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CUMULATED INDEX MEDICUS

CONTENTS

Book 1

Preface v
Index Medicus Citation Format vii
Introduction
Materials Indexed viii
The Indexing Operation viii
Subject Heading Changes ix
Arrangement ix
Subject Section ix
Author Section x
Bibliography of Medical Reviews xi
Access to Articles Cited xi
Interlibrary Loan Policy xii
Other Resources xiv
Regional Medical Libraries xiv
Foreign MEDLARS/MEDLINE Centers xv

MEDICAL SUBJECT HEADINGS (Contents) I-3

JOURNALS INDEXED Abbreviation Listing 1019
Full Title Listing 1097

Book 2 Subject Index A 1165

Book 3 Subject Index B-Ch 2485

Book 4 Subject Index Ci-Ep 3882

Book 5 Subject Index Eq-He 5284

Book 6 Subject Index Hi-Lh 6726

Book 7 Subject Index Li-Na 7976

Book 8 Subject Index Ne-Po 9289

Book 9 Subject Index Pr-So 10686

Book 10 Subject Index Sp-Z 12093

Book 11 Author Index A-D 13463

Book 12 Author Index E-J 14900

Book 13 Author Index K-M 16186

Book 14 Author Index N-Sh 17515

Book 15 Author Index Si-Z 18817

Book 16 Bibliography of Medical Reviews 20067

combined clinical and experimental approach extracted from the 4th Belgian Endocrine Society lecture. Bourguignon JP. **Horm Res** 1988;30(6):224–34 (78 ref.)

Low serum bioactive luteinizing hormone in nonorganic male impotence: possible relationship with altered gonadotropin-releasing hormone pulsatility. Fabbri A, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):867–75

In-vivo effect of ethanol on release of LH-releasing hormone and LH in rats. Emanuele MA, et al. **J Endocrinol** 1989 Apr;121(1):37–41

Photoperiodic control of the development of the LHRH neurosecretory system of European starlings (Sturnus vulgaris) during puberty and the onset of photorefractoriness. Goldsmith AR, et al. **J Endocrinol** 1989 Jul;122(1):255–68

Antihormonal activities of 5 alpha-reductase and aromatase inhibitors. Zoppi S, et al. **J Steroid Biochem** 1988 Oct; 31(4B):677–83

LHRH and LH in peripubertal female rats following prenatal and/or postnatal ethanol exposure. Morris DL, et al. **Life Sci** 1989;44(17):1165–71

Origin of luteinizing hormone-releasing hormone neurons. Schwanzel-Fukuda M, et al. **Nature** 1989 Mar 9; 338(6211):161–4

Sustained intermittent release of gonadotropin-releasing hormone in the prepubertal male rhesus monkey induced by N-methyl-DL-aspartic acid. Gay VL, et al. **Neuroendocrinology** 1988 Aug;48(2):147–52

Simultaneous induction of neuropeptide Y and gonadotropin-releasing hormone release in the rabbit hypothalamus. Pau KY, et al. **Neuroendocrinology** 1989 Feb;49(2):197–201

Pulsatile gonadotropin-releasing hormone release from the human mediobasal hypothalamus in vitro: opiate receptor-mediated suppression. Rasmussen DD, et al. **Neuroendocrinology** 1989 Feb;49(2):150–6

Alterations in luteinizing hormone-releasing hormone release from the mediobasal hypothalamus of ovariectomized, steroid-primed middle-aged rats as measured by push-pull perfusion. Rubin BS, et al. **Neuroendocrinology** 1989 Mar; 49(3):225–32

Morphology of luteinizing hormone-releasing hormone neurons as a function of age and hormonal condition in the male rat. Witkin JW. **Neuroendocrinology** 1989 Apr; 49(4):344–8

Rapid release of substance P and LH-RH from synaptosomes prepared from the medial basal hypothalamus and substantia nigra. Shu C, et al. **Peptides** 1989 Jan-Feb; 10(1):131–6

Inhibin and activin modulate the release of gonadotropin-releasing hormone, human chorionic gonadotropin, and progesterone from cultured human placental cells. Petraglia F, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5114–7

Regulation of luteinizing hormone secretion by neuropeptide Y in rats: hypothalamic and pituitary actions. Crowley WR, et al. **Synapse** 1988;2(3):276–81

THERAPEUTIC USE

Immunoglobulin-mediated hypersensitivity in response to long-term treatment with gonadorelin hydrochloride (Factrel) in a female patient. Foster WG, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):979–83

Clinical effect of cryptocur by undescended testicles. Papp G, et al. **Andrologia** 1989 Jul-Aug;21(4):391–5

Restoration of spermatogenesis with pulsatile gonadotrophin releasing hormone therapy in hypogonadotrophic hypogonadism of traumatic etiology. Fok AC, et al. **Aust N Z J Med** 1989 Aug;19(4):354–7

Influence of serum luteinising hormone concentrations on ovulation, conception, and early pregnancy loss in polycystic ovary syndrome. Homburg R, et al. **BMJ** 1988 Oct 22;297(6655):1024–6

One hundred pregnancies after treatment with pulsatile luteinising hormone releasing hormone to induce ovulation. Homburg R, et al. **BMJ** 1989 Mar 25;298(6676):809–12

The mechanism of the adolescent growth spurt induced by low dose pulsatile GnRH treatment. Stanhope R, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):83–91

Gonadotropin-releasing hormone (GnRH) agonists in the management of endometriosis: a review. Henzl MR. **Clin Obstet Gynecol** 1988 Dec;31(4):840–56 (57 ref.)

A patient with hypogonadotropic hypogonadism successfully treated by long-term pulsatile administration of luteinizing hormone-releasing hormone. Onishi T, et al. **Endocrinol Jpn** 1988 Dec;35(6):925–31

Pituitary response during pulsatile luteinizing hormone-releasing hormone ovulation—induction in patients with clomiphene citrate-resistant polycystic ovary-like disease. Burger CW, et al. **Gynecol Endocrinol** 1988 Mar;2(1):19–33

Synergism of pulsatile LHRH therapy with oral clomiphene treatment. Homburg R, et al. **Gynecol Endocrinol** 1988 Mar; 2(1):59–66

Use of combined exogenous gonadotropins and pulsatile gonadotropin-releasing hormone in patients with polycystic ovarian disease: a new approach to induction of ovulation. Venturini PL, et al. **Gynecol Endocrinol** 1988 Sep;2(3):205–13

Hormonal treatment of cryptorchidism. de Muinck Keizer-Schrama SM. **Horm Res** 1988;30(4–5):178–86 (51 ref.)

The influence of stimulation regimes and luteal phase support on the outcome of IVF. Macnamee MC, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:43–52 (36 ref.)

Treatment of complicated benign prostatic hyperplasia with LHRH-analogues in aged patients. Bianchi S, et al. **Int J Androl** 1989 Apr;12(2):104–9

Increases in bone density during treatment of men with idiopathic hypogonadotropic hypogonadism. Finkelstein JS, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):776–83

Hypogonadotropic hypogonadism in severe beta-thalassemia: effect of chelation and pulsatile gonadotropin-releasing hormone therapy. Wang C, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):511–6

LHRH analogues for hormonal manipulation in acute intermittent porphyria. Anderson KE. **Semin Hematol** 1989 Jan;26(1):10–5 (24 ref.)

The current role of hormonal therapy in the clinical treatment of prostatic cancer. Brendler CB. **Semin Urol** 1988 Nov; 6(4):269–78 (51 ref.)

Hormonal treatment of cryptorchidism: role of pituitary gonadal axis. De Muinck Keizer-Schrama SM, et al. **Semin Urol** 1988 May;6(2):84–95 (101 ref.)

[Importance of analogs of LHRH in the treatment of bone metastasis of cancer of the prostate in 1988] Bessoule O, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):885–7 (Eng. Abstr.) **(Fre)**

[Therapeutic use of gonadotropin-releasing hormone and its analogs] Carol W. **Zentralbl Gynakol** 1988;110(12):757–65 (33 ref.) (Eng. Abstr.) **(Ger)**

[24-hour integrated concentration of LH, FSH, TSH and PRL in subjects with hypogonadotropic hypogonadism treated with pulsatile LHRH] Torre R, et al. **Minerva Endocrinol** 1988 Oct-Dec;13(4):223–9 (Eng. Abstr.) **(Ita)**

[Therapeutic use of luteinizing hormone-releasing hormone] Mićić J, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):355–69 (30 ref.) (Eng. Abstr.) **(Scc)**

[Modification of the echographic pattern of carcinoma of the prostate treated with Lh-rh agonists] Broseta E, et al. **Arch Esp Urol** 1989 Mar;42(2):125–8 (7 ref.) (Eng. Abstr.) **(Spa)**

[Orchiectomy should be chosen instead of LHRH analogs in the treatment of prostatic cancer] Liedberg CF. **Lakartidningen** 1989 Jan 18;86(3):120 **(Swe)**

LH-HCG RECEPTORS see RECEPTORS, LH

LH RECEPTORS see RECEPTORS, LH

LH RELEASING HORMONE see LH-FSH RELEASING HORMONE

LHFSHRH RECEPTORS see RECEPTORS, GONADOLIBERIN

LIBIDO

Level searching: a new assay of sexual motivation in the male rat. Mendelson SD, et al. **Physiol Behav** 1989 Feb; 45(2):337–41

The troubled house of Oedipus and Chrétien's Néo-Tristan: re-writing the mythologies of desire. Rubey D. **Psychoanal Rev** 1988 Spring;75(1):67–94

Intercorrelations among general arousability, emerging and current sexual desire, and severity of sexual dysfunction in women. McCabe MP, et al. **Psychol Rep** 1989 Aug; 65(1):147–54

On desire, excitement, and impotence in modern sex therapy. Vandereycken W. **Psychother Psychosom** 1987; 47(3–4):175–80 (20 ref.)

PHYSIOLOGY

Low sexual desire in women: the role of reproductive hormones. Schreiner-Engel P, et al. **Horm Behav** 1989 Jun; 23(2):221–34

[The physiology of sexual reactions in women] Hovatta O. **Duodecim** 1988;104(15):1095–101 (37 ref.) **(Fin)**

[The physiology of male sexual activity] Huhtaniemi I, et al. **Duodecim** 1988;104(15):1102–8 (27 ref.) **(Fin)**

[Effect of total abdominal and vaginal hysterectomy on the sex life of women] Chojnacki A, et al. **Ginekol Pol** 1988 Aug;59(8):504–7 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Sexual function disorders after local radiotherapy for carcinoma of the prostate. van Heeringen C, et al. **Radiother Oncol** 1988 Sep;13(1):47–52

LIBMAN-SACKS DISEASE see LUPUS ERYTHEMATOSUS, SYSTEMIC

LIBRARIANSHIP see LIBRARY SCIENCE

LIBRARIES

The Wilma L. West Library goes on-line. Binderman MS. **Am J Occup Ther** 1989 Apr;43(4):269–70

Library support for an effective infection control—hazardous materials program. Hook-Shelton SA, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):74

Libraries and archives [editorial] Pizer IH. **Bull Med Libr Assoc** 1989 Jul;77(3):303

The Bakken: a library and museum of electricity in life. Senior JE. **Caduceus** 1988 Fall-Winter;4(3–4):74–89

Programs for reference library managing. Suitsu A, et al. **Comput Appl Biosci** 1989 Jul;5(3):245

Library resources to prevent the spread of HIV. Kerr DL. **J Sch Health** 1988 Nov;58(9):388

LEGISLATION & JURISPRUDENCE

Subpoenas and library operations: rules and recourse. Kibble-Smith BG, et al. **Bull Med Libr Assoc** 1989 Apr; 77(2):196–200

ORGANIZATION & ADMINISTRATION

Practical steps to starting a patients' library. Leverton T. **Practitioner** 1988 Dec;232(1460):1393–6

UTILIZATION

Innovation and education: unlimited potential for the teaching library. Moore M. **Bull Med Libr Assoc** 1989 Jan; 77(1):26–32

LIBRARIES, DENTAL

Further reflections [letter] Glaser JE. **J Am Dent Assoc** 1989 May;118(5):524

LIBRARIES, HEALTH SCIENCE see LIBRARIES, MEDICAL

LIBRARIES, HOSPITAL

Selected list of books and journals for the small medical library. Brandon AN, et al. **Bull Med Libr Assoc** 1989 Apr; 77(2):139–69

ECONOMICS

Book prices and costs for a small-hospital library: a subject analysis. Johnson CA. **Bull Med Libr Assoc** 1989 Jan; 77(1):38–41

ORGANIZATION & ADMINISTRATION

A hospital microwave system for library telecommunication. Hempel RM, et al. **Bull Med Libr Assoc** 1988 Oct; 76(4):339–42

LIBRARIES, MEDICAL

New technology in medical libraries [editorial] Pentelow GM. **BMJ** 1989 Apr 8;298(6678):907–8

Work/training programs for international health science librarians in American medical school libraries. Brennen PW, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):170–5

Preservation of the biomedical literature: an overview. Byrnes MM. **Bull Med Libr Assoc** 1989 Jul;77(3):269–75

Our silent enemy: ashes in our libraries. DeBakey L, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):258–68

Dr. Yan Zonglin, 1982–1983 MLA Cunningham International Fellow: five years later. Ebro D. **Bull Med Libr Assoc** 1989 Apr;77(2):218–9

Preservation activities and needs in U.S. biomedical libraries: a status report. Kirkpatrick BA. **Bull Med Libr Assoc** 1989 Jul;77(3):276–83

Comment on the second report of the register of Copyrights: Library Reproduction of Copyrighted Works (17 U.S.C. 108). McClure LW. **Bull Med Libr Assoc** 1989 Jan; 77(1):74–6

Research databases: a new direction in collection development. McKeehan NC, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):252–5

Effects of cost sharing and end-user searching on a clinical medical librarian program. Miller N. **Bull Med Libr Assoc** 1989 Jan;77(1):71–2

Developing a preservation policy and procedure statement for a health sciences library. Paulson BA. **Bull Med Libr Assoc** 1989 Jul;77(3):293–8

Selection for preservation: considerations for the health sciences. Richards DT, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):284–92

Presentation of the 500,000th volume for the Library. Jimenez FA. **Bull N Y Acad Med** 1988 Nov;64(8):891–2

Medical libraries and the public: friends, foes and frustrations. Kirkpatrick BA. **Bull N Y Acad Med** 1987 Dec; 63(10):968–76

A family medicine research library. Sobal J, et al. **Fam Pract Res J** 1988 Summer;7(4):190–6

A model library [letter] Gaudron AW. **Hosp Community Psychiatry** 1988 Oct;39(10):1110

Medical museum notes. Bonsett CA. **Indiana Med** 1989 Apr; 82(4):240

A library to assist in the development of academic faculty in emergency medicine. Hamilton GC. **J Emerg Med** 1988 Nov-Dec;6(6):551–3

Waring Library Society celebrates tenth anniversary [editorial] Bryan CS. **J S C Med Assoc** 1988 Aug; 84(8):418–9

On library services in North Carolina [letter] Mayer ES. **N C Med J** 1989 Jan;50(1):48–9

David L. Reeves Medical Library [editorial] Alexander E Jr. **Surg Neurol** 1988 Nov;30(5):409–10

The legacy of Hippocrates: Greek medicine in the library

of the Medical Society of London. Nutton V. **Trans Med Soc Lond** 1986–87;103:21–30
Health literature: a neglected resource. Weitzel R. **World Health Forum** 1988;9(4):569–74
[Literary monumenta medica] Palivec V. **Cas Lek Cesk** 1989 Apr 7;128(15):471–2 **(Cze)**
[Literature retrieval and storage by library users with the aid of a microcomputer] Volkers AC, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):294–7 **(Dut)**
[Importance of the university library for scientific research and teaching] Romano G. **Minerva Med** 1988 Sep; 79(9):797–8 (Eng. Abstr.) **(Ita)**

ECONOMICS

The economics of academic health sciences libraries: cost recovery in the era of big science. Williams TL, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):317–22

HISTORY

A lending library for medical students in the eighteenth century. Kronick DA. **Bull Med Libr Assoc** 1989 Jan; 77(1):69–70
Ancient medical library being resurrected in Egypt. Helwig D. **Can Med Assoc J** 1989 Feb 15;140(4):452–3
Medical museum notes. Bonsett CA. **Indiana Med** 1988 Oct; 81(10):822
As far as the eye can see: ophthalmology in the Historical Collections of the Library of the College of Physicians of Philadelphia. Horrocks T. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):37–49
Ex Libris Bibliothecae Collegiensis Medicorum Philadelphiensis: the growth of a library as seen from its bookplates. Radbill SX. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):5–12
[History of the library of the Royal Society of Medicine of Budapest] Kapronczay K. **Orv Hetil** 1988 Oct 2; 129(40):2149–51 **(Hun)**

MANPOWER

The evolving role of clinical medical librarians. Halsted DD, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):299–301

ORGANIZATION & ADMINISTRATION

A hospital microwave system for library telecommunication. Hempel RM, et al. **Bull Med Libr Assoc** 1988 Oct; 76(4):339–42
Monograph support provided by the National Library of Medicine and its regional medical libraries in the medical behavioral sciences. Saye JD, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):295–305
A local network for sharing resources and technical support: BACS/PHILNET. Thayer CW, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):343–5
The marketing audit: a new perspective on library services and products. Wakeley PJ, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):323–7
Harvey Cushing and his books. Towpik E, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):366–70
[Thoughts concerning decentralizing of medical libraries in Norway] Saue T. **Tidsskr Nor Laegeforen** 1988 Sep 30; 108(27):2297–8 (Eng. Abstr.) **(Nor)**

UTILIZATION

Library use and information-seeking behavior of veterinary medical students. Pelzer NL, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):328–33

LIBRARY ADMINISTRATION

Subpoenas and library operations: rules and recourse. Kibble-Smith BG, et al. **Bull Med Libr Assoc** 1989 Apr; 77(2):196–200

MANPOWER

Career progression of academic medical library directors. Newcomer AP, et al. **Bull Med Libr Assoc** 1989 Apr; 77(2):185–95

LIBRARY ASSOCIATIONS

Frances Kathleen Groen Medical Library Association president 1989–1990. Bishop P. **Bull Med Libr Assoc** 1989 Jul;77(3):304–6
Communication: a means to an end. Foster EC. **Bull Med Libr Assoc** 1989 Jan;77(1):104–5
Membership: return on investment. Foster EC. **Bull Med Libr Assoc** 1989 Apr;77(2):239–40

HISTORY

Waring Library Society celebrates tenth anniversary [editorial] Bryan CS. **J S C Med Assoc** 1988 Aug; 84(8):418–9

ORGANIZATION & ADMINISTRATION

Domus or polis? The location of values. Oppenheimer GJ. **Bull Med Libr Assoc** 1988 Oct;76(4):306–16

LIBRARY SCIENCE

Comparative usefulness of MEDLINE searches performed by a drug information pharmacist and by medical librarians. Wanke LA, et al. **Am J Hosp Pharm** 1988 Dec; 45(12):2507–10
Journal rankings by citation analysis in health sciences librarianship. Fang ML. **Bull Med Libr Assoc** 1989 Apr; 77(2):205–11
The evolving role of clinical medical librarians. Halsted DD, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):299–301
Effects of cost sharing and end-user searching on a clinical medical librarian program. Miller N. **Bull Med Libr Assoc** 1989 Jan;77(1):71–2
Innovation and education: unlimited potential for the teaching library. Moore M. **Bull Med Libr Assoc** 1989 Jan; 77(1):26–32
The Bulletin—a special interest journal? [editorial] Pizer IH. **Bull Med Libr Assoc** 1989 Apr;77(2):223–4

STANDARDS

The health sciences librarian's exposure to malpractice liability because of negligent provision of information. Gray JA. **Bull Med Libr Assoc** 1989 Jan;77(1):33–7

LIBRARY SERVICES

Online searching by trained health-care professionals versus searching by librarians [letter] **Am J Hosp Pharm** 1989 Jul; 46(7):1343–4
Developing information-seeking skills in occupational therapy students. Mularski CA, et al. **Am J Occup Ther** 1989 Feb;43(2):110–4
The switch library: new service in rehabilitation librarianship. Haynes DE. **Bull Med Libr Assoc** 1989 Jan;77(1):15–8
The information resources of the food and nutrition information center. Irving HB. **Bull Med Libr Assoc** 1989 Jan;77(1):72–3
The marketing audit: a new perspective on library services and products. Wakeley PJ, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):323–7
Botulism reference service for Canada. **Can Dis Wkly Rep** 1989 Apr 8;15(14):77–8 **(Eng, Fre)**
[Scientific medical information—search and retrieval] Horáková K. **Cesk Epidemiol Mikrobiol Imunol** 1988 S.p; 37(5):316–8 **(Cze)**
[Scientific medical information—its search and retrieval] Horáková K. **Cesk Neurol Neurochir** 1988 Sep; 51(5):298–300 **(Cze)**

ORGANIZATION & ADMINISTRATION

Analyzing in-house journal utilization: an added dimension in decision making. Bader SA, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):216–8
The South Dakota Med-Fax network. Hulkonen DA, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):212–5
Monograph support provided by the National Library of Medicine and its regional medical libraries in the medical behavioral sciences. Saye JD, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):295–305

STANDARDS

The health sciences librarian's exposure to malpractice liability because of negligent provision of information. Gray JA. **Bull Med Libr Assoc** 1989 Jan;77(1):33–7

STATISTICS & NUMERICAL DATA

Statistical measures for shelf reading in an academic health sciences center library. Pedersen WA. **Bull Med Libr Assoc** 1989 Apr;77(2):219–22

LIBRARY TECHNICAL SERVICES

Preservation of the biomedical literature: an overview. Byrnes MM. **Bull Med Libr Assoc** 1989 Jul;77(3):269–75
Our silent enemy: ashes in our libraries. DeBakey L, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):258–68
Preservation activities and needs in U.S. biomedical libraries: a status report. Kirkpatrick BA. **Bull Med Libr Assoc** 1989 Jul;77(3):276–83
Research databases: a new direction in collection development. McKeehan NC, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):252–5
Developing a preservation policy and procedure statement for a health sciences library. Paulson BA. **Bull Med Libr Assoc** 1989 Jul;77(3):293–8
Selection for preservation: considerations for the health sciences. Richards DT, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):284–92
On library services in North Carolina [letter] Mayer ES. **N C Med J** 1989 Jan;50(1):48–9

STATISTICS & NUMERICAL DATA

Requesting reprints: is it worth it? Donlon WC. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):337–9

TRENDS

Accessing the biomedical literature: the South Dakota Med-Fax Network. Lang EA, et al. **S D J Med** 1989 Feb; 42(2):5–8

UTILIZATION

Backup of online public access catalogs in academic health sciences libraries [letter] Carrigan E, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):65–7

LICE

see related
PEDICULOSIS

ANATOMY & HISTOLOGY

Morphometric variation in wild population of louse Polyplax stephensi and its value in taxonomy. Saxena VK. **J Commun Dis** 1988 Jun;20(2):155–8

CLASSIFICATION

A numerical analysis of the American species of the genus Ricinus (Phthiraptera: Amblycera). Lonc E. **Wiad Parazytol** 1989;35(2):127–50

ISOLATION & PURIFICATION

Rodent-ectoparasite association in selected biotopes of Mirzapur and Varanasi Districts of Uttar Pradesh. Saxena VK. **J Commun Dis** 1987 Dec;19(4):310–6
[Ectoparasites and phoresants of the root vole (Microtus oeconomus Pall.) in the Polesye] Savitskil BP, et al. **Parazitologiia** 1988 Sep-Oct;22(5):372–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Clinical presentation of louse-borne relapsing fever among Ethiopian refugees in northern Somalia. Brown V, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):499–502
Arthropod transmission of Eperythrozoon coccoides in mice. Berkenkamp SD, et al. **Lab Anim Sci** 1988 Aug; 38(4):398–401

PARASITOLOGY

Rodent-louse association in rural biotopes of peninsular India. Saxena VK. **J Commun Dis** 1988 Mar;20(1):52–7

LICE, PLANT see **APHIDS**

LICENSES see **LICENSURE**

LICENSURE

1988 policy issues and activities in the states. Lynch C. **ASHA** 1988 Dec;30(12):45–8
An appraisal of cardiovascular standards for Australian civilian flying licences. Vohra J, et al. **Aust N Z J Med** 1989 Feb;19(1):76–82 (6 ref.)
Contracts of employment for locums: the legal implications. Carnerie F. **Can Med Assoc J** 1989 Jun 15;140(12):1477–8
Veterinarians and state reciprocity requirements. Hannah HW. **J Am Vet Med Assoc** 1989 Jan 1;194(1):50–1
National Board Examination revisited. West RL. **J Am Vet Med Assoc** 1989 Jul 15;195(2):188–9
Leads from the MMWR. Licensure of screening tests for antibody to human T-lymphotropic virus type I. **JAMA** 1989 Jan 27;261(4):513, 518–20, 525
British diplomas and limited registration [letter] Ilahi A. **Lancet** 1989 May 13;1(8646):1081
British diplomas and limited registration [letter] Towers PL. **Lancet** 1989 May 27;1(8648):1204
Analysis of an incompetence case. Roth RL. **Md Med J** 1989 Jan;38(1):49–51
Licensure of screening tests for antibody to human T-lymphotropic virus type I. **MMWR** 1988 Dec 9; 37(48):736–40, 745–7
Alcohol and local authorities [letter] Scott P, et al. **N Z Med J** 1989 Apr 26;102(866):200
Engineering organisms for release [news] **Nature** 1989 Jul 13;340(6229):81–2
Genetic engineering. West Germany eases law [news] Dickman S. **Nature** 1989 Jul 13;340(6229):85
Unlicensed persons in patient care settings. Administrative, policy, and ethical issues. Sullivan PA, et al. **Nurs Clin North Am** 1989 Jun;24(2):557–69
Regulatory initiatives: instruments for leadership. Nichols B. **Nurs Outlook** 1989 Mar-Apr;37(2):62–3, 100
The Ohio State Medical Board: is it doing its job? [letter] Stoner BB. **Ohio Med** 1989 Aug;85(8):595
Limited licensing: why is the ARRT involved? Part I. **Radiol Technol** 1988 Nov-Dec;60(2):168–9
Limited licensure facts, not fiction [editorial] DiStefano MG, et al. **Radiol Technol** 1989 Jan-Feb;60(3):256–7
Limited licensing: why is the ARRT involved? Part II. Hanson JW. **Radiol Technol** 1989 Jan-Feb;60(3):263–5
A case for the limited scope technologist [editorial] Rhatigan L. **Radiol Technol** 1988 Nov-Dec;60(2):164
Assessment of the continuing education needs of California's radiologic technologists. Siechta A, et al. **Radiol Technol** 1989 Mar-Apr;60(4):313–7
Comments and solutions on limited licensure [letter] Smorra S. **Radiol Technol** 1989 May-Jun;60(5):441
Professional licenses and AIDS. **Wis Med J** 1988 Dec; 87(12):37

LEGISLATION & JURISPRUDENCE

Driving and epilepsy. Fisher RS, et al. Md Med J 1988 Oct; 37(10):795–8

LICENSURE, DENTAL

"Error" or test? [letter] Pollack BR.
Am J Orthod Dentofacial Orthop 1989 Apr;95(4):41A
Let government achieve reciprocity [letter] Edwards LI.
N Y State Dent J 1988 Aug–Sep;54(7):8

LICENSURE, HOSPITAL see under LICENSURE

LICENSURE, INSTITUTIONAL, PERSONNEL see LICENSURE

LICENSURE, MEDICAL

The case of Dr. Y. Leitner WA. Ala Med 1989 Jan;58(7):9–10
State licensure under fire: a reply. Reddy VH. Ala Med 1989 Jan;58(7):8
Licensure: competence to do what? [correction] [letter]
Can Med Assoc J 1989 Jun 1;140(11):1268
Licensure: competence to do what? [letter]
Can Med Assoc J 1989 Feb 1;140(3):263–4
Licensure: competence to do what? [letter] Aitken GS.
Can Med Assoc J 1989 Mar 1;140(5):498
Licensure: competence to do what? [letter] [published erratum appears in Can Med Assoc J 1989 Jun 1;140(11):1268] Bellan L. Can Med Assoc J 1989 Apr 15; 140(8):889–92
Program for refugee physicians. Klass D.
Can Med Assoc J 1988 Nov 1;139(9):847–8
Licensure: competence to do what? [editorial] Squires BP.
Can Med Assoc J 1988 Nov 15;139(10):927
Safeguarding your medical license after retirement. Bittel DM. J Med Assoc Ga 1989 Aug;78(8):563–5
The Tennessee Board of Medical Examiners. Budd DC.
J Tenn Med Assoc 1989 Jul;82(7):365–8
Suspended doctors in the Health Service. Brahams D.
Lancet 1988 Nov 19;2(8621):1205
The way back. Dekornfeld TJ. Mich Med 1988 Jul;87(7):428, 430
Special House Committee to examine licensing and discipline procedures. Scullion MK. Mich Med 1989 May;88(5):21
Medical misconduct. Conoyer JM. Mo Med 1988 Dec; 85(12):771
A voice from the basket. Witt CM. Mo Med 1988 Dec; 85(12):785–6
Medical licensure application process. Strengths and weaknesses. Berger BR, et al. N C Med J 1988 Jul; 49(7):365–7
Paying back student loans [letter] Bodnar AG.
N Engl J Med 1989 Feb 2;320(5):322
Your prescription—an instrument of your license. Malta FJ.
N J Med 1989 Mar;86(3):203–4
Position paper of the Medical Society of the State of New York on physician recredentialing. N Y State J Med 1989 Apr;89(4):222
Position statement of the Hospital Association of New York State on the Report of the New York State Advisory Committee on Physician Recredentialing.
N Y State J Med 1989 Apr;89(4):223–5
Position statement of the Federation of State Medical Boards of the United States on the assessment of licensed physicians. N Y State J Med 1989 Apr;89(4):226–7
Concentrating on the problem physician: perspectives in medical discipline. Galusha BL. N Y State J Med 1989 Apr;89(4):219–21
Periodic physician recredentialing proposed in New York State. Geilhorn A, et al. N Y State J Med 1989 Apr; 89(4):209–13
The chemically dependent physician: clinical and legal considerations. Angres DH, et al.
New Dir Ment Health Serv 1989 Spring;(41):21–32
Is justice served? Havener WH. Ohio Med 1989 Jan;85(1):11
Status of the Rhode Island Board of Medical Licensure and Discipline. Hamolsky MW. R I Med J 1989 Feb; 72(2):57–60
[The past, present and future system of specialist licensing of the Japanese Thoracic Surgical Society]
Nippon Geka Gakkai Zasshi 1988 Jul;89(7):987–91 (Jpn)

LEGISLATION & JURISPRUDENCE

Nutritionist barred from practicing medicine. Indiana Med 1988 Oct;81(10):844
Impaired physicians who are seeking help. Peer assistance, not public identification. Dickison HW. W V Med J 1989 Sep;85(9):390

STANDARDS

It's up to physicians to keep their licenses current. DeKornfeld TJ. Mich Med 1988 Dec;87(12):787–8

LICENSURE, NURSING

Draining the nursing pool? [letter] Hinton D. Am J Nurs 1989 Jun;89(6):810
Nursing gets no support in fighting unsafe practices [letter] Rinker K. Am J Nurs 1988 Nov;88(11):1479
The definition and purpose of professional licensure. Murphy EK. AORN J 1989 Apr;49(4):1106–9
Grounds for license revocation. Murphy EK. AORN J 1989 May;49(5):1428, 1430, 1432
Helping students combat licensing examination test anxiety. Meyer LL. Comput Nurs 1989 Mar–Apr;7(2):51–2
Success in NCLEX–RN: identifying predictors and optimal timing for intervention. Jenks J, et al. J Nurs Educ 1989 Mar;28(3):112–8
Protecting your license. Bellocq JA. J Prof Nurs 1989 Jan–Feb;5(1):8
Do consumers have a right to know the disciplinary actions taken against nurses who violate the nursing practice act? Do consumers have a right to know the identity of nurses who violate the nursing practice act? Eason FR, et al.
J Prof Nurs 1986 Sep–Oct;2(5):274, 333–4
An investigation of the predictability of NCLEX scores of BSN graduates using academic predictors. Payne MA, et al. J Prof Nurs 1986 Sep–Oct;2(5):326–32
State boards and impaired nurses. Swenson I, et al.
Nurs Outlook 1989 Mar–Apr;37(2):94–6
Predicting nursing GPA and national council licensure examination for registered nurses (NCLEX–RN): a thorough analysis. Feldt RC, et al. Psychol Rep 1989 Apr; 64(2):415–21
Success in old and new licensure examinations: pre–admission factors and academic performance. Friedemann ML, et al. Res Nurs Health 1988 Oct;11(5):343–50
Predicting performance on the National Council Licensure Examination. Froman RD, et al. West J Nurs Res 1989 Jun;11(3):334–46

LICENSURE, PHARMACY

Establishing a rehabilitation program for impaired pharmacists. Sheffield JW. Am J Hosp Pharm 1988 Oct; 45(10):2092–8
A board of pharmacy member's viewpoints on the technician issue. Vandel JH. Am J Hosp Pharm 1989 Mar;46(3):545–7
Professional liability for pharmacists: a focus on pharmacy practice acts. Munger MA, et al.
Drug Intell Clin Pharm 1988 Nov;22(11):886–8
Licensing authority's use of drug manufacturer's confidential data. Brahams D. Lancet 1989 Feb 18;1(8634):395

LICHEN PLANUS

Lichen planus. Dabski C. Am Fam Physician 1989 Apr; 39(4):120–6 (41 ref.)
Lichen planus: a study of 72 cases in Singapore. Vijayasingam SM, et al. Ann Acad Med Singapore 1988 Oct;17(4):541–4
Oral cancer and precancer—a dilemma [letter] Nally FF, et al. Br Dent J 1989 Jun 10;166(11):398
Papulosquamous eruptions: manifestation and management. Hu CH. Compr Ther 1988 Oct;14(10):42–6

BLOOD

Basic and interleukin–2–augmented natural killer cell activity in lichen planus. Simon M Jr, et al. Dermatologica 1989; 178(3):141–4
Lichen planus sera react non–specifically with second trimester fetal skin. Camisa C, et al.
J Clin Lab Immunol 1988 Jun;26(2):81–4
[Induction of mucin deposition in mouse skin by serum from a patient with lichen myxedematosus] Kamimura K, et al. Nippon Hifuka Gakkai Zasshi 1988 Sep;98(10):1039–44 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Occupational dermatoses from colour developing agents. Clinical and histopathological observations. Lidén C, et al. Acta Derm Venereol (Stockh) 1988;68(6):514–22
Lichen planus associated with captopril: a further disorder demonstrating the 'tin–tack' sign [letter] Cox NH, et al. Br J Dermatol 1989 Feb;120(2):319–21
Lichen planus following procainamide–induced lupus erythematosus. Sherertz EF. Cutis 1988 Jul;42(1):51–3
Acetylsalicylic acid may induce a lichenoid eruption [letter] Bharija SC, et al. Dermatologica 1988;177(1):19
Immunohistological study of captopril–induced late cutaneous eruptions. Bretin N, et al. Dermatologica 1988; 177(1):11–5
Lichenoid photoreactive epidermal necrosis with diflunisal. Street ML, et al. J Am Acad Dermatol 1989 May;20(5 Pt 1):850–1
Angiotensin–converting enzyme inhibitors implicated in oral mucosal lichenoid reactions. Firth NA, et al.
Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):41–4
Photosensitive lichenoid reaction accompanied by nonphotosensitive subacute prurigo caused by carbamazepine. Yasuda S, et al. Photodermatol 1988 Oct; 5(5):206–10

CLASSIFICATION

[Lichen planus and lichen erythematosus: their interrelations] Hallak N. Przegl Dermatol 1988 Sep–Oct;75(5):392–6 (23 ref.) (Pol)

COMPLICATIONS

Oral lichen planus and hepatic cirrhosis [letter] [published erratum appears in Ann Intern Med 1989 May 15;110(10):;849] del Olmo JA, et al. Ann Intern Med 1989 Apr 15;110(8):666
Lichen planus pemphigoides with features of lichen planus and pemphigus vulgaris [letter] Lotem M, et al.
Arch Dermatol 1989 May;125(5):707–8
Purpuric palmar lichen nitidus—an unusual though distinctive eruption. Coulson IH, et al.
Clin Exp Dermatol 1988 Sep;13(5):347–9
Lichen planus of the oesophagus. Jobard–Drobacheff C, et al. Clin Exp Dermatol 1988 Jan;13(1):38–41
Nail involvement in lichen planopilaris. Tosti A, et al.
Cutis 1988 Sep;42(3):213–4
Lichen ruber mucosae with esophageal involvement. Van Maercke P, et al. Endoscopy 1988 Jul;20(4):158–60
Lichen planus hypertrophicus with carcinoma breast in a male patient (a case report). Choudhary SD, et al.
Indian J Dermatol 1988 Jul;33(3):40–1
Hypertrophic lichen planus and light sensitivity in an HIV–positive patient. Pardo RJ, et al. Int J Dermatol 1988 Nov;27(9):642–4
The vulvo–vaginal–gingival syndrome. A new form of erosive lichen planus. Pelisse M. Int J Dermatol 1989 Jul–Aug;28(6):381–4
Erythema dyschromicum perstans and lichen planus: are they related? Berger RS, et al. J Am Acad Dermatol 1989 Aug; 21(2 Pt 2):438–42
The association of lichen planus of the penis with squamous cell carcinoma in situ and with verrucous squamous carcinoma. Bain L, et al. J Dermatol Surg Oncol 1989 Apr; 15(4):413–7
[The lichen–hepatitis syndrome] Patrone P, et al.
G Ital Dermatol Venereol 1988 Sep;123(9):413–4 (Eng. Abstr.) (Ita)
[Lichen–chronic hepatopathy syndrome. Etiopathogenetic theories and review of clinical case reports] Rotoli M, et al. Recenti Prog Med 1988 Sep;79(9):392–6 (51 ref.) (Eng. Abstr.) (Ita)
[Is coexistence of lichen erythematosus and lichen planus a new nosologic entity?] Hallak N, et al. Przegl Dermatol 1988 Sep–Oct;75(5):363–71 (Eng. Abstr.) (Pol)

DIAGNOSIS

Bullous lichen planus and lichen planus pemphigoides. Zlatkov N, et al. Dermatol Monatsschr 1988;174(6):339–44
Histopathological discriminant criteria between lichenoid drug eruption and idiopathic lichen planus: retrospective study on selected samples. Van den Haute V, et al.
Dermatologica 1989;179(1):10–3
Genital lichen sclerosus mistaken for child sexual abuse. Jenny C, et al. Pediatrics 1989 Apr;83(4):597–9
[Direct immunofluorescent technic of analyzing fibrinogen in the differential diagnosis of certain diseases of the oral mucous membrane] Yu SF.
Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan; 24(1):22–3, 62 (Eng. Abstr.) (Chi)
[Role of direct immunofluorescence in the diagnosis of oral lichen planus] Gandolfo S, et al. Minerva Stomatol 1989 May;38(5):509–14 (Eng. Abstr.) (Ita)

DRUG THERAPY

The management of intransigent desquamative gingivitis with Dapsone. Matthews RW, et al. Ann Dent 1989 Summer; 48(1):41–3
Our experience in the treatment of vulvar sclerous lichen. Conforti S, et al. Clin Exp Obstet Gynecol 1988; 15(4):178–80
Effect of the local application of ciclosporine A on chronic erosive lichen planus of the oral cavity [letter] Francès C, et al. Dermatologica 1988;177(3):194–5
Lichen planus of the nail: treatment with antimalarials. Mostafa WZ. J Am Acad Dermatol 1989 Feb;20(2 Pt 1):289–90
Intestinal amebiasis, lichen planus, and treatment with metronidazole. Wahba–Yahav AV.
J Am Acad Dermatol 1989 Jun;20(6):1128–9
A clinical trial of PUVA treatment in oral lichen planus. Lehtinen R, et al. Proc Finn Dent Soc 1989;85(1):29–33
[Recurrence and morphologic resistance phenomena of PUVA–treated lichen ruber planus cutaneous] Narwutsch M, et al. Dermatol Monatsschr 1989;175(3):148–54 (Eng. Abstr.) (Ger)
[Histologic and immunofluorescence microscopy phenomena of keratin (Civatte) bodies of PUVA treated cutaneous lichen ruber planus] Narwutsch M, et al.
Dermatol Monatsschr 1989;175(1):8–15 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

The epidemiology of cutaneous amyloidosis in Jakarta (Indonesia). Djuanda A, et al. Ann Acad Med Singapore 1988 Oct;17(4):536–40
Relative incidence of intraoral pemphigus vulgaris, mucus membrane pemphigoid and lichen planus. Zegarelli DJ, et al. Ann Dent 1989 Summer;48(1):5–7
Study of epidemiological features of oral lichen planus. Chattopadhyay A. Indian J Dermatol 1988 Jan;33(1):13–5
[Sclerotic and atrophic lichen of the genitals in boys] Kristiansen VB, et al. Ugeskr Laeger 1989 May 1; 151(18):1111 (Eng. Abstr.) (Dan)

ETIOLOGY

The pathogenesis of lichen planus. Gilhar A, et al. **Br J Dermatol** 1989 Apr;120(4):541–4

[Clinical and histologic analysis of mucous membrane lesions associated with dental restoration] Zhu YX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):49–51, 63 (Eng. Abstr.) (Chi)

[The pathogenesis of lichen ruber planus—a modern concept] Röcken M. **Z Hautkr** 1988 Nov 15;63(11):911–4 (48 ref.) (Eng. Abstr.) (Ger)

IMMUNOLOGY

The lichenoid tissue reaction. An immunological perspective. Shiohara T. **Am J Dermatopathol** 1988 Jun;10(3):252–6 (32 ref.)

In vivo effects of interferon–gamma and anti–interferon–gamma antibody on the experimentally induced lichenoid tissue reaction. Shiohara T, et al. **Br J Dermatol** 1988 Aug;119(2):199–206

Lesional keratinocytes express OKM5, Leu–8 and Leu–11b antigens in lichen planus. Simon M. **Dermatologica** 1988; 177(3):152–8

The lichenoid tissue reaction. A new concept of pathogenesis. Shiohara T, et al. **Int J Dermatol** 1988 Jul–Aug; 27(6):365–74 (86 ref.)

Cellular autoimmunity in psoriasis and lichen planus. Steinmuller D, et al. **J Autoimmun** 1988 Jun;1(3):279–98

PHA stimulation of peripheral blood lymphocytes in oral lichen planus. Abnormality localized between interleukin–2 receptor ligand formation and gamma–interferon secretion. Konttinen YT, et al. **J Clin Lab Immunol** 1989 Jan; 28(1):33–7

Lymphocyte activation in oral lichen planus. Malmström M, et al. **Proc Finn Dent Soc** 1989;85(2):109–17 (19 ref.)

Mononuclear leucocyte function in patients with lichen planus and cutaneous lupus erythematosus during chemotherapy with clofazimine. Zeis BM, et al. **S Afr Med J** 1989 Feb 18;75(4):161–2

[Anticytoplasmic antibodies in lichen planus] Fabbri P, et al. **G Ital Dermatol Venereol** 1988 May;123(5):199–202 (Eng. Abstr.) (Ita)

METABOLISM

Pattern of oral cytokeratins. II. SDS–electrophoretic analysis of cytokeratins in reactive hyperkeratoses and Lichen ruber planus of the oral mucosa. Ermich T, et al. **Biomed Biochim Acta** 1988;47(9):831–6

PATHOLOGY

Longitudinal melanonychia after healing of lichen planus. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):338–9

Expression of lymphocyte activation markers in benign cutaneous T cell infiltrates. Discoid lupus erythematosus versus lichen ruber planus. Sundqvist KG, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):292–5

An immunofluorescence study of lichen planus among Asians in Singapore. Lim KB. **Ann Acad Med Singapore** 1988 Oct; 17(4):545–7

A quantitative assessment of Langerhans cells in oral mucosal lichen planus and leukoplakia. Rich AM, et al. **Br J Dermatol** 1989 Feb;120(2):223–8

Lichenoid epidermal nevus: "linear lichen planus". Brownstein MH, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):913–15

Linear lichen planopilaris of the face. Küster W, et al. **J Am Acad Dermatol** 1989 Jul;21(1):131–2

Actinic lichen planus. A clinicopathologic study of 16 patients. Salman SM, et al. **J Am Acad Dermatol** 1989 Feb; 20(2 Pt 1):226–31

Morphometric analysis of suprabasal cells in oral white lesions. Shabana AH, et al. **J Clin Pathol** 1989 Mar; 42(3):264–70

Lichen planus of the nail presenting as a tumor: diagnosis by longitudinal nail bed biopsy. Lambert DR, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1245–7

Lichenoid eruption due to mercaptopropionylglycine. Kawabe Y, et al. **J Dermatol (Tokyo)** 1988 Oct;15(5):434–9

Malignant development of lichen planus–affected oral mucosa. Holmstrup P, et al. **J Oral Pathol** 1988 May; 17(5):219–25

Immunohistochemical analysis of cells in mucosal lesions of oral lichen planus. Takeuchi Y, et al. **J Oral Pathol** 1988 Sep;17(8):367–73

Course of various clinical forms of oral lichen planus. A prospective follow–up study of 611 patients. Thorn JJ, et al. **J Oral Pathol** 1988 May;17(5):213–8

Expression of MHC class II antigens (HLA DR, DP and DQ) by keratinocytes in oral lichen planus. Farthing PM, et al. **J Oral Pathol Med** 1989 May;18(5):305–9

A histopathologic study of oral mucosal lupus erythematosus. Karjalainen TK, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):547–54

Oral lichenoid dysplasia: a clinicopathologic analysis. Lovas JG, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul; 68(1):57–63

Basement membrane changes in oral lichen planus. Jungell P, et al. **Proc Finn Dent Soc** 1989;85(2):119–24 (27 ref.)

[Electron microscopy findings in lichen planus] Pock L, et al. **Cesk Patol** 1988 Nov;24(4):193–200 (Eng. Abstr.) (Cze)

[Lichen planus] Cambazard F. **Pediatrie** 1988;43(7):645 (Fre)

[Lichen aureus zosteriformis] Braun–Falco O, et al. **Hautarzt** 1989 Jun;40(6):370–2 (Eng. Abstr.) (Ger)

[Lichen ruber ulcerosus plantae] Huwyler T, et al. **Hautarzt** 1989 Jan;40(1):28–30 (Eng. Abstr.) (Ger)

[Lichen ruber ulcerosus] Russwurm R, et al. **Hautarzt** 1989 Apr;40(4):233–5 (Eng. Abstr.) (Ger)

[Bilateral lichen aureus. Report of a clinical case] Iannantuono M, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):59–61 (Eng. Abstr.) (Ita)

[Lichen planus of an exclusive ungual localization] Tosti A, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):529–31 (Ita)

[Keratotic lesions of the oral cavity. Notes on histopathologic differential diagnosis in leukoplakia, lichen planus, lupus erythematosus. Cases investigation] Galliano D, et al. **Minerva Stomatol** 1989 Apr;38(4):481–7 (12 ref.) (Eng. Abstr.) (Ita)

[Chronic lichenoid keratosis] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1989;(1):66–9 (Eng. Abstr.) (Rus)

SURGERY

The use of carbon dioxide laser in lichen myxedematosus. Kaymen AH, et al. **J Dermatol Surg Oncol** 1989 Aug; 15(8):862–5

VETERINARY

Idiopathic benign lichenoid keratosis on the pinna of the ear in four dogs. Anderson WI, et al. **Cornell Vet** 1989 Apr; 79(2):179–84

LICHENS

ANALYSIS

A novel hemolysin from the lichen Parmelia pulla. Hunaiti AA, et al. **Biochem Int** 1988 Dec;17(6):1049–58

Isoenzyme analysis of lichen algae in immobilized pH gradients. Kilias H, et al. **Electrophoresis** 1988 Apr; 9(4):187–91

Background concentrations of lead and cadmium in the lichen Hypogymnia physodes at different altitudes. Král R, et al. **Sci Total Environ** 1989 Aug;84:201–9

IMMUNOLOGY

Contact sensitivity to oak moss. Gonçalo S, et al. **Contact Dermatitis** 1988 Nov;19(5):355–7

LICORICE see GLYCYRRHIZA

LIDOCAINE

Epidural bupivacaine v. lidocaine [letter] Ackerman WE, et al. **Anaesth Intensive Care** 1989 May;17(2):234

Double–blind trial comparing epidural lignocaine with epidural fentanyl for anaesthesia during extracorporeal shock wave lithotripsy. Silbert BS, et al. **Anaesth Intensive Care** 1989 Feb;17(1):9–15

Lignocaine 2% with adrenaline for epidural Caesarean section [letter] Brighouse D, et al. **Anaesthesia** 1989 Jun; 44(6):528–9

Thoracic epidural anesthesia for transsternal thymectomy in myasthenia gravis. Burgess FW, et al. **Anesth Analg** 1989 Oct;69(4):529–31

Interaction of lidocaine and hypothermia in Bier blocks in volunteers. Heavner JE, et al. **Anesth Analg** 1989 Jul; 69(1):53–9

Relief of sciatic radicular pain by sciatic nerve block. Xavier AV, et al. **Anesth Analg** 1988 Dec;67(12):1177–80

Epidural lidocaine for cesarean section: effect of varying epinephrine concentration. Brose WG, et al. **Anesthesiology** 1988 Dec;69(6):936–40

Halothane, fentanyl/nitrous oxide, and spinal lidocaine protect against spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Jun;70(6):967–72

Continuous epidural lidocaine infusion in the parturient with paroxysmal ventricular tachycardia. Juneja MM, et al. **Anesthesiology** 1989 Aug;71(2):305–8

Breathing patterns during postoperative analgesia in patients after lower abdominal operations. Nishino T, et al. **Anesthesiology** 1988 Dec;69(6):967–72

Save the prepuce. Painless separation of preputial adhesions in the outpatient clinic. MacKinlay GA. **BMJ** 1988 Sep 3;297(6648):590–1

Anaesthesia of the skin. Coley S. **Br J Anaesth** 1989 Jan; 62(1):4–5 (8 ref.)

Topical anaesthesia with lidocaine–prilocaine cream for vulval biopsy. Byrne MA, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):497–9

Addition of hyaluronidase to lignocaine with adrenaline for retrobulbar anaesthesia in the surgery of senile cataract. Thomson I. **Br J Ophthalmol** 1988 Sep;72(9):700–2

Retrograde amnesia induced by lidocaine injection into the striatum: protective effect of the negative reinforcer. Pérez–Ruiz C, et al. **Brain Res Bull** 1989 Apr;22(4):599–603

Contamination of multi–dose vials due to repeat usage of syringes for aspiration—Nova Scotia. Langille DB, et al. **Can Dis Wkly Rep** 1988 Oct 22;14(42):193–6 (Eng, Fre)

Lidocaine concentrations in endobronchial aspirates during flexible fiberoptic bronchoscopy [letter] Kato H, et al. **Chest** 1989 Sep;96(3):700

The effect of topical nasal anaesthesia on allergen–induced symptoms, obstruction and blood flow. Holmberg K, et al. **Clin Exp Allergy** 1989 Jul;19(4):443–7

Local anaesthesia for middle ear surgery. Lancer JM, et al. **Clin Otolaryngol** 1988 Oct;13(5):367–74

Outpatient treatment of upper extremity injuries in childhood using intravenous regional anaesthesia. Olney BW, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):576–9

Cocaine and lidocaine as topical urethral anesthetics. Pliskin MJ, et al. **J Urol** 1989 May;141(5):1117–9

Anesthesia for infants recommended [news] **Ohio Med** 1988 Jun;84(6):428

Lidocaine permeability in silicone tissue expanders: an in vitro analysis. Berman DE, et al. **Plast Reconstr Surg** 1989 Oct;84(4):621–3

The effect of polyphloretin phosphate (PPP) on oral infiltration anaesthesia. An experimental investigation. Nordenram A, et al. **Swed Dent J** 1988;12(6):217–20

Use of local anesthesia in operative andrology. Kellami A. **Urology** 1989 Apr;33(4):330–1

[Evaluation of 4% xylocaine anesthesia for the urethral pressure profile measurement and cystometry] Liu SC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):339–42 (Eng. Abstr.) (Chi)

[The anesthetic effect of acupoint injection in ESWL] Lee WC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):283–8 (Eng. Abstr.) (Chi)

[Clonidine enhances analgesia produced by epidural lidocaine] Tzeng JI, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):301–6 (Eng. Abstr.) (Chi)

[Paracervical block. A valuable alternative for ambulatory surgery] Barret P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):109–12 (Eng. Abstr.) (Fre)

[Use of 3 different anesthetic mixtures in peridural anesthesia for extracorporeal shockwave lithotripsy (ESWL)] Tempia A, et al. **Minerva Anestesiol** 1988 Jul–Aug;54(7–8):315–20 (Eng. Abstr.) (Ita)

[Small skin surgery in children: skin analgesia with a cream made of lidocaine and prilocaine] Gelmetti C, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):183–4 (Eng. Abstr.) (Ita)

[Effect of pH–adjustment and concentration of local anesthetics on the onset of epidural anesthesia] Fukuda T, et al. **Masui** 1988 Jul;37(7):809–14 (Eng. Abstr.) (Jpn)

[The relation between the onset time of sympathetic nerve blockade and that of analgesia in epidural anesthesia] Mizuyama K, et al. **Masui** 1988 Jul;37(7):804–8 (Eng. Abstr.) (Jpn)

[Use of sacral anesthesia, prolonged by opiates, in patients with acute proctologic diseases] Koplatadze AM, et al. **Klin Khir** 1989;(2):39–41 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

The reduction of pain on injection of propofol: the effect of addition of lignocaine. Helbo–Hansen S, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):502–4

Spinal anaesthesia with glucose–free 2% lignocaine. Effect of different volumes. Kristensen J, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):53–7

Absorption of lidocaine and prilocaine after application of a eutectic mixture of local anesthetics (EMLA) on normal and diseased skin. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):18–22

Local anaesthesia with a lidocaine/prilocaine cream (EMLA) for cautery of condylomata acuminata on the vulval mucosa. The effect of timing of application of the cream. Ljunghall K, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):362–5

A new method of analgesia for relief of circumcision pain. Andersen KH. **Anaesthesia** 1989 Feb;44(2):118–20

Lignocaine 2% with adrenaline for epidural caesarean section. A comparison with 0.5% bupivacaine. Norton AC, et al. **Anaesthesia** 1988 Oct;43(10):844–9

Penile block via the subpubic space in 100 children. Dalens B, et al. **Anesth Analg** 1989 Jul;69(1):41–5

The use of high–dose lidocaine in wetting solutions for lipoplasty. Lewis CM, et al. **Ann Plast Surg** 1989 Apr; 22(4):307–9

Local anaesthetic creams. Hanks GW, et al. **BMJ** 1988 Nov 12;297(6658):1215–6 (17 ref.)

Lignocaine–prilocaine cream in postherpetic neuralgia [letter] Milligan KA, et al. **BMJ** 1989 Jan 28;298(6668):253

Safe use of lignocaine [letter] Scott DB. **BMJ** 1989 Jul 1; 299(6690):56

Safe use of lignocaine. Scrimshire JA. **BMJ** 1989 Jun 3; 298(6686):1494

In vivo assessment of percutaneous local anaesthetic preparations. McCafferty DF, et al. **Br J Anaesth** 1989 Jan; 62(1):17–21

The Smith Kline & French lecture 1987. Clinical pharmacology and the art of bespoke prescribing. Routledge PA. **Br J Clin Pharmacol** 1988 Oct;26(4):339–45 (46 ref.)

Split skin grafting using topical local anaesthesia (EMLA): a comparison with infiltrated anaesthesia. Goodacre TE, et al. **Br J Plast Surg** 1988 Sep;41(5):533–8

Multi–dose vials of xylocaine: does re–use predispose to HBV or HIV transmission? **Can Dis Wkly Rep** 1989 Feb 18; 15(7):34–5 (Eng, Fre)

Epidural anaesthesia for caesarean section: comparison of two injection techniques. Crochetière CT, et al. **Can J Anaesth** 1989 Mar;36(2):133–6

Safety and efficacy of using high-dose topical and nebulized anesthesia to obtain endobronchial cultures. Berger R, et al. **Chest** 1989 Feb;95(2):299–303

Clinical experience in oral surgery with 2 different automatic aspirating syringes. Meechan JG, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):87–9

Topical lidocaine in the treatment of partial-thickness burns. Brofeldt BT, et al. **J Burn Care Rehabil** 1989 Jan–Feb; 10(1):63–8

Lidocaine during liposuction [letter] Bridenstein JB. **J Dermatol Surg Oncol** 1989 Jul;15(7):775–6

Manipulation of the fractured nose using topical local anaesthesia. el-Kholy A. **J Laryngol Otol** 1989 Jun; 103(6):580–1

Chronic access to endoneurial space using an arterial autograft. Kroin JS, et al. **J Neurosci Methods** 1989 Mar; 27(2):133–42

Post-operative analgesia after epidural administration of mixture of buprenorphine and lignocaine. Dasgupta D, et al. **J Postgrad Med** 1988 Oct;34(4):201–4

Post-operative analgesia after subarachnoid administration of mixture of buprenorphine and lignocaine. Dasgupta D, et al. **J Postgrad Med** 1988 Oct;34(4):205–10

Spinal anesthesia and electroerection in dogs and monkeys. Mueller SC, et al. **J Urol** 1989 Jul;142(1):171–5

Lidocaine for convulsion. Tanaka Y, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):622

Topical local anaesthetics and herpes simplex [letter] Cassuto J. **Lancet** 1989 Jan 14;1(8629):100–1

Topical anaesthesia for fistula cannulation in haemodialysis patients. Watson AR, et al. **Nephrol Dial Transplant** 1988; 3(6):800–2

Topical lidocaine for relief of superficial pain in postherpetic neuralgia. Kissin I, et al. **Neurology** 1989 Aug;39(8):1132–3

Anesthesia update #21. Use of local anesthetic with the hip arthrogram as a diagnostic aid. Daum WJ. **Orthop Rev** 1988 Jan;17(1):123–5

Failure of epidural opioid to control cancer pain in a patient previously treated with massive doses of intravenous opioid. Tanelian DL, et al. **Pain** 1989 Mar;36(3):359–62

The effect of intracoronary lidocaine on ventricular arrhythmia in the infarcted canine heart. Tordjman T, et al. **Pharmacotherapy** 1988;8(5):295–8

Local injection therapy for the treatment of chronic pain. Bourne J. **Practitioner** 1988 Jun 8;232(1450):692–4

Prediction of individual dosage requirements for lignocaine: a validation study for Bayesian forecasting in Japanese patients. Uematsu T, et al. **Ther Drug Monit** 1989; 11(1):25–31

Lidocaine ointment and spray. Bánóczy J. **Ther Hung** 1989; 37(1):40–2 (5 ref.)

Decreased incidence of acute tubular necrosis after cadaveric donor transplantation due to lidocaine donor pretreatment and low-dose dopamine infusion in the recipient. Walaszewski J, et al. **Transplant Proc** 1988 Oct;20(5):913

[Intravenous lidocaine in the treatment of chronic pain caused by bone metastases] Sjøgren P, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2144–6 (Eng. Abstr.) (Dan)

[Distention arthrography in the treatment of adhesive capsulitis of the shoulder] Morency G, et al. **Can Assoc Radiol J** 1989 Apr;40(2):84–6 (Eng. Abstr.) (Fre)

[Effectiveness of intravesical administration of lidocaine gel in females with urge and urge incontinence] Gassner K, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):562–6 (Eng. Abstr.) (Ger)

[Inhalation of lidocaine in pulmonology] Abrosimov VN. **Klin Med (Mosk)** 1988 Dec;66(12):57–9 (Eng. Abstr.) (Rus)

[Use of long-term epidural analgesia] Safronov VS, et al. **Vestn Khir** 1989 Mar;142(3):82 (Rus)

[Changes in the lipid component of liver microsomal membranes during the postischemic period after administration of alpha-tocopherol and lidocaine] Grek OR. **Vopr Med Khim** 1988 Jul–Aug;34(4):57–63 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Cardiovascular responses caused by the combination of lidocaine and vecuronium in the induction of general anaesthesia. Pouttu J, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):549–52

Deleterious hemodynamic effects of lidocaine in severe congestive heart failure. Gottlieb SS, et al. **Am Heart J** 1989 Sep;118(3):611–2

Transient left bundle branch block following lidocaine. Tagliente TM, et al. **Anesth Analg** 1989 Oct;69(4):545–7

Cerebral and hemodynamic effects of lidocaine accidentally injected into the carotid arteries of patients having carotid endarterectomy. Perkins WJ Jr, et al. **Anesthesiology** 1988 Nov;69(5):787–90

Lidocaine & tocainide & mexiletine [letter] Martinez R, et al. **Ann Emerg Med** 1989 Mar;18(3):334

Treatment of peripheral ischemia secondary to lidocaine containing epinephrine. Aycock BG, et al. **Ann Plast Surg** 1989 Jul;23(1):27–30

Facial nerve palsy following tympanmastoid surgery [letter] Madden G. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):635

An allergy to local anesthetics? The consequences of a misdiagnosis. Doyle KA, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):103–6

Local anaesthetic toxicity of haematoma blocks in manipulation of Colles' fractures. Quinton DN. **Injury** 1988 Jul;19(4):239–40

Increased efficacy and toxicity of lidocaine in patients on beta-blockers. Wyse DG, et al. **Int J Cardiol** 1988 Oct; 21(1):59–70

The burning truth [letter] Shulkin DJ, et al. **Int J Dermatol** 1989 Sep;28(7):483

Haematoma block for fractures of the wrist: a cause of compartment syndrome. Younge D. **J Hand Surg [Br]** 1989 May;14(2):194–5

Lidocaine-induced unilateral internuclear ophthalmoplegia: effects on convergence and conjugate eye movements. Gamlin PD, et al. **J Neurophysiol** 1989 Jul;62(1):82–95

Acquired methemoglobinemia. A case report. Foxworth JW, et al. **Mo Med** 1987 Apr;84(4):187–9

Retinal vascular occlusion without retrobulbar or optic nerve sheath hemorrhage after retrobulbar injection of lidocaine. Cowley M, et al. **Ophthalmic Surg** 1988 Dec;19(12):859–61

Respiratory distress after a Nadbath block. Koenig SB, et al. **Ophthalmology** 1988 Sep;95(9):1285–7

[Anaphylaxis caused by lidocaine] Bonnet MC, et al. **Ann Fr Anesth Reanim** 1989;8(2):127–9 (Eng. Abstr.) (Fre)

[Hemodynamic pulmonary edema after axillary plexus block] Larabi MS, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):551–4 (Eng. Abstr.) (Fre)

[Lidocaine-induced anaphylactic shock during tonsillectomy] Marzhan NN. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):66 (Rus)

ANALOGS & DERIVATIVES

Therapeutic serum lidocaine and metabolite concentrations in patients undergoing electrophysiologic study after discontinuation of intravenous lidocaine infusion. Estes NA 3d, et al. **Am Heart J** 1989 May;117(5):1060–4

Lidocaine & tocainide & mexiletine [letter] Martinez R, et al. **Ann Emerg Med** 1989 Mar;18(3):334

General pharmacological studies on N-(2,6-dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate. 3rd communication: effect on cardiovascular system. Aisaka K, et al. **Arzneimittelforschung** 1988 Oct;38(10):1417–25

General pharmacological studies on N-(2,6-dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate. 1st communication: effect on the central nervous system. Hirotsu I, et al. **Arzneimittelforschung** 1988 Oct;38(10):1398–409

General pharmacological studies on N-(2,6-dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate. 2nd communication: effect on the peripheral nervous system and peripheral organs. Hirotsu I, et al. **Arzneimittelforschung** 1988 Oct; 38(10):1410–7

The effects of SUN 1165, a novel sodium channel blocker, on ischemia-induced mitochondrial dysfunction and leakage of lysosomal enzymes in canine hearts. Sugiyama S, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):433–9

QX-314 restores gating charge immobilization abolished by chloramine-T treatment in squid giant axons. Tanguy J, et al. **Biophys J** 1989 Aug;56(2):421–7

Tocainide and metoprolol: an efficacious therapeutic combination in the treatment of premature ventricular beats. Capucci A, et al. **Clin Cardiol** 1989 Jun;12(6):322–31

Influence of rifampin on tocainide pharmacokinetics in humans. Rice TL, et al. **Clin Pharm** 1989 Mar;8(3):200–5

Mexiletine and tocainide: a comparison of antiarrhythmic efficacy, adverse effects, and predictive value of lidocaine testing. Murray KT, et al. **Clin Pharmacol Ther** 1989 May; 45(5):553–61

Tocainide-induced aplastic anemia [letter] Morrill GB, et al. **DICP** 1989 Jan;23(1):90–1

Tocainide blocks Na currents by accumulation of inactivated Na channels. Schwarz JR, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):267–70

Tocainide-induced pulmonary toxicity. Subauste CS, et al. **IMJ** 1988 Nov;174(5):287–9

Slowly developing activation block of cardiac sodium channels by a lidocaine analog, transcainide. Carmeliet E. **J Cardiovasc Pharmacol** 1988 Jul;12(1):110–5

Breast milk tocainide levels [letter] Wilson JH. **J Cardiovasc Pharmacol** 1988 Oct;12(4):497

The effect of histamine-2 receptor antagonists on tocainide pharmacokinetics. North DS, et al. **J Clin Pharmacol** 1988 Jul;28(7):640–3

Assay of free and total tocainide by high performance liquid chromatography (HPLC) with ultraviolet (UV) detection. Harris SC, et al. **J Forensic Sci** 1989 Jul;34(4):912–7

Treatment of hypertensive patients with ventricular arrhythmias: comparison and combination of beta-blocker and anti-arrhythmic therapy. Di Somma S, et al. **J Int Med Res** 1989 Mar–Apr;17(2):113–24

Class IB antiarrhythmic drugs: tocainide, mexiletine, and moricizine. Snyder DW. **J La State Med Soc** 1989 May; 141(5):21–5 (20 ref.)

Lignocaine metabolite formation as a measure of pre-transplant liver function. Oellerich M, et al. **Lancet** 1989 Mar 25;1(8639):640–2

Effects of a lidocaine derivative QX-572 on CA1 neuronal responses to electrical and chemical stimuli in a hippocampal slice. Segal M. **Neuroscience** 1988 Dec; 27(3):905–9

Donor rating in human liver transplantation: correlation of oxygen consumption after revascularization with MEGX formation in donors. Burdelski M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2392–3

Lidocaine metabolism as an index of liver function in hepatic transplant donors and recipients. Schroeder TJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2299–301

[Membrane currents and action potentials of myelinated nerve fibers and their modification by diphenylhydantoin and tocainide] Schwarz JR. **EEG EMG** 1988 Sep; 19(3):115–22 (Eng. Abstr.) (Ger)

[Pharmacokinetics of lidocaine and monoethylglycinexylidide after the intratracheal administration of lidocaine] Satoh Y. **Masui** 1988 Oct; 37(10):1192–8 (Eng. Abstr.) (Jpn)

ANALYSIS

High performance liquid chromatographic measurement of lignocaine in tissue samples following transabdominal placental biopsy. Monkman SC, et al. **Biomed Chromatogr** 1989 Mar;3(2):88–91

Definitive liquid-chromatographic demonstration that N-ethylglycine is the metabolite of lidocaine that interferes in the Kodak sarcosine oxidase-coupled method for creatinine. Roberts RT, et al. **Clin Chem** 1988 Dec; 34(12):2569–72

Identification of cocaine in ccoaine-lidocaine mixtures ("rock cocaine") and other illicit cocaine preparations using derivative absorption spectroscopy. Arufe-Martinez MI, et al. **J Anal Toxicol** 1988 Jul–Aug;12(4):192–6

Chemical stability of lignocaine (lidocaine) and adrenalin (epinephrine) in pH-adjusted parenteral solutions. Bonhomme L, et al. **J Clin Pharm Ther** 1988 Aug; 13(4):257–61

Stability of lidocaine in aqueous solution: effect of temperature, pH, buffer, and metal ions on amide hydrolysis. Powell MF. **Pharm Res** 1987 Feb;4(1):42–5

[Commonly used local anaesthetic-sensitive field effect transistor: its development and applications] Liu WZ, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):688–92 (Eng. Abstr.) (Chi)

[Preparation and analytical characteristics of lidocaine-selective electrode] Wang HX, et al. **Yao Hsueh Hsueh Pao** 1988 May;23(5):370–4 (Eng. Abstr.) (Chi)

ANTAGONISTS & INHIBITORS

Effect of midazolam pretreatment on the intravenous toxicity of lidocaine with and without epinephrine in rats. Torbiner ML, et al. **Anesth Analg** 1989 Jun;68(6):744–9

BLOOD

Therapeutic serum lidocaine and metabolite concentrations in patients undergoing electrophysiologic study after discontinuation of intravenous lidocaine infusion. Estes NA 3d, et al. **Am Heart J** 1989 May;117(5):1060–4

Effect of cimetidine and ranitidine on lidocaine concentrations during epidural anesthesia for cesarean section. Dailey PA, et al. **Anesthesiology** 1988 Dec; 69(6):1013–7

The influence of diazepam on the plasma concentrations of bupivacaine and lignocaine after caudal injection of a mixture of the local anaesthetics in children. Giaufre E, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):116–8

Application of the Abbott TDx lidocaine, phenytoin, and phenobarbital assays to postmortem blood specimens. Caplan YH, et al. **J Anal Toxicol** 1988 Sep–Oct;12(5):265–7

Plasma lidocaine levels during augmentation mammaplasty and suction-assisted lipectomy. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):624–7

Clinical response and total and unbound plasma concentrations after lidocaine overdose. Armstrong DK, et al. **Ther Drug Monit** 1988;10(4):499–500

[Simultaneous determination of lidocaine and quinidine in serum by a simple HPLC method] Zhang YR. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):226–9 (Eng. Abstr.) (Chi)

[Gas chromatographic determination of lidocaine in human plasma] Vetter B, et al. **Pharmazie** 1988 Aug;43(8):552–3 (Ger)

[Plasma lidocaine concentrations during epidural anesthesia—a comparison between patients with normal liver functions and those with abnormal functions] Miyamoto M, et al. **Masui** 1988 Jun;37(6):696–700 (Eng. Abstr.) (Jpn)

DIAGNOSTIC USE

Prognostic value of indocyanine green and lidocaine kinetics for survival and chronic hepatic encephalopathy in cirrhotic patients following elective end-to-side portacaval shunt. Pomier-Layrargues G, et al. **Hepatology** 1988 Nov-Dec;8(6):1506–10

METABOLISM

Lidocaine metabolite and creatinine measurements in the Ektachem 700: steps to minimize its impact on patient care.

Sena SF, et al. **Clin Chem** 1988 Oct;34(10):2144–8

Effects of age on the serum concentration of alpha 1-acid glycoprotein and the binding of lidocaine in pediatric patients. Lerman J, et al. **Clin Pharmacol Ther** 1989 Aug; 46(2):219–25

Prophylactic lidocaine: concentrations in plasma and myocardial tissue and antifibrillatoric efficacy during early ischemia in dogs and pigs. Vogt B, et al. **J Cardiovasc Pharmacol** 1988;12(5):571–8

Perioperative variability of binding of lidocaine, quinidine, and propranolol after cardiac operations. Davies RF, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):634–41

Lignocaine metabolite formation as a measure of pre-transplant liver function. Oellerich M, et al. **Lancet** 1989 Mar 25;1(8639):640–2

Lidocaine metabolism as an index of liver function in hepatic transplant donors and recipients. Schroeder TJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2299–301

PHARMACOKINETICS

Absorption of lidocaine and prilocaine after application of a eutectic mixture of local anesthetics (EMLA) on normal and diseased skin. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):18–22

Spread of radiopaque dye in the thoracic epidural space. Slappendel R, et al. **Anaesthesia** 1988 Nov;43(11):939–42

Tachyphylaxis associated with repeated epidural injections of lidocaine is not related to changes in distribution or the rate of elimination from the epidural space. Mogensen T, et al. **Anesth Analg** 1989 Aug;69(2):180–4

Pharmacokinetics of lidocaine in nonpregnant and pregnant ewes. Santos AC, et al. **Anesth Analg** 1988 Dec; 67(12):1154–8

Lidocaine disposition following intravenous regional anesthesia with different tourniquet deflation technics. Sukhani R, et al. **Anesth Analg** 1989 May;68(5):633–7

Clinical pharmacokinetics of carbonated local anesthetics. III: Interscalene brachial block model [published erratum appears in Anesth Analg 1989 Apr;68(4):550] Sukhani R, et al. **Anesth Analg** 1989 Feb;68(2):90–3

Pharmacokinetics of lidocaine and bupivacaine following subarachnoid administration in surgical patients: simultaneous investigation of absorption and disposition kinetics using stable isotopes. Burm AG, et al. **Anesthesiology** 1988 Oct;69(4):584–92

Interscalene brachial plexus blockade with lidocaine in chronic renal failure—a pharmacokinetic study. McEllistrem RF, et al. **Can J Anaesth** 1989 Jan;36(1):59–63

Peribulbar block for cataract surgery: a prospective double-blind study of two local anesthetics. Davis PL, et al. **Can J Ophthalmol** 1989 Jun;24(4):155–8

Are different pharmacokinetic properties of lidocaine versus propafenone in normal as compared to ischemic myocardium responsible for different electrophysiologic effects which help preventing arrhythmias? Puddu PE, et al. **Cardiologia** 1988 May;33(5):459–62

Systemic absorption of tetracycline and lidocaine following intrapleural instillation. Wooten SA, et al. **Chest** 1988 Nov; 94(5):960–3

Disposition of a flow-limited drug (lidocaine) and a metabolic capacity-limited drug (theophylline) in liver cirrhosis. Colli A, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):642–9

Effect of antipyrine coadministration on the kinetics of acetaminophen and lidocaine. Blyden GT, et al. **Eur J Clin Pharmacol** 1988;35(4):413–7

Pharmacokinetics of lidocaine and bupivacaine in retrobulbar and facial block. Le Normand Y, et al. **Fundam Clin Pharmacol** 1989;3(2):95–102

Lidocaine pharmacokinetics during water immersion in normal humans. Blyden G, et al. **J Appl Physiol** 1989 Jan; 66(1):57–60

Optimal pharmacokinetic delivery of infused drugs: application to the treatment of cardiac arrhythmias. Martin P, et al. **J Biomed Eng** 1988 Jul;10(4):360–4

Rapid estimation of unbound lidocaine clearance in cardiac patients: implications for reducing toxicity [published erratum appears in J Clin Pharmacol 1989 Feb;29(2):157] Denson DD, et al. **J Clin Pharmacol** 1988 Nov; 28(11):995–1000

Effects of cimetidine on lidocaine distribution in rats. Shibasaki S, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):785–93

Spread of local anesthetics in the epidural space. Yip WH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):459–66

Systemic absorption of topical lidocaine in elderly and young adults undergoing bronchoscopy. Ameer B, et al. **Pharmacotherapy** 1989;9(2):74–81

[Pharmacokinetics of epidural lidocaine anesthesia] Xie DJ. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):324–5, 381 (Eng. Abstr.) (Chi)

[Plasma concentrations of lidocaine and prilocaine following infiltration anesthesia in otorhinolaryngologic surgery] Bachmann B, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul; 67(7):335–9 (Eng. Abstr.) (Ger)

[Myocardial distribution of C-14 lidocaine and C-14 propafenone in relation to regional myocardial blood flow in a model of chronic-phase myocardial infarct] Naccarella F, et al. **Cardiologia** 1988 May;33(5):453–8 (Eng. Abstr.) (Ita)

[Pharmacokinetics and the lung uptake of lidocaine during epidural anesthesia] Endo M, et al. **Masui** 1989 Jan; 38(1):59–65 (Eng. Abstr.) (Jpn)

[Pharmacokinetics of lidocaine and monoethylglycinexylidide after the intratracheal administration of lidocaine] Satoh Y. **Masui** 1988 Oct; 37(10):1192–8 (Eng. Abstr.) (Jpn)

[Effect of dopamine on lidocaine metabolism in patients after partial liver resection—a pharmacokinetic analysis] Takata T. **Masui** 1989 Mar;38(3):357–65 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Is there a second external lidocaine binding site on mammalian cardiac cells? Alpert LA, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H79–84

pH and voltage dependence of INa recovery kinetics in atrial cells exposed to lidocaine. Courtney KR. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1554–7

Effects of lidocaine on sarcolemmal fluidity and cellular cAMP in rat cardiomyocytes. Roux S, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H422–7

Efficacy of lignocaine in the suppression of the intra-ocular pressure response to suxamethonium and tracheal intubation. Grover VK, et al. **Anaesthesia** 1989 Jan; 44(1):22–5

Effect of epidural lidocaine on spinal cord blood flow. Mitchell P, et al. **Anesth Analg** 1989 Mar;68(3):312–7

Smooth muscle contraction and local anesthetics: calmodulin-dependent myosin light-chain kinase. Nosaka S, et al. **Anesth Analg** 1989 Oct;69(4):504–10

Inhibition of peritonitis by amide local anesthetics. Rimbäck G, et al. **Anesthesiology** 1988 Dec;69(6):881–6

Resolution of experimental microvascular vasoconstriction in rats by topical application of lidocaine hydrochloride in varying concentrations. Beekman WH, et al. **Ann Plast Surg** 1988 Dec;21(6):570–5

Effect of prenatal lignocaine on auditory brain stem evoked response. Bozynski ME, et al. **Arch Dis Child** 1989 Jul; 64(7):934–8

Effects of lidocaine alone and in combination with tetraethylammonium on the maximum upstroke velocity in guinea-pig papillary muscles. Ban T, et al. **Arzneimittelforschung** 1989 Jul;39(7):770–4

Electrophysiological interactions between carbachol and class I antiarrhythmic drugs (lidocaine, quinidine)—experimental studies in rabbit atrial myocardium. Langenfeld H, et al. **Basic Res Cardiol** 1989 Jan-Feb;84(1):55–62

Combined application of propranolol and local anesthetics: enhanced anticonvulsant action. Müller M, et al. **Biomed Biochim Acta** 1989;48(4):333–6

Use-dependent block of single sodium channels by lidocaine in guinea pig ventricular myocytes. McDonald TV, et al. **Biophys J** 1989 Jun;55(6):1261–6

Developmental neurophysiology of mammalian peripheral nerves and age-related differential sensitivity to local anaesthetic. Benzon HT, et al. **Br J Anaesth** 1988 Dec; 61(6):754–60

Ventilatory response to carbon dioxide during extradural anaesthesia with lignocaine and fentanyl. Morisot P, et al. **Br J Anaesth** 1989 Jul;63(1):97–102

Blockade of the voltage-dependent sodium current in isolated rat hippocampal neurons by tetrodotoxin and lidocaine. Kaneda M, et al. **Brain Res** 1989 Apr 10;484(1-2):348–51

Spreading depression induced by 100 mM KCl in caudate is blocked by local anesthesia of the substantia nigra. Kasser RJ, et al. **Brain Res** 1988 Dec 20;475(2):333–44

Haemodynamic responses to laryngoscopy and tracheal intubation in geriatric patients: effects of fentanyl, lidocaine and thiopentone. Splinter WM, et al. **Can J Anaesth** 1989 Jul;36(4):370–6

Opposite effects of lidocaine and diltiazem on electrophysiologic alterations in acutely ischemic porcine myocardium. Cardinal R, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):697–703

Evidence for two components of sodium channel block by lidocaine in isolated cardiac myocytes. Clarkson CW, et al. **Circ Res** 1988 Nov;63(5):869–78

Blockade of rabbit atrial sodium channels by lidocaine. Characterization of continuous and frequency-dependent blocking. Gilliam FR 3d, et al. **Circ Res** 1989 Sep; 65(3):723–39

Inhaled lignocaine does not alter bronchial hyperresponsiveness to hyperventilation of dry cold air in asthmatic subjects. Caire N, et al. **Clin Exp Allergy** 1989 Jan;19(1):65–70

Acute effects of lidocaine on repolarization and conduction in patients with coronary artery disease. Endresen K, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):387–95

Changes in equine carpal joint synovial fluid in response to the injection of two local anesthetic agents. White KK, et al. **Cornell Vet** 1989 Jan;79(1):25–38

IV lidocaine as an analgesic. Pon D, et al. **DICP** 1989 Jul-Aug;23(7-8):602–4

Electrophysiological effects of lidocaine on isolated guinea pig Purkinje fibers: comparison with its effects on papillary muscle. Aomine M. **Gen Pharmacol** 1989;20(1):99–104

Antibacterial activity of local anaesthetics procaine & lignocaine. Dastidar SG, et al. **Indian J Med Res** 1988 May; 87:506–8

Local dental anaesthesia with lidocaine and adrenaline. Effects on plasma catecholamines, heart rate and blood pressure. Salonen M, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):392–4

Assessment of ST segment depression in patients with cardiac disease after local anesthesia. Vanderheyden PJ, et al. **J Am Dent Assoc** 1989 Sep;119(3):407–12

Interaction of metoprolol and lidocaine on the ventricular fibrillation threshold in the anesthetized dog. de Langen CD, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):683–8

Lidocaine-induced inhibition of the production of interleukin 1-like epidermal cell-derived thymocyte activating factor. Enk C. **J Invest Dermatol** 1989 Aug;93(2):268–71

Lidocaine blocks Na, Ca and K currents of chick ventricular myocytes. Josephson IR. **J Mol Cell Cardiol** 1988 Jul; 20(7):593–604

Effects of topical anesthetic agents on Campylobacter pylori. Czinn SJ, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul; 9(1):46–8

Beneficial effects of lidocaine and disopyramide on oxygen-deficiency-induced contractile failure and metabolic disturbance in isolated rabbit hearts. Takeo S, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):306–14

The effect of intravenous lidocaine on experimental brain edema and neural activities. Nagao S, et al. **J Trauma** 1988 Dec;28(12):1650–5

Assessment of membrane protection by 31P-NMR effects of lidocaine on calcium-paradox in myocardium. Sakai H, et al. **Life Sci** 1989;45(3):217–22

Effects of labetalol and lidocaine on B.P. and H.R. during laryngoscopy and endotracheal intubation. Tzeng CC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):265–72

Class I antiarrhythmic drug receptor: biochemical evidence for state-dependent interaction with quinidine and lidocaine. Hill RJ, et al. **Mol Pharmacol** 1989 Jul; 36(1):150–9

Effects of AN-132, a novel antiarrhythmic lidocaine analogue, and of lidocaine on membrane ionic currents of guinea-pig ventricular myocytes. Ono K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):221–9

Impaired responsiveness of paraventricular neurosecretory neurons to osmotic stimulation in rats after local anesthesia of the subfornical organ. Tanaka J, et al. **Neurosci Lett** 1989 Mar 13;98(1):51–6

The effects of two different dental local anesthetic solutions on plasma potassium levels during third molar surgery. Meechan JG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):650–3

Effect of cocaine and lidocaine on the development of kindled seizures. Stripling JS, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):463–8

Effects of alaprocilate, potassium channel blockers, and lidocaine on the release of 3H-acetylcholine from the guinea-pig ileum myenteric plexus. Alberts P, et al. **Pharmacol Toxicol** 1989 Jul;65(1):25–32

Actions of three local anaesthetics: lidocaine, bupivacaine and ropivacaine on guinea pig papillary muscle sodium channels (Vmax). Arlock P. **Pharmacol Toxicol** 1988 Aug; 63(2):96–104

Influence of lidocaine on plasma protein binding and pharmacokinetics of verapamil in dogs. Belpaire FM, et al. **Prog Clin Biol Res** 1989;300:437–40

[In vitro microbiological research on oral ointments] Oehring H, et al. **Zahn Mund Kieferheilkd** 1989;77(4):312–5 (Eng. Abstr.) (Ger)

[Hemodynamic effects of lidocaine in peripheral arterial flow in dog] Satoh S. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1078–85 (Eng. Abstr.) (Jpn)

[Conformational analysis of anti-arrhythmia agents of the lidocaine series and a model for the mechanism of their action] Volkenshtein MV, et al. **Biofizika** 1988 Nov-Dec; 33(6):968–72 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Propofol as an induction agent in children: pain on injection and pharmacokinetics. Valtonen M, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):152–5

Reducing cocaine solution use by promoting the use of a lidocaine-phenylephrine solution. Goodell JA, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2510–3

Incidence of emesis and postanesthetic recovery after strabismus surgery in children: a comparison of droperidol and lidocaine. Christensen S, et al. **Anesthesiology** 1989 Feb; 70(2):251–4

Pain of delayed traumatic splenic rupture masked by intrapleural lidocaine. Pond WW, et al. **Anesthesiology** 1989 Jan;70(1):154–5

Lack of effectiveness of lidocaine for sustained, wide QRS complex tachycardia. Armengol RE, et al. **Ann Emerg Med** 1989 Mar;18(3):254–7

Local anesthetic creams [letter] **BMJ** 1988 Dec 3; 297(6661):1468

Relief of experimentally induced pruritus with a novel eutectic mixture of local anaesthetic agents. Shuttleworth D, et al. **Br J Dermatol** 1988 Oct;119(4):535–40

Failure of a lidocaine test dose to identify subdural placement of an epidural catheter. Crosby ET, et al. **Can J Anaesth** 1989 Jul;36(4):445–7

The effects of a prophylactic bolus of lidocaine in focal cerebral ischaemia. Gelb AW, et al. **Can J Anaesth** 1988 Sep;35(5):489–93

Lignocaine in experimental myocardial infarction: failure to prevent neutrophil accumulation and ventricular fibrillation and to reduce infarct size. de Lorgeril M, et al. **Cardiovasc Res** 1988 Jun;22(6):439–46

Experience with a new topical anaesthetic in otology. Timms MS, et al. **Clin Otolaryngol** 1988 Dec;13(6):485–90
Prediction of efficacy and tolerance of oral mexiletine by intravenous lidocaine application. Zehender M, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):389–95
Patient tolerance to intravenous potassium chloride with and without lidocaine. Pucino F, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):676–9
A comparative evaluation of the effects of propafenone and lidocaine on early ventricular arrhythmias after acute myocardial infarction. Touboul P, et al. **Eur Heart J** 1988 Nov;9(11):1188–93
Post-operative sore throat: effect of lignocaine jelly and spray with endotracheal intubation. Klemola UM, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):391–9
Lidocaine treatment of neonatal convulsions, a therapeutic dilemma. Wallin A, et al. **Eur J Clin Pharmacol** 1989; 36(6):583–6
Protective effect of lidocaine against ischemia and reperfusion-induced arrhythmias and shifts of myocardial sodium, potassium, and calcium content. Tosaki A, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):621–8
Protection against cerebral hypoxia by local anesthetics: a study using brain slices. Lucas LF, et al. **J Neurosci Methods** 1989 May;28(1–2):47–50
Lidocaine in treatment of hypoxia [letter] Amyes EW. **J Neurosurg** 1989 Jul;71(1):153–4
Effect of lidocaine after experimental cerebral ischemia induced by air embolism. Evans DE, et al. **J Neurosurg** 1989 Jan;70(1):97–102
Prophylactic lidocaine in acute MI [letter] **JAMA** 1989 Mar 3;261(9):1278–9
Epidural xylocaine and pethidine for control of labor pain—a comparative study. Takrouri MS, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):545–51
Anticonvulsive and convulsive effects of lidocaine: comparison with those of phenytoin, and implications for mechanism of action concepts. Stone WE, et al. **Neurol Res** 1988 Sep;10(3):161–8
Pain responses to perineuromal injection of normal saline, gallamine, and lidocaine in humans. Chabal C, et al. **Pain** 1989 Mar;36(3):321–5
Psychophysical observations on patients with neuropathic pain relieved by a sympathetic block. Price DD, et al. **Pain** 1989 Mar;36(3):273–88
Topical skin anesthesia for venous, subcutaneous drug reservoir and lumbar punctures in children. Halperin DL, et al. **Pediatrics** 1989 Aug;84(2):281–4
A prospective, randomized, double-blind evaluation of trigger-point injection therapy for low-back pain. Garvey TA, et al. **Spine** 1989 Sep;14(9):962–4
Effect of lidocaine on forebrain ischemia in rats. Sutherland G, et al. **Stroke** 1989 Jan;20(1):119–22
A preliminary comparison of lidocaine and xylazine as epidural analgesics in ponies. Fikes LW, et al. **Vet Surg** 1989 Jan–Feb;18(1):85–6
[Cardiocirculatory effects of lignocaine] Fassoulaki A, et al. **Cah Anesthesiol** 1989 May;37(3):201–2 (Fre)
[Lidocaine treatment of poisoning with yew needles (Taxus baccata L.)] von Dach B, et al. **Schweiz Med Wochenschr** 1988 Jul 30;118(30):1113–6 (Eng. Abstr.) (Ger)
[2 cases of lidocaine-resistant ventricular tachycardia treated with i.v. mexiletine during complicated acute myocardial infarct] Romanò M, et al. **Clin Ter** 1987 Nov 30; 123(4):297–301 (Eng. Abstr.) (Ita)
[The effect of intravenous administration of xylocaine for the treatment of tinnitus] Yamanaka E, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):566–73 (Eng. Abstr.) (Jpn)
[Antiarrhythmic drug therapy for arrhythmogenic right ventricular dysplasia] You S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):387–92 (Jpn)
[Use of ethacizine and lidocaine to prevent ventricular fibrillation in acute myocardial infarction] Tsyganov OO. **Sov Med** 1988;(11):54–5 (Rus)

TOXICITY

Myocardial and cerebral drug concentrations and the mechanisms of death after fatal intravenous doses of lidocaine, bupivacaine, and ropivacaine in the sheep. Nancarrow C, et al. **Anesth Analg** 1989 Sep;69(3):276–83
Hemodynamic and central nervous system effects of intravenous bolus doses of lidocaine, bupivacaine, and ropivacaine in sheep. Rutten AJ, et al. **Anesth Analg** 1989 Sep;69(3):291–9
Adverse effects of maternally administered lidocaine on the asphyxiated preterm fetal lamb. Morishima HO, et al. **Anesthesiology** 1989 Jul;71(1):110–5
Structural effects of the topical lidocaine–prilocaine anesthetic Emla on the tympanic membrane. Schmidt SH, et al. **Arch Otorhinolaryngol** 1988;245(3):136–41
[A lidocaine base for surface anesthesia of the tympanic membrane] Strutz J, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):340–2 (Eng. Abstr.) (Ger)

LIDOFLAZINE see under **PIPERAZINES**

LIE DETECTION

Polygraph lecture: what did students learn? [letter] Buckley JP. **Am Pharm** 1989 Aug;NS29(8):5
A modified, event-related potential-based guilty knowledge test. Rosenfeld JP, et al. **Int J Neurosci** 1988 Sep; 42(1–2):157–61

LIFE CARE CENTERS, RETIREMENT see **HOMES FOR THE AGED**

LIFE CHANGE EVENTS

The role of life events in the myasthenia gravis outcome: a one-year longitudinal study. Magni G, et al. **Acta Neurol Scand** 1989 Apr;79(4):288–91
Major depression, anxiety disorders and mixed conditions. Childhood and precipitating events. Alnaes R, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):632–8
Characteristics of patients with major depression in combination with dysthymic or cyclothymic disorders. Childhood and precipitating events. Alnaes R, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):11–8
Locus of control, life events and treatment outcome in alcohol dependent patients. Canton G, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):18–23
A clinical study of reactive psychosis. Chavan BS, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):712–5
Pain in non-psychotic psychiatric patients: life events, symptomatology and personality traits. Jensen J. **Acta Psychiatr Scand** 1988 Aug;78(2):201–7
Childbirth as a life event: sociocultural aspects of postnatal depression. Cox JL. **Acta Psychiatr Scand Suppl** 1988; 344:75–83 (41 ref.)
The role of postcessation factors in tobacco abstinence: stressful events and coping responses. Wewers ME. **Addict Behav** 1988;13(3):297–302
Assessment of life events during adolescence: the use of self-report inventories. Williams CL, et al. **Adolescence** 1989 Spring;24(93):95–118 (65 ref.)
Alcoholic women in treatment: early histories and early problem behaviors. Gomberg ES. **Adv Alcohol Subst Abuse** 1989;8(2):133–47
Psychological influences on immunity: making sense of the relationship between stressful life events and health. Kiecolt-Glaser JK, et al. **Adv Exp Med Biol** 1988; 245:237–47 (47 ref.)
Resilient children, psychological wellness, and primary prevention. Cowen EL, et al. **Am J Community Psychol** 1988 Aug;16(4):591–607 (90 ref.)
Prior experience as a moderator of disaster impact on anxiety symptoms in older adults. Norris FH, et al. **Am J Community Psychol** 1988 Oct;16(5):665–83
The timing of major life events: effects of departing from the social clock. Rook KS, et al. **Am J Community Psychol** 1989 Apr;17(2):233–58
High-risk children in young adulthood: a longitudinal study from birth to 32 years. Werner EE. **Am J Orthopsychiatry** 1989 Jan;59(1):72–81
Antidepressant action of crisis seeking and crisis making [letter] Brodsky L. **Am J Psychiatry** 1989 May;146(5):683
Life events of adolescents in relation to personal and parental substance abuse. Brown SA. **Am J Psychiatry** 1989 Apr; 146(4):484–9
Psychosocial distress and well-being among gay and bisexual men with human immunodeficiency virus infection. Chuang HT, et al. **Am J Psychiatry** 1989 Jul;146(7):876–80
Recent life events and panic disorder. Faravelli C, et al. **Am J Psychiatry** 1989 May;146(5):622–6
Use of DSM-III axis IV in clinical practice: rating etiologically significant stressors. Skodol AE, et al. **Am J Psychiatry** 1989 Jan;146(1):61–6
Psychological influences on immunity. Implications for AIDS. Kiecolt-Glaser JK, et al. **Am Psychol** 1988 Nov; 43(11):892–8 (56 ref.)
Family burden and family stigma in major mental illness. Lefley HP. **Am Psychol** 1989 Mar;44(3):556–60 (36 ref.)
Perceptions of life-pattern disintegrity as a link in the relationship between stress and illness. Dixon JP, et al. **ANS** 1989 Jan;11(2):1–11
An empirical study of defense mechanisms. I. Clinical interview and life vignette ratings. Perry JC, et al. **Arch Gen Psychiatry** 1989 May;46(5):444–52
A tormented mind: clinical and theoretical implications of overwhelming life events. Watson PB. **Aust N Z J Psychiatry** 1989 Mar;23(1):97–102
Appraisal of the event as a factor in coping with malpractice litigation. Charles SC, et al. **Behav Med** 1988 Winter; 14(4):148–55
Cognitive mediation of responses to life stress. Gillis JS, et al. **Behav Med** 1989 Spring;15(1):18–22
An examination of the life stress–injury relationship among noncontact sport participants. Hardy CJ, et al. **Behav Med** 1988 Fall;14(3):113–8
Positive life events and depressive symptoms in older adults. Krause N. **Behav Med** 1988 Fall;14(3):101–12
Associations between selected life events and cancer. Scherg H, et al. **Behav Med** 1988 Fall;14(3):119–24
Elevation of glycosylated hemoglobin in a severe crisis situation—cancer in a close relative. Theorell T, et al. **Behav Med** 1988 Fall;14(3):125–8
Relationship of hassles, uplifts, and life events to psychological well-being of freshman medical students. Wolf TM, et al. **Behav Med** 1989 Spring;15(1):37–45
The role of life events in the onset of panic disorder. De Loof C, et al. **Behav Res Ther** 1989;27(4):461–3
Depression and the frequency and strength of pleasant events: exploration of the Staats–Heiby theory. Rose GD, et al. **Behav Res Ther** 1988;26(6):489–94
Reporting of life events, family history of hypertension, and cardiovascular activity at rest and during psychological stress. Jorgensen RS, et al. **Biol Psychol** 1989 Apr; 28(2):135–48
Stress and relapse of breast cancer [see comments] Ramirez AJ, et al. **BMJ** 1989 Feb 4;298(6669):291–3. **Comment in:** **Comment in:** BMJ 1989 Apr 8;298(6678):962–3 BMJ 1989 Apr 15;298(6679):1032
Type A behaviour and life-events. Järvikoski A, et al. **Br J Med Psychol** 1988 Dec;61 (Pt 4):353–63
The Camberwell Collaborative Depression Study. I. Depressed probands: adversity and the form of depression. Bebbington PE, et al. **Br J Psychiatry** 1988 Jun;152:754–65
Life events, difficulties and recovery from chronic depression. Brown GW, et al. **Br J Psychiatry** 1988 Apr; 152:487–98
Behavioural disorder in the mentally handicapped. The role of life events. Ghaziuddin M. **Br J Psychiatry** 1988 May; 152:683–6
Life events and schizophrenia in Nigerians. A controlled investigation. Gureje O, et al. **Br J Psychiatry** 1988 Sep; 153:367–75
The Camberwell Collaborative Depression Study. III. Depression and adversity in the relatives of depressed probands. McGuffin P, et al. **Br J Psychiatry** 1988 Jun; 152:775–82
Cumulative traumata as contributors to chronicity in schizophrenia. Honig AM. **Bull Menninger Clin** 1988 Sep; 52(5):423–34
Reported illness after a CGE closure. Grayson JP. **Can J Public Health** 1989 Jan–Feb;80(1):16–9
Biological and social contributions to negative affect in young adolescent girls. Brooks-Gunn J, et al. **Child Dev** 1989 Feb; 60(1):40–55
Coping with family transitions: winners, losers, and survivors. Hetherington EM. **Child Dev** 1989 Feb;60(1):1–14 (26 ref.)
Stress and psychopathology in children of international employees. Aisenstein C. **Child Psychiatry Hum Dev** 1988 Fall;19(1):45–59
Comparing families in crisis. **Child Today** 1988 Jul–Aug; 17(4):3
Stressful life events in the pathogenesis of Cushing's syndrome. Sonino N, et al. **Clin Endocrinol (Oxf)** 1988 Dec; 29(6):617–23
Coping with the social environment: the relationship between life events, coping strategies and psychological distress. Headey B, et al. **Community Health Stud** 1988;12(4):444–52
Social support and life stress: a mental health consumers perspective. Sullivan WP, et al. **Community Ment Health J** 1989 Spring;25(1):21–32
Method and technique of life events research in depression and anxiety. Oei TI. **Compr Psychiatry** 1988 Nov–Dec; 29(6):566–74 (59 ref.)
Sexual life events and schizophrenia [letter] Remington GJ. **Compr Psychiatry** 1989 Jan–Feb;30(1):114
Preparing for life: the critical transition of adolescence. Hamburg D. **Crisis** 1989 Apr;10(1):4–15
Stress antecedents and immune status in recently diagnosed type I (insulindependent) diabetes mellitus. Vialettes B, et al. **Diabete Metab** 1989 Jan–Feb;15(1):45–50
Psychosocial factors and the onset of type 1 diabetes. Robinson N, et al. **Diabetic Med** 1989 Jan–Feb;6(1):53–8
Employment, stressful life events and the development of alcohol dependence. Gorman DM. **Drug Alcohol Depend** 1988 Oct;22(1–2):151–9
Seizure frequency and major life events in epilepsy. Webster A, et al. **Epilepsia** 1989 Mar–Apr;30(2):162–7
Long-term course of schizoaffective disorders. Part III: Onset, type of episodes and syndrome shift, precipitating factors, suicidality, seasonality, inactivity of illness, and outcome. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):283–90
Reproductive outcome in women who lost their husbands in the course of pregnancy. Cepický P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):137–40
The association of health with stressful life changes, social supports, and coping. Blake RL Jr, et al. **Fam Pract Res J** 1988 Summer;7(4):205–18
A psychocutaneous profile of psoriasis patients who are stress reactors. A study of 127 patients. Gupta MA, et al. **Gen Hosp Psychiatry** 1989 May;11(3):166–73
Nursing home life: Part 2. Your helping hand. Brooke V. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):126–8
Life events and alcohol behavior among older adults. La Greca AJ, et al. **Gerontologist** 1988 Aug;28(4):552–8
Level of depressive symptoms and life stresses for culturally diverse older adults. Smallegan M. **Gerontologist** 1989 Feb; 29(1):45–50
Aging according to biography. Weiland S. **Gerontologist** 1989 Apr;29(2):191–4
Exercise as a buffer of life stress: a prospective study of adolescent health. Brown JD, et al. **Health Psychol** 1988; 7(4):341–53
Life stress and lymphocyte alterations among patients with rheumatoid arthritis. Zautra AJ, et al. **Health Psychol** 1989; 8(1):1–14
The role of social factors in affective disorders: a review. O'Connell RA, et al. **Hosp Community Psychiatry** 1988

Aug;39(8):842–51 (81 ref.)
Psychiatric responses to trauma. Rundell JR, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):68–74 (84 ref.)
Stressful events [letter] Segal SA, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):998
Internal migration in the contemporary United States: comparison of measures and partitioning of stages. Koenig WD. **Hum Biol** 1988 Dec;60(6):927–44
Recent life event frequencies in Nigerians with essential hypertension [letter] Odia OJ, et al. **Hypertension** 1988 Sep; 12(3):330–1
A comparison of thematic apperceptions of sibling affiliation, conflict, and separation at two periods of adulthood. Bedford VH. **Int J Aging Hum Dev** 1989;28(1):53–66
Observed changes in the functioning of nursing home residents after relocation. Bonardi E, et al. **Int J Aging Hum Dev** 1989;28(4):295–304
Do past experiences predict agitation in nursing home residents? Cohen–Mansfield J, et al. **Int J Aging Hum Dev** 1989;28(4):285–94
Age differences in life events: a multivariate controlled analysis. Hughes DC, et al. **Int J Aging Hum Dev** 1988; 27(3):207–20
The perceptual presence of the life course. Redfoot DL, et al. **Int J Aging Hum Dev** 1988;27(3):155–70
Mourning and reminiscence: parallel psychotherapeutic processes for elderly people. Viney LL, et al. **Int J Aging Hum Dev** 1989;28(4):239–49
Preventing adverse changes of work with age. Welford AT. **Int J Aging Hum Dev** 1988;27(4):283–91
Characteristics of past smokers. Kato I, et al. **Int J Epidemiol** 1989 Jun;18(2):345–54
Effect of pregnancy on psychosis: life circumstances and psychiatric symptoms. Kreuer P, et al. **Int J Psychiatry Med** 1989;19(1):65–84
Trauma as a shibboleth in psychoanalysis? Sacerdoti G, et al. **Int J Psychoanal** 1989;70 (Pt 1):95–103
Adversity and the symptoms of depression. Bebbington PE, et al. **Int J Soc Psychiatry** 1988 Autumn;34(3):163–71
Life events and onset of obsessive compulsive disorder. Khanna S, et al. **Int J Soc Psychiatry** 1988 Winter; 34(4):305–9
A comparison of depressed and nondepressed disturbed children on measures of attributional style, hopelessness, life stress, and temperament. Benfield CY, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):397–410
Common problems and coping strategies. II: Findings with adolescent suicide attempters. Spirito A, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):213–21
Common problems and coping strategies. I: Findings with normal adolescents. Stark LJ, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):203–12
Sociotropy/autonomy and vulnerability to specific life events in patients with unipolar depression and bipolar disorders. Hammen C, et al. **J Abnorm Psychol** 1989 May;98(2):154–60
Panic onset and major events in the lives of agoraphobics: a test of contiguity. Pollard CA, et al. **J Abnorm Psychol** 1989 Aug;98(3):318–21
Anxiety, depression, and assertion across alternating intervals of stress. Saigh PA. **J Abnorm Psychol** 1988 Aug; 97(3):338–41
Negative life events, coping responses, and combat–related psychopathology: a prospective study. Solomon Z, et al. **J Abnorm Psychol** 1988 Aug;97(3):302–7
Transitions in the nuclear age: late adolescence to early adulthood. Van Hoorn J, et al. **J Adolesc** 1989 Mar; 12(1):41–53
Psychosocial stress and minor psychiatric morbidity: a community study in Taiwan. Cheng TA. **J Affective Disord** 1989 Sep–Oct;17(2):137–52
Self–esteem, life stress and psychiatric disorder. Miller PM, et al. **J Affective Disord** 1989 Jul–Aug;17(1):65–75
Binary and rate measures of life event experience: their association with illness onset in Edinburgh and London community surveys. Surtees PG, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):139–49
Reliability of life event assessments: test–retest reliability and fall–off effects of the Munich Interview for the Assessment of Life Events and Conditions. Wittchen HU, et al. **J Affective Disord** 1989 Jan–Feb;16(1):77–91
Psychosocial and medical histories of stimulant–treated children. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):798–801
Life attitudes, dreams, and psychic trauma in a group of "normal" children. Terr LC. **J Am Acad Child Psychiatry** 1983 May;22(3):221–30
Complexities in life stress–dysfunction relationships: a case in point—tension headache. Hovanitz CA, et al. **J Behav Med** 1989 Feb;12(1):55–75
Coping style, cognitive hardiness, and health status. Nowack KM. **J Behav Med** 1989 Apr;12(2):145–58
Maternal adversity and recent stressful life events in anxious and depressed children. Goodyer IM, et al. **J Child Psychol Psychiatry** 1988 Sep;29(5):651–67
Recent life events and psychiatric disorder in children: the interaction with preceding extreme adversity. McFarlane AC. **J Child Psychol Psychiatry** 1988 Sep;29(5):677–90
Anxiety and physical illness. Rahe RH. **J Clin Psychiatry** 1988 Oct;49 Suppl:26–9
The brain, depression, and the immune system. Restak RM. **J Clin Psychiatry** 1989 May;50 Suppl:23–5; discussion 26 (9 ref.)
Stress, depression, and the immune system. Stein M. **J Clin Psychiatry** 1989 May;50 Suppl:35–40; discussion 41–2 (35 ref.)
Behavioral and neural influences on cellular immune responses: effects of stress and interleukin–1. Weiss JM, et al. **J Clin Psychiatry** 1989 May;50 Suppl:43–53; discussion 54–5 (43 ref.)
Dimensions of coping that contribute to psychopathology. Clark AA, et al. **J Clin Psychol** 1989 Jan;45(1):28–36
Life events and psychopathology severity: comparisons between psychiatric outpatients and inpatients. Harder DW, et al. **J Clin Psychol** 1989 Mar;45(2):202–9
Irrational thinking and negative emotionality in college students and applicants for mental health services. Muran JC, et al. **J Clin Psychol** 1989 Mar;45(2):188–93
A shortened MMPI useful for psychiatric screening of the non–institutionalized elderly. Smith LW, et al. **J Clin Psychol** 1989 May;45(3):359–65
The relation between immunity and health: comment on Pennebaker, Kiecolt–Glaser, and Glaser. Neale JM, et al. **J Consult Clin Psychol** 1988 Aug;56(4):636–7
Confronting traumatic experience and immunocompetence: a reply to Neale, Cox, Valdimarsdottir, and Stone. Pennebaker JW, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):638–9
Twins' responses to pleasant, unpleasant, and life events. Wierzbicki M. **J Genet Psychol** 1989 Jun;150(2):135–45
Stressful life events and depressive symptoms: disaggregating the effects of acute stressors and chronic strains. Avison WR, et al. **J Health Soc Behav** 1988 Sep;29(3):253–64
The importance of listening to medical students' experiences when teaching them medical ethics. Osborne LW, et al. **J Med Ethics** 1989 Mar;15(1):35–8
Gender and depression: assessing exposure and vulnerability to life events in a chronically strained population. Turner RJ, et al. **J Nerv Ment Dis** 1989 Aug;177(8):443–55
Severely threatening events and marked life difficulties preceding onset or exacerbation of multiple sclerosis. Grant I, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):8–13
Is it possible to prepare for trauma? Weiss RS. **J Palliat Care** 1988 May;4(1–2):74–6
Relationships among life stress, perceived family environment, and the psychological distress of spina bifida adolescents. Murch RL, et al. **J Pediatr Psychol** 1989 Jun; 14(2):193–214
The impact of stress and temperament on medical utilization by school–age children. Wertlieb D, et al. **J Pediatr Psychol** 1988 Sep;13(3):409–21
Type A personality, self–control, and vulnerability to stress. Heilbrun AB Jr, et al. **J Pers Assess** 1988 Fall;52(3):420–33
Explanatory style across the life span: evidence for stability over 52 years. Burns MO, et al. **J Pers Soc Psychol** 1989 Mar;56(3):471–7
Effects of induced mood on self–reported life events and perceived and received social support. Cohen LH, et al. **J Pers Soc Psychol** 1988 Oct;55(4):669–74
Mental addition versus subtraction in counterfactual reasoning: on assessing the impact of personal actions and life events. Dunning D, et al. **J Pers Soc Psychol** 1989 Jul;57(1):5–15
Appraisal of life change, depression, and illness in hardy and nonhardy women. Rhodewalt F, et al. **J Pers Soc Psychol** 1989 Jan;56(1):81–8
Life events, fitness, hardiness, and health: a simultaneous analysis of proposed stress–resistance effects. Roth DL, et al. **J Pers Soc Psychol** 1989 Jul;57(1):136–42
Major life events, hassles, and adaptation in adolescence: confounding in the conceptualization and measurement of life stress and adjustment revisited. Rowlison RT, et al. **J Pers Soc Psychol** 1988 Sep;55(3):432–44
Instrumentality as a life–stress moderator for early versus middle adolescents. Towbes LC, et al. **J Pers Soc Psychol** 1989 Jul;57(1):109–19
Coping with transition. Gonzales–Osler E. **J Psychosoc Nurs Ment Health Serv** 1989 Jun;27(6):29, 32–3
Accident or suicide? Do life change events lead to adolescent suicide? Parker SD. **J Psychosoc Nurs Ment Health Serv** 1988 Jun;26(6):15–9
Minor infection, minor life events and the four day desirability dip. Evans PD, et al. **J Psychosom Res** 1988; 32(4–5):533–9
Life events and difficulties preceding the onset of functional dysphonia. House AO, et al. **J Psychosom Res** 1988; 32(3):311–9
The children of alcoholics life–events schedule: a stress scale for children of alcohol–abusing parents. Roosa MW, et al. **J Stud Alcohol** 1988 Sep;49(5):422–9
Mental tests on elderly patients [letter] van Der Cammen TJ, et al. **Lancet** 1989 May 20;1(8647):1138
The menopause viewed in relation to other life events—a study performed in Belgium. Boulet M, et al. **Maturitas** 1988 Dec;10(4):333–42
Social support, stressful events, strain, dietary intake, and the elderly. McIntosh WA, et al. **Med Care** 1989 Feb; 27(2):140–53
Life events in neurological patients with headache and low back pain (in relation to diagnosis and persistence of pain) by Jørgen Jensen [letter] Speculand B. **Pain** 1988 Dec; 35(3):363–4
Innovations in the management of change. Byrne RB. **Prog Clin Biol Res** 1989;293:7–14
Psychological issues affecting women throughout the life cycle. Seiden AM. **Psychiatr Clin North Am** 1989 Mar; 12(1):1–24 (19 ref.)
General management of depressive illness. Psychosocial issues. Brown JH. **Psychiatr J Univ Ottawa** 1989 Jun; 14(2):426–9 (36 ref.)
Trauma or drive—drive and trauma. A reading of Sigmund Freud's phylogenetic fantasy of 1915. Grubrich–Simitis I. **Psychoanal Study Child** 1988;43:3–32
Autobiographical memory. Sensitivity to age and education of a standardized enquiry. Borrini G, et al. **Psychol Med** 1989 Feb;19(1):215–24
Platelet monoamine oxidase activity and life stress as predictors of psychopathology and coping in a community sample. Irving JB, et al. **Psychol Med** 1989 Feb;19(1):79–90
Autobiographical memory in depression. Williams JM, et al. **Psychol Med** 1988 Aug;18(3):689–95
Profiles of youthful suicide: disrupted development and current stressors. Bagley CR. **Psychol Rep** 1989 Aug; 65(1):234
Meaningful life experiences for elderly persons. Baum SK. **Psychol Rep** 1988 Oct;63(2):427–33
Stress, locus of control, and achievement of high school seniors. Cole T Jr, et al. **Psychol Rep** 1988 Oct;63(2):355–9
Conflict situations in the elderly. Fernández–Ballesteros R, et al. **Psychol Rep** 1988 Aug;63(1):171–6
Mediators of perceptions of stress among community–based elders. Fry PS. **Psychol Rep** 1989 Aug;65(1):307–14
Hassles as a measure of stress in a Japanese sample: preliminary research. Nakano K. **Psychol Rep** 1988 Aug; 63(1):252–4
Midlife depression and the "empty nest" syndrome in Indian women. Pillay AL. **Psychol Rep** 1988 Oct;63(2):591–4
The life events and coping inventory: an assessment of stress in children. Dise–Lewis JE. **Psychosom Med** 1988 Sep–Oct; 50(5):484–99
Psychological and immunological predictors of genital herpes recurrence. Kemeny ME, et al. **Psychosom Med** 1989 Mar–Apr;51(2):195–208
Affective disorder and stress in multiple sclerosis [letter] Stip E. **Psychosomatics** 1988 Fall;29(4):454
Psychosocial stress, physical symptoms, and anxiety in Greek students. Georgas J, et al. **Psychother Psychosom** 1988; 49(3–4):164–70
Life changes related to the onset of juvenile rheumatoid arthritis. Keltikangas–Järvinen L, et al. **Psychother Psychosom** 1988;50(2):102–8
Markers of aging. Modeling the clocks that time us. Featherman DL, et al. **Res Aging** 1986 Sep;8(3):339–65 (43 ref.)
Stress–coping strategies identified from school age children's perspective. Ryan NM. **Res Nurs Health** 1989 Apr; 12(2):111–22 (35 ref.)
What protects a child during migration? Moilanen I, et al. **Scand J Soc Med** 1989;17(1):21–4
Ethnic differences in response to adversity. A community sample of Bangladeshis and their indigenous neighbours. MacCarthy B, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul;24(4):196–201
Personality as modifier of the life change–distress relationship. A longitudinal modelling approach. Ormel J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul; 24(4):187–95
The implications of life events and social integration in the course of combat–related post–traumatic stress disorder. Solomon Z, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jan;24(1):41–8
Life experiences, response styles and mental health among mothers and children in Beirut, Lebanon. Bryce JW, et al. **Soc Sci Med** 1989;28(7):685–95
Sentinel health events as indicators of unmet needs. Carr W, et al. **Soc Sci Med** 1989;29(6):705–14
Longitudinal study of appraisal at Three Mile Island: implications for life event research. Goldsteen R, et al. **Soc Sci Med** 1989;28(4):389–98
Predictive value of life events, psychosocial factors and self–rated health on disability in an elderly rural French population. Grand A, et al. **Soc Sci Med** 1988; 27(12):1337–42
Life stressors and social resources: an integrated assessment approach. Moos RH, et al. **Soc Sci Med** 1988; 27(9):999–1002
Life events, meaning and narrative: the case of infidelity and divorce. Riessman CK. **Soc Sci Med** 1989;29(6):743–51
The role of social support and life stress events in use of mental health services. Sherbourne CD. **Soc Sci Med** 1988; 27(12):1393–400
Personal world expansion for survivors of murder victims. Cowles KV. **West J Nurs Res** 1988 Dec;10(6):687–704
[Crisis– and catastrophe–psychiatry (editorial)] Odden Petersen G. **Ugeskr Laeger** 1988 Oct 24;150(43):2561–2 (Dan)
[Psychosocial strain among patients at a psychiatric emergency unit] Petersen P, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2195–8 (Eng. Abstr.) (Dan)
[Measurement of important life events by support groups for the aged] Kuin Y, et al. **Tijdschr Gerontol Geriatr** 1988 Sep;19(4):163–6 (Eng. Abstr.) (Dut)
[Social mutations and familial psychopathology] Witkowski P, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):954–7 (Fre)
[Is it possible to have a medical definition of family crisis?]

Kahn JP, et al. **Can J Psychiatry** 1989 May;34(4):316–9 (Eng. Abstr.) (Fre)
[What is the impact of divorce upon health management methods within the family?] Cardia-Vonèche L, et al. **Soz Praventivmed** 1988;33(6):281–5 (Eng. Abstr.) (Fre)
[Premorbid and social markers of patients with schizoaffective psychoses] Marneros A, et al. **Fortschr Neurol Psychiatr** 1989 May;57(5):205–12 (Eng. Abstr.) (Ger)
[Categories of life histories. Their significance for psychiatry and psychotherapy] Zacher A. **Monogr Gesamtgeb Psychiatr (Berlin)** 1988;55:1–204 (240 ref.) (Ger)
[Biographical anamnesis and social amnesia. A review of medical history taking, exploration, clinical interview, biographical analysis and diagnostic-clinical consultation] Kobbé U. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):321–35 (69 ref.) (Eng. Abstr.) (Ger)
[Psychosomatic aspects of sudden deafness] Kropp UA, et al. **Psychother Psychosom Med Psychol** 1988 Dec; 38(12):407–12 (Eng. Abstr.) (Ger)
[The significance of stressful life events and their management in patients with rheumatoid arthritis, essential hypertension and stomach and duodenal ulcer] Scholz OB. **Psychother Psychosom Med Psychol** 1989 Mar–Apr; 39(3–4):135–40 (Eng. Abstr.) (Ger)
[The correlation of psychosocial stress and disease activity in patients with Crohn disease and ulcerative colitis] Paar GH, et al. **Z Gastroenterol** 1988 Oct;26(10):648–57 (Eng. Abstr.) (Ger)
[Adjustment to early retirement in males] Niderfranke A. **Z Gerontol** 1989 May–Jun;22(3):143–50 (Eng. Abstr.) (Ger)
[Induced imagination as a methodologic paradigm in assessing stress perception and stress processing] Hänggi D, et al. **Z Klin Psychol Psychopathol Psychother** 1988; 36(3):245–54 (Eng. Abstr.) (Ger)
[Coping: concepts and measuring procedures] Moos RH. **Z Psychosom Med Psychoanal** 1988;34(3):207–25 (39 ref.) (Eng. Abstr.) (Ger)
[Life events, coping and social support: attempt at integration from the psychoanalytic viewpoint] Parekh H, et al. **Z Psychosom Med Psychoanal** 1988;34(3):226–46 (Eng. Abstr.) (Ger)
[Epidemiological research on drinking of women. (Part 2). Effects of consciousness or attitude concerning about drinking and life events on drinking behavior] Yamakawa M. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Feb;24(1):11–35 (Eng. Abstr.) (Jpn)
[Might a myocardial infarction be a positive experience?] Smith P, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30; 108(27):2243–5 (Eng. Abstr.) (Nor)
[Correlations between life events and psychosomatic diseases of the cardiovascular system] Mausch K. **Psychiatr Pol** 1988 Mar–Apr;22(2):156–61 (11 ref.) (Pol)
[Clinical studies of the role of stress situations in the psychopathological picture of the first episode of schizophrenia] Terminska K, et al. **Psychiatr Pol** 1988 Mar–Apr;22(2):116–21 (Eng. Abstr.) (Pol)
[Tuberculosis and the natural human environment in psychosociometric studies] Pecyna MB. **Wiad Lek** 1988 Aug 1;41(15):984–90 (Eng. Abstr.) (Pol)
[Social change. The climacteric and depression] Sánchez Perruca L, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr; 52(2):87–92 (Eng. Abstr.) (Spa)

LIFE EXPECTANCY

Life expectancy in chronic liver disease. Szalay L, et al. **Acta Med Hung** 1988;45(3–4):297–305
Mathematical hazard models of mortality: an alternative to model life tables. Gage TB. **Am J Phys Anthropol** 1988 Aug;76(4):429–41
Life expectancies: population or person? [letter] Silver AL, et al. **Ann Intern Med** 1989 Aug 1;111(3):257–8
Predicting life span for applicants to inpatient hospice. Forster LE, et al. **Arch Intern Med** 1988 Dec; 148(12):2540–3
Inaccurate predictions of life expectancy. Dilemmas and opportunities [editorial] Pearlman RA. **Arch Intern Med** 1988 Dec;148(12):2537–8
The aging process. Harman D. **Basic Life Sci** 1988;49:1057–65
On the incompatibility of Gompertz or Weibull survival dynamics with exponentially distributed individual lifespans. Guess F, et al. **Bull Math Biol** 1988;50(2):187–92
Trends in years of life lost to cancer: 1970 to 1985. Mettlin C. **CA** 1989 Jan–Feb;39(1):33–9
Survival patterns of nursing home admissions and their policy implications. Shapiro E, et al. **Can J Public Health** 1988 Jul–Aug;79(4):268–74
State-specific estimates of smoking-attributable mortality and years of potential life lost—United States, 1985. **Conn Med** 1989 Jan;53(1):39–41
Life tables for Down syndrome. Baird PA, et al. **Hum Genet** 1989 Jun;82(3):291–2
The atrial pacemaker: retrospective analysis of complications and life expectancy in patients with sinus node dysfunction. Lemke B, et al. **Int J Cardiol** 1989 Feb;22(2):185–93
Life expectancy and diabetic retinopathy [letter] Kirstein MD. **J Am Optom Assoc** 1989 Jul;60(7):503
Life expectancy in less developed countries: socioeconomic development or public health? Rogers RG, et al. **J Biosoc Sci** 1989 Apr;21(2):245–52
Survival in multiple sclerosis. Poser S, et al. **J Clin Epidemiol** 1989;42(2):159–68
Prognostic factors for life expectancy in multiple sclerosis analysed by Cox-models. Riise T, et al. **J Clin Epidemiol** 1988;41(10):1031–6
Recent changes in mortality and labor force behavior among older Americans: consequences for nonworking life expectancy. Hayward MD, et al. **J Gerontol** 1988 Nov; 43(6):S194–9
Follow-up study of life span of farmers in relation to physical fitness data in 1963. Onishi N, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):43–56
Hypertension, quality of life and functional status: the concept of active life expectancy. Papsidero JA. **J Hypertens Suppl** 1988 Nov;6(1):S11–4
Which of two individuals do you treat when only their ages are different and you can't treat both? Lewis PA, et al. **J Med Ethics** 1989 Mar;15(1):28–34
Anencephalic infants: life expectancy and organ donation. Pomerance JJ, et al. **J Perinatol** 1989 Mar;9(1):33–7
Analysis of life expectancy and living status of elderly patients surviving a burn injury. Manktelow A, et al. **J Trauma** 1989 Feb;29(2):203–7
Leads from the MMWR. Impact of homicide on years of potential life lost in Michigan's black population. **JAMA** 1989 Feb 3;261(5):686–7
The long-lived men of Greece [news] **Lancet** 1988 Oct 8; 2(8615):861
Population intervention [letter] **Lancet** 1989 Apr 1; 1(8640):718
Life expectancy in Down syndrome adults. Baird PA, et al. **Lancet** 1988 Dec 10;2(8624):1354–6
Life expectancy and planning care for the elderly [letter] Winblad B, et al. **Lancet** 1988 Dec 3;2(8623):1313
Survival and causes of death in thalassaemia major. Zurlo MG, et al. **Lancet** 1989 Jul 1;2(8653):27–30
The effect of low protein–high dextrin diet and subsequent food restriction upon life prolongation in Fischer 344 male rats. Horáková M, et al. **Mech Ageing Dev** 1988 Oct; 45(1):1–7
The striatal dopamine dependency of life span in male rats. Longevity study with (-)deprenyl. Knoll J. **Mech Ageing Dev** 1988 Dec;46(1–3):237–62
An antioxidant induced alterations in peroxidase activity in ageing Zaprionus paravittiger (Diptera). Wadhwa R, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):277–83
DEALE–ing with life expectancy and mortality rates [published erratum appears in Med Decis Making 1989 Jul–Sep;9(3):219] Stalpers LJ, et al. **Med Decis Making** 1989 Apr–Jun;9(2):150–2
Epidemiological studies on the expectation of life for dogs computed from animal cemetery records. Hayashidani H, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1003–8
Left–handedness and life expectancy. London WP. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1040–2
Quality of life and life expectancy in thalassemic patients with complications. Gabutti V, et al. **Prog Clin Biol Res** 1989;309:35–41
Objective and subjective factors in estimating life expectancy. Robbins RA. **Psychol Rep** 1988 Aug;63(1):47–53
Years of potential life lost among a Native American population. Mahoney MC, et al. **Public Health Rep** 1989 May–Jun;104(3):279–85
A multistate analysis of active life expectancy. Rogers A, et al. **Public Health Rep** 1989 May–Jun;104(3):222–6
Life shortening in mice exposed to fission neutrons and gamma rays. VIII. Exposures to continuous gamma radiation. Thomson JF, et al. **Radiat Res** 1989 Apr; 118(1):151–60
Trends in mortality from major non-communicable diseases in the middle-aged population of Malta. Tuomilehto J, et al. **Rev Epidemiol Sante Publique** 1988;36(3):216–25
So long, lefty. Horgan J. **Sci Am** 1988 Aug;259(2):26–7
A note on the consistency of life tables for total populations with those for their subpopulations. Das Gupta P. **Soc Biol** 1988 Spring–Summer;35(1–2):158–63
Assumptions of the QALY procedure. Carr-Hill RA. **Soc Sci Med** 1989;29(3):469–77
The use of QALYs in health care decision making. Loomes G, et al. **Soc Sci Med** 1989;28(4):299–308 (31 ref.)
Does regular exercise prolong life expectancy? Heyden S, et al. **Sports Med** 1988 Aug;6(2):63–71
[Do joggers live longer? 3 current epidemiologic studies of the effect of physical activity on life expectancy] Marti B, et al. **Schweiz Rundsch Med Prax** 1988 Oct 11; 77(41):1097–100 (Eng. Abstr.) (Ger)
[Improving life expectancy in heart failure. Newest results and their consequences] Holtz J, et al. **Versicherungsmedizin** 1988 Nov 1;40(6):146–53 (67 ref.) (Eng. Abstr.) (Ger)
[Rate of survival for the evaluation of sex-specific variations in the health status of the population] Knopf H, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):939–40 (Ger)
[Life expectancy of patients with chronic obstructive respiratory disease] Ulmer WT. **Z Gesamte Inn Med** 1988 Jun 15;43(12):335–7 (10 ref.) (Eng. Abstr.) (Ger)
[Distribution of the species-specific lifespan in various taxonomic animal groups] Muradian KhK. **Zh Obshch Biol** 1989 Jan–Feb;50(1):22–6 (Eng. Abstr.) (Rus)
[Approach to health in Spain (published erratum appears in Med Clin (Barc) 1988 Sep 17;91(8):292)] del Llano J, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):101–4 (Spa)
[Biological and socioeconomic determinants of child survival] Mosley WH. **Salud Publica Mex** 1988 May–Jun; 30(3):312–28 (Eng. Abstr.) (Spa)
[Average life span and lost years—useful measures for distributing resources in a county council district] **Lakartidningen** 1989 May 17;86(20):1871–2 (Swe)
[The long life of women—a societal problem?] Bengtsson C, et al. **Lakartidningen** 1988 Dec 7;85(49):4297–300 (Swe)
[The art of prolongation of life—a medical utopia] Johannisson K. **Lakartidningen** 1988 Nov 16;85(46):3961, 3964–6 (Swe)

TRENDS

Physical condition, longevity, and social performance of Dutch haemophiliacs, 1972–85. Smit C, et al. **BMJ** 1989 Jan 28;298(6668):235–8
Longevity in women. Johansson S. **Cardiovasc Clin** 1989; 19(3):3–16 (57 ref.)
A state-based regression model for estimating substate life expectancy. Swanson DA. **Demography** 1989 Feb; 26(1):161–70
Leads from the MMWR. Years of potential life lost due to cancer—United States, 1968–1985. **JAMA** 1989 Jan 13; 261(2):209
Health promotion and the compression of morbidity. Fries JF, et al. **Lancet** 1989 Mar 4;1(8636):481–3 (19 ref.)
Life expectancy, Down syndrome, and dementia [letter] Steffelaar JW, et al. **Lancet** 1989 Mar 4;1(8636):492–3
Projecting the older population of the United States: lessons from the past and prospects for the future. Guralnik JM, et al. **Milbank Q** 1988;66(2):283–308
Years of potential life lost due to cancer—United States, 1968–1985. **MMWR** 1988 Dec 9;37(48):747–9
Aging: where we have been and where we are going. Brody JA. **Prog Clin Biol Res** 1989;287:7–25
The expectation of life without disability in England and Wales. Bebbington AC. **Soc Sci Med** 1988;27(4):321–6
Post-1950 mortality trends and medical care: gains in life expectancy due to declines in mortality from conditions amenable to medical intervention in The Netherlands. Mackenbach JP, et al. **Soc Sci Med** 1988;27(9):889–94
Life expectancy remains at record level. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):26–30
Investment for an aging population [editorial] Schwartz RG. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):2
Projections of the population of states by age. Wetrogan SI. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):3–10
Of light bulbs and wine glasses: risk factors and mortality trends. Cole P. **Trans Stud Coll Physicians Phila** 1988 Dec; 10(1–4):95–102
[Trends in mortality and the average life span of the population of Czechoslovakia 1963–1983] Strnad L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):485–502 (Eng. Abstr.) (Cze)
[Tobacco smoke as the most important life-shortening factor] Schmidt F. **Versicherungsmedizin** 1988 Sep 1;40(5):117–9 (Ger)
[Life planning—consequences of a steadily growing life span 1650–2000. Considering the longer life span, do we need a life plan?] Imhof AE, et al. **Z Gerontol** 1988 Jul–Aug; 21(4):193–7 (Eng. Abstr.) (Ger)
[Life expectancy in Europe—facts, trends, goals] Kant H. **Z Gesamte Hyg** 1988 Aug;34(8):442–5 (Eng. Abstr.) (Ger)
[Use of a simplified method of calculating mean life expectancy by regions in the Ukraine] Grabovskaia TV, et al. **Sov Zdravookhr** 1989;(6):16–20 (Rus)
[Universal history of mortality] José MV, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):3–17 (Eng. Abstr.) (Spa)

LIFE EXPERIENCES see **LIFE CHANGE EVENTS**

LIFE ISLANDS see **PATIENT ISOLATORS**

LIFE STYLE

see related
HEALTH BEHAVIOR
SOCIAL ENVIRONMENT

The Belgian Interuniversity Research on Nutrition and Health (B.I.R.N.H.): general introduction. For the B.I.R.N.H. Study Group. Kornitzer M, et al. **Acta Cardiol** 1989;44(2):89–99
10-year trends in physical activity in the eastern Finnish adult population: relationship to socioeconomic and lifestyle characteristics. Marti B, et al. **Acta Med Scand** 1988; 224(3):195–203
Alcohol use and its relationship to other addictive and preventive behaviors. Soeken KL, et al. **Addict Behav** 1989; 14(4):459–64
Predictive testing for Huntington disease: II. Demographic characteristics, life-style patterns, attitudes, and psychosocial assessments of the first fifty-one test candidates. Bloch M, et al. **Am J Med Genet** 1989 Feb; 32(2):217–24
Taxonomy of family life styles: III. Replication with families with severely mentally retarded children. Mink IT, et al. **Am J Ment Retard** 1988 Nov;93(3):250–64

Ecology and affective behavior: selected results from a quantitative study among Efe foragers of northeast Zaire. De Zalduondo BO. **Am J Phys Anthropol** 1989 Apr; 78(4):533–45

Controlled trial of a time-efficient method of health promotion. Kelly RB. **Am J Prev Med** 1988 Jul–Aug; 4(4):200–7

Fractures and lifestyle: effect of cigarette smoking, alcohol intake, and relative weight on the risk of hip and forearm fractures in middle-aged women. Hemenway D, et al. **Am J Public Health** 1988 Dec;78(12):1554–8

The external costs of a sedentary life-style. Keeler EB, et al. **Am J Public Health** 1989 Aug;79(8):975–81

Television viewing and obesity in adult males. Tucker LA, et al. **Am J Public Health** 1989 Apr;79(4):516–8

Risk behaviors and health. Contrasting individual and population perspectives. Jeffery RW. **Am Psychol** 1989 Sep; 44(9):1194–202 (67 ref.)

Primary prevention of coronary heart disease versus health promotion—a contradiction? Maschewsky-Schneider U, et al. **Ann Med** 1989 Jun;21(3):215–8

Towards cardiovascular health. Stamler J. **Ann Med** 1989 Jun;21(3):141–55 (60 ref.)

Project SMART parent program: preliminary results of a chronic disease risk reduction trail. Weber MD, et al. **Ann Med** 1989 Jun;21(3):231–3

Life style and patterns of health and social behavior in high-risk adolescents. Kulbok PP, et al. **ANS** 1988 Oct; 11(1):22–35

Health-promoting life styles of older adults: comparisons with young and middle-aged adults, correlates and patterns. Walker SN, et al. **ANS** 1988 Oct;11(1):76–90

Health education of children and adolescents in Sweden. Kornfält R. **Arztl Jugendkd** 1988;79(2):84–6

Anthropometric and lifestyle correlates of serum lipoprotein and apolipoprotein levels among normal non-smoking men and women. Marti B, et al. **Atherosclerosis** 1989 Feb; 75(2–3):111–22

The change in rural practice. Bourke 1968 to 1985. Harris MF. **Aust Fam Physician** 1989 Feb;18(2):129, 132–3

Remedial life-styles [editorial] Wortis J. **Biol Psychiatry** 1989 May;26(1):1–2

Patient's lifestyle [letter] Findlater J. **BMJ** 1989 Feb 4; 298(6669):321–2

Mental distress and social conditions and lifestyle in northern Norway. Hansen V, et al. **BMJ** 1989 Jul 8;299(6691):85–8

Adolphe Abrahams memorial lecture, 1988. Exercise and lifestyle change. Shephard RJ. **Br J Sports Med** 1989 Mar; 23(1):11–22 (148 ref.)

Lifestyles modification program [letter] Decosas J. **Can J Public Health** 1988 Nov–Dec;79(6):271

Perceived benefits of a lifestyles modification program in the rehabilitation of Worker's Compensation recipients. Hannah TE, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):323–6

The healthstyles health promotion program: description and behavioural outcomes. McDowell I, et al. **Can J Public Health** 1988 Nov–Dec;79(6):447–54

The state and mental health of the children of the world. Wilson L. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S29–33 (Eng, Fre)

Chronic disease among Seventh-day Adventists, a low-risk group. Rationale, methodology, and description of the population. Beeson WL, et al. **Cancer** 1989 Aug 1; 64(3):570–81

Cohort study of diet, lifestyle, and prostate cancer in Adventist men. Mills PK, et al. **Cancer** 1989 Aug 1; 64(3):598–604

An investigation of health and lifestyle in people who have private water supplies at home. Meara JR. **Community Med** 1989 May;11(2):131–9

Medical-social intervention in a 70-year-old Swedish population. A general presentation of methodological experience. Eriksson BG, et al. **Compr Gerontol [C]** 1987 Dec;1:49–56

Preventive interventions in adolescence. Diekstra RF. **Crisis** 1989 Apr;10(1):1–3

Effect of life-style activity of varying duration on glycemic control in type II diabetic women. Paternostro-Bayles M, et al. **Diabetes Care** 1989 Jan;12(1):34–7

Influence of occupation and living habits on semen quality in men (scrotal insulation and semen quality). Laven JS, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct; 29(2):137–41

Lifestyle factors in monozygotic and dizygotic twins. Heller RF, et al. **Genet Epidemiol** 1988;5(5):311–21

Lifestyle and blood pressure levels in male twins in Utah. Slattery ML, et al. **Genet Epidemiol** 1988;5(4):277–87

Staying healthy after 85. Hogstel MO, et al. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):16–8

Differentials in mortality. Carstairs V. **Health Bull (Edinb)** 1988 Jul;46(4):226–36

Cigarette smokers do more than just smoke cigarettes. Castro FG, et al. **Health Psychol** 1989;8(1):107–29

Health programmes and the community. Puska P. **Hygie** 1989 Mar;8(1):5–10

One doctor's formula for community outreach. Seizing the moment. **IMJ** 1988 Jul;174(1):37–42

The impact of life style factors and consumption of pharmaceutical drugs on toxicokinetics. Fournier PE, et al. **Int Arch Occup Environ Health** 1988;Suppl:22–30 (17 ref.)

A model for coordinated and integrated lifelong maintenance of health. Haux F. **Int J Rehabil Res** 1987;10(4 Suppl 5):173–5

Nutrition of the elderly in a Mediterranean city in Spain: effects of life-style patterns. Fernández-Ballart J, et al. **Int J Vitam Nutr Res** 1989;59(1):8–13

Colorectal polyps in the Upper Galilee. Niv Y. **Isr J Med Sci** 1989 Jun;25(6):313–7

A place in the sun does not guarantee adequate vitamin D. Morley JE. **J Am Geriatr Soc** 1989 Jul;37(7):663–4 (18 ref.)

Effect of beta-adrenergic blockade on response to exercise in sedentary and active subjects. Brusasco V, et al. **J Appl Physiol** 1989 Jul;67(1):103–9

A non-coronary prone man [letter] Mittal SR. **J Assoc Physicians India** 1988 Feb;36(2):179–80

Health behavior as goal-directed action. Eiser JR, et al. **J Behav Med** 1988 Dec;11(6):523–35

Risk of functional decline among well elders. Mor V, et al. **J Clin Epidemiol** 1989;42(9):895–904

High and low risk groups for cancer of colon and rectum in Denmark: multiplicative Poisson models applied to register linkage data. Mellemgaard A, et al. **J Epidemiol Community Health** 1988 Sep;42(3):249–56

Lifestyle- and occupation-related changes in blood pressure over a six-year period in a cohort of working men. Jenner DA, et al. **J Hypertens Suppl** 1988 Dec;6(4):S605–7

Virtue and the practice of modern medicine. Putman DA. **J Med Philos** 1988 Nov;13(4):433–43

Effects on mood of a life-styles program for the rehabilitation of injured workers. Hannah TE, et al. **J Occup Med** 1989 May;31(5):454–7

Type A behavior, coping mechanisms and emotions related to somatic risk factors of coronary heart disease in adolescents. Keltikangas-Järvinen L, et al. **J Psychosom Res** 1989;33(1):17–27

Lifestyles and social class: implications for primary care. Coulter A. **J R Coll Gen Pract** 1987 Dec;37(305):533–6

Lands of contrast—soldiering abroad: discussion paper. Whelan TR. **J R Soc Med** 1988 Dec;81(12):721–2

Career change: in quest of a controllable lifestyle. Schwartz RW, et al. **J Surg Res** 1989 Sep;47(3):189–92

Can change in life-style reduce failure of arterial reconstructions? [letter] Edwards WS. **J Vasc Surg** 1989 Feb;9(2):399–400

Historical overview of fertility and age. Toulemon L. **Maturitas** 1988;Suppl 1:5–14 (12 ref.)

Beyond the thrifty gene: metabolic implications of prehistoric migration into the New World. Ritenbaugh C, et al. **Med Anthropol** 1989 Jun;11(3):227–36

U-M study links smoking with poor health habits. **Mich Med** 1988 Aug;87(8):502

Health, income, and activities of retired physicians. Rowe ML. **N Y State J Med** 1989 Aug;89(8):450–3

Lifestyle and health programmes [letter] Davenport W. **N Z Med J** 1988 Nov 23;101(858):802

Problem behavior of adolescents. Irwin CE Jr, et al. **Pediatr Rev** 1989 Feb;10(8):235–46 (35 ref.)

Apparel shopping behavior of elderly men and women. Chowdhary U. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1183–9

The Surgeon General's report on nutrition and health [editorial] McGinnis JM. **R I Med J** 1988 Oct;71(10):373

Health perceptions and lifestyles of the elderly. Speake DL, et al. **Res Nurs Health** 1989 Apr;12(2):93–100

A comprehensive study of the way of life and health of the aged population. Motynga IA. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):261–7

Greek immigrant children in southern Sweden in comparison with Greek and Swedish children. I. General living conditions. Neiderud J. **Scand J Soc Med** 1989;17(1):25–31

Health lifestyles and self-direction in employment among American men: a test of the spillover effect. Abel T, et al. **Soc Sci Med** 1989;28(12):1269–74 (31 ref.)

Self-care components of lifestyles: the importance of gender, attitudes and the social situation. Dean K. **Soc Sci Med** 1989;29(2):137–52

Self-care in health promotion. Kickbusch I. **Soc Sci Med** 1989;29(2):125–30 (31 ref.)

Family-oriented prevention of cardiovascular disease: a social epidemiological approach. Venters MH. **Soc Sci Med** 1989;28(4):309–14 (86 ref.)

Lifestyle and low-back pain. The influence of smoking and obesity. Deyo RA, et al. **Spine** 1989 May;14(5):501–6

Does regular exercise prolong life expectancy? Heyden S, et al. **Sports Med** 1988 Aug;6(2):63–71

Of light bulbs and wine glasses: risk factors and mortality trends. Cole P. **Trans Stud Coll Physicians Phila** 1988 Dec; 10(1–4):95–102

[Risk factors for non-infectious diseases in health personnel at the District Institute of National Health in Pardubice] Polák I. **Cas Lek Cesk** 1989 Jan 13;128(3):83–6 (Eng. Abstr.) (Cze)

[Weekly biological rhythms in morbidity and mortality due to cardiovascular diseases] Sitar J. **Cas Lek Cesk** 1989 May 12;128(20):628–30 (Eng. Abstr.) (Cze)

[Analysis of psychosocial findings of patients admitted at an emergency service following attempted suicide] Van Heeringen C, et al. **Arch Belg** 1988;46(3–4):153–67 (Eng. Abstr.) (Dut)

[Long will we live? (letter)] Leclerq RM. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1500 (Dut)

[The prevalence of emaciation in 2 populations (nomadic herdsmen and sedentary agricultural workers) of the Gao region in Mali] Villeneuve P. **Rev Epidemiol Sante Publique** 1988;36(6):421–8 (Eng. Abstr.) (Fre)

[The viewpoint of the elderly on the problems of aging] Collart E, et al. **Schweiz Rundsch Med Prax** 1989 Apr 11; 78(15):419–22 (Eng. Abstr.) (Fre)

[Where shall we live if we lose our independence?] de Roulet R, et al. **Schweiz Rundsch Med Prax** 1989 Apr 11; 78(15):423–8 (Eng. Abstr.) (Fre)

[Obstacles to maintaining the elderly in their own homes] Jeanneret ML, et al. **Schweiz Rundsch Med Prax** 1989 Apr 11;78(15):429–31 (Eng. Abstr.) (Fre)

[Health status of children of preschool age and the effect of environmental factors] Jurko GP, et al. **Arztl Jugendkd** 1988;79(2):101–7 (Eng. Abstr.) (Ger)

[Problems of health education and healthy life style in the young family. 1] Reis K, et al. **Arztl Jugendkd** 1988; 79(2):72–6 (Eng. Abstr.) (Ger)

[Problems of health education and healthy life style in the young family. 2] Reis K, et al. **Arztl Jugendkd** 1988; 79(2):77–83 (Eng. Abstr.) (Ger)

[Health education in the family and schools] Gassmann B. **Soz Praventivmed** 1988;33(4–5):250–4 (Eng. Abstr.) (Ger)

[Strategies for the prevention of cardiovascular diseases in the German Federal Republic] Laaser U, et al. **Soz Praventivmed** 1988;33(4–5):226–32 (Eng. Abstr.) (Ger)

[Coronary risk factors and their relation to psychosocial factors in females with myocardial infarct] Meyer K, et al. **Soz Praventivmed** 1988;33(3):155–61 (Eng. Abstr.) (Ger)

[Sex differences in health and health behavior] Zemp E, et al. **Soz Praventivmed** 1988;33(3):186–92 (23 ref.) (Eng. Abstr.) (Ger)

[Exotics, Macaca and non-responders] Leu HJ. **Vasa** 1988; 17(4):245–6 (Ger)

[On joy] Demling L. **Verh Dtsch Ges Inn Med** 1988; 94:XXI–XXVIII (Ger)

[Physioprevention as the main aspect of a healthy life style and health education] Krauss H. **Z Arztl Fortbild (Jena)** 1989;83(1):41–5 (8 ref.) (Ger)

[The important aspects of a healthy life style and recommendations for health counseling and health propaganda] Noswitz JR. **Z Arztl Fortbild (Jena)** 1989; 83(5):271–4 (Ger)

[Education on health-promoting behaviors in groups of workers] Pasig P. **Z Arztl Fortbild (Jena)** 1988; 82(17):839–42 (Ger)

[Evaluation of health status using self-assessment and including living conditions] Werner K, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):959–61 (Ger)

[The age limit] Lehr U. **Z Gerontol** 1989 May–Jun;22(3):127 (Ger)

[The health behavior of students in grades 5 to 10] Nitzschmann L, et al. **Z Gesamte Hyg** 1988 Nov; 34(11):638–40 (Eng. Abstr.) (Ger)

[Health as the principle for developing the pedagogic process in the high school] Sende J. **Z Gesamte Hyg** 1988 Nov; 34(11):625–7 (Eng. Abstr.) (Ger)

[The health behavior of students in regard to a healthy life style] Sende S. **Z Gesamte Hyg** 1988 Nov;34(11):640–1 (Eng. Abstr.) (Ger)

[Factors influencing the health status of teachers] Vogel H, et al. **Z Gesamte Hyg** 1988 Nov;34(11):642–3 (Eng. Abstr.) (Ger)

[Illness and threat. Forms of psychosocial coping in multiple sclerosis] Görres HJ, et al. **Z Psychosom Med Psychoanal** 1988;34(3):274–90 (Eng. Abstr.) (Ger)

[New results of comparative studies of motivation and social factors influencing abortion in East Germany] Henning G, et al. **Zentralbl Gynakol** 1989;111(5):287–93 (Eng. Abstr.) (Ger)

[Social factors in gerontology] Paul W, et al. **ZFA** 1989 May–Jun;44(3):133–9 (0 ref.) (Eng. Abstr.) (Ger)

[Preventive modification of risk factors—results of a health study] Sauer I, et al. **ZFA** 1988 Nov–Dec;43(6):319–23 (Ger)

[Primary cancer prevention by life style modification] Hirayama T. **Gan No Rinsho** 1989 Jan;35(2):163–70 (Eng. Abstr.) (Jpn)

[Physician's role in the year 2000] Aarskog D, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2665–79 (Nor)

[Life style and AIDS/HIV infection (letter)] Jacobsen CD. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2759 (Nor)

[Study of social problems of hemophilia based on the data from the Pediatric Orthopedic Clinic in Lublin] Piątkowski W, et al. **Acta Haematol Pol** 1988 Jul–Dec;19(3–4):150–2 (Pol)

[Social factors and arterial hypertension] Benko E. **Przegl Lek** 1989;46(2):289–91 (Eng. Abstr.) (Pol)

[The role of social and professional factors in the activities of physicians] Kaptsov VA, et al. **Gig Sanit** 1988 Dec; (12):36–8 (Rus)

[Health-promoting life style and various aspects of anti-alcoholism propaganda] Shepelin OP, et al. **Gig Sanit** 1989 Feb;(2):42–4 (Rus)

[Effect of the health status of parents and family life style on the occurrence of allergic dermatoses and the dermatorespiratory syndrome in children] Nikitina IP.

Pediatriia 1988;(5):58–61 (Eng. Abstr.) (Rus)
[Living conditions and health status of Komi–Perm residents in the works of physicians from the pre–revolution Ural region] Mal'tseva OA. Sov Zdravookhr 1988;(8):70–3 (Rus)
[More attention to a healthy life style for flight personnel] Frolov NI, et al. Voen Med Zh 1989 Feb;(2):55–7 (Rus)
[A tip for occupational health services: triglyceride levels and unhealthy life style] Hedenberg L. Lakartidningen 1988 Dec 21;85(51):4514 (Swe)
[Should society support the care of injuries caused by hazardous behavior?] Josephson U. Lakartidningen 1988 Nov 16;85(46):3953–5 (Swe)

LIFE SUPPORT CARE

Life? Boone MN Jr. Ala Med 1989 Feb;58(8):25–6
Planning in advance for critical care. Streim JE, et al. Am J Nurs 1989 Jan;89(1):37–8, 41
How can a hospital ethics committee help? Weeks LC, et al. Am J Nurs 1989 May;89(5):651–4
NIH Workshop on Withholding and Withdrawing Mechanical Ventilation. Am Rev Respir Dis 1989 Aug; 140(2 Pt 2):S1–46
Vegetative survival after brain insults. Can anaesthetists reduce the frequency of a fate worse than death? Jennett B. Anaesthesia 1988 Nov;43(11):921–2 (12 ref.)
Life–sustaining technology and the elderly. Prolonged mechanical ventilation factors influencing the treatment decision. Goldberg AI. Chest 1988 Dec;94(6):1277–82
Withholding life support. An ethical guide for the perplexed [editorial] Soffer A. Chest 1989 Feb;95(2):260
Life–sustaining treatment for patients with AIDS. Wachter RM, et al. Chest 1989 Mar;95(3):647–52 (57 ref.)
Withholding and withdrawing treatments: ethics at the bedside. Pellegrino ED. Clin Neurosurg 1989;35:164–84
Obeying the Stanford "concept of proportionality?" [letter] Ducharme HM, et al. Crit Care Med 1989 Jul;17(7):711–2
Philosophical, ethical, and legal aspects of resuscitation medicine. II. Recognizing the tragic choice: food, water, and the right to assisted suicide. Schaffner KF. Crit Care Med 1988 Oct;16(10):1063–8
Biographic limits to life–extending technology. Fowler MD. Heart Lung 1989 Mar;18(2):203–5
The severely demented, minimally functional patient: an ethical analysis. Arras JD. J Am Geriatr Soc 1988 Oct; 36(10):938–44
Advanced cardiac life support in the prehospital setting: the Reykjavik experience. Einarsson O, et al. J Intern Med 1989 Feb;225(2):129–35
Our boneyard industry [editorial] Smith RE. J Med Assoc Ga 1988 Sep;77(9):690–1
A proposal concerning decisions to forgo life–sustaining treatment for young people. Leikin S. J Pediatr 1989 Jul; 115(1):17–22
Decisions to limit care [letter] Kramer DJ. JAMA 1989 Feb 3;261(5):698
Nutrition during ten–week life support with successful fetal outcome in a case with fatal maternal brain damage. Nuutinen LS, et al. JPEN J Parenter Enteral Nutr 1989 Jul–Aug;13(4):432–5
Inter–rater variability in an advanced cardiac life support course: a case study. Swanson R, et al. Med Teach 1987; 9(4):447–9
Biomedical ethics. A quest for balance. Cassidy RC. N J Med 1989 Jan;86(1):35–7
The Hastings Center Project on Imperiled Newborns: supreme court, jury, or Greek chorus? Lantos JD. Pediatrics 1989 Apr;83(4):615–6
Ethics of life support in patients with severe stroke. Asplund K, et al. Stroke 1989 Aug;20(8):1107–12 (43 ref.)
[Medicine, servant of charity (letter)] Ned Tijdschr Geneeskd 1989 Mar 18;133(11):573 (Dut)
[Patients in a coma, a solvable problem] Dupuis HM. Ned Tijdschr Geneeskd 1988 Oct 15;132(42):1926–8 (Dut)
[The omission of medical action] Molenaar JC. Ned Tijdschr Geneeskd 1988 Oct 15;132(42):1925–6 (Dut)
[Terminal dehydration and i.v. fluids in the elderly] Adunsky A. Harefuah 1988 Aug;115(3–4):87–9 (Heb)

ECONOMICS

Linking payment for care to informed consent [letter] Bierly JR. JAMA 1989 Oct 6;262(13):1773–4
Home care for life–supported persons: the French system of quality control, technology assessment, and cost containment. Goldberg AI. Public Health Rep 1989 Jul–Aug;104(4):329–35

HISTORY

Historical perspective on mechanical ventilation: from simple life support system to ethical dilemma. Snider GL. Am Rev Respir Dis 1989 Aug;140(2 Pt 2):S2–7

LEGISLATION & JURISPRUDENCE

The real challenge of "Baby Doe": considering the sanctity and quality of life. Goldworth A, et al. Clin Pediatr (Phila) 1989 Mar;28(3):119–22
Active euthanasia: lessons from the President's Commission. Healey JM. Conn Med 1988 Jul;52(7):443
Withholding artificial nutrition and hydration in Connecticut. The case of Carol McConnell. Healey JM. Conn Med 1988 Nov;52(11):691
Refusing life–sustaining technology: the McConnell case. Healey JM. Conn Med 1989 Apr;53(4):245
Aspects of the dilemma: when and how should treatment be withheld or withdrawn? Frelick RW. Del Med J 1989 Jun;61(6):305–7
What physicians can do regarding decisions about life support [published erratum appears in Del Med J 1989 Apr;61(4):251] Raskin D. Del Med J 1989 Mar;61(3):169–70
Care of the brain dead and other troubling patients [editorial] Yates TS Jr. Del Med J 1988 Sep;60(9):529–30
The insane root takes reason prisoner. Annas GJ. Hastings Cent Rep 1989 Jan–Feb;19(1):29–31
Decision to withhold or withdraw support. McGrath RB. Indiana Med 1989 Mar;82(3):196–8
Demystifying the right to die: the New Jersey experience. Weinberg JK. Med Law 1988;7(4):323–45 (88 ref.)
Court authorizes parents to withdraw life support. Weber RD. Mich Med 1989 Jan;88(1):27–9
Conflicts between patients' wishes to forgo treatment and the policies of health care facilities. Miles SH, et al. N Engl J Med 1989 Jul 6;321(1):48–50
The courts and the PVS patient. Armstrong PW, et al. N J Med 1989 Jan;86(1):27–30
Whistle–blowing by nurses: a matter of ethics. Fry ST. Nurs Outlook 1989 Jan–Feb;37(1):56
[The case of a cerebral–damaged 3–year–old boy is finished. The National Board of Health and Welfare criticizes 3 physicians—promises advice on the interruption of life support therapy] Lakartidningen 1989 Jan 25;86(4):250–1 (Swe)

METHODS

Semantics as substance: life support systems or medically invasive technology? [editorial] Kleinman LC. Conn Med 1989 May;53(5):305–6
The effectiveness of the advanced trauma life support system in a mass casualty situation by non–trauma–experienced physicians: Grenada 1983. Walsh DP, et al. J Emerg Med 1989 Mar–Apr;7(2):175–80

NURSING

When did "do not resuscitate" mean "do not care"? Fowler MD. Heart Lung 1989 Jul;18(4):424–5
Critical care units [letter] Robinson K. Heart Lung 1989 Jul; 18(4):430

ORGANIZATION & ADMINISTRATION

Admitting cancer patients to the intensive care unit. Carlon GC. Crit Care Clin 1988 Jan;4(1):183–91 (38 ref.)
Priorities for the use of finite resources: now may be the time to choose [editorial] Garfunkel JM, et al. J Pediatr 1989 Sep;115(3):410–1

PSYCHOLOGY

Attitudes of hospitalized patients toward life support: a survey of 200 medical inpatients. Frankl D, et al. Am J Med 1989 Jun;86(6 Pt 1):645–8
Failed communication about life–support therapy: silent physicians and mute patients [editorial] Kinsella TD, et al. Am J Med 1989 Jun;86(6 Pt 1):643–4
Dialysis patients' attitudes about cardiopulmonary resuscitation and stopping dialysis. Holley JL, et al. Am J Nephrol 1989;9(3):245–51
Do you want everything done? Swensson VM. Am J Nurs 1989 Sep;89(9):1252
Withholding nutrition from hopelessly ill infants [letter] L'Ecuyer JL. J Pediatr 1989 Feb;114(2):339–40
The empty lifeboat. Crum G. N Y State J Med 1988 Oct; 88(10):520–1
Passive euthanasia and dying with dignity. Bauer WB. Wis Med J 1989 Jul;88(7):8, 10

STANDARDS

Withholding and withdrawing mechanical ventilation: assessing quality of life. Dracup K, et al. Am Rev Respir Dis 1989 Aug;140(2 Pt 2):S44–6 (37 ref.)
Prehospital advanced life support skills, medications, and equipment. American College of Physicians. Ann Emerg Med 1988 Oct;17(10):1109–11
Life sustaining technology: making the decisions [editorial] Williams BT. BMJ 1989 Apr 15;298(6679):978
Evaluating life–sustaining treatments for demented persons. Miles SH, et al. Clin Geriatr Med 1988 Nov;4(4):917–24 (31 ref.)
The President's Commission: the need to be more philosophical. Brody BA. J Med Philos 1989 Aug; 14(4):369–83
The rights approach and the intimacy approach: family suffering and care of defective newborns. Blustein J. Mt Sinai J Med 1989 May;56(3):164–7
Ethical issues in nutritional support nursing. Withholding and withdrawing nutritional support. Knox LS. Nurs Clin North Am 1989 Jun;24(2):427–36 (37 ref.)

TRENDS

Physicians' responsibility toward dying patients. Youngblade DM. Iowa Med 1988 Aug;78(8):355

UTILIZATION

Discontinuation of dialysis therapy as a cause of death. Port FK, et al. Am J Nephrol 1989;9(2):145–9
Intensive care unit survival of patients with systemic illness. Raffin TA. Am Rev Respir Dis 1989 Aug;140(2 Pt 2):S28–35 (49 ref.)

LIFE SUPPORT SYSTEMS see under **SEALED CABIN ECOLOGY**

LIFE TABLE METHODS see **ACTUARIAL ANALYSIS**

LIGAMENTS

Pituitary–containing benign cystic teratoma arising from the uterosacral ligament. Heller DS, et al. Arch Pathol Lab Med 1989 Jul;113(7):802–4
Lumbar spinal stenosis associated with hypertrophied ligamentum flavum and calcium pyrophosphate crystal deposition. Drouillard PJ, et al. J Am Osteopath Assoc 1988 Aug;88(8):1019–21
Stylohyoid syndrome [letter] Jan A. JPMA 1989 Jan;39(1):23
Myeloradiculopathy secondary to pseudogout in the cervical ligamentum flavum: case report. Gomez H, et al. Neurosurgery 1989 Aug;25(2):298–302
The retaining ligaments of the cheek. Furnas DW. Plast Reconstr Surg 1989 Jan;83(1):11–6
Extrapelvic endometriosis presenting as a hernia: clinical reports and review of the literature. Sataloff DM, et al. Surgery 1989 Jan;105(1):109–12 (21 ref.)
[Ossification of the ligamentum flavum] Dai LY. Chung Hua Wai Ko Tsa Chih 1989 Feb;27(2):99–101 (24 ref.) (Chi)
[Polyenthesopathies] Amor B, et al. Ann Med Interne (Paris) 1989;140(4):279–84 (48 ref.) (Fre)
[Double compression of the celiac and mesenteric arteries by the arcuate ligament. An unusual cause of abdominal angina in young subjects] Tison E, et al. J Mal Vasc 1989; 14(1):26–31 (17 ref.) (Eng. Abstr.) (Fre)
[Dorsal radiculo–myelopathy due to ossification of the yellow ligaments. Apropos of a case] Folinais D, et al. Rev Rhum Mal Osteoartic 1988 Jun;55(8):595–9 (Fre)
[OPLL—a rare disease picture] Glathe S, et al. ROFO 1988 Oct;149(4):440–1 (Ger)
[The celiac trunk compression syndrome. Considerations on a clinical case] Tridico F, et al. Minerva Cardioangiol 1988 Jul–Aug;36(7–8):385–90 (Eng. Abstr.) (Ita)
[Clinical features of a case of cysts of the hepatogastric ligament] De Martino A, et al. Minerva Chir 1988 Aug 31;43(15–16):1287–9 (Eng. Abstr.) (Ita)
[Neonatal hypotonia in Ehlers–Danlos syndrome] Marinelli I, et al. Minerva Pediatr 1988 Sep;40(9):557–9 (Eng. Abstr.) (Ita)
[A case of myelopathy caused by calcified nodules of cervical ligamentum flavum] Koyama S, et al. No Shinkei Geka 1988 Sep;16(10):1179–85 (Eng. Abstr.) (Jpn)
[Large lipoma of the round ligament of the liver] Budarin VN. Klin Khir 1988;(9):61 (Rus)

ABNORMALITIES

Atlantoaxial subluxation and absence of transverse ligament of the atlas in a dog. Watson AG, et al. J Am Vet Med Assoc 1989 Jul 15;195(2):235–7
Congenital absence of the pericardium and its relationship to the ligamentum arteriosum. Vesely T, et al. Surg Radiol Anat 1989;11(2):171–5

ANALYSIS

A reevaluation of the distribution of 3H–proline in the transseptal ligament of the mouse in radioautography. Johnson RB. Acta Anat (Basel) 1989;135(3):248–54
Amyloid localized to tenosynovium at carpal tunnel release. Natural history of 124 cases. Kyle RA, et al. Am J Clin Pathol 1989 Apr;91(4):393–7 (14 ref.)
Distribution of 35S–sulfate within the transseptal ligament of the mouse. Johnson RB. Anat Rec 1989 Feb;223(2):121–7
The protein components of the 12–nanometer microfibrils of elastic and nonelastic tissues. Gibson MA, et al. J Biol Chem 1989 Mar 15;264(8):4590–8

ANATOMY & HISTOLOGY

Medial and lateral arcuate ligaments of the diaphragm: attachment to the transverse process. Deviri E, et al. Anat Anz 1988;166(1–5):63–7
Morphology of the mandibulo–stylohyoid ligament in human adults. Shimada K, et al. Anat Rec 1988 Oct;222(2):207–10
Morphology of the pterygomandibular raphe in human fetuses and adults. Shimada K, et al. Anat Rec 1989 May; 224(1):117–22
Lateral supporting ligament of the distal phalanx. Winter WG, et al. Foot Ankle 1989 Jun;9(6):310–1
Collagen organisation in the interspinous ligament and its relationship to tissue function. Aspden RM, et al. J Anat 1987 Dec;155:141–51
Discomalleolar and anterior malleolar ligaments: possible causes of middle ear damage during temporomandibular joint surgery. Loughner BA, et al. Oral Surg Oral Med Oral Pathol 1989 Jul;68(1):14–22
Measurement of human lumbar spine ligaments during loaded and unloaded motion. Hedtmann A, et al. Spine 1989 Feb;

14(2):175–85

Ligaments of the lumbar spine: a review. Behrsin JF, et al. **Surg Radiol Anat** 1988;10(3):211–9 (57 ref.)

[Support and suspension of the pelvic viscera in women. Functional and surgical anatomy] Kamina P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(7):835–48 (Eng. Abstr.) (Fre)

BLOOD SUPPLY

[Vascular injuries of the hepatoduodenal ligament during surgical interventions on the biliary tract] Vasiutkov VIa. **Klin Khir** 1988;(9):42–3 (Rus)

EMBRYOLOGY

Developmental regulation of the mRNAs for elastins a, b and c in foetal–calf nuchal ligament and aorta. Paulovic RP, et al. **Biochem J** 1989 Jul 1;261(1):227–32

ENZYMOLOGY

Detection and analysis of neutral endopeptidase from tissues with substrate gel electrophoresis. Sullivan J, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):300–7

INJURIES

Ligament healing in podiatric surgery. Borrelli AH. **J Am Podiatr Med Assoc** 1988 Dec;78(12):619–23

AAOS/NIH/ORS workshop. Injury and repair of the musculoskeletal soft tissues. Savannah, Georgia, June 18–20, 1987. Woo SL, et al. **J Orthop Res** 1988;6(6):907–31

Clinical observations in 185 cases of ligament and tendon injuries treated by the method of dissipating blood stasis and promoting the meridian. Luo QD, et al. **J Tradit Chin Med** 1989 Mar;9(1):15–7

Common injuries of the foot. Often more than 'just a sprain'. Coughlin RR. **Postgrad Med** 1989 Sep 1;86(3):175–9, 182, 185

[Repair of over–extension rupture] Goutallier D. **Rev Chir Orthop** 1988;74(4):318–21 (Fre)

INNERVATION

Neurohistology of lumbar spine ligaments. Yahia LH, et al. **Acta Orthop Scand** 1988 Oct;59(5):508–12

Fusimotor neurones can be reflexly influenced by activity in receptor afferents from the posterior cruciate ligament. Sojka P, et al. **Brain Res** 1989 Mar 27;483(1):177–83

Sensory nerve endings in the cat cruciate ligaments: a morphological investigation. Sjölander P, et al. **Neurosci Lett** 1989 Jul 17;102(1):33–8

[Novocaine block of the round ligament of the liver in the treatment of various diseases of the abdominal organs] Melekhov PA, et al. **Vestn Khir** 1988 Oct;141(10):134–6 (Eng. Abstr.) (Rus)

METABOLISM

Structure of the bovine elastin gene and S1 nuclease analysis of alternative splicing of elastin mRNA in the bovine nuchal ligament. Yeh H, et al. **Biochemistry** 1989 Mar 21; 28(6):2365–70

PATHOLOGY

Society of Uroradiology Award paper. The pars infravaginalis gubernaculi: importance in the identification of the undescended testis. Rosenfield AT, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):775–8

MR imaging of ossification of the posterior longitudinal ligament [letter] Widder DJ. **AJR Am J Roentgenol** 1989 Jul;153(1):194–5

Prevention of ligament and meniscus atrophy by active joint motion in a non–weight–bearing model. Klein L, et al. **J Orthop Res** 1989;7(1):80–5

Ossification of the ligamentum flavum. A case report and its MRI finding. Enomoto H, et al. **Neuroradiology** 1988; 30(6):571–3

Normal and disrupted lumbar longitudinal ligaments: correlative MR and anatomic study. Grenier N, et al. **Radiology** 1989 Apr;171(1):197–205

The anatomy of gubernaculum testis and processus vaginalis in cryptorchidism. Johansen TE. **Scand J Urol Nephrol** 1988;22(2):101–5

Histological studies of gubernaculum testis taken during orchiopexies. Johansen TE, et al. **Scand J Urol Nephrol** 1988;22(2):107–8

Hyperostotic lumbar spinal stenosis. A review of 12 surgically treated cases with roentgenographic survey of ossification of the yellow ligament at the lumbar spine. Kurihara A, et al. **Spine** 1988 Nov;13(11):1308–16

Electrophysiologic diagnosis of cervical OPLL myelopathy using evoked spinal cord potentials. Shinomiya K, et al. **Spine** 1988 Nov;13(11):1225–33

[Studies on induction mechanism of ossification of the posterior longitudinal ligament of the spine—especially on the cultured cells from the human spinal ligament] Ishida Y. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):1019–27 (Eng. Abstr.) (Jpn)

[Experimental study on ossification of spinal ligaments in the rabbit under influence of bone morphogenetic protein] Murakami H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1211–20 (Eng. Abstr.) (Jpn)

[MRI of OPLL (ossification of the posterior longitudinal ligament)] Otake S, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):989–93 (Eng. Abstr.) (Jpn)

[Hepatoduodenal ligament teratoma followed by hypertensive syndrome of the portal vein] Akimov OV. **Arkh Patol** 1989;51(1):60–2 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Dielectric relaxation studies on bovine ligamentum nuchae. Luan CH, et al. **Biopolymers** 1988 Nov;27(11):1787–93

Simultaneous measurements of strains on two surfaces of tendons and ligaments. To SY, et al. **J Biomech** 1988; 21(6):511–4

Structure and mechanical properties of the longitudinal ligaments and ligamentum flavum of the spine. Kirby MC, et al. **J Biomed Eng** 1989 May;11(3):192–6

Torsional stability of the lumbosacral junction. Significance of the iliolumbar ligament. Chow DH, et al. **Spine** 1989 Jun;14(6):611–5

Estimation of force and extensor moment contributions of the disc and ligaments at L4–L5. McGill SM. **Spine** 1988 Dec;13(12):1395–402

Tensile strength of spinal ligaments. Myklebust JB, et al. **Spine** 1988 May;13(5):526–31

In vitro strength of the suspensory apparatus in training and resting horses. Bukowiecki CF, et al. **Vet Surg** 1987 Mar–Apr;16(2):126–30

[The functional significance of the suspending ligaments of the ear ossicle chain] Hüttenbrink KB. **Laryngorhinootologie** 1989 Mar;68(3):146–51 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

[Physiopathology and therapy of ossification of posterior longitudinal ligaments] Yamaura I. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):355–69 (Jpn)

RADIOGRAPHY

The relationship between the common femoral artery, the inguinal crease, and the inguinal ligament: a guide to accurate angiographic puncture. Lechner G, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):165–9

Gastrohepatic ligament fibrosis following esophageal sclerotherapy: CT findings. Foster GS, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):136–7

Exophytic spread of hepatobiliary disease via perihepatic ligaments: demonstration with CT and US. Mori H, et al. **Radiology** 1989 Jul;172(1):41–6

Localized ossifications in the supraspinous and interspinous ligaments of adult man. Scapinelli R. **Rays** 1988 Jan–Apr; 13(1):29–33

[CT of fractures and ligament ruptures of the 1st and 2d cervical vertebrae] Nepper–Rasmussen HJ, et al. **Ugeskr Laeger** 1989 May 1;151(18):1112–4 (Eng. Abstr.) (Dan)

[The pulmodiaphragmal ligament. An often misinterpreted normal variant] Frytz JF, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):204–6 (Eng. Abstr.) (Nor)

SURGERY

Stress fracture of the clavicle leading to nonunion secondary to coracoclavicular reconstruction with Dacron. Dust WN, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):128–9

Tissue reactions around two alloplastic ligament substitute materials: experimental study on rats with carbon fibres and polypropylene. Mäkisalo SE, et al. **Biomaterials** 1989 Mar;10(2):105–8

Transvaginal sacrospinous vaginal fixation. Dony JM. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13–14

Uterosacral ligament suspension of vaginal vault (McCall's culdeplasty). Hirsch HA. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13

The metacarpophalangeal volar plate arthroplasty. Tupper JW. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):371–5 (0 ref.)

Anterior cervical vertebrectomy and interbody fusion for multi–level spondylosis and ossification of the posterior longitudinal ligament. Kojima T, et al. **Neurosurgery** 1989 Jun;24(6):864–72

An anatomic evaluation of the sacrospinous ligament colpopexy. Kettel LM, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):318–22

Radical block resection of hepatoduodenal ligament for carcinoma of the bile duct with double catheter bypass for portal circulation [published erratum appears in Surg Gynecol Obstet 1989 May;168(5):460] Mimura H, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):527–9

[Cholecystostomy through the round ligament of the liver] Toskin KD, et al. **Klin Khir** 1988;(9):68 (Rus)

TRANSPLANTATION

[Cardiopexy using the umbilical ligament of the liver in the treatment of gastro–esophageal reflux. Results of experience with 100 cases] Palot JP, et al. **J Chir (Paris)** 1989 Jan;126(1):13–23 (38 ref.) (Eng. Abstr.) (Fre)

[Plastic surgery of a defect of the common hepatic duct using the round ligament of the liver] Bobrov OE, et al. **Klin Khir** 1988;(9):63–4 (Rus)

[A method for the surgical correction of cardial failure by using the round ligament of the liver] Chibis OA, et al. **Voen Med Zh** 1988 Dec;(12):47–8 (Rus)

ULTRASTRUCTURE

Degeneration of the human lumbar spine ligaments. An ultrastructural study. Yahia H, et al. **Pathol Res Pract** 1989 Apr;184(4):369–75

LIGAMENTS, ARTICULAR

The biochemical and histological effects of artificial ligament wear particles: in vitro and in vivo studies. Olson EJ, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):558–70 (88 ref.)

The iliolumbar ligament syndrome. Broadhurst N. **Aust Fam Physician** 1989 May;18(5):522

Ganglion cysts of the anterior cruciate ligament. A case report. Chang W, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):182–6

Anatomy and biomechanics of the anterior cruciate ligament. Dye SF, et al. **Clin Sports Med** 1988 Oct;7(4):715–25 (38 ref.)

Foramen magnum syndrome from pseudogout of the atlanto–occipital ligament. Case report. Ciricillo SF, et al. **J Neurosurg** 1989 Jul;71(1):141–3

Prosthetic replacement of the cranial cruciate ligament under arthroscopic guidance. A pilot project. Person MW. **Vet Surg** 1987 Jan–Feb;16(1):37–43

[Role of MRI in the study of the Achilles tendon and patellar tendon] Frocrain L, et al. **J Radiol** 1988 Dec;69(12):731–4 (Eng. Abstr.) (Fre)

[Dorsal spinal cord disease caused by ossification of the ligamentum flavum and D10–D11 posterior arthrosis] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep; 55(9):665–7 (Fre)

[Chronic fibular ligament insufficiency at the upper ankle joint. Late results after modified Watson–Jones plastic surgery] Boszotta H, et al. **Unfallchirurg** 1989 Jan; 92(1):11–6 (Eng. Abstr.) (Ger)

[Pellegrini–Stieda disease] Greida BP. **Vestn Khir** 1988 May; 140(5):72 (Rus)

ANALYSIS

Autofluorescence of bovine ligamentum nuchae, cartilage, heart valve and lung measured by microscopy and fibre optics. Swatland HJ. **Res Vet Sci** 1988 Sep;45(2):230–3

ANATOMY & HISTOLOGY

The collateral ligaments of the knee joint in the cat and man. Morphological and functional study of the internal arrangement of fibers. Poliacu Prosé L, et al. **Acta Anat (Basel)** 1988;133(1):70–8

Anatomy of the cruciate ligaments and their function in extension and flexion of the human knee joint. Fuss FK. **Am J Anat** 1989 Feb;184(2):165–76

Factors affecting the region of most isometric femoral attachments. Part I: The posterior cruciate ligament. Grood ES, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):197–207 (32 ref.)

Factors affecting the region of most isometric femoral attachments. Part II: The anterior cruciate ligament. Hefzy MS, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):208–16 (38 ref.)

Anatomy of the posterior cruciate ligament. A review. Van Dommelen BA, et al. **Am J Sports Med** 1989 Jan–Feb; 17(1):24–9 (28 ref.)

The anatomy of the extensor mechanism. Terry GC. **Clin Sports Med** 1989 Apr;8(2):163–77

The role of the anterior tibio–fibular ligament in talar rotation: an anatomical study. Sarsam IM, et al. **Injury** 1988 Mar;19(2):62–4

Entrapment of the distal suprascapular nerve. An anatomical study. Kaspi A, et al. **Int Orthop** 1988;12(4):273–5

Ligaments associated with lumbar intervertebral foramina. 2. The fifth lumbar level. Amonoo–Kuofi HS, et al. **J Anat** 1988 Aug;159:1–10

A stereophotogrammetric method for measurements of ligament structure. Meijer RC, et al. **J Biomech** 1989; 22(2):177–84

Stability of the transverse carpal arch: an experimental study. Garcia–Elias M, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):277–82

An anatomic guide for arthroscopic visualization of the wrist capsular ligaments. North ER, et al. **J Hand Surg [Am]** 1988 Nov;13(6):815–22

The dorsal carpal ligaments: their anatomy and function. Mizuseki T, et al. **J Hand Surg [Br]** 1989 Feb;14(1):91–8 (27 ref.)

Magnetic resonance imaging of the knee and correlation with normal anatomy. Mesgarzadeh M, et al. **Radiographics** 1988 Jul;8(4):707–33

Ligament of the head of the femur in the orangutan and Indian elephant. Crelin ES. **Yale J Biol Med** 1988 Sep–Oct; 61(5):383–8

[Elastometric study of the distal scaphoid ligamental complex and the scapho–lunar ligament] Boabighi A, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):5–10 (Eng. Abstr.) (Fre)

[Fibrous structures of the wrist. I. Methods of studying the fibrous structures and results obtained (history)] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep; 72(217–218):27–30 (37 ref.) (Eng. Abstr.) (Fre)

[Fibrous structures of the wrist. III. Microscopic study.

Rheologic consequences] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep;72(217–218):37–43 (Eng. Abstr.) (Fre)

[Variations in the calcaneo-fibular ligament (lig. calcaneofibulare). Application to the kinematics of the ankle] Trouilloud P, et al. **Bull Assoc Anat (Nancy)** 1988 Mar;72(216):31–5 (Eng. Abstr.) (Fre)

[CT arthrography and MR tomography—a study of the normal anatomy of the cruciate ligaments of the knee joint] Garz G, et al. **Radiol Diagn (Berl)** 1988;29(4):563–70 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Collagenase production by rabbit ligaments and tendon. Harper J, et al. **Connect Tissue Res** 1988;17(4):253–9

Collagenases from periarticular ligaments and tendon: enzyme levels during the development of joint contracture. Harper J, et al. **Matrix** 1989 Jun;9(3):200–5

INJURIES

Thigh muscle atrophy and postoperative osteoarthrosis after knee ligament tears. Kannus P, et al. **Acta Chir Hung** 1988; 29(2):151–61

Free patellar tendon grafting as augmentation or as substitution for acute isolated anterior cruciate ligament tears. Preliminary results. Aerts P, et al. **Acta Orthop Belg** 1988;54(4):401–5

Knee laxity in cruciate ligament injury. Value of examination under anesthesia. Dahlstedt LJ, et al. **Acta Orthop Scand** 1989 Apr;60(2):181–4

Comparison of three different treatments for ruptured lateral ankle ligaments. Møller-Larsen F, et al. **Acta Orthop Scand** 1988 Oct;59(5):564–6

Diagnostic value of stress radiography in lesions of the lateral ligaments of the ankle. Ahovuo J, et al. **Acta Radiol** 1988 Nov–Dec;29(6):711–4

Lesion of the anterior cruciate ligament and sagittal disalignment of the knee in weight-bearing. Egund N, et al. **Acta Radiol** 1988 Sep–Oct;29(5):559–63

The Segond fracture of the proximal tibia: a small avulsion that reflects major ligamentous damage. Goldman AB, et al. **AJR** 1988 Dec;151(6):1163–7

Gamekeeper's thumb. Hankin FM, et al. **Am Fam Physician** 1988 Dec;38(6):127–30

Arthroscopic partial meniscectomy in the anterior cruciate deficient knee. Aglietti P, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):597–602 (51 ref.)

The pivot shift phenomenon: results and description of a modified clinical test for anterior cruciate ligament insufficiency. Bach BR Jr, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):571–6

Proprioception in the anterior cruciate deficient knee. Barrack RL, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):1–6

Dynamic EMG analysis of anterior cruciate deficient legs with and without bracing during cutting. Branch TP, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):35–41

The natural history of conservatively treated partial anterior cruciate ligament tears. Buckley SL, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):221–5 (37 ref.)

Noninvasive diagnosis of cruciate ligament damage with particular reference to computed tomography with arthrography. Büttner-Janz K, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):501–4

Patterns of meniscal injury with acute anterior cruciate ligament tears. Cerabona F, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):603–9

A dynamic analysis of a functional brace for anterior cruciate ligament insufficiency. Cook FF, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):519–24

An analysis of the sidestep cutting manoeuvre. Cross MJ, et al. **Am J Sports Med** 1989 May–Jun;17(3):363–6

A biomechanical evaluation of tibiofemoral rotation in anterior cruciate deficient knees during walking and running. Czerniecki JM, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):327–31

The effect of a nonsteroidal antiinflammatory drug on the healing of ligaments. Dahners LE, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):641–6

Fat pad adhesion to partially torn anterior cruciate ligament: a cause of knee locking. Finsterbush A, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):92–5

An unusual ankle injury in top skiers. Fritschy D. **Am J Sports Med** 1989 Mar–Apr;17(2):282–5; discussion 285–6

Gore-Tex prosthetic ligament in anterior cruciate deficient knees. Glousman R, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):321–6

The effect of exercise on laxity in the anterior cruciate ligament deficient knee. Grana WA, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):586–8

Rupture of deltoid ligament without involvement of the lateral ligament. Jackson R, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):541–3

Nonoperative treatment of grade II and III sprains of the lateral ligament compartment of the knee. Kannus P. **Am J Sports Med** 1989 Jan–Feb;17(1):83–8

Thigh musculature in relation to chronic anterior cruciate ligament tear: muscle size, morphology, and mechanical output before reconstruction. Lorentzon R, et al. **Am J Sports Med** 1989 May–Jun;17(3):423–9

External stabilization of the anterior cruciate ligament deficient knee during rehabilitation. Maltry JA, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):550–4

Pathomechanics of posterior sag of the tibia in posterior cruciate deficient knees. An experimental study. Ogata K, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):630–6

Four to ten year followup of unreconstructed anterior cruciate ligament tears. Pattee GA, et al. **Am J Sports Med** 1989 May–Jun;17(3):430–5

Bilaterality in anterior cruciate ligament injuries: associated intercondylar notch stenosis. Souryal TO, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):449–54

Force plate analyses before and after stabilization of canine stifles for cruciate injury. Budsberg SC, et al. **Am J Vet Res** 1988 Sep;49(9):1522–4

Rupture of the radial collateral ligament of the fifth metacarpophalangeal joint. Wolf BA, et al. **Ann Plast Surg** 1988 Oct;21(4):382–7

The non operative treatment of isolated complete tears of the medial collateral ligament of the knee. A prospective study. Ballmer PM, et al. **Arch Orthop Trauma Surg** 1988; 107(5):273–6

Avulsion fracture. Special type of meniscal damage. Pauly T, et al. **Arch Orthop Trauma Surg** 1989;108(5):325–6

Inversion trauma of the ankle. Schaap GR, et al. **Arch Orthop Trauma Surg** 1989;108(5):273–5

The role of arthroscopy in children and adolescents. Angel KR, et al. **Arthroscopy** 1989;5(3):192–6

Anterior cruciate ligament injury in children and adolescents. Angel KR, et al. **Arthroscopy** 1989;5(3):197–200

"Empty wall" and "vertical strut" signs of ACL insufficiency. Bach BR Jr, et al. **Arthroscopy** 1989; 5(2):137–40

Resection of the patellar ligament: a complication of arthroscopic synovectomy. Bachner EJ, et al. **Arthroscopy** 1989;5(1):76–8

Arthroscopic follow-up of anterior cruciate ligament reconstruction using allogeneic tendon. Shino K, et al. **Arthroscopy** 1989;5(3):165–71

Knees with cruciate ligament insufficiencies in a sports injury clinic [letter] al-Duri Z. **Clin Orthop** 1989 Jul;(244):309

Avulsion fractures of the posterior cruciate ligament of the knee. An experimental percutaneous rigid fixation technique under arthroscopic control. Martinez-Moreno JL, et al. **Clin Orthop** 1988 Dec;(237):204–8

Natural history of the posterior cruciate ligament-deficient knee. Torg JS, et al. **Clin Orthop** 1989 Sep;(246):208–16

The stabilized Lachman test. Wroble RR, et al. **Clin Orthop** 1988 Dec;(237):209–12

Arthroscopic observations of autogeneic quadriceps and patellar tendon grafts after anterior cruciate ligament reconstruction of the knee. Yasuda K, et al. **Clin Orthop** 1989 Sep;(246):217–24

Posttraumatic anterior cruciate ligament insufficiency as a cause of osteoarthritis in a knee joint. Kannus P, et al. **Clin Rheumatol** 1989 Jun;8(2):251–60

Osteoarthrosis of the knee due to chronic posttraumatic insufficiency of the lateral ligament compartment. Eight-year follow-up. Kannus P. **Clin Rheumatol** 1988 Dec;7(4):474–80

Treatment of the anterior cruciate ligament-deficient knee. **Clin Sports Med** 1988 Oct;7(4):697–848

Rehabilitation of the nonreconstructed anterior cruciate ligament-deficient knee. Antich TJ, et al. **Clin Sports Med** 1988 Oct;7(4):813–26

Diagnosis of acute and chronic anterior cruciate ligament tears. Gersoff WK, et al. **Clin Sports Med** 1988 Oct; 7(4):727–38 (46 ref.)

Principles of bracing for the anterior cruciate ligament-deficient knee. Millet CW, et al. **Clin Sports Med** 1988 Oct;7(4):827–33 (21 ref.)

A proposed natural history of symptomatic anterior cruciate ligament injuries of the knee. Ray JM. **Clin Sports Med** 1988 Oct;7(4):697–713 (50 ref.)

Injuries to the cranial cruciate ligament and associated structures: summary of clinical, radiographic, arthroscopic and pathological findings from 10 horses. Prades M, et al. **Equine Vet J** 1989 Sep;21(5):354–7

Does a torn anterior cruciate ligament lead to change in the central nervous drive of the knee extensors? Elmqvist LG, et al. **Eur J Appl Physiol** 1988;58(1–2):203–7

Examination of the sprained ankle: anterior drawer test or arthrography? Lähde S, et al. **Eur J Radiol** 1988 Nov; 8(4):255–7

Late results of the treatment of medical capsulo-ligamentous traumatic injuries of the ankle joint. Tokmakov P, et al. **Folia Med (Plovdiv)** 1987;29(2):15–8

Stabilization of ankle syndesmosis injuries with a syndesmosis screw. Kaye RA. **Foot Ankle** 1989 Jun;9(6):290–3

The influence of dorsiflexion in the treatment of severe ankle sprains: an anatomical study. Smith RW, et al. **Foot Ankle** 1988 Aug;9(1):28–33

Ski injuries, the significance of flake fractures. Fairclough JA, et al. **Injury** 1988 Mar;19(2):79–80

Treatment of fresh tears of the anterior cruciate ligament. A comparison of primary suture and augmentation with carbon fibre. Harilainen A, et al. **Injury** 1987 Nov; 18(6):396–400

Fracture-dislocation of the ankle with rupture of the deltoid ligament. Johnson DP, et al. **Injury** 1988 Mar;19(2):59–61

Age, overweight, sex, and knee instability: their relationship to the post-traumatic osteoarthrosis of the knee joint. Kannus P, et al. **Injury** 1988 Mar;19(2):105–8

A radiological scoring scale for evaluation of post-traumatic osteoarthritis after knee ligament injuries. Kannus P, et al. **Int Orthop** 1988;12(4):291–7

Functional treatment of recent ruptures of the fibular ligament of the ankle. Sommer HM, et al. **Int Orthop** 1989; 13(2):157–60

Treatment of a ruptured medial collateral ligament of the stifle in a horse. Bukowiecki CF, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):687–90

Cruciate and collateral ligament failure in the equine stifle: seven cases (1975–1985). Sanders-Shamis M, et al. **J Am Vet Med Assoc** 1988 Sep 1;193(5):573–6

Medical collateral ligament healing subsequent to different treatment regimens. Gomez MA, et al. **J Appl Physiol** 1989 Jan;66(1):245–52

The three-dimensional kinematics and flexibility characteristics of the human ankle and subtalar joint—Part II: Flexibility characteristics. Chen J, et al. **J Biomech Eng** 1988 Nov;110(4):374–85

Surgical or non-surgical treatment of acute rupture of the anterior cruciate ligament. A randomized study with long-term follow-up. Andersson C, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):965–74

Avulsion fracture of the ligamentum teres in a child. A case report. Barrett IR, et al. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):438–9

Acute tears of the anterior cruciate ligament. Surgical versus conservative treatment. Clancy WG Jr, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1483–8

Double-blind assessment of the value of magnetic resonance imaging in the diagnosis of anterior cruciate and meniscal lesions. Glashow JL, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):113–9

Instrumented Lachman tests for the evaluation of anterior laxity after reconstruction of the anterior cruciate ligament. Harter RA, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):975–83

Current concepts review. The definitions of terms for motion and position of the knee and injuries of the ligaments. Noyes FR, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):465–72 (58 ref.)

An approach to the repair of avulsion of the glenohumeral ligaments in the management of traumatic anterior glenohumeral instability. Thomas SC, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):506–13

Reconstruction for lateral ligament injuries of the ankle. Ahlgren O, et al. **J Bone Joint Surg [Br]** 1989 Mar; 71(2):300–3

Incomplete ruptures of the anterior cruciate ligament. Fruensgaard S, et al. **J Bone Joint Surg [Br]** 1989 May; 71(3):526–30

Knee ligament injuries in adolescents. Eight year follow-up of conservative management. Kannus P, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):772–6

Management of chronic lunotriquetral ligament tears. Pin PG, et al. **J Hand Surg [Am]** 1989 Jan;14(1):77–83

Rupture of the radial collateral ligament of the metacarpo-phalangeal joint of the index finger: a report of three cases. Doyle JR, et al. **J Hand Surg [Br]** 1989 May;14(2):248–50

Carpal instability with volar flexion of the proximal row associated with injury to the scapho-trapezial ligament: report of two cases. Hankin FM, et al. **J Hand Surg [Br]** 1988 Aug;13(3):298–302

Injury of the anterior cruciate ligament: the role of collagenase in ligament degeneration. Amiel D, et al. **J Orthop Res** 1989;7(4):486–93

A unique closed abduction-external rotation ankle fracture. O'Leary C, et al. **J Trauma** 1989 Jan;29(1):119–21

Residual disability after ankle-joint injury [editorial] **Lancet** 1989 May 13;1(8646):1056

Team physician #7. A comparative study of functional bracing in the anterior cruciate deficient knee. Rink PC, et al. **Orthop Rev** 1989 Jun;18(6):719–27 (19 ref.)

Anterior cruciate ligament reconstruction using silastic rod technique. Yerys P. **Orthop Rev** 1987 Nov;16(11):817–25

Bilateral isolated rupture of the posterior cruciate ligament. A case report and literature review. Kannus P, et al. **Orthopedics** 1989 Jul;12(7):995–7 (20 ref.)

Routine radiographs in acute knee distortions. Kannus P, et al. **Orthopedics** 1988 Nov;11(11):1591–3

Dislocation of the elbow: an experimental study of the ligamentous injuries. Søjbjerg JO, et al. **Orthopedics** 1989 Mar;12(3):461–3

Occult cartilage and bone injuries of the knee: detection, classification, and assessment with MR imaging. Mink JH, et al. **Radiology** 1989 Mar;170(3 Pt 1):823–9

Combination of rupture of the ulnar collateral ligament and spiroid fracture of the thumb. Case report. Gottlieb JO, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(1):75–6

Case report 552: Post-traumatic remodelling of the distal tibial epiphysis: a form of aseptic osteonecrosis. Lagier R. **Skeletal Radiol** 1989;18(4):331–3

Rehabilitation of the anterior cruciate ligament in the athlete. Silfverskiold JP, et al. **Sports Med** 1988 Nov;6(5):308–19

The role of the hamstrings in the rehabilitation of the anterior cruciate ligament-deficient knee in athletes. Solomonow M, et al. **Sports Med** 1989 Jan;7(1):42–8 (34 ref.)

Caudal cruciate ligament rupture. A retrospective analysis of 14 dogs. Johnson AL, et al. **Vet Surg** 1987 May–Jun; 16(3):202–6

[Injuries of the ligaments of the talar joint] Kudrna K, et al. **Rozhl Chir** 1989 Feb;68(2):141–4 (Eng. Abstr.) (Cze)
[Diagnosis and therapy of injuries of the external talar ligaments] Sin A. **Rozhl Chir** 1988 Sep;67(8–9):604–7 (Eng. Abstr.) (Cze)
[Conservative management of knee joint ligament injuries] Kannus P, et al. **Duodecim** 1988;104(11):842–9 (Fin)
[Injuries to the cruciate ligament of the knee] Kannus P, et al. **Duodecim** 1989;105(13–14):1239–45 (41 ref.) (Fin)
[Associated rupture of the anterior cruciate ligament and of the meniscus. Surgical indications in the light of 163 knees studies with arthroscopy] Cogan D. **Acta Orthop Belg** 1988; 54(2):237–43 (Eng. Abstr.) (Fre)
[Rupture of the anterior cruciate ligament at a peripheral hospital. Apropos of 70 cases] Rosso R, et al. **Helv Chir Acta** 1989 Jun;56(1–2):63–6 (Eng. Abstr.) (Fre)
[Meniscal lesions in so-called "isolated" ruptures of the anterior cruciate ligament. Apropos of 59 cases] Saragaglia D, et al. **J Chir (Paris)** 1988 Oct;125(10):571–4 (Eng. Abstr.) (Fre)
[Surgical treatment of chronic rupture of the posterior cruciate ligament. Apropos of 78 cases] Bousquet G, et al. **Rev Chir Orthop** 1988;74 Suppl 2:188–90 (Fre)
[Validity and diagnostic value of magnetic resonance imaging in traumatic menisco-ligamentous pathology of the knee. Prospective study of 22 knees] Christel P, et al. **Rev Chir Orthop** 1988;74(5):402–12 (Eng. Abstr.) (Fre)
[Combined rupture of the anterior cruciate ligament and the menisci of the knee. Surgical indications in the light of 163 knee arthroscopies] Cogan D. **Rev Chir Orthop** 1988; 74 Suppl 2:174–7 (Fre)
[The jerk-test in external rotation in rupture of the anterior cruciate ligament. Description and significance] Dupont JY, et al. **Rev Chir Orthop** 1988;74(5):413–23 (Eng. Abstr.) (Fre)
[Fractures and pseudarthroses of the carpal scaphoid. Results concerning type II, III and IV fractures combined with ligament lesions (luxation or peri-lunate trans-scaphoid subluxation)] Herzberg G. **Rev Chir Orthop** 1988; 74(8):711–3 (Fre)
[Fractures and pseudarthroses of the carpal scaphoid. Combined bone and ligament lesions in fresh fractures. An anatomo-radiologic analysis] Herzberg G, et al. **Rev Chir Orthop** 1988;74(8):695–7 (Fre)
[Spontaneous bilateral rupture of the extensor system of the knee in a patient with renal transplantation. Apropos of a case] Lauridsen K, et al. **Rev Chir Orthop** 1989;75(1):45–7 (8 ref.) (Eng. Abstr.) (Fre)
[Fresh ruptures of the anterior cruciate ligament treated with sutures reinforced with the semi-tendinous tendon] Witvoët J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:170–3 (Fre)
[The "positioned image" of the talo-calcaneus joint in instability of the posterior distal ankle joint] Bruns J, et al. **Aktuel Traumatol** 1989 Apr;19(2):82–4 (Eng. Abstr.) (Ger)
[Bilateral intra-ligamentous traumatic rupture of both patellar tendons—a case report] Kohn D, et al. **Aktuel Traumatol** 1988 Dec;18(6):271–4 (Eng. Abstr.) (Ger)
[Changes in pressure and contact surface of the talar joint surface in various foot angle positions and following stepwise division of the fibular ligaments—an experimental study] Paar O, et al. **Aktuel Traumatol** 1988 Dec; 18(6):255–60 (Eng. Abstr.) (Ger)
[Injury of the collateral ligaments of the metacarpophalangeal joint of the thumb and therapy] Reill P, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:35–9 (Eng. Abstr.) (Ger)
[Lateral ligament injury of the anterior ankle joint in sports] Weise K, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:54–66 (Eng. Abstr.) (Ger)
[Results following surgical treatment of fresh ligament injuries of the outer ankle joint] Fleischer GM, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):366–71 (Eng. Abstr.) (Ger)
[Pathophysiology of knee instability] Hertel P. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):37–46 (47 ref.) (Ger)
[Results of treatment following operative therapy of fibular ligament ruptures of the upper ankle joint] Malowsky J, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):253–60 (Eng. Abstr.) (Ger)
[The effectiveness of the Slocum and Larson pes anserinus transfer] Seidlein H, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):483–7 (Eng. Abstr.) (Ger)
[Arthroscopy as a guide in surgical management of capsular ligament injuries of the knee joint] van Alste HE, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):54–8 (Ger)
[Arthroscopy in knee instability] Wuschech H, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):47–54 (Ger)
[Fresh rupture of the inner ligament of the knee joint. An analysis of a sports traumatologic patient sample from 1981 to 1987] Paar O. **Chirurg** 1988 Nov;59(11):749–54 (Eng. Abstr.) (Ger)
[Management of fresh and older ruptures of the anterior cruciate ligament with the Kennedy modified polypropylene ligament augmented tendonplasty. Preliminary contribution] Paar O. **Chirurg** 1988 Nov; 59(11):788–92 (Ger)
[Current status of ligament injuries of the large joints] Schweiberer L, et al. **Chirurg** 1988 Nov;59(11):689–96 (37 ref.) (Ger)
[Reduction of postoperative swelling. Objective measurement of swelling of the upper ankle joint in treatment with serrapeptase— a prospective study] Esch PM, et al. **Fortschr Med** 1989 Feb 10;107(4):67–8, 71–2 (Eng. Abstr.) (Ger)
[Capsular ligament injuries of the knee joint. Significance of anamnesis and findings] Gradinger R, et al. **Fortschr Med** 1989 Feb 28;107(6):144–6 (6 ref.) (Eng. Abstr.) (Ger)
[Capsular ligament lesions of the knee joint. Conservative and surgical treatment] Gradinger R, et al. **Fortschr Med** 1989 Feb 28;107(6):147–9 (Eng. Abstr.) (Ger)
[Secondary ligament instabilities in the area of the elbow joint] Wirth CJ. **Orthopade** 1988 Aug;17(4):353–8 (38 ref.) (Eng. Abstr.) (Ger)
[Ruptured ligaments of the ankle joint—clinical diagnosis in comparison with arthrographic findings] Myllylä V, et al. **Radiol Diagn (Berl)** 1988;29(3):405–9 (Eng. Abstr.) (Ger)
[The lateral capsule sign in the traumatized knee joint] Hardegger F, et al. **Schweiz Med Wochenschr** 1989 Jun 10;119(23):839–42 (Eng. Abstr.) (Ger)
[Preventive stabilization of the knee joint by a bandage (brace) in an ice hockey player. Sense or nonsense?] Bentzin J, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):178–9 (Eng. Abstr.) (Ger)
[The effectiveness of electromyostimulation following operations of the capsule-ligament system of the knee joint in athletes] Franke J, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):62–6 (Eng. Abstr.) (Ger)
[Bosworth management of acromioclavicular joint dislocation] Fröhling M, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):88–91 (Eng. Abstr.) (Ger)
[Basic principles of after care following autoplastic reconstruction of the cruciate ligament] Kohn D, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):67–73 (43 ref.) (Eng. Abstr.) (Ger)
[Surgical therapy of fibular capsule-ligament rupture] Lippert MJ, et al. **Sportverletz Sportschaden** 1989 Mar; 3(1):6–13 (Eng. Abstr.) (Ger)
[Current status of the therapy of anterior cruciate ligament injuries] Noack W, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):13–9 (68 ref.) (Eng. Abstr.) (Ger)
[Roentgenologic signs of anterior cruciate ligament insufficiency] Sandholzer K, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):106–11 (Eng. Abstr.) (Ger)
[Conservative functional treatment of fibular capsule ligament rupture even in the performance athlete?] Sommer HM, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):25–9 (Eng. Abstr.) (Ger)
[Rupture of the anterior cruciate ligament—a diagnostic problem?] Blauth W, et al. **Unfallchirurg** 1988 Aug; 91(8):358–65 (Eng. Abstr.) (Ger)
[Early results following suture and augmentation of the ruptured anterior cruciate ligament. Arthrotomy versus arthroscopic surgical technic] Boszotta H, et al. **Unfallchirurg** 1988 Oct;91(10):459–64 (Eng. Abstr.) (Ger)
[Supination stability of the Adimed-Stabil-II shoe in capsule-ligament instability of the upper ankle joint] Ludolph E, et al. **Unfallchirurg** 1989 Apr;92(4):195–8 (Eng. Abstr.) (Ger)
[Therapy and prognosis of medial ligament injury of the knee joint] Paar O, et al. **Unfallchirurg** 1989 Jun;92(6):291–5 (Eng. Abstr.) (Ger)
[Fibular ligament rupture during growth] Starke W. **Unfallchirurg** 1989 Jan;92(1):6–10 (Eng. Abstr.) (Ger)
[Immediate operation of a rupture of the ankle joint ligament] Bsteh M. **Unfallchirurgie** 1988 Oct;14(5):291–4 (Eng. Abstr.) (Ger)
[The diagnostic certainty of various methods of evaluating recent trauma to knee ligaments] Decker R, et al. **Unfallchirurgie** 1988 Aug;14(4):204–10 (Eng. Abstr.) (Ger)
[Diagnosis and treatment of atlanto-occipital ruptures] Hummel A, et al. **Unfallchirurgie** 1988 Dec;14(6):311–9 (Eng. Abstr.) (Ger)
[Ideal indications for the use of a textile ligament of high strength Trevira in alloplastic replacement of the anterior cruciate ligament in chronic isolated rupture] Mockwitz J, et al. **Unfallchirurgie** 1988 Oct;14(5):276–82 (Eng. Abstr.) (Ger)
[Treatment of cruciate ligament lesion following knee trauma] Müller HW, et al. **Unfallchirurgie** 1988 Oct; 14(5):265–75 (Eng. Abstr.) (Ger)
[Postoperative continuous passive motion following augmentation of anterior cruciate ligament ruptures with polydioxanone ligaments. Early results of a prospective study] Oberbillig C, et al. **Unfallchirurgie** 1989 Jun; 15(3):145–51 (Eng. Abstr.) (Ger)
[Comparison of the value of magnetic resonance tomography and computerized tomography in the follow-up of augmentation-plasties with carbon fiber ligaments of the anterior cruciate ligament] Sim E, et al. **Unfallchirurgie** 1989 Jun;15(3):152–61 (Eng. Abstr.) (Ger)
[Experiences in the diagnosis, therapy and rehabilitation of fresh and chronic fibular capsule and ligament injuries of the upper ankle joint] Ahrendt E, et al. **Z Arztl Fortbild (Jena)** 1989;83(2):83–7 (Ger)
[Capsule, ligament and internal injuries of the knee joint] Franke K, et al. **Z Arztl Fortbild (Jena)** 1989;83(2):77–81 (Ger)
[Ligament lesions of the knee joint in childhood] Ritter G, et al. **Z Kinderchir** 1989 Apr;44(2):94–6 (Eng. Abstr.) (Ger)
[Osteochondral involvement in fibulotalar ligament ruptures] Schütze F, et al. **Z Kinderchir** 1989 Apr;44(2):91–3 (Eng. Abstr.) (Ger)
[Surgical treatment of chronic upper ankle joint instability in childhood] Zwipp H, et al. **Z Kinderchir** 1989 Apr; 44(2):97–104 (Eng. Abstr.) (Ger)
[4-year results following Insall anterior cruciate ligament-plasty] Imhoff A, et al. **Z Orthop** 1989 Mar–Apr; 127(2):152–62 (Eng. Abstr.) (Ger)
[Treatment of flake fracture of the talus] Ittner G, et al. **Z Orthop** 1989 Mar–Apr;127(2):183–6 (Eng. Abstr.) (Ger)
[Resorbable augmentationplasty and functional after care in fresh rupture of the anterior cruciate ligament. An improved treatment concept] Lobenhoffer P, et al. **Z Orthop** 1988 May–Jun;126(3):296–9 (Eng. Abstr.) (Ger)
[Follow-up studies of transosseous capsule-ligament sutures of the basal joint of the thumb using a standardized holder] Lütten C, et al. **Z Orthop** 1989 Jan–Feb;127(1):82–8 (Eng. Abstr.) (Ger)
[Spontaneous ruptures of the extensor system of the knee following joint replacement in patients with rheumatoid arthritis] Trepte CT, et al. **Z Orthop** 1988 Sep–Oct; 126(5):519–25 (Eng. Abstr.) (Ger)
[Periosteal rein-plasty, a simple and safe method in the treatment of chronic fibular instability of the upper ankle joint] Lindenmaier HL, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):201–4 (Ger)
[Initial experiences with ambulatory ligament suture of the fresh ligament rupture of the upper ankle joint using local anesthesia] Bär BW, et al. **Zentralbl Chir** 1988; 113(19):1268–72 (Eng. Abstr.) (Ger)
[Dislocation of the acromioclavicular joint—conservative or surgical therapy?] Hack U, et al. **Zentralbl Chir** 1988; 113(14):899–910 (Eng. Abstr.) (Ger)
[The lower ankle joint. Anatomic and pathophysiologic observations] Machan FG, et al. **Zentralbl Chir** 1989; 114(6):371–80 (Eng. Abstr.) (Ger)
[Ligament injuries of the metacarpophalangeal joint of the thumb] Mitzscherling CP, et al. **Zentralbl Chir** 1988; 113(19):1263–7 (Eng. Abstr.) (Ger)
[Experience with the surgical management of rupture of the capsule and ligament of the acromioclavicular joint] Sánta S, et al. **Orv Hetil** 1989 Jul 16;130(29):1537–41 (160 ref.) (Eng. Abstr.) (Hun)
[Comparison of simple suture and suture reinforced with semitendinous tendon in the treatment of acute lesions of the anterior cruciate ligament] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):329–34 (Eng. Abstr.) (Ita)
[Hemarthrosis in injuries of the anterior cruciate ligament] Felli L, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):137–9 (Eng. Abstr.) (Ita)
[Role of magnetic resonance in acute capsular-ligamentous pathology of the knee] Pinto R, et al. **Radiol Med (Torino)** 1988 Dec;76(6):559–62 (Eng. Abstr.) (Ita)
[Treatment and rehabilitation of anterior cruciate ligament injuries in Norway. A comparison with the Anterior Cruciate Ligament Study Group] Engebretsen L, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1288–90 (Eng. Abstr.) (Nor)
[Ultrasonic diagnosis of tendon and ligament injuries in anterior dislocations of the shoulder joint] Falkowska-Bednarek E. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):49–54 (Eng. Abstr.) (Pol)
[Closed methods of plastic repair in inveterate injuries to the ligaments of the knee joint] Kotel'nikov GP. **Ortop Travmatol Protez** 1988 Jul;(7):46–9 (Eng. Abstr.) (Rus)
[Reflexotherapy in the combined treatment of trauma] Shestkov BP. **Ortop Travmatol Protez** 1988 Jul;(7):65–70 (Eng. Abstr.) (Rus)
[Hypermobility of the knee joint in osteoarthrosis] Chepoi VM, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):22–6 (Eng. Abstr.) (Rus)
[Diagnosis of rupture of the ligament system of the knee joint] Kotel'nikov GP. **Vestn Khir** 1988 Oct;141(10):116–7 (Rus)

INNERVATION

The ultrastructure of sensory nerve endings in human anterior cruciate ligament. Halata Z, et al. **Anat Embryol (Berl)** 1989;179(5):415–21
Distribution of neural elements in collateral ligaments of the rat knee joint—light and electron microscopic studies using silver impregnation method and cholinesterase histochemistry. Nakano K, et al. **Kobe J Med Sci** 1988 Oct; 34(5):201–14

METABOLISM

Carbon fiber as a prosthetic anterior cruciate ligament. A biochemical and histological analysis in pigs. Mäkisalo S,

et al. Am J Sports Med 1989 Jul-Aug;17(4):459-62
Elastin binds to a multifunctional 67-kilodalton peripheral membrane protein. Mecham RP, et al. Biochemistry 1989 May 2;28(9):3716-22
Biochemical heterogeneity within the maturing rabbit medial collateral ligament. Frank C, et al. Clin Orthop 1988 Nov; (236):279-85
Early histologic, metabolic, and vascular assessment of anterior cruciate ligament autografts. Kleiner JB, et al. J Orthop Res 1989;7(2):235-42

PATHOLOGY

Cervical myelopathy due to ossification of the posterior longitudinal ligament. De Bleecker J, et al. Acta Neurol Belg 1988 May-Jul;88(3):133-9
Lesion of the ligamentum bifurcatum in ankle sprain. Agnholt J, et al. Arch Orthop Trauma Surg 1988;107(5):326-8
The Lachman test. Young D, et al. Aust Fam Physician 1989 Feb;18(2):171
MR imaging of anterior cruciate ligament repair. Moeser P, et al. J Comput Assist Tomogr 1989 Jan-Feb;13(1):105-9
Magnetic resonance imaging of the collateral ligaments of the thumb. Louis DS, et al. J Hand Surg [Am] 1989 Jul; 14(4):739-41
Avulsion of the patellar ligament in osteopenic laying fowl [published erratum appears in Vet Rec 1988 Nov 5;123(19):496] Randall CJ, et al. Vet Rec 1988 Oct 22; 123(17):439-41
[Ossification of the posterior longitudinal ligament] Terayama K. Nippon Seikeigeka Gakkai Zasshi 1988 Jun;62(6):679-95 (77 ref.) (Jpn)

PHYSIOLOGY

The effect of knee braces on lateral impact loading of the knee. Baker BE, et al. Am J Sports Med 1989 Mar-Apr; 17(2):182-6
The stabilizing effect of the ligamentous structures in the sinus and canalis tarsi on movements in the hindfoot. An experimental study. Kjaersgaard-Andersen P, et al. Am J Sports Med 1988 Sep-Oct;16(5):512-6
Tibiofemoral joint forces during isokinetic knee extension. Niseil R, et al. Am J Sports Med 1989 Jan-Feb;17(1):49-54
Three-dimensional dynamic motion analysis of the anterior cruciate ligament deficient knee joint. Reuben JD, et al. Am J Sports Med 1989 Jul-Aug;17(4):463-71
Gait alterations in dogs after transection of the anterior cruciate ligament. O'Connor BL, et al. Arthritis Rheum 1989 Sep;32(9):1142-7
The effect of postoperative collateral ligament laxity in total knee arthroplasty. Edwards E, et al. Clin Orthop 1988 Nov; (236):44-51
Further observations on the isometricity of the anterior cruciate ligament. An anatomical study using a 6-mm diameter replacement. Schutzer SF, et al. Clin Orthop 1989 May;(242):247-55
Stabilizing effect of the tibiocalcaneal fascicle of the deltoid ligament on hindfoot joint movements: an experimental study. Kjaersgaard-Andersen P, et al. Foot Ankle 1989 Aug;10(1):30-3
Strain in the lateral ligaments of the ankle. Renstrom P, et al. Foot Ankle 1988 Oct;9(2):59-63
Intrinsic and extrinsic wrist ligaments: biomechanical and functional differences. Logan SE, et al. ISA Trans 1988; 27(3):37-41
Moment-rotation relationships of the ligamentous occipito-atlanto-axial complex. Goel VK, et al. J Biomech 1988;21(8):673-80
Comment on 'Effects of knee flexion angle on the structural properties of the rabbit femur-anterior cruciate ligament-tibia complex' [letter] Grood ES, et al. J Biomech 1988;21(8):688-91
Electromyographic study of the anterior cruciate ligament-hamstrings synergy during isometric knee extension. Grabiner MD, et al. J Orthop Res 1989; 7(1):152-5
Assessment of normal pediatric knee ligament laxity using the genucom. Baxter MP. J Pediatr Orthop 1988 Sep-Oct; 8(5):546-50
The cruciate ligaments and their effect on the kinematics of the human knee. Huber H, et al. Med Biol Eng Comput 1988 Nov;26(6):647-54
The effect of the squat exercise on knee stability. Chandler TJ, et al. Med Sci Sports Exerc 1989 Jun;21(3):299-303
Experimental instability of the elbow joint. Söjbjerg JO, et al. Rev Chir Orthop 1988;74 Suppl 2:334-5
Biomechanics of the ligaments of the human knee and of artificial ligaments. Bonnel F, et al. Surg Radiol Anat 1988; 10(3):221-7
[Fibrous structures of the wrist. II. Biomechanical study] Kuhlmann JN, et al. Bull Assoc Anat (Nancy) 1988 Jun-Sep; 72(217-218):31-5 (Eng. Abstr.) (Fre)
[Biomechanical requirements of the anterior cruciate ligament of the knee] Wesbecker JP, et al. Rev Chir Orthop 1988;74 Suppl 2:187-8 (Fre)
[Biomechanical studies of the tensile strength of the anterior cruciate ligament with special reference to age-dependence] Rauch G, et al. Unfallchirurg 1988 Oct; 91(10):437-43 (Eng. Abstr.) (Ger)
[Biomechanics of the ankle joint] Zwipp H. Unfallchirurg 1989 Mar;92(3):98-102 (17 ref.) (Eng. Abstr.) (Ger)
[Rotation movements of the knee joint. A mathematical-kinematic model] Lengsfeld M. Z Orthop 1989 Mar-Apr;127(2):243-7 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Tibial collateral ligament bursitis [letter] Casscells SW. Am J Sports Med 1989 Jan-Feb;17(1):134-5
Implications of muscular defense in testing for the anterior drawer sign in the knee. A stress radiographic investigation. Iversen BF, et al. Am J Sports Med 1989 May-Jun; 17(3):409-13
Tibial collateral ligament bursitis. Kerlan RK, et al. Am J Sports Med 1988 Jul-Aug;16(4):344-6
Anterior cruciate ligament insufficiency: a dynamic three-dimensional motion analysis. Marans HJ, et al. Am J Sports Med 1989 May-Jun;17(3):325-32
Knee flexor and extensor strength ratios with deficiency of the lateral collateral ligament. Kannus P. Arch Phys Med Rehabil 1988 Nov;69(11):928-31
Relationship between peak torque and total work in an isokinetic contraction of the medial collateral ligament insufficient knee. Kannus P. Int J Sports Med 1988 Aug; 9(4):294-6
The cruciate ligaments in knee replacement. Hagena FW, et al. Int Orthop 1989;13(1):13-6
Mechanical properties of the lateral collateral ligament: effect of cruciate instability in the rabbit [published erratum appears in J Biomech Eng 1988 Nov;110(4):299] Torzilli PA, et al. J Biomech Eng 1988 Aug;110(3):208-12
Three-dimensional instability of the anterior cruciate deficient knee. Kärrholm J, et al. J Bone Joint Surg [Br] 1988 Nov;70(5):777-83
Intertester reliability of clinical judgments of medial knee ligament integrity. McClure PW, et al. Phys Ther 1989 Apr;69(4):268-75
The current status of total knee replacement. Ewald FC, et al. Rheum Dis Clin North Am 1988 Dec;14(3):579-90 (17 ref.)
[Flatfoot in children] Visser JD. Ned Tijdschr Geneeskd 1989 Apr 15;133(15):753-6 (Dut)
[The quadriga phenomenon of the extensor tendon system and the superficial transverse metacarpal ligament] Wilhelm A. Handchir Mikrochir Plast Chir 1988 Jul; 20(4):173-9 (5 ref.) (Eng. Abstr.) (Ger)
[The cruciate ligaments as the major mechanism of control of the movement of the knee joint] Börner M, et al. Z Orthop 1988 Dec;126(6):617-24 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[CT arthrography of the knee joint. A report of experiences with 175 computed tomographic studies of the cruciate ligaments] Garz G, et al. Radiol Diagn (Berl) 1988; 29(4):553-61 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Technetium-99m hydroxymethylene diphosphonate scanning of acute injuries to the lateral ligaments of the ankle. Maurice H, et al. Br J Radiol 1989 Jan;62(733):31-4

SURGERY

Poor results of bovine xenograft for knee cruciate ligament repair. Dahlstedt LJ, et al. Acta Orthop Scand 1989 Feb; 60(1):3-7
Poor results of anterior cruciate ligament repair in adolescence. Engebretsen L, et al. Acta Orthop Scand 1988 Dec;59(6):684-6
Failure of a bovine xenograft for reconstruction of the anterior cruciate ligament. Good L, et al. Acta Orthop Scand 1989 Feb;60(1):8-12
Analysis of rehabilitation techniques after anterior cruciate reconstruction. Anderson AF, et al. Am J Sports Med 1989 Mar-Apr;17(2):154-60 (39 ref.)
The effects of cold therapy in the postoperative management of pain in patients undergoing anterior cruciate ligament reconstruction. Cohn BT, et al. Am J Sports Med 1989 May-Jun;17(3):344-9
Acute repair of the anterior cruciate ligament with lateral capsular augmentation. Cross MJ, et al. Am J Sports Med 1989 Jan-Feb;17(1):63-7
An in vitro study of the Müller anterolateral femorotibial ligament tenodesis in the anterior cruciate ligament deficient knee. Draganich LF, et al. Am J Sports Med 1989 May-Jun;17(3):357-62
Extraarticular reconstruction of the anterior cruciate ligament insufficient knee. A long-term analysis of the Ellison procedure. Durkan JA, et al. Am J Sports Med 1989 Jan-Feb;17(1):112-7
Reconstruction of the anterior cruciate ligament. Long-term effects of different knee angles at primary immobilization and different modes of early training. Elmqvist LG, et al. Am J Sports Med 1988 Sep-Oct;16(5):455-62
A biomechanical analysis of anterior cruciate ligament reconstruction with patellar tendon—a two year followup [letter] Gold RA. Am J Sports Med 1989 Jan-Feb;17(1):134
Load sharing and graft forces in anterior cruciate ligament reconstructions with the Ligament Augmentation Device. Hanley P, et al. Am J Sports Med 1989 May-Jun; 17(3):414-22
Long-term evaluation of knee stability and function following surgical reconstruction for anterior cruciate ligament insufficiency. Harter RA, et al. Am J Sports Med 1988 Sep-Oct;16(5):434-43
Early experience with the GORE-TEX polytetrafluoroethylene anterior cruciate ligament prosthesis. Indelicato PA, et al. Am J Sports Med 1989 Jan-Feb;17(1):55-2
Augmentation with the longitudinal patellar retinaculum in the repair of an anterior cruciate ligament rupture. Jonsson T, et al. Am J Sports Med 1989 May-Jun;17(3):401-8
Long-term followup of anterior cruciate ligament reconstruction using the quadriceps tendon substitution for chronic anterior cruciate ligament insufficiency. Kornblatt I, et al. Am J Sports Med 1988 Sep-Oct;16(5):444-8
A multicenter study on the results of anterior cruciate ligament reconstruction using a Dacron ligament prosthesis in "salvage" cases. Lukianov AV, et al. Am J Sports Med 1989 May-Jun;17(3):380-5; discussion 385-6
Reconstruction of anterior cruciate ligament with carbon fiber. An experimental study on pigs. Mäkisalo S, et al. Am J Sports Med 1988 Nov-Dec;16(6):589-93
Arthroscopic meniscus repair. Miller DB Jr. Am J Sports Med 1988 Jul-Aug;16(4):315-20
The durability of anterior cruciate ligament reconstruction with the patellar tendon. Sandberg R, et al. Am J Sports Med 1988 Jul-Aug;16(4):341-3
Anterior cruciate ligament injuries in the young athlete with open physes [letter] Stanitski CL. Am J Sports Med 1988 Jul-Aug;16(4):424
A biomechanical analysis of anterior cruciate ligament reconstruction with the patellar tendon. A two year followup. Tibone JE, et al. Am J Sports Med 1988 Jul-Aug; 16(4):332-5
Corticosteroids and anterior cruciate ligament repair. Vargas JH 3d, et al. Am J Sports Med 1989 Jul-Aug;17(4):532-4
Epidural morphine after anterior cruciate ligament repair: a comparison with patient-controlled intravenous morphine. Loper KA, et al. Anesth Analg 1989 Mar; 68(3):350-2
The Insall procedure. A method of anterior cruciate ligament reconstruction. Gibson TP, et al. AORN J 1988 Sep; 48(3):466-8, 472-3, 476-9
Arthroscopically assisted anterior cruciate ligament reconstruction. Hales AL. AORN J 1989 Jan;49(1):234-55
Healing at graft fixation site under functional conditions in posterior cruciate ligament reconstruction. A morphological study in sheep. Bosch U, et al. Arch Orthop Trauma Surg 1989;108(3):154-8
Reconstruction of the four major ligaments in an unstable knee joint after dislocation by solvent-preserved human fascia lata transplantation. A case report. Kobayashi S, et al. Arch Orthop Trauma Surg 1989;108(4):246-9
Endoscopic release of the carpal ligament: a new technique for carpal tunnel syndrome. Chow JC. Arthroscopy 1989; 5(1):19-24
Arthroscopically aided anterior cruciate ligament reconstruction using a new drill wire guide. Kariya Y, et al. Arthroscopy 1989;5(3):227-31
Gas-gangrene following arthroscopic surgery. Ketterl R, et al. Arthroscopy 1989;5(1):79-83
Unsuccessful arthroscopic treatment of pyarthrosis following anterior cruciate ligament reconstruction. Kohn D. Arthroscopy 1988;4(4):287-9
Pitfalls in the use of interference screws for anterior cruciate ligament reconstruction: brief report. Matthews LS, et al. Arthroscopy 1989;5(3):225-6
Arthroscopic reconstruction of the anterior cruciate ligament using allograft tendon. Wainer RA, et al. Arthroscopy 1988; 4(3):199-205
Fracture of the patella as a possible complication of medial patellar desmotomy. Wright JD, et al. Aust Vet J 1989 Jun;66(6):189-90
A unitunnel technique for arthroscopic anterior cruciate ligament reconstruction. Beyer AH. Bull Hosp Jt Dis Orthop Inst 1988 Fall;48(2):164-9
Vascularized patella tendon anterior cruciate ligament reconstruction. Arendt EA, et al. Clin Orthop 1989 Jul; (244):222-32
Evaluation of Dacron-covered and plain bovine xenografts as replacements for the anterior cruciate ligament. Berry JL, et al. Clin Orthop 1988 Nov;(236):270-8
Intraarticular versus intraarticular and extraarticular reconstruction for chronic anterior cruciate ligament instability. Strum GM, et al. Clin Orthop 1989 Aug; (245):188-98
Recurrent radial head subluxation treated with annular ligament reconstruction. A case report and follow-up study. Thompson JD, et al. Clin Orthop 1989 Sep; (246):131-5
Complications of intra-articular anterior cruciate reconstruction. Graf B, et al. Clin Sports Med 1988 Oct; 7(4):835-48 (16 ref.)
Trends in rehabilitation following anterior cruciate ligament reconstruction. Huegel M, et al. Clin Sports Med 1988 Oct; 7(4):801-11 (46 ref.)
Arthroscopically assisted reconstruction of the anterior cruciate ligament using a patella tendon bone autograft. Jackson DW, et al. Clin Sports Med 1988 Oct;7(4):785-800
Primary repair of the anterior cruciate ligament. Sherman MF, et al. Clin Sports Med 1988 Oct;7(4):739-50 (42 ref.)
Arthroscopic anterior cruciate ligament reconstruction. Wilcox PG, et al. Clin Sports Med 1987 Jul;6(3):513-24 (12 ref.)

Synthetic and allograft anterior cruciate ligament reconstruction. Zoltan DJ, et al. **Clin Sports Med** 1988 Oct; 7(4):773–84 (47 ref.)

Toxic shock syndrome following repair of a ligament of the knee. Dreghorn CR, et al. **Injury** 1987 Sep;18(5):356–7

Reconstruction of the anterior cruciate ligament by semitendinosus transfer in chronic anterior instability of the knee. Puddu G, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):187–93

Prosthetic reconstruction of the anterior cruciate ligament of the knee: the roles of CT scan and M.R. Romanini L, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):301–10

Retention of the posterior cruciate in total knee arthroplasty. Andriacchi TP, et al. **J Arthroplasty** 1988;3 Suppl:S13–9

Should the posterior cruciate ligament be retained or resected in condylar nonmeniscal knee arthroplasty? The case for resection. Freeman MA, et al. **J Arthroplasty** 1988;3 Suppl:S3–12

Posterior cruciate ligament balancing during total knee arthroplasty. Ritter MA, et al. **J Arthroplasty** 1988; 3(4):323–6

Knee joint motion and ligament forces before and after ACL reconstruction. Lewis JL, et al. **J Biomech Eng** 1989 May; 111(2):97–106

Instrumented measurements of laxity in patients who have a Gore-Tex anterior cruciate-ligament substitute. Markolf KL, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):887–93

Meniscal lesions and chronic anterior cruciate ligament deficiency. Meniscal tears occurring before and after reconstruction. Bray RC, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):128–30

Lateral release for recurrent dislocation of the patella. Dandy DJ, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):121–5

Arthroscopy after anterior cruciate reconstruction with the Leeds-Keio ligament. Fujikawa K, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):566–70

Popliteal artery injury during anterior cruciate ligament reconstruction: brief report. Roth JH, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):840

Operation for collateral ligament ruptures of the metacarpophalangeal joints of the fingers. Schubiner JM, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):388–9

Treatment of duplicated thumb using a ligamentous/periosteal flap. Manske PR. **J Hand Surg [Am]** 1989 Jul;14(4):728–33

Scapholunate ligament excision [letter] Taleisnik J. **J Hand Surg [Am]** 1988 Sep;13(5):790–2

Non-menstrual toxic shock syndrome complicating orthopaedic surgery [letter] Croall J, et al. **J Infect** 1989 Mar;18(2):195–6

Use of patellar tendon autograft for anterior cruciate ligament reconstruction in the rabbit: a long-term histologic and biomechanical study. Ballock RT, et al. **J Orthop Res** 1989; 7(4):474–85

Maturation of autogenous tendon grafts in anterior cruciate ligament reconstruction of the human knee—an arthroscopic study. Yasuda K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):59–66

Effect of posterior cruciate sacrifice on durability of the cement-bone interface. A nine-year survivorship study of 100 total condylar knee arthroplasties. Ranawat CS, et al. **Orthop Clin North Am** 1989 Jan;20(1):63–9

Plastic suction tip in anterior cruciate ligament reconstruction. Skyhar MJ, et al. **Orthop Rev** 1988 Sep; 17(9):933–5

Tips of the Trade #12. Protection of the extensor mechanism insertion during total knee replacement. Worland RL, et al. **Orthop Rev** 1989 May;18(5):624–5

Angulation of fixation screw in knee ligament procedures. Acker JH, et al. **Orthopedics** 1989 Jun;12(6):823–6

Evaluation of experimental transection and partial excision of the caudal cruciate ligament in dogs. Harari J, et al. **Vet Surg** 1987 Mar-Apr;16(2):151–4

[Release of the lateral retinaculum of the knee in retropatellar chondropathy] Homminga GN, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):305–7 (Eng. Abstr.) (Dut)

[Dorsal Dupuytren's disease] Iselin F, et al. **Ann Chir Main** 1988;7(3):247–50 (Eng. Abstr.) (Fre)

[Plastic surgery of the ligament for chronic lateral instability of the ankle] Fritschy D, et al. **Int Orthop** 1988;12(3):239–47 (Eng. Abstr.) (Fre)

[Chronic anterior laxity of the knee treated by extra-articular ligamentoplasty. 226 cases reviewed after more than 2 years] Burgot D, et al. **Rev Chir Orthop** 1988;74(5):424–9 (27 ref.) (Eng. Abstr.) (Fre)

[The early development of postoperative anterior instability] Moyen B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:190–4 (Fre)

[Animal experiment studies of the resistance to wear of a teflon ligament prosthesis] Trepte CT. **Sportverletz Sportschaden** 1987 Jun;1(2):81–5 (Eng. Abstr.) (Ger)

[Lateral ligament replacement of the ankle joint—cialit graft or tendon graft? A comparative clinical study from the Balgrist Orthopedic University Hospital, Zürich] Waldis MF, et al. **Z Orthop** 1988 Jul-Aug;126(4):416–9 (Eng. Abstr.) (Ger)

[Reconstruction of the anterior cruciate ligament with an autologous graft of the patellar tendon] Pagani PA, et al. **Chir Organi Mov** 1988 Apr-Jun;73(2):129–36 (Eng. Abstr.) (Ita)

[Reconstruction of the anterior cruciate ligament with the Kennedy ligament augmentation device (L.A.D.) of reinforcement (preliminary results)] Pagani PA, et al. **Chir Organi Mov** 1988 Jul-Sep;73(3):205–10 (Eng. Abstr.) (Ita)

[Early results of surgical reconstruction of anterior cruciate ligaments of the knee joint by the Jones method] Kwarecki J. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):40–3 (Eng. Abstr.) (Pol)

[An operation for stabilizing the knee joint in rupture of the posterior cruciate ligament] Mironov SP, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):123–5 (Rus)

[Surgical treatment of recent injuries of the internal lateral ligament of the knee joint] Lirtsman VM, et al. **Ortop Travmatol Protez** 1989 Feb;(2):11–3 (Eng. Abstr.) (Rus)

[Late results of plastic surgery of the anterior cruciate ligament of the knee joint using a lavsan endoprosthesis] Tkachenko SS, et al. **Ortop Travmatol Protez** 1989 Feb; (2):7–10 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Arthroscopic "second look" at the GORE-TEX ligament. Ferkel RD, et al. **Am J Sports Med** 1989 Mar-Apr; 17(2):147–52; discussion 152–3

Determination of graft tension before fixation in anterior cruciate ligament reconstruction. Burks RT, et al. **Arthroscopy** 1988;4(4):260–6

[Homologous replacement of the cruciate ligament in the animal experiment] Riemer R, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):72–9 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Microscopical investigation of canine anterior cruciate ligament and patellar tendon: collagen fascicle morphology and architecture. Yahia LH, et al. **J Orthop Res** 1989; 7(2):243–51

LIGANDINS see GLUTATHIONE TRANSFERASES

LIGANDS

see related
RADIOLIGAND ASSAY
RECEPTORS, ENDOGENOUS SUBSTANCES

Evaluation of ligand induced relative change in the bimolecular quenching constant of protein fluorescence: a steady-state model. Somogyi B, et al. **Acta Biochim Biophys Hung** 1988;23(2):125–33

Evaluation of ligand induced relative change in the bimolecular quenching constant of protein fluorescence: applications to lysozyme and adenosine deaminase. Somogyi B, et al. **Acta Biochim Biophys Hung** 1988; 23(2):135–48

A chemical kinetic model for ligand binding to identical and independent binding sites in vivo. Bond JP, et al. **Anal Biochem** 1988 Nov 15;175(1):238–51

Small zone gel chromatography of interacting systems: theoretical and experimental evaluation of elution profiles for kinetically controlled macromolecule-ligand reactions. Cann JR, et al. **Anal Biochem** 1988 Dec;175(2):462–73

Analysis of ligand-binding data without knowledge of bound or free ligand molar concentration. Le Bonniec B, et al. **Anal Biochem** 1988 Oct;174(1):280–90

Analysis of ligand-receptor binding by the difference method. Melikhova EM, et al. **Anal Biochem** 1988 Dec; 175(2):507–15

DESIGN: computerized optimization of experimental design for estimating Kd and Bmax in ligand binding experiments. I. Homologous and heterologous binding to one or two classes of sites. Rovati GE, et al. **Anal Biochem** 1988 Nov 1;174(2):636–49

Evaluation of uncertainties for parameters in binding studies: the sum-of-squares profile and Monte Carlo estimation. Saroff HA. **Anal Biochem** 1989 Jan;176(1):161–9

Application of Fourier transform infrared (FTIR) spectroscopy to the study of protein-ligand interactions. Wingard LB Jr, et al. **Ann N Y Acad Sci** 1988;542:480–4

The use of permeabilized cells to study the ion requirements of receptor-ligand dissociation in endosomes. Diaz R, et al. **Biochem J** 1989 May 15;260(1):127–34

Synthesis of a truncated Mr 46,000 mannose 6-phosphate receptor that is secreted and retains ligand binding. Wendland M, et al. **Biochem J** 1989 May 15;260(1):201–6

Molecular recognition by dihydrofolate reductase: n.m.r. studies of protein-ligand interactions. Roberts GC. **Biochem Soc Trans** 1988 Dec;16(6):925–7

Quantitative analysis of linkage in macromolecules when one ligand is present in limited total quantity. Robert CH, et al. **Biochemistry** 1988 Sep 6;27(18):6829–35

Effect of a contaminating competitive ligand on ligand-binding curves. Inverse protein concentration dependence. Pedersen JB, et al. **Biophys Chem** 1988 Oct; 32(1):79–87

Cooperative ligand-lattice binding. Approximate Gaussian binding distribution. Reiter J, et al. **Biophys Chem** 1989 Mar;33(1):1–9

An analytic solution to the Monod-Wyman-Changeux model and all parameters in this model. Zhou G, et al. **Biophys J** 1989 Feb;55(2):275–80

Effect of dose, molecular size, affinity, and protein binding on tumor uptake of antibody or ligand: a biomathematical model. Thomas GD, et al. **Cancer Res** 1989 Jun 15; 49(12):3290–6

Ligand-induced dimerization of the platelet-derived growth factor receptor. Monomer-dimer interconversion occurs independent of receptor phosphorylation. Bishayee S, et al. **J Biol Chem** 1989 Jul 15;264(20):11699–705

Ligand-induced modulation of the hepatic receptor for asialoglycoproteins. Evidence for the role of cell surface hyposialylation. Weiss P, et al. **J Biol Chem** 1989 Jul 15; 264(20):11572–4

"Lectins as ligands: lessons from 100 years lectinology". 5. Kölner Lectin Meeting. 16 June 1988. **J Clin Chem Clin Biochem** 1988 Dec;26(12):821–35

Geometries of functional group interactions in enzyme-ligand complexes: guides for receptor modelling. Tintelnot M, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):67–84

Ligand-modulated binding of a gene regulatory protein to DNA. Quantitative analysis of cyclic-AMP induced binding of CRP from Escherichia coli to non-specific and specific DNA targets. Takahashi M, et al. **J Mol Biol** 1989 Jun 20;207(4):783–96

Imaging of brain tumors using peripheral benzodiazepine receptor ligands. Black KL, et al. **J Neurosurg** 1989 Jul; 71(1):113–8

Lack of linear correlation between hepatic ligand uptake rate and unbound ligand concentration does not necessarily imply receptor-mediated uptake. Smallwood RH, et al. **J Pharmacokinet Biopharm** 1988 Aug;16(4):397–411

Linkage relations for individual-site binding data [letter] Di Cera E. **J Theor Biol** 1988 Nov 8;135(1):123–4

Analysis of intracellular receptor/ligand sorting in endosomes. Linderman JJ, et al. **J Theor Biol** 1988 May 21;132(2):203–45

Synthetic site-directed ligands. Edmundson AB, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):495–509

Pharmacological study on irreversible ligands of opiate receptors. I. alpha-CAO as agonist of irreversible ligand of opiate receptors. Li LY, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):20–5

Automated site-directed drug design: the prediction and observation of ligand point positions at hydrogen-bonding regions on protein surfaces. Danziger DJ, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):115–24

Automated site-directed drug design: the concept of spacer skeletons for primary structure generation. Lewis RA, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):125–40

Automated site-directed drug design: the formation of molecular templates in primary structure generation. Lewis RA, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22; 236(1283):141–62

Dynamical simulation of rate constants in protein-ligand interactions. Case DA. **Prog Biophys Mol Biol** 1988; 52(1):39–70 (137 ref.)

Strategies in drug design based on 3D-structures of ligands. Martin YC, et al. **Prog Clin Biol Res** 1989;291:177–81

Molecular recognition and metal ion template synthesis. McMurry TJ, et al. **Science** 1989 May 26;244(4907):938–43 (46 ref.)

Binding constants for ligand-carrier complexes. Brodersen R, et al. **Trends Pharmacol Sci** 1988 Jul;9(7):252–7 (18 ref.)

ANALYSIS

Numerical and experimental demonstrations of the need for caution in the use of zonal gel chromatography for characterizing ligand interactions with small acceptors. Cann JR, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):173–83

Protein immobilization on silica supports. A ligand density study. Wu DL, et al. **J Chromatogr** 1988 Dec 23;458:169–74

ISOLATION & PURIFICATION

Rapid purification of iodinated ligands for cyclic nucleotide radioimmunoassays. Wilson SP. **Second Messengers Phosphoproteins** 1988;12(1):1–6

METABOLISM

Localization and quantification of hormones, ligands, and mRNA with affinity-gold probes. Childs GV, et al. **Am J Anat** 1989 Jun-Jul;185(2–3):223–35

Immunogold-surface replica study of ADP-induced ligand binding and fibrinogen receptor clustering in human platelets. Isenberg WM, et al. **Am J Anat** 1989 Jun-Jul; 185(2–3):142–8

Modification of ligand binding to the Na+/K+-activated ATPase. Robinson JD. **Biochim Biophys Acta** 1989 Jul 27; 997(1–2):41–8

1H-NMR and protection studies of interactions between ligands and bovine pancreatic phospholipase A2. Williamson MP, et al. **Biochim Biophys Acta** 1989 Jul 27; 997(1–2):9–14

Postendocytotic sorting of the ligand for the polymeric immunoglobulin receptor in Madin-Darby canine kidney cells. Breitfeld PP, et al. **J Cell Biol** 1989 Aug;109(2):475–86

Lymphocyte recognition of psoriatic endothelium: evidence for a tissue-specific receptor/ligand interaction. Chin YH, et al. **J Invest Dermatol** 1989 Aug;93(2 Suppl):82S–87S (31 ref.)

Solubilization of phencyclidine receptors from rat cerebral cortex in an active ligand binding state. McVittie LD, et al. **Life Sci** 1989;44(23):1793–802

Ligand and protein kinase C downmodulate the colony-stimulating factor 1 receptor by independent mechanisms. Downing JR, et al. **Mol Cell Biol** 1989 Jul; 9(7):2890–6

Ligand-independent tyrosine phosphorylation of EGF receptor and the erbB-2/neu proto-oncogene product is induced by hyperosmotic shock. King CR, et al. **Oncogene** 1989 Jan;4(1):13–8

More about the misuse of Scatchard plots in binding studies. Nicosia S. **Pharmacol Res Commun** 1988 Sep;20(9):733–7

The asialoglycoprotein receptor: properties and modulation by ligand. Weiss P, et al. **Prog Clin Biol Res** 1989; 300:169–84 (62 ref.)

From analysis to synthesis: new ligand binding sites on the lactate dehydrogenase framework. Part I. Clarke AR, et al. **Trends Biochem Sci** 1989 Mar;14(3):101–5 (22 ref.)

PHARMACOLOGY

Effect of peripheral benzodiazepine receptor ligands on the contraction of isolated heart atrium and papillary muscle of rats. Saano V, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):147–9

[Selective effect of ligands on AT- and GC-pairs of DNA bases] Aslanian VM, et al. **Biofizika** 1988 May-Jun; 33(3):430–6 (Eng. Abstr.) (Rus)

LIGASES

ANALYSIS

Zonation of hepatic lipogenic enzymes identified by dual-digitonin-pulse perfusion. Evans JL, et al. **Biochem J** 1989 May 1;259(3):821–9

The mechanism of enzymically induced chemiluminescence reactions of lucigenin. Ramelow US. **J Photochem Photobiol -B-** 1988 Jul;2(1):91–108

ANTAGONISTS & INHIBITORS

The natural and unnatural diastereomers of leucovorin: aspects of their cellular pharmacology. Bertrand R, et al. **Adv Exp Med Biol** 1988;244:13–24

Fluazifop, a grass-selective herbicide which inhibits acetyl-CoA carboxylase in sensitive plant species [published erratum appears in Biochem J 1988 Nov 1;255(3):1061] Walker KA, et al. **Biochem J** 1988 Aug 15; 254(1):307–10

Synthesis of trifluoromethyl analogs of vitamin K as substrates for the liver microsomal vitamin K-dependent carboxylase. Grossman CP, et al. **Biofactors** 1988 Oct; 1(3):255–9

Synthesis of inhibitors of the meso-diaminopimelate-adding enzyme from Escherichia coli. Abo-Ghalia M, et al. **Int J Pept Protein Res** 1988 Sep;32(3):208–22

Cyclopentenylcytosine triphosphate. Formation and inhibition of CTP synthetase. Kang GJ, et al. **J Biol Chem** 1989 Jan 15;264(2):713–8

Vasoactive intestinal peptide stimulates long-chain fatty acid oxidation and inhibits acetyl-coenzyme A carboxylase activity in isolated rat enterocytes. Vidal H, et al. **J Biol Chem** 1989 Mar 25;264(9):4901–6

The site of action of some selective graminaceous herbicides is identified as acetyl-CoA carboxylase. Harwood JL. **Trends Biochem Sci** 1988 Sep;13(9):330–1 (7 ref.)

[Aspartyladenylate analog—effective inhibitor of asparagine synthetase] Zhukov IuN, et al. **Bioorg Khim** 1988 Jul; 14(7):969–72 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Physiological regulation of acetyl-CoA carboxylase gene expression: effects of diet, diabetes, and lactation on acetyl-CoA carboxylase mRNA. Pape ME, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):104–9

DNA methylation patterns associated with asparagine synthetase expression in asparagine-overproducing and -auxotrophic cells. Andrulis IL, et al. **Mol Cell Biol** 1989 Jul;9(7):2922–7

Expression of human argininosuccinate synthetase in murine hematopoietic cells in vivo. Herman GE, et al. **Somat Cell Mol Genet** 1989 Jul;15(4):289–96

BLOOD

Binding sites of ubiquitin-protein ligase. Binding of ubiquitin-protein conjugates and of ubiquitin-carrier protein. Reiss Y, et al. **J Biol Chem** 1989 Jun 25; 264(18):10378–83

DEFICIENCY

Attempts to investigate the molecular basis of urea cycle disorders. Matsuda I, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):505–9

Abnormal fatty acid composition of biotin-responsive multiple carboxylase deficiency fibroblasts. Packman S, et al. **J Inherited Metab Dis** 1989;12(1):47–57

Two siblings with biotin-resistant 3-methylcrotonyl-coenzyme A carboxylase deficiency. Tsai MY, et al. **J Pediatr** 1989 Jul;115(1):110–3

[Prenatal diagnosis of enzymopathies of the urea cycle] Chadefaux B, et al. **Ann Biol Clin (Paris)** 1988;46(7):471–6 (36 ref.) (Eng. Abstr.) (Fre)

GENETICS

Chromosomal localization of the gene for the human trifunctional enzyme, methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase-formyltetrahydrofolate synthetase. Rozen R, et al. **Am J Hum Genet** 1989 Jun;44(6):781–6

Nutritional and hormonal regulation of mRNA abundance for arginine biosynthetic enzymes in kidney. Morris SM Jr, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):230–7

Developmental changes of the content of acetyl-CoA carboxylase mRNA in chicken liver. Takai T, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):313–8

Formylglycinamide ribonucleotide synthetase from Escherichia coli: cloning, sequencing, overproduction, isolation, and characterization. Schendel FJ, et al. **Biochemistry** 1989 Mar 21;28(6):2459–71

Localization of the gene for acetyl-CoA carboxylase to human chromosome 17. Milatovich A, et al. **Cytogenet Cell Genet** 1988;48(3):190–2

Evolution of nuclear gene families in primates. Copy-number variation in the argininosuccinate synthetase (ASS) pseudogene family and the anonymous DNA sequence, D1S1. Daiger SP, et al. **Genetics** 1987 Aug 31;73(1–2):91–8

Molecular structure of the human asparagine synthetase gene. Zhang YP, et al. **Genomics** 1989 Apr;4(3):259–65

Primary structure of a human trifunctional enzyme. Isolation of a cDNA encoding methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase-formyltetrahydrofolate synthetase. Hum DW, et al. **J Biol Chem** 1988 Nov 5;263(31):15946–50

Metabolite regulation of argininosuccinate synthetase in cultured human cells. Jackson MJ, et al. **J Biol Chem** 1988 Nov 5;263(31):16388–94

Heterogeneity at the 5' end of rat acetyl-coenzyme A carboxylase mRNA. Lipogenic conditions enhance synthesis of a unique mRNA in liver. López-Casillas F, et al. **J Biol Chem** 1989 May 5;264(13):7176–84

Expression of human asparagine synthetase in Escherichia coli. Van Heeke G, et al. **J Biol Chem** 1989 Apr 5; 264(10):5503–9

Nucleotide sequence and analysis of the purA gene encoding adenylosuccinate synthetase of Escherichia coli K12. Wolfe SA, et al. **J Biol Chem** 1988 Dec 15;263(35):19147–53

Organization and expression of the cell cycle gene, ts11, that encodes asparagine synthetase. Greco A, et al. **Mol Cell Biol** 1989 Jun;9(6):2350–9

Transcriptional regulation of acetyl coenzyme A carboxylase gene expression by tumor necrosis factor in 30A-5 preadipocytes. Pape ME, et al. **Mol Cell Biol** 1989 Mar; 9(3):974–82

Hormonal regulation of TSE1-repressed genes: evidence for multiple genetic controls in extinction. Thayer MJ, et al. **Mol Cell Biol** 1989 Jul;9(7):2837–46

Nucleotide sequence of the cDNA encoding the rat argininosuccinate synthetase. Surh LC, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9352

Lux C, D and E genes of the Vibrio fischeri luminescence operon code for the reductase, transferase, and synthetase enzymes involved in aldehyde biosynthesis. Boylan M, et al. **Photochem Photobiol** 1989 May;49(5):681–8

Structural features of the acetyl-CoA carboxylase gene: mechanisms for the generation of mRNAs with 5' end heterogeneity. Luo XC, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4042–6

Regulation of human argininosuccinate synthetase gene: induction by positive-acting nuclear mechanism in canavanine-resistant cell variants. Boyce FM 3d, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):113–21

Paradoxical regulation of human argininosuccinate synthetase cDNA minigene in opposition to endogenous gene: evidence for intragenic control sequences. Boyce FM 3d, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):123–9

Single-step selection of mammalian cell mutants deficient in CTP synthetase. Li IC, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):85–91

IMMUNOLOGY

Incorporation of monoclonal antibodies into cells by osmotic permeabilization. Effect on cellular metabolism. Chakrabarti R, et al. **J Biol Chem** 1989 May 15; 264(14):8214–21

ISOLATION & PURIFICATION

Purification, immunoassay, and tissue distribution of rat C1-tetrahydrofolate synthase. Cheek WD, et al. **Arch Biochem Biophys** 1989 May 1;270(2):504–12

Identification of cysteine residues in carbamoyl-phosphate synthase I with reactivity enhanced by N-acetyl-L-glutamate. Geschwill K, et al. **Biochem J** 1989 Jun 1;260(2):573–6

Purification, characterization, and rapid inactivation of thermolabile ubiquitin-activating enzyme from the mammalian cell cycle mutant ts85. Mayer A, et al. **J Biol Chem** 1989 Feb 5;264(4):2060–8

Isolation and identification of acetyl-CoA carboxylase from rainbow trout (Salmo gairdneri) liver. McKim JM Jr, et al. **Lipids** 1989 Mar;24(3):187–92

Vitamin K-dependent carboxylase: affinity purification from bovine liver by using a synthetic propeptide containing the gamma-carboxylation recognition site. Hubbard BR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6893–7

METABOLISM

Studies on glutamine and asparagine synthetases from mixed rumen bacterial flora of buffaloes and cattle. Saini R, et al. **Acta Vet Hung** 1988;36(1–2):95–100

Binding of adenylosuccinate synthetase to contractile proteins of muscle. Manfredi JP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C29–35

Nitrous oxide exposure reduces hepatic C1-tetrahydrofolate synthase expression in rats. Barlowe CK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):245–9

Metabolic responsiveness to phorbol ester and activity of protein kinase C in isolated hepatocytes from partially hepatectomized rats. Houweling M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):294–301

Induction of asparagine synthetase during lymphocyte activation by phytohemagglutinin. Hongo S, et al. **Biochem Int** 1989 Mar;18(3):661–6

Mitochondrial acetyl-CoA carboxylase. Time course of mobilization/activation in liver of refed rats. Roman-Lopez CR, et al. **Biochem J** 1989 Jun 15;260(3):927–30

Bovine milk-fat-globule membrane contains an enzymically inactive form of acetyl-CoA carboxylase. Shriver BJ, et al. **Biochem J** 1989 Feb 1;257(3):925–7

Pyruvate carboxylation in the rat heart. Role of biotin-dependent enzymes. Sundqvist KE, et al. **Biochem J** 1989 Feb 1;257(3):913–6

Vitamin K1 reduction in human liver. Location of the coumarin-drug-insensitive enzyme. Wallin R, et al. **Biochem J** 1989 Jun 15;260(3):879–84

Site-directed mutagenesis of yeast C1-tetrahydrofolate synthase: analysis of an overlapping active site in a multifunctional enzyme. Barlowe CK, et al. **Biochemistry** 1989 Mar 7;28(5):2099–106

Formation and utilization of formyl phosphate by N10-formyltetrahydrofolate synthetase: evidence for formyl phosphate as an intermediate in the reaction. Mejillano MR, et al. **Biochemistry** 1989 Jun 13; 28(12):5136–45

On the intermediacy of carboxyphosphate in biotin-dependent carboxylations. Ogita T, et al. **Biochemistry** 1988 Oct 18;27(21):8028–33

Catalytic mechanism of biotin carboxylase: steady-state kinetic investigations. Tipton PA, et al. **Biochemistry** 1988 Jun 14;27(12):4317–25

Carbon-13 and deuterium isotope effects on the catalytic reactions of biotin carboxylase. Tipton PA, et al. **Biochemistry** 1988 Jun 14;27(12):4325–31

Synthesis of menaquinone-2 derivatives as substrates for the liver microsomal vitamin K-dependent carboxylase. Cheung A, et al. **Biofactors** 1988 Jan;1(1):61–5

Vitamin K-dependent carboxylation of glutamyl residues in proteins. Suttie JW. **Biofactors** 1988 Jan;1(1):55–60 (86 ref.)

Properties of European eel (Anguilla anguilla) liver cell sap acetyl-CoA carboxylase. Miceli A, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):707–14

Regulation of eel (Anguilla anguilla) liver acetyl-CoA carboxylase by changes in the polymeric state of the enzyme. Miceli A, et al. **Boll Soc Ital Biol Sper** 1988 Aug; 64(8):715–22

Acetyl-CoA carboxylase in rat brain. II. Immunocytochemical localization. Tansey FA, et al. **Brain Res** 1988 Sep 1;471(1):131–8

Acetyl-CoA carboxylase in rat brain. I. Activities in homogenates and isolated fractions. Tansey FA, et al. **Brain Res** 1988 Sep 1;471(1):123–30

Human renal carcinoma: asparagine independence with asparaginase susceptibility in culture. Prager MD, et al. **Cancer Lett** 1988 Dec 15;43(3):191–5

Regulation of purine metabolism: a comparative study of the kinetic properties of adenylosuccinate synthetases from various sources. Clark SW, et al. **Comp Biochem Physiol [B]** 1977;58(1):63–5

Studies on enzymes of nitrogen metabolism, and nitrogen end products in the developing chick (Gallus domesticus) embryo. Emmanuel B, et al. **Comp Biochem Physiol [B]** 1978;61(2):287–9

Analysis of the biotin-binding site on acetyl-CoA carboxylase from rat. Bai DH, et al. **Eur J Biochem** 1989 Jun 15;182(2):239–45

Role of reversible phosphorylation of acetyl-CoA carboxylase in long-chain fatty acid synthesis. Kim KH, et al. **FASEB J** 1989 Sep;3(11):2250–6 (50 ref.)

Evidence of a warfarin-sensitive cancer procoagulant in V2 carcinoma. Roncaglioni MC, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):143–7

Studies on the regulation of enzymes related to fatty acid synthesis in goat mammary gland using explant culture system. Jindal HK, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):428–33

Temporal changes in plasma and liver lipids and in the hepatic activities of acetyl-coenzyme a carboxylase and fatty acid synthetase after oestrogen treatment of the male chicken (Gallus domesticus). Manning R, et al. **Int J Biochem** 1989;21(5):517–23

Methenyltetrahydrofolate synthetase prevents the inhibition of phosphoribosyl 5-aminoimidazole 4-carboxamide ribonucleotide formyltransferase by 5-formyltetrahydrofolate polyglutamates. Bertrand R, et

al. **J Biol Chem** 1989 May 25;264(15):8843–6
Vitamin K–dependent carboxylation. In vitro modification of synthetic peptides containing the gamma–carboxylation recognition site. Hubbard BR, et al. **J Biol Chem** 1989 Aug 25;264(24):14145–50
A Chinese hamster cell cycle mutant arrested at G2 phase has a temperature–sensitive ubiquitin–activating enzyme, E1. Kulka RG, et al. **J Biol Chem** 1988 Oct 25; 263(30):15726–31
Biotin–responsive multiple carboxylase deficiency in an 8–year–old boy with normal serum biotinidase and fibroblast holocarboxylase–synthetase activities. Holme E, et al. **J Inherited Metab Dis** 1988;11(3):270–6
Mitochondrial storage forms of acetyl CoA carboxylase: mobilization/activation accounts for increased activity of the enzyme in liver of genetically obese Zucker rats. Allred JB, et al. **J Nutr** 1989 Mar;119(3):478–83
Vitamin K–dependent carboxylase activity in fetal rat lung: developmental effects of dexamethasone and triiodothyronine. Gallaher KJ, et al. **Pediatr Res** 1989 May; 25(5):530–4
Identification of essential arginine residue(s) for Mg–ATP binding of human argininosuccinate synthetase. Isashiki Y, et al. **Protein Seq Data Anal** 1989 Jul;2(4):283–7
In vitro carboxylation of a blood coagulation factor IX precursor produced by recombinant–DNA technology. Soute BA, et al. **Thromb Haemost** 1989 Apr 25;61(2):238–42
Intracellular organization of DNA precursor biosynthetic enzymes. Mathews CK, et al. **Trends Biochem Sci** 1988 Oct;13(10):394–7 (23 ref.)
[Interaction of acetyl–CoA–carboxylase from the rat liver with alkylating amides of ATP and ADP] Amontov SV, et al. **Biokhimiia** 1988 Oct;53(10):1654–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Biochemical characterization of U937 cells resistant to L–asparaginase: the role of asparagine synthetase. Kiriyama Y, et al. **Leukemia** 1989 Apr;3(4):294–7

LIGATION

Pathophysiological sequelae of hepatic artery ligation: an experimental study. O'Donohoe MK, et al. **Eur Surg Res** 1988;20(5–6):330–4

ADVERSE EFFECTS

Structural assessment of rat sciatic nerve following tourniquet compression and vascular manipulation. Nitz AJ, et al. **Anat Rec** 1989 Sep;225(1):67–76
Hemorrhoidal ligation. A review of efficacy. Marshman D, et al. **Dis Colon Rectum** 1989 May;32(5):369–71
An unusual complication of rubber band ligation of hemorrhoids [letter] Shiller M, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):490

INSTRUMENTATION

Absorbable ligating clips: their ultrastructural characteristic in vivo and in vitro. Chegini N. **Clin Obstet Gynecol** 1988 Sep;31(3):725–35
Mechanical properties of nonabsorbable and absorbable ligating clips. von Fraunhofer JA. **Clin Obstet Gynecol** 1988 Sep;31(3):718–24
[A device for removing the ligatures from ligature fistulae] Chernyshev BM, et al. **Voen Med Zh** 1988 Sep;(9):61 **(Rus)**

METHODS

Rubber band ligation of hemorrhoids and rectal mucosal prolapse in constipated patients. Mattana C, et al. **Dis Colon Rectum** 1989 May;32(5):372–5
Endoscopic esophageal varix ligation: technique and preliminary results in children. Hall RJ, et al. **J Pediatr Surg** 1988 Dec;23(12):1222–3

LIGATION, TUBAL see **STERILIZATION, TUBAL**

LIGHT

see related
LIGHTING
PHOTIC STIMULATION
PHOTOCHEMOTHERAPY
PHOTOMETRY
PHOTOSENSITIVITY DISORDERS
PHOTOTHERAPY
SUNLIGHT

An enzyme histochemical study on phosphatases and glycosidases in the ductus epididymidis and ductus deferens of Phodopus sungorus under different photoperiods. Schindelmeiser J, et al. **Acta Histochem Suppl (Jena)** 1989; 37:203–7
The effect of hypoxia on the central light reflex of retinal arteries and veins. Brinchmann–Hansen O, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):249–55
Orienting reactions to light tactile stimuli after single and repeated partial spinal cord lesions in the cat. Danielsson I, et al. **Acta Physiol Scand** 1989 May;136(1):121–30
D–15 performance with short wavelength absorbing filters in normals. Thomas SR, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):697–702
Peak duration of serum melatonin and short–day responses in adult Siberian hamsters. Bartness TJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R812–22
Effects of melatonin on long–day responses in short–day housed adult Siberian hamsters. Bartness TJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R823–30
Quasielastic light scattering evidence for vesicular secretion of biliary lipids. Cohen DE, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G1–8
Bright morning light advances the human circadian system without affecting NREM sleep homeostasis. Dijk DJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R106–11
Bright light can delay human temperature rhythm independent of sleep. Drennan M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R136–41
Hyperprolactinemia prevents short photoperiod–induced changes in brown fat. Kott KS, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R174–80
Vole infant development is influenced perinatally by maternal photoperiodic history. Lee TM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R831–8
Depression and photophobic behavior [letter] Gerbaldo H. **Am J Psychiatry** 1988 Nov;145(11):1479–80
Effects of bright light on adrenergic and cholinergic systems [letter] Majchrzak MJ, et al. **Am J Psychiatry** 1988 Dec; 145(12):1608
Photophobia in depression [letter] Signer SF, et al. **Am J Psychiatry** 1989 Oct;146(10):1355–6
Photoperiodic influence on the innervation of the ductus epididymidis and ductus deferens of Phodopus sungorus—light microscopic studies. Schindelmeiser J, et al. **Anat Anz** 1989;168(4):347–53
Effects of continuous light on rat parotid gland structure and reactivity. Chiarenza AP, et al. **Anat Embryol (Berl)** 1989;179(5):497–501
Influence of long and short photoperiods on the morphology and androgen receptor levels of the epididymis and the ductus deferens of Phodopus sungorus. Schindelmeiser J, et al. **Andrologia** 1988 Nov–Dec;20(6):507–15
Bohr's principle of complementarity [letter] Clark SJ. **Ann Intern Med** 1988 Dec 15;109(12):994–5
Clinical measurement of glare effect in cataract patients. Terry CM, et al. **Ann Ophthalmol** 1989 May;21(5):183–7
Effect of visible light on progressive dormancy of Escherichia coli cells during the survival process in natural fresh water. Barcina I, et al. **Appl Environ Microbiol** 1989 Jan;55(1):246–51
Methylene blue plus light mediates 8–hydroxyguanine formation in DNA. Floyd RA, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):106–11
Control of bacteriochlorophyll accumulation by light in an aerobic photosynthetic bacterium, Erythrobacter sp. OCh 114. Shioi Y, et al. **Arch Biochem Biophys** 1988 Nov 1; 266(2):470–7
Use of cross–polarized light in anterior segment photography. Fariza E, et al. **Arch Ophthalmol** 1989 Apr;107(4):608–10
Methodological considerations in glare testing in patients with cataracts [letter] Prager TC, et al. **Arch Ophthalmol** 1988 Nov;106(11):1501–2
The effect of artificial photoperiod at the end of the breeding season on plasma testosterone concentrations in stallions. Cox JE, et al. **Aust Vet J** 1988 Aug;65(8):239–41
Strain differences of the light–dark preference in inbred rats. Matsuo M, et al. **Behav Genet** 1989 May;19(3):457–66
Photoperiod and thermal effects on the productive and reproductive performance of Ross Tented egg–type and Hubbard broiler chicks living under subtropical conditions. el–Sayiad GA, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(1):109–17
Light–independent NADPH–protochlorophyllide oxidoreductase activity in purified plasma membrane from the cyanobacterium Anacystis nidulans. Peschek GA, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):71–8
Light–induced phosphoinositide degradation and light–induced structural alterations in the rat retina are enhanced after chronic lithium treatment. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1111–9
Damaging action of photodynamic treatment in combination with hyperthermia on transmembrane transport in murine L929 fibroblasts. Boegheim JP, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):215–20
Minimum enzyme unit for Na+/K+–ATPase is the alpha beta–protomer. Determination by low–angle laser light scattering photometry coupled with high–performance gel chromatography for substantially simultaneous measurement of ATPase activity and molecular weight. Hayashi Y, et al. **Biochim Biophys Acta** 1989 Aug 7; 983(2):217–29
A photoreversible conformational change in 124 kDa Avena phytochrome. Singh BR, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):395–405
Determination of solute reflection coefficients in kidney brush–border membrane vesicles by light scattering: influence of the refractive index. Van der Goot F, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):272–4
Effect of light and hyperoxia on ocular blood flow in the newborn piglet. Stiris T, et al. **Biol Neonate** 1989; 55(3):191–6
The effect of bright light on plasma prolactin. Byerley WF, et al. **Biol Psychiatry** 1988 Nov;24(7):843–4
The influence of short photoperiod on testicular and circulating levels of testosterone precursors in the adult golden hamster. Chandrashekar V, et al. **Biol Reprod** 1989 Feb;40(2):300–6
Timing of photorefractoriness in the European starling: significance of photoperiod early and late in the reproductive cycle. Faik H, et al. **Biol Reprod** 1988 Dec; 39(5):1004–8
Long day photoperiods and temperature of 20 degrees C induce spermatogenesis in blinded and non–blinded marbled newts during the period of testicular quiescence. Fraile B, et al. **Biol Reprod** 1988 Oct;39(3):649–55
Evidence for a light compensation of the inhibition of reproduction by low temperatures in the snail Helix aspersa. Ovotestis and albumen gland responsiveness to different conditions of photoperiods and temperatures. Gomot P, et al. **Biol Reprod** 1989 Jun;40(6):1237–45
Reproductive refractoriness in the Welsh Mountain ewe induced by a short photoperiod can be overridden by exposure to a shorter photoperiod. Nicholls TJ, et al. **Biol Reprod** 1989 Jan;40(1):81–6
Pineal and pituitary involvement in the photoperiodic regulation of body weight, coat color and testicular size of the Djungarian hamster, Phodopus sungorus. Niklowitz P, et al. **Biol Reprod** 1988 Sep;39(2):489–98
Maternal transfer of photoperiodic information in Siberian hamsters. II. The nature of the maternal signal, time of signal transfer, and the effect of the maternal signal on peripubertal reproductive development in the absence of photoperiodic input. Stetson MH, et al. **Biol Reprod** 1989 Mar;40(3):458–65
Effect of maternal pinealectomy and reverse photoperiod on the circadian melatonin rhythm in the sheep and fetus during the last trimester of pregnancy. Yellon SM, et al. **Biol Reprod** 1988 Dec;39(5):1093–9
Erythrocyte aggregate rheology by transmitted and reflected light. Gaspar–Rosas A, et al. **Biorheology** 1988;25(3):471–87
Developing red cell flow orientation shown by changes in blood reflectivity. McMillan DE, et al. **Biorheology** 1988; 25(4):675–84
In vitro photosensitization of tumour cell enzymes by photofrin II administered in vivo. Gibson SL, et al. **Br J Cancer** 1989 Jan;59(1):47–53
Loss of antibiotic activity caused by photodegradation: in vivo studies [letter] Ferguson J, et al. **Br J Dermatol** 1988 Oct;119(4):550–1
The effect of light on the skin. Frain–Bell W. **Br J Dermatol** 1988 Oct;119(4):479–85 (29 ref.)
Photoaversion in retinitis pigmentosa. Gawande AA, et al. **Br J Ophthalmol** 1989 Feb;73(2):115–20
Photostress recovery in chronic open angle glaucoma. Sherman MD, et al. **Br J Ophthalmol** 1988 Sep;72(9):641–5
Characteristics of oviposition patterns of turkey hens and the influence of different wavelengths of light. Pyrzak R, et al. **Br Poult Sci** 1989 Mar;30(1):151–60
A melatonin agonist and N–acetyl–N2–formyl–5–methoxykynurenamine accelerate the reentrainment of the melatonin rhythm following a phase advance of the light–dark cycle. Kennaway DJ, et al. **Brain Res** 1989 Aug 28;495(2):349–54
Suprachiasmatic nucleus responsiveness to photic and basal hypothalamic stimulation. Kreisel B, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):707–14
Differences in individual rat preference for light levels. Schmidek M, et al. **Braz J Med Biol Res** 1988;21(3):663–5
Photoactivation of mutagens. De Flora S, et al. **Carcinogenesis** 1989 Jun;10(6):1089–97
Dissociation of membrane–cortex contacts in the hyalospheres of Amoeba proteus exposed to light–shade differences. Kwiatkowska EM, et al. **Cell Biol Int Rep** 1988 Oct;12(10):849–55
Influence of a short light pulse at night on the ultrastructure of the rat pinealocyte: a quantitative study. Karasek M, et al. **Cell Tissue Res** 1988 Oct;254(1):247–9
Photodynamic activities of food additive dyes on the yeast Saccharomyces cerevisiae. Iwamoto Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1632–4
Light and melatonin as zeitgebers in man. Arendt J, et al. **Chronobiol Int** 1987;4(2):273–82 (56 ref.)
Effect of light on reactions between N1–methylnicotinamide and methyl ketones. Carpenter KJ, et al. **Clin Chem** 1989 Sep;35(9):2000
Monoject Amber samplette free of bilirubin photolysis. Landt M, et al. **Clin Chem** 1989 May;35(5):889–90
Studies on light transduction by bacteriorhodopsin and rhodopsin. Braiman M, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:355–64 (40 ref.)
Pineal melatonin content in photoperiodically responsive and non–responsive phenotypes of deer mice. Blank JL, et al. **Comp Biochem Physiol [A]** 1988;91(3):535–7
The ratio of extracellular Ca2+ to K+ ions affects the photoresponses in Stentor coeruleus. Iwatsuki K, et al. **Comp Biochem Physiol [A]** 1989;92(1):101–6
Effect of photoperiod and cold acclimation upon plasma free fatty acid levels in the white rat. Ferguson JH. **Comp Biochem Physiol [B]** 1977;56(3):265–6
Circadian rhythms in adaptation to light of Limulus photoreception. Kass L, et al. **Comp Biochem Physiol [C]** 1988;91(1):229–39
Activity of rhodopsin in vitamin A–deprived rats: light–dependent binding of G–protein. Pepperberg DR, et al. **Curr Eye Res** 1989 Apr;8(4):423–8

Darkness and antibiotics increase the steady-state transcripts of the elongation factor gene (tuf) in Chlamydomonas reinhardtii. Silk GW, et al. **Curr Genet** 1988 Aug; 14(2):119–26

Effect of adaptation and wavelength on the power spectrum of human oscillatory potentials. Vallabhan G, et al. **Doc Ophthalmol** 1988 Jun;69(2):145–51

Pattern electroretinogram can be more than the sum of local luminance responses. van den Berg TJ, et al. **Doc Ophthalmol** 1988 Jul;69(3):307–14

Photoperiodic control of growth hormone secretion and body weight in rams. Barenton B, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):247–55

The effect of photoperiod on diurnal rhythms of serum gonadotrophins, prolactin and melatonin in ovariectomized heifers. Critser JK, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):23–34

LHRH and beta-endorphin in the hypothalamus of the ram in relation to photoperiod and reproductive activity. Ebling FJ, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):149–56

Synergism and diurnal variations of human growth hormone-releasing factor (1–29)NH2 and thyrotropin-releasing factor on growth hormone release in dairy calves. Lapierre H, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):207–14

The influence of duration of photoperiod and hemicastration on growth and testicular and endocrine functions of boars. Minton JE, et al. **Domest Anim Endocrinol** 1988 Jan; 5(1):71–80

Phototaxis in aquatic invertebrates: possible use in ecotoxicity tests. Dojmi Di Delupis G, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):189–93

Photocontrol of organelle and cell type specific changes in the polypeptide composition of Euglena and sorghum. Monroy AF, et al. **Electrophoresis** 1988 Nov;9(11):764–73

Prenatal photoperiod influences neonatal prolactin secretion in the sheep. Ebling FJ, et al. **Endocrinology** 1989 Jul; 125(1):384–91

Visual seizures in children. Aso K, et al. **Epilepsy Res** 1987 Jul;1(4):246–53

A comparison of the acute effect of single doses of vigabatrin and sodium valproate on photosensitivity in epileptic patients. Rimmer EM, et al. **Epilepsy Res** 1987 Nov–Dec; 1(6):339–46

Self-induction of seizures in photosensitive patients in a tropical country. Senanayake N. **Epilepsy Res** 1988 Jan–Feb;2(1):1–8

The effect of light on the biosynthesis of leaf-specific thionins in barley, Hordeum vulgare. Reimann-Philipp U, et al. **Eur J Biochem** 1989 Jun 15;182(2):283–9

Turnover of thylakoid photosystem II proteins during photoinhibition of Chlamydomonas reinhardtii. Schuster G, et al. **Eur J Biochem** 1988 Nov 1;177(2):403–10

5-Methoxypsoralen increases the sensitivity of the retina to light in humans. Souêtre E, et al. **Eur J Clin Pharmacol** 1989;36(1):59–61

Ovarian and body weight responses of female redheaded bunting to ultra-short photoperiods: demonstration of circadian involvement. Tripathi BK. **Exp Biol** 1989; 48(3):173–6

Why is alsynite fiber glass sheet attractive to stable flies? Optical and behavioural studies. Zacks DN, et al. **Exp Biol** 1989;48(4):215–22

A study on the sequence of phototoxic effects of rose bengal using retinal pigment epithelial cells in vitro. Menon IA, et al. **Exp Eye Res** 1989 Jul;49(1):67–73

Retinal degeneration in the mouse induced transplacentally by N-methyl-N-nitrosourea: effects of constant illumination or total darkness. Smith SB, et al. **Exp Eye Res** 1988 Sep;47(3):347–59

Non-identity of cGMP as the guanine nucleotide stimulated to bind to ROS by light and ATP. Yuen PS, et al. **Exp Eye Res** 1989 Jul;49(1):75–85

Circadian rhythm: its appearance and disappearance in association with a bright light pulse. Honma K, et al. **Experientia** 1988 Dec 1;44(11–12):981–3

Effects of photoperiod, temperature and testosterone-treatment on plasma T3 and T4 levels in the Djungarian hamster, Phodopus sungorus. Masuda A, et al. **Experientia** 1989 Jan 15;45(1):102–3

Presence-absence cycles of the mother and not light-darkness are the zeitgeber for the circadian rhythm of newborn mice. Viswanathan N. **Experientia** 1989 Apr 15;45(4):383–5

Regulation of the systemic immune response by visible light and the eye. Ferguson TA, et al. **FASEB J** 1988 Nov; 2(14):3017–21

Light-stimulated phosphorylation of proteins in cell-free extracts from Trichoderma viride. Grešík M, et al. **FEBS Lett** 1989 May 8;248(1–2):185–7

Potential risk of light and room temperature exposure to preimplantation embryos. Fischer B, et al. **Fertil Steril** 1988 Dec;50(6):938–44

Interaction of ruthenium complexes with nucleic acids. DNA damage via photosensitized radical production. Tossi A, et al. **Free Radic Res Commun** 1989;6(2–3):171–3

Thyroidectomy and the termination of juvenile refractoriness in the red-legged partridge (Alectoris graeca chukar). Creighton JA. **Gen Comp Endocrinol** 1988 Nov;72(2):204–8

Effect of environmental temperature and photoperiod on the melatonin levels in the pineal, lateral eye, and plasma of the frog, Rana perezi: importance of ocular melatonin. Delgado MJ, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):46–53

Daily cycles in plasma melatonin levels under long or short photoperiod in the common carp, Cyprinus carpio. Kezuka H, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):296–302

Effects of photoperiod and temperature on gonadal maturation, and plasma steroid and gonadotropin levels in a cyprinid fish, the honmoroko Gnathopogon caerulescens. Okuzawa K, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):139–47

Photoperiodic time measurement during the termination of photorefractoriness in the starling (Sturnus vulgaris L.). Schleussner G, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):54–61

Effects of ovariectomy on long-day-induced premigratory fat deposition, plasma levels of luteinizing hormone and prolactin, and molt in white-crowned sparrows, Zonotrichia leucophrys gambelii. Schwabl H, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):398–405

Nd:YAG laser photodisruption: an experimental investigation on shielding and multiple plasma formation. Capon MR, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):362–6

Effects of continuous light exposure on the rat retina and pineal gland. Mochizuki M, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):346–52

The effect of season on the circulating concentrations of anterior pituitary, ovarian and adrenal cortex hormones and hormone binding proteins in the subarctic area; evidence of increased activity of the pituitary-ovarian axis in spring. Kauppila A, et al. **Gynecol Endocrinol** 1987 Jun; 1(2):137–50

Photobiology of low-power laser effects. Karu T. **Health Phys** 1989 May;56(5):691–704 (63 ref.)

Reproductive behavior and LH levels of cockatiels (Nymphicus hollandicus) associated with photostimulation, nest-box presentation, and degree of mate access. Shields KM, et al. **Horm Behav** 1989 Mar;23(1):68–82

Effect of supplemental light on growth, prolactin, progesterone and luteinizing hormone in water buffalo (Bubalus bubalis). Perera KS, et al. **Int J Biometeorol** 1989 Jun;33(2):89–94

Effects of thyroid hormone on light/dark melatonin synthesis and release by young and maturing rat pineal glands in vitro. Catala MD, et al. **Int J Dev Neurosci** 1988;6(3):285–8

The relationship of the resonant recognition model to effects of low-intensity light on cell growth. Cosic I, et al. **Int J Radiat Biol** 1989 Aug;56(2):179–91

Photo-induced irreversible shortening and swelling of isolated cochlear outer hair cells. Dulon D, et al. **Int J Radiat Biol** 1989 Jun;55(6):1007–14

Inhibition of human lymphocyte stimulation by visible light and phthalocyanine photosensitization: mitogen and wavelength dependency. Kol R, et al. **Int J Radiat Biol** 1989 Jun;55(6):1015–22

Photokinetic and ultrastructural studies on porphyrin photosensitization of HeLa cells. Milanesi C, et al. **Int J Radiat Biol** 1989 Jan;55(1):59–69

Observations of visual sensations produced by Cerenkov radiation from high-energy electrons. Steidley KD, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):685–90

The effect of long-term intraocular pressure reduction on the differential light sensitivity in glaucoma suspects. Chauhan BC, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1478–85

Light adaptation of the electroretinogram. Diminished in retinitis pigmentosa. Gouras P, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):619–24

Growth in amplitude of the human cone electroretinogram with light adaptation. Gouras P, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):625–30

Horses like night-lights [news] Wernette K. **J Am Vet Med Assoc** 1989 May 1;194(9):1175

Photoperiod and heat stress influence on lactating sow performance and photoperiod effects on nursery pig performance. McGlone JJ, et al. **J Anim Sci** 1988 Aug; 66(8):1915–9

Effects of litter size and light regimen imposed during lactation on ovarian follicular population at weaning in third-parity sows. Simoneau C, et al. **J Anim Sci** 1988 Oct; 66(10):2606–13

Failure of photoperiod to alter body growth and carcass composition in beef steers. Zinn SA, et al. **J Anim Sci** 1989 May;67(5):1249–57

Regulation of tetrapyrrole synthesis by light in chemostat cultures of Rhodobacter sphaeroides. Oelze J. **J Bacteriol** 1988 Oct;170(10):4652–7

Differential expression of members of a cyanobacterial psbA gene family in response to light. Schaefer MR, et al. **J Bacteriol** 1989 Jul;171(7):3973–81

Inhibition of the high affinity Fc receptor (Fc gamma RI) on human monocytes by porphyrin photosensitization is highly specific and mediated by the generation of superoxide radicals. Krutmann J, et al. **J Biol Chem** 1989 Jul 5;264(19):11407–13

Inositol trisphosphate production in squid photoreceptors. Activation by light, aluminum fluoride, and guanine nucleotides. Wood SF, et al. **J Biol Chem** 1989 Aug 5; 264(22):12970–6

Influence of photoperiod and gonadal steroids on hibernation in the European hamster. Darrow JM, et al. **J Comp Physiol [A]** 1988 Jul;163(3):339–48

Photoperiod modifies daily maps of light and dark sensitivity for N-acetyltransferase activity in pineal glands of 3-week old Gallus domesticus. Binkley S, et al. **J Comp Physiol [B]** 1989;159(1):37–42

Evidence that olfactory bulbectomy does not influence testicular regression in golden hamsters on short photoperiod by altering pineal melatonin production. Pieper DR, et al. **J Comp Physiol [B]** 1988;158(3):301–5

Effects of the coherence of illumination on electron microdiffraction pattern intensities. Zhu J, et al. **J Electron Microsc Tech** 1987 Nov;7(3):177–83

The hypothalamus and photoperiodic control of FSH secretion by melatonin in the male Syrian hamster. Bonnefond C, et al. **J Endocrinol** 1989 Jul;122(1):247–54

Neuroendocrine responsiveness to light during the neonatal period in the sheep. Ebling FJ, et al. **J Endocrinol** 1988 Nov;119(2):211–8

Photoperiodic control of the development of the LHRH neurosecretory system of European starlings (Sturnus vulgaris) during puberty and the onset of photorefractoriness. Goldsmith AR, et al. **J Endocrinol** 1989 Jul;122(1):255–68

Inhibin concentrations in the peripheral blood of rams during a cycle in testicular activity induced by changes in photoperiod or treatment with melatonin. Lincoln GA, et al. **J Endocrinol** 1989 Jan;120(1):R9–13

Regulation of the onset of the breeding season of the ewe: importance of long days and of an endogenous reproductive rhythm. Malpaux B, et al. **J Endocrinol** 1989 Jul;122(1):269–78

In-vitro secretion of prolactin and growth hormone in the presence of melatonin by pituitary gland from mink kept under long or short days. Meunier M, et al. **J Endocrinol** 1988 Nov;119(2):287–92

Rate of reproductive involution following either exposure to short days or daily administration of melatonin is faster in inbred than in random-bred female Syrian hamsters. Reiter RJ, et al. **J Endocrinol** 1989 Mar;120(3):489–96

Effect of a light pulse during the dark on photoperiodic regulation of the rate of thyroxine-induced, spontaneous, and prolactin-inhibited metamorphosis in Rana pipiens tadpoles [published erratum appears in J Exp Zool 1988 Nov;248(2):251] Wright ML, et al. **J Exp Zool** 1988 Jul; 247(1):99–108

Dependency on light and vitamin A derivatives of the biogenesis of 3-hydroxyretinal and visual pigment in the compound eyes of Drosophila melanogaster. Isono K, et al. **J Gen Physiol** 1988 Nov;92(5):587–600

Adaptation of a deep-sea cephalopod to the photic environment. Evidence for three visual pigments. Matsui S, et al. **J Gen Physiol** 1988 Jul;92(1):55–66

Photobiology 1937–1987. Bickers DR. **J Invest Dermatol** 1989 Apr;92(4 Suppl):25S–31S (55 ref.)

Effects of photoperiod on nymphal diapause in Amblyomma americanum (Acari: Ixodidae). Pound JM, et al. **J Med Entomol** 1988 Nov;25(6):479–83

Modification of cardiac action potential by photosensitizer-generated reactive oxygen. Tarr MT, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):539–43

Sensitivity of ocellar interneurons of the honeybee to constant and temporally modulated light. Baader A. **J Neurobiol** 1989 Sep;20(6):519–29

Stimulation of distinct D2 dopaminergic and alpha 2-adrenergic receptors induces light-adaptive pigment dispersion in teleost retinal pigment epithelium. Dearry A, et al. **J Neurochem** 1988 Nov;51(5):1516–23

Light-induced dopamine release from teleost retinas acts as a light-adaptive signal to the retinal pigment epithelium. Dearry A, et al. **J Neurochem** 1989 Sep;53(3):870–8

Aromatic L-amino acid decarboxylase activity of the rat retina is modulated in vivo by environmental light. Hadjiconstantinou M, et al. **J Neurochem** 1988 Nov; 51(5):1560–4

Effect of different photoperiod exposure on [3H]imipramine binding and serotonin uptake in the rat brain. Rovescalli AC, et al. **J Neurochem** 1989 Feb;52(2):507–14

Seasonal variations in the incidence of photoparoxysmal response [letter] Trenité DG, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):547–8

Light-evoked increases in [K+]o in proximal portion of the dark-adapted cat retina. Frishman LJ, et al. **J Neurophysiol** 1989 Jun;61(6):1233–43

Effects of DIDS on the chick retinal pigment epithelium. II. Mechanism of the light peak and other responses originating at the basal membrane. Gallemore RP, et al. **J Neurosci** 1989 Jun;9(6):1977–84

GABA regulation of circadian responses to light. I. Involvement of GABAA-benzodiazepine and GABAB receptors. Ralph MR, et al. **J Neurosci** 1989 Aug; 9(8):2858–65

Modulation of cone horizontal cell activity in the teleost fish retina. II. Role of interplexiform cells and dopamine in regulating light responsiveness. Yang XL, et al. **J Neurosci** 1988 Jul;8(7):2269–78

Effects of background illumination on the horizontal cell responses in the tiger salamander retina. Yang XL, et al. **J Neurosci** 1989 Mar;9(3):815–27

Modulation of cone horizontal cell activity in the teleost fish retina. I. Effects of prolonged darkness and background illumination on light responsiveness. Yang XL, et al.

J Neurosci 1988 Jul;8(7):2259–68

Light, experimental avian myopia and the role of the suprarenals. Oishi T, et al. J Ocul Pharmacol 1986 Spring; 2(2):139–46

Exposure to light accelerates the formation of dopamine from exogenous L-dopa in the rat retina. Xu JA, et al. J Ocul Pharmacol 1985 Summer;1(2):177–81

Principle of least wave change. Abramson N. J Opt Soc Am [A] 1989 May;6(5):627–9

Effect of luminance on photopic visual acuity in the presence of laser speckle. Artigas JM, et al. J Opt Soc Am [A] 1988 Oct;5(10):1767–71

The power of shadows: shadow stereopsis. Medina Puerta A. J Opt Soc Am [A] 1989 Feb;6(2):309–11

Global spatiochromatic mechanism accounting for luminance variations in contrast sensitivity functions. Rohaly AM, et al. J Opt Soc Am [A] 1989 Feb;6(2):312–7

Light scattering by an arbitrary particle: the scattering-order formulation of the coupled-dipole method. Singham SB, et al. J Opt Soc Am [A] 1988 Nov;5(11):1867–72

Aging and luminance-adaptation effects on spatial contrast sensitivity. Sloane ME, et al. J Opt Soc Am [A] 1988 Dec; 5(12):2181–90

Interactions of light and sodium nitrite in producing relaxation of rabbit aorta. Matsunaga K, et al. J Pharmacol Exp Ther 1989 Feb;248(2):687–95

Two-step photoactivation of hematoporphyrin by excimer-pumped dye-laser pulses. Andreoni A. J Photochem Photobiol [B] 1987 Dec;1(2):181–93

The photoreaction of vacuum-dried rhodopsin at low temperature: evidence for charge stabilization by water. Ganter UM, et al. J Photochem Photobiol [B] 1988 Dec; 2(4):417–26

Characterization of new furocoumarin derivatives by their dark and light-mediated action on RNA bacteriophage MS2. Toth K, et al. J Photochem Photobiol [B] 1988 Sep; 2(2):209–20

Metabolic flux of cyclic GMP and phototransduction in rabbit retina. Ames A 3d, et al. J Physiol (Lond) 1988 Dec; 406:163–79

Prolonged depolarization in turtle cones evoked by current injection and stimulation of the receptive field surround. Burkhardt DA, et al. J Physiol (Lond) 1988 Dec;407:329–48

The modulation of the ionic selectivity of the light-sensitive current in isolated rods of the tiger salamander. Cervetto L, et al. J Physiol (Lond) 1988 Dec;406:181–98

Control of light-sensitive current in salamander rods. Hodgkin AL, et al. J Physiol (Lond) 1988 Sep;403:439–71

Incorporation of analogues of GTP and GDP into rod photoreceptors isolated from the tiger salamander. Lamb TD, et al. J Physiol (Lond) 1988 Dec;407:463–87

The ionic selectivity of the light-sensitive current in isolated rods of the tiger salamander. Menini A, et al. J Physiol (Lond) 1988 Aug;402:279–300

Effects of melatonin and 6-methoxybenzoxazolinone on photoperiodic control of testis size in adult male golden hamsters. Anderson KD, et al. J Pineal Res 1988; 5(4):351–65

Effects of pinealectomy and continuous light on mating behavior of male rats. Colmenero Urquijo MD, et al. J Pineal Res 1989;6(4):359–66

Effects of photoperiod on the 24-hour melatonin profiles of the Bennett's wallaby (Macropus rufogriseus rufogriseus). Curlewis JD, et al. J Pineal Res 1988;5(4):373–83

Melatonin profile in marmots: the influence of catecholamines, hibernation, and light. Florant G, et al. J Pineal Res 1989;7(2):105–13

Effect of pinealectomy, eye enucleation, and melatonin treatment on ovarian activity and vitellogenin levels in the catfish exposed to short photoperiod or long photoperiod. Garg SK. J Pineal Res 1989;7(2):91–104

Effects of protein restriction, melatonin administration, and short daylength on brain benzodiazepine receptors in prepubertal male rats. Kennaway DJ, et al. J Pineal Res 1988;5(5):455–67

Human melatonin suppression by light is intensity dependent. McIntyre IM, et al. J Pineal Res 1989;6(2):149–56

Cytochemical demonstration of lysosomes in the chicken pineal gland: changes induced by light-dark cycle. Ohshima K, et al. J Pineal Res 1989;6(2):103–10

Effects of prior exposure to prolonged continuous light on the pattern of melatonin secretion in sheep held under continuous darkness. Shaw PF, et al. J Pineal Res 1988; 5(5):469–77

Light exposure of oocytes and pregnancy rates after their transfer in the rabbit. Bedford JM, et al. J Reprod Fertil 1989 Mar;85(2):477–81

Photoperiod requirements for puberty differ from those for the onset of the adult breeding season in female sheep. Ebling FJ, et al. J Reprod Fertil 1988 Sep;84(1):283–93

Time of the sidereal year affects responsiveness to the phase-resetting effects of photoperiod in the ewe. Jackson GL, et al. J Reprod Fertil 1989 Jan;85(1):221–7

Test of ML23 as an antagonist to the effects of melatonin in the ram. Lincoln GA, et al. J Reprod Fertil 1989 Jul; 86(2):737–43

LH and testosterone responses to GnRH in red deer (Cervus elaphus) stags kept in a manipulated photoperiod. Suttie JM, et al. J Reprod Fertil 1989 Jan;85(1):213–9

Semen characteristics and testosterone profiles in ferrets kept in a long-day photoperiod, and the influence of hCG timing and sperm dilution medium on pregnancy rate after laparoscopic insemination. Wildt DE, et al. J Reprod Fertil 1989 May;86(1):349–58

Quantal melatonin suppression by exposure to low intensity light in man. McIntyre IM, et al. Life Sci 1989;45(4):327–32

Photoperiod influences the growth of colon cancer in mice. Waldrop RD, et al. Life Sci 1989;45(8):737–44

Optical-fibre apparatus for quantitative measurement of corneal transparency variation. Barbaro V, et al. Med Biol Eng Comput 1988 Mar;26(2):225–7

Spatial light distribution in tumors: phantom measurements. Lenz P. Med Phys 1989 May-Jun;16(3):326–32

Importance of light dose in fluorescent microscopy. Reed MW, et al. Microvasc Res 1988 Jul;36(1):104–7

Uptake and DNA photodamage induced in plant cells in vivo by two cationic porphyrins. Villanueva A, et al. Mutagenesis 1989 Mar;4(2):157–9

Existence and expression of photoreactivation repair genes in various yeast species. Yasui A, et al. Mutat Res 1989 Jan;217(1):3–10

Circadian rhythm and light regulate opsin mRNA in rod photoreceptors. Korenbrot JI, et al. Nature 1989 Feb 2; 337(6206):454–7

Twenty-four-hour patterns of pineal melatonin and pituitary and plasma prolactin in male rats under 'natural' and artificial lighting conditions. Laakso ML, et al. Neuroendocrinology 1988 Sep;48(3):308–13

Reproductive refractoriness of the ewe to inhibitory photoperiod is not caused by alteration of the circadian secretion of melatonin. Malpaux B, et al. Neuroendocrinology 1988 Sep;48(3):264–70

Circadian variation of beta-adrenoceptor binding sites in the pineal gland of the Syrian hamster and prevention of the nocturnal reduction by light exposure or propranolol treatment. Pangerl B, et al. Neuroendocrinology 1989 Jun; 49(6):570–3

Daily melatonin injections affect the expression of circadian rhythmicity in Djungarian hamsters kept under a long-day photoperiod. Puchalski W, et al. Neuroendocrinology 1988 Sep;48(3):280–6

Photoperiodic variation in substance P induced plasma extravasation in the rat. Gibson SJ, et al. Neuropharmacology 1989 Aug;28(8):889–92

Translocation of a photoreceptor-specific MEKA protein by light. Kuo CH, et al. Neurosci Lett 1989 Aug 14;103(1):8–10

Pineal gland N-acetyltransferase and hydroxyindole-O-methyltransferase activity in the rainbow trout (Salmo gairdneri): seasonal variation linked to photoperiod. Morton DJ, et al. Neurosci Lett 1988 Dec 5;94(3):333–7

Sequence of cDNA for a novel light-induced glycine-rich protein. Kaldenhoff R, et al. Nucleic Acids Res 1989 Apr 11;17(7):2853

Fast light-regulated genes of Neurospora crassa. Sommer T, et al. Nucleic Acids Res 1989 Jul 25;17(14):5713–23

Light transmission through the human eyelid: in vivo measurement. Moseley MJ, et al. Ophthalmic Physiol Opt 1988;8(2):229–30

Anomalous loss in blue-green wavelength discrimination with very brief monochromatic stimuli presented to the normal human eye. Scase MO, et al. Ophthalmic Physiol Opt 1988;8(2):193–7

Effects of pH and light exposure on the riboflavin-binding capacity in the rat lens. Hirano H, et al. Ophthalmic Res 1989;21(2):93–6

Lens transmission and autofluorescence in renal disease. van Wirdum E, et al. Ophthalmic Res 1988;20(5):317–26

Rod-cone dystrophy associated with a rod system electroretinogram obtained under photopic conditions. Fishman GA, et al. Ophthalmology 1989 Jun;96(6):913–8

Geophysical variables and behavior: LIV. Zeitoun (Egypt) apparitions of the Virgin Mary as tectonic strain-induced luminosities. Derr JS, et al. Percept Mot Skills 1989 Feb; 68(1):123–8 (14 ref.)

Lights and lattices and where they are seen. Gillespie G. Percept Mot Skills 1989 Apr;68(2):487–504

A cognitive-psychological perspective on Gillespie's "Lights and lattices": some relations among perception, imagery, and thought. Hunt H. Percept Mot Skills 1989 Apr; 68(2):631–41 (44 ref.)

Anatomy of a flash. I. Two-peak masking and a temporal filling-in. Cogan AI. Perception 1989;18(2):243–56

Rotating trapezia which appear luminous and transparent during reversals. Cowie R. Perception 1989;18(2):173–80

Apparent movements induced by luminance modulations: a model study. Mastebroek HA, et al. Perception 1988; 17(5):667–79

Effects of phosphor persistence on perception and the control of eye movements. Neary C, et al. Perception 1989; 18(2):257–64

High intensity light exposure increases blood-brain barrier transport in rats. Saija A, et al. Pharmacol Res Commun 1988 Jul;20(7):553–9

17th annual meeting of the American Society for Photobiology. Abstracts of papers. Boston, Massachusetts, 2–6 July 1989. Photochem Photobiol 1989 Apr;49 Suppl:1S–123S

Subliminal light control of dark adaptation kinetics in Phycomyces phototropism. Galland P, et al. Photochem Photobiol 1989 Apr;49(4):485–91

Light-controlled adaptation kinetics in Phycomyces: evidence for a novel yellow-light absorbing pigment. Galland P, et al. Photochem Photobiol 1989 Apr;49(4):493–9

Photosensitization by antitumor agents—7. Correlation between anthracenedione-photosensitized DNA damage, NADH oxidation and oxygen consumption following visible light illumination. Hartley JA, et al. Photochem Photobiol 1988 Jul;48(1):19–25

Investigations on biological effect of polarized light. Kubasova T, et al. Photochem Photobiol 1988 Oct; 48(4):505–9

Photomovement in motile microorganisms—II. Nultsch W, et al. Photochem Photobiol 1988 Jun;47(6):837–69 (386 ref.)

Stimulation of Escherichia coli division by low-intensity monochromatic visible light. Tiphlova O, et al. Photochem Photobiol 1988 Oct;48(4):467–71

Quantification of visible light-induced melanogenesis in human skin. Porges SB, et al. Photodermatol 1988 Oct; 5(5):197–200

Estimation of optical pathlength through tissue from direct time of flight measurement. Delpy DT, et al. Phys Med Biol 1988 Dec;33(12):1433–42

Infrared and visible thermoluminescence signals of Tm-doped CaF2 measured by a semiconductor photodiode. Meissner P, et al. Phys Med Biol 1988 Dec; 33(12):1407–15

Cytochrome oxidase activity in brown fat varies with reproductive response and use of torpor in deer mice. Blank JL, et al. Physiol Behav 1988;43(3):301–6

Effects of photoperiod, the pineal gland and the gonads on agonistic behavior in female golden hamsters (Mesocricetus auratus). Fleming AS, et al. Physiol Behav 1988; 44(2):227–34

A novel interaction between light and matter: a review. Comorosan S, et al. Physiol Chem Phys Med NMR 1988; 20(4):319–28

Significance of light and social cues in the maintenance of temporal organization in man. Winget CM, et al. Physiologist 1989 Feb;32(1 Suppl):S94–5

Relationship between throat feather-color pattern and photodependency of testicular function in the athens randombred control line of Japanese quail. Burke WH, et al. Poult Sci 1988 Jul;67(7):1098–101

Photoperiodic effects on performance and leg abnormalities in broiler chickens. Classen HL, et al. Poult Sci 1989 Jul; 68(7):873–9

Effects of light environment and population density on growth performance of male turkeys: 2. Physiological changes. Gill DJ, et al. Poult Sci 1988 Nov;67(11):1518–24

Effects of photoperiod and filtered light on growth, reproduction, and mating behavior of turkeys. 1. Growth performance of two lines of males and females. Levenick CK, et al. Poult Sci 1988 Nov;67(11):1505–13

Influence of light intensity on behavior and performance of broiler chickens. Newberry RC, et al. Poult Sci 1988 Jul; 67(7):1020–5

Mammalian cerebral cortical tissue responds to low-intensity visible light. Wade PD, et al. Proc Natl Acad Sci U S A 1988 Dec;85(23):9322–6

Nocturnal increase of type II thyroxine 5'-deiodinase activity in the Syrian hamster harderian gland is abolished by light exposure and induced by isoproterenol. Guerrero JM, et al. Proc Soc Exp Biol Med 1989 Feb;190(2):186–9

Daily changes in concentrations of prolactin in serum of prepubertal bulls exposed to short- or long-day photoperiods. Petitclerc D, et al. Proc Soc Exp Biol Med 1989 May;191(1):37–42

Underfeeding and exposure to short photoperiod alters rat pineal and Harderian gland lysosomal enzyme activities. Vaughan MK, et al. Proc Soc Exp Biol Med 1988 Nov; 189(2):211–6

Biological effect of bright light. Byerley WF, et al. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(5):683–6

Light suppression of melatonin in unipolar depressed patients. Cummings MA, et al. Psychiatry Res 1989 Mar;27(3):351–5

Human melatonin response to light at different times of the night. McIntyre IM, et al. Psychoneuroendocrinology 1989; 14(3):187–93

The effects of novelty, isolation, light and ethanol on the social behavior of mice. Lister RG, et al. Psychopharmacology (Berlin) 1988;96(2):181–7

Light, vitamin D and psychiatry. Role of 1,25 dihydroxyvitamin D3 (soltriol) in etiology and therapy of seasonal affective disorder and other mental processes. Stumpf WE, et al. Psychopharmacology (Berlin) 1989; 97(3):285–94 (83 ref.)

Spatial buffering of light-evoked potassium increases by retinal Müller (glial) cells. Karwoski CJ, et al. Science 1989 May 5;244(4904):578–80

Light adaptation in cat retinal rods. Tamura T, et al. Science 1989 Aug 18;245(4919):755–8

Modulation of rod-cone coupling by light. Yang XL, et al. Science 1989 Apr 21;244(4902):352–4

Diesel soot particles catalyze the production of oxy-radicals. Vogl G, et al. Toxicol Lett 1989 Apr;47(1):17–23

Are nulliparous sandflies light-shy? Gibb PA, et al. Trans R Soc Trop Med Hyg 1988;82(2):342–3

Acridine orange-mediated photodamage of microsomal- and lysosomal fractions. Olsson GM, et al. Virchows Arch [B] 1989;56(4):247–57

Orientation and spatial frequency selectivity of adaptation to color and luminance gratings. Bradley A, et al. Vision Res 1988;28(7):841–56

Dependence of saccadic eye-movements on stimulus

luminance, and an effect of task. Doma H, et al. **Vision Res** 1988;28(8):915–24

Sensation luminance: a new name to distinguish CIE luminance from luminance dependent on an individual's spectral sensitivity. **Kaiser PK. Vision Res** 1988;28(3):455–6

Contributions of the opponent mechanisms to brightness and nonlinear models. Nakano Y, et al. **Vision Res** 1988; 28(7):799–810

Critical flicker frequency as a function of stimulus area and luminance at various eccentricities in human cone vision: a revision of Granit–Harper and Ferry–Porter laws. Rovamo J, et al. **Vision Res** 1988;28(7):785–90

Development and degeneration of retina in rds mutant mice: altered disc shedding pattern in the albino heterozygotes and its relation to light exposure. Sanyal S, et al. **Vision Res** 1988;28(11):1171–8

Light spread and scatter from some common adapting stimuli: computations based on the point-source light profile. Shevell SK, et al. **Vision Res** 1988;28(5):605–9

Aging, senile miosis and spatial contrast sensitivity at low luminance. Sloane ME, et al. **Vision Res** 1988; 28(11):1235–46

Response pooling between chromatic and luminance systems. Ueno T, et al. **Vision Res** 1989;29(3):325–33

The effect of isoluminant and isochromatic stimuli on latency and amplitude of saccades. van Asten WN, et al. **Vision Res** 1988;28(7):827–40

The pupil's response to short wavelength cone stimulation. Verdon W, et al. **Vision Res** 1988;28(10):1119–28

[Beneficial light] Hyyppä MT. **Duodecim** 1989;105(5):396–8 (26 ref.) **(Fin)**

[Hormonal effects of cold and light] Leppäluoto J. **Duodecim** 1989;105(5):430–6 (49 ref.) **(Fin)**

[Chorioretinal circulation and dazzling: use of procyanidol oligomers (Endotelon)] Boissin JP, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):173–4, 177–9 (Eng. Abstr.) **(Fre)**

[Histologic and histometric studies of the epiphysis cerebri of the fattening guinea fowl (Meleagris gallopavo) after the use of different light regimens] Gutte G, et al. **Arch Exp Veterinarmed** 1989 May;43(3):471–80 (Eng. Abstr.) **(Ger)**

[The effect of light intensity and the length of time under natural daylight or artificial lighting on the seasonal fertility rhythm of swine] Lahrmann KH. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1;102(7):227–33 (Eng. Abstr.) **(Ger)**

[The rhythm of melatonin synthesis in the epiphysis and its control by light] Hartmann W, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr;41(4):224–9 (16 ref.) (Eng. Abstr.) **(Ger)**

[Spatial attention: objections to the spotlight model of visual selectivity] Buchner A. **Z Exp Angew Psychol** 1988; 35(4):523–45 (Eng. Abstr.) **(Ger)**

[The effect of natural daylight on human regulation] Klinker L. **Z Gesamte Hyg** 1989 Apr;35(4):196–202 (Eng. Abstr.) **(Ger)**

[Sensitivity of Argas (Persicargas) walkerae to optic irradiation and localization and organization of light perceiving or permeability areas of the integument] Gothe R, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):303–13 (Eng. Abstr.) **(Ger)**

[Morphometrical analysis over a 24-hour period in the rat suprachiasmatic nucleus under the different lighting conditions] Tamai K. **Fukuoka Igaku Zasshi** 1988 Dec; 79(12):879–905 (Eng. Abstr.) **(Jpn)**

[Color vision under different luminosity in various fundus diseases] Shiraishi H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):86–96 (Eng. Abstr.) **(Jpn)**

[Assessment of lens transmission in diabetic patients by autofluorescence measurement] Yamamoto F, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1171–6 (Eng. Abstr.) **(Jpn)**

[Retinal-binding protein and photopigment systems] Hara R, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):471–83 **(Jpn)**

[Photo-reaction of bacteriorhodopsin and mechanism of proton pump] Ikegami A. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):440–51 **(Jpn)**

[Generation of singlet oxygen and oxy-radicals via photosensitization processes] Ito A, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2795–802 **(Jpn)**

[Correlation between the structure of rhodopsin and ability of wavelength recognition] Kakitani T. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):528–36 **(Jpn)**

[Color information processing: conversion from trichromatic process to opponent process] Kaneko A. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):652–62 **(Jpn)**

[Control of cGMP level and light-adaptation in vertebrate photoreceptors] Kawamura S. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):557–65 **(Jpn)**

[Response pattern and visual pigments of photosensory pineal organ] Morita Y, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):622–30 **(Jpn)**

[Pump proteins in extreme halophiles: bacterial rhodopsin pumps] Mukohata Y. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):462–70 **(Jpn)**

[Cyclic GMP-gated cation channel of photoreceptors] Nakatani K. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):574–86 **(Jpn)**

[Structural elucidation of phototransduction proteins] Shinohara T, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):537–45 **(Jpn)**

[Photoreceptors of phototaxis of halobacteria; sensoryrhodopsin and phoborhodopsin] Takahashi T, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):452–61 **(Jpn)**

[Reaction time to single and double stimuli in operators of mining equipment] Gosk A, et al. **Med Pr** 1988;39(5):322–8 (Eng. Abstr.) **(Pol)**

[Dynamics of changes in the light absorption by snail central nervous system ganglia during excitation] Kostin AI. **Biofizika** 1988 Sep–Oct;33(5):879–81 (Eng. Abstr.) **(Rus)**

[Mathematical model of light diffraction on red blood cells] Mkrtchian RG, et al. **Biofizika** 1988 Jul–Aug;33(4):634–6 (Eng. Abstr.) **(Rus)**

[Effect of immunoactive substances on sensitivity of the retina to light] Abramov VV, et al. **Dokl Akad Nauk SSSR** 1988 Nov–Dec;303(1):249–51 **(Rus)**

[Mechanism of photoregulation of carotenogenesis in Neurospora crassa: the use of mutants] Chernysheva EK, et al. **Dokl Akad Nauk SSSR** 1988;301(2):484–6 **(Rus)**

[Photohemolysis sensitized by psoralen. Paradoxical dependence on light intensity] Potapenko AIa, et al. **Dokl Akad Nauk SSSR** 1988;302(5):1258–60 **(Rus)**

[Characteristics of distribution of light in the retina] Medvedev VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):698–700 **(Rus)**

[Effects of the intersensory action of sound on the performance of a simple motor reaction to light in the cat] Polianskii VB, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1102–8 (Eng. Abstr.) **(Rus)**

[Use of a method of systematic analysis for intensification of hygienic studies] Chernilovskaia FM, et al. **Gig Sanit** 1988 Nov;(11):51–4 **(Rus)**

[Carbohydrate metabolism in the fungus Aspergillus niger exposed to light] Chebotarev LN, et al. **Mikrobiologiia** 1988 May–Jun;57(3):385–8 **(Rus)**

[Effect of light on lipid formation and sporulation in the mucoraceous fungus Cunninghamella japonica] Polotebnova MV, et al. **Mikrobiologiia** 1988 May–Jun; 57(3):379–84 **(Rus)**

[Optical effects of the irradiation of the eye and visual cortex with lasers and light] Kashuba VA, et al. **Oftalmol Zh** 1988; (4):237–40 (Eng. Abstr.) **(Rus)**

[Pupil size, its reaction to light and visual acuity in children with myopia] Kliuka IV, et al. **Oftalmol Zh** 1988;(3):159–60 (Eng. Abstr.) **(Rus)**

[The absolute light sensitivity of the visual analyzer in sailors during a 10-month commercial voyage] Ponomarchuk VS, et al. **Oftalmol Zh** 1989;(2):107–11 (Eng. Abstr.) **(Rus)**

[Use of autoblood photomodification in combined therapy of patients with diabetes mellitus of the non-insulin-dependent type] Iakovlev GM, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):22–7 (Eng. Abstr.) **(Rus)**

[The effect of constant light on the histologic picture of the subcommissural and subfornical organ in rats] Kecman M, et al. **Med Pregl** 1988;41(7–8):271–7 (Eng. Abstr.) **(Scr)**

[Orientation at an angle to the light in schools of Moenkhausia dichroura Kner: a model of a circannual clock] Belmonte P, et al. **Acta Cient Venez** 1987;38(4):484–9 (Eng. Abstr.) **(Spa)**

[Photomaniac behavior and schizophrenia] Gerbaldo H, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Dec;34(4):321–3 (Eng. Abstr.) **(Spa)**

[Control of chlorophyll a synthesis by phytochrome and cryptochrome in the red alga Corallina elongata Ellis et Soland] López-Figueroa F, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):287–94 (Eng. Abstr.) **(Spa)**

[Biology of Anopheles (Kerteszia) neivai H., D. & K., 1913 (Diptera: Culicidae) in the Pacific coast of Colombia. III. Luminosity measurements and biting behavior] Murillo C, et al. **Rev Saude Publica** 1988 Apr;22(2):109–12 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

The site of operating microscope light-induced injury on the human retina. Brod RD, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):390–7

Photic retinopathy from the operating room microscope. Study with filters. Robertson DM, et al. **Arch Ophthalmol** 1989 Mar;107(3):373–5

Role of light toxicity in the developing retinal vasculature. **Glass P. Birth Defects** 1988;24(1):103–17 (47 ref.)

Biochemical studies of the chicken vitreous in light-induced avian glaucoma. Kinnear A, et al. **Comp Biochem Physiol [B]** 1978;61(1):107–10

Morphology and time-course of defined photochemical lesions in the rabbit retina. Hoppeler T, et al. **Curr Eye Res** 1988 Sep;7(9):849–60

Three cases with light-induced retinopathy. Harada T, et al. **Doc Ophthalmol** 1988 May;69(1):11–8

Retinal damage thresholds from single-pulse laser exposures in the visible spectrum. Courant D, et al. **Health Phys** 1989 May;56(5):637–42

Retinal damage from intense visible light. Zheltov G, et al. **Health Phys** 1989 May;56(5):625–30 (16 ref.)

Visual functional changes associated with low-level light effects. Zwick H. **Health Phys** 1989 May;56(5):657–63 (55 ref.)

Effect of flickering light stress on certain biochemical parameters in rats. Lalitha R, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):182–6

Failure of vitamin E to protect the retina against damage resulting from bright cyclic light exposure. Katz ML, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):29–36

Retinal light damage reduces autofluorescent pigment deposition in the retinal pigment epithelium. Katz ML, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):37–43

Retinal damage in macaque after white light exposures lasting ten minutes to twelve hours. Kremers JJ, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1032–40

Retinal light damage in rats exposed to intermittent light. Comparison with continuous light exposure. Organisciak DT, et al. **Invest Ophthalmol Vis Sci** 1989 May; 30(5):795–805

Transplantation of photoreceptors to light-damaged retina. Silverman MS, et al. **Invest Ophthalmol Vis Sci** 1989 Aug; 30(8):1684–90

Fluorescent light interferes with pulse oximetry. Amar D, et al. **J Clin Monit** 1989 Apr;5(2):135–6 (6 ref.)

Shunt-dependent hydrocephalus [letter] Ferrara VL. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):277

Comparison of antifading agents used in immunofluorescence. Krenik KD, et al. **J Immunol Methods** 1989 Feb 8;117(1):91–7

Light-induced avian glaucoma as an animal model for human primary glaucoma. Lauber JK. **J Ocul Pharmacol** 1987 Spring;3(1):77–100 (99 ref.)

Influence of visible light and room temperature on cell proliferation in preimplantation rabbit embryos. Schumacher A, et al. **J Reprod Fertil** 1988 Sep; 84(1):197–204

Retinal phototoxicity from the operating microscope. The role of inspired oxygen [see comments] Jaffe GJ, et al. **Ophthalmology** 1988 Aug;95(8):1130–41. **Comment in:** Ophthalmology 1989 Jun;96(6):925–6

Microscope light-induced maculopathy in combined penetrating keratoplasty, extracapsular cataract extraction, and intraocular lens implantation. Stamler JF, et al. **Ophthalmology** 1988 Aug;95(8):1142–6

Reduced incidental light exposure: effect on the development of retinopathy of prematurity in low birth weight infants. Ackerman B, et al. **Pediatrics** 1989 Jun;83(6):958–62

[The observation of light damage to the retina. 2. The changes of ultrastructure] Sun SP, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):213–9 (Eng. Abstr.) **(Chi)**

[The observation of light damage to the retina. 1. The changes of electroretinogram] Wu DZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):171–4 (Eng. Abstr.) **(Chi)**

[Operative retinal photoinjuries] Hochart G, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1063–5 **(Fre)**

[Spectral characteristics of intraocular lenses and injury to the retina caused by visible light] Egorova EV, et al. **Biofizika** 1988 Nov–Dec;33(6):1035–40 (Eng. Abstr.) **(Rus)**

[Damage photosensitized by chlorine e6 in bacteria with various defects of the DNA repair system] Zorina TE, et al. **Mikrobiologiia** 1988 Nov–Dec;57(6):1007–10 (Eng. Abstr.) **(Rus)**

[Experimental morphologic changes in the retina caused by illumination from various light sources (fluorescent and incandescent lamps)] Cherkasov IS, et al. **Oftalmol Zh** 1988; (6):362–4 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Optical quantitation of natural caries in smooth surfaces of extracted teeth. Brinkman J, et al. **Caries Res** 1988; 22(5):257–62

Pupillary light reflex in borderline diabetes mellitus. Kuroda N, et al. **Diabetes Res Clin Pract** 1989 Feb 15;6(2):89–94

Limiting dilution analysis for detection of residual leukemic cells after bone marrow combined decontamination with mafosfamide followed by merocyanine-540-mediated photosensitization. Porcellini A, et al. **Int J Cell Cloning** 1989 Jul;7(4):223–31

Stroboscopic examination of the larynx [editorial] **Lancet** 1989 May 27;1(8648):1175–6

Design and evaluation of a new reflectance pulse oximeter sensor. Mendelson Y, et al. **Med Instrum** 1988 Aug; 22(4):167–73

[Which patients with seasonal photodermatitis should be tested?] Jeanmougin M. **Ann Dermatol Venereol** 1989; 116(2):141–4 (9 ref.) **(Fre)**

[Evaluation of the therapeutic effect of a phlebotropic drug with a new noninvasive method: rheography by reflected light] Tumino G, et al. **Clin Ter** 1987 Aug 15;122(3):189–94 (Eng. Abstr.) **(Ita)**

LIGHT COAGULATION

Colour vision and dark adaptation in diabetic patients after photocoagulation. Mäntyjärvi M. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):113–8

Treatment of age-related macular degeneration by laser photocoagulation. Visual results 2–8 weeks and 2–4 years after initial laser treatment. Nielsen NV, et al.

Acta Ophthalmol (Copenh) 1988 Oct;66(5):522–7

Ocular effects of panretinal photocoagulation. Schiødte N. Acta Ophthalmol Suppl (Copenh) 1988;186:1–32

High grade entrance and exit block in an area of healed myocardial infarction associated with ventricular tachycardia with successful laser photoablation of the anatomic substrate. Littmann L, et al. Am J Cardiol 1989 Jul 1;64(1):122–4

A method for combining matched and unmatched binary data. Application to randomized, controlled trials of photocoagulation in the treatment of diabetic retinopathy. Duffy SW, et al. Am J Epidemiol 1989 Aug;130(2):371–8

A personal experience in comparing three nonoperative techniques for treating internal hemorrhoids. Zinberg SS, et al. Am J Gastroenterol 1989 May;84(5):488–92

Argon laser endophotocoagulator closure of cyclodialysis clefts. Alward WL, et al. Am J Ophthalmol 1988 Dec 15; 106(6):748–9

Bilateral subretinal neovascularization after focal argon laser photocoagulation for diabetic macular edema. Berger AR, et al. Am J Ophthalmol 1989 Jul 15;108(1):88–90

Semiconductor diode laser photocoagulation of human malignant melanoma. Brancato R, et al. Am J Ophthalmol 1989 Mar 15;107(3):295–6

Nd:YAG laser photodisruption of hemorrhagic detachment of the internal limiting membrane [see comments] Gabel VP, et al. Am J Ophthalmol 1989 Jan 15;107(1):33–7. Comment in: Am J Ophthalmol 1989 May 15;107(5):566–8

Transscleral Nd:YAG photocoagulation for cataract incision vascularization associated with recurrent hyphema. Kramer TR, et al. Am J Ophthalmol 1989 Jun 15;107(6):681–2

Enucleation after argon laser photocoagulation for choroidal melanoma. Brancato R, et al. Ann Ophthalmol 1988 Aug; 20(8):296–8

Unilateral proliferative sickle retinopathy: a model for photocoagulation in the proliferative retinopathies. Kimmel AS, et al. Ann Ophthalmol 1989 Jun;21(6):211–2, 216

Photocoagulation of large iris cysts. Sihota R, et al. Ann Ophthalmol 1988 Dec;20(12):470–2

Current management of choroidal neovascularization. Singerman LJ. Ann Ophthalmol 1988 Nov;20(11):415–20, 423 (6 ref.)

Laser treatment of toxoplasmosis. Steahly LP. Ann Ophthalmol 1989 Jan;21(1):36–8

Endolaser photocoagulation of toxoplasmosis. Steahly LP. Ann Ophthalmol 1988 Dec;20(12):463–5

A preliminary study of the combined effect of neodymium: YAG laser photocoagulation and direct steroid instillation in the treatment of capillary/cavernous hemangiomas of infancy. Apfelberg DB, et al. Ann Plast Surg 1989 Feb; 22(2):94–104

Nd–YAG laser photoablation of sessile villous and tubular adenomas of the colorectum. Low DE, et al. Ann Surg 1988 Dec;208(6):725–32

Transscleral cyclophotocoagulation. A laser treatment for glaucoma. Langseth FG. AORN J 1988 Dec;48(6):1122–5, 1127

Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis. Macular Photocoagulation Study Group [see comments] Arch Ophthalmol 1989 Mar;107(3):344–52. Comment in: Arch Ophthalmol 1989 Jul;107(7):955–6

Retinal revascularization following laser photocoagulation treatment for choroidal neovascular membranes. Caskey PJ, et al. Arch Ophthalmol 1988 Nov;106(11):1528–32

Response of pig retinal pigment epithelium to laser photocoagulation in organ culture. Del Priore LV, et al. Arch Ophthalmol 1989 Jan;107(1):119–22

Intraocular pressure in the Diabetic Retinopathy Study [letter] Kaufman SC, et al. Arch Ophthalmol 1989 Mar; 107(3):318

Macular grid photocoagulation for macular edema in central retinal vein occlusion. Klein ML, et al. Arch Ophthalmol 1989 Sep;107(9):1297–302

Intraocular pressure and panretinal photocoagulation [letter] Schiødte N. Arch Ophthalmol 1988 Oct;106(10):1346

The evolution of argon laser photocoagulation scars in patients with the ocular histoplasmosis syndrome. Shah SS, et al. Arch Ophthalmol 1988 Nov;106(11):1533–6

Treatment of Coats' disease with the binocular indirect argon laser photocoagulator [letter] Sneed SR, et al. Arch Ophthalmol 1989 Jun;107(6):789–90

Partial ablation of neovascular membranes involving the fovea [letter; comment] Tornambe PE, et al. Arch Ophthalmol 1989 Jul;107(7):955–6. Comment on: Arch Ophthalmol 1989 Mar;107(3):344–52

Thermal profiles of blood vessels heated by a laser. Pickering JW, et al. Australas Phys Eng Sci Med 1989 Mar;12(1):11–5

Extensive argon laser photocoagulation in the treatment of proliferative diabetic retinopathy. Aylward GW, et al. Br J Ophthalmol 1989 Mar;73(3):197–201

Treatment of retinal embolus by photocoagulation [letter] Dutton GN, et al. Br J Ophthalmol 1989 Jul;73(7):580–1

Long-term follow-up of a prospective trial of argon laser photocoagulation in the treatment of central serous retinopathy. Ficker L, et al. Br J Ophthalmol 1988 Nov; 72(11):829–34

Endoscopic Nd–YAG laser therapy in upper gastrointestinal tract. Fujimoto H. Bull Tokyo Med Dent Univ 1988 Sep; 35(3):59–66

Diagnosis and Nd–YAG laser treatment of unsuspected malignant tracheal obstruction. Gelb AF, et al. Chest 1988 Oct;94(4):767–71

Colonic angiodysplasia. Follow-up of patients after endoscopic treatment for bleeding lesions. Lanthier P, et al. Dis Colon Rectum 1989 Apr;32(4):296–8

YAG laser or BICAP tumor probe for palliation of esophageal cancer strictures? [letter] Naveau S, et al. Gastroenterology 1988 Dec;95(6):1696–7

Selective vascular coagulation of rabbit colon using a flashlamp-excited dye laser operating at 577 nanometers. Nishioka NS, et al. Gastroenterology 1988 Nov; 95(5):1258–64

Endoscopic Nd:YAG laser treatment of severe radiation injury of the lower gastrointestinal tract: long-term follow-up. Alexander TJ, et al. Gastrointest Endosc 1988 Sep–Oct;34(5):407–11

Quantitation of colonic injury from argon laser, neodymium: YAG laser and monopolar electrocautery applied to flat mucosa and small sessile polyps of the canine colon. Hunter JG, et al. Gastrointest Endosc 1989 Jan–Feb;35(1):16–21

Red krypton and blue–green argon laser diabetic panretinal photocoagulation. Blankenship GW, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(4):364–8

Contact transscleral retinopexy using a sapphire crystal probe. Schubert HD, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(1):95–9

Analysis of results in the treatment of peripheral retinoschisis in sex-linked congenital retinoschisis. Turut P, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(4):328–31

Animal experiments for the determination of an optimal wavelength for retinal coagulations. Vogel M, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(3):277–80

Combined photocoagulation and cryotherapy in treatment of Eales' retinopathy. Preliminary report. Das T, et al. Indian J Ophthalmol 1987;35(5–6):106–18

Argon laser iridoplasty. Matai A, et al. Indian J Ophthalmol 1987;35(5–6):290–2

Argon laser iridectomy. Matai A, et al. Indian J Ophthalmol 1987;35(5–6):293–5; discussion 296–7

Treatment of background diabetic retinopathy. Morse PH. Indian J Ophthalmol 1987;35(5–6):337–9

How many laser burns. Reddy SH. Indian J Ophthalmol 1987; 35(5–6):362–3

Argon laser iridotomy in angle closure glaucoma. Rohatgi J, et al. Indian J Ophthalmol 1987;35(5–6):285–9

Commentary: what role do lasers play in the management of colorectal disease. Bown SG. Int J Color Dis 1989; 4(1):26–9

Laser palliation for rectosigmoid cancers. Brunetaud JM, et al. Int J Color Dis 1989;4(1):6–8

Laser treatment of intestinal vascular abnormalities. Mathus-Vliegen EM. Int J Color Dis 1989;4(1):20–5

Risk factors which determine the long term outcome of Neodymium–YAG laser palliation of colorectal carcinoma. Van Cutsem E, et al. Int J Color Dis 1989;4(1):9–11

Dye laser photocoagulation of macular subretinal neovascularization in pathological myopia. A randomized study of three different wavelengths. Brancato R, et al. Int Ophthalmol 1988 Feb;11(4):235–8

The tunable dye laser in the management of retinal vascular disease. Cunha-Vaz JG, et al. Int Ophthalmol 1988; 12(3):193–6

Cyclophotocoagulation in glaucoma therapy. van der Zypen E, et al. Int Ophthalmol 1989 Jan;13(1–2):163–6

Histopathology of diode and argon laser lesions in rabbit retina. A comparative study. Brancato R, et al. Invest Ophthalmol Vis Sci 1989 Jul;30(7):1504–10

Neodymium–YAG transscleral cyclophotocoagulation. The role of pigmentation. Cantor LB, et al. Invest Ophthalmol Vis Sci 1989 Aug;30(8):1834–7

Factors associated with visual outcome after photocoagulation for diabetic retinopathy. Diabetic Retinopathy Study Report #13. Kaufman SC, et al. Invest Ophthalmol Vis Sci 1989 Jan;30(1):23–8

A comparison of CW Nd:YAG contact transscleral cyclophotocoagulation with cyclocryopexy. Schubert HD, et al. Invest Ophthalmol Vis Sci 1989 Mar;30(3):536–42

The role of inflammation in CW Nd:YAG contact transscleral photocoagulation and cryopexy. Schubert HD, et al. Invest Ophthalmol Vis Sci 1989 Mar;30(3):543–9

Heat generation in laser irradiated tissue. Welch AJ, et al. J Biomech Eng 1989 Feb;111(1):62–8

The Early Treatment Diabetic Retinopathy Study: an update. Bresnick GH. J Diabetic Complications 1988 Jul–Sep; 2(3):105–8 (11 ref.)

Krypton laser for proliferative diabetic retinopathy: the Krypton Argon Regression of Neovascularization Study. Singerman LJ, et al. J Diabetic Complications 1988 Oct–Dec;2(4):189–96

Early laser photocoagulation for idiopathic central serous choroidopathy. Yospaiboon Y, et al. J Med Assoc Thai 1989 Mar;72(3):138–43

Atrial myxoma: a new surgical approach using neodymium:yttrium–aluminum–garnet laser photocoagulation [letter] Mesnildrey P, et al. J Thorac Cardiovasc Surg 1989 Aug;98(2):313–4

Congenital genitourinary hemangiomas in a patient with the Klippel–Trenaunay syndrome: management with the neodymium:YAG laser. Hockley NM, et al. J Urol 1989 Apr;141(4):940–1

Laser welding of pedicled flap skin tubes. Mininberg DT, et al. J Urol 1989 Aug;142(2 Pt 2):623–5; discussion 631

Laser treatment of ureteral tumors. Schmeller NT, et al. J Urol 1989 Apr;141(4):840–3

Choroidal vascular repair following orange dye laser photocoagulation. Katoh N, et al. Jpn J Ophthalmol 1989; 33(2):166–72

YAG-laser in the posterior segment of the eye. Kreissig I. Klin Oczna 1988 Apr–May;90(4–5):136–41

Prostaglandin E in rabbit aqueous humor after Nd–YAG laser photodisruption of the iris and the effect of topical indomethacin pretreatment. Joo CK, et al. Korean J Ophthalmol 1987 Dec;1(2):122–7

Comparison of endoscopic polidocanol injection and YAG laser therapy for bleeding peptic ulcers. Rutgeerts P, et al. Lancet 1989 May 27;1(8648):1164–7

Parameters affecting laser palliation in patients with advanced digestive cancers. Brunetaud JM, et al. Lasers Surg Med 1989;9(2):169–73

Endoscopic laser therapy for esophageal cancer: present status with emphasis on past and future. Fleischer D. Lasers Surg Med 1989;9(1):6–16 (50 ref.)

Retinal thermal response to copper-vapor laser exposure. Gabay S, et al. Lasers Surg Med 1988;8(4):418–27

Laser-assisted vasovasostomy. Gilbert PT, et al. Lasers Surg Med 1989;9(1):42–4

Functional and histological restitution in the urinary tract after Nd:YAG laser coagulation. Pensel J, et al. Lasers Surg Med 1988;8(4):371–6

Welding of gallbladder tissue with a pulsed 2.15 microns thulium–holmium–chromium:YAG laser. Popp HW, et al. Lasers Surg Med 1989;9(2):155–9

The first sutureless, laser-welded, end-to-end bowel anastomosis. Sauer JS, et al. Lasers Surg Med 1989; 9(1):70–3

Time constants in thermal laser medicine. van Gemert MJ, et al. Lasers Surg Med 1989;9(4):405–21

Laser probe coagulation of bleeding canine ulcers. Van Stiegmann G, et al. Lasers Surg Med 1988;8(4):409–12

Mucosal vascular malformations of the gastrointestinal tract: clinical observations and results of endoscopic neodymium: yttrium–aluminum–garnet laser therapy. Gostout CJ, et al. Mayo Clin Proc 1988 Oct;63(10):993–1003

Photocoagulation of chorioretinal anastomoses in far-advanced age-related macular degeneration. Cialdini AP, et al. Ophthalmic Surg 1989 May;20(5):316–20

Macular edema in branch retinal vein occlusion: types and treatment. Jalkh AE, et al. Ophthalmic Surg 1989 Jan; 20(1):26–32

Treatment of small choroidal melanomas with photocoagulation. Jalkh AE, et al. Ophthalmic Surg 1988 Oct;19(10):738–42

Juxtapapillary exophytic retinal capillary hemangioma treated by yellow krypton (568 nm) laser photocoagulation. Kremer I, et al. Ophthalmic Surg 1988 Oct;19(10):743–7

Vitrectomy when asteroid hyalosis prevents laser photocoagulation. Lambrou FH Jr, et al. Ophthalmic Surg 1989 Feb;20(2):100–2

Grid laser photocoagulation for atypical central serous chorioretinopathy. Roseman RL, et al. Ophthalmic Surg 1988 Nov;19(11):786–91

Efficacy of panretinal photocoagulation in central retinal vein occlusion. Gomolin JE. Ophthalmologica 1989;199(1):24–7

Foveal ablation for subfoveal choroidal neovascularization. Boldrey EE. Ophthalmology 1989 Sep;96(9):1430–5; discussion 1435–6

The efficacy of panretinal photocoagulation for neovascularization of the iris after central retinal artery obstruction. Duker JS, et al. Ophthalmology 1989 Jan; 96(1):92–5

Feeder vessel photocoagulation [letter] Jampol LM. Ophthalmology 1988 Jun;95(6):855–6

The effect of panretinal photocoagulation on optic nerve cupping. Johns KJ, et al. Ophthalmology 1989 Feb; 96(2):211–6

Transscleral neodymium:YAG thermal cyclophotocoagulation in refractory glaucoma. A preliminary report. Klapper RM, et al. Ophthalmology 1988 Jun;95(6):719–22

The challenge of transferring research results into patient care [editorial] Kupfer C. Ophthalmology 1989 Jun; 96(6):737–8

Atrophic creep of the retinal pigment epithelium after focal macular photocoagulation. Morgan CM, et al. Ophthalmology 1989 Jan;96(1):96–103

Photocoagulation to prevent retinal detachment in acute retinal necrosis. Sternberg P Jr, et al. Ophthalmology 1988 Oct;95(10):1389–93

Rapid enhancement of retinal adhesion by laser photocoagulation. Yoon YH, et al. Ophthalmology 1988 Oct;95(10):1385–8

Percutaneous Nd:YAG laser coagulation of ventricular myocardium in dogs using a special electrode laser catheter. Weber H, et al. PACE 1989 Jun;12(6):899–910

Regression of disc neovascularization by photocoagulation in the acute retinal necrosis syndrome. Han DP, et al. Retina 1988;8(4):244–6

Focal photocoagulation of diabetic macular edema. A clinicopathologic case report. Wallow IH, et al. Retina 1988;8(4):261–9

Combined TUR and laser in the treatment of localized prostatic cancer. Beisland HO. Scand J Urol Nephrol Suppl 1988;110:83–8

Panretinal photocoagulation in the management of neovascular glaucoma. Cashwell LF, et al.

South Med J 1988 Nov;81(11):1364–8
Treatment of drusen-related aging macular degeneration by photocoagulation. Wetzig PC.
Trans Am Ophthalmol Soc 1989;86:276–88; discussion 288–90
Improvement of macular edema after panretinal photocoagulation for proliferative diabetic retinopathy. Gardner TW, et al.
Trans Pa Acad Ophthalmol Otolaryngol 1988;40:691–6
Diagnosis and laser treatment of choroidal neovascularization in age-related macular degeneration (senile macular degeneration). Murphy RP. Yen Ko Hsueh Pao 1986 Mar; 2(1):58–62 (8 ref.)
[Combination therapy of the retina in diabetic retinopathy] Mach R, et al. Cesk Oftalmol 1989 Mar;45(2):84–90 (Eng. Abstr.) (Cze)
[Treatment of an intravitreous bridle in sickle cell retinopathy] Comte P, et al. Bull Soc Ophtalmol Fr 1988 Feb;88(2):257–9 (Fre)
[Congenital retinal arterial loop and photocoagulation] Malthieu D, et al. Bull Soc Ophtalmol Fr 1988 Nov; 88(11):1265–6 (Fre)
[From a laser to a court of law: 4 possible ways] Massin M. Bull Soc Ophtalmol Fr 1988 May;88(5):615–6, 619 (Fre)
[Chromatic discrimination in diabetics after treatment by photocoagulation] Pesme DJ, et al.
Bull Soc Ophtalmol Fr 1988 Jun-Jul;88(6–7):815–7 (Fre)
[Errors in aiming in laser photocoagulation] Turut P, et al. Bull Soc Ophtalmol Fr 1988 May;88(5):595–6, 598 (Eng. Abstr.) (Fre)
[Value of peripheral retinopexy in proliferative diabetic retinopathy with hemorrhage of the vitreous body. A 5-year study] Vallat M, et al. Bull Soc Ophtalmol Fr 1988 Nov;88(11):1267–8, 1271–2 (Eng. Abstr.) (Fre)
[Palliative treatment of esophageal cancer by vaporization with a Nd-YAG laser. Our first cases] Mosimann F. Helv Chir Acta 1989 Jun;56(1–2):163–7 (Eng. Abstr.) (Fre)
[Photocoagulation with the argon laser in cystoid macular edema in retinal venous occlusions. Apropos of 68 cases] Gaudric A, et al. J Fr Ophtalmol 1988;11(4):319–26 (Eng. Abstr.) (Fre)
[Treatment of preretinal retrohyaloidal hemorrhage: value of early argon laser photocoagulation] Kroll P, et al.
J Fr Ophtalmol 1989;12(1):61–6 (Eng. Abstr.) (Fre)
[Surgical peripheral iridectomy and argon laser iridotomy in primary closed-angle glaucoma. Comparative statistical study] Savelsbergh-Fillette MP, et al. J Fr Ophtalmol 1988; 11(4):349–56 (Eng. Abstr.) (Fre)
[Prognostic factors in the treatment of edematous diabetic retinopathy with focal photocoagulation] Fernández-Vigo J, et al. Ophtalmologie 1988 Oct;2(4):311–4 (Eng. Abstr.) (Fre)
[Method of action of the argon laser in the treatment of edematous diabetic retinopathy. Is rupture of the blood-ocular barrier truly its effect?] Haut J, et al.
Ophtalmologie 1988 Jan-Mar;2(1):49–52 (15 ref.) (Eng. Abstr.) (Fre)
[Intra-photocoagulation during vitrectomy] Hendrikse F, et al. Ophtalmologie 1988 Jan-Mar;2(1):17–8 (Eng. Abstr.) (Fre)
[Retinotomy with the Yag-laser in cases of retinal folds with vitreo-retinal traction in proliferative diabetic retinopathy] Lumbroso B, et al. Ophtalmologie 1988 Oct;2(4):307–10 (Eng. Abstr.) (Fre)
[Histochemical determination of vitality limits after the use of neodymium-YAG-lasers on parenchymatous organs] Stöhr GA, et al.
Z Exp Chir Transplant Kunstliche Organe 1989;22(4):235–43 (Eng. Abstr.) (Ger)
[Necessary and sufficient retinal photocoagulation for diabetic retinopathy] Fukuda M, et al.
Nippon Ganka Gakkai Zasshi 1988 Jul;92(7):1255–9 (Eng. Abstr.) (Jpn)
[Photocoagulation for preproliferative diabetic retinopathy and changes in macular lesions] Kojima K, et al.
Nippon Ganka Gakkai Zasshi 1988 Nov;92(11):1781–6 (Eng. Abstr.) (Jpn)
[Histopathological study of the effects of photocoagulation on the retina and choroid with various wavelengths of dye laser] Takahashi K, et al. Nippon Ganka Gakkai Zasshi 1988 Nov;92(11):1797–808 (Eng. Abstr.) (Jpn)
[A scanning electron microscopic study of the retino-choroidal vascular casts following photocoagulation with various wavelengths of dye laser] Takahashi K, et al. Nippon Ganka Gakkai Zasshi 1988 Nov;92(11):1809–17 (Eng. Abstr.) (Jpn)
[Panphotocoagulation in simple and proliferative diabetic retinopathy] Mirkiewicz-Sieradzka B, et al. Klin Oczna 1988 Sep;90(9):317–9 (Eng. Abstr.) (Pol)
[Electrophysiologic studies before and after laser panphotocoagulation in diabetic retinopathy. I. Early results] Palacz O, et al. Klin Oczna 1988 Sep;90(9):320–2 (Eng. Abstr.) (Pol)
[Analysis of the surgical treatment of retinal detachment caused by dialysis retinae] Pecoldowa K, et al.
Klin Oczna 1988 Aug;90(8):269–70 (Eng. Abstr.) (Pol)
[Internal retinal tamponade using SF6 gas. Preliminary report] Pecoldowa K, et al. Klin Oczna 1988 Aug; 90(8):267–8 (Eng. Abstr.) (Pol)
[Use of the copper-vapor laser in the combined treatment of peptic ulcer] Soldatov AI, et al. Klin Khir 1988;(8):64 (Rus)
[Transudative myopic maculopathy: pathogenetic validity and comparative effectiveness of laser interventions] Ivanishko IuA. Oftalmol Zh 1989;(2):99–104 (Eng. Abstr.) (Rus)
[Transscleral coagulation of the retina and ciliary body using a YAG-neodymium laser] Kenczik T, et al.
Oftalmol Zh 1988;(7):408–11 (Eng. Abstr.) (Rus)
[Assessment of the degree of risk of transscleral laser coagulation] Linnik LA. Oftalmol Zh 1988;(8):470–3 (Eng. Abstr.) (Rus)
[Endobronchial laser coagulation in persistent hemoptysis due to granulation of the bronchial stump] Gerasin VA, et al. Vestn Khir 1988 Dec;141(12):32–3 (Rus)
[Morphologic research on the ciliary body in contact transscleral laser cyclocoagulation of human and rabbit eyes] Krasnov MM, et al. Vestn Oftalmol 1988 Sep-Oct; 104(5):11–3 (Eng. Abst.) (Rus)
[Nyctometric studies in argon laser coagulation in patients with diabetic retinopathy] Mironova ZM, et al.
Vestn Oftalmol 1989 May-Jun;105(3):30–2 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Evaluation of phototoxic retinal damage after argon laser iridotomy. Anderson DR, et al. Am J Ophthalmol 1989 Apr 15;107(4):398–402
Absorption of irrigating fluid during laser photocoagulation of the endometrium in the treatment of menorrhagia. Morrison LM, et al. Br J Obstet Gynaecol 1989 Mar; 96(3):346–52
Changes in colour contrast sensitivity associated with operating argon lasers. Gündüz K, et al.
Br J Ophthalmol 1989 Apr;73(4):241–6
Retinal laser photocoagulation in diabetic patients causes prolactin, growth hormone and cortisol release. Pontiroli AE, et al. J Endocrinol Invest 1988 May;11(5):389–91
Pulmonary edema after photocoagulation of the endometrium with the Nd:YAG laser. A case report. Feinberg BI, et al. J Reprod Med 1989 Jun;34(6):431–4
Subretinal neovascularization complicating laser photocoagulation of diabetic maculopathy. Lewen RM.
Ophthalmic Surg 1988 Oct;19(10):734–7
Iatrogenic choroidal neovascularization after krypton red laser photocoagulation. Orth DH, et al.
Ophthalmic Surg 1989 Apr;20(4):273–7
Accommodative weakness and mydriasis following laser treatment at the peripheral retina. Lifshitz T, et al.
Ophthalmologica 1988;197(2):65–8
Clinicopathologic study of organic dye. Laser in the human fundus. Brooks HL Jr, et al. Ophthalmology 1989 Jun; 96(6):822–34
Visual loss after successful photocoagulation of choroidal neovascularization. Han DP, et al. Ophthalmology 1988 Oct;95(10):1380–4
Histologic effects of cyclophotocoagulation [letter] March WF, et al. Ophthalmology 1989 Jun;96(6):925
[Posterior ciliary artery occlusion after krypton photocoagulation of subretinal neovessels] Bacin F, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):647–9 (Fre)
[Retinal detachment after preventive treatment with an argon laser] Bonnet M, et al. Bull Soc Ophtalmol Fr 1988 May; 88(5):621–3 (Eng. Abstr.) (Fre)
[Subretinal neovessels caused by photocoagulation] Malthieu D, et al. Bull Soc Ophtalmol Fr 1988 May;88(5):645–6 (Fre)
[Complications of trabeculoretraction using an argon laser] Moulin F, et al. Bull Soc Ophtalmol Fr 1988 May; 88(5):599–602 (16 ref.) (Eng. Abstr.) (Fre)
[Retinal retraction caused by a laser in a case of proliferative diabetic retinopathy] Muth F, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):631–3 (7 ref.) (Eng. Abstr.) (Fre)
[Recurrent cystoid macular edema during photocoagulation in an aphakic female patient] Pyckewaert M, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):641–2 (Fre)
[Macular pucker syndrome after laser photocoagulation of peripheral retinal tears' Turut P, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):625–8, 630 (9 ref.) (Eng. Abstr.) (Fre)
[Central serous chorioretinopathy and subretinal neovessels: overdose or indication of an error in the laser treatment] Turut P, et al. Bull Soc Ophtalmol Fr 1988 May;88(5):635–6 (Fre)
[Cystoid macular edema directly related to laser photocoagulation] Turut P, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):637–9 (Fre)
[Effects of panretinal photocoagulation on vitreoretinal border tissues: IV. Freeze-cracking SEM of macaca fuscata] Masuyama Y, et al.
Nippon Ganka Gakkai Zasshi 1988 Jul;92(7):1213–20 (Eng. Abstr.) (Jpn)
[A complication of laser photodestruction of bronchial cancer] Shipulin PP, et al. Klin Khir 1988;(10):54 (Rus)

INSTRUMENTATION

The Mainster lens in eyes with intraocular gas [letter] Desroches G. Arch Ophthalmol 1988 Dec;106(12):1649
The infrared coagulator in dermatology. Colver GB.
Dermatol Clin 1989 Jan;7(1):155–67 (16 ref.)
Non-contact retinal photocoagulation using the Volk +90 dioptre lens. Bates R, et al. Eye 1988;2 (Pt 4):409–11
Nd:YAG laser for diminutive polyps [letter] Fraiberg EN, et al. Gastrointest Endosc 1989 Mar-Apr;35(2):136
A randomized study of a coaxial fiber versus a naked fiber for endoscopic Nd:YAG laser therapy of esophageal and rectal tumors. Naveau S, et al. Gastrointest Endosc 1989 May-Jun;35(3):201–6
Deep localized neodymium (Nd)-YAG laser photocoagulation in liver using a new water cooled and echoguided handpiece. Godlewski G, et al.
Lasers Surg Med 1988;8(5):501–9
Microvascular anastomosis using a new diode laser system with a contact probe. Unno N, et al. Lasers Surg Med 1989; 9(2):160–8
Photocoagulation using the Eisner cone. Delaney WV Jr, et al. Retina 1989;9(1):22–7
[The first experience using a contact laser scalpel in surgery] Skobelkin OK, et al. Khirurgiia (Mosk) 1989 Jun;(6):111–2 (Rus)
[Use of plasma surgical devices for hemostasis during operations on the liver and spleen] Skobelkin OK, et al. Vestn Khir 1988 May;140(5):52–3 (Eng. Abstr.) (Rus)

METHODS

Neodymium:yttrium-aluminum-garnet laser occlusion of rhesus placental vasculature via fetoscopy. DeLia JE, et al. Am J Obstet Gynecol 1989 Feb;160(2):485–9
A technique for precise placement of laser applications in transscleral Nd:YAG cyclophotocoagulation. Fiore PM, et al. Am J Ophthalmol 1989 Mar 15;107(3):292–3
Nd:YAG laser pleurodesis through thoracoscopy: new curative therapy in spontaneous pneumothorax. Torre M, et al. Ann Thorac Surg 1989 Jun;47(6):887–9
Photocoagulation of raised new vessels by long-duration low-energy argon laser photocoagulation—a preliminary study. Zeki SM, et al. Br J Ophthalmol 1988 Nov; 72(11):837–40
Low power interstitial Nd YAG laser photocoagulation: studies in a transplantable fibrosarcoma. Matthewson K, et al. Br J Surg 1989 Apr;76(4):378–81
Focal occlusion of the rabbit carotid artery by endovascular laser therapy. O'Reilly GV, et al.
Cardiovasc Intervent Radiol 1988 Dec;11(6):322–4
Gastric ulcer healing after laser treatment in dogs. Marcuard SP, et al. Dig Dis Sci 1989 Jul;34(7):1053–6
Endoscopic laser therapy for watermelon stomach. Gostout CJ, et al. Gastroenterology 1989 Jun;96(6):1462–5
The effect of transscleral laser cyclophotocoagulation on rabbit ciliary body vascularization. van der Zypen E, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(2):172–9
Anastomosis of bypass grafts using a low-powered CO2 laser. Frazier OH, et al. Lasers Surg Med 1989;9(1):30–6
Vasovasostomy in the murine vas deferens: comparison of the Nd:YAG laser at 1.06 microns and 1.318 microns to the CO2 laser. Lowe BA, et al. Lasers Surg Med 1988; 8(4):377–80
Comparative study of the "point-by-point technique" and the "scanning technique" for laser treatment of port-wine stain. Mordon SR, et al. Lasers Surg Med 1989;9(4):398–404
A second puncture probe for laparoscopic delivery of the Nd:Yag laser. Brumsted JR, et al. Obstet Gynecol 1989 Apr;73(4):672–4
A clinical comparison of central and peripheral argon laser panretinal photocoagulation for proliferative diabetic retinopathy. Blankenship GW. Ophthalmology 1988 Feb; 95(2):170–7
Pneumatic repair of primary and secondary retinal detachments using a binocular indirect ophthalmoscope laser delivery system. Friberg TR, et al. Ophthalmology 1988 Feb;95(2):187–93
Central versus peripheral panretinal photocoagulation [letter] Gamel JW. Ophthalmology 1988 Aug;95(8):1157
Photocoagulation of bridging or avulsed retinal vessels [letter] Kauffmann DJ. Ophthalmology 1988 Sep; 95(9):1300–1
Cyclophotocoagulation: how far posterior to the limbus is the ciliary body? [letter] Schubert HD. Ophthalmology 1989 Jan;96(1):139–40
[Experimental analysis of in-depth temperature distribution in echo-guided in-depth irradiation with YAG laser] Uetera Y. Nippon Geka Gakkai Zasshi 1988 Nov; 89(11):1810–21 (Eng. Abstr.) (Jpn)
[Endoscopic treatment of gastric and duodenal ulcers with low-intensity laser] Koshelev VN, et al.
Khirurgiia (Mosk) 1988 Dec;(12):107–10 (Rus)
[Improved methods of laser photocoagulation in hemorrhaging stomach and duodenal ulcers] Grubnik VV. Klin Khir 1988;(8):74 (Rus)
[Changes in the energy thresholds of laser coagulation of retinal tissues with patient age] Linnik LA, et al.
Oftalmol Zh 1988;(6):355–8 (Eng. Abstr.) (Rus)
[Trans-scleral contact laser cyclocoagulation in glaucoma] Krasnov MM, et al. Vestn Oftalmol 1988 Jul-Aug; 104(4):35–40 (Eng. Abstr.) (Rus)

STANDARDS

Neodymium: YAG laser specifications for safe intravesical therapy. Smith JA Jr, et al. J Urol 1989 May;141(5):1238–9

VETERINARY

Neodymium:yttrium, aluminum, and garnet laser energy delivered transsclerally to the ciliary body of dogs. Nasisse MP, et al. **Am J Vet Res** 1988 Nov;49(11):1972–8

LIGHT, LUMINESCENT see **LUMINESCENCE**

LIGHT, VISIBLE see **LIGHT**

LIGHTING

Daily illuminance levels affect pituitary prolactin in male rats. Laakso ML, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):429–34

An illuminated blade for vitreoretinal membrane dissection. Han DP, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):200–1

The changing face of visual persistence. Long GM, et al. **Am J Psychol** 1989 Summer;102(2):197–210

Lightwand intubation in children with abnormal upper airways. Holzman RS, et al. **Anesthesiology** 1988 Nov; 69(5):784–7

An illuminating suggestion [letter] Saunders PR, et al. **Anesthesiology** 1988 Dec;69(6):1027–8

Detectability of emergency lights for underwater escape. Allan JR, et al. **Aviat Space Environ Med** 1989 Mar; 60(3):199–204

Reduction of visually-induced motion sickness elicited by changes in illumination wavelength. Dobie TG, et al. **Aviat Space Environ Med** 1989 Aug;60(8):749–54

Solid perception mechanism by a shading pattern: spatial frequency components in a corrugated wave pattern. Nameda N. **Biol Cybern** 1988;59(2):121–30

System analysis of Phycomyces light-growth response in single and double night-blind mutants. Palit A, et al. **Biol Cybern** 1989;60(5):385–93

Effect of light on diurnal variation of blood amino acids in neonates. Mantagos S, et al. **Biol Neonate** 1989;55(2):97–103

Bright light blocks amitriptyline-induced cholinoceptor supersensitivity. Dilsaver SC, et al. **Biol Psychiatry** 1989 Aug;26(4):416–23

Mechanism of the re-entrainment of the circadian rhythm in the rat pineal N-acetyltransferase activity to an eight-hour advance of the light-dark cycle: phase-jump is involved. Illnerová H. **Brain Res** 1989 Aug 14; 494(2):365–8

A light-induced decrease of cyclic GMP is involved in the photoresponse of molluscan extraocular photoreceptors. Nishi T, et al. **Brain Res** 1989 Apr 17;485(1):185–8

Adaptive changes in the central noradrenergic system in monocular deprived rats. Aurich M, et al. **Brain Res Bull** 1989 Feb;22(2):173–80

Direct in utero perception of light by the mammalian fetus. Weaver DR, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):151–5

Differential responses of rat pineal thyroxine type II 5'-deiodinase and N-acetyltransferase activities to either light exposure, isoproterenol, phenylephrine, or propranolol. Guerrero JM, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):447–58

Photoperiodic influence on the innervation of the ductus epididymidis and ductus deferens of the Djungarian hamster, Phodopus sungorus: electron-microscopic and biochemical results. Schindelmeiser J, et al. **Cell Tissue Res** 1989 Apr;256(1):175–81

Effects of nursery illumination on frequency of eyelid opening and state in preterm neonates. Moseley MJ, et al. **Early Hum Dev** 1988 Nov;18(1):13–26

Length and width summation in human vision at different background levels. Vassilev A, et al. **Exp Brain Res** 1989; 74(2):421–6

Photoreceptor physiology in the rat is governed by the light environment. Penn JS, et al. **Exp Eye Res** 1989 Aug; 49(2):205–15

Glare in aviation. Brennan DH. **Health Phys** 1989 May; 56(5):665–9

Differential color brightness as a body orientation cue. Barbour CG, et al. **Hum Factors** 1988 Dec;30(6):713–7

Black light: how sensors filter spectral variation of the illuminant [published erratum appears in IEEE Trans Biomed Eng 1989 May;36(5):572] Brainard DH, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):140–9

Effects of light- and dark-rearing on the postnatal development of GABA receptor sites in the chick optic lobe. Ríos H, et al. **Int J Dev Neurosci** 1987;5(4):319–25

Regional protein patterns of the embryonic chick brain: developmental shifts and the effects of light stimulation. Zhang J, et al. **Int J Dev Neurosci** 1987;5(2):151–65

The dilation of arterioles in frog submaxillaris muscle caused by visible light. Sonina RS, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):143–58

The effects of background illumination and stimulant medication on smooth pursuit eye movements of hyperactive children. Bylsma FW, et al. **J Absorm Child Psychol** 1989 Feb;17(1):73–90

A comparison of some photoreceptor characteristics in the pineal and retina. II. The Djungarian hamster (Phodopus sungorus). Foster RG, et al. **J Comp Physiol [A]** 1989 Aug; 165(4):565–72

Genetic analyses of photoresponsiveness in the Djungarian hamster, Phodopus sungorus. Lynch GR, et al. **J Comp Physiol [A]** 1989 Jan;164(4):475–81

Loss of the circadian rhythms of locomotor activity, food intake, and plasma melatonin concentration induced by constant bright light in the pigeon (Columba livia). Yamada H, et al. **J Comp Physiol [A]** 1988 Aug;163(4):459–63

Perception of translational heading from optical flow. Warren WH Jr, et al. **J Exp Psychol [Hum Percept]** 1988 Nov; 14(4):646–60

Lighting: aid to pharyngeal pouch identification [letter] Wengraf C. **J Laryngol Otol** 1989 Jan;103(1):124

Dopamine in the rabbit retina and striatum: diurnal rhythm and effect of light stimulation. Nowak JZ, et al. **J Neural Transm** 1989;75(3):201–12

Effect of unit and operatory lights on the consistency of light-activated composites. Pagniano RP, et al. **J Prosthet Dent** 1989 Feb;61(2):150–2

Lighting in submarines. Brown DC. **J R Nav Med Serv** 1988 Summer;74(2):78–85 (12 ref.)

Strain dependent response of circadian rhythms during exposure to continuous illumination. Peleg L, et al. **Life Sci** 1989;44(13):893–900

A light source for testing radiological television cameras. Rowlands JA, et al. **Med Phys** 1989 Jan–Feb;16(1):1–6

Influence of experimental illumination and seasonal variation on crossbreeding mating in the snail Biomphalaria glabrata. Pimentel-Souza F, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):79–85

Membrane currents activated in acutely dissociated rat pineal cells during the circadian cycle. Aguayo LG, et al. **Neurosci Lett** 1988 Oct 5;92(2):155–60

Lithium decreases retinal melatonin levels in the frog. Kemali M, et al. **Neurosci Lett** 1989 Jan 16;96(2):235–9

Altered neuronal sensitivity of lateral geniculate neurones to noradrenaline and 5-HT following exposure to continuous lighting. Mason R. **Neurosci Lett** 1988 Sep 23; 92(1):102–7

Monochromatic endoillumination for epimacular membrane surgery. Kraushar MF, et al. **Ophthalmic Surg** 1989 Jul; 20(7):508–10

Objective and subjective comparisons of the observation of dental xeroradiographs with reflected and transmitted light. Nishikawa K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):770–4

Contribution to ther history of psychology: LII. Purkinje phenomenon: the original and a later account. Brozěk J. **Percept Mot Skills** 1989 Apr;68(2):566

Recognizing faces in bright and dim light. DiNardo L, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):836–8

Time perception: effects of sensory modality, ambient illumination and intervals. Meredith LS, et al. **Percept Mot Skills** 1989 Apr;68(2):373–4

Partial color constancy of isolated surface colors examined by a color-naming method. Uchikawa K, et al. **Perception** 1989;18(1):83–91

Adult susceptibility induced by preweaning shifts of zeitgeber in rats (I). Knaepen E, et al. **Physiol Behav** 1988;44(6):763–7

Reciprocity between luminance and dot density in the perception of brightness. Mulligan JB, et al. **Vision Res** 1988;28(4):503–19

[The Tube-Stat: a useful aid in difficult intubation] Zbinden S, et al. **Anaesthesist** 1989 Mar;38(3):140–3 (Eng. Abstr.) (Ger)

[Effects of a short-term diet of precooked corn flour on the vaginal cycle, in rats placed in various conditions of environmental illumination] Lopez de Onate R, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):227–33 (Eng. Abstr.) (Ita)

[Evaluation of working conditions at the work place with video terminals: a survey conducted in 6 business offices] Berardi BM, et al. **G Ital Med Lav** 1988 Mar;10(2):57–63 (Eng. Abstr.) (Ita)

[Diurnal rhythm of rectal temperature in mice during various lighting conditions] Berezkin MV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):358–60 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Volume monitor malfunction caused by an overhead operating room light [letter] Cotter TP, et al. **Anesthesiology** 1989 Jun;70(6):1022

Building sickness, are symptoms related to the office lighting? Robertson AS, et al. **Ann Occup Hyg** 1989;33(1):47–59

Comparison of 60-Hz electric fields and incandescent light as aversive stimuli controlling the behavior of rats. Stern S, et al. **Bioelectromagnetics** 1989;10(1):99–109

Fluorescent lights, ultraviolet lamps, and cutaneous melanoma [letter] Griffiths AP, et al. **BMJ** 1988 Oct 22; 297(6655):1041

Fluorescent lights, ultraviolet lamps, and risk of cutaneous melanoma [published erratum appears in BMJ 1988 Nov 5;297(6657):1172] Swerdlow AJ, et al. **BMJ** 1988 Sep 10; 297(6649):647–50

Heritable susceptibility to environmentally induced glaucoma in several mutants of Japanese quail. Lauber JK, et al. **J Hered** 1989 Jul-Aug;80(4):268–71

Facial burns as a complication of office surgery lighting. Eisenbaum SL. **Plast Reconstr Surg** 1989 Jan;83(1):155–9

Bilateral loss of vision in bright light. Wiebers DO, et al. **Stroke** 1989 Apr;20(4):554–8

[Effect of various environmental illumination modalities on the muricidal behavior of male Wistar rats] Giammanco S, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):211–7 (Eng. Abstr.) (Ita)

INSTRUMENTATION

Dawn and dusk simulation as a therapeutic intervention. Terman M, et al. **Biol Psychiatry** 1989 Apr 1;25(7):966–70

[Use of a transformer-adaptor when using Soviet halogen lamps in endoscopic sources of cold light of non-Soviet origin] Guzhov VI. **Med Tekh** 1988 Jul-Aug;(4):57–8 (Eng. Abstr.) (Rus)

METHODS

[Experimental morphologic changes in the retina caused by illumination from various light sources (fluorescent and incandescent lamps)] Cherkasov IS, et al. **Oftalmol Zh** 1988; (6):362–4 (Eng. Abstr.) (Rus)

STANDARDS

[Lighting with artificial light in classrooms at general polytechnical high schools of the Hohenmölsen district] Jäger M, et al. **Z Gesamte Hyg** 1988 Nov;34(11):619–20 (Eng. Abstr.) (Ger)

[Some aspects of natural and artificial lighting in schools] Ohme K. **Z Gesamte Hyg** 1988 Nov;34(11):615–8 (Eng. Abstr.) (Ger)

[Evaluation of the optical properties of video display terminals] Grzesik J, et al. **Med Pr** 1989;40(1):18–23 (Eng. Abstr.) (Pol)

LIGHTNING INJURIES see under **ELECTRIC INJURIES**

LIGNAC-FANCONI SYNDROME see **FANCONI SYNDROME**

LIGNIN

Evaluation of internal markers isolated by alkaline hydrogen peroxide incubation and acid detergent lignin extraction. Cochran RC, et al. **J Anim Sci** 1988 Dec;66(12):3245–51

Biomass. Part B. Lignin, pectin, and chitin. **Methods Enzymol** 1988;161:1–574

ANALOGS & DERIVATIVES

Acute exposure to sawdust does not alter airway calibre and responsiveness to histamine in asthmatic subjects. De Luca S, et al. **Eur Respir J** 1988 Jun;1(6):540–6

Evaluation of calcium lignosulfonate-treated soybean meal as a source of rumen protected protein for dairy cattle. Windschitl PM, et al. **J Dairy Sci** 1988 Dec;71(12):3310–22

[The use of oily saw dust in cleaning floors at health facilities] Jatzwauk L, et al. **Z Gesamte Hyg** 1989 Apr;35(4):238–9 (Eng. Abstr.) (Ger)

[Effect of lignins and their model compounds on amine nitrosation in a human gastric juice medium and in the body of mice] Ermilov VB, et al. **Vopr Onkol** 1989; 35(6):693–8 (Eng. Abstr.) (Rus)

ANALYSIS

Soluble lignin–carbohydrate complexes from sheep rumen fluid: their composition and structural features. Conchie J, et al. **Carbohydr Res** 1988 Jun 15;177:127–51

BIOSYNTHESIS

Enzymatic synthesis and chromatographic purification of lignan glucuronides. Brunner G, et al. **Biomed Chromatogr** 1986 Apr;1(2):89–92

METABOLISM

A study of yeasts during the delignification and fungal transformation of wood into cattle feed in Chilean rain forest. González AE, et al. **Antonie Van Leeuwenhoek** 1989; 55(3):221–36

Biomimetic oxidation of nonphenolic lignin models by Mn(III): new observations on the oxidizability of guaiacyl and syringyl substructures. Hammel KE, et al. **Arch Biochem Biophys** 1989 Apr;270(1):404–9

Manganese, Mn-dependent peroxidases, and the biodegradation of lignin. Forrester IT, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):992–9

Veratryl alcohol oxidases from the lignin-degrading basidiomycete Pleurotus sajor-caju. Bourbonnais R, et al. **Biochem J** 1988 Oct 15;255(2):445–50

Pleurotus mushrooms. Part III. Biotransformations of natural lignocellulosic wastes: commercial applications and implications. Rajarathnam S, et al. **CRC Crit Rev Food Sci Nutr** 1989;28(1):31–113 (282 ref.)

Cleavages of aromatic ring and beta-O-4 bond of synthetic lignin (DHP) by lignin peroxidase. Umezawa T, et al. **FEBS Lett** 1989 Jan 2;242(2):325–9

Characterization of a cDNA encoding a manganese peroxidase, from the lignin-degrading basidiomycete Phanerochaete chrysosporium. Pribnow D, et al. **J Biol Chem** 1989 Mar 25;264(9):5036–40

Thiol-mediated oxidation of nonphenolic lignin model compounds by manganese peroxidase of Phanerochaete chrysosporium. Wariishi H, et al. **J Biol Chem** 1989 Aug 25;264(24):14185–91

In situ digestion kinetics and ruminal turnover rates of normal and brown midrib mutant sorghum x sudangrass hays fed to nonlactating Holstein cows. Fritz JO, et al. **J Dairy Sci** 1988 Dec;71(12):3345–51

Lignin degradation [letter] Leisola MS, et al.

Trends Biochem Sci 1988 Mar;13(3):84

PHARMACOLOGY

Inhibition of the infectivity and cytopathic effect of human immunodeficiency virus by water-soluble lignin in an extract of the culture medium of Lentinus edodes mycelia (LEM). Suzuki H, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):367-73

THERAPEUTIC USE

[Experimental substantiation of enterosorption with polyfepan in acute peritonitis] Miroshnichenko AG, et al. **Vestn Khir** 1988 Sep;141(9):97-8 (Rus)

URINE

Detection and identification of the plant lignans lariciresinol, isolariciresinol and secoisolariciresinol in human urine. Bannwart C, et al. **Clin Chim Acta** 1989 Apr 14; 180(3):293-301

LIGNOCAINE see LIDOCAINE

LIMBIC SYSTEM

ABNORMALITIES

The achinencephaly field defect [letter] Toriello HV. **Am J Med Genet Suppl** 1986;2:73-6

Agenesis of the corpus callosum and limbic malformation in Apert's syndrome [letter] Jeret JS, et al. **Arch Neurol** 1989 Jan;46(1):10

ANALYSIS

Detection of vasopressin messenger RNA in cells within the bed nucleus of the stria terminalis by in situ hybridization histochemistry. Miller MA, et al. **Neurosci Lett** 1988 Dec 5;94(3):264-8

ANATOMY & HISTOLOGY

Descending projections to the mammillary nuclei in the rat, as studied by retrograde and anterograde transport of wheat germ agglutinin-horseradish peroxidase. Shibata H. **J Comp Neurol** 1989 Jul 22;285(4):436-52

Topographical organization of the entorhinal projection to the dentate gyrus of the monkey. Witter MP, et al. **J Neurosci** 1989 Jan;9(1):216-28

Electrophysiological connections of neurons in ventral pallidal regions of the olfactory tubercle with the main olfactory bulb and piriform cortex. Barragán E, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):214-9

Anatomical analysis of the involvement of mesolimbocortical dopamine in the locomotor stimulant actions of d-amphetamine and apomorphine. Clarke PB, et al. **Psychopharmacology (Berlin)** 1988;96(4):511-20

CYTOLOGY

Estrogen-concentrating hypothalamic and limbic neurons project to the medial preoptic nucleus. Akesson TR, et al. **Brain Res** 1988 Jun 7;451(1-2):381-5

DRUG EFFECTS

Amphetamine-induced rotation reveals post 6-OHDA lesion neurochemical reorganization. Lynch MR, et al. **Behav Brain Res** 1989 Feb 1;32(1):69-74

The role of mesolimbic dopamine in conditioned locomotion produced by amphetamine. Gold LH, et al. **Behav Neurosci** 1988 Aug;102(4):544-52

Similar effects of daily cocaine and stress on mesocorticolimbic dopamine neurotransmission in the rat. Kalivas PW, et al. **Biol Psychiatry** 1989 Apr 1;25(7):913-28

Cocaine and pseudococaine: comparative effects on electrical after-discharge in the limbic system of cats. Matsuzaki M, et al. **Brain Res Bull** 1978 Jul-Aug;3(4):341-7

Activation of the A10 mesolimbic system by the sigma-receptor agonist (+)SKF 10,047 can be blocked by rimcazole, a novel putative antipsychotic. Ceci A, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):53-7

Oestrogen receptors and effects of oestradiol administration on mRNA synthesis in the limbic system of the neonatal female rat. Greenstein BD, et al. **J Endocrinol** 1989 Jan; 120(1):83-8

Chronic haloperidol-amphetamine interactions and mesolimbic dopamine. Lynch MR, et al. **Neuropsychobiology** 1988;19(2):97-103

Characteristics of limbic seizures evoked by peripheral injections of lithium and pilocarpine. Persinger MA, et al. **Physiol Behav** 1988;44(1):27-37

Diminished regulation of mesolimbic dopaminergic activity in rat after chronic inorganic lead exposure. Lasley SM, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):474-83

ENZYMOLOGY

Effects of chronic electrooconvulsive shock on D1 and D2 dopamine receptor-mediated activity of adenylate cyclase in homogenates of striatum and limbic forebrain of rat. Newman ME, et al. **Neuropharmacology** 1989 Aug; 28(8):787-90

[The effect of starvation on GABA-transaminase and glutamate decarboxylase activity on mitochondria of dog limbic structures during postnatal ontogenesis] Faradzhev AN. **Vopr Med Khim** 1988 Nov-Dec;34(6):32-6 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Phenylethanolamine N-methyltransferase-containing neurons in the limbic system of the young rat. Mezey E. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):347-51

METABOLISM

Intraventricular injections of galanin reduces 5-HT metabolism in the ventral limbic cortex, the hippocampal formation and the fronto-parietal cortex of the male rat. Fuxe K, et al. **Acta Physiol Scand** 1988 Aug;133(4):579-81

Selective stimulation of limbic dopamine activity by nicotine. Grenhoff J, et al. **Acta Physiol Scand** 1988 Aug; 133(4):595-6

Stress and the mesocorticolimbic dopamine systems. Roth RH, et al. **Ann N Y Acad Sci** 1988;537:138-47 (24 ref.)

Limbic brain structures are important sites of kappa-opioid receptor-mediated actions in the rat: a [14C]-2-deoxyglucose study. Ableitner A, et al. **Brain Res** 1989 Jan 30;478(2):326-36

Autoradiographic localization of mu-opioid and neurotensin receptors within the mesolimbic dopamine system. Dilts RP, et al. **Brain Res** 1989 May 29;488(1-2):311-27

The effects of FG 7142 upon local cerebral glucose utilization suggest overlap between limbic structures important in anxiety and convulsions. Pratt JA, et al. **Brain Res** 1988 Dec 20;475(2):218-31

Endogenous oxytocin inhibits morphine tolerance through limbic forebrain oxytocin receptors. Sarnyai Z, et al. **Brain Res** 1988 Nov 1;463(2):284-8

Stress-induced enhancement of dopamine and acetylcholine release in limbic structures: role of corticosterone. Imperato A, et al. **Eur J Pharmacol** 1989 Jun 20;165(2-3):337-8

Restriction of enhanced [2-14C]deoxyglucose utilization to rhinencephalic structures in immature amygdala-kindled rats. Ackermann RF, et al. **Exp Neurol** 1989 Apr; 104(1):73-81

GABAergic and cholinergic neurons exhibit high-affinity nerve growth factor binding in rat basal forebrain. Dreyfus CF, et al. **Exp Neurol** 1989 May;104(2):181-5

Inappropriate sexual behavior and denervation supersensitivity of limbic and midbrain LHRH receptors in Tourette's syndrome [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):295-6

Changes in cholinergic but not in GABAergic markers in amygdala, piriform cortex, and nucleus basalis of the rat brain following systemic administration of kainic acid. Schliebs R, et al. **J Neurochem** 1989 Jul;53(1):212-8

A unique membrane protein is expressed on early developing limbic system axons and cortical targets. Horton HL, et al. **J Neurosci** 1988 Dec;8(12):4653-61

Beta-endorphin in brain limbic structures as neurochemical correlate of psychic dependence on drugs. Sweep CG, et al. **Life Sci** 1989;44(16):1133-40

Evidence for selective inhibition of limbic forebrain dopamine synthesis by 8-OH-DPAT in the rat. Ahlenius S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):551-6

Quantitative distribution of nuclear androgen receptors in microdissected areas of the rat brain. Roselli CE, et al. **Neuroendocrinology** 1989 May;49(5):449-53

Characterization of beta-endorphin-immunoreactivity in limbic brain structures of rats self-administering heroin or cocaine. Sweep CG, et al. **Neuropeptides** 1988 Nov-Dec; 12(4):229-36

Effects of acute and chronic administration of phencyclidine on the A10 dopaminergic mesolimbic system: electrophysiological and behavioral correlates. French ED. **Neuropharmacology** 1988 Aug;27(8):791-8

Selective alterations in cerebral metabolism within the mesocorticolimbic dopaminergic system produced by acute cocaine administration in rats. Porrino LJ, et al. **Neuropsychopharmacology** 1988 May;1(2):109-18

Differential effects of competitive and non-competitive N-methyl-D-aspartate antagonists on glucose use in the limbic system. Nehls DG, et al. **Neurosci Lett** 1988 Aug 31;91(2):204-10

Developmental and regeneration-associated regulation of the limbic system associated membrane protein in explant cultures of the rat brain. Keller F, et al. **Neuroscience** 1989; 28(2):455-74

[The role of the central dopaminergic system in the mechanisms of action of antidepressive drugs and electroconvulsive therapy] Vetulani J. **Psychiatr Pol** 1988 Mar-Apr;22(2):89-98 (Pol)

[Dopamine metabolism and the GABA level in the structures of the nigrostriatal and mesolimbic systems of the rat brain in experimental pathology of higher nervous activity] Saul'skaia NB. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec; 38(6):1145-51 (Eng. Abstr.) (Rus)

PATHOLOGY

Morphometry of the entorhinal cortex [letter] Beckmann H, et al. **Biol Psychiatry** 1989 Apr 1;25(7):977-9

Limbic pathology in schizophrenia: the entorhinal region—a morphometric study. Falkai P, et al. **Biol Psychiatry** 1988 Sep;24(5):515-21

Paraneoplastic limbic encephalopathy with testicular carcinoma. A reversible neurologic syndrome. Burton GV, et al. **Cancer** 1988 Nov 15;62(10):2248-51

Limbic encephalitis: two cases. Kohler J, et al. **J Neuroimmunol** 1988 Dec;20(2-3):177-8

Limbic encephalitis associated with malignant thymoma. McArdle JP, et al. **Pathology** 1988 Jul;20(3):292-5

Perinatal complications and reduced size of brain limbic structures in familial schizophrenia. DeLisi LE, et al. **Schizophr Bull** 1988;14(2):185-91

PHYSIOLOGY

The mesocorticolimbic dopamine system. **Ann N Y Acad Sci** 1988;537:1-540

Neurotensin and the mesocorticolimbic dopamine system. Bissette G, et al. **Ann N Y Acad Sci** 1988;537:397-404 (57 ref.)

Modulation of mesolimbic dopaminergic behaviors by cholecystokinin. Crawley JN. **Ann N Y Acad Sci** 1988; 537:380-96 (75 ref.)

Mesocorticolimbic dopamine systems and reward. Fibiger HC, et al. **Ann N Y Acad Sci** 1988;537:206-15 (48 ref.)

Behavioral evidence for differential neuropeptide modulation of the mesolimbic dopamine system. Kelley AE, et al. **Ann N Y Acad Sci** 1988;537:415-34 (72 ref.)

The functional output of the mesolimbic dopamine system. Koob GF, et al. **Ann N Y Acad Sci** 1988;537:216-27 (50 ref.)

Influence of dopamine on limbic inputs to the nucleus accumbens. Mogenson GJ, et al. **Ann N Y Acad Sci** 1988; 537:86-100 (56 ref.)

Interactions between mesolimbic dopamine neurons, cholecystokinin, and neurotensin: evidence using in vivo voltammetry. Phillips AG, et al. **Ann N Y Acad Sci** 1988; 537:347-61 (51 ref.)

Relationships between mesolimbic dopamine function and eating behavior. Smith GP, et al. **Ann N Y Acad Sci** 1988; 537:254-61 (38 ref.)

Long-term deficits in water maze spatial conditional alternation performance following retrohippocampal lesions in rats. Goodlett CR, et al. **Behav Brain Res** 1989 Feb 1;32(1):63-7

Acquisition of a complex place task in rats with selective ibotenate lesions of hippocampal formation: combined lesions of subiculum and entorhinal cortex versus hippocampus. Bouffard JP, et al. **Behav Neurosci** 1988 Dec; 102(6):828-34

Limbic system, basal ganglia, and dopaminergic neurons. Executive and regulatory neurons and their role in the organization of behavior. Louilot A, et al. **Brain Behav Evol** 1989;33(2-3):157-61

Neonatal thermal lesions of the mesolimbocortical dopaminergic projection decrease food-hoarding behavior. Kalsbeek A, et al. **Brain Res** 1988 Dec 13;475(1):80-90

Selective inhibition of mesolimbic dopamine release following chronic administration of clozapine: involvement of alpha 1-noradrenergic receptors demonstrated by in vivo voltammetry. Lane RF, et al. **Brain Res** 1988 Sep 20; 460(2):398-401

Hypothalamic norepinephrine mediates limbic effects on adrenocortical secretion. Feldman S, et al. **Brain Res Bull** 1988 Oct;21(4):587-90

A neuroanatomical substrate for alcohol drinking: identification of tetrahydropapaveroline (THP)-reactive sites in the rat brain. Myers RD, et al. **Brain Res Bull** 1989 May;22(5):899-911

Comparative effects of age on limbic and scalp P3. Puce A, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep-Oct;74(5):385-93

Changes in the limbic neurotensin systems induced by dopaminergic drugs. Merchant KM, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):1-9

Production and characterization of neglect in rats with unilateral lesions of ventrolateral orbital cortex. King V, et al. **Exp Neurol** 1989 Sep;105(3):287-99

Efferent projections from limbic cortex of the temporal pole to the magnocellular medial dorsal nucleus in the rhesus monkey. Gower EC. **J Comp Neurol** 1989 Feb 15; 280(3):343-58

The nucleus basalis magnocellularis Meynert (NbmM) complex—a central integrator of coded "limbic signals" linked to neocortical modular operation? A proposed (heuristic) model of function. Wenk H. **J Hirnforsch** 1989; 30(2):127-51 (175 ref.)

Inhibition of p-chlorophenylalanine-induced muricide behavior following TRH microinjection into the limbic structures in the rat. Pucilowski O, et al. **J Neural Transm** 1988;74(3):175-80

Feedforward inhibition of the rat entorhinal cortex and subicular complex. Finch DM, et al. **J Neurosci** 1988 Jul; 8(7):2213-26

Control of sensory activation of granule cells in the fascia dentata by extrinsic afferents: septal and entorhinal inputs. Foster TC, et al. **J Neurosci** 1988 Oct;8(10):3869-78

Basic fibroblast growth factor and nerve growth factor administered in gel foam rescue medial septal neurons after fimbria fornix transection. Otto D, et al. **J Neurosci Res** 1989 Jan;22(1):83-91

Man's triune conscious mind. Aurell CG. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):747-54

Mesolimbic dopamine and early post-6-OHDA lesion enhanced responses to d-amphetamine. Lynch MR, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):577-80

Effects of chronic lithium treatment on limbic seizure generation in the cat. Minabe Y, et al. **Psychopharmacology (Berlin)** 1988;96(3):391–4

Increased neuronal responsiveness to cholecystokinin and dopamine induced by lesioning mesolimbic dopaminergic neurons: an electrophysiological study in the rat. Debonnel G, et al. **Synapse** 1988;2(5):537–45

[Neurophysiologic study of the influence of the habenula on the hippocampus: electroencephalographic aspects] Sabatino M, et al. **Riv Neurol** 1989 Mar–Apr;59(2):77–82 (Eng. Abstr.) (Ita)

[Role of the monoaminergic system in the transmission of the effect of androgens on neurons of separate limbic structures of the rat brain] Myalitskiĭ VF. **Arkh Anat Gistol Embriol** 1989 May;96(5):23–5 (Eng. Abstr.) (Rus)

[Kindling of the limbic structures with a shortened interstimulus interval] Timofeeva OA. **Biull Eksp Biol Med** 1989 Mar;107(3):266–8 (Eng. Abstr.) (Rus)

[Comparative study of the discharges of sympathetic and parasympathetic nerves during stimulation of the visceral field of the limbic cortex] Baklavadzhian OG, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):161–70 (Eng. Abstr.) (Rus)

[Possible mechanisms of strio–limbic integration in controlling the realization of an instrumental defense reflex in dogs] Shapovalova KB. **Nerv Sist** 1988;26:113–29 (Rus)

[The visual limbic area in the cerebral cortex of mammals (the limbic cortex and the problems of the evolution of the visual system)] Karamian AI, et al. **Usp Fiziol Nauk** 1988 Jul–Sep;19(3):3–23 (147 ref.) (Rus)

[Differences in the sensory support of the anterior and posterior sections of the limbic cortex of the rat] Akopian EV, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun; 24(3):396–403 (Eng. Abstr.) (Rus)

[Participation of the limbic–neocortical structures in the transmission of trace information in rats] Eliseeva AP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):562–4 (Rus)

PHYSIOPATHOLOGY

A neuroanatomical hypothesis for panic disorder. Gorman JM, et al. **Am J Psychiatry** 1989 Feb;146(2):148–61 (133 ref.)

Intracerebral transplantation of dopamine neurons: understanding the functional role of the mesolimbocortical dopamine system and developing a therapy for Parkinson's disease. Brundin P, et al. **Ann N Y Acad Sci** 1988;537:148–60 (54 ref.)

Prediction of outcome in depressed patients by weekly monitoring with the dexamethasone suppression test. Schweitzer I, et al. **Br J Psychiatry** 1987 Dec;151:780–4

Limbic seizures without brain damage after injection of low doses of kainic acid into the amygdala of freely moving rats. Berger ML, et al. **Brain Res** 1989 Jun 12;489(2):261–72

Effect of noxious tail pinch on the discharge rate of mesocortical and mesolimbic dopamine neurons: selective activation of the mesocortical system. Mantz J, et al. **Brain Res** 1989 Jan 9;476(2):377–81

A 6–hydroxydopamine–induced selective parkinsonian rat model. Perese DA, et al. **Brain Res** 1989 Aug 14; 494(2):285–93

Kluver Bucy syndrome with severe amnesia secondary to herpes encephalitis. Conlon P, et al. **Can J Psychiatry** 1988 Nov;33(8):754–6

Psychiatric implications of altered limbic–hypothalamic–pituitary–adrenocortical activity. Holsboer F. **Eur Arch Psychiatry Neurol Sci** 1989; 238(5–6):302–22 (164 ref.)

Prefrontal–limbic epilepsy: experimental functional anatomy. Collins RC, et al. **J Clin Neurophysiol** 1988 Jan;5(1):105–17

Limbic system symptomatology associated with colloid cyst of the third ventricle. Faris AA, et al. **J Neurol** 1989 Jan; 236(1):60–1

Electrophysiological connections between the hippocampus and entorhinal cortex in patients with complex partial seizures. Rutecki PA, et al. **J Neurosurg** 1989 May; 70(5):667–75

Noradrenergic effects in tardive dyskinesia, akathisia and pseudoparkinsonism via the limbic system and basal ganglia. Wilbur R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):849–64 (61 ref.)

Limbic system–frontal lobes' role in subtypes of "atypical rape". Pontius AA. **Psychol Rep** 1988 Dec;63(3):879–88

Limbic seizures increase neuronal production of messenger RNA for nerve growth factor. Gall CM, et al. **Science** 1989 Aug 18;245(4919):758–61

[Regional cerebral blood flow during development of limbic seizures induced by kainic acid (KA) microinjection into unilateral amygdala in chronic cats] Tanaka S, et al. **No To Shinkei** 1988 Dec;40(12):1125–30 (Eng. Abstr.) (Jpn)

[Nature of the polarity of the maternal–fetal functional system and its role in the pathogenesis of threatened abortion] Orlov VI, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):13–7 (Eng. Abstr.) (Rus)

[Characteristics of neurophysiologic changes in experimental stress induced by long–term group isolation in rats] Rasulov MM, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1087–93 (Eng. Abstr.) (Rus)

[The role of the monoaminergic systems of the neostriatum and limbic structures in the pathology of higher nervous activity] Suvorov NF. **Vestn Akad Med Nauk SSSR** 1988; (11):42–9 (Eng. Abstr.) (Rus)

SECRETION

Plasma corticosterone responses to lesions and stimulations of the limbic thalami nuclei, medial mammillary nucleus and cingulate cortex. Suárez M, et al. **Arch Int Physiol Biochim** 1988 Jun;96(2):69–74

ULTRASTRUCTURE

Fornix afferents to the anteroventral thalamic nucleus: an EM study in the rat. Lenn NJ. **Brain Res Bull** 1978 Nov–Dec;3(6):589–93

Topographical and ultrastructural investigation of the habenulo–interpeduncular pathway in the rat: a wheat germ agglutinin–horseradish peroxidase anterograde study. Kawaja MD, et al. **J Comp Neurol** 1988 Sep 1;275(1):117–27

LIMBS see EXTREMITIES

LIMITATION OF ACTIVITY, CHRONIC see ACTIVITIES OF DAILY LIVING

LIMULUS see HORSESHOE CRABS

LIMULUS TEST

Endotoxin: detection and clinical significance. Philippé JJ, et al. **Acta Clin Belg** 1988;43(6):429–36 (75 ref.)

Detection of gram–negative bacteria in urine by the chromogenic limulus assay. Nurminen M, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):529–31

False–positive result in Limulus test caused by Limulus amebocyte lysate–reactive material in immunoglobulin products. Ikemura K, et al. **J Clin Microbiol** 1989 Sep; 27(9):1965–8

Single–step, chromogenic Limulus amebocyte lysate assay for endotoxin. Lindsay GK, et al. **J Clin Microbiol** 1989 May;27(5):947–51

New microassay for quantitation of endotoxin using Limulus amebocyte lysate combined with enzyme–linked immunosorbent assay. Zhang GH, et al. **J Clin Microbiol** 1988 Aug;26(8):1464–70

Conventional tube and microplate Limulus amoebocyte lysate procedures for determination of gram–negative bacteria in milk. May SA, et al. **J Dairy Sci** 1989 May; 72(5):1137–41

The effect of refrigeration and mixing on detection of endotoxin in parenteral drugs using the Limulus Amebocyte Lysate (LAL) test. Guilfoyle DE, et al. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):183–7

Effect of some penicillins on the sensitivity of limulus amoebocyte lysate test. al–Khalifa IJ, et al. **J Pharm Pharmacol** 1989 Feb;41(2):127–8

A study on limulus amebocyte lysate (LAL) reactive material derived from dialyzers. Yoshioka T, et al. **Jpn J Surg** 1989 Jan;19(1):38–41

Heparin inhibition of endotoxin–dependent Limulus amebocyte lysate coagulation. Marcum JA, et al. **Thromb Haemost** 1989 Apr 25;61(2):294–7

Quantitative assay of lentinan in human blood with the limulus colorimetric test. Yajima Y, et al. **Tohoku J Exp Med** 1989 Feb;157(2):145–51

[Use of Limulus amebocyte lysate (the LAL test) for detecting endotoxin in the substrates of patients with infectious diseases] Bobkova ED, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):84–90 (47 ref.) (Rus)

[Determination of endotoxin—a new method for diagnosis of gram–negative septicemia] Eriksson O, et al. **Lakartidningen** 1988 Oct 12;85(41):3390–2 (Swe)

INSTRUMENTATION

An automated analysis system of Limulus amebocyte lysate (LAL)–endotoxin reaction kinetics using turbidimetric kinetic assay. Oishi H, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3012–9

[Removal of substances interfering with the LAL test using the Sartorius Ultrasart D20 ultrafiltration system] Golin F. **Boll Chim Farm** 1988 May;127(5):101–8 (Eng. Abstr.) (Ita)

METHODS

A modified Limulus amebocyte lysate test with increased sensitivity for detection of bacterial endotoxin. Roth RI, et al. **J Lab Clin Med** 1989 Sep;114(3):306–11

Preparation and use of endotoxin indicators for depyrogenation process studies. LAL Users Group. **J Parenter Sci Technol** 1989 May–Jun;43(3):109–12

[Determination of the endotoxin content of egg products using a miniaturized chromogenic Limulus test] Steffens K, et al. **Z Lebensm Unters Forsch** 1989 Jun;188(6):531–4 (Eng. Abstr.) (Ger)

[Evaluation of screening of bacteriuria—rapid detection of gram–negative bacteriuria by using the chromogenic limulus lysate microassay] Narita T, et al. **Kansenshogaku Zasshi** 1988 Mar;62(3):226–34 (Eng. Abstr.) (Jpn)

VETERINARY

Detection of endotoxin in cases of equine colic. King JN, et al. **Vet Rec** 1988 Sep 3;123(10):269–71

LINCOLNENSIN see LINCOMYCIN

LINCOMYCIN

[Intramolecular hydrogen bonds and conformation of the lincomycin molecule in organic solvents] Gusakova V, et al. **Antibiot Khimioter** 1988 Sep;33(9):657–60 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

[Interactions of theophylline with erythromycin, rifampicin and lincomycin] Halawa B. **Pol Tyg Lek** 1988 Jun 27; 43(26):854–7 (Eng. Abstr.) (Pol)

[Treatment of complicated paronychia of the fingers with retrograde infusions of lincomycin] Zviagin LM, et al. **Vestn Khir** 1988 Jul;141(7):112–4 (Rus)

BIOSYNTHESIS

Discovery, production, and biological assay of an unusual flavenoid cofactor involved in lincomycin biosynthesis. Coats JH, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):472–4

Isolation and identification of 7,8–didemethyl–8–hydroxy–5–deazariboflavin, an unusual cosynthetic factor in streptomycetes, from Streptomyces lincolnensis. Kuo MS, et al. **J Antibiot (Tokyo)** 1989 Mar; 42(3):475–8

PHARMACOLOGY

Lincomycin increases the half–life of beta–lactamase mRNA. Matsushita O, et al. **Antimicrob Agents Chemother** 1989 Jun; 33(6):805–9

Group A streptococci resistant to erythromycin & lincomycin. Prakash K, et al. **Indian J Med Res** 1988 Nov; 88:391–4

Point mutations in the 23 S rRNA genes of four lincomycin resistant Nicotiana plumbaginifolia mutants could provide new selectable markers for chloroplast transformation. Cseplö A, et al. **Mol Gen Genet** 1988 Oct;214(2):295–9

Effect of Eimeria tenella infection on the caecal population of lincomycin–resistant Clostridium perfringens introduced into chickens. Baba E, et al. **Res Vet Sci** 1988 Sep; 45(2):219–21

THERAPEUTIC USE

Therapeutic efficacy of medicating drinking water with spectinomycin and lincomycin–spectinomycin in experimental Escherichia coli infection in poultry. Goren E, et al. **Vet Q** 1988 Jul;10(3):191–7

[Postoperative infection in cesarean section. Comparative study according to the antibiotic used at 2 maternity hospitals in the Central African Republic] Kamuma M, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):401–3 (Eng. Abstr.) (Fre)

[Effect of lincomycin and staphylococcal vaccine on the course of experimental staphylococcal sepsis] Gabysehva LS, et al. **Antibiot Khimioter** 1988 Oct;33(10):779–81 (Eng. Abstr.) (Rus)

LINDANE see BENZENE HEXACHLORIDE

LINEAR ACCELERATORS see PARTICLE ACCELERATORS

LINENS see BEDDING AND LINENS

LINGUAL BONE see HYOID BONE

LINGUAL NERVE see under MANDIBULAR NERVE

LINGUISTICS

Metalinguistic abilities of young hearing–impaired children: performance on a judgment of synonymy task. Borman DL, et al. **Am Ann Deaf** 1988 Dec;133(5):325–9

Documenting syntactically and semantically incomplete bimodal input to hearing–impaired subjects. Luetke–Stahlman B. **Am Ann Deaf** 1988 Jul;133(3):230–4

Genetic variation within the Tupi linguistic group: new data on three Amazonian tribes. Black FL, et al. **Ann Hum Biol** 1988 Sep–Oct;15(5):337–51

Sentence verification and event–related brain potentials. Katayama J, et al. **Biol Psychol** 1987 Oct;25(2):173–85

'A critical approach to the reading of analytical reports' [letter] Cook RJ. **Br Dent J** 1988 Nov 19;165(10):355–6

Effect of text complexity on connected discourse tracking rate. Hochberg I, et al. **Ear Hear** 1989 Jun;10(3):192–9

Auditory feedback and writing: learning disabled and nondisabled students. Espin CA, et al. **Except Child** 1988 Sep;55(1):45–51

Linguistic analyses of the discourse narratives of young and aged women. Walker VG, et al. **Folia Phoniatr (Basel)** 1988; 40(2):58–64

Acquisition of linguistic procedures for printed words: neuropsychological implications for learning. Berninger

VW. Int J Neurosci 1988 Oct;42(3–4):267–81
An alternative view of pronominal errors in autistic children. Oshima–Takane Y, et al. J Autism Dev Disord 1989 Mar; 19(1):73–85
The dependence of lexical relatedness effects on syntactic connectedness. O'Seaghdha PG.
J Exp Psychol [Learn Mem Cogn] 1989 Jan;15(1):73–87
Influence of sentence context on speech perception in young and older adults. Hutchinson KM. J Gerontol 1989 Mar; 44(2):P36–44
Notes on the biology of syntactic processing. Cowart W. J Psycholinguist Res 1989 Jan;18(1):89–103 (23 ref.)
Evoked potentials and the study of sentence comprehension. Garnsey SM, et al. J Psycholinguist Res 1989 Jan; 18(1):51–60
Children's and adults' perception of missing subjects in complement clauses: evidence from another language. Natsopoulos D, et al. J Psycholinguist Res 1989 May; 18(3):313–40
The role of structure in coreference assignment during sentence comprehension. Nicol J, et al.
J Psycholinguist Res 1989 Jan;18(1):5–19 (13 ref.)
The acquisition of morphemes: some evidence from Spanish. Pérez–Pereira M. J Psycholinguist Res 1989 May; 18(3):289–312
Lexical structure in Parsing long–distance dependencies. Tanenhaus MK, et al. J Psycholinguist Res 1989 Jan; 18(1):37–50
An experimental analysis of milieu language intervention: teaching the action–object form. Warren SF, et al.
J Speech Hear Disord 1989 Aug;54(3):448–61
Rule invention in the acquisition of morphology revisited: a case of transparent semantic mapping. Camarata SM, et al. J Speech Hear Res 1988 Sep;31(3):425–31
Government–Binding Theory and some of its applications: a tutorial. Leonard LB, et al. J Speech Hear Res 1988 Dec; 31(4):515–24 (16 ref.)
The oral syntactic proficiency of learning disabled students: a spontaneous story sampling analysis. Roth FP, et al.
J Speech Hear Res 1989 Mar;32(1):67–77
Comprehension of lexical subcategory distinctions by aphasic patients: proper/common and mass/count nouns. Shapiro LP, et al. J Speech Hear Res 1989 Sep;32(3):481–8
In the words of a vascular surgeon [letter] Friedman SG. J Vasc Surg 1989 Aug;10(2):211–2
Children's comprehension of time–altered sentences. Bochner JH. Lang Speech 1987 Apr–Jun;30 (Pt 2):131–43
Recursion in development: support for a biological model of language. Dickinson S. Lang Speech 1987 Jul–Sep;30 (Pt 3):239–49
English compound versus non–compound noun phrases in discourse: an acoustic and perceptual study. Farnetani E, et al. Lang Speech 1988 Apr–Jun;31 (Pt 2):157–80
Stress and intonation in the speech of hearing–impaired Hebrew–speaking children. Frank Y, et al. Lang Speech 1987 Oct–Dec;30 (Pt 4):339–56
Syntactic representations in agrammatic aphasia: the case of prepositions. Grodzinsky Y. Lang Speech 1988 Apr–Jun;31 (Pt 2):115–34
The narrative styles of normal first and third grade children. Klecan–Aker JS, et al. Lang Speech 1987 Jul–Sep;30 (Pt 3):251–62
Syntactic clause boundaries, speech timing, and stuttering frequency in adult stutterers. Klouda GV, et al.
Lang Speech 1987 Jul–Sep;30 (Pt 3):263–76
The emphatic and pharyngeal sounds in Hebrew and in Arabic. Laufer A, et al. Lang Speech 1988 Apr–Jun;31 (Pt 2):181–205
Adolescents' narrative use of orientations and codas. Sleight CC. Lang Speech 1987 Apr–Jun;30 (Pt 2):169–80
The effects of linguistic stress on ASL signs. Wilbur RB, et al. Lang Speech 1987 Oct–Dec;30 (Pt 4):301–23
Genes and tongues [letter] O'Grady RT, et al. Science 1989 Mar 31;243(4899):1651
'Logomach' and English grammar [letter] White DS.
Vet Rec 1988 Jul 2;123(1):40
[Medicine and language; separate and equal] Baik–Smit Duyzentkunst F. Ned Tijdschr Geneeskd 1989 Jun 17; 133(24):1205–6 (Dut)
[Deafness and bilingualism: to be deaf and speaking, writing several languages] Bouvet D.
Rev Laryngol Otol Rhinol (Bord) 1988;109(4):311–7 (Eng. Abstr.) (Fre)
[Neurolinguistics] Peng FC. No To Shinkei 1989 Jan; 41(1):7–14 (16 ref.) (Jpn)
[A linguistic approach to the differential diagnosis of acute appendicitis in children] Akzhigitov GN, et al.
Klin Khir 1989;(6):36–8 (Eng. Abstr.) (Rus)
[Large dose of medicine in the National Encyclopedia. Also, wrong terms by the national linguistic standards] Karlsson Y. Lakartidningen 1989 Mar 8;86(10):860–1 (Swe)

LINITIS PLASTICA see under CARCINOMA, SCIRRHOUS

LINKAGE (GENETICS)

Linkage of HLA–DR beta specific restriction fragment length polymorphisms with Graves' disease. Boehm BO, et al. Acta Endocrinol (Copenh) 1988 Oct;119(2):251–6
Analysis of the gene and gene product in patients with X linked chronic granulomatous disease (XL–CGD). Frey D, et al. Acta Paediatr Hung 1988–89;29(1–2):185–9
Linkage maps of human genes. White R, et al.
Acta Paediatr Jpn Overseas Ed 1987 Aug;29(4):482–8
Suggestive evidence of genetic linkage between alcoholism and the MNS blood group. Hill SY, et al.
Alcoholism (NY) 1988 Dec;12(6):811–4
Probable genetic linkage between genes coding for platelet–specific antigens of the PIA and Bak systems. Letellier SJ, et al. Am J Hematol 1988 Nov;29(3):139–43
Linkage relationships and gene order around the locus for X–linked retinoschisis. Alitalo T, et al.
Am J Hum Genet 1988 Oct;43(4):476–83
Linkage disequilibrium, cystic fibrosis, and genetic counseling. Beaudet AL, et al. Am J Hum Genet 1989 Mar; 44(3):319–26
Identifying pedigrees segregating at a major locus for a quantitative trait: an efficient strategy for linkage analysis. Boehnke M, et al. Am J Hum Genet 1989 Feb;44(2):216–24
Eight closely linked loci place the Wilson disease locus within 13q14–q21. Bowcock AM, et al. Am J Hum Genet 1988 Nov;43(5):664–74
Androgen receptor locus on the human X chromosome: regional localization to Xq11–12 and description of a DNA polymorphism. Brown CJ, et al. Am J Hum Genet 1989 Feb;44(2):264–9
The probability of detecting the origin of nondisjunction of autosomal trisomies. Chakravarti A. Am J Hum Genet 1989 May;44(5):639–45
Linkage heterogeneity between X–linked retinitis pigmentosa and a map of 10 RFLP loci. Chen JD, et al.
Am J Hum Genet 1989 Sep;45(3):401–11
Linkage disequilibrium in the human insulin/insulin–like growth factor II region of human chromosome II. Cox NJ, et al. Am J Hum Genet 1988 Oct;43(4):495–501
Molecular analysis of male–viable deletions and duplications allows ordering of 52 DNA probes on proximal Xq. Cremers FP, et al. Am J Hum Genet 1988 Oct;43(4):452–61
Analysis of DNA polymorphism haplotypes linked to the cystic fibrosis locus in North American black and Caucasian families supports the existence of multiple mutations of the cystic fibrosis gene. Cutting GR, et al. Am J Hum Genet 1989 Mar;44(3):307–18
Linkage analysis of families with fragile–X mental retardation, using a novel RFLP marker (DXS 304). Dahl N, et al. Am J Hum Genet 1989 Aug;45(2):304–9
Restriction analysis of the structural alpha–L–fucosidase gene and its linkage to fucosidosis. Darby JK, et al.
Am J Hum Genet 1988 Nov;43(5):749–55
A genetic linkage map of 27 loci from PND to FY on the short arm of human chromosome I. Dracopoli NC, et al. Am J Hum Genet 1988 Oct;43(4):462–70
Isolation of a new DNA marker in linkage disequilibrium with cystic fibrosis, situated between J3.11 (D7S8) and IRP. Estivill X, et al. Am J Hum Genet 1989 May;44(5):704–10
Recombinations between IRP and cystic fibrosis. Farrall M, et al. Am J Hum Genet 1988 Oct;43(4):471–5
Pelizaeus–Merzbacher disease: an X–linked neurologic disorder of myelin metabolism with a novel mutation in the gene encoding proteolipid protein. Gencic S, et al.
Am J Hum Genet 1989 Sep;45(3):435–42
Multipoint linkage analysis in neurofibromatosis type I: an international collaboration. Goldgar DE, et al.
Am J Hum Genet 1989 Jan;44(1):6–12
Hot spot of recombination within DXS164 in the Duchenne muscular dystrophy gene. Grimm T, et al.
Am J Hum Genet 1989 Sep;45(3):368–72
Lack of linkage disequilibrium between two common restriction sites associated with the COLIA2 gene [letter] Halloran–Blanton S, et al. Am J Hum Genet 1989 Jan; 44(1):154–5
Isolation of additional polymorphic clones from the cystic fibrosis region, using chromosome jumping from D7S8 [published erratum appears in Am J Hum Genet 1989 Aug;45(2):342] Iannuzzi MC, et al. Am J Hum Genet 1989 May;44(5):695–703
Empirical power of three preliminary methods for ordering loci. Kammerer CM, et al. Am J Hum Genet 1988 Dec; 43(6):964–70
Linkage analysis of neurofibromatosis type I, using chromosome 17 DNA markers. Kittur SD, et al.
Am J Hum Genet 1989 Jan;44(1):48–50
Familial Wiedemann–Beckwith syndrome and a second Wilms tumor locus both map to 11p15.5. Koufos A, et al.
Am J Hum Genet 1989 May;44(5):711–9
Estimation of segregation and linkage parameters in simulated data. I. Segregation analyses with different ascertainment schemes. Kramer PL, et al. Am J Hum Genet 1989 Jul; 45(1):83–94
The appropriate threshold for declaring linkage when allowing sex–specific recombination rates. Lander ES, et al. Am J Hum Genet 1988 Oct;43(4):396–400
Galactocerebrosidase activity in somatic cell hybrids derived from twitcher mouse/control human fibroblasts is associated with human chromosome 17. Lyerla TA, et al.
Am J Hum Genet 1989 Feb;44(2):198–207
Linkage analysis of the apolipoprotein C2 gene and myotonic dystrophy on human chromosome 19 reveals linkage disequilibrium in a French–Canadian population. MacKenzie AE, et al. Am J Hum Genet 1989 Jan; 44(1):140–7
Strategies and sample–size considerations for mapping a two–locus autosomal recessive disorder. Majumder PP.
Am J Hum Genet 1989 Sep;45(3):412–23
The detection of linkage and heterogeneity in nuclear families for complex disorders: one versus two marker loci. Martinez MM, et al. Am J Hum Genet 1989 Apr; 44(4):552–9
Linkage analysis of chromosome 17 markers in British and South African families with neurofibromatosis type I. Mathew CG, et al. Am J Hum Genet 1989 Jan;44(1):38–40
Localization of the gene for X–linked recessive type of retinitis pigmentosa (XLRP) to Xp21 by linkage analysis. Musarella MA, et al. Am J Hum Genet 1988 Oct; 43(4):484–94
Localization of the genetic defect in multiple endocrine neoplasia type 1 within a small region of chromosome 11. Nakamura Y, et al. Am J Hum Genet 1989 May;44(5):751–5
Linkage studies in a large fragile X family. Patterson M, et al. Am J Hum Genet 1988 Nov;43(5):684–8
An intronic region within the human factor VIII gene is duplicated within Xq28 and is homologous to the polymorphic locus DXS115 (767). Patterson M, et al.
Am J Hum Genet 1989 May;44(5):679–85
Genetic linkage of Beckwith–Wiedemann syndrome to 11p15. Ping AJ, et al. Am J Hum Genet 1989 May; 44(5):720–3
Estimating the power of a proposed linkage study for a complex genetic trait. Ploughman LM, et al.
Am J Hum Genet 1989 Apr;44(4):543–51
Estimation of segregation and linkage parameters in simulated data. II. Simultaneous estimation with one linked marker. Price RA, et al. Am J Hum Genet 1989 Jul;45(1):95–105
Methylation at the Huntington disease–linked D4S95 locus [letter] Pritchard CA, et al. Am J Hum Genet 1989 Aug; 45(2):335–6
X–linked severe combined immunodeficiency: localization within the region Xq13.1–q21.1 by linkage and deletion analysis. Puck JM, et al. Am J Hum Genet 1989 May; 44(5):724–30
Nucleotide variations in the 3' A gamma enhancer region are linked to beta–gene cluster haplotypes and are unrelated to fetal hemoglobin expression. Ragusa A, et al.
Am J Hum Genet 1989 Jul;45(1):106–11
Evidence from family studies that the gene causing Huntington disease is telomeric to D4S95 and D4S90. Robbins C, et al. Am J Hum Genet 1989 Mar;44(3):422–5
Linkage analysis of families with hereditary retinoblastoma: nonpenetrance of mutation, revealed by combined use of markers within and flanking the RB1 gene. Scheffer H, et al. Am J Hum Genet 1989 Aug;45(2):252–60
New polymorphisms at the DXS98 locus and confirmation of its location proximal to FRAXA by in situ hybridization. Schnur RE, et al. Am J Hum Genet 1989 Feb;44(2):248–54
Flanking markers for the gene causing von Recklinghausen neurofibromatosis (NF1). Seizinger BR, et al.
Am J Hum Genet 1989 Jan;44(1):30–2
Norrie disease gene is distinct from the monoamine oxidase genes. Sims KB, et al. Am J Hum Genet 1989 Sep; 45(3):424–34
Genetic analysis of eight loci tightly linked to neurofibromatosis 1. Stephens K, et al.
Am J Hum Genet 1989 Jan;44(1):13–9
Genetic linkage mapping of chromosome 17 markers and neurofibromatosis type I. Vance JM, et al.
Am J Hum Genet 1989 Jan;44(1):25–9
Lowe oculocerebrorenal syndrome: DNA–based linkage of the gene to Xq24–q26, using tightly linked flanking markers and the correlation to lens examination in carrier diagnosis. Wadelius C, et al. Am J Hum Genet 1989 Feb;44(2):241–7
Prenatal diagnosis of Duchenne muscular dystrophy: prospective linkage analysis and retrospective dystrophin cDNA analysis. Ward PA, et al. Am J Hum Genet 1989 Feb;44(2):270–81
Assignment of autosomal dominant spinocerebellar ataxia (SCA1) centromeric to the HLA region on the short arm of chromosome 6, using multilocus linkage analysis. Zoghbi HY, et al. Am J Hum Genet 1989 Feb;44(2):255–63
Gene testing in autosomal dominant polycystic kidney disease: results of National Kidney Foundation workshop. Scientific Advisory Board of the National Kidney Foundation. Am J Kidney Dis 1989 Feb;13(2):85–7
X–linked mental retardation 3. Proceedings of the Third International Workshop on Fragile X and X–linked Mental Retardation. Troina, Italy, September 13–16, 1987 [published erratum appears in Am J Med Genet 1988 Nov;31(3):727–30] Am J Med Genet 1988 May–Jun; 30(1–2):1–702
Linkage analysis suggests at least two loci for X–linked non–specific mental retardation. Arveiler B, et al.
Am J Med Genet 1988 May–Jun;30(1–2):473–83
A new X–linked dysplasia gigantism syndrome: follow up in the first family and report on a second Austrian family. Behmel A, et al. Am J Med Genet 1988 May–Jun; 30(1–2):275–85
Mental retardation, distinct facial changes, short stature, obesity, and hypogonadism: a new X–linked mental retardation syndrome. Chudley AE, et al.
Am J Med Genet 1988 Dec;31(4):741–51
Prenatal diagnosis of cystic fibrosis by using linked DNA markers in 138 pregnancies at 1–in–4 risk. Feldman GL, et al. Am J Med Genet 1989 Jun;33(2):238–41
Juvenile myoclonic epilepsy (JME) may be linked to the BF and HLA loci on human chromosome 6. Greenberg DA, et al. Am J Med Genet 1988 Sep;31(1):185–92

Probable localisation of the Coffin-Lowry locus in Xp22.2-p22.1 by multipoint linkage analysis. Hanauer A, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):523-30

Dystrophin immunocytochemistry in muscle culture: detection of a carrier of Duchenne muscular dystrophy. Miranda AF, et al. **Am J Med Genet** 1989 Feb;32(2):268-73

Linkage between the fragile X and F9, DXS52 (St14), DXS98 (4D-8) and DXS105 (cX55.7). Mulley J, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):567-80

Simpson-Golabi-Behmel syndrome: an X-linked encephalo-tropho-schisis syndrome. Neri G, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):287-99

Exclusion of allelism and close linkage between neurofibromatosis and multiple cartilaginous exostoses [letter] Pai GS, et al. **Am J Med Genet** 1989 Jan;32(1):145

A family with the Coffin Lowry syndrome revisited: localization of CLS to Xp21-pter. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):309-21

X-linked cutaneous amyloidosis: further clinical and pathological observations. Partington MW, et al. **Am J Med Genet** 1989 Jan;32(1):115-9

X-linked mental retardation with dystonic movements of the hands. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):251-62

Fragile X syndrome: linkage analysis in black and white populations. Schwartz CE, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):531-42

A non-syndromal form of X-linked mental retardation (XLMR) is linked to DXS14. Suthers GK, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):485-91

Iris pigment mosaicism in carriers of X-linked ocular albinism cum pigmento. Maguire AM, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):298-9

RFLPs tightly linked with cystic fibrosis: value of probes at the D7S23 locus in prenatal diagnosis. Vasseur F, et al. **Ann Genet** 1989;32(2):78-81

A computer program to make linkage analysis with LIPED and LINKAGE easier to perform and less prone to input errors. Attwood J, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):259

Detection of linkage between a quantitative trait and a marker locus by the lod score method: sample size and sampling considerations. Demenais F, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):237-46

Efficient computation of lod scores: genotype elimination, genotype redefinition, and hybrid maximum likelihood algorithms. Lange K, et al. **Ann Hum Genet** 1989 Jan;53 (Pt 1):67-83

The chromosome 19 linkage group LDLR, C3, LW, APOC2, LU, SE in man. Lewis M, et al. **Ann Hum Genet** 1988 May;52 (Pt 2):137-44

Molecular biology of Duchenne and Becker's muscular dystrophy: clinical applications. Gutmann DH, et al. **Ann Neurol** 1989 Aug;26(2):189-94 (46 ref.)

Linkage to the Huntington's disease locus in a family with unusual clinical and pathological features. Zweig RM, et al. **Ann Neurol** 1989 Jul;26(1):78-84

Sets of linked genetic markers for human chromosomes. White R, et al. **Annu Rev Genet** 1988;22:259-79 (58 ref.)

Familial aplasia of the cerebellar vermis. Possible X-linked dominant inheritance. Fenichel GM, et al. **Arch Neurol** 1989 May;46(5):582-3

X-linked congenital stationary night blindness [letter] Miyake Y. **Arch Ophthalmol** 1989 May;107(5):635-6

Characterization of the class I HLA 9.2-kb PVU II restriction fragment length polymorphism. Linkage to HLA-A and lack of disease association. Ahearn JM Jr, et al. **Arthritis Rheum** 1989 Jul;32(7):870-6

Nonlinkage of the T cell receptor alpha, beta, and gamma genes to systemic lupus erythematosus in multiplex families. Wong DW, et al. **Arthritis Rheum** 1988 Nov;31(11):1371-6

Carrier detection in X-pigmentary retinal dystrophy (X-linked retinitis pigmentosa) by DNA restriction fragment length polymorphism studies. Chen JD, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):67-74

Prenatal diagnosis and carrier detection by DNA studies in a Duchenne muscular dystrophy family with no living affected male. Chen JD, et al. **Aust Paediatr J** 1988 Dec; 24(6):351-3

Observations on the pathogenesis of Duchenne muscular dystrophy in the light of recent progress in molecular genetics. Kakulas BA. **Aust Paediatr J** 1988;24 Suppl 1:4-8 (25 ref.)

Experience with DNA analysis in Duchenne and Becker muscular dystrophy families in NSW. Morgan G, et al. **Aust Paediatr J** 1988;24 Suppl 1:98-9

Systematic gene mapping in man: data management considerations. Pericak-Vance MA, et al. **Aust Paediatr J** 1988;24 Suppl 1:87-9

Myotonic dystrophy: update on progress to define the gene. Roses AD, et al. **Aust Paediatr J** 1988;24 Suppl 1:66-9 (24 ref.)

No evidence for X linkage in rod-and-frame test (RFT) scores: an answer to Thomas. Tambs K. **Behav Genet** 1989 May;19(3):469-71

Linkage relationships of gene loci in the Medaka, Oryzias latipes (Pisces: Oryziatidae), determined by backcrosses and gynogenesis. Naruse K, et al. **Biochem Genet** 1989 Apr; 27(3-4):183-98

Mapping of the hooded, Gc protein, and albumin gene loci in linkage group VI of the laboratory rat. Shumiya S, et al. **Biochem Genet** 1988 Oct;26(9-10):585-93

Evidence for possible linkage between genetic markers and affective disorders. Hill EM, et al. **Biol Psychiatry** 1988 Dec;24(8):903-17

Linkage analysis of depression spectrum disease. Wilson AF, et al. **Biol Psychiatry** 1989 Jun;26(2):163-75

Gene mapping in the ectodermal dysplasias. Conneally PM. **Birth Defects** 1988;24(2):45-9

Simple tests implied by a genetic X-linked model. Thomas H. **Br J Math Stat Psychol** 1988 Nov;41 (Pt 2):179-91

Autosomal juvenile retinoschisis without foveal retinoschisis. Yamaguchi K, et al. **Br J Ophthalmol** 1989 Jun;73(6):470-3

A linkage study of primary affective disorder. Waters B, et al. **Br J Psychiatry** 1988 Apr;152:560-2

Myotonic dystrophy: linkage with apolipoprotein E and estimation of the gene carrier status with genetic markers. Thibault MC, et al. **Can J Neurol Sci** 1989 Feb;16(1):134-40

Prospects for cancer prevention through genetics: family studies and population screening. Carter CL, et al. **Cancer Detect Prev** 1988;13(1):13-22 (61 ref.)

A genetic linkage study of familial breast-ovarian cancer. Ferrell RE, et al. **Cancer Genet Cytogenet** 1989 Apr; 38(2):241-8

Tandem linkage of human CSF-1 receptor (c-fms) and PDGF receptor genes. Roberts WM, et al. **Cell** 1988 Nov 18;55(4):655-61

Resolution of Acanthamoeba castellanii chromosomes by pulsed field gel electrophoresis and construction of the initial linkage map. Rimm DL, et al. **Chromosoma** 1988 Nov;97(3):219-23

X-linked cleft palate and ankyloglossia in an Icelandic family. Björnsson A, et al. **Cleft Palate J** 1989 Jan;26(1):3-8

Infantile autism, fragile (X) (q27.3) and RFLP analysis in an extended Swedish family. Anvret M, et al. **Clin Genet** 1988 Oct;34(4):265-71

Non-allelic mutations in X-linked retinitis pigmentosa. Chen JD, et al. **Clin Genet** 1989 May;35(5):338-42

X-linked recessive inheritance of an orofaciodigital syndrome with partial expression in females and survival of affected males. Edwards M, et al. **Clin Genet** 1988 Nov;34(5):325-32

Linkage between serum cholinesterase 2 (CHE2) and gamma-crystallin gene cluster (CRYG): assignment to chromosome 2. Eiberg H, et al. **Clin Genet** 1989 May; 35(5):313-21

Emery-Dreifuss syndrome and X-linked muscular dystrophy with contractures: evidence for homogeneity. Goldblatt J, et al. **Clin Genet** 1989 Jan;35(1):1-4

X-linked spastic paraplegia: evidence for homogeneity with a variable phenotype. Goldblatt J, et al. **Clin Genet** 1989 Feb;35(2):116-20

A linkage study of the locus for X-linked Charcot-Marie-Tooth disease. Goonewardena P, et al. **Clin Genet** 1988 Jun;33(6):435-40

Linkage in a family with X-linked Charcot-Marie-Tooth disease. Haites N, et al. **Clin Genet** 1989 Jun;35(6):399-403

Genetic linkage between Huntington's disease and D4S10 (G8) in Scottish families. Holloway S, et al. **Clin Genet** 1989 Feb;35(2):133-8

X-linked olivopontocerebellar atrophy. Lutz R, et al. **Clin Genet** 1989 Jun;35(6):417-22 (11 ref.)

Genetic loci and linkage associations in Neisseria gonorrhoeae and Neisseria meningitidis. West SE, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S92-103 (126 ref.)

Gene linkage in neurofibromatosis. DiSimone RE, et al. **Clin Orthop** 1989 Aug;(245):49-52

Frequency of complement deficiencies in man, disease associations and chromosome assignment of complement genes and linkage groups. A summary of the data from the literature. Hauptmann G. **Complement Inflamm** 1989; 6(2):74-80 (20 ref.)

Genetic studies of low-abundance human plasma proteins. XI. Linkage analysis and population genetics of the C1S subcomponent of the first complement component. Lyons LA, et al. **Complement Inflamm** 1989;6(2):81-7

Fragile X syndrome: a major cause of X-linked mental retardation. Butler MG. **Compr Ther** 1988 Jul;14(7):3-7 (10 ref.)

Update: Duchenne muscular dystrophy. Fenichel GM, et al. **Compr Ther** 1988 Jul;14(7):29-32 (10 ref.)

Genetic analysis and the construction of master strains for assignment of genes to six linkage groups in Aspergillus niger. Bos CJ, et al. **Curr Genet** 1988 Nov;14(5):437-43

XY females in Microtus cabrerae (Rodentia, Microtidae): a case of possibly Y-linked sex reversal. Burgos M, et al. **Cytogenet Cell Genet** 1988;49(4):275-7

In situ hybridization of two cloned chromosome 7 sequences tightly linked to the cystic fibrosis locus. Duncan AM, et al. **Cytogenet Cell Genet** 1988;49(4):309-10

No evidence for linkage between lipoprotein(a) (LPA) and esterase D (ESD). Greger V, et al. **Cytogenet Cell Genet** 1988;48(4):248-9

Linkage relationships of the protein kinase C gamma gene which exclude it as a candidate for myotonic dystrophy. Johnson KJ, et al. **Cytogenet Cell Genet** 1988;48(1):13-5

Report of the committee on linkage data and gene order. Keats BJ, et al. **Cytogenet Cell Genet** 1987;46(1-4):339-43

Report of the committee on linkage and gene order. Keats BJ, et al. **Cytogenet Cell Genet** 1988;49(1-3):224-6

Confirmation of avian sex-chromosome linkage of liver cytosolic aconitase (ACO1). Lacson JM, et al. **Cytogenet Cell Genet** 1988;48(4):244-5

Report of the committee on the genetic constitution of chromosome 3. Naylor SL, et al. **Cytogenet Cell Genet** 1988; 49(1-3):48-51

Genes for salivary proline-rich proteins and taste for phenylthiourea are not closely linked in humans. O'Hanlon K, et al. **Cytogenet Cell Genet** 1988;49(4):315-7

The ornithine aminotransferase (OAT) locus is linked and distal to D10S20 on the long arm of chromosome 10. Wu J, et al. **Cytogenet Cell Genet** 1988;48(2):126-7

A polymorphic DNA marker on chromosome 10 linked to RBP3 on the MEN2A side. Wu J, et al. **Cytogenet Cell Genet** 1988;48(4):246-7

Linkage studies on NIDDM and the insulin and insulin-receptor genes. Cox NJ, et al. **Diabetes** 1989 May; 38(5):653-8

Linkage analysis of the human insulin receptor gene in type 2 (non-insulin-dependent) diabetic families and a family with maturity onset diabetes of the young. O'Rahilly S, et al. **Diabetologia** 1988 Nov;31(11):792-7

Linkage studies of maturity onset diabetes of the young—R.W. pedigree [letter] Vinik AJ, et al. **Diabetologia** 1988 Oct;31(10):778

Studies on an isolated West Indies population. VII. Genetic linkage studies of hearing loss. Bonaiti-Pellie C, et al. **Dis Markers** 1989 Jan-Mar;7(1):57-60

MHC-linked genetic factors (HLA-B35) influencing recurrent circumoral herpetic lesions. Gallina G, et al. **Dis Markers** 1987 Dec;5(4):191-7

Genetic linkage studies of ataxia-telangiectasia: phenotypic blood markers. Gatti RA, et al. **Dis Markers** 1987 Dec; 5(4):207-13

Presumptive evidence for an immunosuppressor susceptibility gene, linked to HLA, in rheumatic fever. Hafez M, et al. **Dis Markers** 1987 Sep;5(3):177-85

Immunodeficiency disease genes on the X chromosome. Mensink EJ, et al. **Dis Markers** 1987 Sep;5(3):129-40 (56 ref.)

Physical mapping of the human pseudo-autosomal region; comparison with genetic linkage map. Petit C, et al. **EMBO J** 1988 Aug;7(8):2369-76

New linkage findings in affective disorders. Gershon ES. **Eur Arch Psychiatry Neurol Sci** 1989;238(5-6):247-50

A family with X-linked ichthyosis and hypogonadism. Pike MG, et al. **Eur J Pediatr** 1989 Feb;148(5):442-4

Absence of linkage of ABO blood group locus to familial tuberous sclerosis [published erratum appears in Exp Neurol 1989 Sep;105(3):320] Kandt RS, et al. **Exp Neurol** 1989 Jun;104(3):223-8

Genetic linkage studies in Alzheimer's disease families. Pericak-Vance MA, et al. **Exp Neurol** 1988 Dec; 102(3):271-9

Linkage of Charcot-Marie-Tooth neuropathy type 1a to chromosome 17. Vance JM, et al. **Exp Neurol** 1989 May; 104(2):186-9

Sex linkage of malic enzyme in Xenopus laevis. Graf JD. **Experientia** 1989 Feb 15;45(2):194-6

A genetic linkage study of a family with Norrie's disease. Esakowitz L, et al. **Eye** 1988;2 (Pt 4):443-7

HLA-linked hemochromatosis alleles in sporadic porphyria cutanea tarda. Edwards CQ, et al. **Gastroenterology** 1989 Oct;97(4):972-81

Two genes in Streptomyces alboniger puromycin biosynthesis pathway are closely linked. Vara JA, et al. **Gene** 1988 Sep 15;69(1):135-40

A more powerful robust sib-pair test of linkage for quantitative traits. Amos CI, et al. **Genet Epidemiol** 1989; 6(3):435-49

Robust methods for the detection of genetic linkage for quantitative data from pedigrees. Amos CI, et al. **Genet Epidemiol** 1989;6(2):349-60

Segregation and linkage analysis of nine Utah breast cancer pedigrees. Bishop DT, et al. **Genet Epidemiol** 1988; 5(3):151-69

Utility of the affected sib pair method to detect linkage of a sex-linked dominant disease with a sex-linked recessive trait. Chakraborty R. **Genet Epidemiol** 1989;6(1):281-6

Some effects of selection strategies on linkage analysis. Cox NJ, et al. **Genet Epidemiol** 1988;5(4):289-97

Linkage studies of HLA and insulin gene restriction fragment length polymorphisms in families with IDDM. Donald JA, et al. **Genet Epidemiol** 1989;6(1):77-81

Linkage analysis and genetic models for IDDM. Easton DF. **Genet Epidemiol** 1989;6(1):83-8

Linkage data on affective disorders in an epidemiologic context. Gershon ES, et al. **Genet Epidemiol** 1989; 6(1):201-9

Linkage analysis under "random" and "genetic" reduced penetrance. Greenberg DA, et al. **Genet Epidemiol** 1989; 6(1):259-64

Partial linkage map of chromosome 13q in the region of the Wilson disease and retinoblastoma genes. Haines JL, et al. **Genet Epidemiol** 1988;5(6):375-80

The impact of varying diagnostic thresholds on affected sib pair linkage analysis. Kendler KS. **Genet Epidemiol** 1988; 5(6):407-19

Performance of linkage analysis under misclassification error when the genetic model is unknown. Martinez M, et al. **Genet Epidemiol** 1989;6(1):253-8

Combined segregation and linkage analysis for IDDM and HLA-DR under several ascertainment assumptions. Pascoe L, et al. **Genet Epidemiol** 1989;6(1):131-6

Affective disorder not linked to HLA. Price RA. **Genet Epidemiol** 1989;6(1):299-304

Genetic analysis of the affective disorders: summary of

GAW5. Rice J, et al. **Genet Epidemiol** 1989;6(1):161–77 (46 ref.)
Linkage detection tests under heterogeneity. Risch N. **Genet Epidemiol** 1989;6(4):473–80
Description of X-linkage pedigrees. Risch N. **Genet Epidemiol** 1989;6(1):187–9
Linkage analysis with cohort effects: an application to X-linkage. Van Eerdewegh P. **Genet Epidemiol** 1989; 6(1):271–6
Linkage analysis with inbreeding. Van Eerdewegh P. **Genet Epidemiol** 1989;6(1):277–9
Summary measures for evaluating the evidence for linkage. Wilson SR. **Genet Epidemiol** 1989;6(1):287–91
Age-related reactivation of an X-linked gene close to the inactivation centre in the mouse. Brown S, et al. **Genet Res** 1988 Oct;52(2):151–4
Can segregation distortion influence gametic disequilibrium? Hedrick PW. **Genet Res** 1988 Dec;52(3):237–42
Length of the chromosomal segment marked by galactose-1-phosphate uridyl transferase and soluble aconitase and conserved since divergence of lineages leading to mouse and man. Nadeau JH. **Genet Res** 1988 Oct;52(2):141–4
Effects of identity disequilibrium and linkage on quantitative variation in finite populations. Tachida H, et al. **Genet Res** 1989 Feb;53(1):63–70
Linkage studies of wavy in the Norway rat, Rattus norvegicus. Robinson R. **Genetica** 1988 Jul 31;77(1):79–80
Genetic linkage in the Norway rat. Robinson R. **Genetica** 1987 Oct 15;74(2):137–42 (75 ref.)
A linkage map of mouse chromosome 12: localization of Igh and effects of sex and interference on recombination. Blank RD, et al. **Genetics** 1988 Dec;120(4):1073–83
Haplotype-specific interactions of non-H-2-linked genetic factors controlling the mouse C4 and Sip protein levels. Bruisten SM, et al. **Genetics** 1989 Apr;121(4):795–801
A comprehensive genetic map of murine chromosome 11 reveals extensive linkage conservation between mouse and human. Buchberg AM, et al. **Genetics** 1989 May; 122(1):153–61
Linkage and the maintenance of heritable variation by mutation-selection balance. Bürger R. **Genetics** 1989 Jan; 121(1):175–84
Linkage disequilibrium and molecular drive in the rDNA gene family. Dover GA. **Genetics** 1989 May;122(1):249–52
Linkage disequilibrium and genetic variances under mutation-selection balance. Hastings A. **Genetics** 1989 Apr; 121(4):857–60
Maternal-effect lethal mutations on linkage group II of Caenorhabditis elegans. Kemphues KJ, et al. **Genetics** 1988 Dec;120(4):977–86
Mapping mendelian factors underlying quantitative traits using RFLP linkage maps. Lander ES, et al. **Genetics** 1989 Jan;121(1):185–99
Gene conversion, linkage, and the evolution of multigene families. Nagylaki T. **Genetics** 1988 Sep;120(1):291–301
Linkage disequilibrium in natural and experimental populations of Drosophila melanogaster. Smit-McBride Z, et al. **Genetics** 1988 Dec;120(4):1043–51
The human "interferon-beta 2/hepatocyte stimulating factor/interleukin-6" gene: DNA polymorphism studies and localization to chromosome 7p21. Bowcock AM, et al. **Genomics** 1988 Jul;3(1):8–16
Construction of a chromosome 15-specific linking library and identification of potential gene sequences. Buiting K, et al. **Genomics** 1988 Aug;3(2):143–9
The cardiac actin locus (Actc-1) is not on mouse chromosome 17 but is linked to beta 2-microglobulin on chromosome 2. Crosby JL, et al. **Genomics** 1989 Jul; 5(1):19–23
Tight linkage between type III Gaucher's disease (Norrbottnian type) and a MspI polymorphism within the gene for human glucocerebrosidase. Dahl N, et al. **Genomics** 1988 Nov;3(4):296–8
Localization of the FGR protooncogene on the genetic linkage map of human chromosome 1p. Dracopoli NC, et al. **Genomics** 1988 Aug;3(2):124–8
Genetic linkage between lipoprotein(a) phenotype and a DNA polymorphism in the plasminogen gene. Drayna DT, et al. **Genomics** 1988 Oct;3(3):230–6
A linkage group of five DNA markers on human chromosome 10. Farrer LA, et al. **Genomics** 1988 Jul; 3(1):72–7
The loci for parathyroid hormone and beta-globin are closely linked and map to chromosome 15 in cattle. Fries R, et al. **Genomics** 1988 Nov;3(4):302–7
Localization of a human Na+,K+-ATPase alpha subunit gene to chromosome 19q12——q13.2 and linkage to the myotonic dystrophy locus. Harley HG, et al. **Genomics** 1988 Nov;3(4):380–4
The baboon apolipoprotein E gene: structure, expression, and linkage with the gene for apolipoprotein C-1. Hixson JE, et al. **Genomics** 1988 May;2(4):315–23
Genetic mapping of the Wiskott-Aldrich syndrome with two highly-linked polymorphic DNA markers. Kwan SP, et al. **Genomics** 1988 Jul;3(1):39–43
An extended genetic linkage map of markers for human chromosome 10. Nakamura Y, et al. **Genomics** 1988 Nov; 3(4):389–92
RFLPs and linkage relationships of the human laminin B2 gene. Nishimura D, et al. **Genomics** 1988 Nov;3(4):393–5
Twelve loci form a continuous linkage map for human chromosome 18. O'Connell P, et al. **Genomics** 1988 Nov; 3(4):367–72
Important findings regarding the pseudoautosomal region of the human X and Y chromosomes [letter] Ott J. **Genomics** 1988 Jul;3(1):91
Comparison of linkage maps of mouse chromosome 12 derived from laboratory strain intraspecific and Mus spretus interspecific backcrosses. Seldin MF, et al. **Genomics** 1989 Jul;5(1):24–8
Protein kinase C: a new linkage marker for growth hormone and for COL1A1. Summar ML, et al. **Genomics** 1989 Jul; 5(1):163–5
Genetic linkage map of human chromosome 21. Tanzi RE, et al. **Genomics** 1988 Aug;3(2):129–36
Exclusion of the dysplastic nevus syndrome (DNS) locus from the short arm of chromosome 1 by linkage studies in Dutch families. van Haeringen A, et al. **Genomics** 1989 Jul;5(1):61–4
X-linked mixed deafness with stapes fixation in a Mauritian kindred: linkage to Xq probe pDP34. Wallis C, et al. **Genomics** 1988 Nov;3(4):299–301
Linkage relationships of the human methylmalonyl CoA mutase to the HLA and D6S4 loci on chromosome 6. Zoghbi HY, et al. **Genomics** 1988 Nov;3(4):396–8
Genetic analysis of X-linked sterility in hybrids between three sibling species of Drosophila. Coyne JA, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):97–106
Use of linkage disequilibrium data in prenatal diagnosis of cystic fibrosis [letter] Brock DJ, et al. **Hum Genet** 1989 May;82(2):202
The gene for X-linked progressive mixed deafness with perilymphatic gusher during stapes surgery (DFN3) is linked to PGK. Brunner HG, et al. **Hum Genet** 1988 Dec; 80(4):337–40
Myotonic dystrophy is closely linked to the gene for muscle-type creatine kinase (CKMM). Brunner HG, et al. **Hum Genet** 1989 Mar;81(4):308–10
Preliminary exclusion of an X-linked gene in Leber optic atrophy by linkage analysis. Chen JD, et al. **Hum Genet** 1989 Jun;82(3):203–7
Recombination between DXS7, DXS84 and a rare form of X-linked retinitis pigmentosa (McK-30320). Curtis D, et al. **Hum Genet** 1989 Jan;81(2):200–2
Linkage disequilibrium for DNA haplotypes near the cystic fibrosis locus in two south European populations. Estivill X, et al. **Hum Genet** 1989 Sep;83(2):175–8
Gene of X-chromosomal congenital stationary night blindness is closely linked to DXS7 on Xp. Gal A, et al. **Hum Genet** 1989 Mar;81(4):315–8
Genetic mapping of anhidrotic ectodermal dysplasia: DXS159, a closely linked proximal marker. Hanauer A, et al. **Hum Genet** 1988 Oct;80(2):177–80
Segregation of linked probes to myotonic dystrophy in a family demonstrating that 152 and APOC2 are on the same side of DM on 19q. Johnson K, et al. **Hum Genet** 1988 Dec;80(4):379–81
The gene for the Lp(a)-specific glycoprotein is closely linked to the gene for plasminogen on chromosome 6. Lindahl G, et al. **Hum Genet** 1989 Jan;81(2):149–52
Brachytelephalangic chondrodysplasia punctata: a possible X-linked recessive form. Maroteaux P. **Hum Genet** 1989 May;82(2):167–70
A case of hereditary persistence of fetal hemoglobin caused by a gene not linked to the beta-globin cluster. Martinez G, et al. **Hum Genet** 1989 Jul;82(4):335–7
Linkage of X-linked retinitis pigmentosa to the hypervariable DNA marker M27 beta (DXS255). Meitinger T, et al. **Hum Genet** 1989 Feb;81(3):283–6
A linkage group with FRA16B (the fragile site at 16q22.1). Mulley JC, et al. **Hum Genet** 1989 May;82(2):131–3
Linkage analysis of the Duffy blood group marker with several chromosome 1 genes in an extended pedigree with Charcot-Marie-Tooth disease. Raeymaekers P, et al. **Hum Genet** 1989 Feb;81(3):231–3
Linkage studies do not confirm the cytogenetic location of incontinentia pigmenti on Xp11. Sefiani A, et al. **Hum Genet** 1988 Nov;80(3):282–6
Mapping the mutation causing the X-linked lymphoproliferative syndrome in relation to restriction fragment length polymorphisms on Xq. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):349–53
Linkage analysis of seven kindreds with the X-linked lymphoproliferative syndrome (XLP) confirms that the XLP locus is near DXS42 and DXS37. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):354–8
Spondyloepiphyseal dysplasia tarda: linkage with genetic markers from the distal short arm of the X chromosome. Szpiro-Tapia S, et al. **Hum Genet** 1988 Dec;81(1):61–3
Linkage studies in X-linked Alport's syndrome. Szpiro-Tapia S, et al. **Hum Genet** 1988 Dec;81(1):85–7
Localization of DNA probes with tight linkage to the cystic fibrosis locus by in situ hybridization using fibroblasts with a 7q22 deletion. van der Hout AH, et al. **Hum Genet** 1988 Oct;80(2):161–4
Confirmation of linkage disequilibrium between haplotype B (XV-2c, allele 1; KM-19, allele 2) and cystic fibrosis allele in the French population. Vidaud M, et al. **Hum Genet** 1989 Jan;81(2):183–4
Dissociation between mental retardation and fragile site expression in a family with fragile X-linked mental retardation. Voelckel MA, et al. **Hum Genet** 1988 Dec; 80(4):375–8
Cystic fibrosis: typing 89 German families with linked DNA probes. Weber J, et al. **Hum Genet** 1988 Dec;81(1):54–6
Regional localization of the TIMP gene on the human X chromosome. Extension of a conserved synteny and linkage group on proximal Xp. Willard HF, et al. **Hum Genet** 1989 Feb;81(3):234–8
MASA syndrome: further clinical delineation and chromosomal localisation. Winter RM, et al. **Hum Genet** 1989 Jul;82(4):367–70
Linkage analysis in X-linked ichthyosis (steroid sulfatase deficiency). Wirth B, et al. **Hum Genet** 1988 Oct; 80(2):191–2
Close linkage of MEN2A with RBP3 locus in Japanese kindreds. Yamamoto M, et al. **Hum Genet** 1989 Jun; 82(3):287–8
DNA haplotypes and frameworks linked to the beta-globin locus in an Austro-Asiatic population with a high prevalence of hemoglobin E. Yongvanit P, et al. **Hum Genet** 1989 Sep;83(2):171–4
The B subunit of coagulation factor XIII is linked to renin and the Duffy blood group to alpha-spectrin on human chromosome 1. Griffiths LR, et al. **Hum Hered** 1989; 39(2):107–9
Estimating the error rate in DNA diagnosis with linked markers. Kádasi L. **Hum Hered** 1989;39(2):67–74
Interaction between AB0 and haptoglobin in a white Australian population. Mitchell RJ, et al. **Hum Hered** 1988; 38(4):251–4
Three Japanese families with members carrying C7 silent allele (C7*Q0). Possibility for an association between C7*Q0 and C6*B. Nishimukai H, et al. **Hum Hered** 1988; 38(4):246–50
Crossover counts and likelihood in multipoint linkage analysis. Thompson EA. **IMA J Math Appl Med Biol** 1987; 4(2):93–108
Scrapie and the sheep MHC: claims of linkage refuted [letter] Cullen PR. **Immunogenetics** 1989;29(6):414–8
Proximity of the CTLA-1 serine esterase and Tcr alpha loci in mouse and man. Harper K, et al. **Immunogenetics** 1988; 28(6):439–44
Coagulation factor XIII B subunit is encoded by a gene linked to the regulator of complement activation (RCA) gene cluster in man. Rodriguez de Cordoba S, et al. **Immunogenetics** 1988;28(6):452–4
Lack of close linkage between human coagulation factor F13A and HLA class I molecules. Schweighofer B, et al. **Immunogenetics** 1989;30(1):58–9
Cloning and expression of the streptococcal C5a peptidase gene in Escherichia coli: linkage to the type 12 M protein gene. Chen CC, et al. **Infect Immun** 1989 Jun;57(6):1740–5
Genetic susceptibility to leprosy on a Caribbean Island: linkage analysis with five markers. Abel L, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):465–71
Genetic models for linkage analysis of ataxia-telangiectasia. Gatti RA, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:261–73
Postulated genetic linkage between manic-depression and stuttering. Hays P, et al. **J Affective Disord** 1989 Jan-Feb; 16(1):37–40
Genetic analysis of a linkage group III mutant in Anopheles stephensi. Akhtar K, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):95–7
Genetic studies on two carboxylesterase loci in Aedes albopictus. Tadano T. **J Am Mosq Control Assoc** 1987 Jun; 3(2):137–41
A Bacillus cereus cytolytic determinant, cereolysin AB, which comprises the phospholipase C and sphingomyelinase genes: nucleotide sequence and genetic linkage. Gilmore MS, et al. **J Bacteriol** 1989 Feb; 171(2):744–53
Localization of Bacillus subtilis sacU(Hy) mutations to two linked genes with similarities to the conserved procaryotic family of two-component signalling systems. Henner DJ, et al. **J Bacteriol** 1988 Nov;170(11):5102–9
Two genes controlling the expression of extended globoglycolipids in mouse kidney are closely linked to each other on chromosome 19. Sekine M, et al. **J Biochem (Tokyo)** 1989 May;105(5):680–3
A gene conversion located 5' to the A gamma gene in linkage disequilibrium with the Bantu haplotype in sickle cell anemia. Bouhassira EE, et al. **J Clin Invest** 1989 Jun; 83(6):2070–3
Correction of the molecular defect in B lymphocytes from X-linked agammaglobulinemia by cell fusion. Schwaber J, et al. **J Clin Invest** 1988 Oct;82(4):1471–6
Clonal diversity in the B cell repertoire of patients with X-linked agammaglobulinemia. Anker R, et al. **J Exp Med** 1989 Jun 1;169(6):2109–19
Canine muscular dystrophy: confirmation of X-linked inheritance. Cooper BJ, et al. **J Hered** 1988 Nov-Dec; 79(6):405–8
Linkage of Nat and Es-1 in the mouse and development of strains congenic for N-acetyltransferase. Mattano SS, et al. **J Hered** 1988 Nov-Dec;79(6):430–3
Linkage relationships of seven enzyme and two pigmentation loci in the snail Biomphalaria glabrata. Mulvey M, et al. **J Hered** 1988 Nov-Dec;79(6):473–6
Assignment of the Es-6 locus to linkage group VII of the rat (Rattus norvegicus) by the use of HXB recombinant inbred rat strains. Pravenec M, et al. **J Immunogenet** 1987 Dec;14(6):313–6

Ig VH, DH, and JH germ-line gene segments linked by overlapping cosmid clones of rabbit DNA. Becker RS, et al. **J Immunol** 1989 Feb 15;142(4):1351–5

Regulation of idiotope expression. IV. Genetic linkage of two D region-dependent T15 idiotopes to the IgH allotype. Cronkhite R, et al. **J Immunol** 1989 Jan 15;142(2):568–74

The IL-4 gene maps to chromosome 11, near the gene encoding IL-3. D'Eustachio P, et al. **J Immunol** 1988 Nov 1;141(9):3067–71

Inheritance of idiotype expression unlinked to the H chain allotype locus. Novel features of genetic control in the Ia.7 system. Epstein SL, et al. **J Immunol** 1989 Mar 1; 142(5):1596–604

Receptors for Fc epsilon and Fc gamma are linked on mouse chromosome 1. Huppi K, et al. **J Immunol** 1988 Oct 15; 141(8):2807–10

Interspersion of the VHQ52 and VH7183 gene families in the NFS/N mouse. Kleinfield RW, et al. **J Immunol** 1989 Jun 15;142(12):4483–92

Murine complement receptor gene family. II. Identification and characterization of the murine homolog (Cr2) to human CR2 and its molecular linkage to Crry. Kurtz CB, et al. **J Immunol** 1989 Sep 15;143(6):2058–67

Linkage analysis of the Bcg gene on mouse chromosome 1. Identification of a tightly linked marker. Schurr E, et al. **J Immunol** 1989 Jun 15;142(12):4507–13

Igh-C allotype-linked control of anti-DNA production and clonotype expression in mice infected with Plasmodium yoelii. Yoshida H, et al. **J Immunol** 1988 Sep 15; 141(6):2125–31

DNA deletions and recombinations in the gene locus of X-linked muscular dystrophies. Shimmoto M, et al. **J Inherited Metab Dis** 1988;11(3):324–8

Diffusion approximations of the two-locus Wright-Fisher model. Ethier SN, et al. **J Math Biol** 1989;27(1):17–28

X-linked congenital adrenal hypoplasia: proposal pathogenesis. Preeyasombat C, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:164–73

Considerations in using linkage analysis as a presymptomatic test for Huntington's disease. Farrer LA, et al. **J Med Genet** 1988 Sep;25(9):577–88

Linkage analysis of manic depression in an Irish family using H-ras 1 and INS DNA markers. Gill M, et al. **J Med Genet** 1988 Sep;25(9):634–5

Linkage analysis of French families with facioscapulohumeral muscular dystrophy. Lucotte G, et al. **J Med Genet** 1989 Aug;26(8):485–6

Linkage analysis in the spinal muscular atrophy type of facioscapulohumeral disease. Siddique T, et al. **J Med Genet** 1989 Aug;26(8):487–9

Blepharophimosis plus ovarian failure: a likely candidate for a contiguous gene syndrome. Smith A, et al. **J Med Genet** 1989 Jul;26(7):434–8

Clinical variability of osteogenesis imperfecta linked to COL1A2 and associated with a structural defect in the type I collagen molecule. Superti-Furga A, et al. **J Med Genet** 1989 Jun;26(6):358–62

Alpha thalassaemia: a potential source of error in DNA linkage studies for adult polycystic kidney disease. Trent RJ, et al. **J Med Genet** 1989 Jan;26(1):6–9

A genetic linkage study of facioscapulohumeral (Landouzy-Déjérine) disease with 24 polymorphic DNA probes. Upadhyaya M, et al. **J Med Genet** 1989 Aug; 26(8):490–3

Linkage reduction allows reconstitution of nucleosomes on DNA microdomains. Negri R, et al. **J Mol Biol** 1989 Jun 5;207(3):615–9

Absence of linkage with the Duffy blood group in a family with Charcot-Marie-Tooth neuropathy. Raeymaekers P, et al. **J Neurol Sci** 1988 Dec;88(1–3):145–50

Genetic counseling using linked DNA probes: cystic fibrosis as a prototype. Johnson JP. **J Pediatr** 1988 Dec; 113(6):957–64 (33 ref.)

Improved definition of carrier status in X-linked hypohidrotic ectodermal dysplasia by use of restriction fragment length polymorphism-based linkage analysis. Zonana J, et al. **J Pediatr** 1989 Mar;114(3):392–9

HLA: linkage with rheumatoid arthritis or seropositivity. Silman A, et al. **J Rheumatol** 1988 Aug;15(8):1189–92

Possible linkage between alcoholism and esterase-D. Tanna VL, et al. **J Stud Alcohol** 1988 Sep;49(5):472–6

Presymptomatic diagnosis of delayed-onset disease with linked DNA markers. The experience in Huntington's disease. Brandt J, et al. **JAMA** 1989 Jun 2;261(21):3108–14

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 Jul 21; 262(3):331

Linkage study of dominantly inherited olivo-ponto-cerebellar atrophy (OPCA) and Holmes' ataxia. Sasaki H, et al. **Jinrui Idengaku Zasshi** 1988 Dec; 33(4):423–38

Linkage between immunoglobulin E responses underlying asthma and rhinitis and chromosome 11q. Cookson WO, et al. **Lancet** 1989 Jun 10;1(8650):1292–5

Predisposition to familial osteoarthrosis linked to type II collagen gene [see comments] Palotie A, et al. **Lancet** 1989 Apr 29;1(8644):924–7. **Comment in:** Lancet 1989 Jun 17;1(8651):1396

A DNA linkage study of Usher's syndrome excluding much of chromosome 4. Smith RJ. **Laryngoscope** 1989 Sep; 99(9):940–9

Myeloproliferative disorders: usefulness of X-linked probes in diagnosis. Taylor KM, et al. **Leukemia** 1989 Jun; 3(6):419–22

Analysis of DNA probes for the prenatal diagnosis of cystic fibrosis. Dry PJ, et al. **Med J Aust** 1989 Aug 7;151(3):131, 133–6

Cystic fibrosis: prenatal diagnosis and carrier detection by DNA analysis. Nelson PV, et al. **Med J Aust** 1989 Aug 7;151(3):126–7, 130–1

Linkage map of Salmonella typhimurium, edition VII. Sanderson KE, et al. **Microbiol Rev** 1988 Dec;52(4):485–532 (535 ref.)

Ovariectomy abolishes the normalization of femoral mineral content in 40-week-old female X-linked hypophosphatemic mice. Soener RA, et al. **Miner Electrolyte Metab** 1988;14(6):321–31

Genes encoding the major surface glycoprotein in Leishmania are tandemly linked at a single chromosomal locus and are constitutively transcribed. Button LL, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):271–83

Tight linkage between the syndrome of generalized thyroid hormone resistance and the human c-erbA beta gene. Usala SJ, et al. **Mol Endocrinol** 1988 Dec;2(12):1217–20

Expanded linkage map of Erwinia chrysanthemi strain 3937. Hugouvieux-Cotte-Pattat N, et al. **Mol Microbiol** 1989 May;3(5):573–81

Linkage studies in facioscapulohumeral muscular dystrophy. Padberg GW, et al. **Muscle Nerve** 1988 Aug;11(8):833–5

Schizophrenia. Genetic linkage revisited [news] Byerley WF. **Nature** 1989 Aug 3;340(6232):340–1

Exclusion of linkage to 5q11–13 in families with schizophrenia and other psychiatric disorders. Detera-Wadleigh SD, et al. **Nature** 1989 Aug 3; 340(6232):391–3

X-linked hypophosphatemia: progress in characterization of genetic and metabolic defects. Kainer G, et al. **Nephron** 1989;51(4):449–53 (40 ref.)

Linkage of X-linked nephrogenic diabetes insipidus with DXS52, a polymorphic DNA marker. Knoers N, et al. **Nephron** 1988;50(3):187–90

Heterogeneity evidence and linkage studies on Charcot-Marie-Tooth disease. Griffiths LR, et al. **Neurology** 1989 Feb;39(2 Pt 1):280–1

Absence of genetic linkage of Charcot-Marie-Tooth disease (HMSN Ia) with chromosome 1 gene markers. Raeymaekers P, et al. **Neurology** 1989 Jun;39(6):844–6

Linkage analysis in familial amyotrophic lateral sclerosis. Siddique T, et al. **Neurology** 1989 Jul;39(7):919–25

Unexpected sex-ratios in families of language/learning-impaired children. Tallal P, et al. **Neuropsychologia** 1989;27(7):987–98

Taq I RFLP linked to the human ets-1 gene. Aparicio JM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4913

Pulse-field linkage of the P3, G6pd and Cf-8 genes on the mouse X chromosome: demonstration of synteny at the physical level. Brockdorff N, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1315–26

Happy mapping: a proposal for linkage mapping the human genome. Dear PH, et al. **Nucleic Acids Res** 1989 Sep 12; 17(17):6795–807

Human prostate specific antigen (PSA) gene: structure and linkage to the kallikrein-like gene, hGK-1. Digby M, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2137

Additional polymorphism for D7S8 linked to cystic fibrosis including detection by DNA amplification. Northrup H, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1784

Subfamily of submaxillary gland-specific Mup genes: chromosomal linkage and sequence comparison with liver-specific Mup genes. Shi Y, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6191–203

Direct construction of a chromosome-specific NotI linking library from flow-sorted chromosomes. Wallace MR, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1665–77

Genetic linkage: the basis of human gene mapping. King CR. **Obstet Gynecol Surv** 1989 Mar;44(3):177–89 (69 ref.)

Localization of Evi-2 to chromosome 11: linkage to other proto-oncogene and growth factor loci using interspecific backcross mice. Buchberg AM, et al. **Oncogene Res** 1988; 2(2):149–65

Genetic linkage analysis of autosomal dominant congenital cataracts with lens-specific DNA probes and polymorphic phenotypic markers. Barrett DJ, et al. **Ophthalmology** 1988 Apr;95(4):538–44

X-linked progressive cone dystrophy. Clinical characteristics of affected males and female carriers. Jacobson DM, et al. **Ophthalmology** 1989 Jun;96(6):885–95

Rod and cone dysfunction in carriers of X-linked retinitis pigmentosa. Peachey NS, et al. **Ophthalmology** 1988 May; 95(5):677–85

The syndrome page. X-linked dominant chondrodysplasia punctata (Conradi-Hünermann syndrome). Krafchik BR. **Pediatr Dermatol** 1989 Jun;6(2):150–1

Hypohidrotic ectodermal dysplasia: argument against an autosomal recessive form clinically indistinguishable from X-linked hypohidrotic ectodermal dysplasia (Christ-Siemens-Touraine syndrome). Sybert VP. **Pediatr Dermatol** 1989 Jun;6(2):76–81

Malignant hyperthermia susceptibility in X-linked muscle dystrophies. Heiman-Patterson TD, et al. **Pediatr Neurol** 1986 Nov-Dec;2(6):356–8

Familial X-linked unilateral carpal hypoplasia/dysplasia—a new syndrome. Report of four cases. Kozlowski K, et al. **Pediatr Radiol** 1989;19(4):261–2

Usefulness of linkage disequilibrium of KM-19 and XV-2c DNA probes for genetic counselling in a high-risk CF family. Chomel JC, et al. **Prenat Diagn** 1989 Apr; 9(4):297–300

Physical linkage of the genes for platelet membrane glycoproteins IIb and IIIa. Bray PF, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8683–7

Linkage mapping of a mouse gene, iv, that controls left-right asymmetry of the heart and viscera. Brueckner M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5035–8

Admixture as a tool for finding linked genes and detecting that difference from allelic association between loci. Chakraborty R, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9119–23

Physical linkage of a guanine nucleotide-binding protein-related gene to the chicken major histocompatibility complex. Guillemot F, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4594–8

Computer-simulation methods in human linkage analysis. Ott J. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4175–8

Human Fc gamma RIII: cloning, expression, and identification of the chromosomal locus of two Fc receptors for IgG. Peltz GA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1013–7

Physical linkage of a human immunoglobulin heavy chain variable region gene segment to diversity and joining region elements. Schroeder HW Jr, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8196–200

Asymptotic distribution of the lod score for familial data. Tai JJ, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):38–41

Linkage analyses in families with nephrogenic diabetes insipidus. Knoers NV, et al. **Prog Clin Biol Res** 1989; 305:149–55

Caution in locating the gene(s) for affective disorder [editorial] Edwards JH, et al. **Psychol Med** 1989 May; 19(2):273–5

Low degree of DNA polymorphism in the HLA-linked lymphotoxin (tumour necrosis factor beta) gene. Partanen J, et al. **Scand J Immunol** 1988 Sep;28(3):313–6

X-linked hypophosphatemia. Meyer RA Jr, et al. **Semin Nephrol** 1989 Mar;9(1):56–61 (58 ref.)

The IL-4 and IL-5 genes are closely linked and are part of a cytokine gene cluster on mouse chromosome 11. Lee JS, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):143–52

DNA binding factors for the CpG-rich island containing the promoter of the human X-linked PGK gene. Yang TP, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):461–72

Different linkage disequilibria of HLA-B27 subtypes and HLA-C locus alleles. Breur-Vriesendorp BS, et al. **Tissue Antigens** 1988 Aug;32(2):74–7

A T cell clone defining a common DP/DR determinant in strong linkage disequilibrium with HLA-A9. Magli MC, et al. **Tissue Antigens** 1988 Nov;32(5):259–66

Evidence that SE is distal to LU on chromosome 19q. Zelinski T, et al. **Transfusion** 1989 May;29(4):304–5

A unique placental antigen controlled by an MHC-linked locus, RT11. Kunz HW, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):559–60

Maps of linkage and synteny homologies between mouse and man. Nadeau JH. **Trends Genet** 1989 Mar;5(3):82–6 (40 ref.)

Mapping genes for manic-depression and schizophrenia with DNA markers. Byerley W, et al. **Trends Neurosci** 1989 Feb;12(2):46–8 (32 ref.)

[Study on RFLPs of DX13/Bgl II in Chinese and its application on linkage analysis of hemophilia A] Shen Y. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):389–92 (Eng. Abstr.) **(Chi)**

[Heritable X-chromosome disease] de la Chapelle A. **Duodecim** 1988;104(22):1774–86 (28 ref.) **(Fin)**

[Detection of the cause of genetic fault in Duchenne's dystrophy] Palotie L, et al. **Duodecim** 1988;104(20):1588–96 (26 ref.) **(Fin)**

[X-linked diseases and carrier detection] Kaplan J. **Ann Biol Clin (Paris)** 1988;46(6):402–5 (Eng. Abstr.) **(Fre)**

[Prenatal diagnosis of X-linked adrenal hypoplasia associated with glycerol kinase deficiency] Malpuech G, et al. **J Genet Hum** 1989 Jun;37(2):155–62 (Eng. Abstr.) **(Fre)**

[Linkage studies in Emery-Dreifuss muscular dystrophy] Paquis V, et al. **J Genet Hum** 1989 Jun;37(2):127–32 (Eng. Abstr.) **(Fre)**

[The genetics and molecular genetics of X-chromosomal recessive ichthyosis] Herrmann FH. **Dermatol Monatsschr** 1989;175(4):197–202 (39 ref.) (Eng. Abstr.) **(Ger)**

[Norrie syndrome: identification of carriers by segregation analysis with flanking DNA markers] Körner J, et al. **Fortschr Ophthalmol** 1989;86(1):78–81 (Eng. Abstr.) **(Ger)**

[Recurrent corneal erosion in epidermolysis bullosa simplex Köbner and X-chromosomal ichthyosis] Steuhl KP, et al. **Fortschr Ophthalmol** 1988;85(6):669–71 (Eng. Abstr.) **(Ger)**

[An autopsy case of X-linked recessive bulbar-spinal muscular atrophy] Hirayama M, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1131–6 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Pseudohypertrophic proximal progressive muscular dystrophy with a malignant course manifesting itself in adolescence] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):113–20 (Eng. Abstr.)

(Rus)
[X chromosome-linked bulbospinal neuronopathy in adults] Mozolevskiĭ IuV. **Zh Nevropatol Psikhiatr** 1989;89(3):121-3 (Eng. Abstr.) (Rus)

LINOLEIC ACIDS

Inhibition of peroxidation of membranes. Niki E, et al. **Basic Life Sci** 1988;49:561-6

Fenton reactions in lipid phases: iron solubility, .OH production, and initiation of lipid oxidation. Schaich KM, et al. **Basic Life Sci** 1988;49:153-6

Ferric bleomycin catalyzed reduction of 10-hydroperoxy-8,12-octadecadienoic acid: evidence for homolytic O-O bond scission. Padbury G, et al. **Biochemistry** 1988 Oct 4;27(20):7846-52

Cytotoxicities of a linoleic acid hydroperoxide and its related aliphatic aldehydes toward cultured human umbilical vein endothelial cells. Kaneko T, et al. **Chem Biol Interact** 1988; 67(3-4):295-304

Autoxidation of methyl linoleate initiated by the ozonide of allylbenzene. Ewing JC, et al. **Lipids** 1989 Jul;24(7):609-15

Effect of alpha-tocopherol on the volatile thermal decomposition products of methyl linoleate hydroperoxides. Frankel EN, et al. **Lipids** 1989 Jul; 24(7):603-8

[A rat model of chronic pancreatic insufficiency induced by injection of zein-oleic acid-linoleic acid solution into the pancreatic duct] Kataoka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1431 (Jpn)

ADMINISTRATION & DOSAGE

Fatty acid composition of serum cholesteryl esters and erythrocyte membranes as indicators of linoleic acid intake in man. Glatz JF, et al. **Am J Clin Nutr** 1989 Feb; 49(2):269-76

Effect of linoleic acid-rich infant formula feeding on brain synaptosomal lipid accretion and enzyme thermotropic behavior in the piglet. Hrboticky N, et al. **J Lipid Res** 1989 Aug;30(8):1173-84

Cigarette smoking and linoleic acid [letter] **Lancet** 1989 Jul 29;2(8657):275-6

Cigarette smoking, polyunsaturated fats, linoleic acid, and coronary heart disease [published erratum appears in **Lancet** 1989 Jun 24;1(8652):1464] Oliver MF. **Lancet** 1989 Jun 3;1(8649):1241-3 (33 ref.)

Lack of effects of trans fatty acids on eicosanoid biosynthesis with adequate intakes of linoleic acid. Zevenbergen JL, et al. **Lipids** 1989 Jun;24(6):555-63

Effects of dietary linoleic acid on beta-adrenergic responsiveness of the guinea pig respiratory system. Loesberg C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov; 34(2):127-34

The effect of donor-specific blood transfusion, cyclosporine, and dietary prostaglandin precursors on rat cardiac allograft survival. II. Effectiveness of a 24-hour induction period with DST and CsA in inducing long-term graft survival. Tchervenkov JI, et al. **Transplantation** 1989 Jan; 47(1):177-81

[Effect of linoleic acid in food on spongioid bone density and prostaglandin biosynthesis in bones] Bartels T, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):353-9 (Eng. Abstr.) (Ger)

[A supplement with poly-unsaturated nutrients in the development and stabilization of the rat brain] Rondinone R. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):265-71 (Eng. Abstr.) (Ita)

[Effect of dietary linoleic acid on the platelet aggregation, fatty acid composition of platelet phospholipids and synthesis of platelet prostaglandins in rats] Markov KhM, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):37-41 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Dietary linoleic acid is required for development of experimentally induced alcoholic liver injury. Nanji AA, et al. **Life Sci** 1989;44(3):223-7

ANALYSIS

Identification of octadeca-9,11-dienoic acid and its significance in the diagnosis of cervical intraepithelial neoplasia. Parham DM, et al. **Clin Chim Acta** 1989 Jul 14; 182(3):289-93

Recognition of cervical neoplasia by the estimation of a free-radical reaction product (octadeca-9,11-dienoic acid) in exfoliated cells. Tay SK, et al. **Free Radic Res Commun** 1987;3(1-5):27-31

Lack of correlation between changes in the concentrations of linoleate and arachidonate in human milk relative to total milk lipid [letter] Clark RM. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec;7(6):937-8

Coronary heart disease and linoleic acid content of adipose tissue. **Nutr Rev** 1987 Nov;45(11):335-6 (8 ref.)

BIOSYNTHESIS

Vessel wall reactivity and 13-hydroxy-octadecadienoic acid synthesis. Buchanan MR, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:293-8

Oxidative metabolism of linoleic acid by human leukocytes. Reinaud O, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):883-91

Formation of 9-hydroxyoctadecadienoic acid from linoleic acid in endothelial cells. Kaduce TL, et al. **J Biol Chem** 1989 Apr 25;264(12):6823-30

Synthesis of hydroxy fatty acids from linoleic acid by human blood platelets. Daret D, et al. **Prostaglandins** 1989 Aug; 38(2):203-14

The induced lipoxygenase in atherosclerotic aorta converts linoleic acid to the platelet chemorepellant factor 13-HODE. Simon TC, et al. **Thromb Res** 1989 Jul 15; 55(2):171-8

[Effect of zinc deficiency on the in vivo biosynthesis of fatty acids of the linoleic series in the rat] Ayala S, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):321-30 (Eng. Abstr.) (Spa)

BLOOD

Hydroxyl radical and leukotoxin biosynthesis in neutrophil plasma membrane. Hayakawa M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1077-85

Effect of cardiopulmonary bypass on circulating concentrations of leucocyte elastase and free radical activity. Hind CR, et al. **Cardiovasc Res** 1988 Jan; 22(1):37-41

Effect of dietary alpha-linolenate/linoleate balance on collagen-induced platelet aggregation and serotonin release in rats. Watanabe S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1572-5

Reduced free radical activity detected by decreased diene conjugates in insulin-dependent diabetic patients. Collier A, et al. **Diabetic Med** 1988 Nov;5(8):747-9

Diene conjugates and microangiopathy [letter] Sinclair AJ, et al. **Diabetic Med** 1989 Jul;6(5):458-9

The effect of systemic heparinisation and haemodialysis on plasma octadeca-9,11-dienoic acid (9,11-LA'). Wickens DG, et al. **Free Radic Res Commun** 1987;3(1-5):99-106

DEFICIENCY

Linoleic acid-deficient rat neutrophils show decreased bactericidal capacity, superoxide formation and membrane depolarization. Gyllenhammar H, et al. **Immunology** 1989 Apr;66(4):616-20

METABOLISM

Biosynthesis and conversions of fatty acid allene oxides. Hamberg M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:64-9

Absorption and metabolism of orally fed arachidonic and linoleic acid in the rat. Nilsson A, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G612-8

Influence of unsaturated fatty acid membrane component on sensitivity of an Escherichia coli fatty acid auxotroph to conditions of nutrient depletion. Massa EM, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2107-11

Age-related changes in linoleate and alpha-linolenate desaturation by rat liver microsomes. Hrelia S, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):348-55

Oxidative metabolism of linoleic acid by human leukocytes. Reinaud O, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):883-91

Selective channelling of arachidonic and linoleic acids into glycerolipids of rat hepatocytes in primary culture. Thomas G, et al. **Biochem J** 1988 Dec 1;256(2):641-7

Effect of fenofibrate treatment on linoleic acid desaturation in liver of obese Zucker rats. Blond JP, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2741-4

Soybean lipoxygenase-1 enzymically forms both (9S)- and (13S)-hydroperoxides from linoleic acid by a pH-dependent mechanism. Gardner HW. **Biochim Biophys Acta** 1989 Feb 20;1001(3):274-81

Effect of dietary fats on linoleic acid metabolism. A radiolabel study in rats. Zevenbergen JL, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):312-23

Kinetics of soybean lipoxygenase reaction in hydrated reversed micelles. Kurganov BI, et al. **Biochimie** 1989 Apr; 71(4):573-8

Fatty acid requirements of breeding turkeys. Whitehead CC, et al. **Br Poult Sci** 1988 Dec;29(4):761-8

Linoleic acid metabolism in metastatic and nonmetastatic murine mammary tumor cells. Chapkin RS, et al. **Cancer Res** 1989 Sep 1;49(17):4724-8

Photolysis of unsaturated fatty acid hydroperoxides. 4. Fatty acid products from the aerobic decomposition of methyl 13(S)-hydroperoxy-9(Z),11(E)-octadecadienoate dissolved in cyclohexane. Schieberle P, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):281-8

Metabolism of oleic, linoleic and linolenic acids in gourami (Trichogaster cosby) fry and mature females. Rahn CH, et al. **Comp Biochem Physiol [B]** 1977;58(1):17-20

Formation of 9-hydroxyoctadecadienoic acid from linoleic acid in endothelial cells. Kaduce TL, et al. **J Biol Chem** 1989 Apr 25;264(12):6823-30

Murine keratinocyte cultures grown at the air/medium interface synthesize stratum corneum lipids and "recycle" linoleate during differentiation. Madison KC, et al. **J Invest Dermatol** 1989 Jul;93(1):10-7

Effect of the dietary alpha-linolenate/linoleate balance on lipid compositions and learning ability of rats. II. Discrimination process, extinction process, and glycolipid compositions. Yamamoto N, et al. **J Lipid Res** 1988 Aug; 29(8):1013-21

Biosynthesis of [14C]arachidonic acid from [14C]linoleate in primary cultures of rat Sertoli cells. Coniglio JG, et al. **Lipids** 1989 Jan;24(1):84-5

Microsomal desaturation-elongation of linoleic acid following parenteral feeding with lipid emulsions in the rat. Innis SM, et al. **Lipids** 1988 Jun;23(6):546-50

The suppression of eicosanoid synthesis by peritoneal macrophages is influenced by the ratio of dietary docosahexaenoic acid to linoleic acid. Lokesh BR, et al. **Lipids** 1989 Jul;24(7):589-93

Formation of trimers of alpha-tocopherol and its model compound, 2,2,5,7,8-pentamethylchroman-6-ol, in autoxidizing methyl linoleate. Yamauchi R, et al. **Lipids** 1988 Aug;23(8):779-83

In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate. Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91-6

Effect of trans fatty acids on the linoleic acid requirement of rats. **Nutr Rev** 1988 Nov;46(11):399-400

Synthesis of hydroxy fatty acids from linoleic acid by human blood platelets. Daret D, et al. **Prostaglandins** 1989 Aug; 38(2):203-14

Heparin inhibits the "quasi-lipoxygenase" activity of hemoglobin toward linoleic acid by oxidant scavenging. Brestel EP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):21-4

The induced lipoxygenase in atherosclerotic aorta converts linoleic acid to the platelet chemorepellant factor 13-HODE. Simon TC, et al. **Thromb Res** 1989 Jul 15; 55(2):171-8

[Effects of exogenous insulin on oxidation of glucose and fatty acid in septic rats] Kihata M. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):580-5 (Eng. Abstr.) (Jpn)

[Linoleic cascade and radical peroxidation reaction] Ozawa T, et al. **Nippon Rinsho** 1988 Oct;46(10):2161-6 (Jpn)

[Studies on inhibition mechanism of autoxidation by tannins and flavonoids. III. Inhibition mechanism of tannins isolated from medicinal plants and related compounds on autoxidation of methyl linoleate] Fujita Y, et al. **Yakugaku Zasshi** 1988 Jun;108(6):528-37 (Eng. Abstr.) (Jpn)

[Potato 5-lipoxygenase. Kinetics of linoleic acid oxidation] Butovich IA, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):106-8 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Mechanisms of linoleic acid uptake by rabbit small intestinal brush border membrane vesicles. Ling KY, et al. **Lipids** 1989 Jan;24(1):51-5

PHARMACOLOGY

Leukocytes biosynthesize leukotoxin (9,10-epoxy-12-octadecenoate)—a novel cytotoxic linoleate epoxide. Ozawa T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:164-7

The generation of chemiluminescence by alveolar macrophages is affected by 9-hydroxy-linoleic acid. Henricks PA, et al. **Agents Actions** 1989 Jan;26(1-2):178-9

Linoleic acid and linolenic acid: effect on permeability properties of cultured endothelial cell monolayers. Hennig B, et al. **Am J Clin Nutr** 1989 Feb;49(2):301-5

Antihypertensive properties of linoleic acid and fish oil omega-3 fatty acids independent of the prostaglandin system. Hui R, et al. **Am J Hypertens** 1989 Aug;2(8):610-7

Inhibition of renin by plasma linoleic acid. Talwalkar RT, et al. **Am J Med Sci** 1988 Sep;296(3):192-7

Prostacyclin biosynthesis by cultured human myometrial smooth muscle cells: dependency on arachidonic or linoleic acid in the culture medium. MacKenzie LW, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1365-72

Effect of linoleic acid infusion on blood pressure in normotensive and hypertensive rats. Reddy SR, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H611-7

Cholesterol-lowering effect of N-(alpha-methylbenzyl)linoleamide (melinamide) in cholesterol-fed diabetic rats. Matsubara K, et al. **Atherosclerosis** 1988 Aug;72(2-3):199-204

Plasma apolipoprotein B in middle-aged Finnish men. Evidence for a regional gradient of apo B and lack of negative correlation between apo B and dietary linoleate in hyperapobetalipoproteinemia. Solakivi T, et al. **Atherosclerosis** 1988 Jul;72(1):55-61

Platelet chemiluminescence induced by linoleic and arachidonic acids. Metsä-Ketelä T, et al. **Basic Life Sci** 1988;49:233-8

The effect of dietary linoleic acid on rat platelet sialic acid. Bolton-Smith C, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):183-6

Fish oil reduces cholesterol and arachidonic acid content more efficiently in rats fed diets containing low linoleic acid to saturated fatty acid ratios. Garg ML, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):337-44

The effect of dietary autoxidized oils on immunocompetent cells in mice. Oarada M, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):156-60

Effects of linoleic acid and mitogenic stimulation on the fatty acid composition of human lymphocytes. Shires SE, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):74–8

Modification of cellular fatty acid composition of Hep–G2 cells: effect of antioxidants on cholesterol esterification and secretion. Stein O, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):115–20

Correlations between endogenous prostaglandin E formation in the bone and spongiosa density. Bartels T, et al. **Biomed Biochim Acta** 1988;47(10–11):S278–81

Investigations on the mechanism of a diminished inotropic isoprenaline effect in isolated rat hearts after high linoleic acid diet. Hoffmann P, et al. **Biomed Biochim Acta** 1988; 47(9):881–6

Inhibition of cell migrations by the linoleic acid oxygenation product 9S–hydroxy 10E,12Z octadecadienoic acid (9–HODE). Pankonin G, et al. **Biomed Biochim Acta** 1988; 47(12):K17–21

Effect of dietary linoleic acid level on lodgement, proliferation and survival of mammary tumor metastases. Hubbard NE, et al. **Cancer Lett** 1989 Feb;44(2):117–25

Inhibition of growth and linoleate–enhanced metastasis of a transplantable mouse mammary tumor by indomethacin. Hubbard NE, et al. **Cancer Lett** 1988 Dec 1;43(1–2):111–20

Differential proliferative response to linoleate in cultures of epithelial cells from normal human breast and fibroadenomas. Balakrishnan A, et al. **Cancer Res** 1989 Feb 15;49(4):857–62

Bidirectional control of membrane expression and/or activation of the tumor cell IRGpIIb/IIIa receptor and tumor cell adhesion by lipoxygenase products of arachidonic acid and linoleic acid. Grossi IM, et al. **Cancer Res** 1989 Feb 15;49(4):1029–37

Inactivation of mutagenic heterocyclic and aryl amines by linoleic acid 13–monohydroperoxide and methemoglobin. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4963–70

Effect of mineral oil and linoleic–acid–containing emulsions on the skin vapour loss of sodium–lauryl–sulphate–induced irritant skin reactions. Blanken R, et al. **Contact Dermatitis** 1989 Feb;20(2):93–7

Effect of high/low dietary linoleic acid levels on the function and fatty acid composition of T–lymphocytes of normal and diabetic rats. Singh B, et al. **Diabetes Res** 1988 Jul; 8(3):129–34

The effects of polyunsaturated fatty acids (PUFAs) on the sleep parameters of the rat pups. Goldstein R. **Endocrinologie** 1988 Jul–Sep;26(3):155–8

Spermidine is necessary for, but not the only mediator of, linoleic acid–stimulated alpha–casein accumulation in mouse mammary epithelial cells. Levay–Young BK, et al. **Endocrinology** 1989 Sep;125(3):1513–8

Modulatory activity of 9–hydroxy– and 9–hydroperoxy–octadecadienoic acid towards reactive oxygen species from guinea–pig pulmonary macrophages. Engels F, et al. **Eur J Biochem** 1989 Sep 1;184(1):197–203

Postirradiation protection of chromosomes by linoleate. Norman A, et al. **Int J Radiat Biol** 1988 Oct;54(4):521–4

The effect of dietary linoleic acid on blood pressure and erythrocyte sodium transport. el Ashry A, et al. **J Hum Hypertens** 1989 Feb;3(1):9–15

Linoleic acid supplementation, membrane lipids and leucocyte sodium transport in normotensive humans. Robertson DA, et al. **J Hum Hypertens** 1989 Apr; 3(2):117–23

Interactions between the metabolism of n–3 and n–6 fatty acids. Sprecher H. **J Intern Med Suppl** 1989;225(731):5–9 (20 ref.)

Growth–inhibition effects of oleic acid, linoleic acid, and their methyl esters on transplanted tumors in mice. Zhu YP, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1302–6

Relative effects of dietary oleic– and linoleic–rich oils on plasma lipoprotein composition in rats. Ney DM, et al. **J Nutr** 1989 Jun;119(6):857–63

Effect of dietary alpha–linolenate/linoleate balance on mean survival time, incidence of stroke and blood pressure of spontaneously hypertensive rats. Shimokawa T, et al. **Life Sci** 1988;43(25):2067–75

Differential effects of dietary linoleic and alpha–linolenic acid on lipid metabolism in rat tissues. Garg ML, et al. **Lipids** 1988 Sep;23(9):847–52

Dietary linoleic acid and the fatty acid profiles in rats fed partially hydrogenated marine oils. Høy CE, et al. **Lipids** 1988 Oct;23(10):973–80

Linoleic acid–induced fatty acid changes in platelet and aorta of the rat: effect of age and cholesterol. Takahashi R, et al. **Lipids** 1988 Sep;23(9):885–90

Neutrophil–derived epoxide, 9,10–epoxy–12–octadecenoate, induces pulmonary edema. Hu JN, et al. **Lung** 1988; 166(6):327–37

Effect of the dietary alpha–linolenate/linoleate balance on leukotriene production and histamine release in rats. Hashimoto A, et al. **Prostaglandins** 1988 Jul;36(1):3–16

Effect of varying concentrations of linoleic acid on alpha–adrenoceptor responses in spontaneously hypertensive rats. Crandall DL, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):115–9

PHYSIOLOGY

Endothelium and underlying membrane reactivity with platelets, leukocytes and tumor cells: regulation by the lipoxygenase–derived fatty acid metabolites, 13–HODE and HETES. Buchanan MR, et al. **Med Hypotheses** 1988 Dec;27(4):317–25

THERAPEUTIC USE

Effects of dietary linoleic acid and gamma linolenic acid on platelets of patients with multiple sclerosis. Mcgregor L, et al. **Acta Neurol Scand** 1989 Jul;80(1):23–7

Linoleic–acid–enriched diet: long–term effects on serum lipoprotein and apolipoprotein concentrations and insulin sensitivity in noninsulin–dependent diabetic patients. Heine RJ, et al. **Am J Clin Nutr** 1989 Mar;49(3):448–56

The use of gamma linolenic acid, linoleic acid and natural vitamin E for the treatment of multicentric lymphoma in two dogs. Williams JH. **J S Afr Vet Assoc** 1988 Sep; 59(3):141–4

Essential fatty acid deficiency in premature infants. **Nutr Rev** 1989 Feb;47(2):39–41

Augmentation of donor–specific transfusion and cyclosporine effects with dietary linoleic acid. Perez RV, et al. **Transplantation** 1989 Jun;47(6):937–40

TOXICITY

Depletion of hepatic coenzyme A derivatives is one of the markers of the toxicity of orally administered secondary autoxidation products of linoleic acid in rat. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):11–23

The effects of orally administered linoleic acid and its autoxidation products on intestinal mucosa in rat. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug; 34(4):363–73

Succinate dehydrogenase and synthetic pathways of glucose 6–phosphate are also the markers of the toxicity of orally administered secondary autoxidation products of linoleic acid in rat liver. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):25–37

LINOLENIC ACIDS

Thermal decomposition of methyl linoleate and methyl linolenate hydroperoxides analyzed by capillary gas chromatography. Frankel EN, et al. **Basic Life Sci** 1988; 49:319–26

Photoaddition of angelicin to linolenic acid methyl ester. Caffieri S, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):515–21

ADMINISTRATION & DOSAGE

[A supplement with poly–unsaturated nutrients in the development and stabilization of the rat brain] Rondinone R. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):265–71 (Eng. Abstr.) **(Ita)**

ANALYSIS

Levels of dihomo–gamma–linolenate are depressed in heart phosphatidylcholine and phosphatidylethanolamine in the biotin–deficient chick. Watkins BA. **Poult Sci** 1989 May; 68(5):698–705

BIOSYNTHESIS

Formation of 6,13–dihydroxyoctadecatrienoic acid isomers from gamma–linolenic acid. Kim MR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1154–60

BLOOD

Effect of dietary alpha–linolenate/linoleate balance on collagen–induced platelet aggregation and serotonin release in rats. Watanabe S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1572–5

DEFICIENCY

Brain cell and tissue recovery in rats made deficient in n–3 fatty acids by alteration of dietary fat. Bourre JM, et al. **J Nutr** 1989 Jan;119(1):15–22

ISOLATION & PURIFICATION

Three new and bioactive icosanoids from the temperate red marine alga Farlowia mollis. Solem ML, et al. **Lipids** 1989 Apr;24(4):256–60

METABOLISM

Age–related changes in linoleate and alpha–linolenate desaturation by rat liver microsomes. Hrelia S, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):348–55

Formation of 6,13–dihydroxyoctadecatrienoic acid isomers from gamma–linolenic acid. Kim MR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1154–60

Relationship between essential fatty acid requirements of aquatic animals and the capacity for bioconversion of linolenic acid to highly unsaturated fatty acids. Kanazawa A, et al. **Comp Biochem Physiol [B]** 1979;63(3):295–8

Metabolism of oleic, linoleic and linolenic acids in gourami (Trichogaster cosby) fry and mature females. Rahn CH, et al. **Comp Biochem Physiol [B]** 1977;58(1):17–20

Is the origin of atopy linked to deficient conversion of omega–6–fatty acids to prostaglandin E1? Melnik BC, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):557–63 (78 ref.)

Effect of the dietary alpha–linolenate/linoleate balance on lipid compositions and learning ability of rats. II. Discrimination process, extinction process, and glycolipid compositions. Yamamoto N, et al. **J Lipid Res** 1988 Aug; 29(8):1013–21

Alpha–linolenic acid [letter] Romans JR. **Lancet** 1989 Feb 25;1(8635):434

Dietary saturated fat level alters the competition between alpha–linolenic and linoleic acid. Garg ML, et al. **Lipids** 1989 Apr;24(4):334–9

In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate. Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91–6

PHARMACOLOGY

Linoleic acid and linolenic acid: effect on permeability properties of cultured endothelial cell monolayers. Hennig B, et al. **Am J Clin Nutr** 1989 Feb;49(2):301–5

Effects of dietary alpha– and gamma–linolenic acid on lipid metabolism in young and adult rats. Choi YS, et al. **Ann Nutr Metab** 1988;32(3):169–76

Effects of gammalinolenic acid on plasma lipoproteins and apolipoproteins. Ishikawa T, et al. **Atherosclerosis** 1989 Feb;75(2–3):95–104

Evidence for the regulation of fatty acid utilization in human sperm by docosahexaenoic acid. Jones RE, et al. **Biol Reprod** 1988 Aug;39(1):76–80

The effect of polyunsaturated fatty acids on rat adipocyte lipogenesis: the role of protein kinase C, calcium and calmodulin. Khokher MA, et al. **Diabetes Res** 1988 Jul; 8(3):139–41

The effects of polyunsaturated fatty acids (PUFAs) on the sleep parameters of the rat pups. Goldstein R. **Endocrinologie** 1988 Jul–Sep;26(3):155–8

Essential fatty acids prevent slowed nerve conduction in streptozotocin diabetic rats. Julu PO. **J Diabetic Complications** 1988 Oct–Dec;2(4):185–8

Prostaglandin E precursor fatty acids inhibit human IL–2 production by a prostaglandin E–independent mechanism. Santoli D, et al. **J Immunol** 1989 Aug 15;143(4):1303–9

Interactions between the metabolism of n–3 and n–6 fatty acids. Sprecher H. **J Intern Med Suppl** 1989;225(731):5–9 (20 ref.)

Suppression of acute and chronic inflammation by dietary gamma linolenic acid. Tate G, et al. **J Rheumatol** 1989 Jun;16(6):729–34

Effect of dietary alpha–linolenate/linoleate balance on mean survival time, incidence of stroke and blood pressure of spontaneously hypertensive rats. Shimokawa T, et al. **Life Sci** 1988;43(25):2067–75

Modulation of eicosanoid production and cell–mediated cytotoxicity by dietary alpha–linolenic acid in BALB/c mice. Fritsche KL, et al. **Lipids** 1989 Apr;24(4):305–11

Differential effects of dietary linoleic and alpha–linolenic acid on lipid metabolism in rat tissues. Garg ML, et al. **Lipids** 1988 Sep;23(9):847–52

Influence of dietary fat composition on intestinal absorption in the rat. Thomson AB, et al. **Lipids** 1989 Jun; 24(6):494–501

Effect of the dietary alpha–linolenate/linoleate balance on leukotriene production and histamine release in rats. Hashimoto A, et al. **Prostaglandins** 1988 Jul;36(1):3–16

The role of prostaglandins in the inhibition of cultured carcinoma cell growth produced by gamma–linolenic acid. Botha JH, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):119–23

[Action of evening primrose oil on cardiovascular risk factors in insulin–dependent diabetics] Uccella R, et al. **Clin Ter** 1989 Jun 15;129(5):381–8 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

alpha–Linolenic acid and long–chain omega–3 fatty acid supplementation in three patients with omega–3 fatty acid deficiency: effect on lymphocyte function, plasma and red cell lipids, and prostanoid formation. Bjerve KS, et al. **Am J Clin Nutr** 1989 Feb;49(2):290–300

Suppression of monosodium urate crystal–induced acute inflammation by diets enriched with gamma–linolenic acid and eicosapentaenoic acid. Tate GA, et al. **Arthritis Rheum** 1988 Dec;31(12):1543–51

Gamma–linolenic acid for attention–deficit hyperactivity disorder: placebo–controlled comparison to D–amphetamine. Arnold LE, et al. **Biol Psychiatry** 1989 Jan 15;25(2):222–8

The use of gamma linolenic acid, linoleic acid and natural vitamin E for the treatment of multicentric lymphoma in two dogs. Williams JH. **J S Afr Vet Assoc** 1988 Sep; 59(3):141–4

TOXICITY

Effect of black–pigmented Bacteroides gingivalis on cytotoxic activity of linolenic acid against mouse macrophages. Hashimoto Y, et al. **Kitasato Arch Exp Med** 1989 Apr;62(1):21–8

LINSEED OIL

PHARMACOLOGY

Linseed and cod liver oil induce rapid growth in a 7–year–old

girl with N-3- fatty acid deficiency. Bjerve KS, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep-Oct;12(5):521-5

LINURON see under **HERBICIDES, UREA**

LIONS see under **CARNIVORA**

LIOTHYRONINE see **TRIIODOTHYRONINE**

LIP

Lip numbness—sometimes a sinister symptom. Flower EA, et al. **Br Dent J** 1989 Jan 21;166(2):46-8

The lip-clip: a simple, low-impedance ground electrode for use in human electrophysiology. Türker KS, et al. **Brain Res Bull** 1988 Jul;21(1):139-41

Moustachology. Aggarwal SK, et al. **Indian J Dermatol** 1987 Jul;32(3):77-9

Epithelial HLA-DR expression in labial salivary glands in Sjögren's syndrome and non-specific sialadenitis. Speight PM, et al. **J Oral Pathol Med** 1989 Mar;18(3):178-83

The labial shield prosthesis. Herman GL. **N Y State Dent J** 1988 Oct;54(8):23

[Variety of cows and sires according to types of dermatoglyphics (patterns) of the nose-labial mirror of cattle] Trofimenko AL. **Tsitol Genet** 1988 Sep-Oct; 22(5):34-9 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Cohen's syndrome with diabetes mellitus. Nambu M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):84-8

Congenital sinuses of the lower lip: reappraisal of Van der Woude syndrome on the basis of nine patients. Srivastava S, et al. **Ann Plast Surg** 1989 Apr;22(4):316-20

Unilateral right lower lip sinus associated with an ipsilateral cleft of the lip and palate. Ratcliffe RJ, et al. **Br J Plast Surg** 1989 Jan;42(1):92-4 (17 ref.)

Surgical treatment of macrocheilia. Pitanguy I, et al. **Head Neck Surg** 1988 May-Jun;10(5):309-18 (28 ref.)

Cleft lip and palate, lower lip pits, and limb deficiency defects [see comments] Küster W, et al. **J Med Genet** 1988 Aug; 25(8):565-7, **Comment in:** J Med Genet 1989 May;26(5):347-8

Concurrent anomalies: cheilitis glandularis and double lip. Report of a case. Cohen DM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):397-9

Congenital double lip: a review of seven cases. Reddy KA, et al. **Plast Reconstr Surg** 1989 Sep;84(3):420-3

[Creating a Cupid's bow in lip deformities] Vissarionov VA. **Vestn Khir** 1988 Jun;140(6):101-3 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Integumental profile changes after surgical orthodontic correction of bimaxillary dentoalveolar protrusion in black patients. O'Reilly MT. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):242-8

Vertical dimensional changes of the lips in the North American black patient after four first-premolar extractions. Park S, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):152-60

Lower anterior face height and lip incompetence do not predict nasal airway obstruction. Hartgerink DV, et al. **Angle Orthod** 1989 Spring;59(1):17-23

Predictability of upper lip soft tissue changes with maxillary advancement. Stella JP, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):697-703

The mentalis muscle: an essential component of chin and lower lip position. Zide BM, et al. **Plast Reconstr Surg** 1989 Mar;83(3):413-20

BLOOD SUPPLY

[Quantitative measurement of microcirculation of human nailfold, lips, and tongue apex by applying laser Doppler technique] Han XM. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):491-3, 34 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Linear changes of the maxillary and mandibular lips. Mamandras AH. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):405-10

INJURIES

Upper lip reconstruction: use of the free superficial temporal artery hair-bearing flap. Lyons GB, et al. **Br J Plast Surg** 1989 May;42(3):333-6

Appliance therapy for perioral electrical burns: a conservative approach. Sadove AM, et al. **J Burn Care Rehabil** 1988 Jul-Aug;9(4):391-5

Delayed repair of an extensive lip laceration in a colt using an Estlander flap. Smyth GB, et al. **Vet Surg** 1988 Nov-Dec;17(6):350-2

INNERVATION

Substance-P-like immunoreactive subepithelial nerve plexuses in the labial mucosa of the mouse. Ichikawa H, et al. **Acta Anat (Basel)** 1989;134(4):283-5

Intrafascicular multi-unit recordings from the human infra-orbital nerve. Nordin M, et al. **Acta Physiol Scand** 1989 Feb;135(2):139-48

Mechanoreceptive units in the human infra-orbital nerve. Nordin M, et al. **Acta Physiol Scand** 1989 Feb;135(2):149-61

Contamination of trigeminal evoked potentials by muscular artifacts [letter] Leandri M, et al. **Ann Neurol** 1989 May; 25(5):527-8

Intraperineural localization of lamellated sensory corpuscles in the skin and oral mucosae of the adult cat and miniature pig. Tachibana T, et al. **J Neurocytol** 1989 Feb;18(1):61-9

Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. **Neurosci Res** 1989 Apr; 6(4):283-98

Mental nerve neuropathy: a symptom of Waldenström's macroglobulinemia. Klokkevold PR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):689-93

[Clinical manifestations and treatment of odontogenic neuropathy (neuritis) of the alveolar nerves] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):133-5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

A histological study of the philtrum. Lee ST. **Ann Acad Med Singapore** 1988 Jul;17(3):328-34

Significance of mucosal vs salivary gland changes in lip biopsies in the diagnosis of chronic graft-vs-host disease. Nakhleh RE, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):932-4

Epithelial dysplasia of the oral cavity and lips. Kaugars GE, et al. **Cancer** 1988 Nov 15;62(10):2166-70

A highly sensitive method for diagnosis of secondary amyloidosis by labial salivary gland biopsy. Delgado WA, et al. **J Oral Pathol Med** 1989 May;18(5):310-4

[Immunopathology of the labial salivary glands in Sjögren's syndrome and other autoimmune diseases] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):237-41 (Eng. Abstr.) **(Fre)**

[Use of cheiloscopy in the clinical evaluation of patients with cleft palate] Pruszewicz A, et al. **Otolaryngol Pol** 1988; 42(4):265-70 (Eng. Abstr.) **(Pol)**

[2 cases of limited cutaneo-muscular atrophy of occupational origin] Kieć-Swierczyńska M, et al. **Przegl Dermatol** 1986 Jul-Aug;73(4):290-2 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Perioral force measurement by a radiotelemetry device. Kato Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):410-4

Digital, labial, and velopharyngeal reaction times in normal speakers. Dalston RM, et al. **Cleft Palate J** 1988 Jul; 25(3):203-9

Sensorimotor characteristics of speech motor sequences. Gracco VL, et al. **Exp Brain Res** 1989;75(3):586-98

The development of skill in producing word-final English stops: kinematic parameters [published erratum appears in J Acoust Soc Am 1989 Jul;86(1):431] Flege JE. **J Acoust Soc Am** 1988 Nov;84(5):1639-52

Patterns of interarticulator phasing and their relation to linguistic structure [published erratum appears in J Acoust Soc Am 1989 Apr;85(4):1788] Nittrouer S, et al. **J Acoust Soc Am** 1988 Nov;84(5):1653-61

Some notes on syllable structure in articulatory phonology. Browman CP, et al. **Phonetica** 1988;45(2-4):140-55

Kinematic characteristics of postvocalic labial stop consonants produced by children and adults. Smith BL, et al. **Phonetica** 1987;44(4):227-37

PHYSIOPATHOLOGY

'Lip numbness—sometimes a sinister symptom' [letter] Flower A, et al. **Br Dent J** 1989 Jun 10;166(11):398

Lip function and eating after a stroke: a nursing perspective. Carr EK, et al. **J Adv Nurs** 1988 Jul;13(4):447-51

Lip movement in apraxia of speech. Robin DA, et al. **J Speech Hear Res** 1989 Sep;32(3):512-23

RADIATION EFFECTS

Radiosensitivity of mouse lip mucosa: influence of anesthesia, carbogen, and a new high O2 carrying perfluorochemical emulsion. Thomas C, et al. **Radiat Res** 1989 Jun; 118(3):476-87

Effect of continuous infusion of bleomycin on the time for completion of repair of sublethal radiation damage in mouse lip mucosa during fractionated irradiation. Vanuytsel L, et al. **Radiother Oncol** 1988 Aug;12(4):333-7

Kinetics of sublethal damage recovery in mouse lip mucosa comparing low and high-LET radiation. Scalliet P, et al. **Strahlenther Onkol** 1989 Apr;165(4):268-71

SURGERY

Reconstruction of cupid's bow: a quadrilateral flap technique. Thomson HG, et al. **Ann Plast Surg** 1989 Mar;22(3):195-202

A new technique for reconstructing half of the skin of the upper or lower lip. Orticochea M. **Br J Plast Surg** 1988 Sep;41(5):544-7

Deepithelialized mucosal-submucosal flaps to correct the "whistling lip" deformity. Rodgers CM, et al. **Cleft Palate J** 1989 Apr;26(2):136-40

Bilateral vermilion flap. A modification of Goldstein's technique. Sawada Y, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):257-9

Ornithine-vasopressin gangrene and reconstruction of the upper lip. Case report. Bütow KW, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):88-91

Reconstruction of soft tissues of the chin and lower lip region following excision of a basal cell carcinoma. Yeo JF, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):337-9

The influence of lip repair with and without soft-tissue undermining on facial growth in beagles. Bardach J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):747-59

Soft-tissue undermining with lip repair: influence on facial growth [letter] Kaplan EN. **Plast Reconstr Surg** 1989 Sep; 84(3):539-40

Repair of ruptured orbicularis oris in trumpet players [letter] Sullivan WG. **Plast Reconstr Surg** 1989 Mar;83(3):578

[One-stage Abbe's operation] Song RY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):3-6 **(Chi)**

[Esthetic and functional aspects of replacement-plasties of the upper lip] Cornelius CP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:171-4 **(Ger)**

[Correction of the narrow margin: lip margin eversion versus Gillies operation] Farmand M, et al. **Fortschr Kiefer Gesichtschir** 1989;34:114-7 **(Ger)**

[Correction of the whistling defect] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1989;34:117-20 **(Ger)**

[Surgical lengthening of the short upper lip] Krüger E. **Fortschr Kiefer Gesichtschir** 1989;34:111-4 **(Ger)**

[Correction of esthetic disorders following cleft lip-plasties] Scheunemann H, et al. **Fortschr Kiefer Gesichtschir** 1989; 34:109-11 **(Ger)**

[Enlargement labial commissuroplasty using the Préaux-Texier-Réal method. Our personal experience] Volpato B, et al. **Minerva Stomatol** 1989 Jun;38(6):645-50 (Eng. Abstr.) **(Ita)**

[Correction of a deformity of the upper lip after primary plastic surgery of bilateral cleft lip] Vissarionov VA. **Vestn Khir** 1988 Aug;141(8):86-8 (Eng. Abstr.) **(Rus)**

LIP DISEASES

[Psoriasis of the prolabium. Clinical note] Nicolò M, et al. **Minerva Stomatol** 1988 May;37(5):381-3 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Ornithine-vasopressin gangrene and reconstruction of the upper lip. Case report. Bütow KW, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):88-91

Naproxen-induced bullous photodermatitis. Rivers JK, et al. **Med J Aust** 1989 Aug 7;151(3):167-8

COMPLICATIONS

Tardive dyskinesia with complaints of pain [letter] Hierholzer RW. **Am J Psychiatry** 1989 Jun;146(6):802

CONGENITAL

Congenital lateral fistula of the upper lip. Report of a case. Takenoshita Y. **J Craniomaxillofac Surg** 1989 May; 17(4):186-9 (13 ref.)

Simultaneous occurrence of a congenital lateral upper lip sinus and congenital gingival cyst: a case report and discussion of pathogenesis. Garlick JA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):317-23

DIAGNOSIS

[Orthodontic failures following overlooked orofacial dyskinesias] Tränkmann J. **Fortschr Kieferorthop** 1988 Aug; 49(4):388-99 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Response of plasma cell orificial mucositis to topically applied steroids [letter] Jones SK, et al. **Arch Dermatol** 1988 Dec; 124(12):1871-2

ETIOLOGY

'Lip numbness—sometimes a sinister symptom' [letter] Jagger RG. **Br Dent J** 1989 Apr 22;166(8):281-2

An allergic reaction to latex rubber gloves. March PJ. **J Am Dent Assoc** 1988 Oct;117(5):590-1

Ptosis of the chin and lip incompetence: consequences of lost mentalis muscle support. Rubens BC, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):359-66 (39 ref.)

PARASITOLOGY

Oro-facial cysticercosis. Mishra YC, et al. **Ann Dent** 1988 Winter;47(2):23-5

[Myiasis: facial location. Apropos of a case of Dermatobia hominis infection] Nderagakura F, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):7-16 (42 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Verruciform xanthoma of the lip: two lesions in a woman [letter] Blanco C, et al. **Am J Dermatopathol** 1988 Apr; 10(2):176-8

Oral acanthosis nigricans: report of a case and comparison of oral and cutaneous pathology. Hall JM, et al. **Am J Dermatopathol** 1988 Feb;10(1):68-73

Sialolithiasis of an accessory salivary gland. Bainton R, et al. **Br Dent J** 1989 Mar 25;166(6):216-7

Labial and gingival enlargement in leprosy. High AS, et al. **Br Dent J** 1988 Nov 19;165(10):371-2

Kawasaki syndrome. Ogden GR, et al. **Br Dent J** 1988 Nov 5;165(9):327–8

Painless swelling of the lower lip. Correll RW, et al. **J Am Dent Assoc** 1988 Nov;117(6):761–2

Painless verrucoid plaque on the lower lip. Jensen JL, et al. **J Am Dent Assoc** 1989 Feb;118(2):217–8

Multiple keratoacanthomas involving the head and neck. Stewart RG, et al. **Otolaryngol Head Neck Surg** 1988 Jul; 99(1):55–8

[A morphologic approach to the mobile oral and pharyngeal structures; a preliminary statistical study of a population of children presenting with a disorder of labiolingual behavior] Doual-Bisser A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):131–40 (Eng. Abstr.) (Fre)

SURGERY

Deepithelialized mucosal–submucosal flaps to correct the "whistling lip" deformity. Rodgers CM, et al. **Cleft Palate J** 1989 Apr;26(2):136–40

Surgical treatment of macrocheilia. Pitanguy I, et al. **Head Neck Surg** 1988 May–Jun;10(5):309–18 (28 ref.)

Vermilionectomy using the W-plasty technique. Fernandez Vozmediano JM, et al. **J Dermatol Surg Oncol** 1989 Jun; 15(6):627–9

Treatment of severe microstomia caused by swallowing of caustic soda. Takato T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):20–4

LIP NEOPLASMS

Metastases from squamous cell carcinoma of the skin and lip. An analysis of twenty-seven cases. Dinehart SM, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):241–8

[Dissemination of an epidermoid carcinoma of the lip through the mental nerve (letter)] Peñarrocha M, et al. **Med Clin (Barc)** 1988 May 28;91(1):37–8 (Spa)

DIAGNOSIS

Neuroendocrine carcinoma of the lip (Merkel cell tumour) examined by electron microscopy and immunohistochemistry. Boysen M, et al. **J Laryngol Otol** 1989 May;103(5):519–23

[The diagnosis of precancerous diseases and cancer of the lip and oral mucosa by using contact fluorescence biomicroscopy] Filiurin MD. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):19–21 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Carcinoma of the lip in Auckland, New Zealand, 1969–1987. Grover R, et al. **Head Neck** 1989 May–Jun;11(3):264–8

[Epidemiologic analysis of lip cancer in a 15-year period in the region surrounding Varaždin] Dvorski I. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):25–6 (Eng. Abstr.) (Scr)

PATHOLOGY

Angiomyoma of the upper lip: report of a case with electron microscopic and immunohistochemical observation. Maeda Y, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):236–42

Focal dermal hypoplasia syndrome with incomplete transverse facial cleft and tumour of the lips. Mizuno A, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):71–6

Slowly enlarging, asymptomatic mass in the upper lip. Kenny KF, et al. **J Am Dent Assoc** 1989 Jan;118(1):95–7

Bluish dome-shaped nodule of the lip. Miller CS, et al. **J Am Dent Assoc** 1989 Jun;118(6):745–7

Large nonpainful swelling of the lower lip. Zussman KM, et al. **J Am Dent Assoc** 1988 Dec;117(7):849–50

Granuloma pyogenicum (pregnancy tumor). Lim SJ, et al. **J Dermatol Surg Oncol** 1989 Apr;15(4):369, 472

Eccrine spiradenoma: report of a case. Yun SS, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):905–7

Parakeratosis of the labial mucosa in zinc-deficient rats. Giunta JL, et al. **J Oral Pathol** 1988 Apr;17(4):186–90

[Pathological and clinical analysis of 102 cases of lip carcinoma] Zhang ZX. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):313–5 (Eng. Abstr.) (Chi)

[Determining the prognosis of spinocellular cancer of the skin and lower lip based on the TNM system and additional parameters] Breuninger H, et al. **Hautarzt** 1988 Jul; 39(7):430–4 (Eng. Abstr.) (Ger)

[The onset of double metachronous neoplasms 29 years after the diagnosis of Hodgkin's disease] Bisi D, et al. **Minerva Med** 1989 May;80(5):511–4 (Eng. Abstr.) (Ita)

RADIOTHERAPY

[Clinical and esthetic results of roentgenotherapy of cancer of the lower lip] Radziszewska J, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):284–9 (Eng. Abstr.) (Pol)

SURGERY

Necrotizing sialometaplasia masquerading as residual cancer of the lip. Granick MS, et al. **Ann Plast Surg** 1988 Aug; 21(2):152–4

Recurrent squamous cell carcinoma of the lower lip. Fazekas-May M, et al. **Head Neck** 1989 Mar–Apr; 11(2):188–90

Long-term results in treating squamous cell carcinoma of the lip, oral cavity, and oropharynx. Hemprich A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):39–42

Bilateral vermilion flap. A modification of Goldstein's technique. Sawada Y, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):257–9

Minor salivary gland tumors of the lip and buccal mucosa. Weber RS, et al. **Laryngoscope** 1989 Jan;99(1):6–9

Division of the pedicle in the Abbé flap [letter] Garcia A, et al. **Plast Reconstr Surg** 1989 Jul;84(1):173

Outpatient surgical treatment of lip carcinomas: immediate and long-term results. Zurrida S, et al. **Tumori** 1989 Jun 30;75(3):263–5

[Esthetic and functional aspects of replacement-plasties of the upper lip] Cornelius CP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:171–4 (Ger)

[An unusual case of granulosa cell tumor of the lip] Sammartino G, et al. **Minerva Stomatol** 1988 Jul;37(7):533–7 (28 ref.) (Eng. Abstr.) (Ita)

[Effect of combined treatment of patients with cancer of the lip with metastases to lymph nodes] Mazurkiewicz M, et al. **Wiad Lek** 1988 Dec 15;41(24):1639–42 (Eng. Abstr.) (Pol)

[Tumors of the lip] Nieto A, et al. **An Otorrinolaringol Ibero Am** 1989;16(2):159–64 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Anchoring fibrils in a spindle cell squamous carcinoma. Ghadially R, et al. **J Submicrosc Cytol Pathol** 1989 Apr; 21(2):249–57

VETERINARY

Giant-cell tumour of soft tissue in two Sprague–Dawley rats. Majeed SK, et al. **J Comp Pathol** 1988 Aug;99(2):235–9

LIPASE

Immobilization/stabilization of lipase from Candida rugosa. Otero C, et al. **Appl Biochem Biotechnol** 1988 Nov; 19(2):163–75

Secondary structures of rat lipolytic enzymes: circular dichroism studies and relation to hydrophobic moments. Roberts IM, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):95–101

Acetylation of Lys-373 in porcine pancreatic lipase after reaction of the enzyme or its C-terminal fragment [corrected] with p-nitrophenyl acetate [published erratum appears in Biochimie 1989 Apr;71(4):611] De Caro JD, et al. **Biochimie** 1988 Dec;70(12):1785–90

A simple method for the separation of triacylglycerols from fatty acids released in lipase assays. Borensztajn J, et al. **J Lipid Res** 1988 Nov;29(11):1549–52

Crystallization and preliminary X-ray study of horse pancreatic lipase. Lombardo D, et al. **J Mol Biol** 1989 Jan 5;205(1):259–61

Homology of Drosophila yolk proteins and the triacylglycerol lipase family. Terpstra P, et al. **J Mol Biol** 1988 Aug 5;202(3):663–5

Recent advances in the purification, characterization and structure determination of lipases. Antonian E. **Lipids** 1988 Dec;23(12):1101–6 (46 ref.)

A unique case of intravenous injection of fungal "pancreatic" enzymes causing shock and proteolysis of haemostatic proteins. Seitz R, et al. **Toxicology** 1989 Apr;55(1–2):239–46

The versatility of lipases for industrial uses. Harwood J. **Trends Biochem Sci** 1989 Apr;14(4):125–6

ADMINISTRATION & DOSAGE

High compared with standard dose lipase pancreatic supplement. Robinson PJ, et al. **Arch Dis Child** 1989 Jan; 64(1):143–5

Immobilization of enzyme by microencapsulation and application of the encapsulated enzyme in the catalysis. Iso M, et al. **J Microencapsul** 1989 Apr–Jun;6(2):165–76

Uric acid serum concentrations in CF-children after pancreatic enzyme supplementation. Wiersbitzky S, et al. **Padiatr Grenzgeb** 1989;28(3):171–3

ADVERSE EFFECTS

Effect of pancreatic enzyme supplements on iron absorption. Zempsky WT, et al. **Am J Dis Child** 1989 Aug; 143(8):969–72

ANALYSIS

A comparative study of two lipases from different strains of Staphylococcus aureus. Rollof J, et al. **APMIS** 1989 Jan;97(1):9–13

Alterations of serum high-density lipoproteins and hepatic lipase activity in congenital hypothyroidism. Tenenbaum D, et al. **Biol Neonate** 1988;54(5):241–5

Wako UV colorimetric pancreatic lipase assay with 1,2-dilinoleoylglycerol as substrate evaluated. Rebbrecht JH, et al. **Clin Chem** 1989 Jul;35(7):1540–1

Immunologically-derived pancreatic amylase, pancreatic lipase, and total amylase compared as predictors of pancreatic inflammation. Van Lente F, et al. **Clin Chem** 1989 Jul;35(7):1542

Lipolytic enzymes of the digestive organs of the crown-of-thorns starfish (Acanthaster planci): comparison of the stomach and pyloric caeca. Brahimi-Horn MC, et al. **Comp Biochem Physiol [B]** 1989;92(4):637–43

Comparative studies of canine colipase and lipases from bovine, porcine, canine, human and rat pancreases. Lee PC. **Comp Biochem Physiol [B]** 1978;60(4):373–8

Enzyme activity electrophoresis and rocket immunoelectrophoresis for the qualitative and quantitative analysis of Geotrichum candidum lipase activity. Jacobsen T, et al. **Electrophoresis** 1989 Jan;10(1):49–52

Human gastric lipase. The N-terminal tetrapeptide is essential for lipid binding and lipase activity. Bernbäck S, et al. **Eur J Biochem** 1989 Jul 1;182(3):495–9

Structural features of lipoprotein lipase. Lipase family relationships, binding interactions, non-equivalence of lipase cofactors, vitellogenin similarities and functional subdivision of lipoprotein lipase. Persson B, et al. **Eur J Biochem** 1989 Jan 15;179(1):39–45

Lipases in human milk: effect of gestational age and length of lactation on enzyme activity. Freed LM, et al. **J Am Coll Nutr** 1989 Apr;8(2):143–50

Enhanced inactivation of bacterial lipases and proteinases in whole milk by a modified ultra high temperature treatment. Bucky AR, et al. **J Dairy Res** 1988 Aug;55(3):373–80

Assay for triacylglycerol lipase by a rapid thin-layer chromatographic technique. Hills MJ, et al. **J Lipid Res** 1988 Oct;29(10):1397–9

A novel spectrophotometric assay for lipase activity utilizing cis-parinaric acid. Rogel AM, et al. **Lipids** 1989 Jun; 24(6):518–25

An enzyme immunoassay for the determination of lipase in human duodenal fluid. Hafkenscheid JC, et al. **Pancreas** 1989;4(1):90–4

Enzyme histochemical and ultrastructural approach in orotic acid–induced fatty liver and their recovery process in Wistar rats. Murakoshi M, et al. **Tokai J Exp Clin Med** 1988 Feb;13(1):37–43

[Triglyceride lipase from the rabbit liver] Soliternova IB, et al. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):14–9 (Eng. Abstr.) (Rus)

[A radioindicator method of determining the activity of pancreatic lipase in the body] Kendysh IN, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):137–40 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Effect of ethanol and acetaldehyde on the enzymatic activity of human pancreatic juice in vitro. I. Inhibition of alpha-amylase and lipase activity. Zakrzewska I, et al. **Acta Med Pol** 1988;29(1–2):41–5

Inactivation of human lipase by proteases. Thiruvengadam R, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G476–81

Inhibition of pancreatic lipase in vitro by the covalent inhibitor tetrahydrolipstatin. Hadváry P, et al. **Biochem J** 1988 Dec 1;256(2):357–61

Inhibition of human milk bile-salt-dependent lipase by boronic acids. Implication to the bile salts activator effect. Abouakil N, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):215–20

Mode of action of tetrahydrolipstatin: a derivative of the naturally occurring lipase inhibitor lipstatin. Borgström B. **Biochim Biophys Acta** 1988 Oct 14;962(3):308–16

Dyslipoproteinemia and an inhibitor of lipolytic enzymes in Weber-Christian disease. Shirai K, et al. **Jpn J Med** 1989 May–Jun;28(3):366–73

BIOSYNTHESIS

Synthesis and contents of pancreatic exportable enzymes. Effect of oleic acid intraduodenal administration. Calvo EL, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(2):145–50

Characterization of a pyoverdine-deficient mutant of Pseudomonas fluorescens impaired in the secretion of extracellular lipase. Fernandez L, et al. **Arch Microbiol** 1988;150(6):523–8

Measurement of pancreatic enzyme synthesis in humans. Problems in patients with calcific pancreatitis. O'Keefe SJ, et al. **Int J Pancreatol** 1989 Feb;4(1):13–27

Heparin induces the expression of hepatic triglyceride lipase in a human hepatoma (HepG2) cell line. Busch SJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9527–32

Human hepatoma (HepG2) cells secrete a single 65 K dalton triglyceride lipase immunologically identical to postheparin plasma hepatic lipase. Busch SJ, et al. **Life Sci** 1989; 45(7):615–22

[Cytophysiology of Penicillium solitum: a producer of lipase] Toskueva EP, et al. **Antibiot Khimioter** 1988 Sep; 33(9):647–50 (Eng. Abstr.) (Rus)

BLOOD

Imipenem-associated elevation of amylase and lipase [letter] Patel SA, et al. **Am J Gastroenterol** 1989 Jan;84(1):80–1

Circulating concentrations of trypsin-like immunoreactivity and activities of lipase and amylase after pancreatic duct ligation in dogs. Simpson KW, et al. **Am J Vet Res** 1989 May;50(5):629–32

Lipase activity and properties in serum of chronic alcoholics. Asvesta S, et al. **Ann Biol Clin (Paris)** 1988;46(7):435–8

Role of hepatic-triglyceride lipase activity in the association between intra-abdominal fat and plasma HDL cholesterol in obese women. Després JP, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):485–92

Purification and characterization of lipoprotein lipase and

hepatic triglyceride lipase from human postheparin plasma: production of monospecific antibody to the individual lipase. Ikeda Y, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):254–69

Amylase, isoamylase, and lipase activities in cyclosporine-treated rats. Elalamy I, et al. **Clin Chem** 1988 Dec;34(12):2583

Diagnostic value of measuring pancreatic lipase and the P3 isoform of the pancreatic amylase isoenzyme in serum of hospitalized hyperamylasemic patients. Panteghini M, et al. **Clin Chem** 1989 Mar;35(3):417–21

Lipase activity measured in serum by a continuous-monitoring pH-Stat technique—an update. Tietz NW, et al. **Clin Chem** 1989 Aug;35(8):1688–93

The importance of objective data in the diagnosis of pancreatitis. Lott JA, et al. **Clin Chim Acta** 1989 Jul 31; 183(1):33–40

Application of two monoclonal antibodies to either an immunosorbent enzyme assay or a competitive binding enzyme immunoassay for human serum pancreatic lipase. Ohkaru Y, et al. **Clin Chim Acta** 1989 Jul 14;182(3):295–300

Serum enzyme changes after ERCP [letter] Tulassay Z. **Endoscopy** 1989 Jul;21(4):197–8

Correlates of amylase and lipase levels in chronic dialysis patients. Caruana RJ, et al. **Int J Artif Organs** 1988 Nov; 11(6):454–8

Serum amylase, isoamylase, and lipase in the acute abdomen. Their diagnostic value for acute pancreatitis. Lin XZ, et al. **J Clin Gastroenterol** 1989 Feb;11(1):47–52

Monoclonal antibodies that distinguish between active and inactive forms of human postheparin plasma hepatic triglyceride lipase. Mao SJ, et al. **J Lipid Res** 1988 Aug; 29(8):1023–9

Use of a fluorescent radiolabeled triacylglycerol as a substrate for lipoprotein lipase and hepatic triglyceride lipase. Dousset N, et al. **Lipids** 1988 Jun;23(6):605–8

[Differentiation of pancreatic lipase and pseudolipase serum activity] Kocna P, et al. **Sb Lek** 1989 Mar;91(2–3):33–9 (Eng. Abstr.) (Cze)

[Serum lipase and amylase levels in chronic renal failure: interpretation of results—effects of extrarenal purification] Thierry FX, et al. **Nephrologie** 1988;9(6):263–7 (Eng. Abstr.) (Fre)

[Acute pancreatitis: new diagnostic possibilities] Dati F, et al. **Ric Clin Lab** 1988;18 Suppl 1:81–94 (32 ref.) (Ita)

[Age-related changes in serum protein and serum enzymes] Miyata S. **Rinsho Byori** 1988 Oct;36(10):1158–61 (Jpn)

[Effect of intravenous glucose load on post-heparin lipoprotein lipase and hepatic lipase activities in the plasma of patients with cerebral infarction] Barycki J. **Wiad Lek** 1988 Jul 1;41(13):860–5 (Eng. Abstr.) (Pol)

[Relation between blood hydrolases and small-intestinal contents] Korot'ko GF, et al. **Vopr Pitan** 1988 May–Jun; (3):48–52 (Eng. Abstr.) (Rus)

DEFICIENCY

Large buoyant LDL-like particles in hepatic lipase deficiency. Auwerx JH, et al. **Arteriosclerosis** 1989 May–Jun;9(3):319–25

Lipoprotein abnormalities associated with lipopolysaccharide-induced lecithin: cholesterol acyltransferase and lipase deficiency. Auerbach BJ, et al. **J Biol Chem** 1989 Jun 15;264(17):10264–70

The beta very low density lipoprotein present in hepatic lipase deficiency competitively inhibits low density lipoprotein binding to fibroblasts and stimulates fibroblast acyl-CoA:cholesterol acyltransferase. Connelly PW, et al. **J Biol Chem** 1988 Oct 5;263(28):14184–8

Lipase deficiencies. Greten H, et al. **J Inherited Metab Dis** 1988;11 Suppl 1:29–32 (8 ref.)

GENETICS

Changes in mRNA levels of rat pancreatic lipase in the early days of consumption of a high-lipid diet. Wicker C, et al. **Eur J Biochem** 1989 Apr 1;180(3):563–7

Cloning, sequencing and expression of the lipase gene from Pseudomonas fragi IFO-12049 in E. coli. Aoyama S, et al. **FEBS Lett** 1988 Dec 19;242(1):36–40

Structure of the canine pancreatic lipase gene. Mickel FS, et al. **J Biol Chem** 1989 Aug 5;264(22):12895–901

Chromosomal mapping and cloning of the lipase gene of Pseudomonas aeruginosa. Wohlfarth S, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):433–40

The codon CUG is read as serine in an asporogenic yeast Candida cylindracea. Kawaguchi Y, et al. **Nature** 1989 Sep 14;341(6238):164–6

Nucleotide sequence of rat adipose hormone sensitive lipase cDNA. Holm C, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9879

Ava-II RFLP at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4908

Xmn-1 and Bg1-II RFLPs at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6762

IMMUNOLOGY

Autoimmune hyperchylomicronemia. Kihara S, et al. **N Engl J Med** 1989 May 11;320(19):1255–9

ISOLATION & PURIFICATION

Rapid purification of detergent-solubilized bovine hormone-sensitive lipase by high performance hydrophobic interaction chromatography. Nilsson S, et al. **Biomed Chromatogr** 1989 Mar;3(2):82–7

Purification of lingual amylase from serous glands of rat tongue and characterization of rat lingual amylase and lingual lipase. Field RB, et al. **J Dent Res** 1989 Feb; 68(2):139–45

METABOLISM

Adsorption of alpha-amylase (EC 3.2.1.1) and lipase (EC 3.1.1.3) before and after substitution therapy in exocrine pancreatic insufficiency. Gregar I, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:233–43

Interfacial interactions between proteins and mammalian lipases. O'Connor CJ, et al. **Adv Colloid Interface Sci** 1987 Nov;28(1):1–34 (131 ref.)

Enhanced cholesteryl ester transfer activity in cyclophosphamide-treated rabbits: relationship with lipolytic enzymes. Dousset N, et al. **Adv Exp Med Biol** 1988;243:255–61

Diacylglycerol metabolism in isolated aortic smooth muscle cells. Severson DL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C11–7

A sensitive, inexpensive method for determining minute quantities of lipase activity. Huang J, et al. **Anal Biochem** 1989 Jun;179(2):413–7

Lipase modified for solubility in organic solvents. Baillargeon MW, et al. **Ann N Y Acad Sci** 1988;542:244–9

Lipases of Fonsecaea pedrosoi and Phialophora verrucosa. Okeke CN, et al. **Antonie Van Leeuwenhoek** 1989; 55(4):313–24

In vivo and in vitro release of lipoprotein lipase and hepatic lipase by low molecular weight heparins. Meraihi Z, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:286–93

Chylomicron-remnant uptake by freshly isolated hepatocytes. Effect of heparin and of hepatic triacylglycerol lipase. Sultan F, et al. **Biochem J** 1989 Mar 1;258(2):587–94

Investigation of the role of serum lipoprotein-associated peroxides in Adriamycin cardiotoxicity. Release of reduced glutathione from rat hearts perfused with lipase-hydrolyzed very low density lipoprotein fractions obtained from Adriamycin-treated and control rats. Thayer WS. **Biochem Pharmacol** 1989 Jun 15;38(12):1923–9

Kinetics of acylglycerol sequential hydrolysis by human milk bile salt activated lipase and effect of taurocholate as fatty acid acceptor. Wang CS, et al. **Biochemistry** 1988 Jun 28; 27(13):4834–40

Human milk bile-salt stimulated lipase: further investigations on the amino-acids residues involved in the catalytic site. Abouakil N, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):225–30

Fatty acids generated by gastric lipase promote human milk triacylglycerol digestion by pancreatic colipase-dependent lipase. Bernbäck S, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):286–93

Acid lipase activity in neonatal rat liver cell types. Effect of starvation. Burgaya F, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):566–9

Heparin decreases the degradation rate of hepatic lipase in Fu5AH rat hepatoma cells. A model for hepatic lipase efflux from hepatocytes. Cisar LA, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):196–204

The rabbit as an animal model of hepatic lipase deficiency. Clay MA, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):173–81

Enzymatic ester synthesis with continuous measurement of water activity. Goldberg M, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):359–62

Circulating and liver-bound salt-resistant hepatic lipases in the golden hamster. Jansen H, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):44–9

Hydrolysis of fluorescent pyrenetriacylglycerols by lipases from human stomach and gastric juice. Nègre A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):340–8

Multi-competitive enzymatic reactions in organic media: a simple test for the determination of lipase fatty acid specificity. Rangheard MS, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):20–8

Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225–33

Secretion of liver lipase activity by periportal and perivenous hepatocytes. Verhoeven AJ, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):239–42

Catalytic activity and association of pancreatic lipase. Antonov VK, et al. **Biochimie** 1988 Sep;70(9):1235–44 (27 ref.)

Minireview on pancreatic lipase and colipase. Chapus C, et al. **Biochimie** 1988 Sep;70(9):1223–34 (84 ref.)

Effect of sodium taurodeoxycholate, CaCl2 and albumin on the action of pancreatic lipase on droplets of trioleoylglycerol and the release of lipolytic products into aqueous media. Scow RO. **Biochimie** 1988 Sep; 70(9):1251–61

Pancreatic adaptation to dietary lipids is mediated by changes in lipase mRNA. Wicker C, et al. **Biochimie** 1988 Sep; 70(9):1277–83

Vitamin D deficiency, pancreatic and small intestinal enzyme development in rats. Jirapinyo P, et al. **Biol Neonate** 1988; 54(1):20–8

Effect of colchicine on alkaline triglyceride lipase activity and triglyceride content in rat skeletal muscle. Gorski J, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1555–9

Some properties of pancreatic lipase in Salmo gairdnerii Rich.:Km, effects of bile salts and Ca2+, gel filtrations. Leger C, et al. **Comp Biochem Physiol [B]** 1977;57(4):359–63

Ontogenic development of swine (Sus domesticus) adipose tissue lipases. Steffen DG, et al. **Comp Biochem Physiol [B]** 1978;59(3):195–8

Increase in pancreatic lipase and trypsin activity and their mRNA levels in streptozotocin-induced diabetic rats. Duan RD, et al. **Dig Dis Sci** 1989 Aug;34(8):1243–8

Triglyceride lipase activities in rat liver. Rodríguez-Fernández C, et al. **Enzyme** 1989;41(1):27–32

Role of a sulfhydryl group in gastric lipases. A binding study using the monomolecular-film technique. Gargouri Y, et al. **Eur J Biochem** 1989 Mar 15;180(2):367–71

Insulin-induced dephosphorylation of hormone-sensitive lipase. Correlation with lipolysis and cAMP-dependent protein kinase activity. Stralfors P, et al. **Eur J Biochem** 1989 Jun 15;182(2):379–85

Gastric lipase: localization in the human stomach. Abrams CK, et al. **Gastroenterology** 1988 Dec;95(6):1460–4

Extrapancreatic lipases [letter] DeNigris SJ. **Gastroenterology** 1989 Aug;97(2):551–2

Human preduodenal lipase is entirely of gastric fundic origin. Moreau H, et al. **Gastroenterology** 1988 Nov;95(5):1221–6

Mixed triglyceride breath test: a noninvasive test of pancreatic lipase activity in the duodenum. Vantrappen GR, et al. **Gastroenterology** 1989 Apr;96(4):1126–34

Immunocytolocalization of human gastric lipase in chief cells of the fundic mucosa. Moreau H, et al. **Histochemistry** 1989; 91(5):419–23

Effects of weight loss and weight maintenance on the serum lipids, lipoprotein lipase and hepatic triglyceride lipase activities in obese rats. Kasim S, et al. **Int J Obes** 1989 Jun;13(3):279–88

Cardiac triacylglycerol content and lipase activity during recovery from exercise. Podbielski B, et al. **J Appl Physiol** 1989 Mar;66(3):1099–103

Enzymatic transesterification with the lipase from Pseudomonas fragi 22.39 B in a non-aqueous reaction system. Nishio T, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):681–2

Production of optically active esters and alcohols from racemic alcohols by lipase-catalyzed stereoselective transesterification in non-aqueous reaction system. Nishio T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):510–2

Modification of low density lipoprotein by lipoprotein lipase or hepatic lipase induces enhanced uptake and cholesterol accumulation in cells. Aviram M, et al. **J Biol Chem** 1988 Oct 25;263(30):15416–22

Hepatic lipase in the rat ovary. Ovaries cannot synthesize hepatic lipase but accumulate it from the circulation. Hixenbaugh EA, et al. **J Biol Chem** 1989 Mar 5; 264(7):4222–30

The fatty liver dystrophy (fld) mutation. A new mutant mouse with a developmental abnormality in triglyceride metabolism and associated tissue-specific defects in lipoprotein lipase and hepatic lipase activities. Langner CA, et al. **J Biol Chem** 1989 May 15;264(14):7994–8003

Rapid radio thin-layer chromatography for assay of lipase-catalyzed esterification and interesterification reactions. Schuch R, et al. **J Chromatogr** 1988 Oct 26; 450(3):448–51

A rapid and sensitive separation of retinol and retinyl palmitate using a small, disposable bonded-phase column: kinetic applications. O'Connor CJ, et al. **J Lipid Res** 1988 Dec;29(12):1693–7

Lipoprotein lipase and hepatic lipase mRNA tissue specific expression, developmental regulation, and evolution. Semenkovich CF, et al. **J Lipid Res** 1989 Mar;30(3):423–31

Application of encapsulated enzyme as a continuous packed-bed reactor. Iso M, et al. **J Microencapsul** 1989 Jul–Sep;6(3):285–99

Effects of bile salt-stimulated lipase-treated triglycerides and free fatty acids on extracellular stages of Eimeria tenella. Winterrowd CA, et al. **J Protozool** 1989 Mar–Apr; 36(2):146–9

Correlation of plasma progesterone concentrations to ovarian H-type lipase activity during pseudopregnancy in the rat. Gåfvels M, et al. **J Reprod Fertil** 1989 Jul;86(2):589–98

Simple high performance liquid chromatography methods for monitoring lipase reactions. Ergan F, et al. **Lipids** 1989 Jan;24(1):76–8

Determination of triacylglycerol lipase activity using carbon-13-labeled triacylglycerols and nuclear magnetic resonance spectroscopy: evidence that hepatic lipase hydrolyzes medium-chain triacylglycerols. Diman RJ, et al. **Magn Reson Med** 1989 Feb;9(2):273–7

Role of the alkaline TG lipase in regulating intramuscular TG content. Oscai LB, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):539–44 (53 ref.)

Activities of lipoprotein lipase and hepatic lipase on long- and medium-chain triglyceride emulsions used in parenteral nutrition. Lutz O, et al. **Metabolism** 1989 Jun;38(6):507–13

Pancreatic lipase and colipase activity increase in pancreatic acinar tissue of diabetic rats. Duan RD, et al. **Pancreas**

1989;4(3):329–34
The role of calcium ions and bile salts on the pancreatic lipase–catalyzed hydrolysis of triglyceride emulsions stabilized with lecithin. Alvarez FJ, et al. **Pharm Res** 1989 Jun;6(6):449–57
Development of lipase activity in yolk membrane and pancreas of young turkeys. Escribano F, et al. **Poult Sci** 1988 Jul;67(7):1089–97
Human gastric lipase. Effects of fatty acid and bovine serum albumin on in vitro activity. Kaminsky S, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):583–7
Catalytic antibodies with lipase activity and R or S substrate selectivity. Janda KD, et al. **Science** 1989 Apr 28; 244(4903):437–40
Heparin and bleeding: an association with lipase release. Barrowcliffe TW, et al. **Thromb Haemost** 1988 Dec 22; 60(3):434–6
Release of lipoprotein lipase and hepatic triglyceride lipase in rats by heparin and other sulphated polysaccharides. Williams SP, et al. **Thromb Res** 1989 Aug 1;55(3):361–8
Renal disposition of amylase, lipase, and lysozyme in the dog. Jacobs RM. **Vet Pathol** 1988 Nov;25(6):443–9
[Comparison of fungal lipase and pancreatic lipase in exocrine pancreatic insufficiency in man. Study of their in vitro properties and intraduodenal bioavailability] Moreau J, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):787–92 (Eng. Abstr.) (Fre)
[The pH dependence of lipase and trypsin activity] Gerber B, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):190–3 (Eng. Abstr.) (Ger)
[Pancreatico–biliary secretion in enteral hyperoxaluria] Möller T, et al. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(6):315–20 (Eng. Abstr.) (Ger)
[The role and mechanism of lysosomal acid lipase activity] Piskorska D, et al. **Przegl Lek** 1988;45(8):637–40 (37 ref.) (Pol)
[Localization and dynamics of lipase accumulation in Penicillium solitum hyphae] Toskueva EP. **Antibiot Khimioter** 1988 Jul;33(7):499–502 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Interference of Staphylococcus aureus lipase with human granulocyte function. Rollof J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):505–10
A comparison of pancreatitis induced by high or low pressure injections of enzymes into the canine pancreatic duct. Schiller WR, et al. **Int J Pancreatol** 1989 Apr;4(3):281–90
On the biological occurrence and regulation of 1–acyl and 1–O–alkyl–diradylglycerols in human neutrophils. Selective destruction of diacyl species using Rhizopus lipase. Tyagi SR, et al. **J Biol Chem** 1989 Aug 5; 264(22):12977–82

PHYSIOLOGY

Bile–salt–activated lipase: effect on kitten growth rate. Wang CS, et al. **Am J Clin Nutr** 1989 Mar;49(3):457–63
Effect of lipoprotein lipase and hepatic triglyceride lipase activity on the distribution of apolipoprotein E among the plasma lipoproteins. Gibson JC, et al. **Atherosclerosis** 1988 Sep;73(1):45–55
Hydrolysis of triacylglycerol arachidonic and linoleic acid ester bonds by human pancreatic lipase and carboxyl ester lipase. Chen Q, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):372–85

SECRETION

Cell–density–dependent release of hepatic lipase from cultured rat hepatocytes. Jensen E, et al. **Horm Metab Res** 1989 Jan;21(1):4–7
The effect of a new synthetic cholinergic compound (aclatonium napadisilate) on interdigestive motility and pancreatic function in humans. Kölbel CB, et al. **Int J Pancreatol** 1989 Oct;5(3):273–9
Effects of CCK–8 in combination with natural or synthetic secretin on amylase, lipase, trypsin, and chymotrypsin secretion in rats. Rösch T, et al. **Int J Pancreatol** 1989 Oct;5(3):249–61
Human gastric lipase: variations induced by gastrointestinal hormones and by pathology. Moreau H, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1044–8
[The role of calcium in the release of digestive enzymes by acinar cells of the pancreas] Grin'kiv MIa, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):13–8 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Use of pancreatic Schilling test to determine efficiency of pancreatic enzyme delivery in pancreatic insufficiency. Brugge WR, et al. **Dig Dis Sci** 1988 Oct;33(10):1226–32
Acid resistant lipase as replacement therapy in chronic pancreatic exocrine insufficiency: a study in dogs. Griffin SM, et al. **Gut** 1989 Jul;30(7):1012–5
Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92
Human pancreatic graft fistula exocrine suppression by oral pancreatic enzymes. Burton FR, et al. **Transplantation** 1989 May;47(5):888–91

URINE

Fractional urinary clearance of immunoreactive lipase in chronic pancreatic disease. Benini L, et al. **J Clin Chem Clin Biochem** 1988 Aug;26(8):527–9
Renal handling of 125I–labelled homologous pancreatic lipase and amylase in the rat. Mályusz M, et al. **J Clin Chem Clin Biochem** 1988 Oct;26(10):611–5

LIPECTOMY

Closed suction lipoplasty on 1078 patients: Illouz told the truth. Hetter GP. **Aesthetic Plast Surg** 1988 Aug; 12(3):183–5
Present results of fat injection. Illouz YG. **Aesthetic Plast Surg** 1988 Aug;12(3):175–81
The use of high–dose lidocaine in wetting solutions for lipoplasty. Lewis CM, et al. **Ann Plast Surg** 1989 Apr; 22(4):307–9
Estimating the ideal peak flow rate [letter] Glass R. **Aust Fam Physician** 1989 Feb;18(2):168
Suction lipectomy [editorial] Emmett AJ. **Aust N Z J Surg** 1989 Aug;59(8):599
Suction lipectomy: review of 888 areas in 300 patients. Rigg BM. **Aust N Z J Surg** 1989 Aug;59(8):631–6
Lipoplasty. **Clin Plast Surg** 1989 Apr;16(2):217–403
The use of lipoplasty in contouring and debulking of flaps. Baird W, et al. **Clin Plast Surg** 1989 Apr;16(2):395–9
Body contour surgery. Baroudi R. **Clin Plast Surg** 1989 Apr; 16(2):263–77 (38 ref.)
Large volume lipoplasty. Clayton DN, et al. **Clin Plast Surg** 1989 Apr;16(2):305–12
Lipoplasty of the knees and anterior thighs. Fodor PB. **Clin Plast Surg** 1989 Apr;16(2):361–4
Lipoplasty: the informed consent and medicolegal considerations. Greenberg G. **Clin Plast Surg** 1989 Apr; 16(2):375–9
Cheek and neck sculpturing: simultaneous buccal fat pad removal and subcutaneous cheek and neck lipoplasty. Guerrerosantos J, et al. **Clin Plast Surg** 1989 Apr; 16(2):343–53
Improved results with closed facial suction. Hetter GP. **Clin Plast Surg** 1989 Apr;16(2):319–32 (13 ref.)
Blood and fluid replacement for lipoplasty procedures. Hetter GP. **Clin Plast Surg** 1989 Apr;16(2):245–8
Refinements in the lipoplasty technique. Illouz YG. **Clin Plast Surg** 1989 Apr;16(2):217–33
Lipoplasty of the iliac crest and lateral femorals. Lewis CM. **Clin Plast Surg** 1989 Apr;16(2):257–62
Lipoplasty in males. Lewis CM. **Clin Plast Surg** 1989 Apr; 16(2):355–60
Anatomy and physiology of adipose tissue. Markman B. **Clin Plast Surg** 1989 Apr;16(2):235–44 (63 ref.)
Abdominolipoplasty. Matarasso A. **Clin Plast Surg** 1989 Apr; 16(2):289–303 (66 ref.)
The big six. Six important tips for a better result in lipoplasty. Mladick RA. **Clin Plast Surg** 1989 Apr;16(2):249–56
Lipoplasty of the calves and ankles. Reed LS. **Clin Plast Surg** 1989 Apr;16(2):365–8
Suction lipectomy in the management of limb lymphedema. Sando WC, et al. **Clin Plast Surg** 1989 Apr;16(2):369–73
Complications associated with suction lipectomy. Teimourian B. **Clin Plast Surg** 1989 Apr;16(2):385–94 (29 ref.)
Abdominal lipoplasty technique. Vogt PA. **Clin Plast Surg** 1989 Apr;16(2):279–88 (12 ref.)
Successful treatment of lipohypertrophic insulin lipodystrophy with liposuction surgery [letter] Field LM. **J Am Acad Dermatol** 1988 Sep;19(3):570
Liposuction surgery for a buffalo hump caused by Cushing's disease. Narins RS. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):307
The fate of hypodermis after liposuction surgery. Piérard–Franchimont C, et al. **J Am Acad Dermatol** 1988 Oct;19(4):723–8
Special issue: liposuction. **J Dermatol Surg Oncol** 1988 Oct; 14(10):1051–182
Lidocaine during liposuction [letter] Bridenstein JB. **J Dermatol Surg Oncol** 1989 Jul;15(7):775–6
The dermatologist as a liposuction surgeon [editorial] Coleman WP 3d. **J Dermatol Surg Oncol** 1988 Oct; 14(10):1057–8
Liposuction under local anesthesia [editorial] Hanke CW. **J Dermatol Surg Oncol** 1989 Jan;15(1):12
The treatment of multiple lipomas by liposuction surgery. Spinowitz AL. **J Dermatol Surg Oncol** 1989 May; 15(5):538–40
Vaginal hysterectomy combined with liposuction. Kovac SR. **Mo Med** 1989 Mar;86(3):165–8
Submental–submandibular suction lipectomy: indications and surgical technique. O'Ryan F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):117–25 (23 ref.)
Abdominoplasty: a new concept and classification for treatment. Bozola AR, et al. **Plast Reconstr Surg** 1988 Dec; 82(6):983–93
On gynecomastia and suction–assisted lipectomy [letter] Fodor PB. **Plast Reconstr Surg** 1988 Nov;82(5):918
Plasma lidocaine levels during augmentation mammaplasty and suction–assisted lipectomy. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):624–7
Suction lipectomy and gynecomastia [letter] Yang CC. **Plast Reconstr Surg** 1989 Apr;83(4):753–4
Suction–assisted lipectomy [letter] Franzblau MJ. **West J Med** 1988 Sep;149(3):345
[Liposuction in cosmetic surgery] Erichsen B. **Ugeskr Laeger** 1989 Jul 3;151(27):1756–9 (Eng. Abstr.) (Dan)
[Focus on liposuction (interview by G. Flageul] Illouz YG. **Ann Chir Plast Esthet** 1988;33(4):382–8 (Fre)
[A new approach to reconstructive plastic surgery: reimplantation of adipose tissue fragments obtained by liposuction] Lafontan M, et al. **Ann Chir Plast Esthet** 1989; 34(1):77–81 (27 ref.) (Fre)
[The thigh of the obese] Nicoletis C. **Phlebologie** 1988 Jul–Oct;41(3):585–8 (Fre)
[Surgery of lipodystrophy] van der Stricht J. **Phlebologie** 1988 Jul–Oct;41(3):589–91 (Eng. Abstr.) (Fre)
[Liposuction in dermatology. Evaluation of its long–term effects] Damseaux M, et al. **Rev Med Liege** 1988 Sep 1; 43(17):569–70 (Fre)
[Autologous injection of fatty tissue following liposuction—not a method for breast augmentation] Hörl HW, et al. **Handchir Mikrochir Plast Chir** 1989 Mar; 21(2):59–61 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Re: Alexander et al: Fatal necrotizing fasciitis following suction–assisted lipectomy [letter; comment] **Ann Plast Surg** 1989 Feb;22(2):176–8. **Comment on:** Ann Plast Surg 1988 Jun;20(6):562–5
Fat embolism after dermolipectomy and liposuction [letter] Abbes M, et al. **Plast Reconstr Surg** 1989 Sep;84(3):546–7
Abdominoplasty combined with other major surgical procedures: safe or sorry? Hester TR Jr, et al. **Plast Reconstr Surg** 1989 Jun;83(6):997–1004
A national survey of complications associated with suction lipectomy: a comparative study. Teimourian B, et al. **Plast Reconstr Surg** 1989 Oct;84(4):628–31
Suction lipoplasty of silicone–injected breasts: a warning [letter] Vinnik CA. **Plast Reconstr Surg** 1989 May; 83(5):926–7
[Fat embolism after dermolipectomy and liposuction] Abbes M, et al. **Ann Chir Plast Esthet** 1989;34(2):160–1 (Fre)
[Lipoaspiration: a plea for drainage] Goddio AS. **Ann Chir Plast Esthet** 1988;33(3):256–63 (Eng. Abstr.) (Fre)

HISTORY

[Development of the surgical technics in abdominoplasty] Elia L, et al. **Minerva Chir** 1989 Jun 30;44(12):1643–6 (Eng. Abstr.) (Ita)

INSTRUMENTATION

The use of wall suction as a liposaspirator. Nichter LS, et al. **Ann Plast Surg** 1988 Sep;21(3):261–3
Selection and utilization of liposuction cannulas. Collins PS. **J Dermatol Surg Oncol** 1988 Oct;14(10):1139–43 (13 ref.)
Why the syringe and not the suction machine? Fournier PF. **J Dermatol Surg Oncol** 1988 Oct;14(10):1062–71
Warning: traditional liposuction cannulas may be dangerous to your patient's health. Weber PJ, et al. **J Dermatol Surg Oncol** 1988 Oct;14(10):1136–8
Computerized suction lipectomy aspirator monitor for improved results in suction lipectomy. Apfelberg DB, et al. **Plast Reconstr Surg** 1988 Nov;82(5):896–903
Suction lipoplasty: biohazardous aerosols and exhaust mist—the clouded issue. Cukier J, et al. **Plast Reconstr Surg** 1989 Mar;83(3):494–9
Creating an inframammary crease with a liposuction cannula [letter] Pinnella JW. **Plast Reconstr Surg** 1989 May; 83(5):925
Liposuction cannula design problems [letter] Weber P, et al. **Plast Reconstr Surg** 1989 Jan;83(1):197–8

METHODS

Liposuction through an axillary incision for treatment of gynecomastia. Abramo AC, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):85–9
Radical abdominoplasty, including body shaping: representative cases. Mühlbauer W. **Aesthetic Plast Surg** 1989 Spring;13(2):105–10
Further advantages of the "vest over pants" abdominoplasty. Planas J, et al. **Aesthetic Plast Surg** 1988 Aug;12(3):123–7
Mammoplasty using liposuction and the periareolar incision. Toledo LS, et al. **Aesthetic Plast Surg** 1989 Winter; 13(1):9–13
Liposuction to debulk the pectoralis major myocutaneous flap. Cueva R, et al. **Am J Otolaryngol** 1988 May–Jun; 9(3):106–10
Lipodystrophy and its treatment. Ketterings C. **Ann Plast Surg** 1988 Dec;21(6):536–43
Liposuction on a lymphedematous arm. Nava VM, et al. **Ann Plast Surg** 1988 Oct;21(4):366–8
Body contouring. Suction–assisted lipolysis and fat transplantation techniques. Grossman JA. **AORN J** 1988 Oct;48(4):713–4, 716–8, 720–5
Serial suction lipectomy. Ersek RA. **Clin Plast Surg** 1989 Apr;16(2):313–7
Lipoplasty: an ideal adjunctive procedure for the face lift. Mladick RA. **Clin Plast Surg** 1989 Apr;16(2):333–41
Refinements in the technique of liposuction. Asken S. **J Dermatol Surg Oncol** 1988 Oct;14(10):1165–72
Safety of liposuction: a review of 9478 cases performed by

dermatologists. Bernstein G, et al.
J Dermatol Surg Oncol 1988 Oct;14(10):1112–4
Determining safe limits for untransfused, outpatient liposuction: personal experience and review of the literature. Chrisman BB, et al. **J Dermatol Surg Oncol** 1988 Oct;14(10):1095–102 (56 ref.)
Noncosmetic applications of liposuction. Coleman WP 3d. **J Dermatol Surg Oncol** 1988 Oct;14(10):1085–90 (34 ref.)
Blunt liposuction cannula dissection with and without suction-assisted lipectomy in reconstructive surgery. Field LM, et al. **J Dermatol Surg Oncol** 1988 Oct;14(10):1116–22
Who should do syringe liposculpturing? [editorial] Fournier PF. **J Dermatol Surg Oncol** 1988 Oct;14(10):1055–6
Anesthesia for liposuction in dermatologic surgery. Klein JA. **J Dermatol Surg Oncol** 1988 Oct;14(10):1124–32 (44 ref.)
Liposuction surgery under local anesthesia: limited blood loss and minimal lidocaine absorption. Lillis PJ.
J Dermatol Surg Oncol 1988 Oct;14(10):1145–8
Liposuction surgery of the lateral thigh. Narins RS.
J Dermatol Surg Oncol 1988 Oct;14(10):1155–61
Transoral submental lipectomy: an adjunct to orthognathic surgery. Epker BN, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):795–803
The tissue expander syringe: an aid to liposuction surgery [letter] Middleton WG. **J Otolaryngol** 1988 Dec;17(7):412–3
Liposuction for fat biopsy. Bloomenstein RB.
Plast Reconstr Surg 1988 Nov;82(5):904–7
En bloc cervical lipectomy for treatment of the problem neck in facial rejuvenation surgery. Robbins LB, et al.
Plast Reconstr Surg 1989 Jan;83(1):53–60
[Liposuction (report of 102 cases)] Han BG.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):81–4, 156 (Eng. Abstr.) **(Chi)**
[Liposuction--a review] Lin ZH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):87–9 (19 ref.) **(Chi)**
[Liposuction] Saberman MN.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):90–1 **(Chi)**
[Liposuction for treating localized adiposity--report of 24 cases] Zhou SJ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):85–6, 156 (Eng. Abstr.) **(Chi)**
[Personal experience with dermolipectomy of the abdominal wall] Měšťák J, et al. **Rozhl Chir** 1988 Nov;67(11):742–7 (Eng. Abstr.) **(Cze)**
[Treatment of subcutaneous lipomas with liposuction] Mouly R, et al. **Ann Chir Plast Esthet** 1988;33(2):163–6 (Eng. Abstr.) **(Fre)**
[Focus on abdominal plasty] Thion A.
Ann Chir Plast Esthet 1989;34(3):275–8 (Eng. Abstr.) **(Fre)**
[Upper palpebral dermolipectomy] Trepaat F.
Ann Chir Plast Esthet 1989;34(3):251–4 (Eng. Abstr.) **(Fre)**
[Possibilities of treatment of lipodystrophies with ambulatory liposuction] Môle B. **Ann Dermatol Venereol** 1988; 115(8):867–72 (4 ref.) **(Fre)**
[Face lifting, submental lipectomy and simultaneous mandibular reduction] Steinhäuser EW.
Fortschr Kiefer Gesichtschir 1989;34:9–12 **(Ger)**

LIPEMIA-CLEARING FACTOR see **LIPOPROTEIN LIPASE**

LIPID A

Orientation measurements on membrane systems made from lipopolysaccharides and free lipid A by FT-IR spectroscopy. Brandenburg K, et al. **Eur Biophys J** 1988; 16(2):83–94
[Studies on lipid A, the active center of endotoxin--structure-activity relationship] Homma Y, et al. **Nippon Saikingaku Zasshi** 1989 May;44(3):585–608 (99 ref.) **(Jpn)**

ANALOGS & DERIVATIVES

Antiherpes activity of chemically synthesized lipid A-subunit analogue GLA-60 in immunosuppressed mice. Ikeda S, et al. **Antiviral Res** 1989 May-Jun;11(4):173–80
Enhancement of nonspecific resistance to viral infection by chemically synthesized lipid A-subunit analogs with different backbone structures and acyl groups. Ikeda S, et al. **Antiviral Res** 1988 Dec 1;10(4–5):167–78
Induction of an endogenous tumor necrosis factor in mice by murine recombinant interferon-gamma combined with a lipid A subunit analog (GLA-60) of low toxicity. Saiki I, et al. **Cancer Immunol Immunother** 1989;29(2):101–8
Neuraminic acid and related compounds. I. Syntheses of biologically active 4',7',8',9'-tetra-O-acetyl-sialyl- and sialyl-(alpha 2-6)-D-glucosamine-4-phosphate analogues of lipid A. Shimizu C, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1772–8
The lipopolysaccharide-induced stimulation of peritoneal macrophages involves at least two signal pathways. Partial stimulation by lipid A precursors. Benninghoff B, et al. **Eur J Biochem** 1989 Feb 15;179(3):589–94
Effect of chemical modification at C1 of the glucosamine backbone of lipid A-subunit analog GLA-27 on manifestation of immunopharmacological activity.
Kumazawa Y, et al. **FEBS Lett** 1988 Oct 24;239(1):117–20
Ability of monophosphoryl lipid A to augment the antibody response of young mice. Baker PJ, et al. **Infect Immun** 1988 Dec;56(12):3064–6
Somnogenic activities of synthetic lipid A. Cady AB, et al. **Infect Immun** 1989 Feb;57(2):396–403
Immunomodulatory activity of monophosphoryl lipid A in C3H/HeJ and C3H/HeSnJ mice. Hiernaux JR, et al. **Infect Immun** 1989 May;57(5):1483–90
Diphosphoryl lipid A from Rhodopseudomonas sphaeroides ATCC 17023 blocks induction of cachectin in macrophages by lipopolysaccharide. Takayama K, et al.
Infect Immun 1989 Apr;57(4):1336–8
Immunopharmacological activities of chemically synthesized lipid A-subunit analogue GLA-27 combined with muramyl dipeptide via spacers of different carbon chain length. Ikeda S, et al. **Int J Immunopharmacol** 1988;10(4):339–46
Antitumor and antimicrobial activities of lipid A-subunit analogue GLA-27. Nakatsuka M, et al.
J Clin Lab Immunol 1988 May;26(1):43–7
Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al.
J Clin Microbiol 1989 Aug;27(8):1748–53
Monophosphoryl lipid A blocks the hemodynamic effects of lethal endotoxemia. Rackow EC, et al.
J Lab Clin Med 1989 Jan;113(1):112–7
Role of novel adjuvants in specific active immunotherapy. Cantrell JL, et al. **Prog Clin Biol Res** 1989;288:297–307
The role of endotoxin in human septic shock: therapeutic potential of lipid A analogs. Danner RL, et al.
Prog Clin Biol Res 1989;286:183–200 (31 ref.)
Endotoxin biosynthetic precursors: biologic and therapeutic activities. Proctor RA. **Prog Clin Biol Res** 1989;299:169–79 (54 ref.)
Pulmonary oxygen toxicity in rats: prevention by pyrogenic diphosphoryl lipid A and potentiation by nontoxic monophosphoryl lipid A and lipid X. Smith RM.
Res Commun Chem Pathol Pharmacol 1988 Nov; 62(2):221–34
Enhancement of humoral immune responses against viral vaccines by a non-pyrogenic 6-O-acylmuramyldipeptide and synthetic low toxicity analogues of lipid A. Tsujimoto M, et al. **Vaccine** 1989 Feb;7(1):39–48

ANALYSIS

Lipid A with 2,3-diamino-2,3-dideoxy-glucose in lipopolysaccharides from slow-growing members of Rhizobiaceae and from "Pseudomonas carboxydovorans". Mayer H, et al. **Arch Microbiol** 1989;151(2):111–6
Determination of lipid A in human middle ear effusions with the competitive ELISA technique. Tanimura F.
Arch Otorhinolaryngol 1989;246(2):79–82
Phase behaviour of lipid X. Lipka G, et al.
Chem Phys Lipids 1988 Oct;48(3–4):267–80
Characterization of the lipid A component of genuine smooth-form lipopolysaccharide. Jiao BH, et al.
Eur J Biochem 1989 Apr 1;180(3):515–8
Structural analysis of the nontoxic lipid A of Rhodobacter capsulatus 37b4. Krauss JH, et al. **Eur J Biochem** 1989 Apr 1;180(3):519–26
Comparative X-ray and Fourier-transform-infrared investigations of conformational properties of bacterial and synthetic lipid A of Escherichia coli and Salmonella minnesota as well as partial structures and analogues thereof. Labischinski H, et al. **Eur J Biochem** 1989 Feb 15;179(3):659–65
Structural characterization of the lipid A component of Bacteroides fragilis strain NCTC 9343 lipopolysaccharide. Weintraub A, et al. **Eur J Biochem** 1989 Aug 1; 183(2):425–31
Isolation of 9-hydroxy-delta-tetradecalactone from lipid A of Pseudomonas diminuta and Pseudomonas vesicularis. Arata S, et al. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):219–22
27-Hydroxyoctacosanoic acid is a major structural fatty acyl component of the lipopolysaccharide of Rhizobium trifolii ANU 843. Hollingsworth RI, et al. **J Biol Chem** 1989 Jun 5;264(16):9300–3
Isolation and characterization of the unusual lipopolysaccharide component, 2-amino-2-deoxy-2-N-(27-hydroxyoctacosanoyl)-3-O-(3-hydroxy- tetradecanoyl)-gluco-hexuronic acid, and its de-O-acylation product from the free lipid A of Rhizobium trifolii ANU843. Hollingsworth RI, et al. **J Biol Chem** 1989 Aug 25;264(24):14039–42

CHEMICAL SYNTHESIS

Effect of chemical modification at C1 of the glucosamine backbone of lipid A-subunit analog GLA-27 on manifestation of immunopharmacological activity.
Kumazawa Y, et al. **FEBS Lett** 1988 Oct 24;239(1):117–20

GENETICS

Gram-negative endotoxin: a biologically active lipid. Raetz CR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:973–82 (53 ref.)

IMMUNOLOGY

Epitope analysis of lipid A preparations from Pseudomonas diminuta and Pseudomonas vesicularis. Arata S, et al.
FEMS Microbiol Lett 1989 Jul 15;51(1):223–5
In vitro stimulation of immune spleen cells enhances the number of anti-lipid A-producing hybridomas. Erich T, et al. **J Immunol Methods** 1989 Mar 10;118(1):17–24
Specificity and cross-reactivity of monoclonal antibodies reactive with the core and lipid A regions of bacterial lipopolysaccharide. Pollack M, et al. **J Infect Dis** 1989 Feb; 159(2):168–88
Inhibitory effects of rabbit antisera on mitogenic activity of Actinobacillus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **J Periodont Res** 1989 May;24(3):165–70
Effects of anti-lipid A human monoclonal antibody on lipopolysaccharide-induced toxicity to the kidney. Tune BM, et al. **J Urol** 1989 Jun;141(6):1463–6
Determination of antibodies against bacterial lipopolysaccharides and lipid A by immunoblotting. Fink PC, et al. **Prog Clin Biol Res** 1989;308:1043–51
[The diagnostic significance of antibodies to lipid A in patients with chronic kidney infections] Altünkova I, et al. **Vutr Boles** 1989;28(1):60–5 (Eng. Abstr.) **(Bul)**
[Studies of antibodies to lipid A in patients with inflammatory bowel disease] Kamoi S.
Nippon Shokakibyo Gakkai Zasshi 1988 Jun;85(6):1245–51 (Eng. Abstr.) **(Jpn)**

METABOLISM

Accumulation of incomplete metabolic side products of lipid A in Salmonella typhimurium during inhibition of 3-deoxy-D-manno-octulosonate incorporation by a new class of antibacterial agents. Kadam SK, et al.
Can J Microbiol 1989 Jun;35(6):646–50
Biosynthesis of lipopolysaccharide in Escherichia coli. Cytoplasmic enzymes that attach 3-deoxy-D-manno-octulosonic acid to lipid A. Brozek KA, et al. **J Biol Chem** 1989 Apr 25;264(12):6956–66
Lipid A binding sites in membranes of macrophage tumor cells. Hampton RY, et al. **J Biol Chem** 1988 Oct 15; 263(29):14802–7
Identification of a lipid A binding site in the acute phase reactant lipopolysaccharide binding protein. Tobias PS, et al. **J Biol Chem** 1989 Jun 25;264(18):10867–71

PHARMACOLOGY

Structural and physicochemical requirements of endotoxins for the activation of arachidonic acid metabolism in mouse peritoneal macrophages in vitro. Lüderitz T, et al.
Eur J Biochem 1989 Jan 15;179(1):11–6
Dissociation of cell-associated interleukin-1 (IL-1) and IL-1 release induced by lipopolysaccharide and lipid A. Cavaillon JM, et al. **Infect Immun** 1989 Mar;57(3):791–7
Immunopharmacological activities of 2-keto-3-deoxyoctonic acid-(alpha 2——6)-linked 4-O-phosphono-D-glucosamine derivatives carrying N- and 3-O-acyl substituents. Kumazawa Y, et al.
Infect Immun 1989 Jun;57(6):1845–8
Enhancement of nonspecific resistance to bacterial infections and tumor regressions by treatment with synthetic lipid A-subunit analogs. Critical role of N- and 3-O-linked acyl groups in 4-O-phosphono-D-glucosamine derivatives. Nakatsuka M, et al. **Int J Immunopharmacol** 1989; 11(4):349–58
Production of tumor necrosis factor by rIFN-gamma-primed C3H/HeJ (Lpsd) macrophages requires the presence of lipid A-associated proteins. Hogan MM, et al.
J Immunol 1988 Dec 15;141(12):4196–202
Antitumor activity, mitogenicity, and lethal toxicity of chemically synthesized monosaccharide analogs of lipid A. Shimizu T, et al. **J Pharmacobiodyn** 1988 Jul;11(7):512–8
Structural heterogeneity regarding local Shwartzman activity of lipid A. Mashimo J, et al. **Microbiol Immunol** 1988; 32(7):653–66
Comparison of interleukin 1 release and interleukin 1 mRNA expression of human monocytes activated by bacterial lipopolysaccharide or synthetic lipid A. Hurme M, et al. **Scand J Immunol** 1989 Aug;30(2):259–63
Adjuvant activities of synthetic lipid A subunit analogues and its conjugates with muramyl dipeptide derivatives. Maeda H, et al. **Vaccine** 1989 Jun;7(3):275–81
[Inhibitory effect of lipopolysaccharides, natural lipid A and synthetic lipid A on growth of murine B cell lines, CYG 34 and CYG 101] Honda F, et al.
Nippon Saikingaku Zasshi 1988 Jul;43(4):837–43 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Macrophage activation by an ornithine-containing lipid or a serine-containing lipid. Kawai Y, et al. **Infect Immun** 1989 Jul;57(7):2086–91

RADIATION EFFECTS

Alterations in the chemical composition and antigenicity of Escherichia coli O89 lipopolysaccharide and lipid A after 60Co gamma irradiation. Elekes E, et al.
Acta Microbiol Hung 1988;35(3):301–5

THERAPEUTIC USE

Effects of nontoxic lipid A and endotoxin on resistance of mice to Toxoplasma gondii. Masihi KN, et al.
J Biol Response Mod 1988 Dec;7(6):535–9
The role of endotoxin in human septic shock: therapeutic potential of lipid A analogs. Danner RL, et al.

Prog Clin Biol Res 1989;286:183–200 (31 ref.)

TOXICITY

Hemodynamic effects of monophosphoryl lipid A compared to endotoxin. Astiz ME, et al. **Circ Shock** 1989 Mar; 27(3):193–8

Structural requirements of lipid A for endotoxicity and other biological activities. Takada H, et al. **Crit Rev Microbiol** 1989;16(6):477–523 (121 ref.)

LIPID BILAYERS

Biotechnological applications of lipid microstructures. Based on the proceedings of the Workshop on Technological Applications of Phospholipid Bilayers, Vesicles, and Thin Films, January 5–9, 1986, Tenerife, Canary Islands; and the Workshop on Biotechnological Applications of Membrane Studies, October 18–22, 1987, San Sebastian, Spain. **Adv Exp Med Biol** 1988;238:1–397

Biotechnological application of membrane proteins reconstituted into vesicular and planar lipid bilayers. Dencher NA. **Adv Exp Med Biol** 1988;238:269–78 (37 ref.)

Molecular modeling of the phospholipid bilayer. Gaber BP, et al. **Adv Exp Med Biol** 1988;238:1–11

The interaction of coenzyme Q and vitamin E with multibilayer liposomes. Gomez-Fernandez JC, et al. **Adv Exp Med Biol** 1988;238:127–39

Effect of PAF acether on oriented egg phosphatidylcholine multibilayers; interaction with cholesterol; comparison to lyso-PC and lyso-PAF. Oliver JL, et al. **Agents Actions** 1989 Jan;26(1–2):121–2

Alpha-subunit of Gs directly activates cardiac calcium channels in lipid bilayers. Imoto Y, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H722–8

Selective electrochemical biosensors from state-switching of bilayer and monolayer lipid membranes by lectin-polysaccharide complexes. Krull UJ, et al. **Analyst** 1989 Jan;114(1):33–40

Penetration and fusion of phospholipid vesicles by lysozyme. Kim J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):100–8

Ethanol causes decreased partitioning into biological membranes without changes in lipid order. Nie Y, et al. **Arch Biochem Biophys** 1989 Jan;268(1):349–59

A time-resolved fluorescence anisotropy study of bilayer membranes containing alpha-tocopherol. Bisby RH, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):386–91

Phospholipid bilayers enhance the stability of leukotriene A4 and epoxytetraenes: stabilization of eicosanoids by liposomes. Fiore S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):477–81

Supramolecular surfactants: amphiphilic polymers designed to disrupt lipid membranes. Regen SL, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):566–71

Enterotoxin of Clostridium perfringens type A forms ion-permeable channels in a lipid bilayer membrane. Sugimoto N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):551–6

The mechanism of vesicle formation [published erratum appears in Biochem J 1989 Mar 15;258(3):following 933] Lasic DD. **Biochem J** 1988 Nov 15;256(1):1–11 (77 ref.)

Binary mixtures of saturated and unsaturated mixed-chain phosphatidylcholine. A differential scanning calorimetry study. Ali S, et al. **Biochemistry** 1989 Jan 24;28(2):522–8

Effects of the local anesthetic tetracaine on the structural and dynamic properties of lipids in model membranes: a high-pressure Fourier transform infrared study. Auger M, et al. **Biochemistry** 1988 Aug 9;27(16):6086–93

Interactions of the local anesthetic tetracaine with membranes containing phosphatidylcholine and cholesterol: a 2H NMR study. Auger M, et al. **Biochemistry** 1988 Jun 28; 27(13):4660–7

Membrane solubilization by detergent: use of brominated phospholipids to evaluate the detergent-induced changes in Ca2+-ATPase/lipid interaction. de Foresta B, et al. **Biochemistry** 1989 Mar 21;28(6):2558–67

Solute partitioning into lipid bilayer membranes. De Young LR, et al. **Biochemistry** 1988 Jul 12;27(14):5281–9

Modulation of the bilayer to hexagonal phase transition and solvation of phosphatidylethanolamines in aqueous salt solutions. Epand RM, et al. **Biochemistry** 1988 Nov 29; 27(24):8776–9

The acid-triggered entry pathway of Pseudomonas exotoxin A. Farahbakhsh ZT, et al. **Biochemistry** 1989 Jan 24; 28(2):580–5

Calcium ion binding between lipid bilayers: the four-component system of phosphatidylserine, phosphatidylcholine, calcium chloride, and water. Feigenson GW. **Biochemistry** 1989 Feb 7;28(3):1270–8

Partitioning of exchangeable fluorescent phospholipids and sphingolipids between different lipid bilayer environments. Gardam MA, et al. **Biochemistry** 1989 Jan 24;28(2):884–93

Thermodynamics of phospholipid bilayer assembly. Gershfeld NL. **Biochemistry** 1989 May 16;28(10):4229–32

31P and 2H NMR studies of structure and motion in bilayers of phosphatidylcholine and phosphatidylethanolamine. Ghosh R. **Biochemistry** 1988 Oct 4;27(20):7750–8

Interactions of triglycerides with phospholipids: incorporation into the bilayer structure and formation of emulsions. Hamilton JA. **Biochemistry** 1989 Mar 21; 28(6):2514–20

Osmoelastic coupling in biological structures: a comprehensive thermodynamic analysis of the osmotic response of phospholipid vesicles and a reevaluation of the "dehydration force" theory. Ito T, et al. **Biochemistry** 1989 Jun 27;28(13):5626–30

The nature of the hydrophobic binding of small peptides at the bilayer interface: implications for the insertion of transbilayer helices. Jacobs RE, et al. **Biochemistry** 1989 Apr 18;28(8):3421–37

Modulation of dolichyl-phosphomannose synthase activity by changes in the lipid environment of the enzyme. Jensen JW, et al. **Biochemistry** 1988 Aug 23;27(17):6315–20

Study of the effect of poly(L-lysine) on phosphatidic acid and phosphatidylcholine/phosphatidic acid bilayers by raman spectroscopy. Laroche G, et al. **Biochemistry** 1988 Aug 23;27(17):6220–8

Effect of fatty acyl chain length and structure on the lamellar gel to liquid-crystalline and lamellar to reversed hexagonal phase transitions of aqueous phosphatidylethanolamine dispersions. Lewis RN, et al. **Biochemistry** 1989 Jan 24; 28(2):541–8

Assembly of complement components C5b-8 and C5b-9 on lipid bilayer membranes: visualization by freeze-etch electron microscopy. McCloskey MA, et al. **Biochemistry** 1989 Jan 24;28(2):534–40

Anion binding to neutral and positively charged lipid membranes. Macdonald PM, et al. **Biochemistry** 1988 Sep 6;27(18):6769–75

Cholesterol modifies the short-range repulsive interactions between phosphatidylcholine membranes. McIntosh TJ, et al. **Biochemistry** 1989 Jan 10;28(1):17–25

Mixing behavior of symmetric chain length and mixed chain length phosphatidylcholines in two-component multilamellar bilayers: evidence for gel and liquid-crystalline phase immiscibility. Mason JT. **Biochemistry** 1988 Jun 14;27(12):4421–9

Interactions of metal ions with phosphatidylserine bilayer membranes: effect of hydrocarbon chain unsaturation. Mattai J, et al. **Biochemistry** 1989 Mar 7;28(5):2322–30

Normal cellular Ha ras p21 protein causes local disruption of bilayer phospholipid. Montgomery GW, et al. **Biochemistry** 1988 Jun 14;27(12):4391–5

Structure and mechanical properties of giant lipid (DMPC) vesicle bilayers from 20 degrees C below to 10 degrees C above the liquid crystal-crystalline phase transition at 24 degrees C. Needham D, et al. **Biochemistry** 1988 Oct 18;27(21):8261–9

Thermomechanical and transition properties of dimyristoylphosphatidylcholine/cholesterol bilayers. Needham D, et al. **Biochemistry** 1988 Jun 28;27(13):4668–73

Vesicle-to-cell protein transfer: insertion of band 3, the erythrocyte anion transporter, into lymphoid cells. Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4655–9

Variation in hydration forces between neutral phospholipid bilayers: evidence for hydration attraction. Rand RP, et al. **Biochemistry** 1988 Oct 4;27(20):7711–22

Effect of poly(ethylene glycol) on the Ca2+-induced fusion of didodecyl phosphate vesicles. Rupert LA, et al. **Biochemistry** 1988 Oct 18;27(21):8232–9

Lipid chains and cholesterol in model membranes: a Monte Carlo Study. Scott HL, et al. **Biochemistry** 1989 May 2; 28(9):3687–91

Laser flash photolysis as a probe of redox protein-membrane interactions: effect of binding of spinach plastocyanin and horse cytochrome c to lipid bilayer vesicles on the kinetics of reduction by flavin semiquinone. Senthilathipan V, et al. **Biochemistry** 1989 Feb 7;28(3):1133–8

Reversed hexagonal phase formation in lecithin-alkane-water systems with different acyl chain unsaturation and alkane length. Sjölund M, et al. **Biochemistry** 1989 Feb 7;28(3):1323–9

Interaction of hemoglobin derivatives with liposomes. Membrane cholesterol protects against the changes of hemoglobin. Szebeni J, et al. **Biochemistry** 1988 Aug 23; 27(17):6425–34

A new electron spin resonance assay for membrane asymmetry and entrapped volume of unilamellar lipid vesicles based on photoreduced flavin adenine dinucleotide. Thurnhofer H, et al. **Biochemistry** 1989 Mar 7; 28(5):2305–12

Identification of the membrane anchor of microsomal rat liver cytochrome P-450. Vergères G, et al. **Biochemistry** 1989 May 2;28(9):3650–5

Properties influencing fluorophore lifetime distributions in lipid bilayers. Williams BW, et al. **Biochemistry** 1988 Oct 18;27(21):7994–9

Structural aspects of pressure effects on infrared spectra of mixed-chain phosphatidylcholine assemblies in D2O. Wong PT, et al. **Biochemistry** 1989 Feb 7;28(3):1259–63

Lipid bilayer permeation by neutral aluminum citrate and by three alpha-hydroxy carboxylic acids. Akeson MA, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):200–6

Spontaneous transfer between phospholipid bilayers of dehydroergosterol, a fluorescent cholesterol analog. Bar LK, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):109–12

Carbamyl phosphatidylcholine—cholesterol interactions in unilamellar vesicles. Bhakuni V, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):216–22

A hydroxide ion carrier in planar phospholipid bilayer membranes: (C6F5)2Hg (dipentafluorophenylmercury). Blaustein RO, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):221–6

Behavior of spin labels in a variety of interdigitated lipid bilayers. Boggs JM, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):243–53

Wave-guide spectroscopy on planar lipid bilayers doped with hydrophobic ions. Braun HP, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):223–30

Monolayer coupling in phosphatidylserine bilayers: distinct phase transitions induced by magnesium interacting with one or both monolayers. Düzgüneş N, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):391–8

Modulation of the bilayer to hexagonal phase transition of phosphatidylethanolamines by acylglycerols. Epand RM, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):161–6

Bilayer-stabilizing properties of myelin basic protein in dioleoylphosphatidylethanolamine systems. Fraser PE, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):23–9

Interaction of alpha-lactalbumin with phospholipid vesicles as studied by photoactivated hydrophobic labeling. Kim J, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):1–8

Reorientational dynamics in lipid vesicles and liposomes studied with ESR: effects of hydration, curvature and unsaturation. Korstanje LJ, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):196–204

The spectroscopic analysis for binding of amphipathic and antimicrobial model peptides containing pyrenylalanine and tryptophan to lipid bilayer. Lee S, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):174–82

Phase behaviour of mixtures of lipid X with phosphatidylcholine and phosphatidylethanolamine [published erratum appears in Biochim Biophys Acta 1989 Mar 13;979(3):379] Lipka G, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):239–50

Neutron and X-ray diffraction structural analysis of phosphatidylinositol bilayers. McDaniel RV, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):241–6

Magainin 1-induced leakage of entrapped calcein out of negatively-charged lipid vesicles. Matsuzaki K, et al. **Biochim Biophys Acta** 1989 May 19;981(1):130–4

Chain-length dependence of n-alkane solubility in phosphatidylcholine bilayers: a 2H-NMR study. Pope JM, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):69–76

Surface charge effects upon membrane transport processes: the effects of surface charge on the monensin-mediated transport of lithium ions through phospholipid bilayers studied by 7Li-NMR spectroscopy. Riddell FG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):65–72

Conductance transition induced by an electric field in lipid bilayers. Robello M, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):173–6

Comparison of phosphatidylethanolamine and phosphatidylcholine vesicles produced by treating cholate-phospholipid micelles with cholestyramine. Shi SP, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):187–95

Changes in chemical structure and function in Escherichia coli cell membranes caused by freeze-thawing. I. Change of lipid state in bilayer vesicles and in the original membrane fragments depending on rate of freezing. Souzu H. **Biochim Biophys Acta** 1989 Jan 16;978(1):105–11

Sensitive detection of protein adsorption to supported lipid bilayers by frequency-dependent capacitance measurements and microelectrophoresis. Stelzle M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):135–42

ESR studies on the ripple phase in multilamellar phospholipid bilayers. Tsuchida K, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):73–80

The polymorphic phase behavior of dielaidoylphosphatidylethanolamine. Effect of n-alkanols. Veiro JA, et al. **Biochim Biophys Acta** 1989 Feb 27; 979(2):251–6

400 MHz two-dimensional nuclear Overhauser spectroscopy on anesthetic interaction with lipid bilayer. Yokono S, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):300–2

Methylation of the antifungal lipopeptide iturin A modifies its interaction with lipids. Harnois I, et al. **Biochimie** 1989 Jan;71(1):111–6

Lateral order in mixed lipid bilayers and its influence on ion translocation by gramicidin: a model for the structure-function relationship in membranes. Henkel T, et al. **Biochimie** 1989 Jan;71(1):89–98

Thermodynamics and kinetics of incorporation into a membrane. Schwarz G. **Biochimie** 1989 Jan;71(1):3–9

The membrane fluidity concept revisited by polarized fluorescence spectroscopy on different model membranes containing unsaturated lipids and sterols. van Ginkel G, et al. **Biochimie** 1989 Jan;71(1):23–32

A laser-induced europium (III) ion luminescence study of the interaction of this ion with phospholipid bilayer vesicles above and below the gel to liquid-crystalline phase transition temperature. Cader BM, et al. **Biophys Chem** 1988 Oct;32(1):97–109

High-frequency ultrasonic absorption spectroscopy on aqueous suspensions of phospholipid bilayer vesicles. Kaatze U, et al. **Biophys Chem** 1988 Dec;32(2–3):153–60

Micropolarities of lipid bilayers and micelles. 5. Localization of pyrene in small unilamellar phosphatidylcholine vesicles. L'Heureux GP, et al. **Biophys Chem** 1988 Jul 15; 30(3):293–301

Fluorescence properties of cholestatrienol in phosphatidylcholine bilayer vesicles. Schroeder F, et al. **Biophys Chem** 1988 Oct;32(1):57–72

Determination of bilayer membrane bending stiffness by tether formation from giant, thin-walled vesicles. Bo L, et al. **Biophys J** 1989 Mar;55(3):509–17

Incorporation of ionic channels from yeast plasma

membranes into black lipid membranes. Gómez-Lagunas F, et al. **Biophys J** 1989 Jul;56(1):115–9
Influence of proteins on the reorganization of phospholipid bilayers into large domains. Haverstick DM, et al. **Biophys J** 1989 Apr;55(4):677–82
Thermodynamic parameters for the binding of divalent cations to gramicidin A incorporated into a lipid environment by Tl-205 nuclear magnetic resonance. Hinton JF, et al. **Biophys J** 1989 Feb;55(2):327–30
Comparison of forces measured between phosphatidylcholine bilayers [letter] Horn RG, et al. **Biophys J** 1988 Dec; 54(6):1185–6
Two-dimensional 1H/13C heteronuclear chemical shift correlation spectroscopy of lipid bilayers. Lee CW, et al. **Biophys J** 1989 Feb;55(2):355–8
Multiple conductance states of the purified calcium release channel complex from skeletal sarcoplasmic reticulum. Liu QY, et al. **Biophys J** 1989 Mar;55(3):415–24
Solvent history dependence of gramicidin A conformations in hydrated lipid bilayers. LoGrasso PV, et al. **Biophys J** 1988 Aug;54(2):259–67
Analysis of the effect of medium and membrane conductance on the amplitude and kinetics of membrane potentials induced by externally applied electric fields. Lojewska Z, et al. **Biophys J** 1989 Jul;56(1):121–8
Repulsive interactions between uncharged bilayers. Hydration and fluctuation pressures for monoglycerides. McIntosh TJ, et al. **Biophys J** 1989 May;55(5):897–904
Water adsorption isotherms and hydration forces for lysolipids and diacyl phospholipids. Marsh D. **Biophys J** 1989 Jun;55(6):1093–100
Partitioning and location of Bay K 8644, 1,4-dihydropyridine calcium channel agonist, in model and biological membranes. Mason RP, et al. **Biophys J** 1989 Apr; 55(4):769–78
Chain configuration and flexibility gradient in phospholipid membranes. Comparison between spin-label electron spin resonance and deuteron nuclear magnetic resonance, and identification of new conformations. Moser M, et al. **Biophys J** 1989 Jan;55(1):111–23
Relations for lipid bilayers. Connection of electron density profiles to other structural quantities. Nagle JF, et al. **Biophys J** 1989 Feb;55(2):309–13
Electro-mechanical permeabilization of lipid vesicles. Role of membrane tension and compressibility. Needham D, et al. **Biophys J** 1989 May;55(5):1001–9
Location of the heme-Fe atoms within the profile structure of a monolayer of cytochrome c bound to the surface of an ultrathin lipid multilayer film. Pachence JM, et al. **Biophys J** 1989 Aug;56(2):327–37
Fusion of synaptic vesicle membranes with planar bilayer membranes. Perin MS, et al. **Biophys J** 1989 May; 55(5):973–86
Influence of negative surface charge on toxin binding to canine heart Na channels in planar bilayers. Ravindran A, et al. **Biophys J** 1989 Feb;55(2):359–65
Critical density fluctuations in lipid bilayers detected by fluorescence lifetime heterogeneity. Ruggiero A, et al. **Biophys J** 1989 Jun;55(6):1111–24
Analysis of the anisotropy decay of trans-parinaric acid in lipid bilayers. Ruggiero A, et al. **Biophys J** 1989 Jun; 55(6):1125–35
The effects of viscosity on gramicidin tryptophan rotational motion. Scarlata SF. **Biophys J** 1988 Dec;54(6):1149–57
Calculation of intermolecular interaction strengths in the P beta' phase in lipid bilayers. Implications for theoretical models [published erratum appears in Biophys J 1989 Jul;56(1):following 224] Scott HL, et al. **Biophys J** 1989 Feb;55(2):339–45
Interaction between bending and tension forces in bilayer membranes. Secomb TW. **Biophys J** 1988 Oct;54(4):743–6
Intermediates in membrane fusion and bilayer/nonbilayer phase transitions imaged by time-resolved cryo-transmission electron microscopy. Siegel DP, et al. **Biophys J** 1989 Jul;56(1):161–9
Anisotropic 2H-nuclear magnetic resonance spin-lattice relaxation in cerebroside- and phospholipid-cholesterol bilayer membranes. Siminovitch DJ, et al. **Biophys J** 1988 Sep;54(3):373–81
Polymorphic phase behavior of lysophosphatidylethanolamine dispersions. A thermodynamic and spectroscopic characterization. Slater JL, et al. **Biophys J** 1989 Aug;56(2):243–52
Determination of the structure of a membrane-incorporated ion channel. Solid-state nuclear magnetic resonance studies of gramicidin A. Smith R, et al. **Biophys J** 1989 Aug; 56(2):307–14
Acyl chain orientational order in the hexagonal HII phase of phospholipid-water dispersions. Sternin E, et al. **Biophys J** 1988 Oct;54(4):689–94
Interfacial properties of gramicidin and gramicidin-lipid mixtures measured with static and dynamic monolayer techniques. Tournois H, et al. **Biophys J** 1989 Mar; 55(3):557–69
Structure and location of amiodarone in a membrane bilayer as determined by molecular mechanics and quantitative x-ray diffraction. Trumbore M, et al. **Biophys J** 1988 Sep; 54(3):535–43
Structure of the fully hydrated gel phase of dipalmitoylphosphatidylcholine. Wiener MC, et al. **Biophys J** 1989 Feb;55(2):315–25
Role of channels in the fusion of vesicles with a planar bilayer. Woodbury DJ, et al. **Biophys J** 1988 Dec; 54(6):1053–63
Vesicle-membrane fusion. Observation of simultaneous membrane incorporation and content release. Woodbury DJ, et al. **Biophys J** 1988 Aug;54(2):345–9
Inhomogeneous translational diffusion of monoclonal antibodies on phospholipid Langmuir-Blodgett films. Wright LL, et al. **Biophys J** 1988 Sep;54(3):463–70
Pentachlorophenol-induced change of zeta-potential and gel-to-fluid transition temperature in model lecithin membranes. Smejtek P, et al. **Chem Biol Interact** 1989; 71(1):37–61
The effect of n-alcohols on vesicular permeability induced at the lipid phase transition temperature: a 1H-NMR study. Hunt GR, et al. **Chem Phys Lipids** 1989 Jul;51(1):55–65
Homogeneous immunoassay based on dihexadecyl-dimethylammonium bilayer membranes. Ihara H, et al. **Clin Chim Acta** 1988 Jun 30;175(1):51–7
Study of physical mechanisms of insulin reception. Hianik T, et al. **Czech Med** 1989;12(2):101–16
The effect of gramicidin A on phospholipid bilayers. Cornell BA, et al. **Eur Biophys J** 1988;16(2):113–9
A model for gramicidin A+-phospholipid interactions in bilayers. Cornell BA, et al. **Eur Biophys J** 1988; 16(5):299–306
Minor effects of bulk viscosity on lipid translational diffusion measured by the excimer formation technique. Ollmann M, et al. **Eur Biophys J** 1988;16(2):109–12
Curvature-electric effects in artificial and natural membranes studied using patch-clamp techniques. Petrov AG, et al. **Eur Biophys J** 1989;17(1):13–7
Membrane bending energy and shape determination of phospholipid vesicles and red blood cells. Svetina S, et al. **Eur Biophys J** 1989;17(2):101–11
The fidelity of response by 1-[4-(trimethylammonio)phenyl]-6-phenyl-1,3,5-hexatriene in time-resolved fluorescence anisotropy measurements on lipid vesicles. Effects of unsaturation, headgroup and cholesterol on orientational order and reorientational dynamics. van Langen H, et al. **Eur Biophys J** 1989;17(1):37–48
A cytolytic delta-endotoxin from Bacillus thuringiensis var. israelensis forms cation-selective channels in planar lipid bilayers. Knowles BH, et al. **FEBS Lett** 1989 Feb 27; 244(2):259–62
The effect of rimantadine on the structure of model and biological membranes. Cherny VV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):23–37
The lateral order of dipalmitoylphosphatidylcholine model membranes in the presence of N-alkyl-N,N,N-trimethylammonium ions as studied by Raman spectroscopy. Cirák J, et al. **Gen Physiol Biophys** 1988 Dec;7(6):633–42
Effects of insulin and glucagon on elasticity of lipid bilayers modified by rat liver plasma membrane fragments. Kavečanský J, et al. **Gen Physiol Biophys** 1988 Oct; 7(5):537–41
Increase of ionic conductance of amphotericin B channels under antibody action. Kolomytkin OV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):73–8
The structure of Staphylococcus aureus alpha-toxin-induced ionic channel. Krasilnikov OV, et al. **Gen Physiol Biophys** 1988 Oct;7(5):467–73
Changes of the energy profile of gramicidin A ionic channel dependent on the ratio of cations of different species in the flux passing through the channel. Lev AA, et al. **Gen Physiol Biophys** 1988 Oct;7(5):547–53
Interaction of tumor necrosis factor and lymphotoxin with model lipid membranes. Young JD. **Immunol Lett** 1988 Dec;19(4):287–91
Role of tryptophan in inducing polymorphic phase formation in lipid dispersions. Srivastava S, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):283–6
ESR study of proton transport across phospholipid vesicle membranes. Khramtsov VV, et al. **J Biochem Biophys Methods** 1989 May;18(3):237–46
The cooperative antioxidant role of glutathione with a lipid-soluble and a water-soluble antioxidant during peroxidation of liposomes initiated in the aqueous phase and in the lipid phase. Barclay LR. **J Biol Chem** 1988 Nov 5;263(31):16138–42
Regulation of UDP-glucuronosyltransferase by lipid-protein interactions. Comparison of the thermotropic properties of pure reconstituted enzyme with microsomal enzyme. Dannenberg A, et al. **J Biol Chem** 1989 Jan 5;264(1):238–42
Phospholamban forms Ca2+-selective channels in lipid bilayers. Kovacs RJ, et al. **J Biol Chem** 1988 Dec 5; 263(34):18364–8
Identification of a hemolysin from Actinobacillus pleuropneumoniae and characterization of its channel properties in planar phospholipid bilayers. Lalonde G, et al. **J Biol Chem** 1989 Aug 15;264(23):13559–64
Reconstitution of membrane proteins. Spontaneous incorporation of integral membrane proteins into preformed bilayers of pure phospholipid. Scotto AW, et al. **J Biol Chem** 1988 Dec 5;263(34):18500–6
Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. Benfenati F, et al. **J Cell Biol** 1989 May;108(5):1851–62
Erythrocyte morphology reflects the transbilayer distribution of incorporated phospholipids. Daleke DL, et al. **J Cell Biol** 1989 Apr;108(4):1375–85
Batrachotoxin-modified sodium channels from squid optic nerve in planar bilayers. Ion conduction and gating properties. Behrens MI, et al. **J Gen Physiol** 1989 Jan; 93(1):23–41
Fusion of phospholipid vesicles with a planar membrane depends on the membrane permeability of the solute used to create the osmotic pressure. Cohen FS, et al. **J Gen Physiol** 1989 Feb;93(2):201–10
Hydrostatic pressures developed by osmotically swelling vesicles bound to planar membranes. Niles WD, et al. **J Gen Physiol** 1989 Feb;93(2):211–44
Cocaine-induced closures of single batrachotoxin-activated Na+ channels in planar lipid bilayers. Wang GK. **J Gen Physiol** 1988 Dec;92(6):747–65
Ion modulation of membrane permeability: effect of cations on intact cells and on cells and phospholipid bilayers treated with pore-forming agents. Bashford CL, et al. **J Membr Biol** 1988 Jul;103(1):79–94
Conduction and blocking properties of a predominantly anion-selective channel from human platelet surface membrane reconstituted into planar phospholipid bilayers. Manning SD, et al. **J Membr Biol** 1989 Jul;109(2):113–22
Reconstitution of the lipid matrix of the outer membrane of gram-negative bacteria as asymmetric planar bilayer. Seydel U, et al. **J Membr Biol** 1989 Jul;109(2):95–103
Pure lipid vesicles can induce channel-like conductances in planar bilayers. Woodbury DJ. **J Membr Biol** 1989 Jul; 109(2):145–50
Controlled release from a large capsule membrane corked with phosphatidylethanolamine bilayers: effect of temperature, pH and concentration of Ca2+ ions. Seki T, et al. **J Microencapsul** 1985 Jan-Mar;2(1):13–22
Interaction of 1,4 dihydropyridine calcium channel antagonists with biological membranes: lipid bilayer partitioning could occur before drug binding to receptors. Herbette LG, et al. **J Mol Cell Cardiol** 1989 Feb; 21(2):187–201
Structural modifications of lipid vesicles by 8-methoxypsoralen. Páli T, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):359–67
Incorporation of toxin pores into liposomes. Füssle R, et al. **Methods Enzymol** 1988;165:285–93
Rotational and translational diffusion in membranes measured by fluorescence and phosphorescence methods. Jovin TM, et al. **Methods Enzymol** 1989;172:471–513
Transbilayer mobility of phosphatidylcholine in the red blood cell. Op den Kamp JA, et al. **Methods Enzymol** 1989; 173:223–31
Prediction of bilayer spanning domains of hydrophobic and amphipathic membrane proteins: application to the cytochrome b and colicin families. Shiver JW, et al. **Methods Enzymol** 1989;172:439–61
Techniques for observing calcium channels from skeletal muscle sarcoplasmic reticulum in planar lipid bilayers. Smith JS, et al. **Methods Enzymol** 1988;157:480–9
Incorporation of membrane proteins into liposomal bilayers. Wrigglesworth JM. **Mol Aspects Med** 1988;10(3):223–32
Selective action of artificial membranes [letter] [published erratum appears in Nature 1989 Feb 9;337(6207):514] Fletcher S. **Nature** 1989 Jan 19;337(6204):216–7
Calmodulin selectively modulates the guanylate cyclase activity by repressing the lipid phase separation temperature in the inner half of the bilayer of rat brain synaptosomal plasma membranes. Kopeikina-Tsiboukidou L, et al. **Neurochem Res** 1989 Feb;14(2):119–27
Probing a Ca2+-activated K+ channel with quaternary ammonium ions. Villarroel A, et al. **Pflugers Arch** 1988 Dec;413(2):118–26
Photoinduced electron transfer across lipid bilayers containing magnesium octaethylporphyrin. Ilani A, et al. **Photochem Photobiol** 1989 May;49(5):673–9
Porphyrin-liposome interactions: influence of the physico-chemical properties of the phospholipid bilayer. Ricchelli F, et al. **Photochem Photobiol** 1988 Jul;48(1):13–8
Light-induced electrical effects in a liquid crystal BLM containing TCNQ. Salamon Z, et al. **Photochem Photobiol** 1988 Sep;48(3):281–7
Anthrax toxin: channel-forming activity of protective antigen in planar phospholipid bilayers. Blaustein RO, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2209–13
Reconstitution of an inwardly rectifying potassium channel from the basolateral membranes of Necturus enterocytes into planar lipid bilayers. Costantin J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5212–6
Photogating of ionic currents across a lipid bilayer. Drain CM, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6959–62
Effects of lipid packing on polymorphic phase behavior and membrane properties. Hui SW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5825–9
M2 delta, a candidate for the structure lining the ionic channel of the nicotinic cholinergic receptor. Oiki S, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8703–7
Single channel properties of lens MIP 28 reconstituted into planar lipid bilayers. Ehring GR, et al. **Proc West Pharmacol Soc** 1988;31:251–3
Regulation and function of transbilayer movement of phosphatidylserine in activated blood platelets and sickle cells. Zwaal RF, et al. **Prog Clin Biol Res** 1988;282:181–92 (21 ref.)
Interdigitated bilayer membranes. Slater JL, et al. **Prog Lipid Res** 1988;27(4):325–59 (94 ref.)

Comparison of the dynamics of the membrane-bound form of fd coat protein in micelles and in bilayers by solution and solid-state nitrogen-15 nuclear magnetic resonance spectroscopy. Bogusky MJ, et al. **Proteins** 1988;4(2):123-30

X-ray studies on phospholipid bilayers. VIII. Interactions with chlorpromazine.HCl. Suwalsky M, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):742-8

[Interactions of detergents with phospholipid bilayers at sublytic concentrations—partition or binding?] Koelsch R, et al. **Biomed Biochim Acta** 1989;48(1):13-7 (Eng. Abstr.) (Ger)

[Single ion channels and macroscopic conductivity of bilayer lipid membranes] Cherenkevich SN, et al. **Biofizika** 1989 Jan-Feb;34(1):45-8 (Eng. Abstr.) (Rus)

[Ionic selectivity of bilayer lipid membranes modified by triforine] Golubev VN, et al. **Biofizika** 1989 Jan-Feb; 34(1):42-4 (Eng. Abstr.) (Rus)

[Ion conductance channels of bilayer from sarcoma-45 phospholipids] Mirkhodzhaev UZ, et al. **Biofizika** 1989 Mar-Apr;34(2):235-40 (Eng. Abstr.) (Rus)

[The effect of microenvironment and formation of intra-molecular links on the tertiary structure of cytochrome P-450 LM2] Uvarov VIu, et al. **Biokhimiia** 1988 Sep;53(9):1433-8 (Eng. Abstr.) (Rus)

[Reconstruction of single calcium channels of synaptic membranes on artificial phospholipid membranes] Sokolov IuV. **Dokl Akad Nauk SSSR** 1988;300(2):469-71 (Rus)

[Effect of pH on the potential-dependent functioning of staphylococcal toxin channels in phosphatidylcholine bilayer] Krasil'nikov OV, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):60-6 (Eng. Abstr.) (Rus)

[Conductivity and diameter of latrotoxin channels in lipid bilayers] Krasil'nikov OV, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):67-71 (Eng. Abstr.) (Rus)

ANALYSIS

Characterization of the L lambda phase in trehalose-stabilized dry membranes by solid-state NMR and X-ray diffraction. Lee CW, et al. **Biochemistry** 1989 Jun 13;28(12):5000-9

Slow-motion ESR study of order and dynamics in oriented lipid multibilayers: effects of unsaturation and hydration. Korstanje LJ, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):225-33

Segregation of anionic lipophiles in bilayers monitored by binding of cationic dye NK-529. Yu BZ, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):15-22

Interaction of surfactants with bilayer of negatively charged lipid: effect on gel-to-liquid-crystalline phase transition of dilauroylphosphatidic acid vesicle membrane. Inoue T, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):189-96

Structure of polymerizable lipid bilayers. I—1,2-bis(10,12-tricosadiynoyl)-sn-glycero-3-phosphocholine, a tubule-forming phosphatidylcholine. Rhodes DG, et al. **Chem Phys Lipids** 1988 Nov; 49(1-2):39-47

The rotational diffusion of chloroplast phosphate translocator and of lipid molecules in bilayer membranes. Wagner R, et al. **Eur J Biochem** 1989 Jun 1;182(1):165-73

Separation of the lipid bilayer from the membrane skeleton during discocyte-echinocyte transformation of human erythrocyte ghosts. Liu SC, et al. **Eur J Cell Biol** 1989 Aug;49(2):358-65

Transverse distribution of alpha-tocopherol in bilayer membranes studied by fluorescence quenching. Bisby RH, et al. **Free Radic Biol Med** 1989;6(3):231-9

Colicin E1 in planar lipid bilayers. Slatin SL. **Int J Biochem** 1988;20(8):737-44 (57 ref.)

Lipid layers in dermal vesicles of sheep scab. Sinclair AN. **J Comp Pathol** 1988 Jul;99(1):115-9

Release studies from lyotropic liquid crystal systems. Ibrahim HG. **J Pharm Sci** 1989 Aug;78(8):683-7

Acute monoarthritis associated with intracellular positively birefringent Maltese cross appearing spherules. Gardner GC, et al. **J Rheumatol** 1989 Mar;16(3):394-6 (14 ref.)

Transverse location of new fluorene based depth dependent fluorescent probes in membranes—quenching studies with 9,10-dibromostearic acid. Lala AK, et al. **Photochem Photobiol** 1989 Jun;49(6):763-7

Frequency spectrum of enthalpy fluctuations associated with macromolecular transitions. Mayorga OL, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9514-8

BLOOD

Self potential generated by unscreened fixed charges at the membrane interface of the erythrocyte perturbs the lipid bilayer. Sitaramam V. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1-2):172-9

DIAGNOSTIC USE

Cardiac calcium channels in planar lipid bilayers. L-type channels and calcium-permeable channels open at negative membrane potentials. Rosenberg RL, et al. **J Gen Physiol** 1988 Jul;92(1):27-54

IMMUNOLOGY

[Effect of monoclonal antibodies on the ionic permeability of a channel formed by amphotericin B in a lipid bilayer] Kolomytkin OV, et al. **Dokl Akad Nauk SSSR** 1988; 300(4):986-9 (Rus)

METABOLISM

Stilbene disulfonate blockade of colonic secretory Cl- channels in planar lipid bilayers. Bridges RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C902-12

The enhancement of proton/hydroxyl flow across lipid vesicles by inhalation anesthetics. Raines DE, et al. **Anesthesiology** 1989 Jan;70(1):57-63

Calcium channels reconstituted from the skeletal muscle dihydropyridine receptor protein complex and its alpha 1 peptide subunit in lipid bilayers. Peizer D, et al. **Ann N Y Acad Sci** 1989;560:138-54

Rat brain hexokinase: the hydrophobic N-terminus of the mitochondrially bound enzyme is inserted in the lipid bilayer. Xie GC, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):803-10

Phase separation in bimolecular mixed lipid membranes induced by polylysine. Mittler-Neher S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):124-9

The influence of phosphatidate bilayers on pig heart AMP deaminase. Crucial role of pH-dependent lipid-phase transition. Woźniak M, et al. **Biochem J** 1988 Nov 1; 255(3):977-81

Conformation of gramicidin in relation to its ability to form bilayers with lysophosphatidylcholine. Killian JA, et al. **Biochemistry** 1988 Sep 20;27(19):7295-301

The kinetic mechanism of cation-catalyzed phosphatidylglycerol transbilayer migration implies close contact between vesicles as an intermediate state. Lentz BR, et al. **Biochemistry** 1989 May 30;28(11):4575-80

Influence of glycolipid oligosaccharide and long-chain base composition on the thermotropic properties of dipalmitoylphosphatidylcholine large unilamellar vesicles containing gangliosides. Masserini M, et al. **Biochemistry** 1989 Jun 13;28(12):5029-34

Interaction of glycosylated human myelin basic protein with lipid bilayers. Persaud R, et al. **Biochemistry** 1989 May 16; 28(10):4209-16

Equilibrium and dynamic bilayer structural properties of unsaturated acyl chain phosphatidylcholine-cholesterol-rhodopsin recombinant vesicles and rod outer segment disk membranes as determined from higher order analysis of fluorescence anisotropy decay. Straume M, et al. **Biochemistry** 1988 Oct 4;27(20):7723-33

Interaction of insulin receptors with lipid bilayers and specific and nonspecific binding of insulin to supported membranes. Sui SF, et al. **Biochemistry** 1988 Sep 20;27(19):7463-9

Effect of the asymmetric Ca2+ distribution on the bilayer properties of phosphatidylcholine-sonicated vesicles. Bakás LS, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):352-60

Molecular basis of porin selectivity: membrane experiments with OmpC-PhoE and OmpF-PhoE hybrid proteins of Escherichia coli K-12. Benz R, et al. **Biochim Biophys Acta** 1989 May 19;981(1):8-14

The influence of the lipid bilayer phase state on the p-aminohippurate (PAH) transport and the activity of the alkaline phosphatase in brush-border membrane vesicles from normal and mutant rats. Bresler VM, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):288-94

Intrinsic molecules in lipid membranes change the lipid-domain interfacial area: cholesterol at domain interfaces. Cruzeiro-Hansson L, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):166-76 (44 ref.)

Retinol transfer across and between phospholipid bilayer membranes. Fex G, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):249-55

Mechanism of action of Bacillus thuringiensis insecticidal delta-endotoxin: interaction with phospholipid vesicles. Haider MZ, et al. **Biochim Biophys Acta** 1989 Jan 30; 978(2):216-22

Binding of phospholipase A2 to zwitterionic bilayers is promoted by lateral segregation of anionic amphiphiles. Jain MK, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):23-32

Membrane potential in liposomes measured by the transmembrane distribution of 86Rb+, tetraphenylphosphonium or triphenylmethylphosphonium: effect of cholesterol in the lipid bilayer. Nakazato K, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):143-50

The monensin-mediated transport of Na+ and K+ through phospholipid bilayers studied by 23Na- and 39K-NMR. Riddell FG, et al. **Biochim Biophys Acta** 1988 Oct 6; 944(2):279-84

Cholesterol-dependent gramicidin A channel inactivation in red blood cell membranes and lipid bilayer membranes. Schagina LV, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):145-50

Transbilayer effects of ethanol on fluidity of brain membrane leaflets. Schroeder F, et al. **Biochim Biophys Acta** 1988 Dec 8; 946(1):85-94

Relationship between gramicidin conformation dependent induction of phospholipid transbilayer movement and hexagonal HII phase formation in erythrocyte membranes. Tournois H, et al. **Biochim Biophys Acta** 1988 Dec 8; 946(1):173-7

Further study on the role of Mg2+ in lipid-protein interaction in reconstituted porcine heart mitochondrial H+-ATPase. Zhang XF, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):53-62

Weak interaction of spectrin with phosphatidylcholine-phosphatidylserine multilayers: a 2H and 31P NMR study. Bitbol M, et al. **FEBS Lett** 1989 Feb 13;244(1):217-22

Lipid dependence of peptide-membrane interactions. Bilayer affinity and aggregation of the peptide alamethicin. Stankowski S, et al. **FEBS Lett** 1989 Jul 3;250(2):556-60

Amphiphilic derivatives of betaine esters as modifiers of macrovesicular BLM. Kuczera J, et al. **Gen Physiol Biophys** 1989 Jun;8(3):223-32

Impermeant potential-sensitive oxonol dyes: I. Evidence for an "on-off" mechanism. George EB, et al. **J Membr Biol** 1988 Aug;103(3):245-53

Proton conductance caused by long-chain fatty acids in phospholipid bilayer membranes. Gutknecht J. **J Membr Biol** 1988 Nov;106(1):83-93

Gating behaviors of a voltage-dependent and Ca2+-activated cation channel of yeast vacuolar membrane incorporated into planar lipid bilayer. Tanifuji M, et al. **J Membr Biol** 1988 Nov;106(1):47-55

Deposition of a photosensitive complex within a lecithin bilayer lipid membrane. Salamon Z, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):351-7

Qinghaosu does not affect the major thermotropic phase transition in model membranes of dipalmitoylphosphatidylcholine. Browning PM, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):57-60

Alteration of lipid order profile and permeability of plasma membranes from Trypanosoma cruzi epimastigotes grown in the presence of ketoconazole. Urbina JA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):185-95

A nuclear magnetic resonance study of the interactions of the antimalarials chloroquine, quinacrine, quinine and mefloquine with dipalmitoylphosphatidylcholine bilayers. Zidovetzki R, et al. **Mol Biochem Parasitol** 1989 Jul; 35(3):199-207

Stable cell membrane labelling. Horan PK, et al. **Nature** 1989 Jul 13;340(6229):167-8

Voltage-gated channels formed in lipid bilayers by a positively charged segment of the Na-channel polypeptide. Tosteson MT, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):707-10

Reconstitution and physiological protein translocation processes. Etémadi AH. **Subcell Biochem** 1989;14:379-486 (712 ref.)

Reconstitution of acetylcholine receptors into planar lipid bilayers. Hanke W, et al. **Subcell Biochem** 1989;14:339-62 (48 ref.)

Reconstitution of the high-affinity receptor for immunoglobulin E. Kinet JP, et al. **Subcell Biochem** 1989; 14:321-37 (48 ref.)

Reconstitution of membrane molecular mechanisms in bilayer lipid membranes and patch-clamp bilayers. Vassilev PM, et al. **Subcell Biochem** 1989;14:97-143 (142 ref.)

[Penetration of ascorbic acid into bilayer phospholipid membranes] Kralnev AG, et al. **Biokhimiia** 1988 Dec; 53(12):1987-95 (Eng. Abstr.) (Rus)

PHARMACOLOGY

[The action of gramicidin S on the ionic permeability of bilayer lipid membranes] Korolev PN, et al. **Biol Nauki** 1988;(7):31-5 (Eng. Abstr.) (Rus)

[Effect of gramicidin S on lipid bilayer organization] Korolev PN, et al. **Biol Nauki** 1989;(1):37-42 (Rus)

[The action of membranotropic compounds with various structures on the parameters of the phase transition of dimyristoylphosphatidylcholine] Sëmin BK, et al. **Biol Nauki** 1989;(5):32-6 (Eng. Abstr.) (Rus)

[Effect of a new antiviral compound 1-morpholinomethyltetrahydro-2(1H)-pyrimidinone on the interaction of influenza virus proteins with flat lipid membranes] Tverdislov VA, et al. **Vopr Virusol** 1988 May-Jun;33(3):278-81 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Theory of protein-induced lateral phase separation in lipid membranes. Sperotto MM, et al. **Cell Biophys** 1989 Feb; 14(1):79-95 (69 ref.)

Effects of membrane surface charge and calcium on the gating of rat brain sodium channels in planar bilayers [published erratum appears in J Gen Physiol 1989 Apr;93(4):following 760] Cukierman S, et al. **J Gen Physiol** 1988 Oct;92(4):431-47

Gating properties of channels formed by Colicin Ia in planar lipid bilayer membranes. Nogueira RA, et al. **J Membr Biol** 1988 Oct;105(2):143-53

LIPID EMULSIONS, INTRAVENOUS see **FAT EMULSIONS, INTRAVENOUS**

LIPID METABOLISM, INBORN ERRORS

COMPLICATIONS

Myopathies caused by disorders of lipid metabolism. Carroll JE. **Neurol Clin** 1988 Aug;6(3):563-74 (74 ref.)

DIAGNOSIS

Long-chain aliphatic fatty acids and phytanic acid simultaneously measured by dual-column capillary chromatography. Tsai MY, et al. **Clin Chem** 1989 Sep; 35(9):1989-91

Apolipoprotein measurements in clinical biochemistry and

their utility vis-a-vis conventional assays. Bachorik PS, et al. **Clin Chim Acta** 1988 Nov;178(1):1-34 (151 ref.)
Inborn errors of lipid metabolism--dermatological aspects. Knobler RM, et al. **Clin Exp Dermatol** 1988 Nov; 13(6):365-70 (44 ref.)
Value of looking at leukocytes in every case of ichthyosis. Wolf R, et al. **Dermatologica** 1988;177(4):237-40
Computer aided phenotyping of dyslipoproteinemia. Pincé H, et al. **Int J Biomed Comput** 1988 Dec;23(3-4):251-63
Plasmalogen biosynthesis in the diagnosis of peroxisomal disorders. Kremser K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):315-7
[2 patients with Reye syndrome?] Houwen RH, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2025-8 (Eng. Abstr.) (Dut)

DIET THERAPY

Medium-chain acyl-CoA dehydrogenase deficiency: metabolic effects and therapeutic efficacy of long-term L-carnitine supplementation. Treem WR, et al. **J Inherited Metab Dis** 1989;12(2):112-9

DRUG THERAPY

Chenodeoxycholic acid normalizes elevated lipoprotein secretion and catabolism in cerebrotendinous xanthomatosis. Tint GS, et al. **J Lipid Res** 1989 May; 30(5):633-40

ENZYMOLOGY

Molecular analysis of peroxisomal beta-oxidation enzymes in infants with peroxisomal disorders indicates heterogeneity of the primary defect. Guerroui S, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):242-51
Peroxisomal oxidation of pipecolic acid in the rat. Kramar R, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):319-21
Lipase deficiencies. Greten H, et al. **J Inherited Metab Dis** 1988;11 Suppl 1:29-32 (8 ref.)

GENETICS

An erroneous apolipoprotein E-3 band in high density lipoprotein fractions. Rawlings AV, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:135-8
Farber lipogranulomatosis: an unusual presentation in a black child. Eviatar L, et al. **Pediatr Neurol** 1986 Nov-Dec; 2(6):371-4
[Cerebrotendinous xanthomatosis in a Druze family] Ben Dror G, et al. **Harefuah** 1988 Nov 1;115(9):224-6 (Eng. Abstr.) (Heb)

METABOLISM

Metabolism of pyrenedecanoic acid in Epstein-Barr virus-transformed lymphoid cell lines from normal subjects and from a patient with multisystemic lipid storage myopathy. Radom J, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):130-6
Independence of triacylglycerol-containing compartments in cultured fibroblasts from Wolman disease and multisystemic lipid storage myopathy. Salvayre R, et al. **FEBS Lett** 1989 Jun 19;250(1):35-9
Phytanic acid and very long chain fatty acids in genetic peroxisomal disorders. Molzer B, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):309-14
Genetic basis of lipoprotein disorders. Breslow JL. **J Clin Invest** 1989 Aug;84(2):373-80 (113 ref.)
Bile acid analyses in "pseudo-Zellweger" syndrome; clues to the defect in peroxisomal beta-oxidation. Clayton PT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:165-8
Familial hypoketotic hypoglycaemia associated with peripheral neuropathy, pigmentary retinopathy and C6-C14 hydroxydicarboxylic aciduria. A new defect in fatty acid oxidation? Poll-The BT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:183-5
Neutral lipid storage disease with ichthyosis: lipid content and metabolism of fibroblasts. Williams ML, et al. **J Inherited Metab Dis** 1988;11(2):131-43
Peroxisomal diseases. Goldfischer SL. **Prog Clin Biol Res** 1988;282:117-37 (130 ref.)
[Glycolipids: structure, enzymatic conversions and metabolic disorders in human diseases] Uzbekov MG. **Vopr Med Khim** 1971 Jul-Aug;17(4):339-56 (112 ref.) (Rus)

PATHOLOGY

A case of combined Farber and Sandhoff disease. Fusch C, et al. **Eur J Pediatr** 1989 Apr;148(6):558-62
[Mitochondrial myopathies and encephalomyelopathies] Zierz S, et al. **Nervenarzt** 1989 Jul;60(7):394-400 (33 ref.) (Ger)

PHYSIOPATHOLOGY

Inborn errors of organic acid metabolism. Green A. **Br J Hosp Med** 1989 May;41(5):426-30, 432, 434 (21 ref.)

LIPID MOBILIZATION

Plasma hormone levels in relation to lipid and protein metabolism during prolonged fasting in king penguin chicks. Le Ninan F, et al. **Gen Comp Endocrinol** 1988 Aug; 71(2):331-7
Muscle lipolysis during exercise. An update. Oscai LB, et al. **Sports Med** 1988 Jul;6(1):23-8 (47 ref.)
[The fat mobilization syndrome in guinea pigs (Cavia porcellus L.)] Lachmann G, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):231-40 (Eng. Abstr.) (Ger)
[Conformation possibilities of the lipotropic acton of human somatotropin] Mzareulov KD. **Biokhimiia** 1988 Jul; 53(7):1156-62 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Interactions between adenylate cyclase inhibitors and beta-adrenoceptors in isolated human fat cells. Lönnqvist F, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):654-60
Alpha 2-antagonist compounds and lipid mobilization: evidence for a lipid mobilizing effect of oral yohimbine in healthy male volunteers. Galitzky J, et al. **Eur J Clin Invest** 1988 Dec;18(6):587-94
Regulation of triglyceride mobilization in isolated hepatocytes by dibutyryl cyclic AMP and epinephrine. Woodside WF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S38-44; discussion S44
Mechanism of the lipid-mobilizing effect of alpha-2 adrenergic antagonists in the dog. Taouis M, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1172-80

LIPID PEROXIDATION

Accumulation of lipid peroxidation products in human cataracts. Babizhayev MA. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):281-7
Evidence for increased lipid peroxidation in the nonischemic portion of the heart with coronary occlusion. Herbaczyńska-Cedro K, et al. **Acta Physiol Pol** 1988 Mar-Apr;39(2):151-5
Proteolysis and lipid peroxidation--two aspects of cell injury in experimental hypovolemic-traumatic shock. Redl H, et al. **Adv Exp Med Biol** 1988;240:449-55
Lipid peroxidation in normal and ulcerated gastric mucosa of rats treated with pentacaine and cimetidine. Nosálová V, et al. **Agents Actions** 1989 Apr;27(1-2):160-2
Lipid peroxidation in vivo and in vitro in relation to atherosclerosis: some fundamental questions. Halliwell B. **Agents Actions Suppl** 1988;26:223-31 (36 ref.)
Hepatic lipid peroxidation and aldehyde dehydrogenase activity in alcoholic and non alcoholic liver disease. Mazzanti R, et al. **Alcohol Alcohol** 1989;24(2):121-8
Lipid peroxidation and altered vascular function in vitamin E-deficient rats. Hubel CA, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1539-45
Cytochrome oxidase and lactate dehydrogenase activities in peroxidized rabbit epididymal spermatozoa. Ferrandi B, et al. **Andrologia** 1989 May-Jun;21(3):215-22
The role of arachidonic acid and oxygen radical metabolites in the pathogenesis of vasogenic brain edema and astrocytic swelling. Chan PH, et al. **Ann N Y Acad Sci** 1989; 559:237-47
Lipid peroxidation in cancer cells: chemical and physical studies. Masotti L, et al. **Ann N Y Acad Sci** 1988;551:47-57; discussion 57-8
Metals and membrane lipid damage by oxy-radicals. Minotti G. **Ann N Y Acad Sci** 1988;551:34-44; discussion 45-6
Increase in crosslinking of nonenzymatically glycosylated collagen induced by products of lipid peroxidation. Hicks M, et al. **Arch Biochem Biophys** 1989 Jan;268(1):249-54
tert-butyl hydroperoxide-dependent microsomal release of iron and lipid peroxidation. II. Evidence for the involvement of nonheme, nonferritin iron in lipid peroxidation. Minotti G. **Arch Biochem Biophys** 1989 Aug 15;273(1):144-7
Nuclear membrane lipid peroxidation products bind to nuclear macromolecules. Vaca CE, et al. **Arch Biochem Biophys** 1989 Mar;269(2):548-54
Prevention of liver cell damage following lipid peroxidation by depression of lysophosphatide formation. Ungemach FR. **Arch Toxicol Suppl** 1989;13:275-81
Iron redox reactions and lipid peroxidation. Aust SD. **Basic Life Sci** 1988;49:137-44
Modification of human low density lipoprotein by lipid peroxidation. Esterbauer H, et al. **Basic Life Sci** 1988; 49:369-73
Oxygen radical-mediated damage to brain tissue. Floyd RA. **Basic Life Sci** 1988;49:1015-23
Hydroperoxidation of unsaturated fatty esters. Frankel EN. **Basic Life Sci** 1988;49:265-82 (49 ref.)
Cytochrome P-448 induction restores the propagation of .O2--induced lipid peroxidation in hepatoma microsomes. Galeotti T, et al. **Basic Life Sci** 1988;49:513-6
Lipid peroxidation dependent on oxygen and catalytic free iron ions in situ storage muscle foods. Harel S, et al. **Basic Life Sci** 1988;49:301-6
Oxygen radicals, lipid peroxidation and DNA damage in mitochondria. Hruszkewycz AM, et al. **Basic Life Sci** 1988; 49:449-56 (70 ref.)
The generation of ferryl or hydroxyl radicals during interaction of hemeproteins with hydrogen peroxide. Kanner J, et al. **Basic Life Sci** 1988;49:145-8
The role of glutathione transferase in the detoxication and repair of lipid and DNA hydroperoxides. Ketterer B, et al. **Basic Life Sci** 1988;49:669-74 (24 ref.)
Enzymatic lipid peroxidation: a step in the breakdown of mitochondria during the maturation of red blood cells. Kühn H, et al. **Basic Life Sci** 1988;49:945-9
Inhibition of peroxidation of membranes. Niki E, et al. **Basic Life Sci** 1988;49:561-6
Lipid peroxidation and haloalkylation in CCl4-induced liver fatty degeneration and necrosis. Poli G, et al. **Basic Life Sci** 1988;49:807-10
Fenton reactions in lipid phases: iron solubility, .OH production, and initiation of lipid oxidation. Schaich KM, et al. **Basic Life Sci** 1988;49:153-6
Plasma lipid peroxidation and atherosclerosis in restricted ovulator chickens. Smith TL, et al. **Basic Life Sci** 1988; 49:941-4
Lipid peroxidation and retinal phototoxic degeneration. Stephens RJ, et al. **Basic Life Sci** 1988;49:283-9
Lipid peroxidation, free radicals and experimental inflammation. Symons AM, et al. **Basic Life Sci** 1988; 49:987-90
The mechanism of quinone formation from carcinogenic benzo[a]pyrene mediated by lipid peroxidation in liposomal suspension. Terao J, et al. **Basic Life Sci** 1988;49:769-72
Detection of lipid peroxidation products in lipids and tissues by gas chromatography-mass spectrometry. van Kuijk FJ, et al. **Basic Life Sci** 1988;49:179-83 (24 ref.)
The role of iron in injury of endothelial cells in vitro and in vivo. Ward PA, et al. **Basic Life Sci** 1988;49:969-74
Influence of life-prolonging food restriction on membrane lipoperoxidation and antioxidant status. Yu BP, et al. **Basic Life Sci** 1988;49:1067-73
Mechanisms of lipid oxidation and antioxidation. Koivistoinen P. **Bibl Nutr Dieta** 1989;(43):260-5
The role of phospholipase A2 in microsomal lipid peroxidation induced with t-butyl hydroperoxide. Borowitz SM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1021-8
An investigation on lipoperoxidation mechanisms in boar spermatozoa. Comaschi V, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):769-75
Thiyl radical attack on polyunsaturated fatty acids: a possible route to lipid peroxidation. Schöneich C, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):113-20
Protein kinase C involvement in lipid peroxidation and cell membrane damage induced by oxygen-based radicals in hepatocytes. von Ruecker AA, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):836-42
Antioxidant protection by haemopexin of haem-stimulated lipid peroxidation. Gutteridge JM, et al. **Biochem J** 1988 Dec 15;256(3):861-5
Hepatic antioxidant enzymes and lipid peroxidation in carbon tetrachloride-induced liver cirrhosis in rats. Nadkarni GD, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):42-5
Rat liver microsomal NADPH-supported oxidase activity and lipid peroxidation dependent on ethanol-inducible cytochrome P-450 (P-450IIE1). Ekström G, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1313-9
Formation of pentane versus 1-pentanol in the ferrous sulfate-initiated decomposition of 15-hydroperoxyeicosatetraenoic acid in hypoxic and hyperoxic conditions. Smith CV, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1362-4
Lens opacity induced by lipid peroxidation products as a model of cataract associated with retinal disease. Babizhayev MA, et al. **Biochim Biophys Acta** 1989 Jul 17; 1004(1):124-33
Effect of lipid peroxidation on membrane-bound Ca2+-ATPase activity of the intestinal brush-border membranes. Ohta A, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):151-7
Radical initiated alpha-tocopherol depletion and lipid peroxidation in mitochondrial membranes. Thomas SM, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):189-97
Role of a partially purified glutathione S-transferase from rat liver nuclei in the inhibition of nuclear lipid peroxidation. Tirmenstein MA, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):174-80
Studies of lipid peroxidation in isolated rat heart mitochondria. Wiswedel I, et al. **Biomed Biochim Acta** 1989; 48(2-3):S73-6
Lipid peroxidation in developing fetal guinea pig brain during normoxia and hypoxia. Mishra OP, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):129-35
Increased lipid peroxidation in malignant tissues of patients with colorectal cancer. Otamiri T, et al. **Cancer** 1989 Jul 15;64(2):422-5
Role of lipid peroxidation in hematoporphyrin derivative-sensitized photokilling of tumor cells: protective effects of glutathione peroxidase. Thomas JP, et al. **Cancer Res** 1989 Apr 1;49(7):1682-6
Evidence for increased lipid peroxidation in the non-ischaemic portion of the heart with coronary occlusion. Herbaczyńska-Cedro K, et al. **Cardiovasc Res** 1989 Feb;23(2):98-103
Reduced lipid peroxidation in dilated hearts of cardiomyopathic turkeys. Lax D, et al. **Cardiovasc Res** 1988 Nov;22(11):826-32
Lipid peroxidation and physical properties of smooth and rough hepatoma microsomes. Masotti L, et al. **Cell Biophys** 1989 Feb;14(1):53-65
Hepatic injury in chronic iron overload. Role of lipid peroxidation. Bacon BR, et al. **Chem Biol Interact** 1989; 70(3-4):183-226 (216 ref.)
The role of iron in oxygen radical mediated lipid

peroxidation. Minotti G, et al. **Chem Biol Interact** 1989; 71(1):1–19 (57 ref.)

Oxidative stress and muscular dystrophy. Murphy ME, et al. **Chem Biol Interact** 1989;69(2–3):101–73 (349 ref.)

Studies on peroxidation of arachidonic acid in different liposomes below and above phase transition temperature. Cervato G, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):135–9

Assay of cardiolipin peroxidation by high-performance liquid chromatography. Parinandi NL, et al. **Chem Phys Lipids** 1988 Dec;49(3):215–20

Steady-state fluorescence anisotropy and multifrequency phase fluorometry on oxidized phosphatidylcholine vesicles. Tanfani F, et al. **Chem Phys Lipids** 1989 Apr; 50(1):1–9

Comparative study: the antioxidant enzymes and lipid peroxidation in cord and maternal red blood cell haemolysates [letter] Novák Z, et al. **Clin Chim Acta** 1989 Mar 15;180(1):103–5

Aberrant free radical activity in cystic fibrosis. Salh B, et al. **Clin Chim Acta** 1989 Apr 28;181(1):65–74

Hyperoxia decreases lung size of amphibian tadpoles without changing GSH-peroxidases or tissue peroxidation. Barja de Quiroga G, et al. **Comp Biochem Physiol [A]** 1989; 92(4):581–8

Lipid peroxidation enzyme system in rainbow trout (Salmo gairdnerii) skeletal muscle microsomes. Han TJ, et al. **Comp Biochem Physiol [B]** 1989;93(2):485–91

Ultrastructure, peroxisomes and lipid peroxidation in reperfused myocardium. Vaughan DM, et al. **Cytobios** 1988;55(221):71–80

Antioxidant and free radical-scavenging enzymes in chronically ethanol-consuming rats: controversy over hepatic lipid peroxidation. Nadkarni GD, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):161–4

Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7

Lipid peroxidation and human cataractogenesis in diabetes and severe myopia. Simonelli F, et al. **Exp Eye Res** 1989 Aug;49(2):181–7

Enzymatic and nonenzymatic lipid peroxidation capacities and antioxidants in hypoxic and reoxygenated rat myocardium. Kihlström M, et al. **Exp Mol Pathol** 1989 Apr;50(2):230–8

The effects of vitamin A nutritional status on microsomal lipid peroxidation and alpha-tocopherol level in rat liver. Pelissier MA, et al. **Experientia** 1989 Apr 15;45(4):342–3

Increased susceptibility to lipid peroxidation in skeletal muscles of dystrophic hamsters. Salminen A, et al. **Experientia** 1989 Aug 15;45(8):747–9

Development of hexachlorobenzene porphyria in rats: time sequence and relationship with lipid peroxidation. Visser O, et al. **Food Chem Toxicol** 1989 May;27(5):317–21

Free radical lipid oxidation affects cholesterol transfer between lipoproteins and erythrocytes. Azizova OA, et al. **Free Radic Biol Med** 1989;7(3):251–7

Lipid peroxidation in mitochondria. Bindoli A. **Free Radic Biol Med** 1988;5(4):247–61 (203 ref.)

Central nervous system trauma and stroke. I. Biochemical considerations for oxygen radical formation and lipid peroxidation. Braughler JM, et al. **Free Radic Biol Med** 1989;6(3):289–301 (108 ref.)

Superoxide dismutase, glutathione peroxidase, catalase, and lipid peroxidation in the major organs of the aging rats. Cand F, et al. **Free Radic Biol Med** 1989;7(1):59–63

Central nervous system trauma and stroke. II. Physiological and pharmacological evidence for involvement of oxygen radicals and lipid peroxidation. Hall ED, et al. **Free Radic Biol Med** 1989;6(3):303–13 (98 ref.)

Susceptibility to lipid peroxidation and accumulation of fluorescent products with age is greater in T-cells than B-cells. Hendricks LC, et al. **Free Radic Biol Med** 1988; 5(3):145–54

Lipid peroxidation in human diseases: evidence of red cell oxidative stress after circulatory shock. Poli G, et al. **Free Radic Biol Med** 1989;6(2):167–70

Selective sensitization of chemiluminescence resulted from lipid and oxygen radical reactions. Sharov VS, et al. **Free Radic Biol Med** 1989;7(3):237–42

Superoxide anion generation, erythrocytes superoxide dismutase activity, and lipid peroxidation during hemoperfusion and hemodialysis in chronic uremic patients. Trznadel K, et al. **Free Radic Biol Med** 1989;6(4):393–7

Effect of hyperlipidemic serum on lipid peroxidation, synthesis of prostacyclin and thromboxane by cultured endothelial cells: protective effect of antioxidants. Wang JA, et al. **Free Radic Biol Med** 1989;7(3):243–9

Effect of lipid peroxidation on the accessibility of dansyl chloride labeling to lipids and proteins of bovine myelin. Arduini A, et al. **Free Radic Res Commun** 1985;1(2):129–35

Stimulation of peroxidation in rat liver microsomes by (copper, zinc)-metallothioneins. Arthur JR, et al. **Free Radic Res Commun** 1987;4(1):15–20

Peroxidation of phospholipids promoted by myeloperoxidase. Carlin G, et al. **Free Radic Res Commun** 1988;4(4):251–7

Biological significance of secondary lipid oxidation products. Frankel EN. **Free Radic Res Commun** 1987;3(1–5):213–25

Lipid peroxidation in the cortex and medulla of rabbit kidneys subjected to cold ischaemia and the value of protective agents. Gower J, et al. **Free Radic Res Commun** 1987; 3(1–5):107–15

Inhibition of liver Golgi glycosylation activities by carbonyl products of lipid peroxidation. Marinari UM, et al. **Free Radic Res Commun** 1987;3(1–5):319–24

Pro-hemolytic effect of aldehydic products of lipid peroxidation. Poli G, et al. **Free Radic Res Commun** 1987; 3(1–5):279–84

Investigation of lipid peroxidation in human low density lipoprotein. Quehenberger O, et al. **Free Radic Res Commun** 1987;3(1–5):233–42

Lipid peroxidation. Definition of experimental conditions for selective study of the propagation and termination phases. Tadolini B, et al. **Free Radic Res Commun** 1989; 5(4–5):245–52

Increased lipid peroxidation in hyperthyroid patients: suppression by propylthiouracil treatment. Videla LA, et al. **Free Radic Res Commun** 1988;5(1):1–10

Role of glutathione peroxidase in protecting mammalian spermatozoa from loss of motility caused by spontaneous lipid peroxidation. Alvarez JG, et al. **Gamete Res** 1989 May; 23(1):77–90

Enzyme release and mitochondrial activity in reoxygenated cardiac muscle: relationship with oxygen-induced lipid peroxidation. Gauduel Y, et al. **Gen Physiol Biophys** 1989 Aug;8(4):327–40

Hepatic mitochondrial oxidative metabolism and lipid peroxidation in experimental hexachlorobenzene-induced porphyria with dietary carbonyl iron overload. Feldman ES, et al. **Hepatology** 1989 May;9(5):686–92

Increased lipid peroxidation in the erythrocytes of kidney stone formers. Anuradha CV, et al. **Indian J Biochem Biophys** 1989 Feb;26(1):39–42

Lipid peroxidation and antiperoxidative enzyme changes in erythrocytes in diabetes mellitus. Selvam R, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):268–72

Age-related changes in lipid profiles & lipid peroxidation in the CNS following restraint stress. Gupta A, et al. **Indian J Med Res** 1988 Jun;87:624–30

The role of free oxygen radicals and sperm function. Aitken RJ. **Int J Androl** 1989 Apr;12(2):95–7

NADPH-dependent drug redox cycling and lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Int J Biochem** 1989;21(2):183–90

Influence of lipid peroxidation and hydrogen peroxide on muscarinic cholinergic receptors and ATP level in rat myocytes and lymphocytes. Gajewski M, et al. **Int J Tissue React** 1988;10(5):281–90

Oxidation of alpha 1-protease inhibitor: role of lipid peroxidation products. Mohsenin V, et al. **J Appl Physiol** 1989 May;66(5):2211–5

Skeletal muscle lipid peroxidation in exercised and food-restricted rats during aging. Starnes JW, et al. **J Appl Physiol** 1989 Jul;67(1):69–75

Comparison of fluorescence characteristics of products of peroxidation of membrane phospholipids with those of products derived from reaction of malonaldehyde with glycine as a model of lipofuscin fluorescent substances. Shimasaki H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):761–6

Effects of cadmium-metallothionein on renal organic ion transport and lipid peroxidation in rats. Suzuki CA, et al. **J Biochem Toxicol** 1988 Spring;3:11–20

Metmyoglobin promotes arachidonic acid peroxidation at acid pH. Fantone J, et al. **J Biol Chem** 1989 Jun 5; 264(16):9408–11

Recognition of oxidized low density lipoprotein by the scavenger receptor of macrophages results from derivatization of apolipoprotein B by products of fatty acid peroxidation. Steinbrecher UP, et al. **J Biol Chem** 1989 Sep 15;264(26):15216–23

Determination of the lipid peroxidation product trans-4-hydroxy-2-nonenal in biological samples by high-performance liquid chromatography and combined capillary column gas chromatography-negative-ion chemical ionisation mass spectrometry. Selley ML, et al. **J Chromatogr** 1989 Mar 24;488(2):329–40

Superoxide anion participation in human monocyte-mediated oxidation of low-density lipoprotein and conversion of low-density lipoprotein to a cytotoxin. Cathcart MK, et al. **J Immunol** 1989 Mar 15;142(6):1963–9

Alterations in protective enzymes against peroxidation in the central and peripheral nervous system of control and dysmyelinating mutant mice. Cloëz I, et al. **J Neurochem** 1989 May;52(5):1353–8

Basal lipid peroxidation in substantia nigra is increased in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Feb;52(2):381–9

Glutathione depletion and oxidative stress: study with perfused bovine eye. Kishida K, et al. **J Ocul Pharmacol** 1985 Spring;1(1):85–99

Erythrocyte membrane lipid peroxidation before and after vitamin E supplementation in children with cholestasis. Lubrano R, et al. **J Pediatr** 1989 Sep;115(3):380–4

ESR evidence for the hydroxyl radical formation in aqueous suspension of quartz particles and its possible significance to lipid peroxidation in silicosis. Shi XL, et al. **J Toxicol Environ Health** 1988;25(2):237–45

Changes in lipid peroxidation and activities of xanthine oxidase, superoxide dismutase and catalase in kidneys of cephaloridine-administered rats. Suzuki Y, et al. **Jpn J Pharmacol** 1989 Jan;49(1):43–51

Decrease of the inhibition of lipid peroxidation by glutathione-dependent system in erythrocytes of non-insulin dependent diabetics. Fujiwara Y, et al. **Klin Wochenschr** 1989 Mar 15;67(6):336–41

In praise of peroxidation. Dormandy TL. **Lancet** 1988 Nov 12;2(8620):1126–8 (24 ref.)

Thiobarbituric acid-reactive malondialdehyde formation during superoxide-dependent, iron-catalyzed lipid peroxidation: influence of peroxidation conditions. Janero DR, et al. **Lipids** 1989 Feb;24(2):125–31

Determination of ethane and pentane in free oxygen radical-induced lipid peroxidation. Pitkänen OM, et al. **Lipids** 1989 Feb;24(2):157–9

Blood levels of free fatty acids and products of lipid peroxidation in rabbits during acute ischaemic hypoxia: protective effect of methylprednisolone. Orzechowski Z, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):159–62

Increased hepatic lipid peroxidation in aged mice. Uysal M, et al. **Mech Ageing Dev** 1989 Apr;48(1):85–9

Clinical and biological correlations related to zinc depletion and lipid peroxide generation in some metabolic and endocrine diseases. Popovici D, et al. **Med Interne** 1989 Jan–Mar;27(1):57–64

Effect of lipid peroxidation on heart mitochondria oxygen consuming and calcium transporting capacities. Ceconi C, et al. **Mol Cell Biochem** 1988 Jun;81(2):131–5

Lysosomal lipolytic enzymes, lipid peroxidation, and injury. Dickens BF, et al. **Mol Cell Biochem** 1988 Jul–Aug; 82(1–2):119–23

alpha-Tocopherol depletion eliminates the regional differences in adrenal mitochondrial lipid peroxidation. Staats DA, et al. **Mol Cell Endocrinol** 1989 Apr; 62(2):189–95

Delayed-onset muscle damage and lipid peroxidation in man after a downhill run. Maughan RJ, et al. **Muscle Nerve** 1989 Apr;12(4):332–6

Is lipid peroxidation associated with DNA damage? Brambilla G, et al. **Mutat Res** 1989 Sep;214(1):123–7

Evidence of an increased susceptibility to lipid peroxidation in red blood cells of chronic renal failure patients [letter] Miguel A, et al. **Nephron** 1988;50(1):64–5

Peroxidative damage to cell membranes following cerebral ischemia. A cause of ischemic brain injury? Ginsberg MD, et al. **Neurochem Pathol** 1988 Jul–Dec;9:171–93

Biological and methodological implications of prostaglandin involvement in mouse brain lipid peroxidation measurements. Bose R, et al. **Neurochem Res** 1989 Mar; 14(3):217–20

Correlation among lipid peroxidation, brain energy metabolism and brain oedema in cerebral ischaemia. Uenohara H, et al. **Neurol Res** 1988 Dec;10(4):194–9

Decreased peroxidative potential in rat brain microsomal fractions during ageing. Devasagayam TP. **Neurosci Lett** 1989 Aug 14;103(1):92–6

Free radical generation during primary infections with Nippostrongylus brasiliensis. Smith NC, et al. **Parasite Immunol** 1989 Mar;11(2):147–60

Copper toxicity and lipid peroxidation in isolated rat hepatocytes: effect of vitamin E. Sokol RJ, et al. **Pediatr Res** 1989 Jan;25(1):55–62

Inhibition of NADPH-induced microsomal lipid peroxidation in the livers of cholestatic rats. Aykaç G, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):39–42

The effect of zinc on iron-induced lipid peroxidation in different lipid systems including liposomes and micelles. Szebeni J, et al. **Physiol Chem Phys Med NMR** 1988; 20(3):205–11

Ascorbate is an outstanding antioxidant in human blood plasma. Frei B, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6377–81

Lipidperoxidation in a canine model of hypovolemic-traumatic shock. Lieners C, et al. **Prog Clin Biol Res** 1989;308:345–50

Pulmonary carbonyl reductase: metabolism of carbonyl products in lipid peroxidation. Matsuura K, et al. **Prog Clin Biol Res** 1989;290:335–49

The 21-aminosteroid U74006F reduces systemic lipid peroxidation, improves neurologic function, and reduces mortality after cardiopulmonary arrest in dogs. Natale JE, et al. **Prog Clin Biol Res** 1989;308:891–6

Conjugated diene production after airway acid aspiration. Stothert JC Jr, et al. **Prog Clin Biol Res** 1989;299:69–74

Lipid peroxidation—an initial event in experimental acute renal failure. Joannidis M, et al. **Renal Physiol Biochem** 1989 Jan–Feb;12(1):47–55

Oxygen radicals, lipid peroxidation, and neutrophil infiltration after small-intestinal ischemia and reperfusion. Otamiri T. **Surgery** 1989 May;105(5):593–7

Relative contributions of protein sulfhydryl loss and lipid peroxidation to allyl alcohol-induced cytotoxicity in isolated rat hepatocytes. Hormann VA, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):375–84

Lipid peroxidation activation and cytochrome P-450 decrease in rat liver endoplasmic reticulum under oxidative stress. Serbinova EA, et al. **Toxicol Lett** 1989 May; 47(2):119–23

Incides of lipid peroxidation in patients with hypercholesterolemia and hypertriglyceridemia. Domagala B, et al. **Wien Klin Wochenschr** 1989 Jun 9;101(12):423–8

Free fatty acids and lipid peroxidation in normal and mastitic bovine milk. Atroshi F, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):321–30

[Lipid peroxidation and myocardial reperfusion injury in open heart surgery] Chen BT, et al.

Chung Hua I Hsueh Tsa Chih 1988 Apr;68(4):212–4 (Chi)
[Effects of lipid peroxidation on cultured bovine smooth muscle cells] Zhen EZ. Chung Hua I Hsueh Tsa Chih 1988 Jul;68(7):391–2 (Chi)
[Injurious effect of lipid peroxidation on human endothelial cells in vitro] Chen TZ. Chung-hua Ping Li Hsueh Tsa Chih 1989 Mar;18(1):15–8 (Eng. Abstr.) (Chi)
[Unscheduled DNA synthesis and lipid peroxidation in the aged population] Srám RJ, et al. Cas Lek Cesk 1988 Oct 28;127(44):1365–9 (Eng. Abstr.) (Cze)
[Role of lipid peroxidation in the formation of atheroma] Emerit J, et al. Presse Med 1989 Apr 22;18(16):832–6 (Eng. Abstr.) (Fre)
[Determination of individual sensitivity of the body to hyperbaric oxygenation] Aschurova LD, et al. Z Gesamte Inn Med 1988 Jul 15;43(14):380–3 (Eng. Abstr.) (Ger)
[Plasma malondialdehyde levels: marker for lipid peroxidation in man] Vendemiale G, et al. Boll Soc Ital Biol Sper 1988 Aug;64(8):699–706 (Eng. Abstr.) (Ita)
[Endotoxin-induced lung injury—the role of leukocytes and oxidants] Miyashita M, et al. Kokyu To Junkan 1989 Jan; 37(1):65–70 (Eng. Abstr.) (Jpn)
[Chronic effects of ethylene oxide on glutathione content and lipid peroxidation in rat liver] Katoh T, et al. Nippon Eiseigaku Zasshi 1988 Dec;43(5):1053–7 (Eng. Abstr.) (Jpn)
[Effects of dietary lipids on lipid peroxidation and the accumulation of mercury in rat tissues] Sakamoto M, et al. Nippon Eiseigaku Zasshi 1988 Oct;43(4):917–22 (Eng. Abstr.) (Jpn)
[Arachidonic acid cascade and radical peroxidation] Fujita T, et al. Nippon Rinsho 1988 Oct;46(10):2155–60 (Jpn)
[Linoleic cascade and radical peroxidation reaction] Ozawa T, et al. Nippon Rinsho 1988 Oct;46(10):2161–6 (Jpn)
[Peroxidation chain reactions of lipid radicals in membrane injuries] Terao J. Nippon Rinsho 1988 Oct;46(10):2149–54 (Jpn)
[Role of lipid peroxidation and polymorphonuclear leukocytes-derived oxygen radicals in acute gastric lesions induced by hyperthermic treatment] Yoshikawa T, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Feb;86(2):159–64 (Eng. Abstr.) (Jpn)
[Production of active oxygen in microsomes] Shimada O, et al. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):2737–43 (Jpn)
[Reactivity of active oxygen with lipids] Terao J. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3060–6 (Jpn)
[Lipid peroxidation in the uterus–placenta–fetus system in cases of nephropathy and fetal hypotrophy] Sieroń G, et al. Ginekol Pol 1988 Oct;59(10):618–23 (Eng. Abstr.) (Pol)
[The role of oxygen-derived free radicals in ischemic heart damage] Karwatowska-Prokopczuk E, et al. Kardiol Pol 1988;31(12):786–98 (66 ref.) (Pol)
[Cytochrome P-450-dependent renal monooxygenases] Czekaj P, et al. Postepy Hig Med Dosw 1988 Nov–Dec; 42(6):640–64 (52 ref.) (Eng. Abstr.) (Pol)
[Increased activity of free radicals in pregnant women with EPH gestosis] Jendryczko A, et al. Przegl Lek 1988; 45(9):670–4 (Eng. Abstr.) (Pol)
[The role of free radicals in erythrocyte damage] Posiełężna B, et al. Wiad Lek 1988 Oct 1;41(19):1305–9 (17 ref.) (Pol)
[The role of antioxidant deficiency in the pathogenesis of late pregnancy toxemia] Abramchenko VV, et al. Akush Ginekol (Mosk) 1988 Jun;(6):67–71 (Rus)
[Synthesis of prostaglandins and lipid peroxidation in pregnant women with gestosis] Shalina RI, et al. Akush Ginekol (Mosk) 1988 Jun;(6):25–9 (Eng. Abstr.) (Rus)
[Effect of hyperbaric oxygenation on various indicators of lipid peroxidation and erythrocyte membranes] Zhdanov GG, et al. Anesteziol Reanimatol 1988 May–Jun;(3):26–8 (Eng. Abstr.) (Rus)
[Lipid peroxidation in the etiology and pathogenesis of atherosclerosis] Lankin VZ, et al. Arkh Patol 1989; 51(1):80–4 (72 ref.) (Eng. Abstr.) (Rus)
[Oxygen dependence of the kinetics of nonenzymatic lipid peroxidation] Sitnitskiĭ AE, et al. Biofizika 1989 Mar–Apr; 34(2):230–4 (Eng. Abstr.) (Rus)
[Initiation of lipid peroxidation as a result of hemoglobin transformation into hemichrome induced by free fatty acids] Andreiuk GM, et al. Biokhimiia 1988 Jun; 53(6):1017–24 (Eng. Abstr.) (Rus)
[Protective effect of high density lipoproteins, their subfractions and lecithin–cholesterol–acyltransferases on the peroxidation modification of low density lipoproteins] Klimov AN, et al. Biokhimiia 1989 Jan;54(1):118–23 (Eng. Abstr.) (Rus)
[Inhibition of free-radical lipid oxidation in the mechanisms of immediate and long-term adaptation to stress] Guliaeva NV. Biol Nauki 1989;(4):5–14 (32 ref.) (Eng. Abstr.) (Rus)
[The importance of antioxidative enzymes in regulating lipid peroxidation in human erythrocyte membranes] Verbolovich VP, et al. Biol Nauki 1989;(1):27–33 (Rus)
[The content of lipid peroxidation products and the activity of antioxidant enzymes in the myocardium and liver of rats with various vitamin E allowances] Arkhipenko IuV, et al. Biull Eksp Biol Med 1988 Dec;106(12):670–1 (Eng. Abstr.) (Rus)
[The state of lipid peroxidation and enzymes of calcium transport system in sarcoplasmic reticulum of ischemic myocardium] Bulgakov VG, et al. Biull Eksp Biol Med 1988 Sep;106(9):272–4 (Eng. Abstr.) (Rus)
[Lipid peroxidation in the synaptosomal and mitochondrial fractions of separate brain structures in hypoxia] Dzhafarov AI, et al. Biull Eksp Biol Med 1989 Mar;107(3):305–7 (Eng. Abstr.) (Rus)
[Lipid peroxidation and the endogenous DNA polymerase activity of fractions of isolated liver chromatin in rats] Gubskiĭ IuI, et al. Biull Eksp Biol Med 1989 Mar; 107(3):296–8 (Eng. Abstr.) (Rus)
[The inhibition stage of lipid peroxidation during stress] Guliaeva NV, et al. Biull Eksp Biol Med 1988 Dec; 106(12):660–3 (Eng. Abstr.) (Rus)
[The role of the activation of lipid peroxidation in the pathogenesis of experimental peritonitis] Koniukhova SG, et al. Biull Eksp Biol Med 1989 May;107(5):557–9 (Eng. Abstr.) (Rus)
[Lipid peroxidation in the caudate nuclei in experimental parkinsonian syndrome] Kucherianu VG, et al. Biull Eksp Biol Med 1989 Jan;107(1):39–41 (Eng. Abstr.) (Rus)
[Modification of blood plasma lipoproteins by a lipid peroxidation product—hexanal] Kuznetsov AS, et al. Biull Eksp Biol Med 1989 Mar;107(3):294–6 (Eng. Abstr.) (Rus)
[Selective suppression of lipid peroxidation in the brain under stress] Meerson FZ, et al. Biull Eksp Biol Med 1988 Nov; 106(11):542–4 (Eng. Abstr.) (Rus)
[The interrelationship of the processes of lipid peroxidation and lipid phospholipase hydrolysis in the synaptosomes] Nikushkin EV, et al. Biull Eksp Biol Med 1989 Feb; 107(2):174–7 (Eng. Abstr.) (Rus)
[Lipid peroxidation—the factor promoting cholesterol accumulation in cells in atherogenesis] Panasenko OM, et al. Biull Eksp Biol Med 1988 Sep;106(9):277–80 (Eng. Abstr.) (Rus)
[The interrelationship of the processes of lipid peroxidation and phospholipase hydrolysis in the synaptosomes] Nikushkin EV, et al. Biull Eksp Biol Med 1989 Feb; 107(2):174–7 (Eng. Abstr.) (Rus)
[Lipid peroxidation—the factor promoting cholesterol accumulation in cells in atherogenesis] Panasenko OM, et al. Biull Eksp Biol Med 1988 Sep;106(9):277–80 (Eng. Abstr.) (Rus)
[Comparative evaluation of the effect of immobilization stress on the dynamics of resistance to induction of lipid peroxidation in internal organs and brain] Arkhipenko IuV, et al. Dokl Akad Nauk SSSR 1989;304(6):1500–3 (Rus)
[Dependence of lipid peroxidation on the typologic characteristics of the nervous system and their relation to the resistance of the body to exertion] Deviatkina TA, et al. Fiziol Zh 1989 Jan–Feb;35(1):55–9 (Eng. Abstr.) (Rus)
[Oxidative phosphorylation and lipid peroxidation of the liver mitochondria in rats after acute benzene poisoning] Trifonov IuA, et al. Gig Sanit 1989 Mar;(3):32–4 (Eng. Abstr.) (Rus)
[Biochemical evaluation of the status of the bronchopulmonary system and liver in workers engaged in the manufacture of graphite products] Arkhipova OG, et al. Gig Tr Prof Zabol 1988 Sep;(9):24–7 (Eng. Abstr.) (Rus)
[Negative inotropic and vasoconstrictor effects of oxidized phospholipids] Bilenko MV, et al. Kardiologiia 1989 Jun; 29(6):88–94 (Eng. Abstr.) (Rus)
[Anti-aggregative activity of the vascular wall, blood coagulation and the status of the physiologic antioxidant system in patients with ischemic heart disease and in healthy persons practicing jogging] Mishchenko VP. Kardiologiia 1988 Nov;28(11):110–2 (Rus)
[Status of thrombocyte membranes and lipid peroxidation in patients with unstable stenocardia] Shatilina LV, et al. Kardiologiia 1989 Feb;29(2):45–9 (Eng. Abstr.) (Rus)
[Free-radical lipid peroxidation in patients with acute gastro-intestinal hemorrhage] Bekh ND, et al. Klin Khir 1989;(4):10–2 (Eng. Abstr.) (Rus)
[Lipid peroxidation and antioxidants in duodenal ulcer] Dalidovich KK, et al. Klin Med (Mosk) 1988 Oct; 66(10):109–12 (Rus)
[Characteristics of lipid peroxidation in persons with an elevated genetic risk for the development of atherosclerotic cardiovascular diseases] Davidenkova EF, et al. Klin Med (Mosk) 1988 Aug;66(8):54–8 (Eng. Abstr.) (Rus)
[Myeloperoxidase of neutrophils and its possible role in lipid peroxidation processes in arteriosclerosis] Davidenkova EF, et al. Klin Med (Mosk) 1989 Jun;67(6):56–8 (Eng. Abstr.) (Rus)
[Free radicals and diseases of the digestive organs (a review of the foreign literature)] Radbil' OS. Klin Med (Mosk) 1989 Mar;67(3):17–21 (28 ref.) (Rus)
[Lipid peroxidation in the human blood during a 120-day period of anti-orthostatic hypokinesia] Zezerov AE, et al. Kosm Biol Aviakosm Med 1989 Mar–Apr;23(2):28–33 (Eng. Abstr.) (Rus)
[Modification of the method of determining lipid peroxidation in a test using thiobarbituric acid] Andreeva LI, et al. Lab Delo 1988;(11):41–3 (Eng. Abstr.) (Rus)
[The effect of storage conditions on lipid peroxidation in erythrocytes] Musatova NV, et al. Lab Delo 1989;(3):52–4 (Eng. Abstr.) (Rus)
[Indices of lipid peroxidation and the ceruloplasmin–transferrin antioxidant system in donors] Podoprigorova VG, et al. Lab Delo 1989;(1):13–5 (Eng. Abstr.) (Rus)
[Effect of the ascorbic acid of the aqueous humor on the lipid peroxidation process in the eye in primary open-angle glaucoma] Aleksidze AT, et al. Oftalmol Zh 1989;(2):114–6 (Eng. Abstr.) (Rus)
[Lipid peroxidation as a mechanism of bioenergetic regulation in inflammation of the respiratory organs] Semenov VL. Patol Fiziol Eksp Ter 1989 Mar–Apr;(2):17–20 (Eng. Abstr.) (Rus)
[State of lipid peroxidation system and antioxidant defense in acute respiratory viral infection in children and the principles of pathogenetic therapy] Ananenko AA, et al. Pediatriia 1989;(1):27–30 (Eng. Abstr.) (Rus)
[Indicators of lipid peroxidation and the level of essential microelements in healthy newborn infants and in those with a history of intrauterine hypotrophy] Deshchekina MF, et al. Pediatriia 1989;(3):18–21 (Eng. Abstr.) (Rus)
[Lipid peroxidation and antioxidant protection in healthy children and in those with chronic glomerulonephritis in a tropical climate] Ishkabulov D, et al. Pediatriia 1989; (7):111 (Rus)
[Indicators of lipid peroxidation and alpha tocopherol in healthy children] Klevko VA, et al. Pediatriia 1989;(3):110 (Rus)
[Plasma and cerebrospinal fluid levels of lipid peroxidation products and free fatty acids in children with convulsions] Kryzhanovskiĭ GN, et al. Pediatriia 1988;(7):22–5 (Eng. Abstr.) (Rus)
[Free-radical oxidation and bioenergetics in pyelonephritis in children] Maldannik VG. Pediatriia 1988;(10):12–6 (Eng. Abstr.) (Rus)
[Functional disorders of lymphocytes in children with bronchial asthma] Safronova ON, et al. Pediatriia 1988; (7):110–1 (Rus)
[Features of lipid peroxidation in patients with diabetes mellitus before and after therapy by a method of transplantation of human fetal islet cell cultures] Pavlovskiĭ MP, et al. Probl Endokrinol (Mosk) 1989 May–Jun; 35(3):26–9 (Eng. Abstr.) (Rus)
[Itsenko–Cushing disease and lipid peroxidation] Tishenina RS, et al. Probl Endokrinol (Mosk) 1988 Jul–Aug;34(4):32–6 (Eng. Abstr.) (Rus)
[Effect of hyperbaric oxygenation on lipid peroxidation and the antioxidant system of the blood in hepatitis B] Boldyrev NA, et al. Sov Med 1989;(4):93–5 (Rus)
[Lipid peroxidation in persons with chronic odontogenic foci of infection] Cherkashin SI. Stomatologiia (Mosk) 1989 May–Jun;68(3):15–7 (Eng. Abstr.) (Rus)
[Lipid peroxidation indices in children with congenital cleft palate] Nagirnyĭ IaP. Stomatologiia (Mosk) 1989 Jan–Feb; 68(1):79–80 (Eng. Abstr.) (Rus)
[Mast-cell mechanism of the pathogenesis of bronchial asthma and peroxidation of membrane lipids] Amatuni VG, et al. Ter Arkh 1989;61(3):34–7 (Eng. Abstr.) (Rus)
[Status of the antioxidant system and free radical lipid peroxidation in patients with chronic renal failure] Grinshteĭn IuI, et al. Ter Arkh 1988;60(6):54–6 (Eng. Abstr.) (Rus)
[Blood lipids and the indicators of lipid peroxidation in patients with hemorrhagic fever with nephrotic syndrome] Koval'skiĭ IuG. Ter Arkh 1988;60(6):82–5 (Eng. Abstr.) (Rus)
[Free-radical oxidation of blood plasma lipids in patients with acute intestinal infections] Malov VA, et al. Ter Arkh 1988; 60(11):75–8 (Eng. Abstr.) (Rus)
[Change in lipid peroxidation in patients with primary osteoarthrosis deformans] Rubyk BI, et al. Ter Arkh 1988; 60(9):110–3 (Eng. Abstr.) (Rus)
[Mechanisms of activation and the role of lipid peroxidation in exacerbation of chronic pancreatitis] Zhukov NA, et al. Ter Arkh 1989;61(2):15–8 (Eng. Abstr.) (Rus)
[Peroxide modification of low density lipoproteins in ischemic heart disease] Kuznetsov AS, et al. Ukr Biokhim Zh 1989 May–Jun;61(3):111–4 (Eng. Abstr.) (Rus)
[Features of ischemic injuries to membranes and activation of lipid peroxidation in the myocardium of rats of various ages] Lemeshko VV, et al. Ukr Biokhim Zh 1989 Mar–Apr; 61(2):98–105 (Eng. Abstr.) (Rus)
[Peroxidation of lipids from liver mitochondria during pneumonia] Semenov VL. Ukr Biokhim Zh 1988 Sep–Oct; 60(5):85–7 (Eng. Abstr.) (Rus)
[The role of free-radical lipid oxidation in adaptation mechanisms] Airapetiants MG, et al. Vestn Akad Med Nauk SSSR 1988;(11):49–55 (25 ref.) (Eng. Abstr.) (Rus)
[Atherosclerosis and the process of lipid peroxidation] Davidenkova EF, et al. Vestn Akad Med Nauk SSSR 1989; (3):10–8 (48 ref.) (Eng. Abstr.) (Rus)
[State of the reaction of peroxidation of lipids and alpha-tocopherol in children in the early postoperative period] Mikhel'son VA, et al. Vestn Akad Med Nauk SSSR 1988;(9):56–61 (Eng. Abstr.) (Rus)
[Effectiveness of the elimination of lipid peroxidation products in various methods of detoxication therapy of patients with traumatic shock] Grinev MV, et al. Vestn Khir 1988 Jun;140(6):53–8 (Eng. Abstr.) (Rus)
[The role of peroxidation in cosmetic ophthalmology] Babizhaev MA, et al. Vestn Oftalmol 1988 Jul–Aug; 104(4):55–8 (Eng. Abstr.) (Rus)
[Correction of lipid peroxidation in the vitreous body in

hemorrhage] Efendiev NM, et al. **Vestn Oftalmol** 1988 Sep-Oct;104(5):67-9 (Eng. Abstr.) **(Rus)**

[The role of lipid peroxidation in the pathogenesis of viral hepatitis] Abakumov GZ, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):30-2 (Eng. Abstr.) **(Rus)**

[Peroxidation and features of fatty acid composition of cell membrane lipids in patients with hypertension] Kulagin IuI, et al. **Vopr Med Khim** 1989 May-Jun;35(3):129-32 **(Rus)**

[The role of lipid peroxidation in the etiology and pathogenesis of atherosclerosis (review)] Lankin VZ, et al. **Vopr Med Khim** 1989 May-Jun;35(3):18-24 (97 ref.) **(Rus)**

[Syndrome of lipid hyperperoxidation in burn patients and its correction using autotransfusion of UV-irradiated blood] Osipovich VK, et al. **Vopr Med Khim** 1988 Sep-Oct; 34(5):62-6 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation, the enzyme antioxidative system and acid phosphatase content of the gastric mucosa in stomach ulcer] Pasechnikov VD. **Vopr Med Khim** 1989 May-Jun; 35(3):51-4 (Eng. Abstr.) **(Rus)**

[Role of the ceruloplasmin-transferrin system in regulating lipid peroxidation of the blood serum under various regimens of hyperbaric oxygenation] Vartanian OA, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):31-5 (Eng. Abstr.) **(Rus)**

[Comparison of various approaches to the determination of the products of lipid peroxidation in heptane-isopropanol extracts of blood] Volchegorskiĭ IA, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):127-31 (Eng. Abstr.) **(Rus)**

[Free-radical lipid oxidation in rabbits with the alimentary peroxidation syndrome] Bobyrev VN, et al. **Vopr Pitan** 1988 Sep-Oct;(5):57-9 (Eng. Abstr.) **(Rus)**

[The action of different food factors on the lipid peroxidation processes in the liver microsomes of rats] Feoktistova AI, et al. **Vopr Pitan** 1988 Sep-Oct;(5):46-51 (Eng. Abstr.) **(Rus)**

[Immune system function and lipid peroxidation processes in protracted forms of pneumonia] Efimov VV, et al. **Vrach Delo** 1989 Apr;(4):73-5 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation, antioxidants and proteinase inhibitors in lung diseases (a review of the literature)] Pilipchuk VN. **Vrach Delo** 1988 Aug;(8):62-7 (60 ref.) **(Rus)**

[Lipid peroxidation of erythrocyte membranes in hypertensive patients] Siurin AA, et al. **Vrach Delo** 1988 Dec;(12):24-6 (Eng. Abstr.) **(Rus)**

[The role of lipid peroxidation in the pathogenesis of ischemic heart disease in miners in deep coal mines] Ursakiĭ TN, et al. **Vrach Delo** 1989 Apr;(4):98-100 **(Rus)**

[Comparative determination of the potential for activating lipid peroxidation of the adrenal cortex, liver and heart in various animals] Doroshkevich NA, et al. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):398-401 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation in emotional stress and neurotic disorders] Aleksandrovskiĭ IuA, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):95-101 (Eng. Abstr.) **(Rus)**

[Study of the processes of lipid peroxidation in patients with endogenous psychoses using gas chromatography] Kovaleva ES, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):99-103 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation processes in patients with schizophrenia] Kovaleva ES, et al. **Zh Nevropatol Psikhiatr** 1989; 89(5):108-10 (Eng. Abstr.) **(Rus)**

[Various indicators of the lipid composition of erythrocyte membranes in healthy persons and in chronic alcoholics in the northeastern part of the USSR] Lapinskiĭ AG, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):121-5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Calmodulin antagonist reduces release of malondialdehyde from isolated ischemic/reperfused rat heart. Beręsewicz A, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5-6):442-9

Metallothionein response to stress in rats: role in free radical scavenging. Hidalgo J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E518-24

Relationship between lung injury and lung lipid peroxidation caused by recurrent endotoxemia. Demling R, et al. **Am Rev Respir Dis** 1989 May;139(5):1118-24

Evaluation of the causal relationship between crocidolite asbestos-induced lipid peroxidation and toxicity to macrophages. Goodglick LA, et al. **Am Rev Respir Dis** 1989 May;139(5):1265-73

Effect of lipid peroxidation upon human spermatic adenosinetriphosphate (ATP). Relationship with motility, velocity and linearity of the spermatozoa. Calamera JC, et al. **Andrologia** 1989 Jan-Feb;21(1):48-54

Suppression of lipid peroxidation in human spermatozoa by prostatic inhibin. Bandivdekar AH, et al. **Arch Androl** 1989; 22(3):217-21

Inhibition of rat liver microsomal lipid peroxidation by N-acyldehydroalanines: an in vitro comparative study. Buc-Calderon P, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):339-46

Oxygen reduction and lipid peroxidation by iron chelates with special reference to ferric nitrilotriacetate. Hamazaki S, et al. **Arch Biochem Biophys** 1989 Jul;272(1):10-7

tert-butyl hydroperoxide kills cultured hepatocytes by peroxidizing membrane lipids. Masaki N, et al. **Arch Biochem Biophys** 1989 Mar;269(2):390-9

Release of iron from ferritin by divicine, isouramil, acid-hydrolyzed vicine, and dialuric acid and initiation of lipid peroxidation. Monteiro HP, et al. **Arch Biochem Biophys** 1989 Jun;271(2):536-45

Microsomal glutathione-dependent protection against lipid peroxidation acts through a factor other than glutathione peroxidase and glutathione S-transferase in rat liver. Nagasaka Y, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):82-6

Alloxan- and glutathione-dependent ferritin iron release and lipid peroxidation. Reif DW, et al. **Arch Biochem Biophys** 1989 Mar;269(2):407-14

2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)-induced lipid peroxidation in genetically responsive and non-responsive mice. Mohammadpour H, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):645-50

Effects of idebenone and related compounds on respiratory activities of brain mitochondria, and on lipid peroxidation of their membranes. Imada I, et al. **Arch Gerontol Geriatr** 1989 May;8(3):323-41

Effects of idebenone on lipid peroxidation and hemolysis in erythrocytes of stroke-prone spontaneously hypertensive rats. Suno M, et al. **Arch Gerontol Geriatr** 1989 May; 8(3):307-11

Inhibition of lipid peroxidation by idebenone in brain mitochondria in the presence of succinate. Suno M, et al. **Arch Gerontol Geriatr** 1989 May;8(3):291-7

Inhibition of brain mitochondrial swelling by idebenone. Suno M, et al. **Arch Gerontol Geriatr** 1989 May; 8(3):299-305 (22 ref.)

Long-term effects of commercial and congeneric polychlorinated biphenyls on ethane production and malondialdehyde levels, indicators of in vivo lipid peroxidation. Dogra S, et al. **Arch Toxicol** 1988; 62(5):369-74

Spontaneous and xenobiotic-induced in vivo-lipid peroxidation in iron-overloaded rats. Younes M, et al. **Arch Toxicol Suppl** 1989;13:282-6

Lipid peroxidation, protein thiols and calcium homeostasis in bromobenzene-induced liver damage. Casini AF, et al. **Basic Life Sci** 1988;49:773-6

A unique role of histidine in Fe-catalyzed lipid oxidation by fish sarcoplasmic reticulum. Erickson MC, et al. **Basic Life Sci** 1988;49:307-12

Possible generation of hydrogen peroxide and lipid peroxidation of erythrocyte membrane by asbestos: cytotoxic mechanism of asbestos. Iguchi H, et al. **Biochem Int** 1989 May;18(5):981-90

Effect of erythropoietin on membrane lipid peroxidation, superoxide dismutase, catalase, and glutathione peroxidase of rat RBC. Chakraborty M, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):8-18

The accumulation of malonyldialdehyde, an end product of membrane lipid peroxidation, can cause potassium leak in normal and sickle red blood cells. Jain SK, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):60-5

Novel membrane localized iron chelators as inhibitors of iron-dependent lipid peroxidation. Braughler JM, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3853-60

Inhibition of rat heart and liver microsomal lipid peroxidation by nifedipine. Engineer F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1279-85

The metabolism of acetaldehyde and not acetaldehyde itself is responsible for in vivo ethanol-induced lipid peroxidation in rats. Kera Y, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3633-8

Eupatoriopicrin-induced lipid peroxidation in liver and tumour tissue of the mouse. Woerdenbag HJ, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3115-8

Protective effects of glutathione against lipid peroxidation in chronically iron-loaded mice. Kawabata T, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):89-94

Synergistic interaction between vitamin E and the bile pigments bilirubin and biliverdin. Stocker R, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):238-44

Impairment of the respiratory chain in the b-c1 region as early functional event during Fe2+/ascorbate induced peroxidation in rat liver mitochondria. Trümper L, et al. **Biomed Biochim Acta** 1988;47(12):933-9

Di-2-ethylhexylphthalate induced peroxidative stress in rat liver. Jayaraman S, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):360-4

Microsomal lipid peroxidation induced by adriamycin, epirubicin, daunorubicin and mitoxantrone: a comparative study. Vile GF, et al. **Cancer Chemother Pharmacol** 1989; 24(2):105-8

Lipid peroxidation and cellular damage caused by the pyrrolizidine alkaloid senecionine, the alkenal trans-4-hydroxy-2-hexenal, and related alkenals. Griffin DS, et al. **Cell Biol Toxicol** 1987 Dec;3(4):379-90

Glutathione and lipid peroxide levels in rat liver following administration of methapyrilene and analogs. Hernandez L, et al. **Chem Biol Interact** 1989;69(2-3):217-24

Effects of lipid peroxidation on GABA uptake and release in iron-induced seizures. Zhang ZH, et al. **Chin Med J [Engl]** 1989 Jan;102(1):24-7

Reduction of lipid peroxidation in reperfused isolated rabbit hearts by diltiazem. Koller PT, et al. **Circ Res** 1989 Sep; 65(3):838-46

Effect of vitamin A treatment on immune reactivity and lipid peroxidation in patients with Sjögren's syndrome. Szöcsik K, et al. **Clin Rheumatol** 1988 Dec;7(4):514-9

The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647-51

Ethanol-induced changes in lipid peroxidation and glutathione content in rat brain. Uysal M, et al. **Drug Alcohol Depend** 1989 Jun;23(3):227-30

Effects of long-chain N-acylethanolamines on lipid peroxidation in cardiac mitochondria. Parinandi NL, et al. **FEBS Lett** 1988 Sep 12;237(1-2):49-52

Inhibition of adriamycin-promoted microsomal lipid peroxidation by beta-carotene, alpha-tocopherol and retinol at high and low oxygen partial pressures. Vile GF, et al. **FEBS Lett** 1988 Oct 10;238(2):353-6

Inhibition by coenzyme Q of ethanol- and carbon tetrachloride-stimulated lipid peroxidation in vivo and catalyzed by microsomal and mitochondrial systems. Beyer RE. **Free Radic Biol Med** 1988;5(5-6):297-303

Protective effect of vitamin E on spinal cord injury by compression and concurrent lipid peroxidation. Iwasa K, et al. **Free Radic Biol Med** 1989;6(6):599-606

Microsomal lipid peroxidation: mechanisms of initiation. The role of iron and iron chelators. Ursini F, et al. **Free Radic Biol Med** 1989;6(1):31-6

Lipid peroxidation induced by N-nitrosodimethylamine (NDMA) in rats in vivo and in isolated hepatocytes. Ahotupa M, et al. **Free Radic Res Commun** 1987; 3(1-5):285-91

The role of secondary messengers in the regulation of lipid peroxidation in rat liver microsomes. Baldenkov GN, et al. **Free Radic Res Commun** 1988;4(5):277-81

Two mechanisms of CCl4-induced fatty liver: lipid peroxidation or covalent binding studied in cultured rat hepatocytes. Becker E, et al. **Free Radic Res Commun** 1987; 3(1-5):299-308

Inhibition of lipid peroxidation by dihydroquinoline-type antioxidant (CH 402). Blázovics A, et al. **Free Radic Res Commun** 1988;4(6):409-13

Antioxidant activity of 5-hydroxytryptophan, 5-hydroxyindole, and DOPA against microsomal lipid peroxidation and its dependence on vitamin E. Cadenas E, et al. **Free Radic Res Commun** 1989;6(1):11-7

The relationship between lipid composition of red blood cells and their susceptibility to lipid peroxidation. Clemens MR, et al. **Free Radic Res Commun** 1987;3(1-5):265-71

Copper-manganese interactions concerning red-cell and plasma lipid peroxidation. Fernandes AC, et al. **Free Radic Res Commun** 1988;5(3):177-84

Effect of cytochrome c on formation of lipid peroxides in rat brain in vitro. Hattori T, et al. **Free Radic Res Commun** 1987;4(1):41-9

Desferrioxamine as an electron donor. Inhibition of membranal lipid peroxidation initiated by H2O2-activated metmyoglobin and other peroxidizing systems. Kanner J, et al. **Free Radic Res Commun** 1987;3(1-5):309-17

Vanadyl- and vanadate-induced lipid peroxidation in mitochondria and in phosphatidylcholine suspensions. Liochev S, et al. **Free Radic Res Commun** 1988;4(5):317-23

Increased hepatic lipid peroxidation with methionine toxicity in the rat. Lynch SM, et al. **Free Radic Res Commun** 1989; 5(4-5):221-6

Non-enzymic lipid peroxidation in microsomes and microsomal phospholipids induced by anthracyclines. Sterrenberg L, et al. **Free Radic Res Commun** 1986; 1(6):369-78

Lipid peroxidation in choline-methionine deficiency. Tan KH, et al. **Free Radic Res Commun** 1987;3(1-5):273-8

Effects of iron loading on free radical scavenging enzymes and lipid peroxidation in rat liver. Fletcher LM, et al. **Gastroenterology** 1989 Oct;97(4):1011-8

Prevention of postischaemic lipid peroxidation and liver cell injury by iron chelation. Omar R, et al. **Gut** 1989 Apr; 30(4):510-4

Histochemical and biochemical studies on the effect of the prostacyclin derivative iloprost on CCl4-induced lipid peroxidation in rat liver and its significance for hepatoprotection. Bursch W, et al. **Hepatology** 1989 Jun; 9(6):830-8

Effects of high glucose and sorbitol pathway on lipid peroxidation of erythrocytes. Nagasaka Y, et al. **Horm Metab Res** 1989 May;21(5):275-6

Effects of oxygen on ferrous sulphate induced lipid peroxidation in liposomal membrane. Agarwal S, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):331-4

Effects of acute oral administration of cadmium chloride on uptake of element and control of lipoperoxidative process in hepatic and renal nuclear fractions of rats. Das M, et al. **Indian J Exp Biol** 1988 Jun;26(6):449-52

Toxicity of soybean lectins: effect on lipid metabolism and lipid peroxidation. Soni GL, et al. **Indian J Exp Biol** 1988 Sep;26(9):697-9

Neurochemical effects of phosphamidon on lipid fractions & lipid peroxidation in the rat central nervous system. Naqvi SM, et al. **Indian J Med Res** 1988 Jul;88:85-90

Effect of alpha-tocopherol on the microsomal lipid peroxidation induced by doxorubicin: influence of ascorbic acid. Geetha A, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):53-8

Mineral fiber-induced malondialdehyde formation and effects of oxidant scavengers in phagocytic cells. Yano E. **Int Arch Occup Environ Health** 1988;61(1-2):19-23

Effect of clofibrate treatment on lipid peroxidation in rat liver homogenate and subcellular fractions. Antonenkov VD, et al. **Int J Biochem** 1988;20(8):829–36

Inhibitory effect of eugenol on Cu2+–catalyzed lipid peroxidation in human erythrocyte membranes. Nagashima K. **Int J Biochem** 1989;21(7):745–9

Peroxidative damage and nephrotoxicity of dichlorovinylcysteine in mice. Beuter W, et al. **J Appl Toxicol** 1989 Jun;9(3):181–6

Mitochondrial and microsomal lipid peroxidation in rat liver after acute acetaldehyde and ethanol intoxication. Uysal M, et al. **J Appl Toxicol** 1989 Jun;9(3):155–8

Stimulation of collagen gene expression by ascorbic acid in cultured human fibroblasts. A role for lipid peroxidation? Chojkier M, et al. **J Biol Chem** 1989 Oct 5;264(28):16957–62

Inhibition of lipid peroxidation by spin labels. Relationships between structure and function. Nilsson UA, et al. **J Biol Chem** 1989 Jul 5;264(19):11131–5

Inhibition of superoxide and ferritin-dependent lipid peroxidation by ceruloplasmin. Samokyszyn VM, et al. **J Biol Chem** 1989 Jan 5;264(1):21–6

Iron-induced lipid peroxidation and inhibition of proliferation in Ehrlich ascites tumor cells. Tillian HM, et al. **J Cancer Res Clin Oncol** 1989;115(1):79–83

Mercury induced time-dependent alterations in lipid profiles and lipid peroxidation in different body organs of cat-fish Heteropneustes fossilis. Bano Y, et al. **J Environ Sci Health [B]** 1989 Apr;24(2):145–66

Iron loading modifies the fatty acid composition of cultured rat myocardial cells and liposomal vesicles: effect of ascorbate and alpha-tocopherol on myocardial lipid peroxidation. Link G, et al. **J Lab Clin Med** 1989 Sep; 114(3):243–9

Studies on hindered phenols and analogues. 1. Hypolipidemic and hypoglycemic agents with ability to inhibit lipid peroxidation. Yoshioka T, et al. **J Med Chem** 1989 Feb; 32(2):421–8

Artificial liposomes as a model for studying the lipid peroxidation effect of p-phenylene diamine. Gupta V, et al. **J Microencapsul** 1989 Jul–Sep;6(3):311–8

Effects of vitamin A and its analogs on nonenzymatic lipid peroxidation in rat brain mitochondria. Das NP. **J Neurochem** 1989 Feb;52(2):585–8

The influence of melanins on the photoperoxidation of lipids. Ezzahir A. **J Photochem Photobiol [B]** 1989 Jun;3(3):341–9

Modulation of the effects of ascorbic acid on lipid peroxidation by tocopherol in adrenocortical mitochondria. Staats DA, et al. **J Steroid Biochem** 1989 Apr;32(4):609–11

Triethyllead-induced peroxidative damage in various regions of the rat brain. Ali SF, et al. **J Toxicol Environ Health** 1989;26(2):235–42

Sub-chronic effects of styrene and styrene oxide on lipid peroxidation and the metabolism of glutathione in rat liver and brain. Katoh T, et al. **J Toxicol Sci** 1989 Feb;14(1):1–9

Potentiation of cisplatin-induced lipid peroxidation in kidney cortical slices by glutathione depletion. Nakano S, et al. **Jpn J Pharmacol** 1989 Jun;50(2):87–92

The relationship between the development of toxicity and lipid peroxidation induced by chromium compounds in rats. Ueno S, et al. **Kitasato Arch Exp Med** 1988 Sep; 61(2–3):137–47

Propranolol as xanthine oxidase inhibitor: implications for antioxidant activity. Janero DR, et al. **Life Sci** 1989; 44(21):1579–88

Glutathione peroxidase, glutathione reductase, and thiobarbituric acid-reactive products in muscles of chickens and mice with genetic muscular dystrophy. Omaye ST, et al. **Life Sci** 1974 Jul 1;15(1):137–45

Ascorbate-enhanced lipid peroxidation in photooxidized cell membranes: cholesterol product analysis as a probe of reaction mechanism. Bachowski GJ, et al. **Lipids** 1988 Jun; 23(6):580–6

Promotion of iron-induced rat liver microsomal lipid peroxidation by copper. Beckman JK, et al. **Lipids** 1988 Jun;23(6):559–63

Effects of fish oil, corn oil and lard diets on lipid peroxidation status and glutathione peroxidase activities in rat heart. Nalbone G, et al. **Lipids** 1989 Mar;24(3):179–86

Mutagenicity in V79 Chinese hamster cells of n-alkanals produced by lipid peroxidation. Brambilla G, et al. **Mutagenesis** 1989 Jul;4(4):277–9

Iron-induced lipid peroxidation and inhibition of dopamine synthesis in striatum synaptosomes. Zaleska MM, et al. **Neurochem Res** 1989 Jul;14(7):597–605

Cellular injury and lipid peroxidation induced by hexavalent chromium in isolated rat hepatocytes. Ueno S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):137–45

Antioxidant activity of dietary canthaxanthin. Mayne ST, et al. **Nutr Cancer** 1989;12(3):225–36

Inhibition of lipid peroxidation by monounsaturated fatty acids. **Nutr Rev** 1989 Apr;47(4):126–8 (5 ref.)

A study of the mechanisms of chloroquine retinopathy. I. Chloroquine effect on lipid peroxidation of retina. Ivanina TA, et al. **Ophthalmic Res** 1989;21(3):216–20

Effect of cadmium chloride on hepatic lipid peroxidation in mice. Andersen HR, et al. **Pharmacol Toxicol** 1988 Sep; 63(3):173–7

Effect of cadmium on lipid peroxidation and antioxidant enzymes in undernourished weanling rat brain. Gill KD, et al. **Pharmacol Toxicol** 1989 Jul;65(1):73–7

Halothane induced hepatic necrosis in rats: the role of in vivo lipid peroxidation. Knights KM, et al. **Pharmacol Toxicol** 1988 Nov;63(5):327–32

Investigation of lipid peroxidation induced by hydrazine compounds in vivo in the rat. Preece NE, et al. **Pharmacol Toxicol** 1989 Mar;64(3):282–5

Prevention of oxidative injury to cardiac phospholipid by membrane-active "stabilizing agents". Janero DR, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):163–73

Form-specific degradation of cytochrome P-450 by lipid peroxidation in rat liver microsomes. Kitada M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):175–88

Increased indices of lipid peroxidation in stress-susceptible pigs and effects of vitamin E. Duthie GG, et al. **Res Vet Sci** 1989 Mar;46(2):226–30

In vivo suppression of stearyl CoA desaturase activity by griseofulvin: evidence against the involvement of lipid peroxidation. Williams MT, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):541–9

Induction of lipid peroxidation in tissues of thallous malonate-treated hamster. Aoyama H, et al. **Toxicology** 1988 Dec 16;53(1):11–8

Cisplatin-induced lipid peroxidation and decrease of gluconeogenesis in rat kidney cortex: different effects of antioxidants and radical scavengers. Hannemann J, et al. **Toxicology** 1988 Oct;51(2–3):119–32

Involvement of cardiac metallothionein in prevention of adriamycin induced lipid peroxidation in the heart. Satoh M, et al. **Toxicology** 1988 Dec 30;53(2–3):231–7

Inhibition of halothane-induced lipid peroxidation by misoprostol without hepatoprotection. Siegers CP, et al. **Toxicology** 1988 Dec 30;53(2–3):213–8

Inhibition of heme-promoted enzymatic lipid peroxidation by desferrioxamine and EDTA. Carlin G, et al. **Ups J Med Sci** 1988;93(3):215–23

[An experimental study on the anti-senility effects of shou xing bu zhi] Chen J. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):226–7, 198 (Eng. Abstr.) (Chi)

[Experimental study on the effect of sodium ferulate in protecting acute oxygen intoxication and lipid peroxidation] Fu ZK. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):546–7, 518 (Eng. Abstr.) (Chi)

[Appraisal of the protective effect of vitamin E against CCl4 liver poisoning] Tang N. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):7–8 (Eng. Abstr.) (Chi)

[Lipid peroxidation in aged patients. Influence of an antioxidant combination (vitamin C-vitamin E-rutin)] Courtière A, et al. **Therapie** 1989 Jan–Feb;44(1):13–7 (Eng. Abstr.) (Fre)

[The effect of propranolol and structurally related compounds on the in vitro lipid peroxidation of rat brain homogenates] Scheibler P, et al. **Pharmazie** 1989 Apr; 44(4):301–2 (Ger)

[Effect of thiamylal on superoxide generation in the cells and on lipid peroxidation of biological membranes] Nishiyama K, et al. **Masui** 1989 Feb;38(2):202–10 (Eng. Abstr.) (Jpn)

[Trends in the development of new antioxidants and clinical studies. L-ascorbic acid derivatives as antioxidants] Shimamoto N. **Nippon Rinsho** 1988 Oct;46(10):2293–7 (Jpn)

[Effect of free radical scavengers on the activity of lipoxygenases and cyclooxygenase] Duniec Z. **Folia Med Cracov** 1987;28(3–4):283–303 (Eng. Abstr.) (Pol)

[Antioxidant therapy in the complex treatment of late pregnancy toxemia] Shalina RI, et al. **Akush Ginekol (Mosk)** 1989 May;(5):37–41 (Eng. Abstr.) (Rus)

[Inhibition of the antioxidative activity of plasma by sodium azide] Klebanov GI, et al. **Biofizika** 1988 May–Jun; 33(3):512–6 (Eng. Abstr.) (Rus)

[Chelating and antiradical effect of rutin during peroxidation of lipids from microsomes and liposomes] Dorozhko AI, et al. **Biokhimiia** 1988 Oct;53(10):1660–6 (Eng. Abstr.) (Rus)

[Antioxidative activity of flavonoids in various systems of lipid peroxidation] Kostiuk VA, et al. **Biokhimiia** 1988 Aug; 53(8):1365–70 (Eng. Abstr.) (Rus)

[Changes in the physico-chemical characteristics of mouse liver lipids after administration of a mixture of unsaturated fatty acids] Kukhtina EN, et al. **Biokhimiia** 1988 Sep; 53(9):1479–85 (Eng. Abstr.) (Rus)

[Effect of alpha- and gamma-tocopherols on the cytochrome P-450 system in the liver of rats with E-avitaminosis. Effectiveness of liposomal forms of gamma-tocopherol] Lokshina EA, et al. **Biokhimiia** 1988 Jul;53(7):1188–92 (Eng. Abstr.) (Rus)

[Effect of radioprotectors on lipid peroxidation in liver microsomes induced by ultraviolet irradiation of the skin in rats] Gorodovikova EN, et al. **Biol Nauki** 1989;(4):15–8 (Eng. Abstr.) (Rus)

[Protection of the monoamine oxidase in brain synaptosomes by fat- and water-soluble antioxidants during lipid peroxidation] Antipov AD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):169–71 (Eng. Abstr.) (Rus)

[Chloditan-induced changes in lipid peroxidation in the adrenals of dogs and guinea pigs] Chelnakova IS, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):171–4 (Eng. Abstr.) (Rus)

[Effect of antioxidants on the indices of free-radical lipid oxidation in the testes of rats of different ages and on the reproductive capacity in chronic multiple antioxidant deficiency] Gaishenets VF, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):229–31 (Eng. Abstr.) (Rus)

[Carnosine prevents the activation of free-radical lipid oxidation during stress] Guliaeva NV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):144–7 (Eng. Abstr.) (Rus)

[The action of a homologous series of ubiquinols on lipid peroxidation in brain mitochondrial and synaptosomal membranes] Kagan VE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):420–2 (Eng. Abstr.) (Rus)

[Lipid peroxidation reactions to the administration of various doses of zymosan] Kim LB, et al. **Biull Eksp Biol Med** 1989 May;107(5):559–61 (Eng. Abstr.) (Rus)

[Protective action of fat- and water-soluble antioxidants on the cytochrome P-450 system during lipid peroxidation in liver microsomes] Serbinova EA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):187–8 (Eng. Abstr.) (Rus)

[Inhibition of lipid peroxidation by antioxidants in the vitreous body during hemorrhage] Zargarli IA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):291–2 (Eng. Abstr.) (Rus)

[Mechanism of membranotropic effect of methylethyl(silatrane-1-yl methyl) sulfonium iodide] Kuznetsov IG, et al. **Dokl Akad Nauk SSSR** 1988; 301(5):1235–7 (Rus)

[Modifying effect of antioxidants on the rate of lipid peroxidation in liver microsomes at early stages of diethylnitrosamine biotransformation] Pakhomov VIu, et al. **Eksp Onkol** 1988;10(5):20–3 (Eng. Abstr.) (Rus)

[Effect of carminomycin on the enzyme systems of the metabolism of active forms of oxygen and on free-radical lipid oxidation in August rats with Walker carcinosarcoma 256] Tazhibaev ShS, et al. **Eksp Onkol** 1989;11(4):66–70 (Eng. Abstr.) (Rus)

[Liver function and lipid peroxidation in indomethacin-induced damage] Klimniuk EV. **Farmakol Toksikol** 1989 Mar–Apr;52(2):81–2 (Eng. Abstr.) (Rus)

[Effect of anti-angina agents on the intensity of lipid peroxidation in the myocardium and liver of rats under hyperbaric oxygenation] Nikolaĭ SL. **Farmakol Toksikol** 1988 Sep–Oct;51(5):65–8 (Eng. Abstr.) (Rus)

[Effect of prostaglandin E2 on the development of myocardial damage in rats with various resistance to hypoxia] Markova EA, et al. **Fiziol Zh** 1989 Mar–Apr; 35(2):100–3 (Eng. Abstr.) (Rus)

[Effect of isomers and the basic metabolites of endosulfan on the status of the microsomal system of the liver] Koshkarian AO, et al. **Gig Sanit** 1989 Mar;(3):93–4 (Rus)

[Study of the mechanisms of the harmful effect of the synthetic detergent "Lotos"] Krivonosov MV, et al. **Gig Sanit** 1989 Apr;(4):88–90 (Rus)

[Induction with cadmium of lipid peroxidation in the tissues of albino rats and its prevention with ascorbic acid] Nurmukhambetov AN, et al. **Gig Sanit** 1989 Mar;(3):77–8 (Rus)

[Effect of bucid on oxidation-reduction processes in the microsomes and mitochondria of the animal liver] Sinitskaia TA, et al. **Gig Sanit** 1989 May;(5):87–8 (Rus)

[The role of free radicals in the pathogenesis of chronic poisoning with phosphorus compounds] Ormanov NZh. **Gig Tr Prof Zabol** 1988 Sep;(9):15–8 (Eng. Abstr.) (Rus)

[Effect of hyperbaric oxygenation on tissue respiratory function and lipid peroxidation in experimental chronic phosphorus poisoning] Orynbaev TO, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):57–9 (Rus)

[Use of the antioxidant ubinon in the complex treatment of patients with ischemic heart disease] Dudaev VA, et al. **Kardiologiia** 1989 Jan;29(1):48–52 (Eng. Abstr.) (Rus)

[Clinico-biochemical evaluation of antioxidant therapy of peripheral vascular arteriosclerosis] Zakirdzhaev DD, et al. **Kardiologiia** 1988 Sep;28(9):92–3 (Rus)

[Effect of antioxidant therapy on lipid peroxidation in patients with acute and protracted pneumonia] Borovkova MS, et al. **Klin Med (Mosk)** 1988 Dec;66(12):62–4 (Eng. Abstr.) (Rus)

[The role of antioxidants in regulating free-radical oxidation of the retina] Pliushko DG, et al. **Oftalmol Zh** 1988; (7):427–9 (Eng. Abstr.) (Rus)

[Dynamics of lipid peroxidation in patients with noninsulin-dependent diabetes mellitus] Mamedgasanov RM, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb; 35(1):19–21 (Eng. Abstr.) (Rus)

[Effectiveness of the combined use of antihypoxic agents and antioxidants in tuberculosis] Aleksandrova AE, et al. **Probl Tuberk** 1988;(6):62–5 (Rus)

[The hepatotoxic action of pyrazinamide and its effect on lipid peroxidation] Slivka IuI. **Probl Tuberk** 1988;(10):47–50 (Eng. Abstr.) (Rus)

[Disorders of fatty acid composition and the processes of lipid peroxidation in chronic ischemic heart disease] Kalmykova VI, et al. **Sov Med** 1989;(4):5–8 (Eng. Abstr.) (Rus)

[Antioxidant activity of hepatotropic preparations in the treatment of chronic diseases of the liver] Loginov AS, et al. **Ter Arkh** 1988;60(8):74–7 (Eng. Abstr.) (Rus)

[The effect of alpha-tocopherol on pulmonary surfactants]

Berezovskiĭ VA, et al. **Ukr Biokhim Zh** 1988 Nov-Dec; 60(6):88–90 (Eng. Abstr.) **(Rus)**

[Activation of lipid peroxidation in the adrenal cortex by metal ions] Doroshkevich NA, et al. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):88–90 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation in skin–resorptive effect of various organophosphate pesticides] Fedorov SM, et al. **Vestn Dermatol Venerol** 1988;(7):14–7 (Eng. Abstr.) **(Rus)**

[Changes in lipid peroxidation in the liver tissue and blood serum of rats with chronic toxic hepatitis under the influence of naftusia mineral water] Pukavskiĭ KV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):57–9 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation in experimental viral infection and the effect on it of interferons and alpha–tocopherol] Ananenko AA, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):86–9 (Eng. Abstr.) **(Rus)**

[Comparative study of the effect of vitamin B12 coenzymes on monooxygenase system and lipid peroxidation in the liver of rabbits poisoned with phenylhydrazine] Korsova TL, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):97–102 (Eng. Abstr.) **(Rus)**

[Vitamin E and propolis as antioxidants after excessive administration of polyunsaturated fatty acids] Okonenko LB, et al. **Vopr Pitan** 1988 Jul–Aug;(4):68–70 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Membrane lipid peroxidation and its pathological consequences. Chatterjee SN, et al. **Indian J Biochem Biophys** 1988 Feb–Apr;25(1–2):25–31

Effect of WR–2721 on radiation–induced lipid peroxidation and enzyme release in erythrocytes and microsomes. Ayene SI, et al. **Int J Radiat Biol** 1989 Sep;56(3):265–75

Radiation–induced volatile hydrocarbon production in platelets. Radha E, et al. **Life Sci** 1989;44(17):1185–91

UV–A induced lipid peroxidation in liposomal membrane. Bose B, et al. **Radiat Environ Biophys** 1989;28(1):59–65

Time course of lipolytic activity and lipid peroxidation after whole–body gamma irradiation of rats. Rejholcová M, et al. **Radiat Res** 1989 Jan;117(1):21–5

[The importance of superoxide dismutase in the development of the post–irradiation syndrome. XI. The effect of diet and irradiation on superoxide dismutase activity and lipoperoxidation in vivo] Stoklasová A, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):403–11 (Eng. Abstr.) **(Cze)**

[Biochemistry of the physiopathologic and clinical aspects of free radicals in radiation injuries] Yukawa O, et al. **Nippon Rinsho** 1988 Oct;46(10):2262–8 **(Jpn)**

[The effect of radiotherapy on the antioxidative activity of tissues and blood erythrocytes] Kal'nova NIu. **Vopr Med Khim** 1989 May–Jun;35(3):25–8 (Eng. Abstr.) **(Rus)**

LIPID PEROXIDES

Thermal decomposition of methyl linoleate and methyl linolenate hydroperoxides analyzed by capillary gas chromatography. Frankel EN, et al. **Basic Life Sci** 1988; 49:319–26

Free radical–mediated degradation of proteins: the protective and deleterious effects of membranes. Hunt JV, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1076–84

Permeability of oxidized phosphatidylcholine liposomes. Tanfani F, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):241–6

Formation of pentane versus 1–pentanol in the ferrous sulfate–initiated decomposition of 15–hydroperoxyeicosatetraenoic acid in hypoxic and hyperoxic conditions. Smith CV, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1362–4

Characterization of fluorescent products from reaction of methyl linoleate hydroperoxides with adenine in the presence of Fe2+ and ascorbic acid. Hasegawa K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):371–6

Spin trapping of free radicals formed during peroxidation of sarcolemmal membranes (SLM). Arroyo CM, et al. **Free Radic Res Commun** 1989;5(6):369–76

Effect of ascorbate on red blood cell lipid peroxidation. Einsele H, et al. **Free Radic Res Commun** 1985;1(1):63–7

In vitro screening of iron chelators using models of free radical damage. Kontoghiorghes GJ, et al. **Free Radic Res Commun** 1986;2(1–2):115–24

Plasma lipid peroxides in murine sepsis—sex differences and effect of antioxidative/anti–inflammatory therapy. Marinkovic D, et al. **Free Radic Res Commun** 1988; 4(4):237–42

Effect of alpha–tocopherol on the volatile thermal decomposition products of methyl linoleate hydroperoxides. Frankel EN, et al. **Lipids** 1989 Jul; 24(7):603–8

Antioxidant activity of beta–carotene–related carotenoids in solution. Terao J. **Lipids** 1989 Jul;24(7):659–61

[Arachidonic acid cascade and radical peroxidation] Fujita T, et al. **Nippon Rinsho** 1988 Oct;46(10):2155–60 **(Jpn)**

[Peroxidation chain reactions of lipid radicals in membrane injuries] Terao J. **Nippon Rinsho** 1988 Oct;46(10):2149–54 **(Jpn)**

[Biochemistry of the physiopathologic and clinical aspects of free radicals in radiation injuries] Yukawa O, et al. **Nippon Rinsho** 1988 Oct;46(10):2262–8 **(Jpn)**

[Chemistry of active oxygen species] Saito I, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2665–77 **(Jpn)**

ANALYSIS

Lipid peroxides, spermatozoa quality and activity of glutathione peroxidase in bull semen. Slaweta R, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):207–14

Lipid peroxides, glutathione peroxidase, prostacyclin and cell cycle stages in normal and atherosclerotic Japanese quail arteries. Wang J, et al. **Atherosclerosis** 1989 Feb; 75(2–3):219–25

Quantitative determination of fatty acid hydroperoxides in vivo. Frank H, et al. **Basic Life Sci** 1988;49:175–8

Specific detection of lipid hydroperoxides using HPLC–EC method. Matsushita S, et al. **Basic Life Sci** 1988;49:163–74

Detection of lipid peroxidation products in lipids and tissues by gas chromatography–mass spectrometry. van Kuijk FJ, et al. **Basic Life Sci** 1988;49:179–83 (24 ref.)

Monoclonal DLR1a/104G antibody recognizing peroxidized lipoproteins in atherosclerotic lesions. Mowri H, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):208–14

Theoretical analysis of a site–specific chemiluminescence reaction and its application to quantitation of lipid hydroperoxides. Fukuzawa K, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):197–203

Specificity of the thiobarbituric acid reaction: its use in studies of lipid peroxidation. Knight JA, et al. **Clin Chem** 1988 Dec;34(12):2433–8

Correlation among lung damage after radiation, amount of lipid peroxides, and antioxidant enzyme activities. Nozue M, et al. **Exp Mol Pathol** 1989 Apr;50(2):239–52

Measurement of hydroperoxydocosahexaenoic acid in rat brain homogenates by reversed–phase high–performance liquid chromatography. Ansari KA, et al. **J Chromatogr** 1989 Jul 28;475:457–60

The influence of storage period and reperfusion in pancreas transplantation using lipoperoxides as a tissue damage marker. Targarona EM, et al. **Transplant Proc** 1988 Oct; 20(5):1016–8

[Fatty acid composition and degree of peroxidation in fish oil and cod liver oil preparations] Luley C, et al. **Arzneimittelforschung** 1988 Dec;38(12):1783–6 (Eng. Abstr.) **(Ger)**

[Measurements of active oxygen by cytochemical demonstration procedures] Hirai K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2708–16 **(Jpn)**

[Peroxide content of dietary vegetable oils under various storage conditions] Golotin VG, et al. **Vopr Pitan** 1989 Jan–Feb;(1):68–9 **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of arachidonic acid–induced vasogenic brain edema by the non–glucocorticoid 21–aminosteroid U74006F. Hall ED, et al. **Brain Res** 1988 Jun 7; 451(1–2):350–2

Attenuation of structural and functional damage from acute renal ischemia by the 21–amino steroid U74006F in rats. Podrazik RM, et al. **Curr Surg** 1989 Jul–Aug;46(4):287–92

A trial of the 21–aminosteroid U74006F in a primate model of chronic cerebral vasospasm. Steinke DE, et al. **Neurosurgery** 1989 Feb;24(2):179–86

The 21–aminosteroid U74006F reduces systemic lipid peroxidation, improves neurologic function, and reduces mortality after cardiopulmonary arrest in dogs. Natale JE, et al. **Prog Clin Biol Res** 1989;308:891–6

Effect of the nonglucocorticoid 21–aminosteroid U74006F experimental cerebral vasospasm. Vollmer DG, et al. **Surg Neurol** 1989 Mar;31(3):190–4

[Inhibition of UV–induced accumulation of lipid peroxides by melanins and ommochromes] Pustynnikov MG, et al. **Biokhimiia** 1988 Jul;53(7):1117–20 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Increased lipid peroxidation after lipid infusion as measured by breath pentane output. Van Gossum A, et al. **Am J Clin Nutr** 1988 Dec;48(6):1394–9

The biphasic effect of calcium on lipid peroxidation. Babizhayev MA. **Arch Biochem Biophys** 1988 Nov 1; 266(2):446–51

Peroxidation–dependent and peroxidation–independent mechanisms by which acetaminophen kills cultured rat hepatocytes. Farber JL, et al. **Arch Biochem Biophys** 1988 Dec;267(2):640–50

Damage to protein synthesis concurrent with lipid peroxidation in rat liver slices: effect of halogenated compounds, peroxides, and vitamin E1. Fraga CG, et al. **Arch Biochem Biophys** 1989 Apr;270(1):84–91

Studies of ascorbate–dependent, iron–catalyzed lipid peroxidation. Miller DM, et al. **Arch Biochem Biophys** 1989 May 15;271(1):113–9

Increased NADPH–dependent chemiluminescence by microsomes after chronic ethanol consumption. Puntarulo S, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):435–45

Protein–phosphate complexes as an inhibitor of iron–induced lipid peroxidation. Dawra RK, et al. **Biochem Int** 1989 Mar; 18(3):537–44

Exhaled alkanes as indices of in vivo lipid peroxidation. Burk RF, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1029–32 (19 ref.)

Lipid peroxidation as a possible cause of ochratoxin A toxicity. Rahimtula AD, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4469–77

Sex differences in ferric nitrilotriacetate–induced lipid peroxidation and nephrotoxicity in mice. Li JL, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):82–7

Interaction of lipid peroxidation products with nuclear macromolecules. Vaca CE, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):35–43

Vanadium–mediated lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):696–703

Peroxidation of lipids and tissue damage by free oxygen radicals in the pathogenesis of inflammatory kidney diseases. Vel'tishchev JE. **Contrib Nephrol** 1988;67:28–30 (4 ref.)

The effect of butylated hydroxytoluene, an inhibitor of lipid peroxidation, on the calcium–induced uncoupling of rat liver mitochondria. Novgorodov SA, et al. **FEBS Lett** 1989 May 8;248(1–2):179–81

The effects of iron–mediated oxidative stress in isolated renal cortical brush border membrane vesicles at normothermic and hypothermic temperatures. Horton R, et al. **Free Radic Res Commun** 1989;5(4–5):267–75

Effect of deferrioxamine and diethyldithiocarbamate on paracetamol–induced hepato– and nephrotoxicity. The role of lipid peroxidation. Younes M, et al. **J Appl Toxicol** 1988 Aug;8(4):261–5

Ischemic modification of cerebrocortical membranes: 5–hydroxytryptamine receptors, fluidity, and inducible in vitro lipid peroxidation [published erratum appears in J Neurochem 1989 Oct;53(4):1329] Villacara A, et al. **J Neurochem** 1989 Aug;53(2):595–601

Lipid peroxidation in focal cerebral ischemia. Kinuta Y, et al. **J Neurosurg** 1989 Sep;71(3):421–9

Hepatic glutathione metabolism and lipid peroxidation in response to excess dietary selenomethionine and selenite in mallard ducklings. Hoffman DJ, et al. **J Toxicol Environ Health** 1989;27(2):263–71

Effect of calcium ion on lipid peroxide formation in endotoxemic mice. Sakaguchi S, et al. **Microbiol Immunol** 1989;33(2):99–110

Protective effect of plant flavonoids, analogs and vitamin E against lipid peroxidation of membranes. Salvayre R, et al. **Prog Clin Biol Res** 1988;280:313–6

Cyclosporine A induced lipid peroxidation in microsomes and effect on active and passive glucose transport by brush border membrane vesicles of rat kidney. Inselmann G, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):207–20

Effects of chronic inhalation of ethylene oxide on lipid peroxidation and glutathione redox cycle in rat liver. Katoh T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):281–4

Polyamine lowered the hepatic lipid peroxide level in rats. Ohmori S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):235–49

Increased lipid peroxidation in vulnerable brain regions after transient forebrain ischemia in rats. Bromont C, et al. **Stroke** 1989 Jul;20(7):918–24

Cisplatin–induced changes in cytochrome P–450, lipid peroxidation and drug–metabolizing enzyme activities in rat kidney cortex. Bompart G. **Toxicol Lett** 1989 Aug; 48(2):193–9

Biochemical toxicology of argemone alkaloids. III. Effect on lipid peroxidation in different subcellular fractions of the liver. Upreti KK, et al. **Toxicol Lett** 1988 Sep; 42(3):301–8

Brain lipid peroxidation and antioxidant protectant mechanisms following acute cyanide intoxication. Ardelt BK, et al. **Toxicology** 1989 Jun 1;56(2):147–54

Lipid peroxidation: a possible mechanism of trichloroethylene–induced nephrotoxicity. Cojocel C, et al. **Toxicology** 1989 Apr;55(1–2):131–41

[Regulation of lipid peroxidation induced by cumene hydroperoxide in the liver mitochondria of irradiated rats] Gudz' TI, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):653–6 (Eng. Abstr.) **(Rus)**

BLOOD

Serum lipid peroxide level and blood superoxide dismutase activity in rats with hydralazine–induced collagenosis–like syndrome. Jendryczko A, et al. **Acta Med Pol** 1988; 29(1–2):89–93

Pathogenesis of cardiovascular disorders in streptozotocin–induced diabetes in rat. II. Correlation between lipid peroxides, thromboxane A2/prostacyclin, and platelet aggregation in different stages of diabetes. Somova L, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(3):57–62

Transformation of 15–hydroperoxyeicosatetraenoic acid to 15–keto–pentadeca–5,8,11,13–tetraenoic acid by hydroperoxide lyase in rabbit leukocytes. Lin YL, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:160–3

Evaluation of an isoluminol chemiluminescence assay for the detection of hydroperoxides in human blood plasma. Frei B, et al. **Anal Biochem** 1988 Nov 15;175(1):120–30

Glutathione peroxidase activity, selenium and lipid peroxides levels in blood of cancer children. Gromadzinska J, et al. **Ann Clin Res** 1988;20(3):177–83

Plasma fatty acid composition and lipid peroxide levels in children with paucity of interlobular bile ducts. Babin F, et al. **Ann Nutr Metab** 1988;32(4):220–30

Hormonal contraceptive increases plasma lipid peroxides in female rats. Relationship to platelet aggregation and lipid biosynthesis. Ciavatti M, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):84–9

Effect of dietary vitamin E on plasma lipids and atherogenesis in restricted ovulator chickens. Smith TL, et al. **Atherosclerosis** 1989 Feb;75(2–3):105–9

Allyl alcohol–induced hemolysis and its relation to iron release and lipid peroxidation. Ferrali M, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1819–25

Stabilization of phosphatidylethanolamine hydroperoxides in human plasma. Terao J. **Biochim Biophys Acta** 1989 Jun 8;1003(2):221–4

Nonheme iron in sickle erythrocyte membranes: association with phospholipids and potential role in lipid peroxidation. Kuross SA, et al. **Blood** 1988 Oct;72(4):1278–85

Lipid peroxides and atherosclerosis. Stringer MD, et al. **BMJ** 1989 Feb 4;298(6669):281–4

Serum lipoperoxidation products in an infant with hemolytic–uremic syndrome. Brown RE, et al. **Clin Chem** 1988 Nov;34(11):2382–4

Plasma malondialdehyde, lipid peroxides, and the thiobarbituric acid reaction [letter] Wade CR, et al. **Clin Chem** 1989 Feb;35(2):336

Intraerythrocytary markers of peroxidative alteration in children with nephrotic syndrome. Gusmano R, et al. **Contrib Nephrol** 1988;67:99–102

Effect of gliclazide on thromboxane B2, parameters of haemostasis, fluorescent IgG and lipid peroxides in non–insulin dependent diabetes mellitus. Florkowski CM, et al. **Diabetes Res** 1988 Oct;9(2):87–90

Plasma lipid peroxides among workers exposed to silica or asbestos dusts. Kamal AA, et al. **Environ Res** 1989 Aug; 49(2):173–80

Systemic effects associated with intermittent claudication. A model to study biochemical aspects of vascular disease? Shearman CP, et al. **Eur J Vasc Surg** 1988 Dec;2(6):401–4

Regarding "Evaluation of an assay for plasma hydroperoxides" published in the Forum, FRBM [letter] **Free Radic Biol Med** 1989;6(6):663–5

Plasma lipid peroxides in murine sepsis—sex differences and effect of antioxidative/anti–inflammatory therapy. Marinkovic D, et al. **Free Radic Res Commun** 1988; 4(4):237–42

Plasma lipid peroxidation in pre–eclampsia. Sieroń G, et al. **Ginekol Pol** 1988 Nov;59(11):668–71

Erythrocyte lipid peroxidation, glutathione and vitamin E levels in cholesterol–fed rats. Uysal M, et al. **Int J Vitam Nutr Res** 1988;58(2):198–201

Oxidation of alpha 1–protease inhibitor: role of lipid peroxidation products. Mohsenin V, et al. **J Appl Physiol** 1989 May;66(5):2211–5

Chemiluminescent assay of lipid hydroperoxides. Belghmi K, et al. **J Biolumin Chemilumin** 1988 Jul–Sep;2(3):113–9

Serum lipid peroxide levels in various dermatoses. Demitsu T, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):325–9

Reye syndrome: rate of oxidation of fatty acids in leukocytes and serum levels of lipid peroxides. Yoshida Y, et al. **J Exp Pathol** 1989 Summer;4(3):133–9

Suppression of vascular prostacyclin generation by jaundiced serum: relation to lipid peroxides. Schroeder ET, et al. **J Lab Clin Med** 1988 Dec;112(6):784–91

A spectrophotometric assay for lipid peroxides in serum lipoproteins using a commercially available reagent. el–Saadani M, et al. **J Lipid Res** 1989 Apr;30(4):627–30

Serum selenium concentration, glutathione peroxidase activity and lipid peroxides in a co–twin control study on multiple sclerosis. Korpela H, et al. **J Neurol Sci** 1989 Jun; 91(1–2):79–84

Plasma thiobarbituric acid reactivity: reaction conditions and the role of iron, antioxidants and lipid peroxy radicals on the quantitation of plasma lipid peroxides. Wade CR, et al. **Life Sci** 1988;43(13):1085–93

Reactivity of photochemically–generated lipid hydroperoxides in cell membranes with glutathione peroxidase. Thomas JP, et al. **Photochem Photobiol** 1989 Feb;49(2):153–6

Antioxidant defenses and lipid peroxidation in human blood plasma. Frei B, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9748–52

Changes of some lipid and lipid peroxidation characteristics in obese people as a result of a low energy diet. Dworschák E, et al. **Z Ernahrungswiss** 1988 Dec;27(4):207–15

[Changes in plasma 6–keto–PGF1 alpha, TXB2 lipid peroxides in acute cerebral infarction patients and the effects of Salvia miltiorrhiza on these three indices] Yu NC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct; 27(10):596–9, 651 (Eng. Abstr.) (Chi)

[The changes in lipid peroxides in platelet, thromboxane B2 and 6–keto prostaglandin F1 alpha in patients with primary lung cancer] Ikeda S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):579–86 (Eng. Abstr.) (Jpn)

[Copper levels and the presence of free radical reaction products in the sera of patients with cancer of the larynx] Gierek T, et al. **Otolaryngol Pol** 1988;42(1–2):33–7 (Eng. Abstr.) (Pol)

[Plasma levels of neutral and polar lipid fractions in pregnant women with gestosis] Serov VN, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):22–5 (Eng. Abstr.) (Rus)

[Blood lipids and lipid peroxides in the families of patients with ischemic heart disease] Davidenkova EF, et al. **Kardiologiia** 1989 Jun;29(6):10–4 (Eng. Abstr.) (Rus)

[Effect of alpha–tocopherol combined with finoptin on the level of lipid hydroperoxides in plasma lipoproteins and on the functional activity of thrombocytes in patients with exertion–induced stable stenocardia] Levchenkio VA, et al. **Kardiologiia** 1989 Jun;29(6):25–8 (Eng. Abstr.) (Rus)

[Free radical oxidation in patients with destructive pancreatitis and its correction using hemosorption] Dedenko IK. **Klin Med (Mosk)** 1988 Nov;66(11):86–8 (Eng. Abstr.) (Rus)

[Lipid peroxidation in the human blood during a 120–day period of anti–orthostatic hypokinesia] Zezerov AE, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):28–33 (Eng. Abstr.) (Rus)

[Indicators of lipid peroxidation and alpha tocopherol in healthy children] Klevko VA, et al. **Pediatriia** 1989;(3):110 (Rus)

[Transport of fatty acids and products of their peroxidation by serum albumin in ischemic and non–coronary injury of the myocardium] Tolkacheva NV, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):89–92 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Changes in glutathione peroxidase and lipid peroxides in cerebrospinal fluid and serum after subarachnoid hemorrhage—with special reference to the occurrence of cerebral vasospasm. Watanabe T, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):645–9

[Products of lipid peroxidation in the cerebrospinal fluid of patients with cranio–cerebral trauma] Skornikov VI, et al. **Lab Delo** 1988;(8):14–6 (Eng. Abstr.) (Rus)

METABOLISM

The influence of a temporary cessation and reperfusion of intestinal blood flow on the level of hepatic lipid peroxides. Lutz J, et al. **Adv Exp Med Biol** 1989;248:803–8

Prostaglandin H synthase: distinct binding sites for cyclooxygenase and peroxidase substrates. Marshall PJ, et al. **Arch Biochem Biophys** 1988 Oct;266(1):162–70

Oxidation of aldehydic products of lipid peroxidation by rat liver microsomal aldehyde dehydrogenase. Mitchell DY, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):11–7

Lipid peroxidation inhibitory factors in liver and muscle of rat, mouse, and chicken. Murphy ME, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):585–93

Endotoxin causes hydrogen peroxide–induced lung lipid peroxidation and prostanoid production. Demling R, et al. **Arch Surg** 1988 Nov;123(11):1337–41

Specific high affinity binding of lipoxygenase metabolites of arachidonic acid by liver fatty acid binding protein. Raza H, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):448–55

The possible role of 9(S)–hydroperoxyoctadecatrienoic acid as a suicide substrate of soybean lipoxygenase. Sok DE, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1357–62

Lipid peroxidation in Ehrlich ascites cell mitochondria is not determined by the polyunsaturated fatty acid content of the membrane. Tretter L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):356–62

Lipid antioxidant properties of quercetin in vitro. Das M, et al. **Biochem Int** 1988 Aug;17(2):203–9

Lipid peroxidation in rat liver microsomes. I. Stimulation of the NADPH–cytochrome P–450 reductase–dependent process in hyperthyroid state. Landriscina C, et al. **Biochem Int** 1988 Aug;17(2):385–93

Pulmonary and hepatic glutathione levels, glutathione shuttle enzymes and lipid peroxidation in rats exposed intratracheally to coal fly ash. Srivastava PK, et al. **Biochem Int** 1988 Sep;17(3):509–16

The mechanism of initiation of lipid peroxidation. Evidence against a requirement for an iron(II)–iron(III) complex. Aruoma OI, et al. **Biochem J** 1989 Mar 1;258(2):617–20

Chelating and free radical scavenging mechanisms of inhibitory action of rutin and quercetin in lipid peroxidation. Afanas'ev IB, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1763–9

Protection of cardiac membrane phospholipid against oxidative injury by calcium antagonists. Janero DR, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4197–203

Reaction of hematin with allylic fatty acid hydroperoxides: identification of products and implications for pathways of hydroperoxide–dependent epoxidation of 7,8–dihydroxy–7,8–dihydrobenzo[a]pyrene. Labeque R, et al. **Biochemistry** 1988 Sep 6;27(18):7060–70

Nonesterified fatty acids inhibit iron–dependent lipid peroxidation. Balasubramanian KA, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):232–7

Interplay between lipoic acid and glutathione in the protection against microsomal lipid peroxidation. Bast A, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):558–61

Characterization of fluorescent products from reaction of methyl linoleate hydroperoxides with adenine in the presence of Fe2+ and ascorbic acid. Hasegawa K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):371–6

Lipid peroxidation of phosphatidylcholine liposomes depressed by the calcium channel blockers nifedipine and verapamil and by the antiarrhythmic–antihypoxic drug stobadine. Ondriaš K, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):238–45

Action of lead(II) and aluminium (III) ions on iron–stimulated lipid peroxidation in liposomes, erythrocytes and rat liver microsomal fractions. Quinlan GJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):196–200

Antioxidant activity of dihydrolipoate against microsomal lipid peroxidation and its dependence on alpha–tocopherol. Scholich H, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):256–61

Hemoglobin: a lifesaver and an oxidant. How to tip the balance. Faassen AE, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):93–104

Contracture and cell damage in calcium paradox is not caused by lipid peroxidation. Belluk B, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1087–91

Analysis of antioxidant defense systems during rat hepatocarcinogenesis. Vo TK, et al. **Carcinogenesis** 1988 Nov;9(11):2009–13

Glutathione and lipid peroxide levels in rat liver following administration of methapyrilene and analogs. Hernandez L, et al. **Chem Biol Interact** 1989;69(2–3):217–24

Participation of lipid peroxides in rat pertussis vaccine pleurisy. II. Leucocytes and related enzymes. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2490–8

Participation of lipid peroxidation in rat pertussis vaccine pleurisy. I. Thiobarbituric acid (TBA) reactant and ceruloplasmin. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2691–4

Effects of metal ions on the antioxidant enzyme activities, protein contents and lipid peroxidation of carp tissues. Radi AA, et al. **Comp Biochem Physiol [C]** 1988;90(1):69–72

Lipid peroxides and superoxide dismutase (SOD) induction in skin inflammatory diseases, and treatment with SOD preparations. Niwa Y. **Dermatologica** 1989;179 Suppl 1:101–6 (15 ref.)

Effects of intratracheal administration of xanthine plus xanthine oxidase on lung antioxidant enzymes, lipid peroxidation, and collagen in hamsters. Giri SN, et al. **Exp Mol Pathol** 1988 Dec;49(3):395–409

Antioxidant behaviour of ubiquinone and beta–carotene incorporated in model membranes. Cabrini L, et al. **Free Radic Res Commun** 1986;2(1–2):85–92

Effect of cytochrome c on formation of lipid peroxides in rat brain in vitro. Hattori T, et al. **Free Radic Res Commun** 1987;4(1):41–9

Inhibitory effects of ebselen on lipid peroxidation in rat liver microsomes. Hayashi M, et al. **Free Radic Res Commun** 1986;2(3):179–85

NADPH–induced microsomal lipid peroxidation as measured by malondialdehyde production in rat liver. Inhibitory effect of naftidrofuryl. Parussini R, et al. **Free Radic Res Commun** 1986;2(1–2):93–100

Anthracycline–induced oxygen consumption and oxidative damage in rat liver microsomes are not necessarily coupled. A study with 8 structurally related anthracyclines. Sterrenberg L, et al. **Free Radic Res Commun** 1985; 1(1):41–54

Effects of vitamin E deficiency on hepatic mitochondrial lipid peroxidation and oxidative metabolism in rats with chronic dietary iron overload. Bacon BR, et al. **Hepatology** 1989 Mar;9(3):398–404

Potential for free radical–induced lipid peroxidation as a cause of endothelial cell injury in Rocky Mountain spotted fever. Silverman DJ, et al. **Infect Immun** 1988 Dec; 56(12):3110–5

Multiple forms of glutathione S–transferase from pig liver—reaction with methyl linoleate hydroperoxides. Williamson G. **Int J Biochem** 1989;21(1):23–30

The effect of cholesterol feeding on lipid peroxide, glutathione, glutathione peroxidase and glutathione transferase in the liver of rats. Uysal M, et al. **Int J Vitam Nutr Res** 1988;58(3):339–42

Halothane–induced hepatic microsomal lipid peroxidation in guinea pigs and rats. Akita S, et al. **J Appl Toxicol** 1989 Feb;9(1):9–14

Effect of iron overload on spontaneous and xenobiotic–induced lipid peroxidation in vivo. Younes M, et al. **J Appl Toxicol** 1989 Apr;9(2):103–8

Changes in lipid peroxide concentrations in plasma and tissues by repeated administration of clioquinol to neonatal rats. Ohshima N, et al. **J Pharmacobiodyn** 1988 Jun;11(6):421–9

Potentiation of ethanol–induced lipid peroxidation of biological membranes by vitamin C. Ahmad FF, et al. **Life Sci** 1988;43(14):1169–76

Follow–up study of lipid peroxides, superoxide dismutase and glutathione peroxidase in the synovial membrane, serum and liver of young and old mice with collagen–induced arthritis. Kasama T, et al. **Life Sci** 1988;43(23):1887–96

Effects of aurothioglucose on iron–induced rat liver microsomal lipid peroxidation. Beckman JK, et al. **Lipids** 1988 Sep;23(9):899–903

Formation of fluorescent substances from degradation products of methyl linoleate hydroperoxides with amino compound. Iio T, et al. **Lipids** 1988 Nov;23(11):1069–72

Streptozotocin–induced diabetes in rat. II. Lipid and lipid peroxide changes of lipoprotein fractions in diabetes complicated by hypertension and myocardial infarction. Somova L, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):751–4

Glutathione transferases: a possible role in the detoxication and repair of DNA and lipid hydroperoxides. Ketterer B, et al. **Mutat Res** 1989 Sep;214(1):33–40 (41 ref.)

The influence of alpha-tocopherol and pyritinol on oxidative DNA damage and lipid peroxidation in human lymphocytes. Topinka J, et al. **Mutat Res** 1989 Mar; 225(3):131–6

Halothane-induced liver injury as a consequence of enhanced microsomal lipid peroxidation in guinea pigs. Akita S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):227–43

Inhibition of doxorubicin-initiated membrane damage by N-acetylcysteine: possible mediation by a thiol-dependent, cytosolic inhibitor of lipid peroxidation. Powell SR, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):175–84

The role of oxygen free radicals in preservation injury in pancreas transplantation. Fernández-Cruz L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1381–3

2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)-induced alterations in lipid peroxidation, enzymes, and divalent cations in rat testis. al-Bayati ZA, et al. **Xenobiotica** 1988 Nov;18(11):1281–9

Lindane-induced oxidative stress. I. Time course of changes in hepatic microsomal parameters, antioxidant enzymes, lipid peroxidative indices and morphological characteristics. Junqueira VB, et al. **Xenobiotica** 1988 Nov; 18(11):1297–304

[Radical reactions and pathogenetic consequences—a review with reference to environmental health aspects] Ellinger C. **Z Gesamte Hyg** 1988 May;34(5):283–6 (39 ref.) (Eng. Abstr.) (Ger)

[Experimental studies on mechanisms and prevention of radiation pneumonitis] Hashimura T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):335–43 (Eng. Abstr.) (Jpn)

[Increased lipid peroxides generation and calcium fluxes in hearts during reperfusion] Shimanuki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):688–93 (Eng. Abstr.) (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in cerebral degenerative diseases such as Alzheimer's and Parkinson diseases] Hirai S. **Nippon Rinsho** 1988 Oct;46(10):2184–9 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in liver and pancreatic diseases] Kamada T, et al. **Nippon Rinsho** 1988 Oct;46(10):2236–40 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in skin diseases] Miyachi Y. **Nippon Rinsho** 1988 Oct;46(10):2252–6 (Jpn)

[Mechanisms of the biosynthesis of free radicals of reactive oxygen] Niki E. **Nippon Rinsho** 1988 Oct;46(10):2125–9 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in shock and disseminated intravascular coagulation] Ogawa R. **Nippon Rinsho** 1988 Oct; 46(10):2196–202 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals. Lipid peroxides, free radicals and diseases] Yagi K. **Nippon Rinsho** 1988 Oct;46(10):2174–8 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals. Role of free radicals in cerebral ischemia] Yoshida S, et al. **Nippon Rinsho** 1988 Oct;46(10):2179–83 (Jpn)

[Enzyme utilization of lipid peroxides in arteriosclerotic human aorta] Bondar'TN, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):444–6 (Eng. Abstr.) (Rus)

[Plasma and cerebrospinal fluid levels of lipid peroxidation products and free fatty acids in children with convulsions] Kryzhanovskiĭ GN, et al. **Pediatriia** 1988;(7):22–5 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Potential mechanism of pulmonary arterial relaxation and guanylate cyclase activation by 15-hydroperoxyeicosatetraenoic acid. Wolin MS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:285–8

Inactivation of soybean lipoxygenase by lipoxygenase inhibitors in the presence of 15-hydroperoxyeicosatetraenoic acid. Reynolds CH. **Biochem Pharmacol** 1988 Dec 1;37(23):4531–7

Cytotoxicity of arachidonic acid and of its lipoxygenase metabolite 15-hydroperoxyeicosatetraenoic acid on human breast cancer MCF-7 cells in culture. Najid A, et al. **Cancer Lett** 1989 Jul 15;46(2):137–41

Hydroxy- and hydroperoxy-6,8,11,14-eicosatetraenoic acids induce DNA strand breaks in human lymphocytes. Weitberg AB, et al. **Carcinogenesis** 1989 Jun;10(6):1029–31

Inactivation of mutagenic heterocyclic and aryl amines by linoleic acid 13-monohydroperoxide and methemoglobin. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4963–70

Lipid hydroperoxides inhibit reacylation of phospholipids in neuronal membranes. Zaleska MM, et al. **J Neurochem** 1989 Jan;52(1):255–60

12-Hydroperoxyeicosatetraenoic acid (12-HPETE) and 15-HPETE stimulate melatonin synthesis in rat pineals. Sakai K, et al. **Prostaglandins** 1988 Jun;35(6):969–76

PHYSIOLOGY

Investigation of the role of serum lipoprotein-associated peroxides in Adriamycin cardiotoxicity. Release of reduced glutathione from rat hearts perfused with lipase-hydrolyzed very low density lipoprotein fractions obtained from Adriamycin-treated and control rats. Thayer WS. **Biochem Pharmacol** 1989 Jun 15;38(12):1923–9

Changes in the fluorescence parameters of bound N-(1-pyrene) maleimide by lipid peroxidation of intestinal brush-border membranes. Ohyashiki T, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):235–42

Lipid peroxidation as a possible cause of cataract. Babizhayev MA, et al. **Mech Ageing Dev** 1988 Jul;44(1):69–89

[A study on the role of serum lipoperoxides, plasma alpha-tocopherol and prostacyclin in arteriosclerosis of essential hypertension] Yabe R, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct;30(10):1161–4 (Eng. Abstr.) (Jpn)

TOXICITY

Effect of dietary lipid peroxides on lymphoid tissues. Oarada M, et al. **Basic Life Sci** 1988;49:327–30

Cytotoxicities of a linoleic acid hydroperoxide and its related aliphatic aldehydes toward cultured human umbilical vein endothelial cells. Kaneko T, et al. **Chem Biol Interact** 1988; 67(3–4):295–304

Killing of blood-stage Plasmodium falciparum by lipid peroxides from tumor necrosis serum. Rockett KA, et al. **Infect Immun** 1988 Dec;56(12):3180–3

Preventive effect of MCI-186 on 15-HPETE induced vascular endothelial cell injury in vitro. Watanabe T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):81–7

Mutagenic lipid peroxides from edible oils. Kensese SM, et al. **Teratogenesis Carcinog Mutagen** 1989;9(3):133–45

[Mechanisms of organ injury by ischemia and protection by antioxidant pretreatment] Kawasaki T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3153–62 (Jpn)

[Role of active oxygen species in carcinogenesis] Kodama M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3136–43 (Jpn)

URINE

Increased urinary lipoperoxides in drug abusers. Knight JA, et al. **Ann Clin Lab Sci** 1988 Sep–Oct;18(5):374–7

Increased urinary lipoperoxide levels in renal transplant patients. Knight JA, et al. **Ann Clin Lab Sci** 1989 Jul–Aug; 19(4):238–41

LIPIDOSIS see LIPOIDOSIS

LIPIDS

Fluorophore-labeled ether lipids: substrates for enzymes of the platelet-activating factor cycle in peritoneal polymorphonuclear leukocytes. Schindler PW, et al. **Anal Biochem** 1988 Nov 1;174(2):477–84

Spin trapping of lipid-derived radicals in liposomes. Feix JB, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):230–5

Lipid–carotenoid interaction: effect on electrical conduction in lipid films. Sarkar D, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):434–7

Macrophage activation by an ornithine-containing lipid or a serine-containing lipid. Kawai Y, et al. **Infect Immun** 1989 Jul;57(7):2086–91

Detergent structure and associated lipid as determinants in the stabilization of solubilized Ca2+-ATPase from sarcoplasmic reticulum. Lund S, et al. **J Biol Chem** 1989 Mar 25;264(9):4907–15

Central nervous system side effects of beta-adrenergic blocking agents with high and low lipid solubility. Conant J, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):656–61

Packing of linear molecules: an electron microscope study of disorder in mesophases and binary solids. Dorset DL. **J Electron Microsc Tech** 1989 Apr;11(4):298–309

Cubic phases of lipid-containing systems. Structure analysis and biological implications. Mariani P, et al. **J Mol Biol** 1988 Nov 5;204(1):165–89

Invited comment: investigative obstacles in the study of the metabolism and toxicity of lipids. Wolfe BM, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):59S–62S (7 ref.)

Location of double bonds in fatty acids of fish oil and rat testis lipids. Gas chromatography–mass spectrometry of the oxazoline derivatives. Yu QT, et al. **Lipids** 1989 Jan; 24(1):79–83

Fat suppression in the time domain in fast MR imaging. Szumowski J, et al. **Magn Reson Med** 1988 Nov;8(3):345–54

Hybrid methods of chemical-shift imaging. Szumowski J, et al. **Magn Reson Med** 1989 Mar;9(3):379–88

Radical processes in lipids. Selectivity of hydrogen abstraction from lipids by benzophenone triplet. Marković DZ, et al. **Photochem Photobiol** 1989 May;49(5):531–5

A brief history of Progress in Lipid Research [editorial] Holman RT. **Prog Lipid Res** 1988;27(1):1–4

True water and fat MR imaging with use of multiple-echo acquisition. Williams SC, et al. **Radiology** 1989 Oct; 173(1):249–53

[Reactivity of active oxygen with lipids] Terao J. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3060–6 (Jpn)

ADMINISTRATION & DOSAGE

Effect of dietary lipids on platelet function and thrombosis. Hornstra G. **Ann Med** 1989 Feb;21(1):53–7

Gallbladder response to enteral lipids in injured patients. Merrell RC, et al. **Arch Surg** 1989 Mar;124(3):301–2

Inhibition of muscular ketone extraction by lipid infusion in man. Rett K, et al. **Horm Metab Res** 1988 Aug;20(8):502–5

Selective transfer of cyclosporin to thoracic lymphatic systems by the application of lipid microspheres. Yanagawa A, et al. **J Microencapsul** 1989 Apr–Jun;6(2):161–4

Omental angiogenic lipid fraction and bone repair. An experimental study in the rat. Nottebaert M, et al. **J Orthop Res** 1989;7(2):157–69

ADVERSE EFFECTS

The effect of short-term refrigeration of milk and addition of breast milk fortifier on the delivery of lipids during tube feeding. Lavine M, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):496–9

ANALYSIS

Effects of starvation on the parathyroid glands in golden hamsters of different ages, with special reference to the frequency of lipid droplets. Emura S, et al. **Acta Anat (Basel)** 1988;133(2):96–101

Variations of Pityrosporum orbiculare in middle-aged and elderly individuals. Bergbrant IM, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):537–40

Effects of single application of a moisturizer: evaporation of emulsion water, skin surface temperature, electrical conductance, electrical capacitance, and skin surface (emulsion) lipids. Blichmann CW, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):327–30

Detection of phthiocerol derivatives in Mycobacterium ulcerans: a preliminary report. Lévy-Frébault V, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:61–3

Lectin mediated agglutination of Candida kefyr cells and their spheroplasts grown in sterol enriched growth medium and its correlation with lipid composition. Sharma SC, et al. **Acta Microbiol Pol** 1988;37(2):175–82

Glycosaminoglycan containing fat-storing cells in hepatic fibrogenesis. Szende B, et al. **Acta Morphol Hung** 1988; 36(3–4):241–51

Lipopigment in the aging brain. Wisniewski HM, et al. **Am J Med Genet Suppl** 1988;5:183–91 (12 ref.)

Dexamethasone effects on microvascular endothelial cell lipid composition. Medow MS, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C512–9

Basal and bile salt-stimulated bile flow and biliary lipid excretion in ponies. Engelking LR, et al. **Am J Vet Res** 1989 Apr;50(4):578–82

Analysis of muscle elements, water, and total lipids from healthy dogs and Labrador retrievers with hereditary muscular dystrophy. Mehta JR, et al. **Am J Vet Res** 1989 May;50(5):640–4

Bronchoalveolar lavage lipids during development of bleomycin-induced fibrosis in rats. Relationship to altered epithelial cell morphology. Low RB, et al. **Am Rev Respir Dis** 1988 Sep;138(3):709–13

Evidence for a highly conserved, immunoreactive lipid in Mycobacterium tuberculosis. Makonkawkeyoon S, et al. **Am Rev Respir Dis** 1989 Mar;139(3):774–8

The study of lipid phase transition kinetics by time-resolved X-ray diffraction. Caffrey M. **Annu Rev Biophys Biophys Chem** 1989;18:159–86 (160 ref.)

Lipid composition of human seminal plasma. Vignon F, et al. **Arch Androl** 1989;22(1):49–53

Polycyclic aromatic hydrocarbon (PAH) residues on skin in relation to air levels among roofers. Wolff MS, et al. **Arch Environ Health** 1989 May–Jun;44(3):157–63

Effect of repeated endotoxin treatment and hypercholesterolemia on preatherosclerotic lesions in weaned pigs. Part II. Lipid and glycosaminoglycan analysis of intima and inner media. Yla-Herttuala S, et al. **Atherosclerosis** 1988 Aug;72(2–3):173–81

Nile red simultaneous staining of intracellular lipids and membrane network in human muscle cultures. Santilli I, et al. **Basic Appl Histochem** 1989;33(1):49–52

Lipid analysis of skeletal muscle from pigs susceptible to malignant hyperthermia. Fletcher JE, et al. **Biochem Cell Biol** 1988 Aug;66(8):917–21

The lipid composition of plasma membrane from goat mammary gland. Sharma A, et al. **Biochem Cell Biol** 1988 Dec;66(12):1355–9

Gastric mucin hydrophobicity: effects of associated and covalently bound lipids, proteolysis, and reduction. Gwozdzinski K, et al. **Biochem Int** 1988 Nov;17(5):907–17

Lipid–lipid interactions in reconstituted high-density lipoproteins by deuterium nuclear magnetic resonance. Fenske DB, et al. **Biochemistry** 1988 Jun 14;27(12):4491–500

Polar lipids and fatty acids of Pseudomonas cepacia. Cox AD, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):60–7

Binding of partially reassembled high-density lipoprotein to isolated human small intestine epithelial cells. Effect of lipid composition. Sviridov DD, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):119–25

Histological staining of lipids for the light and electron microscope. Wigglesworth VB. **Biol Rev Cambridge Philosophic Soc** 1988 Aug;63(3):417–31 (39 ref.)

Total fatty acids of hair lipids in cystic fibrosis. Gershbein

LL, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):136–40
Lipid composition in hepatocyte cultures from hypothyroid rats. Cafagna F, et al. **Boll Soc Ital Biol Sper** 1988 Dec; 64(12):1077–82
The lipid composition of highly differentiated human hepatomas, with special reference to fatty acids. Eggens I, et al. **Br J Exp Pathol** 1988 Oct;69(5):671–83
Serum lipid–bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al.
Bull Soc Sci Med Grand Duche Luxemb 1989 Mar–Apr; 126(1):17–20
Composition of fat in different types of liposarcomas in comparison with lipomas. Knipping G, et al.
Cancer Lett 1989 Jul 1;46(1):51–6
Lipid detection by malachite green–aldehyde in the dental basement membrane in the rat incisor. Goldberg M, et al. **Cell Tissue Res** 1988 Sep;253(3):685–7
Surface respreading after collapse of monolayers containing major lipids of pulmonary surfactant. Fleming BD, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):81–6
Direct measurement of headgroup hydration of polar lipids in inverted micelles. Sen A, et al. **Chem Phys Lipids** 1988 Dec;49(3):179–84
Position statement of the CSCC and CAP Task Force on the measurement of lipids for the assessment of risk of CHD. Dinwoodie A, et al. **Clin Biochem** 1989 Jun; 22(3):231–7
The lipid content of epididymal spermatozoa of Rattus norvegicus. Adams CS, et al.
Comp Biochem Physiol [B] 1977;58(4):409–11
Composition of adrenal lipids from some domestic and wild ruminants. Cmelik SH, et al. **Comp Biochem Physiol [B]** 1977;56(3):267–70
Lipids from nerve tissues of the horseshoe crab, Limulus polyphemus. Lee RF, et al. **Comp Biochem Physiol [B]** 1979;64(4):375–9
The effects of a choline deficiency on the lipid composition and ethanol tolerance of Drosophila melanogaster. Tilghman JA, et al. **Comp Biochem Physiol [C]** 1988; 90(2):439–44
Stratum corneum lipids in skin xerosis. Saint-Léger D, et al. **Dermatologica** 1989;178(3):151–5
Age–associated changes in stratum corneum lipids and their relation to dryness. Saint Léger D, et al. **Dermatologica** 1988;177(3):159–64
Human milk fat content: within–feed variation. Woodward DR, et al. **Early Hum Dev** 1989 Apr;19(1):39–46
Human gastric lipase. The N–terminal tetrapeptide is essential for lipid binding and lipase activity. Bernbäck S, et al.
Eur J Biochem 1989 Jul 1;182(3):495–9
Conformational transmission in condensed lipid model compounds. Chain packing modification by head–group–induced conformational changes in the glyceryl backbone. Meulendijks GH, et al.
Eur J Biochem 1989 Jul 1;182(3):531–8
The influence of dietary low and high unsaturated fats and cholesterol on the fatty acid pattern of serum and aortic cholesteryl esters and the lipid deposits of pig aorta. Künnert B, et al. **Exp Pathol** 1988;34(3):141–50
Mycobacterium xenopi: identification of different chemotypes based on the lipid pattern analysis by TLC. Huttunen R, et al. **Folia Microbiol (Praha)** 1988;33(4):332–4
Polychlorinated biphenyl congeners in adipose tissue lipid and serum of past and present transformer repair workers and a comparison group. Fait A, et al.
Fundam Appl Toxicol 1989 Jan;12(1):42–55
Sudan stain of fecal fat: new insight into an old test. Khouri MR, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):421–7
Fecal lipid excretion in pancreatic insufficiency [letter] Roberts IM. **Gastroenterology** 1989 Jul;97(1):248–9
Lipid fluorophores of the human crystalline lens with cataract. Babizhayev MA.
Graefes Arch Clin Exp Ophthalmol 1989;227(4):384–91
Fat–storing cells and myofibroblasts: one cell or two? Maher JJ. **Hepatology** 1989 Jun;9(6):903–4
Differentiation of cultured human keratinocytes: effect of culture conditions on lipid composition of normal vs. malignant cells. Ponec M, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):689–96
Studies on lipids in mycobacterial cell wall: their important structure and function relating to pathogenicity and their biological activity. Bera A, et al. **Indian J Lepr** 1989 Apr; 61(2):143–50 (10 ref.)
Butyrophilin of milk lipid globule membrane contains N–linked carbohydrates and cross–links with xanthine oxidase. Valivullah HM, et al. **Int J Biochem** 1989; 21(1):103–7
Effects of Echinostoma caproni infection on the lipid composition of Biomphalaria glabrata. Fried B, et al.
Int J Parasitol 1989 May;19(3):353–4
Assay of lipids, glycogen and sugars in individual mosquitoes: correlations with wing length in field–collected Aedes vexans. Van Handel E, et al.
J Am Mosq Control Assoc 1988 Dec;4(4):549–50
Rapid determination of total lipids in mosquitoes. Van Handel E. **J Am Mosq Control Assoc** 1985 Sep;1(3):302–4
Fusion of liposomes with the plasma membrane of epithelial cells: fate of incorporated lipids as followed by freeze fracture and autoradiography of plastic sections. Knoll G, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2511–21
Application of methylamine O–deacylation and Vitride reduction to the analysis of neutral lipids: a thin–layer chromatographic evaluation. Hack MH, et al.
J Chromatogr 1988 Dec 29;434(1):215–21
On–line high–performance liquid chromatography–post–column reaction–capillary gas chromatography analysis of lipids in biological samples. Raglione TV, et al. **J Chromatogr** 1988 Nov 11;454:157–67
Identification of very–long–chain fatty acids in rat and mouse harderian gland lipids by capillary gas chromatography–mass spectrometry. Tvrzická E, et al.
J Chromatogr 1988 Oct 14;431(2):231–8
Lipid and lipoprotein contents of human follicular fluid. Suchanek E, et al. **J Clin Chem Clin Biochem** 1988 Sep; 26(9):543–7
A comparison of rat femoral, sternebral and lumbar vertebral bone marrow fat content by subjective assessment and image analysis of histological sections. Wright JA.
J Comp Pathol 1989 May;100(4):419–26
Lipid quantitation in formalin–fixed liver sections. Mourelle M, et al. **J Histochem Cytochem** 1988 Dec;36(12):1471–4
Neutral lipid storage disease with ichthyosis: lipid content and metabolism of fibroblasts. Williams ML, et al.
J Inherited Metab Dis 1988;11(2):131–43
How should we measure n–3 polyunsaturated fatty acids and their metabolites in humans? Fischer S.
J Intern Med Suppl 1989;225(731):21–4
Microanalytical screening of all major stratum corneum lipids by sequential high–performance thin–layer chromatography. Melnik BC, et al. **J Invest Dermatol** 1989 Feb;92(2):231–4
Calorimetric and electron spin resonance examination of lipid phase transitions in human stratum corneum: molecular basis for normal cohesion and abnormal desquamation in recessive X–linked ichthyosis. Rehfeld SJ, et al.
J Invest Dermatol 1988 Nov;91(5):499–505
Changes in the relative amounts of endogenous and exogenous fatty acids in sebaceous lipids during early adolescence. Stewart ME, et al. **J Invest Dermatol** 1989 Mar;92(3):371–8
Covalently bound lipids of human stratum corneum. Wertz PW, et al. **J Invest Dermatol** 1989 Jan;92(1):109–11
Lipid content and lipid type as determinants of the epidermal permeability barrier. Grubauer G, et al. **J Lipid Res** 1989 Jan;30(1):89–96
Polarity of neutral glycolipids, gangliosides, and sulfated lipids in MDCK epithelial cells. Nichols GE, et al.
J Lipid Res 1988 Sep;29(9):1205–13
Novel molecular analogues of phosphatidylcholines in a lipid extract from bovine brain: 1–long–chain acyl–2–short–chain acyl–sn–glycero–3–phosphocholines. Tokumura A, et al. **J Lipid Res** 1989 Feb;30(2):219–24
Effect of the dietary alpha–linolenate/linoleate balance on lipid compositions and learning ability of rats. II. Discrimination process, extinction process, and glycolipid compositions. Yamamoto N, et al. **J Lipid Res** 1988 Aug; 29(8):1013–21
Biliary bile acids and lipids composition in Opisthorchiasis viverrini. Wongpaitoon V, et al. **J Med Assoc Thai** 1988 Jul;71(7):394–9
Myelin proteins in reverse micelles: tight lipid association required for insertion of the Folch–Pi proteolipid into a membrane–mimetic system. Vacher M, et al.
J Neurochem 1989 Jan;52(1):117–23
Ganglioside and lipid composition of bulk–isolated rat and bovine oligodendroglia. Yu RK, et al. **J Neurosci Res** 1989 Jun;23(2):136–41
Lack of correlation between changes in the concentrations of linoleate and arachidonate in human milk relative to total milk lipid [letter] Clark RM.
J Pediatr Gastroenterol Nutr 1988 Nov–Dec;7(6):937–8
Relationship between human milk lipid–ultrafiltrate and octanol–water partition coefficients. Atkinson HC, et al.
J Pharm Sci 1988 Sep;77(9):796–8
Water evaporation rates from a model of stratum corneum lipids. Friberg SE, et al. **J Pharm Sci** 1989 Aug;78(8):639–43
Quantitative relationship between bile acid structure and biliary lipid secretion in rats. Roda A, et al.
J Pharm Sci 1988 Jul;77(7):596–605
Distinct differences in lipid composition between epidermis and dermis from footpad and dorsal skin of guinea pigs. Uchida Y, et al. **Jpn J Exp Med** 1988 Jun;58(3):153–61
Lipid composition of normal male rat islets. Díaz GB, et al. **Lipids** 1988 Dec;23(12):1125–8
Biopsy method for human adipose with vitamin E and lipid measurements. Handelman GJ, et al. **Lipids** 1988 Jun; 23(6):598–604
Lipid abnormalities in pancreatic tissue of streptozotocin–induced diabetic rats. Levy E, et al.
Lipids 1988 Aug;23(8):771–8
Characterization of skin–surface lipids from the monkey (Macaca fascicularis). Nishimaki–Mogami T, et al.
Lipids 1988 Sep;23(9):869–77
Integral lipids of human hair. Wertz PW, et al. **Lipids** 1988 Sep;23(9):878–81
The distribution of lipids and sterols in cell types from the marine sponge Pseudaxinyssa sp. Zimmerman MP, et al.
Lipids 1989 Mar;24(3):210–6
Buoyant density and lipid composition of purified myelin of aging human brain. Stommel A, et al.
Mech Ageing Dev 1989 Apr;48(1):1–14
UV spectroscopy studies of the oxidation changes in depot and structural lipids in high–fat feeding. Yanishlieva NV, et al. **Nahrung** 1988;32(10):955–60
Myelin lipids in aging human brain. Wender M, et al.
Neurochem Pathol 1988 Apr;8(2):121–30
Aspects of the protein and the lipid composition of myelinoid Marchi–positive bodies from mammalian spinal cord. Corneliuson O, et al. **Neurochem Res** 1988 Dec; 13(12):1149–56
Fatty acid analysis of lipid components of livers from dairy cows with high levels of serum free fatty acids. Ono E, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):900–7
Observations on the lipids of Oochoristica agamae (Cestoda). Aisien SO, et al. **Parasitol Res** 1989;75(4):307–10
Lipid composition of milk from mothers with cystic fibrosis [letter] Golembeski DJ, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):631–2
The pharmacokinetics of intravenously administered diazepam in the rat influenced by composition of the lymph. Lamka J, et al. **Physiol Bohemoslov** 1989;38(3):259–66
Lipids of high–yielding varieties of cashew (Anacardium occidentale L.). Nagaraja KV. **Plant Foods Hum Nutr** 1987; 37(4):307–11
Milk lipid globules: control of their size distribution. Valivullah HM, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8775–9
The lipid composition of adipose tissue. Body DR.
Prog Lipid Res 1988;27(1):39–60 (159 ref.)
High temperature capillary gas liquid chromatography of triacylglycerols and other intact lipids. Mareš P.
Prog Lipid Res 1988;27(2):107–33 (74 ref.)
Recent advances in the high performance liquid chromatography of lipids. Shukla VK. **Prog Lipid Res** 1988; 27(1):5–38 (221 ref.)
The development of pulmonary surfactant lipids in a neonatal marsupial and the rat. Ribbons KA, et al.
Respir Physiol 1989 Jan;75(1):1–10
Regional distribution of total lipids, free fatty acids and free carnitine in human heart. Lachica E, et al.
Rev Esp Fisiol 1988 Dec;44(4):401–5
Fatty acids of plasma and red blood cell lipids in a normal population. Navarro X, et al. **Rev Esp Fisiol** 1988 Dec; 44(4):387–93
Light and electron microscopic study of lipid accumulation along margins of experimental cerebral infarcts in rats. Kudo M, et al. **Stroke** 1988 Dec;19(12):1544–9
Serum lipid–bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al.
Suppl J Med Oncol Tumor Pharmacother 1988;1:17–20
Significance of lipid–associated sialic acid and CA 19–9 as tumor markers for renal cell carcinoma. Echenique JE, et al. **Urology** 1988 Nov;32(5):397–400
Comparison of fat and cream content in normal and mastitic milk of cows. Vandeputte–Van Messom G, et al.
Vet Q 1989 Jan;11(1):61–4
The activity of diagnostic enzymes and the concentration of lipids in the blood vessels of cattle. Mahmoud OM, et al. **Vet Res Commun** 1988;12(2–3):233–5
Ultrastructural histochemical investigations of "dense deposit disease". Pathogenetic approach to a special type of mesangiocapillary glomerulonephritis. Muda AO, et al.
Virchows Arch [A] 1988;413(6):529–37
Ultrastructural and immunohistochemical characteristics of lipid–rich carcinoma of the breast. Wrba F, et al.
Virchows Arch [A] 1988;413(5):381–5
Modulation of lipid composition of yeast in stress conditions. Guerzoni ME, et al. **Yeast** 1989 Apr;5 Spec No:S415–9
[Lithium found in the total brain and brain lipids after intracranial injection of lithium in mice. Relation to the observed behavior disorders] Ermidou–Pollet S, et al.
C R Acad Sci [III] 1989;308(2):65–70 (Eng. Abstr.) **(Fre)**
[Lipid composition of cyprinidae species. 1. Lipid content and fatty acid pattern of silver carp (Hypophthalmichthys molitris (Val.))] Mieth G, et al. **Nahrung** 1989;33(1):91–3 **(Ger)**
[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. **Z Ernahrungswiss** 1988 Jun;27(2):109–18 (Eng. Abstr.) **(Ger)**
[Sudan III staining: really new aspects of a really old test?] Lembcke B. **Z Gastroenterol** 1989 Jul;27(7):398–9 **(Ger)**
[Quantitative morphologic aspects of the normal human parathyroid gland] Cinti S, et al.
Boll Soc Ital Biol Sper 1988 May;64(5):397–401 (Eng. Abstr.) **(Ita)**
[Distribution of 2,2'–methylenebis (4–ethyl–6–tert–butylphenol) in rat fat] Takagi A.
Eisei Shikenjo Hokoku 1988;(106):105–6 (Eng. Abstr.) **(Jpn)**
[Fecal fat excretion rate in patients with Crohn's disease—comparison of a diet containing 50 g/day of fat with elemental diet with an addition of 50 g/day butter fat] Kaku K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):707–14 (Eng. Abstr.) **(Jpn)**
[Lipids of archaebacteria—heptad hypothesis] Koga Y, et al. **Seikagaku** 1988 Jun;60(6):424–35 (48 ref.) **(Jpn)**
[Changes in the lipid content during the storage of human milk] Hurgoiu V, et al.
Rev Pediatr Obstet Ginecol [Pediatr] 1989 Jan–Mar; 38(1):75–8 **(Rum)**
[Changes in lipid composition of maternal and fetal blood and placental tissues in intrauterine growth retardation] Mikhallenko ET, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):66–7 **(Rus)**

[Lipids of initial and mutant cultures of Penicillium chrysogenum, producers of penicillin] Konova IV, et al. **Antibiot Khimioter** 1989 Jan;34(1):3–6 (Eng. Abstr.) **(Rus)**

[Molecular organization of protein–lipid components of the crystalline lens] Babizhaev MA. **Biofizika** 1989 Jan–Feb; 34(1):158–66 (101 ref.) (Eng. Abstr.) **(Rus)**

[Study of total activity of natural lipid antioxidants by chemiluminescence method] Burlakova EB, et al. **Biofizika** 1988 Jul–Aug;33(4):584–8 (Eng. Abstr.) **(Rus)**

[Increased affinity of liposomes derived from total spleen and liver lipids to spleen cells] Kulikov VI, et al. **Biokhimiia** 1988 May;53(5):786–92 (Eng. Abstr.) **(Rus)**

[The use of data on the fatty acid composition of lipids in fungi to determine precisely their phylogenetic relations] Feofilova EP, et al. **Biol Nauki** 1989;(4):66–70 **(Rus)**

[Effect of alimentary hypercholesterolemia on the lipid composition of the chyme and of the blood flowing from the intestines] Bogdarin IuA, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1462–70 (Eng. Abstr.) **(Rus)**

[Study of the fatty acid composition of lipids of the skin using the method of gas–liquid chromatography] Matusis DI. **Lab Delo** 1988;(6):26–30 (Eng. Abstr.) **(Rus)**

[Fatty acids of the total lipids in representatives of the genus Erwinia and other enterobacteria] Zherebilo OE, et al. **Mikrobiol Zh** 1987 Nov–Dec;49(6):83–5 (Eng. Abstr.) **(Rus)**

[Fractional and fatty acid composition of the lipids in the fungus Fusarium solani and its oligoconidial mutants] Mysiakina IS. **Mikrobiologiia** 1988 May–Jun;57(3):389–93 **(Rus)**

[Lipid spectrum of the blood serum and feces in children with gastroduodenal pathology] Khamraev AKh, et al. **Pediatriia** 1988;(10):109 **(Rus)**

[The level of fecal excretion of free amino acids and lipids in children with acute intestinal infections] Abdullaev SKh, et al. **Ter Arkh** 1988;60(11):81–2 (Eng. Abstr.) **(Rus)**

[Proteins and lipids in focal demyelinization in multiple sclerosis and chronic experimental allergic encephalomyelitis] Bukovský V, et al. **Bratisl Lek Listy** 1988 Oct;89(10):725–32 (Eng. Abstr.) **(Slo)**

[Liver lipids in patients with cholelithiasis] Rubio Fernández C, et al. **Rev Clin Esp** 1989 Jun;185(1):3–5 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Lipid lowering actions of 7-(2-methylene butyryl)-(2H)-1,4-benzoxazin-3-(4H)-one derivatives in mice, rats and Syrian hamsters. Moussavi Z, et al. **Clin Chim Acta** 1989 Mar 15;180(1):35–44

BIOSYNTHESIS

Effect of prolactin on enzymes of lipid biosynthesis in mammary gland explants. Waters SB, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E567–71

Effect of glycerol and dihydroxyacetone on hepatic lipogenesis. Carmona A, et al. **Arch Biochem Biophys** 1989 May 15;271(1):130–8

Changes in the activities of various lipid and carbohydrate biosynthetic enzymes in the diatom Cyclotella cryptica in response to silicon deficiency. Roessler PG. **Arch Biochem Biophys** 1988 Dec;267(2):521–8

Effects of ethanol feeding on hepatic lipid synthesis. Tijburg LB, et al. **Arch Biochem Biophys** 1988 Dec;267(2):568–79

Metabolism in Bunostomum trigonocephalum. Sixth communication: lipid biosynthesis from C14-labelled acetate and glucose in the two sexes and third-stage infective larvae. Kumar S. **Arch Exp Veterinarmed** 1988 May;42(3):317–23

Hormonal contraceptive increases plasma lipid peroxides in female rats. Relationship to platelet aggregation and lipid biosynthesis. Ciavatti M, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):84–9

Effects of ciprofibrate and fenofibrate on liver lipids and lipoprotein synthesis in normo- and hyperlipidemic rats. Petit D, et al. **Atherosclerosis** 1988 Dec;74(3):215–25

Changes in the lipogenic response to feeding of liver, white adipose tissue and brown adipose tissue during the development of obesity in the gold-thioglucose-injected mouse. Cooney GJ, et al. **Biochem J** 1989 May 1; 259(3):651–7

Polymyxin B diminishes blood flow to brown adipose tissue and lactating mammary gland in the rat. Possible mechanism of its action to decrease the stimulation of lipogenesis on refeeding. Tedstone AE, et al. **Biochem J** 1989 Jul 15;261(2):445–50

Yeasts for lipid production. Ratledge C. **Biochem Soc Trans** 1988 Dec;16(6):1088–91

Rates of lipogenesis in fetal hepatocytes in suspension and in primary culture: hormonal effects. Roncero C, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):320–4

Lipid and lipoprotein synthesis in isolated and cultured hepatocytes from lean and obese Zucker rats. Wang SR, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):302–11

Altered interactions between glycogenesis and lipid synthesis after liver resection: specific effects of liver regeneration, coupled with non-specific effects of surgery. Holness MJ, et al. **Clin Sci** 1989 Mar;76(3):317–22

In vivo utilization of [3-14C]acetoacetate for lipid and amino acid synthesis in the 15-day-old chick. Caamaño GJ, et al. **Comp Biochem Physiol [B]** 1988;91(1):1–5

Dose response kinetics of serum vitellogenin, liver DNA, RNA, protein and lipid after induction by estradiol-17 beta in male flounders (Platichthys flesus L.). Emmerson J, et al. **Comp Biochem Physiol [B]** 1979;63(1):1–6

Lipid synthesis in the adult dog heartworm, Dirofilaria immitis. Turner AC, et al. **Comp Biochem Physiol [B]** 1979; 64(4):403–5

Lipogenic activity of catfish liver. Lack of response to dietary changes and insulin administration. Warman AW 3d, et al. **Comp Biochem Physiol [B]** 1978;59(2):153–61

The effects of adrenergic agonists and age on lipogenesis in avian hepatocytes. Harris RB, et al. **Comp Biochem Physiol [C]** 1988;91(2):579–83

The role of calcium in mediating phorbol ester- and insulin-stimulated adipocyte lipogenesis. Avasthy N, et al. **Diabetes Res** 1988 Oct;9(2):91–5

The effect of polyunsaturated fatty acids on rat adipocyte lipogenesis: the role of protein kinase C, calcium and calmodulin. Khokher MA, et al. **Diabetes Res** 1988 Jul; 8(3):139–41

The assembly of the major outer membrane protein OmpF of Escherichia coli depends on lipid synthesis. Bolla JM, et al. **EMBO J** 1988 Nov;7(11):3595–9

Multiple cytokines stimulate hepatic lipid synthesis in vivo. Feingold KR, et al. **Endocrinology** 1989 Jul;125(1):267–74

Tumor necrosis factor stimulates hepatic lipid synthesis and secretion. Feingold KR, et al. **Endocrinology** 1989 May; 124(5):2336–42

Adipocyte insulin receptor binding and lipogenesis at term in normal pregnancy. Andersen O, et al. **Eur J Clin Invest** 1988 Dec;18(6):575–81

Role of glucocorticoids in the regulation of lipogenesis. Berdanier CD. **FASEB J** 1989 Aug;3(10):2179–83 (52 ref.)

Studies of 5'-deiodinase activity in rats differing in hepatic lipogenic activity. McIntosh MK, et al. **FASEB J** 1989 Apr;3(6):1734–40

Acridine orange, an inhibitor of protein kinase C, abolishes insulin and growth hormone stimulation of lipogenesis in rat adipocytes. Smal J, et al. **FEBS Lett** 1989 Feb 27; 244(2):465–8

Ethanol tolerance of Saccharomyces cerevisiae and its relationship to lipid content and composition. Ghareib M, et al. **Folia Microbiol (Praha)** 1988;33(6):447–52

Prolactin influences the circadian rhythm of lipogenesis in primary cultured hepatocytes. Cincotta AH, et al. **Horm Metab Res** 1989 Feb;21(2):64–8

Hepatic and adipose tissue lipogenesis as related to age and thyroid status in the rat. Levacher C, et al. **Horm Metab Res** 1988 Jul;20(7):395–9

Acute and long-term lipogenic response to insulin and clenbuterol in bovine intramuscular and subcutaneous adipose tissues. Miller MF, et al. **J Anim Sci** 1989 Apr; 67(4):928–33

Lipid synthesis in permeabilized cultured rat hepatocytes. Mayorek N, et al. **J Biol Chem** 1989 Mar 15;264(8):4450–5

Lipid synthesis and deposition by adult Richardson's ground squirrels in the natural environment. Bintz GL. **J Comp Physiol [B]** 1988;158(2):199–204

Effect of different oxygen concentrations in the gas phase on biochemical activities of goat mammary tissue in organ culture. Skarda J, et al. **J Dairy Res** 1989 Feb;56(1):1–5

Assessment of lipoprotein activators of skim milk lipoprotein lipase and the relationship between lipoprotein lipase activity and milk fat synthesis. Grummer RR, et al. **J Dairy Sci** 1989 Jun;72(6):1451–8

Regulation of bovine adipose tissue metabolism during lactation. 5. Relationships of lipid synthesis and lipolysis with energy intake and utilization. McNamara JP. **J Dairy Sci** 1989 Feb;72(2):407–18

Effect of prolactin on casein and fat synthesis and casein secretion in explants of bovine mammary tissue pretreated in athymic nude mice. Shamay A, et al. **J Dairy Sci** 1989 May;72(5):1169–74

Use of carbon sources for lipid biosynthesis in Mycobacterium leprae: a comparison with other pathogenic mycobacteria. Wheeler PR, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2111–21

Lipogenesis by isolated human apocrine sweat glands: testosterone has no effect during long-term organ maintenance. Barth JH, et al. **J Invest Dermatol** 1989 Mar; 92(3):333–6

Collagen and lipid biosynthesis in a case of epitheliogenesis imperfecta in cattle. Frey J, et al. **J Invest Dermatol** 1989 Jul;93(1):83–6

Transepidermal water loss: the signal for recovery of barrier structure and function. Grubauer G, et al. **J Lipid Res** 1989 Mar;30(3):323–33

Inability of diapausing Culex pipiens (Diptera: Culicidae) to use blood for producing lipid reserves for overwinter survival. Mitchell CJ, et al. **J Med Entomol** 1989 Jul; 26(4):318–26

Lipid synthesis by rat brain microvessel endothelial cells in tissue culture. Roux FS, et al. **J Neuropathol Exp Neurol** 1989 Jul;48(4):437–47

Patterns of lipogenesis in laying hens fed a high fat diet containing safflower oil. Naber EC, et al. **J Nutr** 1989 May; 119(5):690–5

The effect of pectin on hepatic lipogenesis in the enterally-fed rat. Rolandelli RH, et al. **J Nutr** 1989 Jan; 119(1):89–93

Regulation of milk fat synthesis. Neville MC. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):426–9 (29 ref.)

Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on lipid synthesis and lipogenic enzymes in the rat. Lakshman MR, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):62–6

Formation of lipoidal steroids in follicular fluid. Roy R, et al. **J Steroid Biochem** 1989 Aug;33(2):257–62

Predicting coordinated lipid biosynthesis: application to the surfactant-accommodated epidermis. Ando HY, et al. **Lipids** 1988 Nov;23(11):1073–8

Glycogenesis and lipogenesis from 14C-glucose in vivo in rats irradiated with fractionated doses of gamma rays. Paulíková E, et al. **Physiol Bohemoslov** 1988;37(4):333–41

Sphingosine, an inhibitor of protein kinase C, suppresses the insulin-like effects of growth hormone in rat adipocytes. Smal J, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4705–9

Milk and fat production in dairy cattle influenced by advanced subclinical bovine leukemia virus infection. Wu MC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):993–6

Changes in lipogenesis and lipolysis associated with recovery from reversible obesity in mature female rats. Harris RB, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):82–9

Arachidonate incorporation into rat aorta lipid fractions and eicosanoid formation. Effect of prolonged prostacyclin production. Martinez-Sales V, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):1–8

[Effects of a duodenal infusion of rapeseed oil in cows in full lactation. 2. Lipogenic and lipolytic activities of the perirenal adipose tissue] Gagliostro G, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:175–6 (Eng. Abstr.) **(Fre)**

[Lipogenesis, aging and hormonal regulation] Rassoul F, et al. **Z Gerontol** 1989 Jan–Feb;22(1):34–7 (Eng. Abstr.) **(Ger)**

[Effect of drugs on lipid synthesis in sebaceous glands of hamster ear skin] Suzuki M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):783–7 (Eng. Abstr.) **(Jpn)**

[Lipid synthesis in the chloroplast] Yamada M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):335–44 (78 ref.) **(Jpn)**

[Metabolic effects of ethanol and lipid metabolism in the rat liver] Selevich MI. **Vopr Med Khim** 1988 Sep–Oct; 34(5):49–52 (Eng. Abstr.) **(Rus)**

BLOOD

Serum lipid changes during acitretin (etretin) treatment of psoriasis and palmo-plantar pustulosis. Vahlquist C, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):300–5

Metabolic control affects plasma lipid and apolipoprotein levels in women, but not in men, with IDDM. Benzi L, et al. **Acta Diabetol Lat** 1988 Apr–Jun;25(2):149–54

Association of coronary heart disease with serum lipid and apolipoprotein concentrations in long-term diabetes. Results of the Erfurt study. Schauer UJ, et al. **Acta Diabetol Lat** 1989 Jan–Mar;26(1):35–42

Effects of guar-pasta on serum lipid levels in obese diabetic and non-diabetic women with normal lipids. Tognarelli M, et al. **Acta Diabetol Lat** 1988 Jul–Sep;25(3):243–6

Nutritional status and plasma lipids in diabetic subjects. Ristić V, et al. **Acta Med Iugosl** 1989;43(3):197–203

Plasma lipids and their fatty acid composition in multiple sclerosis. Navarro X, et al. **Acta Neurol Scand** 1988 Aug; 78(2):152–7

Fatty acid composition of platelet phospholipids and plasma total lipids in Kawasaki disease. Hidaka T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):294–8

Gas chromatographic analysis of plasma lipids. Kuksis A, et al. **Adv Chromatogr** 1989;28:267–332 (142 ref.)

Modifications in the chemical composition and thermometric behavior of LDL and HDL by probucol in type IIa hyperlipoproteinemia. Dachet C, et al. **Adv Exp Med Biol** 1988;243:179–84

The effect of apolipoprotein E allele substitutions on plasma lipid and apolipoprotein levels. Havekes LM, et al. **Adv Exp Med Biol** 1988;243:87–93 (18 ref.)

Effect of oral administration of highly purified eicosapentaenoic acid and docosahexaenoic acid on platelet function and serum lipids in hyperlipidemic patients. Hirai A, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:627–30

Plasma lipid profiles in relation to diabetic control in Nigerians. Akanji AO, et al. **Afr J Med Med Sci** 1989 Sep; 18(3):229–34

Doxazosin in the treatment of patients with mild or moderate hypertension and mild or moderate renal insufficiency. Bartels AC, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1772–7

A single-blind study of doxazosin in the treatment of mild-to-moderate essential hypertensive patients with concomitant noninsulin-dependent diabetes mellitus. Castrignano R, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1778–84

A long-term study of the effects of celiprolol on blood pressure and lipid-associated risk factors. Herrmann JM, et al. **Am Heart J** 1988 Nov;116(5 Pt 2):1416–21

The effects of terazosin and methyclothiazide on blood pressure and serum lipids. Luther RR, et al. **Am Heart J** 1989 Apr;117(4):842–7

Recent studies on the effects of beta blockers on blood lipid levels. Roberts WC. **Am Heart J** 1989 Mar;117(3):709–14 (29 ref.)

Comparison of the effects of doxazosin and atenolol on blood pressure and blood lipids: a one-year, double-blind study in 228 hypertensive patients. Talseth T, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1790–6

Effect of amiodarone on blood lipids [letter] Gottlieb S, et al. **Am J Cardiol** 1989 Jun 15;63(20):1540

Differences in effects of aerobic exercise training on blood lipids in men and women. Hill JO, et al. **Am J Cardiol** 1989 Jan 15;63(3):254–6

Metabolic effects of antihypertensive therapy with a calcium antagonist. Pool PE, et al. **Am J Cardiol** 1988 Oct 5; 62(11):109G–113G

Effects of isradipine, a new calcium antagonist, versus hydrochlorothiazide on serum lipids and apolipoproteins in patients with systemic hypertension. Samuel P, et al. **Am J Cardiol** 1988 Nov 15;62(16):1068–71

Comparison of serum lipid values in variant angina pectoris and fixed coronary artery disease with normal subjects. Tasaki H, et al. **Am J Cardiol** 1989 Jun 15;63(20):1441–5

alpha-Linolenic acid and long-chain omega-3 fatty acid supplementation in three patients with omega-3 fatty acid deficiency: effect on lymphocyte function, plasma and red cell lipids, and prostanoid formation. Bjerve KS, et al. **Am J Clin Nutr** 1989 Feb;49(2):290–300

Serum lipid response to dietary cholesterol in subjects fed a low-fat, high-fiber diet. Edington JD, et al. **Am J Clin Nutr** 1989 Jul;50(1):58–62

Use of an expanded-whole-wheat product in the reduction of body weight and serum lipids in obese females. Fordyce-Baum MK, et al. **Am J Clin Nutr** 1989 Jul; 50(1):30–6

Body weight loss and changes in blood lipid levels in normal men on hypocaloric diets during Ramadan fasting. Hallak MH, et al. **Am J Clin Nutr** 1988 Nov;48(5):1197–210

Predictive value of a short dietary questionnaire for changes in serum lipids in high-risk Utah families. Hopkins PN, et al. **Am J Clin Nutr** 1989 Aug;50(2):292–300

Effect of dietary cholesterol in normolipidemic subjects is not modified by nature and amount of dietary fat. Kestin M, et al. **Am J Clin Nutr** 1989 Sep;50(3):528–32

Blood lipids, lipoproteins, apoproteins, and uric acid in men fed diets containing fructose or high-amylose cornstarch. Reiser S, et al. **Am J Clin Nutr** 1989 May;49(5):832–9

Lipids and lipoprotein profiles in a 4-h endurance test on a recumbent cycloergometer. Tsopanakis AD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):980–4

Short-term parenteral nutrition with glucose and Intralipid: effects on serum lipids and lipoproteins. Weinberg RB, et al. **Am J Clin Nutr** 1989 May;49(5):794–8

Genetic heritability and common environmental components of resting and stressed blood pressures, lipids, and body mass index in Utah pedigrees and twins. Hunt SC, et al. **Am J Epidemiol** 1989 Mar;129(3):625–38

Serum lipids, lipoproteins, and apolipoproteins and the excessive occurrence of coronary heart disease in non-insulin-dependent diabetic patients. Rönnemaa T, et al. **Am J Epidemiol** 1989 Oct;130(4):632–45

Indicators of fat distribution, serum lipids, and blood pressure in European women born in 1948—the European Fat Distribution Study. Seidell JC, et al. **Am J Epidemiol** 1989 Jul;130(1):53–65

Poland and US collaborative study on cardiovascular epidemiology. II. Correlates of lipids and lipoproteins in men and women aged 35–64 years from selected Polish rural, Polish urban, and US samples. Sznajd J, et al. **Am J Epidemiol** 1989 Sep;130(3):446–56

Antihypertensive drugs and lipid profiles. Ames RP. **Am J Hypertens** 1988 Oct;1(4 Pt 1):421–7 (63 ref.)

Blood pressure-lipid connection. Kaplan NM. **Am J Hypertens** 1989 Jun;2(6 Pt 1):502–3

Effects of antihypertensive agents on serum lipids and lipoproteins. Chait A. **Am J Med** 1989 Jan 23;86(1B):5–7

Hypolipidemic effects of long-term antihypertensive treatment with captopril. A prospective study. Costa FV, et al. **Am J Med** 1988 Mar 11;84(3A):159–61

Effects of prazosin and labetalol on blood pressure control and blood lipid levels in patients with mild-to-moderate essential hypertension. Farry JP, et al. **Am J Med** 1989 Jan 23;86(1B):41–4

Selective alpha 1-adrenergic blockade, lipids, and coronary heart disease risk. Considerations in the treatment of mild hypertension. Graham RM. **Am J Med** 1989 Aug 16; 87(2A):53S–56S (56 ref.)

Effects of prazosin on hemodynamics, hemostasis, and serum lipid and lipoprotein levels in normal and hypercholesterolemic monkeys. Karge WH 3d, et al. **Am J Med** 1989 Jan 23;86(1B):19–23

Forearm and finger hemodynamics, blood pressure control, and lipid changes in diabetic hypertensive patients treated with atenolol and prazosin. A brief report. Kwan CM, et al. **Am J Med** 1989 Jan 23;86(1B):55–8

Comparative effects of prazosin and propranolol on blood lipid profiles in hypertensive, hypercholesterolemic patients. Preliminary results. Leon AS, et al. **Am J Med** 1989 Jan 23;86(1B):36–40

Effect of alpha- and selective beta-blockade for hypertension control on plasma lipoproteins, apoproteins, lipoprotein subclasses, and postprandial lipemia. Superko HR, et al. **Am J Med** 1989 Jan 23;86(1B):26–31

Interaction of diabetes with hypertension and lipids—patients at high risk. An overview. Tzagournis M. **Am J Med** 1989 Jan 23;86(1B):50–4

Metabolic changes during medical treatment of endometriosis: nafarelin acetate versus danazol. Burry KA, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1454–9; discussion 1459–61

Time dependence of the interaction between lipid and glucose in humans. Bonadonna RC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E49–56

1,25-Dihydroxyvitamin D3-induced alterations of lipid metabolism in human monocyte-macrophages. Roullet JB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E290–5

Regulation of plasma lipid transfer by the high-density lipoproteins. Tollefson JH, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 1):E894–902

No metabolic side effects of long-term treatment with verapamil in hypertension. Midtbø K, et al. **Angiology** 1988 Dec;39(12):1025–9

Glycated haemoglobin and other biochemical parameters in Sudanese diabetics. Atabani GS, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):332–4

Essential data derived from biological variation for establishment and use of lipid analyses. Ford RP. **Ann Clin Biochem** 1989 May;26 (Pt 3):281–5

Tea consumption and serum lipids in a Libyan population in Benghazi. Sheriff DS, et al. **Ann Clin Biochem** 1988 Nov; 25 (Pt 6):670–2

Serum lipids in pneumonia of different aetiology. Kerttula Y, et al. **Ann Clin Res** 1988;20(3):184–8

Elevated serum lipids in hypogonadal men with and without hyperprolactinemia. Oppenheim DS, et al. **Ann Intern Med** 1989 Aug 15;111(4):288–92

Dose-response relationships in blood lipids during moderate freshwater fish diet. Hänninen OO, et al. **Ann Med** 1989 Jun;21(3):203–7

No effect on serum lipids by moderate and high doses of vitamin C in elderly subjects with low plasma ascorbic acid levels. Aro A, et al. **Ann Nutr Metab** 1988;32(3):133–7

Short- and long-term effects of hypocaloric diets containing proteins of different sources on plasma lipids and apoproteins of obese subjects. Bosello O, et al. **Ann Nutr Metab** 1988;32(4):206–14

Seasonal variations of serum lipids and apoproteins. Buxtorf JC, et al. **Ann Nutr Metab** 1988;32(2):68–74

Influences of diet and postnatal age on the lipid composition of red blood cell membrane in newborn infants. De-Lucchi C, et al. **Ann Nutr Metab** 1988;32(4):231–9

Influence of casein versus soy protein isolate on lipid metabolism of minipigs. Pfeuffer M, et al. **Ann Nutr Metab** 1988;32(2):83–9

Evening primrose oil in rheumatoid arthritis: changes in serum lipids and fatty acids. Jäntti J, et al. **Ann Rheum Dis** 1989 Feb;48(2):124–7

Influence of magnesium substitution therapy on blood lipid composition in patients with ischemic heart disease. A double-blind, placebo controlled study. Rasmussen HS, et al. **Arch Intern Med** 1989 May;149(5):1050–3

Plasma lipids in patients with type I diabetes mellitus. Influence of race, gender, and plasma glucose control: lipids do not correlate with glucose control in black women. Semenkovich CF, et al. **Arch Intern Med** 1989 Jan; 149(1):51–6

Exercise in controlling serum lipid levels [letter] York E. **Arch Intern Med** 1989 Jan;149(1):223

Effect of dichlorvos on the activity of lipoprotein lipase from adipose tissue, on plasma lipids and postheparin lipolytic plasma activity in rats. Kozlowska A, et al. **Arch Toxicol** 1988;62(2–3):227–9

Effect of cholesterol feeding on lipolytic activities in high- and low-responding rhesus monkeys. Bhattacharyya AK, et al. **Arterioscler Thromb** 1989 May–Jun;9(3):380–9

Effect of dietary omega-3 fatty acid on serum lipids, platelet function, and atherosclerosis in Watanabe heritable hyperlipidemic rabbits. Clubb FJ Jr, et al. **Arterioscler Thromb** 1989 Jul–Aug;9(4):529–37

Alimentary lipemia-induced redistribution of cholesteryl ester between lipoproteins. Studies in normolipidemic, combined hyperlipidemic, and hypercholesterolemic men. Dullaart RP, et al. **Arterioscler Thromb** 1989 Sep–Oct; 9(5):614–22

Test of effect of lipid lowering by diet on cardiovascular risk. The Minnesota Coronary Survey. Frantz ID Jr, et al. **Arterioscler Thromb** 1989 Jan–Feb;9(1):129–35

Serum lipids and apolipoprotein levels in women with acute myocardial infarction. Johansson S, et al. **Arterioscler Thromb** 1988 Nov–Dec;8(6):742–9

Asymptomatic hyperglycemia is associated with lipid and lipoprotein changes favoring atherosclerosis. Laakso M, et al. **Arterioscler Thromb** 1989 Sep–Oct;9(5):665–72

Hyperlipemic response of young trained and untrained men after a high fat meal. Merrill JR, et al. **Arterioscler Thromb** 1989 Mar–Apr;9(2):217–23

Platelet aggregations, fatty acids, clotting factors and serum lipids in rural and urban blacks, and urban whites in South Africa. Chetty N, et al. **Artery** 1988;15(5):234–49

Lack of effect of chlorpromazine and haloperidol on serum lipid levels and on atherogenesis in cholesterol fed rabbits. Saku K, et al. **Artery** 1989;16(3):151–8

The effect of fish oil on lipids, coagulation and fibrinolysis in patients with angina pectoris. Schmidt EB, et al. **Artery** 1988;15(6):316–29

Cholesterol-fed heterozygous Watanabe heritable hyperlipidemic rabbits: a new model for atherosclerosis. Atkinson JB, et al. **Atherosclerosis** 1989 Aug;78(2–3):123–36

Influence of fish protein as compared to casein and soy protein on serum and liver lipids, and serum lipoprotein cholesterol levels in the rabbit. Bergeron N, et al. **Atherosclerosis** 1989 Aug;78(2–3):113–21

Lack of correlation between the apolipoprotein B XbaI polymorphism and blood lipid levels in a Swedish population. Darnfors C, et al. **Atherosclerosis** 1989 Feb; 75(2–3):183–8

Serum lipid and apolipoprotein levels in a Nigerian population sample. Kesteloot H, et al. **Atherosclerosis** 1989 Jul;78(1):33–8

Effects of lovastatin alone and in combination with cholestyramine on serum lipids and apolipoproteins in heterozygotes for familial hypercholesterolemia. Leren TP, et al. **Atherosclerosis** 1988 Oct;73(2–3):135–41

Effects of varying dietary fatty acid ratios on plasma lipids and platelet function in the African green monkey. Lewis JC, et al. **Atherosclerosis** 1989 Jun;77(2–3):167–74

Apolipoprotein B in human aortic biopsies in relation to serum lipids and lipoproteins. Lindén T, et al. **Atherosclerosis** 1989 Jun;77(2–3):159–66

Lipoprotein composition changes induced by fenofibrate in dysbetalipoproteinemia type III. Lussier-Cacan S, et al. **Atherosclerosis** 1989 Aug;78(2–3):167–82

Plasma lipids in beta-thalassemia minor. Maioli M, et al. **Atherosclerosis** 1989 Feb;75(2–3):245–8

Modifications of plasma lipids, lipoproteins and apolipoproteins in advanced cancer patients treated with recombinant interleukin-2 and autologous lymphokine-activated killer cells. Malmendier CL, et al. **Atherosclerosis** 1988 Oct;73(2–3):173–80

Reduction of plasma lipid and homocysteine levels by pyridoxine, folate, cobalamin, choline, riboflavin, and troxerutin in atherosclerosis. Olszewski AJ, et al. **Atherosclerosis** 1989 Jan;75(1):1–6

Abnormalities in serum lipoprotein composition in patients with premature coronary heart disease compared to serum lipid matched controls. Pauciullo P, et al. **Atherosclerosis** 1988 Oct;73(2–3):241–6

Comparison of gemfibrozil and clofibrate on serum lipids in familial combined hyperlipidemia. A randomized placebo-controlled, double-blind, crossover clinical trial. Rabkin SW, et al. **Atherosclerosis** 1988 Oct;73(2–3):233–40

Effect of skim milk and whey diets on plasma lipid levels of rabbits in a cross-over study. Vrecko K, et al. **Atherosclerosis** 1988 Jul;72(1):11–7

Effect of cardiac rehabilitation on postprandial response to a high fat meal in patients with coronary artery disease. Yanes AM, et al. **Atherosclerosis** 1989 Jul;78(1):1–8

Effects of dietary fish oil on platelet function and plasma lipids in hyperlipoproteinemic and normal subjects. Zucker ML, et al. **Atherosclerosis** 1988 Sep;73(1):13–22

Factors influencing aorto-coronary vein graft deterioration: influence of the plasma lipids. Lawrie M. **Beitr Infusionther** 1988;23:97–102

A rationale for setting target plasma lipid levels to reverse atherosclerosis. Parker TS, et al. **Beitr Infusionther** 1988; 23:132–7

Efficacy of plasmapheresis, cascade-filtration and dextran-sulfate adsorption apheresis with calculation of the recovery rate of lipids and lipoproteins. Schwartzkopff W, et al. **Beitr Infusionther** 1988;23:103–11

Rapidly changing lipid levels: some questions. Stern TN. **Beitr Infusionther** 1988;23:138–41

Changes in serum lipids with the presence of various factors. Tesserommatis C, et al. **Beitr Infusionther** 1988;23:195–7

Interconversions of HDL subfractions in normolipidemic and hypoalphacholesterolemic sera incubated with fibroblasts and hepatoma cell line Hep-G2. Perova NV, et al. **Biochem Int** 1988 Dec;17(6):1029–38

Effect of lipid transfer protein on plasma lipids, apolipoproteins and metabolism of high-density lipoprotein cholesteryl ester in the rat. Groener JE, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):93–100

The effect of dietary alpha-bromopalmitate on blood lipids in the rat. Hagve TA, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):143–6

Seasonal variations of plasma lipids and lipoproteins in the hedgehog, an animal model for lipoprotein (a) metabolism: relation to plasma thyroxine and testosterone levels. Laplaud PM, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):143–56

Effects of experimental hypothyroidism on the distribution of lipids and lipoproteins in the plasma of rats. Meyer BJ, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):73–9

Human hepatic low-density lipoprotein receptors: associations of receptor activities in vitro with plasma lipid and apolipoprotein concentrations in vivo. Nanjee MN, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):245–55

Cigarette smoking and serum lipid and lipoprotein concentrations [letter; comment] Cade J, et al. **BMJ** 1989 May 13;298(6683):1312. **Comment on:** BMJ 1989 Mar 25;298(6676):784–8

Cigarette smoking and serum lipid and lipoprotein concentrations: an analysis of published data [see comments] Craig WY, et al. **BMJ** 1989 Mar 25; 298(6676):784–8. **Comment in:** BMJ 1989 May 13;298(6683):1312

The haggis tolerance test in Scots and Sassenachs. Fraser AG, et al. **BMJ** 1988 Dec 24–31;297(6664):1632–4

Plasma lipid and coagulation factor concentrations in insulin dependent diabetics with microalbuminuria. Jones SL, et

al. **BMJ** 1989 Feb 25;298(6672):487–90

Plasma lipids in premenopausal women with mammographic dysplasia. Boyd NF, et al. **Br J Cancer** 1989 May; 59(5):766–71

Quinapril and blood lipids. Koskinen P, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):478–80

Low and conventional dose cyclopenthiazide on glucose and lipid metabolism in mild hypertension. McVeigh GE, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):523–6

Serum lipid changes in patients with mild to moderate essential hypertension taking nicardipine and propranolol. Naukkarinen VA. **Br J Clin Pract** 1988 Dec;42(12):509–13

Lipid-lowering therapy in perspective. Thompson GR. **Br J Clin Pract** 1988 Feb;42(2):61–4 (25 ref.)

A review of the effects of antihypertensive treatment with alpha 1-adrenoceptor antagonists on plasma lipid profiles. Elliott HL. **Br J Clin Pract Symp Suppl** 1987 Dec;54:61–8 (31 ref.)

Lipids and diet in relation to cardiovascular disease in Iceland. Sigurdsson G. **Br J Clin Pract Symp Suppl** 1987 Dec;54:54–5

Interaction of dietary protein, cholesterol and age on lipid metabolism of the rat. Choi YS, et al. **Br J Nutr** 1989 May; 61(3):531–43

The effect of daily baked bean (Phaseolus vulgaris) consumption on the plasma lipid levels of young, normo-cholesterolaemic men. Shutler SM, et al. **Br J Nutr** 1989 Mar;61(2):257–65

Lipids and platelet function in runners. Haigh JR, et al. **Br J Sports Med** 1988 Jun;22(2):66–70

Adjuvant tamoxifen in primary breast cancer: influence on plasma lipids and antithrombin III levels. Bertelli G, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):307–10

Cholesterol and lipids in the risk of coronary artery disease—the Framingham Heart Study. Castelli WP. **Can J Cardiol** 1988 Jul;4 Suppl A:5A–10A

Determining lipid risk factors for coronary heart disease [letter] Gelskey DE, et al. **Can Med Assoc J** 1989 Mar 1;140(5):493

Epidemiologic data on serum lipids and lipoproteins: clinical implications. Rabkin SW. **Can Med Assoc J** 1989 May 15; 140(10):1171

Plasma and erythrocyte lipids in two families with heterozygous hypobetalipoproteinemia. Gheeraert P, et al. **Clin Biochem** 1988 Dec;21(6):371–7

Concentrations of lipids and apolipoproteins in patients with clinically well-controlled insulin-dependent and non-insulin-dependent diabetes. Joven J, et al. **Clin Chem** 1989 May;35(5):813–6

Methods for determining "reference changes" from serial messurements: plasma lipid-bound sialic acid. Shahangian S, et al. **Clin Chem** 1989 Jun;35(6):972–4

A rapid micro-scale procedure for determination of the total lipid profile. Wu LL, et al. **Clin Chem** 1989 Jul; 35(7):1486–91

The Centers for Disease Control-National Heart, Lung and Blood Institute Lipid Standardization Program. An approach to accurate and precise lipid measurements. Myers GL, et al. **Clin Lab Med** 1989 Mar;9(1):105–35 (54 ref.)

Effects of long-term CAPD on carbohydrate and lipid metabolism. Lameire N, et al. **Clin Nephrol** 1988;30 Suppl 1:S53–8

Comparative effects of omega-3 fatty acids in men and women [letter] Mueller BA, et al. **Clin Pharm** 1989 May; 8(5):328–9

Lipid effects of celiprolol, a new cardioselective beta-blocker, versus propranolol. Sirtori CR, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):617–26

Oral contraceptive-induced changes in plasma lipids: do they have any clinical relevance? Hoppe G. **Clin Reprod Fertil** 1987 Dec;5(6):333–45 (73 ref.)

Effects of an olive-oil-rich diet on erythrocyte membrane lipid composition and cation transport systems. Pagnan A, et al. **Clin Sci** 1989 Jan;76(1):87–93

Low-dose effect of simvastatin (MK-733) on serum lipids, lipoproteins, and apolipoproteins in patients with hypercholesterolemia. Saku K, et al. **Clin Ther** 1989 Mar-Apr;11(2):247–57

Effects of slow-release bezafibrate on serum lipids, lipoproteins, apolipoproteins, and postheparin lipolytic activities in patients with type IV and type V hypertriglyceridemia. Saku K, et al. **Clin Ther** 1989 May-Jun;11(3):331–40

Effects of pindolol on serum lipids, apolipoproteins, and lipoproteins in patients with mild to moderate essential hypertension. Sasaki J, et al. **Clin Ther** 1989 Mar-Apr; 11(2):219–24

Comparison of enalapril and hydrochlorothiazide in mild hypertension and changes in plasma lipid concentrations during therapy. Weir MR, et al. **Clin Ther** 1988; 10(6):712–24

The influence of three days or three weeks of force feeding on the transport of plasma lipids in young female chickens (Gallus gallus L.). Bacon WL, et al. **Comp Biochem Physiol [B]** 1978;59(3):203–6

Plasma lipid concentrations for some Brazilian lizards. Gillett MP, et al. **Comp Biochem Physiol [B]** 1979;64(3):273–7

Lipid and apolipoprotein distribution as a function of density in equine plasma lipoprotein. Le Goff D, et al. **Comp Biochem Physiol [B]** 1989;93(2):371–7

Plasma lipids and lipoproteins of some members of the order Perissodactyla. Leat WM, et al. **Comp Biochem Physiol [B]** 1979;63(2):275–81

Changes in serum glucose and lipids, and liver glycogen and phosphorylase during vitellogenesis in nature in the flounder (Platichtys flesus, L.). Petersen IM, et al. **Comp Biochem Physiol [B]** 1977;58(2):167–71

Is determination of plasma lipids useful in the differentiation of multi-infarct dementia from Alzheimer's disease? Erkinjuntti T, et al. **Compr Gerontol [A]** 1988 Feb;2(1):1–6

A multicentre comparative study of serum lipids and lipoproteins in four groups of oral combined contraceptive users and a control group of IUD users. World Health Organization. Task Force on Oral Contraceptives. Boonsiri B, et al. **Contraception** 1988 Dec;38(6):605–29

Lipid and lipoprotein changes during the seven days off oral contraception in women using two triphasic preparations. Percival-Smith RK, et al. **Contraception** 1988 Jul; 38(1):19–26

The effects of Norplant-2 rods on clinical chemistry in Singaporean acceptors after 1 year of use: metabolic changes [published erratum appears in Contraception 1988 Dec;38(6):729] Singh K, et al. **Contraception** 1988 Oct; 38(4):453–63

Effects of cyproterone acetate plus ethinylestradiol low dose on plasma androgens and lipids in mildly hirsute or acneic young women. Vermeulen A, et al. **Contraception** 1988 Oct; 38(4):419–28

The effects of Norplant on clinical chemistry in Singaporean acceptors after 1 year of use: metabolic changes. Viegas OA, et al. **Contraception** 1988 Jul;38(1):79–89

The effect of bopindolol on lipids and platelet aggregation. Pintérová E, et al. **Cor Vasa** 1988;30(5):352–60

Changes in lipid and lipoprotein levels and Achilles tendon diameters and indices in familial hypercholesterolaemic patients with tendinous xanthomatosis treated by diet and bezafibrate for 2 years. Rouffy J, et al. **Curr Med Res Opin** 1988;11(2):123–32

Cardiac performance and plasma lipids of omega-3 fatty acid-treated streptozocin-induced diabetic rats. Black SC, et al. **Diabetes** 1989 Aug;38(8):969–74

Effects of sucrose on carbohydrate and lipid metabolism in NIDDM patients. Hollenbeck CB, et al. **Diabetes Care** 1989 Jan;12(1):62–6; discussion 81–2 (34 ref.)

The medium-term effect of natural or extractive dietary fibres on plasma amino acids and lipids in type 1 diabetics. Bruttomesso D, et al. **Diabetes Res Clin Pract** 1989 Feb 15;6(2):149–55

Serum lipids and lipoproteins in insulin-dependent diabetic patients with persistent microalbuminuria. Watts GF, et al. **Diabetic Med** 1989 Jan-Feb;6(1):25–30

Growth, liver lipid and blood amino acids in rats fed ethanol with an adequate diet. Shoemaker JD, et al. **Drug Alcohol Depend** 1988 Oct;22(1-2):49–54

Lowering lipids and the genesis of hypertension. Ekelund LG. **Drugs** 1988;36 Suppl 3:21

Influence of ketanserin on glucose and lipid metabolism in diabetic patients with hypertension. Janka HU, et al. **Drugs** 1988;36 Suppl 1:123–5

Interrelationship of hypertension, plasma lipids and atherosclerosis. Krzesinski JM, et al. **Drugs** 1988;36 Suppl 2:18–26 (71 ref.)

Effects of ketanserin tartrate on serum lipids in patients with essential hypertension. Nakamura H, et al. **Drugs** 1988;36 Suppl 1:25–34

On the within-population relationship between nutrition and serum lipids: the B.I.R.N.H. study. Kesteloot H, et al. **Eur Heart J** 1989 Mar;10(3):196–202

Influence of training on blood lipids and coagulation. Sellier P, et al. **Eur Heart J** 1988 Nov;9 Suppl M:32–6

Comparison between habitual intake of polyunsaturated fatty acids and their concentrations in serum lipid fractions. von Houwelingen AC, et al. **Eur J Clin Nutr** 1989 Jan; 43(1):11–20

Long-term effect of pindolol on lipids and lipoproteins in men with newly diagnosed hypertension. Terént A, et al. **Eur J Clin Pharmacol** 1989;36(4):347–50

Serum lipids and apolipoproteins in relation to glycaemic control and diabetic nephropathy in long-term survivors of diabetes: results of the Erfurt Study. Schauer UJ, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):280–6

Vinblastine sensitivity of leukaemic lymphoblasts modulated by serum lipid. Holmes KT, et al. **FEBS Lett** 1989 Feb 13;244(1):103–7

The relationship between lipid composition of red blood cells and their susceptibility to lipid peroxidation. Clemens MR, et al. **Free Radic Res Commun** 1987;3(1-5):265–71

The influence of atenolol and prazosin on serum lipids and atherosclerosis in minipigs fed a hyperlipidemic diet. Nafstad I, et al. **Gen Pharmacol** 1988;19(5):719–24

Phenotypic effects of apolipoprotein structural variation on lipid profiles: II. Apolipoprotein A-IV and quantitative lipid measures in the healthy women study. Eichner JE, et al. **Genet Epidemiol** 1989;6(4):493–9

Twin study of genetic and environmental effects on lipid levels. O'Connell DL, et al. **Genet Epidemiol** 1988; 5(5):323–41

Serum lipids and lipoproteins in pregnancies associated with emesis gravidarum. Järnfelt-Samsioe A, et al. **Gynecol Endocrinol** 1987 Mar;1(1):51–60

Serum lipids and their modifications after blood transfusion in polytransfused beta-thalassemic patients. Leonardi S, et al. **Haematologica (Pavia)** 1988 Jul-Aug;73(4):269–71

Effect of nadolol on plasma lipids in hyperthyroidism. Littley MD, et al. **Horm Metab Res** 1989 Jun;21(6):331–3

Effect of enprostil on plasma glucose, insulin and lipid metabolism in patients with non-insulin-dependent diabetes mellitus. Keaven GM, et al. **Horm Metab Res** 1988 Oct; 20(10):633–6

Apolipoprotein E polymorphism in The Netherlands and its effect on plasma lipid and apolipoprotein levels. Smit M, et al. **Hum Genet** 1988 Nov;80(3):287–92

Smoking accounts for adverse effect of antihypertensive medications on plasma lipids. A population-based study. Halkin H, et al. **Hypertension** 1989 Aug;14(2):210–7

Effect of antihypertensive therapy on plasma lipids and lipoproteins in mild hypertension. Sagar S, et al. **Indian Heart J** 1989 Jan-Feb;41(1):39–50

Studies on lipids in normal and hypertensive diabetic subjects. Neginhal AV, et al. **Indian J Med Sci** 1988 Aug; 42(8):179–81

Effect of administration and withdrawal of oral contraceptive pills on serum lipids and lipoproteins. Arora S, et al. **Indian J Physiol Pharmacol** 1988 Jan-Mar;32(1):67–71

Effect of oral zinc sulphate on serum lipids and lipoproteins in human subjects. Shah DR, et al. **Indian J Physiol Pharmacol** 1988 Jan-Mar;32(1):47–50

Serum lipid profile in term and preterm infants in early neonatal period. Kalra A, et al. **Indian Pediatr** 1988 Oct; 25(10):977–81

Blood lipid abnormalities in patients suffering from peripheral vascular disease. Alessandri C, et al. **Int Angiol** 1988 Jul-Sep;7(3):263–5

Glucose metabolism, lipidic pattern, apolipoprotein A and B during hemodialysis with cuprophan and hemodialysis-hemoperfusion. Allegra V, et al. **Int J Artif Organs** 1989 Jan;12(1):31–5

Liposoluble vitamins and lipid parameters in breast cancer. A joint study in northern Italy and southern France. Gerber M, et al. **Int J Cancer** 1988 Oct 15;42(4):489–94

Terazosin: a new antihypertensive agent with favorable effects on lipids. Luther RR. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):313–9 (34 ref.)

The effects of oral contraceptives on plasma lipids and lipoproteins. Krauss RM. **Int J Fertil** 1988;33 Suppl:35–42 (7 ref.)

Metabolic effects of two low-dose triphasic oral contraceptives containing ethinyl estradiol and levonorgestrel or gestodene. Lepot MR, et al. **Int J Fertil** 1987;32 Suppl:15–20

Serum lipids and lipoproteins in women with polycystic ovarian disease with different body mass index. Rojanasakul A, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):401–6

Deficiency of the insulin, glucose-mediated decrease in serum triglycerides in normolipidemic obese subjects. Eckel RH, et al. **Int J Obes** 1988;12(5):369–76

Effects of weight loss and weight maintenance on the serum lipids, lipoprotein lipase and hepatic triglyceride lipase activities in obese rats. Kasim S, et al. **Int J Obes** 1989 Jun;13(3):279–88

Variable effects of weight loss on serum lipids and lipoproteins in obese patients. Stevenson DW, et al. **Int J Obes** 1988;12(6):495–502

Effects of anabolic steroids, testosterone, and HGH on blood lipids and echocardiographic parameters in body builders. Zuliani U, et al. **Int J Sports Med** 1989 Feb;10(1):62–6

Changes and correlations of antioxidant enzymes, lipid peroxidation and serum neutral lipids due to haemodialysis treatment in chronic uraemic patients. Matkovics B, et al. **Int Urol Nephrol** 1988;20(5):559–64

Differences in tocopherol-lipid ratios in ARDS and non-ARDS patients. Bertrand Y, et al. **Intensive Care Med** 1989;15(2):87–93

The influence of oral contraceptives and habitual physical activity on serum lipids in black adolescents and young women. Linder CW, et al. **J Adolesc Health Care** 1989 Jul;10(4):275–82

Lipids: impact on dietary prescription in diabetes. Hagan J, et al. **J Am Diet Assoc** 1989 Aug;89(8):1104–8, 1111 (50 ref.)

The effect of diet on plasma lipids, lipoproteins, and coronary heart disease. Kris-Etherton PM, et al. **J Am Diet Assoc** 1988 Nov;88(11):1373–400 (275 ref.)

The effects of diet differing in fat, carbohydrate, and fiber on carbohydrate and lipid metabolism in type II diabetes. O'Dea K, et al. **J Am Diet Assoc** 1989 Aug;89(8):1076–86

Influence of phospholipids on ruminal fermentation in vitro and on nutrient digestion and serum lipids in sheep. Jenkins TC, et al. **J Anim Sci** 1989 Feb;67(2):529–37

Operation Everest II: plasma lipid and hormonal responses during a simulated ascent of Mt. Everest. Young PM, et al. **J Appl Physiol** 1989 Mar;66(3):1430–5

Lipid profile in polycythaemia of high altitude. Bhalla IP, et al. **J Assoc Physicians India** 1988 Jun;36(6):374–5

Effect of exercise and menstrual cycle status on plasma lipids, low density lipoprotein particle size, and apolipoproteins. Lamon-Fava S, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):17–21

Regional adiposity patterns in relation to lipids, lipoprotein cholesterol, and lipoprotein subfraction mass in men. Terry RB, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):191–9

Serum lipids, apoproteins and nutrient intake in rural Cretan boys consuming high-olive-oil diets. Aravanis C, et al. **J Clin Epidemiol** 1988;41(11):1117–23

Association of body fat distribution with plasma lipids, lipoproteins, apolipoproteins AI and B in postmenopausal women. Soler JT, et al. **J Clin Epidemiol** 1988; 41(11):1075–81

The effect of coffee on blood lipids and blood pressure. Results from a Norwegian cross-sectional study, men and women, 40–42 years. Stensvold I, et al. **J Clin Epidemiol** 1989;42(9):877–84

Cutaneous xanthoma in association with paraproteinemia in the absence of hyperlipidemia. Feingold KR, et al. **J Clin Invest** 1989 Mar;83(3):796–802

Estrogen-induced gallstone formation in males. Relation to changes in serum and biliary lipids during hormonal treatment of prostatic carcinoma. Henriksson P, et al. **J Clin Invest** 1989 Sep;84(3):811–6

Inhibition of cholesteryl ester transfer protein activity by monoclonal antibody. Effects on cholesteryl ester formation and neutral lipid mass transfer in human plasma. Yen FT, et al. **J Clin Invest** 1989 Jun;83(6):2018–24

Plasma lipoproteins in neonatal, preruminant, and weaned calf. Jenkins KJ, et al. **J Dairy Sci** 1988 Nov;71(11):3003–12

Mercury induced time-dependent alterations in lipid profiles and lipid peroxidation in different body organs of cat-fish Heteropneustes fossilis. Bano Y, et al. **J Environ Sci Health [B]** 1989 Apr;24(2):145–66

Stability of plasma total cholesterol, triglycerides, and apolipoproteins B and A-I during the early postmortem period. Särkioja T, et al. **J Forensic Sci** 1988 Nov; 33(6):1432–8

Effect of skinfold levels on lipids and blood pressure in younger and older adults. Garn SM, et al. **J Gerontol** 1988 Nov;43(6):M170–4

Changes in plasma lipids and uric acid with sodium loading and sodium depletion in patients with essential hypertension. Masugi F, et al. **J Hum Hypertens** 1988 Mar; 1(4):293–8

The paediatric lipid clinic in Birmingham. Tarlow M, et al. **J Inherited Metab Dis** 1988;11 Suppl 1:91–3

Lipid profile improvement following celiprolol. Herrmann JM, et al. **J Int Med Res** 1988;16 Suppl 1:39A–46A

Effects of moderate freshwater fish diet on lipid metabolism of Finnish students. Hänninen O, et al. **J Intern Med Suppl** 1989;225(731):77–81

Influence of n-3 fatty acids on blood lipids in normal subjects. Sanders TA, et al. **J Intern Med Suppl** 1989;225(731):99–104

The effect of n-3 polyunsaturated fatty acids on lipids, haemostasis, neutrophil and monocyte chemotaxis in insulin-dependent diabetes mellitus. Schmidt EB, et al. **J Intern Med Suppl** 1989;225(731):201–6

Red cell deformability and lipid composition in two forms of acanthocytosis: enrichment of acanthocytic populations by density gradient centrifugation. Clark MR, et al. **J Lab Clin Med** 1989 Apr;113(4):469–81

Effects of the acute phase response on the concentration and density distribution of plasma lipids and apolipoproteins. Cabana VG, et al. **J Lipid Res** 1989 Jan;30(1):39–49

Effect of a fish oil diet on the composition of rat neutrophil lipids and the molecular species of choline and ethanolamine glycerophospholipids. Careaga-Houck M, et al. **J Lipid Res** 1989 Jan;30(1):77–87

Apolipoprotein A-IV polymorphism and its effect on plasma lipid and apolipoprotein concentrations. de Knijff P, et al. **J Lipid Res** 1988 Dec;29(12):1621–7

Inhibition of lipid transfer by a unique high density lipoprotein subclass containing an inhibitor protein. Nishide T, et al. **J Lipid Res** 1989 Feb;30(2):149–58

Studies on the lipid and apolipoprotein compositions of two species of apoA-I-containing lipoproteins in normolipidemic males and females. Ohta T, et al. **J Lipid Res** 1988 Jun;29(6):721–8

Improved procedure for determination of serum lipid-associated sialic acid: application for early diagnosis of colorectal cancer. Tautu C, et al. **J Natl Cancer Inst** 1988 Oct 19;80(16):1333–7

Effects of meprobamate on plasma lipids, lipoproteins, and experimental atherosclerosis. Wong HY, et al. **J Natl Med Assoc** 1987 Aug;79(8):855–64

Serum lipids and demyelination in experimental allergic encephalomyelitis induced by the increased encephalitogenicity of myelin basic protein given with galactocerebroside. Kržalić LJ, et al. **J Neuroimmunol** 1989 May;22(3):193–9

Plasma lipids, lipoproteins, and fecal excretion of neutral sterols and bile acids in rats fed various high fat diets or a low fat/high sucrose diet. Høstmark AT, et al. **J Nutr** 1989 Mar;119(3):356–63

Effect of oral ingestion of different fractions of Allium cepa on the blood and erythrocyte membrane lipids and certain membrane-bound enzymes in rats. Ahluwalia P, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):155–61

Biliary lipid composition in patients with cystic fibrosis. Becker M, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):308–12 (41 ref.)

Lipids and hypertension [letter] Feeman WE Jr. **JAMA** 1989 May 26;261(20):2954

Alteration of erythrocyte lipid composition following total parenteral nutrition in the rat. Innis SM. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):47–50

Short-term effects of fat emulsion on serum lipids in postoperative patients. Meguid MM, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):77–80

Serum lipids and lipoproteins in schizophrenic patients receiving major tranquilizers. Shafique M, et al. **JPMA** 1988 Oct;38(10):259–61

Study on lipid and glucose metabolism in patients with vasospastic angina. Yoshida H, et al. **Jpn J Med** 1989 May–Jun;28(3):348–54 (28 ref.)

Plasma lipids and acyltransferase activities in experimental nephrotic syndrome. Sestak TL, et al. **Kidney Int** 1989 Aug; 36(2):240–8

Effects of biosynthetic human proinsulin on plasma lipids in type 2 diabetes mellitus. Drexel H, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1171–4

Boreal freshwater fish diet modifies the plasma lipids and prostanoids and membrane fatty acids in man. Agren JJ, et al. **Lipids** 1988 Oct;23(10):924–9

Polyunsaturated fatty acids of serum lipids in myocardial infarction. Crofts JW, et al. **Lipids** 1988 Jun;23(6):539–45

Effects of 2-(2,4-dimethylphenyl)indan-1,3-dione on serum lipoprotein and lipid metabolism of rodents. Hall IH, et al. **Lipids** 1988 Aug;23(8):755–60

Lipid composition of platelets from patients with atherosclerosis: effect of purified eicosapentaenoic acid ethyl ester administration. Kamido H, et al. **Lipids** 1988 Oct;23(10):917–23

Serum lipids in spontaneously hypertensive rats and Sprague-Dawley rats fed menhaden oil. Kingsley TR, et al. **Lipids** 1988 Jun;23(6):564–7

A study of serum lipids in diabetic retinopathy. Mehrotra AN, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):165–7

A comparison of the effects of ethinyl estradiol and estradiol valerate on serum and lipoprotein lipids. Lindberg UB, et al. **Maturitas** 1988 Dec;10(4):343–52

Approach to define "normal aging" in man. Immune function, serum lipids, lipoproteins and neopterin levels. Reibnegger G, et al. **Mech Ageing Dev** 1988 Dec; 46(1–3):67–82

The relevance of plasma lipid changes with cardiovascular drug therapy. Johnson BF, et al. **Med Clin North Am** 1989 Mar;73(2):449–73 (131 ref.)

Effects of pindolol, or a pindolol/clopamide combination preparation, on plasma lipid levels in essential hypertension. Hunter Hypertension Research Group. **Med J Aust** 1989 Jun 5;150(11):646, 648, 651–2 (17 ref.)

Lipids and lipoproteins in patients undergoing coronary-artery surgery. Billington T, et al. **Med J Aust** 1989 Mar 20;150(6):302–4, 306

The lipid hypothesis [letter] Stehbens WE. **Med J Aust** 1989 Jan 16;150(2):108

Oat bran for lowering blood lipids [published erratum appears in Med Lett Drugs Ther 1989 May 19;31(792):48] **Med Lett Drugs Ther** 1988 Dec 2;30(780):111–2

Changes in lipids after weight training [letter] Goldberg L, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):418–20

Effects of low- and moderate-intensity training in spinal cord-injured persons. Hooker SP, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):18–22

Alterations in plasma lipids consequent to endurance training and beta-blockade. Morton AR, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):288–92

Intralipid infusion into humans reduces in vitro platelet aggregation and alters platelet lipid composition. Aviram M, et al. **Metabolism** 1989 Apr;38(4):343–7

Short-term effects of moderate alcohol consumption on lipid metabolism and energy balance in normal men. Contaldo F, et al. **Metabolism** 1989 Feb;38(2):166–71

Acute changes in lipid, lipoprotein, apolipoprotein, and low-density lipoprotein particle size after an endurance triathlon. Lamon-Fava S, et al. **Metabolism** 1989 Sep; 38(9):921–5

Dietary fish oils increase serum lipids in insulin-dependent diabetics compared with healthy controls. Mori TA, et al. **Metabolism** 1989 May;38(5):404–9

Serum lipids and apolipoproteins in the rat refed after starving: influence of the molecular form of nitrogen (protein, peptides, or free amino acids). Poullain MG, et al. **Metabolism** 1989 Aug;38(8):740–4

Changes in lipoproteins induced by the remnant kidney tissue or binephrectomy in chronic uremic patients treated by hemodialysis. Robert D, et al. **Metabolism** 1989 Jun; 38(6):514–21

Effect of bezafibrate on serum lipids in normo- and spontaneously hyperlipidemic rats. Pill J, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):487–92

Lipid studies in primary gout. Yu TF, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):11–6

Nibbling versus gorging: metabolic advantages of increased meal frequency. Jenkins DJ, et al. **N Engl J Med** 1989 Oct 5;321(14):929–34

Effect of triglyceride levels on methyl and methylene envelope line widths in proton nuclear magnetic resonance spectroscopy of human plasma. Mims MP, et al. **N Engl J Med** 1989 Jun 1;320(22):1452–7

A comparison of the effects of hydrochlorothiazide and captopril on glucose and lipid metabolism in patients with hypertension. Pollare T, et al. **N Engl J Med** 1989 Sep 28;321(13):868–73

Changes in plasma lipids and lipoproteins in overweight men during weight loss through dieting as compared with exercise. Wood PD, et al. **N Engl J Med** 1988 Nov 3; 319(18):1173–9

Effect of combined diet and physical exercise on plasma lipids of renal transplant recipients [letter] Triolo G, et al. **Nephrol Dial Transplant** 1989;4(3):237–8

Effects of isoprothiolane and phytosterol on serum lipids and adipose tissue of rats given saturated fat diet. Katamoto H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):119–27

Effect of isoprothiolane on hepatic lesions of heifer caused by carbon tetrachloride. Nagasawa S, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):284–93

Changes in postprandial plasma lipids and lipoproteins in humans. **Nutr Rev** 1989 Jan;47(1):13–5

The effects of estradiol on blood lipids and lipoproteins in postmenopausal women. Fåhraeus L. **Obstet Gynecol** 1988 Nov;72(5 Suppl):18S–22S

CA 125, NB/70K, and lipid-associated sialic acid in monitoring uterine papillary serous carcinoma. Tseng PC, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):384–7

Plasma lipid-associated sialic acid and serum CA 125 as indicators of disease status with advanced ovarian cancer. Vardi JR, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):379–83

Clinical and serum lipid findings in a large family with autosomal dominant retinitis pigmentosa. Newsome DA, et al. **Ophthalmology** 1988 Dec;95(12):1691–5

Acute lipidemic effect of calcium heparin in arteriosclerotic subjects. Ferlito S, et al. **Panminerva Med** 1988 Oct–Dec; 30(4):257–61

Levels of serum cholesterol, triglyceride, HDL-cholesterol, apoproteins A-I and B, and plasma glucose, and prevalence of diastolic hypertension and cigarette smoking in Papua New Guinea highlanders. Scrimgeour EM, et al. **Pathology** 1989 Jan;21(1):46–50

Gastric drip feeding in patients with glycogen storage disease type I: its effects on growth and plasma lipids and apolipoproteins. Fernandes J, et al. **Pediatr Res** 1989 Apr; 25(4):327–31

Hypolipidemic activity of o-(N-phthalimido)acetophenone in Sprague Dawley rats. Hall IH, et al. **Pharm Res** 1987 Dec;4(6):472–9

Synthesis and hypolipidemic activity of 3-imino-1-oxoisoindolines in rodents. Murthy AR, et al. **Pharm Res** 1987 Feb;4(1):21–7

Effects of coffee on plasma lipids, lipoproteins and apolipoproteins. Paoletti R, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):27–38

Plasma adrenaline: relations to blood pressure, blood platelet function and blood lipids in essential hypertension. Kjeldsen SE, et al. **Pharmacol Toxicol** 1988;63 Suppl 1:35–7

A study on composition and hypolipidemic effect of dietary fibre from some plant foods. Agarwal V, et al. **Plant Foods Hum Nutr** 1988;38(2):189–97

Plasma lipids can be reliably assessed within 24 hours after acute myocardial infarction. Sewdarsen M, et al. **Postgrad Med J** 1988 May;64(751):352–6

Deficiencies of polyunsaturated fatty acids and replacement by nonessential fatty acids in plasma lipids in multiple sclerosis. Holman RT, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4720–4

Effects of phenotype, sex, and diet on plasma lipids in LA/N-cp rats. Schnitzer-Polokoff R, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):326–31

Influence of iloprost on eicosanoid generation and lipid levels in experimental myocardial ischemia in dogs. Beitz A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):141–5

Sex differences in lipid, lipoprotein, cardiovascular, and neuroendocrine responses to acute stress. Stoney CM, et al. **Psychophysiology** 1988 Nov;25(6):645–56

Type A behavior in healthy males and females as related to physiological reactivity and blood lipids. Lundberg U, et al. **Psychosom Med** 1989 Mar–Apr;51(2):113–22

Mechanisms for the serum lipid-lowering effect of n-3 fatty acids. Hagve TA, et al. **Scand J Clin Lab Invest** 1988 Dec; 48(8):813–6

Studies of serum lipids in hypercholesterolaemic rabbits treated with doxazosin. Leren TP, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):313–7

Lipid and lipoprotein effects on endothelial eicosanoid formation. Spector AA. **Semin Thromb Hemost** 1988 Apr; 14(2):196–201 (41 ref.)

Lipid associated sialic acid in plasma in patients with advanced carcinoma of the ovaries. Vardi JR, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):296–301

Low plasma lipid levels and increased cholesterol synthesis after partial ileal bypass plus lovastatin in hypercholesterolemic rabbits. Tijerina O, et al. **Surgery** 1988 Oct;104(4):796–805

Action of Viskaldix on serum lipids and lipoproteins. Völgyi Z, et al. **Ther Hung** 1988;36(2):62–6

Red blood cell lipid alterations in type II diabetes mellitus. Prisco D, et al. **Thromb Res** 1989 Jun 15;54(6):751–8

Effects of long-term exercise and high-cholesterol diet on lipid-lipoprotein metabolism in rats. Terao T, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):243–51

Effects of monosodium glutamate (MSG) on serum lipids, blood glucose and cholesterol in adult male mice. Ahluwalia P, et al. **Toxicol Lett** 1989 Feb;45(2–3):195–8

Prospective evaluation of changes in lipid profiles in cyclosporine-treated renal transplant patients. Markell MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1497–9

Effect of cyclosporine on plasma lipids and modification with dietary fish oil. Jevnikar AM, et al. **Transplantation** 1988 Nov;46(5):722–5

Plasma lipid and lipoprotein levels in rheumatic fever. Olguntürk R, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):1–8

The effect of Eimeria acervulina infection on plasma lipids

and lipoproteins in young broiler chicks. Allen PC. **Vet Parasitol** 1988 Nov;30(1):17–30

Plasma vitamins A and E, total lipid and cholesterol concentrations in captive jackass penguins (Spheniscus demersus). Gulland FM, et al. **Vet Rec** 1988 Dec 24–31; 123(26–27):666–7

Plasma alpha–tocopherol, total lipids and total cholesterol in wild rockhopper, magellanic and gentoo penguins before and after moulting. Williams G, et al. **Vet Rec** 1989 Jun 3;124(22):585–6

Dietary fatty acids, serum lipids, platelet biochemistry and function. Galli C, et al. **Wien Klin Wochenschr** 1989 Apr 14;101(8):267–71 (16 ref.)

Comparison of rats with mice concerning the response of lipid metabolism to dietary fats. Beynen AC, et al. **Z Ernahrungswiss** 1988 Sep;27(3):143–9

Changes of some lipid and lipid peroxidation characteristics in obese people as a result of a low energy diet. Dworschák E, et al. **Z Ernahrungswiss** 1988 Dec;27(4):207–15

The effect of a free mackerel–supplemented diet on plasma and lipoprotein lipid concentrations in normolipidemic subjects. Pfeuffer M, et al. **Z Ernahrungswiss** 1988 Dec; 27(4):216–21

Serum levels of some fat metabolism parameters in women with uterine leiomyoma. Rzempoluch J, et al. **Zentralbl Gynakol** 1989;111(12):831–6

[Arterial thrombus formation and serum lipids in rats with renal hypertension] Lakova E, et al. **Eksp Med Morfol** 1988; 27(4):13–7 (Eng. Abstr.) (Bul)

[Effect of fish oil and soybean oil on plasma lipids in rats] Chang WK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 42(4):233–40 (Eng. Abstr.) (Chi)

[Effects of oral contraceptives on serum lipids in fertile women] Su YR. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 68(10):568–71, 40 (Eng. Abstr.) (Chi)

[Effect of fish oils on plasma lipids, glucose tolerance and insulin secretion in persons with endogenous hypertriglyceridemia] Zák A, et al. **Cas Lek Cesk** 1988 Jul 8;127(28):881–4 (Eng. Abstr.) (Cze)

[Food composition and serum lipids in children] Larsen B, et al. **Ugeskr Laeger** 1989 Mar 13;151(11):686–90 (Eng. Abstr.) (Dan)

[Serum lipids and proteins in newborn infants in Ivory Coast] Bensadoun G, et al. **Ann Biol Clin (Paris)** 1989;47(3):153–8 (Eng. Abstr.) (Fre)

[Changes in serum lipids and lipoproteins in 3 cases of heterozygous familial hypercholesterolemia treated by LDL apheresis on dextran sulfate–cellulose columns] Delplanque B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:80–2 (Eng. Abstr.) (Fre)

[Comparative effects of pindolol and atenolol on blood pressure and lipids in mild to moderate arterial hypertension] Herpin D, et al. **Ann Med Interne (Paris)** 1988;139(7):484–7 (28 ref.) (Eng. Abstr.) (Fre)

[Lipid profile of the diabetic. Actual modalities and perspectives] Moulin P, et al. **Diabete Metab** 1989 May–Jun;15(3):142–5 (12 ref.) (Fre)

[The 1988 Apollinaire Bouchardat prize. The role of lipid substrates in adaptation to fasting in the newborn infant and child] Bougnères PF. **Journ Annu Diabetol Hotel Dieu** 1988;:303–14 (26 ref.) (Fre)

[Relation of alcohol consumption and blood lipids and apolipoproteins—a study of a population of 3,897 wage–earners from the Lyon region] Delahaye F, et al. **Rev Epidemiol Sante Publique** 1989;37(1):13–22 (Eng. Abstr.) (Fre)

[Chronic gastritis and serum lipids, hypertension and cholelithiasis] Wolff G, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):149–52 (Eng. Abstr.) (Ger)

[Stepwise diagnosis and therapy of hyperlipidemias] **Fortschr Med** 1988;106 Suppl 46:5–12 (Ger)

[Growth factors, carbohydrate and lipid metabolism in females with polycystic ovary syndrome] Urdl W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:211–3 (Ger)

[Effect of L–carnitine supplemented total parenteral nutrition on postoperative lipid and nitrogen utilization] Rössle C, et al. **Klin Wochenschr** 1988 Dec 15;66(24):1202–11 (Eng. Abstr.) (Ger)

[Effect of cod liver oil administration on blood lipid levels, lipoprotein profile and bleeding time] Burchard HU, et al. **Z Ernahrungswiss** 1988 Dec;27(4):222–8 (Eng. Abstr.) (Ger)

[The effects of the intake of cod liver oil on the blood lipid level, the lipoprotein profile and bleeding time] Burchard HU, et al. **Z Ernahrungswiss** 1989 Mar;28(1):84–91 (Eng. Abstr.) (Ger)

[Postoperative behavior of parameters of intravascular lipid metabolism] Winkler E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):105–11 (Eng. Abstr.) (Ger)

[Lipid metabolism and peripheral hemodynamics in arteriosclerosis obliterans treated with nifedipine—a comparison with pentoxifylline] Beykirch H, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):77–9 (Eng. Abstr.) (Ger)

[Status quo in lipid diagnosis from the internal medicine viewpoint. Discussion of the contribution of the same title by W. Reuter in Z. gesamte inn. Med. 43 (1988) 71–74] Gutsche C, et al. **Z Gesamte Inn Med** 1988 Oct 15; 43(20):589 (Ger)

[Arteriosclerosis and blood lipids] Kipschidse NN, et al. **Z Gesamte Inn Med** 1989 Mar 15;44(6):175–6 (Eng. Abstr.) (Ger)

[Diagnostic value of serum lipid and apolipoprotein parameters for the detection of a coronary risk even in the range of nonpathological serum cholesterol and triglyceride values] Winkler L, et al. **Z Med Lab Diagn** 1988;29(6):314–20 (Eng. Abstr.) (Ger)

[Total blood lipids and lipoproteins in sheep fed Pistacia lentiscus drupe] Bomboi G, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):93–9 (Eng. Abstr.) (Ita)

[Lipid markers of ischemic cardiopathy risk in obese women] Alessandri C, et al. **Clin Ter** 1987 Jun 30;121(6):467–9 (Eng. Abstr.) (Ita)

[Evaluation of apoproteins A and B, lipoproteins and plasma lipids during treatment with bezafibrate in various forms of hyperlipoproteinemia] Saitta A, et al. **Clin Ter** 1988 Mar 15;124(5):373–81 (Eng. Abstr.) (Ita)

[The lipid hypothesis in the etiopathogenesis of ischemic heart disease: confirmations and doubts resulting from primary prevention trials] Caruzzo C, et al. **Minerva Cardioangiol** 1989 Apr;37(4):161–7 (Eng. Abstr.) (Ita)

[Effects of the oral administration of a contraceptive on lipid balance and on the concentration of serum tocopherol] Martino F, et al. **Minerva Ginecol** 1988 Sep;40(9):557–8 (Eng. Abstr.) (Ita)

[Effect of chronic alcohol consumption on blood lipid levels and angiopathy in diabetics] Bertello PD, et al. **Minerva Med** 1989 May;80(5):443–6 (Eng. Abstr.) (Ita)

[Effect of angiotensin converting enzyme inhibitors on lipid, purine and glucose metabolism] Buemi M, et al. **Recenti Prog Med** 1989 Feb;80(2):78–82 (24 ref.) (Eng. Abstr.) (Ita)

[Gemellological study on genetic and environmental factors affecting serum concentrations of lipids and electrolytes in adult twins] Hayakawa K. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):763–77 (Eng. Abstr.) (Jpn)

[Relationship of body fat distribution and serum lipid concentration in middle–aged obesity women] Okamoto K, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1028–35 (Eng. Abstr.) (Jpn)

[Effect of obesity on blood pressure, serum lipid, liver function, blood sugar and uric acid] Saito Y, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):962–8 (Eng. Abstr.) (Jpn)

[Recent trend in the research of hypertension in Japan. The effects of antihypertensive drugs on serum lipids and lipoproteins in patients with mild to moderate hypertension] Goto Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec; 77(12):1820–5 (35 ref.) (Jpn)

[Apolipoprotein E polymorphism, coronary risk factors, serum lipids, lipoproteins and apolipoproteins in myocardial infarction] Shiina Y. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):1–8 (Jpn)

[Effects of gestrinone on serum lipid and lipoprotein levels in women with endometriosis] Fukuda Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):577–84 (Eng. Abstr.) (Jpn)

[Lipid metabolism of the patients with subarachnoid hemorrhage due to ruptured intracranial aneurysm—with special reference to the occurrence of cerebral angiospasm] Nonaka N, et al. **No To Shinkei** 1989 Jan;41(1):67–72 (Eng. Abstr.) (Jpn)

[Determination of plasma lipids and lipoproteins] Nakamura H. **Rinsho Byori** 1988 May;36(5):517–20 (Jpn)

[Study on fluctuations of serum lipids in patients with diabetes mellitus. With special reference to effects of control level and therapy] Okamoto Y, et al. **Rinsho Byori** 1988 Oct; 36(10):1195–200 (Jpn)

[Apolipoprotein and lipid levels in cord blood] Seishima M, et al. **Rinsho Byori** 1988 Aug;36(8):918–22 (Jpn)

[Effect of crude drugs and their prescriptions on the blood rheology affected by glucocorticoid treatment. V. Comparison of sho–saiko–to, dai–saiko–to, san–oh–shashin–to and clofibric acid in betamethasone treated rat] Tani T, et al. **Yakugaku Zasshi** 1988 Sep; 108(9):876–85 (Eng. Abstr.) (Jpn)

[Hypolipemic and antiatherogenic effects of 2',4' dichlorobenzoate of 7–gamma(beta–hydroxypropyl)–theophylline (HME2)] Wójcicki J, et al. **Acta Pol Pharm** 1988;45(4):362–8 (Eng. Abstr.) (Pol)

[Selected problems of etiopathogenesis of femur head necrosis in adults in the light of clinical and biochemical studies] Krzykawski R. **Ann Acad Med Stetin** 1988; 34:119–35 (Eng. Abstr.) (Pol)

[Effect of long–term treatment with nifedipine on the activity of the sympathetic–adrenal system, lipids and beta–thromboglobulin in patients with primary arterial hypertension] Knypl K, et al. **Kardiol Pol** 1988;31 Suppl 1:8–15 (Eng. Abstr.) (Pol)

[Plasma and erythrocyte lipids in amyotrophic lateral sclerosis] Maciejek Z, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):387–93 (Eng. Abstr.) (Pol)

[Evaluation of the effect of diet on selected parameters of protein and lipid metabolism in the blood serum of children with steroid–sensitive nephrotic syndrome] Zoch–Zwierz W, et al. **Pediatr Pol** 1988 Oct;63(10):616–22 (Eng. Abstr.) (Pol)

[Effect of the so–called fat–rich diet in acute viral hepatitis (VH) and chronic hepatopathies on changes in lipid indicators] Boroń P, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):228–34 (Eng. Abstr.) (Pol)

[The effect of bezafibrate on the level of serum lipids, fatty acid lecithin–cholesterol transferase activity and certain parameters of the fibrinolytic system in patients with type IIb and type IV hyperlipoproteinemia] Młyński J, et al. **Pol Arch Med Wewn** 1985 May;73(5):290–7 (Eng. Abstr.) (Pol)

[Use of diazoxide in the studies of the effect of glucagon on the blood serum levels of glucose, free fatty acids and triglycerides in rabbits] Nowak KW, et al. **Pol Arch Weter** 1987;27(4):99–107 (Eng. Abstr.) (Pol)

[Serum lipids in patients with bronchial asthma] Frank–Piskorska A, et al. **Pol Tyg Lek** 1988 Oct 17–24; 43(42–43):1352–4 (Eng. Abstr.) (Pol)

[Effect of hypotensive drugs on serum levels of lipids and lipoproteins in humans] Halawa B, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1422–4 (Pol)

[Serum lipid levels in patients with arteriosclerosis obliterans of the legs during treatment with pentoxifylline] Kuczyńska K, et al. **Pol Tyg Lek** 1988 Aug 22;43(34):1092–4 (Eng. Abstr.) (Pol)

[Blood lipid and lipoprotein profile in patients in the first week of myocardial infarction] Lorenc J. **Przegl Lek** 1989; 46(4):391–9 (Eng. Abstr.) (Pol)

[Effect of a low–calorie diet on serum lipid levels and metabolic function of the liver in obese women during the climacteric period] Chojnowska–Jezierska J, et al. **Wiad Lek** 1989 Dec 1;41(23):1566–70 (Eng. Abstr.) (Pol)

[Effect of hydrochlorothiazide and methyldopa on lipid metabolism in patients with essential hypertension] Mion Júnior D, et al. **AMB Rev Assoc Med Bras** 1988 Mar–Apr; 34(2):41–3 (Eng. Abstr.) (Por)

[Influence of physical activity on plasma levels of lipids and lipoproteins in patients with coronary disease] Da Silva MJ, et al. **Arq Bras Cardiol** 1988 Apr;50(4):231–6 (47 ref.) (Eng. Abstr.) (Por)

[Guanabenz acetate and serum lipids. Sequential evaluation during one year] Spritzer N, et al. **Arq Bras Cardiol** 1988 Aug;51(2):193–7 (Eng. Abstr.) (Por)

[Lipid indicators of risk of myocardial infarct] Serban V, et al. **Rev Med Interna [Med Interna]** 1988 Sep–Oct; 40(5):427–36 (Eng. Abstr.) (Rum)

[Correlated parameters of immune reactivity, hormonal balance and lipid metabolism during pregnancy in healthy women] Dashkevich VE, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):65–7 (Rus)

[Indicators of lipid metabolism and aminotransferase activity in girls with dysfunctional uterine hemorrhage] Kokolina VF, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):44–6 (Eng. Abstr.) (Rus)

[Plasma levels of neutral and polar lipid fractions in pregnant women with gestosis] Serov VN, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):22–5 (Eng. Abstr.) (Rus)

[Effect of lipopolysaccharide toxin on lipid and protein composition of human serum low density lipoproteins] Viktorov AV, et al. **Biokhimiia** 1989 Mar;54(3):434–9 (Eng. Abstr.) (Rus)

[Dynamic changes in the indices of lipid metabolism in erythrocyte membranes at different times of the development of alloxan diabetes] Gevorkian DM. **Biull Eksp Biol Med** 1989 Mar;107(3):298–300 (Eng. Abstr.) (Rus)

[Effect of a diet fortified with polyunsaturated fatty acids of the omega–3 group on plasma lipids and apolipoproteins and thrombocyte aggregation in patients with newly developed stenocardia] Kalinkina OM. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):92 (Rus)

[Interrelation of the expression of lymphocyte Fc receptors modified by prostaglandins and isoproterenol with the level of lipid metabolism] Izvekova VA, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):466–71 (Rus)

[Diurnal profile and correlations between the indicators of lipid metabolism and the hemostasis system in healthy persons] Seliverstova GP. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):659–63 (Rus)

[Comparative study of HLA antigen frequency and lipid metabolic indices in patients with various locations of atherosclerosis] Kovalev IuR, et al. **Gematol Transfuziol** 1988 Oct;33(10):19–23 (Eng. Abstr.) (Rus)

[Metabolic processes in workers engaged in chromium processing] Karimov TK. **Gig Sanit** 1988 Aug;(8):95–6 (Rus)

[Status of lipid metabolism in the administrative personnel of the ministries and departments] Pavlovskaia NA, et al. **Gig Sanit** 1988 Nov;(11):37–40 (Eng. Abstr.) (Rus)

[Changes in biochemical indicators after exposure to carbon disulfide] Pavlova SD, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):12–5 (Eng. Abstr.) (Rus)

[The relation of central blood circulation and the values of fatty and non–fatty body weight in men with normo– and hyperlipoproteinemia] Aleksenko AS, et al. **Kardiologiia** 1988 Aug;28(8):68–72 (Eng. Abstr.) (Rus)

[Effect of essential phospholipids on the lipid spectrum of blood plasma and the aggregative capacity of thrombocytes in patients with ischemic heart disease] Botolova EN, et al. **Kardiologiia** 1988 Sep;28(9):57–61 (Eng. Abstr.) (Rus)

[Characteristics of changes in lipid metabolism after

aortocoronary shunting] Buslenko NS, et al. **Kardiologiia** 1989 Jun;29(6):108–10 (Rus)

[Blood lipids and lipid peroxides in the families of patients with ischemic heart disease] Davidenkova EF, et al. **Kardiologiia** 1989 Jun;29(6):10–4 (Eng. Abstr.) (Rus)

[Content of lysosomes and lipids in the cytoplasm of the blood monocytes in patients with ischemic heart disease] Freidlin IS, et al. **Kardiologiia** 1988 Aug;28(8):75–8 (Eng. Abstr.) (Rus)

[Plasma lipid levels and body weight in patients with post-infarction cardiosclerosis with various degrees of systolic blood pressure] Iuldashev SS. **Kardiologiia** 1989 Mar;29(3):91–2 (Rus)

[Plasma lipid levels in men aged 30–59 years living in rural areas of the Buriat ASSR (epidemiological study)] Nikitin IuP, et al. **Kardiologiia** 1988 Dec;28(12):77–9 (Eng. Abstr.) (Rus)

[Multifaceted analysis of the interactions of morphophysiologic signs and ischemic ECG changes (a population study)] Puzyrev VP, et al. **Kardiologiia** 1989 Feb;29(2):75–7 (Eng. Abstr.) (Rus)

[Blood lipids as a factor of hereditary susceptibility to ischemic heart disease] Ralkov AN, et al. **Kardiologiia** 1989 Jun;29(6):14–9 (Eng. Abstr.) (Rus)

[Assessment of hyperlipidemia based on the ratio of lipid fractions in the blood serum in kidney diseases] Nikulina GG, et al. **Lab Delo** 1988;(9):12–4 (Eng. Abstr.) (Rus)

[Features of blood lipid composition during emotional stress in rabbits with dyslipoproteinemia] Bel'chenko DI, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):10–3 (Eng. Abstr.) (Rus)

[Changes in the lipid composition of the blood plasma lipoproteins in acute emotional stress] Gurin VN, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):57–9 (Eng. Abstr.) (Rus)

[Comparative characteristics of the lipid composition of lipoproteins of the blood plasma and ascitic fluid in liver cirrhosis] Kosukhin AB, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):13–7 (Eng. Abstr.) (Rus)

[Effect of emotional-pain stress on the level of lipids and esterification of cholesterol in the blood of rats] Tverdokhlib VP, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):27–9 (Eng. Abstr.) (Rus)

[Characteristics of the endocrine and immune systems and lipid metabolism in children with lymphatico-hyperplastic diathesis] Bondarenko GP, et al. **Pediatriia** 1989;(2):8–12 (Eng. Abstr.) (Rus)

[Clinical evaluation of a therapeutic complex incorporating linetol and ascorbic and nicotinic acids for the correction of lipid metabolic disorders in children with glomerulonephritis] Makovetskaia GA, et al. **Pediatriia** 1988;(10):109–10 (Rus)

[Features of blood lipid spectrum in schoolchildren with different amount of motor activity] Tashbaev OS, et al. **Pediatriia** 1988;(9):110 (Rus)

[Indicators of vitamin A, E and lipid metabolism in young children with iron-deficiency anemia] Turaev AT, et al. **Pediatriia** 1988;(7):11–4 (Eng. Abstr.) (Rus)

[Serum lipid levels in patients with disseminated processes of the lungs] Belen'kaia TIu. **Probl Tuberk** 1989;(4):60–2 (Rus)

[Diagnostic value of studying the indicators of blood lipid composition and the status of intravascular microcirculation in patients with diabetes mellitus associated with ischemic heart disease] Golubiatnikova GA, et al. **Ter Arkh** 1988;60(8):98–102 (Eng. Abstr.) (Rus)

[Blood lipids and the indicators of lipid peroxidation in patients with hemorrhagic fever with nephrotic syndrome] Koval'skiĭ IuG. **Ter Arkh** 1988;60(6):82–5 (Eng. Abstr.) (Rus)

[Lipid metabolic indices in patients with the gastrointestinal form of food poisoning] Kozhevnikova GM, et al. **Ter Arkh** 1988;60(11):78–80 (Eng. Abstr.) (Rus)

[Lipids of blood and erythrocyte membranes in healthy persons and in patients with diffuse toxic goiter, residing in the European North of the USSR] Shatsova EN, et al. **Ter Arkh** 1988;60(9):47–50 (Eng. Abstr.) (Rus)

[Diagnostic value of determining the levels of lipid-bound sialic acids in the blood in cancer of the kidneys] Rubtsov BI, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):31–3 (Eng. Abstr.) (Rus)

[Comparative characteristics of blood lipids, arterial pressure and physical development of children in various climatogeographic zones of the USSR] Tubol IB, et al. **Vestn Akad Med Nauk SSSR** 1988;(10):75–84 (Eng. Abstr.) (Rus)

[Structural properties and lipid-binding characteristics of plasma fibrinogen and gamma-globulins in vitamin D-deficient rickets] Apukhovskaia LI, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):49–53 (Eng. Abstr.) (Rus)

[Erythrocyte lipids in diabetes mellitus with vascular involvement] Kasimova GM, et al. **Vopr Med Khim** 1989 May–Jun;35(3):42–7 (Eng. Abstr.) (Rus)

[Isolation of fractions of human serum suitable for selective alterations in the level of lipids and apolipoproteins during preparation of standard sera] Khaidukova IL, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):134–9 (Eng. Abstr.) (Rus)

[The use of gas chromatographic profile of serum lipids for computer diagnosis] Lindberg LF, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):86–90 (Eng. Abstr.) (Rus)

[Computer diagnosis of various infectious diseases based on gas chromatographic profile of serum lipids] Miramskiĭ AS, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):115–20 (Eng. Abstr.) (Rus)

[Comparison of various approaches to the determination of the products of lipid peroxidation in heptane–isopropanol extracts of blood] Volchegorskiĭ IA, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):127–31 (Eng. Abstr.) (Rus)

[1H-NMR of blood lipids in malignant and benign tumors] Iushmanov VE, et al. **Vopr Onkol** 1989;35(5):560–4 (Eng. Abstr.) (Rus)

[Relations between antioxidant activity and lipid state of blood as an indicator of the effect of tumor on the body] Kal'nova NIu. **Vopr Onkol** 1989;35(7):795–801 (Eng. Abstr.) (Rus)

[Body weight, blood lipids, blood cortisol and prognosis of patients with cancer of the large intestine and breast] Kovalenko IG, et al. **Vopr Onkol** 1989;35(7):816–22 (Eng. Abstr.) (Rus)

[Effect of eicosapentaenoic acid on lipid metabolism in rabbits with experimental atherosclerosis] Ren LKh, et al. **Vopr Pitan** 1988 Nov–Dec;(6):40–3 (Eng. Abstr.) (Rus)

[Effect of various dietary proteins on the processes of lipid transport in the blood serum] Sharmanov TSh, et al. **Vopr Pitan** 1988 Jul–Aug;(4):45–8 (Eng. Abstr.) (Rus)

[Characteristics of elastolysis and lipid metabolism in arterial hypertension in the middle-aged and elderly] Persidskiĭ IV. **Vrach Delo** 1988 Nov;(11):42–5 (Eng. Abstr.) (Rus)

[Lipid levels in peripheral blood neutrophilic leukocytes in diseases of the hepatobiliary system] Podil'chak MD, et al. **Vrach Delo** 1989 May;(5):62–3 (Rus)

[Fat metabolism in hypocorticism patients] Vlasenko MV. **Vrach Delo** 1989 Jun;(6):81–3 (Rus)

[Effect of physical loading on metabolic indices of lipids in patients with chronic ischemic heart disease] Volkov VI, et al. **Vrach Delo** 1988 Aug;(8):40–3 (Eng. Abstr.) (Rus)

[Various indicators of the lipid composition of erythrocyte membranes in healthy persons and in chronic alcoholics in the northeastern part of the USSR] Lapinskiĭ AG, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):121–5 (Eng. Abstr.) (Rus)

[The lipid profile in patients at risk of ischemic heart disease after preventive rehabilitation at a spa] Strec V, et al. **Bratisl Lek Listy** 1988 Jul;89(7):509–14 (Eng. Abstr.) (Slo)

[Hormonal contraception and its effect on thyroid hormones and lipid metabolism] Sabaková D, et al. **Cesk Gynekol** 1988 May;53(4):275–9 (Eng. Abstr.) (Slo)

[Lipids, lipoproteins, apoproteins and physical exercise in young female athletes] López Benedicto MA, et al. **An Esp Pediatr** 1988 May;28(5):395–400 (Eng. Abstr.) (Spa)

[Lipid profile in vasectomized men] Giner J, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):199–205 (Eng. Abstr.) (Spa)

[Can control of dyslipemia be useful in the reduction of risk of ischemic cerebrovascular accidents? (letter)] Villar Ortiz J, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):639 (Spa)

[Diffuse normolipemic xanthoma planum] Carapeto FJ, et al. **Med Cutan Ibero Lat Am** 1988;16(3):205–10 (Eng. Abstr.) (Spa)

[Pharmacotherapy and clinical research (editorial)] Roessler E. **Rev Med Chil** 1987 Sep;115(9):863–4 (Eng. Abstr.) (Spa)

[The lipid profile in a population of patients with untreated hypertension] Román O, et al. **Rev Med Chil** 1987 Sep;115(9):818–24 (Eng. Abstr.) (Spa)

[Treatment of hypertension with hydrochlorothiazide and pindolol—good for the lipid pattern] Frithz G. **Lakartidningen** 1989 Jul 12;86(28–29):2531–3 (Swe)

DEFICIENCY

Karyometric studies of glial cells in corpus callosum of rats developing a fat deficient diet. Wender M, et al. **Neuropatol Pol** 1988;26(3):403–13

[Changes in the mass of the principal components of the body and classification of the severity of lipid–protein insufficiency in patients with burns] Isaev GA, et al. **Klin Khir** 1989;(3):27–31 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

[Clinical application of lipid emulsion test] Ohkubo I, et al. **Rinsho Byori** 1988 Sep;36(9):1056–60 (Jpn)

GENETICS

Genetic and environmental determinants of serum lipids and lipoproteins in French Canadian families. Pérusse L, et al. **Arteriosclerosis** 1989 May–Jun;9(3):308–18

"Variability gene" effect of cholesteryl ester transfer protein (CETP) genes. Berg K, et al. **Clin Genet** 1989 Jun;35(6):437–45

Increase of ornithine amino lipid content in a sulfonolipid-deficient mutant of Cytophaga johnsonae. Pitta TP, et al. **J Bacteriol** 1989 Feb;171(2):952–7

IMMUNOLOGY

The developmental regulation of the L2/HNK-1 and L3 carbohydrate epitopes in mouse brain. Evidence for separate control of lipid- and protein-bound epitopes. Breen KC. **FEBS Lett** 1989 Apr 10;247(1):36–40

Monoclonal antibody defines determinant between Theiler's virus and lipid–like structures. Fujinami RS, et al. **J Neuroimmunol** 1988 Nov;20(1):25–32

Sulfated lipids represent common antigens on the surface of Trypanosoma cruzi and mammalian tissues. Petry K, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):113–21

Immunochemical studies of polyspecific natural autoantibodies: charge, lipid reactivity, Fab'2 fragments activity and complement fixation. Poncet P, et al. **Mol Immunol** 1988 Oct;25(10):981–9

Lipid mediators of hypersensitivity. Bach MK. **Prog Allergy** 1988;44:10–98 (567 ref.)

ISOLATION & PURIFICATION

High-performance liquid chromatographic analysis of acylated lipids containing pyrene fatty acids. Homan R, et al. **Anal Biochem** 1989 Apr;178(1):166–71

Important data in understanding the interaction between the cell and collagen. Ozgüneş N, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):269–75

Diglycosyl phenol phthiocerol diester of Mycobacterium leprae. Daffé M, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):333–7

Composition and toxicity of lipids from Rhodococcus rhodochrous grown on medium containing galactose, glucose or mannose. de Almeida ET, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):45–50

Isolation and structural characterization of a new non-phosphorylated lipoamino acid from Mycobacterium phlei. Lerouge P, et al. **Chem Phys Lipids** 1988 Dec; 49(3):161–6

Integral lipids of mammalian hair. Wertz PW, et al. **Comp Biochem Physiol [B]** 1989;92(4):759–61

The effect of solvent extraction on the lipids of the stratum corneum in relation to observed immediate whitening of the skin. Goldsmith LB, et al. **Contact Dermatitis** 1988 Nov; 19(5):348–50

Rapid separation of neutral lipids, free fatty acids and polar lipids using prepacked silica Sep-Pak columns. Hamilton JG, et al. **Lipids** 1988 Dec;23(12):1146–9

Separation of neutral lipid, free fatty acid and phospholipid classes by normal phase HPLC. Hamilton JG, et al. **Lipids** 1988 Dec;23(12):1150–3

Analysis of brain and myelin lipids by high-performance thin layer chromatography and densitometry. Di Biase A, et al. **Neurochem Res** 1989 Feb;14(2):153–6

Identification of major lipids from the scent gland secretions of Dumeril's ground boa (Acrantophis dumerili Jan) by gas chromatography–mass spectrometry. Simpson JT, et al. **Z Naturforsch [C]** 1988 Nov–Dec;43(11–12):914–7

[Lithium and cerebral lipids: influence of the intracranial injection of lithium on the extraction of brain lipids in mice. Comparison with sodium] Ermidou-Pollet S, et al. **C R Acad Sci [III]** 1989;308(3):89–93 (Eng. Abstr.) (Fre)

METABOLISM

Morphology of the release of vitamin A–containing lipid droplets by perisinusoidal lipocytes in the rat liver. Kudo S. **Acta Anat (Basel)** 1989;135(3):261–8

Relationship between gallbladder histopathology and ability to concentrate biliary lipids and bilirubin. A study on gallstone patients with functioning gallbladder. Rådberg G, et al. **Acta Chir Scand** 1988 Oct;154(10):581–4

Acute effects of carbon disulphide on hepatic lipid metabolism in Fischer rats. Rojas Martini M. **Acta Cient Venez** 1987;38(3):362–5

Lipid binding properties of fatty acid binding protein isolated from mouse liver. Zanetti R, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):135–44

Tumor growth and lipid metabolism during lactation in the rat. Williamson DH, et al. **Adv Enzyme Regul** 1988; 27:93–104

Exchange and transfer of apolipoproteins and lipids: impact on lipoprotein metabolism. Kostner GM, et al. **Adv Exp Med Biol** 1988;243:333–8

Control of spontaneous lipid and protein transport. Pownall HJ. **Adv Exp Med Biol** 1988;243:173–7 (12 ref.)

In vivo and in vitro effects of copper(I)nicotinic acid complexes on lipids and lipoproteins. el-Saadani M, et al. **Agents Actions Suppl** 1988;26:247–58

Effects of antihypertensives on plasma lipids and lipoprotein metabolism. Krone W, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1729–34 (47 ref.)

Cytochemical studies of lipid metabolism: immunogold probes for lipoprotein lipase and cholesterol. Blanchette-Mackie EJ, et al. **Am J Anat** 1989 Jun–Jul; 185(2–3):255–63 (32 ref.)

Low carnitine intake and altered lipid metabolism in infants. Olson AL, et al. **Am J Clin Nutr** 1989 Apr;49(4):624–8

Lipids and progressive glomerulosclerosis. A model analogous to atherosclerosis. Keane WF, et al. **Am J Nephrol** 1988;8(4):261–71 (106 ref.)

Serum and bile lipid levels in a postmenopausal woman after percutaneous and oral natural estrogens. D'Amato G, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):600–1

The lipid-rich core region of human atherosclerotic fibrous plaques. Prevalence of small lipid droplets and vesicles by

electron microscopy. Guyton JR, et al. **Am J Pathol** 1989 Mar;134(3):705–17

Monoclonal antibody EMR1a/212D recognizing site of deposition of extracellular lipid in atherosclerosis: purification and characterization of the antigen. Nakagami K, et al. **Am J Pathol** 1989 Jul;135(1):93–100

Intestinal microvascular exchange during lipid absorption. Granger DN, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G690–5

Site of action of putative lipostatic factor: hypothalamic metabolism of parabiotic rats. Kasser TR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R224–8

Modulation of rat testes lipid composition by hormones: effect of PRL and hCG. Sebokova E, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E442–8

Role of lipids in calcification of cartilage. Boyan BD, et al. **Anat Rec** 1989 Jun;224(2):211–9 (104 ref.)

Biophysical aspects of lipid interaction with mineral: liposome model studies. Eanes ED. **Anat Rec** 1989 Jun; 224(2):220–5 (24 ref.)

The morphology of release of vitamin A–containing lipid droplets by hepatocytes in rat liver. Kudo S. **Anat Rec** 1989 Sep;225(1):11–20

Lipid–related barriers and gradients in the epidermis. Elias PM, et al. **Ann N Y Acad Sci** 1988;548:4–13 (54 ref.)

Lipid–containing cells in brains of normal and hypoxic infant monkeys: a quantitative and ultrastructural study. Goddard–Finegold J, et al. **Ann Neurol** 1989 Jul; 26(1):34–40

Second Créteil Symposium on Lipids, Lipoproteins and Nutrition. Nutritional control of enzymes of lipoprotein and lipid metabolism. March 25, 1988, Créteil, France. Abstracts. **Ann Nutr Metab** 1988;32(4):245–64

Effects of dietary alpha– and gamma–linolenic acid on lipid metabolism in young and adult rats. Choi YS, et al. **Ann Nutr Metab** 1988;32(3):169–76

Effects of gastric inhibitory polypeptide on glucose and lipid metabolism of isolated rat adipocytes. Hauner H, et al. **Ann Nutr Metab** 1988;32(5–6):282–8

Comparison of lipid content, surface membrane fluidity, and temperature dependence of cis–diamminedichloroplatinum(II) accumulation in sensitive and resistant human ovarian carcinoma cells. Mann SC, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1211–5

Lipid growth requirement and influence of lipid supplement on fatty acid and aldehyde composition of Syntrophococcus sucromutans. Doré J, et al. **Appl Environ Microbiol** 1989 Apr;55(4):927–33

Synthesis of lipid–linked oligosaccharides in Saccharomyces cerevisiae: Man2GlcNAc2 and Man1GlcNAc2 are transferred from dolichol to protein in vivo. Jackson BJ, et al. **Arch Biochem Biophys** 1989 Jul;272(1):203–9

CTP–dependent lipid kinases of yeast. Szkopińska A, et al. **Arch Biochem Biophys** 1988 Oct;266(1):124–31

Effects of isotretinoin on lipid metabolism in the rat. McMaster J, et al. **Arch Dermatol Res** 1989;281(2):116–8

Relative concentrations of 14C–DDT and of two polychlorinated biphenyls in the lipids of cod tissues after a single oral dose. Mitchell AI, et al. **Arch Environ Contam Toxicol** 1977;6(4):525–32

Effects of dietary protein levels on in vitro carbohydrate and lipid metabolism in broiler chickens. Haller J, et al. **Arch Exp Veterinarmed** 1988 May;42(3):414–8

Influence of protein content of diet on growth and lipid composition of European eel muscle and liver. Burgos C, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):117–21

Central retinal vein obstruction with lipid exudate. Brown GC. **Arch Ophthalmol** 1989 Jul;107(7):1001–5

Diet–induced hyperlipoproteinemia and lipid accumulation within spontaneous arterial lesions in the rat. Coutard M, et al. **Artery** 1989;16(3):118–39

Lipid microspherules in synovial fluid of patients with pigmented villonodular synovitis. Ugai K, et al. **Arthritis Rheum** 1988 Nov;31(11):1442–6

Effect of polyunsaturated fatty acids of the n–3 and n–6 series on lipid composition and eicosanoid synthesis of platelets and aorta and on immunological induction of atherosclerosis in rabbits. Bolton–Smith C, et al. **Atherosclerosis** 1988 Jul;72(1):29–35

Studies on hypocholesterolemic activity of rice bran oil. Seetharamaiah GS, et al. **Atherosclerosis** 1989 Aug; 78(2–3):219–23

Enhanced myocardial preservation by nicotinic acid, an antilipolytic compound: mechanism of action. Datta S, et al. **Basic Res Cardiol** 1989 Jan–Feb;84(1):63–76

Liver fat storing cell proliferation is stimulated by epidermal growth factor/transforming growth factor alpha and inhibited by transforming growth factor beta. Bachem MG, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):708–14

Effect of phorbolmyristate acetate on fatty acid uptake and distribution in human promyelocytic leukemia (HL–60) cells in vitro. Das UN. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):639–47

The binding of G proteins to immobilized delipidated rhodopsin. Dizhoor AM, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):544–9

Lipoprotein aggregation as an essential condition of intracellular lipid accumulation caused by modified low density lipoproteins. Tertov VV, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):489–94

The release of radioactive arachidonate from lipids of red blood cell membranes: properties of membrane and serum enzymatic activities. Baker RR, et al. **Biochem Cell Biol** 1988 Jul;66(7):795–801

Effect of histamine H1–receptor antagonist on the regulation of carbohydrate and lipid metabolism in rat liver. Koyama Y, et al. **Biochem Int** 1989 Feb;18(2):399–403

Interleukin–1 and lipid metabolism in the rat. Argilés JM, et al. **Biochem J** 1989 May 1;259(3):673–8

The use of two populations of hepatocytes with different triacylglycerol contents as a model to study the accumulation of liver lipid in the laying hen. Cross KE, et al. **Biochem J** 1988 Oct 1;255(1):259–65

Changes in both acyl–CoA:cholesterol acyltransferase activity and microsomal lipid composition in rat liver induced by distal–small–bowel resection. Molina MT, et al. **Biochem J** 1989 May 15;260(1):115–9

Re–examination of the putative roles of insulin and prolactin in the regulation of lipid deposition and lipogenesis in vivo in mammary gland and white and brown adipose tissue of lactating rats and litter–removed rats. Oller do Nascimento CM, et al. **Biochem J** 1989 Feb 15;258(1):273–8

Role of insulin in the integration of lipid metabolism in mammalian tissues. Williamson DH. **Biochem Soc Trans** 1989 Feb;17(1):37–40 (41 ref.)

Effects of lipid composition and packing on the adsorption of apolipoprotein A–I to lipid monolayers. Ibdah JA, et al. **Biochemistry** 1988 Sep 6;27(18):7155–62

Age–related changes in lipid metabolism in rats: the consequence of moderate food restriction. Choi YS, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):237–42

Alterations of cellular lipids in rat thymocytes during cell cycle progression. Gross G, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):220–6

Effects of in vivo and in vitro lindane treatment on rat ventral prostate lipids. Gutierrez–Ocaña MT, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):67–71

A mismatch between the length of gramicidin and the lipid acyl chains is a prerequisite for HII phase formation in phosphatidylcholine model membranes. Killian JA, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):341–5

Effect of CS–514, a competitive inhibitor of hydroxymethylglutaryl coenzyme A reductase, on cholesterol gallstone formation in hamsters. Koide K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):65–71

Developmental changes in the expression of genes involved in cholesterol biosynthesis and lipid transport in human and rat fetal and neonatal livers. Levin MS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):293–300

Retinoid–mediated induction of the fat–storing phenotype in a liver connective tissue cell line (GRX). Margis R, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):1–5

Effect of macromolecular composition of microorganisms on the thermodynamic description of their growth. Mulder MM, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):406–12

Activities of enzymes of lipid metabolism in Morris hepatoma 7800 C1 cells. Spydevold O, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):80–3

The effect of acetylcholine on inositol lipid metabolism and intracellular calcium concentrations in bovine anterior pituitary cells. Wood CA, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):180–9

Acetate and arachidonate incorporations into lipids of ovine chorioallantoic tissue at day 24 of pregnancy. Waterman RA, et al. **Biol Reprod** 1989 Apr;40(4):785–91

Effects of 2,3–dihydrophthalazine–1,4–dione on Sprague Dawley rats lipid metabolism and serum lipoproteins. Hall IH, et al. **Biomed Biochim Acta** 1988;47(4–5):423–33

The effects of eicozanoids and lipoxygenase inhibitors on the lipid metabolism of aortic cells. Tertov VV, et al. **Biomed Biochim Acta** 1988;47(10–11):S286–8

Oral contraceptives and lipids. Fotherby K. **BMJ** 1989 Apr 22;298(6680):1049–50 (4 ref.)

Microsomal cytochrome P–450–linked monooxygenase systems and lipid composition of human hepatocellular carcinoma. Hamamoto I, et al. **Br J Cancer** 1989 Jan; 59(1):6–11

Effects of labetalol on lipid metabolism. Goto Y, et al. **Br J Clin Pract** 1987 Oct;41(10):957–62

Lipid peroxidation of human granulocytes (PMN) and monocytes by iron complexes. Hoepelman IM, et al. **Br J Haematol** 1989 Aug;72(4):584–8

Protein and energy relations in the broiler chicken. Chronic or acute effects of alternating protein or intermittent feeding regimens on broiler lipid metabolism. Rosebrough RW, et al. **Br J Nutr** 1989 Mar;61(2):223–33

Influences of biotin deficiency and dietary trans–fatty acids on tissue lipids in chickens. Watkins BA. **Br J Nutr** 1989 Jan;61(1):99–111

Argon laser treatment of lipid keratopathy. Marsh RJ. **Br J Ophthalmol** 1988 Dec;72(12):900–4

Lipomobilizing effects of procaterol and yohimbine in the conscious dog: comparison of endocrinological, metabolic and cardiovascular effects. Valet P, et al. **Br J Pharmacol** 1989 May;97(1):229–39

Effects of glucose loads of 50 and 100 g on carbohydrate and lipid oxidation in normal human subjects. Foss MC, et al. **Braz J Med Biol Res** 1988;21(4):773–9

Effect of an anionic detergent on the lipid moieties of various cell types in the opercular epidermis of Rita rita. Roy D. **Bull Environ Contam Toxicol** 1988 Sep;41(3):352–9

Intestinal aspects of lipid absorption: in review. Thomson AB, et al. **Can J Physiol Pharmacol** 1989 Mar;67(3):179–91 (186 ref.)

Biosynthesis, in calf pancreas microsomes, of three lipid–linked oligosaccharide diphosphates from a synthetic dolichyl diphosphate tetrasaccharide. Goussault Y, et al. **Carbohydr Res** 1988 Aug 15;179:381–92

Lipogenesis and cholesterogenesis de novo in liver and adipose tissue. Alterations of lipid metabolism by the effect of short– and long–term thioacetamide administration to rats. Martín–Sanz P, et al. **Carcinogenesis** 1989 Mar; 10(3):477–81

Lipid metabolism of rat adipocytes in culture. Hu CY, et al. **Cell Biol Int Rep** 1989 Feb;13(2):171–80

Ultrastructural and biochemical studies of lipolysis by lipolysosomes in chick hepatocytes. Kanai M. **Cell Tissue Res** 1989 Mar;255(3):559–65

Oxidation of lipids. XV. Role of hydrophilic diarylamines as antioxidants in the oxidations of lipids and biological tissues. Niki E, et al. **Chem Biol Interact** 1988;67(1–2):81–93

Role of peptide structure in lipid–peptide interactions: nuclear magnetic resonance study of the interaction of pentagastrin and [Arg4]pentagastrin with dimyristoylphosphatidylcholine. Epand RM, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):105–10

Pyrene–labeled lipids: versatile probes of membrane dynamics in vitro and in living cells. Pownall HJ, et al. **Chem Phys Lipids** 1989 Jun;50(3–4):191–211 (42 ref.)

Circadian rhythm of liver parameters (cellular structures, mitotic activity, glycogen and lipids in liver and serum) during three consecutive cycles in phenobarbital–treated rats. Kast A, et al. **Chronobiol Int** 1988;5(4):363–85

Circadian rhythm of the liver of male rats pre–treated with phenobarbital—II. Hexobarbital sleeping time and lipids content in liver and serum. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):175–82

Lipid alterations in isolated, working rat hearts during ischemia and reperfusion: its relation to myocardial damage. van Bilsen M, et al. **Circ Res** 1989 Feb; 64(2):304–14

Significance of lipid mediators in shock states. Lefer AM. **Circ Shock** 1989 Jan;27(1):3–12

Lipids as endogenous Na,K–ATPase inhibitors in plasma of healthy individuals and in dialysis dependent patients. Vasdev SC, et al. **Clin Biochem** 1989 Aug;22(4):313–9

Autosomal dominant lamellar ichthyosis exhibits an abnormal scale lipid pattern. Melnik B, et al. **Clin Genet** 1989 Feb; 35(2):152–6

Lipid methylation, hormone action and compensatory hypertrophy in renal cortical tubules. Manzano F, et al. **Clin Physiol Biochem** 1989;7(1):27–33

Effect of replacing glucose with lipid on the energy metabolism of newborn infants. Van Aerde JE, et al. **Clin Sci** 1989 Jun;76(6):581–8

The influence of environmental salinity, temperature, ionizing irradiation and yellow or silver stage on lipid metabolism in the gills of the european eel (Anguilla anguilla). Hansen HJ, et al. **Comp Biochem Physiol [B]** 1979;63(4):483–90

Vitellogenin, lipid and carbohydrate metabolism during vitellogenesis and pregnancy, and after hormonal induction in the blenny Zoarces viviparus (L.). Korsgaard B, et al. **Comp Biochem Physiol [B]** 1979;63(2):245–51

Effect of dietary fatty acids differing by chain lengths and omega series on the growth and lipid composition of turbot Scophthalmus maximus L. Leger C, et al. **Comp Biochem Physiol [B]** 1979;64(4):345–50

Lipid composition of Trypanosoma cruzi. Oliveira MM, et al. **Comp Biochem Physiol [B]** 1977;58(2):195–9

Lipid and carbohydrate metabolism in euthyroid and hypothyroid chick embryo (Gallus domesticus). Raheja KL, et al. **Comp Biochem Physiol [B]** 1979;64(3):289–91

Dietary propylthiouracil and 17 beta–estradiol benzoate implant effects on liver carbohydrate and lipid metabolism in chicks. Rosebrough R, et al. **Comp Biochem Physiol [B]** 1989;92(4):659–65

Lipid dynamics in fish: aspects of absorption, transportation, deposition and mobilization. Sheridan MA. **Comp Biochem Physiol [B]** 1988;90(4):679–90 (99 ref.)

Comparative aspects of lipid metabolism in two shrews (Suncus etruscus and Crocidura russula). Sicart R, et al. **Comp Biochem Physiol [B]** 1978;61(1):77–80

A comparison of lipid metabolism in hepatocytes isolated from fed and starved neonatal and adult rats. Sly MR, et al. **Comp Biochem Physiol [B]** 1978;61(4):501–6

Lymph esterases of the house mouse (Mus musculus)—II. The role of esterase–2 in fat resorption. Wassmer B, et al. **Comp Biochem Physiol [B]** 1988;91(1):179–85

Serum and liver lipid composition and lecithin: cholesterol acyltransferase in horses, Equus caballus. Yamamoto M, et al. **Comp Biochem Physiol [B]** 1979;62(2):185–93

Lack of metabolic effects of a triphasic formulation containing norethindrone in normal women studied prospectively [letter] Crook D, et al. **Contraception** 1989 Jan;39(1):125–8

Comparative metabolic effects of three types of combined oral contraceptive pills in Chinese women. Prasad RN, et al. **Contraception** 1989 Jan;39(1):21–35

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):129–36

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant–2 rod acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):147–54

Fat metabolism in injury and stress. Wiener M, et al.

Crit Care Clin 1987 Jan;3(1):25–56 (143 ref.)

Lipid storage myopathy due to glutaric aciduria type II: treatment of a potentially fatal myopathy. Turnbull DM, et al. Dev Med Child Neurol 1988 Oct;30(5):667–72

Effect of myo-inositol and 73 on myocardial lipids and cardiac function in streptozocin-induced diabetic rats. Xiang H, et al. Diabetes 1988 Nov;37(11):1542–8

Mechanisms decreasing glucose oxidation in diabetes and starvation: role of lipid fuels and hormones. Randle PJ, et al. Diabetes Metab Rev 1988 Nov;4(7):623–38 (68 ref.)

Lipids, diabetes, and vascular disease: the time to act. Betteridge DJ. Diabetic Med 1989 Apr;6(3):195–218 (293 ref.)

Effect of paraquat administered intraperitoneally on the nonpolar lipids of rabbits. Hassan RA, et al. Ecotoxicol Environ Safety 1989 Feb;17(1):47–58

The effect of thyroid hormones on lipid composition and activities of lipid-synthesizing enzymes in the rat heart sarcolemma. Szymański PT, et al. Endokrynol Pol 1989; 40(1):43–9

Fat energy use and plasma lipid changes associated with exercise intensity and temperature. Sink KR, et al. Eur J Appl Physiol 1989;58(5):508–13

Staphylococcal alpha-toxin increases the permeability of lipid vesicles by cholesterol- and pH-dependent assembly of oligomeric channels. Forti S, et al. Eur J Biochem 1989 May 15;181(3):767–73

Effect of incorporation of isabgol husk in a low fibre diet on faecal excretion and serum levels of lipids in adolescent girls. Taneja A, et al. Eur J Clin Nutr 1989 Mar; 43(3):197–202

Fatty acid composition of liver lipids during ontogeny of the chick embryo: effect of a single dose of triiodothyronine. Gomez-Munoz A, et al. Exp Clin Endocrinol 1988 Mar;92(3):323–7

Endogenous opiates do not influence glucose and lipid metabolism in rat adipocytes. Hauner H, et al. Exp Clin Endocrinol 1988 Aug;91(3):350–4

Comparison of lipid accumulation and metabolism in carrageenan-induced granulomas to aorta and blood monocytes of normal and cholesterol-fed rabbits. Bell FP, et al. Exp Mol Pathol 1989 Jun;50(3):327–36

Low-density lipoproteins isolated from the blood of patients with coronary heart disease induce the accumulation of lipids in human aortic cells. Tertov VV, et al. Exp Mol Pathol 1989 Jun;50(3):337–47

Schistosoma mansoni: synthesis and release of phospholipids, lysophospholipids, and neutral lipids by schistosomula. Furlong ST, et al. Exp Parasitol 1989 Jul;69(1):65–77

Isolated cells in suspension for biological research—Part III. Structure and functional properties of enterocytes and adipocytes. Remke H, et al. Exp Pathol 1988;35(1):1–23 (149 ref.)

Lipid characterization and 14C-acetate metabolism in catfish taste epithelium. Brand JG, et al. Experientia 1989 Jan 15; 45(1):77–81

Interaction of benznidazole reactive metabolites with nuclear and kinetoplastic DNA, proteins and lipids from Trypanosoma cruzi. Díaz de Toranzo EG, et al. Experientia 1988 Oct 15;44(10):880–1

Lipid phosphorylation in isolated rat liver nuclei. Synthesis of polyphosphoinositides at subnuclear level. Capitani S, et al. FEBS Lett 1989 Aug 28;254(1–2):194–8

Signal transduction in EJ-H-ras-transformed cells: de novo synthesis of diacylglycerol and subversion of agonist-stimulated inositol lipid metabolism. Chiarugi VP, et al. FEBS Lett 1989 Jul 31;252(1–2):129–34

The role of ubiquinones in the regulation of lipid metabolism in rat thymocytes. Novoselova EG. FEBS Lett 1989 Jun 5;249(2):371–4

Hydroxyl radical generation by the tetracycline antibiotics with free radical damage to DNA, lipids and carbohydrate in the presence of iron and copper salts. Quinlan GJ, et al. Free Radic Biol Med 1988;5(5–6):341–8

Cholestasis of total parenteral nutrition: bile acid and bile lipid metabolism in parenterally nourished rats. Lirussi F, et al. Gastroenterology 1989 Feb;96(2 Pt 1):493–502

Inhibition of peroxisomal beta-oxidation and brain development in rats. Van den Branden C, et al. GLIA 1989; 2(4):260–5

The testicular lesion and sexual differentiation in congenital lipoid adrenal hyperplasia. Ogata T, et al. Helv Paediatr Acta 1989 Jun;43(5–6):531–8

Isolation, culture and main characteristics of mouse fat-storing cells: interaction with viruses. Chen W, et al. Hepatology 1989 Mar;9(3):352–62

Analysis of hepatotoxicity in maternal and fetal rats after glucocorticoid administration by lipid histochemistry and thin layer chromatography. Frank HG, et al. Histochemistry 1989;91(6):487–94

Lipid metabolism in lipoatrophic diabetes. Enzi G, et al. Horm Metab Res 1988 Sep;20(9):587–91

Gossypol and testicular lipids of adult rats. Sheriff DS. Horm Metab Res 1988 Nov;20(11):691–2

Are regional metabolic differences of adipose tissue responsible for different risks of obesity? Björntorp P. Horm Metab Res Suppl 1988;19:23–5 (22 ref.)

Regulation of the intravascular pathways of intestinal lipids. Windler E, et al. Horm Metab Res Suppl 1988;19:4–6 (9 ref.)

Genetics of the quantitative Lp(a) lipoprotein trait. III. Contribution of Lp(a) glycoprotein phenotypes to normal lipid variation. Boerwinkle E, et al. Hum Genet 1989 Apr; 82(1):73–8

Influence of lipid composition on the sensitivity of Candida albicans to antifungal agents. Mago N, et al. Indian J Biochem Biophys 1989 Feb;26(1):30–3

Influence of dietary hexachlorocyclohexane isomers on lipid metabolism in albino rats. Srinivasan K, et al. Indian J Biochem Biophys 1989 Feb;26(1):34–8

Effect of injected organ homogenates on tissue lipid metabolites of uninfected snail host Lymnaea luteola. Rao MR, et al. Indian J Exp Biol 1988 Aug;26(8):647–8

Toxicity of soybean lectins: effect on lipid metabolism and lipid peroxidation. Soni GL, et al. Indian J Exp Biol 1988 Sep;26(9):697–9

Effect of dietary Zn-deficiency on the distribution of lipids in the ovary of mature mouse. Taneja SK, et al. Indian J Exp Biol 1988 Apr;26(4):271–3

Age-related changes in lipid profiles & lipid peroxidation in the CNS following restraint stress. Gupta A, et al. Indian J Med Res 1988 Jun;87:624–30

Neurochemical effects of phosphamidon on lipid fractions & lipid peroxidation in the rat central nervous system. Naqvi SM, et al. Indian J Med Res 1988 Jul;88:85–90

Lipid-modified surface protein antigens expressing size variation within the species Mycoplasma hyorhinis. Boyer MJ, et al. Infect Immun 1989 Jan;57(1):245–54

Temporal changes in plasma and liver lipids and in the hepatic activities of acetyl-coenzyme a carboxylase and fatty acid synthetase after oestrogen treatment of the male chicken (Gallus domesticus). Manning R, et al. Int J Biochem 1989;21(5):517–23

Effects of lectins with various carbohydrate binding specificities on lipid metabolism in isolated rat and hamster adipocytes. Ng TB, et al. Int J Biochem 1989;21(2):149–55

Lipid composition of brown adipose tissue mitochondria and microsomes in hyperthyroid rats. Ruggiero FM, et al. Int J Biochem 1989;21(3):327–32

Effects of different beta-blockers on lipid metabolism in chronic therapy of hypertension. Fogari R, et al. Int J Clin Pharmacol Ther Toxicol 1988 Dec;26(12):597–604

Clear cell carcinoma of the endometrium with lipid-producing activity. Histologic and ultrastructural study suggesting a unique neoplasm. Yorishima M, et al. Int J Gynecol Pathol 1989;8(3):286–95

Effects of fasting on the myocardial subcellular distribution and lipid distribution of terminal p-iodophenyl-substituted fatty acids in rats. Ambrose KR, et al. Int J Rad Appl Instrum [B] 1988;15(6):695–700

Meibomian gland dysfunction. III. Meibomian gland lipids. Nicolaides N, et al. Invest Ophthalmol Vis Sci 1989 May; 30(5):946–51

Pathogenesis of experimental lipid keratopathy. An ultrastructural study of an animal model system. Roth SI, et al. Invest Ophthalmol Vis Sci 1988 Oct;29(10):1544–51

Demonstration of increased myocardial lipid with postischemic dysfunction ("myocardial stunning") by proton nuclear magnetic resonance spectroscopy. Reeves RC, et al. J Am Coll Cardiol 1989 Mar 1;13(3):739–44

Effect of ractopamine on insulin sensitivity and response of isolated rat adipocytes. Hausman DB, et al. J Anim Sci 1989 Jun;67(6):1455–64

Modulation of luteal activity in postpartum beef cows through changes in dietary lipid. Williams GL. J Anim Sci 1989 Mar;67(3):785–93

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. I. Effects of cerulenin on active oxygen-generation and lipid metabolism in phagocytes. Nakata M, et al. J Antibiot (Tokyo) 1989 Jul;42(7):1171–7

Increase of ornithine amino lipid content in a sulfonolipid-deficient mutant of Cytophaga johnsonae. Pitta TP, et al. J Bacteriol 1989 Feb;171(2):952–7

Brain lipids in rat after chronic diazepam treatment. Vrbaški SR, et al. J Biochem (Tokyo) 1989 May;105(5):705–7

Increased translatable mRNA and decreased lipogenesis are responsible for the augmented secretion of lipid-deficient apolipoprotein E by hepatocytes from fasted rats. Davis RA, et al. J Biol Chem 1989 May 25;264(15):8970–7

Expression of human preproapo AI and pre(delta pro)apoAI in a murine pituitary cell line (AtT-20). A comparison of their intracellular compartmentalization and lipid affiliation. Fennewald SM, et al. J Biol Chem 1988 Oct 25;263(30):15568–77

Studies on the purified, lipid-reconstituted (Na+ + Mg2+)-ATPase from Acholeplasma laidlawii B membranes. Dependence of enzyme activity on lipid headgroup and hydrocarbon chain structure. George R, et al. J Biol Chem 1989 Jul 15;264(20):11598–604

Lipid transport during mitosis. Alternative pathways for delivery of newly synthesized lipids to the cell surface. Kobayashi T, et al. J Biol Chem 1989 Apr 5; 264(10):5966–73

A role for lipids in the functional and structural properties of the rat liver aminoacyl-tRNA synthetase complex. Sivaram P, et al. J Biol Chem 1988 Dec 15;263(35):18891–6

Mechanisms of selective alpha1-inhibition in lipid metabolism. Role of doxazosin. Proceedings of an international workshop. Puerto Rico, April 16, 1988. J Cardiovasc Pharmacol 1989;13 Suppl 2:S1–52

Factors influencing the lipid response to selective alpha 1-inhibition. Dzau VJ. J Cardiovasc Pharmacol 1989;13 Suppl 2:S50–2; discussion S52 (9 ref.)

Influence of doxazosin on lipid transport in rats and hamsters. Ontko JA, et al. J Cardiovasc Pharmacol 1989;13 Suppl 2:S31–6; discussions 36–7

Metabolic effects of calcium antagonists in humans, with emphasis on carbohydrate, lipid, potassium, and uric acid homeostases. Trost BN, et al. J Cardiovasc Pharmacol 1988; 12 Suppl 6:S86–92 (73 ref.)

Phospholipase A2-mediated release of arachidonic acid in stimulated guinea pig alveolar macrophages: interaction with lipid mediators and cyclic AMP. Kadiri C, et al. J Cell Biochem 1989 Jun;40(2):157–64

Pigmented, lipid-laden histiocytes in the central nervous system in chronic granulomatous disease of childhood. Riggs JE, et al. J Child Neurol 1989 Jan;4(1):61–3

Effect of tumor necrosis factor (TNF) on lipid metabolism in the diabetic rat. Evidence that inhibition of adipose tissue lipoprotein lipase activity is not required for TNF-induced hyperlipidemia. Feingold KR, et al. J Clin Invest 1989 Apr; 83(4):1116–21

Calcium/calmodulin-mediated action of calcitonin on lipid metabolism in rats. Nishizawa Y, et al. J Clin Invest 1988 Oct;82(4):1165–72

Adherence of neutrophils to cultured human microvascular endothelial cells. Stimulation by chemotactic peptides and lipid mediators and dependence upon the Mac-1, LFA-1, p150,95 glycoprotein family. Tonnesen MG, et al. J Clin Invest 1989 Feb;83(2):637–46

Regulation of leucine catabolism by caloric sources. Role of glucose and lipid in nitrogen sparing during nitrogen deprivation. Vazquez JA, et al. J Clin Invest 1988 Nov; 82(5):1606–13

Effect of exogenous bovine somatotropin on mammary lipid metabolism and milk yield in lactating dairy cows. Lough DS, et al. J Dairy Sci 1989 Jun;72(6):1469–76

Short-term and long-term effects of early nutritional deprivation on adipose tissue growth and metabolism in calves. Robelin J, et al. J Dairy Sci 1989 Feb;72(2):505–13

Eugenia uniflora leaf extract and lipid metabolism in Cebus apella monkeys. Ferro E, et al. J Ethnopharmacol 1988 Dec; 24(2–3):321–5

Effects of active compounds isolated from Angelica shikokiana on lipid metabolism in fat cells. Kimura Y, et al. J Ethnopharmacol 1989 May;25(3):269–80

Metabolic changes in coho and chinook salmon resulting from acute insufficiency in pancreatic hormones. Plisetskaya EM, et al. J Exp Zool 1989 Feb;249(2):158–64

Enzyme activities in oleaginous yeasts accumulating and utilizing exogenous or endogenous lipids. Holdsworth JE, et al. J Gen Microbiol 1988 Nov;134 (Pt 11):2907–15

The renal antihypertensive endocrine function: its relation to cytochrome P-450. Muirhead EE, et al. J Hypertens 1989 May;7(5):361–9

Cellular mechanisms of hypertension and atherosclerosis: hypoxia-induced lipid accumulation in cultured vascular smooth muscle cells from the stroke-prone spontaneously hypertensive rat. Shimizu S, et al. J Hypertens Suppl 1988 Dec;6(4):S163–5

The effects of rHuIFN-alpha A/D on brain lipids and behavior of neonatal ICR Swiss albino mice. Myers-Kazimer R, et al. J Interferon Res 1989 Feb; 9(1):11–21

Murine keratinocyte cultures grown at the air/medium interface synthesize stratum corneum lipids and "recycle" linoleate during differentiation. Madison KC, et al. J Invest Dermatol 1989 Jul;93(1):10–7

Molecular models of the intercellular lipid lamellae in mammalian stratum corneum. Swartzendruber DC, et al. J Invest Dermatol 1989 Feb;92(2):251–7

Membrane structural alterations in murine stratum corneum: relationship to the localization of polar lipids and phospholipases [letter] Wertz PW, et al. J Invest Dermatol 1989 Feb;92(2):305–6

Neutral lipid accumulation in macrophages during lipid-induced macrophage growth. Yui S, et al. J Leukoc Biol 1989 Mar;45(3):189–97

Effect of linoleic acid-rich infant formula feeding on brain synaptosomal lipid accretion and enzyme thermotropic behavior in the piglet. Hrboticky N, et al. J Lipid Res 1989 Aug;30(8):1173–84

Effects of dietary retinoid and triglyceride on the lipid composition of rat liver stellate cells and stellate cell lipid droplets. Moriwaki H, et al. J Lipid Res 1988 Nov; 29(11):1523–34

Interaction of plasma-derived lipid transfer protein with macrophages in culture. Morton RE. J Lipid Res 1988 Oct; 29(10):1367–77

Effects of monosulfate esters of taurochenodeoxycholate on bile flow and biliary lipids in hamsters. Stevens RD, et al. J Lipid Res 1989 May;30(5):673–9

Lipid metabolism during early stages of Wallerian degeneration in the rat sciatic nerve. White FV, et al. J Neurochem 1989 Apr;52(4):1085–92

Traumatic brain injury in the rat: effects on lipid metabolism, tissue magnesium, and water content. Demediuk P, et al. J Neurotrauma 1988;5(2):105–19

Effects of dietary fish oil or pectin on blood pressure and lipid metabolism in the DOCA-salt hypertensive rat. Bond V, et al. J Nutr 1989 May;119(5):813–7

Roles of omega 3 fatty acids and chronic ethanol in the regulation of plasma and liver lipids and plasma apoproteins A1 and E in rats. Lakshman MR, et al. J Nutr 1988 Nov; 118(11):1299–303

Effect of dietary n-3 fatty acids on weight gain and liver

polar lipid fatty acid composition of fingerling channel catfish. Satoh S, et al. **J Nutr** 1989 Jan;119(1):23–8

Dietary effect of Ganoderma lucidum mushroom on blood pressure and lipid levels in spontaneously hypertensive rats (SHR). Kabir Y, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug;34(4):433–8

Effect of polychlorinated biphenyls on lipids and ascorbic acid metabolism in streptozotocin-induced diabetic rats. Kawai-Kobayashi K, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Jun;34(3):281–91

Binding of drugs to human skin: influencing factors and the role of tissue lipids. Walter K, et al.
J Pharm Pharmacol 1988 Oct;40(10):689–93

Effects of quaternary ammonium compounds on the degradation of lipids in lysosomes. Matsumoto Y, et al. **J Pharmacobiodyn** 1989 Feb;12(2):113–7

Biochemistry and metabolism of Giardia. Jarroll EL, et al. **J Protozool** 1989 Mar–Apr;36(2):190–7 (21 ref.)

Influence of exercise and cholesterol feeding on lipids and lipoproteins in rats. Buck EE, et al.
J Sports Med Phys Fitness 1989 Mar;29(1):71–6 (32 ref.)

Nutritional benefits of exercise. Shephard RJ.
J Sports Med Phys Fitness 1989 Mar;29(1):83–90 (72 ref.)

Contrasting effects of testosterone and stanozolol on serum lipoprotein levels. Thompson PD, et al. **JAMA** 1989 Feb 24;261(8):1165–8

The role of lipids in nutrition and disease. Proceedings of the 3rd A.S.P.E.N. Research Workshop. January 17–20, 1988, Las Vegas, Nevada.
JPEN J Parenter Enteral Nutr 1988 Nov–Dec;12(6 Suppl):35S–138S

Effects of L-carnitine supplemented total parenteral nutrition on lipid and energy metabolism in postoperative stress. Pichard C, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):555–62

Alterations in lipid and carbohydrate metabolism in sepsis. Spitzer JJ, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):53S–58S (38 ref.)

Invited comment: the importance of emulsion composition in evaluating different lipids in vivo. Yoshimura NN.
JPEN J Parenter Enteral Nutr 1988 Nov–Dec;12(6 Suppl):91S–93S

Abnormal lipid metabolism in adjuvant arthritic rats. Yamaguchi Y, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):377–86

Effects of reduced renal mass on tissue lipids and renal injury in hyperlipidemic rats. Kasiske BL, et al. **Kidney Int** 1989 Jan;35(1):40–7

Reversible phenotypic modulation induced by deprivation of exogenous essential fatty acids. Laposata M, et al.
Lab Invest 1988 Dec;59(6):838–47

Retinol transport in cultured fat-storing cells of rat liver. Quantitative analysis by anchored cell analysis and sorting system. Matsuura T, et al. **Lab Invest** 1989 Jul;61(1):107–15

Incorporation of trans-8- and cis-8-octadecenoic acid isomers in human plasma and lipoprotein lipids. Emken EA, et al. **Lipids** 1989 Jan;24(1):61–9

Differential effects of dietary linoleic and alpha-linolenic acid on lipid metabolism in rat tissues. Garg ML, et al.
Lipids 1988 Sep;23(9):847–52

Age-related changes in the lipid compositions of rat and human tissues. Kalén A, et al. **Lipids** 1989 Jul;24(7):579–84

Changes in lipid composition of liver microsomes and fatty acyl-CoA desaturase activities induced by medium chain triglyceride feeding. Periago JL, et al. **Lipids** 1989 May; 24(5):383–8

Fenton reactions in lipid phases. Schaich KM, et al.
Lipids 1988 Jun;23(6):570–9

Electron spin resonance imaging of tissues with lipid-rich areas. Bačić G, et al. **Magn Reson Med** 1988 Oct; 8(2):209–19

High-resolution 1H NMR spectral signature from human atheroma. Pearlman JD, et al. **Magn Reson Med** 1988 Jul; 7(3):262–79

Kupffer cells from CCl(4)-treated rat livers induce skin fibroblast and liver fat-storing cell proliferation in culture. Armendáriz-Borunda J, et al. **Matrix** 1989 Mar;9(2):150–8

Personal opinion. Progestogens and lipids. Gambrell RD Jr. **Maturitas** 1988 Oct;10(3):175–9 (20 ref.)

The roles of haemolymphatic lipoproteins in the oogenesis of Rhodnius prolixus. Gondim KC, et al.
Mem Inst Oswaldo Cruz 1987;82 Suppl 3:89–92

Effects of cimaterol, a beta-adrenergic agonist, on lipid metabolism in rats. Eadara JK, et al. **Metabolism** 1989 Jun; 38(6):522–9

Changes in soft tissue body composition and plasma lipid metabolism during nandrolone decanoate therapy in postmenopausal osteoporotic women. Hassager C, et al. **Metabolism** 1989 Mar;38(3):238–42

Phenotypes of apolipoprotein E and abnormalities in lipid metabolism in patients with non-insulin-dependent diabetes mellitus. Imari Y, et al. **Metabolism** 1988 Dec;37(12):1134–8

Changes in whole body lipid composition in a murine model of insulin-dependent diabetes mellitus. Rabinowitz JL, et al. **Metabolism** 1989 Aug;38(8):777–80

Comparison of intraperitoneal and subcutaneous insulin administration on lipids, apolipoproteins, fuel metabolites, and hormones in type I diabetes mellitus. Selam JL, et al. **Metabolism** 1989 Sep;38(9):908–12

Streptozotocin-induced diabetes in rat. II. Lipid and lipid peroxide changes of lipoprotein fractions in diabetes complicated by hypertension and myocardial infarction. Somova L, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):751–4

Involvement of lipids in the interaction of Sindbis virus with goose erythrocytes. Mastromarino P, et al.
Microbiologica 1989 Apr;12(2):113–20

Effect of different dietary brans on lipid metabolism in male albino rats. Muzaffar M, et al. **Nahrung** 1989;33(2):167–70

Effect of interesterified dietary fat mixtures on various lipid indices and liver metal content of rats in fat-metabolism disturbance. Zsinka AJ, et al. **Nahrung** 1988;32(9):815–21

Intraglomerular lipid deposition in experimental focal glomerular sclerosis in the rat [letter] Ohsawa H, et al. **Nephron** 1988;50(1):66

Cerebral perfusion of metabolic inactivators: a new method for rapid fixation of labile lipid pools in brain. Birkle DL, et al. **Neurochem Res** 1988 Sep;13(9):849–52

In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate.
Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91–6

Myelin lipids in senile rat brain. Wender M, et al.
Neuropatol Pol 1988;26(4):555–60

Retinal lipid deposits in malignant arterial hypertension. Hayreh SS, et al. **Ophthalmologica** 1989;198(4):216–29

Gastric lipolysis and fat absorption in preterm infants: effect of medium-chain triglyceride or long-chain triglyceride-containing formulas. Hamosh M, et al.
Pediatrics 1989 Jan;83(1):86–92

Lipolytic activities of p-aminophenol and n-decylamine in endogenous lipid droplets from rat adipocytes. Okuda H, et al. **Pharmacol Res** 1989 May-Jun;21(3):255–62

The effect of oxiracetam treatment on alterations of lipid metabolism in brain areas from spontaneously hypertensive rats. Perini S, et al. **Pharmacol Res** 1989 May-Jun; 21(3):313–23

Lipid metabolism and retinoid therapy. Marsden JR.
Pharmacol Ther 1989;40(1):55–65 (49 ref.)

Inositol lipids: receptor-stimulated hydrolysis and cellular lipid pools. Michell RH, et al.
Philos Trans R Soc Lond [Biol] 1988 Jul 26; 320(1199):239–46 (27 ref.)

Serum and liver lipids of rats fed rubber seed oil. Nwokolo E, et al. **Plant Foods Hum Nutr** 1988;38(2):145–53

Screening of the influence of flavonoids on lipoxygenase and cyclooxygenase activity, as well as on nonenzymic lipid oxidation. Robak J, et al. **Pol J Pharmacol Pharm** 1988 Sep-Oct;40(5):451–8

Effects of sex steroids on lipids and lipoproteins. Samsioe G. **Postgrad Med** 1989 Apr;Spec No:59–63; discussion 89–90

Corticosterone implants and supplemental dietary ascorbic acid effects on lipid metabolism in broiler chicks. Kafri I, et al. **Poult Sci** 1988 Sep;67(9):1356–9

The changes of fat absorption after resection for carcinoma of the gastric cardia—a comparison between total and proximal subtotal gastrectomy. Zhang YT, et al.
Proc Chin Acad Med Sci Peking Union Med Coll 1988; 3(4):232–5

Receptor-like function of heparin in the binding and uptake of neutral lipids. Bosner MS, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7438–42

Lipid metabolism in man. Gurr MI. **Proc Nutr Soc** 1988 Sep; 47(3):277–85 (41 ref.)

Lipid metabolism in farm animals. Vernon RG, et al.
Proc Nutr Soc 1988 Sep;47(3):287–93 (39 ref.)

Prevention of the effects of diabetes on rat cardiac performance and lipid metabolism by L-carnitine. Xiang H, et al. **Proc West Pharmacol Soc** 1988;31:157–9

Role of zinc in lipid and fatty acid metabolism and in membranes. Cunnane SC. **Prog Food Nutr Sci** 1988; 12(2):151–88 (218 ref.)

Lipids and thyroid hormones. Hoch FL. **Prog Lipid Res** 1988; 27(3):199–270 (653 ref.)

Metabolism and function of skin lipids. Ziboh VA, et al.
Prog Lipid Res 1988;27(2):81–105 (121 ref.)

Effects of essential fatty acid deficiency on renal papillary lipid methylation. O'Dea RF Jr, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Sep; 33(3):199–202

Integration of carbohydrate and lipid metabolism in skeletal muscle during postnatal development. Challiss RA, et al. **Reprod Nutr Dev** 1988;28(3B):805–15 (76 ref.)

Effect of glycerol treatment on pulmonary lipid metabolism in mice. Yano T, et al.
Res Commun Chem Pathol Pharmacol 1988 Sep; 61(3):417–20

Hepatocyte heterogeneity and liver function.
Revis Biol Celular 1989;19:1–161 (398 ref.)

Effects of verapamil on intracellular lipid accumulation in cat hearts with 3 h of regional-ischaemia. Jodaien H, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):55–61

Evidence for potentiation of lipid peroxidation in the rat liver after chronic ethanol feeding. Yamada S, et al.
Scand J Clin Lab Invest 1988 Nov;48(7):627–32

Oxidative effects of heme and porphyrins on proteins and lipids. Vincent SH. **Semin Hematol** 1989 Apr;26(2):105–13 (71 ref.)

The role of the placenta in lipid metabolism and transport. Coleman RA. **Semin Perinatol** 1989 Jun;13(3):180–91 (148 ref.)

Anabolic-androgenic steroid effects on endocrinology and lipid metabolism in athletes. Alén M, et al. **Sports Med** 1988 Dec;6(6):327–32 (58 ref.)

Dependence of lipid-lipoprotein metabolism on exercise intensity in experimental fatty liver rats. Terao T, et al.
Tokai J Exp Clin Med 1988 Jun;13(2):99–107

Alterations in lipid metabolism and cellular morphology in the liver of female rats treated with ethmozine. Vincent DR, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):456–63

Lipid ingestion from sheep epidermis by Psoroptes ovis (Acari: Psoroptidae). Sinclair AN, et al. **Vet Parasitol** 1989 May;31(2):149–64

Spatial dispersion of stainable lipid in frozen sections of human aorta. Tracy RE, et al. **Virchows Arch [A]** 1989; 415(1):39–49

Influence of dietary carnitine on lipid and carbohydrate metabolism in rats. Meijer GW, et al. **Z Ernahrungswiss** 1988 Jun;27(2):77–83

[The association of non-insulin-dependent diabetes mellitus with the genes responsible for carbohydrate and lipid metabolism in the Chinese] Xiang KS, et al.
Chung Hua I Hsueh Tsa Chih 1988 Oct;68(10):552–6, 38 (Eng. Abstr.) (Chi)

[Interaction of lipids and lipoproteins with connective components in the vascular wall] Hanil T, et al.
Cesk Fysiol 1986;35(5):387–98 (55 ref.) (Cze)

[Feminar with whey (serum) proteins prepared by thermal denaturation. Nitrogen and lipid balance in neonates with a low birth weight] Melichar V, et al. **Cesk Pediatr** 1989 Jan;44(1):1–5 (Eng. Abstr.) (Cze)

[Circadian variations in hemolymph lipids and lipoproteins and in hepatopancreatic lipids of the shrimp Penaeus japonicus] Vazquez-Boucard C, et al.
Arch Int Physiol Biochim 1989 Feb;97(1):87–93 (Eng. Abstr.) (Fre)

[Effects of intensified insulin therapy on fat metabolism in type 1 diabetes mellitus] Dzien A, et al.
Dtsch Med Wochenschr 1988 Oct 28;113(43):1669–72 (Eng. Abstr.) (Ger)

[Regulation of fat metabolism to reduce coronary risk. Product workshop "Clinical results with Normalip 250 N." Copenhagen, 3 June 1989. Abstracts] **Fortschr Med** 1989; 107 Suppl 68:1–15 (Ger)

[1st Forum on Lipids. The recognition and treatment of fat metabolism disorders in the prevention of atherosclerosis. Lindauer] **Internist (Berlin)** 1988 Oct;29(10 Suppl):1–12 (Ger)

[Effect of omega-3-fatty acids on biliary lipids and lithogenicity] Wechsler JG, et al. **Z Gastroenterol** 1989 May;27(5):254–7 (Eng. Abstr.) (Ger)

[New lipid biochemical aspects in the pathogenesis of a follicular keratinization disorder in acne vulgaris] Melnik B, et al. **Z Hautkr** 1988 Jul 15;63(7):591–2, 595–6 (Eng. Abstr.) (Ger)

[The lipid infiltration theory of atherosclerosis] Dargel R. **Z Med Lab Diagn** 1989;30(5):251–5 (21 ref.) (Ger)

[Mid-term effects of l-carnitine on the lipidogram of rabbits with surgically denervated heart] Bononi P, et al.
Boll Soc Ital Biol Sper 1989 Mar;65(3):255–8 (Eng. Abstr.) (Ita)

[Changes in carbohydrate and lipid metabolism in chronic renal insufficiency] Cassader M, et al. **Clin Ter** 1987 Aug 31;122(4):271–9 (56 ref.) (Eng. Abstr.) (Ita)

[Effects on lipid metabolism of inhibitors of cholesterol synthesis] Guarini G, et al. **Clin Ter** 1988 Apr 15; 125(1):41–50 (Eng. Abstr.) (Ita)

[Lipid metabolism in the rat brain during growth and the effect of maternal ethanol consumption] Arienti G, et al.
Minerva Ginecol 1988 Apr;40(4):249–54 (Eng. Abstr.) (Ita)

[Basal lipid energy utilization in obese women and men] Verga S, et al. **Recenti Prog Med** 1989 Apr;80(4):177–9 (Eng. Abstr.) (Ita)

[Lipids and peripheral arteriopathies] Pasini GF, et al.
Riv Eur Sci Med Farmacol 1987 Sep;9(3):269–71 (12 ref.) (Eng. Abstr.) (Ita)

[Clinical effects of Juzendaiho-to on immunologic and fatty metabolic states in postoperative patients with gastrointestinal cancer] Okamoto T, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-2):1533–7 (Eng. Abstr.) (Jpn)

[Lipid metabolism in daunomycin induced nephrotic rats. (Part 4)] Gomikawa S, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):999–1004 (Eng. Abstr.) (Jpn)

[Lipid and apoprotein abnormalities in the stroke subjects with or without atherosclerotic vascular lesions in the main truncus of cerebral arteries] Kida Y, et al.
Nippon Naika Gakkai Zasshi 1988 Jun;77(6):788–92 (Jpn)

[A case of familial hypobetalipoproteinemia with lipid deposition of the rectum] Mori M, et al.
Nippon Naika Gakkai Zasshi 1988 Jun;77(6):827–33 (Jpn)

[Effect of diet with changed fat composition on various indicators of lipid and energy metabolism in infants born with intrauterine dystrophy] Szotowa W, et al.
Pediatr Pol 1974 Feb;49(2):143–7 (Eng. Abstr.) (Pol)

[Cytochrome P-450-dependent renal monooxygenases] Czekaj P, et al. **Postepy Hig Med Dosw** 1988 Nov–Dec; 42(6):640–64 (52 ref.) (Eng. Abstr.) (Pol)

[The homocysteine theory of arteriosclerosis] Toborek M, et al. **Przegl Lek** 1988;45(5):465–8 (31 ref.) (Pol)

[The role of metabolic disorders in the pathogenesis of obesity] Zahorska-Markiewicz B, et al. **Przegl Lek** 1988; 45(8):641–4 (32 ref.) (Pol)

[Lipids and joint inflammation] Boloşiu HD.
Rev Med Interna [Med Interna] 1988 May–Jun;40(3):217–22 (24 ref.) (Eng. Abstr.) (Rum)
[Dynamics of lipid accumulation on human aortic walls in atherosclerosis] Babaev VR, et al. **Arkh Patol** 1988; 50(11):35–40 (Eng. Abstr.) (Rus)
[The effect of cholesterol oxidation products on the disruption of lipid metabolism and atherosclerotic damage of the aorta in rabbits] Vikhert AM, et al. **Arkh Patol** 1988; 50(11):15–22 (Eng. Abstr.) (Rus)
[Relation between activity of antioxidants and oxidation of substrates in natural lipids] Burlakova EB, et al.
Biofizika 1988 Sep–Oct;33(5):781–6 (Eng. Abstr.) (Rus)
[A study of the stability of liposomes from the total lipid fraction of E. coli by means of fluorescence spectroscopy and a radioisotope probe] Cherniavskiĭ VA, et al.
Biofizika 1988 Nov–Dec;33(6):973–7 (Eng. Abstr.) (Rus)
[Effect of cycloheximide on lipid metabolism in cells, nuclei and subcellular fractions in the rat liver] Alesenko AV, et al. **Biokhimiia** 1989 Feb;54(2):328–37 (Eng. Abstr.) (Rus)
[Changes in the physico-chemical characteristics of mouse liver lipids after administration of a mixture of unsaturated fatty acids] Kukhtina EN, et al. **Biokhimiia** 1988 Sep; 53(9):1479–85 (Eng. Abstr.) (Rus)
[The role of ubiquinones in regulating lipid metabolism in rat thymocytes] Novoselova EG. **Biokhimiia** 1989 Jan; 54(1):27–32 (Eng. Abstr.) (Rus)
[Change in the composition of phospholipids and antioxidative activity of lipids of mouse organs after administration of adriamycin] Pal'mina NP, et al.
Biokhimiia 1988 Nov;53(11):1888–94 (Eng. Abstr.) (Rus)
[Composition of DNA-bound lipids in the regenerating rat liver] Struchkov VA, et al. **Biokhimiia** 1988 Sep; 53(9):1449–54 (Eng. Abstr.) (Rus)
[The interrelationship of the processes of lipid peroxidation and lipid phospholipase hydrolysis in the synaptosomes] Nikushkin EV, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):174–7 (Eng. Abstr.) (Rus)
[A stage of the inhibition of free radical lipid oxidation precedes its activation during stress] Guliaeva NV, et al. **Dokl Akad Nauk SSSR** 1988;300(3):748–52 (Rus)
[DNA-bound lipids of the cells of Zajdela ascites hepatoma and of Ehrlich ascites cancer] Struchkov VA, et al.
Eksp Onkol 1989;11(1):35–9 (Eng. Abstr.) (Rus)
[Thyroid hormones and lipid metabolism] Nikitin VN, et al. **Fiziol Zh** 1989 May–Jun;35(3):91–8 (46 ref.) (Eng. Abstr.) (Rus)
[Carbohydrate and lipid metabolism in rats during adaptation to cold] Pal'chikova NA, et al. **Fiziol Zh** 1989 Mar–Apr; 35(2):61–5 (Eng. Abstr.) (Rus)
[Lipid metabolism in the gastrointestinal tract of lactating cows during the duodenal infusion of choline chloride and methionine] Dudina VM, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):1001–9 (Eng. Abstr.) (Rus)
[Central mechanisms of thermoregulation and phase transitions of brain lipids pertaining to them] Tsariuk VV, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):97–104 (Eng. Abstr.) (Rus)
[Experimental studies for detecting the atherogenic hazard of the pesticide sumilex] Mikhallova OG, et al.
Gig Sanit 1989 May;(5):82–3 (Rus)
[Atherogenic properties of sera from patients with ischemic heart disease demonstrated in vitro] Tertov VV, et al.
Kardiologiia 1989 Apr;29(4):12–5 (Eng. Abstr.) (Rus)
[Various aspects of applied biochemical studies in aviation medicine] Dlusskaia IG, et al.
Kosm Biol Aviakosm Med 1989 May–Jun;23(3):15–21 (76 ref.) (Eng. Abstr.) (Rus)
[Condition of the human skin during a stay in a hermetically closed compartment] Dubinin DM, et al.
Kosm Biol Aviakosm Med 1988 Sep–Oct;22(5):68–71 (Eng. Abstr.) (Rus)
[Carbohydrates and lipids in the blood serum and liver of rats exposed to repeated hypokinesia] Tikhomirova NA, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):81–3 (Rus)
[Lipid-bound sialic acids and DNA-binding proteins of the blood serum in diseases of the blood system] Egorova VA, et al. **Lab Delo** 1988;(6):38–40 (Eng. Abstr.) (Rus)
[Pathogenesis of lipid metabolism disorders in patients with chronic enteritis] Sukhov SV, et al. **Lab Delo** 1989;(1):10–3 (Eng. Abstr.) (Rus)
[Effect of vitamin E on the lipid composition of the erythrocytes of mice and of the malarial parasite Plasmodium berghei] Chuenkova MV, et al.
Med Parazitol (Mosk) 1988 Jul–Aug;(4):13–5 (Eng. Abstr.) (Rus)
[Lipid metabolism and liver function in D-galactosamine poisoning in rats] Vengerovskiĭ AI, et al.
Patol Fiziol Eksp Ter 1988 May–Jun;(3):52–5 (Eng. Abstr.) (Rus)
[Changes in lipid metabolism in rats with radiation sickness and a pronounced intestinal syndrome during parenteral feeding with lipofundin and infusolipol] Stepanov SA, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):775–9 (Eng. Abstr.) (Rus)
[Morphological differentiation and change in the lipid composition of neuroblastoma C1300 cells treated with gangliosides] Gulaia NM, et al. **Ukr Biokhim Zh** 1989 May–Jun;61(3):72–9 (Eng. Abstr.) (Rus)
[Effect of hyperbaric oxygenation on lipid metabolism in patients with arteriosclerosis obliterans of the lower extremities] Pakhomov VI, et al. **Vestn Khir** 1988 Aug; 141(8):129–31 (Rus)
[Lipids, bile and fatty acids of the bile in rabbits with hypercholesterolemia] Badeinova EN, et al.
Vopr Med Khim 1989 Jan–Feb;35(1):99–104 (Eng. Abstr.) (Rus)
[Changes in lipid metabolism and renewal of sialic acids in the composition of glycoproteins of adipose tissue during carbohydrate loading] Gashimova AD, et al.
Vopr Med Khim 1989 Jan–Feb;35(1):114–8 (Eng. Abstr.) (Rus)
[Prevention of atherogenic dislipoproteinemias and metabolic disorders in the liver in emotional-pain stress] Meerson FZ, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):104–9 (Eng. Abstr.) (Rus)
[Carbohydrate metabolism during poisoning with the cholinesterase inhibitor
O-ethyl-S-hexylmethylthiophosphonate] Rozengart VI, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):403–7 (Eng. Abstr.) (Rus)
[The effect of hepatotoxins on the activity of organelle-specific enzymes and metabolism of liver lipids] Vengerovskiĭ AI, et al. **Vopr Med Khim** 1989 May–Jun; 35(3):87–91 (Eng. Abstr.) (Rus)
[Lipid metabolism in patients with burn disease during nasogastral tube hyperalimentation] Sologub VK, et al.
Vopr Pitan 1989 Mar–Apr;(2):18–21 (Eng. Abstr.) (Rus)
[The significance of the structure of dietary oligosaccharides in their metabolism into liver lipids] Virovets OA, et al.
Vopr Pitan 1989 Jan–Feb;(1):49–52 (Eng. Abstr.) (Rus)
[Effect of corticotropin and glucocorticoids on lipid metabolism (a review of the literature)] Korkach VI.
Vrach Delo 1989 Apr;(4):33–7 (34 ref.) (Rus)
[Indices of lipid free-radical oxidation and of antiradical protection of the brain—the neurochemical correlates of the development of the general adaptation syndrome] Guliaeva NV, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):731–7 (Eng. Abstr.) (Rus)
[Apolipoprotein B plays a central role in atherogenesis and lipid metabolism] Wiklund O, et al. **Lakartidningen** 1989 May 17;86(20):1887–8 (Swe)

PHARMACOKINETICS

Uptake and utilization of lipids by Paramecium tetraurelia. Reuter SF, et al. **Eur J Cell Biol** 1989 Jun;49(1):61–5
Regulation of the metabolism of lipid emulsion model lipoproteins by a saturated acyl chain at the 2-position of triacylglycerol. Mortimer BC, et al. **J Lipid Res** 1988 Jun; 29(6):713–20
Effect of different molecular species of phosphatidylcholine on the clearance of emulsion particle lipids. Robins SJ, et al. **J Lipid Res** 1988 Sep;29(9):1195–203
Transfer of isotopic dietary fatty acids into human milk. **Nutr Rev** 1989 Mar;47(3):75–7 (8 ref.)

PHARMACOLOGY

Role of glucagon and insulin in canine bile flow stimulated by endogenous cholecystokinin release. Westfall SG, et al. **Am J Surg** 1989 Jan;157(1):130–6
Role of lipids in augmenting the antibacterial activity of benzoyl peroxide against Propionibacterium acnes. Decker LC, et al. **Antimicrob Agents Chemother** 1989 Mar; 33(3):326–30
Promotion of survival and neurite outgrowth of cultured peripheral neurons by exogenous lipids and detergents. Unsicker K, et al. **Exp Cell Res** 1988 Oct;178(2):377–89
Membrane damage in leukemic cells induced by ether and ester lipids: an electron microscopic study. Noseda A, et al. **Exp Mol Pathol** 1989 Feb;50(1):69–83
In vivo hydroxyapatite formation induced by lipids. Raggio CL, et al. **J Bone Miner Res** 1986 Oct;1(5):409–15
Antimicrobial activity of stratum corneum lipids from normal and essential fatty acid–deficient mice. Bibel DJ, et al. **J Invest Dermatol** 1989 Apr;92(4):632–8
AIDS-antiviral sulfolipids from cyanobacteria (blue-green algae). Gustafson KR, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1254–8
Modulating influence of dietary lipid intake on the prostaglandin system in adult men. Ferretti A, et al.
Lipids 1989 May;24(5):419–22
In vitro alterations of L-asparaginase activity of Tetrahymena pyriformis by lipids. Tsirka SA, et al.
Mol Cell Biochem 1988 Oct;83(2):147–55
Angiogenesis induced by the lipid fraction prepared from bovine follicular fluid. Sato E. **Nippon Juigaku Zasshi** 1988 Aug;50(4):930–2
Effect of the infusion of glucose, itralipid and nutramin on the initiation of rat liver regeneration after partial hepatectomy. Holeček M, et al. **Physiol Bohemoslov** 1988; 37(5):467–73

PHYSIOLOGY

Importance of intercellular lipids in water-retention properties of the stratum corneum: induction and recovery study of surfactant dry skin. Imokawa G, et al.
Arch Dermatol Res 1989;281(1):45–51
Dual role of lipids in the stimulus-secretion coupling for insulin release. Malaisse WJ. **Biochem Soc Trans** 1989 Feb; 17(1):59–60 (33 ref.)
Differential lipid control of (Na+ + K+)-ATPase in homeotherms and poikilotherms. Charnock JS, et al.
Comp Biochem Physiol [B] 1977;58(4):381–7
Surface skin lipids of birds—a proper host kairomone and feeding inducer in the poultry red mite, Dermanyssus gallinae. Zeman P. **Exp Appl Acarol** 1988 Sep;5(1–2):163–73
Lipid regulation of cell membrane structure and function. Yeagle PL. **FASEB J** 1989 May;3(7):1833–42 (50 ref.)
Calcium- and lipid-independent protein kinase C autophosphorylation. Activation by low pH. McFadden PN, et al. **J Biol Chem** 1989 Aug 5;264(22):12765–71
The role of the corneocyte lipid envelopes in cohesion of the stratum corneum. Wertz PW, et al.
J Invest Dermatol 1989 Jul;93(1):169–72
Lipid modulators of cell function. Merrill AH Jr.
Nutr Rev 1989 Jun;47(6):161–9 (91 ref.)
Observation of two structures of the tear film lipid layer. Forst G. **Ophthalmic Physiol Opt** 1988;8(2):190–2
The lipoidal permeability barriers of the skin and alimentary tract. Curatolo W. **Pharm Res** 1987 Aug;4(4):271–7 (61 ref.)
The role of protein and lipid domains in the uptake of solutes by human stratum corneum. Raykar PV, et al.
Pharm Res 1988 Mar;5(3):140–50
Inositol lipids and transmembrane signalling. Papers from a meeting. 2 and 3 December 1987.
Philos Trans R Soc Lond [Biol] 1988 Jul 26; 320(1199):235–436
The effect of increased adiposity on food intake of juvenile rats. Drewry MM, et al. **Physiol Behav** 1989 Feb; 45(2):381–6
Cellular signalling in the kidney: the role of inositol lipids. Pfeilschifter JM. **Renal Physiol Biochem** 1989 Jan–Feb; 12(1):1–31 (222 ref.)
Biomicroscopy of the tear film: aqueous and lipid tear substitutes in the normal and abnormal eye. Carrington S, et al. **Vet Rec** 1988 Sep 24;123(13):329–35
[Stability and flexibility of the lipid layer of the tear film and their pathologic changes in a biophysical experiment] Kaercher T, et al. **Fortschr Ophthalmol** 1989;86(3):245–8 (Eng. Abstr.) (Ger)

RADIATION EFFECTS

[Effect of light on lipid formation and sporulation in the mucoraceous fungus Cunninghamella japonica]
Polotebnova MV, et al. **Mikrobiologiia** 1988 May–Jun; 57(3):379–84 (Rus)
[Changes in the cellularity and lipid concentration of the bone marrow in rats after a single gamma-ray irradiation] Molchanová A, et al. **Radiobiologiia** 1989 Mar–Apr; 29(2):271–4 (Eng. Abstr.) (Rus)
[Lipid metabolic changes in rats with radiation sickness and a pronounced intestinal syndrome following the local irradiation of the abdominal area. The total lipid content of the blood serum and tissues] Stepanov SA.
Radiobiologiia 1989 Mar–Apr;29(2):179–82 (Eng. Abstr.) (Rus)

SECRETION

Relationship of lipid secretion and particle size to diffuse interstitial change in pneumoconiosis: a pathogenetic perspective. Heppleston AG. **Am J Ind Med** 1989; 15(4):427–39 (63 ref.)
Quasielastic light scattering evidence for vesicular secretion of biliary lipids. Cohen DE, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G1–8
Plasma apolipoprotein A-I levels and bile lipid secretion during thoracic duct drainage in the rat. Nilsson A, et al.
Biochim Biophys Acta 1988 Nov 25;963(2):231–6

THERAPEUTIC USE

Biologic contrasts between medullipin I and vasoactive glyceryl compounds. Muirhead EE, et al.
Am J Med Sci 1989 Aug;298(2):93–103
[Liver-protective properties of lipids in sludge] Vengerovskiĭ AI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):46–8 (Rus)

LIPIODOL see under **IODIZED OILS**

LIPOAMIDE DEHYDROGENASE

X-ray structure of lipoamide dehydrogenase from Azotobacter vinelandii determined by a combination of molecular and isomorphous replacement techniques. Schierbeek AJ, et al. **J Mol Biol** 1989 Mar 20;206(2):365–79
Visualization of neurons by NADH-diaphorase staining in the myenteric plexus of some invertebrate and vertebrate species. Gábriel R, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):769–84

ANTAGONISTS & INHIBITORS

Autoantibodies of primary biliary cirrhosis recognize dihydrolipoamide acetyltransferase and inhibit enzyme function. Van de Water J, et al. **J Immunol** 1988 Oct 1; 141(7):2321–4

BLOOD

[Lymphocyte and thrombocyte dehydrogenase activity in the early neonatal period in newborn infants with intrauterine hypotrophy] Deshchekina MF, et al. **Pediatriia** 1988; (8):23–5 (Eng. Abstr.) (Rus)

DEFICIENCY

[Congenital deficiency of metahemoglobin-reductases (diaphorases). A case of cyanosis during general anesthesia] Sodano R, et al. **Minerva Anestesiol** 1989 Jan-Feb; 55(1-2):53-6 (Eng. Abstr.) (Ita)

GENETICS

Overexpression and mutagenesis of the lipoamide dehydrogenase of Escherichia coli. Allison N, et al. **Biochem J** 1988 Dec 15;256(3):741-9

Sequence analysis of the lpdV gene for lipoamide dehydrogenase of branched-chain-oxoacid dehydrogenase of Pseudomonas putida. Burns G, et al. **Eur J Biochem** 1989 Jan 15;179(1):61-9

A method of human diaphorase locus 3 phenotyping in human semen by isoelectric focusing. Pawlowski R. **Forensic Sci Int** 1989 Jul;42(1-2):131-4

The nucleotide sequence of the LPD1 gene encoding lipoamide dehydrogenase in Saccharomyces cerevisiae: comparison between eukaryotic and prokaryotic sequences for related enzymes and identification of potential upstream control sites. Ross J, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1131-9

DIA3 phenotyping in human tissues, dental pulps, and hair roots by isoelectric focusing. Kido A, et al. **Z Rechtsmed** 1988;100(2-3):133-7

IMMUNOLOGY

Detection of autoantibodies to recombinant mitochondrial proteins in patients with primary biliary cirrhosis. Van de Water J, et al. **N Engl J Med** 1989 May 25;320(21):1377-80

ISOLATION & PURIFICATION

Isolation of a third lipoamide dehydrogenase from Pseudomonas putida. Burns G, et al. **J Bacteriol** 1989 Feb; 171(2):665-8

Isolation of an atypically small lipoamide dehydrogenase involved in the glycine decarboxylase complex from Eubacterium acidaminophilum. Freudenberg W, et al. **J Bacteriol** 1989 Mar;171(3):1346-54

Purification of branched-chain keto acid dehydrogenase and lipoamide dehydrogenase-valine from Pseudomonas. Sokatch JR. **Methods Enzymol** 1988;166:342-50

METABOLISM

Consecutive diaphorase-acetylcholinesterase histochemistry in the myenteric plexus of frog stomach. Gábriel R, et al. **Acta Histochem (Jena)** 1989;85(2):135-41

Determination of NADH2-ferricyanide oxidoreductase (cytochrome b5 reductase, diaphorase) activity of human erythrocytes by an analysis of the time-dependence of NADH2 oxidation. Papandreou P, et al. **Clin Chim Acta** 1989 May 15;181(2):189-96

Large-scale preparation and reconstitution of apo-flavoproteins with special reference to butyryl-CoA dehydrogenase from Megasphaera elsdenii. Hydrophobic-interaction chromatography [published erratum appears in Eur J Biochem 1989 Apr 1;180(3):603] Van Berkel WJ, et al. **Eur J Biochem** 1988 Dec 1; 178(1):197-207

Development of NADPH diaphorase-positive pedunculopontine nucleus neurons. Skinner RD, et al. **Exp Neurol** 1989 Apr;104(1):15-21

Enhancement of enzyme-catalyzed production of reactive oxygen species by suspensions of "crocidolite" asbestos fibres. Elstner EF, et al. **Free Radic Res Commun** 1986; 1(6):355-9

Titration studies on the active sites of pig heart lipoamide dehydrogenase and yeast glutathione reductase as monitored by the charge transfer absorbance. Sahlman L, et al. **J Biol Chem** 1989 May 15;264(14):8033-8

Lipoamide dehydrogenase from Escherichia coli. Steady-state kinetics of the physiological reaction. Sahlman L, et al. **J Biol Chem** 1989 May 15;264(14):8039-45

Analytical application of the stereospecific hydrogen exchange reaction between (R)-carnitine and water, catalyzed by (R)-carnitine dehydrogenase and alpha-lipoamide dehydrogenase (diaphorase). Brendel K, et al. **Life Sci** 1974 Jun 16;14(12):2447-58

Deficiency of pyruvate dehydrogenase complex (PDHC) in Leigh's disease fibroblasts: an abnormality in lipoamide dehydrogenase affecting PDHC activation. Hinman LM, et al. **Neurology** 1989 Jan;39(1):70-5

PHYSIOLOGY

Dihydrolipoamide dehydrogenase: functional similarities and divergent evolution of the pyridine nucleotide-disulfide oxidoreductases. Carothers DJ, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):409-25 (97 ref.)

LIPOCHONDRODYSTROPHY

COMPLICATIONS

Mucopolysaccharidosis I presenting with endocardial fibroelastosis of infancy. Stephan MJ, et al. **Am J Dis Child** 1989 Jul;143(7):782-4

Domiciliary use of nasopharyngeal intubation for obstructive sleep apnoea in a child with mucopolysaccharidosis. Steven IM. **Anaesth Intensive Care** 1988 Nov;16(4):493-4

Glaucoma as an early complication of Hurler's disease. Nowaczyk MJ, et al. **Arch Dis Child** 1988 Sep;63(9):1091-3

Corneal opacity in canine MPS I. Changes after bone marrow transplantation. Constantopoulos G, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1802-7

Hurler syndrome with cardiomyopathy in infancy. Donaldson MD, et al. **J Pediatr** 1989 Mar;114(3):430-2

Selective IgA deficiency associated with Hunter syndrome. Carneiro-Sampaio MM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Sep-Oct; 43(5):246-9

[Wilson's disease and mucopolysaccharidosis. Association of 2 genetic diseases in the same patient (letter)] Devetag F, et al. **Presse Med** 1989 Mar 25;18(12):637 (Fre)

DIAGNOSIS

Biochemical diagnosis of Hunter syndrome on Epstein-Barr virus-transformed lymphoblastoid cell lines. Morabito E, et al. **Clin Chim Acta** 1989 May 15;181(2):125-33

ENZYMOLOGY

[Fluorometric determination of alpha-L-iduronidase activity in leukocytes and blood plasma in Hurler's disease] Gusina NB, et al. **Lab Delo** 1988;(7):46-9 (Eng. Abstr.) (Rus)

GENETICS

Further evidence localising the gene for Hunter's syndrome to the distal region of the X chromosome long arm. Roberts SH, et al. **J Med Genet** 1989 May;26(5):309-13

PATHOLOGY

Hunter's syndrome. An ultrastructural study of an autopsy case. Oda H, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1175-90

MR imaging of cavitary lesions in the brain with Hurler/Scheie. Rauch RA, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S1-3

Severe aortic stenosis in systemic lupus erythematosus and mucopolysaccharidosis type II (Hunter's syndrome). Zimmermann B 3d, et al. **Clin Cardiol** 1988 Oct; 11(10):723-5

Focal dendritic swellings in Purkinje cells in mucopolysaccharidoses types I, II and III. A Golgi and ultrastructural study. Ferrer I, et al. **Neuropathol Appl Neurobiol** 1988 Jul-Aug;14(4):315-23

Skeletal muscle involvement in mucopolysaccharidosis type IIA: severe type of Hunter syndrome. Wakai S, et al. **Pediatr Neurol** 1988 May-Jun;4(3):178-80

[Forme fruste of Hunter's disease] Bégány A, et al. **Z Hautkr** 1989 Mar 15;64(3):228-30 (Eng. Abstr.) (Ger)

SURGERY

[Difficult intubation and anesthesia in Pfaundler-Hurler disease] Falk K, et al. **Anaesthesist** 1989 Apr;38(4):208-9 (Eng. Abstr.) (Ger)

[Anesthetic management of a patient with Hunter's syndrome] Takenaka M, et al. **Masui** 1988 Dec; 37(12):1542-6 (Eng. Abstr.) (Jpn)

THERAPY

Long-term effects of bone marrow transplantation in dogs with mucopolysaccharidosis I. Breider MA, et al. **Am J Pathol** 1989 Mar;134(3):677-92

VETERINARY

Long-term neurological effects of bone marrow transplantation in a canine lysosomal storage disease. Shull RM, et al. **Pediatr Res** 1988 Sep;24(3):347-52

LIPODYSTROPHY

CHEMICALLY INDUCED

Lipohypertrophy and lipoatrophy complicating treatment with highly purified bovine and porcine insulins. McNally PG, et al. **Postgrad Med J** 1988 Nov;64(757):850-3

CLASSIFICATION

[Progressive lipodystrophy] Wermut W, et al. **Wiad Lek** 1988 Jun 1;41(11):727-9 (Eng. Abstr.) (Pol)

COMPLICATIONS

Ocular findings in polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy. Hakola HP, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):97-100

Minimal change disease with partial lipodystrophy. Jacob CK, et al. **Child Nephrol Urol** 1988-89;9(1-2):116-7

Steatohepatitis associated with limb lipodystrophy. Powell EE, et al. **Gastroenterology** 1989 Oct;97(4):1022-4

CONGENITAL

Scintigraphic findings in congenital lipodystrophy. Yip TC, et al. **Clin Nucl Med** 1989 Jan;14(1):28-31

Insulin resistance in a boy with congenital generalized lipodystrophy [published erratum appears in Pediatr Res 1989 May;25(5):477] Tsukahara H, et al. **Pediatr Res** 1988 Dec;24(6):668-72

DIAGNOSIS

Partial lipodystrophy. Magnetic resonance findings in one case. Yuh WT, et al. **J Comput Tomogr** 1988 Oct; 12(4):287-91

ETIOLOGY

A case of membranous lipodystrophy complicated by Fanconi's syndrome. Hishikawa R, et al. **Bone Miner** 1988 Oct;5(1):99-105

Lipodystrophia centrifugalis abdominalis infantilis. A possible sequel to Kawasaki disease. Furukawa F. **Int J Dermatol** 1989 Jun;28(5):338-9

HISTORY

The disease of Akhnaton. Hoedl S. **Int J Dermatol** 1989 Apr; 28(3):201-3

IMMUNOLOGY

Partial lipodystrophy: immunologic studies in a Sicilian girl. Fiumara A, et al. **Ann Allergy** 1989 Feb;62(2):128-9

Production of C3 nephritic factor by cultured lymphocytes derived from a patient with partial lipodystrophy. Yamada A, et al. **J Clin Lab Immunol** 1988 Sep;27(1):35-7

PATHOLOGY

Leprechaunism: report of two cases and review. Ioan D, et al. **Endocrinologie** 1988 Jul-Sep;26(3):205-9 (47 ref.)

Nasu-Hakola disease (membranous lipodystrophy). Clinical, histopathological and biochemical studies of three cases. Kitajima I, et al. **J Neurol Sci** 1989 Jun;91(1-2):35-52

Retinal pigment epithelial change and partial lipodystrophy. Davis TM, et al. **Postgrad Med J** 1988 Nov;64(757):871-4

Ultrastructural demonstration of Maclura pomifera agglutinin binding sites in the membranocystic lesions of membranous lipodystrophy (Nasu-Hakola disease). Kitajima I, et al. **Virchows Arch [A]** 1988;413(6):475-83

SURGERY

Lipodystrophy and its treatment. Ketterings C. **Ann Plast Surg** 1988 Dec;21(6):536-43

Successful treatment of lipohypertrophic insulin lipodystrophy with liposuction surgery [letter] Field LM. **J Am Acad Dermatol** 1988 Sep;19(3):570

[Possibilities of treatment of lipodystrophies with ambulatory liposuction] Môle B. **Ann Dermatol Venereol** 1988; 115(8):867-72 (4 ref.) (Fre)

[Surgery of lipodystrophy] van der Stricht J. **Phlebologie** 1988 Jul-Oct;41(3):589-91 (Eng. Abstr.) (Fre)

LIPODYSTROPHY, INTESTINAL

Whipple's disease. Report of one case with intestinal localization. Vandone PL, et al. **Panminerva Med** 1988 Apr-Jun;30(2):107-10

[Whipple's disease in 1989] Languille M, et al. **Rev Med Interne** 1989 Jan-Feb;10(1):13-5 (Fre)

[A case of Whipple's disease] Virasaladze KS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):133-5 (Rus)

[Whipple's disease: review of the Spanish literature, comparison with the international literature and presentation of a new case] Ruiz Montes F, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):679-85 (34 ref.) (Eng. Abstr.) (Spa)

[Morbus Whipple--occurrence, symptoms, diagnosis and treatment of 4 cases] Björk E, et al. **Lakartidningen** 1989 Apr 5;86(14):1275-7 (Swe)

COMPLICATIONS

Intestinal bleeding in patients with Whipple's disease. Feldman M, et al. **Gastroenterology** 1989 Apr;96(4):1207-9

The heart and Whipple's disease [letter] Sossai P, et al. **Int J Cardiol** 1989 May;23(2):275-6

Cerebral manifestations of Whipple's disease [letter] Selhorst JB, et al. **Mayo Clin Proc** 1988 Oct;63(10):1057

Whipple's disease in a patient with longstanding seronegative polyarthritis. Vanderschueren D, et al. **Scand J Rheumatol** 1988;17(5):423-6

[A rare cause of isolated inflammatory syndrome: Whipple's disease] Réville M, et al. **Rev Med Interne** 1989 Jan-Feb; 10(1):57-8 (Fre)

[Acute thrombocytopenic purpura and hypergammaglobulinemia in Whipple's disease. Description of a clinical case] Asnaghi G, et al. **Minerva Dietol Gastroenterol** 1988 Oct-Dec;34(4):277-9 (Eng. Abstr.) (Ita)

[Whipple's disease: neurologic manifestations and review of cases published in the Spanish literature] Ojeda E, et al. **Rev Clin Esp** 1988 Nov;183(7):365-7 (27 ref.) (Eng. Abstr.) (Spa)

[Whipple's disease and splenomegaly with negative intestinal biopsies] Carballo Fernández C, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):397-400 (Eng. Abstr.) (Spa)

DIAGNOSIS

Soybean agglutinin for detection of macrophages in Whipple's disease: a possible aid in diagnosis. Borisch B, et al. **Acta Histochem Suppl (Jena)** 1988;36:235-40

Infection by Mycobacterium avium intracellulare in AIDS:

endoscopic duodenal appearance mimicking Whipple's disease. Vázquez-Iglesias JL, et al. **Endoscopy** 1988 Sep; 20(5):279–80

Lymphedema, lymphocytic myocarditis, and sarcoidlike granulomatosis. Manifestations of Whipple's disease. Southern JF, et al. **JAMA** 1989 Mar 10;261(10):1467–70

[Malignant tumor-like abdominal lymphoma in Whipple's disease] Kortsik CS, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28–29):1107–9 (Eng. Abstr.) (Ger)

[Whipple's disease: abdominal lymphoma, intermittent fever and recurrent arthralgias] Kraus I, et al. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1207–9 (Eng. Abstr.) (Ger)

[Whipple's disease] Chumachenko PA, et al. **Klin Med (Mosk)** 1989 May;67(5):138–9 (Rus)

HISTORY

[The man behind the syndrome: George Hoyt Whipple. He was the first one to theorize on infectious causes of a rare systemic disease] Carlsson M, et al. **Lakartidningen** 1989 Apr 5;86(14):1271–4 (Swe)

IMMUNOLOGY

[Variability in immunologic aspects of Whipple's disease. Is a unitary interpretation possible?] Sardeo G, et al. **Recenti Prog Med** 1989 Mar;80(3):119–22 (Eng. Abstr.) (Ita)

MICROBIOLOGY

Electron microscopic detection of Whipple's bacillus in sarcoidlike periodic acid–Schiff–negative granulomas. Spapen HD, et al. **Dig Dis Sci** 1989 Apr;34(4):640–3

PATHOLOGY

[Whipple's disease apropos of a case] el Mezni F, et al. **Tunis Med** 1988 May;66(5):465–8 (Eng. Abstr.) (Fre)

[The morphology of mesenteric lymph nodes in Whipple's disease] Zolotarevskil VB, et al. **Arkh Patol** 1988; 50(10):63–7 (Eng. Abstr.) (Rus)

[Whipple's disease. Atypical presentation and endoscopic diagnosis (letter)] Pascual D, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):420–1 (Spa)

PHYSIOPATHOLOGY

Oculo-facio-skeletal myorhythmia as a cerebral complication of systemic Whipple's disease. Hausser-Hauw C, et al. **Mov Disord** 1988;3(2):179–84

[Persistence of joint pain in Whipple's disease] Nuutila P, et al. **Duodecim** 1988;104(5):332–5 (Fin)

RADIOGRAPHY

[Pseudolymphomatous aspects of mesenteric lymphadenopathies in Whipple's disease. Value of x-ray computed tomography monitoring] Jaubert D, et al. **Ann Med Interne (Paris)** 1988;139(5):341–3 (Eng. Abstr.) (Fre)

THERAPY

Whipple's disease—effective therapy, elusive etiology. Bruckstein AH. **Hosp Pract [Off]** 1989 May 30;24(5A):61–6, 69–70

LIPOFUSCIN see under **PIGMENTS**

LIPOIC ACID

ANALOGS & DERIVATIVES

Molecular aspects of the removal of ferritin-bound iron by DL-dihydrolipoate. Bonomi F, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):180–6

Antioxidant activity of dihydrolipoate against microsomal lipid peroxidation and its dependence on alpha-tocopherol. Scholich H, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):256–61

Preparation of polylactic acid–polylipoic acid nanospheres as drug targeting carriers. Arai K, et al. **Drug Des Deliv** 1987 Dec;2(2):109–20

ANALYSIS

Detection of bacterial lipoic acid. A modified gas-chromatographic-mass-spectrometric procedure. Pratt KJ, et al. **Biochem J** 1989 Mar 15;258(3):749–54

Determination of lipoyllysine derived from enzymes by liquid chromatography. Hayakawa K, et al. **J Chromatogr** 1989 May 5;490(1):33–41

METABOLISM

Hepatic lipoate uptake. Peinado J, et al. **Arch Biochem Biophys** 1989 Sep;273(2):389–95

2-ketoacid dehydrogenase complexes of Escherichia coli: stereospecificities of the three components for (R)-lipoate. Yang YS, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):465–74

Liberation of lipoate by human serum lipoamidase from bovine heart pyruvate dehydrogenase. Oizumi J, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):658–63

Interplay between lipoic acid and glutathione in the protection against microsomal lipid peroxidation. Bast A, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):558–61

PHARMACOKINETICS

[The role of Na K ATPase in thiamine and lipoic acid interrelations during their absorption in the gastrointestinal tract of mice] Karpov LM. **Fiziol Zh** 1989 Mar-Apr; 35(2):51–7 (Eng. Abstr.) (Rus)

PHARMACOLOGY

The effects of thioctic acid on motor nerve terminals in acrylamide-poisoned rats. Kemplay S, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):275–88

[Bases and applications of the antioxidative properties of thioctic acid] Roldán EJ. **Medicina (B Aires)** 1988; 48(5):525–9 (32 ref.) (Spa)

THERAPEUTIC USE

Neonatal pyruvate dehydrogenase deficiency with lipoate responsive lactic acidaemia and hyperammonaemia. Byrd DJ, et al. **Eur J Pediatr** 1989 Apr;148(6):543–7

LIPOIDOSIS

CHEMICALLY INDUCED

Lung tumor induction upon long-term low-level inhalation of crystalline silica. Muhle H, et al. **Am J Ind Med** 1989; 15(3):343–6

COMPLICATIONS

Corectopia and lipoid proteinosis. Johnson LN, et al. **Br J Ophthalmol** 1989 May;73(5):394–6

Ichthyosis and neutral lipid storage disease (Dorfman–Chanarin syndrome). Venencie PY, et al. **Pediatr Dermatol** 1988 Aug;5(3):173–7

Pulmonary alveolar lipoproteinosis complicating juvenile dermatomyositis. Samuels MP, et al. **Thorax** 1988 Nov; 43(11):939–40

DIAGNOSIS

Diagnosis and treatment of typical and atypical forms of lipopigment storage disorders. Philippart M. **Am J Med Genet Suppl** 1988;5:291–8 (25 ref.)

DRUG THERAPY

Remarkable response of lipoid proteinosis to oral dimethyl sulphoxide. Wong CK, et al. **Br J Dermatol** 1988 Oct; 119(4):541–4

GENETICS

[Hereditary lipidosis with triglyceride overload: a metabolic study in cultured cells] Douste-Blazy L, et al. **Bull Acad Natl Med (Paris)** 1988 Apr;172(4):523–8 (Eng. Abstr.) (Fre)

[Lipoidosis of the glomerular mesangium with accumulation of cholesterol. A novel hereditary disease] Doïtchinov D. **Nephrologie** 1988;9(6):273–6 (Eng. Abstr.) (Fre)

METABOLISM

Cytochemical demonstration of increased phospholipid content in cell membranes in chlorphentermine-induced phospholipidosis. Coulombe PA, et al. **J Histochem Cytochem** 1989 Feb;37(2):139–47

PATHOLOGY

Multifocal verruciform xanthoma of the upper aerodigestive tract in a child with a systemic lipid storage disease. Travis WD, et al. **Am J Surg Pathol** 1989 Apr;13(4):309–16

Lipoid proteinosis: case report. Aubin F, et al. **Pediatr Dermatol** 1989 Jun;6(2):109–13

[Acquired hyalinosis cutis et mucosae in plasmacytoma with monoclonal IgG-lambda gammopathy] von der Helm D, et al. **Hautarzt** 1989 Mar;40(3):153–7 (Eng. Abstr.) (Ger)

VETERINARY

Treatment of idiopathic hepatic lipidosis in cats: 11 cases (1986–1987). Jacobs G, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):635–8

Diagnostic exercise: eye lesions in a rabbit. Fallon MT, et al. **Lab Anim Sci** 1988 Oct;38(5):612–3

LIPOIDPROTEINOSIS see under **LIPOIDOSIS**

LIPOLYSIS

Apolipoprotein C-II deficiencies: in vivo models for assessing the significance of defective lipolysis on lipoprotein metabolism. Breckenridge WC. **Adv Exp Med Biol** 1988; 243:75–9 (20 ref.)

Repetitive weight loss and weight regain: effects on weight reduction, resting metabolic rate, and lipolytic activity before and after exercise and/or diet treatment. van Dale D, et al. **Am J Clin Nutr** 1989 Mar;49(3):409–16

Microdialysis of adipose tissue and blood for in vivo lipolysis studies. Arner P, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E737–42

Automatic luminometric kinetic assay of glycerol for lipolysis studies. Hellmér J, et al. **Anal Biochem** 1989 Feb 15; 177(1):132–7

Comparison in inhibitory effects of lipolysis products on cholesterol esterification. Homma Y. **Artery** 1989; 16(5):233–47

Alterations in the regulation of lipolysis in brown and white adipose tissue in the diabetic state. Saggerson ED. **Biochem Soc Trans** 1989 Feb;17(1):47–9

Lipolysis of phospholipids in model cholesteryl ester rich lipoproteins and related systems: effect of core and surface lipid phase state. Mims MP, et al. **Biochemistry** 1988 Jul 12;27(14):5290–5

Lipolytic enzymes of the human pancreas. II. Purification and properties of cholesterol ester hydrolase. Meyer JG. **Biochim Biophys Acta** 1989 Mar 14;1002(1):89–92

Cachectin/tumor necrosis factor and interleukin-1 show different modes of combined effect on lipoprotein lipase activity and intracellular lipolysis in 3T3-L1 cells. Ogawa H, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):131–5

A single and continuous spectrophotometric assay for various lipolytic enzymes, using natural, non-labelled lipid substrates. Rawyler A, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):337–44

Ultrastructural and biochemical studies of lipolysis by lipolysosomes in chick hepatocytes. Kanai M. **Cell Tissue Res** 1989 Mar;255(3):559–65

Hormonal control of lipolysis from the white adipose tissue of hibernating jerboa (Jaculus orientalis). Moreau-Hamsany C, et al. **Comp Biochem Physiol [A]** 1988;91(4):665–9

Lipolytic activity of porcine adipose tissue after preincubation. Mersmann HJ. **Comp Biochem Physiol [B]** 1989;92(3):493–9

Control of lipolysis and its relevance to development of obesity in man. Arner P. **Diabetes Metab Rev** 1988 Aug; 4(5):507–15 (76 ref.)

Different growth hormone-receptor interactions mediate insulin-like and lipolytic responses of rat adipose tissue. Chipkin SR, et al. **Endocrinology** 1989 Jul;125(1):450–8

Cellular tolerance to adenosine receptor-mediated inhibition of lipolysis: altered adenosine 3',5'-monophosphate metabolism and protein kinase activation. Hoffman BB, et al. **Endocrinology** 1989 May;124(5):2434–42

Phosphorylation of bovine hormone-sensitive lipase by the AMP-activated protein kinase. A possible antilipolytic mechanism. Garton AJ, et al. **Eur J Biochem** 1989 Jan 15; 179(1):249–54

Induction of S100 protein in 3T3-L1 cells during differentiation to adipocytes and its liberating by lipolytic hormones. Kato K, et al. **Eur J Biochem** 1988 Nov 1; 177(2):461–6

Lipolysis in human adipocytes, effects of cell size, age and of regional differences. Engfeldt P, et al. **Horm Metab Res Suppl** 1988;19:26–9 (41 ref.)

Effects of insulin on glucose transport and lipolysis. Smith U. **Horm Metab Res Suppl** 1988;19:50–2 (16 ref.)

Phosphatidylcholine and phosphatidylethanolamine derivatives, membrane fluidity and changes in the lipolytic activity of ram spermatozoa plasma membranes during cryoconservation. Hinkovska-Galcheva V, et al. **Int J Biochem** 1988;20(8):867–71

Antilipogenic but not lipolytic effects of recombinant DNA-derived bovine somatotropin treatment on ovine adipose tissue; variation with genetic type. Sinnett-Smith PA, et al. **Int J Biochem** 1989;21(5):535–40

Lipolytic surface remnants of triglyceride-rich lipoproteins are cytotoxic to macrophages but not in the presence of high density lipoprotein. A possible mechanism of atherogenesis? Chung BH, et al. **J Clin Invest** 1989 Apr; 83(4):1363–74

Regulation of lipolysis during the neonatal period. Importance of thyrotropin. Marcus C, et al. **J Clin Invest** 1988 Nov;82(5):1793–7

Regulation of bovine adipose tissue metabolism during lactation. 5. Relationships of lipid synthesis and lipolysis with energy intake and utilization. McNamara JP. **J Dairy Sci** 1989 Feb;72(2):407–18

Influence of bovine mastitis on lipolysis ond proteolysis in milk. Murphy SC, et al. **J Dairy Sci** 1989 Mar;72(3):620–6

Lipolysis of LDL with phospholipase A2 alters the expression of selected apoB-100 epitopes and the interaction of LDL with cells. Kleinman Y, et al. **J Lipid Res** 1988 Jun;29(6):729–43

The effect of Escherichia coli endotoxin on the adrenergic control of lipolysis in the human adipocyte. Forse RA, et al. **J Surg Res** 1989 Jan;46(1):41–8

Cyclic AMP regulation of fuel metabolism during exercise: regulation of adipose tissue lipolysis during exercise. Shepherd RE, et al. **Med Sci Sports Exerc** 1988 Dec; 20(6):531–8 (44 ref.)

Effects of hypoxia on lipolysis in isolated rat myocardial cells. Larsen TS, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24; 88(1–2):139–44

Role of hormone-sensitive low Km cAMP phosphodiesterase in regulation of cAMP-dependent protein kinase and lipolysis in rat adipocytes. Smith CJ, et al. **Mol Pharmacol** 1989 Mar;35(3):381–6

Effects of lipolytic and antilipolytic agents on glycerol and free fatty acid release from isolated adipocytes of normal and diabetic rats. Kamei I, et al. **Nagoya J Med Sci** 1989 Mar;51(1–4):17–23

Nucleotide sequence of rat adipose hormone sensitive lipase cDNA. Holm C, et al. **Nucleic Acids Res** 1988 Oct 25;

16(20):9879
Gastric lipolysis and fat absorption in preterm infants: effect of medium-chain triglyceride or long-chain triglyceride-containing formulas. Hamosh M, et al. **Pediatrics** 1989 Jan;83(1):86-92
Human glucagon and vasoactive intestinal polypeptide (VIP) stimulate free fatty acid release from human adipose tissue in vitro. Richter WO, et al. **Peptides** 1989 Mar-Apr; 10(2):333-5
Changes in lipogenesis and lipolysis associated with recovery from reversible obesity in mature female rats. Harris RB, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):82-9
[Diurnal profile and correlations between the indicators of lipid metabolism and the hemostasis system in healthy persons] Seliverstova GP. **Fiziol Cheloveka** 1988 Jul-Aug; 14(4):659-63 (Rus)
[Lipolytic activity of sporulating aerobic bacteria isolated from various sources] Smirnov VV, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):6-11 (Eng. Abstr.) (Rus)
[Lipolytic activity of the small intestine in patients with duodenal ulcer] Linevskiĭ IuV. **Vopr Pitan** 1988 Jul-Aug; (4):29-31 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Antilipolytic effect of insulin in non-insulin-dependent diabetes mellitus after conventional treatment with diet and sulfonylurea. Bolinder J, et al. **Acta Med Scand** 1988; 224(5):451-9
Oxidative fuel metabolism during mild hypoglycemia: critical role of free fatty acids. Caprio S, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E413-9
Effect of short- and long-term beta-adrenergic blockade on lipolysis during fasting in humans. Klein S, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E65-73
Effect of dichlorvos on the activity of lipoprotein lipase from adipose tissue, on plasma lipids and postheparin lipolytic plasma activity in rats. Kozlowska A, et al. **Arch Toxicol** 1988;62(2-3):227-9
Metabolism of apolipoproteins C-II, C-III, and B in hypertriglyceridemic men. Changes after heparin-induced lipolysis. Huff MW, et al. **Arteriosclerosis** 1988 Sep-Oct; 8(5):471-9
Enhanced lipolysis of myocardial triglycerides during low-flow ischemia and anoxia in the isolated rat heart. Schoonderwoerd K, et al. **Basic Res Cardiol** 1989 Mar-Apr; 84(2):165-73
Characterization of antilipolytic action of polyamines in isolated rat adipocytes. Richelsen B, et al. **Biochem J** 1989 Jul 15;261(2):661-5
Changes in the sensitivity to glucagon of lipolysis in adipocytes from pregnant and lactating rats. Zammit VA. **Biochem J** 1988 Sep 15;254(3):661-5
Amrinone potentiates catecholamine-induced lipolysis in fat cells. Dorigo P, et al. **Biochem Pharmacol** 1989 Mar 1; 38(5):855-8
How does glucose induce inositol lipid hydrolysis in pancreatic islets? Best L. **Biochem Soc Trans** 1989 Feb; 17(1):60-1
Effects of heparin-induced lipolytic activity on the structure of rat high-density lipoprotein. Swaney JB, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):338-47
Changes in the plasma free fatty acid composition during VLDL lipolysis induced by heparin: their effect on platelet phosphatidylcholine biosynthesis. Tavella JM, et al. **Biomed Biochim Acta** 1988;47(8):725-30
Effects of slow-release bezafibrate on serum lipids, lipoproteins, apolipoproteins, and postheparin lipolytic activities in patients with type IV and type V hypertriglyceridemia. Saku K, et al. **Clin Ther** 1989 May-Jun;11(3):331-40
Contribution of alpha- and beta-receptors to ketogenic and lipolytic effects of norepinephrine in humans. Keller U, et al. **Diabetes** 1989 Apr;38(4):454-9
Abnormal action of catecholamines on lipolysis in adipocytes of type I diabetic patients treated with insulin. Wahrenberg H, et al. **Diabetes** 1989 Apr;38(4):524-33
Clenbuterol-induced desensitization in murine adipocytes: relationship to in vivo effectiveness. Mills SE, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):51-8
Inhibition of insulin-dependent lipogenesis and anti-lipolysis by protein tyrosine kinase inhibitors. Shechter Y, et al. **EMBO J** 1989 Jun;8(6):1671-6
The insulin-like effects of phorbol myristate acetate (PMA) in the isolated fat cell. Solomon SS, et al. **Endocr Res** 1989; 15(3):375-91
Role of adenosine 3',5'-monophosphate and the Ri-receptor Gi-coupled adenylate cyclase inhibitory pathway in the mechanism whereby adrenalectomy increases the adenosine antilipolytic effect in rat fat cells. de Mazancourt P, et al. **Endocrinology** 1989 Mar;124(3):1131-9
The insulin-like effect of vanadate on lipolysis in rat adipocytes is not accompanied by an insulin-like effect on tyrosine phosphorylation. Mooney RA, et al. **Endocrinology** 1989 Jan;124(1):422-9
Insulin-induced dephosphorylation of hormone-sensitive lipase. Correlation with lipolysis and cAMP-dependent protein kinase activity. Strålfors P, et al. **Eur J Biochem** 1989 Jun 15;182(2):379-85
Growth hormone-albumin conjugates. Reduced renal toxicity and altered plasma clearance. Poznansky MJ, et al. **FEBS Lett** 1988 Oct 24;239(1):18-22
Lipolytic response of bovine adipose tissue to alpha and beta adrenergic agents 30 days pre- and 120 days postpartum. Smith DJ, et al. **Gen Pharmacol** 1989;20(3):369-74
Influence of lactate on isoproterenol-induced lipolysis and beta-adrenoceptors distribution in human fat cells. De Pergola G, et al. **Horm Metab Res** 1989 Apr;21(4):210-3
Impaired insulin-mediated inhibition of lipolysis and glucose transport with aging. Reaven GM, et al. **Horm Metab Res** 1989 Apr;21(4):168-71
Cholecystokinin 1-21 stimulates lipolysis in human adipose tissue. Richter WO, et al. **Horm Metab Res** 1989 Apr; 21(4):216-7
Adrenergic regulation of human fat-cell lipolysis. Kather H. **Horm Metab Res Suppl** 1988;19:40-3
On the in vitro lipolytic activity of peptide hormones in human adipose tissue. Richter WO, et al. **Horm Metab Res Suppl** 1988;19:44-9
Lipolytic response of fat cells to catecholamines in sedentary and exercise-trained women. Riviere D, et al. **J Appl Physiol** 1989 Jan;66(1):330-5
Insulin antagonism of catecholamine stimulation of fatty acid transport in the adipocyte. Studies on its mechanism of action. Abumrad NA, et al. **J Biol Chem** 1988 Oct 15; 263(29):14678-83
Effects of insulin on adrenoceptor binding and the rate of catecholamine-induced lipolysis in isolated human fat cells. Engfeldt P, et al. **J Biol Chem** 1988 Oct 25; 263(30):15553-60
Lack of desensitization of catecholamine-induced lipolysis in fat cells from trained and sedentary women after physical exercise. Crampes F, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1011-7
Mechanisms underlying regional differences in lipolysis in human adipose tissue. Wahrenberg H, et al. **J Clin Invest** 1989 Aug;84(2):458-67
Quantitative differences in the cyclic AMP-lipolysis relationships for isoproterenol and forskolin. Allen DO, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):852-8
Lipolytic activities of p-aminophenol and n-decylamine in endogenous lipid droplets from rat adipocytes. Okuda H, et al. **Pharmacol Res** 1989 May-Jun;21(3):255-62
Changes induced in adrenergic lipolysis by the administration of diethylstilboestrol, oestradiol and clomiphene. Miléková D, et al. **Physiol Bohemoslov** 1989;38(2):145-53
Inhibition of growth hormone-stimulated lipolysis by somatostatin, insulin, and insulin-like growth factors (somatomedins) in vitro. Campbell RM, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):362-6
Inhibition of growth hormone-induced lipolysis by 3',5'-guanosine monophosphate in chicken adipose tissue in vitro. Campbell RM, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):367-71
Differences in adrenergic stimulated lipolysis in rat and human adipose tissue. Skaggs S, et al. **Proc West Pharmacol Soc** 1989;32:151-3
Binding and antilipolytic action of insulin in isolated adipocytes from cortisol-treated rats. Calle C, et al. **Rev Esp Fisiol** 1988 Sep;44(3):309-14
[Effects of a duodenal infusion of rapeseed oil in cows in full lactation. 2. Lipogenic and lipolytic activities of the perirenal adipose tissue] Gagliostro G, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:175-6 (Eng. Abstr.) (Fre)

RADIATION EFFECTS

Time course of lipolytic activity and lipid peroxidation after whole-body gamma irradiation of rats. Rejholcová M, et al. **Radiat Res** 1989 Jan;117(1):21-5

LIPOLYSIS, SUCTION see **LIPECTOMY**

LIPOMA

Intracranial lipomas. Maiuri F, et al. **Acta Neurol (Napoli)** 1988 Feb;10(1):29-82 (134 ref.)
Intrarenal lipoma. Rosi P, et al. **Acta Urol Belg** 1988; 56(4):495-503
Angiolipoma of the tongue: report of a case. Lin SC, et al. **Ann Dent** 1989 Summer;48(1):37-8
Primary intravestibular lipoma. Huang TS. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):393-5
Retropharyngeal infiltrating lipoma--a case report. Eisele DW, et al. **Head Neck Surg** 1988 Jul-Aug;10(6):416-21
Lipoleiomyoma of uterus (report of three cases). Gupta AK, et al. **Indian J Cancer** 1988 Jun;25(2):104-7
Frontalis-associated lipoma of the forehead. Salasche SJ, et al. **J Am Acad Dermatol** 1989 Mar;20(3):462-8 (14 ref.)
Intramedullary spinal lipomas. Ratanalert S. **J Med Assoc Thai** 1989 Mar;72(3):179-83
Hibernoma, a brown fat tumour. Paul MA, et al. **Neth J Surg** 1989 Aug;41(4):85-7 (25 ref.)
Intrarenal lipoma: report of a case. Safak M, et al. **Urol Int** 1989;44(2):113-5
[Voluminous lipoma with unusual localization] Micali GP, et al. **G Ital Dermatol Venereol** 1988 May;123(5):241-4 (Eng. Abstr.) (Ita)
[Myelolipoma of the adrenal glands. Presentation of a clinical case and review of the literature] Falchero F, et al. **Minerva Chir** 1989 Jun 30;44(12):1693-8 (50 ref.) (Eng. Abstr.) (Ita)
[Lipohyperplasia of the ileocecal valve. Description of 7 cases] Ricci M, et al. **Minerva Chir** 1988 Apr 15;43(7):625-8 (Eng. Abstr.) (Ita)
[A case of adrenal myelolipoma] Kuwahara T, et al. **Hinyokika Kiyo** 1988 Nov;34(11):2021-3 (9 ref.) (Eng. Abstr.) (Jpn)
[A case of primary myelolipoma of the posterior mediastinum] Suzuki T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1318-22 (Eng. Abstr.) (Jpn)
[Thoracic and lumbo-sacral spinal lipoma in an infant] Honda E, et al. **No Shinkei Geka** 1989 Feb;17(2):171-5 (Eng. Abstr.) (Jpn)
[A case of giant angiomyolipoma of the right kidney] Kudo J, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1043-6 (Eng. Abstr.) (Jpn)
[A giant lipoma of the spermatic cord] Orlov VA, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):120-1 (Rus)
[Large lipoma of the round ligament of the liver] Budarin VN. **Klin Khir** 1988;(9):61 (Rus)

ANALYSIS

Composition of fat in different types of liposarcomas in comparison with lipomas. Knipping G, et al. **Cancer Lett** 1989 Jul 1;46(1):51-6

BLOOD

Exposure of T-cryptantigen on red blood cells in a patient with angiomyolipoma. Buskila D, et al. **Eur Urol** 1988; 14(4):346-7

COMPLICATIONS

Thymolipoma in patients with myasthenia gravis: report of two cases and review. Pan CH, et al. **Acta Neurol Scand** 1988 Jul;78(1):16-21 (34 ref.)
MR diagnosis of lipomatous infiltration of the interatrial septum. Kaplan KR, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):495-6
The radiological diagnosis and management of angiomylipoma of tuberous sclerosis. Kreel L, et al. **Australas Radiol** 1989 May;33(2):176-81
Lumbosacral lipomas with spina bifida. Hirsch JF, et al. **Childs Nerv Syst** 1988 Dec;4(6):354-60
Spontaneous renal rupture secondary to renal neoplasms. Su CJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec; 42(6):475-80
Spinal cord compression caused by dual pathology: a close shave with Ockham's razor. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):558-9
Chondrolipoma of the tongue. Macs A, et al. **Histopathology** 1989 Jun;14(6):660-2
Hepatic angiomyolipoma in a tuberous sclerosis patient. Kristal H, et al. **Isr J Med Sci** 1989 Jul;25(7):412-4
Severe bleeding from submucosal lipoma of the duodenum. Michel LA, et al. **J Clin Gastroenterol** 1988 Oct;10(5):541-5 (24 ref.)
Computed tomography of ileoileocolic intussusception caused by a lipoma. Yoshimitsu K, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):704-6
Renal angiomyolipoma associated with lymph node involvement and renal cell carcinoma in patients with tuberous sclerosis. Taylor RS, et al. **J Urol** 1989 Apr; 141(4):930-2
So-called tethered cervical spinal cord. Roth-Vargas AA, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):69-71
Coexistence of cerebral aneuryam and renal angiomyolipoma--case report. Yoshimoto H, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):26-8
Intraspinal lipomas in infancy and childhood causing a tethered cord syndrome. Stolke D, et al. **Neurosurg Rev** 1988;11(1):59-65
Hemifacial spasm due to intracranial tumor. An international survey of botulinum toxin investigators. Sprik C, et al. **Ophthalmology** 1988 Aug;95(8):1042-5
Carpal tunnel syndrome caused by flexor tendon sheath lipoma. Kremchek TE, et al. **Orthop Rev** 1988 Nov; 17(11):1083-5
Spontaneous expulsion per rectum of an ileal lipoma. Misra SP, et al. **Postgrad Med J** 1988 Sep;64(755):718-9
Gastric lipoma and intussusception in a child. McCombe AW, et al. **Scott Med J** 1988 Aug;33(4):310-1
Angiolipoma of the stomach as a cause of chronic upper gastrointestinal bleeding. DeRidder PH, et al. **Surg Endosc** 1989;3(2):106-8
Intraspinal melanotic arachnoid cyst and lipoma in neurocutaneous melanosis. Kazantikul V, et al. **Surg Neurol** 1989 Feb;31(2):138-41
Duodenal lipoma causing intussusception. Jennings BS, et al. **Surgery** 1989 Apr;105(4):560-3
[Lipoma of the mesentery causing ileus] Kalchev E, et al. **Khirurgiia (Sofiia)** 1989;42(2):80-1 (Bul)
[Angiomyolipoma of the kidney as a source of severe hemorrhage in the urogenital tract] Kania R, et al. **Cas Lek Cesk** 1988 Dec 23;127(52):1671-2 (Eng. Abstr.) (Cze)
[Association of angiolipoma and renal adenocarcinoma in a patient with Bourneville's tuberous sclerosis] Biquet P, et al. **Acta Urol Belg** 1988;56(3):447-52 (Eng. Abstr.) (Fre)
[Renal angiomyolipoma without phacomatosis. Review of the literature apropos of an emergency case surgically treated] Barbin JY, et al. **Chirurgie** 1988;114(2):134-44 (0 ref.) (Eng. Abstr.) (Fre)
[Atrial lipoma as a cause of tachycardiac arrhythmia] Rebeski HP, et al. **Dtsch Med Wochenschr** 1989 Jul 14;

114(28–29):1110–3 (Eng. Abstr.) (Ger)
[Lipoma of the corpus callosum in an infant with seizures] Peter M, et al. **Monatsschr Kinderheilkd** 1989 Mar; 137(3):165–7 (Eng. Abstr.) (Ger)
[A case from practice (141). Patient: Mr. Z. P., born 1927, electrician] Stürmer T. **Schweiz Rundsch Med Prax** 1989 Jun 13;78(24):702–3 (Ger)
[A successfully operated case of bilateral angiomyolipoma causing renal apoplexy] Hoznek A, et al. **Orv Hetil** 1988 Dec 11;129(50):2687–9 (Eng. Abstr.) (Hun)
[Ileocecocolic invagination of lipoma of the cecum in an adult. Description of a case] Cicia S, et al. **Ann Ital Chir** 1988;60(1):65–7 (Eng. Abstr.) (Ita)
[Tethered cord syndrome of adult onset: report of a case and a review of the literature] Yamamura A, et al. **No Shinkei Geka** 1989 Jan;17(1):69–73 (25 ref.) (Eng. Abstr.) (Jpn)
[Intestinal occlusion in submucosal sigmoid lipoma] Maftei O, et al. **Rev Chir [Chir]** 1988 Jul–Aug;37(4):305–8 (Eng. Abstr.) (Rum)
[Lipoma of the small intestine] Dergachev SV, et al. **Vestn Khir** 1988 Sep;141(9):58–9 (Rus)
[Acute abdomen caused by spontaneous rupture of an angiomyolipoma of the kidney] Lurie A, et al. **Arch Esp Urol** 1988 Oct;41(8):607–9 (Eng. Abstr.) (Spa)
[Intraperitoneal hemorrhage after labor as manifestation of renal angiomyolipoma] Martínez-Pecino M, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):25–8 (Eng. Abstr.) (Spa)
[Cecal lipomatosis: a frequent cause of intestinal invagination in adults (letter)] Guerra Cubero E, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):688–90 (Spa)
[Suprarenal myelolipoma: an infrequent cause of acute abdomen] Macarulla E, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):617–9 (Eng. Abstr.) (Spa)

CONGENITAL

Evaluation of congenital extracranial masses by waterpath sonography. Fischer AQ, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):117–9
[Intraspinal lipoma with tethered cord syndrome in childhood] Zumkeller MB, et al. **Z Kinderchir** 1988 Dec; 43(6):384–90 (Eng. Abstr.) (Ger)

DIAGNOSIS

Angiomyolipoma of the kidney. Comparison between magnetic resonance imaging, computed tomography, and ultrasonography for diagnosis. Uhlenbrock D, et al. **Acta Radiol** 1988 Sep–Oct;29(5):523–6
MR imaging of pericallosal lipoma. Dean B, et al. **AJNR** 1988 Sep;9(5):929–31
MR imaging of spinal epidural lipoma. Morano JU, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S102
Angiomyolipoma of the kidney extending into the inferior vena cava: sonographic and CT findings. Arenson AM, et al. **AJR** 1988 Dec;151(6):1159–61
Myelolipoma of the adrenal gland: sonographic and CT features. Musante F, et al. **AJR** 1988 Nov;151(5):961–4
Lipomatous encasement and compression of the heart: antemortem diagnosis by cardiac nuclear magnetic resonance imaging and catheterization. Rokey R, et al. **Am Heart J** 1989 Apr;117(4):952–3
CT and sonographic diagnosis of thymolipoma. A case report. Nuruddin R, et al. **Australas Radiol** 1988 Nov; 32(4):497–9
The appearance of adrenal myelolipoma as seen on nuclear magnetic resonance imaging. Moriyama N, et al. **Br J Urol** 1988 Oct;62(4):384–5
Myelolipoma of the liver. A case report. Nishizaki T, et al. **Cancer** 1989 Mar 1;63(5):930–4 (30 ref.)
Magnetic resonance imaging of an intradural spinal lipoma: a case report. Corr P, et al. **Clin Radiol** 1989 Mar; 40(2):216–8
Submucosal hypopharyngeal lipoma. Nash M, et al. **Ear Nose Throat J** 1989 Jun;68(6):465–8
Proteus syndrome versus Bannayan–Zonana syndrome: a problem in differential diagnosis. Bialer MG, et al. **Eur J Pediatr** 1988 Nov;148(2):122–5
Adrenal myelolipoma discovered incidentally on abdominal CT and MR imaging. Yokota T, et al. **Gastroenterol Jpn** 1989 Apr;24(2):195–7
Lipoma of the liver: US, CT, and MRI appearance. Martí-Bonmatí L, et al. **Gastrointest Radiol** 1989 Spring; 14(2):155–7
Mesenteric lipoma. Gupta DK, et al. **Indian Pediatr** 1988 Oct;25(10):1007–9
Lipomatous hypertrophy of the interatrial septum. Diagnosis by magnetic resonance imaging. Fisher MS, et al. **J Comput Tomogr** 1988 Oct;12(4):267–9
Nerve abscess simulated by a lipoma in a leprosy patient. Malaviya GN, et al. **J Hand Surg [Br]** 1989 Feb;14(1):115–6
Angiomyolipoma of the nasal cavity. Dawlatly EE, et al. **J Laryngol Otol** 1988 Dec;102(12):1156–8
Pre-operative diagnosis of renal angiomyolipoma. Chongchitnant P, et al. **J Med Assoc Thai** 1989 Feb; 72(2):117–21
Intracranial lipomas. Diagnostic and therapeutic considerations. Maiuri F, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):161–7
Coincidental angiomyolipoma and renal cell carcinoma—report of 1 case and review of literature. Huang JK, et al. **J Urol** 1988 Dec;140(6):1516–8
Case 46–1988: myelolipoma of adrenal gland [letter] **N Engl J Med** 1989 May 11;320(19):1284
Magnetic resonance imaging of lipomyelomeningocele and tethered cord. Brophy JD, et al. **Neurosurgery** 1989 Sep; 25(3):336–40
Correlation between magnetic resonance imaging and surgical findings in the tethered spinal cord. Moufarrij NA, et al. **Neurosurgery** 1989 Sep;25(3):341–6
Lipomeningioma: report of three cases and review of the literature. Salibi SS, et al. **Neurosurgery** 1989 Jul; 25(1):122–6 (20 ref.)
Lesion mistaken for hemorrhage in a premature infant: lipoma of corpus callosum. Imaizumi SO, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):313–6
Lipoma of the corpus callosum: diagnosis by ultrasound and magnetic resonance. Fisher RM, et al. **Pediatr Radiol** 1988; 18(5):409–10
MRI study of lumbosacral lipoma in children. Taviere V, et al. **Pediatr Radiol** 1989;19(5):316–20
Intraperitoneal lipoblastoma. Denath FM. **Semin Roentgenol** 1988 Oct;23(4):241–2
Imaging of atypical lipomas of the extremities: report of three cases. Bush CH, et al. **Skeletal Radiol** 1988;17(7):472–5
Adrenal myelolipoma simulating virilizing adrenal tumor. Moskovitz B, et al. **Urol Int** 1989;44(1):53–5
[Angiomyolipoma of the kidney. Apropos of a case] Serhal S, et al. **J Chir (Paris)** 1989 Feb;126(2):125–6 (Fre)
[Parostal lipoma of the axilla. Apropos of a case and review of the literature] Brunet F, et al. **J Radiol** 1988 Nov; 69(11):685–8 (11 ref.) (Eng. Abstr.) (Fre)
[Lipoma of the spermatic cord. Description of a case and review of the literature] Lerais JM, et al. **J Radiol** 1988 Oct;69(10):607–9 (20 ref.) (Eng. Abstr.) (Fre)
[Myelolipoma of the adrenals] Sötje G, et al. **Dtsch Med Wochenschr** 1989 Jun 30;114(26):1030–3 (Eng. Abstr.) (Ger)
[Giant bleeding angiomyolipoma of the kidney in tuberous sclerosis] Brandt H, et al. **ROFO** 1989 May;150(5):606–8 (Ger)
[MRT and CT of diaphragmatic lipomas] Reuther G, et al. **ROFO** 1989 Jun;150(6):691–3 (Eng. Abstr.) (Ger)
[Diagnostic and therapeutic problems in angiomyolipoma of the kidney] Triller J, et al. **ROFO** 1989 Feb;150(2):130–7 (Eng. Abstr.) (Ger)
[Angiomyolipomatosis of the kidneys—possibilities and limitations of imaging procedures] Schnepper U, et al. **Rontgenblatter** 1989 Feb;42(2):85–8 (Eng. Abstr.) (Ger)
[Myelolipoma of the adrenal gland. Considerations on a case simulating adenocarcinoma of the adrenal gland: differential diagnosis and therapeutic approach] De Berti M, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1197–204 (70 ref.) (Eng. Abstr.) (Ita)
[Role of CT and US in the diagnosis of myelolipoma of the adrenal glands] Lamorgese B. **Radiol Med (Torino)** 1989 Jun;77(6):668–71 (Eng. Abstr.) (Ita)
[A pleomorphic lipoma of the palm—comparison to spindle cell lipoma] Hayashi T, et al. **Gan No Rinsho** 1989 Feb; 35(3):437–41 (Eng. Abstr.) (Jpn)
[Adrenal myelolipoma: two case reports] Sumi S, et al. **Hinyokika Kiyo** 1988 May;34(5):855–61 (22 ref.) (Eng. Abstr.) (Jpn)
[Angiomyolipoma: diagnosed preoperatively as renal cell carcinoma by CT scan] Uemura H, et al. **Hinyokika Kiyo** 1989 Apr;35(4):643–6 (Eng. Abstr.) (Jpn)
[Intraspinal lipoma in an infant: a case report of MRI study] Nagane M, et al. **No Shinkei Geka** 1988 Nov;16(12):1411–5 (Eng. Abstr.) (Jpn)
[A large lipoma in the small pelvic cavity simulating a perineal hernia] Trott VF, et al. **Klin Khir** 1989;(5):62–3 (Rus)
[Paravisceral lipoma of the neck] Likhter AS, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):90–1 (Rus)
[Renal angiomyolipoma. Diagnostic and therapeutic aspects] Burgos FJ, et al. **Actas Urol Esp** 1988 May–Jun;12(3):210–6 (38 ref.) (Eng. Abstr.) (Spa)
[Myelolipoma of the adrenal gland: preoperative diagnostic approach] Olivier CM, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):155–60 (44 ref.) (Eng. Abstr.) (Spa)
[Adrenal gland myelolipoma] Gómez Veiga FA, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):39–42 (Eng. Abstr.) (Spa)

DRUG THERAPY

Lipomas and potassium intake [letter] Wilson JE. **Ann Intern Med** 1989 May 1;110(9):750–1
The clinical presentation of cutaneous angiolipomata and the response to beta-blockade. Goodfield MJ, et al. **Clin Exp Dermatol** 1988 May;13(3):190–2
Treatment of metastatic lipid cell tumor of the ovary with BV-CAP and VAC chemotherapy, using serum testosterone and dihydrotestosterone as tumor markers. Patsner B, et al. **Eur J Gynaecol Oncol** 1988;9(6):441–4

EPIDEMIOLOGY

Mixed lipomas of the uterus and the broad ligament [letter] Fernández FA, et al. **Appl Pathol** 1989;7(1):70–1
Subcutaneous tumors: incidence of malignancy. Crabbe MM, et al. **Milit Med** 1988 Oct;153(10):519–21

ETIOLOGY

Renal angiolipomas combined with renal cystic disease in tuberous sclerosis. Henze E, et al. **Eur J Radiol** 1989 May; 9(2):125–6

GENETICS

Involvement of 6p in benign lipomas. A new cytogenetic entity? [letter] Sait SN, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):281–3
Cytogenetic subtype involving chromosome 13 in lipoma. Report of three cases. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):281–8
Breakpoints in benign lipoma may be at 12q13 or 12q14. Turc-Carel C, et al. **Cancer Genet Cytogenet** 1988 Nov; 36(1):131–5
Tuberous sclerosis and the relation with renal angiomyolipoma. A genetic study on the clinical aspects. van Baal JG, et al. **Clin Genet** 1989 Mar;35(3):167–73
Different karyotypic features characterize different clinico-pathologic subgroups of benign lipogenic tumors. Heim S, et al. **Int J Cancer** 1988 Dec 15;42(6):863–7
Renal angiomyolipoma in a family with tuberous sclerosis. Ang PT, et al. **Singapore Med J** 1988 Oct;29(5):521–3

MICROBIOLOGY

Adenovirus type 9-induced tumorigenesis in the rat mammary gland related to sex hormonal state. Ankerst J, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):294–8

PATHOLOGY

Torsion of intra-abdominal lipoma—a rare cause of recurrent or acute abdominal pain. Case report. Aunan E, et al. **Acta Chir Scand** 1988 Sep;154(9):539–40
A case report of "lipomatous hypertrophy of the cardiac interatrial septum", with a proposal for a new term "lipomatous hamartoma of the cardiac atrial septum". Inoue T, et al. **Acta Pathol Jpn** 1988 Dec;38(12):1583–9
Hepatic angiomyolipoma. A case report with review of the literature. Naito M, et al. **Acta Pathol Jpn** 1988 Jun; 38(6):799–804 (13 ref.)
Aspiration biopsy in renal angiomyolipoma. Taavitsainen M, et al. **Acta Radiol** 1989 Jul–Aug;30(4):381–2
Lymphangiolipoma of the mesentery. Radivoyevitch MA, et al. **Am Surg** 1989 Jul;55(7):435–7 (16 ref.)
Subgaleal lipomas. Zitelli JA. **Arch Dermatol** 1989 Mar; 125(3):384–5
Pathologic quiz case 1. Benign infiltrating intermuscular lipoma. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1480–2
Extra-adrenal myelolipoma. Grignon DJ, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):52–4
Chondrolipoma of the breast. Marsh WL Jr, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):369–71
Giant lipoma of the mesentery. Locker A. **Br J Clin Pract** 1987 Oct;41(10):977–8
Angiomyolipoma of the vagina—an uncommon tumour. Case report. Peh SC, et al. **Br J Obstet Gynaecol** 1988 Aug; 95(8):820–3
Fatty tumours of the large intestine: a clinicopathological review of 13 cases. Ryan J, et al. **Br J Surg** 1989 Aug; 76(8):793–6 (31 ref.)
Adrenal myelolipomatous nodules mimicking adrenal neoplasms: report of three cases. Bautista DV, et al. **Can J Surg** 1989 Jan;32(1):51–5
Tenosynovial lipochondromatosis of the flexor hallucis, common toe flexor, and posterior tibial tendons. Hayden JW, et al. **Clin Orthop** 1989 Aug;(245):220–2
Ectopic ACTH and adrenal myelolipoma. Sieber SC, et al. **Conn Med** 1989 Jan;53(1):7–10 (21 ref.)
Nevus lipomatosus cutaneus superficialis of the scalp. Chanoki M, et al. **Cutis** 1989 Feb;43(2):143–4
Intrapancreatic lipoma. First case in the literature. Bigard MA, et al. **Gastroenterol Clin Biol** 1989 May;13(5):505–7
Angiomyolipoma of the colon: a new entity in colonic polypoid lesions. Hikasa Y, et al. **Gastroenterol Jpn** 1989 Aug;24(4):407–9
Adrenal lipoma: a rare tumour of the adrenal gland. Avinoach I, et al. **Histopathology** 1989 Aug;15(2):195–6
Cytologic study of soft tissue tumours examined by fine needle aspiration. Bhaskaran CS, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):272–9
Infiltrating lipoma of the tongue. Shirasuna K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):68–9
Large nonpainful swelling of the lower lip. Zussman KM, et al. **J Am Dent Assoc** 1988 Dec;117(7):849–50
Giant nevus lipomatosus superficialis associated with cavernous hemangioma. Hann SK, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):543–5
Large lipomas in the deep palmar space. Oster LH, et al. **J Hand Surg [Am]** 1989 Jul;14(4):700–4
Nasal lipoma. Preece JM, et al. **J Laryngol Otol** 1988 Nov; 102(11):1044–6
Lipoblastoma of the back. Hershman M, et al. **J R Coll Surg Edinb** 1988 Aug;33(4):218
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 46–1988. A 59-year-old man with angina pectoris, variable hypertension, and an adrenal mass. **N Engl J Med** 1988 Nov 17;319(20):1336–43
Endobronchial lipoma. Remigio PA, et al. **N Y State J Med** 1988 Oct;88(10):550–1

Cerebellopontine angle lipoma with abnormal bony structures—case report. Yoshii K, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):48–51 (14 ref.)

Clinical study of renal angiomyolipoma. Nakazono M, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1075–86

Hibernoma: an unusual tumor of adipose tissue. Hall RE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec; 66(6):706–10 (16 ref.)

Retronasopharyngeal lipoma: a case report. Pitts DB, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):248–51

Histopathology of rare chondroosteoblastic metaplasia in benign lipomas. Katzer B. **Pathol Res Pract** 1989 Apr; 184(4):437–45 (10 ref.)

Extraadrenal intralymphonodular myelolipoma. Stengel B, et al. **Pathol Res Pract** 1989 Jun;184(6):639–41; discussion 41–2

Lipoma of the liver. Fulcheri E. **Pathologica** 1987 Sep–Oct; 79(1063):659–62

Parosteal (periosteal) lipoma. Krajewska I, et al. **Pathology** 1988 Apr;20(2):179–83

Fragments of lipoma ascending to the brain. Cohen AR, et al. **Surg Neurol** 1989 Mar;31(3):215–9

Benign lipoblastoma: first case report of a mesenteric origin. Zanetti G. **Tumori** 1988 Aug 31;74(4):495–8

Association of renal cell carcinoma and angiomyolipoma in the same kidney. Morita T, et al. **Urol Int** 1988;43(3):297–8

[Terminal cone traction syndrome. Attached cord and sacral lipoma] Lapras C, et al. **Neurochirurgie** 1988;34 Suppl 1:91–8 (Fre)

[Intramedullary mature teratoma associated with an attached cord and an intradural lipoma. Apropos of a surgically treated case. Review of the literature] Pelissou-Guyotat I, et al. **Neurochirurgie** 1988;34(3):205–9 (24 ref.) (Eng. Abstr.) (Fre)

[Cervical lipoma or Launois–Bensaude syndrome] Divaris M, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):229–33 (11 ref.) (Eng. Abstr.) (Fre)

[Angiomyolipoma of the kidney (apropos of 2 cases with review of the literature)] Ben Zineb N, et al. **Tunis Med** 1988 Jan;66(1):67–73 (15 ref.) (Eng. Abstr.) (Fre)

[Lipoma of the uterus: apropos of a case of leiomyolipoma] Haouet S, et al. **Tunis Med** 1988 Oct;66(10):701–3 (Eng. Abstr.) (Fre)

[Spindle cell lipoma] Eckert F, et al. **Hautarzt** 1989 Mar; 40(3):161–3 (Eng. Abstr.) (Ger)

[Lipid- (lipoid-) cell tumor of the ovary] Zahradka M, et al. **Zentralbl Gynakol** 1988;110(16):1043–5 (Eng. Abstr.) (Ger)

[Benign lipomatous tumor of the liver] Bugovics E. **Orv Hetil** 1988 Oct 9;129(41):2195–7 (Eng. Abstr.) (Hun)

[A case of brown tumor of the vomer] Carner M, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):199–202 (Eng. Abstr.) (Ita)

[Mediastinal neoplasms of mesenchymal origin] Bortolani EM, et al. **Minerva Chir** 1989 Apr 15;44(7):1163–6 (Eng. Abstr.) (Ita)

[Hibernoma. Presentation of a case] Grandi E, et al. **Pathologica** 1989 Jan–Feb;81(1071):97–101 (Eng. Abstr.) (Ita)

[Lipoleiomyoma of the uterus—report of a case] Sonobe H, et al. **Gan No Rinsho** 1988 Nov;34(14):2019–22 (Eng. Abstr.) (Jpn)

[A glomus tumor of the stomach associated with a lipoma] Yamada Y, et al. **Gan No Rinsho** 1988 Dec;34(15):2096–101 (Eng. Abstr.) (Jpn)

[Giant lipoma of the tongue] Chizh GI. **Vestn Otorinolaringol** 1988 May–Jun;(3):73–4 (Rus)

[Simultaneous unilateral association of a renal angiomyolipoma and an adenocarcinoma] Burgos FJ, et al. **Arch Esp Urol** 1988 Jun;41(5):387–9 (Eng. Abstr.) (Spa)

[Unusual findings during orchidopexy] Sanz Jaka JP, et al. **Arch Esp Urol** 1988 Sep;41(7):553–4 (Eng. Abstr.) (Spa)

[Lipoblastoma. A benign tumor in children] Sánchez-Monroy U, et al. **Bol Med Hosp Infant Mex** 1988 Jun;45(6):390–3 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Tumour No. 3. Alderman P. **Can Med Assoc J** 1988 Nov 1;139(9):883–4

RADIOGRAPHY

Diagnosis of a myocardial lipoma by using CT. Conces DJ Jr, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):725–6

Closed spinal dysraphism: analysis of clinical, radiological, and surgical findings in 104 consecutive patients. Scatliff JH, et al. **AJR Am J Roentgenol** 1989 May;152(5):1049–57

Presacral myelolipoma: case report with computed tomographic and angiographic findings. Chan YF, et al. **Aust N Z J Surg** 1988 May;58(5):432–4

Intraspinal lumbosacral lipoma: review of literature and report of three cases. Sharma S, et al. **Australas Radiol** 1988 May;32(2):207–13 (34 ref.)

Lipoma arborescens of the knee. Armstrong SJ, et al. **Br J Radiol** 1989 Feb;62(734):178–80

Subdural spinal lipoma with posterior fossa extension. Fan CJ, et al. **Clin Radiol** 1989 Jan;40(1):91–4 (14 ref.)

Unusually low CT density in a peripheral neurofibroma. Tàpies Barba C, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1086–7

Giant fibroadipose polyp of the esophagus. Radin DR. **J Comput Tomogr** 1988 Jul;12(3):226–9

Ossifying lipoma. Blanshard JD, et al. **J Laryngol Otol** 1989 Apr;103(4):429–31

Renal angiomyolipoma: a comparison of 5 cases diagnosed by CT scan. Noble JG, et al. **J R Soc Med** 1989 Jan; 82(1):25–7

Computed tomography of lumbar apophyseal joint lipoma: report of three cases. Dietemann JL, et al. **Neuroradiology** 1989;31(1):60–2

CT evidence of renal angiomyolipoma with subcapsular hemorrhage. Nanjo T, et al. **Radiat Med** 1988 Mar–Apr; 6(2):66–70

Case report 498: Intraosseous lipoma of the distal end of the fibula with focal infarction. Gero MJ, et al. **Skeletal Radiol** 1988;17(6):443–6

Case report 489: Hibernoma of left thigh. Nigrisoli M, et al. **Skeletal Radiol** 1988;17(6):432–5

Endobronchial lipoma. Doğan R, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):241–3

[An indistinct breast tumor. Lipoma underneath the greater pectoral muscle] Uhlig U. **Radiologe** 1989 May;29(5):257–8 (Ger)

[Accidental finding of a giant retroperitoneal lipoma in a traumatic rupture of the renal parenchyma] Kleinsorge F, et al. **Rontgenblatter** 1988 Sep;41(9):371–3 (Eng. Abstr.) (Ger)

[A case of lipoma of the small intestine] Bottoni P, et al. **Minerva Med** 1989 Apr;80(4):415–7 (Eng. Abstr.) (Ita)

[Intracranial lipoma. Diagnostic contribution of computerized tomography] Ghiorzi M, et al. **Minerva Pediatr** 1989 Mar;41(3):133–6 (Eng. Abstr.) (Ita)

[Radiological aspects of intestinal lipomas] Soardi GA, et al. **Radiol Med (Torino)** 1988 Dec;76(6):569–76 (Eng. Abstr.) (Ita)

[A case of gastric lipoma diagnosed with CT scan] Nakayama M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1023–6 (19 ref.) (Eng. Abstr.) (Jpn)

[Asymptomatic course of giant lipoma of the mediastinum] Bruns VA, et al. **Vestn Khir** 1989 Feb;142(2):49–50 (Rus)

[Lipoma of the colon] Lazareva MA, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):85 (Rus)

[A 63-year-old man with melena] Diego Rey P, et al. **Rev Clin Esp** 1988 Jun;183(1):35–6 (Spa)

SURGERY

Endoscopic removal of a pedunculated bronchial lipoma by means of the hot snare. Müller LC, et al. **Endoscopy** 1989 Mar;21(2):97–8

Lipofibromatous hamartoma of the ulnar nerve at the elbow: brief report. Gouldesbrough DR, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):331–2

Noncosmetic applications of liposuction. Coleman WP 3d. **J Dermatol Surg Oncol** 1988 Oct;14(10):1085–90 (34 ref.)

Plantar approach for excision of bilateral soft tissue masses in a child. Feldman M, et al. **J Foot Surg** 1989 Jan–Feb; 28(1):60–3

Intraneural lipofibroma of the median nerve. Houpt P, et al. **J Hand Surg [Am]** 1989 Jul;14(4):706–9

Lipofibroma of the superficial branch of the radial nerve. Jacob RA, et al. **J Hand Surg [Am]** 1989 Jul;14(4):704–6

[Treatment of subcutaneous lipomas with liposuction] Mouly R, et al. **Ann Chir Plast Esthet** 1988;33(2):163–6 (Eng. Abstr.) (Fre)

[Colonic lipoma—a rare tumor leading to laparotomy] Beck R, et al. **Chirurg** 1988 Sep;59(9):618–9 (Ger)

[Lipoma of the colon. Description of a case] Colecchia G, et al. **Minerva Chir** 1988 Oct 31;43(20):1761–4 (Eng. Abstr.) (Ita)

[Myelolipoma of the adrenal gland: report of a case] Kawashima H, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1207–10 (26 ref.) (Eng. Abstr.) (Jpn)

[A case of pulmonary lymphangiomyomatosis associated with renal angiomyolipoma] Suzuki T, et al. **Kyobu Geka** 1988 May;41(6):525–8 (Eng. Abstr.) (Jpn)

[Cerebellopontine angle lipoma. Case report] Nakao S, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1113–8 (21 ref.) (Eng. Abstr.) (Jpn)

[A case of adrenal myelolipoma] Tezuka H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1137–41 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Renal angiomyolipoma: an ultrastructural investigation of three cases with histogenetic considerations. Holm-Nielsen P, et al. **APMIS Suppl** 1988;4:37–47

Spindle cell and pleomorphic lipoma: an immunohistochemical study and histogenetic analysis. Beham A, et al. **J Pathol** 1989 Jul;158(3):219–22

Intercellular contacts in tumours of the vascular smooth muscle cells in man. Sosa-Melgarejo JA, et al. **Virchows Arch [A]** 1988;413(5):373–80

VETERINARY

Subconjunctival hibernoma in a goose. Murphy CJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1109–10

Incidental meningeal lipoma in a horse. Anderson WI, et al. **Vet Pathol** 1988 Nov;25(6):530–1

LIPOMATOSIS

Epidural lipomatosis [letter; comment] Doppman JL. **Radiology** 1989 May;171(2):581–2. **Comment on:** Radiology 1988 Nov;169(2):485–90

[Multiple symmetrical lipomatosis. A retrospective study of 14 cases and review of the literature] Smola MG, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):234–8 (25 ref.) (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Mediastinal lipomatosis: a complication of high dose steroid therapy in children. Shukla LW, et al. **Pediatr Radiol** 1988; 19(1):57–8

Epidural lipomatosis after renal transplantation—complete recovery without surgery. Vazquez L, et al. **Transplantation** 1988 Nov;46(5):773–4

[Benign symmetrical lipomatosis—an occupational disease following exposure to tar?] Röcken M. **Derm Beruf Umwelt** 1988 Nov–Dec;36(6):188–90 (42 ref.) (Eng. Abstr.) (Ger)

[Epidural lipomatosis as a complication of a long-term glucocorticoid therapy] Bischoff C. **Dtsch Med Wochenschr** 1988 Dec 16;113(50):1964–7 (18 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Eruptive familial angiolipomas occurring during pregnancy. Heymann WR, et al. **Cutis** 1988 Dec;42(6):525–6

Lipomatosis of the pancreas: an unusual cause of massive steatorrhea. Lozano M, et al. **Pancreas** 1988;3(5):580–2

Myelopathy secondary to spinal epidural lipomatosis. A case report. Soloniuk DS, et al. **Spine** 1989 Jan;14(1):119–22

[Cardiac tamponade from right ventricular rupture in severe lipomatosis] Kharalambus Kh, et al. **Vutr Boles** 1989; 28(2):87–91 (Eng. Abstr.) (Bul)

[Lipomatosis cordis and sudden unexpected death] Qin QS. **J Tongji Med Univ** 1988;8(1):41–3 (Eng. Abstr.) (Ger)

[Intestinal invagination caused by multiple lipomas of the small intestine] Scotti M, et al. **Minerva Chir** 1989 May 15;44(9):1405–7 (Eng. Abstr.) (Ita)

[A case of complicated Madelung's syndrome] Alelnikova MS, et al. **Klin Med (Mosk)** 1988 Jun;66(6):118–9 (Rus)

CONGENITAL

Monomelic macrodystrophia lipomatosa. A case report. Bansal VP, et al. **Int Orthop** 1989;13(1):77–9

Spinal cord involvement in encephalocraniocutaneous lipomatosis. Alfonso I, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):380–4

[Subcutaneous lipoma disclosing intradural lipoma] Bodemer C, et al. **Ann Dermatol Venereol** 1988;115(11):1130–2 (Fre)

DIAGNOSIS

Mucosal plaques seen at colonoscopy: chemical colitis or mucosal pseudolipomatosis? [letter] **Gastroenterology** 1989 Jun;96(6):1626–7

Uneven lipomatosis: a pitfall in pancreatic sonography. Marchal G, et al. **Gastrointest Radiol** 1989 Summer; 14(3):233–7

Epidural lipomatosis [see comments] Quint DJ, et al. **Radiology** 1988 Nov;169(2):485–90. **Comment in:** Radiology 1989 May;171(2):581–2

Pelvic lipomatosis: diagnosis and characterization by magnetic resonance imaging. Demas BE, et al. **Urol Radiol** 1988;10(4):198–202

[Iatrogenic Cushing's syndrome with mediastinal lipomatosis simulating cardiomegaly and pleural effusion: report of a case] Tao HY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):500–4 (Eng. Abstr.) (Chi)

[Madelung's lipomatosis of the neck—a sonographic diagnosis?] Drockur M, et al. **HNO** 1989 Mar;37(3):117–9 (Eng. Abstr.) (Ger)

ETIOLOGY

Mucosal pseudolipomatosis: an air pressure-related colonoscopy complication. Waring JP, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):93–4

Spinal epidural lipomatosis: a serious complication of iatrogenic Cushing's syndrome. Kaplan JG, et al. **Neurology** 1989 Aug;39(8):1031–4 (12 ref.)

[Conference at the Salpêtrière Hospital. June 1987. Progressive spastic paraparesis and dermatomyositis. Epidural lipomatosis during corticosteroid therapy of dermatomyositis] Haguenau M, et al. **Rev Neurol (Paris)** 1989;145(4):330–4 (Fre)

GENETICS

Non-symmetric subcutaneous lipomatosis associated with familial combined hyperlipidaemia. Rubinstein A, et al. **Br J Dermatol** 1989 May;120(5):689–94

Autosomal dominant inheritance in familial angiolipomatosis. Kumar R, et al. **Clin Genet** 1989 Mar;35(3):202–4

Farber lipogranulomatosis: an unusual presentation in a black child. Eviatar L, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):371–4

PATHOLOGY

Neuropathy in multiple symmetric lipomatosis. Madelung's disease. Pollock M, et al. **Brain** 1988 Oct;111 (Pt 5):1157–71

Diffuse lipoblastomatosis—a case report. Kumar RV, et al. **Indian J Cancer** 1988 Dec;25(4):246–50 (11 ref.)

Symptomatic spinal epidural lipomatosis without exogenous steroid intake. Report of a case with magnetic resonance imaging. Gero BT, et al. **Neuroradiology** 1989;31(2):190–2

Madelung's disease (benign symmetric lipomatosis). Plotnicov NA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):171–5

[Cardiac tamponade from right ventricular rupture in severe lipomatosis] Kharalambus Kh, et al. **Vutr Boles** 1989; 28(2):87–91 (Eng. Abstr.) **(Bul)**

[Cervical lipoma or Launois–Bensaude syndrome] Divaris M, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):229–33 (11 ref.) (Eng. Abstr.) **(Fre)**

[Multiple lipomas of the colon. Case report with clinical, roentgenologic, angiographic and histologic findings] Böhm E, et al. **Leber Magen Darm** 1988 Sep;18(5):265–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Pediatric radiology case of the day. Diffuse infiltrating lipomatosis. McAlister WH, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1331–2

Re: Non-operative diagnosis of renal sinus lipomatosis simulating tumour of the renal pelvis [letter] Arora PK. **Br J Urol** 1989 Apr;63(4):445

Case 7. Pelvic fibrolipomatosis. **Radiographics** 1989 Jan; 9(1):102–4

Case report 514: Hamartomatous disorder (newly described). Guy GE, et al. **Skeletal Radiol** 1989;17(8):603–6

[CT images of lipomatosis of the ileocecal valve] Mitani T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):955–60 (Eng. Abstr.) **(Jpn)**

SURGERY

The treatment of multiple lipomas by liposuction surgery. Spinowitz AL. **J Dermatol Surg Oncol** 1989 May; 15(5):538–40

Congenital infiltrating lipomatosis [letter] Slavin SA. **Plast Reconstr Surg** 1989 May;83(5):929

VETERINARY

[Accumulated occurrence of lipomatosis in a cattle herd in Assiut (Egypt)] el Sebaie A, et al. **Tierarztl Prax** 1988; 16(4):359–63 (Eng. Abstr.) **(Ger)**

LIPOMATOSIS, MULTIPLE SYMMETRICAL see under **LIPOMATOSIS**

LIPOMUCOPOLYSACCHARIDOSIS see **MUCOLIPIDOSIS**

LIPOPOLYSACCHARIDES

Shwartzman reaction in the brain induced by fractions of Fusobacterium necrophorum and Escherichia coli lipopolysaccharide in rabbits. Nakajima Y. **Acta Pathol Jpn** 1988 May;38(5):541–7

Intracellular accumulation of cholesteryl esters suppresses production of lipopolysaccharide–induced interleukin 1 by rat peritoneal macrophages. Haga Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):874–80

Structure of the lipopolysaccharide antigenic O–chain produced by Salmonella ohio (O:6,7). Di Fabio JL, et al. **Carbohydr Res** 1989 Jun 15;189:161–8

Isolation and identification of 3–deoxy–7–O–alpha–D–galactopyranosyl–D–manno–2–octulopyranosonate-+ + from the inner core region of the lipopolysaccharide of Escherichia coli EH100. Holst O, et al. **Carbohydr Res** 1989 Jun 1;188:212–8

Somatic antigens of Shigella: structure of the O–specific polysaccharide chain of the Shigella dysenteriae type 7 lipopolysaccharide. Knirel YA, et al. **Carbohydr Res** 1988 Aug 15;179:51–60

Isolation and identification of 3–deoxy–D–threo–hexulosonic acid as a constituent of the lipopolysaccharide of Vibrio parahaemolyticus serotypes O7 and O12. Kondo S, et al. **Carbohydr Res** 1989 Jun 1;188:97–104

Synthesis of a trisaccharide of 3–deoxy–D–manno–2–octulopyranosylonic acid (KDO) residues related to the genus–specific lipopolysaccharide epitope of Chlamydia. Kosma P, et al. **Carbohydr Res** 1988 Dec 1;183(2):183–99

Structure of a neutral polymer isolated from the lipopolysaccharide of the reference strain (C.D.C. 4523–60) for Serratia marcescens serogroup O15. Oxley D, et al. **Carbohydr Res** 1988 Jun 15;177:285–8

Elucidation of the structure of the Pasteurella haemolytica serotype T10 lipopolysaccharide O–antigen by n.m.r. spectroscopy. Richards JC, et al. **Carbohydr Res** 1989 Mar 15;186(2):275–86

Lipopolysaccharides of Proteus penneri species novum. Zych K, et al. **Carbohydr Res** 1989 Jun 1;188:105–11

Orientation measurements on membrane systems made from lipopolysaccharides and free lipid A by FT–IR spectroscopy. Brandenburg K, et al. **Eur Biophys J** 1988; 16(2):83–94

Chemical structure of the lipopolysaccharide of Haemophilus influenzae strain I–69 Rd–/b+. Description of a novel deep–rough chemotype. Helander IM, et al. **Eur J Biochem** 1988 Nov 15;177(3):483–92

The core region of Proteus mirabilis R110/1959 lipopolysaccharide. Radziejewska–Lebrecht J, et al. **Eur J Biochem** 1989 Aug 15;183(3):573–81

Effect of protein kinase C inhibitor (H–7) and calmodulin antagonist (W–7) on pertussis toxin–induced IL–1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL–1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210–5

Fine structure of A and M antigens from Brucella biovars. Meikle PJ, et al. **Infect Immun** 1989 Sep;57(9):2820–8

The structure of the O–specific chain of lipopolysaccharide from Pseudomonas aeruginosa IID 1012 (ATCC 27588). Kaya S, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):29–34

Structure of the O–polysaccharide chain of lipopolysaccharide from Pseudomonas aeruginosa IID 1001 (ATCC 27577). Yokota S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):671–8

Comparison of lipopolysaccharides from Brazilian purpuric fever isolates and conjunctivitis isolates of Haemophilus influenzae biogroup aegyptius. Brazilian Purpuric Fever Study Group. Erwin AL, et al. **J Clin Microbiol** 1989 Apr; 27(4):762–7

Selective up–regulation of human alveolar macrophage collagenase production by lipopolysaccharide and comparison to collagenase production by fibroblasts. Cury JD, et al. **J Immunol** 1988 Dec 15;141(12):4306–12

Na+/H+ exchange activation mediates the lipopolysaccharide–induced proliferation of human B lymphocytes and is impaired in malignant B–chronic lymphocytic leukemia lymphocytes. Gaidano G, et al. **J Immunol** 1989 Feb 1;142(3):913–8

IFN–gamma and IFN–beta independently stimulate the expression of lipopolysaccharide–inducible genes in murine peritoneal macrophages. Hamilton TA, et al. **J Immunol** 1989 Apr 1;142(7):2325–31

Inhibition of lipopolysaccharide activation of 7OZ/3 cells by anti–lipopolysaccharide antibodies. Kirkland TN, et al. **J Immunol** 1988 Nov 1;141(9):3208–13

IL–1 induction–capacity of defined lipopolysaccharide partial structures. Loppnow H, et al. **J Immunol** 1989 May 1; 142(9):3229–38

Secretion of novel and homologous neutrophil–activating peptides by LPS–stimulated human endothelial cells. Schröder JM, et al. **J Immunol** 1989 Jan 1;142(1):244–51

Lipopolysaccharide–induced gene expression in murine peritoneal macrophages is selectively suppressed by agents that elevate intracellular cAMP. Tannenbaum CS, et al. **J Immunol** 1989 Feb 15;142(4):1270–80

Compartmentalization of intraalveolar and systemic lipopolysaccharide–induced tumor necrosis factor and the pulmonary inflammatory response. Nelson S, et al. **J Infect Dis** 1989 Feb;159(2):189–94

Sugar composition of the polysaccharide portion of lipopolysaccharides isolated from non–O1 Vibrio cholerae O2 to O41, O44, and O68. Kondo S, et al. **Microbiol Immunol** 1989;33(8):641–8

Structure and heterogeneity of the oligosaccharides from the lipopolysaccharides of a pyocin–resistant Neisseria gonorrhoeae. Gibson BW, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):17–21

[Molecular weight determination of lipopolysaccharides from rough–type gram–negative bacteria by SDS–polyacrylamide gel electrophoresis] Amano K, et al. **Nippon Saikingaku Zasshi** 1988 Sep;43(5):911–6 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Primary response to lysozyme (HEL) and HEL–LPS in neonatal A/J mice: presence of characteristic adult pattern of regulatory idiotype and fine specificity restriction. Keller MA, et al. **Cell Immunol** 1989 Mar;119(1):143–52

Temporal response of lipoprotein lipase–suppressing mediator and tumor necrosis factor in lipopolysaccharide –injected and –infused rats. Bagby GJ, et al. **Circ Shock** 1989 Aug; 28(4):385–94

Differential regulation of lipopolysaccharide–induced interleukin 1 and tumor necrosis factor synthesis: effects of endogenous and exogenous glucocorticoids and the role of the pituitary–adrenal axis. Zuckerman SH, et al. **Eur J Immunol** 1989 Feb;19(2):301–5

Modulation of macrophage Ia expression by lipopolysaccharide: stem cell requirements, accessory lymphocyte involvement, and IA–inducing factor production. Wentworth PA, et al. **Infect Immun** 1989 Jul; 57(7):2028–36

Haemophilus influenzae outer membrane vesicle–induced blood–brain barrier permeability during experimental meningitis. Wispelwey B, et al. **Infect Immun** 1989 Aug; 57(8):2559–62

Retention of bacterial lipopolysaccharide at the site of subcutaneous injection. Yokochi T, et al. **Infect Immun** 1989 Jun;57(6):1786–91

The effect of lipopolysaccharide desensitization on the regulation of in vivo induction of immunologic tolerance and antibody production and in vitro release of IL–1. Weigle WO, et al. **J Immunol** 1989 Feb 15;142(4):1107–13

Protection of mice against bacterial infection by oral administration of bacterial lipopolysaccharide. Fujiki T, et al. **Microbiol Immunol** 1988;32(12):1253–8

[Effectiveness of phenobarbital, ziksorin and cordiamine in the treatment of non–conjugated hyperbilirubinemia] Vasil'ev VS, et al. **Klin Med (Mosk)** 1989 Apr;67(4):52–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

The effect of nifedipine alone or combined with low dose acetylsalicyclic acid on endotoxin–induced pulmonary hypertension in the piglet. Schranz D, et al. **Intensive Care Med** 1988;14(6):595–601

ANALYSIS

Electron microscopic demonstration of carbohydrates and lipoteichoic acid in cell envelopes of streptococci by lectins labelled with ferritin or gold. Wagner M, et al. **Acta Histochem Suppl (Jena)** 1988;36:409–13

Comparison of protein and lipopolysaccharide patterns of several Coxiella burnetii strains in phase I. Novák M, et al. **Acta Virol (Praha)** 1989 Mar;33(2):172–6

Immunochemical relationship of three antigens purified from Pasteurella multocida strain P–1059. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1510–5

Endotoxin liberation studied by biological and chemical methods. Chemical characterization of six meningococcal lipopolysaccharides. Bryn K, et al. **APMIS** 1989 May; 97(5):429–35

The heterogeneity of lipopolysaccharides from Citrobacter 023 serotype. Katzenellenbogen E. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):119–28

Lipid A with 2,3–diamino–2,3–dideoxy–glucose in lipopolysaccharides from slow–growing members of Rhizobiaceae and from "Pseudomonas carboxydovorans". Mayer H, et al. **Arch Microbiol** 1989;151(2):111–6

The structures of the two lipopolysaccharide O–chains produced by Salmonella boecker. Brisson JR, et al. **Biochem Cell Biol** 1988 Oct;66(10):1066–77

Structure of the lipopolysaccharide antigenic O–chain produced by Salmonella livingstone (O:6,7). Di Fabio JL, et al. **Biochem Cell Biol** 1989 Jun;67(6):278–80

Structural analysis of the three lipopolysaccharides produced by Salmonella madelia (1,6,14,25). Di Fabio JL, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):78–85

Composition and structure of lipopolysaccharide–human plasma low density lipoprotein complex. Analytical ultracentrifugation, 31P–NMR, ESR and fluorescence spectroscopy studies. Victorov AV, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):119–27

Chemical characterization of lipopolysaccharide from Edwardsiella ictaluri, a fish pathogen. Weete JD, et al. **Can J Microbiol** 1988 Nov;34(11):1224–9

Structure of the O–antigen polysaccharide of Haemophilus pleuropneumoniae serotype 3 (ATCC 27090) lipopolysaccharide. Altman E, et al. **Carbohydr Res** 1988 Aug 15;179:245–58

Structural studies of the O–antigenic polysaccharide of Escherichia coli O86, which possesses blood–group B activity. Andersson M, et al. **Carbohydr Res** 1989 Feb 1; 185(2):211–23

Structure of the major lipopolysaccharide antigenic O–chain produced by Salmonella carrau (O:6, 14, 24). di Fabio JL, et al. **Carbohydr Res** 1988 Aug 15;179:233–44

Isolation and chemical analysis of 7–O–(2–amino–2–deoxy–alpha–D–glucopyranosyl)–L–glycero–D–manno–heptose as a constituent of the lipopolysaccharides of the UDP–galactose epimerase–less mutant J–5 of Escherichia coli and Vibrio cholerae. Kaca W, et al. **Carbohydr Res** 1988 Aug 15;179:289–99

Structural studies of a neutral polymer (the putative O10 antigen) isolated from the lipopolysaccharide of Serratia marcescens strain C.D.C. 1287–54 (O10:H8). Oxley D, et al. **Carbohydr Res** 1989 Apr 15;187(2):303–11

Structural studies of an acidic galactoglucomannan from the O15 reference strain (C.D.C. 4523–60) of Serratia marcescens. Oxley D, et al. **Carbohydr Res** 1989 Mar 15; 186(2):295–300

Escherichia coli serotype–39 capsular polysaccharide: primary structure and depolymerisation by a bacteriophage–associated glycanase. Parolis H, et al. **Carbohydr Res** 1989 Feb 1;185(2):225–32

Branhamella catarrhalis: fatty acid and lipopolysaccharide analysis of an atypical strain from blood culture. Wüst J, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):131–4

Characterization of the lipid A component of genuine smooth–form lipopolysaccharide. Jiao BH, et al. **Eur J Biochem** 1989 Apr 1;180(3):515–8

Structural studies on the fucosamine–containing O–specific polysaccharide of Proteus vulgaris O19. Vinogradov EV, et al. **Eur J Biochem** 1989 Mar 1;180(1):95–9

Structural characterization of the lipid A component of Bacteroides fragilis strain NCTC 9343 lipopolysaccharide. Weintraub A, et al. **Eur J Biochem** 1989 Aug 1; 183(2):425–31

Determination of viridans streptococci surface lipoteichoic acid by enzyme linked immune sorbent assay. Hogg SD, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):239–42

Detection of enterobacterial common antigen on bacterial cell surfaces by colony–immunoblotting: effect of its linkage to lipopolysaccharide. Meier–Dieter U, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):215–9

The structure of the lipopolysaccharide core region of Citrobacter 027. Romanowska E, et al.

FEMS Microbiol Lett 1989 Mar;49(1):107–10

Immunoelectron microscopy of lipopolysaccharide in Chlamydia trachomatis. Birkelund S, et al. Infect Immun 1989 Oct;57(10):3250–3

Chemical differences in lipopolysaccharides from Actinobacillus (Haemophilus) actinomycetemcomitans and Haemophilus aphrophilus: clues to differences in periodontopathogenic potential and taxonomic distinction. Brondz I, et al. Infect Immun 1989 Oct;57(10):3106–9

Lipooligosaccharides from Treponema hyodysenteriae and Treponema innocens. Halter MR, et al. Infect Immun 1988 Dec;56(12):3152–6

Neisseria lactamica and Neisseria meningitidis share lipooligosaccharide epitopes but lack common capsular and class 1, 2, and 3 protein epitopes. Kim JJ, et al. Infect Immun 1989 Feb;57(2):602–8

Antigenic evidence for simultaneous expression of two different lipooligosaccharides by some strains of Haemophilus influenzae type b. Patrick CC, et al. Infect Immun 1989 Jul;57(7):1971–8

Heterogeneity of the L-rhamnose residue in the outer core of Pseudomonas aeruginosa lipopolysaccharide, characterized by using human monoclonal antibodies. Yokota S, et al. Infect Immun 1989 Jun;57(6):1691–6

Chemical and biological properties of a phenol-water extract from Leptospira interrogans. Evidence for the absence of lipopolysaccharide. Cinco M, et al. Infection 1988 Jul–Aug; 16(4):238–41

Influence of growth temperature and lipopolysaccharide on hemolytic activity of Serratia marcescens. Poole K, et al. J Bacteriol 1988 Nov;170(11):5146–52

Developmental regulation of a Rhizobium cell surface antigen during growth of pea root nodules. VandenBosch KA, et al. J Bacteriol 1989 Sep;171(9):4537–42

Isolation and characterization of the unusual lipopolysaccharide component, 2-amino-2-deoxy-2-N-(27-hydroxyoctacosanoyl)-3-O-(3-hydroxy- tetradecanoyl)-gluco-hexuronic acid, and its de-O-acylation product from the free lipid A of Rhizobium trifolii ANU843. Hollingsworth RI, et al. J Biol Chem 1989 Aug 25;264(24):14039–42

A new core tetrasaccharide component from the lipopolysaccharide of Rhizobium trifolii ANU 843. Hollingsworth RI, et al. J Biol Chem 1989 Jun 5; 264(16):9294–9

Lipopolysaccharides in a traditional pertussis vaccine. Ibsen P, et al. J Biol Stand 1988 Oct;16(4):299–309

Separation by high-performance liquid chromatography of oligosaccharides obtained after mild acid hydrolysis of Klebsiella pneumoniae O1K2 (NCTC 5055) lipopolysaccharides. Kol O, et al. J Chromatogr 1989 Jul 19;474(2):452–6

Analysis of Salmonella lipopolysaccharides by sodium deoxycholate-polyacrylamide gel electrophoresis. Komuro T, et al. J Chromatogr 1988 Oct 26;450(3):381–7

Gas chromatographic determination of (phosphorylated) 2-keto-3-deoxyoctonic acid, heptoses and glucosamine in bacterial lipopolysaccharides after treatment with hydrofluoric acid, methanolysis and trifluoroacetylation. Sonesson A, et al. J Chromatogr 1989 Jan 27;487(1):1–7

Determination of environmental levels of peptidoglycan and lipopolysaccharide using gas chromatography with negative-ion chemical-ionization mass spectrometry utilizing bacterial amino acids and hydroxy fatty acids as biomarkers. Sonesson A, et al. J Chromatogr 1988 Sep 23; 431(1):1–15

Sandwich immunoassay for the detection of lipoteichoic acid. Tadler MB, et al. J Clin Lab Anal 1989;3(1):21–5

Enzyme-linked immunosorbent assay with Brucella native hapten polysaccharide and smooth lipopolysaccharide. Alonso-Urmeneta B, et al. J Clin Microbiol 1988 Dec; 26(12):2642–6

Occurrence of a common lipopolysaccharide antigen in standard and clinical strains of Pseudomonas aeruginosa. Lam MY, et al. J Clin Microbiol 1989 May;27(5):962–7

New microassay for quantitation of endotoxin using Limulus amebocyte lysate combined with enzyme-linked immunosorbent assay. Zhang GH, et al. J Clin Microbiol 1988 Aug;26(8):1464–70

Differences in lipopolysaccharide profiles of serologically identical Legionella pneumophila serogroup 6 strains. Zanen-Lim OG, et al. J Clin Pathol 1988 Aug;41(8):826–9

Conventional tube and microplate Limulus amoebocyte lysate procedures for determination of gram-negative bacteria in milk. May SA, et al. J Dairy Sci 1989 May; 72(5):1137–41

Electrophoretic heterogeneity of lipopolysaccharides of Actinobacillus actinomycetemcomitans. Hoover CI. J Dent Res 1988 Mar;67(3):574–6

Fatty acid composition of lipopolysaccharides of the strains of different species of Yersinia. Frolov AF, et al. J Hyg Epidemiol Microbiol Immunol 1989;33(1):55–61

A spectrophotometric method for evaluating a latex agglutination assay of Salmonella typhi lipopolysaccharide. Lim PL, et al. J Immunol Methods 1988 Dec 9; 115(2):269–74

An inhibition enzyme-linked immunosorbent assay technique for the detection of endotoxins in proteins extracted from Escherichia coli K12 recombinant DNA. Peborde JP, et al. J Immunol Methods 1989 Jun 21;120(2):259–63

Immunochemistry of the cell surfaces of Bacteroides bivius and Bacteroides disiens. Brown R, et al. J Med Microbiol 1989 Apr;28(4):267–73

Gardnerella vaginalis has a gram-positive cell-wall ultrastructure and lacks classical cell-wall lipopolysaccharide. Sadhu K, et al. J Med Microbiol 1989 Jul;29(3):229–35

Bacteriophage T4 resistant mutants of the plant pathogen Erwinia carotovora. Pirhonen M, et al. Microb Pathog 1988 May;4(5):359–67

Surface exposure of the O-antigen in Klebsiella pneumoniae O1:K1 serotype strains. Tomas JM, et al. Microb Pathog 1988 Aug;5(2):141–7

Formation of a hexagonal lattice structure by an R-form lipopolysaccharide of Klebsiella: effect of various divalent cations on the lattice formation. Kato N, et al. Microbiol Immunol 1988;32(5):481–90

Immunological approaches in septic shock research. Lee CH, et al. Prog Clin Biol Res 1989;286:167–73

Lipooligosaccharides: the principal glycolipids of the neisserial outer membrane. Griffiss JM, et al. Rev Infect Dis 1988 Jul–Aug;10 Suppl 2:S287–95 (46 ref.)

Chemical composition of lipopolysaccharide from Moraxella bovis. Araujo F, et al. Vet Microbiol 1989 Jun;20(2):165–71

Development and evaluation of an enzyme-linked immunosorbent assay for endotoxin in milk. Mohammed AH, et al. Vet Microbiol 1988 Sep;18(1):27–39

Leptospiral lipopolysaccharide presence in the outer envelope: electrophoretic evidence and immunological specificity. Cinco M, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 269(3):277–83

Electron microscopic localization of lipoteichoic acid on group A streptococci. Rýc M, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):168–78

[Relation of the quantity of lipopolysaccharide in periodontal plaque and in calculus to the degree of periodontal inflammation] Li H. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 May; 23(3):136–9, 190 (Eng. Abstr.) (Chi)

[Structure of the lipopolysaccharide/human plasma low density lipoprotein complex. 31P-NMR and fluorescence spectroscopy studies] Viktorov AV, et al. Biokhimiia 1989 Apr;54(4):549–58 (Eng. Abstr.) (Rus)

[Antigenic polysaccharides of bacteria. 35. Establishment of the structure of polysaccharide chains of lipopolysaccharides of Pseudomonas cepacia IMV 4176 and IMV 4202 (Serotype 3)] Knirel' IuA, et al. Bioorg Khim 1988 Dec;14(12):1684–9 (Eng. Abstr.) (Rus)

[The structure of the O-specific polysaccharide chain of the lipopolysaccharide of Yersinia pseudotuberculosis serovar VII] Kotandrova NA, et al. Bioorg Khim 1989 Jan; 15(1):104–10 (Eng. Abstr.) (Rus)

[Structure of the O-specific polysaccharide of the Yersinia enterocolitica serovar O:4.32 lipopolysaccharide. Serologic relations of lipopolysaccharides of Y. enterocolitica O:4.32 and Y. intermedia O:4.33] Zubkov VA, et al. Bioorg Khim 1989 Feb;15(2):187–91 (Eng. Abstr.) (Rus)

[The lipopolysaccharide composition of phytopathogenic bacteria of the genus Pseudomonas, serologic group VI] Gubanova NIa, et al. Mikrobiol Zh 1987 May-Jun; 49(3):10–4 (Eng. Abstr.) (Rus)

[Characteristics of the lipopolysaccharides in Erwinia carotovora subsp. carotovora 8883 isolated by various methods] Moroz SN, et al. Mikrobiol Zh 1989 Jan-Feb; 51(1):3–9 (Eng. Abstr.) (Rus)

[Lipopolysaccharides of the S- and R-forms of Pseudomonas syringae pv. phaseolica] Muras VA, et al. Mikrobiol Zh 1987 Jul–Aug;49(4):8–11 (Eng. Abstr.) (Rus)

[The core oligosaccharides of Pseudomonas fluorescens lipopolysaccharides] Veremeichenko SN. Mikrobiol Zh 1987 Sep–Oct;49(5):18–22 (Eng. Abstr.) (Rus)

[The monosaccharide composition and serologic characteristics of lipopolysaccharides of nonfluorescent bacteria in the Pseudomonas fluorescens group] Zdorovenko GM, et al. Mikrobiol Zh 1987 Sep–Oct; 49(5):13–8 (Eng. Abstr.) (Rus)

[Comparative characteristics of lipopolysaccharides in various strains of Pseudomonas fluorescens] Zdorovenko GM, et al. Mikrobiol Zh 1987 Jul–Aug;49(4):12–7 (Eng. Abstr.) (Rus)

[Immunochemical characteristics of a lipopolysaccharide from Pseudomonas aurantiaca] Zdorovenko GM, et al. Mikrobiologiia 1988 Nov–Dec;57(6):1024–30 (Eng. Abstr.) (Rus)

[Immunochemical characteristics and serologic properties of lipopolysaccharides isolated from various Brucella species using various extraction methods] Malikov VE, et al. Zh Mikrobiol Epidemiol Immunobiol 1989 Mar;(3):22–7 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Antilipopolysaccharide factor from horseshoe crab, Tachypleus tridentatus, inhibits lipopolysaccharide activation of cultured human endothelial cells. Desch CE, et al. Infect Immun 1989 May;57(5):1612–4

Polymyxin B prevents lipopolysaccharide-induced release of tumor necrosis factor-alpha from alveolar macrophages. Stokes DC, et al. J Infect Dis 1989 Jul;160(1):52–7

Inhibition of lipopolysaccharide-induced alpha/beta-interferon synthesis by dopamine and the dopamine-1 agonist fenoldopam. Andrade-Mena CE. J Neuroimmunol 1989 Mar;22(1):47–53

BIOSYNTHESIS

Effects of aminoglycosides and spectinomycin on the synthesis and release of lipopolysaccharide by Escherichia coli. Kusser WC, et al. Antimicrob Agents Chemother 1988 Aug;32(8):1247–50

The function of beta-N-acetyl-D-glucosaminyl monophosphorylundecaprenol in biosynthesis of lipoteichoic acids in a group of Bacillus strains. Shimada A, et al. Eur J Biochem 1988 Oct 1;176(3):559–65

Molecular analysis of lipooligosaccharide biosynthesis in Neisseria gonorrhoeae. Petricoin EF 3d, et al. Infect Immun 1989 Sep;57(9):2847–52

Structure and glycosylation of lipoteichoic acids in Bacillus strains. Iwasaki H, et al. J Bacteriol 1989 Jan;171(1):424–9

Expression of a cell surface antigen from Rhizobium leguminosarum 3841 is regulated by oxygen and pH. Kannenberg EL, et al. J Bacteriol 1989 Sep;171(9):4543–8

Partial deletion of the cloned rfb gene of Escherichia coli O9 results in synthesis of a new O-antigenic lipopolysaccharide. Kido N, et al. J Bacteriol 1989 Jul; 171(7):3629–33

Biosynthesis of lipopolysaccharide in Escherichia coli. Cytoplasmic enzymes that attach 3-deoxy-D-manno-octulosonic acid to lipid A. Brozek KA, et al. J Biol Chem 1989 Apr 25;264(12):6956–66

Inhibition of lipopolysaccharide O-antigen synthesis by colicin M. Harkness RE, et al. J Biol Chem 1989 Sep 5; 264(25):14716–22

Production of an extracellular toxic complex by various strains of Pseudomonas cepacia. Straus DC, et al. J Med Microbiol 1989 Sep;30(1):17–22

Plasmid localization and mapping of two Azospirillum brasilense loci that affect exopolysaccharide synthesis. Michiels K, et al. Plasmid 1989 Mar;21(2):142–6

[Colony count and LPS content of gram-negative bacteria in cold storage foods and water] Weber-Frick C, et al. Zentralbl Bakteriol Mikrobiol Hyg [B] 1989 Feb; 187(3):181–208 (Eng. Abstr.) (Ger)

[The growth and lipopolysaccharide production of Escherichia coli and Pseudomonas aeruginosa] Weber-Frick C, et al. Zentralbl Bakteriol Mikrobiol Hyg [B] 1988 Aug; 186(5–6):478–93 (Eng. Abstr.) (Ger)

[The effect of temperature on the growth and lipopolysaccharide production of gram-negative bacteria] Weber-Frick C, et al. Zentralbl Bakteriol Mikrobiol Hyg [B] 1988 Nov; 187(1):56–69 (Eng. Abstr.) (Ger)

BLOOD

Portal and systemic plasma lipopolysaccharide concentrations in heat-stressed primates. Gathiram P, et al. Circ Shock 1988 Jul;25(3):223–30

Changes in lipopolysaccharide concentrations in hepatic portal and systemic arterial plasma during intestinal ischemia in monkeys. Gathiram P, et al. Circ Shock 1989 Feb;27(2):103–9

The physical-chemical characterization and biologic activity of serum released lipopolysaccharides. Teah VL, et al. J Immunol 1988 Nov 15;141(10):3523–31

Plasma endotoxin as a predictor of multiple organ failure and death in systemic meningococcal disease. Brandtzaeg P, et al. J Infect Dis 1989 Feb;159(2):195–204

Plasma endotoxin: increased levels in neutropenic patients do not correlate with fever. Shands JW Jr, et al. J Infect Dis 1989 Apr;159(4):777–80

The presence of endotoxin activity in cases of experimentally-induced heartwater in sheep. van Amstel SR, et al. Onderstepoort J Vet Res 1988 Dec;55(4):217–20

CHEMICAL SYNTHESIS

[Incorporation of abequose residues into O-specific polysaccharides of Salmonella serotypes B, C2 and C3] Druzhinina TN, et al. Bioorg Khim 1988 Oct;14(10):1419–27 (Eng. Abstr.) (Rus)

[Introduction of modified hexose residues into O-specific polysaccharides of Salmonella of serotype E, B, C2 and C3 using synthetic nucleotide sugars] Druzhinina TN, et al. Bioorg Khim 1988 Sep;14(9):1242–9 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Structure of the O-specific polysaccharides and the protective activity of the lipopolysaccharides in Pseudomonas aeruginosa of 7 immunotypes (after Fisher)] Stanislavskil ES, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Jun;(6):3–7 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Effect of inhaled endotoxin on bronchial reactivity in asthmatic and normal subjects. Michel O, et al. J Appl Physiol 1989 Mar;66(3):1059–64

[The pyrogenal test in assessing body immune reactivity in acute diseases of the respiratory organs] Radchenko EM. Vrach Delo 1989 Apr;(4):75–7 (Eng. Abstr.) (Rus)

GENETICS

Isolation of a mutant from Salmonella typhimurium producing acyl-deficient lipopolysaccharides. Lehmann V, et al. **Eur J Biochem** 1988 Dec 15;178(2):459-64

Molecular cloning and expression in Escherichia coli K-12 of chromosomal genes determining the O7 lipopolysaccharide antigen of a human invasive strain of E. coli O7:K1. Valvano MA, et al. **Infect Immun** 1989 Mar; 57(3):937-43

Identification of a chromosomal locus for expression of lipopolysaccharide epitopes in Haemophilus influenzae. Weiser JN, et al. **Infect Immun** 1989 Oct;57(10):3045-52

Rhizobium leguminosarum CFN42 genetic regions encoding lipopolysaccharide structures essential for complete nodule development on bean plants. Cava JR, et al. **J Bacteriol** 1989 Jan;171(1):8-15

Lipopolysaccharide mutants of Rhizobium meliloti are not defective in symbiosis. Clover RH, et al. **J Bacteriol** 1989 Jul;171(7):3961-7

Isolation and characterization of mutants of Rhizobium leguminosarum bv. viciae 248 with altered lipopolysaccharides: possible role of surface charge or hydrophobicity in bacterial release from the infection thread. de Maagd RA, et al. **J Bacteriol** 1989 Feb; 171(2):1143-50

Genetic derepression of a developmentally regulated lipopolysaccharide antigen from Rhizobium leguminosarum 3841. Wood EA, et al. **J Bacteriol** 1989 Sep;171(9):4549-55

Contribution of lipopolysaccharide to pathogenicity of Haemophilus influenzae: comparative virulence of genetically-related strains in rats. Zwahlen A, et al. **Microb Pathog** 1986 Oct;1(5):465-73

Mapping of chromosomal loci associated with lipopolysaccharide synthesis and serotype specificity in Vibrio cholerae 01 by transposon mutagenesis using Tn5 and Tn2680. Ward HM, et al. **Mol Gen Genet** 1989 Aug; 218(2):367-70

IMMUNOLOGY

Characterization of the specificity of lipopolysaccharide antigens from seven Fisher's immunotypes of Pseudomonas aeruginosa, using ELISA technique. Trafny EA, et al. **Acta Microbiol Pol** 1988;37(2):191-204

Evaluation of the opsonic capacity of core lipopolysaccharide antiserum of equine origin against smooth Escherichia coli 0111:B4, using macrophage chemiluminescence. Morris DD, et al. **Am J Vet Res** 1989 Aug;50(8):1272-8

Production and partial characterization of monoclonal antibodies to Pasteurella haemolytica A1 capsular polysaccharide and lipopolysaccharide. Penaredondo MV, et al. **Am J Vet Res** 1988 Nov;49(11):1962-8

Duration of strain 2308 infection and immunogenicity of Brucella abortus lipopolysaccharide in five strains of mice. Phillips M, et al. **Am J Vet Res** 1989 Mar;50(3):318-22

Identification of a virulence factor for Brucella abortus infection in BALB/c mice. Pugh GW Jr, et al. **Am J Vet Res** 1989 Jun;50(6):887-92

Immunologic, histopathologic, and bacteriologic responses of five strains of mice to Brucella abortus strain 2308. Pugh GW Jr, et al. **Am J Vet Res** 1989 Mar;50(3):323-8

Evaluation of the specificity of Pasteurella multocida somatic antigen-typing antisera prepared in chickens, using ribosome-lipopolysaccharide complexes as inocula. Rimler RB, et al. **Am J Vet Res** 1989 Jan;50(1):29-31

Serodiagnosis of ovine paratuberculosis, using lipoarabinomannan in an enzyme-linked immunosorbent assay. Sugden EA, et al. **Am J Vet Res** 1989 Jun;50(6):850-4

Evaluation of relationship among three purified antigens from Pasteurella multocida strain P-1059 and of their protective capacities in turkeys. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1516-21

Humoral recognition of lipopolysaccharide core antigens of gram-negative bacteria in neonatal swine. Tyler JW, et al. **Am J Vet Res** 1989 Jan;50(1):126-30

Endotoxins and anti-endotoxins (their relevance to the anaesthetist and the intensive care specialist). Brock-Utne JG, et al. **Anaesth Intensive Care** 1989 Feb;17(1):49-55 (52 ref.)

Primary in situ immune response in popliteal lymph nodes and spleen of mice after subcutaneous immunization with thymus-dependent or thymus-independent (type 1 and 2) antigens. Delemarre FG, et al. **Anat Rec** 1989 Feb; 223(2):152-7

Purified native haptens of Brucella abortus B19 and B. melitensis 16M reveal the lipopolysaccharide origin of the antigens. Zygmunt MS, et al. **Ann Inst Pasteur Microbiol** 1988 Jul-Aug;139(4):421-33

Bacteroides fragilis lipopolysaccharide and group B streptococcus serotype II glycocalyx have a common major antigenic determinant. Linko L, et al. **APMIS** 1988 Sep; 96(9):805-12

Polyclonal IgG synthesis of mononuclear cells induced by the homopolymer of 4,6-dideoxy-4-formamido-alpha-D-mannopyranosyl units isolated from Brucella melitensis. Montag T, et al. **Biomed Biochim Acta** 1988;47(6):537-42

Characterization of cross-reacting serotypes of Campylobacter jejuni. Preston MA, et al. **Can J Microbiol** 1989 Feb;35(2):265-73

Lipoarabinomannan from Mycobacterium tuberculosis induces the production of tumour necrosis factor from human and murine macrophages. Moreno C, et al. **Clin Exp Immunol** 1989 May;76(2):240-5

The effect of immunity to core lipopolysaccharides (LPS) on the production of thromboxane and prostacyclin by equine peritoneal macrophages. Morris DD, et al. **Cornell Vet** 1989 Jul;79(3):231-47

Interactions of lymphocytes with bacterial antigens. Jirillo E, et al. **Diagn Clin Immunol** 1988;5(6):279-83 (31 ref.)

Long-lasting thymus-independent immune responses to anti-idiotype lipopolysaccharide conjugates require continuous B cell renewal. Burlen O, et al. **Eur J Immunol** 1988 Sep;18(9):1433-9

B cell memory to thymus-independent antigens type 1 and type 2: the role of lipopolysaccharide in B memory induction. Zhang J, et al. **Eur J Immunol** 1988 Sep; 18(9):1417-24

Antibody response to lipopolysaccharide antigen in Shigella dysenteriae type 1 infection. Sinha AK, et al. **Indian J Med Res** 1988 Jul;88:1-6

Specific immunological unresponsiveness to bacterial lipopolysaccharides develops in a cyclic manner. Elkins KL, et al. **Infect Immun** 1989 Jul;57(7):2253-5

Roles of interferon and cellular adhesion molecules in bacterial activation of human natural killer cells. Lindemann RA. **Infect Immun** 1989 Jun;57(6):1702-6

In vitro and in vivo activity of polyclonal and monoclonal human immunoglobulins G, M, and A against Pseudomonas aeruginosa lipopolysaccharide. Pier GB, et al. **Infect Immun** 1989 Jan;57(1):174-9

Epitope specificities of murine monoclonal and rabbit polyclonal antibodies against enterobacterial lipopolysaccharides of the Re chemotype. Rozalski A, et al. **Infect Immun** 1989 Sep;57(9):2645-52

Inhibition of activated nonresponder C3H/HeJ lymphocytes by lipopolysaccharide endotoxin. Sultzer BM, et al. **Infect Immun** 1988 Dec;56(12):3040-5

Production of antibody to lipopolysaccharide (LPS) after immunization with a LPS-polymyxin B-agarose immunogen. Ryan LK, et al. **J Appl Bacteriol** 1988 Jun; 64(6):487-95

Characterization of lipopolysaccharide from Myxococcus xanthus by use of monoclonal antibodies. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2028-32

Detection of Vibrio cholerae with monoclonal antibodies specific for serovar O1 lipopolysaccharide. Adams LB, et al. **J Clin Microbiol** 1988 Sep;26(9):1801-9

Immunoglobulin M, A, and G antibody response to lipopolysaccharide O antigen in symptomatic and asymptomatic Shigella infections. Cohen D, et al. **J Clin Microbiol** 1989 Jan;27(1):162-7

Monoclonal antibodies delineate multiple epitopes on the O antigens of Salmonella typhi lipopolysaccharide. Qadri A, et al. **J Clin Microbiol** 1988 Nov;26(11):2292-6

Indirect immunoglobulin G (IgG) and IgM enzyme-linked immunosorbent assays (ELISAs) and IgM capture ELISA for detection of antibodies to lipopolysaccharide in adult typhoid fever patients in Pakistan. Sippel J, et al. **J Clin Microbiol** 1989 Jun;27(6):1298-302

Serum IgG antibodies reactive with lipoteichoic acid in adult patients with periodontitis. Monefeldt K, et al. **J Clin Periodontol** 1989 Sep;16(8):519-24

Serological properties and immunobiological activities of lipopolysaccharides from black-pigmented and related oral Bacteroides species. Fujiwara T, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2867-76

Immunobiological properties of lipopolysaccharides isolated from Fusobacterium nucleatum and F. necrophorum. Okahashi N, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1707-15

Lipopolysaccharide (LPS)-reactive monoclonal antibodies fail to inhibit LPS-induced tumor necrosis factor secretion by mouse-derived macrophages. Chia JK, et al. **J Infect Dis** 1989 May;159(5):872-80

Oral ciprofloxacin and a monoclonal antibody to lipopolysaccharide protect leukopenic rats from lethal infection with Pseudomonas aeruginosa. Collins HH, et al. **J Infect Dis** 1989 Jun;159(6):1073-82

The human antibody response during natural bacteremic infection with gram-negative bacilli against lipopolysaccharide core determinants. Cross AS, et al. **J Infect Dis** 1989 Aug;160(2):225-36

Analysis of IgA antibodies to lipopolysaccharide in Yersinia-triggered reactive arthritis. Granfors K, et al. **J Infect Dis** 1989 Jun;159(6):1142-7

Induction of meningeal inflammation by outer membrane vesicles of Haemophilus influenzae type b. Mustafa MM, et al. **J Infect Dis** 1989 May;159(5):917-22

Specificity and cross-reactivity of monoclonal antibodies reactive with the core and lipid A regions of bacterial lipopolysaccharide. Pollack M, et al. **J Infect Dis** 1989 Feb; 159(2):168-88

Immunochemical specificity of human antibodies to lipopolysaccharide from the J5 rough mutant of Escherichia coli O111:B4. Schwartzer TA, et al. **J Infect Dis** 1989 Jan;159(1):35-42

Experimental immunisation of hamsters with lipopolysaccharide antigens of Leptospira interrogans. Jost BH, et al. **J Med Microbiol** 1989 Jun;29(2):115-20

Use of an antigen-capture assay for characterisation of monoclonal antibodies to mycobacterial lipoarabinomannan. Khanolkar SR, et al. **J Med Microbiol** 1989 Mar;28(3):157-62

Humoral immunity in mice mediated by monoclonal antibodies against the A and M antigens of Brucella. Limet JN, et al. **J Med Microbiol** 1989 Sep;30(1):37-43

Inhibitory effects of rabbit antisera on mitogenic activity of Actinobacillus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **J Periodont Res** 1989 May;24(3):165-70

Treatment of toxic shock syndrome with endotoxin-neutralizing antibody. Priest BP, et al. **J Surg Res** 1989 Jun;46(6):527-31

Therapy of suspected septicemia in neonatal foals using plasma-containing antibodies to core lipopolysaccharide (LPS). Morris DD, et al. **J Vet Intern Med** 1987 Oct-Dec; 1(4):175-82

Bacterial lipopolysaccharide and gamma interferon induce transcription of beta interferon mRNA and interferon secretion in murine macrophages. Gessani S, et al. **J Virol** 1989 Jun;63(6):2785-9

Measurement in human sera of antibodies to lipopolysaccharide of Escherichia coli J5. Appelmelk B, et al. **Microb Pathog** 1987 May;2(5):391-3

Prevention of lethal endotoxemia in actinomycin D-sensitized mice by incubation of Salmonella minnesota R595 lipopolysaccharide with monoclonal antibodies to R595. Appelmelk BJ, et al. **Microb Pathog** 1988 Oct; 5(4):251-7

Comparison of monoclonal antibodies to the deeper core region of gram-negative lipopolysaccharide by means of polymyxin B inhibition studies. Appelmelk BJ, et al. **Microb Pathog** 1988 Oct;5(4):297-301

Antibody response to Escherichia coli J5 lipopolysaccharide in patients with bacteremia. Brauner A, et al. **Microb Pathog** 1987 May;2(5):395-6

Role of monoclonal O-antigen antibody epitope specificity and isotype in protection against experimental mouse typhoid. Carlin NI, et al. **Microb Pathog** 1987 Mar; 2(3):171-83

Gonococcal variants selected by growth in vivo or in vitro have antigenically different LPS. Demarco de Hormaeche R, et al. **Microb Pathog** 1988 Apr;4(4):289-97

Cytidine 5'-monophospho-N-acetyl neuraminic acid and a low molecular weight factor from human blood cells induce lipopolysaccharide alteration in gonococci when conferring resistance to killing by human serum. Parsons NJ, et al. **Microb Pathog** 1988 Oct;5(4):303-9

O-antigenic chains of lipopolysaccharide prevent binding of antibody molecules to an outer membrane pore protein in Enterobacteriaceae. van der Ley P, et al. **Microb Pathog** 1986 Feb;1(1):43-9

Epitope expression of gonococcal lipooligosaccharide (LOS). Importance of the lipoidal moiety for expression of an epitope that exists in the oligosaccharide moiety of LOS. Yamasaki R, et al. **Mol Immunol** 1988 Aug;25(8):799-809

Somatic antigens of Haemophilus influenzae as vaccine components. Murphy TF, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S66-8 (20 ref.)

Determination of antibodies against bacterial lipopolysaccharides and lipid A by immunoblotting. Fink PC, et al. **Prog Clin Biol Res** 1989;308:1043-51

Evaluation of three LPS-specific monoclonal antibodies for the immunodiagnosis of bovine brucellosis. Yong WK, et al. **Res Vet Sci** 1989 May;46(3):413-5

Immunochemical and biological reactivity of human anti-lipopolysaccharide IgG obtained by screening of blood donors. Fomsgaard A, et al. **Scand J Immunol** 1989 Mar;29(3):309-16

Different origins of IgA antibodies with various antigen specificities appearing in rat bile. Nilsson K, et al. **Scand J Immunol** 1988 Nov;28(5):547-51

Treatment of experimental gram-negative bacterial sepsis with murine monoclonal antibodies directed against lipopolysaccharide. Priest BP, et al. **Surgery** 1989 Aug; 106(2):147-54; discussion 154-5

Bovine brucellosis: evaluation of field sera by a competitive and superimposable ELISA utilising a monoclonal antibody against Brucella abortus lipopolysaccharide. Chin J, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):109-18

Immunomodulatory effects of staphylococcal lipoteichoic acid in early Listeria monocytogenes infection in Balb/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):251-6

Immunostimulating staphylococcal lipoteichoic acid prevents pulmonary tumor colonization in BALB/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):213-8

Immunological characterization of Yersinia enterocolitica O:9 and O:3 LPS antigens by monoclonal antibodies. Weninger J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):298-313

[Lipopolysaccharide-specific antibodies in intestinal lavage fluid, bile and serum of mice after oral application of inactivated Escherichia coli] Schröder R, et al. **Biomed Biochim Acta** 1988;47(9):915-20 (Eng. Abstr.) (Ger)

[Serological cross reactions of LPS and lipid A isolated from Aeromonas sobria and non 01 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(3):135-41 (Eng. Abstr.) (Pol)

[Immunogenic and antigenic properties of bacterial cells, lipopolysaccharides and lipids A of Aeromonas sobria and

non 01 vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(2):91–7 (Eng. Abstr.) (Pol)

[Characteristics of immunoglobulins specific for LPS and lipid A of Aeromonas sobria and non 01 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(3):142–8 (Eng. Abstr.) (Pol)

[Role of bacterial lipopolysaccharides in provoking immune conflict in the mother–fetus system] Bandazhevskiĭ IuI. **Arkh Patol** 1989;51(5):77–80 (56 ref.) (Eng. Abstr.) (Rus)

[Antigenic polysaccharides of bacteria. 32. The structure of O–specific polysaccharide chains of Pseudomonas cepacia serotype B and E lipopolysaccharides containing D–fucose] Knirel' IuA, et al. **Bioorg Khim** 1988 Sep;14(9):1208–13 (Eng. Abstr.) (Rus)

[Antigenic polysaccharides of bacteria. 34. Structure of O–specific polysaccharide chains of lipopolysaccharides from Pseudomonas cepacia strains IMV 4207 (Serotype A) and IMV 598/2] Knirel' IuA, et al. **Bioorg Khim** 1988 Dec; 14(12):1678–83 (Eng. Abstr.) (Rus)

[Antigenic polysaccharides of bacteria. 33. The structure of O–specific polysaccharide chain of lipopolysaccharide from Pseudomonas cepacia serotype 6] Knirel' IuA, et al. **Bioorg Khim** 1988 Oct;14(10):1413–8 (Eng. Abstr.) (Rus)

[The structure of O–specific polysaccharide of Proteus mirabilis 027 containing amino acids and phosphoethanolamine] Vinogradov EV, et al. **Bioorg Khim** 1988 Sep;14(9):1282–6 (Eng. Abstr.) (Rus)

[Immunologic and structural studies of lipopolysaccharides from Pseudomonas cepacia] Soldatkina A, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):32–8 (Eng. Abstr.) (Rus)

[The protective activity of the detoxified lipopolysaccharide of Neisseria meningitidis serogroup A in in vivo experiments] Del'vig AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):69–73 (Eng. Abstr.) (Rus)

[Immunochemical study of the lipopolysaccharides of Yersinia enterocolitica serovars O5 and O5.27] Frolova GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec; (12):90–4 (Eng. Abstr.) (Rus)

[Antibodies to meningococcal lipopolysaccharide in different forms of meningococcal infection] Martynov IuV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):55–60 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Chemical and immunochemical studies on lipopolysaccharides of Coxiella burnetii phase I and phase II. Mayer H, et al. **Adv Exp Med Biol** 1988;228:577–91 (29 ref.)

Chemical and protective properties of Brucella lipopolysaccharide obtained by butanol extraction. Phillips M, et al. **Am J Vet Res** 1989 Mar;50(3):311–7

Structure of the O-chain of the lipopolysaccharide of Pasteurella haemolytica serotype T3. Leitch RA, et al. **Biochem Cell Biol** 1988 Oct;66(10):1055–65

Rapid isolation of OmpF porin–LPS complexes suitable for structure–function studies. Holzenburg A, et al. **Biochemistry** 1989 May 16;28(10):4187–93

Synthesis of glycoconjugates derived from various lipopolysaccharides of the Vibrionaceae family. Banoub JH, et al. **Eur J Biochem** 1989 Feb 15;179(3):651–7

Purification and characterization of lipooligosaccharides from four strains of "Haemophilus somnus". Inzana TJ, et al. **Infect Immun** 1988 Nov;56(11):2830–7

Structural analysis of lipopolysaccharides from Eikenella corrodens by use of murine monoclonal antibodies. Kato T, et al. **Infect Immun** 1989 Feb;57(2):656–9

Analysis of a common-antigen lipopolysaccharide from Pseudomonas aeruginosa. Rivera M, et al. **J Bacteriol** 1989 Apr;171(4):2244–8

Characterisation of protein co–extracted together with LPS in Escherichia coli, Salmonella minnesota and Yersinia enterocolitica. Strittmatter W, et al. **Microb Pathog** 1987 Jan;2(1):29–36

Rapid preparation of samples for compositional sugar analysis of the "degraded polysaccharide" fraction of lipopolysaccharides from Vibrio cholerae. Kondo S, et al. **Microbiol Immunol** 1988;32(9):907–15

[Isolation, purification and identification of protective substances from a culture broth of germinating Bacillus cereus spores] Pronin SV, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):88–94 (Eng. Abstr.) (Rus)

METABOLISM

Activation of glomerular mesangial cells by gram–negative bacterial cell wall components. Lovett DH, et al. **Am J Pathol** 1988 Dec;133(3):472–84

Interaction between complement subcomponent C1q and bacterial lipopolysaccharides. Zohair A, et al. **Biochem J** 1989 Feb 1;257(3):865–73

Deacylation of bacterial lipopolysaccharide in rat hepatocytes in vitro. Fukuda I, et al. **Br J Exp Pathol** 1989 Jun;70(3):267–74

A high molecular weight lipopolysaccharide specific bacteriophage for Klebsiella pneumoniae. Benedí VJ, et al. **Can J Microbiol** 1988 Jul;34(7):918–21

Interactions between lipopolysaccharide and outer membrane proteins of Acinetobacter calcoaceticus studied by an affinity electrophoresis system. Borneleit P, et al. **Electrophoresis** 1989 Apr;10(4):234–7

Clearance of gut–derived endotoxins by the liver. Release and modification of 3H, 14C–lipopolysaccharide by isolated rat Kupffer cells. Fox ES, et al. **Gastroenterology** 1989 Feb; 96(2 Pt 1):456–61

Effect of Agrobacterium tumefaciens lipopolysaccharide on hemolytic complement system. Ray MK, et al. **Indian J Exp Biol** 1988 Jul;26(7):564–6

Accumulation of chlamydial lipopolysaccharide antigen in the plasma membranes of infected cells. Karimi ST, et al. **Infect Immun** 1989 Jun;57(6):1780–5

Endotoxic–lipopolysaccharide–specific binding proteins on lymphoid cells of various animal species: association with endotoxin susceptibility. Roeder DJ, et al. **Infect Immun** 1989 Apr;57(4):1054–8

Lipoteichoic acid–antilipoteichoic acid complexes induce superoxide generation by human neutrophils. Ginsburg I, et al. **Inflammation** 1988 Dec;12(6):525–48

Novel change in the carbohydrate portion of Myxococcus xanthus lipopolysaccharide during development. Panasenko SM, et al. **J Bacteriol** 1989 Apr;171(4):1835–40

Purification of acyloxyacyl hydrolase, a leukocyte enzyme that removes secondary acyl chains from bacterial lipopolysaccharides. Munford RS, et al. **J Biol Chem** 1989 Sep 15;264(26):15613–9

Lipopolysaccharide interaction with lysozyme. Binding of lipopolysaccharide to lysozyme and inhibition of lysozyme enzymatic activity. Ohno N, et al. **J Biol Chem** 1989 Mar 15;264(8):4434–41

CR3 (CD11b/CD18) expresses one binding site for Arg–Gly–Asp–containing peptides and a second site for bacterial lipopolysaccharide. Wright SD, et al. **J Exp Med** 1989 Jan 1;169(1):175–83

O–antigenic lipopolysaccharides isolated from a marine Vibrio, bio–serogroup 1875, possessing an antigenic factor in common with O1 Vibrio cholerae. Haishima Y, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1827–33

A comparative study of the sugar composition of lipopolysaccharides isolated from Vibrio cholerae, 'Vibrio albensis' and Vibrio metschnikovii. Kondo S, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1699–705

Lipopolysaccharide masking of gonococcal outer–membrane proteins modulates binding of bacterial cathepsin G to gonococci. Shafer WM. **J Gen Microbiol** 1988 Mar;134 (Pt 3):539–45

Plasmid–mediated serum resistance and alterations in the composition of lipopolysaccharides in Salmonella dublin. Terakado N, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2089–93

Cellular and subcellular distribution of injected lipopolysaccharide in rat liver and its inactivation by bile salts. Van Bossuyt H, et al. **J Hepatol** 1988 Dec;7(3):325–37

A procedure for the efficient incorporation of wild–type lipopolysaccharide into liposomes for use in immunological studies. Dijkstra J, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):197–205

Different priming on human neutrophil respiratory burst by lipopolysaccharides from phase I and phase II Coxiella burnetii. Fumarulo R, et al. **Microbiologica** 1989 Jan; 12(1):55–60

Core–specific receptors for lipopolysaccharide on hepatocytes. Parent JB. **Prog Clin Biol Res** 1989;286:131–44

Localization of a lipoteichoic acid binding site to a 24–kilodalton NH2–terminal fragment of fibronectin. Courtney HS, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S360–2

The role of bile acids in the reduction in lipopolysaccharide uptake by cultured rat Kupffer cells. Van Bossuyt H, et al. **Virchows Arch [B]** 1989;57(3):141–7

[The extracellular lipopolysaccharide of gram–negative bacteria] Zdorovenko GM. **Mikrobiol Zh** 1988 Jul–Aug; 50(4):98–107 (27 ref.) (Rus)

PHARMACOKINETICS

Effect of prostaglandin E2 and bacterial endotoxin on the rate of dye transport in the eustachian tube of the chinchilla. Bakaletz LO, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):278–82

A single dose of endotoxin increases intestinal permeability in healthy humans. O'Dwyer ST, et al. **Arch Surg** 1988 Dec;123(12):1459–64

Uptake and modification of 125I–lipopolysaccharide by isolated rat Kupffer cells. Fox ES, et al. **Hepatology** 1988 Nov–Dec;8(6):1550–4

PHARMACOLOGY

Modulation of serum amyloid A gene expression by cytokines and bacterial cell wall components. Sipe JD, et al. **Adv Exp Med Biol** 1988;243:193–201 (37 ref.)

The effects of bacterial lipopolysaccharide (LPS) on high endothelial venules, T lymphocytes and interdigitating cells in mouse lymph nodes. Twisk AJ, et al. **Adv Exp Med Biol** 1988;237:807–11

Lipopolysaccharide stimulates alveolar macrophage adherence in vivo and in vitro. Edelman J, et al. **Agents Actions** 1989 Mar;26(3–4):287–91

Pharmacologic modulation of TNF production by endotoxin stimulated macrophages: in vitro and in vivo effects of auranofin and other chrysotherapeutic compounds. Evans GF, et al. **Agents Actions** 1989 Mar;26(3–4):329–34

Reactivation of a residual Brucella abortus 19 vaccine infection in mice by a virulent challenge or by injection of brucellin or of Brucella lipopolysaccharide. Plommet M, et al. **Ann Rech Vet** 1988;19(4):245–51

Inhibition of polymorphonuclear leucocyte functions in vivo by Yersinia enterocolitica lipopolysaccharide. Hartiala KT, et al. **Ann Rheum Dis** 1989 Jan;48(1):42–7

Peripheral blood leukocyte kinetics following in vivo lipopolysaccharide (LPS) administration to normal human subjects. Influence of elicited hormones and cytokines. Richardson RP, et al. **Ann Surg** 1989 Aug;210(2):239–45

Degradation of arachidonyl phospholipids catalyzed by two phospholipases A2 and phospholipase C in a lipopolysaccharide–treated macrophage cell line RAW264.7. Tanaka Y, et al. **Arch Biochem Biophys** 1989 Jul;272(1):210–8

The effect of lipopolysaccharide from the oral bacterium Bacteroides gingivalis on osteoclastic resorption of sperm–whale dentine slices in vitro. Sismey–Durrant HJ, et al. **Arch Oral Biol** 1987;32(12):911–3

Endotoxin modulation of hepatocyte secretory and cellular protein synthesis is mediated by Kupffer cells. West MA, et al. **Arch Surg** 1988 Nov;123(11):1400–5

Defect of calmodulin–binding protein in expression of interleukin–1 beta gene by LPS–nonresponder C3H/HeJ mouse macrophages. Terada Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):723–9

A novel mechanism of soluble guanylate cyclase stimulation: time–dependent activation by bacterial lipopolysaccharide in rat fetal spleen cells. Graber SE, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):331–8

Changes in neutral amino acid transport activity in myeloid leukemia cells differentiated by lipopolysaccharide. Sato H, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):259–63

Involvement of a pertussis toxin–sensitive G–protein–coupled phospholipase A2 in lipopolysaccharide–stimulated prostaglandin E2 synthesis in cultured rat mesangial cells. Wang J, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):429–35

Stimulation of collagenolytic enzyme release from cultured bone cells of normal and osteopetrotic (mi/mi) mice by parathyroid hormone and lipopolysaccharide. Jilka RL. **Bone Miner** 1989 Jul;6(3):277–87

In–vivo blockage of neutrophil migration by LPS is mimicked by a factor released from LPS–stimulated macrophages. Cunha FQ, et al. **Br J Exp Pathol** 1989 Feb; 70(1):1–8

Lipopolysaccharide–induced insulin resistance in monolayers of cultured hepatocytes. Portolés MT, et al. **Br J Exp Pathol** 1989 Apr;70(2):199–205

The effect of lipopolysaccharide from bacteroides gingivalis and muramyl dipeptide on osteoblast collagenase release. Sismey–Durrant HJ, et al. **Calcif Tissue Int** 1989 May; 44(5):361–3

Production of cytokines after lipopolysaccharide stimulation of murine spleen cells during lymphoma development in AKR mice. Vaillier D, et al. **Cancer Immunol Immunother** 1989;29(1):35–42

Antiproliferative activity of gamma–interferon combined with lipopolysaccharide on murine adenocarcinoma: dependence on an L–arginine metabolism with production of nitrite and citrulline. Lepoivre M, et al. **Cancer Res** 1989 Apr 15;49(8):1970–6

Stimulation of lymphocyte migration by endotoxin, tumor necrosis factor, and interferon. Issekutz TB, et al. **Cell Immunol** 1989 Apr 15;120(1):165–73

Adult human vascular endothelial cells express the IL6 gene differentially in response to LPS or IL1. Loppnow H, et al. **Cell Immunol** 1989 Sep;122(2):493–503

Human endothelial cell response to lipopolysaccharide, interleukin–1, and tumor necrosis factor is regulated by protein synthesis. Pohlman TH, et al. **Cell Immunol** 1989 Mar;119(1):41–52

Regulation of tumor necrosis factor expression in a macrophage–like cell line by lipopolysaccharide and cyclic AMP. Taffet SM, et al. **Cell Immunol** 1989 May; 120(2):291–300

A new pharmacological testing method—different effects of levamisole and the serum of mice orally treated with levamisole on mitogenic activity of lipopolysaccharide. Amagaya S, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1117–9

Effects of recombinant human tumor necrosis factor alpha, lymphotoxin, and Escherichia coli lipopolysaccharide on hemodynamics, lung microvascular permeability, and eicosanoid synthesis in anesthetized sheep. Kreil EA, et al. **Circ Res** 1989 Aug;65(2):502–14

The inhibitory effects of mycobacterial lipoarabinomannan and polysaccharides upon polyclonal and monoclonal human T cell proliferation. Moreno C, et al. **Clin Exp Immunol** 1988 Nov;74(2):206–10

Kinetics of glomerular neutrophil influx after lipopolysaccharide in antibody–mediated injury. Savige JA, et al. **Clin Exp Immunol** 1988 Jul;73(1):134–8

Lipopolysaccharide–stimulated rat brain macrophages release NGF in vitro. Mallat M, et al. **Dev Biol** 1989 May; 133(1):309–11

Osteoblast–like cells secrete granulocyte–macrophage colony–stimulating factor in response to parathyroid hormone and lipopolysaccharide. Weir EC, et al. **Endocrinology** 1989 Feb;124(2):899–904

The lipopolysaccharide-induced stimulation of peritoneal macrophages involves at least two signal pathways. Partial stimulation by lipid A precursors. Benninghoff B, et al. **Eur J Biochem** 1989 Feb 15;179(3):589–94

Structural and physicochemical requirements of endotoxins for the activation of arachidonic acid metabolism in mouse peritoneal macrophages in vitro. Lüderitz T, et al. **Eur J Biochem** 1989 Jan 15;179(1):11–6

Pyrogenic immunomodulators increase the level of prostaglandin E2 in the blood simultaneously with the onset of fever. Rotondo D, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):145–52

Megakaryocyte colony-stimulating factor and burst-promoting activity in LPS-treated mouse spleen cell-conditioned medium. Sugimoto M, et al. **Exp Cell Biol** 1988;56(5):245–53

Lipopolysaccharide-induced suppression of graft-versus-host reactivity in mice. Molendijk A, et al. **Immunobiology** 1988 Sep;177(4–5):371–81

Different effects of bacterial lipopolysaccharide on superoxide anion production by macrophages from normal and tumor-bearing rats. Altavilla D, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):99–106

Dissociation of cell-associated interleukin-1 (IL-1) and IL-1 release induced by lipopolysaccharide and lipid A. Cavaillon JM, et al. **Infect Immun** 1989 Mar;57(3):791–7

Effects of interleukin-1, lipopolysaccharide, and streptococci on procoagulant activity of cultured human cardiac valve endothelial and stromal cells. Drake TA, et al. **Infect Immun** 1989 Feb;57(2):507–12

Comparison of the biological responses induced by lipopolysaccharide and endotoxin of Treponema hyodysenteriae and Treponema innocens. Greer JM, et al. **Infect Immun** 1989 Mar;57(3):717–23

Optimal induction of tumor necrosis factor production in human monocytes requires complete S-form lipopolysaccharide. Mannel DN, et al. **Infect Immun** 1989 Jul;57(7):1953–8

Role of lipopolysaccharide in induction of Ia expression during infection with gram-negative bacteria. Marshall NE, et al. **Infect Immun** 1989 May;57(5):1556–60

Production of interleukin-1 but not tumor necrosis factor by human monocytes stimulated with pneumococcal cell surface components. Riesenfeld-Orn I, et al. **Infect Immun** 1989 Jul;57(7):1890–3

Dynamics of dibutyryl cyclic AMP- and prostaglandin E2-mediated suppression of lipopolysaccharide-induced tumor necrosis factor alpha gene expression. Spengler RN, et al. **Infect Immun** 1989 Sep;57(9):2837–41

Diphosphoryl lipid A from Rhodopseudomonas sphaeroides ATCC 17023 blocks induction of cachectin in macrophages by lipopolysaccharide. Takayama K, et al. **Infect Immun** 1989 Apr;57(4):1336–8

The action of LPS porins and peptidoglycan fragments on human spermatozoa. Galdiero F, et al. **Infection** 1988; 16(6):349–53

Inhibition of adhesion of viridans streptococci to fibronectin-coated hydroxyapatite beads by lipoteichoic acid. Hogg SD, et al. **J Appl Bacteriol** 1988 Dec;65(6):483–9

Critical O2 delivery to skeletal muscle at high and low PO2 in endotoxemic dogs. Bredle DL, et al. **J Appl Physiol** 1989 Jun;66(6):2553–8

Exercise training attenuates the myocardial dysfunction induced by endotoxin. DeBlieux PM, et al. **J Appl Physiol** 1989 Jun;66(6):2805–10

Tolerance to low-dose endotoxin in awake sheep. Whyte RI, et al. **J Appl Physiol** 1989 Jun;66(6):2546–52

Lipoprotein abnormalities associated with lipopolysaccharide-induced lecithin: cholesterol acyltransferase and lipase deficiency. Auerbach BJ, et al. **J Biol Chem** 1989 Jun 15;264(17):10264–70

Macrophages rapidly internalize their tumor necrosis factor receptors in response to bacterial lipopolysaccharide. Ding AH, et al. **J Biol Chem** 1989 Mar 5;264(7):3924–9

O-antigen from Bradyrhizobium japonicum lipopolysaccharide inhibits intercellular (symplast) communication between soybean (Glycine max) cells. Gharyal PK, et al. **J Biol Chem** 1989 Jul 25; 264(21):12119–21

Distinct and additive effects of elastase and endotoxin on expression of alpha 1 proteinase inhibitor in mononuclear phagocytes. Perlmutter DH, et al. **J Biol Chem** 1988 Nov 5;263(31):16499–503

Regulation of type 1 plasminogen activator inhibitor gene expression in cultured bovine aortic endothelial cells. Induction by transforming growth factor-beta, lipopolysaccharide, and tumor necrosis factor-alpha. Sawdey M, et al. **J Biol Chem** 1989 Jun 25; 264(18):10396–401

Lipopolysaccharide-inducible macrophage early genes are induced in Balb/c 3T3 cells by platelet-derived growth factor. Tannenbaum CS, et al. **J Biol Chem** 1989 Mar 5; 264(7):4052–7

Lipopolysaccharide-dependent enhancement of adherence-mediated chemiluminescence response of polymorphonuclear leukocytes. Dwenger A, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):35–9

Lipopolysaccharide-induced expression of the competence gene KC in vascular endothelial cells is mediated through protein kinase C. Shen XY, et al. **J Cell Physiol** 1989 Jul; 140(1):44–51

Bacterial lipopolysaccharides prime human neutrophils for enhanced production of leukotriene B4. Doerfler ME, et al. **J Clin Invest** 1989 Mar;83(3):970–7

Lipopolysaccharide priming of human neutrophils for an enhanced respiratory burst. Role of intracellular free calcium. Forehand JR, et al. **J Clin Invest** 1989 Jan; 83(1):74–83

Parathyroid hormone and lipopolysaccharide induce murine osteoblast-like cells to secrete a cytokine indistinguishable from granulocyte-macrophage colony-stimulating factor. Horowitz MC, et al. **J Clin Invest** 1989 Jan;83(1):149–57

Transforming growth factor beta specifically enhances IgA production by lipopolysaccharide-stimulated murine B lymphocytes. Coffman RL, et al. **J Exp Med** 1989 Sep 1;170(3):1039–44

Interferons and bacterial lipopolysaccharide protect macrophages from productive infection by human immunodeficiency virus in vitro. Kornbluth RS, et al. **J Exp Med** 1989 Mar 1;169(3):1137–51

Mitogen plus interleukin 4 induction of C epsilon transcripts in B lymphoid cells. Rothman P, et al. **J Exp Med** 1988 Dec 1;168(6):2385–9

Interferon gamma and lipopolysaccharide promote macrophage adherence to basement membrane glycoproteins. Shaw LM, et al. **J Exp Med** 1989 Jan 1; 169(1):303–8

Role of lipopolysaccharide and complement in susceptibility of Escherichia coli and Salmonella typhimurium to non-immune serum. Tomás JM, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1009–16

The release of tumor necrosis factor from endotoxin-stimulated rat Kupffer cells is regulated by prostaglandin E2 and dexamethasone. Karck U, et al. **J Hepatol** 1988 Dec;7(3):352–61

Guinea pig Kupffer cells can be activated in vitro to an enhanced superoxide response. I. Comparison with peritoneal macrophages. Rieder H, et al. **J Hepatol** 1988 Dec;7(3):338–44

Reactive oxygen species facilitate the in vitro and in vivo lipopolysaccharide-induced release of tumor necrosis factor. Chaudhri G, et al. **J Immunol** 1989 Aug 15; 143(4):1290–4

Immunostimulation of C3H/HeJ lymphoid cells by R-chemotype lipopolysaccharide preparations. Flebbe L, et al. **J Immunol** 1989 Jan 15;142(2):642–52

Products of lipopolysaccharide-activated macrophages (tumor necrosis factor-alpha, transforming growth factor-beta) but not lipopolysaccharide modify DNA synthesis by rat trophoblast cells exhibiting the 80-kDa lipopolysaccharide-binding protein. Hunt JS, et al. **J Immunol** 1989 Sep 1;143(5):1606–13

Bacterial lipopolysaccharide and inflammatory mediators augment IL-6 secretion by human endothelial cells. Jirik FR, et al. **J Immunol** 1989 Jan 1;142(1):144–7

IL-4 induces the specific rearrangement of gamma 1 genes on the expressed and unexpressed chromosomes of lipopolysaccharide-activated normal murine B cells. Kepron MR, et al. **J Immunol** 1989 Jul 1;143(1):334–9

Effect of lipopolysaccharide on C3 and C5 production by human lung cells. Rothman BL, et al. **J Immunol** 1989 Jul 1;143(1):196–202

Involvement of class II MHC molecules in the LPS-induction of IL-1/TNF secretions by human monocytes. Quantitative differences at the polymorphic level. Santamaria P, et al. **J Immunol** 1989 Aug 1; 143(3):913–22

IFN-gamma and LPS overcome glucocorticoid inhibition of priming for superoxide release in human monocytes. Evidence that secretion of IL-1 and tumor necrosis factor-alpha is not essential for monocyte priming. Szefler SJ, et al. **J Immunol** 1989 Jun 1;142(11):3985–92

Factors mediating lipopolysaccharide-induced ganglioside expression in murine peritoneal macrophages. Berenson CS, et al. **J Leukoc Biol** 1989 Mar;45(3):221–30

Prostaglandin E2 and thromboxane B2 release from human monocytes treated with bacterial lipopolysaccharide. Nichols FC, et al. **J Leukoc Biol** 1988 Nov;44(5):376–84

Modulation of macrophage fibronectin secretion by LPS. Trotter KM, et al. **J Leukoc Biol** 1989 Jun;45(6):515–22

Bacterial lipopolysaccharide reduces macrophage lipoprotein lipase levels: an effect that is independent of tumor necrosis factor. White JR, et al. **J Lipid Res** 1988 Oct;29(10):1379–85

Molecular basis for the inhibition of LPS induced differentiation by anti-immunoglobulin. Yuan D. **J Mol Cell Immunol** 1987;3(3):133–44

Beta-endorphin and lipopolysaccharide interactions with human neutrophils. Simpkins CO, et al. **J Natl Med Assoc** 1988 Feb;80(2):199–203

Systemic lipopolysaccharide and pokeweed mitogen increase quinolinic acid content of mouse cerebral cortex. Heyes MP, et al. **J Neurochem** 1988 Dec;51(6):1946–8

Lipopolysaccharide-free conditions in primary astrocyte cultures allow growth and isolation of microglial cells. Gebicke-Haerter PJ, et al. **J Neurosci** 1989 Jan;9(1):183–94

LPS-elicited secretory responses in monocytes: altered release of PGE2 but not IL-1 beta in patients with adult periodontitis. Garrison SW, et al. **J Periodont Res** 1989 Mar;24(2):88–95

Lipopolysaccharide-stimulated PGE2 release from human monocytes. Comparison of lipopolysaccharides prepared from suspected periodontal pathogens. Garrison SW, et al. **J Periodontol** 1988 Oct;59(10):684–7

Hypoxia and endotoxin induce macrophage-mediated suppression of fibroblast proliferation. Bankey P, et al. **J Trauma** 1989 Jul;29(7):972–9; discussion 979–80

Prostaglandin E1, prostaglandin E2, and endotoxin failure to produce fever in the Japanese freshwater snail Semisulcospira libertina. Rossetti Y, et al. **Jpn J Physiol** 1988;38(2):179–86

Production of tumor necrosis factor by rat mesangial cells in response to bacterial lipopolysaccharide. Baud L, et al. **Kidney Int** 1989 May;35(5):1111–8

Alcohol suppresses lipopolysaccharide-induced tumor necrosis factor activity in serum and lung. Nelson S, et al. **Life Sci** 1989;44(10):673–6

Endotoxin-induced reduction of beta-adrenergic binding sites on splenic lymphocytes in vivo and in vitro: its modulation by anterior hypothalamic lesions. Van Oosterhout AJ, et al. **Life Sci** 1989;44(1):57–65

Interleukin 1 and tumor necrosis factor: studies on the induction by lipopolysaccharide partial structures. Flad HD, et al. **Lymphokine Res** 1989 Fall;8(3):235–8

Immunomodulation of HLA class I and II expression on a human tumor derived cell line by 5-azacytidine, bacterial lipopolysaccharide, gamma interferon and a phorbol ester. Santamaría M, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):269–72

Regulation of tissue factor gene expression in the monocyte procoagulant response to endotoxin. Gregory SA, et al. **Mol Cell Biol** 1989 Jun;9(6):2752–5

Interleukin-1 induction by lipopolysaccharides: structural requirements of the 3-deoxy-D-manno-2-octulosonic acid (KDO). Haeffner-Cavaillon N, et al. **Mol Immunol** 1989 May;26(5):485–94

Effect of cisplatin, lipopolysaccharide, muramyl dipeptide and recombinant interferon-gamma on murine macrophages in vitro. I. Macrophage-mediated tumor cell lysis. Geetha B, et al. **Nat Immun Cell Growth Regul** 1989; 8(2):100–7

Effect of cisplatin, lipopolysaccharide, muramyl dipeptide and recombinant interferon-gamma on murine macrophages in vitro. II. Production of H2O2, O2- and interleukin-1. Sodhi A, et al. **Nat Immun Cell Growth Regul** 1989;8(2):108–16

Induction of lymph follicle formation with endotoxin lipopolysaccharide in the draining lymph node of athymic nude mice. Hoshi H, et al. **Pathol Res Pract** 1988 Dec; 184(1):60–8

Neonatal host defense mechanisms against Listeria monocytogenes infection: the role of lipopolysaccharides and interferons. Bortolussi R, et al. **Pediatr Res** 1989 Mar; 25(3):311–5

1H-nuclear magnetic resonance (NMR) spectroscopic study of B lymphocytes stimulated with lipopolysaccharide (LPS). Ohsaka A, et al. **Physiol Chem Phys Med NMR** 1988;20(3):167–70

Production of tumor necrosis factor and other cytokines by astrocytes stimulated with lipopolysaccharide or a neurotropic virus. Lieberman AP, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6348–52

Effects of bacterial exo- and endotoxins on endothelial arachidonate metabolism. Suttorp N, et al. **Prog Clin Biol Res** 1989;308:119–25

Association between HLA-DR2 and production of tumour necrosis factor alpha and interleukin 1 by mononuclear cells activated by lipopolysaccharide. Bendtzen K, et al. **Scand J Immunol** 1988 Nov;28(5):599–606

Trypsin does not reconstitute responsiveness to lipopolysaccharide in the strain C3H/HeJ, but is a B-cell mitogen-like lipopolysaccharide, stimulating a different subpopulation. Cardell S, et al. **Scand J Immunol** 1989 Feb; 29(2):143–9

Comparison of interleukin 1 release and interleukin 1 mRNA expression of human monocytes activated by bacterial lipopolysaccharide or synthetic lipid A. Hurme M, et al. **Scand J Immunol** 1989 Aug;30(2):259–63

Effective inhibition of cardiolipin-binding antibodies in gram-negative infections by bacterial lipopolysaccharide. Vaarala O, et al. **Scand J Immunol** 1988 Nov;28(5):607–12

Ultrastructural and functional effects of lipopolysaccharide and interleukin-2 on human NK cells. Kang YH, et al. **Scanning Microsc** 1988 Sep;2(3):1567–86

Endothelial cell gene expression of a neutrophil chemotactic factor by TNF-alpha, LPS, and IL-1 beta. Strieter RM, et al. **Science** 1989 Mar 17;243(4897):1467–9

Correlation between antigenic and functional expression of tissue factor on the surface of cultured human endothelial cells following stimulation by lipopolysaccharide endotoxin. Noguchi M, et al. **Thromb Res** 1989 Jul 1; 55(1):87–97

Mechanisms for the stimulation of prostanoid synthesis by cyclosporine and bacterial lipopolysaccharide. Zhang H, et al. **Transplantation** 1989 May;47(5):864–71

Adjuvant activities of synthetic lipid A subunit analogues and its conjugates with muramyl dipeptide derivatives. Maeda H, et al. **Vaccine** 1989 Jun;7(3):275–81

[The cytoplasmic membranes and lipopolysaccharide of Escherichia coli as immunostimulants] Ivanova E, et al. **Acta Microbiol Bulg** 1988;23:69–77 (Eng. Abstr.) **(Bul)**

[Influences of endotoxin on oxidation of fatty acid in rabbits: a comparison between medium chain- and long chain-fatty acids] Hioki T. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):483–8 (Eng. Abstr.) **(Jpn)**

[Immunotropic properties of lipopolysaccharides of gram-negative bacteria] Sibiriak SV, et al.

Antibiot Khimioter 1988 Nov;33(11):871–7 **(Rus)**
[Lipopolysaccharide-induced hydrolysis of plasmalogenic phosphatidylethanolamine in human platelets] Viktorov AV, et al. **Biokhimiia** 1988 May;53(5):842–7 (Eng. Abstr.) **(Rus)**
[The stimulating action of lipopolysaccharide and muramyl dipeptide on the activation of mononuclear cells in human peripheral blood by recombinant interleukin-2 in vitro] Rakhmilevich AL, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):698–701 (Eng. Abstr.) **(Rus)**
[The effect of gram-negative bacteria lipopolysaccharides on the development of Rauscher leukosis in BALB/c mice] Shevliagin VIa, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 Apr;(4):14–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The influence of lipopolysaccharide on the transformation efficiency of Klebsiella pneumoniae. Camprubí S, et al. **Can J Microbiol** 1989 Jul;35(7):735–7
Effects of leptospiral lipopolysaccharide on rabbit platelets. Isogai E, et al. **Int J Med Microbiol** 1989 Jul;271(2):186–96
Mutational changes in physiochemical cell surface properties of plant-growth-stimulating Pseudomonas spp. do not influence the attachment properties of the cells. de Weger LA, et al. **J Bacteriol** 1989 May;171(5):2756–61
Defects in motility and development of Myxococcus xanthus lipopolysaccharide mutants. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2042–8
Roles of flagella, lipopolysaccharide, and a Ca2+-dependent cell surface protein in attachment of Rhizobium leguminosarum biovar viciae to pea root hair tips. Smit G, et al. **J Bacteriol** 1989 Jan;171(1):569–72
Bacterial lipopolysaccharide regulates the phosphorylation of the 68K protein kinase C substrate in macrophages. Rosen A, et al. **J Biol Chem** 1989 Jun 5;264(16):9118–21
Dexamethasone modulation of in vivo effects of endotoxin, tumor necrosis factor, and interleukin-1 on liver cytochrome P-450, plasma fibrinogen, and serum iron. Bertini R, et al. **J Leukoc Biol** 1989 Sep;46(3):254–62
Downregulation of tumor necrosis factor expression in the human Mono-Mac-6 cell line by lipopolysaccharide. Haas JG, et al. **J Leukoc Biol** 1989 Jul;46(1):11–4
The immunosuppressive effects of the in vivo administration of endotoxin as influenced by macrophages. Ogle CK, et al. **J Trauma** 1989 Jul;29(7):1015–20
Contribution of Haemophilus influenzae type b lipopolysaccharide to pathogenesis of infection. Kaplan SL, et al. **Microb Pathog** 1988 Jul;5(1):55–62
Invasion and lysis of HeLa cell monolayers by Salmonella typhi: the role of lipopolysaccharide [published erratum appears in Microb Pathog 1989 Apr;6(4):preceding Table of Contents] Mroczenski-Wildey MJ, et al.
Microb Pathog 1989 Feb;6(2):143–52
The interaction of Escherichia coli with normal human serum: factors affecting the capacity of serum to mediate lipopolysaccharide release. Tesh VL, et al.
Microb Pathog 1988 Mar;4(3):175–87
Topographical alterations in proteins I of Neisseria gonorrhoeae correlated with lipooligosaccharide variation. Judd RC, et al. **Mol Microbiol** 1989 May;3(5):637–43

POISONING

[Prostaglandins and cyclic nucleotides in the dynamic development of an experimental poisoning syndrome caused by Yersinia pestis lipopolysaccharide] Cherkasova TD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):3–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Alterations in the chemical composition and antigenicity of Escherichia coli O89 lipopolysaccharide and lipid A after 60Co gamma irradiation. Elekes E, et al.
Acta Microbiol Hung 1988;35(3):301–5
Effect of ionizing radiation on macrophage stimulating property of Vibrio parahaemolyticus lipopolysaccharide. Bandekar JR, et al. **Indian J Exp Biol** 1988 Sep;26(9):661–4

THERAPEUTIC USE

Protection against the consequences of intravascular coagulation by reticuloendothelial stimulation. Lázár G Jr, et al. **Prog Clin Biol Res** 1989;308:1001–5
[Treatment of patients with chronic catarrhal bronchitis using bacterial polysaccharides as a way to correct secondary immunologic deficiency] Kokosov AN, et al. **Ter Arkh** 1988;60(10):100–3 (Eng. Abstr.) **(Rus)**
[Effect of pyrogenal on dynamics of reflex-motor disorders in patients with diffuse sclerosis] Tiazhkorob AM, et al. **Vrach Delo** 1988 Nov;(11):81–3 (Eng. Abstr.) **(Rus)**

TOXICITY

Cytoplasts and Mo1-deficient neutrophils pretreated with plasma and LPS induce lung injury. Wencel ML, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H751–9
Mucociliary disease of the middle ear during experimental otitis media with effusion induced by bacterial endotoxin. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Jun; 98(6):479–84
Response of cultured rat Kupffer cells to lipopolysaccharide. Van Bossuyt H, et al. **Arch Toxicol** 1988;62(4):316–24
Effects of the polysaccharide chain of lipopolysaccharide in an experimental massive hepatic cell necrosis model. Mizoguchi Y, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1305–10
Morphological damage induced by Escherichia coli lipopolysaccharide in cultured hepatocytes: localization and binding properties. Pagani R, et al.
Br J Exp Pathol 1988 Aug;69(4):537–49
Possible pathogenic mechanisms of Campylobacter pylori [letter] Fumarola D, et al.
Eur J Clin Microbiol Infect Dis 1988 Aug;7(4):579–80
Attenuation of endotoxin-induced cytotoxicity and prostacyclin production in cultured bovine pulmonary artery endothelial cells by phosphodiesterase inhibition. Hussein A, et al. **Exp Lung Res** 1988;14(5):637–54
Effects of the polysaccharide chain of lipopolysaccharide in an experimental massive hepatic cell necrosis model in the mice. Mizoguchi Y, et al. **Gastroenterol Jpn** 1988 Aug; 23(4):390–3
Modulation of endotoxin lethality in mice by hydrazine sulfate. Silverstein R, et al. **Infect Immun** 1989 Jul; 57(7):2072–8
Bacterial lipopolysaccharide-induced intestinal microvascular lesions leading to acute diarrhea. Mathan VI, et al. **J Clin Invest** 1988 Nov;82(5):1714–21
Haemophilus influenzae lipopolysaccharide-induced blood brain barrier permeability during experimental meningitis in the rat. Wispelwey B, et al. **J Clin Invest** 1988 Oct; 82(4):1339–46
Age and lpr dependent induction of increased sensitivity to the toxic effects of lipopolysaccharide and indomethacin in MRL mice: evidence for RES activation during disease progression. Hart DA. **J Clin Lab Immunol** 1988 Jul; 26(3):129–34
Shwartzman reaction in the brain induced by Haemophilus somnus and Escherichia coli lipopolysaccharide in rabbits. Nakajima Y, et al. **J Comp Pathol** 1989 Apr;100(3):231–6
Factors involved in the fatal susceptibility to submicrogram doses of endotoxin in cycloheximide-treated mice. Parry EW. **J Comp Pathol** 1989 Jan;100(1):13–8
Further analysis of lethal factors in cycloheximide-treated mice given low doses of bacterial lipopolysaccharide. Parry EW. **J Comp Pathol** 1989 Feb;100(2):155–60
Modulation of antibody-mediated glomerular injury in vivo by bacterial lipopolysaccharide, tumor necrosis factor, and IL-1. Tomosugi NI, et al. **J Immunol** 1989 May 1; 142(9):3083–90
Role of platelet activating factor in endotoxemic acute renal failure in the male rat. Tolins JP, et al.
J Lab Clin Med 1989 Mar;113(3):316–24
Effects of anti-lipid A human monoclonal antibody on lipopolysaccharide-induced toxicity to the kidney. Tune BM, et al. **J Urol** 1989 Jun;141(6):1463–6
Involvement of cytochrome b5 in the cytotoxic response to Escherichia coli lipopolysaccharide. Portolés MT, et al. **Mol Cell Biochem** 1989 May 4;87(1):79–84
Effect of macrophage inhibition in carrageenan- and D-galactosamine-induced sensitivity to low-dose endotoxin. Kujawa KI, et al. **Prog Clin Biol Res** 1989; 286:237–42
Macrophages regulate the host response to bacterial lipopolysaccharides. Ulevitch RJ, et al.
Prog Clin Biol Res 1989;309:193–202
Synergistic interaction between the trichothecene T-2 toxin and Salmonella typhimurium lipopolysaccharide in C3H/HeN and C3H/HeJ mice. Tai JH, et al.
Toxicol Lett 1988 Nov;44(1-2):191–200
Histological changes and some in vitro biological activities induced by lipopolysaccharide from Bacteroides gingivalis. Isogai H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jul;269(1):64–77
Local and general effects of Salmonella typhimurium endotoxin in calves. Luthman J, et al.
Zentralbl Veterinarmed [A] 1988 Sep;35(8):586–95
[Studies on endotoxin of Leptospira. II. The effects of leptospiral lipopolysaccharides on rabbit's leukocytes and lethality to C57BL/6 mice] Nie DK, et al.
Wei Sheng Wu Hsueh Pao 1988 Sep;28(3):270–4 (Eng. Abstr.) **(Chi)**
[Toxic properties of lipopolysaccharide and lipid A of Aeromonas sobria and non 01 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(2):85–90 (Eng. Abstr.) **(Pol)**
[Ultrastructural organization of the hypothalamic medial preoptic area and its changes under the effect of pyrogens] Archakova LI, et al. **Arkh Anat Gistol Embriol** 1989 Jan; 96(1):44–50 (Eng. Abstr.) **(Rus)**
[Effect of lipopolysaccharide toxin on lipid and protein composition of human serum low density lipoproteins] Viktorov AV, et al. **Biokhimiia** 1989 Mar;54(3):434–9 (Eng. Abstr.) **(Rus)**

LIPOPROTEIN LIPASE

Is vitellogenin an ancestor of apolipoprotein B-100 of human low-density lipoprotein and human lipoprotein lipase? Baker ME. **Biochem J** 1988 Nov 1;255(3):1057–60
Structure of bovine milk lipoprotein lipase. Yang CY, et al. **J Biol Chem** 1989 Oct 5;264(28):16822–7

ANALYSIS

Effect of dichlorvos on the activity of lipoprotein lipase from adipose tissue, on plasma lipids and postheparin lipolytic plasma activity in rats. Kozlowska A, et al.
Arch Toxicol 1988;62(2-3):227–9
Structural features of lipoprotein lipase. Lipase family relationships, binding interactions, non-equivalence of lipase cofactors, vitellogenin similarities and functional subdivision of lipoprotein lipase. Persson B, et al.
Eur J Biochem 1989 Jan 15;179(1):39–45
Regulation of lipoprotein lipase activity in the sand rat: effect of nutritional state and cAMP modulation. Chajek-Shaul T, et al. **Metabolism** 1988 Dec;37(12):1152–8

ANTAGONISTS & INHIBITORS

Purification of a lipoprotein lipase-inhibiting protein produced by a melanoma cell line associated with cancer cachexia. Mori M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1085–92
Inhibition of purified human postheparin lipoprotein lipase by beta-adrenergic blockers in vitro. Kihara S, et al.
Biochem Pharmacol 1989 Feb 1;38(3):407–11
The role of cachectin/TNF in the pathogenesis of tuberculosis. Silva CL, et al. **Braz J Med Biol Res** 1988; 21(3):489–92
Effect of diacylglycerol lipase inhibitor RHC 80267 on pancreatic mouse islet metabolism and insulin secretion. Capito K, et al. **Diabetologia** 1989 Feb;32(2):111–7
Inhibition of lipoprotein lipase by the receptor-binding domain of apolipoprotein E. McConathy WJ, et al.
FEBS Lett 1989 Jul 17;251(1-2):250–2
Dependence of secretory responses to gonadotropin-releasing hormone on diacylglycerol metabolism. Studies with a diacylglycerol lipase inhibitor, RHC 80267. Chang JP, et al. **J Biol Chem** 1988 Dec 15; 263(35):18614–20
Bacterial lipopolysaccharide reduces macrophage lipoprotein lipase levels: an effect that is independent of tumor necrosis factor. White JR, et al. **J Lipid Res** 1988 Oct;29(10):1379–85
Dyslipoproteinemia and an inhibitor of lipolytic enzymes in Weber-Christian disease. Shirai K, et al. **Jpn J Med** 1989 May-Jun;28(3):366–73

BIOSYNTHESIS

Refeeding and insulin increase lipoprotein lipase activity in rat brown adipose tissue. Carneheim CM, et al.
Am J Physiol 1989 May;256(5 Pt 1):E645–50
The role of glucose and glycosylation in the regulation of lipoprotein lipase synthesis and secretion in rat adipocytes. Ong JM, et al. **J Biol Chem** 1989 Feb 25;264(6):3177–82
Biosynthesis of lipoprotein lipase in cultured mouse adipocytes. I. Characterization of a specific antibody and relationships between the intracellular and secreted pools of the enzyme. Vannier C, et al. **J Biol Chem** 1989 Aug 5;264(22):13199–205
Biosynthesis of lipoprotein lipase in cultured mouse adipocytes. II. Processing, subunit assembly, and intracellular transport. Vannier C, et al. **J Biol Chem** 1989 Aug 5;264(22):13206–16

BLOOD

Role of hepatic-triglyceride lipase activity in the association between intra-abdominal fat and plasma HDL cholesterol in obese women. Després JP, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):485–92
Effects of diets supplemented with lard fat or mackerel oil on plasma lipoprotein lipid concentrations and lipoprotein lipase activities in domestic swine. Groot PH, et al.
Atherosclerosis 1989 May;77(1):1–6
Effect of intralipid infusion on lecithin:cholesterol acyltransferase and lipoprotein lipase in young rats. Amr S, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):145–9
Monoglyceride and diglyceride lipases from human platelet microsomes. Chau LY, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):436–44
Topo-dynamic characteristics of human plasma VLDL apolipoproteins and efficiency of triacylglycerol hydrolysis by lipoprotein lipase. Dergunov AD, et al.
Biochim Biophys Acta 1989 Sep 11;1005(1):79–86
Purification and characterization of lipoprotein lipase and hepatic triglyceride lipase from human postheparin plasma: production of monospecific antibody to the individual lipase. Ikeda Y, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):254–69
Effects of weight loss and weight maintenance on the serum lipids, lipoprotein lipase and hepatic triglyceride lipase activities in obese rats. Kasim S, et al. **Int J Obes** 1989 Jun;13(3):279–88
Heparin-released plasma lipase activities, lipoprotein and apoprotein levels in young adult cyclists and sedentary men. Giada F, et al. **Int J Sports Med** 1988 Aug;9(4):270–4
Adrenergic blocking agents and lipoprotein lipase activity. Rubba P, et al. **J Endocrinol Invest** 1989 Feb;12(2):119–22
Relationship of decreased hepatic lipase activity and lipoprotein abnormalities to essential fatty acid deficiency in cystic fibrosis patients. Lévy E, et al. **J Lipid Res** 1989 Aug;30(8):1197–209
Use of a fluorescent radiolabeled triacylglycerol as a substrate for lipoprotein lipase and hepatic triglyceride lipase. Dousset N, et al. **Lipids** 1988 Jun;23(6):605–8
Low-dose colestipol plus fenofibrate: effects on plasma lipoproteins, lecithin:cholesterol acyltransferase, and postheparin lipases in familial hypercholesterolemia.

Weisweiler P. **Metabolism** 1989 Mar;38(3):271–4
[Effect of intravenous glucose load on post–heparin lipoprotein lipase and hepatic lipase activities in the plasma of patients with cerebral infarction] Barycki J. **Wiad Lek** 1988 Jul 1;41(13):860–5 (Eng. Abstr.) (Pol)
[Blood lipase activity in cancer patients] Shelestiuk PI, et al. **Vopr Onkol** 1989;35(7):801–5 (Eng. Abstr.) (Rus)

DEFICIENCY

Detection of familial LPL deficiency by PvuII RFLP. Gotoda T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3607
A major insertion accounts for a significant proportion of mutations underlying human lipoprotein lipase deficiency. Langlois S, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):948–52

GENETICS

Lipoprotein lipase gene expression in THP–1 cells. Auwerx JH, et al. **Biochemistry** 1989 May 30;28(11):4563–7
Structure of the human lipoprotein lipase gene. Deeb SS, et al. **Biochemistry** 1989 May 16;28(10):4131–5
Avian adipose lipoprotein lipase: cDNA sequence and reciprocal regulation of mRNA levels in adipose and heart. Cooper DA, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):92–101
Expression of lipoprotein lipase gene in combined lipase deficiency. Oka K, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):351–4
Genetic and developmental regulation of the lipoprotein lipase gene: loci both distal and proximal to the lipoprotein lipase structural gene control enzyme expression. Kirchgessner TG, et al. **J Biol Chem** 1989 Jan 25; 264(3):1473–82
Insulin regulation of lipoprotein lipase activity in 3T3–L1 adipocytes is mediated at posttranscriptional and posttranslational levels. Semenkovich CF, et al. **J Biol Chem** 1989 May 25;264(15):9030–8
Nucleotide sequence of human cDNA coding for a lipoprotein lipase (LPL) cloned from placental cDNA library. Gotoda T, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2351
Bst–1 RFLP at the human lipoprotein lipase (LPL) gene locus. Li S, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11856
Nucleotide sequence of PvuII polymorphic site at the human lipoprotein lipase gene locus. Oka K, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6752
[Lipoprotein lipase (LPL): recall of the structure of LPL and first results obtained in the isolation of clones from human and rat genomic banks] Etienne J, et al. **Bull Acad Natl Med (Paris)** 1988 Jun;172(6):793–8 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Effects of in vitro prepared immune complexes on rat adipose tissue lipoprotein lipase. Singh A, et al. **J Immunol** 1989 Jul 1;143(1):203–7
Autoimmune hyperchylomicronemia. Kihara S, et al. **N Engl J Med** 1989 May 11;320(19):1255–9

ISOLATION & PURIFICATION

Isolation, characterization, and regulation of diacylglycerol lipases from the bovine brain. Farooqui AA, et al. **Ann N Y Acad Sci** 1989;559:25–36

METABOLISM

Cytochemical studies of lipid metaboliam: immunogold probes for lipoprotein lipase and cholesterol. Blanchette–Mackie EJ, et al. **Am J Anat** 1989 Jun–Jul; 185(2–3):255–63 (32 ref.)
Lipoprotein lipase in myocytes and capillary endothelium of heart: immunocytochemical study. Blanchette–Mackie EJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E818–28
Interaction of lipoprotein lipase with heparin. Oka K, et al. **Ann N Y Acad Sci** 1989;556:173–80
Adaptive response of rats with diet–induced adiposity to energy restriction. Panemangalore M, et al. **Ann Nutr Metab** 1989;33(1):39–48
Rapid hydrolysis of diacylglycerol formed during phosphatidate phosphatase assay by lipase activities in rat liver cytosol and microsomes. Ide H, et al. **Arch Biochem Biophys** 1989 May 15;271(1):177–87
In vivo and in vitro release of lipoprotein lipase and hepatic lipase by low molecular weight heparins. Meraihi Z, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:286–93
Substrate specificity studies of partially purified rabbit heart lipoprotein lipase. Bauer JE. **Artery** 1988;15(5):272–91
Lipoprotein lipase activity in neonatal–rat liver cell types. Burgaya F, et al. **Biochem J** 1989 Apr 1;259(1):159–66
Role of insulin and other hormones in the control of lipoprotein lipase activity. Robinson DS, et al. **Biochem Soc Trans** 1989 Feb;17(1):40–2 (40 ref.)
Spectral observation of an acyl–enzyme intermediate of lipoprotein lipase. Rojas C, et al. **Biochemistry** 1989 May 16;28(10):4475–81
Fate of lipoprotein lipase taken up by the rat liver. Evidence for a conformational change with loss of catalytic activity. Chajek–Shaul T, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):183–91
Modulation of lipoprotein lipase activity in mouse peritoneal macrophages by recombinant human tumor necrosis factor. Friedman G, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):201–7
Control of lipoprotein lipase secretion in mouse macrophages. Goldman R, et al. **Biochim Biophys Acta** 1989 Feb 6; 1001(2):120–6
Regulation of macrophage lipoprotein lipase secretion by the scavenger receptor. Murata Y, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):17–24
Cachectin/tumor necrosis factor and interleukin–1 show different modes of combined effect on lipoprotein lipase activity and intracellular lipolysis in 3T3–L1 cells. Ogawa H, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):131–5
Rapid modulation of rat adipocyte lipoprotein lipase: effect of calcium, A23187 ionophore, and thrombin. Soma MR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):307–14
High liver lipoprotein lipase activity in hyperlipemic developing rats from undernourished pregnant mothers. López–Tejero D, et al. **Biosci Rep** 1988 Aug;8(4):309–14
Temporal response of lipoprotein lipase–suppressing mediator and tumor necrosis factor in lipopolysaccharide –injected and –infused rats. Bagby GJ, et al. **Circ Shock** 1989 Aug; 28(4):385–94
The distribution of lipoprotein lipase (clearing factor lipase) activity in the adiposal, muscular and lung tissues of ten animal species. Cryer A, et al. **Comp Biochem Physiol [B]** 1979;63(4):501–5
Influence of diet on adiposal lipoprotein lipase and hepatic triacylglyceride synthetase activities in the developing pullet (Gallus domesticus). Pfaff FE Jr, et al. **Comp Biochem Physiol [B]** 1977;58(4):345–8
Differential effect of 2,3,7,8–tetrachlorodibenzo–p–dioxin on adipose tissue lipoprotein lipase activity in the guinea pig, rat, hamster, rabbit, and mink. Brewster DW, et al. **Comp Biochem Physiol [C]** 1989;93(1):49–53
Lipoprotein pattern and plasma lipoprotein lipase activities in patients with primary biliary cirrhosis. Relationship with increase of HDL2 fraction in Lp–X–positive and Lp–X–negative subjects. Baldo–Enzi G, et al. **Dig Dis Sci** 1988 Oct;33(10):1201–7
VLDL substrate properties and efficiency of their metabolic transformation by LPL. Dergunov AD, et al. **Experientia** 1989 May 15;45(5):461–3
Lipoprotein lipase. Taskinen MR. **Horm Metab Res Suppl** 1988;19:53–7 (19 ref.)
Evidence for an interaction of lipoprotein lipase with artery wall proteoglycans. Margelin D, et al. **Int J Biochem** 1989; 21(7):761–8
Regional differences in adipose tissue lipoprotein lipase activity in relation to body fat distribution and menopausal status in obese women. Raison J, et al. **Int J Obes** 1988; 12(5):465–72
Lipoprotein lipase in adipose tissues of rats running during cold exposure. Deshaies Y, et al. **J Appl Physiol** 1988 Aug; 65(2):549–54
Site–specific adipose tissue LPL responses to endurance training in female lean Zucker rats. Savard R, et al. **J Appl Physiol** 1988 Aug;65(2):693–9
Modification of low density lipoprotein by lipoprotein lipase or hepatic lipase induces enhanced uptake and cholesterol accumulation in cells. Aviram M, et al. **J Biol Chem** 1988 Oct 25;263(30):15416–22
Secretion and degradation of lipoprotein lipase in cultured adipocytes. Binding of lipoprotein lipase to membrane heparan sulfate proteoglycans is necessary for degradation. Cisar LA, et al. **J Biol Chem** 1989 Jan 25;264(3):1767–74
The fatty liver dystrophy (fld) mutation. A new mutant mouse with a developmental abnormality in triglyceride metabolism and associated tissue–specific defects in lipoprotein lipase and hepatic lipase activities. Langner CA, et al. **J Biol Chem** 1989 May 15;264(14):7994–8003
Release of endothelial cell lipoprotein lipase by plasma lipoproteins and free fatty acids. Saxena U, et al. **J Biol Chem** 1989 Mar 15;264(8):4349–55
The relation between glycosylation and activity of guinea pig lipoprotein lipase. Semb H, et al. **J Biol Chem** 1989 Mar 5;264(7):4195–200
Effects of doxazosin on lipids, lipoprotein lipases, and cholesterol synthesis in the golden hamster. Jansen H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S5–9; discussion S9–10
Effects of doxazosin and other antihypertensives on serum lipid levels and lipoprotein lipase in the C57BR/cdJ mouse. Krupp MN, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S11–8; discussion S18–9
Effect of feeding and obesity on lipoprotein lipase activity, immunoreactive protein, and messenger RNA levels in human adipose tissue. Ong JM, et al. **J Clin Invest** 1989 Jul;84(1):305–11
Paracellular leakage of lipoprotein lipase across the mammary epithelium of the goat. Azzara CD, et al. **J Dairy Sci** 1989 May;72(5):1159–68
Assessment of lipoprotein activators of skim milk lipoprotein lipase and the relationship between lipoprotein lipase activity and milk fat synthesis. Grummer RR, et al. **J Dairy Sci** 1989 Jun;72(6):1451–8
Lipoprotein lipase: a source of free fatty acids in bronchoalveolar lining fluid. Coonrod JD, et al. **J Lab Clin Med** 1989 Apr;113(4):449–57
Effect of tumor necrosis factor administration in vivo on lipoprotein lipase activity in various tissues of the rat. Grunfeld C, et al. **J Lipid Res** 1989 Apr;30(4):579–85
Postheparin plasma lipoprotein and hepatic lipase are determinants of hypo– and hyperalphalipoproteinemia. Kuusi T, et al. **J Lipid Res** 1989 Aug;30(8):1117–26
Lipoprotein lipase and hepatic lipase mRNA tissue specific expression, developmental regulation, and evolution. Semenkovich CF, et al. **J Lipid Res** 1989 Mar;30(3):423–31
Comparison of lipoprotein lipase activity in heart myocytes and perfused hearts. Bagby GJ, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):253–62
Lipoprotein lipase activity and chylomicron clearance in rats fed a high fat diet. Brown CM, et al. **J Nutr** 1988 Nov; 118(11):1294–8
The role of lipoprotein lipase in metabolism of normolipidemic very low density lipoprotein by macrophages. Wang SP, et al. **J Tongji Med Univ** 1989; 9(1):48–53
Activation of lipoprotein lipase by blood platelets. Song SY, et al. **Life Sci** 1974 Jul 1;15(1):103–10
The effect of dietary fish oil on muscle and adipose tissue lipoprotein lipase. Herzberg GR, et al. **Lipids** 1989 Apr; 24(4):351–3
Effect of marginal zinc deficiency on lipoprotein lipase activities in postheparin plasma, skeletal muscle and adipose tissues in the rat. Koo SI, et al. **Lipids** 1989 Feb;24(2):132–6
Activities of lipoprotein lipase and hepatic lipase on long– and medium–chain triglyceride emulsions used in parenteral nutrition. Lutz O, et al. **Metabolism** 1989 Jun;38(6):507–13
Insulin activation of adipocyte lipoprotein lipase. **Nutr Rev** 1989 Feb;47(2):58–9 (7 ref.)
Release of lipoprotein lipase and hepatic triglyceride lipase in rats by heparin and other sulphated polysaccharides. Williams SP, et al. **Thromb Res** 1989 Aug 1;55(3):361–8
[Lipoprotein lipase, diabetes mellitus and hypertriglyceridemia] Goldsztajn P. **Przegl Lek** 1988; 45(11):787–92 (40 ref.) (Pol)

PHYSIOLOGY

Effect of lipoprotein lipase and hepatic triglyceride lipase activity on the distribution of apolipoprotein E among the plasma lipoproteins. Gibson JC, et al. **Atherosclerosis** 1988 Sep;73(1):45–55
Lipoprotein lipase. A multifunctional enzyme relevant to common metabolic diseases. Eckel RH. **N Engl J Med** 1989 Apr 20;320(16):1060–8 (81 ref.)

SECRETION

Stimulatory release of lipoprotein lipase activity from rat fat pads by vanadate. Ueki H, et al. **Arch Biochem Biophys** 1989 Jul;272(1):18–24
Enhanced lipoprotein lipase secretion from human monocyte–derived macrophages caused by hypertriglyceridemic very low density lipoproteins. Ishibashi S, et al. **Arterioscler Thromb** 1989 Sep–Oct;9(5):650–5
Effect of taxol on the heparin–induced secretion of lipoprotein lipase from cardiac myocytes. Severson DL, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):17–22

LIPOPROTEIN LIPASE DEFICIENCY, FAMILIAL see under **HYPERLIPOPROTEINEMIA**

LIPOPROTEIN–X

BLOOD

Lipoprotein X in the cholestatic syndrome. Vrublovský P, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:423–6

METABOLISM

Lipoprotein pattern and plasma lipoprotein lipase activities in patients with primary biliary cirrhosis. Relationship with increase of HDL2 fraction in Lp–X–positive and Lp–X–negative subjects. Baldo–Enzi G, et al. **Dig Dis Sci** 1988 Oct;33(10):1201–7

LIPOPROTEINS

Expression of apolipoprotein B epitopes in lipoproteins. Relationship to conformation and function. Marcel YL, et al. **Arterioscler Thromb** 1988 Nov–Dec;8(6):832–44
Molecular dynamics of the alpha–helical epitope of a novel synthetic lipopeptide foot–and–mouth disease virus vaccine. Krug M, et al. **Biopolymers** 1989 Jan;28(1):499–512
Distinctive properties of signal sequences from bacterial lipoproteins. Klein P, et al. **Protein Eng** 1988 Apr; 2(1):15–20
The structure of signal peptides from bacterial lipoproteins. von Heijne G. **Protein Eng** 1989 May;2(7):531–4

ANALYSIS

Pseudochylous ascites developed in a patient with chronic renal failure: importance of lipoprotein analysis [letter] Shiina S, et al. **Am J Gastroenterol** 1989 Mar;84(3):337–8
Detection and quantification of lipoprotein(a) in the arterial wall of 107 coronary bypass patients. Rath M, et al. **Arterioscler Thromb** 1989 Sep–Oct;9(5):579–92
Differential distribution of apolipoprotein E isoforms in human plasma lipoproteins. Steinmetz A, et al. **Arterioscler Thromb** 1989 May–Jun;9(3):405–11
Lipoprotein(a) in nonhuman primates. Presence and characteristics of Lp(a) immunoreactive materials using anti–human Lp(a) serum. Makino K, et al.

Atherosclerosis 1989 Jul;78(1):81–5

Separation of the different classes of intrahepatic lipoproteins from various animal species. Their binding with 2,3,7,8–tetrachlorodibenzo–p–dioxin and benzo(a)pyrene. Souès S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2833–9

Monoclonal DLR1a/104G antibody recognizing peroxidized lipoproteins in atherosclerotic lesions. Mowri H, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):208–14

Lipoprotein structural abnormalities in chronic renal failure with and without hemodialysis. Camejo G, et al. **Biomed Biochim Acta** 1988;47(3):239–45

Factor VII and extrinsic pathway inhibitor in acute coronary disease. Sandset PM, et al. **Br J Haematol** 1989 Jul; 72(3):391–6

A comparison of the composition and apolipoprotein content of the lipoproteins isolated from human and ferret (Mustela putorius furo L.) serum. Cryer A, et al. **Comp Biochem Physiol [B]** 1978;61(1):151–9

Apolipoproteins and lipoprotein families in chicken embryos and egg yolk. Schjeide OA, et al. **Comp Biochem Physiol [B]** 1977;58(4):349–52

Automated column liquid chromatographic determination of probucol in human serum and lipoprotein fractions. Schöneshöfer M, et al. **J Chromatogr** 1989 May 5; 490(1):230–5

Lipid and lipoprotein contents of human follicular fluid. Suchanek E, et al. **J Clin Chem Clin Biochem** 1988 Sep; 26(9):543–7

Heterogeneity of apolipoprotein E epitope expression on human lipoproteins: importance for apolipoprotein E function. Krul ES, et al. **J Lipid Res** 1988 Oct; 29(10):1309–25

Characterization of dog prenodal peripheral lymph lipoproteins. Evidence for the peripheral formation of lipoprotein–unassociated apoA–I with slow pre–beta electrophoretic mobility. Lefevre M, et al. **J Lipid Res** 1988 Sep;29(9):1139–48

Lipoprotein subfraction composition in non–insulin–dependent diabetes treated by diet, sulphonylurea, and insulin. Billingham MS, et al. **Metabolism** 1989 Sep;38(9):850–7

A case of nephrotic syndrome with glomerular lipoprotein deposition with capillary ballooning and mesangiolysis. Watanabe Y, et al. **Nephron** 1989;51(2):265–70

Identification and localization of the apoprotein fraction of the bile lipoprotein complex in human gallstones. Martigne M, et al. **Scand J Gastroenterol** 1988 Aug;23(6):731–7

[Fluorescent cholesterol derivatives in studies of membranes and lipoproteins] Lapshin EN, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):98–112 (56 ref.) (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Effects of ciprofibrate and fenofibrate on liver lipids and lipoprotein synthesis in normo– and hyperlipidemic rats. Petit D, et al. **Atherosclerosis** 1988 Dec;74(3):215–25

Nutritional factors affecting lipoproteins. Turchetto E, et al. **Beitr Infusionther** 1989;22:46–59 (64 ref.)

Production of lipoprotein(a) by primary baboon hepatocytes. Rainwater DL, et al. **Biochim Biophys Acta** 1989 May 15; 1003(1):30–5

Intestinal lipoprotein synthesis in control and hypercholesterolemic rats. Swift LL, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):186–95

Lipid and lipoprotein synthesis in isolated and cultured hepatocytes from lean and obese Zucker rats. Wang SR, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):302–11

Analysis of plasma protein and lipoprotein synthesis in long–term primary cultures of baboon hepatocytes maintained in serum–free medium. Lanford RE, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):174–82

BLOOD

Lipo– and apolipoproteins in a population survey subset in MONICA–Israel. Brunner D, et al. **Acta Med Scand Suppl** 1988;728:159–64

Comparative trial of the effects on glucose tolerance and lipoprotein metabolism of two new oral contraceptives containing gestoden and desogestrel. Rubeck Petersen K, et al. **Acta Obstet Gynecol Scand** 1988;67(1):37–41

Proton nuclear magnetic resonance spectroscopy of plasma lipoproteins in malignancy. Nabholtz JM, et al. **Acta Oncol** 1988;27(5):479–82

Gas chromatographic analysis of plasma lipids. Kuksis A, et al. **Adv Chromatogr** 1989;28:267–332 (142 ref.)

Lipoprotein particles in hypertriglyceridemic states. Alaupovic P, et al. **Adv Exp Med Biol** 1988;243:289–97

Effects of plasma lipoproteins on eicosanoid metabolism by cultured vascular smooth muscle cells. Larrue J. **Adv Exp Med Biol** 1988;243:47–54

Quantitative abnormalities of lipoprotein particles in chronic hemodialysis patients. Parra HJ, et al. **Adv Exp Med Biol** 1988;243:283–7

Influence of beta 2 agonism and beta 1 and beta 2 antagonism on adverse effects and plasma lipoproteins: results of a multicenter comparison of dilevalol and metoprolol. Materson BJ, et al. **Am J Cardiol** 1989 Jun 5;63(19):58I–63I

Influence of plasma triglycerides on lipoprotein patterns in normal subjects and in patients with coronary artery disease. Richards EG, et al. **Am J Cardiol** 1989 May 15; 63(17):1214–20

Linoleic–acid–enriched diet: long–term effects on serum lipoprotein and apolipoprotein concentrations and insulin sensitivity in noninsulin–dependent diabetic patients. Heine RJ, et al. **Am J Clin Nutr** 1989 Mar;49(3):448–56

Effect of dietary cholesterol in normolipidemic subjects is not modified by nature and amount of dietary fat. Kestin M, et al. **Am J Clin Nutr** 1989 Sep;50(3):528–32

Lipids and lipoprotein profiles in a 4–h endurance test on a recumbent cycloergometer. Tsopanakis AD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):980–4

Short–term parenteral nutrition with glucose and Intralipid: effects on serum lipids and lipoproteins. Weinberg RB, et al. **Am J Clin Nutr** 1989 May;49(5):794–8

Discretion advised when lowering the serum lipid levels of children [letter] Kazanecki ME, et al. **Am J Dis Child** 1989 Jan;143(1):11–2

Serum lipids, lipoproteins, and apolipoproteins and the excessive occurrence of coronary heart disease in non–insulin–dependent diabetic patients. Rönnemaa T, et al. **Am J Epidemiol** 1989 Oct;130(4):632–45

Effects of antihypertensive agents on serum lipids and lipoproteins. Chait A. **Am J Med** 1989 Jan 23;86(1B):5–7

Effects of prazosin on hemodynamics, hemostasis, and serum lipid and lipoprotein levels in normal and hypercholesterolemic monkeys. Karge WH 3d, et al. **Am J Med** 1989 Jan 23;86(1B):19–23

Review of the effects of doxazosin, a new selective alpha 1–adrenergic inhibitor, on lipoproteins in patients with essential hypertension. Pool JL, et al. **Am J Med** 1989 Aug 16;87(2A):57S–61S (43 ref.)

Effect of alpha– and selective beta–blockade for hypertension control on plasma lipoproteins, apoproteins, lipoprotein subclasses, and postprandial lipemia. Superko HR, et al. **Am J Med** 1989 Jan 23;86(1B):26–31

Effect of prazosin treatment on carbohydrate and lipoprotein metabolism in patients with hypertension. Swislocki AL, et al. **Am J Med** 1989 Jan 23;86(1B):14–8

Selective alpha–blockade versus angiotensin–converting enzyme inhibition as initial antihypertensive therapy. Effects on circulating lipoproteins. Takiyyuddin MA, et al. **Am J Med** 1989 Jan 23;86(1B):32–5

Effects of smoking on serum lipoproteins and bone mineral content during postmenopausal hormone replacement therapy. Jensen J, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):820–5

Lipid and lipoprotein changes in women taking low–dose, triphasic oral contraceptives: a controlled, comparative, 12–month clinical trial. Notelovitz M, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1269–80

Serum lipoprotein effects of conjugated estrogen and a sequential conjugated estrogen–medrogestone regimen in hysterectomized postmenopausal women. Sonnendecker EW, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1128–34

Lipoprotein changes in familial hypercholesterolemia after extracorporeal immunoadsorption of low density lipoproteins. Riesen WF, et al. **Ann Biol Clin (Paris)** 1988; 46(10):787–91

Biochemistry and clinical significance of lipoprotein (a). Houlston R, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):499–503 (44 ref.)

Influence of casein versus soy protein isolate on lipid metabolism of minipigs. Pfeuffer M, et al. **Ann Nutr Metab** 1988;32(2):83–9

Lipid composition of serum lipoprotein in opisthorchiasis. Changbumrung S, et al. **Ann Trop Med Parasitol** 1988 Jun; 82(3):263–9

Dyslipoproteinemia in patients with xanthelasma [letter] Pintó X, et al. **Arch Dermatol** 1989 Sep;125(9):1281–2

Effects of modest doses of omega–3 fatty acids on lipids and lipoproteins in hypertriglyceridemic subjects. A randomized controlled trial. Deck C, et al. **Arch Intern Med** 1989 Aug;149(8):1857–62

Adipose tissue distribution and plasma lipoprotein levels in obese women. Importance of intra–abdominal fat. Després JP, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):203–10

Distribution of lipoproteins and apolipoproteins in young adults The CARDIA Study. Donahue RP, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):656–64

Alimentary lipemia–induced redistribution of cholesteryl ester between lipoproteins. Studies in normolipidemic, combined hyperlipidemic, and hypercholesterolemic men. Dullaart RP, et al. **Arteriosclerosis** 1989 Sep–Oct; 9(5):614–22

Asymptomatic hyperglycemia is associated with lipid and lipoprotein changes favoring atherosclerosis. Laakso M, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):665–72

Characteristics associated with apoprotein and lipoprotein lipid levels in middle–aged women. Meilahn EN, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):515–20

Age– and sex–related differences in lipoproteins containing apoprotein A–I. Ohta T, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):90–5

Contraceptive steroid effects on lipids and lipoproteins in cynomolgus monkeys. Parks JS, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):261–8

Serum lipids and lipoproteins as predictors of atherosclerosis. An autopsy study. Reed DM, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):560–4

Selective removal of triglyceride–rich lipoproteins by plasmapheresis in diabetic patients with severe hypertriglyceridemia. Ito H, et al. **Artif Organs** 1989 Jun; 13(3):190–6

Effects of a bezafibrate sustained release formulation on plasma lipoproteins in patients with hypercholesterolemia. Importance of timing of tablet intake for efficacy. Hanefeld M, et al. **Arzneimittelforschung** 1988 Dec;38(12):1835–7

Effects of bezafibrate and gemfibrozil on serum lipoproteins in primary hypercholesterolemia. Weisweiler P. **Arzneimittelforschung** 1988 Jul;38(7):925–7

Effects of catecholestrogen 2–monomethyl ether on serum cholesterol and lipoprotein levels. Kono S, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):399–403

Immunoglobulin–bound lipoproteins (Ig–Lp) as markers of familial hypercholesterolemia, xanthomatosis and atherosclerosis. Beaumont JL, et al. **Atherosclerosis** 1988 Dec;74(3):191–201

Influence of probucol administration on lipoprotein cholesterol and apolipoproteins in normolipemic males. Berg A, et al. **Atherosclerosis** 1988 Jul;72(1):49–54

Aortic intimal lipid content and serum lipoproteins in patients undergoing coronary by–pass surgery as related to clinical prognosis. Bondjers G, et al. **Atherosclerosis** 1988 Aug; 72(2–3):231–9

Pseudocholinesterase and lipoproteins [letter] Cucuiano M. **Atherosclerosis** 1988 Jul;72(1):83–6

Relationships between serum testosterone, fasting insulin and lipoprotein levels among elderly men. Deutscher S, et al. **Atherosclerosis** 1989 Jan;75(1):13–22

Effect of lipoprotein lipase and hepatic triglyceride lipase activity on the distribution of apolipoprotein E among the plasma lipoproteins. Gibson JC, et al. **Atherosclerosis** 1988 Sep;73(1):45–55

Effects of diets supplemented with lard fat or mackerel oil on plasma lipoprotein lipid concentrations and lipoprotein lipase activities in domestic swine. Groot PH, et al. **Atherosclerosis** 1989 May;77(1):1–6

Comparison of lovastatin and probucol in treatment of familial and non–familial hypercholesterolemia: different effects on lipoprotein profiles. Helve E, et al. **Atherosclerosis** 1988 Aug;72(2–3):189–97

Effects of gammalinolenic acid on plasma lipoproteins and apolipoproteins. Ishikawa T, et al. **Atherosclerosis** 1989 Feb;75(2–3):95–104

Serum lipoproteins in patients with myocardial infarction. Kauppinen–Mäkelin R, et al. **Atherosclerosis** 1988 Nov; 74(1–2):65–74

Modification of lipoprotein patterns and retardation of atherogenesis by a fish oil supplement to a hyperlipidemic diet for swine. Kim DN, et al. **Atherosclerosis** 1989 Mar; 76(1):35–54

Accumulation of cholesteryl esters in macrophages incubated with human lipoprotein–antibody autoimmune complex. Klimov AN, et al. **Atherosclerosis** 1988 Nov;74(1–2):41–6

Compositional changes in serum lipoproteins during developing hypercholesterolemia induced in rabbits by cholesterol–free, semipurified diets. Kurowska EM, et al. **Atherosclerosis** 1989 Aug;78(2–3):159–65

Lipid and lipoprotein abnormalities in diabetic patients with peripheral vascular disease. Laakso M, et al. **Atherosclerosis** 1988 Nov;74(1–2):55–63

Apolipoprotein B in human aortic biopsies in relation to serum lipids and lipoproteins. Lindén T, et al. **Atherosclerosis** 1989 Jun;77(2–3):159–66

Lipoprotein composition changes induced by fenofibrate in dysbetalipoproteinemia type III. Lussier–Cacan S, et al. **Atherosclerosis** 1989 Aug;78(2–3):167–82

Transient changes of serum lipoprotein(a) as an acute phase protein. Maeda S, et al. **Atherosclerosis** 1989 Aug; 78(2–3):145–50

Modifications of plasma lipids, lipoproteins and apolipoproteins in advanced cancer patients treated with recombinant interleukin–2 and autologous lymphokine–activated killer cells. Malmendier CL, et al. **Atherosclerosis** 1988 Oct;73(2–3):173–80

Anthropometric and lifestyle correlates of serum lipoprotein and apolipoprotein levels among normal non–smoking men and women. Marti B, et al. **Atherosclerosis** 1989 Feb; 75(2–3):111–22

Cholesterol–lowering effect of N–(alpha–methylbenzyl)linoleamide (melinamide) in cholesterol–fed diabetic rats. Matsubara K, et al. **Atherosclerosis** 1988 Aug;72(2–3):199–204

Effects of soy protein and casein in low cholesterol diets on plasma lipoproteins in normolipidemic subjects. Meinertz H, et al. **Atherosclerosis** 1988 Jul;72(1):63–70

Factor VII coagulant activity is strongly associated with the plasma concentration of large lipoprotein particles in middle–aged men. Mitropoulos KA, et al. **Atherosclerosis** 1989 Apr;76(2–3):203–8

Lipoproteins and apolipoproteins in young male survivors of myocardial infarction. Al–Muhtaseb N, et al. **Atherosclerosis** 1989 Jun;77(2–3):131–8

Effect of pindolol versus atenolol on lipid profile in hypertensive patients. Notghi A, et al. **Atherosclerosis** 1989 Jun;77(2–3):215–20

Abnormalities in serum lipoprotein composition in patients with premature coronary heart disease compared to serum lipid matched controls. Pauciullo P, et al. **Atherosclerosis** 1988 Oct;73(2–3):241–6

Immunochemical characterization and quantitation of lipoprotein (a) in baboons. Development of an assay depending on two antigenically distinct proteins. Rainwater DL, et al. **Atherosclerosis** 1988 Sep;73(1):23–31

Lecithin: cholesterol acyltransferase activity in children and

young adults. Rönnemaa T, et al. **Atherosclerosis** 1989 May; 77(1):7–13

Effects of feeding fish oil on the properties of lipoproteins isolated from rhesus monkeys consuming an atherogenic diet. Soltys PA, et al. **Atherosclerosis** 1989 Apr; 76(2–3):105–15

Effect of skim milk and whey diets on plasma lipid levels of rabbits in a cross-over study. Vrecko K, et al. **Atherosclerosis** 1988 Jul;72(1):11–7

Apolipoprotein E polymorphism and lipoproteins in insulin-treated diabetes mellitus. Winocour PH, et al. **Atherosclerosis** 1989 Feb;75(2–3):167–73

Cholesterol in serum lipoprotein fractions after spaceflight. Leach CS, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1034–7

Coronary disease: spectroscopic correlation of structure and size of plasma lipoproteins with patient clinical history. Simic-Glavaski B, et al. **Basic Life Sci** 1988;49:397–402

Role of human serum lipoproteins on the immunosuppressive action of ciclosporin on PHA-stimulated human peripheral blood mononuclear cells. Rödl S, et al. **Bibl Cardiol** 1988; (43):57–9

Redistribution of cholesterol and beta-sitosterol between intralipid and rat plasma lipoproteins and red blood cells in vivo. Kakis G, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1312–21

Method for quantitating cholesterol in subfractions of serum lipoproteins separated by gradient gel electrophoresis. Cheng ML, et al. **Biochem Genet** 1988 Dec; 26(11–12):657–81

Association between tumour status and serum lipoprotein cholesterol in hemopoietic malignancy. Venkatanarayanan S, et al. **Biochem Int** 1988 Sep;17(3):499–507

Effect of diabetes on the metabolism of triacylglycerol-rich lipoproteins. Arbeeny CM, et al. **Biochem Soc Trans** 1989 Feb;17(1):51–3

Lipoproteins and atherosclerosis in diabetes mellitus. Schonfeld G. **Biochem Soc Trans** 1989 Feb;17(1):53–5 (35 ref.)

Effects of blocking plasma lipid transfer protein activity in the rabbit. Abbey M, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):20–9

Seasonal variations of plasma lipids and lipoproteins in the hedgehog, an animal model for lipoprotein (a) metabolism: relation to plasma thyroxine and testosterone levels. Laplaud PM, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):143–56

Effects of experimental hypothyroidism on the distribution of lipids and lipoproteins in the plasma of rats. Meyer BJ, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):73–9

Effects of 2,3-dihydrophthalazine-1,4-dione on Sprague Dawley rats lipid metabolism and serum lipoproteins. Hall IH, et al. **Biomed Biochim Acta** 1988;47(4–5):423–33

The interaction of prostaglandins with human serum lipoproteins. Bergelson LD. **Biosci Rep** 1989 Feb;9(1):27–40 (32 ref.)

Cigarette smoking and serum lipid and lipoprotein concentrations [letter; comment] Cade J, et al. **BMJ** 1989 May 13;298(6683):1312. **Comment on:** BMJ 1989 Mar 25;298(6676):784–8

Cigarette smoking and serum lipid and lipoprotein concentrations: an analysis of published data [see comments] Craig WY, et al. **BMJ** 1989 Mar 25; 298(6676):784–8. **Comment in:** BMJ 1989 May 13;298(6683):1312

Sensitivity to insulin during treatment with atenolol and metoprolol: a randomised, double blind study of effects on carbohydrate and lipoprotein metabolism in hypertensive patients. Pollare T, et al. **BMJ** 1989 Apr 29; 298(6681):1152–7

Tamoxifen, serum lipoproteins and cardiovascular risk. Bruning PF, et al. **Br J Cancer** 1988 Oct;58(4):497–9

Effect of antihypertensive therapy on plasma lipoproteins in essential hypertension. Silke B. **Br J Clin Pract Symp Suppl** 1987 Dec;54:56–60

Genetic and environmental determinants of plasma lipoproteins relevant to coronary heart disease. Thompson GR. **Br J Clin Pract Symp Suppl** 1987 Dec;54:47–53

Lipoprotein and apolipoprotein levels in postmenopausal women on continuous oestrogen/progestogen therapy. Farish E, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):358–64

Detection and management of individuals and populations at risk for cardiovascular disease: Time to take a stance on cholesterol and lipoproteins. Winnipeg, Manitoba, September 14 and 15, 1987. Proceedings. **Can J Cardiol** 1988 Jul;4 Suppl A:1A–50A

Time to take a stance on cholesterol and lipoproteins. Davignon J, et al. **Can J Cardiol** 1988 Jul;4 Suppl A:1A–3A

Lipoprotein (a): an emerging risk factor for atherosclerosis. Hegele RA. **Can J Cardiol** 1989 Jun–Aug;5(5):263–5 (23 ref.)

Canadian Consensus Conference on Cholesterol: final report. The Canadian Consensus Conference on the Prevention of Heart and Vascular Disease by Altering Serum Cholesterol and Lipoprotein Risk Factors. **Can Med Assoc J** 1988;139(11 Suppl):1–8 (7 ref.) (Eng, Fre)

Epidemiologic data on serum lipids and lipoproteins: clinical implications. Rabkin SW. **Can Med Assoc J** 1989 May 15; 140(10):1171

Exercise, lipoproteins, and coronary artery disease. Krauss RM. **Circulation** 1989 May;79(5):1143–5

Lipoproteins and the pathogenesis of atherosclerosis. Steinberg D, et al. **Circulation** 1989 Sep;80(3):719–23 (32 ref.)

Physical exercise conditioning in the absence of weight loss reduces fasting and postprandial triglyceride-rich lipoprotein levels. Weintraub MS, et al. **Circulation** 1989 May;79(5):1007–14

Serum lipoprotein levels fail to predict postangioplasty recurrent coronary artery stenosis. Austin GE, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):509–14

An unusual band that binds hemoglobin after ultracentrifugation of hemolyzed plasma for lipoprotein separation. Davignon J, et al. **Clin Chem** 1989 Mar;35(3):495

Serum lipoproteins and coronarographic features [letter] Graziani MS, et al. **Clin Chem** 1989 Jun;35(6):1266–7

Lipoprotein(a) quantified by an enzyme-linked immunosorbent assay with monoclonal antibodies. Labeur C, et al. **Clin Chem** 1989 Jul;35(7):1380–4

Enzyme-linked immunosorbent assay of lipoprotein(a) in serum and cord blood. Abe A, et al. **Clin Chim Acta** 1988 Sep 30;177(1):31–40

A specific method for the direct determination of lipoprotein cholesterol in electrophoretic patterns. Aufenanger J, et al. **Clin Chim Acta** 1988 Oct 14;177(2):197–207

Binding of fibronectin to human lipoproteins. Cseh K, et al. **Clin Chim Acta** 1989 Jun 15;182(1):75–85

Physical training plasma lipoproteins and faecal steroid excretion in sedentary men. Sutherland WH, et al. **Clin Physiol** 1988 Oct;8(5):445–52

Effects of slow-release bezafibrate on serum lipids, lipoproteins, apolipoproteins, and postheparin lipolytic activities in patients with type IV and type V hypertriglyceridemia. Saku K, et al. **Clin Ther** 1989 May–Jun;11(3):331–40

Low-dose effect of simvastatin (MK-733) on serum lipids, lipoproteins, and apolipoproteins in patients with hypercholesterolemia. Saku K, et al. **Clin Ther** 1989 Mar–Apr;11(2):247–57

Effects of enalapril on serum lipoproteins in mild essential hypertension. Sasaki J, et al. **Clin Ther** 1989;11(1):38–42

Effects of pindolol on serum lipids, apolipoproteins, and lipoproteins in patients with mild to moderate essential hypertension. Sasaki J, et al. **Clin Ther** 1989 Mar–Apr; 11(2):219–24

An effective method for plasma lipoprotein separation: studies of various animal species. Aviram M, et al. **Comp Biochem Physiol [B]** 1989;93(2):279–82

Serum lipoprotein profiles of young atherosclerosis-susceptible White Carneau and atherosclerosis-resistant Show Racer pigeons. Jensen PF, et al. **Comp Biochem Physiol [B]** 1978;60(1):67–9

Lipid and apolipoprotein distribution as a function of density in equine plasma lipoprotein. Le Goff D, et al. **Comp Biochem Physiol [B]** 1989;93(2):371–7

Plasma lipids and lipoproteins of some members of the order Perissodactyla. Leat WM, et al. **Comp Biochem Physiol [B]** 1979;63(2):275–81

Lipid composition and cholesterol esterification in serum lipoprotein fraction of the horse, Equus caballus. Yamamoto M, et al. **Comp Biochem Physiol [B]** 1979; 63(3):441–9

A multicentre comparative study of serum lipids and lipoproteins in four groups of oral combined contraceptive users and a control group of IUD users. World Health Organization. Task Force on Oral Contraceptives. Boonsiri B, et al. **Contraception** 1988 Dec;38(6):605–29

Lipid and lipoprotein changes during the seven days off oral contraception in women using two triphasic preparations. Percival-Smith RK, et al. **Contraception** 1988 Jul; 38(1):19–26

Lipid metabolism in patients with chronic renal failure in the predialytic phase. Attman PO, et al. **Contrib Nephrol** 1988;65:24–32 (15 ref.)

Epidemiological characteristics of dyslipoproteinaemia and certain other risk factors of atherosclerosis and ischaemic heart disease in 11- and 14-year children in different climatogeographic zones. Results of a cooperative study. Oganov RG, et al. **Cor Vasa** 1988;30(4):248–56

Normalization of lipoproteins following partial ileal bypass in individual WHO lipoprotein phenotypes. Campos CT, et al. **Curr Surg** 1988 Sep–Oct;45(5):380–2 (7 ref.)

Effect of fish oil concentrate on lipoprotein composition in NIDDM. Schectman G, et al. **Diabetes** 1988 Nov; 37(11):1567–73

Lipoproteins and apolipoproteins in young nonobese Arab women with NIDDM treated with insulin. Al-Muhtaseb N, et al. **Diabetes Care** 1989 May;12(5):325–31

Combined effect of exogenous insulin and sucrose on alterations in plasma lipoproteins induced by cholesterol feeding in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):221–6

The effect of glibenclamide and metformin on serum lipoproteins in type 2 diabetes. Rains SG, et al. **Diabetic Med** 1988 Oct;5(7):653–8

Serum lipids and lipoproteins in insulin-dependent diabetic patients with persistent microalbuminuria. Watts GF, et al. **Diabetic Med** 1989 Jan–Feb;6(1):25–30

Increased cholesterylester transfer activity in complicated type 1 (insulin-dependent) diabetes mellitus—its relationship with serum lipids. Dullaart RP, et al. **Diabetologia** 1989 Jan;32(1):14–9

Lipoprotein alterations in diabetes mellitus. Kostner GM, et al. **Diabetologia** 1988 Oct;31(10):717–22 (73 ref.)

Alterations in lipid metabolism induced by antihypertensive therapy. Amery A, et al. **Drugs** 1988;36 Suppl 2:1–5 (13 ref.)

Effects of diuretic drugs on the lipid profile. Ames R. **Drugs** 1988;36 Suppl 2:33–40 (30 ref.)

Effect of ketanserin on lipoproteins in patients with essential hypertension. Arakawa K, et al. **Drugs** 1988;36 Suppl 1:126–9

Effects of acebutolol on the serum lipid profile. Clucas A, et al. **Drugs** 1988;36 Suppl 2:41–50 (39 ref.)

Effects of training on the serum lipid profile in normal men. Hespel P, et al. **Drugs** 1988;36 Suppl 2:27–32

Effect of short-term androgen administration to rabbit females on their lipoprotein metabolism. Háčik T, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):181–6

Differential effects of continuous versus intermittent administration of growth hormone to hypophysectomized female rats on serum lipoproteins and their apoproteins. Oscarsson J, et al. **Endocrinology** 1989 Sep;125(3):1638–49

A comparison of coronary risk factors in groups of trained and untrained adolescents. Máček M, et al. **Eur J Appl Physiol** 1989;58(6):577–82

Alterations in plasma lipoproteins and apolipoproteins associated with estrogen-induced hyperlipidemia in the laying hen. Hermier D, et al. **Eur J Biochem** 1989 Sep 1;184(1):109–18

Gangliosides in normal human serum. Concentration, pattern and transport by lipoproteins. Senn HJ, et al. **Eur J Biochem** 1989 May 15;181(3):657–62

Oestrogen-induced changes in lipoprotein metabolism: role in prevention of atherosclerosis in the cholesterol-fed rabbit. Henriksson P, et al. **Eur J Clin Invest** 1989 Aug; 19(4):395–403

Comparison of the effects of two different doses of alcohol on serum lipoproteins, HDL-subfractions and apolipoproteins A-I and A-II: a controlled study. Välimäki M, et al. **Eur J Clin Invest** 1988 Oct;18(5):472–80

Dietary fibre enrichment, blood pressure, lipoprotein profile and gut hormones in NIDDM patients. Hagander B, et al. **Eur J Clin Nutr** 1989 Jan;43(1):35–44 (26 ref.)

Long-term effect of pindolol on lipids and lipoproteins in men with newly diagnosed hypertension. Terént A, et al. **Eur J Clin Pharmacol** 1989;36(4):347–50

Cardiovascular regulation and lipoprotein profile during administration of co-dergocrine in essential hypertension. Uehlinger DE, et al. **Eur J Clin Pharmacol** 1989; 36(2):119–25

Simvastatin and bezafibrate: effects on serum lipoproteins and lecithin: cholesterol acyltransferase activity in familial hypercholesterolaemia. Weisweiler P. **Eur J Clin Pharmacol** 1988;35(6):579–83

Serum lipoprotein changes in female rats treated with progesterone or synthetic gestagens alone or in combination with estradiol. II. Serum triglycerides and hepatic triglyceride release. Tkocz R, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):7–12

Serum lipoprotein changes in female rats treated with progesterone or synthetic gestagens alone or in combination with estradiol. I. Total and fractionated cholesterol and lipoprotein pattern. Tkocz R, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):319–26

Serum lipoprotein binding by Treponema pallidum: possible role for proteoglycans. Alderete JF, et al. **Genitourin Med** 1989 Jun;65(3):177–82

Serum lipids and lipoproteins in pregnancies associated with emesis gravidarum. Järnfelt-Samsioe A, et al. **Gynecol Endocrinol** 1987 Mar;1(1):51–60

Impact of human growth hormone on plasma lipoprotein concentrations. Møller A, et al. **Horm Metab Res** 1989 Apr; 21(4):207–9

Atherogenic lipoprotein constellation. Mordasini R, et al. **Horm Metab Res Suppl** 1988;19:16–8 (21 ref.)

Effects of major nutrients on plasma lipoproteins. Schonfeld G. **Horm Metab Res Suppl** 1988;19:7–9 (17 ref.)

Lipids changes in alcoholic & non-alcoholic cirrhotics. Manocha S, et al. **Indian J Med Res** 1989 Feb;90:55–61

Effect of administration and withdrawal of oral contraceptive pills on serum lipids and lipoproteins. Arora S, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar;32(1):67–71

Effect of oral zinc sulphate on serum lipids and lipoproteins in human subjects. Shah DR, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar;32(1):47–50

Lipoprotein and apoprotein levels in different types of dialysis. Cassader M, et al. **Int J Artif Organs** 1989 Jul; 12(7):433–8

Computer aided phenotyping of dyslipoproteinemia. Pincé H, et al. **Int J Biomed Comput** 1988 Dec;23(3–4):251–63

Changes in serum and lipoprotein lipids, and apolipoprotein B and A-I, in patients with different types of primary hyperlipoproteinaemia treated with gemfibrozil. Sommariva D, et al. **Int J Clin Pharmacol Res** 1988; 8(5):383–92

The effects of oral contraceptives on plasma lipids and lipoproteins. Krauss RM. **Int J Fertil** 1988;33 Suppl:35–42 (7 ref.)

Metabolic effects of two low-dose triphasic oral contraceptives containing ethinyl estradiol and levonorgestrel or gestodene. Lepot MR, et al. **Int J Fertil** 1987;32 Suppl:15–20

Serum lipids and lipoproteins in women with polycystic ovarian disease with different body mass index. Rojanasakul

A, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):401–6

Body fat distribution, plasma lipoproteins and the risk of coronary heart disease of male subjects. Barakat HA, et al. **Int J Obes** 1988;12(5):473–80

Variable effects of weight loss on serum lipids and lipoproteins in obese patients. Stevenson DW, et al. **Int J Obes** 1988;12(6):495–502

The effect of diet on plasma lipids, lipoproteins, and coronary heart disease. Kris-Etherton PM, et al. **J Am Diet Assoc** 1988 Nov;88(11):1373–400 (275 ref.)

Lipoproteins and cholesterol: biosynthesis and metabolism. Weis SE. **J Am Osteopath Assoc** 1988 Jul;88(7):870–6 (36 ref.)

Effect of guar incorporated diet on plasma lipoprotein fractions in non insulin dependent diabetes mellitus. (NIDDM). Gahlot RS, et al. **J Assoc Physicians India** 1988 Dec;36(12):719–20

Plasma lipoproteins, cardiovascular reactivity and the sympathetic nervous system. Howes LG, et al. **J Auton Pharmacol** 1989 Aug;9(4):293–301 (54 ref.)

Lipoprotein abnormalities associated with lipopolysaccharide-induced lecithin: cholesterol acyltransferase and lipase deficiency. Auerbach BJ, et al. **J Biol Chem** 1989 Jun 15;264(17):10264–70

Purification and identification of the lipoprotein-binding proteins from human blood platelet membrane. Koller E, et al. **J Biol Chem** 1989 Jul 25;264(21):12412–8

Control of low density lipoprotein receptor gene promoter activity. Ketoconazole inhibits serum lipoprotein but not oxysterol suppression of gene transcription. Takagi K, et al. **J Biol Chem** 1989 Jul 25;264(21):12352–7

Rotational diffusion of human lipoproteins and their receptors as determined by time-resolved phosphorescence anisotropy. Tilley L, et al. **J Biol Chem** 1988 Nov 25; 263(33):17541–7

Relation of serum lipoproteins and lipids to the ABO blood groups in patients with intermittent claudication. Hørby J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):533–7

Determination of bromhexine in plasma by reversed-phase liquid chromatography. Interference of lipoproteins on extraction. Johansson M, et al. **J Chromatogr** 1988 Nov 18;432:243–52

Differential turbidimetric assay for subpopulations of lipoproteins containing apolipoprotein A-I. März W, et al. **J Clin Chem Clin Biochem** 1988 Sep;26(9):573–8

Regional adiposity patterns in relation to lipids, lipoprotein cholesterol, and lipoprotein subfraction mass in men. Terry RB, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):191–9

Relationship between change in height and changes in serum lipid and lipoprotein levels in adolescent males: the Bogalusa Heart Study. Chiang YK, et al. **J Clin Epidemiol** 1989;42(5):409–15

Lipoprotein metabolism influenced by training-induced changes in human skeletal muscle. Kiens B, et al. **J Clin Invest** 1989 Feb;83(2):558–64

Intravenous infusion of apolipoprotein E accelerates clearance of plasma lipoproteins in rabbits. Mahley RW, et al. **J Clin Invest** 1989 Jun;83(6):2125–30

Dietary polyunsaturated fats of the W-6 and W-3 series reduce postprandial lipoprotein levels. Chronic and acute effects of fat saturation on postprandial lipoprotein metabolism. Weintraub MS, et al. **J Clin Invest** 1988 Dec; 82(6):1884–93

Effects of combined estrogen and progestin administration on plasma lipoprotein metabolism in postmenopausal women [published erratum appears in J Clin Invest 1989 May;83(5):following 1782] Wolfe BM, et al. **J Clin Invest** 1989 Jan;83(1):40–5

Association between coagulation factors VII and X with triglyceride rich lipoproteins. de Sousa JC, et al. **J Clin Pathol** 1988 Sep;41(9):940–4

Alpha-1 adrenoceptor blockade with doxazosin in hypertension: effects on blood pressure and lipoproteins. Ames RP, et al. **J Clin Pharmacol** 1989 Feb;29(2):123–7

Plasma lipoproteins in neonatal, preruminant, and weaned calf. Jenkins KJ, et al. **J Dairy Sci** 1988 Nov;71(11):3003–12

Effect on days of lactation and methionine hydroxy analog on incorporation of plasma fatty acids into plasma triglycerides. Pullen DL, et al. **J Dairy Sci** 1989 Jan; 72(1):49–58

Metabolic effects of diltiazem and atenolol: results from a randomized, double-blind study with parallel groups. Pollare T, et al. **J Hypertens** 1989 Jul;7(7):551–9

Plasma lipoprotein changes after treatment with pravastatin and gemfibrozil in patients with familial hypercholesterolemia. Franceschini G, et al. **J Lab Clin Med** 1989 Sep;114(3):250–9

Isolation of apolipoproteins from carotenoid-carrying lipoprotein in the serum of chum salmon, Oncorhynchus keta. Ando S, et al. **J Lipid Res** 1988 Oct;29(10):1264–71

Plasma lipoproteins in fish. Babin PJ, et al. **J Lipid Res** 1989 Apr;30(4):467–89 (279 ref.)

Enzyme-linked immunoassay for Lp[a]. Fless GM, et al. **J Lipid Res** 1989 May;30(5):651–62

Lipoprotein[a] is the major apoB-containing lipoprotein in the plasma of a hibernator, the hedgehog (Erinaceus europaeus). Laplaud PM, et al. **J Lipid Res** 1988 Sep; 29(9):1157–70

Localization of lipoprotein unesterified cholesterol in nondenaturing gradient gels with filipin. Lefevre M. **J Lipid Res** 1988 Jun;29(6):815–8

Relationship of decreased hepatic lipase activity and lipoprotein abnormalities to essential fatty acid deficiency in cystic fibrosis patients. Lévy E, et al. **J Lipid Res** 1989 Aug;30(8):1197–209

Screening for lipoprotein[a] elevations in plasma and assessment of size heterogeneity using gradient gel electrophoresis. McNamara JR, et al. **J Lipid Res** 1989 May;30(5):747–55

Detection of vesicular lipoproteins in lecithin:cholesterol acyltransferase-deficient plasma by 1H-NMR spectroscopy. Parmar YI, et al. **J Lipid Res** 1989 May; 30(5):765–71

Hereditary and dietary effects on apolipoprotein[a] isoforms and Lp[a] in baboons. Rainwater DL, et al. **J Lipid Res** 1989 Apr;30(4):549–58

A spectrophotometric assay for lipid peroxides in serum lipoproteins using a commercially available reagent. el-Saadani M, et al. **J Lipid Res** 1989 Apr;30(4):627–30

Plasma lipoproteins, tissue cholesterol overload, and skeletal muscle apolipoprotein A-I synthesis in the developing chick. Tarugi P, et al. **J Lipid Res** 1989 Jan;30(1):9–22

Comparative effects of combined oral contraceptives containing desogestrel or levonorgestrel on serum lipids, lipoproteins and sex hormone binding globulin in healthy women. Sirimongkolkasem R, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:68–73

Effects of meprobamate on plasma lipids, lipoproteins, and experimental atherosclerosis. Wong HY, et al. **J Natl Med Assoc** 1987 Aug;79(8):855–64

Serum lipoprotein profiles in mice: effects of early over- and undernutrition. Aubert R, et al. **J Nutr** 1988 Oct; 118(10):1190–6

Plasma lipids, lipoproteins, and fecal excretion of neutral sterols and bile acids in rats fed various high fat diets or a low fat/high sucrose diet. Høstmark AT, et al. **J Nutr** 1989 Mar;119(3):356–63

Soluble oat fiber tends to normalize lipoprotein composition in cholesterol-fed rats. Ney DM, et al. **J Nutr** 1988 Dec; 118(12):1455–62

Dyslipoproteinemia in juvenile rheumatoid arthritis. Iiowite NT, et al. **J Pediatr** 1989 May;114(5):823–6

Plasma and lipoprotein lipids and apolipoproteins AI, AII and B in patients with chronic airflow limitation. Bolton CH, et al. **J R Soc Med** 1989 Feb;82(2):91–2

Lipoprotein profile in childhood nephrotic syndrome: correlation with clinical severity. Yap HK, et al. **J Singapore Paediatr Soc** 1988;30(1-2):56–60

The effects of aerobic dance training on serum lipids, lipoproteins and cardiopulmonary function. Williford HN, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):151–7

Effects of cyclosporine therapy on plasma lipoprotein levels. Ballantyne CM, et al. **JAMA** 1989 Jul 7;262(1):53–6

Lp(a)' joins other serum cholesterol lipoproteins as risk determinant [news] Merz B. **JAMA** 1989 Apr 14; 261(14):2013–4

Is it time to include lipoprotein analysis in cholesterol screening? [news] Merz B. **JAMA** 1989 Jan 27;261(4):497–8

Serum lipids and lipoproteins in schizophrenic patients receiving major tranquilizers. Shafique M, et al. **JPMA** 1988 Oct;38(10):259–61

Changes of serum lipids after cerebral infarction. Iwasaki Y, et al. **Jpn J Med** 1989 Mar-Apr;28(2):156–8

Decreased serum cholesteryl-ester transfer activity in a patient with familial hyperalphalipoproteinemia. Takegoshi T, et al. **Jpn J Med** 1988 Aug;27(3):295–9

Plasma lipids and acyltransferase activities in experimental nephrotic syndrome. Sestak TL, et al. **Kidney Int** 1989 Aug; 36(2):240–8

The Eberbach/Wiesloch Study: lipoprotein profiles of 35- to 49-year-old men and women. Augustin J, et al. **Klin Wochenschr** 1988;66 Suppl 11:50–7

Incidence rates of fatal and nonfatal myocardial infarction in relation to the lipoprotein profile: first prospective results from the Göttingen Risk, Incidence, and Prevalence Study (GRIPS). Cremer P, et al. **Klin Wochenschr** 1988;66 Suppl 11:42–9

Lipoprotein pattern in long-term diabetes of an at least 35 years' duration. Results of the Erfurt Study. Schauer UJ, et al. **Klin Wochenschr** 1988 Aug 1;66(15):694–8

Reduction of Lp(a) by different methods of plasma exchange. Schenck I, et al. **Klin Wochenschr** 1988 Dec 15; 66(24):1197–201

Treatment of coronary heart disease by diet and exercise: fasting and diurnal lipoproteins. Schlierf G, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1103–9

Unchanged serum lipoprotein (a) concentrations with lovastatin [letter] Berg K, et al. **Lancet** 1989 Sep 30; 2(8666):812

Lipoprotein(a), cholesterol, and coronary heart diseases [letter] Ghilain JM, et al. **Lancet** 1988 Oct 22;2(8617):963

Raised serum lipoprotein during treatment with lovastatin [letter] Jürgens G, et al. **Lancet** 1989 Apr 22;1(8643):911–2

Effects of simvastatin and cholestyramine on lipoprotein profile in hyperlipidaemia of nephrotic syndrome. Rabelink AJ, et al. **Lancet** 1988 Dec 10;2(8624):1335–8

Increased lipoprotein(a) levels in children with familial hypercholesterolaemia [letter] Widhalm K, et al. **Lancet** 1988 Nov 26;2(8622):1262

Effects of zinc and cholesterol/choleate on serum lipoproteins and the liver in rats. Cho CH, et al. **Life Sci** 1989;44(25):1929–36

Defibrotide decreases cholesterol amount in hypercholesterolemic rabbit aorta, with no modification of plasma or lipoprotein cholesterol. Pescador R, et al. **Life Sci** 1989;44(12):789–97

Alpha- and gamma-tocopherol levels in lipoproteins fractionated by affinity chromatography. Clevidence BA, et al. **Lipids** 1989 Feb;24(2):137–40

Effects of 2-(2,4-dimethylphenyl)indan-1,3-dione on serum lipoprotein and lipid metabolism of rodents. Hall IH, et al. **Lipids** 1988 Aug;23(8):755–60

Serum lipoprotein and apoprotein concentrations in 4-(4-chlorophenyl)-2-hydroxytetronic acid and clofibrate-treated cholesterol and cholic acid-fed rats. Kamanna VS, et al. **Lipids** 1989 Jan;24(1):25–32

Increased amounts of cholesterol precursors in lipoproteins after ileal exclusion. Koivisto PV, et al. **Lipids** 1988 Oct; 23(10):993–6

Interaction of rabbit lipoproteins and red blood cells with liposomes of egg yolk phospholipids. Mendez AJ, et al. **Lipids** 1988 Oct;23(10):961–7

Absorption and transport of deuterium-substituted 2R,4'R,8'R-alpha-tocopherol in human lipoproteins. Traber MG, et al. **Lipids** 1988 Aug;23(8):791–7

1H NMR studies on human plasma lipids from newborn infants, healthy adults, and adults with tumors. Eskelinen S, et al. **Magn Reson Med** 1989 Jan;9(1):35–8

Evaluation of the changes in lipid lipoprotein profile induced after ingestion of high cholesterol and fat diet in young healthy females. Arora RC, et al. **Mater Med Pol** 1988 Jul-Sep;20(3):163–4

A comparison of the effects of ethinyl estradiol and estradiol valerate on serum and lipoprotein lipids. Lindberg UB, et al. **Maturitas** 1988 Dec;10(4):343–52

Approach to define "normal aging" in man. Immune function, serum lipids, lipoproteins and neopterin levels. Reibnegger G, et al. **Mech Ageing Dev** 1988 Dec; 46(1-3):67–82

Lipids and lipoproteins in patients undergoing coronary-artery surgery. Billington T, et al. **Med J Aust** 1989 Mar 20;150(6):302–4, 306

Nutritional, physiological, and menstrual status of distance runners. Kaiserauer S, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):120–5

Short-term effects of moderate alcohol consumption on lipid metabolism and energy balance in normal men. Contaldo F, et al. **Metabolism** 1989 Feb;38(2):166–71

Cord blood lipoprotein-cholesterol: relationship birth weight and gestational age of newborns. Diaz M, et al. **Metabolism** 1989 May;38(5):435–8

The effects of omega 3 and omega 6 fatty acid-enriched diets on plasma lipoproteins and apoproteins in familial combined hyperlipidemia. Failor RA, et al. **Metabolism** 1988 Nov; 37(11):1021–8

Relationship between lipoprotein levels and in vivo insulin action in normal young white men. Garg A, et al. **Metabolism** 1988 Oct;37(10):982–7

Abnormalities in the metabolism of postprandial and fasting triglyceride-rich lipoprotein subfractions in normal and insulin-dependent diabetic subjects: effects of sex. Georgopoulos A, et al. **Metabolism** 1989 Aug;38(8):781–9

Homozygous hypobetalipoproteinemia with spared chylomicron formation. Harano Y, et al. **Metabolism** 1989 Jan;38(1):1–7

Acute changes in lipid, lipoprotein, apolipoprotein, and low-density lipoprotein particle size after an endurance triathlon. Lamon-Fava S, et al. **Metabolism** 1989 Sep; 38(9):921–5

Effects of monounsaturated fatty acids v complex carbohydrates on serum lipoproteins and apoproteins in healthy men and women. Mensink RP, et al. **Metabolism** 1989 Feb;38(2):172–8

Effects of catecholamines on serum lipoproteins of normally fed and cholesterol-fed rabbits. O'Donnell L, et al. **Metabolism** 1988 Oct;37(10):910–5

Quantitative and qualitative changes of apolipoprotein AI-containing lipoproteins in patients on continuous ambulatory peritoneal dialysis. Ohta T, et al. **Metabolism** 1989 Sep;38(9):843–9

Changes in lipoproteins induced by the remnant kidney tissue or binephrectomy in chronic uremic patients treated by hemodialysis. Robert D, et al. **Metabolism** 1989 Jun; 38(6):514–21

Plasma lipoproteins in healthy octogenarians: lack of reduced high density lipoprotein cholesterol levels: results from the Framingham Heart Study. Schaefer EJ, et al. **Metabolism** 1989 Apr;38(4):293–6

Low-dose colestipol plus fenofibrate: effects on plasma lipoproteins, lecithin:cholesterol acyltransferase, and postheparin lipases in familial hypercholesterolemia. Weisweiler P. **Metabolism** 1989 Mar;38(3):271–4

Stepwise precipitation method of human blood lipoproteins for clinical routine. Ecsedi GG, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):761–5

Possible biochemical mechanisms involved in the antihypertensive drug-induced changes in serum lipoproteins. Lijnen P, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):17–23 (32 ref.)

Changes in lipoproteins during weight loss [letter] **N Engl J Med** 1989 Mar 9;320(10):668–9

Effect of triglyceride levels on methyl and methylene envelope line widths in proton nuclear magnetic resonance spectroscopy of human plasma. Mims MP, et al.

N Engl J Med 1989 Jun 1;320(22):1452–7
Changes in plasma lipids and lipoproteins in overweight men during weight loss through dieting as compared with exercise. Wood PD, et al. N Engl J Med 1988 Nov 3; 319(18):1173–9
Lipoprotein lipids and apoproteins in healthy renal transplant recipients [letter] Allegra V, et al. Nephron 1989; 51(2):276–7
Lipoproteins and apolipoproteins during the progression of chronic renal disease. Grützmacher P, et al. Nephron 1988; 50(2):103–11
Serum cholesterol, its lipoprotein fractions among survivors of cerebrovascular disease. A case–control study. Wang KJ, et al. Neuroepidemiology 1989;8(4):175–83
Changes in postprandial plasma lipids and lipoproteins in humans. Nutr Rev 1989 Jan;47(1):13–5
The effects of estradiol on blood lipids and lipoproteins in postmenopausal women. Fåhraeus L. Obstet Gynecol 1988 Nov;72(5 Suppl):18S–22S
Effects of coffee on plasma lipids, lipoproteins and apolipoproteins. Paoletti R, et al. Pharmacol Res 1989 Jan–Feb;21(1):27–38
Lipoproteins and coronary heart disease. Krauss RM. Postgrad Med 1989 Apr;Spec No:54–8; discussion 89–90
Beta–blockers, lipoproteins and non–insulin dependent diabetes. Feher MD, et al. Postgrad Med J 1988 Dec; 64(758):926–30
Sex differences in lipid, lipoprotein, cardiovascular, and neuroendocrine responses to acute stress. Stoney CM, et al. Psychophysiology 1988 Nov;25(6):645–56
Homocysteinemia and arteriosclerosis: failure to isolate homocysteine thiolactone from plasma and lipoproteins. McCully KS. Res Commun Chem Pathol Pharmacol 1989 Feb;63(2):301–4
Plasma lipoproteins and fatty liver in dairy cows. Rayssiguier Y, et al. Res Vet Sci 1988 Nov;45(3):389–93
Relationship of serum triglyceride concentration to lipoprotein composition and concentration in normolipidemic and hyperlipidemic subjects. Sommariva D, et al. Ric Clin Lab 1988 Oct–Dec;18(4):281–90
Concentrations of apolipoproteins B, C–I, C–II, C–III, E and lipids in serum and serum lipoproteins of normal subjects during alimentary lipaemia. Annuzzi G, et al. Scand J Clin Lab Invest 1989 Feb;49(1):73–81
Transport of serum bile acids in patients with liver cirrhosis and hyperbilirubinaemia. Hedenborg G, et al. Scand J Clin Lab Invest 1988 Dec;48(8):817–24
Lipoprotein–deficient serum stimulates the uptake of chylomicron remnants in cultured rat hepatocytes. Jensen E, et al. Scand J Clin Lab Invest 1988 Oct;48(6):553–6
Platelet lipoprotein interactions. Brook JG, et al. Semin Thromb Hemost 1988 Jul;14(3):258–65 (50 ref.)
Lipoprotein–mediated cellular mechanisms for atherogenesis in hypertriglyceridemia. Gianturco SH, et al. Semin Thromb Hemost 1988 Apr;14(2):165–9 (28 ref.)
Lipid and lipoprotein effects on endothelial eicosanoid formation. Spector AA. Semin Thromb Hemost 1988 Apr; 14(2):196–201 (41 ref.)
Action of Viskaldix on serum lipids and lipoproteins. Völgyi Z, et al. Ther Hung 1988;36(2):62–6
Is there any correlation between platelet aggregation, plasma lipoproteins, apoproteins and membrane fluidity of human blood platelets? Malle E, et al. Thromb Res 1989 Jan 15; 53(2):181–90
Dependence of lipid–lipoprotein metabolism on exercise intensity in experimental fatty liver rats. Terao T, et al. Tokai J Exp Clin Med 1988 Jun;13(2):99–107
Effects of long–term exercise and high–cholesterol diet on lipid–lipoprotein metabolism in rats. Terao T, et al. Tokai J Exp Clin Med 1987 Nov;12(4):243–51
Plasma lipid and lipoprotein levels in rheumatic fever. Olguntürk R, et al. Turk J Pediatr 1988 Jan–Mar;30(1):1–8
The effect of Eimeria acervulina infection on plasma lipids and lipoproteins in young broiler chicks. Allen PC. Vet Parasitol 1988 Nov;30(1):17–30
The effect of blood sugar, therapy and blood pressure on lipoprotein profiles of diabetics in Trinidad & Tobago. Possible association with ischaemic heart disease. Ragoobirsingh D, et al. West Indian Med J 1989 Jun; 38(2):94–8
The effect of demographic factors on serum lipids in diabetics of Trinidad and Tobago. Possible association with ischaemic heart disease. Ragoobirsingh D, et al. West Indian Med J 1989 Jun;38(2):99–104
Incides of lipid peroxidation in patients with hypercholesterolemia and hypertriglyceridemia. Domagała B, et al. Wien Klin Wochenschr 1989 Jun 9;101(12):425–8
The effect of a free mackerel–supplemented diet on plasma and lipoprotein lipid concentrations in normolipidemic subjects. Pfeuffer M, et al. Z Ernahrungswiss 1988 Dec; 27(4):216–21
[Lipoprotein and apoprotein changes in type–2 diabetes mellitus] Dobrev D, et al. Vutr Boles 1988;27(5):24–8 (Eng. Abstr.) (Bul)
[Serum lipid screening in children and young people] Porkka K, et al. Duodecim 1989;105(4):340–9 (60 ref.) (Fin)
[Quantitative analysis of apolipoproteins and lipoprotein particles in patients with head injuries] Kabbaj O, et al. Ann Biol Clin (Paris) 1989;47(1):35–40 (Eng. Abstr.) (Fre)
[Changes in serum lipids and lipoproteins in 3 cases of heterozygous familial hypercholesterolemia treated by LDL apheresis on dextran sulfate–cellulose columns] Delplanque B, et al. Ann Med Interne (Paris) 1988;139 Suppl 1:80–2 (Eng. Abstr.) (Fre)
[Histopathology of the liver and kidney during malaria: relation to malaria–induced dyslipoproteinemia] Dumont ME, et al. Ann Parasitol Hum Comp 1988;63(3):171–83 (Eng. Abstr.) (Fre)
[Lipoprotein Lp(a): a new risk factor of atherogenesis] Davidoff P, et al. Diabete Metab 1989 Mar–Apr;15(2):55–60 (81 ref.) (Eng. Abstr.) (Fre)
[Lipid profile of the diabetic. Actual modalities and perspectives] Moulin P, et al. Diabete Metab 1989 May–Jun;15(3):142–5 (12 ref.) (Fre)
[Modified lipoproteins and atherogenesis (editorial)] Fruchart JC, et al. Presse Med 1989 Apr 8;18(14):701–2 (Fre)
[NMR research on blood plasma for tumor detection—a method for mass screening?] Fritzsche H, et al. Arch Geschwulstforsch 1989;59(2):129–33 (Eng. Abstr.) (Ger)
[Lipoprotein metabolism in patients with disordered thyroid gland function before and following therapy] Rassoul F, et al. Dtsch Z Verdau Stoffwechselkr 1988;48(2):104–11 (Eng. Abstr.) (Ger)
[Effect of sex steroids on the lipoprotein profile] Prömpeler HJ, et al. Geburtshilfe Frauenheilkd 1988 Nov;48(11):785–7 (Eng. Abstr.) (Ger)
[Maternal lipoproteins post partum. Qualitative and quantitative studies of the effect of lactation] Brockerhoff P, et al. Gynakol Rundsch 1989;29(1):12–21 (Eng. Abstr.) (Ger)
[The effects of the intake of cod liver oil on the blood lipid level, the lipoprotein profile and bleeding time] Burchard HU, et al. Z Ernahrungswiss 1989 Mar;28(1):84–91 (Eng. Abstr.) (Ger)
[Effect of cod liver oil administration on blood lipid levels, lipoprotein profile and bleeding time] Burchard HU, et al. Z Ernahrungswiss 1988 Dec;27(4):222–8 (Eng. Abstr.) (Ger)
[Distribution and elimination of medium– and long–chain fatty acids of a fat emulsion in lipoproteins of severely injured patients following bolus injection] Wolfram G, et al. Z Ernahrungswiss 1989 Jun;28(2):173–80 (Eng. Abstr.) (Ger)
[Use of analytic density gradient ultracentrifugation for the study of cholesterol distribution between the lipoprotein fractions of serum] Gehrisch S, et al. Z Med Lab Diagn 1989;30(5):256–63 (Eng. Abstr.) (Ger)
[Changes in the lipoprotein profile in children with insulin treated type 1 diabetes mellitus] Schottmann B, et al. Z Med Lab Diagn 1989;30(1):76–7 (Ger)
[Distribution of lipoprotein fractions in men with arteriosclerosis obliterans] Karádi I, et al. Orv Hetil 1989 Jul 9;130(28):1489–92 (Eng. Abstr.) (Hun)
[Immunologic correlations of Lp(a) lipoprotein and plasminogen] Karádi I, et al. Orv Hetil 1988 Jul 3; 129(27):1417–20 (Eng. Abstr.) (Hun)
[Total blood lipids and lipoproteins in sheep fed Pistacia lentiscus drupe] Bomboi G, et al. Boll Soc Ital Biol Sper 1988 Jan;64(1):93–9 (Eng. Abstr.) (Ita)
[Effects of bezafibrate on lipoprotein lipids and apolipoproteins B and A1 in patients with primary hypercholesterolemia] Branchi A, et al. Clin Ter 1987 Jul 15;122(1):17–23 (Eng. Abstr.) (Ita)
[Acute myocardial infarction in subjects under 40 years of age. Coronary risk factors] Roncarolo PL, et al. Minerva Cardioangiol 1989 May;37(5):219–28 (Eng. Abstr.) (Ita)
[Serum lipoprotein abnormalities in patients with nephrotic syndrome and effects of steroid therapy] Kohtoku N, et al. Nippon Jinzo Gakkai Shi 1989 Apr;31(4):335–44 (Eng. Abstr.) (Jpn)
[Recent trend in the research of hypertension in Japan. The effects of antihypertensive drugs on serum lipids and lipoproteins in patients with mild to moderate hypertension] Goto Y, et al. Nippon Naika Gakkai Zasshi 1988 Dec; 77(12):1820–5 (35 ref.) (Jpn)
[Effects of gestrinone on serum lipid and lipoprotein levels in women with endometriosis] Fukuda Y, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 May; 41(5):577–84 (Eng. Abstr.) (Jpn)
[Studies on serum lipids in obese children. I. Changes in serum total cholesterol, triglycerides, lipoprotein–cholesterols and apoproteins] Igari J, et al. Rinsho Byori 1988 Sep;36(9):1061–4 (Jpn)
[Determination of plasma lipids and lipoproteins] Nakamura H. Rinsho Byori 1988 May;36(5):517–20 (Jpn)
[Serum lipoprotein analysis of a patient with Tangier disease] Takizawa A, et al. Rinsho Byori 1989 Mar;37(3):285–90 (Jpn)
[The role of lipoproteins and macrophages in the development of atherosclerosis] Bjørneboe GE. Tidsskr Nor Laegeforen 1989 Jan 20;109(2):216–9 (Eng. Abstr.) (Nor)
[Effect of hypotensive drugs on serum levels of lipids and lipoproteins in humans] Halawa B, et al. Pol Tyg Lek 1988 Oct 31;43(44):1422–4 (Pol)
[Lp(a)—the current state of knowledge and clinical significance] Wybrańska I, et al. Przegl Lek 1988; 45(12):855–7 (25 ref.) (Pol)
[Lipid changes in elderly patients with arteriosclerotic complications] Netto MP, et al. Arq Bras Cardiol 1988 Jan; 50(1):11–4 (Eng. Abstr.) (Por)
[The importance of apolipoproteins in dyslipidemias] Quintão EC. Arq Bras Cardiol 1988 Feb;50(2):129–34 (105 ref.) (Por)
[Lipid changes in elderly subjects with non–insulin–dependent diabetes mellitus] Figueira JL, et al. Rev Paul Med 1988 Mar–Apr;106(2):89–94 (Eng. Abstr.) (Por)
[Variability of crystals of blood lipoproteins] Kolosiuk VN, et al. Biofizika 1988 Jul–Aug;33(4):672–4 (Eng. Abstr.) (Rus)
[Modification of blood plasma lipoproteins by a lipid peroxidation product—hexanal] Kuznetsov AS, et al. Biull Eksp Biol Med 1989 Mar;107(3):294–6 (Eng. Abstr.) (Rus)
[Study of changes in the protein–lipid components of blood lipoproteins and the dynamics of coronary arteriosclerosis based on repeated angiographic examinations] Nechaev AS. Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(1):93 (Rus)
[Can the presence of an RNA–lipoprotein complex in human blood serum give evidence of a cancerous disease?] Bazanova NV, et al. Eksp Onkol 1989;11(2):37–9 (Eng. Abstr.) (Rus)
[The relation of central blood circulation and the values of fatty and non–fatty body weight in men with normo– and hyperlipoproteinemia] Aleksenko AS, et al. Kardiologiia 1988 Aug;28(8):68–72 (Eng. Abstr.) (Rus)
[Newly developed stenocardia: effect of intensive physical training on the lipoprotein spectrum of blood plasma] Komendat VI, et al. Kardiologiia 1988 Jun;28(6):60–5 (Eng. Abstr.) (Rus)
[Effect of alpha–tocopherol combined with finoptin on the level of lipid hydroperoxides in plasma lipoproteins and on the functional activity of thrombocytes in patients with exertion–induced stable stenocardia] Levchenkio VA, et al. Kardiologiia 1989 Jun;29(6):25–8 (Eng. Abstr.) (Rus)
[Study of the changes in protein–lipid components of blood lipoproteins and the dynamics of coronary arteriosclerosis based on repeated angiographic examination] Nechaev AS, et al. Kardiologiia 1989 Apr;29(4):16–21 (Rus)
[Quantitative evaluation of the electrophoresis of lipoproteins] Kondrat'eva LA. Lab Delo 1988;(9):70–1 (Rus)
[Features of blood lipid composition during emotional stress in rabbits with dyslipoproteinemia] Bel'chenko DI, et al. Patol Fiziol Eksp Ter 1989 Mar–Apr;(2):10–3 (Eng. Abstr.) (Rus)
[Changes in the lipid composition of the blood plasma lipoproteins in acute emotional stress] Gurin VN, et al. Patol Fiziol Eksp Ter 1988 Sep–Oct;(5):57–9 (Eng. Abstr.) (Rus)
[Comparative characteristics of the lipid composition of lipoproteins of the blood plasma and ascitic fluid in liver cirrhosis] Kosukhin AB, et al. Patol Fiziol Eksp Ter 1989 Mar–Apr;(2):13–7 (Eng. Abstr.) (Rus)
[Structural organization of blood plasma lipoproteins and their interaction with the cell] Voziian PA, et al. Ukr Biokhim Zh 1989 May–Jun;61(3):22–41 (108 ref.) (Eng. Abstr.) (Rus)
[Changes in geometric parameters of liposomes and plasma lipoproteins during enrichment with cholesterol] Voziian PA. Ukr Biokhim Zh 1988 Sep–Oct;60(5):81–4 (Eng. Abstr.) (Rus)
[The problem of the influences of brain cholinergic mechanisms on lipoprotein metabolism in disorders of heat exchange and in emotional stress] Gurin VN, et al. Vestn Akad Med Nauk SSSR 1989;(1):21–8 (Eng. Abstr.) (Rus)
[Determination of molecular types of triacylglycerols in plasma lipoproteins by a method of high performance liquid chromatography using a computer] Liapkov BG, et al. Vopr Med Khim 1989 Jan–Feb;35(1):118–22 (Rus)
[Electrostatic potential on the surface of low density lipoproteins from the plasma of patients with ischemic heart disease: estimation using a fluorescent probe] Omel'ianenko VG, et al. Vopr Med Khim 1989 Jan–Feb;35(1):29–31 (Eng. Abstr.) (Rus)
[Transport of steroid hormones by serum lipoproteins] Panin LE, et al. Vopr Med Khim 1988 Sep–Oct;34(5):56–8 (Eng. Abstr.) (Rus)
[Lipids, lipoproteins, apoproteins and physical exercise in young female athletes] López Benedicto MA, et al. An Esp Pediatr 1988 May;28(5):395–400 (Eng. Abstr.) (Spa)
[Current value of the lipoproteinogram in the study of lipoprotein metabolism (letter)] Pérez Gallofré A, et al. Med Clin (Barc) 1988 Jun 4;91(2):77 (Spa)
[Excessive intake of fats and cholesterol in hypercholesterolemic individuals. Effects of dietary intervention on plasma lipids and lipoprotein cholesterol] Ros E, et al. Med Clin (Barc) 1989 Jan 21;92(2):41–6 (Eng. Abstr.) (Spa)
[Effects of cod liver oil as a source of n–3 fatty acids on lipoproteins and blood viscosity in patients with primary hyperlipoproteinemia] Giorgi AA, et al. Medicina (B Aires) 1988;48(5):479–86 (Eng. Abstr.) (Spa)
[Consumption of fish fats: effect on plasma lipids] Oliván B, et al. Rev Clin Esp 1988 Dec;183(9):452–4 (Eng. Abstr.) (Spa)

DEFICIENCY

Choreo-acanthocytosis. Bharucha EP, et al. **J Neurol Sci** 1989 Feb;89(2-3):135-9

GENETICS

Genetic and environmental determinants of serum lipids and lipoproteins in French Canadian families. Pérusse L, et al. **Arteriosclerosis** 1989 May-Jun;9(3):308-18

Conserved lipoproteins of pathogenic Neisseria species bearing the H.8 epitope: lipid-modified azurin and H.8 outer membrane protein. Cannon JG. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S1-4 (31 ref.)

No evidence for linkage between lipoprotein(a) (LPA) and esterase D (ESD). Greger V, et al. **Cytogenet Cell Genet** 1988;48(4):248-9

Expression and excretion of human pancreatic secretory trypsin inhibitor in lipoprotein-deletion mutant of Escherichia coli. Kanamori T, et al. **Gene** 1988 Jun 30; 66(2):295-300

Detecting genetic effects on lipoprotein phenotypes in baboons: a review of methods and preliminary findings. MacCluer JW, et al. **Genetica** 1987 Aug 31;73(1-2):159-68

Genetic linkage between lipoprotein(a) phenotype and a DNA polymorphism in the plasminogen gene. Drayna DT, et al. **Genomics** 1988 Oct;3(3):230-6

Genetics of the quantitative Lp(a) lipoprotein trait. III. Contribution of Lp(a) glycoprotein phenotypes to normal lipid variation. Boerwinkle E, et al. **Hum Genet** 1989 Apr; 82(1):73-8

The gene for the Lp(a)-specific glycoprotein is closely linked to the gene for plasminogen on chromosome 6. Lindahl G, et al. **Hum Genet** 1989 Jan;81(2):149-52

Klebsiella pneumoniae pulS gene encodes an outer membrane lipoprotein required for pullulanase secretion. D'Enfert C, et al. **J Bacteriol** 1989 Jul;171(7):3673-9

Pseudomonas aeruginosa outer membrane lipoprotein I gene: molecular cloning, sequence, and expression in Escherichia coli. Duchêne M, et al. **J Bacteriol** 1989 Aug;171(8):4130-7

Sequence of an osmotically inducible lipoprotein gene. Jung JU, et al. **J Bacteriol** 1989 Jan;171(1):511-20

Defects in the low density lipoprotein receptor gene affect lipoprotein (a) levels: multiplicative interaction of two gene loci associated with premature atherosclerosis. Utermann G, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4171-4

Lipoprotein(a): a genetically determined lipoprotein containing a glycoprotein of the plasminogen family. Scanu AM. **Semin Thromb Hemost** 1988 Jul;14(3):266-70 (36 ref.)

Identification of the 1.4 kb and 4.0 kb messages for the lipoprotein associated coagulation inhibitor and expression of the encoded protein. Girard TJ, et al. **Thromb Res** 1989 Jul 1;55(1):37-50

Genetics of atherosclerosis and plasma lipoproteins in mice. Bulfield G. **Trends Genet** 1988 Jan;4(1):3-4

IMMUNOLOGY

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. II. Induction of heterologous immunity by mucoid strains of P. aeruginosa. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):185-93

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. III. Polyvalent serum against three mucoid immunotypes potentiates phagocytosis of all (7) mucoid immunotypes. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):195-203

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. I. Induction of homologous immunity by nonmucoid strains of P. aeruginosa. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):177-84

The linkage with apolipoprotein (a) in lipoprotein (a) modifies the immunochemical and functional properties of apolipoprotein B. Zawadzki Z, et al. **Biochemistry** 1988 Nov 1;27(22):8474-81

Lipoproteins may provide fatty acids necessary for human lymphocyte proliferation by both low density lipoprotein receptor-dependent and -independent mechanisms. Cuthbert JA, et al. **J Biol Chem** 1989 Aug 15; 264(23):13468-74

Production of murine monoclonal antibodies against a liver-specific, species cross-reactive antigen in the liver-specific lipoprotein (LSP) preparation. McSorley CG, et al. **J Immunol Methods** 1988 Nov 10;114(1-2):161-6

Characterization of five mouse monoclonal antibodies to apolipoprotein[a] from human Lp[a]: evidence for weak plasminogen reactivity. Guo HC, et al. **J Lipid Res** 1989 Jan;30(1):23-37

The role of extracellular slime in opsonophagocytosis of Staphylococcus epidermidis. Kristinsson KG, et al. **J Med Microbiol** 1988 Nov;27(3):207-13

ISOLATION & PURIFICATION

Isolation of apolipoprotein A-I-containing lipoproteins by immunoaffinity chromatography using a formylated derivative of cellulose gel. Ohta T, et al. **Clin Chim Acta** 1989 Feb 15;179(2):183-90

Analysis of a soluble lipid-protein complex carrying endogenous 11-cis retinaldehyde from bovine retinal pigment epithelium. Livrea MA, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):181-9

METABOLISM

Apolipoprotein C-II deficiencies: in vivo models for assessing the significance of defective lipolysis on lipoprotein metabolism. Breckenridge WC. **Adv Exp Med Biol** 1988; 243:75-9 (20 ref.)

Lecithin: cholesterol acyltransferase and its action on different substrates. Knipping G, et al. **Adv Exp Med Biol** 1988;243:239-45

Exchange and transfer of apolipoproteins and lipids: impact on lipoprotein metabolism. Kostner GM, et al. **Adv Exp Med Biol** 1988;243:333-8

Biological modification of lipoproteins and its role in atherogenesis. Carew TE, et al. **Agents Actions Suppl** 1988; 26:191-200

In vivo and in vitro effects of copper(I)nicotinic acid complexes on lipids and lipoproteins. el-Saadani M, et al. **Agents Actions Suppl** 1988;26:247-58

Effects of antihypertensives on plasma lipids and lipoprotein metabolism. Krone W, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1729-34 (47 ref.)

Preferential incorporation of alpha-tocopherol vs gamma-tocopherol in human lipoproteins. Traber MG, et al. **Am J Clin Nutr** 1989 Mar;49(3):517-26

Effects of progestins on estrogen-induced lipoprotein changes [letter] Hendrix JW, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):274

The in vitro interactions between serum lipoproteins and proteoglycans of the neointima of rabbit aorta after a single balloon catheter injury. Alavi MZ, et al. **Am J Pathol** 1989 Feb;134(2):287-94

Activation of glomerular mesangial cells by gram-negative bacterial cell wall components. Lovett DH, et al. **Am J Pathol** 1988 Dec;133(3):472-84

Interaction of glycosaminoglycans with lipoproteins. Cardin AD, et al. **Ann N Y Acad Sci** 1989;556:186-93

Atherosclerosis: current concepts on pathogenesis and interventional therapies. Yatsu FM, et al. **Ann Neurol** 1989 Jul;26(1):3-12 (115 ref.)

Second Créteil Symposium on Lipids, Lipoproteins and Nutrition. Nutritional control of enzymes of lipoprotein and lipid metabolism. March 25, 1988, Créteil, France. Abstracts. **Ann Nutr Metab** 1988;32(4):245-64

Abstracts: 42nd annual meeting, Council on Arteriosclerosis, American Society for the Study of Arteriosclerosis. Washington, D.C., November 1988. **Arteriosclerosis** 1988 Sep-Oct;8(5):549a-647a

Interaction of lipoprotein Lp(a) and low density lipoprotein with glycosaminoglycans from human aorta. Bihari-Varga M, et al. **Arteriosclerosis** 1988 Nov-Dec;8(6):851-7

Probucol does not affect lipoprotein metabolism in macrophages of Watanabe heritable hyperlipidemic rabbits. Nagano Y, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):453-61

Lipoprotein metabolism in familial hypercholesterolemia. Shepherd J, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1 Suppl):I39-42

Role of platelet secretory products in modified lipoprotein metabolism in macrophages. Hayashi T, et al. **Artery** 1989; 16(5):248-62

The effect of platelets on macrophage lipoprotein metabolism. Aviram M. **Atherosclerosis** 1988 Oct; 73(2-3):269-71

Effects of fenofibrate on lipoprotein metabolism and fatty acid distribution in Zucker rats. Olivier P, et al. **Atherosclerosis** 1988 Nov;74(1-2):15-21

Identification and partial characterization of discrete apolipoprotein A-containing lipoprotein particles secreted by human hepatoma cell line HepG2. Dashti N, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):574-80

Functional analogy between lipoprotein(a) and plasminogen in the binding to the kringle 4 binding protein, tetranectin. Kluft C, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):427-33

Binding of intermediate density lipoproteins rich or poor in high molecular weight apolipoprotein B to rat liver membranes. Brissette L, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1238-47

Uptake of retinyl ester in HL-60 cells via the low-density-lipoprotein-receptor pathway. Wathne KO, et al. **Biochem J** 1989 Jan 1;257(1):239-44

Lipoprotein a inhibits streptokinase-mediated activation of human plasminogen. Edelberg JM, et al. **Biochemistry** 1989 Mar 21;28(6):2370-4

Further characterization of the cellular plasminogen binding site: evidence that plasminogen 2 and lipoprotein a compete for the same site. Gonzalez-Gronow M, et al. **Biochemistry** 1989 Mar 21;28(6):2374-7

Cultivation of rat granulosa cells in a serum-free chemically defined medium--a useful model to study lipoprotein metabolism. Azhar S, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):139-50

Binding of spin-labeled clofibrate to lipoproteins. Olivier JL, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):515-24

The transport of lipoprotein cholesterol into bile: a reassessment of kinetic studies in the experimental animal. Robins SJ, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):327-31

Compartmentalization of phospholipids for lipoprotein assembly on the basis of molecular species and biosynthetic origin. Vance JE. **Biochim Biophys Acta** 1988 Nov 4; 963(1):70-81

Changes in lipoprotein binding and uptake by hepatocytes during rat liver regeneration. Trentalance A, et al. **Biosci Rep** 1989 Apr;9(2):231-41

A physician's guide to lipoprotein metabolism. Little JA. **Can Med Assoc J** 1989 Sep 15;141(6):573

The role of apoproteins in disorders of lipoprotein metabolism. Frohlich JJ, et al. **Clin Biochem** 1989 Feb; 22(1):51-6 (72 ref.)

Microsomal induction, alcohol, and lipoprotein metabolism: is there a three-way relationship? Goldberg DM, et al. **Clin Biochem** 1989 Feb;22(1):57-67 (102 ref.)

Serum lipoproteins in the spiny lobster, Panulirus interruptus. Lee RF, et al. **Comp Biochem Physiol [B]** 1978;59(3):239-43

Pathogenesis and treatment of lipoprotein disorders. Stacpoole P. **Compr Ther** 1989 Apr;15(4):28-44 (19 ref.)

Disturbances of lipoprotein and PGI2 metabolism in IgA nephropathy and Henoch-Schönlein purpura. Túri S, et al. **Contrib Nephrol** 1988;67:37-43

Role of insulin in regulation of lipoprotein metabolism in diabetes. Reaven GM, et al. **Diabetes Metab Rev** 1988 Nov; 4(7):639-52 (120 ref.)

Lipoprotein pattern and plasma lipoprotein lipase activities in patients with primary biliary cirrhosis. Relationship with increase of HDL2 fraction in Lp-X-positive and Lp-X-negative subjects. Baldo-Enzi G, et al. **Dig Dis Sci** 1988 Oct;33(10):1201-7

The lipoprotein receptor concept. Bilheimer DW. **Drugs** 1988;36 Suppl 3:55-62 (25 ref.)

Normal and pathological lipoprotein metabolism. Thompson GR. **Drugs** 1988;36 Suppl 3:51-4 (12 ref.)

Association of a lipoprotein-like particle with bovine fetuin. Kumbla L, et al. **FASEB J** 1989 Jul;3(9):2075-80

Association of a myristoylated protein with a biological membrane and its increased phosphorylation by protein kinase C. Utsumi T, et al. **FEBS Lett** 1988 Sep 26; 238(1):13-6

Free radical lipid oxidation affects cholesterol transfer between lipoproteins and erythrocytes. Azizova OA, et al. **Free Radic Biol Med** 1989;7(3):251-7

Lipoprotein oxidation and induction of ferroxidase activity in stored human extracellular fluids. Winyard PG, et al. **Free Radic Res Commun** 1989;5(4-5):227-35

Identification of sterol acceptors that stimulate cholesterol efflux from human spermatozoa during in vitro capacitation. Langlais J, et al. **Gamete Res** 1988 Jun; 20(2):185-201

Hepatocytic lipoprotein receptors and intracellular lipoprotein catabolism. Havel RJ, et al. **Hepatology** 1988 Nov-Dec;8(6):1689-704 (150 ref.)

Hypolipidemic effect of intravenous pluronic L-81 in fasted rats treated with Triton WR-1339: possible inhibition of hepatic lipoprotein secretion. Nutting DF, et al. **Horm Metab Res** 1989 Mar;21(3):113-5

Lipoprotein metabolism and atherosclerosis--human adipose tissue metabolism. 3rd annual meeting of the German Society for Obesity Research. Munich, October 29-31, 1987. **Horm Metab Res Suppl** 1988;19:1-57

Localization of the cell activator lipopeptide in bone marrow-derived macrophages by electron energy loss spectroscopy (EELS). Wolf B, et al. **Immunol Lett** 1989 Jan 31;20(2):121-6

Inositol and choline levels in the diet and neutral lipid hepatic content of lactating rat. Leclerc J, et al. **Int J Vitam Nutr Res** 1989;59(2):180-3

A review of lipoprotein cholesterol metabolism: importance to ovarian function. Grummer RR, et al. **J Anim Sci** 1988 Dec;66(12):3160-73 (106 ref.)

Temperature-dependent insertion of prolipoprotein into Escherichia coli membrane vesicles and requirements for ATP, soluble factors, and functional SecY protein for the overall translocation process. Tian G, et al. **J Bacteriol** 1989 Apr;171(4):1987-97

Facilitated diacylglycerol exchange between insect hemolymph lipophorins. Properties of Manduca sexta lipid transfer particle. Ryan RO, et al. **J Biol Chem** 1988 Oct 5;263(28):14140-5

Proton motive force-dependent and -independent protein translocation revealed by an efficient in vitro assay system of Escherichia coli. Yamada H, et al. **J Biol Chem** 1989 Jan 25;264(3):1723-8

Genetic basis of lipoprotein disorders. Breslow JL. **J Clin Invest** 1989 Aug;84(2):373-80 (113 ref.)

Comparative evaluation of mitogenicity and basement-membrane-degrading activity of Pseudomonas aeruginosa slime glycolipoprotein and alginate. Anastassiou ED, et al. **J Clin Microbiol** 1989 Mar;27(3):490-4

Acute lipoprotein changes associated with atenolol therapy for hypertension in non-insulin dependent diabetes. Feher MD, et al. **J Hum Hypertens** 1988 Dec;2(4):253-5

The biochemistry of lipoproteins. Salter AM, et al. **J Inherited Metab Dis** 1988;11 Suppl 1:4-17 (67 ref.)

Hepatic lipoprotein and cholesterol metabolism. Report of a conference. Davis RA. **J Lipid Res** 1988 Jun;29(6):825-32

Regulation of triglyceride-rich lipoprotein secretion by fatty acids in CaCo-2 cells. Field FJ, et al. **J Lipid Res** 1988 Nov;29(11):1427-37

Plasma lipoprotein metabolism in lean and in fat chickens produced by divergent selection for plasma very low density lipoprotein concentration. Griffin H, et al. **J Lipid Res** 1989 Aug;30(8):1243-50

Postheparin plasma lipoprotein and hepatic lipase are determinants of hypo- and hyperalphalipoproteinemia. Kuusi T, et al. **J Lipid Res** 1989 Aug;30(8):1117-26

Large lipoproteins are excluded from the arterial wall in

diabetic cholesterol-fed rabbits. Nordestgaard BG, et al. **J Lipid Res** 1988 Nov;29(11):1491–500

Chenodeoxycholic acid normalizes elevated lipoprotein secretion and catabolism in cerebrotendinous xanthomatosis. Tint GS, et al. **J Lipid Res** 1989 May; 30(5):633–40

Relative effects of dietary oleic- and linoleic-rich oils on plasma lipoprotein composition in rats. Ney DM, et al. **J Nutr** 1989 Jun;119(6):857–63

Influence of exercise and cholesterol feeding on lipids and lipoproteins in rats. Buck EE, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):71–6 (32 ref.)

Human lipoprotein influence on the partition of 2,2',4,4',5,5'-hexabromobiphenyl between 3T3L1 adipocytes and culture medium. Kraus AL, et al. **J Toxicol Environ Health** 1989;26(2):157–74

Incorporation of trans-8- and cis-8-octadecenoic acid isomers in human plasma and lipoprotein lipids. Emken EA, et al. **Lipids** 1989 Jan;24(1):61–9

Interaction of potentially toxic bile acids with human plasma proteins: binding of lithocholic (3 alpha-hydroxy-5 beta-cholan-24-oic) acid to lipoproteins and albumin. Malavolti M, et al. **Lipids** 1989 Jul;24(7):673–6

Contribution of plasma protein and lipoproteins to intestinal lymph: comparison of long-chain with medium-chain triglyceride duodenal infusion. Sipahi AM, et al. **Lymphology** 1989 Mar;22(1):13–9

Sudden infant death syndrome and lipoproteins. Reid GM. **Med Hypotheses** 1989 Jun;29(2):77–80 (35 ref.)

The roles of haemolymphatic lipoproteins in the oogenesis of Rhodnius prolixus. Gondim KC, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:89–92

Lipodystrophic diabetes mellitus. Investigations of lipoprotein metabolism and the effects of omega-3 fatty acid administration in two patients. Stacpoole PW, et al. **Metabolism** 1988 Oct;37(10):944–51

Streptozotocin-induced diabetes in rat. II. Lipid and lipid peroxide changes of lipoprotein fractions in diabetes complicated by hypertension and myocardial infarction. Somova L, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):751–4

Involvement of lipids in the interaction of Sindbis virus with goose erythrocytes. Mastromarino P, et al. **Microbiologica** 1989 Apr;12(2):113–20

Identification of a multispecific lipoprotein receptor in adult Schistosoma japonicum by ligand blotting analyses. Rogers MV, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):79–88

The role of the endothelium in myocardial lipoprotein dynamics. Cryer A. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1-2):7–15 (54 ref.)

Characterization of the neisserial lipid-modified azurin bearing the H.8 epitope. Woods JP, et al. **Mol Microbiol** 1989 May;3(5):583–91

Regulation of lipoprotein lipid transfer by unesterified cholesterol. **Nutr Rev** 1989 May;47(5):151–2 (4 ref.)

Effects of sex steroids on lipids and lipoproteins. Samsioe G. **Postgrad Med** 1989 Apr;Spec No:59–63; discussion 89–90

Atherogenic factors in diabetes: the role of lipoprotein metabolism. Crepaldi G, et al. **Postgrad Med J** 1988;64 Suppl 3:10–2 (23 ref.)

Plasmin catalyzes binding of lipoprotein (a) to immobilized fibrinogen and fibrin. Harpel PC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3847–51

Membrane binding sites for plasma lipoproteins on endosomes from rat liver. Jaeckle S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1880–4

Deletion in the first cysteine-rich repeat of low density lipoprotein receptor impairs its transport but not lipoprotein binding in fibroblasts from a subject with familial hypercholesterolemia. Leitersdorf E, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7912–6

[Interaction of lipids and lipoproteins with connective components in the vascular wall] Haniš T, et al. **Cesk Fysiol** 1986;35(5):387–98 (55 ref.) (Cze)

[Circadian variations in hemolymph lipids and lipoproteins and in hepatopancreatic lipids of the shrimp Penaeus japonicus] Vazquez-Boucard C, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):87–93 (Eng. Abstr.) (Fre)

[Variations in the metabolism of lipoproteins as a function of thyroid hormones] Renard E, et al. **Presse Med** 1989 Feb 18;18(7):350–4 (Eng. Abstr.) (Fre)

[The lipid infiltration theory of atherosclerosis] Dargel R. **Z Med Lab Diagn** 1989;30(5):251–5 (21 ref.) (Ger)

[Role of non-enzymatic glycosylation of proteins in the pathogenesis of diabetic complications] Sampietro T. **Minerva Endocrinol** 1988 Oct-Dec;13(4):249–51 (Eng. Abstr.) (Ita)

[Abnormal lipid metabolism in obesity] Omoto A, et al. **Nippon Rinsho** 1988 Nov;46(11):2417–22 (Jpn)

[Mechanisms of lipoprotein metabolism in macrophages] Takahashi K, et al. **Nippon Rinsho** 1989 Mar;47(3):554–9 (Jpn)

[Evaluation of the antioxidative activity of blood plasma using yolk lipoproteins] Klebanov GI, et al. **Lab Delo** 1988; (5):59–62 (Eng. Abstr.) (Rus)

[The effect of dietary proteins on the fluorescence of Nile red in the aortic arch in guinea pigs] Habán P, et al. **Bratisl Lek Listy** 1989 Feb;90(2):120–4 (Eng. Abstr.) (Slo)

PHARMACOKINETICS

The arterial barrier to lipoprotein influx in the hypercholesterolemic rabbit. 2. Long-term studies in deendothelialized and reendothelialized aortas. Schwenke DC, et al. **Atherosclerosis** 1989 Jun;77(2-3):105–15

The arterial barrier to lipoprotein influx in the hypercholesterolemic rabbit. 1. Studies during the first two days after mild aortic injury. Schwenke DC, et al. **Atherosclerosis** 1989 Jun;77(2-3):91–103

Changes in parameters of lipoprotein metabolism during rat hepatic development. Erickson SK, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):525–33

Tissue distribution of [3H]cholesteryl linoleyl ether-labeled human Lp(a) in different rat organs. Ye SQ, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):534–40

Regulation of the metabolism of lipid emulsion model lipoproteins by a saturated acyl chain at the 2-position of triacylglycerol. Mortimer BC, et al. **J Lipid Res** 1988 Jun; 29(6):713–20

PHARMACOLOGY

Investigation on extracellular slime from Pseudomonas aeruginosa as interferon inducer in mice. Cembrzyńska-Nowak M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):167–76

Induction of tumor cytotoxicity in murine bone marrow-derived macrophages by two synthetic lipopeptide analogues. Hoffmann P, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):575–82

Lipopeptide derivatives of bacterial lipoprotein constitute potent immune adjuvants combined with or covalently coupled to antigen or hapten. Reitermann A, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):343–52

"A clinical trial of topical nucleic acid and lipoprotein complex in treatment of herpes simplex keratitis". Dhage SS. **Indian J Ophthalmol** 1987;35(5-6):137–8

Release of endothelial cell lipoprotein lipase by plasma lipoproteins and free fatty acids. Saxena U, et al. **J Biol Chem** 1989 Mar 15;264(8):4349–55

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431–8

Assessment of lipoprotein activators of skim milk lipoprotein lipase and the relationship between lipoprotein lipase activity and milk fat synthesis. Grummer RR, et al. **J Dairy Sci** 1989 Jun;72(6):1451–8

Effects of cholesterol and lipoproteins on aldosterone secretion by bovine zona glomerulosa cells. Simpson HD, et al. **J Endocrinol** 1989 Apr;121(1):125–31

Sphingolipid biosynthesis by rat liver cells: effects of serine, fatty acids and lipoproteins. Messmer TO, et al. **J Nutr** 1989 Apr;119(4):534–8

A membrane fluidizing factor in sera from Duchenne muscular dystrophy patients: effect on lymphocyte membranes of incubation in patient and control lipoproteins. Hübner C, et al. **Pediatr Res** 1989 Jun; 25(6):656–9

The modulatory effect of lipoproteins on the release of interleukin 1 by human peritoneal macrophages stimulated with beta-1,3-D-polyglucose derivatives. Rasmussen LT, et al. **Scand J Immunol** 1989 Apr;29(4):477–84

PHYSIOLOGY

Eicosanoids, apolipoproteins, lipoprotein particles, and atherosclerosis. Proceedings of the Fourth International Colloquium. March 17–19, 1988, Brussels, Belgium. **Adv Exp Med Biol** 1988;243:1–362

Nutrition requirements for mammalian cells and hematopoietic growth factor production. Armstrong MJ, et al. **Ann N Y Acad Sci** 1989;554:66–74 (24 ref.)

Lipoprotein(a). A potential bridge between the fields of atherosclerosis and thrombosis. Scanu AM. **Arch Pathol Lab Med** 1988 Oct;112(10):1045–7 (34 ref.)

Lipoproteins as factors in vessel tone and reactivity modulation. Vedernikov YuP, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):590–6

Intracellular lipoproteins as carriers for 2,3,7,8-tetrachlorodibenzo-p-dioxin and benzo(a)pyrene in rat and mouse liver. Souès S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2841–7

Bile acid synthesis by cultured rabbit hepatocytes: stimulation by three lipoprotein fractions. Whiting MJ, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):137–42

Interaction of lipoproteins with the artery wall. Woolf N. **Drugs** 1988;36 Suppl 3:46–50 (43 ref.)

The contribution of individual lipoproteins to the degradation of platelet-activating factor in human serum. Ostermann G, et al. **Haemostasis** 1989;19(3):160–8

Inhibition of endotoxin-induced activation of human monocytes by human lipoproteins. Flegel WA, et al. **Infect Immun** 1989 Jul;57(7):2237–45

Neutralization of mouse xenotropic virus by lipoproteins involves binding to the virions. Sernatinger J, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2657–61

Role of triglyceride-rich lipoproteins from the liver and intestine in the etiology of postprandial peaks in plasma triglyceride concentration. Cohn JS, et al. **Metabolism** 1989 May;38(5):484–90

Lipoprotein(a) modulation of endothelial cell surface fibrinolysis and its potential role in atherosclerosis. Hajjar KA, et al. **Nature** 1989 May 25;339(6222):303–5

A potential basis for the thrombotic risks associated with lipoprotein(a). Miles LA, et al. **Nature** 1989 May 25; 339(6222):301–3

Lipoprotein(a). Thrombogenesis linked to atherogenesis at last? [news] Scott J. **Nature** 1989 Sep 7;341(6237):22–3

[The immunology of aging: immunoregulatory role of lipoproteins] Huber LA. **Wien Klin Wochenschr** 1989 Jun 23;101(13):440–6 (Eng. Abstr.) (Ger)

[Lipoproteins as a factor regulating vascular tonus] Vedernikov IuP, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):515–7 (Eng. Abstr.) (Rus)

SECRETION

Lipoprotein secretion in lean and obese Zucker female rats in vivo and in a single-pass-perfused liver preparation. Petit D, et al. **Arch Int Physiol Biochim** 1988 Mar; 96(1):51–62

Lysophosphatidylcholine metabolism and lipoprotein secretion by cultured rat hepatocytes deficient in choline. Robinson BS, et al. **Biochem J** 1989 May 15;260(1):207–14

ULTRASTRUCTURE

Particle size distribution of lipoproteins from human atherosclerotic plaque: a preliminary report. Rapp JH, et al. **J Vasc Surg** 1989 Jan;9(1):81–8

LIPOPROTEINS, LDL RECEPTORS see **RECEPTORS, LDL**

LIPOPROTEINS, VLDL CHOLESTEROL

BLOOD

Influence of experimental diets on cholesterol and triglyceride levels of rabbit blood serum lipoproteins. Wehr H, et al. **Acta Physiol Pol** 1988 May-Jun;39(3):202–6

Lipoprotein cholesterol concentrations in the plasma of human subjects as measured in the fed and fasted states. Cohn JS, et al. **Clin Chem** 1988 Dec;34(12):2456–9

The changes in plasma lipoproteins in rat with diabetes induced by streptozotocin. Cheng G, et al. **J Tongji Med Univ** 1988;8(3):160–3

[Changes in the levels of various classes of cholesterol lipoproteins in patients with ischemic heart disease during physical training] Dudaev VA, et al. **Kardiologiia** 1989 Feb; 29(2):49–53 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Separation of human plasma lipoproteins suitable for cholesterol determination by gel permeation chromatography. Jethmalani S, et al. **Indian J Exp Biol** 1988 Aug;26(8):633–7

METABOLISM

Intestinal apolipoprotein B-48 synthesis and lymphatic cholesterol transport are lower in swine fed high fat, high cholesterol diet with soy protein than with casein. Ho HT, et al. **Atherosclerosis** 1989 May;77(1):15–23

A novel explanation for the reduced LDL cholesterol in severe hypertriglyceridemia. Minnich A, et al. **J Lipid Res** 1989 Mar;30(3):347–55

PHYSIOLOGY

Identification of lipid components of human serum lipoproteins involved in the inhibition of Sindbis virus infectivity, hemagglutination, and hemolysis. Mastromarino P, et al. **Arch Virol** 1988;103(3-4):243–52

LIPOPROTEINS, HDL

Defined apolipoprotein A-I conformations in reconstituted high density lipoprotein discs. Jonas A, et al. **J Biol Chem** 1989 Mar 25;264(9):4818–24

Cell-surface binding sites for high density lipoproteins do not mediate efflux of cholesterol from human fibroblasts in tissue culture. Mendel CM, et al. **J Lipid Res** 1988 Sep; 29(9):1171–8

Lipoprotein incorporation enhances radioiodinated cholesteryl ester uptake into steroid hormone-secreting tissues. Counsell RE, et al. **J Nucl Med** 1989 Jun; 30(6):1088–94

ANALYSIS

Heterogeneity in the conformation of apo A-I on the surface of HDL particles. Ayrault-Jarrier M, et al. **Adv Exp Med Biol** 1988;243:149–55

Protein S and SAA: genetics, structure and metabolism. Are they apolipoproteins and identical? Malmendier CL, et al. **Adv Exp Med Biol** 1988;243:203–12 (36 ref.)

Metabolism of low- and high-density-lipoprotein-free cholesterol in rats fed high-fat diets. Chanussot F, et al. **Ann Nutr Metab** 1988;32(5-6):271–81

Lipid-lipid interactions in reconstituted high-density lipoproteins by deuterium nuclear magnetic resonance. Fenske DB, et al. **Biochemistry** 1988 Jun 14;27(12):4491–500

Immunoaffinity fractionation of high-density lipoprotein subclasses 2 and 3 using anti-apolipoprotein A-I and A-II

immunosorbent gels. James RW, et al.
Biochim Biophys Acta 1989 Apr 26;1002(3):292–301

Increased proportion of proapolipoprotein A–I in HDL from patients with liver cirrhosis and hepatitis. Matsuura T, et al. **Gastroenterol Jpn** 1988 Aug;23(4):394–400

Characterization of the binding of thyroxine to high density lipoproteins and apolipoproteins A–I. Benvenga S, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1067–72

Heterogeneity of nascent high density lipoproteins secreted by the hepatoma–derived cell line, Hep G2. McCall MR, et al. **J Lipid Res** 1988 Sep;29(9):1127–37

Intracellular apoA–I and apoB distribution in rat intestine is altered by lipid feeding. Magun AM, et al.
J Lipid Res 1988 Sep;29(9):1107–16

BLOOD

Modifications in the chemical composition and thermometric behavior of LDL and HDL by probucol in type IIa hyperlipoproteinemia. Dachet C, et al.
Adv Exp Med Biol 1988;243:179–84

In vivo evidence for cholesterol ester and triglyceride exchange between high density lipoprotein and infused triglyceride rich particles in abetalipoproteinemia. Erkelens DW, et al. **Adv Exp Med Biol** 1988;243:247–53

Role of apolipoprotein A IV in the interconversion of HDL subclasses. Gambert P, et al. **Adv Exp Med Biol** 1988; 243:263–9 (29 ref.)

Cholesterol and apolipoprotein distribution in plasma high–density–lipoprotein subclasses from zinc–deficient rats. Koo SI, et al. **Am J Clin Nutr** 1989 Jul;50(1):73–9

Variation in human blood high–density lipoprotein response to oral vitamin E megadosage. Muckle TJ, et al.
Am J Clin Pathol 1989 Feb;91(2):165–71

HDL subfractions and adipose tissue metabolism in the reduced–obese state. Eckel RH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E740–6

Regulation of plasma lipid transfer by the high–density lipoproteins. Tollefson JH, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 1):E894–902

Apolipoprotein A–I metabolism in cynomolgus monkey. Identification and characterization of beta–migrating pools. Melchior GW, et al. **Arteriosclerosis** 1989 Jul–Aug; 9(4):470–8

Comparison in inhibitory effects of lipolysis products on cholesterol esterification. Homma Y. **Artery** 1989; 16(5):233–47

Discrepancies between serum and erythrocyte concentrations of vitamin E in hemodialysis patients: role of HDL–bound fraction of vitamin E. Taccone–Gallucci M, et al.
Artif Organs 1988 Oct;12(5):379–81

Anomalies in composition of uremic lipoproteins isolated by gradient ultracentrifugation: relative enrichment of HDL in apolipoprotein C–III at the expense of apolipoprotein A–I. Atger V, et al. **Atherosclerosis** 1988 Nov;74(1–2):75–83

Low high density lipoprotein–2 concentrations in obese male subjects. Bertière MC, et al. **Atherosclerosis** 1988 Sep; 73(1):57–61

Removal of apolipoprotein E–enriched high density lipoprotein by LDL–apheresis in familial hypercholesterolaemia: a possible activation of the reverse cholesterol transport system. Koizumi J, et al.
Atherosclerosis 1988 Nov;74(1–2):1–8

High density lipoprotein concentrations after cessation of smoking: the importance of alterations in diet. Quensel M, et al. **Atherosclerosis** 1989 Feb;75(2–3):189–93

Changes of HDL subfraction concentration and particle size by intralipid in vivo. Sakuma N, et al. **Atherosclerosis** 1988 Nov;74(1–2):91–8

Modification of human low density lipoprotein by lipid peroxidation. Esterbauer H, et al. **Basic Life Sci** 1988; 49:369–73

Copper and copper–nicotinic acid complexes mediated oxidation of high density lipoprotein. el–Saadani M, et al. **Basic Life Sci** 1988;49:381–5

Molecular packing of high–density and low–density lipoprotein surface lipids and apolipoprotein A–I binding. Ibdah JA, et al. **Biochemistry** 1989 Feb 7;28(3):1126–33

The rabbit as an animal model of hepatic lipase deficiency. Clay MA, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):173–81

Effect of lipid transfer protein on plasma lipids, apolipoproteins and metabolism of high–density lipoprotein cholesteryl ester in the rat. Groener JE, et al.
Biochim Biophys Acta 1989 Mar 14;1002(1):93–100

Evidence for qualitative abnormalities in high–density lipoproteins from myeloma patients: the presence of amyloid A protein could explain HDL modifications. Hachem H, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):271–7

Effect of copper deficiency on the composition of three high–density lipoprotein subclasses as separated by heparin–affinity chromatography. Lee CC, et al.
Biochim Biophys Acta 1988 Nov 25;963(2):278–87

Conversion of apolipoprotein–specific high–density lipoprotein populations during incubation of human plasma. Nichols AV, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):325–37

Plasma apolipoprotein A–I levels and bile lipid secretion during thoracic duct drainage in the rat. Nilsson A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):231–6

Effects of heparin–induced lipolytic activity on the structure of rat high–density lipoprotein. Swaney JB, et al.
Biochim Biophys Acta 1989 Apr 26;1002(3):338–47

Alterations of serum high–density lipoproteins and hepatic lipase activity in congenital hypothyroidism. Tenenbaum D, et al. **Biol Neonate** 1988;54(5):241–5

An improvement of Barter's method for assaying plasma cholesterol ester transfer activity: experimental and clinical applications. Harvengt C, et al. **Biomed Pharmacother** 1989; 43(1):53–8

HDL as an independent risk factor in British men (and women) [letter] Crook D, et al. **BMJ** 1989 May 6; 298(6682):1249

Apolipoprotein B and apolipoprotein AI as predictors of coronary artery disease. Sniderman AD. **Can J Cardiol** 1988 Jul;4 Suppl A:24A–30A (70 ref.)

High density lipoproteins during rat liver regeneration. Bruscalupi G, et al. **Cell Mol Biol** 1989;35(1):47–54

Use of a dual–precipitation procedure for measuring high–density lipoprotein 3 (HDL3) in normolipidemic serum. Cloey TA, et al. **Clin Chem** 1989 Jul;35(7):1390–3

Dual–precipitation method evaluated for determination of high–density lipoprotein (HDL), HDL2, and HDL3 cholesterol concentrations. Dias VC, et al. **Clin Chem** 1988 Nov;34(11):2322–7

A dual–precipitation method evaluated for measurement of cholesterol in high–density lipoprotein subfractions HDL2 and HDL3 in human plasma. Patsch W, et al.
Clin Chem 1989 Feb;35(2):265–70

Falsely high high–density lipoprotein triglyceride values by the heparin–manganese precipitation method. Simo IE, et al. **Clin Chem** 1988 Oct;34(10):2127–9

Characterization of two monoclonal antibodies to human apolipoprotein A–I that also bind to rabbit apolipoprotein A–I. Application to ELISA evaluation of rabbit serum apo A–I. Leroy A, et al. **Clin Chim Acta** 1989 Jan 13; 179(1):85–95

Serum arylesterase (paraoxonase) activity following myocardial infarction. Secchiero S, et al.
Clin Chim Acta 1989 Jul 31;183(1):71–5

LDL/HDL–changes in subclinical hypothyroidism: possible risk factors for coronary heart disease. Althaus BU, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):157–63

Effect of captopril on high–density lipoprotein subfractions in patients with mild to moderate essential hypertension. Sasaki J, et al. **Clin Ther** 1989;11(1):129–34

Carbohydrate composition of serum low and high density lipoproteins of nonhuman primate species. Pargaonkar PS, et al. **Comp Biochem Physiol [B]** 1977;56(3):293–9

Dietary fructose as a natural sweetener in poorly controlled type 2 diabetes: a 12–month crossover study of effects on glucose, lipoprotein and apolipoprotein metabolism. Osei K, et al. **Diabetic Med** 1989 Aug;6(6):506–11

Electroblotting of Immobiline DryPlates applied to identification of human plasma apolipoprotein A–I. Holmquist L. **Electrophoresis** 1988 Sep;9(9):511–3

Improvements of the lipoprotein profile after coronary bypass surgery: additional effects of an exercise training program. Agren B, et al. **Eur Heart J** 1989 May;10(5):451–8

Serum amyloid A and high density lipoproteins during the acute phase response. Bausserman LL, et al.
Eur J Clin Invest 1988 Dec;18(6):619–26

Comparison of the effects of two different doses of alcohol on serum lipoproteins, HDL–subfractions and apolipoproteins A–I and A–II: a controlled study. Välimäki M, et al. **Eur J Clin Invest** 1988 Oct;18(5):472–80

Estradiol–induced increase in serum HGH–density lipoprotein cholesterol and its relationships with zinc and copper status in ovariectomized rats. Brenner GM, et al. **Horm Metab Res** 1988 Sep;20(9):597–9

Effect of different APO A–I containing lipoprotein particles on reverse cholesterol transport in fat cells. Barkia A, et al. **Horm Metab Res Suppl** 1988;19:10–2

Effect of raw deseeded fruit powder of Trichosanthes dioica (Roxb) on blood sugar, serum cholesterol, high density lipo–protein, phospholipid and triglyceride levels in the normal albino rabbits. Sharma G, et al.
Indian J Physiol Pharmacol 1988 Apr–Jun;32(2):161–3

Effects of low– and high–density lipoproteins on the proliferation of human breast cancer cells in vitro: differences between hormone–dependent and hormone–independent cell lines. Rotheneder M, et al.
Int J Cancer 1989 May 15;43(5):875–9

High–density lipoprotein composition in obesity: interrelationships with plasma insulin levels and body weight. Cominacini L, et al. **Int J Obes** 1988;12(4):343–52

Heparin–released plasma lipase activities, lipoprotein and apoprotein levels in young adult cyclists and sedentary men. Giada F, et al. **Int J Sports Med** 1988 Aug;9(4):270–4

Improved high–performance liquid chromatographic method for the determination of apolipoproteins in serum high–density lipoproteins. Okazaki M, et al.
J Chromatogr 1988 Aug 19;430(1):135–42

Simplified turbidimetric determination of apolipoproteins A–I, A–II and B using a microtitre method. Sandkamp M, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):685–8

Serum amyloid A protein, apolipoprotein A–I, and apolipoprotein B during the course of acute myocardial infarction. Maury CP, et al. **J Clin Pathol** 1988 Dec; 41(12):1263–8

Lipoproteins of the newborn rat. Reciprocal development of low density lipoproteins and apoprotein E–rich high density lipoproteins. Perrin Ansart MC, et al.
J Dev Physiol 1988 Aug;10(4):321–34

An erroneous apolipoprotein E–3 band in high density lipoprotein fractions. Rawlings AV, et al.
J Inherited Metab Dis 1988;11 Suppl 2:135–8

Abnormal high–density lipoprotein composition in women with insulin–dependent diabetes. Bagdade JD, et al.
J Lab Clin Med 1989 Feb;113(2):235–40

A novel use of endpoint nephelometry to standardize the rate nephelometric assay of human and rat plasma apoprotein A. Chirtel SJ, et al. **J Lab Clin Med** 1989 May; 113(5):632–41

Isolation of apolipoproteins from carotenoid–carrying lipoprotein in the serum of chum salmon, Oncorhynchus keta. Ando S, et al. **J Lipid Res** 1988 Oct;29(10):1264–71

Quantitation of plasma apolipoprotein A–I using two monoclonal antibodies in an enzyme–linked immunosorbent assay. Hogle DM, et al. **J Lipid Res** 1988 Sep;29(9):1221–9

Protein heterogeneity of lipoprotein particles containing apolipoprotein A–I without apolipoprotein A–II and apolipoprotein A–I with apolipoprotein A–II isolated from human plasma. James RW, et al. **J Lipid Res** 1988 Dec; 29(12):1557–71

Inhibition of lipid transfer by a unique high density lipoprotein subclass containing an inhibitor protein. Nishide T, et al. **J Lipid Res** 1989 Feb;30(2):149–58

Suppression of fibroblast growth by Bacteroides gingivalis endotoxin is not reduced by serum lipoproteins. Layman DL, et al. **J Periodontol** 1989 May;60(5):259–63

The changes in plasma lipoproteins in rat with diabetes induced by streptozotocin. Cheng G, et al.
J Tongji Med Univ 1988;8(3):160–3

Gender, lipoproteins, diet, and cardiovascular risk. Sauce for the goose may not be sauce for the gander. Crouse JR 3d. **Lancet** 1989 Feb 11;1(8633):318–20 (33 ref.)

Prednisone increases very low density lipoprotein and high density lipoprotein in healthy men. Ettinger WH Jr, et al.
Metabolism 1988 Nov;37(11):1055–8

Effects of exercise training on high density lipoproteins and apolipoprotein A–I in old and young men. Schwartz RS. **Metabolism** 1988 Dec;37(12):1128–33

High–density lipoprotein apolipoprotein AI and AII turnover in moderate and severe proteinuria. Saku K, et al.
Nephron 1988;50(2):112–5

Effects of phospholipids on the conformation of chicken high density lipoprotein. Brown EM. **Poult Sci** 1989 Mar; 68(3):399–407

Lipoproteins alter the catalytic behavior of the platelet–activating factor acetylhydrolase in human plasma. Stafforini DM, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2393–7

The effects of phenobarbital on serum high density lipoprotein subfractions and apolipoproteins. Luoma PV, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct; 62(1):125–8

Enzymatic determination of high density lipoprotein phospholipid using a sensitive reagent and a Cobas Bio Centrifugal Analyzer. Moshides JS.
Scand J Clin Lab Invest 1988 Feb;48(1):59–64

An evaluation of serum high density lipoproteins–phospholipids. Ide H, et al.
Tohoku J Exp Med 1988 Jul;155(3):261–70

Properties of a protein from Staphylococcus capitis that binds human serum high density lipoprotein. Oaland A, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Jun; 268(4):435–47

[Levels of HDL cholesterol and the HDL2 and HDL3 subfractions in newly detected type 2 diabetes] Brunová J, et al. **Vnitr Lek** 1989 Mar;35(3):292–8 (Eng. Abstr.) **(Cze)**

[Metabolism of high density lipoproteins. Studies in patients with compensated, postinfectious liver cirrhosis] Daerr W. **Fortschr Med** 1989 Feb 10;107(4):46, 49–50 (Eng. Abstr.) **(Ger)**

[Blood serum levels of cholesterol, HDL–cholesterol and triglycerides in diseases of the cerebrovascular circulation] Szirmai I, et al. **Orv Hetil** 1988 Jun 19;129(25):1307–11 (Eng. Abstr.) **(Hun)**

[HDL2b lipoproteins as an acceptor of cholesterol from erythrocyte membrane and the role of lecithin–cholesterol–acyltransferase during this process] Nikiforova AA, et al. **Biokhimiia** 1988 Aug;53(8):1334–8 (Eng. Abstr.) **(Rus)**

[Hypoalphacholesterolemia: dynamics of the subfractional spectrum of high density lipoproteins during their interaction with fibroblasts and hepatoma Hep–G2 cell line] Shakhov IuA, et al. **Biokhimiia** 1989 Mar;54(3):440–7 (Eng. Abstr.) **(Rus)**

[Blood lipids and lipid peroxides in the families of patients with ischemic heart disease] Davidenkova EF, et al.
Kardiologiia 1989 Jun;29(6):10–4 (Eng. Abstr.) **(Rus)**

[Changes in phospholipid composition of high density lipoproteins in children as a possible precursor of the development of ischemic heart disease] Gerasimova EN, et al. **Kardiologiia** 1988 Sep;28(9):61–6 (Eng. Abstr.) **(Rus)**

[Sex hormones in dyslipoproteinemias and disorders of arterial blood pressure in boys 11–12 years of age] Shakhov IuA, et al. **Kardiologiia** 1989 Mar;29(3):81–6 (Eng. Abstr.) **(Rus)**

[Prevalence of ischemic heart disease, arterial hypertension and dyslipoproteinemia in persons with disorders of glucose tolerance] Suntsov IuI, et al. **Kardiologiia** 1989 Jun; 29(6):32–5 (Eng. Abstr.) **(Rus)**

[Morphometric analysis of aortic endothelium and serum lipoproteins in rats during readaptation after 15-day hypokinesia] Gansburgskiĭ AN, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):46-9 (Eng. Abstr.) (Rus)

[A pathologic chemical marker in the diagnosis of schizophrenia] Vernekina NS, et al. **Lab Delo** 1989;(6):75-6 (Rus)

[Effect of nutrition factors on the subfractional spectrum of high density lipoproteins] Shcherbakova IA, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):81-8 (Eng. Abstr.) (Rus)

[Induction of hypercholesterolemia in the rabbit with semisynthetic diets. Changes in the composition of high density lipoproteins] Sánchez-Muniz FJ, et al. **Rev Esp Fisiol** 1988 Mar;44(1):45-9 (Eng. Abstr.) (Spa)

DEFICIENCY

Genetic HDL deficiency states. Ordovas JM, et al. **Adv Exp Med Biol** 1988;243:61-5 (38 ref.)

Familial apolipoprotein A-I, C-III, and A-IV deficiency and premature atherosclerosis due to deletion of a gene complex on chromosome 11. Ordovas JM, et al. **J Biol Chem** 1989 Oct 5;264(28):16339-42

GENETICS

Expression of the human serum apolipoprotein AI and AII genes in Xenopus laevis oocytes. Lipid-associated secretion of gene products. Haase A, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):585-93

The baboon gene for apolipoprotein A-I: characterization of a cDNA clone and identification of DNA polymorphisms for genetic studies of cholesterol metabolism. Hixson JE, et al. **Gene** 1988 Dec 30; 74(2):483-90

Phenotypic effects of apolipoprotein structural variation on lipid profiles. I. APO H and quantitative lipid measures in the healthy women study. Eichner JE, et al. **Genet Epidemiol** 1989;6(2):311-8

Ath-2, a second gene determining atherosclerosis susceptibility and high density lipoprotein levels in mice. Paigen B, et al. **Genetics** 1989 May;122(1):163-8

Degradation of apolipoprotein II mRNA occurs via endonucleolytic cleavage at 5'-AAU-3'/5'-UAA-3' elements in single-stranded loop domains of the 3'-noncoding region. Binder R, et al. **J Biol Chem** 1989 Oct 5;264(28):16910-8

Tissue-specific expression of apolipoprotein A-I (ApoA-I) is regulated by the 5'-flanking region of the human ApoA-I gene. Higuchi K, et al. **J Biol Chem** 1988 Dec 5; 263(34):18530-6

High levels of human apolipoprotein A-I in transgenic mice result in increased plasma levels of small high density lipoprotein (HDL) particles comparable to human HDL3. Walsh A, et al. **J Biol Chem** 1989 Apr 15;264(11):6488-94

The apolipoprotein A-I gene is actively expressed in the rapidly myelinating avian peripheral nerve. LeBlanc AC, et al. **J Cell Biol** 1989 Sep;109(3):1245-56

Apolipoprotein A-I (Glu 198——Lys): a mutant of the major apolipoprotein of high-density lipoproteins occurring in a family with dyslipoproteinemia. Strobl W, et al. **Pediatr Res** 1988 Aug;24(2):222-8

[Genetics and evolution of the mink Lpm-system. VIII. Characteristic changes in the antigenic structure of Lpm-protein and alpha2- macroglobulin in Mustelidae family] Ermolaev VI, et al. **Genetika** 1988 Sep; 24(9):1658-64 (Eng. Abstr.) (Rus)

[Genetic variability of antigenic structure of the Lpm-protein and alpha2-macroglobulin among non-mustelid mammals] Shumnyĭ TV, et al. **Genetika** 1989 Mar;25(3):513-20 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Rapid method for the isolation of two purified subfractions of high density lipoproteins by differential dextran sulfate-magnesium chloride precipitation. Burstein M, et al. **Biochimie** 1989 Jun;71(6):741-6

Isolation, characterization and quantification of apolipoproteins A-I and B of the Golden Syrian hamster (Mesocricetus auratus) and modification of their levels by dietary cholesterol. Burton PM, et al. **Comp Biochem Physiol [B]** 1989;92(4):667-73

Isolation and characterization of a larval lipoprotein from the hemolymph of Manduca sexta. Pattnaik NM, et al. **Comp Biochem Physiol [B]** 1979;63(4):469-76

Characterization of dog prenodal peripheral lymph lipoproteins. Evidence for the peripheral formation of lipoprotein-unassociated apoA-I with slow pre-beta electrophoretic mobility. Lefevre M, et al. **J Lipid Res** 1988 Sep;29(9):1139-48

METABOLISM

Characterization and metabolism of glycated high density lipoproteins in diabetic patients. Calvo C, et al. **Adv Exp Med Biol** 1988;243:165-72

Relationship between structure and metabolism of HDL apolipoproteins: study with synthetic peptides. Ponsin G. **Adv Exp Med Biol** 1988;243:139-47 (27 ref.)

Some factors influencing the interactions of plasma lipoproteins with arterial elastin. Winlove CP, et al. **Artery** 1988;15(6):292-303

Progesterone modulates the expression of HDL binding sites in human skin fibroblasts. Corsini A, et al. **Atherosclerosis** 1988 Nov;74(1-2):107-13

Apolipoprotein A-I inhibits transformation of high density lipoprotein subpopulations during incubation of human plasma. Hopkins GJ, et al. **Atherosclerosis** 1989 Jan; 75(1):73-82

Effects of cholesterol-free, semipurified diets containing different levels of casein or soy protein on distribution of cholesterol and protein among serum lipoproteins of rabbits. Hrabek-Smith JM, et al. **Atherosclerosis** 1989 Apr; 76(2-3):125-30

A familial hyperalphalipoproteinemia with low uptake of high density lipoproteins into peripheral lymphocytes. Kobayashi J, et al. **Atherosclerosis** 1988 Oct;73(2-3):105-11

High density lipoprotein metabolism in a rabbit model of hyperalphalipoproteinemia. Quig DW, et al. **Atherosclerosis** 1989 Mar;76(1):9-19

Relationship between cholesteryl ester transfer activity and high density lipoprotein composition in hyperlipidemic patients. Sparks DL, et al. **Atherosclerosis** 1989 Jun; 77(2-3):183-91

Non-leaky vesiculation of large unilamellar vesicles (LUV) induced by plasma high density lipoproteins (HDL): detection by HPLC. Tischler U, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1219-26

Characterization of high-density lipoprotein binding to rat adipocytes and adipocyte plasma membranes. Zsigmond E, et al. **Biochem Cell Biol** 1988 Sep;66(9):986-97

Interconversions of HDL subfractions in normolipidemic and hypoalphacholesterolemic sera incubated with fibroblasts and hepatoma cell line Hep-G2. Perova NV, et al. **Biochem Int** 1988 Dec;17(6):1029-38

Isolation of a high-density-lipoprotein conversion factor from human plasma. A possible role of apolipoprotein A-IV as its activator. Barter PJ, et al. **Biochem J** 1988 Aug 15;254(1):179-84

Interaction in vivo and in vitro of apolipoprotein E-free high-density lipoprotein with parenchymal, endothelial and Kupffer cells from rat liver. Schouten D, et al. **Biochem J** 1988 Dec 1;256(2):615-21

Purification and characterization of two high-density-lipoprotein-binding proteins from rat and human liver. Tozuka M, et al. **Biochem J** 1989 Jul 1; 261(1):239-44

Interaction of ApoA-1 and ApoE-3 with triglyceride-phospholipid emulsions containing increasing cholesterol concentrations. Model of triglyceride-rich nascent and remnant lipoproteins. Derksen A, et al. **Biochemistry** 1989 Jan 24;28(2):900-6

Receptor-mediated uptake and 'retroendocytosis' of high-density lipoproteins by cholesterol-loaded human monocyte-derived macrophages: possible role in enhancing reverse cholesterol transport. Alam R, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):292-9

Differences in uptake of high-density lipoproteins by rat adrenals using in vivo vs. in situ perfusion techniques. Azhar S, et al. **Biochim Biophys Acta** 1989 Jul 17; 1004(1):61-6

A plasma membrane pool of cholesteryl esters that may mediate the selective uptake of cholesteryl esters from high-density lipoproteins. Knecht TP, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):365-75

Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225-33

Binding of partially reassembled high-density lipoprotein to isolated human small intestine epithelial cells. Effect of lipid composition. Sviridov DD, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):119-25

Lipoprotein pattern and plasma lipoprotein lipase activities in patients with primary biliary cirrhosis. Relationship with increase of HDL2 fraction in Lp-X-positive and Lp-X-negative subjects. Baldo-Enzi G, et al. **Dig Dis Sci** 1988 Oct;33(10):1201-7

The 27-kilodalton thyroxine (T4)-binding protein is human apolipoprotein A-I: identification of a 68-kilodalton high density lipoprotein that binds T4. Benvenga S. **Endocrinology** 1989 Mar;124(3):1265-9

Sequential expression of high and low density lipoprotein receptors in differentiating fetal rat adrenocortical cells in primary culture. Kahri AI, et al. **Endocrinology** 1989 Jul; 125(1):68-75

Insulin-like growth factor type I (somatomedin-C) stimulates high density lipoprotein (HDL) metabolism and HDL-supported progesterone biosynthesis by swine granulosa cells in vitro. Veldhuis JD, et al. **Endocrinology** 1989 Jun;124(6):3069-76

Cholesterol efflux from and high-density-lipoproteins binding to cultured bovine vascular endothelial cells are higher than with vascular smooth muscle cells. Savion N, et al. **Eur J Biochem** 1989 Aug 1;183(2):363-70

Two mechanisms of CCl4-induced fatty liver: lipid peroxidation or covalent binding studied in cultured rat hepatocytes. Becker E, et al. **Free Radic Res Commun** 1987; 3(1-5):299-308

Studies on the regulation of cholesterol metabolism by low- and high-density lipoproteins in HepG2 cells. Ranganathan S, et al. **Hepatology** 1989 Apr;9(4):547-51

Distribution and functions of lecithin:cholesterol acyltransferase and cholesteryl ester transfer protein in plasma lipoproteins. Evidence for a functional unit containing these activities together with apolipoproteins A-I and D that catalyzes the esterification and transfer of cell-derived cholesterol. Francone OL, et al. **J Biol Chem** 1989 Apr 25;264(12):7066-72

Rat adrenal uptake and metabolism of high density lipoprotein cholesteryl ester. Gwynne JT, et al. **J Biol Chem** 1989 May 15;264(14):8141-50

The influence of cellular and lipoprotein cholesterol contents on the flux of cholesterol between fibroblasts and high density lipoprotein. Johnson WJ, et al. **J Biol Chem** 1988 Oct 5;263(28):14099-106

Apolipoprotein A-I binds to a family of bovine seminal plasma proteins. Manjunath P, et al. **J Biol Chem** 1989 Oct 5;264(28):16853-7

Up-regulation of high density lipoprotein receptor activity by gamma-interferon associated with inhibition of cell proliferation. Oppenheimer MJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19318-23

Mechanism of the cholesteryl ester transfer protein-mediated uptake of high density lipoprotein cholesteryl esters by Hep G2 cells. Rinninger F, et al. **J Biol Chem** 1989 Apr 15; 264(11):6111-8

Monoclonal antibody inhibition of cholesteryl ester transfer protein activity in the rabbit. Effects on lipoprotein composition and high density lipoprotein cholesteryl ester metabolism. Whitlock ME, et al. **J Clin Invest** 1989 Jul; 84(1):129-37

Lipoprotein metabolism in hepatic lipase deficiency: studies on the turnover of apolipoprotein B and on the effect of hepatic lipase on high density lipoprotein. Demant T, et al. **J Lipid Res** 1988 Dec;29(12):1603-11

Lipid transfers between reconstituted high density lipoprotein complexes and low density lipoproteins: effects of plasma protein factors. Jonas A, et al. **J Lipid Res** 1988 Oct; 29(10):1349-57

Nitrosylated high density lipoprotein is recognized by a scavenger receptor in rat liver. Kleinherenbrink-Stins MF, et al. **J Lipid Res** 1989 Apr;30(4):511-20

Metabolism of larger high density lipoproteins accumulating in some families of baboons fed a high cholesterol and high saturated fat diet. Kushwaha RS, et al. **J Lipid Res** 1989 Aug;30(8):1147-59

Postheparin plasma lipoprotein and hepatic lipase are determinants of hypo- and hyperalphalipoproteinemia. Kuusi T, et al. **J Lipid Res** 1989 Aug;30(8):1117-26

Regulation of the selective uptake of high density lipoprotein-associated cholesteryl esters by human fibroblasts and Hep G2 hepatoma cells. Rinninger F, et al. **J Lipid Res** 1988 Sep;29(9):1179-94

Interaction of the high density lipoprotein conversion factor with recombinant discoidal complexes of egg phosphatidylcholine, free cholesterol, and apolipoprotein A-I. Rye KA. **J Lipid Res** 1989 Mar;30(3):335-46

Utilization of high-density lipoprotein sphingomyelin by the developing and mature brain in the rat. Bentejac M, et al. **J Neurochem** 1989 May;52(5):1495-500

Uptake and utilization of double-labeled high-density lipoprotein sphingomyelin in isolated brain capillaries of adult rats. Homayoun P, et al. **J Neurochem** 1989 Oct; 53(4):1031-5

Calcium pyrophosphate and monosodium urate crystal interactions with neutrophils: effect of crystal size and lipoprotein binding to crystals. Burt HM, et al. **J Rheumatol** 1989 Jun;16(6):809-17

Endocytic pathway of high density lipoprotein via trans-Golgi system in rat resident peritoneal macrophages. Takahashi K, et al. **Lab Invest** 1989 Sep;61(3):270-7

A role for intracellular traffic of high-density lipoproteins in cholesterol metabolism [editorial] Willingham MC. **Lab Invest** 1989 Sep;61(3):253-5

The binding of lipoproteins to human muscle cells: binding and uptake of LDL, HDL, and alpha-tocopherol. Gurusinghe A, et al. **Muscle Nerve** 1988 Dec;11(12):1231-9

Lipoprotein and apolipoprotein losses during continuous ambulatory peritoneal dialysis. Saku K, et al. **Nephron** 1989; 51(2):220-4

Effects of probucol on the high density lipoprotein system in hypercholesterolaemic patients. Franceschini G, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):113-4

In vivo apoprotein catabolism of high density lipoproteins in copper-deficient, hypercholesterolemic rats. Carr TP, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):370-6

High-density lipoprotein has different binding capacity for different apoproteins. The amyloidogenic apoproteins are easier to displace from high-density lipoprotein. Husebekk A, et al. **Scand J Immunol** 1988 Dec;28(6):653-8

Proteolysis in vitro of low and high density lipoproteins in human plasma by Cerastes cerastes (Egyptian sand viper) venom. el-Asmar MF, et al. **Toxicon** 1988;26(9):809-16

[Protective effect of high density lipoproteins, their subfractions and lecithin-cholesterol-acyltransferases on the peroxidation modification of low density lipoproteins] Klimov AN, et al. **Biokhimiia** 1989 Jan;54(1):118-23 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Platelet activation by oxidatively modified low density lipoproteins. Ardlie NG, et al. **Atherosclerosis** 1989 Apr; 76(2-3):117-24

Enhanced stimulatory effect of high density lipoproteins (HDL) and other agonists on vascular prostacyclin production in rats fed alcohol-containing diets. Guivernau M., et al. **Biochem Pharmacol** 1989 Feb 1;38(3):503–8

Proliferative effect of high density lipoprotein (HDL) and HDL fractions (HDL1,2, HDL3) on virus transformed lymphoblastoid cells. Favre G, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):118–24

An improved method for primary culture of ovarian androgen-producing cells in serum-free medium: effect of lipoproteins, insulin, and insulinlike growth factor-I. Magoffin DA, et al. **In Vitro Cell Dev Biol** 1988 Sep; 24(9):802–7

High density lipoprotein stimulates sterol translocation between intracellular and plasma membrane pools in human monocyte-derived macrophages. Aviram M, et al. **J Lipid Res** 1989 Jan;30(1):65–76

Inhibition of platelet aggregation by abnormal high density lipoprotein particles in plasma from patients with hepatic cirrhosis. Desai K, et al. **Lancet** 1989 Apr 1;1(8640):693–5

Influence of a plasma fraction of human blood, rich in high density lipoprotein, on in vitro formation of prostaglandin I2 (PGI2) and thromboxane A2 (TXA2). Beitz J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):37–9

PHYSIOLOGY

Identification of lipid components of human serum lipoproteins involved in the inhibition of Sindbis virus infectivity, hemagglutination, and hemolysis. Mastromarino P, et al. **Arch Virol** 1988;103(3–4):243–52

Effect of low density lipoproteins, high density lipoproteins, and cholesterol on apolipoprotein A-I mRNA in Hep G2 cells. Monge JC, et al. **FEBS Lett** 1989 Jan 30;243(2):213–7

Effects of apolipoproteins A-IV and A-I on the uptake of phospholipid liposomes by hepatocytes. Bisgaier CL, et al. **J Biol Chem** 1989 Jan 15;264(2):862–6

Promotion of lymphocyte growth by high density lipoproteins (HDL). Physiological significance of the HDL binding site. Jürgens G, et al. **J Biol Chem** 1989 May 25; 264(15):8549–56

Lipolytic surface remnants of triglyceride-rich lipoproteins are cytotoxic to macrophages but not in the presence of high density lipoprotein. A possible mechanism of atherogenesis? Chung BH, et al. **J Clin Invest** 1989 Apr; 83(4):1363–74

High-density lipoproteins (HDL) stimulate placental lactogen secretion in pregnant ewes: further evidence for a role of HDL in placental lactogen secretion during pregnancy. Grandis A, et al. **J Endocrinol** 1989 Mar; 120(3):423–7

THERAPEUTIC USE

High density lipoprotein plasma fractions inhibit aortic fatty streaks in cholesterol-fed rabbits. Badimon JJ, et al. **Lab Invest** 1989 Mar;60(3):455–61

TOXICITY

Lysis of Trypanosoma brucei by a toxic subspecies of human high density lipoprotein. Hajduk SL, et al. **J Biol Chem** 1989 Mar 25;264(9):5210–7

LIPOPROTEINS, HDL CHOLESTEROL

see related
HYPERCHOLESTEROLEMIA
HYPERCHOLESTEROLEMIA, FAMILIAL

ADVERSE EFFECTS

High density lipoprotein cholesterol and mortality. The Framingham Heart Study. Wilson PW, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):737–41

ANALYSIS

[Experiences with the SUMAL PE in the determination of glucose, cholesterol and HDL-cholesterol] Gödicke I, et al. **Z Med Lab Diagn** 1988;29(6):359–60 (Ger)

BLOOD

Factors influencing total cholesterol and high-density lipoprotein cholesterol concentrations in a population at high coronary risk. Patterson CC, et al. **Acta Med Scand Suppl** 1988;728:150–8

Influence of experimental diets on cholesterol and triglyceride levels of rabbit blood serum lipoproteins. Wehr H, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):202–6

Hypertension, changes in high-density lipoproteins and antihypertensive therapy. Flamenbaum W. **Am J Cardiol** 1989 Jun 5;63(19):54–57I (30 ref.)

Basic considerations in the reversal of atherosclerosis: significance of high-density lipoprotein in stimulating reverse cholesterol transport. Kashyap ML. **Am J Cardiol** 1989 May 2;63(16):56H–59H (17 ref.)

Multivariate analysis of the twenty-year follow-up of the Donolo-Tel Aviv Prospective Coronary Artery Disease Study and the usefulness of high density lipoprotein cholesterol percentage. Livshits G, et al. **Am J Cardiol** 1989 Mar 15;63(11):676–81

The effect of weight control on lipid changes in obese children. Epstein LH, et al. **Am J Dis Child** 1989 Apr; 143(4):454–7

Correlates of high density lipoprotein cholesterol in women studied by the method of co-twin control. Cohn BA, et al. **Am J Epidemiol** 1989 May;129(5):988–99

High density lipoprotein cholesterol levels among US adults by selected demographic and socioeconomic variables. The Second National Health and Nutrition Examination Survey 1976–1980. Linn S, et al. **Am J Epidemiol** 1989 Feb; 129(2):281–94

Sex hormones and lipoproteins in men. Kiel DP, et al. **Am J Med** 1989 Jul;87(1):35–9

High-density lipoprotein cholesterol is reduced in patients with sarcoidosis. Kindman LA, et al. **Am J Med** 1989 Apr; 86(4):376–8

Mild exercise therapy increases serum high density lipoprotein2 cholesterol levels in patients with essential hypertension. Sasaki J, et al. **Am J Med Sci** 1989 Apr; 297(4):220–3

The place of HDL in cholesterol management. A perspective from the National Cholesterol Educational Program [published erratum appears in Arch Intern Med 1989 Apr;149(4):940] [comment] Grundy SM, et al. **Arch Intern Med** 1989 Mar;149(3):505–10 (73 ref.). **Comment on:** Arch Intern Med 1988 Jan;148(1):36–69

Effect of low-dose niacin on high-density lipoprotein cholesterol and total cholesterol/high-density lipoprotein cholesterol ratio. Luria MH. **Arch Intern Med** 1988 Nov; 148(11):2493–5

Role of hepatic-triglyceride lipase activity in the association between intra-abdominal fat and plasma HDL cholesterol in obese women. Després JP, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):485–92

Mechanisms of HDL reduction after probucol. Changes in HDL subfractions and increased reverse cholesteryl ester transfer. Franceschini G, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):462–9

Factors associated with high density lipoprotein cholesterol in a population with high high density lipoprotein cholesterol levels. Steyn K, et al. **Arteriosclerosis** 1989 May–Jun;9(3):390–7

Kinetic analysis of cholesterol removal by thermofiltration. Malchesky PS, et al. **ASAIO Trans** 1988 Oct–Dec; 34(4):965–8

Lipids and endurance physical activity [letter] Hellsten G, et al. **Atherosclerosis** 1989 Jan;75(1):93–4

Effects of cessation of smoking on serum lipids and high density lipoprotein-cholesterol. Moffatt RJ. **Atherosclerosis** 1988 Nov;74(1–2):85–9

Lecithin: cholesterol acyltransferase activity in children and young adults. Rönnemaa T, et al. **Atherosclerosis** 1989 May; 77(1):7–13

Plasma vitamin E, apolipoprotein B and HDL-cholesterol in middle-aged men from southern Italy. Rubba P, et al. **Atherosclerosis** 1989 May;77(1):25–9

Apolipoprotein A-I gene polymorphisms: frequency in patients with coronary artery disease and healthy controls and association with serum apo A-I and HDL-cholesterol concentration. Wile DB, et al. **Atherosclerosis** 1989 Jul; 78(1):9–18

Relationship between fatty acid pattern and platelet aggregation in long-term insulin-dependent type I diabetics. Schimke E, et al. **Biomed Biochim Acta** 1988; 47(10–11):S274–7

High density lipoprotein and coronary heart disease. Betteridge DJ. **BMJ** 1989 Apr 15;298(6679):974–5 (22 ref.)

Clinical significance of serum HDL cholesterol. Frohlich J. **Can J Cardiol** 1989 Jun–Aug;5(5):viii

Effect of circulation time on plasma high density lipoprotein cholesterol in rats. Ishizuka T. **Cardiovasc Res** 1988 May; 22(5):368–71

Cholesterol content of high density lipoprotein subfractions as an indicator of risk of coronary heart disease. Jayawardene MI, et al. **Ceylon Med J** 1988 Jun;33(2):63–8

The relationship between serum lipid levels and nutrient intake in healthy inhabitants of urban and rural Shanghai. Chen HZ, et al. **Chin Med J [Engl]** 1989 Jan;102(1):60–6

The effect of edible black tree fungus (Auricuaria auricula) on experimental atherosclerosis in rabbits. Fan YM, et al. **Chin Med J [Engl]** 1989 Feb;102(2):100–5

Serum-lipid and lipoprotein patterns of Beijing populations from birth to senescence. Li JZ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):659–64

Serum HDL cholesterol during acute myocardial infarction and its clinical significance. Zhu BQ, et al. **Chin Med J [Engl]** 1988 Jun;101(6):435–7

High-density lipoprotein cholesterol and cardiovascular disease. Four prospective American studies. Gordon DJ, et al. **Circulation** 1989 Jan;79(1):8–15

Performance of the Technicon "Chem I" system for estimating high-density-lipoprotein cholesterol. Cocco C, et al. **Clin Chem** 1988 Nov;34(11):2379–80

Lipoprotein cholesterol concentrations in the plasma of human subjects as measured in the fed and fasted states. Cohn JS, et al. **Clin Chem** 1988 Dec;34(12):2456–9

Differential determination of HDL-subfractions in clinical laboratories [letter] Demacker PN. **Clin Chem** 1989 Apr; 35(4):701–2

Dual-precipitation method evaluated for determination of high-density lipoprotein (HDL), HDL2, and HDL3 cholesterol concentrations. Dias VC, et al. **Clin Chem** 1988 Nov;34(11):2322–7

A dual-precipitation method evaluated for measurement of cholesterol in high-density lipoprotein subfractions HDL2 and HDL3 in human plasma. Patsch W, et al. **Clin Chem** 1989 Feb;35(2):265–70

Polyacrylamide gel electrophoresis used in a critical study of precipitation reagents for quantifying HDL cholesterol. Roche D, et al. **Clin Chem** 1989 Jun;35(6):1254–5

Statistical interpretation of concentrations of magnesium, zinc, calcium, potassium, cholesterols, and creatine kinase isoenzymes in men at different stages of ischemic heart disease. Speich M, et al. **Clin Chem** 1989 May;35(5):833–5

Plasma lipoproteins and adrenocortical hormones in men—positive association of low density lipoprotein cholesterol with plasma cortisol concentration. Nanjee MN, et al. **Clin Chim Acta** 1989 Feb 28;180(2):113–20

DNA polymorphism at the locus for human cholesteryl ester transfer protein (CETP) is associated with high density lipoprotein cholesterol and apolipoprotein levels. Kondo I, et al. **Clin Genet** 1989 Jan;35(1):49–56

Further evidence for an association between the XbaI polymorphism at the apolipoprotein B locus and lipoprotein level. Leren TP, et al. **Clin Genet** 1988 Dec;34(6):347–51

Measurement of total cholesterol, HDL-cholesterol, and LDL-cholesterol. Bachorik PS. **Clin Lab Med** 1989 Mar; 9(1):61–72 (21 ref.)

Measurement of cholesterol, triglycerides, and HDL using compact analysis systems. Warnick GR. **Clin Lab Med** 1989 Mar;9(1):73–88 (26 ref.)

Relation of running distance to plasma HDL-cholesterol level in middle-aged male runners. Higuchi M, et al. **Clin Physiol** 1989 Apr;9(2):121–30

Variation of HDL cholesterol values in old age from around the world. Muckle TJ. **Compr Gerontol [A]** 1988 Feb; 2(1):7–11 (51 ref.)

Effects of replacing saturated fat with complex carbohydrate in diets of subjects with NIDDM. Abbott WG, et al. **Diabetes Care** 1989 Feb;12(2):102–7

Influence of moderate exercise on glucose homeostasis and serum testosterone in young men with low HDL-cholesterol level. Raz I, et al. **Diabetes Res** 1988 Sep;9(1):31–5

Coronary artery disease, HDL cholesterol, and insulin-gene flanking sequences. Johansen K, et al. **Diabetic Med** 1989 Jul;6(5):429–33

Dietary fructose as a natural sweetener in poorly controlled type 2 diabetes: a 12-month crossover study of effects on glucose, lipoprotein and apolipoprotein metabolism. Osei K, et al. **Diabetic Med** 1989 Aug;6(6):506–11

Effect of pineal treatment on rat HDL-cholesterol under basal conditions and under stimulation with HCG. Damian E, et al. **Endocrinologie** 1989 Jan–Mar;27(1):9–16

Plasma lecithin: cholesterol acyltransferase activity in elite athletes from selected sports. Tsopanakis C, et al. **Eur J Appl Physiol** 1988;58(3):262–5

High density lipoprotein cholesterol and arteriography in intermittent claudication. Hørby J, et al. **Eur J Vasc Surg** 1989 Aug;3(4):333–7

Estradiol-induced increase in serum HGH-density lipoprotein cholesterol and its relationships with zinc and copper status in ovariectomized rats. Brenner GM, et al. **Horm Metab Res** 1988 Sep;20(9):597–9

Serum levels of apolipoprotein A-I, A-II and HDL-cholesterol in second half of normal pregnancy and in pregnancy complicated by pre-eclampsia. Rosing U, et al. **Horm Metab Res** 1989 Jul;21(7):376–82

Total cholesterol and high density lipoprotein cholesterol levels in a segment of urban population in Kerala. Sasikumar B, et al. **Indian Heart J** 1988 Jul–Aug; 40(4):241–6

Effect of cigarette smoking on serum total cholesterol and high density lipoprotein cholesterol in normal subjects and coronary heart patients. Tiwari AK, et al. **Indian Heart J** 1989 Mar–Apr;41(2):92–4

Estimation of high density lipoprotein cholesterol in the diagnosis of lepromatous leprosy. Kumar N, et al. **Indian J Lepr** 1988 Oct;60(4):600–3

Serum HDL-cholesterol & urinary cholesterol in nephrotic syndrome. Nayak SS, et al. **Indian J Med Res** 1988 Aug; 88:150–5

Effect of Commiphora mukul (gum guggulu) in patients of hyperlipidemia with special reference to HDL-cholesterol. Verma SK, et al. **Indian J Med Res** 1988 Apr;87:356–60

Associations between plasma lipoprotein cholesterols, adiposity and adipose tissue distribution during adolescence. Baumgartner RN, et al. **Int J Obes** 1989 Feb; 13(1):31–41

Androgenic-anabolic steroid effects on serum and skin surface lipids, on red cells, and on liver enzymes. Király CL. **Int J Sports Med** 1988 Aug;9(4):249–52

Ascorbic acid, HDL cholesterol, and apolipoprotein A-I in an elderly Chinese population in Boston. Dallal GE, et al. **J Am Coll Nutr** 1989 Feb;8(1):69–74

Elevated high density lipoprotein cholesterol levels correlate with decreased apolipoprotein A-I and A-II fractional catabolic rate in women. Brinton EA, et al. **J Clin Invest** 1989 Jul;84(1):262–9

Associations of alcohol consumption with plasma high density lipoprotein cholesterol and its major subfractions: the Caerphilly and Speedwell Collaborative Heart Disease Studies. Miller NE, et al. **J Epidemiol Community Health** 1988 Sep;42(3):220–5

Cholesterol guidelines, lipoprotein cholesterol levels, and triglyceride levels: potential for misclassification of coronary heart disease risk. Laemmle P, et al. **J Lab Clin Med** 1989 Mar;113(3):325–34

Behavior of human apolipoprotein A–I: phospholipid and apoHDL-phospholipid complexes in vitro and after injection into rabbits. Koizumi J, et al. **J Lipid Res** 1988 Nov;29(11):1405–15

High density lipoprotein cholesterol as a determinant factor in coronary heart disease in Africans. Adebonojo SA, et al. **J Natl Med Assoc** 1989 May;81(5):547–56

Physical activity and high-density lipoprotein cholesterol and subfractions among young black adults. Washburn RA, et al. **J Natl Med Assoc** 1987 Aug;79(8):843–8

The concentration of serum lipids and lipoprotein in children with high and normal blood pressure and in obese and normal weight children. Wu HR, et al. **J Tongji Med Univ** 1988;8(2):110–3

Effects of acupuncture on serum high density lipoprotein cholesterol in cerebral infarction patients. Qi LY, et al. **J Tradit Chin Med** 1988 Sep;8(3):161–3

Lipid level alterations in the Helsinki Heart Study [letter] **JAMA** 1989 Jan 27;261(4):554–5

Is it time to include lipoprotein analysis in cholesterol screening? [news] Merz B. **JAMA** 1989 Jan 27;261(4):497–8

The effects of antihypertensive drugs on serum lipids and lipoproteins in patients with mild to moderate hypertension. Goto Y, et al. **Jpn J Med** 1989 Mar–Apr;28(2):267–8 (12 ref.)

Determination of HDL2 cholesterol by precipitation with dextran sulfate and magnesium chloride: establishing optimal conditions for rat plasma. Sjoblom L, et al. **Lipids** 1989 Jun;24(6):532–4

Long–term and withdrawal effects of two different oestrogen–progestogen combinations on lipid and lipoprotein profiles in post–menopausal women. Jensen J, et al. **Maturitas** 1989 Jun;11(2):117–28

Lipoproteins and apolipoproteins in postmortem serum. Hornick CA, et al. **Mod Pathol** 1988 Nov;1(6):480–4

Effect of a diet enriched with monounsaturated or polyunsaturated fatty acids on levels of low–density and high–density lipoprotein cholesterol in healthy women and men. Mensink RP, et al. **N Engl J Med** 1989 Aug 17; 321(7):436–41

L–carnitine addition to dialysis fluid. A therapeutic alternative for hemodialysis patients. Vacha GM, et al. **Nephron** 1989;51(2):237–42

Apolipoprotein A–I and A–II levels in an Australian population. Ma X, et al. **Pathology** 1989 Jan;21(1):42–5

Factors related to blood lipid levels—the Bremen baseline health survey of the German Cardiovascular Prevention Study. Herman B, et al. **Public Health** 1988 Nov; 102(6):565–75

The effects of phenobarbital on serum high density lipoprotein subfractions and apolipoproteins. Luoma PV, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct; 62(1):125–8

Xanthelasma: clinical indicator of decreased levels of high–density lipoprotein cholesterol. Bates MC, et al. **South Med J** 1989 May;82(5):570–4

Plasma lipoproteins in cortical versus lacunar infarction. Adams RJ, et al. **Stroke** 1989 Apr;20(4):448–52

[Effect of Polygonum multiflorum on the life–span and lipid metabolism in senile Japanese quails] Wang W, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):223–4, 198 (Eng. Abstr.) (Chi)

[Elevating serum HDL–C by high–iodine eggs] Chen B, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):26–7, 63 (Eng. Abstr.) (Chi)

[Serum thiocyanate and HDL levels and their subgroup levels] Hu ZX. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):16 (Chi)

[Effect of alcohol consumption on serum lipids] Qiu SQ, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):14–5, 62–3 (Eng. Abstr.) (Chi)

[Changes in high density lipoprotein and its subclasses in the plasma of cholesterol–fed rabbits] Wang YL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):236–8, 255 (Eng. Abstr.) (Chi)

[Serum lipid and lipoprotein levels in populations of Beijing] Li JZ. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):327–31, 24 (Eng. Abstr.) (Chi)

[The evaluation of lipoprotein as a screening test for coronary heart disease] Li SC. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Jun; 10(3):167–71 (Eng. Abstr.) (Chi)

[Serum lipids and apolipoproteins AI, B100, CI and CII in noninsulin–dependent diabetics] Liu BW, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct;27(10):627–9, 653–4 (Eng. Abstr.) (Chi)

[High density lipoprotein–cholesterol and its subclasses in relation to insulin level in NIDDM] Tian HM, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):189–92 (Eng. Abstr.) (Chi)

[Levels of HDL cholesterol and the HDL2 and HDL3 subfractions in newly detected type 2 diabetes] Brunová J, et al. **Vnitr Lek** 1989 Mar;35(3):292–8 (Eng. Abstr.) (Cze)

[Dietary advice in hypercholesterolemia. Relation of selected dietary factors to total serum cholesterol and high density lipoprotein cholesterol] Andersen MM, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2206–10 (Eng. Abstr.) (Dan)

[Postoperative behavior of parameters of intravascular lipid metabolism] Winkler E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):105–11 (Eng. Abstr.) (Ger)

[Status quo in lipid diagnosis from the internal medicine viewpoint] Reuter W. **Z Gesamte Inn Med** 1988 Oct 15; 43(20):590 (Ger)

[High–density lipoprotein cholesterol—an epidemiologic reappraisal (editorial)] Goldbourt U. **Harefuah** 1989 Feb 1;116(3):172–5 (Heb)

[Low–sodium diet and arterial hypertension: favorable effect on HDL cholesterol of a new low–sodium polysaline combination] Angeli G, et al. **Clin Ter** 1988 Jun 30; 125(6):417–24 (Eng. Abstr.) (Ita)

[Cholesterol fractions in subjects with cerebral, coronary and peripheral vasculopathy] Ferlito S, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):61–6 (Eng. Abstr.) (Ita)

[HDL cholesterol in diabetes mellitus type II] Valesano G, et al. **Minerva Med** 1989 Mar;80(3):261–4 (Eng. Abstr.) (Ita)

[Relation of the nutritional characteristics of the population to the blood plasma level of high–density lipoprotein cholesterol] Davydenko NV, et al. **Ter Arkh** 1988; 60(12):118–21 (Eng. Abstr.) (Rus)

[Cholesterol and high–density lipoprotein cholesterol in acute myocardial infarct (letter)] Paniagua J, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):159 (Spa)

[HDL cholesterol profile in 1988] Assmann G, et al. **Rev Clin Esp** 1989 May;184(8):421–30 (12 ref.) (Spa)

[Correlation of the levels of glycosylated hemoglobin and total cholesterol, total triglycerides and HDL cholesterol in a sample of insulin–dependent diabetics] Ezcurra Ferrer EJ, et al. **Rev Clin Esp** 1989 Mar;184(4):182–4 (Eng. Abstr.) (Spa)

[Effects of antihypertensive therapy with acebutolol on plasma lipids] Román O, et al. **Rev Med Chil** 1987 Sep; 115(9):836–41 (Eng. Abstr.) (Spa)

[2 limits of serum cholesterol levels are appropriate in the diagnosis and treatment of hypercholesterolemia] Walldius G, et al. **Lakartidningen** 1988 Nov 9;85(45):3835–9 (Swe)

CLASSIFICATION

Cholesterol distribution between HDL subfractions. A study of 498 subjects. Sommariva D, et al. **Ric Clin Lab** 1989 Apr–Jun;19(2):165–72

GENETICS

Pedigree analysis of HDL cholesterol concentration in baboons on two diets. MacCluer JW, et al. **Am J Hum Genet** 1988 Oct;43(4):401–13

Restriction fragment length polymorphisms associated with abnormal lipid levels in an adolescent population. Anderson RA, et al. **Atherosclerosis** 1989 Jun;77(2–3):227–37

ISOLATION & PURIFICATION

Separation of human plasma lipoproteins suitable for cholesterol determination by gel permeation chromatography. Jethmalani S, et al. **Indian J Exp Biol** 1988 Aug;26(8):633–7

METABOLISM

The selective uptake of HDL cholesteryl esters and its role in reverse cholesterol transport. Rinninger F, et al. **Agents Actions Suppl** 1988;26:181–7

Hepatic uptake and metabolism of free cholesterol from different lipoprotein classes. An in vivo study in the rat. Bravo E, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):315–20

Transfer of free and esterified cholesterol from low–density lipoproteins and high–density lipoproteins to human adipocytes. Fong BS, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):53–60

Cholesterol flux between high density lipoproteins and cultured rat luteal cells. Rajan VP, et al. **Endocrinology** 1989 Apr;124(4):1857–62

Studies on uptake and utilization of high density lipoprotein cholesterol for steroid hormone synthesis in the isolated adrenocortical cells. Duda T, et al. **Endokrynol Pol** 1989; 40(1):31–41

Adrenocortical cells of the rat show no preference for utilization of either free or esterified HDL–cholesterol in corticosterone formation. Duda T, et al. **Endokrynol Pol** 1988;39(2):103–10

Interactions of basophilic granulocytes and fat metabolism as indicators in thrombophilia. Frick G, et al. **Folia Haematol (Leipz)** 1988;115(3):383–7

Dietary influences on cardiovascular disease risk in anabolic steroid–using and nonusing bodybuilders [published erratum appears in J Am Coll Nutr 1989 Aug;8(4):357] Kleiner SM, et al. **J Am Coll Nutr** 1989 Apr;8(2):109–19

The influence of cellular and lipoprotein cholesterol contents on the flux of cholesterol between fibroblasts and high density lipoprotein. Johnson WJ, et al. **J Biol Chem** 1988 Oct 5;263(28):14099–106

PHARMACOLOGY

The effect of low– and high–density lipoprotein cholesterol on steroid hormone production and ACTH–induced differentiation of rat adrenocortical cells in primary culture. Heikkilä P, et al. **Cell Tissue Res** 1989 Jun;256(3):487–94

LIPOPROTEINS, LDL

Lipoprotein changes in familial hypercholesterolemia after extracorporeal immunoadsorption of low density lipoproteins. Ricsen WF, et al. **Ann Biol Clin (Paris)** 1988; 46(10):787–91

Structure of apolipoprotein B–100 of human low density lipoproteins. Yang CY, et al. **Arteriosclerosis** 1989 Jan–Feb; 9(1):96–108

Apheretic treatment of severe familial hypercholesterolemia: comparison of dextran sulfate cellulose and double membrane filtration methods for low density lipoprotein removal. Franceschini G, et al. **Atherosclerosis** 1988 Oct; 73(2–3):197–202

Carbon disulfide modification and impaired catabolism of low density lipoprotein. Laurman W, et al. **Atherosclerosis** 1989 Aug;78(2–3):211–8

A novel system of LDL apheresis combining a centrifugal plasma separator with a specific LDL adsorption column. Nakajima T, et al. **Atherosclerosis** 1988 Oct;73(2–3):143–8

Preparation of low density lipoprotein–9–methoxy–ellipticin complex and its cytotoxic effect against L1210 and P 388 leukemic cells in vitro. Samadi–Baboli M, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):233–41

[Comparison between treatments of severe forms of familial hypercholesterolemia by total plasma exchange and selective removal of low density lipoproteins (LDLapheresis)] Dairou F, et al. **Presse Med** 1988 Oct 1; 17(33):1679–82 (Eng. Abstr.) (Fre)

ANALYSIS

Metabolism of low– and high–density–lipoprotein–free cholesterol in rats fed high–fat diets. Chanussot F, et al. **Ann Nutr Metab** 1988;32(5–6):271–81

Large buoyant LDL–like particles in hepatic lipase deficiency. Auwerx JH, et al. **Arteriosclerosis** 1989 May–Jun;9(3):319–25

Parinaroyl and pyrenyl phospholipids as probes for the lipid surface layer of human low density lipoproteins. Vauhkonen M, et al. **Biochim Biophys Acta** 1989 Aug 21; 984(1):81–7

Composition and structure of lipopolysaccharide–human plasma low density lipoprotein complex. Analytical ultracentrifugation, 31P–NMR, ESR and fluorescence spectroscopy studies. Victorov AV, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):119–27

Is the level of steroid hormones in the low density lipoprotein (LDL) particles responsible for the prostaglandin I2 inhibitory potency of LDL? Beitz J, et al. **Biomed Biochim Acta** 1988;47(2):181–7

The influence of the triglyceride content of low density lipoprotein on the interaction of apolipoprotein B–100 with cells. Aviram M, et al. **J Biol Chem** 1988 Nov 15; 263(32):16842–8

Conformation of apolipoprotein B after lipid extraction of low density lipoproteins attached to an electron microscope grid. Phillips ML, et al. **J Lipid Res** 1989 Mar;30(3):415–22

[Discrepancy of apolipoprotein B values measured by two turbido–immunometric assays. Differences of turbido–immunometric reactivities between apolipoprotein B in VLDL and in LDL] Tsukamoto H, et al. **Rinsho Byori** 1989 May;37(5):527–32 (Jpn)

BIOSYNTHESIS

Intestinal apolipoprotein synthesis and secretion in the suckling pig. Black DD, et al. **J Lipid Res** 1989 Feb; 30(2):207–18

[The role and mechanism of lysosomal acid lipase activity] Piskorska D, et al. **Przegl Lek** 1988;45(8):637–40 (37 ref.) (Pol)

BLOOD

Modifications in the chemical composition and thermometric behavior of LDL and HDL by probucol in type IIa hyperlipoproteinemia. Dachet C, et al. **Adv Exp Med Biol** 1988;243:179–84

Low density lipoprotein–mediated endothelial cell perturbation: effects on endothelial cell eicosanoid metabolism. Miano JM, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:248–54 (65 ref.)

Dietary fish oil increases conversion of very low density lipoprotein apoprotein B to low density lipoprotein. Huff MW, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):58–66

Apolipoprotein, low density lipoprotein subfraction, and insulin associations with familial combined hyperlipidemia. Study of Utah patients with familial dyslipidemic hypertension. Hunt SC, et al. **Arteriosclerosis** 1989 May–Jun;9(3):335–44

Apolipoprotein A–I metabolism in cynomolgus monkey. Identification and characterization of beta–migrating pools. Melchior GW, et al. **Arteriosclerosis** 1989 Jul–Aug; 9(4):470–8

Heterogeneity of low density lipoprotein responses to fish–oil supplementation in hypertriglyceridemic subjects. Schectman G, et al. **Arteriosclerosis** 1989 May–Jun; 9(3):345–54

Relation of cholesterol to apolipoprotein B in low density lipoproteins of children. The Bogalusa Heart Study. Srinivasan SR, et al. **Arteriosclerosis** 1989 Jul–Aug; 9(4):493–500

Low density lipoprotein subfractions and relationship to other risk factors for coronary artery disease in healthy individuals. Swinkels DW, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):604–13

Effects of exercise–induced weight loss on low density lipoprotein subfractions in healthy men. Williams PT, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):623–32

Comparison in inhibitory effects of lipolysis products on cholesterol esterification. Homma Y. **Artery** 1989; 16(5):233–47

Selective removal of low–density lipoproteins from plasma by polyacrylate–coated Fractogel in vitro and in experimental extracorporeal perfusion. Thies K, et al. **Artif Organs** 1988 Aug;12(4):320–4

Effects of cholesterol–free, semipurified diets containing different levels of casein or soy protein on distribution of cholesterol and protein among serum lipoproteins of rabbits. Hrabek–Smith JM, et al. **Atherosclerosis** 1989 Apr; 76(2–3):125–30

Factor, present in plasma, inhibiting the interaction of low density lipoprotein with arterial proteoglycan. Kempen HJ, et al. **Atherosclerosis** 1989 Aug;78(2–3):137–44

Effects of CS–514 (eptastatin), an inhibitor of 3–hydroxy–3–methylglutaryl coenzyme A (HMG–CoA) reductase, on serum lipid and apolipoprotein levels in heterozygous familial hypercholesterolemic patients treated by low density lipoprotein (LDL)–apheresis. Mabuchi H, et al. **Atherosclerosis** 1988 Aug;72(2–3):183–8

The relevance of a protein–enriched low density lipoprotein as a risk for coronary heart disease in relation to other known risk factors. Swinkels DW, et al. **Atherosclerosis** 1989 May;77(1):59–67

Isolation and partial characterization of an oxidized LDL in humans. Avogaro P, et al. **Basic Life Sci** 1988;49:391–6

Is oxidized low density lipoprotein involved in the recruitment and retention of monocyte/macrophages in the artery wall during the initiation of atherosclerosis? Parthasarathy S, et al. **Basic Life Sci** 1988;49:375–80

Oxidation of human low density lipoprotein initiated by copper (II) chloride. Quehenberger O, et al. **Basic Life Sci** 1988;49:387–90

LDL–apheresis with the HELP system: a 16–month study in severe hypercholesterolemic patients with ischemic heart disease. Baggio G, et al. **Beitr Infusionther** 1988;23:146–51

Quantitative ultrastructural study of platelet plasma–membrane in hypercholesterolemic type IIa patients after plasma exchange and LDL–apheresis. Bianciardi G, et al. **Beitr Infusionther** 1988;23:183–8

Plasma exchange treatment for severe familial hypercholesterolemia: a comparison of two different techniques. Dairou F, et al. **Beitr Infusionther** 1988; 23:152–9

LDL–apheresis by dextran sulfate cellulose adsorption columns: two methods. Falco C, et al. **Beitr Infusionther** 1988;23:191–4

Comparison of dextran sulphate cellulose and double filtration plasmaphereses for the treatment of severe hypercholesterolemia. Franceschini G, et al. **Beitr Infusionther** 1988;23:112–7

The use of combined LDL affinity apheresis utilizing dextran sulfate cellulose columns and hypolipidemic medications in patients with severe hypercholesterolemia to assess regression of atherosclerosis. Jones PH. **Beitr Infusionther** 1988;23:142–5

Long–term plasmapheresis in the management of severe hypercholesterolemia. Keller C, et al. **Beitr Infusionther** 1988;23:81–6

Effects on coronary atherosclerosis of long–term treatment of familial hypercholesterolemia by LDL–apheresis. Mabuchi H, et al. **Beitr Infusionther** 1988;23:87–96

From plasma–exchange to LDL–apheresis: new developments in the treatment of familial hypercholesterolemia. Postiglione A, et al. **Beitr Infusionther** 1988;23:74–80

Extracorporeal LDL elimination with immunoabsorption or heparin precipitation: a comparison in 10 patients. Richter WO, et al. **Beitr Infusionther** 1988;23:127–31

Treatment of severe hypercholesterolemia by LDL–apheresis: cholesterol–lowering effect and clinical evaluation. Saito Y, et al. **Beitr Infusionther** 1988;23:160–71

Treatment of severe hypercholesterolemia by heparin–induced extracorporeal LDL precipitation (HELP). Schuff–Werner P, et al. **Beitr Infusionther** 1988; 23:118–26

Efficacy of plasmapheresis, cascade–filtration and dextran–sulfate adsorption apheresis with calculation of the recovery rate of lipids and lipoproteins. Schwartzkopff W, et al. **Beitr Infusionther** 1988;23:103–11

Selective continuous removal of low density lipoproteins by dextran sulfate cellulose column adsorption apheresis in the therapy of familial hypercholesterolemia. Stefanutti C, et al. **Beitr Infusionther** 1988;23:172–82

Molecular packing of high–density and low–density lipoprotein surface lipids and apolipoprotein A–I binding. Ibdah JA, et al. **Biochemistry** 1989 Feb 7;28(3):1126–33

The rabbit as an animal model of hepatic lipase deficiency. Clay MA, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):173–81

Receptor–mediated binding and degradation of subfractions of human plasma low–density lipoprotein by cultured fibroblasts. Jaakkola O, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):118–22

Turnover of 125I–VLDL and 131I–LDL apolipoprotein B in rabbits fed diets containing casein or soy protein. Khosla P, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):157–63

The interaction of prostaglandins with serum low–density lipoproteins. Manevich EM, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):302–10

In vitro studies with selectively lipid adsorbing materials. Behm E, et al. **Biomater Artif Cells Artif Organs** 1988–89; 16(5):905–13

Aggregation of human plasma low density lipoproteins by means of poly(ethylene glycol). Arnold K, et al. **Biomed Biochim Acta** 1988;47(12):949–54

Modified lipid–protein interactions in Tangier beta lipoprotein (LDL2) demonstrated by fluorescence quenching. Dumon MF, et al. **Chem Phys Lipids** 1988 Dec; 49(3):153–60

Causal relationship between the transitions in the core and the surface in porcine low–density lipoproteins. Herak JN, et al. **Chem Phys Lipids** 1988 Sep;48(1–2):135–9

An alpha slow–moving high–density–lipoprotein subfraction in serum of a patient with radiation enteritis and peritoneal carcinosis. Peynet J, et al. **Clin Chem** 1989 Apr;35(4):674–8

Precipitation of LDL with sulfated polyanions: three methods compared. Siekmeier R, et al. **Clin Chim Acta** 1988 Oct 31;177(3):221–30

LDL/HDL–changes in subclinical hypothyroidism: possible risk factors for coronary heart disease. Althaus BU, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):157–63

Carbohydrate composition of serum low and high density lipoproteins of nonhuman primate species. Pargaonkar PS, et al. **Comp Biochem Physiol [B]** 1977;56(3):293–9

Estimation of cholesterol loading of the low–density lipoprotein fraction in diabetic subjects without ultracentrifugation. Yoshino G, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):155–7

Structural changes in oxidised low–density lipoproteins and of the effect of the anti–atherosclerotic drug probucol observed by synchrotron X–ray and neutron solution scattering. Bellamy MF, et al. **Eur J Biochem** 1989 Aug 1;183(2):321–9

Improved haemorheology associated with a reduction in plasma fibrinogen and LDL in patients being treated by heparin–induced extracorporeal LDL precipitation (HELP). Schuff–Werner P, et al. **Eur J Clin Invest** 1989 Feb;19(1):30–7

Increased low–density lipoproteins (LDL) negatively affect human platelet labelling. Granegger S, et al. **Folia Haematol (Leipz)** 1988;115(4):451–3

Continuous monitoring of in vitro oxidation of human low density lipoprotein. Esterbauer H, et al. **Free Radic Res Commun** 1989;6(1):67–75

Serum high–density lipoprotein particles of alcohol–fed rats are deficient in apolipoprotein E. Lin RC, et al. **Hepatology** 1989 Feb;9(2):307–13

Cholesterol–enrichment of low density lipoprotein fraction is absent in Japanese normolipidemic diabetics. Yoshino G, et al. **Horm Metab Res** 1989 Mar;21(3):152–3

Effects of low– and high–density lipoproteins on the proliferation of human breast cancer cells in vitro: differences between hormone–dependent and hormone–independent cell lines. Rotheneder M, et al. **Int J Cancer** 1989 May 15;43(5):875–9

The beta very low density lipoprotein present in hepatic lipase deficiency competitively inhibits low density lipoprotein binding to fibroblasts and stimulates fibroblast acyl–CoA:cholesterol acyltransferase. Connelly PW, et al. **J Biol Chem** 1988 Oct 5;263(28):14184–8

Apolipoprotein E mediates binding of normal very low density lipoprotein to heparin but is not required for high affinity receptor binding. Fielding PE, et al. **J Biol Chem** 1989 Jul 25;264(21):12462–6

Induction of growth–related metabolism in human vascular smooth muscle cells by low density lipoprotein. Scott–Burden T, et al. **J Biol Chem** 1989 Jul 25; 264(21):12582–9

Effect of exercise and menstrual cycle status on plasma lipids, low density lipoprotein particle size, and apolipoproteins. Lamon–Fava S, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):17–21

Treatment of diet–resistant polygenic hypercholesterolaemic patients with a new nicotinate derivative; in vivo and in vitro low density lipoprotein metabolic studies. Masana L, et al. **J Clin Pharmacol** 1989 Mar;29(3):201–6

Lipoproteins of the newborn rat. Reciprocal development of low density lipoproteins and apoprotein E–rich high density lipoproteins. Perrin Ansart MC, et al. **J Dev Physiol** 1988 Aug;10(4):321–34

Studies on mechanisms for enhanced clearance of low–density lipoproteins in patients with primary hypertriglyceridaemia. Vega GL, et al. **J Intern Med** 1989 Jul;226(1):5–15

Apolipoprotein B–100 of plasma low density lipoproteins undergoes proteolysis by contact activation factors when plasma is treated with dextran sulfate–500–MgCl2. Byrne RE, et al. **J Lipid Res** 1989 Jan;30(1):109–20

Low density lipoprotein heterogeneity in the cebus monkey. Puppione DL, et al. **J Lipid Res** 1989 May;30(5):641–50

Separation of swine plasma LDL from Lpb2/3 heterozygotes into two apoB allelic haplotypes, Lpb2 and Lpb3, with apoB epitope specific antibodies. Rapacz J Jr, et al. **J Lipid Res** 1989 Feb;30(2):199–206

Suppression of fibroblast growth by Bacteroides gingivalis endotoxin is not reduced by serum lipoproteins. Layman DL, et al. **J Periodontol** 1989 May;60(5):259–63

The concentration of serum lipids and lipoprotein in children with high and normal blood pressure and in obese and normal weight children. Wu HR, et al. **J Tongji Med Univ** 1988;8(2):110–3

Gender, lipoproteins, diet, and cardiovascular risk. Sauce for the goose may not be sauce for the gander. Crouse JR 3d. **Lancet** 1989 Feb 11;1(8633):318–20 (33 ref.)

Effects of dietary casein and soy protein on metabolism of radiolabelled low density apolipoprotein B in rabbits. Samman S, et al. **Lipids** 1989 Mar;24(3):169–72

Low density lipoprotein metabolism in rats with puromycin aminonucleoside–induced nephrotic syndrome. Joven J, et al. **Metabolism** 1989 May;38(5):491–5

Acute changes in lipid, lipoprotein, apolipoprotein, and low–density lipoprotein particle size after an endurance triathlon. Lamon–Fava S, et al. **Metabolism** 1989 Sep; 38(9):921–5

Effect of combined therapy with bezafibrate and cholestyramine on low–density lipoprotein metabolism in type IIa hypercholesterolemia. Series JJ, et al. **Metabolism** 1989 Feb;38(2):153–8

Appearance of multidisperse low density lipoprotein and altered lipoprotein composition in non–insulin–dependent diabetes with type IIa hyperlipoproteinemia. Suzuki N, et al. **Metabolism** 1989 Mar;38(3):224–9

Possible therapeutic application of low density lipoprotein apheresis (LDL–A) in conjunction with double filtration plasmapheresis (DFPP) in drug–resistant nephrotic syndrome due to focal glomerular sclerosis (FGS). Tojo K, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1153–60

Modification of epsilon–amino group of lysines, cholesterol oxidation and oxidized lipid–apoprotein cross–link formation by porphyrin–photosensitized oxidation of human low density lipoproteins. Candide C, et al. **Photochem Photobiol** 1988 Aug;48(2):137–46

Lipoproteins alter the catalytic behavior of the platelet–activating factor acetylhydrolase in human plasma. Stafforini DM, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2393–7

Lysolecithin mediated transmembrane diffusion of plasma lipoproteins and albumin. Wells IC, et al. **Prog Clin Biol Res** 1989;292:379–88

Increased activity of the platelet–activating factor acetylhydrolase in plasma low density lipoprotein from patients with essential hypertension. Satoh K, et al. **Prostaglandins** 1989 Jun;37(6):673–82

Low–density lipoprotein: an old substance with a new function? Block LH, et al. **Trends Pharmacol Sci** 1988 Jun; 9(6):214–6 (20 ref.)

[Removal of low density lipoproteins on dextrans sulfate in 2 patients with familial monogenic hypercholesterolemia] Aubert I, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:72–6 (Eng. Abstr.) (Fre)

[Changes in serum lipids and lipoproteins in 3 cases of heterozygous familial hypercholesterolemia treated by LDL apheresis on dextran sulfate–cellulose columns] Delplanque B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:80–2 (Eng. Abstr.) (Fre)

[Modified lipoproteins and atherogenesis (editorial)] Fruchart JC, et al. **Presse Med** 1989 Apr 8;18(14):701–2 (Fre)

[Extracorporeal lipid elimination (LDL–apheresis in the treatment of familial hypercholesterolemia: differential filtration versus dextran sulfate adsorption] Schwaner I, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):130–6 (Eng. Abstr.) (Ger)

[Incorporation of 15N in VLDL and LDL: in vivo synthesis of apolipoprotein B in the post–absorptive and fasting state] Schauder P, et al. **Klin Wochenschr** 1989 Mar 1;67(5):280–5 (Eng. Abstr.) (Ger)

[Effect of hypotensive drugs on serum levels of lipids and lipoproteins in humans] Halawa B, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1422–4 (Pol)

[Low density lipoprotein (LDL) complexes with polyanion polysaccharides] Rółkowski R, et al. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):601–18 (123 ref.) (Eng. Abstr.) (Pol)

[Localization of a 1–anilinonaphthalen–8–sulfonate fluorescent probe on the surface monolayer of low density lipoproteins] Omel'ianenko VG, et al. **Biofizika** 1989 May–Jun;34(3):425–8 (Eng. Abstr.) (Rus)

[Interaction of prostaglandins with low–density lipoproteins in human blood] Martynova MA, et al. **Biokhimiia** 1988 May;53(5):721–7 (Eng. Abstr.) (Rus)

[Structure of the lipopolysaccharide/human plasma low density lipoprotein complex. 31P–NMR and fluorescence spectroscopy studies] Viktorov AV, et al. **Biokhimiia** 1989 Apr;54(4):549–58 (Eng. Abstr.) (Rus)

[Effect of lipopolysaccharide toxin on lipid and protein composition of human serum low density lipoproteins] Viktorov AV, et al. **Biokhimiia** 1989 Mar;54(3):434–9 (Eng. Abstr.) (Rus)

[Effect of tin sulfate on various indicators of lipid metabolism in pregnant albino rats] Grin' NV, et al. **Gig Sanit** 1989 Mar;(3):94–5 (Rus)

[Prospective trends in studies on the role of lipoproteins in human atherogenesis: their effect on disease progression,

diagnostic value and the possibility of corrective interventions] Perova NV. **Kardiologiia** 1989 Jun;29(6):5–9 (Rus)

[Morphometric analysis of aortic endothelium and serum lipoproteins in rats during readaptation after 15-day hypokinesia] Gansburgskii AN, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):46–9 (Eng. Abstr.) (Rus)

[Atherogenic modifications of low density lipoproteins during fibrin formation and fibrinolysis] Chulkova TM. **Vopr Med Khim** 1989 Mar–Apr;35(2):72–5 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

New tumor localizers: advances in the use of low density lipoproteins (LDL). Kahl SB, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):137–9

DIAGNOSTIC USE

Imaging human atherosclerosis with 99mTc-labeled low density lipoproteins. Lees AM, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):461–70

Imaging and kinetics studies with radiolabelled autologous low-density lipoproteins (LDL) in human atherosclerosis [published erratum appears in Nucl Med Commun 1989 Jun;10(6):414] Sinzinger H, et al. **Nucl Med Commun** 1988 Oct;9(10):859–66

GENETICS

Inheritance of low-density lipoprotein subclass patterns: results of complex segregation analysis. Austin MA, et al. **Am J Hum Genet** 1988 Dec;43(6):838–46

Inheritance of low-density lipoprotein subclass patterns: results of complex segregation analysis [letter] Hirschhorn K. **Am J Hum Genet** 1989 May;44(5):768

Study of five haemogenetic markers (Gc, C3, Bf, Ag, and GALT) in six Indonesian populations and in 12 subgroups of Balinese. Scherz R, et al. **Am J Phys Anthropol** 1988 Aug;76(4):489–96

Pvu II polymorphism of low density lipoprotein receptor gene and familial hypercholesterolemia. Study of Italians. Daga A, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):845–50

Heritable allele-specific differences in amounts of apoB and low-density lipoproteins in plasma. Gavish D, et al. **Science** 1989 Apr 7;244(4900):72–6

IMMUNOLOGY

Lactosaminated Fab fragments specific for low density lipoproteins/hepatocyte targeting and hypolipoproteinemic activity. Bernini F, et al. **Arteriosclerosis** 1988 Nov–Dec; 8(6):825–31

Immunological evidence for common antigenic sites in high-density lipoproteins from rainbow trout and man. Ayrault-Jarrier M, et al. **Biochem J** 1988 Sep 15; 254(3):927–30

Familial defective apolipoprotein B-100: enhanced binding of monoclonal antibody MB47 to abnormal low density lipoproteins. Weisgraber KH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9758–62

ISOLATION & PURIFICATION

Low-density lipoprotein preparation by combined diafiltration and ultracentrifugation. Pritchard KA Jr, et al. **Anal Biochem** 1988 Oct;174(1):121–7

Isolation of low density lipoprotein from atherosclerotic vascular tissue of Watanabe heritable hyperlipidemic rabbits. Daugherty A, et al. **Arteriosclerosis** 1988 Nov–Dec; 8(6):768–77

[Electrophoretic separation of high-molecular protein components of low-density lipoproteins] Akimova EI, et al. **Biol Nauki** 1988;(6):94–102 (Eng. Abstr.) (Rus)

[Plasmosorption of low-density lipoproteins on heparin-sepharose columns] Konovalov GA, et al. **Ter Arkh** 1988;60(12):16–21 (Eng. Abstr.) (Rus)

METABOLISM

Interaction of acetyl-LDL and Mal-BSA with scavenger receptor sites of rat liver. Dresel HA, et al. **Agents Actions Suppl** 1988;26:159–63 (12 ref.)

Oxidative modification of low-density lipoprotein: initiation by free radicals and protection by antioxidants. Jessup W, et al. **Agents Actions Suppl** 1988;26:241–6

The modification of low density lipoproteins by macrophages by oxidation or proteolysis. Rankin SM, et al. **Agents Actions Suppl** 1988;26:233–9

Processing of cholesteryl ester from low density lipoproteins in the rat: hepatic metabolism and biliary excretion after uptake by different hepatic cells. van Berkel TJ, et al. **Agents Actions Suppl** 1988;26:99–107

The binding of human low-density lipoproteins to the surface of schistosomula of Schistosoma mansoni is inhibited by polyanions and reduces the binding of anti-schistosomal antibodies. Chiang CP, et al. **Am J Pathol** 1989 May; 134(5):1007–18

Low-density lipoprotein transport in blood vessel walls of squirrel monkeys. Tompkins RG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H452–64

Interaction of lipoprotein Lp(a) and low density lipoprotein with glycosaminoglycans from human aorta. Bihari-Varga M, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):851–7

Dietary treatment of familial hypercholesterolemia. Connor WE, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1 Suppl):I91–105

Modification of low density lipoprotein with 4-hydroxynonenal induces uptake by macrophages. Hoff HF, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):538–49

Interaction of native and cell-modified low density lipoprotein with collagen gel. Hoover GA, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):525–34

Passage of low density lipoproteins through monolayers of human arterial endothelial cells. Effects of vasoactive substances in an in vitro model. Langeler EG, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):550–9

Transendothelial transport of low density lipoprotein in association with cell mitosis in rat aorta. Lin SJ, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):230–6

Metabolism of acetylated low density lipoproteins by monocyte-derived macrophages from patients with Werner's syndrome. Mori S, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):644–9

Comparison of arterial intimal clearances of LDL from diabetic and nondiabetic cholesterol-fed rabbits. Differences in intimal clearance explained by size differences. Nordestgaard BG, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):176–83

Some factors influencing the interactions of plasma lipoproteins with arterial elastin. Winlove CP, et al. **Artery** 1988;15(6):292–303

Interaction of high molecular weight chondroitin sulfate from human aorta with plasma low density lipoproteins. Alves CS, et al. **Atherosclerosis** 1988 Oct;73(2–3):113–24

Actin stress fiber content of regenerated endothelial cells correlates with intramural retention of intermediate plus low density lipoproteins in rat aorta after balloon injury. Barja F, et al. **Atherosclerosis** 1989 Apr;76(2–3):181–91

Plasma lipoproteins and cholesterol metabolism in spontaneously hyperlipemic rats. Fantappiè S, et al. **Atherosclerosis** 1989 Apr;76(2–3):163–71

beta-VLDL and acetylated-LDL binding to pigeon monocyte macrophages. Henson DA, et al. **Atherosclerosis** 1989 Jul;78(1):47–60

Influence of probucol on early experimental atherogenesis in hypercholesterolemic rats. Shankar R, et al. **Atherosclerosis** 1989 Aug;78(2–3):91–7

Low density lipoprotein binding affinity of arterial wall isomeric chondroitin sulfate proteoglycans. Srinivasan SR, et al. **Atherosclerosis** 1988 Jul;72(1):1–9

Low density lipoprotein interaction with artery derived proteoglycan: the influence of LDL particle size and the relationship to atherosclerosis susceptibility. Wagner WD, et al. **Atherosclerosis** 1989 Jan;75(1):49–59

Low density lipoprotein kinetics in African Green monkeys showing variable cholesterolaemic responses to diets realistic for westernised people. Weight MJ, et al. **Atherosclerosis** 1988 Sep;73(1):1–11

Multiple receptors for modified low density lipoproteins in mouse peritoneal macrophages: different uptake mechanisms for acetylated and oxidized low density lipoproteins. Arai H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1375–82

Monoclonal antibody 5A binds apolipoprotein B-48 and inhibits the low density lipoprotein-receptor interaction. Corsini A, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):908–15

Acetylated low density lipoproteins promote the release and metabolism of arachidonic acid by murine macrophages. Diez E, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):461–7

Cyclic AMP decreases LDL catabolism and cholesterol synthesis in the human hepatoma cell line HepG2. Maziere C, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):424–31

Modification of low density lipoprotein by desialylation causes lipid accumulation in cultured cells: discovery of desialylated lipoprotein with altered cellular metabolism in the blood of atherosclerotic patients. Orekhov AN, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):206–11

Processing of cholesteryl ester from low-density lipoproteins in the rat. Hepatic metabolism and biliary secretion after uptake by different hepatic cell types. Kuipers F, et al. **Biochem J** 1989 Feb 1;257(3):699–704

Cholesterol metabolism. Effect of 26-thiacholesterol and 26-aminocholesterol, analogues of 26-hydroxycholesterol, on cholesterol synthesis and low-density-lipoprotein-receptor binding. Miao E, et al. **Biochem J** 1988 Nov 1;255(3):1049–52

Evidence in liver for a disulphide-linked scavenger receptor containing a binding site for acetylated low-density lipoprotein and maleylated bovine serum albumin. Ottnad E, et al. **Biochem J** 1988 Aug 1;253(3):835–8

Uptake of retinyl ester in HL-60 cells via the low-density-lipoprotein-receptor pathway. Wathne KO, et al. **Biochem J** 1989 Jan 1;257(1):239–44

Comparative cellular uptake and cytotoxicity of a complex of daunomycin-low density lipoprotein in human squamous lung tumour cell monolayers. Kerr DJ, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3981–6

Role of insulin and counter-regulatory hormones in the control of hepatic glycerolipid synthesis and low-density-lipoprotein catabolism in diabetes. Brindley DN, et al. **Biochem Soc Trans** 1989 Feb;17(1):43–6 (48 ref.)

Effect of probucol on the physical properties of low-density lipoproteins oxidized by copper. McLean LR, et al. **Biochemistry** 1989 Jan 10;28(1):321–7

Uptake of acetylated LDL by peritoneal macrophages obtained from normal and Watanabe heritable hyperlipidemic rabbits, an animal model for familial hypercholesterolemia. Ishii K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):387–9

The effect of macrophage stimulation on the uptake of acetylated low-density lipoproteins. Leake DS, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):196–200

Assimilation of LDL by experimental tumours in mice. Lombardi P, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):301–6

Regulation of 12-hydroxyeicosatetraenoic acid synthesis by acetyl-LDL in mouse peritoneal macrophages. Mathur SN, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):50–9

The low density lipoprotein receptor. Schneider WJ. **Biochim Biophys Acta** 1989 May 9;988(2):303–17 (136 ref.)

Binding of thyroxine to human plasma low density lipoprotein through specific interaction with apolipoprotein B (apoB-100). Benvenga S, et al. **Biochimie** 1989 Feb; 71(2):263–8

Intracellular transport and degradation of 125I-tyramine cellobiose-labelled low-density lipoprotein endocytosed in vivo in rat liver cells studied by means of subcellular fractionation. Nenseter MS, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):475–83

Effect of prolactin and cyclic AMP on 125I-labelled low density lipoprotein uptake and metabolism by luteinized porcine granulosa cells in culture. Rajkumar K, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1450–4

Receptor-mediated uptake of homologous low-density lipoproteins by isolated liver parenchymal cells of fetal rats. Dürer U, et al. **Cell Tissue Res** 1988 Oct;254(1):203–8

Soluble complex formation between low-density lipoprotein and glycosaminoglycans. A 2H and 31P-NMR, and quasi-elastic light scattering study. Fenske DB, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):15–29

Role of LDL receptors in the in vitro uptake and degradation of LDL in the media of rabbit thoracic aorta. Curmi PA, et al. **Circ Res** 1989 May;64(5):957–67

Macromolecular transport within heart valves. Tompkins RG, et al. **Circ Res** 1989 Jun;64(6):1213–23

Interactions between human and carp (Cyprimus carpio) low density lipoproteins (LDL) and LDL receptors. Fainaru M, et al. **Comp Biochem Physiol [B]** 1988;91(2):331–8

The emergence of the endothelial cell lineage in the chick embryo can be detected by uptake of acetylated low density lipoprotein and the presence of a von Willebrand-like factor. Yablonka-Reuveni Z. **Dev Biol** 1989 Mar; 132(1):230–40

Sequential expression of high and low density lipoprotein receptors in differentiating fetal rat adrenocortical cells in primary culture. Kahri AI, et al. **Endocrinology** 1989 Jul; 125(1):68–75

Defective processing and binding of low-density lipoprotein receptors in fibroblasts from a familial hypercholesterolaemic subject. Knight BL, et al. **Eur J Biochem** 1989 Feb 15;179(3):693–8

Immunoelectron microscopic visualization of the transcytosis of low density lipoproteins in perfused rat arteries. Snelting-Havinga I, et al. **Eur J Cell Biol** 1989 Feb; 48(1):27–36

Low-density lipoproteins isolated from the blood of patients with coronary heart disease induce the accumulation of lipids in human aortic cells. Tertov VV, et al. **Exp Mol Pathol** 1989 Jun;50(3):337–47

Investigation of lipid peroxidation in human low density lipoprotein. Quehenberger O, et al. **Free Radic Res Commun** 1987;3(1–5):233–42

Binding and uptake of native and modified low-density lipoproteins by human hepatocytes in primary culture. Babaev VR, et al. **Hepatology** 1989 Jul;10(1):56–60

Studies on the regulation of cholesterol metabolism by low- and high-density lipoproteins in HepG2 cells. Ranganathan S, et al. **Hepatology** 1989 Apr;9(4):547–51

Hepatic metabolism of colloidal gold-low-density lipoprotein complexes in the rat: evidence for bulk excretion of lysosomal contents into bile. Renaud G, et al. **Hepatology** 1989 Mar;9(3):380–92

Oxidative modification of low density lipoprotein (LDL) by activated human monocytes and the cell lines U937 and HL60. Cathcart MK, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):1001–8

Retinal pigment epithelium possesses both LDL and scavenger receptor activity. Hayes KC, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):225–32

Association of apolipoprotein E with the low density lipoprotein receptor: demonstration of its co-operativity on lipid microemulsion particles. Funahashi T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):582–7

Modification of low density lipoprotein by lipoprotein lipase or hepatic lipase induces enhanced uptake and cholesterol accumulation in cells. Aviram M, et al. **J Biol Chem** 1988 Oct 25;263(30):15416–22

Structural domains of human apolipoprotein B-100. Differential accessibility to limited proteolysis of B-100 in low density and very low density lipoproteins. Chen GC, et al. **J Biol Chem** 1989 Aug 25;264(24):14369–75

Effect of inhibiting N-glycosylation on the stability and binding activity of the low density lipoprotein receptor. Filipovic I. **J Biol Chem** 1989 May 25;264(15):8815–20

Purification of a sarcoplasmic reticulum protein that binds

Ca2+ and plasma lipoproteins. Hofmann SL, et al. **J Biol Chem** 1989 May 15;264(14):8260–70

Proteolytic enzymes of mast cell granules degrade low density lipoproteins and promote their granule–mediated uptake by macrophages in vitro. Kokkonen JO, et al. **J Biol Chem** 1989 Jun 25;264(18):10749–55

Defective receptor binding of low density lipoprotein from pigs possessing mutant apolipoprotein B alleles. Lowe SW, et al. **J Biol Chem** 1988 Oct 25;263(30):15467–73

A macrophage receptor that recognizes oxidized low density lipoprotein but not acetylated low density lipoprotein. Sparrow CP, et al. **J Biol Chem** 1989 Feb 15; 264(5):2599–604

Recognition of oxidized low density lipoprotein by the scavenger receptor of macrophages results from derivatization of apolipoprotein B by products of fatty acid peroxidation. Steinbrecher UP, et al. **J Biol Chem** 1989 Sep 15;264(26):15216–23

Stimulation of receptor–mediated low density lipoprotein endocytosis in neuraminidase–treated cultured bovine aortic endothelial cells. Sprague EA, et al. **J Cell Physiol** 1988 Nov;137(2):251–62

Effects of estrogen on low density lipoprotein metabolism in males. Short–term and long–term studies during hormonal treatment of prostatic carcinoma. Eriksson M, et al. **J Clin Invest** 1989 Sep;84(3):802–10

Dietary fish oil stimulates hepatic low density lipoprotein transport in the rat. Ventura MA, et al. **J Clin Invest** 1989 Aug;84(2):528–37

Evidence for differences in low density lipoprotein processing by porcine granulosa and luteal cells in vitro: effect of addition of serum for plating of granulosa cells on lipoprotein metabolism. Rajkumar K, et al. **J Endocrinol** 1989 Aug;122(2):557–64

Lipoprotein binding to cultured aortic smooth muscle cells from normotensive and hypertensive rats. Scannapieco G, et al. **J Hypertens Suppl** 1988 Dec;6(4):S269–71

Superoxide anion participation in human monocyte–mediated oxidation of low–density lipoprotein and conversion of low–density lipoprotein to a cytotoxin. Cathcart MK, et al. **J Immunol** 1989 Mar 15;142(6):1963–9

Lipid transfers between reconstituted high density lipoprotein complexes and low density lipoproteins: effects of plasma protein factors. Jonas A, et al. **J Lipid Res** 1988 Oct; 29(10):1349–57

Lipolysis of LDL with phospholipase A2 alters the expression of selected apoB–100 epitopes and the interaction of LDL with cells. Kleinman Y, et al. **J Lipid Res** 1988 Jun;29(6):729–43

Guinea pig low density lipoproteins: structural and metabolic heterogeneity. Luc G, et al. **J Lipid Res** 1988 Oct; 29(10):1251–63

Metabolic behavior of hepatic VLDL and plasma LDL apoB–100 in African green monkeys. Marzetta CA, et al. **J Lipid Res** 1989 Mar;30(3):357–70

A potential complication in the use of monoclonal antibodies: inhibition of apoB–mediated receptor binding by an anti–apoE antibody. Maurice R, et al. **J Lipid Res** 1989 Apr;30(4):587–96

Modification of low density lipoproteins by polymorphonuclear cell elastase leads to enhanced uptake by human monocyte–derived macrophages via the low density lipoprotein receptor pathway. Polacek D, et al. **J Lipid Res** 1988 Jun;29(6):797–808

Interaction of aging and dietary fat in the regulation of low density lipoprotein transport in the hamster. Spady DK, et al. **J Lipid Res** 1989 Apr;30(4):559–69

Enzymatic modification of low density lipoprotein by purified lipoxygenase plus phospholipase A2 mimics cell–mediated oxidative modification. Sparrow CP, et al. **J Lipid Res** 1988 Jun;29(6):745–53

Hydrolysis of phosphatidylcholine during LDL oxidation is mediated by platelet–activating factor acetylhydrolase. Steinbrecher UP, et al. **J Lipid Res** 1989 Mar;30(3):305–15

Colestipol–induced changes in LDL composition and metabolism. II. Studies in humans. Young SG, et al. **J Lipid Res** 1989 Feb;30(2):225–38

Studies on oxidized low density lipoproteins. Controlled oxidation and a prostaglandin artifact. Zhang HF, et al. **J Lipid Res** 1989 Feb;30(2):141–8

Prostacyclin–mediated effect of high density lipoproteins as cellular cholesterol acceptors on aortic smooth muscle cells. Shakhov Yu, et al. **J Mol Cell Cardiol** 1989 May; 21(5):461–8

Effects of dietary beef and soy protein on tissue composition and low density lipoprotein uptake in young pigs. Johnson JA, et al. **J Nutr** 1989 May;119(5):696–705

Calcium pyrophosphate and monosodium urate crystal interactions with neutrophils: effect of crystal size and lipoprotein binding to crystals. Burt HM, et al. **J Rheumatol** 1989 Jun;16(6):809–17

Effect of estradiol on low density lipoprotein uptake by bovine aortic endothelial cells. Alexander JJ, et al. **J Surg Res** 1989 Jun;46(6):537–42

Fluorescent low density lipoprotein and acetylated low density lipoprotein labeling of cultured bovine trabecular endothelial cells. Ahn BH, et al. **Korean J Ophthalmol** 1987 Dec;1(2):90–4

Binding–defective low–density lipoprotein in family with hypercholesterolaemia [letter] Corsini A, et al. **Lancet** 1989 Mar 18;1(8638):623

Regulation of low density lipoprotein apoprotein B metabolism by lovastatin and cholestyramine in miniature pigs: effects on LDL composition and synthesis of LDL subfractions. Huff MW, et al. **Metabolism** 1989 Mar; 38(3):256–64

Cholesteryl ester handling by RAW264 macrophages: response to native and acetylated low density lipoprotein. Berg KA, et al. **Mol Cell Biochem** 1988 Nov;84(1):29–40

Lactosylated low density lipoprotein: a potential carrier for the site–specific delivery of drugs to Kupffer cells. Bijsterbosch MK, et al. **Mol Pharmacol** 1989 Sep; 36(3):484–9

The binding of lipoproteins to human muscle cells: binding and uptake of LDL, HDL, and alpha–tocopherol. Gurusinghe A, et al. **Muscle Nerve** 1988 Dec;11(12):1231–9

Beyond cholesterol. Modifications of low–density lipoprotein that increase its atherogenicity. Steinberg D, et al. **N Engl J Med** 1989 Apr 6;320(14):915–24 (94 ref.)

Lipoprotein and apolipoprotein losses during continuous ambulatory peritoneal dialysis. Saku K, et al. **Nephron** 1989; 51(2):220–4

Triglycerides and apoproteins in toxemia of pregnancy. Yamaguchi K. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec;40(12):1875–82

Low density lipoprotein undergoes oxidative modification in vivo. Palinski W, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1372–6

A role for endothelial cell lipoxygenase in the oxidative modification of low density lipoprotein. Parthasarathy S, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1046–50

Phagocytosis of aggregated lipoprotein by macrophages: low density lipoprotein receptor–dependent foam–cell formation. Suits AG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2713–7

Increased uptake of methylated low–density lipoprotein induced by noradrenaline in carotid arteries of anaesthetized rabbits. Shafi S, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):289–98

Metabolic and immunological consequences of glycation of low density lipoproteins. Witztum JL, et al. **Prog Clin Biol Res** 1989;304:219–34 (30 ref.)

Studies on the mechanism of action of prostaglandin F2 alpha induced luteolysis in rats. Rajkumar K, et al. **Prostaglandins** 1988 Oct;36(4):547–64

The effect of estrogen on low–density lipoprotein binding kinetics in aortic endothelial cells. Alexander JJ, et al. **Surgery** 1989 Aug;106(2):386–90; discussion 391

Transglutaminase–catalysed cross–linking: a potential mechanism for the interaction of fibrinogen, low density lipoprotein and arterial type III procollagen. Bowness JM, et al. **Thromb Res** 1989 May 15;54(4):357–67

Effects of calcium antagonists on low density lipoprotein metabolism in human arterial smooth muscle cells. Mori S, et al. **Tohoku J Exp Med** 1988 Apr;154(4):329–33

Proteolysis in vitro of low and high density lipoproteins in human plasma by Cerastes cerastes (Egyptian sand viper) venom. el–Asmar MF, et al. **Toxicon** 1988;26(9):809–16

How bile acids differ: studies of receptor–mediated LDL uptake. Palmer RH, et al. **Trans Am Clin Climatol Assoc** 1987;99:177–84

[Effects of transmural pressure on the transport and distribution of low density lipoproteins in the arterial wall] Curmi PA, et al. **C R Acad Sci [III]** 1989;308(6):149–54 (Eng. Abstr.) **(Fre)**

[Role of lipid peroxidation in the formation of atheroma] Emerit J, et al. **Presse Med** 1989 Apr 22;18(16):832–6 (Eng. Abstr.) **(Fre)**

[Mechanism of foam cell transformation of macrophages] Kita T. **Seikagaku** 1988 Oct;60(10):1163–8 **(Jpn)**

[Cellular and extracellular lipid binding] Kopiecznа–Grzebieniak E, et al. **Przegl Lek** 1988; 45(7):588–91 (20 ref.) **(Pol)**

[Protective effect of high density lipoproteins, their subfractions and lecithin–cholesterol–acyltransferases on the peroxidation modification of low density lipoproteins] Klimov AN, et al. **Biokhimiia** 1989 Jan;54(1):118–23 (Eng. Abstr.) **(Rus)**

[Analysis of binding and absorption of native and modified low density lipoproteins by human liver cells in primary culture] Babaev VR, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):102–4 (Eng. Abstr.) **(Rus)**

[Peroxide modification of low density lipoproteins in ischemic heart disease] Kuznetsov AS, et al. **Ukr Biokhim Zh** 1989 May–Jun;61(3):111–4 (Eng. Abstr.) **(Rus)**

[Protein conformation and localization in low density lipoproteins in health and in ischemic heart disease] Kuznetsov AS, et al. **Ukr Biokhim Zh** 1989 May–Jun; 61(3):47–52 (Eng. Abstr.) **(Rus)**

[The effect of cholesterol esterase on low density lipoproteins. The effect of modified lipoproteins on the accumulation of cholesterol in cultured cells] Kovaleva GG, et al. **Vopr Med Khim** 1989 May–Jun;35(3):47–51 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Low–density lipoprotein (LDL) distribution shown by 99mtechnetium–LDL imaging in patients with myeloproliferative diseases. Vallabhajosula S, et al. **Ann Intern Med** 1989 Feb 1;110(3):208–13

Uptake of LDL in parenchymal and non–parenchymal rabbit liver cells in vivo. LDL uptake is increased in endothelial cells in cholesterol–fed rabbits. Nenseter MS, et al. **Biochem J** 1988 Sep 1;254(2):443–8

Sterol synthesis and low density lipoprotein clearance in vivo in the pregnant rat, placenta, and fetus. Sources for tissue cholesterol during fetal development. Belknap WM, et al. **J Clin Invest** 1988 Dec;82(6):2077–85

Type–C Niemann–Pick disease: low density lipoprotein uptake is associated with premature cholesterol accumulstion in the Golgi complex and excessive cholesterol storage in lysosomes. Blanchette–Mackie EJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8022–6

PHARMACOLOGY

Platelet activation by oxidatively modified low density lipoproteins. Ardlie NG, et al. **Atherosclerosis** 1989 Apr; 76(2–3):117–24

Enhanced procoagulatory activity (PCA) of human monocytes/macrophages after in vitro stimulation with chemically modified LDL. Schuff–Werner P, et al. **Atherosclerosis** 1989 Aug;78(2–3):109–12

Estimation of turnover of low density lipoproteins by simplified methods. Vega GL, et al. **Atherosclerosis** 1989 Apr;76(2–3):139–48

Protective role of intracellular glutathione against oxidized low density lipoprotein in cultured endothelial cells. Kuzuya M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1466–72

Vasoconstriction: a novel activity for low density lipoprotein. Sachinidis A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):315–20

Differential stimulation of growth related metabolism in cultured smooth muscle cells from SHR and WKY rats by combinations of EGF and LDL. Scott–Burden T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):624–32

Low density lipoprotein and apoprotein B induce increases in inositol trisphosphate and cytosolic free Ca2+ via pertussis toxin–sensitive GTP–binding protein in vascular smooth muscle cells. Morita R, et al. **Biochem Int** 1989 Mar;18(3):647–53

Effect of low–density lipoproteins on the synthesis and secretion of proteoglycans by human endothelial cells in culture. Vijayagopal P, et al. **Biochem J** 1988 Oct 15; 255(2):639–46

Low–density lipoprotein derived from atherosclerotic patients enhances macrophage cholesterol accumulation and in vitro platelet aggregation. Keidar S, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):117–24

Photosensitization of Wi26–VA4 transformed human fibroblasts by low density lipoprotein loaded with the anticancer porphyrin mixture photofrin II: evidence for endoplasmic reticulum alteration. Candide C, et al. **Cancer Lett** 1989 Feb;44(2):157–61

Thrombin–induced endothelium–dependent relaxation and its inhibition by LDL in porcine coronary arteries. Inoue Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4626–9

Enhancement of platelet aggregation by low–density lipoproteins from IDDM patients. Watanabe J, et al. **Diabetes** 1988 Dec;37(12):1652–7

The effects of acetylated low–density lipoproteins on fluid–phase pinocytosis by macrophages. Knowles ME, et al. **Eur J Biochem** 1989 Jun 15;182(2):407–12

Low–density lipoproteins increase intracellular calcium in aequorin–loaded platelets. Dunn RC, et al. **FEBS Lett** 1988 Oct 10;238(2):357–60

Phosphatidylinositol turnover in human monocyte–derived macrophages by native and acetyl LDL. Ishikawa Y, et al. **FEBS Lett** 1989 Mar 27;246(1–2):35–8

Chemotactic response of vascular smooth muscle cells to acetoacetylated low–density lipoprotein. Naito M, et al. **Heart Vessels** 1988;4(2):100–3

An improved method for primary culture of ovarian androgen–producing cells in serum–free medium: effect of lipoproteins, insulin, and insulinlike growth factor–I. Magoffin DA, et al. **In Vitro Cell Dev Biol** 1988 Sep; 24(9):862–70

Effects of low density lipoproteins and mevinolin on sympathetic responsiveness in cultured chick atrial cells. Regulation of beta–adrenergic receptors and alpha s. Barnett JV, et al. **J Biol Chem** 1989 Jun 25;264(18):10779–86

Effects of low density lipoproteins and mevinolin on cholesterol content and muscarinic cholinergic responsiveness in cultured chick atrial cells. Regulation of levels of muscarinic receptors and guanine nucleotide regulatory proteins. Haigh LS, et al. **J Biol Chem** 1988 Oct 25;263(30):15608–18

Platelet–modified low density lipoprotein induces macrophage cholesterol accumulation and platelet activation. Aviram M, et al. **J Clin Chem Clin Biochem** 1989 Jan;27(1):3–12

Low–density lipoprotein enhances platelet activation in parallel with the height of blood pressure. Fetkovska N, et al. **J Hypertens Suppl** 1988 Dec;6(4):S646–8

Correction of sphingomyelinase deficiency in Niemann–Pick type C fibroblasts by removal of lipoprotein fraction from culture media. Thomas GH, et al. **J Inherited Metab Dis** 1989;12(2):139–51

[LDL receptor binding and endocytosis in rabbit aortic smooth muscle under different levels of lipids in the culture media] Wang L. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):41–4 **(Chi)**

[Changes in the rosette–forming capacity of peripheral blood

lymphocytes in patients with ischemic heart disease after administration of atherogenic lipoproteins] Vasil'chenko EM, et al. **Kardiologiia** 1989 Feb;29(2):53–6 (Eng. Abstr.) **(Rus)**

[Effects of low density lipoproteins on uric acid crystals] Muniain Ezcurra MA, et al. **Rev Clin Esp** 1988 Oct; 183(5):232–4 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Identification of lipid components of human serum lipoproteins involved in the inhibition of Sindbis virus infectivity, hemagglutination, and hemolysis. Mastromarino P, et al. **Arch Virol** 1988;103(3–4):243–52

Cholesterol accumulation in aortic smooth muscle cells exposed to low density lipoproteins. Contribution of free cholesterol transfer. Slotte JP, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):750–8

Oxidized low density lipoprotein stimulates prostacyclin production by adult human vascular endothelial cells. Triau JE, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):810–8

Lipoprotein aggregation as an essential condition of intracellular lipid accumulation caused by modified low density lipoproteins. Tertov VV, et al.
Biochem Biophys Res Commun 1989 Aug 30;163(1):489–94

Modifications of LDL-receptor-mediated endocytosis rates in CEM lymphoblastic cells grown in lipoprotein-depleted fetal calf serum. Sainte-Marie J, et al.
Biochim Biophys Acta 1989 Jul 10;982(2):265–70

Effect of low density lipoproteins, high density lipoproteins, and cholesterol on apolipoprotein A-I mRNA in Hep G2 cells. Monge JC, et al. **FEBS Lett** 1989 Jan 30;243(2):213–7

A role for apolipoprotein E, apolipoprotein A-I, and low density lipoprotein receptors in cholesterol transport during regeneration and remyelination of the rat sciatic nerve. Boyles JK, et al. **J Clin Invest** 1989 Mar;83(3):1015–31

Endocytic and secretory repertoire of the lipid-loaded macrophage. Montgomery RR, et al. **J Leukoc Biol** 1989 Feb;45(2):129–38

Modified forms of low density lipoprotein affect platelet aggregation in vitro. Aviram M. **Thromb Res** 1989 Mar 15;53(6):561–7

Is low-density lipoprotein hormone-like? [letter] Jacobs M, et al. **Trends Pharmacol Sci** 1988 Jul;9(7):235–6

URINE

[Determination of lipoproteins in the urine in the diagnosis of glomerulonephritis] Nikulina GG, et al. **Lab Delo** 1988; (7):38–41 (Eng. Abstr.) **(Rus)**

LIPOPROTEINS, LDL CHOLESTEROL

see related
HYPERCHOLESTEROLEMIA
HYPERCHOLESTEROLEMIA, FAMILIAL

[Effect of LDL-apheresis on a case of Cerebrotendinous Xanthomatosis] Fukuo Y, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):196–201 (Eng. Abstr.) **(Jpn)**

BLOOD

Influence of experimental diets on cholesterol and triglyceride levels of rabbit blood serum lipoproteins. Wehr H, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):202–6

Lipid-lowering therapy after an atherosclerotic event. Roberts WC. **Am J Cardiol** 1989 Sep 15;64(10):693–5

High-density lipoprotein cholesterol is reduced in patients with sarcoidosis. Kindman LA, et al. **Am J Med** 1989 Apr; 86(4):376–8

The place of HDL in cholesterol management. A perspective from the National Cholesterol Educational Program [published erratum appears in Arch Intern Med 1989 Apr;149(4):940] [comment] Grundy SM, et al.
Arch Intern Med 1989 Mar;149(3):505–10 (73 ref.).
Comment on: Arch Intern Med 1988 Jan;148(1):36–69

Relation of cholesterol to apolipoprotein B in low density lipoproteins of children. The Bogalusa Heart Study. Srinivasan SR, et al. **Arteriosclerosis** 1989 Jul–Aug; 9(4):493–500

Hypolipemic activity of K12.148 in rats, marmosets and pigs. Schliack M, et al. **Artery** 1989;16(2):90–104

Kinetic analysis of cholesterol removal by thermofiltration. Malchesky PS, et al. **ASAIO Trans** 1988 Oct–Dec; 34(4):965–8

XbaI and c/g polymorphisms of the apolipoprotein B gene locus are associated with serum cholesterol and LDL-cholesterol levels in Finland. Aalto-Setälä K, et al. **Atherosclerosis** 1988 Nov;74(1–2):47–54

Plasma low density lipoprotein composition in relation to atherosclerosis in nutritionally defined Vervet monkeys. Benadé AJ, et al. **Atherosclerosis** 1988 Nov;74(1–2):157–68

The relevance of a protein-enriched low density lipoprotein as a risk for coronary heart disease in relation to other known risk factors. Swinkels DW, et al. **Atherosclerosis** 1989 May;77(1):59–67

The lipid hypothesis. Gotto AM Jr. **Beitr Infusionther** 1988; 23:1–7 (16 ref.)

Low-density lipoprotein catabolism in WHHL rabbits after partial ileal bypass surgery. Mol MJ, et al.
Biochim Biophys Acta 1989 Jun 8;1003(2):167–74

Hypertriglyceridemia and lower LDL cholesterol concentration in relation to apolipoprotein E phenotypes in myotonic dystrophy. Moorjani S, et al.
Can J Neurol Sci 1989 Feb;16(1):129–33

Serum-lipid and lipoprotein patterns of Beijing populations from birth to senescence. Li JZ, et al.
Chin Med J [Engl] 1988 Sep;101(9):659–64

Lipoprotein cholesterol concentrations in the plasma of human subjects as measured in the fed and fasted states. Cohn JS, et al. **Clin Chem** 1988 Dec;34(12):2456–9

Calculation of low-density lipoprotein cholesterol with use of triglyceride/cholesterol ratios in lipoproteins compared with other calculation methods. Rao A, et al.
Clin Chem 1988 Dec;34(12):2532–4

Plasma lipoproteins and adrenocortical hormones in men—positive association of low density lipoprotein cholesterol with plasma cortisol concentration. Nanjee MN, et al. **Clin Chim Acta** 1989 Feb 28;180(2):113–20

Validation of the Friedewald formula for the measurement of low density lipoprotein cholesterol in insulin-dependent diabetes mellitus. Winocour PH, et al. **Clin Chim Acta** 1989 Jan 13;179(1):79–83

Further evidence for an association between the XbaI polymorphism at the apolipoprotein B locus and lipoprotein level. Leren TP, et al. **Clin Genet** 1988 Dec;34(6):347–51

Interaction between low density lipoprotein receptor (LDLR) and apolipoprotein E (apoE) alleles contributes to normal variation in lipid level. Pedersen JC, et al.
Clin Genet 1989 May;35(5):331–7

Measurement of total cholesterol, HDL-cholesterol, and LDL-cholesterol. Bachorik PS. **Clin Lab Med** 1989 Mar; 9(1):61–72 (21 ref.)

Effects of replacing saturated fat with complex carbohydrate in diets of subjects with NIDDM. Abbott WG, et al.
Diabetes Care 1989 Feb;12(2):102–7

Dietary fructose as a natural sweetener in poorly controlled type 2 diabetes: a 12-month crossover study of effects on glucose, lipoprotein and apolipoprotein metabolism. Osei K, et al. **Diabetic Med** 1989 Aug;6(6):506–11

Plasma lecithin: cholesterol acyltransferase activity in elite athletes from selected sports. Tsopanakis C, et al.
Eur J Appl Physiol 1988;58(3):262–5

Genetic polymorphism of the apolipoprotein B gene locus influences serum LDL cholesterol level in familial hypercholesterolemia. Aalto-Setälä K, et al. **Hum Genet** 1989 Jul;82(4):305–7

Removal of low density lipoproteins (LDL) from plasma: the state of the art. Klinkmann H, et al.
Int J Artif Organs 1989 Apr;12(4):207–10 (37 ref.)

Associations between plasma lipoprotein cholesterols, adiposity and adipose tissue distribution during adolescence. Baumgartner RN, et al. **Int J Obes** 1989 Feb; 13(1):31–41

The cholesterol hypothesis and the value of intervention. Brown WV. **J Am Osteopath Assoc** 1988 Jul;88(7):859–64 (22 ref.)

Mechanisms by which saturated triacylglycerols elevate the plasma low density lipoprotein-cholesterol concentration in hamsters. Differential effects of fatty acid chain length. Woollett LA, et al. **J Clin Invest** 1989 Jul;84(1):119–28

Cholesterol guidelines, lipoprotein cholesterol levels, and triglyceride levels: potential for misclassification of coronary heart disease risk. Laemmle P, et al.
J Lab Clin Med 1989 Mar;113(3):325–34

The reduction of low density lipoprotein cholesterol by metformin is maintained with long-term therapy. Rains SG, et al. **J R Soc Med** 1989 Feb;82(2):93–4

Friedewald's LDL-cholesterol estimation formula in a Japanese American population. Fujimoto WY.
Jpn Circ J 1988 Jul;52(7):604–6

The effects of antihypertensive drugs on serum lipids and lipoproteins in patients with mild to moderate hypertension. Goto Y, et al. **Jpn J Med** 1989 Mar–Apr;28(2):267–8 (12 ref.)

Long-term and withdrawal effects of two different oestrogen–progestogen combinations on lipid and lipoprotein profiles in post-menopausal women. Jensen J, et al. **Maturitas** 1989 Jun;11(2):117–28

Reduction in plasma low-density lipoprotein cholesterol and urinary mevalonic acid by lovastatin in patients with heterozygous familial hypercholesterolemia. Pappu AS, et al. **Metabolism** 1989 Jun;38(6):542–9

Effect of a diet enriched with monounsaturated or polyunsaturated fatty acids on levels of low-density and high-density lipoprotein cholesterol in healthy women and men. Mensink RP, et al. **N Engl J Med** 1989 Aug 17; 321(7):436–41

The relationship between different lipoprotein fractions and the incidence of coronary heart disease in diabetics of Trinidad & Tobago. Ragoobirsingh D.
West Indian Med J 1989 Mar;38(1):42–7

[Effect of alcohol consumption on serum lipids] Qiu SQ, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):14–5, 62–3 (Eng. Abstr.) **(Chi)**

[Serum lipid and lipoprotein levels in populations of Beijing] Li JZ. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):327–31, 24 (Eng. Abstr.) **(Chi)**

[Postoperative behavior of parameters of intravascular lipid metabolism] Winkler E, et al.
Z Exp Chir Transplant Kunstliche Organe 1989;22(2):105–11 (Eng. Abstr.) **(Ger)**

[Cholesterol fractions in subjects with cerebral, coronary and peripheral vasculopathy] Ferlito S, et al.
Minerva Cardioangiol 1989 Jan–Feb;37(1–2):61–6 (Eng. Abstr.) **(Ita)**

[Changes in the levels of various classes of cholesterol lipoproteins in patients with ischemic heart disease during physical training] Dudaev VA, et al. **Kardiologiia** 1989 Feb; 29(2):49–53 (Eng. Abstr.) **(Rus)**

[Treatment of hypercholesterolemia with enzyme inhibitors] Valdés EF. **Medicina (B Aires)** 1988;48(4):425–8 (14 ref.) **(Spa)**

[Does modified LDL cholesterol trigger the atherosclerotic process?] Mölgaard J, et al. **Lakartidningen** 1989 Jul 12; 86(28–29):2521–2 **(Swe)**

[2 limits of serum cholesterol levels are appropriate in the diagnosis and treatment of hypercholesterolemia] Walldius G, et al. **Lakartidningen** 1988 Nov 9;85(45):3835–9 **(Swe)**

ISOLATION & PURIFICATION

Separation of human plasma lipoproteins suitable for cholesterol determination by gel permeation chromatography. Jethmalani S, et al. **Indian J Exp Biol** 1988 Aug;26(8):633–7

Selective extraction of plasma constituents [editorial] Pineda AA. **Transfusion** 1989 May;29(4):283–4

METABOLISM

Hepatic uptake and metabolism of free cholesterol from different lipoprotein classes. An in vivo study in the rat. Bravo E, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):315–20

Transfer of free and esterified cholesterol from low-density lipoproteins and high-density lipoproteins to human adipocytes. Fong BS, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):53–60

Cholesterol esterification as a limiting factor in accumulation of cell cholesterol: a comparison of two J774 macrophage cell lines. Khoo JC, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):215–7

The XbaI polymorphism of the apolipoprotein B gene influences the degradation of low density lipoprotein in vitro. Series J, et al. **Biochim Biophys Acta** 1989 Jun 8; 1003(2):183–8

Affinity of LDL to a human arterial proteoglycan among male survivors of myocardial infarction. Linden T, et al.
Eur J Clin Invest 1989 Feb;19(1):38–44

The intracellular transport of low density lipoprotein-derived cholesterol is inhibited in Chinese hamster ovary cells cultured with
3-beta-[2-(diethylamino)ethoxy]androst-5-en-17-one.
Liscum L, et al. **J Biol Chem** 1989 Jul 15;264(20):11796–806

The intracellular transport of low density lipoprotein-derived cholesterol is defective in Niemann-Pick type C fibroblasts. Liscum L, et al. **J Cell Biol** 1989 May;108(5):1625–36

A novel explanation for the reduced LDL cholesterol in severe hypertriglyceridemia. Minnich A, et al.
J Lipid Res 1989 Mar;30(3):347–55

[Low density lipoprotein distribution by flotation characteristics in normal conditions and in dyslipoproteinemias] Medvedeva NV, et al.
Vopr Med Khim 1989 May–Jun;35(3):36–41 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Arterial blood derived low density lipoprotein increases platelet aggregation and macrophage cholesterol content in comparison to lipoprotein derived from veinous blood. Keidar S, et al. **Artery** 1989;16(2):62–71

The effect of low- and high-density lipoprotein cholesterol on steroid hormone production and ACTH-induced differentiation of rat adrenocortical cells in primary culture. Heikkilä P, et al. **Cell Tissue Res** 1989 Jun;256(3):487–94

PHYSIOLOGY

Effect of low-density lipoprotein on the expression of high affinity Fc gamma receptors. Bigler RD, et al.
Biochim Biophys Acta 1989 May 10;1011(2–3):102–9

LIPOPROTEINS, VLDL

ANALYSIS

Nascent very low density lipoproteins from rat hepatocytic Golgi fractions are enriched in phosphatidylethanolamine. Hamilton RL, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):162–73

Fractionation of baboon chylomicrons and very-low-density lipoproteins by high-performance liquid chromatography. Williams MC, et al. **J Chromatogr** 1988 Dec 9;433:257–63

Plasma very low density lipoproteins contain a single molecule of apolipoprotein B. Elovson J, et al.
J Lipid Res 1988 Nov;29(11):1461–73

Crystallization and preliminary X-ray diffraction studies on the amino-terminal (receptor-binding) domain of human apolipoprotein E3 from serum very low density lipoproteins. Aggerbeck LP, et al. **J Mol Biol** 1988 Jul 5;202(1):179–81

[Discrepancy of apolipoprotein B values measured by two turbido-immunometric assays. Differences of turbido-immunometric reactivities between apolipoprotein B in VLDL and in LDL] Tsukamoto H, et al.
Rinsho Byori 1989 May;37(5):527–32 **(Jpn)**

ANTAGONISTS & INHIBITORS

Eicosapentaenoic acid inhibits hepatic production of very low density lipoprotein. Rustan AC, et al. **J Intern Med Suppl** 1989;225(731):31–8

BIOSYNTHESIS

Cholesterol is required for secretion of very-low-density lipoprotein by rat liver. Khan B, et al. **Biochem J** 1989 Mar 15;258(3):807–16

BLOOD

Increased VLDL. Halpern MJ, et al. **Adv Exp Med Biol** 1988; 243:327–32 (25 ref.)

Impaired very low-density lipoprotein-triglyceride catabolism in acute and chronic fructose-fed rats. Hirano T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E559–65

Manganese-heparin precipitation of very low-density lipoprotein: screening for type III hyperlipoproteinaemia. Muirhead RA, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):289–91

Dietary fish oil increases conversion of very low density lipoprotein apoprotein B to low density lipoprotein. Huff MW, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):58–66

Physico-chemical properties of cholesterol-fed rabbit beta-VLDL are not affected by different dietary oils. Waugh DA, et al. **Atherosclerosis** 1989 Apr;76(2–3):237–43

Turnover of 125I-VLDL and 131I-LDL apolipoprotein B in rabbits fed diets containing casein or soy protein. Khosla P, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):157–63

Changes in the plasma free fatty acid composition during VLDL lipolysis induced by heparin: their effect on platelet phosphatidylcholine biosynthesis. Tavella JM, et al. **Biomed Biochim Acta** 1988;47(8):725–30

Composition of very-low-density lipoproteins in non-insulin-dependent diabetes mellitus. Ishibashi S, et al. **Clin Chem** 1989 May;35(5):808–12

Effects of dietary sucrose on age-related changes in VLDL-triglyceride kinetics in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):185–90

Presence of very low density lipoprotein compositional abnormalities in type 1 (insulin-dependent) diabetic patients; effects of blood glucose optimisation. Rivellese A, et al. **Diabetologia** 1988 Dec;31(12):884–8

VLDL substrate properties and efficiency of their metabolic transformation by LPL. Dergunov AD, et al. **Experientia** 1989 May 15;45(5):461–3

Bezafibrate lowers VLDL concentrations without modifying its structure. Kazumi T, et al. **Horm Metab Res** 1989 Jun; 21(6):341–2

Very low density lipoprotein. Qualitative abnormalities in patients with premature coronary heart disease and in patients with insulin dependent diabetes. Mancini M, et al. **Horm Metab Res Suppl** 1988;19:13–5

Metabolism of apolipoprotein B-100 in large very low density lipoproteins of blood plasma. Kinetic studies in normal and Watanabe heritable hyperlipidemic rabbits. Yamada N, et al. **J Clin Invest** 1988 Dec;82(6):2106–13

Characterization of very low density lipoprotein from Watanabe heritable hyperlipidemic rabbits. Ishii K, et al. **J Lipid Res** 1989 Jan;30(1):1–7

The effect of high cholesterol, high fat diet on rabbit plasma beta-VLDL and its interaction with macrophage. Wang SP, et al. **J Tongji Med Univ** 1989;9(1):44–7

Very low density lipoprotein apolipoprotein B metabolism in humans. Demant T, et al. **Klin Wochenschr** 1988 Aug 15;66(16):703–12 (59 ref.)

Effects of polyunsaturated fatty acids and/or lecithin on the plasma concentrations of very low density lipoprotein-tryglyceride (VLDL) and ketone bodies in humans. Kurinami S, et al. **Kurume Med J** 1988;35(2):71–6

Prednisone increases very low density lipoprotein and high density lipoprotein in healthy men. Ettinger WH Jr, et al. **Metabolism** 1988 Nov;37(11):1055–8

Appearance of multidisperse low density lipoprotein and altered lipoprotein composition in non-insulin-dependent diabetes with type IIa hyperlipoproteinemia. Suzuki N, et al. **Metabolism** 1989 Mar;38(3):224–9

Morphometric analysis of very low density lipoproteins (VLDL) in chronic alcoholics. Wehr H, et al. **Neuropatol Pol** 1988;26(4):537–45

Normal but not hypertriglyceridemic very low-density lipoprotein induces rapid release of tissue plasminogen activator from cultured human umbilical vein endothelial cells. Booyse FM, et al. **Semin Thromb Hemost** 1988 Apr; 14(2):175–9

Vitamin K-dependent proteins bind to very low-density lipoproteins. Bradley WA, et al. **Semin Thromb Hemost** 1988 Jul;14(3):253–7 (31 ref.)

[Incorporation of 15N in VLDL and LDL: in vivo synthesis of apolipoprotein B in the post-absorptive and fasting state] Schauder P, et al. **Klin Wochenschr** 1989 Mar 1;67(5):280–5 (Eng. Abstr.) (Ger)

GENETICS

Tissue-specific and steroid-dependent interaction of transcription factors with the oestrogen-inducible apoVLDL II promoter in vivo. Wijnholds J, et al. **EMBO J** 1988 Sep;7(9):2757–63

Detection and characterization of degradative intermediates of avian apo very low density lipoprotein II mRNA present in estrogen-treated birds and following destabilization by hormone withdrawal. Cochrane A, et al. **J Biol Chem** 1989 Apr 15;264(11):6495–503

Estrogen-dependent activation of the avian very low density apolipoprotein II and vitellogenin genes. Transient alterations in mRNA polyadenylation and stability early during induction. Cochrane AW, et al. **J Mol Biol** 1988 Oct 5;203(3):555–67

Turnover products of the apo very low density lipoprotein II messenger RNA from chicken liver. Bakker O, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10109–18

METABOLISM

Beta-VLDL metabolism by pigeon macrophages. Evidence for two binding sites with different potentials promoting cholesterol accumulation. Adelman SJ, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):673–83

Enhanced metabolism of normolipidemic human plasma very low density lipoprotein in cultured cells by exogenous apolipoprotein E-3. Eisenberg S, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):480–7

Oxidative modification of beta-very low density lipoprotein. Potential role in monocyte recruitment and foam cell formation. Parthasarathy S, et al. **Arteriosclerosis** 1989 May–Jun;9(3):398–404

Macrophages modify beta-VLDL by proteolysis and enhance subsequent lipid accumulation in arterial smooth muscle cells. Davis JB, et al. **Atherosclerosis** 1989 Jun; 77(2–3):203–8

beta-VLDL and acetylated-LDL binding to pigeon monocyte macrophages. Henson DA, et al. **Atherosclerosis** 1989 Jul;78(1):47–60

Effect of CS-514 (pravastatin) on VLDL-triglyceride kinetics in rats. Yoshino G, et al. **Atherosclerosis** 1988 Oct; 73(2–3):191–5

Secretion and storage of newly synthesized hepatic triacylglycerol fatty acids in vivo in different nutritional states and in diabetes. Duerden JM, et al. **Biochem J** 1988 Nov 1;255(3):929–35

Investigation of the role of serum lipoprotein-associated peroxides in Adriamycin cardiotoxicity. Release of reduced glutathione from rat hearts perfused with lipase-hydrolyzed very low density lipoprotein fractions obtained from Adriamycin-treated and control rats. Thayer WS. **Biochem Pharmacol** 1989 Jun 15;38(12):1923–9

Insulin, diabetes and hepatic very-low-density lipoprotein metabolism. Gibbons GF. **Biochem Soc Trans** 1989 Feb; 17(1):49–51 (43 ref.)

Contribution of cytoplasmic storage triacylglycerol to VLDL-triacylglycerol in isolated rat hepatocytes. Francone OL, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):28–36

Further studies on the mechanism of inhibition of intestinal chylomicron transport by Pluronic L-81. Nutting D, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):357–62

Interaction of beta-very-low-density lipoproteins with rat liver cells. Harkes L, et al. **Eur J Biochem** 1989 Mar 1; 180(1):241–8

Two mechanisms of CCl4-induced fatty liver: lipid peroxidation or covalent binding studied in cultured rat hepatocytes. Becker E, et al. **Free Radic Res Commun** 1987; 3(1–5):299–308

Structural domains of human apolipoprotein B-100. Differential accessibility to limited proteolysis of B-100 in low density and very low density lipoproteins. Chen GC, et al. **J Biol Chem** 1989 Aug 25;264(24):14369–75

In-vitro lipolysis of small very low density lipoproteins from human plasma. Dependence of characteristics of end products on the serum triglyceride concentration. Tornvall P, et al. **J Intern Med** 1989 May;225(5):359–61

Alpha-tocopherol is secreted from rat liver in very low density lipoproteins. Cohn W, et al. **J Lipid Res** 1988 Oct; 29(10):1359–66

Intrahepatic assembly of very low density lipoproteins: immunologic characterization of apolipoprotein B in lipoproteins and hepatic membrane fractions and its intracellular distribution. Davis RA, et al. **J Lipid Res** 1989 Aug;30(8):1185–96

Plasma lipoprotein metabolism in lean and in fat chickens produced by divergent selection for plasma very low density lipoprotein concentration. Griffin H, et al. **J Lipid Res** 1989 Aug;30(8):1243–50

Metabolic behavior of hepatic VLDL and plasma LDL apoB-100 in African green monkeys. Marzetta CA, et al. **J Lipid Res** 1989 Mar;30(3):357–70

Metabolism of n-VLDL and beta-VLDL in peritoneal macrophages from diabetic mice. Gheng G, et al. **J Tongji Med Univ** 1989;9(1):53–7

The role of lipoprotein lipase in metabolism of normolipidemic very low density lipoprotein by macrophages. Wang SP, et al. **J Tongji Med Univ** 1989; 9(1):48–53

Triglycerides and apoproteins in toxemia of pregnancy. Yamaguchi K. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec;40(12):1875–82

[Lipid metabolism disorders in alcoholism] Nakamura H. **Nippon Rinsho** 1988 Aug;46(8):1741–6 (Jpn)

[Lipoprotein lipase, diabetes mellitus and hypertriglyceridemia] Goldsztajn P. **Przegl Lek** 1988; 45(11):787–92 (40 ref.) (Pol)

[Cellular and extracellular lipid binding] Kopieczna-Grzebieniak E, et al. **Przegl Lek** 1988; 45(7):588–91 (20 ref.) (Pol)

PHARMACOKINETICS

Beta-very low density lipoprotein uptake in cultured fibroblasts and smooth muscle cells from Watanabe heritable hyperlipidemic rabbits. Wernette-Hammond ME, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):501–10

Transport pathways of beta-VLDL by aortic endothelium of normal and hypercholesterolemic rabbits. Vasile E, et al. **Atherosclerosis** 1989 Feb;75(2–3):195–210

PHARMACOLOGY

[Changes in the rosette-forming capacity of peripheral blood lymphocytes in patients with ischemic heart disease after administration of atherogenic lipoproteins] Vasil'chenko EM, et al. **Kardiologiia** 1989 Feb;29(2):53–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Enhanced lipoprotein lipase secretion from human monocyte-derived macrophages caused by hypertriglyceridemic very low density lipoproteins. Ishibashi S, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):650–5

Purification and identification of very low density lipoprotein toxicity preventing activity. Arbogast BW. **Atherosclerosis** 1988 Oct;73(2–3):259–67

Lipoproteins as factors in vessel tone and reactivity modulation. Vedernikov YuP, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):590–6

SECRETION

Head group specificity in the requirement of phosphatidylcholine biosynthesis for very low density lipoprotein secretion from cultured hepatocytes. Yao ZM, et al. **J Biol Chem** 1989 Jul 5;264(19):11373–80

Very low density lipoprotein secretion by cultured hepatocytes of rabbits fed purified or autoxidized cholesterol. Kosykh VA, et al. **Lipids** 1989 Feb; 24(2):109–15

[7-Ketocholesterol inhibits secretion of very low density lipoproteins by cultured human and rabbit hepatocytes] Podrez EA, et al. **Dokl Akad Nauk SSSR** 1989;305(3):743–6 (Rus)

LIPOSARCOMA

Liposarcoma of the larynx. Gertner R, et al. **J Laryngol Otol** 1988 Sep;102(9):838–41 (16 ref.)

Myxoid liposarcoma of the spermatic cord. McFadden DW. **J Surg Oncol** 1989 Feb;40(2):132–4 (12 ref.)

Liposarcoma of the ileocecal valve: a case report. Wood DL, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):62–4

[Liposarcoma of the spermatic cord. Review of the literature. Apropos of a case of myxoid liposarcoma] Ntarundenga U, et al. **J Urol (Paris)** 1989;95(2):107–10 (15 ref.) (Eng. Abstr.) (Fre)

[Liposarcoma: epidemiologic and etiopathogenic study] Maalej M, et al. **Tunis Med** 1989 Mar;67(3):177–81 (20 ref.) (Eng. Abstr.) (Fre)

[A case of retroperitoneal liposarcoma] Itoh S, et al. **Rinsho Hoshasen** 1989 Mar;34(3):383–6 (Eng. Abstr.) (Jpn)

ANALYSIS

Composition of fat in different types of liposarcomas in comparison with lipomas. Knipping G, et al. **Cancer Lett** 1989 Jul 1;46(1):51–6

COMPLICATIONS

Retroperitoneal myxoid liposarcoma presenting with hypercalcaemia [letter] Cross PA, et al. **J Clin Pathol** 1989 Mar;42(3):330–1

DIAGNOSIS

Skeletal metastases in liposarcoma detectable only by magnetic resonance imaging. Khurana JS, et al. **Clin Orthop** 1989 Jun;(243):204–7

MR imaging of liposarcomas: correlation of MR features and histology. London J, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):832–5

Primary liposarcoma of the orbit. Problems in the diagnosis and management of five cases. Jakobiec FA, et al. **Ophthalmology** 1989 Feb;96(2):180–91

[Spermatic cord sarcoma—case report and review of literature] Liu YT. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):476–7 (17 ref.) (Eng. Abstr.) (Chi)

[Diagnostic imaging in a case of mesenteric liposarcoma] Francone A, et al. **Clin Ter** 1989 Feb 15;128(3):173–6 (Eng. Abstr.) (Ita)

[Renal liposarcoma. Description of a case] Porpiglia F, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):41–3 (15 ref.) (Eng. Abstr.) (Ita)

[The retroperitoneal liposarcoma: a case report] Ohyabu Y, et al. **Hinyokika Kiyo** 1989 Feb;35(2):307–13 (Eng. Abstr.) (Jpn)

[An ultrasonographic picture of a growing pseudotumor in the abdominal cavity] Bielik J. **Cesk Radiol** 1989 May; 43(3):161–5 (Eng. Abstr.) (Slo)

[Liposarcoma of the pancreas. Report of a clinical case and

review of the literature] Milano C, et al. **Acta Gastroenterol Latinoam** 1988;18(2):133–8 (9 ref.) (Eng. Abstr.) (Spa)

ETIOLOGY

Radiation-induced sarcoma of the thyroid. Griem KL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):991–3

GENETICS

Chromosomal analysis and the classification of soft tissue sarcomas. Molenaar WM, et al. **Lab Invest** 1989 Feb; 60(2):266–74

PATHOLOGY

Cytologic features of well-differentiated sclerosing liposarcoma in aspirated samples. Shattuck MC, et al. **Acta Cytol** 1988 Nov-Dec;32(6):896–901

Primary myxoid liposarcoma of the orbit. Lane CM, et al. **Br J Ophthalmol** 1988 Dec;72(12):912–7

The prognostic value of histologic subtypes in primary extremity liposarcoma. Chang HR, et al. **Cancer** 1989 Oct 1;64(7):1514–20

Juxtacortical liposarcoma. A case report and review of the literature. Kenan S, et al. **Clin Orthop** 1989 Jun;(243):225–9 (16 ref.)

Signet ring cell lymphoma simulating liposarcoma—a case report with brief review of literature. Mathur DR, et al. **Indian J Cancer** 1988 Mar;25(1):52–5 (6 ref.)

A clinicopathologic comparison of malignant fibrous histiocytoma and liposarcoma. Spanier SS, et al. **Instr Course Lect** 1989;38:407–17 (22 ref.)

Liposarcoma of the cord presenting at vasectomy counselling. Milner SM, et al. **J R Army Med Corps** 1989 Jun;135(2):86–7

Liposarcoma of hepatic hilum in childhood: report of a case and review of the literature. Soares FA, et al. **Med Pediatr Oncol** 1989;17(3):239–43 (27 ref.)

[Malignant para-testicular tumors. Apropos of 3 unusual cases] Mhiri MN, et al. **Ann Urol (Paris)** 1989;23(1):23–6 (Eng. Abstr.) (Fre)

[Liposarcoma: clinical study and therapeutic results (46 cases)] Maalej M, et al. **Tunis Med** 1989 Apr;67(4):231–6 (19 ref.) (Eng. Abstr.) (Fre)

[Liposarcoma of the spermatic cord (presentation of a case)] Salerno L, et al. **Ann Osp Maria Vittoria Torino** 1987–88; 30(1):101–6 (Eng. Abstr.) (Ita)

[Mediastinal neoplasms of mesenchymal origin] Bortolani EM, et al. **Minerva Chir** 1989 Apr 15;44(7):1163–6 (Eng. Abstr.) (Ita)

[Retroperitoneal liposarcoma. Clinical contributions] Scilletta B, et al. **Minerva Chir** 1988 Nov 30;43(22):1987–90 (Eng. Abstr.) (Ita)

[Giant liposarcoma of the spermatic cord: a case report] Sone M, et al. **Hinyokika Kiyo** 1989 Jan;35(1):147–51 (23 ref.) (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Retroperitoneal liposarcoma simulating a prolapsed intervertebral disc. A case report. Saadeddin M, et al. **Int Orthop** 1989;13(2):125–8

Case report 505: Malignant fibrous histiocytoma of thigh and liposarcoma in same lower extremity (synchronous lesions). Kuhlman JE, et al. **Skeletal Radiol** 1988;17(7):518–21

[Primary liposarcoma of the long bone (report of 3 cases)] Zhou WX. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):151–3 (Eng. Abstr.) (Chi)

RADIONUCLIDE IMAGING

Utility of 24 hour bone scan in evaluation of bone involvement by soft tissue sarcoma. Mekhmandarov S, et al. **Clin Nucl Med** 1988 Sep;13(9):649–51

SECONDARY

Mediastinal involvement by myxoid liposarcoma. McLean TR, et al. **Ann Thorac Surg** 1989 Jun;47(6):920–1

Cardiac metastasis from a myxoid liposarcoma [letter] Ozoux JP, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):668–9

Metastatic liposarcoma of the brain with response to chemotherapy: case report. Haft H, et al. **Neurosurgery** 1988 Dec;23(6):777–80

SURGERY

Choice of surgical approach in orbital space occupations—an interdisciplinary problem. Heesen J, et al. **Neurosurg Rev** 1988;11(3–4):239–44

[Myxoliposarcoma on the abdominal cavity] Deredzhain A. **Khirurgiia (Sofiia)** 1989;42(1):87–90 (Bul)

[Liposarcoma of the ischiorectal fossa, an unusual tumoral site] Long Pretz P, et al. **Acta Chir Belg** 1988 May-Jun; 88(3):151–4 (Eng. Abstr.) (Fre)

[Is conservative treatment legitimate in recurrent liposarcoma of the limbs?] Fourrier P, et al. **Chirurgie** 1988;114(4):344–6 (Eng. Abstr.) (Fre)

[Retroperitoneal liposarcoma. Report of 3 cases] Bortolani E, et al. **Minerva Chir** 1988 Nov 15;43(21):1875–80 (Eng. Abstr.) (Ita)

[A case of liposarcoma] Macripò G, et al. **Minerva Chir** 1988 Apr 15;43(7):645–8 (Eng. Abstr.) (Ita)

THERAPY

Sarcomas of the retroperitoneum and genitourinary tract. Zhang G, et al. **J Urol** 1989 May;141(5):1107–10

Myelodysplastic syndrome and acute leukaemia following treatment of soft tissue sarcoma. de Graeff A, et al. **Neth J Med** 1989 Jun;34(5–6):251–7 (15 ref.)

[Liposarcoma] Rosen A, et al. **Harefuah** 1989 Apr 16; 116(8):410–3 (Eng. Abstr.) (Heb)

LIPOSOMES

The differential effect of liposomal amphotericin B on human erythrocytes and promastigotes of Leishmania sp. Ramos H, et al. **Acta Cient Venez** 1988;39(2):135–9

Biotechnological applications of lipid microstructures. Based on the proceedings of the Workshop on Technological Applications of Phospholipid Bilayers, Vesicles, and Thin Films, January 5–9, 1986, Tenerife, Canary Islands; and the Workshop on Biotechnological Applications of Membrane Studies, October 18–22, 1987, San Sebastian, Spain. **Adv Exp Med Biol** 1988;238:1–397

Progress in development of synthetic erythrocytes made by encapsulation of hemoglobin. Djordjevich L, et al. **Adv Exp Med Biol** 1988;238:171–97 (34 ref.)

Liposome-encapsulated hemoglobin: a synthetic red cell. Farmer MC, et al. **Adv Exp Med Biol** 1988;238:161–70

Liposome-based immunoassays for detection of small and large molecules. Gaber BP, et al. **Adv Exp Med Biol** 1988; 238:209–14

The interaction of coenzyme Q and vitamin E with multibilayer liposomes. Gomez-Fernandez JC, et al. **Adv Exp Med Biol** 1988;238:127–39

Surfactant-induced liposome fusion: molecular mechanisms and biotechnological applications. Gofii FM, et al. **Adv Exp Med Biol** 1988;238:81–103

Liposomes as a drug delivery system: optimization studies. Gregoriadis G. **Adv Exp Med Biol** 1988;238:151–9 (36 ref.)

Stabilization of small, unilamellar phospholipid vesicles by sucrose during freezing and dehydration. Hauser H, et al. **Adv Exp Med Biol** 1988;238:71–80

Some structural and functional properties of hemoglobin-containing liposomes (hemosomes), a potential red blood cell substitute. Szebeni J, et al. **Adv Exp Med Biol** 1988;238:199–208

Development of membrane-based biosensors: measurement of current from photocycling bacteriorhodopsin on patch clamp electrodes. Yager P. **Adv Exp Med Biol** 1988; 238:257–67

Use of liposomes as injectable-drug delivery systems. Ostro MJ, et al. **Am J Hosp Pharm** 1989 Aug;46(8):1576–87 (90 ref.)

Transfer of phosphatidic acid from liposomes to cells is collision dependent. Longmuir KJ, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C522–31

Sedimentation field flow fractionation of fused unilamellar vesicles: comparison with electron microscopy and gel filtration. Dreyer R, et al. **Anal Biochem** 1988 Dec; 175(2):433–41

Generic liposome reagent for immunoassays. Plant AL, et al. **Anal Biochem** 1989 Feb 1;176(2):420–6

Quantitation of Ca2+ uptake by Arsenazo III-loaded liposomes. Sokolove PM, et al. **Anal Biochem** 1989 Mar; 177(2):402–6

Liposomes of enviroxime and phosphatidylcholine: definition of the drug-phospholipid interactions. Garcon NM, et al. **Antiviral Res** 1989 Mar;11(2):89–98

Liposomes and their potential in oral cholera vaccines. Chaicumpa W, et al. **Asian Pac J Allergy Immunol** 1988 Dec;6(2):70–6 (49 ref.)

Further studies of Mycoplasma gallisepticum serum plate agglutination antigen grown in medium with artificial liposomes substituting for serum. Ahmad I, et al. **Avian Dis** 1989 Jan-Mar;33(1):140–9

Production and metabolism of cytotoxic phospholipids generated during incubation of liposomes with oxyhemoglobin. Inoue K, et al. **Basic Life Sci** 1988; 49:291–300

The mechanism of quinone formation from carcinogenic benzo[a]pyrene mediated by lipid peroxidation in liposomal suspension. Terao J, et al. **Basic Life Sci** 1988;49:769–72

Aggregation of calcium ionophore (A23187) in phospholipid vesicles. Balasubramanian SV, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):891–7

Phospholipid bilayers enhance the stability of leukotriene A4 and epoxytetraenes: stabilization of eicosanoids by liposomes. Fiore S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):477–81

Preparation of EGF labeled liposomes and their uptake by hepatocytes. Ishii Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):732–6

An Na-23 and P-31 NMR investigation of sonicated cardiolipin sodium salt in aqueous medium. Lai A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):979–86

Characterization of plasma-stabilized liposomes composed of dioleoylphosphatidylethanolamine and oleic acid. Liu DX, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):326–33

Abscisic acid enhances aggregation and fusion of phospholipid vesicles. Stillwell W, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):511–6

Iron binding to alpha-tocopherol-containing phospholipid liposomes. Stoyanovsky DA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):834–8

Controlled human RBC modifications affecting the binding of cationic liposomes. Di Giulio A, et al. **Biochem Int** 1988 Jun;16(6):999–1007

Fusion of phosphatidylcholine liposomes induced by polyethylene glycol. Mishra RK, et al. **Biochem Int** 1988 Jun;16(6):1137–44

Effect of pH on the interaction of botulinum neurotoxins A, B and E with liposomes. Montecucco C, et al. **Biochem J** 1989 Apr 1;259(1):47–53

Entrapment of high-molecular-mass DNA molecules in liposomes for the genetic transformation of animal cells. Szelei J, et al. **Biochem J** 1989 Apr 15;259(2):549–53

Partition coefficients of dopamine antagonists in brain membranes and liposomes. Oliveira CR, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2113–20

The use of liposomes in the search for an understanding of the significance of membrane lipid diversity. de Gier J. **Biochem Soc Trans** 1988 Dec;16(6):912–4

Liposomes and erythrocytes as drug carriers in vivo. Nicolau C. **Biochem Soc Trans** 1988 Dec;16(6):917–21

Liposome formation and properties: an evolutionary profile. Papahadjopoulos D. **Biochem Soc Trans** 1988 Dec; 16(6):910–2 (43 ref.)

Liposomes: from membrane model to therapeutic applications. Patel HM, et al. **Biochem Soc Trans** 1988 Dec; 16(6):909–10

Liposomes as carriers for a human malaria sporozoite vaccine. Richards RL, et al. **Biochem Soc Trans** 1988 Dec; 16(6):921–2

Functional reconstitution of the olfactory membrane: incorporation of the olfactory adenylate cyclase in liposomes. Anholt RR. **Biochemistry** 1988 Aug 23; 27(17):6464–8

Conformations and orientations of a signal peptide interacting with phospholipid monolayers. Cornell DG, et al. **Biochemistry** 1989 Apr 4;28(7):2789–97

pH-dependent bilayer destabilization and fusion of phospholipidic large unilamellar vesicles induced by diphtheria toxin and its fragments A and B. Defrise-Quertain F, et al. **Biochemistry** 1989 Apr 18; 28(8):3406–13

Functional reconstitution of the bovine brain GABAA receptor from solubilized components. Dunn SM, et al. **Biochemistry** 1989 Mar 21;28(6):2545–51

Membrane fusion and inverted phases. Ellens H, et al. **Biochemistry** 1989 May 2;28(9):3692–703

Rotational motion of yeast cytochrome oxidase in phosphatidylcholine complexes studied by saturation-transfer electron spin resonance. Fajer P, et al. **Biochemistry** 1989 Jun 27;28(13):5634–43

Interactions of colicin A domains with phospholipid monolayers and liposomes: relevance to the mechanism of action. Frenette M, et al. **Biochemistry** 1989 Mar 21; 28(6):2509–14

Dynamics of proton diffusion within the hydration layer of phospholipid membrane. Gutman M, et al. **Biochemistry** 1989 Apr 4;28(7):2936–40

Phospholipid asymmetry in large unilamellar vesicles induced by transmembrane pH gradients. Hope MJ, et al. **Biochemistry** 1989 May 16;28(10):4181–7

Spontaneous phosphatidylcholine transfer by collision between vesicles at high lipid concentration. Jones JD, et al. **Biochemistry** 1989 Jan 10;28(1):129–34

The membrane as an environment of minimal interconversion. A circular dichroism study on the solvent dependence of the conformational behavior of gramicidin in diacylphosphatidylcholine model membranes. Killian JA, et al. **Biochemistry** 1988 Jun 28;27(13):4848–55

Fluorescence indicates a calcium-dependent interaction between the lipopeptide antibiotic LY146032 and phospholipid membranes. Lakey JH, et al. **Biochemistry** 1988 Jun 28;27(13):4639–45

Fourier transform infrared study of fully hydrated dimyristoylphosphatidylglycerol. Effects of Na+ on the sn-1' and sn-3' headgroup stereoisomers. Lotta TI, et al. **Biochemistry** 1988 Oct 18;27(21):8158–69

Spontaneous vesiculation of large multilamellar vesicles composed of saturated phosphatidylcholine and phosphatidylglycerol mixtures. Madden TD, et al. **Biochemistry** 1988 Nov 29;27(24):8724–30

Mechanism of protein-induced membrane fusion: fusion of phospholipid vesicles by clathrin associated with its membrane binding and conformational change. Maezawa S, et al. **Biochemistry** 1989 Feb 7;28(3):1422–8

Synexin enhances the aggregation rate but not the fusion rate of liposomes. Meers P, et al. **Biochemistry** 1988 Jun 14;27(12):4430–9

Free fatty acid enhancement of cation-induced fusion of liposomes: synergism with synexin and other promoters of vesicle aggregation. Meers P, et al. **Biochemistry** 1988 Sep 6;27(18):6784–94

Change in membrane fluidity induced by lectin-mediated phase separation of the membrane and agglutination of phospholipid vesicles containing glycopeptides. Ohtoyo T, et al. **Biochemistry** 1988 Aug 23;27(17):6458–63

Interaction of diacylglycerols with phosphatidylcholine vesicles as studied by differential scanning calorimetry and fluorescence probe depolarization. Ortiz A, et al. **Biochemistry** 1988 Dec 13;27(25):9030–6

The effect of gentamicin on the biophysical properties of phosphatidic acid liposomes is influenced by the O-C =

O group of the lipid. Ramsammy LS, et al. **Biochemistry** 1988 Oct 18;27(21):8249–54

Structural changes in vesicle membranes and mixed micelles of various lipid compositions after binding of different bile salts. Schubert R, et al. **Biochemistry** 1988 Nov 29; 27(24):8787–94

Binding of a neuropeptide, substance P, to neutral and negatively charged lipids. Seelig A, et al. **Biochemistry** 1989 Mar 21;28(6):2490–6

Physiological levels of diacylglycerols in phospholipid membranes induce membrane fusion and stabilize inverted phases. Siegel DP, et al. **Biochemistry** 1989 May 2; 28(9):3703–9

Membrane fusion activity of influenza virus. Effects of gangliosides and negatively charged phospholipids in target liposomes. Stegmann T, et al. **Biochemistry** 1989 Feb 21; 28(4):1698–704

Lipid–protein interactions mediate the photochemical function of rhodopsin. Wiedmann TS, et al. **Biochemistry** 1988 Aug 23;27(17):6469–74

Osmoelastic coupling in biological structures: decrease in membrane fluidity and osmophobic association of phospholipid vesicles in response to osmotic stress. Yamazaki M, et al. **Biochemistry** 1989 May 2;28(9):3710–5

Simultaneous optical measurement of osmotic and diffusional water permeability in cells and liposomes. Ye RG, et al. **Biochemistry** 1989 Jan 24;28(2):824–9

Effect of the asymmetric Ca2+ distribution on the bilayer properties of phosphatidylcholine–sonicated vesicles. Bakás LS, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):352–60

Effects of free fatty acids and transition temperature on the stability of dry liposomes. Crowe JH, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):7–10

Preparation of liposomes entrapping a high specific activity of 111In3+–bound inulin. Essien H, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):329–36

Intermediary structures during membrane fusion as observed by cryo–electron microscopy. Frederik PM, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):275–8

Physical biochemistry of a liposomal amphotericin B mixture used for patient treatment. Grant CW, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):11–20

The partition and distribution of porphyrins in liposomal membranes. A spectroscopic study. Gross E, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):118–22

Effects of non–electrolyte molecules with anesthetic activity on the physical properties of DMPC multilamellar liposomes. Hitzemann RJ. **Biochim Biophys Acta** 1989 Aug 7;983(2):205–11

Preparation of hemoglobin–containing liposomes using octyl glucoside and octyltetraoxyethylene. Jopski B, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):79–84

Reorientational dynamics in lipid vesicles and liposomes studied with ESR: effects of hydration, curvature and unsaturation. Korstanje LJ, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):196–204

Role of cholesterol in the stability of pH–sensitive, large unilamellar liposomes prepared by the detergent–dialysis method. Liu D, et al. **Biochim Biophys Acta** 1989 Jun 6; 981(2):254–60

The effects of 2H2O on the phase transition of large unilamellar vesicle (LUV) suspensions as detected by ultrasound spectroscopy and electron spin resonance. Ma LD, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):283–92

Liposome-dependent delivery of pteridine antifolates: a two-compartment growth inhibition assay for evaluating drug leakage and metabolism. Ng KY, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):261–8

Effects of antineoplastic ether lipids on model and biological membranes. Noseda A, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):92–100

Persistence at low temperature of the P beta' ripple in dipalmitoylphosphatidylcholine multilamellar vesicles containing either glycosphingolipids or cholesterol. Rock P, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):347–51

Dehydration–rehydration vesicle methodology facilitates a novel approach to antibody binding to liposomes. Senior J, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):58–62

Quantitation of phospholipid vesicles and their cholesterol content in human bile by quasi–elastic light scattering. Sömjen GJ, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):265–70

Liposomes prepared dynamically by interactions between bile salt and phospholipid molecules. Son K, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):288–94

Basic amphipathic helical peptides induce destabilization and fusion of acidic and neutral liposomes. Suenaga M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):143–50

Aqueous two–phase polymer partitioning of lipid vesicles of defined size and composition. Tilcock C, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):208–14

Covalent coupling of sugars to liposomes. Weissig V, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):54–7

New phases of DPPC/water mixtures. Yang CP, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):101–4

Changes in surface capacitance and conductance parallel to phospholipid membranes associated with phase transition: effects of halothane. Yoshida T, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):253–6

Secondary structure changes of diphtheria toxin interacting with asolectin liposomes: an infrared spectroscopy study. Cabiaux V, et al. **Biochimie** 1989 Jan;71(1):153–8

Phagocytosis by guinea pig polymorphonuclear leukocytes of liposomes stabilized with polysaccharides. Atsuta Y, et al. **Biomater Artif Cells Artif Organs** 1989;17(2):125–35

Hemodynamic effects of exchange transfusions with liposome–encapsulated hemoglobin. Miller IF, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):281–8

Factors influencing the in vitro stability of artificial red blood cells based on hemoglobin–containing liposomes. Szebeni J, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):301–12

Nuclear magnetic resonance spectroscopic studies of interaction of bis–GMA analogues with phosphatidylcholine liposomes as a model for biomembranes. Fujisawa S, et al. **Biomaterials** 1989 May; 10(4):269–72

Preparation and properties of large octylglucoside dialysis/adsorption liposomes. Schwarz D, et al. **Biomed Biochim Acta** 1988;47(7):609–21

The liquid condensed diffusional transition of dipalmitoylphosphoglycerocholine in monolayers. Denicourt N, et al. **Biophys Chem** 1989 Mar;33(1):63–70

Conformational change of poly(L–lysine) induced by lipid vesicles of dilauroylphosphatidic acid. Fukushima K, et al. **Biophys Chem** 1988 Jul 15;30(3):237–44

Effects of random copolymers of lysine on the thermotropic behaviour of dipalmitoylphosphatidylglycerol vesicles. A fluorescence anisotropy study. Houbre D, et al. **Biophys Chem** 1988 Jul 15;30(3):245–55

Fusion of native or reconstituted membranes to liposomes, optimized for single channel recording. Correa AM, et al. **Biophys J** 1988 Sep;54(3):569–75

Continuous fluorescence microphotolysis of anthracene–labeled phospholipids in membranes. Theoretical approach of the simultaneous determination of their photodimerization and lateral diffusion rates. Ferrières X, et al. **Biophys J** 1989 Jun;55(6):1081–91

delta pH–induced fluorescence quenching of 9–aminoacridine in lipid vesicles is due to excimer formation at the membrane. Grzesiek S, et al. **Biophys J** 1989 Jun; 55(6):1101–9

Lysophosphatidylcholine stabilizes small unilamellar phosphatidylcholine vesicles. Phosphorus–31 NMR evidence for the "wedge" effect. Kumar VV, et al. **Biophys J** 1989 Apr;55(4):789–92

An intramolecular hydrogen bond with large proton polarizability within the head group of phosphatidylserine. An infrared investigation. Leberle K, et al. **Biophys J** 1989 Apr;55(4):637–48

Quenching of fluorescence of pyrene–substituted lecithin by tetracyanoquinodimethane in liposomes. Lemmetyinen H, et al. **Biophys J** 1989 May;55(5):885–95

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

Proton flux in large unilamellar vesicles in response to membrane potentials and pH gradients. Redelmeier TE, et al. **Biophys J** 1989 Aug;56(2):385–93

Effects of normalization errors on size distributions obtained from dynamic light scattering data. Ruf H. **Biophys J** 1989 Jul;56(1):67–78

Evaluation of the thermal coefficient of the resistance to fluorophore rotation in model membranes. Scarlata SF. **Biophys J** 1989 Jun;55(6):1215–23

Dynamic imaging of lateral diffusion by electron spin resonance and study of rotational dynamics in model membranes. Effect of cholesterol. Shin YK, et al. **Biophys J** 1989 Mar;55(3):537–50

Determination of the structure of a membrane–incorporated ion channel. Solid–state nuclear magnetic resonance studies of gramicidin A. Smith R, et al. **Biophys J** 1989 Aug; 56(2):307–14

Order and dynamics in the lamellar L alpha and in the hexagonal HII phase. Dioleoylphosphatidylethanolamine studied with angle–resolved fluorescence depolarization. van Langen H, et al. **Biophys J** 1989 May;55(5):937–47

Mixed monolayers of linear gramicidins and phospholipid. Surface pressure and surface potential studies. Van Mau N, et al. **Biophys J** 1988 Sep;54(3):563–7

Micellization and interactions with phospholipid vesicles of the lipopeptide iturin A, as monitored by time–resolved fluorescence of a D–tyrosyl residue. Harnois I, et al. **Biopolymers** 1988 Sep;27(9):1403–13

Ca2+ transport through lipid membrane by diastereomer cyclic octapeptides. Kimura S, et al. **Biopolymers** 1989 Jul; 28(7):1247–57

Effect of the mitogenic lectin concanavalin A on the thermotropic behavior of glycosyl–free cationic lipids and their mixtures with zwitterionic lipids. Lüscher–Mattli M. **Biopolymers** 1989 Apr;28(4):799–817

A lipid vesicle system for probing voltage–dependent peptide–lipid interactions: application to alamethicin channel formation. Woolley GA, et al. **Biopolymers** 1989 Jan;28(1):267–72

The reaction of bisulfite with liposomal membranes. Finch L, et al. **Biosci Rep** 1988 Oct;8(5):443–8

Induction of colony–stimulating activity in mice by injection of liposomes containing lipophilic muramyl peptide derivatives. Galelli A, et al. **Cancer Res** 1989 Feb 15; 49(4):810–5

Infrared study of phospholipid hydration. New thermodynamic data about the main phase transition of saturated phosphatidylcholine water multidispersions. Mellier A. **Chem Phys Lipids** 1989 Jul;51(1):23–9

Liposomes for targeted delivery of radioiodinated IVdU and 3–CH3–IVdU for non–invasive detection of herpes simplex virus encephalitis in mice. Stathaki S, et al. **Drug Des Deliv** 1988 Nov;3(3):223–34

Lipid microspheres as novel drug carriers. Mizushima Y. **Drugs Exp Clin Res** 1985;11(9):595–600

Chromatographic modeling of the release of particle–adsorbed molecules into synthetic alveolar surfactant. Schnert SS, et al. **Environ Health Perspect** 1988 Jun;78:185–95

Fluorescence quenching with lindane in small unilamellar L,alpha–dimyristoylphosphatidylcholine vesicles. Daems D, et al. **Eur Biophys J** 1989;17(1):25–36

HPLC study on the 'history' dependence of gramicidin A conformation in phospholipid model membranes. Bažó MC, et al. **FEBS Lett** 1989 Jun 19;250(1):67–71

Lipid peroxidation. Definition of experimental conditions for selective study of the propagation and termination phases. Tadolini B, et al. **Free Radic Res Commun** 1989; 5(4–5):245–52

Spin label and microcalorimetric studies of the interaction of DNA with unilamellar phosphatidylcholine liposomes. Vojčíková L, et al. **Gen Physiol Biophys** 1989 Aug; 8(4):399–406

Gentamicin alters membrane structure as shown by freeze–fracture of liposomes. Forge A, et al. **Hear Res** 1989 Jan;37(2):129–39

The use of liposomes as drug carriers in the immunotherapy of cancer. Fidler IJ. **Horiz Biochem Biophys** 1989;9:213–48 (75 ref.)

Liposomes as a drug delivery system in cancer chemotherapy. Gabizon A. **Horiz Biochem Biophys** 1989; 9:185–211 (118 ref.)

Liposomes as drug carriers in the therapy of infectious diseases. Juliano RL. **Horiz Biochem Biophys** 1989;9:249–79 (110 ref.)

Targeting of liposomes to liver cells. Scherphof GL, et al. **Horiz Biochem Biophys** 1989;9:281–91 (30 ref.)

Antibody responses to liposome–associated antigen. Vannier WE, et al. **Immunol Lett** 1988 Sep;19(1):59–64

Liposome–bearing glycosphingolipids: model membrane system for studying molecular mechanism of cell surface carbohydrate–mediated processes. Podder SK, et al. **Indian J Biochem Biophys** 1988 Feb–Apr;25(1–2):156–65

Preparation of clear solutions of reconstituted acetylcholinesterase. Effect of ionic strength and lipid/protein ratio. Gan L, et al. **Int J Pept Protein Res** 1989 Apr;33(4):268–72

Contrast–carrying liposomes. Current status. Seltzer SE. **Invest Radiol** 1988 Sep;23 Suppl 1:S122–5 (11 ref.)

Cellular uptake and processing of surfactant lipids and apoprotein SP–A by rat lung. Young SL, et al. **J Appl Physiol** 1989 Mar;66(3):1336–42

ESR study of proton transport across phospholipid vesicle membranes. Khramtsov VV, et al. **J Biochem Biophys Methods** 1989 May;18(3):237–46

Circular dichroism study of membrane dynamics focused on effect of monosialoganglíosides. Nishiya T, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):62–5

Ca2+–induced lateral phase separation in ternary mixtures of phosphatidic acid, phosphatidylcholine, and phosphatidylethanolamine inferred by calorimetry. Ohki K. **J Biochem (Tokyo)** 1988 Jul;104(1):14–7

Comparison of fluorescence characteristics of products of peroxidation of membrane phospholipids with those of products derived from reaction of malonaldehyde with glycine as a model of lipofuscin fluorescent substances. Shimasaki H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):761–6

A physicochemical study of the interaction of phosphatidylinositol with buprenorphine and naloxone. Reig F, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):533–49

The temporal sequence of events in the activation of phospholipase A2 by lipid vesicles. Studies with the monomeric enzyme from Agkistrodon piscivorus piscivorus. Bell JD, et al. **J Biol Chem** 1989 Jul 25; 264(21):12194–200

Effects of apolipoproteins A–IV and A–I on the uptake of phospholipid liposomes by hepatocytes. Bisgaier CL, et al. **J Biol Chem** 1989 Jan 15;264(2):862–6

Secondary structure of diphtheria toxin and its fragments interacting with acidic liposomes studied by polarized infrared spectroscopy. Cabiaux V, et al. **J Biol Chem** 1989 Mar 25;264(9):4928–38

Direct observation of singlet oxygen production by merocyanine 540 associated with phosphatidylcholine liposomes. Feix JB, et al. **J Biol Chem** 1988 Nov 25; 263(33):17247–50

Mechanism of vitamin A movement between rod outer segments, interphotoreceptor retinoid–binding protein, and liposomes. Ho MT, et al. **J Biol Chem** 1989 Jan 15; 264(2):928–35

Characterization of diphtheria toxin–induced lesions in liposomal membranes. An evaluation of the relationship between toxin insertion and "channel" formation. Jiang GS, et al. **J Biol Chem** 1989 Aug 15;264(23):13424–9

The importance of the amino terminus of the mitochondrial precursor protein apocytochrome c for translocation across model membranes. Jordi W, et al. **J Biol Chem** 1989 Feb 5;264(4):2292–301

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448–52

Conversion of soluble dopamine beta-hydroxylase to a membrane binding form. Taylor CS, et al. **J Biol Chem** 1989 Sep 15;264(26):15242–6

Drug delivery systems. 1. site-specific drug delivery using liposomes as carriers. Ranade VV. **J Clin Pharmacol** 1989 Aug;29(8):685–94 (90 ref.)

Iron loading modifies the fatty acid composition of cultured rat myocardial cells and liposomal vesicles: effect of ascorbate and alpha-tocopherol on myocardial lipid peroxidation. Link G, et al. **J Lab Clin Med** 1989 Sep; 114(3):243–9

Macrophage subset repopulation in the spleen: differential kinetics after liposome-mediated elimination. van Rooijen N, et al. **J Leukoc Biol** 1989 Feb;45(2):97–104

A simple method for reconstitution of CHO cell and human fibroblast acyl coenzyme A: cholesterol acyltransferase activity into liposomes. Cadigan KM, et al. **J Lipid Res** 1988 Dec;29(12):1683–92

Immunogenicity of ribonucleic acid–protein fraction of Mycobacterium tuberculosis encapsulated in liposomes. Pancholi P, et al. **J Med Microbiol** 1989 Jun;29(2):131–8

Pure lipid vesicles can induce channel-like conductances in planar bilayers. Woodbury DJ. **J Membr Biol** 1989 Jul; 109(2):145–50

Localization of an entrapped item within unilamellar vesicle compartments: use of ultrasound disruption as a procedure to separate aqueous phase and lipidic lamellae. Bakouche O, et al. **J Microencapsul** 1985 Jan–Mar;2(1):39–43

The topography of acetylcholinesterase in dimyristoylphosphatidylcholine liposomes. Barber RF, et al. **J Microencapsul** 1989 Jul–Sep;6(3):301–9

Fate of different kinds of liposomes containing dexamethasone palmitate after intra-articular injection into rabbit joints. Bonanomi MH, et al. **J Microencapsul** 1987 Jul–Sep;4(3):189–200

Large unilamellar lipid vesicles for use in therapeutic and diagnostic medicine. Freytag JW. **J Microencapsul** 1985 Jan–Mar;2(1):31–8

Artificial liposomes as a model for studying the lipid peroxidation effect of p-phenylene diamine. Gupta V, et al. **J Microencapsul** 1989 Jul–Sep;6(3):311–8

Determination of the encapsulation efficiency in liposomes obtained by the 'extruder method'. Hernández J, et al. **J Microencapsul** 1987 Oct–Dec;4(4):315–20

Application of 1H-n.m.r. to the design of liposomes for oral use. Synergistic activity of bile salts and pancreatic phospholipase A2 in the induced permeability of small unilamellar phospholipid vesicles. Hunt GR, et al. **J Microencapsul** 1984 Apr–Jun;1(2):113–22

Effect of liposome surface charge on the stability of technetium (99mTc) radiolabelled liposomes. Love WG, et al. **J Microencapsul** 1989 Jan–Mar;6(1):105–13

Preparation of microencapsulated liposomes, II. Systems containing nylon–gelatin and nylon–gelatin–acacia walling material. Nixon JR, et al. **J Microencapsul** 1989 Jan–Mar; 6(1):43–52

Preparation, characterization, therapeutic efficacy and toxicity of liposomes, containing the antitumour drug cis-dichlorodiamineplatinum(II). Reszka R, et al. **J Microencapsul** 1987 Jul–Sep;4(3):201–12

The preparation and characterization of lipid vesicles containing esters of sucrose and fatty acids. Schenk P, et al. **J Microencapsul** 1989 Jan–Mar;6(1):95–103

Lyophilized liposomes: a new method for long-term vesicular storage. Shulkin PM, et al. **J Microencapsul** 1984 Jan–Mar;1(1):73–80

Evidence that the effect of soya bean phosphatidylinositol–cholesterol–cyclosporin liposomes on the biosynthesis of acidic phospholipids in isolated subcellular membranes from rat liver and heart is attributable to the soya bean phosphatidylinositol–cholesterol liposomes. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Jan–Mar; 6(1):71–86

Preparation of microencapsulated liposomes. Yeung VW, et al. **J Microencapsul** 1988 Oct–Dec;5(4):331–7

Major histocompatibility complex-restricted and unrestricted activation of helper T cell lines by liposome-bound antigens. Walden P, et al. **J Mol Cell Immunol** 1986; 2(4):191–7

Liposomal encapsulation: making old and new drugs do new tricks. Brenner DE. **J Natl Cancer Inst** 1989 Oct 4; 81(19):1436–8

Binding of crotoxin, a presynaptic phospholipase A2 neurotoxin, to negatively charged phospholipid vesicles. Radvanyi F, et al. **J Neurochem** 1989 Oct;53(4):1252–60

Effects of Tween 80 and liposomes on the corneal permeability of anti-inflammatory steroids. Taniguchi K, et al. **J Pharmacobiodyn** 1988 Oct;11(10):685–93

Influence of the gel–liquid phase transition on hematoporphyrin triplet deactivation in liposomes. Ricchelli F, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):475–81

Cytotoxic liposomes: membrane interleukin 1 presented in multilamellar vesicles. Bakouche O, et al. **Lymphokine Res** 1988 Winter;7(4):445–56

Photoreactive lipids for the study of membrane-penetrating toxins. Montecucco C. **Methods Enzymol** 1988;165:347–57

Electron microscopy: assays involving freeze-fracture and freeze-etching. Tranum-Jensen J. **Methods Enzymol** 1988; 165:374–89

Protein–lipid interactions in biological membranes—spin label studies and physiological implications. Benga G. **Mol Aspects Med** 1988;10(3):201–22

Temperature-dependent osmotic permeability in glycoprotein containing liposomes. Neitchev VZ, et al. **Mol Biol Rep** 1988;13(2):85–9

Human choriogonadotropin entrapped into liposomes: characterization, biologic effects and interaction with purified mouse Leydig cells in vitro. Lorenzen A, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):227–38

Cationic liposome-mediated transfection. Felgner PL, et al. **Nature** 1989 Jan 26;337(6205):387–8

Dipalmitoylphosphatidylcholine liposomes reduce [3H]acetylcholine levels in an eserine-sensitive manner in rat cerebral cortical synaptosomes. Bottiglieri D, et al. **Neurochem Res** 1989 Feb;14(2):161–7

Neutrophil-mediated transport of liposomes across the Madin Darby canine kidney epithelial cell monolayer. Cho MJ, et al. **Pharm Res** 1989 Jan;6(1):78–84

The photophysics of merocyanine 540. A comparative study in ethanol and in liposomes. Aramendia PF, et al. **Photochem Photobiol** 1988 Aug;48(2):187–94

The effect of liposomes' membrane composition on the binding of the photosensitizers Hpd and photofrin II. Ehrenberg B, et al. **Photochem Photobiol** 1988 Oct; 48(4):461–6

The production of singlet molecular oxygen by zinc(II) phthalocyanine in ethanol and in unilamellar vesicles. Chemical quenching and photosensitization studies. Valduga G, et al. **Photochem Photobiol** 1988 Jul;48(1):1–5

1H-NMR relaxation study of the liposome—nuclei interaction. Boicelli A, et al. **Physiol Chem Phys Med NMR** 1988;20(4):273–9

The effect of zinc on iron-induced lipid peroxidation in different lipid systems including liposomes and micelles. Szebeni J, et al. **Physiol Chem Phys Med NMR** 1988; 20(3):205–11

Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA. Behr JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6982–6

Actin polymerization induces a shape change in actin-containing vesicles. Cortese JD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5773–7

Mechanism of spontaneous vesiculation. Hauser H. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5351–5

Cationic liposome-mediated RNA transfection. Malone RW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6077–81

Oxygen permeability of phosphatidylcholine—cholesterol membranes. Subczynski WK, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4474–8

Methodology for efficacy study of liposome bronchodilators in long duration experiments. Kamarei A, et al. **Proc West Pharmacol Soc** 1989;32:33–5

The liposome in pharmacology. McCalden TA. **Proc West Pharmacol Soc** 1989;32:101–2

Two-sided functional Na,K-ATPase–liposomes for characterizing the permeability and side of action of pump inhibitors. Rey HG, et al. **Prog Clin Biol Res** 1988; 268B:429–36

Conformation of alamethicin in phospholipid vesicles: implications for insertion models. Cascio M, et al. **Proteins** 1988;4(2):89–98

The role of liposomes in diagnostic imaging. Seltzer SE. **Radiology** 1989 Apr;171(1):19–21 (54 ref.)

Liposomal Gd-DTPA: preparation and characterization of relaxivity. Tilcock C, et al. **Radiology** 1989 Apr; 171(1):77–80

Hepatic metastases: liposomal Gd-DTPA-enhanced MR imaging. Unger EC, et al. **Radiology** 1989 Apr;171(1):81–5

Spontaneous vesicle formation in aqueous mixtures of single-tailed surfactants. Kaler EW, et al. **Science** 1989 Sep 22;245(4924):1371–4

Use of liposomes for protective immunisation against Crotalus durissus (tropical rattlesnake) venom. Freitas TV, et al. **Toxicon** 1989;27(3):341–7

[Liposomes: a promising future in dermatology] Handjani-Vila RM, et al. **Ann Dermatol Venereol** 1989; 116(5):423–30 (16 ref.) **(Fre)**

[Liposomes as drug carriers for cinchona alkaloids and as a model for the interaction of cinchona alkaloids with erythrocytes] Haab J, et al. **Arch Pharm (Weinheim)** 1988 Aug;321(8):451–5 (Eng. Abstr.) **(Ger)**

[International trends in the development of liposomes with reference to various patent situations] Schenk P, et al. **Pharmazie** 1988 Jul;43(7):457–63 (30 ref.) **(Ger)**

[Development of liposome-type biosensors and the application to clinical tests] Kamei H, et al. **Nippon Rinsho** 1988 Sep;46(9):2078–85 (13 ref.) **(Jpn)**

[A method of calculating the liposome membrane permeability using dialysis method] Ambartsumian TG, et al. **Biofizika** 1989 Jan–Feb;34(1):54–6 (Eng. Abstr.) **(Rus)**

[Aggregation of cardiolipin liposomes induced by monovalent cations] Atsagortsian AZ, et al. **Biofizika** 1989 Jan–Feb;34(1):49–53 (Eng. Abstr.) **(Rus)**

[Thermotropic behavior of liposomes from egg yolk lecithin, hydrogenized egg yolk lecithin and their mixtures] Makarova TB, et al. **Biofizika** 1988 Sep–Oct;33(5):787–93 (Eng. Abstr.) **(Rus)**

[The effect of calcium and magnesium ions on the interaction of calcium-binding proteins parvalbumin and alpha-lactalbumin with dipalmitoylphosphatidylcholine vesicles] Permiakov EA, et al. **Biofizika** 1988 May–Jun; 33(3):465–70 (Eng. Abstr.) **(Rus)**

[Ca 2+-dependent capture of small negatively charged liposomes by large unilamellar liposomes from phosphatidylcholine] Budker VG, et al. **Dokl Akad Nauk SSSR** 1989;305(6):1495–8 **(Rus)**

[Reconstruction of a purified and functionally active dihydropyridine-sensitive calcium channel into liposomes] Kostiuk PG, et al. **Dokl Akad Nauk SSSR** 1988; 301(6):1505–7 **(Rus)**

[Changes in geometric parameters of liposomes and plasma lipoproteins during enrichment with cholesterol] Voziian PA. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):81–4 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

A combination of hypothalamic phospholipid liposomes with trazodone for treatment of depression. An open controlled study. Giannelli A, et al. **Acta Psychiatr Scand** 1989 Jan; 79(1):52–8

Liposomes as carriers of antifungal drugs. Lopez-Berestein G. **Ann N Y Acad Sci** 1988;544:390–7

Amphotericin B encapsulated in liposomes administered to cancer patients. Meunier F, et al. **Ann N Y Acad Sci** 1988; 544:598–610

Incorporation of cis-dichlorobiscyclopentylamineplatinum (II) into liposomes enhances its uptake by ADJ/PC6A tumour cells: comparative effects of the free and liposome-incorporated drug on the cyclic 3'-5' nucleotide phosphodiesterase activity. Deliconstantinos G. **Anticancer Res** 1988 Nov–Dec;8(6):1275–8

Oral application of insulin encapsulated liposomes. Das N, et al. **Biochem Int** 1988 Jun;16(6):983–9

Inhibition of cell proliferation with antibody-targeted liposomes containing methotrexate-gamma-dimyristoylphosphatidylethanolamine. Noé C, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):253–60

Analysis of the effect of liposome encapsulation on the vesicant properties, acute and cardiac toxicities, and antitumor efficacy of doxorubicin. Balazsovits JA, et al. **Cancer Chemother Pharmacol** 1989;23(2):81–6

Production of multilamellar, small unilamellar and reverse-phase liposomes containing house dust mite allergens. Potential adjuvants in the immunotherapy of allergic disease. McWilliam AS, et al. **J Immunol Methods** 1989 Jul 6;121(1):53–60

Ocular disposition of inulin from single & multiple doses of positively charged multilamellar liposomes: evidence for alterations in tear dynamics and ocular surface characteristics. Lee VH, et al. **J Ocul Pharmacol** 1986 Fall; 2(4):353–64

Retention and distribution of liposome-entrapped [3H]methotrexate injected into normal or arthritic rabbit joints. Foong WC, et al. **J Pharm Pharmacol** 1988 Jul; 40(7):464–8

A liposomal MRI contrast agent: phosphatidylethanolamine-DTPA. Grant CW, et al. **Magn Reson Med** 1989 Aug;11(2):236–43

Externally triggered release of dye and drugs from liposomes into the eye. An in vitro and in vivo study. Khoobehi B, et al. **Ophthalmology** 1988 Jul;95(7):950–5

Liposomes as delivery system for doxorubicin in cancer chemotherapy. Storm G. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):288–90

The use of inhaled liposome formulations for drug delivery to the lungs and systemic circulation. Fielding RM. **Proc West Pharmacol Soc** 1989;32:103–6 (19 ref.)

Bronchodilator effects of some liposome formulations of metaproterenol sulfate in guinea pigs. McCalden TA, et al. **Proc West Pharmacol Soc** 1988;31:129–32

ADVERSE EFFECTS

Assessment of ocular irritability of liposome preparations. Taniguchi K, et al. **J Pharmacobiodyn** 1988 Sep; 11(9):607–11

ANALYSIS

Mechanism of fluorescence concentration quenching of carboxyfluorescein in liposomes: energy transfer to nonfluorescent dimers. Chen RF, et al. **Anal Biochem** 1988 Jul;172(1):61–77

Circular dichroism for the determination of amphotericin B binding to liposomes. Jullien S, et al. **Anal Biochem** 1988 Jul;172(1):197–202

Stability and fusion of lipid vesicles containing headgroup-modified analogues of phosphatidylethanolamine. Brown PM, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):181–90

Curvature and composition-dependent lipid asymmetry in phosphatidylcholine vesicles containing phosphatidylethanolamine and gangliosides. Thomas PD, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):85–90

Application of synthetic alkyl glycoside vesicles as drug carriers. III. Plasma components affecting stability of the vesicles. Kiwada H, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1841–6

Evidence of chemical instability of phospholipids in liposomes. Piraube C, et al. **Chem Pharm Bull (Tokyo)** 1988

Nov;36(11):4600-2

Effect of ethanol on dimyristoylphosphatidylcholine large unilamellar vesicles investigated by quasi-elastic light scattering and vibrational spectroscopy. Hantz E, et al. **Chem Phys Lipids** 1988 Dec;49(3):143-51

Comparison of steady-state fluorescence polarization and urea permeability of phosphatidylcholine and phosphatidylsulfocholine liposomes as a function of sterol structure. Pugh EL, et al. **Chem Phys Lipids** 1989 Apr; 50(1):43-50

Studies of fluorescence depolarization at high pressures of dimyristoylphosphatidylcholine liposomes containing poly(gamma-benzyl-L-glutamate). Tamura K, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):169-75

Oxidation of glycolipids in liposomes by galactose oxidase. Lampio A, et al. **Eur J Biochem** 1988 Dec 1;178(1):87-91

The immunopotentiating property of lipophilic muramyl dipeptide and its molecular state in liposomal membranes: plaque-forming cell responses and ESR studies. **Manabe** H, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):861-3

New high-performance liquid chromatography-based methodology for monitoring the conformational transitions of self-associating hydrophobic peptides, incorporated into liposomes. Bañó MC, et al. **J Chromatogr** 1988 Dec 23; 458:105-16

A new cytochemical method for ultrastructural detection of liposomes in tissues in vivo. Bugelski PJ, et al. **J Histochem Cytochem** 1989 Jun;37(6):843-51

Characterization of liposome suspensions by flow cytometry. Childers NK, et al. **J Immunol Methods** 1989 Apr 21; 119(1):135-43

Anion channels in giant liposomes made of endoplasmic reticulum vesicles from rat exocrine pancreas. Schmid A, et al. **J Membr Biol** 1988 Sep;104(3):275-82

Preparation and characteristics of dichloromethylene diphosphonate-containing liposomes. Classen E, et al. **J Microencapsul** 1986 Apr-Jun;3(2):109-14

On the use of Percoll as a marker for liposomes in electron microscopy of mouse spleen tissue. Cadd A, et al. **J Microencapsul** 1986 Oct-Dec;3(4):275-82

Characterization of temperature-dependent drug release from liposomes using electron spin resonance. Chan HC, et al. **J Pharm Sci** 1989 Apr;78(4):311-3

Separation of liposome populations differing in phosphoinositide content by chromatography on immobilized neomycin. Riaz M, et al. **J Pharm Sci** 1989 Feb;78(2):172-5

Interactions between aminoglycosides and phospholipids using liposomes: a possible mechanism of nephrotoxicity. Aramaki Y, et al. **Pharm Res** 1989 May;6(5):362-6

Correlation of partitioning of nitroimidazoles in the n-octanol/saline and liposome systems with pharmacokinetic parameters and quantitative structure-activity relationships (QSAR). Betageri GV, et al. **Pharm Res** 1989 May;6(5):399-403

Reconstitution of glucose transport activity in liposomes to test proposed modulators of the transporter. Wheeler TJ. **Prog Clin Biol Res** 1989;292:349-58

[Hemoglobin niosomes. II. Preparation, functional and physico-chemical properties, and stability] Moser P, et al. **Pharm Acta Helv** 1989;64(7):192-202 (Eng. Abstr.) **(Fre)**

[Drug transport through artificial lipoid membranes. 22. Amplitude of ultrasonicated liposomes as a model system for investigations of drug transport] Schneider S, et al. **Pharmazie** 1988 Sep;43(9):630-1 (Eng. Abstr.) **(Ger)**

[ESR-spectroscopy of cytochrome P-450 LM2 in the soluble and membrane-bound state] Uvarov VIu, et al. **Biofizika** 1988 Jul-Aug;33(4):719-20 (Eng. Abstr.) **(Rus)**

[Translocation of ribonuclease through the membrane of liposomes of various lipid composition] Ianopol'skaia ND, et al. **Biokhimiia** 1988 May;53(5):781-5 (Eng. Abstr.) **(Rus)**

[Localization of fluorescent analogs of cholesterol and its esters in lipid models of membranes and lipoproteins] Kurek NK, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):67-74 (Eng. Abstr.) **(Rus)**

[Effect of the conditions of ultrasonic treatment on the characteristics of forming liposomes] Lebed' OI, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):96-101 (Eng. Abstr.) **(Rus)**

[The spatial interrelationships between influenza virus hemagglutinin and the lipid phase in the liposomal membrane] Guliako AA, et al. **Vopr Virusol** 1989 Mar-Apr; 34(2):145-9 (Eng. Abstr.) **(Rus)**

BLOOD

Rapid assessment of liposomal stability in blood by an aqueous nitroxide spin label. Chan HC, et al. **J Biochem Biophys Methods** 1989 Jun;18(4):271-6

DIAGNOSTIC USE

Enhanced fluorescence in indirect immunophenotyping by the use of fluorescent liposomes. Gray AG, et al. **J Immunol Methods** 1989 Jul 6;121(1):1-7

Homogeneous immunoassay for alpha 2 plasmin inhibitor (alpha 2PI) and alpha 2PI-plasmin complex. Application of a sandwich liposome immune lysis assay (LILA) technique. Hosoda K, et al. **J Immunol Methods** 1989 Jul 6;121(1):121-8

IMMUNOLOGY

Stability in biological fluids and clearance of immunoliposomes. Weckenmann HP, et al. **Arzneimittelforschung** 1989 Mar;39(3):415-20

Prostaglandin and thromboxane in liposomes: suppression of the primary immune response to liposomal antigens. Wassef NM, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):565-72

Rat hepatic microsomal cytochrome b5. A simple large-scale purification procedure and antibody production by antigen-containing liposomes. Carlsen J, et al. **Biochem J** 1988 Dec 15;256(3):1051-4

Immunospecific targeting of cytosine arabinonucleoside-containing liposomes to the idiotype on the surface of a murine B-cell tumor in vitro and in vivo. Bankert RB, et al. **Cancer Res** 1989 Jan 15;49(2):301-8

Comparative effect on humoral response of four different proteins covalently linked on BSA-containing liposomes. Shahum E, et al. **Cell Immunol** 1989 Oct 1;123(1):36-43

Liposomes as oral adjuvants. Michalek SM, et al. **Curr Top Microbiol Immunol** 1989;146:51-8 (23 ref.)

Immunoadjuvant action of liposomes: comparison with other adjuvants. Gregoriadis G, et al. **Immunol Lett** 1989 Feb; 20(3):237-40

Mannose-mediated targeted immunoadjuvant action of liposomes. Garcon N, et al. **Immunology** 1988 Aug; 64(4):743-5

Immunopotentiation of the humoral response by liposomes: encapsulation versus covalent linkage. Shahum E, et al. **Immunology** 1988 Oct;65(2):315-7

The role of macrophages in the immunoadjuvant action of liposomes: effects of elimination of splenic macrophages on the immune response against intravenously injected liposome-associated albumin antigen. Su D, et al. **Immunology** 1989 Mar;66(3):466-70

Stimulation of liposome-induced humoral immune responses by non-ionic block polymer surfactants in Xid mice. Zigterman GJ, et al. **Immunology** 1988 Sep;65(1):37-42

Differential effects of liposome-incorporation on liver macrophage activating potencies of rough lipopolysaccharide, lipid A, and muramyl dipeptide. Differences in susceptibility to lysosomal enzymes. Daemen T, et al. **J Immunol** 1989 Apr 1;142(7):2469-74

Effect of liposome encapsulation on antigen presentation in vitro. Comparison of presentation by peritoneal macrophages and B cell tumors. Dal Monte P, et al. **J Immunol** 1989 Mar 1;142(5):1437-43

Liposome-associated tumor necrosis factor retains bioactivity in the presence of neutralizing anti-tumor necrosis factor antibodies. Debs RJ, et al. **J Immunol** 1989 Aug 15; 143(4):1192-7

Liposomes can function as targets for natural killer cytotoxic factor but not for tumor necrosis factor. Roozemond RC, et al. **J Immunol** 1989 Feb 15;142(4):1209-16

A procedure for the efficient incorporation of wild-type lipopolysaccharide into liposomes for use in immunological studies. Dijkstra J, et al. **J Immunol Methods** 1988 Nov 10;114(1-2):197-205

Humoral immune response elicited in rats by measles viral membrane antigens presented in liposomes and ISCOMs. Mougin B, et al. **Vaccine** 1988 Oct;6(5):445-9

[Entrapping of hydrophobized plague capsular antigen into large unilamellar liposomes] Zakrevskii VI, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):89-93 (Eng. Abstr.) **(Rus)**

METABOLISM

Use of enzyme label for quantitative evaluation of liposome adhesion on cell surface: studies with J774 macrophage monolayers. Trubetskoy VS, et al. **Anal Biochem** 1988 Jul; 172(1):185-9

The surface charge of membranes modulates the interaction with the anthracycline daunomycin. Ferragut JA, et al. **Ann N Y Acad Sci** 1988;551:443-5

Specific accumulation of technetium-99m radiolabelled, negative liposomes in the inflamed paws of rats with adjuvant induced arthritis: effect of liposome size. Love WG, et al. **Ann Rheum Dis** 1989 Feb;48(2):143-8

Synergistic inhibition of oxidation in dispersed phosphatidylcholine liposomes by a combination of vitamin E and cysteine. Motoyama T, et al. **Arch Biochem Biophys** 1989 May 1;270(2):655-61

Optimisation of the covalent binding of monoclonal antibodies to liposomes. Weckenmann HP, et al. **Arzneimittelforschung** 1988 Nov;38(11):1556-63

Molecular dynamics of antitumor ether-linked phospholipids in model membranes: a spin-label study. Lai CS, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1189-95

Non-leaky vesiculation of large unilamellar vesicles (LUV) induced by plasma high density lipoproteins (HDL): detection by HPLC. Tischler U, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1219-26

Liposomes as carriers of poorly water-soluble substrates: linear modelling of membrane systems with catalytic or binding sites of different faceedness. Significance of experimental membrane partition coefficients and of kinetic and equilibrium parameters [published erratum appears in Biochem J 1988 Nov 1;255(3):following 1061] Heirwegh KP, et al. **Biochem J** 1988 Aug 15;254(1):101-8

The effect of non-esterified fatty acids on the proton-pumping cytochrome c oxidase reconstituted into liposomes. Labonia N, et al. **Biochem J** 1988 Aug 15; 254(1):139-45

Calcium-independent activation of prothrombin on membranes with positively charged lipids. Rosing J, et al. **Biochemistry** 1988 Dec 13;27(25):9048-55

Interaction of insulin receptors with lipid bilayers and specific and nonspecific binding of insulin to supported membranes. Sui SF, et al. **Biochemistry** 1988 Sep 20;27(19):7463-9

Covalent modification of serum transferrin with phospholipid and incorporation into liposomal membranes. Afzelius P, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):231-8

Uptake and processing of immunoglobulin-coated liposomes by subpopulations of rat liver macrophages. Derksen JT, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):127-36

Membrane-phorbol ester interactions monitored by circular dichroism. Frézard F, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):316-20

Preparation of neo-galactosylated liposomes and their interaction with mouse peritoneal macrophages. Haensler J, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):95-105

Interaction of trichorzianines A and B with model membranes and with the amoeba Dictyostelium. el Hajji M, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):97-104

The characterisation of liposomes with covalently attached proteins. Hutchinson FJ, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):17-24

Calcium translocation in liposome systems modeled on the mitochondrial inner membrane. Kester MB, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):127-33

Membrane potential in liposomes measured by the transmembrane distribution of 86Rb+, tetraphenylphosphonium or triphenylmethylphosphonium: effect of cholesterol in the lipid bilayer. Nakazato K, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):143-50

Interaction of clathrin coat proteins with unilamellar and multilamellar vesicles of phosphatidylcholine. Privat JP, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):257-67

Action of lead(II) and aluminium (III) ions on iron-stimulated lipid peroxidation in liposomes, erythrocytes and rat liver microsomal fractions. Quinlan GJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):196-200

The polyene antibiotic amphotericin B acts as a Ca2+ ionophore in sterol-containing liposomes. Ramos H, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):303-6

Effect of cholesterol on the uptake and intracellular degradation of liposomes by liver and spleen; a combined biochemical and gamma-ray perturbed angular correlation study. Roerdink FH, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):234-40

Synergistic interaction between vitamin E and the bile pigments bilirubin and biliverdin. Stocker R, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):238-44

Temperature-sensitive release of adriamycin, an amphiphilic antitumor agent, from dipalmitoylphosphatidylcholine-cholesterol liposomes. Tomita T, et al. **Biochim Biophys Acta** 1989 Jan 30; 978(2):185-90

Effects of three proposed inhibitors of adipocyte glucose transport on the reconstituted transporter. Wheeler TJ. **Biochim Biophys Acta** 1989 Mar 13;979(3):331-40

Saturable and unsaturable binding of a volatile anesthetic enflurane with model lipid vesicle membranes. Yoshida T, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):287-93

Liposome-encapsulated hemoglobin: oxygen binding properties and respiratory function. Farmer MC, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):289-99

Liposome/heme as a totally synthetic oxygen carrier. Tsuchida E, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1-3):313-9

Nuclear magnetic resonance spectroscopic studies of the interaction of methyl methacrylate and ethylene dimethacrylate with phosphatidylcholine liposomes as a model for biomembranes. Fujisawa S, et al. **Biomaterials** 1989 Jan;10(1):51-5

Liposome-nucleus interactions. Flow cytometric study on the role of the nuclear surface. Caramelli E, et al. **Cell Biochem Funct** 1989 Jan;7(1):71-4

Interactions of parvalbumins with model phospholipid vesicles. Permyakov EA, et al. **Cell Calcium** 1989 Feb-Mar; 10(2):71-9

Studies on peroxidation of arachidonic acid in different liposomes below and above phase transition temperature. Cervato G, et al. **Chem Phys Lipids** 1988 Nov;49(1-2):135-9

Interaction of staphylococcal delta-toxin and synthetic analogues with erythrocytes and phospholipid vesicles. Biological and physical properties of the amphipathic peptides. Alouf JE, et al. **Eur J Biochem** 1989 Aug 1; 183(2):381-90

Lectin-bearing liposomes: differential binding to normal and to transformed mouse fibroblasts. Bogdanov AA Jr, et al. **Exp Cell Res** 1989 Apr;181(2):362-74

Leucine transport in plasma membrane vesicles of Saccharomyces cerevisiae. Calahorra M, et al. **FEBS Lett** 1989 Apr 24;247(2):235-8

Interaction of a hydrophobic model peptide and its fatty acid derivative with lipid vesicles. Joseph M, et al. **FEBS Lett** 1988 Oct 10;238(2):411-4

Interaction of the pore forming-peptide antibiotics Pep 5, nisin and subtilin with non-energized liposomes. Kordel M, et al. **FEBS Lett** 1989 Feb 13;244(1):99-102

Purification and reconstitution into liposomes of an integral membrane protein conferring immunity to colicin A. Geli

V, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):239–43
Effects of oxygen on ferrous sulphate induced lipid peroxidation in liposomal membrane. Agarwal S, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):331–4
Interaction of immunoliposomes with avian myeloblastosis virus and virus transformed cells. Dhananjaya KV, et al. **Indian J Exp Biol** 1988 Dec;26(12):965–8
Interaction of basic extension peptide fragments of adrenodoxin precursor with phospholipid vesicles. Aoyagi H, et al. **Int J Pept Protein Res** 1988 Nov;32(5):406–14
Specific binding of mitochondrial protein precursors to liposomes containing cardiolipin. Ou WJ, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):589–95
Fusion of liposomes with the plasma membrane of epithelial cells: fate of incorporated lipids as followed by freeze fracture and autoradiography of plastic sections. Knoll G, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2511–21
1H and 13C NMR studies of the interaction of eugenol, phenol, and triethyleneglycol dimethacrylate with phospholipid liposomes as a model system for odontoblast membranes. Fujisawa S, et al. **J Dent Res** 1988 Nov; 67(11):1438–41
Carrot phytoalexin alters the membrane permeability of Candida albicans and multilamellar liposomes. Amin M, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):241–6
Amine spin probe permeability in sonicated liposomes. Todd AP, et al. **J Membr Biol** 1989 Jul;109(1):53–64
Imaging liposomes at electron microscopic level: encapsulated colloidal iron as an electrondense marker for liposome–cell interactions. Foldvari M, et al. **J Microencapsul** 1988 Jul–Sep;5(3):231–41
Brain, liver and spleen detection of liposomes after rectal administration. Gabev EE, et al. **J Microencapsul** 1985 Apr–Jun;2(2):85–9
Effect of liposomes on substrate uptake by isolated guinea–pig liver mitochondrial and microsomal membranes. Stuhne–Sekalec L, et al. **J Microencapsul** 1985 Oct–Dec; 2(4):305–13
Targeting small unilamellar liposomes to hepatic parenchymal cells by dose effect. Chow DD, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):506–13
A radiolabel and electron microscopy study of the interaction of liposomes with synaptosomal membranes. Schreier H. **Life Sci** 1989;44(3):193–200
Interaction of rabbit lipoproteins and red blood cells with liposomes of egg yolk phospholipids. Mendez AJ, et al. **Lipids** 1988 Oct;23(10):961–7
Bone marrow uptake of liposome–entrapped spin label after liver blockade with empty liposomes. Federico M, et al. **Magn Reson Med** 1989 Jun;10(3):418–25
Gene transfer from targeted liposomes to specific lymphoid cells by electroporation. Machy P, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8027–31
Reconstitution of Golgi vesicle CMP–sialic acid and adenosine 3'-phosphate 5'-phosphosulfate transport into proteoliposomes. Milla ME, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1786–90
Membrane penetration of Sendai virus glycoproteins during the early stages of fusion with liposomes as determined by hydrophobic photoaffinity labeling. Novick SL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7433–7
UV–A induced lipid peroxidation in liposomal membrane. Bose B, et al. **Radiat Environ Biophys** 1989;28(1):59–65
Arrest and retention of multilamellar liposomes in the brain of normal mice or mice bearing experimental brain metastases. Schackert G, et al. **Sel Cancer Ther** 1989; 5(2):73–9
Liposome mediated dissipation of valinomycin–imposed potassium potential across erythrocytes membrane. Matsudaira R, et al. **Tokai J Exp Clin Med** 1987 Nov; 12(4):253–61
[Interaction of liposomes with vascular endothelial cells] Zipper J, et al. **Biomed Biochim Acta** 1988;47(7):713–9 (Eng. Abstr.) (Ger)
[A study of the stability of liposomes from the total lipid fraction of E. coli by means of fluorescence spectroscopy and a radioisotope probe] Cherniavskiĭ VA, et al. **Biofizika** 1988 Nov–Dec;33(6):973–7 (Eng. Abstr.) (Rus)
[Chelating and antiradical effect of rutin during peroxidation of lipids from microsomes and liposomes] Dorozhko AI, et al. **Biokhimiia** 1988 Oct;53(10):1660–6 (Eng. Abstr.) (Rus)
[Mechanism of formation of malonic dialdehyde during liposome interaction with cells] Konev VV, et al. **Biokhimiia** 1988 Sep;53(9):1439–42 (Eng. Abstr.) (Rus)
[Increased affinity of liposomes derived from total spleen and liver lipids to spleen cells] Kulikov VI, et al. **Biokhimiia** 1988 May;53(5):786–92 (Eng. Abstr.) (Rus)
[Complexing of bovine serum albumin with phosphatidyl choline liposomes] Lebed' OI, et al. **Ukr Biokhim Zh** 1989 May–Jun;61(3):101–6 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Liposomes with prolonged circulation times: factors affecting uptake by reticuloendothelial and other tissues. Allen TM, et al. **Biochim Biophys Acta** 1989 May 19;981(1):27–35
Gadolinium chloride–induced shifts in intrahepatic distributions of liposomes. Lázár G, et al. **Biochim Biophys Acta** 1989 May 10;1011(2–3):97–101
Role of ligand in antibody–directed endocytosis of liposomes by human T-leukemia cells. Matthay KK, et al. **Cancer Res** 1989 Sep 1;49(17):4879–86
Tissue distribution of sialoglycopeptide–bearing liposomes in rats. Saito K, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct; 36(10):4187–91
Electron microscopic studies on tissue distribution of lipid microspheres used as drug delivery carriers. Shoji Y, et al. **Drugs Exp Clin Res** 1985;11(9):601–9
Kinetics and disposition of fluorescein–labelled liposomes in healthy human subjects. Eichler HG, et al. **Eur J Clin Pharmacol** 1988;34(5):475–9
Phosphatidylserine as a determinant of reticuloendothelial recognition of liposome models of the erythrocyte surface. Allen TM, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8067–71
In vivo stability of ester– and ether–linked phospholipid–containing liposomes as measured by perturbed angular correlation spectroscopy. Derksen JT, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9768–72
Liposomes as carriers of drugs. Observations on vesicle fate after injection and its control. Gregoriadis G. **Subcell Biochem** 1989;14:363–78 (60 ref.)
[Binding of voltaren and piroxicam with the membranes of erythrocyte ghosts and liposomes] Mogilevich SE, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):87–90 (Eng. Abstr.) (Rus)

PHARMACOLOGY

In vitro lysis of the bloodstream forms of Trypanosoma brucei gambiense by stearylamine–bearing liposomes. Tachibana H, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):966–70
Effects of chronic injection of sphingomyelin–containing liposomes on lymphoid and non–lymphoid cells in the spleen. Transient suppression of marginal zone macrophages. Claassen E, et al. **Br J Exp Pathol** 1988 Dec; 69(6):865–75
Immunopotentiation of the humoral response by liposomes: effect of a T cell polyclonal activator. Thérien HM, et al. **Cell Immunol** 1988 Oct 15;116(2):320–30
Growth of rat mammary tumor line 64–24 in liposome–supplemented defined medium. I. Effect of liposome B components on colony growth. van der Haegen BA, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):151–7
Growth of rat mammary tumor line 64–24 in liposome–supplemented defined medium. II. Effect of liposome B and prolactin on colony forming efficiency. van der Haegen BA, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):158–62
Inhibition of interferon gamma–induced macrophage microbicidal activity against Leishmania major by liposomes: inhibition is dependent upon composition of phospholipid headgroups and fatty acids. Gilbreath MJ, et al. **Int J Immunopharmacol** 1989;11(2):103–10
Correlation between the synergistic effect of liposomes and endotoxins on the activation of macrophage tumoricidal activity and the effect of liposomes on the rough endoplasmic reticulum of macrophages. Jeannin JF, et al. **J Membr Biol** 1988 Sep;104(2):107–18
Chronic–relapsing experimental allergic encephalomyelitis in strain–13 guinea pigs: cell–mediated immunity and IgG isoelectric focusing in myelin basic protein–liposome–treated and untreated animals. St. Louis J, et al. **J Neuroimmunol** 1989 Feb;21(2–3):137–47
Cationic liposome mediated transfection. Felgner PL, et al. **Proc West Pharmacol Soc** 1989;32:115–21
Liposomes as immune adjuvants. Phillips NC. **Proc West Pharmacol Soc** 1989;32:107–10 (25 ref.)
Interactions of liposomes and platelets. Reinish LW, et al. **Thromb Haemost** 1988 Dec 22;60(3):518–23
Assessment of thrombogenic potential of liposomes. Zbinden G, et al. **Toxicology** 1989 Mar;54(3):273–80
[Research on high–temperature transition in liposomes made from egg yolk lecithin] Makarov TB, et al. **Biol Nauki** 1988; (5):23–31 (Eng. Abstr.) (Rus)
[Effect of liposomes on the adrenoreactivity of the papillary muscle] Kozlov AG, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):200–4 (Eng. Abstr.) (Rus)
[Nucleotide incorporation into liposomes] Otroshchenko VA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):772–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Fluidity and osmotic sensitivity changes of phospholipase A2–treated liposomes. Kinjo M, et al. **Biorheology** 1988; 25(3):517–25

RADIATION EFFECTS

Effects of 2.45–GHz microwave and 100–MHz radiofrequency radiation on liposome permeability at the phase transition temperature. Liu LM, et al. **Bioelectromagnetics** 1988;9(3):249–57

THERAPEUTIC USE

[Liposomes: basic studies in clinical therapeutics] Eklund KK, et al. **Duodecim** 1989;105(1):21–8 (49 ref.) (Fin)
[Stimulating action of liposomes on experimental influenza infection] Petrova IG, et al. **Vopr Virusol** 1988 Nov–Dec; 33(6):662–3 (Eng. Abstr.) (Rus)

TOXICITY

[Granuloma formation in mice by liposomes of new glycolipid containing mycolic acids, "trehalose 2,3,6'-trimycolate"] Yokoi F, et al. **Yakugaku Zasshi** 1989 Jan;109(1):46–51 (Eng. Abstr.) (Jpn)

LIPOSUCTION see **LIPECTOMY**

LIPOTROPIN

BIOSYNTHESIS

The ontogeny of immunoreactive beta–endorphin and beta–lipotropin in the rat ovary. Adams ML, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1171–6

BLOOD

Comparative assessment of ACTH and lipotropin plasma levels in the diagnosis and follow–up of patients with Cushing's syndrome: a study of 210 cases. Kuhn JM, et al. **Am J Med** 1989 Jun;86(6 Pt 1):678–84
Basal plasma beta–endorphin and beta–lipotropin in patients with symptomatic and asymptomatic myocardial ischemia. Perna G, et al. **Cardiologia** 1988 Aug;33(8):765–9
Beta–endorphin/beta–lipotropin release and gonadotropin secretion after acute exercise in physically conditioned males. Elias AN, et al. **Eur J Appl Physiol** 1989;58(5):522–7
Steroid replacement treatment increases beta–endorphin and beta–lipotropin plasma levels in postmenopausal women. Genazzani AR, et al. **Gynecol Obstet Invest** 1988; 26(2):153–9
Decreases in resting plasma beta–endorphin/–lipotropin after endurance training. Lobstein DD, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):161–6
Adaptation to chronic stress. Temporal pattern of immune and neuroendocrine correlates. Irwin MR, et al. **Neuropsychopharmacology** 1988 Sep;1(3):239–42
Premenstrual symptom changes and plasma beta–endorphin/beta–lipotropin throughout the menstrual cycle. Hamilton JA, et al. **Psychoneuroendocrinology** 1988; 13(6):505–14

CEREBROSPINAL FLUID

Age–related changes of methionine–enkephalin and beta–endorphin/beta–lipotropin immunoreactivity in human CSF. Alessio L, et al. **Life Sci** 1988;43(19):1545–50

IMMUNOLOGY

Beta–lipotropin–like immunoreactivity in intraglandular colloid from pituitary intermediate lobe cells. Boyd WH, et al. **Endocrinol Exp** 1988 Dec;22(4):221–7

ISOLATION & PURIFICATION

Isolation and primary structures of elephant adrenocorticotropin and beta–lipotropin. Li CH, et al. **Int J Pept Protein Res** 1988 Dec;32(6):573–8

METABOLISM

Immunolocalization of beta–lipotropin in the inner ear of the guinea pig. Nowak R, et al. **Arch Otorhinolaryngol** 1988; 245(5):297–9
The ontogeny of immunoreactive beta–endorphin and beta–lipotropin in the rat testis. Adams ML, et al. **Life Sci** 1989;44(2):159–66

SECRETION

Effect of histamine on the secretion of pro–opiomelanocortin derived peptides in rats. Knigge U, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):312–9
Involvement of histaminergic neurons in the stress–induced release of pro–opiomelanocortin–derived peptides in rats. Knigge U, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):533–9

TOXICITY

[Initial changes in parameters of blood coagulation in the rat after endotoxin and hormone administration] Kopprasch S, et al. **Z Med Lab Diagn** 1988;29(7):405–7 (Ger)

LIPOTROPIN 61–91 see **BETA–ENDORPHIN**

LIPOXYGENASES

Lipoxygenase isoenzymes: a spectroscopic and structural characterization of soybean seed enzymes. Draheim JE, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):208–18
The complete amino acid sequence of a pea (Pisum sativum) seed lipoxygenase predicted from a near full–length cDNA. Ealing PM, et al. **Biochem J** 1988 Aug 1;253(3):915–8
Alpha–secondary isotope effects in the lipoxygenase reaction. Wiseman JS. **Biochemistry** 1989 Mar 7;28(5):2106–11
[Active oxygen production in lipoxygenase system] Yamamoto S. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2763–9 (Jpn)

ANTAGONISTS & INHIBITORS

Analysis of the effects of cyclooxygenase and lipoxygenase inhibitors on leukocyte accumulation in the inflammatory site. Tsurufuji S, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:515–8

Arabinogalactan- and dextran-induced ear inflammation in mice: differential inhibition by H1-antihistamines, 5-HT-serotonin antagonists and lipoxygenase blockers. van Wauwe JP, et al. **Agents Actions** 1989 Aug;28(1-2):78-82

Selective inhibition of angiotensin II-mediated vasoconstriction by lipoxygenase blockade. Stern N, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H434-43

The contrasting influence of two lipoxygenase inhibitors on hypoxic pulmonary vasoconstriction in anesthetized pigs. McCormack DG, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):100-5

Lipoxygenase inhibitors suppress formation of tumor necrosis factor in vitro and in vivo. Schade UF, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):748-54

Inactivation of soybean lipoxygenase by lipoxygenase inhibitors in the presence of 15-hydroperoxyeicosatetraenoic acid. Reynolds CH. **Biochem Pharmacol** 1988 Dec 1;37(23):4531-7

Inactivation of soybean lipoxygenase 1 by 12-iodo-cis-9-octadecenoic acid. Rotenberg SA, et al. **Biochemistry** 1988 Nov 29;27(24):8813-8

Influence of inhibitors of the eicosanoid metabolism, of antagonists of the eicosanoids and of PAF on mortality assayed in three biochemically characterized shock models. Bahr T, et al. **Biomed Biochim Acta** 1988;47(10-11):S289-92

Antiinflammatory effect of a lipoxygenase inhibitor (FLM 5011) in severe active myocarditis. Geissler W, et al. **Biomed Biochim Acta** 1988;47(10-11):S311-4

Role of eicosanoids in inflammatory reactions of rats. Hirschelmann R, et al. **Biomed Biochim Acta** 1988; 47(10-11):S316-9

Action of cyclooxygenase (COX) and lipoxygenase (LOX) inhibitors as well as of oxygen free radical scavengers (OFRS) in the inflammation-induced vasodepression. Kuhn C, et al. **Biomed Biochim Acta** 1988;47(10-11):S320-3

Inhibition of lipoxygenase (LOX) or of cyclooxygenase (COX) improves survival of rats in endotoxin shock. Schaper U, et al. **Biomed Biochim Acta** 1988; 47(10-11):S282-5

The effects of eicozanoids and lipoxygenase inhibitors on the lipid metabolism of aortic cells. Tertov VV, et al. **Biomed Biochim Acta** 1988;47(10-11):S286-8

Effects of REV 5901, a 5-lipoxygenase inhibitor and leukotriene antagonist, on pulmonary responses to platelet activating factor in the guinea-pig. Anderson G, et al. **Br J Pharmacol** 1988 Aug;94(4):1115-22

Analysis of relaxin release by cultured porcine luteal cells using a reverse hemolytic plaque assay: effects of arachidonic acid, cyclo- and lipooxygenase blockers, phospholipase A2, and melittin. Taylor MJ, et al. **Endocrinology** 1989 Sep;125(3):1389-97

Lipoxygenase and cyclooxygenase blockade by BW755C prevents endotoxin-induced hypotension but not changes in glucose metabolism. Lang CH, et al. **Horm Metab Res** 1988 Sep;20(9):551-4

Lipoxygenase inhibitors enhance the proliferation of human B cells. Behrens TW, et al. **J Immunol** 1989 Oct 1; 143(7):2285-94

Platelet-activating factor (PAF) enhances tumor necrosis factor production by alveolar macrophages. Prevention by PAF receptor antagonists and lipoxygenase inhibitors. Dubois C, et al. **J Immunol** 1989 Aug 1;143(3):964-70

Differential effects of a series of hydroxamic acid derivatives on 5-lipoxygenase and cyclooxygenase from neutrophils and 12-lipoxygenase from platelets and their in vivo effects on inflammation and anaphylaxis. Huang FC, et al. **J Med Chem** 1989 Aug;32(8):1836-42

Effects of lipoxygenase inhibitors on the arachidonic acid cascade in the rabbit cornea after injury. Bazan HE. **J Ocul Pharmacol** 1988 Spring;4(1):43-9

Ocular anti-inflammatory action of a lipoxygenase inhibitor in the rabbit. Chiou LY, et al. **J Ocul Pharmacol** 1985 Winter;1(4):383-90

Blockade of epidermal growth factor-induced uterine contractions by indomethacin or nordihydroguaritic acid. Gardner RM, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):882-6

Pharmacological manipulation of inflammation in rabbit hydronephrosis: effects of a combined cyclooxygenase/lipoxygenase inhibitor ethoxyquin, a thromboxane synthase inhibitor RS-5186 and a PAF antagonist L-659,989. Spaethe SM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1308-16

Effect of AA-861, a selective 5-lipoxygenase inhibitor, on models of allergy in several species. Yamamura H, et al. **Jpn J Pharmacol** 1988 Jul;47(3):261-71

Inhibitors of cyclo-oxygenase and lipoxygenase in onions [letter] Bayer T, et al. **Lancet** 1988 Oct 15;2(8616):906

Lipoxygenase inhibitors suppress formation of tumor necrosis factor in vitro and in vivo. Schade UF, et al. **Lymphokine Res** 1989 Fall;8(3):245-50

Effects of Ca2+ and lipoxygenase inhibitors on hexokinase degradation in rabbit reticulocytes. Magnani M, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):3-7

Leukotriene antagonists attenuate thromboxane-inducible pulmonary hypertension. Soifer SJ, et al. **Pediatr Res** 1989 Aug;26(2):83-7

Anti-inflammatory activity of benzopyrones that are inhibitors of cyclo- and lipo-oxygenase. Della Loggia R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:91-4

The effects of lipoxygenase inhibitor and peptidoleukotriene antagonist on myocardial injury in a canine coronary occlusion-reperfusion model. Toki Y, et al. **Prostaglandins** 1988 Apr;35(4):555-71

Heparin inhibits the "quasi-lipoxygenase" activity of hemoglobin toward linoleic acid by oxidant scavenging. Brestel EP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):21-4

Lipoxygenase and cyclooxygenase blockade by BW755C does not prevent the secondary phase of septic pulmonary hypertension. Hammerman C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):71-7

Effect of cyclooxygenase and lipoxygenase inhibitors on delayed neuronal death in the gerbil hippocampus. Nakagomi T, et al. **Stroke** 1989 Jul;20(7):925-9

Platelet hypersensitivity induced by 1-chloro-2, 4-dinitrobenzene, hydroperoxides and inhibition of lipoxygenase. Hill TD, et al. **Thromb Res** 1989 Mar 1; 53(5):447-55

[Lipoxygenase inhibitors and mast cell degranulation] Grupe R, et al. **Biomed Biochim Acta** 1988;47(12):955-63 (Eng. Abstr.) (Ger)

[The effect of cyclo-oxygenase and lipoxygenase inhibitors on anaphylactic vasodepression ex vivo in mice and rats] Bekemeier H, et al. **Pharmazie** 1988 Nov;43(11):784-5 (Eng. Abstr.) (Ger)

[Inhibition of arachidonic acid-induced ear edema in the mouse with lipoxygenase-, cyclo-oxygenase- and dual inhibitors] Zarnack S, et al. **Pharmazie** 1988 May; 43(5):337-8 (Eng. Abstr.) (Ger)

BIOSYNTHESIS

Gamma-interferon induces prostacyclin and prostaglandin but not lipoxygenase product synthesis in rat endothelial cells. Mattila P, et al. **Immunol Lett** 1989 Jul;22(1):59-63

Lipoxygenase products as common intermediates in cyclic AMP-dependent and -independent adrenal steroidogenesis in rats. Solano AR, et al. **J Mol Endocrinol** 1988 Sep; 1(2):147-54

BLOOD

Interactions between platelets and neutrophils in the eicosanoid pathway. Marcus AJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:263-6

Enzymatic lipid peroxidation: a step in the breakdown of mitochondria during the maturation of red blood cells. Kühn H, et al. **Basic Life Sci** 1988;49:945-9

The biological dynamics of lipoxygenase in rabbit red cells in the course of an experimental bleeding anaemia. Unexpected effects of the calcium ionophore A 23187. Ludwig P, et al. **Biomed Biochim Acta** 1988;47(7):593-608

Iron chelators inhibit human platelet aggregation, thromboxane A2 synthesis and lipoxygenase activity. Barradas MA, et al. **FEBS Lett** 1989 Mar 13;245(1-2):105-9

IMMUNOLOGY

[Lipoxins and leukotrienes, molecular signals of immunoreactions] Steinhilber D. **Pharm Unserer Zeit** 1989 May;18(3):76-81 (Ger)

METABOLISM

Discovery of novel brain lipoxygenase products formed from docosahexaenoic acid (22:6w3). Shingu T, et al. **Adv Alcohol Subst Abuse** 1988;7(3-4):235-40

Lipoxygenase regulation of membrane expression of tumor cell glycoproteins and subsequent metastasis. Honn KV, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:439-43

Mechanism of formation of leukotrienes and lipoxins from arachidonic acid catalyzed by homogenous lipoxygenase from potato tubers. Reddy CC, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:132-6

Synthesis and functions of cyclooxygenase and lipoxygenase products in brain: new findings and an appraisal. Wolfe LS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:387-93

Indomethacin stimulation of macrophage cytostasis against MOPC-315 tumor cells is enhanced by endogenous metabolites of lipoxygenase and counteracted by prostaglandin E2. Bonta IL, et al. **Agents Actions** 1989 Jan; 26(1-2):167-9

Endogenous lipoxygenase metabolites mediate A23187 induced macrophage cytostasis towards P815 tumor cells in vitro. van Hilten JA, et al. **Agents Actions** 1989 Jan; 26(1-2):170-2

Lipoxygenase metabolites as mediators of platelet activating factor-induced increased airways responsiveness to histamine in the guinea-pig. Anderson GP, et al. **Agents Actions Suppl** 1988;23:195-200

In vivo chemotaxis of bovine neutrophils induced by 5-lipoxygenase metabolites of arachidonic and eicosapentaenoic acid. Heidel JR, et al. **Am J Pathol** 1989 Mar;134(3):671-6

Arachidonic acid metabolites in the rat and human brain. New findings on the metabolism of prostaglandin D2 and lipoxygenase products. Wolfe LS, et al. **Ann N Y Acad Sci** 1989;559:74-83

Lipoxygenase metabolism of polyunsaturated fatty acids in oocytes of the frog Xenopus laevis. Hawkins DJ, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):447-55

Lipoxygenase-catalyzed epoxidation of benzo(a)pyrene-7,8-dihydrodiol. Byczkowski JZ, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1199-205

Lipoxygenase activities of the epithelial cells of the human buccal cavity. Green FA. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):545-51

Formation of 6,13-dihydroxyoctadecatrienoic acid isomers from gamma-linolenic acid. Kim MR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1154-60

The possible role of 9(S)-hydroperoxyoctadecatrienoic acid as a suicide substrate of soybean lipoxygenase. Sok DE, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1357-62

Blockade by lipoxygenase inhibitors of Ca2+-dependent insulin secretion from permeabilized rat islets. A molecular mechanism distinct from that of alpha 2-adrenergic agonists. Metz SA. **Biochem Pharmacol** 1989 Jun 1; 38(11):1849-62

Activity of soybean lipoxygenase in the absence of lipid hydroperoxide. Wiseman JS, et al. **Biochemistry** 1988 Nov 29;27(24):8810-3

Soybean lipoxygenase-1 enzymically forms both (9S)- and (13S)-hydroperoxides from linoleic acid by a pH-dependent mechanism. Gardner HW. **Biochim Biophys Acta** 1989 Feb 20;1001(3):274-81

Metabolism of polyunsaturated fatty acids by an (n - 6)-lipoxygenase associated with human ejaculates. Oliw EH, et al. **Biochim Biophys Acta** 1989 Apr 26; 1002(3):283-91

Kinetics of soybean lipoxygenase reaction in hydrated reversed micelles. Kurganov BI, et al. **Biochimie** 1989 Apr; 71(4):573-8

Action of metal chelators on lipoxygenases, cyclooxygenase and on inflammation-induced vasodepression. Hirschelmann R, et al. **Biomed Biochim Acta** 1988; 47(10-11):S256-9

Liquid chromatography and gas chromatography/mass spectrometry of lipoxygenase and cyclooxygenase products from platelets and endothelial cells. Guichardant M, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):245-8

Effects of BW755C, a mixed cyclo-oxygenase-lipoxygenase inhibitor, following traumatic spinal cord injury in rats. Faden AI, et al. **Brain Res** 1988 Oct 25;463(1):63-8

Involvement of lipoxygenase and cyclo-oxygenase pathways in hypoxia and metabolic alkalosis produced by canatoxin in rats. Collares CB, et al. **Braz J Med Biol Res** 1988; 21(1):107-10

Bidirectional control of membrane expression and/or activation of the tumor cell IRGpIIb/IIIa receptor and tumor cell adhesion by lipoxygenase products of arachidonic acid and linoleic acid. Grossi IM, et al. **Cancer Res** 1989 Feb 15;49(4):1029-37

Lipoxygenase products induce neutrophil activation and increase endothelial permeability after thrombin-induced pulmonary microembolism. Perlman MB, et al. **Circ Res** 1989 Jan;64(1):62-73

Selective activation of the gamma-subspecies of protein kinase C from bovine cerebellum by arachidonic acid and its lipoxygenase metabolites. Shearman MS, et al. **FEBS Lett** 1989 Jan 30;243(2):177-82

Stimulation of progesterone and prostaglandin E2 production by lipoxygenase metabolites of arachidonic acid. Wang J, et al. **FEBS Lett** 1989 Feb 13;244(1):154-8

Production of lipoxygenase metabolites of eicosapentaenoic acid by bovine alveolar macrophages in vitro. Laegreid WW, et al. **Inflammation** 1988 Oct;12(5):503-14

Enzymes functional in the syntheses of leukotrienes and related compounds. Shimizu T. **Int J Biochem** 1988; 20(7):661-6 (51 ref.)

Automated high-performance liquid chromatographic extraction and quantification procedure for lipoxygenase metabolites. Haas TA, et al. **J Chromatogr** 1988 Aug 19; 430(1):1-9

Rapid and simple methods for the investigation of lipoxygenase pathways in human granulocytes. Veenstra J, et al. **J Chromatogr** 1988 Oct 14;431(2):413-7

Possible involvement of lipoxygenase pathway of arachidonic acid in rat pituitary hormone release in vitro. Miyake A, et al. **J Endocrinol Invest** 1988 Dec;11(11):805-8

Transcellular lipoxygenase metabolism between monocytes and platelets. Bigby TD, et al. **J Immunol** 1989 Sep 15; 143(6):1948-54

Accumulation of arachidonic acid cyclo- and lipoxygenase products in rat brain during ischemia and reperfusion: effects of treatment with GM1-lactone. Petroni A, et al. **J Neurochem** 1989 Sep;53(3):747-52

Inhibition of the alkali burn-induced lipoxygenation of arachidonic acid in the rabbit cornea in vivo by a platelet activating factor antagonist. Bazan HE, et al. **J Ocul Pharmacol** 1987 Winter;3(4):357-65

Human glial cell production of lipoxygenase-generated eicosanoids: a potential role in the pathophysiology of vascular changes following traumatic brain injury. Hariri RJ, et al. **J Trauma** 1989 Sep;29(9):1203-10

Human colonic (Na+ + K+)-ATPase and specific ouabain binding are not influenced by lipoxygenase products or superoxide radicals. Allgayer H, et al. **Klin Wochenschr** 1988 Jul 1;66(13):599-600

Modulation of renin synthesis by lipoxygenase products in cultured human mesangial cells. Chansel D, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):263–71

Effect of lipoxygenase products on choriogonadotropin secretion by cultured human choriocarcinoma JEG-3 cells pre- and post-stimulation with epidermal growth factor and a phorbol ester. Ilekis J, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):155–8

Mechanism of release of beta-endorphin from rat pituitary cells. Role of lipoxygenase products of arachidonic acid. Nishizaki T, et al. **Neuroendocrinology** 1989 May; 49(5):483–8

The peroxidase/oxidase activity of soybean lipoxygenase—II. Triplet carbonyls and red photoemission during polyunsaturated fatty acid and glutathione oxidation. Schulte-Herbrüggen T, et al. **Photochem Photobiol** 1989 May;49(5):705–10

The peroxidase/oxidase activity of soybean lipoxygenase—I. Triplet excited carbonyls from the reaction with isobutanal and the effect of glutathione. Schulte-Herbrüggen T, et al. **Photochem Photobiol** 1989 May;49(5):697–704

A role for endothelial cell lipoxygenase in the oxidative modification of low density lipoprotein. Parthasarathy S, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1046–50

Significance of follicular cyclooxygenase and lipoxygenase pathways of metabolism of arachidonate in sheep. Carvalho CB, et al. **Prostaglandins** 1989 May;37(5):553–8

Stimulation of bone resorption by lipoxygenase metabolites of arachidonic acid. Meghji S, et al. **Prostaglandins** 1988 Aug;36(2):139–49

Mammalian lipoxygenases: molecular and catalytic properties. Yamamoto S. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(4):219–29 (88 ref.)

Hydroperoxidase activity of lipoxygenase: a potential pathway for xenobiotic metabolism in the presence of linoleic acid. Kulkarni AP, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):305–14

[Effect of free radical scavengers on the activity of lipoxygenases and cyclooxygenase] Duniec Z. **Folia Med Cracov** 1987;28(3–4):283–303 (Eng. Abstr.) **(Pol)**

[Lipoxygenase activation during the development of adaptation reactions in the body] Kosaganova NIu, et al. **Biofizika** 1989 Mar-Apr;34(2):325–7 (Eng. Abstr.) **(Rus)**

[Modulation of arachidonic acid cascade by gangliosides. The effect of gangliosides on lipoxygenase oxidation of arachidonic acid in mouse splenocytes] Bezuglov VV, et al. **Dokl Akad Nauk SSSR** 1988;300(3):725–7 **(Rus)**

[Potato 5-lipoxygenase. Kinetics of linoleic acid oxidation] Butovich IA, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):106–8 (Eng. Abstr.) **(Rus)**

[Activity of lipoxygenase incorporated into reversed micelles of aerosol OT in octane] Butovich IA, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):54–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Enzymatic modification of low density lipoprotein by purified lipoxygenase plus phospholipase A2 mimics cell-mediated oxidative modification. Sparrow CP, et al. **J Lipid Res** 1988 Jun;29(6):745–53

The effect of selected arachidonic acid metabolites on natural killer cell activity. Field WE 2d, et al. **Prostaglandins** 1988 Oct;36(4):411–9

PHYSIOLOGY

The role of cyclooxygenase and lipoxygenase mediators in oxidant-induced lung injury. Farrukh IS, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1343–9

Effects of lipoxygenase and glutathione pathway inhibitors on leukemic cell line growth. Miller AM, et al. **J Lab Clin Med** 1989 Mar;113(3):355–61

Arachidonic acid lipoxygenation may be involved in interleukin-1 induction of prostaglandin biosynthesis. Mugridge KG, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):714–20

Role of lipoxygenase metabolites for the hyper-responsiveness to platelet-activating factor of lungs from actively sensitized guinea pigs. Pretolani M, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):353–9

Role of lipoxygenase, cyclooxygenase and cytochrome P-450 metabolites in contractions of isolated guinea pig pulmonary venules induced by hypoxia and anoxia. Tracey WR, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1097–104

The mechanism of skin tumor promotion caused by phorbol esters: possible involvement of arachidonic acid cascade/lipoxygenase, protein kinase C and calcium/calmodulin systems. Nakadate T. **Jpn J Pharmacol** 1989 Jan;49(1):1–9 (52 ref.)

A possible role for lipoxygenase and epoxygenase arachidonate metabolites in prolactin release from pituitary cells. Judd AM, et al. **Neuroendocrinology** 1988 Oct; 48(4):407–16

Lipoxygenase products regulate IRGpIIb/IIIa receptor mediated adhesion of tumor cells to endothelial cells, subendothelial matrix and fibronectin. Honn KV, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):130–5

Further characterization of the role of the lipoxygenase pathway in the in vivo allograft response. Jordan ML, et al. **Transplant Proc** 1988 Dec;20(6):1274–5

LIPREADING

Cued speech, manual complement to lipreading, for visual reception of spoken language. Principles, practice and prospects for automation. Cornett RO. **Acta Otorhinolaryngol Belg** 1988;42(3):375–84

A cognitive/experiential approach to aural rehabilitation. Scott LC, et al. **Am Ann Deaf** 1989 Mar;134(1):27–30

Tactile presentation of voice fundamental frequency as an aid to the speechreading of sentences. Hanin L, et al. **Ear Hear** 1988 Dec;9(6):335–41

Effect of text complexity on connected discourse tracking rate. Hochberg I, et al. **Ear Hear** 1989 Jun;10(3):192–9

Speech perception studies using a multichannel electrotactile speech processor, residual hearing, and lipreading. Cowan RS, et al. **J Acoust Soc Am** 1989 Jun;85(6):2593–607

Speechreading with reduced vision: a problem of aging. Thorn F, et al. **J Opt Soc Am [A]** 1989 Apr;6(4):491–9

[Development of a French-Quebec lipreading test] Lalande NM, et al. **Audiology** 1989;28(2):71–81 (Eng. Abstr.) **(Fre)**

[Visual and tactile recognition of words of various lengths and lexical occurrence] Prosser S, et al. **Acta Otorhinolaryngol Ital** 1988 Mar-Apr;8(2):165–74 (Eng. Abstr.) **(Ita)**

LIQUID PARAFFIN see **MINERAL OIL**

LISSAMINE GREEN DYES see under **AMMONIUM COMPOUNDS**

LISTERIA

ANALYSIS

Detection of listeriolysin, the thiol-dependent hemolysin in Listeria monocytogenes, Listeria ivanovii, and Listeria seeligeri. Leimeister-Wächter M, et al. **Infect Immun** 1989 Aug;57(8):2350–7

Physical and antigenic heterogeneity in the flagellins of Listeria monocytogenes and L. ivanovii. Peel M, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2593–8

CLASSIFICATION

Evaluation of API 20 STREP system for identifying Listeria species. MacGowan AP, et al. **J Clin Pathol** 1989 May; 42(5):548–50

Taxonomic studies on Brochothrix, Erysipelothrix, Listeria and atypical lactobacilli. Feresu SB, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1165–83

[Identification of Listeria using molecular DNA-DNA hybridization] Bakulov IA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):31–5 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Physiological studies on the growth and utilization of sugars by Listeria species. Pine L, et al. **Can J Microbiol** 1989 Feb;35(2):245–54

Minimum growth temperatures of Listeria monocytogenes and non-haemolytic Listeria. Junttila JR, et al. **J Appl Bacteriol** 1988 Oct;65(4):321–7

Production of Linnocuicina 819, a bacteriocin produced by Listeria innocua. Mollerach ME, et al. **Microbiologica** 1988 Jul;11(3):219–24

IMMUNOLOGY

Phagocytosis and killing of Listeria by guinea pig macrophages and neutrophils. Rudnicka W, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):161–6

Production, purification and characterization of hemolysins from Listeria ivanovii and Listeria monocytogenes Sv4b. Kreft J, et al. **FEMS Microbiol Lett** 1989 Jan 15; 48(2):197–202

Serological studies on Listeria grayi and Listeria murrayi. Vazquez-Boland JA, et al. **J Appl Bacteriol** 1988 May; 64(5):371–8

[Listeriosis studies in game animals in Tirol and in the Steiermark (Austria)] Sixl W, et al. **Geogr Med** 1989;Suppl 2:15–6 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Absence of Listeria species in lower animals. Müller HE. **Ann Inst Pasteur Microbiol** 1988 Nov-Dec;139(6):727–30

Comparison of lithium chloride-phenylethanol-moxalactam and modified Vogel Johnson agars for detection of Listeria spp. in retail-level meats, poultry, and seafood. Buchanan RL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):599–603

Listeria spp. found on fresh market produce. Heisick JE, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1925–7

Comparison of seven plating media for enumeration of Listeria spp. Loessner MJ, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3003–7

Specific gene probe for detection of biotyped and serotyped Listeria strains. Notermans S, et al. **Appl Environ Microbiol** 1989 Apr;55(4):902–6

Assessment of different selective agar media for enumeration and isolation of Listeria from dairy products. Dominguez L, et al. **J Dairy Res** 1988 Nov;55(4):579–83

Probes for identifying Listeria [letter] Datta AR. **JAMA** 1989 Sep 22-29;262(12):1629–30

Listeria and food [letter] Breer C, et al. **Lancet** 1988 Oct 29;2(8618):1022

Ecological survey of Listeria in the Ferrara area (northern Italy). Luppi A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):266–75

[The detection of Listeria monocytogenes and Listeria innocua in cheese] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1988 Nov 1; 101(11):373–5 (Eng. Abstr.) **(Ger)**

[Listeria in food] Breer C, et al. **Schweiz Med Wochenschr** 1989 Mar 11;119(10):306–11 (Eng. Abstr.) **(Ger)**

METABOLISM

[Biochemical differentiation of Listeria from cheese] Seiler H, et al. **Berl Munch Tierarztl Wochenschr** 1989 May 1; 102(5):166–70 (Eng. Abstr.) **(Ger)**

PATHOGENICITY

Virulence of Listeria spp.: course of infection in resistant and susceptible mice. Mainou-Fowler T, et al. **J Med Microbiol** 1988 Oct;27(2):131–40

Pathogenicity testing of Listeria strains isolated from food in fertilized hen's eggs. Lattmann C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):400–5

LISTERIA INFECTIONS

Listeria monocytogenes peritonitis: an additional case [letter] Lopez-San Roman A, et al. **Am J Gastroenterol** 1989 Apr; 84(4):454–5

Listeria monocytogenes spontaneous peritonitis [letter] Pascual J, et al. **Am J Gastroenterol** 1989 Apr;84(4):455

Endocarditis due to Listeria monocytogenes and human immunodeficiency virus infection [published erratum appears in Am J Med 1989 Mar;86(3):366] Riancho JA, et al. **Am J Med** 1988 Nov;85(5):737

Listeria monocytogenes septic arthritis. A case report and review of the literature. Curosh NA, et al. **Arch Intern Med** 1989 May;149(5):1207–8 (13 ref.)

Listeria monocytogenes endophthalmitis: a case report. Brian GR, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):329–31

Brainstem encephalitis due to Listeria monocytogenes. Favourable outcome after early antibiotic therapy. Barontini F, et al. **Ital J Neurol Sci** 1989 Feb;10(1):85–7

Listeria monocytogenes infections of prosthetic joints [letter] Abadie SM. **J Infect Dis** 1989 Jan;159(1):156

Listeriosis. Gellin BG, et al. **JAMA** 1989 Mar 3; 261(9):1313–20 (157 ref.)

Fatal listeria meningitis in immunosuppressed patient [letter] Girmenia C, et al. **Lancet** 1989 Apr 8;1(8641):794

Listeriosis in immunocompromised pregnancy [letter] Ramsden GH, et al. **Lancet** 1989 Apr 8;1(8641):794

Listeriosis: new findings—current concern. Kaufmann SH. **Microb Pathog** 1988 Oct;5(4):225–31 (50 ref.)

Listeria monocytogenes endocarditis: a review of the literature 1950-1986. Gallagher PG, et al. **Scand J Infect Dis** 1988;20(4):359–68 (65 ref.)

Listeriosis as an obstetric complication in an immunocompromised patient. Fan YD, et al. **South Med J** 1989 Aug;82(8):1044–5

[Listeria meningitis in a healthy young adult] Vanderheyden JE, et al. **Rev Med Brux** 1988 Nov;9(9):430–2 (Eng. Abstr.) **(Fre)**

[Listeria monocytogenes septic arthritis of the knee (letter)] Denamur E, et al. **Rev Rhum Mal Osteoartic** 1988 Nov; 55(11):963–4 **(Fre)**

[Rhombencephalitis caused by Listeria monocytogenes] Cañete JD, et al. **Med Clin (Barc)** 1988 Jun 4;91(2):61–5 (33 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Tumour necrosis factor in neonatal listeriosis: a case report. Girardin E, et al. **Eur J Pediatr** 1989 Jun;148(7):644–5

COMPLICATIONS

Listeria brain abscess in the acquired immunodeficiency syndrome [letter] Harris JO, et al. **Arch Neurol** 1989 Mar; 46(3):250

Listeria monocytogenes septicemia in an AIDS patient with a brain abscess. Patey O, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):746–8

Listeria monocytogenes bacteraemia in AIDS [letter] Bizet C, et al. **Lancet** 1989 Mar 4;1(8636):501

Listeriosis in pregnancy [letter] Caird L. **Lancet** 1989 Feb 11;1(8633):322

[Listeria monocytogenes septicemia in acquired immunodeficiency syndrome (letter)] Rello J, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):79 **(Spa)**

DIAGNOSIS

Perinatal listeriosis; more common than reported (2 case reports and revision of literature). Makar AP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):83–91 (16 ref.)

Ultrasonography of a splenic abscess due to Listeria

monocytogenes. Corthouts B, et al. **J Belge Radiol** 1988; 71(3):375–6

Cross-infection with Listeria monocytogenes confirmed by DNA fingerprinting [letter] Facinelli B, et al. **Lancet** 1988 Nov 26;2(8622):1247–8

[Listeriosis in the newborn infant: improved prognosis due to early detection] Bucher HU, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):321–5 (Eng. Abstr.) (Ger)

[2 cases of listeriosis with unusual clinical manifestations] Rebenok ZhA. **Klin Med (Mosk)** 1988 Sep;66(9):123–5 (Rus)

DRUG THERAPY

Effectiveness of nanoparticle-bound ampicillin in the treatment of Listeria monocytogenes infection in athymic nude mice. Youssef M, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1204–7

Inhibitory effect of tetracycline and doxycycline on resistance of mice to infection with a tetracycline-resistant strain of Listeria monocytogenes. Metz P, et al. **Int J Immunopharmacol** 1988;10(5):519–24

First-trimester maternal Listeria monocytogenes sepsis and chorioamnionitis with normal neonatal outcome. Cruikshank DP, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):469–71

ENZYMOLOGY

Phosphatases activities in rabbit infected with Listeria monocytogenes. De Magliola Mundet LD, et al. **Pathologica** 1987 Sep–Oct;79(1063):617–23

EPIDEMIOLOGY

Surveillance of listeriosis in Los Angeles County, 1985–1986. A first year's report. Mascola L, et al. **Arch Intern Med** 1989 Jul;149(7):1569–72

Listeriosis [news] Galbraith NS. **BMJ** 1988 Sep 24; 297(6651):754–5

Human listeriosis surveillance in Canada—1987. **Can Dis Wkly Rep** 1988 Aug 27;14(34):151–5 (Eng, Fre)

Perinatal listeriosis in Dresden 1981–1986: clinical and microbiological findings in 18 cases. Schwarze R, et al. **Infection** 1989 May–Jun;17(3):131–8

Listeriosis: new problems with an old pathogen. Kerr KG, et al. **J Hosp Infect** 1988 Nov;12(4):247–50 (41 ref.)

A possible outbreak of listeriosis caused by an unusual strain of Listeria monocytogenes. McLauchlin J, et al. **J Infect** 1989 Mar;18(2):179–87

Investigation of an outbreak of listeriosis: new hypotheses for the etiology of epidemic Listeria monocytogenes infections. Schwartz B, et al. **J Infect Dis** 1989 Apr; 159(4):680–5

Listeriosis in Scotland, 1988 [letter] Campbell DM. **Lancet** 1989 Mar 4;1(8636):492

Ecological survey of Listeria in the Ferrara area (northern Italy). Luppi A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):266–75

[Listeriosis in France in 1986: census made by hospital laboratories] Goulet V, et al. **Pathol Biol (Paris)** 1989 Mar; 37(3):206–11 (Eng. Abstr.) (Fre)

ETIOLOGY

Listeria septicemia after colonoscopy in an ulcerative colitis patient receiving ACTH [letter] Shemesh O, et al. **Am J Gastroenterol** 1989 Sep;84(9):1127–8

Foodborne listeriosis—Switzerland. **Can Dis Wkly Rep** 1988 Jan 16;14(2):7 (Eng, Fre)

Listeriosis in the setting of malignant disease. Changing issues in an unusual infection. Hantel A, et al. **Cancer** 1989 Jul 15;64(2):516–20

Listeriosis: a community problem? Corcoran GD, et al. **Ir Med J** 1989 Jun;82(2):70–1

Leads from the MMWR. Update—listeriosis and pasteurized milk. **JAMA** 1989 Feb 24;261(8):1119

Listeriosis in hematological malignancies: report of two cases. Ikehara O, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):159–62

Update—listeriosis and pasteurized milk. **MMWR** 1988 Dec 16;37(49):764–6

Listerial endocarditis following coronary artery bypass surgery [letter] Baddour LM. **Rev Infect Dis** 1989 Jul–Aug; 11(4):669

Listeria monocytogenes septicemia associated with consumption of salted mushrooms. Junttila J, et al. **Scand J Infect Dis** 1989;21(3):339–42

Listeria monocytogenes sepsis from an infected indwelling i.v. catheter in a patient with AIDS [letter] Katner HP, et al. **South Med J** 1989 Jan;82(1):94–5

[Listeria infection from high salt concentration] Brander M, et al. **Duodecim** 1988;104(23–24):1971–4 (Fin)

[A case of anal listeria infection in AIDS (letter)] de la Lande P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):972–3 (Fre)

[The significance of corticosteroid insufficiency in the mechanisms of toxicosis in experimental listeriosis] Cherkashin GV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):98–102 (Eng. Abstr.) (Rus)

[Listeria monocytogenes endocarditis on a Hancock bioprosthesis] Aparici M, et al. **Rev Esp Cardiol** 1988 Aug–Sep;41(7):440–2 (23 ref.) (Eng. Abstr.) (Spa)

GENETICS

Impact of genetically regulated T cell proliferation on acquired resistance to Listeria monocytogenes. Berche P, et al. **J Immunol** 1989 Feb 1;142(3):932–9

IMMUNOLOGY

What T cells tell macrophages to do during resistance to listeriosis. Campbell PA. **Adv Exp Med Biol** 1988;239:13–22 (41 ref.)

Which T cells are relevant to resistance against Listeria monocytogenes infection? Kaufmann SH. **Adv Exp Med Biol** 1988;239:135–50 (36 ref.)

In vitro production of colony-stimulating factors by Listeria-immune spleen cells. Magee DM, et al. **Adv Exp Med Biol** 1988;239:245–55

Validation of a role for endogenously produced IFN gamma in resolution of Listeria monocytogenes infection in mice. Schreiber RD. **Adv Exp Med Biol** 1988;239:185–92 (32 ref.)

Defective anti-listerial responses in deciduoma of pseudopregnant mice. Redline RW, et al. **Am J Pathol** 1988 Dec;133(3):485–97

Innate anti-listerial resistance of mice differing in their susceptibility to listeriosis. Długońska H, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):151–9

Comparison of the effects of IL-1 alpha and TNF-alpha on phagocyte accumulation and murine antibacterial immunity. Kurlander RJ, et al. **Cell Immunol** 1989 Oct 1; 123(1):9–22

T cell subsets in DTH, protection and granuloma formation in primary and secondary Listeria infection in mice: superior role of Lyt-2+ cells in acquired immunity. Mielke ME, et al. **Immunol Lett** 1988 Nov;19(3):211–5 (57 ref.)

Resistance to infection in murine beta-thalassemia. Ampel NM, et al. **Infect Immun** 1989 Apr;57(4):1011–7

Macrophage production during murine listeriosis: colony-stimulating factor 1 (CSF-1) and CSF-1-binding cells in genetically resistant and susceptible mice. Cheers C, et al. **Infect Immun** 1988 Nov;56(11):2972–8

Recombinant murine gamma interferon induces enhanced resistance to Listeria monocytogenes infection in neonatal mice. Chen Y, et al. **Infect Immun** 1989 Aug;57(8):2345–9

Administration of purified anti-L3T4 monoclonal antibody impairs the resistance of mice to Listeria monocytogenes infection. Czuprynski CJ, et al. **Infect Immun** 1989 Jan; 57(1):100–9

Treatment of mice with human recombinant interleukin-2 augments resistance to the facultative intracellular pathogen Listeria monocytogenes. Haak-Frendscho M, et al. **Infect Immun** 1989 Oct;57(10):3014–21

Separate and combined effects of recombinant interleukin-1 alpha and gamma interferon on antibacterial resistance. Kurtz RS, et al. **Infect Immun** 1989 Feb;57(2):553–8

Kinetics of interleukin-1 production by macrophages during infection with Listeria monocytogenes. Petit JC, et al. **Int J Immunopharmacol** 1988;10(7):875–8

Acquired resistance to Listeria monocytogenes is mediated by Lyt-2+ T cells independently of the influx of monocytes into granulomatous lesions. Mielke ME, et al. **J Exp Med** 1989 Aug 1;170(2):589–94

Exacerbation of murine listeriosis by a monoclonal antibody specific for the type 3 complement receptor of myelomonocytic cells. Absence of monocytes at infective foci allows Listeria to multiply in nonphagocytic cells. Rosen H, et al. **J Exp Med** 1989 Jul 1;170(1):27–37

Increased natural resistance to Listeria monocytogenes in senescent mice correlates with enhanced macrophage bactericidal activity. Gervais F, et al. **J Gerontol** 1988 Nov; 43(6):B152–6

The C5-sufficient A/J congenic mouse strain. Inflammatory response and resistance to Listeria monocytogenes. Gervais F, et al. **J Immunol** 1989 Mar 15;142(6):2057–60

Early influx of Listeria-reactive T lymphocytes in liver of mice genetically resistant to listeriosis. Goossens PL, et al. **J Immunol** 1988 Oct 1;141(7):2451–5

Lyt-2+ T cell-mediated protection against listeriosis. Protection correlates with phagocyte depletion but not with IFN-gamma production. Lukacs K, et al. **J Immunol** 1989 Apr 15;142(8):2879–86

Efficient natural defense mechanisms against Listeria monocytogenes in T and B cell-deficient allogeneic bone marrow radiation chimeras. Preactivated macrophages are the main effector cells in an early phase after bone marrow transfer. Roesler J, et al. **J Immunol** 1989 Sep 1; 143(5):1710–5

Effect of protein and zinc deficiencies on vaccine efficacy in guinea pigs following pulmonary infection with Listeria. Coghlan LG, et al. **Med Microbiol Immunol (Berl)** 1988; 177(5):255–63

Reduced proliferative response of mouse spleen cells to mitogens during infection with Salmonella typhimurium or Listeria monocytogenes. Brunner H, et al. **Microb Pathog** 1989 Apr;6(4):265–76

Enumeration of Listeria monocytogenes-reactive L3T4+ T cells activated during infection. Kaufmann SH. **Microb Pathog** 1986 Jun;1(3):249–60

Enhancement of host resistance against Listeria infection by Lactobacillus casei: efficacy of cell wall preparation of Lactobacillus casei. Sato K, et al. **Microbiol Immunol** 1988; 32(12):1189–200

Enhancement of host resistance against Listeria infection by Lactobacillus casei: activation of liver macrophages and peritoneal macrophages by Lactobacillus casei. Sato K, et al. **Microbiol Immunol** 1988;32(7):689–98

Neonatal host defense mechanisms against Listeria monocytogenes infection: the role of lipopolysaccharides and interferons. Bortolussi R, et al. **Pediatr Res** 1989 Mar; 25(3):311–5

Effects of Staphylococcus epidermidis on cellular immunity to infection with Listeria monocytogenes. Ehlers S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):200–12

Immunomodulatory effects of staphylococcal lipoteichoic acid in early Listeria monocytogenes infection in Balb/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):251–6

METABOLISM

Enumeration of single IFN-gamma-producing cells in mice during viral and bacterial infection. Gessner A, et al. **J Immunol** 1989 Feb 15;142(4):1293–8

MICROBIOLOGY

Listeria monocytogenes osteomyelitis. Chirgwin K, et al. **Arch Intern Med** 1989 Apr;149(4):931–2

Outbreak of neonatal listeriosis in a regional hospital in Kuwait. Sethi SK, et al. **Eur J Pediatr** 1989 Jan; 148(4):368–70

Is listeriosis often a foodborne illness? Gill P. **J Infect** 1988 Jul;17(1):1–5 (43 ref.)

Listeria monocytogenes and its role in human infection. Lamont RJ, et al. **J Infect** 1988 Jul;17(1):7–28 (196 ref.)

Neonatal listeriosis: experience in Suffolk. Smyth RL, et al. **J Infect** 1988 Jul;17(1):65–70

Virulence of Listeria spp.: course of infection in resistant and susceptible mice. Mainou-Fowler T, et al. **J Med Microbiol** 1988 Oct;27(2):131–40

Listeriosis [editorial] **Lancet** 1989 Jan 14;1(8629):83–4

Listeriosis associated with consumption of turkey franks. **MMWR** 1989 Apr 21;38(15):267–8

Genetic characterization of clones of the bacterium Listeria monocytogenes causing epidemic disease. Piffaretti JC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3818–22

Listeria monocytogenes cholecystitis. Allerberger F, et al. **Z Gastroenterol** 1989 Mar;27(3):145–7

Pathogenicity testing of Listeria strains isolated from food in fertilized hen's eggs. Lattmann C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):400–5

PATHOLOGY

Increased prostaglandin E release and tumor cytostasis by resident Kupffer cells during Listeria monocytogenes infection. Leser HG, et al. **Immunobiology** 1988 Dec; 178(3):224–8

[Involvement of the basal ganglia and brain stem in infection by Listeria monocytogenes. Anatomo-clinical study] Pimentel J, et al. **Ann Pathol** 1989;9(1):54–6 (Eng. Abstr.) (Fre)

[Listeria monocytogenes kerato-uveitis] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):62–5 (Eng. Abstr.) (Ger)

[Four cases of adult Listeria monocytogenes infection in the last 5 years—hepatic necrotic foci in the adult septic case] Kumada T, et al. **Kansenshogaku Zasshi** 1989 May; 63(5):534–40 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Infection with a reduced virulence Listeria monocytogenes strain increases resistance to salmonellosis in mice. Kaeffer B, et al. **Ann Rech Vet** 1989;20(1):47–55

One approach to assess the liver responses in murine listeriosis and visceral leishmaniasis. Milon G, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:414–7

PREVENTION & CONTROL

Ignorance about listeria. Wilkinson PJ. **BMJ** 1989 Jul 29; 299(6694):276–7 (12 ref.)

Recombinant human interleukin 1 alpha enhances anti-Listeria resistance in both genetically resistant and susceptible strains of mice. Kurtz RS, et al. **Immunol Lett** 1988 Aug;18(4):289–92

Co-operative effect of MCF and MAF(IFN-gamma) in the protection of mice against Listeria monocytogenes. Handa T, et al. **Immunology** 1988 Nov;65(3):427–32

Protective effect of a traditional Chinese medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to), on Listeria monocytogenes infection in mice. Kawakita T, et al. **Immunopharmacol Immunotoxicol** 1988;10(3):345–64

Protection of mice against Listeria monocytogenes infection by recombinant human tumor necrosis factor alpha. Desiderio JV, et al. **Infect Immun** 1989 May;57(5):1615–7

Cloned L3T4+ T lymphocytes protect mice against Listeria monocytogenes by secreting IFN-gamma. Magee DM, et al. **J Immunol** 1988 Nov 1;141(9):3203–7

Protective effect of N-acetyl chitohexaose on Listeria monocytogenes infection in mice. Tokoro A, et al. **Microbiol Immunol** 1989;33(4):357–67

Listeria and pasteurisation [letter] Cooke M. **Vet Rec** 1989

Mar 4;124(9):227
[The dilemma of listeriosis control by the public health office] Seeliger H. **Off Gesundheitswes** 1989 Feb;51(2):67–70 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Listeria pneumonia. A case report. Whitelock-Jones L, et al. **S Afr Med J** 1989 Feb 18;75(4):188–9

THERAPY

Listeria prosthetic valve endocarditis [letter] Rao N. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):303–4

TRANSMISSION

Foodborne listeriosis. WHO Working Group. **Bull WHO** 1988;66(4):421–8
Analyses needed to link food with listeriosis [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
CDC identifies listeriosis risks [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
Listeria in hospital lettuce [letter] Bendig JW, et al. **Lancet** 1989 Mar 18;1(8638):616–7
Possible role of person-to-person transmission of Listeria infection in immunocompromised patients [letter] Helenglass G, et al. **Lancet** 1989 Apr 15;1(8642):851
Listeriosis and ready-cooked chicken [letter] Kaczmarski EB, et al. **Lancet** 1989 Mar 11;1(8637):549
Materno-fetal listeriosis from cook-chill and refrigerated food [letter] Kerr KG, et al. **Lancet** 1988 Nov 12; 2(8620):1133
Food-borne listeriosis [letter] Kerr KG, et al. **Lancet** 1989 Apr 15;1(8642):851
Transmission of Listeria monocytogenes from mother's milk to her baby and to puppies [letter] Svabić-Vlahović M, et al. **Lancet** 1988 Nov 19;2(8621):1201
Epidemic listeriosis [letter] Jasper DE. **N Engl J Med** 1989 Feb 23;320(8):538

VETERINARY

Ovine listeriosis in south coastal Western Australia. Reuter R, et al. **Aust Vet J** 1989 Jul;66(7):223–4
An encephalitic form of listeriosis in broiler chickens. Cooper GL. **Avian Dis** 1989 Jan-Mar;33(1):182–5
Reduced in vivo nonspecific resistance to Listeria monocytogenes infection during avian retrovirus-induced immunosuppression. Cummins TJ, et al. **Avian Dis** 1988 Oct-Dec;32(4):663–7
Ingestion and killing of Listeria monocytogenes by blood and milk phagocytes from mastitic and normal cattle. Czuprynski CJ, et al. **J Clin Microbiol** 1989 May; 27(5):812–7
Immunocytochemical detection of Listeria monocytogenes in tissue with the peroxidase-antiperoxidase technique. Marco A, et al. **Vet Pathol** 1988 Sep;25(5):385–7
Bovine iritis [letter] **Vet Rec** 1989 May 13;124(19):519–20
Bovine iritis [letter] Bardsley ME. **Vet Rec** 1989 Jun 3; 124(22):595
Immunisation against infections caused by Listeria monocytogenes in sheep. Gudding R, et al. **Vet Rec** 1989 Jul 29;125(5):111–4
Bovine iritis [letter] Hindson JC. **Vet Rec** 1989 May 6; 124(18):498
Listerial abortion in the bitch [letter] Sturgess CP. **Vet Rec** 1989 Feb 18;124(7):177

LISTERIA MONOCYTOGENES

Listeriosis: new problems with an old pathogen. Kerr KG, et al. **J Hosp Infect** 1988 Nov;12(4):247–50 (41 ref.)
Listeria survives microwave heating [letter] Sheeran MR, et al. **J Hosp Infect** 1989 Jul;14(1):84–6
Listeria in food: a veterinary perspective [letter] Low JC, et al. **Lancet** 1989 Feb 11;1(8633):322

ANALYSIS

Physical and antigenic heterogeneity in the flagellins of Listeria monocytogenes and L. ivanovii. Peel M, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2593–8
[Extraction of chromosomal DNA from Staphylococcus and Listeria by a rapid method using achromopeptidase] Boujaafar N, et al. **Arch Inst Pasteur Tunis** 1988 Jul-Oct; 65(3–4):271–8 (Eng. Abstr.) **(Fre)**
[Isolation of macrophage-activating phospholipid from Listeria monocytogenes] Jakoniuk P, et al. **Med Dosw Mikrobiol** 1989;41(1):15–21 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Effect of lipid composition on activity of liposome-entrapped ampicillin against intracellular Listeria monocytogenes. Bakker-Woudenberg IA, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1560–4
Antibacterial activity of hen egg white lysozyme against Listeria monocytogenes Scott A in foods. Hughey VL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):631–8
In vitro sensitivity of 65 Listeria monocytogenes isolates to new and old antibiotics. Bille J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):52–3
Decreased resistance to Listeria monocytogenes in mice following vanadate exposure: effects upon the function of macrophages. Cohen MD, et al. **Int J Immunopharmacol** 1989;11(3):285–92
Inhibitory action of nisin against Listeria monocytogenes. Benkerroum N, et al. **J Dairy Sci** 1988 Dec;71(12):3237–45

GENETICS

Nucleotide sequence of the listeriolysin gene from a Listeria monocytogenes serotype 1/2a strain. Domann E, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6406
Intracellular methicillin selection of Listeria monocytogenes mutants unable to replicate in a macrophage cell line. Camilli A, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5522–6
Genetic characterization of clones of the bacterium Listeria monocytogenes causing epidemic disease. Piffaretti JC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3818–22

GROWTH & DEVELOPMENT

Survival of Listeria monocytogenes in cheese made of unpasteurized goat milk. Tham W. **Acta Vet Scand** 1988; 29(2):165–72
Effect of interferons on the activation of murine peritoneal macrophages to inhibit the growth of Listeria monocytogenes. Badger AM, et al. **Adv Exp Med Biol** 1988; 239:201–15
Physiological studies on the growth and utilization of sugars by Listeria species. Pine L, et al. **Can J Microbiol** 1989 Feb;35(2):245–54
Growth of Listeria monocytogenes at different pH values in uncultured whey or whey cultured with Penicillium camemberti. Ryser ET, et al. **Can J Microbiol** 1988 Jun; 34(6):730–4
Effect of free or liposome-encapsulated muramyl dipeptide on uptake and intracellular survival of Listeria monocytogenes in mouse peritoneal macrophages in vitro. Bakker-Woudenberg IA, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):603–9
Loss of catalase activity in Tn1545-induced mutants does not reduce growth of Listeria monocytogenes in vivo. Leblond-Francillard M, et al. **Infect Immun** 1989 Aug; 57(8):2569–73
Storage effects of sewage sludge cake on the survival of Listeria monocytogenes. al-Ghazali MR, et al. **J Appl Bacteriol** 1988 Sep;65(3):209–13
Minimum growth temperatures of Listeria monocytogenes and non-haemolytic Listeria. Junttila JR, et al. **J Appl Bacteriol** 1988 Oct;65(4):321–7
Behavior of Listeria monocytogenes during manufacture and ripening of brick cheese. Ryser ET, et al. **J Dairy Sci** 1989 Apr;72(4):838–53

IMMUNOLOGY

Defective anti-listerial responses in deciduoma of pseudopregnant mice. Redline RW, et al. **Am J Pathol** 1988 Dec;133(3):485–97
Bronchoalveolar macrophages from patients with idiopathic pulmonary fibrosis are unable to kill facultative intracellular bacteria. Savici D, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):22–7
In vitro primary induction of T cells mediating delayed footpad reaction and acquired cellular resistance to Listeria monocytogenes. Mitsuyama M, et al. **Immunobiology** 1988 Jul;177(3):254–66
Discrepancy in the abilities of lymphokines and bacteria to mediate tumor protection in vivo and/or tumoricidal activity by macrophages in vitro. Keller R, et al. **Int J Cancer** 1989 Sep 15;44(3):512–7
Ingestion and killing of Listeria monocytogenes by blood and milk phagocytes from mastitic and normal cattle. Czuprynski CJ, et al. **J Clin Microbiol** 1989 May; 27(5):812–7
Effects of growth temperature on the ingestion and killing of clinical isolates of Listeria monocytogenes by human neutrophils. Stecha PF, et al. **J Clin Microbiol** 1989 Jul; 27(7):1572–6
Monoclonal antibodies show Listeria monocytogenes in necropsy tissue samples. McLauchlin J, et al. **J Clin Pathol** 1988 Sep;41(9):983–8
Early influx of Listeria-reactive T lymphocytes in liver of mice genetically resistant to listeriosis. Goossens PL, et al. **J Immunol** 1988 Oct 1;141(7):2451–5
Phagocytosis and killing of Listeria monocytogenes by alveolar macrophages: smokers versus nonsmokers. King TE Jr, et al. **J Infect Dis** 1988 Dec;158(6):1309–16
Listeria monocytogenes reactive T lymphocytes in healthy individuals. Munk ME, et al. **Microb Pathog** 1988 Jul; 5(1):49–54
Immunisation against infections caused by Listeria monocytogenes in sheep. Gudding R, et al. **Vet Rec** 1989 Jul 29;125(5):111–4
Effects of Staphylococcus epidermidis on cellular immunity to infection with Listeria monocytogenes. Ehlers S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):200–12
[Listeriosis studies in game animals in Tirol and in the Steiermark (Austria)] Sixl W, et al. **Geogr Med** 1989;Suppl 2:15–6 (Eng. Abstr.) **(Ger)**
[Listeria antigens and their isolated protein fractions] Khashimova PR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):16–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Evaluation of three newly developed direct plating media to enumerate Listeria monocytogenes in foods. Cassiday PK, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1645–8
Comparative recovery of uninjured and heat-injured Listeria monocytogenes cells from bovine milk. Crawford RG, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1490–4
Synthetic oligodeoxyribonucleotide probes for detection of Listeria monocytogenes. Datta AR, et al. **Appl Environ Microbiol** 1988 Dec;54(12):2933–7
Fate of Listeria monocytogenes in processed meat products during refrigerated storage. Glass KA, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1565–9
Methods for improved recovery of Listeria monocytogenes from cheese. Yousef AE, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2643–9
Listeria may be present in hot dogs [news] **J Am Vet Med Assoc** 1989 Mar 1;194(5):626–7
FSIS to expand Listeria testing [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
The incidence of Listeria monocytogenes in raw milk from farm bulk tanks in north-east Scotland. Fenlon DR, et al. **J Appl Bacteriol** 1989 Mar;66(3):191–6
Effects of sewage treatment on the removal of Listeria monocytogenes. al-Ghazali MR, et al. **J Appl Bacteriol** 1988 Sep;65(3):203–8
Listeria monocytogenes and chilled foods [letter] Gilbert RJ, et al. **Lancet** 1989 Feb 18;1(8634):383–4
Listeria monocytogenes: a protocol for rapid identification [letter] Kempton G. **Med J Aust** 1989 May 15;150(10):607
Immunocytochemical detection of Listeria monocytogenes in tissue with the peroxidase-antiperoxidase technique. Marco A, et al. **Vet Pathol** 1988 Sep;25(5):385–7
[The detection of Listeria monocytogenes and Listeria innocua in cheese] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1988 Nov 1; 101(11):373–5 (Eng. Abstr.) **(Ger)**
[Contamination of cheese with Listeria monocytogenes] Primavesi CA. **Off Gesundheitswes** 1988 Jul;50(7):382–4 (12 ref.) (Eng. Abstr.) **(Ger)**
[Epidemiological significance of poultry in the transmission of Salmonella, Yersinia enterocolitica and Listeria monocytogenes: investigation of unchecked specimens for sale in the marketplace] Curcio ML, et al. **Nuovi Ann Ig Microbiol** 1986 Jan-Dec;37(1–6):85–94 (Eng. Abstr.) **(Ita)**

METABOLISM

Synthesis of listeriolysin in Listeria monocytogenes under heat shock conditions. Sokolovic Z, et al. **Infect Immun** 1989 Jan;57(1):295–8
Amino acid requirement of six strains of Listeria monocytogenes. Siddiqi R, et al. **Int J Med Microbiol** 1989 Jul;271(2):146–52
[Biochemical differentiation of Listeria from cheese] Seiler H, et al. **Berl Munch Tierarztl Wochenschr** 1989 May 1; 102(5):166–70 (Eng. Abstr.) **(Ger)**

PATHOGENICITY

Infection with a reduced virulence Listeria monocytogenes strain increases resistance to salmonellosis in mice. Kaeffer B, et al. **Ann Rech Vet** 1989;20(1):47–55
Recent developments in the study of virulence in Listeria monocytogenes. Chakraborty T, et al. **Curr Top Microbiol Immunol** 1988;138:41–58 (79 ref.)
Identification of an extracellular protein of Listeria monocytogenes possibly involved in intracellular uptake by mammalian cells. Kuhn M, et al. **Infect Immun** 1989 Jan;57(1):55–61
Pathogenicity testing of Listeria strains isolated from food in fertilized hen's eggs. Lattmann C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):400–5

PHYSIOLOGY

Inhibition of Listeria monocytogenes by using bacteriocin PA-1 produced by Pediococcus acidilactici PAC 1.0. Pucci MJ, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2349–53
Loss of viability by Listeria monocytogenes in commercial bovine pepsin-rennet extract. el-Gazzar FE, et al. **J Dairy Sci** 1989 May;72(5):1098–102

RADIATION EFFECTS

Destruction of Listeria monocytogenes during microwave cooking [letter] Lund BM, et al. **Lancet** 1989 Jan 28; 1(8631):218

ULTRASTRUCTURE

Temperature-dependent expression of flagella of Listeria monocytogenes studied by electron microscopy, SDS-PAGE and western blotting. Peel M, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2171–8

LISURIDE see under **ERGOLINES**

LITERATURE

The lunatic, the lover, and the poet: a study of Shakespeare's conception of creativity. Frattaroli EJ. **Adolesc Psychiatry** 1988;15:221–46

One Particular Leviathan [letter] Davison S. Am J Med 1989 Sep;87(3):365
Alienation from self in "The Jewel in the Crown". Remen S. Am J Psychoanal 1988 Fall;48(3):251–60
The inescapability of tragedy. Spitz EH. Bull Menninger Clin 1988 Sep;52(5):377–82
Memorial's dramatic doom: can drama help medical students learn? Helwig D. Can Med Assoc J 1989 Jun 1; 140(11):1364–5
The magic of fairy tales: psychodynamic and developmental perspectives. Lubetsky J. Child Psychiatry Hum Dev 1989 Summer;19(4):245–55
Hypnotic transformation—three studies of theatrical role-playing: a brief communication. Fowler K. Int J Clin Exp Hypn 1988 Oct;36(4):249–55
A walk in the woods [letter] Kohn SR. J Am Acad Dermatol 1989 Feb;20(2 Pt 1):300–1
The impact of literature upon health: some varieties of cathartic response. Ellelli A. Lit Med 1986;5:90–108
The moral vision of The Alchemist: tricks, psychotherapy, and personality traits. Netscher RE. Lit Med 1988;7:177–94
Prospero as a renaissance therapist. Schleiner W. Lit Med 1987;6:54–60
Dream doctors as healers in drama and film: a paradigm, an antecedent, and an imitation. Welsh JM. Lit Med 1987; 6:117–27
Literature and medicine: a short course for medical students. Calman KC, et al. Med Educ 1988 Jul;22(4):265–9
The case of Tertius Lydgate. Streeter RE. Perspect Biol Med 1988 Winter;32(2):171–3
The confrontation with death. Vavra JD. Pharos 1988 Summer;51(3):16–25
Rape as entertainment. Wilson W. Psychol Rep 1988 Oct; 63(2):607–10
["The Jews interpret in a crazy manner." Evaluation of a classical text] Legendre P. Psyche (Stuttg) 1989 Jan; 43(1):20–39 (Eng. Abstr.) (Ger)
[After the convention of physicians and artists] Sáry G. Orv Hetil 1989 Feb 12;130(6):301–2 (Hun)
[Literature, periodicals and video—example for selections for health care center] Lakartidningen 1988 Sep 7; 85(36):2867–72 (Swe)
[The physician with a pen and physicians on the stage] Böttiger LE. Lakartidningen 1988 Dec 28;85(52):4638–9 (Swe)

HISTORY

Theodore Dreiser's "Laughing Gas". Wright AJ. Anesth Analg 1989 Sep;69(3):391–2
The neurology in Shakespeare. Horgan L. Arch Neurol 1989 Aug;46(8):922–4
Philoctetes by Sophocles: a case for diagnosis. Stefanato C. J R Coll Physicians Lond 1989 Jul;23(3):176
The ailment of Dr Anton Chekhov. Behrman S. J R Soc Med 1989 Mar;82(3):163–4
Immunology and literature in the early twentieth century: "Arrowsmith" and "The Doctor's Dilemma". Löwy I. Med Hist 1988 Jul;32(3):314–32
Molière's medical satire: motives and methods. Dirckx JH. Pharos 1989 Winter;52(1):10–4
[Hofmannsthal and the gliding out of this world] Tellenbach H. Z Klin Psychol Psychopathol Psychother 1988; 36(3):268–74 (Eng. Abstr.) (Ger)
[A.P. Chekhov and M.A. Chlenov (on the 125th anniversary of the writer's birth)] Arkhangel'skiĭ GV. Klin Med (Mosk) 1988 Dec;66(12):130–1 (Rus)
[The medical center of Dr. A.P. Chekhov in Krinkov] Belov AV. Klin Med (Mosk) 1989 Apr;67(4):155–7 (Rus)
[Medicine in the life and creativity of M. A. Bulgakov] Likhtenshtein IE. Klin Med (Mosk) 1988 Aug;66(8):149–51 (Rus)
[A.P. Chekhov's comments on cardiac hypertrophy] Shul'tsev GP. Klin Med (Mosk) 1989 Mar;67(3):152–3 (Rus)

LITERATURE, MEDIEVAL

Sexuality in Chaucer [letter] Donow HS. Gerontologist 1989 Jun;29(3):416–7
The troubled house of Oedipus and Chrétien's Néo-Tristan: re-writing the mythologies of desire. Rubey D. Psychoanal Rev 1988 Spring;75(1):67–94

HISTORY

Dante and medicine: the circle of malpractice. Accardo P. South Med J 1989 May;82(5):624–8

LITERATURE, MODERN

James Joyce and Stephen Dedalus: object and selfobject relationships in the successful and blocked creative process. Baker HS. Adolesc Psychiatry 1988;15:258–78
The lunatic, the lover, and the poet: a study of Shakespeare's conception of creativity. Frattaroli EJ. Adolesc Psychiatry 1988;15:221–46
Rediscovered poem after 53 years. Hamrick LC. Ala Med 1989 Apr;58(10):17
Ann Sexton and the daemonic lover. Kavaler SA. Am J Psychoanal 1989 Jun;49(2):105–14
Alienation from self in "The Jewel in the Crown". Remen S. Am J Psychoanal 1988 Fall;48(3):251–60
Sherlock Holmes: a suitable case for treatment? Rollin HR. Br J Psychiatry 1988 Aug;153:241–2
Poetry: the doctor and the tubercle bacilli. Askar AO. Bull Int Union Tuberc Lung Dis 1988 Jun;63(2):12
Taming the wild things. Lystad M. Child Today 1989 Mar–Apr;18(2):16–9
Late style in the novels of Barbara Pym and Penelope Mortimer. Wyatt-Brown AM. Gerontologist 1988 Dec; 28(6):835–9
A walk in the woods [letter] Kohn SR. J Am Acad Dermatol 1989 Feb;20(2 Pt 1):300–1
Literature and music: an educational strategy in psychiatric mental health nursing. Peterson LC, et al. J Nurs Educ 1988 Oct;27(8):374–7
Literature and medical ethics [editorial] Sheriff DS. J R Soc Med 1988 Dec;81(12):688–90
'Poe-phyria,' madness, and The Fall of the House of Usher [letter] Rickman LS, et al. JAMA 1989 Feb 10;261(6):863–4
A piece of my mind. The Benjamin birds. Schiedermayer DL. JAMA 1989 Jan 20;261(3):440
A piece of my mind. On taking up the caduceus. Sen HA. JAMA 1989 Jan 20;261(3):440
Literature and bioethics. Lit Med 1988;7:1–209
Use and abuse of literary concepts in medicine. Lit Med 1986; 5:1–183
A controversy about clinical form. Banks JT. Lit Med 1986; 5:24–6
A case of amyotrophic lateral sclerosis. Barnard D. Lit Med 1986;5:27–42
The roots of guilt and responsibility in Shusaku Endo's The Sea and Poison. Breuer HP. Lit Med 1988;7:80–106
Darwinism in Victorian letters. Breuer HP. Lit Med 1987; 6:128–38
The doctor as patient: bioethical dilemmas reflected in literary narratives. Budge A, et al. Lit Med 1988;7:132–7
Esthetics and anesthetics: mimesis, hermeneutics, and treatment in literature and medicine. Carter AH 3d. Lit Med 1986;5:141–51
To render the lives of patients. Charon R. Lit Med 1986; 5:58–74
The pharmakos figure in modern American stories of physicians and patients. Cowan JC. Lit Med 1987;6:94–109
Medical ethics and the problem of role ambiguity in Mikhail Bulgakov's "The Murderer" and Pearl S. Buck's "The Enemy". Dagi TF. Lit Med 1988;7:107–22
Not choosing not to be: Victorian literary responses to suicide. Gates BT. Lit Med 1987;6:77–91
Making a case. Hunter KM. Lit Med 1988;7:66–79
Medicine as business and patient welfare: Thomas Mann dissects the conflict of interest. Justin RG. Lit Med 1988; 7:138–47
How to read The Body in Pain. Morris DB. Lit Med 1987; 6:139–55
The moral vision of The Alchemist: tricks, psychotherapy, and personality traits. Netscher RE. Lit Med 1988;7:177–94
A case of self defense. Rabkin E. Lit Med 1986;5:43–53
Clinical tales. Sacks O. Lit Med 1986;5:16–23
Prospero as a renaissance therapist. Schleiner W. Lit Med 1987;6:54–60
Sequel. Schneiderman LJ. Lit Med 1986;5:75–83
The limits of narrative. Smith DH. Lit Med 1986;5:54–7
Literature and bioethics: the tension in goals and styles. Terry JS, et al. Lit Med 1988;7:1–21 (24 ref.)
Poems and patients: the balance of interpretation. Terry JS, et al. Lit Med 1987;6:43–53
Using literature to teach ethical principles in medicine: Of Mice and Men and the concept of duty. Waldron EE. Lit Med 1988;7:170–6
Dream doctors as healers in drama and film: a paradigm, an antecedent, and an imitation. Welsh JM. Lit Med 1987; 6:117–27
The ethics of impaired physicians: Wolfe's Dr. McGuire and Williams's Dr. Rivers. Willms J, et al. Lit Med 1988; 7:123–31
Physician burnout [letter] Vinson DC. Pharos 1988 Summer; 51(3):42
Doubling, mythic difference, and the scapegoating of female power in Macbeth. Hunter D. Psychoanal Rev 1988 Spring; 75(1):129–52
The Devil's Elixirs, Jung's "theology," and the dissolution of Freud's "poisoning complex". Kerr J. Psychoanal Rev 1988 Spring;75(1):1–33
Seeing the absent father in a visual style. Lourdeaux L. Psychoanal Rev 1989 Spring;76(1):83–105
The psychological significance of science fiction. McMahon DF. Psychoanal Rev 1989 Summer;76(2):281–95
"Here only weak": sexuality and the structure of trauma in Paradise Lost. Rudnytsky PL. Psychoanal Rev 1988 Spring; 75(1):153–76
Heidi's metaphoric appeal to latency. A journey through the Oedipus complex. Palmer AJ. Psychoanal Study Child 1988; 43:387–97
Picturing the child's inner world of fantasy. On the dialetic between image and word. Spitz EH. Psychoanal Study Child 1988;43:433–47
On death and dying [letter] Elovitz S. South Med J 1988 Oct;81(10):1334
[Transformation symbolism in Andersen's tale "The Little Mermaid"] Engel B. Prax Kinderpsychol Kinderpsychiatr 1988 Dec;37(10):374–8 (12 ref.) (Eng. Abstr.) (Ger)
[The intercepted decline. Tristram Shandy's traumas] Beland H. Psyche (Stuttg) 1988 Aug;42(8):709–23 (Eng. Abstr.) (Ger)
[Faust—an early disturbed personality? An American's speech to a German public] Müller C. Psyche (Stuttg) 1989 Jun;43(6):535–57 (Eng. Abstr.) (Ger)
[Poison—subject and parable. Facts and fables on flora] Giebelmann R. Z Gesamte Hyg 1988 Dec;34(12):739–42 (Eng. Abstr.) (Ger)
[Rubião Meira and the former physicians in his memoir of São Paulo] Corrêa JV. Rev Hosp Clin Fac Med Sao Paulo 1988 Sep–Oct; 43(5):255–7 (Por)

HISTORY

Struwwelpeter Heinrich Hoffmann (1809–1894). Wortis J. Biol Psychiatry 1988 Oct;24(6):615–8
Professor Lord Lister, William Ernest Henley, and Oscar Wilde. Baron JH. BMJ 1988 Dec 24–31;297(6664):1651–3
The illnesses of Elizabeth Barrett Browning [letter] Dally P. BMJ 1989 Apr 8;298(6678):963
The illnesses of Elizabeth Barrett Browning [letter] Milnes JN. BMJ 1989 Apr 22;298(6680):1102
The death of Porthos, or the first description of vertebrobasilar insufficiency in fiction. Rønnov-Jessen V. BMJ 1988 Dec 24–31;297(6664):1658
The illnesses of Elizabeth Barrett Browning [letter] Weir JG. BMJ 1989 Mar 18;298(6675):749
The illnesses of Elizabeth Barrett Browning. Young DA. BMJ 1989 Feb 18;298(6671):439–43
An unrepentant confusion of Art and Science: William Carlos Williams and Julian Tudor Hart. Frey JJ. Fam Med 1985 Sep–Oct;17(5):209–14
Gertrude Stein on the beach. Weissmann G. Hosp Pract [Off] 1989 Jan 15;24(1):40–4, 47, 51 passim
Robert Burton and psychological healing. Jackson SW. J Hist Med Allied Sci 1989 Apr;44(2):160–78
An Anglo-American consultation: Sir William Osler refers Henry James to Sir James Mackenzie. Janowitz HD, et al. J Hist Med Allied Sci 1988 Jul;43(3):297–308
The personal, the political, and the aesthetic: Johann Joachim Winckelmann's German enlightenment life. Sweet DM. J Homosex 1988;16(1–2):147–62
Anton Chekhov's MD thesis: Sakhalin Island. Galton DJ. J R Coll Physicians Lond 1989 Jul;23(3):189–93
William Somerset Maugham: medical student at St Thomas's Hospital 1892 to 1897—'Liza of Lambeth'. Banerjee AK. J R Soc Med 1989 Jan;82(1):44–5
The ailment of Dr Anton Chekhov. Behrman S. J R Soc Med 1989 Mar;82(3):163–4
Fictional doctors and the evolution of medical ethics in the United States, 1975–1900. Burns CR. Lit Med 1988;7:39–55
A. R. Luria and the art of clinical biography. Hawkins AH. Lit Med 1986;5:1–15
Fitzgerald vs. Fitzgerald: "An Alcoholic Case". Monteiro G. Lit Med 1987;6:110–6
Williams's force. Morris DB. Lit Med 1986;5:122–40
Tennyson, the weird seizures in The Princess, and epilepsy. Wright BH. Lit Med 1987;6:61–76
Smallpox in seventeenth-century English literature: reality and the metamorphosis of wit. Anselment RA. Med Hist 1989 Jan;33(1):72–95
Immunology and literature in the early twentieth century: "Arrowsmith" and "The Doctor's Dilemma". Löwy I. Med Hist 1988 Jul;32(3):314–32
On Milton's blindness. Hertzberg R. Med J Aust 1988 Dec 5–19;149(11–12):643–4
Obstetrics and Ernest Hemingway. King CR. Obstet Gynecol 1989 Jul;74(1):117–20
The public hospital revisted: The twenty-fifth anniversary of Jan de Hartog's "The Hospital". Holleman MC, et al. Perspect Biol Med 1989 Summer;32(4):568–80
Molière's medical satire: motives and methods. Dirckx JH. Pharos 1989 Winter;52(1):10–4
[Czech neurologists—authors] Kas S. Cesk Neurol Neurochir 1988 Sep;51(5):336–9 (Eng. Abstr.) (Cze)
[Czech and Slovak pediatricians as authors] Káš S. Cesk Pediatr 1988 Jul;43(7):435–7 (Cze)
[Literary creation and political involvement] Szafran AW. Acta Psychiatr Belg 1988 May–Jun;88(3):242–54 (Eng. Abstr.) (Fre)
[Hendrick Conscience (1812–1883). Pathographic and medical aspects of his life and work] Dieckhöfer K. Clio Med 1985–86;20(1–4):91–103 (Ger)
[Franz Kafka's anorexia nervosa] Fichter MM. Fortschr Neurol Psychiatr 1988 Jul;56(7):231–8 (Eng. Abstr.) (Ger)
[Dr. Charlot Strasser (1884–1950). A Swiss psychiatrist as author, cultural and social politician] Heinrich D. Gesnerus 1988;45 Pt 3–4:483–99 (Eng. Abstr.) (Ger)
[Remarks on the contribution "Displaced and supernumerary molar of the ethmoid bone" by J. Silberzahn (Giessen) in this periodical, volume 67, issue 10 1988, p. 545–546 (letter)] Becker W. Laryngorhinootologie 1989 Feb;68(2):133 (Ger)
[Goethe, Kant, Locke, Villaume knew our technic of individual therapy] Leonhard K. Psychiatr Neurol Med Psychol (Leipz) 1989 Feb;41(2):105–8 (Eng. Abstr.) (Ger)
[Hofmannsthal and the gliding out of this world] Tellenbach H. Z Klin Psychol Psychopathol Psychother 1988; 36(3):268–74 (Eng. Abstr.) (Ger)
[A.P. Chekhov and M.A. Chlenov (on the 125th anniversary of the writer's birth)] Arkhangel'skiĭ GV.

Klin Med (Mosk) 1988 Dec;66(12):130–1 (Rus)
[The medical center of Dr. A.P. Chekhov in Kriukov] Belov AV. Klin Med (Mosk) 1989 Apr;67(4):155–7 (Rus)
[The history of the illness of M.V. Lomonosov] Evdokimov PP. Klin Med (Mosk) 1989 Feb;67(2):143–6 (Rus)
[The history of the illness of I.A. Krylov] Evdokimov PP. Klin Med (Mosk) 1989 Apr;67(4):157 (Rus)
[Medical problems in A. P. Chekhov's work "Sakhalin Island" (on the centenary of A. P. Chekhov's travels to Sakhalin Island)] Shul'tsev GP. Klin Med (Mosk) 1988 Sep; 66(9):145–9 (Rus)
[A.P. Chekhov's comments on cardiac hypertrophy] Shul'tsev GP. Klin Med (Mosk) 1989 Mar;67(3):152–3 (Rus)
[Social and medical observations in "Istarskim Putima" (Istrian Paths) by Franje Horvat Kiš] Rudelić I. Lijec Vjesn 1988 Aug;110(8):291–4 (Eng. Abstr.) (Scr)

LITHIUM

Surface charge effects upon membrane transport processes: the effects of surface charge on the monensin-mediated transport of lithium ions through phospholipid bilayers studied by 7Li-NMR spectroscopy. Riddell FG, et al. Biochim Biophys Acta 1988 Nov 3;945(1):65–72
Static disorder and librational motions of the purine bases in films of oriented Li-DNA. Brandes R, et al. J Mol Biol 1988 Jul 20;202(2):321–32
In vitro study of lithium carbonate adsorption by activated charcoal. Favin FD, et al. J Toxicol Clin Toxicol 1988; 26(7):443–50
Lithium/silver vanadium oxide batteries for implantable defibrillators. Takeuchi ES, et al. PACE 1988 Nov;11(11 Pt 2):2035–9

ADMINISTRATION & DOSAGE

A single dose of lithium carbonate acutely elevates intact parathyroid hormone levels in humans. Seely EW, et al. Acta Endocrinol (Copenh) 1989 Aug;121(2):174–6
Adding lithium carbonate to carbamazepine: antimanic efficacy in treatment-resistant mania. Kramlinger KG, et al. Acta Psychiatr Scand 1989 Apr;79(4):378–85
Lithium treatment: are the present schedules optimal? Plenge P, et al. Acta Psychiatr Scand Suppl 1988;345:69–73 (30 ref.)
The integrated approach. On the significance of pharmacological and nonpharmacological factors when lithium prophylaxis fails. Schou M.
Acta Psychiatr Scand Suppl 1988;345:119–23 (30 ref.)
Lithium every second day [letter] Jensen HV, et al. Am J Psychiatry 1989 Apr;146(4):557
A flavor paired with lithium chloride blocks the formation of a pentobarbital–lithium chloride association. Martin GM, et al. Behav Neural Biol 1989 Jul;52(1):108–15
Measurement of cation transport in vivo in healthy volunteers after the oral administration of lithium carbonate. Wood AJ, et al. Clin Sci 1989 Apr;76(4):397–402
Comment: dosing lithium [letter] Siemsen FK, et al. Drug Intell Clin Pharm 1988 Dec;22(12):1005
Lithium and renal function in relation to concomitant theory. Aberg-Wistedt A, et al. Int Clin Psychopharmacol 1988 Oct;3(4):277–86
Lithium augmentation for treatment-resistant depression in the elderly. Lafferman J, et al. J Geriatr Psychiatry Neurol 1988 Jan;1(1):49–52
A review of lithium dosing methods. Lobeck F. Pharmacotherapy 1988;8(4):248–55 (43 ref.)
Long-term treatment of bipolar depression. Grof P. Psychiatr J Univ Ottawa 1989 Jun;14(2):390–2; discussion 393 (8 ref.)
Lithium antagonism of ethanol-induced intoxication: relationship to intracellular lithium levels. Hirschowitz J, et al. Psychiatry Res 1989 Jul;29(1):55–63
A pilot study of managed lithium discontinuation. Molnar G, et al. Psychopharmacol Bull 1988;24(2):217–9
A comparison of pharmacokinetic versus empirical lithium dosing techniques. Browne JL, et al. Ther Drug Monit 1989; 11(2):149–54
Comparison of three lithium dosing methods in 950 "subjects" by computer simulation. Nelson MV. Ther Drug Monit 1988;10(3):269–74
[A clinical analysis of 30 cases of affective disorder with rapid cyclic episodic features] Mei QY. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Aug; 21(4):236–8, 256 (Eng. Abstr.) (Chi)
[Addition of lithium to thymoleptic drugs in the treatment of therapy refractory depression] Schöpf J. Nervenarzt 1989 Apr;60(4):200–5 (61 ref.) (Eng. Abstr.) (Ger)
[Low doses of lithium in Felty's syndrome (letter)] Toral Revuelta JR, et al. Med Clin (Barc) 1988 Jun 11;91(3):118–9 (Spa)

ADVERSE EFFECTS

Renal function in chronic lithium-treated patients. Conte G, et al. Acta Psychiatr Scand 1989 May;79(5):503–4
Urinary excretion of albumin and retinol-binding protein in lithium-treated patients. Jensen HV, et al. Acta Psychiatr Scand 1988 Sep;78(3):375–8
Prospective studies on a lithium cohort. 2. Renal function. Water and electrolyte metabolism. Schou M, et al. Acta Psychiatr Scand 1988 Oct;78(4):427–33
Prospective studies on a lithium cohort. 3. Tremor, weight gain, diarrhea, psychological complaints. Vestergaard P, et al. Acta Psychiatr Scand 1988 Oct;78(4):434–41
Lithium, polyuria and abnormal diurnal weight gain in psychosis. Vieweg WV, et al. Acta Psychiatr Scand 1988 Oct;78(4):510–4
The impact of long-term lithium treatment on renal function and structure. Hetmar O. Acta Psychiatr Scand Suppl 1988; 345:85–9 (16 ref.)
Lithium induced polyuria and polydipsia. Passavanti G, et al. Adv Exp Med Biol 1989;252:215–31
Combination angiotensin converting enzyme inhibitor/lithium therapy contraindicated in renal disease [letter] Simon G. Am J Med 1988 Dec;85(6):893–4
Myxedema coma associated with lithium therapy. Waldman SA, et al. Am J Med 1989 Sep;87(3):355–6
Lithium-induced downbeat nystagmus. Halmagyi GM, et al. Am J Ophthalmol 1989 Jun 15;107(6):664–70
Effects of lithium on thyroid function [letter] Clower CG. Am J Psychiatry 1989 Oct;146(10):1357
Wernicke's encephalopathy following lithium-induced diarrhea [letter] Epstein RS. Am J Psychiatry 1989 Jun; 146(6):806–7
A case of severe lithium toxicity induced by combined fluoxetine and lithium carbonate [letter] Salama AA, et al. Am J Psychiatry 1989 Feb;146(2):278
Polydipsia, hyponatremia, and psychosis [letter] Vieweg WV, et al. Am J Psychiatry 1989 Jan;146(1):124
Renal tubular function in patients on long-term lithium therapy. Viol GW, et al. Am J Psychiatry 1975 Jan; 132(1):68–70
Lithium-induced nephrotic syndrome. Wood IK, et al. Am J Psychiatry 1989 Jan;146(1):84–7 (10 ref.)
Indomethacin in the treatment of lithium-induced nephrogenic diabetes insipidus. Allen HM, et al. Arch Intern Med 1989 May;149(5):1123–6
Hyperparathyroidism, hypothyroidism, and impaired renal function after 10 to 20 years of lithium treatment. Stancer HC, et al. Arch Intern Med 1989 May;149(5):1042–5
Permanent lithium-induced downbeating nystagmus [letter] Rosenberg ML. Arch Neurol 1989 Aug;46(8):839
Vanadium and other trace elements in patients taking lithium. Campbell CA, et al. Biol Psychiatry 1988 Nov;24(7):775–81
Effect of lithium and neuroleptic combination on lithium transport, blood pressure, and weight in bipolar patients. Ghadirian AM, et al. Biol Psychiatry 1989 Jun;26(2):139–44
Toxic interaction of lithium carbonate and mefenamic acid. MacDonald J, et al. BMJ 1988 Nov 19;297(6659):1339
Neuroleptic malignant syndrome' without neuroleptics [letter] Brennan D, et al. Br J Psychiatry 1988 Apr; 152:578–9
Lithium-induced carpal tunnel syndrome. Deahl MP. Br J Psychiatry 1988 Aug;153:250–1
Lithium, psoriasis, abnormal glucose tolerance, and thyroid dysfunction [letter] Humphreys MS, et al. Br J Psychiatry 1988 Mar;152:437–8
Lithium-induced paranoid hallucinatory state [letter] Kamlana SH. Br J Psychiatry 1989 Feb;154:273
Lithium in pregnancy and still birth: a case report. Khandelwal SK, et al. Br J Psychiatry 1989 Jan;154:114–6
Mania induced by lithium augmentation. A case report. Yuvarajan R, et al. Br J Psychiatry 1988 Dec;153:828–30
Carbamazepine–lithium toxicity in brain-damaged adolescents. Parmelee DX, et al. Brain Inj 1988 Oct–Dec; 2(4):305–8
Lithium-induced renal disease: a prospective study. Jorkasky DK, et al. Clin Nephrol 1988 Dec;30(6):293–302
Lithium-induced internuclear ophthalmoplegia. Deleu D, et al. Clin Neuropharmacol 1989 Jun;12(3):224–6
Lithium and Ebstein's anomaly. Sípek A. Cor Vasa 1989; 31(2):149–56
Lithium-induced headache. Alvarez-Cermeño JC, et al. Headache 1989 Apr;29(4):246–7
Lithium-associated Mallory–Weiss syndrome [letter] Ananth J, et al. J Clin Psychiatry 1988 Oct;49(10):412
Neurotoxicity resulting from a combination of lithium and loxapine [letter] Fuller MA, et al. J Clin Psychiatry 1989 May;50(5):187
Maintenance lithium treatment: side effects and compliance. Gitlin MJ, et al. J Clin Psychiatry 1989 Apr;50(4):127–31
Aggravation of diabetic nephropathy by lithium: a case report and review of the literature. Pawel BR, et al. J Clin Psychiatry 1989 Mar;50(3):101–3 (15 ref.)
Myoclonus during combined tricyclic antidepressant and lithium treatment [letter] Devanand DP, et al. J Clin Psychopharmacol 1988 Dec;8(6):446–7
Weight gain with antidepressants and lithium. Garland EJ, et al. J Clin Psychopharmacol 1988 Oct;8(5):323–30 (87 ref.)
Lithium-induced akathisia. Patterson JF. J Clin Psychopharmacol 1988 Dec;8(6):445
Weight gain with lithium [letter] Vestergaard P, et al. J Clin Psychopharmacol 1989 Jun;9(3):227
Lorazepam in the treatment of lithium-induced akathisia [letter] Yassa R, et al. J Clin Psychopharmacol 1989 Feb; 9(1):70–1
Exacerbation of psoriasis during lithium treatment. Sasaki T, et al. J Dermatol (Tokyo) 1989 Feb;16(1):59–63
Heavy lithium ingestion and haematological changes in rats. Kanwar KC, et al. J Environ Pathol Toxicol Oncol 1988; 8(7 Spec No):1–5
Port-wine stain associated with maternal use of lithium carbonate. Leung AK. J Natl Med Assoc 1987 Aug; 79(8):877–8
Increased extrapyramidal symptoms with addition of lithium to neuroleptics. Addonizio G, et al. J Nerv Ment Dis 1988 Nov;176(11):682–5
Neuroleptic-induced pyrexia. A benign variant. Bamrah JS. J Nerv Ment Dis 1988 Dec;176(12):741–3
Reversible Creutzfeldt–Jakob like syndrome induced by lithium plus levodopa treatment [letter] Broussolle E, et al. J Neurol Neurosurg Psychiatry 1989 May;52(5):686–7
Reversible lithium neurotoxicity at normal serum level may refer to intracranial pathology [letter] Kemperman CJ, et al. J Neurol Neurosurg Psychiatry 1989 May;52(5):679–80
A Creutzfeldt–Jakob like syndrome due to lithium toxicity [letter] Primavera A, et al. J Neurol Neurosurg Psychiatry 1989 Mar;52(3):423
Effects of long-term lithium treatment on kidney function: an overview. Schou M. J Psychiatr Res 1988;22(4):287–96 (80 ref.)
Neuroleptic malignant-like syndrome and lithium [letter] Koehler PJ, et al. Lancet 1988 Dec 24–31; 2(8626–8627):1499–500
Renal aspects of lithium toxicity [editorial] George CR. Med J Aust 1989 Mar 20;150(6):291–2
Electroencephalographic changes and other indices of neurotoxicity with haloperidol–lithium therapy. Saran A, et al. Neuropsychobiology 1989;22(3):152–7
The syndrome of irreversible lithium-effectuated neurotoxicity (SILENT). Adity anjee. Pharmacopsychiatry 1989 Mar;22(2):81–3
Lithium treatment in Aarhus. 2. Risk of renal failure and of intoxication. Schou M, et al. Pharmacopsychiatry 1989 May;22(3):101–3
Lithium treatment of a patient with Addison's disease and affective psychosis. Schulze M, Könking H. Pharmacopsychiatry 1989 Mar;22(2):84–6
Ultrasonic vocalizations in male rats following acquisition of copulation-illness associations. Peters RH, et al. Physiol Behav 1988;44(6):749–51
Neurologic complications in patients treated with lithium. Kiejna A, et al. Psychiatr J Univ Ottawa 1988 Sep; 13(3):164–6
Treatment of the cardiac-impaired depressed patient. Part II: Lithium, carbamazepine, and electroconvulsive therapy. Guttmacher LB, et al. Psychiatr Med 1988;6(3):34–51 (77 ref.)
Thyroid function in patients maintained on lithium. Hatterer JA, et al. Psychiatry Res 1988 Dec;26(3):249–57
Thyroid function and bipolar affective disorder. Joffe RT, et al. Psychiatry Res 1988 Aug;25(2):117–21
Toxic interactions between lithium and non-steroidal anti-inflammatory drugs. Stein G, et al. Psychol Med 1988 Aug;18(3):535–43 (55 ref.)
Environmental lithium and major cardiovascular disease: hypothesis testing of an issue [editorial] McWhorter JH, et al. W V Med J 1988 Sep;84(9):406
[Long-term lithium treatment and renal lesions] Jiang ZN. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Apr; 21(2):121–3 (18 ref.) (Chi)
[Neurotoxicity of lithium with normal lithium levels] Kemperman CJ, et al. Ned Tijdschr Geneeskd 1988 Nov 5;132(45):2066–70 (Eng. Abstr.) (Dut)
[Lasting neurological damage with therapeutic plasma lithium levels] van den Broek WW, et al. Ned Tijdschr Geneeskd 1988 Nov 5;132(45):2063–6 (Eng. Abstr.) (Dut)
[Neurotoxicity of lithium with normal lithium levels (letter)] van Sweden B. Ned Tijdschr Geneeskd 1989 Jan 21; 133(3):133–4 (Dut)
[Lithium, pregnancy and breast feeding] Villeneuve A, et al. Encephale 1989 Mar–Apr;15(2):283–6 (25 ref.) (Eng. Abstr.) (Fre)
[Nephrotoxicity of lithium] Godin M, et al. Presse Med 1989 Jun 10;18(23):1145–6 (Fre)
[Renal function in treatment with lithium. Apropos of 50 personal cases] Bismuth C, et al. Therapie 1988 Aug–Sep; 43(5):419–22 (Eng. Abstr.) (Fre)
[Renal side-effects of lithium salts] Welsch M, et al. Therapie 1988 Aug–Sep;43(5):423–4 (Eng. Abstr.) (Fre)
[Downbeat nystagmus in lithium medication] Engelhardt A, et al. Nervenarzt 1988 Oct;59(10):624–7 (Ger)
[Neurotoxicity in long-term lithium therapy: an electroneurographic study] Eisenstädter A, et al. Wien Klin Wochenschr 1989 Mar 3;101(5):166–8 (Eng. Abstr.) (Ger)
[Lithium and psoriasis. Critical review and case reports] Zirilli G, et al. Minerva Psichiatr 1988 Jan–Mar;29(1):43–50 (49 ref.) (Eng. Abstr.) (Ita)
[Weight gain secondary to treatment with lithium carbonate] Moral Iglesias L, et al. Actas Luso Esp Neurol Psiquiatr Cienc Afines 1989 Jan–Feb;17(1):32–5 (Eng. Abstr.) (Spa)

ANALYSIS

Saliva lithium levels: clinical applications. Neu C, et al. Am J Psychiatry 1975 Jan;132(1):66–8
Presence and significance of lithium in the brown shrimp, Crangon crangon (L.). Spaargaren DH. Comp Biochem Physiol [A] 1988;91(3):457–61
[Methods of quick-freezing and cryosubstitution of biological tissues in analytical ion microscopy] Mony MC, et al. C R Soc Biol (Paris) 1988;182(5):458–65 (Eng. Abstr.) (Fre)

ANTAGONISTS & INHIBITORS

Inhibition by antiepileptics of carbachol but not lithium- or 5-methoxytryptamine-induced wet dog shakes in rats. Sieklucka-Dziuba M, et al. **Pol J Pharmacol Pharm** 1988 Mar-Apr;40(2):119-28

BLOOD

Kinetics of Na-Li exchange in high and low K sheep red blood cells. Ryu KH, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C58-64

Interaction of inhibitin with the human erythrocyte Na+(Li+)i/Nao+ exchanger. Morgan K, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):53-61

A study of the transport of lithium across the erythrocyte membrane in vivo and of the effects of the ion transport inhibitors digoxin and dipyridamole. Wood AJ, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):749-56

Serum lithium monitoring of prophylactic treatment. Critical review and updated recommendations. Schou M. **Clin Pharmacokinet** 1988 Nov;15(5):283-6 (17 ref.)

Bayesian forecasting of serum lithium concentrations. Comparison with traditional methods. Williams PJ, et al. **Clin Pharmacokinet** 1989 Jul;17(1):45-52

Effect of assay methodology on the prediction of lithium maintenance dosage. Karki SD, et al. **DICP** 1989 May; 23(5):372-5

Competition between Li+ and Mg2+ for ATP in human erythrocytes. A 31P NMR and optical spectroscopy study. Ramasamy R, et al. **FEBS Lett** 1989 Feb 13;244(1):223-6

Distribution of sodium-lithium countertransport and blood pressure in Caucasians five to eighty-nine years of age. Turner ST, et al. **Hypertension** 1989 Apr;13(4):378-91

Mixture analysis of erythrocyte lithium-sodium countertransport and blood pressure. Weder AB, et al. **Hypertension** 1989 Feb;13(2):145-50

New direct method for measuring red cell lithium. Summerton AM, et al. **J Clin Pathol** 1989 Apr;42(4):435-7

Children's 24-hour serum lithium level after a single dose predicts initial dose and steady-state plasma level [letter] Geller B, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):155

Sparing effect of sulindac on lithium levels. Miller LG, et al. **J Fam Pract** 1989 May;28(5):592-3

Factors contributing to erythrocyte lithium-sodium countertransport activity in lithium-treated bipolar patients. Rybakowski JK, et al. **Pharmacopsychiatry** 1989 Jan;22(1):16-20

Independence of Na+-Li+ countertransport from dietary salt intake. Frisch J, et al. **Prog Biochem Pharmacol** 1988; 23:101-6

Measurement of lithium transport across human erythrocyte membranes by 7Li NMR spectroscopy. Espanol MT, et al. **Prog Clin Biol Res** 1989;292:34-43

Transmembrane lithium distribution and hypertension in manic depressive patients. Ghadirian AM, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):525-30

EEG sleep, lithium transport, dexamethasone suppression, and monoamine oxidase activity in borderline personality disorder. Lahmeyer HW, et al. **Psychiatry Res** 1988 Jul; 25(1):19-30

[A comparison of EEG changes with reaction time and serum lithium levels during treatment of manic patients with lithium carbonate] Shen JH. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):83-6, 126-7 (Eng. Abstr.) **(Chi)**

[Erythrocyte Li/Na countertransport and correlated variables in a randomized sample of population] Mozzato MG, et al. **Cardiologia** 1989 Apr;34(4):347-51 (Eng. Abstr.) **(Ita)**

[Clinical importance of determining Na-Li countertransport in patients with arterial hypertension] Eliseev AO, et al. **Kardiologiia** 1988 Aug;28(8):26-30 (Eng. Abstr.) **(Rus)**

[Sodium and lithium transport and steroid hormones of the adrenal glands] Eliseev AO, et al. **Sov Med** 1989;(1):24-9 (Eng. Abstr.) **(Rus)**

HISTORY

Lithium: personal reminiscences. Schou M. **Psychiatr J Univ Ottawa** 1989 Mar;14(1):260-2

METABOLISM

Sodium-lithium exchange and sodium-proton exchange are mediated by the same transport system in sarcolemmal vesicles from bovine superior mesenteric artery. Kahn AM, et al. **Circ Res** 1989 Sep;65(3):818-28

Genetic and epidemiological studies on electrolyte transport systems in hypertension. Williams RR, et al. **Clin Physiol Biochem** 1988;6(3-4):136-49 (73 ref.)

Sodium and lithium handling in the isolated hypertensive rat kidney. Firth JD, et al. **Clin Sci** 1989 Mar;76(3):335-41

Odd behaviour of Li+ in frog skin ion transport. Ussing HH. **Comp Biochem Physiol [A]** 1988;90(4):525-9

Natriuretic factors and lithium clearance in patients with the syndrome of inappropriate antidiuretic hormone (SIADH) [letter] Dorhout Mees EJ. **Eur J Clin Invest** 1989 Aug; 19(4):413

Natriuretic factors and lithium clearance in patients with the syndrome of inappropriate antidiuretic hormone (SIADH). Gross P, et al. **Eur J Clin Invest** 1989 Feb;19(1):11-9

Genetic differences in lithium-sodium exchange and regulation of the sodium-hydrogen exchanger in essential hypertension. Canessa ML, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 3:S92-8

Na+-Li+ countertransport in essential hypertension. De la Sierra A, et al. **J Hypertens** 1988 Nov;6(11):931-7

Exaggerated natriuresis and lithium clearance in spontaneously hypertensive rats. Holstein-Rathlou NH, et al. **J Hypertens** 1988 Nov;6(11):889-95

Na+(Li+)/branched-chain amino acid cotransport in Pseudomonas aeruginosa. Uratani Y, et al. **J Membr Biol** 1989 Jan;107(1):57-62

Measurement of renal function in unrestrained conscious rats. Shirley DG, et al. **J Physiol (Lond)** 1989;408:67-76

PHARMACOKINETICS

Insulin-like growth factor I increase glomerular filtration rate and renal plasma flow in man. Guler HP, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):101-6

Red blood cell sodium-lithium countertransport, blood pressure, and uric acid metabolism in untreated healthy men. Strazzullo P, et al. **Am J Hypertens** 1989 Aug; 2(8):634-6

More on prediction of lithium levels or concentrations [letter; comment] **Biol Psychiatry** 1989 Jun;26(2):214-8. **Comment on:** Biol Psychiatry 1988 Jun;24(2):218-24

RBC lithium transport in the psychoses. Hitzemann R, et al. **Biol Psychiatry** 1989 Feb 1;25(3):296-304

Predicting lithium levels [letter] Swartz CM. **Biol Psychiatry** 1988 Dec;24(8):951-3

Dose-dependent salivary excretion following bolus intravenous administration of lithium in dog. Watanabe J, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3105-12

Lithium clearance and renal tubular sodium handling during acute and long-term nifedipine treatment in essential hypertension. Bruun NE, et al. **Clin Sci** 1988 Dec; 75(6):609-13

Red-cell sodium-lithium countertransport and fractional excretion of lithium in normal and hypertensive humans. Weinberger MH, et al. **Hypertension** 1989 Mar;13(3):206-12

Lithium distribution in partially hepatectomized rats. Kaur G, et al. **Indian J Med Sci** 1988 Nov;42(11):263-5

Lithium clearance in water immersion-induced natriuresis in humans. Rabelink TJ, et al. **J Appl Physiol** 1989 Apr; 66(4):1744-8

Reversible alteration of red cell lithium-sodium countertransport in patients with thyroid disease. Brent GA, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):322-8

5-(N,N-dimethyl)amiloride-sensitive Na-Li exchange in isolated specimens of human atrium. Rasmussen HH, et al. **J Clin Invest** 1988 Oct;82(4):1366-75

Limitations of laboratory methods for measuring serum levels [letter] Perlman BB. **J Clin Psychopharmacol** 1988 Dec; 8(6):442-3

Pharmacokinetics of lithium carbonate in children. Vitiello B, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):355-9

Inter-organ relation between salivary gland and kidney in lithium excretion. I. Effects of continuous stimulation of salivation on salivary, renal and systemic clearances of lithium in dog. Watanabe J, et al. **J Pharmacobiodyn** 1988 Dec;11(12):801-7

Small intra- and large inter-individual variability in lithium clearance in humans. Boer WH, et al. **Kidney Int** 1989 May; 35(5):1183-8

Indomethacin increases renal lithium reabsorption in man. Rabelink AJ, et al. **Nephrol Dial Transplant** 1989;4(1):27-31

Generic vs. brand name: a case history [letter] Perera CC. **Ohio Med** 1989 Jul;85(7):506

Studies of lithium pharmacokinetics in patients with affective illness. Lehmann W, et al. **Pol J Pharmacol Pharm** 1988 Jan-Feb;40(1):47-54

The effects of intravenous theophylline infusion versus intravenous sodium bicarbonate infusion on lithium clearance in normal subjects. Holstad SG, et al. **Psychiatry Res** 1988 Aug;25(2):203-11

Unchanged lithium clearance during acute amiloride treatment in sodium-depleted man. Bruun NE, et al. **Scand J Clin Lab Invest** 1989 May;49(3):259-63

The influence of body posture on lithium clearance. Kamper AL, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):509-12

Lack of correlation between lithium pharmacokinetic parameters obtained from plasma and saliva. Obach R, et al. **Ther Drug Monit** 1988;10(3):265-8

[Lithium found in the total brain and brain lipids after intracranial injection of lithium in mice. Relation to the observed behavior disorders] Ermidou-Pollet S, et al. **C R Acad Sci [III]** 1989;308(2):65-70 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Effect of lithium on chemiluminescence of polymorphonuclear granulocytes and mononuclear cells of peripheral blood. Balázs C, et al. **Acta Med Hung** 1989; 46(1):31-42

Haloperidol, chlorpromazine and lithium chloride antagonize the excitatory action of forskolin and of some gut peptides on guinea-pig myenteric neurones. Zafirov DH. **Acta Physiol Pharmacol Bulg** 1988;14(3):17-25

Effects of digitoxin and lithium, used as a marker of passive Na transport, on secretin-dependent bile flow in the pig. Grotmol T, et al. **Acta Physiol Scand** 1989 Jul;136(3):411-7

Indirect evidence for a role of phosphatidylinositol turnover in the cardiac response to H1-receptor stimulation. Mantelli L, et al. **Agents Actions** 1988 Jul;24(3-4):232-6

Mechanism of Li inhibition of vasopressin-sensitive adenylate cyclase in cultured renal epithelial cells. Goldberg H, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F995-1002

Effect of Li+ substitution for extracellular Na+ on GRF-induced GH secretion from rat pituitary cells. Kato M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C712-8

LiCl and CCK inhibit gastric emptying and feeding and stimulate OT secretion in rats. McCann MJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R463-8

Second messenger systems and psychoactive drug action: focus on the phosphoinositide system and lithium. Baraban JM, et al. **Am J Psychiatry** 1989 Oct;146(10):1251-60 (80 ref.)

Effect of lithium chloride on spermatogenesis, testicular delta 5- 3 beta- and 17 beta-hydroxysteroid dehydrogenase activities in toad (Bufo melanostictus). Ghosh PK, et al. **Andrologia** 1989 May-Jun;21(3):199-203

Lithium treatment and serotoninergic function. Neuroendocrine and behavioral responses to intravenous tryptophan in affective disorder. Price LH, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):13-9

Copulation-illness associations in male rats: lithium chloride dose and delay manipulations. Peters RH, et al. **Behav Neurosci** 1989 Feb;103(1):117-23

Light-induced phosphoinositide degradation and light-induced structural alterations in the rat retina are enhanced after chronic lithium treatment. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1111-9

Lithium chloride restores host protein synthesis in herpes simplex virus-infected endothelial cells. Ziaie Z, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1073-8

Activation and stabilization of diaphragm-associated acetylcholinesterase by monovalent (Na+, Li+) cations. Tsakiris S, et al. **Biochem Int** 1988 Jun;16(6):1041-51

Potentiation by lithium of CMP-phosphatidate formation in carbachol-stimulated rat cerebral-cortical slices and its reversal by myo-inositol. Godfrey PP. **Biochem J** 1989 Mar 1;258(2):621-4

Comparison of rate constants for (PO3-) transfer by the Mg(II), Cd(II), and Li(I) forms of phosphoglucomutase. Ray WJ Jr, et al. **Biochemistry** 1989 Jan 24;28(2):559-69

Long-term lithium treatment selectively reduces receptor-coupled inositol phospholipid hydrolysis in rat brain. Casebolt TL, et al. **Biol Psychiatry** 1989 Feb 1; 25(3):329-40

Chronic treatment with lithium produces supersensitivity to nicotine. Dilsaver SC, et al. **Biol Psychiatry** 1989 Mar 15; 25(6):795-9

Effects of GTP on hormone-stimulated adenylate cyclase activity in cerebral cortex, striatum, and hippocampus from rats treated chronically with lithium. Mørk A, et al. **Biol Psychiatry** 1989 Jul;26(3):279-88

The effect of lithium on the renal response to the dopamine prodrug gludopa in normal man. Jeffrey RF, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):725-32

Lithium carbonate--a competitive aldosterone antagonist? Stewart PM, et al. **Br J Psychiatry** 1988 Aug;153:205-7

Modulatory effects of aluminum, calcium, lithium, magnesium, and zinc ions on [3H]MK-801 binding in human cerebral cortex. Hubbard CM, et al. **Brain Res** 1989 May 1;486(1):170-4

Potassium advances circadian activity rhythms: interactions with lithium. Klemfuss H, et al. **Brain Res** 1989 Jul 17; 492(1-2):300-4

Lithium chloride SCN injection alters the circadian rhythm of food intake. Reghunandanan V, et al. **Chronobiol Int** 1989;6(2):123-9

Lithium-induced teratogenesis in frog embryos prevented by a polyphosphoinositide cycle intermediate or a diacylglycerol analog. Busa WB, et al. **Dev Biol** 1989 Apr; 132(2):315-24

Dorsalization of mesoderm induction by lithium. Kao KR, et al. **Dev Biol** 1989 Mar;132(1):81-90

Lithium respecifies cyclic AMP-induced cell-type specific gene expression in Dictyostelium. Van Lookeren Campagne MM, et al. **Dev Genet** 1988;9(4-5):589-96

Inductive effects of fibroblast growth factor and lithium ion on Xenopus blastula ectoderm. Slack JM, et al. **Development** 1988 Jul;103(3):581-90

Normalization of insulin sensitivity with lithium in diabetic rats. Rossetti L. **Diabetes** 1989 May;38(5):648-52

Effects of lithium on the hypothalamo-pituitary-adrenal axis. Sugawara M, et al. **Endocrinol Jpn** 1988 Oct;35(5):655-63

Inhibitory effect of lithium on the release of thyroid hormones from thyrotropin-stimulated mouse thyroids in a perifusion system. Mori M, et al. **Endocrinology** 1989 Mar; 124(3):1365-9

Alteration of inositol phospholipid metabolism in rat cortex by lithium but not carbamazepine. Elphick M, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):411-4

Inhibitory effect of lithium on muscle contractions caused by various stimulants in guinea-pig ileum. Hori M, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):63-70

Involvement of beta-endorphin and mu-opioid receptors in mediating the aversive effect of lithium in the rat. Shippenberg TS, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):135-44

The interaction of lithium with forskolin-inhibited meiotic maturation of denuded mouse oocytes. Gavin AC, et al.

Exp Cell Res 1988 Nov;179(1):298–302
Effects and mechanism of action of lithium chloride on gastric acid secretion in rats. Guglietta A, et al. Gastroenterology 1988 Dec;95(6):1454–9
Effect of lithium carbonate on central thermoregulation in rabbits. Saxena P, et al. Indian J Med Res 1988 Oct; 88:363–70
Lithium stimulation of diffusion chamber colony growth is mediated by factors other than colony-stimulating factor. Doukas MA, et al. Int J Cell Cloning 1989 May;7(3):168–78
Mechanism of lithium-induced augmentation of T-cell proliferation. Kucharz EJ, et al. Int J Immunopharmacol 1988;10(3):253–9
Lithium salts adopted for psychopharmacological use as the modulators of protein synthesis in the brain: analytical review. Kuznetsov DA. Int J Neurosci 1989 Mar; 45(1–2):1–6 (24 ref.)
Lithium dramatically potentiates neurotensin/neuromedin N gene expression. Dobner PR, et al. J Biol Chem 1988 Oct 5;263(28):13983–6
Lithium treatment increases intact and midregion parathyroid hormone and parathyroid volume. Mallette LE, et al. J Clin Endocrinol Metab 1989 Mar;68(3):654–60
Conductance and gating of epithelial Na channels from rat cortical collecting tubule. Effects of luminal Na and Li. Palmer LG, et al. J Gen Physiol 1988 Jul;92(1):121–38
Lithium alters the stereoselectivity of monoamine oxidase in rat brain. Smith DF. J Neural Transm 1989;76(3):205–10
Subacute and chronic in vivo lithium treatment inhibits agonist- and sodium fluoride-stimulated inositol phosphate production in rat cortex. Godfrey PP, et al. J Neurochem 1989 Feb;52(2):498–506
Chronically administered lithium alters neither myo-inositol monophosphatase activity nor phosphoinositide levels in rat brain. Honchar MP, et al. J Neurochem 1989 Aug; 53(2):590–4
Effects of lithium on inositol phospholipid hydrolysis and inhibition of dopamine D1 receptor-mediated cyclic AMP formation by carbachol in rat brain slices. Whitworth P, et al. J Neurochem 1989 Aug;53(2):536–41
Effect of lithium and of other drugs used in the treatment of manic illness on the cation-transporting properties of Na+,K+-ATPase in mouse brain synaptosomes. Wood AJ, et al. J Neurochem 1989 Apr;52(4):1042–9
Acute effects of lithium on catecholamines, serotonin, and their major metabolites in discrete brain regions. Gottberg E, et al. J Neurosci Res 1989 Mar;22(3):338–45
Effect of lithium chloride on the neurotransmitter release from adrenergic nerve terminals of guinea-pig atria. Mantelli L, et al. J Pharm Pharmacol 1989 Mar;41(3):203–5
Lithium increases rat striatal beta- and gamma-preprotachykinin messenger RNAs. Sivam SP, et al. J Pharmacol Exp Ther 1989 Mar;248(3):1297–301
Lithium-induced structural changes in the cortical distal nephron localized by computer-assisted three-dimensional reconstruction. Dørup J, et al. J Ultrastruct Mol Struct Res 1988 Sep;100(3):212–23
Species differences in inhibitory effect of Li+ on high K+-induced contraction in the ileal longitudinal smooth muscle. Hori M, et al. Jpn J Pharmacol 1988 Sep; 48(1):113–9
Chronic effects of imipramine and lithium on 5-HT receptor subtypes in rat frontal cortex, hippocampus and choroid plexus: quantitative receptor autoradiographic analysis. Mizuta T, et al. Jpn J Pharmacol 1989 Jul;50(3):315–26
Chronic effects of imipramine and lithium on postsynaptic 5-HT1A and 5-HT1B sites and on presynaptic 5-HT3 sites in rat brain. Mizuta T, et al. Jpn J Pharmacol 1988 Jun; 47(2):107–13
The effect of lithium and nitrate on potassium contractures in a glycerol-treated slow-twitch muscle of the rat. Bruton JD. Jpn J Physiol 1988;38(5):735–9
Lithium and hydrocortisone interactions on cell growth and gene expression in human promyelocytic leukemia (HL60). Knight SC, et al. Leuk Res 1989;13(4):289–96
Interactions of lithium and hydrocortisone in vitro on normal human hematopoiesis. Veldhuis S, et al. Leuk Res 1988; 12(7):611–4
Lithium: evidence for reduction in circulating testosterone levels in mice following chronic administration. Collins TJ, et al. Life Sci 1988;43(19):1501–5
Lithium suppresses ovariectomy-induced surges in plasma gonadotropins in rats. Sheikha SH, et al. Life Sci 1989; 44(19):1363–9
Effect of lithium and rubidium on the ganglionic inhibitory action of norepinephrine. Tehrani JB, et al. Life Sci 1974 Aug 1;15(3):525–37
Comparative study of immunomodulating activity of Indian medicinal plants, lithium carbonate and glucan. Thatte UM, et al. Methods Find Exp Clin Pharmacol 1988 Oct; 10(10):639–44
Mutations of putP that alter the lithium sensitivity of Salmonella typhimurium. Myers RS, et al. Mol Microbiol 1988 Nov;2(6):749–55
The effect of carbidopa and lithium on the systemic and renal response to acute intravenous saline loading in normal man. Jeffrey RF, et al. Nephrol Dial Transplant 1989;4(4):271–7
Effects of sodium, lithium, and magnesium on in vitro binding of [3H]SCH23390 in rat neostriatum and cerebral cortex. Gottberg E, et al. Neurochem Res 1989 May;14(5):419–26
Naloxone potentiation of effects of cholecystokinin and lithium chloride on oxytocin secretion, gastric motility and feeding. Flanagan LM, et al. Neuroendocrinology 1988 Dec; 48(6):668–73
Possible involvement of presynaptic 5-HT autoreceptors in effect of lithium on 5-HT release in hippocampus of rat. Hotta I, et al. Neuropharmacology 1988 Oct;27(10):987–92
The effects of lithium in vitro and ex vivo on adenylate cyclase in brain are exerted by distinct mechanisms. Mørk A, et al. Neuropharmacology 1989 Mar;28(3):307–11
Effects of lithium on dopamine behavioural supersensitivity induced by rapid eye movement sleep deprivation. Arriaga F, et al. Neuropsychobiology 1988;20(1):23–7
Effect of lithium on the EEG of healthy males and females. A probability mapping study. Thau K, et al. Neuropsychobiology 1989;20(3):158–63
Lithium decreases retinal melatonin levels in the frog. Kemali M, et al. Neurosci Lett 1989 Jan 16;96(2):235–9
Lithium discriminates between muscarinic receptor subtypes on guinea pig hippocampal neurons in vitro. Müller W, et al. Neurosci Lett 1989 May 22;100(1–3):135–40
Acute administration of lithium carbonate interferes with suckling in neonatal rats. McLaughlin CR, et al. Pharmacol Biochem Behav 1989 Feb;32(2):453–8
Attenuation and cross-attenuation in taste aversion learning in the rat: studies with ionizing radiation, lithium chloride and ethanol. Rabin BM, et al. Pharmacol Biochem Behav 1988 Dec;31(4):909–18
Are auditory evoked potentials suitable for predicting the response to lithium prophylaxis? A study on the effects of repeated measurement, age, gender, and personality on the amplitude/stimulus intensity function in healthy volunteers. Hegerl U, et al. Pharmacopsychiatry 1988 Nov; 21(6):336–7
Electrooculography and dark adaptation in patients with affective and schizoaffective psychoses: early physiological effects of carbamazepine and lithium. Kaschka WP, et al. Pharmacopsychiatry 1988 Nov;21(6):404–6
Effects of lithium ions on the metabolism of inositol phospholipids: studies with human granulocytes. van Calker D, et al. Pharmacopsychiatry 1988 Nov;21(6):434–5
Lithium chloride stabilizes systolic blood pressure and increases adrenal catecholamines in the spontaneously hypertensive rat. O'Connor EF, et al. Physiol Behav 1988; 44(1):69–74
Characteristics of limbic seizures evoked by peripheral injections of lithium and pilocarpine. Persinger MA, et al. Physiol Behav 1988;44(1):27–37
Patterns of increased and decreased ingestive behavior after injections of lithium chloride and 2-deoxy-D-glucose. Watson PJ, et al. Physiol Behav 1988;43(6):697–704
Lithium and magnesium-dependent processes in glucose metabolism. Birch NJ, et al. Physiologie 1989 Jan–Mar; 26(1):25–9
Antidepressant action of lithium in behavioral despair test. Eroğlu L, et al. Pol J Pharmacol Pharm 1987 Nov–Dec; 39(6):667–73
Lithium evokes expression of vegetal-specific molecules in the animal blastomeres of sea urchin embryos. Livingston BT, et al. Proc Natl Acad Sci U S A 1989 May; 86(10):3669–73
In vitro effect of lithium on carbamazepine-induced inhibition of murine and human bone marrow-derived granulocyte-macrophage, erythroid, and megakaryocyte progenitor stem cells. Gallicchio VS, et al. Proc Soc Exp Biol Med 1989 Jan;190(1):109–16
Effects of lithium on appetitive discrimination in the rat. Cappeliez P, et al. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(5):725–34
The effects of antidepressant treatments and lithium upon 5-HT1A receptor function. Goodwin GM. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(3–4):445–51
Antidepressant effect of lithium: a neurochemical study on neuronal uptake of norepinephrine and serotonin. Wolf MA, et al. Prog Neuropsychopharmacol Biol Psychiatry 1989;13(5):765–73
Hyperlocomotion induced by dopamine or cholecystokinin + dopamine in the nucleus accumbens is not modified by chronic lithium treatment. Zohar J, et al. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(5):775–9
Inositol-1-phosphatase of human erythrocytes is inhibited by therapeutic lithium concentrations. Agam G, et al. Psychiatry Res 1989 Feb;27(2):217–24
Amitriptyline-induced supersensitivity of a central muscarinic mechanism: lithium blocks amitriptyline-induced supersensitivity. Dilsaver SC, et al. Psychiatry Res 1988 Aug;25(2):181–6
Long-term lithium treatment in rats attenuates m-chlorophenylpiperazine-induced decreases in food intake but not locomotor activity. Aulakh CS, et al. Psychopharmacology (Berlin) 1989;98(4):448–52
Nialamide-induced hypermotility in mice treated with inhibitors of monoamine uptake, 5-HT antagonists and lithium. Buus Lassen J. Psychopharmacology (Berlin) 1989; 98(2):257–61
Lithium increases slow wave sleep: possible mediation by brain 5-HT2 receptors? Friston KJ, et al. Psychopharmacology (Berlin) 1989;98(1):139–40
Effects of lithium on synaptosomal Ca2+ fluxes. Koenig ML, et al. Psychopharmacology (Berlin) 1988;96(2):267–72
Effects of chronic lithium treatment on limbic seizure generation in the cat. Minabe Y, et al. Psychopharmacology (Berlin) 1988;96(3):391–4
Defensive burying of flavors paired with lithium but not amphetamine. Parker LA. Psychopharmacology (Berlin) 1988;96(2):250–2
Short-term lithium treatment enhances responsiveness of postsynaptic 5-HT1A receptors without altering 5-HT autoreceptor sensitivity: an electrophysiological study in the rat brain. Blier P, et al. Synapse 1987;1(3):225–32
Acute effects of lithium on dopaminergic responses: iontophoretic studies in the rat visual cortex. Gottberg E, et al. Synapse 1988;2(4):442–9
Influence of lithium carbonate on the thyrotropin receptor in vitro. Chang TC. Taiwan I Hsueh Hui Tsa Chih 1989 Jan;88(1):13–7
Soman-induced convulsions affect the inositol lipid signaling system: potentiation by lithium; attenuation by atropine and diazepam. Savolainen KM, et al. Toxicol Appl Pharmacol 1988 Nov;96(2):305–14
[Lithium and cerebral lipids: influence of the intracranial injection of lithium on the extraction of brain lipids in mice. Comparison with sodium] Ermidou-Pollet S, et al. C R Acad Sci [III] 1989;308(3):89–93 (Eng. Abstr.) (Fre)
[Lithium and sensory analysis] Johnson FN. Encephale 1989 Jan–Feb;15(1):21–7 (Eng. Abstr.) (Fre)
[Lithium and the kidney] Lavie M, et al. Harefuah 1989 Jan 15;116(2):104–7 (45 ref.) (Heb)
[Pharmacological interactions of lithium] Di Costanzo E, et al. G Clin Med 1988 Nov;69(11):695–7 (38 ref.) (Ita)
[Effect of lithium salts on cardiac activity] Galenko-Iaroshevskil PA, et al. Farmakol Toksikol 1988 Sep–Oct;51(5):115–8 (73 ref.) (Rus)
[Effect of sodium, lithium and amiloride on the K+-dependent phosphatase activity of membrane preparations of Na,K-ATPase] Pisareva LN, et al. Tsitologiia 1989 Feb;31(2):234–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Lithium as a normal metabolite: some implications for cyclotron resonance of ions in magnetic fields. Smith RF. Bioelectromagnetics 1988;9(4):387–91 (17 ref.)

POISONING

Lithium carbonate intoxication. A case report and review of the literature. Simard M, et al. Arch Intern Med 1989 Jan;149(1):36–46 (208 ref.)
Low dose dopamine in lithium poisoning. Macdonald TM, et al. Br J Clin Pharmacol 1988 Aug;26(2):195–7
Severe memory impairment with acute overdose lithium toxicity. A case report. Saxena S, et al. Br J Psychiatry 1988 Jun;152:853–4
Lithium toxicity and mefenamic acid. A possible interaction and the role of prostaglandin inhibition. Shelley RK. Br J Psychiatry 1987 Dec;151:847–8
Lithium intoxication with acute renal failure and death. Rose SR, et al. Drug Intell Clin Pharm 1988 Sep;22(9):691–4
The right answer for the wrong reason. Kassirer JP, et al. Hosp Pract [Off] 1989 Sep 15;24(9):24–6, 29
Severe lithium toxicity treated by hemodialysis: a case report. Paholpak S. J Med Assoc Thai 1989 Feb;72(2):112–6
Creutzfeld-Jacob like syndrome due to lithium toxicity [letter] Kemperman CJ, et al. J Neurol Neurosurg Psychiatry 1989 Feb;52(2):291
Downbeating nystagmus and other ocular motor defects caused by lithium toxicity. Corbett JJ, et al. Neurology 1989 Apr;39(4):481–7 (40 ref.)
Role of the CS–US interval in the US preexposure effect. Misanin JR, et al. Psychol Rep 1989 Apr;64(2):611–4
Ibuprofen-induced lithium toxicity [letter] Bailey CE, et al. South Med J 1989 Sep;82(9):1197
[Lasting neurologic injury in therapeutic lithium plasma levels (letter)] Jansen PA, et al. Ned Tijdschr Geneeskd 1989 Jan 28;133(4):181 (Dut)
[Lithium poisoning in a newborn infant] Olmedillas Alvaro MJ, et al. An Esp Pediatr 1988 Oct;29(4):330–2 (Spa)
[Hemodialysis treatment in lithium poisoning (letter)] Baños Gallardo M, et al. Rev Clin Esp 1988 Jul;183(3):156–7 (Spa)

THERAPEUTIC USE

Lithium in the prophylaxis of affective disorders: a twenty years experience. Hanuš H, et al. Act Nerv Super (Praha) 1989 Apr;31(1):27
Intraindividual comparison of the effect of perphenazine and of the combination of perphenazine and lithium in schizophrenia. Ryšánek R, et al. Act Nerv Super (Praha) 1989 Apr;31(1):37–8
Therapeutic results in acute phases of manic depressive and schizophrenic psychoses as possible predictors of the prophylactic effect. Svestka J, et al. Act Nerv Super (Praha) 1989 Apr;31(1):51–2
Lithium carbonate failed to modify the neutropenia associated with large granular lymphocyte proliferation [letter] Sgarabotto D, et al. Acta Haematol (Basel) 1989; 81(2):114–5
Lithium therapy: from clinical trials to practical management. Coppen A, et al. Acta Psychiatr Scand 1988 Dec; 78(6):754–62
A comparison of electroconvulsive therapy with a combined lithium and tricyclic combination among depressed

tricyclic nonresponders. Dinan TG, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):97–100

Life satisfaction and adjustment in lithium–treated affective patients in remission. Lepkifker E, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):391–5

Acute antidepressant effect of lithium is associated with fluctuation of calcium and magnesium in plasma. A double–blind study on the antidepressant effect of lithium and clomipramine. Linder J, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):27–36

Use of lithium and early relapse in manic–depressive illness. Mander AJ. **Acta Psychiatr Scand** 1988 Aug;78(2):198–200

Prospective studies on a lithium cohort. 1. General features. Vestergaard P, et al. **Acta Psychiatr Scand** 1988 Oct; 78(4):421–6

The effects of administration of lithium salts and magnesium sulfate on the serum anion gap. Silverstein FJ, et al. **Am J Kidney Dis** 1989 May;13(5):377–81

Lithium carbonate therapy for zidovudine–associated neutropenia in patients with acquired immunodeficiency syndrome [letter] Klutman NE. **Am J Med** 1989 Sep; 87(3):362–3

Lithium. In a class by itself. Harris E. **Am J Nurs** 1989 Feb; 89(2):190–5

Clonazepam treatment of five lithium–refractory patients with bipolar disorder. Aronson TA, et al. **Am J Psychiatry** 1989 Jan;146(1):77–80

Lithium and carbamazepine–induced agranulocytosis [letter] Joffe RT, et al. **Am J Psychiatry** 1989 Mar;146(3):404

Lithium–responsive schizophrenia and rheumatoid arthritis [letter] Olfson M. **Am J Psychiatry** 1988 Nov; 145(11):1478–9

Alternatives to lithium for preventive treatment of bipolar disorder. Prien RF, et al. **Am J Psychiatry** 1989 Jul; 146(7):840–8 (106 ref.)

Lithium prophylaxis: myths and realities. Schou M. **Am J Psychiatry** 1989 May;146(5):573–6 (24 ref.)

Lithium treatment of manic episodes with psychotic features in prepubertal children. Varanka TM, et al. **Am J Psychiatry** 1988 Dec;145(12):1557–9

Use of lithium carbonate in the treatment of autoerotic asphyxia. Cesnik JA, et al. **Am J Psychother** 1989 Apr; 43(2):277–86

Lithium carbonate prophylaxis of alcoholism: its time has come [letter] Flemenbaum A. **Arch Gen Psychiatry** 1989 Mar;46(3):290–1

The addition of lithium to carbamazepine. Antidepressant efficacy in treatment–resistant depression. Kramlinger KG, et al. **Arch Gen Psychiatry** 1989 Sep;46(9):794–800

Outside analysis of a multicenter collaborative study. Prien RF, et al. **Arch Gen Psychiatry** 1989 May;46(5):462–4

Response to maintenance therapy in bipolar illness. Effect of index episode. Shapiro DR, et al. **Arch Gen Psychiatry** 1989 May;46(5):401–5

Muscarinic receptor subclassification and G–proteins: significance for lithium action in affective disorders and for the treatment of the extrapyramidal side effects of neuroleptics. Avissar S, et al. **Biol Psychiatry** 1989 Jun; 26(2):113–30 (89 ref.)

Effects of lithium on sleep in mania. Hudson JI, et al. **Biol Psychiatry** 1989 Mar 1;25(5):665–8

The effect of lithium on vitamin D metabolism. Rosenblatt S, et al. **Biol Psychiatry** 1989 Jun;26(2):206–8

Depression resistant to tricyclic antidepressants. Cowen PJ. **BMJ** 1988 Aug 13;297(6646):435–6

Depression resistant to tricyclic antidepressants [letter] Hunter R. **BMJ** 1988 Oct 15;297(6654):981

Lithium combined with haloperidol in schizophrenic patients. Lerner Y, et al. **Br J Psychiatry** 1988 Sep;153:359–62

Carbamazepine vs lithium in the treatment and prophylaxis of mania. Lusznat RM, et al. **Br J Psychiatry** 1988 Aug; 153:198–204

Supervising lithium. A comparison of a lithium clinic, psychiatric out–patient clinics, and general practice. Masterton G, et al. **Br J Psychiatry** 1988 Apr;152:535–8

Did manic–depressive patients who committed suicide receive prophylactic or continuation treatment at the time? Schou M, et al. **Br J Psychiatry** 1988 Sep;153:324–7

Psoriasis and lithium [letter] Vincenti GE. **Br J Psychiatry** 1988 Aug;153:261–2

The effect of somatic treatment and comorbidity on immediate outcome in manic patients. Black DW, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):74–9

Drug alternatives to lithium in manic–depressive disorders. Shaw DM. **Drugs** 1988 Sep;36(3):249–55 (59 ref.)

Effect of lithium treatment on the GH–clonidine test in affective disorders. Brambilla F, et al. **Eur J Clin Pharmacol** 1988;35(6):601–5

Failure of lithium to reduce period of neutropenia during induction therapy of acute myeloid leukemia. Scarffe JH, et al. **Hematol Oncol** 1989 Jan–Feb;7(1):69–75

NIMH report. Treating nonaffective disorders with lithium. Sargent M. **Hosp Community Psychiatry** 1989 Jun; 40(6):579–81 (11 ref.)

Cognitive functions in patients of primary affective disorder on prophylactic lithium treatment. Sharma I, et al. **Indian J Med Res** 1988 Sep;88:246–52

The running talking therapy. Gleser J, et al. **Isr J Psychiatry Relat Sci** 1988;25(2):126–32

Lithium and carbamazepine therapy in a patient with manic depressive illness: clinical effects, interactions and side effects. Klein EM. **Isr J Psychiatry Relat Sci** 1987; 24(4):295–8

Effect of lithium carbonate in HIV–infected patients with immune dysfunction. Parenti DM, et al. **J Acquir Immune Defic Syndr** 1988;1(2):119–24

A family study of bipolar I disorder in adolescence. Early onset of symptoms linked to increased familial loading and lithium resistance. Strober M, et al. **J Affective Disord** 1988 Nov–Dec;15(3):255–68

Concurrent use of lithium and ECT [letter] Adityanjee. **J Clin Psychiatry** 1989 Aug;50(8):307–8

Refractory rapid cycling unipolar depression responds to lithium and carbamazepine treatment [letter] Arana GW, et al. **J Clin Psychiatry** 1989 Sep;50(9):356–7

Effectiveness of lithium in schizophrenia: do we really have an answer? Atre–Vaidya N, et al. **J Clin Psychiatry** 1989 May;50(5):170–3 (33 ref.)

Lithium augmentation of clomipramine [letter] Feder R. **J Clin Psychiatry** 1988 Nov;49(11):458

Lithium efficacy and adverse effects. Gelenberg AJ. **J Clin Psychiatry** 1988 Nov;49 Suppl:8–11 (8 ref.)

Lithium: a therapeutic magic wand. Jefferson JW. **J Clin Psychiatry** 1989 Mar;50(3):81–6 (58 ref.)

Psychometric characteristics of the multidimensional health locus of control scales among psychiatric patients. Wall RE, et al. **J Clin Psychol** 1989 Jan;45(1):94–8

Lack of differential cognitive effects of lithium and carbamazepine in bipolar affective disorder. Joffe RT, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):425–8

What is the duration for augmentation with T3 or lithium in resistant depression? [letter] Price LH. **J Clin Psychopharmacol** 1989 Feb;9(1):73

Lithium treatment of depressed and nondepressed alcoholics. Dorus W, et al. **JAMA** 1989 Sep 22–29;262(12):1646–52

Lithium for zidovudine–induced neutropenia in AIDS [letter] Herbert V, et al. **JAMA** 1988 Dec 23–30;260(24):3588

Lithium for zidovudine–induced neutropenia in AIDS [letter] Nathwani D, et al. **JAMA** 1989 Aug 11;262(6):775–6

A controlled study of lithium carbonate in the treatment of alcoholism. de la Fuente JR, et al. **Mayo Clin Proc** 1989 Feb;64(2):177–80

Lithium therapy and prophylaxis in unipolar manic–depressive illness. Tudorache B, et al. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec;26(4):271–9

Differential responsiveness to lithium in patients with Tourette disorder. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):247–50

Biochemical pharmacology of Gilles de la Tourette's syndrome. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):295–305 (187 ref.)

A combined group and individual approach to outpatient lithium treatment. Seeger PA, et al. **Ohio Med** 1989 Apr; 85(4):300–2

Salivary gland function in patients on chronic lithium treatment. Markitziu A, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):551–7

Adherence to lithium prophylaxis: II. Multivariate analysis of clinical, social, and psychosocial predictors of nonadherence. Aagaard J, et al. **Pharmacopsychiatry** 1988 Jul;21(4):166–70

Predictors of compliance with lithium and carbamazepine regimens in the long–term treatment of recurrent mood and related psychotic disorders. Lenzi A, et al. **Pharmacopsychiatry** 1989 Jan;22(1):34–7

Prophylactic lithium treatment: treatment response, and patient attitudes toward illness and treatment. Schmidt S, et al. **Pharmacopsychiatry** 1988 Nov;21(6):274–5

Computerized documentation for lithium outpatients (routine and research data). Simhandl C, et al. **Pharmacopsychiatry** 1989 Mar;22(2):76–80

Lithium treatment in Aarhus. 1. Prevalence. Vestergaard P, et al. **Pharmacopsychiatry** 1989 May;22(3):99–100

Quality of interepisodic periods in patients with affective disorders under long–term lithium treatment. Volk J, et al. **Pharmacopsychiatry** 1988 Nov;21(6):426–7

Role of hereditary, clinical and pharmacokinetic factors for the prediction of lithium prophylactic effect. WHO Collaborative Study. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):iii–vii

Effect of chronic lithium on sensitivity to light in male and female bipolar patients. Seggie J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):543–9

Lithium augmentation in refractory depression. Katona CL. **Psychiatr Dev** 1988 Summer;6(2):153–71 (73 ref.)

Guide to the long–term drug treatment of major affective disorder: a review. Cooper AJ. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):144–8 (40 ref.)

Psychobiologic aspects of the treatment of primary mania. Clower CG. **Psychiatr Med** 1988;6(3):83–91

Approaches to the treatment of lithium–resistant mania. Menza MA, et al. **Psychiatr Med** 1988;6(4):73–87 (73 ref.)

Lithium delays circadian phase of temperature and REM sleep in a bipolar depressive: a case report. Campbell SS, et al. **Psychiatry Res** 1989 Jan;27(1):23–9

Psychosis, lithium–induced antipsychotic response, and seasonality. Garver DL, et al. **Psychiatry Res** 1988 Dec; 26(3):279–86

Luteinizing hormone responses to luteinizing hormone releasing hormone (LHRH) in acute mania and the effects of lithium on LHRH and thyrotrophin releasing hormone tests in volunteers. Hunter R, et al. **Psychol Med** 1989 Feb; 19(1):69–77

Long–term outcome of lithium prophylaxis in patients initially classified as complete responders. Maj M, et al. **Psychopharmacology (Berlin)** 1989;98(4):535–8

Use of lithium in the medically ill. Amdisen A, et al. **Psychother Psychosom** 1988;49(2):103–19 (122 ref.)

Alexithymia and somatic conditions in patients with affective illnesses during lithium prophylaxis. Rybakowski JK, et al. **Psychother Psychosom** 1988;49(1):1–5

A longitudinal assessment of renal function during treatment with lithium. Waller DG, et al. **Q J Med** 1988 Jul; 68(255):553–8

Does lithium carbonate therapy for alcoholism deter relapse drinking? Clark DC, et al. **Recent Dev Alcohol** 1989; 7:315–28 (35 ref.)

Drug treatment of headache: changing concepts and treatment strategies. Saper JR. **Semin Neurol** 1987 Jun; 7(2):178–91 (56 ref.)

[A comparison of EEG changes with reaction time and serum lithium levels during treatment of manic patients with lithium carbonate] Shen JH. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):83–6, 126–7 (Eng. Abstr.) **(Chi)**

[Comparative study of 2 groups of bipolar manic–depressive patients treated with lithium or with carbamazepine] Rouillon F, et al. **Ann Med Psychol (Paris)** 1988 Jul–Aug; 146(8):748–57 **(Fre)**

[Lithium, manic depressive psychoses and biological rhythms] Wolf MA, et al. **Can J Psychiatry** 1988 Dec; 33(9):853–8 (73 ref.) **(Fre)**

[Behavior of intracellular electrolytes in manic–depressive patients treated with lithium] König L. **Psychiatr Neurol Med Psychol Beih** 1988;41:54–5 **(Ger)**

[The course and social adjustment in the bipolar type of affective disorders after long–term lithium therapy] Fukuda K, et al. **Seishin Shinkeigaku Zasshi** 1988;90(9):699–716 (Eng. Abstr.) **(Jpn)**

[Use of lithium carbonate as a leukocyte stimulant in acute radiation sickness in humans] Konchalovskiĭ MV, et al. **Gematol Transfuziol** 1989 Mar;34(3):16–23 (Eng. Abstr.) **(Rus)**

[Advances in the use of lithium salts in clinical pediatrics and further prospects in that area] Mel'nik VA, et al. **Pediatriia** 1988;(12):76–9 (49 ref.) **(Rus)**

[Comparative effectiveness of the combined use of fenazepam, haloperidol, lithium and metabolic preparations in treating the psychopathologic disorders with obsessions in slowly progressive schizophrenia] Kadysheva NM, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):88–92 (Eng. Abstr.) **(Rus)**

TOXICITY

Volume homeostasis, angiotensin converting enzyme inhibition, and lithium therapy. Navis GJ, et al. **Am J Med** 1989 May;86(5):621

Early renal changes in lithium–treated normal and vasopressin–deficient rats. Jacobsen NO, et al. **APMIS Suppl** 1988;4:56–65

Peripheral versus central manifestations in the toxic interaction of lithium and pilocarpine. Roth D, et al. **Biol Psychiatry** 1989 Jan 15;25(2):153–8

Within–compound learning with US presentation in taste aversion. Heth CD, et al. **Can J Psychol** 1987 Dec; 41(4):501–9

Effect of lithium carbonate on serum glutamate oxaloacetate transaminase, glutamate pyruvate transaminase and lactate dehydrogenase of rats. Vatal M, et al. **Indian J Exp Biol** 1988 Oct;26(10):801–3

Rabbit lung after inhalation of lithium chloride. Johansson A, et al. **J Appl Toxicol** 1988 Oct;8(5):373–5

Atubular glomeruli in lithium–induced chronic nephropathy in rats. Marcussen N, et al. **Lab Invest** 1989 Sep; 61(3):295–302

Lithium–induced morphological changes in the rat kidney at different levels of urine flow. Ottosen PD, et al. **Pharmacol Toxicol** 1988 Aug;63(2):108–13

Maternal and neonatal hepatotoxicity of alkali metals. Messiha FS, et al. **Proc West Pharmacol Soc** 1988;31:71–2

Toxicosis affects instrumental behaviour in rats. Meachum CL. **Q J Exp Psychol [B]** 1988 Aug;40(3):209–28

Potentiation by a novel flavour of conditioned place aversions based on both toxicosis and shock. Westbrook RF, et al. **Q J Exp Psychol [B]** 1988 Nov;40(4):305–19

Hypothyroidism and hyperparathyroidism associated with lithium toxicity [letter] Clur AW. **S Afr Med J** 1989 Aug 5;76(3):124

Teratogenic activity of lithium carbonate: an experimental update [published erratum appears in Teratology 1989 Jan;39(1):95–6] Jurand A. **Teratology** 1988 Aug; 38(2):101–11

Teratogen update: lithium. Warkany J. **Teratology** 1988 Dec; 38(6):593–7 (23 ref.)

URINE

Acute effects of thiazides, with and without carbonic anhydrase inhibiting activity, on lithium and free water clearance in man. Boer WH, et al. **Clin Sci** 1989 May; 76(5):539–45

LITHOCHOLATE see **LITHOCHOLIC ACID**

LITHOCHOLIC ACID

ANALOGS & DERIVATIVES

Reduction of 7-ketolithocholic acid by human liver enzyme preparations in vitro. Amuro Y, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G67-71

Effect of inhibition of protein synthesis on cholestasis induced by taurolithocholate, lithocholate, and a manganese-bilirubin combination in the rat. Dahlström-King L, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2543-9

Comparison of biliary excretion and metabolism of lithocholic acid and its sulfate and glucuronide conjugates in rats. Takikawa H, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):147-50

Effects of oral administration of sulfolithocholic acid disodium salt and lithocholic acid sodium salt on N-methyl-N-nitrosourea-induced colonic tumorigenesis in conventional rats. Tanida N, et al. **Cancer Res** 1989 Mar 1;49(5):1178-81

Natural bile acids mimic hormonal action on K+ conductance in guinea-pig liver cells. Capiod T, et al. **Pflugers Arch** 1989;414 Suppl 1:S162-3

Effect of taurolithocholate on in vivo sulfation and glucuronidation of acetaminophen in rats. Galinsky RE, et al. **Pharm Res** 1988 Jan;5(1):61-4

Reduction of 3 alpha-hydroxy-5 beta-chol-6-en-24-oic acid to lithocholic acid in rats. Kimura K, et al. **Steroids** 1988 Mar-Apr;51(3-4):337-48

[Preparation and specificity of anti glyco-3 beta-hydroxy-5-cholen-24-oic acid C-3 bovine serum albumin (BSA) conjugate antiserum in radioimmunoassay (RIA)] Ikegawa S, et al. **Yakugaku Zasshi** 1988 Oct; 108(10):979-83 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Lithocholate in liver tissue with obstructive jaundice. Yanagisawa J, et al. **Gastroenterol Jpn** 1989 Apr; 24(2):156-8

ANTAGONISTS & INHIBITORS

Effect of inhibition of protein synthesis on cholestasis induced by taurolithocholate, lithocholate, and a manganese-bilirubin combination in the rat. Dahlström-King L, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2543-9

Supplemental administration of 1 alpha-hydroxyvitamin D3 inhibits promotion by intrarectal instillation of lithocholic acid in N-methyl-N-nitrosourea-induced colonic tumorigenesis in rats. Kawaura A, et al. **Carcinogenesis** 1989 Apr;10(4):647-9

BIOSYNTHESIS

Reduction of 3 alpha-hydroxy-5 beta-chol-6-en-24-oic acid to lithocholic acid in rats. Kimura K, et al. **Steroids** 1988 Mar-Apr;51(3-4):337-48

METABOLISM

Taurine and glycine conjugation and sulfation of lithocholate in primary hepatocyte cultures. Galle PR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):250-3

Interaction of potentially toxic bile acids with human plasma proteins: binding of lithocholic (3 alpha-hydroxy-5 beta-cholan-24-oic) acid to lipoproteins and albumin. Malavolti M, et al. **Lipids** 1989 Jul;24(7):673-6

PHARMACOKINETICS

Comparison of biliary excretion and metabolism of lithocholic acid and its sulfate and glucuronide conjugates in rats. Takikawa H, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):147-50

PHARMACOLOGY

Effects of oral administration of sulfolithocholic acid disodium salt and lithocholic acid sodium salt on N-methyl-N-nitrosourea-induced colonic tumorigenesis in conventional rats. Tanida N, et al. **Cancer Res** 1989 Mar 1;49(5):1178-81

Promotional effect of lithocholic acid and 3-hydroxyanthranilic acid on transformation of X-ray-initiated BALB/3T3 cells. Umeda M, et al. **Carcinogenesis** 1989 Sep;10(9):1665-8

Effects of 5 beta-chol-3-en-24-oic acid, and lithocholic acid and its sulfates on prostaglandin E2 output in perfusion of the rat colon. Hikasa Y, et al. **Gastroenterol Jpn** 1989 Feb;24(1):16-21

Structure-activity relationship of the cholestatic activity of dihydrotestosterone glucuronide, allo bile acids and lithocholate. Vore M, et al. **Life Sci** 1989;44(26):2033-40

LITHOLAPAXY see LITHOTRIPSY

LITHOTRIPSY

Radiation dose to patients and personnel during fluoroscopy at percutaneous renal stone extraction. Geterud K, et al. **Acta Radiol** 1989 Mar-Apr;30(2):201-5

Painless ESWL on the Dornier HM4. Preliminary results. Tailly G, et al. **Acta Urol Belg** 1988;56(3):420-6

Physical characteristics of gallstones removed at cholecystectomy: implications for extracorporeal shock-wave lithotripsy. Brink JA, et al. **AJR** 1988 Nov; 151(5):927-31

Extracorporeal shock-wave lithotripsy in the management of bile duct stones. Fried LA, et al. **AJR** 1988 Nov; 151(5):923-6

The current status of biliary lithotripsy: a survey of members of the Society of Gastrointestinal Radiologists. Bova JG. **AJR Am J Roentgenol** 1989 Aug;153(2):291-2

Percutaneous ultrasonic lithotripsy and endoscopic removal of retained intrahepatic stone [letter] Hoe J, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):428-9

Is routine chest radiography required with biliary lithotripsy? Malone DE, et al. **AJR Am J Roentgenol** 1989 May; 152(5):987-9

Walter B. Cannon lecture. Shock-wave lithotripsy of gallstones. Paumgartner G. **AJR Am J Roentgenol** 1989 Aug;153(2):235-42

Usefulness of shock wave lithotripsy as pretreatment for balloon valvuloplasty in calcified mitral stenosis. Nowak B, et al. **Am J Cardiol** 1989 Apr 15;63(13):996-7

SSAT symposium. Shock-wave lithotripsy and other new methods for the treatment of biliary stone disease. Papers presented as part of a postgraduate course during the 30th annual meeting of the Society for Surgery of the Alimentary Tract. Washington, DC, May 14, 1989. **Am J Surg** 1989 Sep;158(3):169-274

Extracorporeal shock-wave lithotripsy of renal calculi. Atala A, et al. **Am J Surg** 1989 Mar;157(3):350-8 (92 ref.)

Panel discussion: cholecystitis. Malt R, et al. **Am J Surg** 1989 Sep;158(3):205-17

Lithotripsy for bile duct stones. Moody FG, et al. **Am J Surg** 1989 Sep;158(3):241-7 (25 ref.)

Selection of patients for gallstone lithotripsy. Rege RV, et al. **Am J Surg** 1989 Sep;158(3):184-7 (11 ref.)

Biliary lithotripsy. Vanderpool D, et al. **Am J Surg** 1989 Sep;158(3):194-7 (25 ref.)

Epidural fentanyl and lithotripsy [letter] Gibbs NM, et al. **Anaesth Intensive Care** 1989 Aug;17(3):383-4

Anaesthesia for extracorporeal shockwave lithotripsy at the Victorian Lithotripsy Service--the first 300 patients. Silbert BS, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):310-7

Double-blind trial comparing epidural lignocaine with epidural fentanyl for anaesthesia during extracorporeal shock wave lithotripsy. Silbert BS, et al. **Anaesth Intensive Care** 1989 Feb;17(1):9-15

Prevention of postdural puncture headache after spinal anaesthesia for extracorporeal shockwave lithotripsy. An assessment of prophylactic epidural blood patching. Sengupta P, et al. **Anaesthesia** 1989 Jan;44(1):54-6

A modified stretcher-lifter device for transfer of patients during extra corporeal shock wave lithotripsy (ESWL) [letter] Malhotra V. **Anesth Analg** 1989 May;68(5):699-700

Value of heart-synchronized ventilation during extracorporeal shock wave lithotripsy remains unproven [letter; comment] Pond WW, et al. **Anesth Analg** 1989 Jun; 68(6):823. **Comment on:** Anesth Analg 1988 Jul;67(7):706-9

Interpleural anesthesia for extracorporeal shock wave lithotripsy [letter] Reiestad F, et al. **Anesth Analg** 1989 Oct; 69(4):551-2

Heart synchronized ventilation during extracorporeal shock wave lithotripsy [letter; comment] Segal E, et al. **Anesth Analg** 1989 Jul;69(1):139. **Comment on:** Anesth Analg 1988 Jul;67(7):706-9

Comparison of interpleural and epidural anesthesia for extracorporeal shock wave lithotripsy. Strømskag KE, et al. **Anesth Analg** 1988 Dec;67(12):1181-3

Pain control during extracorporeal shock wave lithotripsy of gallstones by titrated alfentanil infusion [letter] Schelling G, et al. **Anesthesiology** 1989 Jun;70(6):1022-3

The surgeon and biliary lithotripsy [editorial] Nahrwold DL. **Arch Surg** 1989 Jul;124(7):769-70

Electrohydraulic lithotripsy for biliary stones. Fan ST, et al. **Aust N Z J Surg** 1989 Mar;59(3):217-21

Lithotripsy versus percutaneous nephrolithotomy for renal calculi [letter] **BMJ** 1988 Sep 10;297(6649):685

Treating renal calculi [letter] **BMJ** 1988 Sep 24; 297(6651):794-5

Treating renal calculi [letter] Mays N, et al. **BMJ** 1988 Nov 19;297(6659):1335

Treating renal calculi [letter] Neal DE, et al. **BMJ** 1988 Aug 13;297(6646):483

Extradural bupivacaine and methadone for extracorporeal shock-wave lithotripsy [see comments] Drenger B, et al. **Br J Anaesth** 1989 Jan;62(1):82-6. **Comment in:** Br J Anaesth 1989 May;62(5):579-80

Extradural bupivacaine and methadone for extracorporal shock-wave lithotripsy [letter; comment] Lim M. **Br J Anaesth** 1989 May;62(5):579-80. **Comment on:** Br J Anaesth 1989 Jan;62(1):82-6

Pulse oximetry during extradural analgesia for extracorporeal shock wave lithotripsy. Vegfors M, et al. **Br J Anaesth** 1988 Dec;61(6):771-2

Lithotripsy--a new treatment for the impacted Dormia basket. Cole RS, et al. **Br J Urol** 1989 Mar;63(3):331

Ultrasonic fragmentation in the treatment of male urethral calculi. Durazi MH, et al. **Br J Urol** 1988 Nov;62(5):443-4

Extracorporeal shockwave lithotripsy using ultrasonic imaging: urologists' experience. Kiely EA, et al. **Br J Urol** 1989 Jul;64(1):1-4

Ureterolithotripsy: report of 1000 cases. Kostakopoulos A, et al. **Br J Urol** 1989 Mar;63(3):243-4

Extracorporeal piezoelectric lithotripsy for all renal stones: effectiveness and limitations. Neerhut GJ, et al. **Br J Urol** 1989 Jul;64(1):5-9

Are prophylactic antibiotics necessary during extracorporeal shockwave lithotripsy? Pettersson B, et al. **Br J Urol** 1989 May;63(5):449-52

Phaeochromocytoma diagnosed during percutaneous nephrolithotripsy. Wedman L, et al. **Br J Urol** 1988 Nov; 62(5):485-6

Pulmonary function after extracorporeal shock wave lithotripsy--a comparison of general and regional anaesthesia. Kelly RE, et al. **Can J Anaesth** 1989 Mar; 36(2):137-40

Epidural opioids as anaesthesia for extracorporeal shock wave lithotripsy in two patients with cardiac disease. Silbert BS, et al. **Can J Anaesth** 1988 Nov;35(6):624-7

Antibiotic prophylaxis before extracorporeal shock wave lithotripsy by single-shot application of azlocillin. Herrlinger A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):607-9

Ambulatory treatment by extracorporeal shock wave lithotripsy for an urethral stone in a hypospadic boy. Giordano DR, et al. **Child Nephrol Urol** 1988-89; 9(4):239-40

Percutaneous nephrolithotomy with electrohydraulic shock wave lithotripsy. Yin JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):363-8

Excretion of urinary enzymes after extracorporeal shock-wave lithotripsy. Jung K, et al. **Clin Chem** 1989 Sep; 35(9):2000-1

Management of upper urinary tract calculi with extracorporeal shock-wave lithotripsy. Newman DM, et al. **Compr Ther** 1989 Aug;15(8):35-40 (27 ref.)

Use of external shock-wave lithotripsy and adjuvant ursodiol for treatment of radiolucent gallstones. A national multicenter study. Burnett D, et al. **Dig Dis Sci** 1989 Jul; 34(7):1011-5

Endoscopic gallbladder catheterisation and extracorporeal shockwave lithotripsy in the management of Mirizzi's syndrome. Martin DF, et al. **Endoscopy** 1988 Nov; 20(6):321-2

A thread as a nidus of a common bile duct calculus--findings during endoscopic lithotripsy. Ormann W. **Endoscopy** 1989 Jul;21(4):191-2

The role of extracorporeal lithotripsy (ESWL) in the treatment of gallstones. Sauerbruch T, et al. **Endoscopy** 1988 Nov;20(6):305-8

Treatment of paediatric urolithiasis by extracorporeal shock-wave lithotripsy. Wilbert DM, et al. **Eur J Pediatr** 1988 Aug;147(6):579-81

Extracorporeal shock wave lithotripsy for large renal stones. To what size is extracorporeal shock wave lithotripsy alone feasible? Ackermann D, et al. **Eur Urol** 1988;15(1-2):5-8

Extracorporeal lithotripsy in patients with hemophilia. Becopoulos T, et al. **Eur Urol** 1988;14(4):343-5

Electrohydraulic lithotripsy for stones in Kock pouch. Chen KK, et al. **Eur Urol** 1989;16(2):110-3

Combined treatment of medullary sponge kidney by EDTA potassium citrate and extracorporeal shock wave lithotripsy. Nakatsuka S, et al. **Eur Urol** 1988;14(4):339-42

Percutaneous debulking of staghorn stones combined with extracorporeal shockwave lithotripsy: results and complications. Puppo P, et al. **Eur Urol** 1988;15(1-2):18-25

Staghorn calculi: percutaneous versus anatrophic nephrolithotomy. Rodrigues Netto N Jr, et al. **Eur Urol** 1988;15(1-2):9-12

Treatment of lithiasis in the patient with a solitary kidney. Ruiz Marcellan FJ, et al. **Eur Urol** 1988;15(1-2):13-7

Treatment of large renal calculi with extracorporeal shock wave lithotripsy monotherapy. Selli C, et al. **Eur Urol** 1988; 15(3-4):161-5

Extracorporeal shock wave lithotripsy for urinary stone disease: clinical experience with the electromagnetic lithotriptor 'Lithostar'. Simon J, et al. **Eur Urol** 1989; 16(1):7-11

Combined therapy of staghorn calculi with ureteroscopy and extracorporeal shock wave lithotripsy. Experience with 10 cases. Valente R, et al. **Eur Urol** 1988;14(5):349-52

Outpatient extracorporeal lithotripsy of kidney stones: 1,200 treatments. Vallancien G, et al. **Eur Urol** 1988;15(1-2):1-4

Treatment of distal ureteral calculi with extracorporeal shock wave lithotripsy. Experience with 264 cases. Zehntner C, et al. **Eur Urol** 1989;16(4):250-2

Removal of common bile duct stones by the combination of percutaneous balloon dilatation and extracorporeal shock-wave lithotripsy. Groen JN, et al. **Gastroenterology** 1989 Jul;97(1):202-6

Shock-wave therapy of gastric outlet syndrome caused by a gallstone. Holl J, et al. **Gastroenterology** 1989 Aug; 97(2):472-4

Gallstone disappearance after extracorporeal lithotripsy and oral bile acid dissolution. Ponchon T, et al. **Gastroenterology** 1989 Aug;97(2):457-63

Extracorporeal shock-wave lithotripsy of common bile duct stones [editorial] Richter JM, et al. **Gastroenterology** 1989 Jan;96(1):252-4

Fragmentation of bile duct stones by extracorporeal shock waves. A new approach to biliary calculi after failure of routine endoscopic measures. Sauerbruch T, et al. **Gastroenterology** 1989 Jan;96(1):146-52

Gallbladder motility before and after extracorporeal shock-wave lithotripsy. Spengler U, et al. **Gastroenterology** 1989 Mar;96(3):860-3

Retrograde biliary ultrathin endoscopy enhances biopsy of stenoses and lithotripsy. Ponchon T, et al. **Gastrointest Endosc** 1989 Jul-Aug;35(4):292-7

Ultrasonic lithotripsy of bladder stones. Cetin S, et al. **Int Urol Nephrol** 1988;20(4):361-5

Extracorporeal shock wave lithotripsy of stones in the ureter. Patrashkov T, et al. **Int Urol Nephrol** 1988;20(6):577-83

A theoretical study of cavitation generated by an extracorporeal shock wave lithotripter. Church CC. **J Acoust Soc Am** 1989 Jul;86(1):215-27

In vitro cytotoxic activity of lithotripter shock waves combined with adriamycin or with cisplatin on L1210 mouse leukemia cells. Wilmer A, et al. **J Cancer Res Clin Oncol** 1989;115(3):229-34

Ursodeoxycholic acid for adjuvant therapy with extracorporeal shock wave lithotripsy of gallstones. Fromm H. **J Clin Gastroenterol** 1988;10 Suppl 2:S18-21 (11 ref.)

Extracorporeal shock-wave lithotripsy of the common bile duct stone with ultrasound localization. Beneš J, et al. **J Hepatol** 1989 Jul;9(1):95-8

The lessons from in vitro lithotripsy for the clinical treatment of gallstones. Bird NC, et al. **J Hepatol** 1989 Jul;9(1):99-104

Gallstone treatment by extracorporeal shock-wave lithotripsy. Sackmann M, et al. **J Hepatol** 1988 Oct; 7(2):283-7 (36 ref.)

Inpatient vs outpatient treatment of renal calculi utilizing extracorporeal shock wave lithotripsy. Mays JE, et al. **J Okla State Med Assoc** 1988 Sep;81(9):559-62

Hyperoxaluria and renal calculi in children: the role of extracorporeal shock wave lithotripsy. Boddy SA, et al. **J R Soc Med** 1988 Oct;81(10):604-5

Selective elevation of urinary enzyme levels after extracorporeal shock wave lithotripsy. Assimos DG, et al. **J Urol** 1989 Sep;142(3):687-90

The role of open stone surgery since extracorporeal shock wave lithotripsy. Assimos DG, et al. **J Urol** 1989 Aug;142(2):263-7

Clinical experience using the Wolf Piezolith device at 2 British stone centers. Bowsher WG, et al. **J Urol** 1989 Sep; 142(3):679-82

Morbidity associated with indwelling internal ureteral stents after shock wave lithotripsy. Bregg K, et al. **J Urol** 1989 Mar;141(3):510-2

Current state and future developments of noninvasive treatment of human urinary stones with extracorporeal shock wave lithotripsy. Chaussy CG, et al. **J Urol** 1989 Mar;141(3 Pt 2):782-9 (121 ref.)

Cavitation microjets as a contributory mechanism for renal calculi disintegration in ESWL. Crum LA. **J Urol** 1988 Dec;140(6):1587-90 (32 ref.)

Variations in fluoroscopic and spot film techniques during extracorporeal shock wave lithotripsy. Daniels C, et al. **J Urol** 1989 Mar;141(3):489-91

Extracorporeal shock wave lithotripsy is a surgical operation, albeit noninvasive [letter] Drach GW. **J Urol** 1989 May; 141(5):1213-4

Extracorporeal shock wave lithotripsy in a renal transplant patient. Ellis E, et al. **J Urol** 1989 Jan;141(1):98-9

Caliceal colic: fact or fiction. Fernandez JA, et al. **J Urol** 1989 Aug;142(2):257-8

Overview of surgical treatment of urolithiasis with special reference to lithotripsy. Finlayson B, et al. **J Urol** 1989 Mar;141(3 Pt 2):778-9

Effects of extracorporeal shock wave lithotripsy on the structure and function of rabbit kidney. Gunasekaran S, et al. **J Urol** 1989 May;141(5):1250-4

Short-term changes of laboratory values after extracorporeal shock wave lithotripsy: a comparative study. Haupt G, et al. **J Urol** 1989 Aug;142(2):259-62

Extracorporeal shock wave lithotripsy monotherapy: experience with piezoelectric second generation lithotriptor in 642 patients. Kim SC, et al. **J Urol** 1989 Sep;142(3):674-8

Extracorporeal shock wave lithotripsy and residual stone fragments in lower calices [letter] McCullough DL. **J Urol** 1989 Jan;141(1):140

Long-term results of extracorporeal shock wave lithotripsy in children. Nijman RJ, et al. **J Urol** 1989 Aug;142(2 Pt 2):609-11; discussion 619

Retroperitoneal air, extracorporeal shock wave lithotripsy and epidural anesthesia. Palmer BW, et al. **J Urol** 1989 Apr;141(4):844-5

Critical evaluation of treatment of staghorn calculi by percutaneous nephrolithotomy and extracorporeal shock wave lithotripsy. Schulze H, et al. **J Urol** 1989 Apr; 141(4):822-5

Extracorporeal shock wave lithotripsy treatment of calculi in horseshoe kidneys. Smith JE, et al. **J Urol** 1989 Sep; 142(3):683-6

Iatrogenic lithotripsy failure: penetration of shock waves through tape. Sonda LP, et al. **J Urol** 1989 May; 141(5):1102-3

Extracorporeal shock wave lithotripsy performed on woman with a cardiac pacemaker. Stoller ML, et al. **J Urol** 1988 Dec;140(6):1510-1

Re: Percutaneous lithotripsy in morbid obesity [letter] Tomera K. **J Urol** 1989 Apr;141(4):959

Extracorporeal shockwave lithotripsy of salivary gland stones [letter] Iro H, et al. **Lancet** 1989 Jul 8;2(8654):115

Epidural meperidine: a novel approach to anesthetic management for extracorporeal shock wave lithotripsy--a comparison with epidural marcaine. Hsieh JC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):273-82

Endourology new vistas in the management of urinary tract disease. Mahamooth Z. **Med J Malaysia** 1987 Sep; 42(3):191-5

Extracorporeal shock-wave lithotripsy for gallbladder stones. **Med Lett Drugs Ther** 1989 Feb 10;31(785):9-10 (0 ref.)

Extracorporeal shock-wave lithotripsy: a review. Bashkoff E, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):288-91 (12 ref.)

Effects of extracorporeal shock wave lithotripsy on single chamber rate response and dual chamber pacemakers. Fetter J, et al. **PACE** 1989 Sep;12(9):1494-501

Extracorporeal shock wave lithotripsy for gallstones. How effective is it? Cass AS. **Postgrad Med** 1989 Feb 15; 85(3):111-2, 117-22

Renal calculi after shock wave lithotripsy: US evaluation with an in vitro phantom. Choyke PL, et al. **Radiology** 1989 Jan;170(1 Pt 1):39-44

The biliary lithotripsy team: the necessity for an interdisciplinary approach. Torres WE, et al. **Radiology** 1989 Apr;171(1):73-5

Extracorporeal shock wave lithotripsy in paediatric patients. Böhle A, et al. **Scand J Urol Nephrol** 1989;23(2):137-40

Extracorporeal shock wave lithotripsy: first choice therapy for ureteral stones. Rigatti P, et al. **Scand J Urol Nephrol** 1989;23(1):67-9

Extracorporeal shock wave lithotripsy--medical, technical, economic and policy implications. Proceedings from an international meeting. Linköping, Sweden, 1989. **Scand J Urol Nephrol Suppl** 1989;122:1-128

ESWL monotherapy of renal calculi substratified by site, size and multiplicity. Gleeson MJ, et al. **Scand J Urol Nephrol Suppl** 1989;122:11-20

Extracorporeal shock wave therapy of gallbladder stones--preliminary results. Heinrich R, et al. **Scand J Urol Nephrol Suppl** 1989;122:67-72

Extracorporeal shockwave lithotripsy (ESWL) at Aker Hospital, Oslo. Karlsen S, et al. **Scand J Urol Nephrol Suppl** 1988;110:279-80

Evaluation of biliary extracorporeal shock wave lithotripsy in the United Kingdom--problems with clinical trials. Milner P. **Scand J Urol Nephrol Suppl** 1989;122:52-9

What do our patients have to endure in order to get their stones removed? Pettersson B, et al. **Scand J Urol Nephrol Suppl** 1989;122:29-33

The introduction of ESWL in Europe--what is the issue? Staehr Johansen K. **Scand J Urol Nephrol Suppl** 1989; 122:118-21

Biliary lithotripsy in the United States. Vanderpool D, et al. **South Med J** 1989 May;82(5):636-9

Transduodenal sphincteroplasty for impacted stone made unnecessary by electrohydraulic lithotripsy. Fan ST. **Surg Gynecol Obstet** 1989 Oct;169(4):363-4

Electrohydraulic shock wave lithotripsy (ESWL) fragmentation of retained common duct stones. Johlin FC, et al. **Surgery** 1988 Oct;104(4):592-9

Histopathology of shock wave treated tumor cell suspensions and multicell tumor spheroids. Bräuner T, et al. **Ultrasound Med Biol** 1989;15(5):451-60

Effect of shock waves on suspended and immobilized L1210 cells. Brümmer F, et al. **Ultrasound Med Biol** 1989; 15(3):229-39

Second-generation lithotripsy: a safe, noninvasive, ambulatory procedure. Baert L, et al. **Urol Int** 1989; 44(1):38-40

Mechanism of fragmentation of urinary stones by underwater shock wave. Kambe K, et al. **Urol Int** 1988;43(5):275-81

Effects of extracorporeal shock wave lithotripsy on urinary excretion of N-acetyl-beta-D-glucosamidase. Kitada S, et al. **Urol Int** 1989;44(1):35-7

Case history of a prune-belly syndrome with extracorporeal shock wave lithotripsy treatment of allograft nephrolithiasis. Stenzl A, et al. **Urol Int** 1989;44(2):106-9

The in vitro and in vivo effects of extracorporeal shock waves on malignant cells. Randazzo RF, et al. **Urol Res** 1988;16(6):419-26

Comparison of extracorporeal shock-wave lithotripsy and surgical lithotomy regarding patient satisfaction. Bashkoff E, et al. **Urology** 1989 May;33(5):371-9

Extracorporeal shock-wave lithotripsy in hemophiliac patient. Christensen JG, et al. **Urology** 1989 May; 33(5):424-6

ESWL treatment of urinary calculi. Drago JR, et al. **Urology** 1989 May;33(5):400-3

Management of cystine nephrolithiasis by endourologic methods and shock-wave lithotripsy. Hernandez-Graulau JM, et al. **Urology** 1989 Sep;34(3):139-43

ESWL monotherapy for large-volume renal calculi: efficacy and morbidity. Michaels EK, et al. **Urology** 1989 Aug; 34(2):96-9

Use of retrograde lavage catheter during ESWL treatments. Whelan JP, et al. **Urology** 1989 Jan;33(1):31-6

Surgical intervention following fragmentation of gallstones by extracorporeal shock waves. Teichmann RK, et al. **World J Surg** 1989 May-Jun;13(3):317-20; discussion 320

[Extracorporeal shock wave lithotripsy of staghorn stones] Guo YL. **Chung Hua Wai Ko Tsa Chih** 1989 Mar; 27(3):155-6, 188-9 (Eng. Abstr.) (Chi)

[Prone position in the treatment of ureteral calculi with extracorporeal shock wave lithotripsy] Guo YL. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):285-6, 318 (Eng. Abstr.) (Chi)

[Lithotrity by domestic hydroelectric lithotriptor: report of 54 cases] Yin DH, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):111-2, 127 (Eng. Abstr.) (Chi)

[Experience in electrohydraulic shock wave lithotripsy of bladder stones in 502 cases] Zhang ZW. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):199-200, 253 (Eng. Abstr.) (Chi)

[Intravenous anesthesia in extracorporeal shock wave lithotripsy] Cheng KS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):423-6 (Eng. Abstr.) (Chi)

[The anesthetic effect of acupoint injection in ESWL] Lee WC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):283-8 (Eng. Abstr.) (Chi)

[Extracorporeal shock-wave lithotripsy] Hradec E, et al. **Cas Lek Cesk** 1989 Feb 24;128(9):273-80 (Eng. Abstr.) (Cze)

[Lithotripsy of gallstones using shock waves. First clinical experience in Czechoslovakia] Kordač V, et al. **Cas Lek Cesk** 1988 Nov 4;127(45):1397-9 (Eng. Abstr.) (Cze)

[Initial experience with lithotripsy using extracorporeal shock waves] Poch J, et al. **Rozhl Chir** 1988 Oct;67(10):654-8 (Eng. Abstr.) (Cze)

[A simple model for verifying the effects of a focused shock wave from our generator on erythrocytes and lymphocytes] Beneš J, et al. **Sb Lek** 1989 Apr;91(4):123-8 (Eng. Abstr.) (Cze)

[Analgesia in noninvasive lithotripsy of gallstones] Beneš J, et al. **Sb Lek** 1988 Oct;90(10):310-3 (Eng. Abstr.) (Cze)

[Preclinical verification of possibilities of extracorporeal lithotripsy of gallstones in experimental animals] Beneš J, et al. **Sb Lek** 1987 May;89(5):129-33 (Eng. Abstr.) (Cze)

[Experiences with extracorporeal shockwave lithotripsy in 61 children] Lock MT, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):669-72 (Eng. Abstr.) (Dut)

[Extracorporeal crushing of kidney stones: experiences with a first-generation lithotriptor] Lock MT, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1974-9 (Eng. Abstr.) (Dut)

[Treatment of gallstones in the choledochus duct using extracorporeal shock waves] Terpstra OT. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1970-4 (Eng. Abstr.) (Dut)

[Extracorporeal shockwave lithotripsy in the treatment of gallbladder stones] Vergunst H, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1965-70 (65 ref.) (Dut)

[Treatment of coralliform calculi using shock wave monotherapy] Baert L, et al. **Acta Urol Belg** 1988; 56(3):427-9 (Fre)

[The treatment of a staghorn calculus using extracorporeal lithotripsy as single therapy] Vanden Bossche M, et al. **Acta Urol Belg** 1988;56(4):505-10 (Eng. Abstr.) (Fre)

[Cystine lithiasis and extracorporeal lithotripsy] Conort P, et al. **Ann Urol (Paris)** 1989;23(3):253-4 (Eng. Abstr.) (Fre)

[Extracorporeal lithotripsy as the primary procedure in the treatment of large kidney calculi] Flam T, et al. **Ann Urol (Paris)** 1988;22(6):400-3 (Eng. Abstr.) (Fre)

[What happened at the VIth International Congress on Endourology and Extracorporeal Lithotripsy?] Le Duc A. **Ann Urol (Paris)** 1989;23(1):47-8 (Fre)

[Hydrotherapy. Complement to the treatment of residual nephrolithiasis after extracorporeal lithotripsy] Thomas J. **Ann Urol (Paris)** 1989;23(1):47 (Eng. Abstr.) (Fre)

[Extracorporeal shockwave lithotripsy and cystine lithiasis. Our experience apropos of 11 cases] Tobelem G, et al. **Ann Urol (Paris)** 1989;23(2):146-8 (Eng. Abstr.) (Fre)

[Lithotripsy of biliary calculi: evaluation of ultrasonography as a method to guide treatment by extracorporeal shock waves] Dion YM, et al. **Can J Surg** 1989 Sep;32(5):345-8 (Eng. Abstr.) (Fre)

[Extracorporeal lithotripsy in a young child. Use of the EDAP LT 01 apparatus in a 20-month-old girl] Alessandrini P, et al. **Chir Pediatr** 1988;29(4):213-5 (Eng. Abstr.) (Fre)

[Extracorporeal lithotripsy of gallbladder calculi. Tolerability, complications and early results] Mosnier H, et al. **Gastroenterol Clin Biol** 1989 May;13(5):482-8 (Eng. Abstr.) (Fre)

[Extra- and intracorporeal biliary lithotripsy. I: Physical bases] Ponchon T, et al. **Gastroenterol Clin Biol** 1988 Nov; 12(11):814-22 (44 ref.) (Fre)

[Extracorporeal lithotripsy in cholelithiasis: an alternative to cholecystectomy] Ponchon T. **Gastroenterol Clin Biol** 1989 May;13(5):479-81 (Fre)

[Extracorporeal lithotripsy and gallbladder lithiasis (letter)] Murata I, et al. **J Chir (Paris)** 1988 Dec;125(12):752-3 (Fre)

[Extracorporeal lithotripsy in gallbladder lithiasis] Pelletier G, et al. **Presse Med** 1989 May 27;18(21):1068-71 (21 ref.) (Eng. Abstr.) (Fre)

[Extracorporeal lithotripsy in digestive system diseases] Honoré P, et al. **Rev Med Liege** 1988 Dec 1;43(23):761-4 (Fre)

[Interdisciplinary treatment of gallstones: surgery, endoscopy, lithotripsy. Report of experiences after 4 years] Heberer G, et al. **Chirurg** 1989 Apr;60(4):219-27 (Eng.

Abstr.) (Ger)
[Piezoelectric lithotripsy of gallstones. Initial clinical experiences] Ell C, et al. **Dtsch Med Wochenschr** 1988 Sep 30;113(39):1503–7 (Eng. Abstr.) (Ger)
[What will become of the calculus detritus? (letter)] Greiner L, et al. **Dtsch Med Wochenschr** 1989 Feb 3;114(5):198–9 (Ger)
[What happens to gallstone fragments? What clears the gallbladder after nonsurgical treatment of gallstones? (editorial)] Kümmerle F. **Dtsch Med Wochenschr** 1988 Oct 21;113(42):1623–25 (Ger)
[Extracorporeal shockwave lithotripsy of gallstones: how many patients are suitable for it?] Rambow A, et al. **Dtsch Med Wochenschr** 1989 Jun 9;114(23):895–8 (Eng. Abstr.) (Ger)
[Extracorporeal shockwave lithotripsy in chronic pancreatitis] Soehendra N, et al. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1402–6 (Eng. Abstr.) (Ger)
[Extracorporeal shockwave lithotripsy of bile duct stones] Wenzel H, et al. **Dtsch Med Wochenschr** 1989 May 12; 114(19):738–43 (Eng. Abstr.) (Ger)
[Oral and direct lysis of gallbladder calculi. Competing or complementary procedures to shockwave lithotripsy?] Kurtz W, et al. **Fortschr Med** 1989 Jul 10;107(20):443–5 (17 ref.) (Eng. Abstr.) (Ger)
[Extracorporeal shockwave lithotripsy. Current status in treatment of kidney calculus disease] Rassweiler J, et al. **Fortschr Med** 1989 Aug 10;107(23):499–501 (3 ref.) (Eng. Abstr.) (Ger)
[The management of ureter stones in the age of ESWL] Alund G, et al. **Helv Chir Acta** 1988 Jul;55(3):317–9 (Eng. Abstr.) (Ger)
[What is meant with: stone-free—disintegration sediment—rest-stone following ESWL treatment of infectious discharge stones?] Ulshöfer B, et al. **Helv Chir Acta** 1988 Jul;55(3):321–3 (Eng. Abstr.) (Ger)
[Fragmentation of large and impacted gallstones using ultrasound] Becker CD, et al. **Rontgenpraxis** 1989 Feb; 42(2):40–4 (Ger)
[MTBE litholysis and extracorporeal shock wave lithotripsy of gallstones] Schmassmann A, et al. **Schweiz Med Wochenschr** 1988 Sep 17;118(37):1297–300 (32 ref.) (Eng. Abstr.) (Ger)
[Ureteral calculus—change in therapy at the Urology Department of the Vienna General Polyclinic (1982–1986)] Hübner W. **Urologe [A]** 1988 Jul;27(4):230–3 (Eng. Abstr.) (Ger)
[Arterial blood supply of horseshoe kidneys with special reference to percutaneous lithotripsy] Künzel KH, et al. **Urologe [A]** 1988 Jul;27(4):240–5 (Eng. Abstr.) (Ger)
[Current therapy of ureteral calculus] Miller K, et al. **Urologe [A]** 1989 May;28(3):148–51 (Eng. Abstr.) (Ger)
[Endoscopic removal of bile duct calculi (papillotomy, mechanical lithotripsy, laser-induced lithotripsy] Ell C. **Verh Dtsch Ges Inn Med** 1988;94:112–6 (Ger)
[Treatment of calculi of the gallbladder by extracorporeal shock waves] Sauerbruch T. **Verh Dtsch Ges Inn Med** 1988; 94:131–4 (Ger)
[Percutaneous removal of kidney calculi and extracorporeal shockwave lithotripsy in patients with hemorrhagic diatheses] Kirschner P, et al. **Z Urol Nephrol** 1988 Jul; 81(7):425–30 (Eng. Abstr.) (Ger)
[Extracorporeal lithotripsy (ESWL): 2 years' experience] Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep; 60(3):285–9 (15 ref.) (Eng. Abstr.) (Ita)
[2 years of anesthesia in extracorporeal shockwave lithotripsy. 1768 cases] Gagliardini MA, et al. **Minerva Anestesiol** 1988 May;54(5):187–94 (Eng. Abstr.) (Ita)
[Use of 3 different anesthetic mixtures in peridural anesthesia for extracorporeal shockwave lithotripsy (ESWL)] Tempia A, et al. **Minerva Anestesiol** 1988 Jul–Aug;54(7–8):315–20 (Eng. Abstr.) (Ita)
[Clinical study of extracorporeal shock-wave lithotripsy (ESWL) for renal and ureteral stones. The first report: end-results of 1,000 cases] Higashi Y. **Hinyokika Kiyo** 1988 Dec;34(12):2073–81 (Eng. Abstr.) (Jpn)
[A case of stone former with pacemaker treated by extracorporeal shock wave lithotripsy] Kanazawa T, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1415–9 (Eng. Abstr.) (Jpn)
[Clinical study of extracorporeal shock wave lithotripsy] Onishi N, et al. **Hinyokika Kiyo** 1988 May;34(5):765–9 (Eng. Abstr.) (Jpn)
[243 cases of percutaneous nephrolithotomy—result of 5 years] Tsuboi N, et al. **Hinyokika Kiyo** 1989 Apr; 35(4):359–63 (Eng. Abstr.) (Jpn)
[Extracorporeal shock-wave lithotripsy for children] Wakabayashi A, et al. **Hinyokika Kiyo** 1988 Jun;34(6):963–6 (Eng. Abstr.) (Jpn)
[Renal function assessed by 99mTc-DMSA scintigraphy before and after percutaneous nephrostolithotripsy (PNL)] Sakurai M, et al. **Kaku Igaku** 1988 Nov;25(11):1215–20 (Eng. Abstr.) (Jpn)
[Gallstone destruction utilizing ultrasound low energy and dissolvents: preliminary report] Ino-u-e S, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):2028 (Jpn)
[Anesthesia-free extracorporeal piezoelectric shock wave lithotripsy in renal calculi] Baba S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1919–27 (Eng. Abstr.) (Jpn)
[Treatment of suture-thread stones in the kidney by percutaneous nephrolithotripsy. Report of a case] Matsuda S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):607–10 (9 ref.) (Eng. Abstr.) (Jpn)
[Basic analysis of extracorporeal shock wave lithotripsy of gallstones] Akimoto K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):781–5 (Eng. Abstr.) (Jpn)
[New therapeutic alternatives for patients with gallstones] Ruud TE, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20; 109(2):220–2 (Eng. Abstr.) (Nor)
[Combined treatment of a lithiasis patient by litholysis and extracorporeal lithotripsy of urinary calculi] Banchev A, et al. **Khirurgiia (Sofiia)** 1988;41(3):20–1 (Eng. Abstr.) (Rus)
[Extracorporeal lithotripsy of ureteral calculi using shock waves] Mikhallov P, et al. **Khirurgiia (Sofiia)** 1988; 41(3):7–11 (Eng. Abstr.) (Rus)
[Experimental physiotherapy of kidney calculi] Krylov OA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):68–9 (Rus)
[In situ treatment of distal ureteral calculi using extracorporeal shockwave lithotripsy] Serrate Aguilera RG, et al. **Actas Urol Esp** 1988 May–Jun;12(3):238–41 (Eng. Abstr.) (Spa)
[Ureterorenoscopy combined with extracorporeal shockwave lithotripsy] González Cabrera LA, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):49–52 (Eng. Abstr.) (Spa)
[Cystine calculi of the kidney: our experience with endourologic treatment by shock waves (ESWL)] Pérez Castro Ellendt E, et al. **Arch Esp Urol** 1988 Oct;41(8):593–8 (Eng. Abstr.) (Spa)
[New ultrasonic images in patients with lithiasis after undergoing extracorporeal shock wave lithotripsy] Ruiz Marcellán FJ, et al. **Arch Esp Urol** 1989 May;42(4):357–62 (Eng. Abstr.) (Spa)
[Extracorporeal shock wave lithotripsy (ESWL) in the treatment of urolithiasis] Schärfe T, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):455–9 (Eng. Abstr.) (Spa)
[Extracorporeal lithotripsy in patients with biliary lithiasis. Study and fragmentation in 6 patients] Uribe M, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun;53(2):89–94 (Eng. Abstr.) (Spa)
[Shock wave lithotripsy—a conservative method for treatment of urinary tract calculi] Tiselius HG. **Lakartidningen** 1988 Oct 12;85(41):3366–7 (Swe)

ADVERSE EFFECTS

Nephrocutaneous fistula following extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy. Cecchi M, et al. **Acta Urol Belg** 1988;56(3):439–42
The development of steinstrassen after ESWL: frequency, natural history, and radiologic management. Fedullo LM, et al. **AJR** 1988 Dec;151(6):1145–7
Complications of extracorporeal shock wave lithotripsy. Tillotson CL, et al. **Am Fam Physician** 1988 Dec; 38(6):161–3
Hemoptysis in a child during extracorporeal shock wave lithotripsy. Malhotra V, et al. **Anesth Analg** 1989 Oct; 69(4):526–8
Autonomic hyperreflexia in spinal cord injured patients during extracorporeal shock wave lithotripsy. Stowe DF, et al. **Anesth Analg** 1989 Jun;68(6):788–91
Severe hemorrhage after extracorporeal shock-wave lithotripsy. Stoller ML, et al. **Ann Intern Med** 1989 Oct 1;111(7):612–3
Biliary lithotripsy. Determination of stone fragmentation success and potential tissue injury in swine. Deaconson TF, et al. **Arch Surg** 1989 Aug;124(8):916–20; discussion 921
CT demonstration of irrigant extravasation following percutaneous nephrolithotomy. Graham RT, et al. **Can Assoc Radiol J** 1988 Dec;39(4):284–5
Is extracorporeal shock wave lithotripsy safe in patients with calcific arterial disease? Cooke DA, et al. **Eur J Vasc Surg** 1989 Aug;3(4):363–5
Risk factors in outpatient extracorporeal shock wave lithotripsy. Ackaert KS, et al. **Eur Urol** 1989;16(5):349–53
Histological and ultrastructural evaluation of extracorporeal shock wave lithotripsy-induced acute renal lesions: preliminary report. Rigatti P, et al. **Eur Urol** 1989; 16(3):207–11
Tissue reactions under piezoelectric shockwave application for the fragmentation of biliary calculi. Ell C, et al. **Gut** 1989 May;30(5):680–5
Biological effects of biliary shock wave lithotripsy in swine. Becker CD, et al. **Invest Radiol** 1989 May;24(5):366–70
Effects of lithotripsy on rat kidney: evaluation with MR imaging, histology, and electron microscopy. Neuerburg J, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):82–9
Short-term effects of extracorporeal shock wave lithotripsy on the human gallbladder. Stephenson TJ, et al. **J Pathol** 1989 Jul;158(3):239–46
Electrohydraulic shock wave induced renal injury. Begun FP, et al. **J Urol** 1989 Jul;142(1):155–9
Colonic mucosal ecchymoses after extracorporeal shock wave lithotripsy for upper ureteral calculus. Cass AS, et al. **J Urol** 1988 Nov;140(5):1012–3
Indomethacin as prophylaxis against ureteral colic following extracorporeal shock wave lithotripsy. Cole RS, et al. **J Urol** 1989 Jan;141(1):9–12
Renal loss following extracorporeal shock wave lithotripsy. Donahue LA, et al. **J Urol** 1989 Sep;142(3):809–11
The role of lithotripsy and its side effects. Lingeman JE, et al. **J Urol** 1989 Mar;141(3 Pt 2):793–7 (27 ref.)
Low-renin hypertension after extracorporeal shock wave lithotripsy [letter] Williams CM, et al. **JAMA** 1989 Oct 13;252(14):1952
Auditory risks in percutaneous lithotripsy [letter] Samuel AM, et al. **Lancet** 1989 Aug 19;2(8660):447–8
Iliac-vein thrombosis after extracorporeal shock-wave lithotripsy [letter] Desmet W, et al. **N Engl J Med** 1989 Sep 28;321(13):907
Is extracorporeal biliary lithotripsy painless? My experience with three shock-wave sources [letter] Staritz M. **N Engl J Med** 1989 Mar 23;320(12):811
Right renal trauma: a side effect of biliary lithotripsy [letter] Williams CM, et al. **N Engl J Med** 1989 Mar 16;320(11):739
Effects of extracorporeal shock wave lithotripsy on cardiac pacemakers and its safety in patients with implanted cardiac pacemakers. Cooper D, et al. **PACE** 1988 Nov;11(11 Pt 1):1607–16
Haemorrhagic shock nine days after extracorporeal shock wave lithotripsy in a patient with haemophilia B [letter] Lauper M, et al. **Thromb Haemost** 1988 Dec 22;60(3):532
A model of extracorporeal shock wave action: tandem action of shock waves. Delius M, et al. **Ultrasound Med Biol** 1988; 14(6):515–8
Investigation of cavitation in flowing media by lithotripter shock waves both in vitro and in vivo. Williams AR, et al. **Ultrasound Med Biol** 1989;15(1):53–60
Extracorporeal shock wave lithotripsy and stents: fluoroscopic observations and a hypothesis on the mechanisms of stent function. Fine H, et al. **Urol Radiol** 1989;11(1):37–41
Effects of extracorporeal shock wave lithotripsy (ESWL) on renal tissue. A review. Ackaert KS, et al. **Urol Res** 1989;17(1):3–7 (28 ref.)
Morphological changes following ESWL in the rat kidney. Recker F, et al. **Urol Res** 1989;17(4):229–33
The effect of high energy shock waves (HESW) on human bone marrow. Yang C, et al. **Urol Res** 1988;16(6):427–9
Variation on Water-Pik technique for treatment of steinstrasse after ESWL. Rubenstein MA, et al. **Urology** 1988 Nov;32(5):429–30
[Kidney lithotriptor as a possible source of hospital infection] Rechsteiner J, et al. **Ned Tijdschr Geneeskd** 1988 Oct 1; 132(40):1849–53 (Eng. Abstr.) (Dut)
[Tissue effects of extracorporeal lithotripsy on a model of experimental biliary calculi in dogs] Amouretti M, et al. **Gastroenterol Clin Biol** 1989 May;13(5):489–94 (Eng. Abstr.) (Fre)
[Prevalence and incidence of arterial hypertension in patients with kidney calculi treated by extracorporeal shock wave lithotripsy] Liedl B, et al. **Urologe [A]** 1989 May;28(3):130–3 (Eng. Abstr.) (Ger)
[Monodose aztreonam in the prevention of infection after extracorporeal shockwave lithotripsy. Theoretical premises] Puppo P, et al. **Minerva Urol Nefrol** 1989 Apr–Jun;41(2):109–13 (Eng. Abstr.) (Ita)
[The influence of percutaneous nephrolithotomy on renal function evaluated by 99m-Tc-DTPA renoscintigram] Tsuboi N, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1717–21 (Eng. Abstr.) (Jpn)
[A clinical study of the influence of percutaneous nephroureterolithotomy on renal function using 99mTc-DMSA renal scintigraphy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1479–87 (Eng. Abstr.) (Jpn)
[A study on acute renal damage from percutaneous nephrolithotomy assessed by urinary NAG and gamma-GTP activities] Kageyama Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):343–8 (Eng. Abstr.) (Jpn)
[Renal damage after extracorporeal shock-wave lithotripsy detected by magnetic resonance imaging] Torii S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1323–7 (Eng. Abstr.) (Jpn)
[CT appearance of renal hemorrhage after extracorporeal shock wave lithotripsy] Kanazawa S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):781–7 (Eng. Abstr.) (Jpn)
[Hazards and complications of endoscopic transurethral ureterolithotripsy and lithoextraction and means of prevention] Simonov VIa, et al. **Urol Nefrol (Mosk)** 1989 May-Jun;(3):36–9 (Eng. Abstr.) (Rus)

ECONOMICS

Extracorporeal shock wave lithotripsy: what does the surgeon do? [letter] Schipf RG. **JAMA** 1989 Mar 24–31; 261(12):1732
A cost-effectiveness analysis of extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy. Carlsson P, et al. **Scand J Urol Nephrol Suppl** 1989;122:44–51
Cost and effectiveness of extracorporeal shock wave lithotripsy. Carlsson P, et al. **Scand J Urol Nephrol Suppl** 1989;122:34–43

HISTORY

Vesical calculus, lithotrity, and Napoleon III. Lin JI. **N Y State J Med** 1989 Aug;89(8):472–5

INSTRUMENTATION

Extracorporeal shock-wave lithotripsy of gallstones: Boston experience with the Dornier MPL 9000 lithotripter. Malt RA, et al. **Am J Surg** 1989 Sep;158(3):192–3

Influence of Dornier HM3 system on respiration during extracorporeal shock-wave lithotripsy. Bromage PR, et al. **Anesth Analg** 1989 Mar;68(3):363–7

Comparative evaluation of general, epidural, and spinal anaesthesia for extracorporeal shockwave lithotripsy [letter] Britton JP, et al. **Ann R Coll Surg Engl** 1988 Sep; 70(5):336

Experimental laboratory lithotripter: design, construction, and operation. Akers SR, et al.
Biomed Instrum Technol 1989 Jan–Feb;23(1):50–3

Extracorporeal shock wave lithotripsy with the Lithostar lithotriptor. Grace PA, et al. **Br J Urol** 1989 Aug; 64(2):117–21

The physics and mechanics of lithotripters. Lubock P.
Dig Dis Sci 1989 Jul;34(7):999–1005 (14 ref.)

Mechanical lithotripsy of bile duct stones in 209 patients—effect of technical advances. Schneider MU, et al. **Endoscopy** 1988 Sep;20(5):248–53

Wolf Piezolith 2200 versus the modified Dornier HM3. Efficacy and range of indications. Rassweiler J, et al.
Eur Urol 1989;16(1):1–6

Technical considerations using a pulsed neodym-YAG laser for endoscopic shock wave lithotripsy. Rassweiler J, et al. **Eur Urol** 1989;16(5):374–7

Piezoelectric extracorporeal shock wave lithotripsy in children. Marberger M, et al. **J Urol** 1989 Aug;142(2):349–52

The pulsed dye laser versus the Q-switched Nd:YAG laser in laser-induced shock-wave lithotripsy. Thomas S, et al. **Lasers Surg Med** 1988;8(4):363–70

Isolated pulmonary blast injury in rats—a new model using the extracorporeal shock-wave lithotriptor. Pode D, et al. **Milit Med** 1989 Jun;154(6):288–93

Experimental percutaneous gallstone lithotripsy: results in swine. Miller FJ, et al. **Radiology** 1989 Mar;170(3 Pt 2):985–7

An overview of different ESWL-systems. Boström U.
Scand J Urol Nephrol Suppl 1989;122:73–81

A universal lithotripter for interdisciplinary use: the Siemens "Lithostar Plus". Folberth W.
Scand J Urol Nephrol Suppl 1989;122:86–94

"Lithostar" lithotripsy—Manchester experience. Sandhu DP, et al. **Scand J Urol Nephrol Suppl** 1989;122:21–4

Extracorporeal shock wave lithotripsy of gallstones. Schneider W. **Scand J Urol Nephrol Suppl** 1989;122:82–5

A survey of the acoustic output of commercial extracorporeal shock wave lithotripters. Coleman AJ, et al.
Ultrasound Med Biol 1989;15(3):213–27

Effectiveness of radiation control program for Dornier HM3 lithotriptor. Griffith DP, et al. **Urology** 1989 Jan;33(1):20–5 (21 ref.)

Gastric phytobezoar: endoscopic removal using the gallstone lithotripter. Lübke HJ, et al. **Z Gastroenterol** 1988 Aug; 26(8):393–6

[Experimental study and clinical use of extracorporeal shock wave lithotriptor with water sac] Huang ZC, et al.
Chung Hua I Hsueh Tsa Chih 1988 Sep;68(9):519–21 **(Chi)**

[Extracorporeal lithotripsy of gallbladder lithiasis: preliminary results of the EDAP lithotripsy apparatus (letter)] Pelletier G, et al. **Gastroenterol Clin Biol** 1989; 13(2):223 **(Fre)**

[Focusing water shock waves for lithotripsy by various ellipsoid reflectors] Müller M. **Biomed Tech (Berlin)** 1989 Apr;34(4):62–72 (Eng. Abstr.) **(Ger)**

[Treatment of gallstones by extracorporeal shockwave lithotripsy and adjuvant oral lysis. Status and perspectives] Staritz M, et al. **Internist (Berlin)** 1988 Dec;29(12):792–5 (12 ref.) **(Ger)**

[Percutaneous transhepatic laser lithotripsy of gallstones—results of animal experiments] Wenk H, et al. **Langenbecks Arch Chir** 1989;374(3):169–74 (Eng. Abstr.) **(Ger)**

[Treatment of staghorn calculi. Strategies and results of the combined use of new technics] Eisenberger F, et al.
Urologe [A] 1989 May;28(3):138–44 (Eng. Abstr.) **(Ger)**

[Administration of intracorporeal, laser-induced shock waves for the destruction of urinary calculi] Hofstetter AG, et al. **Urologe [A]** 1989 May;28(3):145–7 (10 ref.) (Eng. Abstr.) **(Ger)**

[Extracorporeal lithotripsy of gallbladder calculi with piezoelectrically generated shock waves: initial experiences] Thiel H, et al. **Z Gastroenterol** 1989 May; 27(5):263–6 (Eng. Abstr.) **(Ger)**

[Sonography for determining indications and monitoring shockwave lithotripsy of gallbladder calculi] Jakobeit C, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:211–2 **(Ger)**

[Extracorporeal lithotripsy with low pressure shockwaves using a modified Dornier HM3 lithotriptor: preliminary results] Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):23–7 (Eng. Abstr.) **(Ita)**

[Use of a high-frequency pulsed hydro jet in the percutaneous treatment of biliary tract calculi] Cesarani F, et al. **Radiol Med (Torino)** 1988 Nov;76(5):453–7 (Eng. Abstr.) **(Ita)**

[Use of an electrohydraulic lithotripter in the percutaneous treatment of biliary tract calculi. The preliminary clinical experience in 4 cases] Juliani E, et al.
Radiol Med (Torino) 1988 Nov;76(5):448–52 (Eng. Abstr.) **(Ita)**

[Extracorporeal shock wave lithotripsy for upper urinary tract stone using piezoelectric lithotripter (Piezolith 2200)] Asakage Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):582–90 (Eng. Abstr.) **(Jpn)**

[Clinical application of Sonolith 2000 on Extracorporeal Shock Wave Lithotripsy for renal and ureteral calculi] Hirao Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):507–16 (Eng. Abstr.) **(Jpn)**

[Clinical experiences in the treatment of upper urinary tract stones by second generation extracorporeal shock wave lithotriptor (EDAP LT-01)] Machida T, et al.
Nippon Hinyokika Gakkai Zasshi 1988 Feb;79(2):214–9 (Eng. Abstr.) **(Jpn)**

[Clinical application of third generation extracorporeal shock wave lithotriptor (TRIPTER X-1) to upper urinary tract stones] Nishimura T, et al.
Nippon Hinyokika Gakkai Zasshi 1989 Feb;80(2):151–7 (Eng. Abstr.) **(Jpn)**

[Confined blasting in microexplosion cystolithotripsy] Uchida M. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):431–8 (Eng. Abstr.) **(Jpn)**

[Removal of concrements from the common bile duct using a device] Lifshits IuZ, et al. **Klin Khir** 1988;(9):64–5 **(Rus)**

[Extracorporeal shockwave lithotripsy at the Dorn'e NM-3 unit. Experience in organizing the delivery of a new type of medical care] Matveev GN, et al. **Ter Arkh** 1988; 60(11):109–12 **(Rus)**

METHODS

Biliary lithotripsy: 1989. Ferrucci JT.
AJR Am J Roentgenol 1989 Jul;153(1):15–22 (39 ref.)

Gallstone lithotripsy [news] Lancaster SL, et al.
Am J Nurs 1988 Dec;88(12):1629–30

Principles of biliary extracorporeal lithotripsy. Technical considerations and clinical implications. Chapman WC, et al. **Am J Surg** 1989 Sep;158(3):179–83 (29 ref.)

Gallstone lithotripsy by extracorporeal shock waves. Sauerbruch T. **Am J Surg** 1989 Sep;158(3):188–91 (23 ref.)

Antegrade ureteroscopy and ultrasonic lithotripsy in the treatment of difficult upper and middle ureteric stones. Tan EC, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):55–8

Extracorporeal shock-wave lithotripsy of bile duct calculi. An interim report of the Dornier U.S. Bile Duct Lithotripsy Prospective Study. Bland KI, et al.
Ann Surg 1989 Jun;209(6):743–53; discussion 753–5

Extracorporeal shock wave lithotripsy (ESWL) in the management of complex biliary tract stone disease. Taylor MC, et al. **Ann Surg** 1988 Nov;208(5):586–92

Second generation lithotripsy: an experience of 200 patients. Bowsher WG, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):227–9 (4 ref.)

Second generation lithotripters: designs and clinical results reviewed. Coptcoat MJ, et al.
Arch Ital Urol Nefrol Androl 1988 Sep;60(3):221–6 (0 ref.)

Ureteral "steinstrasse" after ESWL. Zanetti G, et al.
Arch Ital Urol Nefrol Androl 1988 Mar;60(1):37–40

Percutaneous transhepatic ultrasonic cholelithotripsy. Das AK, et al. **Arch Surg** 1989 Jun;124(6):747–8

Is extracorporeal shockwave lithotripsy suitable treatment for lower ureteric stones? Cole RS, et al. **Br J Urol** 1988 Dec;62(6):525–30

Suprapubic lithotripsy. Gopalakrishnan G, et al.
Br J Urol 1988 Oct;62(4):389

Radiologic contribution to the management of patients undergoing extracorporeal shock wave lithotripsy. Dyer RB, et al. **CRC Crit Rev Diagn Imaging** 1988;28(4):295–330 (35 ref.)

Fragmentation of biliary calculi by means of extracorporeally generated piezoelectric shock waves. Ell C, et al.
Dig Dis Sci 1989 Jul;34(7):1006–10

Who should conduct extracorporeal shock-wave biliary lithotripsy studies? Ertan A, et al. **Dig Dis Sci** 1989 Jul; 34(7):996–8

Successful piezoelectric lithotripsy of a common bile duct stone. Weber J, et al. **Endoscopy** 1989 May;21(3):145–7

Electromagnetically generated extracorporeal shock waves for gallstone lithotripsy: in vitro experiments and clinical relevance. Staritz M, et al. **Eur J Clin Invest** 1989 Apr; 19(2):142–5

Two years clinical experiences with extracorporeal shock-wave lithotripsy and transurethral ureterolithotripsy for ureteral stones at Osaka City University Hospital. Kishimoto T, et al. **Eur Urol** 1989;16(5):343–8

Percutaneous nephrolithotomy in patients with previous renal surgery. Netto Júnior N, et al. **Eur Urol** 1988;14(5):353–5

Painless extracorporeal shock wave lithotripsy for outpatients: a new option. Puppo P, et al. **Eur Urol** 1989; 16(1):12–4

Extracorporeal shock wave lithotripsy in the prone position for stones situated anteriorly. Puppo P, et al. **Eur Urol** 1988; 15(1–2):113–7

Relationship between the frequency of piezoelectric shock waves and the quality of renal stone fragmentation. In vitro study and clinical implications. Vallancien G, et al.
Eur Urol 1989;16(1):41–4

Local shock-wave lithotripsy of distal ureteral calculi. Voges GE, et al. **Eur Urol** 1988;14(4):261–5

Tunable dye laser lithotripsy: in vitro studies and in vivo treatment of choledocholithiasis. Kozarek RA, et al.
Gastrointest Endosc 1988 Sep–Oct;34(5):418–21

Gallbladder lithotripsy: retrograde dissolution of fragments. Ponchon T, et al. **Gastrointest Endosc** 1988 Nov–Dec; 34(6):468–9

What is the place of laser lithotripsy in the treatment of common bile duct stones? Sauerbruch T. **Hepatology** 1989 May;9(5):792–3

Clinical trials of gallstone lithotripsy. Adwers JR.
Hosp Pract [Off] 1989 Jul 15;24(7):83–90 (14 ref.)

Percutaneous transhepatic cholecystoscopy and biliary endoscopic lithotripsy. Inui K, et al.
Indian J Gastroenterol 1989 Jan;8(1):13–6

Acoustic and plasma guided lasertripsy (APGL) of urinary calculi. Bhatta KM, et al. **J Urol** 1989 Aug;142(2):433–7

Flexible ultrasonic lithotriptor and fiberoptic ureterorenoscope: a new approach to ureteral calculi. Higashihara E, et al. **J Urol** 1989 Jul;142(1):40–2

First clinical experience with a Q-switched neodymium:YAG laser for urinary calculi. Hofmann R, et al. **J Urol** 1989 Feb;141(2):275–9

Ureteral stones: the results of primary in situ extracorporeal shock wave lithotripsy. Holden D, et al. **J Urol** 1989 Jul; 142(1):37–9

Ureteral stenting during extracorporeal shock wave lithotripsy: help or hindrance? Preminger GM, et al.
J Urol 1989 Jul;142(1):32–6

Complex struvite calculi treated by primary extracorporeal shock wave lithotripsy and chemolysis with hemiacidrin irrigation. Spirnak JP, et al. **J Urol** 1988 Dec;140(6):1356–9

Extracorporeal shock wave lithotripsy of stones in the mid ureter. Tiselius HG, et al. **J Urol** 1989 Feb;141(2):280–2

Safety and efficacy of electrohydraulic lithotripsy by ureteroscopy. Willscher MK, et al. **J Urol** 1988 Nov; 140(5):957–8

Extracorporeal shock wave lithotripsy: a study of renal stone differences. Powers CJ, et al. **Kans Med** 1989 Jan; 90(1):19–22

Laser lithotripsy: a review of 20 years of research and clinical applications. Dretler SP. **Lasers Surg Med** 1988;8(4):341–56 (24 ref.)

Laser lithotripsy: animal studies of safety and efficacy. Nishioka NS, et al. **Lasers Surg Med** 1988;8(4):357–62

Gall stone lithotripsy—where are we? Adwers JR.
Nebr Med J 1989 Sep;74(9):271–4 (7 ref.)

Kidney stones. How new technology has improved management. Streem SB. **Postgrad Med** 1988 Dec; 84(8):77–8, 81–9 (19 ref.)

Biliary lithotripsy: early observations in 106 patients. Work in progress. Burhenne HJ, et al. **Radiology** 1989 May; 171(2):363–7

Role of percutaneous intracorporeal electrohydraulic lithotripsy in the treatment of biliary tract calculi. Work in progress. Picus D, et al. **Radiology** 1989 Mar;170(3 Pt 2):989–93

Gallbladder lithotripsy. Steinberg HV, et al. **Radiology** 1989 Jul;172(1):7–11

Extracorporeal shock wave lithotripsy of renal and ureteral stones—studies on indications, methods and results. Pettersson B. **Scand J Urol Nephrol Suppl** 1989;120:1–80 (137 ref.)

Gallstone lithotripsy—the Sheffield experience. Ross B, et al. **Scand J Urol Nephrol Suppl** 1989;122:60–6

Treatment of large staghorn stones and ureteral stones without anesthesia. Tiselius HG.
Scand J Urol Nephrol Suppl 1989;122:25–8

Mechanical lithotripsy of gallstones. Groitl H.
Surg Endosc 1987;1(2):127–8

Comparison of methods for transcatheter fragmentation of gallstones. Johnson JP, et al. **Surg Endosc** 1989;3(1):7–10

Biliary stones: treatment by shock-wave lithotripsy. Sackmann M, et al. **Surg Endosc** 1988;2(4):224–6

Second generation extracorporeal shock wave lithotripsy for treatment of urolithiasis. Tanikawa K, et al.
Tokai J Exp Clin Med 1988 Jun;13(2):121–7

Biological effects of shock waves: kidney haemorrhage by shock waves in dogs—administration rate dependence. Delius M, et al. **Ultrasound Med Biol** 1988;14(8):689–94

Percutaneous cholecystolithotomy. Lee PH, et al. **Urology** 1989 Jan;33(1):37–9 (6 ref.)

[Transendoscopic mechanical lithotripsy in choledocholithiasis] Vladimirov B, et al. **Vutr Boles** 1989; 28(3):37–40 (Eng. Abstr.) **(Bul)**

[Treatment of upper urinary calculi using a non-immersed extracorporeal shock wave lithotriptor] Guo ZH.
Chung Hua Wai Ko Tsa Chih 1989 Jan;27(1):39–41, 62 (Eng. Abstr.) **(Chi)**

[The contribution of various lithotripsy technics in the treatment of common bile duct calculi] Liguory C, et al. **Acta Gastroenterol Belg** 1988 May–Jun;51(3):251–6 (Eng. Abstr.) **(Fre)**

[Comparative study of the treatment of lower caliceal lithiasis using percutaneous nephrolithotripsy and extracorporeal lithotripsy] Hubert J, et al. **Acta Urol Belg** 1988;56(3):430–8 (Eng. Abstr.) **(Fre)**

[Treatment of urinary lithiasis using extracorporeal shock waves. Experience with the "Lithostar" electromagnetic lithotripser] Simon J, et al. **Acta Urol Belg** 1988;56(3):413–9 (Eng. Abstr.) **(Fre)**

[Tissue effects of pulsed-dye laser lithotripsy. Experimental study on the ureter in dogs] Zerbib M, et al.
Ann Urol (Paris) 1988;22(6):395–9 (Eng. Abstr.) **(Fre)**

[Extra- and intra-corporeal biliary lithotripsy. 2: Results and

clinical application] Ponchon T, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):953–61 (56 ref.) (Fre)

[Experimental studies on shock-wave cholelithotripsy] Golder W. **Helv Chir Acta** 1989 Jun;56(1–2):179–82 (Eng. Abstr.) (Ger)

[Pain-free piezoelectric extracorporeal shock wave lithotripsy in gallbladder stones. Initial experiences] Ackermann C, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):720–3 (Eng. Abstr.) (Ger)

[Renoscopy and ureteroscopy] Knönagel H. **Schweiz Med Wochenschr** 1989 Jun 17;119(24):872–4 (Eng. Abstr.) (Ger)

[Long-term experiences following extracorporeal shockwave lithotripsy in patients with urinary calculi] Jocham D, et al. **Urologe [A]** 1989 May;28(3):134–7 (Eng. Abstr.) (Ger)

[The staghorn calculus: anatrophic nephrolithotomy versus percutaneous litholapxy and extracorporeal shockwave therapy versus extracorporeal shockwave lithotripsy monotherapy. A report of over 6 years' experience] Recker F, et al. **Urologe [A]** 1989 May;28(3):152–7 (Eng. Abstr.) (Ger)

[Gallstones—dissolution, lithotripsy, extraction] Riemann JF. **Verh Dtsch Ges Inn Med** 1988;94:623–6 (15 ref.) (Ger)

[The status of lithotripsy in lithotherapy] Paumgartner G. **Z Gastroenterol [Verh]** 1989 Jul;24:18–21 (27 ref.) (Ger)

[Treatment of distal ureteral calculi with extracorporeal shockwave lithotripsy: experiences with 310 cases] Zehntner C, et al. **Z Urol Nephrol** 1989 Jul;82(7):363–8 (Eng. Abstr.) (Ger)

[Urolithiasis; methods and results of endoscopic lithotripsy] Reuter HJ. **Arch Ital Urol Nefrol Androl** 1988 Sep; 60(3):215–9 (28 ref.) (Eng. Abstr.) (Ita)

[Current status of the treatment of kidney calculi: extracorporeal shockwave lithotripsy, percutaneous lithotripsy and traditional surgery] Pisani E, et al. **Minerva Chir** 1989 Feb 28;44(4):759–65 (27 ref.) (Ita)

[Extracorporeal shockwave lithotripsy: treatment of choice in ureteral calculi] Rigatti P, et al. **Minerva Chir** 1989 May 15;44(9):1361–3 (Eng. Abstr.) (Ita)

[Clinical application of extracorporeal microexplosive lithotripsy] Honda M, et al. **Hinyokika Kiyo** 1989 Mar; 35(3):385–92 (Eng. Abstr.) (Jpn)

[Electrohydraulic lithotripsy of upper urinary tract calculi] Kinukawa T, et al. **Hinyokika Kiyo** 1988 May;34(5):777–81 (Eng. Abstr.) (Jpn)

[Transurethral ureterolithotripsy under hydraulic ureteral dilatation] Mori Y, et al. **Hinyokika Kiyo** 1989 Jan; 35(1):7–11 (Eng. Abstr.) (Jpn)

[Percutaneous nephro-ureterolithotripsy in patients after urinary diversion or reconstruction using the intestine: report of 5 cases] Onishi N, et al. **Hinyokika Kiyo** 1989 Mar;35(3):393–6 (Eng. Abstr.) (Jpn)

[Clinical experiences of renal and ureteral stones by extracorporeal shock-wave lithotripsy (ESWL). IV: 3-year clinical experience of cases treated with ESWL] Tanda H, et al. **Hinyokika Kiyo** 1988 May;34(5):770–6 (Eng. Abstr.) (Jpn)

[Clinical results of endourologic technique for upper urinary calculi] Yagishita T, et al. **Hinyokika Kiyo** 1989 Apr; 35(4):565–9 (Eng. Abstr.) (Jpn)

[An experiment for lithotripsy with an expansive splitter capsule] Kawauchi A, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun;26(2):126–8 (Eng. Abstr.) (Jpn)

[The treatment of extracorporeal shock wave lithotripsy for middle and lower ureter stones] Gohji K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):297–301 (Eng. Abstr.) (Jpn)

[Clinical experience of extracorporeal piezoelectric lithotripsy (EPL)] Ihara H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1790–7 (Eng. Abstr.) (Jpn)

[Extracorporeal shock wave lithotripsy using microexplosion (mESWL). Clinical experience on 198 cases in Tohoku University] Kambe K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1011–8 (Eng. Abstr.) (Jpn)

[Transurethral ureterolithotripsy (TUL) for outpatients] Kuwahara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1739–44 (Eng. Abstr.) (Jpn)

[Percutaneous nephrolithotripsy] Ohshima S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):864–7 (Eng. Abstr.) (Jpn)

[Endourological treatment of renal and ureteral calculi] Jeromin L, et al. **Pol Tyg Lek** 1988 Aug 1–8; 43(31–32):1005–10 (Eng. Abstr.) (Pol)

[Report on a training trip to the urologic department of the Rudolf Foundation Hospital in Vienna] Kuzaka B. **Wiad Lek** 1988 Oct 15;41(20):1405–7 (Pol)

[Extracorporeal shockwave lithotripsy] Ganc AJ, et al. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):233 (Por)

[Vibration as a therapeutic factor and its use in urology] Bykovskiĭ IaA. **Urol Nefrol (Mosk)** 1989 Mar–Apr; (2):57–64 (143 ref.) (Rus)

[Remote lithotripsy using the "URAT-11" device] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):3–8 (Eng. Abstr.) (Rus)

[Treatment of kidney and ureter stones with extracorporeal shock waves] Patrashkov T, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):9–13 (Eng. Abstr.) (Rus)

[Experimental transparenchymal destruction of kidney stones with shock waves] Alekseeva NI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):55–7 (Rus)

NURSING

Cholelithotripsy. An option for treating cholelithiasis. O'Reilly M, et al. **AORN J** 1989 Jun;49(6):1520–31

STANDARDS

Evaluating gallbladder lithotripsy [letter] Milner PC, et al. **Lancet** 1989 Jul 1;2(8653):51

SUPPLY & DISTRIBUTION

Radiology. Future shock. Droste T. **Hospitals** 1988 Nov 5; 62(21):48, 50

Experience with a mobile extracorporeal shock wave lithotripter in The Netherlands. Hagen JH, et al. **Scand J Urol Nephrol Suppl** 1989;122:108–17

The use of mobile lithotripters in Georgia, USA. McJunkin CP. **Scand J Urol Nephrol Suppl** 1989;122:103–7

TRENDS

Monitoring the diffusion of ESWL in Sweden. Engblom S. **Scand J Urol Nephrol Suppl** 1989;122:122–6

Extracorporeal shock wave lithotripsy. The need for comprehensive assessments. Jönsson B. **Scand J Urol Nephrol Suppl** 1989;122:1–3

Extracorporeal shock wave lithotripsy—what will the issue be? Tiselius HG. **Scand J Urol Nephrol Suppl** 1989;122:4–10

[Extracorporeal shock wave lithotripsy: the evolution of a revolution] Chaussy C, et al. **Urologe [A]** 1989 May; 28(3):126–9 (0 ref.) (Eng. Abstr.) (Ger)

[Telelithotripsy—a new trend in the treatment of urolithiasis] Lopatkin NA, et al. **Klin Med (Mosk)** 1988 Aug;66(8):3–7 (16 ref.) (Rus)

UTILIZATION

Extension of selection criteria for extracorporeal shock wave lithotripsy for gall stones. Darzi A, et al. **BMJ** 1989 Jul 29;299(6694):302–3

Early patterns of diffusion, organization and use of ESWL. Bloom BS, et al. **Scand J Urol Nephrol Suppl** 1989; 122:95–102

LITTER SIZE

The analysis of variance adjustment to chi-square tests when there is litter or herd correlation in surveys or field trials. Donald A, et al. **Acta Vet Scand Suppl** 1988;84:490–2

Multifactorial analysis of return to oestrus and low litter size in the sow. Madec F. **Acta Vet Scand Suppl** 1988;84:167–9

Influences of prenatal and postnatal fraternity size on ovarian development in the mouse. Kirkpatrick BW, et al. **Biol Reprod** 1988 Dec;39(5):1027–31

Reciprocal translocation in four boars producing decreased litter size. Gustavsson I. **Hereditas** 1988;109(2):159–68

Reciprocal chromosome translocations, (1p−; 11q+ and (1p+; 15q−), in domestic pigs with reduced litter size. Kuokkanen MT, et al. **Hereditas** 1988;109(1):69–73

Integration of ovulation rate, potential embryonic viability and uterine capacity into a model of litter size in swine. Bennett GL, et al. **J Anim Sci** 1989 May;67(5):1230–41

Influence of prenatal and postnatal fraternity size on reproduction in swine. Kirkpatrick BW, et al. **J Anim Sci** 1988 Oct;66(10):2530–7

Effects of litter size and light regimen imposed during lactation on ovarian follicular population at weaning in third-parity sows. Simoneau C, et al. **J Anim Sci** 1988 Oct; 66(10):2606–13

Effect of birth and fraternal litter size and cross-fostering on growth and reproduction in swine. Stewart TS, et al. **J Anim Sci** 1989 Mar;67(3):635–40

Effect of stage of gestation, litter size and uterine space on the incidence of mummified fetuses in pigs. Wu MC, et al. **J Anim Sci** 1988 Dec;66(12):3202–7

Litter gender composition affects maternal behavior of the primiparous mouse dam (Mus musculus). Alleva E, et al. **J Comp Psychol** 1989 Mar;103(1):83–7

LH receptor induction and ovulation rate in mice selected for litter size and body weight. Pomp D, et al. **J Reprod Fertil** 1988 Nov;84(2):601–9

Analysis of historical control litter parameters of reproduction toxicity studies in Sprague-Dawley derived rats. Nishimura M, et al. **Jikken Dobutsu** 1989 Apr; 38(2):127–33

Variation in litter size encountered in utero influences the bioenergetic characteristics of adult female mice. Haigh GR, et al. **Physiol Behav** 1988;43(6):831–3

[The results of experimental studies on the modification of litter size in swine by exogenous sex steroid supplementation during early pregnancy. 1. Progesterone levels in plasma without and after hormonal substitution during early pregnancy in swine] Elze K, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):502–8 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Quantitative risk analysis for quantal reproductive and developmental effects. Gaylor DW. **Environ Health Perspect** 1989 Feb;79:243–6

Reproductive response of ewes to immunization with Fecundin (ovandrotone). Meyer HH, et al. **J Anim Sci** 1988 Nov;66(11):2742–9

[Experimental studies on the stimulation of prenatal development in swine by PMSG treatment in early pregnancy. 1. Clinical results of embryonic development in young slaughtered sows and litter results in young and old sows after PMSG treatment on the 11th day of pregnancy] Spitschak K, et al. **Arch Exp Veterinarmed** 1989 May;43(3):351–7 (Eng. Abstr.) (Ger)

LITTLE'S DISEASE see **CEREBRAL PALSY**

LIVER

Hepatocellular carcinoma arising in the abdominal cavity. An autopsy case of ectopic liver origin. Kawahara E, et al. **Acta Pathol Jpn** 1988 Dec;38(12):1575–81

Eighteen to 37 hours' preservation of major organs using a new autoperfusion multiorgan preparation. Chien S, et al. **Ann Thorac Surg** 1989 Jun;47(6):860–7

Ectopic or heterotopic liver (choristoma) associated with the gallbladder. Tejada E, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):950–2 (17 ref.)

Enzymatic detoxification using lipophilic hollow-fiber membranes: III. Oxidation reactions of sulfides. Yamamoto Y, et al. **Artif Organs** 1989 Apr;13(2):103–8

Temporary liver support using a new type of sorbent. A urethane sheet embedded with powdered charcoal. Kawanishi H, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):250–4

Forty-eight hour liver preservation using an artificial blood substitute. Nakajima I, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):277–9

A new solution for liver preservation [editorial] Jamieson NV. **Br J Surg** 1989 Feb;76(2):107–8

Five cases of ectopic liver and a case of accessory lobe of the liver. Watanabe M, et al. **Endoscopy** 1989 Jan; 21(1):39–42

Improved hepatic function in the 24-hour preserved rat liver with UW-lactobionate solution and SRI 63–441. Ontell SJ, et al. **Gastroenterology** 1988 Dec;95(6):1617–24

The liver and IgA: immunological, cell biological and clinical implications. Brown WR, et al. **Hepatology** 1989 May; 9(5):763–84 (304 ref.)

Hepatodiaphragmatic interposition (Chilaiditi's syndrome). Singh H, et al. **Indian Pediatr** 1989 Feb;26(2):183–5

Heterotopic liver of the jejunum. Report of a case and a review. Newland JR, et al. **J Clin Gastroenterol** 1989 Aug; 11(4):461–3 (28 ref.)

Gallbladder embedded in an accessory liver lobe in umbilical cord hernia. Festen C, et al. **J Pediatr Surg** 1988 Oct; 23(10):978–9

A simple method of canine pancreatic islet isolation and intrahepatic transplantation. van der Vliet JA, et al. **J Surg Res** 1989 Feb;46(2):129–34

Hepatobiliary kinetics in the early and late time intervals after a single partial body gamma irradiation. Durakovic A. **Milit Med** 1988 Sep;153(9):479–85

Use of cryopreserved hepatocytes for unscheduled DNA synthesis assays. Swierenga SH, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):167–70

Heterotopic liver in an adrenal gland. Buck FS, et al. **Pediatr Pathol** 1988;8(5):535–40

Left lobe of the liver: percutaneous biliary drainage. Kaufman SL, et al. **Radiology** 1989 Jan;170(1 Pt 1):191–4

Radical block resection of hepatoduodenal ligament for carcinoma of the bile duct with double catheter bypass for portal circulation [published erratum appears in Surg Gynecol Obstet 1989 May;168(5):460] Mimura H, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):527–9

Core cooling technique is superior to flush techniques for liver procurement. Hoshino T, et al. **Transplant Proc** 1989 Jun;21(3):3517–8

Results of extended preservation of the liver for clinical transplantation. Kalayoglu M, et al. **Transplant Proc** 1989 Jun;21(3):3487–8

The natural history of pure canine islet autografts in hepatic or splenic sites. Warnock GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2617–8

An analysis of the components in UW solution using the isolated perfused rabbit liver. Jamieson NV, et al. **Transplantation** 1988 Oct;46(4):512–6

Preservation of the canine liver for 24–48 hours using simple cold storage with UW solution. Jamieson NV, et al. **Transplantation** 1988 Oct;46(4):517–22

[Effects of carbon dioxide (hypocapnia and hypercapnia) on tissue blood flow and oxygenation of liver, kidney and skeletal muscle in the dog] Okazaki K, et al. **Masui** 1989 Apr;38(4):457–64 (Eng. Abstr.) (Jpn)

[Hybrid bioartificial liver using canine hepatocytes in primary culture] Kumagai F. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):546–55 (Eng. Abstr.) (Jpn)

[Hepatoduodenal ligament teratoma followed by hypertensive syndrome of the portal vein] Akimov OV. **Arkh Patol** 1989;51(1):60–2 (Eng. Abstr.) (Rus)

[The potential for enhancing the therapeutic efficacy of antitumor preparations] Konovalova NP, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):466–8 (Eng. Abstr.) (Rus)

[The effect on the liver of a semiconductor IR laser with a constant magnetic field] Mikaelian NP, et al.

Khirurgiia (Mosk) 1989 Jan;(1):85–8 (Eng. Abstr.) (Rus)
[Plastic surgery of a defect of the common hepatic duct using the round ligament of the liver] Bobrov OE, et al. Klin Khir 1988;(9):63–4 (Rus)
[Cholecystostomy through the round ligament of the liver] Toskin KD, et al. Klin Khir 1988;(9):68 (Rus)
[Novocaine block of the round ligament of the liver in the treatment of various diseases of the abdominal organs] Melekhov PA, et al. Vestn Khir 1988 Oct;141(10):134–6 (Eng. Abstr.) (Rus)
[A method for the surgical correction of cardial failure by using the round ligament of the liver] Chibis OA, et al. Voen Med Zh 1988 Dec;(12):47–8 (Rus)
[Preservation of swine liver during 24 hours with C2 solution and verapamil] Aller Reyero MA, et al. Rev Esp Enferm Apar Dig 1988 Dec;74(6):591–600 (Eng. Abstr.) (Spa)
[Arterial circulation in preservation of swine liver by simple perfusion and hypothermic storage] Arias Pérez J, et al. Rev Esp Enferm Apar Dig 1988 Oct;74(4 Pt 1):297–303 (Eng. Abstr.) (Spa)
[Chilaiditi syndrome. Report of 3 cases] Meneses Fernández MM, et al. Rev Esp Enferm Apar Dig 1989 Mar;75(3):300–3 (Spa)

ABNORMALITIES

Radiologic diagnosis of absent left lobe of the liver [letter] Banerjee B, et al. AJR 1989 Apr;152(4):894–5
Sonography case of the day. Pseudosubcapsular splenic hematoma due to elongation of left hepatic lobe. Middleton WD. AJR Am J Roentgenol 1989 Jun;152(6):1325–6
Persistent impairment of liver function caused by a pendulated accessory liver lobe. Fogh J, et al. Eur J Nucl Med 1989;15(6):326–7
Hepatic inversion with an epigastric gallbladder. Hopper KD. Gastrointest Radiol 1988 Oct;13(4):355–7
Scintigraphy in evaluation of the hypoplastic right hepatic lobe: a rare variant. Suneja SK, et al. J Natl Med Assoc 1989 Feb;81(2):205, 209–11
Omphalocele with pyloroduodenal obstruction by extrinsic hepatic compression: a case report. Bruce J, et al. J Pediatr Surg 1988 Nov;23(11):1018–20
Duplication of the hepatopancreatic bud presenting as pyloric stenosis. Gonzalez OR, et al. J Pediatr Surg 1988 Nov; 23(11):1053–4
Symptomatic accessory lobe of the liver associated with hyperthyroidism. Tomooka Y, et al. J Pediatr Surg 1988 Nov;23(11):1055–6
The Goldston syndrome: report of a case. Gloeb DJ, et al. Pediatr Pathol 1989;9(3):337–43
Three congenital anomalies of domestic fowl. Grewal GS, et al. Poult Sci 1989 Jul;68(7):1019–20
Phenotypic correlates of autosomal recessive (infantile) polycystic disease of kidney and liver: criteria for classification and genetic counseling. Herrin JT. Prog Clin Biol Res 1989;305:45–54
[An uncommon cause of acute abdomen—hemorrhage into an accessory hepatic lobe] Vykoufil L. Rozhl Chir 1989 Apr;68(4):253–7 (Eng. Abstr.) (Cze)
[Hepato–diaphragmatic interposition of the colon (Chilaïditi syndrome). Apropos of a case in 3–year–old child] Rapin F, et al. Ann Pediatr (Paris) 1988 Dec;35(10):743–5 (Eng. Abstr.) (Fre)
[Supernumerary liver. A case with a particular location in an omphalocele] Charbonnel E, et al. Chir Pediatr 1988; 29(6):330–5 (33 ref.) (Eng. Abstr.) (Fre)
[Situs inversus of the lungs, heart and liver in a bull] Ries R, et al. Tierarztl Prax 1988;16(3):251–2 (Eng. Abstr.) (Ger)
[Acute hepatic porphyria in combination with configuration anomaly of the liver] Franke U, et al. Zentralbl Chir 1988; 113(21):1412–4 (Ger)

ANALYSIS

Hepatic stores of retinol and retinyl esters in elderly people. Black DA, et al. Age Ageing 1988 Sep;17(5):337–42
Vitamin A concentrations in liver determined by isotope dilution assay with tetradeuterated vitamin A and by biopsy in generally healthy adult humans. Furr HC, et al. Am J Clin Nutr 1989 Apr;49(4):713–6
Assessment of tissue iron overload by nuclear magnetic resonance imaging. Johnston DL, et al. Am J Med 1989 Jul;87(1):40–7
Tissue sulfonamide concentration and correlation in turkeys. Epstein RL, et al. Am J Vet Res 1989 Jun;50(6):926–8
Determination of brodifacoum and bromadiolone residues in rodent and canine liver. Ray AC, et al. Am J Vet Res 1989 Apr;50(4):546–50
Determination of isopentenyl diphosphate and farnesyl diphosphate in tissue samples with a comment on secondary regulation of polyisoprenoid biosynthesis. Bruenger E, et al. Anal Biochem 1988 Sep;173(2):321–7
A rapid and specific extraction procedure for folates determination in rat liver and analysis by high–performance liquid chromatography with fluorometric detection. Gounelle JC, et al. Anal Biochem 1989 Feb 1;176(2):406–11
Analysis of pyridine dinucleotides in cultured rat hepatocytes by high–performance liquid chromatography. Litt MR, et al. Anal Biochem 1989 May 15;179(1):34–6
Glycerol, sodium phosphate, and sodium chloride permit the solubilization and partial purification of rat hepatic alpha 1–receptors by 3–(3–cholamidylpropyl)–dimethylammonio–1–propanesulfonate. Parini A, et al. Anal Biochem 1989 Feb 1;176(2):375–81
Voltammetric and liquid chromatographic identification of organic products of microwave–assisted wet ashing of biological samples. Pratt KW, et al. Anal Chem 1988 Oct 1;60(19):2024–7
Indirect determination of tungstate in rat tissues by atomic absorption spectrometry. Chakraborty D, et al. Analyst 1989 Jan;114(1):67–9
Determination of trace elements in a marine reference material of lobster hepatopancreas (TORT–1) using inductively coupled plasma mass spectrometry. Ridout PS, et al. Analyst 1988 Sep;113(9):1383–6
The extracellular sex steroid–binding proteins of testis and liver. Structure–function studies. Musto NA. Ann N Y Acad Sci 1988;538:37–44
Expression of ras and myc oncogenes in human hepatocellular carcinoma and non–neoplastic liver tissues. Tiniakos D, et al. Anticancer Res 1989 May–Jun; 9(3):715–21
Stabilization of soluble active rat liver glucagon receptor. McVittie LD, et al. Arch Biochem Biophys 1989 Aug 15; 273(1):254–63
Developmental changes of the content of acetyl–CoA carboxylase mRNA in chicken liver. Takai T, et al. Arch Biochem Biophys 1988 Nov 1;266(2):313–8
Metal contents in liver tissues of non–fledged goldeneye, Bucephala clangula, ducklings: a comparison between samples from acidic, circumneutral, and limed lakes in south Sweden. Eriksson MO, et al. Arch Environ Contam Toxicol 1989 Jan–Apr;18(1–2):255–60
Rabbit and rat hepatic lectins have two sugar–combining sites per monomeric unit. Lee RT, et al. Biochem Biophys Res Commun 1988 Sep 30;155(3):1444–51
Recognition of rat liver and kidney nuclear T3 receptors by an antibody against c–erb A peptide. Nakamura H, et al. Biochem Biophys Res Commun 1989 Apr 14; 160(1):148–53
Studies on the structure of the oligosaccharide chains of alpha 1–acid glycoprotein associated with rough membranes from rat liver. Silvanovich A, et al. Biochem Cell Biol 1989 Jan; 67(1):1–7
A liver–specific chromatin protein binding to the 5' far upstream region of the rat serum albumin gene. Kenmochi N, et al. Biochem Int 1988 Jun;16(6):1061–5
Purification and characterization of the core–specific lectin from human serum and liver. Colley KJ, et al. Biochem J 1988 Nov 15;256(1):61–8
Purification of low density lipoprotein receptor from liver and its quantification by anti–receptor monoclonal antibodies. Gherardi E, et al. Biochem J 1988 Jul 15; 253(2):409–15
Properties and fluctuations in vivo of rat liver antizyme inhibitor. Murakami Y, et al. Biochem J 1989 May 1; 259(3):839–45
Low–density–lipoprotein receptors in different rabbit liver cells. Nenseter MS, et al. Biochem J 1989 Jul 15; 261(2):587–93
Purification of chicken liver ferritin by two novel methods and structural comparison with horse spleen ferritin. Passaniti A, et al. Biochem J 1989 Mar 1;258(2):413–9
Subcellular distribution of selenium in deficient mouse liver. Reiter R, et al. Biochem J 1989 Mar 1;258(2):541–5
Purification and characterization of two high–density–lipoprotein–binding proteins from rat and human liver. Tozuka M, et al. Biochem J 1989 Jul 1; 261(1):239–44
Comparative 113Cd–n.m.r. studies on rabbit 113Cd7–, (Zn1,Cd6)– and partially metal–depleted 113Cd6–metallothionein–2a. Vazquez F, et al. Biochem J 1988 Jul 15;253(2):611–4
Studies on fatty–acid–binding proteins. The purification of rat liver fatty–acid–binding protein and the role of cysteine–69 in fatty acid binding. Wilton DC. Biochem J 1989 Jul 1;261(1):273–6
Effect of choline deficiency on S–adenosylmethionine and methionine concentrations in rat liver. Zeisel SH, et al. Biochem J 1989 May 1;259(3):725–9
Failure of sodium benzoate to alleviate plasma and liver ammonia in rats. Palekar AG, et al. Biochem Med Metab Biol 1989 Feb;41(1):64–9
Separation of the different classes of intrahepatic lipoproteins from various animal species. Their binding with 2,3,7,8–tetrachlorodibenzo–p–dioxin and benzo(a)pyrene. Soués S, et al. Biochem Pharmacol 1989 Sep 1;38(17):2833–9
Structure of polyubiquitinated histone H2A. Nickel BE, et al. Biochemistry 1989 Feb 7;28(3):964–8
The alpha–tocopherol and phospholipid fatty acid content of rat liver subcellular membranes in vitamin E and selenium deficiency. Buttriss JL, et al. Biochim Biophys Acta 1988 Nov 4;963(1):61–9
Analysis of the major integral membrane proteins of peroxisomes from mouse liver. Chen NH, et al. Biochim Biophys Acta 1988 Nov 22;945(2):135–44
Purification methods for the sequence–specific DNA–binding protein nuclear factor I (NFI)—generation of protein sequence information. Gander I, et al. Biochim Biophys Acta 1988 Dec 20;951(2–3):411–8
Countercurrent distribution of rat–liver, "soluble"–fraction ribonucleic acids. 1959 [classical article] Holley RW, et al. Biochim Biophys Acta 1989;1000:100–1
Synthesis, modification, and flotation properties of rat hepatocyte apolipoproteins. Hussain MM, et al. Biochim Biophys Acta 1989 Jan 23;1001(1):90–101
The subcellular distribution of the nonspecific lipid transfer protein (sterol carrier protein 2) in rat liver and adrenal gland. van Amerongen A, et al. Biochim Biophys Acta 1989 Feb 20;1001(3):243–8
Rat skeletal muscle, liver and brain have different fetal and adult forms of the glucose transporter. Wang C, et al. Biochim Biophys Acta 1988 Dec 8;946(1):11–8
Presence of a cellular retinylphosphate binding protein in rat liver. Fayet Y, et al. Biochimie 1988 Jun;70(6):735–42
Selective intracellular beryllium localization in rat tissue by mass–resolved ion microprobe imaging. Levi–Setti R, et al. Biol Cell 1988;63(1):77–82
Infrared data indicate U.U mispairs in rat liver 5S RNA. Fabian H, et al. Biomed Biochim Acta 1989;48(1):95–102
HPLC determination of orthophosphate coexisting with large amounts of organophosphates in biological samples. Koshiishi I, et al. Biomed Chromatogr 1986 Aug;1(4):169–72
An HPLC assay for rat liver ferrochelatase activity. Li FM, et al. Biomed Chromatogr 1987;2(4):164–8
Quantitative determination of adriamycin in rat hepatocytes using a volatile extraction buffer, HPLC and fluorescence detection. Mahdadi R, et al. Biomed Chromatogr 1987; 2(3):91–4
Detergent and ion–pair extraction of bile acids in liver tissue for analysis by fast atom bombardment mass spectrometry. Masui T, et al. Biomed Environ Mass Spectrom 1988 Oct; 16(1–12):71–4
Lipid composition in hepatocyte cultures from hypothyroid rats. Cafagna F, et al. Boll Soc Ital Biol Sper 1988 Dec; 64(12):1077–82
The expression of c–myc related to the proliferation and transformation of rat liver–derived epithelial cells. Sinha S, et al. Br J Cancer 1989 May;59(5):674–6
Relations between liver cadmium, cumulative exposure, and renal function in cadmium alloy workers. Mason HJ, et al. Br J Ind Med 1988 Dec;45(12):793–802
Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. Saha N, et al. Br J Nutr 1988 Nov;60(3):407–12
Changes in tissue glutathione and mercury concentrations in rats following mercuric chloride injection through the hepatic portal vein. Sin WC, et al. Bull Environ Contam Toxicol 1989 Jun;42(6):942–8
Decreased cytosolic levels of the heme binding Z protein in rat hepatocyte nodules and hepatocellular carcinomas. Roomi MW, et al. Cancer Lett 1988 Dec 1;43(1–2):55–8
Immunoanalytical detection of O4–ethylthymine in liver DNA of individuals with or without malignant tumors. Huh NH, et al. Cancer Res 1989 Jan 1;49(1):93–7
32P–postlabeling analysis of DNA adducts in liver of wild English sole (Parophrys vetulus) and winter flounder (Pseudopleuronectes americanus). Varanasi U, et al. Cancer Res 1989 Mar 1;49(5):1171–7
Evidence for two selenium–binding proteins distinct from glutathione peroxidase in mouse liver. Bansal MP, et al. Carcinogenesis 1989 Mar;10(3):541–6
Natural environment surpasses polluted environment in inducing DNA damage in fish. Kurelec B, et al. Carcinogenesis 1989 Jul;10(7):1337–9
Epidermal growth factor receptor numbers in male and female mouse primary hepatocyte cultures. Benveniste R, et al. Cell Biochem Funct 1988 Oct;6(4):231–5
Characteristic structures of actin gels induced with hepatic actinogelin or with chicken gizzard alpha–actinin: implication for their function. Tsukita S, et al. Cell Motil Cytoskeleton 1988;10(4):451–63
The simultaneous determination of oxidized and reduced glutathiones in liver tissue by ion pairing reverse phase high performance liquid chromatography with a coulometric electrochemical detector. Harvey PR, et al. Clin Chim Acta 1989 Apr 14;180(3):203–12
Direct and indirect measurement of the hepatic extraction ratio of indocyanine green in the rat. Burns E, et al. Clin Sci 1989 May;76(5):503–8
Ubiquinone analyses in fish tissues and in some marine invertebrates. Farbu T, et al. Comp Biochem Physiol [B] 1979;63(3):395–7
Studies on cryoprotectant equilibration in the intact rat liver using nuclear magnetic resonance spectroscopy: a noninvasive method to assess distribution of dimethyl sulfoxide in tissues. Fuller BJ, et al. Cryobiology 1989 Apr; 26(2):112–8
A glycoprotein from the liver constitutes the inner layer of the egg envelope (zona pellucida interna) of the fish, Oryzias latipes. Hamazaki TS, et al. Dev Biol 1989 May; 133(1):101–10
Histochemical localization of IGF–I and IGF–II mRNA in the rat between birth and adulthood. Beck F, et al. Development 1988 Sep;104(1):29–39
Decreased hepatic selenium content in alcoholic cirrhosis. Dworkin BM, et al. Dig Dis Sci 1988 Oct;33(10):1213–7
Evidence for inhibitory activity against cell proliferation in bovine liver. Campion DR, et al. Domest Anim Endocrinol 1988 Oct;5(4):299–306
Direct N–terminal sequence analysis of rat liver plasma membrane glycoproteins separated by two–dimensional polyacrylamide gel electrophoresis. Benjamin T, et al. Electrophoresis 1989 Jul;10(7):447–55

Purification and characterization of an adenosine triphosphate-stimulated factor that enhances the nuclear binding of activated glucocorticoid-receptor complex from rat liver. Okamoto K, et al. **Endocrinology** 1988 Dec; 123(6):2752–61

Chronic exposure of sheep to a zinc smelter in Peru. Reif JS, et al. **Environ Res** 1989 Jun;49(1):40–9

RNA binding to the untransformed glucocorticoid receptor. Sensitivity to substrate-specific ribonucleases and characterization of a ribonucleic acid associated with the purified receptor. Sablonnière B, et al. **Eur J Biochem** 1988 Nov 1;177(2):371–82

Purification and characterization of the 90-kDa heat-shock protein from mammalian tissues. Yonezawa N, et al. **Eur J Biochem** 1988 Oct 15;177(1):1–7

Ultrastructural demonstration of thioredoxin and thioredoxin reductase in rat hepatocytes. Rozell B, et al. **Eur J Cell Biol** 1988 Aug;46(3):470–7

The hepatic asialoglycoprotein receptor selectively binds to some endogenous tissues. Treichel U, et al. **Eur J Cell Biol** 1989 Feb;48(1):116–20

Biochemical changes related to aging in the senescence-accelerated mouse. Nomura Y, et al. **Exp Gerontol** 1989;24(1):49–55

Isolation and some properties of mammalian hepatic membrane lectins. Ali N, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):163–5

A liver-specific nuclear protein that binds to the distal promoter element of the rat tyrosine aminotransferase gene. Lobanenkov VV, et al. **FEBS Lett** 1989 Jan 30; 243(2):318–22

Chicken liver basic fatty acid-binding protein (pI = 9.0). Purification, crystallization and preliminary X-ray data. Scapin G, et al. **FEBS Lett** 1988 Nov 21;240(1–2):196–200

Barbiturate analysis in tissue by enzymic digestion and high-performance liquid chromatography. Shankar V, et al. **Forensic Sci Int** 1989 Jan;40(1):45–55

Lithocholate in liver tissue with obstructive jaundice. Yanagisawa J, et al. **Gastroenterol Jpn** 1989 Apr; 24(2):156–8

Characterization of estrogen receptor from human liver. Rossini GP, et al. **Gastroenterology** 1989 Apr;96(4):1102–9

Silicone in the liver: possible late effects. Hunt J, et al. **Gut** 1989 Feb;30(2):239–42

Application of keratin immunocytochemistry and sirius red staining in evaluating intrahepatic changes with acute extrahepatic cholestasis due to hepatic duct carcinoma. James J, et al. **Hepatogastroenterology** 1989 Jun;36(3):151–5

Hepatic zinc content in patients with various stages of alcoholic liver disease and in patients with chronic active and chronic persistent hepatitis. Bode JC, et al. **Hepatology** 1988 Nov–Dec;8(6):1605–9

Partial purification of rat hepatic stimulator substance and characterization of its action on hepatoma cells and normal hepatocytes. Fleig WE, et al. **Hepatology** 1989 Feb; 9(2):240–8

Analysis of hepatitis B virus transcripts in infected human livers. Su TS, et al. **Hepatology** 1989 Feb;9(2):180–5

Quantitative analysis of immunogold labelling for ferritin in liver from control and iron-overloaded rats. Cooper PJ, et al. **Histochem J** 1988 Sep;20(9):499–509

Lectin binding sites in normal and phenobarbitale/halothane treated rat liver. A histochemical study. Witt M, et al. **Histochemistry** 1989;90(5):391–7

Detection of O4-ethylthymine in human liver DNA. Huh N, et al. **IARC Sci Publ** 1988;(89):292–5

Dietary lactitol elevates liver cholesterol in rats. Beynen AC, et al. **Int J Vitam Nutr Res** 1988;58(4):471–2

Intrahepatic distribution of vitamin A in humans and rats. Flores H, et al. **Int J Vitam Nutr Res** 1988;58(3):276–80

Size and composition of liver vitamin A reserves of human beings who died of various causes. Schindler R, et al. **Int J Vitam Nutr Res** 1988;58(2):146–54

Postmortem tricyclic antidepressant concentrations: assessing cause of death using parent drug to metabolite ratio. Apple FS. **J Anal Toxicol** 1989 Jul–Aug;13(4):197–8

Evaluation of the Abbott TDx analyzer. Lee CW, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):50–6

The rapid decomposition of biological materials by using a microwave acid digestion bomb. Stripp RA, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):57–9

Isolation and characterization of recombinant cDNA clones corresponding to developmentally regulated genes in pig liver. Stone RT. **J Anim Sci** 1989 Apr;67(4):1082–9

Determination of N-methylcarbamate pesticides in liver by liquid chromatography. Ali MS. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):586–92

Validation study of gas chromatographic determination of pentachlorophenol in animal liver. Gillard D, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):926–9

Liquid chromatographic determination and gas chromatographic–mass spectrometric confirmation of lasalocid sodium in bovine liver: interlaboratory study. Newkirk DR, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug; 72(4):581–4

Confirmation of levamisole residues in cattle and swine livers by capillary gas chromatography–electron impact mass spectrometry. Stout SJ, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1150–3

Determination of the intracellular protein thiol distribution of hepatocytes using monobromobimane derivatisation of intact cells and isolated subcellular fractions. Cotgreave IA, et al. **J Biochem Biophys Methods** 1988 Aug; 16(4):247–54

Multiple forms of growth inhibitors secreted from cultured rat liver cells: purification and characterization. Mashima K, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1020–6

A comparative study on 40S ribosomal proteins of Artemia salina and rat liver: micro analysis of amino acid composition by high-performance liquid chromatography. Odani S, et al. **J Biochem (Tokyo)** 1988 May;103(5):872–7

Glycolipids of metastatic tissue in liver from colon cancer: appearance of sialylated Le(x) and Le(x) lipids. Taki T, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):998–1003

Characterization of cadmium-binding proteins detected in rat liver by the western blotting technique. Aoki Y, et al. **J Biochem Toxicol** 1987 Spring;2:67–71

Factor C from rabbit liver. A new poly(dC) and poly[d(G–C)] template-selective stimulatory protein of DNA polymerases. Asna N, et al. **J Biol Chem** 1989 Mar 25;264(9):5245–52

A novel 58-kDa protein associates with the Golgi apparatus and microtubules. Bloom GS, et al. **J Biol Chem** 1989 Sep 25;264(27):16083–92

Additional members of the rat liver lamin polypeptide family. Structural and immunological characterization. Kaufmann SH. **J Biol Chem** 1989 Aug 15;264(23):13946–55

Purification and properties of a soluble angiotensin II-binding protein from rabbit liver. Kiron MA, et al. **J Biol Chem** 1989 Mar 5;264(7):4138–42

Isolation and characterization of four major neutral glycosphingolipids from the liver of the English sole (Parophrys vetulus). Presence of a novel branched lacto-ganglio-iso-globo hybrid structure. Ostrander GK, et al. **J Biol Chem** 1988 Dec 15;263(35):18716–25

Thyroid hormone and circadian regulation of the binding activity of a liver-specific protein associated with the 5'-flanking region of the S14 gene. Wong NC, et al. **J Biol Chem** 1989 Mar 15;264(8):4466–70

Identification of rat testis galactosyl receptor using antibodies to liver asialoglycoprotein receptor: purification and localization on surfaces of spermatogenic cells and sperm. Abdullah M, et al. **J Cell Biol** 1989 Feb;108(2):367–75

Immunocytochemistry of calciosomes in liver and pancreas. Hashimoto S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2523–31

Isolation and characterization of membranes from bovine liver which are highly enriched in mannose 6-phosphate receptors. Messner DJ, et al. **J Cell Biol** 1989 Jun; 108(6):2149–62

Comparative characterization of the 21-kD and 26-kD gap junction proteins in murine liver and cultured hepatocytes. Traub O, et al. **J Cell Biol** 1989 Mar;108(3):1039–51

Isolation of hydroxy fatty acids from livers of carbon tetrachloride-treated rats by thin-layer chromatography. Bandi ZL, et al. **J Chromatogr** 1989 Jul 28;475:461–6

Determination of melengestrol acetate in bovine tissues by automated coupled-column normal-phase high-performance liquid chromatography. Chichila TM, et al. **J Chromatogr** 1989 Mar 24;488(2):389–406

Studies on steroids. CCXXXVIII. Determination of bile acids in liver tissue by gas chromatography–mass spectrometry with negative ion chemical ionization detection. Goto J, et al. **J Chromatogr** 1988 Oct 28;452:119–29

High-performance concanavalin A affinity chromatography of liver and hepatoma membrane proteins. Josić D, et al. **J Chromatogr** 1988 Jul 1;444:29–39

Measurement of vitamin K in human liver by gradient elution high-performance liquid chromatography using platinum-black catalyst reduction and fluorimetric detection. Usui Y, et al. **J Chromatogr** 1989 Apr 14; 489(2):291–301

Measurement of liver iron content in paraffin-embedded biopsies. van Deursen C, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):689–91

Human serum amyloid A. Three hepatic mRNAs and the corresponding proteins in one person. Kluve-Beckerman B, et al. **J Clin Invest** 1988 Nov;82(5):1670–5

Immunofluorescent localization of type II insulin-like growth factor receptor in rat liver and hepatoma cells. Hartshorn MA, et al. **J Endocrinol** 1989 May;121(2):221–7

Stabilization, accurate determination, and purification of rat liver nuclear thyroid hormone receptor. Ichikawa K, et al. **J Endocrinol** 1989 Feb;120(2):237–43

Cellular distribution of somatogenic receptors and insulin-like growth factor-I mRNA in the rat liver. van Neste L, et al. **J Endocrinol** 1988 Oct;119(1):69–74

Deviations in hepatic amino acid profiles of mouse following repeated hexachlorophene administration. Rajendra W, et al. **J Environ Sci Health [B]** 1988 Aug;23(4):409–26

Evidence for inhibitors of the cell surface protease guanidinobenzoatase. Steven FS, et al. **J Enzym Inhib** 1986; 1(2):127–37

Triiodothyronine increases translatable albumin messenger RNA in Rana catesbeiana tadpole liver. Schultz JJ, et al. **J Exp Zool** 1988 Jul;247(1):69–76

The histoautoradiographic localization of taurocholate in rat liver after bile duct ligation. Evidence for ongoing secretion and reabsorption processes. Buscher HP, et al. **J Hepatol** 1989 Mar;8(2):181–91

Hepatocellular carcinoma with normal adjacent liver. Hepatitis B virus DNA status. Marcellin P, et al. **J Hepatol** 1989 Mar;8(2):249–53

A new cytochemical method for ultrastructural detection of liposomes in tissues in vivo. Bugelski PJ, et al. **J Histochem Cytochem** 1989 Jun;37(6):843–51

Estimation of collagen content of liver specimens. Variation among animals and among hepatic lobes in cirrhotic rats. Gascon-Barré M, et al. **J Histochem Cytochem** 1989 Mar; 37(3):377–81

Transthyretin immunoreactivity in human and porcine liver, choroid plexus, and pancreatic islets. Jacobsson B, et al. **J Histochem Cytochem** 1989 Jan;37(1):31–7

Lipid quantitation in formalin-fixed liver sections. Mourelle M, et al. **J Histochem Cytochem** 1988 Dec;36(12):1471–4

Histochemical abnormalities in liver and jejunal biopsies from a case of cholesterol ester storage disease. Lageron A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:139–42

Interactions of selenium and cadmium with metallothionein-like and other cytosolic proteins of rat kidney and liver. Viljoen AJ, et al. **J Inorg Biochem** 1988 Dec;34(4):277–90

Enzyme-linked immunosorbent assay for human metallothionein: correlation of induction with infection. Grider A, et al. **J Lab Clin Med** 1989 Feb;113(2):221–8

Elemental concentrations in air-exposed and vacuum-stored cryosections of rat liver cells. von Zglinicki T, et al. **J Microsc** 1989 Jun;154 (Pt 3):227–35

Effects of addition of arginine, cystine, and glycine to the bovine milk-simulated amino acid mixture on the level of plasma and liver cholesterol in rats. Yoshida K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec;34(6):567–76

Type 4 chain H expression by bile ductules and hepatocytes in cirrhosis. Okada Y, et al. **J Pathol** 1989 Apr; 157(4):329–38

Immunohistochemical demonstration of the asialoglycoprotein receptor in rat liver by a sensitive avidin-biotin technique. Sipos J, et al. **J Pathol** 1989 Jul; 158(3):247–52

Solubilization and characterization of the liver peripheral-type benzodiazepine receptor. Parola AL, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1149–55

Effect of pinealectomy on liver insulin and glucagon receptor concentrations in the rat. Rodríguez V, et al. **J Pineal Res** 1989;6(1):77–88

Direct identification of the rat hepatocyte arginine8 vasopressin receptor with a radiolabelled V1-selective antagonist. Cornett LE, et al. **J Recept Res** 1989;9(1):1–18

A preliminary study on expression and significance of pre-S1 protein in liver tissue of patients with HBV infection. Hu KQ, et al. **J Tongji Med Univ** 1989;9(1):8–12

Variation between three strains of rat: inhibition of neurotoxic esterase and acetylcholinesterase by tri-o-cresyl phosphate. Carrington CD, et al. **J Toxicol Environ Health** 1988;25(3):259–68

Ubiquitin is present on the cytoskeratin intermediate filaments and Mallory bodies of hepatocytes. Ohta M, et al. **Lab Invest** 1988 Dec;59(6):848–56

Collagen production in fat-storing cells after carbon tetrachloride intoxication in the rat. Immunoelectron microscopic observation of type I, type III collagens, and prolyl hydroxylase. Takahara T, et al. **Lab Invest** 1988 Oct; 59(4):509–21

Hepatic microsomal glucose-6-phosphatase system and sudden infant death syndrome. Burchell A, et al. **Lancet** 1989 Aug 5;2(8658):291–4

Hepatic glutathione content in patients with alcoholic and non alcoholic liver diseases. Altomare E, et al. **Life Sci** 1988;43(12):991–8

HPLC method for quantitation of cholesterol and four of its major oxidation products in muscle and liver tissues. Csallany AS, et al. **Lipids** 1989 Jul;24(7):645–51

Dietary fat ratios and liver plasma membrane lipid composition. Hamm MW, et al. **Lipids** 1988 Sep; 23(9):829–33

Essential fatty acid pattern of glycerolipids in rat hepatocytes in primary culture and in coculture with rat liver epithelial cells. Pepin D, et al. **Lipids** 1988 Aug;23(8):784–90

Copper overload in the developing guinea pig liver: a histological, histochemical and biochemical study. Chesta J, et al. **Liver** 1989 Aug;9(4):198–204

In situ localization of melanotransferrin (melanoma-associated antigen P97) in human liver. A light- and electronmicroscopic immunohistochemical study. Sciot R, et al. **Liver** 1989 Apr;9(2):110–9

Boron-11 MRI and MRS of intact animals infused with a boron neutron capture agent. Kabalka GW, et al. **Magn Reson Med** 1988 Oct;8(2):231–7

Relative contributions of chemical exchange and other relaxation mechanisms in protein solutions and tissues. Zhong JH, et al. **Magn Reson Med** 1989 Sep;11(3):295–308

Differences in the influence of diet on hepatic glutathione S-transferase activity and glutathione content between young and old C57 black female mice. Carrillo MC, et al. **Mech Ageing Dev** 1989 Jan;47(1):1–15

Diversity of non-histone protein fraction NHCP2 from hamster Kirkman-Robbins hepatoma and liver. Krajewska WM, et al. **Mol Cell Biochem** 1988 Sep;83(1):37–46

Multiple cis-acting DNA regulatory elements mediate hepatic angiotensinogen gene expression. Brasier AR, et al. **Mol Endocrinol** 1989 Jun;3(6):1022–34

Multiple regulation of prolactin receptor gene expression in rat liver. Jolicoeur C, et al. **Mol Endocrinol** 1989 Jun; 3(6):895–900

Isolation of ribonucleic acid from the unactivated rat liver glucocorticoid receptor. Unger AL, et al.

Mol Endocrinol 1988 Oct;2(10):952–8

Alteration of manganese distribution in organs of rats treated with streptozotocin. Nishida M, et al. Naturwissenschaften 1989 May;76(5):220–2

Liver vitamin A concentration in patients who died of cancer. Ostrowski J, et al. Neoplasma 1989;36(3):353–5

Fatty acid analysis of lipid components of livers from dairy cows with high levels of serum free fatty acids. Ono E, et al. Nippon Juigaku Zasshi 1988 Aug;50(4):900–7

The nucleotide sequence of cDNA for a mouse liver-type glucose transporter protein. Asano T, et al. Nucleic Acids Res 1989 Aug 11;17(15):6386

Subfamily of submaxillary gland–specific Mup genes: chromosomal linkage and sequence comparison with liver–specific Mup genes. Shi Y, et al. Nucleic Acids Res 1989 Aug 11;17(15):6191–203

Further evidence that the pigment in the Dubin–Johnson syndrome is not melanin. Swartz HM, et al. Pigment Cell Res 1987;1(2):69–75

Growth, liver composition, and calcium balance of rats fed sorghum supplemented with two levels of beans. Obizoba IC. Plant Foods Hum Nutr 1987;37(3):193–200

Purified hepatocyte nuclear factor 1 interacts with a family of hepatocyte–specific promoters. Courtois G, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):7937–41

Expression of apolipoprotein B mRNAs encoding higher– and lower–molecular weight isoproteins in rat liver and intestine [published erratum appears in Proc Natl Acad Sci U S A 1989 Apr;86(8):2657] Tennyson GE, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):500–4

Separation of three commercial forms of vitamin C (ascorbic acid, ascorbic–2–sulfate and ascorbate–2–polyphosphate) by HPLC. Felton SP, et al. Proc Soc Exp Biol Med 1989 Feb;190(2):217–8

Evaluation of prostaglandin–receptors in human and rat liver: interspecies differences at the prostaglandin receptor–level. Virgolini I, et al. Prostaglandins 1988 Dec;36(6):807–18

Solubilization of active and stable receptors for vasoactive intestinal peptide from rat liver. Guijarro L, et al. Regul Pept 1989 Apr;25(1):37–50

Rapid elevation of liver hydroxyproline content following a single administration of various chemical carcinogens to rats. Watanabe A, et al. Res Exp Med (Berl) 1989; 189(1):43–6

Immunohistochemical localisation of alpha–1–protease inhibitor in the horse. Winder NC, et al. Res Vet Sci 1989 May;46(3):354–7

Immunohistochemical techniques for the demonstration of viral antigens in liver tissue. Callea F. Ric Clin Lab 1988 Apr–Sep;18(2–3):223–31 (12 ref.)

Methods for quantitating HLA gene product expression in the liver during hepatitis B virus infection. Pignatelli M. Ric Clin Lab 1988 Apr–Sep;18(2–3):233–9 (25 ref.)

Intracellular water distribution and aging as examined by X–ray microanalysis. von Zglinicki T. Scanning Microsc 1988 Sep;2(3):1791–804

Multielemental assay of tissues of deceased smelter workers and controls. Gerhardsson L, et al. Sci Total Environ 1988 Aug 1;74:97–110

Concentrations of some trace elements in hair, liver and kidney from autopsy subjects—relationship between hair and internal organs. Muramatsu Y, et al. Sci Total Environ 1988 Sep 15;76(1):29–40

The presence of chlorophenols and their conjugates in Finnish human adipose and liver tissues. Mussalo–Rauhamaa H, et al. Sci Total Environ 1989 Jul 1;83(1–2):161–72

The DNA binding domain of the rat liver nuclear protein C/EBP is bipartite. Landschulz WH, et al. Science 1989 Mar 31;243(4899):1681–8

Cadmium and metallothionein levels in the liver of humans exposed to environmental cadmium in Upper Silesia, Poland. Bem EM, et al. Toxicol Lett 1989 Jan;45(1):35–9

Polyacrylamide concentration gradient gel electrophoresis of the 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) receptor in rat liver cytosol. Gillner M. Toxicol Lett 1988 Sep;42(3):273–84

Selective depletion and measurement of glutathione in periportal and pericentral regions in the perfused rat liver. Schön MR, et al. Toxicol Lett 1988 Sep;42(3):265–72

Relationship between hepatic glutathione content and carbon tetrachloride–induced hepatotoxicity in vivo. Shimuzu M, et al. Toxicol Lett 1989 Apr;47(1):95–102

Internal standardization for the monitoring of extraction efficiencies during the isolation and purification of liver mRNA. Donnachie E, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1340–1

Aflatoxins in liver biopsies from Kenya. De Vries HR, et al. Trop Geogr Med 1989 Jan;41(1):26–30

Purification to homogeneity of the major "4S" PAH binding protein from "non responsive" DBA/2N mouse liver by affinity chromatography. Masucci MT, et al. Tumori 1989 Jun 30;75(3):202–10

Alpha–fetoprotein: 25 years of study. Abelev GI. Tumour Biol 1989;10(2):63–74 (59 ref.)

Subcellular distribution of titanium in the liver after treatment with the antitumor agent titanocene dichloride. A study using electron spectroscopic imaging. Köpf–Maier P, et al. Virchows Arch [B] 1989;57(4):213–22

Arsenic, cadmium, lead and mercury in meat, livers and kidneys of sheep slaughtered in The Netherlands. Vos G, et al. Z Lebensm Unters Forsch 1988 Jul;187(1):1–7

[Preliminary study of the origin of alpha–fetoprotein (AFP) in the host hepatocytes of human liver cancer: immunohistochemical analysis of 48 cases] Dai YM, et al. Chung–hua Ping Li Hsueh Tsa Chih 1988 Dec;17(4):247–50 (Eng. Abstr.) (Chi)

[Morphological observations of collagen type I and type III in experimental liver fibrosis] Huang ST. Chung–hua Ping Li Hsueh Tsa Chih 1989 Mar;18(1):8–11 (Eng. Abstr.) (Chi)

[Antihypercholesterolemic and antisteatotic effect of Konjac–polysaccharide in rats fed high cholesterol diet] Zhang YZ, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Sep;19(3):324–8 (Eng. Abstr.) (Chi)

[Wilson's disease with liver copper in normal concentration] Odièvre M, et al. Arch Fr Pediatr 1988 Oct;45(8):565–7 (Eng. Abstr.) (Fre)

[Effect of a diet containing calcium pantothenate on urinary vitamin excretion and on the liver and kidney total pantothenic acid level in rats] Lhuissier M, et al. C R Soc Biol (Paris) 1988;182(6):600–2 (Eng. Abstr.) (Fre)

[Study of the cadmium level of the population of the Augsburg area (Southern Germany)] Gruhl H, et al. J Clin Chem Clin Biochem 1988 Oct;26(10):627–33 (Eng. Abstr.) (Ger)

[An enzymatic method for direct determination of cholesterol in liver homogenate] Gartzke J, et al. Z Med Lab Diagn 1988;29(7):377–80 (Eng. Abstr.) (Ger)

[A normalizing data transformation and its use in linear discriminant analysis] Hietschold V. Z Med Lab Diagn 1988;29(8):450–6 (Eng. Abstr.) (Ger)

[Glutathione status and malondialdehyde content in the liver and blood of the rat in the course of reversible and irreversible endotoxic shock] Kopprasch S, et al. Z Med Lab Diagn 1988;29(6):309–13 (Eng. Abstr.) (Ger)

[Use of infrared spectroscopy for the study of the composition of liver biopsies] Mehnert E, et al. Z Med Lab Diagn 1988;29(7):372–6 (Eng. Abstr.) (Ger)

[The cadmium content of human tissues from biopsies] Angerer P, et al. Zentralbl Bakteriol Mikrobiol Hyg [B] 1988 Nov;187(1):18–30 (Eng. Abstr.) (Ger)

[The determination of metabolites of energy metabolism in liver biopsy samples. The characterization of ketosis in sheep] Bickhardt K, et al. Zentralbl Veterinarmed [A] 1988 Dec;35(10):790–9 (Eng. Abstr.) (Ger)

[Biochemical changes in the liver of the rat after ligation of the common bile duct] Gambella GR, et al. Pathologica 1988 Jan–Feb;80(1065):97–103 (Eng. Abstr.) (Ita)

[Estrogen and androgen receptors in hepatocellular carcinoma and in noncancerous liver tissue] Hamazaki K, et al. Gan No Rinsho 1989 Sep;35(10):1109–13 (Eng. Abstr.) (Jpn)

[Estrogen receptors in human gastric, hepatocellular, and gallbladder carcinomas and normal liver tissues] Ohnami S, et al. Gan To Kagaku Ryoho 1988 Oct;15(10):2923–8 (Eng. Abstr.) (Jpn)

[Immunohistochemical determination of methamphetamine analogues in the animal tissue] Mukaida M, et al. Nippon Hoigaku Zasshi 1988 Jun;42(3):324–30 (Eng. Abstr.) (Jpn)

[Elastin contents estimated by desmosines measurements in tissues and clinical application of the values] Nagai T, et al. Rinsho Byori 1989 Mar;37(3):296–300 (Jpn)

[Chlorinated hydrocarbon levels in swine adipose tissue, liver and pork] Amarowicz R, et al. Rocz Panstw Zakl Hig 1988; 39(3):193–7 (Eng. Abstr.) (Pol)

[The effect of thyroid hormones on structural–functional relations in rat liver chromatin] Adylova AT, et al. Biokhimiia 1988 Aug;53(8):1339–43 (Eng. Abstr.) (Rus)

[Study of the age–related features of the structural state of rat liver cell chromatin using micrococcal nuclease and circular dichroism] Konoplia EF, et al. Biokhimiia 1988 Nov;53(11):1876–82 (Eng. Abstr.) (Rus)

[31P–NMR spectroscopy of the human liver and bile] Khristianovich DS, et al. Biull Eksp Biol Med 1988 Dec; 106(12):678–81 (Eng. Abstr.) (Rus)

[The measurement of the amount of iron (III) complexes with desferal in the perfused rat liver by an EPR method] Kozlov AV, et al. Biull Eksp Biol Med 1989 May; 107(5):577–9 (Eng. Abstr.) (Rus)

[Increased levels of immunoreactive endorphins in the stomach, small intestine mucosa and liver of fasting rats] Dmitriev AD, et al. Dokl Akad Nauk SSSR 1988 Sep–Oct; 302(1):243–5 (Rus)

[Spectrographic analysis of silicon in biological specimens] Anisimova ZA, et al. Gig Sanit 1988 Nov;(11):45–6 (Rus)

[Direct atomic absorption determination of the 3d elements (Fe, Cu, Mn, Co, Ni) and zinc in biological material] Shamgunov AN, et al. Lab Delo 1989;(1):25–8 (Eng. Abstr.) (Rus)

[Comparative study of nucleosome particles in chromatin from normal and tumor cells. I. Structural parameters] Sapozhnikova NA, et al. Mol Biol (Mosk) 1988 Sep–Oct; 22(5):1345–52 (Eng. Abstr.) (Rus)

[Comparative study of nucleosome particles in chromatin from normal and tumor cells. II. Reconstitution, compaction and association induced by ionic strength of a solution] Sapozhnikova NA, et al. Mol Biol (Mosk) 1988 Sep–Oct;22(5):1353–8 (Eng. Abstr.) (Rus)

[Cytochrome P–450 level in the liver as an indication of the severity of certain diseases] Panfilova IK, et al. Pediatriia 1988;(7):35–7 (Rus)

[Demonstration of a sex differentiation in the content of androgen receptors in the liver cytosol of rats] Smirnova OV, et al. Probl Endokrinol (Mosk) 1988 Jul–Aug; 34(4):68–72 (Eng. Abstr.) (Rus)

[The choice of the extractant for isolating nitrogen–containing organic bases from the liver] Kartashov VA, et al. Sud Med Ekspert 1988 Jul–Sep; 31(3):40–1 (Eng. Abstr.) (Rus)

[Extraction of nitrogen–containing organic bases from liver tissue] Kartashov VA, et al. Sud Med Ekspert 1988 Oct–Dec;31(4):31–3 (Eng. Abstr.) (Rus)

[Carbohydrate content of cadaveric blood and the liver in acute fatal poisoning with ethanol] Zombkovskaia LS. Sud Med Ekspert 1988 Jul–Sep;31(3):48–50 (Eng. Abstr.) (Rus)

[Simultaneous photometry of the DNA and silver–grain count in liver cells labelled with 3H–thymidine or 3H–leucine] Shtein GI, et al. Tsitologiia 1988 Dec; 30(12):1472–7 (Eng. Abstr.) (Rus)

[Glucocorticoid receptors of the liver and blood lymphocytes in acute cholecystitis] Golikov PP, et al. Vopr Med Khim 1988 Nov–Dec;34(6):36–9 (Eng. Abstr.) (Rus)

[In vivo effect of L–thyroxine on carbohydrate content of glycoproteins in subcellular fractions of the rat liver] Panasiuk EN, et al. Vopr Med Khim 1988 Nov–Dec; 34(6):64–71 (Eng. Abstr.) (Rus)

[Comparative evaluation of chemical methods for determining diethylstilbestrol in tissues of animal origin] Perevoshchikova KA, et al. Vopr Med Khim 1971 Jul–Aug; 17(4):439–43 (Eng. Abstr.) (Rus)

[Level of heavy metals in the liver of sheep in experimental poisoning with copper oxide from industrial emissions] Vrzgula L, et al. Vet Med (Praha) 1989 May;34(5):297–306 (Eng. Abstr.) (Slo)

[Unexpected presence of hepatitis B virus DNA in hepatocytes of patients with chronic autoimmune (lupoid) hepatitis] Muñoz Calvo B. Med Clin (Barc) 1989 May 13; 92(18):681–3 (Eng. Abstr.) (Spa)

[Liver lipids in patients with cholelithiasis] Rubio Fernández C, et al. Rev Clin Esp 1989 Jun;185(1):3–5 (Eng. Abstr.) (Spa)

[Primary structure of tRNA1ser from bovine liver] Kalachniuk LG, et al. Ukr Biokhim Zh 1989 Jan–Feb; 61(1):72–5 (Eng. Abstr.) (Ukr)

ANATOMY & HISTOLOGY

Intrahepatic ramification of the portal vein in the right and caudate lobes of the liver. Yamane T, et al. Acta Anat (Basel) 1988;133(2):162–72

Regionality of glucose–6–phosphate hydrolysis in the liver lobule of the rat. Metabolic heterogeneity of 'portal' and 'septal' sinusoids. Teutsch F. Acta Histochem Suppl (Jena) 1989;37:15

Relative attenuation measurements of ultrasound in the liver using the zerocrossing method. Fredfeldt KE. Acta Radiol 1989 May–Jun;30(3):299–303

The effect of different food types and rations on the liver and muscle of cod (Gadus morhua L.). Buchmann K, et al. Acta Vet Scand 1988;29(1):57–9

Long–term and short–term effects of dietary cholesterol and fats in the Mongolian gerbil. Temmerman AM, et al. Ann Nutr Metab 1988;32(4):177–85

Circadian rhythm of the liver of male rats dosed with phenobarbital—I. Organ weight, cellular structures, glycogen contents and mitotic activity. Nishikawa J, et al. Chronobiol Int 1987;4(2):161–73

Age–related changes in liver size and hepatic blood flow. The influence on drug metabolism in the elderly. Woodhouse KW, et al. Clin Pharmacokinet 1988 Nov; 15(5):287–94

Human ontogeny of the bile duct to portal space ratio. Kahn E, et al. Hepatology 1989 Jul;10(1):21–3

The effect of age upon liver volume and apparent liver blood flow in healthy man. Wynne HA, et al. Hepatology 1989 Feb;9(2):297–301

A magnetic resonance imaging contrast medium for the liver and bile. Golman K, et al. Invest Radiol 1988 Sep;23 Suppl 1:S243–5

Delayed magnetic resonance hepatic imaging with gadolinium–DTPA. Nelson RC, et al. Invest Radiol 1988 Jul;23(7):509–11

Experimental study of the pharmacokinetics and dose response of ferrite particles used as a contrast agent in MRI of the normal liver of the rabbit. Van Hecke P, et al. Invest Radiol 1989 May;24(5):397–9

Particulate suspensions as ultrasonic contrast agents for liver and spleen. Violante MR, et al. Invest Radiol 1988 Sep;23 Suppl 1:S294–7

The application of a fractal model to the scattering of ultrasound in biological media. Javanaud C. J Acoust Soc Am 1989 Aug;86(2):493–6

Estimates of wave front distortion from measurements of scattering by model random media and calf liver. Waag RC, et al. J Acoust Soc Am 1989 Jan;85(1):406–15

Spectral power determinations of compressibility and density variations in model media and calf liver using ultrasound. Waag RC, et al. J Acoust Soc Am 1989 Jan;85(1):423–31

Gadolinium–phthalein complexone as a contrast agent for hepatobiliary MR imaging. Kawamura Y, et al.

J Comput Assist Tomogr 1989 Jan-Feb;13(1):67-70
Signal suppression of normal liver tissue by phase corrected inversion recovery: a screening technique. Lehmann B, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):650-5
Liver size and serum alkaline phosphatase in normal Thai school-aged children. Assadamongkol K, et al. J Med Assoc Thai 1989 Jan;72 Suppl 1:88-93
Gd-DISIDA--a potential contrast agent for magnetic resonance imaging of the hepatobiliary system. Saha GB, et al. J Nucl Med Allied Sci 1989 Jan-Mar;33(1):1-6
Gross anatomy of the liver, biliary tree, and pancreas in the black-tailed prairie dog (Cynomys ludovicianus). Grace PA, et al. Lab Anim 1988 Oct;22(4):326-9
Feasibility of fast MR imaging of the liver at 1.5 T. Raval B, et al. Magn Reson Imaging 1989 Mar-Apr;7(2):203-10
In vivo measurements of relaxation process in the human liver by MRI. The role of respiratory gating/triggering. Thomsen C, et al. Magn Reson Imaging 1988 Jul-Aug; 6(4):431-6
Gadolinium-labeled liposomes containing paramagnetic amphipathic agents: targeted MRI contrast agents for the liver. Kabalka GW, et al. Magn Reson Med 1988 Sep; 8(1):89-95
Experimental approaches to image localized human 31P NMR spectroscopy. Luyten PR, et al. Magn Reson Med 1989 Jul;11(1):1-21
A quantitative study of relaxation rate enhancement produced by iron oxide particles in polyacrylamide gels and tissue. Majumdar S, et al. Magn Reson Med 1989 Feb; 9(2):185-202
Liver imaging by magnetic resonance. Wolf KJ, et al. Pol Przegl Radiol (Warszawa) 1988 Mar-Apr;52(2):49-54
Application of image-guided surface coil P-31 MR spectroscopy to human liver, heart, and kidney. Matson GB, et al. Radiology 1988 Nov;169(2):541-7
Effect of intravenous fructose on the P-31 MR spectrum of the liver: dose response in healthy volunteers. Terrier F, et al. Radiology 1989 May;171(2):557-63
Current diagnostic imaging modalities of the liver. Clouse ME. Surg Clin North Am 1989 Apr;69(2):193-234 (103 ref.)
Surgical anatomy of the liver. Ger R. Surg Clin North Am 1989 Apr;69(2):179-92
Determination of a hepatic volumetric index by ultrasonic scanning. Boscaini M, et al. Surg Endosc 1987;1(2):103-7
In vivo acoustic attenuation in liver: correlations with blood tests and histology. Duerinckx A, et al. Ultrasound Med Biol 1988;14(5):405-13
Correlation of ultrasonic attenuation with pathologic fat and fibrosis in liver disease. Lin T, et al. Ultrasound Med Biol 1988;14(8):725-34 (20 ref.)
Comparison of theoretical scattering results and ultrasonic data from clinical liver examinations. Lizzi FL, et al. Ultrasound Med Biol 1988;14(5):377-85
A simple technique for sonographic estimation of liver volume. Gladisch R, et al. Z Gastroenterol 1988 Nov; 26(11):694-8
[Measurement of liver volume by ultrasound] Lee SK, et al. Chung Hua I Hsueh Tsa Chih 1988 Feb;41(2):137-42 (Eng. Abstr.) (Chi)
[Identification of jecur Lutra and its adultrants] Wu JL. Chung Yao Tung Pao 1988 May;13(5):8-13, 61 (Eng. Abstr.) (Chi)
[A new multislice gradient echo sequence for magnetic resonance tomography of the liver] Sander B, et al. Digitale Bilddiagn 1989 Mar;9(1):5-11 (Eng. Abstr.) (Ger)
[A comparison of the quantified determination of the echogeneity of the liver by ultrasound and the density of the liver by CT] Zendel W, et al. Rontgenblatter 1989 Mar; 42(3):114-7 (Eng. Abstr.) (Ger)
[The anatomy of the liver] Putz R. Rontgenpraxis 1989 Aug; 42(8):262-5 (13 ref.) (Ger)
[Structuro-metabolic characteristics of the liver acinus] Mishnev OD, et al. Arkh Anat Gistol Embriol 1988 Oct; 95(10):89-96 (133 ref.) (Rus)
[The normal structure of the liver] Aguirre García J, et al. Rev Gastroenterol Mex 1988 Jul-Sep;53(3):133-41 (26 ref.) (Spa)

BLOOD SUPPLY

Neovascularization of pericellular fibrosis in alcoholic liver disease. Taguchi K, et al. Acta Pathol Jpn 1988 May; 38(5):615-26
The effect of pancreatic and intestinal venous blood on hepatic atrophy and compensatory hyperplasia in the rat. Rózga J, et al. Acta Physiol Pol 1988 Sep-Dec; 39(5-6):460-74
In vivo microscopy of the liver after injection of Lipiodol into the hepatic artery and portal vein in the rat. Kar Z, et al. Acta Radiol 1989 Jul-Aug;30(4):419-25
Blood supply of the rat liver in scanning electron microscopy. Kutal M, et al. Acta Univ Palacki Olomuc Fac Med 1988; 119:149-59
The hydrogen gas clearance method for liver blood flow examination: inhalation or local application of hydrogen? Metzger HP. Adv Exp Med Biol 1989;248:141-9
Ischemic hepatitis from aortic dissection [letter] Leslie BR, et al. Ann Intern Med 1989 Mar 15;110(6):495
Pharmacologic modulation of experimental postischemic hepatic function. Ontell SJ, et al. Ann Surg 1989 Feb; 209(2):200-10
Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. Arch Immunol Ther Exp (Warsz) 1987;35(6):753-8
Hepatic infarction in a patient with the lupus anticoagulant. Mor F, et al. Arthritis Rheum 1989 Apr;32(4):491-5
Vascularization of small liver metastases. Archer SG, et al. Br J Surg 1989 Jun;76(6):545-8
Portal flow and mitochondrial function during extrahepatic cholestasis. Castro-e-Silva Júnior O, et al. Braz J Med Biol Res 1988;21(3):637-40
Hepatic blood flow: estimation from clearances of very low dose infusions of ethanol in cats. Greenway CV, et al. Can J Physiol Pharmacol 1988 Sep;66(9):1192-7
Histological analysis of the effect of hyperthermia on normal rabbit hepatic vasculature. Nishimura Y, et al. Cancer Res 1989 Aug 1;49(15):4295-7
Changes in lipopolysaccharide concentrations in hepatic portal and systemic arterial plasma during intestinal ischemia in monkeys. Gathiram P, et al. Circ Shock 1989 Feb;27(2):103-9
Studies on the possible role of oxygen-derived free radicals for impairment of protein and energy metabolism in liver ischemia. Nordström G, et al. Circ Shock 1988 Oct; 26(2):115-26
Effect of hemorrhage on hepatic tissue blood flow in the domestic fowl (Gallus domesticus). Bottje WG, et al. Comp Biochem Physiol [A] 1989;93(4):725-7
Ischemic hepatitis in children: diagnosis and clinical course. Garland JS, et al. Crit Care Med 1988 Dec;16(12):1209-12
Ischemia effect on the level of steroid hormone receptors in hepatocellular carcinoma and adjacent liver tissue. Lui WY, et al. Eur J Cancer Clin Oncol 1989 May;25(5):919-20
Influence of 2-deoxy-D-glucose and arterial ischaemia on glucose oxidation and growth of liver cancer in the rat. Mack P, et al. Eur J Cancer Clin Oncol 1988 Sep; 24(9):1433-7
Acute ischemic liver failure in the rat: a reproducible model not requiring portal decompression. Asakawa H, et al. Eur Surg Res 1989;21(1):42-8
Effect of superoxide dismutase on liver ischemia-reperfusion injury in the rat: a biochemical monitoring. Romani F, et al. Eur Surg Res 1988;20(5-6):335-40
Hepatic haemodynamics as related to blood flow through gut, spleen, and pancreas. Charbon GA, et al. Gut 1989 Feb;30(2):265-78 (87 ref.)
Prevention of postischaemic lipid peroxidation and liver cell injury by iron chelation. Omar R, et al. Gut 1989 Apr; 30(4):510-4
Alteration of hepatic tissue spaces by platelet-activating factor and phenylephrine. Lapointe DS, et al. Hepatology 1989 Feb;9(2):278-84
The multiple-indicator dilution technique for characterization of normal and retrograde flow in once-through rat liver perfusions. St-Pierre MV, et al. Hepatology 1989 Feb;9(2):285-96
Hepatic sinusoidal endothelium: Ulex lectin binding. Petrovic LM, et al. Histopathology 1989 Mar;14(3):233-43
Obstructed portal venous flow and portal vein thrombus in a dog. Willard MD, et al. J Am Vet Med Assoc 1989 May 15;194(10):1449-51
Vascular plexus around intrahepatic bile ducts in normal livers and portal hypertension. Terada T, et al. J Hepatol 1989 Mar;8(2):139-49
Sixty minutes of normothermic ischemia in the rat liver: correlation between adenine nucleotides and bile excretion. Karwinski W, et al. J Surg Res 1989 Feb;46(2):99-103
Polymorphonuclear leucocyte sequestration in the lungs and liver following soft-tissue trauma: an in vivo study. Thörne J, et al. J Trauma 1989 Apr;29(4):451-6
Defenestration of hepatic sinusoids as a cause of hyperlipoproteinaemia in alcoholics. Clark SA, et al. Lancet 1988 Nov 26;2(8622):1225-7
Effect of allopurinol on oxidant stress and hepatic function following ischemia and reperfusion in the rat. Metzger J, et al. Liver 1988 Dec;8(6):344-9
Relation of sinusoidal stenoses following hepatocyte swelling to hepatic vascular resistance in experimental liver cirrhosis. Shibayama Y, et al. Liver 1989 Feb;9(1):36-42
Development of cavernous vasculatures in livers with hepatocellular carcinoma. An autopsy study. Terada T, et al. Liver 1989 Jun;9(3):172-8
Protective effect of prostaglandin E1 (PGE1) on energy metabolism and reticuloendothelial function in the ischemically damaged canine liver. Ueda Y, et al. Liver 1989 Feb;9(1):6-13
The ultrastructural changes of the hepatic microcirculation and their potential significance in experimental Schistosomiasis japonica. Xi YP, et al. Lymphology 1989 Mar;22(1):56-8
Hepatic microvascular regulatory mechanisms. X. Effects of alpha-one or -two adrenoceptor blockade on glucoregulation in normotensive endotoxic rats with optimal perfusion and flowrates. Reilly FD, et al. Microcirc Endothelium Lymphatics 1988 Aug;4(4):293-309
Protective metabolic mechanisms during liver ischemia: transferable lessons from long-diving animals. Hochachka PW, et al. Mol Cell Biochem 1988 Nov;84(1):77-85
Sonographic hepatic arterialisation in newborns receiving parenteral nutrition. Sellier N, et al. Pediatr Radiol 1988; 18(6):471-3
Gastric and hepatic infarction following embolization of the left gastric artery: case report. Brown KT, et al. Radiology 1989 Sep;172(3):731-2
Inhomogeneous enhancement of liver parenchyma secondary to passive congestion: contrast-enhanced CT. Holley HC, et al. Radiology 1989 Mar;170(3 Pt 1):795-800
A pharmacokinetic analysis of enterohepatic circulation of ursodeoxycholic acid, a drug with a high hepatic extraction but a small clearance. Kubota K, et al. Res Commun Chem Pathol Pharmacol 1988 Nov; 62(2):309-26
Liver sinusoids II. Revis Biol Celular 1988;16:1-109
Sinusoidal structure of the liver. Barberá-Guillem E, et al. Revis Biol Celular 1988;16:1-34, 54-68 (284 ref.)
Characterization of hepatic hemodynamics in cirrhotics and non-cirrhotics. Effect of glucagon infusion. Sato N, et al. Scand J Gastroenterol 1989 Mar;24(2):223-30
Anatomic basis of vascular exclusion of the liver. Chevallier JM. Surg Radiol Anat 1988;10(3):187-94
Use of hepatic protein synthesis rate in acute ischemic liver to assess degrees of ischemic injury. Nakagohri T, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2292-3
Protective effect of PGI2 and diltiazem on liver ischemia and reperfusion in pigs. Steininger R, et al. Transplant Proc 1988 Oct;20(5):999-1002
Effective timing of allopurinol administration in the ischemic liver. Castillo M, et al. Transplantation 1989 Apr; 47(4):727-30
Beneficial effect of cyclosporine pretreatment in preventing ischemic damage to the liver in dogs. Hayashi T, et al. Transplantation 1988 Dec;46(6):923-4
Evidence that cyclosporine pretreatment protects lysosomal membrane in liver ischemia in dogs. Hayashi T, et al. Transplantation 1989 May;47(5):924-6
Evaluation of portal vein arterialization as a method of liver graft revascularization by blood ketone body ratio. Yamaguchi M, et al. Transplantation 1989 Sep;48(3):514-6
Repeated hepatic ischemia as a treatment for carcinoid liver metastases. Persson BG, et al. World J Surg 1989 May-Jun; 13(3):307-11; discussion 311-2
[Normothermic total hepatic vascular exclusion for hepatectomy] Ding YT. Chung Hua Chung Liu Tsa Chih 1988 Sep;10(5):392-4 (Eng. Abstr.) (Chi)
[An experimental study of liver perfusion using non-diffusible radiotracers: differentiation of the arterial and portal venous components by deconvolution analysis of first-pass time-activity curves] Szabó Z, et al. Nuklearmedizin 1988 Oct;27(5):209-18 (Eng. Abstr.) (Ger)
[Balloon occlusion of an intrahepatic arterioportal fistula] Gmeinwieser J, et al. ROFO 1989 Feb;150(2):216-8 (Ger)
[Computed tomographic and angiographic studies of arterial liver perfusion following intra-arterial infusion chemotherapy using 5-fluoro-2-deoxyuridine] Roth J, et al. Rontgenblatter 1989 Feb;42(2):80-4 (Eng. Abstr.) (Ger)
[Quantitative evaluation of portal flow/total hepatic flow ratio in hepatic scintigraphy with 99Tc-phytate] Marotta F, et al. G Clin Med 1988 Jun-Jul;69(6-7):421, 423-4 (Eng. Abstr.) (Ita)
[Revascularization of the hepatic artery. Apropos of a case] Viglione G, et al. Minerva Chir 1989 Mar 15;44(5):919-22 (Eng. Abstr.) (Ita)
[Study of microcirculatory changes in experimental dietary fatty liver] Ohhara K. Hokkaido Igaku Zasshi 1989 Mar; 64(2):177-85 (Eng. Abstr.) (Jpn)
[Assessment of the viability of the ischemic liver by chemiluminescenc in rats: preliminary report] Kanno M, et al. Nippon Geka Gakkai Zasshi 1989 Apr;90(4):627 (Jpn)
[Changes in the intrahepatic microvasculature following experimental hepatic arterial embolization. Analysis by scanning electron microscopy of microvascular casts] Demachi H. Nippon Igaku Hoshasen Gakkai Zasshi 1988 Nov 25;48(11):1391-405 (Eng. Abstr.) (Jpn)
[Two cases of severe liver dysfunction (ischemic hepatopathy) associated with acute exacerbation of chronic obstructive lung disease] Nagai S, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jul;26(7):760-5 (Eng. Abstr.) (Jpn)
[Findings in the intrahepatic portal vein of patients with hepatocellular carcinoma (HCC) by percutaneous transhepatic portography (PTP) compared to those of the operative specimens] Hirohashi K, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Dec;85(12):2642-50 (Eng. Abstr.) (Jpn)
[Effects of experimental portal arterialization on remnant liver after extended hepatectomy] Kusano T. Nippon Shokakibyo Gakkai Zasshi 1988 Dec;85(12):2624-32 (Eng. Abstr.) (Jpn)
[Primary vascular diseases of the liver in adults] Hartleb M, et al. Pol Tyg Lek 1988 Sep 12;43(37):1179-83 (Pol)
[Evaluation of hepatic blood supply in obesity] Hartleb M, et al. Pol Tyg Lek 1988 Sep 12;43(37):1184-6 (Eng. Abstr.) (Pol)
[The behavior of the intrahepatic arteriolar muscle layer in hepatosplenic schistosomiasis mansoni] Barbosa M do S, et al. Rev Soc Bras Med Trop 1988 Jan-Mar;21(1):21-2 (Eng. Abstr.) (Por)
[Rheographic and radioisotope liver studies in patients with sepsis undergoing various methods of intensive therapy] Kosonogov IuL, et al. Anesteziol Reanimatol 1988

Nov-Dec;(6):50-3 (Eng. Abstr.) (Rus)
[Complex analysis of the state of sinusoid vessels of the liver after disturbance of innervation] Eletskiĭ IuK, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):71-4 (Eng. Abstr.) (Rus)
[The blood microcirculatory bed of the small intestine, liver and pancreas after resection of the stomach and small intestine] Khudaiberdyev RI. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):44-9 (Eng. Abstr.) (Rus)
[Changes in the intraorganic vessels of the liver in acute experimental peritonitis] Ivanova GS, et al. **Arkh Patol** 1988;50(7):51-8 (Eng. Abstr.) (Rus)
[Analysis of an equivalent electric circuit of the hepatocyte during stopping and restoration of the blood flow] Kabakov AIu. **Biofizika** 1988 Sep-Oct;33(5):828-33 (Eng. Abstr.) (Rus)
[The study of rhythmic changes in the liver hemodynamics by biophysical methods] Sarbash VI. **Biofizika** 1988 Jul-Aug;33(4):726-7 (Eng. Abstr.) (Rus)
[The relation of lymph flow and microcirculation in the cat liver under the effect of serotonin and bradykinin] Kul'baev IS, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):555-61 (Eng. Abstr.) (Rus)
[Anti-ischemic protection of the liver using perfluorocarbon emulsion] Afonin NI, et al. **Gematol Transfuziol** 1989 Jan; 34(1):38-41 (Eng. Abstr.) (Rus)
[Acute appendicitis complicated by pylephlebitis] Driazhenkov GI, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):124-5 (Rus)
[Vascular injuries of the hepatoduodenal ligament during surgical interventions on the biliary tract] Vasiutkov VIa. **Klin Khir** 1988;(9):42-3 (Rus)
[Elemental nutrition and fasting as means for the ischemic protection of the liver] Kozlov SA, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):62-4 (Eng. Abstr.) (Rus)
[A trial of reduction of arterial hepatic blood flow in cardial cirrhosis of the liver] Buianov VM, et al. **Sov Med** 1988; (6):24-6 (Eng. Abstr.) (Rus)
[Rheohepatography in the diagnosis of abdominal arteriosclerosis] Murashko VV, et al. **Sov Med** 1988; (10):87-9 (Rus)
[Re-artelialization of the liver after intravascular occlusion and the possibilities of re-embolization of the arterial bed of the liver] Tarazov PG, et al. **Vestn Khir** 1988 May; 140(5):34-6 (Eng. Abstr.) (Rus)
[Angiographic evaluation of the results of roentgeno-endovascular occlusion of the hepatic artery] Tarazov PG, et al. **Vestn Khir** 1988 Oct;141(10):30-5 (Eng. Abstr.) (Rus)
[Preoperative roentgeno-endovascular occlusion of the branches of the hepatic artery in focal lesions of the liver] Volynskiĭ IuD, et al. **Vestn Khir** 1988 Aug;141(8):33-6 (Eng. Abstr.) (Rus)
[Regeneration ability of ischemic liver and the effect of liver resection and extracts stimulating proliferation] Bilenko MV, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):93-7 (Eng. Abstr.) (Rus)
[Changes in the lipid component of liver microsomal membranes during the postischemic period after administration of alpha-tocopherol and lidocaine] Grek OR. **Vopr Med Khim** 1988 Jul-Aug;34(4):57-63 (Eng. Abstr.) (Rus)
[Ischemic hepatitis: description of 11 cases] Aloy Duch A, et al. **Rev Clin Esp** 1988 Oct;183(5):255-8 (Eng. Abstr.) (Spa)

CYTOLOGY

Morphology of the release of vitamin A-containing lipid droplets by perisinusoidal lipocytes in the rat liver. Kudo S. **Acta Anat (Basel)** 1989;135(3):261-8
Intracellular lumina and bile canaliculi in rat hepatocytes in vitro--a cytochemical study. Remy L, et al. **Acta Histochem (Jena)** 1989;85(1):87-92
A method for rapid preparation of single-cell suspensions from rat hepatocyte primary cultures on collagen substratum and the mechanism of cell dissociation. Miyazaki M, et al. **Acta Med Okayama** 1988 Dec; 42(6):351-4
Studies on hepatic hemopoiesis induced by immunization with syngeneic liver extracts in mice. Aizawa K, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1105-18
Induction of the proteinase inhibitor alpha 2-macroglobulin in rat hepatocytes by a monocyte-derived factor. Andus T, et al. **Adv Exp Med Biol** 1988;240:191-8
B cell precursor populations in fetal and neonatal rat liver: frequency, topography and antigenic phenotype. Veldhuis GJ, et al. **Adv Exp Med Biol** 1988;237:57-62
Ethanol-induced impairments in receptor-mediated endocytosis of asialoorosomucoid in isolated rat hepatocytes: time course of impairments and recovery after ethanol withdrawal. Casey CA, et al. **Alcoholism (NY)** 1989 Apr;13(2):258-63
Functional units in rainbow trout (Salmo gairdneri, Richardson) liver: III. Morphometric analysis of parenchyma, stroma, and component cell types. Hampton JA, et al. **Am J Anat** 1989 May;185(1):58-73
Role of periductal and ductular epithelial cells of the adult rat pancreas in pancreatic hepatocyte lineage. A change in the differentiation commitment. Rao MS, et al. **Am J Pathol** 1989 May;134(5):1069-86
Hypoxic liver cell death: critical Po2 and dependence of viability on glycolysis. Anundi I, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G58-64
Cyanide toxicity in hepatocytes under aerobic and anaerobic conditions. Aw TY, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C435-41
Swelling, reductive stress, and cell death during chemical hypoxia in hepatocytes. Gores GJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C347-54
A fluorescent indicator for measuring cytosolic free magnesium. Raju B, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C540-8
Separation of hepatocyte plasma membrane domains by free flow electrophoresis. Evers C, et al. **Anal Biochem** 1989 Feb 1;176(2):338-43
The ultrastructure of megakaryopoietic cells of the yolk sac and liver in mouse embryo. Matsumura G, et al. **Anat Rec** 1988 Oct;222(2):164-9
Evaluation of technical aspects of the preparation of haemopoietic cells from human fetal liver. Ratajczak MZ. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):223-33
Endocrine cells in the intrahepatic biliary tree in normal livers and hepatolithiasis. Kurumaya H, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):143-7
Microencapsulated hepatocytes for bioartificial liver support. Cai ZH, et al. **Artif Organs** 1988 Oct;12(5):388-93
Liver fat storing cell proliferation is stimulated by epidermal growth factor/transforming growth factor alpha and inhibited by transforming growth factor beta. Bachem MG, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):708-14
Almost total conversion of pancreas to liver in the adult rat: a reliable model to study transdifferentiation. Rao MS, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):131-6
Toxicity of polymorphonuclear neutrophils against hepatocytes: protective effect of heparin. Mavier P, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1865-7
Ca2+ transport by rat liver plasma membranes: the transporter and the previously reported Ca2+-ATPase are different enzymes. Birch-Machin MA, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):308-14
Uptake and processing of immunoglobulin-coated liposomes by subpopulations of rat liver macrophages. Derksen JT, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):127-36
Differential properties of organ-specific serum opsonins for liver and spleen macrophages. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):379-83
Effects of iron overload on transferrin secretion by cultured fetal rat hepatocytes. Lescoat G, et al. **Biol Cell** 1989; 65(3):221-9
Culture of proliferating and differentiating fat-storing cells in 3T3-conditioned medium. Mendoza-Figueroa T, et al. **Biol Cell** 1988;64(1):29-38
Comparative determination of the asialoglycoprotein receptor by ligand and antibody binding in hepatocytes from normal and diabetic rats. Slama A, et al. **Biol Cell** 1988;63(3):367-9
Haemopoiesis in long-term cultures of liver, spleen and bone marrow of pre- and postnatal mice: CFU-GM production. Van Den Heuvel RL, et al. **Br J Haematol** 1988 Nov; 70(3):273-7
Reactivity and toxicity of atracurium and its metabolites in vitro. Nigrovic V, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):262-8
Immortal epithelial cells of normal C3H mouse liver in culture: possible precursor populations for spontaneous hepatocellular carcinoma. Lee GH, et al. **Cancer Res** 1989 Jan 15;49(2):403-9
Purification and biological characterization of human hepatopoietin A, a polypeptide growth factor for hepatocytes. Zarnegar R, et al. **Cancer Res** 1989 Jun 15; 49(12):3314-20
Comparison of 5-bromo-2-deoxyuridine and [3H]thymidine for studies of hepatocellular proliferation in rodents. Lanier TL, et al. **Carcinogenesis** 1989 Jul;10(7):1341-3
Prevention of cytotoxicity and inhibition of intercellular communication by antioxidant catechins isolated from Chinese green tea. Ruch RJ, et al. **Carcinogenesis** 1989 Jun; 10(6):1003-8
Alterations of pyrimidine and nucleic acid synthesis during adaptive growth of liver induced by nafenopin, a peroxisome proliferator. An in vivo study. Seifert J, et al. **Carcinogenesis** 1989 Aug;10(8):1383-8
Transformation of cultured fetal rat liver cells by MDAB and phenobarbital. Morphological, biochemical and immunocytochemical characterization of cell lines. Yeoh G, et al. **Carcinogenesis** 1989 Jun;10(6):1015-27
Stimulation of DNA synthesis but not of peroxisomal beta-oxidation by nafenopin in primary cultures of marmoset hepatocytes. Bieri F, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1077-87
2-D gel comparison of membrane proteins from freshly isolated and cultured fetal and adult hepatocytes. Radford J. **Cell Biol Int Rep** 1988 Dec;12(12):1011-25
Co-culture of fibroblasts and hepatic parenchymal cells induces metabolic changes and formation of a three-dimensional structure. Senoo H, et al. **Cell Biol Int Rep** 1989 Feb;13(2):197-206
Effects of ethanol on protein metabolism in hepatocyte primary cultures from adult rat. Voci A, et al. **Cell Biol Int Rep** 1988 Aug;12(8):647-60
Effect of varying the exposure and 3H-thymidine labeling period upon the outcome of the primary hepatocyte DNA repair assay. Barfknecht TR, et al. **Cell Biol Toxicol** 1988 Jun;4(2):199-209
Ethidium bromide resistance in a rat liver epithelial cell line: association with enhanced drug efflux. Berman JJ. **Cell Biol Toxicol** 1988 Sep;4(3):325-32
Rat hepatocytes prepared without collagenase: prolonged retention of differentiated characteristics in culture. Meredith MJ. **Cell Biol Toxicol** 1988 Dec;4(4):405-25
Calcium dependence of bleb formation and cell death in hepatocytes. Nieminen AL, et al. **Cell Calcium** 1988 Dec; 9(5-6):237-46
A comparison of murine hepatic accessory cells and splenic dendritic cells. Shah PD, et al. **Cell Immunol** 1989 Feb; 118(2):394-405
Growth stimulation of adult rat hepatocytes in a primary culture by soluble factor(s) secreted from nonparenchymal liver cell. Yamamoto N, et al. **Cell Struct Funct** 1989 Apr; 14(2):217-29
Evidence for arrested G2 cell subpopulation in rat liver inducible to mitosis. Gómez-Lechón J, et al. **Cell Tissue Kinet** 1987 Nov;20(6):583-90
Three-dimensional structure of endothelial cells in hepatic sinusoids of the rat as revealed by the Golgi method. Wake K, et al. **Cell Tissue Res** 1988 Sep;253(3):563-71
Circadian rhythm of liver parameters (cellular structures, mitotic activity, glycogen and lipids in liver and serum) during three consecutive cycles in phenobarbital-treated rats. Kast A, et al. **Chronobiol Int** 1988;5(4):363-85
The effect of pH on the viability of hypothermically stored rat hepatocytes. Fox LE, et al. **Cryobiology** 1989 Apr; 26(2):186-90
Differences in the flow and absorption cytometric DNA distributions of mouse hepatocytes and tumor cells. Bose KK, et al. **Cytometry** 1989 Jul;10(4):388-93
Beige granules as a cell marker for clonal analysis in kidney and liver of mouse aggregation chimaeras, and three-dimensional reconstruction from serial paraffin sections. Nakatsuji N. **Development** 1988 Nov;104(3):383-90
Activities of cytosolic and microsomal drug oxidases of rat hepatocytes in primary culture. Sherratt AJ, et al. **Drug Metab Dispos** 1989 Jan-Feb;17(1):20-5
Stimulation of glucose production by activin-A in isolated rat hepatocytes. Mine T, et al. **Endocrinology** 1989 Aug; 125(2):586-91
Promutagen activation by freshly isolated and cryopreserved rat hepatocytes. Loretz LJ, et al. **Environ Mol Mutagen** 1988;12(3):335-41
Vitamin A excess alters membrane flow in rat liver. Morré DM, et al. **Eur J Cell Biol** 1988 Jun;46(2):307-15
Altered growth factor requirements and cell cycle control in rat hepatoma cells versus adult rat hepatocytes in culture. Paul D, et al. **Eur J Cell Biol** 1988 Jun;46(2):270-4
Immunocytochemical localization of liver-specific proteins in pancreatic hepatocytes of rat. Usuda N, et al. **Eur J Cell Biol** 1988 Jun;46(2):299-306
Effect of ciclosporin on allogeneic hepatocyte transplantation: a morphological study. Maganto P, et al. **Eur Surg Res** 1988;20(4):248-53
Relation between the rate of cell movement under agarose and the positioning of cells in heterotypic aggregates. Jones BM, et al. **Exp Cell Res** 1989 Jan;180(1):287-96
Mechanisms responsible for long-term survival of adult rat hepatocytes in the presence of phenobarbital in primary culture. Miyazaki M, et al. **Exp Cell Res** 1989 Jun; 182(2):415-24
Hepatocytes from old rats retain responsiveness of c-myc expression to EGF in primary culture but do not enter S phase. Sawada N. **Exp Cell Res** 1989 Apr;181(2):584-8
A rat liver 57-kDa protein is identified to share antigenic determinants with statin, a marker for nonproliferating cells. Sester U, et al. **Exp Cell Res** 1989 Jun;182(2):550-8
The effects of bestatin, a microbial aminopeptidase inhibitor, on epidermal growth factor-induced DNA synthesis and cell division in primary cultured hepatocytes of rats. Takahashi S, et al. **Exp Cell Res** 1989 Aug;183(2):399-412
Fetal liver blast cell colonies: a source of erythroid progenitors. Pharr PN, et al. **Exp Hematol** 1988 Oct; 16(9):748-51
Separation and characterization of hepatocytes from immature and adult rats into distinct subpopulations by centrifugal elutriation. Klinger W, et al. **Exp Pathol** 1988; 33(4):213-22
Functional and structural zonal hepatocyte heterogeneity--dynamics and ontogenic development. Klinger W, et al. **Exp Pathol** 1988;35(2):69-91 (204 ref.)
The ability of cultivated human skin fibroblasts to store vitamin A. A contribution to the cytogenesis of the Ito cells of the liver. Körner T, et al. **Exp Pathol** 1988; 35(4):247-51
Effect of mevinolin on rat hepatocytes: a morphometric study. Rebuffat P, et al. **Exp Pathol** 1988;35(3):133-9
Apoptotic hepatocytes become insoluble in detergents and chaotropic agents as a result of transglutaminase action. Fesus L, et al. **FEBS Lett** 1989 Mar 13;245(1-2):150-4
A pertussis toxin-sensitive GTP-binding protein plays a role in the G0-G1 transition of rat hepatocytes following establishment in primary culture. Fujinaga Y, et al. **FEBS Lett** 1989 Mar 13;245(1-2):117-21
Effects of bile acids on liver cell injury by cultured supernatant of activated liver adherents cells. Mizoguchi Y, et al. **Gastroenterol Jpn** 1989 Feb;24(1):25-30
Effect of endotoxin on release of reactive oxygen

intermediates by rat hepatic macrophages. Arthur MJ, et al. **Gastroenterology** 1988 Dec;95(6):1588–94
Stimulation of G2-arrested rat liver and pancreas cells by fasting. Daoust R. **Gastroenterology** 1989 Jul;97(1):219–21
Fully automated measurements by light microscopy of tissue sections using a cellular array computer. Claeys A, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):83–90
Differential location of hemopoietic colonies within liver acini of postnatal and phenylhydrazine-treated adult mice. Barberá-Guillem E, et al. **Hepatology** 1989 Jan;9(1):29–36
Fat-storing cells and myofibroblasts: one cell or two? Maher JJ. **Hepatology** 1989 Jun;9(6):903–4
Electron microscopic and time lapse studies of mitosis in cultured rat hepatocytes. Sattler CA, et al. **Hepatology** 1988 Nov–Dec;8(6):1540–9
Clinical significance of human hepatocyte growth factor in blood from patients with fulminant hepatic failure. Tsubouchi H, et al. **Hepatology** 1989 Jun;9(6):875–81
The development of the intrahepatic bile ducts in man: a keratin-immunohistochemical study. Van Eyken P, et al. **Hepatology** 1988 Nov–Dec;8(6):1586–95
A correlated morphometric and cytochemical study on hepatocyte nucleolar size and RNA distribution during vitellogenesis. Herbener GH, et al. **Histochem J** 1988 Apr; 20(4):194–200
A simple fixation procedure for immunofluorescent detection of different cytoskeletal components within the same cell. Vielkind U, et al. **Histochemistry** 1989;91(1):81–8
Response of human hepatocyte lysosomes to postmortem anoxia. Yu QC, et al. **Hum Pathol** 1988 Oct;19(10):1174–80
Adult rat hepatocyte microcarrier culture. Comparison to the conventional dish culture system. Athari A, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1085–91
Modulation of the liver specific phenotype in the human hepatoblastoma line Hep G2. Kelly JH, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):217–22
Role of different epithelial cell types in liver ontogenesis, regeneration and neoplasia. Marceau N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):336–41 (72 ref.)
Influence of branched-chain amino acid composition of culture media on the synthesis of plasma proteins by serum-free cultured rat hepatocytes. Montoya A, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):358–64
A simple medium for the study of hepatocyte growth in culture under defined conditions. Sand TE, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):981–4
Stimulating effects of bovine small intestine mucosal factors on rat hepatocyte development. Takahashi N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):365–72
A method for the comparative study of replicative DNA synthesis in GGT-positive and GGT-negative hepatocytes in primary culture isolated from carcinogen-treated rats. Xu YH, et al. **In Vitro Cell Dev Biol** 1988 Oct; 24(10):995–1000
Killing of Leishmania donovani by activated liver macrophages from resistant and susceptible strains of mice. Olivier M, et al. **Int J Parasitol** 1989 Jul;19(4):377–83
Langerhans cells with monoclonal antibody Lag [letter] McLelland J. **J Am Acad Dermatol** 1989 Apr;20(4):711
Autocrine mechanism of growth of neonatal rat hepatocytes in primary culture. Nakamura T, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):700–6
Maintenance of differentiated phenotype of cultured rat hepatic lipocytes by basement membrane matrix. Friedman SL, et al. **J Biol Chem** 1989 Jun 25;264(18):10756–62
Proteolytic processing of rat liver membrane secretory component. Cleavage activity is localized to bile canalicular membranes. Musil LS, et al. **J Biol Chem** 1988 Oct 25;263(30):15799–808
Affinity and distribution of surface and intracellular hyaluronic acid receptors in isolated rat liver endothelial cells. Raja RH, et al. **J Biol Chem** 1988 Nov 15; 263(32):16661–8
Regulation of triglyceride mobilization in isolated hepatocytes by dibutyryl cyclic AMP and epinephrine. Woodside WF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S38–44; discussion S44
Purification and partial characterization of a hepatocyte antiproliferative glycopeptide. Auger G, et al. **J Cell Biochem** 1989 Aug;40(4):439–51
Regulation of hepatocyte growth: alpha-1 adrenergic receptor and ras p21 changes in liver regeneration. Cruise JL, et al. **J Cell Physiol** 1989 Aug;140(2):195–201
Inositol 1,3,4,5-tetrakisphosphate stimulates the initiation of DNA synthesis in Ca2+-deprived rat liver cells. Hill TD, et al. **J Cell Physiol** 1989 Aug;140(2):403–7
Proliferation of fetal rat hepatocytes in response to growth factors and hormones in primary culture. Hoffmann B, et al. **J Cell Physiol** 1989 Jun;139(3):654–62
Reciprocal regulation of adult rat hepatocyte growth and functional activities in culture by dimethyl sulfoxide. McGowan JA. **J Cell Physiol** 1988 Dec;137(3):497–504
Establishment and partial characterization of SV40 virus-immortalized hepatocyte lines of normal and lethal mutant mice carrying a deletion on chromosome 7. Paul D, et al. **J Cell Physiol** 1989 Jun;139(3):599–609
Serum from partially hepatectomized rats induces primary hepatocytes to enter S phase: a role for prostaglandins? Little P, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):549–53
Formation of plasma membrane domains in rat hepatocytes and hepatoma cell lines in culture. Maurice M, et al. **J Cell Sci** 1988 May;90 (Pt 1):79–92
Adhesive interactions and the metabolic activity of hepatocytes. Hughes RC, et al. **J Cell Sci Suppl** 1987; 8:273–91 (57 ref.)
Biliary copper excretion by hepatocyte lysosomes in the rat. Major excretory pathway in experimental copper overload. Gross JB Jr, et al. **J Clin Invest** 1989 Jan;83(1):30–9
Preferential distribution of apoptotic bodies in acinar zone 3 of normal human and rat liver. Benedetti A, et al. **J Hepatol** 1988 Dec;7(3):319–24
Cell proliferation and the aetiology of hepatocellular carcinoma. Berman JJ. **J Hepatol** 1988 Dec;7(3):305–9
Effect of cimetidine, ranitidine, famotidine and omeprazole on hepatocyte proliferation in vitro. Francavilla A, et al. **J Hepatol** 1989 Jan;8(1):32–41
Primary culture of cryopreserved adult human hepatocytes on homologous extracellular matrix and the influence of monocytic products on albumin synthesis. Moshage HJ, et al. **J Hepatol** 1988 Aug;7(1):34–44
Involvement of tumor necrosis factor in endotoxin-triggered neutrophil adherence to sinusoidal endothelial cells of mouse liver and its modulation in acute phase. Schlayer HJ, et al. **J Hepatol** 1988 Oct;7(2):239–49
Consecutive expression of carbonic anhydrase isoenzymes during development of rat liver and skeletal muscle differentiation. Laurila AL, et al. **J Histochem Cytochem** 1989 Sep;37(9):1375–82
Effects of monensin on ATP levels and cell functions in rat liver and lung in vitro. Mariani MF, et al. **J Membr Biol** 1989 Jun;108(3):235–46
Cachectin/tumor necrosis factor production by fetal and newborn rat hepatic macrophages. Silen ML, et al. **J Pediatr Surg** 1989 Jan;24(1):34–8; Discussion 38
Effect of treatment with phospholipase A2, colchicine, and beta-galactosidase on agglutination of rat hepatocytes. Bikhazi AB, et al. **J Pharm Sci** 1989 Jul;78(7):547–9
Culture of fibroblast-like cells derived from normal human liver. Identification by morphologic and immunologic criteria. Casini A, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):141–8
Baseline volume data of human liver parenchymal cell. Duarte MI, et al. **J Submicrosc Cytol Pathol** 1989 Apr; 21(2):275–9
Effect of benzyl chloride on rat hepatocytes. Abdel-Rahman MS, et al. **J Toxicol Environ Health** 1988;25(4):453–9
Study of hepatotoxicity in isolated perfused liver versus cultures of rat hepatocytes. Fouad FM, et al. **J Toxicol Environ Health** 1989;26(1):83–99
Development of hepatocytes in the pancreas of hamsters treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. Rao MS, et al. **J Toxicol Environ Health** 1988;25(2):201–5
Active proliferation of mouse hepatocytes in primary culture under defined conditions as compared to rat hepatocytes. Sawada N, et al. **Jpn J Cancer Res** 1988 Sep;79(9):983–8
Comparative test for cytotoxicity of hexavalent and trivalent chromium in primary cultures of hepatocytes. Susa N, et al. **Kitasato Arch Exp Med** 1989 Apr;62(1):53–7
Inverse relationship between epidermal growth factor induced proliferation and expression of high affinity surface epidermal growth factor receptors in rat hepatocytes. Wollenberg GK, et al. **Lab Invest** 1989 Feb;60(2):254–9
Hepatic chromaffin cells. Martinez I, et al. **Life Sci** 1974 Jul 15;15(2):267–71
Effect of ornithine on transferrin secretion of rat and human hepatocyte cultures. Lescoat G, et al. **Liver** 1988 Dec; 8(6):360–5
The streaming liver IV: DNA content of the hepatocyte increases with its age. Schwartz-Arad D, et al. **Liver** 1989 Apr;9(2):93–9
Effect of interferon alpha, gamma, and tumor necrosis factor alpha on the HLA-A, B, C expression of cell lines derived from human liver. Yoshioka K, et al. **Liver** 1989 Feb; 9(1):14–9
The streaming liver. V: Time and age-dependent changes of hepatocyte DNA content, following partial hepatectomy. Zajicek G, et al. **Liver** 1989 Jun;9(3):164–71
Kupffer cells from CC1(4)-treated rat livers induce skin fibroblast and liver fat-storing cell proliferation in culture. Armendáriz-Borunda J, et al. **Matrix** 1989 Mar;9(2):150–8
Regulation of amino acid transport in hepatocytes isolated from adult and old rats. Leoni S, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):19–27
Age-dependent accumulation of alkali-labile sites in DNA of post-mitotic but not in that of mitotic rat liver cells. Mullaart E, et al. **Mech Ageing Dev** 1988 Oct;45(1):41–9
Non-parenchymal cells as mediators of physiological responses in liver. Altin JG, et al. **Mol Cell Biochem** 1988 Sep;83(1):3–14 (80 ref.)
Tissue-specific gene expression in mouse hepatocytes cultured in growth-restricting medium. Spiegelberg T, et al. **Mol Cell Biol** 1988 Aug;8(8):3338–44
What's new in the hepatocellular uptake mechanism of bilirubin and fatty acids? Stremmel W. **Pathol Res Pract** 1988 Aug;183(4):524–8 (60 ref.)
Effects of prenatal terbutaline exposure on cellular development in lung and liver of neonatal rat: ornithine decarboxylase activity and macromolecules. Kudlacz EM, et al. **Pediatr Res** 1989 Jun;25(6):617–22
Natural bile acids mimic hormonal action on K+ conductance in guinea-pig liver cells. Capiod T, et al. **Pflugers Arch** 1989;414 Suppl 1:S162–3
Chemical structure and toxicity of diuretics in isolated hepatocytes. Higaki J, et al. **Pharmacol Toxicol** 1989 Jul; 65(1):21–4
Melanogenesis in the pigment cells of Rana esculenta L. liver: evidence for tyrosinase-like activity in the melanosome protein fraction. Cicero R, et al. **Pigment Cell Res** 1989 Mar-Apr;2(2):100–8
TPA stimulates both release of choline and ethanolamine and synthesis of PGI2 in C-9 cells. Xiao DM, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):213–7
Transforming growth factor alpha may be a physiological regulator of liver regeneration by means of an autocrine mechanism. Mead JE, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1558–62
Cell volume regulation in liver. Graf J, et al. **Renal Physiol Biochem** 1988 May-Oct;11(3-5):202–20 (81 ref.)
Lymphoid cells of the liver. Bengoechea AB. **Revis Biol Celular** 1988;16:35–68 (284 ref.)
Liver sinusoidal endothelial cells: isolation, purification, characterization and interaction with hepatocytes. Morin O, et al. **Revis Biol Celular** 1988;15:1–85 (338 ref.)
The role of extracellular matrix in normal liver. Bissell DM, et al. **Scand J Gastroenterol Suppl** 1988;151:1–7 (32 ref.)
Proliferation and phenotypic expression of non-parenchymal liver cells. Bouwens L. **Scand J Gastroenterol Suppl** 1988; 151:46–51
Different proliferative activity in vitro of periportal and perivenous hepatocytes. Gebhardt R. **Scand J Gastroenterol Suppl** 1988;151:8–18
Alteration in chromatin conformation of proliferating and differentiating enzyme genes in normal mouse liver and ascites hepatoma cells and its relation to the gene expression of enzymes. Li S, et al. **Sci Sin [B]** 1988 Nov;31(11):1319–24
Gene expression in implanted rat hepatocytes following retroviral-mediated gene transfer. Anderson KD, et al. **Somat Cell Mol Genet** 1989 May;15(3):215–27
Number of T-lymphocytes in the remnant liver after partial hepatectomy in rats. Lee CS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):787–90
Evaluation of simplified variants of the UW solution using the isolated perfused rabbit liver. Jamieson NV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1294–5
Protective effect of alpha tocopherol on Ca2+ regulation by microsomal fractions isolated from preserved rat livers. Kawada T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1301–2
Different cytoprotective effects of calcium blockers in hypothermic liver preservation. Umeshita K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1290–1
Hepatic endothelial cells. Targets in liver allograft rejection? Adams DH, et al. **Transplantation** 1989 Mar;47(3):479–82
Preservation of hepatocyte suspensions at 4 degrees C. Lund P, et al. **Transplantation** 1988 Oct;46(4):563–5
Characterization of interstitial dendritic cells in human liver. Prickett TC, et al. **Transplantation** 1988 Nov;46(5):754–61
Mechanism of replacement of non-parenchymal liver cells (NPLC) in murine radiation chimeras. Freudenberg N, et al. **Virchows Arch [A]** 1989;415(3):203–9
Desmin and actin in the identification of Ito cells and in monitoring their evolution to myofibroblasts in experimental liver fibrosis. Ballardini G, et al. **Virchows Arch [B]** 1988;56(1):45–9
Optimization of cryopreservation procedures for rat and human hepatocytes. Loretz LJ, et al. **Xenobiotica** 1989 May; 19(5):489–98
Plasma membrane hyperpolarization effect on chromatin and protein biosynthesis in rat hepatocytes of different ages. Frolkis VV, et al. **ZFA** 1989 Jan-Feb;44(1):3–5
[Studies on the kinetic changes of the growth of CFU-S in unstable and relative stable culture systems] Pei XT, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):569–76 (Eng. Abstr.) **(Chi)**
[Isolation and enrichment of CFU-E from mouse fetal liver by affinity chromatography on a column of sepharose-transferrin] Zhang YH, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):113–8 (Eng. Abstr.) **(Chi)**
[The biochemical and pharmacological effects of biphenyl dimethyl dicarboxylate (DDB) on rat liver cells] Chen L, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):881–5 (Eng. Abstr.) **(Chi)**
[Disorganization of the structure of gap junctions isolated from rat liver and treated by the action of a mixture of 2 detergents] Mazet F, et al. **C R Acad Sci [III]** 1988; 307(12):679–84 (Eng. Abstr.) **(Fre)**
[Cytogenetic relationship between portal fibroblasts and Ito cells of the liver] Körner T, et al. **Zentralbl Allg Pathol** 1989;135(3):277–80 (Eng. Abstr.) **(Ger)**
[Growth factor and growth inhibitor for hepatocyte proliferation] Nakamura T. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):481–8 (14 ref.) (Eng. Abstr.) **(Jpn)**
[Proliferative activity of the hepatocytes at different times of day during prolonged hypokinesia] Li SE. **Biull Eksp Biol Med** 1988 Nov;106(11):610–1 (Eng. Abstr.) **(Rus)**
[Topographic distribution of proliferating hepatocytes in the hepatic lobe of intact rats during the course of 24 hours] Savchenko TV, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):227–9 (Eng. Abstr.) **(Rus)**
[Stimulating effect of biologically active substances from the spleen on the functional activity of hepatocytes] Korpachev

VV, et al. **Fiziol Zh** 1989 May-Jun;35(3):80-3 (Eng. Abstr.) (Rus)

[Effect of the spleen cells from partially splenectomized and partially hepatectomized mice on the proliferation of hepatocytes in the regenerating liver of syngeneic recipients] Babaeva AG, et al. **Ontogenez** 1988 Nov-Dec; 19(6):573-81 (Eng. Abstr.) (Rus)

[Changes in the proliferative activity of the corneal epithelium and the regenerating liver in partial splenectomy in mice] Druzhkova TA. **Ontogenez** 1988 Jul-Aug; 19(4):390-3 (Eng. Abstr.) (Rus)

[The enzymatic isolation of hepatocytes from the mouse liver] Faktor VM. **Tsitologiia** 1988 May;30(5):644-7 (Eng. Abstr.) (Rus)

[Functional characteristics of rat hepatocytes isolated by a nonenzymatic method and incubated in vitro] Petrenko AIu, et al. **Tsitologiia** 1989 May;31(5):608-11 (Eng. Abstr.) (Rus)

[Short-term storage of isolated hepatocytes under profound hypothermic conditions] Kravchenko LP, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):94-7 (Eng. Abstr.) (Rus)

[The effect of factors stimulating proliferation of hepatocytes on cholesterol esterification in the serum during liver regeneration] Konevalova NIu, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):37-42 (Eng. Abstr.) (Rus)

[The hepatocyte. Ricardo Baquero González Lecture] Grases PJ. **GEN** 1987 Jul-Sep;41(3):81-92 (42 ref.) (Spa)

[In vitro study of fetal hepatocytes (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):461 (Spa)

[A growing research interest in liver sinusoidal cells] Holmberg SB, et al. **Lakartidningen** 1989 Jan 25;86(4):232 (Swe)

DRUG EFFECTS

Systemic adrenergic actions on liver T-4 5'deiodinase differ considerably from those seen in vitro. Porta S, et al. **Acta Med Austriaca** 1988;15 Suppl 1:40

Effect of intravenously injected iodinated lipid emulsion on the liver. An experimental study correlating computed tomography findings with in vivo microscopy and electron microscopy findings. Ivancev K, et al. **Acta Radiol** 1989 May-Jun;30(3):291-8

Prolactin as a mammalian mitogen and tumor promoter. Buckley AR, et al. **Adv Enzyme Regul** 1988;27:371-91

An experimental study of fetal alcohol syndrome in the rat: biochemical modifications in brain and liver. Ledig M, et al. **Alcohol Alcohol** 1989;24(3):231-40

Ethanol-induced inhibition of liver cell function: I. Effect of ethanol on hormone stimulated hepatocyte DNA synthesis and the role of ethanol metabolism. Carter EA, et al. **Alcoholism (NY)** 1988 Aug;12(4):555-62

Effect of disulfiram on canine liver aldehyde dehydrogenase activity: in vivo inactivation in a nonrodent animal model. Sanny CG, et al. **Alcoholism (NY)** 1988 Oct;12(5):622-4

Long-term effects of amiodarone on hepatic function. Robinson K, et al. **Am J Cardiol** 1989 Jul 1;64(1):95-6

Efficacy and long-term adverse effect pattern of lovastatin. Tobert JA. **Am J Cardiol** 1988 Nov 11;62(15):28J-34J (36 ref.)

The effect of alpha-interferon on the liver in a patient with hairy cell leukemia: light and electron microscopic studies. Itoh S, et al. **Am J Gastroenterol** 1989 Aug;84(8):942-7

Hepatotoxic and hepatoprotective potential of histamine (H2)-receptor antagonists [letter] Donovan JW. **Am J Med** 1988 Dec;85(6):893

Metal-inducible pathology in the liver, pancreas, and kidney of transgenic mice expressing SV40 early region genes. Dyer KR, et al. **Am J Pathol** 1989 Aug;135(2):401-10

Changes in the organization and antigenic determinants of intermediate filaments of rat hepatocytes after infusion of cytochalasin B in vivo. Ohta M, et al. **Am J Pathol** 1988 Dec;133(3):578-88

Hepatotoxicity and metabolism of isoflurane in rats with cirrhosis. Baden JM. **Anesth Analg** 1989 Mar;68(3):214-8

Comparative effects of halothane and isoflurane anesthesia on the ultrastructure of human hepatic cells. Goldfarb G, et al. **Anesth Analg** 1989 Oct;69(4):491-5

Probable azathioprine hepatotoxicity: a case report. Small P, et al. **Ann Allergy** 1989 Jun;62(6):518-20

Changing the class of NSAID in cases of hepatotoxicity [letter] [see comments] Llorca G, et al. **Ann Rheum Dis** 1988 Sep;47(9):791. **Comment in:** Ann Rheum Dis 1989 May;48(5):439

Toxicity, uptake, and subcellular distribution in rat hepatocytes of roxithromycin, a new semisynthetic macrolide, and erythromycin base. Villa P, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1541-6

Liver cell necrosis and regeneration following injections of carbon tetrachloride. Effects of the thyrotropin-releasing hormone and somatostatin. Myren J, et al. **APMIS** 1989 Apr;97(4):334-42

Toxicity and partial structure of a hepatotoxic peptide produced by the cyanobacterium Nodularia spumigena Mertens emend. L575 from New Zealand. Carmichael WW, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2257-63

Peroxidation-dependent and peroxidation-independent mechanisms by which acetaminophen kills cultured rat hepatocytes. Farber JL, et al. **Arch Biochem Biophys** 1988 Dec;267(2):640-50

tert-butyl hydroperoxide kills cultured hepatocytes by peroxidizing membrane lipids. Masaki N, et al. **Arch Biochem Biophys** 1989 Mar;269(2):390-9

Alterations in hepatocyte cytoskeleton caused by redox cycling and alkylating quinones. Thor H, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):397-407

Validation of a diagnostic test. Epidemiologic principles in dermatology. Weinstock MA. **Arch Dermatol** 1989 Sep; 125(9):1260-4

Effect of topical application of clotrimazole to rats on epidermal and hepatic monooxygenase activities and cytochrome P-450. Merk HF, et al. **Arch Dermatol Res** 1989;281(3):198-202

Organ weights, liver constituents, and serum components in growing chicks fed ochratoxin A. Sreemannarayana O, et al. **Arch Environ Contam Toxicol** 1989 May-Jun; 18(3):404-10

Effect of chloropheniramine maleate on liver and kidney functions as well as blood count of guinea pigs. el-Sadek SE, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):249-53

Different responses of albumin-containing and alpha-fetoprotein-containing cells to estriol in the adult mouse liver. Terao K, et al. **Arch Histol Cytol** 1989 Mar; 52(1):71-6

Effects of commercial chlorophenolate, 2,3,7,8-TCDD, and pure phenoxyacetic acids on hepatic peroxisome proliferation, xenobiotic metabolism and sister chromatid exchange in the rat. Mustonen R, et al. **Arch Toxicol** 1989; 63(3):203-8

Comparative hepatotoxicity and metabolism of N-methylformamide in rats and mice. Tulip K, et al. **Arch Toxicol** 1988;62(2-3):167-76

Differences in liver sensitivity to methyl carbamate between Wistar and Fischer 344 rats. Bomhard E, et al. **Arch Toxicol Suppl** 1989;13:319-21

Liver histology in rheumatoid arthritis patients receiving long-term methotrexate therapy. A prospective study with baseline and sequential biopsy samples. Kremer JM, et al. **Arthritis Rheum** 1989 Feb;32(2):121-7

The effects of PGI2 analog (OP-41483) on perfused porcine liver. Kimoto M, et al. **Artif Organs** 1989 Jun;13(3):204-8

Action of beta-adrenoceptor blockers on liver function of rats. Kulcsár-Gergely J. **Arzneimittelforschung** 1989 Jul; 39(7):782-5

Protease inhibitors do not prevent the killing of cultured hepatocytes by cystamine. Masaki N, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):412-7

Protein kinase C involvement in lipid peroxidation and cell membrane damage induced by oxygen-based radicals in hepatocytes. von Ruecker AA, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):836-42

Effect of 3-deazaadenosine on methionine metabolism in isolated perfused livers. Duerre JA. **Biochem Cell Biol** 1988 Oct;66(10):1032-9

Effect of cycloheximide on the levels of nuclear HMG proteins in rat liver. Oka T, et al. **Biochem Int** 1988 Dec; 17(6):1151-5

Glutathione depletion by 2-nitroimidazole-1-acetohydroxamic acid as a radiosensitizer in hypoxic rat hepatocytes. Takanuki K, et al. **Biochem Int** 1988 Jul;17(1):155-62

Effect of recombinant human tumour necrosis factor alpha on protein synthesis in liver, skeletal muscle and skin of rats. Charters Y, et al. **Biochem J** 1989 Mar 1;258(2):493-7

[Leu]enkephalin stimulates carbohydrate metabolism in isolated hepatocytes and kidney tubule fragments by interaction with angiotensin II receptors. Hothi SK, et al. **Biochem J** 1989 Feb 1;257(3):705-10

Evidence that guanosine 5'-[gamma-thio]triphosphate stimulates plasma membrane Ca2+ inflow when introduced into hepatocytes. Hughes BP, et al. **Biochem J** 1989 Jan 15;257(2):591-8

Rapid stimulation of calcium uptake into rat liver by L-tri-iodothyronine. Hummerich H, et al. **Biochem J** 1989 Mar 1;258(2):363-7

The calcium ionophore A23187 increases the tight-junctional permeability in rat liver. Kan KS, et al. **Biochem J** 1988 Dec 15;256(3):1039-41

Oestradiol 17 beta-glucuronide increases tight-junctional permeability in rat liver. Kan KS, et al. **Biochem J** 1989 Jul 1;261(1):297-300

Cholesterol is required for secretion of very-low-density lipoprotein by rat liver. Khan B, et al. **Biochem J** 1989 Mar 15;258(3):807-16

Stimulation of hepatic cholesterol biosynthesis by fatty acids. Effects of oleate on cytoplasmic acetoacetyl-CoA thiolase, acetoacetyl-CoA synthetase and hydroxymethylglutaryl-CoA synthase. Salam WH, et al. **Biochem J** 1989 Mar 1;258(2):563-8

Effects of oestrogen on adenylate cyclase system and glucose output in rat liver. Shima S, et al. **Biochem J** 1989 Jan 15;257(2):407-11

Chylomicron-remnant uptake by freshly isolated hepatocytes. Effect of heparin and of hepatic triacylglycerol lipase. Sultan F, et al. **Biochem J** 1989 Mar 1;258(2):587-94

Inhibition of phosphatidylethanolamine synthesis by glucagon in isolated rat hepatocytes. Tijburg LB, et al. **Biochem J** 1989 Feb 1;257(3):645-50

Estradiol-produced modifications on the response to glucose of hepatocytes from fasted rats. Astiazaran AM, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):197-203

Sodium benzoate inhibits fatty acid oxidation in rat liver: effect on ammonia levels. Kalbag SS, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):133-42

Comparison of the susceptibility of hepatocytes from postnatal and adult mice to hepatotoxins. Adamson GM, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4183-90

Effects of carbon tetrachloride on calcium homeostasis. A critical reconsideration. Albano E, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2719-25

Ca2+ mobilization by vasopressin and glucagon in perfused livers. Effect of prior intoxication with bromotrichloromethane. Benedetti A, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1799-805

Effect of fenofibrate treatment on linoleic acid desaturation in liver of obese Zucker rats. Blond JP, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2741-4

Effects of clofibrate and acetylsalicylic acid on hepatic carnitine palmitoyltransferase synthesis. Brady PS, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):811-4

Antidotal effectiveness of N-acetylcysteine in reversing acetaminophen-induced hepatotoxicity. Enhancement of the proteolysis of arylated proteins. Bruno MK, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4319-25

Paracetamol-induced stimulation of glycogenolysis in isolated mouse hepatocytes is not directly associated with cell death. Burcham PC, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2357-62

The cytotoxicity of menadione in hepatocytes isolated from streptozotocin-induced diabetic rats. Grant MH, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3793-6

The characterization of perfluorosuccinate as an inhibitor of gluconeogenesis in isolated rat hepatocytes. Gregory RB, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2867-72

Effects of the pyrrolizidine alkaloid senecionine and the alkenals trans-4-OH-hexenal and trans-2-hexenal on intracellular calcium compartmentation in isolated hepatocytes. Griffin DS, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):391-7

The induction of liver peroxisomal proliferation by beta,beta'-methyl-substituted hexadecanedioic acid (MEDICA 16). Hertz R, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3571-7

The changes in activities of some ammonia metabolizing enzymes in liver and brain of rats intoxicated by chronic administration of acetaldehyde. Holownia A, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2935-7

Effect of caffeine on urea biosynthesis and some related processes, ketone bodies, ATP and liver amino acids. Jordá A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2727-32

Biochemical studies of six nitrogen-containing heterocycles in rat tissues. Kitchin KT, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2733-8

The specificity of inhibition of debrisoquine 4-hydroxylase activity by quinidine and quinine in the rat is the inverse of that in man. Kobayashi S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2795-9

Different cytotoxicity and metabolism of doxorubicin, daunorubicin, epirubicin, esorubicin and idarubicin in cultured human and rat hepatocytes. Le Bot MA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3877-87

Effect of the alpha-glucosidase inhibitor N-hydroxyethyl-1-deoxynojirimycin (Bay m 1099) on the biosynthesis of liver secretory glycoproteins. Ludolph D, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2479-86

Ethanol effects on active Na+ and K+ transport in cultured fetal rat hepatocytes. McCall D, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2593-600

In vivo and in vitro studies of the hepatotoxic effects of 4-chlorophenol in mice. Phornchirasilp S, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):961-72

Failure of oral gossypol to inhibit hepatic microsomal and cytosolic drug-metabolising enzymes. Rajpurohit R, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4590-2

Studies on calcium transport during carbon tetrachloride mediated hepatotoxicity in mice. Reitman FA, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4584-6

The effect of di-isopropyl 1,3 dithiol-2-ylidenemalonate (malotilate) on the hepatic changes induced by ethanol administration in the rat. Ryle PR, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4341-51

NAD+ depletion and cytotoxicity in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3967-74

Interconversion of NAD(H) to NADP(H). A cellular response to quinone-induced oxidative stress in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2631-7

Toxicity of uricosuric diuretics in rat hepatocyte culture. Tolman KG, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1181-4

Evidence in vivo for elevation of intracellular free Ca2+ in the liver after diquat, acetaminophen, and CCl4. Tsokos-Kuhn JO. **Biochem Pharmacol** 1989 Sep 15; 38(18):3061-5

The effect of methotrexate on hepatic levels of reduced glutathione in mice. Wiebkin P, et al. **Biochem Pharmacol** 1989 May 15;38(10):1551-4

Inhibition of hepatic gluconeogenesis by metformin. Synergism with insulin. Wollen N, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4353-8

Effects of aluminum and other cations on the structure of brain and liver chromatin. Walker PR, et al. **Biochemistry** 1989 May 2;28(9):3911-5

Bile acid synthesis and intracellular and extracellular cholesterol concentrations in isolated rat hepatocytes: the effect of dietary cholesterol. Sutton CM, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):210–7

In vitro effect of caffeine on some aspects of nitrogen metabolism in isolated rat hepatocytes. Jordá A, et al. **Biochimie** 1988 Oct;70(10):1417–21

The effect of carbon tetrachloride on the copper–laden rat liver. Barrow L, et al. **Br J Exp Pathol** 1989 Feb;70(1):9–19

Alpha 1–antitrypsin and hepatic fibrosis. Ozeki T, et al. **Br J Exp Pathol** 1989 Apr;70(2):143–52

Morphological damage induced by Escherichia coli lipopolysaccharide in cultured hepatocytes: localization and binding properties. Pagani R, et al. **Br J Exp Pathol** 1988 Aug;69(4):537–49

Lipopolysaccharide–induced insulin resistance in monolayers of cultured hepatocytes. Portolés MT, et al. **Br J Exp Pathol** 1989 Apr;70(2):199–205

Quantitative electron microscopy of carcinogen–induced alterations in hepatocyte rough endoplasmic reticulum. II. Modulation of the effects of 3'MeDAB by adrenalectomy and adrenal corticosteroids. Winton DJ, et al. **Br J Exp Pathol** 1989 Jun;70(3):369–84

Impaired mitochondrial oxidative energy metabolism following paracetamol–induced hepatotoxicity in the rat. Katyare SS, et al. **Br J Pharmacol** 1989 Jan;96(1):51–8

Induction of hepatic cytochrome P-450 activity in wild cotton rats (Sigmodon hispidus) by phenobarbital and 3–methylcholanthrene. Elangbam CS, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):716–20

Gill, liver, and kidney lesions associated with experimental exposures to carbaryl and dimethoate in the fish (Puntius conchonius Ham.). Gill TS, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):71–8

Histopathological effects of monosodium methanearsonate (MSMA) on New Zealand white rabbits (Oryctalagus cuniculus). Jaghabir MT, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):289–93

Short–term toxicity of methyl benzimidazole carbamate in dogs. Janardhan A, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):704–11

Blood pressure reduction by CCl4 in the spontaneously hypertensive rat. Loyke HF. **Bull Environ Contam Toxicol** 1988 Jul;41(1):56–62

Histopathological changes in liver and kidney of Mus booduga following oral benzenehexachloride (BHC) feeding. Philip GH, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):499–502

Changes in the protein metabolism in liver and kidney of Mus booduga gray after oral BHC feeding. Philip GH, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):822–7

Toxic effect of fenvalerate on fructose–1,6–diphosphate aldolase activity of liver, gill, kidney, and brain of the fresh water teleost, Tilapia mossambica. Radhaiah V, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):150–3

The effect of dietary protein and sulfur amino acids on hepatic glutathione concentration and glutathione–dependent enzyme activities in the rat. Bauman PF, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1048–52

Increased retinoic acid metabolism following 3,3',4,4',5,5'–hexabromobiphenyl injection. Spear PA, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1181–6

Short–term effects of butylated hydroxytoluene on the Wistar rat liver, urinary bladder and thyroid gland. Briggs D, et al. **Cancer Lett** 1989 Jul 1;46(1):31–6

Inhibition of mouse hepatocyte intercellular communication by phthalate monoesters. Klaunig JE, et al. **Cancer Lett** 1988 Dec 1;43(1–2):65–71

Over expression of proto–oncogenes: ki–ras, fos and myc in rat liver cells treated in vitro by two liver tumor promoters: phenobarbital and biliverdin. Lafarge–Frayssinet C, et al. **Cancer Lett** 1989 Mar;44(3):191–8

Variations of DNA–(cytosine–5–)–methyltransferase activities after administration of N–hydroxy–N–aminofluorene to Sprague–Dawley rats. Pfohl–Leszkowicz A, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):91–7

Initiation activity of endogenously synthesized N–nitrosobis(2–hydroxypropyl)amine in the rat liver. Yamamoto K, et al. **Cancer Lett** 1989 Jun;45(3):221–5

Comparison of the pharmacokinetics and hepatotoxic effects of saporin and ricin A–chain immunotoxins on murine liver parenchymal cells. Blakey DC, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7072–8

Characterization of chromium effects on a rat liver epithelial cell line and their relevance to in vitro transformation. Briggs JA, et al. **Cancer Res** 1988 Nov 15;48(22):6484–90

Use of primary cultures of human hepatocytes in toxicology studies. Butterworth BE, et al. **Cancer Res** 1989 Mar 1; 49(5):1075–84

Effects of butyrate on epidermal growth factor receptor binding, morphology, and DNA synthesis in cultured rat hepatocytes. Gladhaug IP, et al. **Cancer Res** 1988 Nov 15; 48(22):6560–4

Formation of 8–hydroxydeoxyguanosine in liver DNA of rats following long–term exposure to a peroxisome proliferator. Kasai H, et al. **Cancer Res** 1989 May 15;49(10):2603–5

Effects of the liver tumor promoter ethinyl estradiol on epidermal growth factor–induced DNA synthesis and epidermal growth factor receptor levels in cultured rat hepatocytes. Shi YE, et al. **Cancer Res** 1989 Jul 1; 49(13):3574–80

Transformation of rat liver epithelial cells with v–H–ras or v–raf causes expression of MDR–1, glutathione–S–transferase–P and increased resistance to cytotoxic chemicals. Burt RK, et al. **Carcinogenesis** 1988 Dec;9(12):2329–32

Comparative effects of three carcinogens on human, rat and mouse hepatocytes. Cole KE, et al. **Carcinogenesis** 1989 Jan;10(1):139–43

S–adenosylmethionine, S–adenosylhomocysteine and DNA methylation levels in the liver of rats fed methapyrilene and analogs. Hernandez L, et al. **Carcinogenesis** 1989 Mar; 10(3):557–62

Centrifugal elutriation of hepatocytes from 2–acetylaminofluorene–treated rats and their characterization by flow cytometry. Klose U, et al. **Carcinogenesis** 1989 Mar;10(3):553–6

Dehydroepiandrosterone induced alterations in rat liver carbohydrate metabolism. Mayer D, et al. **Carcinogenesis** 1988 Nov;9(11):2039–43

Organ–specific effects of long term feeding of 2,3,7,8–tetrachlorodibenzo–p–dioxin and 1,2,3,7,8–pentachlorodibenzo–p–dioxin on I–compounds in hepatic and renal DNA of female Sprague–Dawley rats. Randerath K, et al. **Carcinogenesis** 1988 Dec;9(12):2285–9

Inhibitors of ADP–ribosyl transferase suppress the mitogenic actions exerted by tumour promoters, but not those evoked by peptide mitogens, in primary neonatal rat hepatocytes. Romano F, et al. **Carcinogenesis** 1988 Dec;9(12):2147–54

32P–postlabeling analysis of 1–nitropyrene–DNA adducts in female Sprague–Dawley rats. Roy AK, et al. **Carcinogenesis** 1989 Jan;10(1):195–8

Blockade of alpha–1 adrenergic receptor inhibits hepatic DNA synthesis stimulated by tumor promoters. Tsai WH, et al. **Carcinogenesis** 1989 Jan;10(1):73–8

The role of specific DNA adducts in the induction of micronuclei by N–hydroxy–2–acetylaminofluorene in rat liver in vivo. van de Poll ML, et al. **Carcinogenesis** 1989 Apr;10(4):717–22

The cytogenetic and hepatotoxic effects of dioxin on mouse liver cells. Brooks AL, et al. **Cell Biol Toxicol** 1988 Mar; 4(1):31–40

Genotoxic effects of heavy metals in rat hepatocytes. Denizeau F, et al. **Cell Biol Toxicol** 1989 Jan;5(1):15–25

Human hepatocyte and kidney cell metabolism of 2–acetylaminofluorene and comparison to the respective rat cells. Langenbach R, et al. **Cell Biol Toxicol** 1988 Dec; 4(4):453–65

Effects of serum and serum–derived factors on the growth and production of alpha–fetoprotein and albumin by human hepatoma cell lines. Tokiwa T, et al. **Cell Biol Toxicol** 1989 Jun;5(2):207–16

Changes in succinate dehydrogenase zonation following cyclosporin–treatment in normal and regenerating rat liver. Garcia–Alonso I, et al. **Cell Mol Biol** 1988;34(6):605–14

Effect of dimethyl sulfoxide on cytosolic ionized calcium concentration and cytoskeletal organization of hepatocytes in a primary culture. Yamamoto N. **Cell Struct Funct** 1989 Feb;14(1):75–85

Halothane, the liver and the Sri Lankan anaesthetist [editorial] Ganepola SR. **Ceylon Med J** 1989 Mar;34(1):13–5

Hepatic actions of levonorgestrel: correlations between biochemical and morphological findings. Kretzschmar M, et al. **Chem Biol Interact** 1989;70(1–2):157–66

Effect of acetaminophen on hepatic content and biliary efflux of glutathione disulfide in mice. Smith CV, et al. **Chem Biol Interact** 1989;70(3–4):241–8

Effect of a single dose of enalapril on renin gene expression in the kidney and angiotensinogen gene expression in the liver of rats. Nakamura A, et al. **Clin Exp Hypertens [A]** 1988;10(6):1283–4

Perhexilene: effects on hepatic lysosomal function in rats. Sewell RB, et al. **Clin Exp Pharmacol Physiol** 1989 Jan; 16(1):25–32

Fatty acid effects on gluconeogenesis in goat, calf and guinea pig hepatocytes. Aiello RJ, et al. **Comp Biochem Physiol [B]** 1988;91(2):339–44

Dietary propylthiouracil and 17 beta–estradiol benzoate implant effects on liver carbohydrate and lipid metabolism in chicks. Rosebrough R, et al. **Comp Biochem Physiol [B]** 1989;92(4):659–65

Effect of bromobenzene and O–bromophenol on kidney and liver of English sole (Parophrys vetulus). Casillas E, et al. **Comp Biochem Physiol [C]** 1989;93(1):43–8

The effects of Norplant–2 rods on clinical chemistry in Singaporean acceptors after 1 year of use: metabolic changes [published erratum appears in Contraception 1988 Dec;38(6):729] Singh K, et al. **Contraception** 1988 Oct; 38(4):453–63

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):129–36

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant–2 rod acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):147–54

Cholestatic liver injury after prolonged exposure to methyldopa. Moses A, et al. **Digestion** 1989;42(1):57–60

Changes in sulfhydryl compounds in plasma, liver and brain after acute and chronic acetaldehyde administration in rats. Farbiszewski R, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):79–82

Antigenical alterations of hepatocyte membrane in rats after long–term administration of ethanol and carbon tetrachloride. Parafita MA, et al. **Drug Alcohol Depend** 1989 Apr;23(2):177–9

Acetaminophen hepatotoxicity in aging rats. Rikans LE, et al. **Drug Chem Toxicol** 1988;11(3):237–47

Methoxyflurane enhances allyl alcohol hepatotoxicity in rats. Possible involvement of increased acrolein formation. Kershaw WC, et al. **Drug Metab Dispos** 1989 Mar–Apr; 17(2):117–22

Influence of diet on the expression of hepatotoxicity from carbon tetrachloride in ICR mice. Shertzer HG, et al. **Drug Nutr Interact** 1988;5(4):275–82

Dose–related carcinogenic effects of water–borne benzo[a]pyrene on livers of two small fish species. Hawkins WE, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):219–31

Carbofuran–induced histopathological and biochemical changes in liver of the teleost fish, Channa punctatus (Bloch). Ram RN, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):194–201

Histopathological alterations in the liver of freshwater teleost Tilapia mossambica in response to cadmium toxicity. Usha Rani A, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):221–6

Rat liver cytosolic protein changes after ethanol exposure studied by two–dimensional electrophoresis. Wirth PJ, et al. **Electrophoresis** 1988 Jan;9(1):47–53

Comparative response of male rats to parathion and lindane: histopathological and biochemical studies. Dikshith TS, et al. **Environ Res** 1978 Aug;17(1):1–9

Initiation of cell proliferation in livers of the viviparous fish Poeciliopsis lucida with 7,12–dimethylbenz[a]anthracene. Schultz ME, et al. **Environ Res** 1989 Apr;48(2):248–54

Insulin antagonism of dexamethasone induction of tyrosine aminotransferase in cultured fetal hepatocytes. A correlation between enzyme activity, synthesis, level of messenger RNA and transcription. Cake MH, et al. **Eur J Biochem** 1989 Jun 15;182(2):429–35

Stimulation by insulin of glycolysis in cultured hepatocytes is attenuated by extracellular ATP and puromycin through purine–dependent inhibition of phosphofructokinase 2 activation. Probst I, et al. **Eur J Biochem** 1989 Jun 15; 182(2):387–93

Effects of 3,5,3'–triiodothyronine (T3) on rat liver peroxisomal compartment during cold exposure. Goglia F, et al. **Exp Biol** 1989;48(3):135–40

Differential entry of ricin into malignant and normal rat hepatocytes. Decastel M, et al. **Exp Cell Res** 1989 Feb; 180(2):399–408

Interleukin–1 beta is a potent growth inhibitor of adult rat hepatocytes in primary culture. Nakamura T, et al. **Exp Cell Res** 1988 Dec;179(2):488–97

Hepatotoxicity of carbon tetrachloride after chronic ethanol consumption. Shibayama Y. **Exp Mol Pathol** 1988 Oct; 49(2):234–42

Effect of feeding a choline–deficient diet on the hepatic nuclear response to tryptophan in the rat. Sidransky H, et al. **Exp Mol Pathol** 1989 Aug;51(1):68–79

Different mechanisms in the hepatic actions of estrogens. Kulcsár–Gergely J, et al. **Exp Pathol** 1988;34(2):119–23

An in vitro demonstration of peroxisome proliferation and increase in peroxisomal beta–oxidation system mRNAs in cultured rat hepatocytes treated with ciprofibrate. Thangada S, et al. **FEBS Lett** 1989 Jul 3;250(2):205–10

Serum bile acid concentrations as an indicator of liver dysfunction induced during danazol therapy. Heikkinen J, et al. **Fertil Steril** 1988 Nov;50(5):761–5

Cadmium–induced liver and spleen damage in inbred mouse strains. Godowicz B. **Folia Biol (Krakow)** 1988; 36(1–2):47–51

Histopathological evaluation of proliferative liver lesions in rats fed trans–anethole in chronic studies. Newberne PM, et al. **Food Chem Toxicol** 1989 Jan;27(1):21–6

The effect of avocado oils on some liver characteristics in growing rats. Werman MJ, et al. **Food Chem Toxicol** 1989 May;27(5):279–82

Hepatotoxicity of dichloromethane. Mizutani K, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):113–28

Renal and hepatic tolerance of nonionic and ionic contrast media in intravenous digital subtraction angiography. Langer M, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:95–100

Effects of oxidative stress caused by hyperoxia and diquat. A study in isolated hepatocytes. Eklöw–Låstbom L, et al. **Free Radic Res Commun** 1986;2(1–2):57–68

Chemiluminescent and respiratory responses related to thyroid hormone–induced liver oxidative stress. Fernandez V, et al. **Free Radic Res Commun** 1988;5(2):77–84

Free radicals appear to affect survival of hepatocytes at 4 degrees C. Lund P, et al. **Free Radic Res Commun** 1985; 1(1):69–75

Electron spin resonance studies on isolated hepatocytes treated with ferrous or ferric iron. Poli G, et al. **Free Radic Res Commun** 1987;3(1–5):251–5

Alcohol–induced hepatotoxicity: a role for oxygen free radicals. Younes M, et al. **Free Radic Res Commun** 1987; 3(1–5):19–26

Absence of liver DNA fragmentation in rats treated with high oral doses of 32 benzodiazepine drugs. Carlo P, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):34–41

DNA methylation in rat liver by daminozide, 1,1–dimethylhydrazine, and dimethylnitrosamine.

Sagelsdorff P, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):723–30

Disposition and elimination of three polychlorinated dibenzofurans in the liver of the rat. Van den Berg M, et al. **Fundam Appl Toxicol** 1989 May;12(4):738–47

Hepatotoxicity of agents that enhance formation of focal hepatocellular proliferative lesions (putative preneoplastic foci) in a rapid rat liver bioassay. Ward JM, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):163–71

Prostaglandins protect primary cultured rat hepatocytes against carbon tetrachloride–induced damage. Yamamoto H, et al. **Gastroenterol Jpn** 1989 Aug;24(4):447

Short time action of antirheumatic substances on the liver of rat. Protective effect of tryptophan + methionine. Kröger H, et al. **Gen Pharmacol** 1989;20(2):211–2

Acute effects with reference to thrombogenicity and liver toxicity after injection of different coagulation factor concentrates. Schulman S, et al. **Haemostasis** 1989; 19(3):152–9

Vasodilator therapy of portal hypertension: focus on the liver. Blei AF. **Hepatology** 1989 Jun;9(6):896–9 (42 ref.)

Mechanism of iron potentiation of hepatic uroporphyria: studies in cultured chick embryo liver cells. Bonkovsky HL. **Hepatology** 1989 Sep;10(3):354–64

Histochemical and biochemical studies on the effect of the prostacyclin derivative iloprost on CCl4–induced lipid peroxidation in rat liver and its significance for hepatoprotection. Bursch W, et al. **Hepatology** 1989 Jun; 9(6):830–8

Protective effect of vasodilators on liver function after long hypothermic preservation: a study in the isolated perfused rat liver. Chazouillères O, et al. **Hepatology** 1989 Jun; 9(6):824–9

Prednisolone for primary biliary cirrhosis—good news, bad news. Combes B. **Hepatology** 1989 Oct;10(4):511–3

Selective permeabilization of the endoplasmic reticulum by monohydroxylated bile acids in liver [letter] Combettes L, et al. **Hepatology** 1989 Apr;9(4):663–5

The effect of estrogen and tamoxifen on hepatocyte proliferation in vivo and in vitro. Francavilla A, et al. **Hepatology** 1989 Apr;9(4):614–20

Biochemical effects and zonal heterogeneity of peroxisome proliferation induced by perfluorocarboxylic acids in rat liver. Just WW, et al. **Hepatology** 1989 Apr;9(4):570–81

Hemodynamic and metabolic responses to leukotriene C4 in isolated perfused rat liver. Krell H, et al. **Hepatology** 1989 Sep;10(3):300–5

Presence of covalently bound metabolites on rat hepatocyte plasma membrane proteins after administration of isaxonine, a drug leading to immunoallergic hepatitis in man. Loeper J, et al. **Hepatology** 1989 May;9(5):675–8

In vitro toxicity of hydrogen peroxide against normal vs. tumor rat hepatocytes: role of catalase and of the glutathione redox cycle. Mavier P, et al. **Hepatology** 1988 Nov–Dec;8(6):1673–8

A pilot, double–blind, controlled 1–year trial of prednisolone treatment in primary biliary cirrhosis: hepatic improvement but greater bone loss. Mitchison HC, et al. **Hepatology** 1989 Oct;10(4):420–9

Drug–induced allergic hepatitis: does isaxonine fall into this category? Pohl LR. **Hepatology** 1989 May;9(5):785–8

Analysis of hepatotoxicity in maternal and fetal rats after glucocorticoid administration by lipid histochemistry and thin layer chromatography. Frank HG, et al. **Histochemistry** 1989;91(6):487–94

Targeting of liposomes to liver cells. Scherphof GL, et al. **Horiz Biochem Biophys** 1989;9:281–91 (30 ref.)

Effect of triiodothyronine and thyroxine on malic enzyme activity and protein and nucleic acid contents of liver and muscle of toad, Bufo melanostictus. Dey SS, et al. **Horm Metab Res** 1989 Jan;21(1):49–50

Effect of fructose on phenylephrine–induced glucose output in perfused rat liver. Taylor WM, et al. **Horm Metab Res** 1988 Aug;20(8):528–30

In vivo effects of molybdate on activation of rat liver cytosol glucocorticoid receptor. Yoshida A, et al. **Horm Metab Res** 1988 Sep;20(9):566–9

Induction of single–strand breaks in liver DNA of mice after inhalation of vinyl chloride. Walles SA, et al. **IARC Sci Publ** 1988;(89):227–31

Effect of hydrazine sulfate on glucose–regulating enzymes in the normal and cancerous rat. Silverstein R, et al. **Immunopharmacology** 1989 Jan–Feb;17(1):37–43

Influence of dietary hexachlorocyclohexane isomers on lipid metabolism in albino rats. Srinivasan K, et al. **Indian J Biochem Biophys** 1989 Feb;26(1):34–8

Effects of acute oral administration of cadmium chloride on uptake of element and control of lipoperoxidative process in hepatic and renal nuclear fractions of rats. Das M, et al. **Indian J Exp Biol** 1988 Jun;26(6):449–52

Development of paracetamol induced hepatocellular tolerance in albino rats. Vikas, et al. **Indian J Med Res** 1988 Aug;88:181–6

Effect of recombinant interleukin–1 on mRNA levels in rat liver. De Jong FA, et al. **Inflammation** 1988 Dec; 12(6):613–7

Effect of clofibrate treatment on lipid peroxidation in rat liver homogenate and subcellular fractions. Antonenkov VD, et al. **Int J Biochem** 1988;20(8):829–36

Different preparations of natural and recombinant human interleukin–6 (IFN–beta 2, BSF–2) similarly stimulate acute phase protein synthesis and uptake of alpha–aminoisobutyric acid by cultured rat hepatocytes. Bereta J, et al. **Int J Biochem** 1989;21(4):361–6

The effect of selenium on the hepatic drug metabolism and inducibility in rat. Laitinen M, et al. **Int J Biochem** 1988; 20(7):675–81

Dependence with nutritional status of the ethanol effects on fatty acid metabolism in rat hepatocytes. Maquedano A, et al. **Int J Biochem** 1988;20(9):937–41

The protective action of a water poor in calcium on the liver and digestive apparatus of guinea–pigs chronically treated with 9–alpha–fluoro–16–beta–methylprednisolone. Agostini G, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:1–10

Depression of liver drug metabolism and increase in plasma fibrinogen by interleukin 1 and tumor necrosis factor: a comparison with lymphotoxin and interferon. Bertini R, et al. **Int J Immunopharmacol** 1988;10(5):525–30

Carbon tetrachloride hepatotoxicity in endotoxin tolerant and polymyxin B–treated rats. Williams JF. **Int J Immunopharmacol** 1988;10(8):975–80

In vivo and in vitro investigations on biological effects of aromatic bis–(2–chloroethyl)amino–bisphosphonic acids, new agents proposed for chemotherapy of bone tumors: cytostatic activity in rat osteosarcoma; toxicity and genotoxicity in liver and bone marrow; mutagenicity in S. typhimurium. Pool BL, et al. **Invest New Drugs** 1988 Jun;6(2):67–78

Monensin and bile protein secretion. A tool to investigate hepatocyte intracellular vesicular polarity. Casu A, et al. **Ital J Biochem** 1988 May–Jun;37(3):139–47

Effect of caffeine on ornithine metabolism in rat brain, liver and kidney. Colombatto S, et al. **Ital J Biochem** 1989 Mar–Apr;38(2):75–82

The diagnostic usefulness of isocitrate dehydrogenase (ICDH) in the marmoset (Callithrix jacchus). Davy CW, et al. **J Appl Toxicol** 1989 Feb;9(1):33–7

Differing hepatotoxicity and lethality after subacute trichloroethylene exposure in aqueous or corn oil gavage vehicles in B6C3F1 mice. Merrick BA, et al. **J Appl Toxicol** 1989 Feb;9(1):15–21

Oxmetidine (H2 receptor antagonist) induced cytotoxicity in isolated rat hepatocytes. Willson RA, et al. **J Appl Toxicol** 1988 Jun;8(3):223–5

Effect of deferrioxamine and diethyldithiocarbamate on paracetamol–induced hepato– and nephrotoxicity. The role of lipid peroxidation. Younes M, et al. **J Appl Toxicol** 1988 Aug;8(4):261–5

Mechanism of stimulation of DNA synthesis induced by epinephrine in primary culture of adult rat hepatocytes. Takai S, et al. **J Biochem (Tokyo)** 1988 May;103(5):848–52

Chlordecone does not interfere with hepatic repair after carbon tetrachloride or partial hepatectomy. Dolak JA, et al. **J Biochem Toxicol** 1987 Spring;2:57–66

Role of cellular calcium homeostasis in toxic liver injury induced by the pyrrolizidine alkaloid senecionine and the alkenal trans–4–OH–2–hexenal. Griffin DS, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:155–67

Evaluation of the calcium mobilizing action of acetaminophen and bromobenzene in rat hepatocyte cultures. Long RM, et al. **J Biochem Toxicol** 1988 Winter; 3:353–62

2,3,7,8–Tetrachlorodibenzo–p–dioxin causes an increase in protein kinases associated with epidermal growth factor receptor in the hepatic plasma membrane. Madhukar BV, et al. **J Biochem Toxicol** 1988 Winter;3:261–77

Differential toxicity of cis and trans isomers of dichlorodiammineplatinum. Singh G, et al. **J Biochem Toxicol** 1988 Fall;3:223–33

Chronic liver injury by thioacetamide and promotion of hepatic carcinogenesis. Gervasi PG, et al. **J Cancer Res Clin Oncol** 1989;115(1):29–35

Transforming growth factor beta responsiveness is modulated by the extracellular collagen matrix during hepatic ito cell culture. Davis BH. **J Cell Physiol** 1988 Sep;136(3):547–53

Characterization of the inhibitory effect of glucocorticoids on the DNA replication of adult rat hepatocytes growing at various cell densities. Vintermyr OK, et al. **J Cell Physiol** 1989 Jan;138(1):29–37

Use of thermospray liquid chromatography–mass spectrometry for characterization of reactive metabolites of 3'–hydroxyacetanilide, a non–hepatotoxic regioisomer of acetaminophen. Rashed MS, et al. **J Chromatogr** 1989 Jul 14;474(1):209–22

Growth hormone enhances hepatic epidermal growth factor receptor concentration in mice. Jansson JO, et al. **J Clin Invest** 1988 Dec;82(6):1871–6

The effect of carbamazepine on hematological hepatic function in chronic schizophrenia [letter] Costa JF, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):374–5

Effect of lead nitrate administration on liver and kidney structure in rats. Abdel–Aal SF, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):689–99

Inhibitory effect of neurohypophysial peptides on cyclic AMP accumulation by isolated hepatocytes of the trout. Lahlou B, et al. **J Endocrinol** 1988 Dec;119(3):439–45

In vitro effect of profenofos, fenvalerate and dimilin on protein and RNA biosynthesis by rabbit liver and muscle tissues. el–Sebae AH, et al. **J Environ Sci Health [B]** 1988 Oct;23(5):439–51

In vivo studies on the effect of some insecticides on the hepatic activities of L–tryptophan 2,3–dioxygenase and pyridoxal phosphokinase of male mice. el–Toukhy MA, et al. **J Environ Sci Health [B]** 1989 Jun;24(3):265–76

Hepatoprotective effects of Wedelia calendulacea. Sharma AK, et al. **J Ethnopharmacol** 1989 Feb;25(1):93–102

Effects of amphotericin B on the excretory function and the colloid clearance capacity of the perfused rat liver. Gaeta GB, et al. **J Hepatol** 1989 May;8(3):344–50

Effect of propranolol on metabolic activity of the liver in patients with alcoholic cirrhosis. Vinel JP, et al. **J Hepatol** 1988 Oct;7(2):186–92

Dexamethasone modulation of in vivo effects of endotoxin, tumor necrosis factor, and interleukin–1 on liver cytochrome P–450, plasma fibrinogen, and serum iron. Bertini R, et al. **J Leukoc Biol** 1989 Sep;46(3):254–62

Isoniazid–rifampicin–induced submassive hepatic necrosis. Kasantikul V. **J Med Assoc Thai** 1989 Jan;72(1):56–8

Toxicity and association of polycyanoacrylate nanoparticles with hepatocytes. Kreuter J, et al. **J Microencapsul** 1984 Jul–Sep;1(3):253–7

Roles of omega 3 fatty acids and chronic ethanol in the regulation of plasma and liver lipids and plasma apoproteins A1 and E in rats. Lakshman MR, et al. **J Nutr** 1988 Nov; 118(11):1299–303

The toxicity of parenteral copper in the chick: dependence on route of administration. McCormick CC, et al. **J Nutr** 1988 Nov;118(11):1398–402

Apoptosis—the mechanism of cell death in dimethylnitrosamine–induced hepatotoxicity. Pritchard DJ, et al. **J Pathol** 1989 Jul;158(3):253–60

Effects of aluminum on the liver following high–dose enteral administration to rats. Klein GL, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):105–7

Effects of antimycotics on hepatic steroid metabolism. Morita K, et al. **J Pharmacobiodyn** 1988 Dec;11(12):808–15

Hepatotoxicity of menadione predominates in oxygen–rich zones of the liver lobule. Badr MZ, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1317–22

Altered hepatic calcium homeostasis in guinea pigs with halothane–induced hepatotoxicity. Farrell GC, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):751–6

Differential effects of coadministration of aminoacetonitrile on immunosuppression and hepatotoxicity produced by dimethylnitrosamine. Haggerty HG, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):774–80

Hepatoprotective effects of cystathionine against acetaminophen–induced necrosis. Kitamura Y, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):667–71

Inhibition of taurocholate transport by cyclosporin A in cultured rat hepatocytes. Kukongviriyapan V, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):685–9

Biliary excretion of acetaminophen–glutathione as an index of toxic activation of acetaminophen: effect of chemicals that alter acetaminophen hepatotoxicity. Madhu C, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1069–77

Protection by L–2–oxothiazolidine–4–carboxylate, a cysteine prodrug, against 1,1–dichloroethylene hepatotoxicity in rats is associated with decreases in toxin metabolism and cytochrome P–450. Moslen MT, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):157–63

Contribution of metabolites to the route– and time–dependent hepatic effects of di–(2–ethylhexyl)phthalate in the rat. Pollack GM, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):176–81

Mechanism of increased hepatotoxicity of acetaminophen by the simultaneous administration of caffeine in the rat. Sato C, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1243–7

Mechanism of toxicity of an experimental bidentate phosphine gold complexed antineoplastic agent in isolated rat hepatocytes. Smith PF, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):944–50

Contribution of menthofuran to the hepatotoxicity of pulegone: assessment based on matched area under the curve and on matched time course. Thomassen D, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):825–9

Liposome–mediated delivery of gadolinium–diethylenetriaminopentaacetic acid to hepatic cells: a P–31 NMR study. Vion–Dury J, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1113–8

Effects of steroid anaesthesia on some liver function tests in goats. Amer HA, et al. **J Steroid Biochem** 1989 Mar; 32(3):475–6

Hepatic glutathione metabolism and lipid peroxidation in response to excess dietary selenomethionine and selenite in mallard ducklings. Hoffman DJ, et al. **J Toxicol Environ Health** 1989;27(2):263–71

Evaluation of the subchronic and reproductive effects of a series of chlorinated propanes in the rat. II. Toxicity of 1,2,2,3–tetrachloropropane and 1,1,2,2,3–pentachloropropane. Johannsen FR, et al. **J Toxicol Environ Health** 1988;25(3):317–28

Triglyceride accumulation in long–term cultures of adult rat hepatocytes by chronic exposure to Aroclor 1254. Mendoza–Figueroa T, et al. **J Toxicol Environ Health** 1989; 26(3):293–308

Sub–chronic effects of styrene and styrene oxide on lipid peroxidation and the metabolism of glutathione in rat liver and brain. Katoh T, et al. **J Toxicol Sci** 1989 Feb;14(1):1–9

Additional survey on genotoxicity of natural anthraquinones in the hepatocyte primary culture/DNA repair assay. Mori H, et al. **J Toxicol Sci** 1988 Aug;13(3):161–6

Effects of p–tert–butylphenyl trans–4–guanidinomethylcyclohexane carboxylate hydrochloride (NCO–650) and its metabolite,

p-tert-butylphenol(BP) on drug-metabolizing enzymes and fine structure in rat liver. Nakayama S, et al. **J Toxicol Sci** 1988 May;13(2):71-81

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in dogs. Shibata H, et al. **J Toxicol Sci** 1989 May;14(2):67-75

Preventive effect of 3-aminobenzamide on the reduction of NAD levels in rat liver following administration of diethylnitrosamine. Uchida K, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1094-100

Changes in amine oxidase in plasma of rats treated with hepatotoxins. Obata T, et al. **Jpn J Pharmacol** 1988 Sep; 48(1):142-4

Effects of zinc and cholesterol/cholcate on serum lipoproteins and the liver in rats. Cho CH, et al. **Life Sci** 1989;44(25):1929-36

Anti-HIV drugs: comparative toxicities in murine fetal liver and bone marrow erythroid progenitor cells. Gogu SR, et al. **Life Sci** 1989;45(4):iii-vii

Pre-treatment influences on SGPT levels and liver damage after inhalation of CCl4. Magos L, et al. **Life Sci** 1974 Nov 1;15(9):1631-7

Additive stimulation of hepatic putrescine production by glucagon and insulin after partial hepatectomy in rats. Sato Y, et al. **Life Sci** 1989;45(1):77-83

Effect of various steroids on the biosynthesis of arachidonic acid in isolated hepatocytes and HTC cells. Marra CA, et al. **Lipids** 1988 Nov;23(11):1053-8

Biochemical mechanisms involved in the hepatotoxicity of some drugs. Olinescu R, et al. **Med Interne** 1982 Jan-Mar; 20(1):59-65

Phenobarbital specifically reduces gap junction protein mRNA level in rat liver. Mesnil M, et al. **Mol Carcinog** 1988;1(2):79-81

Effects of cycloheximide on hepatic and uterine insulin-like growth factor-I mRNA. Murphy LJ, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):81-6

Expression of insulin-like growth factor I in cultured rat hepatocytes: effects of insulin and growth hormone. Johnson TR, et al. **Mol Endocrinol** 1989 Mar;3(3):580-7

Oxygen-dependent hepatotoxicity due to doxorubicin: role of reducing equivalent supply in perfused rat liver. Ganey PE, et al. **Mol Pharmacol** 1988 Nov;34(5):695-701

1,3-(2-Chloroethyl)-1-nitrosourea potentiates the toxicity of acetaminophen both in the phenobarbital-induced rat and in hepatocytes cultured from such animals. Kyle ME, et al. **Mol Pharmacol** 1988 Oct;34(4):584-9

Assessment of peroxisome proliferation and liver growth-stimulating potential by nondirectly genotoxic compounds in cultured hepatocytes. Bieri F, et al. **Mol Toxicol** 1987-88 Fall;1(4):439-44

Hepatotoxicity of the opioids morphine, heroin, meperidine, and methadone to cultured human hepatocytes. Gómez-Lechón MJ, et al. **Mol Toxicol** 1987-88 Fall; 1(4):453-63

Toxicity of paracetamol in human hepatocytes. Comparison of the protective effects of sulfhydryl compounds acting as glutathione precursors. Larrauri A, et al. **Mol Toxicol** 1987-88 Fall;1(4):301-11

Cyclosporine A nephrotoxicity studied by the combined application of kidney cell lines, hepatocytes, and endothelial-platelet cocultures. Vickers A, et al. **Mol Toxicol** 1987-88 Fall;1(4):351-61

Poly(ADP-ribose) catabolism in mammalian cells exposed to DNA-damaging agents. Alvarez-Gonzalez R, et al. **Mutat Res** 1989 Sep;218(2):67-74

The rat-liver carcinogen N-nitrosomorpholine initiates unscheduled DNA synthesis and induces micronuclei in the rat liver in vivo. Ashby J, et al. **Mutat Res** 1989 Apr; 225(4):143-7

Heritable protein variants induced by exposure to ethylnitrosoureas: heritability, subcellular location, and tissue distribution. Giometti CS, et al. **Mutat Res** 1988 Nov; 202(1):9-17

Induction of sister-chromatid exchanges by direct and indirect mutagens in human lymphocytes, co-cultured with intact rat liver cells. Effect of enzyme induction and preservation of the liver cells by freezing in liquid nitrogen. Lindahl-Kiessling K, et al. **Mutat Res** 1989 Mar; 211(1):77-87

Testing of hydralazine in in vivo-in vitro hepatocyte assays for UDS and stimulation of replicative DNA synthesis. Puri EC, et al. **Mutat Res** 1989 Jul;218(1):13-9

The genotoxicity of a variety of aniline derivatives in a DNA repair test with primary cultured rat hepatocytes. Yoshimi N, et al. **Mutat Res** 1988 Oct;206(2):183-91

Hepatotoxicity of cocaine. Shuster L, et al. **NIDA Res Monogr** 1988;88:250-75 (66 ref.)

Cellular injury and lipid peroxidation induced by hexavalent chromium in isolated rat hepatocytes. Ueno S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):137-45

Mechanisms of carbon tetrachloride hepatotoxicity. Clawson GA. **Pathol Immunopathol Res** 1989;8(2):104-12 (67 ref.)

Early liver cell lesions in rats induced by thioacetamide. An ultrastructural, cytophotometric and autoradiographic study. Marleen F, et al. **Pathol Res Pract** 1988 Dec; 184(1):69-76

Copper toxicity and lipid peroxidation in isolated rat hepatocytes: effect of vitamin E. Sokol RJ, et al. **Pediatr Res** 1989 Jan;25(1):55-62

A new perspective of radiation protection by metallothionein induction. Matsubara J, et al. **Pharmacol Ther** 1988; 39(1-3):331-3

Effect of cadmium chloride on hepatic lipid peroxidation in mice. Andersen HR, et al. **Pharmacol Toxicol** 1988 Sep; 63(3):173-7

Protective effect of anethol dithiolthione against acetaminophen hepatotoxicity in mice. Warnet JM, et al. **Pharmacol Toxicol** 1989 Jul;65(1):63-4

Cyanide-induced injury to the isolated perfused rat liver. Younes M, et al. **Pharmacol Toxicol** 1988 Nov;63(5):382-5

Inhibition of mouse liver sialidase by the root of Scutellaria baicalensis. Nagai T, et al. **Planta Med** 1989 Feb;55(1):27-9

Amiodarone and desethylamiodarone toxicity in isolated hepatocytes in culture. Gross SA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):163-9

Estrogen therapy and liver function--metabolic effects of oral and parenteral administration. von Schoultz B, et al. **Prostate** 1989;14(4):389-95 (46 ref.)

Cyclophosphamide-induced liver necrosis: a possible interaction with azathioprine. Shaunak S, et al. **Q J Med** 1988 Apr;67(252):309-17 (17 ref.)

Halothane-induced liver injury as a consequence of enhanced microsomal lipid peroxidation in guinea pigs. Akita S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):227-43

Paradoxical effect of cobaltous chloride on carbon disulfide induced hepatotoxicity in rats. Chengelis CP. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):83-96

Changes in hepatic glutathione concentrations during carbon disulfide induced hepatotoxicity in the rat. Chengelis CP. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):97-109

In vivo studies on halogen compound interactions. I. Effects of carbon tetrachloride plus 1,2-dibromoethane on liver necrosis. Danni O, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):377-90

Hepatotoxicity of cyclophosphamide in man: pharmacokinetic analysis. Honjo I, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):149-65

Effects of chronic inhalation of ethylene oxide on lipid peroxidation and glutathione redox cycle in rat liver. Katoh T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):281-4

Glutathione (GSH) content in livers from control and carbon tetrachloride poisoned rats treated with the calmodulin inhibitors thioridazine, imipramine or chlorpromazine. Villarruel MC, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):397-400

Evaluation of desferrioxamine mesylate on survival, and prevention of histopathological changes in the liver, in haemorrhagic shock: an experimental study in dogs. Sanan S, et al. **Resuscitation** 1989 Feb;17(1):63-75

Amikacin-induced liver toxicity: correlations between biochemical indexes and ultrastructural features in an experimental model. Martines G, et al. **Rev Med Univ Navarra** 1988 Jan-Mar;32(1):41-5

Differences in liver reparatory activity in male and female rats following the administration of carbon tetrachloride. Smejkalová J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(5):387-441

Prostaglandins and CCl4-induced liver cell mortality. The effect of the prostaglandin analogue enprostil. Bang S, et al. **Scand J Gastroenterol** 1988 Oct;23(8):931-4

Toxicology of fungicides: effects of 270 days administration of zinc ethylene-bis-dithiocarbamate in Friesian cattle. Gennaro Soffietti M, et al. **Schweiz Arch Tierheilkd** 1988 Dec;130(12):657-72

Hepatic and renal tolerability of long-term naproxen treatment in patients with rheumatoid arthritis. Turner R. **Semin Arthritis Rheum** 1987 Feb;17(3 Suppl 2):29-35

Biochemical effects of three carcinogenic chlorinated methanes in rat liver. Kitchin KT, et al. **Teratogenesis Carcinog Mutagen** 1989;9(1):61-9

Pathophysiology of cyanoginosin-LR: in vivo and in vitro studies. Adams WH, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):248-57

Selective protein arylation and the age dependency of acetaminophen hepatotoxicity in mice. Beierschmitt WP, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):517-29

A long-term intravenous model of aluminum maltol toxicity in rabbits: tissue distribution, hepatic, renal, and neuronal cytoskeletal changes associated with systemic exposure. Bertholf RL, et al. **Toxicol Appl Pharmacol** 1989 Mar 15; 98(1):58-74

In vitro toxicity assessment of cyclosporin A and its analogs in a primary rat hepatocyte culture model. Boelsterli UA, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):212-21

Obesity as a risk factor in drug-induced organ injury. III. Increased liver and kidney injury by furosemide in the obese overfed rat. Corcoran GB, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):12-24

Mechanism of allyl formate-induced hepatotoxicity in rainbow trout. Droy BF, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):313-24

Induction of peroxisomal beta-oxidation in the rat liver in vivo and in vitro by tetrazole-substituted acetophenones: structure-activity relationships. Eacho PI, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):177-84

Reduction of hepatic and renal nonprotein sulfhydryl content and increased toxicity of rubratoxin B in the Syrian hamster and Mongolian gerbil. Engelhardt JA, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):85-92

Acute exposure to formaldehyde induces hepatic metallothionein synthesis in mice. Goering PL. **Toxicol Appl Pharmacol** 1989 Apr;98(2):325-37

Relative contributions of protein sulfhydryl loss and lipid peroxidation to allyl alcohol-induced cytotoxicity in isolated rat hepatocytes. Hormann VA, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):375-84

Antagonism of bromobenzene-induced hepatotoxicity by the alpha-adrenoreceptor blocking agents phentolamine and idazoxan: role of hypothermia. Kerger BD, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):360-9

Effects of trichloroethylene and its metabolites on rodent hepatocyte intercellular communication. Klaunig JE, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):454-65

Studies on the mechanism of coumarin-induced toxicity in rat hepatocytes: comparison with dihydrocoumarin and other coumarin metabolites. Lake BG, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):311-23

Comparative studies on nafenopin-induced hepatic peroxisome proliferation in the rat, Syrian hamster, guinea pig, and marmoset. Lake BG, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):148-60

Uroporphyrin accumulation in cultured chick embryo hepatocytes: comparison of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 3,4,3',4'-tetrachlorobiphenyl. Lambrecht RW, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):507-16

Halocarbon hepatotoxicity is not initiated by Ca2+-stimulated endonuclease activation. Long RM, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):350-9

Genotoxicity of carcinogens in human hepatocytes: application in hazard assessment. McQueen CA, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):360-6

Differential induction and regulation of peroxisomal enzymes: predictive value of peroxisome proliferation in identifying certain nonmutagenic carcinogens. Nemali MR, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):72-87

Effects of culture duration on hydrogen peroxide-induced hepatocyte toxicity. Ruch RJ, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):451-64

Decreased ligand binding to the hepatic glucocorticoid and epidermal growth factor receptors after 2,3,4,7,8-pentachlorodibenzofuran and 1,2,3,4,7,8-hexachlorodibenzofuran treatment of pregnant mice. Ryan RP, et al. **Toxicol Appl Pharmacol** 1989 May; 98(3):454-64

Thyroid and liver trophic changes in rats secondary to liver microsomal enzyme induction caused by an experimental leukotriene antagonist (L-649,923). Sanders JE, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):378-87

Studies of chemical toxicity to fresh and cryopreserved rat hepatocytes. Santone KS, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):370-6

MPTP and MPTP analogs induced cell death in cultured rat hepatocytes involving the formation of pyridinium metabolites. Singh Y, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):347-59

Depression of hepatic glutathione by opioid analgesic drugs in mice. Skoulis NP, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):139-47

Phenobarbital-induced cytosolic cytoprotective mechanisms that offset increases in NADPH cytochrome P450 reductase activity in menadione-mediated cytotoxicity. Utley WS, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):323-33

Alterations in lipid metabolism and cellular morphology in the liver of female rats treated with ethmozine. Vincent DR, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):456-63

The chronic hepatic or renal toxicity of di(2-ethylhexyl) phthalate, acetaminophen, sodium barbital, and phenobarbital in male B6C3F1 mice: autoradiographic, immunohistochemical, and biochemical evidence for levels of DNA synthesis not associated with carcinogenesis or tumor promotion. Ward JM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):494-506

Studies on the etiology of trace metal-induced porphyria: effects of porphyrinogenic metals on coproporphyrinogen oxidase in rat liver and kidney. Woods JS, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):183-90

The metabolism of mono-(2-ethylhexyl) phthalate (MEHP) and liver peroxisome proliferation in the hamster. Lhuguenot JC, et al. **Toxicol Ind Health** 1988 Dec; 4(4):431-41

In vitro screens from CNS, liver and kidney for systemic toxicity. Tyson CA, et al. **Toxicol Ind Health** 1989 Jan; 5(1):107-32 (161 ref.)

Toxic responses in F344 rats and B6C3F1 mice given roxarsone in their diets for up to 13 weeks. Abdo KM, et al. **Toxicol Lett** 1989 Jan;45(1):55-66

Early influence of aflatoxin B1 on the functional state of isolated rat hepatocytes. Agüero RM, et al. **Toxicol Lett** 1989 Feb;45(2-3):133-40

Comparison of the toxicity of two trichothecenes applied topically to brain and liver of rats. Bergmann F, et al. **Toxicol Lett** 1989 Jul;48(1):49-56

Comparison of in vivo and in vitro methods for assessing the effects of carbon tetrachloride on the hepatic drug-metabolizing enzyme system. Chadwick RW, et al. **Toxicol Lett** 1988 Sep;42(3):309-16

Comparison of in vivo and in vitro methods for assessing

the effects of repeated dosing with carbon tetrachloride on the hepatic drug-metabolizing enzyme system. Chadwick RW, et al. **Toxicol Lett** 1988 Nov;44(1-2):201-13

Concentration-dependent depletion of non-protein sulfhydryl (NPSH) content in lung, heart and liver tissue of rats and mice after acute inhalation exposure to butadiene. Deutschmann S, et al. **Toxicol Lett** 1989 Feb; 45(2-3):175-83

Interaction of hexachlorocyclohexane (HCH) and chlorpropham (CIPC) in male rats. Dikshith TS, et al. **Toxicol Lett** 1989 Feb;45(2-3):281-8

Alpha-tocopheryl succinate protects hepatocytes from chemical-induced toxicity under physiological calcium conditions. Fariss MW, et al. **Toxicol Lett** 1989 Apr; 47(1):61-75

Increased alkylation of liver DNA and cell turnover in young versus old rats exposed to vinyl chloride correlates with cancer susceptibility. Laib RJ, et al. **Toxicol Lett** 1989 Feb; 45(2-3):231-9

Nafenopin, a peroxisome proliferator, depletes hepatic vitamin E content and elevates plasma oxidised glutathione levels in rats. Lake BG, et al. **Toxicol Lett** 1989 Feb; 45(2-3):221-9

Effect of allyl isothiocyanate on hepatic monooxygenases and serum transferases in rats. Lewerenz HJ, et al. **Toxicol Lett** 1988 Nov;44(1-2):65-70

Influence of ascorbic acid esters on acetaminophen-induced hepatotoxicity in mice. Mitra A, et al. **Toxicol Lett** 1988 Nov;44(1-2):39-46

The effects of radical stress and N-ethylmaleimide on rat hepatic alpha 1-adrenergic receptors. Pruijn FB, et al. **Toxicol Lett** 1989 Jan;45(1):73-82

Cholestyramine as an antidote against paracetamol-induced hepato- and nephrotoxicity in the rat. Siegers CP, et al. **Toxicol Lett** 1989 May;47(2):179-84

Validation of a morphometric analysis procedure using indomethacin-induced alterations in cultured hepatocytes. Sorensen EM. **Toxicol Lett** 1989 Jan;45(1):101-10

Biochemical toxicology of argemone alkaloids. III. Effect on lipid peroxidation in different subcellular fractions of the liver. Upreti KK, et al. **Toxicol Lett** 1988 Sep; 42(3):301-8

Hepatotoxicity of gardenia yellow color in rats. Yamano T, et al. **Toxicol Lett** 1988 Nov;44(1-2):177-82

Lipid peroxidation: a possible mechanism of trichloroethylene-induced nephrotoxicity. Cojocel C, et al. **Toxicology** 1989 Apr;55(1-2):131-41

Inhibition of benzo[a]pyrene-7,8-diol formation in vitro by complex organic mixtures. Dankovic DA, et al. **Toxicology** 1989 Apr;55(1-2):93-102

Protective effect of flavonoids on drug-induced hepatotoxicity in vitro. Davila JC, et al. **Toxicology** 1989 Aug;57(3):267-86

Centrally mediated opioid induced depression of hepatic glutathione: effects of intracerebroventricular administration of mu, kappa, sigma and delta agonists. James RC, et al. **Toxicology** 1988 Oct;51(2-3):267-79

Comparison of the effects of ascorbyl palmitate and L-ascorbic acid on paracetamol-induced hepatotoxicity in the mouse. Jonker D, et al. **Toxicology** 1988 Nov 30; 52(3):287-95

Combined toxicity of ethanol and methylmercury in rat. McNeil SI, et al. **Toxicology** 1988 Dec 30;53(2-3):345-63

Intracytoplasmic triglyceride accumulation produced by dexamethasone in adult rat hepatocytes cultivated on 3T3 cells. Mendoza-Figueroa T, et al. **Toxicology** 1988 Nov 30;52(3):273-86

Correlation between cytosolic Ca2+ concentration and cytotoxicity in hepatocytes exposed to oxidative stress. Nicotera P, et al. **Toxicology** 1988 Nov 14;52(1-2):55-63

On the role of mitochondria in cell injury caused by vanadate-induced Ca2+ overload. Richelmi P, et al. **Toxicology** 1989 Jul 3;57(1):29-44

Comparisons of the toxicity of CdCl2 and Cd-metallothionein in isolated rat hepatocytes. Sendelbach LE, et al. **Toxicology** 1989 Apr;55(1-2):83-91

Inhibition of halothane-induced lipid peroxidation by misoprostol without hepatoprotection. Siegers CP, et al. **Toxicology** 1988 Dec 30;53(2-3):213-8

Perturbation of glutathione by a central action of morphine. Skoulis NP, et al. **Toxicology** 1989 Aug;57(3):287-302

Increased levels of hepatic metallothionein in rat and mouse after injection of acetaminophen. Wormser U, et al. **Toxicology** 1988 Dec 30;53(2-3):323-9

Isolated rat liver perfusion studies with cyclic heptapeptide toxins of Microcystis and Oscillatoria (freshwater cyanobacteria). Berg K, et al. **Toxicon** 1988;26(9):827-37

No effect of modulators of reactive oxygen-induced pathology on microcystin-LR intoxication. Franz DR, et al. **Toxicon** 1988;26(11):1098-101

Blood pressure and hepatocellular effects of the cyclic heptapeptide toxin produced by the freshwater cyanobacterium (blue-green alga) Microcystis aeruginosa strain PCC-7820. Theiss WC, et al. **Toxicon** 1988; 26(7):603-13

Effects of calcium blocking agents and prostaglandins I2 or E2 on the tolerance of the rat liver to ischemia. Lambotte L, et al. **Transplant Proc** 1988 Oct;20(5):986

Prevention of liver damage by using free radical scavengers and changes in plasma PG levels during liver ischemia. Ohhori I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1309-11

Glucose-containing organ preservation solutions and intracellular acidosis [letter] Fuller BJ, et al. **Transplantation** 1988 Dec;46(6):925

Preservation of livers with UW or Euro-Collins' solution [letter] Todo S, et al. **Transplantation** 1988 Dec;46(6):925-6

A toxin from Pasteurella multocida type D causes acute hepatic necrosis in pigs. Cheville NF, et al. **Vet Pathol** 1988 Nov;25(6):518-20

Toxicity of microcystin LR, a cyclic heptapeptide hepatotoxin from Microcystis aeruginosa, to rats and mice. Hooser SB, et al. **Vet Pathol** 1989 May;26(3):246-52

Internal lesions in veal calves and clenbuterol [letter] Vissar LJ, et al. **Vet Rec** 1989 May 20;124(20):546

Comparative studies on the effect of fenbendazole on the liver and liver microsomal enzymes in goats, quail and rats. Dalvi RR. **Vet Res Commun** 1989;13(2):135-9

Lindane-induced oxidative stress. II. Time course of changes in hepatic glutathione status. Barros SB, et al. **Xenobiotica** 1988 Nov;18(11):1305-10

Induction of peroxisome proliferation in rat liver by dietary treatment with 2,2,4,4,6,8,8-heptamethylnonane. Ikeda T, et al. **Xenobiotica** 1988 Nov;18(11):1271-80

Ethanol feeding stimulates trichloromethyl radical formation from carbon tetrachloride in liver. Reinke LA, et al. **Xenobiotica** 1988 Nov;18(11):1311-8

[Pharmacological and toxicological study of protexyl--a new hepatoprotective preparation] Klouchek E, et al. **Eksp Med Morfol** 1988;27(2):9-14 (Eng. Abstr.) **(Bul)**

[Mechanism of cell damage by hematoporphyrin derivative (HPD) plus light. III. Effect of HPD plus light on lysosomes of liver and hepatoma cell] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):22-4 (Eng. Abstr.) **(Chi)**

[Is it truly necessary to terminate the clinical use of halothane? (letter)] Mingi CL. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):81 **(Chi)**

[Biochemical and pharmacologic effects of wuweizi (Schizandra chinensis (Turcz.) Baill.) and its chemical contents on animal livers] Liu GT. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):197-203 (15 ref.) **(Chi)**

[Morphologic evaluation of the effectiveness of hepatic drugs] Záhoř Z. **Cas Lek Cesk** 1988 Oct 21;127(43):1329-33 (Eng. Abstr.) **(Cze)**

[Biological side-effects of potential anti-tubercular agents. XIV. Relation between the chemical structure, antitubercular activity and hepatotoxicity of 2-alkylthio-6-(2-chlorobenzamido) benzothiazoles] Waisser K, et al. **Cesk Farm** 1988 Dec;37(10):437-9 (Eng. Abstr.) **(Cze)**

[Anatomo-pathologic study of hepatic toxicity in intra-arterial hepatic chemotherapy] Bognel C, et al. **Gastroenterol Clin Biol** 1989;13(2):125-31 (Eng. Abstr.) **(Fre)**

[Hepatotoxic action of furosemide in chronic experimental hepatopathies] Bubueanu G, et al. **Physiologie** 1988 Oct-Dec;25(4):201-6 **(Fre)**

[The fermentation diagnosis and histologic studies in blood and the liver of surviving rats after 1 and 2 administrations of a median toxic dose of parathion methyl. 2. Tyrosine aminotransferase and pathologico-morphological findings in the liver] Sonnenschein P, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):9-15 (Eng. Abstr.) **(Ger)**

[Light and electron microscopic studies on the dose and time dependency of the hepatotoxicity of benzopyrones] Preuss-Ueberschär C, et al. **Arzneimittelforschung** 1988 Sep;38(9):1318-26 (Eng. Abstr.) **(Ger)**

[Different circadian influences in the administration of sulfur preparations on the metabolic liver functions] Harisch G, et al. **DTW** 1988 Sep;95(8):329-31 (Eng. Abstr.) **(Ger)**

[Relationship between various antioxidant systems in hepatic cells during bromobenzene poisoning] Maellaro E, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):195-202 (Eng. Abstr.) **(Ita)**

[Effect of ethanol administration on the concentrations of glutathione and alpha-tocopherol in rat liver] Toda T, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep; 23(3):234-42 (Eng. Abstr.) **(Jpn)**

[Acute or subacute toxicity of 2,3,4,7,8-pentachlorodibenzofuran and 1,2,3,4,7,8-hexachlorodibenzofuran to rats in non-lethal dose] Nishizumi M. **Fukuoka Igaku Zasshi** 1989 May; 80(5):235-9 (Eng. Abstr.) **(Jpn)**

[Protective effects of ulinastatin on hepatic oxygen metabolism during halothane anesthesia in the presence of graded hypoxic hypoxemia] Matsumoto N, et al. **Masui** 1989 Apr;38(4):531-9 (Eng. Abstr.) **(Jpn)**

[Protective effect of phenobarbital in toxic liver damage by kerosine hydrocarbons in rats] Kamiński M, et al. **Folia Med Cracov** 1988;29(1-2):87-98 (Eng. Abstr.) **(Pol)**

[Effect of thyroxine and estradiol on the ultrastructural image of the liver] Zwirska-Korczala K, et al. **Patol Pol** 1988 Apr-Jun;39(2):114-25 (Eng. Abstr.) **(Pol)**

[The hepatotoxicity of drugs] Oancea R. **Rev Med Interna [Med Interna]** 1988 Sep-Oct; 40(5):395-406 (15 ref.) (Eng. Abstr.) **(Rum)**

[Effect of hormonal therapy of patients with dysfunctional uterine hemorrhage on the hepatobiliary system] Benediktov II, et al. **Akush Ginekol (Mosk)** 1988 Aug; (8):22-5 (Eng. Abstr.) **(Rus)**

[Accumulation in the regenerating liver of hepatocytes with pathological nuclei as affected by daunorubicin] Kharlamova SB, et al. **Antibiot Khimioter** 1988 Jul; 33(7):518-24 (Eng. Abstr.) **(Rus)**

[Pharmacological analysis of the effect of natural double-helical nucleic acids on the detoxifying function of the liver] Masycheva VI, et al. **Antibiot Khimioter** 1988 Oct;33(10):775-8 (Eng. Abstr.) **(Rus)**

[Role of the cytosolic factor in the interaction of [3H] alpha-tocopherol with rat liver nuclei] Donchenko GV, et al. **Biokhimiia** 1988 Dec;53(12):2019-24 (Eng. Abstr.) **(Rus)**

[Inhibition of proliferation of normal and neoplastic liver cells under conditions of prolonged hormonal stimulation] Krasil'nikov MA, et al. **Biokhimiia** 1989 Apr;54(4):656-61 (Eng. Abstr.) **(Rus)**

[Effect of tissue-specific proliferation inhibitors on the level of mitotic activity and cell adhesion in disordered innervation] Eletskiĭ IuK, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):239-42 (Eng. Abstr.) **(Rus)**

[Effects of beta-carotene on genotoxic lesions in the liver under formation and action of carcinogenic N-nitrosodimethylamine] Mikhailenko VM, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):481-3 (Eng. Abstr.) **(Rus)**

[Effect of inhibitors of polyamine biosynthesis and of exogenous polyamines on the mitogenic effect of epidermal growth factor in a hepatocyte culture] Osipova LA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):339-42 (Eng. Abstr.) **(Rus)**

[Changes in the peripheral blood, liver and spleen during the long-term experimental administration of modified hemoglobin] Selivanov EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):488-90 (Eng. Abstr.) **(Rus)**

[Imprinting effect of aroclor 1254 in the metabolic activation of benz[a]pyrene by rat liver tissue] Mizgirev IV, et al. **Eksp Onkol** 1989;11(1):21-4 (Eng. Abstr.) **(Rus)**

[Effect of free and immobilized terrilytin on the proliferative activity of normal hepatocytes and under physical loading and exposure to vibration] Chalyĭ GA, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):86-90 (Eng. Abstr.) **(Rus)**

[Effect of fenilin on the enzyme activity of the monooxygenase system in the rat liver during a change in the feeding] Imambaev SE. **Farmakol Toksikol** 1989 Jan-Feb;52(1):59-61 (Eng. Abstr.) **(Rus)**

[Disulfiram and butylhydroxyanisole induction of glutathione-S- and UDP glucuronosyltransferase activities in the liver and its role in preventing the toxic action of diethylnitrosamine in rats] Kalinina EV, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):89-92 (Eng. Abstr.) **(Rus)**

[Effect of the antitumor preparations prospidin and spirobromin on the function of the liver lysosomal apparatus in mice] Kliment'eva TK, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):71-4 (Eng. Abstr.) **(Rus)**

[Liver function and lipid peroxidation in indomethacin-induced damage] Klimniuk EV. **Farmakol Toksikol** 1989 Mar-Apr;52(2):81-2 (Eng. Abstr.) **(Rus)**

[The immunotropic activity of GABA during cytochrome P-450 induction in the liver] Kovalev IE, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):53-5 (Eng. Abstr.) **(Rus)**

[Effect of anti-angina agents on the intensity of lipid peroxidation in the myocardium and liver of rats under hyperbaric oxygenation] Nikolaĭ SL. **Farmakol Toksikol** 1988 Sep-Oct;51(5):65-8 (Eng. Abstr.) **(Rus)**

[Pathogenetic mechanisms of liver damage by the anthelmintic preparation chloxyl] Vinogradova LF, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):62-6 (Eng. Abstr.) **(Rus)**

[Change in the cooperation of T- and B-lymphocytes during the immune response of ram erythrocytes in the presence of liver injury by carbon tetrachloride] Bryzgina TM. **Fiziol Zh** 1989 Jan-Feb;35(1):25-30 (Eng. Abstr.) **(Rus)**

[Effect of splenin on liver function in alloxan diabetes in rats] Shevchenko AV, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):104-8 (Eng. Abstr.) **(Rus)**

[Morphobiochemical studies of the effect of inhalation of gasoline] Dolinskaia SI, et al. **Gig Sanit** 1989 Feb;(2):75-7 **(Rus)**

[Study of characteristics of the transplacental effects of formaldehyde and dicyclohexyl-18-crown-6 based on morphologic and biochemical indicators] Lamentova TG, et al. **Gig Sanit** 1989 Mar;(3):89-90 **(Rus)**

[Experimental study of the biological effect of salts of hydrofluosilicic acid] Rumiantsev GI, et al. **Gig Sanit** 1988 Nov;(11):80-2 **(Rus)**

[Effect of aroclor 1254 on morphochemical parameters of various organs in experimental studies] Seffner V, et al. **Gig Sanit** 1989 Mar;(3):71-4 **(Rus)**

[Effectiveness of hepatoprotective agents in experimental allyl alcohol poisoning] Vengerovskiĭ AI, et al. **Gig Tr Prof Zabol** 1989;(5):46-7 **(Rus)**

[Tissue specificity of the regulation of proliferative processes by brain and liver extracts] Vitvitskiĭ VN. **Izv Akad Nauk SSSR [Biol]** 1988 Sep-Oct;(5):694-700 (Eng. Abstr.) **(Rus)**

[Expression of oncogenes in the rat liver under conditions of template biosynthesis uncoupling by sublethal doses of cycloheximide] Filippova GN, et al. **Mol Biol (Mosk)** 1989 May-Jun;23(3):843-50 (Eng. Abstr.) **(Rus)**

[Lipid metabolism and liver function in D-galactosamine poisoning in rats] Vengerovskiĭ AI, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):52-5 (Eng. Abstr.) (Rus)

[Effect of the synthetic leu-enkephalin analog dalargin on liver metabolism and blood supply in acute blood loss in rats] Zoloev GK, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):48-52 (Eng. Abstr.) (Rus)

[Use of variants of the ligand metabolism method for determining the estrogen receptor content in subfractions of liver cells after the administration of various doses of estradiol] Ignatenko LL, et al. **Probl Endokrinol (Mosk)** 1988 Jul-Aug;34(4):76-81 (Eng. Abstr.) (Rus)

[The hepatotoxic action of pyrazinamide and its effect on lipid peroxidation] Slivka IuI. **Probl Tuberk** 1988;(10):47-50 (Eng. Abstr.) (Rus)

[Hepatotoxic effect of a combination of pyrazinamide with isoniazid and rifampicin] Slivka IuI, et al. **Probl Tuberk** 1989;(4):39-42 (Eng. Abstr.) (Rus)

[Drug prophylaxis of liver lesions induced by isoniazid and its metabolites] Sokolova GB, et al. **Probl Tuberk** 1989; (5):36-40 (Eng. Abstr.) (Rus)

[Effect of cryoprecipitate on the phagocytic activity of liver cells in peritonitis] Zhadkevich MM, et al. **Sov Med** 1988; (12):3-6 (Eng. Abstr.) (Rus)

[A decrease in the level of unscheduled DNA synthesis in preparations of irradiated rat hepatocyte nuclei under the effect of polyamines] Bezlepkin VG, et al. **Tsitologiia** 1989 Apr;31(4):469-75 (Eng. Abstr.) (Rus)

[Highly permeable contacts and electrical characteristics of the tissue of the normal liver and hepatomas. III. Absence of an effect of the tumor promoter phenobarbital on intercellular contacts in the mouse liver] Sharovskaia IuIu, et al. **Tsitologiia** 1988 Jun;30(6):678-84 (Eng. Abstr.) (Rus)

[The harmful action of ethanol on the liver: the role of alcohol dehydrogenase and aldehyde dehydrogenase] Usatenko MS, et al. **Tsitologiia** 1989 May;31(5):604-7 (Eng. Abstr.) (Rus)

[Change in the dry weight of hepatocytes during chronic intoxication of rats with CCl4] Zavadskaia EE, et al. **Tsitologiia** 1989 Apr;31(4):419-25 (Eng. Abstr.) (Rus)

[Ethanol stimulates the RNA-polymerase activity of rat liver cell nuclei] Bozhko GKh, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):48-52 (Eng. Abstr.) (Rus)

[Changes in lipid peroxidation in the liver tissue and blood serum of rats with chronic toxic hepatitis under the influence of naftusia mineral water] Pukavskiĭ KV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul-Aug;(4):57-9 (Eng. Abstr.) (Rus)

[Liver-protective properties of lipids in sludge] Vengerovskiĭ AI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep-Oct;(5):46-8 (Rus)

[Effect of various combinations of antibacterial drugs on enzyme activity in guinea pig tissues] Kruchakova FA, et al. **Vopr Med Khim** 1971 Jul-Aug;17(4):356-60 (Eng. Abstr.) (Rus)

[Separate and combined action of antibiotics and vitamins on monoamine oxidase activity of the rabbit liver in staphylococcal infection] Tsyganenko AIa. **Vopr Med Khim** 1971 Jul-Aug;17(4):364-9 (Eng. Abstr.) (Rus)

[The effect of hepatotoxins on the activity of organelle-specific enzymes and metabolism of liver lipids] Vengerovskiĭ AI, et al. **Vopr Med Khim** 1989 May-Jun; 35(3):87-91 (Eng. Abstr.) (Rus)

[Effect of aflatoxin B1 on DNA enzymatic methylation and secondary structures of the rat liver] Aslanian VM, et al. **Vopr Onkol** 1989;35(1):48-52 (Eng. Abstr.) (Rus)

[Comparative evaluation of the hepatoprotective, antioxidant and cholagogic activities of flavonoid preparations] Skakun NP, et al. **Vrach Delo** 1988 Dec;(12):52-4 (Eng. Abstr.) (Rus)

[Effect of fenicaberan on liver function in patients with chronic noncalculous cholecystitis] Skroban NV. **Vrach Delo** 1989 Jun;(6):18-20 (Eng. Abstr.) (Rus)

[Immunomorphologic changes in the liver under the influence of low tetracycline doses] Zhil'skaia ZhIa, et al. **Vrach Delo** 1988 Oct;(10):70-2 (Eng. Abstr.) (Rus)

[The effect of chlorinated aromatic compounds on isolated hepatocytes] Popović M, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):215-22 (Eng. Abstr.) (Scr)

[Glafenine hepatotoxicity (letter)] López Navidad A, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):475 (Spa)

[Effects of pyrazinamide on the liver in patients with tuberculosis. An ultrastructural study] Pilheu JA, et al. **Medicina (B Aires)** 1985;45(1):15-9 (Eng. Abstr.) (Spa)

[Histological function of the liver after corticoid administration] Amado Fernández-Pola J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):305-11 (Eng. Abstr.) (Spa)

[Risk of liver reactions after treatment with flucloxacillin] **Lakartidningen** 1989 Mar 15;86(11):977-8 (Swe)

EMBRYOLOGY

Fetal liver length in normal and isoimmunized pregnancies. Roberts AB, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):42-6

Induction of hepatic glycogenesis in the fetal rat. Gruppuso PA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E49-54

Long-term complete chimerism and stable hematopoiesis in beagles after fetal liver hematopoietic stem cell transplantation. Cain GR, et al. **Am J Vet Res** 1989 Aug; 50(8):1282-4

Localization of fibronectin in megakaryocytes of fetal liver. Bockman DE, et al. **Anat Rec** 1989 Jan;223(1):90-4

Isolation of a new human fetal liver cytochrome P450 cDNA clone: evidence for expression of a limited number of forms of cytochrome P450 in human fetal livers. Komori M, et al. **Arch Biochem Biophys** 1989 Jul;272(1):219-25

Isolation and characterization of human fetal liver cytochrome P450HLp2: a third member of the P450III gene family. Wrighton SA, et al. **Arch Biochem Biophys** 1989 Jan;268(1):144-51

Carcinoembryonic antigen gene family: molecular cloning of cDNA for a PS beta G/FL-NCA glycoprotein with a novel domain arrangement. Khan WN, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):525-35

Monoclonal antibody directed detection of cytochrome P-450 (PCN) in human fetal liver. Ladona MG, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4735-41

Effects of fetal hypoinsulinemia on fetal hepatic insulin binding in the rat. Gruppuso PA. **Biochim Biophys Acta** 1989 Feb 9;1010(2):270-3

Inhibitory effect of dibutyryl cyclic adenosine monophosphate on the induction of alkaline phosphatase in human fetal liver cell line. Sorimachi K, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):72-7

Glycogen metabolism in late gestation in fetuses of maternal diabetic rata. Margolis RN, et al. **Biol Neonate** 1988; 54(3):133-43

Sequential development of enzymes of gluconeogenesis and glucose synthesis in fetal goat liver. Dhanotiya RS, et al. **Biomed Biochim Acta** 1988;47(8):805-8

Developmental regulation of erythropoiesis by hematopoietic growth factors: analysis on populations of BFU-E from bone marrow, peripheral blood, and fetal liver. Emerson SG, et al. **Blood** 1989 Jul;74(1):49-55

Relationship between in utero development of the mouse liver and tumor development following transplacental exposure to ethylnitrosoures. Branstetter DG, et al. **Cancer Res** 1989 Jul 1;49(13):3620-6

Immunocytochemical characterization of lymphocyte development in human embryonic and fetal livers. Abe J. **Clin Immunol Immunopathol** 1989 Apr;51(1):13-21

Carnitine concentration during the development of human tissues. Nakano C, et al. **Early Hum Dev** 1989 Apr; 19(1):21-7

Nutritional regulation of the placental lactogen receptor in fetal liver: implications for fetal metabolism and growth. Freemark M, et al. **Endocrinology** 1989 Sep;125(3):1504-12

The cell-surface expression of the cell adhesion molecule cellCAM 105 in rat fetal tissues and regenerating liver. Odin P, et al. **Exp Cell Res** 1988 Nov;179(1):89-103

Fatty acid composition of liver lipids during ontogeny of the chick embryo: effect of a single dose of triiodothyronine. Gomez-Munoz A, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):323-7

Induction of hemopoietic chimerism in the caprine fetus by intraperitoneal injection of fetal liver cells. Pearce RD, et al. **Experientia** 1989 Mar 15;45(3):307-8

Fructose-1,6-bisphosphatase: Part III—Characterization of the enzyme from developing human fetal liver. Biswas T, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):350-4

Porphyrinostatic effect of isonicotinic acid hydrazide on porphyric chick embryo and yeast. Kotal P, et al. **Int J Biochem** 1988;20(11):1281-3

Globin gene expression in erythroid human fetal liver cells. Ley TJ, et al. **J Clin Invest** 1989 Mar;83(3):1032-8

Strain variation in the frequency of Abelson murine leukemia virus-transformed fetal liver pre-B cells bearing complete immunoglobulin heavy chain rearrangements. Osman GE, et al. **J Exp Med** 1988 Dec 1;168(6):2023-30

Ultrasonographic measurement of prenatal fetal liver. Murao F, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1550-4

Effects of beta-2 agonist on hepatic glycogen metabolism in the fetal lamb. Warburton D, et al. **Pediatr Res** 1988 Sep;24(3):330-2

Molecular cloning and expression of cDNA for a carcinoembryonic antigen-related fetal liver glycoprotein. Khan WN, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3332-6

Embryological development of peripheral benzodiazepine binding sites in the chick liver. Peterson CL, et al. **Proc West Pharmacol Soc** 1988;31:263-4

Human fetal liver cells as seen by scanning electron microscopy. Makabe S, et al. **Prog Clin Biol Res** 1989; 295:277-80

Functional anatomy of the liver of the human fetus: applications to ultrasonography. Champetier J, et al. **Surg Radiol Anat** 1989;11(1):53-62 (39 ref.)

[Ontogeny of the mouse liver studied with hepatocyte membrane antigens and a comparison with alpha-fetoprotein synthesis] Shipova LIa, et al. **Ontogenez** 1988 May-Jun;19(3):264-9 (Eng. Abstr.) (Rus)

[Intrauterine growth retardation in rats. I. Energy metabolism during the development of the fetal liver] Araya J, et al. **Rev Med Chil** 1987 Dec;115(12):1125-9 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Arylsulfatase A from human tissues contains an endo-beta-N-acetylglucosaminidase F-resistant oligosaccharide. Laidler PM, et al. **Acta Biochim Pol** 1988; 35(4):343-56

Endogenous phosphatase activity in tumor cells in a liver aspirate. A potential problem for immunocytodiagnosis using immunoalkaline phosphatase methods. Yam LT. **Acta Cytol** 1989 Jul-Aug;33(4):505-10

3,3',5'-Triiodothyronine inhibits ontogenetic development of iodothyronine-5'-deiodinase in the liver of the neonatal mouse. Han DC, et al. **Acta Endocrinol (Copenh)** 1988 Oct; 119(2):181-8

Lesions and repair of cells of maternal mice after valproic acid (VPA) treatment on day 8 of pregnancy: an enzyme histochemical analysis. Gossrau R, et al. **Acta Histochem (Jena)** 1989;86(1):23-32

Enzyme histochemical investigation of ITO's cells in semithin sections of human liver biopsy specimens. Körner T, et al. **Acta Histochem (Jena)** 1989;85(1):73-7

Gamma-glutamyltransferase induction by glucocorticoids in rat liver: age-dependence, time-dependence, dose-dependence, and intralobular distribution. Tongiani R, et al. **Acta Histochem (Jena)** 1989;86(1):51-61

Reduction of 3-mercaptopyruvate in rat liver is catalyzed by lactate dehydrogenase. Ohta J, et al. **Acta Med Okayama** 1989 Apr;43(2):89-95

Purification of human liver phenylalanine hydroxylase with a monoclonal antibody to it and characterization of the enzyme. Minato S. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):569-70

Studies on the nature of superoxide dismutase activity in sheep liver subcellular fractions. Konstantinova SG, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):71-7

Carbonic anhydrase localization to perivenous hepatocytes. Carter N, et al. **Acta Physiol Scand** 1989 Feb;135(2):163-7

Cytosolic purine 5'-nucleotidases of rat liver and human red blood cells: regulatory properties and role in AMP dephosphorylation. Van den Berghe G, et al. **Adv Enzyme Regul** 1988;27:297-311

Physico-chemical and immunological properties of bovine liver 5'-deoxy-5'-methylthioadenosine phosphorylase. Della Ragione F, et al. **Adv Exp Med Biol** 1988;250:187-97 (20 ref.)

Characterization of different forms of dipeptidyl peptidase IV from rat liver and hepatoma by monoclonal antibodies. Hartel S, et al. **Adv Exp Med Biol** 1988;240:207-14

The activation of pyruvate dehydrogenase by glucagon in hepatocytes is diminished by phorbol myristate acetate: a role for cytoplasmic calcium in dehydrogenase regulation. Staddon JM, et al. **Adv Exp Med Biol** 1988;232:245-7

Properties of leukotriene A4-hydrolase from guinea pig liver. Haeggström JT, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:94-7

Hepatic lysosomal cathepsin activities after acute ethanol administration. Donohue TM Jr, et al. **Alcohol Alcohol** 1988;23(4):265-70

Hepatic lipid peroxidation and aldehyde dehydrogenase activity in alcoholic and non alcoholic liver disease. Mazzanti R, et al. **Alcohol Alcohol** 1989;24(2):121-8

Mechanism and regulation of ethanol elimination in humans: intermolecular hydrogen transfer and oxidoreduction in vivo. Cronholm T, et al. **Alcoholism (NY)** 1988 Oct; 12(5):683-6

Degradation of aliphatic alcohols by human liver alcohol dehydrogenase: effect of ethanol and pharmacokinetic implications. Ehrig T, et al. **Alcoholism (NY)** 1988 Dec; 12(6):789-94

Maintenance of alcohol dehydrogenase activity in long-term culture of hepatocytes from female rat. Grunnet N, et al. **Alcoholism (NY)** 1989 Feb;13(1):25-8

Purification and characterization of beef and pig liver aldehyde dehydrogenases. Guan KL, et al. **Alcoholism (NY)** 1988 Oct;12(5):713-9

The HELLP syndrome: a serious complication of pregnancy with hemolysis, elevated levels of liver enzymes, and low platelet count. Baca L, et al. **Am J Med** 1988 Oct; 85(4):590-1

Regulation of glycogen synthesis in the liver. Nuttall FQ, et al. **Am J Med** 1988 Nov 28;85(5A):77-85 (68 ref.)

Elevated liver enzymes and thrombocytopenia in the third trimester of pregnancy: an unusual case report and a review of the literature. Hannah ME, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):322-3 (2 ref.)

Reduction of 7-ketolithocholic acid by human liver enzyme preparations in vitro. Amuro Y, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G67-71

Reciprocal changes of muscle oxidases and liver enzymes with recovery from iron deficiency. Azevedo JL Jr, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E401-5

Acetyl-CoA hydrolase: relation between activity and cholesterol metabolism in rat. Ebisuno S, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R724-30

Phosphorylase synthesis in diabetic hepatocytes and cardiomyocytes. Rulfs J, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E74-80

Biosynthetic capacity of hummingbird liver. Suarez RK, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R699-702

Effect of sepsis on activity of pyruvate dehydrogenase complex in skeletal muscle and liver [letter] Vary TC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E445

Spectrophotometric method for differentiation of cardiac and hepatic lactate dehydrogenase activities in dogs.

Aguilera-Tejero E, et al. **Am J Vet Res** 1989 Jul; 50(7):1128–30

An enzyme immunoassay for the quantitation of rat liver carbamoyl-phosphate synthetase I. Cerda M, et al. **Anal Biochem** 1988 Nov 1;174(2):687–92

Transblot identification of biotin-containing proteins in rat liver. Haneji T, et al. **Anal Biochem** 1989 Feb 15; 177(1):57–61

Determination of serum kynurenine and hepatic tryptophan dioxygenase activity by high-performance liquid chromatography. Holmes EW. **Anal Biochem** 1988 Aug 1;172(2):518–25

An assay for dihydroorotase using high-performance liquid chromatography with radioactivity detection. Mehdi S, et al. **Anal Biochem** 1989 Jan;176(1):105–8

A human liver alcohol dehydrogenase enzyme-linked immunosorbent assay method specific for class I, II, and III isozymes. Montavon P, et al. **Anal Biochem** 1989 Jan; 176(1):48–56

An improved assay for hepatic glycogen synthase in liver extracts with emphasis on synthase R. Nuttall FQ, et al. **Anal Biochem** 1989 May 1;178(2):311–9

Analysis of liver aldehyde dehydrogenase isoenzymes using high-performance (pressure) liquid chromatography. Sanny CG, et al. **Anal Biochem** 1988 Jul;172(1):51–5

Furosemide and increases in liver enzymes [letter] Lang I, et al. **Ann Intern Med** 1988 Nov 15;109(10):845

Is liver biopsy useful in the evaluation of patients with chronically elevated liver enzymes? Van Ness MM, et al. **Ann Intern Med** 1989 Sep 15;111(6):473–8

Suppression of the hepatic glucose-6-phosphatase system in diabetic rats by vanadate. Schulz LO. **Ann Nutr Metab** 1988;32(5–6):289–96

Structural studies on the carbohydrate moieties of human liver alpha-L-fucosidase. Argade SP, et al. **Arch Biochem Biophys** 1988 Oct;266(1):227–47

Rat liver chitobiase: purification, properties, and role in the lysosomal degradation of Asn-linked glycoproteins. Aronson NN Jr, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):290–300

Purification and characterization of thymidylate synthetase in the liver of the mouse bearing Ehrlich ascites tumor. Asanagi M, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):749–57

Identification of histidyl peptide labeled by 2-(4-bromo-2,3-dioxobutylthio)adenosine 5'-monophosphate in an ADP regulatory site of glutamate dehydrogenase. Batra SP, et al. **Arch Biochem Biophys** 1989 Apr;270(1):277–85

Purification, immunoassay, and tissue distribution of rat C1-tetrahydrofolate synthase. Cheek WD, et al. **Arch Biochem Biophys** 1989 May 1;270(2):504–12

In vitro stimulation of rat liver retinyl ester hydrolase by ethanol. Friedman H, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):69–74

Hemipalmitoylcarnitinium, a strong competitive inhibitor of purified hepatic carnitine palmitoyltransferase. Gandour RD, et al. **Arch Biochem Biophys** 1988 Dec;267(2):515–20

Effects of ethanol feeding on the activity and regulation of hepatic carnitine palmitoyltransferase I. Guzmán M, et al. **Arch Biochem Biophys** 1988 Dec;267(2):580–8

Catabolism of epoxy fatty esters by the purified epoxide hydrolase from mouse and human liver. Halarnkar PP, et al. **Arch Biochem Biophys** 1989 Jul;272(1):226–36

Effect of nitrous oxide inactivation of vitamin B12-dependent methionine synthetase on the subcellular distribution of folate coenzymes in rat liver. Horne DW, et al. **Arch Biochem Biophys** 1989 May 1;270(2):729–33

Multiple forms of biliverdin reductase: modification of the pattern of expression in rat liver by bromobenzene. Huang TJ, et al. **Arch Biochem Biophys** 1989 May 1;270(2):513–20

Complete amino acid sequence of chicken liver acyl carrier protein derived from the fatty acid synthase. Huang WY, et al. **Arch Biochem Biophys** 1989 Apr;270(1):92–8

Stereoselective ligand interactions of chicken liver phosphoenolpyruvate carboxykinase with fluorophosphoenolpyruvate. Hwang SH, et al. **Arch Biochem Biophys** 1989 Mar;269(2):646–63

Purification of prosthetically intact sulfite oxidase from chicken liver using a modified procedure. Kipke CA, et al. **Arch Biochem Biophys** 1989 Apr;270(1):383–90

Mouse liver P450Coh: genetic regulation of the pyrazole-inducible enzyme and comparison with other P450 isoenzymes. Lang MA, et al. **Arch Biochem Biophys** 1989 May 15;271(1):139–48

Abundance of mRNAs encoding urea cycle enzymes in fetal and neonatal mouse liver. Morris SM Jr, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):175–80

Evidence that aspartic proteinase is involved in the proteolytic processing event of procathepsin L in lysosomes. Nishimura Y, et al. **Arch Biochem Biophys** 1989 Jun;271(2):400–6

Purification and crystallization of rat liver NAD(P)H:(quinone-acceptor) oxidoreductase by cibacron blue affinity chromatography: identification of a new and potent inhibitor. Prochaska HJ. **Arch Biochem Biophys** 1988 Dec;267(2):529–38

A rat liver lysosomal membrane flavin-adenine dinucleotide phosphohydrolase: purification and characterization. Shin HJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):95–103

Quantitation of mRNAs specific for the mixed-function oxidase system in rat liver and extrahepatic tissues during development. Simmons DL, et al. **Arch Biochem Biophys** 1989 May 15;271(1):10–20

Dihydroxyacetone phosphate acyltransferase and alkyldihydroxyacetone phosphate synthase activities in rat liver subcellular fractions and human skin fibroblasts. Singh H, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):676–86

A rapid purification method for rat liver pyruvate carboxylase and amino acid sequence analyses of NH2-terminal and biotin peptide. Thampy KG, et al. **Arch Biochem Biophys** 1988 Oct;266(1):270–6

Effects of ethanol feeding on hepatic lipid synthesis. Tijburg LB, et al. **Arch Biochem Biophys** 1988 Dec;267(2):568–79

Expression of a cDNA encoding a rat liver glutathione S-transferase Ya subunit in Escherichia coli. Wang RW, et al. **Arch Biochem Biophys** 1989 Mar;269(2):536–43

Cytochrome P450 in livers of diabetic rats: regulation by growth hormone and insulin. Yamazoe Y, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):567–75

Suppression of male-specific cytochrome P450 2c and its mRNA by 3,4,5,3',4',5'-hexachlorobiphenyl in rat liver is not causally related to changes in serum testosterone. Yeowell HN, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):508–14

Rat liver ATP-sulfurylase: purification, kinetic characterization, and interaction with arsenate, selenate, phosphate, and other inorganic oxyanions. Yu M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):156–74

Effect of aflatoxin B1 on alkaline phosphatase and lactic dehydrogenase levels in liver and serum of broiler chicks. Amer HA, et al. **Arch Exp Veterinarmed** 1988 Jul; 42(4):595–602

Properties of purified liver glutamate dehydrogenase of aging rats. Prabhakaram M, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):297–309

In vivo and in vitro release of lipoprotein lipase and hepatic lipase by low molecular weight heparins. Meraihi Z, et al. **Arch Int Pharmacodyn Ther** 1989 Jan-Feb;297:286–93

Pharmacokinetics and biological activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin. 1. Dose-dependent tissue distribution and induction of hepatic ethoxyresorufin O-deethylase in rats following a single injection. Abraham K, et al. **Arch Toxicol** 1988;62(5):359–68

Profile of drug metabolizing enzymes in the nuclear and microsomal fractions from rat liver nodules and normal liver. Pacifici GM, et al. **Arch Toxicol** 1988;62(5):336–40

Distribution and induction of cytochrome P-450 and two cytochrome P-450-dependent monooxygenase activities in rat liver parenchymal cell subpopulations separated by centrifugal elutriation. Seibert B, et al. **Arch Toxicol** 1989; 63(1):18–22

Depletion of cytochrome P-450 and alterations in activities of drug metabolizing enzymes by S-(1,2-dichlorovinyl)-L-cysteine in mouse kidney cortex. Cojocel C, et al. **Arch Toxicol Suppl** 1989;13:417–21

Effect of toxogonin on the rat liver drug metabolizing enzyme systems. Dishovski C, et al. **Arch Toxicol Suppl** 1989;13:294–6

Liver damage after coal-tar treatment does not prevent induction of glutathione S-transferases in rat liver. Evelo CT, et al. **Arch Toxicol Suppl** 1989;13:112–6

Characterization of microsomal and cytoplasmic metyrapone reducing enzymes from mouse liver. Maser E. **Arch Toxicol Suppl** 1989;13:271–4

Different effects of intraperitoneally and orally administered palladium chloride on the hepatic monooxygenase system of male mice. Phielepeit T, et al. **Arch Toxicol Suppl** 1989; 13:357–62

Study of glutathione and glutathione related enzymes in acetaminophen-poisoned mice. Prevention by anethole trithione pretreatment. Warnet JM, et al. **Arch Toxicol Suppl** 1989;13:322–5

Protective effect of zinc against hepatotoxic agents in the rat liver slice system: role of metallothionein. Wormser U, et al. **Arch Toxicol Suppl** 1989;13:316–8

Large buoyant LDL-like particles in hepatic lipase deficiency. Auwerx JH, et al. **Arteriosclerosis** 1989 May-Jun;9(3):319–25

Role of hepatic-triglyceride lipase activity in the association between intra-abdominal fat and plasma HDL cholesterol in obese women. Després JP, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):485–92

Metabolic fate of the new anti-ulcer drug enprostil in animals. 4th communication: effect on hepatic drug metabolizing enzyme system in rats. Yamada Y, et al. **Arzneimittelforschung** 1989 Mar;39(3):356–60

Effect of lipoprotein lipase and hepatic triglyceride lipase activity on the distribution of apolipoprotein E among the plasma lipoproteins. Gibson JC, et al. **Atherosclerosis** 1988 Sep;73(1):45–55

Pre-eclampsia and the HELLP syndrome. Liaw ST. **Aust Fam Physician** 1989 May;18(5):485, 487, 490

Modulation of the activity of hepatic gamma-glutamyl transpeptidase, adenosine triphosphatase, placental glutathione S-transferase and adenylate cyclase by acute administration of lead nitrate. Columbano A, et al. **Basic Appl Histochem** 1988;32(4):501–10

Microsomal fatty acid composition and Ca2+ uptake modifications induced by SOD depletion in rat liver. Bartoli GM, et al. **Basic Life Sci** 1988;49:717–20

Potential of methylene blue to block oxygen radical generation in reperfusion injury. Kelner MJ, et al. **Basic Life Sci** 1988;49:895–8

Oxidative modification of enzymes during aging and acute oxidative stress. Starke-Reed PE, et al. **Basic Life Sci** 1988; 49:537–40

The nucleotide sequence of a full length cDNA clone encoding rat liver urate oxidase. Alvares K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):991–5

Nitrous oxide exposure reduces hepatic C1-tetrahydrofolate synthase expression in rats. Barlowe CK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):245–9

Regio- and stereoselective regulation of monooxygenase activities by isoenzyme-selective phosphorylation of cytochrome P450. Bartlomowicz B, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):46–52

Nucleotide sequence of rat liver iodothyronine 5'-monodeiodinase (5' MD): its identity with the protein disulfide isomerase. Boado RJ, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1297–304

Studies on the biogenesis of the mammalian ATP synthase complex: isolation and characterization of a full-length cDNA encoding the rat F1-beta-subunit. Boulet D, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1184–90

Evidence that the enoyl-CoA hydratase bifunctional protein of mouse liver peroxisomes is identical with the 70,000 dalton peroxisomal membrane protein. Crane DI, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):503–8

Detection of an ATPase activity in rat liver peroxisomes. del Valle R, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1353–9

The increase in hepatic tyrosine aminotransferase activity by ethanol administration involves an acceleration of enzyme synthesis. Donohue TM Jr, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1471–7

Regulation of the stability of chicken embryo liver delta-aminolevulinate synthase mRNA by hemin. Drew PD, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):102–7

Precocious induction of malic enzyme by nutritional and hormonal factors in rat foetal hepatocyte primary cultures. Fabregat I, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1028–34

The inhibition of cytoplasmic acetoacetyl-CoA thiolase by a triyne carbonate (L-660, 631). Greenspan MD, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):548–53

Isolation of the mRNA encoding rat liver catechol-O-methyltransferase. Grossman MH, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):776–82

Ionic strength-dependent interaction of rat liver casein kinase I with plasma membrane. Hashimoto E, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):633–7

Non-C-G recognition sequences of DNA cytosine-5-methyltransferase from rat liver. Hubrich-Kühner K, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1175–82

Centrilobular expression of ethanol-inducible cytochrome P-450 (IIE1) in rat liver. Ingelman-Sundberg M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):55–60

Four species of cDNAs for cytochrome P450 isozymes immunorelated to P450C-M/F encode for members of P450IID subfamily, increasing the number of members within the subfamily. Ishida N, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):681–8

Molecular cloning of a cDNA for rat liver monoamine oxidase B. Ito A, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):970–6

Rabbit liver alcohol dehydrogenase: isolation and characterization of class I isozymes. Keung WM, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):445–53

Sequence of the 5'-flanking region of the rat 6-phosphofructo-2-kinase/fructose 2,6-bisphosphatase gene: regulation by glucocorticoids. Lange AJ, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):753–60

GTP hydrolysis by guinea pig liver transglutaminase. Lee KN, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1370–5

The site of substrate and fructose 2,6-bisphosphate binding to rabbit liver fructose-1,6-bisphosphatase. Liu F, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):689–95

Rat liver carboxylesterase: cDNA cloning, sequencing, and evidence for a multigene family. Long RM, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):866–73

Inhibitory action of isovaleryl-L-carnitine on proteolysis in perfused rat liver. Miotto G, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):797–802

Ubiquitous formation of catalase compound II in hemoglobin-free perfused rat liver and detection of novel spectral species. Orii Y, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1272–8

An insulin mediator preparation serves to stimulate the cyclic GMP activated cyclic AMP phosphodiesterase rather than other purified insulin-activated cyclic AMP phosphodiesterases [published erratum appears in Biochem Biophys Res Commun 1989 Feb 15;158(3):1072] Pyne NJ, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):290–6

Age-related changes in the expression of cytochrome P-450 (b+e) gene in the rat after phenobarbitone administration. Rath PC, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1403–9

Role of calcium in the phenylephrine-induced activation of phosphorylase "A" in isolated liver cells. Saz JM, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):480–5

Purification by cibacron blue F3GA dye affinity

chromatography and comparison of NAD(P)H:quinone reductase (E.C.1.6.99.2) from rat liver cytosol and microsomes. Sharkis DH, et al.
Biochem Biophys Res Commun 1989 Jun 15;161(2):434–41

The 3-hydroxyacyl-CoA epimerase activity of rat liver peroxisomes is due to the combined actions of two enoyl-CoA hydratases: a revision of the epimerase-dependent pathway of unsaturated fatty acid oxidation. Smeland TE, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):988–92

Half-life of proteasomes (multiprotease complexes) in rat liver. Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1309–15

Autodegradation of rat liver proteasomes (large multicatalytic proteinase complexes). Tanaka K, et al.
Biochem Biophys Res Commun 1989 Jan 31;158(2):548–54

Isozymes of fructose 6-phosphate,2-kinase:fructose-2,6-bisphosphatase in rat and bovine heart, liver, and skeletal muscle. Taniyama M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):949–54

Induction of gamma-glutamyl transpeptidase activity by all-trans retinoic acid in cultured rat liver epithelial cells. Tsao MS, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1039–45

Thyroid hormone suppression of hepatic levels of phenobarbital-inducible P-450b and P-450e and other neonatal P-450s in hypophysectomized rats. Yamazoe Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):609–14

Rat alkaline phosphatase: the identification of a new allele. Finley SL. **Biochem Genet** 1988 Jun;26(5–6):361–5

Effects of deletions in mouse chromosome 7 on expression of genes encoding the urea-cycle enzymes and phosphoenolpyruvate carboxykinase (GTP) in liver, kidney, and intestine. Morris SM Jr, et al.
Biochem Genet 1988 Dec;26(11–12):769–81

Identification of the trans-stilbene oxide-active glutathione transferase in human mononuclear leukocytes and in liver as GST1. Seidegård J, et al. **Biochem Genet** 1989 Apr; 27(3–4):253–61

Genetic control of ganglioside biosynthesis in mice. Sokoloff D, et al. **Biochem Genet** 1988 Oct;26(9–10):631–44

Inhibitory effects of psoralens on rat liver cyclic AMP phosphodiesterase. Bovalini L, et al. **Biochem Int** 1988 Jun; 16(6):991–8

Enzymatic characterization of UDP-galactose:FdSdG galactosyltransferase in purified liver plasma membrane. Fernandez-Briera A, et al. **Biochem Int** 1989 Feb; 18(2):415–28

Novel immunochemical characteristics of glutathione S-transferase isozymes of rat liver cytosol. Fukai F, et al.
Biochem Int 1988 Nov;17(5):945–51

Effect of vitamin A deficiency on hepatic and intestinal drug metabolizing enzymes in rats. Gupta PH, et al.
Biochem Int 1989 Jul;19(1):123–33

Inhibition of liver lysosomal acid phospholipase A1 by blood serum proteins. Löffler BM, et al. **Biochem Int** 1988 Nov; 17(5):965–71

An improved purification procedure for rat liver lysosomal phospholipase A1. Löffler BM, et al. **Biochem Int** 1989 Jan;18(1):129–39

Influence of cold exposure on liver amino acid metabolism enzymes of the rat. López-Soriano FJ, et al.
Biochem Int 1988 Jun;16(6):1075–81

Purification of 6-phosphogluconolactonase from bass (Dicentrarchus labrax L.)liver. Medina-Puerta MM, et al.
Biochem Int 1988 Dec;17(6):1011–9

Bass liver 6-phosphogluconate dehydrogenase: inhibition by nucleoside phosphates and by fructose 1,6 bisphosphate. Medina Puerta MM, et al. **Biochem Int** 1988 Sep; 17(3):479–87

NADP-dependent isocitrate dehydrogenase from bass (Dicentrarchus labrax L.) liver. Medina-Puerta MM, et al.
Biochem Int 1988 Sep;17(3):489–98

Isolation and characterization of chicken liver lysosomes. Nakabayashi T, et al. **Biochem Int** 1988 Jun;16(6):1119–25

Age-related differential induction of tryptophan pyrrolase by hydrocortisone in the liver of male rats. Patnaik SK, et al. **Biochem Int** 1989 Jun;18(6):1221–8

Interaction of caffeine and of theophylline with liver glutamate dehydrogenase. Prabhakaram M, et al.
Biochem Int 1989 Jan;18(1):217–25

Effect of patulin on some enzymes of carbohydrate metabolism studied in rats. Sakthisekaran D, et al.
Biochem Int 1989 Jul;19(1):37–51

Effect of cellular Ca2+ loading on alpha 1-agonist or protein kinase C activators-mediated stimulation of phosphorylase "a" in liver cells. Saz JM, et al. **Biochem Int** 1989 Jul; 19(1):107–13

Polarized electric field effects on the regulation of succinate dehydrogenase activity in amphibian muscle and liver: kinetic study. Subrahamanyam K, et al. **Biochem Int** 1989 Apr;18(4):851–63

Functional heterogeneity of rat hepatocytes: predominance of aryl hydrocarbon hydroxylase activity in perivenular zone. Tazawa J, et al. **Biochem Int** 1988 Jun;16(6):1127–35

Partial purification and properties of the isozymes of S-adenosylmethionine synthetase from sheep liver. Xue GP, et al. **Biochem Int** 1989 Mar;18(3):525–35

Substrate specificity of rat liver glutathione S-transferase isoenzymes for a series of glutathione analogues, modified at the gamma-glutamyl moiety. Adang AE, et al.
Biochem J 1988 Oct 15;255(2):721–4

Cytosolic glutathione transferases from rat liver. Primary structure of class alpha glutathione transferase 8–8 and characterization of low-abundance class Mu glutathione transferases. Alin P, et al. **Biochem J** 1989 Jul 15; 261(2):531–9

Inhibition of type I and type II iodothyronine deiodinase activity in rat liver, kidney and brain produced by selenium deficiency. Beckett GJ, et al. **Biochem J** 1989 May 1; 259(3):887–92

The calcium ionophore A23187 is a potent stimulator of the vitamin D3-25 hydroxylase in hepatocytes isolated from normocalcaemic vitamin D-depleted rats. Benbrahim N, et al. **Biochem J** 1988 Oct 1;255(1):91–7

Stimulation of hepatic inositol 1,4,5-trisphosphate kinase activity by Ca2+-dependent and -independent mechanisms. Biden TJ, et al. **Biochem J** 1988 Dec 15; 256(3):697–701

Regulation of carnitine palmitoyltransferase in vivo by glucagon and insulin. Brady PS, et al. **Biochem J** 1989 Mar 15;258(3):677–82

Lipoprotein lipase activity in neonatal-rat liver cell types. Burgaya F, et al. **Biochem J** 1989 Apr 1;259(1):159–66

Reversible dissociation of the catalytically active subunits of pigeon liver malic enzyme. Chang GG, et al.
Biochem J 1988 Aug 15;254(1):123–30

Change in specificity of glycosidase inhibition by N-alkylation of amino sugars. al Daher S, et al.
Biochem J 1989 Mar 1;258(2):613–5

Studies on the unusual behaviour of bovine liver UDP-glucose dehydrogenase in assays at acid and neutral pH and on the presence of tightly bound nucleotide material in purified preparations of this enzyme. Dickinson FM. **Biochem J** 1988 Nov 1;255(3):775–80

The amounts of rat liver cyclic AMP-dependent protein kinase I and II are differentially regulated by diet. Ekanger R, et al. **Biochem J** 1988 Dec 1;256(2):447–52

Zonation of hepatic lipogenic enzymes identified by dual-digitonin-pulse perfusion. Evans JL, et al.
Biochem J 1989 May 1;259(3):821–9

Purification and characterization of human liver dehydroepiandrosterone sulphotransferase. Falany CN, et al. **Biochem J** 1989 Jun 15;260(3):641–6

Human liver glucuronate 2-sulphatase. Purification, characterization and catalytic properties. Freeman C, et al. **Biochem J** 1989 Apr 1;259(1):209–16

Prostaglandins E2 and F2 alpha affect glycogen synthase and phosphorylase in isolated hepatocytes. Gómez-Foix AM, et al. **Biochem J** 1989 Jul 1;261(1):93–7

Expression of 5-aminolaevulinate synthase and cytochrome P-450 mRNAs in chicken embryo hepatocytes in vivo and in culture. Effect of porphyrinogenic drugs and haem [published erratum appears in Biochem J 1989 Feb 1;257(3):following 934] Hamilton JW, et al. **Biochem J** 1988 Oct 1;255(1):267–75

The human glutathione S-transferases. Immunohistochemical studies of the developmental expression of Alpha- and Pi-class isoenzymes in liver. Hiley C, et al. **Biochem J** 1988 Aug 15;254(1):255–9

Pyruvate dehydrogenase activities during the fed-to-starved transition and on re-feeding after acute or prolonged starvation. Holness MJ, et al. **Biochem J** 1989 Mar 1; 258(2):529–33

Activation of hepatocyte protein kinase C by redox-cycling quinones. Kass GE, et al. **Biochem J** 1989 Jun 1; 260(2):499–507

Sex-related difference in the inductions by perfluoro-octanoic acid of peroxisomal beta-oxidation, microsomal 1-acylglycerophosphocholine acyltransferase and cytosolic long-chain acyl-CoA hydrolase in rat liver. Kawashima Y, et al. **Biochem J** 1989 Jul 15;261(2):595–600

Studies on the effect of lysosomotropic agents on the release of Gal beta 1-4GlcNAc alpha-2,6-sialytransferase from rat liver slices during the acute-phase response. Lammers G, et al. **Biochem J** 1989 Jul 15;261(2):389–93

Glucagon desensitization of adenylate cyclase and stimulation of inositol phospholipid metabolism does not involve the inhibitory guanine nucleotide regulatory protein Gi, which is inactivated upon challenge of hepatocytes with glucagon. Murphy GJ, et al. **Biochem J** 1989 Apr 1;259(1):191–7

Purification of two distinct types of phosphoinositide-specific phospholipase C from rat liver. Enzymological and structural studies. Nakanishi O, et al. **Biochem J** 1988 Dec 1;256(2):453–9

Interaction with a monoclonal antibody alters the expression of co-operativity by phenylalanine hydroxylase from rat liver. Parniak MA, et al. **Biochem J** 1989 Jan 15; 257(2):383–8

Egasyn affects the processing of beta-glucuronidase in mouse liver. Pfister K, et al. **Biochem J** 1988 Nov 1;255(3):825–32

Nutritional regulation of hepatic glucose-6-phosphate dehydrogenase. Transient activation of transcription. Prostko CR, et al. **Biochem J** 1989 Feb 15;258(1):295–9

Activation of rat liver plasma-membrane diacylglycerol kinase by vasopressin and phenylephrine. Rider MH, et al. **Biochem J** 1988 Nov 1;255(3):923–8

Subcellular distribution and characteristics of trihydroxycoprostanoyl-CoA synthetase in rat liver. Schepers L, et al. **Biochem J** 1989 Jan 1;257(1):221–9

Preferential localization of rat liver D-myo-inositol 1,4,5-trisphosphate/1,3,4,5-tetrakisphosphate 5-phosphatase in bile-canalicular plasma membrane and 'late' endosomal vesicles. Shears SB, et al. **Biochem J** 1988 Dec 1;256(2):363–9

Immunochemical detection of different isoenzymes of cytochrome P-450 induced in chick hepatocyte cultures. Sinclair P, et al. **Biochem J** 1989 Feb 15;258(1):237–45

Electrophoretic and immunochemical characterization of 3 alpha-hydroxysteroid/dihydrodiol dehydrogenases of rat tissues. Smithgall TE, et al. **Biochem J** 1988 Sep 15; 254(3):715–21

Purification of alpha 2,6-sialyltransferase from rat liver by dye chromatography. Sticher U, et al. **Biochem J** 1988 Jul 15;253(2):577–80

Detoxification of DNA hydroperoxide by glutathione transferases and the purification and characterization of glutathione transferases of the rat liver nucleus. Tan KH, et al. **Biochem J** 1988 Sep 15;254(3):841–5

Purification and characterization of rat liver glycosylasparaginase. Tollersrud OK, et al. **Biochem J** 1989 May 15;260(1):101–8

The mobilization of ferritin iron by liver cytosol. A comparison of xanthine and NADH as reducing substrates. Topham R, et al. **Biochem J** 1989 Jul 1;261(1):137–43

Androgen hydroxylation catalysed by a cell line (SD1) that stably expresses rat hepatic cytochrome P-450 PB-4 (IIB1). Waxman DJ, et al. **Biochem J** 1989 May 15;260(1):81–5

Monoamine oxidase A from human placenta and monoamine oxidase B from bovine liver both have one FAD per subunit. Weyler W. **Biochem J** 1989 Jun 15;260(3):725–9

The glucose-6-phosphatase/glucokinase ratio in the liver of obese-diabetic subjects. Belfiore F, et al.
Biochem Med Metab Biol 1989 Feb;41(1):77–80

Changes in activities of some ammonia-metabolizing enzymes in the rat liver and the brain after chronic ethanol administration. Farbiszewski R, et al.
Biochem Med Metab Biol 1988 Dec;40(3):219–24

Inhibitory effect of 5-phosphoribosyl 1-pyrophosphate and ADP on the nonoxidative pentose phosphate pathway activity. Hosomi S, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):52–9

Assay of sulfotransferase in subcellular fractions of hypothyroid mouse pituitary and liver tissue. Magner JA.
Biochem Med Metab Biol 1989 Feb;41(1):81–3

Hydrazine stress in the diabetic: ornithine decarboxylase activity. Rogers KS, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):46–9

Purification and properties of O6-methylguanine-DNA-methyltransferase in human hepatic tissue. Yawetz A, et al.
Biochem Med Metab Biol 1989 Jun;41(3):177–83

Glucocorticoid hormones prevent the induction of gamma-glutamyl transpeptidase by ethanol in a rat hepatoma cell line. Barouki R, et al.
Biochem Pharmacol 1989 Feb 15;38(4):677–84

Diurnal variation and melatonin induction of hepatic molybdenum hydroxylase activity in the guinea-pig. Beedham C, et al. **Biochem Pharmacol** 1989 May 1; 38(9):1459–64

Presence of cytosolic aldehyde dehydrogenase isozymes in adult and fetal rat liver. Cao QN, et al.
Biochem Pharmacol 1989 Jan 1;38(1):77–83

Ontogeny of the activity of alcohol dehydrogenase and aldehyde dehydrogenases in the liver and placenta of the guinea pig. Card SE, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2535–41

Hormonal regulation of the developmental pattern of epoxide hydrolases. Studies in rat liver. Denlinger CL, et al.
Biochem Pharmacol 1989 Feb 15;38(4):603–10

Inducibility of rat liver cytochrome P-450IA1 (P-450c) mRNA during the partial inhibition of protein synthesis. Foldes RL, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):1017–9

Circadian rhythm of rat liver dihydropyrimidine dehydrogenase. Possible relevance to fluoropyrimidine chemotherapy. Harris BE, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4759–62

Alterations in plasma amino acids and hepatic enzymes in the 4-pentenoic acid model of Reye's syndrome. Hart MA, et al. **Biochem Pharmacol** 1989 May 15;38(10):1696–8

Stabilization of ornithine decarboxylase in mouse liver and lung by methylglyoxal bis(cyclohexylamidinohydrazone). Hibasami H, et al. **Biochem Pharmacol** 1988 Nov 1; 37(21):4117–20

Glutathione conjugation of the fluorophotometric epoxide substrate, 7-glycidoxycoumarin (GOC), by rat liver glutathione transferase isoenzymes. Hiratsuka A, et al.
Biochem Pharmacol 1989 Aug 15;38(16):2609–13

Dog liver glutathione S-transferase and its strong immunoreactivity with rat transferase-P(7-7). Igarashi T, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4713–8

Increased hepatic retinal dehydrogenase activity after phenobarbital and ethanol administration. Leo MA, et al.
Biochem Pharmacol 1989 Jan 1;38(1):97–103

Partial characterization of an enzyme that hydrolyzes sarin, soman, tabun, and diisopropyl phosphorofluoridate (DFP). Little JS, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):23–9

Synergistic induction of delta-aminolevulinic acid synthase activity by N-ethylprotoporphyrin IX and 3,5-diethoxycarbonyl-1,4-dihydro-2,6-dimethyl-4-isobutylpyridine . Mackie JE, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2169–73

Growth hormone regulation of hepatic drug-metabolizing

enzymes in the mouse. MacLeod JN, et al. **Biochem Pharmacol** 1989 May 15;38(10):1673–7

Differential effects of cyclosporin on hepatic and renal heme, cytochrome P-450 and drug metabolism. Possible role in nephrotoxicity of the drug. Mayer RD, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1001–7

Inhibition of the hepatic O6-alkylguanine-DNA alkyltransferase in vivo by pretreatment with antineoplastic agents. Meer L, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):929–34

Hydrolysis of phthalate esters by purified rat and human liver carboxylesterases. Mentlein R, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3126–8

Structure-activity relationship of ligands of dihydrouracil dehydrogenase from mouse liver. Naguib FN, et al. **Biochem Pharmacol** 1989 May 1;38(9):1471–80

Immunochemical and catalytical studies on hepatic coumarin 7-hydroxylase in man, rat, and mouse. Raunio H, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3889–95

Characterization and post-natal development of rat cerebellum tyrosylprotein sulfotransferase. Rens-Domiano S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2930–2

The effect of hyperthermia on conversion of rat hepatic xanthine dehydrogenase to xanthine oxidase. Skibba JL, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4592–5

Dependence of the induction of cytochrome P-450 by phenobarbital in primary cultures of adult rat hepatocytes on the composition of the culture medium. Turner NA, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2247–51

Species differences in the effects of bezafibrate, a hypolipidemic agent, on hepatic peroxisome-associated enzymes. Watanabe T, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):367–71

Characteristics of rat hepatocytes sorted by fluorescence-activated flow cytometry. Effects of mixed function oxidase inducers. White IN, et al. **Biochem Pharmacol** 1989 May 15;38(10):1639–45

Inhibition of pig liver esterase by trifluoromethyl ketones: modulators of the catalytic reaction alter inhibition kinetics. Allen KN, et al. **Biochemistry** 1989 Jan 10;28(1):135–40

Expression of a human liver cytochrome P-450 protein with tolbutamide hydroxylase activity in Saccharomyces cerevisiae. Brian WR, et al. **Biochemistry** 1989 Jun 13; 28(12):4993–9

In vitro dissociation and reassociation of human alcohol dehydrogenase class I isozymes. Briganti F, et al. **Biochemistry** 1989 Jun 27;28(13):5374–9

Amino acid sequences of pyridoxal 5'-phosphate binding sites and fluorescence resonance energy transfer in chicken liver fatty acid synthase. Chang SI, et al. **Biochemistry** 1989 May 2;28(9):3781–8

Amino acid sequences of substrate-binding sites in chicken liver fatty acid synthase. Chang SI, et al. **Biochemistry** 1988 Jun 28;27(13):4753–60

Cloning, sequencing, and regulation of rat liver carnitine octanoyltransferase: transcriptional stimulation of the enzyme during peroxisome proliferation. Chatterjee B, et al. **Biochemistry** 1988 Dec 13;27(25):9000–6

Substrate flux through methylenetetrahydrofolate dehydrogenase: predicted effects of the concentration of methylenetetrahydrofolate on its partitioning into pathways leading to nucleotide biosynthesis or methionine regeneration. Green JM, et al. **Biochemistry** 1988 Oct 18; 27(21):8014–22

Inducible (class 3) aldehyde dehydrogenase from rat hepatocellular carcinoma and 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated liver: distant relationship to the class 1 and 2 enzymes from mammalian liver cytosol/mitochondria. Hempel J, et al. **Biochemistry** 1989 Feb 7;28(3):1160–7

Determination of amino- and carboxyl-terminal sequences of guinea pig liver transglutaminase: evidence for amino-terminal processing. Ikura K, et al. **Biochemistry** 1989 Mar 7;28(5):2344–8

Posttranslational modification of hepatic cytochrome P-450. Phosphorylation of phenobarbital-inducible P-450 forms PB-4 (IIB1) and PB-5 (IIB2) in isolated rat hepatocytes and in vivo. Koch JA, et al. **Biochemistry** 1989 Apr 18; 28(8):3145–52

3 beta-Hydroxy-5 beta-steroid dehydrogenase activity of human liver alcohol dehydrogenase is specific to gamma-subunits. McEvily AJ, et al. **Biochemistry** 1988 Jun 14;27(12):4284–8

Binding of nucleotides to an extramitochondrial acetyl-CoA hydrolase from rat liver. Nakanishi Y, et al. **Biochemistry** 1988 Jun 28;27(13):4822–6

Rip locus: regulation of female-specific isozyme (I-P-450(16 alpha) of testosterone 16 alpha-hydroxylase in mouse liver, chromosome localization, and cloning of P-450 cDNA. Noshiro M, et al. **Biochemistry** 1988 Aug 23;27(17):6434–43

Genetic regulation of estrogen-dependent repression of female-specific testosterone 16 alpha-hydroxylase (I-P-450(16 alpha) in male mouse liver: murine Ripr locus. Noshiro M, et al. **Biochemistry** 1988 Aug 23;27(17):6444–8

Effect of insulin on ATP-citrate lyase phosphorylation: regulation of peptide A and peptide B phosphorylations. Ramakrishna S, et al. **Biochemistry** 1989 Jan 24; 28(2):856–60

Mechanism of binding of horse liver alcohol dehydrogenase and nicotinamide adenine dinucleotide. Sekhar VC, et al. **Biochemistry** 1988 Jul 12;27(14):5082–8

Kinetic studies of the pyridoxal kinase from pig liver: slow-binding inhibition by adenosine tetraphosphopyridoxal. Tagaya M, et al. **Biochemistry** 1989 May 30;28(11):4670–5

Ethionine-induced alterations of enzymes involved in lipid metabolism and their possible relationship to induction of fatty liver. Aarsaether N, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):349–58

Immunohistochemical localization of human liver glutathione S-transferase (GST) isozymes with special reference to polymorphic GST1. Abei M, et al. **Biochim Biophys Acta** 1989 May 1;995(3):279–84

Inactivation of chicken liver mevalonate 5-diphosphate decarboxylase by sulfhydryl-directed reagents: evidence of a functional dithiol. Alvear M, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):7–11

On the structure-linked sedimentability of rat liver beta-N-acetylglucosaminidase. Baccino FM, et al. **Biochim Biophys Acta** 1971 May 12;235(2):353–7

Glucose-6-phosphate dehydrogenase from Dicentrarchus labrax liver: kinetic mechanism and kinetics of NADPH inhibition. Bautista JM, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):354–63

Nonpolar interactions in the modification of an essential sulfhydryl of sorbitol dehydrogenase by N-alkylmaleimides. Beier KH, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):236–41

Activation of rat liver cytosolic phosphatidic acid phosphatase by nucleoside diphosphates. Berglund L, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):382–7

The effects of some nucleosides and dithiothreitol on the stability and activity of liver phenylalanine hydroxylase. Bublitz C. **Biochim Biophys Acta** 1971 May 12; 235(2):311–21

Acid lipase activity in neonatal rat liver cell types. Effect of starvation. Burgaya F, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):566–9

Identity of a cytosolic neutral cholesterol esterase in rat liver with the bile salt stimulated cholesterol esterase in pancreas. Camulli ED, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):177–82

Heparin decreases the degradation rate of hepatic lipase in Fu5AH rat hepatoma cells. A model for hepatic lipase efflux from hepatocytes. Cisar LA, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):196–204

The rabbit as an animal model of hepatic lipase deficiency. Clay MA, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):173–81

The major type-1 protein phosphatase catalytic subunits are the same gene products in rabbit skeletal muscle and rabbit liver. Cohen PT, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):125–8

Hepatic sn-glycerol-3-phosphate acyltransferases: effect of monoacylglycerol analogs on mitochondrial and microsomal activities. Coleman RA. **Biochim Biophys Acta** 1988 Nov 25;963(2):367–74

Intracellular localization of catalase and of some oxidases in rat liver. 1960 [classical article] de Duve C, et al. **Biochim Biophys Acta** 1989;1000:321–2

Specificity determinants of maize casein kinase-IIB are related to but distinct from those of rat liver casein kinase-2. Dobrowolska G, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):274–7

Compared expression levels of ornithine transcarbamylase and carbamylphosphate synthetase in liver and small intestine of normal and mutant mice. Dubois N, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):321–8

Evidence for the presence of carbonic anhydrase in the plasma membrane of rat hepatocytes. Garcia-Marin JJ, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):17–22

The importance of nucleoside triphosphate inhibition of liver glycogen synthase phosphatase activity. Gilboe DP, et al. **Biochim Biophys Acta** 1989 May 31;991(2):340–6

Rat liver S-adenosylhomocysteinase. Spectrophotometric study of coenzyme binding. Gomi T, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):172–9

Rat liver dihydroxyacetone-phosphate acyltransferase: enzyme characteristics and localization studies. Hardeman D, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):1–9

Bile salt-dependent, neutral cholesteryl ester hydrolase of rat liver: possible relationship with pancreatic cholesteryl ester hydrolase. Harrison EH. **Biochim Biophys Acta** 1988 Nov 4;963(1):28–34

Changes in polyamine-oxidizing capacity of peroxisomes under various physiological conditions in rats. Hayashi H, et al. **Biochim Biophys Acta** 1989 May 31;991(2):310–6

Purification and properties of a magnesium-dependent endodeoxyribonuclease endogenous to rat-liver nuclei. Hibino Y, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):313–20

Purification and properties of an endonuclease endogenous to rat-liver nuclei. Hibino Y, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):287–92

Ornithine decarboxylase activity and the accumulation of its mRNA during early stages of liver regeneration. Hirvonen A. **Biochim Biophys Acta** 1989 Jan 23;1007(1):120–3

Substrate binding order in mevalonate 5-diphosphate decarboxylase from chicken liver. Jabalquinto AM, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):257–9

Circulating and liver-bound salt-resistant hepatic lipases in the golden hamster. Jansen H, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):44–9

Some kinetic differences between the M isoenzymes of pyruvate kinase from liver and muscle. Jiménez de Asúa L, et al. **Biochim Biophys Acta** 1971 May 12;235(2):326–34

delta-aminolevulinic acid synthetase from the particulate fraction of liver of porphyric rats. Kaplan BH. **Biochim Biophys Acta** 1971 May 12;235(2):381–8

Molecular cloning of cDNA for the catalytic subunit of rat liver type 2A protein phosphatase, and detection of high levels of expression of the gene in normal and cancer cells. Kitagawa Y, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):123–9

Purification and characterization of antizyme inhibitor of ornithine decarboxylase from rat liver. Kitani T, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):44–9

Glutamate dehydrogenase from human liver. III. Antibody-binding sites and properties of the antigen-antibody complex. Lehmann FG. **Biochim Biophys Acta** 1971 May 12;235(2):259–75

Double inhibition of L-threonine dehydratase by aminothiols. Leoncini R, et al. **Biochim Biophys Acta** 1989 Jan 19; 994(1):52–8

Biospecific dye-binding and hydrophobic interaction chromatography as tools for high yield preparation of purified phospholipase A1 from rat liver. Löffler BM, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):225–31

Characterization of porphobilinogen deaminase from rat liver. Mazzetti MB, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):97–104

Bilitranslocase is the protein responsible for the electrogenic movement of sulfobromophthalein in plasma membrane vesicles from rat liver: immunochemical evidence using mono- and poly-clonal antibodies. Miccio M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):115–20

Identification of 10-formyltetrahydrofolate dehydrogenase-hydrolase as a major folate binding protein in liver cytosol. Min H, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):348–53

Cloning of rabbit uricase cDNA reveals a conserved carboxy-terminal tripeptide in three species. Motojima K, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):116–8

Sulfhydryl groups of an extramitochondrial acetyl-CoA hydrolase from rat liver. Nakanishi Y, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):209–13

Reactivity of artificial substrates for prenyltransferase. Nishino T, et al. **Biochim Biophys Acta** 1971 May 12; 235(2):322–5

Levels and size complexity of DNA polymerase beta mRNA in rat regenerating liver and other organs. Nowak R, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):203–7

Vasopressin transiently stimulates phospholipase C activity in cultured rat hepatocytes. Pittner RA, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):227–32

Fatty acyl coupled catalase. Rosen G, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):264–9

Distinct type-1 protein phosphatases are associated with hepatic glycogen and microsomes. Schelling D, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):221–31

Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225–33

Inhibitors of sterol synthesis. 15-oxygenated steryl ester hydrolase activity of rat liver at neutral and acid pH. Stephens TW, et al. **Biochim Biophys Acta** 1989 Feb 6; 1001(2):127–33

Role of a partially purified glutathione S-transferase from rat liver nuclei in the inhibition of nuclear lipid peroxidation. Tirmenstein MA, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):174–80

Evidence for a cholera-toxin-sensitive G-protein involved in the regulation of phosphatidylinositol 4-phosphate kinase of rat liver membranes. Urumow T, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):232–8

Secretion of liver lipase activity by periportal and perivenous hepatocytes. Verhoeven AJ, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):239–42

Distribution of xanthine dehydrogenase and oxidase activities in human and rabbit tissues. Wajner M, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):79–84

Administration of D-aspartate increases D-aspartate oxidase activity in mouse liver. Yamada R, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):325–8

Structural and immunochemical properties of rat liver tyrosine aminotransferase. Dietrich JB, et al. **Biochimie** 1988 May;70(5):673–9

Identity of alanine:glyoxylate aminotransferase with alanine:2-oxoglutarate aminotransferase in rat liver cytosol. Kobayashi S, et al. **Biochimie** 1989 Apr;71(4):471–5

Human liver GTP cyclohydrolase I: purification and some properties. Shen RS, et al. **Biochimie** 1989 Mar;71(3):343–9

Subcellular topology of rat liver methionyl-, leucyl-, and arginyl-tRNA synthetases. Amar-Costesec A, et al. **Biol Cell** 1989;65(1):21–8

The effect of sex hormones on the acinar distribution pattern of phosphoenolpyruvate carboxykinase activity in rat liver. Wimmer M. **Biol Chem Hoppe Seyler** 1989 Jul; 370(7):683–90

Acyl-CoA dehydrogenase enzymes during early postnatal development in the rat. Carroll JE, et al. **Biol Neonate** 1989; 55(3):185–90

Alterations of serum high-density lipoproteins and hepatic lipase activity in congenital hypothyroidism. Tenenbaum

D, et al. **Biol Neonate** 1988;54(5):241–5
Age-dependent effects of phorbol ester on adenylate cyclase stimulation by glucagon in liver of female rats. Hermsdorf T, et al. **Biomed Biochim Acta** 1989;48(4):255–60
Isoenzyme patterns of pyruvate kinase, lactate dehydrogenase, and alkaline phosphatase in isolated fat-storing cells of rat liver. Kässner G, et al. **Biomed Biochim Acta** 1988;47(7):551–6
Activity of the two prolidase isoforms in rat liver after chronic CCl4 intoxication. Miech G, et al. **Biomed Biochim Acta** 1988;47(12):1073–5
Purification of rat liver soluble catechol-O-methyltransferase by high performance liquid chromatography. Korkolainen T, et al. **Biomed Chromatogr** 1989 May;3(3):127–30
HPLC determination of ferrochelatase activity in human liver. Roberts RG. **Biomed Chromatogr** 1987;2(2):71–5
High liver lipoprotein lipase activity in hyperlipemic developing rats from undernourished pregnant mothers. López-Tejero D, et al. **Biosci Rep** 1988 Aug;8(4):309–14
Effect of chronic alcoholism on hepatic alcohol-dehydrogenase and aldehyde-dehydrogenase activities in man. Mazzanti R, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):465–72
Regulation of eel (Anguilla anguilla) liver acetyl-CoA carboxylase by changes in the polymeric state of the enzyme. Miceli A, et al. **Boll Soc Ital Biol Sper** 1988 Aug; 64(8):715–22
Properties of European eel (Anguilla anguilla) liver cell sap acetyl-CoA carboxylase. Miceli A, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):707–14
Evidence of the induction of de novo synthesis of delta-aminolaevulinate dehydratase by lead. Fujita H, et al. **Br J Ind Med** 1988 Oct;45(10):710–2
Monoamine oxidases of the human brain and liver. Kalaria RN, et al. **Brain** 1988 Dec;111 (Pt 6):1441–51
d-Amphetamine and ethanol: a drug-drug interaction study. Messiha FS. **Brain Res Bull** 1978 Nov-Dec;3(6):595–9
Molecular cloning and nucleotide sequence of rat brain argininosuccinate lyase cDNA with an extremely long 5'-untranslated sequence: evidence for the identity of the brain and liver enzymes. Kawamoto S, et al. **Brain Res Mol Brain Res** 1989 May;5(3):235–41
Does PEPCK play a key role in amino acid oxidation? Curi R. **Braz J Med Biol Res** 1988;21(1):27–30
Effect of calcitonin on hepatic drug metabolism. Godinho AF, et al. **Braz J Med Biol Res** 1988;21(4):851–3
Tissue damage markers in experimental Chagas' disease. Palhares PE, et al. **Braz J Med Biol Res** 1988;21(5):957–9
Development of the cotton rat (Sigmodon hispidus) as a biomonitor of environmental contamination with emphasis on hepatic cytochrome P-450 induction and population characteristics. Elangbam CS, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):482–8
Modulation of hepatic cytochrome P-450 and DT-diaphorase by oral and sub-cutaneous administration of the pro-oxidant fungicide dichlone (2,3-dichloro-1,4-naphthoquinone). Elliott AJ, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):164–71
In vitro inactivation of hepatic alcohol dehydrogenase and aldehyde dehydrogenases from rats by dithiocarbamates with or without metals. Freundt KJ, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):540–7
In vitro effect of linear alkylbenzene sulphonate (LAS) on some enzymes in liver and gills of the teleost Channa punctatus. Gupta BN, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):375–81
Inhibition of chick embryo hepatic uroporphyrinogen decarboxylase by components of xenobiotic-treated chick embryo hepatocytes in culture. James CA, et al. **Can J Physiol Pharmacol** 1989 Mar;67(3):246–9
Increased thymidylate synthase (EC 2.1.1.45) activity in normal and neoplastic proliferation. Hashimoto Y, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):1–10
Comparison of GST-P versus GGT as markers of hepatocellular lineage during analyses of initiation of carcinogenesis. Cameron RG. **Cancer Invest** 1988; 6(6):725–34
Oxidative metabolism of 4-hydroxy-2,3-nonenal during diethyl-nitrosamine-induced carcinogenesis in rat liver. Canuto RA, et al. **Cancer Lett** 1989 Jul 1;46(1):7–13
Induction of rat liver glutathione transferase subunit 7 by lead nitrate. Di Ilio C, et al. **Cancer Lett** 1989 Aug; 46(3):167–71
Rat liver gamma glutamyl transpeptidase mRNA differs in the 5' untranslated sequence from the corresponding kidney mRNA. Griffiths SA, et al. **Cancer Lett** 1989 Jul 1; 46(1):69–74
Changes in host liver fatty acid synthase in tumour-bearing mice. Tisdale MJ, et al. **Cancer Lett** 1988 Nov;42(3):231–5
Oxidative metabolism of cyclophosphamide: identification of the hepatic monooxygenase catalysts of drug activation. Clarke L, et al. **Cancer Res** 1989 May 1;49(9):2344–50
Changes in peroxisomes and mitochondria in liver of ethionine exposed rats: a biochemical and morphological investigation. Aarsaether N, et al. **Carcinogenesis** 1989 Jun; 10(6):987–94
Phosphorylation of carcinogen metabolizing enzymes: regulation of the phosphorylation status of the major phenobarbital inducible cytochromes P-450 in hepatocytes. Bartlomowicz B, et al. **Carcinogenesis** 1989 Jan;10(1):225–8
Ornithine decarboxylase basal activity in liver, oesophagus and lung of vitamin A deficient rats, and the effect of retinoic acid. Daliam A, et al. **Carcinogenesis** 1988 Dec; 9(12):2161–4
The role of N-sulfation in the N-hydroxy-2-acetylaminofluorene-mediated outgrowth of diethylnitrosamine-initiated hepatocytes to gamma-glutamyltranspeptidase-positive foci in male rat liver. Kroese ED, et al. **Carcinogenesis** 1988 Nov; 9(11):1953–8
Further evidence that mitogen-induced cell proliferation does not support the formation of enzyme-altered islands in rat liver by carcinogens. Ledda-Columbano GM, et al. **Carcinogenesis** 1989 May;10(5):847–50
Variations in catechol O-methyltransferase activity in rodent tissues: possible role in estrogen carcinogenicity. Li SA, et al. **Carcinogenesis** 1989 Jan;10(1):63–7
Differential induction of fetal mouse liver and lung cytochromes P-450 by beta-naphthoflavone and 3-methylcholanthrene. Miller MS, et al. **Carcinogenesis** 1989 May;10(5):875–91
Hepatic tumor-promoting chlorinated hydrocarbons stimulate protein kinase C activity. Moser GJ, et al. **Carcinogenesis** 1989 May;10(5):851–6
Elevation of polycyclic aromatic hydrocarbon-inducible aryl hydrocarbon hydroxylase activity in rat hepatocytes in primary culture by inhibitors of poly(ADP-ribose) polymerase. Nemoto N, et al. **Carcinogenesis** 1988 Oct; 9(10):1823–7
Expression of N-acetylglucosaminyltransferase III in hepatic nodules generated by different models of rat liver carcinogenesis. Pascale R, et al. **Carcinogenesis** 1989 May; 10(5):961–4
Enzymatic acetylation and sulfation of N-hydroxyarylamines in bacteria and rat livers. Yamazoe Y, et al. **Carcinogenesis** 1989 Sep;10(9):1675–9
gamma-Glutamyltranspeptidase-negative phenotypic property of preneoplastic and neoplastic liver lesions induced by ciprofibrate does not change following 2-acetylaminofluorene administration. Yeldandi AV, et al. **Carcinogenesis** 1989 Apr;10(4):797–9
Glutathione-S transferase activity in cultured human hepatocytes. Yves V, et al. **Cell Biol Int Rep** 1988 Nov; 12(11):959–67
Intracellular lactate dehydrogenase concentration as an index of cytotoxicity in rat hepatocyte primary culture. Chao ES, et al. **Cell Biol Toxicol** 1988 Mar;4(1):1–11
Pyruvate kinase isoenzyme transitions in cultures of fetal rat hepatocytes. Scott RJ, et al. **Cell Differ Dev** 1988 Nov; 25(2):109–18
Ultracytochemical localization of adenylate cyclase in liver of normal and of CCl4 and CCl4 plus colchicine treated rats. Rambotti MG, et al. **Cell Mol Biol** 1988;34(6):621–8
Effect of starvation and refeeding on cysteamine dioxygenase activity in rat liver and heart. Rosei MA. **Cell Mol Biol** 1988;34(3):287–93
The distribution pattern of NADP+-dependent isocitrate dehydrogenase in rat liver. Wack S, et al. **Cell Mol Biol** 1989;35(3):305–12
A macrophage receptor for liver lysosomal beta-glucosidase. Imai K. **Cell Struct Funct** 1988 Aug;13(4):325–32
Immunocytochemical localization of acid phosphatase in rat liver. Yokota S, et al. **Cell Struct Funct** 1989 Apr; 14(2):163–71
In vivo and in vitro effects of a new macrolide antibiotic roxithromycin on rat liver cytochrome P-450: comparison with troleandomycin and erythromycin. Delaforge M, et al. **Chem Biol Interact** 1988;68(3–4):179–88
Induction of cytosolic and microsomal epoxide hydrolases in mouse liver by peroxisome proliferators, with special emphasis on structural analogues of 2-ethylhexanoic acid. Lundgren B, et al. **Chem Biol Interact** 1988;68(3–4):219–40
Perfluorodecanoic acid decreases the enzyme activity and the amount of glutathione S-transferases proteins and mRNAs in vivo. Schramm H, et al. **Chem Biol Interact** 1989;70(1–2):127–43
Methyl linoleate ozonide as a substrate for rat glutathione S-transferases: reaction pathway and isoenzyme selectivity. Vos RM, et al. **Chem Biol Interact** 1989;69(2–3):269–78
Two distinct low-molecular-weight acid phosphatases from rat liver. Fujimoto S, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3020–6
Preparation and characterization of monoclonal antibodies specific for ribonuclease inhibitor from rat liver. Miura K, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3038–42
Studies on the subunits of rabbit hepatic glutathione S-transferases. Miyaura S, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4527–33
Glutathione peroxidase activity of glutathione S-transferase in rabbit liver. Miyaura S, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2523–30
Characterization of mouse liver sialidase and partial purification of the lysosomal sialidase. Nagai T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4008–18
Substrate specificities of alpha-N-acetylgalactosaminidases I and II from squid liver. Nashida T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4000–7
Calcium-binding protein regucalcin is an activator of (Ca2+-Mg2+)-adenosine triphosphatase in the plasma membranes of rat liver. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3532–9
Inhibitors of sterol synthesis. Effects of dietary 5 alpha-cholest-8(14)-en-3 beta-ol-15-one on early enzymes in hepatic cholesterol biosynthesis. Miller LR, et al. **Chem Phys Lipids** 1988 Jul;47(3):177–86
Circadian rhythms in enzymatic activity of rat liver arginase and glucose 6-phosphate dehydrogenase. Soler G, et al. **Chronobiologia** 1988 Jul-Sep;15(3):205–12
Failure of glucagon to induce hepatic phosphoenolpyruvate carboxykinase in endotoxic shock. Stith RD, et al. **Circ Shock** 1988 Nov;26(3):267–72
Regulation of carnosine metabolism: the subcellular localization of carnosinase in liver. Kalra J, et al. **Clin Biochem** 1988 Oct;21(5):315–8
Endoprotease in human liver transforming multiple forms of alkaline phosphatase. Seiffert UB, et al. **Clin Biochem** 1989 Apr;22(2):103–7
Alkaline phosphatase isoenzymes of liver and bone origin are incompletely resolved by wheat-germ-lectin affinity chromatography. Gonchoroff DG, et al. **Clin Chem** 1989 Jan;35(1):29–32
Reference intervals for plasma alanine aminopeptidase in the Hitachi 737 analyzer, derived from patients with normal biochemical liver profiles. Hurst PL, et al. **Clin Chem** 1988 Dec;34(12):2583–4
Sialidase from different sources compared for electrophoretically separating serum alkaline phosphatase fractions from liver and bone. Jung K, et al. **Clin Chem** 1989 Sep;35(9):1955–7
Catabolism of circulating enzymes: plasma clearance, endocytosis, and breakdown of lactate dehydrogenase-1 in rabbits. Smit MJ, et al. **Clin Chem** 1988 Dec; 34(12):2475–80
Assay of HMG-CoA reductase activity in the evaluation of cholesterol synthesis in man. Carulli N, et al. **Clin Chim Acta** 1989 Jul 31;183(1):77–81 (13 ref.)
Differences between human liver- and bone-type alkaline phosphatases. Miura M, et al. **Clin Chim Acta** 1989 Feb 28;180(2):177–87
Measurement of cytochrome c oxidase activity in human liver specimens obtained by needle biopsy. Sakai Y, et al. **Clin Chim Acta** 1988 Sep 15;176(3):343–6
Characterization and regulation of rat liver UDP glucuronosyltransferases. Mackenzie PI, et al. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):501–4 (13 ref.)
Immunochemical and catalytical characterization of the human liver NADPH-cytochrome P450 reductase. McManus ME, et al. **Clin Exp Pharmacol Physiol** 1989 Feb; 16(2):121–34
A study of the biochemical characteristics of NADP+ isocitrate dehydrogenase from the liver and kidney of the Arabian camel (Camelus dromedarius). al-Ali AK, et al. **Comp Biochem Physiol [B]** 1989;92(3):517–21
A comparative characterization of cytosolic superoxide dismutase/(SOD) from hog liver and erythrocytes. Bartkowiak A, et al. **Comp Biochem Physiol [B]** 1979; 62(1):61–6
Frog liver glycogen synthase. In vitro and in vivo interconversions between I and D forms. Castiñeiras MJ, et al. **Comp Biochem Physiol [B]** 1978;59(4):277–84
Alterations in glycohydrolase activities in streptozotocin-diabetic Chinese hamsters (Cricetulus griseus). Chang AY, et al. **Comp Biochem Physiol [B]** 1979; 63(3):341–4
Evidence for glycosyltransferases in trout liver microsomes (Salmo gairdneri). Cornillon B, et al. **Comp Biochem Physiol [B]** 1979;63(3):419–21
Some properties of liver alkaline phosphatase from the goat Capra hircus. Eze LC, et al. **Comp Biochem Physiol [B]** 1978;61(2):227–32
Characterization of mevalonate-activating enzymes in the neonatal chick liver. Garcia-Martinez J, et al. **Comp Biochem Physiol [B]** 1978;61(2):275–9
Mouse strain variations in the magnitude of induction of liver DT-diaphorase and hereditary transmission of the trait. Horie S, et al. **Comp Biochem Physiol [B]** 1989;93(2):493–8
Comparative immunology of mammalian uricase using anti-hog liver uricase. Htay HH, et al. **Comp Biochem Physiol [B]** 1989;92(3):583–6
Purine nucleoside phosphorylase from bovine liver. Ikezawa Z, et al. **Comp Biochem Physiol [B]** 1978;60(2):111–6
The lower molecular weight acid phosphatase from the frog liver: isolation of homogeneous AcPase III and IV representing glycoforms with different bioactivity. Jańska H, et al. **Comp Biochem Physiol [B]** 1989;92(2):341–6
Effects of temperature, salinity, and feeding on aminotransferase activity in the liver and white muscle of rainbow trout (Salmo gairdneri Richardson). Jürss K. **Comp Biochem Physiol [B]** 1979;64(2):213–8
Isolation and characterization of shrew (Suncus murinus) liver alcohol dehydrogenases. Keung WM, et al. **Comp Biochem Physiol [B]** 1989;93(1):169–73
Phosphofructokinase from porcine heart, liver and erythrocytes. Koyama T, et al. **Comp Biochem Physiol [B]** 1989;93(3):517–21
The hepatic cytochrome level in the cat (Felis catus): normal value and variations in relation to some biological parameters. Maugras M, et al. **Comp Biochem Physiol [B]** 1979;64(1):125–7
The influence of elevated environmental temperature and nutrient intake on thyroid status and hepatic enzyme activities in immature male chicks. Moss B, et al. **Comp Biochem Physiol [B]** 1978;60(2):157–61
Comparative studies on the molecular weight of glutathione S-transferases from mammalian livers and an insect. Motoyama N, et al. **Comp Biochem Physiol [B]** 1979;

63(4):451–4
Comparative study of alpha–glucosidase activities in liver, plasma and urine of carp, rat and dog. Murat JC, et al. **Comp Biochem Physiol [B]** 1978;61(1):145–9
D–amino acid oxidase in mouse liver—II. Nagata Y, et al. **Comp Biochem Physiol [B]** 1988;91(3):503–4
An isoelectric focusing study of acid phosphohydrolases in liver lysosomes of higher vertebrates. Nakabayashi T, et al. **Comp Biochem Physiol [B]** 1979;63(2):221–31
Cholesterol esterases from normal and FEC hamster liver. Nègre A, et al. **Comp Biochem Physiol [B]** 1988;91(1):79–83
A comparison of the glutathione S–transferases of trout and rat liver. Nimmo IA, et al. **Comp Biochem Physiol [B]** 1979; 63(3):423–7
Alanine:glyoxylate aminotransferase activities in liver of Suncus murinus (insectivora). Okuno E, et al. **Comp Biochem Physiol [B]** 1988;90(4):773–8
Glucose phosphorylation and dephosphorylation in chicken liver. O'Neill IE, et al. **Comp Biochem Physiol [B]** 1978; 59(4):317–25
Influence of diet on adiposal lipoprotein lipase and hepatic triacylglyceride synthetase activities in the developing pullet (Gallus domesticus). Pfaff FE Jr, et al. **Comp Biochem Physiol [B]** 1977;58(4):345–8
Comparative activities of glycogen phosphorylase and gamma–amylase in livers of carp (Cyprinus carpio) and goldfish (Carassius auratus). Picukans I, et al. **Comp Biochem Physiol [B]** 1979;62(4):455–7
Some comparisons of pig and sheep liver cytosolic aldehyde dehydrogenases. Ramsey AJ, et al. **Comp Biochem Physiol [B]** 1989;93(1):77–83
L–serine dehydratase and L–serine–pyruvate aminotransferase activities in different animal species. Rowsell EV, et al. **Comp Biochem Physiol [B]** 1979; 63(4):543–55
Kinetic investigations on the behaviour of free amino acids in the plasma and of two aminotransferases in the liver of rainbow trout (Salmo gairdnerii Richardson) after feeding on a synthetic composition containing pure amino acids. Schlisio W, et al. **Comp Biochem Physiol [B]** 1978; 59(4):373–9
The effect of bile acids on liver alcohol dehydrogenase in different mammalian species. Simonetta M, et al. **Comp Biochem Physiol [B]** 1979;64(4):363–7
A comparative study of some properties of cytidine deaminase from Escherichia coli and chicken liver. Vita A, et al. **Comp Biochem Physiol [B]** 1989;93(3):591–4
A comparison of selected physical properties of hepatic sorbitol dehydrogenases [L–iditol: NAD oxidoreductases] from four mammalian species. Walsall EP, et al. **Comp Biochem Physiol [B]** 1978;59(3):213–8
Enzymes involved in adenine nucleotide metabolism of developing chick embryo liver. Wegelin I, et al. **Comp Biochem Physiol [B]** 1978;61(2):327–9
Effect of nutritional factors and cortisol on tyrosine aminotransferase activity in liver of brook trout, Salvelinus fontinalis Mitchill. Whiting SJ, et al. **Comp Biochem Physiol [B]** 1977;58(2):189–93
Separation of beta–N–acetylglucosaminidase isoenzymes from liver and plasma of six mammalian species by DEAE–cellulose chromatography. Willcox P, et al. **Comp Biochem Physiol [B]** 1978;61(1):1–12
Kidney and liver carnosinase activity and carnosine level in goose. Wolos A, et al. **Comp Biochem Physiol [B]** 1979; 62(4):515–9
A sensitive radiometric assay for cysteic acid decarboxylase activity in crude enzyme preparations of rat liver and brain. Yam CF, et al. **Comp Biochem Physiol [B]** 1977;58(1):115–7
Significance of the variation in isozymes of liver lactate dehydrogenase with thermal acclimation in goldfish—I. Thermostability and temperature dependency. Yamawaki H, et al. **Comp Biochem Physiol [B]** 1979;62(1):89–93
Significance of the variation in isozymes of liver lactate dehydrogenase with thermal acclimation in goldfish—II. Effect of pH. Yamawaki H, et al. **Comp Biochem Physiol [B]** 1979;62(1):95–9
Induction of hepatic aryl hydrocarbon hydroxylase activity in rainbow trout (Salmo gairdneri) exposed to coal liquids. Dauble DD, et al. **Comp Biochem Physiol [C]** 1988; 91(2):431–5
Constitutive and Aroclor 1254–induced hepatic glutathione S–transferase, peroxidase and reductase activities in genetically inbred mice. Makary M, et al. **Comp Biochem Physiol [C]** 1988;91(2):425–9
Comparison of hepatic drug metabolizing enzyme activities in several agricultural species. Short CR, et al. **Comp Biochem Physiol [C]** 1988;91(2):419–24
Hepatic phase II biotransformation in C57Bl/KsJ db/db mice: comparison to that in Swiss Webster and 129 REJ mice. Watkins JB 3d, et al. **Comp Biochem Physiol [C]** 1988; 90(2):417–21
Chronic ethanol treatment of rats reduces RNA polymerase activity in isolated liver nuclei. Boyadjiev S, et al. **Cytobios** 1988;56(226–227):195–8
Activity of alcohol dehydrogenase and aldehyde dehydrogenase in maternal liver, fetal liver and placenta of the near–term pregnant ewe. Clarke DW, et al. **Dev Pharmacol Ther** 1989;12(1):35–41
Control of glycogen synthase and phosphorylase in hepatocytes from diabetic rats. Effects of glucagon, vasopressin, and vanadate. Rodríguez–Gil JE, et al. **Diabetes** 1989 Jun;38(6):793–8
Effects of enzyme induction therapy on glucose and drug metabolism in obese mice model of non–insulin dependent diabetes mellitus. Karvonen I, et al. **Diabetes Res** 1989 Feb; 10(2):85–92
Plasma hepatic glutathione S–transferase concentrations after insulin–induced hypoglycaemia in normal subjects and diabetic patients. Howie AF, et al. **Diabetic Med** 1989 Apr; 6(3):224–7
Differences in liver glycogen–synthase phosphatase activity in rodents with spontaneous insulin–dependent and non–insulin–dependent diabetes. Bollen M, et al. **Diabetologia** 1988 Sep;31(9):711–3
The development of phenylalanine hydroxylase in rat liver; in vivo, and in vitro studies utilizing fetal hepatocyte cultures. Yeoh GC, et al. **Differentiation** 1988 Jun; 38(1):42–8
Clinical use of serum enzymes in liver disease. Reichling JJ, et al. **Dig Dis Sci** 1988 Dec;33(12):1601–14 (157 ref.)
Regulatory elements controlling the basal and drug–inducible expression of glutathione S–transferase Ya subunit gene. Daniel V, et al. **DNA** 1989 Jul–Aug;8(6):399–408
Hepatic expression of rat P450 mRNA assessed by in situ hybridization to oligomer probes. Hassett C, et al. **DNA** 1989 Jan–Feb;8(1):29–37
Antioxidant and free radical–scavenging enzymes in chronically ethanol–consuming rats: controversy over hepatic lipid peroxidation. Nadkarni GD, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):161–4
The development of an assay for determination of monooxygenase of human foetal livers based on rate of decrease in substrate concentration. Akintonwa DA, et al. **Drug Des Deliv** 1988 Jul;3(1):77–83
Haloperidol reductase in human and guinea pig livers. Inaba T, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):330–3
Kinetic characterization of acetylator genotype–dependent and –independent N–acetyltransferase isozymes in homozygous rapid and slow acetylator inbred hamster liver cytosol. Trinidad A, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):238–47
Evidence in humans for variant allozymes of the nondeficient sparteine/debrisoquine monooxygenase (P450IID 1) in vitro. Tyndale RF, et al. **Drug Metab Dispos** 1989 May–Jun; 17(3):334–40
Effects of dietary zinc deficiency on the activity of enzymes associated with phase I and II of drug metabolism in Fischer–344 rats: activities of drug metabolising enzymes in zinc deficiency. Jagadeesan V, et al. **Drug Nutr Interact** 1988;5(4):403–13
Effect of 7,12–dimethylbenz(a)anthracene administration on hepatic drug metabolizing enzymes in female rats fed corn, primrose, and menhaden oils. Wade AE, et al. **Drug Nutr Interact** 1988;5(4):309–16
Xenobiotic metabolizing enzyme systems in test fish. III. Comparative studies of liver cytosolic glutathione S–transferases. Donnarumma L, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):180–6
Hepatic monooxygenase induction and promutagen activation in channel catfish from a contaminated river basin. Winston GW, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):258–71
Characterization of two different genes (cDNA) for cytochrome c oxidase subunit VIa from heart and liver of the rat. Schlerf A, et al. **EMBO J** 1988 Aug;7(8):2387–91
Dose dependent reversal by i.v. glucose administration of the stimulation of rat liver glycogen phosphorylase by epinephrine infusion. Németh S, et al. **Endocrinol Exp** 1988 Dec;22(4):249–54
In vivo effects of thyroid hormone, glucocorticoid, androgen, and somatotropin on RNA polymerase I activities in isolated liver nuclei. Matsui H, et al. **Endocrinol Jpn** 1988 Oct;35(5):697–704
Derangement in hepatic enzymes caused by sucrose–drinking and its implication for the development of hyperglycemia in female Wistar fatty rats. Sugiyama Y, et al. **Endocrinol Jpn** 1989 Apr;36(2):245–51
Pathogenesis of hyperglycemia in genetically obese–hyperglycemic rats, Wistar fatty: presence of hepatic insulin resistance. Sugiyama Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):65–73
A study of hepatic low Km iodothyronine 5'–monodeiodinase. Boado RJ, et al. **Endocrinology** 1989 May;124(5):2245–51
Aging alters the activity of 5'–deiodinase in the adenohypophysis, thyroid gland, and liver of the male rat. Donda A, et al. **Endocrinology** 1989 Mar;124(3):1305–9
Effect of interleukin–1 (IL–1) on thyroid hormone metabolism in mice: stimulation by IL–1 of iodothyronine 5'–deiodinating activity (type I) in the liver. Fujii T, et al. **Endocrinology** 1989 Jan;124(1):167–74
The influence of genetic background on the expression of mutations at the diabetes locus in the mouse. V. Interaction between the db gene and hepatic sex steroid sulfotransferases correlates with gender–dependent susceptibility to hyperglycemia. Leiter EH, et al. **Endocrinology** 1989 Feb;124(2):912–22
Licorice inhibits corticosteroid 11 beta–dehydrogenase of rat kidney and liver: in vivo and in vitro studies. Monder C, et al. **Endocrinology** 1989 Aug;125(2):1046–53
Heterologous desensitization of the liver adenylyl cyclase: analysis of the role of G–proteins. Premont RT, et al. **Endocrinology** 1989 Sep;125(3):1151–60
Calcitonin gene–related peptide stimulates adenylate cyclase activation via a guanine nucleotide–dependent process in rat liver plasma membranes. Yamaguchi A, et al. **Endocrinology** 1988 Nov;123(5):2591–6
The effect of insulin on glucose–6–phosphate dehydrogenase activity in liver, heart and skeletal muscle of rat during hypothermia. Torlińska T, et al. **Endokrynol Pol** 1988; 39(2):111–8
Pretreatment with mixed–function oxidase inducers increases the sensitivity of the hepatocyte/DNA repair assay. Shaddock JG, et al. **Environ Mol Mutagen** 1989;13(4):281–8
Aldehyde dehydrogenase from human erythrocytes: structural relationship to the liver cytosolic isozyme. Agarwal DP, et al. **Enzyme** 1989;42(1):47–52
Liver enzyme changes in a guinea–pig model of facial eczema (sporidesmiotoxicosis). Bonnefoi M, et al. **Enzyme** 1989; 42(1):39–46
Induction of gamma–glutamyl transferase by dexamethasone in cultured fetal rat hepatocytes. Cotariu D, et al. **Enzyme** 1988;40(4):212–6
Human erythrocyte catalase, isolation with an improved method, characterization and comparison to bovine liver catalase. Góth L. **Enzyme** 1989;41(4):191–9
Simultaneous purification and characterization of aspartate aminotransferase isoenzymes from chicken liver. Gracia R, et al. **Enzyme** 1988;40(4):189–97
Time–resolved fractionation of bone and liver alkaline phosphatase activities with a 'peeling–off' method. Miggiano GA, et al. **Enzyme** 1989;41(2):61–7
Effects of some S–blocked glutathione derivatives on the prevalent glyoxalase II (a form) of rat liver. Principato GB, et al. **Enzyme** 1989;41(3):175–80
Subcellular localization of UDP–glucuronyltransferase by differential centrifugation. Changes produced by pretreatment of rats with secretin, glucagon, vasoactive intestinal polypeptide and phenobarbitone. Ricci GL, et al. **Enzyme** 1989;41(2):75–86
Effect of uridine on hepatic galactose–1–phosphate uridyltransferase. Rogers S, et al. **Enzyme** 1989;42(1):53–60
Dehydrogenases of the pentose phosphate pathway in rat liver peroxisomes. Antonenkov VD. **Eur J Biochem** 1989 Jul 15;183(1):75–82
Fe(II)–substituted horse liver alcohol dehydrogenase, a model for non–heme iron enzymes. Various states of iron–dioxygen interaction investigated by Mössbauer and EPR spectroscopy. Bill E, et al. **Eur J Biochem** 1989 Mar 1;180(1):111–21
Purification and properties of mouse liver coproporphyrinogen oxidase. Bogard M, et al. **Eur J Biochem** 1989 May 1;181(2):417–21
A combination of intracellular leucine with either glutamate or aspartate inhibits autophagic proteolysis in isolated rat hepatocytes. Caro LH, et al. **Eur J Biochem** 1989 May 15;181(3):717–20
Molecular differences between rat–liver and rat–kidney biliverdin reductase. Implications for their in vivo regulation. Cascone O, et al. **Eur J Biochem** 1989 Jan 15; 179(1):123–30
Regulation of the expression of the phosphoenolpyruvate carboxykinase gene in cultured rat hepatocytes by glucagon and insulin. Christ B, et al. **Eur J Biochem** 1988 Dec 15; 178(2):373–9
Transfection of hepatic genes into adult rat hepatocytes in primary culture and their tissue–specific expression. Ginot F, et al. **Eur J Biochem** 1989 Mar 15;180(2):289–94
Purification and characterization of 6–pyruvoyl tetrahydropterin synthase from salmon liver. Hasler T, et al. **Eur J Biochem** 1989 Mar 1;180(1):205–11
Reaction of bovine–liver copper–zinc superoxide dismutase with hydrogen peroxide. Evidence for reaction with H_2O_2 and HO_2^- leading to loss of copper. Jewett SL, et al. **Eur J Biochem** 1989 Apr 1;180(3):569–75
Zonal distribution of fatty acid synthase in liver parenchyma of male and female rats. Katz N, et al. **Eur J Biochem** 1989 Mar 1;180(1):185–9
Purification and properties of 5,6–dihydropyrimidine amidohydrolase from calf liver. Kautz J, et al. **Eur J Biochem** 1989 May 1;181(2):431–5
Soaking in Cs_2SO_4 reveals a caesium–aromatic interaction in bovine–liver rhodanese. Kooystra PJ, et al. **Eur J Biochem** 1988 Nov 1;177(2):345–9
Inhibitors of liver lysosomal acid phospholipase A1. Kunze H, et al. **Eur J Biochem** 1988 Nov 15;177(3):591–5
Analysis of the inactivation of liver alcohol dehydrogenase during storage in Aerosol–OT/isooctane microemulsions. Larsson KM, et al. **Eur J Biochem** 1989 Aug 1; 183(2):357–61
Phosphorylation/dephosphorylation of the beta light chain of clathrin from rat liver coated vesicles. Loeb JE, et al. **Eur J Biochem** 1989 Jun 1;182(1):195–202
Triacylglycerol synthesis in cultured rat hepatocytes. The rate–limiting role of diacylglycerol acyltransferase. Mayorek N, et al. **Eur J Biochem** 1989 Jun 15; 182(2):395–400
The kinetics of the thermal deactivation of transglutaminase from guinea–pig liver. Nury S, et al. **Eur J Biochem** 1989 Mar 1;180(1):161–6
Purification, characterization and subcellular localization of pig liver alpha–L–iduronidase. Ohshita T, et al. **Eur J Biochem** 1989 Jan 15;179(1):201–7
Different membrane–bound forms of acetylcholinesterase are present at the cell surface of hepatocytes. Perelman A, et al. **Eur J Biochem** 1989 Jun 1;182(1):203–7

DNA polymerase alpha from normal rat liver is different than DNA polymerases alpha from Morris hepatoma strains. Popanda O, et al. **Eur J Biochem** 1989 Jul 15; 183(1):5–13

The binding of 1,10-phenanthroline to specifically active-site cobalt(II)-substituted horse-liver alcohol dehydrogenase. A probe for the open-enzyme conformation. Sartorius C, et al. **Eur J Biochem** 1988 Nov 15;177(3):493–9

Dissociation of outer-sphere water is rate-limiting for the binding of ligands in the active site of horse liver alcohol dehydrogenase. Sartorius C, et al. **Eur J Biochem** 1988 Nov 15;177(3):501–4

Human liver cytosolic epoxide hydrolases. Schladt L, et al. **Eur J Biochem** 1988 Oct 1;176(3):715–23

Purification of GTP cyclohydrolase I from human liver and production of specific monoclonal antibodies. Schoedon G, et al. **Eur J Biochem** 1989 Jan 2;178(3):627–34

Differential induction of peroxisomal and microsomal fatty-acid-oxidising enzymes by peroxisome proliferators in rat liver and kidney. Characterisation of a renal cytochrome P-450 and implications for peroxisome proliferation. Sharma RK, et al. **Eur J Biochem** 1989 Sep 1;184(1):69–78

Synthesis and biological activity of N6-(N[(4-azido-3,5,6-trifluoro)-pyridin-2-yl]-2-aminoethyl)-adenosine 5'-monophosphate, a new AMP photoactivatable derivative. Covalent modification of horse liver alcohol dehydrogenase. Sicsic S, et al. **Eur J Biochem** 1989 Feb 1;179(2):435–40

Isolation and characterization of a rat liver alkaline phosphatase gene. A single gene with two promoters. Toh Y, et al. **Eur J Biochem** 1989 Jun 15;182(2):231–7

Studies on the active site of rat glutathione S-transferase isoenzyme 4-4. Chemical modification by tetrachloro-1,4-benzoquinone and its glutathione conjugate. van Ommen B, et al. **Eur J Biochem** 1989 May 1;181(2):423–9

Accumulation of carbamoylphosphate-synthetase and phosphoenolpyruvate-carboxykinase mRNA in embryonic rat hepatocytes. Evidence for translational control during the initial phases of hepatocyte-specific gene expression in vitro. van Roon MA, et al. **Eur J Biochem** 1988 Dec 1;178(1):191–6

Depression of liver drug metabolism in sarcoma-bearing mice. Evidence for a circulating factor and dissociation from lipolytic activity. Bertini R, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1845–9

Selective induction of peroxisomal enzymes by the hypolipidemic drug bezafibrate. Detection of modulations by automatic image analysis in conjunction with immunoelectron microscopy and immunoblotting. Beier K, et al. **Eur J Cell Biol** 1988 Aug;46(3):383–93

Immunocytochemical analysis of soluble epoxide hydrolase and catalase in mouse and rat hepatocytes demonstrates a peroxisomal localization before and after clofibrate treatment. Hollinshead M, et al. **Eur J Cell Biol** 1988 Aug; 46(3):394–402

Extra-pancreatic action of glibenclamide in man: reduction in vitro of the inhibitory effect of glucagon and epinephrine on the hepatic key glycolytic enzymes phosphofructokinase (PFK) and pyruvate kinase (PK). Belfiore F, et al. **Eur J Clin Invest** 1989 Aug;19(4):367–71

Glycogen phosphorylase activation by progesterone in liver. Sancho MJ, et al. **Exp Clin Endocrinol** 1988 Dec; 92(2):154–60

Cytochrome P450 isozyme distribution in normal and tumor-bearing hepatic tissue from rainbow trout (Salmo gairdneri). Lorenzana RM, et al. **Exp Mol Pathol** 1989 Jun; 50(3):348–61

Schistosoma mansoni: suppression of carbamoyl phosphate synthetase (ammonia) and ornithine carbamoyltransferase activities in the liver of infected mice. Tanabe M, et al. **Exp Parasitol** 1989 May;68(4):432–42

Immunohistochemical localization of glutamine synthetase in human liver. Gebhardt R, et al. **Experientia** 1989 Feb 15;45(2):137–9

Purification of alpha-ketoaldehyde dehydrogenase from the human liver and its possible significance in the control of glycation. Oimomi M, et al. **Experientia** 1989 May 15; 45(5):463–6

Studies of 5'-deiodinase activity in rats differing in hepatic lipogenic activity. McIntosh MK, et al. **FASEB J** 1989 Apr;3(6):1734–40

Predominant localization of phosphoenolpyruvate carboxykinase mRNA in the periportal zone of rat liver parenchyma demonstrated by in situ hybridization. Bartels H, et al. **FEBS Lett** 1989 May 8;248(1-2):188–94

Expression of a human liver cDNA encoding a UDP-glucuronosyltransferase catalysing the glucuronidation of hyodeoxycholic acid in cell culture. Fournel-Gigleux S, et al. **FEBS Lett** 1989 Jan 30; 243(2):119–22

Heterogeneous expression of glutamine synthetase mRNA in rat liver parenchyma revealed by in situ hybridization and Northern blot analysis of RNA from periportal and perivenous hepatocytes. Gebhardt R, et al. **FEBS Lett** 1988 Dec 5;241(1-2):89–93

Evidence for two closely related isozymes of arylamine N-acetyltransferase in human liver. Grant DM, et al. **FEBS Lett** 1989 Feb 13;244(1):203–7

Isozymic forms of protein kinase C in regenerating rat liver. Houweling M, et al. **FEBS Lett** 1989 Apr 24;247(2):487–91

Identity of GD1C, GT1a and GQ1b synthase in Golgi vesicles from rat liver. Iber H, et al. **FEBS Lett** 1989 Aug 28;254(1-2):124–8

Identity of GA1, GM1a and GD1b synthase in Golgi vesicles from rat liver. Iber H, et al. **FEBS Lett** 1989 May 8; 248(1-2):18–22

Assay of phosphotyrosyl protein phosphatase using synthetic peptide 1142–1153 of the insulin receptor. King MJ, et al. **FEBS Lett** 1988 Sep 12;237(1-2):137–40

A specific, low Km ADP-ribose pyrophosphatase from rat liver. Miró A, et al. **FEBS Lett** 1989 Feb 13;244(1):123–6

The 18 kDa cytosolic acid phosphatase from bovine live has phosphotyrosine phosphatase activity on the autophosphorylated epidermal growth factor receptor. Ramponi G, et al. **FEBS Lett** 1989 Jul 3;250(2):469–73

Heterogeneous activation of protein kinase C during rat liver regeneration induced by carbon tetrachloride administration. Sasaki Y, et al. **FEBS Lett** 1989 Aug 28; 254(1-2):59–65

Na+, K+-specific inhibition of protein and peptide hydrolyses by proteasomes from human hepatoma tissues. Seol JH, et al. **FEBS Lett** 1989 Apr 24;247(2):197–200

Effect of phenobarbital on the expression of glutathione S-transferase isoenzymes in cultured rat hepatocytes. Vandenberghe Y, et al. **FEBS Lett** 1989 Jul 17; 251(1-2):59–64

Diurnal changes in the activity of arylsulphatases A and B of rat liver. Urbanik-Brzóska A, et al. **Folia Biol (Krakow)** 1988;36(3-4):173–82

Changes in the activity of some liver drug-metabolizing enzymes during and after prolonged application of diphenylhydantoin. Kantarev N, et al. **Folia Med (Plovdiv)** 1987;29(4):24–9

Comparative histoenzymological studies of the liver of some teleosts in relation to their feeding habits. Mishra KP, et al. **Folia Morphol (Praha)** 1988;36(3):286–9

The effect of feeding brassica vegetables and intact glucosinolates on mixed-function-oxidase activity in the livers and intestines of rats. McDanell R, et al. **Food Chem Toxicol** 1989 May;27(5):289–93

A comparative study of the hepatotoxicity of 1-fluoropentane and 1-fluorohexane. Nhachi CF, et al. **Food Chem Toxicol** 1988 Aug;26(8):705–13

Properties of enzymes in hepatocytes that convert 5-HPETE or LTA4 into LTB4. Trudell JR, et al. **Free Radic Biol Med** 1989;7(3):275–84

Liver nuclear NADPH-cytochrome P-450 reductase may be involved in redox cycling of bleomycin-Fe(III), oxy radical formation and DNA damage. Kappus H, et al. **Free Radic Res Commun** 1987;2(4-6):271–7

Effects of hepatic inducers on testicular epoxide-metabolizing enzymes in the rat and mouse. DiBiasio KW, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):449–59

The effects of perfluorodecanoic acid on hepatic stearoyl-coenzyme A desaturase and mixed function oxidase activities in rats. Van Rafelghem MJ, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):503–10

Serum activity and hepatic localization of superoxide dismutase in alcoholics. Inagaki T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):277–83

Measurement of immunoreactive gamma-glutamyl transpeptidase in human sera and liver tissues of patients with various liver diseases. Sekiya C, et al. **Gastroenterol Jpn** 1989 Aug;24(4):378–85

Subcellular localization of aldehyde dehydrogenase isozymes in human liver. Takase S, et al. **Gastroenterol Jpn** 1989 Feb;24(1):31–9

Effect of liver regeneration on hepatic cytochrome P450 isozymes and serum sex steroids in the male rat. Liddle C, et al. **Gastroenterology** 1989 Mar;96(3):864–72

Pilot study of cyclosporin A in patients with symptomatic primary biliary cirrhosis. Minuk GY, et al. **Gastroenterology** 1988 Nov;95(5):1356–63

Influence of liver disease on hepatic alcohol and aldehyde dehydrogenases. Panés J, et al. **Gastroenterology** 1989 Sep; 97(3):708–14

Glutathione S-transferase, cytochrome P450, and uridine 5'-diphosphate-glucuronosyltransferase in human small intestine and liver. Peters WH, et al. **Gastroenterology** 1989 Mar;96(3):783–9

The regulation of 6-phosphofructo-1-kinase by insulin and glucagon in isolated hepatocytes of the American eel. Foster GD, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):382–9

Enhancement of ornithine decarboxylase activity in Ambystoma liver slices by ovine prolactin: an evaluation of possible mediators. Ibrahim RH, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):90–6

Oxidative metabolism in a teleost, Anabas testudineus Bloch: effect of thyroid hormones on hepatic enzyme activities. Peter MC, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):96–107

Nucleotide and deduced amino acid sequence of the E1 alpha subunit of human liver branched-chain alpha-ketoacid dehydrogenase. Zhang B, et al. **Gene** 1988 Sep 15; 69(1):159–64

The liver/erythrocyte pyruvate kinase gene complex [Pk-1] in the mouse: structural gene mutations. Fitton LA, et al. **Genet Res** 1989 Apr;53(2):105–10

Age-related changes in the response of hepatic succinic dehydrogenase activity to thyroxine and thiourea in lizards. Sahu N, et al. **Gerontology** 1988;34(4):179–83

Differential regulation of glutathione S-transferases in cultured hepatocytes. Abramovitz M, et al. **Hepatology** 1989 Feb;9(2):235–9

Increased bioavailability of enzymes of eicosanoid synthesis in hepatic and extrahepatic tissues after portacaval shunting. Goerig M, et al. **Hepatology** 1989 Aug; 10(2):154–62

Hepatic enzymic zonation: a reevaluation of the concept of the liver acinus. Lamers WH, et al. **Hepatology** 1989 Jul; 10(1):72–6

Localization of ammonia-metabolizing enzymes in human liver: ontogenesis of heterogeneity. Moorman AF, et al. **Hepatology** 1989 Mar;9(3):367–72

Hepatic dopamine sulfotransferases in untreated rats and in rats subjected to endocrine or hypertension-related treatments. Singer SS, et al. **Hepatology** 1988 Nov-Dec; 8(6):1511–20

Hepatic aldehyde dehydrogenase activity in liver diseases, with particular emphasis on alcoholic liver disease. Takase S, et al. **Hepatology** 1989 May;9(5):704–9

The intralobular distribution of ethanol-inducible P450IIE1 in rat and human liver. Tsutsumi M, et al. **Hepatology** 1989 Oct;10(4):437–46

A quantitative histochemical study of 5'-nucleotidase activity in rat liver using the lead salt method and polyvinyl alcohol. Frederiks WM, et al. **Histochem J** 1988 Apr; 20(4):207–14

Differentiating the effects of microwave and heat on tissue proteins and their crosslinking by formaldehyde. Hopwood D, et al. **Histochem J** 1988 Jun-Jul;20(6-7):341–6

Simultaneous histochemical assay of two dehydrogenases in the same cell. Stoward PJ, et al. **Histochem J** 1988 Nov; 20(11):610–6

Sex differences of the influence of T3 on the topical distribution of phosphoenolpyruvate carboxykinase activity in the liver acinus. Wimmer M. **Histochemistry** 1989; 92(2):109–13

Cell-density-dependent release of hepatic lipase from cultured rat hepatocytes. Jensen E, et al. **Horm Metab Res** 1989 Jan;21(1):4–7

Streptozotocin-induced diabetes increases sialidase activity in the rat liver. Murayama M, et al. **Horm Metab Res** 1988 Nov;20(11):718–9

Is enzyme induction good for you? A problem of epidemiology and toxicology. McLean AE. **Hum Toxicol** 1988 Sep;7(5):419–22 (29 ref.)

Effect of methionine supplementation on lanthanum chloride and neodymium chloride induced alterations in enzymes of the antioxidant defence system and gamma-glutamyl cycle in chick liver. Ghosh N, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):336–40

Effect of substrates and coenzymes on the molecular symmetry-related properties of horse liver and yeast alcohol dehydrogenases. Malhotra OP, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):63–73

Effect of adrenaline on hepatic enzyme activities in an apodan amphibia Gegenophis carnosus. Josekumar VS, et al. **Indian J Exp Biol** 1988 Oct;26(10):796–800

Enzymatic detoxification using lipophilic hollow-fiber membranes: IV. Glutathione conjugation reactions. Tsikas D, et al. **Int J Artif Organs** 1989 Feb;12(2):121–8

Maturation of embryonic chick liver delta-aminolevulinate synthase: precursor pools and regulation by intra-cellularly produced heme. Ades IZ, et al. **Int J Biochem** 1988; 20(9):959–64

Effect of chronic ethanol treatment under partial catalase inhibition on the activity of enzymes related to peroxide metabolism in rat liver and heart. Antonenkov VD, et al. **Int J Biochem** 1988;20(8):823–8

Calcium-activated phospholipid-dependent protein kinases from rat liver: characterization of purified isoenzymic forms. Azhar S, et al. **Int J Biochem** 1989;21(2):209–18

Purification and characterization of a broad specificity beta-glucosidase from sheep liver. Chinchetru MA, et al. **Int J Biochem** 1989;21(5):469–76

A fluorescence study of substrate and inhibitor binding to bovine liver dihydrofolate reductase. Degan P, et al. **Int J Biochem** 1989;21(3):291–5

Characterization of a glucosyltransferase activity in liver plasma membrane: modulation by cations and lipidic effectors. Fernández-Briera A, et al. **Int J Biochem** 1988; 20(9):951–8

Xanthine oxidase activity and immunologically detectable protein in the C57Bl/6 mouse. Manchester KM, et al. **Int J Biochem** 1988;20(10):1061–6

Lack of evidence for a pyruvate kinase isozyme shift in hepatocytes of the regenerating rat liver. Miyanaga O, et al. **Int J Biochem** 1988;20(11):1219–25

Separation and properties of multiple forms of dihydrodiol dehydrogenase from hamster liver. Sawada H, et al. **Int J Biochem** 1989;21(4):367–75

Purification by affinity chromatography and characterization of porcine liver cytoplasmic polyamine oxidase. Tsukada T, et al. **Int J Biochem** 1988;20(7):695–702

Multiple forms of glutathione S-transferase from pig liver—reaction with methyl linoleate hydroperoxides. Williamson G. **Int J Biochem** 1989;21(1):23–30

Serum lactate dehydrogenase in murine leprosy: source and isozymes. Herrera JL, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):641–6

Effects of weight loss and weight maintenance on the serum

lipids, lipoprotein lipase and hepatic triglyceride lipase activities in obese rats. Kasim S, et al. Int J Obes 1989 Jun;13(3):279–88

The histochemical location of three diagnostic enzymes in the marmoset liver. Davy CW, et al. J Appl Toxicol 1989 Apr;9(2):109–11

Protection of glutathione S-transferase from bilirubin inhibition. Fukai F, et al. J Biochem (Tokyo) 1989 Jun; 105(6):968–73

Purification and characterization of NADP+-dependent 3 alpha-hydroxysteroid dehydrogenase from mouse liver cytosol. Hara A, et al. J Biochem (Tokyo) 1988 Jun; 103(6):1027–34

Acid phosphatase in rat liver lysosomal membranes: purification and characterization. Himeno M, et al. J Biochem (Tokyo) 1989 Mar;105(3):449–56

Expression of four phenobarbital-inducible cytochrome P-450s in liver, kidney, and lung of rats. Imaoka S, et al. J Biochem (Tokyo) 1989 Jun;105(6):939–45

Production and characterization of monoclonal antibodies to rat liver arginase. Isoai A, et al. J Biochem (Tokyo) 1989 Jun;105(6):894–7

Rat liver phosphoribosyl pyrophosphate synthetase: existence of the purified enzyme as heterogeneous aggregates and identification of the catalytic subunit. Kita K, et al. J Biochem (Tokyo) 1989 May;105(5):736–41

Molecular cloning and sequence analysis of cDNA containing the entire coding region for human fetal liver cytochrome P-450. Komori M, et al. J Biochem (Tokyo) 1989 Feb;105(2):161–3

Quinolinic acid phosphoribosyltransferase: purification and partial characterization from human liver and brain. Okuno E, et al. J Biochem (Tokyo) 1988 Jun;103(6):1054–9

Single active site mechanism of rabbit liver acid alpha-glucosidase. Onodera S, et al. J Biochem (Tokyo) 1989 Apr;105(4):611–8

Studies on the equilibria and kinetics of the reactions of ferrous catalase with ligands. Shimizu N, et al. J Biochem (Tokyo) 1988 Jul;104(1):136–40

Comparative studies on the primary structure of human cystatin as from epidermis, liver, spleen, and leukocytes. Takeda A, et al. J Biochem (Tokyo) 1989 Jun;105(6):986–91

Purification and characterization of chicken liver cathepsin B. Wada K, et al. J Biochem (Tokyo) 1988 Sep;104(3):472–6

Comparative study of the sugar chains of gamma-glutamyltranspeptidases purified from human hepatocellular carcinoma and from human liver. Yamashita K, et al. J Biochem (Tokyo) 1989 May;105(5):728–35

Allylisopropylacetamide induces rat hepatic ornithine decarboxylase. Kitchin KT, et al. J Biochem Toxicol 1987 Fall-Winter;2:215–23

Immunoaffinity purification, partial sequence, and subcellular localization of rat liver phospholipase A2. Aarsman AJ, et al. J Biol Chem 1989 Jun 15;264(17):10008–14

The binding sites on fibrin(ogen) for guinea pig liver transglutaminase are similar to those of blood coagulation factor XIII. Characterization of the binding of liver transglutaminase to fibrin. Achyuthan KE, et al. J Biol Chem 1988 Oct 5;263(28):14296–301

Acceptor substrate-potentiated inactivation of bovine liver rhodanese. Aird BA, et al. J Biol Chem 1988 Oct 25; 263(30):15270–6

Expression cloning and regulation of steroid 5 alpha-reductase, an enzyme essential for male sexual differentiation. Andersson S, et al. J Biol Chem 1989 Sep 25;264(27):16249–55

The amino acid sequence of rat liver glucokinase deduced from cloned cDNA. Andreone TL, et al. J Biol Chem 1989 Jan 5;264(1):363–9

Identification and regulation of a rat liver cDNA encoding farnesyl pyrophosphate synthetase. Ashby MN, et al. J Biol Chem 1989 Jan 5;264(1):635–40

The influence of the triglyceride content of low density lipoprotein on the interaction of apolipoprotein B-100 with cells. Aviram M, et al. J Biol Chem 1988 Nov 15; 263(32):16842–8

Modification of low density lipoprotein by lipoprotein lipase or hepatic lipase induces enhanced uptake and cholesterol accumulation in cells. Aviram M, et al. J Biol Chem 1988 Oct 25;263(30):15416–22

Characterization of mRNA species related to human liver cytochrome P-450 nifedipine oxidase and the regulation of catalytic activity. Bork RW, et al. J Biol Chem 1989 Jan 15;264(2):910–9

Role of bestatin-sensitive exopeptidases in the intracellular degradation of hepatic proteins. Botbol V, et al. J Biol Chem 1989 Aug 15;264(23):13504–9

Membrane topology of mammalian cytochromes P-450 from liver endoplasmic reticulum. Determination by trypsinolysis of phenobarbital-treated microsomes. Brown CA, et al. J Biol Chem 1989 Mar 15;264(8):4442–9

Sequence analysis, biogenesis, and mitochondrial import of the alpha-subunit of rat liver propionyl-CoA carboxylase. Browner MF, et al. J Biol Chem 1989 Jul 25; 264(21):12680–5

The catalytic site of rat hepatic lauric acid omega-hydroxylase. Protein versus prosthetic heme alkylation in the omega-hydroxylation of acetylenic fatty acids. CaJacob CA, et al. J Biol Chem 1988 Dec 15; 263(35):18640–9

The complete amino acid sequence of the low molecular weight cytosolic acid phosphatase. Camici G, et al. J Biol Chem 1989 Feb 15;264(5):2560–7

An intrinsic membrane glycoprotein of the golgi apparatus with O-linked N-acetylglucosamine facing the cytosol. Capasso JM, et al. J Biol Chem 1988 Dec 25; 263(36):19778–82

Periodate-oxidized 3-aminopyridine adenine dinucleotide phosphate as a fluorescent affinity label for pigeon liver malic enzyme. Chang GG, et al. J Biol Chem 1989 Jan 5;264(1):280–7

Arginine residues at the active site of avian liver phosphoenolpyruvate carboxykinase. Cheng KC, et al. J Biol Chem 1989 Feb 25;264(6):3317–24

Resonance Raman spectra of bovine liver catalase compound II. Similarity of the heme environment to horseradish peroxidase compound II. Chuang WJ, et al. J Biol Chem 1989 Aug 25;264(24):14209–15

Induction of rat liver 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase mRNA by refeeding and insulin. Colosia AD, et al. J Biol Chem 1988 Dec 15;263(35):18669–77

The beta very low density lipoprotein present in hepatic lipase deficiency competitively inhibits low density lipoprotein binding to fibroblasts and stimulates fibroblast acyl-CoA:cholesterol acyltransferase. Connelly PW, et al. J Biol Chem 1988 Oct 5;263(28):14184–8

Chemical cross-linking reveals a dimeric structure for CTP:phosphocholine cytidylyltransferase. Cornell R. J Biol Chem 1989 May 25;264(15):9077–82

The tyrosine-dependent oxidation of tetrahydropterins by lysolecithin-activated rat liver phenylalanine hydroxylase. Davis MD, et al. J Biol Chem 1988 Nov 25;263(33):17312–6

Evidence for the formation of the 4a-carbinolamine during the tyrosine-dependent oxidation of tetrahydrobiopterin by rat liver phenylalanine hydroxylase. Davis MD, et al. J Biol Chem 1989 May 25;264(15):8585–96

Regulation of the expression of the L-type pyruvate kinase gene in adult rat hepatocytes in primary culture. Decaux JF, et al. J Biol Chem 1989 Jul 15;264(20):11584–90

The expression of cAMP-dependent protein kinase subunits is differentially regulated during liver regeneration. Ekanger R, et al. J Biol Chem 1989 Mar 15;264(8):4374–82

Purification of a phospholipase C from rat liver cytosol that acts on phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 4-phosphate. Fukui T, et al. J Biol Chem 1988 Nov 25;263(33):17730–7

Mitochondrial ATP synthase. Overexpression in Escherichia coli of a rat liver beta subunit peptide and its interaction with adenine nucleotides. Garboczi DN, et al. J Biol Chem 1988 Oct 25;263(30):15694–8

Thyroidal regulation of rat renal and hepatic Na,K-ATPase gene expression. Gick GG, et al. J Biol Chem 1988 Nov 15;263(32):16610–8

A heritable variant of mouse liver ornithine aminotransferase (EC 2.6.1.13) induced by ethylnitrosourea. Giometti CS, et al. J Biol Chem 1988 Oct 25;263(30):15781–4

Expression of rat liver S-adenosylhomocysteinase cDNA in Escherichia coli and mutagenesis at the putative NAD binding site. Gomi T, et al. J Biol Chem 1989 Sep 25; 264(27):16138–42

Purification and characterization of methylmalonate-semialdehyde dehydrogenase from rat liver. Identity to malonate-semialdehyde dehydrogenase. Goodwin GW, et al. J Biol Chem 1989 Sep 5; 264(25):14965–71

The dual effects of alcohols on the kinetic properties of guinea pig liver cytosolic beta-glucosidase. Gopalan V, et al. J Biol Chem 1989 Sep 15;264(26):15418–22

Characterization and conservation of the inner E2 core domain structure of branched-chain alpha-keto acid dehydrogenase complex from bovine liver. Construction of a cDNA encoding the entire transacylase (E2b) precursor. Griffin TA, et al. J Biol Chem 1988 Oct 5; 263(28):14008–14

Persulfide generated from L-cysteine inactivates tyrosine aminotransferase. Requirement for a protein with cysteine oxidase activity and gamma-cystathionase. Hargrove JL. J Biol Chem 1988 Nov 25;263(33):17262–9

The solubilization of tetrameric alkaline phosphatase from human liver and its conversion into various forms by phosphatidylinositol phospholipase C or proteolysis. Hawrylak K, et al. J Biol Chem 1988 Oct 5; 263(28):14368–73

Enzymatic conversion of prostaglandin H2 to prostaglandin F2 alpha by aldehyde reductase from human liver: comparison to the prostaglandin F synthetase from bovine lung. Hayashi H, et al. J Biol Chem 1989 Jan 15; 264(2):1036–40

Epimerization of 3-hydroxyacyl-CoA esters in rat liver. Involvement of two 2-enoyl-CoA hydratases. Hiltunen JK, et al. J Biol Chem 1989 Aug 15;264(23):13536–40

Hepatic lipase in the rat ovary. Ovaries cannot synthesize hepatic lipase but accumulate it from the circulation. Hixenbaugh EA, et al. J Biol Chem 1989 Mar 5; 264(7):4222–30

Detection of 10 variants of biliverdin reductase in rat liver by two-dimensional gel electrophoresis. Huang TJ, et al. J Biol Chem 1989 May 15;264(14):7844–9

Peroxisomal bile acid-CoA:amino-acid N-acyltransferase in rat liver. Kase BF, et al. J Biol Chem 1989 Jun 5; 264(16):9220–3

A monoclonal antibody against COOH-terminal peptide of human liver manganese superoxide dismutase. Kawaguchi T, et al. J Biol Chem 1989 Apr 5;264(10):5762–7

Internalization and activation of the rat liver insulin receptor kinase in vivo. Khan MN, et al. J Biol Chem 1989 Aug 5;264(22):12931–40

Phosphorylation of myocardial fructose-6-phosphate,2-kinase: fructose-2,6-bisphosphatase by cAMP-dependent protein kinase and protein kinase C. Activation by phosphorylation and amino acid sequences of the phosphorylation sites. Kitamura K, et al. J Biol Chem 1988 Nov 15; 263(32):16796–801

Cloning and sequence analysis of a rat liver cDNA encoding acyl-peptide hydrolase. Kobayashi K, et al. J Biol Chem 1989 May 25;264(15):8892–9

The stereochemical course of phospho group transfer catalyzed by rat liver 6-phosphofructo-2-kinase. Kountz PD, et al. J Biol Chem 1988 Nov 5;263(31):16069–72

Induction of ornithine decarboxylase in rat liver by phorbol ester is mediated by prostanoids from Kupffer cells. Kuiper J, et al. J Biol Chem 1989 Apr 25;264(12):6874–8

Human aldehyde dehydrogenase. Purification and characterization of a third isozyme with low Km for gamma-aminobutyraldehyde. Kurys G, et al. J Biol Chem 1989 Mar 15;264(8):4715–21

Feminization of rat hepatic P-450 expression by cisplatin. Evidence for perturbations in the hormonal regulation of steroid-metabolizing enzymes. LeBlanc GA, et al. J Biol Chem 1988 Oct 25;263(30):15732–9

Mechanism of ferritin iron uptake: activity of the H-chain and deletion mapping of the ferro-oxidase site. A study of iron uptake and ferro-oxidase activity of human liver, recombinant H-chain ferritins, and of two H-chain deletion mutants. Levi S, et al. J Biol Chem 1988 Dec 5; 263(34):18086–92

Cysteine 288: an essential hyperreactive thiol of cytosolic phosphoenolpyruvate carboxykinase (GTP). Lewis CT, et al. J Biol Chem 1989 Jan 5;264(1):27–33

Localization of the ecto-ATPase (ecto-nucleotidase) in the rat hepatocyte plasma membrane. Implications for the functions of the ecto-ATPase. Lin SH. J Biol Chem 1989 Aug 25;264(24):14403–7

Cloning and expression of a cDNA coding for a rat liver plasma membrane ecto-ATPase. The primary structure of the ecto-ATPase is similar to that of the human biliary glycoprotein I. Lin SH, et al. J Biol Chem 1989 Aug 25; 264(24):14408–14

The epidermal growth factor receptor tyrosine kinase in liver epithelial cells. The effect of ligand-dependent changes in cellular location. McCune BK, et al. J Biol Chem 1989 Sep 15;264(26):15501–7

Conservation of central nervous system glutaryl-coenzyme A dehydrogenase in fruit-eating bats with glutaric aciduria and deficient hepatic glutaryl-coenzyme A dehydrogenase. McMillan TA, et al. J Biol Chem 1988 Nov 25; 263(33):17258–61

A reactive cysteine in avian liver phosphoenolpyruvate carboxykinase. Makinen AL, et al. J Biol Chem 1989 Jul 25;264(21):12148–57

Protein kinase C located in rat liver nuclei. Partial purification and biochemical and immunochemical characterization. Masmoudi A, et al. J Biol Chem 1989 Jan 15;264(2):1172–9

Molecular cloning and nucleotide sequence of cDNAs encoding the precursors of rat long chain acyl-coenzyme A, short chain acyl-coenzyme A, and isovaleryl-coenzyme A dehydrogenases. Sequence homology of four enzymes of the acyl-CoA dehydrogenase family. Matsubara Y, et al. J Biol Chem 1989 Sep 25;264(27):16321–31

Involvement of the carboxyl-terminal propeptide of beta-glucuronidase in its compartmentalization within the endoplasmic reticulum as determined by a synthetic peptide approach. Medda S, et al. J Biol Chem 1989 Sep 25; 264(27):15824–8

Detection of time-dependent and oxidatively induced antigens of bovine liver rhodanese with monoclonal antibodies. Merrill GA, et al. J Biol Chem 1988 Dec 25; 263(36):19324–30

Enzymic conversion of 11,12-leukotriene A4 to 11,12-dihydroxy-5,14-cis-7,9-trans-eicosatetraenoic acid. Purification of an epoxide hydrolase from the guinea pig liver cytosol. Miki I, et al. J Biol Chem 1989 Apr 5; 264(10):5799–805

Molecular cloning and primary structure of cDNA encoding the catalytic domain of rat liver aspartyl-tRNA synthetase. Mirande M, et al. J Biol Chem 1989 Jan 15;264(2):842–7

Cloning and sequence analysis of cDNA for rat liver uricase. Motojima K, et al. J Biol Chem 1988 Nov 15; 263(32):16677–81

An S6 kinase activated during liver regeneration is related to the insulin-stimulated S6 kinase in H4 hepatoma cells. Nemenoff RA, et al. J Biol Chem 1988 Dec 25; 263(36):19455–60

Reactivity of chicken liver xanthine dehydrogenase containing modified flavins. Nishino T, et al. J Biol Chem 1989 Apr 15;264(11):6075–85

The reactivity of chicken liver xanthine dehydrogenase with molecular oxygen. Nishino T, et al. J Biol Chem 1989 Feb 15;264(5):2518–27

Requirements of both glucocorticoids and glucagon as co-inducers for activation of transcription of the serine dehydratase gene in cultured rat hepatocytes. Noda C, et al. J Biol Chem 1988 Oct 15;263(29):14764–8

Dehydrogenase-dependent ethanol metabolism in deer mice (Peromyscus maniculatus) lacking cytosolic alcohol dehydrogenase. Reversibility and isotope effects in vivo and in subcellular fractions. Norsten C, et al. **J Biol Chem** 1989 Apr 5;264(10):5593–7

Primary structure of rat liver dipeptidyl peptidase IV deduced from its cDNA and identification of the NH2-terminal signal sequence as the membrane-anchoring domain. Ogata S, et al. **J Biol Chem** 1989 Feb 25; 264(6):3596–601

Human liver serine dehydratase. cDNA cloning and sequence homology with hydroxyamino acid dehydratases from other sources. Ogawa H, et al. **J Biol Chem** 1989 Sep 25; 264(27):15818–23

Purification of hepoxilin epoxide hydrolase from rat liver. Pace-Asciak CR, et al. **J Biol Chem** 1989 Jun 5; 264(16):9310–3

Hormonal regulation of mouse fatty acid synthase gene transcription in liver. Paulauskis JD, et al. **J Biol Chem** 1989 Jan 5;264(1):574–7

Isolation of a vesicular intermediate in the cell-free transfer of membrane from transitional elements of the endoplasmic reticulum to Golgi apparatus cisternae of rat liver. Paulik M, et al. **J Biol Chem** 1988 Nov 25;263(33):17738–48

Nucleotide sequence and glucocorticoid regulation of the mRNAs for the isoenzymes of rat aspartate aminotransferase. Pavé-Preux M, et al. **J Biol Chem** 1988 Nov 25;263(33):17459–66

Glucagon-induced desensitization of adenylyl cyclase in primary cultures of chick hepatocytes. Evidence for multiple pathways. Premont RT, et al. **J Biol Chem** 1988 Nov 5;263(31):16087–95

Purification of a hepatic S6 kinase from cycloheximide-treated Rats. Price DJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13825–33

Characterization of tyrosylprotein sulfotransferase from rat liver and other tissues. Rens-Domiano S, et al. **J Biol Chem** 1989 Jan 15;264(2):899–905

Specificity of rat hepatic phosphatidylethanolamine N-methyltransferase for molecular species of dioxyl phosphatidylethanolamine. Ridgway ND, et al. **J Biol Chem** 1988 Nov 15;263(32):16856–63

Phosphatidylethanolamine levels and regulation of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1989 Jan 15;264(2):1203–7

Kinetic mechanism of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1988 Nov 15;263(32):16864–71

The multicatalytic proteinase. Multiple proteolytic activities. Rivett AJ. **J Biol Chem** 1989 Jul 25;264(21):12215–9

A gene specifying subunit VIII of human cytochrome c oxidase is localized to chromosome 11 and is expressed in both muscle and non-muscle tissues. Rizzuto R, et al. **J Biol Chem** 1989 Jun 25;264(18):10595–600

Differences in environment of FAD between NAD-dependent and O2-dependent types of rat liver xanthine dehydrogenase shown by active site probe study. Saito T, et al. **J Biol Chem** 1989 Sep 25;264(27):15930–5

Differences in redox and kinetic properties between NAD-dependent and O2-dependent types of rat liver xanthine dehydrogenase. Saito T, et al. **J Biol Chem** 1989 Jun 15;264(17):10015–22

The activator protein for glucosylceramide beta-glucosidase from guinea pig liver. Improved isolation method and complete amino acid sequence. Sano A, et al. **J Biol Chem** 1988 Dec 25;263(36):19597–601

Oxysterol regulators of 3-hydroxy-3-methylglutaryl-CoA reductase in liver. Effect of dietary cholesterol. Saucier SE, et al. **J Biol Chem** 1989 Apr 25;264(12):6863–9

Characterization of a glucagon receptor-linked protease from canine hepatic plasma membranes. Partial purification, kinetic analysis, and determination of sites for hormone processing. Sheetz MJ, et al. **J Biol Chem** 1988 Dec 15; 263(35):19210–7

Post-transcriptional regulation of 3-hydroxy-3-methylglutaryl-CoA reductase mRNA in rat liver. Glucocorticoids block the stabilization caused by thyroid hormones. Simonet WS, et al. **J Biol Chem** 1989 Jan 5;264(1):569–73

A role for lipids in the functional and structural properties of the rat liver aminoacyl-tRNA synthetase complex. Sivaram P, et al. **J Biol Chem** 1988 Dec 15;263(35):18891–6

Purification and characterization of a ribonuclease from human liver. Sorrentino S, et al. **J Biol Chem** 1988 Nov 5;263(31):16125–31

Stereospecific oxidation of secondary alcohols by human alcohol dehydrogenases. Stone CL, et al. **J Biol Chem** 1989 Jul 5;264(19):11112–6

Rat liver mitochondrial and cytosolic fumarases with identical amino acid sequences are encoded from a single gene. Suzuki T, et al. **J Biol Chem** 1989 Feb 15; 264(5):2581–6

Proteasomes (multi-protease complexes) as 20 S ring-shaped particles in a variety of eukaryotic cells. Tanaka K, et al. **J Biol Chem** 1988 Nov 5;263(31):16209–17

Acute regulation of hepatic protein phosphatases by glucagon, insulin, and glucose. Tóth B, et al. **J Biol Chem** 1988 Oct 5;263(28):14061–6

Two glycosphingolipid sialyltransferases are localized in different sub-Golgi compartments in rat liver. Trinchera M, et al. **J Biol Chem** 1989 Sep 25;264(27):15766–9

Isolation and mapping of the beta-hydroxyacyl dehydratase activity of chicken liver fatty acid synthase. Tsukamoto Y, et al. **J Biol Chem** 1988 Nov 5;263(31):16225–9

Liver glucose-6-phosphatase activity is modulated by physiological intracellular Ca2+ concentrations. van de Werve G. **J Biol Chem** 1989 Apr 15;264(11):6033–6

Structure, turnover, and heme-mediated suppression of the level of mRNA encoding rat liver delta-aminolevulinate synthase. Yamamoto M, et al. **J Biol Chem** 1988 Nov 5; 263(31):15973–9

X-ray diffraction analyses of crystals of rat liver NAD(P)H:(quinone-acceptor) oxidoreductase containing cibacron blue. Ysern X, et al. **J Biol Chem** 1989 May 15; 264(14):7765–7

Heterogeneous alterations of UDP-glucuronosyltransferases in mouse hepatic foci. Bock KW, et al. **J Cancer Res Clin Oncol** 1989;115(3):285–9

Molecular immunocytochemistry of the CuZn superoxide dismutase in rat hepatocytes. Chang LY, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2169–79

An enzyme trafficking defect in two patients with primary hyperoxaluria type 1: peroxisomal alanine/glyoxylate aminotransferase rerouted to mitochondria. Danpure CJ, et al. **J Cell Biol** 1989 Apr;108(4):1345–52

Purification of glutathione S-transferases from rat liver and Walker 256 mammary carcinoma cells by high-performance liquid chromatography and a glutathione affinity column. LaCreta FP, et al. **J Chromatogr** 1988 Dec 29;434(1):83–93

Assay of ATP-sulfurylase activity from rat liver by high-performance liquid chromatography. Mina M, et al. **J Chromatogr** 1988 Dec 9;433:63–72

Purification of rabbit liver aldehyde oxidase by affinity chromatography on benzamidine sepharose 6B. Stell JG, et al. **J Chromatogr** 1989 Jul 28;475:363–72

Hepatic phosphotyrosine phosphatase activity and its alterations in diabetic rats. Meyerovitch J, et al. **J Clin Invest** 1989 Sep;84(3):976–83

Erythromycin breath test as an assay of glucocorticoid-inducible liver cytochromes P-450. Studies in rats and patients. Watkins PB, et al. **J Clin Invest** 1989 Feb;83(2):688–97

Metformin treatment of lean and obese Zucker rats modulates the ability of glucagon and insulin to regulate hepatocyte adenylate cyclase activity. Gawler DJ, et al. **J Endocrinol** 1989 Jul;122(1):207–12

A peptidase activity from primate liver that inactivates oxytocin in vitro: purification and partial characterization. Krishna GS, et al. **J Endocrinol** 1989 Jun;121(3):537–44

Hypothalamic hormones that release growth hormone stimulate hepatic 5'-monodeiodination activity in the chick embryo. Kühn ER, et al. **J Endocrinol** 1988 Aug; 118(2):233–6

A dual role of growth hormone as a feminizing and masculinizing factor in the control of sex-specific cytochrome P-450 isozymes in rat liver. Mode A, et al. **J Endocrinol** 1989 Feb;120(2):311–7

Effect of adrenaline on biliary excretion of triiodothyronines in rats mediated by alpha 1-adrenoceptors and related to the inhibition of 5'-monodeiodination in liver. Langer P, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):471–6

Inhibition of dihydropteridine reductase in rat striatal synaptosomes and from human liver by metabolites of biogenic amines. Shen RS. **J Enzym Inhib** 1985;1(1):61–6

Inhibition of rat liver tryptophan pyrrolase activity and elevation of brain tryptophan concentration by administration of DL-alpha-amino-beta-pyridinepropanoic acid (pyridylalanine) analogs. Shimeno H, et al. **J Enzym Inhib** 1987;2(1):57–66

Aldehyde dehydrogenase activity in brain and liver of the rainbow trout (Salmo gairdneri Richardson). Nilsson GE. **J Exp Zool** 1988 Sep;247(3):189–97

High hepatic gamma-glutamyltransferase (gamma-GT) activity with normal serum gamma-GT in children with progressive idiopathic cholestasis. Chobert MN, et al. **J Hepatol** 1989 Jan;8(1):22–5

The gamma-glutamyltransferase/glutamine synthetase activity ratio. A powerful marker for the acinar origin of hepatocytes. Lindros KO, et al. **J Hepatol** 1989 May; 8(3):338–43

The application of quantitative cytochemistry to study the acinar distribution of enzymatic activities in human liver biopsy sections. Sokal EM, et al. **J Hepatol** 1989 Jul; 9(1):42–8

Distribution of protein disulfide isomerase in rat hepatocytes. Akagi S, et al. **J Histochem Cytochem** 1988 Dec; 36(12):1533–42

Characterization of antibody against human liver guanase by immunoblotting and immunohistochemical staining of human liver guanase by a direct labeling antibody-enzyme method. Ito S, et al. **J Histochem Cytochem** 1989 May; 37(5):611–5

A new microphotometric method for measurement of cytochrome P-450 in sections of liver. Watanabe J, et al. **J Histochem Cytochem** 1989 Aug;37(8):1257–63

Enzymatic heterogeneity in primary hyperoxaluria type 1 (hepatic peroxisomal alanine: glyoxylate aminotransferase deficiency). Danpure CJ, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:205–7

The subcellular metabolism of glyoxylate in primary hyperoxaluria type 1: the relationship between glycine production and oxalate overproduction. Thompson GN, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:212–4

Diversity in residual alanine glyoxylate aminotransferase activity in hyperoxaluria type I: correlation with pyridoxine responsiveness. Wanders RJ, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:208–11

Resonance Raman spectra of bovine liver catalase: enhancement of proximal tyrosinate vibrations. Chuang WJ, et al. **J Inorg Biochem** 1988 Nov;34(3):201–19

Monoclonal antibodies directed characterization of epidermal and hepatic cytochrome P-450 isozymes induced by skin application of therapeutic crude coal tar. Khan WA, et al. **J Invest Dermatol** 1989 Jul;93(1):40–5

Hepatic regenerative enzyme activity after diffuse injury with galactosamine: relationship to histologic alterations. Zieve L, et al. **J Lab Clin Med** 1988 Nov;112(5):575–82

Bile acid sulfotransferase I from rat liver sulfates bile acids and 3-hydroxy steroids: purification, N-terminal amino acid sequence, and kinetic properties. Barnes S, et al. **J Lipid Res** 1989 Apr;30(4):529–40

Lipoprotein metabolism in hepatic lipase deficiency: studies on the turnover of apolipoprotein B and on the effect of hepatic lipase on high density lipoprotein. Demant T, et al. **J Lipid Res** 1988 Dec;29(12):1603–11

Postheparin plasma lipoprotein and hepatic lipase are determinants of hypo- and hyperalphalipoproteinemia. Kuusi T, et al. **J Lipid Res** 1989 Aug;30(8):1117–26

Relationship of decreased hepatic lipase activity and lipoprotein abnormalities to essential fatty acid deficiency in cystic fibrosis patients. Lévy E, et al. **J Lipid Res** 1989 Aug;30(8):1197–209

Localization of 3-hydroxy-3-methylglutaryl CoA reductase and 3-hydroxy-3-methylglutaryl CoA synthase in the rat liver and intestine is affected by cholestyramine and mevinolin. Li AC, et al. **J Lipid Res** 1988 Jun;29(6):781–96

Monoclonal antibodies that distinguish between active and inactive forms of human postheparin plasma hepatic triglyceride lipase. Mao SJ, et al. **J Lipid Res** 1988 Aug; 29(8):1023–9

Subcellular localization of 3 alpha, 7 alpha-dihydroxy- and 3 alpha,7 alpha,12 alpha-trihydroxy-5 beta-cholestanoyl-coenzyme A ligase(s) in rat liver. Prydz K, et al. **J Lipid Res** 1988 Aug;29(8):997–1004

Studies on the catalytic site of rat liver HMG-CoA reductase: interaction with CoA-thioesters and inactivation by iodoacetamide. Roitelman J, et al. **J Lipid Res** 1989 Jan; 30(1):97–107

Hepatic monoacylglycerol acyltransferase: ontogeny and characterization of an activity associated with the chick embryo. Sansbury K, et al. **J Lipid Res** 1989 Aug; 30(8):1251–8

Squalene analogues containing isopropylidene mimics as potential inhibitors of pig liver squalene epoxidase and oxidosqualene cyclase. Sen SE, et al. **J Med Chem** 1989 Sep;32(9):2152–8

Molecular organization of a high molecular weight multi-protease complex from rat liver. Tanaka K, et al. **J Mol Biol** 1988 Oct 20;203(4):985–96

Mechanism of action of cyclic AMP in altering steroid metabolism in permeabilized rat hepatocytes. Berry LA, et al. **J Mol Endocrinol** 1988 Nov;1(3):165–70

Mitochondrial storage forms of acetyl CoA carboxylase: mobilization/activation accounts for increased activity of the enzyme in liver of genetically obese Zucker rats. Allred JB, et al. **J Nutr** 1989 Mar;119(3):478–83

Effect of diet during pregnancy and lactation on the activity of HMG-CoA reductase in the developing rat. Innis SM. **J Nutr** 1988 Oct;118(10):1177–83

Activities of branched-chain amino acid—degrading enzymes in liver from rats fed different dietary levels of protein. Soemitro S, et al. **J Nutr** 1989 Aug;119(8):1203–12

Lack of specificity of polyunsaturated fats in the inhibition of rat liver glucose-6-phosphate dehydrogenase. Szepesi B, et al. **J Nutr** 1989 Feb;119(2):161–5

Dietary biotin requirements of young rainbow trout (Salmo gairdneri) determined by weight gain, hepatic biotin concentration and maximal biotin-dependent enzyme activities in liver and white muscle. Woodward B, et al. **J Nutr** 1989 Jan;119(1):54–60

Disparate effects of dietary fatty acids on activity of 5'-nucleotidase of rat liver plasma membrane. Zuniga ME, et al. **J Nutr** 1989 Feb;119(2):152–60

Effect of vitamin B12-deficiency on the activity of hepatic cystathionine beta-synthase in rats. Doi T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):101–10

Effect of pyridoxine deficiency and prednisolone on beta-alanine-oxoglutarate aminotransferase and D-3-aminoisobutyrate aminotransferase in rat liver and kidney. Mizota C, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):223–36

Effect of graded doses of erythorbic acid on activities of drug metabolic enzyme and phosphatases in guinea pigs. Suzuki E, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct; 34(5):439–47

Effect of erythorbic acid administration on activities of drug metabolic enzyme and phosphatases in guinea pigs administered an adequate amount of ascorbic acid. Suzuki E, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr; 35(2):123–31

Liver structure and function in print workers exposed to toluene. Guzelian P, et al. **J Occup Med** 1988 Oct; 30(10):791–6

Hepatic Na,K-ATPase development in the rat. Duffy LF,

et al. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec; 7(6):894–901

Developmental changes in the intra-acinar distribution of succinate dehydrogenase, glutamate dehydrogenase, glucose-6-phosphatase, and NADPH dehydrogenase in the rat liver. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):522–7

Interaction of nefopam and orphenadrine with the cytochrome P-450 and the glutathione system in rat liver. Leurs R, et al. **J Pharm Pharmacol** 1989 Jun;41(6):388–93

Human liver and plasma aspirin esterase. Williams FM, et al. **J Pharm Pharmacol** 1989 Jun;41(6):407–9

Deamination of aliphatic amines of different chain lengths by rat liver monoamine oxidase A and B. Yu PH. **J Pharm Pharmacol** 1989 Mar;41(3):205–8

Immunochemical studies for the presence of P-450 HFLa, a form of cytochrome P-450 in human fetal livers in human hepatocellular carcinoma cells. Kitada M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):341–4

Stimulatory and inhibitory effects of forskolin on adenylate cyclase in rat normal hepatocytes and hepatoma cells. Miyamoto K, et al. **J Pharmacobiodyn** 1989 Feb;12(2):87–93

Comparative studies on the inducing effects of cobalt chloride and co-protoporphyrin on hepatic ornithine decarboxylase and heme oxygenase in rats. Numazawa S, et al. **J Pharmacobiodyn** 1989 Jan;12(1):50–9

Competing pathways in drug metabolism. II. An identical, anterior enzymic distribution for 2- and 5-sulfoconjugation and a posterior localization for 5-glucuronidation of gentisamide in the rat liver. Morris ME, et al. **J Pharmacokinet Biopharm** 1988 Dec;16(6):633–56

Stereoselectivity of styrene oxidation in microsomes and in purified cytochrome P-450 enzymes from rat liver. Foureman GL, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):492–7

Combined hepatic arterial-portal venous and hepatic arterial-hepatic venous perfusions to probe the abundance of drug metabolizing activities: perihepatic venous O-deethylation activity for phenacetin and periportal sulfation activity for acetaminophen in the once-through rat liver preparation. Pang KS, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):690–700

Potentiation of 3-methylcholanthrene induction of rat hepatic cytochrome P450IA1 by dexamethasone in vivo. Sherratt AJ, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):667–72

The mechanism of enzymically induced chemiluminescence reactions of lucigenin. Ramelow US. **J Photochem Photobiol -B-** 1988 Jul;2(1):91–108

Activation of phospholipases A1 and A2 in heart, liver, and blood during endotoxin shock. Liu MS, et al. **J Surg Res** 1988 Nov;45(5):472–80

Chloroform-induced multiple forms of ornithine decarboxylase: differential sensitivity of forms to enhancement by diethyl maleate and inhibition by ODC-antizyme. Savage RE Jr, et al. **J Toxicol Environ Health** 1989;27(1):57–64

Sequence heterogeneity of human liver arginase cDNAs and restriction fragment length polymorphism of the gene locus. Haraguchi Y, et al. **Jinrui Idengaku Zasshi** 1988 Sep; 33(3):305–13

The biphasic change of cytosolic acetyl-CoA hydrolase in rat liver during 3'-methyl-4-dimethylaminoazobenzene hepatocarcinogenesis. Ebisuno S, et al. **Jpn J Cancer Res** 1989 Feb;80(2):132–5

Changes in the quantity and activity of cytochrome P-450 isozymes in primary cultured rat hepatocytes. Namiki M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):126–31

GM1 ganglioside beta-galactosidases from bovine liver. Hiraiwa M, et al. **Jpn J Exp Med** 1988 Jun;58(3):129–38

Acid phospholipase A1 in liver—a brief survey. Kunze H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):126–30 (35 ref.)

Human hepatoma (HepG2) cells secrete a single 65 K dalton triglyceride lipase immunologically identical to postheparin plasma hepatic lipase. Busch SJ, et al. **Life Sci** 1989; 45(7):615–22

Effect of protein level in the diet on quinolinate phosphoribosyltransferase of rat liver. Ghafoorunissa, et al. **Life Sci** 1974 Nov 1;15(9):1597–602

Effect of controlled feeding on the isoenzymes of pyruvate kinase, hexokinase and aldolase in liver during development. Walker PR. **Life Sci** 1974 Oct 15; 15(8):1507–14

Daily rhythms in tyrosine transaminase and other hepatic enzymes that metabolize amino acids: mechanisms and possible consequences. Wurtman RJ. **Life Sci** 1974 Sep 1; 15(5):827–47 (59 ref.)

Delta 6 and delta 5 desaturase activities in liver from obese Zucker rats at different ages. Blond JP, et al. **Lipids** 1989 May;24(5):389–95

Use of a fluorescent radiolabeled triacylglycerol as a substrate for lipoprotein lipase and hepatic triglyceride lipase. Dousset N, et al. **Lipids** 1988 Jun;23(6):605–8

Isolation and identification of acetyl-CoA carboxylase from rainbow trout (Salmo gairdneri) liver. McKim JM Jr, et al. **Lipids** 1989 Mar;24(3):187–92

Prostaglandin I2 synthase in the lymphatic endothelium of rat liver as revealed by preembedding immunoelectron microscopy. Ito Y, et al. **Lymphology** 1989 Mar;22(1):51–5

Determination of triacylglycerol lipase activity using carbon-13-labeled triacylglycerols and nuclear magnetic resonance spectroscopy: evidence that hepatic lipase hydrolyzes medium-chain triacylglycerols. Dimand RJ, et al. **Magn Reson Med** 1989 Feb;9(2):273–7

Effect of chronic caloric restriction on hepatic enzymes of intermediary metabolism in the male Fischer 344 rat. Feuers RJ, et al. **Mech Ageing Dev** 1989 May;48(2):179–89 (41 ref.)

Effects of aging and caloric restriction on hepatic drug metabolizing enzymes in the Fischer 344 rat. II: Effects on conjugating enzymes. Leakey JA, et al. **Mech Ageing Dev** 1989 May;48(2):157–66 (43 ref.)

Effects of aging and caloric restriction on hepatic drug metabolizing enzymes in the Fischer 344 rat. I: The cytochrome P-450 dependent monooxygenase system. Leakey JE, et al. **Mech Ageing Dev** 1989 May;48(2):145–55 (53 ref.)

Changes in some hepatic enzyme activities related to phase II drug metabolism in male and female rats as a function of age. Santa Maria C, et al. **Mech Ageing Dev** 1988 Aug; 44(2):115–25

Effects of growth hormone on pyruvate dehydrogenase activity in intact rat liver and in isolated hepatocytes: comparison with insulin. Clot JP, et al. **Metabolism** 1988 Nov;37(11):1101–6

Experimental diabetes increases the formation of sulfane by transsulfuration and inactivation of tyrosine aminotransferase in cytosols from rat liver. Hargrove JL, et al. **Metabolism** 1989 Jul;38(7):666–72

Activities of lipoprotein lipase and hepatic lipase on long- and medium-chain triglyceride emulsions used in parenteral nutrition. Lutz O, et al. **Metabolism** 1989 Jun;38(6):507–13

Carnitine palmitoyltransferase: effects of diabetes, fasting, and pH on the reaction that generates acyl CoA. McCormick K, et al. **Metabolism** 1988 Nov;37(11):1073–7

Galactose as a regulatory factor of its own metabolism by rat liver. Rogers SR, et al. **Metabolism** 1989 Aug; 38(8):810–5

D-methylmalonyl-CoA hydrolase. Kovachy RJ, et al. **Methods Enzymol** 1988;166:393–400

Measurement of branched-chain alpha-keto acid dehydrogenase flux rates in perfused heart and liver. Lapointe DS, et al. **Methods Enzymol** 1988;166:484–97

Proton ATPases in Golgi vesicles and endoplasmic reticulum: characterization and reconstitution of proton pumping. Lowe A, et al. **Methods Enzymol** 1988;157:611–9

Branched-chain alpha-keto acid dehydrogenase and its kinase from rabbit liver and heart. Paxton R. **Methods Enzymol** 1988;166:313–20

Purification and assay of alpha-ketoisocaproate dioxygenase from rat liver. Sabourin PJ, et al. **Methods Enzymol** 1988; 166:288–97

Preparation and acidification activity of lysosomes and lysosomal membranes. Schneider DL, et al. **Methods Enzymol** 1988;157:591–601

DL-methylmalonyl-CoA racemase from rat liver. Stabler SP, et al. **Methods Enzymol** 1988;166:400–6

Comparison of the thermolability and hydrophobic properties of high- and low-molecular-weight forms of rabbit liver arginyl-tRNA synthetase. Berbec H, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):125–33

On the compartmentalization of catalase, fatty acyl-CoA oxidase and urate oxidase in mammalian livers, and the influence of clofibrate treatment on this microlocalization. Hemsley A, et al. **Mol Cell Biochem** 1988 Oct;83(2):187–94

The regulatory kinetic properties of porcine hepatic glucokinase. Vogel WK, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):171–9

Activity of the carbamyl phosphate synthetase I promoter in liver nuclear extracts is dependent on a cis-acting C/EBP recognition element. Howell BW, et al. **Mol Cell Biol** 1989 Jul;9(7):2928–33

Positional and developmental regulation of glutamine synthetase expression in mouse liver. Kuo CF, et al. **Mol Cell Biol** 1988 Nov;8(11):4966–71

Peroxisome targeting signal of rat liver acyl-coenzyme A oxidase resides at the carboxy terminus. Miyazawa S, et al. **Mol Cell Biol** 1989 Jan;9(1):83–91

Glucocorticoid and developmental regulation of amylase mRNAs in mouse liver cells. Samuelson LC, et al. **Mol Cell Biol** 1988 Sep;8(9):3857–63

The regulation of adenylate cyclase in liver membranes of lean and obese mice. Bégin-Heick N, et al. **Mol Cell Endocrinol** 1988 Oct;59(3):187–94

Adenylate cyclase of catfish hepatocyte membranes: basal properties and sensitivity to catecholamines and glucagon. Ottolenghi C, et al. **Mol Cell Endocrinol** 1988 Dec; 60(2-3):163–8

Distribution and induction sites of phenobarbital- and 3-methylcholanthrene-inducible cytochromes P-450 in murine liver: immunohistochemical localization with monoclonal antibodies. Forkert PG, et al. **Mol Pharmacol** 1988 Dec;34(6):736–43

Primary structures of cytochrome P-450 isozyme 5 from rabbit and rat and regulation of species-dependent expression and induction in lung and liver: identification of cytochrome P-450 gene subfamily IVB. Gasser R, et al. **Mol Pharmacol** 1989 May;35(5):617–25

Coinduction of multiple hepatic cytochrome P-450 proteins and their mRNAs in rats treated with imidazole antimycotic agents. Hostetler KA, et al. **Mol Pharmacol** 1989 Mar;35(3):279–85

Studies on the mechanism of methanol poisoning: purification and comparison of rat and human liver 10-formyltetrahydrofolate dehydrogenase. Johlin FC, et al. **Mol Pharmacol** 1989 Jun;35(6):745–50

Oxidation of midazolam and triazolam by human liver cytochrome P450IIIA4. Kronbach T, et al. **Mol Pharmacol** 1989 Jul;36(1):89–96

Reaction of rat liver DT-diaphorase (NAD(P)H:quinone acceptor reductase) with 5'-[p-(fluorosulfonyl)benzoyl]-adenosine. Liu XF, et al. **Mol Pharmacol** 1989 Jun;35(6):818–22

Secobarbital-mediated inactivation of rat liver cytochrome P-450b: a mechanistic reappraisal. Lunetta JM, et al. **Mol Pharmacol** 1989 Jan;35(1):10–7

Purification and biochemical characterization of hepatic arylamine N-acetyltransferase from rapid and slow acetylator mice: identity with arylhydroxamic acid N,O-acyltransferase and N-hydroxyarylamine O-acetyltransferase. Mattano SS, et al. **Mol Pharmacol** 1989 May;35(5):599–609

Regulation of hepatic cortisol sulfotransferase in rats by pituitary growth hormone. Yamazoe Y, et al. **Mol Pharmacol** 1989 May;35(5):707–12

Induction and activity of several isoenzymes of cytochrome P-450 in primary cultures of rat hepatocytes, in comparison with in vivo data. Wortelboer HM, et al. **Mol Toxicol** 1987-88 Fall;1(4):373–81

The molecular nature of spontaneous and chemically induced mutations in the hypoxanthine-guanine phosphoribosyl transferase gene in rat liver epithelial cells. Armel P, et al. **Mutat Res** 1988 Nov;202(1):147–53

Acetaldehyde activation of poly(ADP-ribose)polymerase in hepatocytes of mice treated in vivo. Clerici L, et al. **Mutat Res** 1989 Sep;227(1):47–51

Mutagenic activation of aflatoxin B1 by P-450 HFLa in human fetal livers. Kitada M, et al. **Mutat Res** 1989 Sep; 227(1):53–8

Presence of a particulate thyrotropin-releasing hormone-degrading pyroglutamate aminopeptidase activity in rat liver. Scharfmann R, et al. **Neuroendocrinology** 1989 Apr;49(4):442–8

Evaluation of the cytotoxicity of sodium valproate on primary cultured rat hepatocytes. Takeuchi T, et al. **Neuropediatrics** 1988 Aug;19(3):158–61

Tourette's medications: effect on minor oxidative and reductive pathways of biogenic amines. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):215–8

Changes of glycolytic enzyme activities and plasma insulin levels in diabetic herbivorous voles and KK mice. Arai T, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):859–64

Nucleotide sequence of rat liver glutamate dehydrogenase cDNA. Amuro N, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2356

Nucleotide sequence of a full-length cDNA for arylamine N-acetyltransferase from rabbit liver. Blum M, et al. **Nucleic Acids Res** 1989 May 11;17(9):3589

The complete nucleotide sequence of bovine liver cytochrome b5 mRNA. Cristiano RJ, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):799

Nucleotide sequence of rat liver glutamate dehydrogenase cDNA. Das AT, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2355

Complete cDNA sequence of human foetal liver peroxisomal 3-oxoacyl-CoA thiolase. Fairbairn LJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3588

Nucleotide sequence of cDNA encoding subunit IV of cytochrome c oxidase from fetal rat liver. Gopalan G, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4376

Nucleotide sequence of cDNA for rat liver and brain cytochrome c oxidase subunit VIa (Vb). Goto Y, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6388

Nucleotide sequence of cDNA for rat brain and liver cytochrome c oxidase subunit IV. Goto Y, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2851

A salivary amylase transgene is efficiently expressed in liver but not in parotid gland of transgenic mice. Jones JM, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6613–23

Nucleotide sequence of the human liver-type alkaline phosphatase cDNA. Kishi F, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2129

Ava-II RFLP at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4908

Xmn-1 and Bg1-II RFLPs at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6762

Human liver-type arginase gene: structure of the gene and analysis of the promoter region. Takiguchi M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8789–802

Disseminated intravascular coagulation and the syndrome of hemolysis, elevated liver enzymes, and low platelets in severe preeclampsia. Van Dam PA, et al. **Obstet Gynecol** 1989 Jan;73(1):97–102

The sensitivity to noxious heat in relation to brain and liver opioid glucuronidation in inbred strains of mice. Wahlström A, et al. **Pain** 1989 Jul;38(1):71–5

Fluctuations in rat liver alanine-amino-transferase activity during experimental nippostrongylosis. Robertson LJ. **Parasitology** 1989 Apr;98 Pt 2:301–6

Hepatic and muscular presentations of carnitine palmitoyl transferase deficiency: two distinct entities. Demaugre F, et al. **Pediatr Res** 1988 Sep;24(3):308–11

Sexual differentiation of rat hepatic bile salt sulfotransferase isoenzymes. Kane RE, et al. **Pediatr Res** 1988 Aug; 24(2):247–53

Activity of hepatic galactose-metabolizing enzymes in the

pregnant rat and fetus. Rogers SR, et al. **Pediatr Res** 1989 Feb;25(2):161–6

Carbamyl phosphate synthetase and ornithine transcarbamylase activities in enzyme-deficient human liver measured by radiochromatography and correlated with outcome. Tuchman M, et al. **Pediatr Res** 1989 Jul; 26(1):77–82

Influence of prenatal administration of cadmium on postnatal development and inducibility of hepatic monooxygenases in rats. Jahn F, et al. **Pharmacol Toxicol** 1989 Mar; 64(3):291–2

Diethylthiocarbamic acid methyl ester: a suicide inhibitor of liver aldehyde dehydrogenases? Johansson B. **Pharmacol Toxicol** 1989 May;64(5):471–4

Effects of perinatal treatment with lead and disulfiram on ALAD activity in blood, liver and kidney and urinary ALA excretion in rats. Oskarsson A. **Pharmacol Toxicol** 1989 Apr;64(4):344–8

Glucagon-induced refractoriness of hepatocyte adenylate cyclase: comparison of homologous and heterologous components and evidence against a role of cAMP. Refsnes M, et al. **Pharmacol Toxicol** 1989 May;64(5):397–403

Cell-catalyzed binding of 3H-(-)-trans-7,8-dihydroxy-7,8-dihydrobenzo[a]pyrene to cellular and exogenous DNA and the role of purified human liver epoxide hydrolase. Gozakara EM, et al. **Pharmacology** 1988;37(3):154–64

Influence of alpha 1-adrenergic receptor stimulation and phorbol esters on hepatic Na+/K+-ATPase activity. Smart JL, et al. **Pharmacology** 1988;37(2):94–104

Photo- and thermal-activation of bovine liver urocanase. Hug DH, et al. **Photochem Photobiol** 1988 Dec;48(6):763–6

Liver phosphorylase activation during early phase of feeding behavior: a neurohumoral regulation. Hell NS, et al. **Physiol Behav** 1988;43(3):383–7

Antioxidant enzymatic systems in pigment tissue of amphibia. Geremia E, et al. **Pigment Cell Res** 1989 May-Jun; 2(3):208–12

Brain choline acetyltransferase and muscarinic receptor sites, brain and liver cholinesterases in precocial Acomys cahirinus and altricial rat during post-natal development. Michalek H, et al. **Pol J Pharmacol Pharm** 1988 Sep-Oct; 40(5):543–51

Fetal liver alanine: glyoxylate aminotransferase and the prenatal diagnosis of primary hyperoxaluria type 1. Danpure CJ, et al. **Prenat Diagn** 1989 Apr;9(4):271–81

Rapid activation of protein kinase C in isolated rat liver nuclei by prolactin, a known hepatic mitogen. Buckley AR, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8649–53

Sex change in cytochrome P-450 phenotype by growth hormone treatment of adult rat hepatocytes maintained in a culture system on matrigel. Guzelian PS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9783–7

Molecular cloning and sequencing of chicken liver fatty acid synthase cDNA. Holzer KP, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4387–91

Vitamin K-dependent carboxylase: affinity purification from bovine liver by using a synthetic propeptide containing the gamma-carboxylation recognition site. Hubbard BR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6893–7

cDNA sequence of rat liver fructose-1,6-bisphosphatase and evidence for down-regulation of its mRNA by insulin. el-Maghrabi MR, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8430–4

Identification of pp120, an endogenous substrate for the hepatocyte insulin receptor tyrosine kinase, as an integral membrane glycoprotein of the bile canalicular domain. Margolis RN, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7256–9

Isolation of a rat liver Golgi mannosidase II clone by mixed oligonucleotide-primed amplification of cDNA. Moremen KW. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5276–80

Retroviral-mediated gene transfer and expression of human phenylalanine hydroxylase in primary mouse hepatocytes. Peng H, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8146–50

Both GA2, GM2, and GD2 synthases and GM1b, GD1a, and GT1b synthases are single enzymes in Golgi vesicles from rat liver. Pohlentz G, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7044–8

Isolation and sequence determination of a cDNA clone for rat peroxisomal urate oxidase: liver-specific expression in the rat. Reddy PG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9081–5

Expression of delta-aminolevulinate synthase in avian cells: separate genes encode erythroid-specific and nonspecific isozymes. Riddle RD, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):792–6

Biochemical localization of hepatic surface-membrane Na+,K+-ATPase activity depends on membrane lipid fluidity. Sutherland E, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8673–7

Tissue-specific genetic variation in the level of mouse alcohol dehydrogenase is controlled transcriptionally in kidney and posttranscriptionally in liver. Tussey L, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5903–7

Expression in Xenopus oocytes of rat liver mRNA coding for a bile salt-dependent cholesteryl ester hydrolase. Zolfaghari R, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6913–6

Tissue specificity of induction of hamster monooxygenase activity by ethanol. Ueng TH, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):1–8

Hepatic, testicular aldehyde dehydrogenase and sex steroids. Messiha FS. **Proc West Pharmacol Soc** 1988;31:75–6

"High Km" aldehyde dehydrogenase isozymes in human tissues: constitutive and tumor-associated forms. Agarwal DP, et al. **Prog Clin Biol Res** 1989;290:119–31

Kinetic properties of murine liver aldehyde dehydrogenases. Algar EM, et al. **Prog Clin Biol Res** 1989;290:93–103

Modulation of hepatic-phase I and gut-microflora xenobiotic metabolizing enzymes by dietary flavonoids. Alldrick AJ, et al. **Prog Clin Biol Res** 1988;280:139–42

Stimulation of DNA chain initiation by a protein factor (NPF-1) from rat liver of different ages. Basu S, et al. **Prog Clin Biol Res** 1989;287:289–99

Human alcohol dehydrogenase cDNAs: structure and expression. Edenberg HJ, et al. **Prog Clin Biol Res** 1989; 290:181–92

Tissue-specific differences in the expression of the genes encoding the alpha and beta subunits of rat Na,K-ATPase. Gick GG, et al. **Prog Clin Biol Res** 1988;268B:65–70

Enzymatic conversion of prostaglandin H2 to prostaglandin F2 alpha by aldehyde reductase from human liver. Hayashi H, et al. **Prog Clin Biol Res** 1989;290:365–79

Class III aldehyde dehydrogenase from rat liver: super-family relationship to classes I and II and functional interpretations. Hempel J, et al. **Prog Clin Biol Res** 1989; 290:3–17

NAD(P)-linked aromatic aldehydes preferring cytoplasmic aldehyde dehydrogenases in the rat. Constitutive and inducible forms in liver, lung, stomach and intestinal mucosa. Koivusalo M, et al. **Prog Clin Biol Res** 1989; 290:19–33

Cytosolic aldehyde dehydrogenases of rat liver. Properties of forms present in liver nodules from 20-methylcholantrene treated and untreated rats, and in livers from 20-methylcholantrene treated normal rats. Ritter E, et al. **Prog Clin Biol Res** 1989;290:35–47

Effects of feeding quercetin and flavone on hepatic drug metabolizing enzymes of rat. Siess MH, et al. **Prog Clin Biol Res** 1988;280:147–50

Relationships between the kinetics of alcohol or coenzyme oxidoreduction and amino acid sequence of human liver alcohol dehydrogenase isoenzymes. Stone CL, et al. **Prog Clin Biol Res** 1989;290:155–65

Mouse liver 3-hydroxyhexobarbital dehydrogenase: purification and substrate specificity. Takenoshita R, et al. **Prog Clin Biol Res** 1989;290:279–91

Bovine liver cytosolic aldehyde reductase and carbonyl reductase. Purification and characterization. Terada T, et al. **Prog Clin Biol Res** 1989;290:293–305

Identification of essential arginine residue(s) for Mg-ATP binding of human argininosuccinate synthetase. Isashiki Y, et al. **Protein Seq Data Anal** 1989 Jul;2(4):283–7

Evidence for chicken GH as the only hypophyseal factor responsible for the stimulation of hepatic 5'-monodeiodination activity in the chick embryo. Berghman L, et al. **Reprod Nutr Dev** 1989;29(2):197–202

Effects of a cysteine precursor, L-2-oxothiazolidine-carboxylate, nutritional status, and sex on tissue glutathione and hepatic GSH-utilizing enzymes of CD-1 mice [published erratum appears in Res Commun Chem Pathol Pharmacol 1988 Sep;61(3):432] Moslen MT, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):49–63

Effects of N1,N3-diallyluracil and N1,N3-diallylthymine on hepatic drug-metabolizing enzymes of mice. Tateoka Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):135–43

Effect of pregnancy and fetal development on sheep liver superoxide dismutase activity. Konstantinova SG, et al. **Res Vet Sci** 1988 Nov;45(3):287–90

Regulation of glycolysis in sea bass liver: phosphofructokinase isozymes. Fideu MD, et al. **Rev Esp Fisiol** 1989 Jun;45(2):179–86

Regulation of the pentose phosphate cycle in bass (Dicentrarchus labrax L.) liver. Medina-Puerta MM, et al. **Rev Esp Fisiol** 1988 Dec;44(4):433–9

Differences in cytochrome P-450 levels between isolated hepatocytes and hepatic microsomes from phenobarbital treated rats. Muñoz JJ, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):129–31

Purification and kinetics of mouse liver fructose 6-phosphate, 2-kinase. Li L, et al. **Sci Sin [B]** 1988 Nov;31(11):1307–14

Stimulatory and inhibitory effects of sodium salts on adenylate cyclase of rat liver. Implications for salt modulation of guanine nucleotide-binding regulatory component function. Joshi LR, et al. **Second Messengers Phosphoproteins** 1988;12(2-3):105–21

Corticosteroid 11 beta-hydroxysteroid dehydrogenase activities in vertebrate liver. Monder C, et al. **Steroids** 1988 Nov-Dec;52(5-6):515–28

In-vivo and in-vitro studies of the effects of mercaptoundecahydrododecaborate (BSH) on hepatic cytochrome P-450 mono-oxygenase enzyme activity and on hexobarbital (HXB) induced sleep in mice. Fontenelle L, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):172–3

Release of lipoprotein lipase and hepatic triglyceride lipase in rats by heparin and other sulphated polysaccharides. Williams SP, et al. **Thromb Res** 1989 Aug 1;55(3):361–8

Studies on the mechanism of haloacetonitriles toxicity: inhibition of rat hepatic glutathione S-transferases in vitro. Ahmed AE, et al. **Toxicol Appl Pharmacol** 1989 Sep 1; 100(2):271–9

Histochemical localization of rhodanese activity in rat liver and skeletal muscle. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):247–55

Contribution of methylsulfonyl metabolites of m-dichlorobenzene to the heme metabolic enzyme induction by the parent compound in rat liver. Kato Y, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):550–9

Inhibition by ethanol of rat liver plasma membrane (Na+,K+)ATPase: protective effect of S-adenosyl-L-methionine, L-methionine, and N-acetylcysteine. Pascale R, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):216–29

In-vitro biotransformation of 3-nitropropanol (miserotoxin aglycone) by horse liver alcohol dehydrogenase. Benn MH, et al. **Toxicol Lett** 1989 May;47(2):165–72

Comparison of the peroxisome proliferator-induced pleiotropic response in the liver of nine strains of mice. Dwivedi RS, et al. **Toxicol Pathol** 1989;17(1 Pt 1):16–26

Induction of pulmonary and hepatic cytochrome P-450 species by coal fly ash inhalation in rats. Chauhan SS, et al. **Toxicology** 1989 May 31;56(1):95–105

Response of rat hepatocyte cultures to cadmium chloride and cadmium-diethyldithiocarbamate. Hellström-Lindahl E, et al. **Toxicology** 1989 May 31;56(1):9–21

Chlorinated drinking water is mutagenic and causes 3-methylcholanthrene type induction of hepatic monooxygenase. Liimatainen A, et al. **Toxicology** 1988 Oct; 51(2-3):281–9

Changes in activity of oxygen free radical scavengers and in levels of endogenous antioxidants during hepatic ischemia and subsequent reperfusion. Marubayashi S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1317–8

Analysis of glutathione-dependent enzyme activities in two different rat hepatomas and in normal liver in relation to their role in resistance to oxidative stress. Rossi MA, et al. **Tumori** 1988 Dec 31;74(6):617–21

Kinetics of some benzothiazoles, benzoxazoles, and quinolines as substrates and inhibitors of rabbit liver aldehyde oxidase. Gristwood W, et al. **Xenobiotica** 1988 Aug;18(8):949–54

Effects of methyl ethyl ketone pretreatment on hepatic mixed-function oxidase activity and on in vivo metabolism of n-hexane. Robertson P Jr, et al. **Xenobiotica** 1989 Jul; 19(7):721–9

Purification and characterization of cysteine conjugate transaminases from rat liver. Tomisawa H, et al. **Xenobiotica** 1988 Sep;18(9):1015–28

Ascorbic acid excretion as a noninvasive screening parameter of mixed function oxygenases status in rats. Clausing P, et al. **Z Versuchstierkd** 1988;31(6):255–62

Gamma-glutamyltranspeptidase in liver homogenates of rats of different ages: enzyme kinetics and age course of Km and Vmax. Kretzschmar M, et al. **Z Versuchstierkd** 1989; 32(1):41–7

[Effect of acute and chronic alcohol poisoning on RNA polymerase activity of isolated rat liver nuclei] Boiadzhiev S, et al. **Eksp Med Morfol** 1988;27(4):24–7 (Eng. Abstr.) **(Bul)**

[Effects of hyperbaric pressure and hyperbaric oxygen on enzymic activity of mouse liver] Xu GX. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):228–30 **(Chi)**

[The effect of 5-[2-(N,N-dimethylamino)ethoxy]-7-oxo-7H-benzo(c) fluorene hydrochloride (Benfluron, a cytostatic) on ornithine decarboxylase activity in the regenerating rat liver in vivo] Veselá J, et al. **Cesk Farm** 1988 Jul;37(6):251–4 (Eng. Abstr.) **(Cze)**

[Long-term consumption of a diet with moderate medium chain triglyceride content does not inhibit the activity of enzymes involved in hepatic lipogenesis in the rat] Chanez M, et al. **C R Acad Sci [III]** 1988;307(12):685–8 (Eng. Abstr.) **(Fre)**

[The HELLP syndrome: a special form of hypertension in pregnancy] Tchobroutsky C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):325–30 (Eng. Abstr.) **(Fre)**

[Solubilization of cytochromes P-450 from the human liver by various classes of detergents] Isa M, et al. **J Pharm Belg** 1988 Jul-Aug;43(4):246–57 (Eng. Abstr.) **(Fre)**

[The effects of irradiated wheat flour on C57bl mice. III. Effect on hepatic and pancreatic enzymes] Delcour-Firquet MP. **J Toxicol Clin Exp** 1985 Mar-Apr; 5(2):113–9 (Eng. Abstr.) **(Fre)**

[Regulation of the expression of the hepatic phosphoenolpyruvate carboxykinase gene during development and nutrition transitions] Girard J. **Journ Annu Diabetol Hotel Dieu** 1989;:161–73 (72 ref.) **(Fre)**

[Regulation of genetic expression of the enzymes of glycolysis and gluconeogenesis in the liver of the diabetic] Munnich A. **Journ Annu Diabetol Hotel Dieu** 1988;:203–12 (10 ref.) **(Fre)**

[2 cases of the HELLP (Hemolysis Elevated Liver Low Platelet) syndrome] Estebe JP, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):359–62 (Eng. Abstr.) **(Fre)**

[Model studies in the histochemical investigation of hydrolases using tetrazolium salts] Seidler E. **Acta Histochem (Jena)** 1988;84(2):227–34 (Eng. Abstr.) **(Ger)**

[Cytophotometric determination of the distribution of alcohol dehydrogenase in the rat liver] Blattner J, et al. **Acta Histochem Suppl (Jena)** 1988;36:311–4 (Ger)

[Cytochemistry of beta-glucuronidase in the rat liver: an example of genetic variation due to inbreeding] von Deimling O, et al. **Acta Histochem Suppl (Jena)** 1988; 36:305–10 (Ger)

[The liver of the white rat as an experimental model of observations of the effect of ethyl alcohol on the organism] Czerny K, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(3):337–44 (Eng. Abstr.) (Ger)

[The influence of coal ashes and soil dust on the activity of two selected hydrolytic enzymes in the liver of laboratory animals] Krolikowska-Prasal I, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):763–72 (Eng. Abstr.) (Ger)

[Reactions of the liver to high caloric enteral feeding with formula diets] Lübke HJ, et al. **Infusionstherapie** 1988 Oct; 15(5):190–5 (Eng. Abstr.) (Ger)

[The antipyrine test in occupational medicine research—evaluation of individual reproducibility and frequency distribution of half-life] Uhlig H, et al. **Z Gesamte Hyg** 1989 Feb;35(2):82–4 (Eng. Abstr.) (Ger)

[The metabolism of free fatty acids in the liver] Kuhfahl E. **Z Gesamte Inn Med** 1989 Apr 15;44(8):225–8 (43 ref.) (Eng. Abstr.) (Ger)

[Development and significance of estrogen-induced increase in the activity of several liver enzymes] Németh S. **Z Gesamte Inn Med** 1988 Aug 1;43(15):418–20 (Eng. Abstr.) (Ger)

[The electrophoretic separation of the isoenzymes of alkaline phosphatase on cellulose acetate films] Schulze G, et al. **Z Med Lab Diagn** 1988;29(6):333–7 (Eng. Abstr.) (Ger)

[Hepatic ornithine decarboxylase activity of rats induced by administration of 2-nitro-p-cresol and sodium deoxycholate] Nambaru S, et al. **Eisei Shikenjo Hokoku** 1988;(106):95–7 (Eng. Abstr.) (Jpn)

[Tissue distribution, inductive effect on liver enzymes and acute toxicity of 2,3,4,7,8-pentachlorodibenzofuran in Golden Syrian hamsters] Koga N, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):227–34 (Eng. Abstr.) (Jpn)

[Changes in poly (ADP-ribose) polymerase activity in post-hepatectomized rat liver nuclei with glucagon and insulin] Fujii Y. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):385–95 (Eng. Abstr.) (Jpn)

[Purification and characterization of mouse liver arginase and its role in liver regeneration] Uchida T. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):431–8 (Eng. Abstr.) (Jpn)

[A case of metastatic liver tumor with hypoglycemic attacks] Ooi S, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):712–6 (Jpn)

[Effect of the nonsteroidal anti-inflammatory drug 480156-S on hepatic drug-metabolizing activity and pharmacological action of diazepam and pentobarbital in rats] Matsubara T, et al. **Nippon Yakurigaku Zasshi** 1988 Oct;92(4):201–13 (Eng. Abstr.) (Jpn)

[Serine: pyruvate aminotransferase of rat liver—organelle localization and multihormonal regulation of its synthesis] Ichiyama A, et al. **Seikagaku** 1988 Nov;60(11):1253–66 (29 ref.) (Jpn)

[Biliary tract occlusion with laboratory diagnosis of liver cell injury (letter)] Søndenaa K. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2183 (Nor)

[Effect of age on the activity of hepatic mixed function oxidases in female rats after phenobarbital induction] Plewka D, et al. **Med Pr** 1988;39(6):381–90 (Eng. Abstr.) (Pol)

[Effect of ethanol and acetaldehyde on the activity and release of cathepsins from lysosomes of the canine liver (studies in vitro)] Skrzydlewska E, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:59–76 (Eng. Abstr.) (Pol)

[Effect of acute carbaryl poisoning in rats on transamination reactions with the participation of pyruvate. II. The activity of hepatic aminotransferases] Jeleniewicz K, et al. **Rocz Panstw Zakl Hig** 1988;39(3):231–8 (Eng. Abstr.) (Pol)

[Effect of intravenous glucose load on post-heparin lipoprotein lipase and hepatic lipase activities in the plasma of patients with cerebral infarction] Barycki J. **Wiad Lek** 1988 Jul 1;41(13):860–5 (Eng. Abstr.) (Pol)

[Inhibition of lactate dehydrogenase in rat erythrocytes and liver with -SH group reagents] Gheorghiță N, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct-Dec;92(4):721–4 (Eng. Abstr.) (Rum)

[Transformation of anthracycline antibiotics and their semisynthetic derivatives as affected by the liver aldo-keto reductase of rats] Reznikova MI, et al. **Antibiot Khimioter** 1988 Jul;33(7):508–12 (Eng. Abstr.) (Rus)

[Decrease in the level and enzymatic activity of cytochrome P-450 during diethylnitrosamine metabolism in vivo and in vitro] Goloshchapov OF, et al. **Biofizika** 1988 May-Jun; 33(3):530–2 (Eng. Abstr.) (Rus)

[Interaction of acetyl-CoA-carboxylase from the rat liver with alkylating amides of ATP and ADP] Amontov SV, et al. **Biokhimiia** 1988 Oct;53(10):1654–9 (Eng. Abstr.) (Rus)

[SH-groups of NAD kinase from the rabbit liver] Bulygina ER, et al. **Biokhimiia** 1988 Sep;53(9):1557–62 (Eng. Abstr.) (Rus)

[Phosphorylation of components of high molecular weight aminoacyl-tRNA-synthetase complex from the rabbit liver by associated casein kinase type I] Elizarov SM, et al. **Biokhimiia** 1989 May;54(5):774–83 (Eng. Abstr.) (Rus)

[Isolation and characterization of casein kinases I and II from rabbit liver. Analysis of their effects on protein biosynthesis in the cell] Elizarov SM, et al. **Biokhimiia** 1989 Mar; 54(3):409–20 (Eng. Abstr.) (Rus)

[Neutral proteinase in peroxisomes from rat liver cells] Komov VP, et al. **Biokhimiia** 1988 Sep;53(9):1532–8 (Eng. Abstr.) (Rus)

[Effect of alpha- and gamma-tocopherols on the cytochrome P-450 system in the liver of rats with E-avitaminosis. Effectiveness of liposomal forms of gamma-tocopherol] Lokshina EA, et al. **Biokhimiia** 1988 Jul;53(7):1188–92 (Eng. Abstr.) (Rus)

[Regulation of glucosamine synthetase activity by cholesterol and hydrocortisone] Sharaev PN, et al. **Biokhimiia** 1988 Sep;53(9):1505–8 (Eng. Abstr.) (Rus)

[Inorganic pyrophosphatase of rat liver cytosol. Isolation and properties] Smirnova IN, et al. **Biokhimiia** 1989 Feb; 54(2):228–34 (Eng. Abstr.) (Rus)

[Comparative characteristics of tRNA-methyltransferases from rabbit liver and myocardium under normal conditions and in experimental ischemia] Tarasiavichene LE, et al. **Biokhimiia** 1989 Mar;54(3):427–33 (Eng. Abstr.) (Rus)

[Liver aldolase as a possible target for the action of N-methyl-N-nitrosourea] Treshchenkova IuA, et al. **Biokhimiia** 1989 Mar;54(3):516–23 (Eng. Abstr.) (Rus)

[Interaction of amino acyl-tRNA-synthetases from the rabbit liver with RNA and polyanions] Vol'fson AD, et al. **Biokhimiia** 1988 May;53(5):799–805 (Eng. Abstr.) (Rus)

[Lipid peroxidation and the endogenous DNA polymerase activity of fractions of isolated liver chromatin in rats] Gubskiĭ IuI, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):296–8 (Eng. Abstr.) (Rus)

[Experimental study of the hepatoprotective effect of transcranial transcutaneous electrostimulation and the synthetic analog of leu-enkephalin dalargin] Kuzin MI, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):266–8 (Eng. Abstr.) (Rus)

[Oxidoreductase activity of an unusual liver estrogen-binding protein in rats] Smirnov AN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):337–9 (Eng. Abstr.) (Rus)

[Isolation of estrophilic fractions of hydroxysteroid dehydrogenase from rabbit liver] Smirnov AN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):179–82 (Eng. Abstr.) (Rus)

[Effect of adaptation to hypoxia on the antioxidant enzyme activity in the liver in animals that have undergone stress] Tverdokhlib VP, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):528–9 (Eng. Abstr.) (Rus)

[Restoration of pantothenate kinase activity by low-molecular weight disulfides] Moiseenok AG, et al. **Dokl Akad Nauk SSSR** 1988;300(2):485–7 (Rus)

[Effect of the induction of liver cytochrome P-450 by a chemically inert fluorocarbon on the reactions of immediate and delayed hypersensitivity] Khlopushina TG, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):86–7 (Eng. Abstr.) (Rus)

[Na, K-ATPase activity of the hepatocyte plasma membranes during disturbance of the bile-secreting function of the liver by inhibitors of protein synthesis] Masiuk AI, et al. **Fiziol Zh** 1989 Jan-Feb;35(1):40–4 (Eng. Abstr.) (Rus)

[Experimental data on the substantiation of maximum permissible levels of sevin in atmospheric air] Ashriatova NKh. **Gig Sanit** 1988 Jul;(7):72–4 (Rus)

[Hygienic characteristics of small doses of sodium sulfate after its inhalation] Denisov IuN, et al. **Gig Sanit** 1989 Apr; (4):69–71 (Rus)

[Status of the liver and blood enzymes in rats exposed to potassium dichromate after administration of vitamins] Karimov TK, et al. **Gig Sanit** 1988 Jul;(7):79–81 (Rus)

[Changes in the glucosephosphate dehydrogenase activity in the liver and blood of albino rats after poisoning with chloride-containing pesticides] Krysanova AI, et al. **Gig Sanit** 1988 Oct;(10):82–3 (Rus)

[Effect of thiuram D on the activity of oxidative liver enzymes in experimental studies] Makarova LF, et al. **Gig Sanit** 1988 Oct;(10):81–2 (Rus)

[Data on hygienic substantiation of the maximum permissible level of keltan in atmospheric air] Ubaldullaev RU, et al. **Gig Sanit** 1988 Jul;(7):71–2 (Rus)

[Dehydrogenase activity of the liver in rats following 30 days' exposure to hypergravity] Vetrova EG, et al. **Kosm Biol Aviakosm Med** 1988 Nov-Dec;22(6):64–6 (Eng. Abstr.) (Rus)

[DNA and nucleotide triphosphate-activated proteinase from rat liver nuclear matrix specific for H1 histone] Kutsyl MP, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1430–6 (Eng. Abstr.) (Rus)

[Isolation and characteristics of endonuclease tightly bound to alpha-polymerase from the rat liver] Timchenko NA, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):976–83 (Eng. Abstr.) (Rus)

[The activity of alpha-ketoglutarate dehydrogenase and succinate dehydrogenase in the liver of the developing chick embryo. The relation to the rate of the tricarboxylic acid cycle] Ermolaeva LP, et al. **Ontogenez** 1988 Nov-Dec; 19(6):640–4 (Eng. Abstr.) (Rus)

[Phenylalanine hydroxylase of human embryos: its homology with the enzyme from the liver of adults] Laptev AV, et al. **Ontogenez** 1988 Jul-Aug;19(4):385–9 (Eng. Abstr.) (Rus)

[The effect of denervation on ligandin levels and glutathione S-transferase activity in the rat liver] Spiridonov VK, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):21–3 (Eng. Abstr.) (Rus)

[Isolation of highly-purified NADP(H)-dependent enzymes from the rat liver using NADP-hydrazidoadipoyl oxypropyl sepharose] Bondar' VS, et al. **Prikl Biokhim Mikrobiol** 1988 May-Jun;24(3):361–7 (Eng. Abstr.) (Rus)

[A histochemical method for detecting xanthine oxidase activity in the liver] Simonenkova VA, et al. **Tsitologiia** 1988 Nov;30(11):1383–5 (Eng. Abstr.) (Rus)

[Comparative study of protein kinase C in the normal rat liver and in Zajdela's hepatoma. I. Electrophoretic analysis] Zakharova NV, et al. **Tsitologiia** 1988 Oct;30(10):1267–9 (Eng. Abstr.) (Rus)

[An increase of CDP-choline: diglyceride phosphocholine transferase reaction in microsome fraction and its decrease in nuclear membranes of the rat liver after treatment with hydrocortisone] Gevorkian ES, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):81–3 (Eng. Abstr.) (Rus)

[Distribution of aminoacyl-t-RNA-synthetase activity in rabbit liver cells during disruption of protein biosynthesis in experimental myocardia infarct] Ivanov LL, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):34–8 (Eng. Abstr.) (Rus)

[Insulin-degrading neutral proteinases of the plasma membrane of loach liver and embryo cells] Kusen' SI, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):23–7 (Eng. Abstr.) (Rus)

[The effect of temperature acclimation on NADP-dependent dehydrogenase activity in the carp liver and various mechanisms of its regulation] Sautin IuIu, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):29–34 (Eng. Abstr.) (Rus)

[Triglyceride lipase from the rabbit liver] Soliternova IB, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):14–9 (Eng. Abstr.) (Rus)

[Insulin-degrading neutral protease from plasma membranes of rat liver cells and erythrocytes] Sologub LI, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):28–33 (Eng. Abstr.) (Rus)

[Enzymatic activity of the pancreas and liver in the cryosurgical treatment of diffuse pancreonecrosis] Tsitsiashvili MSh, et al. **Vestn Khir** 1988 Jun;140(6):46–8 (Rus)

[Comparative characteristics of microsomal epoxide hydrolase in the rat liver and small intestine mucosa] Kravchenko LV, et al. **Vopr Med Khim** 1988 Nov-Dec; 34(6):122–8 (Eng. Abstr.) (Rus)

[Effect of silimarine on activity of lysosomal proteinases in the liver and kidneys during tetramethylthiuram disulfide administration] Tabagari SI, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):110–3 (Eng. Abstr.) (Rus)

[Activity of 5-alpha- and 5-beta-steroid reductases in subcellular liver structures from rats bearing Walker carcinosarcoma] Ulinskaite AP, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):77–81 (Eng. Abstr.) (Rus)

[Effect of long-term consumption of various krill products on lysosomal proteinase activity in rats] Zilova IS, et al. **Vopr Pitan** 1988 Jul-Aug;(4):51–4 (Eng. Abstr.) (Rus)

[The enzyme activity of carbohydrate metabolism in the liver of swine during the transition from prenatal to postnatal development] Snitinskiĭ VV. **Zh Evol Biokhim Fiziol** 1988 Sep-Oct;24(5):702–7 (Eng. Abstr.) (Rus)

[Changes of liver enzymes during severe infections] Conde Martel A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):651–5 (Eng. Abstr.) (Spa)

[Distribution of proteins and enzymes in 3 submitochondrial fractions isolated from the internal mitochondrial membrane of the rat liver] Eugui J. **Rev Med Univ Navarra** 1987 Jul-Sep;31(3):137–9 (Eng. Abstr.) (Spa)

GROWTH & DEVELOPMENT

Alterations of fasting glucose and fat metabolism in intrauterine growth-retarded newborn dogs. Kliegman RM. **Am J Physiol** 1989 Mar;256(3 Pt 1):E380–5

Pubescence-related changes in hepatocyte insulin dynamics in female rats. Krakower GR, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E780–7

Nuclear thyroid hormone receptors: ontogeny and thyroid hormone effects in sheep. Polk D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E543–9

Hepatic sexual dimorphism: ontogeny and influence of adult gonadectomy. Studer RK, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):E392–400

Biochemical characterization of mitochondrial and lysosomal particles in old rat liver. Mertens-Strijthagen J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):37–46

Influence of glucocorticoids on the postnatal development of cytochrome P-450 in rat liver. Müller D, et al. **Arch Toxicol Suppl** 1989;13:343–6

Influence of life-prolonging food restriction on membrane lipoperoxidation and antioxidant status. Yu BP, et al. **Basic Life Sci** 1988;49:1067–73

Tissue-specific differential modulation of arginase and ornithine aminotransferase by hydrocortisone during

various developmental stages of the rat. Patnaik SK, et al. **Biochem Int** 1989 Apr;18(4):709–19

Postnatal changes in dolichol–pathway enzyme activities in rat liver. Oda–Tamai S, et al. **Biochem J** 1989 Jul 15; 261(2):371–5

Age–related changes in the translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in rat liver. Cascales C, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):384–8

Changes in parameters of lipoprotein metabolism during rat hepatic development. Erickson SK, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):525–33

Cyclic GMP, cyclic AMP, glucose at birth, and maturation of rat liver mitochondria. Meister R, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):67–73

Immunochemical quantitation of fatty–acid–binding proteins. I. Tissue and intracellular distribution, postnatal development and influence of physiological conditions on rat heart and liver FABP. Paulussen RJ, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):201–9

Development of the rat hepatic microsomal glucose–6–phosphatase system and its glucocorticoid inducibility. Burchell A, et al. **Biol Neonate** 1988; 54(2):107–15

Participation of hepatocytes in the production of basement membrane components in human and rat liver during the perinatal period. Rescan PY, et al. **Cell Differ Dev** 1989 Mar;26(2):131–44

A study on enzyme adaptation pattern in postnatal rat liver in relation to activity rest cycle. Bhattacharya RD, et al. **Cell Mol Biol** 1988;34(4):407–17

Age–related induction and disappearance of carcinogen–DNA–adducts in livers of rats exposed to low levels of 2–acetylaminofluorene. Mullaart E, et al. **Chem Biol Interact** 1989;69(4):373–84

Role of thyroid hormones in the normal and glucocorticosteroid hormone–induced evolution of carbamoyl–phosphate synthase (ammonia) activity in axolotl liver. Lamers WH, et al. **Comp Biochem Physiol [B]** 1978;59(2):103–10

Insulin–dependent changes in subcellular distribution of liver insulin receptors in obese Zucker rats. López S, et al. **Diabetologia** 1988 Dec;31(12):922–7

Apolipoprotein–E–gene expression in rat liver during development in relation to insulin and glucagon. Mangeney M, et al. **Eur J Biochem** 1989 Apr 15;181(1):225–30

Long–term protein and calorie restriction: alterations in nucleic acid levels of organs of male rats. Bales CW, et al. **Exp Gerontol** 1988;23(3):189–96

Organ and skeletal growth in mice with a major gene for rapid postweaning growth. Famula TR, et al. **Growth Dev Aging** 1988 Autumn;52(3):145–50

Regulation of the rabbit cytochrome P–450 3c gene. Age–dependent expression and transcriptional activation by rifampicin. Potenza CL, et al. **J Biol Chem** 1989 Sep 25;264(27):16222–8

The expression of alpha(1)–acid glycoprotein mRNA during rat development. High levels of expression in the decidua. Thomas T, et al. **J Biol Chem** 1989 Apr 5;264(10):5784–90

Evidence for tissue specific alterations in Zn2+–induced conformational changes in fructose–bisphosphatase of senescent rats. Trigun SK, et al. **J Inorg Biochem** 1989 Apr;35(4):255–66

Enhancement of neonatal somatic and hepatic growth by orally administered epidermal growth factor in rats. Berseth CL, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec; 7(6):889–93

Stimulation of rat liver growth by a 1,3–dithiole derivative, KZ–1026. Hirayama Y, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):101–10

Molecular aspects of age–related changes in albumin synthesis in female WAG/Rij rats. Horbach GJ, et al. **Life Sci** 1988;43(21):1707–14

Sex–difference in the age related change of cholesterol metabolism in rats. Choi YS, et al. **Mech Ageing Dev** 1988 Jul;44(1):91–9

Studies of sequence heterogeneity of mitochondrial DNA from rat and mouse tissues: evidence for an increased frequency of deletions/additions with aging. Pikó L, et al. **Mech Ageing Dev** 1988 Jun;43(3):279–93

Developmental and steroid hormonal regulation of insulin–like growth factor II expression. Levinovitz A, et al. **Mol Endocrinol** 1989 May;3(5):797–804

The inadequacy of perinatal glucuronidation: immunoblot analysis of the developmental expression of individual UDP–glucuronosyltransferase isoenzymes in rat and human liver microsomes. Coughtrie MW, et al. **Mol Pharmacol** 1988 Dec;34(6):729–35

The tissue specificity of the age–related changes in alkali–induced DNA–unwinding. Hartnell JM, et al. **Mutat Res** 1989 May;219(3):187–92

Age and strain dependence of O6–methylguanine DNA methyltransferase activity in mice. Nakatsuru Y, et al. **Mutat Res** 1989 Jan;219(1):51–6

Age–associated changes in DNA methylation and mRNA level of the c–myc gene in spleen and liver of mice. Ono T, et al. **Mutat Res** 1989 Jan;219(1):39–50

Differential regulation of muscle and liver insulin receptors by energy restriction in growing rats. Balage M, et al. **Reprod Nutr Dev** 1988;28(3B):819–20

[Steroid hormone transformation in the gonads and liver of aged rats] Schriefers H, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):371–80 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Ontogeny of hepatic fatty acid–binding protein immunoreactivity in human liver and intestinal tract. Suzuki T, et al. **Acta Pathol Jpn** 1988 Aug;38(8):979–87

Partial hepatectomy augments the liver's antitumor response. Doerr R, et al. **Arch Surg** 1989 Feb;124(2):170–4

Anti–liver–kidney microsome antibody type 1 recognizes human cytochrome P450 db1. Gueguen M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):542–7

Cellular location of the cleavage event of the polymeric immunoglobulin receptor and fate of its anchoring domain in the rat hepatocyte. Solari R, et al. **Biochem J** 1989 Feb 1;257(3):759–68

Fliv–1: a surface membrane differentiation antigen of fetal rat hepatocytes. Radford J, et al. **Cell Biol Int Rep** 1989 Jun;13(6):499–512

Monoclonal antibodies directed against rat liver epithelial cell lines selectively recognize bile duct epithelium in livers of adult rats. Gebhardt R, et al. **Cell Biol Toxicol** 1988 Dec;4(4):379–92

Effect of growth and differentiation stimuli on the development of antigen–responsive B cells in fetal liver. Teale JM, et al. **Cell Immunol** 1988 Dec;117(2):389–98

A preliminary study on localization of HBxAg in liver tissue of patients with chronic liver disease and its significance. Hu KQ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):671–4

Relationship between HBsAg detected in liver tissue and liver injury. Tan CX, et al. **Chin Med J [Engl]** 1988 Aug; 101(8):564–7

Clonal analysis of liver–derived T cells of patients with primary biliary cirrhosis. Hoffmann RM, et al. **Clin Exp Immunol** 1989 May;76(2):210–5

Localization of halothane–induced antigen in situ by specific anti–halothane metabolite antibodies. Hubbard AK, et al. **Clin Exp Immunol** 1989 Jun;76(3):422–7

Autoantibodies to isolated human hepatocyte plasma membranes in liver disease. I. Specificity for chronic active hepatitis. Swanson NR, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):291–304

Responder T–cell subsets and antigenic stimulus in mixed lymphocyte–hepatocyte culture. Bumgardner GL, et al. **Curr Surg** 1989 Jan–Feb;46(1):20–3

Antibodies to hepatic endosomes. Identification of two endosome antigens. Enrich C, et al. **Eur J Cell Biol** 1989 Apr;48(2):344–52

Decreased number of asialoglycoprotein receptors in diabetic BB Wistar rat. Scarmato P, et al. **Experientia** 1989 May 15;45(5):480–2

Detection of anti–liver cell membrane antibody using a human hepatocellular carcinoma cell line. Lobo–Yeo A, et al. **Hepatology** 1989 Feb;9(2):210–4

Characterization of the incorporation of woodchuck hepatitis virus surface antigen into hepatocyte plasma membrane in woodchuck hepatitis and in the virus–induced hepatocellular carcinoma. Michalak TI, et al. **Hepatology** 1989 Jul;10(1):44–55

Antibody responses in the liver and bile of rats injected with horse erythrocytes. Carter L, et al. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):135–9

The role of the liver in translocation of IgA into the gastrointestinal tract. Brown WR, et al. **Immunol Invest** 1989 Jan–May;18(1–4):269–85 (124 ref.)

Modulation of colon–derived experimental hepatic metastasis by murine nonparenchymal liver cells. Cohen SA, et al. **Immunol Invest** 1989 Jan–May;18(1–4):351–63

Hepatic and biliary autoantigens. Mackay IR. **Immunol Invest** 1989 Jan–May;18(1–4):253–67

The role of the liver in catabolism of mouse and human IgA. Mestecky J, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):313–24 (19 ref.)

Defective hepatic handling of IgA immune aggregates by mice with experimental IgA nephropathy. González E, et al. **Immunology** 1989 Jul;67(3):308–13

Presence of a distinct CD8+ and CD5– leucocyte subpopulation in the sheep liver. Meeusen E, et al. **Immunology** 1988 Aug;64(4):615–9

Serial study of liver–directed autoantibodies and autoreactive T–lymphocytes in acute viral hepatitis B. Vento S, et al. **J Autoimmun** 1988 Jun;1(3):299–307

Monoclonal antibodies recognizing different epitopes of the 27–kDa gap junction protein from rat liver. Takeda A, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):901–7

Purification of the rat hepatic alpha 2–macroglobulin receptor as an approximately 440–kDa single chain protein. Moestrup SK, et al. **J Biol Chem** 1989 Sep 15; 264(26):15574–7

Cytotoxic T–cells and antibody–producing cells isolated from liver and spleen of immunized rats. Malter M, et al. **J Cancer Res Clin Oncol** 1989;115(2):157–60

Binding and transepithelial transport of immunoglobulins by intestinal M cells: demonstration using monoclonal IgA antibodies against enteric viral proteins. Weltzin R, et al. **J Cell Biol** 1989 May;108(5):1673–85

Sensitive avidin biotin based technique for identifying liver membrane antigens in tissue sections. Sipos J, et al. **J Clin Pathol** 1988 Nov;41(11):1217–22

Isolation and characterization of (gamma, delta) CD4+ T cell clones derived from human fetal liver cells. Aparicio P, et al. **J Exp Med** 1989 Sep 1;170(3):1009–14

Murine hepatic accessory cells support the proliferation of Th1 but not Th2 helper T lymphocyte clones. Magilavy DB, et al. **J Exp Med** 1989 Sep 1;170(3):985–90

Production of antibodies directed against microtubular aggregates in hepatocytes of chimpanzees with non–A, non–B hepatitis. Maeda T, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1401–7

Anti–HBs– and anti–HBc–containing plasma cells in livers of patients with chronic type B hepatitis. Petrovic LM, et al. **J Hepatol** 1988 Aug;7(1):7–13

Serum markers of hepatitis B virus replication, liver histology and intrahepatic expression of hepatitis B core antigen. Ramalho F, et al. **J Hepatol** 1988 Aug;7(1):14–20

A monoclonal antibody to rat liver arylsulfatase C and its application in immunohistochemistry. Kawano J, et al. **J Histochem Cytochem** 1989 May;37(5):683–90

Rapid low molecular weight polyethylene glycol embedding protocol for immunocytochemistry. Mowery J, et al. **J Histochem Cytochem** 1989 Oct;37(10):1549–52

Differential effects of liposome–incorporation on liver macrophage activating potencies of rough lipopolysaccharide, lipid A, and muramyl dipeptide. Differences in susceptibility to lysosomal enzymes. Daemen T, et al. **J Immunol** 1989 Apr 1;142(7):2469–74

Early influx of Listeria–reactive T lymphocytes in liver of mice genetically resistant to listeriosis. Goossens PL, et al. **J Immunol** 1988 Oct 1;141(7):2451–5

Augmentation of mouse liver–associated natural killer activity by biologic response modifiers occurs largely via rapid recruitment of large granular lymphocytes from the bone marrow. Wiltrout RH, et al. **J Immunol** 1989 Jul 1; 143(1):372–8

Enterically transmitted non–A, non–B hepatitis: identification of virus–associated antigen in experimentally infected cynomolgus macaques. Krawczynski K, et al. **J Infect Dis** 1989 Jun;159(6):1042–9

Liver–derived cytotoxic T cells in hepatitis A virus infection. Vallbracht A, et al. **J Infect Dis** 1989 Aug;160(2):209–17

Comparative study of cytotoxicity, tumor necrosis factor, and prostaglandin release after stimulation of rat Kupffer cells, murine Kupffer cells, and murine inflammatory liver macrophages. Decker T, et al. **J Leukoc Biol** 1989 Feb; 45(2):139–46

Preliminary research on the relationship between expression of HBV antigens and liver cell necrosis in the liver tissue of patients with chronic liver diseases. Hu KQ, et al. **J Tongji Med Univ** 1988;8(1):24–8

Toxicity of phorbol myristate acetate–stimulated polymorphonuclear neutrophils against rat hepatocytes. Demonstration and mechanism. Guigui B, et al. **Lab Invest** 1988 Dec;59(6):831–7

A monoclonal antibody specific for the hepatocyte receptor binding site on hepatitis B virus. Petit MA, et al. **Mol Immunol** 1989 Jun;26(6):531–7

Role of hepatocytes in the uptake of IgA and IgA–containing immune complexes in mice. Phillips JO, et al. **Mol Immunol** 1988 Sep;25(9):873–9

A nonimmunoglobulin precipitin to tissue extracts in pathological human sera. Kim DS, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):196–200

Core–specific receptors for lipopolysaccharide on hepatocytes. Parent JB. **Prog Clin Biol Res** 1989;286:131–44

Diagnosis of a human case of Rift Valley fever by immunoperoxidase demonstration of antigen in fixed liver tissue. Arborio M, et al. **Res Virol** 1989 Mar–Apr; 140(2):165–8

Change of intrahepatic expression of hepatitis–B core antigen during the clinical course of type–B chronic hepatitis. Franca ST, et al. **Scand J Gastroenterol** 1989 May; 24(4):454–60

Liver sinusoidal blood containing natural killer–like cells. Lukomska B, et al. **Scand J Immunol** 1989 Feb;29(2):239–46

The influence of hepatocellular function on NK and T cell tumoricidal activity. Roughneen PT, et al. **Surgery** 1988 Nov;104(5):888–93

Expression of NK–cell associated antigen on human fetal liver cells. Phan DT, et al. **Thymus** 1988;11(4):253–6

A specific hepatocyte receptor for the circumsporozoite protein: an unlikely hypothesis [letter] Suhrbier A. **Trans R Soc Trop Med Hyg** 1988;82(2):351–2

L3T4+,LyT2– and LyT2+,L3T4– T cells participate in the generation of allospecific cytotoxicity in response to MHC class I+ hepatocytes. Bumgardner GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):421–2

In vitro immunosuppressive effects of murine hepatocyte cytosol. Bumgardner GL, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):1154–5

Characterization of interstitial dendritic cells in human tissues. Hart DN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):401–3

Comparative in vitro immunogenicity of cultured murine islets and hepatocytes. Meloche M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2682–4

Role of canine hepatic sinusoidal lining cells in the immune response. Sakagami K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):411–5

Afferent and efferent pathways in T cell responses to MHC class I+, II–hepatocytes. Bumgardner GL, et al. **Transplantation** 1989 Jan;47(1):163–70

[Detection of HBxAG in the liver tissue of patients with chronic liver diseases and its significance] Hu KQ, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):355–7, 390 (Eng. Abstr.) **(Chi)**

[The role of liver, spleen and/or gastrointestinal immunization on the pathogenesis of mesangial IgA deposits] Wang L, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):216–20, 260–1 (Eng. Abstr.) **(Chi)**

[Double immunohistochemical staining of HBsAg and HBcAg in hepatocellular carcinoma and its surrounding tissue] Jiang Z. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):251–3 (Eng. Abstr.) **(Chi)**

[Immunohistochemical detection of HBs, HBc and delta antigens in liver sections. Technics, value as a routine procedure according to the cycle of the viral disease and prospects for the future] Degott C, et al. **Ann Pathol** 1988; 8(3):175–83 (30 ref.) (Eng. Abstr.) **(Fre)**

[Histological localization of non–A, non–B hepatitis related antigen in the liver] Unoki H, et al. **Nippon Rinsho** 1988 Dec;46(12):2614–7 **(Jpn)**

[Predictive value of serum aminoterminal type III procollagen peptide levels, serum laminin levels, and liver membrane antibodies for prognosis of chronic hepatitis] Hirata R. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr; 86(4):905–12 (Eng. Abstr.) **(Jpn)**

[A study of lymphocyte subsets in the peripheral blood, liver and spleen of patients with idiopathic portal hypertension (IPH)] Kato N. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):736–47 (Eng. Abstr.) **(Jpn)**

[Usefulness of the methods of morphologic detection of HBsAg and HBcAg in liver tissue] Chibowski D, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:337–50 (Eng. Abstr.) **(Pol)**

[Mechanisms of bile secretion disorder in immune pathology of the plasma membranes of hepatocytes] Makogon NV. **Fiziol Zh** 1988 Jul–Aug;34(4):8–12 (Eng. Abstr.) **(Rus)**

[Evaluation of the activity of liver and spleen macrophages in children with hepatitis A and B] Relzis AR, et al. **Pediatriia** 1989;(7):20–3 (Eng. Abstr.) **(Rus)**

[Antigenic divergence in a primary rat hepatocyte culture after exposure to the hepatic carcinogen N–diethylnitrosamine] Nazarov IV, et al. **Tsitologiia** 1989 Mar;31(3):352–5 (Eng. Abstr.) **(Rus)**

[Quantitative evaluation of sensitization of lymphoid cells to normal tissue and bacterial antigens] Krylenkov VA, et al. **Vestn Khir** 1987 Dec;139(12):54–6 **(Rus)**

[An immunosorbent method for the quantitative determination of antiliver autoantibodies in patients with viral hepatitis] Tertyshnaia EV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):64–7 (Eng. Abstr.) **(Rus)**

[Distribution of the antigen of hepatitis B virus in liver tissue in healthy carriers and in patients with chronic active and acute hepatitis] Garciá–Ruiz H, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun;54(2):87–90 (Eng. Abstr.) **(Spa)**

INJURIES

Hepatic trauma. Sheldon GF, et al. **Adv Surg** 1989;22:179–93 (37 ref.)

Embolism of massive hepatic tissue in inferior vena cava and right atrium after closed liver injury. Takatsu A, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):233–5

Hepatic packing in major hepatic trauma [letter] Ferguson CM. **Arch Surg** 1989 Apr;124(4):508–9

Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291–3

Fibrin glue achieves hemostasis in patients with coagulation disorders. Kram HB, et al. **Arch Surg** 1989 Mar; 124(3):385–7

Hepatic trauma. Stain SC, et al. **Arch Surg** 1988 Oct; 123(10):1251–5

Hepatic trauma in Auckland. Douglas RG, et al. **Aust N Z J Surg** 1988 Apr;58(4):307–14

Perihepatic packing: its role in the management of liver trauma. Hollands MJ, et al. **Aust N Z J Surg** 1989 Jan; 59(1):21–4

Management of the traumatized liver: an appraisal of 63 cases. Watson DI, et al. **Aust N Z J Surg** 1989 Feb;59(2):137–42

Cholescintigraphy in the diagnosis and follow up of hepatobiliary injury. Wig J, et al. **Clin Nucl Med** 1988 Oct; 13(10):751–5

Hepatic trauma revisited. Feliciano DV, et al. **Curr Probl Surg** 1989 Jul;26(7):453–524 (188 ref.)

Embolotherapy for severe iatrogenic hepatic injury [letter] Walter RM, et al. **Gastroenterology** 1989 Oct;97(4):1065–6

Intestinal endotoxins as co–factors in liver injury. Nolan JP, et al. **Immunol Invest** 1989 Jan–May;18(1–4):325–37 (36 ref.)

Splenic and liver trauma in children. Rescorla FJ, et al. **Indiana Med** 1989 Jul;82(7):516–20 (20 ref.)

An approach to selective conservative management of liver injuries. Redmond HP, et al. **Ir Med J** 1988 Nov;81(1):14–6

Laparoscopically applied fibrin glue in experimental liver trauma. Ishitani MB, et al. **J Pediatr Surg** 1989 Sep; 24(9):867–71

Hepatic and splenic conservation in trauma [letter] Reidy JF. **J R Soc Med** 1989 Feb;82(2):122–3

Ruptured hepatocellular carcinoma evokes risk of implanted metastases. Sonoda T, et al. **J Surg Oncol** 1989 Jul; 41(3):183–6

Traumatic hemobilia: etiology, diagnosis, and management [clinical conference] Mangiante EC, et al. **J Tenn Med Assoc** 1988 Sep;81(9):575–7

Cerebral function monitoring in rats with a critical hepatic injury treated with pneumatic antishock garment and infusion. Aberg T, et al. **J Trauma** 1989 Feb;29(2):168–74

Surgical management of severe liver trauma: a role for liver transplantation. Angstadt J, et al. **J Trauma** 1989 May; 29(5):606–8

Intra–abdominal sepsis following liver trauma. Bender JS, et al. **J Trauma** 1989 Aug;29(8):1140–4; discussion 1144–5

Severe hepatic trauma: a multi–center experience with 1,335 liver injuries. Cogbill TH, et al. **J Trauma** 1988 Oct; 28(10):1433–8

Repair of suprahepatic caval lesions under extracorporeal circulation in major liver trauma. Launois B, et al. **J Trauma** 1989 Jan;29(1):127–8

Nonoperative management of blunt pediatric liver injury—late complications: case report. MacGillivray DC, et al. **J Trauma** 1989 Feb;29(2):251–4 (24 ref.)

Rupture of the liver and right hemidiaphragm presenting as right hemothorax. Tribble JB, et al. **J Trauma** 1989 Jan; 29(1):116–8

The effect of viable omentum on early bile leakage and healing of liver lacerations. Trooskin SZ, et al. **J Trauma** 1989 Jan;29(1):47–50

HGF induction in normal rat by transferring agents and lymph from liver–injured rat. Takahashi N. **Naturwissenschaften** 1988 Oct;75(10):519–21

The roles of hepatic nerves in the reduction of food intake as a consequence of intraportal sodium propionate administration in sheep. Anil MH, et al. **Q J Exp Physiol** 1988 Jul;73(4):539–46

Blunt hepatic/splenic trauma in adults: CT–based classification and correlation with prognosis and treatment [letter] Conrad MR. **Radiology** 1989 Oct;173(1):285–6

CT diagnosis of blunt hepatic and splenic injuries: a look to the future [editorial] Jeffrey RB Jr. **Radiology** 1989 Apr; 171(1):17–8

Blunt hepatic trauma in adults: CT–based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):27–32

The involvement of extracellular calcium in hypoxic injury to the isolated rat liver. Strubelt O, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):327–34

Injuries of the liver. A series of 338 patients treated by an accident service. Wilkinson AE. **S Afr J Surg** 1989 Jun; 27(2):69–71; discussion 71–2

Surgery for liver trauma. Feliciano DV. **Surg Clin North Am** 1989 Apr;69(2):273–84 (55 ref.)

Nonoperative management of blunt hepatic trauma in adults. Farnell MB, et al. **Surgery** 1988 Oct;104(4):748–56

[Experimental and clinical use of porous biological membranes in the injured solid intra–abdominal organs] Li H, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):18–9, 60 (Eng. Abstr.) **(Chi)**

[Who survives a serious accident? (letter)] Boerma EJ. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):42 **(Dut)**

[Hepatic injuries. Therapeutic approach. Analysis of 140 cases and review of the literature] Mentha G, et al. **Ann Chir** 1988;42(6):381–8 (42 ref.) (Eng. Abstr.) **(Fre)**

[Hepatic injuries in children. Apropos of 23 case reports] Scheye T, et al. **Ann Pediatr (Paris)** 1988 Dec;35(10):731–5 (Eng. Abstr.) **(Fre)**

[Hepatic rupture after puncture biopsy: value of embolization. Apropos of a case with hepatoblastoma] Takvorian P, et al. **Pediatrie** 1988;43(6):531–3 (Eng. Abstr.) **(Fre)**

[Severe contusions of the liver. Therapeutic considerations. Apropos of 17 cases] Jebira A, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):535–41 (Eng. Abstr.) **(Fre)**

[Blunt upper abdominal trauma as a complication of cardiac resuscitation] Reinartz H. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):111–4 (Eng. Abstr.) **(Ger)**

[A grenade splinter as the cause of cholangitis and icterus] Niebuhr H, et al. **Dtsch Med Wochenschr** 1989 Aug 25; 114(34):1283–5 (Eng. Abstr.) **(Ger)**

[Therapy and prognosis in 102 liver injuries] Eisner L, et al. **Helv Chir Acta** 1989 Jan;55(5):593–6 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of liver injuries in the polytraumatized patient] Schweizer W, et al. **Helv Chir Acta** 1989 Jan;55(5):597–612 (Eng. Abstr.) **(Ger)**

[Diagnosis of liver trauma: ultrasound versus computed tomography] Grabenwöger F, et al. **ROFO** 1989 Feb; 150(2):163–6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Surgical treatment of liver injuries. Considerations on a series of 32 cases] Drusco GM, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1291–6 (Eng. Abstr.) **(Ita)**

[Reappraisal of hepatectomy in traumatic rupture of the liver] Kasai T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):532–7 (Eng. Abstr.) **(Jpn)**

[The role of computed tomography in blunt hepatic injury] Kaji T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1123–32 (Eng. Abstr.) **(Jpn)**

[A case of old traumatic intrahepatic hematoma] Moriura S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr; 86(4):941–4 **(Jpn)**

[A case of liver injury complicated with progressive muscular dystrophy (limb–girdle type)—a histological investigation of orcein negative ground glass inclusions in many of the hepatocytes] Uehara M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):95–9 **(Jpn)**

[Balloon tamponade in transfixing wounds of the liver: immediate results] Branco PD, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb;43(1):20–5 (Eng. Abstr.) **(Por)**

[Surgical tactics in injuries of the liver] Il'iasov ShSh, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):119–21 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of liver injuries and their sequelae] Nikhinson RA, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):81–4 (Eng. Abstr.) **(Rus)**

[Subcapsular hematoma of the liver simulating malignant tumor] Ismailov AKh, et al. **Klin Khir** 1988;(9):57 **(Rus)**

[Diagnosis and surgical treatment of injuries of the liver] Krivitskii DI, et al. **Klin Khir** 1988;(9):56–7 **(Rus)**

[Methods of hemostasis and hepatectomy in injuries of the liver] Tsybyrné KA, et al. **Klin Khir** 1989;(4):27–9 (Eng. Abstr.) **(Rus)**

[Post–traumatic sequestration of the right hepatic lobe complicated by profuse external hemorrhage in a child] Doronin VF, et al. **Vestn Khir** 1987 Dec;139(12):66–8 **(Rus)**

[Migration of a fragment of liver parenchyma into the common bile duct] Lifshits IuZ, et al. **Vrach Delo** 1989 Jan;(1):87–8 **(Rus)**

INNERVATION

Drinking saccharin increases food intake and preference—IV. Cephalic phase and metabolic factors. Tordoff MG, et al. **Appetite** 1989 Feb;12(1):37–56

Distribution, possible origins and fine structure of neuropeptide Y–containing nerve fibers in the rat liver. Inoue N, et al. **Brain Res** 1989 Jul 24;493(1):87–96

Lateral and ventromedial hypothalamic influences on hepatic autonomic nerve activity in the rat. Yoshimatsu H, et al. **Brain Res Bull** 1988 Aug;21(2):239–44

Modulation by somatostatin of nerve–mediated activation of glycogenolysis in the perfused rat liver. Beckh K, et al. **FEBS Lett** 1989 Jul 3;250(2):345–8

Localization of adrenergic and neuropeptide tyrosine–containing nerves in the mammalian liver. Burt AD, et al. **Hepatology** 1989 Jun;9(6):839–45

Hepatic innervation in hepatic regeneration. Cruise JL. **Hepatology** 1988 Nov–Dec;8(6):1718–9

Hepatic denervation alters hemodynamic response to hemorrhage in conscious rats. Ozier Y, et al. **Hepatology** 1989 Oct;10(4):473–6

Alterations in gastric acid secretion following hepatic vagotomy at a stage of development in rats. Ohtake M, et al. **Int J Dev Neurosci** 1987;5(4):289–93

Effect of hepatic vagotomy on postexercise substrate levels in food–restricted rats. Lavoie JM, et al. **J Appl Physiol** 1989 Apr;66(4):1965–9

The effect of liver denervation on the consumption of various diets by rats. Bellinger LL, et al. **Physiol Behav** 1988; 43(4):527–31

The effect of endogenous sugar acids on the afferent discharge rate of the hepatic branch of the vagus nerve in the rat. Niijima A. **Physiol Behav** 1988;44(4–5):661–4

The body weight loss of young rats caused by hepatic branch vagotomy is influenced by environmental temperature. Sakaguchi T, et al. **Physiol Behav** 1988;43(5):673–5

Lesion of vagal afferent terminals impairs glucagon–induced suppression of food intake. Weatherford SC, et al. **Physiol Behav** 1988;43(5):645–50

The effect of gastro–entero–pancreatic hormones on the activity of vagal hepatic afferent fibres. Niijima A. **Prog Brain Res** 1988;74:155–60

Ultrastructure of cholinergic innervation in the cirrhotic liver in guinea pigs. Neurohistochemical and ultrastructural study. Akiyoshi H. **Virchows Arch [B]** 1989;57(2):81–90

[Effect of deafferentation of the liver on hepatocytes located in various parts of the hepatic lobule] Kniazeva GB, et al. **Arkh Anat Gistol Embriol** 1988 Jul;95(7):74–6 (Eng. Abstr.) **(Rus)**

[Pharmacokinetic characteristics of drug substance in liver denervation] Ashirmetov AKh, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):77–80 (Eng. Abstr.) **(Rus)**

[Interrelations of macro– and microhemodynamics and lymph outflow in the cat liver during stimulation of the hepatic nerves] Kostiushina NV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):359–66 (Eng. Abstr.) **(Rus)**

METABOLISM

Hepatic drug disposition in multiple organ failure. Schregel W, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):638–42

Acute effects of carbon disulphide on hepatic lipid metabolism in Fischer rats. Rojas Martini M. **Acta Cient Venez** 1987;38(3):362–5

Internalization and release of insulin from hepatocytes. Cresto JC, et al. **Acta Diabetol Lat** 1989 Apr–Jun;26(2):103–13

Sources of calcium mobilized by glucagon in isolated rat hepatocytes. Mine T, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):301–6

Hepatic metabolism, biliary clearance and enterohepatic circulation of thyroid hormone. Visser TJ, et al. **Acta Med Austriaca** 1988;15 Suppl 1:37–9 (9 ref.)

The effect of long–term low protein intake on liver and serum phospholipids in rats. Ristić V, et al. **Acta Med Iugosl** 1988; 42(3):183–6

Effects of insulin and glucagon on energy and carbohydrate metabolism of rat hepatocytes in primary culture. Kobayashi T, et al. **Acta Med Okayama** 1988 Oct;

42(5):259–69
Effect of high dose alpha-tocopherol acetate on the toxicity and tissue distribution of adriamycin (doxorubicin). Shinozawa S, et al. **Acta Med Okayama** 1988 Oct; 42(5):253–8
Immunohistochemical differentiation of yolk sac-type alpha-fetoprotein from hepatic-type alpha-fetoprotein. Okamoto T. **Acta Pathol Jpn** 1989 Jan;39(1):51–4
Data on the evolution of hormones. Investigations on imprinting evoked by oligopeptides exhibiting no hormonal activity. Csaba G, et al. **Acta Physiol Hung** 1988;72(2):151–8
Effect of high carbohydrate and high protein diets on microsomal fatty acid composition, "fluidity" and delta 6 desaturation activity in kidney and lung. Mandon EC, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):49–58
Lipid binding properties of fatty acid binding protein isolated from mouse liver. Zanetti R, et al.
Acta Physiol Pharmacol Latinoam 1988;38(1):135–44
Effect of cold exposure on the concentration of triglyceride in the liver of the rat. Górski J, et al.
Acta Physiol Pol 1988 Mar–Apr;39(2):136–42
Metabolic response to starvation in late pregnant rats. I. Maternal response. Nowacka M, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):427–34
Influence of chronic ethanol treatment and the abstinence period on the ethanol elimination by the isolated perfused rat liver. Rajtar G. **Acta Physiol Pol** 1988 Jul–Aug; 39(4):276–80
Transfer of DOPA from the sympatho-adrenal system to the pancreas, liver and kidney via the blood circulation. Andén NE, et al. **Acta Physiol Scand** 1989 May;136(1):75–9
Enzymatic hydrolysis of S-phosphocysteamine. Orzeszko G, et al. **Acta Pol Pharm** 1988;45(2):171–5
Transport systems for amphipathic compounds in normal and neoplastic hepatocytes. Buscher HP, et al.
Adv Enzyme Regul 1988;27:173–92
Regulation of liver metabolism by intercellular communication. Kuiper J, et al. **Adv Enzyme Regul** 1988; 27:193–208
Astrocytes synthesize and secrete alpha 2-macroglobulin: differences between the regulation of alpha 2-macroglobulin synthesis in rat liver and brain. Bauer J, et al. **Adv Exp Med Biol** 1988;240:199–205
Role of guanine nucleotide regulatory proteins and inositol phosphates in the hormone induced mobilization of hepatocyte calcium. Blackmore PF, et al.
Adv Exp Med Biol 1988;232:169–82
Arginylation, surface hydrophobicity and degradation of cytosol proteins from rat hepatocytes. Bohley P, et al.
Adv Exp Med Biol 1988;240:159–69
AGEPC: a potent calcium-dependent chemical mediator in the liver. Fisher RA, et al. **Adv Exp Med Biol** 1988; 232:203–12
Pharmacodynamics of 5-fluorouracil and leucovorin. Gustavsson BG, et al. **Adv Exp Med Biol** 1988;244:219–24
Regulation of liver plasma membrane Ca2+ pump. Lotersztajn S, et al. **Adv Exp Med Biol** 1988;232:69–82
The influence of a temporary cessation and reperfusion of intestinal blood flow on the level of hepatic lipid peroxides. Lutz J, et al. **Adv Exp Med Biol** 1989;248:803–8
Distribution and metabolism of calcium leucovorin in normal and tumor tissue. Mullin RJ, et al. **Adv Exp Med Biol** 1988; 244:25–38
Cellular Ca2+ dyshomeostasis in the liver in endotoxic shock. Sayeed MM, et al. **Adv Exp Med Biol** 1988;232:125–9
Potentiation by GTP of Ins(1,4,5)P3-induced Ca2+ mobilization in permeabilized hepatocytes. Thomas AP.
Adv Exp Med Biol 1988;232:197–201
Alkylating toxins and the liver plasma membrane calcium pump/calcium atpase. Tsokos-Kuhn JO, et al.
Adv Exp Med Biol 1988;232:151–8
Oxygen distribution in isolated perfused liver observed by phosphorescence imaging. Wilson DF, et al.
Adv Exp Med Biol 1989;248:109–15
Sequential formation of leukotriene E4 metabolites by isolated rat hepatocytes. Stene DO, et al.
Adv Prostagiandin Thromboxane Leukotriene Res 1989; 19:108–11
Interaction of acetyl-LDL and Mal-BSA with scavenger receptor sites of rat liver. Dresel HA, et al.
Agents Actions Suppl 1988;26:159–63 (12 ref.)
Role of the liver in reverse cholesterol transport. Havel RJ.
Agents Actions Suppl 1988;26:125–32 (14 ref.)
Processing of cholesteryl ester from low density lipoproteins in the rat: hepatic metabolism and biliary excretion after uptake by different hepatic cells. van Berkel TJ, et al.
Agents Actions Suppl 1988;26:99–107
The liver peptides after chronic administration of ethanol in rats. Farbiszewski R, et al. **Alcohol Alcohol** 1988; 23(4):283–8
Pyridoxal phosphate annuls acetaldehyde inhibition of uridine uptake by hepatocytes. Kakuma S, et al.
Alcohol Alcohol 1989;24(1):31–4
Effect of chronic ethanol administration on protein catabolism in rat liver. Donohue TM Jr, et al.
Alcoholism (NY) 1989 Feb;13(1):49–57
Effect of chronic ethanol consumption on the content of alpha-tocopherol in subcelilular fractions of rat liver. Hagen BF, et al. **Alcoholism (NY)** 1989 Apr;13(2):246–51
Impaired hepatic elimination of paranitrophenol and its metabolites in the rat following chronic ethanol pretreatment. Mitchell MC, et al. **Alcoholism (NY)** 1989 Apr;13(2):264–70
Hepatic adenosine in rats fed ethanol: effect of acute hyperoxia or hypoxia. Miyamoto K, et al.
Alcoholism (NY) 1988 Aug;12(4):512–5
Hepatic cholesterol metabolism as a function of carbon disulfide concentration and treatment with phenobarbital. Simmons JE, et al. **Am Ind Hyg Assoc J** 1988 Sep; 49(9):427–33
Oral contraceptives: effect of long-term use on liver vitamin A storage assessed by the relative dose response test. Amatayakul K, et al. **Am J Clin Nutr** 1989 May;49(5):845–8
Olive oil and liver cholesterol [letter] Beynen AC.
Am J Clin Nutr 1989 Feb;49(2):392–4
Aging: effect on hepatic metabolism and transport of folate in the rat. Horne DW, et al. **Am J Clin Nutr** 1989 Aug; 50(2):359–63
In situ distribution of enolase isozymes in chronic liver disease. Fukuda Y, et al. **Am J Gastroenterol** 1989 Jun; 84(6):601–5
The behavior of asialotransferrin-iron in the rat. Beguin Y, et al. **Am J Hematol** 1988 Dec;29(4):204–10
Hepatic metabolism of insulin. Duckworth WC, et al.
Am J Med 1988 Nov 28;85(5A):71–6 (28 ref.)
Endothelial mediation is necessary for subsequent hepatocyte uptake of transferrin. Soda R, et al. **Am J Med Sci** 1989 May;297(5):314–20
Differential effects of partial hepatectomy on hepatic and renal heme and cytochrome P450 metabolism. Solangi K, et al. **Am J Med Sci** 1988 Dec;296(6):387–91
Hepatic immunohistochemical localization of the tight junction protein ZO-1 in rat models of cholestasis. Anderson JM, et al. **Am J Pathol** 1989 May;134(5):1055–62
Hepatic binding of DNA is mediated by a receptor on nonparenchymal cells. Emlen W, et al. **Am J Pathol** 1988 Oct;133(1):54–60
Cellular localization of laminin gene transcripts in normal and fibrotic human liver. Milani S, et al. **Am J Pathol** 1989 Jun;134(6):1175–82
Kinetic analysis of electrogenic 2 Na+–1 H+ antiport in crustacean hepatopancreas. Ahearn GA, et al.
Am J Physiol 1989 Sep;257(3 Pt 2):R484–93
Ursodeoxycholate-induced changes in hepatic Na+–H+ exchange and biliary HCO3- excretion. Anwer MS, et al.
Am J Physiol 1989 Sep;257(3 Pt 1):G371–9
Relation between biliary glutathione excretion and bile acid-independent bile flow. Ballatori N, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):G22–30
Determinants of glutathione efflux and biliary GSH/GSSG ratio in perfused rat liver. Ballatori N, et al.
Am J Physiol 1989 Mar;256(3 Pt 1):G482–90
Hepatic glucose production and insulin sensitivity preceding diabetes in monkeys. Bodkin NL, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E676–81
Calcitonin gene-related peptide receptor antagonist human CGRP-(8–37). Chiba T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E331–5
Ca2+ concentration influences the hepatic extraction of bioactive human PTH-(1–34) in rats. D'Amour P, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):E87–92
Compartmental modeling of the hepatic transport of taurocholate in the rat in vivo. Deroubaix X, et al.
Am J Physiol 1989 Aug;257(2 Pt 1):G210–20
Alpha-adrenergic modulation of glutathione metabolism in isolated rat hepatocytes. Estrela JM, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E801–5
Effect of amino acid deprivation on initiation of protein synthesis in rat hepatocytes. Everson WV, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):C18–27
Development of a new fluorescent angiotensin II probe. Fatigati V, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C452–8
Hepatocyte beta-adrenergic responsiveness and guanine nucleotide-binding regulatory proteins. García-Sáinz JA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C384–9
Processing of cholecystokinin by isolated liver cells. Gores GJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G242–8
Handling of tracer norepinephrine by the dog liver. Goresky CA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G107–23
Changes in hepatic blood volume on galactose and indocyanine green uptake by cat liver. Greenway CV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G524–31
Volume-regulatory K+ fluxes in the isolated perfused rat liver: characterization by ion transport inhibitors. Haddad P, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G357–63
Ethanol stimulates leucine uptake by rat fetal hepatocytes via trans-stimulation. Henderson GI, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):G384–9
Metallothionein response to stress in rats: role in free radical scavenging. Hidalgo J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E518–24
Uptake and distribution of transferrin and iron in perfused, iron-deficient rat liver. Holmes JM, et al.
Am J Physiol 1989 Jun;256(6 Pt 1):G1022–7
Glucose intolerance in thyrotoxic rats: role of insulin, glucagon, and epinephrine. Ikeda T, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E843–9
Importance of glycosylation for hepatic clearance of renal renin. Kim S, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E642–51
Initiation of protein synthesis in a cell-free system prepared from rat hepatocytes. Kimball SR, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C28–34
Stimulation of oxygen uptake by glucagon is oxygen dependent in perfused rat liver. Kizaki Z, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):G369–76
Gluconeogenesis in perfused livers from dexamethasone-treated chickens. Kobayashi T, et al.
Am J Physiol 1989 Apr;256(4 Pt 2):R907–14
Contributions of gluconeogenesis and glycogenolysis during glucose counterregulation in normal humans. Lecavalier L, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E844–51
Hormonal regulation of hepatocyte tight junctional permeability. Lowe PJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G454–61
Effect of loss of first-phase insulin secretion on hepatic glucose production and tissue glucose disposal in humans. Luzi L, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E241–6
Effect of chelators on copper metabolism and copper pools in mouse hepatocytes. McArdle HJ, et al.
Am J Physiol 1989 Apr;256(4 Pt 1):G667–72
Enhanced glucose transport in response to inhibition of respiration in Clone 9 cells. Mercado CL, et al.
Am J Physiol 1989 Jul;257(1 Pt 1):C19–28
Characterization of glucagon and catecholamine effects on isolated sheep hepatocytes. Morand C, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):R539–46
Effects of ethanol on amino acid transport in basolateral liver plasma membrane vesicles. Moseley RH, et al.
Am J Physiol 1989 Mar;256(3 Pt 1):G458–65
Uptake of bumetanide into isolated rat hepatocytes and primary liver cell cultures. Petzinger E, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):G78–86
Fasting and postabsorptive hepatic glucose and insulin metabolism in hyperthyroidism. Raboudi N, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):E159–66
Na+–H+ exchange activity in rat hepatocytes: role in regulation of intracellular pH. Renner EL, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):G44–52
Altered hepatic fatty acid metabolism in endotoxicosis: effect of L-carnitine on survival. Takeyama N, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):E31–8
Effect of adenine on liver nucleotide after fructose loading by 31P-NMR. Thoma WJ, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 1):G949–56
Rat liver metabolism of dicarboxylic acids. Vamecq J, et al.
Am J Physiol 1989 Apr;256(4 Pt 1):G680–8
Allopurinol kinetics in humans as a means to assess liver function: design of a loading test. Van Waeg G, et al.
Am J Physiol 1989 Jul;257(1 Pt 2):R237–45
Exercise-induced fall in insulin and hepatic carbohydrate metabolism during muscular work. Wasserman DH, et al.
Am J Physiol 1989 Apr;256(4 Pt 1):E500–9
Glucagon is a primary controller of hepatic glycogenolysis and gluconeogenesis during muscular work. Wasserman DH, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E108–17
Hepatic artery versus portal vein and systemic infusion of fluorodeoxyuridine of rabbit VX-2 hepatic implants. Butler JA, et al. **Am J Surg** 1989 Jan;157(1):126–9
High-performance liquid chromatographic assay of biphenyl metabolism by hepatocytes cultured in an embryo/hepatocyte co-culture medium. Mole ML, et al.
Anal Biochem 1988 Nov 15;175(1):74–84
The morphology of release of vitamin A-containing lipid droplets by hepatocytes in rat liver. Kudo S. **Anat Rec** 1989 Sep;225(1):11–20
Comparison of 3H-galactose and 3H-glucose as precursors of hepatic glycogen in control-fed rats. Michaels JE, et al. **Anat Rec** 1989 May;224(1):22–8
Sufentanil pharmacokinetics in patients with cirrhosis. Chauvin M, et al. **Anesth Analg** 1989 Jan;68(1):1–4
Uptake and excretion of vecuronium bromide and pancuronium bromide in the isolated perfused rat liver. Bencini AF, et al. **Anesthesiology** 1988 Oct;69(4):487–92
Is the metabolism of alfentanil subject to debrisoquine polymorphism? A study using human liver microsomes. Lavrijsen KL, et al. **Anesthesiology** 1988 Oct;69(4):535–40
The role of oxidative biotransformation of halothane in the guinea pig model of halothane-associated hepatotoxicity. Lind RC, et al. **Anesthesiology** 1989 Apr;70(4):649–53
A model for determining the influence of hepatic uptake of nondepolarizing muscle relaxants in the pig. Motsch J, et al. **Anesthesiology** 1989 Jan;70(1):128–33
The role of HNF-1 in liver-specific gene expression. Baumhueter S, et al. **Ann N Y Acad Sci** 1989;557:272–8, discussion 279
Effect of tert-butyl hydroperoxide on metabolism of liver and hepatoma. Borrello S, et al. **Ann N Y Acad Sci** 1988; 551:144–6
Interleukin-6. The major regulator of acute-phase protein synthesis in man and rat. Castell JV, et al.
Ann N Y Acad Sci 1989;557:87–99; discussion 100–1
Response of liver genes to acute phase mediators. Darlington GJ, et al. **Ann N Y Acad Sci** 1989;557:310–5; discussion 315–6
Factors that affect the rate of erythropoietin production by extrarenal sites. Fried W. **Ann N Y Acad Sci** 1989;554:1–8 (26 ref.)
Regulation of hepatocyte-specific gene expression. Grayson DR, et al. **Ann N Y Acad Sci** 1989;557:243–55, discussion 255–6 (27 ref.)
Regulation of fibrinogen synthesis and secretion by the chicken hepatocyte. Grieninger G, et al.
Ann N Y Acad Sci 1989;557:257–70, discussion 270–1
Postmodernism, the acute phase response, and interpretation of data. Kushner I. **Ann N Y Acad Sci** 1989;557:240–2 (7

ref.)
Liver functions in hepatocytes entrapped within calcium alginate. Miura Y, et al. **Ann N Y Acad Sci** 1988;542:521–32
Effect of dietary ornithine on renal and hepatic polyamine synthesis. Bedford MR, et al. **Ann Nutr Metab** 1988; 32(5–6):265–70
Effects of durum wheat dietary selenium on glutathione peroxidase activity and Se content in long–term–fed rats. Ciappellano S, et al. **Ann Nutr Metab** 1989;33(1):22–30
Administration of balanced or BCAA–enriched amino acid solution in septic rats. Effects on protein synthesis in the liver. Pedersen P, et al. **Ann Surg** 1988 Dec;208(6):714–20
Hormonal regulation of hepatic gluconeogenesis and glycolysis. Pilkis SJ, et al. **Annu Rev Biochem** 1988; 57:755–83 (268 ref.)
Biochemical mechanisms of induction of hepatic peroxisome proliferation. Lock EA, et al.
Annu Rev Pharmacol Toxicol 1989;29:145–63 (119 ref.)
The role of cytoplasmic proteins in hepatic bile acid transport. Stolz A, et al. **Annu Rev Physiol** 1989;51:161–76 (89 ref.)
Hepatobiliary metabolism and urinary excretion of 4–demethoxydaunorubicin as compared to daunorubicin in rats. Catapano CV, et al. **Anticancer Res** 1988 Jul–Aug; 8(4):725–31
High hepatic excretion in humans of cefpiramide, a new cephalosporin. Brogard JM, et al.
Antimicrob Agents Chemother 1988 Sep;32(9):1360–4
Hepatobiliary kinetics and excretion of ciprofloxacin. Parry MF, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):982–5
Changes in urea cycle–related metabolites in the mouse after combined administration of valproic acid and an amino acid load. Alonso E, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):267–73
Effect of glycerol and dihydroxyacetone on hepatic lipogenesis. Carmona A, et al. **Arch Biochem Biophys** 1989 May 15;271(1):130–8
Glycogen synthesis from glucose and fructose in hepatocytes from diabetic rats. Ciudad CJ, et al.
Arch Biochem Biophys 1988 Dec;267(2):437–47
Ah receptor for 2,3,7,8–tetrachlorodibenzo–p–dioxin in rat liver: lack of sensitivity to alkaline phosphatase when compared with that of glucocorticoid receptor. Denison MS, et al. **Arch Biochem Biophys** 1989 Sep;273(2):458–65
Androgen receptor in rat liver: characterization and separation from a male–specific estrogen–binding protein. Eagon PK, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):161–75
Metabolism of vitamin D2 in pig liver homogenates: evidence for a free radical reaction. Engstrom GW, et al.
Arch Biochem Biophys 1989 May 1;270(2):432–40
Damage to protein synthesis concurrent with lipid peroxidation in rat liver slices: effect of halogenated compounds, peroxides, and vitamin E1. Fraga CG, et al.
Arch Biochem Biophys 1989 Apr;270(1):84–91
Control of hepatic gluconeogenesis: role of fatty acid oxidation. González–Manchón C, et al.
Arch Biochem Biophys 1989 May 15;271(1):1–9
Existence of acetyl–CoA–dependent chain elongation system in hepatic peroxisomes of rat: effects of clofibrate and di–(2–ethylhexyl)phthalate on the activity. Horie S, et al.
Arch Biochem Biophys 1989 Oct;274(1):64–73
Quantitative analysis of internalization of glucagon by isolated hepatocytes. Horwitz EM, et al.
Arch Biochem Biophys 1988 Dec;267(2):758–69
Intracellular acidosis protects cultured hepatocytes from the toxic consequences of a loss of mitochondrial energization. Masaki N, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):152–61
Hepatic lipoate uptake. Peinado J, et al.
Arch Biochem Biophys 1989 Sep;273(2):389–95
Radioligand–dependent differences in the molecular properties of the mouse and rat hepatic aryl hydrocarbon receptor complexes. Piskorska–Pliszczynska J, et al.
Arch Biochem Biophys 1988 Nov 15;267(1):372–83
Alterations in energy status by menadione metabolism in hepatocytes isolated from fasted and fed rats. Redegeld FA, et al. **Arch Biochem Biophys** 1989 Aug 15; 273(1):215–22
Quantitation of carbon flow through the hepatic folate–dependent one–carbon pool in rats. Schalinske KL, et al. **Arch Biochem Biophys** 1989 May 15;271(1):49–55
Expression of the alpha–fetoprotein gene in adult rat liver. Wan YJ, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):267–76
Effect of zinc deficiency on the accumulation of metallothionein and cadmium in the rat liver and kidney. Sato M, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug; 18(4):587–93
Effect of thyroxine (T4) and thiourea on the hepatic oxygen consumption of male garden lizards of three different age groups. Sahu N, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):55–62
In vitro hepatic drug and anesthetic metabolism of rats with dietary–induced obesity. Rice SA, et al.
Arch Int Pharmacodyn Ther 1989 May–Jun;299:286–93
Expression of cytokeratins in normal and diseased livers and in primary liver carcinomas. Lai YS, et al.
Arch Pathol Lab Med 1989 Feb;113(2):134–8
Metabolic interaction between skeletal muscle and liver during bacteremia. Harkema JM, et al. **Arch Surg** 1988 Nov; 123(11):1415–9
Determinants of urea nitrogen production in sepsis. Muscle catabolism, total parenteral nutrition, and hepatic clearance of amino acids. Pittiruti M, et al. **Arch Surg** 1989 Mar; 124(3):362–72
Effect of dichloroacetate on plasma and hepatic amino acids in sterile inflammation and sepsis. Vary TC, et al.
Arch Surg 1989 Sep;124(9):1071–7
Endotoxin modulation of hepatocyte secretory and cellular protein synthesis is mediated by Kupffer cells. West MA, et al. **Arch Surg** 1988 Nov;123(11):1400–5
Short–term effects of chlorophenols on the function and viability of primary cultured rat hepatocytes. Aschmann C, et al. **Arch Toxicol** 1989;63(2):121–6
An in vivo study of benzene metabolite DNA adduct formation in liver of male New Zealand rabbits. Bauer H, et al. **Arch Toxicol** 1989;63(3):209–13
In vitro covalent binding of the pyrethroids cismethrin, cypermethrin and deltamethrin to rat liver homogenate and microsomes. Catinot R, et al. **Arch Toxicol** 1989; 63(3):214–20
Effects of cadmium exposure during pregnancy on cadmium and zinc concentrations in neonatal liver and consequences for the offspring. Roelfzema WH, et al. **Arch Toxicol** 1989; 63(1):38–42
Metabolic activation of diethylstilbestrol and 7,8–benzoflavone in hamster hepatocytes. Blaich G, et al.
Arch Toxicol Suppl 1989;13:203–5
Study of nafenopin, a hypolipidemic drug on liver metabolism. Gerbracht U, et al. **Arch Toxicol Suppl** 1989; 13:304–8
Depletion of hepatic glutathione in rats impairs phagocytosis in vivo. Hennighausen G, et al. **Arch Toxicol Suppl** 1989; 13:326–9
Effect of arsenic on cellular metabolism after single or repeated injection in guinea pigs. Reichl FX, et al.
Arch Toxicol Suppl 1989;13:363–5
Inhibitory effect of cholephilic organic acids on hepatobiliary transport and mitochondrial respiration. Varga F, et al.
Arch Toxicol Suppl 1989;13:309–11
Lactosaminated Fab fragments specific for low density lipoproteins/hepatocyte targeting and hypolipoproteinemic activity. Bernini F, et al. **Arteriosclerosis** 1988 Nov–Dec; 8(6):825–31
Chylomicron remnant metabolism. Role of hepatic lipoprotein receptors in mediating uptake. Mahley RW, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1 Suppl):I14–8
Enhanced apolipoprotein E production with normal hepatic mRNA levels in the Watanabe heritable hyperlipidemic rabbit. Rall CJ, et al. **Arteriosclerosis** 1988 Nov–Dec; 8(6):804–9
Identification and evaluation of O–alkyl substituted hydroxamic acids as potent in vitro inhibitors of the hepatic glycine cleavage system and investigation of their action on in vivo central nervous system glycine concentration. Johnson G, et al. **Arzneimittelforschung** 1989 Apr; 39(4):432–7
Effects of ciprofibrate and fenofibrate on liver lipids and lipoprotein synthesis in normo– and hyperlipidemic rats. Petit D, et al. **Atherosclerosis** 1988 Dec;74(3):215–25
Lipid peroxidation, protein thiols and calcium homeostasis in bromobenzene–induced liver damage. Casini AF, et al.
Basic Life Sci 1988;49:773–6
Specific detection of lipid hydroperoxides using HPLC–EC method. Matsushita S, et al. **Basic Life Sci** 1988;49:163–74
Increased oxidation of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Basic Life Sci** 1988; 49:611–4
Lipid peroxidation and haloalkylation in CCl4–induced liver fatty degeneration and necrosis. Poli G, et al.
Basic Life Sci 1988;49:807–10
Reduction of nitroheterocyclic drugs by ascorbate and catecholamines: a possible mechanism for the neurotoxicity of nitroheterocyclic drugs. Rao DN, et al.
Basic Life Sci 1988;49:787–94
Low level chemiluminescence from isolated rat hepatocytes, intact lung and intestine in situ. Turrens JF, et al.
Basic Life Sci 1988;49:239–42
Direct activation by prostaglandin F2 alpha but not thromboxane A2 of glycogenolysis via an increase in inositol 1,4,5–trisphosphate in rat hepatocytes. Athari A, et al. **Biochem Biophys Res Commun** 1989 Sep 29; 163(3):1235–42
Inhibition of in vivo DNA synthesis in regenerating rat liver following thermal injury. Carter EA, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):196–201
Changes in rat liver mRNA for alpha–1–acid–glycoprotein, apolipoprotein E, apolipoprotein B and beta–actin after mouse recombinant tumor necrosis factor injection. Delers F, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):81–8
Electron microscopic evidence for endocytosis of superoxide dismutase by hepatocytes using protein–gold adducts. Dini L, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):940–4
Inhibition of hepatic fatty acid oxidation by bezafibrate and bezafibroyl CoA. Eacho PI, et al.
Biochem Biophys Res Commun 1988 Dec 30;157(3):1148–53
Liver cytosolic non–dialysable factor(s) can counteract GTP–dependent Ca2+ release in rat liver microsomal fractions. Fulceri R, et al.
Biochem Biophys Res Commun 1989 Sep 15;163(2):823–9
Use of deuterium labelled glucose in evaluating the pathway of hepatic glycogen synthesis [published erratum appears in Biochem Biophys Res Commun 1989 Jul 14;162(1):557] Goodman MN, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):522–7
Metabolic responsiveness to phorbol ester and activity of protein kinase C in isolated hepatocytes from partially hepatectomized rats. Houweling M, et al.
Biochem Biophys Res Commun 1989 Jan 16;158(1):294–301
Role of peroxisomal fatty acid beta–oxidation in ethanol metabolism. Inatomi N, et al.
Biochem Biophys Res Commun 1989 Aug 30;163(1):418–23
Increased level of apolipoprotein B mRNA in the liver of ventromedial hypothalamus lesioned obese rats. Inui Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):1107–12
Preparation of EGF labeled liposomes and their uptake by hepatocytes. Ishii Y, et al.
Biochem Biophys Res Commun 1989 Apr 28;160(2):732–6
Mitochondria and xanthine oxidase both generate reactive oxygen species in isolated perfused rat liver after hypoxic injury. Jaeschke H, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):140–7
Physicochemical characterization of [3H] DHEA binding in rat liver. Kalimi M, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):22–9
Effect of chemical carcinogens and partial hepatectomy on "in vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1412–7
Continued high albumin production by multicellular spheroids of adult rat hepatocytes formed in the presence of liver–derived proteoglycans. Koide N, et al.
Biochem Biophys Res Commun 1989 May 30;161(1):385–91
The induction of glycogenolysis in the perfused liver by platelet activating factor is mediated by prostaglandin D2 from Kupffer cells. Kuiper J, et al.
Biochem Biophys Res Commun 1988 Dec 30;157(3):1288–95
Comparison of taurocholate accumulation in cultured hepatocytes of pig, rat and man. Kwekkeboom J, et al.
Biochem Biophys Res Commun 1989 Jul 31;162(2):619–25
Loss of surface galactosyl receptor activity on isolated rat hepatocytes induced by monensin or chloroquine requires receptor internalization via a clathrin coated pit pathway. McAbee DD, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):261–6
Phenobarbital decreases hepatocyte EGF receptor expression independent of protein kinase C activation. Meyer SA, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):652–9
Identification of glutathione S–transferase as a substrate and glutathione as an inhibitor of in vitro calmodulin–stimulated protein methylation in rat liver cytosol. Neal TL, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):368–74
The pathways for fluid phase and receptor mediated endocytosis in rat hepatocytes are different but thermodynamically equivalent. Oka JA, et al.
Biochem Biophys Res Commun 1989 Mar 15;159(2):488–94
Synergistic inhibition of hepatic ketogenesis in the presence of insulin and a cAMP antagonist. Olivieri MC, et al.
Biochem Biophys Res Commun 1989 Mar 15;159(2):741–7
The role of endosomal traffic in the transendothelial transport of ceruloplasmin in the liver. Omoto E, et al.
Biochem Biophys Res Commun 1989 Aug 15;162(3):1346–50
The human protein S locus: identification of the PS alpha gene as a site of liver protein S messenger RNA synthesis. Ploos van Amstel HK, et al.
Biochem Biophys Res Commun 1988 Dec 30;157(3):1033–8
Altered hepatic microsomal function and elevated protooncogene expression as residual effects in rats exposed to delta–9–tetrahydrocannabinol. Prasanna HR, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):217–21
Specific high affinity binding of lipoxygenase metabolites of arachidonic acid by liver fatty acid binding protein. Raza H, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):448–55
Degradation of aspartate aminotransferase in rat liver lysosomes. Sato A, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):440–2
Infusion of human insulin–like growth factor I (IGF–I) into malnourished rats reduces hepatic IGF–I mRNA abundance. Schalch DS, et al.
Biochem Biophys Res Commun 1989 Apr 28;160(2):795–800
Enhancement in rats by the liver tumor promoter ethinyl estradiol of a serum factor(s) which is stimulatory for hepatocyte DNA synthesis. Shi YE, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):154–61
Inositol lipid metabolism in vasopressin stimulated hepatocytes from rats infused with tumor necrosis factor. Spitzer JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):197–203
Biosynthesis of phosphatidylethanolamine via the CDP–ethanolamine route is an important pathway in isolated rat hepatocytes. Tijburg LB, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):1275–80
Fate of asialofetuin endocytosed by rat liver. Wattiaux R, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):313–8
The complete nucleotide sequence of human liver cytochrome b5 mRNA. Yoo M, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):576–80
Binding of intermediate density lipoproteins rich or poor in high molecular weight apolipoprotein B to rat liver

membranes. Brissette L, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1238–47

Phosphorylation of liver plasma membrane–bound calmodulin. Ghosh S, et al. **Biochem Cell Biol** 1988 Aug; 66(8):922–7

Minor lamin polypeptides from rat liver nuclei can be cross–linked into heteropolymers by disulfide bridges. Raymond Y, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1295–302

A comparison of acetylation in vitro of microsomal, homogenate, and Golgi fractions of rat liver. Sambasivam H, et al. **Biochem Cell Biol** 1988 Oct;66(10):1152–61

Genetic differences in zinc and copper induction of liver metallothionein in inbred strains of the mouse. Farr C, et al. **Biochem Genet** 1989 Apr;27(3–4):199–217

Correlation between changes in membrane lipid composition induced by dietary lipid and membrane–bound enzyme activity in chick liver. Alejandre MJ, et al. **Biochem Int** 1988 Sep;17(3):461–9

Perturbations in nitrogen metabolism of brain and liver of rat following repeated benthiocarb administration. Babu GR, et al. **Biochem Int** 1989 Jun;18(6):1253–68

Transfer of N–acetylglucosamine to endogenous glycoproteins in the nucleus and in non–nuclear membranes of rat hepatocytes: electrophoretic analysis of the endogenous acceptors. Galland S, et al. **Biochem Int** 1988 Jul;17(1):59–67

Effect of H–7 on the modulation of glucagon actions by activators of protein kinase–C. García–Sáinz JA, et al. **Biochem Int** 1989 Jan;18(1):243–9

Extracts of brewer's yeast contain GABA which enhances activation of glycogen synthetase by insulin in isolated rat hepatocytes. Holdsworth ES, et al. **Biochem Int** 1988 Dec; 17(6):1107–16

Effect of histamine H1–receptor antagonist on the regulation of carbohydrate and lipid metabolism in rat liver. Koyama Y, et al. **Biochem Int** 1989 Feb;18(2):399–403

Clofibrate does not induce peroxisomal 3 alpha,7 alpha,12 alpha–trihydroxy–5 beta–cholestanoyl coenzyme A oxidation in rat liver. Evidence that this reaction is catalyzed by an enzyme system different from that of peroxisomal acyl–coenzyme A oxidation. Pedersen JI, et al. **Biochem Int** 1988 Jul;17(1):163–9

Increased catabolism of phosphatidylcholine to betaine regulates the liver phosphatidylcholine content in rats fed orotic acid. Tokmakjian SD, et al. **Biochem Int** 1989 Apr; 18(4):751–7

Solubilization of rat liver vasopressin receptors as a complex with a guanine–nucleotide–binding protein and phosphoinositide–specific phospholipase C. Aiyar N, et al. **Biochem J** 1989 Jul 1;261(1):63–70

A discoordinate increase in the cellular amount of 3–hydroxy–3–methylglutaryl–CoA reductase results in the loss of rate–limiting control over cholesterogenesis in a tumour cell–free system. Azrolan NI, et al. **Biochem J** 1989 Mar 1;258(2):421–5

Albumin stimulates the release of lysophosphatidylcholine from cultured rat hepatocytes. Baisted DJ, et al. **Biochem J** 1988 Aug 1;253(3):693–701

Quantitative analysis of intermediary metabolism in rat hepatocytes incubated in the presence and absence of ethanol with a substrate mixture including ketoleucine. Baranyai JM, et al. **Biochem J** 1989 Feb 15;258(1):121–40

Regulation of fatty acid and carbohydrate metabolism by insulin, growth hormone and tri–iodothyronine in hepatocyte cultures from normal and hypophysectomized rats. Betley S, et al. **Biochem J** 1989 Mar 1;258(2):547–52

Recovery of hepatocytes from attack by the pore former amphotericin B. Binet A, et al. **Biochem J** 1988 Jul 15; 253(2):435–40

Glutamine as a major nitrogen carrier to the liver in suckling rat pups. Casado J, et al. **Biochem J** 1988 Dec 1; 256(2):377–81

Biosynthesis of platelet–activating factor by cultured rat Kupffer cells stimulated with calcium ionophore A23187. Chao W, et al. **Biochem J** 1989 Feb 1;257(3):823–9

Zonation of glycogen and glucose syntheses, but not glycolysis, in rat liver. Chen KS, et al. **Biochem J** 1988 Oct 1;255(1):99–104

Changes in the lipogenic response to feeding of liver, white adipose tissue and brown adipose tissue during the development of obesity in the gold–thioglucose–injected mouse. Cooney GJ, et al. **Biochem J** 1989 May 1; 259(3):651–7

Evidence that the production of acetate in rat hepatocytes is a predominantly cytoplasmic process. Crabtree B, et al. **Biochem J** 1989 Feb 1;257(3):673–8

The use of two populations of hepatocytes with different triacylglycerol contents as a model to study the accumulation of liver lipid in the laying hen. Cross KE, et al. **Biochem J** 1988 Oct 1;255(1):259–65

Characterization of Ca2+ fluxes in rat liver plasma–membrane vesicles. Dargemont C, et al. **Biochem J** 1988 Nov 15;256(1):117–24

Secretion and storage of newly synthesized hepatic triacylglycerol fatty acids in vivo in different nutritional states and in diabetes. Duerden JM, et al. **Biochem J** 1988 Nov 1;255(3):929–35

A 115 kDa calmodulin–binding protein is located in rat liver endosome fractions. Enrich C, et al. **Biochem J** 1988 Nov 1;255(3):999–1005

Intracellular transport of formaldehyde–treated serum albumin in liver endothelial cells after uptake via scavenger receptors. Eskild W, et al. **Biochem J** 1989 Mar 1; 258(2):511–20

Control analysis of mammalian serine biosynthesis. Feedback inhibition on the final step. Fell DA, et al. **Biochem J** 1988 Nov 15;256(1):97–101

Omega–3 fatty acids increase the arachidonic acid content of liver cholesterol ester and plasma triacylglycerol fractions in the rat. Garg ML, et al. **Biochem J** 1989 Jul 1;261(1):11–5

Vanadate raises fructose 2,6–bisphosphate concentrations and activates glycolysis in rat hepatocytes. Gómez–Foix AM, et al. **Biochem J** 1988 Oct 15;255(2):507–12

Factors regulating the secretion of lysophosphatidylcholine by rat hepatocytes compared with the synthesis and secretion of phosphatidylcholine and triacylglycerol. Effects of albumin, cycloheximide, verapamil, EGTA and chlorpromazine. Graham A, et al. **Biochem J** 1988 Aug 1;253(3):687–92

Uptake, production and metabolism of cysteinyl leukotrienes in the isolated perfused rat liver. Inhibition of leukotriene uptake by cyclosporine. Hagmann W, et al. **Biochem J** 1989 Jul 15;261(2):611–6

The acylation of proteins by xenobiotic amphipathic carboxylic acids in cultured rat hepatocytes. Hertz R, et al. **Biochem J** 1988 Aug 15;254(1):39–44

Location of platelet activating factor binding in rat liver. Hill CE, et al. **Biochem J** 1988 Aug 1;253(3):651–7

Interactions of cholera toxin with isolated hepatocytes. Effects of low pH, chloroquine and monensin on toxin internalization, processing and action. Janicot M, et al. **Biochem J** 1988 Aug 1;253(3):735–43

Glutathione replenishment capacity is lower in isolated perivenous than in periportal hepatocytes. Kera Y, et al. **Biochem J** 1988 Sep 1;254(2):411–7

Processing of cholesteryl ester from low–density lipoproteins in the rat. Hepatic metabolism and biliary secretion after uptake by different hepatic cell types. Kuipers F, et al. **Biochem J** 1989 Feb 1;257(3):699–704

Regulation of 5–methyltetrahydrofolate synthesis. Lumb M, et al. **Biochem J** 1989 Mar 1;258(2):611–2

Endocytosis of hyaluronic acid by rat liver endothelial cells. Evidence for receptor recycling. McGary CT, et al. **Biochem J** 1989 Feb 1;257(3):875–84

Extremely rapid endocytosis mediated by the mannose receptor of sinusoidal endothelial rat liver cells. Magnusson S, et al. **Biochem J** 1989 Feb 1;257(3):651–6

Glucagon–induced changes in fructose 2,6–bisphosphate and 6–phosphofructo–2–kinase in cultured rat foetal hepatocytes. Martin–Sanz P, et al. **Biochem J** 1989 Feb 1;257(3):795–9

Effect of vasopressin on the regulation of protein synthesis initiation in liver cells. Menaya J, et al. **Biochem J** 1988 Sep 15;254(3):773–9

Calcium rather than cyclic AMP is an intracellular messenger of parathyroid hormone action on glycogen metabolism in isolated rat hepatocytes. Mine T, et al. **Biochem J** 1989 Mar 15;258(3):889–94

Binding of ADP to rat liver cytosolic proteins and its influence on the ratio of free ATP/free ADP. Mörikofer–Zwez S, et al. **Biochem J** 1989 Apr 1; 259(1):117–24

Dephosphorylation of 1D–myo–inositol 1,4–bisphosphate in rat liver. Morris AJ, et al. **Biochem J** 1988 Sep 15; 254(3):655–60

Epidermal–growth–factor stimulation of gluconeogenesis in isolated rat hepatocytes involves the inactivation of pyruvate kinase [published erratum appears in Biochem J 1989 Mar 15;258(3):following 933] Moule SK, et al. **Biochem J** 1988 Oct 1;255(1):361–4

Cyclic AMP induces metallothionein gene expression in rat hepatocytes but not in rat kidney. Nebes VL, et al. **Biochem J** 1988 Oct 15;255(2):741–3

Uptake of LDL in parenchymal and non–parenchymal rabbit liver cells in vivo. LDL uptake is increased in endothelial cells in cholesterol–fed rabbits. Nenseter MS, et al. **Biochem J** 1988 Sep 1;254(2):443–8

Alterations in the protein–synthesis, –degradation and/or –secretion rates in hepatic subcellular fractions of selenium–deficient mice. Otter R, et al. **Biochem J** 1989 Mar 1;258(2):535–40

Evidence in liver for a disulphide–linked scavenger receptor containing a binding site for acetylated low–density lipoprotein and maleylated bovine serum albumin. Ottnad E, et al. **Biochem J** 1988 Aug 1;253(3):835–8

Comparison of the flux of carbon to hepatic glycogen deposition and fatty acid and cholesterol synthesis on refeeding rats fed ad libitum or meal–fed rats with a chow–diet meal. Pallardo FV, et al. **Biochem J** 1989 Jan 15;257(2):607–10

Exposure of cultured hepatocytes to cyclic AMP enhances the vasopressin–mediated stimulation of inositol phosphate production. Pittner RA, et al. **Biochem J** 1989 Jan 15; 257(2):455–60

A rapid method for the functional reconstitution of amino acid transport systems from rat liver plasma membranes. Partial purification of System A. Quesada AR, et al. **Biochem J** 1988 Nov 1;255(3):963–9

Lysophosphatidylcholine metabolism and lipoprotein secretion by cultured rat hepatocytes deficient in choline. Robinson BS, et al. **Biochem J** 1989 May 15;260(1):207–14

Interaction in vivo and in vitro of apolipoprotein E–free high–density lipoprotein with parenchymal, endothelial and Kupffer cells from rat liver. Schouten D, et al. **Biochem J** 1988 Dec 1;256(2):615–21

Regulation of plasma acute–phase protein and albumin levels in the liver of scalded rats. Sevaljević L, et al. **Biochem J** 1989 Mar 15;258(3):663–8

Effect of serum proteins on haem uptake and metabolism in primary cultures of liver cells. Sinclair PR, et al. **Biochem J** 1988 Nov 15;256(1):159–65

Uptake and degradation in vivo and in vitro of laminin and nidogen by rat liver cells. Smedsrød B, et al. **Biochem J** 1989 Jul 1;261(1):37–42

Insulin effects on apolipoprotein B production by normal, diabetic and treated–diabetic rat liver and cultured rat hepatocytes. Sparks JD, et al. **Biochem J** 1989 Jul 1; 261(1):83–8

The conjugation of 4–nitroquinoline 1–oxide, a potent carcinogen, by mammalian glutathione transferases. 4–Nitroquinoline 1–oxide conjugation by human, rat and mouse liver cytosols, extrahepatic organs of mice and purified mouse glutathione transferase isoenzymes. Stanley JS, et al. **Biochem J** 1988 Nov 15;256(1):303–6

Selective channelling of arachidonic and linoleic acids into glycerolipids of rat hepatocytes in primary culture. Thomas G, et al. **Biochem J** 1988 Dec 1;256(2):641–7

Hypophysectomy does not alter the acinar zonation of gluconeogenesis or the mitochondrial redox state in rat liver. Tosh D, et al. **Biochem J** 1989 May 15;260(1):183–7

Glucagon regulation of gluconeogenesis and ketogenesis in periportal and perivenous rat hepatocytes. Heterogeneity of hormone action and of the mitochondrial redox state. Tosh D, et al. **Biochem J** 1988 Nov 15;256(1):197–204

Identification of a protein from rat liver cytosol that enhances activation of the glucocorticoid receptor. Tymoczko JL, et al. **Biochem J** 1988 Nov 15;256(1):47–52

The hepatic glycogenolysis induced by reversible ischaemia or KCN is exclusively catalysed by phosphorylase a. Vandebroeck A, et al. **Biochem J** 1988 Dec 1;256(2):685–8

Lack of V1 vasopressin receptors in rabbit hepatocytes. Vandekerckhove A, et al. **Biochem J** 1989 Apr 15; 259(2):609–11

Pregnancy and pentobarbital anaesthesia modify hepatic synthesis of acylglycerol glycerol and glycogen from gluconeogenic precursors during fasting in rats. Zorzano A, et al. **Biochem J** 1988 Dec 1;256(2):487–91

Hepatic antioxidant enzymes and lipid peroxidation in carbon tetrachloride–induced liver cirrhosis in rats. Nadkarni GD, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):42–5

Glucocorticoid receptor regulation: the effects of adrenalectomy, exogenous glucocorticoid, and stress on hepatic receptor number in male and female mice. Svec F, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):224–33

Oxygen dependence of salbutamol elimination by the isolated perfused rat liver. Angus PW, et al. **Biochem Pharmacol** 1989 May 1;38(9):1443–9

Accumulation of phenols and catechols in isolated mouse hepatocytes in starvation or after pretreatment with acetone. Bánhegyi G, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4157–62

Immunochemical analysis of acetaminophen covalent binding to proteins. Partial characterization of the major acetaminophen–binding liver proteins. Bartolone JB, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4763–74

Caffeine and theophylline metabolism in newborn and adult human hepatocytes; comparison with adult rat hepatocytes. Berthou F, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3691–700

Effect of pretreatment with 7,8–benzoflavone and diethylstilbestrol on the hepatic metabolism of diethylstilbestrol in the male Syrian golden hamster in vivo. Blaich G, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3565–70

Phorbol ester–induced attenuation of tissue DNA synthesis: antagonism by prolactin in liver and thymus. Buckley AR, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1192–4

Independent regulation of thromboxane and prostaglandin synthesis in liver macrophages. Dieter P, et al. **Biochem Pharmacol** 1989 May 15;38(10):1577–81

Decreased estrogen hydroxylation in male rat liver following cimetidine treatment. Galbraith RA, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):313–9

Differential effects of cimetidine, ranitidine and famotidine on the hepatic metabolism of estrogen and testosterone in male rats. Galbraith RA, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2046–9

Peroxidase as a model for reduction of tertiary amine oxides catalyzed by rat hepatic supernatant and microsomal fractions. Gillespie SG, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):573–9

Effect of n–butyrate on the synthesis of sulfated glycosaminoglycans and hyaluronate by rat liver fat–storing cells (Ito cells). Gressner AM, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3771–6

Alteration by perfluorodecalin of hepatic metabolism and excretion of phenobarbital. Huang R, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3761–4

Effects of the nonsteroidal anti–inflammatory drug mefenamic acid on energy metabolism in the perfused rat liver. Kemmelmeier FS, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):823–30

Kinetic analysis of the elimination process of human epidermal growth factor (hEGF) in rats. Kim DC, et al.

Biochem Pharmacol 1989 Jan 15;38(2):241–9
Differential formation of dinitrate metabolites from glyceryl trinitrate in subcellular fractions of rabbit liver. Lau DT, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):543–6
High affinity, saturable [3H]mepyramine binding sites on rat liver plasma membrane do not represent histamine H1-receptors. A warning. Leurs R, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2175–80
Interaction of haloacetonitriles with glutathione and glutathione-S-transferase. Lin EL, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):685–8
Metabolism of metronidazole and antipyrine in isolated rat hepatocytes. Influence of sex and enzyme induction and inhibition. Loft S, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1125–36
Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—II. Lung and liver slices. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3717–22
Sulphation and glucuronidation of paracetamol in human liver: assay conditions. Pacifici GM, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4405–7
In vitro inhibition of hepatic steroid hydroxylation by tamoxifen, a series of tamoxifen analogues and related compounds. Reidy GF, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):195–9
Inhibition of purine catabolism by benzbromarone in isolated rat liver cells. Comparison with allopurinol and probenecid. Rodilla F, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3561–3
Decrease in the number of receptors for epidermal growth factor in the liver of D-galactosamine-intoxicated rats. Sato H, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2663–71
Comparative drug metabolism of diazepam in hepatocytes isolated from man, rat, monkey and dog. Seddon T, et al. **Biochem Pharmacol** 1989 May 15;38(10):1657–65
In vitro drug metabolism and pharmacokinetics of diazepam in cynomolgus monkey hepatocytes during culture for six days. Seddon T, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2621–30
Intracellular lipoproteins as carriers for 2,3,7,8-tetrachlorodibenzo-p-dioxin and benzo(a)pyrene in rat and mouse liver. Soués S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2841–7
Effects of chlorpromazine on taurocholate transport in isolated rat hepatocytes. Stacey NH. **Biochem Pharmacol** 1988 Nov 1;37(21):4129–34
Drug metabolism by periportal and perivenous rat hepatocytes. Comparison of phase I and phase II reactions and their inducibility during culture. Suolinna EM, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1329–34
Kinetics of sulphate conjugation in extracts of human foetal liver cells in culture. Tan TM, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4629–33
Metabolic activation of the nephrotoxic haloalkene 1,1,2-trichloro-3,3,3-trifluoro-1-propene by glutathione conjugation. Vamvakas S, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2297–304
Changes in polyamine content in primary cultures of adult rat hepatocytes. Wallace HM. **Biochem Pharmacol** 1989 Jan 15;38(2):379–81
Eupatoriopicrin-induced lipid peroxidation in liver and tumour tissue of the mouse. Woerdenbag HJ, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3115–8
Role of insulin and counter-regulatory hormones in the control of hepatic glycerolipid synthesis and low-density-lipoprotein catabolism in diabetes. Brindley DN, et al. **Biochem Soc Trans** 1989 Feb;17(1):43–6 (48 ref.)
What factors control hepatic triacylglycerol accumulation in alcohol abuse? Brindley DN. **Biochem Soc Trans** 1988 Jun;16(3):251–3
Repetitive calcium transients in hormone-stimulated cells. Cobbold P, et al. **Biochem Soc Trans** 1989 Feb;17(1):9–10
Liver plasma membrane domains and endocytic trafficking. Evans WH, et al. **Biochem Soc Trans** 1989 Aug; 17(4):619–22 (54 ref.)
Insulin, diabetes and hepatic very-low-density lipoprotein metabolism. Gibbons GF. **Biochem Soc Trans** 1989 Feb; 17(1):49–51 (43 ref.)
The interrelationships of alcohol dehydrogenase and the aldehyde dehydrogenases in the metabolism of ethanol in liver. Harrington MC, et al. **Biochem Soc Trans** 1988 Jun; 16(3):239–41
Rudimentary phosvitin domain in a minor chicken vitellogenin gene. Byrne BM, et al. **Biochemistry** 1989 Mar 21;28(6):2572–7
Characterization of the cDNA encoding human nucleophosmin and studies of its role in normal and abnormal growth. Chan WY, et al. **Biochemistry** 1989 Feb 7;28(3):1033–9
Purification and immunochemical characterization of the cytoplasmic androgen-binding protein of rat liver. Demyan WF, et al. **Biochemistry** 1989 Feb 21;28(4):1732–6
Synthesis and characterization of N-hydroxysuccinimide ester chemical affinity derivatives of asialoorosomucoid that covalently cross-link to galactosyl receptors on isolated rat hepatocytes. Herzig MC, et al. **Biochemistry** 1989 Jan 24;28(2):600–10
Amino acid sequence of the ribonuclease inhibitor from porcine liver reveals the presence of leucine-rich repeats. Hofsteenge J, et al. **Biochemistry** 1988 Nov 15; 27(23):8537–44
A deuterium surface coil NMR study of the metabolism of D-methionine in the liver of the anesthetized rat. London RE, et al. **Biochemistry** 1988 Oct 4;27(20):7864–9
Characterization of high molecular weight transforming growth factor alpha produced by rat hepatocellular carcinoma cells. Luetteke NC, et al. **Biochemistry** 1988 Aug 23;27(17):6487–94
Patterns of alternative splicing of fibronectin pre-mRNA in human adult and fetal tissues. Oyama F, et al. **Biochemistry** 1989 Feb 7;28(3):1428–34
Secretion of 35SO4-labeled proteins from isolated rat hepatocytes. von Würtemberg MM, et al. **Biochemistry** 1989 May 2;28(9):4088–93
Isolation and characterization of soluble beta-galactoside-binding lectins from mammalian liver. Ali N, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):30–4
Nonenzymatically glycated serum albumin: interaction with galactose-specific liver lectins. Aring J, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):140–4
Glycogenolysis—and not gluconeogenesis—is the source of UDP-glucuronic acid for glucuronidation. Bánhegyi G, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):429–35
Intracellular mitochondrial membrane potential as an indicator of hepatocyte energy metabolism: further evidence for thermodynamic control of metabolism. Berry MN, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):294–306
Methanethiol and dimethylsulfide formation from 3-methylthiopropionate in human and rat hepatocytes. Blom HJ, et al. **Biochim Biophys Acta** 1988 Nov 18; 972(2):131–6
Metabolism of octanoyl- and palmitoylcarnitine by intact rat hepatocytes. Brass EP. **Biochim Biophys Acta** 1989 Jun 8; 1003(2):209–12
Modulation of prostaglandin E2 catabolism and action by fuel substrates in rat hepatocytes. Brass EP, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):233–6
Hepatic uptake and metabolism of free cholesterol from different lipoprotein classes. An in vivo study in the rat. Bravo E, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):315–20
Regulation of hepatic parenchymal and non-parenchymal cell function by the diadenine nucleotides Ap3A and Ap4A. Busshardt E, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):151–9
Fate of lipoprotein lipase taken up by the rat liver. Evidence for a conformational change with loss of catalytic activity. Chajek-Shaul T, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):183–91
The cyanogen bromide fragment I of asialoorosomucoid is transported more efficiently than asialoorosomucoid in rat hepatocytes. Chang TM, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):166–76
Effects of exogenous phospholipase enzymes, arachidonic acid and 1-oleoyl-2-acetyl-sn-glycerol on ketogenesis in isolated rat hepatocytes. Chihara M, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):5–9
Beta-oxidation of medium chain (C8–C14) fatty acids studied in isolated liver cells. Christensen E, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):187–95
Age-associated changes in dolichol and dolichyl phosphate metabolism in the kidneys and liver of mice. Crick DC, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):180–6
Human fetal liver fatty acid binding proteins. Role on glucose-6-phosphate dehydrogenase activity. Das T, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):164–72
Modulation of vitamin A metabolism during hepatic and intestinal cell culture. Davis BH, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):318–24
Determination of the apparent functional molecular mass of the hepatocellular sodium-dependent taurocholate transporter by radiation inactivation. Elsner R, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):113–7
Fast kinetics analysis of the peroxidatic reaction catalysed by horse liver alcohol dehydrogenase. Favilla R, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):285–92
Contribution of cytoplasmic storage triacylglycerol to VLDL-triacylglycerol in isolated rat hepatocytes. Francone OL, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):28–36
Specific intracellular hyaluronic acid binding to isolated rat hepatocytes is membrane-associated. Frost SJ, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):66–74
Taurine and glycine conjugation and sulfation of lithocholate in primary hepatocyte cultures. Galle PR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):250–3
Purification and characterization of a cofactor that controls the oxidative phase of the pentose phosphate cycle in liver and other tissues of rat. Garcia G, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):59–65
Characterization, size estimation and solubilization of alpha-macroglobulin complex receptors in liver membranes. Gliemann J, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):326–32
Control of gluconeogenesis: role of fatty acids in the alpha-adrenergic response. González-Manchón C, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):192–9
Homologous and heterologous beta-adrenergic desensitization in hepatocytes. Additivity and effect of pertussis toxin. Hernández-Sotomayor SM, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):311–9
Metabolism of aqueous soluble nitroxides in hepatocytes: effects of cell integrity, oxygen, and structure of nitroxides. Iannone A, et al. **Biochim Biophys Acta** 1989 Apr 25; 991(1):90–6
Effects of corn oil- and fish oil-supplemented diets on phospholipid fatty acid composition of rat liver nuclei. Iritani N, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):224–30
Purification of heat shock protein 90 from calf uterus and rat liver and characterization of the highly hydrophobic region. Iwasaki M, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):1–8
Regulation of hepatic inorganic phosphate and ATP in response to fructose loading: an in vivo 31P-NMR study. Karczmar GS, et al. **Biochim Biophys Acta** 1989 Jul 11; 1012(2):121–7
Increased rate of cholic acid formation from 3 alpha,7 alpha-dihydroxy-5 beta-cholestane in perfused livers from diabetic rats. Kimura K, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):329–32
Identification of receptors in the liver that mediate endocytosis of circulating tissue kallikreins. Kouyoumdjian M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):299–304
S-(4-azidophenacyl)[35S]glutathione photoaffinity labeling of rat liver plasma membrane-associated proteins. Kunst M, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):15–23
ATP-stimulated uptake of S-(2,4-dinitrophenyl)glutathione by plasma membrane vesicles from rat liver. Kunst M, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):123–5
Gadolinium chloride-induced shifts in intrahepatic distributions of liposomes. Lázár G, et al. **Biochim Biophys Acta** 1989 May 10;1011(2-3):97–101
Heme catabolism in cultured hepatocytes: evidence that heme oxygenase is the predominant pathway and that a proportion of synthesized heme is converted rapidly to biliverdin. Lincoln BC, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):49–58
Inhibition of DNA polymerization and DNA transcription to RNA by seminal plasma peptides. Lugaro G, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):420–8
Partial structure and hormonal regulation of rabbit liver inhibitor-1; distribution of inhibitor-1 and inhibitor-2 in rabbit and rat tissues. MacDougall LK, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):218–26
Retinoid-mediated induction of the fat-storing phenotype in a liver connective tissue cell line (GRX). Margis R, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):1–5
Detection and characterization of anionic polypeptide fraction binding sites in rat liver plasma membranes and cultured hepatocytes. Martigne M, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):341–6
Fibrinogen and albumin synthesis are regulated at the transcriptional level during the acute phase response. Moshage HJ, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):450–4
Human hepatic low-density lipoprotein receptors: associations of receptor activities in vitro with plasma lipid and apolipoprotein concentrations in vivo. Nanjee MN, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):245–55
The physical-chemical basis for sex-related differences in uptake of fatty acids by the liver. Noy N, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):125–30
Pathways in the binding and uptake of ferritin by hepatocytes. Osterloh K, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):40–5
The role of sulfhydryl groups in sulfobromophthalein transport in rat liver plasma membrane vesicles. Passamonti S, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):294–8
Effect of pyridoxal isonicotinoyl hydrazone and other hydrazones on iron release from macrophages, reticulocytes and hepatocytes. Ponka P, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):122–9
Production of lipoprotein(a) by primary baboon hepatocytes. Rainwater DL, et al. **Biochim Biophys Acta** 1989 May 15; 1003(1):30–5
The effect of methionine on methotrexate metabolism in rat hepatocytes in monolayer culture. Rhee MS, et al. **Biochim Biophys Acta** 1989 May 10;1011(2-3):122–8
The transport of lipoprotein cholesterol into bile: a reassessment of kinetic studies in the experimental animal. Robins SJ, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):327–31
Effect of cholesterol on the uptake and intracellular degradation of liposomes by liver and spleen; a combined biochemical and gamma-ray perturbed angular correlation study. Roerdink FH, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):234–40
Rates of lipogenesis in fetal hepatocytes in suspension and in primary culture: hormonal effects. Roncero C, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):320–4
Deoxyribonucleoside triphosphate pools in regenerating rat liver: effect of hydroxyurea and exogenous deoxypyrimidines. Röttigen V, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):349–54
Stimulation of CTP: phosphocholine cytidylyltransferase and phosphatidylcholine synthesis by calcium in rat hepatocytes. Sanghera JS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):284–92
Uptake of ferritin and iron bound to ferritin by rat hepatocytes: modulation by apotransferrin, iron chelators and chloroquine. Sibille JC, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):204–9
Association of thrombin, plasmin, thrombin-antithrombin III

complex and plasmin–antithrombin III complex with isolated hepatocytes. Spolarics Z, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):231–6

Divergent fate of unsaturated and saturated ceramides and sphingomyelins in rat liver and cells in culture. Stein O, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):175–82

Variations of hepatic cholesterol precursors during altered flows of endogenous and exogenous squalene in the rat. Strandberg TE, et al. **Biochim Biophys Acta** 1989 Feb 6; 1001(2):150–6

Scavenger receptor–mediated recognition of maleylated albumin and its relation to subsequent endocytic degradation. Takata K, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):273–80

Regulation of the biosynthesis of triacylglycerol, phosphatidylcholine and phosphatidylethanolamine in the liver. Tijburg LB, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):1–19 (228 ref.)

Clofibrate induces carnitine acyltransferases in periportal and perivenous zones of rat liver and does not disturb the acinar zonation of gluconeogenesis. Tosh D, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):245–50

Examination of the potential role of the glycerophosphorylcholine (GPC) pathway in the biosynthesis of phosphatidylcholine by liver and lung. Veldhuizen RA, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):157–61

Lipid and lipoprotein synthesis in isolated and cultured hepatocytes from lean and obese Zucker rats. Wang SR, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):302–11

Fluorescent glucagon derivatives. II. The use of fluorescent glucagon derivatives for the study of receptor disposition in membranes. Ward LD, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):307–16

Bile acid synthesis by cultured rabbit hepatocytes: stimulation by three lipoprotein fractions. Whiting MJ, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):137–42

Bile acid synthesis and secretion by rabbit hepatocytes in primary monolayer culture: comparison with rat hepatocytes. Whiting MJ, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):176–84

Characterization of Rose Bengal binding to sinusoidal and bile canalicular plasma membrane from rat liver. Yachi K, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):1–7

Azidobenzamido-008, a new photosensitive substrate for the 'multispecific bile acid transporter' of hepatocytes: evidence for a common transport system for bile acids and cyclosomatostatins in basolateral membranes. Ziegler K, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):263–72

Bile acid binding proteins in hepatocellular membranes of newborn and adult rats. Identification of transport proteins with azidobenzamidotauro[14C]cholate ([14C]ABATC). Ziegler K, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):161–8

In vitro evidence for the involvement of mitochondrial folate metabolism in the supply of cytoplasmic one–carbon units. Barlowe CK, et al. **Biofactors** 1988 Jul;1(2):171–6

Trimethylamine oxidation in liver tissue is not catalyzed by a molybdenum cofactor–dependent enzyme. Johnson JL. **Biofactors** 1988 Jul;1(2):153–5

Surface hydrophobicity, arginylation and degradation of cytosol proteins from rat hepatocytes. Bohley P, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:307–10

Compartmentation of hepatic fatty–acid–binding protein in liver cells and its effect on microsomal phosphatidic acid biosynthesis. Bordewick U, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):229–38

Leukotriene C4 metabolism during its action on glucose and lactate balance and flow in perfused rat liver. Iwai M, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1131–6

Intracellular transport and degradation of 125I–tyramine cellobiose–labelled low–density lipoprotein endocytosed in vivo in rat liver cells studied by means of subcellular fractionation. Nenseter MS, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):475–83

Permissive action of triiodothyronine on the long–term increase of glycolysis by insulin in cultured rat hepatocytes. Rosa J, et al. **Biol Chem Hoppe Seyler** 1988 Sep; 369(9):997–1003

Spermidine level and protein synthesis are coregulated in nonproliferating hepatocytes. Schulz WA, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):729–36

Incorporation of non–acetylated hexosamines into plasma membrane glycoproteins of liver cells after galactosamine injection. Schulzke JD, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):957–64

Output and effects of thromboxane produced by the liver perfused with phorbol myristate acetate. Tran–Thi TA, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1179–84

Alanine turnover rate and its hepatic metabolism are increased in midpregnant rat. Pastor–Anglada M, et al. **Biol Neonate** 1988;54(3):126–32

Second messengers and the regulation of Ca2+ fluxes by Ca2+–mobilizing agonists in rat liver. Altin JG, et al. **Biol Rev Cambridge Philosophic Soc** 1988 Nov; 63(4):551–611 (423 ref.)

Ultrastructural aspects and clinical implications of PFC/non–phagocytic cell interactions. Caiazza S, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):485–93

Metyrapone decreases the glutathione concentration in liver and kidney. Appenroth D, et al. **Biomed Biochim Acta** 1989; 48(4):355–8

Hyaluronic acid content and hyaluronidase activity in liver and spleen of rats with hydralazine–induced collagen–like syndrome. Dróżdż M, et al. **Biomed Biochim Acta** 1988; 47(3):247–50

Control of the fructose 6–phosphate/fructose 2,6–bisphosphate cycle by sn–glycerol 3–phosphate. Frenzel J, et al. **Biomed Biochim Acta** 1988;47(6):461–70

Stimulation of alanine metabolism in rat liver by ammonia. Fritz S, et al. **Biomed Biochim Acta** 1988;47(12):923–32

Nucleotide concentrations in hepatocytes during anoxia and reoxygenation in presence of allopurinol and oxypurinol. Schneider W, et al. **Biomed Biochim Acta** 1989; 48(2–3):S40–3

Pathways and control of adenine nucleotide catabolism in anoxic rat hepatocytes. Van Den Berghe G, et al. **Biomed Biochim Acta** 1989;48(2–3):S5–10

Rates of de novo fatty acid synthesis in liver, muscle and adipose tissue in non–pregnant and pregnant rats in vivo. Zimmermann T, et al. **Biomed Biochim Acta** 1989; 48(4):227–31

Structure elucidation of mitomycin C metabolites. I. The applicability of various mass spectrometric techniques in metabolic studies on mitomycin C. Heeremans CE, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):377–82

Isolation, purification and structure elucidation of cyclosporin A metabolites in rabbit and man. Wallemacq PE, et al. **Biomed Environ Mass Spectrom** 1989 Jan; 18(1):48–5 ,

Gastrointestinal, liver, and lung extraction ratio of acetaminophen in the rat after high dose administration. Bhargava VO, et al. **Biopharm Drug Dispos** 1989 Jul–Aug; 10(4):389–96

Primaquine disposition in the isolated perfused rat liver: effect of mefloquine induced bile flow reduction. Coleman MD, et al. **Biopharm Drug Dispos** 1989 Mar–Apr;10(2):153–64

Changes in lipoprotein binding and uptake by hepatocytes during rat liver regeneration. Trentalance A, et al. **Biosci Rep** 1989 Apr;9(2):231–41

In vivo liver and lung targeting of adriamycin encapsulated in glutaraldehyde–treated murine erythrocytes. Zocchi E, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):555–62

Plasminogen binding to rat hepatocytes in primary culture and to thin slices of rat liver. Gonias SL, et al. **Blood** 1989 Aug 1;74(2):729–36

Megakaryocyte and hepatocyte origins of human fibrinogen biosynthesis exhibit hepatocyte–specific expression of gamma chain–variant polypeptides. Haidaris PJ, et al. **Blood** 1989 Aug 1;74(2):743–50

Iron mobilization from hepatocyte monolayer cultures by chelators: the importance of membrane permeability and the iron–binding constant. Porter JB, et al. **Blood** 1988 Nov; 72(5):1497–503

Red cell aging results in a change of cell surface carbohydrate epitopes allowing for recognition by galactose–specific receptors of rat liver macrophages. Schlepper–Schäfer J, et al. **Blood Cells** 1988;14(1):259–74

The effect of roxatidine acetate and cimetidine on hepatic drug clearance assessed by simultaneous administration of three model substrates. Tanaka E, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):171–4

Haem arginate improves hepatic oxidative metabolism in variegate porphyria. Tokola O, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):753–7

Deacylation of bacterial lipopolysaccharide in rat hepatocytes in vitro. Fukuda I, et al. **Br J Exp Pathol** 1989 Jun;70(3):267–74

Rabbit serum alpha–2–macroglobulin binds to liver ferritin: association causes a heterogeneity of ferritin molecules. Santambrogio P, et al. **Br J Haematol** 1989 Feb; 71(2):281–90

Effects of vitamin B6 deficiency and repletion on the uptake of steroid hormones into uterus slices and isolated liver cells of rats. Bender DA, et al. **Br J Nutr** 1989 May; 61(3):619–28

Distribution of retinol in rat liver cells: effect of age, sex and nutritional status. Blomhoff R, et al. **Br J Nutr** 1988 Sep;60(2):233–9

Changes in glutathione status and 3,5,3'–triiodothyronine action in livers of rats given cysteine–deficient diets. Garcin H, et al. **Br J Nutr** 1989 Mar;61(2):301–7

Time–course effects of protein malnutrition on hepatic fatty acids delta 6 and delta 5 desaturation in the growing rat. Narce M, et al. **Br J Nutr** 1988 Sep;60(2):389–402

Protein and energy relations in the broiler chicken. Chronic or acute effects of alternating protein or intermittent feeding regimens on broiler lipid metabolism. Rosebrough RW, et al. **Br J Nutr** 1989 Mar;61(2):223–33

Dibromosulphophthalein: its pharmacokinetics and binding to hepatic cytosol proteins in rats with acute renal failure. Silberstein DJ, et al. **Br J Pharmacol** 1988 Oct;95(2):343–52

Calmodulin antagonist trifluoperazine inhibits polyamine biosynthesis and liver regeneration. Alexander RW, et al. **Br J Surg** 1988 Dec;75(12):1160–2

The effects of supplementation of the diet of young steers with Mo and S on the intracellular distribution of copper in liver and on copper fractions in blood. Wang ZY, et al. **Br Vet J** 1988 Nov–Dec;144(6):543–51

Diazepam binding inhibitor–like immunoreactivity(51–70): distribution in human brain, spinal cord and peripheral tissues. Ball JA, et al. **Brain Res** 1989 Feb 13;479(2):300–5

Hypothalamic regulation of histidyl–proline diketopiperazine binding sites in the rat liver. Ogawa N, et al. **Brain Res** 1988 Jun 7;451(1–2):115–8

Octanoate transport in the isolated, perfused rat liver. Constantin J, et al. **Braz J Med Biol Res** 1989;22(1):145–9

The influence of albumin on palmitate transport in the isolated perfused rat liver. Ferraresi–Filho O, et al. **Braz J Med Biol Res** 1989;22(1):139–43

Hepatic clearance and metabolism in the rat of a human breast cancer associated glycoprotein (GCDFP–15). Toth CA, et al. **Breast Cancer Res Treat** 1988 Oct;12(2):235–43

The role of antioxidant enzymes in benzo(a)pyrene–induced carcinogenesis. Liotti FS, et al. **Bull Cancer (Paris)** 1989; 76(1):43–50

Effect of alpha–naphthyl isothiocyanate and CCl4 interaction on hepatocellular calcium transport. Agarwal AK, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):464–70

Di–2–ethylhexylphthalate induced peroxidative stress in rat liver. Jayaraman S, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):360–4

Dehydroabietic acid (DHAA) does not inhibit bilirubin conjugation in the liver of rainbow trout. Mattsoff L, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):894–901

Changes induced by hexachlorocyclohexane isomers in rat liver and testis. Srinivasan K, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):531–9

Thermal injury–induced expression of acute–phase proteins in rat liver. Ševaljević L, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):280–6

Effects of hepatic blood flow on hepatic ethanol kinetics measured in cats and predicted from the parallel tube model. Greenway CV. **Can J Physiol Pharmacol** 1989 Jul; 67(7):728–33

Effect of albuterol on oxygen uptake and Na+–K+ ATPase activity of jejunal epithelia and liver in chickens. Rompala RE, et al. **Can J Physiol Pharmacol** 1989 May;67(5):431–4

Plasma and liver copper values in horses with equine degenerative myeloencephalopathy. Dill SG, et al. **Can J Vet Res** 1989 Jan;53(1):29–32

Glucocorticoid receptors in hepatocellular carcinoma and adjacent liver tissue. P'eng FK, et al. **Cancer** 1988 Nov 15;62(10):2134–8

Influence of pH on the modification of thiols by carbamoylating agents and effects on glutathione levels in normal and neoplastic cells. Hu JJ, et al. **Cancer Chemother Pharmacol** 1989;24(2):95–101

Elevated levels of prostaglandin E2 in the liver of rats fed a choline deficient diet: possible involvement in liver tumor promotion. Gupta C, et al. **Cancer Lett** 1989 Jul 15; 46(2):129–35

Effects of mace (Myristica fragrans, Houtt.) on cytosolic glutathione S–transferase activity and acid soluble sulfhydryl level in mouse liver. Kumari MV, et al. **Cancer Lett** 1989 Jul 15;46(2):87–91

Effect of beta–naphthoflavone on the metabolism of aflatoxin B1 in hamsters. Santhanam K, et al. **Cancer Lett** 1989 May; 45(2):129–34

Immunocytochemical analysis of O6–alkylguanine shows tissue specific formation in and removal from esophageal and liver DNA in rats treated with methylbenzylnitrosamine, dimethylnitrosamine, diethylnitrosamine and ethylnitrosourea. Scherer E, et al. **Cancer Lett** 1989 Jul 1;46(1):21–9

Hepatic DNA adduct formation in rats treated with benzo[f]quinoline. Sikka HC, et al. **Cancer Lett** 1988 Dec 1;43(1–2):133–8

The low uptake of an abrin A–chain immunotoxin by rat hepatic cells in vivo and in vitro. Skilleter DN, et al. **Cancer Lett** 1989 Aug;46(3):161–6

Modulation of hepatic heme–binding Z protein in mice by the porphyrogenic carcinogens griseofulvin and hexachlorobenzene. Vincent SH, et al. **Cancer Lett** 1989 May;45(2):109–14

Effect of mass of 111In–benzyl–EDTA monoclonal antibody on hepatic uptake and processing in mice. Adams GP, et al. **Cancer Res** 1989 Apr 1;49(7):1707–11

Modulation of the metabolism and pharmacokinetics of 1–beta–D–arabinofuranosylcytosine by 1–beta–D–arabinofuranosyluracil in leukemic mice. Chandrasekaran B, et al. **Cancer Res** 1989 Jun 15; 49(12):3259–66

Metabolic activation of 6–nitrochrysene in explants of human bronchus and in isolated rat hepatocytes. Delclos KB, et al. **Cancer Res** 1989 Jun 1;49(11):2909–13

Cytoplasmic accumulation of ditercalinium in rat hepatocytes and induction of mitochondrial damage. Fellous R, et al. **Cancer Res** 1988 Nov 15;48(22):6542–9

Differential regulation of normal and tumor alpha 1–fetoprotein genes in fetal hepatocyte x hepatoma hybrids. Gingras MC, et al. **Cancer Res** 1988 Nov 15;48(22):6371–4

Metabolism and excretion of etoposide in isolated, perfused rat liver models. Hande K, et al. **Cancer Res** 1988 Oct 15; 48(20):5692–5

Effect of butylated hydroxyanisole pretreatment on aflatoxin B1–DNA binding and aflatoxin B1–glutathione conjugation in isolated hepatocytes from rats. Jhee EC, et al. **Cancer Res** 1989 Mar 15;49(6):1357–60

Genetic variation in liver tumor susceptibility, plasma testosterone levels, and androgen receptor binding in six inbred strains of mice. Kemp CJ, et al. **Cancer Res** 1989 Sep 15;49(18):5044–7

Effects of pyrimidine nucleoside phosphorylase inhibitors on hepatic fluoropyrimidine elimination in the rat. LaCreta FP, et al. **Cancer Res** 1989 May 15;49(10):2567–73

Lack of binding of methapyrilene and similar antihistamines to rat liver DNA examined by 32P postlabeling. Lijinsky W, et al. **Cancer Res** 1988 Nov 15;48(22):6475–7

A mechanism of inhibition of aflatoxin B1–DNA binding in the liver by phenobarbital pretreatment of rats. Lotlikar PD, et al. **Cancer Res** 1989 Feb 15;49(4):951–7

Hydroxy metabolites of methyl–n–amylnitrosamine produced by esophagus, stomach, liver, and other tissues of the neonatal to adult rat and hamster. Mirvish SS, et al. **Cancer Res** 1988 Oct 15;48(20):5663–8

Late target protein of the carcinogen N–2–fluorenylacetamide in rat liver. Munir KM, et al. **Cancer Res** 1988 Dec 1;48(23):6745–52

Response of cultured hepatocytes to a hepatomitogen after initiation by conditioned medium or other factors. Ove P, et al. **Cancer Res** 1989 Jan 1;49(1):98–103

Effect of cancer on the in vivo energy state of rat liver and skeletal muscle. Schneeberger AL, et al. **Cancer Res** 1989 Mar 1;49(5):1160–4

Characterization of 3–methylcholanthrene effects on the rat glucocorticoid receptor in vivo. Sunahara GI, et al. **Cancer Res** 1989 Jul 1;49(13):3535–41

Evidence for enzymatic activation and oxygen involvement in cytotoxicity and antitumor activity of N,N',N''–triethylenethiophosphoramide. Teicher BA, et al. **Cancer Res** 1989 Sep 15;49(18):4996–5001

Rapid appearance of hypomethylated DNA in livers of rats fed cancer–promoting, methyl–deficient diets. Wainfan E, et al. **Cancer Res** 1989 Aug 1;49(15):4094–7

Decreased activation of carcinogens in the liver of carcinogen–resistant rats. Yano M, et al. **Cancer Res** 1989 Oct 1;49(19):5352–7

Effect of fatty acids on formation, distribution, storage, and release of benzo(a)pyrene phenols and glucuronides in the isolated perfused rat liver. Zhong Z, et al. **Cancer Res** 1989 Apr 15;49(8):2012–6

4–(2–amino–1–methylimidazo[4,5–b]pyrid–6–yl)phenyl sulfate—a major metabolite of the food mutagen 2–amino–1–methyl–6– phenylimidazo[4,5–b]pyridine (PhIP) in the rat. Alexander J, et al. **Carcinogenesis** 1989 Aug;10(8):1543–7

Species differences in the interaction between CCl4 reactive metabolites and liver DNA or nuclear protein fractions. Castro GD, et al. **Carcinogenesis** 1989 Feb;10(2):289–94

Detection of cyclic 1,N2–propanodeoxyguanosine adducts in DNA of rats treated with N–nitrosopyrrolidine and mice treated with crotonaldehyde. Chung FL, et al. **Carcinogenesis** 1989 Jul;10(7):1291–7

Preparation of microgram quantities of BaP–DNA adducts using isolated rat hepatocytes in vitro. Dankovic DA, et al. **Carcinogenesis** 1989 Apr;10(4):789–91

Enhanced metabolic activation of chemical hepatocarcinogens in woodchucks infected with hepatitis B virus. De Flora S, et al. **Carcinogenesis** 1989 Jun; 10(6):1099–106

Interactions of rutaecarpine alkaloids with specific binding sites for 2,3,7,8–tetrachlorodibenzo–p–dioxin in rat liver. Gillner M, et al. **Carcinogenesis** 1989 Apr;10(4):651–4

Comparative effect of dietary butylated hydroxyanisole and beta–naphthoflavone on aflatoxin B1 metabolism, DNA adduct formation, and carcinogenesis in rainbow trout [published erratum appears in Carcinogenesis 1988 Nov;9(11):2146] Goeger DE, et al. **Carcinogenesis** 1988 Oct;9(10):1793–800

Fluoranthene–DNA adducts: identification and quantification by an HPLC–32P–postlabeling method. Gorelick NJ, et al. **Carcinogenesis** 1989 Sep;10(9):1567–77

Genotoxicity of the food mutagen 2–amino–1–methyl–6–phenylimidazo[4,5–b]pyridine (PhIP): formation of 2–hydroxamino–PhIP, a directly acting genotoxic metabolite. Holme JA, et al. **Carcinogenesis** 1989 Aug;10(8):1389–96

Oxidation of N–butyl–N–(3–formylpropyl)nitrosamine to N–butyl–N–(3–carboxypropyl)nitrosamine in rat liver and inhibition by disulfiram. Irving CC. **Carcinogenesis** 1988 Nov;9(11):2109–12

Effect of a Prudhoe Bay crude oil on hepatic and renal peroxisomal beta–oxidation and mixed–function oxidase activities in rats. Khan S, et al. **Carcinogenesis** 1989 Feb; 10(2):269–72

Metabolism of aromatic amines: relationships of N–acetylation, O–acetylation, N,O–acetyltransfer and deacetylation in human liver and urinary bladder. Land SJ, et al. **Carcinogenesis** 1989 Apr;10(4):727–31

Evaluation of dichloromethane as an inducer of DNA synthesis in the B6C3F1 mouse liver. Lefevre PA, et al. **Carcinogenesis** 1989 Jun;10(6):1067–72

Reduced accumulation of I–compounds in liver DNA of rats fed a choline–devoid diet. Li D, et al. **Carcinogenesis** 1989 Mar;10(3):605–7

Uptake of N–nitrosobis(2–oxopropyl)amine by isolated rat and hamster hepatocytes: species differences and evidence for an active carrier–mediated transport process. Mangino MM, et al. **Carcinogenesis** 1988 Oct;9(10):1763–72

Lipogenesis and cholesterogenesis de novo in liver and adipose tissue. Alterations of lipid metabolism by the effect of short– and long–term thioacetamide administration to rats. Martín–Sanz P, et al. **Carcinogenesis** 1989 Mar; 10(3):477–81

DNA repair synthesis in isolated rainbow trout liver cells. Miller MR, et al. **Carcinogenesis** 1989 Jun;10(6):995–1001

Metabolism of acetylaminofluorene in primary cultures of human hepatocytes: dose–response over a four–log range. Monteith DK, et al. **Carcinogenesis** 1988 Oct;9(10):1835–41

DNA adduct formation and removal in specific liver cell populations during chronic dietary administration of 2–acetylaminofluorene. Poirier MC, et al. **Carcinogenesis** 1989 Jun;10(6):1143–5

A comparison between different types of covalent DNA modifications (I–compounds, persistent carcinogen adducts and 5–methylcytosine) in regenerating rat liver. Randerath K, et al. **Carcinogenesis** 1988 Oct;9(10):1843–8

Metabolic oxidation of diethylstilbestrol to diethylstilbestrol–4',4''–quinone in Syrian hamsters. Roy D, et al. **Carcinogenesis** 1989 Jul;10(7):1241–5

The chemistry and biology of 7H–dibenzo[c,g]carbazole: synthesis and characterization of selected derivatives, metabolism in rat liver preparations and mutagenesis mediated by cultured rat hepatocytes. Stong DB, et al. **Carcinogenesis** 1989 Mar;10(3):419–27

Metabolic activation of the carcinogen 6–hydroxymethylbenzo[a]pyrene: formation of an electrophilic sulfuric acid ester and benzylic DNA adducts in rat liver in vivo and in reactions in vitro. Surh YJ, et al. **Carcinogenesis** 1989 Aug;10(8):1519–28

Analysis of antioxidant defense systems during rat hepatocarcinogenesis. Vo TK, et al. **Carcinogenesis** 1988 Nov;9(11):2009–13

Metabolism of the food carcinogen 2–amino–3,8–dimethylimidazo[4,5–f]quinoxaline in isolated rat liver cells. Wallin H, et al. **Carcinogenesis** 1989 Jul; 10(7):1277–83

Effect of compounds acting on gap junctions and membrane fluidity on the course and cell–to–cell transmission of hormonal imprinting in cell culture. Kovács P, et al. **Cell Biol Int Rep** 1988 Aug;12(8):661–2

Variations on the standard protocol design of the hepatocyte DNA repair assay. Barfknecht TR, et al. **Cell Biol Toxicol** 1987 Jun;3(2):193–207

Relative cytotoxicity of psychotropic drugs in cultured rat hepatocytes. Boelsterli UA, et al. **Cell Biol Toxicol** 1987 Sep;3(3):231–50

Gas chromatography–mass spectrometry analysis of tert.–butyldimethylsilyl derivatives of 2–acetylaminofluorene and metabolites in isolated rat hepatocytes. Diez Ibañez MA, et al. **Cell Biol Toxicol** 1987 Sep;3(3):327–40

Lipid peroxidation and cellular damage caused by the pyrrolizidine alkaloid senecionine, the alkenal trans–4–hydroxy–2–hexenal, and related alkenals. Griffin DS, et al. **Cell Biol Toxicol** 1987 Dec;3(4):379–90

Use of scintillometric quantitation of unscheduled DNA synthesis in isolated rat hepatocytes for the screening of genotoxic agents. Hsia MT. **Cell Biol Toxicol** 1987 Jun; 3(2):127–42

Effects of pretreatment with inducers of hepatic mixed function oxidases on DNA repair elicited by various compounds in hepatocytes from adult and neonatal rats. Kornbrust D, et al. **Cell Biol Toxicol** 1987 Jun;3(2):143–64

Species variation in bladder cell and liver cell activation of acetylaminofluorene. Langenbach R, et al. **Cell Biol Toxicol** 1987 Sep;3(3):303–19

The hepatocyte primary culture/DNA repair test using hepatocytes from several species. McQueen CA, et al. **Cell Biol Toxicol** 1987 Jun;3(2):209–18

Cystathionase activity and glutathione metabolism in redifferentiating rat hepatocyte primary cultures. Meredith MJ. **Cell Biol Toxicol** 1987 Dec;3(4):361–77

In vivo measurement of unscheduled DNA synthesis and S–phase synthesis as an indicator of hepatocarcinogenesis in rodents. Mirsalis JC. **Cell Biol Toxicol** 1987 Jun; 3(2):165–73

Influence of age, sex and strain on the in vitro induction of unscheduled DNA synthesis in rat hepatocyte primary cultures. Probst GS, et al. **Cell Biol Toxicol** 1987 Jun; 3(2):113–25

Passive calcium influx by plasma membrane vesicles isolated from rat liver. Bygrave FL, et al. **Cell Calcium** 1989 May–Jun;10(4):235–40

Alterations in binding of inositol 1,4,5–trisphosphate to subcellular structures of rat liver during chronic endotoxemia. Deaciuc IV, et al. **Cell Calcium** 1989 Aug–Sep;10(6):425–32

Mechanism of the calcium pump in the endoplasmic reticulum of liver: phosphoproteins as reaction intermediates. Heilmann C, et al. **Cell Calcium** 1989 Jul; 10(5):275–87

Effect of hydrocortisone on deposition of types I and IV collagen in primary culture of rat hepatocytes. Clement B, et al. **Cell Mol Biol** 1988;34(5):449–60

Correlation of the in vitro incorporation of 14C–labelled amino acids into proteins with tRNA levels in hepatomas 7793 and AH 130. Del Monte U, et al. **Cell Mol Biol** 1988; 34(4):361–71

Radioautographic study on the localization of an anti–allergic agent, tranilast, in the rat liver. Momose Y, et al. **Cell Mol Biol** 1989;35(3):347–55

Effect of a diet low in methionine–cysteine on rat liver chromatin and nuclear proteins. Norell M, et al. **Cell Mol Biol** 1989;35(1):63–74

An experimental study on the pathway of iron transfer from macrophages to erythrocytes in rat liver. Ono T, et al. **Cell Struct Funct** 1989 Feb;14(1):61–74

Effect of phlebotomy on the ferritin iron content in the rat liver as determined morphometrically with the use of electron energy loss spectroscopy. Cleton MI, et al. **Cell Tissue Res** 1989 Jun;256(3):601–5

Receptor–mediated uptake of homologous low–density lipoproteins by isolated liver parenchymal cells of fetal rats. Dürer U, et al. **Cell Tissue Res** 1988 Oct;254(1):203–8

Ultrastructural and biochemical studies of lipolysis by lipolysosomes in chick hepatocytes. Kanai M. **Cell Tissue Res** 1989 Mar;255(3):559–65

Influence of vitamin A status and DDT on vitamin A–dependent protein mannosylation in rat liver. Azais–Braesco V, et al. **Chem Biol Interact** 1989; 69(2–3):259–67

Hepatic injury in chronic iron overload. Role of lipid peroxidation. Bacon BR, et al. **Chem Biol Interact** 1989; 70(3–4):183–226 (216 ref.)

Liver DNA alkylation after a single carcinogenic dose of dimethylnitrosamine to newborn and adult CFW Swiss mice. Coccia P, et al. **Chem Biol Interact** 1988; 68(3–4):259–71

Benzo[a]pyrene metabolism and induction of enzyme–altered foci in regenerating rat liver. Dock L, et al. **Chem Biol Interact** 1988;67(3–4):243–53

Cocaine–induced biochemical changes and cytotoxicity in hepatocytes isolated from both mice and rats. Donnelly DA, et al. **Chem Biol Interact** 1988;67(1–2):95–104

Metallothionein induction in mouse tissues by cis–dichlorodiammineplatinum(II) and its hydrolysis products. Farnworth PG, et al. **Chem Biol Interact** 1989; 69(4):319–32

Glutathione and lipid peroxide levels in rat liver following administration of methapyrilene and analogs. Hernandez L, et al. **Chem Biol Interact** 1989;69(2–3):217–24

In vitro macromolecular binding of 2–(2–chlorophenyl)–2–(4–chlorophenyl)–1,1–dichloroethane (o,p'–DDD) in the mouse lung and liver. Lund BO, et al. **Chem Biol Interact** 1989;70(1–2):63–72

Metabolism of benzo[a]pyrene and 7 beta,8 alpha–dihydroxy–9 alpha, 10 alpha–epoxy–7,8,9,10–tetrahydrobenzo[a pyrene in lung and liver of newborn mice. Melikian AA, et al. **Chem Biol Interact** 1989;69(2–3):245–57

Covalent binding of 4–nitrobenzyl mercaptan S–sulfate to the sulfhydryl groups of hepatic cytosolic proteins and bovine serum albumin with mixed disulfide bond formation. Miwa K, et al. **Chem Biol Interact** 1988;68(1–2):27–38

Increased lead uptake and inhibition of ALAD–activity in isolated rat hepatocytes incubated with lead–diethyldithiocarbamate complex. Oskarsson A, et al. **Chem Biol Interact** 1988;67(1–2):59–70

Careful consideration of the effects induced by glutathione depletion in rat liver and heart. The involvement of cytosolic and mitochondrial glutathione pools. Romero FJ, et al. **Chem Biol Interact** 1989;70(1–2):29–37 (53 ref.)

Formation and persistence of benzo[a]pyrene–diolepoxide–DNA adducts in liver of English sole (Parophrys vetulus). Varanasi U, et al. **Chem Biol Interact** 1989;69(2–3):203–16

Identification of fatty acid conjugates of plaunotol, a new anti–ulcer agent, formed in rat liver homogenate system. Ikeda T, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep; 36(9):3595–603

Studies on the metabolism of gomisin A (TJN–101). I. Oxidative products of gomisin A formed by rat liver S9 mix. Ikeya Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun; 36(6):2061–9

Inhibitory effect of extracts of muscles of mackerel (Scomber japonicus Houttuyn) on hepatic glycogenolysis in rats. Matsuda R, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):490–2

The conjugative metabolism of 4–methylumbelliferone and deconjugation to the parent drug examined by isolated perfused liver and in vitro liver homogenate of rats. Miyauchi S, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):475–80

Glucose release from isolated, perfused liver of alloxan–diabetic rats. Nishihata T, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3678–82

Calcium channel blockers as inhibitors of drug metabolism. Hunt BA, et al. **Chest** 1989 Aug;96(2):393–9 (50 ref.)

Circadian rhythm of the liver of male rats pre–treated with phenobarbital—II. Hexobarbital sleeping time and lipids content in liver and serum. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):175–82

Xenon handling in the liver: red cell capacity effect. Goresky CA, et al. **Circ Res** 1988 Oct;63(4):767–78

Triacylglycerol output by the isolated perfused liver of endotoxin–treated rats. Deaciuc IV, et al. **Circ Shock** 1988 Jul;25(3):165–72

Influence of hemorrhagic shock on hepatic energy metabolism in carbon tetrachloride–induced cirrhotic rats. Ikai I, et al. **Circ Shock** 1988 Dec;26(4):365–74

Impairments in vasopressin–stimulated inositol lipid metabolism in hepatocytes of septic rats. Rodriguez de Turco EB, et al. **Circ Shock** 1988 Aug;25(4):299–307

Mechanisms involved in the effect of M6434 on experimental hemorrhagic shock: II. Effects on energy metabolism and organ blood flow. Uemura A, et al. **Circ Shock** 1989 Mar; 27(3):183–91

Deleterious effects of splanchnic congestion on hepatic energy metabolism following repeated portal triad cross–clamping in dogs. Yamamoto S, et al. **Circ Shock**

1988 Oct;26(2):193–201
Effect of colchicine on collagen synthesis by liver fibroblasts in murine schistosomiasis. Mansour MM, et al. **Clin Chim Acta** 1988 Sep 30;177(1):11–20
Glucocorticoids and glucose metabolism: hepatic glucose production in untreated Addisonian patients and on two different levels of glucocorticoid administration. Malerbi D, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):415–22
Induction of angiotensinogen mRNA in hepatocytes by angiotensin II and glucocorticoids. Klett C, et al. **Clin Exp Hypertens [A]** 1988;10(6):1009–22
The effect of (a) neomycin and lactulose treatment on systemic and portal serum GABA levels in rats and (b) pH changes on [3H] GABA binding to isolated rat hepatocytes. Minuk GY, et al. **Clin Invest Med** 1988 Oct; 11(5):373–6
Influence of hyperglycemia on glucose uptake and hepatic glucose production in non-dialyzed uremic patients. Schmitz O, et al. **Clin Nephrol** 1988 Jul;30(1):27–34
Patterns of gallium uptake in amebic liver abscesses. Verma RC, et al. **Clin Nucl Med** 1989 Jul;14(7):523–5
Diabetic patients and hepatic drug metabolism [letter; comment] Denaro C, et al. **Clin Pharmacol Ther** 1989 Jun; 45(6):695–6. **Comment on:** Clin Pharmacol Ther 1988 Oct;44(4):408–17
The influence of verapamil and nifedipine on hepatic indocyanine green clearance in patients with HBsAg-positive cirrhosis and ascites. Lay CS, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):453–7
Selective incorporation of iododeoxyuridine into DNA of hepatic metastases versus normal human liver. Speth PA, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):369–75
Fatty acid changes in liver choline and ethanolamine glycerophospholipids in aspirin-treated rats fed linoleate, gamma-linolenate and fish oil. Huang YS, et al. **Clin Physiol Biochem** 1989;7(2):79–86
Free and total carnitine and acylcarnitine content of plasma, urine, liver and muscle of alcoholics. de Sousa C, et al. **Clin Sci** 1988 Oct;75(4):437–40
Increased rates of hepatic cholesterogenesis and fatty acid synthesis in septic rats in vivo: evidence for the possible involvement of insulin. de Vasconcelos PR, et al. **Clin Sci** 1989 Feb;76(2):205–11
Altered interactions between glycogenesis and lipid synthesis after liver resection: specific effects of liver regeneration, coupled with non-specific effects of surgery. Holness MJ, et al. **Clin Sci** 1989 Mar;76(3):317–22
Effect of the cyclo-oxygenase inhibitor fenbufen on muscle and liver protein metabolism, muscle glutamine and plasma insulin in endotoxaemic rats. Jepson MM, et al. **Clin Sci** 1989 Jul;77(1):13–20
Genomic response to growth factors. Nathans D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:893–900
Role of glycosyl phosphoinositides in insulin action. Saltiel AR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:955–63
Types I and IV procollagen gene expression in cultured rat hepatocytes. Clement B, et al. **Coll Relat Res** 1988 Jul; 8(4):349–59
Aminoterminal propeptide of type III procollagen is cleared from the circulation by receptor-mediated endocytosis in liver endothelial cells. Smedsrød B. **Coll Relat Res** 1988 Jul;8(4):375–88
Isolation of a porcine hepatic ferritin receptor. Adams PC, et al. **Comp Biochem Physiol [B]** 1988;90(4):837–41
Comparative studies on the major features of insulin receptors in mammalian and non-mammalian liver membranes. al-Attas OS. **Comp Biochem Physiol [B]** 1989;93(1):125–33
Gluconeogenesis in isolated chicken (Gallus domesticus) liver cells. Brady LJ, et al. **Comp Biochem Physiol [B]** 1979; 63(2):193–8
Fatty acid metabolism of the perfused caudate lobe from livers of fed and fasted non-pregnant and fasted late pregnant ewes. Butler SM, et al. **Comp Biochem Physiol [B]** 1988;91(1):25–31
Regulation of carbohydrate metabolism in mouse liver. Effect of glucagon on gluconeogenic/glycolytic flux in isolated perfused livers. Cook DE, et al. **Comp Biochem Physiol [B]** 1979;64(1):33–9
Dose response kinetics of serum vitellogenin, liver DNA, RNA, protein and lipid after induction by estradiol-17 beta in male flounders (Platichthys flesus L.). Emmerson J, et al. **Comp Biochem Physiol [B]** 1979;63(1):1–6
Comparison of glucose, sorbitol and fructose accumulation in lens and liver of diabetic and insulin-treated rats and mice. Gaynes BI, et al. **Comp Biochem Physiol [B]** 1989; 92(4):685–90
Hepatic gluconeogenesis and mitochondrial function during hibernation. Gehnrich SC, et al. **Comp Biochem Physiol [B]** 1988;91(1):11–6
Degradation of extracellular thymidine by cultured hepatocytes from rainbow trout (Salmo gairdneri). Kocal TE, et al. **Comp Biochem Physiol [B]** 1988;91(3):557–61
Vitellogenin, lipid and carbohydrate metabolism during vitellogenesis and pregnancy, and after hormonal induction in the blenny Zoarces viviparus (L.). Korsgaard B, et al. **Comp Biochem Physiol [B]** 1979;63(2):245–51
Alaskan malamute chondrodysplasia—VIII. Incorporation of [14C]glucosamine and [3H]serine in hepatic metal-binding proteins of Canis familaris. McBride-Warren PA, et al. **Comp Biochem Physiol [B]** 1979;63(4):569–76
Frog liver dolichols: separation and quantitative determination related to seasonality. Marino M, et al. **Comp Biochem Physiol [B]** 1988;91(1):193–5
Gluconeogenesis in vertebrate livers. Phillips JW, et al. **Comp Biochem Physiol [B]** 1977;57(2):127–31
Ketogenesis in vertebrate livers. Phillips JW, et al. **Comp Biochem Physiol [B]** 1977;57(2):133–8
Metabolism of hibernating reptiles. Changes of free amino acids in blood, liver and brain. Raheem KA, et al. **Comp Biochem Physiol [B]** 1979;64(3):305–8
Lipogenesis in liver and adipose tissue of the domestic cat (Felis domestica). Richard MJ, et al. **Comp Biochem Physiol [B]** 1989;93(3):561–4
Isolation, characterization, and expression of fatty acid binding protein in the liver of Gallus domesticus. Sewell JE, et al. **Comp Biochem Physiol [B]** 1989;92(3):509–16
A comparison of gluconeogenesis in hepatocytes from neonatal and adult rats. Sly MR, et al. **Comp Biochem Physiol [B]** 1978;61(3):471–7
A comparison of lipid metabolism in hepatocytes isolated from fed and starved neonatal and adult rats. Sly MR, et al. **Comp Biochem Physiol [B]** 1978;61(4):501–6
Lipogenic activity of catfish liver. Lack of response to dietary changes and insulin administration. Warman AW 3d, et al. **Comp Biochem Physiol [B]** 1978;59(2):153–61
Serum and liver lipid composition and lecithin: cholesterol acyltransferase in horses, Equus caballus. Yamamoto M, et al. **Comp Biochem Physiol [B]** 1979;62(2):185–93
Differences between chick and turkey embryos in sensitivity to 3,3',4,4'-tetrachloro-biphenyl and in concentration/affinity of the hepatic receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin. Brunström B, et al. **Comp Biochem Physiol [C]** 1988;91(2):507–12
The effects of adrenergic agonists and age on lipogenesis in avian hepatocytes. Harris RB, et al. **Comp Biochem Physiol [C]** 1988;91(2):579–83
The effects of malotilate on hepatic drug metabolizing systems in different strains of rats. Kai K, et al. **Comp Biochem Physiol [C]** 1988;90(1):13–9
Acid-base regulation of hepatic glutamine degradation. Häussinger D, et al. **Contrib Nephrol** 1988;63:161–6
Control by pH of ureogenesis in isolated hepatocytes. Meijer AJ, et al. **Contrib Nephrol** 1988;63:167–70
Transcutaneous and liver surface PO2 during hemorrhagic hypotension and treatment with phenylephrine. Tremper KK, et al. **Crit Care Med** 1989 Jun;17(6):537–40
Effects of chlorpromazine and methylprednisolone on perfusion preservation of rabbit livers. Sundberg R, et al. **Cryobiology** 1988 Oct;25(5):417–24
Perinatal opiate exposure. Effects on metabolism of xenobiotics and steroids in adult rat liver. Hansson T, et al. **Dev Pharmacol Ther** 1989;12(3):146–52
Perinatal cimetidine exposure has no apparent effect on hepatic drug oxidative or conjugative activity in adult male rat offspring. Kane RE, et al. **Dev Pharmacol Ther** 1989; 12(2):96–105
Conjugation of styrene oxide by the basic and acidic forms of glutathione transferase in the human fetal liver. Pacifici GM, et al. **Dev Pharmacol Ther** 1988;11(4):243–51
Tolbutamide enhances insulin action on gluconeogenesis and on fructose 2,6-bisphosphate levels in isolated rat hepatocytes. Monge L, et al. **Diabete Metab** 1988 Dec; 14(6):712–6
Sleep-associated fall in glucose disposal and hepatic glucose output in normal humans. Putative signaling mechanism linking peripheral and hepatic events. Clore JN, et al. **Diabetes** 1989 Mar;38(3):285–90
Predominant role of gluconeogenesis in increased hepatic glucose production in NIDDM. Consoli A, et al. **Diabetes** 1989 May;38(5):550–7
Metabolic effects of low-dose insulin therapy on glucose metabolism in diabetic ketoacidosis. Luzi L, et al. **Diabetes** 1988 Nov;37(11):1470–7
Relationship of hepatic glucose uptake to intrahepatic glucose concentration in fasted rats after glucose load. Niewoehner CB, et al. **Diabetes** 1988 Nov;37(11):1559–66
Exercise-induced fall in insulin and increase in fat metabolism during prolonged muscular work. Wasserman DH, et al. **Diabetes** 1989 Apr;38(4):484–90
Do sulfonylureas influence hepatic insulin clearance? [letter] Groop LC, et al. **Diabetes Care** 1988 Sep;11(8):689–90
Effects of 8-wk alpha-glucosidase inhibition on metabolic control, C-peptide secretion, hepatic glucose output, and peripheral insulin sensitivity in poorly controlled type II diabetic patients. Schnack C, et al. **Diabetes Care** 1989 Sep; 12(8):537–43
Renal and hepatic aspects of ketoacidosis: a quantitative analysis based on energy turnover. Halperin ML, et al. **Diabetes Metab Rev** 1989 Jun;5(4):321–36 (57 ref.)
Mechanism and regulation of protein degradation in liver [published erratum appears in Diabetes Metab Rev 1989 May;5(3):320] Mortimore GE, et al. **Diabetes Metab Rev** 1989 Feb;5(1):49–70 (114 ref.)
D-sorbitol clearance [letter] Merkel C, et al. **Dig Dis Sci** 1988 Oct;33(10):1341
Frequency of upper gastrointestinal lesions in patients with liver cirrhosis. Sacchetti C, et al. **Dig Dis Sci** 1988 Oct; 33(10):1218–22
Hepatic clearance of polyethylene glycol 900 and mannitol in the pig. Friman S, et al. **Digestion** 1988;39(3):172–80
Acute phase proteins as disease markers. Kushner I, et al. **Dis Markers** 1987 Mar;5(1):1–11 (90 ref.)
Trout P450IA1: cDNA and deduced protein sequence, expression in liver, and evolutionary significance. Heilmann LJ, et al. **DNA** 1988 Jul-Aug;7(6):379–87
Efficient DNA-mediated gene transfer into primary cultures of adult rat hepatocytes. Pasco DS, et al. **DNA** 1989 Sep; 8(7):535–41
Tissue-specific regulation of human alpha 1-antitrypsin gene expression in transgenic mice. Shen RF, et al. **DNA** 1989 Mar;8(2):101–8
Expression of the 31-kD stress protein in rat myoblasts and hepatocytes. Shuman J, et al. **DNA** 1988 Sep;7(7):475–82
Effect of bovine growth hormone on incorporation of [14C]acetate into lipids by co-cultures of bovine mammary, liver, and adipose tissue explants. Fekry AE, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):87–94
Effects of estradiol-17 beta on the net hepatic extraction of triglyceride in vivo in fed and fasted sheep. Kerr DE, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):191–7
Spironolactone metabolism in target tissues. Characteristics of deacetylation in kidney, liver, adrenal cortex, and testes. Flowers NL, et al. **Drug Metab Dispos** 1989 Mar-Apr; 17(2):186–9
Effect of galactosamine-induced hepatic UDP-glucuronic acid depletion on acetaminophen elimination in rats. Dispositional differences between hepatically and extrahepatically formed glucuronides of acetaminophen and other chemicals. Gregus Z, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):527–33
Transport of acetaminophen conjugates in isolated rat hepatocytes. Iida S, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):341–4
Metabolism of diazepam in vitro by human liver. Independent variability of N-demethylation and C3-hydroxylation. Inaba T, et al. **Drug Metab Dispos** 1988 Jul-Aug; 16(4):605–8
Biopharmaceutical characterization of 450191-S, a ring-opened derivative of 1,4-benzodiazepine. II. Evidence for reduced first-pass extraction by rat liver. Koike M, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):609–15
Stereoselective oxidation of nilvadipine, a new dihydropyridine calcium antagonist, in rat and dog liver. Niwa T, et al. **Drug Metab Dispos** 1989 Jan-Feb;17(1):64–8
Some factors affecting phencyclidine biotransformation by human liver and placenta. Pohorecki R, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):271–4
The covalent binding to protein of valproic acid and its hepatotoxic metabolite, 2-n-propyl-4-pentenoic acid, in rats and in isolated rat hepatocytes. Porubek DJ, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):123–30
Foreign compound metabolism studies with human liver obtained as surgical waste. Relation to donor characteristics and effects of tissue storage. Powis G, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):582–9
Pharmacokinetics and enterohepatic circulation of 2-n-propyl-4-pentenoic acid in the rat. Singh K, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):848–52
Sulfation of acetaminophen in isolated rat hepatocytes. Relationship to sulfate ion concentrations and intracellular levels of 3'-phosphoadenosine-5'-phosphosulfate. Sweeny DJ, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):712–5
Role of pharmacokinetics and metabolism in the enhanced susceptibility of middle-aged male Sprague-Dawley rats to acetaminophen nephrotoxicity. Tarloff JB, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):139–46
Phenylbutazone-hydroxycoumarol interactions. Effects on steady state disposition, hepatocellular distribution, and biliary excretion of (S)-acenocoumarol in rats. Thijssen HH, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):744–8
New micro-optical methods to study metabolism in periportal and pericentral regions of the liver lobule. Thurman RG, et al. **Drug Metab Rev** 1988;19(3-4):263–81 (28 ref.)
Effects of prolonged acetaminophen ingestion and dietary methionine on mouse liver glutathione. Reicks M, et al. **Drug Nutr Interact** 1988;5(4):351–63
Experimental and clinical evaluation of the biliary pharmacokinetic profile of cefpiramide, a new cephalosporin with high hepatic elimination. Brogard JM, et al. **Drugs Exp Clin Res** 1988;14(8):519–27
Biochemical changes in the liver of fish, Tilapia mossambica (Peters), during continuous exposure to monocrotophos. Joshi UM, et al. **Ecotoxicol Environ Safety** 1988 Jun; 15(3):272–6
Composition and genetic variability of proteins from nuclear fractions of mouse (DBA/2J and C57BL/6J) liver and brain. Jungblut P, et al. **Electrophoresis** 1989 Jul; 10(7):464–72
Two distinct factors interact with the promoter regions of several liver-specific genes. Hardon EM, et al. **EMBO J** 1988 Jun;7(6):1711–9
Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor. Herz J, et al. **EMBO J** 1988 Dec 20;7(13):4119–27
Intranuclear distribution of rat liver glucocorticoid receptors by nuclease digestion in a cell-free system. Sato N, et al. **Endocr Res** 1988–89;14(4):243–62
Effect of estradiol on the phosphorylation of rat liver ribosome proteins. Nikolov JT, et al. **Endocrinol Exp** 1989 Mar;23(1):29–35
Comparison of the effects of dexamethasone 21-acetate and corticosterone on glucocorticoid cytosol receptor depletion and induction of TAT in rat liver. Alexandrová M, et al.

Endocrinol Exp (Bratisl) 1988 Sep;22(3):171–9
Effects of neonatal nutrition on glucagon binding and glucagon stimulated cAMP production in isolated rat hepatocytes. Ficková M, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):131–41
In vitro metabolism of 7 alpha–methyl–19–nortestosterone by rat liver, prostate, and epididymis. Agarwal AK, et al. **Endocrinology** 1988 Nov;123(5):2187–93
Adaptation of liver membrane somatogenic and lactogenic growth hormone (GH) binding to the spontaneous pulsation of GH secretion in the male rat. Bick T, et al. **Endocrinology** 1989 Sep;125(3):1711–7
Loss of androgenic induction of alpha 2u–globulin gene family in the liver of NIH black rats. Chatterjee B, et al. **Endocrinology** 1989 Sep;125(3):1385–8
Time course of hepatic 3–hydroxy–3–methylglutaryl coenzyme A reductase activity and messenger ribonucleic acid, biliary lipid secretion, and hepatic cholesterol content in methimazole–treated hypothyroid and hypophysectomized rats after triiodothyronine administration: possible linkage of cholesterol synthesis to biliary secretion. Day R, et al. **Endocrinology** 1989 Jul; 125(1):459–68
Tumor necrosis factor stimulates hepatic lipid synthesis and secretion. Feingold KR, et al. **Endocrinology** 1989 May; 124(5):2336–42
Multiple cytokines stimulate hepatic lipid synthesis in vivo. Feingold KR, et al. **Endocrinology** 1989 Jul;125(1):267–74
Dexamethasone–induced changes in phosphorylation of the insulin and epidermal growth factor receptors and their substrates in intact rat hepatocytes. Karasik A, et al. **Endocrinology** 1988 Nov;123(5):2214–22
Triiodothyronine rapidly reverses inhibition of S14 gene transcription by glucagon. Kinlaw WB, et al. **Endocrinology** 1988 Nov;123(5):2255–60
Insulin–stimulated phosphorylation of a 195K protein from muscle and liver in the presence of poly–L–lysine. Komori K, et al. **Endocrinology** 1989 Sep;125(3):1438–50
Dietary protein restriction decreases insulin–like growth factor I independent of insulin and liver growth hormone binding. Maiter D, et al. **Endocrinology** 1989 May; 124(5):2604–11
A novel hepatic nucleotide is correlated with the carbohydrate induction of messenger ribonucleic acid–S14. Mariash CN. **Endocrinology** 1989 Jan;124(1):212–7
Effect of thyroid hormones on urea biosynthesis and related processes in rat liver. Marti J, et al. **Endocrinology** 1988 Nov;123(5):2167–74
Uptake of cortisol by the perfused rat liver: validity of the free hormone hypothesis applied to cortisol. Mendel CM, et al. **Endocrinology** 1989 Jan;124(1):468–76
Metabolism of triiodothyroacetic acid (TA3) in rat liver. I. Deiodination of TA3 and TA3 sulfate by microsomes. Rutgers M, et al. **Endocrinology** 1989 Jul;125(1):424–32
Metabolism of triiodothyroacetic acid (TA3) in rat liver. II. Deiodination and conjugation of TA3 by rat hepatocytes and in rats in vivo. Rutgers M, et al. **Endocrinology** 1989 Jul;125(1):433–43
Interaction of rat liver glucocorticoid receptor with histones. Ueda K, et al. **Endocrinology** 1989 Feb;124(2):1042–9
Differences in the developmental patterns of somatotrophic and lactogenic receptors in rabbit liver cytosol. Ymer SI, et al. **Endocrinology** 1989 Jul;125(1):516–23
Cadmium concentrations in human liver, blood, and bile: comparison with a metabolic model. Elinder CG, et al. **Environ Res** 1978 Oct;17(2):236–41
Relationship of cadmium accumulation to zinc or copper concentration in horse liver and kidney. Koizumi N, et al. **Environ Res** 1989 Jun;49(1):104–14
Dietary protein and lead retention. Quarterman J, et al. **Environ Res** 1978 Aug;17(1):68–77
The effect of age on the absorption and excretion of lead. Quarterman J, et al. **Environ Res** 1978 Aug;17(1):78–83
Triglyceride lipase activities in rat liver. Rodríguez–Fernández C, et al. **Enzyme** 1989;41(1):27–32
Ethanol–induced inhibition of leukotriene degradation by omega–oxidation. Baumert T, et al. **Eur J Biochem** 1989 Jun 15;182(2):223–9
The antiglycogenolytic action of 1–deoxynojirimycin results from a specific inhibition of the alpha–1,6–glucosidase activity of the debranching enzyme. Bollen M, et al. **Eur J Biochem** 1989 May 15;181(3):775–80
Interaction of beta–very–low–density lipoproteins with rat liver cells. Harkes L, et al. **Eur J Biochem** 1989 Mar 1; 180(1):241–8
Stimulation of thromboxane release by extracellular UTP and ATP from perfused rat liver. Role of icosanoids in mediating the nucleotide responses. Häussinger D, et al. **Eur J Biochem** 1988 Dec 1;178(1):249–56
Purification and characterization of 55–kDa protein with 3,5,3'–triiodo–L–thyronine–binding activity and protein disulfide–isomerase activity from beef liver membrane. Horiuchi R, et al. **Eur J Biochem** 1989 Aug 15; 183(3):529–38
Unesterified long–chain fatty acids inhibit thyroid hormone binding to the nuclear receptor. Solubilized receptor and the receptor in cultured cells. Inoue A, et al. **Eur J Biochem** 1989 Aug 15;183(3):565–72
Mechanism of action of cysteinyl leukotrienes on glucose and lactate balance and on flow in perfused rat liver. Comparison with the effects of sympathetic nerve stimulation and noradrenaline. Iwai M, et al. **Eur J Biochem** 1989 Mar 15;180(2):273–81
A common liver–specific factor binds to the rat albumin and alpha–foetoprotein promoters in vitro and acts as a positive trans–acting factor in vivo. Jose–Estanyol M, et al. **Eur J Biochem** 1989 May 15;181(3):761–6
DNA–dependent mono(ADP–ribosyl)ation of p33, an acceptor protein in hen liver nuclei. Mishima K, et al. **Eur J Biochem** 1989 Feb 1;179(2):267–73
Specific S–thiolation of a 30–kDa cytosolic protein from rat liver under oxidative stress. Rokutan K, et al. **Eur J Biochem** 1989 Jan 15;179(1):233–9
Hepatic processing of insulin. Characterization of differential inhibition by weak bases. Smith GD, et al. **Eur J Biochem** 1989 May 1;181(2):287–94
Gene expression in regenerating liver in relation to cell proliferation and stress. Sobczak J, et al. **Eur J Biochem** 1989 Mar 1;180(1):49–53
Evidence indicating that the glucagon–induced increase in cytoplasmic free Ca2+ concentration in hepatocytes is mediated by an increase in cyclic AMP concentration. Staddon JM, et al. **Eur J Biochem** 1989 Jan 15;179(1):47–52
Functional hepatocyte heterogeneity. Vascular 2–oxoglutarate is almost exclusively taken up by perivenous, glutamine–synthetase–containing hepatocytes. Stoll B, et al. **Eur J Biochem** 1989 May 15;181(3):709–16
Stimulation of glucose phosphorylation by fructose in isolated rat hepatocytes. Van Schaftingen E, et al. **Eur J Biochem** 1989 Jan 15;179(1):173–7
A protein from rat liver confers to glucokinase the property of being antagonistically regulated by fructose 6–phosphate and fructose 1–phosphate. Van Schaftingen E. **Eur J Biochem** 1989 Jan 15;179(1):179–84
Metabolism of cysteinyl leukotrienes in non–recirculating rat liver perfusion. Hepatocyte heterogeneity in uptake and biliary excretion. Wettstein M, et al. **Eur J Biochem** 1989 Apr 15;181(1):115–24
Chronic iron overload inhibits protein secretion by adult rat hepatocytes maintained in long–term primary culture. Desvergne B, et al. **Eur J Cell Biol** 1989 Jun;49(1):162–70
Ammonia and glutamine metabolism in human liver slices: new aspects on the pathogenesis of hyperammonaemia in chronic liver disease. Kaiser S, et al. **Eur J Clin Invest** 1988 Oct;18(5):535–42
Effect of hyperosmolality on basal and hormone–stimulated hepatic glucose metabolism in vitro. Komjati M, et al. **Eur J Clin Invest** 1989 Apr;19(2):128–34
Synthesis and secretion of alpha 2–macroglobulin by human hepatocytes in culture. Munck Petersen C, et al. **Eur J Clin Invest** 1988 Oct;18(5):543–8
Alpha– and gamma–interferon (IFN alpha, IFN gamma) but not interleukin–1 (IL–1) modulate synthesis and secretion of beta 2–microglobulin by hepatocytes. Ramadori G, et al. **Eur J Clin Invest** 1988 Aug;18(4):343–51
Hepatic extraction of morphine is impaired in cirrhosis. Crotty B, et al. **Eur J Clin Pharmacol** 1989;36(5):501–6
Metabolism of n–hexyl–homologues of delta–8–tetrahydrocannabinol and delta–9–tetrahydrocannabinol in the mouse. Brown NK, et al. **Eur J Drug Metab Pharmacokinet** 1988 Jul–Sep; 13(3):165–76
Autoradiographic study of the localization of 2,2', 4,4', 5,5'–hexachlorobiphenyl in liver and skin tissue after in vitro uptake. Di Francesco C, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):241–5
Incorporation of chlorpromazine into bilayer liposomes for protection against microsomal metabolism and liver absorption. Schwendener RA. **Eur J Drug Metab Pharmacokinet** 1988 Apr–Jun; 13(2):135–41
Regulation of hepatic synthesis of C3 and C4 during the acute–phase response in the rat. Anthony R, et al. **Eur J Immunol** 1989 Aug;19(8):1405–12
Hepatic 123I–insulin binding kinetics in non–insulin–dependent (type 2) diabetic patients after i.v. bolus administration. Oolbekkink M, et al. **Eur J Nucl Med** 1989;15(6):292–5
Metabolism of methyl–branched iodo palmitic acids in cultured hepatocytes. Thomas G, et al. **Eur J Nucl Med** 1989;15(7):367–72
Liver lactate uptake in correcting of hemorrhagic shock with crystalloid, colloid, or whole blood. Mäkisalo HJ. **Eur Surg Res** 1988;20(4):267–76
Effects of hydrostatic pressure (HP = 101 ATA) on nucleotides and pyridine dinucleotides tissue contents in trout. Cann–Moisan C, et al. **Exp Biol** 1988;47(4):239–42
Cultured liver epithelial cells can incorporate monoclonal antibodies directed against intracellular cytokeratin structures without microinjection. Swierenga SH. **Exp Cell Biol** 1988;56(1–2):103–7
Extracellular ATP mobilizes intracellular Ca2+ in T51B rat liver epithelial cells: a study involving single cell measurements. Boynton AL, et al. **Exp Cell Res** 1989 Mar; 181(1):245–55
The effect of aging and dietary restriction on DNA repair. Weraarchakul N, et al. **Exp Cell Res** 1989 Mar; 181(1):197–204
Increased phospholipid methylation and glycogen phosphorylase activation after a single dose of dexamethasone in mouse liver. Marino A, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):314–22
Influence of microinjection of corticosterone into ventromedial hypothalamus on hepatic acetate metabolism in rabbits. Seto K, et al. **Exp Clin Endocrinol** 1988 Sep; 92(1):111–4
Influence of microinjection of glucagon into the amygdala on hepatic acetate metabolism in rabbits. Seto K, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):69–72
Relation between renal and hepatic excretion of drugs: XIII. Pharmacokinetics of new antiarrhythmic drug Bonnecor in rats with normal and impaired excretory functions. Fleck C, et al. **Exp Pathol** 1989;36(3):165–75
Relation between renal and hepatic excretion of drugs. XI. Excretion of sulfonamides with various physico–chemical properties of different ages—influence of nephrectomy or bile duct ligation. Fleck C, et al. **Exp Pathol** 1988; 35(2):115–27
Relation between renal and hepatic excretion of drugs. XII. Influence of dexamethasone, triiodothyronine, or phenobarbital on the elimination of sulfonamides in rats of different ages. Fleck C, et al. **Exp Pathol** 1989; 36(1):43–52
Relation between renal and hepatic excretion in drugs. VIII. Influence of triiodothyronine on maturation of phenol red excretion in rats. Fleck C, et al. **Exp Pathol** 1988; 34(2):89–98
Relation between renal and hepatic excretion of drugs: IX. Acceleration of phenol red excretion via kidney and liver in rats of different ages by dexamethasone treatment. Fleck C, et al. **Exp Pathol** 1988;34(3):161–9
Relation between renal and hepatic excretion of drugs: X. Excretion of nalorphine in young and adult rats pretreated with hormones or xenobiotics. Fleck C, et al. **Exp Pathol** 1988;34(3):171–80
Effect of thyroid hormone on somatomedin–C release from perfused rat liver. Ikeda T, et al. **Experientia** 1989 Feb 15;45(2):170–1
Development of in vitro toxicity tests with cultures of freshly isolated rat hepatocytes. Maier P. **Experientia** 1988 Oct 15;44(10):807–17
The use of primary cultures of adult rat hepatocytes to study induction of enzymes and DNA synthesis: effect of nafenopin and electroporation. Muakkassah–Kelly SF, et al. **Experientia** 1988 Oct 15;44(10):823–7 (27 ref.)
The effects of vitamin A nutritional status on microsomal lipid peroxidation and alpha–tocopherol level in rat liver. Pelissier MA, et al. **Experientia** 1989 Apr 15;45(4):342–3
Expansion of the bile acid pool changes the biliary transport characteristics of centrizonal hepatocytes. Reichen J, et al. **Experientia** 1989 Feb 15;45(2):135–7
Choline accumulation in isolated rat hepatocytes. Yoshioka K, et al. **Experientia** 1988 Oct 15;44(10):889–92
Glyoxylate cycle in the rat liver: effect of vitamin D3 treatment. Davis WL, et al. **FASEB J** 1989 Mar;3(5):1651–5
Indirect versus direct routes of hepatic glycogen synthesis. Kurland IJ, et al. **FASEB J** 1989 Sep;3(11):2277–81 (34 ref.)
D–xylulose–induced depletion of ATP and Pi in isolated rat hepatocytes. Vincent MF, et al. **FASEB J** 1989 May; 3(7):1855–61
Increase in phosphoribosyl pyrophosphate induced by ATP and Pi depletion in hepatocytes. Vincent MF, et al. **FASEB J** 1989 May;3(7):1862–7
Regulation of interleukin–6 receptor expression in human monocytes and hepatocytes. Bauer J, et al. **FEBS Lett** 1989 May 22;249(1):27–30
1,2–sn–diacylglycerol accumulates in choline–deficient liver. A possible mechanism of hepatic carcinogenesis via alteration in protein kinase C activity? Blusztajn JK, et al. **FEBS Lett** 1989 Jan 30;243(2):267–70
Regulation of hepatic expression of IGF I and fetal IGF binding protein mRNA in streptozotocin–diabetic rats. Böni–Schnetzler M, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):253–6
Lipid phosphorylation in isolated rat liver nuclei. Synthesis of polyphosphoinositides at subnuclear level. Capitani S, et al. **FEBS Lett** 1989 Aug 28;254(1–2):194–8
n–butyrate and dexamethasone synergistically modulate the surface expression of epidermal growth factor receptors in cultured rat hepatocytes. Gladhaug IP, et al. **FEBS Lett** 1989 Jan 16;243(1):21–4
Hepatic ethanol metabolism is mediated predominantly by catalase–H2O2 in the fasted state. Handler JA, et al. **FEBS Lett** 1988 Sep 26;238(1):139–41
Isolation and sequencing of a cDNA clone encoding 107 kDa sialoglycoprotein in rat liver lysosomal membranes. Himeno M, et al. **FEBS Lett** 1989 Feb 27;244(2):351–6
Alpha 1–adrenergic stimulation causes Mg2+ release from perfused rat liver. Jakob A, et al. **FEBS Lett** 1989 Mar 27;246(1–2):127–30
In vitro translation of cytosolic and peroxisomal epoxide hydrolase and catalase on liver polyribosomes from untreated and clofibrate–treated C57B1/6 mice. Joste V, et al. **FEBS Lett** 1989 May 22;249(1):83–8
The 'cation–dependent' mannose 6–phosphate receptor binds ligands in the absence of divalent cations. Junghans U, et al. **FEBS Lett** 1988 Sep 12;237(1–2):81–4
Characterization of purinoceptors present on human liver plasma membranes. Keppens S, et al. **FEBS Lett** 1989 May 8;248(1–2):137–40
Three actin–binding proteins are developmentally regulated in rat liver plasma membranes. Keresztes M. **FEBS Lett** 1989 May 22;249(1):51–5
ATP stimulates the uptake of S–dinitrophenylglutathione by

rat liver plasma membrane vesicles. Kobayashi K, et al. **FEBS Lett** 1988 Nov 21;240(1–2):55–8

Transport of CMP–N–glycoloylneuraminic acid into mouse liver Golgi vesicles. Lepers A, et al. **FEBS Lett** 1989 Jul 3;250(2):245–50

Generation of phosphatidylinositol 4,5–bisphosphate proceeds through an intracellular route in rat hepatocytes. Lundberg GA, et al. **FEBS Lett** 1988 Nov 21; 240(1–2):171–6

Enhanced levels of cathepsin B mRNA in murine tumors. Moin K, et al. **FEBS Lett** 1989 Feb 13;244(1):61–4

Primary structure of rat liver elongation factor 2 deduced from the cDNA sequence. Oleinikov AV, et al. **FEBS Lett** 1989 May 8;248(1–2):131–6

Increase of glucose and lactate output and decrease of flow by human anaphylatoxin C3a but not C5a in perfused rat liver. Püschel GP, et al. **FEBS Lett** 1989 Jan 16;243(1):83–7

Treatment of intact hepatocytes with either the phorbol ester TPA or glucagon elicits the phosphorylation and functional inactivation of the inhibitory guanine nucleotide regulatory protein Gi. Pyne NJ, et al. **FEBS Lett** 1989 Jan 16; 243(1):77–82

Cellular fibronectin is induced by epidermal growth factor, but not by dexamethasone or cyclic AMP in rat liver epithelial cells. Seebacher T, et al. **FEBS Lett** 1988 Oct 24;239(1):113–6

A growth factor for hepatocytes is inactivated by sub–lethal gamma–irradiation in vivo or in vitro. Skouteris GG, et al. **FEBS Lett** 1989 Mar 13;245(1–2):155–8

Heterogeneous distribution of nuclear triiodothyronine receptors in liver and preadipose cells as evidenced by their reactivity to antibodies against different protein products of erb A oncogenes. Torresani J, et al. **FEBS Lett** 1989 Jul 3;250(2):251–6

Interaction of cytosol fractions containing activated glucocorticoid–receptor complexes from rat liver and thymus with heterologous nuclei: effects on transcription. Tzavaras TJ, et al. **FEBS Lett** 1989 Jun 19;250(1):30–4

The maximum of the histone acetyltransferase activity precedes DNA–synthesis in regenerating rat liver. Weiss G, et al. **FEBS Lett** 1988 Sep 26;238(1):205–10

An X–ray, microanalytical and ultrastructural study of cadmium absorption and transport in rat liver. Hulínská D, et al. **Folia Morphol (Praha)** 1989;37(1):78–88

Brugia malayi: status of host during different stages of infection. Joshi A, et al. **Folia Parasitol (Praha)** 1989; 36(2):169–75

Effects of human diets on biotransformation enzyme activity and metabolic activation of carcinogens in rat liver. Alink GM, et al. **Food Chem Toxicol** 1988 Nov–Dec; 26(11–12):883–91

Formation and persistence of ethylguanines in liver DNA of rainbow trout (Salmo gairdneri) treated with diethylnitrosamine by water exposure. Fong AT, et al. **Food Chem Toxicol** 1988 Aug;26(8):699–704

Interaction of nitrite with catalase in the perfused rat liver. Takano T, et al. **Food Chem Toxicol** 1988 Oct;26(10):837–9

Free radical activation of monomethyl and dimethyl hydrazines in isolated hepatocytes and liver microsomes. Albano E, et al. **Free Radic Biol Med** 1989;6(1):3–8

Lipid peroxidation induced by N–nitrosodimethylamine (NDMA) in rats in vivo and in isolated hepatocytes. Ahotupa M, et al. **Free Radic Res Commun** 1987; 3(1–5):285–91

The role of secondary messengers in the regulation of lipid peroxidation in rat liver microsomes. Baldenkov GN, et al. **Free Radic Res Commun** 1988;4(5):277–81

Two mechanisms of CCl4–induced fatty liver: lipid peroxidation or covalent binding studied in cultured rat hepatocytes. Becker E, et al. **Free Radic Res Commun** 1987; 3(1–5):299–308

Increased hepatic lipid peroxidation with methionine toxicity in the rat. Lynch SM, et al. **Free Radic Res Commun** 1989; 5(4–5):221–6

Inhibition of liver Golgi glycosylation activities by carbonyl products of lipid peroxidation. Marinari UM, et al. **Free Radic Res Commun** 1987;3(1–5):319–24

Free radical and cytotoxic effects of chelators and their iron complexes in the hepatocyte. Mostert LJ, et al. **Free Radic Res Commun** 1987;3(6):379–88

The decisive pO2–levels in haloalkane–mediated liver cell injury. Noll T, et al. **Free Radic Res Commun** 1987; 3(1–5):293–8

Damage of erythrocytes by activated oxygen generated in hypoxic rat liver. Siems W, et al. **Free Radic Res Commun** 1987;4(1):31–9

H2O2 formation during nucleotide degradation in the hypoxic rat liver: a quantitative approach. Siems W, et al. **Free Radic Res Commun** 1986;1(5):289–95

Possible binding sites for inositol 1,4,5–trisphosphate in canine tracheal smooth muscle cells and rat liver cells. Ishimatsu T. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):102–13

Evaluation of propanil and its N–oxidized derivatives for genotoxicity in the Salmonella typhimurium reversion, Chinese hamster ovary/hypoxanthine guanine phosphoribosyl transferase, and rat hepatocyte/DNA repair assays. McMillan DC, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):429–39

Interferon alpha and gamma positive mononuclear cells and HLA antigen expression on hepatocyte membrane in the liver in chronic type B and non–A, non–B hepatitis. Arao M, et al. **Gastroenterol Jpn** 1989 Jun;24(3):255–61

Immunoelectron microscopic observation of alpha–fetoprotein synthesis in human non–malignant liver tissues using immunoperoxidase methods. Kinoyama S, et al. **Gastroenterol Jpn** 1988 Aug;23(4):414–22

Specific lectin bindings to oval cells and proliferated bile ductules. Makino Y, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):658–65

Tryptophan metabolism in D–galactosamine–induced liver injury. Mizoguchi Y, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):534–7

Copper–induced hypercholesterolemia of golden hamsters: enhanced synthesis of cholesterol in the liver. Ohguchi S, et al. **Gastroenterol Jpn** 1988 Dec;23(6):629–32

Rat but not human interferons suppress hepatic oxidative drug metabolism in rats. Craig PI, et al. **Gastroenterology** 1989 Oct;97(4):999–1004

Effects of iron loading on free radical scavenging enzymes and lipid peroxidation in rat liver. Fletcher LM, et al. **Gastroenterology** 1989 Oct;97(4):1011–8

Clearance of gut–derived endotoxins by the liver. Release and modification of 3H, 14C–lipopolysaccharide by isolated rat Kupffer cells. Fox ES, et al. **Gastroenterology** 1989 Feb; 96(2 Pt 1):456–61

Preserved cytosolic and synthetic liver function in jaundice of severe extrahepatic infection. Pirovino M, et al. **Gastroenterology** 1989 Jun;96(6):1589–95

Fat–storing (Ito) cells of rat liver synthesize and secrete apolipoproteins: comparison with hepatocytes. Ramadori G, et al. **Gastroenterology** 1989 Jul;97(1):163–72

Ethanol, liver fibrosis, and the control of proteoglycan biosynthesis [letter] [published erratum appears in Gastroenterology 1989 Sep;97(3):813] Scott JE. **Gastroenterology** 1989 May;96(5 Pt 1):1376

Evidence that rat Kupffer cells stimulate and inhibit hepatocyte protein synthesis in vitro by different mechanisms. West MA, et al. **Gastroenterology** 1989 Jun; 96(6):1572–82

Immunocytochemical localization of myosin in normal and phalloidin–treated rat hepatocytes. Yasuura S, et al. **Gastroenterology** 1989 Oct;97(4):982–9

Insulin and the regulation of glycogen metabolism and gluconeogenesis in American eel hepatocytes. Foster GD, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):374–81

Binding of adrenergic ligands to liver plasma membrane preparations from the axolotl, Ambystoma mexicanum; the toad, Xenopus laevis; and the Australian lungfish, Neoceratodus forsteri. Janssens PA, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):524–30

Corticosteroid receptors in liver cytosol of the clawed toad, Xenopus laevis: influence of thyroid and ovarian hormones. Lange CB, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):485–97

Hydroxylation of phenylethylamine by rat liver preparations. Inhibition studies. Mosnaim AD, et al. **Gen Pharmacol** 1989; 20(4):463–7

A liver–specific factor essential for albumin transcription differs between differentiated and dedifferentiated rat hepatoma cells. Cereghini S, et al. **Genes Dev** 1988 Aug; 2(8):957–74

Isolation of a recombinant copy of the gene encoding C/EBP. Landschulz WH, et al. **Genes Dev** 1988 Jul; 2(7):786–800

Effect of aging on hepatic clearance of vasopressin in Fischer 344 rats. Shih AP, et al. **Gerontology** 1988;34(5–6):257–63

Essential trace metal concentrations in beagle liver and bone tissue after prolonged Zn–DTPA treatment. Jones CW, et al. **Health Phys** 1989 Feb;56(2):223–7

Binding and uptake of native and modified low–density lipoproteins by human hepatocytes in primary culture. Babaev VR, et al. **Hepatology** 1989 Jul;10(1):56–60

Reduced binding and removal of chylomicron remnants by ethionine–induced premalignant liver. Barnard GF, et al. **Hepatology** 1989 May;9(5):731–9

Acinar heterogeneity of fatty acid binding protein expression in the livers of male, female and clofibrate–treated rats. Bass NM, et al. **Hepatology** 1989 Jan;9(1):12–21

Anoxic hepatocyte injury: role of reversible changes in elemental content and distribution. Berger ML, et al. **Hepatology** 1989 Feb;9(2):219–28

Different capacities for amino acid transport in periportal and perivenous hepatocytes isolated by digitonin/collagenase perfusion. Burg [illegible]J, et al. **Hepatology** 1989 Jan;9(1):22–8

Expression of different members of heat shock protein 70 gene family in liver and hepatomas. Cairo G, et al. **Hepatology** 1989 May;9(5):740–6

Isolation, culture and main characteristics of mouse fat–storing cells: interaction with viruses. Chen W, et al. **Hepatology** 1989 Mar;9(3):352–62

Effect of molecular charge on para– and transcellular access of horseradish peroxidase into rat bile. Hardison WG, et al. **Hepatology** 1989 Jun;9(6):866–71

The effects of monensin on the transport of horseradish peroxidase into intracellular lumina in cultured rat hepatocytes. Hashieh IA, et al. **Hepatology** 1989 Jul; 10(1):61–5

Hepatocytic lipoprotein receptors and intracellular lipoprotein catabolism. Havel RJ, et al. **Hepatology** 1988 Nov–Dec;8(6):1689–704 (150 ref.)

Covalent binding of acetaldehyde to liver tubulin: a step in the right direction [editorial] Israel Y. **Hepatology** 1989 Jan; 9(1):161–2 (22 ref.)

Stimulation of DNA synthesis in hepatocytes by Kupffer cells after partial hepatectomy. Katsumoto F, et al. **Hepatology** 1989 Mar;9(3):405–10

The role of nonparenchymal and parenchymal liver cells in the catabolism of extracellular purines. Leser HG, et al. **Hepatology** 1989 Jul;10(1):66–71

Regulation of the hepatic transferrin receptor in hereditary hemochromatosis. Lombard M, et al. **Hepatology** 1989 Jan; 9(1):1–5

In situ hybridization for procollagen types I, III and IV mRNA in normal and fibrotic rat liver: evidence for predominant expression in nonparenchymal liver cells. Milani S, et al. **Hepatology** 1989 Jul;10(1):84–92

Androgen receptor analysis on needle biopsy of the liver: a step closer in determining whether hepatocellular carcinomas are sex hormone–sensitive. Mishkin S, et al. **Hepatology** 1989 Mar;9(3):509

Taurocholate transport by basolateral plasma membrane vesicles isolated from human liver. Novak DA, et al. **Hepatology** 1989 Oct;10(4):447–53

Selective hepatobiliary transport of nordeoxycholate side chain conjugates in mutant rats with a canalicular transport defect. Oude Elferink RP, et al. **Hepatology** 1989 Jun; 9(6):861–5

Severe cholestasis leads to vitamin D depletion without perturbing its C–25 hydroxylation in the dog. Plourde V, et al. **Hepatology** 1988 Nov–Dec;8(6):1577–85

Hepatic metabolism of colloidal gold–low–density lipoprotein complexes in the rat: evidence for bulk excretion of lysosomal contents into bile. Renaud G, et al. **Hepatology** 1989 Mar;9(3):380–92

Cellular analysis of c–Ha–ras gene expression in rat liver after CCl4 administration. Sasaki Y, et al. **Hepatology** 1989 Oct; 10(4):494–500

Do branched chain keto amino acids regulate their own metabolism? Schauder P. **Hepatology** 1988 Nov–Dec; 8(6):1716–8

A quantitative study of fluorescein isothiocyanate–dextran transport in the microcirculation of the isolated perfused rat liver. Stock RJ, et al. **Hepatology** 1989 Jan;9(1):75–82

Incomplete compensation of enhanced hepatic oxygen consumption in rats with alcoholic centrilobular liver necrosis. Tsukamoto H, et al. **Hepatology** 1989 Feb; 9(2):302–6

Heterogeneous acinar localization of the asialoglycoprotein internalization system in rat hepatocytes. van der Sluijs P, et al. **Hepatology** 1988 Nov–Dec;8(6):1521–9

Thyroid hormones and the hepatic handling of bilirubin. I. Effects of hypothyroidism and hyperthyroidism on the hepatic transport of bilirubin mono– and diconjugates in the Wistar rat. Van Steenbergen W, et al. **Hepatology** 1989 Feb;9(2):314–21

Aging and determinants of hepatic drug clearance. Vestal RE. **Hepatology** 1989 Feb;9(2):331–4 (45 ref.)

Effect of repetitive low–dose endotoxin on liver parenchymal and Kupffer cell fibronectin release. Vincent PA, et al. **Hepatology** 1989 Apr;9(4):562–9

Serial antipyrine clearance studies detect altered hepatic metabolic function during spontaneous and interferon–induced changes in chronic hepatitis B disease activity. Williams SJ, et al. **Hepatology** 1989 Aug; 10(2):192–7

Mercury–selenium interactions in relation to histochemical staining of mercury in the rat liver. Baatrup E, et al. **Histochem J** 1989 Feb;21(2):89–98

Morphometric cytochemistry of diminution of catalase–containing peroxisomes in copper–loaded liver. Homer BL, et al. **Histochem J** 1989 Feb;21(2):63–71

Optimizing the immunohistochemical signal from the transferrin receptor in liver tissue. Lombard M, et al. **Histochem J** 1989 Apr;21(4):223–7

Some comments on the mechanism of the periodic acid–Schiff–Alcian blue method. Reid PE, et al. **Histochem J** 1988 Nov;20(11):651–4

In situ localization of transthyretin–mRNA in the adult human liver, choroid plexus and pancreatic islets and in endocrine tumours of the pancreas and gut. Jacobsson B. **Histochemistry** 1989;91(4):299–304

Changes in the patching and capping of insulin receptors under the influence of hormonal imprinting. Kovács P, et al. **Histochemistry** 1988;90(3):241–4

Cytochemical localization of DNA loop attachment sites to the nuclear lamina and to the inner nuclear matrix. Zini N, et al. **Histochemistry** 1989;91(3):199–204

Massive pericellular collagen deposition in the liver of a young female with severe Crohn's disease. Bosma A, et al. **Histopathology** 1989 Jan;14(1):81–90

A study of hepatic metabolism of thyroxine in BB/W rats treated with L–thyroxine. Banovac K, et al. **Horm Metab Res** 1989 Feb;21(2):69–72

Prolactin influences the circadian rhythm of lipogenesis in primary cultured hepatocytes. Cincotta AH, et al. **Horm Metab Res** 1989 Feb;21(2):64–8

No effect of long–term DHEA treatment on either hepatocyte and adipocyte pentose pathway activity or adipocyte glycerol release. Diersen–Schade DA, et al. **Horm Metab Res** 1989 Jul;21(7):356–8

Hepatic and adipose tissue lipogenesis as related to age and thyroid status in the rat. Levacher C, et al. **Horm Metab Res** 1988 Jul;20(7):395–9

Hypolipidemic effect of intravenous pluronic L–81 in fasted rats treated with Triton WR–1339: possible inhibition of

hepatic lipoprotein secretion. Nutting DF, et al. **Horm Metab Res** 1989 Mar;21(3):113–5

Regulation of the intravascular pathways of intestinal lipids. Windler E, et al. **Horm Metab Res Suppl** 1988;19:4–6 (9 ref.)

Effect of theophylline and salbutamol on hepatic drug metabolism. Døssing M, et al. **Hum Toxicol** 1989 May; 8(3):225–8

Glutathione peroxidase and catalase in liver, kidney, testis and brain regions of rats following cadmium exposure and subsequent withdrawal. Shukla GS, et al. **Ind Health** 1989; 27(2):59–69

In vitro effect of ions in presence of insulin and acetylcholine on glucose uptake or release by liver of domestic pigeons Columba livia. Pilo B, et al. **Indian J Exp Biol** 1988 Apr; 26(4):312–4

Association of proteoglycans with other extracellular matrix macromolecules in liver. Unnikrishnan VS, et al. **Indian J Exp Biol** 1988 Oct;26(10):784–9

Protein synthesis in human foetal brain & liver. Samanta BK, et al. **Indian J Med Res** 1989 Feb;90:69–76

Lithium distribution in partially hepatectomized rats. Kaur G, et al. **Indian J Med Sci** 1988 Nov;42(11):263–5

Hepatic drug metabolizing capacity of patients of cirrhosis before and after clinico–biochemical recovery. Chauhan CK, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar; 33(1):63–6

Effect of dietary restriction with and without leucine supplementation on hepatic protein status in rats. Chugh K, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):41–6

Effects of monocytic products, recombinant interleukin–1, and recombinant interleukin–6 on glycosylation of alpha 1–acid glycoprotein: studies with primary human hepatocyte cultures and rats. Pos O, et al. **Inflammation** 1989 Aug;13(4):415–27

Regulation of protein synthesis in intact rat liver by calcium mobilizing agents. Chin KV, et al. **Int J Biochem** 1988; 20(11):1313–9

Degradation of endogenous proteins and internalized asialofetuin in primary cultured hepatocytes of rats. Kato H, et al. **Int J Biochem** 1989;21(5):483–95

Differences among chicken erythrocyte histones H1 and H5 in associating with H1–depleted polynucleosomes. Klingholz R, et al. **Int J Biochem** 1988;20(11):1321–5

Why the L–type pentose pathway does not function in liver. Landau BR. **Int J Biochem** 1989;21(1):99–102 (33 ref.)

Zhi–mu saponin inhibits alpha–fetoprotein gene expression in developing rat liver. Li PM, et al. **Int J Biochem** 1989; 21(1):15–22

Regulation of biogenesis of liver delta–aminolevulinate synthase: effects of structural modifications of heme on the enzyme's RNA. Lorber BJ, et al. **Int J Biochem** 1989; 21(4):439–43

Temporal changes in plasma and liver lipids and in the hepatic activities of acetyl–coenzyme a carboxylase and fatty acid synthetase after oestrogen treatment of the male chicken (Gallus domesticus). Manning R, et al. **Int J Biochem** 1989;21(5):517–23

Studies on ferritin in rat liver and spleen during repeated phlebotomy. Mostert LJ, et al. **Int J Biochem** 1989; 21(1):39–47

Intermediate peptides of insulin degradation in liver and cultured hepatocytes of rats. Takahashi S, et al. **Int J Biochem** 1988;20(12):1369–80

Microinjection of endogenous and exogenous proteins into primary cultures of rat hepatocytes and the degradation of the injected proteins. Takenaka A, et al. **Int J Biochem** 1989;21(5):497–508

Pharmacokinetics of ciprofloxacin in impaired liver function. Esposito S, et al. **Int J Clin Pharmacol Res** 1989;9(1):37–41

Phenazone pharmacokinetics as an index of hepatic metabolic efficiency. Wiela A, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):562–5

Influence of genetic obesity and of fat–feeding on hepatic FABP concentration and activity. Malewiak MI, et al. **Int J Obes** 1988;12(6):543–6

Iododeoxyuridine (IdUrd) incorporation into DNA of human hematopoietic cells, normal liver and hepatic metastases in man: as a radiosensitizer and as a marker for cell kinetic studies. Speth PA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1247–50

Tryptophan metabolism by the isolated rat liver cells—effects of leucine and its metabolites. Kiyohara Y, et al. **Int J Vitam Nutr Res** 1989;59(1):85–92

Inositol and choline levels in the diet and neutral lipid hepatic content of lactating rat. Leclerc J, et al. **Int J Vitam Nutr Res** 1989;59(2):180–3

Enterohepatic circulation of newly administered alpha–tocopherol in the rat. Lee–Kim YC, et al. **Int J Vitam Nutr Res** 1988;58(3):284–91

The effect of cholesterol feeding on lipid peroxide, glutathione, glutathione peroxidase and glutathione transferase in the liver of rats. Uysal M, et al. **Int J Vitam Nutr Res** 1988;58(3):339–42

The stimulating effect of a cytosol extract from regenerating liver on isolated hepatocytes and the positive role of insulin. Gorini P, et al. **Ital J Surg Sci** 1988;18(3):201–5

Hepatic triacylglycerol synthesis during a period of fatty liver development in sheep. Herdt TH, et al. **J Anim Sci** 1988 Aug;66(8):1997–2013

CO2 and bicarbonate exchange in the rat liver. Lipsen B, et al. **J Appl Physiol** 1988 Dec;65(6):2736–43

Effect of liver glycogen content on glucose production in running rats. Vissing J, et al. **J Appl Physiol** 1989 Jan; 66(1):318–22

Regulation of hepatic glucose production in running rats studied by glucose infusion. Vissing J, et al. **J Appl Physiol** 1988 Dec;65(6):2552–7

Effect of cimetidine on hepatic biochemical changes, liver toxicity and major urinary metabolite excretion of trichloroethylene in rats. Landriault H, et al. **J Appl Toxicol** 1989 Apr;9(2):75–81

Single base substitution between human intestinal and hepatic apolipoprotein B mRNA detected by ribonuclease cleavage analysis. Aburatani H, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):911–5

Taurine transport across hepatocyte plasma membranes: analysis in isolated rat liver sinusoidal plasma membrane vesicles. Inoue M, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):155–8

Compensatory route of spermidine acetylation and oxidation can supply sufficient putrescine for hepatic DNA synthesis at an early stage after partial hepatectomy in diaminopropane–treated rats. Sato Y, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):98–101

Hepatic accumulation of pyrophosphate during acetate metabolism. Yamada T, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):847–50

Effect of verapamil on glycogenolysis and gluconeogenesis in the perfused rat liver. Badr M. **J Biochem Toxicol** 1989 Spring;4(1):35–7

Assessment of arsenic effects on cytosolic heme status using tryptophan pyrrolase as an index. Cebrián ME, et al. **J Biochem Toxicol** 1988 Summer;3:77–86

Liver cell calcium homeostasis in carbon tetrachloride liver cell injury: new data with fura2. Dolak JA, et al. **J Biochem Toxicol** 1988 Winter;3:329–42

Altered activation/detoxication enzymology following neonatal diethylstilbestrol treatment. Lamartiniere CA, et al. **J Biochem Toxicol** 1988 Summer;3:87–103

Hepatic polyamines and related enzymes following chlordecone–potentiated carbon tetrachloride toxicity in rats. Rao SB, et al. **J Biochem Toxicol** 1989 Spring; 4(1):55–63

Induction of single–strand breaks and interstrand cross–links in liver DNA after the administration of 2–acetylaminofluorene and trans–4–acetylaminostilbene to rats. Ruthsatz M, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:271–9

Effects of six months' feeding of cypermethrin on the blood and liver of albino rats. Shakoori AR, et al. **J Biochem Toxicol** 1988 Spring;3:59–71

Effect of 2,3,7,8–tetrachlorodibenzo–p–dioxin on the hepatic distribution of iron, copper, zinc, and magnesium in rats. Wahba ZZ, et al. **J Biochem Toxicol** 1988 Summer;3:121–9

Changes in the concentration and fatty acid composition of phosphoinositides induced by hormones in hepatocytes. Augert G, et al. **J Biol Chem** 1989 Feb 15;264(5):2574–80

Cloning and characterization of the mouse gene that encodes the peptide core of secretory granule proteoglycans and expression of this gene in transfected rat–1 fibroblasts. Avraham S, et al. **J Biol Chem** 1989 Oct 5;264(28):16719–26

A 14–kilodalton selenium–binding protein in mouse liver is fatty acid–binding protein. Bansal MP, et al. **J Biol Chem** 1989 Aug 15;264(23):13780–4

Dissociation of fibrinogen and fibronectin binding from transglutaminase–mediated cross–linking at the hepatocyte surface. Barsigian C, et al. **J Biol Chem** 1988 Oct 5; 263(28):14015–22

Human apolipoprotein A–I. Post–translational modification by covalent phosphorylation. Beg ZH, et al. **J Biol Chem** 1989 Apr 15;264(12):6913–21

Effects of apolipoproteins A–IV and A–I on the uptake of phospholipid liposomes by hepatocytes. Bisgaier CL, et al. **J Biol Chem** 1989 Jan 15;264(2):862–6

Characterization of the angiotensin II receptor in primary cultures of rat hepatocytes. Evidence that a single population is coupled to two different responses. Bouscarel B, et al. **J Biol Chem** 1988 Oct 15;263(29):14913–9

Agonist–induced down–regulation of the angiotensin II receptor in primary cultures of rat hepatocytes. Bouscarel B, et al. **J Biol Chem** 1988 Oct 15;263(29):14920–4

Differential association of rat liver heparan sulfate proteoglycans in membranes of the Golgi apparatus and the plasma membrane. Brandan E, et al. **J Biol Chem** 1989 Jun 25;264(18):10520–6

The chicken liver cation–independent mannose 6–phosphate receptor lacks the high affinity binding site for insulin–like growth factor II. Canfield WM, et al. **J Biol Chem** 1989 May 5;264(13):7100–3

Mechanism of phosphorylation in the lumen of the Golgi apparatus. Translocation of adenosine 5'–triphosphate into Golgi vesicles from rat liver and mammary gland. Capasso JM, et al. **J Biol Chem** 1989 Mar 25;264(9):5233–40

Microtubule depolymerization inhibits the regulation of alpha 1–acid glycoprotein mRNA by hepatocyte stimulating factor. Carter KC, et al. **J Biol Chem** 1989 Jan 5; 264(1):515–9

Deadenylation of alpha 1–acid glycoprotein mRNA in cultured hepatic cells during stimulation by dexamethasone. Carter KC, et al. **J Biol Chem** 1989 Mar 5;264(7):4112–9

Channeling of urea cycle intermediates in situ in permeabilized hepatocytes. Cheung CW, et al. **J Biol Chem** 1989 Mar 5;264(7):4038–44

Vasopressin inhibits type–I collagen and albumin gene expression in primary cultures of adult rat hepatocytes. Chojkier M, et al. **J Biol Chem** 1989 Jun 5;264(16):9583–91

Fatty acid interactions with rat intestinal and liver fatty acid–binding proteins expressed in Escherichia coli. A comparative 13C NMR study. Cistola DP, et al. **J Biol Chem** 1989 Feb 15;264(5):2700–10

Identification of a cell surface–binding protein for the core protein of the basement membrane proteoglycan. Clément B, et al. **J Biol Chem** 1989 Jul 25;264(21):12467–71

Characteristics of bile acid–mediated Ca2+ release from permeabilized liver cells and liver microsomes. Combettes L, et al. **J Biol Chem** 1989 Jan 5;264(1):157–67

A multisubunit transcription factor essential for accurate initiation by RNA polymerase II. Conaway JW, et al. **J Biol Chem** 1989 Feb 5;264(4):2357–62

Increased translatable mRNA and decreased lipogenesis are responsible for the augmented secretion of lipid–deficient apolipoprotein E by hepatocytes from fasted rats. Davis RA, et al. **J Biol Chem** 1989 May 25;264(15):8970–7

Purification of oxysterol binding protein from hamster liver cytosol. Dawson PA, et al. **J Biol Chem** 1989 May 25; 264(15):9046–52

Separation and characterization of 7 and 9 S forms of rat liver aryl hydrocarbon receptor. Dougherty JJ. **J Biol Chem** 1989 May 25;264(15):8786–90

Synthesis and properties of 5–azido–UDP–glucose. Development of photoaffinity probes for nucleotide diphosphate sugar binding sites. Drake RR Jr, et al. **J Biol Chem** 1989 Jul 15;264(20):11928–33

Solubilization and reconstitution characteristics of hepatic system A–mediated amino acid transport. Fafournoux P, et al. **J Biol Chem** 1989 Mar 25;264(9):4805–11

An estradiol–dependent protein from chicken liver binds single–stranded DNA and RNA. Feavers IM, et al. **J Biol Chem** 1989 Jun 5;264(16):9114–7

Acidification and ion permeabilities of highly purified rat liver endosomes. Fuchs R, et al. **J Biol Chem** 1989 Feb 5;264(4):2212–20

Brefeldin A causes disassembly of the Golgi complex and accumulation of secretory proteins in the endoplasmic reticulum. Fujiwara T, et al. **J Biol Chem** 1988 Dec 5; 263(34):18545–52

Interaction of a positive regulatory factor(s) with a 106–base pair upstream region controls transcription of metallothionein–I gene in the liver. Garg LC, et al. **J Biol Chem** 1989 Feb 5;264(4):2134–8

Identification of integrin–like matrix receptors with affinity for interstitial collagens. Gullberg D, et al. **J Biol Chem** 1989 Jul 25;264(21):12686–94

Stabilization of glycogen stores and stimulation of glycogen synthesis in hepatocytes by phenacyl imidazolium compounds. Harris RA, et al. **J Biol Chem** 1989 Sep 5; 264(25):14674–80

Biogenesis of the somatogenic receptor in rat liver. Husman B, et al. **J Biol Chem** 1989 Jan 15;264(2):690–7

Chylomicron–chylomicron remnant clearance by liver and bone marrow in rabbits. Factors that modify tissue–specific uptake. Hussain MM, et al. **J Biol Chem** 1989 Jun 5; 264(16):9571–82

Regulation of hepatic glycine catabolism by glucagon. Jois M, et al. **J Biol Chem** 1989 Feb 25;264(6):3347–51

Transport of N–acetyl–D–glucosamine and N–acetyl–D–galactosamine by rat liver lysosomes. Jonas AJ, et al. **J Biol Chem** 1989 Mar 25;264(9):4953–6

Rapid induction of rat liver S14 gene transcription by thyroid hormone. Jump DB. **J Biol Chem** 1989 Mar 15; 264(8):4698–703

Differential tissue expression of three 35–kDa annexin calcium–dependent phospholipid–binding proteins. Kaetzel MA, et al. **J Biol Chem** 1989 Aug 25;264(24):14463–70

The function of Gp170, the multidrug resistance gene product, in rat liver canalicular membrane vesicles. Kamimoto Y, et al. **J Biol Chem** 1989 Jul 15; 264(20):11693–8

Introduction and expression of the human insulin gene in adult rat liver. Kaneda Y, et al. **J Biol Chem** 1989 Jul 25; 264(21):12126–9

Insulin and epidermal growth factor stimulate phosphorylation of a 170–kDa protein in intact hepatocytes immunologically related to lipocortin 1. Karasik A, et al. **J Biol Chem** 1988 Dec 5;263(34):18558–62

2,5–Di–(tert–butyl)–1,4–benzohydroquinone rapidly elevates cytosolic Ca2+ concentration by mobilizing the inositol 1,4,5–trisphosphate–sensitive Ca2+ pool. Kass GE, et al. **J Biol Chem** 1989 Sep 15;264(26):15192–8

Characterization of the interaction in vivo of tissue–type plasminogen activator with liver cells. Kuiper J, et al. **J Biol Chem** 1988 Dec 5;263(34):18220–4

The fatty liver dystrophy (fld) mutation. A new mutant mouse with a developmental abnormality in triglyceride metabolism and associated tissue–specific defects in lipoprotein lipase and hepatic lipase activities. Langner CA, et al. **J Biol Chem** 1989 May 15;264(14):7994–8003

A regulatory element in the ApoCIII promoter that directs hepatic specific transcription binds to proteins in expressing and nonexpressing cell types. Leff T, et al. **J Biol Chem** 1989 Sep 25;264(27):16132–7

Free acetate production by rat hepatocytes during peroxisomal fatty acid and dicarboxylic acid oxidation. Leighton F, et al. **J Biol Chem** 1989 Jun 25;

264(18):10347–50
Subunit structure of the erythropoietin receptor. McCaffery PJ, et al. J Biol Chem 1989 Jun 25;264(18):10507–12
Hormonal regulation of inositol 1,4,5–trisphosphate receptor in rat liver. Mauger JP, et al. J Biol Chem 1989 May 25; 264(15):8821–6
Lipid synthesis in permeabilized cultured rat hepatocytes. Mayorek N, et al. J Biol Chem 1989 Mar 15;264(8):4450–5
Enhanced carrier–mediated lactate entry into isolated hepatocytes from starved and diabetic rats. Metcalfe HK, et al. J Biol Chem 1988 Dec 25;263(36):19505–9
Modulation of the amino acid control of hepatic protein degradation by caloric deprivation. Two modes of alanine co–regulation. Mortimore GE, et al. J Biol Chem 1988 Dec 25;263(36):19545–51
Increase in surface expression of transferrin receptors on cultured hepatocytes of adult rats in response to iron deficiency. Muller–Eberhard U, et al. J Biol Chem 1988 Oct 15;263(29):14753–6
Role of low density lipoprotein receptor–dependent and –independent sites in binding and uptake of chylomicron remnants in rat liver. Nagata Y, et al. J Biol Chem 1988 Oct 15;263(29):15151–8
Perturbation of insulin–receptor interactions by intramolecular hormone cross–linking. Analysis of relative movement among residues A1, B1, and B29. Nakagawa SH, et al. J Biol Chem 1989 Jan 5;264(1):272–9
The nicotinamide adenine dinucleotide–binding site of chicken liver xanthine dehydrogenase. Evidence for alteration of the redox potential of the flavin by NAD binding or modification of the NAD–binding site and isolation of a modified peptide. Nishino T, et al. J Biol Chem 1989 Apr 5;264(10):5468–73
Hyperosmolarity inhibits galactosyl receptor–mediated but not fluid phase endocytosis in isolated rat hepatocytes. Oka JA, et al. J Biol Chem 1989 Jul 15;264(20):12016–24
Purification and protein sequence analysis of rat liver prolactin receptor. Okamura H, et al. J Biol Chem 1989 Apr 5;264(10):5904–11
Intrahepatocellular site of the catabolism of heme and globin moiety of hemoglobin–haptoglobin after intravenous administration to rats. Oshiro S, et al. J Biol Chem 1988 Nov 5;263(31):16032–8
Characterization of a glutathione conjugate of the 1,4–benzosemiquinone–free radical formed in rat hepatocytes. Rao DN, et al. J Biol Chem 1988 Dec 5; 263(34):17981–6
The albumin receptor effect may be due to a surface–induced conformational change in albumin. Reed RG, et al. J Biol Chem 1989 Jun 15;264(17):9867–72
Tissue– and species–specific regulation of murine alpha 1–antitrypsin gene transcription. Rheaume C, et al. J Biol Chem 1988 Oct 15;263(29):15118–21
Mechanism of the cholesteryl ester transfer protein–mediated uptake of high density lipoprotein cholesteryl esters by Hep G2 cells. Rinninger F, et al. J Biol Chem 1989 Apr 15; 264(11):6111–8
Estrogen treatment increases phospholipid transfer activities in chicken liver. Rusiñol AE, et al. J Biol Chem 1989 Apr 25;264(12):6612–4
Hepatic bile acid metabolism during early development revealed from the analysis of human fetal gallbladder bile. Setchell KD, et al. J Biol Chem 1988 Nov 15; 263(32):16637–44
Hepatic glycogen synthesis from duodenal glucose and alanine. An in situ 13C NMR study. Shalwitz RA, et al. J Biol Chem 1989 Mar 5;264(7):3930–4
Elevated synthesis of human alpha 1–antitrypsin hinders the secretion of murine alpha 1–antitrypsin from hepatocytes of transgenic mice. Sifers RN, et al. J Biol Chem 1989 Sep 15;264(26):15696–700
Free sphingosine formation from endogenous substrates by a liver plasma membrane system with a divalent cation dependence and a neutral pH optimum. Slife CW, et al. J Biol Chem 1989 Jun 25;264(18):10371–7
Studies on the expression of genes encoding apolipoproteins B100 and B48 and the low density lipoprotein receptor in nonhuman primates. Comparison of dietary fat and cholesterol. Sorci–Thomas M, et al. J Biol Chem 1989 May 25;264(15):9039–45
Beta 2–adrenergic agonist regulation of immune aggregate– and platelet–activating factor–stimulated hepatic metabolism. Steinhelper ME, et al. J Biol Chem 1989 Jul 5;264(19):10976–81
Studies of the fatty acid–binding site of rat liver fatty acid–binding protein using fluorescent fatty acids. Storch J, et al. J Biol Chem 1989 May 25;264(15):8708–13
Amino acid limitation negatively regulates insulin–like growth factor–II mRNA levels and E–domain peptide secretion at a post–transcriptional step in BRL–3A rat liver cells. Straus DS, et al. J Biol Chem 1988 Dec 5; 263(34):18404–10
Effect of sucrose diet on apolipoprotein biosynthesis in rat liver. Increase in apolipoprotein E gene transcription. Strobl W, et al. J Biol Chem 1989 Jan 15;264(2):1190–4
Endocytic uptake of nonenzymatically glycosylated proteins is mediated by a scavenger receptor for aldehyde–modified proteins. Takata K, et al. J Biol Chem 1988 Oct 15; 263(29):14819–25
A possible role of inorganic phosphate as a regulator of oxidative phosphorylation in combined urea synthesis and gluconeogenesis in perfused rat liver. A phosphorus magnetic resonance spectroscopy study. Tanaka A, et al. J Biol Chem 1989 Jun 15;264(17):10034–40
Effect of insulin and insulin–like growth factors I and II on phosphatidylinositol and phosphatidylinositol 4,5–bisphosphate breakdown in liver from humans with and without type II diabetes. Thakker JK, et al. J Biol Chem 1989 May 5;264(13):7169–75
Hepatocytes and reticulocytes have different mechanisms for the uptake of iron from transferrin. Thorstensen K. J Biol Chem 1988 Nov 15;263(32):16837–41
Subcellular binding and effects on calcium homeostasis produced by acetaminophen and a nonhepatotoxic regioisomer, 3'–hydroxyacetanilide, in mouse liver. Tirmenstein MA, et al. J Biol Chem 1989 Jun 15; 264(17):9814–9
Hydrolysis of dolichyl esters by rat liver lysosomes. Tollbom O, et al. J Biol Chem 1989 Jun 15;264(17):9836–41
Induction of P–450IIB genes within the rat liver acinus is not dependent on the chemical inducer or on the acinar organization. Traber PG, et al. J Biol Chem 1989 Jun 15; 264(17):10292–8
Purification of a specific repressor of ferritin mRNA translation from rabbit liver. Walden WE, et al. J Biol Chem 1989 Aug 15;264(23):13765–9
Ligand–induced modulation of the hepatic receptor for asialoglycoproteins. Evidence for the role of cell surface hyposialylation. Weiss P, et al. J Biol Chem 1989 Jul 15; 264(20):11572–4
A hepatocyte–specific basolateral membrane protein is targeted to the same domain when expressed in Madin–Darby canine kidney cells. Wessels HP, et al. J Biol Chem 1989 Jan 5;264(1):17–20
Head group specificity in the requirement of phosphatidylcholine biosynthesis for very low density lipoprotein secretion from cultured hepatocytes. Yao ZM, et al. J Biol Chem 1989 Jul 5;264(19):11373–80
Glucose phosphorylation is not rate limiting for accumulation of glycogen from glucose in perfused livers from fasted rats. Youn JH, et al. J Biol Chem 1989 Jan 5;264(1):168–72
Recombinant tumor necrosis factor reduces hepatic drug metabolism in vivo in the rat. Duan L, et al. J Biol Response Mod 1988 Aug;7(4):365–70
Rapid action of 1,25–dihydroxyvitamin D3 on hepatocyte phospholipids. Baran DT, et al. J Bone Miner Res 1988 Dec;3(6):593–600
Hepatic handling of vitamin D3 in micronodular cirrhosis: a structure–function study in the rat. Plourde V, et al. J Bone Miner Res 1988 Aug;3(4):461–71
In vivo short–term assays of repair and replication of rat liver DNA. Sawada S, et al. J Cancer Res Clin Oncol 1989; 115(4):345–50
Effect of oxidative iodination of epidermal growth factor on its binding and secretion by hepatocytes. Marti U, et al. J Cell Biochem 1989 May;40(1):109–19
Subcellular localization of sterol carrier protein–2 in rat hepatocytes: its primary localization to peroxisomes. Keller GA, et al. J Cell Biol 1989 Apr;108(4):1353–61
Differential arrest of secretory protein transport in cultured rat hepatocytes by azide treatment. Persson R, et al. J Cell Biol 1988 Dec;107(6 Pt 2):2503–10
Transgenic expression of the muscle–specific intermediate filament protein desmin in nonmuscle cells. Pieper FR, et al. J Cell Biol 1989 Mar;108(3):1009–24
Relations between the intracellular pathways of the receptors for transferrin, asialoglycoprotein, and mannose 6–phosphate in human hepatoma cells. Stoorvogel W, et al. J Cell Biol 1989 Jun;108(6):2137–48
Cortisol induction of metallothionein in primary culture of rainbow trout hepatocytes. Hyllner SJ, et al. J Cell Physiol 1989 Apr;139(1):24–8
Effects of temperature on the degradation and biliary secretion of asialoorosomucoid by the perfused rat liver: evidence for two intracellular pathways. Kloppel TM. J Cell Physiol 1989 Mar;138(3):555–60
Comparison of uptake kinetics in freshly isolated suspensions and short–term primary cultures of rat hepatocytes. Kukongviriyapan V, et al. J Cell Physiol 1989 Sep; 140(3):491–7
Regulation of beta–adrenergic receptor expression in rat liver. Schleifer LS, et al. J Cell Physiol 1989 Jul;140(1):52–8
Direct evidence for nuclear and cytoplasmic colocalization of proteasomes (multiprotease complexes) in liver. Tanaka K, et al. J Cell Physiol 1989 Apr;139(1):34–41
Gas chromatographic–mass spectrometric study of deacetylation and oxidation of 2–acetylaminofluorene by rat liver epithelial cell lines upon cocarcinogen induction. Diez Ibañez MA, et al. J Chromatogr 1989 Mar 17; 488(1):237–48
Biotransformation of beta–nortestosterone by cultured porcine hepatocytes. Hoogenboom LA, et al. J Chromatogr 1989 Apr 7;489(1):105–9
Rapid method for the determination and quantification of bromosulphophthalein and metabolites in cultured hepatocytes, culture media and bile by high–performance liquid chromatography. Van 't Klooster GA, et al. J Chromatogr 1988 Nov 18;432:223–31
Comparison of sulphated glycosaminoglycan and hyaluronate synthesis and secretion in cultured hepatocytes, fat storing cells, and Kupffer cells. Gressner AM, et al. J Clin Chem Clin Biochem 1989 Mar;27(3):141–9
Accumulation of iron and iron compounds in liver tissue. A comparative study of the histological and chemical estimation of liver iron [published erratum appears in J Clin Chem Clin Biochem 1989 Jun;27(6):349] van Deursen C, et al. J Clin Chem Clin Biochem 1988 Oct;26(10):617–22
Effect of time on measurement of hepatic glucose production. Chen YD, et al. J Clin Endocrinol Metab 1988 Nov; 67(5):1084–8
Regulation of growth hormone–independent insulin–like growth factor–binding protein (BP–28) in cultured human fetal liver explants. Lewitt MS, et al. J Clin Endocrinol Metab 1989 Aug;69(2):246–52
No evidence for a defect in growth hormone binding to liver membranes in thalassemia major. Postel–Vinay MC, et al. J Clin Endocrinol Metab 1989 Jan;68(1):94–8
Normal cellular uptake of thyroxine from serum of patients with familial dysalbuminemic hyperthyroxinemia or elevated thyroxine–binding globulin. Sarne DH, et al. J Clin Endocrinol Metab 1988 Dec;67(6):1166–70
Prehepatic beta–cell secretion during the intravenous glucose tolerance test in humans: application of a combined model of insulin and C–peptide kinetics. Watanabe RM, et al. J Clin Endocrinol Metab 1989 Oct;69(4):790–7
Hepatic adenosine triphosphate–dependent Ca2+ transport is mediated by distinct carriers on rat basolateral and canalicular membranes. Blitzer BL, et al. J Clin Invest 1989 Apr;83(4):1319–25
Hepatobiliary transport of glutathione and glutathione conjugate in rats with hereditary hyperbilirubinemia. Elferink RP, et al. J Clin Invest 1989 Aug;84(2):476–83
Immunohistochemical localization of low density lipoprotein receptors in adrenal gland, liver, and intestine. Fong LG, et al. J Clin Invest 1989 Sep;84(3):847–56
Bicarbonate–dependent and –independent intracellular pH regulatory mechanisms in rat hepatocytes. Evidence for Na+–HCO3– cotransport. Gleeson D, et al. J Clin Invest 1989 Jul;84(1):312–21
Intracellular pH during "chemical hypoxia" in cultured rat hepatocytes. Protection by intracellular acidosis against the onset of cell death. Gores GJ, et al. J Clin Invest 1989 Feb;83(2):386–96
Clearance of atrial natriuretic factor by lung, liver, and kidney in human subjects and the dog. Hollister AS, et al. J Clin Invest 1989 Feb;83(2):623–8
Immunoperoxidase localization of bile salts in rat liver cells. Evidence for a role of the Golgi apparatus in bile salt transport. Lamri Y, et al. J Clin Invest 1988 Oct; 82(4):1173–82
Guanine nucleotide binding regulatory proteins and adenylate cyclase in livers of streptozotocin– and BB/Wor–diabetic rats. Immunodetection of Gs and Gi with antisera prepared against synthetic peptides. Lynch CJ, et al. J Clin Invest 1989 Jun;83(6):2050–62
Rat hepatocytes exhibit basolateral Na+/HCO3– cotransport. Renner EL, et al. J Clin Invest 1989 Apr; 83(4):1225–35
Dietary fish oil stimulates hepatic low density lipoprotein transport in the rat. Ventura MA, et al. J Clin Invest 1989 Aug;84(2):528–37
Hepatic oleate uptake. Electrochemical driving forces in intact rat liver. Weisiger RA, et al. J Clin Invest 1989 Feb; 83(2):411–20
Elimination kinetics of circulating antigens and immune complexes. II. Hepatic and extrahepatic elimination of chemically modified albumin preparations in relation to their non–specific physicochemical properties. Skogh T, et al. J Clin Lab Immunol 1988 Sep;27(1):13–7
In vivo oxidation of the methyl group of hepatic 5–methyltetrahydrofolate. Lumb M, et al. J Clin Pathol 1988 Nov;41(11):1158–62
Saturable first–pass kinetics of propranolol. Keller F, et al. J Clin Pharmacol 1989 Mar;29(3):240–5
Volatile fatty acid uptake and propionate metabolism in ruminant hepatocytes. Aiello RJ, et al. J Dairy Sci 1989 Apr;72(4):942–9
Net metabolism of hormones by portal–drained viscera and liver of lactating holstein cows. Reynolds CK, et al. J Dairy Sci 1989 Jun;72(6):1459–68
Net metabolism of volatile fatty acids, D–beta–hydroxybutyrate, nonesterifield fatty acids, and blood gasses by portal–drained viscera and liver of lactating Holstein cows. Reynolds CK, et al. J Dairy Sci 1988 Sep; 71(9):2395–405
Growth hormone acutely increases glucose output by hepatocytes isolated from hypophysectomized rats. Blake WL, et al. J Endocrinol 1989 Aug;122(2):457–64
In–vivo uptake of human growth hormone in male rat liver. Bullier–Picard F, et al. J Endocrinol 1989 Apr;121(1):19–25
A monoclonal antibody to lactogenic receptors from female rat liver. Emtner M, et al. J Endocrinol 1989 Mar; 120(3):401–7
Effect of the glycogenolytic gluconeogenetic hormones, glucagon, vasopressin and angiotensin II, on biliary excretion of iodothyronines in rats is possibly related to the inhibition of 5'–monodeiodination in the liver. Langer P, et al. J Endocrinol 1989 May;121(2):299–302
Possible role of histones in the organization of rat liver thyroid hormone receptors in chromatin. Sakurai A, et al. J Endocrinol 1989 May;121(2):337–41
Furosemide, fenclofenac, diclofenac, mefenamic acid and meclofenamic acid inhibit specific T3 binding in isolated rat hepatic nuclei. Topliss DJ, et al. J Endocrinol Invest 1988 May;11(5):355–60
Effects of hyposmotic shock on ion fluxes in isolated trout

hepatocytes. Bianchini L, et al. **J Exp Biol** 1988 Jul; 137:303–18

Age–dependence of the lateral mobility of proteins in the plasma membrane of hepatocytes of C57BL/6 mice: FRAP studies on liver smears. Zs.-Nagy I, et al. **J Gerontol** 1989 Jul;44(4):B83–7

Adaptive regulation of hepatic bile salt transport. Effect of prolonged bile salt depletion in the rat. Accatino L, et al. **J Hepatol** 1988 Oct;7(2):215–23

Retinol and retinyl esters in patients with alcoholic liver disease. Bell H, et al. **J Hepatol** 1989 Jan;8(1):26–31

Expression of preS1 and preS2 in the liver of chronic hepatitis B virus carriers. Fraiese A, et al. **J Hepatol** 1988 Oct; 7(2):157–63

Regulation of hyaluronate synthesis in rat liver fat storing cell cultures by Kupffer cells. Gressner AM, et al. **J Hepatol** 1988 Dec;7(3):310–8

Taurocholate transport by liver plasma membrane vesicles is not altered in cirrhotic rats. Krähenbühl S, et al. **J Hepatol** 1989 Jul;9(1):1–9

Calcium channels in hepatocytes. Mauger JP, et al. **J Hepatol** 1988 Oct;7(2):278–82 (34 ref.)

'Albumin–receptor' uptake kinetics do not require an intact lobular architecture and are not specific for albumin. Nunes R, et al. **J Hepatol** 1988 Dec;7(3):293–304

Hepatitis B virus DNA forms in the liver of chronically infected individuals. Relation to replication profile. Pontisso P, et al. **J Hepatol** 1989 Jul;9(1):29–35

Detection of hepatitis B virus core gene products in sera and liver of HBV–infected individuals. Theilmann L, et al. **J Hepatol** 1989 Jan;8(1):77–85

Cultured Kupffer cells, isolated from human and rat liver biopsies, ingest endotoxin. Van Bossuyt H, et al. **J Hepatol** 1988 Aug;7(1):45–56

Cellular and subcellular distribution of injected lipopolysaccharide in rat liver and its inactivation by bile salts. Van Bossuyt H, et al. **J Hepatol** 1988 Dec;7(3):325–37

Thyroid hormones and the hepatic handling of bilirubin. II. Effects of hypothyroidism and hyperthyroidism on the apparent maximal biliary secretion of bilirubin in the Wistar rat. Van Steenbergen W, et al. **J Hepatol** 1988 Oct; 7(2):229–38

Immunohistochemical localization of metallothionein in developing rat tissues. Nishimura H, et al. **J Histochem Cytochem** 1989 May;37(5):715–22

The renal antihypertensive endocrine function: its relation to cytochrome P–450. Muirhead EE, et al. **J Hypertens** 1989 May;7(5):361–9

Evidence for inhibition of exodus of small neutral amino acids from non–brain tissues in hyperphenylalaninaemic rats. de Cespedes C, et al. **J Inherited Metab Dis** 1989;12(2):166–80

Polarizing inclusions in some organs of children with congenital peroxisomal diseases (Zellweger's, Refsum's, chondrodysplasia punctata (rhizomelic form), X–linked adrenoleukodystrophy). Kerckaert I, et al. **J Inherited Metab Dis** 1988;11(4):372–86

Peroxisomal integral membrane proteins in livers of patients with Zellweger syndrome, infantile Refsum's disease and X–linked adrenoleukodystrophy. Small GM, et al. **J Inherited Metab Dis** 1988;11(4):358–71

Hepatic metabolites and uric acid excretion in fructose–1,6–diphosphatase deficiency. Velázquez A, et al. **J Inherited Metab Dis** 1988;11(3):303–4

Eicosapentaenoic acid inhibits hepatic production of very low density lipoprotein. Rustan AC, et al. **J Intern Med Suppl** 1989;225(731):31–8

Hepatocyte iron release in rats. Beguin Y, et al. **J Lab Clin Med** 1989 Mar;113(3):346–54

Effects of bile duct ligation and dietary change on hepatic carbohydrate metabolism in rats. Tsuge H, et al. **J Lab Clin Med** 1989 Jan;113(1):34–40

Interleukin–1 and interleukin–6 stimulate acute–phase protein production in primary mouse hepatocytes. Prowse KR, et al. **J Leukoc Biol** 1989 Jan;45(1):55–61

Uptake of chylomicron remnants by the liver: further evidence for the modulating role of phospholipids. Borensztajn J, et al. **J Lipid Res** 1988 Aug;29(8):1087–96

Hepatic lipoprotein and cholesterol metabolism. Report of a conference. Davis RA. **J Lipid Res** 1988 Jun;29(6):825–32

Mechanisms by which tumor necrosis factor stimulates hepatic fatty acid synthesis in vivo. Grunfeld C, et al. **J Lipid Res** 1988 Oct;29(10):1327–35

Identification of lipoprotein–binding proteins in rat liver Golgi apparatus membranes. Harrison JC, et al. **J Lipid Res** 1988 Nov;29(11):1439–49

Regulation of bile acid synthesis. III. Correlation between biliary bile salt hydrophobicity index and the activities of enzymes regulating cholesterol and bile acid synthesis in the rat. Heuman DM, et al. **J Lipid Res** 1989 Aug; 30(8):1161–71

Nitrosylated high density lipoprotein is recognized by a scavenger receptor in rat liver. Kleinherenbrink–Stins MF, et al. **J Lipid Res** 1989 Apr;30(4):511–20

Effects of dietary retinoid and triglyceride on the lipid composition of rat liver stellate cells and stellate cell lipid droplets. Moriwaki H, et al. **J Lipid Res** 1988 Nov; 29(11):1523–34

Elevation of liver diacylglycerols and molecular species of diacylglycerols in rats fed a lipogenic diet. Ontko JA, et al. **J Lipid Res** 1989 May;30(5):691–9

Biosynthetic relationships between three rat apolipoprotein B peptides. Reuben MA, et al. **J Lipid Res** 1988 Oct; 29(10):1337–47

Lipoprotein lipase and hepatic lipase mRNA tissue specific expression, developmental regulation, and evolution. Semenkovich CF, et al. **J Lipid Res** 1989 Mar;30(3):423–31

Influence of development, estrogens, and food intake on apolipoprotein A–I, A–II, and E mRNA in rat liver and intestine. Staels B, et al. **J Lipid Res** 1989 Aug; 30(8):1137–45

Metabolism of 3–(p–chlorophenyl)pyrrolidine. Structural effects in conversion of a prototype gamma–aminobutyric acid prodrug to lactam and gamma–aminobutyric acid type metabolites. Wall GM, et al. **J Med Chem** 1989 Jun; 32(6):1340–8

Brain, liver and spleen detection of liposomes after rectal administration. Gabev EE, et al. **J Microencapsul** 1985 Apr–Jun;2(2):85–9

Effect of chlorpromazine associated with liposomes on the biosynthesis of acidic lipids in subcellular membranes. Stuhne–Sekalec L, et al. **J Microencapsul** 1986 Jan–Mar; 3(1):13–24

Conformation of [Cd7]–metallothionein–2 from rat liver in aqueous solution determined by nuclear magnetic resonance spectroscopy. Schultze P, et al. **J Mol Biol** 1988 Sep 5;203(1):251–68

Growth hormone regulates the rodent hepatic epidermal growth factor receptor at a pretranslational level. Johansson S, et al. **J Mol Endocrinol** 1989 Sep;3(2):113–20

Decreased expression of hepatic epidermal growth factor receptor gene in diabetic mice. Kasayama S, et al. **J Mol Endocrinol** 1989 Jul;3(1):49–56

Quantitative analysis of amyloid fibril protein in systemic organs of patients with familial amyloidotic polyneuropathy. Nakazato M, et al. **J Neurol Sci** 1989 Feb; 89(2–3):235–42

Improved sarcoma imaging and reduced hepatic activity with indium–111–SCN–Bz–DTPA linked to MoAb 19–24. Blend MJ, et al. **J Nucl Med** 1988 Nov;29(11):1810–6

On the accumulation in liver of 111In following administration of the B72.3 antibody [letter] Hnatowich DJ, et al. **J Nucl Med** 1989 Sep;30(9):1575–6

Rapid blood clearance of biotinylated IgG after infusion of avidin. Sinitsyn VV, et al. **J Nucl Med** 1989 Jan;30(1):66–9

Liver insulin receptor tyrosine kinase activity in a rat model of type II diabetes mellitus and obesity. Adamo M, et al. **J Nutr** 1989 Mar;119(3):484–9

Orotic aciduria due to arginine deprivation: changes in the levels of carbamoyl phosphate and of other urea cycle intermediates in mouse liver. Alonso E, et al. **J Nutr** 1989 Aug;119(8):1188–95

Visceral organ size and hepatocyte metabolic activity in fed and fasted rats. Burrin DG, et al. **J Nutr** 1988 Dec; 118(12):1547–52

Effect of dietary methyl group deficiency on one–carbon metabolism in rats. Cook RJ, et al. **J Nutr** 1989 Apr; 119(4):612–7

Incorporation of iron from an oral dose into the ferritin of the duodenal mucosa and the liver of normal and iron–deficient rats. Ehtechami C, et al. **J Nutr** 1989 Feb; 119(2):202–10

The effect of dietary fatty acid composition on liver retinyl ester (vitamin A ester) composition in the rat. Furr HC, et al. **J Nutr** 1989 Apr;119(4):581–5

Changes in pyridoxal phosphate and pyridoxamine phosphate in blood, liver and brain in the pregnant mouse. Furth–Walker D, et al. **J Nutr** 1989 May;119(5):750–6

Changes in hepatic parenchymal and nonparenchymal cell vitamin A content during vitamin A depletion in the rat. Green MH, et al. **J Nutr** 1988 Nov;118(11):1331–5

The distribution of [14C]–2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) and its effect on the vitamin A content in parenchymal and stellate cells of rat liver. Håkansson H, et al. **J Nutr** 1989 Apr; 119(4):573–80

Synthesis of hepatic protein during pregnancy in the rat. Harris JE, et al. **J Nutr** 1988 Nov;118(11):1319–24

Effect of dietary methyl group deficiency on folate metabolism in rats. Horne DW, et al. **J Nutr** 1989 Apr; 119(4):618–21

Maternal zinc deprivation and interleukin–1 influence metallothionein gene expression and zinc metabolism of rats. Huber KL, et al. **J Nutr** 1988 Dec;118(12):1570–6

The effect of dietary zinc status on biliary metal excretion of rats. Jaw S, et al. **J Nutr** 1988 Nov;118(11):1385–90

Effect of vitamin A deficiency on nitrogen balance and hepatic urea cycle enzymes and intermediates in rats. John A, et al. **J Nutr** 1989 Jan;119(1):29–35

Effect of various intakes of phylloquinone on signs of vitamin K deficiency and serum and liver phylloquinone concentrations in the rat. Kindberg CG, et al. **J Nutr** 1989 Feb;119(2):175–80

Effect of dietary fat and cholesterol supplements on glucagon receptor binding and adenylate cyclase activity of rat liver plasma membrane. Lee CR, et al. **J Nutr** 1989 Apr; 119(4):539–46

Role of vitamin A degradation in the control of hepatic levels in the rat. Leo MA, et al. **J Nutr** 1989 Jul;119(7):993–1000

Sphingolipid biosynthesis by rat liver cells: effects of serine, fatty acids and lipoproteins. Messmer TO, et al. **J Nutr** 1989 Apr;119(4):534–8

The effect of pectin on hepatic lipogenesis in the enterally–fed rat. Rolandelli RH, et al. **J Nutr** 1989 Jan; 119(1):89–93

Effect of dietary n–3 fatty acids on weight gain and liver polar lipid fatty acid composition of fingerling channel catfish. Satoh S, et al. **J Nutr** 1989 Jan;119(1):23–8

Reduction of plasma and hepatic triacylglycerides with whole milk–containing diets in rats. Schneeman BO, et al. **J Nutr** 1989 Jul;119(7):965–70

Plasma ammonia, plasma, brain and liver amino acids and urea cycle enzyme activities in rats fed ammonium acetate. Semon BA, et al. **J Nutr** 1989 Feb;119(2):166–74

Effect of hypothyroidism on methylmalonate excretion and hepatic vitamin B–12 levels in rats. Stokstad EL, et al. **J Nutr** 1988 Dec;118(12):1495–501

Effect of molybdenum supplementation on hepatic trace elements and enzymes of female rats. Yang MT, et al. **J Nutr** 1989 Feb;119(2):221–7

Effects of dietary casein and soybean protein on triglyceride turnover in rat liver. Iritani N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):309–15

Depletion of hepatic coenzyme A derivatives is one of the markers of the toxicity of orally administered secondary autoxidation products of linoleic acid in rat. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):11–23

Metallothionein and copper in liver disease with copper retention—a histopathological study. Elmes ME, et al. **J Pathol** 1989 Jun;158(2):131–7

In situ evaluation of the stimulatory state of hepatic macrophages based on their ability to produce superoxide anions in rats. Mochida S, et al. **J Pathol** 1989 May; 158(1):67–71

Vitamin K1 and K2 in infant human liver. Kayata S, et al. **J Pediatr Gastroesterol Nutr** 1989 Apr;8(3):304–7

Unequal disposition of enantiomers of the organic cation oxyphenonium in the rat isolated perfused liver. Feitsma KG, et al. **J Pharm Pharmacol** 1989 Jan;41(1):27–31

Influence of streptozocin–induced diabetes on reductive metabolism of acetohexamide in rat liver. Imamura Y, et al. **J Pharm Pharmacol** 1989 Mar;41(3):186–7

Reduction by acetylsalicylic acid of paracetamol–induced hepatic glutathione depletion in rats treated with 4,4'–dichlorobiphenyl, phenobarbitone and pregnenolone–16–alpha–carbonitrile. van Bree L, et al. **J Pharm Pharmacol** 1989 May;41(5):343–5

Hydroxylation of debrisoquine using perfused liver isolated from Sprague Dawley and DA rats: comparison with in–vivo results. Vincent–Viry M, et al. **J Pharm Pharmacol** 1988 Oct;40(10):695–700

Biodegradation rate of embolized protein microspheres in lung, liver and kidney of rats. Willmott N, et al. **J Pharm Pharmacol** 1989 Jul;41(7):433–8

Hepatic drug clearance in children: studies with indocyanine green as a model substrate. Evans WE, et al. **J Pharm Sci** 1989 Jun;78(6):452–6

Membrane–limited hepatic transport of the conjugative metabolites of 4–methylumbelliferone in rats. Miyauchi S, et al. **J Pharm Sci** 1988 Aug;77(8):688–92

Effect of altered albumin concentrations on elimination of unbound prazosin in vivo in the rat and in the isolated perfused rat liver. Oie S, et al. **J Pharm Sci** 1988 Nov; 77(11):948–51

Disposition of a polymeric prodrug of mitomycin C, mitomycin C–dextran conjugate, in the perfused rat liver. Sato K, et al. **J Pharm Sci** 1989 Jan;78(1):11–6

Concurrent determination of hepatic bioavailability of salicylamide by three techniques in the dog. Tozer TN, et al. **J Pharm Sci** 1989 Jun;78(6):462–4

Effect of quinidine on the hepatic uptake of digoxin in guinea pigs. Okudaira K, et al. **J Pharmacobiodyn** 1989 Jan; 12(1):24–30

Effects of perfusate flow rate on measured blood volume, disse space, intracellular water space, and drug extraction in the perfused rat liver preparation: characterization by the multiple indicator dilution technique. Pang KS, et al. **J Pharmacokinet Biopharm** 1988 Dec;16(6):595–632

Effect of plasma protein binding on elimination of taurocholate by isolated perfused rat liver: comparison of venous equilibrium, undistributed and distributed sinusoidal, and dispersion models. Smallwood RH, et al. **J Pharmacokinet Biopharm** 1988 Aug;16(4):377–96

Effect of a protein binding change on unbound and total plasma concentrations for drugs of intermediate hepatic extraction. Smallwood RH, et al. **J Pharmacokinet Biopharm** 1988 Oct;16(5):529–42

Lack of linear correlation between hepatic ligand uptake rate and unbound ligand concentration does not necessarily imply receptor–mediated uptake. Smallwood RH, et al. **J Pharmacokinet Biopharm** 1988 Aug;16(4):397–411

Oxygen dependence of omeprazole clearance and sulfone and sulfide metabolite formation in the isolated perfused rat liver. Angus PW, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1043–7

Zonal compartmentation of perfused rat liver: plasma reappearance of rhodamine B explained. Braakman I, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):869–73

Models of hepatic elimination: implications from studies of the simultaneous elimination of taurocholate and diazepam by isolated rat liver under varying conditions of binding. Ching MS, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1048–54

Targeting small unilamellar liposomes to hepatic parenchymal cells by dose effect. Chow DD, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):506–13

Role of bile acid conjugation in hepatic transport of

dihydroxy bile acids. Clayton LM, et al.
J Pharmacol Exp Ther 1989 Mar;248(3):1130–7

Structural specificity of mechanisms controlling the hepatic uptake and biliary output of methotrexate in the rat. Deutsch JC, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):221–6

Metabolic changes in glutathione and metallothionein in newborn rat liver. Gallant KR, et al.
J Pharmacol Exp Ther 1989 May;249(2):631–7

Coupling of hepatic prostaglandin receptors to adenylate cyclase through a pertussis toxin sensitive guanine nucleotide regulatory protein. Garrity MJ, et al.
J Pharmacol Exp Ther 1989 Mar;248(3):979–83

Stereoselectivity of glutathione conjugation: blood elimination of alpha–bromoisovalerylurea enantiomers and biliary excretion of the conjugates in unanesthetized normal or congenitally jaundiced rats. Polhuijs M, et al.
J Pharmacol Exp Ther 1989 Jun;249(3):874–8

Immunochemical quantitation of 3-(cystein-S-yl)acetaminophen adducts in serum and liver proteins of acetaminophen–treated mice. Pumford NR, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):190–6

Ranitidine–induced changes in the renal and hepatic clearances of procainamide are correlated. Rocci ML Jr, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):923–8

Exposure of rats to inhalational anesthetics alters the hepatobiliary clearance of cholephilic xenobiotics. Watkins JB 3d. **J Pharmacol Exp Ther** 1989 Aug;250(2):421–7

Multispecificity of Na+–dependent taurocholate uptake in basolateral (sinusoidal) rat liver plasma membrane vesicles. Zimmerli B, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):301–8

Effects of single or multiple doses of L–carnitine on liver energetic metabolism of rats forced to run.
Bobyleva–Guarriero V, et al.
J Sports Med Phys Fitness 1988 Sep;28(3):298–303

Comparison of the biopotency of corticosterone and dexamethasone acetate in glucocorticoid receptor down regulation in rat liver. Alexandrová M, et al.
J Steroid Biochem 1989 Apr;32(4):531–5

Sex steroid–binding protein: identification and comparison of the primary product following cell–free translation of human and monkey (Macaca fascicularis) liver RNA. Kottler ML, et al. **J Steroid Biochem** 1989 Aug;33(2):201–7

Transcortin biosynthesis and intracellular distribution of rat liver polyribosomes synthesizing transcortin. Kraujelis K, et al. **J Steroid Biochem** 1989 Jan;32(1A):121–5

In vitro evidence for modification of rat liver glucocorticoid receptor binding properties and transformation by hyperthermia. Matić G, et al. **J Steroid Biochem** 1989 Feb; 32(2):263–70

Down–regulation of glucocorticoid receptor and its relationship to the induction of rat liver tyrosine aminotransferase. Yang YL, et al. **J Steroid Biochem** 1989 Jan;32(1A):99–104

Monokine depression of bile flow in the isolated perfused rat liver. Ott MT, et al. **J Surg Res** 1989 Sep;47(3):248–50

In vitro hepatic insulin resistance in chronic pancreatitis in the rat. Seymour NE, et al. **J Surg Res** 1989 May; 46(5):450–6

Carbaryl metabolism is inhibited by cimetidine in the isolated perfused rat liver and in man. Ward SA, et al.
J Toxicol Clin Toxicol 1988;26(5–6):269–81

Modification of aflatoxin B1 biotransformation in vitro and DNA binding in vivo by dietary broccoli in rats. Ramsdell HS, et al. **J Toxicol Environ Health** 1988;25(3):269–84

Covalent binding of [14C]–2,6–dimethylaniline to DNA of rat liver and ethmoid turbinate. Short CR, et al.
J Toxicol Environ Health 1989;27(1):85–94

Inhibitory effect of phenobarbital on peroxisome biogenesis in mouse hepatocytes. Kanamura S, et al.
J Ultrastruct Mol Struct Res 1988 Sep;100(3):269–77

Zearanol metabolism by subcellular fractions from lamb liver. Pompa G, et al. **J Vet Pharmacol Ther** 1988 Jun; 11(2):197–203

Effects of nucleosides and a nucleotide on DNA and RNA syntheses by the salvage and de novo pathway in primary monolayer cultures of hepatocytes and hepatoma cells. Ohyanagi H, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):51–8

Anabolic steroids support postoperative gut/liver amino acid metabolism. Souba WW, et al.
JPEN J Parenter Enteral Nutr 1988 Nov–Dec;12(6):550–4

Analysis of acute and chronic heart failure in view of hepatic oxygen supply–demand relationship using hepatic venous oxygen saturation. Matsuda H, et al. **Jpn Circ J** 1989 Feb; 53(2):175–9

Effects of mepacrine on the oxidation of [1–14C]oleate in isolated rat hepatocytes. Chihara M, et al.
Jpn J Pharmacol 1989 Jul;50(3):350–3

Divalent cations increase the binding capacity of the [3H]mepyramine binding site, a possible histamine H1 receptor, in rat liver membranes. Fukui H, et al.
Jpn J Pharmacol 1989 Mar;49(3):351–5

Species and sex differences in the inhibitory action of the corticosteroid alclometasone dipropionate on the hepatic drug–metabolizing system. Nishibe Y, et al.
Jpn J Pharmacol 1989 Aug;50(4):435–43

The effect of fructose on the cellular content of adenine nucleotides in the perfused rat liver. Nishi T, et al.
Jpn J Surg 1989 May;19(3):351–7 (21 ref.)

Angiotensin receptor: properties and relevance to the development of antagonists. Soffer RL, et al.
Kidney Int Suppl 1988 Oct;26:S69–72

Kinetics of interaction of 2–acetylaminofluorene with normal liver and carcinogen–induced hepatocyte nodules in vivo and in vitro. Eriksson LC, et al. **Lab Invest** 1989 Mar; 60(3):409–17

Retinol transport in cultured fat–storing cells of rat liver. Quantitative analysis by anchored cell analysis and sorting system. Matsuura T, et al. **Lab Invest** 1989 Jul;61(1):107–15

Iron deposition in liver in zidovudine–related transfusion–dependent anaemia [letter] Lindley R, et al.
Lancet 1989 Sep 16;2(8664):681

Lignocaine metabolite formation as a measure of pre–transplant liver function. Oellerich M, et al. **Lancet** 1989 Mar 25;1(8639):640–2

Wilson's disease patients can be decoppered [letter] Walshe JM. **Lancet** 1989 Jul 22;2(8656):228

On the enterohepatic cycle of triiodothyronine in rats; importance of the intestinal microflora. de Herder WW, et al. **Life Sci** 1989;45(9):849–56

High affinity binding sites for basic fibroblast growth factor in rat hepatic plasma membranes. Gauthier T, et al.
Life Sci 1989;44(8):509–16

High biliary and systemic excretion of a glucuronide during its hepatic synthesis. Gessner T, et al. **Life Sci** 1974 Jul 1;15(1):83–94

The uptake of labelled sulphur by the proteins of human liver slices incubated with L–(35S)–methionine or (35S)–sulphate. Heinonen K. **Life Sci** 1974 Aug 1; 15(3):463–70

Inhibition of hepatic cholesterol synthesis by the alpha 1–adrenoceptor blocker doxazosin in the hypercholesterolemic golden hamster. Jansen H, et al.
Life Sci 1989;44(15):1013–7

Follow–up study of lipid peroxides, superoxide dismutase and glutathione peroxidase in the synovial membrane, serum and liver of young and old mice with collagen–induced arthritis. Kasama T, et al. **Life Sci** 1988;43(23):1887–96

Vanadate counteracts glucagon effects in isolated rat hepatocytes. Miralpeix M, et al. **Life Sci** 1989;44(20):1491–7

Ac–Tyr1hGRF discriminates between VIP receptors from rat liver and intestinal epithelium. Rouyer–Fessard C, et al. **Life Sci** 1989;45(9):829–33

Amino acid metabolism during hemoperfusion over biological materials. Ukikusa M, et al. **Life Support Syst** 1983;1 Suppl 1:78–81

Black currant seed oil feeding and fatty acids in liver lipid classes of guinea pigs. Crozier GL, et al. **Lipids** 1989 May; 24(5):460–6

Effect of dietary fat on individual long–chain fatty acyl–CoA esters in rat liver and skeletal muscle. Ney DM, et al.
Lipids 1989 Mar;24(3):233–5

The hepatocellular transport of sulfobromophthalein–glutathione by clofibrate treated, perfused rat liver. Sorrentino D, et al. **Lipids** 1989 May; 24(5):438–42

Human hepatic sinusoidal endothelial cells in culture produce von Willebrand factor and contain Weibel–Palade bodies. Harrison RL, et al. **Liver** 1989 Aug;9(4):242–9

Liver adenosine triphosphate and pH in fasted and well–fed mice after infusion of adenine nucleotide precursors. Lee RG, et al. **Liver** 1988 Dec;8(6):337–43

Differential effects of interleukin–1 alpha, tumor necrosis factor alpha, and transforming growth factor beta 1 on cell proliferation and collagen formation by cultured fat–storing cells. Matsuoka M, et al. **Liver** 1989 Apr; 9(2):71–8

Does a linear pattern of sinusoidal IgA deposition distinguish between alcoholic and diabetic liver disease? Nagore N, et al. **Liver** 1988 Oct;8(5):281–6

DNA synthesis in cultured adult rat hepatocytes: effect of serum and calcium. Sand TE, et al. **Liver** 1989 Feb; 9(1):20–6

Hepatocellular transferrin receptor expression in secondary siderosis. Sciot R, et al. **Liver** 1989 Feb;9(1):52–61

Continuous–flow 13C–filtered 1H NMR spectroscopy of ethanol metabolism in rat liver perfusate. Albert K, et al.
Magn Reson Med 1989 Sep;11(3):309–15

Inactivation kinetics of horseradish peroxidase microinjected into hepatocytes from mice of various ages. Ishigami A, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):125–33

Effect of chronic food restriction in aging rats. II. Liver cytosolic antioxidants and related enzymes. Laganiere S, et al. **Mech Ageing Dev** 1989 Jun;48(3):221–30

The poly(U) translational capacity of Fischer 344 rat liver does not deteriorate with age and is not affected by dietary regime. Laughrea M, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):137–43

Age–related changes of long–chain fatty acid metabolism in rat liver. Mori S, et al. **Mech Ageing Dev** 1988 Aug; 44(2):175–83

Influence of age upon the metabolism of zinc in livers of C57BL/6J mice. Thomas DJ, et al. **Mech Ageing Dev** 1989 Mar;47(3):241–51

Increased hepatic lipid peroxidation in aged mice. Uysal M, et al. **Mech Ageing Dev** 1989 Apr;48(1):85–9

Role of cyclic AMP in regulation of hepatic glucose production during exercise. Winder WW.
Med Sci Sports Exerc 1988 Dec;20(6):551–9 (50 ref.)

Changes in glutamate–cycle enzyme mRNA levels in a rat model of hepatic encephalopathy. Thomas JW, et al.
Metab Brain Dis 1988 Jun;3(2):81–90

Glyburide but not ciglitazone enhances insulin action in the liver independent of insulin receptor kinase activation. Caro JF, et al. **Metabolism** 1989 Jul;38(7):606–11

Stimulation of de novo biosynthesis of purine and pyrimidine nucleotides in the liver of rats following burn injury. Chikenji T, et al. **Metabolism** 1988 Dec;37(12):1114–9

Role of triglyceride–rich lipoproteins from the liver and intestine in the etiology of postprandial peaks in plasma triglyceride concentration. Cohn JS, et al. **Metabolism** 1989 May;38(5):484–90

Fasting hyperglycemia in non–insulin–dependent diabetes mellitus: contributions of excessive hepatic glucose production and impaired tissue glucose uptake. DeFronzo RA, et al. **Metabolism** 1989 Apr;38(4):387–95

Glucagon and hepatic glucose production: modulation by low–dose bradykinin infusion. Hartl WH, et al.
Metabolism 1989 Sep;38(9):878–82

Glutamine metabolism in the liver: overview and current concepts. Häussinger D. **Metabolism** 1989 Aug;38(8 Suppl 1):14–7 (39 ref.)

Regulation of hepatic glucose output during moderate exercise in non–insulin–dependent diabetes. Jenkins AB, et al. **Metabolism** 1988 Oct;37(10):966–72

Hepatic metabolic alterations in rats treated with low–dose endotoxin and aspirin: an animal model of Reye's syndrome. Kilpatrick LE, et al. **Metabolism** 1989 Jan; 38(1):73–7

Effects of hypocaloric diet and insulin therapy on metabolic control and mechanisms of hyperglycemia in obese non–insulin–dependent diabetic subjects. Laakso M, et al.
Metabolism 1988 Nov;37(11):1092–100

Pathways of hepatic glycogen formation in humans following ingestion of a glucose load in the fed state. Magnusson I, et al. **Metabolism** 1989 Jun;38(6):583–5

Cigarette smoking alters hepatic estrogen metabolism in men: implications for atherosclerosis. Michnovicz JJ, et al.
Metabolism 1989 Jun;38(6):537–41

Effect of sulfonylureas on hepatic glycogen metabolism: activation of glycogen phosphorylase. Mojena M, et al.
Metabolism 1989 May;38(5):466–70

Errors in the isotopic estimations of hepatic glycogen synthesis and glucose output. Rognstad R. **Metabolism** 1989 Jul;38(7):619–24

Evidence for the existence of a GTP–dependent factor in hepatic cytosol that stimulates cyclic AMP binding: possible role in the modulation of cyclic AMP action. Rosenberg EM, et al. **Metabolism** 1989 Sep;38(9):916–20

Inhibition of apolipoprotein secretion and phosphatidate phosphohydrolase activity by eicosapentaenoic and docosahexaenoic acids in the perfused rat liver. Wong SH, et al. **Metabolism** 1988 Dec;37(12):1177–81

Purification and biochemical assay of synexin and of the homologous calcium–dependent membrane–binding proteins, endonexin II and lipocortin I. Pollard HB, et al.
Methods Cell Biol 1989;31:207–27

Transport of glutathione, glutathione disulfide, and glutathione conjugates across the hepatocyte plasma membrane. Akerboom TP, et al. **Methods Enzymol** 1989; 173:523–34

Ca2+ fluxes and phosphoinositides in hepatocytes. Blackmore PF, et al. **Methods Enzymol** 1989;173:534–45

Measurement of amino acid transport by hepatocytes in suspension or monolayer culture. Kilberg MS.
Methods Enzymol 1989;173:564–75

Ionic permeability of isolated muscle sarcoplasmic reticulum and liver endoplasmic reticulum vesicles. Meissner G.
Methods Enzymol 1988;157:417–37

Amino acid control of intracellular protein degradation. Mortimore GE, et al. **Methods Enzymol** 1988;166:461–76

An increase of collagen biosynthesis in livers of rats submitted to chronic intoxication with ethanol. Bańkowski E, et al.
Mol Cell Biochem 1989 Jan 23;85(1):43–8

Effects of warm and cold ischemia on mitochondrial functions in brain, liver and kidney. Baumann M, et al.
Mol Cell Biochem 1989 Jun 1;87(2):137–45

Changes to the integral membrane protein composition of mouse liver peroxisomes in response to the peroxisome proliferators clofibrate, Wy–14,643 and di(2–ethyl–hexyl)phthalate. Crane DI, et al.
Mol Cell Biochem 1988 May;81(1):29–36

Hepatic alpha 1 and beta adrenergic receptors in various animal species. Sulakhe SJ, et al. **Mol Cell Biochem** 1988 Sep;83(1):81–8

Multiple hepatocyte–enriched nuclear factors function in the regulation of transthyretin and alpha 1–antitrypsin genes. Costa RH, et al. **Mol Cell Biol** 1989 Apr;9(4):1415–25

Differential activity of a tissue–specific extinguisher locus in hepatic and nonhepatic cells. Gourdeau H, et al.
Mol Cell Biol 1989 May;9(5):1813–22

Stimulation of the acute–phase response in simian virus 40–hepatocyte cell lines. Liao WS, et al. **Mol Cell Biol** 1989 Jul;9(7):2779–86

Differential expression in male and female mouse liver of very similar mRNAs specified by two group 1 major urinary protein genes. McIntosh I, et al. **Mol Cell Biol** 1989 May;9(5):2202–7

Two regulatory domains flank the mouse H19 gene. Yoo–Warren H, et al. **Mol Cell Biol** 1988 Nov; 8(11):4707–15

Homologous induction of growth hormone receptors in cultured rat hepatocytes. Barash I, et al.
Mol Cell Endocrinol 1989 Apr;62(2):281–6

Receptor-mediated endocytosis and degradation of bovine growth hormone in rat liver. Husman B, et al. **Mol Cell Endocrinol** 1988 Sep;59(1-2):13-25

Glycosylation characteristics of the mouse liver lactogenic receptor. Lascols O, et al. **Mol Cell Endocrinol** 1989 Aug; 65(1-2):145-55

Regulation of liver angiotensinogen mRNA by glucocorticoids and thyroxine. Sernia C, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):147-56

Effect of calcitonin on exchangeable calcium transport in isolated rat hepatocytes. Yamaguchi M. **Mol Cell Endocrinol** 1989 Apr;62(2):313-8

Nuclear acceptor sites for estrogen-receptor complexes in the liver of the turtle, Chrysemys picta. I. Sexual differences, species specificity and hormonal dependency. Yu MS, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):37-48

Glucocorticoid and cyclic nucleotide regulation of plasminogen activator and plasminogen activator-inhibitor gene expression in primary cultures of rat hepatocytes. Heaton JH, et al. **Mol Endocrinol** 1989 Jan;3(1):185-92

Identification and estrogen induction of two estrogen receptors (ER) messenger ribonucleic acids in the rainbow trout liver: sequence homology with other ERs. Pakdel F, et al. **Mol Endocrinol** 1989 Jan;3(1):44-51

Extranuclear estrogen-regulated destabilization of Xenopus laevis serum albumin mRNA. Schoenberg DR, et al. **Mol Endocrinol** 1989 May;3(5):805-14

Interactions between glycolysis and mixed function oxidation: studies with 7-ethoxycoumarin in perfused livers from beta-naphthoflavone-treated rats. Belinsky SA, et al. **Mol Pharmacol** 1989 Apr;35(4):512-8

Platelet-activating factor stimulates arachidonic acid metabolism in rat liver cells (C-9 cell line) by a receptor-mediated mechanism. Levine L. **Mol Pharmacol** 1988 Dec;34(6):793-9

Divalent cation-induced interconversion of hepatic angiotensin receptor subtypes. McQueen J, et al. **Mol Pharmacol** 1989 Jun;35(6):809-17

Detection and characterization of a low affinity form of cytosolic Ah receptor in livers of mice nonresponsive to induction of cytochrome P1-450 by 3-methylcholanthrene. Okey AB, et al. **Mol Pharmacol** 1989 Jun;35(6):823-30

Stimulation of in vivo hepatic uptake and in vitro hepatic binding of [125I]2-Iodo-3,7,8-trichlorodibenzo-p-dioxin by the administration of agonist for the Ah receptor. Poland A, et al. **Mol Pharmacol** 1989 Jul;36(1):121-7

[125I]2-iodo-3,7,8-trichlorodibenzo-p-dioxin-binding species in mouse liver induced by agonists for the Ah receptor: characterization and identification. Poland A, et al. **Mol Pharmacol** 1989 Jul;36(1):113-20

The metabolism of N-acetyl-3,5-dimethyl-p-benzoquinone imine in isolated hepatocytes involves N-deacetylation. Rossi L, et al. **Mol Pharmacol** 1988 Nov;34(5):674-81

Characterization of 2,3,7,8-tetrachlorodibenzo-p-dioxin-mediated decreases in dexamethasone binding to rat hepatic cytosolic glucocorticoid receptor. Sunahara GI, et al. **Mol Pharmacol** 1989 Aug;36(2):239-47

Changes of the respiratory coefficient in cultures of rat liver cells. Crăciun O, et al. **Morphol Embryol (Bucur)** 1989 Jan-Mar;35(1):53-8

Aroclor-1254-induced rat-liver S9 causes chromosomal aberrations in CHO cells but not human lymphocytes: a role for active oxygen? Kirkland DJ, et al. **Mutat Res** 1989 Sep;214(1):115-22

Preferential activation of 6-aminochrysene and 2-aminoanthracene to mutagenic moieties by different forms of cytochrome P450 in hepatic 9000 X g supernatants from the rat. Lubet RA, et al. **Mutat Res** 1989 Jun; 212(2):275-84

Induced hepatocytes as a metabolic activation system for the mouse-lymphoma assay. Oglesby LA, et al. **Mutat Res** 1989 Jul;223(3):295-302

Age-specific methylation of high-mobility-group proteins of the rat liver and its modulation by spermine and sodium butyrate. Thakur MK, et al. **Mutat Res** 1989 Mar; 219(2):107-11

Pancreatic alpha- and beta-cell function and metabolic changes during oral L-alanine and glucose administration: comparative studies between normal, diabetic and cirrhotic subjects. Hattori T, et al. **Nagoya J Med Sci** 1989 Mar; 51(1-4):7-16

Increased concentrations of liver cholesterol in rats fed lactulose. Beynen AC. **Nahrung** 1989;33(1):89-90

Effect of interesterified dietary fat mixtures on various lipid indices and liver metal content of rats in fat-metabolism disturbance. Zsinka AJ, et al. **Nahrung** 1988;32(9):815-21

A conjugate of acyclovir monophosphate with lactosaminated albumin releases the phosphorylated drug in liver cells. Fiume L, et al. **Naturwissenschaften** 1989 Feb; 76(2):74-6

Significant correlations between atmospherics and the in vivo incorporation of 3H-thymidine into the nuclear DNA of liver cells. Hoffmann G, et al. **Naturwissenschaften** 1988 Sep;75(9):459-60

Correlation of levels of Pt and Se in rats treated simultaneously with cisplatin and sodium selenite. Sakurai H, et al. **Naturwissenschaften** 1988 Aug;75(8):405-6

The influence of tetracyclines on the aggregation of free and membrane-bound polysomes and on the RNA content of the liver of mice. Hopf G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):455-8

Genes expressed in cortical neurons--chromatin conformation and DNase I hypersensitive sites. Ivanov TR, et al. **Neurochem Res** 1989 Feb;14(2):129-37

Presence of a particulate thyrotropin-releasing hormone-degrading pyroglutamate aminopeptidase activity in rat liver. Scharfmann R, et al. **Neuroendocrinology** 1989 Apr;49(4):442-8

Quantitative and morphological studies on the influence of zinc deficiency on the liver of pregnant rats. Mamba K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):566-73

DISIDA kinetics measure liver function in dogs. Fraser IA, et al. **Nucl Med Commun** 1989 Jun;10(6):435-47

Turnover products of the apo very low density lipoprotein II messenger RNA from chicken liver. Bakker O, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10109-18

Cloning and nucleotide sequencing of transthyretin (prealbumin) cDNA from rat choroid plexus and liver [published erratum appears in Nucleic Acids Res 1989 Jul 25;17(14):5882] Duan W, et al. **Nucleic Acids Res** 1989 May 25;17(10):3979

Different liver nuclear proteins binds to similar DNA sequences in the 5' flanking regions of three hepatic genes. Ochoa A, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):119-33

Liver cell specific gene transcription in vitro: the promoter elements HP1 and TATA box are necessary and sufficient to generate a liver-specific promoter. Ryffel GU, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):939-53

Heterocyclic amine-DNA adducts analyzed by 32P-postlabeling method. Yamashita K, et al. **Nucleic Acids Symp Ser** 1988;(19):111-4

Effect of dietary lipids on hepatic and plasma beta-carotene and vitamin A levels in rats fed beta-carotene. Alam BS, et al. **Nutr Cancer** 1989;12(1):57-60

Antioxidant activity of dietary canthaxanthin. Mayne ST, et al. **Nutr Cancer** 1989;12(3):225-36

Hepatic zonation of carbohydrate metabolism. **Nutr Rev** 1989 Jul;47(7):219-21 (5 ref.)

Parallel mechanisms of iron uptake by cells. **Nutr Rev** 1989 Feb;47(2):54-5 (11 ref.)

Effects of thyroid hormone on lipogenesis and glucose flux. **Nutr Rev** 1988 Oct;46(10):356-8 (13 ref.)

Elevation of 1,2-diacylglycerol in ras-transformed neonatal liver and pancreas of transgenic mice. Wilkison WO, et al. **Oncogene** 1989 May;4(5):625-8

Transient expression of c-fos and constant expression of c-myc in freshly isolated and cultured normal adult rat hepatocytes. Etienne PL, et al. **Oncogene Res** 1988; 3(3):255-62

The transcriptional regulation of liver-specific gene expression. de Simone V, et al. **Oxf Surv Eukaryot Genes** 1988;5:51-90 (126 ref.)

Effect of euglycemic hyperinsulinemia on neonatal canine hepatic and muscle metabolism. Kliegman R, et al. **Pediatr Res** 1989 Feb;25(2):124-9

Sequential intrahepatic metabolic effects of enteric galactose alimentation in newborn rats. Kliegman RM, et al. **Pediatr Res** 1988 Sep;24(3):302-7

Metabolic studies of carnitine in a child with propionic acidemia. Kurczynski TW, et al. **Pediatr Res** 1989 Jul; 26(1):63-6

Effects of ammonium chloride, salicylate, and carnitine on palmitic acid oxidation in rat liver slices. Maddaiah VT, et al. **Pediatr Res** 1989 Feb;25(2):119-23

Peroxisomal L-pipecolic acid oxidation is deficient in liver from Zellweger syndrome patients. Mihalik SJ, et al. **Pediatr Res** 1989 May;25(5):548-52

Effect of acute umbilical cord compression on hepatic carbohydrate metabolism in the fetal lamb. Rudolph CD, et al. **Pediatr Res** 1989 Mar;25(3):228-33

Hepatic metallothionein as a source of zinc and cysteine during the first year of life. Zlotkin SH, et al. **Pediatr Res** 1988 Sep;24(3):326-9

Water, K+, H+, lactate and glucose fluxes during cell volume regulation in perfused rat liver. Lang F, et al. **Pflugers Arch** 1989 Jan;413(3):209-16

The effects of phthalimide and saccharin derivatives on low-density lipoprotein (LDL) and high-density lipoprotein (HDL) receptor activity and related enzyme activities. Hall IH, et al. **Pharm Res** 1988 Jul;5(7):413-20

Covalent and noncovalent protein binding of drugs: implications for hepatic clearance, storage, and cell-specific drug delivery. Meijer DK, et al. **Pharm Res** 1989 Feb; 6(2):105-18 (159 ref.)

Statistical moment analysis of hepatobiliary transport of phenol red in the perfused rat liver. Nishida K, et al. **Pharm Res** 1989 Feb;6(2):140-6

An equation for the systemic availability of drugs undergoing simultaneous enterohepatic cycling, first-pass metabolism, and intestinal elimination. Shepard TA, et al. **Pharm Res** 1987 Jun;4(3):195-9

Effect of amiodarone and desethylamiodarone on the pharmacokinetics of antipyrine in the rat. Svensson CK, et al. **Pharm Res** 1987 Jun;4(3):251-4

Uptake of colchicine, a microtubular system disrupting agent, by isolated rat hepatocytes. Wierzba K, et al. **Pharm Res** 1989 Mar;6(3):235-8

Effects of medroxyprogesterone acetate on serum prolactin levels and liver prolactin binding capacity in the rat. Muccioli G, et al. **Pharmacol Res Commun** 1988 Aug; 20(8):719-30

Brain, kidney and liver 203Hg-methyl mercury uptake in the rat: relationship to the neutral amino acid carrier. Aschner M. **Pharmacol Toxicol** 1989 Jul;65(1):17-20

Deuterium isotope effects on ethanol oxidation in perfused rat liver and in rats and rabbits in vivo: application to determine the contribution of various pathways. Lundquist F, et al. **Pharmacol Toxicol** 1989 Jul;65(1):55-62

Inhibition of acute CNS-tolerance to hexobarbital and prolongation of hexobarbital anaesthesia by disulfiram treatment in rats. Nilsson GE, et al. **Pharmacol Toxicol** 1989 Jan;64(1):137-43

Effects of toluene on protein synthesis and the interaction with ethanol in hepatocytes isolated from fed and fasted rats. Smith-Kielland A, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):83-7

Chlorpromazine, administered in vivo and in vitro, inhibits the efflux of bile acids in freshly isolated rat hepatocytes. Willson RA, et al. **Pharmacol Toxicol** 1989 May;64(5):454-8

Effect of glucose administration on various rat hepatic constituents and on the spectral binding of hexobarbital and methadone to rat hepatic cytochrome P450. Buchholz J, et al. **Pharmacology** 1989;38(2):129-36

Hepatic and renal clearances of probenecid in the rat. Emanuelsson BM, et al. **Pharmacology** 1989;38(1):61-8

The effect of a saturated fat diet on pentobarbital induced sleeping time and phospholipid composition of mouse brain and liver. Aloia RC, et al. **Pharmazie** 1988 Jul;43(7):496-8

Phosphorescence maxima and triplet state lifetimes of NAD+ and epsilon-NAD+ in ternary complexes with horse liver alcohol dehydrogenase. Rousslang K, et al. **Photochem Photobiol** 1989 Feb;49(2):137-43

Nitrogen-15 NMR studies of rat liver in vitro and in vivo. Gründer W, et al. **Phys Med Biol** 1989 Apr;34(4):457-63

Effect of the parenteral administration of energy substrates in different postoperation phases on the initiation and development of liver regeneration in rats subjected to partial hepatectomy. Zívný P, et al. **Physiol Bohemoslov** 1989;38(3):251-8

Biosynthesis and function of melanins in hepatic pigmentary system. Sichel G. **Pigment Cell Res** 1988;1(4):250-8

Serum and liver lipids of rats fed rubber seed oil. Nwokolo E, et al. **Plant Foods Hum Nutr** 1988;38(2):145-53

Identification of an epitope shared by the DNA-binding domain of glucocorticoid receptor and the B chain of insulin. Cayanis E, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2138-42

Purification and characterization of a bovine acetyl low density lipoprotein receptor. Kodama T, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9238-42

Low density lipoprotein receptor-related protein mediates uptake of cholesteryl esters derived from apoprotein E-enriched lipoproteins. Kowal RC, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5810-4

ATP stimulates Ca2+ uptake and increases the free Ca2+ concentration in isolated rat liver nuclei. Nicotera P, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):453-7

Evidence for expression of the facilitated glucose transporter in rat hepatocytes. Rhoads DB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9042-6

High-level erythroid expression of human alpha-globin genes in transgenic mice. Ryan TM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):37-41

Hepatocyte gap junctions are permeable to the second messenger, inositol 1,4,5-trisphosphate, and to calcium ions. Sáez JC, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2708-12

Dynamic determination of kinetic parameters for the interaction between polypeptide hormones and cell-surface receptors in the perfused rat liver by the multiple-indicator dilution method. Sato H, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8355-9

Membrane docosahexaenoate is supplied to the developing brain and retina by the liver. Scott BL, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2903-7

Immunological demonstration of the accumulation of insulin, but not insulin receptors, in nuclei of insulin-treated cells. Soler AP, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6640-4

Conditional enhancement of liver-specific gene transcription. Zaret KS, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9076-80

Encapsulation of doxorubicin in liver-targeted erythrocytes increases the therapeutic index of the drug in a murine metastatic model. Zocchi E, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2040-4

Effect of bile acids on calcium efflux from isolated rat hepatocytes and perfused rat livers. Anwer MS, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):147-52

Oxidative metabolism of cocaine: comparison of brain and liver. Benuck M, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):7-13

Degradation of zinc-metallothionein in monolayer cultures of rat hepatocytes. Chen ML, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):130-8

Zinc suppression of free radicals induced in cultures of rat hepatocytes by iron, t-butyl hydroperoxide, and 3-methylindole. Coppen DE, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):100-9

Characterization and solubilization of cyclo(His-Pro) binding from rat liver membranes. Mori M, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):108-12

The effect of burn injury and zinc nutriture on fecal endogenous zinc, tissue zinc distribution, and

T-lymphocyte subset distribution using a murine model. Shippee RL, et al. **Proc Soc Exp Biol Med** 1988 Oct; 189(1):31–8

Liver slices: an in vitro system for determination of N-acetylation in human liver. Gunawardhana L, et al. **Proc West Pharmacol Soc** 1988;31:137–41

Solubilization of a peripheral type benzodiazepine binding site from rat liver. Parola AL, et al. **Proc West Pharmacol Soc** 1988;31:49–52

Liver iron kinetic in thalassemic patients after bone marrow transplantation. Angelucci E, et al. **Prog Clin Biol Res** 1989; 309:291–8

Hepatic iron stores in thalassemia: non-invasive magnetic measurements. Brittenham GM, et al. **Prog Clin Biol Res** 1989;309:101–6

Role of monokines in altering hepatic metabolism in sepsis. Cerra FB, et al. **Prog Clin Biol Res** 1989;286:265–77 (21 ref.)

Alterations in splenic and hepatic protein kinase C in sepsis and chronic endotoxemia. Hermiller JB, et al. **Prog Clin Biol Res** 1989;286:61–70

Influence of sepsis on perfused rat liver metabolism. Kovats E, et al. **Prog Clin Biol Res** 1989;308:589–93

Binding of drugs to alpha 1-acid glycoprotein and its desialylated form. Influence on hepatic disposition and implications for drug targeting to the liver. Meijer DK, et al. **Prog Clin Biol Res** 1989;300:143–67 (52 ref.)

Transport of the trace metal cation, zinc(II), by rat liver plasma membrane vesicles. Pattison SE, et al. **Prog Clin Biol Res** 1989;292:369–78

Liver iron stores before and after bone marrow transplantation for thalassemia. Politi P, et al. **Prog Clin Biol Res** 1989;309:281–9

Alterations in hepatic and aortic phospholipase-C coupled receptors and signal transduction in rat intraperitoneal sepsis. Roth BL, et al. **Prog Clin Biol Res** 1989;286:41–59

Modification of protein kinase C (PKC) activity and diacylglycerol (DAG) accumulation in hepatocytes in continuous endotoxemia. Spitzer JA, et al. **Prog Clin Biol Res** 1989;308:575–88

Modification of adrenergic and vasopressin receptor-linked lipid metabolism during endotoxemia. Spitzer JA, et al. **Prog Clin Biol Res** 1989;286:77–99

Stimulation of arachidonic acid metabolism by CCl4 in isolated rat hepatocytes. Marinovich M, et al. **Prostaglandins** 1989 Jan;37(1):23–31

16,16 Dimethyl prostaglandin E2 decreases the formation of collagen in fibrotic rat liver slices. Peters KM, et al. **Prostaglandins** 1989 Apr;37(4):445–56

Changes of prostacyclin and thromboxane synthesis in the course of mouse liver perfusion. Stimulated thromboxane A2 synthesis of freshly prepared isolated mouse hepatocytes. Spolarics Z, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):107–12

The nucleotide sequence of rabbit liver cytochrome b5 mRNA. Dariush N, et al. **Protein Seq Data Anal** 1988; 1(5):351–3

Changes in the nuclear protein kinase activities in the regenerating liver of partially irradiated rat. Asami K, et al. **Radiat Res** 1989 Sep;119(3):500–10

The disposition of ethiofos (WR-2721) in the isolated perfused rat liver. Coleman MD, et al. **Radiat Res** 1989 Feb;117(2):334–41

Quantitation of MR relaxation effects of iron oxide particles in liver and spleen. Majumdar S, et al. **Radiology** 1988 Dec; 169(3):653–8

Inhibitory effects of cadmium on rat ornithine carbamoyltransferase and urea synthesis in the rat liver parenchymal cells. Aoki Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):411–22

The sensitivity of glycogenolysis to glucagon, epinephrine and cyanide in livers from rats in different metabolic conditions. Bazotte RB, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):193–203

Blood and liver biochemical indices of the dystrophic chicken model. Brazeau GA, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):439–50

The effect of fleroxacin on hepatic drug metabolism in the rat. Grech-Bélanger O, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):121–33

Tissue and biliary glutathione disulfide in the perfused vitamin E-deficient rat liver. Hill KE, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):373–83

Effects of carbon disulfide, diethyldithiocarbamate, and disulfiram on drug metabolism in the perfused rat liver. Masuda Y, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):65–82

Polyamine lowered the hepatic lipid peroxide level in rats. Ohmori S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):235–49

Effects of perphenazine, chlorpromazine or CoCl2 on the activities of delta-aminolevulinic acid synthetase and heme oxygenase and on the content of hemoprotein in rat liver. Senda N, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):57–64

Effect of exogenous heme on hepatic iron-load and changes induced in hepatic heme metabolism by chronic iron-load. Volin L, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):423–38

Effects of propylene glycol on redox state of the perfused rat liver—a note of caution. Schölmerich J, et al. **Res Exp Med (Berl)** 1989;189(1):39–42

Enhancement of tetrathiomolybdate-induced biliary copper excretion in sheep by general anaesthesia and the effect on copper excretion in urine and bile. Ke Y, et al. **Res Vet Sci** 1989 May;46(3):344–8

Enhancement of tetrathiomolybdate-induced copper excretion in bile of sheep by the alpha 2-agonistic action of xylazine. Symonds HW, et al. **Res Vet Sci** 1989 May; 46(3):349–53

Clearance of bromosulphthalein by the liver of sheep. West HJ. **Res Vet Sci** 1989 Mar;46(2):258–63

Evaluation of total plasma bile acid concentrations for the diagnosis of hepatobiliary disease in horses. West HJ. **Res Vet Sci** 1989 Mar;46(2):264–70

Muscle and liver protein synthesis and degradation in growing rats fed a raw field bean (Vicia faba L.) diet. Goena M, et al. **Rev Esp Fisiol** 1988 Dec;44(4):345–51

Differential metabolic pattern of muscle and liver after the administration of a beta-adrenergic agonist. Portillo MP, et al. **Rev Esp Fisiol** 1988 Jun;44(2):227–9

Effects of short-term sublethal cadmium exposures on the biochemical composition of dogfish liver. Rosell M, et al. **Rev Esp Fisiol** 1989 Mar;45(1):95–7

X-ray and xenobiotic effect on rat liver oxygen tension. Zima M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(5):443–53

Human hepatocytes in culture synthesize and secrete fibronectin. Christiansen BS, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):685–90

Serum concentrations of unconjugated and conjugated cholic acid in portal venous and systemic venous blood of fasting man. Einarsson K, et al. **Scand J Clin Lab Invest** 1989 Feb; 49(1):83–91

Lipoprotein-deficient serum stimulates the uptake of chylomicron remnants in cultured rat hepatocytes. Jensen E, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):553–6

Effects of oral S-adenosyl-L-methionine on hepatic glutathione in patients with liver disease. Vendemiale G, et al. **Scand J Gastroenterol** 1989 May;24(4):407–15

Early events in the regulation of hepatocyte DNA synthesis: the role of alpha-adrenergic stimulation. Cruise JL, et al. **Scand J Gastroenterol Suppl** 1988;151:19–30

The inhibitory effect of phlorhizin and phloretin on hexose transport in the liver. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986;124:75–81

Diazinon toxicity: effect on protein and nucleic acid metabolism in the liver of zebrafish, Brachydanio rerio (Cyprinidae). Ansari BA, et al. **Sci Total Environ** 1988 Sep 15;76(1):63–8

Investigations of the binding of 239Pu to liver cell membranes. Planas-Bohne F, et al. **Sci Total Environ** 1989 Jul 15;83(3):263–71

Inositol 1,3,4,5-tetrakisphosphate induces Ca2+ sequestration in rat liver cells. Hill TD, et al. **Science** 1988 Nov 25;242(4882):1176–8

Increased expression of DNA cointroduced with nuclear protein in adult rat liver. Kaneda Y, et al. **Science** 1989 Jan 20;243(4889):375–8

Acute hepatic heme depletion: impaired gluconeogenesis in rats. Correia MA, et al. **Semin Hematol** 1989 Apr; 26(2):120–7

Toxicological aspects of liver heme biosynthesis. De Matteis F. **Semin Hematol** 1988 Oct;25(4):321–9 (59 ref.)

Mechanisms of bile secretion: insights from the isolated rat hepatocyte couplet. Boyer JL, et al. **Semin Liver Dis** 1988 Nov;8(4):308–16 (53 ref.)

Formation, hepatic metabolism, and transport of bile pigments: a status report. Crawford JM, et al. **Semin Liver Dis** 1988 May;8(2):105–18 (168 ref.)

Metabolic zonation of liver parenchyma. Jungermann K. **Semin Liver Dis** 1988 Nov;8(4):329–41 (159 ref.)

Transport polarity of hepatocytes. Meier PJ. **Semin Liver Dis** 1988 Nov;8(4):293–307 (208 ref.)

Mechanistic aspects of hepatic bilirubin uptake. Sorrentino D, et al. **Semin Liver Dis** 1988 May;8(2):119–36 (212 ref.)

Mechanisms involved in receptor-mediated changes of intracellular Ca2+ in liver. Williamson JR, et al. **Soc Gen Physiol Ser** 1987;42:93–116 (72 ref.)

Daily metabolism and hepatic balance studies of plasma cortisol and aldosterone in the preruminant calf. Gardy-Godillot M, et al. **Steroids** 1989 Jan-Feb; 53(1-2):49–58

Estradiol-binding molecules in the liver of the water frog Rana esculenta, during the reproductive cycle. Paolucci M, et al. **Steroids** 1988 Oct;52(4):361–2

The amino acid sequence of rat CBG deduced from a cDNA, and identification of CBG mRNA in the liver under different physiological states. Smith CL, et al. **Steroids** 1988 Oct;52(4):331–2

Evidence that activation of Kupffer cells results in production of L-arginine metabolites that release cell-associated iron and inhibit hepatocyte protein synthesis. Billiar TR, et al. **Surgery** 1989 Aug;106(2):364–71; discussion 371–2

Comparison of the effects of enteral feeding with continuous and intermittent parenteral nutrition on hepatic triglyceride secretion in human beings. Isabel-Martinez L, et al. **Surgery** 1989 Mar;105(3):415–20

Changes in the levels of endogenous antioxidants in the liver of mice with experimental endotoxemia and the protective effects of the antioxidants. Sugino K, et al. **Surgery** 1989 Feb;105(2 Pt 1):200–6

Renal and hepatic handling of endogenous tissue-type plasminogen activator (t-PA) and its inhibitor in man. Brommer EJ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):404–11

Uptake and degradation of tissue plasminogen activator in rat liver. Einarsson M, et al. **Thromb Haemost** 1988 Jun 16;59(3):474–9

Synthesis of factor VIII in human hepatocytes in culture. Ingerslev J, et al. **Thromb Haemost** 1988 Dec 22; 60(3):387–91

Tissue plasminogen activator is endocytosed by mannose and galactose receptors of rat liver cells. Smedsrød B, et al. **Thromb Haemost** 1988 Jun 16;59(3):480–4

Characterization of the binding of bovine thrombin to isolated rat hepatocytes. Weyer B, et al. **Thromb Haemost** 1988 Dec 22;60(3):419–27

Uptake of human recombinant tissue-type plasminogen activator by rat hepatocytes in vivo: an electron microscope autoradiographic study. Bugelski PJ, et al. **Thromb Res** 1989 Feb 1;53(3):287–303

Biosynthesis of factor V by normal adult rat hepatocytes. Mazzorana M, et al. **Thromb Res** 1989 Jun 15;54(6):655–75

Uptake and cellular transport of [11-3H] all-trans-retinoic acid in the liver of vitamin A-deficient hamsters. Chowdhury A, et al. **Tissue Cell** 1988;20(4):555–65

Localization of actin and cytokeratin in hepatocytes and biliary epithelial cells in normal human livers using a low temperature resin and post-embedding immunohistochemistry. Kono N, et al. **Tohoku J Exp Med** 1989 Apr;157(4):325–35

Selective acetaminophen metabolite binding to hepatic and extrahepatic proteins: an in vivo and in vitro analysis. Bartolone JB, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):240–9

Binding of cocaine in the liver, olfactory mucosa, eye, and fur of pigmented mice. Brittebo EB. **Toxicol Appl Pharmacol** 1988 Nov;96(2):315–23

Cyanide metabolism in the isolated, perfused, bloodless hindlimbs or liver of the rat. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):338–49

Cyanide release from nitroprusside in the isolated, perfused, bloodless liver and hindlimbs of the rat. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):354–6

Induction of hepatic metallothionein in male B6C3F1 mice exposed to hepatic tumor promoters: effects of phenobarbital, acetaminophen, sodium barbital, and di(2-ethylhexyl) phthalate. Waalkes MP, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):217–26

Nitrofurantoin-stimulated superoxide production by channel catfish (Ictalurus punctatus) hepatic microsomal and soluble fractions. Washburn PC, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):363–77

Influence of diethyldithiocarbamate on nickel-induced hepatic metallothionein in rats. Khandelwal S, et al. **Toxicol Ind Health** 1989 May;5(3):405–13

The influence of di(2-ethylhexyl)phthalate on protein turnover in rat liver. Ganning AE, et al. **Toxicol Lett** 1989 Aug;48(2):185–92

Characterization and development of metallothionein in fetal forelimbs, brain and liver from the mouse. Muñoz C, et al. **Toxicol Lett** 1989 Jan;45(1):83–91

Intestinal and hepatobiliary disposition of drugs. Klaassen CD. **Toxicol Pathol** 1988;16(2):130–7 (10 ref.)

Drug-induced hydrogen peroxide production in isolated rat hepatocytes. Boutin JA, et al. **Toxicology** 1989 Feb; 54(2):129–37

Factors affecting the hepatic biotransformation of the phosphorothioate pesticide chlorpyrifos. Sultatos LG. **Toxicology** 1988 Oct;51(2-3):191–200

Selective retention of toxic polychlorinated dibenzo-p-dioxins and dibenzofurans in the liver of the rat after intravenous administration of a mixture. van den Berg M, et al. **Toxicology** 1989 Apr;55(1-2):173–82

Metallothionein immunoreactivity in the liver and kidney of copper injected rats. Williams LM, et al. **Toxicology** 1989 May 15;55(3):307–16

The uptake of fatty acids by the liver. Zakim D, et al. **Trans Am Clin Climatol Assoc** 1987;99:41–6 (19 ref.)

Identification of a sulfate conjugate of cyclosporin. Henricsson S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):837–8

Liver preservation: 31P and 13C NMR spectroscopic assessment of liver energy and metabolism after cold storage in Collins, Marshall, Ringer's lactate, UW and modified UW solutions. Nedelec JF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1327–9

Metabolic effects of systemic versus portal venous drainage of orthotopic small bowel isografts. Shaffer D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2872–4

Biochemical differences between Ringer's lactate and Collins' solution in hepatic preservation: detection by 31P magnetic resonance spectroscopy. Vine W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1338–9

Hepatic tolerance to hypotension as assessed by the changes in arterial ketone body ratio in the state of brain death. Lin H, et al. **Transplantation** 1989 Mar;47(3):444–8

Pyridine nucleotide fluorometry in preserved porcine liver with fluorocarbon emulsion. Ozaki N, et al. **Transplantation** 1989 Aug;48(2):198–201

Application of diethylstilbestrol dipropionate in bulls. II. Residues in bile, liver, kidney, muscle tissues and application site. Jansen EH, et al. **Vet Q** 1989 Apr; 11(2):87–93

Effects of partial hepatectomy on microtubules and hepatocellular transport of indocyanine green in rats. Fukuyama T, et al. **Virchows Arch [B]** 1988;56(1):5–12

Effects of an NADPH-generating system on primaquine degradation by hamster liver fractions. Abu-El-Haj S, et al. **Xenobiotica** 1988 Oct;18(10):1165–78

Comparison of caffeine metabolism by slices, microsomes and hepatocyte cultures from adult human liver. Berthou F, et al. **Xenobiotica** 1989 Apr;19(4):401–17

Studies on the biotransformation of lonazolac, bromerguride, lisuride and terguride in laboratory animals and their hepatocytes. Hümpel M, et al. **Xenobiotica** 1989 Apr; 19(4):361–77

The metabolism of propranolol (ICI 45,520, Inderal) and xamoterol (ICI 118,587, Corwin) by isolated rat hepatocytes: in vivo–in vitro correlations. McCormick DJ, et al. **Xenobiotica** 1988 Dec;18(12):1401–12

Zonal distribution of paracetamol glucuronidation in the isolated perfused rat liver. Mitchell MC, et al. **Xenobiotica** 1989 Apr;19(4):389–400

The inhibition by chlorate of the sulphation of polyethyleneglycol in the isolated perfused guinea pig liver. Roy AB, et al. **Xenobiotica** 1988 Sep;18(9):1049–55

The metabolism of N,N-dimethylaniline by isolated rat hepatocytes: identification of a novel N-conjugate. Sherratt AJ, et al. **Xenobiotica** 1989 Apr;19(4):379–88

The toxicokinetics of (1R, cis)- and (1R, trans)- tetramethrin in the isolated perfused rat liver. Silver IS, et al. **Xenobiotica** 1989 May;19(5):509–19

A cyclic imine intermediate in the in vitro metabolic conversion of 1,6-diaminohexane to 6-aminohexanoic acid and caprolactam. Subramanyam B, et al. **Xenobiotica** 1989 Jan;19(1):33–42

Involvement of cystathionase in the formation of alkane-thiols from corresponding cysteine conjugates. Tomisawa H, et al. **Xenobiotica** 1988 Sep;18(9):1029–37

Influence of medium composition on 7-alkoxycoumarin O-dealkylase activities of rat hepatocytes in primary maintenance culture. Warren M, et al. **Xenobiotica** 1988 Aug;18(8):973–81

Plasma clearance of bile acids in the rat: hepatic uptake under physiological conditions without countertransport. Gärtner U, et al. **Z Gastroenterol** 1989 Apr;27(4):207–11

[Liver biochemical tests in paraquat intoxication] Kuo CH, et al. **Chang Keng I Hsueh** 1988 Sep 20;11(3):160–6 (Eng. Abstr.) (Chi)

[Effect of qifen drugs on energy charge in rat liver cells] Zhang JJ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug; 8(8):477–8, 454 (Eng. Abstr.) (Chi)

[Metabolic characteristics of polymeric IgA in the human body] Zhu SL. **Chung Hua I Hsueh Tsa Chih** 1989 Apr; 69(4):214–6 (Chi)

[Changes in liver collagen metabolism and its significance during fibrosis formation of the liver in rabbits with schistosomiasis] Liu P, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):202–4 (Eng. Abstr.) (Chi)

[Isolated hepatocytes as a model for the study of drug metabolism] Kvasničková E, et al. **Cesk Farm** 1988 Jul; 37(6):272–4 (Cze)

[Metabolic response in laboratory rats after 3 days and 14 days of the physical stress of swimming] Holečková J, et al. **Cesk Fysiol** 1988;37(5):469–76 (Cze)

[Saccharides and liver repair] Holeček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):367–96 (Eng. Abstr.) (Cze)

[The importance of superoxide dismutase in the development of the post-irradiation syndrome. XI. The effect of diet and irradiation on superoxide dismutase activity and lipoperoxidation in vivo] Stoklasová A, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):403–11 (Eng. Abstr.) (Cze)

[Clearance of drugs in disturbed liver function] Brandt KH, et al. **Ned Tijdschr Geneeskd** 1988 Dec 10;132(50):2267–71 (Dut)

[Genetic polymorphism of drug oxidation] Heller FR, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):91–101 (31 ref.) (Eng. Abstr.) (Fre)

[Hormonal control of the development of hepatic gluconeogenesis in the neonate] Girard J. **Ann Endocrinol (Paris)** 1988;49(4–5):287–93 (43 ref.) (Eng. Abstr.) (Fre)

[Glucagon is processed to the (19–29) fragment at the level of the hepatocyte membrane] Blache P, et al. **C R Acad Sci [III]** 1989;308(17):467–72 (Eng. Abstr.) (Fre)

[Alcohol dehydrogenase and aldehyde dehydrogenase isoenzymes: role in metabolism and hepatic toxicity of alcohol] Fleury B, et al. **Gastroenterol Clin Biol** 1988 Dec; 12(12):912–20 (103 ref.) (Fre)

[Liver metabolism of meprobamate: clinical estimation in acute intoxication] Bismuth C, et al. **J Toxicol Clin Exp** 1985 Sep–Oct;5(5):321–8 (Eng. Abstr.) (Fre)

[Effect of insulin on the liver metabolism of lipids and vitamin D in the diabetic patient: clinical implications] Monnier L, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:203–12 (Fre)

[Cefpiramide, a new cephalosporin with high hepatic elimination; experimental evaluation of its biliary passage and disposition in the liver] Brogard JM, et al. **Pathol Biol (Paris)** 1989 May;37(5):418–23 (Eng. Abstr.) (Fre)

[Influence of fasting and the dietary lipid content on ketogenesis in isolated rabbit hepatocytes] Durix A, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:181–2 (Eng. Abstr.) (Fre)

[Gastro-entero-pancreatic production and hepatic uptake of gastrin and somatostatin in the preruminant calf receiving milk proteins or milk serum] Guilloteau P, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:163–4 (Eng. Abstr.) (Fre)

[Metabolic studies of 5-ethyl-2'-deoxyuridine with liver extract, liver cells and liver cell culture] Buchele A, et al. **Arzneimittelforschung** 1989 Feb;39(2):220–2 (Eng. Abstr.) (Ger)

[Glucagon metabolism in the in vitro recycling perfused rat liver] Hildebrandt W, et al. **Biomed Biochim Acta** 1989; 48(4):201–10 (Eng. Abstr.) (Ger)

[Glucagon degradation in the in vitro recycling perfused rat liver during acute energy deficiency] Hildebrandt W, et al. **Biomed Biochim Acta** 1989;48(4):211–9 (Eng. Abstr.) (Ger)

[Effect of metabolic changes in the liver on the cytotoxic activity of cyclophosphamide in the incisor of rats] Rosenfeld E, et al. **Biomed Biochim Acta** 1988;47(8):761–6 (Eng. Abstr.) (Ger)

[Stability of 5-phenyl-1,4,5-benzotriazepines in a physiologic environment] Pfeifer S, et al. **Pharmazie** 1989 Jan;44(1):63–4 (Ger)

[The biotransformation of STS 267 [16 alpha-azido-3-methoxyestra-1,3,5(10)-triene-17-one]. Epimerization of a 16 alpha-azido group—a new metabolic reaction in the rat liver] Schumann W. **Pharmazie** 1988 May;43(5):329–32 (Eng. Abstr.) (Ger)

[Functional interactions of the adrenal cortex and liver in rats following x-ray irradiation] Lickevič LA, et al. **Radiobiol Radiother (Berl)** 1989;30(3):261–4 (Eng. Abstr.) (Ger)

[Modification of the energy status of the liver in experimental hemorrhagic shock by intravenous enkephalin administration] Grässler J, et al. **Z Med Lab Diagn** 1988; 29(8):457–9 (Ger)

[Activation of hepatic phospholipase C induced by 4-hydroxynonenal] Garramone A, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):809–16 (Eng. Abstr.) (Ita)

[Behavior of nucleotides in the liver of the rat after castration and treatment with testosterone] Pizzichini M, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):265–8 (Eng. Abstr.) (Ita)

[Bile acids in the blood: a new indicator of hepatic function in occupational exposure to xenobiotics?] Franco G. **Med Lav** 1988 Mar–Apr;79(2):91–9 (36 ref.) (Eng. Abstr.) (Ita)

[Liver metabolism of indocyanine green and aminopyrine in liver cirrhosis: relations with functioning liver cell mass] Bolognesi M, et al. **Minerva Med** 1988 Dec;79(12):1035–41 (Eng. Abstr.) (Ita)

[Iron overload in alcoholic hepatopathy: clinical implications and evaluation technics] Bettini R, et al. **Recenti Prog Med** 1988 Nov;79(11):444–8 (Eng. Abstr.) (Ita)

[A multicenter comparative study in patients with liver metastasis to compare tegafur in new forms with existing drugs. SF-RC.SF-SP Comparative Study Group] Kashii A, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2387–92 (Eng. Abstr.) (Jpn)

[Light microscopic radioautographic study of DNA synthesis in the livers of aging mice] Ma H. **Kaibogaku Zasshi** 1988 Jun;63(3):137–47 (Eng. Abstr.) (Jpn)

[Subcellular kinetics of In-111 monoclonal antibody in the liver] Kinuya S, et al. **Kaku Igaku** 1989 Feb;26(2):231–7 (Eng. Abstr.) (Jpn)

[Study on liver uptake changes in serial 67Ga scintigraphy] Kobayashi H, et al. **Kaku Igaku** 1989 Feb;26(2):139–44 (Eng. Abstr.) (Jpn)

[Accumulation of 99mTc-phosphorous compounds uptake by liver tumors] Otsuka N, et al. **Kaku Igaku** 1989 Apr; 26(4):559–63 (Jpn)

[Chronic effects of ethylene oxide on glutathione content and lipid peroxidation in rat liver] Katoh T, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1053–7 (Eng. Abstr.) (Jpn)

[Experimental study of hepatic hemodynamics and hepatic oxygen consumption after hepatectomy] Asahi K, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):228–42 (Eng. Abstr.) (Jpn)

[Effects of various energy substrates on the recovery of the hepatic energy level after cold storage] Watanabe Y. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1204–10 (Eng. Abstr.) (Jpn)

[Chemotherapy of liver abscess (II). Significance of the preoperative administration of amphotericin B based on concentration in the liver tissue] Tanimura H, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):372–80 (Eng. Abstr.) (Jpn)

[On the relations between 67Ga uptake in tumor or liver and blood chemistry data in patients with malignant tumors] Kubota M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1013–23 (Eng. Abstr.) (Jpn)

[Iron metabolism in the hepatocytes and Kupffer cells of rats receiving large amounts of iron dextran] Shimada K. **Nippon Ika Daigaku Zasshi** 1989 Jun;56(3):245–57 (Eng. Abstr.) (Jpn)

[The studies on the loss and recovery of the steroid binding ability of rat liver glucocorticoid receptor] Takada Y, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1258–72 (Eng. Abstr.) (Jpn)

[Characterization of type II insulin-like growth factor binding on rat hepatocytes of primary monolayer culture: regulation of the binding by IGF-I and related peptides] Yamasaki M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20;64(12):1281–92 (Eng. Abstr.) (Jpn)

[Detection of leukotrienes in rat liver tissue] Kawada N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2193–6 (Eng. Abstr.) (Jpn)

[Effects of the cholestatic factor and the prostaglandin E1 derivative on the level of cAMP in isolated hepatocytes of rats] Kioka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):45–9 (Eng. Abstr.) (Jpn)

[Changes in production of platelet activating factor by adherent hepatocytes of mice with experimental liver failure] Kioka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):759–63 (Eng. Abstr.) (Jpn)

[Comparative study on the mutagenic activity of rat liver and bladder S9 by fluctuation test] Hayashi K, et al. **Sangyo Igaku** 1988 Sep;30(5):385–91 (Eng. Abstr.) (Jpn)

[Metabolic reduction of acetohexamide in rat liver and kidney] Imamura Y, et al. **Yakugaku Zasshi** 1988 Aug; 108(8):758–62 (Eng. Abstr.) (Jpn)

[Slow acetylation phenotype as a risk factor in patients with laryngeal cancer] Gierek T, et al. **Otolaryngol Pol** 1988; 42(4):232–5 (Eng. Abstr.) (Pol)

[Does the cytochrome P-450-dependent system of microsomal monooxygenases protect the body from the toxic effect of xenobiotics?] Lutz W, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):795–8 (Pol)

[The role of glutathione transferases in inactivation of carcinogenic compounds] Mikstacka R. **Postepy Biochem** 1988;34(1–2):47–57 (60 ref.) (Pol)

[Detoxication of xenobiotics by conjugation reactions] Barańczyk-Kuźma A. **Postepy Hig Med Dosw** 1988 Jan–Feb;42(1):29–42 (66 ref.) (Eng. Abstr.) (Pol)

[Hepatic complications in acute pancreatitis] Długosz J. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):665–81 (100 ref.) (Eng. Abstr.) (Pol)

[Usefulness of determination of porphyrins and their precursors for the evaluation of disorders of heme synthesis in the liver after exposure to xenobiotics] Stankiewicz A, et al. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):574–88 (43 ref.) (Eng. Abstr.) (Pol)

[Antipyrine biotransformation in the liver of patients with psoriasis] Bienias L, et al. **Przegl Dermatol** 1988 Mar–Apr; 75(2):113–6 (Eng. Abstr.) (Pol)

[Biochemistry of cholestasis] Kokot F. **Przegl Epidemiol** 1988; 42(4):375–80 (Eng. Abstr.) (Pol)

[Effect of acute carbaryl poisoning in rats on transamination reactions with the participation of pyruvate. II. The activity of hepatic aminotransferases] Jeleniewicz K, et al. **Rocz Panstw Zakl Hig** 1988;39(3):231–8 (Eng. Abstr.) (Pol)

[Effect of vanadium on selected biochemical parameters of the blood and internal organs in rats] Zaporowska H, et al. **Rocz Panstw Zakl Hig** 1988;39(5):379–84 (Eng. Abstr.) (Pol)

[Effect of a low-calorie diet on serum lipid levels and metabolic function of the liver in obese women during the climacteric period] Chojnowska-Jezierska J, et al. **Wiad Lek** 1989 Dec 1;41(23):1566–70 (Eng. Abstr.) (Pol)

[Metabolism of anesthetics in the liver and its significance for anesthesiology] Krakovskiĭ ME, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):74–9 (79 ref.) (Rus)

[Rifampicin pharmacokinetics in patients with pulmonary tuberculosis with concomitant helminthiasis] Korablev VN, et al. **Antibiot Khimioter** 1989 Apr;34(4):287–8 (Eng. Abstr.) (Rus)

[Collagen and fibronectin of the liver in children with congenital fibrosis, an extrahepatic portal circulation block and post-hepatitis cirrhosis (an immunohistochemical study)] Shekhonin BV, et al. **Arkh Patol** 1989;51(4):35–41 (Eng. Abstr.) (Rus)

[Potassium transport in ischemia and anoxia of the perfused liver] Kabakov AIu, et al. **Biofizika** 1989 Mar–Apr; 34(2):295–6 (Eng. Abstr.) (Rus)

[Inhibition of RNA synthesis in animal cells by sodium selenite] Abdullaev FI, et al. **Biokhimiia** 1989 Jan; 54(1):145–8 (Eng. Abstr.) (Rus)

[Effect of cycloheximide on lipid metabolism in cells, nuclei and subcellular fractions in the rat liver] Alesenko AV, et al. **Biokhimiia** 1989 Feb;54(2):328–37 (Eng. Abstr.) (Rus)

[Effect of catecholamines and serotonin on RNA-synthesizing activity in isolated nuclei and chromatin

of the rat brain and liver] Arkhipova LV, et al. **Biokhimiia** 1988 Jul;53(7):1078–81 (Eng. Abstr.) (Rus)

[Rat liver energetics according to data of 31P-NMR in extreme states of the processes of biosynthesis of proteins and nucleic acids] Khristianovich DS, et al. **Biokhimiia** 1988 Nov;53(11):1900–5 (Eng. Abstr.) (Rus)

[Age-related differences in the inhibition of DNA synthesis in the liver of albino rats by proliferation inhibitors of chalone type] Klimenko AI, et al. **Biokhimiia** 1988 Jun; 53(6):979–84 (Eng. Abstr.) (Rus)

[Changes in the physico-chemical characteristics of mouse liver lipids after administration of a mixture of unsaturated fatty acids] Kukhtina EN, et al. **Biokhimiia** 1988 Sep; 53(9):1479–85 (Eng. Abstr.) (Rus)

[Increased affinity of liposomes derived from total spleen and liver lipids to spleen cells] Kulikov VI, et al. **Biokhimiia** 1988 May;53(5):786–92 (Eng. Abstr.) (Rus)

[Dynamics of the biosynthesis of components of the protein synthesizing apparatus of the rat liver at the stage of restoration of translation, inhibited by cycloheximide] Mitrokhin IuI, et al. **Biokhimiia** 1988 Dec;53(12):2033–41 (Eng. Abstr.) (Rus)

[Effect of phosphopantothenate on the biosynthesis of cholesterol and its esters from various precursors in the liver of db/db mice] Obrosova IG, et al. **Biokhimiia** 1988 Nov;53(11):1797–802 (Eng. Abstr.) (Rus)

[The role of aldehyde dehydrogenases in the malonic dialdehyde metabolism in the rat liver] Pirozhkov SV, et al. **Biokhimiia** 1988 Sep;53(9):1443–8 (Eng. Abstr.) (Rus)

[Composition of DNA-bound lipids in the regenerating rat liver] Struchkov VA, et al. **Biokhimiia** 1988 Sep; 53(9):1449–54 (Eng. Abstr.) (Rus)

[Stimulation of DNA synthesis in isolated nuclei of rat liver cells by neutral Mn-dependent DNase of chromatin] Vinter VG, et al. **Biokhimiia** 1988 Nov;53(11):1906–11 (Eng. Abstr.) (Rus)

[Estimation of a direct regulatory effect of estrogens on hepatocytes, evaluated according to the change in the level of free estrogen–binding protein in primary cell culture] Vishniakova TG, et al. **Biokhimiia** 1989 Apr;54(4):694–701 (Eng. Abstr.) (Rus)

[Nuclear matrix proteins of the rat liver at various levels of body thyroid status] Adylova AT. **Biol Nauki** 1989; (1):33–7 (Rus)

[The content of lipid peroxidation products and the activity of antioxidant enzymes in the myocardium and liver of rats with various vitamin E allowances] Arkhipenko IuV, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):670–1 (Eng. Abstr.) (Rus)

[Analysis of binding and absorption of native and modified low density lipoproteins by human liver cells in primary culture] Babaev VR, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):102–4 (Eng. Abstr.) (Rus)

[Synthesis of DNA and alpha-fetoprotein in the monolayer culture of mouse hepatocytes] Gal'perina TE. **Biull Eksp Biol Med** 1988 Sep;106(9):350–3 (Eng. Abstr.) (Rus)

[Partial purification of endogenous inhibitors of (+)-[3H] SKF 10047 binding with sigma-opioid receptors of the liver] Nagornaia LV, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):314–7 (Eng. Abstr.) (Rus)

[Comparative evaluation of the effect of immobilization stress on the dynamics of resistance to induction of lipid peroxidation in internal organs and brain] Arkhipenko IuV, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1500–3 (Rus)

[Metabolism of arachidonic acid in cell nuclei of the liver of albino rats] Babenko NA, et al. **Dokl Akad Nauk SSSR** 1988;302(2):460–3 (Rus)

[A sharp increase in the liver of a factor stimulating proliferation of fibroblasts in vitro in experimental cirrhosis] Beliaev ND, et al. **Dokl Akad Nauk SSSR** 1989; 306(2):496–8 (Rus)

[Counterphase oscillations in the intensity of protein synthesis and the concentration of ATP in hepatocytes in vitro] Iurovitskiĭ IuG, et al. **Dokl Akad Nauk SSSR** 1989; 304(2):480–2 (Rus)

[Carbachol—an inducer of nitrogen oxide formation in the liver of animals in vivo] Vanin AF, et al. **Dokl Akad Nauk SSSR** 1988;301(2):490–2 (Rus)

[Transport of x-ray contrast media in isolated target and nontarget cells] Shimanovskiĭ NL, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):80–4 (Eng. Abstr.) (Rus)

[The role of Na K ATPase in thiamine and lipoic acid interrelations during their absorption in the gastrointestinal tract of mice] Karpov LM. **Fiziol Zh** 1989 Mar-Apr; 35(2):51–7 (Eng. Abstr.) (Rus)

[Carbohydrate and lipid metabolism in rats during adaptation to cold] Pal'chikova NA, et al. **Fiziol Zh** 1989 Mar-Apr; 35(2):61–5 (Eng. Abstr.) (Rus)

[The mother-newborn infant system as a natural biological model for the study of the effects of exogenous chemical substances and the products of their biotransformation] Goncharuk EI, et al. **Gig Sanit** 1988 Jun;(6):10–2 (Eng. Abstr.) (Rus)

[Effect of carbon monoxide on the biotransformation of xenobiotics] Riazanov EM, et al. **Gig Sanit** 1988 Jun; (6):89–90 (Rus)

[Various changes in protein metabolism and integral indicators in rats after a single-dose exposure to phenol] Skvortsova RI, et al. **Gig Sanit** 1989 Mar;(3):79 (Rus)

[The role of free radicals in the pathogenesis of chronic poisoning with phosphorus compounds] Ormanov NZh. **Gig Tr Prof Zabol** 1988 Sep;(9):15–8 (Eng. Abstr.) (Rus)

[The role of suppression of cholesterol 7-hydroxylase activity of the liver in the development of atherogenic stress-induced dyslipoproteinemia] Meerson FZ, et al. **Kardiologiia** 1988 Sep;28(9):85–7 (Rus)

[Pharmacokinetics of antipyrine in viral and alcoholic lesions of the liver] Tsyrkunov VM, et al. **Klin Med (Mosk)** 1989 Feb;67(2):87–9 (Eng. Abstr.) (Rus)

[Carbohydrates and lipids in the blood serum and liver of rats exposed to repeated hypokinesia] Tikhomirova NA, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):81–3 (Rus)

[Hormonal regulation of total RNA and protein biosynthesis in liver cell cultures of rats in the pre- and postnatal period of development] Fedotov Vp, et al. **Probl Endokrinol (Mosk)** 1989 May-Jun;35(3):54–8 (Eng. Abstr.) (Rus)

[Binding of glucocorticoids and glucocorticoid-receptor complexes with rat liver nuclear matrix] Konoplia EF, et al. **Probl Endokrinol (Mosk)** 1989 Jan-Feb;35(1):50–4 (Eng. Abstr.) (Rus)

[Metabolism of 3H-corticosterone in the liver cells of intact and adrenalectomized rats] Minchenko AG, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):70–5 (Eng. Abstr.) (Rus)

[Interaction of androgen-receptor complexes in rat liver cytosol with cellular nuclei and DNA] Smirnova OV, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):52–5 (Eng. Abstr.) (Rus)

[Antioxidant activity of hepatotropic preparations in the treatment of chronic diseases of the liver] Loginov AS, et al. **Ter Arkh** 1988;60(8):74–7 (Eng. Abstr.) (Rus)

[Change in the number of epidermal growth factor receptors of hepatocytes during liver regeneration in rats] Ivashchenko IuD, et al. **Tsitologiia** 1989 Apr;31(4):453–9 (Eng. Abstr.) (Rus)

[Binding of alcian blue by the outer perimembrane layers of cells in the liver, thymus and transplantable tumors] Slivinskiĭ GG. **Tsitologiia** 1988 Jun;30(6):672–7 (Eng. Abstr.) (Rus)

[Age-related features of the metabolism of fatty acid components of phospholipids of the cell nuclei of rat liver under the effect of dietetic factors] Babenko NA. **Ukr Biokhim Zh** 1989 May-Jun;61(3):85–90 (Eng. Abstr.) (Rus)

[Activity of key enzymes of heme metabolism and the content of several hemoproteins in the liver of rats of various ages] Kaliman PA, et al. **Ukr Biokhim Zh** 1989 Jan-Feb; 61(1):75–8 (Eng. Abstr.) (Rus)

[Identification of transcortin-synthesizing polyribosomes in the rat liver] Krauialis KI, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):14–8 (Eng. Abstr.) (Rus)

[Phosphorylation of lactate dehydrogenase by purified plasma membranes of loach liver cells: stimulation with insulin] Kusen' SI, et al. **Ukr Biokhim Zh** 1989 Jan-Feb; 61(1):79–81 (Eng. Abstr.) (Rus)

[Changes in the level of pyrimidine nucleoside phosphates in the liver of irradiated rats] Nagiev ER, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):89–91 (Eng. Abstr.) (Rus)

[Evaluation of the drug metabolizing function of the liver in patients with psoriasis] Rakhmatov AB, et al. **Vestn Dermatol Venerol** 1988;(12):14–7 (Eng. Abstr.) (Rus)

[Drug-metabolizing activity of the liver in patients with eczema and allergic dermatitis] Zhigulin VA, et al. **Vestn Dermatol Venerol** 1989;(3):42–4 (Eng. Abstr.) (Rus)

[Intensity of gluconeogenesis in the rat liver in the recovery period after long-term hypokinesis] Ershikov SM. **Vopr Med Khim** 1989 May-Jun;35(3):55–8 (Eng. Abstr.) (Rus)

[Stability of DNA-protein complexes in cell nuclei of the rat liver during aging] Konoplia EF, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):78–82 (Eng. Abstr.) (Rus)

[The effect of emotional-pain stress on the rate of DNA synthesis in heart and liver cells] Meerson FZ, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):59–62 (Eng. Abstr.) (Rus)

[Effect of experimental hyper- and hypothyrosis on the level of various forms of vitamin A in various tissues of albino rats] Natanson AO, et al. **Vopr Med Khim** 1971 Jul-Aug; 17(4):411–4 (Eng. Abstr.) (Rus)

[Features of RNA synthesis in isolated cell nuclei of M-1 sarcoma and rat liver] Rubtsova GV, et al. **Vopr Med Khim** 1971 Jul-Aug;17(4):415–22 (Eng. Abstr.) (Rus)

[Metabolic effects of ethanol and lipid metabolism in the rat liver] Selevich MI. **Vopr Med Khim** 1988 Sep-Oct; 34(5):49–52 (Eng. Abstr.) (Rus)

[The effect of ethanol on the initial stage of protein biosynthesis in the rat liver] Sushkova VV, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):21–4 (Eng. Abstr.) (Rus)

[Features of purine compound metabolism in hepatoma 22, mouse liver and erythrocytes during tumor development] Tikhonov IuV, et al. **Vopr Med Khim** 1989 May-Jun; 35(3):125–9 (Eng. Abstr.) (Rus)

[Effect of the ratio of polyunsaturated fatty acids of the omega 6 and omega 3 families in the diet of rats on the cholesterol content of the blood plasma and liver] Arutiunova MB, et al. **Vopr Pitan** 1988 Nov-Dec;(6):36–9 (Eng. Abstr.) (Rus)

[Effect of supplementary vitamin administration on free amino acids in the liver and brain of rats with alcoholic intoxication] Ostrovskiĭ SIu, et al. **Vopr Pitan** 1988 May-Jun;(3):41–5 (Eng. Abstr.) (Rus)

[The significance of the structure of dietary oligosaccharides in their metabolism into liver lipids] Virovets OA, et al. **Vopr Pitan** 1989 Jan-Feb;(1):49–52 (Eng. Abstr.) (Rus)

[Cholate-forming function of the liver in patients with chronic alcoholism] Anokhina GA, et al. **Vrach Delo** 1989 Jun;(6):16–8 (Eng. Abstr.) (Rus)

[Indices of lysozyme activity and of liver metabolic function in staphylococcal and Pseudomonas aeruginosa infection] Pavlenko VA, et al. **Vrach Delo** 1989 Mar;(3):111–3 (Eng. Abstr.) (Rus)

[Hemosorption in the correction of disorders of the protein-forming function of the liver in subhepatic jaundice] Protsiuk VP. **Vrach Delo** 1988 Dec;(12):47–9 (Eng. Abstr.) (Rus)

[Comparative determination of the potential for activating lipid peroxidation of the adrenal cortex, liver and heart in various animals] Doroshkevich NA, et al. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):398–401 (Eng. Abstr.) (Rus)

[Glucagon binding by isolated chick hepatocytes] Ukhanova MV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug; 24(4):509–15 (Eng. Abstr.) (Rus)

[Clinical significance of the determination of biochemico-enzymic and morphologic factors in the etiopathogenesis and diagnosis of chronic alcoholic liver diseases] Džambas D, et al. **Med Pregl** 1988;41(3–4):104–9 (Eng. Abstr.) (Scr)

[The effect of silymarin on gluconeogenesis in the liver of rats after damage due to phosmet] Uličná O, et al. **Bratisl Lek Listy** 1988 Sep;89(9):678–82 (Eng. Abstr.) (Slo)

[Elevated indicators of liver metabolism in patients with giardiasis] Krčméry V, et al. **Vnitr Lek** 1989 May; 35(5):479–82 (Eng. Abstr.) (Slo)

[Hepatotoxicity mechanisms] Pla A, et al. **Med Clin (Barc)** 1988 Nov 26;91(18):710–5 (64 ref.) (Spa)

[Interactions of biosynthetic human and porcine insulins with their cellular receptors and with fetal subcellular fractions from humans and rats] Rodríguez M, et al. **Rev Clin Esp** 1988 Oct;183(5):235–40 (Eng. Abstr.) (Spa)

MICROBIOLOGY

Detection of hepatitis delta virus in serum and liver tissue by molecular hybridization. Validation of a rapid spot-hybridization technique. Gupta S, et al. **Am J Clin Pathol** 1989 Aug;92(2):218–21

Detection of yellow fever viral RNA by nucleic acid hybridization and viral antigen by immunocytochemistry in fixed human liver. Monath TP, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):663–8

State of hepatitis B virus DNA in hepatocytes of patients with noncarcinomatous liver disease. Its special relationship with necroinflammatory activity and the stage of disease. Tozuka S, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):20–5

Effects of biliary obstruction on hepatic clearance of bacteria. Allen MO, et al. **Arch Surg** 1989 Aug;124(8):973–7

Inclusion-body hepatitis in day-old turkeys. Guy JS, et al. **Avian Dis** 1988 Jul-Sep;32(3):587–90

Growth characteristics of Tyzzer's organism in cultured mouse hepatocytes. Kawamura S, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):125–7

Replication of duck hepatitis B virus in primary duck hepatocytes and its dependence on the state of differentiation of the host cell. Galle PR, et al. **Hepatology** 1989 Oct;10(4):459–65

Fulminant NANB hepatitis in a patient with AIDS: a possible demonstration of direct hepatic damage by the virus/es involved? Libanore M, et al. **Infection** 1988 Jul-Aug; 16(4):255

Intracellular parasitism of parenchymal cells by Mycobacterium leprae. Job CK, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):659–70

Hepatitis B-DNA replication and histological patterns in liver biopsy specimens of chronic HBsAg positive patients with and without hepatitis delta virus superinfection. Villari D, et al. **J Clin Pathol** 1989 Jul;42(7):689–93

Propagation of hepatitis A virus in hybrid cell lines derived from marmoset liver and Vero cells. Ashida M, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2487–94

Viruslike particles in liver in sporadic non-A, non-B fulminant hepatitis. Fagan EA, et al. **J Med Virol** 1989 Jan;27(1):76–80

Electron microscopy of ribonucleic acid in nuclear particulate aggregates of hepatitis D using nuclease-gold complexes. Kojima T, et al. **J Med Virol** 1989 Jul; 28(3):183–8

Status of hepatitis B virus DNA in hepatocellular carcinoma: a study based on paired tumor and nontumor liver tissues. Lai MY, et al. **J Med Virol** 1988 Jul;25(3):249–58

Frequent integration of hepatitis B virus DNA in noncancerous liver tissue from hepatocellular carcinoma patients. Tanaka Y, et al. **J Med Virol** 1988 Sep;26(1):7–14

Hepatitis B virus infection of adult human hepatocytes cultured in the presence of dimethyl sulfoxide. Gripon P, et al. **J Virol** 1988 Nov;62(11):4136–43

Liver-specific expression of hepatitis B virus is determined by the combined action of the core gene promoter and the enhancer. Honigwachs J, et al. **J Virol** 1989 Feb; 63(2):919–24

X-region-specific transcript in mammalian hepatitis B virus-infected liver. Kaneko S, et al. **J Virol** 1988 Nov; 62(11):3979–84

Characterization of self-cleaving RNA sequences on the genome and antigenome of human hepatitis delta virus. Kuo MY, et al. **J Virol** 1988 Dec;62(12):4439–44

Human liver plasma membranes contain receptors for the hepatitis B virus pre-S1 region and, via polymerized human serum albumin, for the pre-S2 region. Pontisso P, et al. **J Virol** 1989 May;63(5):1981–8

Latent hepatitis B virus infection with full-length viral genome in a patient serologically immune to hepatitis B virus infection. Blum HE, et al. **Liver** 1988 Oct;8(5):307–16

The effect of monosaccharides on in situ hepatic trapping of Candida albicans. Sawyer RT. **Mycopathologia** 1988 Nov;104(2):81–5

An in vitro system for infection with hepatitis B virus that uses primary human fetal hepatocytes. Ochiya T, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1875–9

Detection of human cytomegalovirus DNA in liver biopsies from patients with cytomegalovirus-related liver disease. Dény P, et al. **Res Virol** 1989 Jul–Aug;140(4):361–72

Recovery of virus from the liver of children with fatal dengue: reflections on the pathogenesis of the disease and its possible analogy with that of yellow fever. Rosen L, et al. **Res Virol** 1989 Jul–Aug;140(4):351–60

Cycloheximide increases endogenous retroviral RNA levels in murine liver and lung. Manenti G, et al. **Tumori** 1989 Jun 30;75(3):217–21

The surface gene promoter of the human hepatitis B virus displays a preference for differentiated hepatocytes. Chang HK, et al. **Virology** 1989 May;170(1):176–83

Evidence for replication of hepatitis delta virus RNA in hepatocyte nuclei after in vivo infection. Gowans EJ, et al. **Virology** 1988 Nov;167(1):274–8

[Collection method of Mycobacterium leprae from infected armadillo liver—a comparison with Draper's method] Miyata Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Oct–Dec; 56(4):166–71 (Eng. Abstr.) **(Jpn)**

[Selective inhibition by 3'-azido-2',3-dideoxythymidine-5'-triphosphate of reverse transcription in retrovirus A particles from the rat liver] Pyrinova GB, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1405–10 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Pathophysiology of experimental leishmaniasis: the role of parasite physiology in the development of metastatic disease. Hill JO. **Am J Trop Med Hyg** 1988 Sep; 39(3):256–60

Cultivation of exoerythrocytic stages of Plasmodium cynomolgi, P. knowlesi, P. coatneyi, and P. inui in Macaca mulatta hepatocytes. Millet P, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):529–34

Visceral leishmaniasis: resistance to reinfection in the liver following chemotherapy in the BALB/c mouse. Carter KC, et al. **Exp Parasitol** 1989 May;68(4):375–81

Plasmodium vivax: in vitro development of exoerythrocytic stages in squirrel monkey hepatocytes and inhibition by an anti-P. cynomolgi monoclonal antibody. Millet P, et al. **Exp Parasitol** 1989 Jul;69(1):91–3

Alveolar echinococcosis of the liver. Miguet JP, et al. **J Hepatol** 1989 May;8(3):373–9

Dual action of anti-sporozoite antibodies in vitro. Nudelman S, et al. **J Immunol** 1989 Aug 1;143(3):996–1000

Transfer of Eimeria nieschulzi using extraintestinal tissue. Mayberry LF, et al. **J Parasitol** 1989 Jun;75(3):470–2

Visceral leishmaniasis: drug carrier system characteristics and the ability to clear parasites from the liver, spleen and bone marrow in Leishmania donovani infected BALB/c mice. Carter KC, et al. **J Pharm Pharmacol** 1989 Feb;41(2):87–91

Sporulated coccidian oocysts resembling Goussia Labbe, 1896 in the viscera of Nile crocodiles. Gardiner CH, et al. **J Wildl Dis** 1986 Oct;22(4):575–7

Hepatic lesions associated with Cooperioides hepaticae (Nematoda: Trichostrongyloidea) infection in impala (Aepyceros melampus) of the Kruger National Park. Pletcher JM, et al. **J Wildl Dis** 1988 Oct;24(4):650–5

Sporozoite vaccine induces genetically restricted T cell elimination of malaria from hepatocytes. Hoffman SL, et al. **Science** 1989 Jun 2;244(4908):1078–81

Demonstration of eosinophilic granulocytes in Schistosoma granulomata using naphthalene black [published erratum appears in Trans R Soc Trop Med Hyg 1988;82(3):357] Ball MT, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):261

Liver parenchymal cell parasitism in human visceral leishmaniasis. Duarte MI, et al. **Virchows Arch [A]** 1989; 415(1):1–6

Detection of Toxoplasma gondii in liver tissue sections from brown hares (Lepus europaeus P.) and mountain hares (Lepus timidus L.) using the peroxidase anti-peroxidase (PAP) technique as a complement to conventional histopathology. Gustafsson K, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):402–7

PATHOLOGY

Life expectancy in chronic liver disease. Szalay L, et al. **Acta Med Hung** 1988;45(3–4):297–305

Glycosaminoglycan containing fat-storing cells in hepatic fibrogenesis. Szende B, et al. **Acta Morphol Hung** 1988; 36(3–4):241–51

Morphologic studies of the liver and bile ducts in biliary atresia. Ohi R, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):584–9

A comparative pathological study of liver injury after different combination chemotherapies for leukemia. Tanaka H, et al. **Acta Pathol Jpn** 1988 Nov;38(11):1417–32

Intranuclear inclusion bodies in liver of chronic hepatitis B with delta infection. Yamada G, et al. **Acta Pathol Jpn** 1988 Jun;38(6):759–68

MR-cholangiography with a double contrast technique. Hemmingsson A, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):29–33

MR appearance of the liver after partial hepatectomy. Arrivé L, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1215–20

Evaluation of fibrosis in the disse space in noncirrhotic alcoholic liver disease. Robert P, et al. **Alcoholism (NY)** 1989 Apr;13(2):176–80

Macroregenerative nodules of the liver in primary biliary cirrhosis: report of two autopsy cases. Terada T, et al. **Am J Gastroenterol** 1989 Apr;84(4):418–21

Ovine ceroid-lipofuscinosis. I: Lipopigment composition is indicative of a lysosomal proteinosis. Palmer DN, et al. **Am J Med Genet Suppl** 1988;5:141–58

Fatal hepatic necrosis caused by disseminated type 5 adenovirus infection in a renal transplant recipient. Norris SH, et al. **Am J Nephrol** 1989;9(2):101–5

Emergence of neoplastic transformants spontaneously or after exposure to N-methyl-N'-nitro-N-nitrosoguanidine in populations of rat liver epithelial cells cultured under selective and nonselective conditions. Lee LW, et al. **Am J Pathol** 1989 Jul;135(1):63–71

Histologic studies on the hepatic lesions induced by graft-versus-host reaction in MHC class II disparate hosts compared with primary biliary cirrhosis. Saitoh T, et al. **Am J Pathol** 1989 Aug;135(2):301–7

Role of hepatic histologic findings in the prognosis and treatment of bleeding esophageal varices. Andreoni B, et al. **Am J Surg** 1989 Feb;157(2):220–4

Primary sclerosing cholangitis associated with liver atrophy. Hadjis NS, et al. **Am J Surg** 1989 Jul;158(1):43–7

Nonoperative approach to hilar cancer determined by the atrophy-hypertrophy complex. Hadjis NS, et al. **Am J Surg** 1989 Apr;157(4):395–9

Morphologic and functional changes in the remnant liver following resection for cirrhosis or chronic hepatitis. Kanematsu T, et al. **Am J Surg Pathol** 1989 Sep; 13(9):776–81

Neutrophil accumulation and structural changes in nonpulmonary organs after acute lung injury induced by phorbol myristate acetate. Mizer LA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1017–26

Morphometric characteristics of hepatocellular dysplasia. Matturri L, et al. **Anal Quant Cytol Histol** 1988 Oct; 10(5):339–42

Is liver biopsy useful in the evaluation of patients with chronically elevated liver enzymes? Van Ness MM, et al. **Ann Intern Med** 1989 Sep 15;111(6):473–8

The role of interleukin-6 as the hepatocyte stimulating factor in the network of inflammatory cytokines. Koj A. **Ann N Y Acad Sci** 1989;557:1–8 (48 ref.)

Intraoperative ultrasound of the liver affects operative decision making. Parker GA, et al. **Ann Surg** 1989 May; 209(5):569–76; discussion 576–7

Reduction of DNA repair efficiency during the initial phase of rat liver carcinogenesis. Brambilla G, et al. **Anticancer Res** 1988 Jul–Aug;8(4):605–9

Congenital hepatic fibrosis: evolving morphology. Bernstein J, et al. **APMIS Suppl** 1988;4:17–26

The role of liver biopsies in psoriatic patients receiving long-term methotrexate treatment. Improvement in liver abnormalities after cessation of treatment. Newman M, et al. **Arch Dermatol** 1989 Sep;125(9):1218–24

Detection of hepatotoxicity associated with methotrexate therapy for psoriasis. O'Connor GT, et al. **Arch Dermatol** 1989 Sep;125(9):1209–17

Serological and histological follow up of chronic hepatitis B infection. Ruiz-Moreno M, et al. **Arch Dis Child** 1989 Aug;64(8):1165–9

Incidence of preneoplastic foci in rat liver dependent on different promoting schemes. Deml E, et al. **Arch Toxicol Suppl** 1989;13:233–6

Transjugular liver biopsy—an Australian experience. Steadman C, et al. **Aust N Z J Med** 1988 Dec;18(7):836–40

Inflammatory pseudotumour of the liver. Levitt MD, et al. **Aust N Z J Surg** 1988 Sep;58(9):743–5

Death due to a probable herpesvirus infection in a common wombat (Vombatus ursinus). Rothwell JT, et al. **Aust Vet J** 1988 Nov;65(11):360–1

Effect of dietary lipid peroxides on lymphoid tissues. Oarada M, et al. **Basic Life Sci** 1988;49:327–30

Role of active oxygen in paraquat and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) cytotoxicity. Sandy MS, et al. **Basic Life Sci** 1988; 49:795–801

Effects of the polysaccharide chain of lipopolysaccharide in an experimental massive hepatic cell necrosis model. Mizoguchi Y, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1305–10

Hypoxia-reoxygenation injury and the generation of reactive oxygen in isolated hepatocytes. de Groot H, et al. **Biomed Biochim Acta** 1989;48(2–3):S11–5

An association between parameters of liver blood flow and percentage hepatic replacement with tumour. Hunt TM, et al. **Br J Cancer** 1989 Mar;59(3):410–4

Diffuse hepatic calcification. Kerlin P, et al. **Br J Radiol** 1988 Nov;61(731):1079–80

A patient with seropositive rheumatoid arthritis. Capell H. **Br J Rheumatol** 1989 Aug;28(4):340

Percutaneous histopathologic evaluation of liver in treatment of non-Hodgkin's lymphoma. Yoshimatsu S. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):25–31

Liver findings in generalized mastocytosis. A clinicopathologic study. Horny HP, et al. **Cancer** 1989 Feb 1;63(3):532–8 (85 ref.)

Clonal state of human hepatocellular carcinoma and non-tumorous hepatocytes. Esumi M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S1–3

Hepatocellular carcinoma in adenomatous hyperplasia of the liver. Sakurai M, et al. **Cancer Chemother Pharmacol** 1989; 23 Suppl:S110–3

Induction of rat liver gamma-glutamyltranspeptidase-positive foci by oral administration of 1-nitropyrene. Denda A, et al. **Cancer Lett** 1989 Apr;45(1):21–6

Selective implantation and growth in rats and mice of experimental liver metastasis in acinar zone one. Barberá-Guillem E, et al. **Cancer Res** 1989 Jul 15; 49(14):4003–10

Production of hepatocellular carcinoma by oval cells: cell cycle expression of c-myc and p53 at different stages of oval cell transformation. Braun L, et al. **Cancer Res** 1989 Mar 15;49(6):1554–61

Differences between the promoting activities of the peroxisome proliferator WY-14,643 and phenobarbital in rat liver. Cattley RC, et al. **Cancer Res** 1989 Jun 15; 49(12):3246–51

Cross-linkage of nucleophosmin in tumor cells by nitrogen mustard. Chan PK. **Cancer Res** 1989 Jun 15;49(12):3271–5

In vitro hepatotoxicity of SR 4233 (3-amino-1,2,4-benzotriazine-1,4-dioxide), a hypoxic cytotoxin and potential antitumor agent. Costa AK, et al. **Cancer Res** 1989 Feb 15;49(4):925–9

In vivo differentiation of rat liver oval cells into hepatocytes. Evarts RP, et al. **Cancer Res** 1989 Mar 15;49(6):1541–7

Enhancement of hepatocarcinogenesis in rats by dietary fructose. Enzmann H, et al. **Carcinogenesis** 1989 Jul; 10(7):1247–52

Protooncogene methylation and expression in regenerating liver and preneoplastic liver nodules induced in the rat by diethylnitrosamine: effect of variations of S-adenosylmethionine:S-adenosylhomocysteine ratio. Garcea R, et al. **Carcinogenesis** 1989 Jul;10(7):1183–92

The food-mutagens 2-amino-1-methyl-6-phenylimidazo-[4,5-b]-pyridine (PhIP) and 2-amino-3,8-dimethylimidazo[4,5-f]-quinoxaline (MeIQx) initiate enzyme-altered hepatic foci in the resistant hepatocyte model. Kleman M, et al. **Carcinogenesis** 1989 Sep;10(9):1697–700

The lectin binding characteristics of spontaneous and phenobarbitone induced hepatic lesions in C3H/He mice. Pritchard DJ, et al. **Carcinogenesis** 1989 Sep;10(9):1737–42

Evaluation of chlordecone in a two-stage model of hepatocarcinogenesis: a significant sex difference in the hepatocellular carcinoma incidence. Sirica AE, et al. **Carcinogenesis** 1989 Jun;10(6):1047–54

Hexachlorobenzene as a promoter of diethylnitrosamine-initiated hepatocarcinogenesis in rats and comparison with induction of porphyria. Stewart FP, et al. **Carcinogenesis** 1989 Jul;10(7):1225–30

Isolation and characterization of parenchymal cells from experimentally induced macronodular rat liver cirrhosis. Müller D, et al. **Cell Biochem Funct** 1989 Apr;7(2):119–28

Some studies of the antischistosomal drug, metrifonate. Shehata MM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):173–4

Procollagen III peptide and fibronectin in alcohol-related chronic liver disease: correlations with morphological features and biochemical tests. Gabrielli GB, et al. **Clin Chim Acta** 1989 Feb 22;179(3):315–22

Fine-needle aspiration cytology of pediatric patients with primary hepatic tumors: a comparative study of two hepatoblastomas and a liver-cell carcinoma. Dekmezian R, et al. **Diagn Cytopathol** 1988;4(2):162–8

Familial hemophagocytic lymphohistiocytosis. Lachman MF, et al. **Diagn Cytopathol** 1988;4(2):121–4

Fine-needle aspiration of the liver: out of the ivory tower and into the community. Leiman G, et al. **Diagn Cytopathol** 1989;5(1):35–9

Tests for liver metastases in gastrointestinal cancer. A critical review. Christensen M, et al. **Dig Dis** 1989;7(4):194–202

Statement on outpatient percutaneous liver biopsy. Jacobs WH, et al. **Dig Dis Sci** 1989 Mar;34(3):322–3

Histological changes of the liver by treatment of chronic non-A, non-B hepatitis with recombinant leukocyte interferon alpha. Comparison with histological changes in chronic hepatitis B. Omata M, et al. **Dig Dis Sci** 1989 Mar; 34(3):330–7

Plugged liver biopsy in patients with impaired coagulation. Tobin MV, et al. **Dig Dis Sci** 1989 Jan;34(1):13–5

Hepatocyte and nuclear areas and fatty infiltration of the liver in chronic alcoholic liver disease. González-Reimers E, et al. **Drug Alcohol Depend** 1988 Dec;22(3):195–203

Indices of growth and death of liver cells in human chronic liver disease. Barr RD, et al. **East Afr Med J** 1987 Sep; 64(9):595–600

Histopathology associated with elevated levels of growth hormone and insulin-like growth factor I in transgenic mice. Quaife CJ, et al. **Endocrinology** 1989 Jan;124(1):40–8

Smooth liver surface may conceal cirrhosis. Evidence for the late development of nodular surface of the cirrhotic liver. Orlando R, et al. **Endoscopy** 1988 Nov;20(6):323–5

Measurements of response to chemotherapy using ultrasound in metastatic liver involvement. Bleiberg H, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):857–9

Effect of hepatic and renal dysfunction on disposition of bupropion in rats. Kaka JS, et al. **Eur J Drug Metab Pharmacokinet** 1988 Jul–Sep; 13(3):149–53

Hepatic structural correlates of liver fibrosis: a morphometric analysis. Buschmann RJ, et al. **Exp Mol Pathol** 1989 Feb; 50(1):114–24

Interaction of hypoxia and carbon tetrachloride toxicity in hepatocyte monolayers. Costa AK, et al. **Exp Mol Pathol** 1989 Apr;50(2):183–92

Further studies on the mechanism of the late protective effects of phenylmethylsulfonyl fluoride on carbon tetrachloride-induced liver necrosis. de Ferreyra EC, et al. **Exp Mol Pathol** 1989 Apr;50(2):253–69

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

DNA damage in liver and kidney of rats after treatment with hydralazine in vivo. Jendryczko A, et al. **Exp Pathol** 1989; 36(1):53–7

Histological and histometrical changes of liver damage in rats after treatment with ethanol and carbon tetrachloride. Kniepert E, et al. **Exp Pathol** 1989;36(3):185–8

Thioacetamide-induced cirrhosis-like liver lesions in rats—usefulness and reliability of this animal model. Müller A, et al. **Exp Pathol** 1988;34(4):229–36

Protection against carbon tetrachloride hepatotoxicity by 5,10-dihydroindeno[1,2-b]indole, a potent inhibitor of lipid peroxidation. Shertzer HG, et al. **Food Chem Toxicol** 1988 Jun;26(6):517–22

Protection by desferrioxamine against histopathological changes of the liver in the post-oligaemic phase of clinical haemorrhagic shock in dogs: correlation with improved survival rate and recovery. Sanan S, et al. **Free Radic Res Commun** 1989;6(1):29–38

Target tissue morphology and serum biochemistry following 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure in a TCDD-susceptible and a TCDD-resistant rat strain. Pohjanvirta R, et al. **Fundam Appl Toxicol** 1989 May; 12(4):698–712

Survey of copper granules in liver biopsy specimens from various liver abnormalities other than Wilson's disease and biliary diseases. Miyamura H, et al. **Gastroenterol Jpn** 1988 Dec;23(6):633–8

Effects of the polysaccharide chain of lipopolysaccharide in an experimental massive hepatic cell necrosis model in the mice. Mizoguchi Y, et al. **Gastroenterol Jpn** 1988 Aug; 23(4):390–3

Antipyrine clearance per unit liver volume in cirrhotics with and without hepatocellular carcinoma indicating a correlation with histological change of the liver. Noda S, et al. **Gastroenterol Jpn** 1989 Apr;24(2):159–63

Potential role of tumor necrosis factor (TNF) in an experimental model of massive liver necrosis. Ohnishi H, et al. **Gastroenterol Jpn** 1989 Feb;24(1):83

Choice of liver biopsy needle [letter] Bateson MC. **Gastroenterology** 1989 May;96(5 Pt 1):1376–7

Virus-liver cell interactions in duck hepatitis B virus infection. A study of virus dissemination within the liver. Jilbert AR, et al. **Gastroenterology** 1988 Nov;95(5):1375–82

Fatal hemorrhage from an arterio-portal-peritoneal fistula after percutaneous liver biopsy. Korula J, et al. **Gastroenterology** 1989 Jan;96(1):244–6

Association of focal nodular hyperplasia and hepatic hemangioma. Mathieu D, et al. **Gastroenterology** 1989 Jul; 97(1):154–7

Hepatocellular carcinoma without cirrhosis in Japanese patients. Okuda K, et al. **Gastroenterology** 1989 Jul; 97(1):140–6

Clonal origin of atypical adenomatous hyperplasia of the liver and clonal identity with hepatocellular carcinoma. Tsuda H, et al. **Gastroenterology** 1988 Dec;95(6):1664–6

Clinical use of a nonferromagnetic needle for magnetic resonance-guided biopsy. Mueller PR, et al. **Gastrointest Radiol** 1989 Winter;14(1):61–4

Studies on quantitative morphology. XI. Morphometrical determination of connective tissue in rat livers. Löw O, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):557–63

Postnatal response of liver and skeletal muscle in pigs from gestationally fasted gilts. Ezekwe MO, et al. **Growth Dev Aging** 1988 Spring;52(1):47–51

Histological analysis of liver parenchyma and choledochal wall, and external diameter and intraluminal pressure of the common bile duct in controls and patients with common bile duct stones with and without acute suppurative cholangitis. Burdiles P, et al. **Hepatogastroenterology** 1989 Jun;36(3):143–6

Serum HBV DNA and intrahepatic hepatitis B core antigen (HBcAg) in chronic hepatitis B virus infection: correlation with infectivity and liver histology. Milani S, et al. **Hepatogastroenterology** 1988 Dec;35(6):306–8

Reperfusion injury to endothelial cells following cold ischemic storage of rat livers. Caldwell-Kenkel JC, et al. **Hepatology** 1989 Sep;10(3):292–9

Ubiquitin—a common denominator in intermediate filament pathology of brain and liver? Denk H, et al. **Hepatology** 1989 Oct;10(4):514–5

Biopsy diagnosis of well-differentiated hepatocellular carcinoma based on new morphologic criteria. Kondo F, et al. **Hepatology** 1989 May;9(5):751–5

Acute massive necrosis of the liver induced by antibody/complement, not by T-cells. Okuda K. **Hepatology** 1989 Jul;10(1):118–9

Nodular regenerative hyperplasia of the liver following bone marrow transplantation. Snover DC, et al. **Hepatology** 1989 Mar;9(3):443–8

Portal hypertension and ascites in acute hepatitis: clinical, hemodynamic and histological correlations. Valla D, et al. **Hepatology** 1989 Oct;10(4):482–7

Coexistent pulmonary and portal hypertension: Yin and Yang. Wanless IR. **Hepatology** 1989 Aug;10(2):255–7 (8 ref.)

A cytokeratin immunohistochemical study of cholestatic liver disease: evidence that hepatocytes can express 'bile duct-type' cytokeratins. Van Eyken P, et al. **Histopathology** 1989 Aug;15(2):125–35

Hereditary tyrosinemia type I (chronic form): pathologic findings in the liver. Dehner LP, et al. **Hum Pathol** 1989 Feb;20(2):149–58

Mallory body clustering in adenomatous hyperplasia in human cirrhotic livers: report of four cases. Terada T, et al. **Hum Pathol** 1989 Sep;20(9):868–90

Studies on the toxicity of Agrobacterium tumefaciens in mice. Mitra A, et al. **Indian J Biochem Biophys** 1988 Jun; 25(3):262–7

Role of glucose-6-phosphate dehydrogenase on enhanced proliferation of pre-neoplastic and neoplastic cells in rat liver induced by N-nitrosomorpholine. Baba M, et al. **Int J Cancer** 1989 May 15;43(5):892–5

Abnormal DNA content in liver-cell dysplasia: a flow cytometric study. Roncalli M, et al. **Int J Cancer** 1989 Aug 15;44(2):204–7

Hepatic morphology in reactional states of leprosy. Patnaik JK, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):499–505

Lysosomal-mitochondrial interrelationships in damage to the liver in acute experimental pancreatitis in dogs. Treatment with prostacyclin (PGI2). Długosz J, et al. **Int J Pancreatol** 1988 Jul;3(5):343–56

Diagnosis of avian tuberculosis in a horse by use of liver biopsy. Lofstedt J, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):260–2

In vivo and in vitro test for growth potential of liver cells from rats during early stage of hepatocarcinogenesis by 3'-methyl-4-dimethylaminoazobenzene. Miyazaki M, et al. **J Cancer Res Clin Oncol** 1989;115(1):1–8

Clonality of preneoplastic liver lesions: histological analysis in chimeric rats. Weinberg WC, et al. **J Cell Sci** 1988 Mar; 89 (Pt 3):423–31

Plasma sorbitol dehydrogenase determination in experimental hepatotoxicity using the Abbott Bichromatic Analyzer. Pakuts AP, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):693–5

Should we routinely perform liver biopsy in suspected alcoholic liver disease? Atterbury CE. **J Clin Gastroenterol** 1988 Dec;10(6):605–7

The value of Chiba fine-needle aspiration biopsy in the diagnosis of hepatic malignancy: a comparison with Menghini needle biopsy. Farnum JB, et al. **J Clin Gastroenterol** 1989 Feb;11(1):101–9

Clinical aspects of liver atrophy. Hadjis NS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):3–7 (52 ref.)

Diagnostic value of liver biopsy in alcoholic liver disease. Talley NJ, et al. **J Clin Gastroenterol** 1988 Dec; 10(6):647–50

Accumulation of PiZ alpha 1-antitrypsin causes liver damage in transgenic mice. Carlson JA, et al. **J Clin Invest** 1989 Apr;83(4):1183–90

Sclerosing cholangitis with hepatic microvesicular steatosis in cystic fibrosis and chronic pancreatitis. Benett I, et al. **J Clin Pathol** 1989 May;42(5):466–9

Comparison of intralobar non-parenchyma, subcapsular non-parenchyma, and liver capsule thickness. Ryoo JW, et al. **J Clin Pathol** 1989 Jul;42(7):740–4

CT and MR imaging of postnecrotic liver scars. Itai Y, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):971–5

Hepatic adenoma: MR appearance mimicking focal nodular hyperplasia. Nokes SR, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):885–7

Osler-Weber-Rendu disease: MR findings in the liver. Varma DG, et al. **J Comput Assist Tomogr** 1989 Jan-Feb; 13(1):134–5

Dynamic CT vs 0.5 T MR imaging in the detection of surgically proven hepatic metastases. Zeman RK, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):637–44

Ultrasonographic profile of the liver and caliber of portal vein after oral antibilharzial drugs. el-Hawey AM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):605–10

Assessment of recent techniques in diagnosis of chronic hepatic disorders. el-Hawy AM, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):115–29

Thyroid function tests in acute viral hepatitis: relative reduction in serum thyroxine levels due to T4-TBG binding inhibitors in patients with severe liver cell necrosis. Pagliacci MC, et al. **J Endocrinol Invest** 1989 Mar; 12(3):149–53

Liver biopsy complications monitored by ultrasound. Hederström E, et al. **J Hepatol** 1989 Jan;8(1):94–8

Mechanisms of acetaldehyde hepatotoxicity. Lauterburg BH, et al. **J Hepatol** 1988 Dec;7(3):384–90

Liver cell dysplasia accompanying hepatocellular carcinoma in southern Africa. Differences between urban and rural populations. Paterson AC, et al. **J Hepatol** 1989 Mar; 8(2):241–8

Hepatic homing of mononuclear inflammatory cells isolated during murine chronic graft-vs-host disease. Howell CD, et al. **J Immunol** 1989 Jul 15;143(2):476–83

Immunoregulation of hepatic fibrosis in murine schistosomiasis japonica. Olds GR, et al. **J Infect Dis** 1989 Apr;159(4):798–801

Liver structure and function in print workers exposed to toluene. Guzelian P, et al. **J Occup Med** 1988 Oct; 30(10):791–6

Hepatic sinusoidal cell destruction in the development of intravascular coagulation in acute liver failure of rats. Hirata K, et al. **J Pathol** 1989 Jun;158(2):157–65

Histopathologic features of the liver in pediatric acquired immune deficiency syndrome. Jonas MM, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):73–81

Determination of residual erythrocytes in rat tissue homogenates using commercially available anti-red blood cell sera. Schümann K, et al. **J Pharmacol Methods** 1989 Jul;21(4):281–5

Entamoeba histolytica: diffuse liver inflammation in gerbils (Meriones unguiculatus) with experimentally induced amebic liver abscess. Chadee K, et al. **J Protozool** 1989 Mar-Apr;36(2):154–8

Multiple fine needle liver aspiration cytology in the diagnosis of liver metastases: a prospective comparison with ultrasound and radionuclide scanning. Armstrong DN, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):244–6

Nodular transformation of the liver in a patient with systemic lupus erythematosus [letter] Hubscher O, et al. **J Rheumatol** 1989 Mar;16(3):410–2

Liver biopsy findings in patients with rheumatoid arthritis undergoing longterm treatment with methotrexate. Rau R, et al. **J Rheumatol** 1989 Apr;16(4):489–93

Acute Lantana camara toxicity in cattle. Fourie N, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):173–8

A morphometric study of the effects of short-term starvation on rat hepatocytes. Belloni AS, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):751–7

Ultrastructural study of cells in pseudolobules of the liver with experimental cirrhosis. Shen SL, et al. **J Tongji Med Univ** 1988;8(3):135–9

Metabolism and hepatorenal toxicity due to repeated exposure to styrene in spontaneously hypertensive rats (SHR). Décarie S, et al. **J Toxicol Environ Health** 1989; 27(4):455–65

Mechanistic study on formaldehyde-induced hepatotoxicity. Strubelt O, et al. **J Toxicol Environ Health** 1989; 27(3):351–66

The sonographic appearance of extramedullary hematopoiesis in the liver. Abbitt PL, et al. **JCU** 1989 May; 17(4):280–2

An ultrasonic hepatic pseudomass due to colonic interposition. Wong AD, et al. **JCU** 1988 Nov-Dec; 16(9):669–71

Potentiating effects of phenobarbitone on the induction of cirrhosis in rats by carbon tetrachloride. Qazi FM, et al. **JPMA** 1988 Nov;38(11):296–9

Accumulation of abnormally high ploid nuclei in the liver of LEC rats developing spontaneous hepatitis. Fujimoto Y, et al. **Jpn J Cancer Res** 1989 Jan;80(1):45–50

Advantages and limitations of stereological estimation of placental glutathione S-transferase-positive rat liver cell foci by computerized three-dimensional reconstruction. Imaida K, et al. **Jpn J Cancer Res** 1989 Apr;80(4):326–30

Elevation of serum alpha-fetoprotein and proliferation of oval cells in the livers of LEC rats. Takahashi H, et al. **Jpn J Cancer Res** 1988 Jul;79(7):821–7

Production of Tyzzer's disease in rats by ingestion of bacterial spores. Itoh T, et al. **Jpn J Exp Med** 1989 Feb;59(1):9–15

Fulminant hepatic failure without evidence of cirrhosis in a case of Wilson's disease. Enomoto K, et al. **Jpn J Med** 1989 Jan-Feb;28(1):80–4 (16 ref.)

Multiple nodular foci in the liver associated with chronic hepatic porphyria after previous treatment of breast cancer. Lelbach WK, et al. **Klin Wochenschr** 1989 Jun 1; 67(11):592–7

A technique for liver biopsy in Pekin ducks. Bacher J, et al. **Lab Anim Sci** 1989 Jan;39(1):67–8

Morphologic and chemical studies on a murine mutation (toxic milk mice) resulting in hepatic copper toxicosis. Biempica L, et al. **Lab Invest** 1988 Oct;59(4):500–8

Cytoplasmic foreign material in liver and spleen. An iatrogenic complication of haemodialysis. Giangrande A, et al. **Life Support Syst** 1983;1 Suppl 1:223–6

Alcoholic foamy degeneration in Spain. Prevalence and clinico-pathological features. Montull S, et al. **Liver** 1989 Apr;9(2):79–85

Pathology of hepatolithiasis associated with biliary malformation in Japan. Nakanuma Y, et al. **Liver** 1988 Oct; 8(5):287–92

Pathologic study of primary biliary cirrhosis of early histologic stages presenting cholestatic jaundice. Nakanuma Y, et al. **Liver** 1988 Dec;8(6):319–24

Liver cirrhosis in histiocytosis X. Pirovino M, et al. **Liver** 1988 Oct;8(5):293–8

A rapid method for the in vivo measurement of liver volume. Zoli M, et al. **Liver** 1989 Jun;9(3):159–63

Detection of a systemic effect of malignancy in vivo by magnetic resonance imaging. Richards MA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):557–65

In vivo proton nuclear magnetic resonance imaging and spectroscopy studies of halocarbon-induced liver damage. Brauer M, et al. **Magn Reson Med** 1989 Feb;9(2):229–39

MRI measurement of hepatocyte toxicity using the new MRI contrast agent manganese dipyridoxal diphosphate, a manganese/pyridoxal 5-phosphate chelate. Young SW, et al. **Magn Reson Med** 1989 Apr;10(1):1–13

Age related variations of hepatocarcinogenic effect of azo dye (3'-MDAB) as linked to the level of hepatocyte polyploidization. Medvedev ZA, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):159–74

Alcoholic liver disease. Diehl AM. **Med Clin North Am** 1989 Jul;73(4):815–30 (131 ref.)

Delayed-type hypersensitivity skin reaction to HBsAg and immunohistopathologic study of liver in patients with acute type B viral hepatitis. Nagafuchi S, et al. **Microbiol Immunol** 1989;33(7):539–48

Ketamine hydrochloride as sole anesthetic for open liver biopsy. Abu Khalaf A, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):537–43

Main autopsy findings in liver transplant patients. Markin RS, et al. **Mod Pathol** 1989 Jul;2(4):339–48

Genotoxic activity of the N-acetylated metabolites of the food mutagens 2-amino-3-methylimidazo[4,5-f]quinoline (IQ) and 2-amino-3,4-dimethylimidazo[4,5-f]quinoline (MeIQ). Brunborg G, et al. **Mutagenesis** 1988 Jul;3(4):303–9

Hydroxyurea-induced toxic side-effects in animals and an attempt at reducing them with vitamins E and C. Malec J, et al. **Neoplasma** 1989;36(4):427–35

Three cases of nodular regenerative hyperplasia of the liver following renal transplantation. Buffet C, et al. **Nephrol Dial Transplant** 1988;3(3):327–30

Is nodular regenerative hyperplasia of the liver associated with azathioprine therapy after renal transplantation? Jones MC, et al. **Nephrol Dial Transplant** 1988;3(3):331–3

Toxicity of aldicarb in young chicks. Farage-Elawar M. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):549–54

Liver pathology in diabetes mellitus and morbid obesity. Clinical, pathological, and biochemical considerations. Silverman JF, et al. **Pathol Annu** 1989;24 Pt 1:275–302 (125 ref.)

Growth patterns of the fibrous septa of cirrhosis. A morphometric and allometric study. Pesce CM, et al. **Pathol Res Pract** 1989 May;184(5):486–8

Role of endotoxin on hypoglycaemia in acute hepatic failure. Relationship between hypoglycaemia and hepatic injury following endotoxaemia in diabetic and nondiabetic rats. Shibayama Y. **Pathol Res Pract** 1989 May;184(5):489–93

Case 1. Postnatally acquired cytomegalovirus hepatitis. Larson E. **Pediatr Pathol** 1989;9(2):173–6

Case 4. Wolman's disease. Mitsudo S, et al. **Pediatr Pathol** 1989;9(2):193–8

Halothane induced hepatic necrosis in rats: the role of in vivo lipid peroxidation. Knights KM, et al. **Pharmacol Toxicol** 1988 Nov;63(5):327–32

Pyogenic liver abscess with two normal ultrasound scans. Bunney RG. **Postgrad Med J** 1988 May;64(751):373–4

Giant hamartoma of liver mimicking malignancy. Narasimharao KL, et al. **Postgrad Med J** 1988 May; 64(751):398–400

The prenatal determination of glucose-6-phosphatase activity by fetal liver biopsy. Golbus MS, et al. **Prenat Diagn** 1988 Jul;8(6):401–4

Growth regulation of cancer metastases by their host organ. Sargent NS, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7251–5

Lysosomal and cytosolic enzyme release as a measure of organelle specific toxicity in cultured rat liver slices. Connors MS, et al. **Proc West Pharmacol Soc** 1988;31:143–7

Maternal and neonatal hepatotoxicity of alkali metals. Messiha FS, et al. **Proc West Pharmacol Soc** 1988;31:71–2

Reversal features of hepatic haemosiderosis and haemochromatosis in thalassemia after bone marrow transplantation. Muretto P, et al. **Prog Clin Biol Res** 1989; 309:299–314

Ultrasonography, angiography, computed tomography and magnetic resonance in nodular regenerative hyperplasia of the liver: report of a pseudo-tumoral case. Patriarche C, et al. **Radiat Med** 1988 May-Jun;6(3):111–4

Cirrhosis: diagnosis with sonographic study of the liver surface. Di Lelio A, et al. **Radiology** 1989 Aug; 172(2):389–92

Short TI inversion-recovery imaging of the liver: pulse-sequence optimization and comparison with spin-echo imaging. Dousset M, et al. **Radiology** 1989 May; 171(2):327–33

Diagnosis of liver cirrhosis with US: receiver-operating characteristic analysis of multidimensional caudate lobe indexes. Hess CF, et al. **Radiology** 1989 May;171(2):349–51

Liver volume measurements and three-dimensional display from MR images. McNeal GR, et al. **Radiology** 1988 Dec; 169(3):851–4

Adenomatous hyperplastic nodules in the cirrhotic liver: differentiation from hepatocellular carcinoma with MR imaging. Matsui O, et al. **Radiology** 1989 Oct;173(1):123–6

Intrahepatic periportal abnormal intensity on MR images: an indication of various hepatobiliary diseases. Matsui O, et al. **Radiology** 1989 May;171(2):335–8

Liver biopsy through the femoral vein. Mewissen MW, et al. **Radiology** 1988 Dec;169(3):842–3

Central scars in primary liver tumors: MR features, specificity, and pathologic correlation. Rummeny E, et al. **Radiology** 1989 May;171(2):323–6

Small hepatocellular carcinoma and cavernous hemangioma: differentiation with dynamic FLASH MR imaging with Gd-DTPA. Yoshida H, et al. **Radiology** 1989 May; 171(2):339–42

Induction of altered hepatocellular foci of hamster for a possible short-term assay for carcinogens. Mori H, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):451–4

Is the deterioration of liver viability due to hepatic warm ischemia or reinflow of pooled-portal blood in intermittent portal triad cross-clamping? Nitta N, et al. **Res Exp Med (Berl)** 1988;188(5):341–50

Effect of Proteus mirabilis on liver and spleen weight and the hemagglutinin response to SRBC in rats. Dlugovitzky DG, et al. **Rev Latinoam Microbiol** 1988 Jan-Mar; 30(1):31–5

Role of liver peroxisomes in bile acid formation: inborn error of C27-steroid side chain cleavage in peroxisome deficiency (Zellweger syndrome). Kase BF. **Scand J Clin Lab Invest** 1989 Feb;49(1):1–10 (52 ref.)

Intravascular coagulation in the development of massive hepatic necrosis induced by Corynebacterium parvum and endotoxin in rats. Yamada S, et al. **Scand J Gastroenterol** 1989 Apr;24(3):293–8

Liver biopsy: experience at Enugu, eastern Nigeria. Osuafor TO, et al. **Scand J Gastroenterol Suppl** 1986;124:107–12

Chronic non-A, non-B hepatitis with special reference to the transfusion-associated form. Mattsson L. **Scand J Infect Dis Suppl** 1989;59:1–55

Prospective analysis of liver biopsies before and after methotrexate therapy in rheumatoid patients. Brick JE, et al. **Semin Arthritis Rheum** 1989 Aug;19(1):31–44

Sonography of the liver, gallbladder, and spleen. Nyland TG, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb; 4(1):13–31 (44 ref.)

Ultrasound-guided biopsy. Smith S. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):95–104 (31 ref.)

Fine needle aspiration cytology of hepatocellular carcinoma manifested as bone metastasis. Gattuso P, et al. **South Med J** 1989 Jun;82(6):793–5

Ultrasonographic study of the biliary system in opisthorchiasis patients after treatment with praziquantel. Pungpak S, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):157–62

Endoscopic observations of the residual cavity after liver hydatid disease surgery. Eleftheriadis E, et al. **Surg Endosc** 1988;2(4):220–3

Comparison between the 21-gauge Urocut needle and the 21-gauge Surecut needle in echo-guided percutaneous biopsy of neoplastic liver lesions. Solmi L, et al. **Surg Endosc** 1989;3(1):38–41

Inhalation toxicity of high flash aromatic naphtha. Clark DG, et al. **Toxicol Ind Health** 1989 May;5(3):415–28

Pancreatic hepatocytes associated with chronic 2,6-dichloro-p-phenylenediamine administration in Fischer 344 rats. McDonald MM, et al. **Toxicol Pathol** 1989; 17(1 Pt 1):1–6

Histopathological studies on experimental marine toxin poisoning—III. Morphological changes in the liver and thymus of male ICR mice induced by goniodomin A, isolated from the dinoflagellate Goniodoma pseudogoniaulax. Terao K, et al. **Toxicon** 1989;27(2):269–71

Parenchymal calcifications in the liver of kidney allograft recipients: an unrecognized side-effects of cyclosporine. Nanni G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1558–9

Hepatotoxicity of azathioprine in renal transplant recipients. Ramalho HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1716–7

Protective effect of inosine administration on ischemic rat liver cell injury. Stortoni F, et al. **Transplant Proc** 1988 Oct;20(5):974–6

Clinicopathological study of livers from brain-dead patients treated with a combination of vasopressin and epinephrine. Nagareda T, et al. **Transplantation** 1989 May;47(5):792–7

New approaches to the measurement of morbidity in intestinal schistosomiasis. Zwingenberger K, et al. **Trop Med Parasitol** 1989 Jun;40(2):163–8

Losses in tissue associated with finite amplitude ultrasound transmission. Fry FJ, et al. **Ultrasound Med Biol** 1989; 15(5):481–97

Viral and autoimmune hepatitis. Morphologic and pathogenetic aspects of cell damage in hepatitis with potential chronicity. Dienes HP. **Veroff Pathol** 1989; 132:1–107

Giant cell hepatopathy in three aborted midterm equine fetuses. Car BD, et al. **Vet Pathol** 1988 Sep;25(5):389–91

A protein toxin from Pasteurella multocida type D causes acute and chronic hepatic toxicity in rats. Cheville NF, et al. **Vet Pathol** 1989 Mar;26(2):148–57

Hepatitis and copper accumulation in Skye terriers. Haywood S, et al. **Vet Pathol** 1988 Nov;25(6):408–14

Emperipolesis of lymphoid neoplastic cells in feline hepatocytes. Ossent P, et al. **Vet Pathol** 1989 May; 26(3):279–80

A longitudinal study of starvation in piglets and the introduction of a modified liver biopsy technique. van Lith PM, et al. **Vet Q** 1988 Jul;10(3):145–50

Liver cell shedding and phagocytic reaction in alcoholic liver disease. An ultrastructural study. Bardadin KA, et al. **Virchows Arch [A]** 1989;415(1):21–9

Morphometric analysis of hepatocellular carcinoma. Kondo F, et al. **Virchows Arch [A]** 1988;413(5):425–30

Hepatic peroxisomes in adrenoleukodystrophy and related syndromes: cytochemical and morphometric data. Roels F, et al. **Virchows Arch [A]** 1988;413(4):275–85

Fatty macroregenerative nodule in non-steatotic liver cirrhosis. A morphologic study. Terada T, et al. **Virchows Arch [A]** 1989;415(2):131–6

Evidence for a hepatocellular lineage in a combined hepatocellular-cholangiocarcinoma of transitional type. Fisher HP, et al. **Virchows Arch [B]** 1988;56(2):71–6

Identification and percentage frequency of isolated non-parenchymal liver cells (NPLC) in the mouse. Freudenberg N, et al. **Virchows Arch [B]** 1989;57(2):109–15

Needle biopsy of the liver. A critique of four currently available methods. Babb RR, et al. **West J Med** 1989 Jan; 150(1):39–42 (55 ref.)

A new technical of liver biopsy with plugging of the needle track using a double channel biopsy device. An experimental study. Zatloukal K, et al. **Z Gastroenterol** 1988 Nov;26(11):699–703

Incomplete herniation of liver lobes through the diaphragm in Han: WIST rats. Rittinghausen S, et al. **Z Versuchstierkd** 1988;31(4):151–4

[Changes of the liver in Hodgkin's disease] Nedelcheva E. **Vutr Boles** 1989;28(3):19–23 (73 ref.) **(Bul)**

[Changes in the liver of patients with chronic ulcerohemorrhagic colitis] Nikolovska D, et al. **Vutr Boles** 1988;27(4):6–9 (23 ref.) **(Bul)**

[Histopathological and ultrastructural changes of the liver in rats following phosphorus burn] Liu YS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):278–81 (Eng. Abstr.) **(Chi)**

[Effects of epidermal growth factor on the regeneration of hepatocytes after hepatic necrosis in rats] Chen TX. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):371–3, 26 (Eng. Abstr.) **(Chi)**

[Protective effects of anti-oxidants in hepatic and pulmonary injuries subsequent to bowel ischemia] Sheng ZY. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):183–6, 14 (Eng. Abstr.) **(Chi)**

[Relation of serum glutathione S-transferase activity and pathologic abnormalities of the liver] Hu DR, et al. **Chung Hua Nei Ke Tsa Chih** 1988 May;27(5):269–71, 325 (Eng. Abstr.) **(Chi)**

[Experimental duck hepatitis B virus infection] Ying YY. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):1–4 (Eng. Abstr.) **(Chi)**

[Protective effects of the pollen of Codonopsis pilosula (Franch.) Nannf. on liver lesions at the ultrastructural level] Xiao JC, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar; 14(3):42–4, 64 (Eng. Abstr.) **(Chi)**

[Histopathologic findings and changes in levels of aflatoxins and lipids in the liver of laying hens in experimental acute aflatoxicosis] Fukal L, et al. **Vet Med (Praha)** 1988 Aug; 33(8):495–502 (Eng. Abstr.) **(Cze)**

[Sphingomyelinase activity in a patient with Niemann-Pick disease] Sengers RC, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):70–3 (Eng. Abstr.) **(Dut)**

[Major hypersplenism with chronic agranulocytosis in regenerative nodular hyperplasia of the liver. Correction by splenectomy (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1989;140(3):223–4 **(Fre)**

[Histopathology of the liver and kidney during malaria: relation to malaria-induced dyslipoproteinemia] Dumont ME, et al. **Ann Parasitol Hum Comp** 1988;63(3):171–83 (Eng. Abstr.) **(Fre)**

[Ultrastructural study of the liver in Niemann-Pick disease type C] Chamlian A, et al. **Ann Pathol** 1989;9(2):132–6 (Eng. Abstr.) **(Fre)**

[Heatstroke: a rare cause of massive hepatic necrosis due to hypoxia] Chavoutier-Uzzan F, et al. **Gastroenterol Clin Biol** 1988 Aug-Sep;12(8–9):668–9 (13 ref.) (Eng. Abstr.) **(Fre)**

[Hepatic cytoprotection (1). Morphologic aspects of cell death] Feldmann G. **Gastroenterol Clin Biol** 1989 Jun; 13(6–7):562–7 (29 ref.) **(Fre)**

[Imaging of nodular regenerative hyperplasia of the liver. Study of 9 cases] Pelletier G, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):687–90 (12 ref.) (Eng. Abstr.) **(Fre)**

[Immunochemical diagnosis of hepatic localizations in malignant lymphoid hematologic diseases. Study of 80 cases] Voigt JJ, et al. **Gastroenterol Clin Biol** 1989 Apr; 13(4):343–52 (Eng. Abstr.) **(Fre)**

[Hepatic hypertrophy after right hepatectomy of traumatic

rupture] Tochon B, et al. **Presse Med** 1989 Mar 4; 18(9):475–7 (Eng. Abstr.) (Fre)

[The occurrence of degenerative liver damage in cattle] Johannsen U, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):777–92 (Eng. Abstr.) (Ger)

[Measuring the color content of liver and kidney] Pankratz H, et al. **Beitr Gerichtl Med** 1988;46:267–70 (Eng. Abstr.) (Ger)

[Fibrin glue injection—a hemostatic technic after laparoscopic liver biopsy] Thiele H, et al. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1196–8 (Eng. Abstr.) (Ger)

[Liver morphology and clinical aspects of a case of cholesterol ester storage disease] Justus J, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):198–207 (Eng. Abstr.) (Ger)

[The pathomorphology of the liver after unilateral hepatic duct obstruction with laboratory-chemical observations of the course in the dog] Ruf G, et al. **Helv Chir Acta** 1989 Jun;56(1–2):169–73 (Eng. Abstr.) (Ger)

[Chronic increased cholestasis parameters and sonographic echogenic round liver lesions in a clinically healthy male] Spengler U, et al. **Internist (Berlin)** 1989 Apr;30(4):265–8 (Ger)

[A rare complication of intraoperative liver puncture] Müller U, et al. **Med Klin** 1988 Jul 15;83(15):485–7 (Ger)

[Improvement of MR tomography of the liver using a multislice gradient echo sequence] Hamm B, et al. **ROFO** 1989 Mar;150(3):307–15 (Eng. Abstr.) (Ger)

[Differentiation of focal liver lesions using contrast-enhanced MRT] Heintz P, et al. **ROFO** 1989 Mar;150(3):297–306 (Eng. Abstr.) (Ger)

[Pathologic anatomy of focal liver diseases] Borchard F. **Rontgenpraxis** 1989 Aug;42(8):266–77 (39 ref.) (Ger)

[CT-guided fine needle biopsy of liver masses. A comparison of the results of a working group over 2 time periods] Lüning M, et al. **Rontgenpraxis** 1989 May;42(5):174–9 (Ger)

[Sonographic diagnosis of focal changes of the liver] Pirschel J. **Rontgenpraxis** 1989 Aug;42(8):278–84 (24 ref.) (Ger)

[Reproducibility of sonographic measurements in the follow-up of liver size] Mergelsberg M, et al. **Ultraschall Med** 1988 Dec;9(6):293–8 (Eng. Abstr.) (Ger)

[Hyperestrogenemia following various shunt operations: on the role of estrogens in the development of focal nodular hyperplasia of the liver] Grün R, et al. **Z Gastroenterol** 1989 Jul;27(7):378–82 (Eng. Abstr.) (Ger)

[Changes in connective tissue metabolism in alcohol-induced liver fibrosis] Schuppan D, et al. **Z Gastroenterol** 1988 Oct; 26 Suppl 3:28–38 (44 ref.) (Ger)

[Focal nodular hyperplasia of the liver] Mölleken K. **Z Gesamte Inn Med** 1989 Apr 1;44(7):208–10 (Eng. Abstr.) (Ger)

[Incidence and forensic value of liver cell hydrops in external asphyxia and sudden infant death] Weiler G, et al. **Z Rechtsmed** 1988;100(2–3):113–21 (Eng. Abstr.) (Ger)

[Effect of human uremic serum on the survival of fetal rat hepatocytes] Otting U, et al. **Z Urol Nephrol** 1988 Sep; 81(9):581–8 (Eng. Abstr.) (Ger)

[Percutaneous liver biopsy by Menghini's method in beagle dogs] Theuer D. **Z Versuchstierkd** 1988;31(5):241–3 (Eng. Abstr.) (Ger)

[Silver impregnation of connective tissue. V.] Krutsay M. **Zentralbl Allg Pathol** 1988;134(4–5):518–20 (Eng. Abstr.) (Ger)

[Nodular and cystic lesions of the liver in postmortem studies] Bugovics E. **Orv Hetil** 1988 Dec 11;129(50):2681–2, 2685–6 (31 ref.) (Eng. Abstr.) (Hun)

[Morphometric analysis of the liver of rats, castrated and treated with testosterone] Tanganelli P, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):257–63 (Eng. Abstr.) (Ita)

[Focal nodular hyperplasia of the liver] Petracca E, et al. **Clin Ter** 1988 Apr 15;125(1):61–4 (Eng. Abstr.) (Ita)

[Liver biopsy at a day-hospital. Experience with a selected case series] Maggi G, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):241–4 (Eng. Abstr.) (Ita)

[Pathogenesis of hepatic changes secondary to cholestasis] Gambella GR, et al. **Pathologica** 1988 Nov–Dec; 80(1070):687–95 (Eng. Abstr.) (Ita)

[Pseudotumorous "skip area" in subtotal hepatic steatosis. Echographic and computed tomographic aspects] Alessi V, et al. **Radiol Med (Torino)** 1988 Oct;76(4):280–3 (Eng. Abstr.) (Ita)

[Renal parenchymal neoplasm as a chance finding during hepatobiliary echography] Angelini F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):214–6 (Eng. Abstr.) (Ita)

[Echography with portable equipment. Its possibilities and limits in the hepatobiliary area] Angelini F, et al. **Radiol Med (Torino)** 1988 Oct;76(4):337–9 (Eng. Abstr.) (Ita)

[The impact of echo-guided percutaneous biopsy in the diagnosis of focal hepatic lesions] Lorenzoni A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):230–4 (Eng. Abstr.) (Ita)

[The clinical usefulness of portal venous flow ratio by hepatic angiography with 99mTc-Sn colloid in chronic liver diseases: a comparison with histological finding] Takegoshi K, et al. **Kaku Igaku** 1989 Apr;26(4):499–505 (Eng. Abstr.) (Jpn)

[Four cases of adult Listeria monocytogenes infection in the last 5 years—hepatic necrotic foci in the adult septic case] Kumada T, et al. **Kansenshogaku Zasshi** 1989 May; 63(5):534–40 (Eng. Abstr.) (Jpn)

[Focal sparing around the gallbladder in fatty liver: an useful sign in the diagnosis of borderline cases by CT] Chen K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):146–52 (Eng. Abstr.) (Jpn)

[Ultrasonographic diagnosis of mild fatty infiltration of the liver with the difference between liver and kidney echolevels] Kojima K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):153–62 (Eng. Abstr.) (Jpn)

[Magnetic resonance imaging of post massive hepatic necrosis—a comparison of CT and histologic findings] Ueno E. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25;48(11):1406–17 (Eng. Abstr.) (Jpn)

[Visceral larva migrans by Toxocara cati with multiple nodules in liver] Mitsugi K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1742–3 (Jpn)

[An autopsy case of clostridial liver abscess] Nakano O, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):690–4 (Jpn)

[Effects of polyene phosphatidyl choline on hepatocytotoxic activity in cultured supernatant of activated liver adherent cells] Kodama C, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec; 85(12):2596–600 (Eng. Abstr.) (Jpn)

[Studies on the mechanism of liver injury by lymphokine-activated killer cell] Mizoguchi Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1390–7 (Eng. Abstr.) (Jpn)

[A case of pancreatic pseudocyst intruded into the right lobe of the liver] Shimayama T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1708–11 (Jpn)

[A case of hepatic focal nodular hyperplasia of usefulness of liver scintigraphy in diagnosis] Hirayama T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1133–6 (Eng. Abstr.) (Jpn)

[Single photon emission computed tomography of focal nodular hyperplasia of the liver] Ito K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):915–8 (Jpn)

[A case of focal nodular hyperplasia in the liver] Yoshimura N, et al. **Rinsho Hoshasen** 1989 Feb;34(2):289–92 (Eng. Abstr.) (Jpn)

[Indirect immunoperoxidase method using a monoclonal antibody and clinico-pathological examination of non-A, non-B hepatitis] Unoki H. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):305–16 (Eng. Abstr.) (Jpn)

[Effect of phenobarbital on the morphologic, histochemical and ultrastructural picture of the rat liver after chronic administration of CCl4] Chibowski D, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:351–62 (Eng. Abstr.) (Pol)

[Clinical picture of acute focal necrosis of the liver in pregnancy] Lotocki W, et al. **Ginekol Pol** 1988 Oct; 59(10):645–50 (Eng. Abstr.) (Pol)

[Liver abscess with an atypical course diagnosed by ultrasonographically-guided thin-needle biopsy] Zmudziński J, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1199–200 (Pol)

[Hepatic cell dysplasia. A pre-malignant lesion related to hepatocellular carcinoma and infection by hepatitis B virus] de Queiroz AC, et al. **Arq Gastroenterol** 1987 Apr–Jun; 24(2):80–3 (Eng. Abstr.) (Por)

[Features of the destructive and reparative processes of the liver in various types of acute experimental peritonitis] Glumov VIa, et al. **Arkh Patol** 1989;51(5):33–9 (Eng. Abstr.) (Rus)

[Morphology of mesotheliocytes from liver capsule in normal conditions and in experimental peritonitis] Khoroshaev va. **Biull Eksp Biol Med** 1988 Sep;106(9):374–7 (Eng. Abstr.) (Rus)

[Clinico-morphological and biochemical parallels in hemopoietic and hepatic involvement in hypoplastic anemia] Khaleva LV, et al. **Gematol Transfuziol** 1988 Jun; 33(6):22–6 (Eng. Abstr.) (Rus)

[Proliferation and polyploidy of hepatocytes as indicators of liver regeneration after exposure to environmental chemical factors] Beliaeva NN. **Gig Sanit** 1989 Mar;(3):48–52 (Eng. Abstr.) (Rus)

[Functional state of animals after inhalation of electrolysis oxygen obtained from distilled water] Koziarin IP. **Gig Sanit** 1989 Jan;(1):74–5 (Rus)

[Ultrasonic equivalents of morphologic structures of the liver] Semendiaeva ME, et al. **Sov Med** 1988;(10):24–7 (Eng. Abstr.) (Rus)

[A rapid method of isolating a phenothiazine derivatives from cadaveric specimens] Salomatin EM. **Sud Med Ekspert** 1989 Jan–Mar;32(1):39–41 (Eng. Abstr.) (Rus)

[Gas-chromatographic detection of acetic acid in cadaveric specimens] Voronkova LG, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):41–2 (Eng. Abstr.) (Rus)

[Roentgenoradiological and ultrasonic diagnosis of liver and spleen involvement in patients with Hodgkin's disease] Balashov AT, et al. **Ter Arkh** 1988;60(9):73–6 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of benign focal lesions of the liver] Boger MM, et al. **Ter Arkh** 1988;60(7):66–9 (Eng. Abstr.) (Rus)

[Echomorphological comparisons in chronic diseases of the liver] Iakhontova OI, et al. **Ter Arkh** 1989;61(2):52–5 (Eng. Abstr.) (Rus)

[Cardinal problems of alcoholic diseases of the liver] Mansurov KhKh, et al. **Ter Arkh** 1988;60(7):69–74 (Eng. Abstr.) (Rus)

[Development and experience in the use of unified records of findings with respect to results of ultrasonic studies of the liver and bile ducts] Nikogosian GA, et al. **Ter Arkh** 1989;61(4):31–3 (Rus)

[The state of the hepatobiliary system and the pancreas in patients with eczema and neurodermatitis] Zaerko VV, et al. **Vestn Dermatol Venerol** 1989;(3):38–42 (Eng. Abstr.) (Rus)

[Clinical anatomy of the upper part of the abdominal cavity in reoperations on the stomach after organ-sparing surgery] Gusak VK, et al. **Vestn Khir** 1988 Oct;141(10):16–8 (Eng. Abstr.) (Rus)

[Interrelations of changes in liver tissue and chemical composition of the bile and biliary calculi] Vagner EA, et al. **Vestn Khir** 1987 Dec;139(12):24–7 (Eng. Abstr.) (Rus)

[Clinical laboratory and echographic criteria of the change to chronicity of acute viral hepatitis] Dorofeev GI, et al. **Voen Med Zh** 1988 Nov;(11):55–7 (Rus)

[Echo-controlled puncture biopsy of the liver] Babak OIa, et al. **Vrach Delo** 1989 Jan;(1):89–90 (Eng. Abstr.) (Rus)

[Echo scanning—a method for detecting the chronicity of the process in primary hepatitis] Bondarev LS, et al. **Vrach Delo** 1988 Dec;(12):98–100 (Eng. Abstr.) (Rus)

[Morphologic changes in the placenta and liver in fetal hypoxia] Eshchenko OI, et al. **Vrach Delo** 1988 Oct; (10):67–70 (Eng. Abstr.) (Rus)

[Present-day status of glycogenosis Ib. Report of a new case] Morena Hinojosas V, et al. **An Esp Pediatr** 1988 Jun; 28(6):557–60 (Eng. Abstr.) (Spa)

[Detection of the DNA of hepatitis B virus in liver biopsies of chronic carriers of HBsAg] Bartolomé Nebreda FJ, et al. **Rev Clin Esp** 1988 Jun;183(2):67–70 (Eng. Abstr.) (Spa)

[Anatomopathologic repercussions of segmental liver resection] Capitán Morales LC, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):441–8 (Eng. Abstr.) (Spa)

[Laparoscopic hemostatic procedures in patients with coagulation disorders undergoing hepatic and splenic puncture biopsies] Ferrando J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):447–9 (Eng. Abstr.) (Spa)

[Biliary peritonitis after hepatic biopsy: favorable course with conservative medical treatment] Planas R, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):281–3 (14 ref.) (Eng. Abstr.) (Spa)

[Multicentric abdominal angiofollicular hyperplasia: a clinical variant with exclusive involvement of the liver and abdominal lymph nodes] Montalbán C, et al. **Sangre (Barc)** 1989 Aug;34(4):285–91 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Alpha-adrenergic receptors in the regulation of liver functions. Kulcsár-Gergely J, et al. **Acta Pharm Hung** 1989 Jan;59(1):1–9

The significance of the hepatic LDL-receptor for the metabolism of exogenous cholesterol. Greeve J, et al. **Agents Actions Suppl** 1988;26:173–9

William Harvey as hepatologist. Chen TS, et al. **Am J Gastroenterol** 1988 Nov;83(11):1274–7

Detection of viral genomes in the liver by in situ hybridization using 35S-, bromodeoxyuridine-, and biotin-labeled probes. Niedobitek G, et al. **Am J Pathol** 1989 Mar;134(3):633–9

Hepatic renal interrelations in acid-base regulation [letter] Alpern RJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F807–9

Role of bicarbonate in biliary excretion of diisothiocyanostilbene disulfonate. Anwer MS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G713–22

Increased sinusoidal volume and solute extraction during retrograde liver perfusion. Bass NM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1041–8

Effect of membrane potential and cellular ATP on glutathione efflux from isolated rat hepatocytes. Fernandez-Checa JC, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G403–8

Electrophysiological evidence for Na+-coupled bicarbonate transport in cultured rat hepatocytes. Fitz JG, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G491–500

Phenylarsine oxide inhibition of endocytosis: effects on asialofetuin internalization. Gibson AE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C182–4

Effect of hypertonic stress on liver cell volume, bile flow, and volume-regulatory K+ fluxes. Haddad P, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G563–9

Measurement of hepatocellular function, cardiac output, effective blood volume, and oxygen saturation in rats. Hauptman JG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R439–44

Inward-rectifying potassium channels in rat hepatocytes. Henderson RM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1028–35

Viability of the vascularly perfused, recirculating rat intestine and intestine-liver preparations. Hirayama H, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G249–58

Sex differences in membrane potential in the intact perfused rat liver. Weisiger RA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G822–5

Hepatic efflux of glutathione by the perfused rat liver: role of membrane potential difference. Wright TL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G547–55

Effects of hypocapnia and hypercapnia on splanchnic circulation and hepatic function in the beagle. Fujita Y, et al. **Anesth Analg** 1989 Aug;69(2):152–7

Carbon dioxide and hepatic circulation. Gelman S. **Anesth Analg** 1989 Aug;69(2):149–51

Change in hepatic function, hemodynamics, and morphology after liver transplant. Physiological effect of therapy. Millikan WJ Jr, et al. **Ann Surg** 1989 May;209(5):513–25

Lipid peroxidation inhibitory factors in liver and muscle of rat, mouse, and chicken. Murphy ME, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):585–93

A hybrid bioartificial liver composed of multiplated hepatocyte monolayers. Uchino J, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):972–7

The effect of triiodothyronine on the association of the rat apolipoprotein A–I, C–III and A–IV genes with the nuclear matrix. Apostolopoulos JJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):576–82

"In vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):255–61

The characterization of three types of partially processed mRNA and two pseudogenes for human liver cytochrome b5. Yoo M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):18–24

Vasopressin–stimulated Ca2+ influx in rat hepatocytes is inhibited in high–K+ medium. Savage AL, et al. **Biochem J** 1989 Jun 15;260(3):821–7

Cocaine–induced changes in perfusion pressure and bile flow in perfused rat livers. Garhart CA, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2139–45

Role of N–glycosylation for the plasma clearance of rat liver secretory glycoproteins. Gross V, et al. **Biochem Soc Trans** 1989 Feb;17(1):21–3

Effects of L–alanine on membrane potential, potassium (86Rb) permeability and cell volume in hepatocytes from Raja erinacea. Ballatori N, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):261–9

Intracellular pH influences the resting membrane potential of isolated rat hepatocytes. Bear CE, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):113–20

Developmental changes in the expression of genes involved in cholesterol biosynthesis and lipid transport in human and rat fetal and neonatal livers. Levin MS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):293–300

Identification of protein–bound riboflavin in rat hepatocyte plasma membrane as a source of autofluorescence. Nokubo M, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):303–8

Membrane potential measurements in isolated rat liver plasma membrane vesicles: effect of transmembrane ion concentration gradients. Thalhammer T, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):371–4

Differential response of primary cultures of human and rat hepatocytes to aflatoxin B1–induced cytotoxicity and protection by the hepatoprotective agent (+)–cyanidanol–3. Bégué JM, et al. **Biol Cell** 1988; 63(3):327–33

Ex–vivo perfusion of surgically removed organs. Baba S, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):623–4

Potential role of a liver–derived factor in mediating renal response to protein. Alvestrand A, et al. **Blood Purif** 1988; 6(5):276–84 (47 ref.)

Hepatocellular water and electrolyte secretion. Bear CE, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1253–60 (77 ref.)

Brown adipose tissue, liver, and diet–induced thermogenesis in cafeteria diet–fed rats. Ma SW, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):376–81

Regulation of transforming growth factor alpha messenger RNA expression in a chemically transformed rat hepatic epithelial cell line by phorbol ester and hormones. Raymond VW, et al. **Cancer Res** 1989 Jul 1;49(13):3608–12

Lack of promoting effect of clonazepam on the development of N–nitrosodiethylamine–initiated hepatocellular tumors in mice is correlated with its inability to inhibit cell–to–cell communication in mouse hepatocytes. Diwan BA, et al. **Carcinogenesis** 1989 Sep;10(9):1719–24

Phenobarbital: a non–genotoxic agent which induces the repair of O6–methylguanine from hepatic DNA. O'Connor PJ, et al. **Carcinogenesis** 1988 Nov;9(11):2033–8

A glycosylated liver–specific transcription factor stimulates transcription of the albumin gene. Lichtsteiner S, et al. **Cell** 1989 Jun 30;57(7):1179–87

The relation between inhibition of glycolysis and stimulation of oxygen uptake due to glucagon in livers from rats in different metabolic conditions. Bazotte RB, et al. **Cell Biochem Funct** 1988 Oct;6(4):225–30

The response of liver to lactobionate/raffinose (University of Wisconsin—UW) solution during hypothermic preservation: a study using 31phosphorus nuclear magnetic resonance. Busza AL, et al. **Cryobiology** 1989 Jun; 26(3):273–6

Small B2 RNAs in mouse oocytes, embryos, and somatic tissues. Bachvarova R. **Dev Biol** 1988 Dec;130(2):513–23

Thyroid hormone directly induces hepatocyte competence for estrogen–dependent vitellogenin synthesis during the metamorphosis of Xenopus laevis. Kawahara A, et al. **Dev Biol** 1989 Mar;132(1):73–80

Effect of a phospho–oligosaccharidic putative insulin messenger on insulin release in rats. Malaisse WJ, et al. **Diabetologia** 1989 May;32(5):295–9

Indocyanine green clearance and estimation of plasma volume in the normal horse. Parry BW, et al. **Equine Vet J** 1989 Mar;21(2):142–4

Methodological limitations of the use of intrinsic hepatic clearance of ICG as a measure of liver cell function. Keiding S, et al. **Eur J Clin Invest** 1988 Oct;18(5):507–11

The epigenetic influences of bone marrow and fetal liver stroma cells on the developmental potential of Ly–1+ pro–B lymphocyte clones. Palacios R, et al. **Eur J Immunol** 1989 Feb;19(2):347–56

Morphological and functional modifications of rat liver peroxisomal subpopulations during cold exposure. Goglia F, et al. **Exp Biol** 1989;48(3):127–33

Calorie restriction delays age–dependent loss in androgen responsiveness of the rat liver. Chatterjee B, et al. **FASEB J** 1989 Feb;3(2):169–73

Hepatocyte function and extracellular matrix geometry: long–term culture in a sandwich configuration [published erratum appears in FASEB J 1989 May;3(7):1873] Dunn JC, et al. **FASEB J** 1989 Feb;3(2):174–7

Interleukin–6 is the major regulator of acute phase protein synthesis in adult human hepatocytes. Castell JV, et al. **FEBS Lett** 1989 Jan 2;242(2):237–9

Arachidonic acid metabolites in hepatobiliary physiology and disease. Kaminski DL. **Gastroenterology** 1989 Sep; 97(3):781–92 (135 ref.)

Effects of insulin and glucagon on elasticity of lipid bilayers modified by rat liver plasma membrane fragments. Kavečanský J, et al. **Gen Physiol Biophys** 1988 Oct; 7(5):537–41

Hepatocyte heterogeneity: the coming of age from the description of a biological curiosity to a partial understanding of its physiological meaning and regulation. Gumucio JJ. **Hepatology** 1989 Jan;9(1):154–60 (52 ref.)

Technetium–99m–iminodiacetic acid organic anions: review of biokinetics and clinical application in hepatology. Krishnamurthy S, et al. **Hepatology** 1989 Jan;9(1):139–53 (164 ref.)

A simplified single stage total hepatectomy in the rat with maintenance of gastrointestinal absorptive function. Yamaguchi Y, et al. **Hepatology** 1989 Jan;9(1):69–74

Hepatic functions of albino rats during lactation. Datta UK, et al. **Indian J Med Res** 1988 Jul;88:51–6

Compared roles of glucose, galactose and fructose as glycogen precursors during the acute response to insulin in cultured rat foetal hepatocytes. Menuelle P, et al. **Int J Biochem** 1988;20(8):777–82

Factors affecting in–transit shrink and liver abscesses in fed steers. Harman BR, et al. **J Anim Sci** 1989 Feb;67(2):311–7

Comparison of particle clearance and macrophage phagosomal motion in liver and lungs of rats. Weinstock SB, et al. **J Appl Physiol** 1988 Oct;65(4):1811–20

Transcriptional regulation of ferritin H and L subunits in adult erythroid and liver cells from the mouse. Unambiguous identification of mouse ferritin subunits and in vitro formation of the ferritin shells. Beaumont C, et al. **J Biol Chem** 1989 May 5;264(13):7498–504

Requirements for the translational repression of ferritin transcripts in wheat germ extracts by a 90–kDa protein from rabbit liver. Brown PH, et al. **J Biol Chem** 1989 Aug 15;264(23):13383–6

Isolation and characterization of rat cytochrome P–450IIB gene family members. Use of the polymerase chain reaction to detect expression of a novel P–450 mRNA. Giachelli CM, et al. **J Biol Chem** 1989 Apr 25;264(12):7046–53

Nicotinamide prolongs survival of primary cultured hepatocytes without involving loss of hepatocyte–specific functions. Inoue C, et al. **J Biol Chem** 1989 Mar 25; 264(9):4747–50

Ca2+ oscillations induced by hormonal stimulation of individual fura–2–loaded hepatocytes. Kawanishi T, et al. **J Biol Chem** 1989 Aug 5;264(22):12859–66

Heterogeneity at the 5' end of rat acetyl–coenzyme A carboxylase mRNA. Lipogenic conditions enhance synthesis of a unique mRNA in liver. López–Casillas F, et al. **J Biol Chem** 1989 May 5;264(13):7176–84

Glucocorticoid regulation of hepatic 6–phosphofructo–2–kinase/fructose–2,6–bisphosphatase gene expression. Marker AJ, et al. **J Biol Chem** 1989 Apr 25;264(12):7000–4

Alteration of microtubule physiology in hepatocytes by insulin. Caron JM. **J Cell Physiol** 1989 Mar;138(3):603–10

Electrophysiological properties of isolated rat liver cells. Sawanobori T, et al. **J Cell Physiol** 1989 Jun;139(3):580–5

Influence of germ cells upon transferrin secretion by rat Sertoli cells in vitro. Le Magueresse B, et al. **J Endocrinol** 1988 Sep;118(3):R13–6

Heterogeneous lobular distribution of hepatocytes expressing acute–phase genes during the acute inflammatory reaction. Bernuau D, et al. **J Exp Med** 1989 Jul 1;170(1):349–54

An L–arginine–dependent mechanism mediates Kupffer cell inhibition of hepatocyte protein synthesis in vitro. Billiar TR, et al. **J Exp Med** 1989 Apr 1;169(4):1467–72

Food restriction prevents an age–associated increase in rat liver beta–adrenergic receptors. Dax EM, et al. **J Gerontol** 1989 May;44(3):B72–6

Selected abstracts from the meeting of the British Association for the Study of the Liver. London, U.K., 16 and 17 February, 1989. **J Hepatol** 1989 Jul;9(1):P1–10

Abstracts of the 24th meeting of the European Association for the Study of the Liver. Munich, F.R.G., 30 August–2 September, 1989. **J Hepatol** 1989;9 Suppl 1:S1–261

Regulation of hepatic metabolism by extracellular nucleotides and eicosanoids. The role of cell heterogeneity. Häussinger D. **J Hepatol** 1989 Mar;8(2):259–66 (43 ref.)

Receptor–mediated internalization of high density lipoprotein by rat sinusoidal liver cells: identification of a nonlysosomal endocytic pathway by fluorescence–labeled ligand. Takata K, et al. **J Lipid Res** 1988 Sep;29(9):1117–26

Tracer kinetic modeling approaches for the quantification of hepatic function with technetium–99m DISIDA and scintigraphy. Gambhir SS, et al. **J Nucl Med** 1989 Sep; 30(9):1507–18

The effect of portacaval shunt on delayed–hypersensitivity responses following antigen feeding. Callery MP, et al. **J Surg Res** 1989 Apr;46(4):391–4

Involvement of the liver in the regulation of tryptophan availability. Possible role in the responses of liver and brain to starvation. Bloxam DL, et al. **Life Sci** 1974 Oct 15; 15(8):1443–55

Roles of spleen and liver in the clearance of Escherichia coli K1 bacteraemia in infant rats. Pelkonen S, et al. **Microb Pathog** 1989 Feb;6(2):93–102

In vitro and in vivo regulation of liver epithelial cells carrying a metallothionein–rasT24 fusion gene. Seyama T, et al. **Mol Carcinog** 1988;1(2):89–95

Multiple hepatic trans–acting factors are required for in vitro transcription of the human alpha–1–antitrypsin gene. Li Y, et al. **Mol Cell Biol** 1988 Oct;8(10):4362–9

Tumorigenicity of simian virus 40–hepatocyte cell lines: effect of in vitro and in vivo passage on expression of liver–specific genes and oncogenes. Woodworth CD, et al. **Mol Cell Biol** 1988 Oct;8(10):4492–501

Effect of intracellular pH on potassium conductance in liver. Henderson RM, et al. **Pflugers Arch** 1988 Aug;412(3):334–5

An electrodeless measuring technique for determining conductivity of biological tissues at radio frequencies. Li L, et al. **Phys Med Biol** 1988 Dec;33(12):1443–52

Functional specialization of different hepatocyte populations. Jungermann K, et al. **Physiol Rev** 1989 Jul;69(3):708–64 (387 ref.)

Properties of membrane ion conductances evoked by hormonal stimulation of guinea–pig and rabbit isolated hepatocytes. Capiod T, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):187–201

Liver function of dairy cows in late pregnancy and early lactation. West HJ. **Res Vet Sci** 1989 Mar;46(2):231–7

Hepatocyte heterogeneity and liver function. **Revis Biol Celular** 1989;19:1–161 (398 ref.)

Liver–specific growth factors. Fleig WE. **Scand J Gastroenterol Suppl** 1988;151:31–6 (50 ref.)

Transforming growth factor beta and inhibition of hepatocellular proliferation. Strain AJ. **Scand J Gastroenterol Suppl** 1988;151:37–45 (103 ref.)

Transcriptional and post–transcriptional control of liver gene expression during various physiologic and pathophysiologic states. Shafritz DA. **Semin Liver Dis** 1988 Nov;8(4):285–92

Change in hepatic gene expression after shock/resuscitation. Buchman TG, et al. **Surgery** 1989 Aug;106(2):283–90; discussion 290–1

Hepatocytes enhance Kupffer cell–mediated tumor cell cytostasis in vitro. Curran RD, et al. **Surgery** 1989 Aug; 106(2):126–32

Early extranuclear effect of triiodothyronine (T3) on tissue slices: relevance to organ donor viability. Wicomb WN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1263–4

Calcium oscillations in non–excitable cells. Rink TJ, et al. **Trends Neurosci** 1989 Feb;12(2):43–6 (18 ref.)

Application of Fourier analysis to clinical study of patterns of tissue movement. Tristam M, et al. **Ultrasound Med Biol** 1988;14(8):695–707

[15N] ammonium test for liver function diagnosis. Jung K, et al. **Z Med Lab Diagn** 1989;30(3):169–74

[The liver and blood coagulation—the current status of the problem] Doncheva N, et al. **Vutr Boles** 1989;28(1):9–14 (37 ref.) **(Bul)**

[Relation of ethanol levels in human blood to body weight and liver function] Bodlák J, et al. **Soud Lek** 1988 Nov; 33(4):56–61 (Eng. Abstr.) **(Cze)**

[Calcium and the liver] Claret M, et al. **Ann Endocrinol (Paris)** 1988;49(4–5):358–61 (24 ref.) (Eng. Abstr.) **(Fre)**

[Hepatic expression of the apolipoprotein B gene in the cow during lactation] Cardot P, et al. **Reprod Nutr Dev** 1988; 28 Suppl 1:169–70 (Eng. Abstr.) **(Fre)**

[Beta receptor blockade and liver function] Kulcsár–Gergely J. **Acta Pharm Hung** 1989 Jan;59(1):17–22 (Eng. Abstr.) **(Ger)**

[Subacute butyric acid burden in cattle. 1. Clinical results and effects on the carbohydrate–fat metabolism and the liver function of young fattening bulls] Dabbagh MN, et al. **Arch Exp Veterinarmed** 1989 May;43(3):427–35 (Eng. Abstr.) **(Ger)**

[Subacute butyric acid burden in cattle. 3. Clinical results and effect on the carbohydrate–fat metabolism, the liver function and the acid–base balance in fattening bulls] Dabbagh MN, et al. **Arch Exp Veterinarmed** 1989 May; 43(3):446–54 (Eng. Abstr.) **(Ger)**

[Functional relations between liver and kidney. I. Sodium excretion] Köhler H, et al. **Dtsch Med Wochenschr** 1988 Sep 23;113(38):1486–91 (26 ref.) (Ger)

[4th meeting of the German Association for the Study of the Liver. Berlin, 29–30 January 1988. Abstracts] **Z Gastroenterol** 1988 Jan;26(1):1–103 (Ger)

[German Association for the Study of the Liver. Abstracts 1989. Düsseldorf, 20–21 January 1989] **Z Gastroenterol** 1989 Jan;27(1):15–74 (Ger)

[Effects of metanabol and training on liver function and selected biochemical indicators of the blood and urine in weight lifters] Fojt E, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1189–92 (Pol)

[Chromatin matrix activity in hepatocyte nuclei after disturbance of the hepatic vagal innervation] Shcherbo IV, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):69–72 (Eng. Abstr.) (Rus)

[Physiological characteristics and functional role of liver osmoreceptors in the regulation of water–electrolyte homeostasis] Tyryshkina EM. **Dokl Akad Nauk SSSR** 1988; 300(5):1263–6 (Rus)

[Effect of a natriuretic factor of hepatic origin on the indices of water–salt metabolism and blood circulation] Konovchuk VN, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):245–50 (Eng. Abstr.) (Rus)

[Interstitial volume receptors of the liver] Tyryshkina EM. **Fiziol Zh SSSR** 1989 Jan;75(1):90–6 (Eng. Abstr.) (Rus)

[Functional status of the hepatobiliary system during anti–orthostatic hypodynamia] Andriako LIa, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):48–50 (Eng. Abstr.) (Rus)

[Role of various hormones of total metabolic action in the expression of sex differentiation of the rat liver by a specific estrogen–binding protein] Smirnova OV, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):59–63 (Eng. Abstr.) (Rus)

[Stimulation of DNA and RNA synthesis in the liver of hepatectomized rats by fractions of liver cytosol and conditioned media obtained during cultivation of rat liver explants] Abakumova OIu, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):69–74 (Eng. Abstr.) (Rus)

[Features of the functional status of the pancreas and liver after vagotomy] Shevchenko BF, et al. **Vrach Delo** 1989 May;(5):53–5 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Thyroid hormones and thyroxine–binding globulin in relation to liver function and serum testosterone in men with alcoholic cirrhosis. Becker U, et al. **Acta Med Scand** 1988; 224(4):367–73

Homologous rat hepatic protease inhibitor genes show divergent functional responses to inflammation. Schwarzenberg SJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C413–9

Effect of delayed operation for bleeding esophageal varices on Child's class and indices of liver function. Grossman MD, et al. **Am J Surg** 1988 Dec;156(6):502–5

Stimulation of hepatic acute phase response by cytokines and glucocorticoids. Baumann H, et al. **Ann N Y Acad Sci** 1989; 557:280–95, discussion 295–6 (23 ref.)

IFN beta 2/BSF2/IL–6 is the monocyte–derived HSF that regulates receptor–specific acute phase gene regulation in hepatocytes. Gauldie J, et al. **Ann N Y Acad Sci** 1989; 557:46–58; discussion 58–9 (54 ref.)

Effect of tick–borne fever on liver and kidney function in dwarf–cross goats. Watson AD, et al. **Br Vet J** 1988 Nov–Dec;144(6):581–9

Hepatic dysfunction in the adult respiratory distress syndrome. Schwartz DB, et al. **Chest** 1989 Apr;95(4):871–5

Splanchnic blood flows in a rat model of antibiotic–controlled intra–abdominal abscess during normoxia and hyperoxia. Muhvich KH, et al. **Circ Shock** 1989 Mar;27(3):253–62

Monitoring hepatic function. Zaloga GP, et al. **Crit Care Clin** 1988 Jul;4(3):591–603 (79 ref.)

The dexamethasone suppression test in chronic alcoholics with and without depression and its relationship to their hepatic status. Majumdar SK, et al. **Drug Alcohol Depend** 1988 Jul;21(3):231–5

Comparison of anamnestic history, alcohol intake and smoking, nutritional status, and liver dysfunction between thorotrast patients who developed primary liver cancer and those who did not. Kiyosawa K, et al. **Environ Res** 1989 Aug;49(2):166–72

Transient liver function tests abnormalities in OHSS [letter] Sueldo CE. **Fertil Steril** 1988 Dec;50(6):995–6

Impaired liver function in stable renal allograft recipients. Frey FJ, et al. **Hepatology** 1989 Apr;9(4):606–13

Dynamics of hepatic connective tissue matrix constituents during murine Schistosoma mansoni infection. el–Meneza S, et al. **Hepatology** 1989 Jan;9(1):50–6

Hepatic acute phase reaction in vivo and in vitro. Baumann H. **In Vitro Cell Dev Biol** 1989 Feb;25(2):115–26 (159 ref.)

Liver function and plasma protein metabolism in rodent model of filariasis. Nadkarni GD, et al. **Indian J Gastroenterol** 1989 Jul;8(3):151–3

A study of incidence of Australia antigen and derangements in liver function tests in leprosy. Nayak KC, et al. **Indian J Lepr** 1989 Jan;61(1):23–30

The role of the liver in exocrine pancreatic disease. Braganza JM. **Int J Pancreatol** 1988;3 Suppl 1:S19–42 (100 ref.)

Determinants of hepatic function in liver cirrhosis in the rat. Multivariate analysis. Reichen J, et al. **J Clin Invest** 1988 Dec;82(6):2069–76

Potential role of Kupffer cells in initiating liver injury during endotoxemia. Katoh M, et al. **J Exp Pathol** 1989 Summer; 4(3):141–61

Indocyanine green intrinsic hepatic clearance as a prognostic index of survival in patients with cirrhosis. Merkel C, et al. **J Hepatol** 1989 Jul;9(1):16–22

The role of sinusoidal stenoses in portal hypertension of liver cirrhosis. Shibayama Y, et al. **J Hepatol** 1989 Jan;8(1):60–6

Verapamil has no effect on porto–hepatic pressure gradient, hepatic blood flow and elimination function of the liver in patients with liver cirrhosis. Vinel JP, et al. **J Hepatol** 1989 May;8(3):302–7

Resting energy expenditure is increased in infants and children with extrahepatic biliary atresia. Pierro A, et al. **J Pediatr Surg** 1989 Jun;24(6):534–8

Hepatocellular membrane function during chronic burn injury. Minei JP, et al. **J Surg Res** 1989 Apr;46(4):311–6

Blood clearance of 99mTc–phytate for evaluation of hepatic dysfunction in rats. Shibata H, et al. **J Toxicol Sci** 1988 May;13(2):83–96

Changes in liver function tests in patients with inflammatory bowel disease on enteral nutrition. Dolz C, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):401–5 (41 ref.)

The influence of liver dysfunction on cyclosporine pharmacokinetics—a comparison between 70 per cent hepatectomy and complete bile duct ligation in dogs. Takaya S, et al. **Jpn J Surg** 1989 Jan;19(1):49–56

One approach to assess the liver responses in murine listeriosis and visceral leishmaniasis. Milon G, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:414–7

Subcapsular steatonecrosis in response to peritoneal insulin delivery: a clue to the pathogenesis of steatonecrosis in obesity. Wanless IR, et al. **Mod Pathol** 1989 Mar;2(2):69–74

Hepatic dysfunction in multiple systems organ failure as a manifestation of altered cell–cell interaction. Cerra FB, et al. **Prog Clin Biol Res** 1989;308:563–73 (21 ref.)

Dose related effect of endotoxin on the reticulo endothelial system (RES), the sinusoidal cells in the liver, and on hepatocytes from rats. Karim MR, et al. **Prog Clin Biol Res** 1989;308:407–12

Assessing hepatic dysfunction in rabbits experimentally infected with Trypanosoma brucei. Arowolo RO, et al. **Rev Elev Med Vet Pays Trop** 1988;41(3):277–81

Serum bilirubin subfractions in patients with alcohol abuse during detoxication. Ahlgren A, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):319–26

Cerebral blood flow and liver function in patients with encephalopathy due to acute and chronic liver diseases. Almdal T, et al. **Scand J Gastroenterol** 1989 Apr; 24(3):299–303

Role of free radicals in entero–hepatic dysfunction caused by portal circulatory disturbance: effect of SOD derivative. Kawamoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1287–9

Free radicals and liver ischemia–reperfusion injury. Lambotte L, et al. **Transplant Proc** 1988 Oct;20(5):977

Effect of xanthine oxydase inhibition on warm ischemic lesions of the liver. Lamesch P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1285–6

[Role of the liver in multiple organ failure] Meng XJ. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):191–3, 14 (Eng. Abstr.) (Chi)

[Role of the liver in the pathogenesis of multiple organ failure] Meng XJ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):13–5, 59 (Eng. Abstr.) (Chi)

[The effect of total photochemotherapy on liver tests in patients with psoriasis treated with the PUVA method] Salavec M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):695–702 (Eng. Abstr.) (Cze)

[Ascites, abdominal pain and a marginally functioning liver in a young woman] Pikkarainen P, et al. **Duodecim** 1989; 105(12):1211–9 (Fin)

[Effects of prophylactic intraportal chemotherapy on liver function, blood profile and survival in patients with colo–rectal cancer] Inoue Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3024–7 (Eng. Abstr.) (Jpn)

[Effect of obesity on blood pressure, serum lipid, liver function, blood sugar and uric acid] Saito Y, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):962–8 (Eng. Abstr.) (Jpn)

[The effects of exercise on liver function in patients with chronic liver disease] Takiguchi F. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):132–43 (Eng. Abstr.) (Jpn)

[A case of pre–eclampsia with liver dysfunction and thrombocytopenia—is the administration of corticosteroid and gamma–globulin effective against thrombocytopenia?] Fujimoto H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1299–303 (Jpn)

[Studies of metabolic abnormality of zinc in chronic liver diseases (report 2)—basic examination of its effects on pathophysiology] Nagai K. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):39–44 (Eng. Abstr.) (Jpn)

[Quantitative analysis of morphological parameters in the cirrhotic liver using automatic image analyzer—the correlation with liver function and Miyake's classification] Nishiyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1672–80 (Eng. Abstr.) (Jpn)

[An evaluation of predicting postoperative residual liver function using 99mTc tin colloid] Tamai T, et al. **Radioisotopes** 1988 Oct;37(10):558–63 (Eng. Abstr.) (Jpn)

[Effect of disorders of liver function on vitamin D absorption in children with post–hepatitis cirrhosis of the liver] Ryżko J, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1559–61 (Pol)

[The effect of anesthesia and surgery on cerebral and pulmonary circulation and on the state of the liver in gynecologic patients] Grigorian MR, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):24–6 (Eng. Abstr.) (Rus)

[Changes in liver function during the dynamics of traumatic disease with various methods of resuscitation] Magomedov AG. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):45–7 (Eng. Abstr.) (Rus)

[Characteristics of the functional status of the liver in hemophilia] Demidova NV, et al. **Gematol Transfuziol** 1989 Feb;34(2):24–6 (Eng. Abstr.) (Rus)

[Functional status of the liver in podagra] Bobokhodzhaev MKh, et al. **Klin Med (Mosk)** 1989 Feb;67(2):94–7 (Eng. Abstr.) (Rus)

[Functional state of the liver in children with portal hypertension based on data of the galactose tolerance test] Chibisov IV, et al. **Lab Delo** 1988;(6):30–3 (Eng. Abstr.) (Rus)

[Functional state of the liver in patients recovering from acute viral hepatitis B] Antonova TV, et al. **Sov Med** 1988; (11):15–8 (Eng. Abstr.) (Rus)

[The role of the hepatic stroma in the pathogenesis of hepatitis] Maianskii DN. **Vestn Akad Med Nauk SSSR** 1988; (5):81–8 (118 ref.) (Rus)

[Detoxifying function of the liver in patients with rubromycosis during treatment with antimycotics] Lapina IZ, et al. **Vestn Dermatol Venerol** 1989;(4):51–4 (Eng. Abstr.) (Rus)

[Effect of hemosorption on the functional state of the liver in patients with acute pancreatitis] Dedenko IK, et al. **Vestn Khir** 1988 Jul;141(7):86–7 (Rus)

[Disorders of immunologic reactivity in patients with destructive pancreatitis with functional insufficiency of the liver] Koval'chuk VI, et al. **Vestn Khir** 1988 Jul;141(7):45–9 (Eng. Abstr.) (Rus)

[Hemodynamic and functional changes in the liver of children with extrahepatic portal hypertension in relation to the method of portacaval shunt] Leont'ev AF, et al. **Vestn Khir** 1988 Aug;141(8):68–71 (Eng. Abstr.) (Rus)

[Hepatocyte function and hepatic blood flow in patients with peritonitis] Zhadkevich MM, et al. **Vestn Khir** 1988 Sep; 141(9):26–30 (Eng. Abstr.) (Rus)

[Cholate–forming and cholesterol–secreting function of the liver in patients with ulcers after vagotomy] Fedyshin SP, et al. **Vrach Delo** 1989 May;(5):48–50 (Eng. Abstr.) (Rus)

[Hepatic repercussion of acute intestinal ischemia. Experimental study] Suso Alea FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):219–24 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

Hepatic irradiation in primary and metastatic liver cancer. Hatano K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S49–53

Photoreactivating enzyme in the blind cave fish, Anoptichthys jordani. Woodhead AD, et al. **Comp Biochem Physiol [B]** 1979;63(1):73–6

Scheduled and unscheduled DNA synthesis in chick embryo liver following X–irradiation and treatment with DNA repair inhibitors in vivo. Stammberger I, et al. **Int J Radiat Biol** 1989 Sep;56(3):325–33

Acute toxicities associated with radiation in the second National Wilms' Tumor Study. Thomas PR, et al. **J Clin Oncol** 1988 Nov;6(11):1694–8

Absence of fatty replacement in radiation damaged liver: CT demonstration. Cutillo DP, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):259–61

The in vitro unscheduled DNA synthesis (UDS) assay in rat primary hepatocytes. Validation of improved methods for primary culture including data on the lack of effect of ionizing radiation. Harbach PR, et al. **Mutat Res** 1989 Apr;216(2):101–10

An in vitro micronucleus assay for determining the radiosensitivity of hepatocytes. Alati T, et al. **Radiat Res** 1989 Sep;119(3):562–8

Radiosensitivity of parenchymal hepatocytes as a function of oxygen concentration. Alati T, et al. **Radiat Res** 1989 Jun;118(3):488–501

Organ–specific metallothionein induction in mice by X irradiation. Koropatnick J, et al. **Radiat Res** 1989 Aug; 119(2):356–65

Biochemical study on the postnatally developing mouse liver after a low level tritiated (HTO) in utero exposure. Pareek S, et al. **Radiobiol Radiother (Berl)** 1989;30(2):167–72

Changes of butyrylcholinesterase activity in the liver and plasma of rabbits following ionizing irradiation. Skopec F, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(1):29–38

[The effect of ionizing radiation and cystamine on DNA synthesis in liver tissue in rats after partial hepatectomy] Chmelař V, et al.

Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(4):427–36 (Eng. Abstr.) **(Cze)**

[Increase of hepatic and renal metallothionein mRNA level induced by whole body irradiation] Hayashi H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1467–71 (Eng. Abstr.) **(Jpn)**

[Cellular repair of sublethal radiation damage in 2 subpopulations of the CFUs from embryonal liver and bone marrow of adult mice] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):89–91 (Eng. Abstr.) **(Rus)**

[Comparative radiosensitivity of CFUs of the mouse bone marrow and embryonal liver forming 7- and 11-day colonies] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):93–5 (Eng. Abstr.) **(Rus)**

[In vivo cell fusion induced by fast neutrons and gamma-rays] Gil'iano NIa, et al. **Dokl Akad Nauk SSSR** 1988; 301(6):1484–7 **(Rus)**

[Evaluation of the internal irradiation of humans after inhalation of radionuclides] Shcherbakova LM. **Gig Sanit** 1988 Nov;(11):90–1 **(Rus)**

[The effect of ionizing radiation on the transmethylation of phospholipids in the high molecular complex acyl-tRNA-synthetase] Babenko AIu, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):41–3 (Eng. Abstr.) **(Rus)**

[The state of the molecular electron carriers of the cell energy system at early periods following irradiation] Beregovskaia NN, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):588–90 (Eng. Abstr.) **(Rus)**

[Aldolase biosynthesis and stability in a monolayer of intact and irradiated rat liver cells] Komov VP, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):154–7 (Eng. Abstr.) **(Rus)**

[Effect of irradiation on the intracellular reception of glucocorticoids in tissues with various radiosensitivities] Konoplia EF, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):772–4 (Eng. Abstr.) **(Rus)**

[The content of pyridoxal coenzymes in the brain and liver of rats exposed to a single irradiation with x-rays] Pikulev AT, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):70–3 (Eng. Abstr.) **(Rus)**

[The stimulating action of low doses of ionizing radiation on glucokinase synthesis in the liver of developing rats] Slozhenikina LV, et al. **Radiobiologiia** 1989 Jul–Aug; 29(4):473–6 (Eng. Abstr.) **(Rus)**

[Biochemical changes of the liver in rats with a combined lesion from 89Sr and 131I] Soroka LP, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):207–10 (Eng. Abstr.) **(Rus)**

[Changes in the composition of DNA-bound nonhistone protein in the thymus and liver of gamma-irradiated rats] Strazhevskaia NB, et al. **Radiobiologiia** 1989 Jul–Aug; 29(4):441–4 (Eng. Abstr.) **(Rus)**

[Modification by cystamine of radiation-induced free radical damage to biomolecules in tissues of mouse organs] Svistunenko DA, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):3–7 (Eng. Abstr.) **(Rus)**

[Frequency of structural chromosome aberrations in the hepatocytes of rats exposed to polymeric 239Pu] Zakharova ML, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):752–5 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Experimental investigation of a new iodinated lipid emulsion for computed tomography of the liver. Ivancev K, et al. **Acta Radiol** 1989 Jul–Aug;30(4):407–13

Primary hepatic actinomycosis: a diagnostic problem. Kazmi KA, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):310–1

Dual energy CT estimation of liver iron content in thalassaemic children. Leighton DM, et al. **Australas Radiol** 1988 May;32(2):214–9

Percutaneous techniques in the liver and biliary system: recent advances. Adam A. **Br J Hosp Med** 1989 Aug; 42(2):102–10 (37 ref.)

Determination of the integrated CT number of the whole liver in patients with severe hepatitis: as an indicator of the functional reserve of the liver. Kumahara T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):290–7

Transient perihilar attenuation difference in the liver on dynamic CT secondary to portal vein thrombosis: report of two cases. Takayasu K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):205–8

Evaluation of computed tomography in the assessment of liver iron overload. A study of 46 cases of idiopathic hemochromatosis. Guyader D, et al. **Gastroenterology** 1989 Sep;97(3):737–43

Comparison of contrast media injection rates and volumes for hepatic dynamic incremented computed tomography. Berland LL, et al. **Invest Radiol** 1988 Dec;23(12):918–22

Perfluoroctylbromide and hepatosplenic computed tomography. Preliminary clinical study. Bruneton JN, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S306–7

CT demonstration of right hepatic lobe atrophy. Demaerel P, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):351–3

Gastrohepatic ligament fibrosis following esophageal sclerotherapy: CT findings. Foster GS, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):136–7

Long-term follow-up of hepatitis using computed tomography. Ishikawa N, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):645–9

CT characteristics of intrahepatic, periportal, extramedullary hematopoiesis. Kobayashi A, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):354–6

Portal thrombosis complicating appendicitis: ultrasound detection and hepatic computed tomography lobar attenuation alteration. Chan SC, et al. **J Comput Tomogr** 1988 Jul;12(3):208–10

Changes in liver and spleen volumes in alcoholic liver disease. Sato H, et al. **J Hepatol** 1989 Mar;8(2):150–7

Nontraumatic hepatic diaphragmatic herniation: demonstration by computed chest tomography. Cosmo L, et al. **J La State Med Soc** 1988 Dec;140(12):41–4

Computed tomography scanning of the liver to determine efficacy of iron chelation therapy in thalassemia major. Olivieri NF, et al. **J Pediatr** 1989 Mar;114(3):427–30

Liver, spleen, and vessels: preliminary clinical results of CT with perfluorooctylbromide. Bruneton JN, et al. **Radiology** 1989 Jan;170(1 Pt 1):179–83

Dynamic hepatic CT. Foley WD. **Radiology** 1989 Mar;170(3 Pt 1):617–22

[Radiodiagnosis of the liver and biliary tract] Juliani G, et al. **Radiol Med (Torino)** 1989 Apr;77(4):309–12 (62 ref.) **(Ita)**

[A new contrast material for CT of the liver and spleen. Iodinated oil emulsified by a non-ionic contrast material] Hori S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1503–10 (Eng. Abstr.) **(Jpn)**

[CT anatomy of para-caval portion of the caudate lobe of the liver] Matsui O, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):841–6 (Eng. Abstr.) **(Jpn)**

[Roentgenologic evaluation of intrahepatic redistribution after thorotrast administration] Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1333–41 (Eng. Abstr.) **(Jpn)**

[Changes in liver and spleen volume in various types of compensated liver cirrhosis--measurement by computed tomography] Hoshino H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2577–82 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Diagnosis of acute cholecystitis by cholescintigraphy: significance of pericholecystic hepatic uptake. Swayne LC, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1211–3

Focal fatty infiltration of the liver in acute alcoholic liver injury: hot spots with radiocolloid SPECT scan. Kudo M, et al. **Am J Gastroenterol** 1989 Aug;84(8):948–52

Nuclear scintigraphic assessment of liver size in clinically normal dogs. Godshalk CP, et al. **Am J Vet Res** 1989 May; 50(5):645–50

Effect of specific antibody pretreatment on liver uptake of 111In-labeled anticarcinoembryonic antigen monoclonal antibody in nude mice bearing human colon cancer xenografts. Beatty BG, et al. **Cancer Res** 1989 Mar 15; 49(6):1587–94

Discordant hepatic uptake of Tc-99m HIDA and Tc-99m colloid in a patient with segmental biliary obstruction. Aburano T, et al. **Clin Nucl Med** 1988 Aug;13(8):599–601

Results of hepatobiliary imaging using Tc-99m EHIDA. Ansari SM, et al. **Clin Nucl Med** 1989 May;14(5):354–6

Asymmetric gallbladder contraction following cholecystokinin hepatobiliary imaging. Atkins HL, et al. **Clin Nucl Med** 1989 Feb;14(2):82–6

The value of SPECT imaging in the diagnosis of hepatic hemangioma. Brunetti JC, et al. **Clin Nucl Med** 1988 Nov; 13(11):800–4

False-positive indium-111 WBC image secondary to an unusual configuration of the right hepatic lobe. Budde RB Jr, et al. **Clin Nucl Med** 1989 Jan;14(1):64

Peripheral enhancement in a hepatic hemangioma seen in a technetium-99m DTPA renal image. Cabahug CJ, et al. **Clin Nucl Med** 1989 Jan;14(1):66–7

Diffuse bone marrow metastases observed incidental to liver-spleen imaging. Campeau RJ, et al. **Clin Nucl Med** 1988 Dec;13(12):919

Peripheral increased activity surrounding metastatic adenocarcinoma to the liver on hepatobiliary imaging. Cifers RW, et al. **Clin Nucl Med** 1989 Feb;14(2):130–1

Scintigraphic detection of focal biliary obstruction. Drake GD, et al. **Clin Nucl Med** 1989 Jun;14(6):458–9

Tc-99m MDP uptake in hepatoblastoma. Elgazzar AH, et al. **Clin Nucl Med** 1989 Feb;14(2):143

Hepatic photopenia in gallium imaging. Glaser AM, et al. **Clin Nucl Med** 1988 Jul;13(7):502–5

Computerized liver imaging: relationship with quantitatively estimated histological parameters in liver cirrhosis. Gonzalez-Reimers CE, et al. **Clin Nucl Med** 1988 Dec; 13(12):896–9

Liver-spleen visualization following aerosol lung ventilation with technetium-99m DTPA. Goyer P, et al. **Clin Nucl Med** 1989 Feb;14(2):141–2

Abnormal Tc-99m MAA accumulation. Hiltz A, et al. **Clin Nucl Med** 1988 Oct;13(10):727–9

Hepatic localization of Tc-99m MAA during lower extremity venography. Kolla I, et al. **Clin Nucl Med** 1989 Jun; 14(6):433–5

Gastric pertechnetate contribution to blood pool images. Levine GM, et al. **Clin Nucl Med** 1989 Jun;14(6):436–8

Two false-negative results using morphine sulfate in hepatobiliary imaging. Mack JM, et al. **Clin Nucl Med** 1989 Feb;14(2):87–8

Postcholecystectomy bile leak. Serial hepatobiliary imaging and percutaneous drainage. Patel M, et al. **Clin Nucl Med** 1988 Nov;13(11):805–7

Esophageal reflux: massive hiatus hernia on hepatobiliary study. Peracha HU, et al. **Clin Nucl Med** 1988 Oct; 13(10):772–3

Enhanced detectability of local colloid uptake with SPECT imaging. Podoloff DA, et al. **Clin Nucl Med** 1988 Aug; 13(8):580–2

Enlarged left lobe of the liver mistaken for a mass in the splenic region. Rao MG. **Clin Nucl Med** 1989 Feb;14(2):134

Frequency of hepatic visualization during I-131 imaging for metastatic thyroid carcinoma. Rosenbaum RC, et al. **Clin Nucl Med** 1988 Sep;13(9):657–60

Examples of complementary roles of abdominal CT and radiocolloid liver imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Jul;14(7):532–6

Unusual pattern of lung uptake of technetium-99m sulfur colloid seen on the liver scan of a patient with pulmonary tuberculosis. Stewart CA, et al. **Clin Nucl Med** 1989 Apr; 14(4):271–4

Pericholecystic hepatic activity in a postcholecystectomy patient. Swayne LC, et al. **Clin Nucl Med** 1989 May; 14(5):382–3

Tc-99m MDP uptake in ischemic hepatopathy. Timmons JH, et al. **Clin Nucl Med** 1988 Oct;13(10):759–60

Hepatobiliary and gallium imaging findings in gallbladder perforation: a case report and review of the literature. Yeo E, et al. **Clin Nucl Med** 1989 Feb;14(2):77–81 (27 ref.)

A measurement of regional portal blood flow with Xe-133 and balloon catheter in man. Yasuhara Y, et al. **Eur J Nucl Med** 1989;15(7):346–50

Non-homogeneous intrahepatic drug distribution in intraportal infusional chemotherapy demonstrated by Tc-99m-MAA perfusion SPECT. Aeberhard P, et al. **Eur J Surg Oncol** 1989 Apr;15(2):119–23

Uptake of technetium 99m hepatobiliary imaging agents by cultured rat hepatocytes. Lan JA, et al. **Gastroenterology** 1988 Dec;95(6):1625–31

A method for recovering physiological components from dynamic radionuclide images using the maximum entropy principle: a numerical investigation. Nakamura M, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):906–17

Estimation of hepatic volume by SPECT during liver regeneration: an experimental study in an animal model. Faurous P, et al. **Int J Rad Appl Instrum [B]** 1989; 16(4):375–9

Preparation of tin-albumin nanospheres for labelling with 99mTc and application in liver scintigraphy. Knop G, et al. **J Microencapsul** 1984 Jul–Sep;1(3):249–52

Optimum processing protocols for volume determination of the liver and spleen from SPECT imaging with technetium-99m sulfur colloid. Mut F, et al. **J Nucl Med** 1988 Nov;29(11):1768–75

Reproducibility of Hepatic Perfusion Index [letter] Parkin A, et al. **J Nucl Med** 1988 Oct;29(10):1747–8

Automated body contour for liver SPECT using photopeak data [letter] Sloboda RS. **J Nucl Med** 1989 Feb;30(2):266–7

Discrepant sulfur colloid and radioparticle liver uptake in superior vena cava obstruction: case report. Suneja SK, et al. **J Nucl Med** 1989 Jan;30(1):113–6

A radiopharmaceutical for the study of the liver: 99mTc-DTPA-asialo-orosomucoid. I: Radiochemical and animal distribution studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):110–6

A radiopharmaceutical for the study of the liver: 99mTc-DTPA-asialo-orosomucoid. II: Human dynamic and imaging studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):117–26

Results of liver angiography and perfusion scintigraphy do not correlate with response to hepatic artery infusion chemotherapy. Lehner B, et al. **J Surg Oncol** 1988 Oct; 39(2):73–8

Hepatic reticulo-endothelial function: a correlation of radioisotopic and immunohistochemical assessment. Triger DR, et al. **Liver** 1989 Apr;9(2):86–92

A comparison of liver-spleen ratios and uptakes obtained using planar and tomographic techniques. Chandler ST. **Nucl Med Commun** 1989 Apr;10(4):297–307

Value of hepatobiliary scintigraphy and ultrasonography in the differential diagnosis of jaundice. Picozzi R, et al. **Nucl Med Commun** 1985 Feb;6(2):97–108

Integrated dynamic image of the liver: a new dynamic study for evaluation of liver disease. Suzuki Y, et al. **Nucl Med Commun** 1988 Jul;9(7):533–40

A prospective study to evaluate posttraumatic liver function by scintigraphy as a possible predictor of organ failure. Regel G, et al. **Prog Clin Biol Res** 1989;308:775–80

Hepatic visualization with a "hot" spot adjacent to the porta hepatis in Tc-99m MAA venography of the lower extremity: a sign of IVC obstruction. DeLand FH, et al. **Radiat Med** 1988 May–Jun;6(3):107–10

Budd-Chiari syndrome [letter] Halkar RK. **Radiology** 1989 Aug;172(2):580

The pharmacokinetic characteristics of a hepatobiliary 99mTc-radiopharmaceutical: comparison of the imported and national kits. Arteaga de Murphy C, et al. **Rev Invest Clin** 1989 Jan–Mar;41(1):37–44

Diagnosis of pyogenic liver abscess via liver scanning with indium-111 labelled granulocytes. Denison H, et al. **Scand J Infect Dis** 1989;21(3):345–8

Hepatic radionuclide planar imaging. Oratz M, et al. **Semin Liver Dis** 1989 Feb;9(1):7–15 (78 ref.)

[Hepatobiliary scintigraphy with Tc-99m-EHIDA in patients with obstructive jaundice] Hu YZ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):631-2, 640 (Eng. Abstr.) **(Chi)**

[Liver scintigraphy as a diagnostic adjuvant to ultrasonic examination in cases of hepatic focal processes] Poulsen L, et al. **Ugeskr Laeger** 1989 Jul 3;151(27):1751-3 (Eng. Abstr.) **(Dan)**

[Scintigraphic estimation of dearterialization after transcatheter hepatic arterial embolization therapy] Mizukawa K, et al. **Kaku Igaku** 1989 Mar;26(3):319-28 (Eng. Abstr.) **(Jpn)**

[Estimation of total liver uptake and liver uptake per unit of liver volume of Tc-99m(Sn)-N-pyridoxyl-5-methyltryptophan (Tc-99m-PMT) using SPECT] Nakamura K, et al. **Kaku Igaku** 1988 Dec;25(12):1363-9 (Eng. Abstr.) **(Jpn)**

[Three-dimensional functional imaging by deconvolution analysis in Tc-99m-PMT hepatobiliary dynamic SPECT imaging] Sakuma H, et al. **Kaku Igaku** 1988 Oct; 25(10):1061-71 (Eng. Abstr.) **(Jpn)**

[Evaluation of hepatic function by hepatobiliary scintigraphy using factor analysis] Shimomura O, et al. **Kaku Igaku** 1989 Feb;26(2):145-53 (Eng. Abstr.) **(Jpn)**

[Comparison of bone, gallium and hepatobiliary scintigraphy in the detection of bone metastases in hepatoma] Tahara T, et al. **Kaku Igaku** 1988 Dec;25(12):1337-44 (Eng. Abstr.) **(Jpn)**

[Measurement of effective hepatic blood flow using 99mTc-PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62-5 (Eng. Abstr.) **(Jpn)**

[A case report of the hypereosinophilic syndrome with eosinophilic peritonitis, revealing abnormal imagings of the liver scintigram and brain computed tomography] Masunaga T, et al. **Nippon Naika Gakkai Zasshi** 1989 May; 78(5):666-71 **(Jpn)**

[The influence of ursodeoxycholic acid on hepatobiliary scintigraphy with 99mTc-N-pyridoxyl-5-methyltryptophan in chronic liver diseases] Hayakawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov; 85(11):2389-95 (Eng. Abstr.) **(Jpn)**

[Estimation of the volume and percent uptake of the liver and spleen by SPECT] Yamagata A. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1252-9 (Eng. Abstr.) **(Jpn)**

[Factor analysis of post-transcatheter arterial embolization in primary liver and biliary tract tumors] Nanjo T, et al. **Rinsho Hoshasen** 1989 Apr;34(4):515-6 **(Jpn)**

[Hepatic blood flow studied by computed scintigraphy in patients with chronic diffuse liver diseases] Podymova SD, et al. **Klin Med (Mosk)** 1988 Aug;66(8):102-5 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the transport of transit hepatotropic compounds based on mathematical modelling] Dzhalmukashev UK. **Med Radiol (Mosk)** 1989 Jan; 34(1):33-7 (Eng. Abstr.) **(Rus)**

[A system for the automated description and recognition of liver scintigrams] Vairadian AS, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):16-21 **(Rus)**

[Gammagraphy of the liver. I. General principles and indications] Ortega C. **Rev Invest Clin** 1967 Apr-Jun; 19(2):179-88 **(Spa)**

SECRETION

Synergistic effect of insulin and glucocorticoid on albumin secretion in cultured hepatocytes. Grunnet N, et al. **Acta Physiol Scand** 1988 Aug;133(4):593-4

Voltage-driven, taurocholate-dependent secretion in isolated hepatocyte couplets. Weinman SA, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G826-32

Lipoprotein secretion in lean and obese Zucker female rats in vivo and in a single-pass-perfused liver preparation. Petit D, et al. **Arch Int Physiol Biochim** 1988 Mar; 96(1):51-62

Translocation and proteolytic processing of nascent secretory polypeptide chains: two functions associated with the ribosomal domain of the endoplasmic reticulum. Amar-Costesec A, et al. **Biol Cell** 1989;65(2):99-108

Release of hepatic stimulatory substance from cultures of free and microencapsulated hepatocytes: preliminary report. Kashani SA, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):741-6

Identification of the inhibitor of the plasminogen activator as the major protein secreted by endothelial rat liver cells. Kuiper J, et al. **FEBS Lett** 1989 Mar 13;245(1-2):229-34

Effects of somatostatin on hepatic bile formation. Magnusson I, et al. **Gastroenterology** 1989 Jan;96(1):206-12

Zonal diversity or zonal heterogeneity in bile secretion [letter; comment] Yousef IM, et al. **Gastroenterology** 1989 Apr;96(4):1230-1. **Comment on:** Gastroenterology 1988 Oct;95(4):1130-43

Extrahepatic obstructive cholestasis reverses the bile salt secretory polarity of rat hepatocytes. Fricker G, et al. **J Clin Invest** 1989 Sep;84(3):876-85

The bile salt secretory polarity of hepatocytes. Meier PJ. **J Hepatol** 1989 Jul;9(1):124-9 (38 ref.)

Alpha-tocopherol is secreted from rat liver in very low density lipoproteins. Cohn W, et al. **J Lipid Res** 1988 Oct; 29(10):1359-66

Effect of different energy sources on hepatic triglyceride secretion during parenteral nutrition. Burgess P, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6):569-73

Very low density lipoprotein secretion by cultured hepatocytes of rabbits fed purified or autoxidized cholesterol. Kosykh VA, et al. **Lipids** 1989 Feb; 24(2):109-15

Contribution of the liver to thoracic duct lymph flow in a motionless subject. Mobley WP, et al. **Lymphology** 1989 Jun;22(2):81-4

Nutrition and somatomedin: nutritionally regulated release of somatomedins and somatomedin inhibitors from perfused livers in rats. Goldstein S, et al. **Metabolism** 1989 Aug; 38(8):745-52

[Cytotoxicity of tris: it's effect on the secretory pathway] Oda K, et al. **Seikagaku** 1989 Apr;61(4):290-4 **(Jpn)**

[7-Ketocholesterol inhibits secretion of very low density lipoproteins by cultured human and rabbit hepatocytes] Podrez EA, et al. **Dokl Akad Nauk SSSR** 1989;305(3):743-6 **(Rus)**

[Features of protein secretion by the rat liver in various stages of carbon tetrachloride or heliotrine poisoning] Tadzhibaev KT. **Patol Fiziol Eksp Ter** 1989 Mar-Apr;(2):57-60 (Eng. Abstr.) **(Rus)**

[Evaluation of the excretory function of the liver in inflammatory diseases of the biliary tract (data of radioimmunologic analysis of cholylglycine level)] Buianov VM, et al. **Sov Med** 1989;(5):29-32 (Eng. Abstr.) **(Rus)**

SURGERY

Echinococcus alveolaris treated by right trisegmentectomy. Jakab F, et al. **Acta Chir Hung** 1988;29(3):223-30

Healing of experimental laser wound in liver and spleen. Tichy M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:161-8

The suction knife in liver surgery. Haapiainen R, et al. **Am J Surg** 1989 Mar;157(3):340-2, 344-5

Hepatic resection technique. Mason GR. **Am J Surg** 1989 Mar;157(3):343-5

Vascular occlusions for liver resections. Operative management and tolerance to hepatic ischemia: 142 cases. Delva E, et al. **Ann Surg** 1989 Feb;209(2):211-8

Liver surgery: a revolution. Hardy KJ. **Aust N Z J Surg** 1989 Jul;59(7):519-21 (18 ref.)

Hepatic tumour resection with profound hypothermia and circulatory arrest. Goh DW, et al. **Br J Surg** 1989 Jun; 76(6):548-9

The changing face of hepatic resection. Iwatsuki S, et al. **Curr Probl Surg** 1989 May;26(5):281-379 (160 ref.)

Comparison of sites for transplantation of canine pancreatic microfragments. Evans MG, et al. **Diabetes Res** 1989 Jan; 10(1):35-41

A comparative study of the tissue-destroying effect of the laser and electrocoagulation. Matek W, et al. **Endoscopy** 1989 Jan;21(1):31-6

A comparison between insulin and glucagon release from orthotopically-placed islets of Langerhans and after their transplantation into the liver of diabetic rats. Blech W, et al. **Exp Clin Endocrinol** 1989 May;93(2-3):261-6

Ablation of rabbit liver, stomach, and colon with a pulsed holmium laser. Nishioka NS, et al. **Gastroenterology** 1989 Mar;96(3):831-7

Healing of the resected liver stump: its process and the significance of portal blood flow. Kuwano H, et al. **Int Surg** 1988 Jul-Sep;73(3):157-60

Reflectance during pulsed holmium laser irradiation of tissue. Nishioka NS, et al. **Lasers Surg Med** 1989;9(4):375-81

Contact YAG laser system in abdominal surgery, in particular hepatic and pancreatic surgery. Joffe SN. **Semin Surg Oncol** 1989;5(1):48-56

Introflexion as a method of surgical treatment for hydatid disease. Arioğul O, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):356-8

Exposure of the left hepatic duct through the hilum or in the umbilical of the liver: anatomic limitations. Couinaud C. **Surgery** 1989 Jan;105(1):21-7

Protective effect of aprotinin on ischemic hepatocellular damage. Lie TS, et al. **Transplantation** 1989 Sep;48(3):396-9

[The surgical anatomy of the liver] Astrukov E, et al. **Khirurgiia (Sofiia)** 1989;42(2):69-75 (11 ref.) **(Bul)**

[Iatrogenic hemobilia: clinical manifestation, diagnosis and management] Peng QF. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):153-4, 188 (Eng. Abstr.) **(Chi)**

[Hepatoenterostomy with a hepatobiliary "basin". A report of 209 cases] Wu JS. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):147-9, 188 (Eng. Abstr.) **(Chi)**

[Intraoperative ultrasonic scanning in surgery of the liver, biliary tract and pancreas (letter)] Rokkjaer M. **Ugeskr Laeger** 1989 Aug 21;151(34):2153-4 **(Dan)**

[Complete wrapping of the liver with resorbable mesh for hepatic rupture with persistent hemorrhage (letter)] Spay G, et al. **Presse Med** 1988 Oct 15;17(35):1816-7 **(Fre)**

[Sutures, anastomosis and drainage technics of the liver] Trede M, et al. **Chirurg** 1988 Dec;59(12):805-14 (18 ref.) **(Ger)**

[Typical sonographic findings in hemihepatectomized or partially hepatectomized patients] Helzel MV. **Rontgenblatter** 1988 Sep;41(9):374-9 (Eng. Abstr.) **(Ger)**

[Histochemical determination of vitality limits after the use of neodymium-YAG-lasers on parenchymatous organs] Stöhr GA, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):235-43 (Eng. Abstr.) **(Ger)**

[Cryosurgery of the healthy rat liver] Earnst M, et al. **Zentralbl Chir** 1988;113(17):1105-10 (Eng. Abstr.) **(Ger)**

[Supplemental proposal in the surgical treatment of liver injury. Experimental studies] Caramanico L, et al. **Minerva Chir** 1989 Apr 15;44(7):1067-9 (Eng. Abstr.) **(Ita)**

[Effect of dopamine on lidocaine metabolism in patients after partial liver resection—a pharmacokinetic analysis] Takata T. **Masui** 1989 Mar;38(3):357-65 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of biliodigestive anastomoses] Gredzhev AF, et al. **Klin Khir** 1988;(9):1-3 (Eng. Abstr.) **(Rus)**

[Surgery of the bile ducts in obstructive jaundice using a percutaneous transhepatic approach] Pipiia VI, et al. **Vestn Khir** 1989 Feb;142(2):106-8 **(Rus)**

[A method of arrest of parenchymatous hemorrhage] Urakov AL, et al. **Vestn Khir** 1988 May;140(5):113-4 **(Rus)**

TRANSPLANTATION

Changes in pH and acid-base equilibrium during experimental liver transplantation by active and passive veno-venous bypass. Jakab F, et al. **Acta Chir Hung** 1988; 29(2):107-16

A simplified technique for transplantation of the canine liver. Jamieson NV, et al. **Acta Chir Scand** 1988 Sep;154(9):511-6

Bronchoalveolar lavage in liver transplant patients. Allen KA, et al. **Acta Cytol** 1989 Jul-Aug;33(4):539-43

Liver transplantation. Van Thiel DH, et al. **Adv Intern Med** 1989;34:97-110 (52 ref.)

Intrahepatic cholangiographic abnormalities in liver transplants: correlation with biopsy evidence of rejection and other disorders. Bauman J, et al. **AJR** 1989 Feb; 152(2):275-9

Hepatic lymphoma in cyclosporine-treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501-3

Periportal low-attenuation areas on CT: value as evidence of liver transplant rejection. Kaplan SB, et al. **AJR** 1989 Feb;152(2):285-7

The role of sonography and transhepatic cholangiography in the diagnosis of biliary complications after liver transplantation. Zemel G, et al. **AJR** 1988 Nov;151(5):943-6

Liver transplantation for alcoholic liver disease: a consideration of reasons for and against. Van Thiel DH, et al. **Alcoholism (NY)** 1989 Apr;13(2):181-4

Successful treatment of angina pectoris with liver transplantation and bilateral internal mammary bypass graft surgery in familial hypercholesterolemia. Brush JE Jr, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1365-7

Blood carnitine status after orthotopic liver transplantation in patients with end-stage liver disease. Palombo JD, et al. **Am J Clin Nutr** 1989 Sep;50(3):504-7

Delayed hemolysis resulting from anti-A1 after liver transplantation. Brecher ME, et al. **Am J Clin Pathol** 1989 Feb;91(2):232-5

Porokeratosis of mibelli in transplant recipients. Komorowski RA, et al. **Am J Clin Pathol** 1989 Jan;91(1):71-4

Cutaneous cytomegalovirus infection in a liver transplant patient. Diagnosis by in situ DNA hybridization. Patterson JW, et al. **Am J Dermatopathol** 1988 Dec;10(6):524-30

Marked transient alkaline phosphatemia following pediatric liver transplantation. Koneru B, et al. **Am J Dis Child** 1989 Jun;143(6):669-70

Distal splenorenal shunt for portal vein thrombosis after liver transplantation. Marino IR, et al. **Am J Gastroenterol** 1989 Jan;84(1):67-70

Malignant papillomatosis of the bile ducts: a new indication for liver transplantation? [letter] Rambaud S, et al. **Am J Gastroenterol** 1989 Apr;84(4):448-9

Amanita poisoning: treatment and the role of liver transplantation. Klein AS, et al. **Am J Med** 1989 Feb; 86(2):187-93 (32 ref.)

Hypertrophic osteoarthropathy after liver transplantation. McCarthy GM, et al. **Am J Med** 1989 Apr;86(4):500-1

Successful pregnancy after a liver transplant. Sims CJ, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):532-3

Early induction of MHC antigens in human liver grafts. An immunohistologic study. Gouw AS, et al. **Am J Pathol** 1988 Oct;133(1):82-94

Management of variceal hemorrhage in the potential liver transplant candidate. Crass RA, et al. **Am J Surg** 1989 May; 157(5):476-8

Factors influencing early survival after liver transplantation. Stock PG, et al. **Am J Surg** 1989 Feb;157(2):215-9

The role of nontransplant procedures for sclerosing cholangitis. Thompson JS, et al. **Am J Surg** 1988 Dec; 156(6):506-8

Biliary tract complications in orthotopic adult liver transplantation. Wilson BJ, et al. **Am J Surg** 1989 Jul; 158(1):68-70

Complications requiring operative intervention after orthotopic liver transplantation. Wood RP, et al. **Am J Surg** 1988 Dec;156(6):513-8

Physiological changes during liver transplantation. Kalpokas M, et al. **Anaesth Intensive Care** 1989 Feb;17(1):24-30

Right heart dysfunction, pulmonary embolism, and paradoxical embolization during liver transplantation. A transesophageal two-dimensional echocardiographic study. Ellis JE, et al. **Anesth Analg** 1989 Jun;68(6):777-82

Prognostic significance of reperfusion hyperglycemia during liver transplantation. Mallett SV, et al. **Anesth Analg** 1989 Feb;68(2):182-5

Considerations for anesthetic management during

veno-venous bypass in adult hepatic transplantation. Paulsen AW, et al. **Anesth Analg** 1989 Apr;68(4):489-96
Effect of plasma cholinesterase activity on the duration of action of succinylcholine in patients with genotypically normal enzyme. Ritter DM, et al. **Anesth Analg** 1988 Nov; 67(11):1123-6
Management of acute elevation of intracranial pressure during hepatic transplantation. Brajtbord D, et al. **Anesthesiology** 1989 Jan;70(1):139-41
Exchange autotransfusion using the cell saver during liver transplantation [letter] Brown MR, et al. **Anesthesiology** 1989 Jan;70(1):168-9
Intraoperative coagulation changes in children undergoing liver transplantation. Kang Y, et al. **Anesthesiology** 1989 Jul;71(1):44-7
Effect of a prior portasystemic shunt on subsequent liver transplantation. Brems JJ, et al. **Ann Surg** 1989 Jan; 209(1):51-6
Liver transplantation, including the concept of reduced-size liver transplants in children. Broelsch CE, et al. **Ann Surg** 1988 Oct;208(4):410-20
Change in hepatic function, hemodynamics, and morphology after liver transplant. Physiological effect of therapy. Millikan WJ Jr, et al. **Ann Surg** 1989 May;209(5):513-25
The role of liver transplantation in hepatobiliary malignancy. A retrospective analysis of 95 patients with particular regard to tumor stage and recurrence. Ringe B, et al. **Ann Surg** 1989 Jan;209(1):88-98
Abdominal organ cluster transplantation for the treatment of upper abdominal malignancies. Starzl TE, et al. **Ann Surg** 1989 Sep;210(3):374-85; discussion 385-6
Reversal of hypersplenism following orthotopic liver transplantation. Yanaga K, et al. **Ann Surg** 1989 Aug; 210(2):180-3
Liver transplantation today. Roberts JP, et al. **Annu Rev Med** 1989;40:287-303 (99 ref.)
Experimental aspects of transplantation of haemopoietic cells of fetal liver. Ratajczak MZ. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):235-43
Orthotopic liver transplantation for biliary atresia. Evolution of management. Millis JM, et al. **Arch Surg** 1988 Oct; 123(10):1237-9
Successful reconstruction of late portal vein stenosis after hepatic transplantation. Scantlebury VP, et al. **Arch Surg** 1989 Apr;124(4):503-5
Stratifying the causes of death in liver transplant recipients. An approach to improving survival. Shaw BW Jr, et al. **Arch Surg** 1989 Aug;124(8):895-900
Portacaval shunt and liver transplantation in treatment of familial hypercholesterolemia. Bilheimer DW. **Arteriosclerosis** 1989 Jan-Feb;9(1 Suppl):I158-63
Orthotopic liver transplantation for fulminant and subacute hepatic failure. Stieber AC, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):959-64
Effects of Cyclosporin A on gingival status following liver transplantation. Ross PJ, et al. **ASDC J Dent Child** 1989 Jan-Feb;56(1):56-9 (22 ref.)
Decision-making in 100 patients referred to the Australian National Liver Transplantation Unit. McCaughan GW, et al. **Aust N Z J Med** 1989 Apr;19(2):132-7
Liver transplantation: an update for physicians. Powell LW. **Aust N Z J Med** 1989 Aug;19(4):369-77 (34 ref.)
The treatment of end-stage liver disease in childhood. Shepherd RW. **Aust Paediatr J** 1988 Aug;24(4):213-6
Liver transplantation. Neuberger JM, et al. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):231-52 (46 ref.)
The role of allopurinol and oxygen free radical scavengers in liver preservation. Toledo-Pereyra LH. **Basic Life Sci** 1988;49:1047-52
Metabolic effects of portacaval shunt surgery and liver transplantation in familial hypercholesterolemia. Bilheimer DW. **Beitr Infusionther** 1988;23:61-73 (48 ref.)
Long term liver preservation using artificial blood substitutes. Nakajima I, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1-3):347-54
The viability and regeneration of artificial cell microencapsulated rat hepatocyte xenograft transplants in mice. Wong H, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):731-9
Correction of severe hyponatraemia by continuous arteriovenous haemofiltration before liver transplantation. Larner AJ, et al. **BMJ** 1988 Dec 10;297(6662):1514-5
Extra-hepatic metabolism of midazolam. Park GR, et al. **Br J Clin Pharmacol** 1989 May;27(5):634-7
The pharmacokinetics of midazolam following orthotopic liver transplantation. Shelly MP, et al. **Br J Clin Pharmacol** 1989 May;27(5):629-33
Liver transplantation for primary and secondary hepatic apudomas. Arnold JC, et al. **Br J Surg** 1989 Mar; 76(3):248-9
Emergency orthotopic liver transplantation in two patients using one donor liver. Bismuth H, et al. **Br J Surg** 1989 Jul;76(7):722-4
Anaesthesia for liver transplantation--a model for the anaesthetic management of end-stage hepatic failure. Waterman PM. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S34-8 (16 ref.)
Biliary tract reconstruction in liver transplantation. Wall WJ, et al. **Can J Surg** 1989 Mar;32(2):97-100
No better memorial [letter] MacLeod MK. **Can Med Assoc J** 1989 Mar 1;140(5):494
Treatment of hepatic epithelioid hemangioendothelioma with liver transplantation. Marino IR, et al. **Cancer** 1988 Nov 15;62(10):2079-84
Experience with transplantation in the treatment of liver cancer. Jenkins RL, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S104-9
Clinical variability of cyclosporine pharmacokinetics in adult and pediatric patients after renal, cardiac, hepatic, and bone-marrow transplants. Clardy CW, et al. **Clin Chem** 1988 Oct;34(10):2012-5
Cyclosporine concentrations in blood after liver transplantation: correlation of immunoassay results with clinical events. Haven MC, et al. **Clin Chem** 1989 Apr; 35(4):564-8
Measurement of cyclosporine in plasma from patients with various transplants: HPLC radioimmunoassay with a specific monoclonal antibody compared. McBride JH, et al. **Clin Chem** 1989 Aug;35(8):1726-30
Clinical pharmacokinetics in organ transplant patients. Venkataramanan R, et al. **Clin Pharmacokinet** 1989 Mar; 16(3):134-61 (219 ref.)
The role of ultrasound scanning in management after liver transplantation. Raby N, et al. **Clin Radiol** 1988 Sep; 39(5):507-10
Equipoise and the ethics of segmental liver transplantation. Singer PA, et al. **Clin Res** 1988 Oct;36(6):539-45
Immunopathology of liver transplantation. Demetris AJ, et al. **Crit Rev Immunol** 1989;9(2):67-92 (249 ref.)
Liver transplantation in a 48-year-old female with primary biliary cirrhosis. Larsen ML, et al. **Dan Med Bull** 1988 Jun;35(3):299-301
T-cell populations in liver and renal transplant recipients with infectious esophagitis. Brouillette DE, et al. **Dig Dis Sci** 1989 Jan;34(1):92-6
Liver transplantation. A primer for practicing gastroenterologists. Part II. Dindzans VJ, et al. **Dig Dis Sci** 1989 Feb;34(2):161-6 (22 ref.)
Liver transplantation. A primer for practicing gastroenterologists, Part I. Dindzans VJ, et al. **Dig Dis Sci** 1989 Jan;34(1):2-8 (46 ref.)
Bacterial infections after liver transplantation. Paya CV, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):499-504 (20 ref.)
Restoration of ATP contents in the transplanted liver closely relates to graft viability in dogs. Higashi H, et al. **Eur Surg Res** 1989;21(2):76-82
Immune thrombocytopenia in dogs after fetal liver hematopoietic cell transplantation. Cain GR, et al. **Exp Hematol** 1989 Mar;17(3):287-91
Patterns of leukocyte chemotaxis to bile after liver transplantation. Adams DH, et al. **Gastroenterology** 1989 Aug;97(2):433-8
Liver transplantation in a patient with protoporphyria. Bloomer JR, et al. **Gastroenterology** 1989 Jul;97(1):188-94
Liver transplantation in the management of fulminant hepatic failure. Emond JC, et al. **Gastroenterology** 1989 Jun; 96(6):1583-8
Human liver cell transplantation. Prolonged function in athymic-Gunn and athymic-analbuminemic hybrid rats. Moscioni AD, et al. **Gastroenterology** 1989 Jun; 96(6):1546-51
Evidence for disease recurrence after liver transplantation for primary biliary cirrhosis. Clinical and histologic follow-up studies. Polson RJ, et al. **Gastroenterology** 1989 Sep;97(3):715-25
Hemostasis in liver transplantation. Porte RJ, et al. **Gastroenterology** 1989 Aug;97(2):488-501 (119 ref.)
Epithelioid hemangioendothelioma and liver transplantation [letter] van de Stadt J, et al. **Gastroenterology** 1989 Jan; 96(1):275-6
Cyclosporin A pharmacokinetics in liver transplant recipients in relation to biliary T-tube clamping and liver dysfunction. Naoumov NV, et al. **Gut** 1989 Mar;30(3):391-6
A nursing perspective of the ethical issues surrounding liver transplantation. Omery A, et al. **Heart Lung** 1988 Nov;17(6 Pt 1):626-31
The hepatic artery in orthotopic liver transplantation. Lerut JP, et al. **Helv Chir Acta** 1988 Jul;55(3):367-78
Primary hepatic cancer—the role of limited resection and total hepatectomy with orthotopic liver replacement. Funovics JM, et al. **Hepatogastroenterology** 1988 Dec; 35(6):316-20
Biliary beta 2-microglobulin in liver allograft rejection. Adams DH, et al. **Hepatology** 1988 Nov-Dec;8(6):1565-70
Selection of portal-systemic shunts with an eye to subsequent liver transplantation. Flye MW. **Hepatology** 1988 Nov-Dec;8(6):1715-6
Increased galactose clearance after liver transplantation: a measure of increased blood flow through the denervated liver? Henderson JM, et al. **Hepatology** 1989 Sep; 10(3):288-91
Do transplanted human livers regenerate? Koch KS, et al. **Hepatology** 1989 May;9(5):789-90
Liver transplantation: intraoperative changes in coagulation factors in 100 first transplants. Lewis JH, et al. **Hepatology** 1989 May;9(5):710-4
The aminopyrine breath test predicts the outcome of hepatic transplantation in pigs. Oakland CD, et al. **Hepatology** 1989 Apr;9(4):602-5
A histometric analysis of chronically rejected human liver allografts: insights into the mechanisms of bile duct loss: direct immunologic and ischemic factors. Oguma S, et al. **Hepatology** 1989 Feb;9(2):204-9
Drug-binding proteins after liver transplantation: are they significant? Tredger JM, et al. **Hepatology** 1989 Sep; 10(3):390-2
Aplastic anemia after liver transplantation for fulminant viral hepatitis: black box or bag of worms? Zeldis JB. **Hepatology** 1989 Oct;10(4):520-1
Hepatoportal arteriovenous fistula: morphologic features studied after orthotopic liver transplantation. Hashimoto E, et al. **Hum Pathol** 1989 Jul;20(7):707-9
Bile duct injury as a part of diagnostic criteria for liver allograft rejection. Kemnitz J, et al. **Hum Pathol** 1989 Feb; 20(2):132-43
The present state of liver transplantation and the future prospects for intestinal transplantation. Starzl TE. **Immunol Invest** 1989 Jan-May;18(1-4):623-33 (29 ref.)
Liver transplantation. Rouch DA, et al. **Indiana Med** 1989 Jan;82(1):22-6
Cholangiocarcinoma in sclerosing cholangitis. The role of liver transplantation. Stieber AC, et al. **Int Surg** 1989 Jan-Mar;74(1):1-3
Intraoperative hemodynamic modifications during pediatric orthotopic liver transplantation. Carlier M, et al. **Intensive Care Med** 1989;15 Suppl 1:S73-5
Intensive care for children after orthotopic liver transplantation. Moulin D, et al. **Intensive Care Med** 1989; 15 Suppl 1:S71-2
Biliary tract complications in orthotopic liver transplantation: an experimental study in the pig. Filipponi F, et al. **Ital J Surg Sci** 1989;19(2):131-6
Liver transplantation in the rat: surgical experience with 212 liver transplants. Filipponi F, et al. **Ital J Surg Sci** 1988; 18(4):317-22
Liver transplantation: medical aspects. Choksi AP. **J Assoc Physicians India** 1988 Apr;36(4):263-6 (40 ref.)
Changes of genetic apolipoprotein phenotypes caused by liver transplantation. Implications for apolipoprotein synthesis. Kraft HG, et al. **J Clin Invest** 1989 Jan; 83(1):137-42
Beta-2-microglobulin expression in the liver after liver transplantation. Hubscher SG, et al. **J Clin Pathol** 1988 Oct;41(10):1049-57
Massive haemorrhagic necrosis of the liver after liver transplantation. Hübscher SG, et al. **J Clin Pathol** 1989 Apr;42(4):360-70
Simultaneous retrieval of the heart and liver from a single donor: an evaluation through preservation and transplantation. Morishita Y, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):269-73
Metabolic activity of microcarrier attached liver cells after intraperitoneal transplantation during severe liver insufficiency in the rat. Bosman DK, et al. **J Hepatol** 1989 Jul;9(1):49-58
Transplantation of isolated hepatocytes. A review of current ideas. Fuller BJ. **J Hepatol** 1988 Dec;7(3):368-76 (48 ref.)
Epithelioid hemangioendothelioma of the liver following contact with vinyl chloride. Recurrence after orthotopic liver transplantation. Gelin M, et al. **J Hepatol** 1989 Jan; 8(1):99-106
Auxiliary liver transplantation in jaundiced rats with UDP-glucuronyltransferase deficiency and defective hepatobiliary transport. Jansen PL, et al. **J Hepatol** 1989 Mar;8(2):192-200
Transplantation of the liver in adults and children with fulminant hepatic failure. Vickers C, et al. **J Hepatol** 1988 Oct;7(2):143-50
Disseminated adenovirus infection after liver transplantation and its possible treatment with ganciclovir [letter] Wreghitt TG, et al. **J Infect** 1989 Jul;19(1):88-9
Toga-like virus as a cause of fulminant hepatitis attributed to sporadic non-A, non-B. Fagan EA, et al. **J Med Virol** 1989 Jul;28(3):150-5
Brief report: primary human herpesvirus 6 infection in a patient following liver transplantation from a seropositive donor. Ward KN, et al. **J Med Virol** 1989 Jun;28(2):69-72
Calculation of portal contribution to hepatic blood flow with 99mTc-microcolloids. A noninvasive method to diagnose liver graft rejection. Martin-Comin J, et al. **J Nucl Med** 1988 Nov;29(11):1776-80
Liver transplantation for ornithine transcarbamylase deficiency in a girl. Largillière C, et al. **J Pediatr** 1989 Sep;115(3):415-7
Mechanisms of hypertension during and after orthotopic liver transplantation in children. Lawless S, et al. **J Pediatr** 1989 Sep;115(3):372-9
Cytomegalovirus gastroenteritis after liver transplantation. Proujansky R, et al. **J Pediatr** 1988 Oct;113(4):700-3
Mental and motor development, social competence, and growth one year after successful pediatric liver transplantation. Stewart SM, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):574-81
Gastric bezoar after hepatic transplantation. Schwarzenberg SJ, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):119-22
Liver transplantation therapy for children: Part 2. Shaw BW Jr, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec; 7(6):797-815 (87 ref.)
Pediatric liver transplantation: a 3-year experience. Andrews WS, et al. **J Pediatr Surg** 1989 Jan;24(1):77-82
Liver transplantation in infants and children. Kalayoglu M, et al. **J Pediatr Surg** 1989 Jan;24(1):70-6
Surgical limitation for biliary atresia: indication for liver transplantation. Kasai M, et al. **J Pediatr Surg** 1989 Sep; 24(9):851-4

Evaluation of immune status in pediatric recipients of hepatic orthografts. Payne H, et al. **J Pediatr Surg** 1988 Sep; 23(9):825–8

Intensive care course following liver transplantation in children. Sommerauer J, et al. **J Pediatr Surg** 1988 Aug; 23(8):705–8

Liver transplantation and the Kasai operation in biliary atresia. Stewart BA, et al. **J Pediatr Surg** 1988 Jul; 23(7):621–6

Hepatic artery thrombosis in pediatric liver transplantation. Tan KC, et al. **J Pediatr Surg** 1988 Oct;23(10):927–30

The liver pattern in Burkitt's lymphoma [letter] **J Ultrasound Med** 1988 Dec;7(12):697–8

Newly approved organ preservation solution puts longer life in liver grafts [news] Merz B. **JAMA** 1989 Jul 7;262(1):14

Two new approaches to liver transplantation: one organ, two patients...two organs, one patient [news] Merz B. **JAMA** 1989 Jul 7;262(1):14–5

Liver transplantation for alcoholic cirrhosis [letter] Olbrisch ME, et al. **JAMA** 1989 May 26;261(20):2958

Orthotopic liver transplantation for alcoholic cirrhosis. Starzl TE, et al. **JAMA** 1988 Nov 4;260(17):2542–4

Extended preservation of human liver grafts with UW solution. Todo S, et al. **JAMA** 1989 Feb 3;261(5):711–4

A study of liver regeneration using fetal rat liver tissue transplanted into the spleen. Ebata H, et al. **Jpn J Surg** 1988 Sep;18(5):540–7

The beneficial effect of superoxide dismutase on the rat liver graft. Mizuta T, et al. **Jpn J Surg** 1989 Mar;19(2):208–12

Auxiliary liver transplantation [editorial] **Lancet** 1989 Mar 11;1(8637):533–4

Indocyanine-green clearance and liver transplantation [letter] Clements D, et al. **Lancet** 1989 May 6;1(8645):1016

Liver transplantation in primary hyperoxaluria type 1 [letter] Cochat P, et al. **Lancet** 1989 May 20;1(8647):1142–3

Protein C deficiency and portal thrombosis in liver transplantation in children. Harper PL, et al. **Lancet** 1988 Oct 22;2(8617):924–7

Immunological evaluation before liver transplantation in children [letter] Kelly DA, et al. **Lancet** 1989 Feb 25; 1(8635):449

Liver transplantation in cystic fibrosis [letter] Mieles LA, et al. **Lancet** 1989 May 13;1(8646):1073

Endotoxaemia, pulmonary complications, and thrombocytopenia in liver transplantation. Miyata T, et al. **Lancet** 1989 Jul 22;2(8656):189–91

Liver transplantation from live donors [letter] Raia S, et al. **Lancet** 1989 Aug 26;2(8661):497

Protein C deficiency and thrombotic complications after liver transplantation in children [letter] Stringer MD, et al. **Lancet** 1989 Jan 14;1(8629):102–3

Improvement in hypertrophic hepatic osteoarthropathy after liver transplantation [letter] Vickers C, et al. **Lancet** 1988 Oct 22;2(8617):968

Potential various appearances of hyperacute rejection in human liver transplantation. Gubernatis G, et al. **Langenbecks Arch Chir** 1989;374(4):240–4

Changes in phospholipid composition of the mitochondrial membrane after orthotopic liver transplantation. Tatsumi Y, et al. **Life Sci** 1989;44(15):1053–8

Anesthesia and orthotopic liver transplantation: a review. Ho WM, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):207–22 (100 ref.)

Plasma glucose concentrations during liver transplantation. Atchison SR, et al. **Mayo Clin Proc** 1989 Feb;64(2):241–5

Cyclosporine: a review and its specific use in liver transplantation. de Groen PC. **Mayo Clin Proc** 1989 Jun; 64(6):680–9 (151 ref.)

Assessment of nutritional status of patients with end-stage liver disease undergoing liver transplantation. DiCecco SR, et al. **Mayo Clin Proc** 1989 Jan;64(1):95–102

Beyond 1 year after liver transplantation. Eid A, et al. **Mayo Clin Proc** 1989 Apr;64(4):446–50

Comparison of analgesic requirements after liver transplantation and cholecystectomy. Eisenach JC, et al. **Mayo Clin Proc** 1989 Mar;64(3):356–9

Application of the Mayo primary biliary cirrhosis survival model to Mayo liver transplant patients. Grambsch PM, et al. **Mayo Clin Proc** 1989 Jun;64(6):699–704

The first 100 liver transplantations at the Mayo Clinic. Krom RA, et al. **Mayo Clin Proc** 1989 Jan;64(1):84–94

Organ donation--are we moving in the right direction? Krom RA. **Mayo Clin Proc** 1989 Jun;64(6):705–7

Endotheliitis in hepatic allografts. Ludwig J, et al. **Mayo Clin Proc** 1989 May;64(5):545–54

Classification and terminology of hepatic allograft rejection: whither bound? Ludwig J. **Mayo Clin Proc** 1989 Jun; 64(6):676–9

Intraoperative blood loss and patient and graft survival in orthotopic liver transplantation: their relationship to clinical and laboratory data. Motschman TL, et al. **Mayo Clin Proc** 1989 Mar;64(3):346–55

Blood bank support of a liver transplantation program. Motschman TL, et al. **Mayo Clin Proc** 1989 Jan; 64(1):103–11

Role of the nurse in the multidisciplinary team approach to care of liver transplant patients. Overman JA, et al. **Mayo Clin Proc** 1989 Jun;64(6):690–8

Incidence, distribution, and outcome of episodes of infection in 100 orthotopic liver transplantations. Paya CV, et al. **Mayo Clin Proc** 1989 May;64(5):555–64

Rapid shell vial culture and tissue histology compared with serology for the rapid diagnosis of cytomegalovirus infection in liver transplantation. Paya CV, et al. **Mayo Clin Proc** 1989 Jun;64(6):670–5

Immunohistologic pattern of the portal T-lymphocyte infiltration in hepatic allograft rejection. Perkins JD, et al. **Mayo Clin Proc** 1989 May;64(5):565–9

Intensive-care unit experience in the Mayo liver transplantation program: the first 100 cases. Plevak DJ, et al. **Mayo Clin Proc** 1989 Apr;64(4):433–45

Recurrent hepatitis B infection in hepatic allograft [letter] Rakela J. **Mayo Clin Proc** 1989 May;64(5):597

Failure of interferon to prevent recurrent hepatitis B infection in hepatic allograft. Rakela J, et al. **Mayo Clin Proc** 1989 Apr;64(4):429–32

Acute hepatic failure: the emerging role of orthotopic liver transplantation. Rakela J, et al. **Mayo Clin Proc** 1989 Apr; 64(4):424–8

Hemodynamic and metabolic changes in hepatic transplantation. Rettke SR, et al. **Mayo Clin Proc** 1989 Feb; 64(2):232–40

Anesthesia approach to hepatic transplantation. Rettke SR, et al. **Mayo Clin Proc** 1989 Feb;64(2):224–31

Evaluation of preoperative hematology-coagulation screening in liver transplantation. Ritter DM, et al. **Mayo Clin Proc** 1989 Feb;64(2):216–23

Retrieval of donor livers. Sterioff S, et al. **Mayo Clin Proc** 1989 Jan;64(1):112–5

Intraoperative autologous transfusion: its role in orthotopic liver transplantation. Williamson KR, et al. **Mayo Clin Proc** 1989 Mar;64(3):340–5

Liver transplantation. Muñoz SJ, et al. **Med Clin North Am** 1989 Jul;73(4):1011–39 (131 ref.)

Arterialization of liver transplants in rats: I. Application of the tissue perfusion monitor in hemodynamic studies. Lee S, et al. **Microsurgery** 1989;10(1):15–20

Main autopsy findings in liver transplant patients. Markin RS, et al. **Mod Pathol** 1989 Jul;2(4):339–48

Orthotopic liver transplantation in children. Mendez IB, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):71–6

Aplastic anemia after liver transplantation for non-A, non-B hepatitis [letter] **N Engl J Med** 1989 Jan 12;320(2):122–3

Efficiency of liver transplantation in patients with primary biliary cirrhosis. Markus BH, et al. **N Engl J Med** 1989 Jun 29;320(26):1709–13

Ethics of liver transplantation with living donors. Singer PA, et al. **N Engl J Med** 1989 Aug 31;321(9):620–2

Liver transplantation (2). Starzl TE, et al. **N Engl J Med** 1989 Oct 12;321(15):1014–22 (118 ref.)

Auxiliary partial liver transplantation for end-stage chronic liver disease. Terpstra OT, et al. **N Engl J Med** 1988 Dec 8;319(23):1507–11

Persistent acitrullinemia after liver transplantation for carbamylphosphate synthetase deficiency [letter] Tuchman M. **N Engl J Med** 1989 Jun 1;320(22):1498–9

Reversal of hyperglobulinemia after orthotopic liver transplantation [letter] Yanaga K, et al. **N Engl J Med** 1989 Aug 10;321(6):399

Procurement of the liver and the whole pancreas from a single cadaver donor. Hesselink EJ, et al. **Neth J Surg** 1989 Feb;41(1):15–7

Central pontine myelinolysis after liver transplantation. Estol CJ, et al. **Neurology** 1989 Apr;39(4):493–8

Brachial plexus injury following liver transplantation. Katirji MB. **Neurology** 1989 May;39(5):736–8

Indication of Kasai's operation for biliary atresia: for early decision of liver transplantation. Chiba T. **Nippon Geka Hokan** 1988 Jul 1;57(4):261–6

Successful pregnancy after orthotopic liver transplantation. Haagsma EB, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):442–3

Dental management of patients after liver transplantation. Svirsky JA, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):541–6

Association of parainfluenza virus type 3 infection with allograft rejection in a liver transplant recipient. Herzog KD, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):534–6

Use of aminoglycosides during cyclosporine A immunosuppression after liver transplantation in children. Leach CT, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):354–7

Acute humoral rejection of an ABO-unmatched liver allograft in a pediatric recipient [published erratum appears in Pediatr Pathol 1989;9(2):following 211] Brantley SG, et al. **Pediatr Pathol** 1988;8(5):467–75

Varicella in pediatric orthotopic liver transplant recipients. McGregor RS, et al. **Pediatrics** 1989 Feb;83(2):256–61

Prolonged paralysis associated with long-term pancuronium use. Haas JL, et al. **Pharmacotherapy** 1989;9(3):154–7

Reconstructive surgery for immunosuppressed organ-transplant recipients. Cohen M, et al. **Plast Reconstr Surg** 1989 Feb;83(2):291–5

A psychiatric study of 247 liver transplantation candidates. Trzepacz PT, et al. **Psychosomatics** 1989 Spring; 30(2):147–53

Psychosomatic aspects of liver transplantation. Surman OS, et al. **Psychother Psychosom** 1987;48(1–4):26–31

Hepatic artery anastomotic stenosis after transplantation: treatment with percutaneous transluminal angioplasty. Abad J, et al. **Radiology** 1989 Jun;171(3):661–2

Recurrent cholangiocarcinoma in the biliary tree after liver transplantation. Herbener T, et al. **Radiology** 1988 Dec; 169(3):641–2

Infected bilomas and hepatic artery thrombosis in infant recipients of liver transplants. Interventional radiology and medical therapy as an alternative to retransplantation. Hoffer FA, et al. **Radiology** 1988 Nov;169(2):435–8

Biliary complications after liver transplantation in children. Letourneau JG, et al. **Radiology** 1989 Mar;170(3 Pt 2):1095–9

Acute allograft rejection in liver transplant recipients: lack of correlation with loss of hepatic artery diastolic flow. Longley DG, et al. **Radiology** 1988 Nov;169(2):417–20

Liver transplant rejection: value of the resistive index in Doppler US of hepatic arteries. Marder DM, et al. **Radiology** 1989 Oct;173(1):127–9

Obstruction to hepatic venous drainage after liver transplantation: treatment with balloon angioplasty. Zajko AB, et al. **Radiology** 1989 Mar;170(3 Pt 1):763–5

Aspergillus endocarditis in patients without prior cardiovascular surgery: report of a case in a liver transplant recipient and review. Woods GL, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):263–72 (42 ref.)

Human liver transplantation [editorial] Robson SC, et al. **S Afr Med J** 1989 Mar 4;75(5):205

Imaging in hepatic transplantation. Davis PL, et al. **Semin Liver Dis** 1989 Feb;9(1):90–101 (39 ref.)

Liver transplantation for primary biliary cirrhosis. Tzakis AG, et al. **Semin Liver Dis** 1989 May;9(2):144–8 (27 ref.)

Radionuclide evaluation of liver transplants. Hawkins RA, et al. **Semin Nucl Med** 1988 Jul;18(3):199–212 (56 ref.)

The role of transplantation in liver disease. Jenkins RL, et al. **Surg Clin North Am** 1989 Apr;69(2):371–82 (42 ref.)

Infection and rejection of primary hepatic transplant in 93 consecutive patients treated with triple immunosuppressive therapy. Ascher NL, et al. **Surg Gynecol Obstet** 1988 Dec; 167(6):474–84

Obstructing mucocele of the cystic duct after transplantation of the liver. Koneru B, et al. **Surg Gynecol Obstet** 1989 May;168(5):394–6

Transplantation of the liver for metastatic endocrine tumors of the intestine and pancreas. Makowka L, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):107–11

Combined hepatic and pancreaticoduodenal procurement for transplantation. Marsh CL, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):254–8

A technique for concomitant whole duodenopancreatectomy and hepatectomy for transplantation in the multiple organ donor. Nghiem DD. **Surg Gynecol Obstet** 1989 Sep; 169(3):257–8

Revised method of orthotopic hepatic transplantation in canines. Pienaar BH, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):341–6

Proximal abdominal graft for arterialization during hepatic transplantation. Stewart MT, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):261–2

Preservation of the retrohepatic vena cava during recipient hepatectomy for orthotopic transplantation of the liver. Stieber AC, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):542–4

Orthotopic liver transplantation: nonoperative management of early, acute portal vein thrombosis. Burke GW 3d, et al. **Surgery** 1988 Nov;104(5):924–8

A new method? [letter] Calne R. **Surgery** 1989 Jul;106(1):114

Procurement of a whole pancreas and liver from the same cadaveric donor. Delmonico FL, et al. **Surgery** 1989 Jun; 105(6):718–23

Bleeding esophageal varices: treatment by sclerotherapy and liver transplantation. Garrett KO, et al. **Surgery** 1988 Nov; 104(5):819–23

Liver transplantation in the treatment of bleeding esophageal varices. Iwatsuki S, et al. **Surgery** 1988 Oct;104(4):697–705

Orthotopic liver transplantation totally corrects factor IX deficiency in hemophilia B. Merion RM, et al. **Surgery** 1988 Nov;104(5):929–31

Trophic factors from pancreatic islets in combined hepatocyte-islet allografts enhance hepatocellular survival. Ricordi C, et al. **Surgery** 1989 Feb;105(2 Pt 1):218–23

Whole body gas exchange: amino acid and lactate clearance as indicators of initial and early allograft viability in liver transplantation. Svensson KL, et al. **Surgery** 1989 Apr; 105(4):472–80

Tc-NGA imaging in liver transplantation: preliminary clinical experience. Woodle ES, et al. **Surgery** 1989 Mar; 105(3):401–7

Liver transplantation: therapeutic option in end-stage liver disease [see comments] Alpert E, et al. **Tex Med** 1988 Dec; 84(12):68–72 (9 ref.). **Comment in:** Tex Med 1989 May;85(5):8–9

Reader cites further programs in transplantation [letter; comment] Gonwa TA, et al. **Tex Med** 1989 May;85(5):8–9 . **Comment on:** Tex Med 1988 Dec;84(12):68–72

Liver transplantation in 1988: progress in transplantation [editorial] Whigham TE, et al. **Tex Med** 1988 Dec; 84(12):4–6

Comparison of whole-blood cyclosporine levels measured by radioimmunoassay and fluorescence polarization in patients post orthotopic liver transplant. Hooks MA, et al. **Ther Drug Monit** 1989;11(3):304–9

Intraoperative evolution of coagulation parameters and t-PA/PAI balance in orthotopic liver transplantation. Arnoux D, et al. **Thromb Res** 1989 Aug 1;55(3):319–28

The current status of liver transplantation. Calne R. **Trans Med Soc Lond** 1986–87;103:50–60 (4 ref.)

Red cell antibody problems in 1000 liver transplants. Ramsey G, et al. **Transfusion** 1989 Jun;29(5):396–400

Combination harvesting procedure for liver and whole pancreas. Bunzendahl H, et al. **Transpl Int** 1988 Jul; 1(2):99–102

HLA compatibility and different features of liver allograft rejection. Gubernatis G, et al. **Transpl Int** 1988 Oct; 1(3):155–60

One liver for two: an experimental study in primates. Houssin D, et al. **Transpl Int** 1988 Dec;1(4):201–4

The accuracy of aspiration cytology in the diagnosis of rejection following orthotopic liver transplantation. Kirby RM, et al. **Transpl Int** 1988 Oct;1(3):119–26

Prophylaxis with ranitidine against peptic ulcer disease after liver transplantation. Klompmaker IJ, et al. **Transpl Int** 1988 Dec;1(4):209–12

Intrahepatic bile duct strictures after human orthotopic liver transplantation. Recurrence of primary sclerosing cholangitis or unusual presentation of allograft rejection? Lerut J, et al. **Transpl Int** 1988 Oct;1(3):127–30

Transjugular liver biopsy in the follow-up of liver transplant patients [letter] Mentha G, et al. **Transpl Int** 1988 Oct; 1(3):179–80

A new technique of hepatic vein reconstruction in partial liver transplantation. Ringe B, et al. **Transpl Int** 1988 Apr; 1(1):30–5

Mortality after orthotopic liver transplantation. An analysis of the causes of death in the first 50 liver transplantations in Groningen, The Netherlands. Slooff MJ, et al. **Transpl Int** 1988 Jul;1(2):69–74

Graft transection and warm perfusion in situ in canine partial orthotopic liver transplantation. Tanaka K, et al. **Transpl Int** 1988 Dec;1(4):213–8

Proceedings of the twelfth International Congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book II. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–2475

Twelfth international congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Proceedings. **Transplant Proc** 1989 Feb;21(1 Pt 1):1–1193

Seventh annual meeting of the Canadian Transplantation Society. Ottawa, Canada, September 24–25, 1988. Proceedings. **Transplant Proc** 1989 Apr;21(2):3311–74

Third International Symposium on Perioperative Care in Liver Transplantation. Proceedings. **Transplant Proc** 1989 Jun;21(3):3475–563

Serum hyaluronic acid following liver transplantation: evidence of hepatic endothelial damage. Adams DH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2274

Fetal liver transplantation in rhesus monkeys. Aggarwal S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3114–5

Is there a post-reperfusion syndrome? Aggarwal S, et al. **Transplant Proc** 1989 Jun;21(3):3497–9

Results of liver transplantation for hepatitis delta disease without immunoprophylaxis. Agnes S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2426–8

Lack of specialized antigen-presenting cells (IDCs) in donor heart, kidney, liver, and lung at transplantation. Amlot PL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):169–70

Usefulness of rapid machine cooling in the procurement of livers. Asano T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1307–8

Selection criteria for liver transplantation donors. Ascher NL. **Transplant Proc** 1989 Jun;21(3):3482–3

Blood ketone body ratio as an indicator of graft viability in rat liver allotransplantation. Asonuma K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1335–7

Orpitt: a computerized chart for intraoperative real time management of liver transplant data. Avolio AW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2353–6

An immune monitoring program for controlling immunosuppressive therapy. Baehr RV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1189–91

Donor-specific serum transfusion prolongs survival of orthotopic liver transplantation in the rat. Baquerizo A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1179–80

Kidney and liver initial graft function under different procurement techniques. Belli LS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1209–10

Allotransplantation of hepatocytes into spleen prolongs survival and improves albumin levels in cirrhotic dogs. Benito JM, et al. **Transplant Proc** 1989 Jun;21(3):3520

Hyperacute rejection in liver transplantation: a case report. Bird G, et al. **Transplant Proc** 1989 Aug;21(4):3742–4

Effects of donor splenocytes treated with mitomycin C on rat hepatic, cardiac, and intestinal allografts. Bollinger RB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):213–4

Regulation of biliary secretion following liver transplantation. Bowers BA, et al. **Transplant Proc** 1989 Jun;21(3):3554

Potential problems with autotransfusion during hepatic transplantation. Brajtbord D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2347–8

Low haematocrit reduces hepatic artery thrombosis after liver transplantation. Buckels JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2460–1

Does liver transplantation cure primary biliary cirrhosis? Buist LJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2402

Donor rating in human liver transplantation: correlation of oxygen consumption after revascularization with MEGX formation in donors. Burdelski M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2392–3

Overcoming early cyclosporine nephrotoxicity after liver transplantation. Burdick JF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2236–7

Comparison of Thromboelastograph and Sonoclot coagulation analyzer for assessing coagulation status during orthotopic liver transplantation. Chapin JW, et al. **Transplant Proc** 1989 Jun;21(3):3539

Changes of bile acid profile and coagulation during orthotopic liver transplantation. Codoceo R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2351–2

Liver perfusion in multiorgan harvesting for transplantation. Colledan M, et al. **Transplant Proc** 1988 Oct;20(5):847–8

Long-term results after liver transplantation in B and delta hepatitis. Colledan M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2421–3

The successful use of repeated courses of OKT3 for hepatic allograft rejection using %T3 cells to adjust dose. Colonna JO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2247–8

Serum guanase: a biochemical indicator of rejection in liver transplant recipients. Crary GS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2315–6

In situ versus bench resection of liver allografts before orthotopic liver transplantation. Crucitti F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2364–6

Bacterial infections in liver transplant patients under selective decontamination with norfloxacin. Cuervas-Mons V, et al. **Transplant Proc** 1989 Jun;21(3):3558

Successful treatment of severe cytomegalovirus infections with ganciclovir and CMV hyperimmune globulin in liver transplant recipients. D'Alessandro AM, et al. **Transplant Proc** 1989 Jun;21(3):3560–1

Anesthetic problems in pediatric liver transplantation. Davis PJ, et al. **Transplant Proc** 1989 Jun;21(3):3493–6

Selection criteria for liver transplantation: preliminary experience of Niguarda Hospital, Milan. De Carlis L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2415–6

Duplex Doppler in the postoperative monitoring of liver transplant recipients. De Gaetano AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2319–21

Advanced liver failure predisposes to cyclosporine-induced central nervous system symptoms after liver transplantation. de Groen PC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2456

Liver transplantation—energy expenditure, nitrogen loss, and substrate oxidation rate in the first two postoperative days. Delafosse B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2453–4

Simultaneous procurement of pancreas and liver from a single cadaveric donor. Delmonico FL, et al. **Transplant Proc** 1989 Jun;21(3):3521

Morphology of solid organ allograft arteriopathy: identification of proliferating intimal cell populations. Demetris AJ, et al. **Transplant Proc** 1989 Aug;21(4):3667–9

Antibody mediated rejection of human liver allografts: transplantation across ABO blood group barriers. Demetris AJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2217–20

Systemic arterial hypertension in the immediate postoperative period of liver transplantation. Diaz MA, et al. **Transplant Proc** 1989 Jun;21(3):3547–8

Postoperative liver transplant monitoring with fine-needle aspiration biopsy. Di Tondo U, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2311–2

Potential protective effects of furosemide against early cyclosporine-induced renal injury in hepatic transplant recipients. Driscoll DF, et al. **Transplant Proc** 1989 Jun; 21(3):3549–50

Identification of the nature of hemostatic failure during transplantation of the liver. Dugdale M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2332–3

Is there hyperacute rejection of the liver? Duquesnoy RJ. **Transplant Proc** 1989 Jun;21(3):3506–7

Cellular aspects of intragraft immunity in liver transplantation. Duquesnoy RJ. **Transplant Proc** 1989 Aug; 21(4):3629–30

Comparative hemodynamics of venovenous and venoarterial bypass during liver transplantation in the pig. Eason J, et al. **Transplant Proc** 1989 Jun;21(3):3525

The predictive role of immunologic tests in liver transplant rejection. Edwards LC, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2282–3

Conversion from standard cyclosporine to low-dose cyclosporine in liver transplant recipients: effect on nephrotoxicity and hypertension beyond one year. Eid A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2238–9

Long-term outcome after liver transplantation. Eid A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2409–10

The influence of MHC subregions on the induction of suppressor cells after orthotopic rat liver transplantation. Engemann R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):427–8

Early detection of malfunctioning liver grafts with liver-to-spleen RES scintigram ratio. Ericzon BG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2297–8

Liver transplantation for hereditary tyrosinemia in the presence of hepatocellular carcinoma. Esquivel CO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2445–6

Fluoride plasma concentration after isoflurane anesthesia during and after liver transplantation. Essén P, et al. **Transplant Proc** 1989 Jun;21(3):3530

Hemodynamic changes on clamping and unclamping of major vessels during liver transplantation. Estrin JA, et al. **Transplant Proc** 1989 Jun;21(3):3500–5

Expression of major histocompatibility complex (MHC) antigens on vascular endothelium of spontaneously tolerated liver allografts. Fabiani B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):407–8

Cyclosporine induced hemolytic anemia in a liver transplant patient. Faure JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2242–3

Back-table surgery for liver grafts. Ferla G, et al. **Transplant Proc** 1988 Oct;20(5):1003–4

Superiority of ex vivo flushing during liver harvesting. Finkelstein I, et al. **Transplant Proc** 1988 Oct;20(5):971–2

Pediatric liver transplantation across ABO blood group barriers. Fischel RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2221–2

Liver transplant recipients—self-report of symptom frequency, symptom distress, quality of life. Foley TC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2417–8

Predictors of graft function following liver transplantation. Forster J, et al. **Transplant Proc** 1989 Apr;21(2):3356–7

Coagulation factors as indicators of early graft function following liver transplantation. Forster J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2308–10

Study of eosinophilia and hepatic dysfunction as a predictor of rejection in human liver transplantation. Foster PF, et al. **Transplant Proc** 1988 Feb;20(1 Suppl 1):676–7

Liver transplantation in the Cambridge/King's College Hospital series—the first 400 patients. Friend PJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2397–8

Improved results of preservation of hepatic grafts preflushed with albumin and prostaglandins. Gaber AO, et al. **Transplant Proc** 1988 Oct;20(5):992–3

Liver transplantation for acute and subacute fulminant hepatic failure. Gallinger S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2435–8

Phenotypic characterization of T-suppressor lymphocytes induced by orthotopic rat liver transplantation. Gassel HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):429–30

New technique of combined liver and kidney transplantation. Genyk YS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2381–2

Hepatorenal syndrome and orthotopic liver transplantation. Gonwa TA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2419–20

Experimental studies of hepatic clearance rates of amino acids as an initial function test of the liver graft. Goto T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2305–7

Liver transplant aspiration cytology (TAC) at three weeks and one year in healthy recipients with grafts free of histologic abnormality. Greene CL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2211–2

Antilymphoblast globulin (ALG) as initial prophylaxis against rejection following liver transplantation. Greig PD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2244–6

Treatment of primary liver graft non-function with prostaglandin E1 results in increased graft and patient survival. Greig PD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2385–8

Prostaglandin E1 for primary nonfunction following liver transplantation. Greig PD, et al. **Transplant Proc** 1989 Apr; 21(2):3360–1

Induction of class I and class II major histocompatibility complex antigens (MHC) in rejecting human liver grafts. Gridelli B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2215–6

Different features of acute liver allograft rejection, their outcome and possible relationship to HLA-compatibility. Gubernatis G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2213–4

Total oxygen consumption, ketone body ratio and a special score as early indicators of irreversible liver allograft dysfunction. Gubernatis G, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2279–81

Prophylactic ATG or OKT3 in liver transplantation in the presence of contraindications to cyclosporine (CyA) or azathioprine (AZA). Gugenheim J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2257

Rejection of ABO incompatible liver allografts in man. Gugenheim J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2223–4

Lymphocyte parameters in liver graft recipients receiving prophylactic OKT3 or conventional triple therapy. Hamilton G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2255–6

Early detection of viral infection in liver graft recipients by immune monitoring. Hamilton G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2266–7

Low dose immunosuppression for septic liver transplantation patients. Hart ME, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2234–5

Bile acid profile as an early indicator of allograft function during orthotopic liver transplantation. Herrera J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2313–4

Hepatic artery thrombosis after orthotopic liver transplantation—a fatal complication or an asymptomatic event. Hesselink EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2462

Hepatic artery thrombosis (HAT) after orthotopic transplantation (OLT)—the influence of technical factors and rejection episodes. Hesselink EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2468

Fine needle aspiration biopsy in liver transplants. Höckerstedt K, et al. **Transplant Proc** 1989 Aug;21(4):3625–6

Differentiation between acute rejection and infection in liver transplant patients. Höckerstedt K, et al.

Transplant Proc 1989 Feb;21(1 Pt 2):2317–8
Transplantation of livers from non–heart–beating donors is possible by core cooling technique. Hoshino T, et al. Transplant Proc 1989 Jun;21(3):3519
Liver transplantation from non–heart–beating donors by core cooling technique. Hoshino T, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1206–8
Useful parameters for predicting posttransplant liver viability. Hoshino T, et al. Transplant Proc 1988 Oct;20(5):987–91
One week of monitoring of portal and hepatic arterial blood flow after liver transplantation using implantable pulsed Doppler microprobes. Houssin D, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2277–8
Effects of FK506 and 15–deoxyspergualin in rat orthotopic liver transplantation. Inagaki K, et al. Transplant Proc 1989 Feb;21(1 Pt 1):1069–71
Angiographic evidence of collateral rearterialization of the grafted liver in the rat. Isai H, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2463–5
Liver transplantation for fulminant hepatic failure. Iwatsuki S, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2431–4
Severe infections early after liver transplantation. Jacobs F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2271–3
The isolated perfused rabbit liver as a model for assessment of organ preservation. Jamieson NV, et al. Transplant Proc 1988 Oct;20(5):996–7
The 24– to 48–hour preservation of canine liver by simple cold storage using UW lactobionate solution. Jamieson NV, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1292–3
Indications for selection for liver transplantation in children. Jara P, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2450–1
Waiting in line: should selected patients ever be moved up? Jonasson O. Transplant Proc 1989 Jun;21(3):3390–4; discussion 3413–8
Correlation between dose and level of cyclosporine after orthotopic liver transplantation. Kahn D, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2240–1
Estrogen and androgen receptors in the liver after orthotopic liver transplantation. Kahn D, et al. Transplant Proc 1989 Feb;21(1 Pt 1):409–10
Clinical results in liver transplantation using UW solution for extended preservation. Kalayoglu M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1342–3
Results of extended preservation of the liver for clinical transplantation. Kalayoglu M, et al. Transplant Proc 1989 Jun;21(3):3487–8
Long–term enhancement of rat renal allografts by serum from liver grafted rats. Kamada N, et al. Transplant Proc 1989 Feb;21(1 Pt 1):433–4
Bacteriologic study of autotransfusion during liver transplantation. Kang Y, et al. Transplant Proc 1989 Jun; 21(3):3538
Hemodynamic instability during liver transplantation. Kang YG, et al. Transplant Proc 1989 Jun;21(3):3489–92
Criteria for the histopathological classification of liver allograft rejection and their clinical relevance. Kemnitz J, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2208–10
The liver donor: special considerations. Klintmalm GB. Transplant Proc 1988 Oct;20(5 Suppl 7):9–11
The role of class I antigens in hyperacute rejection of hepatic allografts in rats. Knechtle SJ, et al. Transplant Proc 1989 Jun;21(3):3557
Association of very high blood levels of cyclosporin metabolites with clinical complications after liver transplantation. Kohlhaw K, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2232–3
Preservation and reflow damage in liver transplantation in the pig. Koizumi M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1323–6
The correlation of mononuclear cell growth liver transplant biopsy cultures with histologic evidence of rejection and allograft dysfunction. Kolbeck PC, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2394–6
Infections in pediatric liver recipients treated for acute rejection. Koneru B, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2251–2
Autotransfusion in liver transplantation. Kristiansson M, et al. Transplant Proc 1989 Jun;21(3):3537
Rejection and blood flow in auxiliary partial canine liver homografts. Ku Y, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2228–9
Qualitative assessment of liver function after hypovolemic, hypoxemic, and ischemic shock in a transplantation model. Lamesch P, et al. Transplant Proc 1988 Oct;20(5):994–5
Fine needle aspiration biopsy in liver transplants. Lautenschlager I. Transplant Proc 1989 Aug;21(4):3618–20
Correlation of cytologic findings to activation markers in acute liver rejection. Lautenschlager I, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2290–1
Relevance of hepatitis B viral DNA in assessment of potential liver allograft recipients. Levy GA, et al. Transplant Proc 1989 Apr;21(2):3333–4
Antithrombin III during liver transplantation. Lewis JH, et al. Transplant Proc 1989 Jun;21(3):3543–4
Hepatic functional difference between brain death hypotension and hypovolemic hypotension in liver donation. Lin H, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2389–91
Liver transplantation in Australia: the Queensland experience. Lynch S, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2399–401
Cell surface phenotype of mononuclear cells infiltrating bile ducts during acute and chronic liver allograft rejection. McCaughan GW, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2201–2
The development of a lymphocyte population with suppressor phenotype after successful liver transplantation. McDiarmid SV, et al. Transplant Proc 1989 Feb;21(1 Pt 1):423–4
DHPG (Gancyclovir) improves survival in CMV pneumonia. Mai M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2263–5
Evidence for damage due to free radicals at reperfusion in porcine liver transplants. Maley WR, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1316
Hormonal control of glucose metabolism during liver transplantation. Mallett S, et al. Transplant Proc 1989 Jun; 21(3):3529
Alpha interferon therapy in patients with hepatitis infection undergoing organ transplantation. Mancini C, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2429–30
Maintenance immunosuppression without steroids in pediatric liver transplantation. Margarit C, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2230–1
Intraoperative blood transfusion requirements and deficient hemostasis in highly alloimmunized patients undergoing liver transplantation. Marino IR, et al. Transplant Proc 1988 Dec;20(6):1087–9
HLA alloimmunization and blood requirements in orthotopic liver transplantation. Marino IR, et al. Transplant Proc 1989 Feb;21(1 Pt 1):789–91
Xanthine and hypoxanthine accumulation during storage may contribute to reperfusion injury following liver transplantation in the rat. Marzi I, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1319–20
Factors responsible for hepatic artery thrombosis after pediatric liver transplantation. Mazzaferro V, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2466–7
The isolated hepatocyte preservation model: a comparison of hypertonic citrate and lactobionate solutions. Michell ID, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1312–3
Renal allograft rejection induces MHC class II upregulation in autologous kidney and liver of the recipient. Miller SM, et al. Transplant Proc 1989 Feb;21(1 Pt 1):328
Preservation of renal function using OKT3 in liver transplant patients. Millis JM, et al. Transplant Proc 1989 Jun; 21(3):3551–2
Analysis of donor and recipient variables and early graft function after orthotopic liver transplantation. Mimeault R, et al. Transplant Proc 1989 Apr;21(2):3355
Rabbit antibodies accompanying graft rejection and other tissue destruction. Miyata M, et al. Transplant Proc 1989 Feb;21(1 Pt 1):196–200
Relevance of donor liver selection and graft viability in a liver transplantation program. Mora NP, et al. Transplant Proc 1988 Oct;20(5):978–9
Value of prostacyclin plus verapamil for obtaining 24–hour preserved liver allografts. Mora NP, et al. Transplant Proc 1988 Oct;20(5):980–2
Effect of 15–deoxyspergualin on class II antigen expression in hepatic sinusoidal lining cells and on infiltration of mononuclear cells in swine liver transplantation. Morisaki F, et al. Transplant Proc 1989 Feb;21(1 Pt 1):1077–80
OKT3 immunoprophylaxis in human liver transplantation. Mühlbacher F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2253–4
Postoperative thrombocytopenia in liver transplant recipients: prognostic implications and treatment with high dose of gamma–globulin. Munoz SJ, et al. Transplant Proc 1989 Jun;21(3):3545–6
Long–term liver preservation using artificial blood substitute. Nakajima I, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1314–5
Successful orthotopic liver transplantation after –4 degrees C preservation in rats. Nakajima Y, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1305–6
Patterns of immune activation during the first four weeks in liver transplant patients. Nashan B, et al. Transplant Proc 1989 Aug;21(4):3623–4
Does end–tidal CO2 pressure (PETCO2) reflect hepatic metabolism during orthotopic liver transplantation (OLTX)? Neidecker J, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2339–40
Limiting dilution analysis: a new approach to identify the status of allograft recipients. Nikaein A, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2286–9
Chronic liver allograft rejection and obliterative arteriopathy: possible pathogenic mechanisms. Oguma S, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2203–7
Assessment of the viability of liver allografts by chemiluminescence. Ohkohchi N, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1332–4
Reduced–size orthotopic liver transplantation in children: an experience with seven cases. Ong TH, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2443–4
Effects of fetal liver transplantation in congenitally enzyme deficient rats. Otsu I, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2357–9
Decreased loss of liver nucleotides and energy charge during hypothermic preservation by donor pretreatment with glucose—a preliminary report. Palombo JD, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1299–300
Intraoperative measurements related to subsequent hepatic graft failure. Paulsen AW, et al. Transplant Proc 1989 Feb; 21(1 Pt 2):2337–8
Effects of atropine pretreatment on the revascularization syndrome. Paulsen AW, et al. Transplant Proc 1989 Feb; 21(1 Pt 2):2341–2
Determination of an adequate flush volume for removal of preservation fluid prior to revascularization of the donor liver. Paulsen AW, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2349–50
Observations on abdominal venous pressures during orthotopic liver transplantation in man. Peachey T, et al. Transplant Proc 1989 Jun;21(3):3526–7
Quality of life following liver transplantation. Pennington JC Jr. Transplant Proc 1989 Jun;21(3):3514–6
Pharmacological method (triple–drug therapy) for successful 24–hour preservation of liver allografts. Pereira F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1303–4
Soluble interleukin 2 receptor level in liver allograft recipients: an indicator of rejection. Perkins JD, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2275–6
The multiple organ donor: prospective multicenter analysis of outcome in the United States of America. Peters TG, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1218–20
Liver grafting for malignant liver tumors. Pichlymayr R, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2403–5
Postoperative transfascial vascular monitoring, liver biopsy biliary evaluation, and drainage of hepatic allografts. Pinson CW, et al. Transplant Proc 1989 Jun;21(3):3553
Reoperative procedures following liver transplantation. Pinson CW, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2334–6
Perioperative infection in liver transplant recipients under a quadruple immunosuppressive protocol. Pirsch JD, et al. Transplant Proc 1989 Jun;21(3):3559
High levels of donor HLA antigens in the circulation of human liver graft recipients. Pollard SG, et al. Transplant Proc 1989 Feb;21(1 Pt 1):425–6
Long term nephrotoxicity in liver transplantation. Poplawski S, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2469–71
Tissue–type–plasminogen–activator–associated fibrinolysis in orthotopic liver transplantation. Porte RJ, et al. Transplant Proc 1989 Jun;21(3):3542
Intracranial pressure monitoring during orthotopic liver transplantation for acute liver failure. Potter D, et al. Transplant Proc 1989 Jun;21(3):3528
Donor data in liver grafts with primary non–function—a preliminary analysis by the European Liver Registry. Pruim J, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2383–4
The validity of clinical parameters for the selection of liver donors. Pruim J, et al. Transplant Proc 1988 Oct;20(5):973
Incompatible blood transfusions in liver transplant patients with significant red cell alloantibodies. Ramsey G, et al. Transplant Proc 1989 Jun;21(3):3531
Graft hepatitis delta virus reinfection after orthotopic liver transplantation in HDV cirrhosis. Reynès M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2424–5
Pancreatic islets enhance hepatocellular survival in combined hepatocyte–islet–cell transplantation. Ricordi C, et al. Transplant Proc 1989 Feb;21(1 Pt 3):2689–90
Analysis of biliary complications following orthotopic liver transplantation. Ringe B, et al. Transplant Proc 1989 Feb; 21(1 Pt 2):2472–6
Preoperative coagulation screen does not predict intraoperative blood product requirements in orthotopic liver transplantation. Ritter DM, et al. Transplant Proc 1989 Jun;21(3):3533–4
Predictors of intraoperative death and long–term survival in liver transplantation: a multistage analysis. Roberts MS, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2439–42
Immunohistology of liver allografts in recipients managed with prophylactic OKT3. Rohrer RJ, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2249–50
Aspergillus fumigatus infections in liver transplant patients. Rossi G, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2268–70
Results in 50 orthotopic liver transplants in Milan. Rossi G, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2411–4
Effect of massive transfusion during liver transplantation on rejection and infection. Rouch DA, et al. Transplant Proc 1988 Dec;20(6):1135–7
Noncompliance in organ transplant recipients. Rovelli M, et al. Transplant Proc 1989 Feb;21(1 Pt 1):833–4
Characteristics of alloreactive rat T cell lines established from low and high rejecting orthotopic liver transplants. Ruiz P, et al. Transplant Proc 1989 Apr;21(2):3286–8
In situ and systemic cellular immunity associated with orthotopic rat liver allograft acceptance or rejection. Ruiz P, et al. Transplant Proc 1989 Feb;21(1 Pt 1):416–20
Transplantation of spheroidal aggregate cultured hepatocytes into the rat spleen. Saito S, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2374–7
Mitochondrial respiratory function, adenine nucleotides and antioxygenic enzymes in pig liver transplantation. Sakurada M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1321–2
CMV hyperimmune globulin prophylaxis after liver transplantation: a prospective randomized controlled study. Saliba F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2260–2
Portal and arterial thrombosis in liver transplantation: a frequent event in severe rejection. Samuel D, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2225–7
Can serum liver function tests differentiate rejection from other causes of liver dysfunction after hepatic transplantation? Sankary HN, et al. Transplant Proc 1988 Feb;20(1 Suppl 1):669–70
Can criteria present on hepatic allograft biopsy determine

the presence or absence of rejection? Sankary HN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2284–5

Intraoperative continuous arterio–venous hemofiltration (CAVH)—a method to diminish fluid sequestration during liver transplant operations. Sankary HN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2326–7

Fetal liver allo– and xenotransplantation in acute and chronic hepatic failure. Sano N, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2360–1

Clinical usefulness of a semiquantitative scoring system for liver transplant aspiration cytology. Schlitt HJ, et al. **Transplant Proc** 1989 Aug;21(4):3621–2

Lidocaine metabolism as an index of liver function in hepatic transplant donors and recipients. Schroeder TJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2299–301

Phenotypic analysis of CD3 + alpha/beta TCR–cells in allograft recipients and in normal lymphoid tissue. Schwinzer R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):111–2

Arterial grafts for revascularization of liver transplants. Secrest CL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2345–6

Baseline cardiac index does not predict hemodynamic instability during orthotopic liver transplantation. Seifert RD, et al. **Transplant Proc** 1989 Jun;21(3):3523–4

Hemolysis in ABO–compatible liver transplantation—only after O grafts? Shanwell A, et al. **Transplant Proc** 1989 Jun;21(3):3532

Improved results with retransplantation of the liver. Shaw BW Jr, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2407–8

Exclusion criteria for liver transplant recipients. Shaw BW Jr. **Transplant Proc** 1989 Jun;21(3):3484–6

Donor portal vein arterialization during liver transplantation. Sheil AG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2343–4

A modified cannulation technique for veno–venous bypass during orthotopic liver transplantation. Slooff MJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2328–9

Postoperative evolution of extrahepatic organ function. Snyder JV. **Transplant Proc** 1989 Jun;21(3):3508–10

Liver transplantation: an unfinished product. Starzl TE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2197–200

The point system for organ distribution. Starzl TE, et al. **Transplant Proc** 1989 Jun;21(3):3432–6; discussion 3440–4

Patterns of macrophage immigration and differentiation in human liver grafts. Steinhoff G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):398–400

Pancreaticoduodenal allograft procurement in combination with liver allograft procurement. Sterioff S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2767–8

Rapid infusion technique as a safe alternative to veno–venous bypass in orthotopic liver transplant (TX). Stock PG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2322–5

Vascular anastomosis in liver grafting by use of a synthetic absorbable cuff material. Sumimoto K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2371–3

Reversal of ongoing liver graft rejection by administration of serum from liver–transplanted rats. Sumimoto R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):431–2

Preservation of rabbit livers by continuous hypothermic perfusion after donor pretreatment with chlorpromazine and methylprednisolone. Sundberg R, et al. **Transplant Proc** 1988 Oct;20(5):998

Liver transplantation in a high–risk group of children. Superina RA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2447–9

Effect of DRw6 antigen in recipients and donors on survival after liver transplant. Superina RA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):786–8

Coagulation disorders during orthotopic liver transplantation: inhibition of tissue thromboplastin activity by its antibody. Suzumura N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2367–8

Partial liver transplantation in dogs: preserving the IVC of the recipient and use of a heparinized catheter (Anthron) for portal vein bypass. Taira N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2362–3

A new immunosuppressant, 15–deoxyspergualin, inhibits production of IL–1 from isolated hepatic sinusoidal lining cells in swine liver transplantation. Takasu S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1081–4

Neopterin and creatinine relationships in liver and kidney transplants. Takasugi M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2056–8

Evaluation of early graft function in orthotopic liver transplants in dogs. Tashiro S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1344–6

Flow and vascular resistance measurements in auxiliary liver segments transplanted in orthotopic position. Then PK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2378–80

Pathologic recognition of preservation injury in hepatic allografts with six months follow–up. Tillery W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1330–1

Effects of perfusion temperature on donor graft viability in canine orthotopic partial liver transplantation. Tokunaga Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1296–8

Improved liver preservation by combined gravity flow perfusion and cold storage. Toledo–Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):983–5

Liver preservation: experimental and clinical observations. Toledo–Pereyra LH. **Transplant Proc** 1988 Oct;20(5):965–8 (31 ref.)

Unmatched stem cell transplantation as a possible alternative to bone marrow transplantation. Touraine JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3112–3

Orthotopic liver transplantation in the rat: the effect of RT2 matching on survival. Tsuchimoto S, et al. **Transplant Proc** 1989 Apr;21(2):3266–7

Orthotopic liver transplantation in rats receiving FK506. Tsuchimoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1064–5

Vanishing bile duct syndrome in canine liver allotransplants. Uchida H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):404–6

Extrahepatic disease in liver transplant recipients. Van Thiel DH, et al. **Transplant Proc** 1989 Jun;21(3):3478–81

Conjugative drug metabolism in liver transplant patients. Venkataramanan R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2455

Steroid metabolism in liver transplant patients. Venkataramanan R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2452

Hemodynamic study following liver transplantation. Vera SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2302–4

Alterations in plasminogen activator and plasminogen activator inhibitor levels during liver transplantation. Virji MA, et al. **Transplant Proc** 1989 Jun;21(3):3540–1

Isolation, characterization and in vitro activity of human cyclosporin A metabolites. Wallemacq PE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):906–10

Information needs of primary caregivers in pediatric liver transplantation. Weichler N, et al. **Transplant Proc** 1989 Jun;21(3):3562

Patterns of MHC class II antigen expression (HLA–DR, DP, and DQ) on peripheral blood T lymphocytes in patients after liver transplant. Winkler M, et al. **Transplant Proc** 1989 Aug;21(4):3627–8

Cognitive function and quality of life in adult liver transplant recipients. Wolcott D, et al. **Transplant Proc** 1989 Jun; 21(3):3563

Liver transplantation for malignant liver disease. Wolff H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2406

Use of a monoclonal antibody against the T cell receptor for prophylactic immunosuppressive treatment after liver transplantation. Wonigeit K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2258–9

Combined retrieval of liver and pancreas grafts: alternatives for organ procurement. Wright FH, et al. **Transplant Proc** 1989 Jun;21(3):3522

The role of RT1.a major histocompatibility antigens in prolonging the survival of hepatic allografts in the rat. Yamaguchi Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):792–3

A synergistic effect of total lymphoid irradiation, cyclosporine, and splenectomy in a hamster–to–rat hepatic xenograft model. Yamaguchi Y, et al. **Transplant Proc** 1989 Jun;21(3):3556

The effect of pretreatment with class I major histocompatibility complex (MHC) antigens on hepatic or cardiac allograft survival in the rat. Yamaguchi Y, et al. **Transplant Proc** 1989 Jun;21(3):3555

Significance of blood flow measurement in clinical liver transplantation. Yanaga K, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2330–1

Is hepatic artery thrombosis after liver transplantation really a surgical complication? Yanaga K, et al. **Transplant Proc** 1989 Jun;21(3):3511–3

Comparative studies of FK506 and cyclosporine in canine orthotopic hepatic allograft survival. Yokota K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1066–8

Neopterin: a biochemical marker in the process of organ transplantation. Zachariah NY, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2294–6

Orthotopic partial liver transplantation in dogs can be performed without cold perfusion of the donor liver. Zaima M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2369–70

Pseudoaneurysms following orthotopic liver transplantation: clinical and radiologic manifestations. Zajko AB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2457–9

Hepatic iron in the control of iron absorption in a rat liver transplantation model. Adams PC, et al. **Transplantation** 1989 Jul;48(1):19–21

Hepatic artery thrombosis due to acute pancreatitis following liver transplantation. Badger I, et al. **Transplantation** 1989 Sep;48(3):526–7

Orthotopic liver transplantation resulting in amitriptyline toxicity in the recipient. Brems JJ, et al. **Transplantation** 1989 Jul;48(1):159–61

Hepatic artery reconstruction during liver transplantation. Brems JJ, et al. **Transplantation** 1989 Feb;47(2):403–6

Transdiaphragmatic exposure for direct atrial–caval anastomosis in liver transplantation for Budd–Chiari syndrome. Burtch GD, et al. **Transplantation** 1989 Jul; 48(1):161–3

The feasibility of in vivo resection of the left lobe of the liver and its use for transplantation. Czerniak A, et al. **Transplantation** 1989 Jul;48(1):26–32

Soluble HLA antigens in the circulation of liver graft recipients. Davies HS, et al. **Transplantation** 1989 Mar; 47(3):524–7

Cyclosporine neurotoxicity late after liver transplantation [letter] de Bruijn KM, et al. **Transplantation** 1989 Mar; 47(3):575–6

Variation in patient response associated with different preparations of murine monoclonal antibody therapy. Delmonico FL, et al. **Transplantation** 1989 Jan;47(1):92–5

Cytomegalovirus infection in pediatric liver recipients. A virological survey and prophylaxis with CMV immune globulin and early DHPG treatment. Dussaix E, et al. **Transplantation** 1989 Aug;48(2):272–4

Selective proliferation of chemically altered rat liver epithelial cells following hepatic transplantation. Faris RA, et al. **Transplantation** 1989 Jul;48(1):87–92

Blood and graft eosinophilia as predictors of rejection in human liver transplantation. Foster PF, et al. **Transplantation** 1989 Jan;47(1):72–4

Simultaneous liver and renal transplantation in man. Gonwa TA, et al. **Transplantation** 1988 Nov;46(5):690–3

Pathogenesis and outcome of hepatorenal syndrome in patients undergoing orthotopic liver transplant. Gonwa TA, et al. **Transplantation** 1989 Feb;47(2):395–7

Treatment of primary liver graft nonfunction with prostaglandin E1. Greig PD, et al. **Transplantation** 1989 Sep;48(3):447–53

Late complications with gallbladder conduit biliary reconstruction after liver transplantation. Halff G, et al. **Transplantation** 1989 Sep;48(3):537–9

Immunological unresponsiveness to hepatic allografts in rats. Immunological reactivities of the recipient to donor antigens. Hasuike Y, et al. **Transplantation** 1989 Jun; 47(6):1043–7

Liver transplantation—the rejected patients. Heyink J, et al. **Transplantation** 1989 Jun;47(6):1069–71

Evidence that cold preservation–induced microcirculatory injury in liver allografts is not mediated by oxygen–free radicals or cell swelling in the rat. Holloway CM, et al. **Transplantation** 1989 Aug;48(2):179–88

The importance of the hepatic artery in rat liver transplantation. Howden B, et al. **Transplantation** 1989 Mar; 47(3):428–31

Portocaval shunt in preparation for emergency liver transplantation [letter] Husberg B, et al. **Transplantation** 1989 Mar;47(3):574

Prognosis of liver transplantation in patients with erythropoietic protoporphyria [letter] Johnson JA, et al. **Transplantation** 1989 Jul;48(1):175–6

Pancreatic hormonal responses to hyperglycemia during orthotopic liver transplantation in man. Khoury GF, et al. **Transplantation** 1989 May;47(5):891–3

Neurotensin and vasoactive intestinal peptide levels during orthotopic liver transplantation in man. Khoury GF, et al. **Transplantation** 1988 Oct;46(4):601–2

Orthotopic liver transplantation in a patient with a giant cavernous hemangioma of the liver and Kasabach–Merritt syndrome. Klompmaker IJ, et al. **Transplantation** 1989 Jul; 48(1):149–51

Suprahepatic vena cava cuffs in rat liver transplantation—a simplified method? [letter] Knoop M, et al. **Transplantation** 1989 Mar;47(3):576

Serial decrease in glomerular filtration rate in long–term pediatric liver transplantation survivors treated with cyclosporine. McDiarmid SV, et al. **Transplantation** 1989 Feb;47(2):314–8

Metabolic function of grafted liver in rats. Marni A, et al. **Transplantation** 1988 Dec;46(6):830–5

The use of pulmonary artery sequestration as an hepatic arterial conduit. A case of unusual hepatic arterial supply. Marsh JW, et al. **Transplantation** 1989 Jan;47(1):199–200

Evidence that graft survival is not related to parenchymal cell viability in rat liver transplantation. The importance of nonparenchymal cells. Marzi I, et al. **Transplantation** 1989 Sep;48(3):463–8

Hepatic artery thrombosis after pediatric liver transplantation—a medical or surgical event? Mazzaferro V, et al. **Transplantation** 1989 Jun;47(6):971–7

The hepatic artery in liver transplantation. Merion RM, et al. **Transplantation** 1989 Sep;48(3):438–43

Randomized prospective trial of OKT3 for early prophylaxis of rejection after liver transplantation. Millis JM, et al. **Transplantation** 1989 Jan;47(1):82–8

Preservation of dog liver, kidney, and pancreas using the Belzer–UW solution with a high–sodium and low–potassium content. Moen J, et al. **Transplantation** 1989 Jun;47(6):940–5

Effect of T cell supplementation to fetal liver cells transplanted into isogeneic mice. Navarro J, et al. **Transplantation** 1988 Nov;46(5):779–82

Prognosis after liver transplantation for primary biliary cirrhosis. Neuberger J, et al. **Transplantation** 1989 Sep; 48(3):444–7

Evidence that temporary complete occlusion of splenic vessels prevents massive embolization and sudden death associated with intrasplenic hepatocellular transplantation. Nieto JA, et al. **Transplantation** 1989 Mar;47(3):449–50

Hepatic transplantation in galactosemia. Otto G, et al. **Transplantation** 1989 May;47(5):902–3

Soluble interleukin–2 receptor level as an indicator of liver allograft rejection. Perkins JD, et al. **Transplantation** 1989 Jan;47(1):77–81

Systemic effects of tissue plasminogen activator–associated fibrinolysis and its relation to thrombin generation in orthotopic liver transplantation. Porte RJ, et al. **Transplantation** 1989 Jun;47(6):978–84

Low rate of Rhesus immunization from Rh–incompatible blood transfusions during liver and heart transplant surgery. Ramsey G, et al. **Transplantation** 1989 Jun;47(6):993–5

Occlusion of biliary stents in hepatic transplantation caused by cyclosporine deposition. Sack J, et al.

Transplantation 1989 Jun;47(6):1068

An analysis of the determinants of hepatic allograft rejection using stepwise logistic regression. Sankary H, et al. **Transplantation** 1989 Jan;47(1):74–7

Hydralazine-induced cholestatic jaundice following liver transplantation. Shaefer MS, et al. **Transplantation** 1989 Jan; 47(1):203–4

A new method for orthotopic rat liver transplantation with arterial cuff anastomosis to the recipient common hepatic artery. Steffen R, et al. **Transplantation** 1989 Jul;48(1):166–8

Neoadjuvant chemotherapy and orthotopic liver transplantation for hepatocellular carcinoma. Stone MJ, et al. **Transplantation** 1989 Aug;48(2):344–7

Successful hepatic allograft procurement and transplantation from a donor after cholecystectomy. Stratta RJ, et al. **Transplantation** 1988 Oct;46(4):599–600

Reliable indices for the determination of viability of grafted liver immediately after orthotopic transplantation. Bile flow rate and cellular adenosine triphosphate level. Sumimoto K, et al. **Transplantation** 1988 Oct;46(4):506–9

24-hour rat liver preservation using UW solution and some simplified variants. Sumimoto R, et al. **Transplantation** 1989 Jul;48(1):1–5

Technique of liver transplantation in the rat [letter] Tamaki T, et al. **Transplantation** 1988 Nov;46(5):783–4

Hypothermic preservation of the rat liver assessed by orthotopic transplantation. III. Improved functional recovery with isotonic citrate solution and a stable prostacyclin analogue. Tamaki T, et al. **Transplantation** 1988 Oct;46(4):626–8

Hepatic reperfusion injury following orthotopic liver transplantation in the rat. Thurman RG, et al. **Transplantation** 1988 Oct;46(4):502–6

Primary nonfunction of hepatic allografts with preexisting fatty infiltration. Todo S, et al. **Transplantation** 1989 May; 47(5):903–5

Cyclosporine blood levels—an evaluation of radioimmunoassay with selective monoclonal or polyclonal antibodies and high-performance liquid chromatography in liver transplant recipients. Tredger JM, et al. **Transplantation** 1988 Nov;46(5):681–6

The effect of blood group matching on the survival of orthotopic liver transplants in the rat. Tsuchimoto S, et al. **Transplantation** 1989 Mar;47(3):570–2

Venous jump grafts for liver transplantation in patients with portal vein thrombosis. Tzakis A, et al. **Transplantation** 1989 Sep;48(3):530–1

Intraoperative blood transfusions in highly alloimmunized patients undergoing orthotopic liver transplantation. Weber T, et al. **Transplantation** 1989 May;47(5):797–801

Evaluation of portal vein arterialization as a method of liver graft revascularization by blood ketone body ratio. Yamaguchi M, et al. **Transplantation** 1989 Sep;48(3):514–6

The role of class I major histocompatibility complex antigens in prolonging the survival of hepatic allografts in the rat. Yamaguchi Y, et al. **Transplantation** 1989 Jan;47(1):171–7

The effect of preservation fluid on the blood flow of pediatric liver allografts [letter] Yanaga K, et al. **Transplantation** 1989 Aug;48(2):358

Portal vein thromboembolism of liver allografts from splenectomized donors. Yanaga K, et al. **Transplantation** 1989 Feb;47(2):399–400

Liver transplantation—the first 25 years. Ascher HL. **West J Med** 1988 Sep;149(3):316–21 (66 ref.)

Liver transplantation and Wilson's disease. Ho TA, et al. **Wis Med J** 1988 Oct;87(10):14–5

Score-aided decision making in patients with severe liver damage after hepatic transplantation. Gubernatis G, et al. **World J Surg** 1989 May–Jun;13(3):259–65

Surgical methods for the prevention of first and recurrent variceal bleeding. Henderson JM. **Z Gastroenterol** 1988 Sep;26 Suppl 2:49–53 (17 ref.)

[Liver transplantation—the experience of the center in Cambridge (England)] Ninkov P. **Khirurgiia (Sofiia)** 1988; 41(5):84–7 **(Bul)**

[Current status and perspectives of research on hepatocyte transplantation in the treatment of liver diseases] Zhang YX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr; 27(4):248–50 (15 ref.) **(Chi)**

[Recurrence of primary carcinoma of the liver in liver allotransplantation] Černý E, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):916–7 (Eng. Abstr.) **(Cze)**

[Perspectives in hepatocyte transplantation] Holeček M. **Cas Lek Cesk** 1988 Nov 18;127(47):1445–7 (Eng. Abstr.) **(Cze)**

[Liver transplantation—must our problems be exported?] Juhl E. **Ugeskr Laeger** 1989 Feb 6;151(6):359 **(Dan)**

[Liver transplantation undertaken on Danes abroad] Keiding S, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):360–2 (Eng. Abstr.) **(Dan)**

[Pediatric organ transplantation] Leijàla M, et al. **Duodecim** 1989;105(9):807–10 **(Fin)**

[Treatment of extrahepatic bile duct atresia: Kasai's operation or hepatic transplantation?] Otte JB, et al. **Acta Chir Belg** 1988 May–Jun;88(3):133–41 (Eng. Abstr.) **(Fre)**

[Liver transplantation] Otte JB. **Ann Chir** 1988;42(7):432–7 (8 ref.) **(Fre)**

[Fibrinolytic activity in patients undergoing hepatic transplantation] Houvenaeghel M, et al. **Ann Fr Anesth Reanim** 1989;8(1):4–11 (34 ref.) (Eng. Abstr.) **(Fre)**

[Adult livers for grafts in small children. An unavoidable necessity (editorial)] Alagille D. **Arch Fr Pediatr** 1989 Jun–Jul;46(6):395–6 **(Fre)**

[Practical aspects of surveillance after hepatic transplantation in children] Bernard O, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:749–54 (Eng. Abstr.) **(Fre)**

[The imaging of organ transplants in children] Brunelle F, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:761–4 (Eng. Abstr.) **(Fre)**

[Subfulminant hepatitis A treated by hepatic transplant] Devictor D, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):405–7 (Eng. Abstr.) **(Fre)**

[Histopathology of the liver during hepatic transplantation in children] Hadchouel M, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:765–8 (13 ref.) (Eng. Abstr.) **(Fre)**

[Liver transplantation in the child. The situation in Europe and personal results of the first 100 patients] Otte JB, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:719–25 (Eng. Abstr.) **(Fre)**

[Hepatic transplantation. The experience of Hôpital Paul-Brousse] Bismuth H, et al. **Chirurgie** 1988; 114(4):296–9 (Eng. Abstr.) **(Fre)**

[109 orthotopic hepatic transplantations. Evaluation of our experience] Chapuis Y, et al. **Chirurgie** 1988;114(10):775–84 (Eng. Abstr.) **(Fre)**

[Hemorrhagic portal hypertension: a role for hepatic transplantation? (letter)] Mentha G, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):318–9 **(Fre)**

[Orthotopic hepatic transplantation] Lerut JP, et al. **Helv Chir Acta** 1988 Jul;55(3):353–65 (25 ref.) (Eng. Abstr.) **(Fre)**

[Rejection of discordant xenografts of the liver and heart] Settaf A, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):365–9 (Eng. Abstr.) **(Fre)**

[Fulminans hepatitis caused by Amanita phalloides poisoning. An indication for hepatic allotransplantation (letter)] Boudjema K, et al. **Presse Med** 1989 May 6;18(18):937 **(Fre)**

[Liver transplantation and transfusion] Bismuth A, et al. **Rev Fr Transfus Immunohematol** 1988 Nov;31(4):603–30 (8 ref.) **(Fre)**

[A case of Wilson's hepatic metabolic disease treated radically with liver transplantation] Honoré P, et al. **Rev Med Liege** 1988 Aug 1–15;43(15–16):526–9 **(Fre)**

[Hepatic transplantation: a new procedure in the treatment of hepatic alveolar echinococcosis] Gillet M, et al. **Rev Med Suisse Romande** 1989 Feb;109(2):97–8 **(Fre)**

[In situ hybridization in detecting virus infections in biopsies following orthotopic liver transplantation] Wittekind C, et al. **Acta Histochem Suppl (Jena)** 1989;37:113–6 (Eng. Abstr.) **(Ger)**

[Liver transplantation—anesthesiology aspects] Zadrobilek VE, et al. **Anaesthesiol Reanim** 1989;14(2):99–105 (Eng. Abstr.) **(Ger)**

[Hemodynamic and metabolic changes during orthotopic liver transplantation] Zadrobilek E, et al. **Anaesthesist** 1988 Nov;37(11):672–9 (Eng. Abstr.) **(Ger)**

[The technic of orthotopic liver transplantation] Brölsch C, et al. **Chirurg** 1988 Aug;59(8):509–18 (1 ref.) **(Ger)**

[Size reduction of the donor liver before orthotopic transplantation. Surgical technic and results] Brölsch C, et al. **Chirurg** 1988 Aug;59(8):558–64 **(Ger)**

[Comparison of the results of liver transplantation in children and adults] Bumgardner GL, et al. **Chirurg** 1988 Aug; 59(8):526–35 **(Ger)**

[Current indications for kidney, pancreas and liver transplantation] Pichlmayr R. **Chirurg** 1988 Jul;59(7):454–8 (25 ref.) **(Ger)**

[Changed donor criteria for liver transplantation due to new preservation potentials (letter)] Bechstein WO, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1305 **(Ger)**

[Indications for liver transplantation in Wilson's disease with a fulminant course] Zilker TR, et al. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):871–5 (Eng. Abstr.) **(Ger)**

[Liver transplantation: initial experiences from Zurich] Decurtins M, et al. **Helv Chir Acta** 1989 Jan;55(5):633–6 (Eng. Abstr.) **(Ger)**

[Management of children with fatal liver diseases with reference to eventual liver transplantation] Cario WR, et al. **Infusionstherapie** 1988 Oct;15(5):197–202 (16 ref.) (Eng. Abstr.) **(Ger)**

[Manifestation of Gilbert syndrome (Meulengracht disease) following orthotopic liver transplantation: a rare cause of postoperative hyperbilirubinemia] Henne-Bruns D, et al. **Klin Wochenschr** 1988 Jul 1;66(13):596–8 (Eng. Abstr.) **(Ger)**

[Liver transplantation in low portal vein flow: separation of portal vein areas with divided portal-venous and arterialized caval-venous liver perfusion. 1. Clinical case report] Pichlmayr R, et al. **Langenbecks Arch Chir** 1989; 374(4):232–9 (Eng. Abstr.) **(Ger)**

[CT and MRT following liver transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):544–8 (17 ref.) (Eng. Abstr.) **(Ger)**

[Ultrasonic diagnosis following liver transplantation] Barton P, et al. **ROFO** 1989 Aug;151(2):145–53 (Eng. Abstr.) **(Ger)**

[Hemorrhage of the right adrenal gland following liver transplantation] Rieber A, et al. **ROFO** 1989 Jun;150(6):732 **(Ger)**

[CT before and after liver transplantation] Schurawitzki H, et al. **ROFO** 1988 Oct;149(4):349–53 (Eng. Abstr.) **(Ger)**

[Hepatic veno-occlusive disease: indication for liver transplantation?] Decurtins M, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):731–3 (Eng. Abstr.) **(Ger)**

[Liver transplantation] Pichlmayr R. **Verh Dtsch Ges Inn Med** 1988;94:326–9 **(Ger)**

[The effect of ascorbic acid in preservation solutions on the antioxidative potential of blood plasma during liver transplantation in miniature swine] Popov I, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):22–6 (Eng. Abstr.) **(Ger)**

[Demonstration of dual liver systems after experimental auxiliary partial liver transplantation using the alternative of sequential hepatobiliary scintigraphy] Schmiedel T, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(4):206–12 (Eng. Abstr.) **(Ger)**

[Liver transplantation: morphologic and functional adaptation of the transplant] Lauchart W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:239–40 (26 ref.) **(Ger)**

[Is there a place for transplant in the treatment of primary cancer of the liver?] Angrisani L. **Minerva Chir** 1989 Jan 31;44(1–2):29–31 **(Ita)**

[Changes in the lymphocyte subpopulations in a patient with orthotopic transplant of the liver] Cavallini M, et al. **Minerva Chir** 1989 Jun 30;44(12):1651–4 (Eng. Abstr.) **(Ita)**

[Perfusion of the liver for transplantation. Comparison of technics] Colledan M, et al. **Minerva Chir** 1988 Oct 31; 43(20):1661–7 (Eng. Abstr.) **(Ita)**

[Pharmacokinetics and metabolism of cyclosporin A in liver transplant] Corbetta G, et al. **Minerva Chir** 1989 Jan 31; 44(1–2):33–5 **(Ita)**

[Liver transplant: personal experience] Galmarini D, et al. **Minerva Chir** 1989 Jan 31;44(1–2):5–8 (3 ref.) **(Ita)**

[Liver transplant in Bologna. Results of the first 8 cases] Gozzetti G, et al. **Minerva Chir** 1989 Jan 31;44(1–2):9–14 **(Ita)**

[Evaluation of plasma carnitine levels after orthotopic transplantation of the liver] Iapichino G, et al. **Minerva Chir** 1989 Apr 15;44(7):1099–102 (Eng. Abstr.) **(Ita)**

[15 anatomo-pathological and hepatic autopsy findings after liver transplantation] Matturri L, et al. **Minerva Chir** 1988 Oct 15;43(19):1523–31 (Eng. Abstr.) **(Ita)**

[Experience in the first year of activity in the unit of liver transplants at the Ciudad Sanitaria 1 de Octubre (Madrid)] Moreno González E, et al. **Minerva Chir** 1989 Jan 31; 44(1–2):15–9 **(Ita)**

[A new technic in liver transplant: a single donor for 2 receivers (partial grafting)] Morino M, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2021–8 (Eng. Abstr.) **(Ita)**

[Anesthesia problems in liver transplant. Personal experiences] Pastore E, et al. **Minerva Chir** 1989 Jan 31; 44(1–2):25–7 **(Ita)**

[Bench surgery in orthotopic liver transplantation. The authors' personal experience] Ferla G, et al. **Minerva Med** 1989 Jul;80(7):765–8 **(Ita)**

[The liver transplantation problem in the HBsAg-positive patient] Meriggi F, et al. **Minerva Med** 1989 Jul; 80(7):769–70 **(Ita)**

[The measurement of hepatic circulation before and after orthotopic liver transplantation in dog—by using transit-time blood flow meter and H2 clearance method] Nishiwaki H, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):243–9 (Eng. Abstr.) **(Jpn)**

[Perfluorochemical emulsion as a perfusate in 24-hour liver preservation prior to transplantation in the rat] Ogino K, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1662–71 (Eng. Abstr.) **(Jpn)**

[Experimental study of orthotopic liver transplantation in dog—with reference to change of hepatic function, serum insulin, glucagon, c-AMP after liver transplantation and the viability of the graft] Ohno Y. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1192–203 (Eng. Abstr.) **(Jpn)**

[The present status and future of liver transplantation] Takagi H. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1347–50 (6 ref.) (Eng. Abstr.) **(Jpn)**

[Transplantation medicine] Sterkowicz S. **Pol Tyg Lek** 1988 Jun 13;43(24):786–8 (Eng. Abstr.) **(Pol)**

[Histological study of splenic colonies at different times following the transplantation of hematopoietic cells from embryonic liver] Domaratskaia EI, et al. **Ontogenez** 1988 Jul–Aug;19(4):380–4 (Eng. Abstr.) **(Rus)**

[Orthotopic transplantation of the liver] Ivanov PA, et al. **Sov Med** 1989;(3):53–7 (52 ref.) **(Rus)**

[Transplantation of embryonic liver in severe combined immune deficiency] Shereshkov SI, et al. **Ter Arkh** 1988; 60(5):36–42 (57 ref.) **(Rus)**

[Liver transplant in children. Selection of receptors and donors] Casaubón-Garcín PR, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):298–302 (22 ref.) (Eng. Abstr.) **(Spa)**

[Liver transplant in fulminant hepatitis] Badosa F, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):584–5 (Eng. Abstr.) **(Spa)**

[Ascites and renal insufficiency in a 59-year-old male subjected to liver transplant for hepatocarcinoma on liver cirrhosis (clinical conference)] Terés J, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):547–55 **(Spa)**

[Orthotopic liver transplantation. Postoperative follow-up of 18 cases in intensive care] Cisneros Alonso C, et al. **Rev Clin Esp** 1988 Oct;183(5):241-5 (Eng. Abstr.) (Spa)

[Surgical evaluation of a liver transplant program. Experiences with the first 45 cases] Cienfuegos JA, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):635-44 (Eng. Abstr.) (Spa)

[Metabolic indicators of early graft function in liver transplantation. Comparative study] Mora NP, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):643-7 (Eng. Abstr.) (Spa)

[Aspects related to extraction and preservation in 60 cases of liver transplant] Mora NP, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):119-22 (Eng. Abstr.) (Spa)

[Liver transplant: efficacious treatment of fulminant hepatic failure] Moreno González E, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):251-5 (Eng. Abstr.) (Spa)

[Evaluation of the surgical and anesthetic strategy as a key factor in the postoperative results of liver transplant] Moreno González E, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):499-503 (Eng. Abstr.) (Spa)

[Necrosis of the bile ducts as an expression of uncontrollable rejection in the liver transplant between ABO incompatible groups] Moreno González E, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):685-9 (Eng. Abstr.) (Spa)

[Reduction of transfusion needs by the early introduction of venovenous bypass in liver transplant] Moreno González E, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):1-5 (Eng. Abstr.) (Spa)

[Liver transplant in fibrolamellar hepatocarcinoma: apropos of a case. Review of the literature] Ratia Giménez T, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):273-6 (21 ref.) (Eng. Abstr.) (Spa)

[Evaluation of the socio-affective adaptation of patients with liver transplant] Reyes A-Echandía S, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):645-9 (Eng. Abstr.) (Spa)

[Acute hepatic insufficiency. Orthoptic hepatic transplant as a therapeutic alternative] Rakela J. **Rev Gastroenterol Mex** 1988 Jul-Sep;53(3):151-6 (Eng. Abstr.) (Spa)

[Liver transplant] Rakela J. **Rev Gastroenterol Mex** 1988 Jul-Sep;53(3):227-36 (34 ref.) (Spa)

ULTRASTRUCTURE

Ultrastructural findings in citrullinaemia in Holstein-Friesian calves. Harper PA, et al. **Acta Neuropathol (Berl)** 1988; 76(3):306-10

An electron microscopic examination of age-related changes in the rat liver. The influence of diet. Iwasaki K, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1119-30

Occurrence of immunohistochemically detected small Mallory bodies in liver disease. Yoshioka K, et al. **Am J Gastroenterol** 1989 May;84(5):535-9

Ovine ceroid-lipofuscinosis II: Pathologic changes interpreted in light of biochemical observations. Jolly RD, et al. **Am J Med Genet Suppl** 1988;5:159-70

cAMP delays disappearance of gap junctions between pairs of rat hepatocytes in primary culture. Sáez JC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C1-11

Effects of antibodies against chicken riboflavin carrier protein on fetal hepatic cell ultrastructure. Natraj U, et al. **Am J Reprod Immunol** 1989 Jan;19(1):6-10

Ultrastructure of hepatic and renal lesions in chickens fed aflatoxin. Mollenhauer HH, et al. **Am J Vet Res** 1989 May; 50(5):771-7

Circadian variation of epidermal growth factor receptor in mouse liver. Scheving LA, et al. **Anat Rec** 1989 Aug; 224(4):459-65

Three-dimensional organization of the collagen fibrillar framework of the human and rat livers. Ohtani O. **Arch Histol Jpn** 1988 Dec;51(5):473-88

Hepatic ultrastructure after methotrexate therapy for rheumatoid arthritis. Bjorkman DJ, et al. **Arthritis Rheum** 1988 Dec;31(12):1465-72

Age and sex related changes of plasma membrane fluidity in isolated rat hepatocytes. Benedetti A, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):840-5

Nascent very low density lipoproteins from rat hepatocytic Golgi fractions are enriched in phosphatidylethanolamine. Hamilton RL, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):162-73

A histone 1-like antigen is a component of the nuclear envelope. Venkatraman JT, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):675-80

Accumulation of unglycosylated liver secretory glycoproteins in the rough endoplasmic reticulum. Yeo TK, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1421-8

Phosphatidylinositol-specific phospholipase C of Bacillus thuringiensis as a probe for the distribution of phosphatidylinositol in hepatocyte membranes. Higgins JA, et al. **Biochem J** 1989 May 1;259(3):913-6

Identification of dexamethasone-binding sites on male-rat liver plasma membranes by affinity labelling. Howell GM, et al. **Biochem J** 1989 Jun 1;260(2):435-41

Insulin stimulates proteolysis of the alpha-subunit, but not the beta-subunit, of its receptor at the cell surface in rat liver. Lipson KE, et al. **Biochem J** 1989 Jul 15; 261(2):333-40

An investigation of the transverse topology of bilirubin UDP-glucuronosyltransferase in rat hepatic endoplasmic reticulum. Shepherd SR, et al. **Biochem J** 1989 Apr 15; 259(2):617-20

Nuclear envelope glycoprotein with poly(A) polymerase activity of rat liver: isolation, characterization, and immunohistochemical localization. Kurl RN, et al. **Biochemistry** 1988 Dec 13;27(25):8974-80

A membrane transporter mediates access of uridine 5'-diphosphoglucuronic acid from the cytosol into the endoplasmic reticulum of rat hepatocytes: implications for glucuronidation reactions. Hauser SC, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):149-57

Identification of 3 alpha, 7 alpha, 12 alpha-trihydroxy-5 beta-cholest-24-enoic acid as an intermediate in the peroxisomal conversion of 3 alpha,7 alpha,12 alpha-trihydroxy-5 beta-cholestanoic acid to cholic acid. Ostlund Farrants AK, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):198-202

Isolation of rat liver endocytic vesicles using the proton pump as a marker. Sabolić I, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):191-201

Compartmentation of dicarboxylic acid beta-oxidation in rat liver: importance of peroxisomes in the metabolism of dicarboxylic acids. Suzuki H, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):25-30

Compartmentalization and differential labeling of phospholipids of rat liver subcellular membranes. Vance JE. **Biochim Biophys Acta** 1988 Nov 4;963(1):10-20

Light and electron microscopic immunolocalization of two nuclear antigens in the liver of Pleurodeles waltl using monoclonal antibodies. Pyne CK, et al. **Biol Cell** 1988; 64(3):343-52

Bile secretory apparatus in the newborn dog: relationship between structural and functional immaturities. Tavoloni N, et al. **Biol Neonate** 1989;55(2):124-35

The ultrastructural features of aflatoxin B1-induced lesions in the rat liver. Pritchard DJ, et al. **Br J Exp Pathol** 1988 Dec;69(6):793-804

Effect of fasting on aggregation of hepatocyte rough endoplasmic reticulum in adrenalectomized and 3'MeDAB-treated rats: quantitative electron microscope study. Winton DJ, et al. **Br J Exp Pathol** 1988 Dec; 69(6):877-89

Differences in hepatic pathology resulting from bile duct obstruction in young and old rats. Medeiros MV, et al. **Braz J Med Biol Res** 1988;21(1):75-83

Cell density dependent morphological changes in adult rat hepatocytes during primary culture. Koji T, et al. **Cell Biochem Funct** 1988 Oct;6(4):237-43

Resolution as a function of accelerating voltage in electron microscopy of semithick biological specimens. Cole RW, et al. **Cell Biophys** 1988 Oct;13(2):133-40

A protein associated with the mouse and rat hepatocyte junctional complex. Chapman LM, et al. **Cell Tissue Res** 1989 Aug;257(2):333-41

Immunohistochemistry of vacuoles occurring in rat hepatocytes after retinol administration. Kudo S. **Cell Tissue Res** 1989 Aug;257(2):263-8

Effect of protoporphyrin on peroxidative damage of rat liver lysosomes. Imai K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4608-11

Multi-organ damage resulting from experimental faecal peritonitis. Tighe D, et al. **Clin Sci** 1989 Mar;76(3):269-76

Developmental patterns of peroxisomal enzymes in amphibian liver during spontaneous and triiodothyronine-induced metamorphosis. Ciolek E, et al. **Comp Biochem Physiol [B]** 1989;93(2):477-84

Ultrastructure of the liver of Lake Erie coho salmon from post-hatching until spawning. Leatherland JF, et al. **Cytobios** 1988;54(218-219):195-208

Confirmation of avian sex-chromosome linkage of liver cytosolic aconitase (ACO1). Lacson JM, et al. **Cytogenet Cell Genet** 1988;48(4):244-5

Binding sites for epidermal growth factor in nuclear fraction from rat liver. Ichii S, et al. **Endocrinol Jpn** 1988 Aug; 35(4):567-75

The expression of a metallothionein-ovine growth hormone fusion gene in transgenic mice does not impair fertility but results in pathological lesions in the liver. Orian JM, et al. **Endocrinology** 1989 Jan;124(1):455-63

Isolation and analysis of nuclear bodies from estrogen-stimulated chick liver. Brasch K, et al. **Exp Cell Res** 1989 Jun;182(2):425-35

Sinusoidal dilatation of the liver in patients on oral contraceptives. Electron microscopical study of 14 cases. Balázs M. **Exp Pathol** 1988;35(4):231-7

Glutathione synthesis and export in experimental liver cirrhosis induced by thioacetamide: relations to ultrastructural changes. Kretzschmar M, et al. **Exp Pathol** 1989;36(2):113-22

Pathology of hepatic peroxisomes in chronic hepatitis B and immunosuppression. Reinke P, et al. **Exp Pathol** 1988; 34(2):71-7

Accessibility of histone H1(0) and its structural domains to antibody binding in mononucleosomes. Banchev T, et al. **FEBS Lett** 1989 Mar 13;245(1-2):245-8

Studies on the mechanism of inhibition of nuclear triiodothyronine binding by fatty acids. van der Klis FR, et al. **FEBS Lett** 1989 Mar 27;246(1-2):6-12

Structure of the rat liver ribosome 40 S subunit: freeze-drying and high-resolution shadow casting. Vasiliev VD, et al. **FEBS Lett** 1989 May 8;248(1-2):92-6

Ultrastructural identification and clinical significance of light microscopic giant mitochondria in alcoholic liver injuries. Inagaki T, et al. **Gastroenterol Jpn** 1989 Feb;24(1):46-53

Intermediate filaments of hepatocytes and biliary epithelial cells in bile duct obstruction: transmission and scanning electron microscopy study. Okanoue T, et al. **Gastroenterol Jpn** 1988 Aug;23(4):428-34

Hepatic peroxisomal abnormalities in abetalipoproteinemia. Collins JC, et al. **Gastroenterology** 1989 Sep;97(3):766-70

Hormonal influences on the middle-affinity estrogen-binding sites in the liver of the newt Pleurodeles waltl [published erratum appears in Gen Comp Endocrinol 1989 Jul;75(1):163] Dupont H, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):217-22

Cytosolic and microsomal glutathione S-transferase isoenzymes in normal human liver and intestinal epithelium. Hayes PC, et al. **Gut** 1989 Jun;30(6):854-9

Studies on nuclear acid deoxyribonucleases and proofreading exonuclease isolated from rat liver nuclei. Akiyoshi H. **J Biochem (Tokyo)** 1988 Oct;104(4):521-5

Nonspecific lipid transfer protein (sterol carrier protein-2) is located in rat liver peroxisomes. Tsuneoka M, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):560-4

Degradation of uric acid in fish liver peroxisomes. Intraperoxisomal localization of hepatic allantoicase and purification of its peroxisomal membrane-bound form. Hayashi S, et al. **J Biol Chem** 1989 Feb 25;264(6):3211-5

Isolation of cell-to-cell adherens junctions from rat liver. Tsukita S, et al. **J Cell Biol** 1989 Jan;108(1):31-41

Properties of binding sites for chloroquine in liver lysosomal membranes. Colombo MI, et al. **J Cell Physiol** 1988 Dec; 137(3):598-602

Quantitative assessment of canalicular bile formation in isolated hepatocyte couplets using microscopic optical planimetry. Gautam A, et al. **J Clin Invest** 1989 Feb; 83(2):565-73

Use of histological examination to assess ultrastructure of liver in patients with long standing jejuno-ileal bypass for morbid obesity. Boon AP, et al. **J Clin Pathol** 1988 Dec; 41(12):1281-7

Nucleolar organiser regions in normal, cirrhotic, and carcinomatous livers. Crocker J, et al. **J Clin Pathol** 1988 Oct;41(10):1044-8

Verifying copper toxicosis in Bedlington terriers by analytical electron microscopy of needle biopsies of liver. Eriksson J, et al. **J Comp Pathol** 1989 May;100(4):443-8

Lysosomes in the pathogenesis of liver injury in chronic copper poisoned sheep: an ultrastructural and morphometric study. Kumaratilake JS, et al. **J Comp Pathol** 1989 May;100(4):381-90

The cytoskeleton of the hepatocyte. Structure and functions. Feldmann G. **J Hepatol** 1989 May;8(3):380-6 (38 ref.)

Hepatocyte cell surface polarity as demonstrated by lectin binding. McMillan PN, et al. **J Histochem Cytochem** 1988 Dec;36(12):1561-71

A minibead method for detection of membrane lectins. Matsuoka T, et al. **J Histochem Cytochem** 1989 Jan; 37(1):91-6

Heterogeneity of catalase staining in human hepatocellular peroxisomes. Roels F, et al. **J Histochem Cytochem** 1989 Mar;37(3):331-7

Evidence for the presence of specific binding sites for corticoids in mouse liver plasma membranes. Trueba M, et al. **J Membr Biol** 1989 May;108(2):115-24

X-ray microanalysis with continuous specimen cooling: is it necessary? von Zglinicki T, et al. **J Microsc** 1988 Jul; 151 (Pt 1):43-7

Hepatocyte-specific promoter element HP1 of the Xenopus albumin gene interacts with transcriptional factors of mammalian hepatocytes. Schorpp M, et al. **J Mol Biol** 1988 Jul 20;202(2):307-20

Zellweger-like syndrome with detectable hepatic peroxisomes: a variant form of peroxisomal disorder. Suzuki Y, et al. **J Pediatr** 1988 Nov;113(5):841-5

Studies on the stabilizing effect of traditional Chinese preparation—re du qing—on the membrane of lysosomes. Deng YM, et al. **J Tongji Med Univ** 1988;8(2):122-7

Effect of agents which rearrange the cytoskeleton in vitro on the structure and function of hepatocytic canaliculi. Kawahara H, et al. **Lab Invest** 1989 May;60(5):692-704

Cellular mechanisms of toxicity and tolerance in the copper-loaded rat. I. Ultrastructural changes in the liver. Fuentealba I, et al. **Liver** 1988 Dec;8(6):372-80

Hypoceruloplasminemia and ultrastructural changes resembling Wilson's disease in nonalcoholic liver steatosis. A clinical and pathological study of five cases. Geubel AP, et al. **Liver** 1988 Oct;8(5):299-306

Liver cell rosettes: structural differences in cholestasis and hepatitis. Nagore N, et al. **Liver** 1989 Feb;9(1):43-51

Enterically transmitted non-A, non-B hepatitis in cynomolgus monkeys: morphology and probable mechanism of hepatocellular necrosis. Soe S, et al. **Liver** 1989 Jun;9(3):135-45

Effect of chronic food restriction in aging rats. I. Liver subcellular membranes. Laganiere S, et al. **Mech Ageing Dev** 1989 Jun;48(3):207-19

Isolation of line 10 hepatoma-cell membrane by the water extraction method and immunochemical analysis. Ahsan CR, et al. **Microbiol Immunol** 1989;33(3):219-27

Morphometry of liver parenchyma in needle biopsy

specimens from patients with alcoholic liver disease: preliminary variables for the diagnosis and prognosis of cirrhosis. Ryoo JW, et al. **Mod Pathol** 1989 Jul;2(4):382–9

Variations of liver prolactin receptors during the estrous cycle in normal rats and in the genetically hypoprolactinemic IPL nude rat. Guillaumot P, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):17–23

Variations of liver prolactin receptors during pregnancy in normal rats and in the genetically hypoprolactinemic IPL nude rat. Guillaumot P, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):25–9

Electron microscopic cytochemical analysis of hepatic granuloma induced by Cryptococcus neoformans. Baba T. **Mycopathologia** 1988 Oct;104(1):37–46

Scanning electron microscopy of the nuclei isolated from chicken liver. Arai S, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):946–8

Expression and phenotypic alterations caused by an inducible transforming ras oncogene introduced into rat liver epithelial cells. Huber BE, et al. **Oncogene** 1988 Sep; 3(3):245–56

Electron microscopic features of biliary cirrhosis in the rat after ligation of the common bile duct. Buffa P, et al. **Pathologica** 1988 Nov–Dec;80(1070):697–709

Membrane binding sites for plasma lipoproteins on endosomes from rat liver. Jaeckle S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1880–4

Reconstitution of Golgi vesicle CMP–sialic acid and adenosine 3'-phosphate 5'-phosphosulfate transport into proteoliposomes. Milla ME, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1786–90

A mathematical model for the freezing process in biological tissue. Rubinsky B, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):343–58

The morphology of hepatic glycogen synthesis. Cardell RR, et al. **Prog Clin Biol Res** 1989;295:263–7

Three–dimensional structure of the sinusoidal wall in the liver: a Golgi study. Wake K. **Prog Clin Biol Res** 1989; 295:257–62

The liver in kwashiorkor. Tai da Rocha–Afodu J. **Scand J Gastroenterol Suppl** 1986;124:9–24

High resolution scanning electron microscopic characterization of organelles in renal and hepatic cells: comparison of two specimen preparation methods. Yang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr; 87(4):413–20

Nuclear deformity of hepatocytes in acute viral hepatitis. Masuda T, et al. **Tohoku J Exp Med** 1988 Dec;156(4):375–9

Enzyme histochemical and ultrastructural approach in orotic acid–induced fatty liver and their recovery process in Wistar rats. Murakoshi M, et al. **Tokai J Exp Clin Med** 1988 Feb;13(1):37–43

Variable hepatocellular vacuolization associated with glycogen in rabbits. Wells MY, et al. **Toxicol Pathol** 1988; 16(3):360–5

[Observations by quantitative electron microscopy of the action of zinc in protecting the liver from cadmium damage] Cheng S. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):161–3 (Eng. Abstr.) **(Chi)**

[Needle–like inclusions in hepatocytes in porphyria cutanea tarda] Fakan F, et al. **Cesk Patol** 1988 Nov;24(4):211–7 (Eng. Abstr.) **(Cze)**

[Fine morphology of the lymphatics and tissue spaces in the liver parenchyma in man and its significance in hepatobiliary surgery] Klika E, et al. **Rozhl Chir** 1989 Feb; 68(2):103–9 (Eng. Abstr.) **(Cze)**

[Hepatic cytopuncture and image analysis: confirmation of the existence of a polyploidy of normal hepatocyte nuclei] Maubon I, et al. **Arch Anat Cytol Pathol** 1988;36(4):156–9 (Eng. Abstr.) **(Fre)**

[Increase in nuclear aluminum concentration during hepatic regeneration: study by analytical ionic microscopy] Bonhomme L, et al. **C R Acad Sci [III]** 1989;308(11):293–7 (Eng. Abstr.) **(Fre)**

[Laboratory and morphologic studies in a child with IIb type hyperlipoproteinemia] Zombori J, et al. **Orv Hetil** 1988 Jul 17;129(29):1539–42 (34 ref.) (Eng. Abstr.) **(Hun)**

[Effect of DDT on hepatocytes in Ictalurus sp. and Carassius carassius] Baruffaldi A, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):111–6 (Eng. Abstr.) **(Ita)**

[Intranuclear particles in chronic non–A, non–B hepatitis: what diagnostic significance?] Borgia G, et al. **Minerva Med** 1989 Jun;80(6):535–9 (Eng. Abstr.) **(Ita)**

[Morphometric analysis of sinusoidal endothelial fenestration of human liver tissues obtained by blind biopsy] Kanaoka H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1518–24 (Eng. Abstr.) **(Jpn)**

[Morphology and variation of the Berg bodies in chronic liver disease] Raica M, et al. **Rev Med Interna [Med Interna]** 1988 Jul–Aug;40(4):359–65 (Eng. Abstr.) **(Rum)**

[Ultrastructural pathology of the liver in abdominal typhoid] Erman BA, et al. **Arkh Patol** 1989;51(4):28–34 (Eng. Abstr.) **(Rus)**

[Ultrastructural localization of neutral DNAse in hepatocytes by immune electron microscopy using colloidal gold] Abramova ZI, et al. **Biol Nauki** 1988;(7):98–105 (Eng. Abstr.) **(Rus)**

[Automated morphometric evaluation of the chromatin structure of liver cell nuclei after vagotomy] Butusova NN, et al. **Biull Eksp Biol Med** 1989 May;107(5):637–9 (Eng. Abstr.) **(Rus)**

[Early post–toxic defects in hepatocyte membranes revealed by electron microscopy with the aid of a lanthanum transmembrane tracer] Vakulin GM. **Biull Eksp Biol Med** 1989 Jan;107(1):99–101 (Eng. Abstr.) **(Rus)**

[Ultrastructural bases of intravascular thrombosis in the liver in mechanical jaundice] Zufarov KA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):376–9 (Eng. Abstr.) **(Rus)**

[Electron microscope study of chromatin in nuclei of rat hepatocytes during age–related changes in the genome] Mantelfel' VM, et al. **Mol Biol (Mosk)** 1988 Jul–Aug; 22(4):1087–96 (Eng. Abstr.) **(Rus)**

[Effect of moderately low and low temperatures on cellular and intracellular structures of the liver] Kaprel'iants AS, et al. **Tsitol Genet** 1988 Sep–Oct;22(5):7–12 (Eng. Abstr.) **(Rus)**

[Morphologic study of the effects of acute stress and the separate administration of "adaptive hormones" on mouse hepatocytes] Shkurupiĭ VA. **Tsitol Genet** 1988 Jul–Aug; 22(4):3–8 (Eng. Abstr.) **(Rus)**

[Frequency of chromosome aberration in liver cells of rats of various ages] Uriadnitskaia TI, et al. **Tsitol Genet** 1988 May–Jun;22(3):23–5 (Eng. Abstr.) **(Rus)**

[The ultrastructure and possible role of the vacuolar component of hepatocyte nucleoli] Chelidze PV, et al. **Tsitologiia** 1989 Jan;31(1):23–8 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in the hepatocytes in chronic delta infection] Dolzhanskiĭ AM, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):561–4 (Eng. Abstr.) **(Rus)**

[A study of the subcellular structure of the rabbit liver during the development of a bacterial infection] Korinteli VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):77–80 (Eng. Abstr.) **(Rus)**

[Ultrastructural study of the liver from rats treated with ethanol and/or carbon tetrachloride] Beiras E, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):436–40 (Eng. Abstr.) **(Spa)**

LIVER ABSCESS

Pyogenic and amebic liver abscess. Rustgi AK, et al. **Med Clin North Am** 1989 Jul;73(4):847–58 (68 ref.)

Liver abscesses. Frey CF, et al. **Surg Clin North Am** 1989 Apr;69(2):259–71 (43 ref.)

Diagnostic and therapeutic approaches to pyogenic abscess of the liver. Klatchko BA, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):332–6

COMPLICATIONS

Liver abscess: a harbinger of Crohn's disease. Teague M, et al. **Am J Gastroenterol** 1988 Dec;83(12):1412–4

Fusiform bacterial sepsis. Metastases with osteomyelitis and hepatic abscess occurring in a chaotic family. Van Dyke DC, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):423–5

Peliosis hepatis associated with liver and retroperitoneal abscesses. Van Schil P, et al. **Digestion** 1988;41(1):55–60

Subdiaphragmatic gas in hepatic hydatid disease [letter] Masterton RG, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):576–7

Metastatic septic endophthalmitis in pyogenic liver abscess. Chiu CT, et al. **J Clin Gastroenterol** 1988 Oct;10(5):524–7

Hemobilia. A complication of hepatic abscess secondary to staphylococcal endocarditis. Certain M, et al. **J Med Assoc Ga** 1988 Dec;77(12):901–3

Successful treatment of metastatic endophthalmitis. Case reports. Wang FD, et al. **Ophthalmologica** 1989; 198(3):124–8

Hepatic abscess and cystic fibrosis. Canny GJ, et al. **Postgrad Med J** 1988 Oct;64(756):814–7

Primary tuberculous liver abscess associated with the human immunodeficiency virus. Weinberg JJ, et al. **Tubercle** 1988 Jun;69(2):145–7

[Liver abscess perforating into the peritoneum, duodenum and colon] Bravo JL, et al. **Rev Invest Clin** 1967 Jan–Mar; 19(1):77–84 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Resolution of liver abscesses: comparison of pyogenic and amebic liver abscesses. Sheen IS, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):384–9

Ultrasonographic manifestations of liver abscesses; an experimental study. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):63–9

A novel approach to an uncommon condition. Bergman MM, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):37, 41–2

Ultrasound and CT of multifocal liver abscesses caused by Yersinia enterocolitica. Leyman P, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):913–5

A study on laboratory diagnosis of liver abscess in Pondicherry. Mehta RB, et al. **J Indian Med Assoc** 1989 Jan;87(1):4–6

Bacterial liver abscess in children. Wang DS, et al. **J Singapore Paediatr Soc** 1989;31(1–2):75–8

Ultrasonographic findings of liver abscess. Sakijan AS. **Med J Malaysia** 1988 Dec;43(4):332–7

Ultrasonographic and microbiological diagnosis of mycetic liver abscesses in patients with AIDS. Filice C, et al. **Microbiologica** 1989 Jan;12(1):101–4

Pyogenic liver abscess with two normal ultrasound scans. Bunney RG. **Postgrad Med J** 1988 May;64(751):373–4

Wheel–within–a–wheel patterns in hepatosplenic infections [letter] Fletcher BD, et al. **Radiology** 1988 Nov; 169(2):578–9

Complicated appendiceal inflammatory disease in children: pylephlebitis and liver abscess. Slovis TL, et al. **Radiology** 1989 Jun;171(3):823–5

[Pyogenic abscess of the liver. A retrospective study of 17 cases] Dziri C, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):383–9 (26 ref.) (Eng. Abstr.) **(Fre)**

[Liver abscess with an atypical course diagnosed by ultrasonographically–guided thin–needle biopsy] Zmudziński J, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1199–200 **(Pol)**

[Actinomycosis of the liver] Tochilov AA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):141–2 **(Rus)**

[Clinical aspects and diagnosis of bacterial abscesses of the liver in children] Ponomarev AA, et al. **Pediatriia** 1989; (6):93–6 (38 ref.) **(Rus)**

[Pseudotuberculosis in surgical practice] Sizov OG, et al. **Vestn Khir** 1988 Sep;141(9):68–9 **(Rus)**

[Computerized axial tomography, ultrasonography and percutaneous drainage in the diagnosis and treatment of pyogenic abscess of the liver] Sánchez Alvarez J, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):139–42 (43 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Conservative management of a Yersinia enterocolitica hepatic abscess. Watson JA, et al. **Aust N Z J Surg** 1989 Apr;59(4):353–4

Ceftriaxone in biliary and pancreatic abscesses. Pirich K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):469–70

Treatment of hepatic abscesses supplemented by T.C.M.—a comparative observation of therapeutic effects on 64 patients. Zeng QH. **J Tradit Chin Med** 1988 Sep;8(3):187–9

[Chemotherapy of liver abscess (II). Significance of the preoperative administration of amphotericin B based on concentration in the liver tissue] Tanimura H, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):372–80 (Eng. Abstr.) **(Jpn)**

[Liver abscesses. Medical treatment (letter)] Segura F, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):597–8 **(Spa)**

[Medical treatment of single hepatic abscess caused by anaerobic germ in a previously healthy patient] Escudero Sereno V, et al. **Rev Esp Enferm Apar Dig** 1989 Feb; 75(2):219 **(Spa)**

ETIOLOGY

Tuberculous (peri) hepatic abscesses. Desmidt P, et al. **Acta Clin Belg** 1988;43(5):378–80

Pyogenic liver abscess due to Bacteroides fragilis. Ka K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):280–6

Subhepatic abscess caused by appendicitis [letter] Ngo C. **AJR Am J Roentgenol** 1989 Sep;153(3):657

Liver abscess in Crohn's disease [letter] Fielding JF. **Am J Gastroenterol** 1989 Jul;84(7):834

Liver abscess following superior mesenteric artery revascularization for acute mesenteric ischemia. Shah PM, et al. **Ann Vasc Surg** 1989 Jul;3(3):261–3

Klebsiella pneumoniae liver abscess associated with septic endophthalmitis [letter] Casanova C, et al. **Arch Intern Med** 1989 Jun;149(6):1467

Liver abscess. The need for complete gastrointestinal evaluation. Cohen JL, et al. **Arch Surg** 1989 May; 124(5):561–4

Typhoid fever. Unusual hepatic manifestations. Kumar A, et al. **Clin Pediatr (Phila)** 1989 Feb;28(2):99–100

Liver abscess due to Yersinia enterocolitica: case report and review of the literature. Khanna R, et al. **Dig Dis Sci** 1989 Apr;34(4):636–9 (30 ref.)

Hepatic abscesses and "sump syndrome": a new case [letter] Prat F, et al. **Endoscopy** 1989 Jan;21(1):51

Beta–lactamase producing Haemophilus influenzae as causative agent of a liver abscess. Cantón R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):748–9

Liver abscess caused by Clostridium bifermentans following blunt abdominal trauma. Nachman S, et al. **J Clin Microbiol** 1989 May;27(5):1137–8

Uncommon complications of human fascioliasis in Alexandria. Abou Basha LM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):743–9

Hepatic abscess due to transhepatic biliary endoprosthesis placement. Simmons TC, et al. **J Natl Med Assoc** 1989 May;81(5):604–6, 608

Liver abscesses due to diverticulitis. Brussaard C, et al. **ROFO** 1989 Apr;150(4):487–8

Yersinia enterocolitica causing spinal osteomyelitis and empyema in a nonimmunocompromised host. Sinnott JT 4th, et al. **South Med J** 1989 Mar;82(3):399–400

Infected echinococcal cyst. A common cause of pyogenic hepatic abscess. Karavias D, et al. **Ups J Med Sci** 1988; 93(3):289–96

[Liver abscess as a complication of inflammatory abdominal diseases] Strnad J, et al. **Rozhl Chir** 1988 Dec;67(12):810–4 (Eng. Abstr.) **(Cze)**

[Chronic myelocytic leukemia detected through the associated multiple liver abscess. A case report] Matsumura I, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):567–8 **(Jpn)**

[Non–clostridial anaerobes in the etiopathogenesis of

perivesical cholangiogenic abscesses of the liver] Zemskov VS, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):78–80 (Eng. Abstr.) **(Rus)**

[Liver abscess after surgery of hemorrhoids] Timerbulatov VM, et al. **Vestn Khir** 1988 Sep;141(9):135–6 **(Rus)**

[Sepsis and multiple hepatic abscesses caused by Yersinia enterocolitica (letter)] Díez LF, et al. **Rev Clin Esp** 1989 Mar;184(5):267 **(Spa)**

HISTORY

[Abscesses of the liver. 1856 (classical article)] Jiménez MF. **Salud Publica Mex** 1989 Jan–Feb;31(1):127–31 **(Spa)**

MICROBIOLOGY

Isolation of Eikenella corrodens from a liver abscess. Case report. Hofstad T, et al. **Acta Chir Scand** 1989 Feb; 155(2):139–40

Gardnerella vaginalis: an unusual case of pyogenic liver abscess. Ezzell JH Jr, et al. **Am J Gastroenterol** 1988 Dec; 83(12):1409–11

Eikenella corrodens isolated from a polymicrobial hepatic abscess. Massey BT. **Am J Gastroenterol** 1989 Sep; 84(9):1100–2

Primary hepatic actinomycosis: a diagnostic problem. Kazmi KA, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):310–1

Actinomycetes in pyogenic liver abscess. Logan MN, et al. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):394–6

Liver abscesses due to Yersinia enterocolitica in patients with haemochromatosis. Olesen LL, et al. **J Intern Med** 1989 May;225(5):351–4

Liver abscess caused by Streptococcus milleri. Chua D, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):197–202 (38 ref.)

PATHOLOGY

Fever, jaundice, and anemia in a 61-year-old man [clinical conference] **Am J Med** 1988 Nov;85(5):697–700

[An autopsy case of clostridial liver abscess] Nakano O, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):690–4 **(Jpn)**

[Multiple small liver abscesses] Briskin BS, et al. **Klin Med (Mosk)** 1988 Sep;66(9):91–4 (Eng. Abstr.) **(Rus)**

[Anatomo-clinical case. 30-year-old man with icterus, fever and a pyogenic hepatic abscess] Herrera M, et al. **Rev Invest Clin** 1988 Jul–Sep;40(3):307–16 **(Spa)**

RADIOGRAPHY

Use of the cluster sign in the diagnosis of small pyogenic hepatic abscesses [letter; comment] Grant T, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):429–30. **Comment on:** AJR Am J Roentgenol 1988 Sep;151(3):487–9

[Lipiodol accumulation of the liver abscess—a case report] Mizukawa K, et al. **Rinsho Hoshasen** 1988 Dec; 33(13):1711–3 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Radiological case of the month. Pylephlebitis secondary to unsuspected appendiceal rupture. Giuliano CT, et al. **Am J Dis Child** 1989 Sep;143(9):1099–100

Clinical usefulness of technetium-99m HM-PAO labeled white blood cell imaging in abscesses. Mortelmans L, et al. **Clin Nucl Med** 1989 Feb;14(2):127–9

Diagnosis of a liver abscess with Ga-67 and radiocolloid tomography. Sangar VK, et al. **Clin Nucl Med** 1989 Jun; 14(6):443–5

Diagnosis of pyogenic liver abscess via liver scanning with indium-111 labelled granulocytes. Denison H, et al. **Scand J Infect Dis** 1989;21(3):345–8

[Differential value of hepatic scintigraphy in simple and complicated hydatidosis and liver abscesses] Lobo G, et al. **Rev Med Chil** 1988 Apr;116(4):337–42 (Eng. Abstr.) **(Spa)**

SURGERY

Pycgenic liver abscess: an improvement in prognosis. Farges O, et al. **Br J Surg** 1988 Sep;75(9):862–5

Gas-containing pyogenic liver abscess—a case report and review of the literature. Hayashi Y, et al. **Jpn J Surg** 1989 Jan;19(1):74–7 (17 ref.)

Percutaneous transhepatic gallstone removal by nephroscopic technique in a case of cholelithogenous liver abscess. Janetschek G, et al. **World J Surg** 1988 Oct;12(5):691–4

[Perforation of the gallbladder into the liver in gallstone occlusion of the cystic duct] Pratschke E, et al. **Chirurg** 1989 Jun;60(6):433–4 **(Ger)**

[Experiences with CT-guided percutaneous drainage of pyogenic liver abscesses] Nagel B, et al. **Radiol Diagn (Berl)** 1989;30(1):5–12 (Eng. Abstr.) **(Ger)**

[Percutaneous drainage of liver abscesses under ultrasonic control] Elwertowski M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):77–81 (Eng. Abstr.) **(Pol)**

[Surgical treatment of multiple abscesses of the liver] Buromskaia GA, et al. **Khirurgiia (Mosk)** 1988 Sep; (9):140–1 **(Rus)**

[Treatment of multiple pyogenic abscesses of the liver by drainage under computed tomography control] Todua FI, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):112–3 **(Rus)**

[A case of primary pyogenic abscess of the liver] Arekhov NG. **Klin Khir** 1988;(9):59 **(Rus)**

[Diagnosis and treatment of abscesses of the liver using computerized tomography] Todua FI, et al. **Vestn Khir** 1988 Jul;141(7):39–42 (Eng. Abstr.) **(Rus)**

[Multiple intrahepatic pyogenic abscesses treated by echographically directed percutaneous puncture] González-Garzón Montes A, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):717–20 (Eng. Abstr.) **(Spa)**

[Surgical treatment of non-amebic liver abscesses. 10 years' experience at the Instituto Nacional de la Nutrición Salvador Zubirán] Monroy TT, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):157–60 (Eng. Abstr.) **(Spa)**

THERAPY

[Treatment of pyogenic liver abscesses using percutaneous transparietal drainage] Volfová M, et al. **Sb Lek** 1989 Mar; 91(2–3):63–6 (Eng. Abstr.) **(Cze)**

[Ultrasound-guided puncture. A modern treatment of liver abscess] Pelissier G, et al. **Ann Chir** 1989;43(1):37–9 (Eng. Abstr.) **(Fre)**

[Percutaneous drainage treatment of primary liver abscesses] Berger H, et al. **ROFO** 1989 Feb;150(2):167–70 (Eng. Abstr.) **(Ger)**

[Therapy of pyogenic liver abscess] Küchler B, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):736–9 (Eng. Abstr.) **(Ger)**

[A case of multiple liver abscess treated by drainage under the guidance of ultrasound and chemotherapy] Takase T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):682–3 **(Jpn)**

VETERINARY

Antibiotic susceptibility of Fusobacterium necrophorum from bovine hepatic abscesses. Baba E, et al. **Br Vet J** 1989 Mar–Apr;145(2):195–7

A retrospective study of hepatic abscesses in goats: pathological and microbiological findings. Rosa JS, et al. **Br Vet J** 1989 Jan–Feb;145(1):73–6

Susceptibility of the Speke's gazelle to hepatic abscesses. Munson L, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1056–8

Factors affecting in-transit shrink and liver abscesses in fed steers. Harman BR, et al. **J Anim Sci** 1989 Feb;67(2):311–7

Plasma prolidase activity as a possible diagnostic index of chronic hepatic abscess in cattle. Motoi Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):44–51

Partial hepatic resection for treatment of a single liver abscess in a dairy heifer. Parker JE, et al. **Vet Surg** 1988 Mar–Apr; 17(2):87–9

LIVER ABSCESS, AMEBIC

Amoebic liver abscess in a bisexual man. Stanley PJ. **J Infect** 1988 Sep;17(2):163–5

Pyogenic and amebic liver abscess. Rustgi AK, et al. **Med Clin North Am** 1989 Jul;73(4):847–58 (68 ref.)

Amebic abscess of the liver. A report of ten cases. Perssud M, et al. **N Y State J Med** 1988 Aug;88(8):436–8

Pyogenic and amebic abscesses of the liver. Greenstein AJ, et al. **Semin Liver Dis** 1988 Aug;8(3):210–7 (90 ref.)

[Hepatic amebiasis. Apropos of 3 cases] Hamdani A, et al. **Tunis Med** 1987 Nov;65(11):713–8 (24 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Serum alpha-feto protein in amoebic liver abscess. Sharma MP, et al. **Indian J Med Res** 1989 Apr;90:127–30

COMPLICATIONS

Amoebic liver and splenic abscesses [letter] Misra SC, et al. **Indian J Gastroenterol** 1989 Jul;8(3):204

Hepatobiliary communication in amoebic liver abscess [published erratum appears in J Assoc Physicians India 1988 Oct;36(10):612] Singh DS, et al. **J Assoc Physicians India** 1988 Jul;36(7):449

Amoebic lung abscesses. A case report. Snyders FA, et al. **S Afr Med J** 1989 Apr 1;75(7):344–6

Unusual presentation of amoebic liver abscess. Fadlalla Ahmed H, et al. **Trop Geogr Med** 1989 Jan;41(1):69–72

[Unexplained fever with spontaneous remission in a patient who traveled in the tropics (letter)] Endtz LJ. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):132 **(Dut)**

[Unexplained fever with spontaneous recovery in a patient who visited the tropics] Ewals JA, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2089–92 **(Dut)**

DIAGNOSIS

Amebic liver abscess: emergency department diagnosis. Doezema D, et al. **Am J Emerg Med** 1988 Nov;6(6):628–30

Resolution of liver abscesses: comparison of pyogenic and amebic liver abscesses. Sheen IS, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):384–9

A military dependent with a hepatic mass. Trowers EA, et al. **Hosp Pract [Off]** 1989 May 30;24(5A):74, 76, 79–80

Enzyme-linked immunosorbent assay in the detection of antigen in amoebic liver abscess. Agarwal SK, et al. **Indian J Gastroenterol** 1988 Oct;7(4):239–40

Dot enzyme linked immunosorbent assay for immunodiagnosis of amoebiasis. Mahajan RC, et al. **Indian J Med Res** 1989 Mar;89:100–4

Long shelf-life of antigen-sensitised erythrocytes by double aldehyde stabilisation for the serodiagnosis of amoebiasis by indirect haemagglutination. Parija SC, et al. **J Diarrhoeal Dis Res** 1988 Mar;6(1):29–34

A study on laboratory diagnosis of liver abscess in Pondicherry. Mehta RB, et al. **J Indian Med Assoc** 1989 Jan;87(1):4–6

Clinical features and management of amebic liver abscess. Experience from 29 patients. Weinke T, et al. **Klin Wochenschr** 1989 Apr 17;67(8):415–20 (39 ref.)

Evaluation of an enzyme-linked immunosorbent assay in the serodiagnosis of amoebic liver abscess. Sathar MA, et al. **S Afr Med J** 1988 Dec 17;74(12):625–8

[Amebic abscess of the liver] Vozianova ZhI, et al. **Klin Khir** 1988;(9):58 **(Rus)**

DRUG THERAPY

Metronidazole neuropathy: a case report. Takeuchi H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):291–5

EPIDEMIOLOGY

Outbreak of amoebiasis in tourists returning from Thailand [letter] de Lalla F, et al. **Lancet** 1988 Oct 8;2(8615):847

[Invasive amebiasis as a public health problem] Carrada-Bravo T. **Bol Med Hosp Infant Mex** 1989 Feb; 46(2):139–48 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Antigenic stability and immunodominance of the Gal/GalNAc adherence lectin of Entamoeba histolytica. Petri WA Jr, et al. **Am J Med Sci** 1989 Mar;297(3):163–5

Amebic liver abscess and circulating immune complexes of Entamoeba histolytica proteins. Gandhi BM, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):440–4

A simple spot-test for circulating Entamoeba histolytica antigen-antibody complexes in patients with amoebic liver abscess. Gandhi BM, et al. **Indian J Med Res** 1989 May; 89:177–83

A simple & rapid Dot-ELISA dipstick technique for detection of antibodies to Entamoeba histolytica in amoebic liver abscess. Sharma M, et al. **Indian J Med Res** 1988 Nov;88:409–15

PATHOLOGY

Entamoeba histolytica: diffuse liver inflammation in gerbils (Meriones unguiculatus) with experimentally induced amebic liver abscess. Chadee K, et al. **J Protozool** 1989 Mar–Apr;36(2):154–8

Ultrasonic features of pyogenic and amoebic hepatic abscesses. Oleszczuk-Raszke K, et al. **Pediatr Radiol** 1989; 19(4):230–3 (21 ref.)

Abdominal vein distension in amoebic liver abscess. Naraqi S, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):426

[Invasive amebiasis with detection of Entamoeba histolytica in rectal biopsies and liver abscesses] Bihl P, et al. **Z Gastroenterol** 1989 Feb;27(2):107–11 (Eng. Abstr.) **(Ger)**

[A new case of amebic hepatic abscess] Rivasi F, et al. **Pathologica** 1988 Mar–Apr;80(1066):219–23 (Eng. Abstr.) **(Ita)**

[Morphologic findings in systemic amebiasis. Apropos of 1 case] Ortiz J, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 2):717–9 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

In vitro and in vivo studies of macrophage functions in amebiasis. Denis M, et al. **Infect Immun** 1988 Dec; 56(12):3126–31

PREVENTION & CONTROL

[Induction of protective antiamebic immunity in hamsters with heterologous antigens] Jiménez Cardoso JM, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):133–8 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Patterns of gallium uptake in amebic liver abscesses. Verma RC, et al. **Clin Nucl Med** 1989 Jul;14(7):523–5

SURGERY

Indications for aspiration of amoebic liver abscess. de la Rey Nel J, et al. **S Afr Med J** 1989 Apr 15;75(8):373–6

[Selection of the method of treatment of amebic abscess of the liver] Gaibatov SP, et al. **Klin Khir** 1988;(9):17–20 (Eng. Abstr.) **(Rus)**

THERAPY

A comparative evaluation of percutaneous catheter drainage for resistant amebic liver abscesses. Singh JP, et al. **Am J Surg** 1989 Jul;158(1):58–62

Intraperitoneal rupture of amoebic liver abscess. Sarda AK, et al. **Br J Surg** 1989 Feb;76(2):202–3

Echo-guided percutaneous puncture: a safe and valuable therapeutic tool for amebic liver abscess. Giorgio A, et al. **Gastrointest Radiol** 1988 Oct;13(4):336–40

Perforated amebic liver abscesses: successful percutaneous treatment. Ken JG, et al. **Radiology** 1989 Jan;170(1 Pt

1):195–7

LIVER CIRCULATION

see related
HEPATIC ARTERY
HEPATIC VEINS
PORTAL SYSTEM

Portal venous blood flow during and after cholecystectomy. Holm C, et al. **Acta Chir Scand** 1988 Nov–Dec; 154(11–12):653–5

Evaluation of temporary liver dearterialization and embolization in patients with metastatic carcinoid tumour. Nobin A, et al. **Acta Oncol** 1989;28(3):419–24

Budd–Chiari syndrome: the results of duplex and color Doppler imaging. Grant EG, et al. **AJR** 1989 Feb; 152(2):377–81

Hepatic perfusion in cavernous transformation of the portal vein: evaluation by using CT angiography. Nakao N, et al. **AJR Am J Roentgenol** 1989 May;152(5):985–6

Arterial perfusion abnormalities of the liver after hepatic arterial infusion chemotherapy and their correlation with changes in the metastases: evaluation with CT and angiography. Roth J, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):751–4

William Harvey as hepatologist. Chen TS, et al. **Am J Gastroenterol** 1988 Nov;83(11):1274–7

Measurement of portal shunting in dogs. Hoefs JC. **Am J Gastroenterol** 1989 Mar;84(3):296–301

Analysis of hepatofugal flow in portal venous system using ultrasonic Doppler duplex system. Kawasaki T, et al. **Am J Gastroenterol** 1989 Aug;84(8):937–41

Increased sinusoidal volume and solute extraction during retrograde liver perfusion. Bass NM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1041–8

Changes in hepatic blood volume on galactose and indocyanine green uptake by cat liver. Greenway CV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G524–31

Measurement of hepatocellular function, cardiac output, effective blood volume, and oxygen saturation in rats. Hauptman JG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R439–44

Reduced hepatic blood flow and intestinal malabsorption in severe falciparum malaria. Molyneux ME, et al. **Am J Trop Med Hyg** 1989 May;40(5):470–6

Carbon dioxide and hepatic circulation. Gelman S. **Anesth Analg** 1989 Aug;69(2):149–51

Effective hepatic blood flow during cardiopulmonary bypass. Hampton WW, et al. **Arch Surg** 1989 Apr;124(4):458–9

An association between parameters of liver blood flow and percentage hepatic replacement with tumour. Hunt TM, et al. **Br J Cancer** 1989 Mar;59(3):410–4

Changes in the hepatic perfusion index during the development of experimental hepatic tumours. Nott DM, et al. **Br J Surg** 1989 Mar;76(3):259–63

Effects of hepatic blood flow on hepatic ethanol kinetics measured in cats and predicted from the parallel tube model. Greenway CV. **Can J Physiol Pharmacol** 1989 Jul; 67(7):728–33

Adenine nucleotides and carbohydrates in subpopulations of hepatic nodules with normal and compromised microcirculation. Anundi I, et al. **Cancer Res** 1989 Jun 15; 49(12):3282–6

Age-related changes in liver size and hepatic blood flow. The influence on drug metabolism in the elderly. Woodhouse KW, et al. **Clin Pharmacokinet** 1988 Nov; 15(5):287–94

A model to decrease hepatic blood flow and cardiac output with pressure breathing. Perkins MW, et al. **Clin Pharmacol Ther** 1989 May;45(5):548–52

Direct and indirect measurement of the hepatic extraction ratio of indocyanine green in the rat. Burns E, et al. **Clin Sci** 1989 May;76(5):503–8

Arterial occlusion reduces tumour cell lodgement in the rat liver. Blomqvist G, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1573–8

Assessment of liver circulation by quantitative scintiangiography: evaluation of the relative contribution of the hepatic arterial and portal venous blood flows to liver perfusion. Gianpaolo M, et al. **Eur J Nucl Med** 1989; 15(4):211–6

A measurement of regional portal blood flow with Xe-133 and balloon catheter in man. Yasuhara Y, et al. **Eur J Nucl Med** 1989;15(7):346–50

Galactose clearance and hepatic blood flow [letter] Zenilman ME, et al. **Gastroenterology** 1989 Jan;96(1):268

Measurement of normal portal venous blood flow by Doppler ultrasound. Brown HS, et al. **Gut** 1989 Apr;30(4):503–9

Protein kinase C agonists inhibit bile secretion independently of effects on the microcirculation in the isolated perfused rat liver. Corasanti JG, et al. **Hepatology** 1989 Jul; 10(1):8–13

Increased galactose clearance after liver transplantation: a measure of increased blood flow through the denervated liver? Henderson JM, et al. **Hepatology** 1989 Sep; 10(3):288–91

Treatment of post-shunt portal systemic encephalopathy by embolization of the shunt. Henderson JM. **Hepatology** 1989 Jan;9(1):164–5

A quantitative study of fluorescein isothiocyanate-dextran transport in the microcirculation of the isolated perfused rat liver. Stock RJ, et al. **Hepatology** 1989 Jan;9(1):75–82

The effect of age upon liver volume and apparent liver blood flow in healthy man. Wynne HA, et al. **Hepatology** 1989 Feb;9(2):297–301

Alterations in insulin clearance and hepatic blood flow during the night do not contribute to the 'dawn phenomenon' in type I diabetes. Widmer A, et al. **Horm Res** 1988; 29(5–6):197–201

Effects of thermal stress and level of feed intake on portal plasma flow and net fluxes of metabolites in lactating Holstein cows. McGuire MA, et al. **J Anim Sci** 1989 Apr; 67(4):1050–60

Hepatic and intestinal blood flow following thermal injury. Carter EA, et al. **J Burn Care Rehabil** 1988 Jul–Aug; 9(4):347–50

Variability in the pharmacokinetics of nisoldipine as caused by differences in liver blood flow response. van Harten J, et al. **J Clin Pharmacol** 1989 Aug;29(8):714–21

Portal thrombosis complicating appendicitis: ultrasound detection and hepatic computed tomography lobar attenuation alteration. Chan SC, et al. **J Comput Tomogr** 1988 Jul;12(3):208–10

Calculated splanchnic oxygen uptake and hepatic vascular resistance: what do these terms mean? Hadengue A, et al. **J Hepatol** 1989 May;8(3):387–90

Redistribution of visceral blood volume in upright exercise in healthy volunteers. Froelich JW, et al. **J Nucl Med** 1988 Oct;29(10):1714–8

Calculation of portal contribution to hepatic blood flow with 99mTc–microcolloids. A noninvasive method to diagnose liver graft rejection. Martin–Comin J, et al. **J Nucl Med** 1988 Nov;29(11):1776–80

Reproducibility of Hepatic Perfusion Index [letter] Parkin A, et al. **J Nucl Med** 1988 Oct;29(10):1747–8

Role of purines and xanthine oxidase in reperfusion injury in perfused rat liver. Zhong Z, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):470–5

Liver blood flow measurement in the rat. The electromagnetic versus the microsphere and the clearance methods. Daemen MJ, et al. **J Pharmacol Methods** 1989 Jul;21(4):287–97

Liver function in congestive heart failure: abnormal elevation of serum hepatic enzyme and hepatic venous flow velocity. Kumada T, et al. **Jpn Circ J** 1989 Feb;53(2):165–74

Analysis of acute and chronic heart failure in view of hepatic oxygen supply–demand relationship using hepatic venous oxygen saturation. Matsuda H, et al. **Jpn Circ J** 1989 Feb; 53(2):175–9

Radioisotopic assessment of hepatic arterial flow to evaluate perfusion patterns of totally implanted drug-delivery systems. Dondi M, et al. **Life Support Syst** 1983;1 Suppl 1:82–4

Changes in ovine hepatic circulation and oxygen consumption at birth. Townsend SF, et al. **Pediatr Res** 1989 Mar;25(3):300–4

Corrosion casts in liver and stomach microcirculation. Ohtani O. **Prog Clin Biol Res** 1989;295:317–26

Quantitative analysis of the contribution of hepatic, renal and portal circulation to the clearance of exogenous catecholamines. Sumikawa K, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):337–46

D-sorbitol plasma disappearance rate: an index to evaluate changes in liver circulation. Ballarè M, et al. **Ric Clin Lab** 1988 Oct–Dec;18(4):305–11

Evidence of the intact hepatocyte theory in alcoholic cirrhosis. Vaubourdolle M, et al. **Scand J Gastroenterol** 1989 May;24(4):467–74

Radical block resection of hepatoduodenal ligament for carcinoma of the bile duct with double catheter bypass for portal circulation [published erratum appears in Surg Gynecol Obstet 1989 May;168(5):460] Mimura H, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):527–9

Serum hyaluronic acid following liver transplantation: evidence of hepatic endothelial damage. Adams DH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2274

Donor rating in human liver transplantation: correlation of oxygen consumption after revascularization with MEGX formation in donors. Burdelski M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2392–3

One week of monitoring of portal and hepatic arterial blood flow after liver transplantation using implantable pulsed Doppler microprobes. Houssin D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2277–8

Angiographic evidence of collateral rearterialization of the grafted liver in the rat. Isai H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2463–5

Effect of xanthine oxydase inhibition on warm ischemic lesions of the liver. Lamesch P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1285–6

Changes in activity of oxygen free radical scavengers and in levels of endogenous antioxidants during hepatic ischemia and subsequent reperfusion. Marubayashi S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1317–8

Use of hepatic protein synthesis rate in acute ischemic liver to assess degrees of ischemic injury. Nakagohri T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2292–3

Prevention of liver damage by using free radical scavengers and changes in plasma PG levels during liver ischemia. Ohhori I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1309–11

Arterial grafts for revascularization of liver transplants. Secrest CL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2345–6

Evaluation of portal vein arterialization as a method of liver graft revascularization by blood ketone body ratio. Yamaguchi M, et al. **Transplantation** 1989 Sep;48(3):514–6

Hepatic blood flow and drug metabolism in glycerol-rechallenged rats. Nakatani T, et al. **Urol Res** 1989;17(4):235–7

[Effects of positive expiratory pressure on cardiac output and estimated hepatic blood flow during controlled ventilation in man] Ichaï C, et al. **Ann Fr Anesth Reanim** 1988; 7(6):452–8 (Eng. Abstr.) (Fre)

[Liver circulation following enteral and parenteral alcohol administration] Schmidt V, et al. **Beitr Gerichtl Med** 1988; 46:167–70 (Eng. Abstr.) (Ger)

[Studies on the portasystemic shunt in pelvic vein thrombosis and the vena cava inferior syndrome] Zückmantel WR, et al. **Radiol Diagn (Berl)** 1988;29(4):635–40 (Eng. Abstr.) (Ger)

[Study of splanchno–portal hemodynamics in prognostic evaluation of the cirrhogenous development in patients at risk] Reitano R, et al. **Clin Ter** 1987 Jan 15;120(1):11–5 (Eng. Abstr.) (Ita)

[Redistribution of intrahepatic arterial blood flow after ligation of an aberrant lobar artery. Use of degradable starch microspheres] Balletto N, et al. **Minerva Chir** 1988 Apr 15;43(7):575–80 (Eng. Abstr.) (Ita)

[Intra–hepato–arterial chemotherapy combined with hyperthermic treatment: clinical results of metastatic cancer of the liver and effects on correct (but not at all necessary) hepatic blood flow] Hamazoe R, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3032–5 (Eng. Abstr.) (Jpn)

[Stagnation of liver blood and effectiveness of intra–arterial chemotherapy in metastatic colorectal cancer] Kameyama M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2894–6 (Eng. Abstr.) (Jpn)

[Effect of degradable starch microspheres (DSM) on hepatic hemodynamics] Koike S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2818–21 (Eng. Abstr.) (Jpn)

[The clinical usefulness of portal venous flow ratio by hepatic angiography with 99mTc–Sn colloid in chronic liver diseases: a comparison with histological finding] Takegoshi K, et al. **Kuku Igaku** 1989 Apr;26(4):499–505 (Eng. Abstr.) (Jpn)

[Studies of hemodynamics of hepatocellular carcinoma by Tc 99 m-MAA scintigraphy—especially effects of hepatic arterial occlusion] Yano S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1248–56 (Eng. Abstr.) (Jpn)

[Experimental study of hepatic hemodynamics and hepatic oxygen consumption after hepatectomy] Asahi K, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):228–42 (Eng. Abstr.) (Jpn)

[The measurement of hepatic circulation before and after orthotopic liver transplantation in dog—by using transit-time blood flow meter and H2 clearance method] Nishiwaki H, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):243–9 (Eng. Abstr.) (Jpn)

[Measurement of effective hepatic blood flow using 99mTc–PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62–5 (Eng. Abstr.) (Jpn)

[Experimental and clinical studies of hepatic blood flow evaluation by dynamic CT] Watanabe H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):972–81 (Eng. Abstr.) (Jpn)

[Analysis of hepatic hemodynamics by a new method of per–rectal portal scintigraphy using 99mTcO4– (direct intramural administration of radioisotope)] Ohe T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):715–24 (Eng. Abstr.) (Jpn)

[Evaluation of hepatic blood supply in obesity] Hartleb M, et al. **Pol Tyg Lek** 1988 Sep 12;43(37):1184–6 (Eng. Abstr.) (Pol)

[Analysis of an equivalent electric circuit of the hepatocyte during stopping and restoration of the blood flow] Kabakov AIu. **Biofizika** 1988 Sep–Oct;33(5):828–33 (Eng. Abstr.) (Rus)

[Effect of neurohypophyseal hormones on hepatic circulation] Tsybenko VA, et al. **Fiziol Zh** 1988 Nov–Dec; 34(6):70–5 (Eng. Abstr.) (Rus)

[Interrelations of macro– and microhemodynamics and lymph outflow in the cat liver during stimulation of the hepatic nerves] Kostiushina NV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):359–66 (Eng. Abstr.) (Rus)

[Effect of the type of anesthesia on the blood circulation in the portal vein system of children with portal hypertension during portacaval shunting] Aleksandrov AE, et al. **Klin Khir** 1988;(6):57–8 (Rus)

[Hepatic blood flow studied by computed scintigraphy in patients with chronic diffuse liver diseases] Podymova SD, et al. **Klin Med (Mosk)** 1988 Aug;66(8):102–5 (Eng. Abstr.) (Rus)

[Echographic and hemodynamic indicators in liver cirrhosis with portal hypertension] Rikhsieva LE, et al. **Sov Med** 1989;(2):13–5 (Eng. Abstr.) (Rus)

[Hemodynamic and functional changes in the liver of children with extrahepatic portal hypertension in relation to the method of portacaval shunt] Leont'ev AF, et al. **Vestn Khir** 1988 Aug;141(8):68–71 (Eng. Abstr.) (Rus)

[Central and organic hemodynamics during the treatment of infection by splenosorption] Novikova RI, et al. **Vestn Khir** 1989 Feb;142(2):11–3 (Eng. Abstr.) (Rus)

[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24–7 (Eng. Abstr.) **(Rus)**

[Hepatocyte function and hepatic blood flow in patients with peritonitis] Zhadkevich MM, et al. **Vestn Khir** 1988 Sep; 141(9):26–30 (Eng. Abstr.) **(Rus)**

[Arterial circulation in preservation of swine liver by simple perfusion and hypothermic storage] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):297–303 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effects of dopamine on the portal circulation after therapeutic hepatic artery ligation. Winsö O, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):458–63

Isoflurane and hepatic oxygenation [editorial] Gelman S, et al. **Anesthesiology** 1988 Nov;69(5):639–40

A comparison of the influence of famotidine and cimetidine on phenytoin elimination and hepatic blood flow. Sambol NC, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):83–7

The contribution of nisoldipine–induced changes in liver blood flow to its pharmacokinetics after oral administration. van Harten J, et al. **Br J Clin Pharmacol** 1989 May; 27(5):581–6

The effect of propranolol on the hyperaemic response of the hepatic artery to portal venous occlusion in the dog. Alexander B, et al. **Br J Pharmacol** 1989 Feb;96(2):356–62

Effects of propylthiouracil and methimazole on splanchnic hemodynamics in awake and unrestrained rats. Kawasaki T, et al. **Hepatology** 1989 Sep;10(3):273–8

Effect of vasodilators on hepatic microcirculation in cirrhosis: a study in the isolated perfused rat liver. Marteau P, et al. **Hepatology** 1989 Jun;9(6):820–3

Beta–blockade with propranolol and hepatic artery blood flow in patients with cirrhosis. Mastai R, et al. **Hepatology** 1989 Sep;10(3):269–72

Lack of effects of isosorbide–5–mononitrate on hepatic hemodynamics in HBsAg–positive cirrhosis. Tsai YT, et al. **Hepatology** 1989 Sep;10(3):283–7

Lack of effect of ranitidine on rat hepatic blood flow. Melzer E, et al. **Isr J Med Sci** 1989 Mar;25(3):152–3

Endothelin–1 causes vasoconstriction and vasodilation in the blood perfused liver of the dog. Withrington PG, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S209–10

ATP–MgCl2 and liver blood flow following shock and ischemia. Chaudry IH. **Prog Clin Biol Res** 1989;299:19–31 (40 ref.)

The effect of PGE2 on hepatic blood flow and bile indocyanin green in the rat. Bruck R, et al. **Prostaglandins** 1989 May;37(5):531–8

Comparative haemodynamic effects of betaxolol and propranolol in patients with cirrhosis. Braillon A, et al. **Scand J Gastroenterol** 1988 Aug;23(6):691–5

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. I. Premedication with phenoxybenzamine and papaverine] Tilšer I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):503–12 (Eng. Abstr.) **(Cze)**

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. II. Premedication with phenoxybenzamine, papaverine and Palerol] Tilšer I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):513–26 (Eng. Abstr.) **(Cze)**

[An experimental study of PGE1 infusion into the liver circulation] Ishida T. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):898–905 (Eng. Abstr.) **(Jpn)**

[Measurement of portal blood flow in man by a continuous local thermodilution method. III. Effects of dopamine on systemic and portal hemodynamics after hepatectomy] Kinoshita H, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):556–65 (Eng. Abstr.) **(Jpn)**

[The hepatic hemodynamic response to intra–arterial infusion of vasoactive agents—Part 1. Blood flow measurements in dogs] Motohashi O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):773–80 (Eng. Abstr.) **(Jpn)**

[The hepatic hemodynamic response to intra–arterial infusion of vasoactive agents—Part 2. Blood flow measurements in rats with liver cancer] Motohashi O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):882–8 (Eng. Abstr.) **(Jpn)**

[Pharmacological effects of reiousan on experimental hepatic injuries and hepatic functions] Morishita S, et al. **Nippon Yakurigaku Zasshi** 1989 Apr;93(4):261–70 (Eng. Abstr.) **(Jpn)**

[Effect of pharmacologic preparations on hepatic blood flow studied by tetrapolar rheo–hepatography] Geller LI, et al. **Ter Arkh** 1988;60(8):77–9 **(Rus)**

LIVER CIRRHOSIS

Atrial natriuretic factor in patients with liver disease. Epstein M. **Am J Nephrol** 1989;9(2):89–100 (80 ref.)

Non–cirrhotic portal fibrosis. Sarin SK. **Gut** 1989 Mar; 30(3):406–15 (50 ref.)

[Extrahepatic digestive surgery in the cirrhotic patient] Zarski JP, et al. **J Chir (Paris)** 1988 Oct;125(10):597–600 (Eng. Abstr.) **(Fre)**

[Plasma dehydroepiandrosterone sulfate and urine steroid excretion in hepatic cirrhosis] Capra F, et al. **Recenti Prog Med** 1989 Jan;80(1):4–8 (Eng. Abstr.) **(Ita)**

[When hepatic fibrosis becomes a disease...] Grimaud JA, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec;20(4):189–92 (14 ref.) **(Por, Fre)**

BLOOD

Sex hormones and sex hormone binding globulin in males with compensated and decompensated cirrhosis of the liver. De Besi L, et al. **Acta Endocrinol (Copenh)** 1989 Mar; 120(3):271–6

Determination of the aminoterminal peptide of procollagen type III and laminin P1 in serum of patients with chronic liver disease. Kárteszi M, et al. **Acta Med Hung** 1988; 45(3–4):277–86

Increased amount of serum type IV collagen peptide in human liver fibrosis as determined by enzyme–immunoassay with monoclonal antibodies. Matsumoto E, et al. **Acta Pathol Jpn** 1989 Apr;39(4):217–23

Pharmacokinetics of a new angiotensin–converting enzyme inhibitor, benazepril hydrochloride, in special populations. Kaiser G, et al. **Am Heart J** 1989 Mar;117(3):746–51

Circadian rhythm of atrial natriuretic peptide, plasmatic renin activity, and plasma aldosterone in compensated cirrhosis of the liver. Colantonio D, et al. **Am J Gastroenterol** 1989 Feb;84(2):209–10

Plasma concentrations of atrial natriuretic peptide in patients with decompensated liver cirrhosis [letter] Tulassay Z, et al. **Am J Gastroenterol** 1989 Aug;84(8):978–81

Pharmacokinetics and protein binding of propofol in patients with cirrhosis. Servin F, et al. **Anesthesiology** 1988 Dec; 69(6):887–91

Serum apoproteins A and B and the lecithin: cholesterol acyl transferase activities in liver cirrhosis and hepatic coma patients. Nayak SS, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):299–304

Alpha 1–acid glycoprotein concentration and molecular heterogeneity: relationship to oxprenolol binding in serum from healthy volunteers and patients with lung carcinoma or cirrhosis. Fraeyman NF, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):733–40

The pharmacokinetics and pharmacodynamics of perindopril in patients with hepatic cirrhosis. Tsai HH, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):53–9

Aminoterminal propeptide of type III procollagen in methotrexate–induced liver fibrosis and cirrhosis. Risteli J, et al. **Br J Dermatol** 1988 Sep;119(3):321–5

Caffeine as indicator of metabolic functions of microsomal liver enzymes. Varagnolo M, et al. **Clin Chim Acta** 1989 Jul 31;183(1):91–4

Copper distribution among serum proteins in paediatric liver disorders and malignancies. Barrow L, et al. **Eur J Clin Invest** 1988 Dec;18(6):555–60

Serum zinc, retinol and retinol–binding protein levels in cirrhotics with hypogonadism. Abdu–Gusau K, et al. **Eur J Clin Nutr** 1989 Jan;43(1):53–7

Lactitol: gastrointestinal absorption and effect on blood lactate in healthy volunteers and patients with cirrhosis. Metzger J, et al. **Eur J Clin Pharmacol** 1988;35(1):97–9

Increased proportion of giant platelets and platelet distribution width are better indicators of altered platelet homeostasis than mean platelet volume in liver cirrhosis. Luzzatto G, et al. **Folia Haematol (Leipz)** 1988; 115(5):719–26

Determination of individual serum bile acids in chronic liver diseases: fasting levels and results of oral chenodeoxycholic acid tolerance test. Adachi Y, et al. **Gastroenterol Jpn** 1988 Aug;23(4):401–7

Plasma levels of atrial natriuretic peptide in patients with liver cirrhosis and its relation to ascites and renal function. Fukui H, et al. **Gastroenterol Jpn** 1989 Apr;24(2):149–55

Non–septic endotoxemia in cirrhotic patients. Yajima Y, et al. **Gastroenterol Jpn** 1989 Jun;24(3):262–9

Raised plasma concentrations of 3–methoxy–4–hydroxyphenylethyleneglycol in cirrhotic patients with or without hepatic encephalopathy. Echizen H, et al. **Gut** 1989 May;30(5):656–64

Increased serum soluble interleukin 2 receptor levels in patients with viral liver diseases. Yamaguchi S, et al. **Hepatogastroenterology** 1988 Oct;35(5):245–8

Are there any characteristic changes in the plasma concentration of atrial natriuretic factor in liver cirrhosis? [letter; comment] Tulassay T, et al. **Hepatology** 1989 Aug; 10(2):263–4. **Comment on:** Hepatology 1988 May–Jun;8(3)636–42

Lipids changes in alcoholic & non–alcoholic cirrhotics. Manocha S, et al. **Indian J Med Res** 1989 Feb;90:55–61

Plasma protein binding of zolpidem in liver and renal insufficiency. Pacifici GM, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep;26(9):439–43

Significance of prolactin levels in protosystemic encephalopathy. Sharma MP, et al. **J Assoc Physicians India** 1988 Mar;36(3):207–9

Digoxin–like substance(s) interfere(s) with serum estimations of the drug in cirrhotic patients. Nikou GC, et al. **J Clin Gastroenterol** 1989 Aug;11(4):430–3

Coagulation equilibrium in bilharzial hepatic fibrosis. Shahine MY, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):733–41

C–peptide in non–alcoholic cirrhosis and hepatocellular carcinoma. Pun KK, et al. **J Endocrinol Invest** 1988 May; 11(5):337–43

Histidine–rich glycoprotein is elevated in mild liver cirrhosis and decreased in moderate and severe liver cirrhosis. Leebeek FW, et al. **J Lab Clin Med** 1989 Apr;113(4):493–7

Serum thyroid hormone levels in liver cirrhosis. Agha F, et al. **JPMA** 1989 Jul;39(7):179–83

Endogenous endotoxemia in patients with liver cirrhosis—a quantitative analysis of endotoxin in portal and peripheral blood. Tachiyama G, et al. **Jpn J Surg** 1988 Jul;18(4):403–8

Correlation of caffeine elimination and Child's classification in liver cirrhosis. Holstege A, et al. **Klin Wochenschr** 1989 Jan 4;67(1):6–15

Inhibition of platelet aggregation by abnormal high density lipoprotein particles in plasma from patients with hepatic cirrhosis. Desai K, et al. **Lancet** 1989 Apr 1;1(8640):693–5

Atrial natriuretic peptide–renin–aldosterone system in cirrhosis of the liver: circadian study. Colantonio D, et al. **Life Sci** 1989;45(7):631–5

Hyperfucosylation of alpha 1–acid glycoprotein during cirrhosis. Biou D, et al. **Prog Clin Biol Res** 1989;300:215–8

Do increased catecholamines and plasma methionine enkephalin in cirrhosis promote bleeding oesophageal varices? Thornton JR, et al. **Q J Med** 1988 Jul; 68(255):541–51

D–sorbitol plasma disappearance rate: an index to evaluate changes in liver circulation. Ballarè M, et al. **Ric Clin Lab** 1988 Oct–Dec;18(4):305–11

The behaviour of plasma catecholamines in liver cirrhosis. Purello D'Ambrosio F, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):133–7

Measurement of serum bile alcohol levels in liver dysfunction, using isotope dilution–mass spectrometry. Hiraoka T, et al. **Scand J Gastroenterol** 1988 Sep;23(7):821–6

Adenine nucleotide metabolism of blood platelets in human liver cirrhosis. Zaima M, et al. **Thromb Res** 1988 Jul 15; 51(2):127–34

Immunological and functional determination of the protease inhibitors, protein C and antithrombin III, in liver cirrhosis and in neoplasia. Zurborn KH, et al. **Thromb Res** 1988 Nov 15;52(4):325–36

Plasma amino acid abnormalities in liver disease: comparative analysis of idiopathic portal hypertension, extrahepatic portal occlusion and liver cirrhosis. Ouchi K, et al. **Tohoku J Exp Med** 1989 Jun;158(2):171–8

Intestinal zinc absorption in cirrhotic patients. Solis–Herruzo J, et al. **Z Gastroenterol** 1989 Jun;27(6):335–8

[Humoral substances in peripheral and portal veins in cirrhotic patients] Li SJ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):44–7, 62 (Eng. Abstr.) **(Chi)**

[Atrial natriuretic factor in liver cirrhosis. The effect of volume loading] Tesař V, et al. **Cas Lek Cesk** 1988 Dec 2;127(49):1515–21 (Eng. Abstr.) **(Cze)**

[Vitamin D3 level and age. Changes in the 1,25–dihydroxycholecalciferol level in various age groups in normal persons, in patients with osteoporosis, renal failure and liver cirrhosis] Weiss H, et al. **Med Klin** 1988 Oct 14;83(20):660–6 (Eng. Abstr.) **(Ger)**

[Growth hormone in females with liver cirrhosis] Grün R. **Z Gastroenterol** 1989 Jun;27(6):331–4 (Eng. Abstr.) **(Ger)**

[One point determination of oral caffeine clearance in patients with liver diseases] Richter E, et al. **Z Gastroenterol** 1988 Dec;26(12):744–9 (Eng. Abstr.) **(Ger)**

[The pituitary in the cirrhotic patient: hormonal data] Cotrozzi G, et al. **Boll Soc Ital Biol Sper** 1988 Apr; 64(4):323–7 (Eng. Abstr.) **(Ita)**

[Behavior of circulating somatostatin in cirrhotic subjects: correlation with hepatic function] Tanganelli I, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):251–6 (Eng. Abstr.) **(Ita)**

[Erythrocyte filterability and relative viscosity in liver cirrhosis and chronic hepatitis] Mares M, et al. **Clin Ter** 1989 May 31;129(4):243–59 (Eng. Abstr.) **(Ita)**

[Changes in coagulation inhibitors (AT III, protein C, protein S) in patients with liver cirrhosis] Kobayashi I, et al. **Rinsho Byori** 1989 Apr;Spec No 81:93–7 **(Jpn)**

[Age–related changes of serum human atrial natriuretic polypeptide levels in normal subjects and clinical significance in liver cirrhosis, diabetes mellitus] Sato R, et al. **Rinsho Byori** 1989 May;37(5):543–8 **(Jpn)**

[Pathogenesis of the cytopenia syndrome in patients with cirrhosis of the liver complicated by portal hypertension] Eramishantsev AK, et al. **Khirurgiia (Mosk)** 1989 Feb; (2):36–9 (Eng. Abstr.) **(Rus)**

[Prevention and treatment of hemostatic disorders in patients with liver cirrhosis] Podymova SD, et al. **Klin Med (Mosk)** 1989 May;67(5):111–3 (Eng. Abstr.) **(Rus)**

[Serum hippurate levels in patients with liver cirrhosis under basal conditions and after glucose administration] Spustová V, et al. **Bratisl Lek Listy** 1989 Apr;90(4):279–81 (Eng. Abstr.) **(Slo)**

[Hypoxemia and liver cirrhosis (letter)] Gea J, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):519 **(Spa)**

[Systemic hemodynamic imbalance in liver cirrhosis] Prieto J, et al. **Rev Clin Esp** 1989 Jan;184(1):1–2 (27 ref.) **(Spa)**

[Serum determination of N–terminal peptide of type III procollagen as a marker of fibrotic activity] García Montes JM, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):241–5 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Methotrexate-associated hepatotoxicity: retrospective analysis of 210 patients with rheumatoid arthritis. Shergy WJ, et al. **Am J Med** 1988 Dec;85(6):771–4

Exaggerated cholestasis and hepatic fibrosis following simultaneous administration of chlorpromazine and sodium valproate. Bach N, et al. **Dig Dis Sci** 1989 Aug;34(8):1303–7

Micronodular cirrhosis after thiabendazole. Roy MA, et al. **Dig Dis Sci** 1989 Jun;34(6):938–41

Thioacetamide-induced cirrhosis-like liver lesions in rats—usefulness and reliability of this animal model. Müller A, et al. **Exp Pathol** 1988;34(4):229–36

Childhood cirrhosis from copper poisoning in the nineteenth century [letter] Gordon AG.
J Pediatr Gastroenterol Nutr 1988 Nov–Dec;7(6):934

Liver cirrhosis and hepatocellular carcinoma after prolonged exposure to TNT: causal relationship or mere coincidence? Garfinkel D, et al. **Med Interne** 1988 Oct–Dec;26(4):287–90

Studies on the induction of cholangiofibrosis by coumarin in the rat. Evans JG, et al. **Toxicology** 1989 Apr; 55(1–2):207–24

[Probable side effects caused by plethoryl. Common acute hepatitis, anicteric hepatitis, cirrhosis due to hypervitaminosis A, inflammatory arthralgias] Maroy B, et al. **Presse Med** 1989 Mar 18;18(11):567–70 (Eng. Abstr.) (Fre)

[Essential biochemical aspects and toxicology of copper] Dieter HH. **Off Gesundheitswes** 1989 May;51(5):222–7 (14 ref.) (Eng. Abstr.) (Ger)

[Histopathologic observations on acute liver lesions in patients taking Nizoralt (ketokonazol)] Kendrey G, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):292–7 (Eng. Abstr.) (Hun)

[Pyridimocarbamate (prodectin)-induced acute liver damage, cirrhosis and primary liver cancer—accidental finding?] Kendrey G, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jan; 29(1):51–4 (Eng. Abstr.) (Hun)

[A 73-year-old patient with discrete changes in hepatic biochemistry (clinical conference)] **Rev Clin Esp** 1989 Mar; 184(5):252–6 (Spa)

COMPLICATIONS

Lipid malnutrition of patients with liver cirrhosis: effect of low intake of dietary lipid on plasma fatty acid composition. Okita M, et al. **Acta Med Okayama** 1989 Feb;43(1):39–45

Quantitation and karyometry of cerebral neuroglia and endothelial cells in liver cirrhosis and in the hepatosplenic schistosomiasis mansoni. Brasileiro-Filho G, et al.
Acta Neuropathol (Berl) 1989;77(6):582–90

Radiological cases of the month. Pulmonary arteriovenous shunting in a child with cirrhosis of the liver. Crary GS, et al. **Am J Dis Child** 1989 Jun;143(6):749–51

"Low T3 syndrome" in cirrhosis: effect of beta-blockade. Bernardi M, et al. **Am J Gastroenterol** 1989 Jul;84(7):727–31

Gallstones are not common in cirrhosis of the liver in India [letter] Saraya A, et al. **Am J Gastroenterol** 1989 Jun; 84(6):683–4

Peritonitis following colonoscopy in a cirrhotic with ascites [letter] Shrake PD, et al. **Am J Gastroenterol** 1989 Apr; 84(4):453–4

Comparative efficacy of psychometric tests in detection of subclinical hepatic encephalopathy in nonalcoholic cirrhotics: search for a rational approach. Sood GK, et al. **Am J Gastroenterol** 1989 Feb;84(2):156–9

Intraoperative ultrasonography in resection of small hepatocellular carcinoma associated with cirrhosis. Nagasue N, et al. **Am J Surg** 1989 Jul;158(1):40–2

Pulmonary and extrapulmonary contributors to hypoxemia in liver cirrhosis. Mélot C, et al. **Am Rev Respir Dis** 1989 Mar;139(3):632–40

Relationships among iron accumulation, cirrhosis, and hepatitis B virus infection in Bantu siderosis. Senba M, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):77–8

Schistosomal versus nonschistosomal variceal bleeders. Do they respond differently to selective shunt (DSRS)? Ezzat FA, et al. **Ann Surg** 1989 Apr;209(4):489–500

Surgical margin and recurrence after resection of hepatocellular carcinoma in patients with cirrhosis. Further evaluation of limited hepatic resection. Yoshida Y, et al. **Ann Surg** 1989 Mar;209(3):297–301

Pericardial effusion associated with ascites secondary to hepatic cirrhosis [letter] Shah A, et al.
Arch Intern Med 1989 Jun;149(6):1462

Comparative clinical study of spironolactone and potassium canrenoate. A randomized evaluation with double cross-over. Emili M, et al. **Arzneimittelforschung** 1988 Oct; 38(10):1492–5

Pathogenesis of ascites in cirrhosis. A unitary hypothesis. Stanley MM. **ASAIO Trans** 1989 Apr–Jun;35(2):161–3 (12 ref.)

Treatment of ascites and renal failure in cirrhosis. Ginès P, et al. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):165–86 (85 ref.)

Risk lesions in cirrhosis and development of hepatocellular carcinoma: an autopsy study. Nakanuma Y, et al.
Biomed Pharmacother 1989;43(2):127–33

Controlled trial of propranolol to prevent recurrent variceal bleeding in patients with non-cirrhotic portal fibrosis. Kiire CF. **BMJ** 1989 May 20;298(6684):1363–5

Treating the ascites of cirrhosis. Panos M, et al. **BMJ** 1988 Sep 17;297(6650):698–9 (14 ref.)

Ascites in cirrhosis: pathophysiology and management. Panos M, et al. **Br J Hosp Med** 1988 Oct;40(4):256, 258, 260–2

Effect of cirrhosis on accuracy of 99Tcm-tin colloid scintigraphy and ultrasound scanning in diagnosis of hepatocellular carcinoma [letter] Goldfarb CR, et al.
Br J Radiol 1989 Apr;62(736):387

Diffuse hepatic calcification. Kerlin P, et al. **Br J Radiol** 1988 Nov;61(731):1079–80

Hepatocellular pseudotumour (regenerating nodule) in the cirrhotic liver mimicking hepatocellular carcinoma. Nagasue N, et al. **Br J Surg** 1988 Nov;75(11):1124–8

Relationship between cirrhosis, liver cancer, and hepatic metastases. An autopsy study. Melato M, et al. **Cancer** 1989 Jul 15;64(2):455–9

External accumulation of radionuclide in hepatic hydrothorax. Albin RJ, et al. **Clin Nucl Med** 1989 May; 14(5):341–3

Detection of pulmonary telangiectasia using dynamic pulmonary perfusion imaging in patients with liver cirrhosis. Shijo H, et al. **Clin Nucl Med** 1989 Mar; 14(3):179–82

Lactitol in prevention of recurrent episodes of hepatic encephalopathy in cirrhotic patients with portal-systemic shunt. Riggio O, et al. **Dig Dis Sci** 1989 Jun;34(6):823–9

Bumetanide, spironolactone and a combination of the two, in the treatment of ascites due to liver disease. A prospective, controlled, randomized trial. Sarin SK, et al.
Digestion 1988;41(2):101–7

Endoscopic sclerotherapy of bleeding esophageal varices. A comparative study of results in patients with schistosomiasis and cirrhosis. Sakai P, et al. **Endoscopy** 1988 Jul;20(4):134–6

Acute disseminated intravascular coagulation after percutaneous balloon aortic valvuloplasty in a cirrhotic patient. Unger P, et al. **Eur Heart J** 1989 Mar;10(3):283–4

Low dose 1-hexylcarbamoyl-5-fluorouracil (HCFU) recommended for cirrhotic patients with hepatocellular carcinoma. Takenaka K, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1191–5

Primary hepatocellular carcinoma in idiopathic hemochromatosis after reversal of cirrhosis. Blumberg RS, et al. **Gastroenterology** 1988 Nov;95(5):1399–402

Asymptomatic hepatocellular carcinoma in Child's A cirrhosis. A comparison of natural history and surgical treatment. Cottone M, et al. **Gastroenterology** 1989 Jun; 96(6):1566–71

Hepatocellular carcinoma with and without cirrhosis. A comparison in southern African blacks. Kew MC.
Gastroenterology 1989 Jul;97(1):136–9

Pathogenesis of sodium retention complicating cirrhosis: is there room for diminished "effective" arterial blood volume? Rector WG Jr, et al. **Gastroenterology** 1988 Dec; 95(6):1658–63

Injection sclerotherapy for bleeding esophageal varices in cirrhotic patients with hepatocellular carcinoma. Ng WD, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):69–70

Incidence of cholelithiasis among patients with cirrhosis and portal hypertension. Steinberg HV, et al.
Gastrointest Radiol 1988 Oct;13(4):347–50

Prophylactic endoscopic sclerotherapy of oesophageal varices in liver cirrhosis. A multicentre prospective controlled randomised trial in Vienna. Pötzi R, et al.
Gut 1989 Jun;30(6):873–9

Is ascites caused by impaired hepatic inactivation of blood borne endogenous opioid peptides? Thornton JR, et al.
Gut 1988 Sep;29(9):1167–72

Frequent non-response to histamine H2-receptor antagonists in cirrhotics. Walker S, et al. **Gut** 1989 Aug;30(8):1105–9

Risk factors of hepatocellular carcinoma in Germany: hepatitis B or liver cirrhosis? Röckelein G, et al.
Hepatogastroenterology 1988 Aug;35(4):151–7

Cirrhotics with variceal hemorrhage: the importance of the time interval between admission and the start of analysis for survival and rebleeding rates. Burroughs AK, et al.
Hepatology 1989 Jun;9(6):801–7

Disseminated intravascular coagulation in cirrhosis. Carr JM.
Hepatology 1989 Jul;10(1):103–10 (102 ref.)

The initial hemorrhage from esophageal varices. Conn HO.
Hepatology 1989 Jun;9(6):905–7

Effect of D-tryptophan-6-luteinizing hormone-releasing hormone on the tumoral growth and plasma sex steroid levels in cirrhotic patients with hepatocellular carcinoma. Guéchot J, et al. **Hepatology** 1989 Sep;10(3):346–8

Morphological and histological features of resected hepatocellular carcinoma in cirrhotic patients in the West. Kemeny F, et al. **Hepatology** 1989 Feb;9(2):253–7

Spiders and capillaries. Sherlock S. **Hepatology** 1989 Sep; 10(3):388–9

Variceal sclerotherapy in cirrhosis. Chawla YK, et al.
Indian J Gastroenterol 1988 Oct;7(4):215–7

Effect of low dosage of polidocanol in treatment of esophageal varices in cirrhotic patients. Bhargava DK, et al. **Indian J Med Res** 1988 Dec;88:515–21

Infantile polycystic kidney disease with hyaline membrane disease [letter] Kumar A, et al. **Indian Pediatr** 1989 Feb; 26(2):196–7

Indian childhood cirrhosis and cryoglobulinemia. Ray D, et al. **Indian Pediatr** 1988 May;25(5):417–21

Pattern analysis of serum alpha-fetoprotein in the early diagnosis of hepatocellular carcinoma in liver cirrhosis. Arrigoni A, et al. **Int J Biol Markers** 1988 Jul–Sep; 3(3):172–6

Hypogonadism and sexual dysfunction in hemochromatosis: the effects of cirrhosis and diabetes. Cundy T, et al.
J Clin Endocrinol Metab 1989 Jul;69(1):110–6

Diaphragmatic defect as a cause of massive hydrothorax in cirrhosis of liver. Chen A, et al. **J Clin Gastroenterol** 1988 Dec;10(6):663–6 (8 ref.)

Caroli's disease of the left hepatic lobe associated with hepatic fibrosis. Serejo F, et al. **J Clin Gastroenterol** 1988 Oct;10(5):559–64 (30 ref.)

CT demonstration of retrohepatic gallbladder in severe cirrhosis. Nardi PM, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):968–70

Lactitol vs. lactulose in the treatment of chronic recurrent portal-systemic encephalopathy. Heredia D, et al.
J Hepatol 1988 Aug;7(1):106–10

Nadolol for prophylaxis of gastrointestinal bleeding in patients with cirrhosis. A randomized trial. Lebrec D, et al. **J Hepatol** 1988 Aug;7(1):118–25

Systemic and regional hemodynamic effects of isosorbide dinitrate in patients with liver cirrhosis and portal hypertension. Mols P, et al. **J Hepatol** 1989 May; 8(3):316–24

Lactitol and lactulose for the treatment of subclinical hepatic encephalopathy in cirrhotic patients. A randomised, cross-over study. Morgan MY, et al. **J Hepatol** 1989 Mar; 8(2):208–17

Forms of hepatic failure in patients with liver cirrhosis. Watanabe A, et al. **J Med** 1988;19(5–6):383–93

Re-evaluation of the value of ascitic fluid pH lactate dehydrogenase and total proteins in the diagnosis of spontaneous bacterial peritonitis (SBP). el-Touny M, et al.
J Trop Med Hyg 1989 Feb;92(1):6–9

Sonographic relationship between gallbladder wall thickness and the etiology of ascites. Marti-Bonmati L, et al.
JCU 1989 Sep;17(7):497–501

Peritoneovenous shunting for intractable cirrhotic and cancerous ascites using different types of shunting tubes. Akimaru K, et al. **Jpn J Surg** 1988 Sep;18(5):502–8

Anorectal varices, haemorrhoids, and portal hypertension. Hosking SW, et al. **Lancet** 1989 Feb 18;1(8634):349–52

Rectal and colonic varices in cirrhosis [letter] Naveau S, et al. **Lancet** 1989 Mar 18;1(8638):624

Liver cirrhosis in histiocytosis X. Pirovino M, et al.
Liver 1988 Oct;8(5):293–8

Randomized controlled study of propranolol for prevention of recurrent esophageal varices bleeding in patients with cirrhosis. Sheen IS, et al. **Liver** 1989 Feb;9(1):1–5

Adenomatous hyperplastic nodules in the cirrhotic liver: a therapeutic approach. Work in progress. Livraghi T, et al. **Radiology** 1989 Jan;170(1 Pt 1):155–7

Massive hydrothorax complicating liver cirrhosis as a result of a diaphragmatic defect [letter] Chen A. **Respiration** 1988; 54(3):206–7

Use of diuretics in salt-retaining states. Hura CE, et al.
Semin Nephrol 1988 Dec;8(4):318–32 (144 ref.)

Atraumatic hemobilia arising from a cirrhotic liver. Merrell SW, et al. **Surgery** 1989 Jul;106(1):105–9

Pulmonary infection with Nocardia caviae in a patient with diabetes mellitus and liver cirrhosis. Salh B, et al.
Thorax 1988 Nov;43(11):933–4

Delta superinfection in patients with chronic hepatitis, liver cirrhosis and hepatocellular carcinoma in a Sahelian area. Study of 112 cases versus 46 controls. Cenac A, et al.
Trans R Soc Trop Med Hyg 1987;81(6):994–7

Prophylactic sclerotherapy in nonalcoholic liver cirrhosis: preliminary results of a prospective controlled randomized trial. Russo A, et al. **World J Surg** 1989 Mar–Apr; 13(2):149–53

[2 cases of spontaneous skin laceration of an umbilical hernia in patients with liver cirrhosis and ascites] Drŭndov A. **Khirurgiia (Sofiia)** 1989;42(2):76–7 (Bul)

[2 cases of spontaneous skin laceration in the area of an umbilical hernia in patients with liver cirrhosis and ascites] Drŭndov A. **Khirurgiia (Sofiia)** 1988;41(4):93–5 (Bul)

[Gustatory function in patients with hepatitis and cirrhosis] Zhai Q, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec; 27(12):741–2, 782 (Eng. Abstr.) (Chi)

[The study of pancreatic tissue alterations in cirrhosis patients] Lee KT, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Aug; 4(8):451–8 (Eng. Abstr.) (Chi)

[Hepatocellular carcinoma in cirrhosis. The surgeon's point of view] Smadja C, et al.
Ana Gastroenterol Hepatol (Paris) 1989 Jun–Sep; 25(4):129–31 (37 ref.) (Fre)

[Chronic hepatic encephalopathy in cirrhotic patients and spontaneous portacaval anastomosis. Portal angiographic and manometric study] Bauret P, et al.
Gastroenterol Clin Biol 1989;13(2):132–5 (Eng. Abstr.) (Fre)

[Prevention of the first hemorrhagic complication by rupture of esophageal varices in cirrhosis] Calès P.
Gastroenterol Clin Biol 1989;13(2 Pt 3):T18–21 (3 ref.) (Fre)

[Prognosis of spontaneous ascitic infection in cirrhotic patients] Ink O, et al. **Gastroenterol Clin Biol** 1989 Jun; 13(6–7):556–61 (Eng. Abstr.) (Fre)

[Is the prevention of first digestive hemorrhage justified in cirrhotic patients?] Pascal JP, et al.
Gastroenterol Clin Biol 1988 Aug–Sep;12(8–9):637–40 (Fre)

[Echographic detection of hepatocellular carcinoma in patients hospitalized for cirrhosis] Roget L, et al.

Gastroenterol Clin Biol 1988 Nov;12(11):827–32 (Eng. Abstr.) (Fre)

[Is the focal echographic lesion of the liver in patients with cirrhosis always correlated with hepatocellular carcinoma? 217 cases] Buffet C, et al. **Presse Med** 1988 Sep 24; 17(32):1629–32 (22 ref.) (Eng. Abstr.) (Fre)

[Hypoxemia in liver cirrhosis] Cadranel J, et al. **Presse Med** 1989 Mar 18;18(11):577–81 (Eng. Abstr.) (Fre)

[Spontaneous bacterial peritonitis caused by Acinetobacter calcoaceticus. A rare nosocomial infection in the cirrhotic patient (letter)] Sureda A, et al. **Presse Med** 1988 Nov 12; 17(40):2137–8 (Fre)

[Primary prevention of hemorrhage of esophageal varices by beta-blockade—generally indicated?] Sieg A, et al. **Klin Wochenschr** 1988 Nov 1;66(21):1099–101 (Ger)

[Autonomic neuropathy in diabetes mellitus, chronic renal failure and liver cirrhosis] Bielefeldt K, et al. **Med Klin** 1989 Feb 15;84(2):72–6 (Eng. Abstr.) (Ger)

[Treatment of ascites in liver cirrhosis (editorial)] Meyer B. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):733–4 (Ger)

[Therapy of complications of chronic liver diseases] Gerok W. **Verh Dtsch Ges Inn Med** 1988;94:316–25 (18 ref.) (Ger)

[Hypoxemia in liver cirrhosis] Lieberman D, et al. **Harefuah** 1988 Dec 15;115(12):397–9 (36 ref.) (Heb)

[Spontaneous chylous ascites in liver cirrhosis] Shaked Y, et al. **Harefuah** 1988 Nov 15;115(10):277–8 (Eng. Abstr.) (Heb)

[Polyunsaturated phosphatidylcholine combined with vitamin B complex in the treatment of chronic active hepatitis with cirrhosis] Ilic V, et al. **Clin Ter** 1988 Jan 15;124(1):39–46 (Eng. Abstr.) (Ita)

[Stroke in cirrhotic and non-cirrhotic patients: study of an anatomo-pathological case series] Melato M, et al. **G Clin Med** 1988 May;69(5):335–7, 340 (Eng. Abstr.) (Ita)

[The lichen-hepatitis syndrome] Patrone P, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):413–4 (Eng. Abstr.) (Ita)

[Cholecystectomy in cirrhotic patients] Marconi R, et al. **Minerva Chir** 1989 Feb 15;44(3):481–6 (Ita)

[Cardiocirculatory changes and sclerosis of esophageal varices] Cantarini D, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):225–7 (Eng. Abstr.) (Ita)

[Clinical study of primary hepatic carcinoma in liver cirrhosis with ascites] Salmi A, et al. **Minerva Dietol Gastroenterol** 1988 Jul–Sep;34(3):163–6 (Eng. Abstr.) (Ita)

[Hepatocellular carcinoma. Significance of the association with cirrhosis, alcohol consumption and the hepatitis B virus (serum markers and tissue antigens)] Frosi AR, et al. **Minerva Med** 1989 Jan;80(1):15–21 (Eng. Abstr.) (Ita)

[Evaluation of the usefulness of ultrasonics in the diagnosis of cancerous cirrhosis. Comparison with CT] Garretti L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):187–92 (Eng. Abstr.) (Ita)

[Role of combined etiology (alcohol and B virus) in the development of hepatocarcinoma in subjects with liver cirrhosis] Cristani A, et al. **Recenti Prog Med** 1989 May; 80(5):233–6 (Eng. Abstr.) (Ita)

[Ultrasound-guided percutaneous injection of alcohol: palliative therapy of primary hepatic carcinoma associated with cirrhosis (preliminary results)] Salmi A. **Recenti Prog Med** 1988 Nov;79(11):449–51 (Eng. Abstr.) (Ita)

[A study on pathogenesis of gastric ulcer in patient with liver cirrhosis: with special reference to the gastric mucosal blood flow] Maeda T. **Fukuoka Igaku Zasshi** 1988 Aug; 79(8):636–46 (Eng. Abstr.) (Jpn)

[An aged patient with acute myelogenous leukemia complicated with liver cirrhosis: successful treatment with low-dose cytosine arabinoside] Saigo K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2441–4 (Eng. Abstr.) (Jpn)

[Controlled prospective trial to evaluate Syosakiko-to in preventing hepatocellular carcinoma in patients with cirrhosis of the liver] Yamamoto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1519–24 (Eng. Abstr.) (Jpn)

[Two case reports of septic shock due to Vibrio vulnificus with liver cirrhosis] Tateyama M, et al. **Kansenshogaku Zasshi** 1989 Feb;63(2):156–61 (Eng. Abstr.) (Jpn)

[Transcatheter arterial infusion therapy using lipiodol and mitomycin C for hepatocellular carcinoma with liver cirrhosis] Adachi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1710–9 (Eng. Abstr.) (Jpn)

[Feasibility of CHOP chemotherapy—with special reference to age, diabetes mellitus, liver cirrhosis and obesity] Kuribayashi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):109–16 (Eng. Abstr.) (Jpn)

[Partial splenic embolization as a treatment in hypersplenism and portal hypertension in chronic liver diseases] Matsuo H, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug; 77(8):1206–11 (Jpn)

[A case of liver cirrhosis accompanied with chylothorax and chylous ascites after endoscopic sclerotherapy of esophageal varices] Tohda S, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1282–3 (Jpn)

[Risk factors for side effects of long-term administration of 5-fluorouracil derivatives in patients with hepatocellular carcinoma associated with liver cirrhosis—relationship with serum concentration of anti-tumor agents and side effect] Ikeda K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2411–9 (Eng. Abstr.) (Jpn)

[Neuropathological study of the esophagus in cirrhotic patients with esophageal varices] Koshino Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):1–10 (Eng. Abstr.) (Jpn)

[A case of liver cirrhosis associated with monoclonal gammopathy and primary hepatoma] Mori T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):945–9 (12 ref.) (Jpn)

[Esophageal variceal pressure by endoscopic pneumatic pressure sensor in patients with liver cirrhosis] Toba N. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):214–9 (Eng. Abstr.) (Jpn)

[Tactics of transfusion-infusion therapy of anemic syndrome in patients with cirrhosis of the liver] Zherebtsov LA, et al. **Gematol Transfuziol** 1988 Sep;33(9):42–6 (Eng. Abstr.) (Rus)

[Hepatogenic ulcer (various aspects of its pathogenesis)] Kataev SS, et al. **Klin Med (Mosk)** 1989 Jun;67(6):32–6 (Eng. Abstr.) (Rus)

[Hepatopulmonary syndrome in diffuse diseases of the liver] Voro bev LP, et al. **Sov Med** 1989;(5):44–8 (64 ref.) (Rus)

[Characteristics of portal-lymphatic hypertension and surgical treatment of patients with cirrhosis of the liver and persistent ascites] Nazyrov FG, et al. **Vestn Khir** 1989 Feb;142(2):104–6 (Rus)

[Acute viral hepatitis B in patients with liver cirrhosis] Nožić D, et al. **Vojnosanit Pregl** 1989 Mar–Apr;46(2):131–3 (Scr)

[Ascites and renal insufficiency in a 59-year-old male subjected to liver transplant for hepatocarcinoma on liver cirrhosis (clinical conference)] Terés J, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):547–55 (Spa)

[Liver cirrhosis and hypoxemia: contribution of pulmonary scintigraphy (letter)] Verdú J, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):678 (Spa)

[The hepatorenal system: its relation to the physiopathology of renal water and salt retention in liver cirrhosis (editorial)] López-Novoa JM. **Rev Clin Esp** 1988 Jun;183(1):1–2 (Spa)

[Caroli's disease and hepatic cirrhosis. Are they associated or coincident? (letter)] Navarro M, et al. **Rev Clin Esp** 1988 Sep;183(4):219–20 (Spa)

[Bacterial endocarditis and liver cirrhosis] Del Olmo Martínez ML, et al. **Rev Esp Enferm Apar Dig** 1988 Jun; 73(6):655–7 (Eng. Abstr.) (Spa)

[Variation of C3 in ascitic fluid from cirrhotic patients subjected to intestinal sterilization or selective intestinal decontamination] Soriano G, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):123–6 (Eng. Abstr.) (Spa)

CONGENITAL

Congenital hepatic fibrosis: evolving morphology. Bernstein J, et al. **APMIS Suppl** 1988;4:17–26

Congenital hepatic fibrosis without renal involvement. Lubani MM, et al. **Indian Pediatr** 1988 May;25(5):466–9

Familial congenital hypoplasia of depressor anguli oris muscle with congenital hepatic fibrosis. Thapa BR, et al. **Indian Pediatr** 1989 Jan;26(1):82–5

Congenital hepatic fibrosis, bile duct abnormality, long pancreaticobiliary common channel, and pancreatitis [letter] Perisic VN, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):790–1

Case 6. Perinatal hemochromatosis. Silver MM, et al. **Pediatr Pathol** 1989;9(2):203–10

[Congenital liver fibrosis in adults. Apropos of a case] Elajmi S, et al. **Tunis Med** 1987 Apr;65(4):271–5 (Eng. Abstr.) (Fre)

[Spontaneous bacterial peritonitis in a patient with congenital hepatic fibrosis and Caroli's disease] Pereira-Lima JE, et al. **Arq Gastroenterol** 1988 Jan–Mar;25(1):29–32 (Eng. Abstr.) (Por)

[Hepatic fibropolycystic disease in Mexico. Study of 82 cases] Torres-Barrera G, et al. **Rev Invest Clin** 1989 Jan–Mar; 41(1):45–52 (Eng. Abstr.) (Spa)

DIAGNOSIS

Serum aminoterminal propeptide of type III procollagen. A non-invasive test for liver fibrogenesis in methotrexate-treated psoriatics. Zachariae H, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):241–4

First description of "Indian childhood cirrhosis" in a non-Indian infant in Europe. Weiss M, et al. **Acta Paediatr Scand** 1989 Jan;78(1):152–6

Characteristic sonographic pattern of schistosomal hepatic fibrosis. Abdel-Wahab MF, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):72–6

Efficacy of serum laminin measurement for diagnosis of fibrotic liver diseases. Kropf J, et al. **Clin Chem** 1988 Oct; 34(10):2026–30

Diagnostic efficiency in discriminating liver malignancies from cirrhosis by serum gamma-glutamyltransferase isoforms [published erratum appears in Clin Chim Acta 1989 Feb 28;180(2):201] Sacchetti L, et al. **Clin Chim Acta** 1988 Oct 14;177(2):167–72

Ultrasonographic features of hepatocellular pseudotumour in the cirrhotic liver. Chang YC, et al. **Clin Radiol** 1988 Nov;39(6):635–8

Cirrhosis of the liver: new concepts. Achord JL. **Compr Ther** 1989 Feb;15(2):11–6 (10 ref.)

The 30-minute aminopyrine breath test: optimization of sampling times after intravenous administration of 14C-aminopyrine. Miotti T, et al. **Digestion** 1988; 39(4):241–50

Changes in ICG plasma clearance and excretion rate into bile and urine of ICG before and after exercise in patients with chronic liver diseases. Iijima T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):338

Ultrasonography in chronic liver disease [letter] Giorgio A, et al. **Gastroenterology** 1988 Dec;95(6):1697–8

Tissue polypeptide antigen (TPA) modifications in hepatic cirrhosis, aggressive chronic hepatitis, persistent chronic hepatitis, and in minimal pathology. Sabbatani S, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):127–8

Alpha-fetoprotein, tissue polypeptide antigen and ferritin in diagnosing primary hepatocellular carcinoma in patients with liver cirrhosis. Leandro G, et al. **J Cancer Res Clin Oncol** 1989;115(3):276–8

Unusual anodic migrating isoamylase differentiates selected malignant from nonmalignant ascites. Kosches DS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):43–6

Chronic hepatitis and indolent cirrhosis due to methyldopa: the bottom of the iceberg? Lee WM, et al. **J S C Med Assoc** 1989 Feb;85(2):75–9

Utility of sonographic gallbladder wall patterns in differentiating malignant from cirrhotic ascites. Huang YS, et al. **JCU** 1989 Mar–Apr;17(3):187–92

Pancreatic alpha- and beta-cell function and metabolic changes during oral L-alanine and glucose administration: comparative studies between normal, diabetic and cirrhotic subjects. Hattori T, et al. **Nagoya J Med Sci** 1989 Mar; 51(1–4):7–16

Serum elastase 1 in clinical practice. Lesi C, et al. **Pancreas** 1988;3(4):444–9

Cirrhosis: diagnosis with sonographic study of the liver surface. Di Lelio A, et al. **Radiology** 1989 Aug; 172(2):389–92

Diagnosis of liver cirrhosis with US: receiver-operating characteristic analysis of multidimensional caudate lobe indexes. Hess CF, et al. **Radiology** 1989 May;171(2):349–51

Adenomatous hyperplastic nodules in the cirrhotic liver: differentiation from hepatocellular carcinoma with MR imaging. Matsui O, et al. **Radiology** 1989 Oct;173(1):123–6

Laparoscopic ultrasonography in the study of liver diseases. Preliminary results. Fornari F, et al. **Surg Endosc** 1989; 3(1):33–7

Doppler echography for hemodynamic studies of the azygos vein. Sukigara M, et al. **Surg Endosc** 1989;3(1):21–8

[Differential diagnosis of schistosomial and non-schistosomial cirrhosis] Huang YX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):402–4, 453 (Eng. Abstr.) (Chi)

[Duplex sonographic findings in the portal system] Seitz K. **Verh Dtsch Ges Inn Med** 1988;94:560–8 (Ger)

[Importance of endoscopic and ultrasound evaluation in the study of liver cirrhosis] Salmi A, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):304–6 (Eng. Abstr.) (Ita)

[Evolution of the echographic picture in primary liver tumor associated with cirrhosis] Mazzola G, et al. **Radiol Med (Torino)** 1989 May;77(5):488–92 (Eng. Abstr.) (Ita)

[A new determination method of type IV collagen in sera and its clinical significance in relation to hepatic fibrosis] Suzuki H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1569 (Jpn)

[Clinical application of lipid emulsion test] Ohkubo I, et al. **Rinsho Byori** 1988 Sep;36(9):1056–60 (Jpn)

[Ultrasonic equivalents of morphologic structures of the liver] Semendiaeva ME, et al. **Sov Med** 1988;(10):24–7 (Eng. Abstr.) (Rus)

[Glucose homeostasis in the cirrhotic liver. Diagnostic and prognostic value of the intravenous glucagon double test (letter)] Franco-Vicario R, et al. **Rev Clin Esp** 1988 Apr; 182(7):390–1 (Spa)

[Bases of the diagnosis of liver cirrhosis. Critical analysis at hospitals in Santiago, Chile] Otondo J, et al. **Rev Med Chil** 1988 May;116(5):439–43 (Eng. Abstr.) (Spa)

DIET THERAPY

Low glycemic index foods and reduced glucose, amino acid, and endocrine responses in cirrhosis. Jenkins DJ, et al. **Am J Gastroenterol** 1989 Jul;84(7):732–9

[Effect of the so-called fat-rich diet in acute viral hepatitis (VH) and chronic hepatopathies on changes in lipid indicators] Boroń P, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):228–34 (Eng. Abstr.) (Pol)

DRUG THERAPY

The use of diuretics in preventing ascites recurrence. Arrigoni A, et al. **Br J Clin Pract** 1988 Mar;42(3):116–20

Colchicine in liver cirrhosis. Gagnon A, et al. **DICP** 1989 May;23(5):388

Effect of praziquantel on hepatic fibrosis in experimental Schistosomiasis mansoni. el-Badrawy NM, et al. **Exp Mol Pathol** 1988 Oct;49(2):151–60

Effects of malotilate treatment on the serum markers of hepatic fibrogenesis in liver cirrhosis. Takase S, et al. **Gastroenterol Jpn** 1988 Dec;23(6):639–45

Colchicine treatment of cirrhosis: questions. Grace ND. **Hepatology** 1989 Apr;9(4):655–6

Vitamin B6 repletion in cirrhosis with oral pyridoxine: failure to improve amino acid metabolism. Henderson JM, et al. **Hepatology** 1989 Apr;9(4):582–8

Colchicine treatment of cirrhosis: answers. Kershenobich D, et al. **Hepatology** 1989 Apr;9(4):656–7

Atrial natriuretic peptide administered as intravenous infusion or bolus injection to patients with liver cirrhosis and ascites. Petrillo A, et al. **J Cardiovasc Pharmacol** 1988 Sep; 12(3):279–85

Propranolol prevents first gastrointestinal bleeding in non-ascitic cirrhotic patients. Final report of a multicenter randomized trial. The Italian Multicenter Project for Propranolol in Prevention of Bleeding. **J Hepatol** 1989 Jul; 9(1):75–83

Randomized controlled trial of silymarin treatment in patients with cirrhosis of the liver. Ferenci P, et al. **J Hepatol** 1989 Jul;9(1):105–13

Changes in the plasma pattern of sex steroids in patients with liver cirrhosis treated with mepartricin. Tavanti A, et al. **J Int Med Res** 1989 May–Jun;17(3):212–7

Colchicine in the treatment of cirrhosis [letter] **N Engl J Med** 1988 Nov 10;319(19):1285–6

Comparative haemodynamic effects of betaxolol and propranolol in patients with cirrhosis. Braillon A, et al. **Scand J Gastroenterol** 1988 Aug;23(6):691–5

Relationship among beta-adrenergic blockade, propranolol concentration, and liver function in patients with cirrhosis. Caujolle B, et al. **Scand J Gastroenterol** 1988 Oct; 23(8):925–30

Effect of combination therapy of vitamin K1 and ursodeoxycholic acid on liver function tests. Iijima T, et al. **Trop Gastroenterol** 1988 Jul–Aug;9(3):139–44

[Comparative study of the therapeutic effect of Western medicine and traditional Chinese medicine combined with Western medicine in 517 cases of liver cirrhosis] Gu WX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):410–3, 389 (Eng. Abstr.) **(Chi)**

[Effect of captopril therapy on sodium and water excretion in patients with liver cirrhosis and ascites] Brunkhorst R, et al. **Klin Wochenschr** 1989 Aug 1;67(15):774–83 (Eng. Abstr.) **(Ger)**

[Colchicine therapy in liver cirrhosis] Poralla T. **Z Gastroenterol** 1989 Jan;27(1):10–2 **(Ger)**

ENZYMOLOGY

Alteration of serum cholinesterase isozyme in patients with liver cirrhosis [letter] Hada T, et al. **Clin Chim Acta** 1988 Nov;178(1):111–2

Mitochondrial aspartate aminotransferase in nonalcoholic cirrhosis [letter] Cadiot G, et al. **Gastroenterology** 1989 Jul; 97(1):240–1

[Metabolism of high density lipoproteins. Studies in patients with compensated, postinfectious liver cirrhosis] Daerr W. **Fortschr Med** 1989 Feb 10;107(4):46, 49–50 (Eng. Abstr.) **(Ger)**

[Behavior of angiotensin-converting enzymes in hepatic cirrhosis (letter)] Reitano R, et al. **Recenti Prog Med** 1989 Jan;80(1):46–7 **(Ita)**

EPIDEMIOLOGY

HBs antigenemia in chronic liver disorders in infancy and childhood. Sundaravalli N, et al. **Trop Gastroenterol** 1988 Apr–Jun;9(2):80–2

ETHNOLOGY

Patterns of cirrhosis in Natal Indians. Seebaran AR, et al. **S Afr Med J** 1988 Dec 17;74(12):622–4

ETIOLOGY

Hepatic sinusoidal fibrosis in agnogenic myeloid metaplasia. Tsao MS. **Am J Clin Pathol** 1989 Mar;91(3):302–5

The relationship of hepatocellular carcinoma and liver cirrhosis to hepatitis B virus infection in the Philippines. Lingao AL. **Gastroenterol Jpn** 1989 Aug;24(4):425–33

Hepatitis B virus infection in liver cirrhosis and hepatocellular carcinoma in Jakarta Indonesia. Sulaiman HA. **Gastroenterol Jpn** 1989 Aug;24(4):434–41

Chronic infection with Epstein–Barr virus, Chlamydia and hepatitis A virus, terminating in cirrhosis and nasopharyngeal carcinoma. Ariad S, et al. **Isr J Med Sci** 1989 Jun;25(6):328–31

Blood transfusion as a risk factor for cirrhosis and liver cancer: a matched case-control study [letter] Fukuda A, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1189–90

Natural course after the development of cirrhosis in patients with chronic type B hepatitis: a prospective study. Liaw YF, et al. **Liver** 1989 Aug;9(4):235–41

The interference of an autoimmune mechanism in the pathogeny of chronic active liver diseases. Banciu T, et al. **Med Interne** 1989 Jan–Mar;27(1):47–52

Metabolic liver diseases. Lee WM. **Trans Assoc Life Insur Med Dir Am** 1989;72:105–10

Aflatoxins in liver biopsies from Kenya. De Vries HR, et al. **Trop Geogr Med** 1989 Jan;41(1):26–30

[Differential diagnostic indices between schistosomal liver fibrosis and post-hepatic cirrhosis] Zeng YL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):94–8 (Eng. Abstr.) **(Chi)**

[Study of splanchno-portal hemodynamics in prognostic evaluation of the cirrhogenous development in patients at risk] Reitano R, et al. **Clin Ter** 1987 Jan 15;120(1):11–5 (Eng. Abstr.) **(Ita)**

[Histiocytosis X with cholestasis in an adult developed liver cirrhosis] Fujii H, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1566–71 **(Jpn)**

[Liver cirrhosis] Oka H. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1157–67 **(Jpn)**

[A case of development of liver cirrhosis in Rendu–Osler disease] Lazdin OA. **Klin Med (Mosk)** 1989 Jan;67(1):125–6 **(Rus)**

[The significance of the hepatitis B virus in the development of chronic liver diseases] Khazanov AI, et al. **Voen Med Zh** 1988 Nov;(11):59–60 **(Rus)**

[Liver cirrhosis caused by alpha-1-antitrypsin deficiency] Peršić M, et al. **Acta Med Iugosl** 1989;43(2):137–46 (Eng. Abstr.) **(Scr)**

GENETICS

Further delineation of a syndrome of cerebellar vermis hypo/aplasia, oligophrenia, congenital ataxia, coloboma, and hepatic fibrosis. Verloes A, et al. **Am J Med Genet** 1989 Feb;32(2):227–32

Alpha-1-antitrypsin protease inhibitor SZ phenotype and liver cirrhosis. Coli A, et al. **Appl Pathol** 1989;7(1):54–60

Hypomethylation of the c-myc oncogene in liver cirrhosis and chronic hepatitis. Aiba N, et al. **Gastroenterol Jpn** 1989 Jun;24(3):270–6

Juvenile nephronophthisis associated with new skeletal abnormalities, tapetoretinal degeneration and liver fibrosis. Bianchi C, et al. **Helv Paediatr Acta** 1989 Jun; 43(5–6):449–55

Perinatal iron deficiency and ICC [letter] Chaudhary SK. **Indian Pediatr** 1988 May;25(5):480–1

Nucleolar organiser regions in normal, cirrhotic, and carcinomatous livers. Crocker J, et al. **J Clin Pathol** 1988 Oct;41(10):1044–8

[Fibropolycystic diseases of the liver and bile ducts—a case report and review of the literature] Stümpflen A, et al. **Wien Klin Wochenschr** 1988 Dec 2;100(23):765–9 (28 ref.) (Eng. Abstr.) **(Ger)**

[The role of genetic factors and parental HB viral infection in the development of chronic hepatitis and liver cirrhosis in children] Chistova LV, et al. **Pediatriia** 1988;(6):15–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Interleukin 2 receptor bearing T lymphocytes in patients with chronic liver disease. Kakumu S, et al. **Gastroenterol Jpn** 1988 Aug;23(4):408–13

Interferon-gamma receptors on T cells in patients with chronic liver disease. Kakumu S, et al. **Hepatogastroenterology** 1988 Aug;35(4):158–61

Immunocytochemical investigation of hepatitis B virus-associated antigens in cases of liver cirrhosis and HBsAg antigenemia and their relationship to development of hepatocellular carcinoma. Iwai M, et al. **Histochem J** 1988 May;20(5):283–9

Lymphocyte function tests in cirrhotic patients under treatment with spironolactone and potassium canrenoate. Cuppone R, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):436–42

Type 4 chain H expression by bile ductules and hepatocytes in cirrhosis. Okada Y, et al. **J Pathol** 1989 Apr; 157(4):329–38

[Interleukin-1 and liver cirrhosis] Ramadòri G. **Z Gastroenterol** 1988 Aug;26(8):437–8 **(Ger)**

[Serology of total E immunoglobulins in liver cirrhosis] Linoli G. **Pathologica** 1987 Nov–Dec;79(1064):773–80 (Eng. Abstr.) **(Ita)**

[Associated hepatitis B virus forms and analysis of immunologic configurations in histologically typified chronic diseases of the liver. Epidemiologic aspects and development factors] Cortinovis A, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):425–39 (Eng. Abstr.) **(Ita)**

[Immunological studies on the pathogenesis of chronic liver diseases with special reference to interferon-gamma production by peripheral blood mononuclear cells] Maeda E. **Fukuoka Igaku Zasshi** 1988 Aug;79(8):594–614 (Eng. Abstr.) **(Jpn)**

[Subpopulations of immunocompetent cells in patients with liver cirrhosis studied using monoclonal antibodies] Podymova SD, et al. **Ter Arkh** 1988;60(11):49–53 **(Rus)**

METABOLISM

Clinical, biochemical, and hormonal changes after a single, large-volume paracentesis in cirrhosis with ascites. Gentile S, et al. **Am J Gastroenterol** 1989 Mar;84(3):279–84

Cellular localization of laminin gene transcripts in normal and fibrotic human liver. Milani S, et al. **Am J Pathol** 1989 Jun;134(6):1175–82

Pharmacokinetics of perindopril: therapeutic consequences. Lees KR, et al. **Arch Mal Coeur** 1989 May;82 Spec No 1:31–4

Iron-negative foci in siderotic macroregenerative nodules in human cirrhotic liver. A marker of incipient neoplastic lesions. Terada T, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):916–20

Hepatic antioxidant enzymes and lipid peroxidation in carbon tetrachloride-induced liver cirrhosis in rats. Nadkarni GD, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):42–5

Liquid chromatographic analysis of metoclopramide with fluorescence detection in cirrhotic patients. Albani F, et al. **Biomed Chromatogr** 1987;2(3):135–6

Pharmacokinetics of atracurium and laudanosine in patients with hepatic cirrhosis. Parker CJ, et al. **Br J Anaesth** 1989 Feb;62(2):177–83

The pharmacokinetics of caffeine and its dimethylxanthine metabolites in patients with chronic liver disease. Scott NR, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):205–13

Alpha 1-acid glycoprotein and hepatic fibrosis. Ozeki T, et al. **Br J Exp Pathol** 1988 Aug;69(4):589–95

Difference in the in vitro uptake of bromodeoxyuridine between liver cirrhosis with and without hepatocellular carcinoma. Tarao K, et al. **Cancer** 1989 Jul 1;64(1):104–9

Differential expression of insulin-like growth factor II mRNA in human primary liver cancers, benign liver tumors, and liver cirrhosis. Cariani E, et al. **Cancer Res** 1988 Dec 1;48(23):6844–9

Metronidazole kinetics and liver function in hepatic cirrhosis. Kampf D, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):311–2

Vitamin B6 status in cirrhotic patients in relation to apoenzyme of serum alanine aminotransferase. Ohgi N, et al. **Clin Biochem** 1988 Dec;21(6):367–70

Ganglioside variations in human liver cirrhosis and hepatocellular carcinoma as shown by two-dimensional thin-layer chromatography. Tanno M, et al. **Clin Biochem** 1988 Dec;21(6):333–9

Disposition of a flow-limited drug (lidocaine) and a metabolic capacity-limited drug (theophylline) in liver cirrhosis. Colli A, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):642–9

The effect of cirrhosis on the steady-state pharmacokinetics of oral ciprofloxacin. Frost RW, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):608–16

The influence of verapamil and nifedipine on hepatic indocyanine green clearance in patients with HBsAg-positive cirrhosis and ascites. Lay CS, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):453–7

Pharmacokinetics of flecainide in patients with cirrhosis of the liver. McQuinn RL, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):566–72

Kinetics and dynamics of enalapril in patients with liver cirrhosis. Ohnishi A, et al. **Clin Pharmacol Ther** 1989 Jun; 45(6):657–65

Diet-induced thermogenesis in patients with liver cirrhosis. Eriksson LS, et al. **Clin Physiol** 1989 Apr;9(2):131–41

Profile of etodolac: pharmacokinetic evaluation in special populations. Brater DC, et al. **Clin Rheumatol** 1989 Mar; 8 Suppl 1:25–35 (24 ref.)

Prolongation of the half-life of lactate after maximal exercise in patients with hepatic dysfunction. Almenoff PL, et al. **Crit Care Med** 1989 Sep;17(9):870–3

Hepatic extraction of morphine is impaired in cirrhosis. Crotty B, et al. **Eur J Clin Pharmacol** 1989;36(5):501–6

The pharmacokinetics of theophylline and enprofylline in patients with liver cirrhosis and in patients with chronic renal disease. Kraan J, et al. **Eur J Clin Pharmacol** 1988; 35(4):357–62

Steady-state intravenous pharmacokinetics of pirenzepine in patients with hepatic insufficiency and combined renal- and hepatic insufficiency. Krakamp B, et al. **Eur J Clin Pharmacol** 1989;36(1):71–3

The pharmacokinetics of bendazac-lysine and 5-hydroxybendazac, its main metabolite, in patients with hepatic cirrhosis. Rovei V, et al. **Eur J Clin Pharmacol** 1988;35(4):391–6

400-MHz 1H-NMR spectroscopy of fucosylated tetrasialyl oligosaccharides isolated from normal and cirrhotic alpha 1-acid glycoprotein. Wieruszeski JM, et al. **FEBS Lett** 1988 Oct 10;238(2):390–4

Increased proportion of proapolipoprotein A-I in HDL from patients with liver cirrhosis and hepatitis. Matsuura T, et al. **Gastroenterol Jpn** 1988 Aug;23(4):394–400

Antipyrine clearance per unit liver volume in cirrhotics with and without hepatocellular carcinoma indicating a correlation with histological change of the liver. Noda S, et al. **Gastroenterol Jpn** 1989 Apr;24(2):159–63

Atrial natriuretic factor in cirrhotic patients with ascites [letter; comment] **Gastroenterology** 1989 Apr;96(4):1225–7 . **Comment on:** Gastroenterology 1988 Sep;95(3):764–70

Sorbitol clearance: shift from flow-limitation in controls to enzyme-flow dependence in cirrhosis [letter; comment] Keiding S. **Gastroenterology** 1989 Apr;96(4):1227–8. **Comment on:** Gastroenterology 1988 Sep;95(3):749–59

Mediators of vasopressin induced natriuresis in cirrhosis—possible role of atrial natriuretic factor [letter] Gerbes AL. **Gut** 1989 Aug;30(8):1158–9

Specific loss of the high-molecular-weight form of S-adenosyl-L-methionine synthetase in human liver cirrhosis. Cabrero C, et al. **Hepatology** 1988 Nov-Dec; 8(6):1530–4

Atrial natriuretic factor and renin-aldosterone in volume regulation of patients with cirrhosis. Gerbes AL, et al.

Hepatology 1989 Mar;9(3):417–22

Glucagon selectively increases splanchnic blood flow in patients with well–compensated cirrhosis. Lee SS, et al. **Hepatology** 1988 Nov–Dec;8(6):1501–5

Relationship between oxygen transport and oxygen uptake in patients with cirrhosis: effects of vasoactive drugs. Moreau R, et al. **Hepatology** 1989 Mar;9(3):427–32

Gluconeogenesis from nitrogen precursors and hyperammonemia of cirrhosis: is there a cause–effect relationship? [letter] Trevisani F, et al. **Hepatology** 1989 Feb;9(2):343–5

Hepatic drug metabolizing capacity of patients of cirrhosis before and after clinico–biochemical recovery. Chauhan CK, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar; 33(1):63–6

Serum and hair zinc in Indian childhood cirrhosis. Misra PK, et al. **Indian Pediatr** 1989 Jan;26(1):22–5

Pharmacokinetics of ciprofloxacin in impaired liver function. Esposito S, et al. **Int J Clin Pharmacol Res** 1989;9(1):37–41

Serum protein binding of penbutolol in patients with hepatic cirrhosis. Aguirre C, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):566–9

Plasma protein binding of ethinyloestradiol: effect of disease and interaction with drugs. Pacifici GM, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):362–5

Cefoperazone pharmacokinetics in patients with liver cirrhosis: a predictive value of the ujoviridin test. Saudek F, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb; 27(2):82–7

Pharmacokinetics of amoxycillin/clavulanic acid in serum and ascitic fluid in cirrhotic patients. Grange JD, et al. **J Antimicrob Chemother** 1989 Apr;23(4):605–11

Hepatic handling of vitamin D3 in micronodular cirrhosis: a structure–function study in the rat. Plourde V, et al. **J Bone Miner Res** 1988 Aug;3(4):461–71

Effects of liver disease on the disposition of ciramadol in humans. Hoyumpa AM, et al. **J Clin Pharmacol** 1989 Mar; 29(3):217–24

Pharmacokinetics of midazolam following intravenous and oral administration in patients with chronic liver disease and in healthy subjects. Pentikäinen PJ, et al. **J Clin Pharmacol** 1989 Mar;29(3):272–7

Glucose and insulin metabolism in cirrhosis. Petrides AS, et al. **J Hepatol** 1989 Jan;8(1):107–14 (41 ref.)

Pharmacokinetics of enalapril and lisinopril in subjects with normal and impaired hepatic function. Hayes PC, et al. **J Hum Hypertens** 1989 Jun;3 Suppl 1:153–8

Glucosamine and sialic acid content of gastric mucin in subjects with hepatic cirrhosis. Rao JJ, et al. **J Indian Med Assoc** 1988 Aug;86(8):210–2

Hepatic copper level [letter] Ozsoylu S. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):789–90

Presence of the atrial natriuretic factor (ANF) in human ascitic fluid. Gerbes AL, et al. **Life Sci** 1988;43(19):1517–21

Is thrombocytopenia in liver failure dependent on an inadequate synthesis of thrombopoietic stimulating factor by the liver? Aseni P, et al. **Med Hypotheses** 1988 Aug; 26(4):217–9

Cell–matrix interactions in schistosomal portal fibrosis: a dynamic event. Grimaud JA. **Mem Inst Oswaldo Cruz** 1987; 82 Suppl 4:55–65 (74 ref.)

Pathogenesis of sodium and water retention in high–output and low–output cardiac failure, nephrotic syndrome, cirrhosis, and pregnancy (1) [published erratum appears in N Engl J Med 1989 Mar 9;320(10):676] Schrier RW. **N Engl J Med** 1988 Oct 20;319(16):1065–72 (94 ref.)

Iron, copper and zinc levels in serum and cirrhotic liver of patients with and without hepatocellular carcinoma. Nagasue N, et al. **Oncology** 1989;46(5):293–6

16,16 Dimethyl prostaglandin E2 decreases the formation of collagen in fibrotic rat liver slices. Peters KM, et al. **Prostaglandins** 1989 Apr;37(4):445–56

Superiority of disease–specific over conventional formula in predicting creatinine clearance from serum creatinine in patients with liver cirrhosis. Echizen H, et al. **Ther Drug Monit** 1988;10(4):369–75

Sex hormone profile in cirrhosis liver. Thillai Thiruvadi Vallal S, et al. **Trop Gastroenterol** 1988 Oct–Dec; 9(4):199–210

[Fibronectin in liver cirrhosis: an immunohistochemical study] Li XA. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):124–6 (Eng. Abstr.) **(Chi)**

[Antibiotics and cirrhosis] Silvain C, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):71–9 (113 ref.) **(Fre)**

[Atrial natriuretic factor in cirrhosis] Vinel JP, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):697–703 (124 ref.) **(Fre)**

[Pharmacokinetics of cefotaxime in cirrhotic patients with or without ascites] Vincent P, et al. **Presse Med** 1988 Dec 10;17(44):2331–4 (Eng. Abstr.) **(Fre)**

[The galactose clearance capacity and values of reverse T3 in liver cirrhosis] Relli P, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):329–32 (Eng. Abstr.) **(Ita)**

[Examining water–electrolyte balance in liver cirrhosis with a view to therapeutic management] Reitano R, et al. **Clin Ter** 1988 Apr 30;125(2):101–5 (Eng. Abstr.) **(Ita)**

[Liver metabolism of indocyanine green and aminopyrine in liver cirrhosis: relations with functioning liver cell mass] Bolognesi M, et al. **Minerva Med** 1988 Dec;79(12):1035–41 (Eng. Abstr.) **(Ita)**

[Determination of zinc and copper in patients with liver cirrhosis of diverse clinical severity] Sartori M, et al. **Minerva Med** 1988 Oct;79(10):891–5 (Eng. Abstr.) **(Ita)**

[Study on the pharmacokinetics of UFT in patients with hepatocellular carcinoma associated with cirrhosis] Une Y, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3153–9 (Eng. Abstr.) **(Jpn)**

[Evaluation of DNA synthesis using antibromodeoxyuridine antibody in liver cirrhosis and chronic active hepatitis] Kuni Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2187–92 (Eng. Abstr.) **(Jpn)**

[Comparative characteristics of the lipid composition of lipoproteins of the blood plasma and ascitic fluid in liver cirrhosis] Kosukhin AB, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):13–7 (Eng. Abstr.) **(Rus)**

[Characteristics of changes in the oxygen regimen of patients with chronic hepatitis and liver cirrhosis] Volianskaia OE, et al. **Vrach Delo** 1988 Nov;(11):23–5 (Eng. Abstr.) **(Rus)**

MORTALITY

Effect of renal prostaglandins on survival in patients with liver cirrhosis. Kawasaki H, et al. **Am J Gastroenterol** 1989 Mar;84(3):285–9

Prognostic indicators of survival in patients with cirrhosis and esophageal varices, without previous bleeding. Merkel C, et al. **Am J Gastroenterol** 1989 Jul;84(7):717–22

Clinical features, course, viral markers and follow–up in young versus adult nonalcoholic cirrhotics—a retrospective study. Qureshi H, et al. **Digestion** 1989;42(2):110–5

Something new in liver cirrhosis epidemiology [letter] Melato M, et al. **Lancet** 1989 Aug 12;2(8659):395–6

Superiority of the Child–Pugh classification to quantitative liver function tests for assessing prognosis of liver cirrhosis. Albers I, et al. **Scand J Gastroenterol** 1989 Apr;24(3):269–76

[Mortality rates in alcoholic and non–alcoholic liver cirrhosis in Denmark] Andersen P, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):502–5 (Eng. Abstr.) **(Dan)**

[Mortality ratio of liver cirrhosis in Denmark (letter)] Graudal N, et al. **Ugeskr Laeger** 1989 May 22; 151(21):1331–2 **(Dan)**

PATHOLOGY

Glycosaminoglycan containing fat–storing cells in hepatic fibrogenesis. Szende B, et al. **Acta Morphol Hung** 1988; 36(3–4):241–51

Hepatic squamous cell carcinoma with hypercalcemia in liver cirrhosis. Arase Y, et al. **Acta Pathol Jpn** 1988 May; 38(5):643–50

Neovascularization of pericellular fibrosis in alcoholic liver disease. Taguchi K, et al. **Acta Pathol Jpn** 1988 May; 38(5):615–26

Evaluation of fibrosis in the disse space in noncirrhotic alcoholic liver disease. Robert P, et al. **Alcoholism (NY)** 1989 Apr;13(2):176–80

Evaluation of the incidence and significance of the "mosaic pattern" in patients with cirrhosis, noncirrhotic portal fibrosis, and extrahepatic obstruction. Sarin SK, et al. **Am J Gastroenterol** 1988 Nov;83(11):1235–9

Morphologic and functional changes in the remnant liver following resection for cirrhosis or chronic hepatitis. Kanematsu T, et al. **Am J Surg Pathol** 1989 Sep; 13(9):776–81

The role of morphometry in the cytology of well–differentiated hepatocarcinoma and cirrhosis with atypia. Zeppa P, et al. **Anal Quant Cytol Histol** 1988 Oct; 10(5):343–8

Detection of hepatotoxicity associated with methotrexate therapy for psoriasis. O'Connor GT, et al. **Arch Dermatol** 1989 Sep;125(9):1209–17

Mechanism of fibroplasia in chronic active hepatitis. An immunohistochemical study of various collagen types, fibronectin and laminin in human liver. Liang YR. **Chin Med J [Engl]** 1989 Jan;102(1):53–9

Smooth liver surface may conceal cirrhosis. Evidence for the late development of nodular surface of the cirrhotic liver. Orlando R, et al. **Endoscopy** 1988 Nov;20(6):323–5

Comparison of snare and large forceps biopsies in the histologic diagnosis of gastric vascular ectasia in cirrhosis. Saperas E, et al. **Endoscopy** 1989 Jul;21(4):165–7

Hepatocellular carcinoma without cirrhosis in Japanese patients. Okuda K, et al. **Gastroenterology** 1989 Jul; 97(1):140–6

Studies on the size of human male gonad in biomorphosis, alcohol intoxication, and cirrhosis—a review and own findings. Sośni'. H. **Gegenbaurs Morphol Jahrb** 1988; 134(5):733–61

Perinatal idiopathic hemochromatosis. Raju UB, et al. **Henry Ford Hosp Med J** 1988;36(4):187–90

Large regenerative nodules and dysplastic nodules in cirrhotic livers: a histopathologic study. Wada K, et al. **Hepatology** 1988 Nov–Dec;8(6):1684–8

Vascular transformation of lymph node sinuses in a patient with liver cirrhosis. A case report. Yokozaki H, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):89–92

Massive pericellular collagen deposition in the liver of a young female with severe Crohn's disease. Bosma A, et al. **Histopathology** 1989 Jan;14(1):81–90

Incomplete septal cirrhosis: histopathological aspects. Sciot R, et al. **Histopathology** 1988 Dec;13(6):593–603

Mallory body clustering in adenomatous hyperplasia in human cirrhotic livers: report of four cases. Terada T, et al. **Hum Pathol** 1989 Sep;20(9):868–90

Comparison of intralobar non–parenchyma, subcapsular non–parenchyma, and liver capsule thickness. Ryoo JW, et al. **J Clin Pathol** 1989 Jul;42(7):740–4

Hepatic vein webs and resistant ascites. Diagnosis, management and implications. Vickers CR, et al. **J Hepatol** 1989 May;8(3):287–93

Regenerating liver macronodule causing biliary obstruction. Kane RA, et al. **JCU** 1989 Jul–Aug;17(6):434–8

Morphometry of liver parenchyma in needle biopsy specimens from patients with alcoholic liver disease: preliminary variables for the diagnosis and prognosis of cirrhosis. Ryoo JW, et al. **Mod Pathol** 1989 Jul;2(4):382–9

Growth patterns of the fibrous septa of cirrhosis. A morphometric and allometric study. Pesce CM, et al. **Pathol Res Pract** 1989 May;184(5):486–8

Stereometry of male gonad and the value of the topological index of sudanophilic bodies (SLey). Correlative investigations. Sośnik H. **Patol Pol** 1988 Oct–Dec; 39(4):284–94

Liver volume measurements and three–dimensional display from MR images. McNeal GR, et al. **Radiology** 1988 Dec; 169(3):851–4

Correlation of ultrasonic attenuation with pathologic fat and fibrosis in liver disease. Lin T, et al. **Ultrasound Med Biol** 1988;14(8):729–34 (20 ref.)

Fatty macroregenerative nodule in non–steatotic liver cirrhosis. A morphologic study. Terada T, et al. **Virchows Arch [A]** 1989;415(2):131–6

[Analysis of 35 cases of pathology in yin deficiency syndrome] Dai HL, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):7–9, 3 (Eng. Abstr.) **(Chi)**

[Comparison of pathological features between hepatocellular carcinoma with and without liver cirrhosis] Lai RQ. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):289–91 (Eng. Abstr.) **(Chi)**

[Clinicopathologic findings of hepatic neuropathy: a case report] Chen QT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):160–2, 189 (Eng. Abstr.) **(Chi)**

[Pseudotumor nodules of the liver in cirrhotic patients. Study of 7 cases] Cadranel JF, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):833–40 (23 ref.) (Eng. Abstr.) **(Fre)**

[A 35–year–old patient with necrotizing exanthema, restrictive cardiomyopathy, liver cirrhosis and acute psychosis] Schön S, et al. **Med Klin** 1989 Mar 15; 84(3):139–43 **(Ger)**

[Rapid development of liver cirrhosis following acute non–A, non–B hepatitis] Huth M, et al. **Z Gastroenterol** 1989 May; 27(5):272–8 (Eng. Abstr.) **(Ger)**

[Ultrastructure of Ito cells in fibrotic liver diseases] Bartók I, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jan;29(1):18–29 (41 ref.) (Eng. Abstr.) **(Hun)**

[Liver cirrhosis. Survival of a homogeneous population] Donà G, et al. **G Clin Med** 1989 Apr;70(4):255–62 (Eng. Abstr.) **(Ita)**

[Cytology in the diagnosis of chronic hepatopathies] Genova G, et al. **Pathologica** 1988 May–Jun;80(1067):325–32 (Eng. Abstr.) **(Ita)**

[A case of Cruveilhier–Baumgarten syndrome. The elucidation of collateral vessels of the portal system by magnetic resonance image] Hashimoto A, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1410–6 **(Jpn)**

[Quantitative analysis of morphological parameters in the cirrhotic liver using automatic image analyzer—the correlation with liver function and Miyake's classification] Nishiyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1672–80 (Eng. Abstr.) **(Jpn)**

[A case of a small hepatoma with multicentric development in precirrhotic fibrosis] Sanefuji H, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):331–6 (Eng. Abstr.) **(Jpn)**

[Pathomorphology of congenital liver fibrosis in children] Klochkov SA, et al. **Arkh Patol** 1988;50(11):60–6 (Eng. Abstr.) **(Rus)**

[The role of the hepatitis B virus in the development of liver cirrhosis and tumors] Shaff J, et al. **Arkh Patol** 1988; 50(11):47–51 (Eng. Abstr.) **(Rus)**

[Collagen and fibronectin of the liver in children with congenital fibrosis, an extrahepatic portal circulation block and post–hepatitis cirrhosis (an immunohistochemical study)] Shekhonin BV, et al. **Arkh Patol** 1989;51(4):35–41 (Eng. Abstr.) **(Rus)**

[Hepatic fibropolycystic disease (Caroli's disease and congenital hepatic fibrosis)] Angeles–Angeles A, et al. **Gac Med Mex** 1988 Sep–Oct;124(9–10):391–4 **(Spa)**

PHYSIOPATHOLOGY

Psychomotor dysfunctions in alcoholic and post–necrotic cirrhotic patients without overt encephalopathy. Puca FM, et al. **Acta Neurol Scand** 1989 Apr;79(4):280–7

Differences in portal hemodynamics in cirrhosis and idiopathic portal hypertension. Ohnishi K, et al. **Am J Gastroenterol** 1989 Apr;84(4):409–12

Effects of propranolol and nitroglycerin on cephalad collateral venous flow in patients with cirrhosis: evaluation using transesophageal real–time two–dimensional Doppler echography. Sukigara M, et al. **Am J Gastroenterol** 1988 Nov;83(11):1248–54

Relationship between plasma ANF responsiveness and renal

sodium handling in cirrhotic humans. Epstein M, et al. **Am J Nephrol** 1989;9(2):133–43
Interstitial dynamics in rats with early stage experimental cirrhosis of the liver. Sanz E, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F497–503
Pulmonary hemodynamics and gas exchange during exercise in liver cirrhosis. Agusti AG, et al. **Am Rev Respir Dis** 1989 Feb;139(2):485–91
Manipulation of ascitic fluid pressure in cirrhotics to optimize hemodynamic and renal function. Savino JA, et al. **Ann Surg** 1988 Oct;208(4):504–11
Hyperresponsiveness to water immersion in sodium retaining cirrhotics: the role of atrial natriuretic factor. Campbell PJ, et al. **Clin Invest Med** 1988 Dec;11(6):392–5
Gastric secretion in cirrhosis and non-cirrhotic portal fibrosis. Gaur SK, et al. **Digestion** 1988;39(3):151–5
The application of F wave measurements in hepatic patients. Fierro B, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov;70(5):442–6
Long-term effect of nadolol on quantitative liver function tests in patients with cirrhosis. Merkel C, et al. **Eur J Clin Pharmacol** 1988;34(5):501–4
Renal hemodynamic and natriuretic effects of human atrial natriuretic factor infusion in cirrhosis with ascites. Laffi G, et al. **Gastroenterology** 1989 Jan;96(1):167–77
Reduction of portal pressure by isosorbide-5-mononitrate in patients with cirrhosis. Effects on splanchnic and systemic hemodynamics and liver function. Navasa M, et al. **Gastroenterology** 1989 Apr;96(4):1110–8
Pressure of intraoesophageal varices assessed by fine needle puncture: its relation to endoscopic signs and severity of liver disease in patients with cirrhosis. Kleber G, et al. **Gut** 1989 Feb;30(2):228–32
Blunted natriuretic response and low blood pressure after atrial natriuretic factor in early cirrhosis. Beutler JJ, et al. **Hepatology** 1989 Aug;10(2):148–53
Propranolol does not alter cerebral blood flow and functions in cirrhotic patients without previous hepatic encephalopathy. Calès P, et al. **Hepatology** 1989 Mar; 9(3):439–42
Effect of meal on portal hemodynamics in healthy humans and in patients with chronic liver disease. Gaiani S, et al. **Hepatology** 1989 Jun;9(6):815–9
Altered platelet function in cirrhosis of the liver: impairment of inositol lipid and arachidonic acid metabolism in response to agonists. Laffi G, et al. **Hepatology** 1988 Nov-Dec;8(6):1620–6
Beta-blockade with propranolol and hepatic artery blood flow in patients with cirrhosis. Mastai R, et al. **Hepatology** 1989 Sep;10(3):269–72
Lack of effects of isosorbide-5-mononitrate on hepatic hemodynamics in HBsAg-positive cirrhosis. Tsai YT, et al. **Hepatology** 1989 Sep;10(3):283–7
Growth hormone and carbohydrate intolerance in cirrhosis. Shankar TP, et al. **Horm Metab Res** 1988 Sep;20(9):579–83
Biogenic amines in relation to gastric acid secretion in hepatic cirrhosis. Rao JJ, et al. **Indian J Med Sci** 1988 Jul; 42(7):157–61
Acute effects of peritoneovenous shunt (Le Veen) on the hemodynamics and gas exchange in patients with hepatic intractable ascites. Brandi LS, et al. **Ital J Surg Sci** 1988; 18(2):137–42
A framework for evaluating and conducting prognostic studies: an application to cirrhosis of the liver. Infante-Rivard C, et al. **J Clin Epidemiol** 1989; 42(8):791–805 (65 ref.)
Renal function and effective beta-blockade in cirrhosis with ascites. Relationship with baseline sympathoadrenergic tone. Bernardi M, et al. **J Hepatol** 1989 May;8(3):279–86
Liver fibrosis and extracellular matrix. Biagini G, et al. **J Hepatol** 1989 Jan;8(1):115–24 (65 ref.)
Indocyanine green intrinsic hepatic clearance as a prognostic index of survival in patients with cirrhosis. Merkel C, et al. **J Hepatol** 1989 Jul;9(1):16–22
Fron the Alcohol, Drug Abuse and Mental Health Administration. **JAMA** 1989 Apr 21;261(15):2175
Hepatic reticulo-endothelial function: a correlation of radioisotopic and immunohistochemical assessment. Triger DR, et al. **Liver** 1989 Apr;9(2):86–92
Renal nerves in renal sodium-retaining states: cirrhotic ascites, congestive heart failure, nephrotic syndrome. Zambraski EJ. **Miner Electrolyte Metab** 1989;15(1-2):88–96 (41 ref.)
Hepatic macrophage function in schistosomal glomerulopathy. Barsoum RS, et al. **Nephrol Dial Transplant** 1988;3(5):612–6
A DIC-like picture on plasma and ascitic fluid of cirrhotic patients. Patrassi GM, et al. **Res Exp Med (Berl)** 1988; 188(5):351–6
Laboratory parameters in the natural history of liver cirrhosis. Milani A, et al. **Ric Clin Lab** 1989 Apr-Jun; 19(2):173–8
Esophageal motility in cirrhotics with and without esophageal varices. Passaretti S, et al. **Scand J Gastroenterol** 1989 Apr;24(3):334–8
Characterization of hepatic hemodynamics in cirrhotics and non-cirrhotics. Effect of glucagon infusion. Sato N, et al. **Scand J Gastroenterol** 1989 Mar;24(2):223–30
Wedged hepatic venous pressure recording and venography for the assessment of pre-cirrhotic and cirrhotic liver disease. van Leeuwen DJ, et al. **Scand J Gastroenterol** 1989 Jan;24(1):65–73

[Reaction of the cardiovascular and humoral system to acute hypervolemia in patients with liver cirrhosis] Kozáková M, et al. **Cas Lek Cesk** 1989 Feb 3;128(6):168–73 (Eng. Abstr.) (Cze)
[Does the atrial natriuretic factor play a role in cirrhosis?] Donckier J. **Acta Gastroenterol Belg** 1987 Nov-Dec; 50(6):649–55 (48 ref.) (Fre)
[Why are metastases in cirrhotic livers so rare?] Seitz G. **Ultraschall Med** 1989 Jun;10(3):123–6 (28 ref.) (Eng. Abstr.) (Ger)
[ACE and systemic hemodynamic changes in liver cirrhosis] Reitano R, et al. **Clin Ter** 1987 Jul 15;122(1):33–8 (Eng. Abstr.) (Ita)
[Circadian rhythm of atrial natriuretic peptide, plasma renin and aldosterone activity in healthy subjects and in patients with compensated liver cirrhosis] Colantonio D, et al. **Recenti Prog Med** 1989 Mar;80(3):147–9 (Eng. Abstr.) (Ita)
[The effects of exercise on liver function in patients with chronic liver disease] Takiguchi F. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):132–43 (Eng. Abstr.) (Jpn)
[Evaluation of gallbladder emptying in patients with chronic liver disease by 99mTc-EHIDA hepatobiliary scintigraphy] Kurihara N, et al. **Radioisotopes** 1989 Jun; 38(6):269–74 (Eng. Abstr.) (Jpn)
[A case of hyperechoic regenerative nodule in liver cirrhosis] Niizawa M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1031–3 (Eng. Abstr.) (Jpn)
[Effect of disorders of liver function on vitamin D absorption in children with post-hepatitis cirrhosis of the liver] Ryżko J, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1559–61 (Pol)
[Hormonal changes in chronic diffuse diseases of the liver] Dusiov AD. **Sov Med** 1989;(5):19–22 (Eng. Abstr.) (Rus)
[Echographic and hemodynamic indicators in liver cirrhosis with portal hypertension] Rikhsieva LE, et al. **Sov Med** 1989;(2):13–5 (Eng. Abstr.) (Rus)
[Fibronectin and Kupffer cells in hepatic cirrhosis] Muñoz Villafranca MC, et al. **Rev Esp Enferm Apar Dig** 1988 Oct; 74(4 Pt 1):313–7 (Eng. Abstr.) (Spa)
[The kallikrein-kinin system in digestive diseases] Pérez Blanco FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):573–6 (61 ref.) (Eng. Abstr.) (Spa)

RADIOGRAPHY

Acquired malposition of the colon and gallbladder in patients with cirrhosis: CT findings and clinical implications. Gore RM, et al. **Radiology** 1989 Jun;171(3):739–42
[Lipiodol UltraFluid in the imaging diagnosis of hepatocarcinoma with cirrhosis] Roversi R, et al. **Radiol Med (Torino)** 1989 Jul-Aug;78(1-2):44–52 (Eng. Abstr.) (Ita)
[Changes in liver and spleen volume in various types of compensated liver cirrhosis--measurement by computed tomography] Hoshino H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2577–82 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

Integrated dynamic image of the liver: a new dynamic study for evaluation of liver disease. Suzuki Y, et al. **Nucl Med Commun** 1988 Jul;9(7):533–40
[Evaluation of changes in portal collaterals by single photon emission CT: effects of endoscopic injection sclerotherapy] Azuma M, et al. **Kaku Igaku** 1989 Feb;26(2):171–5 (Eng. Abstr.) (Jpn)

SURGERY

Operative timing and patient survival following distal splenorenal shunt. Pomerantz RA, et al. **Am Surg** 1989 Jun; 55(6):333–7
Prognostic value of indocyanine green and lidocaine kinetics for survival and chronic hepatic encephalopathy in cirrhotic patients following elective end-to-side portacaval shunt. Pomier-Layrargues G, et al. **Hepatology** 1988 Nov-Dec;8(6):1506–10
Experimental study of vagotomy for prevention of stress ulcer after hepatectomy of cirrhotic livers. Its influence on hepatic regeneration. Urakawa T, et al. **Scand J Gastroenterol** 1988 Aug;23(6):705–11
Use of microcrystalline collagen powder and fibrinogen tissue adhesive for hemostasis and prevention of rebleeding in patients with hepatocellular carcinoma associated with cirrhosis of the liver. Sakon M, et al. **Surg Gynecol Obstet** 1989 May;168(5):453–4
Graft hepatitis delta virus reinfection after orthotopic liver transplantation in HDV cirrhosis. Reynès M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2424–5
[Results of portal shunts for intractable ascites in patients with cirrhosis. 57 cases] Hannoun L, et al. **Chirurgie** 1988; 114(6):497–501 (16 ref.) (Eng. Abstr.) (Fre)
[Late results of Warren's distal splenorenal shunt] Gouillat C, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):291–7 (Eng. Abstr.) (Fre)
[Peritoneovenous shunting in intractable ascites of cirrhosis. Results of a prospective study on improving prognostic factors] Hillaire S, et al. **Gastroenterol Clin Biol** 1988 Oct; 12(10):681–6 (Eng. Abstr.) (Fre)
[Liver transplantation: initial experiences from Zurich] Decurtins M, et al. **Helv Chir Acta** 1989 Jan;55(5):633–6 (Eng. Abstr.) (Ger)
[Manifestation of Gilbert syndrome (Meulengracht disease) following orthotopic liver transplantation: a rare cause of postoperative hyperbilirubinemia] Henne-Bruns D, et al. **Klin Wochenschr** 1988 Jul 1;66(13):596–8 (Eng. Abstr.) (Ger)
[Liver transplantation in low portal vein flow: separation of portal vein areas with divided portal-venous and arterialized caval-venous liver perfusion. 1. Clinical case report] Pichlmayr R, et al. **Langenbecks Arch Chir** 1989; 374(4):232–9 (Eng. Abstr.) (Ger)
[Liver transplantation] Pichlmayr R. **Verh Dtsch Ges Inn Med** 1988;94:326–9 (Ger)
[Peritoneovenous shunt complicating a glomerulonephritis associated with bacteremia. Description of a clinical case] Rocca F, et al. **Recenti Prog Med** 1989 Apr;80(4):186–7 (Eng. Abstr.) (Ita)
[Significance of perioperative nutritional support and activation of the reticuloendothelial system on the resection of the cirrhotic liver] Ouchi K, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1371–4 (Eng. Abstr.) (Jpn)
[Use of the Leveen shunt in the treatment of clinically intractable ascites] D'Albuquerque LA, et al. **Arq Gastroenterol** 1988 Jul-Sep;25(3):138–44 (Eng. Abstr.) (Por)
[Profuse intra-abdominal hemorrhage in laparocentesis of ascites] Kukharuk FE, et al. **Klin Khir** 1988;(9):47–8 (Rus)
[Our judgements on the potential for surgical treatment of patients with liver cirrhosis and portal hypertension] Tsatsanidi KN, et al. **Ter Arkh** 1988;60(10):26–30 (Eng. Abstr.) (Rus)

THERAPY

Prognosis of patients with cirrhosis and chronic liver disease admitted to the medical intensive care unit [letter] Adams J, et al. **Crit Care Med** 1989 Aug;17(8):843–4
Prognosis of patients with cirrhosis and chronic liver disease in the medical intensive care unit [letter] Grundler WG. **Crit Care Med** 1989 Jul;17(7):710
Temporary deterioration of pulmonary functions after injection sclerotherapy for cirrhotic patients with esophageal varices. Kitano S, et al. **Eur Surg Res** 1988; 20(5-6):298–303
Pathogenesis of sodium and water retention [letter; comment] Munoz SJ. **N Engl J Med** 1989 Jun 8;320(23):1561–2. **Comment on:** N Engl J Med 1988 Oct 27;319(17):1127–34
Results of treatment of patients with hepatocellular carcinoma with severe cirrhosis of the liver. Fujio N, et al. **World J Surg** 1989 Mar-Apr;13(2):211–7; discussion 217–8
[Treatment of cirrhotic ascites] Zhang BL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):415–8, 454 (Eng. Abstr.) (Chi)
[Orthograde intestinal irrigation with a mannitol solution in reducing hepatic encephalopathy in patients with liver cirrhosis and gastrointestinal hemorrhage] Micklefield GH, et al. **Z Gastroenterol** 1989 Jul;27(7):374–7 (Eng. Abstr.) (Ger)
[Blood correctors in the combined therapy of chronic hepatitis and liver cirrhosis] Zherebtsov LA, et al. **Gematol Transfuziol** 1988 Jul;33(7):3–7 (Eng. Abstr.) (Rus)
[A trial of reduction of arterial hepatic blood flow in cardial cirrhosis of the liver] Buianov VM, et al. **Sov Med** 1988; (6):24–6 (Eng. Abstr.) (Rus)
[Sorption detoxication in cirrhosis of the liver] Sitnikov VA, et al. **Sov Med** 1988;(5):108–12 (Rus)
[Organizational and economic aspects of the treatment of patients with liver cirrhosis of alcoholic and viral etiologies] Ermakov VV, et al. **Sov Zdravookhr** 1988; (12):17–9 (Eng. Abstr.) (Rus)
[Ultrasonic echography in evaluating splenic blood circulation] Rikhcieva LE, et al. **Vestn Khir** 1989 Mar; 142(3):55–7 (Rus)
[Angiographic evaluation of the results of roentgeno-endovascular occlusion of the hepatic artery] Tarazov PG, et al. **Vestn Khir** 1988 Oct;141(10):30–5 (Eng. Abstr.) (Rus)
[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24–7 (Eng. Abstr.) (Rus)

URINE

Analysis of cysteinyl leukotrienes in human urine: enhanced excretion in patients with liver cirrhosis and hepatorenal syndrome. Huber M, et al. **Eur J Clin Invest** 1989 Feb; 19(1):53–60
Renal prostaglandin E2 and other vasoactive modulators in refractory hepatic ascites: response to peritoneovenous shunting. Shaw-Stiffel T, et al. **Gastroenterology** 1988 Nov; 95(5):1332–8
Circadian variation in renal sodium and potassium handling in cirrhosis. The role of aldosterone, cortisol, sympathoadrenergic tone, and intratubular factors. Trevisani F, et al. **Gastroenterology** 1989 Apr;96(4):1187–98
Purification of PGE2 in the urine of cirrhotic patients: comparison of three chromatographic techniques. Laffi G, et al. **J Nucl Med Allied Sci** 1988 Apr-Jun;32(2):67–74

Enhancement of renal function by a long-acting somatostatin analogue in patients with decompensated cirrhosis. Mountokalakis T, et al. **Nephrol Dial Transplant** 1988; 3(5):604–7

The kallikrein–kininogen–kinin system in patients with liver disease and ascites. Solomon R, et al. **Nephron** 1988; 50(1):39–44

[Excretion of renal kallikrein in liver cirrhosis] Pérez Blanco FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):505–8 (Eng. Abstr.) (Spa)

VETERINARY

Hepatic cirrhosis in two young dogs. Obwolo MJ, et al. **Vet Rec** 1988 Aug 27;123(9):231–2

[Liver cirrhosis in young calves] Doll K, et al. **Tierarztl Prax** 1989;17(2):149–56 (Eng. Abstr.) (Ger)

LIVER CIRRHOSIS, ALCOHOLIC

Mechanisms of alcoholic liver damage. **Mol Aspects Med** 1988;10(2):93–194

Episodic confusion and tremor associated with extrahepatic portacaval shunting in cirrhotic liver disease. Russell DM, et al. **Neurology** 1989 Mar;39(3):403–5

BLOOD

Thyroid hormones and thyroxine–binding globulin in relation to liver function and serum testosterone in men with alcoholic cirrhosis. Becker U, et al. **Acta Med Scand** 1988; 224(4):367–73

Serum selenium in liver cirrhosis: correlation with markers of fibrosis. Casaril M, et al. **Clin Chim Acta** 1989 Jun 30; 182(2):221–7

Serum and ascitic fluid concentrations of apolipoproteins A and B in alcoholic cirrhosis patients. Nayak SS, et al. **Clin Chim Acta** 1989 Feb 15;179(2):207–9

Pharmacokinetics of ornidazole in patients with acute viral hepatitis, alcoholic cirrhosis, and extrahepatic cholestasis. Taburet AM, et al. **Clin Pharmacol Ther** 1989 Apr; 45(4):373–9

Testosterone and alcoholic cirrhosis. Epidemiologic, pathophysiologic and therapeutic studies in men. Gluud C. **Dan Med Bull** 1988 Dec;35(6):564–75 (172 ref.)

Increased serum corrinoids correlates with disease severity and IgA levels in alcoholic cirrhosis. Djalali M, et al. **Digestion** 1988;41(4):215–22

Plasma levels of atrial natriuretic peptide in patients with liver cirrhosis and its relation to ascites and renal function. Fukui H, et al. **Gastroenterol Jpn** 1989 Apr;24(2):149–55

Lipids changes in alcoholic & non–alcoholic cirrhotics. Manocha S, et al. **Indian J Med Res** 1989 Feb;90:55–61

Transport of serum bile acids in patients with liver cirrhosis and hyperbilirubinaemia. Hedenborg G, et al. **Scand J Clin Lab Invest** 1988 Dec;48(8):817–24

[Role of the serum level of mitochondrial aspartate aminotransferase as marker of alcoholic intoxication in cirrhotic patients] Ink O, et al. **Presse Med** 1989 Jan 28; 18(3):111–4 (Eng. Abstr.) (Fre)

[Alcohol and endocrinologic homeostasis] Keck E, et al. **Z Gastroenterol** 1988 Oct;26 Suppl 3:39–46 (47 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Acute metabolic alkalosis with hypokalemia and azotemia following massive upper gastrointestinal hemorrhage in a 54–year–old alcoholic man with cirrhosis [letter] De Marchi S, et al. **Am J Nephrol** 1988;8(5):433–4

Randomized clinical trials of treatment of ascites in alcoholic cirrhotics. Medical treatment versus peritoneovenous shunting. Stanley MM. **ASAIO Trans** 1989 Apr–Jun; 35(2):174–6 (7 ref.)

Gonadal dysfunction and inadequate sexual performance in alcoholic cirrhotic men. Gavaler JS, et al. **Gastroenterology** 1988 Dec;95(6):1680–3

No effect of oral testosterone treatment on sexual dysfunction in alcoholic cirrhotic men. Gluud C, et al. **Gastroenterology** 1988 Dec;95(6):1582–7

Beta–blockade prevents recurrent gastrointestinal bleeding in well–compensated patients with alcoholic cirrhosis: a multicenter randomized controlled trial. Colombo M, et al. **Hepatology** 1989 Mar;9(3):433–8

Prostatic hypertrophy in the elderly cirrhotic patient: an estrogenic or androgenic response? Van Thiel DH, et al. **Hepatology** 1989 Jan;9(1):167–8

Ultrasound documentation of diaphragmatic rent in hepatic hydrothorax. Raju EP, et al. **Indian J Gastroenterol** 1989 Apr;8(2):111–2

Fibrinous pericarditis in alcoholic liver disease. Yang SS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):53–5

HBV–DNA hybridization in hepatocellular carcinoma associated with alcohol in Japan. Horiike N, et al. **J Med Virol** 1989 Jul;28(3):189–92

Clostridium perfringens septicaemia associated with liver cirrhosis [letter] Han LK, et al. **Med J Aust** 1979 Oct 20; 2(8):431–2

Bleeding colonic varices controlled by propranolol. McAlpine LG, et al. **Scott Med J** 1988 Dec;33(6):370–1

Vibrio sepsis in a cirrhotic patient. Jordan JH, et al. **South Med J** 1989 Jun;82(6):799–800

Multiple myeloma in alcoholic liver cirrhosis. Ito M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):39–44 (15 ref.)

Recurrent spontaneous infected pleural effusion in a patient with alcoholic cirrhosis, hepatic hydrothorax, and ascites. Baylor PA, et al. **West J Med** 1988 Aug;149(2):216–7

[Predictive factors of the first digestive hemorrhage and death in cirrhotic patients with esophageal varices] Calès P. **Gastroenterol Clin Biol** 1989 Jan;13(1):54–9 (Eng. Abstr.) (Fre)

[Can septicemia and ascitic fluid infections in cirrhotic patients be treated by the oral route alone?] Silvain C, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):335–9 (Eng. Abstr.) (Fre)

[The glomerulopathies of cirrhosis of the liver] Karmochkine M, et al. **Presse Med** 1989 Apr 29;18(17):876–9 (22 ref.) (Eng. Abstr.) (Fre)

[A case of fibro–lamellar carcinoma of the liver] Cardano S, et al. **G Clin Med** 1988 Jun–Jul;69(6–7):439–41 (Eng. Abstr.) (Ita)

[Recent advances in surgical therapy of hepatocarcinomas. 5 questions on the exeresis of carcinomas of the cirrhotic liver] Belghiti J, et al. **Minerva Chir** 1989 Mar 31; 44(6):933–5 (5 ref.) (Eng. Abstr.) (Ita)

[Infectious endocarditis, meningitis and pneumonia in alcoholic liver cirrhosis] Zharkov OB, et al. **Ter Arkh** 1988; 60(10):115–7 (Rus)

[Evaluation of cortical bone atrophy: its usefulness in the diagnosis of osteoporosis associated with liver cirrhosis] Jorge Hernández JA, et al. **Rev Clin Esp** 1988 May; 182(8):412–8 (Eng. Abstr.) (Spa)

DIAGNOSIS

The measurement of D,L–2,3–butanediol in controls and patients with alcoholic cirrhosis. Casazza JP, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):33–5

Serum procollagen III N–terminal peptide and laminin P1 fragment concentrations in alcoholic liver disease and primary biliary cirrhosis. van Zanten RA, et al. **Clin Chim Acta** 1988 Oct 14;177(2):141–6

[Analysis of hospitalizations over 10 years before the manifestation of alcoholic cirrhosis (letter)] Clerc P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):970 (Fre)

DIET THERAPY

[Zinc and alcoholic liver cirrhosis] Floriani M, et al. **G Clin Med** 1988 May;69(5):341–5 (Eng. Abstr.) (Ita)

DRUG THERAPY

Hepatoprotective and immunomodulatory effects of antioxidant therapy. Láng I, et al. **Acta Med Hung** 1988; 45(3–4):287–95

Combination of ketanserin and verapamil or propranolol in patients with alcoholic cirrhosis: search for an additive effect. Hadengue A, et al. **Hepatology** 1989 Jan;9(1):83–7

Low dose of nitroglycerin failed to improve splanchnic hemodynamics in patients with cirrhosis: evidence for an impaired cardiopulmonary baroreflex function. Moreau R, et al. **Hepatology** 1989 Jul;10(1):93–7

Long–term hemodynamic effects of ketanserin, a 5–hydroxytryptamine blocker, in portal hypertensive patients. Vorobioff J, et al. **Hepatology** 1989 Jan;9(1):88–91

Effect of propranolol on metabolic activity of the liver in patients with alcoholic cirrhosis. Vinel JP, et al. **J Hepatol** 1988 Oct;7(2):186–92

[Effect of posture on the diuretic treatment of decompensated cirrhosis and heart failure] Wilken–Jensen C, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):13–5 (Eng. Abstr.) (Dan)

[Diuretic resistance of liver cirrhosis: pharmacologic treatment approaches] Gross P, et al. **Klin Wochenschr** 1989 Aug 1;67(15):790–2 (11 ref.) (Ger)

[Drug therapy of alcoholic liver damage] Thaler H. **Verh Dtsch Ges Inn Med** 1988;94:312–6 (32 ref.) (Ger)

ENZYMOLOGY

Effect of free radical scavengers on superoxide dismutase (SOD) enzyme in patients with alcoholic cirrhosis. Fehér J, et al. **Acta Med Hung** 1988;45(3–4):265–76

The circadian rhythm of serum angiotensin–converting enzyme is disrupted in ascitic liver cirrhosis. Cugini P, et al. **Enzyme** 1989;41(2):94–100

Differential effects of malotilate on 5–, 12– and 15–lipoxygenase in human ascites cells. Zijlstra FJ, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):291–5

EPIDEMIOLOGY

Hospital morbidity from cirrhosis of the liver and per capita consumption of absolute alcohol in Ontario, 1978 to 1982: a descriptive analysis. Hunter DJ, et al. **Can J Public Health** 1988 Jul–Aug;79(4):243–8

ETIOLOGY

Alcohol and liver injury: dose–related or permissive effect? Sørensen TI. **Liver** 1989 Aug;9(4):189–97 (36 ref.)

Factors determining cirrhosis in alcoholic liver disease. Bird GL, et al. **Mol Aspects Med** 1988;10(2):97–105 (26 ref.)

Nutrition and alcoholic liver damage [letter] Rao GA, et al. **Nutr Rev** 1989 Feb;47(2):63–4

Alcoholic liver injury. Davis M. **Proc Nutr Soc** 1988 Jul; 47(2):115–20 (54 ref.)

[A case of myocardial dystrophy associated with liver cirrhosis in alcoholism] Tokmachev IuK, et al. **Klin Med (Mosk)** 1989 Feb;67(2):127–9 (Rus)

GENETICS

Haplotype analysis of a type I collagen gene and its association with alcoholic cirrhosis in man. Weiner FR, et al. **Mol Aspects Med** 1988;10(2):159–68

IMMUNOLOGY

Decreased proliferative activity associated with activation markers in patients with alcoholic liver cirrhosis. Devière J, et al. **Clin Exp Immunol** 1988 Jun;72(3):377–82

High interleukin–6 serum levels and increased production by leucocytes in alcoholic liver cirrhosis. Correlation with IgA serum levels and lymphokines production. Deviere J, et al. **Clin Exp Immunol** 1989 Aug;77(2):221–5

Effect of (+)cyanidanol–3 on cellular immune reactions and on superoxide dismutase activity in vitro. Láng I, et al. **Free Radic Res Commun** 1987;4(1):51–60

[In vitro demonstration of a deficit in suppressor T–cell function in alcoholic cirrhosis. Role of hepatitis B virus infection] Vetter D, et al. **Gastroenterol Clin Biol** 1989 Jan; 13(1):60–5 (Eng. Abstr.) (Fre)

METABOLISM

Sufentanil pharmacokinetics in patients with cirrhosis. Chauvin M, et al. **Anesth Analg** 1989 Jan;68(1):1–4

Vitamin B6 status in cirrhotic patients in relation to apoenzyme of serum alanine aminotransferase. Ohgi N, et al. **Clin Biochem** 1988 Dec;21(6):367–70

Tianeptine and its main metabolite pharmacokinetics in chronic alcoholism and cirrhosis. Royer RJ, et al. **Clin Pharmacokinet** 1989 Mar;16(3):186–91

Flumazenil disposition and elimination in cirrhosis. Janssen U, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):317–23

Decreased hepatic selenium content in alcoholic cirrhosis. Dworkin BM, et al. **Dig Dis Sci** 1988 Oct;33(10):1213–7

Frequency of upper gastrointestinal lesions in patients with liver cirrhosis. Sacchetti C, et al. **Dig Dis Sci** 1988 Oct; 33(10):1218–22

The pharmacokinetics of ceftriaxone and cefotaxime in cirrhotic patients with ascites. Hary L, et al. **Eur J Clin Pharmacol** 1989;36(6):613–6

Zinc in liver cirrhosis after intravenous zinc sulphate overload [letter] Gil Extremera B, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):429

Functional and structural changes in parotid glands of alcoholic cirrhotic patients. Dutta SK, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):510–8

The relationship between insulin sensitivity and skeletal muscle enzyme activities in hepatic cirrhosis. Kruszynska Y, et al. **Hepatology** 1988 Nov–Dec;8(6):1615–9

Hepatic sinusoidal endothelium: Ulex lectin binding. Petrovic LM, et al. **Histopathology** 1989 Mar;14(3):233–43

Effect of protein binding on testosterone extraction by human cirrhotic liver: evidence for a dissociation–limited uptake. Guéchot J, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):200–3

Insulin and C–peptide in ascitic fluid and plasma and their relative responses to glucagon in patients with cirrhosis. Akgün S, et al. **J Endocrinol Invest** 1988 Dec;11(11):789–93

Abnormal tissue oxygenation in patients with cirrhosis and liver failure. Moreau R, et al. **J Hepatol** 1988 Aug; 7(1):98–105

Splanchnic and hepatic renin metabolism in alcoholic cirrhosis. Lack of evidence of a splanchnic source of production or of significantly impaired hepatic clearance. Rector WG Jr, et al. **J Hepatol** 1988 Aug;7(1):93–7

Excretion of [24–14C] glycochenodeoxycholate–3–sulphate in patients with liver cirrhosis. Hedenborg G, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):15–21

Bile constituents in ascitic fluid. Hedenborg G, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):543–52

[Energy expenditure and the use of nutriments in cirrhotic patients fasting and at rest. Influence of alcoholic hepatitis and the severity score of the disease] Campillo B, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):544–50 (Eng. Abstr.) (Fre)

MORTALITY

Interpreting trends in alcohol consumption and alcohol related damage. Skog OJ. **Alcohol Alcohol** 1988; 23(3):193–202 (41 ref.)

Effect on liver cirrhosis and traffic accident mortality of changing the number and type of alcohol outlets in western Australia. Smith DI. **Alcoholism (NY)** 1989 Apr;13(2):190–5

Alcohol and liver injury: dose–related or permissive effect? Sørensen TI. **Br J Addict** 1989 Jun;84(6):581–9 (36 ref.)

Clinical features, course, viral markers and follow–up in young versus adult nonalcoholic cirrhotics—a retrospective study. Qureshi H, et al. **Digestion** 1989;42(2):110–5

Trends in alcohol–related morbidity and mortality. Williams GD, et al. **Public Health Rep** 1988 Nov–Dec;103(6):592–7

Underreporting of alcohol–related mortality from cirrhosis is declining in Sweden and Denmark. Prytz H, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1035–43

[Mortality rates in alcoholic and non–alcoholic liver cirrhosis in Denmark] Andersen P, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):502–5 (Eng. Abstr.) (Dan)

PATHOLOGY

Effects of malotilate on alcoholic liver injury in rats. Matsuda Y, et al. **Alcoholism (NY)** 1988 Oct;12(5):665–70

Selenium in pancreas of chronic alcoholics. Peneda J, et al. **Alcoholism (NY)** 1988 Dec;12(6):773

Evaluation of marrow cellularity in alcoholism and hepatic cirrhosis, by aspiration, biopsy and histomorphometric. Batista JN, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):27–31

An increase of collagen biosynthesis precedes other symptoms of ethanol-induced liver damage in rats. Pawlicka E, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):113–6

Diffuse fibrosis of the pancreas: a peculiar pattern of pancreatitis in alcoholic cirrhosis. Martin E, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):579–84

Ultrastructural identification and clinical significance of light microscopic giant mitochondria in alcoholic liver injuries. Inagaki T, et al. **Gastroenterol Jpn** 1989 Feb;24(1):46–53

Changes in liver and spleen volume in alcoholic liver fibrosis of man. Tarao K, et al. **Hepatology** 1989 Apr;9(4):589–93

Recurrent haematemesis and epigastric pain in an alcoholic. Anand AC, et al. **J Assoc Physicians India** 1988 Oct; 36(10):613–5

Does a "moderate" alcohol intake damage the brain? Harper C, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):909–13

Bone changes in alcoholic cirrhosis of the liver. A histomorphometric study. Chappard D, et al. **Pathol Res Pract** 1989 May;184(5):480–5

Morphometry of terminal hepatic veins. 2. Follow up in chronically alcohol-fed baboons. Porto LC, et al. **Virchows Arch [A]** 1989;414(4):299–307

[Changes in connective tissue metabolism in alcohol-induced liver fibrosis] Schuppan D, et al. **Z Gastroenterol** 1988 Oct; 26 Suppl 3:28–38 (44 ref.) (Ger)

[Two autopsy cases of cerebellar lesions found in excessive alcohol drinkers with alcoholic liver cirrhosis and pancreatic fibrosis] Koizumi N, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Dec;23(4):301–7 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Psychomotor dysfunctions in alcoholic and post-necrotic cirrhotic patients without overt encephalopathy. Puca FM, et al. **Acta Neurol Scand** 1989 Apr;79(4):280–7

Comparative acute effects of diflunisal and indomethacin on renal function in patients with cirrhosis and ascites. Antillon M, et al. **Am J Gastroenterol** 1989 Feb;84(2):153–5

Pharmacodynamic and pharmacokinetic study of propranolol in patients with cirrhosis and portal hypertension. Calès P, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):763–70

The calcium-channel blocker, verapamil, does not improve portal pressure in patients with alcoholic cirrhosis. Merkel C, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):273–7

Beneficial effect of 8-ornithin vasopressin on renal dysfunction in decompensated cirrhosis. Lenz K, et al. **Gut** 1989 Jan;30(1),90–6

The liver and alcohol. Brunt P. **J Hepatol** 1988 Dec; 7(3):377–83 (57 ref.)

Mechanisms of acetaldehyde hepatotoxicity. Lauterburg BH, et al. **J Hepatol** 1988 Dec;7(3):384–90

Verapamil has no effect on porto-hepatic pressure gradient, hepatic blood flow and elimination function of the liver in patients with liver cirrhosis. Vinel JP, et al. **J Hepatol** 1989 May;8(3):302–7

Evidence of the intact hepatocyte theory in alcoholic cirrhosis. Vaubourdolle M, et al. **Scand J Gastroenterol** 1989 May;24(4):467–74

[Ascitic fluid from alcoholic cirrhosis patients does not enhance chemotaxis of polynuclear neutrophils] Blanchard M, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Mar–Apr; 25(2):47–50 (Eng. Abstr.) (Fre)

[Influence of malnutrition on insulin resistance in cirrhotic patients, studied with the euglycemic clamp (letter)] **Gastroenterol Clin Biol** 1989 May;13(5):527–8 (Fre)

[Influence of ascites on splanchnic and systemic hemodynamics in patients with alcoholic cirrhosis] Cereda JM, et al. **Gastroenterol Clin Biol** 1989 May;13(5):495–8 (Eng. Abstr.) (Fre)

[Serum laminin and portal pressure in alcoholic cirrhosis. A study of 39 patients] Mal F, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):841–4 (Eng. Abstr.) (Fre)

[Functional reserve of the exocrine pancreas in chronic diseases of the liver] D'Ambrosi A, et al. **Recenti Prog Med** 1988 Nov;79(11):441–3 (Eng. Abstr.) (Ita)

PSYCHOLOGY

Impact of cirrhosis on the neuropsychological test performance of alcoholics. Tarter RE, et al. **Alcoholism (NY)** 1988 Oct;12(5):619–21

RADIONUCLIDE IMAGING

Computerized liver imaging: relationship with quantitatively estimated histological parameters in liver cirrhosis. Gonzalez-Reimers CE, et al. **Clin Nucl Med** 1988 Dec; 13(12):896–9

SURGERY

Liver transplantation for alcoholic cirrhosis [letter] Olbrisch ME, et al. **JAMA** 1989 May 26;261(20):2958

Orthotopic liver transplantation for alcoholic cirrhosis. Starzl TE, et al. **JAMA** 1988 Nov 4;260(17):2542–4

THERAPY

[Artificial nutrition and alcoholic cirrhosis] Michel H, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov;24(6):329–32 (22 ref.) (Eng. Abstr.) (Fre)

[Organizational and economic aspects of the treatment of patients with liver cirrhosis of alcoholic and viral etiologies] Ermakov VV, et al. **Sov Zdravookhr** 1988; (12):17–9 (Eng. Abstr.) (Rus)

URINE

Urine ethanol assessment: a helpful method for controlling abstinence in alcoholic liver disease. Caballería J, et al. **Alcohol Alcohol** 1988;23(5):403–7

LIVER CIRRHOSIS, BILIARY

Pregnancy and primary biliary cirrhosis. Nir A, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):279–82 (10 ref.)

Primary biliary cirrhosis. Moreno-Otero R, et al. **Med Clin North Am** 1989 Jul;73(4):911–29 (175 ref.)

Primary biliary cirrhosis. **Semin Liver Dis** 1989 May; 9(2):103–57

Primary biliary cirrhosis: current knowledge, perspectives, and future directions. Mackay IR, et al. **Semin Liver Dis** 1989 May;9(2):149–57 (72 ref.)

[Primary biliary cirrhosis. Current problems] Poupon R, et al. **Presse Med** 1989 Apr 15;18(15):746–8 (Fre)

[Primary biliary cirrhosis] Grippon P, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):501–6 (57 ref.) (Fre)

[Primary biliary cirrhosis] Dehesa M, et al. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):207–18 (135 ref.) (Eng. Abstr.) (Spa)

BLOOD

Plasma methionine enkephalin concentration and prognosis in primary biliary cirrhosis. Thornton JR, et al. **BMJ** 1988 Nov 12;297(6658):1241–2

Bile acid glycine and taurine conjugates in serum of patients with primary biliary cirrhosis: effect of ursodeoxycholic treatment. Chretien Y, et al. **Gut** 1989 Aug;30(8):1110–5

Serum immunoglobulin E levels in patients with primary biliary cirrhosis. Minuk GY, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):462–6

Sex steroids and steroid binding proteins in primary biliary cirrhosis. Eriksson S, et al. **J Steroid Biochem** 1989 Mar; 32(3):427–31

Serum cholesterol precursors, cholestanol, and plant sterols in primary biliary cirrhosis. Nikkilä K, et al. **Scand J Gastroenterol** 1988 Oct;23(8):967–72

COMPLICATIONS

A case of membranous glomerulonephritis in the course of primary biliary cirrhosis [letter] Carella G, et al. **Am J Gastroenterol** 1989 May;84(5):579–80

Primary biliary cirrhosis in a patient with multiple sclerosis. Taub WH, et al. **Am J Gastroenterol** 1989 Apr;84(4):415–7

Association of primary biliary cirrhosis and blue rubber bleb naevus syndrome. Ullrich D, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):627–9

Primary biliary cirrhosis with fibrosing alveolitis. Osaka M, et al. **Gastroenterol Jpn** 1988 Aug;23(4):457–60

Prospective evaluation of esophageal varices in primary biliary cirrhosis: development, natural history, and influence on survival. Gores GJ, et al. **Gastroenterology** 1989 Jun;96(6):1552–9

Hepatic epithelioid hemangioendothelioma in primary biliary cirrhosis [letter] Terada T, et al. **Gastroenterology** 1989 Sep; 97(3):810–1

Vitamin E deficiency in primary biliary cirrhosis: gastrointestinal malabsorption, frequency and relationship to other lipid-soluble vitamins. Muñoz SJ, et al. **Hepatology** 1989 Apr;9(4):525–31

The "butterfly" sign in patients with primary biliary cirrhosis [letter] Venencie PY, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):571–2

Pseudohyponatraemia, hypercholesterolaemia, and primary biliary cirrhosis. Hickman PE, et al. **J Clin Pathol** 1989 Feb;42(2):167–71

No specific association between primary biliary cirrhosis and bacteriuria? Floreani A, et al. **J Hepatol** 1989 Mar; 8(2):201–7

Arthralgias as a presenting manifestation of primary biliary cirrhosis. Goldenstein C, et al. **J Rheumatol** 1989 May; 16(5):681–4

Coexistence of CREST syndrome and primary biliary cirrhosis. Serological studies of two cases. Hirakata M, et al. **J Rheumatol** 1988 Jul;15(7):1166–70

Comparison of rifampicin with phenobarbitone for treatment of pruritus in biliary cirrhosis. Bachs L, et al. **Lancet** 1989 Mar 18;1(8638):574–6

Gastric angiodysplasia associated with primary biliary cirrhosis [letter] Haboubi NY, et al. **Lancet** 1988 Oct 22; 2(8617):972

Lymphadenopathy in primary biliary cirrhosis: CT observations. Outwater E, et al. **Radiology** 1989 Jun; 171(3):731–3

Primary biliary cirrhosis, temporal arteritis (giant cell arteritis) and polymyalgia rheumatica in a single patient. Gagnerie F, et al. **Scand J Rheumatol** 1988;17(3):231–2

Gastrointestinal syndromes in primary biliary cirrhosis. Schaffner F, et al. **Semin Liver Dis** 1988 Aug;8(3):263–71 (126 ref.)

[Primary biliary cirrhosis associated with sarcoidosis and myasthenia (letter)] Turner K, et al. **Ann Med Interne (Paris)** 1989;140(2):149–51 (Fre)

[Borderline chronic active hepatitis/primary biliary cirrhosis, associated with autoimmune thrombopenic purpura (letter)] Benamouzig R, et al. **Gastroenterol Clin Biol** 1989 Jan; 13(1):110 (5 ref.) (Fre)

[Association of sarcoidosis and primary biliary cirrhosis. Clinical and anatomopathologic study of a case followed for over 10 years] Xerri L, et al. **Gastroenterol Clin Biol** 1989 May;13(5):513–6 (Eng. Abstr.) (Fre)

[The association of myasthenia gravis, primary biliary cirrhosis and insulin-dependent diabetes [letter]] Taillan B, et al. **Presse Med** 1989 Mar 4;18(9):493 (Fre)

[Cefotaxime-induced allergic agranulocytosis in an acute attack of serologically atypical primary biliary cirrhosis] Berg PA, et al. **Dtsch Med Wochenschr** 1988 Sep 23; 113(38):1478–81 (Eng. Abstr.) (Ger)

[Agranulocytosis in primary biliary cirrhosis (letter)] Müller-Gerharz R, et al. **Dtsch Med Wochenschr** 1989 Jan 20;114(3):118 (Ger)

[Pruritus, status following cholecystectomy (clinical conference)] Zuber J, et al. **Schweiz Rundsch Med Prax** 1988 Dec 6;77(49):1357–61 (Eng. Abstr.) (Ger)

[A case of primary biliary cirrhosis associated with progressive systemic sclerosis] Sanada H, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1721–5 (Jpn)

[Asymptomatic primary biliary cirrhosis (A-PBC) associated with so-called "Hashitoxicosis"] Sasaki H, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):746–7 (Jpn)

[A case of primary biliary cirrhosis-chronic active hepatitis overlapping syndrome with improved transaminase levels by steroid treatment] Imamura Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1415–9 (Jpn)

[Hepatocarcinoma in primary biliary cirrhosis (letter)] Carnicer Jáuregui F, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):578–9 (Spa)

CONGENITAL

Pediatric radiology case of the day. Congenital hepatic fibrosis with saccular dilatation of the intrahepatic bile ducts and infantile polycystic kidneys. McAlister WH, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1329–30

DIAGNOSIS

Serum procollagen III N-terminal peptide and laminin P1 fragment concentrations in alcoholic liver disease and primary biliary cirrhosis. van Zanten RA, et al. **Clin Chim Acta** 1988 Oct 14;177(2):141–6

Gastric antral vascular ectasia and primary biliary cirrhosis [letter] Koivisto PV. **Endoscopy** 1988 Nov;20(6):334

Two different types of antimitochondrial antibodies (anti-M2 and anti-M4) may not differentiate primary biliary cirrhosis (PBC) with prominent piecemeal necrosis from classical PBC. Okuno T, et al. **Gastroenterol Jpn** 1989 Feb; 24(1):40–5

Selected reflections on hepatobiliary disease [letter] Schiff L. **J Fla Med Assoc** 1988 Aug;75(8):486–7

Primary biliary cirrhosis presenting as idiopathic thrombocytopenic purpura with deterioration after splenectomy. Wallerstedt S, et al. **J Intern Med** 1989 Apr; 225(4):279–83

Primary biliary cirrhosis: clinical features and outcome, with special reference to asymptomatic disease. Nyberg A, et al. **Scand J Gastroenterol** 1989 Jan;24(1):57–64

DRUG THERAPY

Autoimmune chronic active hepatitis and primary biliary cirrhosis. Triger DR. **Baillieres Clin Gastroenterol** 1989 Jan; 3(1):21–38 (45 ref.)

Opioid peptides and primary biliary cirrhosis. Thornton JR, et al. **BMJ** 1988 Dec 10;297(6662):1501–4

Pilot study of cyclosporin A in patients with symptomatic primary biliary cirrhosis. Minuk GY, et al. **Gastroenterology** 1988 Nov;95(5):1356–63

Colchicine in primary biliary cirrhosis [letter] Mollengarden GA. **Gastroenterology** 1989 Jun;96(6):1628–9

Effect of ursodeoxycholic acid on bile acid metabolism in primary biliary cirrhosis. Batta AK, et al. **Hepatology** 1989 Oct;10(4):414–9

Prednisolone for primary biliary cirrhosis—good news, bad news. Combes B. **Hepatology** 1989 Oct;10(4):511–3

A pilot, double-blind, controlled 1-year trial of prednisolone treatment in primary biliary cirrhosis: hepatic improvement but greater bone loss. Mitchison HC, et al. **Hepatology** 1989 Oct;10(4):420–9

Ursodeoxycholic acid for chronic liver diseases. Podda M, et al. **J Clin Gastroenterol** 1988;10 Suppl 2:S25–31 (48 ref.)

Ursodeoxycholic acid in primary biliary cirrhosis [letter] Bateson MC, et al. **Lancet** 1989 Apr 22;1(8643):898–9
Medical treatment of primary biliary cirrhosis. Kaplan MM. **Semin Liver Dis** 1989 May;9(2):138–43 (44 ref.)
[Ursodeoxycholic acid in primary biliary cirrhosis. 1: Therapeutic approaches up to now and the rationale for treatment with ursodeoxycholic acid] Eisenburg J, et al. **Fortschr Med** 1988 Nov 30;106(34):691–4 (59 ref.) (Eng. Abstr.) (Ger)
[Ursodeoxycholic acid in primary biliary cirrhosis. 2: Prospective long-term study of 21 patients] Eisenburg J, et al. **Fortschr Med** 1988 Nov 30;106(34):695–8 (Eng. Abstr.) (Ger)
[Ursodeoxycholic acid—a new therapy concept in cholestatic liver diseases] Raedsch R, et al. **Klin Wochenschr** 1989 Feb 15;67(4):265–8 (19 ref.) (Ger)
[Ursodeoxycholic acid in the treatment of primary biliary cirrhosis: results of a controlled study] Leuschner U, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:133 (Ger)
[Effect of ursodeoxycholic acid treatment on primary biliary cirrhosis] Raedsch R, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:125–7 (Ger)
[A case of primary biliary cirrhosis treated with colchicine and ursodeoxycholic acid] Shibata J, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2265–9 (Jpn)

ENZYMOLOGY

Autoantibodies of primary biliary cirrhosis recognize dihydrolipoamide acetyltransferase and inhibit enzyme function. Van de Water J, et al. **J Immunol** 1988 Oct 1; 141(7):2321–4
Primary structure of the human M2 mitochondrial autoantigen of primary biliary cirrhosis: dihydrolipoamide acetyltransferase. Coppel RL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7317–21

ETIOLOGY

Idiopathic adulthood ductopenia. A cause of chronic cholestatic liver disease and biliary cirrhosis. Ludwig J, et al. **J Hepatol** 1988 Oct;7(2):193–9
Meconium ileus and its equivalent as a risk factor for the development of cirrhosis: an autopsy study in cystic fibrosis. Maurage C, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):17–20
[Primary biliary cirrhosis disclosed in mixed connective tissue disease (letter)] Staumont G, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):968 (Fre)
[A case of rheumatoid arthritis with chronic thyroiditis, primary biliary cirrhosis, and anti-centromere antibody] Hashimoto M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar; 78(3):393–7 (Jpn)

GENETICS

NcoI restriction fragment length polymorphism (RFLP) of the tumour necrosis factor (TNF alpha) region in primary biliary cirrhosis and in healthy Danes. Fugger L, et al. **Scand J Immunol** 1989 Aug;30(2):185–9
[Primary biliary cirrhosis in brother and sister] Nakao Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul; 85(7):1403–8 (10 ref.) (Jpn)

IMMUNOLOGY

Clinical and immunological features of Sjögren's syndrome in patients with primary biliary cirrhosis with emphasis on focal sialadenitis. Hansen BU, et al. **Acta Med Scand** 1988; 224(6):611–9
Impaired monocyte function in primary biliary cirrhosis. Olmos JM, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):353–8
Histologic studies on the hepatic lesions induced by graft–versus–host reaction in MHC class II disparate hosts compared with primary biliary cirrhosis. Saitoh T, et al. **Am J Pathol** 1989 Aug;135(2):301–7
Antibodies against the acetylcholine receptor also in nonmyasthenic autoimmune disease. Sundewall AC, et al. **Ann N Y Acad Sci** 1988;540:525–7
Anti–mitochondrial autoantibodies of primary biliary cirrhosis as a novel probe in the study of the biosynthetic regulation of the yeast 2–oxo acid dehydrogenase complexes. Sudoyo H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):220–7
The association of the autoantigens of primary biliary cirrhosis with the mitochondrial H+–ATPase—a reassessment. Sudoyo H, et al. **Biochem Int** 1989 May; 18(5):951–60
Two new serum immunoassays (RIA and EIA) for the determination of M2 antimitochondrial antibodies in primary biliary cirrhosis. Plebani M, et al. **Clin Chim Acta** 1989 May 15;181(2):201–6
False positive ELISA tests for anticardiolipin antibodies in sera from patients with repeated abortion, rheumatologic disorders and primary biliary cirrhosis: correlation with elevated polyclonal IgM and implications for patients with repeated abortion. Cowchock S, et al. **Clin Exp Immunol** 1988 Aug;73(2):289–94
Clonal analysis of liver–derived T cells of patients with primary biliary cirrhosis. Hoffmann RM, et al. **Clin Exp Immunol** 1989 May;76(2):210–5
Characterization of a new mitochondrial antigen–antibody system (M9/anti–M9) in patients with anti–M2 positive and anti–M2 negative primary biliary cirrhosis. Klein R, et al. **Clin Exp Immunol** 1988 Oct;74(1):68–74
Autoantibodies to 200 kD polypeptide(s) of the nuclear envelope: a new serologic marker of primary biliary cirrhosis. Lassoued K, et al. **Clin Exp Immunol** 1988 Nov; 74(2):283–8
Clonal analysis of human T lymphocytes infiltrating the liver in chronic active hepatitis B and primary biliary cirrhosis. Meuer SC, et al. **Eur J Immunol** 1988 Sep;18(9):1447–52
Characterisation of the reactivity of autoantibodies in primary biliary cirrhosis. Fussey SP, et al. **FEBS Lett** 1989 Mar 27;246(1–2):49–53
Antimitochondrial antibodies in primary biliary cirrhosis recognize both specific peptides and shared epitopes of the M2 family of antigens. Flannery GR, et al. **Hepatology** 1989 Sep;10(3):370–4
Molecular aspects of the M2 autoantigens in primary biliary cirrhosis: what a difference a year makes. James OF, et al. **Hepatology** 1989 Aug;10(2):247–51 (41 ref.)
Primary biliary cirrhosis: lymphocyte subsets and function in a time frame [letter] Konikoff F, et al. **Hepatology** 1989 Oct;10(4):525–6
Immunization of experimental animals with dihydrolipoamide acetyltransferase, as a purified recombinant polypeptide, generates mitochondrial antibodies but not primary biliary cirrhosis. Krams SM, et al. **Hepatology** 1989 Mar;9(3):411–6
Liver diseases associated with autoantibodies directed to nuclear envelope components [letter] Lassoued K, et al. **Hepatology** 1989 Jun;9(6):911–2
The autologous mixed lymphocyte reaction in primary biliary cirrhosis: analysis of activation and blastogenesis of autoreactive T lymphocytes. Lindor KD, et al. **Hepatology** 1988 Nov–Dec;8(6):1555–9
Identity of the M2 autoantigens in primary biliary cirrhosis. Mackay IR, et al. **Hepatology** 1989 Sep;10(3):389–90
Frequency of IgG and IgM autoantibodies to four specific M2 mitochondrial autoantigens in primary biliary cirrhosis. Mutimer DJ, et al. **Hepatology** 1989 Oct;10(4):403–7
Defective immunoregulation in primary biliary cirrhosis: CD4+, Leu–8+ T cells have abnormal activation and suppressor function in vitro. Suou T, et al. **Hepatology** 1989 Oct;10(4):408–13
Reactivity of primary biliary cirrhosis sera with a human fetal liver cDNA clone of branched–chain alpha–keto acid dehydrogenase dihydrolipoamide acyltransferase, the 52 kD mitochondrial autoantigen. Surh CD, et al. **Hepatology** 1989 Jan;9(1):63–8
Antimitochondrial autoantibodies in primary biliary cirrhosis recognize cross–reactive epitope(s) on protein X and dihydrolipoamide acetyltransferase of pyruvate dehydrogenase complex. Surh CD, et al. **Hepatology** 1989 Aug;10(2):127–33
Abnormalities of B cell activation and immunoregulation in patients with chronic inflammatory liver diseases. Sieber G, et al. **Immunobiology** 1988 Dec;178(3):215–23
Antimitochondrial antibodies of primary biliary cirrhosis recognize dihydrolipoamide acyltransferase and inhibit enzyme function of the branched chain alpha–ketoacid dehydrogenase complex. Fregeau DR, et al. **J Immunol** 1989 Jun 1;142(11):3815–20
Mitochondrial M2 autoantigens and primary biliary cirrhosis [letter] **Lancet** 1989 Feb 25;1(8635):447–8
Are antimitochondrial antibodies in primary biliary cirrhosis induced by R(rough)–mutants of enterobacteriaceae? Stemerowicz R, et al. **Lancet** 1988 Nov 19;2(8621):1166–70
Autoantibodies to topoisomerase I in primary biliary cirrhosis [letter] Vogel W, et al. **Lancet** 1988 Dec 3;2(8623):1314–5
M2 autoantigens in primary biliary cirrhosis [letter] Yeaman SJ, et al. **Lancet** 1989 Jan 14;1(8629):103
Detection of autoantibodies to recombinant mitochondrial proteins in patients with primary biliary cirrhosis. Van de Water J, et al. **N Engl J Med** 1989 May 25;320(21):1377–80
Identification and analysis of the major M2 autoantigens in primary biliary cirrhosis. Fussey SP, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8654–8
Immune dysfunction in primary biliary cirrhosis. II. Increased production of prostaglandin E. Chiricolo M, et al. **Scand J Immunol** 1989 Sep;30(3):363–7
Mitochondrial autoantigens in primary biliary cirrhosis. Association of disease–specific determinants with a subunit of complex I (NADH–ubiquinone reductase) of the inner mitochondrial membrane. Frostell A, et al. **Scand J Immunol** 1988 Dec;28(6):645–52
Primary biliary cirrhosis: indication for a single mitochondrial antigenic epitope detected by patient autoantibodies and a novel monoclonal antibody. Mendel–Hartvig I, et al. **Scand J Immunol** 1988 Oct;28(4):403–10
Identification and characterization of four M2 mitochondrial autoantigens in primary biliary cirrhosis. Bassendine MF, et al. **Semin Liver Dis** 1989 May;9(2):124–31 (71 ref.)
Nature of the mitochondrial antigens of primary biliary cirrhosis and their possible relationships to the etiology of the disease. Baum H. **Semin Liver Dis** 1989 May; 9(2):117–23 (57 ref.)
Heterogeneity of antimitochondrial antibodies. Berg PA, et al. **Semin Liver Dis** 1989 May;9(2):103–16 (62 ref.)
Molecular definitions, autoepitopes, and enzymatic activities of the mitochondrial autoantigens of primary biliary cirrhosis. Van de Water J, et al. **Semin Liver Dis** 1989 May; 9(2):132–7 (45 ref.)
[Prognostic significance of antimitochondrial antibody profiles A–D in primary biliary cirrhosis] Klein R, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1549–53 (Eng. Abstr.) (Ger)
[Immunology of primary biliary cirrhosis] Manns M. **Z Gastroenterol [Verh]** 1989 Jul;24:128–30 (21 ref.) (Ger)
[Primary biliary cirrhosis with negative antimitochondrial antibodies associated with Sjogren's syndrome (letter)] Martínez Ruiz M, et al. **Rev Clin Esp** 1989 Mar;184(4):216–7 (Spa)

METABOLISM

Expression of beta 2–microglobulin on interlobular bile ducts in primary biliary cirrhosis and other hepatobiliary diseases. Nakanuma Y, et al. **Acta Pathol Jpn** 1988 Jul;38(7):853–60
Lipoprotein pattern and plasma lipoprotein lipase activities in patients with primary biliary cirrhosis. Relationship with increase of HDL2 fraction in Lp–X–positive and Lp–X–negative subjects. Baldo–Enzi G, et al. **Dig Dis Sci** 1988 Oct;33(10):1201–7
Interferon gamma and bile duct damage in primary biliary cirrhosis. Kakumu S, et al. **Gastroenterol Jpn** 1989 Apr; 24(2):225
Intestinal malabsorption of vitamin E in primary biliary cirrhosis. Sokol RJ, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):479–86
Impaired sulfoxidation in patients with primary biliary cirrhosis. Scharschmidt BF, et al. **Hepatology** 1989 Apr; 9(4):654–5
Canalicular bile flow and bile salt secretion are maintained in rats with liver cirrhosis. Further evidence for the intact cell hypothesis. Krähenbühl S, et al. **J Hepatol** 1988 Aug; 7(1):63–71
Vitamin D, parathyroid hormone, and bone mineral content of lumbar spine and femur in primary biliary cirrhosis. Almdal T, et al. **J Intern Med** 1989 Mar;225(3):207–13
Vimentin expression of newly formed rat bile duct epithelial cells in secondary biliary fibrosis. Milani S, et al. **Virchows Arch [A]** 1989;415(3):237–42
[Biochemical changes in the liver of the rat after ligation of the common bile duct] Gambella GR, et al. **Pathologica** 1988 Jan–Feb;80(1065):97–103 (Eng. Abstr.) (Ita)

MORTALITY

Risk factors and prognosis in primary biliary cirrhosis. Goudie BM, et al. **Am J Gastroenterol** 1989 Jul;84(7):713–6
Prognosis in primary biliary cirrhosis: model for decision making. Dickson ER, et al. **Hepatology** 1989 Jul;10(1):1–7
Application of the Mayo primary biliary cirrhosis survival model to Mayo liver transplant patients. Grambsch PM, et al. **Mayo Clin Proc** 1989 Jun;64(6):699–704
[Clinical course and prognosis of primary biliary cirrhosis—multivariant analysis on cases of national survey] Inoue K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr; 86(4):889–96 (Eng. Abstr.) (Jpn)

PATHOLOGY

Macroregenerative nodules of the liver in primary biliary cirrhosis: report of two autopsy cases. Terada T, et al. **Am J Gastroenterol** 1989 Apr;84(4):418–21
S100 protein positive dendritic cells in primary biliary cirrhosis and other chronic inflammatory liver diseases. Relevance to pathogenesis? Demetris AJ, et al. **Am J Pathol** 1989 Apr;134(4):741–7
Evidence for disease recurrence after liver transplantation for primary biliary cirrhosis. Clinical and histologic follow–up studies. Polson RJ, et al. **Gastroenterology** 1989 Sep;97(3):715–25
Liver cell rosettes: structural differences in cholestasis and hepatitis. Nagore N, et al. **Liver** 1989 Feb;9(1):43–51
Pathologic study of primary biliary cirrhosis of early histologic stages presenting cholestatic jaundice. Nakanuma Y, et al. **Liver** 1988 Dec;8(6):319–24
Electron microscopic features of biliary cirrhosis in the rat after ligation of the common bile duct. Buffa P, et al. **Pathologica** 1988 Nov–Dec;80(1070):697–709
[Space occupying lesion in the area of the portal vein and obstructive jaundice (clinical conference)] Haag K, et al. **Med Klin** 1988 Oct 14;83(20):678–81 (Ger)
[A rare complication of intraoperative liver puncture] Müller U, et al. **Med Klin** 1988 Jul 15;83(15):485–7 (Ger)
[Monolobar (unilateral), secondary biliary liver cirrhosis in Klatskin tumor] Göke B, et al. **Z Gastroenterol** 1989 Feb; 27(2):99–102 (Eng. Abstr.) (Ger)
[The natural course of primary biliary cirrhosis] Gerok W. **Z Gastroenterol [Verh]** 1989 Jul;24:131–2 (Ger)
[Pathogenesis of hepatic changes secondary to cholestasis] Gambella GR, et al. **Pathologica** 1988 Nov–Dec; 80(1070):687–95 (Eng. Abstr.) (Ita)
[Anatomopathologic aspects of chronic hepatitis and primary biliary cirrhosis] Aguirre García J, et al. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):143–9 (34 ref.) (Spa)

PHYSIOPATHOLOGY

The haruspex and primary biliary cirrhosis. Schaffner F. **Am J Gastroenterol** 1989 Jul;84(7):711–2
Serotonin blockade in conscious, unrestrained cirrhotic dogs with portal hypertension. Mastaï R, et al. **Hepatology** 1989 Feb;9(2):265–8

Effects of glucagon on systemic and splanchnic circulation in conscious rats with biliary cirrhosis. Cerini R, et al. **J Hepatol** 1989 Jul;9(1):69–74

Esophageal dysfunction in primary biliary cirrhosis. Parés A, et al. **J Hepatol** 1988 Dec;7(3):362–7

Salicylic acid causes a diuresis and natriuresis in normal and common bile-duct-ligated cirrhotic miniature swine. Zambraski EJ, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):983–8

PSYCHOLOGY

Sjogren's syndrome. Its contribution to neuropsychiatric syndrome in patients with primary biliary cirrhosis. Tarter RE, et al. **Dig Dis Sci** 1989 Jan;34(1):9–12

RADIONUCLIDE IMAGING

Scintigraphic criteria for the diagnosis of obstructive hepatobiliary diseases with Tc-99m IDA. Krishnamurthy S, et al. **Clin Nucl Med** 1988 Oct;13(10):704–9

[Results of functional scintigraphic studies of the hepatobiliary system following reconstruction of bile duct injuries with ring drainage splinting] Lauschke G, et al. **Zentralbl Chir** 1988;113(18):1175–84 (Eng. Abstr.) (Ger)

SURGERY

Liver transplantation in a 48-year-old female with primary biliary cirrhosis. Larsen ML, et al. **Dan Med Bull** 1988 Jun;35(3):299–301

Assessment of nutritional status of patients with end-stage liver disease undergoing liver transplantation. DiCecco SR, et al. **Mayo Clin Proc** 1989 Jan;64(1):95–102

Efficiency of liver transplantation in patients with primary biliary cirrhosis. Markus BH, et al. **N Engl J Med** 1989 Jun 29;320(26):1709–13

Liver transplantation for primary biliary cirrhosis. Tzakis AG, et al. **Semin Liver Dis** 1989 May;9(2):144–8 (27 ref.)

Does liver transplantation cure primary biliary cirrhosis? Buist LJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2402

THERAPY

Prognostication in primary biliary cirrhosis: relevance to the individual patient. Christensen E. **Hepatology** 1989 Jul; 10(1):111–3 (26 ref.)

Natural killer-cell activity and the response to interferons alpha, beta, and gamma in patients with primary biliary cirrhosis. Matheson DS, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):214–8

Treatment of intra-heptic cholestasis in primary biliary cirrhosis by long term plasmapheresis. Vankeerberghen L, et al. **Life Support Syst** 1983;1 Suppl 1:106–11

Prognosis after liver transplantation for primary biliary cirrhosis. Neuberger J, et al. **Transplantation** 1989 Sep; 48(3):444–7

[Primary biliary cirrhosis: therapeutic trial using plasma exchange and immunosuppression. Preliminary results] Rifle G, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:32–4 (Eng. Abstr.) (Fre)

[Therapy with bile acids. New therapeutic approaches in dyspepsia and primary biliary cirrhosis] Kurtz W. **Fortschr Med** 1988 Jun 20;106(18):390–2 (0 ref.) (Eng. Abstr.) (Ger)

[What is safe in therapy of primary biliary cirrhosis?] Wiedmann KH, et al. **Internist (Berlin)** 1988 Nov; 29(11):765–77 (83 ref.) (Ger)

LIVER CIRRHOSIS, EXPERIMENTAL

Problems with animal models of chronic liver disease: suggestions for improvement in standardization. Mullen KD, et al. **Hepatology** 1989 Mar;9(3):500–3

CHEMICALLY INDUCED

Persistence of hepatic fibrosis and tissue eggs following treatment of Schistosoma japonicum infected mice. Cheever AW, et al. **Am J Trop Med Hyg** 1989 Jun; 40(6):620–8

Thioacetamide- and carbon tetrachloride-induced liver cirrhosis. Dashti H, et al. **Eur Surg Res** 1989;21(2):83–91

Chronic liver injury by thioacetamide and promotion of hepatic carcinogenesis. Gervasi PG, et al. **J Cancer Res Clin Oncol** 1989;115(1):29–35

Dimethylnitrosamine-induced cirrhosis. Evidence for an immunological mechanism. Jézéquel AM, et al. **J Hepatol** 1989 Jan;8(1):42–52

Synergism between ethanol and carbon tetrachloride in the generation of liver fibrosis. Bosma A, et al. **J Pathol** 1988 Sep;156(1):15–21

Potentiating effects of phenobarbitone on the induction of cirrhosis in rats by carbon tetrachloride. Qazi FM, et al. **JPMA** 1988 Nov;38(11):296–9

Effects of cortisol pretreatment on the acute hepatotoxicity of aflatoxin B1. Chentanez T, et al. **Toxicol Lett** 1988 Sep; 42(3):237–48

COMPLICATIONS

The role of sinusoidal stenoses in portal hypertension of liver cirrhosis. Shibayama Y, et al. **J Hepatol** 1989 Jan;8(1):60–6

[Anti-tumor effect of fluoropyrimidines on human tumor cell lines transplanted in nude mice with CCl4-induced liver dysfunction] Nio Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):538–45 (Eng. Abstr.) (Jpn)

[Experimental study on responses to and prevention of endotoxin shock in thioacetamide-induced cirrhotic rats] Okamoto H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2197–206 (Eng. Abstr.) (Jpn)

DRUG THERAPY

The experimental cirrhosis—enzymatic changes and influence of Regopar. Andronescu E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):133–8

Reversibility of rat liver cirrhosis by medroxyprogesterone acetate. Stenbäck F, et al. **Toxicol Pathol** 1989;17(1 Pt 1):38–45

[Hepatotoxic action of furosemide in chronic experimental hepatopathies] Bubueanu G, et al. **Physiologie** 1988 Oct–Dec;25(4):201–6 (Fre)

ENZYMOLOGY

Source of increased serum beta-hexosaminidase in rat liver cirrhosis. Hultberg B, et al. **Enzyme** 1988;40(1):18–24

Active and latent collagenase activity during reversal of hepatic fibrosis in murine schistosomiasis. Emonard H, et al. **Hepatology** 1989 Jul;10(1):77–83

Urea cycle enzyme activities are normal and inducible by a high-protein diet in CCl4 cirrhosis of rats. Snodgrass PJ. **Hepatology** 1989 Mar;9(3):373–9

Glutamate decarboxylase inhibition and vitamin B6 metabolism in brain of cirrhotic rats chronically treated with carbon tetrachloride. Díaz-Muñoz M, et al. **J Neurosci Res** 1988 Jul;20(3):376–82

ETIOLOGY

Hepatic fibrosis in hamsters experimentally infected with S. mansoni. el-Sebai MM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):755–7

Immunoregulation of hepatic fibrosis in murine schistosomiasis japonica. Olds GR, et al. **J Infect Dis** 1989 Apr;159(4):798–801

The pathogenesis of liver fibrosis in schistosomiasis japonica: sequential qualitative and quantitative immunohistochemical study of extracellular components in schistosomal egg granulomas in murine liver. Xu YH, et al. **J Tongji Med Univ** 1988;8(2):65–73

Pathogenesis of pipe-stem fibrosis of the liver (experimental observation on murine schistosomiasis). Andrade ZA. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):325–34

IMMUNOLOGY

Differential immunoregulation of granulomatous inflammation, portal hypertension, and hepatic fibrosis in murine schistosomiasis mansoni. Olds GR, et al. **J Immunol** 1989 May 15;142(10):3605–11

METABOLISM

Hepatotoxicity and metabolism of isoflurane in rats with cirrhosis. Baden JM. **Anesth Analg** 1989 Mar;68(3):214–8

Mitochondrial function in carbon tetrachloride-induced cirrhosis in the rat. Qualitative and quantitative defects. Krähenbühl S, et al. **Biochem Pharmacol** 1989 May 15; 38(10):1583–8

Influence of hemorrhagic shock on hepatic energy metabolism in carbon tetrachloride-induced cirrhotic rats. Ikai I, et al. **Circ Shock** 1988 Dec;26(4):365–74

Orotic acid overproduction in experimental cirrhosis of rats. Shoemaker JD, et al. **Exp Mol Pathol** 1989 Jun;50(3):371–84

Glutathione synthesis and export in experimental liver cirrhosis induced by thioacetamide: relations to ultrastructural changes. Kretzschmar M, et al. **Exp Pathol** 1989;36(2):113–22

Effect of secretin on bile formation in rats with cirrhosis of the liver: structure-function relationship. Knuchel J, et al. **Gastroenterology** 1989 Oct;97(4):950–7

Ethanol, liver fibrosis, and the control of proteoglycan biosynthesis [letter] [published erratum appears in Gastroenterology 1989 Sep;97(3):813] Scott JE. **Gastroenterology** 1989 May;96(5 Pt 1):1376

Organ distribution of 3H-endotoxin in rats with liver fibrosis and rats with liver cirrhosis. Shirai M, et al. **Hepatogastroenterology** 1989 Jun;36(3):172–4

Alterations in the functional expression of receptors on cirrhotic rat hepatocytes. d'Arville CN, et al. **Hepatology** 1989 Jan;9(1):6–11

In situ hybridization for procollagen types I, III and IV mRNA in normal and fibrotic rat liver: evidence for predominant expression in nonparenchymal liver cells. Milani S, et al. **Hepatology** 1989 Jul;10(1):84–92

In vitro and in vivo association of transforming growth factor-beta 1 with hepatic fibrosis. Czaja MJ, et al. **J Cell Biol** 1989 Jun;108(6):2477–82

Downregulation of the male-specific hepatic microsomal steroid 16 alpha-hydroxylase, cytochrome P-450UT-A, in rats with portal bypass. Relevance to estradiol accumulation and impaired drug metabolism in hepatic cirrhosis. Cantrill E, et al. **J Clin Invest** 1989 Apr; 83(4):1211–6

Taurocholate transport by liver plasma membrane vesicles is not altered in cirrhotic rats. Krähenbühl S, et al. **J Hepatol** 1989 Jul;9(1):1–9

Estimation of collagen content of liver specimens. Variation among animals and among hepatic lobes in cirrhotic rats. Gascon-Barré M, et al. **J Histochem Cytochem** 1989 Mar; 37(3):377–81

Collagen production in fat-storing cells after carbon tetrachloride intoxication in the rat. Immunoelectron microscopic observation of type I, type III collagens, and prolyl hydroxylase. Takahara T, et al. **Lab Invest** 1988 Oct; 59(4):509–21

Insulin sensitivity in experimental cirrhosis. Chowdhury SA, et al. **Mol Cell Biochem** 1989 Aug 15;89(1):69–72

Desmin and actin in the identification of Ito cells and in monitoring their evolution to myofibroblasts in experimental liver fibrosis. Ballardini G, et al. **Virchows Arch [B]** 1988;56(1):45–9

[Dynamic changes in collagen type I and type III in experimental liver fibrosis] Li JJ. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):374–7, 26 (Eng. Abstr.) (Chi)

[Changes in liver collagen metabolism and its significance during fibrosis formation of the liver in rabbits with schistosomiasis] Liu P, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):202–4 (Eng. Abstr.) (Chi)

MORTALITY

Somatostatin analogue improves survival in conscious cirrhotic rats subjected to gastrointestinal bleeding. Cerini R, et al. **Clin Sci** 1989 Jul;77(1):7–9

PATHOLOGY

Cirrhosis of the liver induced by cupric nitrilotriacetate in Wistar rats. An experimental model of copper toxicosis. Toyokuni S, et al. **Am J Pathol** 1989 Jun;134(6):1263–74

Alpha 1-antitrypsin and hepatic fibrosis. Ozeki T, et al. **Br J Exp Pathol** 1989 Apr;70(2):143–52

Hepatic structural correlates of liver fibrosis: a morphometric analysis. Buschmann RJ, et al. **Exp Mol Pathol** 1989 Feb; 50(1):114–24

Studies on quantitative morphology. XI. Morphometrical determination of connective tissue in rat livers. Löw O, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):557–63

Experimental carbon tetrachloride-induced cirrhosis of the liver. Muñoz Torres E, et al. **Int J Tissue React** 1988; 10(4):245–51

Ultrastructural study of cells in pseudolobules of the liver with experimental cirrhosis. Shen SL, et al. **J Tongji Med Univ** 1988;8(3):135–9

Relation of sinusoidal stenoses following hepatocyte swelling to hepatic vascular resistance in experimental liver cirrhosis. Shibayama Y, et al. **Liver** 1989 Feb;9(1):36–42

Ultrastructure of cholinergic innervation in the cirrhotic liver in guinea pigs. Neurohistochemical and ultrastructural study. Akiyoshi H. **Virchows Arch [B]** 1989;57(2):81–90

[Morphological observations of collagen type I and type III in experimental liver fibrosis] Huang ST. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):8–11 (Eng. Abstr.) (Chi)

[Morphometry of the heterogenic distribution of tissue components] Löw O. **Gegenbaurs Morphol Jahrb** 1989; 135(1):133–6 (11 ref.) (Eng. Abstr.) (Ger)

[Changes in hepatic fibrosis induced by carbon tetrachloride, after previous administration of vitamin A] Chehter L, et al. **Rev Paul Med** 1988 Jul–Aug;106(4):185–9 (Eng. Abstr.) (Por)

[A sharp increase in the liver of a factor stimulating proliferation of fibroblasts in vitro in experimental cirrhosis] Beliaev ND, et al. **Dokl Akad Nauk SSSR** 1989; 306(2):496–8 (Rus)

PHYSIOPATHOLOGY

Effect of portacaval surgical anastomosis on systemic and splanchnic hemodynamics in portal hypertensive, cirrhotic rats. Romeo JM, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1493–8

Isolation and characterization of parenchymal cells from experimentally induced macronodular rat liver cirrhosis. Müller D, et al. **Cell Biochem Funct** 1989 Apr;7(2):119–28

Hemodynamic effects of blood volume restitution following a hemorrhage in rats with portal hypertension due to cirrhosis of the liver: influence of the extent of portal-systemic shunting. Kravetz D, et al. **Hepatology** 1989 Jun;9(6):808–14

Effect of vasodilators on hepatic microcirculation in cirrhosis: a study in the isolated perfused rat liver. Marteau P, et al. **Hepatology** 1989 Jun;9(6):820–3

Mechanisms of a clonidine-induced decrease in portal pressure in normal and cirrhotic conscious rats. Roulot D, et al. **Hepatology** 1989 Oct;10(4):477–81

Determinants of hepatic function in liver cirrhosis in the rat. Multivariate analysis. Reichen J, et al. **J Clin Invest** 1988 Dec;82(6):2069–76

Role of prostaglandins and thromboxane in the control of renal hemodynamics in experimental liver cirrhosis. Leehey DJ, et al. **J Lab Clin Med** 1989 Mar;113(3):309–15

Sodium chloride preference is altered in a rat model of liver disease. Deems RO, et al. **Physiol Behav** 1988;43(4):521–5

Influence of hypoxia on mitochondrial function and energy status in CCl4-induced cirrhotic rat liver. Wakashiro S, et al. **Res Exp Med (Berl)** 1989;189(3):153–61

Effect of atrial natriuretic peptide on arterial pressure and renal function in cirrhotic rats with ascites. López C, et

al. **Rev Esp Fisiol** 1988 Sep;44(3):265–72

[Studies of metabolic abnormality of zinc in chronic liver diseases (report 2)—basic examination of its effects on pathophysiology] Nagai K.
Nippon Shokakibyo Gakkai Zasshi 1989 Jan;86(1):39–44 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Prevention of CCL4-induced liver cirrhosis by silymarin. Mourelle M, et al. **Fundam Clin Pharmacol** 1989;3(3):183–91

Preventive effect of malotilate on dimethylnitrosamine-induced liver fibrosis in the rat. Ala-Kokko L, et al. **J Lab Clin Med** 1989 Feb; 113(2):177–83

[Rapeseed in experimental cirrhosis in the rat] Alvizouri M, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun;54(2):99–102 (Eng. Abstr.) **(Spa)**

SURGERY

Allotransplantation of hepatocytes into spleen prolongs survival and improves albumin levels in cirrhotic dogs. Benito JM, et al. **Transplant Proc** 1989 Jun;21(3):3520

[The portacaval anastomosis in the liver cirrhosis model in the rat—significance of special preoperative preparation for decreasing surgical fatalities] Hanisch E, et al.
Langenbecks Arch Chir 1989;374(2):92–4 (Eng. Abstr.) **(Ger)**

[The possibility of correcting metabolic disorders in experimental liver cirrhosis by cryodestruction and plasma-flow resection] Mikaelian NP, et al.
Biull Eksp Biol Med 1989 May;107(5):604–7 (Eng. Abstr.) **(Rus)**

LIVER CIRRHOSIS, OBSTRUCTIVE see **LIVER CIRRHOSIS, BILIARY**

LIVER DISEASES

Atrial natriuretic factor in patients with liver disease. Epstein M. **Am J Nephrol** 1989;9(2):89–100 (80 ref.)

Nonviral infections of the liver. Ellis CJ.
Baillieres Clin Gastroenterol 1989 Jan;3(1):67–74 (19 ref.)

Acute liver failure. O'Grady JG, et al.
Baillieres Clin Gastroenterol 1989 Jan;3(1):75–89 (42 ref.)

Primary care of women with gastrointestinal disorders. Bjorkman DJ, et al. **Clin Obstet Gynecol** 1988 Dec; 31(4):974–88 (28 ref.)

Pathogenesis and treatment of fulminant liver failure. Payne JA. **Compr Ther** 1989 Feb;15(2):42–4 (16 ref.)

The porphyrias. Bloomer JR, et al. **Dis Mon** 1989 Jan; 35(1):1–54 (112 ref.)

The American Association for the Study of Liver Diseases. 34th annual meeting and postgraduate course. November 4–5, 1983 and November 6–7, 1983, Chicao, Illinois. Abstracts. **Hepatology** 1983 Sep–Oct;3(5):777–887

The American Association for the Study of Liver Diseases. 40th annual meeting and postgraduate course. October 28–31, 1989, Chicago, Illinois. Abstracts. **Hepatology** 1989 Oct;10(4):531–758

Issue dedicated to Hans Popper in memoriam 1903–1988.
Hepatology 1989 May;9(5):669–800

Abstracts: annual conference of the Indian Association for the Study of the Liver. Ahmedabad, October 31, 1988.
Indian J Gastroenterol 1988 Oct;7(4 Suppl):A37–42

Safe use of clonidine, nifedipine and vitamin K in hepatic porphyria [letter] Bhadoria DP, et al.
J Assoc Physicians India 1988 Nov;36(11):675–6

Ranitidine and porphyria—causal or coincidental? [letter] Tripathi SK. **J Assoc Physicians India** 1988 Nov;36(11):680

Acute porphyria in the emergency department. Karcz A, et al. **J Emerg Med** 1989 May–Jun;7(3):279–85 (39 ref.)

Selected abstracts from the meeting of the British Association for the Study of the Liver. London, U.K., 19 February, 1988. **J Hepatol** 1988 Aug;7(1):P1–7

Abstracts of the 24th meeting of the European Association for the Study of the Liver. Munich, F.R.G., 30 August–2 September, 1989. **J Hepatol** 1989;9 Suppl 1:S1–261

Selected abstracts from the meeting of the British Association for the Study of the Liver. London, U.K., 16 and 17 February, 1989. **J Hepatol** 1989 Jul;9(1):P1–10

Selected abstracts from the XIIIth meeting of the Spanish Association for the Study of the Liver (AEEH). Madrid, Spain, 2 and 3 June, 1988. **J Hepatol** 1988 Aug;7(1):P8–18

Hepatology: a coming of age [editorial] Czaja AJ.
Mayo Clin Proc 1989 Apr;64(4):473–4

Fulminant hepatic failure. Katelaris PH, et al.
Med Clin North Am 1989 Jul;73(4):955–70 (79 ref.)

Liver disease in pregnancy. Rustgi VK.
Med Clin North Am 1989 Jul,73(4):1041–6 (42 ref.)

Pregnancy and acute intermittent porphyria. Kanaan C, et al. **Obstet Gynecol Surv** 1989 Apr;44(4):244–9 (50 ref.)

Applied basic science in hepatology. A tribute to Hans Popper. **Semin Liver Dis** 1988 Nov;8(4):283–366

Leukotrienes as mediators in diseases of the liver. Keppler D, et al. **Semin Liver Dis** 1988 Nov;8(4):357–66 (121 ref.)

[Anesthesia and hepatic porphyria] Blanloeil Y, et al.
Ann Fr Anesth Reanim 1989;8(2):109–25 (74 ref.) (Eng. Abstr.) **(Fre)**

[7th national continuing education seminar on hepato-gastroenterology. Genève, Palexpo, 15–16 April 1989] **Gastroenterol Clin Biol** 1989;13(2 Pt 3):T1–25 **(Fre)**

[24th forum on research in hepato-gastroenterology. 12th French language seminar on hepatology and gastroenterology. 7th national continuing education seminar on hepato-gastroenterology. Genève, Palexpo, 15–19 April 1989. Abstracts] **Gastroenterol Clin Biol** 1989; 13(2 Pt 2):A1–320 **(Fre)**

[4th meeting of the German Association for the Study of the Liver. Berlin, 29–30 January 1988. Abstracts]
Z Gastroenterol 1988 Jan;26(1):1–103 **(Ger)**

[German Association for the Study of the Liver. Abstracts 1989. Düsseldorf, 20–21 January 1989] **Z Gastroenterol** 1989 Jan;27(1):15–74 **(Ger)**

[Hepatology] Mazzacca G, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):119–23 (Eng. Abstr.) **(Ita)**

[Hepato-biliary diseases—new diagnostic and therapeutic methods (2)] **Nippon Rinsho** 1988 Jun;46 Suppl:3–1258 **(Jpn)**

[Hepato-biliary diseases—new diagnostic and therapeutic methods (1)] **Nippon Rinsho** 1988 Feb;Spec No:1–1165 **(Jpn)**

[Experimental study on animal model for hepatolithiasis] Ueda N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep; 85(9):1724 **(Jpn)**

[Actinomycosis of the liver] Minsker OB, et al.
Khirurgiia (Mosk) 1988 Nov;(11):116–7 **(Rus)**

[Monitoring in hepatology] Mikhailenko AA, et al.
Vrach Delo 1989 May;(5):59–62 (Eng. Abstr.) **(Rus)**

[Actinomycosis of the liver] Colović R. **Acta Chir Iugosl** 1988;35(2):309–13 (Eng. Abstr.) **(Scc)**

[The liver in the next century (editorial)] Rodés J.
Rev Clin Esp 1988 May;182(9):453 **(Spa)**

[The liver in the 21st century] Sherlock S. **Rev Clin Esp** 1988 May;182(9):489–91 **(Spa)**

[Hepatic rupture in pregnancy (letter)] Basora M, et al.
Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):127 **(Spa)**

[Hepatic peliosis. Review of the literature] Nieves Cereceda C, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):205–11 (76 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Blood carnitine status after orthotopic liver transplantation in patients with end-stage liver disease. Palombo JD, et al. **Am J Clin Nutr** 1989 Sep;50(3):504–7

Thrombin and plasmin generation in patients with liver disease. Takahashi H, et al. **Am J Hematol** 1989 Sep; 32(1):30–5

Alpha-1-antitrypsin in liver disease. Deam D, et al.
Ann Clin Biochem 1989 Mar;26 (Pt 2):122–4

Human plasma extrinsic pathway inhibitor activity: II. Plasma levels in disseminated intravascular coagulation and hepatocellular disease. Warr TA, et al. **Blood** 1989 Aug 15;74(3):994–8

Determination of branched-chain amino acids and tyrosine in serum of patients with various hepatic diseases, and its clinical usefulness. Azuma Y, et al. **Clin Chem** 1989 Jul; 35(7):1399–403

Significance of low serum urea nitrogen concentrations. Lum G, et al. **Clin Chem** 1989 Apr;35(4):639–40

Rapid radioimmunoassay of circulating chromogranin A: in vitro stability, exploration of the neuroendocrine character of neoplasia, and assessment of the effects of organ failure. O'Connor DT, et al. **Clin Chem** 1989 Aug;35(8):1631–7

Serum indole and skatole in patients with various liver diseases. Suyama Y, et al. **Clin Chim Acta** 1988 Aug 31; 176(2):203–6

Plasma protein S in disseminated intravascular coagulation, liver disease, collagen disease, diabetes mellitus, and under oral anticoagulant therapy. Takahashi H, et al.
Clin Chim Acta 1989 Jun 30;182(2):195–208

Computer-assisted predictive mathematical relationship among plasma acetaminophen concentration and time and hepatotoxicity in man. Chung SJ.
Comput Methods Programs Biomed 1989 Jan;28(1):37–43

Serum insulin-like growth factor II in chronic liver disease. Hayakawa T, et al. **Dig Dis Sci** 1989 Mar;34(3):338–42

Serum vitronectin concentration in various liver diseases. Okabe K. **Gastroenterol Jpn** 1989 Feb;24(1):82

Absence of HBV-DNA in serum of hemophilic carriers of hepatitis B surface antigen with chronic liver disease. Tagariello G, et al. **Haematologica (Pavia)** 1988 May–Jun; 73(3):245–7

Does hypophosphatemia play a role in acute liver failure? Knochel JP. **Hepatology** 1989 Mar;9(3):504–5

Increased serum ferritin in chronic liver disease: a risk factor for primary hepatocellular carcinoma. Hann HW, et al. **Int J Cancer** 1989 Mar 15;43(3):376–9

Serum thyroid hormone levels in patients with liver damage: evidence of multiple abnormalities in presence of euthyroidism. Mehta MN, et al.
J Assoc Physicians India 1988 Nov;36(11):637–9

Fibronectin in acute and subacute hepatic failure. Anand AC, et al. **J Clin Gastroenterol** 1989 Jun;11(3):314–9

Methionine enkephalin is increased in plasma in acute liver disease and is present in bile and urine. Thornton JR, et al. **J Hepatol** 1989 Jan;8(1):53–9

Radioimmunoassay of serum IGF-I and IGF-II in patients with chronic liver diseases and hepatocellular carcinoma with or without hypoglycemia. Wu JC, et al.
J Lab Clin Med 1988 Nov;112(5):589–94

Extreme elevation of the erythrocyte sedimentation rate in patients admitted to a general medical ward in Harare, Zimbabwe. Stein CM, et al. **J Trop Med Hyg** 1989 Aug; 92(4):259–62

Alphafetoprotein in liver disease. Ahmed W, et al. **JPMA** 1988 Sep;38(9):234–6

Plasminogen and plasminogen proactivator in liver diseases. Boyadjian HP, et al. **Med Interne** 1988 Oct–Dec; 26(4):291–6

A pharmacokinetic analysis of enterohepatic circulation of ursodeoxycholic acid, a drug with a high hepatic extraction but a small clearance. Kubota K, et al.
Res Commun Chem Pathol Pharmacol 1988 Nov; 62(2):309–26

Serum protease inhibitors in opisthorchiasis, hepatoma, cholangiocarcinoma, and other liver diseases.
Changbumrung S, et al.
Southeast Asian J Trop Med Public Health 1988 Jun; 19(2):299–305

Effect of liver damage on the level of coagulation factor II, X and VII in human and bovine plasma. Rybák M, et al. **Thromb Res** 1988 Oct 15;52(2):79–85

Plasma alpha 2-plasmin inhibitor-plasmin complex and FDP-D-Dimer in fulminant hepatic failure. Tomiya T, et al. **Thromb Res** 1989 Feb 1;53(3):253–60

Clinical studies on zinc in chronic liver diseases. Grüngreiff K, et al. **Z Gastroenterol** 1988 Aug;26(8):409–15

[Protein C and liver dysfunction] Doncheva N.
Vutr Boles 1988;27(3):18–22 (20 ref.) **(Bul)**

[Changes in blood selenium level and glutathione peroxidase activity and their clinical significance in primary liver cancer and benign liver diseases] Yang DH, et al.
Chung Hua Nei Ko Tsa Chih 1988 Oct;27(10):612–4, 652 (Eng. Abstr.) **(Chi)**

[The somatotropic hormone and liver diseases] Weber P, et al. **Vnitr Lek** 1989 Jan;35(1):36–42 (Eng. Abstr.) **(Cze)**

[Sympathetic nervous system activity and chronic hepatic disease] Heller FR. **Acta Gastroenterol Belg** 1988 Mar–Apr; 51(2):137–40 **(Fre)**

[Reverse T3 values] Grebe SF, et al. **Acta Med Austriaca** 1988;15 Suppl 1:35–6 **(Ger)**

[Erythrocyte protoporphyrin studies in hepato-erythropoietic porphyria] Kószó F, et al.
Orv Hetil 1988 Sep 25;129(39):2095–9 (38 ref.) (Eng. Abstr.) **(Hun)**

[False values of blood digoxin in patients with acute and chronic liver disease. Role of canrenoate potassium and comparison of radioimmunologic and immunoenzymatic methods] Nardoni A, et al. **Clin Ter** 1988 May 31; 125(4):287–90 (Eng. Abstr.) **(Ita)**

[Bile salts, copper, ceruloplasmin in meal test] Fazzin G, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):355–61 (Eng. Abstr.) **(Ita)**

[Structure of sugar chains in alpha-fetoprotein—difference between primary hepatoma and benign hepatic diseases] Sugitachi I, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1732–9 (Eng. Abstr.) **(Jpn)**

[Significance of serum free form bile acid level in pre-hepatic failure after surgery] Uchiyama K, et al.
Nippon Geka Hokan 1988 Jul 1;57(4):293–301 (Eng. Abstr.) **(Jpn)**

[Study on productive activity of leukotrienes in peripheral neutrophils in patients with liver disease] Kawada N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1570 **(Jpn)**

[Measurement of serum bile alcohol levels in liver dysfunction using isotope dilution-mass spectrometry] Kosaka D, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2396–401 (Eng. Abstr.) **(Jpn)**

[Erythropoietic disorders in chronic diffuse liver diseases] Korol'ko IuR, et al. **Gematol Transfuziol** 1988 Jun; 33(6):26–9 (Eng. Abstr.) **(Rus)**

[Gamma-glutamyltranspeptidase in occupational exposure to hepatotoxic material and certain diseases]
Orešković-Dulizibarić D, et al. **Med Pregl** 1988; 41(9–10):359–61 (Eng. Abstr.) **(Scr)**

[Behavior of serum CA 72.4 in patients with non-tumor pathologies. Preliminary results (letter)] Sagredo E, et al.
Med Clin (Barc) 1989 Jan 21;92(2):78–9 **(Spa)**

CHEMICALLY INDUCED

Effect of splenectomy on hepasor treatment in allyl-alcohol-traumatized rat liver. Virtanen P, et al.
Acta Anat (Basel) 1989;134(4):301–4

Methotrexate-induced chronic liver injury: guidelines for detection and prevention. The ACG Committee on FDA-related matters. American College of Gastroenterology. Lewis JH, et al. **Am J Gastroenterol** 1988 Dec;83(12):1337–45 (82 ref.)

Massive hepatic necrosis in a child after administration of phenobarbital. Mockli G, et al. **Am J Gastroenterol** 1989 Jul;84(7):820–2 (13 ref.)

Response to Drs. Langan and Thomas [letter] Tandon RK.
Am J Gastroenterol 1989 Feb;84(2):210

Fatal labetalol-induced hepatic injury. Douglas DD, et al.
Am J Med 1989 Aug;87(2):235–6

Allopurinol hepatotoxicity. Tam S, et al. **Am J Med** 1989 Mar;86(3):357–8

Labetalol hepatotoxicity [letter] Thiele DL. **Am J Med** 1989 Sep;87(3):361

Is halothane obsolete? Two standards of judgement. Weis KH, et al. **Anaesthesia** 1989 Feb;44(2):97–100 (72 ref.)

Adverse hepatic reactions associated with etretinate in patients with psoriasis—analysis of 22 cases. Thirumoorthy

T, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):477–81
Fulminant hepatic failure after ingestion of sustained-release nicotinic acid. Mullin GE, et al. **Ann Intern Med** 1989 Aug 1;111(3):253–5
Hepatic toxicity after acebutolol therapy. Tanner LA, et al. **Ann Intern Med** 1989 Sep 15;111(6):533–4
Oral contraceptives and focal nodular hyperplasia of the liver. Hagay ZJ, et al. **Arch Gynecol Obstet** 1988; 243(4):231–4
Histopathologic findings in the liver of rheumatoid arthritis patients treated with long-term bolus methotrexate. Aponte J, et al. **Arthritis Rheum** 1988 Dec;31(12):1457–64
Hepatic ultrastructure after methotrexate therapy for rheumatoid arthritis. Bjorkman DJ, et al. **Arthritis Rheum** 1988 Dec;31(12):1465–72
Hepatotoxicity after prolonged use of acetaminophen: a case report. Bravo-Fernández EF, et al. **Bol Asoc Med P R** 1988 Nov;80(11):417–9
The use of antipyrine clearance to measure liver damage in psoriatic patients receiving methotrexate. Paramsothy J, et al. **Br J Dermatol** 1988 Dec;119(6):761–5
Generalized eruption with severe liver dysfunction associated with occupational exposure to trichloroethylene. Nakayama H, et al. **Contact Dermatitis** 1988 Jul;19(1):48–51
Phenytoin hepatotoxicity: a review of the literature. Smythe MA, et al. **DICP** 1989 Jan;23(1):13–8 (41 ref.)
In vivo effects of immunostimulating lipopeptides on mouse liver microsomal cytochromes P-450 and on paracetamol-induced toxicity. Migliore-Samour D, et al. **Experientia** 1989 Sep 15;45(9):882–6
Histopathological evaluation of proliferative liver lesions in rats fed trans-anethole in chronic studies. Newberne PM, et al. **Food Chem Toxicol** 1989 Jan;27(1):21–6
Protection against carbon tetrachloride hepatotoxicity by 5,10-dihydroindeno[1,2-b]indole, a potent inhibitor of lipid peroxidation. Shertzer HG, et al. **Food Chem Toxicol** 1988 Jun;26(6):517–22
Effects of bile acids on liver cell injury by cultured supernatant of activated liver adherents cells. Mizoguchi Y, et al. **Gastroenterol Jpn** 1989 Feb;24(1):25–30
Drug-induced mononucleosis-like hepatic injury in a patient with systemic lupus erythematosus. Takegoshi K, et al. **Gastroenterol Jpn** 1989 Feb;24(1):65–9
A dog model for acetaminophen-induced fulminant hepatic failure. Francavilla A, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):470–8
Peliosis hepatis induced by 6-thioguanine administration. Larrey D, et al. **Gut** 1988 Sep;29(9):1265–9
Hepatic mitochondrial oxidative metabolism and lipid peroxidation in experimental hexachlorobenzene-induced porphyria with dietary carbonyl iron overload. Feldman ES, et al. **Hepatology** 1989 May;9(5):686–92
Cocaine-induced hepatotoxicity. Porter JM, et al. **Hepatology** 1988 Nov-Dec;8(6):1713
Influence of the strain of rats on the induction of hexachlorobenzene induced porphyria. Wainstok de Calmanovici R, et al. **Int J Biochem** 1989;21(4):377–81
Investigations on the role of free radical processes in hexachlorobenzene-induced porphyria in mice. Rizzardini M, et al. **J Biochem Toxicol** 1988 Spring;3:33–45
Variations in the intralobular distribution of copper in the livers of copper-loaded rats in relation to the pathogenesis of copper storage diseases. Fuentealba I, et al. **J Comp Pathol** 1989 Jan;100(1):1–11
Liver injury associated with N-acetylcysteine administration. Badawy AH, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):563–71
Amiodarone-induced liver disease. Genève J, et al. **J Hepatol** 1989 Jul;9(1):130–3 (34 ref.)
Early coagulopathy in severe iron poisoning. Tenenbein M, et al. **J Pediatr** 1988 Oct;113(4):695–7
Propylthiouracil hepatotoxicity: two pediatric cases and review of the literature. Jonas MM, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):776–9 (17 ref.)
The occurrence of intramitochondrial Ca2+ granules in valproate-induced liver injury. Kimura A, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):13–8
Propylthiouracil hepatotoxicity mimicking autoimmune chronic active hepatitis in a girl [letter] Maggiore G, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):547–8
Valproic acid therapy and mitochondrial alterations. Partin JS. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):5–7
Amineptine, a tricyclic antidepressant, inhibits the mitochondrial oxidation of fatty acids and produces microvesicular steatosis of the liver in mice. Le Dinh T, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):745–50
Effects of portacaval shunt, transposition, and dimethylnitrosamine-induced chronic liver injury on pancreatic hormones and amino acids in dog. Hashimoto N, et al. **J Surg Res** 1989 Jan;46(1):35–40
Captopril and the liver [letter] Bellary SV, et al. **Lancet** 1989 Aug 26;2(8661):514
Hepatotoxicity of paracetamol in combination with interferon and vinblastine [letter] Kellokumpu-Lehtinen P, et al. **Lancet** 1989 May 20;1(8647):1143
Hepatotoxicity of actinomycin-D [letter] Pritchard J, et al. **Lancet** 1989 Jan 21;1(8630):168
Long-term hepatotoxicity of tacrine [letter] Summers WK, et al. **Lancet** 1989 Apr 1;1(8640):729
Drug-induced liver disease. Lewis JH, et al. **Med Clin North Am** 1989 Jul;73(4):775–92 (113 ref.)
Effect of polymyxin B on hemoglobin-mediated hepatotoxicity. Marks DH, et al. **Milit Med** 1989 Apr; 154(4):180–4
Valproic acid hepatic fatalities. II. US experience since 1984. Dreifuss FE, et al. **Neurology** 1989 Feb;39(2 Pt 1):201–7
Mechanisms of carbon tetrachloride hepatotoxicity. Clawson GA. **Pathol Immunopathol Res** 1989;8(2):104–12 (67 ref.)
Liver toxicity of retinoid therapy. Roenigk HH Jr. **Pharmacol Ther** 1989;40(1):145–55 (54 ref.)
A model system for studying the bioavailability of intestinally administered microcystin-LR, a hepatotoxic peptide from the cyanobacterium Microcystis aeruginosa. Dahlem AM, et al. **Pharmacol Toxicol** 1989 Feb;64(2):177–81
Hepatotoxicity caused by drugs. Sherlock S. **Ration Drug Ther** 1988 Jul;22(7):1–8
Acetaminophen-induced acute hepatic failure in pigs: controversical results to other animal models. Henne-Bruns D, et al. **Res Exp Med (Berl)** 1988;188(6):463–72
Toxicological aspects of liver heme biosynthesis. De Matteis F. **Semin Hematol** 1988 Oct;25(4):321–9 (59 ref.)
The relation between the oxidative biotransformation of hexachlorobenzene and its porphyrinogenic activity. van Ommen B, et al. **Toxicol Appl Pharmacol** 1989 Sep 15; 100(3):517–28
2,3,7,8-Tetrachlorodibenzo-p-dioxin-induced porphyria in genetically inbred mice: partial antagonism and mechanistic studies. Yao C, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):208–16
Relationship between hepatic glutathione content and carbon tetrachloride-induced hepatotoxicity in vivo. Shimuzu M, et al. **Toxicol Lett** 1989 Apr;47(1):95–102
Hepatotoxicity of pulegone in rats: its effects on microsomal enzymes, in vivo. Moorthy B, et al. **Toxicology** 1989 May 15;55(3):327–37
Characteristics of 2,3,7,8-tetrachlorodibenzo-p-dioxin induced endotoxin hypersensitivity: association with hepatotoxicity. Rosenthal GJ, et al. **Toxicology** 1989 Jun 16;56(3):239–51
Copper toxicity [letter] Prociv P. **Trans R Soc Trop Med Hyg** 1988;82(5):800
[Veno-occlusive disease of the liver and nephroblastoma in children (role of the vincristine-actinomycin combination?] Chevallier B, et al. **Ann Pediatr (Paris)** 1988 Sep; 35(7):525–6 **(Fre)**
[Light and electron microscopic studies on the dose and time dependency of the hepatotoxicity of benzopyrones] Preuss-Ueberschär C, et al. **Arzneimittelforschung** 1988 Sep;38(9):1318–26 (Eng. Abstr.) **(Ger)**
[Adverse reactions of antituberculous drugs] Hagiwara T, et al. **Kekkaku** 1988 Dec;63(12):763–71 (Eng. Abstr.) **(Jpn)**
[Granuloma formation in mice by liposomes of new glycolipid containing mycolic acids, "trehalose 2,3,6'-trimycolate"] Yokoi F, et al. **Yakugaku Zasshi** 1989 Jan;109(1):46–51 (Eng. Abstr.) **(Jpn)**
[Experience with differentiated mass screening and treatment of workers in petrochemical plants with diseases of the liver and biliary tract] Bulatova FD, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):18–20 (Eng. Abstr.) **(Rus)**
[Drug prophylaxis of liver lesions induced by isoniazid and its metabolites] Sokolova GB, et al. **Probl Tuberk** 1989; (5):36–40 (Eng. Abstr.) **(Rus)**
[Autopsy findings after long-term use of anticonvulsants] Dasović-Knežević M, et al. **Lijec Vjesn** 1988 Jun-Jul; 110(6-7):209–11 (Eng. Abstr.) **(Scr)**
[Hepatotoxicity mechanisms] Pla A, et al. **Med Clin (Barc)** 1988 Nov 26;91(18):710–5 (64 ref.) **(Spa)**
[Glafenine hepatotoxicity or acute cardiac liver?] Valls X, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):475–6 **(Spa)**
[Hepatotoxicity of erythromycin (letter)] García Buey L, et al. **Rev Clin Esp** 1989 Feb;184(3):158 **(Spa)**

COMPLICATIONS

Intestinal and hepatic manifestations of AIDS. Kotler DP. **Adv Intern Med** 1989;34:43–71 (99 ref.)
Obstructive jaundice in polycystic disease of the liver [letter] Shah P, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):658
Intrahepatic stones associated with cholangiocarcinoma. Chen MF, et al. **Am J Gastroenterol** 1989 Apr;84(4):391–5
Infection in a patient with polycystic kidney and liver disease: noninvasive localization and treatment [letter] Toussaint C, et al. **Am J Med** 1988 Nov;85(5):754–5
Is propofol a safe agent in porphyria? Weir PM, et al. **Anaesthesia** 1988 Dec;43(12):1022–3
Acute intermittent porphyria (AIP)—an unusual cause of acute confusional state. A case report. Tan CH, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):451–3
Fulminant hepatitis A in intravenous drug users with chronic liver disease. Akriviadis EA, et al. **Ann Intern Med** 1989 May 15;110(10):838–9
Oral lichen planus and hepatic cirrhosis [letter] [published erratum appears in Ann Intern Med 1989 May 15;110(10):849] del Olmo JA, et al. **Ann Intern Med** 1989 Apr 15;110(8):666
Bacterial infections complicating liver disease. Wyke RJ. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):187–210 (92 ref.)
Use of propofol in a patient with porphyria [letter] McLouglin C. **Br J Anaesth** 1989 Jan;62(1):114
Secondary erythrocytosis and sarcoidosis. Bowen DT, et al. **Br J Haematol** 1989 Jun;72(2):286–7
Hepatobiliary implications and complications in protoporphyria, a 20-year study. Doss MO, et al. **Clin Biochem** 1989 Jun;22(3):223–9
The skin-liver connection. Sarkany I. **Clin Exp Dermatol** 1988 May;13(3):151–9 (86 ref.)
Hepatic disease and the skin. Berman JE, et al. **Dermatol Clin** 1989 Jul;7(3):435–48 (37 ref.)
Blood exchange and transfusion therapy for acute cholestasis in protoporphyria. van Wijk HJ, et al. **Dig Dis Sci** 1988 Dec;33(12):1621–5
Peliosis hepatis associated with liver and retroperitoneal abscesses. Van Schil P, et al. **Digestion** 1988;41(1):55–60
Hypoglycemia associated with liver disease and ethanol. Arky RA. **Endocrinol Metab Clin North Am** 1989 Mar; 18(1):75–90 (75 ref.)
Glucose tolerance in adult Ethiopian patients with liver disease and porphyria cutanea tarda. Mengistu M, et al. **Ethiop Med J** 1989 Jul;27(3):107–14
Thrombosis promoting changes in chronic liver diseases. Rák K. **Folia Haematol (Leipz)** 1988;115(3):333–9
Major complications of acute and chronic liver disease. Munoz SJ, et al. **Gastroenterol Clin North Am** 1988 Jun; 17(2):265–87 (166 ref.)
Hepatobiliary abnormalities of AIDS. Schneiderman DJ. **Gastroenterol Clin North Am** 1988 Sep;17(3):615–30 (39 ref.)
Portal hypertension secondary to intrahepatic arterio-portal shunt in primary amyloidosis: a case report. Aramaki T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):410–3
Hepatic osteodystrophy. Static and dynamic bone histomorphometry and serum bone Gla-protein in 80 patients with chronic liver disease. Diamond TH, et al. **Gastroenterology** 1989 Jan;96(1):213–21
Hepatic actinomycosis with portal vein occlusion. Cheng YF, et al. **Gastrointest Radiol** 1989 Summer;14(3):268–70
Hepatobiliary complications in chronic pancreatitis. Wilson C, et al. **Gut** 1989 Apr;30(4):520–7
Sexual behavior in women with nonalcoholic liver disease. Bach N, et al. **Hepatology** 1989 May;9(5):698–703
The prevalence and incidence of cholecystolithiasis in patients with chronic liver diseases: a prospective study. Sheen IS, et al. **Hepatology** 1989 Apr;9(4):538–40
Hepatic dementia or acquired hepatocerebral degeneration. Mendez MF. **J Am Geriatr Soc** 1989 Mar;37(3):259–60
Severe intrahepatic cholestasis in patients treated with recombinant interleukin-2 and lymphokine-activated killer cells. Hoffman M, et al. **J Cancer Res Clin Oncol** 1989; 115(2):175–8
Antiparietal cell antibodies in gastritis associated with chronic liver diseases. Massoud A, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):239–45
Hemolytic anemia and susceptibility to hydrogen-peroxide hemolysis in children with vitamin E-deficiency and chronic liver disease. Fernández-Zamorano A, et al. **J Med** 1988;19(5-6):317–34
Hepatic and biliary tract abnormalities in patients with AIDS. Sonographic-pathologic correlation. Grumbach K, et al. **J Ultrasound Med** 1989 May;8(5):247–54
Gallstones, bile acids, and the liver. **Lancet** 1989 Jul 29; 2(8657):249–51 (44 ref.)
Autonomic neuropathy in liver disease [editorial] **Lancet** 1989 Sep 23;2(8665):721–2
Estimate of prevalence of glucose intolerance in chronic liver disease. Degree of agreement among some diagnostic criteria. Buzzelli G, et al. **Liver** 1988 Dec;8(6):354–9
Conditions associated with hepatocellular carcinoma. Lisker-Melman M, et al. **Med Clin North Am** 1989 Jul; 73(4):999–1009 (82 ref.)
Experimental candidiasis associated with liver injury. Role of transferrin. Abe F, et al. **Mycopathologia** 1988 Oct; 104(1):3–6
Neurologic manifestations of hepatic disease. Rothstein JD, et al. **Neurol Clin** 1989 Aug;7(3):563–78 (98 ref.)
Hepatosplenic candidiasis: an overlooked cause of prolonged fever during recovery from an episode of neutropenia. Fenaux P, et al. **Nouv Rev Fr Hematol** 1989;31(1):45–9
Role of endotoxin on hypoglycaemia in acute hepatic failure. Relationship between hypoglycaemia and hepatic injury following endotoxaemia in diabetic and nondiabetic rats. Shibayama Y. **Pathol Res Pract** 1989 May;184(5):489–93
Acute cholestatic jaundice in children with sickle cell disease: hepatic crises or hepatitis? Mallouh AA, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):689–92
Intra-abdominal bleeding after rupture of hepatic cyst. Lotz GW, et al. **South Med J** 1989 May;82(5):667
Massive hemoperitoneum from transhepatic perforation of the gallbladder: a rare complication of cholelithiasis. Syme RG, et al. **Surgery** 1989 Apr;105(4):556–9
Extrahepatic disease in liver transplant recipients. Van Thiel DH, et al. **Transplant Proc** 1989 Jun;21(3):3478–81
Primary liver cell carcinoma associated with infective liver disease. Atoba MA, et al. **Trop Geogr Med** 1988 Jul; 40(3):244–6
[Use of alkaline phosphatase isoenzymes in controlling the treatment of hepatic osteopathies] Kocián J, et al. **Vnitr Lek** 1988 Oct;34(10):994–1002 (Eng. Abstr.) **(Cze)**
[Idiopathic granulomatous hepatitis and lymphoma of serous membranes] Buffet C, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):305–8 (21 ref.) (Eng. Abstr.) **(Fre)**
[The liver and periarteritis nodosa] Le Thi Huong D, et al. **Gastroenterol Clin Biol** 1989;13(2):141–8 (51 ref.) **(Fre)**
[A syndrome associating severe fever bouts, hepatic disorder,

pancytopenia and disseminated intravascular coagulation in the course of Still's disease in adults] Masson C, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):559–62 (20 ref.) **(Fre)**

[Pulmonary complications and acid–base disorders in liver diseases] Yersin B, et al. **Schweiz Med Wochenschr** 1989 May 13;119(19):595–600 (49 ref.) (Eng. Abstr.) **(Fre)**

[Severe thrombocytopenia, hemolysis and liver function disorder in late pregnancy. HELLP syndrome] Mathis G, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1598–600 (Eng. Abstr.) **(Ger)**

[Diseases of the liver and bile ducts in AIDS] Hess G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:167–70 (20 ref.) **(Ger)**

[Partial rupture of biliary cyst of large dimensions. Clinical description and ultrasonic diagnosis] Farinelli F, et al. **Minerva Med** 1988 Oct;79(10):903–6 (Eng. Abstr.) **(Ita)**

[Hepato–renal polycystosis, Marfan's syndrome and spina bifida occulta: a complex association. Description of a clinical case] Ortino O, et al. **Minerva Med** 1988 Dec; 79(12):1105–7 (Eng. Abstr.) **(Ita)**

[Lichen–chronic hepatopathy syndrome. Etiopathogenetic theories and review of clinical case reports] Rotoli M, et al. **Recenti Prog Med** 1988 Sep;79(9):392–6 (51 ref.) (Eng. Abstr.) **(Ita)**

[Late results of the surgical treatment of advanced valvular heart disease with preoperative major organ dysfunctions] Yamada O, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):974–9 (Eng. Abstr.) **(Jpn)**

[Histiocytosis X with cholestasis in an adult developed liver cirrhosis] Fujii H, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1566–71 **(Jpn)**

[Relation between the degree of hepatic disease and the impairment of red blood cells (letter)] Gallurt P, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):359 **(Spa)**

[Hepatic granulomas with fibrinoid ring in visceral leishmaniasis (kala–azar) (letter)] Marazuela M, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):439 **(Spa)**

[Regenerative nodular hyperplasia of the liver and gastric carcinoma (letter)] Cano Ruiz A, et al. **Rev Clin Esp** 1988 Jun;183(2):101 **(Spa)**

[Hemoperitoneum as the first manifestation of hepatic regenerative nodular hyperplasia associated with Hodgkin's lymphoma (letter)] Ramos Soria F, et al. **Rev Clin Esp** 1989 Apr;184(6):333 **(Spa)**

[47–year–old male with refractory anemia, neurologic disorders, jaundice and hepatomegaly (clinical conference)] Contreras Navarro AM, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):177–83 **(Spa)**

[Hematologic significance of erythrocytic macrocytosis: prospective analysis of 109 successively studied cases] Outeiriño Pérez JJ, et al. **Sangre (Barc)** 1989 Feb; 34(1):32–40 (Eng. Abstr.) **(Spa)**

CONGENITAL

Hepatic disease associated with intrauterine parvovirus B19 infection in a newborn premature infant. Metzman R, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):112–4

Arteriohepatic dysplasia (Alagille's syndrome) with keratoderma. Monk BE, et al. **J R Soc Med** 1989 May; 82(5):297–8

Astrocyte response to perinatal liver disease, hyperammonemia, and hyperbilirubinemia: an immunohistochemical study. Koo H, et al. **Pediatr Pathol** 1988;8(3):301–11

[Management of children with fatal liver diseases with reference to eventual liver transplantation] Cario WR, et al. **Infusionstherapie** 1988 Oct;15(5):197–202 (16 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Diagnostic approach to the jaundiced patient. Elewaut A. **Acta Clin Belg** 1988;43(4):312–6

Inflammatory pseudotumor of the liver. Report of the fine needle aspiration cytologic findings in a case initially misdiagnosed as malignant. Lupovitch A, et al. **Acta Cytol** 1989 Mar–Apr;33(2):259–62

Comparison of STIR and spin–echo MR imaging at 1.5 T in 90 lesions of the chest, liver, and pelvis. Shuman WP, et al. **AJR** 1989 Apr;152(4):853–9

Intrahepatic rupture of a pancreatic pseudocyst: sonographic and CT demonstration [letter] Lantink JA, et al. **AJR Am J Roentgenol** 1989 May;152(5):1129

Abnormal liver function tests in asymptomatic patients. McKenna JP, et al. **Am Fam Physician** 1989 Mar; 39(3):117–26 (21 ref.)

Diagnostic laparoscopy: a prospective review of 100 cases. Herrera JL, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1051–4

Solitary nonparasitic cyst of the liver: a rare cause of abdominal distension. Roisman I, et al. **Am J Gastroenterol** 1989 Sep;84(9):1095–9 (49 ref.)

Alpha–fetoprotein in cancer. Jalanko H. **Ann Chir Gynaecol** 1989;78(1):27–31 (27 ref.)

Is liver biopsy useful in the evaluation of patients with chronically elevated liver enzymes? Van Ness MM, et al. **Ann Intern Med** 1989 Sep 15;111(6):473–8

Histological and cytological fine needle biopsies from focal liver lesions. Intra– and interobserver reproducibility of diagnoses. Glenthøj A, et al. **APMIS** 1989 Jul;97(7):611–8

Phenytoin hepatotoxicity masked by corticosteroids. Lisker–Melman M, et al. **Arch Intern Med** 1989 May; 149(5):1196–7

Cholesteryl ester storage disease. Report of a case. Coelho CA, et al. **Arq Gastroenterol** 1987 Jul–Dec;24(3–4):184–7 (8 ref.)

Value of laparoscopy in the diagnosis of hepatic and peritoneal diseases. Sayeed A, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):90–4

The prevalence and characterization of simple hepatic cysts by ultrasound examination. Gaines PA, et al. **Br J Radiol** 1989 Apr;62(736):335–7

Salutary lesson in interpretation of liver palpation at laparotomy for sigmoid carcinoma. Malpani KR, et al. **Bristol Med Chir J** 1988 Nov;103(4):73

Patent ductus venosus: problems in assessment and management. Barsky MF, et al. **Can J Surg** 1989 Jul; 32(4):271–5

Synthesis of [13C]phenacetin and its application to the breath test for the diagnosis of liver disease. Kurumaya K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2679–81

Diagnostic value of C–13–methacetin breath test in liver diseases. Qiu YY, et al. **Chin Med J [Engl]** 1988 Jan; 101(1):37–41

The diagnostic accuracy of three recommended methods for serum aspartate aminotransferase assays in patients suspected of myocardial infarction and hepatobiliary diseases. Goldberg DM, et al. **Clin Biochem** 1988 Oct; 21(5):323–8

Measurements of glutathione S–transferase B1 in plasma after birth asphyxia: an early indication of hepatocellular damage. Beckett GJ, et al. **Clin Chem** 1989 Jun;35(6):995–9

Alpha–fetoprotein antibody–lectin enzyme immunoassay to characterize sugar chains for the study of liver diseases [published erratum appears in Clin Chim Acta 1989 Jun 30;182(2):239] Kinoshita N, et al. **Clin Chim Acta** 1989 Feb 15;179(2):143–51

Studies on serum immunoreactive prolyl 4–hydroxylase in liver diseases—its elevation both in hepatocellular damage and cholestatic diseases. Nagai Y, et al. **Clin Chim Acta** 1988 Jun 30;175(1):27–36

The abdominal manifestation of von Hippel–Lindau disease and a radiological screening protocol for an affected family. Jennings CM, et al. **Clin Radiol** 1988 Jul;39(4):363–7 (29 ref.)

Clinical use of serum enzymes in liver disease. Reichling JJ, et al. **Dig Dis Sci** 1988 Dec;33(12):1601–14 (157 ref.)

Ecarin test in diagnosis of dicoumarol therapy, liver diseases and DIC. Kornalik F, et al. **Folia Haematol (Leipz)** 1988; 115(4):483–7

Ultrasonography in chronic liver disease [letter] Giorgio A, et al. **Gastroenterology** 1988 Dec;95(6):1697–8

The recognition of early liver disease. Sampliner RE. **Hosp Pract [Off]** 1989 Mar 30;24(3A):53, 55–6

Comparison of techniques for in vivo attenuation measurements. Parker KJ, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1064–8

Comparison of serum bile acids with standard liver function tests in the diagnosis of liver disease. Agha S, et al. **Indian J Gastroenterol** 1989 Jan;8(1):41–2

Quantitative ultrasonic detection and classification of diffuse liver disease. Comparison with human observer performance. Garra BS, et al. **Invest Radiol** 1989 Mar; 24(3):196–203

Magnetic resonance imaging of focal hepatic lesions: a review. Degryse H, et al. **J Belge Radiol** 1988;71(2):167–75 (27 ref.)

An improved sensitive assay method for the heterogeneity of alpha–foetoprotein: possible application for early differential diagnosis. Ohkawa K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):337–41

Assessment of recent techniques in diagnosis of chronic hepatic disorders. el–Hawy AM, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):115–29

Liver injury tests in hazardous waste workers: the role of obesity. Hodgson MJ, et al. **J Occup Med** 1989 Mar; 31(3):238–42

Liver function testing in a working population: three strategies to reduce false–positive results. Wright C, et al. **J Occup Med** 1988 Sep;30(9):693–7

Inflammatory pseudotumor of the liver. Standiford SB, et al. **J Surg Oncol** 1989 Apr;40(4):283–7

Unknown case 3: subcapsular liver hematoma. Rachner T, et al. **J Ultrasound Med** 1988 Nov;7(11):649

Prenatal diagnosis of fetal liver calcifications. Richards DS, et al. **J Ultrasound Med** 1988 Dec;7(12):691–4

Ultrasonography in the assessment of diffuse liver disease [letter] Székely G, et al. **JAMA** 1988 Dec 23–30; 260(24):3588–9

Hepatic parenchymal calcifications—differentiation from intrahepatic stones. Lin HH, et al. **JCU** 1989 Jul–Aug; 17(6):411–5

Feasibility of fast MR imaging of the liver at 1.5 T. Raval B, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):203–10

In vivo measurements of relaxation process in the human liver by MRI. The role of respiratory gating/triggering. Thomsen C, et al. **Magn Reson Imaging** 1988 Jul–Aug; 6(4):431–6

MRI measurement of hepatocyte toxicity using the new MRI contrast agent manganese dipyridoxal diphosphate, a manganese/pyridoxal 5–phosphate chelate. Young SW, et al. **Magn Reson Med** 1989 Apr;10(1):1–13

Hepatic imaging and advanced endoscopic techniques. Rustgi AK, et al. **Med Clin North Am** 1989 Jul;73(4):895–909 (65 ref.)

Acute intermittent porphyria in pregnancy. Milo R, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):450–2

Hepatic rupture in pregnancy. Neerhof MG, et al. **Obstet Gynecol Surv** 1989 Jun;44(6):407–9 (14 ref.)

Transient abdominal granulomas in children. Fleckenstein JL, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):228–32

Metastatic Wilms' tumor to the liver with MR findings simulating cysts: case report emphasizing need for integrated imaging. Brody AS, et al. **Pediatr Radiol** 1989; 19(5):337–8

Cerebrospinal fluid pseudocyst presenting as a hepatic mass: a complication of ventriculoperitoneal shunt. Wang F, et al. **Pediatr Radiol** 1989;19(5):326–7

Liver imaging by magnetic resonance. Wolf KJ, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):49–54

Intrahepatic periportal abnormal intensity on MR images: an indication of various hepatobiliary diseases. Matsui O, et al. **Radiology** 1989 May;171(2):335–8

Hepatic imaging. **Semin Liver Dis** 1989 Feb;9(1):1–101

Computed tomography and magnetic resonance imaging of the liver. Bernardino ME, et al. **Semin Liver Dis** 1989 Feb; 9(1):32–49 (87 ref.)

Rational uses of hepatic imaging modalities. Burnett DA. **Semin Liver Dis** 1989 Feb;9(1):1–6 (38 ref.)

Hepatic ultrasound. Igidbashian VN, et al. **Semin Liver Dis** 1989 Feb;9(1):16–31 (139 ref.)

Current diagnostic imaging modalities of the liver. Clouse ME. **Surg Clin North Am** 1989 Apr;69(2):193–234 (103 ref.)

Ultrasonography in the diagnosis of benign diffuse parenchymal liver diseases: a prospective study. Yang PM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):966–77

Hepatic granuloma manifested as a pseudotumor with calcification: report of a case. Yuan CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1121–4

Study of eosinophilia and hepatic dysfunction as a predictor of rejection in human liver transplantation. Foster PF, et al. **Transplant Proc** 1988 Feb;20(1 Suppl 1):676–7

Can serum liver function tests differentiate rejection from other causes of liver dysfunction after hepatic transplantation? Sankary HN, et al. **Transplant Proc** 1988 Feb;20(1 Suppl 1):669–70

An analysis of the determinants of hepatic allograft rejection using stepwise logistic regression. Sankary H, et al. **Transplantation** 1989 Jan;47(1):74–7

In vivo acoustic attenuation in liver: correlations with blood tests and histology. Duerinckx A, et al. **Ultrasound Med Biol** 1988;14(5):405–13

Score–aided decision making in patients with severe liver damage after hepatic transplantation. Gubernatis G, et al. **World J Surg** 1989 May–Jun;13(3):259–65

[15N] ammonium test for liver function diagnosis. Jung K, et al. **Z Med Lab Diagn** 1989;30(3):169–74

[Gamma–glutamyltransferase activity in the serum and the mean–cell erythrocyte volume of patients with chronic ethylism and chronic liver diseases (preliminary report)] Penev P, et al. **Vutr Boles** 1988;27(4):49–54 (Eng. Abstr.) **(Bul)**

[Standards in the differentiation of the symptom–complex in liver yang exuberance syndrome] Chen GL. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):549–51 **(Chi)**

[Diagnosis and traditional Chinese medicine combined with Western medicine in the treatment of hepatic porphyria] Chen MH. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep; 8(9):573–5 (17 ref.) **(Chi)**

[Diagnostic value of serum total bile acid in hepatobiliary diseases] Tam KM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):89–94 (Eng. Abstr.) **(Chi)**

[Liver scintigraphy as a diagnostic adjuvant to ultrasonic examination in cases of hepatic focal processes] Poulsen L, et al. **Ugeskr Laeger** 1989 Jul 3;151(27):1751–3 (Eng. Abstr.) **(Dan)**

[Current developments in hepatology] Lockefeer JH, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):627–9 **(Dut)**

[Determination of blood level of muscle enzymes in glycogenoses with liver involvement: a diagnostic criterion] Labrune P, et al. **Ann Pediatr (Paris)** 1989 May; 36(5):299–301 (Eng. Abstr.) **(Fre)**

[Value of a score using clinical and biological variables for determining the benignity or malignancy of a hepatic mass] Menu Y, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):340–2 (Eng. Abstr.) **(Fre)**

[Hepatobiliary actinomycosis. Apropos of 3 cases with pseudocancerous aspects] Sondag D, et al. **Gastroenterol Clin Biol** 1989 May;13(5):508–12 (23 ref.) (Eng. Abstr.) **(Fre)**

[Biliary cysts or hepatic cysts] Levy VG. **Presse Med** 1989 Feb 18;18(7):322–4 **(Fre)**

[Gamma GT assay: a necessary and sufficient test for the screening of hepatopathies?] Meyer C, et al. **Rev Med Interne** 1989 May–Jun;10(3):247–8 **(Fre)**

[Basic abdominal ultrasound diagnosis course. Liver—normal findings and diffuse liver diseases] Weigold B. **Bildgebung** 1987–89;56 Suppl 1:17–23 **(Ger)**

[Basic abdominal ultrasound diagnosis course. Circumscribed liver changes] Zoller WG. **Bildgebung** 1987–89;56 Suppl 1:25–31 **(Ger)**

[Diagnostic strategy of the liver and bile ducts] Junginger T, et al. **Langenbecks Arch Chir** 1988;Suppl 2:435–9 (Eng.

Abstr.) (Ger)
[Procollagen III peptide (P-3-P): is it necessary in liver diagnosis?] Pott G, et al. **Med Klin** 1989 Mar 15;84(3):158–9, 172 (18 ref.) (Ger)
[Differential sonographic diagnosis of focal liver lesions] Görich J, et al. **Radiologe** 1988 Aug;28(8):349–55 (53 ref.) (Ger)
[Predictive value of magnetic resonance tomography in comparison with sonography and computed tomography in the diagnosis of focal liver lesions] Hauenstein KH, et al. **Radiologe** 1988 Aug;28(8):362–9 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of focal changes of the liver] Pirschel J. **Rontgenpraxis** 1989 Aug;42(8):278–84 (24 ref.) (Ger)
[Differential diagnostic importance of sonographically detected lymph node enlargement of the liver hilum in non-malignant liver diseases] Kathrein H, et al. **Ultraschall Med** 1989 Jun;10(3):127–31 (Eng. Abstr.) (Ger)
[Imaging procedures in gastroenterology. Magnetic resonance tomography] Loeffler W. **Verh Dtsch Ges Inn Med** 1988;94:154–8 (Ger)
[Focal and diffuse liver changes] von Klinggräff G. **Verh Dtsch Ges Inn Med** 1988;94:543–8 (13 ref.) (Ger)
[Behavior of the aminophenazone breath test in chronic liver diseases] Treutler J, et al. **Z Gesamte Inn Med** 1988 Dec 1;43(23):688–92 (Eng. Abstr.) (Ger)
[Acute hepatic porphyria in combination with configuration anomaly of the liver] Franke U, et al. **Zentralbl Chir** 1988; 113(21):1412–4 (Ger)
[Focal nodular hyperplasia of the liver] Petracca E, et al. **Clin Ter** 1988 Apr 15;125(1):61–4 (Eng. Abstr.) (Ita)
[Determination of blood ferritin in the evaluation of hepatic siderosis in patients with porphyria cutanea tarda] Vozza A, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug; 123(7–8):325–7 (Eng. Abstr.) (Ita)
[Evaluation of serum cathepsin B-like activity in liver diseases] Miyata M. **Fukuoka Igaku Zasshi** 1988 Nov; 79(11):832–8 (Eng. Abstr.) (Jpn)
[Quantitative estimation of the liver parenchymal echo pattern using acoustic intensive histogram (echo-histogram) analysis in diffuse liver diseases] Kimura S. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):331–7 (Jpn)
[A case report of the hypereosinophilic syndrome with eosinophilic peritonitis, revealing abnormal imagings of the liver scintigram and brain computed tomography] Masunaga T, et al. **Nippon Naika Gakkai Zasshi** 1989 May; 78(5):666–71 (Jpn)
[Clinical significance of measurement of serum adenosine deaminase activity in patients with various liver diseases] Toyama M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2633–41 (Eng. Abstr.) (Jpn)
[Clinical evaluation of ursodeoxycholic acid. Glucagon tolerance test in patients with chronic liver disease] Yamashita Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2651–7 (Eng. Abstr.) (Jpn)
[Clinical evaluation of measurement of plasma antithrombin III, alpha 2-plasmin inhibitor and plasminogen in various liver disease] Yanagisawa N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2601–9 (Eng. Abstr.) (Jpn)
[Selection and understanding of bedside tests. Hepato-biliary symptoms] Abei T. **Rinsho Byori** 1987 Jul;Spec No 72:153–9 (Jpn)
[Clinical application of serum guanase analysis by electrophoresis] Nishikawa Y, et al. **Rinsho Byori** 1988 Nov;36(11):1313–6 (Jpn)
[Serum levels of guanidino compounds in liver diseases] Park K, et al. **Rinsho Byori** 1988 Jun;36(6):689–93 (Jpn)
[Analysis of clinical symptoms and various morphologic changes in patients dying of acute intermittent porphyria (AIP)] Kaszewska I, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):279–87 (Eng. Abstr.) (Pol)
[Patients returning from tropical countries] Pawłowski Z. **Wiad Parazytol** 1988;34(4–6):637–9 (Pol)
[Giant non-parasitic cyst of the liver] Zherlov GK, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):142–3 (Rus)
[Subcapsular hematoma of the liver simulating malignant tumor] Ismailov AKh, et al. **Klin Khir** 1988;(9):57 (Rus)
[Clinical aspects and diagnosis of non-parasitic solitary cysts of the liver] Ponomarev AA. **Klin Med (Mosk)** 1989 Jun; 67(6):27–32 (36 ref.) (Rus)
[Ultrasonic study of the large vessels of the peritoneal cavity and the retroperitoneal space in diseases of the liver] Shurandina NV. **Med Radiol (Mosk)** 1988 Oct;33(10):74–9 (61 ref.) (Rus)
[The significance of changes in neutrophil reactivity in the clinical picture of chronic liver diseases in children] Gorbunova IV, et al. **Pediatriia** 1988;(6):19–23 (Eng. Abstr.) (Rus)
[Clinical evaluation of the "skin window" method in chronic liver diseases in children] Potapov AS, et al. **Pediatriia** 1988;(11):32–6 (Eng. Abstr.) (Rus)
[Possibilities of echography in the differential diagnosis of surgical diseases of the liver] Tolua FI, et al. **Sov Med** 1989;(4):90–3 (Rus)
[Ultrasonic diagnosis of benign focal lesions of the liver] Boger MM, et al. **Ter Arkh** 1988;60(7):66–9 (Eng. Abstr.) (Rus)
[Echomorphological comparisons in chronic diseases of the liver] Iakhontova OI, et al. **Ter Arkh** 1989;61(2):52–5 (Eng. Abstr.) (Rus)
[Sarcoidosis of the liver with marked jaundice] Babich AV, et al. **Vestn Khir** 1988 Oct;141(10):52–3 (Rus)
[Acute porphyria simulating "acute abdomen"] Baskakov VA, et al. **Vestn Khir** 1989 Feb;142(2):51–2 (Rus)
[Giant true cyst of the liver] Tupiakov VA, et al. **Vestn Khir** 1989 Mar;142(3):52–3 (Rus)
[Diagnosis of liver diseases] Gembitskii EV, et al. **Voen Med Zh** 1988 Jun;(6):34–6 (Rus)
[Clinico-diagnostic significance of protein indices and blood enzyme activity in focal liver diseases] Gaevskaia VA, et al. **Vrach Delo** 1988 Sep;(9):22–5 (Eng. Abstr.) (Rus)
[Cystic changes in the liver in our 5-year ultrasonographic study] Krillo V, et al. **Vnitr Lek** 1989 Mar;35(3):278–82 (Eng. Abstr.) (Slo)
[Non-cystic diseases of the liver in a 5-year ultrasonographic study] Sorf M, et al. **Vnitr Lek** 1989 Mar;35(3):283–7 (Eng. Abstr.) (Slo)
[Echographic study of hepatic and pancreatic pathology in children] Enríquez G. **An Esp Pediatr** 1988 Sep;29 Suppl 33:112–3 (5 ref.) (Spa)
[Subcapsular hepatic hematoma in the neonatal period: echographic diagnosis] Henales Villate V, et al. **An Esp Pediatr** 1989 May;30(5):400–3 (Eng. Abstr.) (Spa)
[Detection of hepatitis B virus DNA. Its use in the etiological diagnosis of chronic hepatopathies (editorial)] Costa J, et al. **Med Clin (Barc)** 1989 May 13;92(18):696–8 (Spa)
[Increase in serum mucin-like carcinoma-associated antigen (MCA) in patients with chronic liver diseases (letter)] Soriano A, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):675 (Spa)
[Current indications for liver biopsy] Hernández Guío C. **Rev Clin Esp** 1988 Nov;183(7):377–80 (26 ref.) (Spa)
[Solitary congenital liver cyst (diagnosis after an episode of acute pancreatitis] Díaz Rojas F, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):261–3 (Eng. Abstr.) (Spa)
[Incidence of asymptomatic liver diseases in patients biopsied over a 3-year period, but not belonging to any risk group] Nogueira Soriano JM, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):52–6 (Eng. Abstr.) (Spa)
[Hepatic polycystosis in adults (letter)] Sillero C. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):728–9 (Spa)
[Peritoneoscopy in the diagnosis of diseases of the liver, bile ducts and peritoneum] Ragasol A. **Rev Invest Clin** 1967 Jul–Sep;19(3):245–54 (Eng. Abstr.) (Spa)

DRUG THERAPY

Effect of acute and chronic propranolol administration on antipyrine and paracetamol clearance in patients with chronic liver disease. Hayes PC, et al. **Am J Gastroenterol** 1989 Jul;84(7):723–6
Prescribing for patients with liver disease. Arns PA, et al. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):109–30 (187 ref.)
Evaluating treatment options for chronic liver disease. Carey WD. **Cleve Clin J Med** 1989 Jul–Aug;56(5):473–4
Chronic liver diseases: current therapeutic options. Kaplan MM. **Hosp Pract [Off]** 1989 Mar 15;24(3):111–6, 121–3, 126–30
Glucagon in hepatic failure [letter] Khosla SN, et al. **Indian J Gastroenterol** 1989 Jul;8(3):203
Hepatoprotective activity of kutkin—the iridoid glycoside mixture of Picrorhiza kurroa [published erratum appears in Indian J Med Res 1988 Dec;88:iv] Ansari RA, et al. **Indian J Med Res** 1988 Apr;87:401–4
Kinetics of a single dose combination of nifedipine/acebutolol in patients with chronic liver disease. Lejeune P, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):513–6
Premenstrual exacerbations in hepatic porphyria: prevention by intermittent administration of an LH-RH agonist in combination with a gestagen [letter] Bargetzi MJ, et al. **JAMA** 1989 Feb 10;261(6):864
Controlled trial of haem arginate in acute hepatic porphyria. Herrick AL, et al. **Lancet** 1989 Jun 10;1(8650):1295–7
Use of the Romanian product Silimarina in the treatment of chronic liver diseases. Tănăsescu C, et al. **Med Interne** 1988 Oct–Dec;26(4):311–22
Anti-hepatotoxic activity of extracts and constituents of Buddleja species. Houghton PJ, et al. **Planta Med** 1989 Apr;55(2):123–6
An evaluation of the potency of Osbeckia octandra and Melothria maderaspantana as antihepatotoxic agents. Jayathilaka KA, et al. **Planta Med** 1989 Apr;55(2):137–9
Antihepatotoxic principles of Liquidambar formosana fruits. Konno C, et al. **Planta Med** 1988 Oct;54(5):417–9
Antihepatotoxic principles of Solanum capsicastrum. Lin CN, et al. **Planta Med** 1989 Feb;55(1):48–50
The effect of gomisin A on immunologic liver injury in mice. Nagai H, et al. **Planta Med** 1989 Feb;55(1):13–7
New hepatoprotective triterpenes from Canarium album. Tamai M, et al. **Planta Med** 1989 Feb;55(1):44–7
New antihepatotoxic naphtho-pyrone glycosides from the seeds of Cassia tora. Wong SM, et al. **Planta Med** 1989 Jun;55(3):276–80
Effects of oral S-adenosyl-L-methionine on hepatic glutathione in patients with liver disease. Vendemiale G, et al. **Scand J Gastroenterol** 1989 May;24(4):407–15
[Treatment of acute attacks of hepatic porphyrias with hematin] Devars du Mayne JF. **Ann Med Interne (Paris)** 1989;140(2):83–5 (Fre)
[The liver, hepatobiliary infections and antibiotics] Brogard JM, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):51–3 (Fre)
[Efficacy and tolerance of intravenously administered epomediol in patients with hepatopathy] Fiocchi G, et al. **Clin Ter** 1988 Oct 15;127(1):37–41 (Eng. Abstr.) (Ita)
[The influence of ursodeoxycholic acid on hepatobiliary scintigraphy with 99mTc-N-pyridoxyl-5-methyltryptophan in chronic liver diseases] Hayakawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov; 85(11):2389–95 (Eng. Abstr.) (Jpn)
[Effect of superoxide dismutase and catalase on acute hepatic cell necrosis model] Sakagami Y. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2474 (Jpn)
[Antioxidant activity of hepatotropic preparations in the treatment of chronic diseases of the liver] Loginov AS, et al. **Ter Arkh** 1988;60(8):74–7 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Blood cell superoxide dismutase and enolase activities as markers of alcoholic and nonalcoholic liver diseases. Ledig M, et al. **Alcohol** 1988 Sep–Oct;5(5):387–91
delta-aminolevulinic acid synthetase from the particulate fraction of liver of porphyric rats. Kaplan BH. **Biochim Biophys Acta** [971 May 12;233(2):381–8
Activation energy and lectin affinity chromatography of gamma-glutamyltransferase as a marker for enzyme heterogeneity. Delanghe JR, et al. **Clin Biochem** 1989 Apr; 22(2):115–9
Hyperamylasemia and alpha-amylase isoenzymes in acute liver congestion due to cardiac circulatory failure. Góth L, et al. **Clin Chem** 1989 Aug;35(8):1793–4
High-molecular-mass ("biliary") isoenzyme of alkaline phosphatase and the diagnosis of liver dysfunction in cystic fibrosis. Schoenau E, et al. **Clin Chem** 1989 Sep; 35(9):1888–90
Biliary alkaline phosphatase measured by mini-column chromatography on DEAE-cellulose: application to detection of hepatobiliary diseases. Yeh CT, et al. **Clin Chem** 1989 Aug;35(8):1684–7
New form of dual porphyria: coexistent acute intermittent porphyria and porphyria cutanea tarda. Doss MO. **Eur J Clin Invest** 1989 Feb;19(1):20–5
A comparative study of the hepatotoxicity of 1-fluoropentane and 1-fluorohexane. Nhachi CF, et al. **Food Chem Toxicol** 1988 Aug;26(8):705–13
Measurement of immunoreactive gamma-glutamyl transpeptidase in human sera and liver tissues of patients with various liver diseases. Sekiya C, et al. **Gastroenterol Jpn** 1989 Aug;24(4):378–85
Influence of liver disease on hepatic alcohol and aldehyde dehydrogenases. Panés J, et al. **Gastroenterology** 1989 Sep; 97(3):708–14
The nature of unexplained chronic aminotransferase elevations of a mild to moderate degree in asymptomatic patients. Hay JE, et al. **Hepatology** 1989 Feb;9(2):193–7
The liver disease of asymptomatic patients with elevated aminotransferases [letter] Sampliner RE. **Hepatology** 1989 Oct;10(4):524–5
Hepatic aldehyde dehydrogenase activity in liver diseases, with particular emphasis on alcoholic liver disease. Takase S, et al. **Hepatology** 1989 May;9(5):704–9
Porphyrinostatic effect of isonicotinic acid hydrazide on porphyric chick embryo and yeast. Kotal P, et al. **Int J Biochem** 1988;20(11):1281–3
Effect of hepatic failure toxins on regenerative enzymes in the liver after injury with galactosamine in the rat. Zieve L, et al. **J Lab Clin Med** 1989 Apr;113(4):463–8
Clinical evaluation of serum gamma glutamyl transpeptidase in Thai patients with hepatic disease. Tepsuwan A, et al. **J Med Assoc Thai** 1988 Jun;71(6):319–28
Clinical significance of serum guanase activity in various liver diseases. Shiota G, et al. **Jpn J Med** 1989 Jan–Feb; 28(1):22–4
Alkaline phosphatase isozymes in non-malignant intestinal and hepatic diseases. Domar U, et al. **Scand J Gastroenterol** 1988 Sep;23(7):793–800
[Current value of gamma-glutamyltransferase levels] Ben Ammar S, et al. **Tunis Med** 1988 Oct;66(10):649–53 (Eng. Abstr.) (Fre)
[Complex determination of superoxide dismutase and glutathione reductase activity in the erythrocytes of patients with chronic diseases of the liver] Makarenko EV. **Lab Delo** 1988;(11):48–50 (Eng. Abstr.) (Rus)
[5'-nucleotidase activity in the blood in chronic diseases of the liver and biliary tract] Loginov AS, et al. **Sov Med** 1989;(1):10–2 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

The pattern of chronic liver disease in a hospital population in Riyadh. al-Mofleh I. **East Afr Med J** 1988 Aug; 65(8):514–9
Liver disease in women. Alcohol, autoimmunity, and gallstones. Sherlock S. **West J Med** 1988 Dec;149(6):683–6 (28 ref.)
[Current view of liver diseases in Nuevo León] Muñoz Espinosa LE. **Rev Gastroenterol Mex** 1988 Apr–Jun; 53(2):111–8 (Spa)

ETIOLOGY

Frequency of hepatic cysts in adult polycystic kidney disease. Thomsen HS, et al. **Acta Med Scand** 1988;224(4):381–4

The natural history of liver disease in alpha 1–antitrypsin deficient children. Sveger T. **Acta Paediatr Scand** 1988 Nov;77(6):847–51

Passive hepatic congestion in heart failure: CT abnormalities. Moulton JS, et al. **AJR** 1988 Nov;151(5):939–42

Fatal hepatic necrosis caused by disseminated type 5 adenovirus infection in a renal transplant recipient. Norris SH, et al. **Am J Nephrol** 1989;9(2):101–5

The kidney, hepatobiliary system, and spleen in sickle cell anemia. Pearson HA. **Ann N Y Acad Sci** 1989;565:120–5 (40 ref.)

Effect of granulocyte inhibitory factor on granuloma formation in mice infected with Schistosoma mansoni. Nogueira-Machado JA, et al. **Ann Trop Med Parasitol** 1988 Aug;82(4):377–82

Hepatic calcification in proliferated bile ductules in a uremic patient. Kurumaya H, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):411–3

Liver biopsy findings in the acquired immunodeficiency syndrome. González ER, et al. **Bol Asoc Med P R** 1988 Aug;80(8):274–6

Liver involvement in acute Q fever [letter] Domingo P, et al. **Chest** 1988 Oct;94(4):895–6

Hepatosplenic and small bowel calcification due to Schistosoma mansoni infection. Radhakrishnan S, et al. **Dig Dis Sci** 1988 Dec;33(12):1637–40

Cellular mechanisms of toxicity and tolerance in the copper-loaded rat. II. Pathogenesis of copper toxicity in the liver. Fuentealba I, et al. **Exp Mol Pathol** 1989 Feb; 50(1):26–37

Hepatotoxicity and renal toxicity in rats of corn samples associated with field cases of equine leukoencephalomalacia. Voss KA, et al. **Food Chem Toxicol** 1989 Feb;27(2):89–96

Influence of sex and breastfeeding on liver disease in alpha 1–antitrypsin deficiency [letter] Labrune P, et al. **Hepatology** 1989 Jul;10(1):122

Alpha 1–antitrypsin deficiency in lung and liver disease. Buist AS. **Hosp Pract [Off]** 1989 May 15;24(5):51–9 (10 ref.)

Spontaneous rupture of the liver associated with amyloidosis. Ades CJ, et al. **J Clin Gastroenterol** 1989 Feb;11(1):85–7

Liver biopsy complications monitored by ultrasound. Hederström E, et al. **J Hepatol** 1989 Jan;8(1):94–8

Liver function tests in cholecystitis. Jain VK, et al. **J Indian Med Assoc** 1988 Sep;86(9):236–8

Cat-scratch disease without adenopathy. Malatack JJ, et al. **J Pediatr** 1989 Jan;114(1):101–4

Hepatic injury during rotavirus infections [letter] St. Geme JW 3d, et al. **J Pediatr** 1988 Nov;113(5):952–3

Hepatic complications of total parenteral nutrition. Sax HC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):615–8 (32 ref.)

Liver disease in anti-HBe positive chronic HBsAg carriers and hepatitis C virus [letter] Fattovich G, et al. **Lancet** 1989 Sep 30;2(8666):797–8

Localized hepatic oil embolization following lymphography. Bruna J. **Lymphology** 1988 Dec;21(4):224–6

A report of actinomycosis involving the lung and liver. Forgan-Smith JR, et al. **Med J Aust** 1989 Feb 6; 150(3):153–5

The gastrointestinal and hepatic manifestations of the acquired immunodeficiency syndrome. Lane GP, et al. **Med J Aust** 1989 Feb 6;150(3):139–43

T4+ (helper phenotype) chronic lymphocytic leukemia: case report with liver failure and literature review. Greer JP, et al. **Med Pediatr Oncol** 1988;16(5):356–62 (71 ref.)

Disturbed liver function in heart transplantation candidates: two case reports. Huisman AM, et al. **Neth J Med** 1989 Aug;35(1–2):33–7

Acute hepatic failure precipitated in a patient with subclinical liver disease by vibrionic and clostridial septicemia. Simon TP, et al. **Pathology** 1988 Apr;20(2):188–90

Heatstroke and rhabdomyolysis presenting as fulminant hepatic failure. Fidler S, et al. **Postgrad Med J** 1988 Feb; 64(748):157–9

Graft versus host of the liver: clinical, morphological and immunological aspects. Miglio F, et al. **Prog Clin Biol Res** 1989;309:239–47 (19 ref.)

Hepatic complications of bone marrow transplantation. Sale GE. **Prog Clin Biol Res** 1989;309:349–56 (15 ref.)

Hepatic hematoma in polyarteritis nodosa. Bonomo L, et al. **Rays** 1988 May–Aug;13(2):19–21

Hepatobiliary complications of gastrointestinal disease. **Semin Liver Dis** 1988 Aug;8(3):201–83

Hepatobiliary complications of malabsorption and malnutrition. Quigley EM, et al. **Semin Liver Dis** 1988 Aug; 8(3):218–28 (155 ref.)

Hepatobiliary complications of inflammatory bowel disease. Schrumpf E, et al. **Semin Liver Dis** 1988 Aug;8(3):201–9 (68 ref.)

Relationship of fibrinogen-bound sialic acid and liver disease in patients with lymphoma. Farias C, et al. **Thromb Res** 1988 Aug 1;51(3):325–9

Predictability before transplant of hepatic complications following allogeneic bone marrow transplantation. Locasciulli A, et al. **Transplantation** 1989 Jul;48(1):68–72

A protein toxin from Pasteurella multocida type D causes acute and chronic hepatic toxicity in rats. Cheville NF, et al. **Vet Pathol** 1989 Mar;26(2):148–57

[Liver complications in severely burned children] Kripner J, et al. **Rozhl Chir** 1988 Nov;67(11):752–5 (Eng. Abstr.) (Cze)

[Hepato-biliary complications in enteral nutrition] Godeberge P. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov; 24(6):301–3 (17 ref.) (Eng. Abstr.) (Fre)

[Hepatic manifestations in Still's disease] Algayres JP, et al. **Ann Med Interne (Paris)** 1988;139(7):476–81 (29 ref.) (Eng. Abstr.) (Fre)

[Hepatobiliary changes during exclusive parenteral feeding in infants with severe diarrhea] Larchet M, et al. **Arch Fr Pediatr** 1988 Nov;45(9):623–8 (44 ref.) (Eng. Abstr.) (Fre)

[Absence of liver hematoma after transcutaneous hepatic puncture biopsy in 181 patients: echographic study (letter)] Sbolli G, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):969 (8 ref.) (Fre)

[Hemorrhagic hepatic complications of hepatic puncture-biopsies. Role of echography] Jousse D, et al. **J Radiol** 1988 Dec;69(12):759–62 (7 ref.) (Eng. Abstr.) (Fre)

[Spontaneous cutaneous-cystic-hepatic-bronchial fistula due to an hydatid cyst] Kehila M, et al. **Tunis Med** 1987 Apr; 65(4):267–70 (Eng. Abstr.) (Fre)

[Two fatal cases of hepatic failure due to a malignant lymphoma presenting a liver injury] Tokuyama K, et al. **Gan No Rinsho** 1989 Jan;35(1):74–80 (Eng. Abstr.) (Jpn)

[Liver failure after hepatic resection] Shimada H, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):566–72 (Eng. Abstr.) (Jpn)

[Acute liver dysfunction following modified Fontan operation in complex cardiac lesions—analysis of the contributing hemodynamic factors] Matsuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1135–41 (Eng. Abstr.) (Jpn)

[Severe liver damage in acute circulatory failure. A clinical study of 40 cases] Yasuda H, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):629–34 (Jpn)

[An autopsy case of autoimmune hepatitis with hepatolithiasis] Morioka T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):950–4 (Jpn)

[Hepatic complications in acute pancreatitis] Długosz J. **Postepy Hig Med Dosw** 1988 Nov-Dec;42(6):665–81 (100 ref.) (Eng. Abstr.) (Pol)

[Clinico-biochemical characteristics of hepatic insufficiency in peritonitis] Filipovich NE, et al. **Klin Med (Mosk)** 1988 Jul;66(7):93–6 (Eng. Abstr.) (Rus)

[Severe forms of acute pneumonia with a protracted course accompanied by liver and intestinal dysfunction and dysbacteriosis in young children] Fedenko NN, et al. **Pediatriia** 1988;(11):36–41 (Rus)

[Possibilities of predicting postoperative complications in patients with cholelithiasis] Ozerov VF, et al. **Vestn Khir** 1988 Dec;141(12):59–62 (Rus)

[Changes of the liver and bile ducts in patients with acute intestinal diseases] Maslov VP. **Vrach Delo** 1989 May; (5):66–8 (Eng. Abstr.) (Rus)

[Severe post-splenectomy hepatic insufficiency in a patient with agnogenic myeloid metaplasia] Pérez-Villa F, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):108–10 (Eng. Abstr.) (Spa)

[Granulomatous hepatitis caused by cytomegalovirus in an immunocompetent adult (letter)] Colomina J, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):727–8 (Spa)

[Laparoscopic hemostatic procedures in patients with coagulation disorders undergoing hepatic and splenic puncture biopsies] Ferrando J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):447–9 (Eng. Abstr.) (Spa)

GENETICS

Autosomal dominant polycystic kidney disease with liver and pancreatic involvement in early childhood. Milutinovic J, et al. **Am J Kidney Dis** 1989 Apr;13(4):340–4

The role of the Ah locus in hexachlorobenzene-induced porphyria. Studies in congenic C57BL/6J mice. Hahn ME, et al. **Biochem J** 1988 Aug 15;254(1):245–54

Genetics and pathogenesis of human uroporphyrinogen decarboxylase defects. Elder GH, et al. **Clin Biochem** 1989 Jun;22(3):163–8

Detection of hepatitis B virus X gene protein and antibody in type B chronic liver disease. Katayama K, et al. **Gastroenterology** 1989 Oct;97(4):990–8

Liver disease and hepatitis B infection in a large New Zealand family. Milne A, et al. **N Z Med J** 1989 Jun 28; 102(870):318–20

[The protease inhibitor system in children (in diseases of the lung, liver and hereditary alpha 1-antitrypsin deficiency)] Gillissen A, et al. **Klin Padiatr** 1989 Jan-Feb;201(1):6–10 (Eng. Abstr.) (Ger)

[HLA studies and histochemical detection of liver iron in porphyria cutanea tarda] Köstler E, et al. **Z Hautkr** 1989 Feb 15;64(2):132–4 (Eng. Abstr.) (Ger)

HISTORY

Will artificial liver therapy ever become a reality? Historical aspects and future prospects of the artificial liver. Hori M. **Artif Organs** 1988 Aug;12(4):293–5

IMMUNOLOGY

Hepatitis B surface antigen and immunoglobulin M complexes in chronic carriers and patients with acute and chronic liver diseases. Ayoola EA, et al. **Afr J Med Med Sci** 1989 Mar;18(1):21–4

Significant increase in the antibody to Gal alpha 1-3Gal structure in sera of patients with hepatocellular carcinoma after transcatheter arterial embolization. Kashiwagi M, et al. **Cancer Res** 1989 Aug 15;49(16):4396–401

Autoantibodies to histones and their subfractions in chronic liver diseases. Konikoff F, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):77–82

Splenic adherent cells induce T cell hyporesponsiveness in experimental hepatic failure. Roughneen PT, et al. **Curr Surg** 1989 Jan-Feb;46(1):36–8

Prevalence of hepatitis B surface antigen in persons with liver disorders in Jordan [letter] Toukan AU, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):585–7

Antibody dependent cytotoxicity in chronic active liver disease. Banciu T, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):695–7

The seroprevalence of anti-HTLV-1 antibodies in patients with various liver diseases. Iida S, et al. **Hepatogastroenterology** 1988 Oct;35(5):242–4

The liver and IgA: immunological, cell biological and clinical implications. Brown WR, et al. **Hepatology** 1989 May; 9(5):763–84 (304 ref.)

Expression of blood group-related antigens in the intrahepatic biliary tree and hepatocytes in normal livers and various hepatobiliary diseases. Nakanuma Y, et al. **Hepatology** 1989 Aug;10(2):174–8

Relative risks of death due to liver disease among Japanese male adults having various statuses for hepatitis B s and e antigen/antibody in serum: a prospective study. Sakuma K, et al. **Hepatology** 1988 Nov–Dec;8(6):1642–6

Antibodies to nuclear lamin proteins in liver disease. Wesierska-Gadek J, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):365–72

Interleukin 1 alpha production by peripheral blood monocytes from patients with chronic liver disease and effect of sera on interleukin 1 alpha production. Kakumu S, et al. **J Clin Lab Immunol** 1988 Jul;26(3):113–9

Phenotypic expression of natural killer cell associated membrane antigens in patients with chronic liver disease and hepatocellular carcinoma. Kakumu S, et al. **J Clin Lab Immunol** 1988 May;26(1):29–32

Hepatitis B (HbsAg and HBcAg) hepatic markers in HBsAg positive chronic liver disease [letter] Escobar FJ, et al. **J Clin Pathol** 1989 May;42(5):558

Antibodies to hepatitis C virus in non-A, non-B post-transfusion and cryptogenetic chronic liver disease [letter] Sansonno D, et al. **Lancet** 1989 Sep 30;2(8666):798–9

[Immunological studies on peripheral blood lymphocytes from patients with chronic liver diseases. Especially on T cell functions] Hidaka K. **Fukuoka Igaku Zasshi** 1988 Jul; 79(7):497–513 (Eng. Abstr.) (Jpn)

[Studies on B cell function and non-specific B cell activation in patients with chronic liver diseases] Hirota K. **Fukuoka Igaku Zasshi** 1988 Jul;79(7):514–28 (Eng. Abstr.) (Jpn)

[Studies on rheumatoid factors in chronic liver diseases] Nakaya H. **Fukuoka Igaku Zasshi** 1988 Nov;79(11):791–803 (Eng. Abstr.) (Jpn)

[Antibody-producing ability of splenic cells of the progeny of female rats with chronic lesions of the liver] Briukhin GV, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):97–100 (Eng. Abstr.) (Rus)

[Characteristics of chronic liver diseases with the presence of serum markers of the hepatitis B virus] Aprosina ZG, et al. **Ter Arkh** 1988;60(11):23–8 (Eng. Abstr.) (Rus)

[Circulating immune complexes in patients with acute and chronic diseases of the liver] Uibo RM, et al. **Ter Arkh** 1989;61(2):61–4 (Eng. Abstr.) (Rus)

[Study and significance of cryoimmunoglobulins in chronic liver diseases] Fonollosa Plá V, et al. **Rev Clin Esp** 1989 May;184(8):404–8 (44 ref.) (Eng. Abstr.) (Spa)

METABOLISM

Expression of beta 2-microglobulin on interlobular bile ducts in primary biliary cirrhosis and other hepatobiliary diseases. Nakanuma Y, et al. **Acta Pathol Jpn** 1988 Jul;38(7):853–60

In situ distribution of enolase isozymes in chronic liver disease. Fukuda Y, et al. **Am J Gastroenterol** 1989 Jun; 84(6):601–5

Effects of cholestatic hepatic disease and chronic renal failure on alfentanil pharmacokinetics in children. Davis PJ, et al. **Anesth Analg** 1989 May;68(5):579–83

Expression of cytokeratins in normal and diseased livers and in primary liver carcinomas. Lai YS, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):134–8

Decrease in the number of receptors for epidermal growth factor in the liver of D-galactosamine-intoxicated rats. Sato H, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2663–71

Plasma protein binding of frusemide in liver disease: effect of hypoalbuminaemia and hyperbilirubinaemia. Viani A, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):175–8

Absence of hyperparathyroidism in severe liver disease. Klein GL, et al. **Calcif Tissue Int** 1989 May;44(5):330–4

Elevated plasma tamoxifen levels in a patient with liver obstruction [letter] DeGregorio MW, et al.

Cancer Chemother Pharmacol 1989;23(3):194–5
Effects of epidermal growth factor, glucagon and insulin on the hepatocytes after experimental liver cell necrosis. In vivo studies with monoclonal anti-bromo-deoxyuridine staining. Chen TX, et al. Chin Med J [Engl] 1988 Nov; 101(11):837–40
Guide to drug dosage in hepatic disease. Bass NM, et al. Clin Pharmacokinet 1988 Dec;15(6):396–420 (166 ref.)
Effect of liver disorders on ethanol elimination and alcohol and aldehyde dehydrogenase activities in liver and erythrocytes. Zorzano A, et al. Clin Sci 1989 Jan;76(1):51–7
Endogenous, cutaneous vitamin D synthesis stimulation as an effective way of improving the vitamin D status in children with hepatobiliary malfunctions. Lukaszkiewicz J, et al. Digestion 1989;42(3):158–62
Ammonia and glutamine metabolism in human liver slices: new aspects on the pathogenesis of hyperammonaemia in chronic liver disease. Kaiser S, et al. Eur J Clin Invest 1988 Oct;18(5):535–42
Steady-state intravenous pharmacokinetics of pirenzepine in patients with hepatic insufficiency and combined renal- and hepatic insufficiency. Krakamp B, et al. Eur J Clin Pharmacol 1989;36(1):71–3
Pharmacokinetics of felodipine in patients with liver disease. Regårdh CG, et al. Eur J Clin Pharmacol 1989;36(5):473–9
Tryptophan metabolism in D-galactosamine-induced liver injury. Mizoguchi Y, et al. Gastroenterol Jpn 1988 Oct; 23(5):534–7
Dynamic relationship between urea and glutamine synthesis in the mechanism of ammonia detoxication: a tracer study using 15NH4Cl in fulminant hepatic failure rats. Morimoto Y, et al. Gastroenterol Jpn 1988 Oct;23(5):538–45
Pharmacokinetics of tin-mesoporphyrin in man and the effects of tin-chelated porphyrins on hyperexcretion of heme pathway precursors in patients with acute inducible porphyria. Galbraith RA, et al. Hepatology 1989 Jun; 9(6):882–8
S-phase cells in diseased human liver determined by an in vitro BrdU-anti-BrdU method. Shimizu A, et al. Hepatology 1988 Nov-Dec;8(6):1535–9
Current status of calcium in hepatocellular injury. Thomas CE, et al. Hepatology 1989 Sep;10(3):375–84 (92 ref.)
Digoxin-like immunoreactive substances in chronic liver disease. Yang SS, et al. Hepatology 1989 Mar;9(3):363–6
A cytokeratin immunohistochemical study of cholestatic liver disease: evidence that hepatocytes can express 'bile duct-type' cytokeratins. Van Eyken P, et al. Histopathology 1989 Aug;15(2):125–35
Biogenic amine status in acute fulminant hepatocellular failure in children. Krishnamoorthy MS, et al. Indian J Physiol Pharmacol 1989 Jan-Mar;33(1):15–20
Pharmacokinetics and pharmacodynamics of nitrendipine in healthy subjects and patients with kidney and liver disease. Eichelbaum M, et al. J Cardiovasc Pharmacol 1988;12 Suppl 4:S6–10 (12 ref.)
Disposition of nitrendipine in patients with chronic liver diseases. Zilly W, et al. J Cardiovasc Pharmacol 1988;12 Suppl 4:S175–7
Gas chromatographic-mass spectrometric assessment of the pharmacokinetics of amineptine and its main metabolite in volunteers with liver impairment. Tsaconas C, et al. J Chromatogr 1989 Feb 24;487(2):313–29
Determination of tissue iron and ferritin in liver pathology comparison of histochemical and biochemical results. van Deursen CT, et al. J Clin Chem Clin Biochem 1989 Jun; 27(6):345–9
Increased amounts of the Aspergillus metabolite D-mannitol in tissue and serum of rats with experimental aspergillosis. Wong B, et al. J Infect Dis 1989 Jul;160(1):95–103
Leukocyte endogenous mediator fails to alter protein dynamics in a model of liver dysfunction. Flores EA, et al. J Lab Clin Med 1989 Feb;113(2):211–20
Concurrent occurrence of 3 beta,12 alpha-dihydroxy-5-cholenoic acid associated with 3 beta-hydroxy-5-cholenoic acid and their preferential urinary excretion in liver diseases. Shoda J, et al. J Lipid Res 1989 Aug;30(8):1233–42
Observation of cerebral metabolites in an animal model of acute liver failure in vivo: a 1H and 31P nuclear magnetic resonance study. Bates TE, et al. J Neurochem 1989 Jul; 53(1):102–10
Metallothionein and copper in liver disease with copper retention—a histopathological study. Elmes ME, et al. J Pathol 1989 Jun;158(2):131–7
Hepatic glutathione content in patients with alcoholic and non alcoholic liver diseases. Altomare E, et al. Life Sci 1988;43(12):991–8
Brain cholecystokinin depletion in rats with acute liver failure. Bonato C, et al. Life Sci 1989;44(2):131–5
Serotonin and tryptamine metabolism in the acute hepatic failure model: changes in tryptophan and its metabolites in the liver, brain and kidney. Kodama C, et al. Osaka City Med J 1989 Jun;35(1):1–11
Drug metabolism in liver disease. Howden CW, et al. Pharmacol Ther 1989;40(3):439–74 (182 ref.)
Sulfadimidine kinetics in patients with various chronic liver diseases. Horváth T, et al. Pol J Pharmacol Pharm 1988 May-Jun;40(3):257–64
Serum retinol levels in liver and gastrointestinal diseases. Ostrowski J, et al. Riv Eur Sci Med Farmacol 1987 Mar; 9(1):3–8
Serum retinol binding protein in post-necrotic liver diseases. Tarantino G, et al. Riv Eur Sci Med Farmacol 1987 Jun; 9(2):139–43
[Clearance of drugs in disturbed liver function] Brandt KH, et al. Ned Tijdschr Geneeskd 1988 Dec 10;132(50):2267–71 (Dut)
[The risk of drug overdosage in hepatic diseases] Bircher J. Acta Gastroenterol Belg 1988 Jan-Feb;51(1):102–5 (Eng. Abstr.) (Fre)
[The use of preanesthetic drugs and general anesthetics in hepatic insufficiency] Harvengt C. Acta Gastroenterol Belg 1988 Jan-Feb;51(1):106–10 (Eng. Abstr.) (Fre)
[Liver changes suggesting alpha-1-antitrypsin deficiency (a neglected disease)] Bartók I, et al. Orv Hetil 1989 Sep 3; 130(36):1911–6, 1919 (54 ref.) (Eng. Abstr.) (Hun)
[Clinico-pathological studies of cytochrome P-450 on human hepatic disorders] Sano K. Hokkaido Igaku Zasshi 1989 May;64(3):363–72 (Eng. Abstr.) (Jpn)
[Plasma lidocaine concentrations during epidural anesthesia—a comparison between patients with normal liver functions and those with abnormal functions] Miyamoto M, et al. Masui 1988 Jun;37(6):696–700 (Eng. Abstr.) (Jpn)
[Biochemistry of the physiopathologic and clinical aspects of free radicals in liver and pancreatic diseases] Kamada T, et al. Nippon Rinsho 1988 Oct;46(10):2236–40 (Jpn)
[Immunoreactive human epidermal growth factor in the bile from patients with hepatobiliary disease] Hase K, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Dec;85(12):2610–7 (Eng. Abstr.) (Jpn)
[Changes in production of platelet activating factor by adherent hepatocytes of mice with experimental liver failure] Kioka K, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Mar;86(3):759–63 (Eng. Abstr.) (Jpn)
[Studies of metabolic abnormality of zinc in chronic liver diseases (report-1)—clinical significance] Nagai K. Nippon Shokakibyo Gakkai Zasshi 1988 Dec;85(12):2618–23 (Eng. Abstr.) (Jpn)
[Kupffer cell-derived growth factor in fibroblasts in acute liver injury induced by carbon tetrachloride] Seko S, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Oct; 85(10):2217–24 (Eng. Abstr.) (Jpn)
[Usefulness of determination of porphyrins and their precursors for the evaluation of disorders of heme synthesis in the liver after exposure to xenobiotics] Stankiewicz A, et al. Postepy Hig Med Dosw 1988 Sep-Oct;42(5):574–88 (43 ref.) (Eng. Abstr.) (Pol)
[Amino acid metabolism in hepatic encephalopathy] Szostak D. Wiad Lek 1988 Mar 1;41(5):327–35 (Eng. Abstr.) (Pol)
[Disruption of the electrolyte and microelement composition of gastric juice and bile in patients with chronic diseases of the hepatobiliary system] Gubergrits AIa, et al. Vrach Delo 1989 May;(5):64–6 (Eng. Abstr.) (Rus)

MICROBIOLOGY

The effect of monosaccharides on in situ hepatic trapping of Candida albicans. Sawyer RT. Mycopathologia 1988 Nov;104(2):81–5
Filamentous bacterial forms in histological sections [letter] Chan JK, et al. Pathology 1989 Jan;21(1):67
Detection of human cytomegalovirus DNA in liver biopsies from patients with cytomegalovirus-related liver disease. Dény P, et al. Res Virol 1989 Jul-Aug;140(4):361–72

MORTALITY

Life expectancy in chronic liver disease. Szalay L, et al. Acta Med Hung 1988;45(3-4):297–305
Alcoholic and non-alcoholic liver disease in relation to alcohol consumption in Scotland, 1978–84. Part I: Epidemiology of liver diseases. Kreitman N, et al. Br J Addict 1989 Jun;84(6):607–18
Early indicators of prognosis in fulminant hepatic failure. O'Grady JG, et al. Gastroenterology 1989 Aug;97(2):439–45
Risk factors before hepatectomy, hepatic function after hepatectomy and computed tomographic changes as indicators of mortality from hepatic failure. Didolkar MS, et al. Surg Gynecol Obstet 1989 Jul;169(1):17–26
Exclusion criteria for liver transplant recipients. Shaw BW Jr. Transplant Proc 1989 Jun;21(3):3484–6
[A long-term follow-up study of the histologically confirmed chronic liver diseases in the Juntedo University Hospital] Inaba Y, et al. Gan No Rinsho 1989 Jan;35(2):221–6 (Eng. Abstr.) (Jpn)

NURSING

Spontaneous rupture of the liver during pregnancy: a case report. Nelson DB, et al. J Obstet Gynecol Neonatal Nurs 1989 Mar-Apr; 18(2):106–13

PATHOLOGY

Peliosis hepatis. An unusual case involving the spleen and lymph nodes. Kubosawa H, et al. Acta Pathol Jpn 1989 Mar;39(3):212–5
Duplex sonography of the portal venous system: pitfalls and limitations. Parvey HR, et al. AJR 1989 Apr;152(4):765–70
Revised guidelines on methotrexate use and liver biopsy [letter] Borislow DS, et al. Am J Gastroenterol 1989 Jul; 84(7):841
Occurrence of immunohistochemically detected small Mallory bodies in liver disease. Yoshioka K, et al. Am J Gastroenterol 1989 May;84(5):535–9
Congenital biliary dilatation in autosomal dominant adult polycystic disease of the liver and kidneys. Terada T, et al. Arch Pathol Lab Med 1988 Nov;112(11):1113–6
Transjugular liver biopsy—an Australian experience. Steadman C, et al. Aust N Z J Med 1988 Dec;18(7):836–40
Prevalence of intranuclear particles in liver pathologies. Borgia G, et al. Boll Soc Ital Biol Sper 1989 Apr; 65(4):321–7
Hematologic and hepatic manifestations of the cutaneous porphyrias. Pimstone NR. Clin Dermatol 1985 Apr-Jun; 3(2):83–102 (116 ref.)
Long-term follow-up of hepatic siderosis associated with spontaneous portosystemic shunting. Capron JP, et al. Dig Dis Sci 1989 May;34(5):804–5
Plugged liver biopsy in patients with impaired coagulation. Tobin MV, et al. Dig Dis Sci 1989 Jan;34(1):13–5
Indices of growth and death of liver cells in human chronic liver disease. Barr RD, et al. East Afr Med J 1987 Sep; 64(9):595–600
Histopathological features of liver disease in hospitalized Ethiopian patients. Fekade D. Ethiop Med J 1989 Jan; 27(1):9–13
Survey of copper granules in liver biopsy specimens from various liver abnormalities other than Wilson's disease and biliary diseases. Miyamura H, et al. Gastroenterol Jpn 1988 Dec;23(6):633–8
Clinical use of a nonferromagnetic needle for magnetic resonance-guided biopsy. Mueller PR, et al. Gastrointest Radiol 1989 Winter;14(1):61–4
Morphometric discrepancies in HBsAg-positive cells in chronic liver disease [letter] Luo DZ, et al. Hum Pathol 1989 Sep;20(9):923
Pathologic features of hepatolithiasis in Japan. Nakanuma Y, et al. Hum Pathol 1988 Oct;19(10):1181–6
Massive haemorrhagic necrosis of the liver after liver transplantation. Hübscher SG, et al. J Clin Pathol 1989 Apr;42(4):360–70
Pattern of gall bladder sonography in chronic liver diseases. el-Hawy AM, et al. J Egypt Soc Parasitol 1989 Dec; 19(2):515–21
Hepatic sinusoidal cell destruction in the development of intravascular coagulation in acute liver failure of rats. Hirata K, et al. J Pathol 1989 Jun;158(2):157–65
Alpha 1-antitrypsin deficiency and the PiMS phenotype: case report and literature review. Gourley MF, et al. J Pediatr Gastroenterol Nutr 1989 Jan;8(1):116–21 (47 ref.)
Ultrasound manifestation of metastatic perihepatic calcifications from ovarian carcinoma [letter] Pombo F, et al. JCU 1989 May;17(4):304–6
Liver biopsy. Shamsi Z, et al. JPMA 1989 Jun;39(6):167–9
Multiple nodular foci in the liver associated with chronic hepatic porphyria after previous treatment of breast cancer. Lelbach WK, et al. Klin Wochenschr 1989 Jun 1; 67(11):592–7
Morphologic and chemical studies on a murine mutation (toxic milk mice) resulting in hepatic copper toxicosis. Biempica L, et al. Lab Invest 1988 Oct;59(4):500–8
A rapid method for the in vivo measurement of liver volume. Zoli M, et al. Liver 1989 Jun;9(3):159–63
Ketamine hydrochloride as sole anesthetic for open liver biopsy. Abu Khalaf A, et al. Middle East J Anesthesiol 1988 Oct;9(6):537–43
Electron microscopic cytochemical analysis of hepatic granuloma induced by Cryptococcus neoformans. Baba T. Mycopathologia 1988 Oct;104(1):37–46
Liver pathology in diabetes mellitus and morbid obesity. Clinical, pathological, and biochemical considerations. Silverman JF, et al. Pathol Annu 1989;24 Pt 1:275–302 (125 ref.)
Biopsy-documented tuberculous pleural effusion in a patient with biopsy-proven coexisting sarcoidosis. Giotaki HA, et al. Respiration 1988;54(3):193–6
Liver biopsy: experience at Enugu, eastern Nigeria. Osuafor TO, et al. Scand J Gastroenterol Suppl 1986;124:107–12
Peripheral hepatolithiasis incidentally found at autopsy. A morphological study. Saito K, et al. Virchows Arch [A] 1988;414(1):53–9
Microvasculature in the small portal tracts in idiopathic portal hypertension. A morphological comparison with other hepatic diseases. Terada T, et al. Virchows Arch [A] 1989;415(1):61–7
Needle biopsy of the liver. A critique of four currently available methods. Babb RR, et al. West J Med 1989 Jan; 150(1):39–42 (55 ref.)
[Diagnostic quality control of hepatobiliary echography by autopsy correlation] Frouge C, et al. Gastroenterol Clin Biol 1989 Mar;13(3):285–90 (Eng. Abstr.) (Fre)
[Ultrasound-guided cytopuncture and hepatic microbiopsy in focal lesions of the liver. Apropos of 160 cases] Brauner M, et al. J Radiol 1988 Oct;69(10):567–9 (Eng. Abstr.) (Fre)
[Hepatic biopsy ultrasonically guided with an "Ingenor" thick needle in the histologic diagnosis of focal hepatic lesions (letter)] Giovannini M, et al. Presse Med 1988 Nov 12;17(40):2141–2 (Fre)
[Karyometric studies of astrocytes and nerve cells of the putamen in human hepatic encephalopathy] Martin H, et

al. **Gegenbaurs Morphol Jahrb** 1989;135(1):55–62 (Eng. Abstr.) (Ger)

[Pathologic anatomy of focal liver diseases] Borchard F. **Rontgenpraxis** 1989 Aug;42(8):266–77 (39 ref.) (Ger)

[CT-guided fine needle biopsy of liver masses. A comparison of the results of a working group over 2 time periods] Lüning M, et al. **Rontgenpraxis** 1989 May;42(5):174–9 (Ger)

[Sonographic-controlled puncture and its effect on further diagnosis and therapy] Schneider H, et al. **Ultraschall Med** 1989 Jun;10(3):143–6 (Eng. Abstr.) (Ger)

[Laparoscopy—relevant indications] Henning H. **Verh Dtsch Ges Inn Med** 1988;94:626–8 (Ger)

[Paracetamol poisoning in a swine model] Henne-Bruns D, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):255–63 (Eng. Abstr.) (Ger)

[Ultrasonographic morphology of liver diseases in the light of laparoscopy] Székely G, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul;28(3):196–201 (Eng. Abstr.) (Hun)

[Nodular and cystic lesions of the liver in postmortem studies] Bugovics E. **Orv Hetil** 1988 Dec 11;129(50):2681–2, 2685–6 (31 ref.) (Eng. Abstr.) (Hun)

[Tardive syphilis of hepatic localization] Tomidei M, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):509–11 (Eng. Abstr.) (Ita)

[15 anatomo-pathological and hepatic autopsy findings after liver transplantation] Matturri L, et al. **Minerva Chir** 1988 Oct 15;43(19):1523–31 (Eng. Abstr.) (Ita)

[Liver biopsy at a day-hospital. Experience with a selected case series] Maggi G, et al. **Minerva Dietol Gastroenterol** 1988 Oct-Dec;34(4):241–4 (Eng. Abstr.) (Ita)

[Idiopathic hepatosplenic granulomatosis] Nalli G, et al. **Recenti Prog Med** 1989 Jan;80(1):9–13 (Eng. Abstr.) (Ita)

[Studies on mechanism and clinical significance of ultrasonographical gallbladder wall thickening in liver diseases] Haraguchi Y. **Fukuoka Igaku Zasshi** 1988 Aug; 79(8):615–35 (Eng. Abstr.) (Jpn)

[A serological survey and histopathological comparison of HBV-associated liver diseases in southern part of Korea and west Japan] Lee SD. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):163–71 (Eng. Abstr.) (Jpn)

[A case of malignant transformation of non-parasitic cyst of the liver] Tokarczyk J, et al. **Wiad Lek** 1988 Mar 15; 41(6):393–6 (Eng. Abstr.) (Pol)

[Morphology and variation of the Berg bodies in chronic liver disease] Raica M, et al. **Rev Med Interna [Med Interna]** 1988 Jul-Aug;40(4):359–65 (Eng. Abstr.) (Rum)

[Hepatic granulomatosis (editorial)] Guma CL. **Acta Gastroenterol Latinoam** 1987;17(4):351–2 (Spa)

[Alpha 1-antitrypsin deficiency with histologic expression of metabolic disease of carbohydrates] de la Oliva Senovilla P, et al. **An Esp Pediatr** 1989 Feb;30(2):137–9 (Eng. Abstr.) (Spa)

[The hepatocyte. Ricardo Baquero González Lecture] Grases PJ. **GEN** 1987 Jul-Sep;41(3):81–92 (42 ref.) (Spa)

[Usefulness of fine-needle aspiration puncture cytology in focal liver lesions] Rendón Alvarez F, et al. **GEN** 1987 Jan-Mar;41(1):7–11 (13 ref.) (Eng. Abstr.) (Spa)

[Ring hepatic granulomas caused by cytomegalovirus (letter)] Vaquero Pérez M, et al. **Med Clin (Barc)** 1988 Nov 5; 91(15):599 (Spa)

[Liver involvement in Hodgkin's disease. Histopathological study with clinico-biochemical correlation] Mugüerza JM, et al. **Rev Clin Esp** 1988 Jul;183(3):110–9 (Eng. Abstr.) (Spa)

[Liver biopsy] Solís Herruzo JA. **Rev Clin Esp** 1989 Feb; 184(3):117–20 (40 ref.) (Spa)

[Q fever: hepatic pathology] Mayol Belda MJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):462–4 (Eng. Abstr.) (Spa)

[Hepatic polycystic disease: apropos of a case] Suso Alea FJ, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):189–91 (Eng. Abstr.) (Spa)

[Hepatic fibropolycystic disease in Mexico. Study of 82 cases] Torres-Barrera G, et al. **Rev Invest Clin** 1989 Jan-Mar; 41(1):45–52 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

A simplified scheme for the investigation of thyroid function in chronic liver disease. Bannister P, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):373–5

Comparison of absorbable materials for surgical haemostasis. Blair SD, et al. **Br J Surg** 1988 Oct;75(10):969–71

Thyroid functions in patients with various chronic liver diseases. Shimada T, et al. **Endocrinol Jpn** 1988 Jun; 35(3):357–69

Protective effect of nitrendipine against hypoxic injury in perfused livers from ethanol-treated rats. Thurman RG, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S113–6

Studies on changes of thyroid hormones in various liver diseases: usefulness of free thyroid hormones as liver function test. Takahashi H, et al. **Jpn J Med** 1989 May-Jun; 28(3):297–302

Hepatic granuloma as a model of inflammation and repair: an overview. Wahl SM. **Methods Enzymol** 1988;163:605–22 (67 ref.)

Plasma urea, an unreliable indicator of renal function in hepatic failure [letter] Somers SS, et al. **Postgrad Med J** 1988 Dec;64(758):975–6

Exercise and liver disease. Ritland S. **Sports Med** 1988 Aug; 6(2):121–6 (16 ref.)

Hemodynamic study following liver transplantation. Vera SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2302–4

[Long-term course of hepatic glycogenosis. A retrospective study of 76 cases] de Parscau L, et al. **Arch Fr Pediatr** 1988 Nov;45(9):641–5 (Eng. Abstr.) (Fre)

[Ultrasonic determination of the common carotid and brachial artery blood flow in patients with acute hepatic failure—with special reference to a decrease in common carotid artery blood flow and its relationship with brain edema] Komori H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):764–72 (Eng. Abstr.) (Jpn)

[Changes in central hemodynamics and microcirculation in patients with hepatobiliary pathology undergoing operations using ketamine, neuroleptanalgesia and epidural anesthesia] Vasil'kov VG, et al. **Anesteziol Reanimatol** 1988 Sep-Oct;(5):66–9 (Eng. Abstr.) (Rus)

[Changes in the volumoregulation in liver diseases] Gapon LI. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):59–61 (Eng. Abstr.) (Rus)

[24-hour rhythm of prolactin secretion in liver disease patients with and without signs of feminization] Martínez Verano J, et al. **Rev Esp Enferm Apar Dig** 1988 Aug; 74(2):139–42 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

The pharmacological and pathological studies on several hepatic protective crude drugs from Taiwan (I). Chiu HF, et al. **Am J Chin Med** 1988;16(3–4):127–37

Hepatic packing in major hepatic trauma [letter] Ferguson CM. **Arch Surg** 1989 Apr;124(4):508–9

Protection against carbon tetrachloride hepatotoxicity by 5,10-dihydroindeno[1,2-b]indole, a potent inhibitor of lipid peroxidation. Shertzer HG, et al. **Food Chem Toxicol** 1988 Jun;26(6):517–22

Acetaminophen hepatotoxicity in rats is attenuated by silybin dihemisuccinate. Campos R, et al. **Prog Clin Biol Res** 1988; 280:375–8

Hepatic insufficiency after portacaval shunting is prevented by prior intraportal pancreatic islet autotransplantation. Callery MP, et al. **Surgery** 1989 Aug;106(2):257–65; discussion 265–6

[Observations by quantitative electron microscopy of the action of zinc in protecting the liver from cadmium damage] Cheng S. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):161–3 (Eng. Abstr.) (Chi)

[The liver under top protection?] Poynard T. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):542–3 (Fre)

[Hepatocholecystopathy] Cairella M. **Clin Ter** 1988 Oct 15; 127(1):69–70 (Ita)

[Protective effects of DBcAMP on acute liver failure induced by D-galactosamine in rats] Kakisaka A, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):396–403 (Eng. Abstr.) (Jpn)

[Experimental study of the hepatoprotective effect of transcranial transcutaneous electrostimulation and the synthetic analog of leu-enkephalin dalargin] Kuzin MI, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):266–8 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Case of the month. A rare diversion? Wardlaw JM, et al. **Br J Radiol** 1989 Aug;62(740):759–60

Spontaneous rupture of nonparasitic cyst of the liver. Akriviadis EA, et al. **Gastroenterology** 1989 Jul;97(1):213–5

Polycystic liver disease: quantitation of parenchymal and cyst volumes from computed tomography images and clinical correlates of hepatic cysts. Everson GT, et al. **Hepatology** 1988 Nov-Dec;8(6):1627–34

Computed tomography of liver sarcoidosis. Nakata K, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):707–8

The CT appearance of cystic masses of the liver. Murphy BJ, et al. **Radiographics** 1989 Mar;9(2):307–22 (43 ref.)

Potential role of perfluorooctylbromide in the detection and characterization of liver lesions with CT [published erratum appears in Radiology 1989 Apr;171(1):287] Mattrey RF. **Radiology** 1989 Jan;170(1 Pt 1):18–20

Exophytic spread of hepatobiliary disease via perihepatic ligaments: demonstration with CT and US. Mori H, et al. **Radiology** 1989 Jul;172(1):41–6

Calcification of the ductus venosus: a cause of right upper quadrant calcification in the newborn. Rizzo AJ, et al. **Radiology** 1989 Oct;173(1):89–90

Serendipity in cholangiography. Iko BO. **Scand J Gastroenterol Suppl** 1986;124:213–8

Angiography in the diagnosis of liver disease. Okuda K, et al. **Semin Liver Dis** 1989 Feb;9(1):50–62 (45 ref.)

Benign hepatic masses mimicking metastatic renal cell carcinoma. Wishnow KI, et al. **Urology** 1989 Mar; 33(3):250–2

[Angiographic detection of focal changes in the liver] Jaschke W, et al. **Radiologe** 1988 Aug;28(8):374–9 (55 ref.) (Eng. Abstr.) (Ger)

[Limitations of computed tomographic differential diagnosis of focal liver changes] Wimmer B, et al. **Radiologe** 1988 Aug;28(8):356–61 (16 ref.) (Eng. Abstr.) (Ger)

[A case of rapidly-enlarging multiple giant hepatic cysts—CT analysis and a discussion of the literature] Shimada M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1511–4 (5 ref.) (Eng. Abstr.) (Jpn)

[CAT in hepatorenal polycystosis in the adult] Gironella Coll J, et al. **Arch Esp Urol** 1988 Nov-Dec;41(9):877–9 (Eng. Abstr.) (Spa)

[Abdominal pain and a hepatic mass in a young man] Franco-Vicario R, et al. **Rev Clin Esp** 1989 Feb; 184(2):104–5 (Spa)

RADIONUCLIDE IMAGING

Postpartum hepatic hemorrhage in the syndrome of hemolysis, elevated liver enzymes, and low platelets: diagnosis by radiocolloid scanning. Lee HK, et al. **Clin Nucl Med** 1988 Sep;13(9):635–7

Enlarged left lobe of the liver mistaken for a mass in the splenic region. Rao MG. **Clin Nucl Med** 1989 Feb;14(2):134

Evaluation of six new 99mTc-IDA agents for hepatobiliary imaging. Chervu LR, et al. **Eur J Nucl Med** 1988; 14(9–10):441–5

Technetium-99m-iminodiacetic acid organic anions: review of biokinetics and clinical application in hepatology. Krishnamurthy S, et al. **Hepatology** 1989 Jan;9(1):139–53 (164 ref.)

Sensitivity of nuclear imaging in detecting hepatic space occupying lesions. Jangid DR, et al. **J Assoc Physicians India** 1988 Feb;36(2):145–8

SPECT versus planar liver scintigraphy: is SPECT worth it? Fawcett HD, et al. **J Nucl Med** 1989 Jan;30(1):57–9

Technetium-99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma, adenoma, and focal nodular hyperplasia [letter; comment] Kotzerke J, et al. **J Nucl Med** 1989 Jul;30(7):1278–80. **Comment on:** J Nucl Med 1988 Dec;29(12):1916–20

A radiopharmaceutical for the study of the liver: 99mTc-DTPA-asialo-orosomucoid. II: Human dynamic and imaging studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr-Jun;32(2):117–26

Integrated dynamic image of the liver: a new dynamic study for evaluation of liver disease. Suzuki Y, et al. **Nucl Med Commun** 1988 Jul;9(7):533–40

Single photon emission computed tomography of the liver. Keyes JW Jr. **Semin Liver Dis** 1989 Feb;9(1):77–85 (69 ref.)

Role of positron emission tomographic scanning in the diagnosis of liver disease. Smith JJ. **Semin Liver Dis** 1989 Feb;9(1):86–9 (33 ref.)

[Comparison of the clinical value of an iterative reconstruction procedure with that of a filtered back projection in SPECT of the liver] Reuland P, et al. **Nuklearmedizin** 1989 Aug;28(4):139–44 (Eng. Abstr.) (Ger)

[Nuclear medical differentiation of focal lesions of the liver] Wetzel E, et al. **Radiologe** 1988 Aug;28(8):370–3 (15 ref.) (Eng. Abstr.) (Ger)

[The clinical usefulness of portal venous flow ratio by hepatic angiography with 99mTc-Sn colloid in chronic liver diseases: a comparison with histological finding] Takegoshi K, et al. **Kaku Igaku** 1989 Apr;26(4):499–505 (Eng. Abstr.) (Jpn)

[The current posture on radioisotope exploration in chronic diffuse hepatopathies] Cotul S. **Rev Med Interna [Med Interna]** 1988 May-Jun;40(3):211–6 (0 ref.) (Rum)

[Hepatobiliary scintigraphy in the diagnosis of diseases of the biliary tract] Briskin BS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):35–8 (Rus)

[Hepatic blood flow studied by computed scintigraphy in patients with chronic diffuse liver diseases] Podymova SD, et al. **Klin Med (Mosk)** 1988 Aug;66(8):102–5 (Eng. Abstr.) (Rus)

[Thyroid function in chronic liver diseases in an endemic region] Riabchikov AV. **Med Radiol (Mosk)** 1989 Jul; 34(7):36–41 (Eng. Abstr.) (Rus)

[Gammagraphy of the liver. I. General principles and indications] Ortega C. **Rev Invest Clin** 1967 Apr-Jun; 19(2):179–88 (Spa)

RADIOTHERAPY

[Acid-base equilibrium of the blood during treatment using plasma UV-irradiation of chronic diseases of the liver and bile ducts with cholestasis] Apollonova LA, et al. **Klin Med (Mosk)** 1989 May;67(5):100–4 (Eng. Abstr.) (Rus)

SURGERY

Vascular occlusions for liver resections. Operative management and tolerance to hepatic ischemia: 142 cases. Delva E, et al. **Ann Surg** 1989 Feb;209(2):211–8

Orthotopic liver transplantation for fulminant and subacute hepatic failure. Stieber AC, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):959–64

Decision-making in 100 patients referred to the Australian National Liver Transplantation Unit. McCaughan GW, et al. **Aust N Z J Med** 1989 Apr;19(2):132–7

The treatment of end-stage liver disease in childhood. Shepherd RW. **Aust Paediatr J** 1988 Aug;24(4):213–6

Liver transplantation. Neuberger JM, et al. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):231–52 (46 ref.)

Liver transplantation in a patient with protoporphyria.

Bloomer JR, et al. **Gastroenterology** 1989 Jul;97(1):188–94
Liver transplantation in the management of fulminant hepatic failure. Emond JC, et al. **Gastroenterology** 1989 Jun; 96(6):1583–8
Diagnosis and surgical correction of patent ductus venosus in a calf. Reimer JM, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1539–41
Liver transplantation: medical aspects. Choksi AP. **J Assoc Physicians India** 1988 Apr;36(4):263–6 (40 ref.)
Mechanisms of hypertension during and after orthotopic liver transplantation in children. Lawless S, et al. **J Pediatr** 1989 Sep;115(3):372–9
Mental and motor development, social competence, and growth one year after successful pediatric liver transplantation. Stewart SM, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):574–81
Pediatric liver transplantation: a 3-year experience. Andrews WS, et al. **J Pediatr Surg** 1989 Jan;24(1):77–82
Liver transplantation in infants and children. Kalayoglu M, et al. **J Pediatr Surg** 1989 Jan;24(1):70–6
Fat emulsion in surgical patients with liver disorders. Nagayama M, et al. **J Surg Res** 1989 Jul;47(1):59–64
Splanchnic transplantation. An approach to the infant dependent on parenteral nutrition who develops irreversible liver disease [published erratum appears in **JAMA** 1989 Jul 14;262(2):210] Williams JW, et al. **JAMA** 1989 Mar 10;261(10):1458–62
Auxiliary liver transplantation [editorial] **Lancet** 1989 Mar 11;1(8637):533–4
Improvement in hypertropiic hepatic osteoarthropathy after liver transplantation [letter] Vickers C, et al. **Lancet** 1988 Oct 22;2(8617):968
Acute hepatic failure: the emerging role of orthotopic liver transplantation. Rakela J, et al. **Mayo Clin Proc** 1989 Apr; 64(4):424–8
Liver transplantation. Muñoz SJ, et al. **Med Clin North Am** 1989 Jul;73(4):1011–39 (131 ref.)
Successful surgical treatment of polycystic liver disease. Berliner S, et al. **Med Interne** 1989 Jan–Mar;27(1):65–7
Surgical alternatives for the treatment of nonparasitic liver cysts. Boyle TM, et al. **Mt Sinai J Med** 1989 Mar;56(2):90–2
Auxiliary partial liver transplantation for end-stage chronic liver disease. Terpstra OT, et al. **N Engl J Med** 1988 Dec 8;319(23):1507–11
Polycystic disease of the liver: a report of six patients. Eggink WF, et al. **Neth J Surg** 1988 Oct;40(5):136–8
Solitary non-parasitic liver cyst treated by cyst-gastrostomy. Chang D. **Postgrad Med J** 1988 Jun;64(752):459–61
Liver surgery. **Surg Clin North Am** 1989 Apr;69(2):179–445
Liver resection techniques. Foster JH. **Surg Clin North Am** 1989 Apr;69(2):235–49
The role of transplantation in liver disease. Jenkins RL, et al. **Surg Clin North Am** 1989 Apr;69(2):371–82 (42 ref.)
Liver transplantation: therapeutic option in end-stage liver disease [see comments] Alpert E, et al. **Tex Med** 1988 Dec; 84(12):68–72 (9 ref.). **Comment in:** Tex Med 1989 May;85(5):8–9
Long-term results after liver transplantation in B and delta hepatitis. Colledan M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2421–3
Liver transplantation for acute and subacute fulminant hepatic failure. Gallinger S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2435–8
Liver transplantation for fulminant hepatic failure. Iwatsuki S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2431–4
Indications for selection for liver transplantation in children. Jara P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2450–1
Results of extended preservation of the liver for clinical transplantation. Kalayoglu M, et al. **Transplant Proc** 1989 Jun;21(3):3487–8
Intracranial pressure monitoring during orthotopic liver transplantation for acute liver failure. Potter D, et al. **Transplant Proc** 1989 Jun;21(3):3528
Fetal liver allo- and xenotransplantation in acute and chronic hepatic failure. Sano N, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2360–1
Liver transplantation in a high-risk group of children. Superina RA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2447–9
Prognosis of liver transplantation in patients with erythropoietic protoporphyria [letter] Johnson JA, et al. **Transplantation** 1989 Jul;48(1):175–6
[Actinomycosis of the liver (a case report)] Tasev Kh, et al. **Khirurgiia (Sofiia)** 1988;41(6):79–81 (Bul)
[Current status and perspectives of research on hepatocyte transplantation in the treatment of liver diseases] Zhang YX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr; 27(4):248–50 (15 ref.) (Chi)
[Indications for liver resection] Procházka M, et al. **Vnitr Lek** 1989 Feb;35(2):126–31 (Eng. Abstr.) (Cze)
[Hepatic transplantation. The experience of Hôpital Paul-Brousse] Bismuth H, et al. **Chirurgie** 1988; 114(4):296–9 (Eng. Abstr.) (Fre)
[109 orthotopic hepatic transplantations. Evaluation of our experience] Chapuis Y, et al. **Chirurgie** 1988;114(10):775–84 (Eng. Abstr.) (Fre)
[Orthotopic hepatic transplantation] Lerut JP, et al. **Helv Chir Acta** 1988 Jul;55(3):353–65 (25 ref.) (Eng. Abstr.) (Fre)
[Spontaneous hepatic hematoma during pregnancy] Pezet D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(8):1059–61 (Eng. Abstr.) (Fre)
[Size reduction of the donor liver before orthotopic transplantation. Surgical technic and results] Brölsch C, et al. **Chirurg** 1988 Aug;59(8):558–64 (Ger)
[Comparison of the results of liver transplantation in children and adults] Bumgardner GL, et al. **Chirurg** 1988 Aug; 59(8):526–35 (Ger)
[Surgical therapy of parenchymatous liver cysts] Sperling P. **Zentralbl Chir** 1988;113(18):1159–65 (Eng. Abstr.) (Ger)
[Anesthesiologic and resuscitation problems in interventions of liver resection] Grosso E, et al. **Minerva Anestesiol** 1988 Sep;54(9):349–57 (20 ref.) (Eng. Abstr.) (Ita)
[Intra-operative echographic exploration of the hepatobiliopancreatic system] Ciulli A, et al. **Minerva Chir** 1989 Feb 28;44(4):555–9 (0 ref.) (Ita)
[A case of old traumatic intrahepatic hematoma] Moriura S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr; 86(4):941–4 (Jpn)
[An evaluation of predicting postoperative residual liver function using 99mTc tin colloid] Tamai T, et al. **Radioisotopes** 1988 Oct;37(10):558–63 (Eng. Abstr.) (Jpn)
[Choledochoduodenostomy in benign hepatobiliopancreatic lesions] Stoica T, et al. **Rev Chir [Chir]** 1988 Nov–Dec; 37(6):423–32 (Rum)
[Acute suppurative cholangitis complicated by mechanical jaundice and hepatic insufficiency] Gilenko IA, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):38–41 (Eng. Abstr.) (Rus)
[External respiration, gas exchange and hemodynamics in the early postoperative period in patients after extensive resection of the liver] Vishnevskii VA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):116–9 (Rus)
[Intraoperative reserving of large volumes of autologous blood in surgery of the liver] Zhuravlev VA, et al. **Vestn Khir** 1988 Aug;141(8):108–11 (Eng. Abstr.) (Rus)
[Liver transplant in children. Selection of receptors and donors] Casaubón-Garcín PR, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):298–302 (22 ref.) (Eng. Abstr.) (Spa)
[Orthotopic liver transplantation. Postoperative follow-up of 18 cases in intensive care] Cisneros Alonso C, et al. **Rev Clin Esp** 1988 Oct;183(5):241–5 (Eng. Abstr.) (Spa)
[Liver transplant: efficacious treatment of fulminant hepatic failure] Moreno González E, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):251–5 (Eng. Abstr.) (Spa)
[Selective occlusion of the hepatic artery and portal vein in hepatic rupture due to severe pre-eclampsia] Ibañez Fuentes JR, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun; 54(2):107–10 (Eng. Abstr.) (Spa)
[Acute hepatic insufficiency. Orthoptic hepatic transplant as a therapeutic alternative] Rakela J. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):151–6 (Eng. Abstr.) (Spa)
[Liver transplant] Rakela J. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):227–36 (34 ref.) (Spa)

THERAPY

Medical applications of artificial cells in transfusion, phenylketonuria, essential amino acid production, and liver support. Chang TM. **Ann N Y Acad Sci** 1988;542:507–14
Percutaneous aspiration and alcohol sclerotherapy for symptomatic hepatic cysts. An alternative to surgical intervention. Kairaluoma MI, et al. **Ann Surg** 1989 Aug; 210(2):208–15
Microencapsulated hepatocytes for bioartificial liver support. Cai ZH, et al. **Artif Organs** 1988 Oct;12(5):388–93
Chronic hepatic assist. Malchesky PS, et al. **Artif Organs** 1988 Aug;12(4):300–4 (30 ref.)
Total or partial hepatic assist: limitations and possibilities [editorial] Nosé Y. **Artif Organs** 1988 Aug;12(4):291–2
Therapy of liver disease. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):1–282
Nutritional management of patients with chronic liver disease. Blendis LM. **Baillieres Clin Gastroenterol** 1989 Jan; 3(1):91–108 (79 ref.)
Bilirubin removal by anion exchange resin in post-operative liver failure. Miyazaki M, et al. **Biomater Artif Cells Artif Organs** 1988–89;16(5):977–83
Alcohol sclerotherapy of non-parasitic cysts of the liver. Andersson R, et al. **Br J Surg** 1989 Mar;76(3):254–5
Dialysis in nonuremia. Splendiani G, et al. **Contrib Nephrol** 1989;70:277–83 (17 ref.)
Prognosis of patients with cirrhosis and chronic liver disease admitted to the medical intensive care unit [letter] Adams J, et al. **Crit Care Med** 1989 Aug;17(8):843–4
Liver transplantation. A primer for practicing gastroenterologists, Part I. Dindzans VJ, et al. **Dig Dis Sci** 1989 Jan;34(1):2–8 (46 ref.)
Microcatheter with a ball tip for hepatic embolization and intra-arterial chemotherapy. Hori S, et al. **Eur J Radiol** 1989 Feb;9(1):44–7
Antithrombin III concentrate in the treatment of fulminant hepatic failure. Fujiwara K, et al. **Gastroenterol Jpn** 1988 Aug;23(4):423–7
On the demise of the artificial liver [letter] Bihari D. **Gastroenterology** 1989 Feb;96(2 Pt 1):551–3
Nutrition in liver failure [editorial] Blackburn GL, et al. **Gastroenterology** 1989 Oct;97(4):1049–51
Treatment of post-shunt portal systemic encephalopathy by embolization of the shunt. Henderson JM. **Hepatology** 1989 Jan;9(1):164–5
Metabolic activity of microcarrier attached liver cells after intraperitoneal transplantation during severe liver insufficiency in the rat. Bosman DK, et al. **J Hepatol** 1989 Jul;9(1):49–58
Parenteral nutrition in patients with liver disease. Silk DB. **J Hepatol** 1988 Oct;7(2):269–77 (30 ref.)
Transplantation of the liver in adults and children with fulminant hepatic failure. Vickers C, et al. **J Hepatol** 1988 Oct;7(2):143–50
Management of acute liver failure. Williams R. **Postgrad Med J** 1988 Oct;64(756):769–71 (4 ref.)
Hepatic artery embolization for bleeding and tumors. Clouse ME. **Surg Clin North Am** 1989 Apr;69(2):419–32 (66 ref.)
Management of cystic disease of the liver. Doty JE, et al. **Surg Clin North Am** 1989 Apr;69(2):285–95 (26 ref.)
Perioperative management of fulminant and subfulminant hepatic failure with therapeutic plasmapheresis. Munoz SJ, et al. **Transplant Proc** 1989 Jun;21(3):3535–6
Treatment of primary liver graft nonfunction with prostaglandin E1. Greig PD, et al. **Transplantation** 1989 Sep;48(3):447–53
[Studies on the rat model of surgically evoked acute liver failure] Zhang YX. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):95–9 (Chi)
[Modern aspects of intensive therapy of acute liver failure, complicated by encephalopathy] Margulis MS, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):60–4 (56 ref.) (Rus)
[Priority therapeutic methods in hepatology, gastroenterology and urologic oncology] Granov AM. **Med Radiol (Mosk)** 1988 Nov;33(11):26–30 (Eng. Abstr.) (Rus)
[Current treatment of pyoseptic complications of acute hepatorenal insufficiency] Shimanko II, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):39–44 (Eng. Abstr.) (Rus)
[Re-artelialization of the liver after intravascular occlusion and the possibilities of re-embolization of the arterial bed of the liver] Tarazov PG, et al. **Vestn Khir** 1988 May; 140(5):34–6 (Eng. Abstr.) (Rus)
[Effect of hemosorption on the clinical course of chronic liver diseases] Kurdyballo FV, et al. **Vrach Delo** 1988 Jul; (7):60–3 (Eng. Abstr.) (Rus)
[Comments on the current treatment of fulminant liver failure] Cardenal Sánchez C, et al. **Rev Clin Esp** 1989 Feb; 184(3):143–6 (44 ref.) (Eng. Abstr.) (Spa)
[Clinical nutrition. Infusion of branched-chain amino acids has no positive effect in patients with liver diseases] Eriksson LS, et al. **Lakartidningen** 1988 Nov 23; 85(47):4088–9 (Swe)

URINE

Decreased diuretic response to furosemide in rats with acute hepatic failure. Huang Y, et al. **J Pharmacobiodyn** 1988 Aug;11(8):583–9
[Absorption spectra of urine in acute intermittent porphyria] Zakhariia EA, et al. **Lab Delo** 1988;(5):67–9 (Eng. Abstr.) (Rus)

VETERINARY

Spectrophotometric method for differentiation of cardiac and hepatic lactate dehydrogenase activities in dogs. Aguilera-Tejero E, et al. **Am J Vet Res** 1989 Jul; 50(7):1128–30
Variations in serum sorbitol dehydrogenase, aspartate transaminase, and isoenzyme 5 of lactate dehydrogenase activities in horses given carbon tetrachloride. Bernard WV, et al. **Am J Vet Res** 1989 May;50(5):622–3
Hepatotoxicity to dogs of horse meat contaminated with indospicine. Hegarty MP, et al. **Aust Vet J** 1988 Nov; 65(11):337–40
Anaesthesia for small animal patients with disease of the hepatic, renal or gastrointestinal system. Dodman NH, et al. **Br Vet J** 1989 Jan–Feb;145(1):3–22 (110 ref.)
Sensitivity and specificity of canine serum total amylase and isoamylase activity determinations. Jacobs RM, et al. **Can J Vet Res** 1988 Oct;52(4):473–5
Hepatic AA amyloidosis associated with severe strongylosis in a horse. Vanhooser SL, et al. **Equine Vet J** 1988 Jul; 20(4):274–6
Kleingrass-associated hepatotoxicosis in horses. Cornick JL, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):932–5
Hyalohyphomycosis caused by Paecilomyces lilacinus in an Aldabra tortoise. Heard DJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1143–5
Treatment of idiopathic hepatic lipidosis in cats: 11 cases (1986–1987). Jacobs G, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):635–8
Verifying copper toxicosis in Bedlington terriers by analytical electron microscopy of needle biopsies of liver. Eriksson J, et al. **J Comp Pathol** 1989 May;100(4):443–8
Polycystic disease of the kidney and liver in an adult Persian cat. Stebbins KE. **J Comp Pathol** 1989 Apr;100(3):327–30
Blood clearance of 99mTc-phytate for evaluation of hepatic dysfunction in dogs. Shibata H, et al. **J Toxicol Sci** 1988 Aug;13(3):151–9
Hepatic failure in dairy cattle following mastitis or metritis. Sweeney RW, et al. **J Vet Intern Med** 1988 Apr–Jun; 2(2):80–4
Evaluation of total plasma bile acid concentrations for the diagnosis of hepatobiliary disease in horses. West HJ.

Res Vet Sci 1989 Mar;46(2):264–70
Feline hepatic disease. Wolf AM. Tijdschr Diergeneeskd 1989 Apr;114 Suppl 1:22S–25S
Nutritional management of hepatic disease. Bauer JE, et al. Vet Clin North Am Small Anim Pract 1989 May; 19(3):513–26 (61 ref.)
Haematology and serum biochemistry in the racing greyhound following intraperitoneal povidone-iodine. Ndikuwera J, et al. Vet Res Commun 1988;12(1):77–86
[The occurrence of degenerative liver damage in cattle] Johannsen U, et al. Arch Exp Veterinarmed 1988 Sep; 42(5):777–92 (Eng. Abstr.) (Ger)
[The effect of the infusion of Haploppapus baylahuen in dogs with liver damage induced by carbon tetrachloride] Martin R, et al. Zentralbl Veterinarmed [A] 1988 Nov;35(9):691–5 (Eng. Abstr.) (Spa)

LIVER DISEASES, ALCOHOLIC

Alcoholic liver disease. Diehl AM. Med Clin North Am 1989 Jul;73(4):815–30 (131 ref.)

BLOOD

AST vs. ALT [letter] Bradshaw RW. Am Fam Physician 1989 Aug;40(2):55, 58
Low serum creatinine levels in severe hepatic disease [letter] Matz R. Arch Intern Med 1989 Jun;149(6):1471
Role of acetaldehyde in the pathogenesis of alcoholic liver disease. Barry RE. Br J Addict 1988 Dec;83(12):1381–6 (41 ref.)
Procollagen III peptide and fibronectin in alcohol-related chronic liver disease: correlations with morphological features and biochemical tests. Gabrielli GB, et al. Clin Chim Acta 1989 Feb 22;179(3):315–22
Modifications of concanavalin A patterns of alpha 1-acid glycoprotein and alpha 2-HS glycoprotein in alcoholic liver disease. Jezequel M, et al. Clin Chim Acta 1988 Aug 15;176(1):49–57
Plasma heparin cofactor II in alcoholic liver disease. Andersson TR, et al. J Hepatol 1988 Aug;7(1):79–84
The hepatic component in alcoholic encephalopathy. Banciu T, et al. Med Interne 1982 Jan–Mar;20(1):69–71
Biochemical testing in patients with alcoholic liver disease. Hubbell FA, et al. South Med J 1989 Mar;82(3):318–20
[Increased androgen-binding capacity and decreased free androgen index in male alcoholics with liver disease] Szarvas F, et al. Orv Hetil 1989 Jul 23;130(30):1597–601 (Eng. Abstr.) (Hun)
[Alteration of prostaglandin metabolism in alcoholic liver disease: its association with platelet dysfunction after chronic alcohol ingestion] Arai M, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Feb;86(2):220–6 (Eng. Abstr.) (Jpn)
[Plasma amino acid in patients with alcoholic liver diseases—with special reference to the reduce of tyrosine] Ishii M, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Jul; 85(7):1381–9 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

[Alcohol dehydrogenase and aldehyde dehydrogenase isoenzymes: role in metabolism and hepatic toxicity of alcohol] Fleury B, et al. Gastroenterol Clin Biol 1988 Dec; 12(12):912–20 (103 ref.) (Fre)

COMPLICATIONS

Factors determining cirrhosis in alcoholic liver disease. Bird GL, et al. Mol Aspects Med 1988;10(2):97–105 (26 ref.)
[Hepatitis B viral infection and alcoholic liver damage] Golubović G, et al. Med Pregl 1988;41(5–6):246–8 (Eng. Abstr.) (Scr)
[A 73-year-old patient with discrete changes in hepatic biochemistry (clinical conference)] Rev Clin Esp 1989 Mar; 184(5):252–6 (Spa)

DIAGNOSIS

The aminopyrine breath test for the evaluation of liver function in alcoholic patients: drug pharmacokinetics and environmental factors. Lane EA. Adv Alcohol Subst Abuse 1988;7(3–4):25–32
Graded neuropsychological impairment and elevated gamma-glutamyl transferase in chronic alcoholic men. Irwin M, et al. Alcoholism (NY) 1989 Feb;13(1):99–103
Clinical significance of a new isoform of serum alanine aminopeptidase; relationship with liver disease and alcohol consumption. Sanderink GJ, et al. Clin Chim Acta 1989 Jan 13;179(1):23–31
[Clinical significance of the determination of biochemico-enzymic and morphologic factors in the etiopathogenesis and diagnosis of chronic alcoholic liver diseases] Džambas D, et al. Med Pregl 1988;41(3–4):104–9 (Eng. Abstr.) (Scr)

DRUG THERAPY

Effects of malotilate treatment on alcoholic liver disease. Takase S, et al. Alcohol 1989 May–Jun;6(3):219–22
Treatment of alcoholic liver disease. Saunders JB. Baillieres Clin Gastroenterol 1989 Jan;3(1):39–65 (105 ref.)
[Polyunsaturated phosphatidylcholine + vitamin B complex in the therapy of alcoholic hepatopathies. A controlled study versus standard therapy] Hazuka V, et al. Clin Ter 1987 Dec 15;123(5):369–75 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Blood cell superoxide dismutase and enolase activities as markers of alcoholic and nonalcoholic liver diseases. Ledig M, et al. Alcohol 1988 Sep–Oct;5(5):387–91
Hepatic lipid peroxidation and aldehyde dehydrogenase activity in alcoholic and non alcoholic liver disease. Mazzanti R, et al. Alcohol Alcohol 1989;24(2):121–8
Chemiluminescence from acetaldehyde oxidation by xanthine oxidase involves generation of and interactions with hydroxyl radicals. Puntarulo S, et al. Alcoholism (NY) 1989 Feb;13(1):84–90
Effect of silibinin on the activity and expression of superoxide dismutase in lymphocytes from patients with chronic alcoholic liver disease. Fehér J, et al. Free Radic Res Commun 1987;3(6):373–7
Serum activity and hepatic localization of superoxide dismutase in alcoholics. Inagaki T, et al. Gastroenterol Jpn 1989 Jun;24(3):277–83
Gel-filtration of serum gamma-glutamyl-transpeptidase with HPLC in hepatobiliary diseases and its significance. Nishii K, et al. Gastroenterol Jpn 1988 Aug;23(4):435–41
Influence of liver disease on hepatic alcohol and aldehyde dehydrogenases. Panés J, et al. Gastroenterology 1989 Sep; 97(3):708–14
Hepatic aldehyde dehydrogenase activity in liver diseases, with particular emphasis on alcoholic liver disease. Takase S, et al. Hepatology 1989 May;9(5):704–9
Kupffer cell number is normal, but their lysozyme content is reduced in alcoholic liver disease. Kelly PM, et al. J Hepatol 1989 Mar;8(2):173–80
Coproporphyrinogen oxidase, protoporphyrinogen oxidase and ferrochelatase activities in human liver biopsies with special reference to alcoholic liver disease. Li F, et al. J Hepatol 1989 Jan;8(1):86–93
Lecithin: cholesterol-acyltransferase (LCAT) activity in alcoholic liver disease. Sasso GF, et al. Panminerva Med 1989 Jan–Mar;31(1):30–3

ETHNOLOGY

Apparent differences between Asian and Caucasians in alcohol-induced liver changes [letter] Wilson DT, et al. Br J Addict 1988 Dec;83(12):1461
Alcoholic liver disease among ethnic Asians and non-Asians. Banerjee A, et al. J R Soc Health 1988 Dec;108(6):211–2

ETIOLOGY

What determines susceptibility to chronic alcohol associated disease? Maxwell D. Br J Addict 1988 Nov;83(11):1235–6
Metabolism of ethanol and its consequences for the liver and gastrointestinal tract. Barry RE, et al. Dig Dis 1988; 6(4):194–202 (50 ref.)
Animal models for alcoholic liver disease. Mezey E. Hepatology 1989 Jun;9(6):904–5
Tumor necrosis factor, the acute phase response and the pathogenesis of alcoholic liver disease. Thiele DL. Hepatology 1989 Mar;9(3):497–9
Effect of different dietary fats on ethanol metabolism: implications for pathogenesis of experimental alcoholic liver disease. Nanji AA, et al. Int J Vitam Nutr Res 1988; 58(4):475–6
Dietary linoleic acid is required for development of experimentally induced alcoholic liver injury. Nanji AA, et al. Life Sci 1989;44(3):223–7
Alcohol-induced injury to the liver [letter] Rao GA, et al. N Engl J Med 1989 May 18;320(20):1353–4
Alcoholic liver injury. Davis M. Proc Nutr Soc 1988 Jul; 47(2):115–20 (54 ref.)
[Alcohol-induced liver diseases] Arnold W. Leber Magen Darm 1989 Mar;19(2):59–66, 69 (44 ref.) (Eng. Abstr.) (Ger)
[The liver and alcohol] Teschke R, et al. Z Gastroenterol 1988 Oct;26 Suppl 3:53–9 (24 ref.) (Eng. Abstr.) (Ger)
[Clinical study of ethanol-induced liver injuries] Hasumura Y, et al. Nippon Rinsho 1988 Aug;46(8):1710–6 (Jpn)
[Forms of hepatic disease in alcoholic patients in Salvador, BA] Cotrim HP, et al. Arq Gastroenterol 1988 Jan–Mar; 25(1):4–7 (Eng. Abstr.) (Por)
[Alcoholic liver disease] de Oliveira e Silva A, et al. Arq Gastroenterol 1988 Jan–Mar;25(1):1–3 (Por)

GENETICS

Genotypes of alcohol-metabolizing enzymes in Japanese with alcohol liver diseases: a strong association of the usual Caucasian-type aldehyde dehydrogenase gene (ALDH1(2)) with the disease [published erratum appears in Am J Hum Genet 1989 Apr;44(4):619] Shibuya A, et al. Am J Hum Genet 1988 Nov;43(5):744–8
Genetic polymorphism of the alcohol metabolising enzymes as a basis for alcoholic liver disease. Grant DA. Br J Addict 1988 Nov;83(11):1255–9 (19 ref.)
Genetic polymorphism of enzymes of alcohol metabolism and susceptibility to alcoholic liver disease. Bosron WF, et al. Mol Aspects Med 1988;10(2):147–58 (53 ref.)

IMMUNOLOGY

Ethanol induces the production of antibodies to acetaldehyde-modified epitopes in rats. Worrall S, et al. Alcohol Alcohol 1989;24(3):217–23
Serum inhibition of complement derived leukocyte chemotaxis and levels of immunoglobulin A subclass in alcoholic liver disease. Onishi S, et al. Gastroenterol Jpn 1989 Jun;24(3):284–9
Status of hepatitis B virus DNA in alcoholic liver disease: a study of a large urban population in the United States. Fong TL, et al. Hepatology 1988 Nov–Dec;8(6):1602–4
Portal tract macrophages are increased in alcoholic liver disease. Karakucuk I, et al. Histopathology 1989 Mar; 14(3):245–53
Relevance of immune mediated mechanisms in progressive alcoholic liver injury. Eddleston AL, et al. Mol Aspects Med 1988;10(2):169–77 (58 ref.)

METABOLISM

Effect of chronic ethanol administration on protein catabolism in rat liver. Donohue TM Jr, et al. Alcoholism (NY) 1989 Feb;13(1):49–57
Hepatic adenosine in rats fed ethanol: effect of acute hyperoxia or hypoxia. Miyamoto K, et al. Alcoholism (NY) 1988 Aug;12(4):512–5
Biochemical basis for alcohol-induced liver injury [published erratum appears in Clin Biochem 1989 Aug;22(4):337] French SW. Clin Biochem 1989 Feb;22(1):41–9 (141 ref.)
Endotoxin-induced hypercoagulability: a possible aggravating factor of alcoholic liver disease. Arai M, et al. Hepatology 1989 Jun;9(6):846–51
Hepatic zinc content in patients with various stages of alcoholic liver disease and in patients with chronic active and chronic persistent hepatitis. Bode JC, et al. Hepatology 1988 Nov–Dec;8(6):1605–9
Incomplete compensation of enhanced hepatic oxygen consumption in rats with alcoholic centrilobular liver necrosis. Tsukamoto H, et al. Hepatology 1989 Feb; 9(2):302–6
Ethanol-induced increase in cytosolic estrogen receptors in human male liver: a possible explanation for biochemical feminization in chronic liver disease due to alcohol. Villa E, et al. Hepatology 1988 Nov–Dec;8(6):1610–4
Impaired oxygen utilization. A new mechanism for the hepatotoxicity of ethanol in sub-human primates. Lieber CS, et al. J Clin Invest 1989 May;83(5):1682–90
Is alcohol hepatotoxic in the baboon? Ainley CC, et al. J Hepatol 1988 Aug;7(1):85–92
Retinol and retinyl esters in patients with alcoholic liver disease. Bell H, et al. J Hepatol 1989 Jan;8(1):26–31
Alcoholic hepatotoxicity [letter] French SW. J Hepatol 1989 Jul;9(1):134–5
Chlordiazepoxide metabolite accumulation in liver disease. Barton K, et al. Med Toxicol Adverse Drug Exp 1989 Jan–Feb;4(1):73–6
Pathophysiology of alcoholic liver disease [published erratum appears in Mol Aspects Med 1988;10(4):i] Lieber CS. Mol Aspects Med 1988;10(2):107–46 (294 ref.)
Role of acetaldehyde in the pathogenesis of alcoholic liver disease. Peters TJ, et al. Mol Aspects Med 1988; 10(2):179–90 (137 ref.)
Biochemical and molecular basis of alcohol-induced injury to liver and other tissues. Lieber CS. N Engl J Med 1988 Dec 22;319(25):1639–50 (199 ref.)
[Iron overload in alcoholic hepatopathy: clinical implications and evaluation technics] Bettini R, et al. Recenti Prog Med 1988 Nov;79(11):444–8 (Eng. Abstr.) (Ita)
[Pharmacokinetics of antipyrine in viral and alcoholic lesions of the liver] Tsyrkunov VM, et al. Klin Med (Mosk) 1989 Feb;67(2):87–9 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Hepatitis B virus in alcoholic liver disease with hepatocellular carcinoma [letter] Bréchot C. Hepatology 1989 Mar; 9(3):514

MORTALITY

Longevity among ethnic groups in alcoholic liver disease. Mendenhall CL, et al. Alcohol Alcohol 1989;24(1):11–9
Alcoholic and non-alcoholic liver disease in relation to alcohol consumption in Scotland, 1978–84. Part I: Epidemiology of liver diseases. Kreitman N, et al. Br J Addict 1989 Jun;84(6):607–18

PATHOLOGY

Neovascularization of pericellular fibrosis in alcoholic liver disease. Taguchi K, et al. Acta Pathol Jpn 1988 May; 38(5):615–26
Evaluation of fibrosis in the disse space in noncirrhotic alcoholic liver disease. Robert P, et al. Alcoholism (NY) 1989 Apr;13(2):176–80
Hepatocyte and nuclear areas and fatty infiltration of the liver in chronic alcoholic liver disease. González-Reimers E, et al. Drug Alcohol Depend 1988 Dec;22(3):195–203
A cytokeratin immunohistochemical study of alcoholic liver disease: evidence that hepatocytes can express bile duct-type' cytokeratins. Van Eyken P, et al. Histopathology 1988 Dec;13(6):605–17
Should we routinely perform liver biopsy in suspected alcoholic liver disease? Atterbury CE. J Clin Gastroenterol 1988 Dec;10(6):605–7
Diagnostic value of liver biopsy in alcoholic liver disease. Talley NJ, et al. J Clin Gastroenterol 1988 Dec;

10(6):647–50
Liver cell shedding and phagocytic reaction in alcoholic liver disease. An ultrastructural study. Bardadin KA, et al. **Virchows Arch [A]** 1989;415(1):21–9
Ultrasonic demonstration of portal vein occlusion. Khan O, et al. **West Indian Med J** 1988 Jun;37(2):123–6
[Liver changes caused by alcohol. A 10–year study] Zoubek V, et al. **Cas Lek Cesk** 1988 Nov 18;127(47):1448–50 (Eng. Abstr.) (Cze)
[The incidence and clinical significance of Mallory bodies detected by immunofluorescence method in alcoholic liver disease in Japan] Koyama W.
Nippon Shokakibyo Gakkai Zasshi 1988 Nov; 85(11):2402–10 (Eng. Abstr.) (Jpn)
[Cardinal problems of alcoholic diseases of the liver] Mansurov KhKh, et al. **Ter Arkh** 1988;60(7):69–74 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

[Liver disease caused by alcohol in man: similarities and differences with animal experiment findings] Bosma A, et al. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):762–4 (22 ref.) (Dut)
[Functional state of the hypophyseo–adrenal system in patients with chronic alcoholism and various degrees of liver damage] Borodulin VG, et al.
Zh Nevropatol Psikhiatr 1988;88(9):118–21 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Beef fat prevents alcoholic liver disease in the rat. Nanji AA, et al. **Alcoholism (NY)** 1989 Feb;13(1):15–9

PSYCHOLOGY

Perception of illness among patients with alcoholic liver disease. Farid BT, et al. **J Stud Alcohol** 1988 Jul;49(4):375–7

RADIOGRAPHY

Changes in liver and spleen volumes in alcoholic liver disease. Sato H, et al. **J Hepatol** 1989 Mar;8(2):150–7

RADIONUCLIDE IMAGING

Unusual pattern of lung uptake of technetium–99m sulfur colloid seen on the liver scan of a patient with pulmonary tuberculosis. Stewart CA, et al. **Clin Nucl Med** 1989 Apr; 14(4):271–4
Thallium per rectum scintigraphy, portal pressure and portal perfusion [letter; comment] Urbain D, et al. **Hepatology** 1989 Aug;10(2):262. **Comment on:** Hepatology 1988 Jul–Aug;8(4):785–7

REHABILITATION

Low–alcohol drinks [letter] Wingate DL. **Alcohol Alcohol** 1989;24(3):264–5

THERAPY

Liver transplantation for alcoholic liver disease: a consideration of reasons for and against. Van Thiel DH, et al. **Alcoholism (NY)** 1989 Apr;13(2):181–4

LIVER DISEASES, PARASITIC

BLOOD

Hypoprothrombinemia in the compensated form of hepatosplenic schistosomiasis: further studies. Manoukian N, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug; 30(4):274–80

COMPLICATIONS

Liver involvement in human schistosomiasis mansoni. Regression of immunological and biochemical disease markers after specific treatment. Zwingenberger K, et al. **Acta Trop (Basel)** 1988 Sep;45(3):263–75
Schistosomal versus nonschistosomal variceal bleeders. Do they respond differently to selective shunt (DSRS)? Ezzat FA, et al. **Ann Surg** 1989 Apr;209(4):489–500
Bleeding gastric varices without obvious esophageal varices due to hepatic schistosomiasis [letter] Contractor QQ, et al. **Indian J Gastroenterol** 1989 Jan;8(1):56–7
Cryptococcosis of the liver in a systemic lupus erythematosus patient. Fong KY, et al. **Singapore Med J** 1988 Jun; 29(3):309–10
[Liver biopsy findings in AIDS (letter)] Marcial Rojas R. **Bol Asoc Med P R** 1988 Nov;80(11):436 (Spa)

DIAGNOSIS

Characteristic sonographic pattern of schistosomal hepatic fibrosis. Abdel–Wahab MF, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):72–6
Recurrent cholangitis secondary to oriental cholangiohepatitis. Bonar S, et al. **J Clin Gastroenterol** 1989 Aug;11(4):464–8
Case 27–1988: hepatosplenic schistosomiasis [letter] **N Engl J Med** 1988 Nov 10;319(19):1286–7
Rectal snips in the diagnosis of hepatosplenic schistosomiasis. Harries AD, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):720
[Differential diagnosis of schistosomial and non–schistosomial cirrhosis] Huang YX, et al.
Chung Hua Nei Ko Tsa Chih 1988 Jul;27(7):402–4, 453 (Eng. Abstr.) (Chi)
[Differential diagnostic indices between schistosomal liver fibrosis and post–hepatic cirrhosis] Zeng YL, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(2):94–8 (Eng. Abstr.) (Chi)
[Diagnostic contribution of echography in a case of schistosomiasis] Borzio F, et al. **Radiol Med (Torino)** 1989 Jun;77(6):709–10 (Ita)
[Patients returning from tropical countries] Pawłowski Z. **Wiad Parazytol** 1988;34(4–6):637–9 (Pol)
[Intradermal reaction with diluted antigen for the diagnosis of schistosomiasis mansoni: evaluation of sensitivity] Pinto PL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec;43(6):288–90 (Eng. Abstr.) (Por)

DRUG THERAPY

Efficacy of diclazuril in the prevention and cure of intestinal and hepatic coccidiosis in rabbits. Vanparijs O, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):109–17
Encouraging self–reliance in the fight against liver fluke. Mongkolintra S, et al. **World Health Forum** 1988;9(3):341–4

ETHNOLOGY

The importance of consanguinity in hepatosplenic schistosomiasis in some endemic areas. Prata A.
Rev Soc Bras Med Trop 1988 Apr–Jun;21(2):45–6 (5 ref.) (Eng, Por)

ETIOLOGY

Pathogenesis of pipe–stem fibrosis of the liver (experimental observation on murine schistosomiasis). Andrade ZA. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):325–34
Hepatic granuloma in a man from North America caused by a nymph of Linguatula serrata. Baird JK, et al. **Pathology** 1988 Apr;20(2):198–9
[Clinical picture and the course of infection in hemolytic disease of the newborn] Maszkiewicz W, et al.
Acta Haematol Pol 1988 Jan–Jun;19(1–2):99–103 (Eng. Abstr.) (Pol)

IMMUNOLOGY

Effects of induction of anti–embryonation immunity on liver granulomas, spleen weight and portal pressure in mice infected with Schistosoma japonicum. Garcia EG, et al. **Acta Trop (Basel)** 1989 Mar;46(2):93–9
Granuloma formation in Schistosoma japonicum infected nude mice: the effects of reconstitution with L3T4+ or Lyt2+ splenic cells. Cheever AW, et al.
Am J Trop Med Hyg 1989 Jan;40(1):66–71
Differential immunoregulation of granulomatous inflammation, portal hypertension, and hepatic fibrosis in murine schistosomiasis mansoni. Olds GR, et al.
J Immunol 1989 May 15;142(10):3605–11

METABOLISM

Expression of the precursor of the major merozoite surface antigens during the hepatic stage of malaria. Suhrbier A, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):351–5
Patterns of sulfated glycosaminoglycan synthesis and accumulation in hepatic granulomas induced by schistosomal infection. da Silva LC, et al.
Exp Mol Pathol 1989 Jun;50(3):411–20
Deficiency of interleukin–2 production upon addition of soluble egg antigen to cultures of isolated hepatic granulomas or hepatic granuloma cells from mice infected with Schistosoma japonicum. Stavitsky AB, et al.
Infect Immun 1989 Aug;57(8):2339–44
Biliary bile acids and lipids composition in Opisthorchiasis viverrini. Wongpaitoon V, et al. **J Med Assoc Thai** 1988 Jul;71(7):394–9
[Biochemistry of schistosomiasis mansoni. VII. Lipid changes of lysosomal membranes during the initial phase of liver injury] Rodrigues LE. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):47–52 (Eng. Abstr.) (Por)
[Biochemistry of schistosomiasis mansoni. IV. Changes in the hepatic lysosome compartment in relation to the time of infection] Rodrigues LE, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):169–74 (Eng. Abstr.) (Por)

PATHOLOGY

Hepatic granuloma resulting from Enterobius vermicularis. Mondou EN, et al. **Am J Clin Pathol** 1989 Jan;91(1):97–100
Sonomorphological abnormalities in Sudanese children with Schistosoma mansoni infection: a proposed staging–system for field diagnosis of periportal fibrosis.
Doehring–Schwerdtfeger E, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):63–9
Fasciola gigantica: the second case of human infection in Thailand. Kachintorn U, et al. **J Med Assoc Thai** 1988 Aug; 71(8):451–5
Intrahepatic bile duct changes in human hepatosplenic schistosomiasis mansoni. Vianna MR, et al. **Liver** 1989 Apr; 9(2):100–9
The histopathology of Scomber japonicus infection by Nematobothrium scombri (Trematoda:Didymozoidae) and of larval anisakid nematode infections in the liver of Pagrus pagrus. Eiras JC, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):155–9

PHYSIOPATHOLOGY

Liver function and plasma protein metabolism in rodent model of filariasis. Nadkarni GD, et al.
Indian J Gastroenterol 1989 Jul;8(3):151–3
[Biometric data on adult patients with schistosomiasis, Bahia (Brazil)] Tavares–Neto J, et al. **Rev Saude Publica** 1988 Aug;22(4):288–91 (Eng. Abstr.) (Por)

RADIOGRAPHY

CT findings of clonorchiasis. Choi BI, et al. **AJR** 1989 Feb; 152(2):281–4
Hepatic clonorchiasis—a study by endoscopic retrograde cholangiopancreatography. Leung JW, et al.
Gastrointest Endosc 1989 May–Jun;35(3):226–31
[Hepatocellular carcinoma associated with schistosomiasis japonica; CT and angiographic features] Fujimoto H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):139–45 (Eng. Abstr.) (Jpn)

VETERINARY

Hepatic trematodiasis in five cockatoos. Quesenberry KE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1103–5
Hepatic lesions associated with Cooperioides hepaticae (Nematoda: Trichostrongyloidea) infection in impala (Aepyceros melampus) of the Kruger National Park. Pletcher JM, et al. **J Wildl Dis** 1988 Oct;24(4):650–5
Cysticercus fasciolaris infection in a breeding colony of mice. Davis JA, et al. **Lab Anim Sci** 1989 May;39(3):250–2
Preventive treatment of rabbit coccidiosis with alpha–difluoromethylornithine. San Martín–Núñez BV, et al. **Vet Parasitol** 1988 Nov;30(1):1–10
Intrahepatic biliary coccidiosis in a dog. Lipscomb TP, et al. **Vet Pathol** 1989 Jul;26(4):343–5

LIVER EXTRACTS

METABOLISM

[The effect of the nutritional status of rats on the protein biosynthetic activity in a cell–free system] Schröder A, et al. **Arch Tierernahr** 1988 Sep;38(9):727–34 (Eng. Abstr.) (Ger)

PHARMACOLOGY

[Regeneration ability of ischemic liver and the effect of liver resection and extracts stimulating proliferation] Bilenko MV, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):93–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Effects of human fetal liver extract on the growth of HL–60 cells. Wu CT, et al. **Exp Hematol** 1989 Mar;17(3):304–8

TOXICITY

Precipitable tissue proteins can cause experimental acute renal failure. Zager RA. **Lab Invest** 1988 Dec;59(6):798–808

LIVER FIBROSIS see **LIVER CIRRHOSIS**

LIVER FUNCTION TESTS

The prognostic value of routine biochemical liver tests, serum bile acids, and hepatitis B virus markers in acute viral B hepatitis. Vucelić B, et al. **Acta Med Iugosl** 1988; 42(4):269–80
Early detection of harmful alcohol consumption: comparison of clinical, laboratory, and self–report screening procedures. Babor TF, et al. **Addict Behav** 1989; 14(2):139–57
The aminopyrine breath test for the evaluation of liver function in alcoholic patients: drug pharmacokinetics and environmental factors. Lane EA.
Adv Alcohol Subst Abuse 1988;7(3–4):25–32
Laboratory markers as compared to drinking measures before and after inpatient treatment for alcoholism. Keso L, et al. **Alcoholism (N Y)** 1989 Jun;13(3):449–52
Abnormal liver function tests in asymptomatic patients. McKenna JP, et al. **Am Fam Physician** 1989 Mar; 39(3):117–26 (21 ref.)
A renaissance of sulfobromophthalein infusion method for animal studies of hepatobiliary function? [letter] Mikulecký M. **Am J Physiol** 1989 Aug;257(2 Pt 2):R456–7
Clinical laboratories for the practicing pharmacist: liver function tests. Waite WW. **Am Pharm** 1988 Dec; ns28(12):51–5 (11 ref.)
Validation of a diagnostic test. Epidemiologic principles in dermatology. Weinstock MA. **Arch Dermatol** 1989 Sep; 125(9):1260–4
Failure of prediction of liver function test abnormalities with the urine urobilinogen and urine bilirubin assays. Binder L, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):73–6
Acute fatty liver of pregnancy: clinical features and diagnosis. Purdie JM, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb; 28(1):62–7
Tests for liver metastases in gastrointestinal cancer. A critical review. Christensen M, et al. **Dig Dis** 1989;7(4):194–202
D–sorbitol clearance [letter] Merkel C, et al. **Dig Dis Sci** 1988 Oct;33(10):1341

The 30-minute aminopyrine breath test: optimization of sampling times after intravenous administration of 14C-aminopyrine. Miotti T, et al. **Digestion** 1988; 39(4):241-50

On the antipyrine test in laboratory animals. Studies in the dog and monkey. Vickers FF, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):160-5

Long-term effect of nadolol on quantitative liver function tests in patients with cirrhosis. Merkel C, et al. **Eur J Clin Pharmacol** 1988;34(5):501-4

Galactose clearance and hepatic blood flow [letter] Zenilman ME, et al. **Gastroenterology** 1989 Jan;96(1):268

Liver function tests in patients with computed tomography demonstrated hepatic metastases. Ottmar MD, et al. **Gastrointest Radiol** 1989 Winter;14(1):55-8

Assessment of hepatic function and damage in animal species. Animal Clinical Chemistry Association. **J Appl Toxicol** 1988 Aug;8(4):249-54 (63 ref.)

Clinical evaluation of serum gamma glutamyl transpeptidase in Thai patients with hepatic disease. Tepsuwan A, et al. **J Med Assoc Thai** 1988 Jun;71(6):319-28

Liver injury tests in hazardous waste workers: the role of obesity. Hodgson MJ, et al. **J Occup Med** 1989 Mar; 31(3):238-42

Liver function testing in a working population: three strategies to reduce false-positive results. Wright C, et al. **J Occup Med** 1988 Sep;30(9):693-7

Diagnostic value of liver function tests in bile duct obstruction. Stein TA, et al. **J Surg Res** 1989 Mar; 46(3):226-9

Efficacy of peroperative liver function tests and ultrasound in detecting hepatic metastasis in carcinoma of the breast. Clark CP 3d, et al. **Surg Gynecol Obstet** 1988 Dec; 167(6):510-4

Predictors of graft function following liver transplantation. Forster J, et al. **Transplant Proc** 1989 Apr;21(2):3356-7

Coagulation factors as indicators of early graft function following liver transplantation. Forster J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2308-10

Experimental studies of hepatic clearance rates of amino acids as an initial function test of the liver graft. Goto T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2305-7

Biochemical abnormalities in serum and urine from renal transplant recipients receiving cyclosporine. Jones MC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1487-9

Qualitative assessment of liver function after hypovolemic, hypoxemic, and ischemic shock in a transplantation model. Lamesch P, et al. **Transplant Proc** 1988 Oct;20(5):994-5

Donor data in liver grafts with primary non-function—a preliminary analysis by the European Liver Registry. Pruim J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2383-4

[The sensitivity of clinico-chemical markers of alcoholism following short-term motivated alcohol abstinence] Haffner HT, et al. **Blutalkohol** 1989 Mar;26(2):114-22 (Eng. Abstr.) (Ger)

[Metamizol-caffeine elimination in females with increased serum aminotransferase activities treated with steroidal oral contraceptives] Bergmann M, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(5):261-7 (Eng. Abstr.) (Ger)

[The importance of liver changes in workers with chronic benzene exposure] Damrau J, et al. **Gastroenterol J** 1989; 49(1):17-9 (Eng. Abstr.) (Ger)

[Disorders of liver function, thrombopenia and hemolysis in a special clinical form of hypertension in pregnancy (the so-called HELLP syndrome) (published erratum appears in Geburtshilfe Frauenheilkd 1989 Jan;49(1):79)] Niesert S, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):637-40 (Eng. Abstr.) (Ger)

[Loss of renal functional reserve following kidney transplantation and in patients with advanced disorders of liver function] Eisenhauer T, et al. **Klin Wochenschr** 1988 Sep 15;66(18):946-52 (Eng. Abstr.) (Ger)

[Procollagen III peptide (P-3-P): is it necessary in liver diagnosis?] Pott G, et al. **Med Klin** 1989 Mar 15;84(3):158-9, 172 (18 ref.) (Ger)

[Detection of liver metastases in gynecologic neoplasms by sonography, scintigraphy, computerized tomography and liver enzymes] Schillinger H, et al. **Onkologie** 1988 Oct; 11(5):216-20 (Eng. Abstr.) (Ger)

[The value of laboratory markers in the diagnosis of alcoholism] Richter G, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:93-5 (Ger)

[Liver function parameters and fibrinogen in intra-arterial and intravenous PGE1 infusion] Sinzinger H, et al. **Wien Klin Wochenschr** 1988 Jul 15;100(14):488-90 (Eng. Abstr.) (Ger)

[Liver transplantation: morphologic and functional adaptation of the transplant] Lauchart W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:239-40 (26 ref.) (Ger)

[Effect of human uremic serum on the survival of fetal rat hepatocytes] Otting U, et al. **Z Urol Nephrol** 1988 Sep; 81(9):581-8 (Eng. Abstr.) (Ger)

[The behavior of serum "liver enzyme" activity in children with chronic renal failure, hemodialysis and kidney transplantation] Otting U, et al. **Z Urol Nephrol** 1989 Jun; 82(6):331-8 (Eng. Abstr.) (Ger)

[Behavior of parameters of liver metabolism in intermediate-term use of the gestagen dienogest in the treatment of endometriosis] Köhler G, et al. **Zentralbl Gynakol** 1989;111(12):807-10 (Eng. Abstr.) (Ger)

[Research on liver function before and after surgery by the relation of artery blood ketone body ratio and beta-hydroxybutyrate: preliminary report] Hamanoue M, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1753 (Jpn)

[Two cases of anorexia nervosa associated with grossly abnormal liver function tests] Yamagata A, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):563-4 (Jpn)

[Diagnostic value of the bilirubin load test] Eselev MM. **Lab Delo** 1989;(2):35-7 (Eng. Abstr.) (Rus)

[Index of the functional state of the liver] Serov NA, et al. **Sov Med** 1989;(3):13-5 (Eng. Abstr.) (Rus)

[Metabolic indicators of early graft function in liver transplantation. Comparative study] Mora NP, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):643-7 (Eng. Abstr.) (Spa)

METHODS

Liver function tests in cholecystitis [letter] De MK. **J Indian Med Assoc** 1989 Mar;87(3):76

Blood clearance of 99mTc-phytate for evaluation of hepatic dysfunction in dogs. Shibata H, et al. **J Toxicol Sci** 1988 Aug;13(3):151-9

Rapid 31P NMR test of liver function. Thoma WJ, et al. **Magn Reson Med** 1988 Oct;8(2):220-3

DISIDA kinetics measure liver function in dogs. Fraser IA, et al. **Nucl Med Commun** 1989 Jun;10(6):435-47

Effect of intravenous fructose on the P-31 MR spectrum of the liver: dose response in healthy volunteers. Terrier F, et al. **Radiology** 1989 May;171(2):557-63

[15N] ammonium test for liver function diagnosis. Jung K, et al. **Z Med Lab Diagn** 1989;30(3):169-74

[Possibilities of the use of radioactively labeled metabolites of hemoglobin-bilirubin for testing liver function. 1. Labeling of bilirubin with 99m technetium] Kämpfer I, et al. **Radiol Diagn (Berl)** 1988;29(3):471-6 (Eng. Abstr.) (Ger)

[Estimation of total liver uptake and liver uptake per unit of liver volume of Tc-99m(Sn)-N-pyridoxyl-5-methyltryptophan (Tc-99m-PMT) using SPECT] Nakamura K, et al. **Kaku Igaku** 1988 Dec;25(12):1363-9 (Eng. Abstr.) (Jpn)

[Evaluation of hepatic function by hepatobiliary scintigraphy using factor analysis] Shimomura O, et al. **Kaku Igaku** 1989 Feb;26(2):145-53 (Eng. Abstr.) (Jpn)

[Estimation of the volume and percent uptake of the liver and spleen by SPECT] Yamagata A. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1252-9 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum colloidal reaction] Itoh C, et al. **Rinsho Byori** 1988 May;36(5):507-11 (Jpn)

LIVER GLYCOGEN

ANALYSIS

The structure of the rat liver glycogen backbone protein. Calder PC, et al. **Biochem Int** 1988 Oct;17(4):711-7

The relationships between glycogen stores and muscle ultimate pH in commercially slaughtered pigs. Warriss PD, et al. **Br Vet J** 1989 Jul-Aug;145(4):378-83

Changes in serum glucose and lipids, and liver glycogen and phosphorylase during vitellogenesis in nature in the flounder (Platichtys flesus, L.). Petersen IM, et al. **Comp Biochem Physiol [B]** 1977;58(2):167-71

Structural and functional studies on rabbit liver glycogenin. Smythe C, et al. **Eur J Biochem** 1989 Jul 15;183(1):205-9

Anesthetic effects on liver and muscle glycogen concentrations: rest and postexercise. Musch TI, et al. **J Appl Physiol** 1989 Jun;66(6):2895-900

Effects of infection with Eimeria labbeana on some serum constituents and liver glycogen in the palm dove (Streptopelia senegalensis aegyptiaca). Marzouk M, et al. **Parasitol Res** 1989;75(3):183-5

[A method of quantitative determination of glycogen in histologic sections] Chistova TI. **Sud Med Ekspert** 1989 Apr-Jun;32(2):45-7 (Rus)

[Cytofluorimetric study of glycogen fractions of the liver cells of patients with chronic viral and alcoholic hepatitis] Kudriavtseva MV, et al. **Tsitologiia** 1988 Jun;30(6):705-9 (Eng. Abstr.) (Rus)

[The content of glycogen and its fractions in human hepatocytes in traumatic disease] Kudriavtseva MV, et al. **Tsitologiia** 1988 Dec;30(12):1449-53 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Regulation of glycogen synthesis in the liver. Nuttall FQ, et al. **Am J Med** 1988 Nov 28;85(5A):77-85 (68 ref.)

Precursors to glycogen in ovine fetuses. Levitsky LL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E743-7

Hepatic glycogen in humans. I. Direct formation after oral and intravenous glucose or after a 24-h fast. Radziuk J. **Am J Physiol** 1989 Aug;257(2 Pt 1):E145-57

Zonation of glycogen and glucose syntheses, but not glycolysis, in rat liver. Chen KS, et al. **Biochem J** 1988 Oct 1;255(1):99-104

Acute inhibition by ethanol of intestinal absorption of glucose and hepatic glycogen synthesis on glucose refeeding after starvation in the rat. Cook EB, et al. **Biochem J** 1988 Aug 15;254(1):59-65

Rates of appearance and disappearance of plasma lactate after oral glucose: implications for indirect-pathway hepatic glycogen repletion in man. Consoli A, et al. **Clin Physiol Biochem** 1989;7(2):70-8

Indirect versus direct routes of hepatic glycogen synthesis. Kurland IJ, et al. **FASEB J** 1989 Sep;3(11):2277-81 (34 ref.)

Glycogenesis in muscle and liver during exercise. Hutber CA, et al. **J Appl Physiol** 1989 Jun;66(6):2811-7

Hepatic glycogen synthesis from duodenal glucose and alanine. An in situ 13C NMR study. Shalwitz RA, et al. **J Biol Chem** 1989 Mar 5;264(7):3930-4

Glucose phosphorylation is not rate limiting for accumulation of glycogen from glucose in perfused livers from fasted rats. Youn JH, et al. **J Biol Chem** 1989 Jan 5;264(1):168-72

Errors in the isotopic estimations of hepatic glycogen synthesis and glucose output. Rognstad R. **Metabolism** 1989 Jul;38(7):619-24

The morphology of hepatic glycogen synthesis. Cardell RR, et al. **Prog Clin Biol Res** 1989;295:263-7

[The action of cyclosporin A (CSA) on glycogen synthesis processes in rats in vivo] Hopps V, et al. **Minerva Med** 1989 May;80(5):447-9 (Eng. Abstr.) (Ita)

DEFICIENCY

Pyruvate dehydrogenase activities during the fed-to-starved transition and on re-feeding after acute or prolonged starvation. Holness MJ, et al. **Biochem J** 1989 Mar 1; 258(2):529-33

METABOLISM

The role of prostaglandins in endotoxin stimulated glycogenolysis in the liver. Kuiper J, et al. **Agents Actions** 1989 Jan;26(1-2):201-2

Contributions of gluconeogenesis and glycogenolysis during glucose counterregulation in normal humans. Lecavalier L, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E844-51

Hepatic glycogen in humans. II. Gluconeogenetic formation after oral and intravenous glucose. Radziuk J. **Am J Physiol** 1989 Aug;257(2 Pt 1):E158-69

Effect of dietary protein on in vivo insulin action and liver glycogen repletion. Rossetti L, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E212-9

Direct activation by prostaglandin F2 alpha but not thromboxane A2 of glycogenolysis via an increase in inositol 1,4,5-trisphosphate in rat hepatocytes. Athari A, et al. **Biochem Biophys Res Commun** 1989 Sep 29; 163(3):1235-42

Comparison of the flux of carbon to hepatic glycogen deposition and fatty acid and cholesterol synthesis on refeeding rats fed ad libitum or meal-fed rats with a chow-diet meal. Pallardo FV, et al. **Biochem J** 1989 Jan 15;257(2):607-10

Paracetamol-induced stimulation of glycogenolysis in isolated mouse hepatocytes is not directly associated with cell death. Burcham PC, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2357-62

Glycogenolysis—and not gluconeogenesis—is the source of UDP-glucuronic acid for glucuronidation. Bánhegyi G, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):429-35

Distinct type-1 protein phosphatases are associated with hepatic glycogen and microsomes. Schelling D, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):221-31

Different accessibility from the artery and the portal vein of alpha- and beta-receptors involved in the sympathetic nerve action on glycogenolysis and hemodynamics in perfused rat liver. Gardemann A, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):47-54

Glycogen metabolism in late gestation in fetuses of maternal diabetic rats. Margolis RN, et al. **Biol Neonate** 1988; 54(3):133-43

Circadian rhythm of liver parameters (cellular structures, mitotic activity, glycogen and lipids in liver and serum) during three consecutive cycles in phenobarbital-treated rats. Kast A, et al. **Chronobiol Int** 1988;5(4):363-85

Circadian rhythm of the liver of male rats dosed with phenobarbital—I. Organ weight, cellular structures, glycogen contents and mitotic activity. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):161-73

Altered interactions between glycogenesis and lipid synthesis after liver resection: specific effects of liver regeneration, coupled with non-specific effects of surgery. Holness MJ, et al. **Clin Sci** 1989 Mar;76(3):317-22

Modulation by somatostatin of nerve-mediated activation of glycogenolysis in the perfused rat liver. Beckh K, et al. **FEBS Lett** 1989 Jul 3;250(2):345-8

Insulin and the regulation of glycogen metabolism and gluconeogenesis in American eel hepatocytes. Foster GD, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):374-81

Postnatal glycogenolysis and gluconeogenesis in glucagon-treated premature newborn rats. Luis AM, et al. **Horm Metab Res** 1988 Aug;20(8):525-6

Glycogen metabolism in radiation induced hepatocellular carcinoma in Swiss albino mice. Gupta NK, et al. **Indian J Cancer** 1988 Dec;25(4):235-40

Compared roles of glucose, galactose and fructose as glycogen precursors during the acute response to insulin in cultured rat foetal hepatocytes. Menuelle P, et al. **Int J Biochem** 1988;20(8):777-82

Effect of hepatic vagotomy on postexercise substrate levels in food-restricted rats. Lavoie JM, et al. **J Appl Physiol** 1989 Apr;66(4):1965-9

Effect of verapamil on glycogenolysis and gluconeogenesis in the perfused rat liver. Badr M. **J Biochem Toxicol** 1989 Spring;4(1):35–7

Platelet-activating factor-stimulated hepatic glycogenolysis is not mediated through cyclooxygenase-derived metabolites of arachidonic acid. Lapointe DS, et al. **J Biol Chem** 1989 Jul 25;264(21):12130–3

In vivo desensitization of glycogenolysis to Ca2+-mobilizing hormones in rat liver cells. Tsujimoto G, et al. **J Clin Invest** 1988 Dec;82(6):1922–33

A minimal model of liver glycogen metabolism; feasibility for predicting flux rates. Kurland IJ, et al. **J Theor Biol** 1988 Dec 7;135(3):343–58

Effect of intravenous caffeine on muscle glycogenolysis in fasted exercising rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):167–72

Effect of caffeine on glycogenolysis during exercise in endurance trained rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):173–7

Hepatic zonation of carbohydrate metabolism. **Nutr Rev** 1989 Jul;47(7):219–21 (5 ref.)

Alterations in serum glucose and hepatic glycogen concentrations during octanoate administration in rabbits. Trice JE, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):294–7

Effects of beta-2 agonist on hepatic glycogen metabolism in the fetal lamb. Warburton D, et al. **Pediatr Res** 1988 Sep;24(3):330–2

Dynamics of metabolic responses to prolonged elevation of circulating adrenaline in resting and exercising rats. Nazar K, et al. **Pflugers Arch** 1989 Feb;413(4):429–34

Natural-abundance 13C NMR study of glycogen repletion in human liver and muscle. Jue T, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1439–42

Pertussis toxin blocks an inhibition of hormone-stimulated glycogenolysis by prostaglandin E2 and its analogue in cultured hepatocytes. Okumura T, et al. **Prostaglandins** 1988 Oct;36(4):463–75

Glycogen metabolism and post-exercise ketosis in carbohydrate-restricted trained and untrained rats. Adams JH, et al. **Q J Exp Physiol** 1989 Jan;74(1):27–34

The sensitivity of glycogenolysis to glucagon, epinephrine and cyanide in livers from rats in different metabolic conditions. Bazotte RB, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):193–203

Liver glycogen in gangrenous intestinal obstruction. Engin A, et al. **Res Exp Med (Berl)** 1988;188(4):299–303

Variable hepatocellular vacuolization associated with glycogen in rabbits. Wells MY, et al. **Toxicol Pathol** 1988; 16(3):360–5

Influence of dietary carnitine on lipid and carbohydrate metabolism in rats. Meijer GW, et al. **Z Ernahrungswiss** 1988 Jun;27(2):77–83

[The fine structure of trout liver glycogen] Mercier C, et al. **Comp Biochem Physiol [B]** 1977;58(4):397–9 (Eng. Abstr.) (Fre)

[Carbohydrates and lipids in the blood serum and liver of rats exposed to repeated hypokinesia] Tikhomirova NA, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):81–3 (Rus)

[Intensity of gluconeogenesis in the rat liver in the recovery period after long-term hypokinesis] Ershikov SM. **Vopr Med Khim** 1989 May–Jun;35(3):55–8 (Eng. Abstr.) (Rus)

[Change in the glycogen level in the liver, heart and skeletal muscles of rodents during exposure to plague toxin] Kratinov AG, et al. **Vopr Med Khim** 1971 Jul–Aug; 17(4):373–9 (Eng. Abstr.) (Rus)

LIVER MICROSOMES see **MICROSOMES, LIVER**

LIVER MITOCHONDRIA see **MITOCHONDRIA, LIVER**

LIVER NEOPLASMS

Triple synchronous malignant tumors. Hepatic leiomyosarcoma, splenic hemangiosarcoma and sigmoid colon cancer. Case report. Kinoshita A, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):477–9

Single cerebral metastasis mimicking a colloid cyst of the third ventricle. Lazzarino LG, et al. **Acta Neurol (Napoli)** 1987 Oct–Dec;9(5–6):364–7

Fibrolamellar hepatocellular carcinoma. Kwee HG. **Am Fam Physician** 1989 Aug;40(2):175–7 (12 ref.)

Hepatocellular carcinoma in the United States. Tabibian N. **Am Fam Physician** 1988 Oct;38(4):115–21 (42 ref.)

Hepatocellular carcinoma presenting with the superior mediastinal syndrome. Kew MC. **Am J Gastroenterol** 1989 Sep;84(9):1092–4

Hepatocellular carcinoma metastatic to the stomach presenting as bleeding multiple craterogenic ulcers. Lynch P, et al. **Am J Gastroenterol** 1989 Jun;84(6):653–5

Hepatocellular and cholangiocellular carcinoma, double cancer of the liver: report of two cases resected synchronously and metachronously. Takayasu K, et al. **Am J Gastroenterol** 1989 May;84(5):544–7

Hepatocellular carcinoma in a case of familial polyposis coli [letter] Van Steenbergen W, et al. **Am J Gastroenterol** 1989 Sep;84(9):1120–1

Radiological appearances of skeletal metastasis from hepatocellular carcinoma. O'Donnell C, et al. **Australas Radiol** 1988 Nov;32(4):437–9

Liver cancer. Oberfield RA, et al. **CA** 1989 Jul–Aug; 39(4):206–18 (60 ref.)

Spontaneous regression of a hepatocellular carcinoma—a case report. Suzuki M, et al. **Hepatogastroenterology** 1989 Jun;36(3):160–3

Hepatoblastoma: case report and literature review. Conley PM, et al. **J La State Med Soc** 1989 Jul;141(7):20–4 (8 ref.)

Experience with hepatic hemangioendothelioma in infancy and childhood. Holcomb GW 3d, et al. **J Pediatr Surg** 1988 Jul;23(7):661–6

Echocardiographic findings of mobile atrial hepatocellular carcinoma. Report of five cases. Chua SO, et al. **J Ultrasound Med** 1989 Jul;8(7):347–52

Clinical aspects of cholangiocarcinoma and its comparison with hepatocellular carcinoma. Qureshi H, et al. **JPMA** 1988 Aug;38(8):209–11

Hepatoblastoma. Perilongo G, et al. **Med Pediatr Oncol** 1989; 17(2):144–8

Hepatobiliary tumours of childhood: investigation and management. Joyce AD, et al. **Prog Pediatr Surg** 1989; 22:69–93 (73 ref.)

Case report 535: Hepatoma metastatic to the sternum. Reed JD Jr, et al. **Skeletal Radiol** 1989;18(2):161–3

Benign liver tumors. Nichols FC 3d, et al. **Surg Clin North Am** 1989 Apr;69(2):297–314 (26 ref.)

Hepatic hemangioendotheliomas in infancy. Becker JM, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):189–200 (127 ref.)

[Reductional major surgery and chemotherapy in multimetastatic apudomas] Elias D, et al. **Ann Chir** 1988; 42(7):474–81 (Eng. Abstr.) (Fre)

[Hepatocellular carcinoma] Gilsanz Garciá V. **Bull Acad Natl Med** 1989 Mar;173(3):263–82 (41 ref.) (Fre)

[Usefulness of tumor markers in hepatogastroenterology] Rougier P, et al. **Gastroenterol Clin Biol** 1989;13(2 Pt 3):T1–5 (25 ref.) (Fre)

[Prognostic factors in hepatocarcinoma] Le Thai B. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):405–12 (84 ref.) (Eng. Abstr.) (Fre)

[Hepatocellular carcinoma] Habscheid W. **Dtsch Med Wochenschr** 1988 Dec 9;113(49):1926–31 (87 ref.) (Ger)

[Carcinoid tumor of the liver] Ito H, et al. **Dtsch Med Wochenschr** 1989 Apr 21;114(16):623–7 (Eng. Abstr.) (Ger)

[Cystic lymphangioma of the liver. Presentation of a clinical case] Clerici D, et al. **Minerva Chir** 1989 Apr 15; 44(7):1139–41 (Eng. Abstr.) (Ita)

[Malignant fibrous histiocytoma of the liver] Ohyama S, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):306–9 (8 ref.) (Eng. Abstr.) (Jpn)

[Retrospective study of hemangioma of the liver in our department of surgery] Sudo T, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):421–6 (Eng. Abstr.) (Jpn)

[Transcatheter arterial embolization in osseous metastasis of hepatocellular carcinoma] Nagata Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):417–22 (Eng. Abstr.) (Jpn)

[Brain metastasis of hepatocellular carcinoma: a case report] Matsuo H, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun; 77(6):842–6 (Jpn)

[Cranial metastasis of hepatocellular carcinoma: case report] Ogasawara H, et al. **No Shinkei Geka** 1988 Dec; 16(13):1479–82 (Eng. Abstr.) (Jpn)

[Metastatic hepatoma presenting as intracranial hemorrhage: report of two cases] Todo T, et al. **No To Shinkei** 1988 Oct;40(10):919–24 (Eng. Abstr.) (Jpn)

[A case of inflammatory pseudotumor of the liver] Joh S, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1039–42 (19 ref.) (Eng. Abstr.) (Jpn)

[A case of mesenchymal hamartoma of the liver] Kanegawa K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1035–8 (Eng. Abstr.) (Jpn)

[Diagnosis and treatment of tumors of the liver in children] Kononuchenko VP, et al. **Khirurgiia (Mosk)** 1988 Jul; (7):79–83 (Eng. Abstr.) (Rus)

[Large lipoma of the round ligament of the liver] Budarin VN. **Klin Khir** 1988;(9):61 (Rus)

ANALYSIS

Expression of ras and myc oncogenes in human hepatocellular carcinoma and non-neoplastic liver tissues. Tiniakos D, et al. **Anticancer Res** 1989 May–Jun; 9(3):715–21

DNA sequences homologous to mitochondrial genes in nuclei from normal rat tissues and from rat hepatoma cells. Corral M, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):258–64

Purification form human hepatoma cells of a 130-kDa membrane glycoprotein with properties of the heparin-binding growth factor receptor. DiSorbo D, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1007–14

The lipid composition of highly differentiated human hepatomas, with special reference to fatty acids. Eggens I, et al. **Br J Exp Pathol** 1988 Oct;69(5):671–83

Polyisoprenoid, cholesterol and ubiquinone levels in human hepatocellular carcinomas. Eggens I, et al. **Br J Exp Pathol** 1989 Feb;70(1):83–92

Histologic markers in primary and metastatic tumors of the liver. Ganjei P, et al. **Cancer** 1988 Nov 1;62(9):1994–8

Androgen and estrogen receptors in hepatocellular carcinoma and the surrounding liver in women. Nagasue N, et al. **Cancer** 1989 Jan 1;63(1):112–6

Immunological analysis and characterization of lymphocyte subsets in specimens of human hepatocellular carcinomas and metastatic liver cancers. Yuh K, et al. **Cancer Immunol Immunother** 1989;28(1):1–8

Detection of membrane-bound alpha-fetoprotein in human hepatoma cell lines by monoclonal antibody 19F12. Hosokawa S, et al. **Cancer Res** 1989 Jan 15;49(2):361–6

Immunoanalytical detection of O4-ethylthymine in liver DNA of individuals with or without malignant tumors. Huh NH, et al. **Cancer Res** 1989 Jan 1;49(1):93–7

Normal hepatocytes exhibiting histone H3 with antibody accessible sites that are cryptic in carcinogen-altered hepatocytes. Munir KM, et al. **Cancer Res** 1989 Jan 15; 49(2):424–32

Ischemia effect on the level of steroid hormone receptors in hepatocellular carcinoma and adjacent liver tissue. Lui WY, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):919–20

Characterization of woodchuck hepatitis virus DNA and RNA in the hepatocellular carcinomas of woodchucks. Fuchs K, et al. **Hepatology** 1989 Aug;10(2):215–20

Characteristics of the distribution of lectin receptors in intrahepatic cholangiocellular carcinoma. Zhang SM, et al. **Histochem J** 1989 May;21(5):296–300

Immunohistochemical basic and acidic isoferritins in hepatocellular carcinoma. Cohen C. **Mod Pathol** 1988 Nov; 1(6):404–6

Multiple cis-acting DNA regulatory elements mediate hepatic angiotensinogen gene expression. Brasier AR, et al. **Mol Endocrinol** 1989 Jun;3(6):1022–34

[Localization of tumor-associated placental protein in human placental tissue and detection in carcinoma cell lines] Cao ZH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May; 10(3):188–90 (Eng. Abstr.) (Chi)

[A quantitative study on DNA content of hepatocellular carcinoma by image analysis technique] Cong WM. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):367–9 (Eng. Abstr.) (Chi)

[HBV DNA status and its correlation with HBsAg expression in hepatocellular carcinoma] Chen CX. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):625–8, 44 (Eng. Abstr.) (Chi)

[Quantitative determination of DNA content in hepatocytic carcinoma and its clinicopathologic significance] Cong WM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 68(8):463–5 (Chi)

[Primary hepatocarcinoma and hepatitis B virus in Sardinia] Lai ME, et al. **Pathologica** 1988 Jul–Aug;80(1068):443–8 (Eng. Abstr.) (Ita)

[Estrogen and androgen receptors in hepatocellular carcinoma and in noncancerous liver tissue] Hamazaki K, et al. **Gan No Rinsho** 1989 Sep;35(10):1109–13 (Eng. Abstr.) (Jpn)

[Estrogen receptors in human gastric, hepatocellular, and gallbladder carcinomas and normal liver tissues] Ohnami S, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2923–8 (Eng. Abstr.) (Jpn)

[Biological activity of hepatocellular carcinoma by analysing nuclear DNA ploidy patterns and using anti BrdU monoclonal antibody] Jung-Rou T. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):168–80 (Eng. Abstr.) (Jpn)

BLOOD

Plasma abnormal prothrombin levels in patients with small hepatocellular carcinoma. Tanabe Y, et al. **Am J Gastroenterol** 1988 Dec;83(12):1386–9

Alpha 1-microglobulin (HC protein) in human hepatocellular carcinoma. Vincent C, et al. **Br J Cancer** 1989 Mar; 59(3):415–6

Serum C-reactive protein as a serum marker for the diagnosis of hepatocellular carcinoma. Lee FY, et al. **Cancer** 1989 Apr 15;63(8):1567–71

Caffeine as indicator of metabolic functions of microsomal liver enzymes. Varagnolo M, et al. **Clin Chim Acta** 1989 Jul 31;183(1):91–4

Serum vitronectin concentration in various liver diseases. Okabe K. **Gastroenterol Jpn** 1989 Feb;24(1):82

Hepatoma-associated alterations of serum alpha 1-antitrypsin in hereditary hepatitis LEC rats as a new animal model of liver disease. Masuda R, et al. **Int J Biochem** 1988; 20(10):1171–6

Altered glycosylation of serum transferrin of patients with hepatocellular carcinoma. Yamashita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2415–23

C-peptide in non-alcoholic cirrhosis and hepatocellular carcinoma. Pun KK, et al. **J Endocrinol Invest** 1988 May; 11(5):337–43

Radioimmunoassay of serum IGF-I and IGF-II in patients with chronic liver diseases and hepatocellular carcinoma with or without hypoglycemia. Wu JC, et al. **J Lab Clin Med** 1988 Nov;112(5):589–94

Abnormal plasma prothrombin (PIVKA-II) levels in hepatocellular carcinoma. Kawaguchi Y. **Jpn J Surg** 1989 May;19(3):296–300

Alpha-fetoprotein, carcinoembryonic antigen and various biochemical tests in patients with tumorous and inflammatory liver diseases. Weber P, et al. **Neoplasma** 1988;35(5):605–13

Application of des-gamma-carboxy prothrombin as a complementary tumor marker with alpha-fetoprotein in the

diagnosis of hepatocellular carcinoma. Ho CH, et al. **Scand J Gastroenterol** 1989 Jan;24(1):47–52

Serum protease inhibitors in opisthorchiasis, hepatoma, cholangiocarcinoma, and other liver diseases. Changbumrung S, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):299–305

[Changes in blood selenium level and glutathione peroxidase activity and their clinical significance in primary liver cancer and benign liver diseases] Yang DH, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct;27(10):612–4, 652 (Eng. Abstr.) **(Chi)**

[Structure of sugar chains in alpha-fetoprotein—difference between primary hepatoma and benign hepatic diseases] Sugitachi I, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1732–9 (Eng. Abstr.) **(Jpn)**

[Studies of vitamin K sensitivity of PIVKA-II in patients with hepatocellular carcinoma] Furukawa M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2583–9 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Changes in vascularity of liver tumours after hepatic arterial embolization with degradable starch microspheres. Civalleri D, et al. **Br J Surg** 1989 Jul;76(7):699–703

Development of cavernous vasculatures in livers with hepatocellular carcinoma. An autopsy study. Terada T, et al. **Liver** 1989 Jun;9(3):172–8

[Indications and significance of color Doppler sonography for gastroenterologic diagnosis] Gebel M. **Z Gastroenterol [Verh]** 1989 Jul;24:219–22 **(Ger)**

[Studies of hemodynamics of hepatocellular carcinoma by Tc 99 m-MAA scintigraphy—especially effects of hepatic arterial occlusion] Yano S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1248–56 (Eng. Abstr.) **(Jpn)**

[Arterial-portal shunting in hepatic cavernous hemangioma; a case report] Shima Y, et al. **Rinsho Hoshasen** 1989 Feb; 34(2):285–8 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Acute myeloid leukemia followed by hepatic leiomyosarcoma. A case report. Principe F, et al. **Acta Med Port** 1988 Jan–Feb;1(1):87–9 (12 ref.)

Prolactin as a mammalian mitogen and tumor promoter. Buckley AR, et al. **Adv Enzyme Regul** 1988;27:371–91

Effects of allyl sulfide, germanium and NaCl on the development of glutathion S-transferase P-positive rat hepatic foci initiated by diethylnitrosamine. Jang JJ, et al. **Anticancer Res** 1989 Mar–Apr;9(2):273–5

The effects of dose and duration of administration on the promotion index of phenobarbital in multistage hepatocarcinogenesis in the rat. Rizvi TA, et al. **APMIS Suppl** 1988;2:262–74

Oral contraceptives and focal nodular hyperplasia of the liver. Hagay ZJ, et al. **Arch Gynecol Obstet** 1988; 243(4):231–4

Oral contraceptives and primary liver cancer. La Vecchia C, et al. **Br J Cancer** 1989 Mar;59(3):460–1

Hepatocellular carcinoma and exposure to hexachlorobenzene: a case report. Seldén A, et al. **Br J Ind Med** 1989 Feb;46(2):138–40

Aflatoxin B1 induced hepatic neoplasia in Great Lakes coho salmon. Black JJ, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):742–5

Relationship between in utero development of the mouse liver and tumor development following transplacental exposure to ethylnitrosourea. Branstetter DG, et al. **Cancer Res** 1989 Jul 1;49(13):3620–6

The effects of bay-region methyl substitution on 6-nitrochrysene mutagenicity in Salmonella typhimurium and tumorigenicity in newborn mice. el-Bayoumy K, et al. **Carcinogenesis** 1989 Sep;10(9):1685–9

Species differences in the interaction between CCl4 reactive metabolites and liver DNA or nuclear protein fractions. Castro GD, et al. **Carcinogenesis** 1989 Feb;10(2):289–94

Tumor promoting activities of ethylphenylacetylurea and diethylacetylurea, the ring hydrolysis products of barbiturate tumor promoters phenobarbital and barbital, in rat liver and kidney initiated by N-nitrosodiethylamine. Diwan BA, et al. **Carcinogenesis** 1989 Jan;10(1):189–94

Promotion of malignant 'embryonal' liver tumors by phenobarbital: increased incidence and shortened latency of hepatoblastomas in (DBA/2 x C57BL/6)F1 mice initiated with N-nitrosodiethylamine. Diwan BA, et al. **Carcinogenesis** 1989 Jul;10(7):1345–8

Lack of promoting effect of clonazepam on the development of N-nitrosodiethylamine-initiated hepatocellular tumors in mice is correlated with its inability to inhibit cell-to-cell communication in mouse hepatocytes. Diwan BA, et al. **Carcinogenesis** 1989 Sep;10(9):1719–24

Enhancement of hepatocarcinogenesis in rats by dietary fructose. Enzmann H, et al. **Carcinogenesis** 1989 Jul; 10(7):1247–52

Comparative effect of dietary butylated hydroxyanisole and beta-naphthoflavone on aflatoxin B1 metabolism, DNA adduct formation, and carcinogenesis in rainbow trout [published erratum appears in Carcinogenesis 1988 Nov;9(11):2146] Goeger DE, et al. **Carcinogenesis** 1988 Oct;9(10):1793–800

Hepatic tumor-promoting chlorinated hydrocarbons stimulate protein kinase C activity. Moser GJ, et al. **Carcinogenesis** 1989 May;10(5):851–6

Rapid bioassay methods for carcinogens and modifiers of hepatocarcinogenesis. Ito N, et al. **Crit Rev Toxicol** 1989; 19(4):385–415 (153 ref.)

Evaluation of the carcinogenic risk of the phenoxyherbicide MCPA to an urodele amphibian. Zavanella T, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):114–22

The question of carcinogenic effects of hydrazine. Steinhoff D, et al. **Exp Pathol** 1988;33(3):133–43

Chronic toxicity/carcinogenicity studies of sulphamethazine in B6C3F1 mice. Littlefield NA, et al. **Food Chem Toxicol** 1989 Jul;27(7):455–63

A case of cholangiocarcinoma detected after follow-up for seven years for thorotrast deposition. Imai H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):570–5

Do aflatoxin-DNA adduct measurements in humans provide accurate data for cancer risk assessment? Groopman JD. **IARC Sci Publ** 1988;(89):55–62

Combined oral contraceptives and liver cancer. The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. **Int J Cancer** 1989 Feb 15;43(2):254–9

Possible role of certain antioxidant enzymes in dimethylnitrosamine-induced liver carcinogenesis. Liotti FS, et al. **Int J Cancer** 1988 Nov 15;42(5):803–6

Steroid related neoplasia in human liver. Barrows GH, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:47–59

Vinyl chloride-induced hepatic angiosarcoma. Falk H. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:39–46

Hepatic adenoma and oral contraceptive use. Greer T. **J Fam Pract** 1989 Mar;28(3):322–6

Epithelioid hemangioendothelioma of the liver following contact with vinyl chloride. Recurrence after orthotopic liver transplantation. Gelin M, et al. **J Hepatol** 1989 Jan; 8(1):99–106

Hepatocellular carcinoma after danazol therapy. Weill BJ, et al. **J Rheumatol** 1988 Sep;15(9):1447–9

Unusual but reversible hepatic lesions following long-term treatment with pyridylcarbinol for familial hypercholesterolemia. Keller C, et al. **Klin Wochenschr** 1988 Jul 15;66(14):647–50

Liver cirrhosis and hepatocellular carcinoma after prolonged exposure to TNT: causal relationship or mere coincidence? Garfinkel D, et al. **Med Interne** 1988 Oct–Dec;26(4):287–90

Liver angiosarcoma in a vinyl chloride polymerization plant worker. Report of the seventh Italian case. Brugnami G, et al. **Med Lav** 1988 Jan–Feb;79(1):34–41

Liver tumor in long-term user of oral contraceptives. Ferrara BE, et al. **Postgrad Med** 1988 Nov 1;84(6):107–9

Molecular dosimetry of hepatic aflatoxin B1-DNA adducts: linear correlation with hepatic cancer risk. Bechtel DH. **Regul Toxicol Pharmacol** 1989 Aug;10(1):74–81 (21 ref.)

Increased risk for primary liver cancer among women exposed to solvents. Hernberg S, et al. **Scand J Work Environ Health** 1988 Dec;14(6):356–65

Modulation of diethylnitrosamine-induced hepatocarcinogenesis and O6-ethylguanine formation in rainbow trout by indole-3-carbinol, beta-naphthoflavone, and Aroclor 1254. Fong AT, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):93–100

Translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in thioacetamide-induced liver tumours in rats. Cascales C, et al. **Toxicol Lett** 1989 Apr;47(1):9–16

Failure of the peroxisome proliferator WY-14,643 to initiate growth-selectable foci in rat liver. Cattley RC, et al. **Toxicology** 1989 May 31;56(1):1–7

The in vivo metabolism of methapyrilene, a hepatocarcinogen, in the rat. Kammerer RC, et al. **Xenobiotica** 1988 Jul;18(7):869–81

[Pyridimocarbamate (prodectin)-induced acute liver damage, cirrhosis and primary liver cancer—accidental finding?] Kendrey G, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jan; 29(1):51–4 (Eng. Abstr.) **(Hun)**

[Hepatic angiosarcoma caused by vinyl chloride: a new Italian case] Chiozzini G, et al. **Med Lav** 1988 Jan–Feb; 79(1):24–33 (Eng. Abstr.) **(Ita)**

[Hepatic angiosarcoma with thorotrast] Vadell Nadal C, et al. **Rev Clin Esp** 1988 Dec;183(9):475–7 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Transcatheter arterial embolization for the treatment of ruptured hepatocellular carcinoma [letter] Shiina S, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):658–9

Intrahepatic stones associated with cholangiocarcinoma. Chen MF, et al. **Am J Gastroenterol** 1989 Apr;84(4):391–5

Kaposi's sarcoma with visceral involvement in a young heterosexual male without evidence of the acquired immune deficiency syndrome. Kumar S, et al. **Am J Gastroenterol** 1989 Mar;84(3):318–21

The Kasabach-Merritt syndrome: severe bleeding disorder caused by celiac arteriography—reversal by heparin treatment. Mewes T, et al. **Am J Gastroenterol** 1989 Aug; 84(8):965–71

Massive hyperthyroxinemia in a euthyroid patient with hepatocellular carcinoma. Ober KP, et al. **Am J Med** 1989 May;86(5):621–3

Hepatocellular carcinoma in a child with familial Russell-Silver syndrome. Chitayat D, et al. **Am J Med Genet** 1988 Dec;31(4):909–14

Trisomy 18 and hepatoblastoma. Mamlok V, et al. **Am J Med Genet** 1989 May;33(1):125–6

Arterial hypertension as a paraneoplastic phenomenon in hepatocellular carcinoma. Kew MC, et al. **Arch Intern Med** 1989 Sep;149(9):2111–3

Evaluation of the synthetic somatostatin analogue SMS 201-995 in patients with hypoglycaemia associated with hepatocellular carcinoma. Joffe BI, et al. **Br J Cancer** 1988 Jul;58(1):91–2

Pityriasis rotunda as a cutaneous marker of hepatocellular carcinoma: a comparison with its prevalence in other diseases. Berkowitz I, et al. **Br J Dermatol** 1989 Apr; 120(4):545–9

Severe eosinophilia associated with a malignant islet cell tumour. Haldane JH, et al. **Can Med Assoc J** 1989 May 1;140(9):1061, 1063

Relationship between cirrhosis, liver cancer, and hepatic metastases. An autopsy study. Melato M, et al. **Cancer** 1989 Jul 15;64(2):455–9

Porphyria cutanea tarda resulting from primary hepatocellular carcinoma. O'Reilly K, et al. **Clin Exp Dermatol** 1988 Jan;13(1):44–8 (15 ref.)

Polymyositis and hepatocellular carcinoma. Sattar MA, et al. **Clin Rheumatol** 1988 Dec;7(4):538–42

Chronic myelomonocytic leukemia with chromosomal changes involving 1p36 and hepatocellular carcinoma in a case of Fanconi's anemia. Bessho F, et al. **Eur J Haematol** 1989 May;42(5):492–5

Hepatocellular carcinoma with and without cirrhosis. A comparison in southern African blacks. Kew MC. **Gastroenterology** 1989 Jul;97(1):136–9

Association of focal nodular hyperplasia and hepatic hemangioma. Mathieu D, et al. **Gastroenterology** 1989 Jul; 97(1):154–7

Hepatic epithelioid hemangioendothelioma in primary biliary cirrhosis [letter] Terada T, et al. **Gastroenterology** 1989 Sep; 97(3):810–1

Injection sclerotherapy for bleeding esophageal varices in cirrhotic patients with hepatocellular carcinoma. Ng WD, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):69–70

Spontaneous haemoperitoneum from rupture of a primary hepatic adenoma in an adult man—an update [letter] McInerney PD. **Gut** 1988 Oct;29(10):1427

Hepatocellular carcinoma in idiopathic haemochromatosis [letter] Sheehan F, et al. **Gut** 1989 Jun;30(6):889

Fibrolamellar hepatocellular carcinoma complicating ulcerative colitis with primary sclerosing cholangitis. Snook JA, et al. **Gut** 1989 Feb;30(2):243–5

Hepatocellular carcinoma in woodchuck hepatitis virus-infected woodchucks: presence of viral DNA in tumor tissue from chronic carriers and animals serologically recovered from acute infections. Korba BE, et al. **Hepatology** 1989 Mar;9(3):461–70

Serological markers of hepatitis B virus and hepatitis D virus infections in Greek adults with primary hepatocellular carcinoma. Tassopoulos NC, et al. **Infection** 1989 Jan–Feb; 17(1):17–9

Pemphigus foliaceus associated with acanthosis nigricans-like lesions and hepatocellular carcinoma. Muramatsu T, et al. **Int J Dermatol** 1989 Sep;28(7):462–3

Blood clot in the biliary tree due to hepatocellular carcinoma. Fraser GM, et al. **Isr J Med Sci** 1989 Feb;25(2):118–20

Hepatic angiomyolipoma in a tuberous sclerosis patient. Kristal H, et al. **Isr J Med Sci** 1989 Jul;25(7):412–4

Giant hemangioma of the liver (Kasabach-Merritt syndrome): successful suppression of intravascular coagulation permitting surgical removal. Watzke HH, et al. **J Clin Gastroenterol** 1989 Jun;11(3):347–50

Hepatocellular carcinoma in Alagille's syndrome: a family study. Rabinovitz M, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):26–30

Spontaneous rupture of hepatocellular carcinoma in a child: report of a survival. Chen CL, et al. **J Pediatr Surg** 1989 Apr;24(4):404–5

Resection of hepatocellular carcinoma with obstructive jaundice caused by compression of the common hepatic duct. Lee KC, et al. **J Surg Oncol** 1988 Nov;39(3):201–5 (29 ref.)

Immunohistochemical research on HDV infection in Chinese patients with chronic liver disease. Zhang YY, et al. **J Tongji Med Univ** 1989;9(1):5–7

Sonographic relationship between gallbladder wall thickness and the etiology of ascites. Marti-Bonmati L, et al. **JCU** 1989 Sep;17(7):497–501

Necrotizing myelopathy associated with hepatocellular carcinoma. Misumi H, et al. **Jpn J Med** 1988 Aug; 27(3):333–6

Fibrolamellar carcinoma as a cause of bile duct obstruction. Eckstein RP, et al. **Pathology** 1988 Oct;20(4):326–31

Non-immune fetal hydrops with hepatic hemangioendothelioma and Kasabach-Merritt syndrome: a case report. Skopec LL, et al. **Pediatr Pathol** 1989; 9(1):87–93

Hepatoblastoma in a patient with familial polyposis coli. LeSher AR, et al. **Surgery** 1989 May;105(5):668–70 (17 ref.)

Delta superinfection in patients with chronic hepatitis, liver cirrhosis and hepatocellular carcinoma in a Sahelian area. Study of 112 cases versus 46 controls. Cenac A, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):994–7

Primary liver cell carcinoma associated with infective liver disease. Atoba MA, et al. **Trop Geogr Med** 1988 Jul;

40(3):244–6
Cornelia de Lange syndrome associated with Wilms' tumour and infantile haemangioendothelioma of the liver: report of two autopsy cases. Maruiwa M, et al. **Virchows Arch [A]** 1988;413(5):463–8
[Neonatal hemangiomatosis with prolonged icterus] Hendriks JJ, et al. **Tijdschr Kindergeneeskd** 1989 Feb;57(1):29–31 (Eng. Abstr.) **(Dut)**
[Hepatocarcinoma and hypereosinophilia] Salame M, et al. **Acta Gastroenterol Belg** 1988 Mar–Apr;51(2):169–72 (Eng. Abstr.) **(Fre)**
[Late cutaneous porphyria secondary to a primary cancer of the liver] Pillette M, et al. **Ann Dermatol Venereol** 1988; 115(10):1051–4 **(Fre)**
[Spontaneous rupture of an adenoma of the liver during pregnancy] Estebe JP, et al. **J Chir (Paris)** 1988 Nov; 125(11):654–6 (Eng. Abstr.) **(Fre)**
[Coronary thromboembolism in hepatic sarcoma following myocardial infarct] Tenna M, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):61–5 (Eng. Abstr.) **(Ita)**
[A case of Behçet disease associated with hepatocellular carcinoma] Murata I, et al. **Gan No Rinsho** 1989 Apr; 35(5):625–31 (Eng. Abstr.) **(Jpn)**
[A case of juvenile polyp in an elderly person with hepatocellular carcinoma] Sonobe H, et al. **Gan No Rinsho** 1988 Oct;34(12):1719–22 (Eng. Abstr.) **(Jpn)**
[A case of HCC with a tumor thrombus in the main portal vein surviving (Vp4) for over three years and six months] Suyama Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1723–30 (Eng. Abstr.) **(Jpn)**
[A case of biliary tract obstruction due to metastatic hepatic cancer, in which topical injection of CDDP and ADM into PTCD with concomitant use of UFT resulting in partial reopening of biliary tract] Hayashi T, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2293–6 (Eng. Abstr.) **(Jpn)**
[Partial splenic embolization as a treatment in hypersplenism and portal hypertension in chronic liver diseases] Matsuo H, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug; 77(8):1206–11 **(Jpn)**
[A case of hemangiopericytoma associated with hypoglycemia] Yoshida T, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):674–9 **(Jpn)**
[A case of liver cirrhosis associated with monoclonal gammopathy and primary hepatoma] Mori T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):945–9 (12 ref.) **(Jpn)**
[A case of fusiform aneurysm of the intrahepatic portal vein with tumor thrombus] Ohta Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1409–14 (17 ref.) **(Jpn)**
[A case report of hepatocellular carcinoma with tumor thrombus in the pulmonary artery demonstrated by MRI] Harada M, et al. **Rinsho Hoshasen** 1988 Aug;33(8):907–10 (Eng. Abstr.) **(Jpn)**
[Indications for emergency TAE of ruptured HCC] Ibukuro K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):973–6 (Eng. Abstr.) **(Jpn)**
[A case of multiple peripheral hepatic artery aneurysms after chemoembolization] Ito K, et al. **Rinsho Hoshasen** 1989 Feb;34(2):281–4 (Eng. Abstr.) **(Jpn)**
[A case of giant hemangioma of the liver accompanied by Kasabach–Merritt syndrome] Taniwaki S, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1601–4 (Eng. Abstr.) **(Jpn)**
[Interventional angiography in patients with liver cancer associated with severe celiac artery stenosis—insertion of catheter at the stenotic site] Usuki N, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1621–3 **(Jpn)**
[Imaging diagnosis of portal vein thrombosis following splenectomy in 23 patients with hepatocellular carcinoma] Yamashita K, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1561–4 (Eng. Abstr.) **(Jpn)**
[Hepatocarcinoma in primary biliary cirrhosis (letter)] Carnicer Jáuregui F, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):578–9 **(Spa)**
[Hypoglycemia crisis and hypovolemic shock as initial manifestations of hepatocarcinoma (letter)] Molina Boix M, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):577–8 **(Spa)**

CONGENITAL

Fetal hepatoblastoma presenting as nonimmune hydrops. Kazzi NJ, et al. **Am J Perinatol** 1989 Jul;6(3):278–80
Mesenchymal hamartoma of the liver. A case report. Singh H, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):403–6
Primitive neuroectodermal tumor of the brain associated with malignant rhabdoid tumor of the liver: a histologic, immunohistochemical, and electron microscopic study. Chang CH, et al. **Pediatr Pathol** 1989;9(3):307–19
Mesenchymal hamartoma of the liver of an infant—case report. Senyüz OF, et al. **Z Kinderchir** 1988 Dec; 43(6):422–3
[Multiple cutaneous and hepatic angioma in a newborn infant] Lorette G, et al. **Ann Dermatol Venereol** 1988; 115(11):1132–3 **(Fre)**
[Hepatoblastoma: a catamnestic study and proposal of a therapy concept] Mildenberger H, et al. **Z Kinderchir** 1989 Apr;44(2):78–82 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Endogenous phosphatase activity in tumor cells in a liver aspirate. A potential problem for immunocytodiagnosis using immunoalkaline phosphatase methods. Yam LT. **Acta Cytol** 1989 Jul–Aug;33(4):505–10
Hypoechoic lesions without halo in echogenic liver. A frequent sonographic dilemma. Hess CF, et al. **Acta Radiol** 1988 Sep–Oct;29(5):541–5
Evaluation of intrahepatic tumour extent and prediction of resection size in liver tumours by computed tomography, ultrasonography and angiography. Tidebrant G, et al. **Acta Radiol** 1989 Jul–Aug;30(4):395–9
Hepatic lymphoma in cyclosporine-treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501–3
MR differentiation of hepatocellular carcinoma from cavernous hemangioma: complementary roles of FLASH and T2 values. Ohtomo K, et al. **AJR** 1989 Mar; 152(3):505–7
Primary liver tumors: diagnosis by MR imaging. Rummeny E, et al. **AJR** 1989 Jan;152(1):63–72
Giant cavernous hemangioma of the liver: CT and MR imaging in 10 cases. Choi BI, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1221–6
Biliary cystadenoma and cystadenocarcinoma: CT and sonographic findings. Korobkin M, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):507–11
Strategy for early diagnosis of hepatocellular carcinoma (HCC). Ebara M, et al. **Ann Acad Med Singapore** 1989 Jan; 18(1):83–9
Alpha-fetoprotein in cancer. Jalanko H. **Ann Chir Gynaecol** 1989;78(1):27–31 (27 ref.)
Histological and cytological fine needle biopsies from focal liver lesions. Intra- and interobserver reproducibility of diagnoses. Glenthøj A, et al. **APMIS** 1989 Jul;97(7):611–8
Blood-group-related antigen Lewis(x) and Lewis(y) in the differential diagnosis of cholangiocarcinoma and hepatocellular carcinoma. Jovanovic R, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):139–42
Tumor markers for early diagnosis of cholangiocarcinoma. Sirisinha S. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):1–3
The radiology of cystic liver tumours. Philips RL. **Australas Radiol** 1989 Feb;33(1):66–8
Hepatoma presenting as a lump in the groin. Scott HJ, et al. **Br J Clin Pract** 1988 Dec;42(12):518–9
Effect of cirrhosis on accuracy of 99Tcm-tin colloid scintigraphy and ultrasound scanning in diagnosis of hepatocellular carcinoma [letter] Goldfarb CR, et al. **Br J Radiol** 1989 Apr;62(736):387
Pulsed Doppler in the diagnosis of small liver tumours. Yasuhara K, et al. **Br J Radiol** 1988 Oct;61(730):898–902
Hepatocellular pseudotumour (regenerating nodule) in the cirrhotic liver mimicking hepatocellular carcinoma. Nagasue N, et al. **Br J Surg** 1988 Nov;75(11):1124–8
Hemangioma of the liver: characteristics exhibited on a 0.15 Tesla scanner. Flak B, et al. **Can Assoc Radiol J** 1989 Jun; 40(3):135–8
Mesenchymal hamartoma in a 10-month-old infant: appearance by magnetic resonance imaging. Roberts EA, et al. **Can Assoc Radiol J** 1989 Aug;40(4):219–21
Myelolipoma of the liver. A case report. Nishizaki T, et al. **Cancer** 1989 Mar 1;63(5):930–4 (30 ref.)
Infantile hepatic hemangiomas. Clinical features, radiologic investigations, and treatment of 20 patients. Stanley P, et al. **Cancer** 1989 Aug 15;64(4):936–49
Recent advances in ultrasonographic diagnosis of hepatocellular carcinoma. Tanaka S, et al. **Cancer** 1989 Apr 1;63(7):1313–7
The ratio of fucosylation of alpha-fetoprotein in hepatoblastoma. Tsuchida Y, et al. **Cancer** 1989 Jun 1; 63(11):2174–6
Diagnostic efficiency in discriminating liver malignancies from cirrhosis by serum gamma-glutamyltransferase isoforms [published erratum appears in Clin Chim Acta 1989 Feb 28;180(2):201] Sacchetti L, et al. **Clin Chim Acta** 1988 Oct 14;177(2):167–72
Ultrasonographic features of hepatocellular pseudotumour in the cirrhotic liver. Chang YC, et al. **Clin Radiol** 1988 Nov;39(6):635–8
Benign liver tumors. Ros PR, et al. **Curr Probl Diagn Radiol** 1989 May–Jun;18(3):125–55 (113 ref.)
Malignant liver tumors. Ros PR, et al. **Curr Probl Diagn Radiol** 1989 May–Jun;18(3):95–124 (87 ref.)
Des-gamma-carboxyprothrombin in hepatocellular carcinoma after vitamin K1 injection. Buffet C, et al. **Dig Dis Sci** 1989 Jun;34(6):963–4
Sonographic characteristics of small hepatocellular carcinoma. Choi BI, et al. **Gastrointest Radiol** 1989 Summer;14(3):255–61
Hepatic hemangioma in the presence of fatty infiltration: an atypical sonographic appearance. Marsh JI, et al. **Gastrointest Radiol** 1989 Summer;14(3):262–4
Liposa of the liver: US, CT, and MRI appearance. Martí-Bonmatí L, et al. **Gastrointest Radiol** 1989 Spring; 14(2):155–7
Primary lymphoma of the liver: a more optimistic point of view. Anthony PP. **Hepatology** 1989 Jan;9(1):165–7
Immunotargeting in the diagnosis and treatment of liver cancer. Keegan-Rogers V, et al. **Hepatology** 1989 Apr; 9(4):646–8
alpha-Fetoprotein monitoring in Chinese patients with chronic hepatitis B virus infection: role in the early detection of hepatocellular carcinoma. Lok AS, et al. **Hepatology** 1989 Jan;9(1):110–5
The use of a monoclonal antibody against alpha-fetoprotein for the radioimmunodetection of hepatocellular carcinoma. Springolo E, et al. **Hepatology** 1989 Jan;9(1):116–20
The significance of alpha-fetoprotein and other tumour markers in differential immunocytochemistry of primary liver tumours. Brumm C, et al. **Histopathology** 1989 May; 14(5):503–13
Pattern analysis of serum alpha-fetoprotein in the early diagnosis of hepatocellular carcinoma in liver cirrhosis. Arrigoni A, et al. **Int J Biol Markers** 1988 Jul–Sep; 3(3):172–6
Alpha-fetoprotein monoclonal assay: preliminary clinical findings in a high risk population. Pizzocolo G, et al. **Int J Biol Markers** 1988 Jan–Mar;3(1):10–4
Magnetic resonance imaging of focal hepatic lesions: a review. Degryse H, et al. **J Belge Radiol** 1988;71(2):167–75 (27 ref.)
Alpha-fetoprotein, tissue polypeptide antigen and ferritin in diagnosing primary hepatocellular carcinoma in patients with liver cirrhosis. Leandro G, et al. **J Cancer Res Clin Oncol** 1989;115(3):276–8
Primary hepatic lymphoma [letter] Yapp R 3d, et al. **J Clin Gastroenterol** 1988 Oct;10(5):584–5
Signal suppression of normal liver tissue by phase corrected inversion recovery: a screening technique. Lehmann B, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):650–5
Hepatic adenoma: MR appearance mimicking focal nodular hyperplasia. Nokes SR, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):885–7
Scintigraphic and ultrasound features of giant hemangiomas of the liver. Lisbona R, et al. **J Nucl Med** 1989 Feb; 30(2):181–6
Distinction between hepatocellular carcinoma, cholangiocarcinoma, and metastatic carcinoma based on immunohistochemical staining for carcinoembryonic antigen and for cytokeratin 19 on paraffin sections. Balaton AJ, et al. **J Pathol** 1988 Dec;156(4):305–10
Inflammatory pseudotumor of the liver. Standiford SB, et al. **J Surg Oncol** 1989 Apr;40(4):283–7
Primary hepatocellular adenoma in men. Pulpeiro JR, et al. **JCU** 1989 May;17(4):269–74
MRI of hepatic lymphoma. Weissleder R, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):675–81
Specificity of tumor markers (CEA, GICA, TPA, alpha-FP, FpA, gamma-GT) for the diagnosis of hepatic metastases from large bowel cancers. Abbasciano V, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):129–32
Immunoperoxidase staining as a diagnostic aid for hepatocellular carcinoma. Christensen WN, et al. **Mod Pathol** 1989 Jan;2(1):8–12
Value of hepatic blood flow study in the diagnosis of hepatoma. Lee HK, et al. **Mt Sinai J Med (NY)** 1989 Jan; 56(1):33–5
Histiocytosis X presenting as multiple intrahepatic nodules. Hara T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep; 51(6):1059–62
Prenatal sonographic diagnosis of hepatic hemangioendothelioma with secondary nonimmune hydrops fetalis. Gonen R, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):485–7
Radioimmunodetection of tumors with monoclonal antiplacental ferritin antibody: preliminary results. Moroz C, et al. **Oncology** 1989;46(1):35–9
Ultrasound of primary hepatic tumours in childhood. de Campo M, et al. **Pediatr Radiol** 1988;19(1):19–24
Follow-up imaging of benign pediatric liver tumors. Leary DL, et al. **Pediatr Radiol** 1989;19(4):234–6
Hepatic epithelioid haemangioendothelioma: difficult name, difficult diagnosis? Cobden I, et al. **Postgrad Med J** 1988 Feb;64(748):128–31
A benign liver tumour—characteristic appearances. Kreel L. **Postgrad Med J** 1988 Apr;64(750):297–9
Giant hamartoma of liver mimicking malignancy. Narasimharao KL, et al. **Postgrad Med J** 1988 May; 64(751):398–400
Hepatic haemangioma: a critical review of diagnosis and management. Reading NG, et al. **Q J Med** 1988 May; 67(253):431–45 (35 ref.)
Atypical cavernous hemangioma of the liver. Itai Y, et al. **Radiat Med** 1988 May–Jun;6(3):135–40
Ultrasonography, angiography, computed tomography and magnetic resonance in nodular regenerative hyperplasia of the liver: report of a pseudo-tumoral case. Patriarche C, et al. **Radiat Med** 1988 May–Jun;6(3):111–4
Ultrasound case of the day. Pedunculated retroperitoneal liver hemangioma. Needleman L, et al. **Radiographics** 1989 Jul;9(4):769–73
Primary liver tumors in children: comparison of CT and MR imaging. Boechat MI, et al. **Radiology** 1988 Dec; 169(3):727–32
Short TI inversion-recovery imaging of the liver: pulse-sequence optimization and comparison with spin-echo imaging. Dousset M, et al. **Radiology** 1989 May; 171(2):327–33
Hepatic epithelioid hemangioendothelioma: report of five cases. Furui S, et al. **Radiology** 1989 Apr;171(1):63–8
Detection of focal hepatic masses: prospective evaluation with CT, delayed CT, CT during arterial portography, and

MR imaging. Heiken JP, et al. **Radiology** 1989 Apr; 171(1):47–51

Distinction of hepatic cavernous hemangioma from hepatic metastases with MR imaging. Li KC, et al. **Radiology** 1988 Nov;169(2):409–15

Adenomatous hyperplastic nodules in the cirrhotic liver: differentiation from hepatocellular carcinoma with MR imaging. Matsui O, et al. **Radiology** 1989 Oct;173(1):123–6

Hepatic tumors: comparison of CT during arterial portography, delayed CT, and MR imaging for preoperative evaluation. Nelson RC, et al. **Radiology** 1989 Jul;172(1):27–34

Erythromycin–induced hepatitis: simulator of malignancy. Rigauts HD, et al. **Radiology** 1988 Dec;169(3):661–2

Central scars in primary liver tumors: MR features, specificity, and pathologic correlation. Rummeny E, et al. **Radiology** 1989 May;171(2):323–6

Hepatic neoplasia: breath–hold MR imaging. Winkler ML, et al. **Radiology** 1989 Mar;170(3 Pt 1):801–6

Small hepatocellular carcinoma and cavernous hemangioma: differentiation with dynamic FLASH MR imaging with Gd–DTPA. Yoshida H, et al. **Radiology** 1989 May; 171(2):339–42

Laparoscopic ultrasonography in the study of liver diseases. Preliminary results. Fornari F, et al. **Surg Endosc** 1989; 3(1):33–7

Hepatocellular carcinoma presenting as intracranial metastasis. Lee JP, et al. **Surg Neurol** 1988 Oct;30(4):316–20

Hepatic granuloma manifested as a pseudotumor with calcification: report of a case. Yuan CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1121–4

Coagulation assays as diagnostic markers of hepatocellular carcinoma. Lefrère JJ, et al. **Thromb Haemost** 1988 Dec 22;60(3):468–70

Prognostic significance of urinary neopterin levels in patients with hepatocellular carcinoma. Kawasaki H, et al. **Tohoku J Exp Med** 1988 Aug;155(4):311–8

Early diagnosis of hepatocellular carcinoma using imaging modalities. Park CH. **Yonsei Med J** 1988;29(2):101–8

[A case of cystadenocarcinoma of the liver] Viichki I, et al. **Khirurgiia (Sofiia)** 1989;42(2):61–5 **(Bul)**

[The place of echography in the clinical diagnosis of hepatic hemangioma] Grigovrov N, et al. **Vutr Boles** 1989; 28(1):78–82 (Eng. Abstr.) **(Bul)**

[Alpha–fetoprotein (AFP) variant in the diagnosis of small liver cancer] Tu ZX, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):191–3 (Eng. Abstr.) **(Chi)**

[Comparative study of nuclear imaging with 99mTc–PMT, B ultrasound and CT in the diagnosis of hepatic tumors] Wu ZM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):329–33 (Eng. Abstr.) **(Chi)**

[Diagnostic value of serum alpha–L–fucosidase in primary hepatic carcinoma] Ke JL. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):153–5 **(Chi)**

[Echographic aspect of a hepatic artery aneurysm simulating a neoplastic mass of the porta hepatis] Chhem RK, et al. **Can Assoc Radiol J** 1989 Aug;40(4):222–3 (Eng. Abstr.) **(Fre)**

[Echographic detection of hepatocellular carcinoma in patients hospitalized for cirrhosis] Roget L, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):827–32 (Eng. Abstr.) **(Fre)**

[Hepatic Kaposi's sarcoma and AIDS. Ultrasonographic and x–ray computed tomographic aspects] Defalque D, et al. **J Radiol** 1988 Oct;69(10):617–20 (Eng. Abstr.) **(Fre)**

[Is the focal echographic lesion of the liver in patients with cirrhosis always correlated with hepatocellular carcinoma? 217 cases] Buffet C, et al. **Presse Med** 1988 Sep 24; 17(32):1629–32 (22 ref.) (Eng. Abstr.) **(Fre)**

[Basic abdominal ultrasound diagnosis course. Liver—normal findings and diffuse liver diseases] Weigold B. **Bildgebung** 1987–89;56 Suppl 1:17–23 **(Ger)**

[Basic abdominal ultrasound diagnosis course. Circumscribed liver changes] Zoller WG. **Bildgebung** 1987–89;56 Suppl 1:25–31 **(Ger)**

[Primary diaphragmatic tumor? Cavernous liver hemangioma] Blum U, et al. **Radiologe** 1989 Apr; 29(4):201–2 **(Ger)**

[Differential sonographic diagnosis of focal liver lesions] Görich J, et al. **Radiologe** 1988 Aug;28(8):349–55 (53 ref.) **(Ger)**

[Predictive value of magnetic resonance tomography in comparison with sonography and computed tomography in the diagnosis of focal liver lesions] Hauenstein KH, et al. **Radiologe** 1988 Aug;28(8):362–9 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of focal liver and spleen lesions. Experiences using ferrite, a new RES–specific MR contrast medium] Rummeny E, et al. **Radiologe** 1988 Aug; 28(8):380–6 (Eng. Abstr.) **(Ger)**

[Dynamic MR tomography of intrahepatic tumors] Hamm B, et al. **ROFO** 1989 Apr;150(4):434–41 (Eng. Abstr.) **(Ger)**

[Sonographic diagnosis of focal changes of the liver] Pirschel J. **Rontgenpraxis** 1989 Aug;42(8):278–84 (24 ref.) **(Ger)**

[Differential diagnostic importance of sonographically detected lymph node enlargement of the liver hilum in non–malignant liver diseases] Kathrein H, et al. **Ultraschall Med** 1989 Jun;10(3):127–31 (Eng. Abstr.) **(Ger)**

[Sonographic diagnosis of hepatocellular carcinoma. Results of a retrospective study 1983–1989] Reuss J, et al. **Ultraschall Med** 1989 Jun;10(3):111–4 (Eng. Abstr.) **(Ger)**

[Highly differentiated primary liver cell carcinoma. 2 case reports] von Klinggräff G. **Ultraschall Med** 1989 Jun; 10(3):115–8 (Eng. Abstr.) **(Ger)**

[Tumor markers in internal medicine hepatology] Vogel W, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):484–9 (28 ref.) (Eng. Abstr.) **(Ger)**

[The role of intraoperative ultrasonic studies in abdominal surgery] Winternitz T, et al. **Orv Hetil** 1989 Jun 25; 130(26):1377–8, 1381–2 (27 ref.) (Eng. Abstr.) **(Hun)**

[The role of laparoscopy in the study of hepatocarcinomas] Miscusi G, et al. **Ann Ital Chir** 1987;59(1–6):259–69 (Eng. Abstr.) **(Ita)**

[Diagnostic imaging in the evaluation of hepatic metastasis] Gualdi GF, et al. **Clin Ter** 1987 Nov 15;123(3):225–7 **(Ita)**

[Magnetic resonance in the evaluation of tumors of the liver] Gualdi GF, et al. **Clin Ter** 1988 Oct 31;127(2):147–50 **(Ita)**

[Clinical study of primary hepatic carcinoma in liver cirrhosis with ascites] Salmi A, et al. **Minerva Dietol Gastroenterol** 1988 Jul–Sep;34(3):163–6 (Eng. Abstr.) **(Ita)**

[Vascular leiomyoblastoma of the liver. A personal case] Bianchi C, et al. **Minerva Med** 1989 May;80(5):495–6 (Eng. Abstr.) **(Ita)**

[Evaluation of the usefulness of ultrasonics in the diagnosis of cancerous cirrhosis. Comparison with CT] Garretti L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):187–92 (Eng. Abstr.) **(Ita)**

[The impact of echo–guided percutaneous biopsy in the diagnosis of focal hepatic lesions] Lorenzoni A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):230–4 (Eng. Abstr.) **(Ita)**

[Evolution of the echographic picture in primary liver tumor associated with cirrhosis] Mazzola G, et al. **Radiol Med (Torino)** 1989 May;77(5):488–92 (Eng. Abstr.) **(Ita)**

[Demonstration of the value of iron as an organ–specific contrast medium in magnetic resonance of the liver. A case] Pavone P, et al. **Radiol Med (Torino)** 1988 Dec;76(6):634–5 **(Ita)**

[Echotomography and hyperechoic angiomas of the liver. The structural aspects in 297 cases] Volterrani L, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):57–60 (Eng. Abstr.) **(Ita)**

[Diagnostic imaging of small liver tumors] Honda, et al. **Gan No Rinsho** 1988 Aug;34(10):1478–83 (Eng. Abstr.) **(Jpn)**

[Clinical characteristics and imaging diagnosis of early cancer in the hepatobiliary and pancreatic region] Mizumoto R, et al. **Gan No Rinsho** 1988 Aug;34(10):1342–8 (Eng. Abstr.) **(Jpn)**

[Diagnosis of liver cancer] Oto M, et al. **Gan No Rinsho** 1989 Jan;Spec No:295–300 **(Jpn)**

[Evaluation of plasma PIVKA–II as a new marker for hepatocellular carcinoma] Tada H, et al. **Gan No Rinsho** 1989 Apr;35(5):564–70 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of PIVKA–II as a marker of hepatocellular carcinoma] Arima K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3049–52 (Eng. Abstr.) **(Jpn)**

[Clinical usefulness of plasma PIVKA–II assay and its limitations in patients with hepatocellular carcinoma] Fujiyama S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1129–38 (Eng. Abstr.) **(Jpn)**

[Imaging diagnosis of hepatocellular carcinomas] Matsui O, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):25–33 (Eng. Abstr.) **(Jpn)**

[Divergence in the evaluation of the ultrasonogram of a liver tumor] Higashi Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1497–502 (Eng. Abstr.) **(Jpn)**

[MR imaging of hepatocellular carcinoma following transcatheter hepatic chemo–embolization] Yoshioka H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):119–27 (Eng. Abstr.) **(Jpn)**

[A case of inflammatory pseudotumor of the liver] Hirasawa R, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov; 77(11):1710–4 **(Jpn)**

[Diagnostic ability of ultrasonography for very small cancer] Kitamura T, et al. **Nippon Rinsho** 1989 May;47(5):1031–6 **(Jpn)**

[Early liver cancer—definition, diagnosis and treatment] Mito M, et al. **Nippon Rinsho** 1989 May;47(5):1121–9 **(Jpn)**

[Diagnosis of hepatocellular carcinoma using tumor Doppler signals] Nakamura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1649–55 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of serum CA125 in patients with hepatocellular carcinoma] Ohgi N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2239–42 (Eng. Abstr.) **(Jpn)**

[Magnetic resonance imaging of hepatic carcinoid tumors] Tamada T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2466–70 **(Jpn)**

[Clinical evaluation of PIVKA–II in patients with hepatocellular carcinoma. Detection of PIVKA–II by EIA using anti–PIVKA–II monoclonal antibody] Ohtani M, et al. **Rinsho Byori** 1989 Apr;37(4):405–9 **(Jpn)**

[Des–gamma–carboxy prothrombin in patients with hepatocellular carcinoma] Yamashiki M, et al. **Rinsho Byori** 1989 Feb;37(2):118–21 **(Jpn)**

[The usefulness of motion artifact suppression technic (MAST) in the MRI diagnosis of liver tumors] Hirohashi S, et al. **Rinsho Hoshasen** 1989 May;34(5):591–7 (Eng. Abstr.) **(Jpn)**

[Image diagnosis of infantile hemangioendothelioma of the liver] Morita Y, et al. **Rinsho Hoshasen** 1988 Dec; 33(13):1677–83 (Eng. Abstr.) **(Jpn)**

[Nonspecific tumor markers in hepatocellular carcinoma] Stanciu L, et al. **Rev Med Interna [Med Interna]** 1988 Sep–Oct;40(5):443–9 (Eng. Abstr.) **(Rum)**

[Subcapsular hematoma of the liver simulating malignant tumor] Ismailov AKh, et al. **Klin Khir** 1988;(9):57 **(Rus)**

[Tumor markers in primary and metastatic liver cancer and cancer of the pancreas] Moroz GS, et al. **Sov Med** 1988; (12):116–7 **(Rus)**

[Radiodiagnosis of liver hemangiomas] Savchenko AP, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr;(2):38–44 (Eng. Abstr.) **(Rus)**

[The importance of echography in the diagnosis of hepatic hemangioma] Medvedev VE, et al. **Vrach Delo** 1988 Aug; (8):16–8 (Eng. Abstr.) **(Rus)**

[Sonographic evaluation of the operability of liver tumors] Fučkar Z, et al. **Acta Chir Iugosl** 1988;35(2):283–95 (Eng. Abstr.) **(Scr)**

[Serum oncofetal antigens in the diagnosis of malignancies in gastroenterohepatology] Libman E, et al. **Med Pregl** 1988;41(11–12):467–72 (Eng. Abstr.) **(Scr)**

[Acute abdomen as form of presentation of hepatic adenoma] Sambresqui A, et al. **Acta Gastroenterol Latinoam** 1988; 18(4):269–74 (15 ref.) (Eng. Abstr.) **(Spa)**

[Hepatocarcinoma in childhood, image diagnosis. Apropos of a case] Collado Rodríguez JM, et al. **An Esp Pediatr** 1989 Mar;30(3):220–2 **(Spa)**

[Early diagnosis of hepatocellular carcinoma] Bruix J, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):379–81 **(Spa)**

[Current indications for liver biopsy] Hernández Guío C. **Rev Clin Esp** 1988 Nov;183(7):377–80 (26 ref.) **(Spa)**

[Cutaneous metastases of hepatocarcinoma (letter)] Pérez MM, et al. **Rev Clin Esp** 1988 Jun;183(1):50–1 **(Spa)**

[Cutaneous metastasis as the first manifestation of hepatocarcinoma (letter)] Simón Marco MA, et al. **Rev Clin Esp** 1989 Apr;184(6):336 **(Spa)**

[Giant cavernous hemangioma of the liver] Palazón Azorín JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):81–6 (Eng. Abstr.) **(Spa)**

[Hepatic cystadenoma: report of a case] Paredes Cotoré JP, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):385–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Pharmacokinetics of intra–arterial mitomycin C with or without degradable starch microspheres (DSM) in the treatment of non–resectable liver cancer. Andersson M, et al. **Acta Oncol** 1989;28(2):219–22

Combination of cisplatin plus fluoropyrimidine chemotherapy effective against liver metastases from carcinoma of the anal canal. Ajani JA, et al. **Am J Med** 1989 Aug;87(2):221–4

Intra–arterial hepatic chemotherapy for liver malignancy. Malik ST, et al. **BMJ** 1988 Aug 13;297(6646):434–5

High–dose mitomycin C: activity in hepatocellular carcinoma. Cheirsilpa A, et al. **Cancer Chemother Pharmacol** 1989;24(1):50–3

Hepatic arterial chemotherapy for primary and metastatic liver cancers. Ensminger W. **Cancer Chemother Pharmacol** 1989;23 Suppl:S68–73 (43 ref.)

Adriamycin–lipiodol suspension for i.a. chemotherapy of hepatocellular carcinoma. Katagiri Y, et al. **Cancer Chemother Pharmacol** 1989;23(4):238–42

Phase II study of mitoxantrone in unresectable primary hepatocellular carcinoma following hepatitis B infection. Lai KH, et al. **Cancer Chemother Pharmacol** 1989;23(1):54–6

Treatment of hepatic cancer by hepatic arterial infusion chemotherapy. Miura T. **Cancer Chemother Pharmacol** 1989;23 Suppl:S121–2

Randomized controlled study of mitomycin C/carboquone/5–fluorouracil/OK–432 (MQ–F–OK) therapy and mitomycin C/5–fluorouracil/doxorubicin (FAM) therapy against advanced liver cancer. Sakata Y, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S9–12

Combination chemoembolization therapy for hepatocellular carcinoma: mainly, using cisplatin (CDDP). Yodono H, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S42–4

Hepatic perfusion with FUdR utilizing an implantable system in patients with liver primary cancer or metastatic cancer confined to the liver. Seeger J, et al. **Cancer Invest** 1989; 7(1):1–6

Clinical trial of continuous infusion verapamil, bolus vinblastine, and continuous infusion VP–16 in drug–resistant pediatric tumors. Cairo MS, et al. **Cancer Res** 1989 Feb 15;49(4):1063–6

Transcatheter arterial chemoembolization therapy for hepatocellular carcinoma using polylactic acid microspheres containing aclarubicin hydrochloride. Ichihara T, et al. **Cancer Res** 1989 Aug 1;49(15):4357–62

Regional chemotherapy of liver metastases from colorectal carcinoma: hepatic artery or portal vein infusion? Chu DZ, et al. **Cancer Treat Rev** 1988 Dec;15(4):243–56 (154 ref.)

'Two-route chemotherapy' using intra-arterial cisplatin and intravenous sodium thiosulfate, its neutralizing agent, for hepatic malignancies [see comments] Abe R, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1671–4, **Comment in:** Eur J Cancer Clin Oncol 1989 May;25(5):775–6

Low dose 1-hexylcarbamoyl-5-fluorouracil (HCFU) recommended for cirrhotic patients with hepatocellular carcinoma. Takenaka K, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1191–5

Phase II study of ifosfamide (Holoxan) in hepatoma. Thongprasert S, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1795–6

Phase II trial of mitoxantrone in patients with hepatocellular carcinoma. Yoshida T, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1897–8

Non-homogeneous intrahepatic drug distribution in intraportal infusional chemotherapy demonstrated by Tc-99m-MAA perfusion SPECT. Aeberhard P, et al. **Eur J Surg Oncol** 1989 Apr;15(2):119–23

Epithelioid haemangioendothelioma of the liver: objective response to hepatic intra-arterial 5-FU. Holley MP, et al. **Eur J Surg Oncol** 1989 Feb;15(1):73–8

Effect of D-tryptophan-6-luteinizing hormone-releasing hormone on the tumoral growth and plasma sex steroid levels in cirrhotic patients with hepatocellular carcinoma. Guéchot J, et al. **Hepatology** 1989 Sep;10(3):346–8

A 5-year experience of lipiodolization: selective regional chemotherapy for 200 patients with hepatocellular carcinoma. Kanematsu T, et al. **Hepatology** 1989 Jul; 10(1):98–102

The clinical relevance of tumor marker CEA, CA 19-9 in regional chemotherapy of hepatic metastases of colorectal carcinoma. Safi F, et al. **Int J Biol Markers** 1988 Apr-Jun; 3(2):101–6

Treatment of primary and metastatic liver cancer using an implantable chemoinfusion pump. Peretz T, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9–10):562–7

Hepatoblastoma [letter] Misra SC, et al. **J Assoc Physicians India** 1988 Sep;36(9):571

Regional therapy of malignant liver tumors. Hohenberger P, et al. **J Cancer Res Clin Oncol** 1988;114(6):657–9

Failure of ketoconazole as anti-androgen therapy in nonresectable primary hepatocellular carcinoma. Gupta S, et al. **J Clin Gastroenterol** 1988 Dec;10(6):651–4

Assessment of serial carcinoembryonic antigen: determinations to monitor the therapeutic progress and prognosis of metastatic liver disease treated by regional chemotherapy. Quentmeier A, et al. **J Surg Oncol** 1989 Feb;40(2):112–8

A phase II study of etoposide in patients with hepatocellular carcinoma by the Tokyo Liver Cancer Chemotherapy Study Group. Yoshino M, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):120–2

Differential tumor regression in patients with bilobar hepatic metastases and dual arterial supply: evidence supporting the advantage of intra-arterial over intravenous route of drug delivery. Mavlight GM, et al. **Sel Cancer Ther** 1989; 5(1):37–45

Intra-arterial hepatic chemotherapy for metastatic liver from colo-rectal carcinoma origin. Rougier P, et al. **Sel Cancer Ther** 1989;5(1):47–54

Infusional versus systemic chemotherapy for liver metastases from colorectal cancer. Williams NN, et al. **Surg Clin North Am** 1989 Apr;69(2):401–10 (47 ref.)

[Intra-arterial chemotherapy of isolated liver metastases of colorectal origin (the principles, types and results)] Marinov V, et al. **Khirurgiia (Sofiia)** 1988;41(6):63–7 (Eng. Abstr.) (Bul)

[A method for the local application of cytostatics under ultrasonic control in patients with inoperable liver metastases] Nedeva A, et al. **Khirurgiia (Sofiia)** 1989; 42(2):95–8 (Bul)

[Preliminary study of traditional Chinese medicine-Western medicine treatment of patients with primary liver carcinoma] Ling HY, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jun;9(6):348–9, 325 (Eng. Abstr.) (Chi)

[Exploration of the relation of pulse, tongue appearance and biochemical, immunologic changes in primary hepatic carcinoma] Tao XC. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):405–6, 388 (Eng. Abstr.) (Chi)

[Rational bases and results of intra-arterial hepatic chemotherapy] Rougier P, et al. **Ann Chir** 1988; 42(9):639–46 (Eng. Abstr.) (Fre)

[Failure of elliptinium acetate in the treatment of unresectable hepatocarcinoma (phase II trial)] Rougier P, et al. **Bull Cancer (Paris)** 1988;75(10):979–81 (Eng. Abstr.) (Fre)

[Anatomo-pathologic study of hepatic toxicity in intra-arterial hepatic chemotherapy] Bognel C, et al. **Gastroenterol Clin Biol** 1989;13(2):125–31 (Eng. Abstr.) (Fre)

[Chemosensitivity of fibrolamellar carcinoma of the liver (letter)] Feidt P, et al. **Gastroenterol Clin Biol** 1988 Oct; 12(10):767–8 (6 ref.) (Fre)

[Gastroduodenal complications of hepatic intra-arterial chemotherapy of hepatic metastases of colorectal origin] Rougier P, et al. **Gastroenterol Clin Biol** 1989;13(2):193–6 (Eng. Abstr.) (Fre)

[A Technic of re-using a thrombosed hepatic artery in hepatic intra-arterial chemotherapy] Chazelet C, et al. **J Chir (Paris)** 1988 Nov;125(11):663–5 (Eng. Abstr.) (Fre)

[Chemoembolization of hepatocellular carcinoma with lipiodol, epirubicin and cisplatin] Bokemeyer B, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):128–32 (Eng. Abstr.) (Ger)

[Portable infusion pump for ambulatory cytostatic therapy in inoperable liver metastases] Kienzle HF, et al. **Dtsch Med Wochenschr** 1988 Oct 21;113(42):1635–7 (Eng. Abstr.) (Ger)

[Rationale and current results of loco-regional chemotherapy in hepatic metastases of colorectal carcinoma] Ficorella C, et al. **Clin Ter** 1987 Jun 15;121(5):391–9 (Eng. Abstr.) (Ita)

[Ultrasound-guided percutaneous injection of alcohol: palliative therapy of primary hepatic carcinoma associated with cirrhosis (preliminary results)] Salmi A. **Recenti Prog Med** 1988 Nov;79(11):449–51 (Eng. Abstr.) (Ita)

[A case of hepatoma treated successfully with a percutaneous intratumoral injection of CDDP-PC-lipiodol suspension] Aikawa H, et al. **Gan No Rinsho** 1989 Apr;35(5):620–4 (Eng. Abstr.) (Jpn)

[Hepatic arterial infusion chemotherapy using totally implantable reservoir in liver metastases in colorectal cancer] Akamatsu H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2884–8 (Eng. Abstr.) (Jpn)

[Chemotherapy with Cisplatin-Phosphatidyl-choline-Lipiodol (CPL) suspension in unresectable hepatocellular carcinoma] Aoki Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3066–9 (Eng. Abstr.) (Jpn)

[A 5-FU, ADR, MMC combined hepatic arterial infusion therapy in non-resectable liver metastases from colon and gastric cancer] Arai Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2731–4 (Eng. Abstr.) (Jpn)

[Intra-arterial infusion chemotherapy of liver metastases in colorectal cancer] Fujiyoshi M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2880–3 (Eng. Abstr.) (Jpn)

[Intra-arterial injection of cisplatin suspension in Lipiodol (LPS) in the treatment of hepatocellular carcinoma] Fukushima S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3062–5 (Eng. Abstr.) (Jpn)

[Clinical study of intrahepatic arterial infusion of unresectable hepatoblastoma and hepatocarcinoma in children] Hamada H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2783–7 (Eng. Abstr.) (Jpn)

[Two-route chemotherapy under AT-II induced hypertension using totally implanted injection port system in liver metastases derived from digestive cancers] Hokita S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2901–4 (Eng. Abstr.) (Jpn)

[A case report of bilateral liver metastasis from rectal cancer effectively treated with continuous infusion of anti-cancer drugs through hepatic artery] Ikubo A, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2445–8 (Eng. Abstr.) (Jpn)

[Hepatic arterial infusion chemotherapy of hepatocellular carcinoma] Ishibashi T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2778–81 (Eng. Abstr.) (Jpn)

[The study of transcatheter arterial chemo-lipiodol administration in liver metastasis of colorectal cancer] Ishikawa T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3036–40 (Eng. Abstr.) (Jpn)

[Studies on drug release from anti-cancer drug suspended Lipiodol] Isshiki K, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 2):3019–23 (Eng. Abstr.) (Jpn)

[Analysis of prognostic factors in patients with hepatocellular cancer treated by hepatic arterial infusion chemotherapy] Izumi R, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2965–8 (Eng. Abstr.) (Jpn)

[Usefulness of subcutaneously implanted reservoir for postoperative therapy in hepatocellular carcinoma and liver metastases of colorectal carcinoma] Kajikawa S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2774–7 (Eng. Abstr.) (Jpn)

[Hepatic cancer] Kako M. **Gan To Kagaku Ryoho** 1989 Mar; 16(3 Pt 1):307–10 (Eng. Abstr.) (Jpn)

[Stagnation of liver blood and effectiveness of intra-arterial chemotherapy in metastatic colorectal cancer] Kameyama M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2894–6 (Eng. Abstr.) (Jpn)

[A case of hepatocellular carcinoma (HCC) with lung metastasis which responded to chemotherapy with a single use of 1-hexylcarbamoyl-5-fluorouracil (HCFU)] Kanda Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):269–72 (Eng. Abstr.) (Jpn)

[A multicenter comparative study in patients with liver metastasis to compare tegafur in new forms with existing drugs. SF-RC.SF-SP Comparative Study Group] Kashii A, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2387–92 (Eng. Abstr.) (Jpn)

[Arterial infusion chemotherapy in patients with gastric cancer in liver metastasis and long-term survival after treatment] Kitamura M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2936–9 (Eng. Abstr.) (Jpn)

[A case of massive hepatoma which responded to SMANCS/Lipiodol regimen with intra-arterial infusion] Kubo M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2953–6 (Eng. Abstr.) (Jpn)

[Study of long-survival cases with liver metastasis of colorectal cancer by hepatic arterial infusion chemotherapy] Kurooka K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2940–3 (Eng. Abstr.) (Jpn)

[Reservoir implanted arterial infusion therapy in liver cancer with replaced right hepatic artery] Nagabuchi E, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2995–8 (Eng. Abstr.) (Jpn)

[Combination chemo-endocrine therapy of metastatic and stage IV breast cancer with cyclophosphamide, adriamycin, prednisolone and tamoxifen (CAPT)—with special reference to management of brain and liver metastasis] Nakamura Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):243–50 (Eng. Abstr.) (Jpn)

[Arterial infusion cancer chemotherapy in liver tumor using implantable reservoir] Nashimoto A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3053–6 (Eng. Abstr.) (Jpn)

[Distribution of pulsed intra arterial infusion chemotherapy in hepatic carcinomas] Nishimura Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2991–4 (Eng. Abstr.) (Jpn)

[Over two years survival of intra-arterial infusion chemotherapy in gastric cancer with liver metastases] Okuyama K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2932–5 (Eng. Abstr.) (Jpn)

[Effect of PMU hepatic arterial chemotherapy for liver metastases of gastric cancer. Hokuriku Cisplatin Round-table Conference] Sakuma H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2557–62 (Eng. Abstr.) (Jpn)

[Results of intra-arterial infusion chemotherapy of colorectal cancer in patients with metastatic liver cancer] Sawada T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2889–92 (Eng. Abstr.) (Jpn)

[Complications of intra-arterial infusion chemotherapy in patients with colorectal cancer with liver metastasis, with special reference to IA-5-FU induced sclerosing cholangitis] Sawada T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3087–91 (Eng. Abstr.) (Jpn)

[Selective anticancer effects of intra-arterial infusion of 3',5'-dioctanoyl-5-fluoro-2'-deoxyuridine (TT82) in hepatocellular carcinoma] Shibata T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3057–61 (Eng. Abstr.) (Jpn)

[New approach for unresectable primary liver cancer—intra-arterial combination chemotherapy during and after operation with local injection of ethanol] Shiga T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2765–8 (Eng. Abstr.) (Jpn)

[Eight cases of non-resectable hepatocellular carcinoma surviving for more than 3 years after Lipiodol administration] Shirabe K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2974–7 (Eng. Abstr.) (Jpn)

[Intra-arterial chemotherapy with angiotensin II in metastatic carcinoma of the liver using implantable pump] Takagi S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2987–90 (Eng. Abstr.) (Jpn)

[Availability of intermittent chemotherapy by reservoir in liver metastasis of colo-rectal cancer] Takano S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2871–4 (Eng. Abstr.) (Jpn)

[Evaluation of long survival cases treated with intra-arterial cancer chemotherapy using implantable reservoirs] Tsuji Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2944–8 (Eng. Abstr.) (Jpn)

[Intra-arterial infusion chemotherapy under flow occlusion using a double lumen reservoir] Une Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3081–6 (Eng. Abstr.) (Jpn)

[Assessment of three-year survival cases with unresectable hepatocellular carcinoma treated by arterial chemotherapy] Yamashita K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2969–73 (Eng. Abstr.) (Jpn)

[A case of hepatocellular carcinoma effectively treated by intraarterial infusion of CDDP and other agents] Yodono H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3265–8 (Eng. Abstr.) (Jpn)

[Transcatheter arterial infusion therapy using lipiodol and mitomycin C for hepatocellular carcinoma with liver cirrhosis] Adachi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1710–9 (Eng. Abstr.) (Jpn)

[Intraarterial injection therapy of CDDP-PC-lipiodol suspension for hepatoma] Aikawa H, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1585–9 (Eng. Abstr.) (Jpn)

[Development of balloon occluded arterial infusion (BOAI) and its clinical application in hepatocellular carcinoma] Kawabata M. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1740–51 (Eng. Abstr.) (Jpn)

[Clinicopathological effects of US-guided intratumoral ethanol injection to small liver cancer with special references to its adequate injected volume] Suyama Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20; 23(8):1727–31 (Eng. Abstr.) (Jpn)

[Intra-arterial infusion therapy with polysaccharide solution as a carrier of anticancer agents—a new method of intra-arterial infusion therapy] Shimizu T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):702–16 (Eng. Abstr.) (Jpn)

[Targeting cancer chemotherapy used Lipiodol as a carrier]

Konno T. **Nippon Rinsho** 1989 Jun;47(6):1384–90 **(Jpn)**

[Chemoembolization using microencapsulated anticancer drugs] Sato K, et al. **Nippon Rinsho** 1989 Jun;47(6):1379–83 **(Jpn)**

[Risk factors for side effects of long-term administration of 5-fluorouracil derivatives in patients with hepatocellular carcinoma associated with liver cirrhosis—relationship with serum concentration of anti-tumor agents and side effect] Ikeda K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2411–9 (Eng. Abstr.) **(Jpn)**

[Study of percutaneous ethanol injection therapy (PEIT) under ultrasonography in hepatocellular carcinoma] Notsumata K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2666–72 (Eng. Abstr.) **(Jpn)**

[Right gastric arterial embolization in avoidance of gastric toxicity by hepatic infusion chemotherapy] Arai Y, et al. **Rinsho Hoshasen** 1988 Jun;33(6):663–5 (Eng. Abstr.) **(Jpn)**

[Conservative treatment of malignant liver tumors] Komov DV, et al. **Vopr Onkol** 1989;35(3):347–52 (Eng. Abstr.) **(Rus)**

[Clinico-morphological comparisons of the results of the combined treatment of tumors with platinum derivatives] Shalimov SA, et al. **Vrach Delo** 1988 Jul;(7):79–82 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Demonstration that the enzyme that converts precursor of apolipoprotein A-I to apolipoprotein A-I is secreted by the hepatocarcinoma cell line Hep G2. Edelstein C, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):23–30

The effects of acute-phase inducers and dimethyl sulphoxide on delta-aminolaevulinate synthase activity in human HepG2 hepatoma cells. Iwasa F, et al. **Biochem J** 1989 Apr 15;259(2):605–7

Induction of aryl hydrocarbon hydroxylase and demonstration of a specific nuclear receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin in two human hepatoma cell lines. Labruzzo P, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2339–48

Regulation of squalene synthetase in human hepatoma cell line Hep G2 by sterols, and not by mevalonate-derived non-sterols. Cohen LH, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):69–73

Alpha-L-fucosidase as a serum marker of hepatocellular carcinoma in southern African blacks. Bukofzer S, et al. **Br J Cancer** 1989 Mar;59(3):417–20

Comparison of GST-P versus GGT as markers of hepatocellular lineage during analyses of initiation of carcinogenesis. Cameron RG. **Cancer Invest** 1988; 6(6):725–34

The galactosyltransferase activity of hepatic nodules during rat liver carcinogenesis. Roomi MW, et al. **Cancer Lett** 1988 Dec 1;43(1-2):49–54

Quantitative morphometric comparison between the expression of two different "marker enzymes" in preneoplastic liver lesions induced in rats with low doses of N-nitrosodiethanolamine. Zerban H, et al. **Cancer Lett** 1988 Dec 1;43(1-2):99–104

Immunochemical comparison of human and rhesus monkey liver microsomal and the hepatocellular carcinoma-induced human serum epoxide hydrolases (preneoplastic antigens): basis for an enzyme-linked immunoabsorbent assay. Moody DE, et al. **Carcinogenesis** 1989 Feb;10(2):343–9

gamma-Glutamyltranspeptidase-negative phenotypic property of preneoplastic and neoplastic liver lesions induced by ciprofibrate does not change following 2-acetylaminofluorene administration. Yeldandi AV, et al. **Carcinogenesis** 1989 Apr;10(4):797–9

Partial characterization of an abnormal lactate dehydrogenase isoenzyme, LDH-1ex, in serum from a patient with hepatocellular carcinoma. Kalpaxis DL, et al. **Clin Chem** 1989 May;35(5):844–8

Effects of N-hydroxyethyl-1-deoxynojirimycin (BAY m 1099) on the activity of neutral- and acid alpha-glucosidases in human fibroblasts and HepG2 cells. Wisselaar HA, et al. **Clin Chim Acta** 1989 Jun 15; 182(1):41–52

Cytochrome P450 isozyme distribution in normal and tumor-bearing hepatic tissue from rainbow trout (Salmo gairdneri). Lorenzana RM, et al. **Exp Mol Pathol** 1989 Jun; 50(3):348–61

The influence of culture medium composition on drug metabolising enzyme activities of the human liver derived Hep G2 cell line. Doostdar H, et al. **FEBS Lett** 1988 Dec 5;241(1-2):15–8

Identification of zymogen and mature forms of human carboxypeptidase H. A processing enzyme for the synthesis of peptide hormones. Hook VY, et al. **FEBS Lett** 1988 Oct 10;238(2):338–42

The clinical significance of serum alpha-L-fucosidase assay in hepatocellular carcinoma. Yamamoto K, et al. **Fukuoka Igaku Zasshi** 1988 Jun;79(6):463–8

Gel-filtration of serum gamma-glutamyl-transpeptidase with HPLC in hepatobiliary diseases and its significance. Nishii K, et al. **Gastroenterol Jpn** 1988 Aug;23(4):435–41

Measurement of immunoreactive gamma-glutamyl transpeptidase in human sera and liver tissues of patients with various liver diseases. Sekiya C, et al. **Gastroenterol Jpn** 1989 Aug;24(4):378–85

Human gamma-glutamyl transpeptidase cDNA: comparison of hepatoma and kidney mRNA in the human and rat. Goodspeed DC, et al. **Gene** 1989 Mar 15;76(1):1–9

Biochemical aspects of alpha-L-fucosidase in hepatocellular carcinoma. Leray G, et al. **Hepatology** 1989 Feb; 9(2):249–52

Comparative study of the sugar chains of gamma-glutamyltranspeptidases purified from human hepatocellular carcinoma and from human liver. Yamashita K, et al. **J Biochem (Tokyo)** 1989 May;105(5):728–35

Heparin induces the expression of hepatic triglyceride lipase in a human hepatoma (HepG2) cell line. Busch SJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9527–32

Carboxypeptidase H. A regulatory peptide-processing enzyme produced by human hepatoma Hep G2 cells. Grimwood BG, et al. **J Biol Chem** 1989 Sep 15; 264(26):15662–7

Characterization of the carboxypeptidase N secreted by Hep G2 cells. Grimwood BG, et al. **J Biol Chem** 1988 Oct 5; 263(28):14397–401

Immunochemical studies for the presence of P-450 HFLa, a form of cytochrome P-450 in human fetal livers in human hepatocellular carcinoma cells. Kitada M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):341–4

Human hepatoma (HepG2) cells secrete a single 65 K dalton triglyceride lipase immunologically identical to postheparin plasma hepatic lipase. Busch SJ, et al. **Life Sci** 1989; 45(7):615–22

Cytochemical localization and biochemical analysis of the enzyme markers in human hepatoma cell lines. Chao CF, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Oct; 12(4):222–7

"High Km" aldehyde dehydrogenase isozymes in human tissues: constitutive and tumor-associated forms. Agarwal DP, et al. **Prog Clin Biol Res** 1989;290:119–31

Regulation of the expression of the rat alcohol dehydrogenase gene by glucocorticoids. Qulali M, et al. **Prog Clin Biol Res** 1989;290:143–53

[Observations on the activity and immunologic properties of CuZn-SOD of whole blood in cancer patients] Liu ZF, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):212–3 **(Chi)**

[Diagnostic value of 5'nucleotidase in primary and secondary neoplasms of the liver] Tozzoli R, et al. **Chir Ital** 1988 Apr;40(2):146–51 (Eng. Abstr.) **(Ita)**

[Serum and tissue prolyl hydroxylase (PH) in hepatocellular carcinoma and gastrointestinal cancer] Suzuki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2232–8 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Incidence of primary liver cancer in Singapore, 1968–1982. Chia KS, et al. **Ann Acad Med Singapore** 1989 May; 18(3):313–6

Hepatocellular carcinoma in western Sydney. Hollands MJ, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):89–95 (94 ref.)

Liver cancer in an endemic area of schistosomiasis japonica in Yamanashi Prefecture, Japan. Inaba Y. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:211–8

Update on vascular tumours of the liver. Zafrani ES. **J Hepatol** 1989 Jan;8(1):125–30 (33 ref.)

Significance of hepatitis B surface antigen carriers in a cohort. Iijima T, et al. **Trop Gastroenterol** 1988 Oct-Dec;9(4):196–8

Hepatocellular carcinoma in Zimbabwe. Kiire CF. **Trop Gastroenterol** 1988 Jul-Aug;9(3):127–31

[Epidemiological study on relationship between hepatitis B and liver cancer—a prospective study on development of liver cancer and distribution of HBsAg carriers and liver damage persons in Guangxi] Ding ZG. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):220–3 (Eng. Abstr.) **(Chi)**

[Primary liver cancer in Denmark 1943–1985. Cancer statistics 24] Andersen IB, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):579–81 **(Dan)**

[Hepatocellular carcinoma] Andersen IB, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):550–3 (Eng. Abstr.) **(Dan)**

[Hepatocellular carcinoma] Gilsanz García V. **An R Acad Nac Med (Madr)** 1988;105(3):387–409 (41 ref.) **(Spa)**

ETIOLOGY

Hepatitis B virus infection and hepatocellular carcinoma: correlation between IgM antibody to hepatitis B core antigen, hepatitis B e antigen, and hepatitis B DNA. Sjogren MH, et al. **Am J Trop Med Hyg** 1988 Dec; 39(6):582–5

Risk lesions in cirrhosis and development of hepatocellular carcinoma: an autopsy study. Nakanuma Y, et al. **Biomed Pharmacother** 1989;43(2):127–33

A case-control study of risk factors for hepatoblastoma. A report from the Childrens Cancer Study Group. Buckley JD, et al. **Cancer** 1989 Sep 1;64(5):1169–76

The association of hepatocellular carcinoma in childhood with hepatitis B virus infection. Leuschner I, et al. **Cancer** 1988 Dec 1;62(11):2363–9

A case-control study of primary hepatocellular carcinoma in Taiwan. Lu SN, et al. **Cancer** 1988 Nov 1;62(9):2051–5

A large-scale cohort study on risk factors for primary liver cancer, with special reference to the role of cigarette smoking. Hirayama T. **Cancer Chemother Pharmacol** 1989; 23 Suppl:S114–7

Elevated levels of prostaglandin E2 in the liver of rats fed a choline deficient diet: possible involvement in liver tumor promotion. Gupta C, et al. **Cancer Lett** 1989 Jul 15; 46(2):129–35

Hepatitis B virus, aflatoxins, and hepatocellular carcinoma in southern Guangxi, China. Yeh FS, et al. **Cancer Res** 1989 May 1;49(9):2506–9

Comparison of anamnestic history, alcohol intake and smoking, nutritional status, and liver dysfunction between thorotrast patients who developed primary liver cancer and those who did not. Kiyosawa K, et al. **Environ Res** 1989 Aug;49(2):166–72

1,2-sn-diacylglycerol accumulates in choline-deficient liver. A possible mechanism of hepatic carcinogenesis via alteration in protein kinase C activity? Blusztajn JK, et al. **FEBS Lett** 1989 Jan 30;243(2):267–70

Gastrointestinal and hepatobiliary neoplasms in AIDS. Friedman SL. **Gastroenterol Clin North Am** 1988 Sep; 17(3):465–86 (131 ref.)

The relationship of hepatocellular carcinoma and liver cirrhosis to hepatitis B virus infection in the Philippines. Lingao AL. **Gastroenterol Jpn** 1989 Aug;24(4):425–33

Hepatitis B virus infection in liver cirrhosis and hepatocellular carcinoma in Jakarta Indonesia. Sulaiman HA. **Gastroenterol Jpn** 1989 Aug;24(4):434–41

Primary hepatocellular carcinoma in idiopathic hemochromatosis after reversal of cirrhosis. Blumberg RS, et al. **Gastroenterology** 1988 Nov;95(5):1399–402

Asymptomatic hepatocellular carcinoma in Child's A cirrhosis. A comparison of natural history and surgical treatment. Cottone M, et al. **Gastroenterology** 1989 Jun; 96(6):1566–71

Hepatocellular carcinoma in primary haemochromatosis in the absence of cirrhosis. Fellows IW, et al. **Gut** 1988 Nov; 29(11):1603–6

Risk factors of hepatocellular carcinoma in Germany: hepatitis B or liver cirrhosis? Röckelein G, et al. **Hepatogastroenterology** 1988 Aug;35(4):151–7

The role of membranous obstruction of the inferior vena cava in the etiology of hepatocellular carcinoma in Southern African blacks. Kew MC, et al. **Hepatology** 1989 Jan; 9(1):121–5

Hepatocellular carcinoma in corticosteroid-treated severe autoimmune chronic active hepatitis. Wang KK, et al. **Hepatology** 1988 Nov-Dec;8(6):1679–83

Acute and chronic pericholangiolitis in association with multifocal hepatic lymphangiomatosis. Sathyavagiswaran L, et al. **Hum Pathol** 1989 Jun;20(6):601–3

Prospects for epidemiological studies on hepatocellular cancer as a model for assessing viral and chemical interactions. Bosch FX, et al. **IARC Sci Publ** 1988; (89):427–38 (58 ref.)

Increased serum ferritin in chronic liver disease: a risk factor for primary hepatocellular carcinoma. Hann HW, et al. **Int J Cancer** 1989 Mar 15;43(3):376–9

Risk factors for hepatocellular carcinoma in northern Italy. La Vecchia C, et al. **Int J Cancer** 1988 Dec 15;42(6):872–6

Cell proliferation and the actiology of hepatocellular carcinoma. Berman JJ. **J Hepatol** 1988 Dec;7(3):305–9

Hepatocellular carcinoma with normal adjacent liver. Hepatitis B virus DNA status. Marcellin P, et al. **J Hepatol** 1989 Mar;8(2):249–53

Chimpanzee model for hepatitis non-A, non-B related hepatocellular carcinoma [editorial] Moor-Jankowski J. **J Med Primatol** 1988;17(5):233–4

Non-A, non-B hepatitis-related hepatocellular carcinoma in a chimpanzee. Muchmore E, et al. **J Med Primatol** 1988; 17(5):235–46

HBV-DNA hybridization in hepatocellular carcinoma associated with alcohol in Japan. Horiike N, et al. **J Med Virol** 1989 Jul;28(3):189–92

Hepatocellular carcinoma: possible etiologies in patients without serologic evidence of hepatitis B virus infection. Tabor E. **J Med Virol** 1989 Jan;27(1):1–6 (76 ref.)

Blood transfusion as a risk factor for cirrhosis and liver cancer: a matched case-control study [letter] Fukuda A, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1189–90

Hepatoblastoma and familial adenomatous polyposis [published erratum appears in J Natl Cancer Inst 1989 Mar 15;81(6):461] Garber JE, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1626–8

Hepatocellular carcinoma in young hepatitis B virus carriers. Quak SH, et al. **J Singapore Paediatr Soc** 1988; 30(3-4):134–8

Blood transfusion, alcohol consumption, and cigarette smoking in causation of hepatocellular carcinoma: a case-control study in Fukuoka, Japan. Tanaka K, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1075–82

Generation of high yields of Syrian hamster cholangiocellular carcinomas and hepatocellular nodules by combined nitrite and aminopyrine administration and Opisthorchis viverrini infection. Thamavit W, et al. **Jpn J Cancer Res** 1988 Aug; 79(8):909–16

Hepatocellular carcinoma: molecular biology of its growth and relationship to hepatitis B virus infection. Di Bisceglie AM. **Med Clin North Am** 1989 Jul;73(4):985–97 (74 ref.)

Conditions associated with hepatocellular carcinoma. Lisker-Melman M, et al. **Med Clin North Am** 1989 Jul; 73(4):999–1009 (82 ref.)

Aflatoxins in liver biopsies from Kenya. De Vries HR, et al. **Trop Geogr Med** 1989 Jan;41(1):26–30

[Multiple pathogenic factors analysis on primary liver cancer the role of HBV infection combined with other risk factors in the occurrence of PLC] Wang XL, et al.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1989 Apr; 10(2):82–5 (Eng. Abstr.) (Chi)

[A causative factors study on primary hepatogenosis cancer (PHC)] Ye BF.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1988 Dec; 9(6):350–3 (Eng. Abstr.) (Chi)

[HBsAg carrier state and primary hepatocellular carcinoma—a ten-year prospective study] Lu JH.
Chung Hua Yu Fang I Hsueh Tsa Chih 1988 Sep; 22(5):259–62 (Eng. Abstr.) (Chi)

[Multivariate analysis in the causes of liver cancer] Yu SZ.
Chung Hua Yu Fang I Hsueh Tsa Chih 1988 Jul;22(4):196–9 (Eng. Abstr.) (Chi)

[Hepatocellular carcinoma in cirrhosis. The surgeon's point of view] Smadja C, et al.
Ann Gastroenterol Hepatol (Paris) 1989 Jun–Sep; 25(4):129–31 (37 ref.) (Fre)

[Pathogenesis and clinical aspects of primary liver cell carcinomas] Wiedmann KH, et al. **Ultraschall Med** 1989 Jun;10(3):108–10 (12 ref.) (Eng. Abstr.) (Ger)

[Prevention and therapy of liver diseases. Liver cancer] Gerber MA, et al. **Verh Dtsch Ges Inn Med** 1988;94:325–6 (Ger)

[Proposal of the evaluation of risk factors and probability of acquiring hepatocarcinoma] Sanguinetti M, et al.
Chir Ital 1988 Jun;40(3):249–51 (Eng. Abstr.) (Ita)

[Hepatocellular carcinoma. Significance of the association with cirrhosis, alcohol consumption and the hepatitis B virus (serum markers and tissue antigens)] Frosi AR, et al. **Minerva Med** 1989 Jan;80(1):15–21 (Eng. Abstr.) (Ita)

[Role of combined etiology (alcohol and B virus) in the development of hepatocarcinoma in subjects with liver cirrhosis] Cristani A, et al. **Recenti Prog Med** 1989 May; 80(5):233–6 (Eng. Abstr.) (Ita)

[Diagnostic imaging of thorotrast associated cholangiocarcinoma and mixed hepatocellular and cholangiocellular carcinoma] Sasaki F, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Aug 25; 48(8):948–54 (Eng. Abstr.) (Jpn)

[Roentgenologic evaluation of intrahepatic redistribution after thorotrast administration] Sasaki F, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Nov 25; 48(11):1333–41 (Eng. Abstr.) (Jpn)

[Etiologic factors and clinical features in small hepatocellular carcinoma] Watanabe Y, et al.
Nippon Shokakibyo Gakkai Zasshi 1988 Sep;85(9):1656–63 (Eng. Abstr.) (Jpn)

[A case of malignant transformation of non-parasitic cyst of the liver] Tokarczyk J, et al. **Wiad Lek** 1988 Mar 15; 41(6):393–6 (Eng. Abstr.) (Pol)

GENETICS

Induction of an Alu-sequence containing transcript by insulin in human hepatoma cells. Chuang LM, et al.
Biochem Biophys Res Commun 1988 Nov 15;156(3):1287–92

Elevation of c-myc transcript level in human liver during surgical resection of hepatocellular carcinoma: possible cause for underestimation of c-myc gene activation in the tumor. Hayashi H, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1260–4

Molecular cloning of rat phosphoprotein phosphatase 2A beta cDNA and increased expressions of phosphatase 2A alpha and 2A beta in rat liver tumors. Kitagawa Y, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):821–7

Cytogenetic analysis of a mesenchymal hamartoma of the liver. Speleman F, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):29–32

Genetic variation in liver tumor susceptibility, plasma testosterone levels, and androgen receptor binding in six inbred strains of mice. Kemp CJ, et al. **Cancer Res** 1989 Sep 15;49(18):5044–7

Ploidy and karyotype of hepatocytes isolated from enzyme-altered foci in two different protocols of multistage hepatocarcinogenesis in the rat. Sargent L, et al.
Carcinogenesis 1989 Feb;10(2):387–91

Expression of c-myc and N-ras oncogenes in human hepatocellular carcinoma and pancreatic adenocarcinoma. A biochemical and immunocytochemical study. Lin Y, et al. **Chin Med J [Engl]** 1988 Jul;101(7):523–8

Expression of oncogenes in human hepatoma cell lines. Ting LP, et al.
Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih 1988 Aug;21(3):141–50

Regional localization of the LCA oncogene to human chromosome region 2q14——q21. Tokino T, et al.
Cytogenet Cell Genet 1988;48(1):63–4

Deletions in human chromosome arms 11p and 13q in primary hepatocellular carcinomas. Wang HP, et al.
Cytogenet Cell Genet 1988;48(2):72–8

Expression of high- and low-affinity epidermal growth factor receptors in human hepatoma cell lines. Clementi M, et al. **FEBS Lett** 1989 Jun 5;249(2):297–301

Hypomethylation of the c-myc oncogene in liver cirrhosis and chronic hepatitis. Aiba N, et al. **Gastroenterol Jpn** 1989 Jun;24(3):270–6

Construction of an EBNA-producing line of well-differentiated human hepatoma cells and of appropriate Epstein-Barr virus-based shuttle vectors. Lutfalla G, et al. **Gene** 1989 Mar 15;76(1):27–39

Human M2-type pyruvate kinase: cDNA cloning, chromosomal assignment and expression in hepatoma. Tani K, et al. **Gene** 1988 Dec 20;73(2):509–16

Regional mapping to 4q32.1 by in situ hybridization of a DNA domain rearranged in human liver cancer. Blanquet V, et al. **Hum Genet** 1988 Nov;80(3):274–6

Chromosomal assignment of woodchuck hepatitis virus (WHV) DNA integration sites in a woodchuck hepatocellular carcinoma-derived cell line (WH257GE10). Mizuno Y, et al. **Int J Cancer** 1989 Apr 15;43(4):652–7

Deregulation of alternative splicing of fibronectin pre-mRNA in malignant human liver tumors. Oyama F, et al. **J Biol Chem** 1989 Jun 25;264(18):10331–4

Nucleolar organiser regions in normal, cirrhotic, and carcinomatous livers. Crocker J, et al. **J Clin Pathol** 1988 Oct;41(10):1044–8

Changes in ploidy distributions in human liver carcinogenesis. Saeter G, et al. **J Natl Cancer Inst** 1988 Nov 16; 80(18):1480–5

Characterization of hepatitis B virus major surface antigen gene transcriptional regulatory elements in differentiated hepatoma cell lines. Raney AK, et al. **J Virol** 1989 Sep; 63(9):3919–25

Low incidence of point mutation of c-Ki-ras and N-ras oncogenes in human hepatocellular carcinoma. Tsuda H, et al. **Jpn J Cancer Res** 1989 Mar;80(3):196–9

Giant cavernous hemangioma of the liver and multiple primary malignant tumors in a patient with suspected familial inhibition of natural killer cell activity—a case report. Tomiyama T, et al. **Jpn J Surg** 1989 Mar; 19(2):216–22

Structural alterations in c-myc and c-Ha-ras proto-oncogenes in human hepatocellular carcinoma. Fukuda K, et al. **Kurume Med J** 1988;35(2):77–87

Transforming DNA sequences of human hepatocellular carcinomas, their distribution and relationship with hepatitis B virus sequence in human hepatomas. Yang SS, et al. **Leukemia** 1988 Dec;2(12 Suppl):102S–113S

Transforming activity of DNA from rat liver tumors induced by the carcinogen methyl(acetoxymethyl)nitrosamine. Goyette M, et al. **Mol Carcinog** 1988;1(1):26–32

Interaction of a hepatoma-specific nuclear factor with transcription-regulatory sequences of the human alpha-fetoprotein and albumin genes. Sawadaishi K, et al. **Mol Cell Biol** 1988 Dec;8(12):5179–87

H4IIEC3 rat hepatoma cells activate N-nitrosodimethylamine but are resistant to the genotoxic products. Roscher E, et al. **Mutagenesis** 1989 Jul;4(4):292–6

Identification of a conserved sequence in the non-coding regions of many human genes. Donehower LA, et al.
Nucleic Acids Res 1989 Jan 25;17(2):699–710

Two genes associated with liver cancer are regulated by different mechanisms in rasT24 transformed liver epithelial cells. Li YC, et al. **Oncogene** 1989 Jun;4(6):795–8

Oncogene-induced liver neoplasia in transgenic mice. Sandgren EP, et al. **Oncogene** 1989 Jun;4(6):715–24

Activated N-ras gene was found in human hepatoma tissue but only in a small fraction of the tumor cells. Takada S, et al. **Oncogene** 1989 Feb;4(2):189–93

c-myc gene amplification during hepatocarcinogenesis by a choline-devoid diet. Chandar N, et al.
Proc Natl Acad Sci U S A 1989 Apr;86(8):2703–7

Quantitative variation in immunoglobulin G (Igsr-1) in LEC rats associated with spontaneous hepatitis and hepatoma. Matsumoto K, et al. **Transplant Proc** 1989 Apr;21(2):3259

[Hepatitis B virus and hepatocarcinoma: integration of HBV DNA in the gene coding for the receptor of retinoic acid (editorial)] de Thé H, et al. **Pathol Biol (Paris)** 1989 Jan; 37(1):5–6 (Fre)

[Molecular aspects of human hepatocellular carcinoma] Imamura T, et al. **Gan To Kagaku Ryoho** 1989 Jan; 16(1):18–24 (Eng. Abstr.) (Jpn)

[Hepatitis B virus: DNA integration and hepatocellular carcinoma] Matsubara K. **Gan To Kagaku Ryoho** 1989 Mar; 16(3 Pt 2):530–41 (Eng. Abstr.) (Jpn)

[A study on the DNA histogram pattern of hepatocellular carcinoma—application of a high resolution analytical system using a charge couple device (CCD)] Hino A, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):871–9 (Eng. Abstr.) (Jpn)

IMMUNOLOGY

Circulating LAK-1 cells and autologous mixed lymphocyte reaction in patients with hepatocellular carcinoma. Stefanini GF, et al. **Am J Gastroenterol** 1989 Apr; 84(4):396–9

Functional and phenotypic analysis of tumor-infiltrating lymphocytes isolated from human primary and metastatic liver tumors and cultured in recombinant interleukin-2. Takagi S, et al. **Cancer** 1989 Jan 1;63(1):102–11

Monoclonal antibodies directed to a disulfated glycosphingolipid, SB1a (GgOse4Cer-II3IV3-bis-sulfate), associated with human hepatocellular carcinoma. Hiraiwa N, et al. **Cancer Res** 1988 Dec 1;48(23):6769–74

Significant increase in the antibody to Gal alpha 1-3Gal structure in sera of patients with hepatocellular carcinoma after transcatheter arterial embolization. Kashiwagi M, et al. **Cancer Res** 1989 Aug 15;49(16):4396–401

Relationship between cell membrane potential and natural killer cell cytolysis in human hepatocellular carcinoma cells. Stevenson D, et al. **Cancer Res** 1989 Sep 1; 49(17):4842–5

Local immune response in hepatocellular carcinoma and its clinical implication. Guo YJ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):685–8

Prevalence of hepatitis B viral markers in hepatitis B endemic areas of China. Luo S, et al. **Chin Med J [Engl]** 1988 Sep; 101(9):654–8

Decrease of transplantability by the immunopotentiators, OK-432 and interleukin-2: experiments on a human hepatoma cell line in nude mice. Saito H, et al.
Eur J Cancer Clin Oncol 1989 Jan;25(1):79–89

Biologic significance of the detection of HBsAg and HBcAg in liver and tumor from 204 HBsAg-positive patients with primary hepatocellular carcinoma. Hsu HC, et al.
Hepatology 1989 May;9(5):747–50

Detection of anti-liver cell membrane antibody using a human hepatocellular carcinoma cell line. Lobo-Yeo A, et al. **Hepatology** 1989 Feb;9(2):210–4

Lymphokine-activated killer cell activity in patients with primary and metastatic malignant liver tumors. Schwarz RE, et al. **Hepatology** 1989 Aug;10(2):221–7

In vivo expression of two novel tumor-associated antigens and their use in immunolocalization of human hepatocellular carcinoma. Takahashi H, et al.
Hepatology 1989 Apr;9(4):625–34

Immunocytochemical investigation of hepatitis B virus-associated antigens in cases of liver cirrhosis and HBsAg antigenemia and their relationship to development of hepatocellular carcinoma. Iwai M, et al.
Histochem J 1988 May;20(5):283–9

A live cell enzyme-linked immunosorbent assay for detecting human hepatoma membrane antigens. Gaffar SA, et al.
Hybridoma 1989 Jun;8(3):331–6

A new human cholangiocellular carcinoma cell line (HuCC-T1) producing carbohydrate antigen 19/9 in serum-free medium. Miyagiwa M, et al.
In Vitro Cell Dev Biol 1989 Jun;25(6):503–10

Phenotypic expression of natural killer cell associated membrane antigens in patients with chronic liver disease and hepatocellular carcinoma. Kakumu S, et al.
J Clin Lab Immunol 1988 May;26(1):29–32

Binding of metastatic colon carcinoma cells to liver macrophages. Gjøen T, et al. **J Leukoc Biol** 1989 Apr; 45(4):362–9

[Immunohistochemical study on HBsAg, HBcAg and AFP in 104 patients with small liver cancer] Zhang SP.
Chung Hua Chung Liu Tsa Chih 1988 Sep;10(5):353–6 (Eng. Abstr.) (Chi)

[A study on the hepatitis B virus associated nuclear antigen in a hepatocellular carcinoma cell line CZHC8571] Chen ZP. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):572–4, 40 (Eng. Abstr.) (Chi)

[Double immunohistochemical staining of HBsAg and HBcAg in hepatocellular carcinoma and its surrounding tissue] Jiang Z. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):251–3 (Eng. Abstr.) (Chi)

[Distribution of HBcAg in tissues of 104 cases of small liver carcinoma] Zhang SP.
Chung-hua Ping Li Hsueh Tsa Chih 1988 Sep;17(3):195–7 (Eng. Abstr.) (Chi)

METABOLISM

Inhibition of insulin degradation by insulin-like growth factors I and II in human hepatoma (HepG2) cells. Keller S, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):279–85

Selective and persistent deposition and gradual drainage of iodized oil, Lipiodol in the hepatocellular carcinoma after injection into the feeding hepatic artery. Okayasu I, et al.
Am J Clin Pathol 1988 Nov;90(5):536–44

IFN beta 2/IL-6 is one of several cytokines that modulate acute phase gene expression in human hepatocytes and human macrophages. Perlmutter DH.
Ann N Y Acad Sci 1989;557:332–41; discussion 341–2

Modulation of 5-fluorouracil and 5-fluorouridine toxicity by membrane transport inhibitors in normal tissues of rats with liver adenocarcinoma. Jakobsson B, et al.
Anticancer Res 1989 Mar–Apr;9(2):285–90

Expression of cytokeratins in normal and diseased livers and in primary liver carcinomas. Lai YS, et al.
Arch Pathol Lab Med 1989 Feb;113(2):134–8

Effect of two different glucose concentrations on insulin receptor mRNA levels in human hepatoma HepG2 cells. Briata P, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1415–20

Human inter-alpha-trypsin inhibitor. Synthesis and maturation in hepatoma HepG2 cells. Bourguignon J, et al. **Biochem J** 1989 Jul 1;261(1):305–8

Release of soluble resident as well as secretory proteins from HepG2 cells by partial permeabilization of rough-endoplasmic-reticulum membranes. Strous GJ, et al. **Biochem J** 1989 Jan 1;257(1):159–63

The toxicity of menadione and mitozantrone in human liver-derived Hep G2 hepatoma cells. Duthie SJ, et al.
Biochem Pharmacol 1989 Apr 15;38(8):1247–55

Effect of cell cholesterol content on apolipoprotein B secretion and LDL receptor activity in the human hepatoma cell line, HepG2. Fuki IV, et al.
Biochim Biophys Acta 1989 Feb 6;1001(2):235–8

Microsomal cytochrome P-450-linked monooxygenase systems and lipid composition of human hepatocellular

carcinoma. Hamamoto I, et al. **Br J Cancer** 1989 Jan; 59(1):6–11

Human hepatocellular cancers show decreased prostaglandin E1 binding capacity. Virgolini I, et al. **Br J Cancer** 1989 Mar;59(3):407–9

Distribution of basement membrane components in human hepatocellular carcinoma. Donato MF, et al. **Cancer** 1989 Jan 15;63(2):272–9

Glucocorticoid receptors in hepatocellular carcinoma and adjacent liver tissue. P'eng FK, et al. **Cancer** 1988 Nov 15;62(10):2134–8

Difference in the in vitro uptake of bromodeoxyuridine between liver cirrhosis with and without hepatocellular carcinoma. Tarao K, et al. **Cancer** 1989 Jul 1;64(1):104–9

Immunohistochemical study of sex steroid hormones in primary liver cancer. Liossi AK, et al. **Cancer Detect Prev** 1988;13(3–4):195–201

Differential expression of insulin-like growth factor II mRNA in human primary liver cancers, benign liver tumors, and liver cirrhosis. Cariani E, et al. **Cancer Res** 1988 Dec 1;48(23):6844–9

Transcripts of the insulin-like growth factors I and II in human hepatoma. Su TS, et al. **Cancer Res** 1989 Apr 1; 49(7):1773–7

Analysis of antioxidant defense systems during rat hepatocarcinogenesis. Vo TK, et al. **Carcinogenesis** 1988 Nov;9(11):2009–13

Lipiodol retention within hepatic cavernous hemangioma. Uflacker R, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):76–9

Fatty acid composition of phospholipids in mitochondria and microsomes during diethylnitrosamine carcinogenesis in rat liver. Canuto RA, et al. **Cell Biochem Funct** 1989 Jan; 7(1):11–9

Ganglioside variations in human liver cirrhosis and hepatocellular carcinoma as shown by two-dimensional thin-layer chromatography. Tanno M, et al. **Clin Biochem** 1988 Dec;21(6):333–9

Effect of cytokines on glycosylation of acute phase proteins in human hepatoma cell lines. Mackiewicz A, et al. **Clin Exp Immunol** 1989 Jan;75(1):70–5

Selective incorporation of iododeoxyuridine into DNA of hepatic metastases versus normal human liver. Speth PA, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):369–75

Primary lymphoma of the liver showing immunohistochemical evidence of T-cell origin. Successful management by right trisegmentectomy. Andreola S, et al. **Dig Dis Sci** 1988 Dec;33(12):1632–6

Hepatocellular carcinoma producing carcinoembryonic antigen. Maeda M, et al. **Dig Dis Sci** 1988 Dec; 33(12):1629–31

Phloretin inhibits cellular uptake and nuclear receptor binding of triiodothyronine in human hep G2 hepatocarcinoma cells. Movius EG, et al. **Endocrinology** 1989 Apr;124(4):1988–97

Regulation of low-density-lipoprotein-receptor mRNA by insulin in human hepatoma Hep G2 cells. Wade DP, et al. **Eur J Biochem** 1989 May 15;181(3):727–31

RNA labelling with 3H-orotic acid and 3H-fluorouracil of rat liver tumour following transient hepatic arterial ischaemia. Mack P, et al. **Eur J Surg Oncol** 1988 Dec; 14(6):669–75

The synthesis of human alpha-2-HS glycoprotein is down-regulated by cytokines in hepatoma HepG2 cells. Daveau M, et al. **FEBS Lett** 1988 Dec 5;241(1–2):191–4

Increased proportion of proapolipoprotein A-I in HDL from patients with liver cirrhosis and hepatitis. Matsuura T, et al. **Gastroenterol Jpn** 1988 Aug;23(4):394–400

Antipyrine clearance per unit liver volume in cirrhotics with and without hepatocellular carcinoma indicating a correlation with histological change of the liver. Noda S, et al. **Gastroenterol Jpn** 1989 Apr;24(2):159–63

Carbohydrate metabolism in hepatocellular carcinoma: where does the glucose go? Marchesini G, et al. **Hepatology** 1989 Aug;10(2):253–5 (8 ref.)

Effect of galactose on interaction of N-(2-hydroxypropyl)methacrylamide copolymers with hepatoma cells in culture: preliminary application to an anticancer agent, daunomycin. O'Hare KB, et al. **Hepatology** 1989 Aug;10(2):207–14

Studies on the regulation of cholesterol metabolism by low- and high-density lipoproteins in HepG2 cells. Ranganathan S, et al. **Hepatology** 1989 Apr;9(4):547–51

S-phase cells in diseased human liver determined by an in vitro BrdU-anti-BrdU method. Shimizu A, et al. **Hepatology** 1988 Nov–Dec;8(6):1535–9

Changes of glycoconjugates in human hepatocellular carcinoma. Zhang SM, et al. **Histochemistry** 1989; 92(2):171–5

Orcein-positive granules in liver cell carcinoma [letter] **Histopathology** 1989 Aug;15(2):204–8

Liver cell carcinoma with orcein-positive granules and no identifiable copper. Shousha S, et al. **Histopathology** 1988 Oct;13(4):455–8

Phorbol ester modulates interleukin 6- and interleukin 1-regulated expression of acute phase plasma proteins in hepatoma cells. Baumann H, et al. **J Biol Chem** 1988 Nov 25;263(33):17390–6

Metalloendoprotease inhibitors block protein synthesis, intracellular transport, and endocytosis in hepatoma cells. Strous GJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18197–204

Plasma carriers influence the uptake of cholecalciferol by human hepatoma-derived cells. Haddad JG, et al. **J Bone Miner Res** 1989 Apr;4(2):243–7

Expression of class I and class II major histocompatibility antigens on human hepatocellular carcinoma. Sung CH, et al. **J Clin Invest** 1989 Feb;83(2):421–9

Thyroxine uptake by human hepatoma cells from serum of patients submitted to long-term thyroxine suppressive therapy. Bartalena L, et al. **J Endocrinol Invest** 1988 Oct; 11(9):629–35

ras oncogene p21 expression in hepatocellular carcinoma. Jagirdar J, et al. **J Exp Pathol** 1989;4(1):37–46

Hepatocyte-stimulating factor III shares structural and functional identity with leukemia-inhibitory factor. Baumann H, et al. **J Immunol** 1989 Aug 15;143(4):1163–7

5-Bromo-2'-deoxyuridine incorporation into DNA in hepatic VX2 tumor-bearing rabbits. Knol JA, et al. **J Surg Res** 1989 Aug;47(2):112–6

Effects of nucleosides and a nucleotide on DNA and RNA syntheses by the salvage and de novo pathway in primary monolayer cultures of hepatocytes and hepatoma cells. Ohyanagi H, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):51–8

Metabolism of the tropine indole-3-carboxylate ICS 205-930 by differentiated rat and human hepatoma cells. Fischer V, et al. **Mol Toxicol** 1987–88 Fall;1(4):341–50

Iron, copper and zinc levels in serum and cirrhotic liver of patients with and without hepatocellular carcinoma. Nagasue N, et al. **Oncology** 1989;46(5):293–6

Hepatic hemangioendothelioma of infancy associated with elevated alpha fetoprotein and catecholamine by-products. Seo IS, et al. **Pediatr Pathol** 1988;8(6):625–31

Interferon beta 2/B-cell stimulating factor 2/interleukin 6 affects glycosylation of acute phase proteins in human hepatoma cell lines. Mackiewicz A, et al. **Scand J Immunol** 1989 Mar;29(3):265–71

Regional hepatic arterial infusion of degradable starch microspheres increases fluorodeoxyuridine (FUdR) tumor uptake. Thom AK, et al. **Surgery** 1989 Mar;105(3):383–92

[Preliminary study of the origin of alpha-fetoprotein (AFP) in the host hepatocytes of human liver cancer: immunohistochemical analysis of 48 cases] Dai YM, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):247–50 (Eng. Abstr.) **(Chi)**

[An immunohistochemical study on pre-S proteins of hepatitis B virus] Hu KQ. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):27–9 (Eng. Abstr.) **(Chi)**

[A histochemical study of diethylnitrosamine-induced altered liver cells in rats] Zhang YC, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):23–6 (Eng. Abstr.) **(Chi)**

[Clinical study of the drug delivery in metastatic liver cancer using bromodeoxyuridine] Taniguchi H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3015–8 (Eng. Abstr.) **(Jpn)**

[Study on the pharmacokinetics of UFT in patients with hepatocellular carcinoma associated with cirrhosis] Une Y, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3153–9 (Eng. Abstr.) **(Jpn)**

[Accumulation of 99mTc-phosphorous compounds uptake by liver tumors] Otsuka N, et al. **Kaku Igaku** 1989 Apr; 26(4):559–63 **(Jpn)**

[Clearance of anti-cancer agent in hepatic carcinoma after transarterial embolization with lipiodol assessed by Tc-99m pertechnetate] Yoshimura H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):454–65 (Eng. Abstr.) **(Jpn)**

[In vivo and in vitro studies on PGE2 production and function in human hepatocellular carcinoma] Itakura M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):227–36 (Eng. Abstr.) **(Jpn)**

[Hemopoietic factor producing hepatocellular carcinoma in a child] Toyoda Y, et al. **Rinsho Ketsueki** 1989 Jan; 30(1):94–8 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Hepatitis B and delta markers in primary hepatocellular carcinoma patients in the Gizan area of Saudi Arabia. Arya SC, et al. **APMIS Suppl** 1988;3:30–4

Hepatitis B virus and primary hepatocellular carcinoma. London WT, et al. **Cancer Invest** 1988;6(3):317–26 (35 ref.)

Hepatitis B virus in alcoholic liver disease with hepatocellular carcinoma [letter] Bréchot C. **Hepatology** 1989 Mar; 9(3):514

Analysis of hepatitis B virus transcripts in infected human livers. Su TS, et al. **Hepatology** 1989 Feb;9(2):180–5

Insulin suppresses hepatitis B surface antigen expression in human hepatoma cells. Chou CK, et al. **J Biol Chem** 1989 Sep 15;264(26):15304–8

Status of hepatitis B virus DNA in hepatocellular carcinoma: a study based on paired tumor and nontumor liver tissues. Lai MY, et al. **J Med Virol** 1988 Jul;25(3):249–58

Low incidence and high titers of antibodies to hepatitis B virus X-protein in sera of Chinese patients with hepatocellular carcinoma. Liang XH, et al. **J Med Virol** 1988 Jul;25(3):329–37

Frequent integration of hepatitis B virus DNA in noncancerous liver tissue from hepatocellular carcinoma patients. Tanaka Y, et al. **J Med Virol** 1988 Sep;26(1):7–14

Features of two hepatitis B virus (HBV) DNA integrations suggest mechanisms of HBV integration. Hino O, et al. **J Virol** 1989 Jun;63(6):2638–43

Structural analysis of a hepatitis B virus genome integrated into chromosome 17p of a human hepatocellular carcinoma. Zhou YZ, et al. **J Virol** 1988 Nov;62(11):4224–31

[Clinical analysis of patients with hepatocellular carcinoma with non-A, non-B hepatitis virus] Takezaki E, et al. **Gan No Rinsho** 1989 Jun;35(7):781–6 (Eng. Abstr.) **(Jpn)**

MORTALITY

Long-term surviving patients with hepatocellular carcinoma comprised of dense collagenous stroma. Sonoda T, et al. **Am J Gastroenterol** 1989 Sep;84(9):1087–91

Primary liver cancer death and occupation in Texas. Suarez L, et al. **Am J Ind Med** 1989;15(2):167–75

Androgen receptor in hepatocellular carcinoma as a prognostic factor after hepatic resection. Nagasue N, et al. **Ann Surg** 1989 Apr;209(4):424–7

Long-term survivors after resection for primary liver cancer. Clinical analysis of 19 patients surviving more than ten years. Zhou XD, et al. **Cancer** 1989 Jun 1;63(11):2201–6

Long-term prognosis of surgical patients with hepatocellular carcinoma. Kawano N, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S129–32

Prognostic factors for survival in hepatocellular carcinoma. Falkson G, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7314–8 (19 ref.)

Hepatocellular carcinoma: some aspects to improve long-term survival. Zhou XD, et al. **J Surg Oncol** 1989 Aug;41(4):256–62

[Survey of the time span (1975–1980) on mortality due to original liver tumor in Lazio] De Luca D'Alessandro E, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):205–10 (Eng. Abstr.) **(Ita)**

[A study of the geographic epidemiology of liver cancer death and related factors] Yan S, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):987–94 (Eng. Abstr.) **(Jpn)**

NURSING

[Some problems need special attention in therapeutic embolization in hepatic artery surgery] Chang YL. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):592–3 **(Chi)**

PATHOLOGY

Differential diagnosis of malignant intrahepatic tumors by ultrasonically guided fine needle aspiration biopsy and by laparoscopic/intraoperative biopsy. A comparative study. Prior C, et al. **Acta Cytol** 1988 Nov–Dec;32(6):892–5

Hepatic squamous cell carcinoma with hypercalcemia in liver cirrhosis. Arase Y, et al. **Acta Pathol Jpn** 1988 May; 38(5):643–50

Lymphangiosis carcinomatosa of the liver. Itoh T, et al. **Acta Pathol Jpn** 1988 Jun;38(6):751–8

Hepatic angiomyolipoma. A case report with review of the literature. Naito M, et al. **Acta Pathol Jpn** 1988 Jun; 38(6):799–804 (13 ref.)

A new human pleomorphic hepatocellular carcinoma cell line, KYN-2. Yano H, et al. **Acta Pathol Jpn** 1988 Aug; 38(8):953–66

MR imaging of liver neoplasms. Rummeny E, et al. **AJR** 1989 Mar;152(3):493–9

Focal nodular hyperplasia of the liver: features on Gd-DTPA-enhanced MR [letter] Tham RT, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):884–5

Hepatoblastoma in an adult with metastasis to the ovaries. Green LK, et al. **Am J Clin Pathol** 1989 Jul;92(1):110–5

Heterogenous expression of endothelial cell markers in infantile hemangioendothelioma. Immunohistochemical study of two solitary cases and one multiple one. Yasunaga C, et al. **Am J Clin Pathol** 1989 Jun;91(6):673–81

Liver cell adenoma: diagnosis and treatment of a rare hepatic neoplastic process. Brophy CM, et al. **Am J Gastroenterol** 1989 Apr;84(4):429–32

Malignant fibrous histiocytoma of the liver: a case report and review of the literature. Katsuda S, et al. **Am J Gastroenterol** 1988 Nov;83(11):1278–82 (25 ref.)

Long-term surviving patients with hepatocellular carcinoma comprised of dense collagenous stroma. Sonoda T, et al. **Am J Gastroenterol** 1989 Sep;84(9):1087–91

Macroregenerative nodules of the liver in primary biliary cirrhosis: report of two autopsy cases. Terada T, et al. **Am J Gastroenterol** 1989 Apr;84(4):418–21

Evidence for the stem cell origin of hepatocellular carcinoma and cholangiocarcinoma. Sell S, et al. **Am J Pathol** 1989 Jun;134(6):1347–63 (87 ref.)

Hepatoblastoma: an analysis of the relationship between morphologic subtypes and prognosis. Dehner LP, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):301–7 (23 ref.)

The role of morphometry in the cytology of well-differentiated hepatocarcinoma and cirrhosis with atypia. Zeppa P, et al. **Anal Quant Cytol Histol** 1988 Oct; 10(5):343–8

Transformation of hepatic cell adenoma to hepatocellular carcinoma due to oral contraceptive use. Gyorffy EJ, et al. **Ann Intern Med** 1989 Mar 15;110(6):489–90

The role of liver transplantation in hepatobiliary malignancy. A retrospective analysis of 95 patients with particular regard to tumor stage and recurrence. Ringe B, et al. **Ann Surg** 1989 Jan;209(1):88–98

RES-macrophage stimulation and liver tumour growth in rats; evaluation with dynamic liver RES scintigraphy. Holmberg SB, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1291-5

Discrimination between normal and malignant hepatocytes in man by the monoclonal antibody RL23/36: comparison with the Ca1 and 791T/36 monoclonal antibodies. Hawkey CJ, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):51-5

Malignant systemic mastocytosis. Jane SM, et al. **Aust N Z J Med** 1988 Jun;18(4):610-2

Inflammatory pseudotumour of the liver. Levitt MD, et al. **Aust N Z J Surg** 1988 Sep;58(9):743-5

Fine-needle biopsy of hepatic hydatids and haemangiomas: an overstated hazard. Langlois SL. **Australas Radiol** 1989 May;33(2):144-9 (23 ref.)

Tumour calcification after hepatic dearterialization [letter] Bengmark S. **Br J Surg** 1989 Mar;76(3):317-8

Histopathology and prognosis in childhood hepatoblastoma and hepatocarcinoma. Haas JE, et al. **Cancer** 1989 Sep 1; 64(5):1082-95

Localized fibrous tumor (localized fibrous mesothelioma) of the liver. Kottke-Marchant K, et al. **Cancer** 1989 Sep 1; 64(5):1096-102

Evaluation of the prognosis for small hepatocellular carcinoma based on tumor volume doubling time. A preliminary report. Okazaki N, et al. **Cancer** 1989 Jun 1; 63(11):2207-10

Establishment of a human cell line (HCC-T) from a patient with hepatoma bearing no evidence of hepatitis B or A virus infection. Saito H, et al. **Cancer** 1989 Sep 1; 64(5):1054-60

Undifferentiated (embryonal) sarcoma of the liver. A clinicopathologic study of a survivor treated with combined technique therapy. Steiner M, et al. **Cancer** 1989 Sep 15;64(6):1318-22

A case of biliary cystadenocarcinoma with morphologic and histochemical features of hepatocytes. Tomimatsu M, et al. **Cancer** 1989 Sep 15;64(6):1323-8

Clonal state of human hepatocellular carcinoma and non-tumorous hepatocytes. Esumi M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S1-3

Hepatocellular carcinoma with sarcomatous change: a special reference to the relationship with anticancer therapy. Kojiro M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S4-8

Hepatocellular carcinoma in adenomatous hyperplasia of the liver. Sakurai M, et al. **Cancer Chemother Pharmacol** 1989; 23 Suppl:S110-3

Clinicopathological features of malignancy in hepatocellular carcinoma. Tanaka J, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S96-100

Different lineages of chemically induced hepatocellular carcinoma in rats defined by monoclonal antibodies. Dunsford HA, et al. **Cancer Res** 1989 Sep 1;49(17):4894-900

Sequential analysis of quinoline-induced hepatic hemangioendothelioma development in rats. Hasegawa R, et al. **Carcinogenesis** 1989 Apr;10(4):711-6

Adenosquamous cell carcinoma of the liver--report of two cases. Hu TJ, et al. **Chang Keng I Hsueh** 1988 Jun; 11(2):152-9

Fine-needle aspiration cytology of pediatric patients with primary hepatic tumors: a comparative study of two hepatoblastomas and a liver-cell carcinoma. Dekmezian R, et al. **Diagn Cytopathol** 1988;4(2):162-8

Epithelioid hemangioendothelioma: report of a case diagnosed by fine-needle aspiration. Gambacorta M, et al. **Diagn Cytopathol** 1989;5(2):207-10

Cholangiocarcinoma associated with multiple bile-duct hamartomas of the liver. Dekker A, et al. **Dig Dis Sci** 1989 Jun;34(6):952-8

Five cases of ectopic liver and a case of accessory lobe of the liver. Watanabe M, et al. **Endoscopy** 1989 Jan; 21(1):39-42

Differential distribution of B16F10 melanoma cells in the liver lobule. Hilario E, et al. **Exp Cell Biol** 1988; 56(6):303-10

Age and sex differences in bone metastasis of hepatocellular carcinoma in Japanese autopsy cases. Fukusato T, et al. **Gastroenterol Jpn** 1989 Apr;24(2):127-34

Clonal origin of recurrent hepatocellular carcinomas. Chen PJ, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):527-9

Fine needle liver biopsy of hepatocellular carcinoma: is sampling simple? [letter] D'Aquino M, et al. **Gastroenterology** 1989 Jul;97(1):247-8

Hepatocellular carcinoma without cirrhosis in Japanese patients. Okuda K, et al. **Gastroenterology** 1989 Jul; 97(1):140-6

Fine needle biopsy of hepatocellular carcinoma: improvement in diagnosis by microhistology. Sangalli G, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):524-6

Clonal origin of atypical adenomatous hyperplasia of the liver and clonal identity with hepatocellular carcinoma. Tsuda H, et al. **Gastroenterology** 1988 Dec;95(6):1664-6

Morphological and histological features of resected hepatocellular carcinoma in cirrhotic patients in the West. Kemeny F, et al. **Hepatology** 1989 Feb;9(2):253-7

Biopsy diagnosis of well-differentiated hepatocellular carcinoma based on new morphologic criteria. Kondo F, et al. **Hepatology** 1989 May;9(5):751-5

Large regenerative nodules and dysplastic nodules in cirrhotic livers: a histopathologic study. Wada K, et al. **Hepatology** 1988 Nov-Dec;8(6):1684-8

Experimental studies on the treatment of hepatocellular carcinoma with cis-platin.transferrin complex. Hamada Y. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):864-74

Pseudosarcomatous cystadenocarcinoma versus biliary carcinosarcoma of the liver [letter] Castelletto RH, et al. **Hum Pathol** 1988 Nov;19(11):1363-4

Epithelioid hemangioendothelioma of the liver: an ultrastructural study. Scoazec JY, et al. **Hum Pathol** 1989 Jul;20(7):673-81

Mallory body clustering in adenomatous hyperplasia in human cirrhotic livers: report of four cases. Terada T, et al. **Hum Pathol** 1989 Sep;20(9):868-90

Recombinant human interleukin 1 alpha is cytotoxic for and increases surface expression of HLA-A,B,C antigens of a human hepatoma cell line, PLC/PRF/5. Yoshioka K, et al. **Immunobiology** 1989 Feb;178(4-5):380-9

Further cellular investigation of the human hepatoblastoma-derived cell line HepG2: morphology and immunocytochemical studies of hepatic-secreted proteins. Bouma ME, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):267-75

Multinodular infantile hemangioendothelioma of liver. Thapa BR, et al. **Indian Pediatr** 1988 Feb;25(2):199-203

Recurrent haematemesis and epigastric pain in an alcoholic. Anand AC, et al. **J Assoc Physicians India** 1988 Oct; 36(10):613-5

Mixed hepatoblastoma in a young adult. Misra GC, et al. **J Assoc Physicians India** 1988 Feb;36(2):169-70

Clonality of preneoplastic liver lesions: histological analysis in chimeric rats. Weinberg WC, et al. **J Cell Sci** 1988 Mar; 89 (Pt 3):423-31

The value of Chiba fine-needle aspiration biopsy in the diagnosis of hepatic malignancy: a comparison with Menghini needle biopsy. Farnum JB, et al. **J Clin Gastroenterol** 1989 Feb;11(1):101-9

Hepatocellular carcinoma in Wilson's disease. Case report and review of the literature. Polio J, et al. **J Clin Gastroenterol** 1989 Apr;11(2):220-4 (26 ref.)

In vitro amplification of hepatitis B virus sequences from liver tumour DNA and from paraffin wax embedded tissues using the polymerase chain reaction. Lo YM, et al. **J Clin Pathol** 1989 Aug;42(8):840-6

Inhibition of guanidinobenzoatase: evidence for multiple forms of this protease on different tumour cells. Steven FS, et al. **J Enzym Inhib** 1988;2(2):117-27

Intracranial metastasis of hepatic carcinomas: a study of 9 cases within 28 years. Shuangshoti S, et al. **J Med Assoc Thai** 1989 Jun;72(6):307-13

Gingival metastasis from primary hepatocellular carcinoma: report of a case and review of literature. Kanazawa H, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):987-90 (20 ref.)

Primary liver neoplasms: evaluation of proliferative index using MoAb Ki67. Grigioni WF, et al. **J Pathol** 1989 May; 158(1):23-9

Lymphangioendothelioma of the liver in a neonate. Peters ME, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):115-8

Ruptured hepatocellular carcinoma evokes risk of implanted metastases. Sonoda T, et al. **J Surg Oncol** 1989 Jul; 41(3):183-6

Fibrolamellar carcinoma of the liver in the Orient. Yoshida K, et al. **J Surg Oncol** 1988 Nov;39(3):187-9

The liver pattern in Burkitt's lymphoma [letter] **J Ultrasound Med** 1988 Dec;7(12):697-8

A review of the unusual liver tumours. Jamal Q, et al. **JPMA** 1989 Feb;39(2):53-6

Epithelioid hemangioendothelioma of the liver with myocardial metastases. Bellmunt J, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):153-8

The general rules for the clinical and pathological study of primary liver cancer. Liver Cancer Study Group of Japan. **Jpn J Surg** 1989 Jan;19(1):98-129 (12 ref.)

Pathomorphological characteristics of thorotrast-related cholangiocarcinoma. Ito Y. **Kurume Med J** 1988;35(2):63-9

Is fine-needle aspiration of tumours harmless? [letter] [see comments] Glaser KS, et al. **Lancet** 1989 Mar 18; 1(8638):620. **Comment in:** Lancet 1989 Jun 17;1(8651):1384-5

Iron induction of ferritin synthesis and secretion in human hepatoma cell (Hep G2) cultures. Lescoat G, et al. **Liver** 1989 Jun;9(3):179-85

Hepatocellular carcinoma with tumor thrombus in inferior vena cava [clinical conference] Close P, et al. **Med Pediatr Oncol** 1989;17(3):232-5

Liposarcoma of hepatic hilum in childhood: report of a case and review of the literature. Soares FA, et al. **Med Pediatr Oncol** 1989;17(3):239-43 (27 ref.)

Relationship between immunophenotype and the development of second primary neoplasms in patients with non-Hodgkin's lymphoma. Shimizu K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):71-9

Hepatocellular carcinoma presenting as an oral cavity lesion. Mucitelli DR, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):701-5 (27 ref.)

Lipoma of the liver. Fulcheri E. **Pathologica** 1987 Sep-Oct; 79(1063):659-62

Enormous hepatomegaly due to hepatocarcinoma. Pesce C, et al. **Pathologica** 1987 Sep-Oct;79(1063):655-7

An unusual hepatocellular carcinoma: an ultrastructural and immunohistochemical study. Chan KW, et al. **Pathology** 1988 Jul;20(3):299-302

Percutaneous fine needle aspiration biopsy of tumorous lesions of the liver and the pancreas guided by ultrasonography. Szadowska A, et al. **Patol Pol** 1988 Apr-Jun;39(2):73-82

Rupture of hepatocellular carcinoma following transcatheter arterial embolization. Nakao N, et al. **Radiat Med** 1988 Jul-Aug;6(4):147-9

Establishment and characterization of a cell line from a human cholangiocellular carcinoma. Kusaka Y, et al. **Res Exp Med (Berl)** 1988;188(5):367-75

Mesenchymal hamartoma of the liver. A report of 5 cases. Cooper K, et al. **S Afr Med J** 1989 Mar 18;75(6):295-8

Fine needle aspiration cytology of hepatocellular carcinoma manifested as bone metastasis. Gattuso P, et al. **South Med J** 1989 Jun;82(6):793-5

Comparison between the 21-gauge Urocut needle and the 21-gauge Surecut needle in echo-guided percutaneous biopsy of neoplastic liver lesions. Solmi L, et al. **Surg Endosc** 1989;3(1):38-41

Morphometric evaluation of hepatocellular proliferative lesions in the rat liver. Broxup BR, et al. **Toxicol Pathol** 1988;16(4):401-17

Polypoid endobronchial extension from invasive thymoma. Honma K, et al. **Virchows Arch [A]** 1988;413(5):469-74

Morphometric analysis of hepatocellular carcinoma. Kondo F, et al. **Virchows Arch [A]** 1988;413(5):425-30

Evidence for a hepatocellular lineage in a combined hepatocellular-cholangiocarcinoma of transitional type. Fisher HP, et al. **Virchows Arch [B]** 1988;56(2):71-6

[Inhibitory effect of pingyangmycin on human liver cancer and stomach cancer xenografts in nude mice] Jiang M. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):357-9 (Eng. Abstr.) (Chi)

[Spinal metastasis of primary hepatocellular carcinoma--a case report] Yeh JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):255-60 (Eng. Abstr.) (Chi)

[Primary hepatocellular carcinoma (PHCC) in adolescents and children: a pathological study. The Country-wide Coordination Group of Pathology of Liver Cancer] **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):118-20 (Eng. Abstr.) (Chi)

[Comparison of pathological features between hepatocellular carcinoma with and without liver cirrhosis] Lai RQ. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):289-91 (Eng. Abstr.) (Chi)

[Fibrolamellar carcinoma of the liver: clinico-pathologic analysis of 6 cases] Zheng ZZ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):617-9, 639 (Eng. Abstr.) (Chi)

[Cytotoxic effect of carcinophotorin plus red light on human liver cancer cells in vitro] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):93-6 (Eng. Abstr.) (Chi)

[Comparative studies of intermediate filament patterns and components in human hepatoma cells and HeLa cells] Chang RX, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):493-503 (Eng. Abstr.) (Chi)

[Verification of invasion of a hepatoma into the portal circulation using thin-needle aspiration biopsy under ultrasonic control] Hořejšová M, et al. **Cas Lek Cesk** 1986 Oct 31;125(44):1361-2 (Eng. Abstr.) (Cze)

[Epithelioid hemangioendothelioma of the liver] Chlumská A, et al. **Cesk Patol** 1989 Mar;25(1):35-43 (Eng. Abstr.) (Cze)

[Regenerative nodular hyperplasia and hepatocarcinoma (letter)] de Saint-Maur PP. **Ann Pathol** 1988;8(3):253-4 (Fre)

[Stimulation, by acute inflammation, of the proliferation in preneoplastic hepatocyte foci expressing the gamma glutamyl transpeptidase, induced by diethylnitrosamine in adult rats] Nadal C, et al. **C R Acad Sci [III]** 1988; 307(5):239-44 (Eng. Abstr.) (Fre)

[Pseudotumor nodules of the liver in cirrhotic patients. Study of 7 cases] Cadranel JF, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):833-40 (23 ref.) (Eng. Abstr.) (Fre)

[Hepatic undifferentiated (or embryonal) sarcoma. Diagnostic and therapeutic problems apropos of botryoid rhabdomyosarcoma] Vetter D, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):98-103 (68 ref.) (Eng. Abstr.) (Fre)

[Immunochemical diagnosis of hepatic localizations in malignant lymphoid hematologic diseases. Study of 80 cases] Voigt JJ, et al. **Gastroenterol Clin Biol** 1989 Apr; 13(4):343-52 (Eng. Abstr.) (Fre)

[Value of ultrasound-guided cytopuncture in the diagnosis of hepatocellular carcinoma] Roget L, et al. **J Radiol** 1989 Feb;70(2):75-8 (Eng. Abstr.) (Fre)

[Giant nerve-sheath fibroma. Apropos of a case associated with hepatorenal polycystosis] Satge D, et al. **Pathologica** 1987 Nov-Dec;79(1064):761-72 (Eng. Abstr.) (Fre)

[Sonographically guided puncture with a large caliber needle in the diagnosis of hepatic tumors (letter)] Giovannini M, et al. **Presse Med** 1989 May 27;18(21):1077-8 (Fre)

[Pseudotumor in steatosis hepatis--focal absence of fatty liver] Becher H, et al. **Med Klin** 1988 Jul 15;83(15):488-9, 502 (Ger)

[Pathologic anatomy of focal liver diseases] Borchard F. **Rontgenpraxis** 1989 Aug;42(8):266-77 (39 ref.) (Ger)

[CT-guided fine needle biopsy of liver masses. A comparison of the results of a working group over 2 time periods] Lüning M, et al. **Rontgenpraxis** 1989 May;42(5):174-9 (Ger)

[Sonographic-controlled puncture and its effect on further diagnosis and therapy] Schneider H, et al. **Ultraschall Med** 1989 Jun;10(3):143-6 (Eng. Abstr.) (Ger)

[Fibrolamellar liver cell cancer. A case report] Kahle M, et al. **Z Gastroenterol** 1989 Jun;27(6):341-3 (Eng. Abstr.) (Ger)

[Fine needle puncture cytology in metastatic hepatocellular carcinoma] Wehle K, et al. **Z Gastroenterol** 1989 Apr; 27(4):225-7 (Eng. Abstr.) (Ger)

[Focal nodular hyperplasia of the liver] Mölleken K. **Z Gesamte Inn Med** 1989 Apr 1;44(7):208-10 (Eng. Abstr.) (Ger)

[Comparison of fine needle aspiration cytology and histology in hepatocellular carcinoma and in liver metastasis] Barten M, et al. **Zentralbl Allg Pathol** 1989;135(2):147-54 (Eng. Abstr.) (Ger)

[Benign lipomatous tumor of the liver] Bugovics E. **Orv Hetil** 1988 Oct 9;129(41):2195-7 (Eng. Abstr.) (Hun)

[A case of fibro-lamellar carcinoma of the liver] Cardano S, et al. **G Clin Med** 1988 Jun-Jul;69(6-7):439-41 (Eng. Abstr.) (Ita)

[Neoplasm of the liver and spleen. A clinical case] Pozzato G, et al. **G Clin Med** 1989 Mar;70(3):225-6 (Ita)

[21-year-old woman with apparent hepatic mass after treatment of amenorrhea] Malt RA, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):221-8 (Ita)

[Cytodiagnosis using ultrasound-guided transcutaneous aspiration with fine needle of focal liver masses] Fregonese D, et al. **Pathologica** 1988 Sep-Oct;80(1069):573-6 (Eng. Abstr.) (Ita)

[Cytology in the diagnosis of chronic hepatopathies] Genova G, et al. **Pathologica** 1988 May-Jun;80(1067):325-32 (Eng. Abstr.) (Ita)

[Laparoscopy in the staging of lymphoma. Personal experience] Reguzzoni G, et al. **Recenti Prog Med** 1988 May;79(5):206-9 (Eng. Abstr.) (Ita)

[A histopathologic comparative study of European cases of fibrolamellar carcinoma and Japanese cases of sclerosing hepatocellular carcinoma] Haratake J, et al. **Gan No Rinsho** 1989 Jun;35(7):793-8 (Eng. Abstr.) (Jpn)

[A clinicopathological study of the extension modes of hepatocellular carcinoma evaluated from surgically removed and autopsied cases--the prognostic factors and operability] Kasashima M, et al. **Gan No Rinsho** 1989 May; 35(6):669-76 (Eng. Abstr.) (Jpn)

[A case of cystadenocarcinoma of the liver complicated by gastric cancer--a review of 83 cases of primary cystic liver cancer in the literature] Morokoshi Y, et al. **Gan No Rinsho** 1988 Aug;34(9):1174-84 (38 ref.) (Eng. Abstr.) (Jpn)

[An autopsied case of double carcinomata consisting of hepatocellular and renal cell carcinoma associated with adrenocortical adenoma] Nagaoka H, et al. **Gan No Rinsho** 1989 Feb;35(3):404-10 (Eng. Abstr.) (Jpn)

[An autopsy revealing hepatocellular carcinoma with solitary metastatic gastric cancer] Nishio M. et al. **Gan No Rinsho** 1989 Jan;35(2):298-304 (Eng. Abstr.) (Jpn)

[Study of small hepatocellular carcinomas] Shimoyama T, et al. **Gan No Rinsho** 1989 Jul;35(8):899-904 (Eng. Abstr.) (Jpn)

[A case of hepatocellular carcinoma with a duodenal invasion from metastatic lymph node] Sone Y, et al. **Gan No Rinsho** 1989 May;35(6):756-60 (9 ref.) (Eng. Abstr.) (Jpn)

[Two fatal cases of hepatic failure due to a malignant lymphoma presenting a liver injury] Tokuyama K, et al. **Gan No Rinsho** 1989 Jan;35(1):74-80 (Eng. Abstr.) (Jpn)

[Pathomorphologic characteristics of small liver cancer in the early stage and the basic pathologic features of hepatocellular carcinoma] Kojiro M. **Gan To Kagaku Ryoho** 1989 Jan;16(1):11-7 (Eng. Abstr.) (Jpn)

[The progression of non-A, non-B hepatitis to chronic diseases, and the transformation to hepatocellular carcinoma] Ichida T, et al. **Nippon Rinsho** 1988 Dec; 46(12):2669-75 (26 ref.) (Jpn)

[A new in vitro portal invasion model of hepatocellular carcinoma: co-culture of primary human portal vein endothelial cell and human hepatoma cell lines utilizing permeable collagen membrane] Ichida T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2270 (Jpn)

[A case of giant cavernous hemangioma of the liver that showed extrahepatic growth] Okuda T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):91-4 (Jpn)

[Establishment of a human hepatoma cell line, HCC-T] Saito H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep; 85(9):1664-71 (Eng. Abstr.) (Jpn)

[Effects of interferon on the cell cycle of human hepatoma HLF cells analyzed by flow cytometry] Takeda T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):876-81 (Eng. Abstr.) (Jpn)

[A case of a small hepatoma with multicentric development in precirrhotic fibrosis] Sanefuji H, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):331-6 (Eng. Abstr.) (Jpn)

[Effectiveness of ultrasonographically guided fine-needle biopsy in the diagnosis of abdominal tumors] Stachura J, et al. **Patol Pol** 1988 Jul-Sep;39(3):189-96 (Eng. Abstr.) (Pol)

[Hepatocellular carcinoma. Morphologic and immunohistochemical study in autopsy material] Costa e Silva A, et al. **Acta Med Port** 1988 Jul-Dec;1(4-6):265-72 (Eng. Abstr.) (Por)

[Hepatic cell dysplasia. A pre-malignant lesion related to hepatocellular carcinoma and infection by hepatitis B virus] de Queiroz AC, et al. **Arq Gastroenterol** 1987 Apr-Jun; 24(2):80-3 (Eng. Abstr.) (Por)

[Primary hepatic apudoma with serotonin syndrome] Grigor'ev BA, et al. **Arkh Patol** 1989;51(4):65-8 (Eng. Abstr.) (Rus)

[Primary carcinoid of the liver] Derizhanova IS, et al. **Vopr Onkol** 1989;35(6):736-9 (Rus)

[Multiple hepatic nodules in a 51-year-old male (clinical conference)] Bru C, et al. **Med Clin (Barc)** 1989 May 20; 92(19):749-56 (Spa)

[Cervical metastases as the presenting form of a hepatocarcinoma (letter)] Domingo C, et al. **Rev Clin Esp** 1988 May;182(9):507-8 (Spa)

[Single cutaneous metastasis as the first symptom of a hepatocarcinoma (letter)] Galván Casas C, et al. **Rev Clin Esp** 1989 Mar;184(4):212-4 (Spa)

[Primary liver cancer: study of 37 cases] Balil Gilart A, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):585-90 (Eng. Abstr.) (Spa)

[An unusual form of metastasis of hepatocarcinoma: endobronchial metastasis] Camps C, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):155-7 (Eng. Abstr.) (Spa)

[Malignant mixed tumor of the liver. Presentation of a case and review of the literature] Hernández E, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):565-8 (19 ref.) (Eng. Abstr.) (Spa)

[Hepatic mesenchymal hamartoma] Sánchez Blanco JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):73-7 (Eng. Abstr.) (Spa)

[Anatomo-clinical case. A 51-year-old-woman with a clinical picture of chronic hepatic insufficiency and chylous ascites] Vaca O, et al. **Rev Invest Clin** 1989 Jan-Mar; 41(1):81-8 (Spa)

[Fibrolamellar hepatocellular carcinoma: report of 4 cases] Silva H, et al. **Rev Med Chil** 1988 Feb;116(2):153-6 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Defective function of lymphokine-activated killer cells and natural killer cells in patients with hepatocellular carcinoma. Saibara T, et al. **Hepatology** 1989 Mar; 9(3):471-6

[Relief of stable pains of advanced primary hepatic cancer patients by an injection of morphine administered through a duct retained in the extradural cave] Chen ZD. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):463-4 (Chi)

[Effect of degradable starch microspheres (DSM) on hepatic hemodynamics] Koike S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2818-21 (Eng. Abstr.) (Jpn)

[The hepatic hemodynamic response to intra-arterial infusion of vasoactive agents--Part 2. Blood flow measurements in rats with liver cancer] Motohashi O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):882-8 (Eng. Abstr.) (Jpn)

[Factor analysis of post-transcatheter arterial embolization in primary liver and biliary tract tumors] Nanjo T, et al. **Rinsho Hoshasen** 1989 Apr;34(4):515-6 (Jpn)

PREVENTION & CONTROL

Screening for hepatocellular carcinoma in high-risk individuals. A clinical review. Regan LS. **Arch Intern Med** 1989 Aug;149(8):1741-4 (39 ref.)

Reply to the letter of L. C. Clark and G. F. Combs, Jr. [letter] Foster HD. **J Nutr** 1989 Jun;119(6):950

Screening for hepatocellular carcinoma. Review and perspective. Ellis JC. **West J Med** 1988 Aug;149(2):183-7 (52 ref.)

[Enzyme linked counter reference electrophoresis assay and reverse passive hemagglutination assay in general survey of liver cancer] Huang JQ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):109-10 (Eng. Abstr.) (Chi)

[Screening for liver cancer in Luh-Guu township] Chou PS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):1021-4 (Eng. Abstr.) (Chi)

[Effects of prophylactic intraportal chemotherapy on liver function, blood profile and survival in patients with colo-rectal cancer] Inoue Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3024-7 (Eng. Abstr.) (Jpn)

[Portal vein infusion therapy of the prevention of liver metastasis from colorectal carcinomas] Okubo Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3028-31 (Eng. Abstr.) (Jpn)

[Preventive hepatic arterial infusion in high risk cases of liver metastasis from gastric cancer] Takahashi Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2756-9 (Eng. Abstr.) (Jpn)

[Controlled prospective trial to evaluate Syosakiko-to in preventing hepatocellular carcinoma in patients with cirrhosis of the liver] Yamamoto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1519-24 (Eng. Abstr.) (Jpn)

[Evaluation of biochemical examination and image procedures in mass screening survey for liver cancer] Kojima J, et al. **Rinsho Byori** 1988 Jul;36(7):759-66 (Jpn)

RADIOGRAPHY

Transcatheter arterial chemotherapy using doxorubicin, iodized oil and Gelfoam embolization in hepatocellular carcinoma. Van Beers B, et al. **Acta Radiol** 1989 Jul-Aug; 30(4):415-8

Focal nodular hyperplasia of the liver on delayed enhanced CT [letter] Kier R, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):885-6

CT of primary lymphoma of the liver. Sanders LM, et al. **AJR Am J Roentgenol** 1989 May;152(5):973-6

Hepatic venography in the surgical assessment of hepatic tumours. Odurny A, et al. **Br J Radiol** 1989 Jan; 62(733):6-12

Computed tomographic arteriography (C.T.A.) of the liver. Dondelinger RF, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(1):27-34

Intraarterial digital subtraction angiography in detection of hepatocellular carcinoma. Takahashi K, et al. **Cardiovasc Intervent Radiol** 1989 Mar-Apr;12(2):61-5

Acalculous cholecystitis complicating hepatic intraarterial lipiodol: case report. Yeung E, et al. **Cardiovasc Intervent Radiol** 1989 Mar-Apr;12(2):80-2

Detection of hepatic metastases in diffuse fatty infiltration by CT: the complementary role of imaging. Lipman JC, et al. **Clin Nucl Med** 1988 Aug;13(8):602-5

CT diagnosis of pedunculated liver tumours. Lüning M, et al. **Eur J Radiol** 1988 Nov;8(4):221-5

Mesenchymal hamartoma of the liver in an adult: radiologic diagnosis. Gutierrez OH, et al. **Gastrointest Radiol** 1988 Oct;13(4):341-4

Selective hepatic angiography is the main method of diagnosing hepatic hemangiomas [letter] Mostbeck G, et al. **Hepatogastroenterology** 1989 Jun;36(3):178

Intraarterial digital subtraction angiography for evaluating hepatic tumors. Naito A, et al. **Hiroshima J Med Sci** 1988 Dec;37(4):161-6

Epithelioid hemangioendothelioma of the liver. Darras T, et al. **J Belge Radiol** 1988;71(6):722-3

Tumor thrombus in the branches of the distal portal vein: CT demonstration. Imaeda T, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):262-8

Angiosarcoma of the liver mimicking cavernous hemangioma on dynamic CT. Itai Y, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):910-2

Computed tomography detection of small daughter nodules in hepatocellular carcinoma after iodized oil infusion into the hepatic artery. Ohishi H, et al. **J Comput Tomogr** 1988 Apr;12(2):129-34

Computed tomographic appearances of massive neonatal hemangioma of the liver: a case report. Qureshi SA, et al. **J Comput Tomogr** 1988 Apr;12(2):135-7

Incremental dynamic CT for small hepatic tumours using high-speed, high-resolution CT apparatus. Murayama S, et al. **Radiat Med** 1988 Sep-Oct;6(5):200-3

Dynamic hepatic CT. Foley WD. **Radiology** 1989 Mar;170(3 Pt 1):617-22

Hypovascular hepatocellular carcinoma undetected at angiography and CT with iodized oil. Yoshimatsu S, et al. **Radiology** 1989 May;171(2):343-7

Computerized tomography in metastatic evaluation. Smith RE, et al. **Wis Med J** 1989 May;88(5):25-7

[Potential role of peritumoral vascular modifications on the peripheral enhancement of dynamic computerized radiography of hepatic metastases] Tshibwabwa-Tumba E, et al. **J Belge Radiol** 1988;71(4):471-4 (Eng. Abstr.) (Fre)

[Angiographic detection of focal changes in the liver] Jaschke W, et al. **Radiologe** 1988 Aug;28(8):374-9 (55 ref.) (Eng. Abstr.) (Ger)

[Limitations of computed tomographic differential diagnosis of focal liver changes] Wimmer B, et al. **Radiologe** 1988 Aug;28(8):356-61 (16 ref.) (Eng. Abstr.) (Ger)

[CT portography in malignant space-occupying lesions of the liver] Köster O, et al. **ROFO** 1989 Feb;150(2):156-62 (Eng. Abstr.) (Ger)

[Lipiodol UltraFluid in the imaging diagnosis of hepatocarcinoma with cirrhosis] Roversi R, et al. **Radiol Med (Torino)** 1989 Jul-Aug;78(1-2):44-52 (Eng. Abstr.) (Ita)

[Significance of lipiodol-CT in the evaluation of therapeutic effects of Lp-TAE for hepatocellular carcinoma--clinicopathologic study] Jinno K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1660-71 (Eng. Abstr.) (Jpn)

[Clinicopathological evaluation of angiograms in hepatocellular carcinoma] Minematsu S, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1028-39 (Eng. Abstr.) (Jpn)

[Diagnostic value of computed tomography for the detection of invasion of the caudate bile duct branch in carcinoma of the hepatic hilum] Nagino M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):889-97 (Eng. Abstr.) (Jpn)

[Hepatocellular carcinoma associated with schistosomiasis

japonica; CT and angiographic features] Fujimoto H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):139–45 (Eng. Abstr.) **(Jpn)**

[Detection of hepatic neoplasms by hepato-portal subtraction angiography] Takahashi K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1472–4 (Eng. Abstr.) **(Jpn)**

[Usefulness of intra-arterial digital subtraction angiography using carbon dioxide in hepatocellular carcinoma] Takahashi T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1326–32 (Eng. Abstr.) **(Jpn)**

[Findings in the intrahepatic portal vein of patients with hepatocellular carcinoma (HCC) by percutaneous transhepatic portography (PTP) compared to those of the operative specimens] Hirohashi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2642–50 (Eng. Abstr.) **(Jpn)**

[Pharmacoangiography of liver neoplasms and gallbladder arteries with angiotensin II] Fujita Y, et al. **Rinsho Hoshasen** 1989 Feb;34(2):297–300 **(Jpn)**

[A case of hepatocellular carcinoma with atypical angiographic findings] Morita S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):719–22 (Eng. Abstr.) **(Jpn)**

[A case of focal fatty liver difficult to distinguish from the liver metastasis of rectal cancer on CT] Nishimoto H, et al. **Rinsho Hoshasen** 1989 Mar;34(3):367–70 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma; characteristic image diagnosis reflecting difference of histologic grade] Takada I, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1597–600 (Eng. Abstr.) **(Jpn)**

[Evaluation of the newly designed pharmacoangiography (dynamic pharmacoangiography) in hepatic tumors] Watanabe S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):767–72 (Eng. Abstr.) **(Jpn)**

[Pheochromocytomas with extra-adrenal location] Pacho R, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct; 51(5):241–4 (Eng. Abstr.) **(Pol)**

[Fibrolamelar hepatocarcinoma. Radiological characteristics: apropos of 2 cases] Palmer JA, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):257–9 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Distinction between hemangioma of the liver and hepatocellular carcinoma: value of labeled RBC-SPECT scanning. Kudo M, et al. **AJR Am J Roentgenol** 1989 May; 152(5):977–83

Role of scintigraphy in establishing optimal perfusion in hepatic arterial infusion pump chemotherapy. Savolaine ER, et al. **Am J Clin Oncol** 1989 Feb;12(1):68–74

Importance of cholescintigraphy and inferior vena cava flow studies in the differential diagnosis of hepatocellular carcinoma. Botha U, et al. **Am J Physiol Imaging** 1989; 4(2):55–61

The value of SPECT imaging in the diagnosis of hepatic hemangioma. Brunetti JC, et al. **Clin Nucl Med** 1988 Nov; 13(11):800–4

Peripheral enhancement in a hepatic hemangioma seen in a technetium-99m DTPA renal image. Cabahug CJ, et al. **Clin Nucl Med** 1989 Jan;14(1):66–7

Hepatocarcinoma in association with the Alagille syndrome. duCret RP, et al. **Clin Nucl Med** 1988 Dec;13(12):920–1

Tc-99m MDP uptake in hepatoblastoma. Elgazzar AH, et al. **Clin Nucl Med** 1989 Feb;14(2):143

Atypical scintigraphic pattern of liver hemangioma. Hardoff R, et al. **Clin Nucl Med** 1989 May;14(5):376–7

Comparison of delayed imaging with Tc-99m PMT and Tc-99m DEIDA for visualization of hepatoma. Hasegawa Y, et al. **Clin Nucl Med** 1989 Jul;14(7):526–31

Scintigraphic features of malignant epithelioid hemangioendothelioma. Lee KS, et al. **Clin Nucl Med** 1989 Jul;14(7):501–3

Gastric pertechnetate contribution to blood pool images. Levine GM, et al. **Clin Nucl Med** 1989 Jun;14(6):436–8

Gallium-67 SPECT imaging in hepatocellular carcinoma. Rush C, et al. **Clin Nucl Med** 1988 Jul;13(7):535–7

Examples of complementary roles of abdominal CT and radiocolloid liver imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Jul;14(7):532–6

Hepatic hypertrophic osteodystrophy detected on bone imaging. Spencer RP. **Clin Nucl Med** 1988 Aug;13(8):611–2

Is anti-alphafetoprotein immunoscintigraphy a promising approach for the diagnosis of hepatoma? Implications of a quantitative study in 41 patients. Demangeat JL, et al. **Eur J Nucl Med** 1988;14(12):612–20

Compariron of delayed hepatobiliary imaging using 99mTc-Sn-N-pyridoxyl-5-methyltryptophan and 67Ga-citrate imaging for diagnosis of hepatocellular carcinoma. Hasegawa Y, et al. **Eur J Nucl Med** 1988; 14(7–8):414–8

Mechanism of 201Tl uptake in tumours. Schweil AM, et al. **Eur J Nucl Med** 1989;15(7):376–9

Dynamic positron emission tomography with 13N-ammonia in liver tumors. Shibata T, et al. **Eur J Nucl Med** 1988; 14(12):607–11

Sensitivity of nuclear imaging in detecting hepatic space occupying lesions. Jangid DR, et al. **J Assoc Physicians India** 1988 Feb;36(2):145–8

Radiological seminar CCXLXI: Hepatic cavernous hemangioma diagnosed by 99mTc blood pool scintigraphy. Sanders JA. **J Miss State Med Assoc** 1988 Jul;29(7):195–8

Technetium-99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma: relationship between detectability and tumor differentiation [see comments] Calvet X, et al. **J Nucl Med** 1988 Dec;29(12):1916–20. **Comment in:** J Nucl Med 1989 Jul;30(7):1278–80

Technetium-99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma, adenoma, and focal nodular hyperplasia [letter; comment] Kotzerke J, et al. **J Nucl Med** 1989 Jul;30(7):1278–80. **Comment on:** J Nucl Med 1988 Dec;29(12):1916–20

Clinical significance of 99mTc-N-pyridoxyl-5-methyltryptophan (99mTc-PMT) in the diagnosis of intrahepatic masses. Oyamada H, et al. **Radioisotopes** 1989 May;38(5):244–51

[Delayed Tc-99m-PMT imaging in the specific diagnosis of hepatocellular carcinoma] Wu ZM. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):360–3 (Eng. Abstr.) **(Chi)**

[Diagnosis of liver cell adenoma by multiple radiotracer imaging: report of 3 cases] Wu ZM. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):488–90, 511 (Eng. Abstr.) **(Chi)**

[Scintigraphy of neoplastic processes in the liver using tumor-trophic radiopharmaceuticals] Jakovleva LA. **Cesk Radiol** 1986 Oct;40(5):353–9 (Eng. Abstr.) **(Cze)**

[Comparison of the clinical value of an iterative reconstruction procedure with that of a filtered back projection in SPECT of the liver] Reuland P, et al. **Nuklearmedizin** 1989 Aug;28(4):139–44 (Eng. Abstr.) **(Ger)**

[Nuclear medical differentiation of focal lesions of the liver] Wetzel E, et al. **Radiologe** 1988 Aug;28(8):370–3 (15 ref.) (Eng. Abstr.) **(Ger)**

[Accurate detection of hemangioma of the liver by SPECT] Adám E, et al. **Orv Hetil** 1989 Feb 19;130(8):401–3 (Eng. Abstr.) **(Hun)**

[Usefulness of a study with 99m Tc-labelled erythrocytes for the recognition of hepatic angioma in the staging of cancer patients] Ugolotti G, et al. **Radiol Med (Torino)** 1988 Oct;76(4):308–10 (Eng. Abstr.) **(Ita)**

[Scintigraphic estimation of dearterialization after transcatheter hepatic arterial embolization therapy] Mizukawa K, et al. **Kaku Igaku** 1989 Mar;26(3):319–28 (Eng. Abstr.) **(Jpn)**

[Accumulation of 99mTc-phosphorous compounds in primary hepatic tumors associated with hypercalcemia] Otsuka N, et al. **Rinsho Hoshasen** 1989 Feb;34(2):293–5 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemangioma of the liver with 99mTc labeled erythrocytes] Janković Z, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):273–5 (Eng. Abstr.) **(Scr)**

RADIOTHERAPY

Treatment of liver tumors with yttrium-90 microspheres alone. Blanchard RJ, et al. **Can Assoc Radiol J** 1989 Aug; 40(4):206–10

Hepatic irradiation in primary and metastatic liver cancer. Hatano K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S49–53

Radioiodinated fatty acid esters in the management of hepatocellular carcinoma: preliminary findings. Yoo HS, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S54–8

Radioimmunotherapy for hepatocellular carcinoma (HCC) using 131I-anti HCC isoferritin IgG: preliminary results of experimental and clinical studies. Liu KD, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):319–23

CT treatment planning of the liver. Lim M. **Med Dosim** 1988 Sep;13(3):119–26

Microencapsulation of activable radiotherapeutic agents. Jay M, et al. **Prog Clin Biol Res** 1989;292:293–300

Hepatic malignancies: improved treatment with intraarterial Y-90. Herba MJ, et al. **Radiology** 1988 Nov;169(2):311–4

Hepatocellular carcinoma: pilot trial of treatment with Y-90 microspheres. Houle S, et al. **Radiology** 1989 Sep; 172(3):857–60

Immunoradiotherapy for primary nonresectable hepatocellular carcinoma. Sitzmann JV, et al. **Surg Clin North Am** 1989 Apr;69(2):393–400 (24 ref.)

Hepatocellular carcinoma; treatment with a radioiodinated fatty acid ester. Yoo HS, et al. **Yonsei Med J** 1988; 29(2):166–75

[Transcatheter internal radiotherapy of hepatoma using radioactive iodized oil (I-131 Lipiodol)] Kajiya Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):815–21 (Eng. Abstr.) **(Jpn)**

[Radiation therapy of hepatocellular carcinoma] Takagi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):237–45 (Eng. Abstr.) **(Jpn)**

[Conservative treatment of malignant liver tumors] Komov DV, et al. **Vopr Onkol** 1989;35(3):347–52 (Eng. Abstr.) **(Rus)**

SECONDARY

Treatment of probable subclinical liver metastases and gross pancreatic carcinoma with hepatic artery 5-fluorouracil infusion and radiation therapy. Wiley AL Jr, et al. **Acta Oncol** 1988;27(4):377–81

Field-echo pulse sequences used under suspended respiration for detection of liver metastases. Andersson T, et al. **Acta Radiol** 1989 May-Jun;30(3):285–9

Therapeutic approach to liver metastases for colorectal cancer. Gennari L, et al. **Adv Exp Med Biol** 1988; 233:433–41

Glycosaminoglycan (GAG) metabolism as a potential target to prevent metastasis formation. Kopper L, et al. **Adv Exp Med Biol** 1988;233:367–75

The role of pharmacokinetics in the clinical treatment of metastases. Pannuti F, et al. **Adv Exp Med Biol** 1988; 233:443–52

Management of metastatic cancer to the liver. Sugarbaker PH, et al. **Adv Surg** 1989;22:1–56 (205 ref.)

Dynamic hepatic CT scanning. Foley WD. **AJR** 1989 Feb; 152(2):272–4

Detection of liver metastases with superparamagnetic iron oxide in 15 patients: results of MR imaging at 1.5 T. Marchal G, et al. **AJR** 1989 Apr;152(4):771–5

CT evaluation of suspected hepatic metastases: comparison of techniques for i.v. contrast enhancement. Paushter DM, et al. **AJR** 1989 Feb;152(2):267–71

Calcification of metastatic mucinous carcinoma of the liver after embolization [letter] Muramatsu Y, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):657–8

Arterial perfusion abnormalities of the liver after hepatic arterial infusion chemotherapy and their correlation with changes in the metastases: evaluation with CT and angiography. Roth J, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):751–4

Imaging hepatic metastases from colorectal carcinoma: identification of candidates for partial hepatectomy. Seltzer SE, et al. **AJR Am J Roentgenol** 1989 May;152(5):917–23 (65 ref.)

Massive hemoperitoneum following rupture of hepatic metastases from unsuspected choriocarcinoma. Erb RE, et al. **Am J Emerg Med** 1989 Mar;7(2):196–8

Sweet's syndrome and myelodysplastic syndrome in a patient with metastatic breast carcinoma. Meulders Q, et al. **Am J Med** 1989 Jan;86(1):138–9

Hepatic metastases of diffuse iris melanoma 17 years after enucleation. Shields JA, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):749–50

Treatment of biliary obstruction caused by metastatic cancer. Bear HD, et al. **Am J Surg** 1989 Apr;157(4):381–5; discussion 385

Vaccinia colon oncolysate immunotherapy for murine hepatic metastases can be modulated with low-dose interleukin-2. Third place winner: Conrad Jobst Award. Barnavon Y, et al. **Am Surg** 1988 Dec;54(12):696–701

Endothelial cells help in the diagnosis of primary versus metastatic carcinoma of the liver in fine needle aspirates. An immunofluorescence study with vimentin and endothelial cell-specific antibodies. Domagala W, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):8–14

SMS 201-995 and provocation tests in preparation of patients with carcinoids for surgery or hepatic arterial embolization. Ahlman H, et al. **Anesth Analg** 1988 Dec;67(12):1142–8

Surgery of hepatic metastases. Bengmark S. **Ann Acad Med Singapore** 1989 Jan;18(1):72–4

Non-surgical management of liver metastases. Tan YO. **Ann Acad Med Singapore** 1989 Jan;18(1):28–31 (32 ref.)

A comparison of methods to measure the percentage hepatic replacement with colorectal metastases. Hunt TM, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):11–3

Hepatic resection of metastasis from colorectal carcinoma. Morbidity, mortality, and pattern of recurrence. Holm A, et al. **Ann Surg** 1989 Apr;209(4):428–34

Resection of hepatic metastases from colorectal cancer. Biologic perspective. Steele G Jr, et al. **Ann Surg** 1989 Aug;210(2):127–38 (85 ref.)

'Benign' clear-cell tumor (sugar tumor) of the lung with hepatic metastases ten years after resection of pulmonary primary tumor [letter] Sale GE, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1177–8

The resection of hepatic metastases. Another view. Adson MA. **Arch Surg** 1989 Sep;124(9):1023–4 (9 ref.)

Hepatectomy prolongs survival of mice with induced liver metastases. Castillo MH, et al. **Arch Surg** 1989 Feb; 124(2):167–9

Partial hepatectomy augments the liver's antitumor response. Doerr R, et al. **Arch Surg** 1989 Feb;124(2):170–4

Results of surgical excision of one to 13 hepatic metastases in 98 consecutive patients. Minton JP, et al. **Arch Surg** 1989 Jan;124(1):46–8

Hepatic resection for metastases from colorectal carcinoma is of dubious value. Silen W. **Arch Surg** 1989 Sep; 124(9):1021–2 (13 ref.)

An association between parameters of liver blood flow and percentage hepatic replacement with tumour. Hunt TM, et al. **Br J Cancer** 1989 Mar;59(3):410–4

Oestrogen receptor status of primary breast carcinomas and their metastases. Relation to pattern of spread and survival after recurrence. Kamby C, et al. **Br J Cancer** 1989 Aug; 60(2):252–7

Embolization of liver metastases. Allison DJ. **Br J Hosp Med** 1989 Jan;41(1):60–1

Relative proton density and relaxation times in liver metastases during interferon treatment. Andersson T, et al. **Br J Radiol** 1989 May;62(737):433–7

Vascularization of small liver metastases. Archer SG, et al. **Br J Surg** 1989 Jun;76(6):545–8

Growth rates in hepatic metastases [letter] Finlay IG, et al. **Br J Surg** 1989 Jun;76(6):652

Salutary lesson in interpretation of liver palpation at

laparotomy for sigmoid carcinoma. Malpani KR, et al. **Bristol Med Chir J** 1988 Nov;103(4):73

Early liver metastases in patients with medullary carcinoma of the thyroid gland. Gautvik KM, et al. **Cancer** 1989 Jan 1;63(1):175–80

The value of immunoscintigraphy for the operative retreatment of colorectal cancer. Limitations of a new diagnostic method. Hölting T, et al. **Cancer** 1989 Aug 15; 64(4):830–3

Prognostic variables in patients with hepatic metastases from colorectal cancer. Importance of medical assessment of liver involvement. Kemeny N, et al. **Cancer** 1989 Feb 15; 63(4):742–7

A phase I study of hepatic arterial infusion using difluoromethylornithine. Lipton A, et al. **Cancer** 1989 Feb 1;63(3):433–7

Regional chemotherapy for hepatic metastases of colorectal carcinoma (continuous intraarterial versus continuous intraarterial/intravenous therapy). Results of a controlled clinical trial. Safi F, et al. **Cancer** 1989 Jul 15;64(2):379–87

Nonspecific corticosteroid therapy in patients receiving intra-arterial chemotherapy for hepatic metastases of colorectal origin. Janis LW, et al. **Cancer Invest** 1988; 6(3):267–70

Influence of mouse uterus on the metastatic patterns of tumour cells. Maharajan P, et al. **Cancer Lett** 1988 Dec 1;43(1–2):33–6

Selective implantation and growth in rats and mice of experimental liver metastasis in acinar zone one. Barberá-Guillem E, et al. **Cancer Res** 1989 Jul 15; 49(14):4003–10

Synergistic antitumor effects of combination immunotherapy with recombinant interleukin-2 and a recombinant hybrid alpha-interferon in the treatment of established murine hepatic metastases. Cameron RB, et al. **Cancer Res** 1988 Oct 15;48(20):5810–7

Inhibition of experimental liver tumor growth in mice by liposomes containing a lipophilic muramyl dipeptide derivative. Phillips NC, et al. **Cancer Res** 1989 Feb 15; 49(4):936–9

Transcatheter arterial embolization for metastatic liver tumors: a study in resected cases. Kuroda C, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):72–5

Liver metastasis of choriocarcinoma. Report of 44 patients. Wang YE, et al. **Chin Med J [Engl]** 1988 Sep;101(9):637–42

Lactate dehydrogenase isoenzyme patterns in serum of patients with metastatic liver disease. Rotenberg Z, et al. **Clin Chem** 1989 May;35(5):871–3

Liver metastasis in cancer of the stomach and its dependence on the histology of the primary tumor: an autopsy study on 102 cases. Rhomberg W, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):585–90

Peripheral increased activity surrounding metastatic adenocarcinoma to the liver on hepatobiliary imaging. Cifers RW, et al. **Clin Nucl Med** 1989 Feb;14(2):130–1

Adrenal cortical carcinoma with hepatic metastasis: preoperative radiological evaluation. Azodo MV, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):171–4

Tests for liver metastases in gastrointestinal cancer. A critical review. Christensen M, et al. **Dig Dis** 1989;7(4):194–202

Pharmacoangiographic diagnosis of venous invasion of carcinoma of the colon with reference to liver metastases. Iijima T. **Dis Colon Rectum** 1988 Sep;31(9):718–22

No treatment option for liver metastases from colorectal adenocarcinoma. Palmer M, et al. **Dis Colon Rectum** 1989 Aug;32(8):698–701

Diffuse multinodular hepatic steatosis of metastatic appearance. A case description [letter] Amoyal P, et al. **Endoscopy** 1989 Jul;21(4):193–4

A new reproducible model of hepatic and peritoneal metastases from colonic carcinoma. Archer SG, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1623–32

Measurements of response to chemotherapy using ultrasound in metastatic liver involvement. Bleiberg H, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):857–9

Arterial occlusion reduces tumour cell lodgement in the rat liver. Blomqvist G, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1573–8

Sensitivity to six antitumor drugs differs between primary and metastatic liver cancers. Kanematsu T, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1511–3

Endocrine and immune effects of melatonin therapy in metastatic cancer patients. Lissoni P, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):789–95

Eighteen-year survival of unresected leiomyoblastoma of the stomach with liver and lymph node metastases. Baba H, et al. **Eur J Surg Oncol** 1989 Apr;15(2):159–64

Hypercalcaemia and breast cancer—an increased humoral component in patients with liver metastases. Coleman RE, et al. **Eur J Surg Oncol** 1988 Oct;14(5):423–8

Radioimmunolocation of hepatic and pulmonary metastasis of human colon adenocarcinoma. Takahashi H, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1317–29

Ultrasonic patterns observed in hepatic metastases from breast carcinoma: diagnosis and evolution. Martínez A, et al. **Gastrointest Radiol** 1989 Winter;14(1):49–54

Liver function tests in patients with computed tomography demonstrated hepatic metastases. Ottmar MD, et al. **Gastrointest Radiol** 1989 Winter;14(1):55–8

Hepatic resection for colorectal liver metastases. Roh MS. **Hematol Oncol Clin North Am** 1989 Mar;3(1):171–81 (35 ref.)

Tumor markers, liver function tests and symptoms in 115 patients with isolated colorectal liver metastases. Lorenz M, et al. **Int J Biol Markers** 1989 Jan–Mar;4(1):18–26

Diagnosis of bone and liver metastases in breast cancer comparing tumor markers and imaging techniques. Zanco P, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):103–5

Anti-tumor effect of recombinant murine TNF-alpha (rMuTNFa) given by continuous i.v. infusion as compared to repeated i.v. injections in a rat liver metastasis model. Scheringa M, et al. **Int J Cancer** 1989 May 15;43(5):905–9

Do aggressive subclones within primary colorectal cancer give rise to liver metastases? Jass JR, et al. **Int J Color Dis** 1989;4(2):109–117

Stage IV-S metastatic neuroblastoma presenting as skin nodules at birth. Nguyen TQ, et al. **Int J Dermatol** 1988 Dec;27(10):712–3

Fatal clostridial pancreatitis following ERCP and percutaneous needle biopsy. Howard JM, et al. **Int J Pancreatol** 1989 Oct;5(3):305–10

Phase I–II study of prophylactic hepatic irradiation with local irradiation and systemic chemotherapy for adenocarcinoma of the pancreas. Komaki R, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1447–52

Iododeoxyuridine (IdUrd) incorporation into DNA of human hematopoietic cells, normal liver and hepatic metastases in man: as a radiosensitizer and as a marker for cell kinetic studies. Speth PA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1247–50

Histoimmunological characterization of the cellular reaction to liver metastases induced by colon cancer cells in syngeneic rats. Martin M, et al. **Invasion Metastasis** 1989; 9(4):216–30

Effect of partial hepatectomy on experimental liver invasion by intraportally injected colon carcinoma cells in rats. van Dale P, et al. **Invasion Metastasis** 1988;8(4):217–27

Combination chemotherapy in metastatic tumors of unknown origin. 5-Fluorouracil, adriamycin and mitomycin C for adenocarcinomas and adriamycin, vinblastine and mitomycin C for anaplastic carcinomas. Sulkes A, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):604–10

Exophytic mass of the floor of the mouth. Whitt JC, et al. **J Am Dent Assoc** 1989 Sep;119(3):425–7

Massive hemorrhage secondary to metastatic testicular carcinoma. Cunningham LN, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):341–4

Glycolipids of metastatic tissue in liver from colon cancer: appearance of sialylated Le(x) and Le(x) lipids. Taki T, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):998–1003

Effects of sandostatin on plasma chromogranin-A levels in neuroendocrine tumors. Moattari AR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):902–5

A phase I study of intraarterial iododeoxyuridine in patients with colorectal liver metastases. Chang AE, et al. **J Clin Oncol** 1989 May;7(5):662–8

The modulation of fluorouracil with leucovorin in metastatic colorectal carcinoma: a prospective randomized phase III trial. Gastrointestinal Tumor Study Group. Petrelli N, et al. **J Clin Oncol** 1989 Oct;7(10):1419–26

Delayed enhancement of ascites following high-dose contrast CT for liver metastases. Minutoli A, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):916–7

CT and MR imaging of advanced Zollinger-Ellison syndrome. Tjon A Tham RT, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):821–8

Dynamic CT vs 0.5 T MR imaging in the detection of surgically proven hepatic metastases. Zeman RK, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):637–44

Case report: calcified liver metastases from osteosarcoma. Shapiro RS, et al. **J Comput Tomogr** 1988 Jul;12(3):196–8

Hepatic resection for metastatic colorectal cancer. Koretz MJ. **J Med Assoc Ga** 1988 Dec;77(12):904–5

Effective palliation of metastatic adenocarcinoma to the liver: a case report. Smith RA, et al. **J Miss State Med Assoc** 1988 Oct;29(10):301–4

Differences in biodistribution of indium-111-and iodine-131-labeled B72.3 monoclonal antibodies in patients with colorectal cancer. Yokoyama K, et al. **J Nucl Med** 1989 Mar;30(3):320–7

Multiple fine needle liver aspiration cytology in the diagnosis of liver metastases: a prospective comparison with ultrasound and radionuclide scanning. Armstrong DN, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):244–6

Colorectal liver metastases: is 'no treatment' still best? Allen-Mersh TG. **J R Soc Med** 1989 Jan;82(1):2–3 (27 ref.)

Determinants of survival in patients with unresectable colorectal liver metastases. Chang AE, et al. **J Surg Oncol** 1989 Apr;40(4):245–51

Results of liver angiography and perfusion scintigraphy do not correlate with response to hepatic artery infusion chemotherapy. Lehner B, et al. **J Surg Oncol** 1988 Oct; 39(2):73–8

Site-directed metastasis: a model to study site variations in treatment response. Casey ME, et al. **J Surg Res** 1988 Nov; 45(5):443–51

Ultrasound manifestation of metastatic perihepatic calcifications from ovarian carcinoma [letter] Pombo F, et al. **JCU** 1989 May;17(4):304–6

Preventive and antiproliferative effects of tumor necrosis factor against experimental hepatic metastases of mouse color.-26 tumor. Nishiyama Y, et al. **Jpn J Cancer Res** 1989 Apr;80(4):366–72

Enhanced liver metastatic potential of alpha-fetoprotein-producing human gastric carcinoma after carbon tetrachloride-induced liver damage in nude mice. Sawada H, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):341–7

Murine liver metastasis model using L5178Y-ML lymphoma and the effect of antitumor agents on the metastasis. Watanabe Y, et al. **Jpn J Cancer Res** 1988 Nov; 79(11):1208–16

Treatment of a case of asynchronous bilateral renal cell carcinomas with inferior vena caval thrombus and hepatic metastases. Takai K, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):379–85

Preoperative ultrasonography screening for liver metastases of patients with colorectal cancer. Yoshida T, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):112–5

Radioisotopic assessment of hepatic arterial flow to evaluate perfusion patterns of totally implanted drug-delivery systems. Dondi M, et al. **Life Support Syst** 1983;1 Suppl 1:82–4

Thomsen-Friedenreich (T)-active glycoproteins and a blood group N antigen precursor with T activity from human liver metastatic carcinomas. Otsuka K, et al. **Naturwissenschaften** 1988 Aug;75(8):407–9

Liver vitamin A concentration in patients who died of cancer. Ostrowski J, et al. **Neoplasma** 1989;36(3):353–5

A malignant tumor of the pancreas producing glucagonoma syndrome: immunocytochemistry and ultrastructure of liver metastases and comparison with the primary tumor. Bani D, et al. **Pancreas** 1989;4(4):492–5

Metastatic neoplasms of the liver: their frequency in relation to age and to locations of the primary neoplasms. Analysis of 10157 malignant tumours at autopsy. Silvestri F, et al. **Pathologica** 1988 Sep–Oct;80(1069):533–49

Metastatic Wilms' tumor to the liver with MR findings simulating cysts: case report emphasizing need for integrated imaging. Brody AS, et al. **Pediatr Radiol** 1989; 19(5):337–8

Hepatic metastases due to choriocarcinoma. Alveyn CG, et al. **Postgrad Med J** 1988 Dec;64(758):941–2

An unusual case of shock in a young woman [letter] McConnell AA, et al. **Postgrad Med J** 1989 Feb;65(760):120

Can something be done for patients with liver metastases for colorectal cancer? O'Mahony C. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):909–10

Ultrasound case of the day. Cystic neuroblastoma with metastatic disease of the liver. Kurtz AB, et al. **Radiographics** 1989 Mar;9(2):361–4

Regional anesthesia for hepatic arterial embolization. Coldwell DM, et al. **Radiology** 1989 Sep;172(3 Pt 2):1039–40

Liver metastases: detection with MR imaging at 0.5 and 1.5 T. Reinig JW, et al. **Radiology** 1989 Jan;170(1 Pt 1):149–53

Reliability of scintigraphic diagnosis of liver metastases. Gjørup T, et al. **Scand J Gastroenterol** 1988 Oct; 23(8):955–60

Surgery for synchronous hepatic metastases of colorectal cancer. Bismuth H, et al. **Scand J Gastroenterol Suppl** 1988; 149:144–9

The role of occult hepatic metastases in staging colorectal carcinoma. Finlay IG, et al. **Scand J Gastroenterol Suppl** 1988;149:150–4

Pre-operative scanning of the liver for colorectal liver metastases. Flowerdew AD, et al. **Scand J Gastroenterol Suppl** 1988;149:62–8

Prevention of metastases in curative treatment of colorectal cancer. Jeekel J. **Scand J Gastroenterol Suppl** 1988; 149:117–9

Approach to hepatic metastases from colorectal adenocarcinoma. Mazzaferro V, et al. **Semin Liver Dis** 1988 Aug;8(3):247–53 (77 ref.)

Approach to hepatic involvement by endocrine tumors of the gastrointestinal tract. Stockmann F, et al. **Semin Liver Dis** 1988 Aug;8(3):254–62 (99 ref.)

Value of in vivo tissue testing in predicting the clinical response to regional perfusion chemotherapy in colorectal cancer patients with liver metastases. Schmitz R, et al. **Strahlenther Onkol** 1989 Jul;165(7):546–7

Current trends in management of hepatic metastases. Williams NN, et al. **Surg Annu** 1989;21:215–35 (110 ref.)

Surgery for colorectal cancer metastatic to the liver. Optimizing the results of treatment. Hughes K, et al. **Surg Clin North Am** 1989 Apr;69(2):339–59

Experience with colorectal carcinoma metastatic to the liver. Saenz NC, et al. **Surg Clin North Am** 1989 Apr;69(2):361–70 (46 ref.)

Efficacy of peroperative liver function tests and ultrasound in detecting hepatic metastasis in carcinoma of the breast. Clark CP 3d, et al. **Surg Gynecol Obstet** 1988 Dec; 167(6):510–4

Transplantation of the liver for metastatic endocrine tumors of the intestine and pancreas. Makowka L, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):107–11

Chemoinfusion of the hepatic artery for metastases to the liver. Sterchi JM, et al. **Surg Gynecol Obstet** 1989 Apr; 168(4):291–5

Prospective evaluation of hepatic imaging studies in the detection of colorectal metastases: correlation with surgical findings. Ward BA, et al. **Surgery** 1989 Feb;105(2 Pt 1):180–7

Copper histochemistry of 5 murine tumors and their respective metastases. Fuchs AG, et al. **Tumour Biol** 1989; 10(1):38–45

Related glycoproteins from normal secretory and malignant breast cells. Purification and initial comparative characterizations. Ishida M, et al. **Tumour Biol** 1989; 10(1):12–22

Benign hepatic masses mimicking metastatic renal cell carcinoma. Wishnow KI, et al. **Urology** 1989 Mar; 33(3):250–2

[Hepatic metastasis of choriocarcinoma] Wang YE. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Jul;23(4):228–30, 254 (Eng. Abstr.) (Chi)

[Intra-arterial chemotherapy of metastatic liver tumors and tumors in the sub-hepatic area] Andrysek O, et al. **Cas Lek Cesk** 1987 Jun 12;126(24):740–3 (Eng. Abstr.) (Cze)

[Prognosis in synchronous liver metastasis from colorectal cancer. A multicenter study of patients with cancer of the rectum and cancer of the rectosigmoid colon] Balslev I, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1045–8 (Eng. Abstr.) (Dan)

[Isodense and isoechoic liver metastases] Lorentzen T, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):951–2 (Eng. Abstr.) (Dan)

[Carcinoid cardiopathy: value of ultrasonography and MRI. Apropos of a case related to bronchial tumor. Review of the literature] Ebagosti A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):91–5 (27 ref.) (Eng. Abstr.) (Fre)

[Analysis by flow cytometry of hepatic metastases of colorectal cancer] Salmon RJ, et al. **Ann Chir** 1988; 42(9):656–60 (20 ref.) (Eng. Abstr.) (Fre)

[Anatomo-clinical conference. Pitié-Salpêtrière Hospital. Case No. 1—1989. Multiple hepatic lesions and persistent fever under antiobiotherapy] De Gennes C, et al. **Ann Med Interne (Paris)** 1989;140(2):142–8 (Fre)

[Evaluation of 242 laparotomies for hepatic metastasis performed at the Institut Gustave Roussy over 5 years] Elias D, et al. **J Chir (Paris)** 1988 Aug–Sep;125(8–9):479–83 (Eng. Abstr.) (Fre)

[Natural history of synchronous hepatic metastases from a non-treated colorectal cancer] Giacchi R, et al. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):419–23 (Eng. Abstr.) (Fre)

[Excisional surgery of hepatic metastases of colorectal adenocarcinoma] Pouyet M, et al. **J Chir (Paris)** 1988 Oct; 125(10):565–70 (11 ref.) (Eng. Abstr.) (Fre)

[Surgical treatment of hepatic metastases of colorectal cancer. Results and indications] Belghiti J. **Presse Med** 1989 Jan 7–14;18(1):7–8 (Fre)

[Surgical treatment of hepatic metastases of cylindroma of the submaxillary gland (letter)] Houvenaeghel G, et al. **Presse Med** 1989 May 20;18(20):1030–1 (Fre)

[Liver resection in patients with metastases of colorectal cancers. Results and prognostic factors] Hohenberger P, et al. **Chirurg** 1988 Jun;59(6):410–7 (Eng. Abstr.) (Ger)

[Status of skeletal scintigraphy, lung roentgen image and liver sonography in the follow-up of breast cancer] Schünemann H. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):379–84 (Eng. Abstr.) (Ger)

[Scintigraphic search for metastases in patients with neoplasms of the head and neck] Brauneis J, et al. **HNO** 1988 Nov;36(11):445–51 (Eng. Abstr.) (Ger)

[Therapy concepts in colorectal liver metastases. What is proven, what is open to discussion?] Muhrer KH, et al. **Leber Magen Darm** 1988 Dec;18(6):281–9 (55 ref.) (Eng. Abstr.) (Ger)

[Bronchobiliary fistula in necrotizing liver metastasis of sigmoid cancer following regional chemotherapy] Kocks I, et al. **Med Klin** 1988 Jul 15;83(15):499–501 (Ger)

[Intra-arterial 5-fluorouracil chemotherapy in liver metastases of colorectal cancer] Schlag P, et al. **Med Klin** 1988 Oct 28;83(21):705–9, 734 (Eng. Abstr.) (Ger)

[Perfusion scintigraphy using 99mTc-labeled microspheres in the functional evaluation of an implanted portsystem for intraarterial cytostatic treatment of liver metastases] Madler M, et al. **Nuklearmedizin** 1988 Oct;27(5):228–30 (Eng. Abstr.) (Ger)

[Radioimmunotherapy of solitary liver metastases using intratumor instillation of 131I-labeled monoclonal antibodies—initial results of a clinical study] Müller-Gärtner HW, et al. **Nuklearmedizin** 1988 Dec; 27(6):258–65 (Eng. Abstr.) (Ger)

[Detection of liver metastases in gynecologic neoplasms by sonography, scintigraphy, computerized tomography and liver enzymes] Schillinger H, et al. **Onkologie** 1988 Oct; 11(5):216–20 (Eng. Abstr.) (Ger)

[Bone marrow necrosis in a patient with metastatic breast cancer in chemotherapy with chlorambucil, methotrexate and prednisone] Voigtmann R. **Onkologie** 1989 Feb; 12(1):36–8, 40 (Eng. Abstr.) (Ger)

[Iodine-accumulating, hormone-producing liver metastasis of a follicular thyroid carcinoma] Krebs B, et al. **ROFO** 1989 Apr;150(4):489 (Ger)

[Bone and liver metastases in uterine, cervical and ovarian cancer] Karkavitsas N. **Rontgenblatter** 1988 Aug; 41(8):326–8 (Eng. Abstr.) (Ger)

[Computed tomographic and angiographic studies of arterial liver perfusion following intra-arterial infusion chemotherapy using 5-fluoro-2-deoxyuridine] Roth J, et al. **Rontgenblatter** 1989 Feb;42(2):80–4 (Eng. Abstr.) (Ger)

[Correlation of the perfusion of liver metastases in angio-CT and PET] Beyer-Enke SA, et al. **Rontgenpraxis** 1989 Mar; 42(3):84–8 (Ger)

[Why are metastases in cirrhotic livers so rare?] Seitz G. **Ultraschall Med** 1989 Jun;10(3):123–6 (28 ref.) (Eng. Abstr.) (Ger)

[Therapy of metastatic carcinoid with the somatostatin analog octreotide and with recombinant interferon alfa 2b] Linkesch M, et al. **Wien Klin Wochenschr** 1989 Jun 23; 101(13):455–7 (Eng. Abstr.) (Ger)

[Our therapy concept in nonresectable liver metastases] Margreiter R, et al. **Wien Med Wochenschr** 1988 Jul 15; 138(13):305–7 (Eng. Abstr.) (Ger)

[Surgery of resectable liver metastases] Priesching A. **Wien Med Wochenschr** 1988 Jul 15;138(13):302–4 (Eng. Abstr.) (Ger)

[What does after care in colorectal cancer accomplish? A prospective study over an 8-year period] Schiessel R, et al. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):263–6 (Eng. Abstr.) (Ger)

[The frequency and localization of hematogenic distant metastases of bronchial carcinoma] Schulz G. **Z Erkr Atmungsorgane** 1989;172(2):99–105 (Eng. Abstr.) (Ger)

[Is there a primary indication for regional therapy of liver metastases of gastrointestinal tumors?] Herrmann R. **Z Gastroenterol [Verh]** 1989 Jul;24:192–3 (Ger)

[Locoregional chemotherapy of liver metastases] Hohenberger P, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:186–8 (22 ref.) (Ger)

[Can the occurrence of extrahepatic metastases in regional chemotherapy of the liver be prevented by adding systemic chemotherapy? A randomized multicenter study] Hottenrott C, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:199–201 (Ger)

[Intra-portal chemoprevention and therapy of liver metastases] Laffer U. **Z Gastroenterol [Verh]** 1989 Jul; 24:189–91 (Ger)

[Interdisciplinary therapy concepts in primary and secondary neoplasms of the liver] Strohmeyer G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:66–9 (29 ref.) (Ger)

[Carcinoid tumor with cystic liver metastases] Klemm G, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):342–4 (Eng. Abstr.) (Ger)

[A draining carcinoma of the stomach] Honma K, et al. **Zentralbl Allg Pathol** 1989;135(2):155–9 (Eng. Abstr.) (Ger)

[Locoregional chemotherapy of liver tumors] Henne-Bruns D, et al. **Zentralbl Chir** 1989;114(10):668–76 (Eng. Abstr.) (Ger)

[Experiences with intra-arterial tumor chemotherapy of malignant liver tumors via totally implantable catheter systems] Matthias M, et al. **Zentralbl Chir** 1989; 114(10):655–67 (Eng. Abstr.) (Ger)

[Correlations between lymphocytes and female hormonal factors (letter)] Deák Bárdos G. **Orv Hetil** 1988 Jun 19; 129(25):1343 (Hun)

[Treatment of hepatic metastases. Our experience] Gosso P, et al. **Minerva Chir** 1988 Oct 15;43(19):1621–3 (Eng. Abstr.) (Ita)

[Clinical considerations on 2 cases of carcinoid tumor of the ileum with hepatic metastases] Vietri F, et al. **Minerva Chir** 1988 Oct 31;43(20):1745–51 (Eng. Abstr.) (Ita)

[An autopsied case of esophageal cancer metastasizing to primary hepatocellular carcinoma] Doihara H, et al. **Gan No Rinsho** 1989 Mar;35(4):516–22 (14 ref.) (Eng. Abstr.) (Jpn)

[Complete remission, obtained by multidisciplinary treatment of recurrent breast cancer with carcinomatous pleuritis, and cervical lymph node and diver metastasis] Kusama M, et al. **Gan No Rinsho** 1989 Jan;35(1):93–9 (Eng. Abstr.) (Jpn)

[A histopathological investigation of metastatic liver tumors—the classification of their histological patterns and metastatic pathways taking into account the microscopic metastatic foci] Shibata H. **Gan No Rinsho** 1989 Feb; 35(3):335–7 (Eng. Abstr.) (Jpn)

[The therapeutic effects of OK-432 combined adoptive immunotherapy (AIT) against liver metastases of breast cancer] Okino T, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2–3):1913–9 (Eng. Abstr.) (Jpn)

[Chemotherapeutic effect on metastatic tumors] Takahashi H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1255–9 (Eng. Abstr.) (Jpn)

[Preventive effects of intra-arterial infusion chemotherapy of liver metastasis in non-resectable pancreatic cancer] Yasuda T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2863–6 (Eng. Abstr.) (Jpn)

[A case of liver metastasis of gastric cancer which was made resectable by hypertheromo-chemo-radiotherapy] Urade M, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):446–9 (5 ref.) (Eng. Abstr.) (Jpn)

[Analysis of renal cell carcinoma with tumorous legion in the liver] Tanaka Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):229–35 (Eng. Abstr.) (Jpn)

[A case of metastatic liver tumor with hypoglycemic attacks] Ooi S, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):712–6 (Jpn)

[A case of nontraumatic Clostridium septicum infection with intrahepatic pneumatic tumor and adenocarcinoma of the transverse colon] Tokita H, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1873–8 (Jpn)

[An autopsy case of calcified squamous cell carcinoma of the pancreas with cystic hepatic metastases] Hachiya H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep; 85(9):1712–6 (Jpn)

[A new determination method of type IV collagen in sera and its clinical application for liver metastasis in gastrointestinal cancer] Suzuki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2696 (Jpn)

[Primary angiosarcoma of the spleen with metastases in the liver—radionuclide and angiographic study] Hayashi K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1137–40 (Eng. Abstr.) (Jpn)

[Multi-modal treatment of patients with multiple liver metastases caused by sigmoid cancer] Sawada S, et al. **Rinsho Hoshasen** 1989 May;34(5):585–9 (Eng. Abstr.) (Jpn)

[Diagnosis of metastatic foci. Selected problems of the management tactics and an evaluation of diagnostic possibilities of currently used radiologic methods] Pruszyński B. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun; 52(3):165–9 (Eng. Abstr.) (Pol)

[Exercises of clinical reasoning] **Arq Gastroenterol** 1988 Jul–Sep;25(3):178–82 (Por)

[Ocular melanoma metastases to primary liver carcinoma] Samsonov VA. **Arkh Patol** 1989;51(5):67–9 (Eng. Abstr.) (Rus)

[Gamma-glutamyltranspeptidase and alkaline phosphatase in the blood in the diagnosis of malignant neoplasms] Tokarskaia ZB, et al. **Lab Delo** 1989;(4):72–3 (Rus)

[Echographic semeiotics of metastatic lesions of the liver] Vesnin AG, et al. **Vopr Onkol** 1988;34(11):1335–9 (Eng. Abstr.) (Rus)

[Intra-arterial chemotherapy, using the hepatic artery, in metastases of colorectal carcinoma] Hidalgo OF, et al. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):169–76 (77 ref.) (Eng. Abstr.) (Spa)

SECRETION

The secretion of high molecular weight cathepsin B from cultured human liver cancers. Ohsawa T, et al. **Acta Med Okayama** 1989 Feb;43(1):9–15

Effects of chemotherapeutic agents on alpha-fetoprotein secretion and growth of human hepatoma cell lines in vitro. Murasoka A, et al. **Br J Cancer** 1989 Apr;59(4):569–72

Secretion of Mr 46,000 protein from human hepatoma cells treated with tumor promotors is regulated by c-myc gene expression. Miwatani H, et al. **Cell Struct Funct** 1989 Apr; 14(2):183–92

[Clinical studies on the relation of abnormal growth hormone secretions to hepatic diabetes mellitus in patients with hepatocellular carcinoma] Kamijo K, et al. **Gan No Rinsho** 1989 Jun;35(7):775–9 (Eng. Abstr.) (Jpn)

SURGERY

Surgical treatment of cavernous hemangioma of the liver. Andersson R, et al. **Acta Chir Scand** 1988 Oct;154(10):577–9

Extended right hepatic lobectomy: combined resection of inferior vena cava and its reconstruction by EPTFE graft (Gore-Tex). Case report. Kumada K, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):481–3

Primary non-Hodgkin lymphoma treated with liver resection. Case report. Søndenaa K, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):681–2

Resectability of liver tumours evaluated by computed tomography. Tidebrant G, et al. **Acta Radiol** 1988 Sep–Oct; 29(5):531–4

MR appearance of the liver after partial hepatectomy. Arrivé L, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1215–20

Hepatic resection for primary and metastatic tumors. Attiyeh FF, et al. **Am J Surg** 1988 Nov;156(5):368–73

Intraoperative ultrasonography in resection of small hepatocellular carcinoma associated with cirrhosis. Nagasue N, et al. **Am J Surg** 1989 Jul;158(1):40–2

Management of cavernous hemangioma of the liver. Sinanan MN, et al. **Am J Surg** 1989 May;157(5):519–22

Synchronous hepatocellular carcinoma and adenocarcinoma of the colon. Mainwaring RD, et al. **Am Surg** 1989 Aug; 55(8):528–32

Surgical resection for hepatocellular carcinoma. Choi TK. **Ann Acad Med Singapore** 1988 Jan;17(1):96–100 (45 ref.)

Synchronous primary hepatocellular carcinoma and multiple early gastric cancer—a case report. Ng BL, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):101–3

Vascular occlusions for liver resections. Operative management and tolerance to hepatic ischemia: 142 cases. Delva E, et al. **Ann Surg** 1989 Feb;209(2):211–8

Spontaneous ruptured hepatocellular carcinoma. An appraisal of surgical treatment. Lai EC, et al. **Ann Surg** 1989 Jul;210(1):24–8

Liver cell adenomas. A 12-year surgical experience from a specialist hepato-biliary unit. Leese T, et al. **Ann Surg** 1988 Nov;208(5):558–64

Intraoperative ultrasound of the liver affects operative decision making. Parker GA, et al. **Ann Surg** 1989 May; 209(5):569–76; discussion 576–7

Perioperative blood transfusions are associated with decreased time to recurrence and decreased survival after

resection of colorectal liver metastases. Stephenson KR, et al. **Ann Surg** 1988 Dec;208(6):679–87

Surgical margin and recurrence after resection of hepatocellular carcinoma in patients with cirrhosis. Further evaluation of limited hepatic resection. Yoshida Y, et al. **Ann Surg** 1989 Mar;209(3):297–301

The resection of hepatic metastases. Another view. Adson MA. **Arch Surg** 1989 Sep;124(9):1023–4 (9 ref.)

Hepatic resection in 120 patients with hepatocellular carcinoma. Chen MF, et al. **Arch Surg** 1989 Sep; 124(9):1025–8

Improved early results of elective hepatic resection for liver tumors. One hundred consecutive hepatectomies in cirrhotic and noncirrhotic patients. Franco D, et al. **Arch Surg** 1989 Sep;124(9):1033–7

Primary cancer of the liver. Evaluation, treatment, and prognosis. McDermott WV, et al. **Arch Surg** 1989 May; 124(5):552–4; discussion 554–5

Hepatic resection for metastases from colorectal carcinoma is of dubious value. Silen W. **Arch Surg** 1989 Sep; 124(9):1021–2 (13 ref.)

Hepatic resection: value of operative ultrasound and ultrasonic dissection. Hardy KJ, et al. **Aust N Z J Surg** 1989 Aug;59(8):621–3

The surgical management of hepatoma: a review of 29 hepatic resections. Ngoi SS, et al. **Australas Radiol** 1988 May; 32(2):227–9

Surgical management of space-occupying lesions in the liver. Leese T, et al. **Baillieres Clin Gastroenterol** 1989 Jan; 3(1):253–77 (93 ref.)

Liver transplantation for primary and secondary hepatic apudomas. Arnold JC, et al. **Br J Surg** 1989 Mar; 76(3):248–9

Hepatic tumour resection with profound hypothermia and circulatory arrest. Goh DW, et al. **Br J Surg** 1989 Jun; 76(6):548–9

Treatment of hepatic epithelioid hemangioendothelioma with liver transplantation. Marino IR, et al. **Cancer** 1988 Nov 15;62(10):2079–84

Surgery of small hepatocellular carcinoma. Analysis of 144 cases. Tang ZY, et al. **Cancer** 1989 Jul 15;64(2):536–41

Experience with major hepatic resections for hepatocellular carcinoma. Chen CL, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S101–3

Experience with transplantation in the treatment of liver cancer. Jenkins RL, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S104–9

Liver resection for hepatocellular carcinoma: results from 150 consecutive patients. Nagasue N, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S78–82

Conditions favoring long-term survival after hepatectomy for hepatocellular carcinomas. Yamanaka N, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S83–6

Epithelioid hemangioendothelioma and liver transplantation [letter] van de Stadt J, et al. **Gastroenterology** 1989 Jan; 96(1):275–6

Recurrent form of hepatocellular carcinoma after partial hepatic resection. Ezaki T, et al. **Hepatogastroenterology** 1989 Jun;36(3):164–7

Primary hepatic cancer—the role of limited resection and total hepatectomy with orthotopic liver replacement. Funovics JM, et al. **Hepatogastroenterology** 1988 Dec; 35(6):316–20

Patterns of intrahepatic recurrence after curative resection of hepatocellular carcinoma. Matsumata T, et al. **Hepatology** 1989 Mar;9(3):457–60

The use of cardiopulmonary bypass and circulatory arrest in the resection of massive tumors. Fraser GC, et al. **J Pediatr Surg** 1988 Aug;23(8):777–8

Malignant mesenchymoma of the liver in children. Newman KD, et al. **J Pediatr Surg** 1989 Aug;24(8):781–3

Preoperative chemotherapy in 'unresectable' hepatoblastoma. Pierro A, et al. **J Pediatr Surg** 1989 Jan;24(1):24–8; discussion 29

Hepatic hemangioma: resection using hypothermic circulatory arrest in the newborn. Ranne RD, et al. **J Pediatr Surg** 1988 Oct;23(10):924–6

Use of intraoperative ultrasound during hepatic resection in pediatric patients. Thomas BL, et al. **J Pediatr Surg** 1989 Jul;24(7):690–2; discussion 692–3

Evaluation of partial hepatectomy for primary liver carcinoma. Li GH, et al. **J Surg Oncol** 1989 May;41(1):5–8

Surgical treatment of adrenal metastasis following hepatectomy for hepatocellular carcinoma. Takayasu K, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):62–6

Status of ischemic therapy for hepatic tumors. Bengmark S, et al. **Surg Clin North Am** 1989 Apr;69(2):411–8 (30 ref.)

Pediatric hepatic surgery. Guzzetta PC, et al. **Surg Clin North Am** 1989 Apr;69(2):251–7 (18 ref.)

Experience with resection of primary hepatic malignancy. Iwatsuki S, et al. **Surg Clin North Am** 1989 Apr; 69(2):315–22

Hepatic cryosurgery. Ravikumar TS, et al. **Surg Clin North Am** 1989 Apr;69(2):433–40

Avoidance of injury to the left hepatic duct during parenchymal dissection for hepatic trisegmentectomy. Brower ST, et al. **Surg Gynecol Obstet** 1989 May; 168(5):457–8

Risk factors before hepatectomy, hepatic function after hepatectomy and computed tomographic changes as indicators of mortality from hepatic failure. Didolkar MS, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):17–26

Repeat hepatectomy for recurrent malignant tumors of the liver. Lange JF, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):119–26 (38 ref.)

Enucleation of intrahepatic biliary cystadenomas. Pinson CW, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):534–7

Use of microcrystalline collagen powder and fibrinogen tissue adhesive for hemostasis and prevention of rebleeding in patients with hepatocellular carcinoma associated with cirrhosis of the liver. Sakon M, et al. **Surg Gynecol Obstet** 1989 May;168(5):453–4

Lack of intrahepatic recurrence of hepatocellular carcinoma by temporary portal venous embolization with starch microspheres. Matsumata T, et al. **Surgery** 1989 Feb;105(2 Pt 1):188–91

Adverse effects of preoperative hepatic artery chemoembolization for resectable hepatocellular carcinoma: a retrospective comparison of 138 liver resections. Nagasue N, et al. **Surgery** 1989 Jul;106(1):81–6

Liver transplantation for hereditary tyrosinemia in the presence of hepatocellular carcinoma. Esquivel CO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2445–6

Liver grafting for malignant liver tumors. Pichlymayr R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2403–5

Liver transplantation for malignant liver disease. Wolff H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2406

Orthotopic liver transplantation in a patient with a giant cavernous hemangioma of the liver and Kasabach–Merritt syndrome. Klompmaker IJ, et al. **Transplantation** 1989 Jul; 48(1):149–51

[The use of Ampoxen in treating a large hemangioma of the liver] Avramov T, et al. **Khirurgiia (Sofiia)** 1989;42(2):83–4 **(Bul)**

[Normothermic total hepatic vascular exclusion for hepatectomy] Ding YT. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):392–4 (Eng. Abstr.) **(Chi)**

[Nursing care of patients with homologous total spleen transplantation] Jin GX, et al. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):135–7 **(Chi)**

[Resection of hepatic hilar liver cancer] Yu YQ. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):157–9, 189 (Eng. Abstr.) **(Chi)**

[Caudate lobe resection for primary hepatocellular carcinoma—a case report] He S. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):437–9 (Eng. Absr.) **(Chi)**

[Recurrence of primary carcinoma of the liver in liver allotransplantation] Černý E, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):916–7 (Eng. Abstr.) **(Cze)**

[Hepatocellular carcinoma. Possibilities of surgical treatment] Huguet C. **Ann Chir** 1988;42(10):715–6 **(Fre)**

[Surgical resection of hepatic metastases of colorectal origin] Nordlinger B, et al. **Ann Chir** 1988;42(6):375–9 (26 ref.) **(Fre)**

[Surgery of hepatoblastoma and hepatocarcinoma in children in the era of preoperative chemotherapy. Current progress and limitations] Gauthier F, et al. **Chir Pediatr** 1988; 29(6):307–12 (Eng. Abstr.) **(Fre)**

[Results of the excision of benign tumors of the liver in 22 patients] Vons C, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):280–4 (Eng. Abstr.) **(Fre)**

[Surgical treatment of hepatic metastases of colorectal cancer. Results and indications] Belghiti J. **Presse Med** 1989 Jan 7–14;18(1):7–8 **(Fre)**

[Segment-oriented liver resection. Principles—technic—status] Scheele J. **Chirurg** 1989 Apr; 60(4):251–65 (Eng. Abstr.) **(Ger)**

[The resectability of large focal liver lesions] Baer HU, et al. **Helv Chir Acta** 1989 Jan;55(5):613–8 (Eng. Abstr.) **(Ger)**

[Liver transplantation: initial experiences from Zurich] Decurtins M, et al. **Helv Chir Acta** 1989 Jan;55(5):633–6 (Eng. Abstr.) **(Ger)**

[Achievements of tumor surgery in tumors of the liver and bile ducts] Pichlmayr R. **Langenbecks Arch Chir** 1988;Suppl 2:127–32 (4 ref.) (Eng. Abstr.) **(Ger)**

[Surgical therapy of liver and bile duct tumors] Viebahn R, et al. **Ultraschall Med** 1989 Jun;10(3):119–22 (27 ref.) (Eng. Abstr.) **(Ger)**

[Occipitocervical fusion in metastasis to the dens] Wozasek GE, et al. **Unfallchirurgie** 1988 Dec;14(6):320–3 (Eng. Abstr.) **(Ger)**

[Resection of benign and malignant liver tumors] Gall FP, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:70–3 **(Ger)**

[Adaptive and regenerative processes following liver resection] Neuhaus P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:236–8 (19 ref.) **(Ger)**

[Interdisciplinary therapy concepts in primary and secondary neoplasms of the liver] Strohmeyer G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:66–9 (29 ref.) **(Ger)**

[Hepatoblastoma: a catamnestic study and proposal of a therapy concept] Mildenberger H, et al. **Z Kinderchir** 1989 Apr;44(2):78–82 (Eng. Abstr.) **(Ger)**

[Hamartoma of the liver in childhood] Gottschalk E, et al. **Zentralbl Chir** 1988;113(24):1564–70 (Eng. Abstr.) **(Ger)**

[Cystadenoma of the liver and bile ducts with ovarian stroma] Jakschik J, et al. **Zentralbl Chir** 1989;114(1):45–8 **(Ger)**

[Is there a place for transplant in the treatment of primary cancer of the liver?] Angrisani L. **Minerva Chir** 1989 Jan 31;44(1–2):29–31 **(Ita)**

[Redistribution of intrahepatic arterial blood flow after ligation of an aberrant lobar artery. Use of degradable starch microspheres] Balletto N, et al. **Minerva Chir** 1988 Apr 15;43(7):575–80 (Eng. Abstr.) **(Ita)**

[Recent advances in surgical therapy of hepatocarcinomas. 5 questions on the exeresis of carcinomas of the cirrhotic liver] Belghiti J, et al. **Minerva Chir** 1989 Mar 31; 44(6):933–5 (5 ref.) (Eng. Abstr.) **(Ita)**

[Results of hepatic resection for metastasis] Caldarola L, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):47–51 **(Ita)**

[Primary neoplasms of the hepatic hilum: palliative resections] Gazzaniga GM, et al. **Minerva Chir** 1989 Jan 31;44(1–2):147–9 **(Ita)**

[Synchronous hepatectomy and exeresis of primary tumor of the colorectum] Morelli N, et al. **Minerva Chir** 1989 May 31;44(10):1447–51 (Eng. Abstr.) **(Ita)**

[Primary tumors of the biliary hilum. Anatomical and therapeutic aspects] Morelli N, et al. **Minerva Chir** 1989 May 31;44(10):1453–5 (Eng. Abstr.) **(Ita)**

[Evaluation of amplified right or left lobectomy of the liver (trisegmentectomy)] Moreno González E, et al. **Minerva Chir** 1989 Jan 31;44(1–2):21–4 **(Ita)**

[A rare case of giant hemangioma of the liver] Tridico F, et al. **Minerva Chir** 1988 Oct 15;43(19):1625–9 (Eng. Abstr.) **(Ita)**

[Our experience on the surgery of liver tumors] Viola M, et al. **Minerva Chir** 1989 Jun 30;44(12):1647–50 (Eng. Abstr.) **(Ita)**

[Hepatocellular carcinoma treated with a curative segmentectomy five years after complete remission of acute myeloblastic leukemia] Hirota Y, et al. **Gan No Rinsho** 1989 Aug;35(9):1073–6 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of hepatocellular carcinoma] Okamoto E, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):40–5 (Eng. Abstr.) **(Jpn)**

[Primary hepatocellular carcinoma growing in the complete remission of malignant lymphoma treated with curative segmentectomy] Maekawa T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):808–13 **(Jpn)**

[An evaluation of predicting postoperative residual liver function using 99mTc tin colloid] Tamai T, et al. **Radioisotopes** 1988 Oct;37(10):558–63 (Eng. Abstr.) **(Jpn)**

[Surgically treated adenoma of the left hepatic lobe] Wereszczyńska-Siemiątkowska U, et al. **Wiad Lek** 1988 Nov 1;41(21):1462–7 (Eng. Abstr.) **(Pol)**

[Pleural complications in patients with focal lesions of the liver] Al'perovich BI, et al. **Klin Khir** 1988;(9):60 **(Rus)**

[Treatment of hepatic hemangioma by cryodestruction] Domanskiĭ BV, et al. **Klin Khir** 1989;(5):58–9 **(Rus)**

[Left-side lobectomy in focal lesions of the liver] Zatolokin VD, et al. **Klin Khir** 1988;(9):71–2 **(Rus)**

[Preoperative roentgeno-endovascular occlusion of the branches of the hepatic artery in focal lesions of the liver] Volynskiĭ IuD, et al. **Vestn Khir** 1988 Aug;141(8):33–6 (Eng. Abstr.) **(Rus)**

[Ascites and renal insufficiency in a 59-year-old male subjected to liver transplant for hepatocarcinoma on liver cirrhosis (clinical conference)] Terés J, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):547–55 **(Spa)**

[Mixed malignant tumor of the liver (letter)] Díaz-Faes M, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):318–9 **(Spa)**

[Liver transplant in fibrolamellar hepatocarcinoma: apropos of a case. Review of the literature] Ratia Giménez T, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):273–6 (21 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Evaluation of temporary liver dearterialization and embolization in patients with metastatic carcinoid tumour. Nobin A, et al. **Acta Oncol** 1989;28(3):419–24

Necrosis of portal tumor embolus of hepatocellular carcinoma by lipiodol transcatheter chemo-embolization. A case report. Wakasa K, et al. **Acta Pathol Jpn** 1988 Oct; 38(10):1363–7

Sonographically guided percutaneous injection of ethanol for treatment of hepatocellular carcinoma: value of Gelfoam to mark the lesion [letter] Shiina S, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):430

Percutaneous alcohol injection of hepatocellular carcinoma [letter] Salmi A. **Ann Intern Med** 1989 Mar 15;110(6):494

Palliative treatment of hepatic tumours. Bengmark S. **Br J Surg** 1989 Aug;76(8):771–3 (9 ref.)

Studies on the chemotherapy with 5-fluorouracil in transcatheter arterial chemoembolization (TAE) treated patients with resectable or non-resectable hepatocellular carcinoma. Osaka Study Group on Hepatocellular Carcinoma. **Cancer Chemother Pharmacol** 1989;23 Suppl:S29–32

Alleviation of gallbladder complications by treatment of hepatic arterial embolization with caerulein. Akamatsu K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S59–64

Effects of transcatheter arterial chemoembolization with oral chemotherapy on hepatic neoplasms. Hashimoto N, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S21–5

Arterial chemotherapy and transcatheter arterial embolization therapy for non-resectable hepatocellular carcinoma. Hirai K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S37–41

Treatment of hepatocellular carcinoma utilizing lymphokine-activated killer cells and interleukin-2. Ichida T, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S45–8

Effect of caerulein on abdominal pain following transcatheter

hepatic arterial embolization in malignant liver cancer patients. Ido K, et al. **Cancer Chemother Pharmacol** 1989; 23 Suppl:S65–7

A pre-operative chemoembolization therapy using lipiodol, cisplatin and gelatin sponge for hepatocellular carcinoma. Imaoka S, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S126–8

Current status and future aspects on treatment of liver cancer. Kim BS, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S118–20

Cooperative study on arterial regional chemotherapy for primary liver cancer in Hokkaido. Kusano M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S17–20

Significance of transcatheter chemoembolization combined with surgical resection for hepatocellular carcinomas. Monden M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S90–5

Transcatheter arterial embolization using iodized oil (lipiodol) mixed with an anticancer drug for the treatment of hepatocellular carcinoma. Ohishi H, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S33–6

Treatment of primary liver cancer in Singapore. A review of 3200 cases seen between January 1, 1977, and July 31, 1987. Oon CJ, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S13–6

Multimodal treatment of hepatocellular carcinoma. Shimamura Y, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S87–9

Hepatic artery embolization for inoperable hepatocellular carcinoma; prognosis and risk factors. Takayasu K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S123–5

Transcatheter arterial chemoembolization for hepatocellular carcinoma. Yang CF, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S26–8

Adoptive immunotherapy administered via the hepatic artery and intralesional interleukin-2 in hepatocellular carcinoma. Fagan EA, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:151–60

Regional treatment of hepatic metastases and hepatocellular carcinoma. Kemeny N, et al. **Curr Probl Cancer** 1989 Jul–Aug;13(4):197–283 (306 ref.)

Temporary chemoembolization of liver malignancies—technique. Hottenrott C. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2687

Immunotherapy using Freund's adjuvant and recombinant interleukin-2 combined with transarterial chemoembolization for hepatocellular carcinoma. Ito T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):386–92

A case report of transcatheter arterial embolization of cholestatic type of hepatoma. Takagi H, et al. **Gastroenterol Jpn** 1989 Jun;24(3):315–9

Treatment of hepatocellular carcinoma by transcatheter arterial embolization combined with intraarterial infusion of a mixture of cisplatin and ethiodized oil. Kasugai H, et al. **Gastroenterology** 1989 Oct;97(4):965–71

Newly developed transarterial chemoembolization material: CDDP-lipiodol suspension. Araki T, et al. **Gastrointest Radiol** 1989 Winter;14(1):46–8

Emergency treatment of the complications of giant liver hemangiomas. Pezzullo LS, et al. **Hepatogastroenterology** 1988 Dec;35(6):321–3

Immunotargeting in the diagnosis and treatment of liver cancer. Keegan-Rogers V, et al. **Hepatology** 1989 Apr; 9(4):646–8

Adoptive immunotherapy with lymphokine-activated killer cells plus recombinant interleukin 2 in patients with unresectable hepatocellular carcinoma. Onishi S, et al. **Hepatology** 1989 Sep;10(3):349–53

Targeted therapy for hepatic cancer: good in theory, problematic in practice. Wright TL. **Hepatology** 1989 Apr; 9(4):657–8

Twenty-one-year survival after hepatic resection for primary hepatocellular carcinoma. A case report and review of the literature. Rossonis GA, et al. **Ital J Surg Sci** 1988; 18(3):291–5 (36 ref.)

Variable patterns of technetium-99m MAA perfusion in the therapeutically embolized liver. Hall JT, et al. **J Nucl Med** 1989 Jun;30(6):1012–7

Treatment of murine hepatic metastases with vaccinia colon oncolysates and IL-2. Barnavon Y, et al. **J Surg Res** 1988 Dec;45(6):523–30

Retarding liver cancer growth in the rat by transient repeated hepatic dearterialization. Mack P, et al. **J Surg Res** 1989 Feb;46(2):123–8

Insulin response to glucose challenge after transient hepatic dearterialization for rat liver malignancy. Mack P, et al. **J Surg Res** 1989 Aug;47(2):124–8

Hepatic haemangioma—a suitable case for treatment? [editorial] **Lancet** 1988 Oct 15;2(8616):882–4 (28 ref.)

Suppression of HBsAg production in PLC/PRF/5 human hepatoma cell line by interferons. Yamashita Y, et al. **Microbiol Immunol** 1988;32(11):1119–26

Results of preoperative portal vein embolization for hepatocellular carcinoma. Kinoshita H, et al. **Osaka City Med J** 1988 Oct;34(2):115–22

Caudal epidural morphine analgesia for an infant with advanced neuroblastoma: report of a case. Berde CB, et al. **Pain** 1989 Feb;36(2):219–23

Transcatheter arterial embolization for spontaneous rupture of hepatocellular carcinoma. Ohtomo K, et al. **Radiat Med** 1988 Jul–Aug;6(4):150–6

Hepatic embolization through pancreaticoduodenal arcade: double catheter technique. Ohtomo K, et al. **Radiat Med** 1988 Jul–Aug;6(4):157–8

An attempt of hyperthermia with balloon catheter and immunochemotherapeutic agent. Yamada R, et al. **Radiat Med** 1988 Mar–Apr;6(2):79–84

Adenomatous hyperplastic nodules in the cirrhotic liver: a therapeutic approach. Work in progress. Livraghi T, et al. **Radiology** 1989 Jan;170(1 Pt 1):155–7

Transcatheter oily chemoembolization of hepatocellular carcinoma. Nakamura H, et al. **Radiology** 1989 Mar;170(3 Pt 1):783–6

A useful maneuver for hepatic arterial catheterization in patients with metastatic hepatic disease and abnormal vascular anatomy. Goldberg JA, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):71–2

Neoadjuvant chemotherapy and orthotopic liver transplantation for hepatocellular carcinoma. Stone MJ, et al. **Transplantation** 1989 Aug;48(2):344–7

Regression of line-10 hepatocellular carcinoma by a less toxic cord factor analogue combined with L18-MDP or synthetic lipid A analogues. Ishida H, et al. **Vaccine** 1988 Oct;6(5):440–4

Results of treatment of patients with hepatocellular carcinoma with severe cirrhosis of the liver. Fujio N, et al. **World J Surg** 1989 Mar–Apr;13(2):211–7; discussion 217–8

Repeated hepatic ischemia as a treatment for carcinoid liver metastases. Persson BG, et al. **World J Surg** 1989 May–Jun; 13(3):307–11; discussion 311–2

[Targeting study of human hepatocellular carcinoma (HCC) using human HCC model in nude mice] Liu KD. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):414–6 (Eng. Abstr.) **(Chi)**

[Hepatic artery chemoembolization in the treatment of primary liver cancer] Guo JY. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct;22(5):261–4 (Eng. Abstr.) **(Chi)**

[Chemo-embolization of hepatic malignant tumors with lipiodol and anticancerous agent] Peng B. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec;22(6):351–4 (Eng. Abstr.) **(Chi)**

[Evaluation and radiologic observations on hepatic artery embolization with IBCA in the treatment of hepatocellular carcinoma] Zhao ZR. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):140–3 (Eng. Abstr.) **(Chi)**

[Treatment of benign tumors of the liver] Benhamou JP. **Gastroenterol Clin Biol** 1989 Mar;13(3):277–9 **(Fre)**

[Chemoembolization of hepatocellular carcinoma—computed tomographic follow-up observation] Grote R, et al. **ROFO** 1989 Jul;151(1):15–22 (Eng. Abstr.) **(Ger)**

[Therapy of hepatic carcinoma by the intra-arterial injection of lipiodol, antineoplastic agents and gelfoam] Rossi P, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):37–43 (Eng. Abstr.) **(Ita)**

[Treatment of liver cancer] Arii S, et al. **Gan No Rinsho** 1989 Jan;Spec No:301–9 **(Jpn)**

[Antitumoral effect of gamma-interferon in patients with hepatocellular carcinoma] Kanda Y, et al. **Gan No Rinsho** 1988 Aug;34(9):1073–8 (Eng. Abstr.) **(Jpn)**

[The effect of naproxen on fever following transcatheter arterial embolization of hepatic tumors] Miyazaki M, et al. **Gan No Rinsho** 1988 Oct;34(12):1659–62 (Eng. Abstr.) **(Jpn)**

[Influence of hepatic ischemia on liver regeneration following hepatectomy, with special reference to the therapeutic choice for ruptured hepatoma] Miyazaki M, et al. **Gan No Rinsho** 1989 Jun;35(7):787–92 (Eng. Abstr.) **(Jpn)**

[Usefulness of partial splenic embolization (PSE) in hepatocellular carcinomas showing a risk of gastrointestinal bleeding after transcatheter arterial embolization (TAE)] Ohmoto K, et al. **Gan No Rinsho** 1989 May;35(6):690–5 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma treated by the combined therapy of ultrasonic guided ethanol injection and transcatheter arterial embolization] Suyama Y, et al. **Gan No Rinsho** 1989 Feb;35(3):397–403 (Eng. Abstr.) **(Jpn)**

[The clinical course of nodular type hepatocellular carcinomas after transcatheter arterial embolization (TAE) therapy] Suyama Y, et al. **Gan No Rinsho** 1989 Aug; 35(9):983–9 (Eng. Abstr.) **(Jpn)**

[Non-vascular interventional radiology—percutaneous ethanol injection (PEI) in hepatocellular carcinoma smaller than 3 cm in diameter] Ebara M, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3311–8 (Eng. Abstr.) **(Jpn)**

[Recent progress in multidisciplinary treatment of hepatic cancer] Fujita M, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2–1):1000–7 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Intra-hepato-arterial chemotherapy combined with hyperthermic treatment: clinical results of metastatic cancer of the liver and effects on correct (but not at all necessary) hepatic blood flow] Hamazoe R, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3032–5 (Eng. Abstr.) **(Jpn)**

[Combination therapy of hyperthermia and other methods in liver and bile tract cancers—evaluation of these methods using cancer cell lines in vitro] Hasumura S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1905–12 (Eng. Abstr.) **(Jpn)**

[Development of a new therapeutic method in hepatocellular carcinoma using a culture system—the intensifying effect of human epidermal growth factor (hEGF) on the antitumor action of antitumor agents] Hata Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1874–9 (Eng. Abstr.) **(Jpn)**

[Continuous arterial infusion therapy of recombinant interleukin-2 and cyclophosphamide in hepatoma and liver metastasis] Hayakawa K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2842–4 (Eng. Abstr.) **(Jpn)**

[Chemoembolization with degradable starch microspheres for liver metastases in colorectal cancer] Itani K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2897–900 (Eng. Abstr.) **(Jpn)**

[Prognosis of intra-arterial chemo-embolization in metastatic liver cancer] Ito K, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 2):3041–4 (Eng. Abstr.) **(Jpn)**

[A case of recurrent hepatocellular carcinoma successfully treated by arterial chemoembolization in combination with local hyperthermia] Kawano K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2957–60 (Eng. Abstr.) **(Jpn)**

[Chemo-embolization therapy of unresectable liver metastases using implantable infusion port] Minami T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2875–9 (Eng. Abstr.) **(Jpn)**

[Hepatic arterial infusion chemotherapy and hyperthermia with degradable starch microspheres in primary and metastatic liver malignancies] Miura T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2822–6 (Eng. Abstr.) **(Jpn)**

[A long-survival case of hepatocellular carcinoma treated by intra-arterial chemotherapy and immunotherapy] Nagano H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2961–4 (Eng. Abstr.) **(Jpn)**

[Limitation of oily chemoembolization against hepatocellular carcinoma and arterioportal segmental chemoembolization] Nakamura H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2849–52 (Eng. Abstr.) **(Jpn)**

[Segmental arterio-portal chemo-embolization in hepatocellular carcinoma (cement therapy)] Oi H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2853–7 (Eng. Abstr.) **(Jpn)**

[Metastatic liver cancer from the stomach successfully treated by combined immunochemotherapy and transarterial embolization] Otsuka S, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2429–32 (Eng. Abstr.) **(Jpn)**

[Chemo-embolization using degradable starch microspheres and regional hyperthermia in unresectable hepatocellular carcinoma] Oyamada H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3070–4 (Eng. Abstr.) **(Jpn)**

[Chemoembolization therapy of hepatocellular carcinoma-antitumor effect and side effect] Saito Y, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3283–9 (Eng. Abstr.) **(Jpn)**

[Adjuvant surgery to enhance therapeutic effects of chemo-embolization in advanced hepatocellular carcinoma] Sasaki Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3045–8 (Eng. Abstr.) **(Jpn)**

[Intra-arterial injection of cisplatin suspension in lipiodol (LPS) for the treatment of advanced hepatocellular carcinoma (stage IV)] Shibata J, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):357–64 (Eng. Abstr.) **(Jpn)**

[Transcatheter arterial embolization with hepatic arterial induction of endogenous TNF in hepatocellular carcinoma] Takekoshi H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2845–8 (Eng. Abstr.) **(Jpn)**

[Non-surgical (medical) treatment of hepatocellular carcinoma (HCC)] Tanikawa K. **Gan To Kagaku Ryoho** 1989 Jan;16(1):34–9 (Eng. Abstr.) **(Jpn)**

[NK activity and T cell subsets in percutaneous ethanol injection therapy of liver cancer—effect of lentinan with combined use] Yamamoto S, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3291–4 **(Jpn)**

[Usefulness of measurement of hepatic arterial blood flow during surgery to insert an arterial reservoir in unresectable hepatocellular carcinoma] Yano K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2982–5 (Eng. Abstr.) **(Jpn)**

[An assessment of therapeutic effects by transcatheter arterial embolization (TAE) with degradable starch microspheres (DSM) for hepatic malignant tumors] Hirai K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):772–80 (Eng. Abstr.) **(Jpn)**

[Transcatheter chemoembolization using Lipiodol cisplatin sandwich therapy of liver metastasis of colorectal cancer] Kameyama M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2568–74 (Eng. Abstr.) **(Jpn)**

[Studies on the effectiveness of hyperthermia combined with arterial therapeutic blockage in the treatment of tumors. Part 3. Clinical studies on the effectiveness of hyperthermia combined with arterial chemo-embolization using degradable starch microspheres (DSM)] Murata T. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2725–31 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma surviving more than five years by chemoembolization with mitomycin C microcapsules] Nakamura J, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2630–5 (Eng. Abstr.) **(Jpn)**

[Intra-hepatic artery infusional chemotherapy with cisplatin suspension in lipiodol (LPS) of hepatocellular carcinoma (II)--A clinical study] Shibata J, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2750-9 (Eng. Abstr.) **(Jpn)**

[Clinical studies of intermittent hepatic arterial occlusion with infusion chemotherapy for unresectable hepatocellular carcinoma associated with arterioportal or arteriovenous shunts] Yano S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):99-108 (Eng. Abstr.) **(Jpn)**

[Antitumor effect and indication of chemoembolization using degradable starch microspheres and regional hyperthermia in patients with hepatocellular carcinoma] Yoshikawa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20; 24(4):786-92 (Eng. Abstr.) **(Jpn)**

[Olive oil-lipiodol mixture and anticancer agents (5FU, MMC) emulsion as a chemoembolic agent] Ohno K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1189-91 (Eng. Abstr.) **(Jpn)**

[Necrotizing effect of the combination therapy of TAE and PEIT on advanced hepatocellular carcinoma] Satoi J, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep; 85(9):1694-8 **(Jpn)**

[Immunological influence of the transcatheter arterial embolization to the hepatocellular carcinoma--investigation of cellular and humoral immunity] Takagi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2207-16 (Eng. Abstr.) **(Jpn)**

[Embolization of a ruptured hepatoma through the pancreatic arcades--a case report] Choji K, et al. **Rinsho Hoshasen** 1988 Jun;33(6):723-6 (Eng. Abstr.) **(Jpn)**

[Disappearance of lung metastases from hepatocellular carcinoma following PSK administration] Hara Y, et al. **Rinsho Hoshasen** 1988 Jun;33(6):731-4 (Eng. Abstr.) **(Jpn)**

[Successful experience in transcatheter arterial embolization (TAE) after visualizing extravasation due to rupture of hepatocellular carcinoma (HCC)] Kitsuki H, et al. **Rinsho Hoshasen** 1988 Jun;33(6):727-30 (Eng. Abstr.) **(Jpn)**

[A case of hepatoma suspected pulmonary emboli following transcatheter arterial embolization] Ozaki M, et al. **Rinsho Hoshasen** 1989 Jan;34(1):165-7 (Eng. Abstr.) **(Jpn)**

[The efficacy of epidural anesthesia in preventing pain following TAE of liver malignancies] Saito Y, et al. **Rinsho Hoshasen** 1988 Sep;33(9):977-80 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma with intratumoral gas formation detected by plain abdominal X-ray film] Watanabe H, et al. **Rinsho Hoshasen** 1988 Aug;33(8):911-4 **(Jpn)**

[Embolization of the hepatic artery in the treatment of metastases of gastric cancer to the liver] Tarazov PG, et al. **Klin Med (Mosk)** 1988 Dec;66(12):84-6 (Eng. Abstr.) **(Rus)**

[Embolization of the hepatic artery in the treatment of malignant tumors of the liver complicated by jaundice] Granov AM, et al. **Vestn Khir** 1988 Jul;141(7):36-9 (Eng. Abstr.) **(Rus)**

[Angiographic evaluation of the results of roentgeno-endovascular occlusion of the hepatic artery] Tarazov PG, et al. **Vestn Khir** 1988 Oct;141(10):30-5 (Eng. Abstr.) **(Rus)**

[X-ray endovascular embolization of the hepatic artery in the palliative treatment of hepatocellular cancer] Granov AM, et al. **Vopr Onkol** 1989;35(6):703-9 (Eng. Abstr.) **(Rus)**

[X-ray endovascular treatment of a malignant liver adenoma] Tarazov PG, et al. **Vopr Onkol** 1989;35(4):478-80 **(Rus)**

[Hepatic hemangiomatosis: therapeutic embolization with polyvinyl alcohol (ivalon)] Jiménez Fernández F, et al. **An Esp Pediatr** 1988 Jun;28(6):588-90 **(Spa)**

ULTRASTRUCTURE

Lipid peroxidation and physical properties of smooth and rough hepatoma microsomes. Masotti L, et al. **Cell Biophys** 1989 Feb;14(1):53-65

Quantification of nuclear pores in tumor promoter-induced hepatic nodules in rats: a freeze-fracture study. Evans MG. **J Toxicol Environ Health** 1988;25(4):471-7

[Ultrasonographic morphology of liver diseases in the light of laparoscopy] Székely G, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul;28(3):196-201 (Eng. Abstr.) **(Hun)**

[The role of the hepatitis B virus in the development of liver cirrhosis and tumors] Shaff J, et al. **Arkh Patol** 1988; 50(11):47-51 (Eng. Abstr.) **(Rus)**

VETERINARY

Cholangiocarcinoma in a 4-month-old double yellow-cheeked Amazon parrot (Amazona autumnalis). Anderson WI, et al. **Avian Dis** 1989 Jul-Sep;33(3):594-9

Cholangiocarcinoma in a blue-fronted Amazon parrot (Amazona estiva). Elangbam CS, et al. **Avian Dis** 1988 Jul-Sep;32(3):594-6

Antemortem diagnosis of hepatic adenocarcinoma in a ewe. Lofstedt J, et al. **J Am Vet Med Assoc** 1988 Dec 15; 193(12):1537-8

Pleural effusion resulting from malignant hepatoblastoma in a horse. Prater PE, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):383-5

Ulex europaeus agglutinin 1 lectin histochemical staining of dog hepatocellular and bile duct carcinomas. Brown PJ, et al. **Res Vet Sci** 1989 May;46(3):421-3

Transforming genes in duck hepatic carcinoma--mht(raf) and Ha-ras. Tan H, et al. **Sci Sin [B]** 1988 Nov;31(11):1325-32

The ultrastructure and histology of hepatocellular carcinomas of English sole (Parophrys vetulus) from Puget Sound, Washington. Stehr CM, et al. **Toxicol Pathol** 1988; 16(4):418-31

Emperipolesis of lymphoid neoplastic cells in feline hepatocytes. Ossent P, et al. **Vet Pathol** 1989 May; 26(3):279-80

Bile acid profile in a dog with cholangiocarcinoma. Thompson MB, et al. **Vet Pathol** 1989 Jan;26(1):75-8

LIVER NEOPLASMS, EXPERIMENTAL

Cell cycle-specific variation of intracellular plasminogen activator activity in cultured human alveolar epithelial carcinoma and rat hepatoma cells. Orfanoudakis G, et al. **Biol Cell** 1989;65(3):297-300

Efficient one-step selection of hepatoma cell variants of a variety of phenotypes by use of aflatoxin B1. Corcos L, et al. **Differentiation** 1988 Jul;38(2):134-9

Conditions required for activation of the mouse albumin or alpha-fetoprotein gene in hybrids between mouse lymphoblastoma and rat hepatoma cells. Sellem CH, et al. **Differentiation** 1988 Nov;39(1):66-77

ANALYSIS

Physicochemical characterization of the nuclear form of Ah receptor from mouse hepatoma cells exposed in culture to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Prokipcak RD, et al. **Arch Biochem Biophys** 1988 Dec;267(2):811-28

DNA sequences homologous to mitochondrial genes in nuclei from normal rat tissues and from rat hepatoma cells. Corral M, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):258-64

Decreased cytosolic levels of the heme binding Z protein in rat hepatocyte nodules and hepatocellular carcinomas. Roomi MW, et al. **Cancer Lett** 1988 Dec 1;43(1-2):55-8

Partial purification of a growth factor synthesized by a rat hepatoma cell line established in serum-free medium. Matsuda H, et al. **Cancer Res** 1989 Apr 15;49(8):2118-22

High-performance concanavalin A affinity chromatography of liver and hepatoma membrane proteins. Josić D, et al. **J Chromatogr** 1988 Jul 1;444:29-39

Immunofluorescent localization of type II insulin-like growth factor receptor in rat liver and hepatoma cells. Hartshorn MA, et al. **J Endocrinol** 1989 May;121(2):221-7

Activation of cytochrome P450IA1 gene expression by 2,3,7,8-tetrachlorodibenzo-p-dioxin in wild-type and high-activity variant mouse hepatoma cells. Hirst MA, et al. **Mol Carcinog** 1989;2(1):40-6

Diversity of non-histone protein fraction NHCP2 from hamster Kirkman-Robbins hepatoma and liver. Krajewska WM, et al. **Mol Cell Biochem** 1988 Sep;83(1):37-46

Alpha-fetoprotein: 25 years of study. Abelev GI. **Tumour Biol** 1989;10(2):63-74 (59 ref.)

[Isolation of poly(A)+ RNA from mouse 615 hepatomas and estimation of its activity in vitro] Zou CH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):116-9 (Eng. Abstr.) **(Chi)**

[Comparative study of nucleosome particles in chromatin from normal and tumor cells. I. Structural parameters] Sapozhnikova NA, et al. **Mol Biol (Mosk)** 1988 Sep-Oct; 22(5):1345-52 (Eng. Abstr.) **(Rus)**

[Comparative study of nucleosome particles in chromatin from normal and tumor cells. II. Reconstitution, compaction and association induced by ionic strength of a solution] Sapozhnikova NA, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1353-8 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Hyperthermia, tissue microcirculation, and temporarily increased thermosensitivity in VX2 carcinoma in rabbit liver. Matsuda H, et al. **Cancer Res** 1989 May 15; 49(10):2777-82

Evidence that epinephrine acutely redistributes blood flow to experimental intrahepatic tumors. Ackerman NB, et al. **Surgery** 1989 Feb;105(2 Pt 1):213-7

[The studies on the blood supply of metastatic liver tumor induced by VX2 using BrdU] Shioaki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):281 **(Jpn)**

CHEMICALLY INDUCED

An enzyme histochemical analysis of the different steps in thioacetamide induced liver carcinogenesis in rats. Praet MM, et al. **Acta Histochem Suppl (Jena)** 1989;37:161-7

Primary liver tumors in beagle dogs exposed by inhalation to aerosols of plutonium-238 dioxide. Gillett NA, et al. **Am J Pathol** 1988 Nov;133(2):265-76

The effects of dose and duration of administration on the promotion index of phenobarbital in multistage hepatocarcinogenesis in the rat. Rizvi TA, et al. **APMIS Suppl** 1988;2:262-74

Effects of potassium ethylxanthogenate on nitrosodiethylamine-induced DNA damage and on liver carcinogenesis. Hadjiolov D, et al. **Arch Geschwulstforsch** 1988;58(5):313-8

Enhancement of hepatic tumors induced by N-nitrosodimethylamine in female toads Bufo regularis by oestrone. Sakr SA, et al. **Arch Geschwulstforsch** 1989; 59(1):7-10

Incidence of preneoplastic foci in rat liver dependent on different promoting schemes. Deml E, et al. **Arch Toxicol Suppl** 1989;13:233-6

Hypomethylation of c-myc proto-oncogene of N-nitrosomorpholine--induced rat liver nodules and of H4IIE cells. Münzel P, et al. **Arch Toxicol Suppl** 1989; 13:211-3

Modulation of 17 alpha-ethinylestradiol and 7,8-benzoflavone metabolism in hamster liver microsomes is possibly related to hepatotumorigenesis. Tritscher AM, et al. **Arch Toxicol Suppl** 1989;13:230-2

Hypolipidemic drug clofibrate promotes hepatic tumor. Nagini S, et al. **Biochem Int** 1988 Oct;17(4):605-10

Induction of peroxisome proliferation and hepatic tumours in C57BL/6N mice by ciprofibrate, a hypolipidaemic compound. Rao MS, et al. **Br J Cancer** 1988 Jul;58(1):46-51

Quantitative aspects of accelerated nuclear polyploidization and tumour formation in dieldrin treated CF-1 mouse liver. van Ravenzwaay B, et al. **Br J Cancer** 1988 Jul;58(1):52-6

The ultrastructural features of aflatoxin B1-induced lesions in the rat liver. Pritchard DJ, et al. **Br J Exp Pathol** 1988 Dec;69(6):793-804

Chlorobenzilate-induced effects on enzyme-altered foci in rat liver and intercellular communication in rat liver WB-F344 epithelial cells. Flodström S, et al. **Cancer Lett** 1988 Dec 15;43(3):161-6

Induction and promotion of gamma-glutamyltranspeptidase-positive foci in the liver of female rats treated with ethinyl estradiol, clomiphene, tamoxifen and their associations. Ghia M, et al. **Cancer Lett** 1989 Aug;46(3):195-202

Lack of initiating activity of the peroxisome proliferator ciprofibrate in two-stage hepatocarcinogenesis. Glauert HP, et al. **Cancer Lett** 1989 Feb;44(2):95-100

Effect of the antihistamine, methapyrilene, as an initiator of hepatocarcinogenesis in female rats. Glauert HP, et al. **Cancer Lett** 1989 Aug;46(3):189-94

Modifying effects of concomitant treatment with butylated hydroxyanisole or butylated hydroxytoluene on N,N-dibutylnitrosamine-induced liver, forestomach and urinary bladder carcinogenesis in F344 male rats. Imaida K, et al. **Cancer Lett** 1988 Dec 15;43(3):167-72

Effect of phenobarbital on diethylnitrosamine and dimethylnitrosamine induced hepatocellular tumors in male B6C3F1 mice. Klaunig JE, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):133-9

Transgenerational effect of orthoaminoasotoluol in mice. Popova NV. **Cancer Lett** 1989 Aug;46(3):203-6

Modification of transplacental tumorigenesis by 3-methylcholanthrene in mice by genotype at the Ah locus and pretreatment with beta-naphthoflavone. Anderson LM, et al. **Cancer Res** 1989 Apr 1;49(7):1676-81

Relationship of hepatic peroxisome proliferation and replicative DNA synthesis to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and [4-chloro-6-(2,3-xylidino)-2-pyrimidinylthio]acetic acid (Wy-14,643) in rats. Marsman DS, et al. **Cancer Res** 1988 Dec 1;48(23):6739-44

Relationship of oxidative damage to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and Wy-14,643. Conway JG, et al. **Carcinogenesis** 1989 Mar;10(3):513-9

Differential susceptibility of a fish, tilapia Oreochromis mossambicus (Teleostei, Cichlidae) to hepatocarcinogenesis by diethylnitrosamine and methylazoxymethanol acetate. Ding JL, et al. **Carcinogenesis** 1989 Mar;10(3):493-9

The role of N-sulfation in the N-hydroxy-2-acetylaminofluorene-mediated outgrowth of diethylnitrosamine-initiated hepatocytes to gamma-glutamyltranspeptidase-positive foci in male rat liver. Kroese ED, et al. **Carcinogenesis** 1988 Nov; 9(11):1953-8

The air pollutant 2-nitrofluorene as initiator and promoter in a liver model for chemical carcinogenesis. Möller L, et al. **Carcinogenesis** 1989 Mar;10(3):435-40

The role of GSH depletion and toxicity in hydroquinone-induced development of enzyme-altered foci. Stenius U, et al. **Carcinogenesis** 1989 Mar;10(3):593-9

Phenobarbital promotion in diethylnitrosamine-initiated infant B6C3F1 mice: influence of gender. Weghorst CM, et al. **Carcinogenesis** 1989 Mar;10(3):609-12

In vivo measurement of unscheduled DNA synthesis and S-phase synthesis as an indicator of hepatocarcinogenesis in rodents. Mirsalis JC. **Cell Biol Toxicol** 1987 Jun; 3(2):165-73

Benzo[a]pyrene metabolism and induction of enzyme-altered foci in regenerating rat liver. Dock L, et al. **Chem Biol Interact** 1988;67(3-4):243-53

Dose-related carcinogenic effects of water-borne benzo[a]pyrene on livers of two small fish species. Hawkins WE, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):219-31

Carcinogenicity of 2,3,4,7,8-pentachlorodibenzofuran and 1,2,3,4,7,8-hexachlorodibenzofuran in rats. Nishizumi M. **Fukuoka Igaku Zasshi** 1989 May;80(5):240-5

Transplacental initiation of liver, lung, neurogenic, and connective tissue tumors by N-nitroso compounds in mice. Anderson LM, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):604–20

Hepatotoxicity of agents that enhance formation of focal hepatocellular proliferative lesions (putative preneoplastic foci) in a rapid rat liver bioassay. Ward JM, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):163–71

Effects of glycerol on lung and liver tumor development. Witschi H, et al. **Fundam Appl Toxicol** 1989 Jul; 13(1):174–80

Histochemical and microbiochemical demonstration of reduced pyruvate kinase activity in thioacetamide-induced neoplastic nodules of rat liver. Klimek F, et al. **Histochemistry** 1988;90(1):37–42

Long-term effects of female sex steroids on female rat liver in an initiator-promoter model of hepatocarcinogenesis. Annapurna VV, et al. **Indian J Biochem Biophys** 1988 Dec; 25(6):708–13

Carcinogenicity of iron in conjunction with a chlorinated environmental chemical, hexachlorobenzene, in C57BL/10ScSn mice. Smith AG, et al. **Int J Cancer** 1989 Mar 15;43(3):492–6

Chronic liver injury by thioacetamide and promotion of hepatic carcinogenesis. Gervasi PG, et al. **J Cancer Res Clin Oncol** 1989;115(1):29–35

Tumor-promoting activity and cytotoxicity of 3,4,3',4'-tetrachlorobiphenyl on N-nitrosomorpholine-induced murine liver foci. Kobusch AB, et al. **J Cancer Res Clin Oncol** 1989;115(3):247–52

Histogenesis of dieldrin and DDT-induced hepatocellular carcinoma in Balb/c mice. Lipsky MM, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):79–93

Lack of modifying effects of 2,2'-[(4-aminophenyl) imino] bisethanol sulfate on induction of preneoplastic gamma-glutamyl transpeptidase-positive foci in a medium-term bioassay system using F344 rats. Hagiwara A, et al. **J Toxicol Sci** 1989 May;14(2):77–86

Enhancing effect of ethanol on aflatoxin B1-induced hepatocarcinogenesis in male ACI/N rats. Tanaka T, et al. **Jpn J Cancer Res** 1989 Jun;80(6):526–30

Age related variations of hepatocarcinogenic effect of azo dye (3'-MDAB) as linked to the level of hepatocyte polyploidization. Medvedev ZA, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):159–74

Oxidative DNA damage caused by persistent peroxisome proliferation: its role in hepatocarcinogenesis. Reddy JK, et al. **Mutat Res** 1989 Sep;214(1):63–8 (60 ref.)

Primary and transplantable hepatomas induced by aflatoxin B1 in hypothyroid rats. Bednarz W. **Neoplasma** 1989; 36(1):113–26

A semipurified diet that suppresses phenobarbital promotion of hepatocarcinogenesis in the rat. Hendrich S, et al. **Nutr Cancer** 1989;12(3):249–58

Early liver cell lesions in rats induced by thioacetamide. An ultrastructural, cytophotometric and autoradiographic study. Marleen P, et al. **Pathol Res Pract** 1988 Dec; 184(1):69–76

Differential induction and regulation of peroxisomal enzymes: predictive value of peroxisome proliferation in identifying certain nonmutagenic carcinogens. Nemali MR, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):72–87

The chronic hepatic or renal toxicity of di(2-ethylhexyl) phthalate, acetaminophen, sodium barbital, and phenobarbital in male B6C3F1 mice: autoradiographic, immunohistochemical, and biochemical evidence for levels of DNA synthesis not associated with carcinogenesis or tumor promotion. Ward JM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):494–506

Increased alkylation of liver DNA and cell turnover in young versus old rats exposed to vinyl chloride correlates with cancer susceptibility. Laib RJ, et al. **Toxicol Lett** 1989 Feb; 45(2–3):231–9

Dose-response relationship of diethylnitrosamine-initiated tumors in neonatal balb/c mice: effect of phenobarbital promotion. Klaunig JE, et al. **Toxicol Pathol** 1988; 16(3):381–5

[An observation on hepatocarcinogenesis in rat by longterm feeding with minimal doses of aflatoxin B1] Lin C. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):198–200 (Eng. Abstr.) **(Chi)**

[Ferric nitrilotriacetate (Fe3+-NTA) produces active oxygens and induces malignant transformation on cultured rat liver cells] Awai M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2844–54 **(Jpn)**

[Effect of sialadenectomy on hepatic carcinogenesis in rats induced by N-nitrosodiethylamine] Osipova LA, et al. **Eksp Onkol** 1988;10(4):18–20 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Hepatocellular carcinoma in woodchuck hepatitis virus-infected woodchucks: presence of viral DNA in tumor tissue from chronic carriers and animals serologically recovered from acute infections. Korba BE, et al. **Hepatology** 1989 Mar;9(3):461–70

DIAGNOSIS

Hepatic metastases: rat models for imaging research. Chen MC, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):1–8

Superparamagnetic iron oxide-enhanced MR imaging: pulse sequence optimization for detection of liver cancer. Fretz CJ, et al. **Radiology** 1989 Aug;172(2):393–7

Hepatic metastases: liposomal Gd-DTPA-enhanced MR imaging. Unger EC, et al. **Radiology** 1989 Apr;171(1):81–5

[Induction of liver metastases in the rat. An experimental model for research on magnetic resonance] Pavone P, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):94–8 (Eng. Abstr.) **(Ita)**

DIET THERAPY

Anti-cancer therapy with valine-depleted amino acid imbalance solution. Nishihira T, et al. **Tohoku J Exp Med** 1988 Nov;156(3):259–70

DRUG THERAPY

Hepatic artery versus portal vein and systemic infusion of fluorodeoxyuridine of rabbit VX-2 hepatic implants. Butler JA, et al. **Am J Surg** 1989 Jan;157(1):126–9

First experiments with locoregional chemotherapy in the treatment of autochthonous rat hepatoma. Rozycki-Gerlach W, et al. **Arch Geschwulstforsch** 1988; 58(6):369–78

Enhanced sensitivity of the rat hepatoma cell to the daunorubicin analogue 4-demethoxydaunorubicin associated with induction of DNA damage. Woods KE, et al. **Cancer Res** 1989 Sep 1;49(17):4846–51

Potentiation of antitumor effect of aclarubicin on rat hepatoma model by hepatic arterially administered oily dosage forms. Okagaki T, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3092–7

Combined intermittent dearterialization and intraperitoneal 5-fluorouracil administration for liver tumours in the rat. Mack P, et al. **Eur J Cancer Clin Oncol** 1988 May; 24(5):909–13

Cytotoxicity of N6-cycloalkylated adenine and adenosine analogs to mouse hepatoma cells. Thedford R, et al. **Exp Cell Biol** 1989;57(2):53–9

Inhibitory effects of synthetic acidic retinoid and polyprenoic acid on the development of hepatoma in rats induced by 3'-methyl-N, N-dimethyl-4-aminoazobenzene. Moriwaki H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):546–52

Efficacy of two-route chemotherapy using cis-diamminedichloroplatinum(II) and its antidote, sodium thiosulfate, in combination with angiotensin II for rat liver tumor. Hasuda K, et al. **Int J Cancer** 1989 Aug 15; 44(2):373–7

Antitumor effect of a baker's yeast mannan-mitomycin C conjugate against mouse hepatoma, MH134, in vivo and in vitro. Aizawa K, et al. **Int J Immunopharmacol** 1989; 11(2):191–5

Continuous or bolus chemotherapy with 5-fluoro-2'-deoxyuridine in transplanted experimental liver tumors? Riemenschneider T, et al. **J Cancer Res Clin Oncol** 1988;114(5):482–6

New method of photosensitizer accumulation for photodynamic therapy in an experimental liver tumor. Nishiwaki Y, et al. **Lasers Surg Med** 1989;9(3):254–63

Encapsulation of doxorubicin in liver-targeted erythrocytes increases the therapeutic index of the drug in a murine metastatic model. Zocchi E, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2040–4

Doxorubicin-loaded nanoparticles: increased efficiency in murine hepatic metastases. Chiannilkulchai N, et al. **Sel Cancer Ther** 1989;5(1):1–11

In vitro chemosensitivity testing based on intracellular ATP levels (ATP assay). Miura M, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):49–55

Modulating influence of dehydroepiandrosterone administration on the morphology and enzyme phenotype of dimethylaminoazobenzene-induced hepatocellular foci and nodules. Moore MA, et al. **Virchows Arch [B]** 1988; 55(6):337–43

[The effect of "SRRS" recipe on the formation of liver cancer in the rat] Qiu JX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):734–5, 710 (Eng. Abstr.) **(Chi)**

[Mechanism of cell damage by hematoporphyrin derivative (HPD) plus light. III. Effect of HPD plus light on lysosomes of liver and hepatoma cell] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):22–4 (Eng. Abstr.) **(Chi)**

[Antitumor effect of actinidia chinensis polysaccharide on murine tumor] Lin PF. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):441–4 (Eng. Abstr.) **(Chi)**

[Inhibitory effects of jian pi li qi Chinese medicinal herbs on diethylnitrosamine (DEN)-induced hepatocarcinogenesis in rats] Yao WQ. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):134–6, 10 (Eng. Abstr.) **(Chi)**

[Enhanced effect of hepatic arterial infused anticancer drugs on rabbit VX-2 carcinoma by means of combination with Lipiodol. Adriamycin versus Lipiodol adriamycin sandwich method and adriamycin suspended in a Lipiodol] Hoshino M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2810–3 (Eng. Abstr.) **(Jpn)**

[Antitumor activities of oily suspended YM881 (SMANCS) against VX2 carcinoma] Kimura M, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2183–8 (Eng. Abstr.) **(Jpn)**

[Importance of the conjugated antibody for the induction of selective effect of adriamycin conjugated with anti AFP monoclonal antibody and entrapped in liposomes against AFP producing tumors] Konno H, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2213–7 (Eng. Abstr.) **(Jpn)**

[Hepatic artery and portal vein infusion of adriamycin in experimental liver metastasis] Kuroda K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2859–62 (Eng. Abstr.) **(Jpn)**

[Experimental study of 5-FU + leucovorin therapy by continuous arterial infusion] Mori T. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2838–41 (Eng. Abstr.) **(Jpn)**

[Loco-regional cancer chemotherapy with a new drug delivery system, "anticancer drug-fibrin clot"] Sugitachi A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2814–7 (Eng. Abstr.) **(Jpn)**

[Experimental studies on the antitumor effect of progesterone and enhancement of the therapeutic effect of anticancer drugs by progesterone—from the aspect of zinc metabolism] Ujiie S, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2423–8 (Eng. Abstr.) **(Jpn)**

[Experimental study on liver cancer—effect of intra-arterial injection of adriamycin-lipiodol emulsion on VX2 liver tumor] Imura K. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1473–82 (Eng. Abstr.) **(Jpn)**

[Intratumoral administration of OK432 in rats with liver tumor] Ishimaru M. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):880–8 (Eng. Abstr.) **(Jpn)**

[Effect of ascorbic acid on the hepatocarcinogenic action of N-nitrosodiethylamine in rats] Birk RV, et al. **Eksp Onkol** 1988;10(6):66–8 (Eng. Abstr.) **(Rus)**

[Suppression of tumor growth in the liver by cis-diamminedichloroplatinum as large oligolamellar liposomes prepared by freezing and thawing] Kaledin VI, et al. **Vopr Onkol** 1989;35(5):599–602 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Characterization of different forms of dipeptidyl peptidase IV from rat liver and hepatoma by monoclonal antibodies. Hartel S, et al. **Adv Exp Med Biol** 1988;240:207–14

The H+ -ATP synthase of mitochondria in tissue regeneration and neoplasia. Papa S, et al. **Ann N Y Acad Sci** 1988;551:168–77; discussion 177–8

Insulin and phorbol myristic acetate induce ornithine decarboxylase in Reuber H35 rat hepatoma cells by different mechanisms. Goodman SA, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):343–50

Synthesis and targeting of hexokinase to mitochondria in hepatoma cells. Kabir F, et al. **Arch Biochem Biophys** 1989 Oct;274(1):94–9

Induction of cytochrome P450-dependent monooxygenase activities in rat hepatoma H-4-IIE cells in culture by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds: mechanistic studies using radiolabeled congeners. Zacharewski T, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):344–55

Profile of drug metabolizing enzymes in the nuclear and microsomal fractions from rat liver nodules and normal liver. Pacifici GM, et al. **Arch Toxicol** 1988;62(5):336–40

rp-120: a common endogenous substrate for insulin and IGF-1 receptor-associated tyrosine kinase activity in the highly malignant AS-30D rat hepatoma cells. Fanciulli M, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):168–73

Potentiation of N-methyl-N'-nitro-N-nitrosoguanidine-induced O6-methylguanine-DNA-methyltransferase activity in a rat hepatoma cell line by poly (ADP-ribose) synthesis inhibitors. Lefebvre P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):599–604

Calcium sensitive isocitrate and 2-oxoglutarate dehydrogenase activities in rat liver and AS-30D hepatoma mitochondria. Murphy AN, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1218–25

Modulation of nuclear cyclic AMP-dependent protein kinase in dibutyryl cyclic AMP-treated rat H4IIE hepatoma cells. Squinto SP, et al. **Biochem J** 1989 Jun 15;260(3):673–82

Glutathione transferases in rat hepatoma cells. Effects of ascites cells on the isoenzyme pattern in liver and induction of glutathione transferases in the tumour cells. Tahir MK, et al. **Biochem J** 1989 Jan 1;257(1):215–20

Induction of cytochrome P450IA1 in mouse hepatoma cells by several chemicals. Phenobarbital and TCDD induce the same form of cytochrome P450. Kärenlampi SO, et al. **Biochem Pharmacol** 1989 May 1;38(9):1517–25

Inducible (class 3) aldehyde dehydrogenase from rat hepatocellular carcinoma and 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated liver: distant relationship to the class 1 and 2 enzymes from mammalian liver cytosol/mitochondria. Hempel J, et al. **Biochemistry** 1989 Feb 7;28(3):1160–7

Heparin decreases the degradation rate of hepatic lipase in Fu5AH rat hepatoma cells. A model for hepatic lipase efflux from hepatocytes. Cisar LA, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):196–204

The effect of polycyclic aromatic hydrocarbons on choline kinase activity in mouse hepatoma cells. Paulson BK, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):274–7

Purification and properties of cathepsin D from rat Yoshida ascites hepatoma AH-130. Bonelli G, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:323–7

Increased thymidylate synthase (EC 2.1.1.45) activity in

normal and neoplastic proliferation. Hashimoto Y, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):1–10

Oxidative metabolism of 4–hydroxy–2,3–nonenal during diethyl–nitrosamine–induced carcinogenesis in rat liver. Canuto RA, et al. **Cancer Lett** 1989 Jul 1;46(1):7–13

Induction of rat liver gamma–glutamyltranspeptidase–positive foci by oral administration of 1–nitropyrene. Denda A, et al. **Cancer Lett** 1989 Apr;45(1):21–6

Expression of tumor–associated aldehyde dehydrogenase gene in rat hepatoma cell lines. Lin KH, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7009–12

Differential modulation of gene induction by glucocorticoids and antiglucocorticoids in rat hepatoma tissue culture cells. Simons SS Jr, et al. **Cancer Res** 1989 Apr 15;49(8 Suppl):2244s–2252s

Regulation of D–beta–hydroxybutyrate dehydrogenase in rat hepatoma cell lines. Zhang WW, et al. **Cancer Res** 1989 May 1;49(9):2433–7

Increases in cytochrome P–450 mediated 17 beta–estradiol 2–hydroxylase activity in rat liver microsomes after both acute administration and subchronic administration of 2,3,7,8–tetrachlorodibenzo–p–dioxin in a two–stage hepatocarcinogenesis model. Graham MJ, et al. **Carcinogenesis** 1988 Nov;9(11):1935–41

Expression of N–acetylglucosaminyltransferase III in hepatic nodules generated by different models of rat liver carcinogenesis. Pascale R, et al. **Carcinogenesis** 1989 May; 10(5):961–4

Association of DNA topoisomerase I and RNA polymerase I: a possible role for topoisomerase I in ribosomal gene transcription. Rose KM, et al. **Chromosoma** 1988; 96(6):411–6

Inhibition of mammalian spermine synthase by N–alkylated–1,3–diaminopropane derivatives in vitro and in cultured rat hepatoma cells. Baillon JG, et al. **Eur J Biochem** 1989 Jan 15;179(1):17–21

DNA polymerase alpha from normal rat liver is different than DNA polymerases alpha from Morris hepatoma strains. Popanda O, et al. **Eur J Biochem** 1989 Jul 15; 183(1):5–13

Chain–fluorinated polyamines as tumor markers—IV. Comparison of 2–fluoroputrescine and 2,2–difluoroputrescine as substrates of spermidine synthase in vitro and in vivo. Dezeure F, et al. **Int J Biochem** 1988; 20(11):1299–312

Role of glucose–6–phosphate dehydrogenase on enhanced proliferation of pre–neoplastic and neoplastic cells in rat liver induced by N–nitrosomorpholine. Baba M, et al. **Int J Cancer** 1989 May 15;43(5):892–5

High–molecular–weight neutral proteinase of rat ascites hepatoma cells and their collagenolytic activity. Maruyama R, et al. **Invasion Metastasis** 1988;8(5):285–300

Functional significance of mitochondrial bound hexokinase in tumor cell metabolism. Evidence for preferential phosphorylation of glucose by intramitochondrially generated ATP. Arora KK, et al. **J Biol Chem** 1988 Nov 25;263(33):17422–8

Hormonal regulation of chimeric genes containing the phosphoenolpyruvate carboxykinase promoter regulatory region in hepatoma cells infected by murine retroviruses. Hatzoglou M, et al. **J Biol Chem** 1988 Nov 25; 263(33):17798–808

An S6 kinase activated during liver regeneration is related to the insulin–stimulated S6 kinase in H4 hepatoma cells. Nemenoff RA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19455–60

Heterogeneous alterations of UDP–glucuronosyltransferases in mouse hepatic foci. Bock KW, et al. **J Cancer Res Clin Oncol** 1989;115(3):285–9

Description and analysis of differential sensitivity to glucocorticoids in Fao cells. Gagne D, et al. **J Steroid Biochem** 1988 Dec;31(6):917–25

The biphasic change of cytosolic acetyl–CoA hydrolase in rat liver during 3'–methyl–4–dimethylaminoazobenzene hepatocarcinogenesis. Ebisuno S, et al. **Jpn J Cancer Res** 1989 Feb;80(2):132–5

The source of serum alkaline phosphatases in liver–tumour–bearing rats. Hultcrantz R, et al. **Liver** 1989 Aug;9(4):216–22

Cobalt–activated acylase (AA–Co) activity in experimental liver carcinogenesis in rats. Part I. Chronic poisoning by dimethylaminoazobenzene. Simon K, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):70–5

Cobalt–activated acylase (AA–Co) activity in experimental liver carcinogenesis in rats. Part II. Chronic poisoning with carbon tetrachloride (CCl4). Simon K, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):147–9

Metabolism of ethanol and carcinogens by glutathione transferases. Bora PS, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4470–3

Regulation of the expression of the rat alcohol dehydrogenase gene by glucocorticoids. Quiali M, et al. **Prog Clin Biol Res** 1989;290:143–53

Cytosolic aldehyde dehydrogenases of rat liver. Properties of forms present in liver nodules from 20–methylcholantrene treated and untreated rats, and in livers from 20–methylcholantrene treated normal rats. Ritter E, et al. **Prog Clin Biol Res** 1989;290:35–47

Regulation of the expression of some genes for enzymes of glutathione metabolism in hepatotoxicity and hepatocarcinogenesis. Pitot HC, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):23–34

Analysis of glutathione–dependent enzyme activities in two different rat hepatomas and in normal liver in relation to their role in resistance to oxidative stress. Rossi MA, et al. **Tumori** 1988 Dec 31;74(6):617–21

Biochemical microanalysis of alpha–glucosidase activity in preneoplastic and neoplastic hepatic lesions induced in rats by N–nitrosomorpholine. Klimek F, et al. **Virchows Arch [B]** 1989;57(4):245–50

[The gene expression of carbamyl phosphate synthetase I in hepatocarcinogenesis] Yang YP, et al. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):191–4 (Eng. Abstr.) **(Chi)**

[Pretumor markers in experimental liver cancer and its biological significance] Yiao JL, et al. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):306–8 (11 ref.) **(Chi)**

[Histocytochemical studies on hematoporphyrin photoradiation effect on two enzymes of human liver cancer cells in nude mice] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):272–5 (Eng. Abstr.) **(Chi)**

[The activity of nuclear endonucleases and topoisomerases in the liver of rats and in diethylnitrosamine–induced tumors] Basnak'ian AG, et al. **Eksp Onkol** 1989;11(2):15–9 (Eng. Abstr.) **(Rus)**

[Comparative study of protein kinase C in the normal rat liver and in Zajdela's hepatoma. I. Electrophoretic analysis] Zakharova NV, et al. **Tsitologiia** 1988 Oct;30(10):1267–9 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Production of hepatocellular carcinoma by oval cells: cell cycle expression of c–myc and p53 at different stages of oval cell transformation. Braun L, et al. **Cancer Res** 1989 Mar 15;49(6):1554–61

Partial hepatectomy of rats ten weeks before carcinogen administration can enhance liver carcinogenesis: preliminary observations. Bartsch H, et al. **Carcinogenesis** 1988 Dec;9(12):2315–7

T antigen expression and tumorigenesis in transgenic mice containing a mouse major urinary protein/SV40 T antigen hybrid gene. Held WA, et al. **EMBO J** 1989 Jan; 8(1):183–91

Chimpanzee model for hepatitis non–A, non–B related hepatocellular carcinoma [editorial] Moor–Jankowski J. **J Med Primatol** 1988;17(5):233–4

Non–A, non–B hepatitis–related hepatocellular carcinoma in a chimpanzee. Muchmore E, et al. **J Med Primatol** 1988; 17(5):235–46

High susceptibility to hepatocellular carcinoma development in LEC rats with hereditary hepatitis. Masuda R, et al. **Jpn J Cancer Res** 1988 Jul;79(7):828–35

Enhancement of aflatoxin B1–induced hepatocarcinogenesis in rats by partial hepatectomy. Rizvi TA, et al. **Virchows Arch [B]** 1989;56(5):345–50

[A study on primary liver cancer in tree shrews induced by human hepatitis B virus and aflatoxin B1] Yan RQ. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):19–22 (Eng. Abstr.) **(Chi)**

GENETICS

Molecular cloning of rat phosphoprotein phosphatase 2A beta cDNA and increased expressions of phosphatase 2A alpha and 2A beta in rat liver tumors. Kitagawa Y, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):821–7

Regulation of albumin mRNA in H4 rat hepatoma cells by the availability of essential amino acids. Straus DS, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):33–6

Transcriptional deviation of the rat insulin–like growth factor II gene initiated at three alternative leader–exons between neonatal tissues and ascites hepatomas. Ueno T, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):411–9

Diploid nature of hepatocellular tumours developing from transplanted preneoplastic liver cells. Saeter G, et al. **Br J Cancer** 1989 Feb;59(2):198–205

Differential regulation of normal and tumor alpha 1–fetoprotein genes in fetal hepatocyte x hepatoma hybrids. Gingras MC, et al. **Cancer Res** 1988 Nov 15;48(22):6371–4

Chromosomal analysis of a diethylnitrosamine–induced tumorigenic and a nontumorigenic rat liver cell line. Holecek BU, et al. **Cancer Res** 1989 Jun 1;49(11):3024–8

Infrequent activation of K–ras, H–ras, and other oncogenes in hepatocellular neoplasms initiated by methyl(acetoxymethyl)nitrosamine, a methylating agent, and promoted by phenobarbital in F344 rats. Watatani M, et al. **Cancer Res** 1989 Mar 1;49(5):1103–9

The influence of phenobarbital and butylated hydroxytoluene on the ploidy rate in rat hepatocarcinogenesis. Haesen S, et al. **Carcinogenesis** 1988 Oct;9(10):1755–61

Studies on hypomethylation of liver DNA during early stages of chemical carcinogenesis in rat liver. Rao PM, et al. **Carcinogenesis** 1989 May;10(5):933–7

Reactivation of rat insulin–like growth factor II gene during hepatocarcinogenesis. Ueno T, et al. **Carcinogenesis** 1988 Oct;9(10):1779–83

Expression of different members of heat shock protein 70 gene family in liver and hepatomas. Cairo G, et al. **Hepatology** 1989 May;9(5):740–6

Poly(A+)RNA levels of growth–, differentiation– and transformation–associated genes in the progressive development of hepatocellular carcinoma in the rat. Huber BE, et al. **Hepatology** 1989 May;9(5):756–62

Sequence requirements for apolipoprotein B RNA editing in transfected rat hepatoma cells. Davies MS, et al. **J Biol Chem** 1989 Aug 15;264(23):13395–8

Increased incidence of CAD gene amplification in tumorigenic rat lines as an indicator of genomic instability of neoplastic cells. Otto E, et al. **J Biol Chem** 1989 Feb 25;264(6):3390–6

TGF beta gene transcription in normal and neoplastic liver growth. Carr BI, et al. **J Cell Biochem** 1989 Apr; 39(4):477–87

Immortalization and malignant transformation of hepatocytes by transforming genes of polyoma virus and of SV40 virus in vitro and in vivo. Paul D, et al. **Klin Wochenschr** 1988; 66 Suppl 11:134–9 (54 ref.)

Glucocorticoid and developmental regulation of amylase mRNAs in mouse liver cells. Samuelson LC, et al. **Mol Cell Biol** 1988 Sep;8(9):3857–63

Tumorigenicity of simian virus 40–hepatocyte cell lines: effect of in vitro and in vivo passage on expression of liver–specific genes and oncogenes. Woodworth CD, et al. **Mol Cell Biol** 1988 Oct;8(10):4492–501

Purification and characterization of a high–mobility–group–like DNA–binding protein that stimulates rRNA synthesis in vitro. Yang–Yen HF, et al. **Mol Cell Biol** 1988 Aug;8(8):3406–14

Glucocorticoid responsiveness of mouse mammary tumor virus (MMTV) promoters in a down–transcription hepatoma tissue culture (HTC) variant. John NJ, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):57–68

Glucocorticoid induction of plasminogen activator and plasminogen activator–inhibitor messenger RNA in rat hepatoma cells. Heaton JH, et al. **Mol Endocrinol** 1989 Feb; 3(2):349–55

Epidermal growth factor induction of cellular proliferation and protooncogene expression in growth–arrested rat H4IIE hepatoma cells: role of cyclic adenosine monophosphate. Squinto SP, et al. **Mol Endocrinol** 1989 Mar;3(3):433–46

Proto–oncogene activation during chemically induced hepatocarcinogenesis in rodents. Beer DG, et al. **Mutat Res** 1989 Jan;220(1):1–10 (88 ref.)

The rat albumin gene promoter is appropriately regulated in transient but not in stable transfections. Berland R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11573–90

Structure of a cDNA clone specific to hepatoma cells with rearranged mitochondrial sequences. Corral M, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10935

RNAs containing mitochondrial ND6 and COI sequences present an abnormal structure in chemically induced rat hepatomas. Corral M, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5191–206

Fused transcripts of c–myc and a new cellular locus, hcr in a primary liver tumor. Etiemble J, et al. **Oncogene** 1989 Jan;4(1):51–7

Structure and expression of hcr, a locus rearranged with c–myc in a woodchuck hepatocellular carcinoma. Möröy T, et al. **Oncogene** 1989 Jan;4(1):59–65

c–myc gene amplification during hepatocarcinogenesis by a choline–devoid diet. Chandar N, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2703–7

Gene expression during multistage hepatocarcinogenesis. Pitot HC, et al. **Scand J Gastroenterol Suppl** 1988;151:52–61

Alteration in chromatin conformation of proliferating and differentiating enzyme genes in normal mouse liver and ascites hepatoma cells and its relation to the gene expression of enzymes. Li S, et al. **Sci Sin [B]** 1988 Nov;31(11):1319–24

Altered methylation of ras oncogenes in benzidine–induced B6C3F1 mouse liver tumors. Vorce RL, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):398–410

Quantitative variation in immunoglobulin G (Igsr–1) in LEC rats associated with spontaneous hepatitis and hepatoma. Matsumoto K, et al. **Transplant Proc** 1989 Apr;21(2):3259

[Gene expressible products in 615 line mouse transplantable hepatoma proteins study] Lin X, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):241–5 (Eng. Abstr.) **(Chi)**

[Expression of H–ras gene in mouse 615 transplantable hepatoma] Zou CH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):238–40 (Eng. Abstr.) **(Chi)**

[Changes in the expression of genes in the tissues of tumor–bearing animals] Likhtenshtein AV, et al. **Dokl Akad Nauk SSSR** 1989;304(5):1256–8 **(Rus)**

IMMUNOLOGY

Host cell–tumor cell interactions in a 24 hour transplanted Yoshida ascites tumor. Roveta G. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):383–8

Production of monoclonal antibodies to preneoplastic liver cell populations induced by chemical carcinogens in rats and to transplantable Morris hepatomas. Dunsford HA, et al. **Cancer Res** 1989 Sep 1;49(17):4887–93

Characterization of the incorporation of woodchuck hepatitis virus surface antigen into hepatocyte plasma membrane in woodchuck hepatitis and in the virus–induced hepatocellular carcinoma. Michalak TI, et al. **Hepatology** 1989 Jul;10(1):44–55

Antibody to mouse interferon alpha/beta abrogates resistance to the multiplication of Friend erythroleukemia cells in the livers of allogeneic mice. Gresser I, et al. **J Exp Med** 1988

Oct 1;168(4):1271–91
H-2Kb antigen expression has no effect on natural killer susceptibility and tumorigenicity of a murine hepatoma. Nishimura MI, et al. **J Immunol** 1988 Dec 15; 141(12):4403–9
Xenogenization of tumor cells by transfection with plasmid containing env gene of Friend leukemia virus. Sugiura C, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1259–63
Changing tumour antigen expression in metastatic hepatocellular carcinoma cells of the guinea pig. van de Molengraft F, et al. **Virchows Arch [B]** 1989;56(4):211–9
[T cell subsets in peripheral blood and spleen in malignant hepatoma bearing rats] Ge YG.
Chung Hua Chung Liu Tsa Chih 1988 Nov;10(6):417–20 (Eng. Abstr.) (Chi)
[The regulation of splenocyte natural killer activity in C3HA mice in the early period after hepatoma 22a transplantation] Filatova NA, et al. **Eksp Onkol** 1989;11(2):42–5 (Eng. Abstr.) (Rus)
[Molecular weights of the hetero-organic NHCP antigens of kidney origin associated with rat hepatomas] Kushner VP, et al. **Tsitologiia** 1988 Oct;30(10):1226–31 (Eng. Abstr.) (Rus)

METABOLISM

Transport systems for amphipathic compounds in normal and neoplastic hepatocytes. Buscher HP, et al.
Adv Enzyme Regul 1988;27:173–92
Abnormal Ca^{2+} transport characteristics of hepatoma mitochondria and endoplasmic reticulum. Murphy AN, et al. **Adv Exp Med Biol** 1988;232:139–50
Effects of systemic inhibition of prostaglandin production on protein metabolism in tumor-bearing rats. Strelkov AB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C261–9
Effect of tert-butyl hydroperoxide on metabolism of liver and hepatoma. Borrello S, et al. **Ann N Y Acad Sci** 1988; 551:144–6
Regulation of rat liver acute phase genes by interleukin-6 and production of hepatocyte stimulating factors by rat hepatoma cells. Fey GH, et al. **Ann N Y Acad Sci** 1989; 557:317–29; discussion 329–31
Lipid peroxidation in cancer cells: chemical and physical studies. Masotti L, et al. **Ann N Y Acad Sci** 1988;551:47–57; discussion 57–8
Ca^{2+}-transport-mediated regulation of metabolism in hepatoma mitochondria. Murphy AN, et al.
Ann N Y Acad Sci 1988;551:253–5
Active Ca^{2+} accumulation in the endoplasmic reticulum of different hepatomas: stimulation by phosphates and Ca^{2+}-releasing effect of IP3. Romani A, et al.
Ann N Y Acad Sci 1988;551:249–52
Cytochrome P-448 induction restores the propagation of $.O_2^-$-induced lipid peroxidation in hepatoma microsomes. Galeotti T, et al. **Basic Life Sci** 1988;49:513–6
A short incubation time in insulin binding experiments leads to disappearance of negative cooperativity in H35 hepatoma cells. de Vries CP, et al.
Biochem Biophys Res Commun 1988 Dec 30;157(3):1390–5
The aromatic hydrocarbon receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin and variable levels of induced aryl hydrocarbon hydroxylase activity in clones of mouse hepatoma cells. Forster-Gibson CJ, et al.
Biochem Cell Biol 1988 Dec;66(12):1278–86
Glucocorticoid stimulation of tetrahydrobiopterin levels and phenylalanine hydroxylase activity in rat hepatoma cells. Parniak MA, et al. **Biochem Cell Biol** 1989 Jun;67(6):293–6
Induction of heme oxygenase in rat hepatoma cells by exposure to heavy metals and hyperthermia. Taketani S, et al. **Biochem Int** 1988 Oct;17(4):665–72
A discoordinate increase in the cellular amount of 3-hydroxy-3-methylglutaryl-CoA reductase results in the loss of rate-limiting control over cholesterogenesis in a tumour cell-free system. Azrolan NI, et al. **Biochem J** 1989 Mar 1;258(2):421–5
Regulation of polyamine biosynthesis in rat hepatoma (HTC) cells by a bisbenzyl polyamine analogue. Bitonti AJ, et al. **Biochem J** 1989 Feb 1;257(3):769–74
Effects of dimethyl sulphoxide on the synthesis of plasma proteins in the human hepatoma HepG2. Induction of an acute-phase-like reaction. Iwasa F, et al. **Biochem J** 1988 Aug 1;253(3):927–30
Expression of the haemopexin-transport system in cultured mouse hepatoma cells. Links between haemopexin and iron metabolism. Smith A, et al. **Biochem J** 1988 Dec 15; 256(3):941–50
Eupatoriopicrin-induced lipid peroxidation in liver and tumour tissue of the mouse. Woerdenbag HJ, et al.
Biochem Pharmacol 1989 Sep 15;38(18):3115–8
Characterization of high molecular weight transforming growth factor alpha produced by rat hepatocellular carcinoma cells. Luetteke NC, et al. **Biochemistry** 1988 Aug 23;27(17):6487–94
Alteration of ganglioside composition and metabolism in doxorubicin-resistant rat tumoral cells. Benchekroun MN, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):553–7
Biosynthesis of high molecular weight polylactosamine-type glycopeptides in rat Zajdela hepatoma ascites cells. Saunier B, et al. **Biochim Biophys Acta** 1989 May 10; 1011(2-3):110–6
The adenine nucleotide catabolism in nonphosphorylating mitochondria of different tissues. Ziegler M, et al.
Biomed Biochim Acta 1989;48(2-3):S48–52
Influence of pH on the modification of thiols by carbamoylating agents and effects on glutathione levels in normal and neoplastic cells. Hu JJ, et al.
Cancer Chemother Pharmacol 1989;24(2):95–101
Decreased vacuolar acidification capacity in drug-resistant rat liver preneoplastic nodules. Anderson GN, et al.
Cancer Res 1989 Jul 15;49(14):3765–9
Adenine nucleotides and carbohydrates in subpopulations of hepatic nodules with normal and compromised microcirculation. Anundi I, et al. **Cancer Res** 1989 Jun 15; 49(12):3282–6
Cross-linkage of nucleophosmin in tumor cells by nitrogen mustard. Chan PK. **Cancer Res** 1989 Jun 15;49(12):3271–5
Biochemical and growth inhibitory effects of the erythro and threo isomers of gamma-fluoromethotrexate, a methotrexate analogue defective in polyglutamylation. McGuire JJ, et al. **Cancer Res** 1989 Aug 15;49(16):4517–25
Significance of purine salvage in circumventing the action of antimetabolites in rat hepatoma cells. Natsumeda Y, et al. **Cancer Res** 1989 Jan 1;49(1):88–92
Cellular expression of alpha-fetoprotein gene and its relation to albumin gene expression during rat azo-dye hepatocarcinogenesis. Scoazec JY, et al. **Cancer Res** 1989 Apr 1;49(7):1790–6
Tissue-specific pharmacodynamics of 5-bromo-2'-deoxyuridine incorporation into DNA in VX2 tumor-bearing rabbits. Stetson PL, et al. **Cancer Res** 1988 Dec 1;48(23):6900–5
Cyclosporin A and verapamil enhancement of daunorubicin-produced nucleolar protein B23 translocation in daunorubicin-resistant and -sensitive human and murine tumor cells. Sweet P, et al. **Cancer Res** 1989 Feb 1; 49(3):677–80
Enhanced metabolic activation of chemical hepatocarcinogens in woodchucks infected with hepatitis B virus. De Flora S, et al. **Carcinogenesis** 1989 Jun; 10(6):1099–106
Protooncogene methylation and expression in regenerating liver and preneoplastic liver nodules induced in the rat by diethylnitrosamine: effect of variations of S-adenosylmethionine:S-adenosylhomocysteine ratio. Garcea R, et al. **Carcinogenesis** 1989 Jul;10(7):1183–92
Analysis of antioxidant defense systems during rat hepatocarcinogenesis. Vo TK, et al. **Carcinogenesis** 1988 Nov;9(11):2009–13
Fatty acid composition of phospholipids in mitochondria and microsomes during diethylnitrosamine carcinogenesis in rat liver. Canuto RA, et al. **Cell Biochem Funct** 1989 Jan; 7(1):11–9
Metabolism of 4-hydroxynonenal by the rat hepatoma cell line MH1C1. Ferro M, et al. **Cell Biochem Funct** 1988 Oct; 6(4):245–50
Heat shock, protein synthesis and ribosomal protein S6 phosphorylation in vitro in Yoshida AH 130 ascites hepatoma cells. Comolli R, et al. **Cell Biol Int Rep** 1988 Oct;12(10):907–17
Correlation of the in vitro incorporation of 14C-labelled amino acids into proteins with tRNA levels in hepatomas 7793 and AH 130. Del Monte U, et al. **Cell Mol Biol** 1988; 34(4):361–71
A mouse minialbumin gene is specifically expressed in differentiated hepatoma cells but not in transgenic mice. Lorès P, et al. **Differentiation** 1988 Jun;38(1):35–41
Insulin and dexamethasone regulation of a rat hepatoma messenger ribonucleic acid: insulin has a transcriptional and a posttranscriptional effect. Messina JL. **Endocrinology** 1989 Feb;124(2):754–61
Uptake of 3,5,3'-triiodothyronine by cultured rat hepatoma cells is inhibitable by nonbile acid cholephils, diphenylhydantoin, and nonsteroidal antiinflammatory drugs. Topliss DJ, et al. **Endocrinology** 1989 Feb; 124(2):980–6
Influence of 2-deoxy-D-glucose and arterial ischaemia on glucose oxidation and growth of liver cancer in the rat. Mack P, et al. **Eur J Cancer Clin Oncol** 1988 Sep; 24(9):1433–7
Differential entry of ricin into malignant and normal rat hepatocytes. Decastel M, et al. **Exp Cell Res** 1989 Feb; 180(2):399–408
Overall proteolysis in perfused and subfractionated chemically induced malignant hepatoma of rat: effects of amino acids. Yucel T, et al. **Exp Mol Pathol** 1989 Feb; 50(1):38–49
Cytosolic-free Ca^{2+} and cell killing in hepatoma 1c1c7 cells exposed to chemical anoxia. Nicotera P, et al.
FASEB J 1989 Jan;3(1):59–64
Angiotensinogen production by rat hepatoma cells is stimulated by B cell stimulatory factor 2/interleukin-6. Itoh N, et al. **FEBS Lett** 1989 Feb 13;244(1):6–10
Enhanced levels of cathepsin B mRNA in murine tumors. Moin K, et al. **FEBS Lett** 1989 Feb 13;244(1):61–4
Antioxidant systems in tumour cells: the levels of antioxidant enzymes, ferritin, and total iron in a human hepatoma cell line. Bannister WH, et al. **Free Radic Res Commun** 1986; 1(6):361–7
An unusual NAD(P)H-dependent O_2^--generating redox system in hepatoma 22a nuclei. Peskin AV, et al.
Free Radic Res Commun 1987;3(1–5):47–55
Specific lectin bindings to oval cells and proliferated bile ductules. Makino Y, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):658–65
Reduced binding and removal of chylomicron remnants by ethionine-induced premalignant liver. Barnard GF, et al. **Hepatology** 1989 May;9(5):731–9
In vitro toxicity of hydrogen peroxide against normal vs. tumor rat hepatocytes: role of catalase and of the glutathione redox cycle. Mavier P, et al. **Hepatology** 1988 Nov-Dec;8(6):1673–8
Studies on the regulation of cholesterol metabolism by low- and high-density lipoproteins in HepG2 cells. Ranganathan S, et al. **Hepatology** 1989 Apr;9(4):547–51
Mechanisms of alpha-fetoprotein synthesis in hepatoma cells. Combined electron microscopic immunocytochemistry and autoradiography. Iwai M, et al. **Histochemistry** 1989; 92(2):115–20
The use of the rat hepatoma cell line MH1C1 to investigate the stimulus-secretion response of hepatic acute phase proteins. Taktak YS, et al. **Horm Metab Res** 1988 Nov; 20(11):682–6
Glycogen metabolism in radiation induced hepatocellular carcinoma in Swiss albino mice. Gupta NK, et al.
Indian J Cancer 1988 Dec;25(4):235–40
Prostaglandin biosynthetic capacity of hepatomas with different growth rates. Cyran J, et al. **Int J Biochem** 1989; 21(4):445–51
Immunocytochemical detection of the onco-developmental protein oncomodulin in pre-neoplastic and neoplastic hepatocellular lesions during hepatocarcinogenesis in rats. Bernaert D, et al. **Int J Cancer** 1989 Apr 15;43(4):719–27
Time dependent zinc distribution in the development of the BW7756 murine hepatoma. Preiss IL, et al.
Int J Rad Appl Instrum [B] 1988;15(4):361–4
Mechanisms involved in the cellular uptake of hematoporphyrin by rat hepatoma cells. Naitoh Y, et al.
J Biochem (Tokyo) 1988 Jun;103(6):973–8
Transport of 1,5-anhydro-D-glucitol across plasma membranes in rat hepatoma cells. Suzuki M, et al.
J Biochem (Tokyo) 1988 Dec;104(6):956–9
Tyrosine phosphorylation of the insulin receptor during insulin-stimulated internalization in rat hepatoma cells. Backer JM, et al. **J Biol Chem** 1989 Jan 25;264(3):1694–701
Phorbol ester modulates interleukin 6- and interleukin 1-regulated expression of acute phase plasma proteins in hepatoma cells. Baumann H, et al. **J Biol Chem** 1988 Nov 25;263(33):17390–6
Steroid binding to hepatoma tissue culture cell glucocorticoid receptors involves at least two sulfhydryl groups. Miller NR, et al. **J Biol Chem** 1988 Oct 15;263(29):15217–25
Tyrosine phosphorylation of pp185 by insulin receptor kinase in a cell-free system. Tashiro-Hashimoto Y, et al.
J Biol Chem 1989 Apr 25;264(12):6879–85
Cell surface heparan sulphate and adhesive property of sublines of rat ascites hepatoma AH7974. Kimura A, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):683–9
Autoantibodies to the insulin receptor (B-10) can stimulate tyrosine phosphorylation of the beta-subunit of the insulin receptor and a 185,000 molecular weight protein in rat hepatoma cells. Takayama-Hasumi S, et al.
J Clin Endocrinol Metab 1989 Apr;68(4):787–95
Modulation of the synthesis of apolipoproteins in rat hepatoma cells. Pietrangelo A, et al. **J Hepatol** 1988 Oct; 7(2):258–68
Effect of dietary protein quality on development of aflatoxin B1-induced hepatic preneoplastic lesions. Schulsinger DA, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1241–5
Stimulatory and inhibitory effects of forskolin on adenylate cyclase in rat normal hepatocytes and hepatoma cells. Miyamoto K, et al. **J Pharmacobiodyn** 1989 Feb;12(2):87–93
Kinetics of interaction of 2-acetylaminofluorene with normal liver and carcinogen-induced hepatocyte nodules in vivo and in vitro. Eriksson LC, et al. **Lab Invest** 1989 Mar; 60(3):409–17
Kinetics of excretion of 2-acetylaminofluorene in normal and xenobiotic-treated rats and in rats with hepatocyte nodules. Rinaudo JA, et al. **Lab Invest** 1989 Mar;60(3):399–408
Beta 1-adrenoceptors in rat hepatoma. Desensitization by isoproterenol and phorbol-myristate-acetate. García-Sáinz JA, et al. **Life Sci** 1989;44(23):1767–75
Tissue distribution of cisplatin after hepatic arterial injection of a cisplatin-lipiodol suspension containing phosphatidylcholine to rabbits carrying VX-2 hepatic carcinoma. Nakashima M, et al. **Pharm Res** 1989 Apr; 6(4):342–5
Rapid elevation of liver hydroxyproline content following a single administration of various chemical carcinogens to rats. Watanabe A, et al. **Res Exp Med (Berl)** 1989; 189(1):43–6
Evaluation of selective boron absorption in liver tumors. Chiaraviglio D, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):170–2
Insulin stimulates the synthesis of plasminogen activator inhibitor 1 by the human hepatocellular cell line Hep G2. Alessi MC, et al. **Thromb Haemost** 1988 Dec 22;60(3):491–4
Interaction of thrombin and factor Xa with bovine vascular endothelial cells, smooth muscle cells and rat hepatoma cells. Dryjski M, et al. **Thromb Haemost** 1988 Oct 31; 60(2):148–52
Influence of ochratoxin B on the ochratoxin A inhibition of phenylalanyl-tRNA formation in vitro and protein synthesis in hepatoma tissue culture cells. Roth A, et al.
Toxicol Lett 1989 Feb;45(2-3):307–13
Regulation of protein turnover versus growth state. III. Growth cessation is associated with activation of autophagy in Yoshida ascites hepatoma AH-340. Pfeifer

U, et al. **Virchows Arch [B]** 1988;55(6):363–9
[Interaction between ricin and Zajdela ascitic hepatoma cells] Decastel M, et al. **C R Acad Sci [III]** 1988;307(4):165–70 (Eng. Abstr.) **(Fre)**
[Distribution of human alpha-fetoprotein in animal tumor cells] Sasaki J, et al. **Gan To Kagaku Ryoho** 1988 Dec; 15(12):3305–8 **(Jpn)**
[Experimental studies on drug uptake by metastatic liver tumor after intra-arterial, intraportal and intravenous administration of BrdU] Shioaki Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2829–32 (Eng. Abstr.) **(Jpn)**
[Hypoalphacholesterolemia: dynamics of the subfractional spectrum of high density lipoproteins during their interaction with fibroblasts and hepatoma Hep–G2 cell line] Shakhov IuA, et al. **Biokhimiia** 1989 Mar;54(3):440–7 (Eng. Abstr.) **(Rus)**
[Thymidine transport and its incorporation into the cellular DNA of Ehrlich ascites cancer and Zajdela's ascitic hepatoma in the presence of thiophosphamide and thiophosphamide–modified DNA] Patskovskiĭ IuV, et al. **Eksp Onkol** 1989;11(4):37–41 (Eng. Abstr.) **(Rus)**
[Purine compound transport and metabolism in the thymus and spleen lymphocytes of C3HA mice during the growth of hepatoma 22] Pimenov AM, et al. **Eksp Onkol** 1989; 11(4):33–7 (Eng. Abstr.) **(Rus)**
[DNA–bound lipids of the cells of Zajdela ascites hepatoma and of Ehrlich ascites cancer] Struchkov VA, et al. **Eksp Onkol** 1989;11(1):35–9 (Eng. Abstr.) **(Rus)**
[Absorption and transition of [8–14C]adenosine and 2',3'–O–isopropylidene adenosine by Zaidel hepatomas and their homogenates] Golovatskiĭ ID, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):64–9 (Eng. Abstr.) **(Rus)**
[Stimulation with triiodothyronine of the synthesis of DNA, total proteins, nuclear proteins and nuclear matrix proteins in cultured cells of hepatoma Morris 7777] Adylova AT, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):113–7 (Eng. Abstr.) **(Rus)**
[Metabolism of nuclear proteins of the thymus and bone marrow cells in mice with hepatoma 22] Savina MI, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):111–4 (Eng. Abstr.) **(Rus)**
[Features of purine compound metabolism in hepatoma 22, mouse liver and erythrocytes during tumor development] Tikhonov IuV, et al. **Vopr Med Khim** 1989 May–Jun; 35(3):125–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Activation of c–myc by woodchuck hepatitis virus insertion in hepatocellular carcinoma. Hsu T, et al. **Cell** 1988 Nov 18;55(4):627–35
Unlinked regulation of the sensitivity of primary glucocorticoid–inducible responses in mouse mammary tumor virus infected Fu5–5 rat hepatoma cells. Wasner G, et al. **Mol Endocrinol** 1988 Nov;2(11):1009–17

PATHOLOGY

Maturational agents alone or in combination with cytotoxic agents in therapy of tumor metastases. Milas L, et al. **Adv Exp Med Biol** 1988;233:377–83
Evidence for the stem cell origin of hepatocellular carcinoma and cholangiocarcinoma. Sell S, et al. **Am J Pathol** 1989 Jun;134(6):1347–63 (87 ref.)
pH regulation in hepatoma cells: roles for Na–H exchange, Cl–HCO3 exchange, and Na–HCO3 cotransport. Weintraub WH, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G317–27
Cytomorphometry. A methodologic study of preparation techniques, selection methods and sample sizes. van Diest PJ, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):225–31
Shape change leading to cell death and Ca2+ entry in Yoshida hepatoma cells. Russo MA, et al. **Ann N Y Acad Sci** 1988;551:267–9
1,25–Dihydroxyvitamin D3–induced growth restriction of cultured epithelial cells derived from a murine hepatic tumor. Tanaka Y, et al. **Biochem Pharmacol** 1989 Feb 1; 38(3):449–53
Disseminated Yoshida ascites tumor cells in the liver are still tumorigenic after liver storing at –80 degrees C. Roveta G. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):377–82
Location predilection of intramuscularly transplanted Yoshida ascites tumor cells. Roveta G. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):189–94
Evaluation of the transplacental tumorigenicity of the tobacco–specific carcinogen 4–(methylnitrosamino)–1–(3–pyridyl)–1–butanone in mice. Anderson LM, et al. **Cancer Res** 1989 Jul 15;49(14):3770–5
Differences between the promoting activities of the peroxisome proliferator WY–14,643 and phenobarbital in rat liver. Cattley RC, et al. **Cancer Res** 1989 Jun 15; 49(12):3246–51
Inhibition of promotion and persistent nodule growth by S–adenosyl–L–methionine in rat liver carcinogenesis: role of remodeling and apoptosis. Garcea R, et al. **Cancer Res** 1989 Apr 1;49(7):1850–6
Focal impairment of growth in hepatocellular neoplasms of C57BL/6 mice: a possible explanation for the strain's resistance to hepatocarcinogenesis. Kakizoe S, et al. **Cancer Res** 1989 Jul 15;49(14):3985–9
Immortal epithelial cells of normal C3H mouse liver in culture: possible precursor populations for spontaneous hepatocellular carcinoma. Lee GH, et al. **Cancer Res** 1989 Jan 15;49(2):403–9
Analysis of hepatocyte plasma membrane polarity during rat azo dye hepatocarcinogenesis using monoclonal antibodies directed against domain–associated antigens. Scoazec JY, et al. **Cancer Res** 1988 Dec 1;48(23):6882–90
Promotion of malignant 'embryonal' liver tumors by phenobarbital: increased incidence and shortened latency of hepatoblastomas in (DBA/2 x C57BL/6)F1 mice initiated with N–nitrosodiethylamine. Diwan BA, et al. **Carcinogenesis** 1989 Jul;10(7):1345–8
Lack of promoting effect of clonazepam on the development of N–nitrosodiethylamine–initiated hepatocellular tumors in mice is correlated with its inability to inhibit cell–to–cell communication in mouse hepatocytes. Diwan BA, et al. **Carcinogenesis** 1989 Sep;10(9):1719–24
Enhancement of hepatocarcinogenesis in rats by dietary fructose. Enzmann H, et al. **Carcinogenesis** 1989 Jul; 10(7):1247–52
Intralobular distribution of preneoplastic foci in rat liver after a single dose of N–methyl–N–nitrosourea (MNU) following partial hepatectomy. Maguire S, et al. **Carcinogenesis** 1989 May;10(5):871–4
Cycles of repeated augmentation pressure in rapid production of pancreatic and cholangiocellular carcinomas in hamsters initiated with N–nitrosobis(2–oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1457–9
The lectin binding characteristics of spontaneous and phenobarbitone induced hepatic lesions in C3H/He mice. Pritchard DJ, et al. **Carcinogenesis** 1989 Sep;10(9):1737–42
Neuroendocrine dysdifferentiation and bombesin production in carcinogen–induced hepatocellular rat tumours. Seglen PO, et al. **Carcinogenesis** 1989 Jan;10(1):21–5
Evaluation of chlordecone in a two–stage model of hepatocarcinogenesis: a significant sex difference in the hepatocellular carcinoma incidence. Sirica AE, et al. **Carcinogenesis** 1989 Jun;10(6):1047–54
Hexachlorobenzene as a promoter of diethylnitrosamine–initiated hepatocarcinogenesis in rats and comparison with induction of porphyria. Stewart FP, et al. **Carcinogenesis** 1989 Jul;10(7):1225–30
Strain differences in hepatic tumor promotion by phenobarbital in diethylnitrosamine– and dimethylnitrosamine–initiated infant male mice. Weghorst CM, et al. **Carcinogenesis** 1989 Aug;10(8):1409–12
Effect of two aliphatic aldehydes, methylglyoxal and 4–hydroxypentenal, on the growth of Yoshida ascites hepatoma AH–130. Tessitore L, et al. **Chem Biol Interact** 1989;70(3–4):227–40
The role of calcium channels and serotonin (5–HT2) receptors for tumour cell lodgement in the liver. Skolnik G, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):169–74
Morphological characteristics and ganglioside composition of substratum adhesion sites in a hepatoma cell line (CMH5123 cells) during different phases of growth. Barletta E, et al. **Exp Cell Res** 1989 Jun;182(2):394–402
Metaplastic pancreatic cells in liver tumors induced by diethylnitrosamine. Lee BC, et al. **Exp Mol Pathol** 1989 Feb;50(1):104–13
The effect of several sex steroid hormones on the growth rate of three Morris hepatoma tumor lines. Erdstein J, et al. **Hepatology** 1989 Apr;9(4):621–4
Role of different epithelial cell types in liver ontogenesis, regeneration and neoplasia. Marceau N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):336–41 (72 ref.)
Synergistic promoter effect of diethylstilbesterol & phenobarbitone in diethylnitrosamine induced hepatic neoplasia in rats. Arora VK, et al. **Indian J Med Res** 1989 Feb;90:9–16
Phenotypic variability of cultured rat hepatoma cell population in respect to alpha–fetoprotein synthesis. Eraiser TL, et al. **Int J Cancer** 1988 Oct 15;42(4):633–7
Enhanced tumor growth and metastatic spread of an MH134 variant lacking a part of the MM antigen: a possible role of antibody–dependent cellular cytotoxicity in control of tumor growth and metastases. Hara H, et al. **Int J Cancer** 1989 Jul 15;44(1):137–42
Glucocorticoids confer normal serum/growth factor–dependent growth regulation to Fu5 rat hepatoma cells in vitro. Sequential expression of cell cycle–regulated genes without changes in intracellular calcium or pH. Cook PW, et al. **J Biol Chem** 1988 Dec 25;263(36):19296–302
The role of cellular folates in the enhancement of activity of the thymidylate synthase inhibitor 10–propargyl–5,8–dideazafolate against hepatoma cells in vitro by inhibitors of dihydrofolate reductase. Galivan J, et al. **J Biol Chem** 1989 Jun 25;264(18):10685–92
In vivo and in vitro test for growth potential of liver cells from rats during early stage of hepatocarcinogenesis by 3'–methyl–4–dimethylaminoazobenzene. Miyazaki M, et al. **J Cancer Res Clin Oncol** 1989;115(1):1–8
Sequential changes in growth kinetics and cellular phenotype during hepatocarcinogenesis. Zerban H, et al. **J Cancer Res Clin Oncol** 1989;115(4):329–34
Correlations between heparan sulfate metabolism and hepatoma growth. Ishihara M, et al. **J Cell Physiol** 1989 Mar;138(3):467–76
Formation of plasma membrane domains in rat hepatocytes and hepatoma cell lines in culture. Maurice M, et al. **J Cell Sci** 1988 May;90 (Pt 1):79–92
Differences in growth of transplantable ascites hepatoma among various lines of Donryu rat. Ding XD, et al. **Jikken Dobutsu** 1989 Apr;38(2):151–4
Potentiation of invasive capacity of rat ascites hepatoma cells by transforming growth factor–beta. Mukai M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):107–10
Ultrastructural and immunocytochemical characterization of the cellular phenotype in primary adenoid liver tumours of the rat. Ruan Y, et al. **Pathol Res Pract** 1989 Feb; 184(2):223–33
Doxorubicin conjugates of monoclonal antibodies to hepatoma–associated antigens. Shouval D, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8276–80
Cell–to–cell interaction between N–13A ascitic hepatoma cells and normal cells maintained in short–term co–cultures: an optical, transmission and scanning electron microscopical study. Boix–Ferrero JJ, et al. **Rev Esp Oncol** 1985;32(4):595–612
Magnetic resonance imaging of hepatic neoplasms in the rat. Johnson GA, et al. **Vet Pathol** 1989 Jul;26(4):303–8
Unusual histochemical pattern in preneoplastic hepatic foci characterized by hyperactivity of several enzymes. Enzmann H, et al. **Virchows Arch [B]** 1989;57(2):99–108
[Mechanism of cell damage by hematoporphyrin derivative (HPD) plus light. II. Effect of HPD plus light on respiration and oxidative phosphorylation in hepatoma cells and normal liver mitochondria] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):349–52 (Eng. Abstr.) **(Chi)**
[The microcomputer in aiding morphometry and analysis of lesions in experimental liver cell carcinoma] Ding L. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):704–5 **(Chi)**
[Pathological study of hepatocarcinogenesis in rats induced by 3'–Me–DAB] Xu YD. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):87–90 (Eng. Abstr.) **(Chi)**
[Interference of inflammation caused by polyester with the development of Yoshida ascite hepatoma in rats. V. Study of cytotoxicity in vitro] Melandri P, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):77–84 (Eng. Abstr.) **(Ita)**
[Interference of inflammation caused by polyester with the growth of Yoshida ascite hepatoma. IV. Modifications of the sedimentation profile of the hepatoma cells] Torboli M, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):69–75 (Eng. Abstr.) **(Ita)**
[Morphology of Morris hepatoma 5123 cells cultured in vitro] Chyczewski L, et al. **Patol Pol** 1988 Jul–Sep;39(3):204–9 (Eng. Abstr.) **(Pol)**
[Inhibition of proliferation of normal and neoplastic liver cells under conditions of prolonged hormonal stimulation] Krasil'nikov MA, et al. **Biokhimiia** 1989 Apr;54(4):656–61 (Eng. Abstr.) **(Rus)**
[Spontaneous hepatomas in hybrid mice (CBA x C57Bl/6)F1] Khar'kovskaia NA, et al. **Eksp Onkol** 1988;10(4):37–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Changes in the hepatic perfusion index during the development of experimental hepatic tumours. Nott DM, et al. **Br J Surg** 1989 Mar;76(3):259–63
Regional coupling of blood flow and methionine uptake in an experimental tumor assessed with autoradiography. Abe Y, et al. **Eur J Nucl Med** 1988;14(7–8):388–92
[Effects of the spleen and tuftsin on the growth and metastasis of murine ascitic hepatoma] Chen S. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):615–8, 42 (Eng. Abstr.) **(Chi)**
[Highly permeable contacts and electrical characteristics of the tissue of the normal liver and hepatomas. III. Absence of an effect of the tumor promoter phenobarbital on intercellular contacts in the mouse liver] Sharovskaia IuIu, et al. **Tsitologiia** 1988 Jun;30(6):678–84 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Prevention of prostate cancer and liver tumors in L–W rats by moderate dietary restriction. Pollard M, et al. **Cancer** 1989 Aug 1;64(3):686–90
Minimal dose and time protection by lindane (gamma–isomer of 1,2,3,4,5,6 hexachlorocyclohexane) against liver tumors induced by aflatoxin B1. Angsubhakorn S, et al. **Int J Cancer** 1989 Mar 15;43(3):531–4
Inhibition by cysteamine of hepatocarcinogenesis induced by N–nitrosomorpholine in Sprague–Dawley rats. Tatsuta M, et al. **Int J Cancer** 1989 Sep 15;44(3):529–33
Inhibitory effect of tamoxifen on diethylstilbestrol–promoted hepatic tumorigenesis in male rats and its possible mechanism of action. Kohigashi K, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1335–9
Inhibitory effect of ellagic acid on N–2–fluorenylacetamide–induced liver carcinogenesis in male ACI/N rats. Tanaka T, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1297–303
[Inhibition of aflatoxin B1–induced hepatocarcinogenesis by Rhizopus delemar] Zhu CR. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):688–90, 48 (Eng. Abstr.) **(Chi)**
[The effect of subcutaneous nitrosamine injections on the origin of tumors of the liver and their inhibition by vitamin C] Wagner W, et al. **Zentralbl Chir** 1988;113(22):1501–6

(Eng. Abstr.) (Ger)

RADIOGRAPHY

[Tumor imaging effects of perfluoroctylbromide (PFOB) emulsion] Murata K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2669–78 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

Radioimmunotherapy for hepatocellular carcinoma (HCC) using 131I–anti HCC isoferritin IgG: preliminary results of experimental and clinical studies. Liu KD, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):319–23

SECONDARY

Experimental liver metastasis. Implications of clonal proclivity and organ specificity. Ravikumar TS, et al. **Arch Surg** 1989 Jan;124(1):49–54

Immunotherapy of murine hepatic metastases with lymphokine–activated killer cells expanded in serum–free media and recombinant interleukin 2. Lafreniere R, et al. **Cancer Res** 1989 May 1;49(9):2409–14

Selection of a highly metastatic liver–colonizing subpopulation of Lewis lung carcinoma variant H–59 using murine hepatocyte monolayers. Brodt P. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):525–39

Demonstration of the organ preference of liver selected 'high metastatic' Lewis lung tumor cell line. Paku S, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):599–607

alpha–Difluoromethylornithine inhibits liver metastasis produced by intrasplenic injection of human tumor cells into nude mice. Zirvi KA, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):591–8

Effect of angiotensin II on blood flow in the transplanted sheep squamous cell carcinoma. Burton MA, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1373–6

Modulation of colon–derived experimental hepatic metastasis by murine nonparenchymal liver cells. Cohen SA, et al. **Immunol Invest** 1989 Jan–May;18(1–4):351–63

[Induction of liver metastases in the rat. An experimental model for research on magnetic resonance] Pavone P, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):94–8 (Eng. Abstr.) (Ita)

SECRETION

Transferrin is an autocrine growth factor secreted by Reuber H–35 cells in serum–free culture. Shapiro LE, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):650–4

SURGERY

Deep localized neodymium (Nd)–YAG laser photocoagulation in liver using a new water cooled and echoguided handpiece. Godlewski G, et al. **Lasers Surg Med** 1988;8(5):501–9

[Animal experiment studies of cryosurgical treatment of DS sarcomas and Morris hepatomas implanted in the liver] Ernst M, et al. **Zentralbl Chir** 1988;113(17):1111–5 (Eng. Abstr.) (Ger)

[Experimental analysis of in–depth temperature distribution in echo–guided in–depth irradiation with YAG laser] Uetera Y. **Nippon Geka Gakkai Zasshi** 1988 Nov; 89(11):1810–21 (Eng. Abstr.) (Jpn)

THERAPY

Effect on liver tumor growth in rats of allopurinol and 5–fluorouracil in combination with hepatic artery ligation. Carlsson G, et al. **Cancer Chemother Pharmacol** 1989; 23(3):169–72

Inhibition of murine hepatic tumor growth by liposomes containing a lipophilic muramyl dipeptide. Brodt P, et al. **Cancer Immunol Immunother** 1989;28(1):54–8

Immunotherapy of tumor–bearing mice utilizing virus help. Shimizu Y, et al. **Cancer Immunol Immunother** 1988; 27(3):223–7

Variable efficacy of interferon–alpha treatment on growth of human hepatoma cell lines in vitro. Ilan Y, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):505–11

Evaluation of high–intensity therapeutic ultrasound irradiation in the treatment of experimental hepatoma. Moore WE, et al. **J Pediatr Surg** 1989 Jan;24(1):30–3; discussion 33

Hematoporphyrin as a sensitizer of cell–damaging effect of ultrasound. Yumita N, et al. **Jpn J Cancer Res** 1989 Mar; 80(3):219–22

Postoperative active–specific immunotherapy of lymph node micrometastasis in a guinea pig tumor model. Bier H, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(4):197–205

Regression of line–10 hepatocellular carcinoma by a less toxic cord factor analogue combined with L18–MDP or synthetic lipid A analogues. Ishida H, et al. **Vaccine** 1988 Oct;6(5):440–4

[Radiotherapy alternated with chemotherapy and immunotherapy on nude mice bearing human hepatocellular carcinoma] Bao YM. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):382–4 (Eng. Abstr.) (Chi)

[Antitumor effect of IL–2 entrapped in liposomes on rat hepatoma, AH–66] Konno H, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):53–8 (Eng. Abstr.) (Jpn)

[Intra–hepatic artery infusional chemotherapy with cisplatin suspension in lipiodol (LPS) of hepatocellular carcinoma (I)—Preparation of LPS and its anticancer effect on a rabbit liver cancer model after injection into the hepatic artery] Fukushima S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2743–9 (Eng. Abstr.) (Jpn)

[Studies on the effectiveness of hyperthermia combined with arterial therapeutic blockage in the treatment of tumors. Part 2. Experimental studies on the effectiveness of hyperthermia combined with arterial embolization using degradable starch microspheres (DSM)] Murata T. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2717–24 (Eng. Abstr.) (Jpn)

[Studies on the effectiveness of hyperthermia combined with arterial therapeutic blockage in the treatment of tumors. Part 1. Experimental studies on the effectiveness of hyperthermia combined with arterial ligation] Murata T. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2709–16 (Eng. Abstr.) (Jpn)

[Tumor–specific immunotherapy model utilizing virus–reactive helper T–cell activities] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1307–14 (Eng. Abstr.) (Jpn)

[Induction of endogenous antitumor activities in the portal vein by using a subcutaneously–imbedded pediculated spleen in the rat; experimental study of adjuvant immunotherapy in liver metastases] Fujii M. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1850–9 (Eng. Abstr.) (Jpn)

[Effects of low–frequency ultrasound on tumors cells in experimental animals] Biriukov IuV, et al. **Grudn Khir** 1989 May–Jun;(3):64–9 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

The enhanced association of keratin with hepatoma cell nuclei. Burkhardt AL, et al. **Cancer Biochem Biophys** 1989 May;10(3):207–17

Isolation of purified plasma membranes from cultured cells and hepatomas by two–phase partition and preparative free–flow electrophoresis. Navas P, et al. **Cancer Res** 1989 Apr 15;49(8):2147–56

Lipid peroxidation and physical properties of smooth and rough hepatoma microsomes. Masotti L, et al. **Cell Biophys** 1989 Feb;14(1):53–65

Electron microscopic studies on chromatin loop of rat ascites hepatoma cells. Tohno Y, et al. **Cell Mol Biol** 1989; 35(1):27–32

[Observation of mast cells in adenoid liver tumors] Ruan YB, et al. **J Tongji Med Univ** 1988;8(3):129–34 (Eng. Abstr.) (Ger)

[Effect of single–stranded breaks on the ultrastructural organization and cytochemistry of the chromatin in tumor cells] Erenpreisa EA, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):591–3 (Eng. Abstr.) (Rus)

LIVER REGENERATION

Characterization by morphometric model of liver regeneration in the rat. Vizzotto L, et al. **Am J Anat** 1989 Aug;185(4):444–54

The H+ –ATP synthase of mitochondria in tissue regeneration and neoplasia. Papa S, et al. **Ann N Y Acad Sci** 1988;551:168–77; discussion 177–8

Inhibition of in vivo DNA synthesis in regenerating rat liver following thermal injury. Carter EA, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):196–201

Metabolic responsiveness to phorbol ester and activity of protein kinase C in isolated hepatocytes from partially hepatectomized rats. Houweling M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):294–301

Effect of chemical carcinogens and partial hepatectomy on "in vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1412–7

NH2–terminal amino acid sequence of rabbit hepatopoietin A, a heparin–binding polypeptide growth factor for hepatocytes. Zarnegar R, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1370–6

Changes in polyamine–oxidizing capacity of peroxisomes under various physiological conditions in rats. Hayashi H, et al. **Biochim Biophys Acta** 1989 May 31;991(2):310–6

Ornithine decarboxylase activity and the accumulation of its mRNA during early stages of liver regeneration. Hirvonen A. **Biochim Biophys Acta** 1989 Jan 23;1007(1):120–3

Levels and size complexity of DNA polymerase beta mRNA in rat regenerating liver and other organs. Nowak R, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):203–7

Deoxyribonucleoside triphosphate pools in regenerating rat liver: effect of hydroxyurea and exogenous deoxypyrimidines. Röttgen V, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):349–54

Stimulated rat liver mitochondrial biogenesis after partial hepatectomy. Nagino M, et al. **Cancer Res** 1989 Sep 1; 49(17):4913–8

Protooncogene methylation and expression in regenerating liver and preneoplastic liver nodules induced in the rat by diethylnitrosamine: effect of variations of S–adenosylmethionine:S–adenosylhomocysteine ratio. Garcea R, et al. **Carcinogenesis** 1989 Jul;10(7):1183–92

Comparison of 5–bromo–2–deoxyuridine and [3H]thymidine for studies of hepatocellular proliferation in rodents. Lanier TL, et al. **Carcinogenesis** 1989 Jul;10(7):1341–3

A comparison between different types of covalent DNA modifications (I–compounds, persistent carcinogen adducts and 5–methylcytosine) in regenerating rat liver. Randerath K, et al. **Carcinogenesis** 1988 Oct;9(10):1843–8

High density lipoproteins during rat liver regeneration. Bruscalupi G, et al. **Cell Mol Biol** 1989;35(1):47–54

Immunoarchitecture of regenerated splenic transplants: influence of donor and host age on the regeneration of splenic compartments. Westermann J, et al. **Cell Tissue Res** 1988 Nov;254(2):403–13

Altered interactions between glycogenesis and lipid synthesis after liver resection: specific effects of liver regeneration, coupled with non–specific effects of surgery. Holness MJ, et al. **Clin Sci** 1989 Mar;76(3):317–22

Molecular events in liver regeneration and repair. van Lancker JL. **Curr Top Pathol** 1989;79:205–54 (307 ref.)

Estradiol and testosterone levels in patients undergoing partial hepatectomy. A possible signal for hepatic regeneration? Francavilla A, et al. **Dig Dis Sci** 1989 Jun; 34(6):818–22

Indices of growth and death of liver cells in human chronic liver disease. Barr RD, et al. **East Afr Med J** 1987 Sep; 64(9):595–600

Gene expression in regenerating liver in relation to cell proliferation and stress. Sobczak J, et al. **Eur J Biochem** 1989 Mar 1;180(1):49–53

The cell–surface expression of the cell adhesion molecule cellCAM 105 in rat fetal tissues and regenerating liver. Odin P, et al. **Exp Cell Res** 1988 Nov;179(1):89–103

Isozymic forms of protein kinase C in regenerating rat liver. Houweling M, et al. **FEBS Lett** 1989 Apr 24;247(2):487–91

Casein kinase 2 activity increases in the prereplicative phase of liver regeneration. Pérez M, et al. **FEBS Lett** 1988 Oct 10;238(2):273–6

Heterogeneous activation of protein kinase C during rat liver regeneration induced by carbon tetrachloride administration. Sasaki Y, et al. **FEBS Lett** 1989 Aug 28; 254(1–2):59–65

The maximum of the histone acetyltransferase activity precedes DNA–synthesis in regenerating rat liver. Weiss G, et al. **FEBS Lett** 1988 Sep 26;238(1):205–10

Changes of plasma insulin glucagon and somatostatin in portal blood and morphological changes of islets of Langerhans after hepatectomy in dogs. Shobu R. **Gastroenterol Jpn** 1988 Aug;23(4):442–7

Effect of liver regeneration on hepatic cytochrome P450 isozymes and serum sex steroids in the male rat. Liddle C, et al. **Gastroenterology** 1989 Mar;96(3):864–72

Liver regeneration. Chamuleau RA, et al. **Hepatogastroenterology** 1988 Dec;35(6):309–12 (40 ref.)

Do transplanted human livers regenerate? Koch KS, et al. **Hepatology** 1989 May;9(5):789–90

Nodular regenerative hyperplasia of the liver following bone marrow transplantation. Snover DC, et al. **Hepatology** 1989 Mar;9(3):443–8

Role of different epithelial cell types in liver ontogenesis, regeneration and neoplasia. Marceau N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):336–41 (72 ref.)

Lack of evidence for a pyruvate kinase isozyme shift in hepatocytes of the regenerating rat liver. Miyanaga O, et al. **Int J Biochem** 1988;20(11):1219–25

Estimation of hepatic volume by SPECT during liver regeneration: an experimental study in an animal model. Faurous P, et al. **Int J Rad Appl Instrum [B]** 1989; 16(4):375–9

Healing of the resected liver stump: its process and the significance of portal blood flow. Kuwano H, et al. **Int Surg** 1988 Jul–Sep;73(3):157–60

The stimulating effect of a cytosol extract from regenerating liver on isolated hepatocytes and the positive role of insulin. Gorini P, et al. **Ital J Surg Sci** 1988;18(3):201–5

Compensatory route of spermidine acetylation and oxidation can supply sufficient putrescine for hepatic DNA synthesis at an early stage after partial hepatectomy in diaminopropane–treated rats. Sato Y, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):98–101

The expression of cAMP–dependent protein kinase subunits is differentially regulated during liver regeneration. Ekanger R, et al. **J Biol Chem** 1989 Mar 15;264(8):4374–82

An S6 kinase activated during liver regeneration is related to the insulin–stimulated S6 kinase in H4 hepatoma cells. Nemenoff RA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19455–60

TGF beta gene transcription in normal and neoplastic liver growth. Carr BI, et al. **J Cell Biochem** 1989 Apr; 39(4):477–87

Control of DNA polymerase–alpha activity in regenerating rat liver by calcium and 1 alpha,25(OH)2D3. Rixon RH, et al. **J Cell Physiol** 1989 May;139(2):354–60

Alteration of glucose–6–phosphatase activity and regenerative, and total DNA concentrations in regenerating and normal rat liver of aqueous extracts of two Nigerian plants. Oruambo IF. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):191–9

Does hyperprolactinemia affect hepatic regeneration independent of sex steroids? Kahn D, et al. **J Lab Clin Med** 1988 Nov;112(5):644–51

Effect of hepatic failure toxins on regenerative enzymes in the liver after injury with galactosamine in the rat. Zieve L, et al. **J Lab Clin Med** 1989 Apr;113(4):463–8

Hepatic regenerative enzyme activity after diffuse injury with galactosamine: relationship to histologic alterations. Zieve

L, et al. **J Lab Clin Med** 1988 Nov;112(5):575–82
Impaired liver regeneration in the analbuminemic rat. Hicks BA, et al. **J Surg Res** 1989 May;46(5):427–30
Regenerating liver macronodule causing biliary obstruction. Kane RA, et al. **JCU** 1989 Jul–Aug;17(6):434–8
A study of liver regeneration using fetal rat liver tissue transplanted into the spleen. Ebata H, et al. **Jpn J Surg** 1988 Sep;18(5):540–7
Regulation of liver growth: protooncogenes and transforming growth factors. Fausto N, et al. **Lab Invest** 1989 Jan; 60(1):4–13 (83 ref.)
Additive stimulation of hepatic putrescine production by glucagon and insulin after partial hepatectomy in rats. Sato Y, et al. **Life Sci** 1989;45(1):77–83
Expression of c-raf-1 and A-raf-1 during regeneration of rat liver following surgical partial hepatectomy. Silverman JA, et al. **Mol Carcinog** 1989;2(2):63–7
Further purification and characterization of hepatopoietin. Hoffmann G, et al. **Naturwissenschaften** 1988 Sep;75(9):458
Case 6. Perinatal hemochromatosis. Silver MM, et al. **Pediatr Pathol** 1989;9(2):203–10
Effect of the parenteral administration of energy substrates in different postoperation phases on the initiation and development of liver regeneration in rats subjected to partial hepatectomy. Zivný P, et al. **Physiol Bohemoslov** 1989;38(3):251–8
Effect of the parenteral administration of amino acid solutions in different phases after partial hepatectomy on the initiation and development of liver regeneration in rats. Zivný P, et al. **Physiol Bohemoslov** 1989;38(2):135–43
Transforming growth factor alpha may be a physiological regulator of liver regeneration by means of an autocrine mechanism. Mead JE, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1558–62
Experimental study of vagotomy for prevention of stress ulcer after hepatectomy of cirrhotic livers. Its influence on hepatic regeneration. Urakawa T, et al. **Scand J Gastroenterol** 1988 Aug;23(6):705–11
Proliferation and phenotypic expression of non-parenchymal liver cells. Bouwens L. **Scand J Gastroenterol Suppl** 1988; 151:46–51
Early events in the regulation of hepatocyte DNA synthesis: the role of alpha-adrenergic stimulation. Cruise JL, et al. **Scand J Gastroenterol Suppl** 1988;151:19–30
Liver-specific growth factors. Fleig WE. **Scand J Gastroenterol Suppl** 1988;151:31–6 (50 ref.)
Transforming growth factor beta and inhibition of hepatocellular proliferation. Strain AJ. **Scand J Gastroenterol Suppl** 1988;151:37–45 (103 ref.)
Fatty macroregenerative nodule in non-steatotic liver cirrhosis. A morphologic study. Terada T, et al. **Virchows Arch [A]** 1989;415(2):131–6
Effects of partial hepatectomy on microtubules and hepatocellular transport of indocyanine green in rats. Fukuyama T, et al. **Virchows Arch [B]** 1988;56(1):5–12
[The effect of 5-[2-(N,N-dimethylamino)ethoxy]-7-oxo-7H-benzo(c) fluorene hydrochloride (Benfluron, a cytostatic) on ornithine decarboxylase activity in the regenerating rat liver in vivo] Veselá J, et al. **Cesk Farm** 1988 Jul;37(6):251–4 (Eng. Abstr.) (Cze)
[The role of functional loading in liver regeneration mechanisms] Simek J, et al. **Cesk Fysiol** 1989;38(3):219–40 (125 ref.) (Cze)
[Saccharides and liver repair] Holeček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):367–96 (Eng. Abstr.) (Cze)
[Regenerative nodular hyperplasia and hepatocarcinoma (letter)] de Saint-Maur PP. **Ann Pathol** 1988;8(3):253–4 (Fre)
[Increase in nuclear aluminum concentration during hepatic regeneration: study by analytical ionic microscopy] Bonhomme L, et al. **C R Acad Sci [III]** 1989;308(11):293–7 (Eng. Abstr.) (Fre)
[Reparative abilities following infectious and toxic damage of the liver] Manns M. **Z Gastroenterol [Verh]** 1989 Jul; 24:233–5 (22 ref.) (Ger)
[Adaptive and regenerative processes following liver resection] Neuhaus P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:236–8 (19 ref.) (Ger)
[Significance of plasma glucagon and serum hepatocyte growth-promoting activity in rats during liver regeneration] Nagahama J. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):914–26 (Eng. Abstr.) (Jpn)
[Existence and clinical significance of human hepatocyte growth factor in sera and plasma from patients with fulminant hepatic failure] Nakayama H. **Fukuoka Igaku Zasshi** 1988 Jul;79(7):537–47 (Eng. Abstr.) (Jpn)
[Influence of hepatic ischemia on liver regeneration following hepatectomy, with special reference to the therapeutic choice for ruptured hepatoma] Miyazaki M, et al. **Gan No Rinsho** 1989 Jun;35(7):787–92 (Eng. Abstr.) (Jpn)
[Effect of activation of the reticuloendothelial system on hepatocyte regeneration in partially hepatectomized rats] Katoh K, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):250–7 (Eng. Abstr.) (Jpn)
[Hepato-portal-splenic dynamics after hepatectomies] Yamanaka N, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1422–5 (Eng. Abstr.) (Jpn)
[Purification and characterization of mouse liver arginase and its role in liver regeneration] Uchida T. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):431–8 (Eng. Abstr.) (Jpn)
[Changes in polyamine levels in erythrocytes during regeneration of rat liver] Ichiba K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1318 (Jpn)
[A case of hyperechoic regenerative nodule in liver cirrhosis] Niizawa M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1031–3 (Eng. Abstr.) (Jpn)
[Features of the destructive and reparative processes of the liver in various types of acute experimental peritonitis] Glumov VIa, et al. **Arkh Patol** 1989;51(5):33–9 (Eng. Abstr.) (Rus)
[Composition of DNA-bound lipids in the regenerating rat liver] Struchkov VA, et al. **Biokhimiia** 1988 Sep; 53(9):1449–54 (Eng. Abstr.) (Rus)
[Proliferation and polyploidy of hepatocytes as indicators of liver regeneration after exposure to environmental chemical factors] Beliaeva NN. **Gig Sanit** 1989 Mar;(3):48–52 (Eng. Abstr.) (Rus)
[Effect of the spleen cells from partially splenectomized and partially hepatectomized mice on the proliferation of hepatocytes in the regenerating liver of syngeneic recipients] Babaeva AG, et al. **Ontogenez** 1988 Nov-Dec; 19(6):573–81 (Eng. Abstr.) (Rus)
[Changes in the proliferative activity of the corneal epithelium and the regenerating liver in partial splenectomy in mice] Druzhkova TA. **Ontogenez** 1988 Jul–Aug; 19(4):390–3 (Eng. Abstr.) (Rus)
[Demonstration of the lymphokine mechanism of the reinforcement of lymphoid proliferation during liver regeneration in mice] Rakhmilevich AL. **Ontogenez** 1989 Mar–Apr;20(2):192–8 (Eng. Abstr.) (Rus)
[Change in the number of epidermal growth factor receptors of hepatocytes during liver regeneration in rats] Ivashchenko IuD, et al. **Tsitologiia** 1989 Apr;31(4):453–9 (Eng. Abstr.) (Rus)
[Regeneration ability of ischemic liver and the effect of liver resection and extracts stimulating proliferation] Bilenko MV, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):93–7 (Eng. Abstr.) (Rus)
[The effect of factors stimulating proliferation of hepatocytes on cholesterol esterification in the serum during liver regeneration] Konevalova NIu, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):37–42 (Eng. Abstr.) (Rus)
[Hemoperitoneum as the first manifestation of hepatic regenerative nodular hyperplasia associated with Hodgkin's lymphoma (letter)] Ramos Soria F, et al. **Rev Clin Esp** 1989 Apr;184(6):333 (Spa)
[Anatomopathologic repercussions of segmental liver resection] Capitán Morales LC, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):441–8 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Liver cell necrosis and regeneration following injections of carbon tetrachloride. Effects of the thyrotropin-releasing hormone and somatostatin. Myren J, et al. **APMIS** 1989 Apr;97(4):334–42
Calmodulin antagonist trifluoperazine inhibits polyamine biosynthesis and liver regeneration. Alexander RW, et al. **Br J Surg** 1988 Dec;75(12):1160–2
Effect of tamoxifen on hepatic regeneration in male rats. Kahn D, et al. **Dig Dis Sci** 1989 Jan;34(1):27–32
Different effects of glucose and intralipid on the onset of liver regeneration in the early period after partial hepatectomy in the rat. Holeček M, et al. **Exp Pathol** 1988; 33(4):257–60
Effect of glucocorticoid on liver regeneration after partial hepatectomy in the rat. Tsukamoto I, et al. **Gut** 1989 Mar; 30(3):387–90
The effect of estrogen and tamoxifen on hepatocyte proliferation in vivo and in vitro. Francavilla A, et al. **Hepatology** 1989 Apr;9(4):614–20
Effect of dimethyl sulphoxide on mitochondrial biogenesis in regenerating rat liver and Saccharomyces cerevisiae. Desai SD, et al. **Indian J Biochem Biophys** 1989 Apr; 26(2):87–91
Chlordecone does not interfere with hepatic repair after carbon tetrachloride or partial hepatectomy. Dolak JA, et al. **J Biochem Toxicol** 1987 Spring;2:57–66
Human growth hormone stimulates liver regeneration in rats. Asakawa K, et al. **J Endocrinol Invest** 1989 May; 12(5):343–7
Effect of the infusion of glucose, itralipid and nutramin on the initiation of rat liver regeneration after partial hepatectomy. Holeček M, et al. **Physiol Bohemoslov** 1988; 37(5):467–73
Effects of cyclosporine on oxidative phosphorylation and adenylate energy charge of regenerating rat liver. Uemoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):924–5
Effect of cyclosporin A on liver regeneration following partial hepatectomy in the mouse. Yoshimura S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):911–2
[Effects of epidermal growth factor on the regeneration of hepatocytes after hepatic necrosis in rats] Chen TX. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):371–3, 26 (Eng. Abstr.) (Chi)
[Experimental study of normal liver regeneration in hepatic arterial infusion with degradable starch microspheres (DSM)] Yoshinaka K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):787–92 (Eng. Abstr.) (Jpn)
[Accumulation in the regenerating liver of hepatocytes with pathological nuclei as affected by daunorubicin] Kharlamova SB, et al. **Antibiot Khimioter** 1988 Jul; 33(7):518–24 (Eng. Abstr.) (Rus)
[Heparin and its antagonist—a quaternary ammonium salt of oligomer-25-conidine: distribution in subcellular organelles, effect on DNA synthesis in the regenerating rat liver] Khatsernova BIa, et al. **Vopr Med Khim** 1989 May-Jun;35(3):83–7 (Eng. Abstr.) (Rus)
[Enhancement of the antitumor activity of the regenerating liver in rats by an extract of rose root] Udintsev SN, et al. **Vopr Onkol** 1989;35(5):618–20 (Rus)

RADIATION EFFECTS

Changes in the nuclear protein kinase activities in the regenerating liver of partially irradiated rat. Asami K, et al. **Radiat Res** 1989 Sep;119(3):500–10

LIVING WILLS see **RIGHT TO DIE**

LIVOR MORTIS see **POSTMORTEM CHANGES**

LIZARDS

Ichthyosis and delusions of lizard invasion. Browning SM, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):766–7
What is your diagnosis? Case 1. Decreased bone density, multiple pathologic fractures, and excessive periosteal new bone formation. Saint-Erne N. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1229–30
Acute myocardial infarction following a gila monster (Heloderma suspectum cinctum) bite. Bou-Abboud CF, et al. **West J Med** 1988 May;148(5):577–9

ANATOMY & HISTOLOGY

Allometry of the kidney: implications for the ontogeny of osmoregulation. Beuchat CA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R760–7
Capillary and mitochondrial unit in muscles of a large lizard. Conley KE, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R982–8
A Golgi and electron microscope study of the precommissural dorsal septum in the reptile: Podarcis hispanica. Martín-Pérez V, et al. **Anat Anz** 1988; 166(1–5):195–207
Scanning electron microscope study of the morphology of the reptilian lung: the Savanna monitor lizard Varanus exanthematicus and the pancake tortoise Malacochersus tornieri. Maina JN, et al. **Anat Rec** 1989 Aug;224(4):514–22
Mixed-junction axon terminals on identified principal abducens motoneurons in the monitor lizard. Wouterlood FG, et al. **Brain Res** 1988 Oct 25;463(1):198–203
Histological and immunocytochemical study of the endocrine pancreas of the lizard Podarcis hispanica Steindachner, 1870 (Lacertidae). López J, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):212–28
Morphology of the basilar papilla of the bobtail lizard Tiliqua rugosa. Köppl C. **Hear Res** 1988 Sep 15;35(2–3):209–28
Primary projections and efferent cells of the VIIIth cranial nerve in the monitor lizard, Varanus exanthematicus. Barbas-Henry HA, et al. **J Comp Neurol** 1988 Nov 8; 277(2):234–49
Efferent connections of the dorsal cortex of the lizard Gekko gecko studied with Phaseolus vulgaris-leucoagglutinin. Hoogland PV, et al. **J Comp Neurol** 1989 Jul 15; 285(3):289–303
Projections from the medial cortex in the brain of lizards: correlation of anterograde and retrograde transport of horseradish peroxidase with Timm staining. Olucha F, et al. **J Comp Neurol** 1988 Oct 22;276(4):469–80
Efferent connections of the striatum and the nucleus accumbens in the lizard Gekko gecko. Russchen FT, et al. **J Comp Neurol** 1988 Oct 1;276(1):61–80
Laminar distribution and morphology of gamma-aminobutyric acid (GABA)-immunoreactive neurons in the medial and dorsomedial areas of the cerebral cortex of the lizard Podarcis hispanica. Schwerdtfeger WK, et al. **J Comp Neurol** 1988 Dec 22;278(4):473–85
Distribution of noradrenaline immunoreactivity in the forebrain and midbrain of the lizard Gekko gecko. Smeets WJ, et al. **J Comp Neurol** 1989 Jul 22;285(4):453–66
The photoreceptors of the chameleon retina (Chamaleo chamaleo). A Golgi study. Armengol JA, et al. **J Hirnforsch** 1988;29(4):403–9
Neuronal typology of Gallotia galloti optic tectum. Morales MC, et al. **J Hirnforsch** 1989;30(2):175–83
Internodal microvilli of Schwann cells of myelinated fibres in lizard spinal roots project onto unmyelinated axons. Pannese E, et al. **J Neurocytol** 1989 Jun;18(3):295–302
Nerve fibres with myelinated and unmyelinated portions in dorsal spinal roots. Pannese E, et al. **J Neurocytol** 1988 Oct;17(5):693–700
The blood-testis barrier in lizards during the annual spermatogenic cycle. Cavicchia JC, et al. **Microsc Electron Biol Celular** 1988 Jun;12(1):73–87
[Anatomy of the brain of the New Zealand Gray Sphenodon punctatus (sphenodontidae). A quantitative study of the principle subdivisions of the brain] Platel R. **J Hirnforsch** 1989;30(3):325–37 (Eng. Abstr.) (Fre)
[Neural connections in the septum of lizards studied by the

method of horseradish peroxidase axonal transport] Belekhova MG, et al. **Neirofiziologiia** 1988;20(3):398–407 (Eng. Abstr.) (Rus)

BLOOD

Morphological observations on the erythrocytes, leukocytes and thrombocytes of blue tongue lizards (Lacertilia: Scincidae, Tiliqua). Canfield PJ, et al. **Anat Histol Embryol** 1988 Dec;17(4):328–42

Hemoglobins of reptiles. The primary structures of the alpha I- and beta I-chains of common iguana (Iguana iguana) hemoglobin. Rücknagel KP, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1143–50

Plasma lipid concentrations for some Brazilian lizards. Gillett MP, et al. **Comp Biochem Physiol [B]** 1979;64(3):273–7

Immunochemical identity of the high and low molecular weight forms of Galapagos marine iguana hemoglobin. Higgins PJ. **Comp Biochem Physiol [B]** 1978;59(2):129–32

Effects of intracranial implantation of dihydrotestosterone on sexual behavior in male Cnemidophorus inornatus, a direct sexual ancestor of a parthenogenetic lizard. Rozendaal JC, et al. **Horm Behav** 1989 Jun;23(2):194–202

EMBRYOLOGY

Differentiation and development of the reproductive system in the iguanid lizard, Sceloporus undulatus. Austin HB. **Gen Comp Endocrinol** 1988 Dec;72(3):351–63

GROWTH & DEVELOPMENT

Delayed postnatal neurogenesis in the cerebral cortex of lizards. Lopez-Garcia C, et al. **Brain Res** 1988 Oct 1; 471(2):167–74

Ontogenesis of contractile properties of skeletal muscle and sprint performance in the lizard Dipsosaurus dorsalis. Marsh RL. **J Exp Biol** 1988 Jul;137:119–39

Postnatal neurogenesis in the olfactory bulbs of a lizard. A tritiated thymidine autoradiographic study. Garcia-Verdugo JM, et al. **Neurosci Lett** 1989 Apr 10; 98(3):247–52

IMMUNOLOGY

Structural, functional relationship of thymus derived cells of the lizard Calotes versicolor. Manickasundari M, et al. **Dev Comp Immunol** 1988 Summer;12(3):603–10

Endogenous corticosteroids mediate seasonal cyclic changes in immunity of lizards. Saad AH, et al. **Immunobiology** 1988 Sep;177(4–5):390–403

Detection of Thy-1+ cells in the developing thymus of the lizard, Chalcides ocellatus. el Deeb S, et al. **Thymus** 1988; 12(1):3–9

INJURIES

Treatment of a nonunion fracture of the tibia in a Chinese water dragon, including stimulation of osteogenesis with direct electric current. Mader DR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1141–2

METABOLISM

The distribution of zinc in the forebrain and midbrain of the lizard Gekko gecko. A histochemical study. Smeets WJ, et al. **Anat Embryol (Berl)** 1989;180(1):45–56

Serotonin innervation of the cerebral cortex in lizards. Guirado S, et al. **Brain Res** 1989 May 29;488(1–2):213–20

Neurons in the medial cortex give rise to Timm-positive boutons in the cerebral cortex of lizards. Lopez-Garcia C, et al. **Brain Res** 1988 Nov 1;463(2):205–17

The role of aldosterone in water and electrolyte transport across the colonic epithelium of the lizard, Gallotia galloti. Diaz M, et al. **Comp Biochem Physiol [A]** 1988;91(1):71–7

Metabolism of hibernating reptiles. Changes of free amino acids in blood, liver and brain. Raheem KA, et al. **Comp Biochem Physiol [B]** 1979;64(3):305–8

The Gecko visual pigment: the dark exchange reaction and the effects of anions. Crescitelli F, et al. **Exp Eye Res** 1989 Jul;49(1):43–8

Age-related changes in the response of hepatic succinic dehydrogenase activity to thyroxine and thiourea in lizards. Sahu N, et al. **Gerontology** 1988;34(4):179–83

GABA as a potential transmitter in lizard photoreceptors: immunocytochemical and biochemical evidence. Engbretson GA, et al. **J Comp Neurol** 1988 Dec 15; 278(3):461–71

Lead in the scales of cobras and wall lizards from rural and urban areas of Punjab, India. Kaur S. **Sci Total Environ** 1988 Dec;77(2–3):289–90

PARASITOLOGY

Additional Plasmodium species from Anolis lizards of Hispaniola and Panama. Telford SR Jr, et al. **Int J Parasitol** 1989 May;19(3):275–84

Experimental transmission of Plasmodium mexicanum by bites of infected Lutzomyia vexator (Diptera: Psychodidae). Klein TA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):154–64

Vector incrimination and experimental transmission of Plasmodium floridense by bites of infected Culex (Melanoconion) erraticus. Klein TA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):165–75

Gastric cryptosporidiosis in a chameleon. Dillehay DL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1139–40

Hirstie. trombidiiformis infestation in a colony of chuckwallas. Mader DR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1138–9

Lyme disease in California: interrelationship of Ixodes pacificus (Acari: Ixodidae), the western fence lizard (Sceloporus occidentalis), and Borrelia burgdorferi. Lane RS, et al. **J Med Entomol** 1989 Jul;26(4):272–8

Recognition of cyclic transmission of Sarcocystis stehlinii n. sp. in the Gran Canarian giant lizard. Matuschka FR, et al. **J Parasitol** 1989 Jun;75(3):383–7

Isolation of free-living amoebas from the intestinal contents of reptiles. Sesma MJ, et al. **J Parasitol** 1989 Apr; 75(2):322–4

Eimeria sinaitae n. sp. (Apicomplexa: Eimeriidae) from the rock agama (Agama sinaita) in Saudi Arabia. Kasim AA, et al. **J Protozool** 1988 Aug;35(3):388–9

Physaloptera retusa (Nematoda, Physalopteridae) in naturally infected sagebrush lizards, Sceloporus graciosus (Iguanidae). Goldberg SR, et al. **J Wildl Dis** 1989 Jul; 25(3):425–9

Observations on the lipids of Oochoristica agamae (Cestoda). Aisien SO, et al. **Parasitol Res** 1989;75(4):307–10

Leishmania tarentolae Wenyon, 1921 from the gecko Tarentola annularis in the Sudan. Elwasila M. **Parasitol Res** 1988;74(6):591–2

Haemogregarina sp. (Apicomplexa: Adeleorina) from the gecko Tarentola annularis in the Sudan: fine structure and life-cycle trials. Elwasila M. **Parasitol Res** 1989;75(6):444–8

The sex ratio of Plasmodium gametocytes. Schall JJ. **Parasitology** 1989 Jun;98 Pt 3:343–50

PHYSIOLOGY

Effect of upper airway CO2 pattern on ventilatory frequency in tegu lizards. Ballam GO, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 2):R156–61

Thermal sensitivity of reptilian melatonin rhythms: "cold" tuatara vs. "warm" skink. Firth BT, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1160–3

Evolution of mammalian endothermic metabolism: mitochondrial activity and cell composition. Hulbert AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R63–9

Fever response in laboratory-maintained and free-ranging chuckwallas (Sauromalus obesus). Muchlinski AE, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R150–5

Electrical stimulation of lateral hypothalamic area and behavioural sequences in a lacertid lizard. Molina-Borja M, et al. **Behav Brain Res** 1989 Mar 1;32(2):197–201

Responses of the isolated rectum of the rainbow lizard (Agama agama) to sympathomimetics. Inyang AL, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):68–71

Seasonal variation in steroid biosynthesis by the testis of the lizard Tiliqua Rugosa. Bourne AR, et al. **Comp Biochem Physiol [B]** 1978;59(4):363–7

The prophylactic effect of diphenylhidantoin in the kindling effect on reptiles (Gallotia galloti). Gomez T, et al. **Comp Biochem Physiol [C]** 1988;90(1):203–5

Gonadotropin-induced ovulation in a reptile (Anolis carolinensis): histological observations. Jones RE, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):312–22

Psychobiology of sexual behavior in a whiptail lizard, Cnemidophorus inornatus. Lindzey J, et al. **Horm Behav** 1988 Sep;22(3):279–93

Local and systemic alterations in cholinesterase activity during tail regeneration in normal and adrenal suppressed Gekkonid lizards Hemidactylus flaviviridis. Abraham S, et al. **Indian J Exp Biol** 1988 Oct;26(10):755–8

Effect of masking of parietal eye on cloacal temperature in Varanus monitor. Kulshreshtha VV, et al. **Indian J Exp Biol** 1988 Oct;26(10):790–1

Gonadectomy and tail regeneration in the gekkonid lizard Hemidactylus flaviviridis. Ramachandran AV, et al. **Indian J Exp Biol** 1988 Nov;26(11):832–4

Effect of venous (gut) CO2 loading on intrapulmonary gas fractions and ventilation in the tegu lizard. Ballam GO, et al. **J Comp Physiol [B]** 1988;158(5):591–600

Effects of progestins on sexual behaviour in castrated lizards (Cnemidophorus inornatus). Lindzey J, et al. **J Endocrinol** 1988 Nov;119(2):265–73

Ventilatory action of the hypaxial muscles of the lizard Iguana iguana: a function of slow muscle. Carrier DR. **J Exp Biol** 1989 May;143:435–57

Parachlorophenylalanine retards tail regeneration in the gekkonid lizard Hemidactylus flaviviridis exposed to continuous light. Ramachandran AV, et al. **J Exp Biol** 1989 May;143:235–43

Chemical access to the vomeronasal organs of the lizard Chalcides ocellatus. Graves BM, et al. **J Exp Zool** 1989 Feb;249(2):150–7

Potassium channels in lizard nodes of Ranvier and motor endings. Benoit E, et al. **Pflugers Arch** 1989;414 Suppl 1:S133–4

A comparison of the surfactant associated lipids derived from reptilian and mammalian lungs. Daniels CB, et al. **Respir Physiol** 1989 Mar;75(3):335–47

[Dynamics of the intraventricular flow in tegu lizards, Tupinambis teguixin (Reptilia, Teiidae)] Abe AS, et al. **Rev Bras Biol** 1988 Nov;48(4):731–40 (Eng. Abstr.) (Por)

[Effects of environmental hypoxia on various hemodynamic, acid-base and electrolytic constants of Iguana iguana (L., 1758)] de Belmar W, et al. **Acta Cient Venez** 1987; 38(3):350–5 (Eng. Abstr.) (Spa)

LOA

ANATOMY & HISTOLOGY

[The inner body of Loa loa microfilariae. Morphologic and physiopathologic data] Ardoin-Guidon F, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):13–20 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Identification of a surface antigen on Loa loa microfilariae the recognition of which correlates with the amicrofilaremic state in man. Pinder M, et al. **J Immunol** 1988 Oct 1;141(7):2480–6

Biochemical and immunochemical characterization of surface and excretory-secretory antigens of Loa loa microfilariae. Egwang TG, et al. **Mol Biochem Parasitol** 1988 Dec; 31(3):251–61

The identification and partial characterization of an immunodominant 29-31 kilodalton surface antigen expressed by adult worms of the human filaria Loa loa. Egwang TG, et al. **Mol Biochem Parasitol** 1988 Dec; 31(3):263–72

ISOLATION & PURIFICATION

Presence of Loa loa microfilariae in ascitic fluid [letter] Hautekeete ML, et al. **J Infect Dis** 1989 Sep;160(3):559–60

[Dead Loa loa filaria in a subconjunctival site. Apropos of a case] Carme B, et al. **J Fr Ophtalmol** 1988;11(12):865–7 (Eng. Abstr.) (Fre)

LOA LOA see **LOA**

LOACHES see **CYPRINIFORMES**

LOBBYING see under **POLITICS**

LOBOTOMY see **PSYCHOSURGERY**

LOBSTEIN'S DISEASE see **OSTEOGENESIS IMPERFECTA**

LOBSTERS

ANATOMY & HISTOLOGY

Long-term survival of decentralized axons and incorporation of satellite cells in motor neurons of rock lobsters. Atwood HL, et al. **Neurosci Lett** 1989 Jun 19;101(2):121–6

ENZYMOLOGY

High-molecular-weight serine proteinase from lobster muscle that degrades myofibrillar proteins. Mykles DL. **J Exp Zool** 1989 Jun;250(3):244–52

GROWTH & DEVELOPMENT

Growth of inhibitory innervation in a lobster muscle. Govind CK, et al. **J Morphol** 1989 Feb;199(2):197–205

[Human somatotropin stimulates the growth of young American lobsters, Homarus americanus (Crustacea, Decapoda)] Charmantier G, et al. **C R Acad Sci [III]** 1989; 308(1):21–6 (Eng. Abstr.) (Fre)

METABOLISM

Determination of trace elements in a marine reference material of lobster hepatopancreas (TORT-1) using inductively coupled plasma mass spectrometry. Ridout PS, et al. **Analyst** 1988 Sep;113(9):1383–6

Serum lipoproteins in the spiny lobster, Panulirus interruptus. Lee RF, et al. **Comp Biochem Physiol [B]** 1978;59(3):239–43

Lobster (Homarus americanus) striated muscle myosin. Regenstein JM. **Comp Biochem Physiol [B]** 1977; 56(3):239–44

Spectroscopic investigations of Panulirus interruptus hemocyanin in the crystalline state. Volbeda A, et al. **Eur J Biochem** 1989 May 15;181(3):669–73

Liquid chromatographic procedures for the analysis of compounds in the serotonergic and octopamine pathways of lobster hemolymph. Fadool DA, et al. **J Chromatogr** 1988 Oct 28;452:491–501

Binding of oxygen and carbon monoxide to the hemocyanin from the spiny lobster. Connelly PR, et al. **J Mol Biol** 1989 Jun 20;207(4):829–32

Pseudo 2-fold symmetry in the copper-binding domain of arthropodan haemocyanins. Possible implications for the evolution of oxygen transport proteins. Volbeda A, et al. **J Mol Biol** 1989 Apr 5;206(3):531–46

Higher mitochondrial density in slow versus fast lobster sensory neurons. Mayes JI, et al. **Neurosci Lett** 1989 Jul 17;102(1):87–90

Disposition of sulfadimethoxine in the lobster (Homarus americanus). James MO, et al. **Vet Hum Toxicol** 1988;30 Suppl 1:36–40

MICROBIOLOGY

Isolation of Salmonella wentworth (11 : Z10 : 1, 2) for the first time in India. Iyer TS, et al. **J Commun Dis** 1987 Dec; 19(4):424–5

PHYSIOLOGY

Forskolin reduces a transient potassium current in lobster neurons by a cAMP-independent mechanism. Harris-Warrick RM. **Brain Res** 1989 Jun 5;489(1):59–66

Mechanism of egg attachment stalk formation in the lobster, Homarus. Goudeau M, et al. **Gamete Res** 1987 Dec; 18(4):279–89

A complex cortical reaction leads to formation of the fertilization envelope in the lobster, Homarus. Talbot P, et al. **Gamete Res** 1988 Jan;19(1):1–18

Adaptation in chemoreceptor cells. I. Self-adapting backgrounds determine threshold and cause parallel shift of response function. Borroni PF, et al. **J Comp Physiol [A]** 1988 Nov;164(1):67–74

Neural attrition following limb loss and regeneration in juvenile lobsters. Govind CK, et al. **J Neurobiol** 1988 Dec; 19(8):667–80

Peptidergic modulation of a multioscillator system in the lobster. I. Activation of the cardiac sac motor pattern by the neuropeptides proctolin and red pigment-concentrating hormone. Dickinson PS, et al. **J Neurophysiol** 1989 Apr; 61(4):833–44

Cholecystokinin-like peptide is a modulator of a crustacean central pattern generator. Turrigiano GG, et al. **J Neurosci** 1989 Jul;9(7):2486–501

Switching of a neuron from one network to another by sensory-induced changes in membrane properties. Hooper SL, et al. **Science** 1989 Jun 30;244(4912):1587–9

Hormonal control of behavior: amines and the biasing of behavioral output in lobsters. Kravitz EA. **Science** 1988 Sep 30;241(4874):1775–81 (47 ref.)

LOCAL AREA NETWORKS see under **COMPUTER SYSTEMS**

LOCATION DIRECTORIES AND SIGNS see under **FACILITY DESIGN AND CONSTRUCTION**

LOCKED-IN SYNDROME see **QUADRIPLEGIA**

LOCOMOTION

Spinal locomotion: a comparison of the kinematics and the electromyographic activity in the same animal before and after spinalization. Bélanger M, et al. **Acta Biol Hung** 1988; 39(2–3):151–4

The neuronal bases of locomotion in lamprey—in vitro studies of the brainstem-spinal cord. Grillner S, et al. **Acta Biol Hung** 1988;39(2–3):145–9 (38 ref.)

Reticulospinal neurons, locomotor control and the development of tailswimming in Xenopus. van Mier P. **Acta Biol Hung** 1988;39(2–3):161–77 (40 ref.)

Lumbar back muscle activity during walking with a leg inequality. Vink P, et al. **Acta Morphol Neerl Scand** 1987; 25(4):261–71

Speed control in quadrupedal locomotion: principles of limb coordination in the dog. Błaszczyk JW, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(2–3):105–24

Alteration in the pattern of locomotion following a partial movement restraint in puppies. Błaszczyk JW, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(1):39–46

Locomotion score in rheumatoid arthritis. Larsson SE, et al. **Acta Orthop Scand** 1989 Jun;60(3):271–7

Effect of labyrinthine dysfunction upon head oscillation and gaze during stepping and running. Takahashi M, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec;106(5–6):348–53

Lumbar back muscle activity during locomotion: effects of voluntary modifications of normal trunk movements. Carlson H, et al. **Acta Physiol Scand** 1988 Jul;133(3):343–53

An assistive device for toddlers ambulating with an intravenous pole. Anderson LJ, et al. **Am J Occup Ther** 1988 Oct;42(10):671–2

Effect of posture and locomotion on energy expenditure. Abitbol MM. **Am J Phys Anthropol** 1988 Oct;77(2):191–9

Structural adaptations of the femur and humerus to arboreal and terrestrial environments in three species of macaque. Burr DB, et al. **Am J Phys Anthropol** 1989 Jul;79(3):357–67

Functional analysis of the biceps femoris muscle during locomotor behavior in some primates. Kumakura H. **Am J Phys Anthropol** 1989 Jul;79(3):379–91

Role of supraspinatus in the quadrupedal locomotion of vervets (Cercopithecus aethiops): implications for interpretation of humeral morphology. Larson SG, et al. **Am J Phys Anthropol** 1989 Jul;79(3):369–77

The calcaneus of Australopithecus afarensis and its implications for the evolution of bipedality. Latimer B, et al. **Am J Phys Anthropol** 1989 Mar;78(3):369–86

Gluteus maximus muscle function and the origin of hominid bipedality. Marzke MW, et al. **Am J Phys Anthropol** 1988 Dec;77(4):519–28

Back muscle function during bipedal walking in chimpanzee and gibbon: implications for the evolution of human locomotion. Shapiro LJ, et al. **Am J Phys Anthropol** 1988 Oct;77(2):201–12

Creeping patterns of human adults and infants. Sparrow WA. **Am J Phys Anthropol** 1989 Mar;78(3):387–401

Foot and ankle biomechanics in walking and running. A review. Czerniecki JM. **Am J Phys Med Rehabil** 1988 Dec; 67(6):246–52 (32 ref.)

Rehabilitation technology for standing and walking after spinal cord injury. Jaeger RJ, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):128–33 (50 ref.)

Individual correlation of morphology, muscle mechanics, and locomotion in a salamander. Bennett AF, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1200–8

Kinematic analysis of cutting horses working a mechanical flag. Clayton HM. **Am J Vet Res** 1989 Aug;50(8):1418–22

Effect of weight loading on the coronary band interstitial fluid pressure in horses. Olivier A, et al. **Am J Vet Res** 1989 Aug;50(8):1198–201

Electromyographic activity of cubital joint muscles in horses during locomotion. Tokuriki M, et al. **Am J Vet Res** 1989 Jun;50(6):950–7

Descriptive and functional morphology of the locomotory apparatus of the spotted hyaena (Crocuta crocuta, Erxleben, 1777). Spoor CF, et al. **Anat Anz** 1989; 168(3):261–6

Elastic strain energy in the low back muscles during human walking. Vink P, et al. **Anat Embryol (Berl)** 1989; 180(1):99–101

Reticulospinal neurons in lamprey: transmitters, synaptic interactions and their role during locomotion. Brodin L, et al. **Arch Ital Biol** 1988 Oct;126(4):317–45 (134 ref.)

The influence of mediolateral deformity, tibial torsion, and foot position on femorotibial load. Prediction of a musculoskeletal computer model. Lindgren U, et al. **Arch Orthop Trauma Surg** 1989;108(1):22–6

Biofeedback device for patients on axillary crutches. Ang EJ, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):644–7

Acute physiologic and perceptual responses during three modes of ambulation: walking, axillary crutch walking, and running. Bhambani Y, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):445–50

Ambulation in the adolescent with spina bifida. II. Oxygen cost of mobility. Findley TW, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):855–61

Energy cost of ambulation in healthy and disabled Filipino children. Luna-Reyes OB, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):946–9

Increased energy cost of walking in multiple sclerosis: effect of spasticity, ataxia, and weakness. Olgiati R, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):846–9

Influence of appropriate lower extremity orthotic management on ambulation, pain, and fatigue in a postpolio population. Waring WP, et al. **Arch Phys Med Rehabil** 1989 May;70(5):371–5

Walking in the American cockroach: the timing of motor activity in the legs during straight walking. Delcomyn F. **Biol Cybern** 1989;60(5):373–84

Parameter optimization model of learning in stepping motion. Flashner H, et al. **Biol Cybern** 1989;60(4):277–84

Head orientation in pigeons: postural, locomotor and visual determinants. Erichsen JT, et al. **Brain Behav Evol** 1989; 33(5):268–78

The role of spinal cord inputs in modulating the activity of reticulospinal neurons during fictive locomotion in the lamprey. Dubuc R, et al. **Brain Res** 1989 Mar 27; 483(1):196–200

Modulation of reflex responses during fictive locomotion in the forelimb of the cat. Hishinuma M, et al. **Brain Res** 1989 Mar 13;482(1):184–8

Phasic modulation of reticulospinal neurones during fictive locomotion and other types of spinal motor activity in lamprey. Kasicki S, et al. **Brain Res** 1989 Apr 10; 484(1–2):203–16

Brainstem command systems for locomotion in the lamprey: localization of descending pathways in the spinal cord. McClellan AD. **Brain Res** 1988 Aug 9;457(2):338–49

Electromyographic activity of cat hindlimb flexors and extensors during locomotion at varying speeds and inclines. Pierotti DJ, et al. **Brain Res** 1989 Feb 27;481(1):57–66

Sex steroids modulate motor-correlated increases in cerebellar discharge. Smith SS, et al. **Brain Res** 1989 Jan 9;476(2):307–16

Locomotion in rats transplanted with noradrenergic neurons. Yakovleff A, et al. **Brain Res Bull** 1989 Jan;22(1):115–21

The effects of body weight support on the locomotor pattern of spastic paretic patients. Visintin M, et al. **Can J Neurol Sci** 1989 Aug;16(3):315–25

Locomotor experience: a facilitator of spatial cognitive development. Kermoian R, et al. **Child Dev** 1988 Aug; 59(4):908–17

Morphological research of the locomotor apparatus. Cihák R, et al. **Czech Med** 1989;12(1):40–52 (30 ref.)

A dynamic EMG profile index to quantify muscular activation disorder in spastic paretic gait. Fung J, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep; 73(3):233–44

Bilateral electromyographical analysis of the lower limbs during walking in normal adults. Ounpuu S, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):429–38

Electromyography of stair locomotion in elderly men and women. James B, et al. **Electromyogr Clin Neurophysiol** 1989 Apr;29(3):161–8

Cardiorespiratory strain during walking in snow with boots of different weights. Smolander J, et al. **Ergonomics** 1989 Jan;32(1):3–13

Neural control of limb coordination. II. Hatching and walking motor output patterns in the absence of input from the brain. Bekoff A, et al. **Exp Brain Res** 1989;74(3):609–17

Spared-root deafferentation of a cat's hindlimb: hierarchical regulation of pathways mediating recovery of motor behavior. Goldberger ME. **Exp Brain Res** 1988; 73(2):329–42

Partial and complete deafferentation of cat hindlimb: the contribution of behavioral substitution to recovery of motor function. Goldberger ME. **Exp Brain Res** 1988;73(2):343–53

The quinolinic acid model of Huntington's disease: locomotor abnormalities. Sanberg PR, et al. **Exp Neurol** 1989 Jul; 105(1):45–53

Habitat use by squirrel monkeys (Saimiri oerstedi) in Costa Rica. Boinski S. **Folia Primatol (Basel)** 1987;49(3–4):151–67

Foot morphology and locomotor adaptation in Eocene primates. Gebo DL. **Folia Primatol (Basel)** 1988; 50(1–2):3–41

Getting a handle on patient mobility. Heeschen SJ. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):146–7

How to wear a belt [letter] McCarver K. **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):177

Ambulatory computer system for recording and controlling locomotion. Gahery Y, et al. **Int J Biomed Comput** 1988 Dec;23(3–4):209–20

Enhancing postural stability in hemiplegics using externally applied forces. Godall RM, et al. **Int J Rehabil Res** 1987; 10(4 Suppl 5):132–40

Energy costs of wheelchair propulsion by elderly and disabled people. Hunter J. **Int J Rehabil Res** 1987;10(4 Suppl 5):30–4

A new electronic mobility aid for the blind—a field evaluation. Kumpf M. **Int J Rehabil Res** 1987;10(4 Suppl 5):298–301

Mobility. Pratt D. **Int J Rehabil Res** 1987;10(4 Suppl 5):41–6

State of the art of implanted multichannel devices to mobilize paraplegics. Thoma H, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):86–90

Ventilatory responses of trained and untrained subjects during running and walking. Berry MJ, et al. **Int J Sports Med** 1988 Oct;9(5):325–9

Short-term entrainment of ventilation to the walking cycle in humans. Hill AR, et al. **J Appl Physiol** 1988 Aug; 65(2):570–8

Coupling between respiratory and stepping rhythms during locomotion in decerebrate cats. Kawahara K, et al. **J Appl Physiol** 1989 Jul;67(1):110–5

Coupling of cardiac and locomotor rhythms. Kirby RL, et al. **J Appl Physiol** 1989 Jan;66(1):323–9

Simulation of quadrupedal locomotion using a rigid body model. van den Bogert AJ, et al. **J Biomech** 1989; 22(1):33–41

The dynamics of quadrupedal locomotion. Pandy MG, et al. **J Biomech Eng** 1988 Aug;110(3):230–7

Electrical muscle stimulation in combination with a reciprocating gait orthosis for ambulation by paraplegics. Phillips CA. **J Biomed Eng** 1989 Jul;11(4):338–44 (35 ref.)

Orthopaedic management of high-level spina bifida. Early walking compared with early use of a wheelchair. Mazur JM, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):56–61

Mobility after amputation for failed knee replacement. Pring DJ, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):770–1

Swimming by sea otters: adaptations for low energetic cost locomotion. Williams TM. **J Comp Physiol [A]** 1989 Feb; 164(6):815–24

Loss of the circadian rhythms of locomotor activity, food intake, and plasma melatonin concentration induced by constant bright light in the pigeon (Columba livia). Yamada H, et al. **J Comp Physiol [A]** 1988 Aug;163(4):459–63

Kangaroo rat locomotion: design for elastic energy storage or acceleration? Biewener AA, et al. **J Exp Biol** 1988 Nov; 140:243–55

Muscle forces during locomotion in kangaroo rats: force platform and tendon buckle measurements compared. Biewener AA, et al. **J Exp Biol** 1988 Jul;137:191–205

Kinematics and estimated thrust production of swimming harp and ringed seals. Fish FE, et al. **J Exp Biol** 1988 Jul; 137:157–73

Speed, stride frequency and energy cost per stride: how do they change with body size and gait? Heglund NC, et al. **J Exp Biol** 1988 Sep;138:301–18

Muscular mechanisms of snake locomotion: an electromyographic study of the sidewinding and concertina modes of Crotalus cerastes, Nerodia fasciata and Elaphe obsoleta. Jayne BC. **J Exp Biol** 1988 Nov;140:1–33

Ontogenesis of contractile properties of skeletal muscle and sprint performance in the lizard Dipsosaurus dorsalis. Marsh RL. **J Exp Biol** 1988 Jul;137:119–39

Preferred speeds in terrestrial vertebrates: are they equivalent? Perry AK, et al. **J Exp Biol** 1988 Jul;137:207–19

Muscular mechanisms of snake locomotion: an electromyographic study of lateral undulation of the Florida banded water snake (Nerodia fasciata) and the yellow rat snake (Elaphe obsoleta). Jayne BC. **J Morphol** 1988 Aug;197(2):159–81

Morphology and locomotor adaptations of the bovid femur in relation to habitat. Kappelman J. **J Morphol** 1988 Oct; 198(1):119–30

Identification of excitatory interneurons contributing to generation of locomotion in lamprey: structure, pharmacology, and function. Buchanan JT, et al. **J Neurophysiol** 1989 Jul;62(1):59–69

Interlimb coordination of leg-muscle activation during perturbation of stance in humans. Dietz V, et al. **J Neurophysiol** 1989 Sep;62(3):680–93

Rhythmic fluctuations of dorsal root potentials and antidromic discharges of primary afferents during fictive locomotion in the cat. Dubuc R, et al. **J Neurophysiol** 1988

Dec;60(6):2014–36
Performance of the human vestibuloocular reflex during locomotion. Grossman GE, et al. **J Neurophysiol** 1989 Jul; 62(1):264–72
Endogenous activation of glycine and NMDA receptors in lamprey spinal cord during fictive locomotion. Alford S, et al. **J Neurosci** 1989 Aug;9(8):2792–800
Motor neuronal receptive fields delimit patterns of motor activity during locomotion of the locust. Laurent G, et al. **J Neurosci** 1988 Nov;8(11):4349–66
Structural and functional properties of reticulospinal neurons in the early–swimming stage Xenopus embryo. van Mier P, et al. **J Neurosci** 1989 Jan;9(1):25–37
Loads on the lumbar trunk during level walking. Cromwell R, et al. **J Orthop Res** 1989;7(3):371–7
Energy cost of three–point crutch ambulation in fracture patients. Waters RL, et al. **J Orthop Trauma** 1987; 1(2):170–3
Ambulation in patients with myelomeningocele: a multivariate statistical analysis. Samuelsson L, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):569–75
The supraspinal control of mammalian locomotion. Armstrong DM. **J Physiol (Lond)** 1988 Nov;405:1–37 (96 ref.)
Evidence that mid–lumbar neurones in reflex pathways from group II afferents are involved in locomotion in the cat. Edgley SA, et al. **J Physiol (Lond)** 1988 Sep;403:57–71
Step–related discharges of Purkinje cells in the paravermal cortex of the cerebellar anterior lobe in the cat. Edgley SA, et al. **J Physiol (Lond)** 1988 Jul;401:399–415
Simultaneous recording of longitudinal displacements of both feet during human walking. Bessou P, et al. **J Physiol (Paris)** 1988–89;83(2):102–10
The effect of rear wheel camber in manual wheelchair propulsion. Veeger D, et al. **J Rehabil Res Dev** 1989 Spring; 26(2):37–46
Spinal claudication in systemic amyloidosis. Harats N, et al. **J Rheumatol** 1989 Jul;16(7):1003–6
The work of walking: a calorimetric study. Webb P, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):331–7
Behavior of Biomphalaria glabrata, the intermediate host snail of Schistosoma mansoni, at different depths in water in laboratory conditions. Jurberg P, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):197–208
Muscle function in locomotion [news] Johnston I, et al. **Nature** 1988 Oct 27;335(6193):767–8
Why animals have different muscle fibre types. Rome LC, et al. **Nature** 1988 Oct 27;335(6193):824–7
Chronically isolated lumbar half spinal cord, produced by hemisection and longitudinal myelotomy, generates locomotor activities of the ipsilateral hindlimb of the cat. Kato M. **Neurosci Lett** 1989 Mar 27;98(2):149–53
Longitudinal myelotomy of lumbar spinal cord has little effect on coordinated locomotor activities of bilateral hindlimbs of the chronic cats. Kato M. **Neurosci Lett** 1988 Nov 11;93(2–3):259–63
Afferent and efferent connections of brainstem locomotor regions: study by means of horseradish peroxidase transport technique. Bayev KV, et al. **Neuroscience** 1988 Sep; 26(3):871–91
New locomotor regions of the brainstem revealed by means of electrical stimulation. Beresovskii VK, et al. **Neuroscience** 1988 Sep;26(3):863–9
The mesencephalic centre controlling locomotion in the rat. Coles SK, et al. **Neuroscience** 1989;28(1):149–57
Effects of walking on balance among elders. Roberts BL. **Nurs Res** 1989 May–Jun;38(3):180–2
Locomotor behavior of rhesus macaques (Macaca mulatta) on Cayo Santiago. Dunbar DC. **P R Health Sci J** 1989 Apr;8(1):79–85
Early prognostic factors for walking in spinal cord injuries. Daverat P, et al. **Paraplegia** 1988 Aug;26(4):255–61
Hybrid paraplegic locomotion with the ParaWalker using intramuscular stimulation: a single subject study. Nene AV, et al. **Paraplegia** 1989 Apr;27(2):125–32
Energy cost of paraplegic locomotion with the ORLAU ParaWalker. Nene AV, et al. **Paraplegia** 1989 Feb; 27(1):5–18
A review of the fundamental design problems of providing ambulation for paraplegic patients. Stallard J, et al. **Paraplegia** 1989 Feb;27(1):70–5
Effect of physical exercise prelabyrinthectomy on locomotor balance compensation in the squirrel monkey. Igarashi M, et al. **Percept Mot Skills** 1989 Apr;68(2):407–14
Visual stimulation affects the perception of voluntary leg movements during walking. Lackner JR, et al. **Perception** 1988;17(1):71–80
Effects of foot orthoses on center–of–pressure patterns in women. McPoil TG Jr, et al. **Phys Ther** 1989 Feb; 69(2):149–54
Functional electrical stimulation and lower extremity bracing for ambulation exercise of the spinal cord injured individual: a medically prescribed system. Phillips CA. **Phys Ther** 1989 Oct;69(10):842–9
Dynamic biomechanics of the normal foot and ankle during walking and running. Rodgers MM. **Phys Ther** 1988 Dec; 68(12):1822–30 (49 ref.)
Mobility methods selected for use in home and community environments. York J. **Phys Ther** 1989 Sep;69(9):736–47
Subthalamic and mesencephalic locomotor regions: brain damage augments the importance of female movement for the display of sexual behavior in male rats. Edwards DA, et al. **Physiol Behav** 1988;44(6):803–9
Spontaneous bodily rotations and direction of locomotion at different times after radio frequency lesions at sites in and near the substantia nigra. Isaacson RL, et al. **Physiol Behav** 1988;44(2):199–204
Propulsion of a fin whale (Balaenoptera physalus): why the fin whale is a fast swimmer. Bose N, et al. **Proc R Soc Lond [Biol]** 1989 Jul 22;237(1287):175–200
Vestibulospinal control of posture and locomotion. **Prog Brain Res** 1988;76:1–442
Phasic modulation of postural activation patterns during human walking. Forssberg H, et al. **Prog Brain Res** 1988; 76:221–7 (26 ref.)
Visual and vestibular control of locomotion in early and late sensory–deprived cats. Marchand AR, et al. **Prog Brain Res** 1988;76:229–38 (45 ref.)
The behaviour of lateral vestibular neurons during walk, trot and gallop in acute precollicular decerebrate cats. Mori S, et al. **Prog Brain Res** 1988;76:211–20 (38 ref.)
Fetal brain tissue transplants and recovery of locomotion following damage to sensorimotor cortex in rats. Slavin MD, et al. **Prog Brain Res** 1988;78:33–8
The effectiveness of shock–absorbing insoles during normal walking. Johnson GR. **Prosthet Orthot Int** 1988 Aug; 12(2):91–5
Visuomotor coordination in reaching and locomotion. Georgopoulos AP, et al. **Science** 1989 Sep 15; 245(4923):1209–10 (21 ref.)
Reproducibility of walking test results in chronic obstructive airways disease. Knox AJ, et al. **Thorax** 1988 May; 43(5):388–92
[Why do children walk when falling down while adults fall down in walking?] Brenière Y, et al. **C R Acad Sci [III]** 1988;307(11):617–22 (Eng. Abstr.) (Fre)
[A theoretical model of the transition phase in human locomotion] Beuter A, et al. **Can J Sport Sci** 1988 Dec; 13(4):247–53 (Eng. Abstr.) (Fre)
[How the cubic measure of the jumping style of the prosimian and its proportions is determined] Demes B, et al. **Z Morphol Anthropol** 1989;77(3):209–25 (Eng. Abstr.) (Ger)
[Orthopedic surgery to prolong walking in Duchenne muscular dystrophy] Granata C, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):237–48 (Eng. Abstr.) (Ita)
[Changes in the segmental reactions in the decerebrate cat during scratching and locomotion] Baev KV, et al. **Neirofiziologiia** 1988;20(3):412–5 (Eng. Abstr.) (Rus)
[Morphologic analysis of the origin of spinal locomotor strip fibers in the cat] Berezovskiĭ VK. **Neirofiziologiia** 1989; 21(3):327–35 (Eng. Abstr.) (Rus)
[A mathematical model of the activity of spinal generators of rhythmic movements] Degtiarenko AM. **Neirofiziologiia** 1988;20(5):586–97 (Eng. Abstr.) (Rus)
[Modulation of the segmental reflex reactions during real locomotion in rats] Iakhnitsa IA, et al. **Neirofiziologiia** 1988; 20(3):326–33 (Eng. Abstr.) (Rus)
[Phase–dependent changes in the posterior root potentials during real locomotion in rats] Iakhnitsa IA, et al. **Neirofiziologiia** 1988;20(3):333–40 (Eng. Abstr.) (Rus)
[Effect of adequate stimulation of the vestibular apparatus on the locomotor activity of the fore– and hindlimb muscles in guinea pigs. Movements relative to the vertical axis] Marlinskiĭ VV, et al. **Neirofiziologiia** 1989;21(2):192–7 (Eng. Abstr.) (Rus)
[Antidromic impulsation of the dorsal roots at the time of real locomotion in rats] Piliavskiĭ AI, et al. **Neirofiziologiia** 1988;20(5):579–85 (Eng. Abstr.) (Rus)
[The effect of the weight of equipment and weapons on physiologic indicators during the movement of soldiers belonging to mortar units] Sovtić P, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):168–72 (Eng. Abstr.) (Scr)

DRUG EFFECTS

Modulation of locomotor activity induced by injections of carbachol into the tegmental pedunculopontine nucleus and adjacent areas in the rat. Brudzynski SM, et al. **Brain Res** 1988 Jun 7;451(1–2):119–25
Microinjections of Sch–23390 into the ventral tegmental area and substantia nigra pars reticulata attenuate the development of sensitization to the locomotor activating effects of systemic amphetamine. Stewart J, et al. **Brain Res** 1989 Aug 28;495(2):401–6
Antinociception vs motor effects of intrathecal vasopressin as measured by four pain tests. Thurston CL, et al. **Brain Res** 1988 Oct 25;463(1):1–11
The impairment of mobility and development in freshwater snails (Physa fontinalis and Lymnaea stagnalis) caused by herbicides. Kosanke GJ, et al. **Comp Biochem Physiol [C]** 1988;90(2):373–9
Biphasic effect of D–2 agonist quinpirole on locomotion and movements. Eilam D, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):151–7
Repeated stimulation of D–1 dopamine receptors increases the circling response to bromocriptine in rats with a 6–OHDA lesion. Rouillard C, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):125–33
Antidepressants given repeatedly increase the behavioural effect of dopamine D–2 agonist. Maj J, et al. **J Neural Transm** 1989;78(1):1–8
The use of thiopentone in the treatment of non–organic locomotor disorders. White A, et al. **J Psychosom Res** 1988; 32(3):249–53
Abnormal locomotion in the rat after administration of a TRH analogue. Clarke KA, et al. **Neuropeptides** 1989 Jul; 14(1):65–70
Increase in endogenous 5–hydroxytryptamine levels modulates the central network underlying locomotion in the lamprey spinal cord. Christenson J, et al. **Neurosci Lett** 1989 May 22;100(1–3):188–92
Peripheral mediation of effects of clenbuterol on locomotor and investigatory behavior in rats. Geyer MA, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):417–20
Patterns of locomotor and stereotypic behavior during continuous amphetamine administration in rats. Hollingsworth EM, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):535–7
Role of quisqualic acid receptors in the hypermotility response produced by the injection of AMPA into the nucleus accumbens. Shreve PE, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):379–84
Opposite actions of CCK–8 on amphetamine–induced hyperlocomotion and stereotypy following intracerebroventricular and intra–accumbens injections in rats. Weiss F, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):309–17
Nociceptive circling and naloxone. Rabinowitz R, et al. **Pharmacol Res Commun** 1983 Nov;15(10):963–7
The involvement of dopamine D1 and D2 receptors in the locomotor stimulation produced by (+)–amphetamine in naive and dopamine–depleted mice. Ross SB, et al. **Pharmacol Toxicol** 1989 Jan;64(1):72–7
Perturbations of locomotor activity rhythms following suprachiasmatic bungarotoxin infusion. Pauly JR, et al. **Physiol Behav** 1988;43(6):859–65
[Effects of a sublethal concentration of molluscacide (CuCl2) on the reproductive activity and movements of the molluscan host Lymnaea truncatula Müller] Rondelaud D. **Ann Rech Vet** 1988;19(4):273–8 (Eng. Abstr.) (Fre)

PHYSIOLOGY

Empirical evaluation of two–sample statistical tests for differences of stepping phase during insect walking. Cocatre–Zilgien JH, et al. **Biol Cybern** 1988;59(6):367–77
Individual differences and variability in the timing of motor activity during walking in insects. Delcomyn F, et al. **Biol Cybern** 1988;59(6):379–84
Modulation of rhythmic function in the posterior midbrain. Garcia–Rill E, et al. **Neuroscience** 1988 Nov;27(2):639–54

LOCOMOTION, CELL see CELL MOVEMENT

LOCOMOTOR ATAXIA see TABES DORSALIS

LOCUS COERULEUS

Clonidine infusions into the locus coeruleus attenuate behavioral and neurochemical changes associated with naloxone–precipitated withdrawal. Taylor JR, et al. **Psychopharmacology (Berlin)** 1988;96(1):121–34

ANATOMY & HISTOLOGY

Chemoanatomical organization of the noradrenergic input from locus coeruleus to the olfactory bulb of the adult rat. McLean JH, et al. **J Comp Neurol** 1989 Jul 15; 285(3):339–49
Selective visualization of rodent locus ceruleus by a radiolabeled N–methyl–4–phenyl–1,2,3,6–tetrahydropyridine analog. Efange SM, et al. **J Neurochem** 1989 Aug;53(2):459–64
Cerebellar cortical and nuclear afferents from the feline locus coeruleus complex. Dietrichs E. **Neuroscience** 1988 Oct; 27(1):77–91

CYTOLOGY

Quantitation of catecholamine neurons in the locus coeruleus in human brains of normal young and older adults and in depression. Chan–Palay V, et al. **J Comp Neurol** 1989 Sep 15;287(3):357–72
Nicotine induced excitation of locus coeruleus neurons is mediated via release of excitatory amino acids. Engberg G. **Life Sci** 1989;44(21):1535–40
Branching projections from subcoeruleus area neurons to medial preoptic area and cervical spinal cord revealed by double retrograde neuronal labeling. Leanza G, et al. **Neurosci Lett** 1989 Aug 14;103(1):11–6
Branching axons from subcoeruleus area project to the nucleus raphe pontis and hypothalamic zona incerta, as studied with the double fluorescent retrograde tracing technique. Leanza G, et al. **Neurosci Lett** 1988 Oct 5; 92(2):132–6
Chronic imipramine diminishes the nuclear size of neurons in the locus coeruleus and cingular cortex but not in the hippocampus of the rat brain. Smiałowska M, et al. **Neuroscience** 1988 Sep;26(3):803–7
[Topography of catecholamine–containing neurons of the locus coeruleus in the cat] Semeniutin AI. **Fiziol Zh** 1989 Mar–Apr;35(2):7–13 (Eng. Abstr.) (Rus)
[Distribution of norepinephrine–containing neurons projecting to the parietal associative cortex and spinal cord in the cat locus coeruleus] Semeniutin AI, et al. **Neirofiziologiia** 1989;21(1):112–21 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Pacemaker-like firing of noradrenergic locus coeruleus neurons in vivo induced by the excitatory amino acid antagonist kynurenate in the rat. Svensson TH, et al. **Acta Physiol Scand** 1989 Mar;135(3):421–2

Behavioural and electrocortical spectrum–power effects of clonidine and related drugs given into several areas of the rat brain. Nisticò G, et al. **Ann Ist Super Sanita** 1988; 24(3):421–8

Microinfusion of clonidine and yohimbine into locus coeruleus alters EEG power spectrum: effects of aging and reversal by phosphatidylserine. de Sarro GB, et al. **Br J Pharmacol** 1988 Dec;95(4):1278–86

Electrophysiological effects of tianeptine on rat locus coeruleus, raphe dorsalis, and hippocampus activity. Dresse A, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S51–8

Chronic cocaine reduces alpha 2-adrenoceptor elicited mydriasis and inhibition of locus coeruleus neurons. Pitts DK, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):201–9

Galanin decreases the activity of locus coeruleus neurons in vitro. Seutin V, et al. **Eur J Pharmacol** 1989 May 19; 164(2):373–6

Morphine effects on locus ceruleus neurons are dependent on the state of arousal and availability of external stimuli: studies in anesthetized and unanesthetized rats. Valentino RJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1178–86

Inhibitory effects of L-threo-DOPS, an L-noradrenaline precursor, on locus coeruleus-originating neurons in the caudate nucleus. Hirose A, et al. **Jpn J Pharmacol** 1988 Dec;48(4):435–40

A novel action of morphine in the rat locus coeruleus: persistent decrease in adenylate cyclase. Beitner DB, et al. **Mol Pharmacol** 1989 May;35(5):559–64

Preservation of the substantia nigra and locus coeruleus in a patient receiving levodopa (2 kg) plus decarboxylase inhibitor over a four-year period. Quinn N, et al. **Mov Disord** 1986;1(1):65–8

Valproate enhances GABA-A mediated inhibition of locus coeruleus neurones in vitro. Olpe HR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):655–7

[Quantitative evaluation of the cytoarchitectonic reorganization of the locus coeruleus in the brain stem under the influence of 6-hydroxydopamine] Usova IP, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):635–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Two types of locus coeruleus neurons born on different embryonic days in the mouse. Steindler DA, et al. **Anat Embryol (Berl)** 1989;179(5):423–34

ENZYMOLOGY

Ultrastructural localization of phenylethanolamine N-methyltransferase-like immunoreactivity in the rat locus coeruleus. Milner TA, et al. **Brain Res** 1989 Jan 23; 478(1):1–15

Corticosterone increases protein tyrosine kinase activity in the locus coeruleus and other monoaminergic nuclei of rat brain. Nestler EJ, et al. **Mol Pharmacol** 1989 Mar; 35(3):265–70

Effects of local inhibition of locus coeruleus acetylcholinesterase by fasciculin in rats. Abó V, et al. **Neurosci Lett** 1989 Apr 10;98(3):253–7

METABOLISM

Localization of dopamine beta-hydroxylase (DBH) and neuropeptide tyrosine (NPY) mRNA in the grey monkey locus coeruleus and adrenal medulla. Dagerlind A, et al. **Acta Physiol Scand** 1988 Dec;134(4):563–4

Dopaminergic terminals in the rat locus coeruleus: an immunocytochemical investigation. McRae-Degueurce A, et al. **Acta Physiol Scand** 1988 Aug;133(4):583–5

Vasopressin and noradrenaline coexistence in the rat locus ceruleus: differential decreases of their levels in distant brain areas after thermal and neurotoxic lesions. Caffé AR, et al. **Brain Res** 1988 Sep 6;459(2):386–90

Transient elevation of locus coeruleus alpha 2-adrenergic receptor binding during the early stages of amygdala kindling. Jimenez-Rivera CA, et al. **Brain Res** 1989 Apr 24;485(2):363–70

Regulation of G proteins by chronic morphine in the rat locus coeruleus. Nestler EJ, et al. **Brain Res** 1989 Jan 9; 476(2):230–9

Changes in neurotransmitter turnover in locus coeruleus produced by changes in arterial blood pressure. Bhaskaran D, et al. **Brain Res Bull** 1988 Aug;21(2):191–9

Fentanyl decreases catecholamine metabolism measured by in vivo voltammetry in the rat locus coeruleus. Milne B, et al. **Can J Physiol Pharmacol** 1989 May;67(5):532–6

Effects of chronic imipramine treatment on glucocorticoid receptor immunoreactivity in various regions of the rat brain. Evidence for selective increases of glucocorticoid receptor immunoreactivity in the locus coeruleus and in 5-hydroxytryptamine nerve cell groups of the rostral ventromedial medulla. Kitayama I, et al. **J Neural Transm** 1988;73(3):191–203

Excitatory amino acid receptors in rat locus coeruleus. An extracellular in vitro study. Olpe HR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):312–4

Multiple changes in noradrenergic mechanisms in the coeruleo-hippocampal pathway during aging. Structural and functional correlates in intraocular double grafts. Eriksdotter-Nilsson M, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):117–24 (90 ref.)

Immunohistochemical analysis of the neurotoxic effects of DSP-4 identifies two populations of noradrenergic axon terminals. Fritschy JM, et al. **Neuroscience** 1989; 30(1):181–97

Convergence and interaction of neck and macular vestibular inputs on locus coeruleus and subcoeruleus neurons. Manzoni D, et al. **Pflugers Arch** 1989 Apr;413(6):580–98

Adaptive changes of beta-adrenergic receptors after neonatal locus coeruleus lesion: regulation of serotoninergic unit activity. Lanfumey L, et al. **Synapse** 1988;2(6):644–9

[Cytochemical study of the neurocytes of the rat locus coeruleus after guanethidine sympathectomy] Altan G, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):242–5 (Eng. Abstr.) **(Rus)**

[The role of the neurons of the locus coeruleus and ventral tegmental area in the development of catecholamine-deficient conditions] Kucherenko RP, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):110–2 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Evidence for retrograde degeneration of epinephrine neurons in Alzheimer's disease. Burke WJ, et al. **Ann Neurol** 1988 Oct;24(4):532–6

The neuropathology of aminergic nuclei in Alzheimer's disease. Zweig RM, et al. **Ann Neurol** 1988 Aug; 24(2):233–42

Alterations in catecholamine neurons of the locus coeruleus in senile dementia of the Alzheimer type and in Parkinson's disease with and without dementia and depression. Chan-Palay V, et al. **J Comp Neurol** 1989 Sep 15; 287(3):373–92

Lewy bodies contain epitopes both shared and distinct from Alzheimer neurofibrillary tangles. Galloway PG, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):654–63

The topography of nerve cell loss from the locus caeruleus in elderly persons. Marcyniuk B, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):5–9

Possible increase of dopamine-beta-hydroxylase activity in the locus ceruleus of paranoid schizophrenic patients: a preliminary post-mortem study. Gay N, et al. **Psychiatry Res** 1989 Jan;27(1):31–8

PHYSIOLOGY

Gain regulation of the vestibulospinal reflex following microinjection of a beta-adrenergic agonist or antagonist into the locus coeruleus and the dorsal pontine reticular formation. Stampacchia G, et al. **Adv Otorhinolaryngol** 1988;41:134–41

Arousal state vs. temperature effects on neuronal activity in subcoeruleus area. Grahn DA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R840–9

Injections of beta-adrenergic substances in the locus coeruleus affect the gain of vestibulospinal reflexes in decerebrate cats. D'Ascanio P, et al. **Arch Ital Biol** 1989 Jun;127(3):187–218

Inhibition of vestibulospinal reflexes during the episodes of postural atonia induced by unilateral lesion of the locus coeruleus in the decerebrate cat. D'Ascanio P, et al. **Arch Ital Biol** 1989 Mar;127(2):81–97

Evidence for cholinergic participation in frontal cortical potentials evoked by single impulse stimulation in the locus coeruleus area of freely moving rats. Heller U, et al. **Biomed Biochim Acta** 1989;48(4):261–7

Modulatory effect of locus coeruleus stimulation on visually evoked potentials in freely moving rats. Heller U, et al. **Biomed Biochim Acta** 1989;48(4):269–75

Lesions of the dorsal noradrenergic bundle simultaneously enhance and reduce responsivity to novelty in a food preference test. Cole BJ, et al. **Brain Res** 1988 Dec; 472(4):325–49 (67 ref.)

Electrophysiological characterization of adrenoceptors in the rat dorsal hippocampus. II. Receptors mediating the effect of synaptically released norepinephrine. Curet O, et al. **Brain Res** 1988 Dec 13;475(1):47–57

The nucleus locus coeruleus modulates local cerebral glucose utilization during noise stress in rats. Justice A, et al. **Brain Res** 1989 Jun 19;490(1):73–84

The actions of two monoamines on spinal motoneurons from stimulation of the locus coeruleus in the cat. Lai YY, et al. **Brain Res** 1989 Apr 10;484(1-2):268–72

An analysis of serotonin secretion in hypothalamic regions based on 5-hydroxytryptophan accumulation or push-pull perfusion. Effects of mesencephalic raphe or locus coeruleus stimulation and correlated changes in plasma luteinizing hormone. Petersen SL, et al. **Brain Res** 1989 Aug 21;495(1):9–19

Peripheral, but not local or intracerebroventricular, administration of benzodiazepines attenuates evoked activity of locus coeruleus neurons. Simson PE, et al. **Brain Res** 1989 Jun 26;490(2):236–42

Effects of locally infused pharmacological agents on spontaneous and sensory-evoked activity of locus coeruleus neurons. Adams LM, et al. **Brain Res Bull** 1988 Sep;21(3):395–400

Potent inhibitory input to locus coeruleus from the nucleus prepositus hypoglossi. Ennis M, et al. **Brain Res Bull** 1989 May;22(5):793–803

Responses of primate locus coeruleus neurons to simple and complex sensory stimuli. Grant SJ, et al. **Brain Res Bull** 1988 Sep;21(3):401–10

Locus coeruleus potentiation of dentate gyrus responses: evidence for two systems. Harley C, et al. **Brain Res Bull** 1989 Apr;22(4):643–50

New evidence for a gating action of norepinephrine in central neuronal circuits of mammalian brain. Waterhouse BD, et al. **Brain Res Bull** 1988 Sep;21(3):425–32

Characterization of a developmentally transient adrenergic depolarizing response in cultured locus coeruleus neurons. Finlayson PG, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1547–54

Serotonergic regulation of noradrenergic coerulean neurons: electrophysiological evidence for the involvement of 5-HT2 receptors. Gorea E, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):285–91

Electrical stimulation of the lateral habenula increases hippocampal noradrenaline release as monitored by in vivo microdialysis. Kalén P, et al. **Exp Brain Res** 1989; 76(1):239–45

Changes of reactions of neurones in dorsal raphe nucleus and locus coeruleus to electroacupuncture by hypothalamic arcuate nucleus stimulation. Yin QH, et al. **Funct Neurol** 1988 Jul-Sep;3(3):263–73

Studies on noradrenergic alterations in relation to early phenobarbital-induced behavioral changes. Yanai J, et al. **Int J Dev Neurosci** 1987;5(4):337–44

A metabolite of buspirone increases locus coeruleus activity via alpha 2-receptor blockade. Engberg G. **J Neural Transm** 1989;76(2):91–8

Activation of locus coeruleus from nucleus paragigantocellularis: a new excitatory amino acid pathway in brain. Ennis M, et al. **J Neurosci** 1988 Oct;8(10):3644–57

GABA-mediated inhibition of locus coeruleus from the dorsomedial rostral medulla. Ennis M, et al. **J Neurosci** 1989 Aug;9(8):2973–81

The noradrenergic neurotoxin DSP-4 eliminates the coeruleospinal projection but spares projections of the A5 and A7 groups to the ventral horn of the rat spinal cord. Lyons WE, et al. **J Neurosci** 1989 May;9(5):1481–9

Effects of locus coeruleus lesions on auditory, long-latency, event-related potentials in monkey. Pineda JA, et al. **J Neurosci** 1989 Jan;9(1):81–93

Electrophysiological correlates of presynaptic alpha 2-receptor-mediated inhibition of norepinephrine release at locus coeruleus synapses in dentate gyrus. Washburn M, et al. **J Neurosci** 1989 Jun;9(6):2131–40

Inward rectification of resting and opiate-activated potassium currents in rat locus coeruleus neurons. Williams JT, et al. **J Neurosci** 1988 Nov;8(11):4299–306

Serotonin agonists inhibit synaptic potentials in the rat locus ceruleus in vitro via 5-hydroxytryptamine1A and 5-hydroxytryptamine1B receptors. Bobker DH, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):37–43

Synaptic potentials in rat locus coeruleus neurones. Cherubini E, et al. **J Physiol (Lond)** 1988 Dec;406:431–42

Somatostatin induces an inward rectification in rat locus coeruleus neurones through a pertussis toxin-sensitive mechanism. Inoue M, et al. **J Physiol (Lond)** 1988 Dec; 407:177–98

Glucose effects on firing rate of neurons of the locus coeruleus: another attempt to put memory back in the brain. Sara SJ. **Neurobiol Aging** 1988 Sep-Dec;9(5-6):730–2

Blockade of alpha 2-adrenergic receptors, but not blockade of gamma-aminobutyric acidA, serotonin, or opiate receptors, augments responsiveness of locus coeruleus neurons to excitatory stimulation. Simson PE, et al. **Neuropharmacology** 1989 Jul;28(7):651–60

Potency of antipsychotics in reversing the effects of a hallucinogenic drug on locus coeruleus neurons correlates with 5-HT2 binding affinity. Rasmussen K, et al. **Neuropsychopharmacology** 1988 May;1(2):101–7

Brain microvessels are innervated by locus ceruleus noradrenergic neurons. Kalaria RN, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):203–8

Differential effects of ascending neurons containing dopamine and noradrenaline in the control of spontaneous activity and of evoked responses in the rat prefrontal cortex. Mantz J, et al. **Neuroscience** 1988 Nov;27(2):517–26

The role of alpha 1-adrenoceptor-mediated collateral excitation in the regulation of the electrical activity of locus coeruleus neurons. Nakamura S, et al. **Neuroscience** 1988 Dec;27(3):921–9

Coerulospinal influence on recurrent inhibition of spinal motonuclei innervating antagonistic hindleg muscles of the cat. Fung SJ, et al. **Pflugers Arch** 1988 Sep;412(4):346–53

Behavior of monkeys during opiate withdrawal and locus coeruleus stimulation. Grant SJ, et al. **Pharmacol Biochem Behav** 1988 May;30(1):13–9

On the role of the dorsal noradrenergic bundle in learning and habituation to novelty. Pisa M, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):835–45

Single potassium channels opened by opioids in rat locus ceruleus neurons. Miyake M, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3419–22

The role of Renshaw cells in the dynamic control of posture during vestibulospinal reflexes. Pompeiano O. **Prog Brain Res** 1988;76:83–95 (65 ref.)

Modified coeruleo-cortical noradrenergic neurotransmission after serotonin depletion by PCPA: electrophysiological studies in the rat. Ferron A. **Synapse** 1988;2(5):532-6
Failure to block responses of locus coeruleus neurons to somatosensory stimuli by destruction of two major afferent nuclei. Rasmussen K, et al. **Synapse** 1989;4(2):162-4
Excitation of locus coeruleus neurons by an adenosine 3',5'-cyclic monophosphate-activated inward current: extracellular and intracellular studies in rat brain slices. Wang YY, et al. **Synapse** 1987;1(5):481-7
[The influences of intracerebroventricular injection of dihydroxyphenylserine in rabbits and electrical stimulation of locus coeruleus in rats upon the increase of electro-acupuncture-induced immune functions] Zhao JC, et al. **Chen Tzu Yen Chiu** 1988;13(2):119-23 (Eng. Abstr.) **(Chi)**
[Effect of injection of 6-hydroxydopamine into the regions of the supraoptic and paraventricular nuclei on the response produced by stimulation of the locus coeruleus in rats] Jin XJ, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):382-5 (Eng. Abstr.) **(Chi)**
[Responses of hypothalamic paraventricular neurons to locus coeruleus (LC) and dorsal raphe (DR) stimulation in rats] Xing BR, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):303-7 (Eng. Abstr.) **(Chi)**
[Involvement of rat locus coeruleus in the analgesic effect induced by monosodium glutamate injection into the hypothalamic arcuate nucleus area] Zhang N, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):529-38 (Eng. Abstr.) **(Chi)**
[Electrophysiologic study of locus coeruleus projections to central cerebellar nuclei] Khanbabian MV, et al. **Neirofiziologiia** 1989;21(1):39-44 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Low frequency stimulation of the locus coeruleus reduces regional cerebral blood flow in the spinalized cat. Goadsby PJ, et al. **Brain Res** 1989 Jan 2;476(1):71-7
Locus coeruleus discharge characteristics of morphine-dependent rats: effects of naltrexone. Valentino RJ, et al. **Brain Res** 1989 May 29;488(1-2):126-34
The effect of amygdala kindled seizures on locus coeruleus activity. Jimenez-Rivera CA, et al. **Brain Res Bull** 1989 Apr;22(4):751-8
Stimulation of brainstem nuclei in the cat: effect on neuronal activity in the primary visual cortex of relevance to cerebral blood flow and migraine. Adams RW, et al. **Cephalalgia** 1989 Jun;9(2):107-18
Mechanisms of hypoglycemic brain damage. Evidence against a significant role of the noradrenergic locus coeruleus system. Lindvall O, et al. **Exp Brain Res** 1988; 73(1):219-23
Diminished sympathetic excitation of locus coeruleus noradrenergic neurons in the conscious mature spontaneously hypertensive rat. Kawamura H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S518-20
A neuroanatomical and biochemical basis for attention deficit disorder with hyperactivity in children: a defect in tonic adrenaline mediated inhibition of locus coeruleus stimulation. Mefford IN, et al. **Med Hypotheses** 1989 May; 29(1):33-42 (90 ref.)
Corticotropin-releasing factor: evidence for a neurotransmitter role in the locus coeruleus during hemodynamic stress. Valentino RJ, et al. **Neuroendocrinology** 1988 Dec;48(6):674-7
The effect of locus coeruleus lesion on water, sodium and potassium content of the rat cerebral cortex. Moufarrij NA, et al. **Neurol Res** 1989 Jun;11(2):97-100
Altered activity of the locus coeruleus in an animal model of depression. Simson PE, et al. **Neuropsychopharmacology** 1988 Dec;1(4):287-95
Involvement of locus coeruleus and noradrenergic neurotransmission in fentanyl-induced muscular rigidity in the rat. Lui PW, et al. **Neurosci Lett** 1989 Jan 2;96(1):114-9
Electrophysiological evidence for terminal sprouting of locus coeruleus neurons following repeated mild stress. Nakamura S, et al. **Neurosci Lett** 1989 May 22; 100(1-3):147-52
Stimulation of locus coeruleus in man. Preliminary trials for spasticity and epilepsy. Feinstein B, et al. **Stereotact Funct Neurosurg** 1989;52(1):26-41

TRANSPLANTATION

Evidence for functional contact between cografted locus coeruleus and spinal cord in oculo: electrophysiological studies. Henschen AF, et al. **Brain Res** 1988 Nov 22; 474(1):66-74
Differential effects of granule cell transplantation on two sprouted axonal systems in granuloprival coeruleocerebellar cultures. Seil FJ, et al. **Brain Res** 1988 Sep 1;471(1):153-7
Locomotion in rats transplanted with noradrenergic neurons. Yakovleff A, et al. **Brain Res Bull** 1989 Jan;22(1):115-21
Ultrastructure of spinal cord grafts with and without cografts of locus coeruleus in oculo. Inoue HK, et al. **Exp Neurol** 1988 Oct;102(1):109-20
Neuron transplantation reverses phenobarbital-induced behavioral birth defects in mice. Yanai J, et al. **Int J Dev Neurosci** 1988;6(5):409-16
Growth of brain tissue grafts is dependent upon host age. Eriksdotter-Nilsson M, et al. **Mech Ageing Dev** 1989 Jul; 49(1):1-22 (65 ref.)
Suppression and induction of epileptic activity by neuronal grafts. Buzsáki G, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9327-30
Intracerebral grafting of fetal noradrenergic locus coeruleus neurons: evidence for seizure suppression in the kindling model of epilepsy. Lindvall O, et al. **Prog Brain Res** 1988; 78:79-86 (32 ref.)
[Compensation for behavioral disorders caused by 6-hydroxydopamine administration via the transplantation of embryonic tissue from the locus coeruleus in rats] Semenova TP, et al. **Zh Vyssh Nerv Deiat** 1988 Sep-Oct; 38(5):872-80 (Eng. Abstr.) **(Rus)**

LOCUS OF CONTROL see **INTERNAL-EXTERNAL CONTROL**

LOCUSTS see **GRASSHOPPERS**

LOD SCORE see under **LINKAGE (GENETICS)**

LOEFFLER SYNDROME see **PULMONARY EOSINOPHILIA**

LOFEPRAMINE see under **DIBENZAZEPINES**

LOGIC

Replication of trance logic using a modified experimental design: highly hypnotizable subjects in both real and simulator groups. Marks DF, et al. **Int J Clin Exp Hypn** 1989 Jul;37(3):232-48
Matte Blanco and skelton: systems of logic and logic of systems. Taylor S. **Int J Psychoanal** 1988;69 (Pt 3):427-9
Predicate calculus, artificial intelligence, and workers' compensation. Harber P, et al. **J Occup Med** 1989 May; 31(5):484-9
A comprehensive view on affect and logic. Some implications for treatment and prevention of schizophrenia. Dauwalder JP. **Psychopathology** 1988;21(2-3):95-110 (76 ref.)
Moral reasoning among medical geneticists in eighteen nations. Wertz DC, et al. **Theor Med** 1989 Jun;10(2):123-38
[The physician and the computer. 19. Logical deduction] Kasal P, et al. **Cesk Pediatr** 1988 Jul;43(7):418-22 (Eng. Abstr.) **(Cze)**
[The physician and the computer. 21. Logical questions] Kasal P. **Cesk Pediatr** 1988 Sep;43(9):545-7 (Eng. Abstr.) **(Cze)**
[The physician and the computer. 30. Evaluation of time, different aspects of the same problem] Kasal P, et al. **Cesk Pediatr** 1989 Jun;44(6):352-5 (Eng. Abstr.) **(Cze)**
[Temporal logic and expert systems in cancer management] Lardennois B, et al. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):331-42 **(Fre)**
[The logic of diagnoses used in expert systems. II. Applications in virology] Cristea A, et al. **Virologie** 1988 Jul-Sep;39(3):167-71 (Eng. Abstr.) **(Fre)**
[Dynamic EEG asymmetry during verbal-logical activities with stimuli of different modalities] Fedotchev AI, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):371-7 **(Rus)**
[The laws of formal logic in the work of the forensic medical expert] Mel'nikov VS. **Sud Med Ekspert** 1988 Jul-Sep; 31(3):6-8 (Eng. Abstr.) **(Rus)**
[Characteristics of the conceptual and logical thinking of younger schoolchildren from the aspect of diagnosing intellectual impairment] Peresleni LI, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):35-9 (Eng. Abstr.) **(Rus)**
[Logical structure and meaning in information processing] Rimoldi HJ, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Dec; 34(4):303-8 (Eng. Abstr.) **(Spa)**
[Reasoning strategies in biomedical research] Vega-Franco L. **Bol Med Hosp Infant Mex** 1989 Jul;46(7):500-6 (17 ref.) (Eng. Abstr.) **(Spa)**

LOIASIS see under **FILARIASIS**

LOLIUM see under **GRASSES**

LOMUSTINE

ADMINISTRATION & DOSAGE

[Analysis of the results of combined treatment of poorly differentiated brain gliomas] Pęszyński J, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):221-7 (Eng. Abstr.) **(Pol)**

ANALOGS & DERIVATIVES

Genotoxic effects of MeCCNU on human peripheral blood lymphocytes. Vyas RC, et al. **Toxicol Lett** 1988 Nov; 44(1-2):153-9

ANALYSIS

Capillary gas chromatography and thermionic N-P-specific detection of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU) or 1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU) in stability and pharmacokinetic studies. El-Yazigi A, et al. **Pharm Res** 1988 Apr;5(4):220-5

PHARMACOLOGY

Release of 7-alkylguanines from haloethylnitrosourea-treated DNA by E. coli 3-methyladenine-DNA glycosylase II. Carter CA, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1261-5
Response of cultured human cell lines from rhabdomyosarcoma xenografts to treatment with chloroethylnitrosoureas. Smith DG, et al. **Cancer Res** 1989 Feb 15;49(4):883-6
Chemical specificity for induction of stress response genes by DNA-damaging drugs in human adenocarcinoma cells. Schaefer EL, et al. **Carcinogenesis** 1988 Oct;9(10):1733-8

THERAPEUTIC USE

Efficacy of adjuvant chemotherapy for patients with poor-risk medulloblastoma: a preliminary report. Packer RJ, et al. **Ann Neurol** 1988 Oct;24(4):503-8
A randomized study of CCNU with and without benznidazole in the treatment of recurrent grades 3 and 4 astrocytoma. Report to the Medical Research Council by the Brain Tumor Working Party. Bleehen NM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1077-81
Postoperative radiotherapy and radiotherapy combined with CCNU chemotherapy for treatment of brain gliomas. Trojanowski T, et al. **J Neurooncol** 1988 Nov;6(3):285-91
Quality of survival of patients with brain gliomas treated with postoperative CCNU and radiation therapy. Trojanowski T, et al. **J Neurosurg** 1989 Jan;70(1):18-23
Effects of CCNU therapy on human chromosomes. Vyas RC, et al. **Mutat Res** 1988 Oct;206(2):163-6

TOXICITY

SCE induction by CCNU and pregnancy. Ashby J. **Mutat Res** 1989 Apr;222(4):299
Sister chromatid exchange in human lymphocytes exposed to ascorbic acid and the cancer chemotherapeutic agent 1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea. Best RG, et al. **Teratogenesis Carcinog Mutagen** 1988;8(6):339-46

LONELINESS see under **SOCIAL ISOLATION**

LONG CHAIN ACYL COA see **ACYL COENZYME A**

LONG QT SYNDROME see under **ARRHYTHMIA**

LONG TERM CARE

see related
INSURANCE, LONG TERM CARE

Long term spinal opiate treatment. Müller H, et al. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):83-6
Observations on Alzheimer disease: a comparison of services in Japan and the United States. Reifler BV. **Alzheimer Dis Assoc Disord** 1988;2(4):375-81
Using strengths of geriatric residents in long-term care. Aizenstein S, et al. **Am J Nurs** 1988 Oct;88(10):1403-4, 1406
Long-term care: the need for, and limits of, an effective federal role. Somers AR. **Ann Intern Med** 1989 Jan 1; 110(1):3-5
Health care decisions among elderly long-term care residents and their potential proxies. Ouslander JG, et al. **Arch Intern Med** 1989 Jun;149(6):1367-72
Psychiatric morbidity of long stay hospital population [letter] **BMJ** 1988 Nov 19;297(6659):1334
The public/private divide in long-stay health care [letter] Livesley B. **Br J Hosp Med** 1988 Sep;40(3):234
Long-term care of the elderly. A descriptive study of 3600 institutionalized patients in the county of Västerbotten, Sweden. Sandman PO, et al. **Compr Gerontol [A]** 1988 Oct; 2(3):120-32
3rd Symposium on a Long Term Clinical Care of Parkinson's Disease. Tokyo, April 23, 1988. Proceedings. **Eur Neurol** 1989;29 Suppl 1:1-38
Ethical issues in the conduct of research in long term care. Cassel CK. **Gerontologist** 1988 Jun;28 Suppl:90-6 (19 ref.)
Autonomy in long term care: some crucial distinctions. Collopy BJ. **Gerontologist** 1988 Jun;28 Suppl:10-7
Improving the discharge planning process: distinguishing between coercion and choice. Dubler NN. **Gerontologist** 1988 Jun;28 Suppl:76-81
Enhancing the autonomy of mentally impaired nursing home residents. Hegeman C, et al. **Gerontologist** 1988 Jun;28 Suppl:71-5
All in the family: extended autonomy and expectations in surrogate health care decision-making. High DM. **Gerontologist** 1988 Jun;28 Suppl:46-51
Autonomy in long term care: background issues and a programmatic response. Hofland BF. **Gerontologist** 1988 Jun;28 Suppl:3-9 (29 ref.)
In the borderlands of autonomy: responsibility in long term care facilities. Jameton A. **Gerontologist** 1988 Jun;28 Suppl:18-23 (16 ref.)
Provider assumptions about long-term care in American Indian communities. Manson SM. **Gerontologist** 1989 Jun; 29(3):355-8
From informed consent to negotiated consent. Moody HR. **Gerontologist** 1988 Jun;28 Suppl:64-70
Medical decision-making among elderly people in long term care. Tymchuk AJ, et al. **Gerontologist** 1988 Jun;28 Suppl:59-63

Care of spinal-cord-injured patients after the acute period. Levinson W, et al. **J Gen Intern Med** 1989 Jul-Aug; 4(4):336-48 (72 ref.)
Life expectancy and planning care for the elderly [letter] Winblad B, et al. **Lancet** 1988 Dec 3;2(8623):1313
Continuing care--of continuing concern [letter] Williams SR. **N Z Med J** 1989 May 10;102(867):232-3
Data for long-term care planning. Application of a synthetic estimation technique. Unger A, et al. **Res Aging** 1988 Jun; 10(2):194-219
Data needs for policy analysis of long-term care. Van Nostrand JF. **Vital Health Stat [4]** 1988 Dec;(25):131-41
Long-term care for the elderly. The future of nursing homes. Vladeck BC. **West J Med** 1989 Feb;150(2):215-20 (17 ref.)
[A diet survey at a long-term care department] Rasmussen HH. **Ugeskr Laeger** 1989 Apr 24;151(17):1043-5 (Eng. Abstr.) **(Dan)**
[Hospital long term care] Celin D, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):207-14 (Eng. Abstr.) **(Ita)**
[Interprofessional cooperation in the municipalities: basic groups. From the project Evaluation of the follow-up of patients with long-term sickness certification] Tellnes G, et al. **Tidsskr Nor Laegeforen** 1989 Apr 20;109(11):1166-9 (Eng. Abstr.) **(Nor)**

CLASSIFICATION

Case-mix classification of Medicare residents in skilled nursing facilities: resource utilization groups (RUG-T18). Fries BE, et al. **Med Care** 1989 Sep;27(9):843-58

ECONOMICS

Long-term care initiatives: success in Hennepin County, Minnesota [news] Lindberg G, et al. **Am J Public Health** 1989 Apr;79(4):519
Disparity in government funding of long-term care [letter] Kellett JM. **Br J Hosp Med** 1988 Jul;40(1):80
Financing long-term care: options for the future. Horner C. **Bull N Y Acad Med** 1988 Jan-Feb;64(1):15-9
Long term care: what does it cost? [editorial] Sobel ER. **Del Med J** 1988 Oct;60(10):591-2
Impoverishing the elderly: a case study of the financial risk of spend-down among Massachusetts elderly people. Branch LG, et al. **Gerontologist** 1988 Oct;28(5):648-52
The social HMO demonstration: early experience. Greenberg J, et al. **Health Aff (Millwood)** 1988 Summer;7(3):66-79
Patterns of change in functional status in extended care. Rohrer JE, et al. **Health Serv Res** 1988 Oct;23(4):495-509
Only modest improvement in LTC reimbursement. Eubanks P. **Hospitals** 1989 Mar 20;63(6):30, 34, 38-40
Illinois matches quality with reimbursement. Eubanks P. **Hospitals** 1988 Nov 5;62(21):110
Long-term care bills: a question of funding? Eubanks P. **Hospitals** 1989 Jan 5;63(1):64
Long-term care: the risks can yield rewards. Larkin H. **Hospitals** 1988 Oct 20;62(20):58-64
A prospective budgeting model for home- and community-based long-term care. Weissert WG, et al. **Inquiry** 1989 Spring;26(1):116-29
Financing long-term care. The growing dilemma. Pawlson LG. **J Am Geriatr Soc** 1989 Jul;37(7):631-8
A profile of Medicaid home and community-based care waivers, 1985: findings of a national survey. Laudicina SS, et al. **J Health Polit Policy Law** 1988 Fall;13(3):525-46
Financial problems inherent in the admission of AIDS patients into long-term care facilities. Adams HR. **J Leg Med** 1989 Mar;10(1):89-101
The impact of Medicaid reimbursement policy on subacute care in hospitals. Coburn AF, et al. **Med Care** 1989 Jan; 27(1):25-33
Long-term care still a problem after catastrophic health care bill. McMahon SM. **Mich Med** 1989 Mar;88(3):19-20
Trading acute-care benefits for long-term care [letter] Rushing D. **Nurs Outlook** 1989 May-Jun;37(3):112, 146
AMA report of the Council on Medical Service. Financing long-term care. **R I Med J** 1988 Jul;71(7):265-71

LEGISLATION & JURISPRUDENCE

LTC on back burner in Congress [news] **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):175
A model legal-financial education workshop for families caring for neurologically impaired elders. Pratt C, et al. **Gerontologist** 1989 Apr;29(2):258-62
[Report of experiences with a model for the assessment of long-term inpatient psychiatric cases in a large city by the appointed public health service--the Berlin model for long-term psychiatric patients] Lieske V. **Off Gesundheitswes** 1988 Jul;50(7):389-91 (Eng. Abstr.) **(Ger)**
[Reform of the right of power of attorney, guardianship and assistance--draft of the discussion of a nursing care law] Schulte B. **Off Gesundheitswes** 1989 Mar;51(3):132-8 (Eng. Abstr.) **(Ger)**

MANPOWER

Toward competent, caring paid caregivers [editorial] Kane RA. **Gerontologist** 1989 Jun;29(3):291-2

METHODS

QALYS and long-term care for elderly people in the UK: scales for assessment of quality of life. Donaldson C, et al. **Age Ageing** 1988 Nov;17(6):379-87 (19 ref.)
Long-term treatment of severe dysarthria: a case study. Simpson MB, et al. **J Speech Hear Disord** 1988 Nov; 53(4):433-40

ORGANIZATION & ADMINISTRATION

Planning long-term care for heterogeneous older populations. Manton KG. **Ann Rev Gerontol Geriatr** 1988; 8:217-55
Board and home care. Protective living for the vulnerable. Ross V. **Geriatr Nurs (New York)** 1988 Nov-Dec;9(6):330-3
Goals and characteristics of long-term care programs: an analytic model. Braun KL, et al. **Gerontologist** 1989 Feb; 29(1):51-8 (27 ref.)
The Block Nurse Program. Jamieson M, et al. **Gerontologist** 1989 Feb;29(1):124-7
Long-term care in American Indian communities: issues for planning and research. Manson SM. **Gerontologist** 1989 Feb;29(1):38-44
Closures can provide diverse LTC opportunities. Eubanks P. **Hospitals** 1989 Jun 5;63(11):48, 50-1
Telephone communication with the primary physician by staff of a long-term care facility [letter] Rezvan A. **J Am Geriatr Soc** 1989 Mar;37(3):289-90
Long-term care and AIDS: perspectives from experience with the elderly. Benjamin AE. **Milbank Q** 1988; 66(3):415-43 (93 ref.)
Long term care of AIDS patients. Afzal N, et al. **QRB** 1989 Jan;15(1):20-5
Alternative, outpatient settings of care for people with AIDS. Beresford L. **QRB** 1989 Jan;15(1):9-16
A client-centered case management model. Kerr MH, et al. **QRB** 1988 Sep;14(9):279-83
Long-term health care in Texas: the time for serious study is now. Anderson RJ. **Tex Med** 1988 Aug;84(8):8-10
[The distribution of resources in long-term care is directed by the functional capacity of the patients and by nursing goals] **Lakartidningen** 1989 Feb 8;86(6):452-4 **(Swe)**

PSYCHOLOGY

The use of proxy responses for aged patients in long-term care settings. Magaziner J, et al. **Compr Gerontol [B]** 1987 Dec;1(3):118-21
Nursing home life: Part 2. Your helping hand. Brooke V. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):126-8
Care for life. Resnick BM. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):130-2
Never-married elderly. A reassessment with implications for long-term care policy. Stull DE, et al. **Res Aging** 1989 Mar;11(1):124-39

STANDARDS

A short term in long-term [letter] Kelly FL. **Am J Nurs** 1988 Nov;88(11):1479-80
Long-term mechanical ventilation in pediatric respiratory failure: medical and ethical considerations. Farrell PM, et al. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S36-40
Quality of life in long-term care: whose choices? Fabiano L, et al. **Dimens Health Serv** 1989 Mar;66(2):14-6, 31
LTC reforms good but difficult to implement. Eubanks P. **Hospitals** 1989 May 5;63(9):54
Using case management to monitor community-based long term care. Applebaum R, et al. **QRB** 1988 Jul;14(7):227-31
Quality assurance strategies for home-delivered long term care. Phillips PD, et al. **QRB** 1989 May;15(5):156-62

STATISTICS & NUMERICAL DATA

The past and future of home- and community-based long-term care. Weissert WG, et al. **Milbank Q** 1988; 66(2):309-88 (54 ref.)

SUPPLY & DISTRIBUTION

Long-term care in small rural hospitals. Bowlyow JE. **Gerontologist** 1989 Feb;29(1):81-5

TRENDS

Keeping our elderly out of institutions by putting them back in their homes. Melcher J. **Am Psychol** 1988 Aug; 43(8):643-7
Reversing the image of long-term care. Hughes J. **Dimens Health Serv** 1988 Sep;65(6):11, 37
Problems assessed but far from resolved in 1988. Eubanks P. **Hospitals** 1988 Dec 20;62(24):68
Future directions for community-based long-term care research. Lowe BF. **Milbank Q** 1988;66(3):552-71
Long-term care: a growing concern. Allyn KJ. **R I Med J** 1988 Jul;71(7):259

LONG TERM CARE INSURANCE see **INSURANCE, LONG TERM CARE**

LONGEVITY

see related
LIFE EXPECTANCY

Metchnikoff and prolongation of life. Howell TH. **Age Ageing** 1988 Nov;17(6):420-1
Gerontology and geography. Macfadyen DM. **Age Ageing** 1988 Jul;17(4):217-9
Longevity among ethnic groups in alcoholic liver disease. Mendenhall CL, et al. **Alcohol Alcohol** 1989;24(1):11-9
Longevity of man: relative weight and fatness in middle age. Keys A. **Ann Med** 1989 Jun;21(3):163-8
The changing and heterogeneous nature of aging and longevity: a social and biomedical perspective. Berkman LF. **Ann Rev Gerontol Geriatr** 1988;8:37-68 (132 ref.)
Dependence of susceptibility to carcinogenesis on species life span. Anisimov VN. **Arch Geschwulstforsch** 1989; 59(3):205-13 (52 ref.)
The aging process. Harman D. **Basic Life Sci** 1988;49:1057-65
A cSOD-null mutant of Drosophila confers sensitivity to paraquat and reduced longevity. Phillips JP. **Basic Life Sci** 1988;49:689-93
Food, reproduction and longevity: is the extended lifespan of calorie-restricted animals an evolutionary adaptation? Holliday R. **Bioessays** 1989 Apr;10(4):125-7
Is greater female longevity a general finding among animals? Smith DW. **Biol Rev Camb Philos Soc** 1989 Feb;64(1):1-12 (69 ref.)
Longevity in women. Johansson S. **Cardiovasc Clin** 1989; 19(3):3-16 (57 ref.)
Social fate and long-term survival of patients with a recent myocardial infarction, after cardiac rehabilitation. Fioretti P, et al. **Eur Heart J** 1988 Nov;9 Suppl L:89-94
Life extension by dietary restriction in the bowl and doily spider, Frontinella pyramitela. Austad SN. **Exp Gerontol** 1989;24(1):83-92
Reproductive fitness and longevity in Drosophila melanogaster. Le Bourg E, et al. **Exp Gerontol** 1988; 23(6):491-500
The rate of living theory revisited. Lints FA. **Gerontology** 1989;35(1):36-57 (63 ref.)
Mini-editorial set: selection for longer-lived rodents. **Growth Dev Aging** 1988 Winter;52(4):207-11
Testosterone and survival: a cost of aggressiveness? Dufty AM Jr. **Horm Behav** 1989 Jun;23(2):185-93
Long-term survival of a harlequin fetus. Roberts LJ. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):335-9
Productive longevity of first-cross cows produced in a five-breed diallel: I. Reasons for removal. Rohrer GA, et al. **J Anim Sci** 1988 Nov;66(11):2826-35
A measure of survival time for long-term follow-up studies of the elderly. Deeg DJ, et al. **J Clin Epidemiol** 1989; 42(6):541-9
Exercise and longevity: studies on rats. Holloszy JO. **J Gerontol** 1988 Nov;43(6):B149-51 (43 ref.)
Inheritance of immune responsiveness, life span, and disease incidence in interline crosses of mice selected for high or low multispecific antibody production. Covelli V, et al. **J Immunol** 1989 Feb 15;142(4):1224-34
Old age in Down's syndrome. Demissie A, et al. **J R Soc Med** 1988 Dec;81(12):740
Old age in Down's syndrome [letter] Jancar J. **J R Soc Med** 1989 May;82(5):317-8
Leads from the MMWR. Years of potential life lost before age 65--United States, 1987. **JAMA** 1989 Feb 10; 261(6):823, 827
Comparative longevity in a college cohort of Christian Scientists. Simpson WF. **JAMA** 1989 Sep 22-29; 262(12):1657-8
Adiposity or longevity: which factor accounts for the increase in type II diabetes mellitus when populations acculturate to an industrial technology? Wiedman DW. **Med Anthropol** 1989 Jun;11(3):237-53
Impact of homicide on years of potential life lost in Michigan's black population. **MMWR** 1989 Jan 13; 38(1):4-6, 11
Years of potential life lost before age 65--United States, 1987. **MMWR** 1989 Jan 20;38(2):27-9
P1-450 and P3-450 gene expression and maximum life span in mice. Spindler SR, et al. **Mutat Res** 1989 Mar; 219(2):89-94
Lateral preference and longevity [letter] Anderson MG. **Nature** 1989 Sep 14;341(6238):112
Satisfaction with work is strongest factor in predicting longevity. Polakoff PL. **Occup Health Saf** 1989 Apr; 58(4):37-8
Life histories of male Cayo Santiago macaques. Berard JD. **P R Health Sci J** 1989 Apr;8(1):61-4
Why do women live longer than men? Biologic differences that influence longevity. Hazzard WR. **Postgrad Med** 1989 Apr;85(5):271-8, 281-3 (13 ref.)
Nature, nurture and death. Wright K. **Sci Am** 1988 Jun; 258(6):34, 38
Acute graft rejection in the late survivors of renal transplantation. Clinical and histological observations in the second decade. Rao KV, et al. **Transplantation** 1989 Feb; 47(2):290-2
A forecast of women's health and longevity. Implications for an aging America. Cassel CK, et al. **West J Med** 1988 Dec;149(6):712-7 (21 ref.)
Social class and social mobility--effects on survival. A study of an entire birth cohort during an 80-year life span. Samuelsson G, et al. **Z Gerontol** 1989 May-Jun; 22(3):156-61
[A health and nutrition survey of 211 Uygur centenarians in Xinjiang Uygur Autonomous Region] Wang XY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):324-7 (Eng. Abstr.) **(Chi)**
[Do the fittest survive? Psychosocial and demographic determinants of longevity from a 12-year longitudinal study

on relocation of the aged] Mertens F. **Tijdschr Gerontol Geriatr** 1988 Sep;19(4):153–62 (Eng. Abstr.) (Dut)
[Are females healthier than males? On the health status of females in West Germany] Maschewsky-Schneider U, et al. **Soz Praventivmed** 1988;33(3):173–80 (Eng. Abstr.) (Ger)
[Surgical stabilization of pathologic fractures. Effect on longevity and quality of life] Friedl W, et al. **Versicherungsmedizin** 1988 Jul 1;40(4):104–7 (Eng. Abstr.) (Ger)
[The cardiovascular system of healthy long-living A^khazians] Korkuschko OW, et al. **Z Gerontol** 1988 Sep–Oct;21(5):248–52 (Eng. Abstr.) (Ger)
[Heteromorphism of chromosome 1, 9 and 16 homologs in persons living in regions differing in the level of longevity] Kuznetsova SM, et al. **Tsitol Genet** 1988 Jul–Aug; 22(4):27–32 (Eng. Abstr.) (Rus)
[Role of genetic and environmental factors in the realization of the hereditary potential of record-holding cows' longevity] Mozhilevskii PL. **Tsitol Genet** 1989 May–Jun; 23(3):62–7 (Eng. Abstr.) (Rus)
[The rebellion of medical doctors (editorial)] Fernández-Cruz A. **Rev Clin Esp** 1988 Sep;183(4):161–6 (Spa)
[Average life span and lost years—useful measures for distributing resources in a county council district] **Lakartidningen** 1989 May 17;86(20):1871–2 (Swe)
[The art of prolongation of life—a medical utopia] Johannisson K. **Lakartidningen** 1988 Nov 16;85(46):3961, 3964–6 (Swe)

DRUG EFFECTS

The effects on longevity and fecundity of Glossina tachinoides after feeding on pigs treated with ivermectin. Van den Bossche P, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):133–9
Cortisone extends life span in the rotifer Asplanchna brightwelli. Bozovic V, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):45–51
Control of aluminium ingestion and its relation to longevity. Bjorkstein J, et al. **Int J Vitam Nutr Res** 1988;58(4):462–5
Striatal dopamine, sexual activity and lifespan. Longevity of rats treated with (–)deprenyl. Knoll J, et al. **Life Sci** 1989; 45(6):525–31
Effect of dietary alpha-linolenate/linoleate balance on mean survival time, incidence of stroke and blood pressure of spontaneously hypertensive rats. Shimokawa T, et al. **Life Sci** 1988;43(25):2067–75
Active oxygen free radicals are scavenged by condensed tannins. Uchida S, et al. **Prog Clin Biol Res** 1988;280:135–8
[Effect of Polygonum multiflorum on the life-span and lipid metabolism in senile Japanese quails] Wang W, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):223–4, 198 (Eng. Abstr.) (Chi)
[Increase in the longevity and decrease in the tumor incidence in mice given polypeptide thymus and epiphysis factors at different age] Anisimov VN, et al. **Dokl Akad Nauk SSSR** 1988;302(2):473–6 (Rus)

RADIATION EFFECTS

Dose-response modeling of life shortening in a retrospective analysis of the combined data from the JANUS program at Argonne National Laboratory. Carnes BA, et al. **Radiat Res** 1989 Jul;119(1):39–56
[Evaluation of changes in the median life span of animals following separate and combined exposures to external 137Cs gamma irradiation and incorporated 239Pu] Levdik TI, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):550–3 (Rus)

LONGITUDINAL STUDIES

Estimating intervention effects in longitudinal studies. Dwyer JH, et al. **Am J Epidemiol** 1989 Oct;130(4):781–95
NHLBI workshop summary. Longitudinal analysis in pulmonary disease epidemiology. Becklake MR, et al. **Am Rev Respir Dis** 1988 May;137(5):1241–3
Mixed longitudinal studies: their efficiency for the estimation of trends over time. Chinn S. **Ann Hum Biol** 1988 Nov–Dec;15(6):443–54
Re-examination of longitudinal studies of workers [editorial] Kilburn KH. **Arch Environ Health** 1989 May–Jun; 44(3):132–3
Models for longitudinal data: a generalized estimating equation approach [published erratum appears in Biometrics 1989 Mar;45(1):347] Zeger SL, et al. **Biometrics** 1988 Dec;44(4):1049–60
Development and use of a database management system for longitudinal research. Parks PL. **Comput Nurs** 1989 May–Jun;7(3):110–1
The use of proportional hazards regression in investigating dropout rates in a longitudinal study. Macera CA, et al. **J Clin Epidemiol** 1988;41(12):1175–80
Participation in a follow up study of health among unemployed and employed people after a company closedown: drop outs and selection bias. Iversen L, et al. **J Epidemiol Community Health** 1988 Dec;42(4):396–401
Longitudinal studies as intervention. Collins C, et al. **Nurs Res** 1989 Jul–Aug;38(4):251–3
Ambidirectional studies—an extension of longitudinal studies in psychiatry. Mortensen PB. **Psychiatr Dev** 1988 Summer; 6(2):173–81 (22 ref.)
The hidden fallacies in longitudinal designs [editorial] Oberst MT. **Res Nurs Health** 1989 Feb;12(1):iii–iv
Lessons from longitudinal studies. Patrick CH. **Vital Health Stat [4]** 1988 Dec;(25):163–73
[A longitudinal system of mortality surveillance according to socio-economic characteristics, as shown by population censuses: description and documentation of the system] Costa G, et al. **Epidemiol Prev** 1988 Sep;10(36):37–47 (26 ref.) (Eng. Abstr.) (Ita)

LOOP ILEOSTOMY see **ILEOSTOMY**

LOOP OF HENLE see under **KIDNEY TUBULES**

LOPERAMIDE see under **PIPERIDINES**

LORAJMINE see **AJMALINE**

LORAZEPAM

General anesthesia for intractable ventricular tachycardia. Bitar J, et al. **Am J Cardiol** 1988 Dec 1;62(17):1318
Withdrawal from benzodiazepines of short half-life [letter] Craig DF. **Can Med Assoc J** 1988 Dec 1;139(11):1036–7
Comparative study of the abuse liability of alprazolam, lorazepam, diazepam, methaqualone, and placebo. Orzack MH, et al. **Int J Addict** 1988 May;23(5):449–67 (14 ref.)
Rapid induction of lorazepam dependence and reversal with flumazenil. Nutt DJ, et al. **Life Sci** 1988;43(13):1045–53

ADMINISTRATION & DOSAGE

Lorazepam administration during embryonic development alters GABAA receptor binding and function. Miller LG, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):241–6
Suppression of pentylenetetrazol-elicited seizure activity by intraosseous lorazepam in pigs. Jim KF, et al. **Epilepsia** 1989 Jul–Aug;30(4):480–6
Lorazepam fast-dissolving drug formulation (FDDF) and intravenous administrations as anaesthetic premedicants: a pharmacokinetic analysis. Camu F, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):261–8
[Daytime sedation measured after intake of nitrazepam and lorazepam, respectively, as hypnotics for 10 days] Lundsgaard C, et al. **Ugeskr Laeger** 1989 Jun 26; 151(26):1676–9 (Eng. Abstr.) (Dan)

ADVERSE EFFECTS

Mania precipitated by benzodiazepine withdrawal. Rigby J, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):406–7
Depression in patients receiving lorazepam for panic [letter] Lydiard RB, et al. **Am J Psychiatry** 1989 Sep;146(9):1230–1
Inappropriate secretion of antidiuretic hormone associated with lorazepam. Engel WR, et al. **BMJ** 1988 Oct 1; 297(6652):858
Delusional depression following benzodiazepine withdrawal. Keshavan MS, et al. **Can J Psychiatry** 1988 Oct;33(7):626–7
Relative abuse liability of lorazepam and diazepam: an evaluation in 'recreational' drug users. Funderburk FR, et al. **Drug Alcohol Depend** 1988 Dec;22(3):215–22
Mania induced by lorazepam withdrawal: a report of two cases. Turkington D, et al. **J Affective Disord** 1989 Jul–Aug; 17(1):93–5
Loxapine–lorazepam-induced hypotension and stupor [letter] Battaglia J, et al. **J Clin Psychopharmacol** 1989 Jun; 9(3):227–8
Paradoxical precipitation of tonic seizures by lorazepam in a child with atypical absence seizures. DiMario FJ Jr, et al. **Pediatr Neurol** 1988 Jul–Aug;4(4):249–51
[Convulsive episodes caused by a suspension of lorazepam] Pellegrini A, et al. **Riv Neurol** 1988 Jul–Aug;58(4):153–5 (Eng. Abstr.) (Ita)

ANALOGS & DERIVATIVES

A new lormetazepam galenical formulation for sublingual premedication. Van Boven MJ, et al. **Acta Anaesthesiol Belg** 1988;39(4):233–7
Partial GABA agonist activity of SR 95531 on the binding of [35S]TBPS, [3H]DMCM and [3H]lormetazepam to rat brain membranes. Zimmermann LN, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2889–93
Fixed drug eruption with lormetazepam (Noctamid) [letter] Jafferany M, et al. **Dermatologica** 1988;177(6):386
A double-blind comparison between nitrazepam, lorazepam, lormetazepam and placebo as preoperative night sedatives. Sanders LD, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):377–83
Treatment of adjustment disorders: a comparative evaluation. De Leo D. **Psychol Rep** 1989 Feb;64(1):51–4
Lormetazepam, memory and information processing: a review. Bhatti JZ, et al. **Psychopharmacol Ser** 1988;6:169–79 (22 ref.)
Anterograde and retrograde amnesia after lormetazepam and flunitrazepam. Ott H, et al. **Psychopharmacol Ser** 1988; 6:180–93
Human studies on the benzodiazepine receptor antagonist beta-carboline ZK 93 426: antagonism of lormetazepam's psychotropic effects. Duka T, et al. **Psychopharmacology (Berlin)** 1988;95(4):463–71

BLOOD

The use of gas chromatography/negative ion chemical ionization mass spectrometry for the determination of lorazepam in whole blood. Koves EM, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):69–72
Presence of lorazepam in the blood plasma of drug free rats. Wildman J, et al. **Life Sci** 1988;43(15):1257–60

PHARMACOKINETICS

Lack of effect of influenza vaccine on the pharmacokinetics of antipyrine, alprazolam, paracetamol (acetaminophen) and lorazepam. Scavone JM, et al. **Clin Pharmacokinet** 1989 Mar;16(3):180–5
Disposition of lorazepam in human beings: enterohepatic recirculation and first-pass effect. Herman RJ, et al. **Clin Pharmacol Ther** 1989 Jul;46(1):18–25
Kinetic and dynamic study of intravenous lorazepam: comparison with intravenous diazepam. Greenblatt DJ, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):134–40

PHARMACOLOGY

A double-blind comparison between nitrazepam, lorazepam, lormetazepam and placebo as preoperative night sedatives. Sanders LD, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):377–83
A comparative study of the interaction of alcohol with alpidem, lorazepam and placebo in normal subjects. Allen D, et al. **Int Clin Psychopharmacol** 1988 Oct;3(4):327–41
Ritanserin versus lorazepam: a double-blind, cross-over study of reaction times in healthy volunteers. Altamura AC, et al. **Int J Clin Pharmacol Res** 1989;9(3):197–201
Lorazepam pharmacodynamics and pharmacokinetics in children. Relling MV, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):641–6
Increased central noradrenergic activity during benzodiazepine withdrawal: an electrophysiological study. Bell J, et al. **Neuropharmacology** 1988 Nov;27(11):1187–90
Withdrawal, tolerance and sensitization after a single dose of lorazepam. File SE, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):937–40
Effects of 1 week administration of two benzodiazepines on the sleep and early daytime performance of normal subjects. Jurado JL, et al. **Psychopharmacology (Berlin)** 1989;99(1):91–3
Effects of lorazepam on memory, attention and sedation in man: antagonism by Ro 15-1788. Preston GC, et al. **Psychopharmacology (Berlin)** 1989;97(2):222–7
Low-dose oral lorazepam administration in Alzheimer subjects and age-matched controls. Sunderland T, et al. **Psychopharmacology (Berlin)** 1989;99(1):129–33

THERAPEUTIC USE

Haloperidol and lorazepam for the treatment of nausea and vomiting associated with the treatment of intractable migraine headaches [letter] Backonja M, et al. **Arch Neurol** 1989 Jul;46(7):724
Placebo-controlled comparative study of the anxiolytic activity and of the pharmacokinetics of oral and sublingual lorazepam in generalized anxiety. Spénard J, et al. **Biopharm Drug Dispos** 1988 Sep–Oct;9(5):57–64
Gilles de la Tourette's syndrome. Amelioration following acute akinesia during lorazepam withdrawal. Wright S, et al. **Br J Psychiatry** 1989 Feb;154:257–9
Metoclopramide versus metoclopramide and lorazepam. Superiority of combined therapy in the control of cisplatin-induced emesis. Gordon CJ, et al. **Cancer** 1989 Feb 1;63(3):578–82
High-dose lorazepam therapy for status epilepticus in a pediatric patient. Reincke HM, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):889–90
Lorazepam as premedication for gastroscopy. Burkhalter E. **Gastrointest Endosc** 1989 Jan–Feb;35(1):64–5
Double-blind placebo cross-over study of long-acting (chlordesmethyldiazepam) versus short-acting (lorazepam) benzodiazepines in generalized anxiety disorders. Bertin I, et al. **Int J Clin Pharmacol Res** 1989;9(3):203–8
Emergency intravenous sedation of the delirious, medically ill patient. Adams F. **J Clin Psychiatry** 1988 Dec;49 Suppl:22–7
Lorazepam treatment of psychogenic catatonia: an update. Salam SA, et al. **J Clin Psychiatry** 1988 Dec;49 Suppl:16–21 (31 ref.)
Lorazepam monotherapy for catatonic stupor [letter] Ungvari GA, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):154
Lorazepam in the treatment of lithium-induced akathisia [letter] Yassa R, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):70–1
Antiemetic therapy for chemotherapy-induced vomiting: metoclopramide, benztropine, dexamethasone, and lorazepam regimen compared with chlorpromazine alone. Marshall G, et al. **J Pediatr** 1989 Jul;115(1):156–60
Antiemetic prophylaxis of cancer chemotherapy-induced nausea and vomiting with cinnarizine and lorazepam. Wilder-Smith CH, et al. **Oncology** 1989;46(3):169–72
Lorazepam versus diazepam for the treatment of status epilepticus. Giang DW, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):358–61
Improvement in spasmodic torticollis following treatment and withdrawal from high dose lorazepam—clinical observations. Lal S. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):531–5
Lorazepam vs. alprazolam in the treatment of panic disorder. Schweizer E, et al. **Psychopharmacol Bull** 1988;24(2):224–7

LORDOSIS

Features of a hormone-driven defined neural circuit for a mammalian behavior. Principles illustrated, neuroendocrine syllogisms, and multiplicative steroid effects. Pfaff DW. **Ann N Y Acad Sci** 1989;563:131–47 (69 ref.)

COMPLICATIONS

Stiff-man syndrome updated. Lorish TR, et al. **Mayo Clin Proc** 1989 Jun;64(6):629–36 (26 ref.)

DIAGNOSIS

The importance of lumbar lordosis measurement device' application during pregnancy, and post-partum isometric exercise. Otman AS, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):155–62

Evaluation of a flexible ruler technique for measuring lumbar lordosis in the clinical assessment of low back pain. Simpson SR. **J Soc Occup Med** 1989 Spring;39(1):25–9

Spinal sagittal configuration and mobility related to low-back pain in the female gymnast. Ohlén G, et al. **Spine** 1989 Aug;14(8):847–50

[Mediastinal widening in thoracic lordosis] Fischer U, et al. **ROFO** 1989 May;150(5):617–8 (Ger)

[Spinal deviations in sports medicine practice] Korbelář P, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):69–71 (Eng. Abstr.) (Ger)

ETIOLOGY

Thoracolumbar kyphosis and lumbosacral hyperlordosis in achondroplastic children. Kopits SE. **Basic Life Sci** 1988; 48:241–55

Lumbosacral hyperlordosis due to fibrosis of the paravertebral muscles. Case report. Budassi R, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):395–9

Postoperative lordoscoliosis causing extrinsic compression of the right main stem bronchus and respiratory insufficiency. A case report. Scuderi G, et al. **Spine** 1989 Jan;14(1):110–4

[Irreducible lordosis due to lamina-dural fusion] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):589–94 (Fre)

PATHOLOGY

Measurement of spinal sagittal configuration and mobility with Debrunner's kyphometer. Ohlén G, et al. **Spine** 1989 Jun;14(6):580–3

PHYSIOPATHOLOGY

Reliability of clinical measurements of lumbar lordosis taken with a flexible rule. Lovell FW, et al. **Phys Ther** 1989 Feb; 69(2):96–105

[Hip-lumbar extensor tightness—equivalent of a nerve root irritation syndrome in the adolescent] Hähnel H, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):296–305 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Brace treatment for symptomatic spondylolisthesis. Bell DF, et al. **Clin Orthop** 1988 Nov;(236):192–8

RADIOGRAPHY

[Evaluation of lordosis of the cervical spine] Kiwerski J. **Pol Przegl Radiol (Warszawa)** 1988 Mar-Apr;52(2):55–7 (Eng. Abstr.) (Pol)

SURGERY

Lengthening of the lower limbs and correction of lumbar hyperlordosis in achondroplasia. Vilarrubias JM, et al. **Basic Life Sci** 1988;48:357–71

Anterior Zielke instrumentation for spinal deformity in adults. Kostuik JP, et al. **J Bone Joint Surg [Am]** 1989 Jul; 71(6):898–912

[CD-instrumentation in the treatment of spinal deformities] Dubousset J, et al. **Orthopade** 1989 Apr;18(2):118–27 (Eng. Abstr.) (Ger)

[Results of the treatment of flexion deformities of the spine caused by ankylosing spondylitis using lumbar osteotomy] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(4):293–300 (Eng. Abstr.) (Pol)

VETERINARY

Curvature of the lumbar spine as a consequence of mechanical necessities in Japanese macaques trained for bipedalism. Preuschoft H, et al. **Folia Primatol (Basel)** 1988; 50(1–2):42–58

LORIS, SLOW see **LORISIDAE**

LORISIDAE

ANATOMY & HISTOLOGY

Three-dimensional analysis of the arterial pattern of the upper limbs in Lorisiformes (Prosimiae, Primates). Ikeda A, et al. **Acta Anat (Basel)** 1988;132(4):297–303

GENETICS

The chromosomes of Nycticebus coucang (Boddaert, 1785) (Primates: Prosimii). Stanyon R, et al. **Genetica** 1987 Nov 30;75(2):145–52

PHYSIOLOGY

Sperm-sperm associations in the loris epididymis. Phillips DM, et al. **Gamete Res** 1987 Sep;18(1):17–25

LORR'S INPATIENT MULTIDIMENSIONAL PSYCHIATRIC RATING SCALE see under **PSYCHIATRIC STATUS RATING SCALES**

LOUDNESS PERCEPTION

Stimulus intensity, attentional instructions, and the ear advantage during dichotic listening. Bloch MI, et al. **Brain Cogn** 1989 Jan;9(1):136–48

An auditory Stroop effect for pitch, loudness, and time. Morgan AL, et al. **Brain Lang** 1989 May;36(4):592–603

Equal loudness contours derived from comparisons of sensory differences. Schneider BA, et al. **Can J Psychol** 1987 Dec;41(4):429–41

Temporal summation of repetitive click stimuli. Darling RM, et al. **Ear Hear** 1989 Jun;10(3):173–7

Variability of most comfortable and uncomfortable loudness levels to speech stimuli in the hearing impaired. Sammeth CA, et al. **Ear Hear** 1989 Apr;10(2):94–100

Loudness scales from loudness processes: a multivariate approach. Algom D, et al. **Int J Neurosci** 1989 Jun; 46(3–4):167–83

Binaural summation and lateralization of transients: a combined analysis. Algom D, et al. **J Acoust Soc Am** 1988 Oct;84(4):1302–15

The measurement of loudness in individual children and adults by absolute magnitude estimation and cross-modality matching. Collins AA, et al. **J Acoust Soc Am** 1989 May; 85(5):2012–21

The effect of varying the amplitude-frequency response on the masked speech-reception threshold of sentences for hearing-impaired listeners. van Dijkhuizen JN, et al. **J Acoust Soc Am** 1989 Aug;86(2):621–8

Illusory continuity of tonal and infratonal periodic sounds. Warren RM, et al. **J Acoust Soc Am** 1988 Oct;84(4):1338–42

Discriminability, loudness, and masking in the rat (Rattus norvegicus): a confirmation and extension. Raslear TG. **J Comp Psychol** 1989 Sep;103(3):289–96

The distinction between integral and separable dimensions: evidence for the integrality of pitch and loudness. Grau JW, et al. **J Exp Psychol [Gen]** 1988 Dec;117(4):347–70

On cross-modal similarity: the perceptual structure of pitch, loudness, and brightness. Marks LE. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):586–602

Central and peripheral representation of whispered and voiced speech. Samuel AG. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):379–88

Magnitude estimation and cross-modal matching of lingual vibrotactile and auditory sensation. Harris D, et al. **J Speech Hear Res** 1989 Sep;32(3):698–702

Prediction of individual loudness exponents from cross-modality matching. Hellman RP, et al. **J Speech Hear Res** 1988 Dec;31(4):605–15

Judgments and measurements of the loudness of tinnitus before and after masking. Penner MJ. **J Speech Hear Res** 1988 Dec;31(4):582–7

Music preferences and perception of loudness. Cullari S, et al. **Percept Mot Skills** 1989 Feb;68(1):186

Relation of sound intensity and accuracy of localization. Farrimond T. **Percept Mot Skills** 1989 Aug;69(1):59–63

Orienting in schizophrenia: habituation to auditory stimuli of constant and varying intensity in patients high and low in skin conductance responsivity. Ohman A, et al. **Psychophysiology** 1989 Jan;26(1):48–61

[A dynamic model of loudness adaptation] Hübner R. **Z Psychol** 1989;197(1):97–107 (Eng. Abstr.) (Ger)

[Clinical studies on the loudness of tinnitus] Ogasawara M. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1871–82 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Neuronal discharge rate is unsuitable for encoding sound intensity at the inferior-colliculus level. Ehret G, et al. **Hear Res** 1988 Sep 1;35(1):1–7

Intensity coding and the dynamic range problem. Viemeister NF. **Hear Res** 1988 Aug;34(3):267–74

Single-tone intensity discrimination based on auditory-nerve rate responses in backgrounds of quiet, noise, and with stimulation of the crossed olivocochlear bundle. Winslow RL, et al. **Hear Res** 1988 Sep 15;35(2–3):165–89

Effects of acoustic overstimulation on spectral and temporal processing in the amphibian auditory nerve. Penna M, et al. **J Acoust Soc Am** 1989 Apr;85(4):1617–29

[Peripheral auditory adaptation in guinea pigs: comparison with loudness adaptation in man] Dumon T, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):447–51 (13 ref.) (Eng. Abstr.) (Fre)

[Changes of the voice in the Lombard reflex] Lamprecht A. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):350–4 (Eng. Abstr.) (Ger)

LOUDNESS RECRUITMENT see **RECRUITMENT, LOUDNESS**

LOUDNESS RECRUITMENT DETECTION see **RECRUITMENT DETECTION (AUDIOLOGY)**

LOUIS-BAR SYNDROME see **ATAXIA TELANGIECTASIA**

LOUPING ILL VIRUS see under **ENCEPHALITIS VIRUSES, TICK-BORNE**

LOVASTATIN

Discovery, biochemistry and biology of lovastatin. Alberts AW. **Am J Cardiol** 1988 Nov 11;62(15):10J–15J (38 ref.)

ADMINISTRATION & DOSAGE

Effects of combined therapy with lovastatin and colestipol in heterozygous familial hypercholesterolemia. Effects on kinetics of apolipoprotein B. Vega GL, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1 Suppl):I135–44

Effects of lovastatin alone and in combination with cholestyramine on serum lipids and apolipoproteins in heterozygotes for familial hypercholesterolemia. Leren TP, et al. **Atherosclerosis** 1988 Oct;73(2–3):135–41

Gemfibrozil alone and in combination with lovastatin for treatment of hypertriglyceridemia in NIDDM. Garg A, et al. **Diabetes** 1989 Mar;38(3):364–72

Unchanged serum lipoprotein (a) concentrations with lovastatin [letter] Berg K, et al. **Lancet** 1989 Sep 30; 2(8666):812

ADVERSE EFFECTS

Efficacy and long-term adverse effect pattern of lovastatin. Tobert JA. **Am J Cardiol** 1988 Nov 11;62(15):28J–34J (36 ref.)

Lovastatin and visual changes [letter] [see comments] Mieczkowski LE, et al. **Ann Intern Med** 1989 Mar 1; 110(5):410–1. **Comment in:** Ann Intern Med 1989 Jun 1;110(11):944

Lovastatin and visual changes [letter; comment] Newell FW. **Ann Intern Med** 1989 Jun 1;110(11):944. **Comment on:** Ann Intern Med 1989 Mar 1;110(5):410–1

The role of cholesterol-lowering agents in drug-induced rhabdomyolysis and polymyositis [letter] Goldman JA, et al. **Arthritis Rheum** 1989 Mar;32(3):358–9

Unnecessary alarm about lovastatin and cataracts [letter] Schechter RJ. **J Cataract Refract Surg** 1988 Sep;14(5):581–2

Hyperkalemia during treatment with HMG-CoA reductase inhibitor [letter] Edelman S, et al. **N Engl J Med** 1989 May 4;320(18):1219–20

ANALOGS & DERIVATIVES

Effects of simvastatin and probucol in hypercholesterolemia (Simvastatin Multicenter Study Group II). Pietro DA, et al. **Am J Cardiol** 1989 Mar 15;63(11):682–6

Pseudocholinesterase and lipoproteins [letter] Cucuiano M. **Atherosclerosis** 1988 Jul;72(1):83–6

Simvastatin (MK 733): an effective treatment for hypercholesterolemia. Lintott CJ, et al. **Aust N Z J Med** 1989 Aug;19(4):317–20

Tissue selectivity of the cholesterol-lowering agents lovastatin, simvastatin and pravastatin in rats in vivo. Germershausen JI, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):667–75

Effects of MK-733, an inhibitor of 3-hydroxy-3-methylglutaryl-coenzyme A reductase, on absorption and excretion of [3H]cholesterol in rabbits. Ishida F, et al. **Biochim Biophys Acta** 1988 Nov 4; 963(1):35–41

Effects of MK-733 (simvastatin), an inhibitor of 3-hydroxy-3-methylglutaryl coenzyme A reductase, on intestinal acylcoenzyme A:cholesterol acyltransferase activity in rabbits. Ishida F, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):117–23

The porphyrinogenic effect of simvastatin in experimental systems. Schoenfeld N, et al. **Biomed Pharmacother** 1989; 43(2):135–9

Low-dose effect of simvastatin (MK-733) on serum lipids, lipoproteins, and apolipoproteins in patients with hypercholesterolemia. Saku K, et al. **Clin Ther** 1989 Mar-Apr;11(2):247–57

Clinical experience with simvastatin compared with cholestyramine. Erkelens DW, et al. **Drugs** 1988;36 Suppl 3:87–92

HMG CoA reductase inhibitors. Current clinical experience. Walker JF. **Drugs** 1988;36 Suppl 3:83–6 (13 ref.)

Comparative effects of simvastatin and cholestyramine in treatment of patients with hypercholesterolaemia. Mölgaard J, et al. **Eur J Clin Pharmacol** 1989;36(5):455–60

Simvastatin and bezafibrate: effects on serum lipoproteins and lecithin: cholesterol acyltransferase activity in familial hypercholesterolaemia. Weisweiler P. **Eur J Clin Pharmacol** 1988;35(6):579–83

Simvastatin (MK 733) in heterozygous familial hypercholesterolemia: a two-year trial. Leclercq V, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb;27(2):76–81

Growth inhibition of yeast by compactin (ML-236B) analogues. Ikeura R, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1148–50

A quantitative structure-activity relationship study of 3-hydroxy-3-methyl-glutaryl-coenzyme A reductase inhibitors. Aggarwal D, et al. **J Pharmacobiodyn** 1988 Sep;

11(9):591–9
Preventive effect of MK–733 (simvastatin), an inhibitor of HMG–CoA reductase, on hypercholesterolemia and atherosclerosis induced by cholesterol feeding in rabbits. Kobayashi M, et al. **Jpn J Pharmacol** 1989 Jan;49(1):125–33
Transient symptomatic hypotension in patients on simvastatin [letter] French J, et al. **Lancet** 1989 Sep 30;2(8666):807–8
Effects of simvastatin and cholestyramine on lipoprotein profile in hyperlipidaemia of nephrotic syndrome. Rabelink AJ, et al. **Lancet** 1988 Dec 10;2(8624):1335–8
[A multicenter study of cholesterol reduction by simvastatin] Faergeman O, et al. **Ugeskr Laeger** 1989 Jul 3;151(27):1764 **(Dan)**
[Efficacy and safety of simvastatin, a new cholesterol-lowering drug] Mol MJ, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):362–6 (Eng. Abstr.) **(Dut)**
[Type IIa dyslipoproteinemia. Effects of simvastatin and bezafibrate on atherogenic and non-atherogenic lipoprotein particles (letter)] Lecerf JM, et al. **Presse Med** 1988 Dec 17;17(45):2400 **(Fre)**
[Therapeutic possibilities of a newly registered lipid suppressor] Mölgaard J, et al. **Lakartidningen** 1988 Oct 5; 85(40):3271–4 **(Swe)**

METABOLISM

Metabolism of lovastatin by rat and human liver microsomes in vitro. Greenspan MD, et al. **Drug Metab Dispos** 1988 Sep–Oct;16(5):678–82

PHARMACOKINETICS

Tissue selectivity of the cholesterol-lowering agents lovastatin, simvastatin and pravastatin in rats in vivo. Germershausen JI, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):667–75
The physiological disposition of lovastatin. Duggan DE, et al. **Drug Metab Dispos** 1989 Mar–Apr;17(2):166–73

PHARMACOLOGY

Effects of mevinolin, an inhibitor of cholesterol synthesis, on the morphological and functional responses of rat adrenal zona fasciculata to a prolonged treatment with 4-aminopyrazolo-pyrimidine. Mazzocchi G, et al. **Anat Rec** 1988 Jul;221(3):700–6
Lovastatin is hypertriglyceridemic in Syrian golden hamsters. Amin D, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):530–4
Mevinolin (lovastatin) inhibits androstenedione production by porcine ovarian theca cells at the level of the 17 alpha-hydroxylase:C–17,20-lyase complex. Engelhardt H, et al. **Endocrinology** 1989 May;124(5):2297–304
Effect of mevinolin on rat hepatocytes: a morphometric study. Rebuffat P, et al. **Exp Pathol** 1988;35(3):133–9
Effects of low density lipoproteins and mevinolin on sympathetic responsiveness in cultured chick atrial cells. Regulation of beta-adrenergic receptors and alpha s. Barnett JV, et al. **J Biol Chem** 1989 Jun 25;264(18):10779–86
The effects of mevinolin on the thiol/disulfide exchange between 3-hydroxy-3-methylglutaryl-coenzyme A reductase and glutathione. Cappel RE, et al. **J Biol Chem** 1989 Jun 5;264(16):9180–7
Effects of low density lipoproteins and mevinolin on cholesterol content and muscarinic cholinergic responsiveness in cultured chick atrial cells. Regulation of levels of muscarinic receptors and guanine nucleotide regulatory proteins. Haigh LS, et al. **J Biol Chem** 1988 Oct 25;263(30):15608–18
Rat granulosa cell apolipoprotein E secretion. Regulation by cell cholesterol. Wyne KL, et al. **J Biol Chem** 1989 Oct 5;264(28):16530–6
Isolation and characterization of mevinolin resistant mutants of Saccharomyces cerevisiae. Bard M, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1071–8
Localization of 3-hydroxy-3-methylglutaryl CoA reductase and 3-hydroxy-3-methylglutaryl CoA synthase in the rat liver and intestine is affected by cholestyramine and mevinolin. Li AC, et al. **J Lipid Res** 1988 Jun;29(6):781–96
Regulation of low density lipoprotein apoprotein B metabolism by lovastatin and cholestyramine in miniature pigs: effects on LDL composition and synthesis of LDL subfractions. Huff MW, et al. **Metabolism** 1989 Mar; 38(3):256–64
Effects of a competitive inhibitor (mevinolin) of 3-hydroxy-3-methylglutaryl coenzyme A reductase on human and bovine endothelial cells, fibroblasts and smooth muscle cells in vitro. Falke P, et al. **Pharmacol Toxicol** 1989 Feb;64(2):173–6

THERAPEUTIC USE

A symposium: HMG CoA reductase inhibitors—a new therapeutic class. Atlanta, Georgia, March 26, 1988. Proceedings. **Am J Cardiol** 1988 Nov 11;62(15):1J–49J
Treatment of dyslipidemia in non-insulin-dependent diabetes mellitus with lovastatin. Garg A, et al. **Am J Cardiol** 1988 Nov 11;62(15):44J–49J
Lovastatin therapy for hypercholesterolemia in cardiac transplant recipients. Kuo PC, et al. **Am J Cardiol** 1989 Sep 15;64(10):631–5
Comparison between lovastatin and gemfibrozil in the treatment of primary hypercholesterolemia: the Finnish Multicenter Study. Tikkanen MJ, et al. **Am J Cardiol** 1988 Nov 11;62(15):35J–43J
Efficacy and long-term adverse effect pattern of lovastatin. Tobert JA. **Am J Cardiol** 1988 Nov 11;62(15):28J–34J (36 ref.)
Lovastatin in the treatment of multifactorial hyperlipidemia associated with proteinuria. Golper TA, et al. **Am J Kidney Dis** 1989 Apr;13(4):312–20
Topics in clinical pharmacology: lovastatin. Sabra R. **Am J Med Sci** 1988 Dec;296(6):426–8 (21 ref.)
Cholesterol homeostasis in mononuclear leukocytes from patients with familial hypercholesterolemia treated with lovastatin. Hagemenas FC, et al. **Arteriosclerosis** 1989 May–Jun;9(3):355–61
Comparison of lovastatin and probucol in treatment of familial and non-familial hypercholesterolemia: different effects on lipoprotein profiles. Helve E, et al. **Atherosclerosis** 1988 Aug;72(2–3):189–97
Primary prevention of atherosclerosis by lovastatin in a genetically hyperlipidaemic rabbit strain. La Ville AE, et al. **Atherosclerosis** 1989 Aug;78(2–3):205–10
Influence of lovastatin plus gemfibrozil on plasma lipids and lipoproteins in patients with heterozygous familial hypercholesterolemia. Illingworth DR, et al. **Circulation** 1989 Mar;79(3):590–6
Intensive combination drug therapy of familial hypercholesterolemia with lovastatin, probucol, and colestipol hydrochloride. Witztum JL, et al. **Circulation** 1989 Jan;79(1):16–28
Lovastatin. A preliminary review of its pharmacodynamic properties and therapeutic use in hyperlipidaemia. Henwood JM, et al. **Drugs** 1988 Oct;36(4):429–54 (65 ref.)
HMG CoA reductase inhibitors. Current clinical experience. Walker JF. **Drugs** 1988;36 Suppl 3:83–6 (13 ref.)
Cardiovascular effects of acute hypercholesterolemia in rabbits. Reversal with lovastatin treatment. Osborne JA, et al. **J Clin Invest** 1989 Feb;83(2):465–73
Lovastatin vs cholestyramine therapy for primary hypercholesterolemia [letter] **JAMA** 1988 Dec 23–30; 260(24):3590–1
Lovastatin and elevated creatine kinase: results of rechallenge [letter] Israeli A, et al. **Lancet** 1989 Apr 1;1(8640):725
Lipid-lowering drugs in treatment of hyperlipidaemia associated with nephrotic syndrome [letter] Joven J, et al. **Lancet** 1989 May 6;1(8645):1029
Raised serum lipoprotein during treatment with lovastatin [letter] Jürgens G, et al. **Lancet** 1989 Apr 22;1(8643):911–2
Lovastatin: an HMG–CoA reductase inhibitor for lowering cholesterol. Frishman WH, et al. **Med Clin North Am** 1989 Mar;73(2):437–48 (40 ref.)
Reduction in plasma low-density lipoprotein cholesterol and urinary mevalonic acid by lovastatin in patients with heterozygous familial hypercholesterolemia. Pappu AS, et al. **Metabolism** 1989 Jun;38(6):542–9
Low plasma lipid levels and increased cholesterol synthesis after partial ileal bypass plus lovastatin in hypercholesterolemic rabbits. Tijerina O, et al. **Surgery** 1988 Oct;104(4):796–805
[Treatment of familial hypercholesterolemia using Mevacor. Initial experience] Ceška R, et al. **Cas Lek Cesk** 1989 May 19;128(21):661–3 (Eng. Abstr.) **(Cze)**
[Lovastatin in hyperlipemia of the nephrotic syndrome] Guarini G, et al. **Recenti Prog Med** 1988 Dec;79(12):496–9 (Eng. Abstr.) **(Ita)**

TOXICITY

Preclinical evaluation of lovastatin. MacDonald JS, et al. **Am J Cardiol** 1988 Nov 11;62(15):16J–27J (28 ref.)
Toxicity of the HMG-coenzyme A reductase inhibitor, lovastatin, to rabbits. Kornbrust DJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):498–505

LOVE

The lunatic, the lover, and the poet: a study of Shakespeare's conception of creativity. Frattaroli EJ. **Adolesc Psychiatry** 1988;15:221–46
An affair of the heart. LaCombe MA. **Am J Med** 1987 Dec; 83(6):1131–3
Sketches in the snow. Landsean E. **Am J Nurs** 1988 Dec; 88(12):1738
Two cases of erotomania (de Clérambault's syndrome) in bipolar affective disorder. Signer SF, et al. **Br J Psychiatry** 1987 Dec;151:853–5
Our love of children [editorial] MacLean G. **Can J Psychiatry** 1988 Aug;33(6):431–2
Freud's three theories of love in the light of later developments. Bergmann MS. **J Am Psychoanal Assoc** 1988;36(3):653–72 (42 ref.)
Psychological kinship, love, and liking: preliminary validity data. Bailey KG, et al. **J Clin Psychol** 1989 Jul;45(4):587–94
Love, lust, and money: values in old age. Berezin MA. **J Geriatr Psychiatry** 1987;20(2):141–51
"Socratic love" as a disguise for same-sex love in the Italian Renaissance. Dall'Orto G. **J Homosex** 1988;16(1–2):33–65
Sodomites, platonic lovers, contrary lovers: the backgrounds of the modern homosexual. Hekma G. **J Homosex** 1988; 16(1–2):433–55
Love's labors lost: five letters from a seventeenth-century Portuguese sodomite. Mott L, et al. **J Homosex** 1988; 16(1–2):91–101
Love and death: existential dimensions of physicians' difficulties with moral problems. Barnard D. **J Med Philos** 1988 Nov;13(4):393–409
A letter from Dr. Elisabeth Kubler-Ross [letter] Kubler-Ross E. **J Palliat Care** 1988 Dec;4(4):5
Love attitudes among Xhosa adolescents in South Africa. Stones CR, et al. **J Soc Psychol** 1989 Feb;129(1):131–2
Do caring wives protect against cardiac disease? [editorial] Goble AJ. **Med J Aust** 1989 Aug 21;151(4):183–4
On the fate of the intrapsychic image of the psychoanalyst after termination of the analysis. Bergmann MS. **Psychoanal Study Child** 1988;43:137–53
The Love/Hate Checklist: a further report. Parish TS. **Psychol Rep** 1988 Aug;63(1):294
The Love/Hate Checklist: a preliminary report. Parish TS. **Psychol Rep** 1988 Aug;63(1):67–70
Severing the bonds of love: a case study in soul loss. Steedly MM. **Soc Sci Med** 1988;27(8):841–56
[Therapy in the pathology of love] Matilla Gómez V. **An R Acad Nac Med (Madr)** 1989;106(1):101–11 **(Spa)**

LOW BACK PAIN see **BACKACHE**

LOW CARDIAC OUTPUT see **CARDIAC OUTPUT, LOW**

LOW DENSITY LIPOPROTEINS see **LIPOPROTEINS, LDL**

LOW MOLECULAR WEIGHT HEPARIN see **HEPARIN, LOW MOLECULAR WEIGHT**

LOW MOLECULAR WEIGHT NUCLEAR RNA see **RNA, SMALL NUCLEAR**

LOW T3 AND T4 SYNDROME see **EUTHYROID SICK SYNDROMES**

LOW T3 SYNDROME see **EUTHYROID SICK SYNDROMES**

LOWER BODY NEGATIVE PRESSURE see under **DECOMPRESSION**

LOWER EXTREMITY see **LEG**

LOWN-GANONG-LEVINE SYNDROME see under **PRE-EXCITATION SYNDROMES**

LOXAPINE see under **DIBENZOXAZEPINES**

LP-X see **LIPOPROTEIN-X**

LSD see **LYSERGIC ACID DIETHYLAMIDE**

LUBRICATION see under **PHYSICS**

LUCENSOMYCIN see under **ANTIBIOTICS, ANTIFUNGAL**

LUCERNE see **ALFALFA**

LUCIFERASE

Firefly luciferase as a tool in molecular and cell biology. Gould SJ, et al. **Anal Biochem** 1988 Nov 15;175(1):5–13 (34 ref.)
Clinical and biochemical applications of luciferases and luciferins. Kricka LJ. **Anal Biochem** 1988 Nov 15; 175(1):14–21 (92 ref.)
Continuous-flow bioluminescent determination of ATP in platelets using firefly luciferase immobilized on epoxy methacrylate. Carrea G, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):7–11
Bioluminescent assay of ATPase activity in embryonic material using firefly luciferase. Hanocq-Quertier J, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):17–24
In memoriam Dr Marlene DeLuca. 1987 O. M. Smith Lecture. Firefly luciferase: mechanism of action, cloning and expression of the active enzyme. Kricka LJ, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):1–5
Histochemical representation of regional ATP in the brain using a firefly luciferase-immobilized membrane in a multilayer film format. Kobayashi S, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):563–70
Bioluminescence assays. DeLuca M. **Prog Clin Biol Res** 1988; 285:47–60

ANTAGONISTS & INHIBITORS

Protein denaturation during heat shock and related stress. Escherichia coli beta-galactosidase and Photinus pyralis luciferase inactivation in mouse cells. Nguyen VT, et al. **J Biol Chem** 1989 Jun 25;264(18):10487–92

BIOSYNTHESIS

Synthesis and pathway of Luciola mingrelica firefly luciferase in Xenopus laevis frog oocytes and in cell-free systems. Kutuzova GD, et al. **Biochimie** 1989 Apr;71(4):579–83

DIAGNOSTIC USE

Bioluminescent microassay of various metabolites using bacterial luciferase co-immobilized with multienzyme systems. Ugarova NN, et al. **Anal Biochem** 1988 Sep;

173(2):221–7
An NADH-linked luciferase assay for glycogen: the preparation of glycogen-free, viable human eccrine sweat glands. Welch C, et al. **Anal Biochem** 1989 Feb 1; 176(2):228–33
Fibre-optic sensor with co-immobilised bacterial bioluminescence enzymes. Gautier SM, et al. **Biosensors** 1989;4(3):181–94

GENETICS

Advantages of firefly luciferase as a reporter gene: application to the interleukin-2 gene promoter. Williams TM, et al. **Anal Biochem** 1989 Jan;176(1):28–32
Expression of bacterial luciferase genes from Vibrio harveyi in Bacillus subtilis and in Escherichia coli. Karp M. **Biochim Biophys Acta** 1989 Jan 23;1007(1):84–90
Electroporation of mammalian cells with a firefly luciferase expression plasmid: kinetics of transient expression differ markedly among cell types. Maxwell IH, et al. **DNA** 1988 Oct;7(8):557–62
Cloning and sequence analysis of cDNA for luciferase of a Japanese firefly, Luciola cruciata. Masuda T, et al. **Gene** 1989 Apr 30;77(2):265–70
A plasmid vector and quantitative techniques for the study of transcription termination in Escherichia coli using bacterial luciferase. Peabody DS, et al. **Gene** 1989 Feb 20; 75(2):289–96
Requirement for autoinducer in transcriptional negative autoregulation of the Vibrio fischeri luxR gene in Escherichia coli. Dunlap PV, et al. **J Bacteriol** 1989 Jun; 171(6):3549–52
Luciferase cDNA from Japanese firefly, Luciola cruciata: cloning, structure and expression in Escherichia coli. Tatsumi H, et al. **J Biolumin Chemilumin** 1989 Apr–Jun; 3(2):75–8
A conserved tripeptide sorts proteins to peroxisomes. Gould SJ, et al. **J Cell Biol** 1989 May;108(5):1657–64
The use of the luxA gene of the bacterial luciferase operon as a reporter gene. Olsson O, et al. **Mol Gen Genet** 1988 Dec;215(1):1–9
Nucleotide sequence of part of Photobacterium leiognathi lux region. Illarionov BA, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9855
Protein sequence homology between plant 4-coumarate:CoA ligase and firefly luciferase. Schröder J. **Nucleic Acids Res** 1989 Jan 11;17(1):460
Regulated expression of foreign genes in mammalian cells under the control of coliphage T3 RNA polymerase and lac repressor. Deuschle U, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5400–4
Bacterial luciferase alpha beta fusion protein is fully active as a monomer and highly sensitive in vivo to elevated temperature. Escher A, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6528–32
Cloning and expression of cDNA for the luciferase from the marine ostracod Vargula hilgendorfii. Thompson EM, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6567–71
Complementary DNA coding click beetle luciferases can elicit bioluminescence of different colors. Wood KV, et al. **Science** 1989 May 12;244(4905):700–2

METABOLISM

Luciferase reverse micellar bioluminescence: kinetics and emission spectra. Thompson A, et al. **Basic Life Sci** 1988; 49:229–32
Interaction between luciferases from various species of bioluminescent bacteria and the yellow fluorescent protein of Vibrio fischeri strain Y-1. Daubner SC, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1191–8
Random and site-directed mutagenesis of bacterial luciferase: investigation of the aldehyde binding site. Chen LH, et al. **Biochemistry** 1989 Mar 21;28(6):2684–9
Bioluminescence spectral and fluorescence dynamics study of the interaction of lumazine protein with the intermediates of bacterial luciferase bioluminescence. Lee J, et al. **Biochemistry** 1989 May 16;28(10):4263–71
Dynamic fluorescence properties of bacterial luciferase intermediates. Lee J, et al. **Biochemistry** 1988 Jun 28; 27(13):4862–70
A new type of ultrasensitive bioluminogenic enzyme substrates. I. Enzyme substrates with D-luciferin as leaving group. Miska W, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):407–11
Dynamic fluorescence study of the interaction of lumazine protein with bacterial luciferases. Lee J, et al. **Biophys Chem** 1989 Mar;33(1):99–111
Bacterial luciferase as a biosensor of biologically active compounds. Danilov VS, et al. **Biotechnology** 1989; 11:39–78 (209 ref.)
Bioluminescence emission of bacterial luciferase with 1-deaza-FMN. Evidence for the noninvolvement of N(1)-protonated flavin species as emitters. Kurfürst M, et al. **Eur J Biochem** 1989 May 1;181(2):453–7
Fused bacterial luciferase subunits catalyze light emission in eukaryotes and prokaryotes. Boylan M, et al. **J Biol Chem** 1989 Feb 5;264(4):1915–8
Stability of firefly luciferase in tricine buffer and in a commercial enzyme stabilizer. Hall MS, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):41–4
Immunogold labeling of luciferase in the luminous bacterium Vibrio harveyi after fast-freeze fixation and different freeze-substitution and embedding procedures. Nicolas MT, et al. **J Histochem Cytochem** 1989 May;37(5):663–74

PHYSIOLOGY

Free radical participation in bacterial bioluminescence. Matheson IB, et al. **Free Radic Res Commun** 1986; 2(1–2):1–5

LUCIFERIN

Clinical and biochemical applications of luciferases and luciferins. Kricka LJ. **Anal Biochem** 1988 Nov 15; 175(1):14–21 (92 ref.)

ANALOGS & DERIVATIVES

A new type of ultrasensitive bioluminogenic enzyme substrates. I. Enzyme substrates with D-luciferin as leaving group. Miska W, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):407–11
Naphthyl- and quinolylluciferin: green and red light emitting firefly luciferin analogues. Branchini BR, et al. **Photochem Photobiol** 1989 May;49(5):689–95

GENETICS

Circadian regulation of bioluminescence in Gonyaulax involves translational control. Morse D, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):172–6

METABOLISM

Role of a luciferin-binding protein in the circadian bioluminescent reaction of Gonyaulax polyedra. Morse D, et al. **J Biol Chem** 1989 Jul 15;264(20):11822–6
Properties and cellular localization of a luciferin binding protein in the bioluminescence reaction of Gonyaulax polyedra. Morse D, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):79–83

LUDWIG'S ANGINA

Ludwig's angina: an analysis of 14 cases. Juang YC, et al. **Scand J Infect Dis** 1989;21(2):121–5

COMPLICATIONS

[Acute mediastinitis due to Ludwig's angina] Kubota H. **Rinsho Hoshasen** 1989 Apr;34(4):513–4 **(Jpn)**

DRUG THERAPY

New treatment for Ludwig's angina [letter] Hutchison IL, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):83–4

ETIOLOGY

[Ludwig's angina: an analysis of eight cases] Hsu CC. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):449–54 **(Chi)**

LULIBERIN see **LH-FSH RELEASING HORMONE**

LULIBERIN RECEPTORS see **RECEPTORS, GONADOLIBERIN**

LUMBAGO see **BACKACHE**

LUMBAR PUNCTURE see **SPINAL PUNCTURE**

LUMBAR REGION see **LUMBOSACRAL REGION**

LUMBAR VERTEBRAE

Spondylolysis and its relationship to degenerative joint disease in the prehistoric southeastern United States. Bridges PS. **Am J Phys Anthropol** 1989 Jul;79(3):321–9
Intervertebral disk space infection following translumbar aortography. Fieve G, et al. **Ann Vasc Surg** 1986 Nov; 1(3):382–5
Lumbar discitis in a patient with quadriplegia: case report. Durance JP. **Arch Phys Med Rehabil** 1989 Mar;70(3):233–5
Lumbar spondylolisthesis: retrospective comparison and three-year follow-up of two conservative treatment programs. Sinaki M, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):594–8
Medical treatment of synovial cysts of the zygapophyseal joints: four cases with long-term followup [letter] Mariette X, et al. **Arthritis Rheum** 1989 May;32(5):660–1
Solitary plasmacytoma of the spine (a case report and review of literature). Mohan V, et al. **Australas Radiol** 1988 May; 32(2):272–5 (16 ref.)
Pott's disease masquerading as vertebral lymphoma. Stockdale AD, et al. **Br J Clin Pract** 1988 Sep;42(9):389–91
Paravertebral abscess due to nondiphtheria coryneform bacteria as a complication of ingrown toenails. Dieleman LA, et al. **Infection** 1989 Jan–Feb;17(1):26–7
The evolution of spondylolysis into spondylolisthesis during adult age. Postacchini F. **Ital J Orthop Traumatol** 1989 Jun;15(2):210–6
Osteoid osteoma of the vertebral body. A case report. Savarese A, et al. **Ital J Orthop Traumatol** 1989 Jun; 15(2):253–7 (13 ref.)
Pott's disease in Kentucky: diagnosis and treatment. Roy TM, et al. **J Ky Med Assoc** 1988 Sep;86(9):499–502
A hypothesis introducing a new calculation for discal reduction emphasis on stentotic factors and manipulative treatment [letter] Church CP, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):151–2
Conservative management of herniated nucleus pulposes: treatment approaches. Sanders M, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):309–13 (55 ref.)
Cryptococcal infection of the lumbar spine. Lie KW, et al. **J R Soc Med** 1989 Mar;82(3):172–3
Efficacy of nonloading exercises in prevention of vertebral bone loss in postmenopausal women: a controlled trial. Sinaki M, et al. **Mayo Clin Proc** 1989 Jul;64(7):762–9
Hazards of examination of the lumbar spine [letter] Carey RP, et al. **Med J Aust** 1989 May 1;150(9):541–2
Lumbar intervertebral disk herniation with a concomitant nerve root neurinoma at the same site. Case report and review of the literature. Albert FK, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):222–5 (25 ref.)
Imaging rounds #96. Spondylolysis—laminal fragmentation on the AP view. Amato M, et al. **Orthop Rev** 1988 Sep; 17(9):925–31 (28 ref.)
Cat-scratch disease associated with a vertebral osteolytic lesion. Shanon AB, et al. **Pediatr Infect Dis J** 1989 Jan; 8(1):51–2
Intraspinal synovial cysts: MR imaging. Jackson DE Jr, et al. **Radiology** 1989 Feb;170(2):527–30
Brucellar and tuberculous spondylitis: comparative imaging features. Sharif HS, et al. **Radiology** 1989 May; 171(2):419–25
Case report 516: Lumbar vertebral chordoma causing sclerosis of affected vertebra (3rd lumbar vertebra). Roddie M, et al. **Skeletal Radiol** 1989;17(8):611–3
Pyogenic infection of the lumbar vertebral spine due to gas-forming organisms. A case report. Charles RW, et al. **Spine** 1989 May;14(5):541–3
TLSO treatment of idiopathic scoliosis. An analysis of the Wilmington jacket. Hanks GA, et al. **Spine** 1988 Jun; 13(6):626–9
Infected Charcot spine following spinal cord injury. Mikawa Y, et al. **Spine** 1989 Aug;14(8):892–5
Computed tomography and fluoroscopy guided anesthesia and steroid injection in facet syndrome. Murtagh FR. **Spine** 1988 Jun;13(6):686–9
Pyogenic vertebral osteomyelitis of a lumbar facet joint with associated epidural abscess. A case report with review of the literature. Roberts WA. **Spine** 1988 Aug;13(8):948–52 (35 ref.)
Occult infections causing persistent low-back pain. Schofferman L, et al. **Spine** 1989 Apr;14(4):417–9
Scoliosis associated with lumbar spondylolisthesis. A clinical survey of 190 young patients. Seitsalo S, et al. **Spine** 1988 Aug;13(8):899–904
Rotatory olisthesis in idiopathic scoliosis. Trammell TR, et al. **Spine** 1988 Dec;13(12):1378–82
Dural mesenchymal chondrosarcoma of the lumbar spine. Case report. Di Lorenzo N, et al. **Surg Neurol** 1989 Jun; 31(6):470–2
Posterior epidural migration of extruded lumbar disk. Lichtor T. **Surg Neurol** 1989 Oct;32(4):311–2
Translumbar amputation for cancer of the bladder [letter] Mackenzie AR. **Surgery** 1989 Jun;105(6):811
[Ossification of the ligamentum flavum] Dai LY. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):99–101 (24 ref.) **(Chi)**
[Intervertebral fusion of a lumbo-sacral segment with insertion of a rotated local bone block by anterio-lateral approach] Zhao DL, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):136–8, 189 (Eng. Abstr.) **(Chi)**
[Anatomo-clinical conference. Pitié-Salpêtrière Hospital. Case No. 2-1987. Fever and regressive sciatica in a Corsican woman] Vidailhet MJ, et al. **Ann Med Interne (Paris)** 1989;140(3):197–202 **(Fre)**
[Non-infectious destructive spondyloarthropathy in chronic hemodialysis patients. 2 cases with lumbar localization] Vende B, et al. **Ann Radiol (Paris)** 1988;31(4):239–43 (Eng. Abstr.) **(Fre)**
[Radiologic case of the month. Lumbar discitis] Eurin D, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):421–2 **(Fre)**
[Spinal osteoid osteomas. Apropos of 4 cases] Guy G, et al. **Neurochirurgie** 1989;35(1):41–6 (47 ref.) (Eng. Abstr.) **(Fre)**
[Synovial cysts and synovialomas of the lumbar spine. Histo-pathologic and neuro-surgical aspects apropos of 8 cases] Rousseaux P, et al. **Neurochirurgie** 1989;35(1):31–9 (50 ref.) (Eng. Abstr.) **(Fre)**
[Percutaneous injection of cement into metastatic vertebrae (letter)] Kaemmerlen P, et al. **Presse Med** 1989 May 13; 18(19):983–4 **(Fre)**
[Spondylolisthesis with severe displacement in children and adolescents Results of 12 cases of posterior reduction fixation] Herman S, et al. **Rev Chir Orthop** 1988; 74(7):614–21 (Eng. Abstr.) **(Fre)**
[Pars interarticularis reconstruction of spondylolysis using plates and screws with grafting without arthrodesis. Apropos of 78 cases] Louis R. **Rev Chir Orthop** 1988; 74(6):549–57 (23 ref.) (Eng. Abstr.) **(Fre)**
[Lumbar spinous apophysis. An unusual location of osteoid osteoma] Carpentier E, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1001–3 **(Fre)**
[Vertebral compression disclosing bifocal staphylococcal spondylodiscitis] Juvin R, et al.

Rev Rhum Mal Osteoartic 1989 May;56(6):495–7 (Fre)
[Irreducible lordosis due to lamina–dural fusion] Renier JC, et al. Rev Rhum Mal Osteoartic 1988 Jun;55(8):589–94 (Fre)
[A torment for almost everyone: backache] Hipp E. Fortschr Med 1989 Jun 20;107(18):35 (Ger)
[Clinical deterioration following chemonucleolysis. Sequestration or neurotoxic complication?] Wehling P, et al. Neurochirurgia (Stuttg) 1989 May;32(3):72–6 (Eng. Abstr.) (Ger)
[Chance coincidence of spondylolisthesis and osteoid osteoma of the spine—a case report] Molsberger A, et al. Z Orthop 1989 May–Jun;127(3):343–5 (Eng. Abstr.) (Ger)
[The radicular and pseudoradicular syndrome of infectious spondylitis and its differential diagnostic significance] Weber M, et al. Z Orthop 1988 Sep–Oct;126(5):563–9 (Eng. Abstr.) (Ger)
[Work posture and changes in the spine of coffin–carriers] Occhipinti E, et al. Med Lav 1988 Nov–Dec;79(6):452–9 (Eng. Abstr.) (Ita)
[Diagnostic value of CT in an unusual case of multiple myeloma] Gozzi G, et al. Radiol Med (Torino) 1988 Sep; 76(3):221–3 (Ita)
[Vertebral monostotic histiocytosis-X with intraspinal spread. Usefulness of CT] Gugliantini P, et al. Radiol Med (Torino) 1989 Jun;77(6):697–700 (Ita)
[Thoracic and lumbo–sacral spinal lipoma in an infant] Honda E, et al. No Shinkei Geka 1989 Feb;17(2):171–5 (Eng. Abstr.) (Jpn)
[Lumbar spine, coxofemoral and calcaneus osteoporosis: clinico–radiologic study] Knoplich J, et al. Rev Paul Med 1987 Nov–Dec;105(6):301–11 (Eng. Abstr.) (Por)
[Staphylococcal osteomyelitis of the spine as a complication of gunshot abdominal wound] Ardashev IP, et al. Ortop Travmatol Protez 1989 Jan;(1):57–9 (Rus)
[Prerequisites of manual therapy in spinal diseases] Khvisiuk NI, et al. Ortop Travmatol Protez 1988 Jun;(6):68–71 (Rus)
[Treatment of spinal cord compression in multiple myeloma] Golenkov AK, et al. Sov Med 1988;(10):107–9 (Rus)
[The radicular syndrome in spondylolisthesis] Protsenko AI, et al. Sov Med 1988;(11):101–3 (Rus)

ABNORMALITIES

Spondylothoracic dysplasia. Report of four cases. Marti D, et al. Acta Orthop Belg 1988;54(4):413–7
Spinal disorders: kyphosis and lumbar stenosis. Dubousset J, et al. Basic Life Sci 1988;48:299–303 (0 ref.)
Sacralization of a sixth lumbar vertebra and its effect upon the estimation of living stature. Lundy JK. J Forensic Sci 1988 Jul;33(4):1045–9
Incarcerated congenital lumbar hernia associated with the lumbocostovertebral syndrome. Hancock BJ, et al. J Pediatr Surg 1988 Aug;23(8):782–3
Anatomical evaluation of the caudal regression syndrome (lumbosacral agenesis) with magnetic resonance imaging. Pappas CT, et al. Neurosurgery 1989 Sep;25(3):462–5
Aplasia of inferior articular processes of L3. A case report. Fischetti SG, et al. Rays 1988 Sep–Dec;13(3):19–21
Symptomatic clasp–knife deformity of the spinous processes. Goobar JE, et al. Spine 1988 Aug;13(8):953–6
Anomalous lumbosacral articulations and low–back pain. Evaluation and treatment. Jönsson B, et al. Spine 1989 Aug; 14(8):831–4
Congenital absence of a lumbar pedicle. Mizutani M, et al. Spine 1989 Aug;14(8):890–1
Congenital absence of lumbar articular facets with computerized axial tomography documentation. Phillips MR, et al. Spine 1988 Jun;13(6):676–8
Nuclear magnetic resonance computerised tomography (NMR–CT) in early diagnosis of dumbbell neuroblastoma. Ogita S, et al. Z Kinderchir 1989 Apr;44(2):122–3
[Surgical treatment of spinal kyphosis following congenital hemivertebra] Rui KQ. Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Apr; 11(2):92–6 (Eng. Abstr.) (Chi)
[Alagille's syndrome: variable expressivity (letter)] Karpathios T, et al. Arch Fr Pediatr 1988 Oct;45(8):597 (Fre)
[X–ray computed tomography of a bilateral retrosomatic fissure of L2 (letter)] Maigne JY, et al. Rev Rhum Mal Osteoartic 1988 Nov;55(11):961–3 (Fre)
[Congenital tilt of the sacral plateau and the fate of the spine] Carstens C. Z Orthop 1988 Sep–Oct;126(5):532–8 (Eng. Abstr.) (Ger)
[Surgical therapy of severe knee flexion and hip flexion contractures in caudal regression syndrome] Carstens C, et al. Z Orthop 1988 Dec;126(6):625–8 (Eng. Abstr.) (Ger)
[Concordant occurrence of grade I spondylolisthesis in childhood in a pair of monozygotic twins] Hamel J, et al. Z Orthop 1988 Sep–Oct;126(5):530–1 (Eng. Abstr.) (Ger)
[Caudal regression syndrome with complete absence of lumbo–sacral spine in a son of a diabetic woman. Presentation of a case] Altamura G, et al. Minerva Pediatr 1988 Jun;40(6):367–71 (Eng. Abstr.) (Ita)
[Studies on experimentally induced malformations of the spine and spinal cord: neuropathology of lumbosacral agenesis] Iwai K. Nippon Seikeigeka Gakkai Zasshi 1989 Jan;63(1):116–30 (Eng. Abstr.) (Jpn)
[Characteristics of spinal stress in modeling scoliotic deformity and the methods of its correction] Gladkov AV, et al. Ortop Travmatol Protez 1989 Jan;(1):43–7 (Eng. Abstr.) (Rus)
[Epidurography in congenital developmental anomalies of the spine in children] Ul'rikh EV, et al. Ortop Travmatol Protez 1988 Jun;(6):31–4 (Eng. Abstr.) (Rus)

ANALYSIS

Quantitative computed tomography in measurement of vertebral trabecular bone mass. A modified method. Nilsson M, et al. Acta Radiol 1988 Nov–Dec;29(6):719–25
Some factors which influence the evaluation of a dual photon measurement of lumbar spine bone mineral mass. Webber CE. Can Assoc Radiol J 1989 Apr;40(2):87–91
Correlation of mechanical properties of vertebral trabecular bone with equivalent mineral density as measured by computed tomography. Lang SM, et al. J Bone Joint Surg [Am] 1988 Dec;70(10):1531–8
A comparison of rat femoral, sternebral and lumbar vertebral bone marrow fat content by subjective assessment and image analysis of histological sections. Wright JA. J Comp Pathol 1989 May;100(4):419–26
The effect of oral contraceptives on lumbar bone density in premenopausal women. Collins CL, et al. J La State Med Soc 1988 Sep;140(9):31–2, 35–9
Increased vertebral bone density in heavy drinkers of mineral water rich in fluoride [letter] Meunier PJ, et al. Lancet 1989 Jan 21;1(8630):152
Lower vertebral bone density in male long distance runners. Bilanin JE, et al. Med Sci Sports Exerc 1989 Feb; 21(1):66–70
[Measurement of bone mineral content by quantitative digital radiography. First results in the lumbar vertebrae] Braillon P, et al. Presse Med 1989 May 27;18(21):1062–5 (Eng. Abstr.) (Fre)
[Laser micro–spectroanalytical determinations of aluminum in lumbar vertebrae of non–nephrectomized and 5/6 nephrectomized rats after application of dose– and time–dependent aluminum chloride solutions] Schmidt R, et al. Acta Histochem (Jena) 1989;85(2):175–86 (Eng. Abstr.) (Ger)
[Parathyroid hormone and bone mineral content in male and female patients receiving hemodialysis] Torizumi K, et al. Radioisotopes 1988 Jul;37(7):410–3 (Eng. Abstr.) (Jpn)

ANATOMY & HISTOLOGY

Pedicle origin and intervertebral compartment in the lumbar and upper sacral spine. A biometric study. Pfaundler S, et al. Acta Neurochir (Wien) 1989;97(3–4):158–65
Overriding vertebral spinous processes in the extinct horse, Equus occidentalis [published erratum appears in Am J Vet Res 1989 Jun;50(6):989] Klide AM. Am J Vet Res 1989 Apr;50(4):592–3
Medial and lateral arcuate ligaments of the diaphragm: attachment to the transverse process. Deviri E, et al. Anat Anz 1988;166(1–5):63–7
Anatomy of the lumbar spine in achondroplasia. Giglio GC, et al. Basic Life Sci 1988;48:227–39
Anatomy of the lumbar spinal canal. Lonstein JE. Basic Life Sci 1988;48:219–26
Vertebral morphometry: normative data. Gallagher JC, et al. Bone Miner 1988 Jun;4(2):189–96
Prediction of vertebral strength by dual photon absorptiometry and quantitative computed tomography. Eriksson SA, et al. Calcif Tissue Int 1989 Apr;44(4):243–50
Peak trabecular vertebral density: a comparison of adolescent and adult females. Gilsanz V, et al. Calcif Tissue Int 1988 Oct;43(4):260–2
Ligaments associated with lumbar intervertebral foramina. 2. The fifth lumbar level. Amonoo–Kuofi HS, et al. J Anat 1988 Aug;159:1–10
Normal vertebral dimensions and normal variation in serial measurements of vertebrae. Davies KM, et al. J Bone Miner Res 1989 Jun;4(3):341–9
Normal and disrupted lumbar longitudinal ligaments: correlative MR and anatomic study. Grenier N, et al. Radiology 1989 Apr;171(1):197–205
Anatomy of the lumbar vertebral column. Yeager VL. Semin Neurol 1986 Dec;6(4):341–9 (22 ref.)
Neuromuscular thermography of the lumbar spine with CT correlation. Chafetz N, et al. Spine 1988 Aug;13(8):922–5
Topographic anatomical aspects of lumbar disc puncture. Koninga JG, et al. Spine 1988 Aug;13(8):958–61
Anatomic analysis of pedicle cortical and cancellous diameter as related to screw size. Misenhimer GR, et al. Spine 1989 Apr;14(4):367–72
Vertebral body and posterior element morphology: the normal spine in middle life. Scoles PV, et al. Spine 1988 Oct;13(10):1082–6
Ligaments of the lumbar spine: a review. Behrsin JF, et al. Surg Radiol Anat 1988;10(3):211–9 (57 ref.)
Morphometric analysis of the thoracolumbar and lumbar pedicles, anatomo–radiologic study. Marchesi D, et al. Surg Radiol Anat 1988;10(4):317–22
A morphometric study of the lumbar foramen. Influence of flexion–extension movements and of isolated disc collapse. Mayoux–Benhamou MA, et al. Surg Radiol Anat 1989; 11(2):97–102
[Functional anatomy of the lumbar spine] Maigne JY. Agressologie 1989 Mar;30(3):127–8 (Eng. Abstr.) (Fre)
[Bone and muscle density of the lumbar spine (letter)] Vico L, et al. Presse Med 1989 Jun 24;18(25):1254 (Fre)
[The anatomic variability of the intervertebral foramina L4——L5 and L5——S1 in the light of planimetric studies] Goździewski S, et al. Gegenbaurs Morphol Jahrb 1988; 134(5):785–90 (Eng. Abstr.) (Ger)
[The lumbosacral transition: morphologic variations and their functional significance] Lax S, et al. Gegenbaurs Morphol Jahrb 1988;134(4):497–527 (Eng. Abstr.) (Ger)
[Transabdominal lumbal ultrasonic tomometry—sonographic measurement of the lumbar spine] Hagen A, et al. Ultraschall Med 1988 Oct;9(5):240–5 (Eng. Abstr.) (Ger)
[Laminectomy in the dog for experimental purposes—a technical comment] Santa M, et al. Z Exp Chir Transplant Kunstliche Organe 1988;21(6):340–3 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

Demonstration of vertebral body end plate veins by magnetic resonance imaging. Saywell WR, et al. Br J Radiol 1989 Mar;62(735):290–2
Magnetic resonance imaging in cases of spinal dural arteriovenous malformation. Isu T, et al. Neurosurgery 1989 Jun;24(6):919–23
Spinal dural arteriovenous malformation: report of an unusual case. Tanaka K, et al. Neurosurgery 1989 Jun;24(6):915–8
[Anatomical study of the intercostal, subcostal and lumbar arteries in man—on the formation and embryological significance of the common trunk] Higashi N, et al. Kaibogaku Zasshi 1988 Aug;63(4):221–32 (Eng. Abstr.) (Jpn)
[Venous pressure in the vertebral venous plexus and its role in cauda equina claudication] Yazaki S, et al. Nippon Seikeigeka Gakkai Zasshi 1988 Aug;62(8):733–45 (Eng. Abstr.) (Jpn)
[Extra– and intraorganic blood channel of the rabbit lumbar vertebrae in health and after cutting the segmentary arteries and veins] Pavlova MN, et al. Arkh Anat Gistol Embriol 1989 May;96(5):38–45 (Eng. Abstr.) (Rus)
[Complex treatment of lumbosacral radiculoischemia using manual therapy] Drobinskiĭ AD, et al. Zh Nevropatol Psikhiatr 1989;89(4):24–6 (Eng. Abstr.) (Rus)

DRUG EFFECTS

[Chemonucleolysis—a possible ambulatory treatment method in lumbar intervertebral disk displacement?] Vogl G, et al. Nervenarzt 1988 Nov;59(11):669–71 (Ger)
[Chemonucleolysis—with extended indications. 4 years clinical experience] Bock–Lamberlin PR, et al. Z Orthop 1988 Dec;126(6):661–5 (Eng. Abstr.) (Ger)

EMBRYOLOGY

The parathyroid glands in the skeletal development of the ovine foetus. Aaron JE, et al. Bone Miner 1989 Aug; 7(1):13–22

ENZYMOLOGY

Correlation between alkaline and acid phosphatase activities and age–related osteopenia in murine vertebrae. Bar–Shira–Maymon B, et al. Calcif Tissue Int 1989 Feb; 44(2):99–107

GROWTH & DEVELOPMENT

Biomechanical and biochemical changes in lumbar vertebrae of rapidly growing rats. Salem GJ, et al. Am J Physiol 1989 Jan;256(1 Pt 2):R259–63
Comparison of long bones and vertebrae in growing male rats: rate of growth, mineralization, and uptake of 3H–tetracycline at the organ level. Coffey SA, et al. Growth Dev Aging 1988 Autumn;52(3):151–6

INJURIES

Segmental spinal instrumentation in the early fixation of the fracture–dislocations of the dorsal and lumbar spine (S.S.I). De Luna ER, et al. Acta Chir Hung 1989;30(1):45–53
Recurrence of deformity after removal of Harrington's fixation of spine fracture. Seventy–six cases followed for 2 years. Myllynen P, et al. Acta Orthop Scand 1988 Oct; 59(5):497–502
Epidemiology of vertebral fractures in women. Melton LJ 3d, et al. Am J Epidemiol 1989 May;129(5):1000–11
Combined Kirschner–Ehmer apparatus and dorsal spinal plate fixation of caudal lumbar fractures in dogs: biomechanical properties. Shores A, et al. Am J Vet Res 1988 Nov;49(11):1979–82
Lumbar posterior vertebral spur. Soper J. Australas Radiol 1988 Aug;32(3):343–7
Reduced occurrence of vertebral crush fractures in senile osteoporosis treated with 1 alpha (OH)–vitamin D3. Orimo H, et al. Bone Miner 1987 Oct;3(1):47–52
Surgical treatment of post–traumatic kyphosis: a report of 16 cases. Jodoin A, et al. Can J Surg 1989 Jan;32(1):36–42
Anterolateral compression fracture of the thoracolumbar spine. A seat belt injury. Miniaci A, et al. Clin Orthop 1989

Mar;(240):153–6
The natural history of the osteoporotic vertebral fracture. Lyritis GP, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:66–9
The symptomatic lumbar spine in the athlete. Kraus DR, et al. **Clin Sports Med** 1989 Jan;8(1):59–69 (14 ref.)
Operative fixation of fractures of the thoracic and lumbar vertebrae by Williams plates with reference to late kyphosis. Aho AJ, et al. **Injury** 1988 May;19(3):153–8
Unstable fractures of the thoracic and lumbar spine: the audit of an 8-year series with early reduction using Harrington instrumentation. Böstman OM, et al. **Injury** 1987 May; 18(3):190–5
Chylothorax following fracture of the thoracolumbar spine. Gartside R, et al. **Injury** 1988 Sep;19(5):363–4 (21 ref.)
Computerized tomography of injury to the thoracolumbar spine. Wilson BP, et al. **Injury** 1987 May;18(3):185–9
Spring alloplasty in the treatment of fractures of the thoracic and lumbar spines. A correlation of the results of treatment with the mechanism of injury. Kiwerski J. **Int Orthop** 1989; 13(1):33–7
Repair of sixth lumbar vertebral fracture–luxations, using transilial pins and plastic spinous-process plates in six dogs. Lewis DD, et al. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):538–42
Vertebral body fracture in a captive cheetah. Pernikoff DS, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1199–200
Combined Kirschner–Ehmer device and dorsal spinal plate fixation technique for caudal lumbar vertebral fractures in dogs. Shores A, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):335–9
Dural laceration occurring with burst fractures and associated laminar fractures. Cammisa FP Jr, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1044–52
Fractures of the lumbar lamina with epidural hematoma simulating herniation of a disc. A case report. Garth WP Jr, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):771–2
Vertebral fractures without neurological deficit. A long-term follow-up study. Hazel WA Jr, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1319–21
Unilateral facet dislocation of the lumbosacral junction. A case report and review of the literature. Kramer KM, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1258–61 (11 ref.)
Remodelling of the spinal canal after burst fracture. A prospective study of two cases. Fidler MW. **J Bone Joint Surg [Br]** 1988 Nov;70(5):730–2
Serratia osteomyelitis causing neurological deterioration after spine fracture. A report of two cases. Lowe J, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):256–8
MR imaging of traumatic spinal arachnoid cyst. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):862–5
Vertebral body impactor for posterior lateral decompression of thoracic and lumbar fractures. Technical note. Oro J, et al. **J Neurosurg** 1989 Feb;70(2):285–6
Therapeutic concept and results of operative treatment in acute trauma of the thoracic and lumbar spine: the Hannover experience. Blauth M, et al. **J Orthop Trauma** 1987;1(3):240–52
Undetected posttraumatic instability of "stable" thoracolumbar fractures. Keene JS, et al. **J Orthop Trauma** 1988;2(3):202–11
Traction bow for acute reduction of fracture and/or dislocation of the thoracic or thoracolumbar spine. Wang GJ, et al. **J Orthop Trauma** 1988;2(2):124–9
Long-term follow-up of nonoperatively treated thoracolumbar spine fractures. Weinstein JN, et al. **J Orthop Trauma** 1987;1(2):152–9
Monostotic fibrous dysplasia of the lumbar spine: case report and review of the literature. Troop JK, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):599–601 (22 ref.)
Lumbar seatbelt injury in a child: case report. Moskowitz A. **J Trauma** 1989 Sep;29(9):1279–82
Radiology of posterior lumbar apophyseal ring fractures: report of 13 cases. Dietemann JL, et al. **Neuroradiology** 1988;30(4):337–44
Pedicle screw fixation—limitations [editorial] D'Ambrosia R. **Orthopedics** 1989 Jul;12(7):935
Development of the locking hook spinal rod system. Jacobs RR, et al. **Orthopedics** 1988 Oct;11(10):1415–21
Low lumbar burst fractures. Reduction and stabilization using the modular spine fixation system. Levine AM, et al. **Orthopedics** 1988 Oct;11(10):1427–32
Perforation of the inferior vena cava with aortic and vertebral penetration by a suprarenal Greenfield filter. Kim D, et al. **Radiology** 1989 Sep;172(3):721–3
Posterior lumbar apophyseal ring fracture simulating a mass lesion in computed tomograms. Kolín J, et al. **ROFO** 1989 Jul;151(1):114–5
Burst fractures of the thoracolumbar spine. Albuquerque RG, et al. **Singapore Med J** 1988 Dec;29(6):624–30
Spontaneous unstable burst fracture of the thoracolumbar spine in osteoporosis. A report of two cases. Arciero RA, et al. **Spine** 1989 Jan;14(1):114–7
Traumatic retrolisthesis of the lumbosacral junction. A case report. Cohn SL, et al. **Spine** 1989 Jan;14(1):132–4
Atypical multivertebral fracture due to hyperextension in an adolescent girl. A case report. Ferrandez L, et al. **Spine** 1989 Jun;14(6):645–6
Decompression and circumferential stabilization of unstable spinal fractures. Gertzbein SD, et al. **Spine** 1988 Aug; 13(8):892–5
An analytical investigation of the mechanics of spinal instrumentation. Goel VK, et al. **Spine** 1988 Sep; 13(9):1003–11
Post-traumatic lumbar extra-arachnoid mass with radiculopathy responding to conservative therapy in a patient with bilateral laminar fractures. Gupta KL, et al. **Spine** 1988 Aug;13(8):945–8
Relationship between traumatic spinal canal stenosis and neurologic deficits in thoracolumbar burst fractures. Hashimoto T, et al. **Spine** 1988 Nov;13(11):1268–72
Migrating spinal pseudarthrosis in the spine affected by ankylosing spondylitis. Ho E, et al. **Spine** 1989 May; 14(5):546–8
Significance of acute posttraumatic bony encroachment of the neural canal. Keene JS, et al. **Spine** 1989 Aug; 14(8):799–802
MRI diagnosis of traumatic Schmorl's node. A case report. Kornberg M. **Spine** 1988 Aug;13(8):934–5
Anterior stabilization, instrumentation, and decompression for post-traumatic kyphosis. Kostuik JP, et al. **Spine** 1989 Apr;14(4):379–86
Bilateral facet dislocations in the thoracolumbar spine. Levine AM, et al. **Spine** 1988 Jun;13(6):630–40
Unilateral dislocation of a lumbosacral facet. Miz GS, et al. **Spine** 1988 Aug;13(8):956–7
Multiple spinal fractures after scoliosis fusion with Harrington rods. Thomas R, et al. **Spine** 1989 May; 14(5):539–41
Intraoperative ultrasonography for reduction of thoracolumbar burst fractures. Vincent KA, et al. **Spine** 1989 Apr;14(4):387–90
Complications with the variable spinal plating system. Whitecloud TS 3d, et al. **Spine** 1989 Apr;14(4):472–6
[Care of patients with dorsal and lumbar vertebra compression fracture treated by padding pill] Tao JR. **Chung Hua Hu Li Tsa Chih** 1988 Sep;23(9):532 (Chi)
[Treatment of unstable fracture-dislocation of the thoracolumbar spine with Luque's U-shaped rod] Jiang HZ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar; 26(3):139–40, 189 (Eng. Abstr.) (Chi)
[Vertebrectomy in treating fracture-dislocation of the spine with paraplegia] Xu ST. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):85–7, 125 (Eng. Abstr.) (Chi)
[Comprehensive classification and surgical treatment of injury of the thoracolumbar spine] Zhang GB, et al. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):71–4, 124 (Eng. Abstr.) (Chi)
[Concepts in the treatment of injuries of the thoracic and lumbar spine] Wendsche P, et al. **Rozhl Chir** 1989 Jan; 68(1):15–22 (Eng. Abstr.) (Cze)
[Orthopedic treatment of fractures of the dorsolumbar and lumbar spine with recoil of the posterior corpus wall (burst fracture) without or with minor neurologic lesions] Goutallier D, et al. **Rev Chir Orthop** 1988;74 Suppl 2:77–83 (Fre)
[Management and results of conservative treatment of patients with injuries of the thoracic and lumbar vertebrae] Bilow H, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:7–17 (Eng. Abstr.) (Ger)
[Stability of the spine following osteosynthesis with internal fixation. Case report] Schwarz N, et al. **Aktuel Traumatol** 1989 Apr;19(2):61–2 (Eng. Abstr.) (Ger)
[Fixateur externe as a definitive treatment method of unstable thoracolumbar spinal fractures in emergency conditions—technical modification and clinical experiences] Knopf W, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):96–103 (Eng. Abstr.) (Ger)
[Acute management of spinal injuries. The thoracic and lumbar spine, surgical therapy] Dick W. **Langenbecks Arch Chir** 1988;Suppl 2:261–5 (10 ref.) (Eng. Abstr.) (Ger)
[Acute management of spinal injuries. The thoracic and lumbar spine, conservative and functional therapy] Dürr W. **Langenbecks Arch Chir** 1988;Suppl 2:255–60 (15 ref.) (Eng. Abstr.) (Ger)
[Muscular imbalance in elite swimmers and the resulting sports damage of the lumbar spine and knee joints] Pieper HG, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):29–31 (Eng. Abstr.) (Ger)
[The "chapeau-claque" mechanism. Biomechanical aspects of roentgen diagnosis of vertebral fractures] Richter-Turtur M, et al. **Unfallchirurg** 1989 Jul;92(7):328–30 (Eng. Abstr.) (Ger)
[Flexion-distraction injuries of the thoracolumbar spine with complete pancreatic rupture. Description of a case] Rommens P, et al. **Unfallchirurg** 1989 Jan;92(1):26–8 (Eng. Abstr.) (Ger)
[Exertion, spinal fracture, intervertebral disk displacement] Mohing W. **Versicherungsmedizin** 1989 Jul 1;41(4):129–32 (Eng. Abstr.) (Ger)
[Fractures of the thoracolumbar spine] Lokiec F, et al. **Harefuah** 1989 Mar 1;116(5):277–80 (18 ref.) (Heb)
[Use of contractors in unstable fractures of the thoraco-lumbar spine] Szlachta Z, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):20–5 (Eng. Abstr.) (Pol)
[Outcome of the surgical treatment of spondylolisthesis] Ardashev IP, et al. **Ortop Travmatol Protez** 1989 May; (5):22–5 (Eng. Abstr.) (Rus)
[Computerized tomography in the diagnosis of traumatic changes in the spine] Kossovoĭ AL. **Ortop Travmatol Protez** 1988 Dec;(12):54–7 (51 ref.) (Rus)
[A case of successful treatment of severe combined injuries of the spine and spinal cord] Polishchuk NE, et al. **Ortop Travmatol Protez** 1989 May;(5):50–1 (Rus)
[A device for applying corsets and for reclination of compressed vertebrae] Shchekin OV. **Ortop Travmatol Protez** 1988 Jun;(6):56–8 (Rus)
[Use of damper hammocks in the treatment of spinal fractures] Shchëtkin VA. **Ortop Travmatol Protez** 1989 Jan; (1):60–1 (Rus)
[Injuries of the lumbosacral segments of the spine] Shvets AI. **Ortop Travmatol Protez** 1989 May;(5):18–22 (Eng. Abstr.) (Rus)
[Differential diagnosis of marginal fractures of the vertebrae] Matveenko IuV, et al. **Sud Med Ekspert** 1989 Apr–Jun; 32(2):51–2 (Rus)
[Rehabilitation treatment of patients with uncomplicated fractures of the spine at a hospital rehabilitation center] Bagaturiia GO, et al. **Vestn Khir** 1989 Feb;142(2):63–6 (Eng. Abstr.) (Rus)

INNERVATION

Neurohistology of lumbar spine ligaments. Yahia LH, et al. **Acta Orthop Scand** 1988 Oct;59(5):508–12
[Indications for lumbar facet infiltrations. Preliminary results] Schuermans P. **Acta Belg Med Phys** 1988 Jul–Sep; 11(3):143–8 (Dut)
[Reflex scoliosis in backache syndrome] Kiwerski J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):351–8 (Eng. Abstr.) (Pol)
[Treatment of reflex neurodystrophic syndromes of lumbar osteochondrosis using hydroxycobalamin injections] Pishel' IaV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):44–5 (Rus)
[Thermographic examination of patients with neurologic manifestations of lumbar osteochondrosis] Belova AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):31–5 (Eng. Abstr.) (Rus)

METABOLISM

Changes with aging in the bone mineral content of the lumbar spine and femoral neck in healthy women in Hungary. Lakatos P, et al. **Acta Med Hung** 1989;46(1):73–83
The relation of radionuclide uptake by bone to the rate of calcium mineralization. II: Patient studies using 99Tcm-MDP. Budd RS, et al. **Br J Radiol** 1989 Apr; 62(736):318–20
Early vertebral trabecular bone loss in normal premenopausal women. Buchanan JR, et al. **J Bone Miner Res** 1988 Oct; 3(5):583–7
[Nucleolytic action of chondroitinase ABC on the lumbar disc of the rabbit] Henderson N, et al. **C R Acad Sci [III]** 1988;307(7):403–6 (Eng. Abstr.) (Fre)

PATHOLOGY

Translaminar screw fixation in lumbar spine pathology. Technical note. Markwalder TM, et al. **Acta Neurochir (Wien)** 1989;99(1–2):58–60
MR imaging of the pars interarticularis. Johnson DW, et al. **AJR** 1989 Feb;152(2):327–32
Alterations in appendicular skeletal mass in patients with rheumatoid arthritis, psoriatic arthritis, and osteoarthritis [letter] Verstraeten A. **Ann Rheum Dis** 1989 Mar;48(3):264
Tophaceous gout of the axial skeleton. Arnold MH, et al. **Aust N Z J Med** 1988 Dec;18(7):865–7
Age-related changes in vertebral trabecular bone architecture—assessed by a new method. Mosekilde L. **Bone** 1988;9(4):247–50
Age-related bone loss in lumbar vertebrae of CW-1 female mice: a histomorphometric study. Bar-Shira-Maymon B, et al. **Calcif Tissue Int** 1989 Jan;44(1):36–45
Measurement of anisotropic vertebral trabecular bone loss during aging by quantitative image analysis. Bergot C, et al. **Calcif Tissue Int** 1988 Sep;43(3):143–9
Change in vertebral shape in spinal osteoporosis. Hedlund LR, et al. **Calcif Tissue Int** 1989 Mar;44(3):168–72
Increase of vertebral density by combination therapy with pulsatile 1–38hPTH and sequential addition of calcitonin nasal spray in osteoporotic patients. Hesch RD, et al. **Calcif Tissue Int** 1989 Mar;44(3):176–80
Spinal metastasis of pilocytic astrocytoma of the chiasma opticum. Kocks W, et al. **Childs Nerv Syst** 1989 Apr; 5(2):118–20
Skeletal metastases in liposarcoma detectable only by magnetic resonance imaging. Khurana JS, et al. **Clin Orthop** 1989 Jun;(243):204–7
Acquired coronal cleft vertebra. Wilson AR, et al. **Clin Radiol** 1989 Mar;40(2):167–73
Comparison of T1 and T2 weighted images of the lumbar spine. Moffit B, et al. **Comput Med Imaging Graph** 1988 Sep–Oct;12(5):271–6
Curvature of the lumbar spine as a consequence of mechanical necessities in Japanese macaques trained for bipedalism. Preuschoft H, et al. **Folia Primatol (Basel)** 1988; 50(1–2):42–58
Nuclear magnetic resonance in the diagnosis of lumbar herniated disc. Santori FS, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):243–55
Incidence of unfused ossicles in the lumbar facet joints: CT, MR, and cryomicrotomy study. Wang ZL, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):594–7

Malignant histiocytosis with clinical presentation of compression of cauda equina. Shuangshoti S, et al. **J Med Assoc Thai** 1988 Aug;71(8):461–5

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 13–1989. A 76-year-old woman with multiple bone lesions and thrombocytopenia. **N Engl J Med** 1989 Mar 30;320(13):854–60

Thoracolumbar needle biopsy. Alexander AH. **Orthopedics** 1988 Oct;11(10):1473–7

Isthmic spondylolysis of the lumbar spine: MR imaging at 1.5 T. Grenier N, et al. **Radiology** 1989 Feb;170(2):489–93

Sequestrated lumbar intervertebral disc associated with vertebral erosion. Briceno CE, et al. **Spine** 1989 Aug; 14(8):898–9

Spondylolisthesis with unilateral pars interarticularis defect and contralateral facet joint degeneration. A case report. Kornberg M. **Spine** 1988 Jun;13(6):712–3

The prevalence of disc degeneration associated with neural arch defects of the lumbar spine assessed by magnetic resonance imaging. Szypryt EP, et al. **Spine** 1989 Sep; 14(9):977–81

[Unilateral isthmic lysis in x-ray computed tomography] Chevrot A, et al. **J Radiol** 1988 Dec;69(12):767–9 (Eng. Abstr.) **(Fre)**

[Spondylitis caused by malignant duodeno–retroperitoneal histiocytosis—a case report] Siegling CW, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):117–20 (Eng. Abstr.) **(Ger)**

[The morphology of the lumbar spinal canal] Vitzthum HE. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):1–4 (Eng. Abstr.) **(Ger)**

[A rare course of retroperitoneal malignant histiocytosis with duodeno–retroperitoneal fistula] Lüders H, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):249–50 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography in spondylolysis and spondylolisthesis] Lang P, et al. **Z Orthop** 1988 Dec; 126(6):651–7 (Eng. Abstr.) **(Ger)**

[Significance of nuclear magnetic resonance tomography for the diagnosis of degenerative diseases of the lumbar spine] Schulitz KP, et al. **Z Orthop** 1988 May–Jun;126(3):334–44 (Eng. Abstr.) **(Ger)**

[Modeling of scoliosis in animal experiments and the concepts of its etiology and pathogenesis] Shevtsova OA. **Ortop Travmatol Protez** 1988 Jun;(6):72–5 **(Rus)**

PHYSIOLOGY

Mineral content and strength of lumbar vertebrae. A cadaver study. Granhed H, et al. **Acta Orthop Scand** 1989 Feb; 60(1):105–9

Stability of the lumbar spine. A study in mechanical engineering. Bergmark A. **Acta Orthop Scand Suppl** 1989; 230:1–54 (54 ref.)

Analysis of human torso motion with muscle actuators. Katbab A. **Ann Biomed Eng** 1989;17(1):75–91

Low-frequency magnetic field technology: quantifying spinal range of motion. Cohn ML, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):455–7

Biomechanical analysis and assessment of lumbar stress during load lifting using a dynamic 19-segment human model. Jäger M, et al. **Ergonomics** 1989 Jan;32(1):93–112

Validation of single-segment and three-segment spinal models used to represent lumbar flexion. Kippers V, et al. **J Biomech** 1989;22(1):67–75

Nonlinear gross response analysis of a lumbar motion segment in combined sagittal loadings. Shirazi-Adl A, et al. **J Biomech Eng** 1988 Aug;110(3):216–22

Spine kinematics: a digital videofluoroscopic technique. Breen AC, et al. **J Biomed Eng** 1989 May;11(3):224–8

Rotational mobility of the human back in forward flexion. Hindle RJ, et al. **J Biomed Eng** 1989 May;11(3):219–23

Structure and mechanical properties of the longitudinal ligaments and ligamentum flavum of the spine. Kirby MC, et al. **J Biomed Eng** 1989 May;11(3):192–6

Skin accelerometer displacement and relative bone movement of adjacent vertebrae in response to chiropractic percussion thrusts. Smith DB, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):26–37

Prediction of the compressive strength of vertebral bodies of the lumbar spine by quantitative computed tomography. Biggemann M, et al. **Skeletal Radiol** 1988;17(4):264–9

Prediction of the compressive strength of human lumbar vertebrae. Brinckmann P, et al. **Spine** 1989 Jun;14(6):606–10

Influence of dynamic factors and external loads on the moment at the lumbar spine in lifting. Buseck M, et al. **Spine** 1988 Aug;13(8):918–21

The effect of flexion–extension motion of the lumbar spine on the capacity of the spinal canal. An experimental study. Dai LY, et al. **Spine** 1989 May;14(5):523–5

How does posture affect coupling in the lumbar spine? Panjabi M, et al. **Spine** 1989 Sep;14(9):1002–11

A database of isoinertial trunk strength tests against three resistance levels in sagittal, frontal, and transverse planes in normal male subjects. Parnianpour M, et al. **Spine** 1989 Apr;14(4):409–11

Instantaneous axes of rotation of the lumbar intervertebral joints. Pearcy MJ, et al. **Spine** 1988 Sep;13(9):1033–41

Morphological and functional changes of the lumbar spinous processes in the elderly. Scapinelli R. **Surg Radiol Anat** 1989;11(2):129–33

[Effect of resection of the posterior structures of the lumbar spine: a biomechanical study] Dai LY. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):272–5, 317–8 (Eng. Abstr.) **(Chi)**

[Kinematic effects of discectomy on the lumbar spine: an experimental study] Hou TS. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):88–92, 125 (Eng. Abstr.) **(Chi)**

[A biomechanical study of the lumbar intervertebral disc by the finite element method] Takahata T. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun;62(6):665–78 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Iliac crest trabecular bone volume as predictor for vertebral compressive strength, ash density and trabecular bone volume in normal individuals. Mosekilde L, et al. **Bone** 1988;9(4):195–9

Is recurrent low back trouble associated with increased lumbar sagittal mobility? Burton AK, et al. **J Biomed Eng** 1989 May;11(3):245–8

A medical orthopaedist talks about low back syndromes [interview] Fraser D. **Semin Neurol** 1986 Dec;6(4):403–10

Regional variations in the compressive properties of lumbar vertebral trabeculae. Effects of disc degeneration. Keller TS, et al. **Spine** 1989 Sep;14(9):1012–9

Correlations of hip mobility with degree of back pain and lumbar spinal mobility in chronic low-back pain patients. Mellin G. **Spine** 1988 Jun;13(6):668–70

Experimental instability in the rabbit lumbar spine. Stokes IA, et al. **Spine** 1989 Jan;14(1):68–72

Passive lumbar mobility. A prospective study of back pain in young men during their military service. Hellsing AL. **Ups J Med Sci** 1988;93(3):255–65

RADIATION EFFECTS

Bone necrosis and tumor induction following experimental intraoperative irradiation. Powers BE, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):559–67

RADIOGRAPHY

Roentgenologic assessment of spondylolisthesis. II. An evaluation of progression. Danielson B, et al. **Acta Radiol** 1989 Jan–Feb;30(1):65–8

Radiologic aspects of low back pain and sciatic syndromes [editorial] Taveras JM. **AJNR** 1989 Mar–Apr;10(2):451–2

Leg-length inequality has poor correlation with lumbar scoliosis. A radiological study of 100 patients with chronic low-back pain. Hoikka V, et al. **Arch Orthop Trauma Surg** 1989;108(3):173–5

Clinical and radiographic improvement of bone of the second lumbar vertebra in Paget's disease following therapy with etidronate disodium: a case report. Nicholas JJ, et al. **Arthritis Rheum** 1989 Jun;32(6):776–9

Quantitative computed tomography of lumbar vertebrae in Japanese patients with osteoporosis [published erratum appears in Bone Miner 1989 May;6(2):235] Fujii Y, et al. **Bone Miner** 1989 Apr;6(1):87–94

CT measurement of the normal cervical and lumbar spinal canal in Chinese. Zeng YL, et al. **Chin Med J [Engl]** 1988 Dec;101(12):898–900

Fractures and vertebral bone mineral density in patients with renal osteodystrophy. Piraino B, et al. **Clin Nephrol** 1988 Aug;30(2):57–62

Radiographic evidence of posterior lumbar interbody fusion with an emphasis on computed tomographic scanning. Lin PM. **Clin Orthop** 1989 May;(242):158–63

A reassessment of Holt's data on: "The question of lumbar discography". Simmons JW, et al. **Clin Orthop** 1988 Dec; (237):120–4 (42 ref.)

Roentgenographic measurement of pedicle screw penetration. Whitecloud TS, et al. **Clin Orthop** 1989 Aug; (245):57–68 (34 ref.)

Lumbar and thoracic spine pain in the athlete: radiographic evaluation. Cacayorin ED, et al. **Clin Sports Med** 1987 Oct; 6(4):767–83 (30 ref.)

Reference values for trabecular and cortical vertebral bone density in single and dual-energy quantitative computed tomography. Kalender WA, et al. **Eur J Radiol** 1989 May; 9(2):75–80

Diskography with iotrolan before chemonucleolysis with chymopapain. Bien S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:143–7

Comparative clinical study with iotrolan versus metrizamide in lumbar myelography. Inoue S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:161–6

Iotrolan versus iopamidol: a controlled, multicenter, double-blind study of lumbar and direct cervical myelography. Ringel K, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:153–7

Plasma level and renal excretion of iotrolan after lumbar injection in patients. Weinmann HJ, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:224–7

Osteoid osteoma of the spine. Savini R, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):233–8

Vertebral bone density in Scheuermann disease. Gilsanz V, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):894–7

Post-traumatic spinal synovial cyst with spondylolysis: CT features. Awwad EE, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):334–7

Plain film assessment of spinal stenosis: method comparison with lumbar CT. Dailey EJ, et al. **J Manipulative Physiol Ther** 1989 Jun;12(3):192–9 (41 ref.)

Biomechanical analysis by chiropractic radiography: Part I. A simple method for determining X-ray projectional distortion. Zengel F, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):273–80

Biomechanical analysis by chiropractic radiography: Part III. Lack of effect of projectional distortion on Gonstead vertebral endplate lines. Zengel F, et al. **J Manipulative Physiol Ther** 1988 Dec;11(6):469–73

A digital videofluoroscopic technique for spine kinematics. Breen A, et al. **J Med Eng Technol** 1989 Jan–Apr; 13(1–2):109–13

Rheumatoid nodule formation within the lumbar extradural space [letter] Richmond I, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):414

The effect of limping on vertebral bone density: a study of children with tarsal coalition. Gilsanz V, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):33–6

Spondylolisthesis in children under 12 years of age: long-term results of 56 patients treated conservatively or operatively. Seitsalo S, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):516–21

Biostereometrics in the study of the morphology of the lumbar sacral spine. Adams LP, et al. **Med Biol Eng Comput** 1988 Jul;26(4):383–8

Effect of intervertebral changes of the spinal trabecular and cortical mineral content on the precision requirements in longitudinal single and dual energy computed tomography examinations. Sandor T, et al. **Med Phys** 1989 Mar–Apr; 16(2):218–24

Spinal brucellosis. A case with "cauliflower" appearance on CT. Demirci M, et al. **Neuroradiology** 1989;31(3):282–3

Computed tomography of lumbar apophyseal joint lipoma: report of three cases. Dietemann JL, et al. **Neuroradiology** 1989;31(1):60–2

Measurement of effective pedicle diameter in the human spine. Banta CJ 2d, et al. **Orthopedics** 1989 Jul;12(7):939–42

Diffuse idiopathic skeletal hyperostosis: diagnostic significance of radiographic abnormalities of the pelvis. Haller J, et al. **Radiology** 1989 Sep;172(3):835–9

Facet joint arthrography in lumbar spondylolysis: anatomic basis for spread of contrast medium. McCormick CC, et al. **Radiology** 1989 Apr;171(1):193–6

Radiological patterns of lumbar spinal degenerative changes in symptomatic patients. Nzeh DA, et al. **Rays** 1987 Sep–Dec;12(3):35–8

Posterior lumbar apophyseal ring fracture simulating a mass lesion in computed tomograms. Kolín J, et al. **ROFO** 1989 Jul;151(1):114–5

Multiple lumbar spondylolyses with transverse process pseudo-arthroses. A case report. Beningfield SJ, et al. **S Afr Med J** 1989 Jun 3;75(11):544–5

Computed tomography in the evaluation of acute and chronic low back pain syndromes commonly seen. Archer CR, et al. **Semin Neurol** 1986 Dec;6(4):350–71 (28 ref.)

Pyogenic vertebral osteomyelitis of the posterior elements. Ehara S, et al. **Skeletal Radiol** 1989;18(3):175–8

Intravertebral vacuum cleft in the fifth lumbar vertebra. Hashimoto K, et al. **Spine** 1989 Mar;14(3):351–4

Roentgenographic evaluation of lumbar spine flexion–extension in asymptomatic individuals. Hayes MA, et al. **Spine** 1989 Mar;14(3):327–31

Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327–31

Extruded nucleus pulposus causing osseous erosion of a lumbar vertebral body. A report of three cases. Norfray JF, et al. **Spine** 1988 Aug;13(8):941–4

Lumbar degenerative kyphosis. Clinical, radiological and epidemiological studies. Takemitsu Y, et al. **Spine** 1988 Nov;13(11):1317–26

Isolated spinous process deviation. A pitfall in the interpretation of AP radiographs of the lumbar spine. Van Schaik JP, et al. **Spine** 1989 Sep;14(9):970–6

Variations in zygapophyseal joint orientation and level of transition at the thoracolumbar junction. Preliminary survey using computed tomography. Singer KP, et al. **Surg Radiol Anat** 1988;10(4):291–5

[Lumbar neurinoma with corporeal–pedicle development. Apropos of a case] Lozes G, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):333–5 **(Fre)**

[The spontaneous course of disk prolapse in lumbar root compression syndrome. A CT-controlled prospective study] Schultz U, et al. **Nervenarzt** 1988 Nov;59(11):661–8 **(Ger)**

[Long-term roentgenologic studies in peak performance javelin throwers] Neusel E, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):76–80 (Eng. Abstr.) **(Ger)**

[Osseous support in spondylolisthesis. A case report] Imhäuser G. **Z Orthop** 1988 Dec;126(6):647–50 (Eng. Abstr.) **(Ger)**

[Radiologic measurement of the behavior of lumbar intervertebral disks in idiopathic scoliosis based on so-called "bending" images] Lack W, et al. **Z Orthop** 1989 Mar–Apr;127(2):187–90 (Eng. Abstr.) **(Ger)**

[Idiopathic benign non-infectious segmental vertebral sclerosis] Anda S, et al. **Tidsskr Nor Laegeforen** 1989 Mar

10;109(7–8):838–40 (Eng. Abstr.) (Nor)
[Value of computerized tomography methods in diagnosing various diseases of the spine and spinal cord] Dmitriev AE, et al. **Ortop Travmatol Protez** 1989 May;(5):1–7 (Eng. Abstr.) (Rus)
[A method of roentgenological diagnosis of bilateral spondylolysis] Zaretskov VV, et al. **Ortop Travmatol Protez** 1989 Jan;(1):59–60 (Rus)
[Comparative clinico-roentgenological characteristics of degenerative-dystrophic changes in various segments of the spine] Kamalov II. **Zh Nevropatol Psikhiatr** 1989; 89(4):28–31 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Comparison of bone mass measured by histomorphometry on iliac biopsy and by dual photon absorptiometry of the lumbar spine. Delmas PD, et al. **Bone** 1988;9(4):209–13
Normal and abnormal features of the lumbar spine observed in dual photon absorptiometry scans. Hopkins A, et al. **Clin Nucl Med** 1989 Jun;14(6):410–4
Significance of solitary spine abnormalities on technetium-99m bone imaging. Thivolle P, et al. **Clin Nucl Med** 1988 Jul;13(7):527–8
False-negative bone scan in extensive metastatic disease: CT and MR findings. Mehta RC, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):717–9
Bone SPECT in patients with persistent back pain after lumbar spine surgery. Lusins JO, et al. **J Nucl Med** 1989 Apr;30(4):490–6
Septic arthritis of a lumbar facet joint: detection with bone SPECT imaging. Swayne LC, et al. **J Nucl Med** 1989 Aug; 30(8):1408–11
New radiographic technique may renew credibility of bone densitometry [editorial] Sartoris DJ, et al. **Mayo Clin Proc** 1988 Nov;63(11):1147–50
Comparison of dual-energy x-ray absorptiometry and dual photon absorptiometry for bone mineral measurements of the lumbar spine. Wahner HW, et al. **Mayo Clin Proc** 1988 Nov;63(11):1075–84
Assessment of vertebral mineral content by means of a single-crystal scintillation camera. Vandevivere J, et al. **Nucl Med Commun** 1988 Aug;9(8):603–12
Quantitative dual-energy radiographic absorptiometry of the lumbar spine: in vivo comparison with dual-photon absorptiometry. Borders J, et al. **Radiology** 1989 Jan;170(1 Pt 1):129–31
Spinal bone density following spinal fusion. Lipscomb HJ, et al. **Spine** 1989 Apr;14(4):477–9
[Study of the density of vertebral bones by dichromatic photon absorptiometry. Influence of age, sex, menopause and body type] Audran M, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):141–6 (Fre)

SURGERY

Fixateur interne—new method for segmental stabilization of the thoracolumbar spine. Pentelényi T, et al. **Acta Chir Hung** 1988;29(4):373–83
A new cause of chronic meningitis: infected lumbar pseudomeningocele. Koo J, et al. **Am J Med** 1989 Jan; 86(1):103–4
Results of screw osteosynthesis in spondylolysis and low-grade spondylolisthesis. Winter M, et al. **Arch Orthop Trauma Surg** 1989;108(2):96–9
Dermoid tumours occurring at the site of previous meningocele repair. Pansey BK, et al. **Clin Neurol Neurosurg** 1988;90(2):137–40
Operative neurological complications resulting from thoracic and lumbar spine internal fixation. Meyer PR Jr, et al. **Clin Orthop** 1988 Dec;(237):125–31
Lumbar spinal stenosis syndrome. Petropoulos BP. **Clin Orthop** 1989 Sep;(246):70–80
Direct repair of spondylolysis. Roca J, et al. **Clin Orthop** 1989 Sep;(246):86–91
Following microdiskectomy. Laceration of the abdominal aorta and vena cava. Young PH. **IMJ** 1988 Aug;174(2):93–4
Lumbar disc herniation: diagnosis, surgical treatment, recurrence. A review of 872 operated cases. Ruggieri F, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):15–22
Spondylectomy for malignant tumors of the spine. Sundaresan N, et al. **J Clin Oncol** 1989 Oct;7(10):1485–91
One-stage posterolateral decompression and stabilization for primary and metastatic vertebral tumors in the thoracic and lumbar spine. Shaw B, et al. **J Neurosurg** 1989 Mar; 70(3):405–10
Convex growth arrest for progressive congenital scoliosis due to hemivertebrae. Winter RB, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):633–8
Questions "percutaneous discectomy" [letter] Haines SJ. **Minn Med** 1988 Dec;71(12):744, 747
Spinal extradural metastasis from a medulloblastoma. Altinörs N, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):84–6
Intraspinal mesenchymal chondrosarcoma in a three-year-old boy. Reif J, et al. **Neurosurg Rev** 1987; 10(4):311–4
The Heffington frame [letter] Lange DR. **Orthop Rev** 1989 Feb;18(2):266–7
The Wiltse pedicle screw fixation system. Guyer DW, et al. **Orthopedics** 1988 Oct;11(10):1455–60
A neurosurgeon looks at low back syndromes [interview] McDonald J. **Semin Neurol** 1986 Dec;6(4):416–24
Segmental ("floating") lumbar spine fusions. Brodsky AE, et al. **Spine** 1989 Apr;14(4):447–50
Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. **Spine** 1989 Jan;14(1):108–10
The AO spinal internal fixator. Esses SI. **Spine** 1989 Apr; 14(4):373–8
Tension band wiring-bone grafting for spondylolysis and spondylolisthesis. A clinical and biomechanical study. Hambly M, et al. **Spine** 1989 Apr;14(4):455–60
Surgical treatment of isthmic lumbosacral spondylolisthesis. Analysis of variables influencing results. Hanley EN Jr, et al. **Spine** 1989 Jan;14(1):48–50
L4–5 degenerative spondylolisthesis. The results of treatment by decompressive laminectomy without fusion. Herron LD, et al. **Spine** 1989 May;14(5):534–8
The failure of ethylene oxide gas-sterilized freeze-dried bone graft for thoracic and lumbar spinal fusion. Herron LD, et al. **Spine** 1989 May;14(5):496–500
The Wiltse pedicle screw fixation system. Early clinical results. Horowitch A, et al. **Spine** 1989 Apr;14(4):461–7
Enhancement of lumbar spine fusion by use of translaminar facet joint screws. Jacobs RR, et al. **Spine** 1989 Jan; 14(1):12–5
Fusions and transfusions. An analysis of blood loss and autologous replacement during lumbar fusions. Johnson RG, et al. **Spine** 1989 Apr;14(4):358–62
Intraspinal narcotic analgesia. A comparison of two methods of postoperative pain relief. Johnson RG, et al. **Spine** 1989 Apr;14(4):363–6
Long-term results of lumbar spine surgery complicated by unintended incidental durotomy. Jones AA, et al. **Spine** 1989 Apr;14(4):443–6
The comparative results of treatment in idiopathic thoracolumbar and lumbar scoliosis using the Harrington, Dwyer, and Zielke instrumentations. Luk KD, et al. **Spine** 1989 Mar;14(3):275–80
1989 Volvo Award in basic science. Device-related osteoporosis with spinal instrumentation. McAfee PC, et al. **Spine** 1989 Sep;14(9):919–26
Rationale for spinal fusion in lumbar spinal stenosis. Nasca RJ. **Spine** 1989 Apr;14(4):451–4
Posterior lumbar interbody fusion with facet-screw fixation. Stonecipher T, et al. **Spine** 1989 Apr;14(4):468–71
Reconstruction of the lumbar spine using AO DCP plate internal fixation. Thalgott JS, et al. **Spine** 1989 Jan; 14(1):91–5
Paresis of proximal lumbar roots after reduction of L5–S1 spondylolisthesis. Transfeldt EE, et al. **Spine** 1989 Aug; 14(8):884–7
New uses and refinements of the paraspinal approach to the lumbar spine. Wiltse LL, et al. **Spine** 1988 Jun; 13(6):696–706
Elective major lumbar spinal surgery in the elderly. Kramer PW. **Surg Neurol** 1988 Nov;30(5):359–63
A critique of posterior lumbar interbody fusion: 12 years' experience with 250 patients. Rish BL. **Surg Neurol** 1989 Apr;31(4):281–9
Combined aortic and inferior vena cava injury during laminectomy. A serious complication. Fargally M, et al. **Vasa** 1988;17(4):288–92
[Clinical investigation of causes of failed back surgery syndrome] Wann SL, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):543–50 (Eng. Abstr.) (Chi)
[Anterior medial approach in vertebrectomy of L1 and L2 with primary control of the aorta and the inferior vena cava] Lassale B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:67–70 (Fre)
[Role of osteosynthesis of the lumbar spine associated with the surgical treatment of narrow lumbar canal] Roy-Camille R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:70–3 (Fre)
[Work capacity following operations for lumbar intervertebral disk displacements with special reference to sex specific differences] Herrmann L, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):372–80 (Eng. Abstr.) (Ger)
[Neurofibromatosis and spinal deformities—a case report] Pfeiffer U, et al. **Beitr Orthop Traumatol** 1988 Jul; 35(7):315–20 (Eng. Abstr.) (Ger)
[Results of surgical treatment of patients with ankylosing spondylarthritis] Schubert T, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):290–5 (Eng. Abstr.) (Ger)
[Surgical therapy of backache] Opitz G, et al. **Fortschr Med** 1989 Jun 20;107(18):69–70, 73–4 (9 ref.) (Eng. Abstr.) (Ger)
[Spondylodiscitis following lumbar intervertebral disk surgery. Clinical aspects—diagnosis—therapy] Frank AM, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):205–9 (Eng. Abstr.) (Ger)
[Etiology of the recurrence of lumbar intervertebral disk displacement] Reith C, et al. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):5–9 (Eng. Abstr.) (Ger)
[Complications in lumbar intervertebral disk operations] Schüwer U, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:192–5 (23 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance tomography studies with contrast media in post-discotomy syndrome] Oppel U, et al. **Orthopade** 1989 Feb;18(1):41–52 (Eng. Abstr.) (Ger)
[Clinico-neurologic long-term results following surgery of intervertebral disk displacement] Herrmann L, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb;41(2):75–83 (Eng. Abstr.) (Ger)
[Lumbar diskectomy without or with spondylodesis? Revival of an old dilemma] Benini A. **Z Orthop** 1989 May–Jun; 127(3):276–85 (73 ref.) (Eng. Abstr.) (Ger)
[Progression of Paget's disease of the spine 10 years following posterolateral spondylodesis] Hopf C, et al. **Z Orthop** 1989 Jan–Feb;127(1):47–50 (Eng. Abstr.) (Ger)
[Body traction using centrifugal force in the treatment of spinal diseases] Kelp HH. **Z Orthop** 1989 May–Jun; 127(3):354–7 (Eng. Abstr.) (Ger)
[Ventral interligamental-intercorporal spondylodesis in spondylolisthesis] Matzen KA. **Z Orthop** 1989 Jan–Feb; 127(1):39–46 (Eng. Abstr.) (Ger)
[Postoperative lumbar intervertebral discitis. A review of a 15-year period and 7,493 operations] Stolke D, et al. **Z Orthop** 1988 Dec;126(6):666–70 (Eng. Abstr.) (Ger)
[Memory spondylodesis of the lumbar spine—results following 76 operations] von Salis-Soglio GF. **Z Orthop** 1989 Mar–Apr;127(2):191–6 (Eng. Abstr.) (Ger)
[Infectious damage to the intervertebral disk—before and following discotomy] Weber M. **Z Orthop** 1988 Sep–Oct; 126(5):555–62 (Eng. Abstr.) (Ger)
[Vertebral implant as a treatment principle in tumors and metastases of the thoracic and lumbar spine] Wuisman P, et al. **Z Orthop** 1989 Jan–Feb;127(1):25–31 (Eng. Abstr.) (Ger)
[Differential therapy of lumbar intervertebral disk protrusion] Mayer HM, et al. **Zentralbl Chir** 1989;114(8):489–502 (101 ref.) (Eng. Abstr.) (Ger)
[Indications and results of sensory rhizotomy in cicatricial lumbar radiculitis syndromes] Kocks W, et al. **Zentralbl Neurochir** 1988;49(4):336–9 (Eng. Abstr.) (Ger)
[Results of the treatment of flexion deformities of the spine caused by ankylosing spondylitis using lumbar osteotomy] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(4):293–300 (Eng. Abstr.) (Pol)
[Late results of the surgical treatment of spondylolisthesis complicated by injury of the cauda equina] Jarmundowicz W, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):216–20 (Eng. Abstr.) (Pol)
[Experimental substantiation and clinical evaluation of posterior spinal fusion using acryloxide] Bellendir EN, et al. **Vestn Khir** 1987 Dec;139(12):69–73 (Eng. Abstr.) (Rus)
[Results of the surgical treatment of patients with hematogenic osteomyelitis of the spine] Tikhodeev SA. **Vestn Khir** 1988 May;140(5):42–6 (Eng. Abstr.) (Rus)

LUMBOSACRAL PLEXUS

Nerve entrapment after Pfannenstiel incision [letter] Piura B. **Am J Obstet Gynecol** 1989 Aug;161(2):499–500
Continuous blockade of the lumbar plexus after knee surgery—postoperative analgesia and bupivacaine plasma concentrations. A controlled clinical trial. Dahl JB, et al. **Anaesthesia** 1988 Dec;43(12):1015–8
Continuous lumbar plexus block after arthroplasty [letter] Dahl JB, et al. **Anaesthesia** 1988 Nov;43(11):989
Lumbosacral plexopathy in a woman with CREST syndrome and vasculitis [letter] Moore ME, et al. **Arthritis Rheum** 1989 May;32(5):661–3
Evaluation of "3 in 1" lumbar plexus block in patients having muscle biopsy. Madej TH, et al. **Br J Anaesth** 1989 May; 62(5):515–7
'Hot and dry foot' as initial manifestation of neoplastic lumbosacral plexopathy. Dalmau J, et al. **Neurology** 1989 Jun;39(6):871–2
Case report 524: 1. Giant Tarlov (perineurial) cysts of lumbosacral spine. 2. Metastatic carcinoma (from lung) of the right ilium. Truwit CL, et al. **Skeletal Radiol** 1989; 18(1):75–7
[Use of continuous block of the lumbar plexus ("3-in-1 block") for pain management in children (letter)] Dahl JB, et al. **Reg Anaesth** 1989 Jul;12(4):86 (Ger)
[Magnetic resonance tomography of the perineural cyst] Vahldiek G, et al. **ROFO** 1988 Nov;149(5):508–12 (Eng. Abstr.) (Ger)
[Lumbosacral plexopathy in patients with cancer] Dalmau J, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):344–8 (Eng. Abstr.) (Spa)
[Primary neuropathy of the lumbosacral plexus (letter)] Dalmau J, et al. **Med Clin (Barc)** 1988 Dec 10;91(20):797–8 (Spa)
[Trans-sacral neurolytic block for the treatment of chronic perineal pain of oncologic origin] Miralles Pardo FS, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):130–5 (Eng. Abstr.) (Spa)

ANATOMY & HISTOLOGY

The lumbosacral plexus in coypu. Langenfeld M. **Folia Morphol (Warsz)** 1987;46(3–4):175–80
[Superior gluteal nerve entrapment neuropathy] Plihal E, et al. **Schweiz Rundsch Med Prax** 1989 Mar 21;78(12):326–9 (Eng. Abstr.) (Fre)

BLOOD SUPPLY

[Profuse intraoperative hemorrhage from the veins of the anterior sacral plexus] Nazarov AA. **Vestn Khir** 1988 May; 140(5):65–6 (Rus)

DRUG EFFECTS

Brachial and lumbar plexitis as a reaction to heroin. Stamboulis E, et al. **Drug Alcohol Depend** 1988 Dec; 22(3):205–7

[Successful corticoid treatment of lumbosacral plexus neuropathy in heroin abuse. Clinical aspects, electrophysiology, therapy and follow-up] Herdmann J, et al. **Nervenarzt** 1988 Nov;59(11):683–6 (Eng. Abstr.) (Ger)

INJURIES

[Neural complications of injuries of the pelvis] Lechevallier J, et al. **Chir Pediatr** 1988;29(2–3):120–2 (Eng. Abstr.) (Fre)

[Characteristics of rehabilitation treatment after tendon and muscle plastic surgery in children with sequelae of injuries of the peripheral nerves] Kaptelin AF, et al. **Ortop Travmatol Protez** 1989 Feb;(2):29–34 (Eng. Abstr.) (Rus)

PATHOLOGY

Lumbosacral plexopathy. Chad DA, et al. **Semin Neurol** 1987 Mar;7(1):97–107 (32 ref.)

PHYSIOLOGY

Urethral responses to sacral stimulation in chronic spinal dog. Walter JS, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R284–91

Extent of blockade with various approaches to the lumbar plexus. Parkinson SK, et al. **Anesth Analg** 1989 Mar; 68(3):243–8

RADIATION EFFECTS

[Pathogenesis, diagnosis and therapy of nerve lesions following combined (surgical–radiotherapy) cancer therapy] Trettin H. **Z Lymphol** 1989 Jul;13(1):42–7 (Eng. Abstr.) (Ger)

LUMBOSACRAL REGION

Lumbar back muscle activity during locomotion: effects of voluntary modifications of normal trunk movements. Carlson H, et al. **Acta Physiol Scand** 1988 Jul;133(3):343–53

The iliolumbar ligament syndrome. Broadhurst N. **Aust Fam Physician** 1989 May;18(5):522

Acute lumbosacral myofascitis associated with Reiter's disease: case report [letter; comment] Nelson WW. **J Manipulative Physiol Ther** 1989 Jun;12(3):240–1. **Comment on:** J Manipulative Physiol Ther 1988 Dec;11(6):500–4

ABNORMALITIES

Treatment of lumbosacral agenesis by through-knee amputation and femoral osteotomy. Douglas DL, et al. **J R Coll Surg Edinb** 1988 Aug;33(4):219–21

ANATOMY & HISTOLOGY

[Applied aspects of anatomy of the lumbar lymph nodes and their vessels] Borziak EI. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):48–57 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

The left ascending lumbar vein: a potential pitfall in CT diagnosis. Meanock CI, et al. **Clin Radiol** 1988 Sep; 39(5):565–6

INJURIES

[Is antero-lateral dislocation of the lumbosacral spine a surgical indication?] Roy-Camille R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:83–5 (Fre)

PHYSIOLOGY

Relation between intra-abdominal pressure and lumbar stress: effect of trunk posture. Mairiaux P, et al. **Ergonomics** 1988 Sep;31(9):1331–42

SURGERY

[The results of posterolateral lumbosacral arthrodesis] Onimus M, et al. **Rev Chir Orthop** 1988;74 Suppl 2:94–8 (Fre)

LUMICOLCHICINES see under COLCHICINE

LUMINESCENCE

Functional states of neutrophils as suggested by whole blood chemiluminescence. Zgliczyński JM, et al. **Acta Biochim Pol** 1988;35(4):331–42

Chemiluminescence of human neutrophils after interaction with group A streptococci opsonized with antibodies to streptococcal carbohydrate. Rüfenacht R, et al. **Acta Paediatr Hung** 1988–89;29(1–2):125–30

The generation of chemiluminescence by alveolar macrophages is affected by 9-hydroxy-linoleic acid. Henricks PA, et al. **Agents Actions** 1989 Jan;26(1–2):178–9

Enhancement by cimetidine of chemotactic peptide-stimulated ATP release and chemiluminescence in human neutrophils. Tarnok I, et al. **Agents Actions** 1988 Jul;24(3–4):261–5

Lucigenin-enhanced chemiluminescence in blood is increased in cancer. Trulson A, et al. **Am J Clin Pathol** 1989 Apr; 91(4):441–5

Increased phagocytic cell chemiluminescence in patients with cystic fibrosis. Roberts RL, et al. **Am J Dis Child** 1989 Aug;143(8):944–50

Phosphorimeters for analysis of decay profiles and real time monitoring of exponential decay and oxygen concentrations. Green TJ, et al. **Anal Biochem** 1988 Oct; 174(1):73–9

Bioluminescent microassay of various metabolites using bacterial luciferase co-immobilized with multienzyme systems. Ugarova NN, et al. **Anal Biochem** 1988 Sep; 173(2):221–7

Artifactual chemiluminescence in the determination of nitrogen monoxide in the vapour phase of mainstream cigarette smoke. Houlgate PR, et al. **Analyst** 1989 Jan; 114(1):71–5

Effects of bovine colostrum, foal serum immunoglobulin concentration and intravenous plasma transfusion on chemiluminescence response of foal neutrophils. Leblanc MM, et al. **Anim Genet** 1988;19(4):435–45

Correlation of MAST chemiluminescent assay (CLA) with RAST and skin prick tests for diagnosis of inhalant allergic disease. Scolozzi R, et al. **Ann Allergy** 1989 Mar; 62(3):193a–193b

Role of myeloperoxidase in intracellular and extracellular chemiluminescence of neutrophils. Nurcombe HL, et al. **Ann Rheum Dis** 1989 Jan;48(1):56–62

A reference procedure to study chemiluminescence induced in polymorphonuclear leukocytes by Neisseria meningitidis. Fredlund H, et al. **APMIS** 1988 Oct;96(10):941–9

A mitochondrial chemiluminescence evoked by a novel mixed copper(II)–cyanide complex/acetaldehyde cyanohydrin chelate: a kinetic analysis suggesting a role for membrane-bound vicinal sulfhydryls. Steele RH, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):125–42

Changes in membrane constituents and chemiluminescence in vitamin E-deficient red blood cells induced by the xanthine oxidase reaction. Yasuda H, et al. **Arch Biochem Biophys** 1989 Jul;272(1):81–7

Lucigenin chemiluminescence and its relationship to mitochondrial respiration in phagocytic cells. Esterline RL, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):584–91

Luminescence emission from Neurospora copper metallothionein. Time-resolved studies. Beltramini M, et al. **Biochem J** 1989 May 15;260(1):189–93

A luminometric assay for peroxisomal beta-oxidation. Effects of fasting and streptozotocin-diabetes on peroxisomal beta-oxidation. Osmundsen H, et al. **Biochem J** 1989 May 15;260(1):215–20

Comparison of the effects of superoxide dismutase and cytochrome c on luminol chemiluminescence produced by xanthine oxidase-catalyzed reactions. Radi RA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):89–93

Assessment of phagocytic function using chemiluminescence. Hosker HS, et al. **Blood Rev** 1989 Jun;3(2):88–93 (50 ref.)

Dithranol-mediated, dose-dependent priming and activation of luminol-enhanced chemiluminescence responses of human neutrophils in vitro. Anderson R. **Br J Dermatol** 1989 Jul;121(1):1–9

Increased chemiluminescence of polymorphonuclear leucocytes in dogs with volume overload heart failure. Prasad K, et al. **Br J Exp Pathol** 1989 Aug;70(4):463–8

Evaluation of ATP photometer for toxicity testing using Microtox luminescent bacterial reagent. Awong J, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):118–22

Theoretical analysis of a site-specific chemiluminescence reaction and its application to quantitation of lipid hydroperoxides. Fukuzawa K, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):197–203

A sensitive and specific chemiluminescence method for estimating the ability of human granulocytes and monocytes to generate O2-. Nishida A, et al. **Clin Chim Acta** 1989 Feb 15;179(2):177–81

Micromethod for determination of ATPase activities using bioluminescence technique. Steiner M, et al. **Clin Chim Acta** 1988 Sep 30;177(1):107–13

An immunobioluminescence assay for gamma-gamma enolase activity in human serum and cerebrospinal fluid. Wevers RA, et al. **Clin Chim Acta** 1988 Dec 15; 178(2):141–50

Lucigenin-induced chemiluminescence in human neutrophils in the process of chemotactic migration measured in a modified Boyden chamber. Kato T, et al. **Dermatologica** 1989;179 Suppl 1:113–5

Phosphorescence measurements of calf gamma-II, III, and IV crystallins at 77 and 293 K. Berger JW, et al. **Exp Eye Res** 1989 May;48(5):627–39

Oxygen-concentration dependence of microsomal chemiluminescence. Puntarulo S, et al. **Free Radic Biol Med** 1989;7(3):269–73

Selective sensitization of chemiluminescence resulted from lipid and oxygen radical reactions. Sharov VS, et al. **Free Radic Biol Med** 1989;7(3):237–42

Spontaneous lung chemiluminescence upon paraquat administration. Turrens JF, et al. **Free Radic Biol Med** 1988; 5(3–6):319–23

Free radical participation in bacterial bioluminescence. Matheson IB, et al. **Free Radic Res Commun** 1986; 2(1–2):1–5

Chemiluminescence of ischaemic and reperfused intestine in vivo. Roldán EJ, et al. **Gut** 1989 Feb;30(2):184–7

Increased sensitivity of the chemoattractant-induced chemiluminescence in eosinophils isolated from atopic individuals. Koenderman L, et al. **Immunology** 1989 Aug; 67(4):534–6

Application of bioluminescent technology to patient care and research in leprosy. Katoch VM. **Indian J Lepr** 1989 Jul; 61(3):313–22 (58 ref.)

Inhibition of Vibrio harveyi bioluminescence by cerulenin: in vivo evidence for covalent modification of the reductase enzyme involved in aldehyde synthesis. Byers DM, et al. **J Bacteriol** 1989 Jul;171(7):3866–71

Requirement for autoinducer in transcriptional negative autoregulation of the Vibrio fischeri luxR gene in Escherichia coli. Dunlap PV, et al. **J Bacteriol** 1989 Jun; 171(6):3549–52

Identification of a locus controlling expression of luminescence genes in Vibrio harveyi. Martin M, et al. **J Bacteriol** 1989 May;171(5):2406–14

Detection of singlet (1O2) oxygen phosphorescence during chloroperoxidase-catalyzed decomposition of ethyl hydroperoxide. Hall RD, et al. **J Biol Chem** 1989 May 15; 264(14):7900–6

Role of a luciferin-binding protein in the circadian bioluminescent reaction of Gonyaulax polyedra. Morse D, et al. **J Biol Chem** 1989 Jul 15;264(20):11822–6

Fifth International Symposium on Bioluminescence and Chemiluminescence. Florence–Bologna, Italy, September, 1988. Proceedings of the poster presentations. Part 1. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):41–100

Bioluminescence and chemoluminescence literature. **J Biolumin Chemilumin** 1987 Sep;1(4):223–46

Fourth International Symposium on Bioluminescence and Chemiluminescence. Freiburg, 8–10 September 1986. Abstracts. **J Biolumin Chemilumin** 1986 Sep;1(2):77–145

Bioluminescence and chemoluminescence literature. **J Biolumin Chemilumin** 1987 May;1(3):189–99

Bioluminescence and chemoluminescence literature. **J Biolumin Chemilumin** 1986 Jun;1(1):35–44

Effect of a new fluorinated quinolone (ofloxacin) on the chemiluminescence of phagocytosing human neutrophils. Aquilini D, et al. **J Biolumin Chemilumin** 1989 Apr–Jun; 3(2):85–7

Determination of oil oxidation by an aldehyde-requiring mutant of luminous bacteria. Berkovich A, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):125–9

Measurement of phagocyte chemiluminescence using a microtitre plate luminometer. Blair AL, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):67–70

The effect of quenchers on the chemiluminescence of luminol and lucigenin. Bottu G. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):59–65

Bioluminescent enzyme immunoassay for progesterone using monoclonal antibodies and glucose-6-phosphate dehydrogenase labels. Brochu M, et al. **J Biolumin Chemilumin** 1987 Sep;1(4):215–22

Effects of granulocytes on human neuroblastoma cells measured by chemiluminescence and chromium-51 release assay. Bruchelt G, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):93–6

Determination of absolute chemiluminescence quantum yields for reactions of bis-(pentachlorophenyl) oxalate, hydrogen peroxide and fluorescent compounds. Catherall CL, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):147–54

Use of a microtitre plate chemiluminescence reader to study surface phagocytosis by human monocytes. Cree IA, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):71–4

Analysis of luminol-dependent chemiluminescence from granule depleted neutrophil cytoplasts reveals two different light-emitting mechanisms. Dahlgren C. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):25–33

Lipopolysaccharide-dependent enhancement of adherence-mediated chemiluminescence response of polymorphonuclear leukocytes. Dwenger A, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):35–9

Bioluminescent flow sensors: L-lactate dehydrogenase activity determination in serum. Girotti S, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):41–5

Synthesis and chemiluminescence of copolymers of 5-amino-8-vinyl-phthalazine-1,4(2H,3H)-dione with methyl methacrylate or styrene, and of alpha, omega-bis[5-amino-phthalazine-1,4(2H,3H)-dion-]8-yl alkanes [= alpha, omega-bis(6-luminyl) alkanes]: investigations on an intramolecular 'distance effect'. Gundermann KD, et al. **J Biolumin Chemilumin** 1987 Sep; 1(4):201–13

An enhanced chemiluminescent enzyme immunoassay for serum carcinoembryonic antigen based on a modification of a commercial kit. Haggart R, et al. **J Biolumin Chemilumin** 1986 Jun;1(1):29–34

Factors affecting the measurement of chemiluminescence in stimulated human polymorphonuclear leucocytes. Harber MJ, et al. **J Biolumin Chemilumin** 1986 Jun;1(1):15–27

Systematic distribution of bioluminescence in living organisms. Herring PJ. **J Biolumin Chemilumin** 1987 May; 1(3):147–63

Enhanced chemiluminescence in the peroxidase-luminol-H2O2 system: anomalous reactivity of enhancer phenols with enzyme intermediates. Hodgson M, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):21–5

Opsonic activity of ascitic fluids by a chemiluminescent method. Huu TP, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):89-92

Lampteromyces bioluminescence--1. Identification of riboflavin as the light emitter in the mushroom L. japonicus. Isobe M, et al. **J Biolumin Chemilumin** 1987 May; 1(3):181-8

Dyakia bioluminescence--1. Bioluminescence and fluorescence spectra of the land snail, D. striata. Isobe M, et al. **J Biolumin Chemilumin** 1988 Apr-Jun;2(2):73-9

An evaluation of the performance of ten commercial luminometers. Jago PH, et al. **J Biolumin Chemilumin** 1989 Jul-Sep;3(3):131-45

A sensitive CCD image system for detection of chemiluminescent reactions. Jansen EH, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):53-7

Method for reducing the rate of light emission from chemiluminescent and bioluminescent reactions using frozen reagents. Kricka LJ, et al. **J Biolumin Chemilumin** 1989 Jul-Sep;3(3):155-8

Extra-weak chemiluminescence of drugs. VIII. Extra-weak chemiluminescence arising from the amino-carbonyl reaction. Kurosaki Y, et al. **J Biolumin Chemilumin** 1989 Jan-Mar;3(1):13-9

A portable silicon photodiode luminometer. Marks K, et al. **J Biolumin Chemilumin** 1987 May;1(3):173-9

Properties and cellular localization of a luciferin binding protein in the bioluminescence reaction of Gonyaulax polyedra. Morse D, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):79-83

Free fatty acid determination by peroxidase catalysed luminol chemiluminescence. Näslund BM, et al. **J Biolumin Chemilumin** 1989 Jul-Sep;3(3):115-24

Measurement of urinary somatomedin C by a chemiluminescent method. Orlando C, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):47-51

Bioluminescent assay of D-3-hydroxybutyrate in serum. Raunio RP, et al. **J Biolumin Chemilumin** 1986 Jun; 1(1):11-4

Inhibition of luminol-dependent luminescence and simultaneous generation of native luminescence of activated human polymorphonuclear leukocytes by addition of albumin. Roschger P, et al. **J Biolumin Chemilumin** 1988 Jan-Mar;2(1):1-7

Rapid microbiology: applications of bioluminescence in the food industry--a review. Stannard CJ, et al. **J Biolumin Chemilumin** 1986 Jun;1(1):3-10 (43 ref.)

Incorporation of enhanced chemiluminescent reactions into fully automated enzyme immunoassays. Thorpe GH, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):97-100

The transcription of bacterial luminescence is regulated by sigma 32. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr-Jun;2(2):81-93

Chemiluminescence detection for high-performance liquid chromatography of biomedical samples. De Jong GJ, et al. **J Chromatogr** 1989 Aug 11;492:319-43 (95 ref.)

Evaluation of enhanced luminescence immunoenzymometric assays (LIA) for ferritin and free T4. Armbruster DA, et al. **J Clin Lab Anal** 1989;3(2):78-83

Rapid bioluminescence method for bacteriuria screening. Pezzlo MT, et al. **J Clin Microbiol** 1989 Apr;27(4):716-20

Interaction of Bordetella pertussis virulence components with neutrophils: effect on chemiluminescence induced by a chemotactic peptide and by intact bacteria. Craig FF, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2201-11

Differential sensitivity of macrophages from herpes simplex virus-resistant and -susceptible mice to respiratory burst priming by interferon-alpha/beta. Ellermann-Eriksen S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2139-47

Separation and chemiluminescence properties of human, canine and rat polymorphonuclear cells. Lindena J, et al. **J Immunol Methods** 1988 Nov 25;115(1):141-7

A dual microtiter plate (192 sample) luminometer employing computer-aided single-photon imaging applicable to cellular luminescence and luminescence immunoassay. Maly FE, et al. **J Immunol Methods** 1989 Aug 15; 122(1):91-6

A sensitive chemiluminescence based immunoassay for antibody to staphylococcal peptidoglycan. Minors S, et al. **J Immunol Methods** 1988 Nov 25;115(1):119-25

Immunometric assay for lutropin (hLH) based on the use of universal reagents for enzymatic labelling and magnetic separation and monitored by enhanced chemiluminescence. Pazzagli M, et al. **J Immunol Methods** 1988 Nov 10; 114(1-2):61-8

Antibody-coated target cell membrane-induced chemiluminescence by human polymorphonuclear leukocytes. Van Kessel KP, et al. **J Immunol Methods** 1989 Mar 31;118(2):279-85

Characterization of the luminol-amplified light-generating reaction induced in human monocytes. Johansson A, et al. **J Leukoc Biol** 1989 May;45(5):444-51

Chemiluminescence in a macrophage cell line modulated by biological response modifiers. Tosk J, et al. **J Leukoc Biol** 1989 Aug;46(2):103-8

Dynamical structure of glutamate dehydrogenase as monitored by tryptophan phosphorescence. Signal transmission following binding of allosteric effectors. Cioni P, et al. **J Mol Biol** 1989 May 5;207(1):237-47

On the problems involved in detecting luminescence from singlet oxygen in biological specimens [news] Rodgers MA. **J Photochem Photobiol -B-** 1988 Mar;1(3):371-3

Chemiluminescence enhancement by trypanocidal drugs and by inhibitors of antioxidant enzymes in Trypanosoma cruzi. Giulivi C, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):243-51

Tryptophan phosphorescence at room temperature as a tool to study protein structure and dynamics. Papp S, et al. **Photochem Photobiol** 1989 Jun;49(6):775-84 (76 ref.)

Serum mediated depression of chemiluminescence response of granulocytes in hemorrhagic shock. Bühren V, et al. **Prog Clin Biol Res** 1989;308:523-5

Bioluminescence assays. DeLuca M. **Prog Clin Biol Res** 1988; 285:47-60

Chemiluminescence-inducing radicals in experimental porcine septic shock lung. Reichle H, et al. **Prog Clin Biol Res** 1989;308:339-44

Chemiluminescence of polymorphonuclear leukocytes and whole blood during acute bacterial infection. Pauksens K, et al. **Scand J Infect Dis** 1989;21(3):277-84

Complementary DNA coding click beetle luciferases can elicit bioluminescence of different colors. Wood KV, et al. **Science** 1989 May 12;244(4905):700-2

Evaluation of granulocyte-releasing products and chemiluminescence during cytapheresis. Lindena J, et al. **Transfusion** 1989 Jun;29(5):424-8

Stimulated chemiluminescence of polymorphonuclear leukocytes in rheumatoid arthritis: in vivo enhancement by auranofin. Piergiacomi G, et al. **Z Rheumatol** 1988 May-Jun;47(3):151-5

[Equipment for lyoluminescent dosimetry] Bouček J, et al. **Sb Lek** 1989 Jan;91(1):21-6 (Eng. Abstr.) (Cze)

[Hydrogen peroxide assay by chemoluminescence (letter)] Dumas P, et al. **Ann Biol Clin (Paris)** 1989;47(3):159 (Fre)

[Bioluminescence assay of luteinizing hormone in plasma and urine] Terouanne B, et al. **Ann Biol Clin (Paris)** 1989; 47(1):15-21 (Eng. Abstr.) (Fre)

[Assay of biogenic amines by bioluminescence] Fraysse M, et al. **C R Acad Sci [III]** 1989;308(7):195-8 (Eng. Abstr.) (Fre)

[Measuring chemiluminescence during blood preservation. 1. Spontaneous chemiluminescence] Lewin G, et al. **Z Med Lab Diagn** 1989;30(3):165-8 (Eng. Abstr.) (Ger)

[Induction of chemiluminescence of human granulocytes by monocyte factors from patients with chronic polyarthritis and arthrosis] Meske S, et al. **Z Rheumatol** 1988 May-Jun; 47(3):146-50 (Eng. Abstr.) (Ger)

[Luminol-dependent chemiluminescence of peripheral neutrophils in asthmatic patients] Fukuda K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):200-5 (Eng. Abstr.) (Jpn)

[Measurements of active oxygen by chemiluminescence] Nakano M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2699-707 (Jpn)

[Bioluminescence and action mechanism of activated oxygen species] Suzuki N, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3037-41 (Jpn)

[Correlation of mitochondria metabolism and spontaneous luminescence of incubation cells] Bat'ianov AP. **Biofizika** 1988 Nov-Dec;33(6):1029-34 (Eng. Abstr.) (Rus)

[Study of total activity of natural lipid antioxidants by chemiluminescence method] Burlakova EB, et al. **Biofizika** 1988 Jul-Aug;33(4):584-8 (Eng. Abstr.) (Rus)

[Sensibilized dimer luminescence of singlet molecular oxygen in solutions] Krasnovskiĭ AA Jr, et al. **Biofizika** 1988 Sep-Oct;33(5):884-6 (Eng. Abstr.) (Rus)

[Effect of anthrax toxin on the chemiluminescence of human leukocytes] Tafel'shtein EE, et al. **Biol Nauki** 1988; (11):16-20 (Eng. Abstr.) (Rus)

[An experimental analysis of the interrelation of the kinetics of spontaneous blood serum chemiluminescence and of the kinetics of the tumor process] Barabol VA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):224-6 (Eng. Abstr.) (Rus)

[Rapid chemiluminescence analysis of the effect of drugs on the functional activity of phagocytosing blood cells] Kalmykov SV, et al. **Farmakol Toksikol** 1989 Mar-Apr; 52(2):97-100 (Eng. Abstr.) (Rus)

[Determination of the luminol-dependent chemiluminescence of granulocytes] Smoligovets EO, et al. **Lab Delo** 1989; (2):23-6 (Eng. Abstr.) (Rus)

[Study of latex-induced luminol-dependent chemiluminescence of neutrophils] Zurochka AV, et al. **Lab Delo** 1989;(3):32-6 (Eng. Abstr.) (Rus)

[Experimental endofluorimeters for evaluating the intensity of luminescence of tissues in normal and pathological conditions during endoscopic studies and surgical interventions] Barskiĭ IIa, et al. **Med Tekh** 1988 Jul-Aug; (4):44-9 (Eng. Abstr.) (Rus)

[Cloning and insertion mutagenesis of DNA fragment coding for the luminescent system of Photobacterium leiognathi] Ptitsyn LR, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct; (10):17-9 (Eng. Abstr.) (Rus)

[Changes in the pulmonary surfactant system and induced chemiluminescence of pulmonary washings after fasting and the effect of alpha-tocopherol on them] Dorovatovskiĭ VA, et al. **Patol Fiziol Eksp Ter** 1989 Mar-Apr;(2):20-2 (Eng. Abstr.) (Rus)

[Measurement of the chemiluminescence of the urine and blood serum during the adverse effects of drugs on patients with tuberculosis] Shchutskaia EI, et al. **Probl Tuberk** 1989; (1):55-9 (Eng. Abstr.) (Rus)

[Effect of He-Ne laser radiation on the chemiluminescence of mouse spleen cells] Karu TI, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):230-4 (Eng. Abstr.) (Rus)

[Luminescent analysis in the diagnosis and prognosis of gastric ulcer] Baranovskiĭ AIu. **Sov Med** 1988;(9):46-50 (55 ref.) (Rus)

[Effect of thermal injury and middle molecular weight peptides on plasma chemiluminescence] Riabinin VE, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):60-4 (Eng. Abstr.) (Rus)

[The microbial factor in the chemiluminescence of the peripheral blood neutrophils of patients with suppurative surgical infection] Belotskiĭ SM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):87-90 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Polymorphonuclear leukocyte chemiluminescence response in HLA-B27 positive and negative arthritic patients. Tertti R. **Rheumatol Int** 1989;8(6):279-82

LUMINESCENT PROTEINS

Response of aequorin-loaded platelets to activators of protein kinase C. Ware JA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C35-43

A comparative study of three methods for intracellular loading of the calcium indicator aequorin in ferret papillary muscles. Kihara Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):402-7

Low-density lipoproteins increase intracellular calcium in aequorin-loaded platelets. Dunn RC, et al. **FEBS Lett** 1988 Oct 10;238(2):357-60

Use of calcium-regulated photoproteins as intracellular Ca2+ indicators. Blinks JR. **Methods Enzymol** 1989; 172:164-203

[Bioluminescence and action mechanism of activated oxygen species] Suzuki N, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3037-41 (Jpn)

ANALYSIS

Ca-induced Ca release from the sarcoplasmic reticulum of isolated myofibrillar bundles of barnacle muscle fibres. Lea TJ, et al. **Pflugers Arch** 1989 Feb;413(4):401-6

BIOSYNTHESIS

Overexpression and purification of the recombinant Ca2+-binding protein, apoaequorin. Inouye S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):473-7

DIAGNOSTIC USE

Fibre-optic sensor with co-immobilised bacterial bioluminescence enzymes. Gautier SM, et al. **Biosensors** 1989;4(3):181-94

IMMUNOLOGY

Binding of murine monoclonal antibodies to the active and inactive configurations of aequorin. Watanabe M, et al. **FEBS Lett** 1989 Mar 27;246(1-2):73-7

METABOLISM

Interaction between luciferases from various species of bioluminescent bacteria and the yellow fluorescent protein of Vibrio fischeri strain Y-1. Daubner SC, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1191-8

The determination of plasma oxalate concentrations using an enzyme/bioluminescent assay. 2. Co-immobilisation of bioluminescent enzymes and studies of in vitro oxalogenesis. Parkinson IS, et al. **Clin Chim Acta** 1989 Jan 13;179(1):97-108

Photochemically-induced dynamic nuclear polarization proton-NMR of aequorin discharged by calcium-independent light emission. Ray BD, et al. **Eur J Biochem** 1989 Jan 2;178(3):705-9

The enzymology and molecular biology of the Ca2+-activated photoprotein, aequorin. Cormier MJ, et al. **Photochem Photobiol** 1989 Apr;49(4):509-12

Bioluminescence of the Ca2+-binding photoprotein aequorin after cysteine modification. Kurose K, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):80-4

PHARMACOLOGY

Functional responses of aequorin-loaded human neutrophils. Comparison with fura-2-loaded cells. Ozaki Y, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):113-9

LUMINOL see under **PYRIDAZINES**

LUMPECTOMY see **MASTECTOMY, SEGMENTAL**

LUMPY SKIN DISEASE VIRUS see under **POXVIRIDAE**

LUNDBORG-UNVERRICHT SYNDROME see **EPILEPSY, MYOCLONUS**

LUNG

see related
AIR SACS

PNEUMONECTOMY
RESPIRATION
Lung surrogates. Niederer PF, et al.
Acta Anaesthesiol Scand Suppl 1989;90:79–86
Mechanisms of neutrophil recruitment to the lung by grain dust exposure [published erratum appears in Am Rev Respir Dis 1989 Apr;139(4):1065] Von Essen SG, et al. Am Rev Respir Dis 1988 Oct;138(4):921–7
Airway management for unilateral lung lavage in children. McKenzie B, et al. Anesthesiology 1989 Mar;70(3):550–3
Eighteen to 37 hours' preservation of major organs using a new autoperfusion multiorgan preparation. Chien S, et al. Ann Thorac Surg 1989 Jun;47(6):860–7
Foreign body–induced hemoptysis [letter] Lowe R, et al.
Ann Thorac Surg 1989 Feb;47(2):330–1
Unilateral high–frequency jet ventilation during one–lung ventilation for thoracotomy. Nakatsuka M, et al.
Ann Thorac Surg 1988 Dec;46(6):654–60
Foreign body aspirate extraction [letter] Núñez H, et al.
Chest 1989 Sep;96(3):698
Removal of broken fragment of biopsy forceps with magnetic extractor. Saito H, et al. Chest 1989 Mar;95(3):700–1
Intravenous digital subtraction angiography and lung imaging: compared value in the diagnosis of pulmonary embolism. Rosso J, et al. Clin Nucl Med 1989 Mar; 14(3):183–6
A study of magnetic field in the lung of workers in an asbestos factory. Weng XT, et al. Ind Health 1989;27(1):9–15
Hyperthermia of mouse lungs: technique and control of critical parameters. Eddy HA, et al.
Int J Hyperthermia 1988 Nov–Dec;4(6):627–41
Behaviour of spherical and irregular (U,Pu)O2 particles after inhalation or intratracheal instillation in rat lung and during in vitro culture with bovine alveolar macrophages. Müller HL, et al. Int J Radiat Biol 1989 May;55(5):829–42
Pulmonary aspiration of a metal casting: report of case. Seals ML, et al. J Am Dent Assoc 1988 Oct;117(5):587–8
Improved static lung preservation with corticosteroids and hypothermia. Hall TS, et al. J Heart Transplant 1988 Sep–Oct;7(5):348–52
Complications of the Fogarty catheter technique for removal of endobronchial foreign bodies. Treen DC Jr, et al.
J Pediatr Surg 1989 Jun;24(6):613–5
Organ–specific chemotactic factors present in lung extracellular matrix. Cerra RF, et al. J Surg Res 1989 May; 46(5):422–6
Preservation of the lung. Comparison of topical cooling and cold crystalloid pulmonary perfusion. Locke TJ, et al.
J Thorac Cardiovasc Surg 1988 Nov;96(5):789–95
The role of neural and vasoactive mediators in the regulation of the pulmonary circulation during cardiopulmonary preservation. Mashburn JP, et al.
J Thorac Cardiovasc Surg 1989 Sep;98(3):434–42; discussion 442–3
The effect of ischemic time and temperature on lung preservation in a simple ex vivo rabbit model used for functional assessment. Wang LS, et al.
J Thorac Cardiovasc Surg 1989 Sep;98(3):333–42
Pulmonary migration following periurethral polytetrafluoroethylene injection for urinary incontinence. Claes H, et al. J Urol 1989 Sep;142(3):821–2
Combined monitoring of thoracic duct and lung lymph during E. coli sepsis in awake sheep. Smith L, et al.
Lymphology 1988 Sep;21(3):169–77
Effect of lung–density correction in treatment planning for tangential–fields breast irradiation: a case report. Kuchnir FT, et al. Med Dosim 1989;14(2):109–11
Abdominal nodal connexions of the lymphatics of the lung (18.03.1988). Riquet M, et al. Surg Radiol Anat 1988; 10(3):251–2
Perforation of the oesophagus by a swallowed foreign body presenting as a mediastinal and pulmonary mass. Radford PJ, et al. Thorax 1988 May;43(5):416–7
Benign cystic ovarian teratoma with lung differentiation. Pruszczyński M, et al. Zentralbl Allg Pathol 1988; 134(7):687–9
[Pulmonary lavage for alveolar proteinosis. A case report] Yang CL, et al. Ma Tsui Hsueh Tsa Chi 1989 Mar; 27(1):55–9 (Eng. Abstr.) (Chi)
[Atypical tracheobronchial foreign body aspiration. Contribution of a case report] Ott PM.
Schweiz Rundsch Med Prax 1988 Oct 18;77(42):1132–5 (Eng. Abstr.) (Ger)
[A massive hemoptysis caused by accidental swallowing of a fish bone] Takahashi K, et al. Kyobu Geka 1988 May; 41(6):510–2 (Eng. Abstr.) (Jpn)
[Lung lavage and artificial surfactant replacement therapy—animal experimentation and clinical application] Ganzuka M, et al. Masui 1989 May;38(5):632–9 (Eng. Abstr.) (Jpn)
[Evaluation of monitoring during lung lavage] Okada K, et al. Masui 1988 Jun;37(6):727–30 (Eng. Abstr.) (Jpn)
[The results of experimental study of six–hour heart–lung preservation by autoperfusion method—its evaluation of optimal conditions and lung function after preservation] Matsuoka M, et al. Nippon Kyobu Geka Gakkai Zasshi 1989 Apr;37(4):694–701 (Eng. Abstr.) (Jpn)
[A foreign body in the upper lobe of the right lung] Plaksin ED. Khirurgiia (Mosk) 1988 Oct;(10):135 (Rus)
[Present–day problems of lung auscultation] Reiderman MI. Ter Arkh 1989;61(4):113–6 (Rus)
[Comparative evaluation of the morphologic and x–ray changes in the lungs of coal miners] Donets IK, et al.
Vestn Rentgenol Radiol 1988 May–Jun;(3):87–8 (Rus)

ABNORMALITIES
Agenesis of the lungs [letter] Pant MC, et al.
AJR Am J Roentgenol 1989 Jun;152(6):1339
Fetal growth retardation, hydrocephalus, hypoplastic multilobed lungs, and other anomalies in 4 sibs. Game K, et al. Am J Med Genet 1989 Jun;33(2):276–9
Postnatal respiratory function after chronic drainage of fetal pulmonary cyst. Blott M, et al. Am J Obstet Gynecol 1988 Oct;159(4):858–9
Comparison of six different ultrasonographic methods for predicting lethal fetal pulmonary hypoplasia. Vintzileos AM, et al. Am J Obstet Gynecol 1989 Sep;161(3):606–12
Congenital lesions of the lungs. Ferguson TB Jr.
Ann Thorac Surg 1989 Mar;47(3):481–2
Intrauterine treatment of a fetal pulmonary cyst by chorioamniotic shunt. Bernaschek G, et al.
Arch Gynecol Obstet 1989;244(2):129–32
An unusual case of congenital chest wall deformity with polymastia and absence of part of the lung. Deshpande SN, et al. Br J Plast Surg 1989 Jul;42(4):484–6
Alpha–fetoprotein findings in a case of cystic adenomatoid malformation of the lung. Albright SG, et al.
Clin Genet 1989 Jan;35(1):75–6
Congenital cystic adenomatoid malformation of the lung and alpha fetoprotein [letter] Journel H, et al. Clin Genet 1988 Nov;34(5):344
Agenesis of the lung. Kaya IS, et al. Eur Respir J 1989 Jul; 2(7):690–2
Development of fetal lamb lung and kidney in obstructive uropathy: a preliminary report. Pringle KC, et al.
Fetal Ther 1988;3(1–2):118–28
Pulmonary agenesis. Chopra K, et al. Indian Pediatr 1988 Jul;25(7):678–82
Left pulmonary isomerism with normal arrangement of the heart and abdominal organs. Computed tomography of two adults. Escarous A. Int J Cardiol 1989 Jul;24(1):118–20
Sirenomelia without Potter syndrome: MR characteristics. Savader SJ, et al. J Comput Assist Tomogr 1989 Jul–Aug; 13(4):689–91
CT appearance of cystic adenomatoid malformations. Shackelford GD, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):612–6
A further patient with the lethal type of Larsen syndrome. Clayton–Smith J, et al. J Med Genet 1988 Jul;25(7):499–500
Aberrant arterial supply in congenital cystic adenomatoid malformation of the lung. Rashad F, et al.
J Pediatr Surg 1988 Nov;23(11):1007–8
Right pneumonectomy syndrome: a lethal complication of lung resection in a newborn with cystic adenomatoid malformation. Stolar C, et al. J Pediatr Surg 1988 Dec; 23(12):1180–3
Type III congenital cystic adenomatoid malformation associated with elevated maternal serum alpha–fetoprotein. Johnston RJ, et al. J Perinatol 1988 Summer;8(3):222–4
Pneumothorax and an azygos lobe [letter] Weissman JL, et al. J Thorac Imaging 1989 Jan;4(1):vi–ix
Prenatal sonographic diagnosis of bronchopulmonary foregut malformation. Siffring PA, et al. J Ultrasound Med 1989 May;8(5):277–80
Breath of life [editorial] Lancet 1989 Feb 11;1(8633):305–6
Image feature analysis and computer–aided diagnosis in digital radiography: classification of normal and abnormal lungs with interstitial disease in chest images. Katsuragawa S, et al. Med Phys 1989 Jan–Feb;16(1):38–44
Prenatal prediction of lethal pulmonary hypoplasia using ultrasonic fetal chest circumference. Songster GS, et al. Obstet Gynecol 1989 Feb;73(2):261–6
Congenital cystic adenomatoid malformation of the lung associated with bile duct hypoplasia. Garcia H, et al.
Pathol Res Pract 1988 Nov;183(6):771–7
Pulmonary hypoplasia in neonatal hypophosphatasia. Silver MM, et al. Pediatr Pathol 1988;8(5):483–93
Management of an unusual case of congenital lobar emphysema. Hill RC, et al. Pediatr Pulmonol 1988; 5(4):252–4
Dysmorphic lungs in a case of leprechaunism: case report and review of literature. Thurlbeck WM, et al.
Pediatr Pulmonol 1988;5(2):100–6 (57 ref.)
Pulmonary sequestration with histologic changes of cystic adenomatoid malformation. Morin C, et al.
Pediatr Radiol 1989;19(2):130–2
A spectrum of skeletal anomalies associated with pulmonary agenesis: possible neural crest injuries. Osborne J, et al.
Pediatr Radiol 1989;19(6–7):425–32
Left azygos lobe. Takasugi JE, et al. Radiology 1989 Apr; 171(1):133–4
Congenital cystic adenomatoid malformation of the lung. Presentation of 16 cases. Beluffi G, et al. ROFO 1989 May; 150(5):523–30
Abnormalities of the azygos system: CT evaluation. Dudiak CM, et al. Semin Roentgenol 1989 Jan;24(1):47–55 (29 ref.)
The azygos lobe: its variation in health and disease. Felson B. Semin Roentgenol 1989 Jan;24(1):56–66 (10 ref.)
Azygos lobe and azygos continuation of the inferior vena cava. Shah Y. Semin Roentgenol 1989 Jan;24(1):5–6
Congenital cystic adenomatoid malformation of the lung: report of a case. Hou JW, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Aug;87(8):832–5
[Left pulmonary artery sling associated with right pulmonary hypoplasia and ventricular septal defect] Rossignol AM, et al. Arch Mal Coeur 1989 May;82(5):803–6 (Eng. Abstr.) (Fre)
[Prenatal diagnosis of an adenomatoid malformation of the lung. Apropos of 2 cases] Thomas D, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(4):501–6 (Eng. Abstr.) (Fre)
[Unilateral lung aplasia—on the danger of diagnostic–therapeutic erroneous assessment. A case report] Abel M. Klin Padiatr 1989 Jan–Feb;201(1):66–8 (Eng. Abstr.) (Ger)
[Congenital and acquired cystic lung changes] Feichtinger I, et al. Prax Klin Pneumol 1988 Jul;42(7):553–6 (Eng. Abstr.) (Ger)
[Situs inversus of the lungs, heart and liver in a bull] Ries R, et al. Tierarztl Prax 1988;16(3):251–2 (Eng. Abstr.) (Ger)
[Total laryngo–tracheo–esophageal cleft with situs inversus totalis, aplasia of the right diaphragm and hypoplasia of the lung on the right side] Heitmann F, et al.
Z Geburtshilfe Perinatol 1988 Jul–Aug;192(4):181–3 (Eng. Abstr.) (Ger)
[Pulmonary atresia with an intact septum: indications for the neonatal surgical treatment guided by 2–dimensional and Doppler echocardiography] Gagliardi MG, et al.
G Ital Cardiol 1989 Apr;19(4):315–8 (Eng. Abstr.) (Ita)
[Cystic adenomatoid malformation of the lung. Diagnostic and classification problems] Del Borrello E, et al.
Minerva Chir 1988 Nov 15;43(21):1849–53 (Eng. Abstr.) (Ita)
[Review of the Pena–Shokeir syndrome I, Pena–Shokeir II and Neu–Laxova. Clinical and interpretative contribution] Sulli N, et al. Minerva Pediatr 1988 Mar;40(3):191–4 (24 ref.) (Eng. Abstr.) (Ita)
[A case report of a patient who developed cyanosis and significant decrease in PtcO2 caused by a contraction of the ductus arteriosus] Tanaka K, et al. Masui 1989 Jan; 38(1):107–9 (Eng. Abstr.) (Jpn)
[Bronchography in a newborn infant with hypoplasia of the lung. Case report] Grzywna W, et al. Pediatr Pol 1988 Oct;63(10):658–60 (Pol)
[Congenital cystic adenomatous defect of development of the lung] Kovalenko VL, et al. Arkh Patol 1988;50(9):76–8 (Eng. Abstr.) (Rus)
[Role of genetically determined factors in the formation of developmental disorders of the lungs] Pavlunin AV, et al. Grudn Khir 1988 Jul–Aug;(4):44–9 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of congenital anomalies of the lungs in children] Tsuman VG, et al. Grudn Khir 1988 Nov–Dec; (6):41–6 (Eng. Abstr.) (Rus)
[Variants of Macleod's syndrome in children] Spivak TV, et al. Pediatriia 1988;(4):30–3 (Eng. Abstr.) (Rus)
[Non–tuberculous diseases of the lungs in adolescents referred to tuberculosis hospitals] Ianchevskaia AA, et al.
Probl Tuberk 1988;(9):21–3 (Eng. Abstr.) (Rus)
[Resection of superior and lower lobes of the right lung in a female patient with fibro–cavernous tuberculosis and congenital defect] Ladnyĭ AIa, et al. Probl Tuberk 1988; (12):53–5 (Rus)
[Spontaneous pneumothorax as a complication of lung cyst] Tikhoniuk PI, et al. Probl Tuberk 1988;(7):76 (Rus)
[Agenesia and aplasia of the lung and its lobes] Fedorov BN, et al. Vestn Khir 1989 Mar;142(3):47–8 (Rus)
[Developmental defects of the lungs (a lecture)] Pilipchuk NS. Vrach Delo 1988 Dec;(12):61–7 (Eng. Abstr.) (Rus)
[Successful surgery of congenital lung and bronchial cysts in a 9–year–old girl] Cekovský L, et al. Cesk Pediatr 1989 Apr;44(4):236–7 (Slo)
[Congenital unilateral pulmonary hypoplasia] de la Morena Pardo ML, et al. An Esp Pediatr 1988 Nov;29(5):382–6 (Eng. Abstr.) (Spa)
[Pulmonary abscess in subjacent congenital malformation in infants] Fernández Sánchez A, et al. An Esp Pediatr 1988 Nov;29(5):413–6 (Spa)

ANALYSIS
Asbestos fibers in human pulmonary and extrapulmonary tissues. Huang J, et al. Am J Ind Med 1988;14(3):331–9
Mineral fiber concentration in lung tissue of mesothelioma patients in Finland. Tuomi T, et al. Am J Ind Med 1989; 16(3):247–54
Antileukoprotease is associated with elastin fibers in the extracellular matrix of the human lung. An immunoelectron microscopic study. Kramps JA, et al.
Am Rev Respir Dis 1989 Aug;140(2):471–6
High levels of transforming growth factor–beta are present in the epithelial lining fluid of the normal human lower respiratory tract. Yamauchi K, et al.
Am Rev Respir Dis 1988 Jun;137(6):1360–3
Determination of carbonyl groups in oxidatively modified proteins by reduction with tritiated sodium borohydride. Lenz AG, et al. Anal Biochem 1989 Mar;177(2):419–25
Construction of a flexible airway model for teaching. Wang PM, et al. Anat Rec 1988 Jul;221(3):780–1
Detection of reactive free radicals in fresh coal mine dust and their implication for pulmonary injury. Dalal NS, et al. Ann Occup Hyg 1989;33(1):79–84
Thoracic magnetic dust content, occupational exposure, and respiratory status of shipyard welders. Stern RM, et al.
Arch Environ Health 1988 Sep–Oct;43(5):361–70
Purification and characterization of predominant G–protein from bovine lung membranes. Biochemical and

immunochemical comparison with Gi1 and Go purified from brain. Kanaho Y, et al. **Biochem J** 1989 Apr 15; 259(2):499–506

Identification of lung major GTP-binding protein as Gi2 and its distribution in various rat tissues determined by immunoassay. Asano T, et al. **Biochemistry** 1989 May 30; 28(11):4749–54

Partial purification of a binding protein for polychlorinated biphenyls from rat lung cytosol: physicochemical and immunochemical characterization. Lund J, et al. **Biochemistry** 1988 Oct 4;27(20):7895–901

A refined method for the photoaffinity labelling of the nitrobenzylthioinosine-sensitive nucleoside transport protein: application to cell membranes of calf lung tissue. IJzerman AP, et al. **Biochim Biophys Acta** 1989 Feb 27; 979(2):153–6

Aspects of secondary and quaternary structure of surfactant protein A from canine lung. King RJ, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):294–301

Biosynthesis of collagen crosslinks. II. In vivo labelling and stability of lung collagen in rats. Last JA, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):182–9

Presence of pancreatic-type phospholipase A2 mRNA in rat gastric mucosa and lung. Sakata T, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):124–6

Indole derivatization procedures for electron capture negative chemical ionization mass spectrometry: identification of 1-methyl-1,2,3,4-tetrahydro-beta-carboline in rat brain and lung. Bosin TR, et al. **Biomed Environ Mass Spectrom** 1989 Apr;18(4):247–52

Isolation of silica-dependent protein from rat lung with special reference to development of fibrosis. Aalto M, et al. **Br J Exp Pathol** 1989 Apr;70(2):167–82

Volatile pollutants in the environment and human tissues. Kroneld R. **Bull Environ Contam Toxicol** 1989 Jun; 42(6):873–7

Measurement of extravascular lung water during abdominal aortic surgery. Kowalski S, et al. **Can J Anaesth** 1989 May; 36(3 Pt 1):283–8

The detection of bovine respiratory syncytial virus in formalin fixed bovine lung with commercially available monoclonal antibodies and avidin biotin complex immunohistochemistry. Haines DM, et al. **Can J Vet Res** 1989 Jul;53(3):366–8

High concentrations of chromium in lung tissue from lung cancer patients. Anttila S, et al. **Cancer** 1989 Feb 1; 63(3):467–73

Comparison of DNA adducts and sister chromatid exchange in lung cancer cases and controls. Perera F, et al. **Cancer Res** 1989 Aug 15;49(16):4446–51

Relationship between number of asbestos bodies in autopsy lung and pleural plaques on chest X-ray film. Kishimoto T, et al. **Chest** 1989 Mar;95(3):549–52

Iodine determination in amiodarone lung [letter] Navarro V, et al. **Chest** 1988 Dec;94(6):1318

Aerosol deposition in the human lung: effect of high-frequency oscillation on the deposition characteristics of an inhaled nebulized aerosol. Thomas SH, et al. **Clin Sci** 1988 Nov;75(5):535–42

A comparison of asbestos burden in non-urban patients with and without lung cancer. Dodson RF, et al. **Cytobios** 1988; 56(224):7–15

Cellular and subcellular localization of a binding protein for polychlorinated biphenyls in ra. lung. Lund J, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):590–9

Hybridization in situ studies of angiotensinogen gene expression in rat adrenal and lung. Campbell DJ, et al. **Endocrinology** 1989 Jan;124(1):218–22

Mass transfer rates of polycyclic aromatic hydrocarbons between micron-size particles and their environment—theoretical estimates. Gerde P, et al. **Environ Health Perspect** 1989 Feb;79:249–58

Dust from carbon fibre. Holt PF, et al. **Environ Res** 1978 Oct;17(2):276–83

Endothelin binding sites in porcine aortic and rat lung membranes. Kanse SM, et al. **Eur J Biochem** 1989 Jun 1; 182(1):175–9

Introduction of a high-resolution cytochemical method for studying the distribution of phospholipids in biological tissues. Coulombe PA, et al. **Eur J Cell Biol** 1988 Aug; 46(3):564–76

Magnetopneumography: a general review. Le Gros V, et al. **Eur Respir J** 1989 Feb;2(2):149–59 (46 ref.)

Electron microscopic analysis of asbestos body cores from the Belgian urban population. Moulin E, et al. **Eur Respir J** 1988 Oct;1(9):818–22

The roles of factors from lung in murine megakaryocytopoiesis. Fawcett J, et al. **Exp Hematol** 1989 Jan;17(1):25–9

Biotin stores in rodent lungs: localization to Clara and type II alveolar cells. Kuhn C. **Exp Lung Res** 1988;14(4):527–36

Assessment of lung water by magnetic resonance in three types of pulmonary edema. Vinitski S, et al. **Heart Vessels** 1988;4(2):88–93

Cellular localization of bovine pancreatic trypsin inhibitor and related molecular forms in bovine lung. Businaro R, et al. **Histochem J** 1988 Apr;20(4):187–93

Serotonin-like immunoreactive cells in the pulmonary epithelium of ancient fish species. Zaccone G, et al. **Histochemistry** 1989;92(1):61–3

Mesotheliomas—asbestos exposure and lung burden. Berry G, et al. **IARC Sci Publ** 1989;(90):486–96

Fibre levels in lung and correlation with air samples. Case BW, et al. **IARC Sci Publ** 1989;(90):207–18 (66 ref.)

Alveolar and lung fibre levels in non-occupationally exposed subjects. Chiappino G, et al. **IARC Sci Publ** 1989;(90):310–3

Fibre content of lung in amphibole- and chrysotile-induced mesothelioma: implications for environmental exposure. Churg A, et al. **IARC Sci Publ** 1989;(90):314–8

A comparison of 32P-postlabelling and immunological methods to examine human lung DNA for benzo[a]pyrene adducts. Garner RC, et al. **IARC Sci Publ** 1988; (89):196–200

Non-occupational malignant mesotheliomas. Gibbs AR, et al. **IARC Sci Publ** 1989;(90):219–28

Smoking and the pulmonary mineral particle burden. Kalliomäki PL, et al. **IARC Sci Publ** 1989;(90):323–9

Fibre type and burden in parenchymal tissues of workers occupationally exposed to asbestos in the United States. Langer AM, et al. **IARC Sci Publ** 1989;(90):330–5

Asbestos fibre content of lungs with mesotheliomas in Osaka, Japan: a preliminary report. Morinaga K, et al. **IARC Sci Publ** 1989;(90):438–43

Mineral fibres and dusts in lungs of subjects living in an urban environment. Paoletti L, et al. **IARC Sci Publ** 1989; (90):354–60

Correlation between lung fibre content and disease in East London asbestos factory workers. Wagner JC, et al. **IARC Sci Publ** 1989;(90):444–8

Determination of nickel in lung specimens of thirty-nine autopsied nickel workers. Andersen I, et al. **Int Arch Occup Environ Health** 1989;61(4):289–95

Substantiating hazardous exposure to asbestos by examination of pulmonary dust. Eitner F. **Int Arch Occup Environ Health** 1988;61(3):163–6

Comparison of vitamin E levels in plasma, bronchoalveolar lavage, and lung tissues of adult pulmonary patients. Tangney CC, et al. **J Am Coll Nutr** 1989 Jun;8(3):203–14

Spiramycin concentrations in lung tissue. Kitzis M, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:123–6

Effect of dietary fish oil on lung lipid profile and hypoxic pulmonary hypertension. Archer SL, et al. **J Appl Physiol** 1989 Apr;66(4):1662–73

Hyaluronan affects extravascular water in lungs of unanesthetized rabbits. Bhattacharya J, et al. **J Appl Physiol** 1989 Jun;66(6):2595–9

Multiple distinct membrane heparan sulfate proteoglycans in human lung fibroblasts. Lories V, et al. **J Biol Chem** 1989 Apr 25;264(12):7009–16

Partial primary structure of the 48- and 90-kilodalton core proteins of cell surface-associated heparan sulfate proteoglycans of lung fibroblasts. Prediction of an integral membrane domain and evidence for multiple distinct core proteins at the cell surface of human lung fibroblasts. Marynen P, et al. **J Biol Chem** 1989 Apr 25;264(12):7017–24

Membrane-associated chondroitin sulfate proteoglycans of human lung fibroblasts. David G, et al. **J Cell Biol** 1989 Mar;108(3):1165–73

Isolation of a new member of the S100 protein family: amino acid sequence, tissue, and subcellular distribution. Glenney JR Jr, et al. **J Cell Biol** 1989 Feb;108(2):569–78

Analysis of lung air from patients with bronchogenic carcinoma and controls using gas chromatography-mass spectrometry. Preti G, et al. **J Chromatogr** 1988 Nov 18; 432:1–11

Anion-exchange high-performance liquid chromatographic determination of ascorbic acid and hexavalent chromium in rat lung preparations after treatment with sodium chromate in vitro and in vivo. Suzuki Y, et al. **J Chromatogr** 1989 Apr 14;489(2):283–90

Four monoclonal antibodies, AMH-1, -2, -3, and -4, give varied reactivities with monocytes, alveolar macrophages, and epithelioid-cell granulomas. Akiyama J, et al. **J Clin Immunol** 1988 Sep;8(5):372–80

Renin in human fetal lung—a biochemical and immunohistochemical study. Taylor GM, et al. **J Hypertens** 1988 Oct;6(10):845–51

Fatty acids of pulmonary surfactant phosphatidylcholine from fetal rabbit lung tissue in culture. Biosynthesis of n-10 monoenoic fatty acids. Longmuir KJ, et al. **J Lipid Res** 1988 Aug;29(8):1065–77

Liposomal pulmonary drug delivery. I. In vivo disposition of atropine base in solution and liposomal form following endotracheal instillation to the rabbit lung. Meisner D, et al. **J Microencapsul** 1989 Jul-Sep;6(3):379–87

Purification and characterization of a heat- and acid-stable progestin binding protein of rat lung. Moser EH, et al. **J Steroid Biochem** 1989 Jun;32(6):759–67

Calculating concentration of inhaled radiolabeled particles from external gamma counting: external counting efficiency and attenuation coefficient of thorax. Langenback EG, et al. **J Toxicol Environ Health** 1989;27(1):139–52

Changes in rat lung microsomal lipids after p-xylene: relationship to inhibition of benzo[a]pyrene metabolism. Roberts AE, et al. **J Toxicol Environ Health** 1988; 25(4):479–94

Alpha-smooth muscle actin in parenchymal cells of bleomycin-injured rat lung. Mitchell J, et al. **Lab Invest** 1989 May;60(5):643–50

Lung cancer cell type and asbestos body lung content. Preliminary results of a surgical series-based study. Andrion A, et al. **Med Lav** 1988 Jan-Feb;79(1):19–23

Further purification and partial characterization of the rat lung cytoplasmic factors modulating adenylate cyclase activity in plasma membrane. Nijjar MS, et al. **Mol Cell Biochem** 1988 May;81(1):65–74

Evidence for a pulmonary B3 bradykinin receptor. Farmer SG, et al. **Mol Pharmacol** 1989 Jul;36(1):1–8

Absence of immunoreactive vasoactive intestinal polypeptide in tissue from the lungs of patients with asthma. Ollerenshaw S, et al. **N Engl J Med** 1989 May 11; 320(19):1244–8

Correlation of DNA adduct levels in human lung with cigarette smoking. Phillips DH, et al. **Nature** 1988 Dec 22–29;336(6201):790–2

Immunohistochemical localization of pulmonary surfactants in fetal rabbit lung. Yoneyama K. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1740–6

Effects of protein deprivation from the neonatal period on lung collagen and elastin in the rat. Kalenga M, et al. **Pediatr Res** 1989 Aug;26(2):125–7

Fluorescence spectra in lung with porphyrin injection. Anthony DJ, et al. **Photochem Photobiol** 1989 May; 49(5):583–6

The simultaneous imaging of boronated tissue sections and the location of fissionable actinide particles in CR-39 solid state track detector, utilising a neutron-induced autoradiographic technique. Morris KJ, et al. **Phys Med Biol** 1988 Oct;33(10):1195–203

Autoradiographic localization of leukotriene C4 and D4 binding sites in guinea-pig lung. Carstairs JR, et al. **Prostaglandins** 1988 Apr;35(4):503–13

Calcitonin gene-related peptide in hamster lung and its coexistence with serotonin: a chemical and immunocytochemical study. Keith IM, et al. **Regul Pept** 1988 Sep;22(4):315–23

Autofluorescence of bovine ligamentum nuchae, cartilage, heart valve and lung measured by microscopy and fibre optics. Swatland HJ. **Res Vet Sci** 1988 Sep;45(2):230–3

Immunohistochemical localisation of alpha-1-protease inhibitor in the horse. Winder NC, et al. **Res Vet Sci** 1989 May;46(3):354–7

A comparison of the surfactant associated lipids derived from reptilian and mammalian lungs. Daniels CB, et al. **Respir Physiol** 1989 Mar;75(3):335–47

Scanning electron microscopic autoradiography of lung. Lauhala KE, et al. **Scanning Microsc** 1988 Sep;2(3):1631–4

Quantitative analysis of particulate burden in lung tissue. Mastin JP, et al. **Scanning Microsc** 1988 Sep;2(3):1613–29 (121 ref.)

Multielemental assay of tissues of deceased smelter workers and controls. Gerhardsson L, et al. **Sci Total Environ** 1988 Aug 1;74:97–110

Mallory's phloxine B-methylene blue-azure II stain emphasizes elastin and collagen bundles in epoxy embedded lung. Oldmixon EH. **Stain Technol** 1988 May;63(3):165–70

[Characterization of prostaglandin E2 receptors in the lung of guinea pigs] Tian Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):122–6 (Eng. Abstr.) **(Chi)**

[Studies on cell surface fibronectin of transformed Syrian hamster lung cells induced by butyric acid] Xu K, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):67–73 (Eng. Abstr.) **(Chi)**

[Assessment of fluid content of the lung by thoracic radiography. Comparison of extravascular lung water measurement and results of radiological estimation methods] Heinrichs W, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1583–7 (Eng. Abstr.) **(Ger)**

[Quantitation of manganese and vanadium levels in the lung of "normal" and occupationally exposed persons] Kraus T, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1-2):108–26 (Eng. Abstr.) **(Ger)**

[On the analysis of actual state of contamination with asbestos in the autopsy cases in Hokkaido] Wu FY, et al. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):562–6 (Eng. Abstr.) **(Jpn)**

[Relationship between elemental composition of particulate matters accumulated in human lung and occupational histories] Ohshima S, et al. **Sangyo Igaku** 1988 Sep; 30(5):404–5 **(Jpn)**

[Crystalline and amorphous forms of SiO2 in the lungs of patients with silicosis] Shalaeva MP, et al. **Gig Tr Prof Zabol** 1989;(4):11–3 (Eng. Abstr.) **(Rus)**

[Study of the nucleoprotein fraction of lung tissue in experimental berylliosis using gel filtration] Vasil'eva EV. **Vopr Med Khim** 1971 Jul-Aug;17(4):361–4 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Morphology and morphometry of the normal lung of the adult vervet monkey (Cercopithecus aethiops). Maina JN. **Am J Anat** 1988 Nov;183(3):258–67

Relationship of lung geometry to the development of pleural abnormalities in insulation workers exposed to asbestos. Delfino R, et al. **Am J Ind Med** 1989;15(4):417–25

A comparison of lung structure in male DBA and C57 black mice and their F1 offspring. Kida K, et al. **Am Rev Respir Dis** 1989 May;139(5):1238–43

Chest wall and lung surface viewing with ultrasound. Birnholz J. **Chest** 1988 Dec;94(6):1275–6

An assessment of dynamic images by applied potential tomography for monitoring pulmonary perfusion. McArdle FJ, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:87–91

Hyperoxia decreases lung size of amphibian tadpoles without changing GSH-peroxidases or tissue peroxidation. Barja de Quiroga G, et al. **Comp Biochem Physiol [A]** 1989; 92(4):581–8

Is the horse lung well designed? [editorial] Rose RJ. **Equine Vet J** 1987 Nov;19(6):492–3

Influence of airway calibre on the intrapulmonary dose and distribution of inhaled aerosol in normal and asthmatic subjects. Chung KF, et al. **Eur Respir J** 1988 Dec; 1(10):890–5

Effect of lung volume on ventilation distribution. Crawford AB, et al. **J Appl Physiol** 1989 Jun;66(6):2502–10

Scintigraphic regional lung dimensions in upright and head-down men. Demedts M, et al. **J Appl Physiol** 1989 Apr;66(4):1927–34

Lung weight in vivo measured with computed tomography and rebreathing of soluble gases. Hyde RW, et al. **J Appl Physiol** 1989 Jul;67(1):166–73

Variability of parenchymal expansion measured by computed tomography. Rodarte JR, et al. **J Appl Physiol** 1989 Jul; 67(1):226–31

Effects of starvation and refeeding on elastase-induced emphysema. Sahebjami H, et al. **J Appl Physiol** 1989 Jun; 66(6):2611–6

Inhomogeneity during deflation of excised canine lungs. II. Alveolar volumes. Warner DO, et al. **J Appl Physiol** 1988 Oct;65(4):1766–74

Clapping or percussion causes atelectasis in dogs and influences gas exchange. Zidulka A, et al. **J Appl Physiol** 1989 Jun;66(6):2833–8

Lungs of the gecko Rhacodactylus leachianus (Reptilia: Gekkonidae): a correlative gross anatomical and light and electron microscopic study. Perry SF, et al. **J Morphol** 1989 Jan;199(1):23–40

Direct lymphatic drainage of lung segments to the mediastinal nodes. An anatomic study on 260 adults. Riquet M, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):623–32

Are pulmonary factors responsible for the direction of the spinal curvature in idiopathic scoliosis? Del Bigio MR. **Med Hypotheses** 1989 Apr;28(4):217–8

Pleural pressure from abdominal to pulmonary rib cage: sweep of the lung border. Agostoni E, et al. **Respir Physiol** 1989 Jan;75(1):105–15

Pleural liquid pressure at the caudal border of the lung. Agostoni E, et al. **Respir Physiol** 1989 Jan;75(1):117–28

Gas exchange in the lung of a dasyurid marsupial: morphometric estimation of diffusion capacity and blood oxygen uptake kinetics. Hallam JF, et al. **Respir Physiol** 1989 Sep;77(3):309–22

The use of the DENTACRYL rapid (Spofa) resin for preparation of the rat tracheobronchial casts. Havránková J, et al. **Z Versuchstierkd** 1989;32(2):97–100

[The topography of the organs of the thoracic cavity of the hippopotamus (Hippopotamus amphibius Linné 1758)] Heinrichs J, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(5):615–23 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

Interaction of verapamil and halogenated inhalation anesthetics on hypoxic pulmonary vasoconstriction. Kjaeve J, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):193–8

Brain abscess: association with pulmonary arteriovenous fistula and hereditary hemorrhagic telangiectasia: report of three cases. Gelfand MS, et al. **Am J Med** 1988 Nov; 85(5):718–20

Muscarinic regulation of pulmonary intravascular volume in isolated canine lungs. Bell L, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1219–26

Leukocyte effects on microcirculation in artificially perfused rat lungs. Braide M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1117–26

Combined neurohumoral block modulates pulmonary vascular P/Q relationship in conscious dogs. Geller HS, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1084–90

Vascular reactivity and permeability to serotonin in cyclooxygenase-inhibited dog lung. Hofman WF, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1096–105

Pulmonary embolism: analysis of endothelial pore sizes in canine lung. Townsley MI, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1075–83

Charge-related lung microvascular injury. Chang SW, et al. **Am Rev Respir Dis** 1989 Feb;139(2):534–45 (123 ref.)

Intravascular macrophages in pulmonary capillaries of humans. Dehring DJ, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):1027–9

Barbiturate anesthetics inhibit thromboxane-, potassium-, but not angiotensin-induced pulmonary vasoconstriction. McShane AJ, et al. **Anesthesiology** 1989 May;70(5):775–9

Pulmonary haemorrhage, pulmonary infarction, and the lupus anticoagulant. Howe HS, et al. **Ann Rheum Dis** 1988 Oct; 47(10):869–72

The rapid induction by interleukin-2 of pulmonary microvascular permeability. Klausner JM, et al. **Ann Surg** 1989 Jan;209(1):119–28

The association of Escherichia coli virulence and pulmonary microvascular damage. Barke RA, et al. **Arch Surg** 1989 Apr;124(4):449–52

The use of perfluorochemical emulsion in the study of pulmonary microvascular permeability. Schneeberger EE. **Biomater Artif Cells Artif Organs** 1988;16(1–3):565–74

Pulmonary angiitis and granulomatosis: a review. Weisbrod GL. **Can Assoc Radiol J** 1989 Jun;40(3):127–34 (125 ref.)

Attenuation of pulmonary and systemic vasoconstriction with pentoxifylline and aminophylline. Hakim TS, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):396–401

Vasoactive intestinal polypeptide-immunoreactive nerves in the pulmonary vasculature of the aquatic file snake Acrochordus granulatus. Donald JA, et al. **Cell Tissue Res** 1989 Mar;255(3):585–8

Reduction of pulmonary capillary blood volume following cold exposure in patients with Raynaud's phenomenon. Barr WG, et al. **Chest** 1988 Dec;94(6):1195–9

SC-39026, a serine elastase inhibitor, prevents muscularization of peripheral arteries, suggesting a mechanism of monocrotaline-induced pulmonary hypertension in rats. Ilkiw R, et al. **Circ Res** 1989 Apr; 64(4):814–25

Evaluation of endothelial injury in the human lung. Dawson CA, et al. **Clin Chest Med** 1989 Mar;10(1):13–24 (72 ref.)

Metabolic sources of reactive oxygen metabolites during oxidant stress and ischemia with reperfusion. Grisham MB, et al. **Clin Chest Med** 1989 Mar;10(1):71–81 (44 ref.)

Detection of pulmonary telangiectasia using dynamic pulmonary perfusion imaging in patients with liver cirrhosis. Shijo H, et al. **Clin Nucl Med** 1989 Mar; 14(3):179–82

Role of pulmonary diseases and physical condition in the regulation of vasoactive hormones. Hietanen E, et al. **Clin Physiol** 1988 Dec;8(6):581–90

Gaar equation is not a reliable predictor of pulmonary capillary pressure [letter] Cope DK, et al. **Crit Care Med** 1989 Mar;17(3):300–1

Hypoxic pulmonary vasoconstrictor response with asymmetric oleic acid injury in the dog. Johnston WE, et al. **Crit Care Med** 1989 Jul;17(7):647–51

Effect of superoxide dismutase and catalase infusion at reflow on cardiopulmonary function after lung ischemia in dogs breathing room air. Paull DE, et al. **Curr Surg** 1988 Jul–Aug;45(4):292–4

Serial pulmonary blood volume changes with supine exercise in normal subjects and in coronary artery disease patients. Alexopoulos D, et al. **Eur Heart J** 1988 Nov;9(11):1223–9

Fatty acids binding to albumin increases its uptake and transcytosis by the lung capillary endothelium. Galis Z, et al. **Eur J Cell Biol** 1988 Dec;47(2):358–65

The influence of prostaglandin E1 on systemic and pulmonary haemodynamics after aortic surgery. Hocken D, et al. **Eur J Vasc Surg** 1989 Feb;3(1):19–23

Ethanol induces acute pulmonary vasoconstriction in salt-perfused rat lungs. Drummond WH, et al. **Exp Lung Res** 1989 May;15(3):447–58

Role of arterial occlusion in pulmonary scar cancers. Kolin A, et al. **Hum Pathol** 1988 Oct;19(10):1161–7

Pulmonary scar cancers [letter] Kung IT. **Hum Pathol** 1989 Jun;20(6):605–6

The pulmonary vasculature in meconium aspiration. Perlman EJ, et al. **Hum Pathol** 1989 Jul;20(7):701–6

The optical measurement of 1,2-propanediol for the determination of lung capillary permeability surface area. Galloway RL Jr, et al. **IEEE Trans Biomed Eng** 1989 Jun; 36(6):591–7

A rare case of tetralogy of Fallot with unusual blood supply to the left lung. Anjos RT, et al. **Int J Cardiol** 1989 Sep; 24(3):363–6

Neutrophil retention in model capillaries: deformability, geometry, and hydrodynamic forces. Downey GP, et al. **J Appl Physiol** 1988 Oct;65(4):1861–71

Effect of perivascular electromagnetic flow probes on pulmonary hemodynamics. Grant BJ, et al. **J Appl Physiol** 1988 Oct;65(4):1885–90

Erythrocyte deformability and segmental pulmonary vascular resistance: osmolarity and heat treatment. Hakim TS. **J Appl Physiol** 1988 Oct;65(4):1634–41

Effect of endotoxin pretreatment on the pulmonary vascular response to hypoxia in O2-exposed lambs. Hazinski TA, et al. **J Appl Physiol** 1988 Oct;65(4):1586–91

Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. Hyman AL, et al. **J Appl Physiol** 1989 Jul;67(1):371–6

Some features of oscillatory flow in a model bifurcation. Jan DL, et al. **J Appl Physiol** 1989 Jul;67(1):147–59

Effects of increased pulmonary vascular tone on gas exchange in canine oleic acid pulmonary edema. Leeman M, et al. **J Appl Physiol** 1988 Aug;65(2):662–8

Absence of neural modulation of hypoxic pulmonary vasoconstriction in conscious dogs. Lodato RF, et al. **J Appl Physiol** 1988 Oct;65(4):1481–7

Dynamic response of local pulmonary blood flow to alveolar gas tensions: experiment. Paradowski LJ, et al. **J Appl Physiol** 1989 Jun;66(6):2559–64

Airway blood flow response to eucapnic dry air hyperventilation in sheep. Parsons GH, et al. **J Appl Physiol** 1989 Mar;66(3):1443–7

Importance of vasoconstriction in lipid mediator-induced pulmonary edema. Sakai A, et al. **J Appl Physiol** 1989 Jun; 66(6):2667–74

Reduction in pulmonary varix size after mitral valve replacement. Iwasaki T, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):381–3

Microvascular casting of the lung: effects of various fixation protocols. Schraufnagel DE, et al. **J Electron Microsc Tech** 1988 Feb;8(2):185–91

Misalignment of lung vessels and alveolar capillary dysplasia: a cause of persistent pulmonary hypertension. Cater G, et al. **J Pediatr** 1989 Feb;114(2):293–300

Aberrant arterial supply in congenital cystic adenomatoid malformation of the lung. Rashad F, et al. **J Pediatr Surg** 1988 Nov;23(11):1007–8

Role of lipoxygenase, cyclooxygenase and cytochrome P-450 metabolites in contractions of isolated guinea pig pulmonary venules induced by hypoxia and anoxia. Tracey WR, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1097–104

Increased plasma oncotic pressure inhibits pulmonary fluid transport when pulmonary pressures are elevated. Wareing TH, et al. **J Surg Res** 1989 Jan;46(1):29–34

Polymorphonuclear leucocyte sequestration in the lungs and liver following soft-tissue trauma: an in vivo study. Thörne J, et al. **J Trauma** 1989 Apr;29(4):451–6

Direct and indirect actions of acetylcholine and histamine on intrapulmonary artery and vein muscles of the rat. Chen GF, et al. **Jpn J Physiol** 1989;39(1):51–65

An evaluation of the tolerance of the autotransplanted canine lung against warm ischemia. Yamazaki F, et al. **Jpn J Surg** 1989 May;19(3):326–33 (21 ref.)

Antagonism of leukotriene receptors and administration of a 5-lipoxygenase inhibitor do not affect hypoxic vasoconstriction. Thomas HM 3d, et al. **Lung** 1989; 167(3):187–98

The pulmonary microcirculation of the rat: differential ultrastructural responses of the endothelia to protamine sulfate. DeFouw DO, et al. **Microcirc Endothelium Lymphatics** 1988 Aug;4(4):267–92

The influence of circulatory overload on extraalveolar microvessel endothelium of dog lung in vivo. DeFouw DO, et al. **Microvasc Res** 1988 Jul;36(1):92–103

Pulmonary microvascular cytology in the diagnosis of lymphangitic carcinomatosis. Masson RG, et al. **N Engl J Med** 1989 Jul 13;321(2):71–6

Altered lung vascular permeability during intermittent haemodialysis. Bell D, et al. **Nephrol Dial Transplant** 1988; 3(4):426–31

Bronchial compression by an enlarged left atrium in infants; a cause of hypovascularity of the left lung. Corr L, et al. **Pediatr Radiol** 1988;18(6):459–63

Responses of small intrapulmonary arteries to vasoactive compounds in the fetal and neonatal lamb: norepinephrine, epinephrine, serotonin, and potassium chloride. Dunn JA, et al. **Pediatr Res** 1989 Apr;25(4):360–3

The effect of alkalosis on hypoxia-induced pulmonary vasoconstriction in lungs of newborn rabbits. Fike CD, et al. **Pediatr Res** 1989 Apr;25(4):383–8

Endotoxin-induced pulmonary endothelial injury. Meyrick B, et al. **Prog Clin Biol Res** 1989;308:91–9 (18 ref.)

Proteases as mediators of pulmonary vascular permeability. Neuhof H, et al. **Prog Clin Biol Res** 1989;308:305–14 (19 ref.)

In-situ complement activation, pulmonary hypertension and vascular leakage in rabbit lungs—the role of the terminal complement complex. Seeger W, et al. **Prog Clin Biol Res** 1989;308:283–9

Escherichia coli hemolysin causes thromboxane-mediated hypertension and vascular leakage in rabbit lungs. Seeger W, et al. **Prog Clin Biol Res** 1989;308:67–72 (19 ref.)

Cardiopulmonary response to endotoxin and the eicosanoids. Traber DL, et al. **Prog Clin Biol Res** 1989;308:201–6 (21 ref.)

Effect of cardiac output on pulmonary hemodynamics. Grant BJ, et al. **Respir Physiol** 1989 Jun;76(3):303–17

Identification of constriction in large versus small vessels using the arterial-venous and the double-occlusion techniques in isolated canine lungs. Hakim TS. **Respiration** 1988;54(1):61–9

Ranking corrosion efficiency: a Latin square study on rat lung microvascular corrosion casts. Schraufnagel DE. **Scanning Microsc** 1989 Mar;3(1):299–302; discussion 302–4

Mechanics of stimulated neutrophils: cell stiffening induces retention in capillaries. Worthen GS, et al. **Science** 1989 Jul 14;245(4914):183–6

Hypothermia or continuous ventilation decreases ischemia-reperfusion injury in an ex vivo rat lung model. Badellino MM, et al. **Surgery** 1989 Jun;105(6):752–60

Almitrine bismesylate reduces hypoxic pulmonary vasoconstriction in isolated rat lungs. Kato S, et al. **Tohoku J Exp Med** 1989 Feb;157(2):119–29

Collapse and reexpansion of lungs increase microvascular permeability in sheep. Koike K, et al. **Tohoku J Exp Med** 1989 Jan;157(1):19–29

[Multiple micropulmonary neoplastic emboli and subacute pulmonary heart disease] He XW. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):28–9, 1 (Chi)

[Cerebral abscess and Osler-Rendu disease. Apropos of 4 cases] Peruzzi P, et al. **Neurochirurgie** 1988;34(3):179–87 (48 ref.) (Eng. Abstr.) (Fre)

[Neural influences on pulmonary vasomotility in man] Moruzzi P, et al. **G Ital Cardiol** 1988 Apr;18(4):301–7 (Eng. Abstr.) (Ita)

[Hypoxic pulmonary vasoconstriction] Muneyuki M. **Masui** 1988 Dec;37(12):1424–36 (58 ref.) (Eng. Abstr.) (Jpn)

[Systemic arterial supply to the normal lung] Kimura S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):1012–6 (15 ref.) (Eng. Abstr.) (Jpn)

[Clinical studies of the distribution of pulmonary blood flow at rest and with exercise in mitral stenosis in connection with the reversibility of the pulmonary vascular lesion]

Kohno T. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):2005–15 (Eng. Abstr.) **(Jpn)**

[Studies on 5-hydroxytryptamine receptor in the pulmonary vasculature with special reference to its role in the regulation of the pulmonary hemodynamics] Kato J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):405–14 (Eng. Abstr.) **(Jpn)**

[The effect of almitrine on hypoxic pulmonary vasoconstriction in isolated perfused rat lungs] Kato S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul; 26(7):707–13 (Eng. Abstr.) **(Jpn)**

[Three cases of intralobar pulmonary sequestration—demonstration of an aberrant artery by contrast CT] Ikeda K, et al. **Rinsho Hoshasen** 1989 Jan; 34(1):169–72 (Eng. Abstr.) **(Jpn)**

[A rheographic method of evaluation of disorders of pulmonary blood flow] Gürtler-Krawczyńska E, et al. **Kardiol Pol** 1988;31 Suppl 1:52–9 (Eng. Abstr.) **(Pol)**

[Roentgenological picture of pulmonary thromboembolism] Kopczyńska-Kowalczykowa M. **Pneumonol Pol** 1988 May; 56(5):226–30 **(Pol)**

[Usefulness of pulmonary scintigraphy in the diagnosis of pulmonary embolism] Wąsek Z, et al. **Pneumonol Pol** 1988 May;56(5):231–7 **(Pol)**

[Involvement of pulmonary microcirculation in experimental acute pancreatitis] Chaib E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):193–6 (Eng. Abstr.) **(Por)**

[Characteristics of central and regional hemodynamics in pregnant women with late toxemia and hypertension] Medvedev BI, et al. **Akush Ginekol (Mosk)** 1989 May; (5):28–31 (Eng. Abstr.) **(Rus)**

[A new method of pulmonary rheography in an experiment] Valda RI, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):109–11 (Eng. Abstr.) **(Rus)**

[Value of a radionuclide method of examining pulmonary microcirculation in silicosis] Kuz'mina OT. **Gig Tr Prof Zabol** 1989;(4):51–2 **(Rus)**

[Ligation of patent ductus arteriosus, removal of an aneurysm of a segmental artery and resection of the left lung] Beliaev PA, et al. **Grudn Khir** 1989 Jan–Feb;(1):87–8 **(Rus)**

[Pulmonary regulation of fibrinogen levels in acquired heart defects with pulmonary hypertension] Gebel' GIa, et al. **Kardiologiia** 1988 Jun;28(6):65–9 (Eng. Abstr.) **(Rus)**

[Value of correcting microcirculatory disorders of inflammatory foci in the treatment of infection] Shoĭkhet IaN, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):58–61 (Eng. Abstr.) **(Rus)**

[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):68–72 (Eng. Abstr.) **(Rus)**

[Status of capillary blood flow in the lungs in various outcomes of acute pneumonia] Busarova GA, et al. **Klin Med (Mosk)** 1989 May;67(5):49–52 (Eng. Abstr.) **(Rus)**

[A rare case of multiple arteriovenous malformations of the lungs] Livandovskiĭ IuA, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):98–9 **(Rus)**

[Pulmonary vasculitis in a patient with periarteritis nodosa] Bulyk MA, et al. **Probl Tuberk** 1988;(9):73–4 **(Rus)**

[Effects of air pollutants on pulmonary blood vessels] Kumpan NB, et al. **Probl Tuberk** 1988;(12):45–8 (Eng. Abstr.) **(Rus)**

[Circular resection of the pulmonary artery during removal of the upper lobe of the left lung] Egiazarian VT, et al. **Vestn Khir** 1988 Sep;141(9):53–4 **(Rus)**

[Possibility of restoration of the respiratory function of the lung after recanalization of the pulmonary artery after its long-term experimental occlusion] Khalov IuN. **Vestn Khir** 1988 May;140(5):36–9 (Eng. Abstr.) **(Rus)**

[Surgical correction of congenital arteriovenous aneurysms of the lungs] Korolev BA, et al. **Vestn Khir** 1988 Jun; 140(6):8–13 (Eng. Abstr.) **(Rus)**

[2-stage surgical correction of complex congenital abnormalities of the heart, lung and diaphragm in a child] Voronov AA, et al. **Vestn Khir** 1988 Oct;141(10):87–8 **(Rus)**

[Pulmonary arteriovenous fistula treated using percutaneous transcatheter embolization] Navarro Merino M, et al. **An Esp Pediatr** 1988 Sep;29(3):199–202 (Eng. Abstr.) **(Spa)**

CYTOLOGY

A unique cell type in the lung—the Clara cell (the non-ciliated bronchiolar epithelial cell). Komáromy L, et al. **Acta Biol Hung** 1988;39(1):17–29 (51 ref.)

Direct transdiaphragmatic traffic of peritoneal macrophages to the lung. Pitt ML, et al. **Adv Exp Med Biol** 1988; 237:627–32

Arachidonic acid products and the thoracic accumulation of neutrophils and platelets following i.v. antigen challenge of sensitised guinea-pig. Walker JR, et al. **Agents Actions** 1989 Jan;26(1–2):99–102

Cytoplasmic pH in pulmonary macrophages: recovery from acid load is Na+ independent and NEM sensitive. Bidani A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C65–76

Regulation of lung cell proliferation by polypeptide growth factors. King RJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L23–38 (186 ref.)

Matrix-derived soluble components influence type II pneumocytes in primary culture. Rannels SR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C621–9

Density-independent isolation of type II pneumocytes after partial pneumonectomy. Uhal BD, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C515–21

In vitro Sendai viral replication in pulmonary macrophages from mice treated with 4-ipomeanol. Durham SK, et al. **Am J Vet Res** 1988 Oct;49(10):1677–80

Prostaglandin synthesis and release by subpopulations of rat interstitial macrophages. Chandler DB, et al. **Am Rev Respir Dis** 1988 Oct;138(4):901–7

111Indium-labeled neutrophil migration into the lungs of bleomycin-treated rabbits assessed noninvasively by external scintigraphy. Haslett C, et al. **Am Rev Respir Dis** 1989 Sep;140(3):756–63

Isolation and antigenic identification of hamster lung interstitial macrophages. Kobzik L, et al. **Am Rev Respir Dis** 1988 Oct;138(4):908–14

Differential proliferation of fibroblasts cultured from normal and fibrotic human lungs. Raghu G, et al. **Am Rev Respir Dis** 1988 Sep;138(3):703–8

Stimulation of hamster pulmonary neuroendocrine cells and associated peptides by repeated exposure to cigarette smoke. Tabassian AR, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):436–40

Modulation of keratin expression in type II pneumocytes by the extracellular matrix. Woodcock-Mitchell J, et al. **Am Rev Respir Dis** 1989 Feb;139(2):343–51

The influence of variations in the measuring procedure on quantitative nuclear image features in histologic sections of lung tissue. Thunnissen FB, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):349–54

Immunohistochemical localization of gastrin-releasing peptide in normal and diseased human lung. Tsutsumi Y. **Ann N Y Acad Sci** 1988;547:336–50

Microperoxisomes in type II pneumocytes and interstitial cells of postnatal rat lungs. Van Meir F, et al. **Cell Biol Int Rep** 1988 Aug;12(8):579–86

Distribution and frequency of neuro-epithelial bodies in post-natal rabbit lung: quantitative study with monoclonal antibody against serotonin. Cho T, et al. **Cell Tissue Res** 1989 Feb;255(2):353–62

Fibrin is a determinant of neutrophil sequestration in the lung. Cooper JA, et al. **Circ Res** 1988 Oct;63(4):735–41

The volumes of rat and human lung cells as measured by an image analyser. Simmons JA, et al. **Clin Phys Physiol Meas** 1988 Nov;9(4):363–9

Hydrophobic surfactant-associated proteins: electrophoretic and immunologic analyses and cellular localization in human lung. Katyal SL, et al. **Exp Lung Res** 1988; 14(5):655–69

Role of cyclic AMP in proliferation of lung tissue in organ culture. Yang WZ, et al. **Exp Lung Res** 1989 Jul; 15(4):527–35

The effect of paraquat lung on mononuclear cells. Barabás K, et al. **Exp Pathol** 1988;34(2):115–8

Blocking of lectin-like adhesion molecules on pulmonary cells inhibits lung sarcoma L-1 colonization in BALB/c-mice. Roszkowski W, et al. **Experientia** 1989 Jun 15;45(6):584–8

Dimethylthiourea prevents hydrogen peroxide and neutrophil mediated damage to lung endothelial cells in vitro and disappears in the process. Toth KM, et al. **Free Radic Biol Med** 1989;6(5):457–66

Guinea pig lung cells. Method of isolation and partial purification, identification, ultrastructure, and cell count. Pelé JP, et al. **Inflammation** 1989 Feb;13(1):103–23

Stimulation of release of prostaglandins and thromboxanes from isolated guinea pig lung cells by bradykinin, f-Met-Leu-Phe, phorbol myristate, ionophore A23187, and leukotrienes. Robidoux C, et al. **Inflammation** 1988 Aug; 12(4):285–95

Distribution and histochemical characterization of pulmonary mast cells in the rat and guinea pig. Bachelet CM, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):225–9

Neutrophil kinetics in rabbits during infusion of zymosan-activated plasma. Doerschuk CM, et al. **J Appl Physiol** 1989 Jul;67(1):88–95

Kinetics of radiolabeled neutrophils in swine. Ohgami M, et al. **J Appl Physiol** 1989 Apr;66(4):1881–5

Application of macrophage and peripheral lung cultures. Plaake M, et al. **J Appl Toxicol** 1988 Dec;8(6):399–402

MHC control of cell position in vitro. Birkby CA, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):167–74

Pulmonary endocrine cells in various species in the Himalaya. Gosney J, et al. **J Comp Pathol** 1988 Jul;99(1):93–100

Separation of potent and poorly functional human lung accessory cells based on autofluorescence. Nicod LP, et al. **J Leukoc Biol** 1989 May;45(5):458–65

Effects of monensin on ATP levels and cell functions in rat liver and lung in vitro. Mariani MF, et al. **J Membr Biol** 1989 Jun;108(3):235–46

A confocal laser microscope scanner for digital recording of optical serial sections. Carlsson K, et al. **J Microsc** 1989 Feb;153 (Pt 2):171–80

The type II pneumocyte as a model of lung cell interaction with the extracellular matrix. Rannels SR, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:151–9

Contractile cells in normal and fibrotic lung. Adler KB, et al. **Lab Invest** 1989 Apr;60(4):473–85 (163 ref.)

Ultrastructural analysis of maturing human T and TC mast cells in situ. Craig SS, et al. **Lab Invest** 1989 Jan; 60(1):147–57

Quantitation of a murine lung endothelial cell protein, P112, with a double monoclonal antibody assay. Kennel SJ, et al. **Lab Invest** 1988 Nov;59(5):692–701

Isolation of bovine type II pneumocytes in high yield and purity. Augustin-Voss HG, et al. **Lung** 1989;167(1):1–10

Localization of transglutaminase activity in type II epithelial cell cultures and elevation of enzyme activity in lungs of rats instilled with quartz. Hind AL, et al. **Lung** 1988; 166(6):339–46

Cellular metabolism of pulmonary surfactant. Williams MC. **Mead Johnson Symp Perinat Dev Med** 1987;(30):5–11 (36 ref.)

Dexamethasone acts as a negative regulator of epidermal growth factor receptor synthesis in fetal rat lung cells. Oberg KC, et al. **Mol Endocrinol** 1989 Jun;3(6):915–22

On the origin of cells infiltrating lung interstitia: an experimental and quantitative research in splenectomized rabbits. Ionescu J, et al. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):195–205

Resident pulmonary lymphocytes expressing the gamma/delta T-cell receptor. Augustin A, et al. **Nature** 1989 Jul 20;340(6230):239–41

Effects of prenatal terbutaline exposure on cellular development in lung and liver of neonatal rat: ornithine decarboxylase activity and macromolecules. Kudlacz EM, et al. **Pediatr Res** 1989 Jun;25(6):617–22

M cell in the immune system of the lung. Pankow W, et al. **Respiration** 1988;54(4):209–19 (55 ref.)

Neuroendocrine cell populations in normal human lungs: a quantitative study. Gosney JR, et al. **Thorax** 1988 Nov; 43(11):878–82

Effects of sodium cromoglycate and nedocromil sodium on histamine secretion from human lung mast cells. Leung KB, et al. **Thorax** 1988 Oct;43(10):756–61

Bronchoalveolar lavage cytology in cynomolgus monkeys and identification of cytologic alterations following sequential saline lavage. Haley PJ, et al. **Vet Pathol** 1989 May;26(3):265–73

[The effects of cigarette smoking on the activity of pulmonary macrophage] Du BY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):235–6, 256 (Eng. Abstr.) **(Chi)**

[Toxic and transforming effects of mainstream cigarette smoke particles on human embryonic lung fibroblasts] Liu CS. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):335–7 **(Chi)**

[PBNA induce malignant transformation in Syrian hamster lung cell culture] Gu Q, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):457–65 (Eng. Abstr.) **(Chi)**

[Differentiation of human type II pneumocytes in vitro. Influence of the matrix components collagen and fibronectin on epithelial induction] Papadopoulos T, et al. **Verh Dtsch Ges Pathol** 1988;72:278–83 (Eng. Abstr.) **(Ger)**

[Endocrine cells of the APUD-system in the human lung (electron microscopy characteristics)] Blinova SA. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):55–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Pharmacodynamics of lipoxin A4 in airway smooth muscle. Dahlén SE, et al. **Agents Actions** 1989 Jan;26(1–2):93–5

Endotoxin protection against pulmonary oxygen toxicity and its reversal by acetyl salicylic acid: role of eicosanoid production by broncho-alveolar lavage cells. Klein J, et al. **Agents Actions** 1989 Jan;26(1–2):246–8

Effect of the PAF-antagonist WEB 2086 on anaphylactic lung reaction: comparison of inhalative and intravenous challenge. Heuer H, et al. **Agents Actions Suppl** 1988; 23:207–15

Drugs affecting pulmonary responses to platelet activating factor as novel anti-asthma drugs. Page CP, et al. **Agents Actions Suppl** 1988;23:173–85 (56 ref.)

Biochemical mechanisms in the effects of kerosene on airways of experimental animals. Garciá Mesa M, et al. **Allergol Immunopathol (Madr)** 1988 Sep-Oct;16(5):363–7

Effect of nedocromil sodium on exercise-induced bronchoconstriction in children. Henriksen JM. **Allergy** 1988 Aug;43(6):449–53

Pulmonary function in preterm infants following treatment with intravenous indomethacin. Krauss AN, et al. **Am J Dis Child** 1989 Jan;143(1):78–81

Lung function of welders of zinc-coated mild steel: cross-sectional analysis and changes over five consecutive work shifts. Marquart H, et al. **Am J Ind Med** 1989; 16(3):289–96

Serial lung function testing in patients treated with amiodarone: a prospective study. Gleadhill IC, et al. **Am J Med** 1989 Jan;86(1):4–10

Prediction of amiodarone-induced pulmonary toxicity [editorial] Mason JW. **Am J Med** 1989 Jan;86(1):2–3

Abnormalities of pathways of fibrin turnover in lung lavage of rats with oleic acid and bleomycin-induced lung injury support alveolar fibrin deposition. Idell S, et al. **Am J Pathol** 1989 Aug;135(2):387–99

Pulmonary effects of blood replacement with a perfluorochemical emulsion followed by exposure to 85% oxygen or air. Barry BE, et al. **Am Rev Respir Dis** 1988 Aug;138(2):435–44

The effect of inhaled budesonide on the maximal degree of airway narrowing to leukotriene D4 and methacholine in

normal subjects in vivo. Bel EH, et al. **Am Rev Respir Dis** 1989 Feb;139(2):427–31

Effect of antiasthma drugs on microvascular leakage in guinea pig airways. Boschetto P, et al. **Am Rev Respir Dis** 1989 Feb;139(2):416–21

The pulmonary effects of buthionine sulfoximine treatment and glutathione depletion in rats. Coursin DB, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1471–9

Relationship between lung injury and lung lipid peroxidation caused by recurrent endotoxemia. Demling R, et al. **Am Rev Respir Dis** 1989 May;139(5):1118–24

Tumor necrosis factor interacts with interleukin-1 and interferons to inhibit fibroblast proliferation via fibroblast prostaglandin-dependent and -independent mechanisms. Elias JA. **Am Rev Respir Dis** 1988 Sep;138(3):652–8

The effects of kaolin on the lung. Morgan WK, et al. **Am Rev Respir Dis** 1988 Oct;138(4):813–20

Adenosine potentiates mediator release from human lung mast cells. Peachell PT, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1143–51

Tumor necrosis factor causes increased pulmonary permeability and edema [letter] Stoklosa JC, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1359–60

Unattenuated structural and biochemical alterations in the rat lung during functional adaptation to ozone. Tepper JS, et al. **Am Rev Respir Dis** 1989 Aug;140(2):493–501

A randomized, double-blind comparison of the effects of interpleural bupivacaine and saline on morphine requirements and pulmonary function after cholecystectomy. VadeBoncouer TR, et al. **Anesthesiology** 1989 Sep;71(3):339–43

Serum copper concentration as an index of cardiopulmonary injury in monocrotaline-treated rats. Molteni A, et al. **Ann Clin Lab Sci** 1988 Nov–Dec;18(6):476–83

Increased lung water and ascites after massive cocaine overdosage in mice and improved survival related to beta-adrenergic blockage. Robin ED, et al. **Ann Intern Med** 1989 Feb 1;110(3):202–7

Pulmonary function in wood workers exposed to formaldehyde: a prospective study. Alexandersson R, et al. **Arch Environ Health** 1989 Jan–Feb;44(1):5–11

Effects of ozone exposure: a comparison between oral and nasal breathing. Hynes B, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):357–60

Duration of enhanced responsiveness upon re-exposure to ozone. Schonfeld BR, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):229–36

The effects of water soluble contrast agents on the respiratory tract. Lovett I, et al. **Australas Radiol** 1989 May;33(2):124–7

Lung energy metabolism following twenty-four hours exposure to one hundred percent oxygen. Bassett DJ, et al. **Basic Life Sci** 1988;49:979–82

Bradykinin- and chemotactic peptide fMLP-stimulated leukotriene biosynthesis in rat lungs and its inhibition by vasoactive intestinal peptide. Di Marzo V, et al. **Biochem Int** 1988 Aug;17(2):235–42

Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts. Golds EE, et al. **Biochem J** 1989 Apr 15;259(2):585–8

Effects of milrinone and salbutamol on antigen induced arachidonic acid metabolism in the isolated rat lung. Post MJ, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2573–4

Stimulation of surfactant secretion by vasopressin in primary cultures of adult rat type II pneumocytes. Brown LA, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):76–81

Response to oral theophylline in severe chronic obstructive airways disease [letter] Davidson AC, et al. **BMJ** 1989 Feb 25;298(6672):523–4

Comparison of the cardiovascular and pulmonary effects of oral celiprolol, propranolol and placebo in normal volunteers. Busst CM, et al. **Br J Clin Pharmacol** 1989 Apr; 27(4):405–10

In vitro effect of toluene diisocyanate on beta adrenergic and muscarinic receptor function in lung tissue of the rat. Born PJ, et al. **Br J Ind Med** 1989 Jan;46(1):56–9

Pulmonary function in histology technicians compared with women from Michigan: effects of chronic low dose formaldehyde on a national sample of women. Kilburn KH, et al. **Br J Ind Med** 1989 Jul;46(7):468–72

Is the short term limit value for sulphur dioxide exposure safe? Effects of controlled chamber exposure investigated with bronchoalveolar lavage. Sandström T, et al. **Br J Ind Med** 1989 Mar;46(3):200–3

Effects of REV 5901, a 5-lipoxygenase inhibitor and leukotriene antagonist, on pulmonary responses to platelet activating factor in the guinea-pig. Anderson G, et al. **Br J Pharmacol** 1988 Aug;94(4):1115–22

Effect of captopril on the bradykinin-induced release of prostacyclin from guinea-pig lungs and bovine aortic endothelial cells. de Nucci G, et al. **Br J Pharmacol** 1988 Nov;95(3):783–8

Limited interference of specific Paf antagonists with hyper-responsiveness to Paf itself of lungs from actively sensitized guinea-pigs. Pretolani M, et al. **Br J Pharmacol** 1989 Jun;97(2):433–42

Mechanism of action of platelet-activating factor on guinea-pig lung parenchyma strips. Jancar S, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1187–91

Pharmacology of L-660,711 (MK-571): a novel potent and selective leukotriene D4 receptor antagonist. Jones TR, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):17–28

Lack of influence of butylated hydroxytoluene on modification of lung microsome mediated aflatoxin B1–DNA binding: role of pulmonary glutathione S-transferase. Allameh A, et al. **Cancer Lett** 1988 Dec 1; 43(1–2):125–31

In vitro morphological changes induced by 4-(methylnitrosamino)-1-(3-pyridyl)-1-(butanone) in fetal hamster respiratory tract tissue. Joshi PA, et al. **Cancer Lett** 1989 Mar;44(3):173–8

Synergistic protection from lung damage by combining antithrombin-III and alpha 1-proteinase inhibitor in the E. coli endotoxemic sheep pulmonary dysfunction model. Redens TB, et al. **Circ Shock** 1988 Sep;26(1):15–26

Comparison of the cardiopulmonary responses to single bolus and continuous infusion of endotoxin in an ovine model. Traber DL, et al. **Circ Shock** 1989 Feb;27(2):123–38

Cardiovascular and pulmonary effects of human recombinant tumor necrosis factor in the conscious rat. Turner CR, et al. **Circ Shock** 1989 Aug;28(4):369–84

Effect of nedocromil sodium on down-regulation of pulmonary beta-adrenoceptors. Kioumis I, et al. **Clin Sci** 1989 Jun;76(6):599–602

Swine model of early adult respiratory distress syndrome induced by intravenous ethchlorvynol. Jebson PJ, et al. **Crit Care Med** 1989 Mar;17(3):255–60

Cellular and eicosanoid composition of bronchoalveolar lavage fluid in endotoxin protection against pulmonary oxygen toxicity. Klein J, et al. **Crit Care Med** 1989 Mar; 17(3):247–50

Effect of prazosin on the cardiopulmonary response to dopamine in awake lambs: comparison with phentolamine and tolazoline. Drummond WH, et al. **Dev Pharmacol Ther** 1988;11(5):297–305

Pulmonary toxicity of trichloroethylene in mice. Covalent binding and morphological manifestations. Forkert PG, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):106–13

Review, discussion, and summary: toxicology. Graham JA. **Environ Health Perspect** 1989 Feb;79:191–4

Effects of inhaled acids on lung biochemistry. Last JA. **Environ Health Perspect** 1989 Feb;79:115–9

Comparative toxicity of ambient air pollutants: some aspects related to lung defense. Schlesinger RB. **Environ Health Perspect** 1989 May;81:123–8

Factors affecting the response of lung clearance systems to acid aerosols: role of exposure concentration, exposure time, and relative acidity. Schlesinger RB. **Environ Health Perspect** 1989 Feb;79:121–6

The effect of dietary vitamin A on NO2 exposure on the hamster lung. Kim JC. **Environ Res** 1978 Aug;17(1):116–30

Rat lung reactivity to natural and man-made fibrous silicates following short-term exposure. Lemaire I, et al. **Environ Res** 1989 Apr;48(2):193–210

Accumulation of mixed mineral dusts in the lungs of rats during chronic inhalation exposure. McMillan CH, et al. **Environ Res** 1989 Apr;48(2):218–37

Potentiation of the expression of nitrogen dioxide-induced lung injury by postexposure exercise. Stavert DM, et al. **Environ Res** 1989 Feb;48(1):87–99

Enhanced pulmonary toxicity in smokers with germ-cell cancer treated with cis-platinum, vinblastine and bleomycin: a long-term follow-up. Hansen SW, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):733–6

Interaction of BAY K-8644 with effects of digoxin in the dog heart-lung preparation. Seifen E, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):109–17

Effects of atropine, acetylsalicylic acid, FPL 55712, and phentolamine on increased histamine responsiveness of cat lung strips under conditions of airway inflammation. Bánovčin P, et al. **Eur Respir J** 1989 Jun;2(6):517–21 (26 ref.)

Pulmonary densities during anaesthesia. An experimental study on lung morphology and gas exchange. Hedenstierna G, et al. **Eur Respir J** 1989 Jun;2(6):528–35

Effect of maternal hormone treatment on lung protein leakage and lung function of preterm newborn rabbits. Ikegami M, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(3):16s–20s

Extension of oxygen tolerance. Symposium in honor of Christian J. Lambertsen, MD. Philadelphia, Pennsylvania, May 26, 1987. Proceedings. **Exp Lung Res** 1988;14 Suppl:863–1058

Pulmonary limits of oxygen tolerance in man. Clark JM. **Exp Lung Res** 1988;14 Suppl:897–910

Extension of oxygen tolerance by treatment with endotoxin: means to improve its potential therapeutic safety in man. Frank L. **Exp Lung Res** 1988;14 Suppl:987–1003

Effects of aerosol exposures to cadmium chloride on the clearance of titanium dioxide from the lungs of rats. Greenspan BJ, et al. **Exp Lung Res** 1988;14(4):491–9

Dietary fish oil inhibits bleomycin-induced pulmonary fibrosis in the rat. Kennedy JI Jr, et al. **Exp Lung Res** 1989 Mar;15(2):315–29

Sex hormones influence growth and surfactant production in fetal lung explants. McMillan EM, et al. **Exp Lung Res** 1989 Mar;15(2):167–79

Effect of 2 ppm ozone exposure on rat lung lipid fatty acids. Rabinowitz JL, et al. **Exp Lung Res** 1988;14(4):477–89

Morphological study of the effects of ozone on rat lung. II. Long-term exposure. Hiroshima K, et al. **Exp Mol Pathol** 1989 Apr;50(2):270–80

Tissue culture and experimental carcinogenesis. Mohr U, et al. **Exp Pathol** 1989;36(4):221–31

Comparative effects of T-2 toxin and diacetoxyscirpenol on drug metabolizing enzymes in rat tissues. Galtier P, et al. **Food Chem Toxicol** 1989 Apr;27(4):215–20

Spontaneous lung chemiluminescence upon paraquat administration. Turrens JF, et al. **Free Radic Biol Med** 1988; 5(5–6):319–23

The effects of iron and desferrioxamine on the lung injury induced by intravenous bleomycin and hyperoxia. Hay JG, et al. **Free Radic Res Commun** 1987;4(2):109–14

Lung response to ultrafine Kevlar aramid synthetic fibrils following 2-year inhalation exposure in rats. Lee KP, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):1–20

The effect of prolonged occupational exposure to the low concentrations of nitrogen oxides in combination with ammonia on chronic bronchitis and the lung function. Jędrychowski W, et al. **G Ital Med Lav** 1987 May–Jul; 9(3–4):147–51

Bleomycin, vincristine, mitomycin C, and cis-platinum in gynecologic squamous cell carcinomas: a high incidence of pulmonary toxicity. Chambers SK, et al. **Gynecol Oncol** 1989 Mar;32(3):303–9

Oxatomide inhibits the release of chemical mediators from human lung tissues and from granulocytes. Manabe H, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):91–7

Effect of long-term administration of platelet-activating factor on pulmonary responsiveness and morphology in the guinea pig. Mencia-Huerta JM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):154–6

Anti-allergic effects of milrinone and sulmazole in isolated rat lungs in comparison with theophylline. Post MJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):1–5

Angiotensin-converting enzyme as a possible marker for lung toxicity in amiodarone-treated patients. Foresti V, et al. **Int J Clin Pharmacol Res** 1989;9(4):261–7

Lung function following exposure to, and recovery from, nitrogen dioxide. Davidson JT, et al. **Isr J Med Sci** 1967 May–Jun;3(3):470–4

A comparison of the effects of nedocromil sodium and beclomethasone dipropionate on pulmonary function, symptoms, and bronchial responsiveness in patients with asthma. Svendsen UG, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):224–31

Lung injury induced by short-term intermittent trimellitic anhydride (TMA) inhalation. Zeiss CR, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):219–23

Dimethylthiourea does not ameliorate reperfusion lung injury in dogs or rabbits. Bishop MJ, et al. **J Appl Physiol** 1988 Nov;65(5):2051–6

O.35 ppm O3 exposure induces hyperresponsiveness on 24-h reexposure to 0.20 ppm O3. Brookes KA, et al. **J Appl Physiol** 1989 Jun;66(6):2756–62

Acute transient SO2-induced airway hyperreactivity: effects of nedocromil sodium. Jackson DM, et al. **J Appl Physiol** 1988 Sep;65(3):1119–24

Hydroperoxide-induced chemiluminescence in rabbit lungs: role of arachidonic acid enzymes. Knoblauch AL, et al. **J Appl Physiol** 1988 Sep;65(3):1340–50

Role of oxidants, eicosanoids, and neutrophils in amphotericin B lung injury in rats. McDonnell TJ, et al. **J Appl Physiol** 1988 Nov;65(5):2195–206

Phorbol myristate acetate-induced injury of isolated perfused rat lungs: neutrophil dependence. Perry M, et al. **J Appl Physiol** 1988 Nov;65(5):2164–9

Catalase prevents prostanoid release and lung lipid peroxidation after endotoxemia in sheep. Seekamp A, et al. **J Appl Physiol** 1988 Sep;65(3):1210–6

Oleic acid reduces pulmonary microvascular sieving capacity in sheep. Smith L, et al. **J Appl Physiol** 1989 Jun; 66(6):2866–72

Pulmonary blood flow distribution after lobar oleic acid injury: a PET study. Velazquez M, et al. **J Appl Physiol** 1988 Nov;65(5):2228–35

Hypoxia increases glutathione redox cycle and protects rat lungs against oxidants. White CW, et al. **J Appl Physiol** 1988 Dec;65(6):2607–16

Polyethylene glycol-attached antioxidant enzymes decrease pulmonary oxygen toxicity in rats. White CW, et al. **J Appl Physiol** 1989 Feb;66(2):584–90

Cytokines increase rat lung antioxidant enzymes during exposure to hyperoxia. White CW, et al. **J Appl Physiol** 1989 Feb;66(2):1003–7

Immediate effect of verapamil on pulmonary functions in bronchial asthma. Sharma SK, et al. **J Asthma** 1987; 24(3):179–82

Changes in lung ATP concentration in the rat after low-level phosgene exposure. Currie WD, et al. **J Biochem Toxicol** 1987 Summer;2:105–14

Correlation between augmented resistance to influenza virus infection and histological changes in lung of mice treated with trehalose-6,6'-dimycolate. Azuma M, et al. **J Biol Response Mod** 1988 Oct;7(5):473–82

Amiodarone causes acute oxidant lung injury in ventilated and perfused rabbit lungs. Kennedy TP, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):23–36

The effect of human urogastrone on lung phospholipids in fetal rabbits. Haigh RM, et al. **J Dev Physiol** 1988 Oct; 10(5):433–43

Tumor necrosis factor/cachectin plays a key role in bleomycin-induced pneumopathy and fibrosis. Piguet PF, et al. **J Exp Med** 1989 Sep 1;170(3):655–63

Effect of spironolactone-hydrochlorothiazide on lung function in infants with chronic bronchopulmonary

dysplasia. Engelhardt B, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):619–24

Studies in the guinea-pig with ICI 185,282: a thromboxane A2 receptor antagonist. Birch J, et al. **J Pharm Pharmacol** 1988 Oct;40(10):706–10

Role of lipoxygenase metabolites for the hyper-responsiveness to platelet-activating factor of lungs from actively sensitized guinea pigs. Pretolani M, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):353–9

Effects of purified altertoxins I, II, and III in the metabolic communication V79 system. Boutin BK, et al. **J Toxicol Environ Health** 1989;26(1):75–81

Circulating factors that modify lung cell DNA synthesis following exposure to inhaled oxidants. I. Effect of serum and lavage on lung fibroblasts following exposure of adult rats to 1 ppm ozone. Tanswell AK, et al. **J Toxicol Environ Health** 1989;27(2):239–54

Endotoxin suppresses surfactant synthesis in cultured rat lung cells. Li JJ, et al. **J Trauma** 1989 Feb;29(2):180–8

Inhibitory effect of nicotine on benzo(a)pyrene elimination and marked pulmonary metabolism of nicotine in isolated perfused rat lung. Foth H, et al. **Klin Wochenschr** 1988;66 Suppl 11:98–104

Effect of superoxide dismutase on early radiation injury of lungs in the rat. Malaker K, et al. **Mol Cell Biochem** 1988 Dec;84(2):141–5

Accumulation of epidermal growth factor receptors in retinoic acid-treated fetal rat lung cells is due to enhanced receptor synthesis. Oberg KC, et al. **Mol Endocrinol** 1988 Oct;2(10):959–65

Acute pulmonary toxicity of bleomycin: DNA scission and matrix protein mRNA levels in bleomycin-sensitive and -resistant strains of mice. Harrison JH Jr, et al. **Mol Pharmacol** 1989 Aug;36(2):231–8

Bronchoconstrictor action of neuropeptide Y (NPY) in isolated guinea pig airways. Cadieux A, et al. **Neuropeptides** 1989 May-Jun;13(4):215–9

Lung volume changes during histamine-induced bronchoconstriction in recurrently wheezy infants. Maxwell DL, et al. **Pediatr Pulmonol** 1988;5(3):145–51

Combined effects of corticosteroid, thyroid hormones, and beta-agonist on surfactant, pulmonary mechanics, and beta-receptor binding in fetal lamb lung. Warburton D, et al. **Pediatr Res** 1988 Aug;24(2):166–70

Effects of lysozyme on spleen and lungs in mice with Lewis lung carcinoma. Ceschia V, et al. **Pharmacol Res Commun** 1988 Jul;20(7):615–6

The effect of morphine, naloxone, D- and L-aspartic acid on the brain and lung ACE in mice. Koyuncuoğlu H, et al. **Pharmacol Res Commun** 1983 Nov;15(10):969–78

Pulmonary toxicity of phosphorothioate impurities found in organophosphate insecticides. Imamura T, et al. **Pharmacol Ther** 1988;38(3):419–27 (51 ref.)

Halothane decreases uptake of noradrenaline in sliced rat lungs. Hede AR. **Pharmacol Toxicol** 1988 Aug;63(2):141–2

Sensory irritation and pulmonary irritation of C3–C7 n-alkylamines: mechanisms of receptor activation. Nielsen GD, et al. **Pharmacol Toxicol** 1988 Oct;63(4):293–304

Pulmonary complications of amiodarone toxicity. Dunn M, et al. **Prog Cardiovasc Dis** 1989 May-Jun;31(6):447–53 (33 ref.)

Mechanistic studies of tobacco carcinogenesis in mouse epidermis and lung tissues. Melikian AA, et al. **Prog Clin Biol Res** 1989;298:331–45

The influence of xanthines on the contractile responses of PGF2 alpha and PGD2 in human parenchymal strips. Napier FE, et al. **Prostaglandins** 1989 Aug;38(2):227–35

Loratadine, an antihistamine, blocks antigen- and ionophore-induced leukotriene release from human lung in vitro. Temple DM, et al. **Prostaglandins** 1988 Apr; 35(4):549–54

Indomethacin and LY171883 modify porcine cardiopulmonary responses to leukotrienes. Olson NC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):175–82

Pathology and glutathione status in 3-methylindole-treated rodents. Adams JD Jr, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):323–36

The mechanism of carbon tetrachloride induced pulmonary Clara cell damage: biochemical and morphologic studies. Yano T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec;62(3):483–93

Effect of glycerol treatment on pulmonary lipid metabolism in mice. Yano T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):417–20

Effects of hyperoxia and dimethylthiourea on neonatal pulmonary hemodynamics in piglets. Hoffmeister AC, et al. **Respir Physiol** 1989 May;76(2):139–48

Ozone-induced accelerated lung clearance of 99mTc-DTPA aerosol in conscious sheep. Hornof WJ, et al. **Respir Physiol** 1989 Sep;77(3):277–90

Effects of ammonia and histamine on lung irritant receptors in the rabbit. Matsumoto S. **Respir Physiol** 1989 Sep; 77(3):301–8

Structural and functional changes in lung tissue of mice fed with beta-aminopropionitrile fumarate, L-3-cis-hydroxyproline, and L-4-cis-hydroxyproline. Popow C, et al. **Respiration** 1988;54(2):132–8

Cell response in bronchoalveolar lavage fluid after sulfur dioxide exposure. Sandström T, et al. **Scand J Work Environ Health** 1989 Apr;15(2):142–6

Effect of ibuprofen on the pulmonary and systemic response to repeated doses of endotoxin. Demling RH, et al. **Surgery** 1989 Mar;105(3):421–9

Cardiovascular and pulmonary effects of beta-blocking agents: implications for their use in ophthalmology. Collignon P. **Surv Ophthalmol** 1989 Apr;33 Suppl:455–6; discussion 459–60

Beneficial effect of iloprost on early pulmonary function after lung preservation with modified eurocollins solution. Klepetko W, et al. **Thorac Cardiovasc Surg** 1989 Jun; 37(3):174–9

Effect of histamine on proliferation of normal human adult lung fibroblasts. Jordana M, et al. **Thorax** 1988 Jul; 43(7):552–8

Effect of methacholine induced bronchoconstriction on the pulmonary distribution and plasma pharmacokinetics of inhaled sodium cromoglycate in subjects with normal and hyperreactive airways. Richards R, et al. **Thorax** 1988 Aug; 43(8):611–6

Influence of breathing pattern on lung deposition and bronchodilator response to nebulised salbutamol in patients with stable asthma. Zainudin BM, et al. **Thorax** 1988 Dec; 43(12):987–91

Pretreatment with EDU decreases rat lung cellular responses to ozone. Bassett DJ, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):32–40

Inhaled cigarette smoke induces the formation of DNA adducts in lungs of rats. Bond JA, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):161–72

Comparative pneumotoxicity of cyclopentadienyl manganese tricarbonyl and methylcyclopentadienyl manganese tricarbonyl. Clay RJ, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):434–43

Morphogenesis of O,O,S-trimethyl phosphorothioate-induced pulmonary injury in mice. Durham SK, et al. **Toxicol Appl Pharmacol** 1988 Dec; 96(3):417–28

Long-term morphologic and biochemical changes induced by O,O,S-trimethyl phosphorothioate in the rat lung. Durham SK, et al. **Toxicol Appl Pharmacol** 1989 May; 98(3):465–74

Characterization of the oxidant generation by inflammatory cells lavaged from rat lungs following acute exposure to ozone. Esterline RL, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):229–39

Monokine-induced lung injury in rats: similarities to monocrotaline-induced pneumotoxicity. Gillespie MN, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):134–43

Comparison of acute ozone-induced nasal and pulmonary inflammatory responses in rats. Hotchkiss JA, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):289–302

Alteration of bronchoalveolar lavage cell populations following bleomycin treatment in mice. Janick-Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):465–73

Effect of cytotoxic monoclonal antibody depletion of T-lymphocyte subpopulations on bleomycin-induced lung damage in C57BL/6J mice. Janick-Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):474–84

Teratogenic effects of nitrofen on cellular and functional maturation of the rat lung. Lau C, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):412–22

Establishing aerosol exposure concentrations for inhalation toxicity studies. Lewis TR, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):377–83

Tolerance to multiple doses of the pulmonary toxicant, naphthalene. O'Brien KA, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):487–500

Amiodarone-induced pulmonary toxicity in rats: biochemical and pharmacological characteristics. Reasor MJ, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):124–33

Possible mechanism of chrysotile asbestos-stimulated superoxide anion production in guinea pig alveolar macrophages. Roney PL, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):132–44

Toxicity to alveolar macrophages in rats following parenteral injection of nickel chloride. Sunderman FW Jr, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):107–18

Enhancement of butylated hydroxytoluene-induced mouse lung damage by butylated hydroxyanisole. Thompson DC, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):115–21

Studies on the mechanism of enhancement of butylated hydroxytoluene-induced mouse lung toxicity by butylated hydroxyanisole. Thompson DC, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):122–31

Enhanced cancer metastasis after monocrotaline-induced lung injury. Vincic L, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):259–70

Pulmonary platelet sequestration is increased following monocrotaline pyrrole treatment of rats. White SM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):465–75

Pulmonary function responses of young and older adults to mixtures of O3, NO2 and PAN. Drechsler-Parks DM, et al. **Toxicol Ind Health** 1989 May;5(3):505–17

Effect of paraquat on lung calcium transport. Agarwal AK, et al. **Toxicol Lett** 1988 Sep;42(3):317–23

Concentration-dependent depletion of non-protein sulfhydryl (NPSH) content in lung, heart and liver tissue of rats and mice after acute inhalation exposure to butadiene. Deutschmann S, et al. **Toxicol Lett** 1989 Feb; 45(2-3):175–83

Changes in rat lung collagen after life-time treatment with vanadium. Kowalska M. **Toxicol Lett** 1989 May; 47(2):185–90

Pulmonary histopathology of rats following parenteral injections of nickel chloride. Knight JA, et al. **Toxicol Pathol** 1988;16(3):350–9

Biochemical responses of rat and mouse lung to inhaled nickel compounds. Benson JM, et al. **Toxicology** 1989 Aug; 57(3):255–66

Exacerbation of tallysomycin toxicity in rats by concurrent exposure to sublethal hyperoxia. Coursin DB, et al. **Toxicology** 1989 Apr;55(1-2):225–37

Effect of reserpine on N-methylthiobenzamide-induced pulmonary edema: role of lung norepinephrine and hypothermia. Gibbs LS, et al. **Toxicology** 1989 Mar; 54(3):311–21

Bleomycin and cyclophosphamide toxicity in mice with damaged lung tissue. Kehrer JP. **Toxicology** 1989 Jul 3; 57(1):69–82

A new monoclonal antibody to study mouse macrophage antigen during BHT-induced lung injury and repair. Kennel SJ, et al. **Toxicology** 1989 Apr;55(1-2):103–16

Polyamine synthesis in rat lungs injured with alpha-naphthylthiourea. Olson JW, et al. **Toxicology** 1989 May 15;55(3):317–26

Lung cell reactions in guinea pigs after inhalation of asbestos (amosite). Sjöstrand M, et al. **Toxicology** 1989 Jul 3; 57(1):1–14

Effects of nitrogen dioxide and ozone in combination on xenobiotic metabolizing activities of rat lungs. Takahashi Y, et al. **Toxicology** 1989 Jun 16;56(3):253–62

A selective decrease in the xenobiotic metabolizing activity of rat lungs by nitrogen dioxide exposures. Takahashi Y, et al. **Toxicology** 1989 Mar;54(3):281–96

Synergistic interaction of ozone and respirable aerosols on rat lungs. IV. Protection by quenchers of reactive oxygen species. Warren DL, et al. **Toxicology** 1988 Dec 16; 53(1):113–33

Evaluation of pulmonary toxicity induced by pepleomycin. Villani F, et al. **Tumori** 1988 Aug 31;74(4):429–32

Histologic and ultrastructural alterations in lungs of rats exposed to sub-lethal concentrations of hydrogen sulfide. Lopez A, et al. **Vet Pathol** 1988 Sep;25(5):376–84

Respiratory and pulmonary haemodynamic changes during experimental organophosphate poisoning in goats. Bakima M, et al. **Vet Res Commun** 1989;13(2):127–33

Monocrotaline pneumotoxicity in mice. Molteni A, et al. **Virchows Arch [B]** 1989;57(3):149–55

[The mechanism of aerosol effects on the lung] Nieminen MM, et al. **Duodecim** 1988;104(6):458–62 (21 ref.) **(Fin)**

[Microbiologic studies of the lung clearance of rats after aerogenous long term exposure to ammonia] Kastner P, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):191–8 (Eng. Abstr.) **(Ger)**

[The environment and the airways] Magnussen H, et al. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1416–21 (50 ref.) **(Ger)**

[The effect of air pollutants on cultured lung cells] Ebert W, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:259–62 (Eng. Abstr.) **(Ger)**

[The effect of hyperosmolar mixed solution of sodium chloride and beta 2 sympathomimetics on lung function in asthmatic children and adolescents] Schöni MH, et al. **Schweiz Med Wochenschr** 1988 Sep 24;118(38):1377–81 (Eng. Abstr.) **(Ger)**

[Air pollution emissions and changes in lung function] Marth E, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):439–48 (Eng. Abstr.) **(Ger)**

[Oncolytic action and pulmonary toxicity of bleomycin revisited] Lauta VM, et al. **Clin Ter** 1988 Mar 31; 124(6):465–82 (49 ref.) (Eng. Abstr.) **(Ita)**

[Inhibition of chemical mediator release from human leukocytes and lung fragments by TBX] Kawashima T, et al. **Arerugi** 1988 Jul;37(7):438–47 (Eng. Abstr.) **(Jpn)**

[Morphology of 3,4,5,3',4'-pentachlorinated biphenyl-induced change in canine lung] Nagata N, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):255–7 (Eng. Abstr.) **(Jpn)**

[Effects of pentazocine on pulmonary airway dynamics of the rabbit] Taguchi H, et al. **Masui** 1988 Nov; 37(11):1359–63 (Eng. Abstr.) **(Jpn)**

[The effects of nicotine on the synthesis and secretion of surfactant in the rabbit fetal lung] Nakamura K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1679–84 (Eng. Abstr.) **(Jpn)**

[Antiallergic effects of mequitazine. I. In vitro experiments] Kohno S, et al. **Nippon Yakurigaku Zasshi** 1988 Aug; 92(2):145–57 (Eng. Abstr.) **(Jpn)**

[Dynamics of the morphologic and cytoenzymatic changes in the lungs of rats of both sexes in acute cadmium chloride poisoning] Siegel A. **Med Pr** 1988;39(4):229–35 (Eng. Abstr.) **(Pol)**

[Morphometric analysis of the rat lung after exposure to xylene vapors] Stetkiewicz J, et al. **Med Pr** 1988; 39(5):297–308 (Eng. Abstr.) **(Pol)**

[Pulmonary complications of various drug use] Wieczorek U, et al. **Wiad Lek** 1988 Apr 1;41(7):443–6 (34 ref.) (Eng. Abstr.) **(Pol)**

[Morphobiochemical studies of the effect of inhalation of gasoline] Dolinskaia SI, et al. **Gig Sanit** 1989 Feb;(2):75–7 **(Rus)**

[Side effects of amiodarone on the lungs] Reingardene DI, et al. **Klin Med (Mosk)** 1988 Aug;66(8):36–9 (23 ref.) **(Rus)**

[Intrapulmonary administration of streptomycin in the treatment of destructive lower-lobe pulmonary tuberculosis] Skobelev VV. **Probl Tuberk** 1988;(6):40–3 (Eng. Abstr.) **(Rus)**

[Intrapulmonary administration of metipred in infectious-allergic bronchial asthma] Provotorov VM, et al. **Sov Med** 1989;(5):81–2 **(Rus)**

[Effect of antioxidants on the proliferation of human diploid cells at various phases of the culture growth] Aksiutina MS, et al. **Tsitologiia** 1988 Dec;30(12):1494–8 (Eng. Abstr.) **(Rus)**

[Effect of various combinations of antibacterial drugs on enzyme activity in guinea pig tissues] Kruchakova FA, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):356–60 (Eng. Abstr.) **(Rus)**

[Influence of endogenous catecholamines on responses of rat lung to beta-adrenergic agonists] Candenas ML, et al. **Rev Esp Fisiol** 1988 Dec;44(4):375–9 (Eng. Abstr.) **(Spa)**

EMBRYOLOGY

Corticotropin-releasing hormone in amniotic fluid during gestation and labor and in relation to fetal lung maturation. Laatikainen TJ, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):891–5

Ovine fetal lung fluid response to intravenous saline solution infusion: fetal atrial natriuretic factor effect. Sherman DJ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1347–52

Discordant accelerated pulmonary maturation after adrenocorticotropic hormone-induced labor in twin sheep fetuses. Vilos GA, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1321–6

Acute effects of partial compression of ductus arteriosus on fetal pulmonary circulation. Abman SH, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H626–34

Thyroid inhibition and developmental increases in fetal rat lung antioxidant enzymes. Sosenko IR, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L94–9

NHLBI workshop summary. Developmental neurobiology of respiratory control. Chernick V, et al. **Am Rev Respir Dis** 1989 May;139(5):1295–301 (0 ref.)

Nonimmune-mediated phagocytosis by "premedullary" lung macrophages: effects of concanavalin A, tuftsin, and macrophage-inhibitory peptide. Sorokin SP, et al. **Anat Rec** 1989 Jan;223(1):55–61

Ultrastructural features of type II alveolar epithelial cells in early embryonic mouse lung. Ten Have-Opbroek AA, et al. **Anat Rec** 1988 Aug;221(4):846–53

Mothers who smoke and the lungs of their offspring. Moessinger AC. **Ann N Y Acad Sci** 1989;562:101–4

Immature alveolar/blood barrier and low disaturated phosphatidylcholine in fetal lung after intrauterine exposure to O,O,S-trimethylphosphorothioate. Koizumi A, et al. **Arch Toxicol** 1989;63(4):331–5

Comparison of pharyngeal aspiration and amniotic fluid surfactant phospholipids for prediction of RDS. Dhall K, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep; 14(3):347–54

Epidermal growth factor influences the developmental clock regulating maturation of the fetal lung fibroblast. Nielsen HC. **Biochim Biophys Acta** 1989 Jul 11;1012(2):201–6

Maternal treatments with corticosteroids and/or T3 change lung volumes and rupture pressures in preterm rabbits. ElKady T, et al. **Biol Neonate** 1988;54(4):203–10

Effects of antenatal hydrocortisone on tidal volumes in spontaneously breathing preterm newborn rabbits. Possible mediation by adrenal catecholamines. Hedner T, et al. **Biol Neonate** 1988;54(4):211–7

Age-dependent effects of beta 2-adrenergic-stimulating drugs on fetal rabbit lung liquid and adrenal catecholamines. Lundell KH, et al. **Biol Neonate** 1988; 54(3):144–50

Effect of premature delivery on rat lung retinol (vitamin A) and retinyl ester stores. Zachman RD, et al. **Biol Neonate** 1988;54(5):285–8

Human amniotic fluid urogastrone (epidermal growth factor) and fetal lung phospholipids. Haigh R, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):171–8

Lung development in the second trimester. Wigglesworth JS. **Br Med Bull** 1988 Oct;44(4):894–908 (52 ref.)

Physiological factors in fetal lung growth. Kitterman JA. **Can J Physiol Pharmacol** 1988 Aug;66(8):1122–8 (86 ref.)

Stage-specific expression of SSEA-1-related antigens in the developing lung of human embryos and its relation to the distribution of these antigens in lung cancers. Miyake M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7150–8

Embryonic mouse lung morphogenesis and type II cytodifferentiation in serumless, chemically defined medium using prolonged in vitro cultures. Jaskoll TF, et al. **Cell Differ** 1988 Jul;24(2):105–17

Multicenter evaluation of TDx test for assessing fetal lung maturity. Russell JC, et al. **Clin Chem** 1989 Jun; 35(6):1005–10

Ultrastructural and biochemical evidence of glycogen in the developing lung of the chick embryo: possible contribution to surfactant. Hylka VW. **Comp Biochem Physiol [A]** 1989; 93(4):677–83

Localization of epidermal growth factor precursor in tooth and lung during embryonic mouse development. Snead ML, et al. **Dev Biol** 1989 Aug;134(2):420–9

Oligohydramnios in the second trimester of pregnancy, fetal breathing and normal lung growth. Biott M, et al. **Early Hum Dev** 1988 May;17(1):37–40

Preliminary report of transabdominal amniocentesis for the determination of pulmonary maturity in an equine population. Williams MA, et al. **Equine Vet J** 1988 Nov; 20(6):457–8

Lung surfactant enhancement in utero. Di Renzo GC, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):1–11 (43 ref.)

Assessment of foetal lung maturity. Cosmi EV, et al. **Eur Respir J [Suppl]** 1989 Mar;2(3):40s–49s (52 ref.)

Requirements of perinatal prevention and treatment of respiratory distress syndrome. Di Renzo GC, et al. **Eur Respir J [Suppl]** 1989 Mar;2(3):68s–72s

Foetal pulmonary maturation in pregnancies complicated by diabetes and Rh immunization. Pardi G, et al. **Eur Respir J [Suppl]** 1989 Mar;2(3):50s–52s

Transferrin stimulates proteoglycan accumulation by fetal lung cells in culture. Skinner SJ, et al. **Exp Lung Res** 1989 Mar;15(2):269–83

Reductionism, creativity, and the next hypothesis [comment] Smith BT. **Exp Lung Res** 1989 May;15(3):331–4. **Comment on:** Exp Lung Res 1989 May;15(3):335–43

Synergism of cortisol and thyrotropin-releasing hormone in lung maturation in fetal sheep. Liggins GC, et al. **J Appl Physiol** 1988 Oct;65(4):1880–4

Identification of surfactant proteolipid SP-B in human surfactant and fetal lung. Weaver TE, et al. **J Appl Physiol** 1988 Aug;65(2):982–7

Transcriptional regulation of the gene encoding the major surfactant protein (SP-A) in rabbit fetal lung. Boggaram V, et al. **J Biol Chem** 1988 Dec 15;263(35):19060–5

Regulation of expression of the gene encoding the major surfactant protein (SP-A) in human fetal lung in vitro. Disparate effects of glucocorticoids on transcription and on mRNA stability. Boggaram V, et al. **J Biol Chem** 1989 Jul 5;264(19):11421–7

Development of surface membrane characteristics of "premedullary" macrophages in organ cultures of embryonic rat and hamster lungs. Sorokin SP, et al. **J Histochem Cytochem** 1989 Mar;37(3):365–76

Glucocorticoid hormone effect on transplacental carcinogenesis and lung differentiation: influence of histocompatibility-2 complex. Oomen LC, et al. **J Natl Cancer Inst** 1989 Apr 5;81(7):512–7

In utero thyroxine therapy for the induction of fetal lung maturity: long term effects. Barkai G, et al. **J Perinat Med** 1988;16(2):145–8

In-vivo NMR spectroscopy of the fetal lung in guinea-pigs. Langner K, et al. **J Perinat Med** 1988;16(5–6):447–52

Clinical assessment of fetal lung maturity in high risk pregnancies using fluorescence polarization [letter] Salmona M, et al. **J Perinat Med** 1988;16(3):257–8

Lung maturational agents and surfactant treatments: are they complementary in preterm infants? Jobe AH. **J Perinatol** 1989 Mar;9(1):14–8

The amniostat immunologic slide test for phosphatidylglycerol: a comparison of efficacy among screening tests for fetal lung maturity. Nguyen H, et al. **J Perinatol** 1987 Winter;7(1):16–20

Characterization of the glucocorticoid receptor in fetal rat lung during development: influence of proteolytic activity. Brönnegård M, et al. **J Steroid Biochem** 1988 Nov; 31(5):809–17

Pulmonary development in the fetal lamb with severe bladder outlet obstruction and oligohydramnios: a morphometric study. Docimo SG, et al. **J Urol** 1989 Aug;142(2 Pt 2):657–60; discussion 667–8

Fetal lung development. Vail, Colorado, June 14–18, 1987. **Mead Johnson Symp Perinat Dev Med** 1987;(30):1–58

Glucocorticoid regulation of lung maturation. Ballard PL. **Mead Johnson Symp Perinat Dev Med** 1987;(30):22–7 (25 ref.)

Characterization of transmitted motion in fetal lung: quantitative analysis. Adler R, et al. **Med Phys** 1989 May-Jun;16(3):333–7

Fetal lung maturation: the combined use of corticosteroids and thyrotropin-releasing hormone. Morales WJ, et al. **Obstet Gynecol** 1989 Jan;73(1):111–6

Interpretation of indices of fetal pulmonary maturity by gestational age. VanMarter LJ, et al. **Paediatr Perinat Epidemiol** 1988 Oct;2(4):360–4

Normal lung growth following antenatal dexamethasone treatment for respiratory distress syndrome. Wiebicke W, et al. **Pediatr Pulmonol** 1988;5(1):27–30

Prenatal relationship of surfactant lipid and protein constituents in infants with respiratory distress syndrome: a preliminary communication. Wilbur DB, et al. **Pediatr Pulmonol** 1989;6(2):109–12

Inositol and glucocorticoid in the development of lung stability in male and female rabbit fetuses. Anceschi MM, et al. **Pediatr Res** 1988 Nov;24(5):617–21

Structural maturation of the human fetal lung: a morphometric study of the development of air-blood barriers. DiMaio M, et al. **Pediatr Res** 1989 Aug;26(2):88–93

Vitamin K-dependent carboxylase activity in fetal rat lung: developmental effects of dexamethasone and triiodothyronine. Gallaher KJ, et al. **Pediatr Res** 1989 May; 25(5):530–4

Ontogeny of epidermal growth factor receptor/kinase and of lipocortin-1 in the ovine lung. Johnson MD, et al. **Pediatr Res** 1989 May;25(5):535–41

The effect of experimental maternal hypoxia on fetal lung growth. Larson JE, et al. **Pediatr Res** 1988 Aug;24(2):156–9

Lack of sex differences in antioxidant enzyme development in the fetal rabbit lung. Sosenko IR, et al. **Pediatr Res** 1989 Jul;26(1):16–9

Mechanical properties of fetal minipig lungs after substitution of surfactant with fluorocarbon and dipalmitoylphosphatidylcholine. Wuthe J, et al. **Res Exp Med (Berl)** 1988;188(4):247–53

Amniotic fluid phospholipids and foetal lung maturation. Zapata A, et al. **Scand J Clin Lab Invest** 1988 Feb; 48(1):39–43

Prevention of respiratory distress syndrome. Moya FR, et al. **Semin Perinatol** 1988 Oct;12(4):348–58 (126 ref.)

[The use of an enzyme method for determining phosphatidylglycerol in the amniotic fluid and an assessment of its reliability for predicting fetal lung maturity] Lalchev Z, et al. **Akush Ginekol (Sofiia)** 1988; 27(6):26–30 (Eng. Abstr.) **(Bul)**

[Comparative evaluation of the black foam film method for determining lung surfactant maturity in the newborn infant] Zhekova N, et al. **Akush Ginekol (Sofiia)** 1989;28(2):31–5 (Eng. Abstr.) **(Bul)**

[Critical evaluation of various methods of determining markers of fetal maturity in amniotic fluid] Möller U, et al. **Zentralbl Gynakol** 1988;110(24):1574–82 (Eng. Abstr.) **(Ger)**

[Comparison of the effect of Lasolvan and betamethasone on lung maturity of fetal rabbits] Stepińska J, et al. **Zentralbl Gynakol** 1989;111(6):379–84 (Eng. Abstr.) **(Ger)**

[Diagnosis of pulmonary maturity in the fetus] Massobrio M, et al. **Ann Ostet Maria Vittoria Torino** 1987–88;30(1):9–18 (Eng. Abstr.) **(Ita)**

[Determination of fetal pulmonary maturity using gas chromatographic analysis of fatty acids in the amniotic fluid. Statistic reliability of the method] Diani F, et al. **Minerva Ginecol** 1989 Jun;41(6):257–60 (Eng. Abstr.) **(Ita)**

[Diagnostic value of the hydrolytic method of determining the degree of fetal lung maturity] Torkhovskaia TI, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):28–31 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Lesions and repair of cells of maternal mice after valproic acid (VPA) treatment on day 8 of pregnancy: an enzyme histochemical analysis. Gossrau R, et al. **Acta Histochem (Jena)** 1989;86(1):23–32

Eosinophilic leucocytes and arylsulfatase activity in bronchoalveolar lavage fluid of patients with bronchial asthma. Tanizaki Y, et al. **Acta Med Okayama** 1988 Aug; 42(4):227–30

Action of epsilon-aminocaproic acid on the proteolysis system during experimental influenza in mice. Puzis LE, et al. **Acta Virol (Praha)** 1988 Nov;32(6):515–21

The role of chymase in ionophore-induced histamine release from human pulmonary mast cells. Hultsch T, et al. **Adv Exp Med Biol** 1988;240:133–6

Partial purification and characterization of leukotriene C4 synthase from guinea pig lung. Izumi T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:90–3

Prostaglandin omega-hydroxylase and related cytochrome P-450. Kusunose M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:343–6

Pulmonary P-450-mediated eicosanoid metabolism and regulation in the pregnant rabbit. Masters BS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:335–8

Cloning, nucleotide sequence and gene expression of bovine lung prostaglandin F synthetase. Watanabe K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:462–5

Endotoxin increases lung Cu,Zn superoxide dismutase mRNA: O2 raises enzyme synthesis. Iqbal J, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L61–4

Pulmonary angiotensin-converting enzyme activity in the oxygen-toxic sheep. Howell RE, et al. **Am Rev Respir Dis** 1988 Jul;138(1):160–6

Pulmonary lysozyme—a secretory protein of type II pneumocytes in the rat. Singh G, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1261–7

Hyperoxia and xanthine dehydrogenase/oxidase activities in rat lung and heart. Elsayed NM, et al. **Arch Biochem Biophys** 1989 Sep;273(2):281–6

Substrate specificity and inhibitors of a capillary injury-related protease from sheep lung lymph. Orlowski M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):125–36

Essential histidine residues in lysolecithin:lysolecithin acetyltransferase from rabbit lung. Pérez-Gil J, et al. **Arch Biochem Biophys** 1989 Mar;269(2):562–8

Purification and biochemical characterization of the rabbit pulmonary glutathione S-transferase: stereoselectivity and activity toward pyrene 4,5-oxide. Serabjit-Singh CJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):184–94

The in vitro effects of alkanes, alcohols, and ketones on rat lung cytochrome P450-dependent alkoxyphenoxazone dealkylase activities. Rabovsky J, et al. **Arch Toxicol** 1989; 63(1):13–7

Molecular cloning of a cDNA coding for 70 kilodalton subunit of soluble guanylate cyclase from rat lung. Nakane M, et al. **Biochem Biophys Res Commun** 1988 Dec 30;

157(3):1139–47

Evidence of a pH–dependent conformational change at the active site of lysolecithin:lysolecithin acyltransferase from rabbit lung. Pérez–Gil J, et al. **Biochem Int** 1989 Apr; 18(4):803–12

A Ca2+–sensitive cyclic–3',5'–nucleotide phosphodiesterase from sheep lung modulated by a tightly bound endogenous calmodulin. Radhakrishnan TS, et al. **Biochem Int** 1988 Nov;17(5):919–25

Temperature and thiol–induced desensitization of a Ca2+–sensitive cyclic–3',5'–nucleotide phosphodiesterase from sheep lung. Radhakrishnan TS, et al. **Biochem Int** 1988 Nov;17(5):927–33

The effects of Triton X–100 and chlorpromazine on the Mg2+–dependent and Mg2+–independent phosphatidate phosphohydrolase activities of rat lung. Walton PA, et al. **Biochem J** 1989 Jul 15;261(2):673–8

Evidence for metabolism of 3–methylindole by prostaglandin H synthase and mixed–function oxidases in goat lung and liver microsomes. Formosa PJ, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4359–66

Stabilization of ornithine decarboxylase in mouse liver and lung by methylglyoxal bis(cyclohexylamidinohydrazone). Hibasami H, et al. **Biochem Pharmacol** 1988 Nov 1; 37(21):4117–20

Differential forskolin activation of rat heart and lung adenylate cyclase. Dependence on membrane–protein interactions. Jackman GP, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1091–5

In situ iodination of angiotensin–converting enzyme and other pulmonary endothelial membrane proteins. Merker M, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):983–92

Identification of a novel P450 expressed in rat lung: cDNA cloning and sequence, chromosome mapping, and induction by 3–methylcholanthrene. Kimura S, et al. **Biochemistry** 1989 May 2;28(9):3798–803

Site–directed inactivation of human lung acidic glutathione S–transferase by 1–chloro–2,4–dinitrobenzene in the absence of glutathione. Corrigall AV, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):399–404

The species of acyl–CoA in subcellular fractions of type II cells isolated from adult rat lung and their incorporation into phosphatidic acid. den Breejen JN, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):277–82

Human skin tryptase: purification, partial characterization and comparison with human lung tryptase. Harvima IT, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):71–80

Phosphofructokinase in alveolar type II cells isolated from fetal and adult rat lung. Heesbeen EC, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):388–94

Activities of enzymes of phospholipid and fatty acid synthesis in fetal and adult rat type II pneumocytes. Kresch MJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):173–7

Phospholipases A2 and C of human lung; subcellular distribution and substrate selectivity. Yeats DA, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):189–95

Cell specific differences in O6–methylguanine–DNA methyltransferase activity and removal of O6–methylguanine in rat pulmonary cells. Belinsky SA, et al. **Carcinogenesis** 1988 Nov;9(11):2053–8

Ornithine decarboxylase basal activity in liver, oesophagus and lung of vitamin A deficient rats, and the effect of retinoic acid. Daliam A, et al. **Carcinogenesis** 1988 Dec; 9(12):2161–4

Differential induction of fetal mouse liver and lung cytochromes P–450 by beta–naphthoflavone and 3–methylcholanthrene. Miller MS, et al. **Carcinogenesis** 1989 May;10(5):875–91

Methyl linoleate ozonide as a substrate for rat glutathione S–transferases: reaction pathway and isoenzyme selectivity. Vos RM, et al. **Chem Biol Interact** 1989;69(2–3):269–78

Purification of acidic glutathione S–transferases from human lung, placenta and erythrocyte and the development of a specific radioimmunoassay for their measurement. Howie AF, et al. **Clin Chim Acta** 1988 Sep 30;177(1):65–75

The distribution of lipoprotein lipase (clearing factor lipase) activity in the adiposal, muscular and lung tissues of ten animal species. Cryer A, et al. **Comp Biochem Physiol [B]** 1979;63(4):501–5

Distinct pulmonary and hepatic forms of flavin–containing monooxygenase in sheep. Williams DE, et al. **Comp Biochem Physiol [B]** 1989;93(2):465–70

Effect of cadmium on pulmonary and renal microsomal drug metabolizing enzymes of the guinea–pig. Karakaya A, et al. **Comp Biochem Physiol [C]** 1988;90(1):241–4

Distribution of microsomal monooxygenases in the rabbit respiratory tract. Sabourin PJ, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):557–62

The influence of inhaled formaldehyde on rat lung cytochrome P450. Dallas CE, et al. **Environ Res** 1989 Jun; 49(1):50–9

Frequent derepression of G6PD and HPRT on the marsupial inactive X chromosome associated with cell proliferation in vitro. Migeon BR, et al. **Exp Cell Res** 1989 Jun; 182(2):597–609

Effects of corticosteroids, prostaglandin E2, and beta–agonists on adenylate cyclase activity in fetal rat lung fibroblasts and type II epithelial cells [see comments] Skinner SJ, et al. **Exp Lung Res** 1989 May;15(3):335–43. **Comment in:** Exp Lung Res 1989 May;15(3):331–4

Effects of centrophenoxine on cholinephosphotransferase activity in maternal and fetal guinea pig lung. Stith IE, et al. **Exp Lung Res** 1989 Jul;15(4):587–96

Cholinephosphate cytidylyltransferase in fetal rat lung cells: activity and subcellular distribution in response to dexamethasone, triiodothyronine, and fibroblast–conditioned medium. Viscardi RM, et al. **Exp Lung Res** 1989 Mar;15(2):223–37

Immunoelectron–microscopic demonstration of elastase in emphysematous lungs of tight–skin mice. de Santi MM, et al. **Exp Mol Pathol** 1989 Aug;51(1):18–30

Effects of intratracheal administration of xanthine plus xanthine oxidase on lung antioxidant enzymes, lipid peroxidation, and collagen in hamsters. Giri SN, et al. **Exp Mol Pathol** 1988 Dec;49(3):395–409

Regulation of a rat lung protein tyrosine kinase activity by reversible phosphorylation/dephosphorylation. Srivastava AK, et al. **FEBS Lett** 1988 Sep 26;238(1):156–60

Age–dependent resistance to the toxic effects of paraquat in relation to superoxide dismutase activity in rat lung. Petrović VM, et al. **Free Radic Res Commun** 1986; 1(5):305–9

Endocrine control of cytosolic factors stimulating adenylate cyclase in rat lung. Chaudhary KC, et al. **Horm Metab Res** 1988 Oct;20(10):624–9

Mechanisms of fibre–induced superoxide release from alveolar macrophages and induction of superoxide dismutase in the lungs of rats inhaling crocidolite. Mossman BT, et al. **IARC Sci Publ** 1989;(90):81–92

Release of elastase from purified human lung mast cells and basophils. Identification as a Hageman factor cleaving enzyme. Meier HL, et al. **Inflammation** 1989 Jun; 13(3):295–308

beta–N–acetylhexosaminidase isoenzymes during chick embryo development. Beccari T, et al. **Int J Biochem** 1989; 21(7):769–76

Comparison of highly purified sheep liver and lung NADPH–cytochrome P–450 reductases by the analysis of kinetic and catalytic properties. Işcan MY, et al. **Int J Biochem** 1988;20(11):1189–96

Erdosteine protection from cigarette smoke–induced loss of alpha 1–antitrypsin activity in rat lungs. Biagi GL, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):235–7

Development of O2 tolerance in rabbits with no increase in antioxidant enzymes. Baker RR, et al. **J Appl Physiol** 1989 Apr;66(4):1679–84

Rat lung antioxidant enzyme activities and their specific proteins during hyperoxia. Crouch LS, et al. **J Appl Physiol** 1988 Aug;65(2):797–804

Leukotriene A4 hydrolase from guinea pig lung: the presence of two catalytically active forms. Bito H, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):261–4

Expression of four phenobarbital–inducible cytochrome P–450s in liver, kidney, and lung of rats. Imaoka S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):939–45

Differential stimulation of rat lung particulate guanylate cyclase activity by atrial natriuretic peptide and sodium nitroprusside. Iwasa F, et al. **J Biochem (Tokyo)** 1989 May; 105(5):697–9

Chromatographic and catalytic properties of multiple forms of rabbit pulmonary cytochromes P–450. Ueng TH, et al. **J Biochem Toxicol** 1988 Winter;3:343–52

Enzymatic conversion of prostaglandin H2 to prostaglandin F2 alpha by aldehyde reductase from human liver: comparison to the prostaglandin F synthetase from bovine lung. Hayashi H, et al. **J Biol Chem** 1989 Jan 15; 264(2):1036–40

Prostaglandin and fatty acid omega– and (omega–1)–oxidation in rabbit lung. Acetylenic fatty acid mechanism–based inactivators as specific inhibitors. Muerhoff AS, et al. **J Biol Chem** 1989 Jan 15;264(2):749–56

Rat lung Cu,Zn superoxide dismutase. Isolation and sequence of a full–length cDNA and studies of enzyme induction. Hass MA, et al. **J Clin Invest** 1989 Apr;83(4):1241–6

Interaction of angiotensin I–converting enzyme with two potent tricyclic inhibitors. Giroux E, et al. **J Enzym Inhib** 1989;2(4):269–77

High yield enzymatic conversion of intravascular leukotriene A4 in blood–free perfused lungs. Grimminger F, et al. **J Immunol** 1988 Oct 1;141(7):2431–6

Monoclonal antibodies to angiotensin–converting enzyme: a powerful tool for lung and vessel studies. Danilov S, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:165–70

Effect of pyridoxamine on semicarbazide–sensitive amine oxidase activity of rabbit lung and heart. Buffoni F, et al. **J Pharm Pharmacol** 1989 Jul;41(7):469–73

Phosphatidic acid phosphatase in neonatal rat lung: effects of prenatal dexamethasone or terbutaline treatment on basal activity and on responsiveness to beta adrenergic stimulation. Kudlacz EM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):236–40

Effect of ethanol, carbon tetrachloride, and methyl ethyl ketone on butanol oxidase activity in rat lung and liver. Carlson GP. **J Toxicol Environ Health** 1989;27(2):255–61

Differential effects of ibuprofen, indomethacin, and meclofenamate on prostaglandin endoperoxide H2 metabolism. Mayeux PR, et al. **Mol Cell Biochem** 1989 May 4;87(1):41–6

Primary structures of cytochrome P–450 isozyme 5 from rabbit and rat and regulation of species–dependent expression and induction in lung and liver: identification of cytochrome P–450 gene subfamily IVB. Gasser R, et al. **Mol Pharmacol** 1989 May;35(5):617–25

The nucleotide sequence of the cDNA encoding the human lung protein phosphatase 2A beta catalytic subunit. Hemmings BA, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11366

The nucleotide sequence of the cDNA encoding the human lung protein phosphatase 2A alpha catalytic subunit. Stone SR, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11365

The kallikrein kinin system in pulmonary lavage fluid of reserpinized rats. Catanzaro OL, et al. **Pharmacol Res Commun** 1988 Aug;20(8):685–91

NAD(P)–linked aromatic aldehydes preferring cytoplasmic aldehyde dehydrogenases in the rat. Constitutive and inducible forms in liver, lung, stomach and intestinal mucosa. Koivusalo M, et al. **Prog Clin Biol Res** 1989; 290:19–33

Prostaglandin F synthetase—a dual function enzyme. Watanabe K, et al. **Prog Clin Biol Res** 1989;290:351–64

Purification and characterization of leukotriene A4 epoxide hydrolase from dog lung. Manganaro F, et al. **Prostaglandins** 1988 Dec;36(6):859–74

Characterization of a phospholipase A2 in hamster lung and in vitro and in vivo effects of bleomycin on this enzyme. Wang Q, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):85–92

Lung angiotensin converting enzyme activity in rats with differing susceptibilities to chronic hypoxia. Jederlinic P, et al. **Thorax** 1988 Sep;43(9):703–7

Antileucoprotease in the developing fetal lung. Willems LN, et al. **Thorax** 1988 Oct;43(10):784–6

Pulmonary indoleamine 2,3–dioxygenase activity and its significance in the response of rats, mice, and rabbits to oxidative stress. Daley–Yates PT, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):222–32

Glutathione metabolism and utilization of external thiols by cigarette smoke–challenged, isolated rat and rabbit lungs. Joshi UM, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):324–35

Induction of pulmonary and hepatic cytochrome P–450 species by coal fly ash inhalation in rats. Chauhan SS, et al. **Toxicology** 1989 May 31;56(1):95–105

Proliferation–associated expression of DNA methyltransferase in human embryonic lung cells. Papadopoulos T, et al. **Virchows Arch [B]** 1989;56(6):371–5

[Elastases and pulmonary pathologies] Lafuma C. **Pathol Biol (Paris)** 1988 Nov;36(9):1124–32 (41 ref.) (Eng. Abstr.) **(Fre)**

[The role of elastolytic enzymes and smoking in the pathogenesis of emphysema] Szemenyei K. **Morphol Igazsagugyi Orv Sz** 1989 Jan;29(1):30–8 (87 ref.) (Eng. Abstr.) **(Hun)**

[Changes in the activity of angiotensin–converting enzyme of the lung and systemic hemodynamics in spontaneously hypertensive rats under the effect of galvanic current] Karpitskiĭ VV, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):10–3 (Eng. Abstr.) **(Rus)**

[Specific accumulation of monoclonal antibodies against angiotensin–converting enzyme in the rat lung] Danilov SM, et al. **Dokl Akad Nauk SSSR** 1988;301(4):1003–7 **(Rus)**

[Proteinases in the bronchopulmonary apparatus of rats with bronchial anaphylaxis] Komov VP, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):72–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Rat lung lectin gene expression is regulated developmentally and by dexamethasone. Clerch LB, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C501–5

Postnatal stimulation of rat surfactant protein A synthesis by dexamethasone. Floros J, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):L137–43

Postpneumonectomy compensatory lung growth. Cagle PT, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1314–26 (89 ref.)

Postpneumonectomy compensatory lung growth [letter] Laros CD, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1569–70

Tissue–specific expression of the mammalian bombesin gene. Sunday ME. **Ann N Y Acad Sci** 1988;547:95–113

Lung glycogen metabolism in suckling rats: a comparative study. Maritz GS. **Biol Neonate** 1988;54(2):100–6

Accelerating and retarding effects of dexamethasone on the development of the avian lung. Wittmann J, et al. **Dev Pharmacol Ther** 1989;12(3):153–61

Collagen and non–collagen protein synthesis in developing lung exposed to tobacco smoke. Garrett RJ. **Environ Res** 1978 Oct;17(2):205–15

Somatomedin–C/insulinlike growth factor I (Sm–C/IGF–I) and insulinlike growth factor II (IGF–II) mRNAs during lung development in the rat. Davenport ML, et al. **Exp Lung Res** 1988;14(5):607–18

Immunohistochemical analysis of calcitonin and calcitonin gene–related peptide in human lung. Tsutsumi Y. **Hum Pathol** 1989 Sep;20(9):896–902

Mechanism of improvement in pulmonary gas exchange during growth in awake piglets. Escourrou PJ, et al. **J Appl Physiol** 1988 Sep;65(3):1055–61

Relationship between maximal expiratory flows and lung volumes in growing humans. Martin TR, et al. **J Appl Physiol** 1988 Aug;65(2):822–8

Long–term consequences of compensatory lung growth. Thurlbeck WM, et al. **J Appl Physiol** 1989 Jun;66(6):2891–4

Trophic control of lung development by sympathetic

neurons: effects of neonatal sympathectomy with 6-hydroxydopamine. Slotkin TA, et al. **J Dev Physiol** 1988 Dec;10(6):577–90

The effect of age on postpneumonectomy growth in rabbits. Cagle PT, et al. **Pediatr Pulmonol** 1988;5(2):92–5

Long-term lung function is unaffected by antenatal dexamethasone treatment [letter] Silverman M. **Pediatr Pulmonol** 1989;6(3):210–1

Effects of protein deprivation from the neonatal period on lung collagen and elastin in the rat. Kalenga M, et al. **Pediatr Res** 1989 Aug;26(2):125–7

Delayed lung maturation in the macrosomic offspring of genetically determined diabetic (db/+) mice. Lawrence S, et al. **Pediatr Res** 1989 Feb;25(2):173–9

Fetal lung growth: influence of maternal exposure to cold and exercise in rats. Faridy EE, et al. **Respir Physiol** 1989 Mar;75(3):309–25

IMMUNOLOGY

Involvement of peptidoleukotrienes in antigen–dependent thromboxane (TX) synthesis in IgG1–sensitized guinea pig lungs. Cheng JB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:187–90

The lung and primary immunodeficiency. Cantani A, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):429–37 (64 ref.)

Immune mediators increase adherence of T–lymphocytes to human lung fibroblasts. Hampson F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C336–40

Pathogenesis of naturally acquired bovine respiratory syncytial virus infection in calves: evidence for the involvement of complement and mast cell mediators. Kimman TG, et al. **Am J Vet Res** 1989 May;50(5):694–700

Localized immune memory in the lung. Bice DE, et al. **Am Rev Respir Dis** 1988 Sep;138(3):565–71

Characterization of bronchoalveolar lymphocytes during a specific antibody–forming cell response in the lungs of mice. Curtis JL, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):393–400

Expression of Ia by murine alveolar macrophages is upregulated during the evolution of a specific immune response in pulmonary parenchyma. Kaltreider HB, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1411–6

Active immunization induces lung hyperresponsiveness in the guinea pig. Pharmacologic modulation and triggering role of the booster injection. Pretolani M, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1572–8

Increased pulmonary gamma interferon production in asbestosis. Robinson BW, et al. **Am Rev Respir Dis** 1988 Aug;138(2):278–83

Dendritic cells from rat lung are potent accessory cells. Rochester CL, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):121–8

Local complement activation, thromboxane–mediated vasoconstriction, and vascular leakage in isolated lungs. Role of the terminal complement sequence. Seeger W, et al. **Am Rev Respir Dis** 1989 Jan;139(1):88–99

Antigen–induced lung solute clearance in rats is dependent on capsaicin–sensitive nerves. Sestini P, et al. **Am Rev Respir Dis** 1989 Feb;139(2):401–6

Pulmonary antigen challenge in rats passively sensitized with a monoclonal IgE antibody induces immediate but not late changes in airway mechanics. Sorkness R, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1152–6

Interleukins in pulmonary sarcoidosis. Dissociative correlations of lung interleukins 1 and 2 with the intensity of alveolitis. Yamaguchi E, et al. **Am Rev Respir Dis** 1988 Sep;138(3):645–51

The sensitivity of guinea pig mesenteric and pulmonary mast cells to some histamine releasers. Brezezińska–Błaszczyk E, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):871–6

Lung immunoglobulins in the sudden infant death syndrome. Forsyth KD, et al. **BMJ** 1989 Jan 7;298(6665):23–6

Lung immunoglobulins in the sudden infant death syndrome [letter] Matthews TG, et al. **BMJ** 1989 Feb 25; 298(6672):522

Effects of inhaled titanium dioxide dust on the lung and on the course of experimental Legionnaires' disease. Baskerville A, et al. **Br J Exp Pathol** 1988 Dec;69(6):781–92

Rat alpha 2 macroglobulin is a selective inhibitor of antigen–induced leucotrienes in rat isolated lungs. Ufkes JG, et al. **Br J Exp Pathol** 1988 Aug;69(4):457–64

Effect of smoking on natural killer cell activity in the lung. Takeuchi M, et al. **Chest** 1988 Oct;94(4):688–93

Airway secretory IgA concentrations in patients with lung cancer. Evaluation of the uninvolved lung. Wesselius LJ, et al. **Chest** 1989 Jun;95(6):1265–8

Defence against allergic sensitization in the healthy lung: the role of inhalation tolerance. Holt PG, et al. **Clin Exp Allergy** 1989 May;19(3):255–62 (50 ref.)

A new experimental model of in–situ immune complex disease of the lung. Boyce NW, et al. **Clin Exp Immunol** 1988 Jun;72(3):493–8

The distribution of phenotypically distinct macrophage subsets in the lungs of patients with cryptogenic fibrosing alveolitis. Noble B, et al. **Clin Exp Immunol** 1989 Apr; 76(1):41–6

Flow cytometric analysis of pulmonary lymphocytes from mice infected with respiratory syncytial virus. Openshaw PJ. **Clin Exp Immunol** 1989 Feb;75(2):324–8

Expression of the hypervariable PUM locus in normal and malignant lung: the tumor–associated epitopes are present but masked in normal tissue. Griffiths B, et al. **Dis Markers** 1988 Jul–Sep;6(3):195–202

Lung humoral response to Pseudomonas species. Fick RB. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):29–34 (23 ref.)

Pulmonary macrophages in nosocomial pneumonia: defense function and dysfunction, and prospects for activation. Rose RM. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):25–8 (26 ref.)

Active sensitization of guinea–pig airways in vivo enhances in vivo and in vitro responsiveness. Featherstone RL, et al. **Eur Respir J** 1988 Oct;1(9):839–45

Plant constituents of cotton dust and lung effects after inhalation. Rylander R. **Eur Respir J** 1988 Oct;1(9):812–7

Limiting–dilution analysis of T cells extracted from solid human lung tissue: comparison of precursor frequencies for proliferative responses and lymphokine production between lung and blood T cells from individual donors. Holt PG, et al. **Immunology** 1988 Aug;64(4):649–54

Identification of leukotriene B4 as the neutrophil chemotactic factor released by antigen challenge from passively sensitized guinea pig lungs. Atkins PC, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):136–43

Modification of guinea pig lung anaphylaxis by central nervous system (CNS) perturbations. Leslie CA, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):94–101

Longitudinal study of alveolitis in hypersensitivity pneumonitis patients: an immunologic evaluation. Trentin L, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):577–85

The use of experimental airborne infections to monitor impairments in pulmonary defenses. Gardner DE. **J Appl Toxicol** 1988 Dec;8(6):385–8

Deleterious effects of complement activation on the lungs during extracorporeal circulation and its inhibition by FUT–175. Miyamoto Y, et al. **J Biomater Appl** 1989 Jul; 4(1):56–68 (36 ref.)

Lung derived surface active material (SAM) inhibits natural killer cell tumor cytotoxicity. Baughman RP, et al. **J Clin Lab Immunol** 1989 Feb;28(2):51–4

Influenza virus–specific T cells lead to early interferon gamma in lungs of infected hosts: development of a sensitive radioimmunoassay. Taylor PM, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):975–8

Phagocytosis and killing of Listeria monocytogenes by alveolar macrophages: smokers versus nonsmokers. King TE Jr, et al. **J Infect Dis** 1988 Dec;158(6):1309–16

Mononuclear cells from human lung parenchyma support antigen–induced T lymphocyte proliferation. Nicod LP, et al. **J Leukoc Biol** 1989 Apr;45(4):336–44

Is the measurement of virus–specific antibody in the lungs of transplant recipients with cytomegalovirus pneumonitis of diagnostic or prognostic value? Milburn HJ, et al. **J Med Virol** 1988 Oct;26(2):197–206

Ultrastructural cytochemical analysis of oxygen radical–mediated immunoglobulin A immune complex induced lung injury in the rat. Warren JS, et al. **Lab Invest** 1989 May;60(5):651–8

Cellular interactions in lung inflammation and immunity. Bienenstock J, et al. **Postgrad Med J** 1988;64 Suppl 4:111–9 (70 ref.)

Allergy, occupation and the lung. Newman Taylor A. **Postgrad Med J** 1988;64 Suppl 4:41–7 (34 ref.)

Specific antibody containing cells in the porcine respiratory tract following intraperitoneal and intratracheal immunisation. Sheldrake RF, et al. **Res Vet Sci** 1988 Nov; 45(3):369–73

Study of immune complexes in bronchoalveolar lavage fluids. Dall'Aglio PP, et al. **Respiration** 1988;54 Suppl 1:36–41

Effects of human immunodeficiency virus on pulmonary host defenses. Beck JM, et al. **Semin Respir Infect** 1989 Jun; 4(2):75–84 (76 ref.)

Effect of cytotoxic monoclonal antibody depletion of T–lymphocyte subpopulations on bleomycin–induced lung damage in C57BL/6J mice. Janick–Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):474–84

Expression of class I and class II MHC antigens in normal and transplanted human lung. Taylor PM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):451–2

Expression of MHC antigens in normal human lungs and transplanted lungs with obliterative bronchiolitis. Taylor PM, et al. **Transplantation** 1989 Sep;48(3):506–10

[Effect of smoking on natural killer cell activity in the lung] Takeuchi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Mar; 26(3):267–74 (Eng. Abstr.) **(Jpn)**

[Detection of viral antigens in the lungs and spleen of mice infected with influenza virus] Ivanova IA, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):39–45 (Eng. Abstr.) **(Rus)**

[Quantitative evaluation of sensitization of lymphoid cells to normal tissue and bacterial antigens] Krylenkov VA, et al. **Vestn Khir** 1987 Dec;139(12):54–6 **(Rus)**

[Immunoregulatory activity of the lungs in relation to corpuscular and soluble antigens] Eremenko AE. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):82–5 (Eng. Abstr.) **(Rus)**

INJURIES

Pulmonary contusion. Hill JW, et al. **Am Fam Physician** 1988 Nov;38(5):219–20

Radiological case of the month. Traumatic pulmonary pseudocyst. Co MA, et al. **Am J Dis Child** 1989 Jul; 143(7):841–2

Death due to hydrofluoric acid. Chela A, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):47–8

Clinical and laboratory features of acute sulfur dioxide inhalation poisoning: two–year follow–up. Rabinovitch S, et al. **Am Rev Respir Dis** 1989 Feb;139(2):556–8

5–Hydroxytryptamine uptake in oxygen radical–mediated acute lung injury. Vigneswaran WT, et al. **Am Rev Respir Dis** 1989 Feb;139(2):382–6

Airway fires during surgery with the carbon dioxide laser [letter] Pashayan AG, et al. **Anesthesiology** 1989 Sep; 71(3):478

Primary blast injury after a bomb explosion in a civilian bus. Katz E, et al. **Ann Surg** 1989 Apr;209(4):484–8

The role of iron in injury of endothelial cells in vitro and in vivo. Ward PA, et al. **Basic Life Sci** 1988;49:969–74

Submarine escape training, lung cysts and tension pneumothorax. Saywell WR. **Br J Radiol** 1989 Mar; 62(735):276–8

Delayed sequelae of pulmonary barotrauma. Cooper M, et al. **Can Assoc Radiol J** 1989 Aug;40(4):232–3

Airway pressure release ventilation in a patient with acute pulmonary injury. Florete OG Jr, et al. **Chest** 1989 Sep; 96(3):679–82

Effect of hemorrhagic hypotension on endotoxin–induced lung injury in awake sheep. Krausz MM, et al. **Circ Shock** 1989 Jan;27(1):39–50

Critical care management of chest injury. Clemmer TP, et al. **Crit Care Clin** 1986 Oct;2(4):759–73 (59 ref.)

Local proteolytic activation after pulmonary trauma is not prevented by high dose steroids. Andréasson S, et al. **Crit Care Med** 1989 Aug;17(8):792–7

The mechanism of fatal cardiopulmonary injury caused by a blow from a golf club. Purdue B, et al. **Forensic Sci Int** 1989 Jul;42(1–2):125–30

Estimating lung mechanics of dogs with unilateral lung injury. Chapman FW, et al. **IEEE Trans Biomed Eng** 1989 Apr;36(4):405–13

Lung barotrauma in the ICU. Powner DJ. **Indiana Med** 1988 Jul;81(7):614–5

Oxygen free radicals and lungs. Junod AF. **Intensive Care Med** 1989;15 Suppl 1:S21–23

Reflection of differential pulmonary perfusion in polytrauma patients on differential lung ventilation (DLV). A comparison of two CO2–derived methods. Zandstra DF, et al. **Intensive Care Med** 1989;15(3):151–4

O2– and pneumonia–induced lung injury. I. Pathological and morphometric studies. Coalson JJ, et al. **J Appl Physiol** 1989 Jul;67(1):346–56

Effect of exogenous surfactant instillation on experimental acute lung injury. Harris JD, et al. **J Appl Physiol** 1989 Apr;66(4):1846–51

Supplemental oxygen reduces right ventricular hypertrophy in monocrotaline–injected rats. Hill NS, et al. **J Appl Physiol** 1989 Apr;66(4):1642–8

Type II pneumocyte changes during hyperoxic lung injury and recovery. Holm BA, et al. **J Appl Physiol** 1988 Dec; 65(6):2672–8

O2– and pneumonia–induced lung injury. II. Properties of pulmonary surfactant. King RJ, et al. **J Appl Physiol** 1989 Jul;67(1):357–65

Propranolol and serotonin removal in lung injury. Merker MP, et al. **J Appl Physiol** 1988 Dec;65(6):2579–84

Trauma of lung due to impact load. Yen RT, et al. **J Biomech** 1988;21(9):745–53

Pulmonary contusion: CT vs plain radiograms. Schild HH, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):417–20

Quantitation and pattern of parenchymal lung injury in blunt chest trauma. Diagnostic and therapeutic implications. Wagner RB, et al. **J Comput Tomogr** 1988 Oct;12(4):270–81

Lung injury in rabbits induced by intravenous administration of heterologous polyclonal antibodies to angiotensin converting enzyme (kininase II). Caldwell PR, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:171–4

Tracheopleuropulmonary injuries following enteral tube insertion. Odocha O, et al. **J Natl Med Assoc** 1989 Mar; 81(3):275–81

Secondary infection of post–traumatic pulmonary cavitary lesions in adolescents and young adults: role of computed tomography and operative debridement and drainage. Carroll K, et al. **J Trauma** 1989 Jan;29(1):109–12

Synchronized independent lung ventilation in the management of pediatric unilateral pulmonary contusion: case report. Frame SB, et al. **J Trauma** 1989 Mar; 29(3):395–7

Occlusion of bronchopleural fistula after lung injury—a new treatment by bronchoscopy. Regel G, et al. **J Trauma** 1989 Feb;29(2):223–6

Central lung injuries: a need for early vascular control. Wiencek RG Jr, et al. **J Trauma** 1988 Oct;28(10):1418–24

Role of pulmonary alveolar macrophage activation in acute lung injury after burns and smoke inhalation. Clark CJ, et al. **Lancet** 1988 Oct 15;2(8616):872–4

Clinical use of differential lung ventilation in the treatment of asymmetric lung injury: report of a case. Talbot AR, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):67–73

Lung injury and pulmonary edema in respiratory distress syndrome. Jobe A. **Mead Johnson Symp Perinat Dev Med** 1987;(30):52–8 (40 ref.)

Isolated pulmonary blast injury in rats—a new model using

the extracorporeal shock-wave lithotriptor. Pode D, et al. **Milit Med** 1989 Jun;154(6):288–93

Acute pulmonary intoxications. Overview and practical guidelines [published erratum appears in Neth J Med 1989 Apr;34(3–4):169] Sangster B, et al. **Neth J Med** 1988 Aug; 33(1–2):91–100 (16 ref.)

Identifying lung overdistention during mechanical ventilation by using volume-pressure loops. Fisher JB, et al. **Pediatr Pulmonol** 1988;5(1):10–4

Exogenous surfactant in experimental aspiration trauma. Strohmaier W, et al. **Prog Clin Biol Res** 1989;308:797–801

Pulmonary contusion. Evaluation and classification by computed tomography. Wagner RB, et al. **Surg Clin North Am** 1989 Feb;69(1):31–40

Collagen breakdown during acute lung injury. Adamson IY, et al. **Thorax** 1988 Jul;43(7):562–8

[Diagnostic and therapeutic characteristics of pulmonary gunshot wounds] Vasilev B. **Khirurgiia (Sofiia)** 1988; 41(4):64–8 (29 ref.) **(Bul)**

[An experimental study of blast injury] Wang ZG. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):7–11, 2 (Eng. Abstr.) **(Chi)**

[Traumatic rupture of 3 lobes of the right lung without any parietal lesion. A peculiar entity] Houdelette P, et al. **J Chir (Paris)** 1989 May;126(5):313–4 (8 ref.) (Eng. Abstr.) **(Fre)**

[Significance of lung contusion in mortality following polytrauma. Possibilities for therapeutic influence] Regel G, et al. **Chirurg** 1988 Nov;59(11):771–6 (Eng. Abstr.) **(Ger)**

[Lung injuries] Pichlmaier H, et al. **Langenbecks Arch Chir** 1989;374(3):131–7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Lung injuries] Vogt-Moykopf I, et al. **Langenbecks Arch Chir** 1989;374(3):129–30 **(Ger)**

[Rupture of the lung with repeated intrapulmonary hemorrhage] Koennecke HC, et al. **ROFO** 1988 Oct; 149(4):434–5 **(Ger)**

[Comment on the contribution by Th. Joka et al.: Early diagnosis of lung contusion by bronchoscopy. Unfallchirurg (1987) 90:286] Hoffmann P, et al. **Unfallchirurg** 1989 Feb;92(2):92–6 **(Ger)**

[Hematoma and pulmonary contusion as a consequence of closed injury of the thorax in childhood] Moro G, et al. **Minerva Chir** 1989 Mar 15;44(5):927–9 (Eng. Abstr.) **(Ita)**

[A case of pulmonary rupture successfully treated by operation] Hayakawa K, et al. **Kyobu Geka** 1988 Oct; 41(11):909–11 (Eng. Abstr.) **(Jpn)**

[Effects of continuous high pressure mechanical ventilation on the lung and circulation] Higashi K. **Masui** 1988 Aug; 37(8):981–8 (Eng. Abstr.) **(Jpn)**

[Experimental assessment of lung injury with cardiopulmonary bypass using a unilateral pulmonary artery occlusion model: preliminary report] Kuratani T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):630 **(Jpn)**

[Radiological image of barotrauma of the lungs in a frogman] Krzyżak J. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct; 51(5):276–8 (Eng. Abstr.) **(Pol)**

[Clinical x-ray characteristics of lung contusion in closed chest trauma] Florikian AK, et al. **Klin Khir** 1988;(10):7–9 (Eng. Abstr.) **(Rus)**

[Solitary contusion hematoma of the lungs with air cysts] Kharitonov VA, et al. **Vrach Delo** 1989 Jan;(1):67–9 **(Rus)**

INNERVATION

Augmented breath provoked by lung inflation in cat. Romaniuk JR, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):57–71

Cardiopulmonary receptors and "neurogenic hypertension". Persson P. **Acta Physiol Scand Suppl** 1988;570:1–53

Processing of pulmonary afferent input patterns by respiratory I-beta neurons. Bajić J, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R379–93

Sensory receptors and reflex pathways of nonadrenergic inhibitory nervous system in feline airways. Inoue H, et al. **Am Rev Respir Dis** 1989 May;139(5):1175–8

Ventilation and breathing pattern during progressive hypercapnia and hypoxia after human heart-lung transplantation. Sanders MH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):38–44

Release of multiple tachykinins from capsaicin-sensitive sensory nerves in the lung by bradykinin, histamine, dimethylphenyl piperazinium, and vagal nerve stimulation. Saria A, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1330–5

Immunohistochemical demonstration of enkephalin-containing nerve fibers in guinea pig and rat lungs. Shimosegawa T, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):441–8

Facilitation by tachykinins of neurotransmission in guinea-pig pulmonary parasympathetic nerves. Hall AK, et al. **Br J Pharmacol** 1989 May;97(1):274–80

The nucleus reticularis gigantocellularis modulates the cardiopulmonary responses to central and peripheral drives related to exercise. Richard CA, et al. **Brain Res** 1989 Mar 13;482(1):49–56

Inspiratory-modulated neurons of the rostrolateral pons: effects of pulmonary afferent input. Shaw CF, et al. **Brain Res** 1989 Apr 17;485(1):179–84

Contribution of pulmonary receptors to the heart rate response to acute hypoxemia in rabbits. Kato H, et al. **Circulation** 1988 Nov;78(5 Pt 1):1260–6

Adrenoceptors and the lung: their role in health and disease. Reinhardt D. **Eur J Pediatr** 1989 Jan;148(4):286–93 (97 ref.)

Decrementing expiratory neurons of the Bötzinger complex. II. Direct inhibitory synaptic linkage with ventral respiratory group neurons. Ezure K, et al. **Exp Brain Res** 1988;72(1):159–66

Decrementing expiratory neurons of the Bötzinger complex. I. Response to lung inflation and axonal projection. Manabe M, et al. **Exp Brain Res** 1988;72(1):150–8

Cardiopulmonary baroreflexes fail to modulate sympathetic responses during isometric exercise in humans: direct evidence from microneurographic studies. Sanders JS, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1241–51

Influence of respiratory drive on airway responses to excitation of lung C-fibers. Haxhiu MA, et al. **J Appl Physiol** 1989 Jul;67(1):203–9

Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. Hyman AL, et al. **J Appl Physiol** 1989 Jul;67(1):371–6

Phrenic afferents and ventilatory control at increased end-expiratory lung volumes in cats. Iscoe S. **J Appl Physiol** 1989 Mar;66(3):1297–303

Stimulation of vagal pulmonary C-fibers by a single breath of cigarette smoke in dogs. Lee LY, et al. **J Appl Physiol** 1989 May;66(5):2032–8

Rapidly adapting pulmonary receptor afferents: I. Arborization in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):560–73

Rapidly adapting pulmonary receptor afferents: II. Fine structure and synaptic organization of central terminal processes in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):574–94

Age-related changes in vasoactive intestinal polypeptide levels and distribution in the rat lung. Geppetti P, et al. **J Neural Transm** 1988;74(1):1–10

Firing rate may be a determinant of nerve fibre vulnerability in axonopathies. Satchell PM, et al. **J Neurol Sci** 1988 Nov; 87(2–3):289–97

Ability of developing epithelia to attract neurite outgrowth in culture is not correlated with the appearance of laminin. Nishi R. **J Neurosci Res** 1988 Oct–Dec;21(2–4):307–14

Neonatal central catecholaminergic lesions with intracisternal 6-hydroxydopamine: effects on development of presynaptic and postsynaptic components of peripheral sympathetic pathways and on the ornithine decarboxylase/polyamine system in heart, lung and kidney. Slotkin TA, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):975–82

Cardiovascular responses to stimulation of pulmonary C fibres in the cat: their modulation by changes in respiration. Daly MD, et al. **J Physiol (Lond)** 1988 Aug;402:43–63

Lung C-fibre receptor activation and defensive reflexes in anaesthetized cats. Tatar M, et al. **J Physiol (Lond)** 1988 Aug;402:411–20

Lack of effect of lung denervation on the measurement of potential difference after single-lung transplantation [letter] Alton EW, et al. **N Engl J Med** 1989 Jun 29;320(26):1755

Eosinophil chemotactic response to rat CGRP-1 is increased after exposure to trypsin or guinea-pig lung particulate fraction. Manley HC, et al. **Neuropeptides** 1989 Jan; 13(1):29–34

Ruthenium red selectively inhibits capsaicin-induced release of calcitonin gene-related peptide from the isolated perfused guinea pig lung. Amann R, et al. **Neurosci Lett** 1989 Jul 3;101(3):311–5

Diaphragmatic vasodilation elicited by pulmonary C-fiber stimulation. Coast JR, et al. **Respir Physiol** 1989 Mar; 75(3):279–88

The stimulatory effect of nicotine on vagal pulmonary C-fibers in dogs. Kou YR, et al. **Respir Physiol** 1989 Jun; 76(3):347–56

Entrainment of the respiratory rhythm by periodic lung inflation during vagal cooling. Muzzin S, et al. **Respir Physiol** 1989 Feb;75(2):157–72

Spectral composition of synchronized discharge of phrenic nerve activity in the rabbit and effects of pulmonary afferents. Schmid K, et al. **Respir Physiol** 1989 Apr; 76(1):37–52

[Nonadrenergic noncholinergic nervous system in the lung and bronchial asthma] Fu JX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):48–50 (20 ref.) **(Chi)**

[Muscarinic receptor subtypes of the lung: classification and clinical significance] Ukena D, et al. **Prax Klin Pneumol** 1988 Oct;42(10):742–4 (29 ref.) **(Ger)**

[Lung denervation. A study of therapy of shock lung] Glöckler M. **Wien Klin Wochenschr Suppl** 1980;111:1–23 (Eng. Abstr.) **(Ger)**

[Effect of chemical sympathectomy on the function of the pulmonary surfactant system in white rats] Sluka BA, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):853–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of Gramoxone-induced reactive oxygen radicals on eicosanoid synthesis of mouse lung. Matkovics B, et al. **Acta Biol Hung** 1988;39(4):351–9

Effect of high carbohydrate and high protein diets on microsomal fatty acid composition, "fluidity" and delta 6 desaturation activity in kidney and lung. Mandon EC, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):49–58

Prenatal cholinergic stimulation of pulmonary neuroendocrine cells by nicotine. Nylén ES, et al. **Acta Physiol Scand** 1988 Jan;132(1):117–8

Semisynthetic inhibitors of human leukocyte elastase and their protective effect on lung elastin degradation in vitro. Beckmann J, et al. **Adv Exp Med Biol** 1988;240:107–14

Human bronchial proteinase inhibitor: rapid purification procedure and inhibition of leucocyte elastase in presence and in absence of human lung elastin. Boudier C, et al. **Adv Exp Med Biol** 1988;240:115–22

Hemodialysis with cuprophane membranes leads to alteration of granulocyte oxidative metabolism and leukocyte sequestion in the lung. Kolb G, et al. **Adv Exp Med Biol** 1988;240:377–84

Evaluation of the functional integrity of endothelium in perfused lungs. Bult H, et al. **Agents Actions** 1989 Jan; 26(1–2):258–60

Leukotriene release in chopped human lung: characteristics and regulation. Kumlin M, et al. **Agents Actions** 1989 Jan; 26(1–2):84–6

Effects of protamine on histamine release from human lung. Levy JH, et al. **Agents Actions** 1989 Aug;28(1–2):70–2

Azelastine inhibits stimulated histamine release from human lung tissue in vitro but does not alter cyclic nucleotide content. Little MM, et al. **Agents Actions** 1989 Aug; 28(1–2):16–21

Lipoxin A4 causes generation of thromboxane A2 in the guinea-pig lung. Wikström E, et al. **Agents Actions** 1989 Jan;26(1–2):90–2

Cervical dislocation of mice induces rapid accumulation of platelet serotonin in the lung. Yamamoto Y, et al. **Agents Actions** 1988 Aug;25(1–2):48–56

Characterisation of the leukotriene receptor(s) on human isolated lung strips. Gardiner PJ, et al. **Agents Actions Suppl** 1988;23:121–8

Harman in rat brain, lung and human CSF: effect of alcohol consumption. Bosin TR, et al. **Alcohol** 1988 Nov-Dec; 5(6):505–11

Pulmonary extraction of immunoreactive atrial natriuretic factor in dogs. Bates ER, et al. **Am J Cardiol** 1989 Feb 1;63(5):372–3

Müllerian inhibiting substance depresses accumulation in vitro of disaturated phosphatidylcholine in fetal rat lung. Catlin EA, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1299–303

Gestation-dependent effects of the combined treatment of glucocorticoids and thyrotropin-releasing hormone on surfactant production by fetal rabbit lung. Oulton M, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):961–7

Expression of the 35kDa and low molecular weight surfactant-associated proteins in the lungs of infants dying with respiratory distress syndrome. deMello DE, et al. **Am J Pathol** 1989 Jun;134(6):1285–93

Classification and morphometric quantitation of insoluble materials from the lungs of patients with alveolar proteinosis. Gilmore LB, et al. **Am J Pathol** 1988 Nov; 133(2):252–64

Effect of transit time on metabolism of a pulmonary endothelial enzyme substrate. Dawson CA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H853–65

Evidence for regulation of sodium transport from airspace to vascular space by cAMP. Goodman BE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L86–93

Spermidine uptake by type II pulmonary epithelial cells in primary culture. Kameji R, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):C160–7

Effects of ketamine and fentanyl on lung metabolism in perfused rat lungs. Martin DC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E379–84

Stretch-related changes in lung cAMP after partial pneumonectomy. Russo LA, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):E261–8

Localization of spermidine uptake in rabbit lung slices. Saunders NA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C579–87

Processing of hydrophobic pulmonary surfactant protein B in rat type II cells. Weaver TE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L100–8

Effect of fluoxetine on metabolism of tricyclic antidepressants in the lungs [letter; comment] Downs JM, et al. **Am J Psychiatry** 1989 Jun;146(6):814–5. **Comment on:** Am J Psychiatry 1988 Nov;145(11):1478

Assessment of lung water distribution by nuclear magnetic resonance. A new method for quantifying and monitoring experimental lung injury. Cutillo AG, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1371–8

Effects of hyperoxia and vitamin E on the fatty acid composition of rat lung microsomes and mitochondria. Dilley ED, et al. **Am Rev Respir Dis** 1989 Aug;140(2):423–9

Role of absorptive and secretory processes in hydration of the airway surface. Frizzell RA. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S3–6

Effects of cigarette smoke on tissue uptake and retention of iron oxide in the guinea pig. Gilks B, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1382–4

The effect of parainfluenza 3 infection on guinea pig basophil and lung mast cell histamine release. Graziano FM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):715–20

Accumulation of hyaluronan (hyaluronic acid) in the lung in adult respiratory distress syndrome. Hällgren R, et al. **Am Rev Respir Dis** 1989 Mar;139(3):682–7

Resolution of impaired pulmonary function and pulmonary

hypertension after phorbol ester administration in rabbits. Havill AM, et al. **Am Rev Respir Dis** 1989 Sep;140(3):782–8
Solute movement across the alveolar–capillary membrane after intratracheally administered bleomycin in rats. Jordana M, et al. **Am Rev Respir Dis** 1988 Jul;138(1):96–100
Cyclooxygenase products from endogenous arachidonic acid in isolated dog and rabbit lungs. Littner MR, et al. **Am Rev Respir Dis** 1988 Aug;138(2):383–8
Differential expression of the tumor necrosis factor/cachectin gene by blood and lung mononuclear phagocytes. Martinet Y, et al. **Am Rev Respir Dis** 1988 Sep;138(3):659–65
Age-related changes in lung collagen metabolism. A role for degradation in regulating lung collagen production. Mays PK, et al. **Am Rev Respir Dis** 1989 Aug;140(2):410–6
Experimental diabetes and the lung. II. In vivo connective tissue metabolism. Ofulue AF, et al. **Am Rev Respir Dis** 1988 Aug;138(2):284–9
Carcinogen metabolism studies in human bronchial and lung parenchymal tissues. Petruzzelli S, et al. **Am Rev Respir Dis** 1989 Aug;140(2):417–22
Clearance of phosphatidylcholine and cholesterol from liposomes, liposomes loaded with metaproterenol, and rabbit surfactant from adult rabbit lungs. Pettenazzo A, et al. **Am Rev Respir Dis** 1989 Mar;139(3):752–8
Pulmonary retention of iodobenzyl-propanediamine in humans. Effect of cigarette smoking. Pistolesi M, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1429–33
The molecular biology of chloride secretion in epithelia. Rechkemmer GR. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S7–9
The effect of platelet-activating factor on histamine and muscarinic receptor function in guinea pig airways. Robertson DN, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1317–22
Biosynthesis of the third and fifth complement components by isolated human lung cells. Rothman BL, et al. **Am Rev Respir Dis** 1989 Jan;139(1):212–20
Substance P: the relationship between receptor distribution in rat lung and the capacity of substance P to stimulate vascular permeability. Sertl K, et al. **Am Rev Respir Dis** 1988 Jul;138(1):151–9
Tumor necrosis factor causes increased pulmonary permeability and edema. Comparison to septic acute lung injury. Stephens KE, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1364–70
Reconstitution of tubular myelin from synthetic lipids and proteins associated with pig pulmonary surfactant. Suzuki Y, et al. **Am Rev Respir Dis** 1989 Jul;140(1):75–81
5-Hydroxytryptamine uptake in oxygen radical-mediated acute lung injury. Vigneswaran WT, et al. **Am Rev Respir Dis** 1989 Feb;139(2):382–6
Eicosanoid production in isolated perfused lungs stimulated by calcium ionophore A23187. Westcott JY, et al. **Am Rev Respir Dis** 1988 Oct;138(4):895–900
First-pass uptake of verapamil, diazepam, and thiopental in the human lung. Roerig DL, et al. **Anesth Analg** 1989 Oct; 69(4):461–6
An oil-based model of inhalation anesthetic uptake and elimination. Loughlin PJ, et al. **Anesthesiology** 1989 Aug; 71(2):278–82
Effect of propranolol on the first pass uptake of fentanyl in the human and rat lung. Roerig DL, et al. **Anesthesiology** 1989 Jul;71(1):62–8
Anti-neutrophil-elastase defenses of the lower respiratory tract in alpha 1-antitrypsin deficiency directly augmented with an aerosol of alpha 1-antitrypsin. Hubbard RC, et al. **Ann Intern Med** 1989 Aug 1;111(3):206–12
Pharmacokinetics and human tissue penetration of flurithromycin. Benoni G, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1875–8
Effects of puromycin and hydroxynorvaline on net production and intracellular degradation of collagen in human fetal lung fibroblasts. Barile FA, et al. **Arch Biochem Biophys** 1989 Apr;270(1):294–301
Isolation of in vivo radiolabeled proteoglycans from rat lung. Vilim V. **Arch Biochem Biophys** 1988 Nov 15;267(1):143–50
Relationship between tracheobronchial particle clearance rates and sites of initial deposition in man. Ilowite JS, et al. **Arch Environ Health** 1989 Jul-Aug;44(4):267–73
Increase in substance P levels in the lung of old rats. Amenta F, et al. **Arch Gerontol Geriatr** 1988 Sep;7(3):215–9
Uptake and displacement of [3H]-propranolol and [3H]-chlorpromazine in isolated, recirculating perfused guinea-pig lungs. Heinzow B, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:211–20
Metabolic extraction of dopamine in the canine lungs. van Schaik FW, et al. **Arch Int Physiol Biochim** 1988 Mar; 96(1):25–34
Pulmonary phospholipid accumulation distal to an obstructed bronchus. A morphologic study. Verbeken EK, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):886–90
Endotoxin causes hydrogen peroxide-induced lung lipid peroxidation and prostanoid production. Demling R, et al. **Arch Surg** 1988 Nov;123(11):1337–41
Pulmonary clearance and toxicity of zinc oxide instilled into the rat lung. Hirano S, et al. **Arch Toxicol** 1989;63(4):336–42
Study of the excretion mechanism of a perfluorochemical emulsion. Tsuda Y, et al. **Artif Organs** 1989 Jun; 13(3):197–203
Lung tissue concentrations of ciprofloxacin following intravenous administration in patients. Forst H, et al. **Arzneimittelforschung** 1989 May;39(5):618–9
Evidence of pulmonary tropism of bamifylline and its main active metabolite. Schiantarelli P, et al. **Arzneimittelforschung** 1989 Feb;39(2):215–9
Prostaglandins and leukotrienes in pulmonary O2 toxicity. Faiman MD, et al. **Basic Life Sci** 1988;49:983–6
Low level chemiluminescence from isolated rat hepatocytes, intact lung and intestine in situ. Turrens JF, et al. **Basic Life Sci** 1988;49:239–42
Retinoic acid rapidly induces lung cellular retinol-binding protein mRNA levels in retinol deficient rats. Haq R, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):712–6
Atrial natriuretic peptide gene expression and its secretion by pneumocytes derived from neonatal rat lungs. Matsubara H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):619–27
Fatty acids stimulate phosphatidylcholine synthesis and CTP:choline-phosphate cytidylyltransferase in type II pneumocytes isolated from adult rat lung. Burkhardt R, et al. **Biochem J** 1988 Sep 1;254(2):495–500
A comparison of the specificity of phosphatidylcholine synthesis by human fetal lung maintained in either organ or organotypic culture. Caesar PA, et al. **Biochem J** 1988 Jul 15;253(2):451–7
Stimulation of surfactant phospholipid biosynthesis in the lungs of rats treated with silica. Miller BE, et al. **Biochem J** 1988 Aug 1;253(3):659–65
Receptor binding of guinea pig and pig vasoactive intestinal peptides by rat lung. Paul S, et al. **Biochem J** 1988 Sep 1;254(2):613–5
Species pattern of phosphatidylinositol from lung surfactant and a comparison of the species pattern of phosphatidylinositol and phosphatidylglycerol synthesized de novo in lung microsomal fractions. Rüstow B, et al. **Biochem J** 1988 Aug 15;254(1):67–71
Formation of angiotensin II and other angiotensin peptides from des-leu 10-angiotensin I in rat lung and kidney. Drummer OH, et al. **Biochem Pharmacol** 1988 Nov 15; 37(22):4327–33
Effect of age on the uptake of propranolol by perfused rat lung. Iwamoto K, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):4029–32
The accumulation of cystamine and its metabolism to taurine in rat lung slices. Lewis CP, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):481–8
Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—I. Lung and liver microsomes. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3709–15
Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—II. Lung and liver slices. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3717–22
Decreased selectivity of vasoactive intestinal peptide receptors by GTP. Paul S. **Biochem Pharmacol** 1989 Feb 15;38(4):699–702
Pulmonary disposition of the potent glucocorticoid budesonide, evaluated in an isolated perfused rat lung model. Ryrfeldt A, et al. **Biochem Pharmacol** 1989 Jan 1; 38(1):17–22
Patterns of alternative splicing of fibronectin pre-mRNA in human adult and fetal tissues. Oyama F, et al. **Biochemistry** 1989 Feb 7;28(3):1428–34
Selective hydrolysis of ether-containing glycerophospholipids by phospholipase A2 in rabbit lung [published erratum appears in Biochim Biophys Acta 1989 Aug 8;1004(2):279] Angle MJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):234–40
Reutilization of surfactant phosphatidylglycerol and lysophosphatidylcholine by adult rabbits. Jacobs HC, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):227–33
Fluorescence studies on binding of amphiphilic drugs to isolated lamellar bodies: relevance to phospholipidosis. Joshi UM, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):309–20
Production of prostaglandins by fetal rat lung type II pneumonocytes and fibroblasts. Olson DM, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):327–30
Uptake of the 35 kDa major surfactant apoprotein (SP-A) by neonatal rabbit lung tissue. Snyder JM, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):1–7
Examination of the potential role of the glycerophosphorylcholine (GPC) pathway in the biosynthesis of phosphatidylcholine by liver and lung. Veldhuizen RA, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):157–61
Solute and water transport across the pulmonary epithelium: a new chapter in lung physiology inaugurated by Alfred Jost. Strang LB. **Biol Neonate** 1989;55(6):355–65 (31 ref.)
Chromatographic studies of human lung elastin digestion products obtained by leucocyte elastase: comparison between newborn and adult soluble fragments. Smyrlaki M, et al. **Biomed Chromatogr** 1987;2(2):57–61
Column separation using Bio-Gel P100 for the characterization of the products of human lung elastin degradation by leucocyte elastase and cathepsin G. Smyrlaki M, et al. **Biomed Chromatogr** 1986 Feb;1(1):27–30
Mass spectrometric investigation of the temperature dependence of gas transport through a human body to the lungs. Adamczyk B, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):455–6
Gastrointestinal, liver, and lung extraction ratio of acetaminophen in the rat after high dose administration. Bhargava VO, et al. **Biopharm Drug Dispos** 1989 Jul-Aug; 10(4):389–96
In vivo liver and lung targeting of adriamycin encapsulated in glutaraldehyde-treated murine erythrocytes. Zocchi E, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):555–62
Lack of ion movement in the isolated and perfused rabbit lung ventilated with hypercapnic mixtures. Rosciano V, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):677–82
Solubility of freon-22 in blood and lung tissue. Franks PJ, et al. **Br J Anaesth** 1989 Apr;62(4):425–8
Pulmonary kinetics of fentanyl and alfentanil in surgical patients. Taeger K, et al. **Br J Anaesth** 1988 Oct; 61(4):425–34
Pulmonary epithelial permeability in bronchiectasis. Chan TB, et al. **Br J Dis Chest** 1988 Jan;82(1):56–63
Effect of acute lung injury on metabolism of adenine nucleotides in rat perfused lung. Grantham CJ, et al. **Br J Pharmacol** 1988 Aug;94(4):1029–36
Alteration of fate of vasoactive autacoids in pulmonary circulation following monocrotaline-induced lung vascular injury in rats. Ito K, et al. **Br J Pharmacol** 1988 Aug; 94(4):1167–74
Identification of M1 muscarinic receptors in pulmonary sympathetic nerves in the guinea-pig by use of pirenzepine. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):499–505
Effect of pirenzepine and gallamine on cardiac and pulmonary muscarinic receptors in the rabbit. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):506–12
Alpha 1-adrenoceptor function and autoradiographic distribution in human asthmatic lung. Spina D, et al. **Br J Pharmacol** 1989 Jul;97(3):701–8
The effects of smoking and silica exposure on pulmonary epithelial permeability: a radioaerosol study with 99mTc-DTPA. Nery LE, et al. **Braz J Med Biol Res** 1988; 21(2):223–32
Lung water. Noble WH. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S46–50 (8 ref.)
The effect of lung concentrations of glutathione and vitamin E on the pulmonary toxicity of 3-methylindole. Kubow S, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):863–7
The effects of arginine vasopressin and epinephrine on lung liquid production in fetal goats. Perks AM, et al. **Can J Physiol Pharmacol** 1989 May;67(5):491–8
Effects of hypoxia or hyperoxia on the lung of the chick embryo. Xu LJ, et al. **Can J Physiol Pharmacol** 1989 May; 67(5):515–9
Metabolism of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone by hamster respiratory tissues cultured with ellagic acid. Castonguay A, et al. **Cancer Lett** 1989 Jul 15;46(2):93–105
Formation of cigarette smoke-induced DNA adducts in the rat lung and nasal mucosa. Gupta RC, et al. **Cancer Res** 1989 Apr 15;49(8):1916–20
Effects of aromatic isothiocyanates on tumorigenicity, O6-methylguanine formation, and metabolism of the tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in A/J mouse lung. Morse MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2894–7
Metabolism of 1,8-dinitropyrene by rabbit lung. Tee LB, et al. **Carcinogenesis** 1988 Oct;9(10):1869–74
Age dependent expression of cytochrome P-450b and metabolism of the potent carcinogen 2-nitrofluorene in the rat lung. Törnquist S, et al. **Carcinogenesis** 1988 Dec; 9(12):2209–14
Neuronal galanin is widely distributed in the chicken respiratory tract and coexists with multiple neuropeptides. Luts A, et al. **Cell Tissue Res** 1989 Apr;256(1):95–103
Proliferating cell nuclear antigen (PCNA/cyclin) immunocytochemistry as a labeling index in mouse lung tissues. Thaete LG, et al. **Cell Tissue Res** 1989 Apr; 256(1):167–73
Effects of sulfite on glutathione S-sulfonate and the glutathione status of lung cells. Keller DA, et al. **Chem Biol Interact** 1989;70(1-2):145–56
In vitro macromolecular binding of 2-(2-chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane (o,p'-DDD) in the mouse lung and liver. Lund BO, et al. **Chem Biol Interact** 1989;70(1-2):63–72
Metabolism of benzo[a]pyrene and 7 beta,8 alpha-dihydroxy-9 alpha, 10 alpha-epoxy-7,8,9,10-tetrahydrobenzo[a pyrene in lung and liver of newborn mice. Melikian AA, et al. **Chem Biol Interact** 1989;69(2-3):245–57
Submitochondrial distribution of basic drugs in the isolated perfused lung. Okumura K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1109–11
Accumulation mechanism of basic drugs in the isolated perfused rat lung. Yoshida H, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):450–3
Penetration of imipenem-cilastatin into the lung tissue and pericardial fluid of thoracotomized patients. Benoni G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):259–60
Histochemical evaluation of lung collagen content in acute and chronic interstitial diseases. Saldiva PH, et al. **Chest** 1989 May;95(5):953–7
Lung compartmentalization of increased TNF releasing ability by mononuclear phagocytes in pulmonary sarcoidosis. Spatafora M, et al. **Chest** 1989 Sep;96(3):542–9
Effects of endotoxin-induced lung injury on the pharmacokinetics of prostaglandin E2 and adenosine in rat isolated lung. Grantham CJ, et al. **Circ Shock** 1988 Oct;

26(2):157–67
Reactive oxygen intermediates reduce inactivation of serotonin in isolated, perfused rat lungs. Kjaeve J, et al. **Circ Shock** 1989 Jun;28(2):79–87
31P nuclear magnetic resonance determination of changes in energy state in lung preservation. Hall TS, et al. **Circulation** 1988 Nov;78(5 Pt 2):III95–8
Energy expenditure of autoperfusing heart–lung preparation. Riveron FA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III103–9
Metabolic functions of the lungs. **Clin Chest Med** 1989 Mar; 10(1):1–128
Lung metabolism of xenobiotic compounds. Duncan CA. **Clin Chest Med** 1989 Mar;10(1):49–58 (76 ref.)
Lung serotonin metabolism. Hart CM, et al. **Clin Chest Med** 1989 Mar;10(1):59–70 (71 ref.)
Free radical effects on lung metabolism. Jenkinson SG. **Clin Chest Med** 1989 Mar;10(1):37–47 (51 ref.)
Interpretation of metabolic function of the lung. Influence of perfusion, kinetics, and injury. Pitt BR, et al. **Clin Chest Med** 1989 Mar;10(1):1–12 (77 ref.)
Lung eicosanoid metabolism. Voelkel NF, et al. **Clin Chest Med** 1989 Mar;10(1):95–105 (74 ref.)
Pulmonary surfactant metabolism. Wright JR, et al. **Clin Chest Med** 1989 Mar;10(1):83–93 (68 ref.)
Role of the lung in glutamine homeostasis. Welbourne TC. **Contrib Nephrol** 1988;63:178–82
High tidal volume ventilation produces increased lung water in oleic acid–injured rabbit lungs. Bowton DL, et al. **Crit Care Med** 1989 Sep;17(9):908–11
Expression of intermediate filament proteins in fetal and adult human lung tissues. Broers JL, et al. **Differentiation** 1989 May;40(2):119–28
The physiological disposition of aerosolized 4–[(3–(4–acetyl–3–hydroxy–2–propylphenoxy)propyl)= sulfonyl]–gamma –oxobenzenebutanoate (L–648,051) in rats. Tocco DJ, et al. **Drug Metab Dispos** 1988 Sep–Oct; 16(5):697–700
Bioavailability of benzo(a)pyrene deposited in the lung. Correlation with dissolution from urban air particulates and covalently bound DNA adducts. Törnquist S, et al. **Drug Metab Dispos** 1988 Nov–Dec;16(6):842–7
Effect of dietary vitamin E level on the biochemical response of rat lung to ozone inhalation. Elsayed NM, et al. **Drug Nutr Interact** 1988;5(4):373–86
Increased vitamin A in esophagus and lungs after moderate ethanol consumption. Leo MA, et al. **Drug Nutr Interact** 1988;5(4):227–36
Stimulation of collagen formation by insulin and insulin–like growth factor I in cultures of human lung fibroblasts. Goldstein RH, et al. **Endocrinology** 1989 Feb;124(2):964–70
Identification of the cytochrome P–450 isozymes responsible for testosterone oxidation in rat lung, kidney, and testis: evidence that cytochrome P–450a (P450IIA1) is the physiologically important testosterone 7 alpha–hydroxylase in rat testis. Sonderfan AJ, et al. **Endocrinology** 1989 Aug; 125(2):857–66
The accumulation of nickel in human lungs. Edelman DA, et al. **Environ Health Perspect** 1989 May;81:221–4
Similarity between man and laboratory animals in regional pulmonary deposition of ozone. Miller FJ, et al. **Environ Res** 1978 Aug;17(1):84–101
Autoradiographic localization of changes in pulmonary beta–adrenoceptors in an animal model of atopy. Engels F, et al. **Eur J Pharmacol** 1989 May 2;164(1):139–46
Muscarinic receptor subtypes mediating vasodilation in the pulmonary artery. McCormack DG, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):293–7
Muscarinic receptor subtypes in human and guinea pig lung. Mak JC, et al. **Eur J Pharmacol** 1989 May 19;164(2):223–30
In vivo clearance of natural and modified surfactant. Pettenazzo A, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(3):13s–15s
Induction of the stress response by isolation of rabbit type II pneumocytes. Brandes ME, et al. **Exp Lung Res** 1989; 15(1):93–111
Clearance of chrysotile asbestos from human lung. Churg A, et al. **Exp Lung Res** 1988;14(5):567–74
Matrix deposition and extracellular processing of newly synthesized collagens in the isolated perfused rat lung. Crouch EC, et al. **Exp Lung Res** 1988;14(5):705–24
Interferon production in rat type II pneumocytes and alveolar macrophages. Hahon N, et al. **Exp Lung Res** 1989 May; 15(3):429–45
Effects of hyperoxia on surfactant morphology and cell viability in organotypic cultures of fetal rat lung. Loo CK, et al. **Exp Lung Res** 1989 Jul;15(4):597–617
Effects of exogenous fatty acids and inhibition of de novo fatty acid synthesis on disaturated phosphatidylcholine production by fetal lung cells and adult type II cells. Maniscalco WM, et al. **Exp Lung Res** 1989 May; 15(3):473–89
Smooth muscle isoactin and elastin in fetal bovine lung. Noguchi A, et al. **Exp Lung Res** 1989 Jul;15(4):537–52
Pulmonary metabolism of reactive oxygen species. Panus PC, et al. **Exp Lung Res** 1988;14 Suppl:959–76 (48 ref.)
Characterization and comparison of the role of beta–agonists on in vivo and in vitro surfactant–related phospholipid synthesis and secretion by fetal rabbit lung and isolated type II alveolar cells. Rasmusson MG, et al. **Exp Lung Res** 1988;14(6):811–22
Purification and characterization of fatty acid–binding proteins from human fetal lung. Sa G, et al. **Exp Lung Res** 1989 Jul;15(4):619–34
Individual differences in regional deposition of 6–micron particles in humans with induced bronchoconstriction. Svartengren M, et al. **Exp Lung Res** 1989;15(1):139–49
Acute cigarette smoke exposure alters lung eicosanoid and inflammatory cell concentrations in rabbits. Witten ML, et al. **Exp Lung Res** 1988;14(6):727–42
Identification and characterization of glucagon–like peptide–1 7–36 amide–binding sites in the rat brain and lung. Kanse SM, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):209–12
The DNF15S2 locus at 3p21 is transcribed in normal lung and small cell lung cancer. Naylor SL, et al. **Genomics** 1989 Apr;4(3):355–61
Comparison of glycoconjugates at the surface of developing type II pneumocytes and Clara cells. Honda T, et al. **Histochem J** 1989 Apr;21(4):241–7
Localisation of mRNA and co–expression and molecular forms of GRP gene products in endocrine cells of fetal human lung. Bhatnagar M, et al. **Histochemistry** 1988; 90(4):299–307
Glycoconjugate with terminal galactose. A selective property of macrophages in developing rat lung. Honda T, et al. **Histochemistry** 1989;91(1):61–7
Rat lung 29 kD beta–galactoside–binding lectin is secreted by bronchiolar Clara cells into airways. Wasano K, et al. **Histochemistry** 1989;90(6):447–51
The lung as a target organ for thyroxine. Datta H, et al. **Horm Metab Res** 1989 Jun;21(6):305–8
Elastin breakdown and regeneration in emphysema [editorial] Woodward SC. **Hum Pathol** 1989 Jul;20(7):613–4
Leukotriene generation and metabolism in isolated human lung macrophages. Schönfeld W, et al. **Immunology** 1988 Dec;65(4):529–36
Pharmacokinetics of cefonicid in serum and its penetration into lung tissue, bronchial mucosa and pleura. Furlan G, et al. **Int J Clin Pharmacol Res** 1989;9(1):49–53
Xibornol: multiple dose pharmacokinetics and diffusion in lung, tonsillar tissue and laryngeal mucosa. Scaglione F, et al. **Int J Clin Pharmacol Res** 1988;8(6):457–61
Dual–isotope measurement of lung water. Chu RY, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):419–21
Competition for polyamine uptake into rat lung slices by WR2721 and analogues. Wyatt I, et al. **Int J Radiat Biol** 1989 Mar;55(3):463–72
Effect of vitamin A deficiency on pulmonary defense systems of guinea pig lung. Nair CR, et al. **Int J Vitam Nutr Res** 1988;58(4):375–80
The interaction of azelastine with human lung histamine H1, beta, and muscarinic receptor–binding sites. Casale TB. **J Allergy Clin Immunol** 1989 Apr;83(4):771–6
Penetration of enoxacin into lung tissue. Newsom SW, et al. **J Antimicrob Chemother** 1989 Jan;23(1):113–5
The penetration of ofloxacin into lung tissue. Wijnands WJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:85–9
Taurine uptake by isolated alveolar macrophages and type II cells. Banks MA, et al. **J Appl Physiol** 1989 Mar; 66(3):1079–86
Pulmonary clearance of radiotracers after positive end–expiratory pressure or acute lung injury. Barrowcliffe MP, et al. **J Appl Physiol** 1989 Jan;66(1):288–94
Rat lung glucose metabolism after 24 h of exposure to 100% oxygen. Bassett DJ, et al. **J Appl Physiol** 1989 Feb; 66(2):989–96
Characterization of muscarinic receptor subtypes on human peripheral lung. Casale TB, et al. **J Appl Physiol** 1988 Aug; 65(2):594–600
Incorporation of arachidonic acid into lipids of the isolated perfused rat lung. Chilton FH, et al. **J Appl Physiol** 1989 Jun;66(6):2763–71
Sequence of interstitial liquid accumulation in liquid–inflated sheep lung lobes. Conhaim RL, et al. **J Appl Physiol** 1989 Jun;66(6):2659–66
Pulmonary epithelial sieving of small solutes in rat lungs. Effros RM, et al. **J Appl Physiol** 1988 Aug;65(2):640–8
New evidence for active sodium transport from fluid–filled rat lungs. Effros RM, et al. **J Appl Physiol** 1989 Feb; 66(2):906–19
Pulmonary permeability in never–smokers between 21 and 67 yr of age. Groth S, et al. **J Appl Physiol** 1989 Jul; 67(1):422–8
Effect of change in particle number on pulmonary clearance of aerosolized 99mTc–DTPA. Groth S, et al. **J Appl Physiol** 1989 Jun;66(6):2750–5
Human platelets attenuate oxidant injury in isolated rabbit lungs. Heffner JE, et al. **J Appl Physiol** 1988 Sep; 65(3):1258–66
Role of lungs and inactive muscle in acid–base control after maximal exercise. Kowalchuk JM, et al. **J Appl Physiol** 1988 Nov;65(5):2090–6
Effects of reactive oxygen species on prostacyclin production in perinatal rat lung cells. Lee DS, et al. **J Appl Physiol** 1989 Mar;66(3):1321–7
Plasma protein binding and endothelial enzyme interactions in the lung. Linehan JH, et al. **J Appl Physiol** 1989 Jun; 66(6):2617–28
Total CA activity in isolated perfused guinea pig lung by 18O–exchange method. Nioka S, et al. **J Appl Physiol** 1988 Nov;65(5):2236–44
Simultaneous measurement of lung clearance rates for Tc– and In–DTPA in normal and damaged lungs. O'Brodovich H, et al. **J Appl Physiol** 1989 May;66(5):2293–7
Kinetics of serotonin uptake in isolated rabbit lungs. Peeters FA, et al. **J Appl Physiol** 1989 May;66(5):2328–37
Hyperoxia and self– or neutrophil–generated O2 metabolites inactivate xanthine oxidase. Terada LS, et al. **J Appl Physiol** 1988 Nov;65(5):2349–53
Solubility of Freon 22 in human blood and lung tissue. Varese N, et al. **J Appl Physiol** 1989 May;66(5):2468–71
P1 and P2 purinergic receptor signal transduction in rat type II pneumocytes. Warburton D, et al. **J Appl Physiol** 1989 Feb;66(2):901–5
Cellular uptake and processing of surfactant lipids and apoprotein SP–A by rat lung. Young SL, et al. **J Appl Physiol** 1989 Mar;66(3):1336–42
Chemical modification of surfactant protein A alters high affinity binding to rat alveolar type II cells and regulation of phospholipid secretion. Kuroki Y, et al. **J Biol Chem** 1988 Nov 25;263(33):17596–602
Identification of structurally distinct alpha 2–adrenergic receptors. Lanier SM, et al. **J Biol Chem** 1988 Oct 5; 263(28):14491–6
Subcellular distribution of "peripheral type" binding sites for [3H]Ro5–4864 in guinea pig lung. Localization to the mitochondrial inner membrane. Mukherjee S, et al. **J Biol Chem** 1989 Oct 5;264(28):16713–8
Solubilization of rat lung vasoactive intestinal peptide receptors in the active state. Characterization of the binding properties and comparison with membrane–bound receptors. Patthi S, et al. **J Biol Chem** 1988 Dec 25; 263(36):19363–9
Normal phosphatidylcholine composition of lung surfactant 24 hours after inhalation injury. Prien T, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):38–44
Pulmonary alveolar macrophages express a polyamine transport system. Saunders NA, et al. **J Cell Physiol** 1989 Jun;139(3):624–31
Distribution of hyaluronate and hyaluronate receptors in the adult lung. Green SJ, et al. **J Cell Sci** 1988 May;90 (Pt 1):145–56
Lung fluid balance in lambs before and after premature birth. Bland RD, et al. **J Clin Invest** 1989 Aug;84(2):568–76
Effects of interferon–gamma on expression of cell surface receptors for collagen and deposition of newly synthesized collagen by cultured human lung fibroblasts. Clark JG, et al. **J Clin Invest** 1989 May;83(5):1505–11
Clearance of atrial natriuretic factor by lung, liver, and kidney in human subjects and the dog. Hollister AS, et al. **J Clin Invest** 1989 Feb;83(2):623–8
Regulation of messenger RNAs for the hydrophobic surfactant proteins in human lung. Liley HG, et al. **J Clin Invest** 1989 Apr;83(4):1191–7
Thromboxane–mediated hypertension and vascular leakage evoked by low doses of Escherichia coli hemolysin in rabbit lungs. Seeger W, et al. **J Clin Invest** 1989 Jul;84(1):220–7
Epinephrine stimulates prostaglandin synthesis by bullfrog lung from warm–acclimated, but not cold–acclimated, animals. Herman CA, et al. **J Exp Zool** 1988 Oct; 248(1):101–8
Increased beta–adrenergic receptors in the light–density membrane fraction in lungs from senescent rats. Scarpace PJ, et al. **J Gerontol** 1988 Nov;43(6):B163–7
Binding and uptake of pulmonary surfactant protein (SP–A) by pulmonary type II epithelial cells. Ryan RM, et al. **J Histochem Cytochem** 1989 Apr;37(4):429–40
Effect of lipopolysaccharide on C3 and C5 production by human lung cells. Rothman BL, et al. **J Immunol** 1989 Jul 1;143(1):196–202
Mast cell mediators stimulate synthesis of arachidonic acid metabolites in macrophages. Salari H, et al. **J Immunol** 1989 Apr 15;142(8):2821–7
Lung mucociliary transport in asymptomatic asthma: effects of inhaled histamine. Garrard CS, et al. **J Lab Clin Med** 1989 Feb;113(2):190–5
Glutathione disulfide formation occurring during hypoxia and reoxygenation of rat lung. Jenkinson SG, et al. **J Lab Clin Med** 1988 Oct;112(4):471–80
Lung and muscle water after crystalloid and colloid infusion in septic rats: effect on oxygen delivery and metabolism. Rackow EC, et al. **J Lab Clin Med** 1989 Feb;113(2):184–9
Heart and lung metabolism. US–USSR joint symposium. September 1–3, 1987, Asheville, NC, U.S.A. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:1–179
Signal–transducing GTP–binding proteins of mammalian heart and lungs. Tkachuk VA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:91–5
A study of beta–adrenoceptors in rat lung parenchymal strip. Candenas ML, et al. **J Pharm Pharmacol** 1989 May; 41(5):357–9
Effects of bovine serum albumin and recirculation rate on the uptake of propranolol by rat perfused lung. Iwamoto K, et al. **J Pharm Pharmacol** 1989 Apr;41(4):266–8
Specific age–dependence in capacity–limited uptake of propranolol by isolated rat lung. Iwamoto K, et al. **J Pharm. Pharmacol** 1989 Jun;41(6):398–401
Biodegradation rate of embolized protein microspheres in lung, liver and kidney of rats. Willmott N, et al. **J Pharm Pharmacol** 1989 Jul;41(7):433–8
A novel dosing method for drug administration to the airways of the isolated perfused rat lung. Byron PR, et al. **J Pharm Sci** 1988 Aug;77(8):693–5
Kinetic and pharmacologic analysis of [3H]leukotriene E4 binding to receptors on guinea pig lung membranes: evidence for selective binding to a subset of leukotriene

D4 receptors. Aharony D, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):581–8

Characterization of leukotriene B4 binding sites on guinea pig lung macrophages. Cristol JP, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1199–203

Characterization of muscarinic receptors in human, guinea pig and rat lung. Gies JP, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):309–15

Plasma and pulmonary pharmacokinetics of bleomycin in murine strains that are sensitive and resistant to bleomycin-induced pulmonary fibrosis. Harrison JH Jr, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1052–8

Pulmonary extraction of propranolol in normal and oxygen-toxic sheep. Howell RE, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):93–9

Early increases in pulmonary mRNA encoding procollagens and transforming growth factor-beta in mice sensitive to cyclophosphamide-induced pulmonary fibrosis. Hoyt DG, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):38–43

Isoproterenol-induced inhibition of immunoglobulin E-mediated release of histamine and arachidonic acid metabolites from the human lung mast cell. Undem BJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):209–17

The toxicokinetics of methyl-ISP in rats. Shi N, et al. **J Tongji Med Univ** 1988;8(2):78–82

In vitro influence of molybdenum on benzo[a]pyrene metabolism in hepatic and pulmonary rat microsomes. Bompart G, et al. **J Toxicol Environ Health** 1989; 26(4):459–68

Effect of altered dose rate on NO2 uptake and transformation in isolated lungs. Postlethwait EM, et al. **J Toxicol Environ Health** 1989;26(4):497–507

Retention and clearance of inhaled submicron carbon black particles. Strom KA, et al. **J Toxicol Environ Health** 1989; 26(2):183–202

Effect of carbon monoxide on the cytochrome P-450-mediated activation of 4-ipomeanol by the isolated perfused rabbit lung. Trela BA, et al. **J Toxicol Environ Health** 1989;27(3):341–50

Effect of carbon monoxide on the cytochrome P-450-mediated metabolism of aniline and p-nitroanisole in the isolated perfused rabbit lung. Trela BA, et al. **J Toxicol Environ Health** 1989;27(3):331–40

Lung retention and binding of [14C]-1-nitropyrene when inhaled by F344 rats as a pure aerosol or adsorbed to carbon black particles. Wolff RK, et al. **J Toxicol Environ Health** 1989;26(3):309–25

Changes in extravascular lung water and fatty acids in a hyperdynamic canine model of sepsis. Fuortes M, et al. **J Trauma** 1988 Oct;28(10):1455–9

Effect of oxitropium bromide (Ba253) on isolated respiratory smooth muscle and release of chemical mediators from passively sensitized lung fragments. Kohno SW, et al. **Jpn J Pharmacol** 1989 Jun;50(2):207–16

Extracellular matrix biosynthesis by cultured fetal rat lung epithelial cells. I. Characterization of the clone and the major genetic types of collagen produced [published erratum appears in Lab Invest 1989 Aug;61(2):252] Leheup BP, et al. **Lab Invest** 1989 Jun;60(6):791–807

The biosynthesis of 5-methoxy-N,N-dimethyltryptamine in vitro. Mandel LR, et al. **Life Sci** 1974 Oct 15;15(8):1457–63

Alcohol suppresses lipopolysaccharide-induced tumor necrosis factor activity in serum and lung. Nelson S, et al. **Life Sci** 1989;44(10):673–6

Lung MK 351A uptake after hypoxia adaptation and subsequent hyperoxia exposure. Jackson RM, et al. **Lung** 1988;166(4):209–19

Influence of a beta-adrenergic agonist on septic shock-induced alterations of phosphatidylcholine metabolism in rat lung. von Wichert P, et al. **Lung** 1988; 166(5):257–67

Water proton NMR relaxation mechanisms in lung tissue. Kveder M, et al. **Magn Reson Med** 1988 Aug;7(4):432–41

Cyclic AMP levels in lung and spleen tissue of mice treated with pertussis toxin. Torre D, et al. **Microbiologica** 1989 Jan;12(1):29–33

Lectin histochemistry of normal lung and pulmonary adenocarcinoma. Kawai T, et al. **Mod Pathol** 1988 Nov; 1(6):485–92

Oxidation of proteins in rat heart and lungs by polymorphonuclear leukocyte oxidants. Fliss H. **Mol Cell Biochem** 1988 Dec;84(2):177–88

Relationship between the cytoplasmic activator of adenylate cyclase and glycogen metabolism in rat lung. Nijjar MS, et al. **Mol Cell Biochem** 1988 Sep;83(1):73–80

The effects of oxygen radical—mediated pulmonary endothelial damage on cancer metastasis [published erratum appears in Mol Cell Biochem 1989 Mar 16;86(1):97] Orr FW, et al. **Mol Cell Biochem** 1988 Dec;84(2):189–98

Synthesis of phosphatidylcholine and phosphatidylglycerol in rat lung mitochondria. Schlame M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):115–22

Binding of radiolabeled high affinity antagonist to leukotriene D4 receptor in guinea pig lung membranes: interconversion of agonist-receptor binding affinity states. O'Sullivan BP, et al. **Mol Pharmacol** 1989 Jun;35(6):795–802

Total body, systemic and pulmonary clearance and fractional extraction of unlabelled and differently 3H-labelled noradrenaline in the anaesthetized rabbit. Halbrügge T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):361–7

The influence of age on the pulmonary clearance of 99Tcm-DTPA radioaerosol. Pigorini F, et al. **Nucl Med Commun** 1988 Dec;9(12):965–71

Demonstration and quantitation of pharmacological inhibition of pulmonary uptake of N-isopropyl-123I-p-iodoamphetamine by propranolol. Akber SF. **Nuklearmedizin** 1989 Jun;28(3):100–4

Oxygen toxicity in the infant rhesus monkey: effects on regulatory peptides in lung and blood. Keith IM, et al. **Pediatr Pulmonol** 1988;5(1):31–5

Initiation of fetal rat lung phospholipid and surfactant-associated protein A mRNA synthesis. Gross I, et al. **Pediatr Res** 1989 Mar;25(3):239–44

Recovery of treatment doses of surfactants from the lungs and vascular compartments of mechanically ventilated premature rabbits. Seidner SR, et al. **Pediatr Res** 1989 Apr; 25(4):423–8

Menhaden fish oil, n-3 polyunsaturated fatty acids, and protection of newborn rats from oxygen toxicity. Sosenko IR, et al. **Pediatr Res** 1989 Apr;25(4):399–404

Chronic glucose infusion inhibits development of beta-receptor binding in fetal lamb lung. Warburton D, et al. **Pediatr Res** 1988 Aug;24(2):171–4

Autoradiographic localization of calcitonin gene-related peptide (CGRP) binding sites in human and guinea pig lung. Mak JC, et al. **Peptides** 1988 Sep-Oct;9(5):957–63

Binding of basic drugs to rat lung mitochondria. Hori R, et al. **Pharm Res** 1987 Apr;4(2):142–6

Solute absorption from the airways of the isolated rat lung. I. The use of absorption data to quantify drug dissolution or release in the respiratory tract. Niven RW, et al. **Pharm Res** 1988 Sep;5(9):574–9

Bambuterol: uptake and metabolism in guinea pig isolated lungs. Ryrfeldt A, et al. **Pharm Res** 1988 Mar;5(3):151–5

Subcellular distribution of basic drugs accumulated in the isolated perfused lung. Yoshida H, et al. **Pharm Res** 1987 Feb;4(1):50–3

Xenobiotic metabolism by isolated pulmonary cells. Devereux TR, et al. **Pharmacol Ther** 1989;41(1-2):243–56 (84 ref.)

The regulation of collagen production in normal lung and during interstitial lung disease. Laurent GJ, et al. **Postgrad Med J** 1988;64 Suppl 4:26–34 (84 ref.)

Fate of aerosolized recombinant DNA-produced alpha 1-antitrypsin: use of the epithelial surface of the lower respiratory tract to administer proteins of therapeutic importance. Hubbard RC, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):680–4

Glucocorticoids both stimulate and inhibit production of pulmonary surfactant protein A in fetal human lung. Liley HG, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9096–100

Glutathione metabolism in the lung: inhibition of its synthesis leads to lamellar body and mitochondrial defects. Mårtensson J, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5296–300

The use of inhaled liposome formulations for drug delivery to the lungs and systemic circulation. Fielding RM. **Proc West Pharmacol Soc** 1989;32:103–6 (19 ref.)

High affinity neurotransmitter and drug receptors in human lung preparations. Parmar SS, et al. **Proc West Pharmacol Soc** 1988;31:209–12

Adult rat lung in dynamic organ culture: a new tool in pharmacology. Stefaniak MS, et al. **Proc West Pharmacol Soc** 1988;31:149–51

Pulmonary carbonyl reductase: metabolism of carbonyl products in lipid peroxidation. Matsuura K, et al. **Prog Clin Biol Res** 1989;290:335–49

Omega-hydroxylation of prostaglandin E1 in the isolated perfused lungs of pregnant rabbits. Leithauser MT, et al. **Prostaglandins** 1988 Dec;36(6):819–33

Involvement of prostanoids in the pulmonary pressor effect of histamine. Akar F, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):25–9

Leukotriene generation and small airway smooth muscle responsiveness in human lung. de Jongste JC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):31–6

Metabolism of LTC4 to LTD4 and LTE4 in isolated guinea pig lung lobes. Kobayashi J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):155–7

Studies of alveolar cell morphometry and mass clearance in the rat lung following inhalation of an enriched uranium dioxide aerosol. Morris KJ, et al. **Radiat Environ Biophys** 1989;28(2):141–54

Rat lung benzo(a)pyrene metabolism following three days continuous exposure to 0.6 ppm ozone. Bassett DJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):291–307

Biovailability and pulmonary first-pass removal of etretinate in rats. Thongnopnua P, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):269–72

Effects of intralipid and hydrocortisone upon human fetal lung cell cultures. Kunkelmann H, et al. **Res Exp Med (Berl)** 1988;188(6):411–23

Postnatal changes in lung phospholipids and alveolar macrophages in term newborn monkeys. Jackson JC, et al. **Respir Physiol** 1988 Sep;73(3):289–300

Pulmonary exchange of solutes during experimental lung lavage in pigs. Juettner FM, et al. **Respiration** 1988; 54(4):226–34

Increased hyaluronic acid production in lung—a possible important factor in interstitial and alveolar edema during general anesthesia and in adult respiratory distress syndrome. Modig J, et al. **Resuscitation** 1989 Jun; 17(3):223–31

Oxygen free radicals mediate ischemia-induced lung injury. Klausner JM, et al. **Surgery** 1989 Feb;105(2 Pt 1):192–9

Heparin potentiates endothelial cell growth factor stimulation of plasminogen activator synthesis by diploid human lung fibroblasts. Rappaport RS, et al. **Thromb Haemost** 1988 Jun 16;59(3):514–22

Kinetics of pulmonary surfactant phosphatidylcholine metabolism in the lungs of silica-treated rats. Dethloff LA, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):1–11

The effect of molecular weight/lipophilicity on clearance of organic compounds from lungs. Henderson RF, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):515–21

Vitamin E, membrane order, and antioxidant behavior in lung microsomes and reconstituted lipid vesicles. Patel JM, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):101–14

Pulmonary disposition of inhaled NO2-nitrogen in isolated rat lungs. Postlethwait EM, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):303–12

Incorporation and disappearance of oxygen-18 in lung from mice exposed to 1 ppm 18O3. Santrock J, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):75–80

The effect of carbon monoxide on aminopyrine metabolism in the isolated perfused rabbit lung. Trela BA, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):442–50

Effects of adsorption of benzo[a]pyrene onto carbon black particles on levels of DNA adducts in lungs of rats exposed by inhalation. Wolff RK, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):289–99

Metabolism of 1,3-butadiene by lung and liver microsomes of rats and mice repeatedly exposed by inhalation to 1,3-butadiene. Bond JA, et al. **Toxicol Lett** 1988 Nov; 44(1-2):143–51

Alkane production by isolated rat heart and lung. Dutta S, et al. **Toxicol Lett** 1988 Nov;44(1-2):55–64

Species differences in release of arachidonate metabolites in response to inhaled diluted diesel exhaust. Henderson RF, et al. **Toxicol Lett** 1988 Sep;42(3):325–32

Metallothionein-I accumulation in the rat lung following a single paraquat administration. Sato M, et al. **Toxicol Lett** 1989 Jan;45(1):41–7

Toxicity of cadmium oxide instilled into the rat lung. I. Metabolism of cadmium oxide in the lung and its effects on essential elements. Hirano S, et al. **Toxicology** 1989 Apr; 55(1-2):15–24

[Assessment of decorporation of cerium-144 through the lungs by kinetic and morphological indicators] Lalova Kh, et al. **Eksp Med Morfol** 1989;28(1):13–9 (Eng. Abstr.) (Bul)

[Early pulmonary fluid exchanges after steam inhalation injury in goats] Wang CZ, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):9–13, 17 (Eng. Abstr.) (Chi)

[The washout behavior of isoflurane following balanced anesthesia and its effect on postoperative oxygen supply] Mertzlufft F, et al. **Anaesthesist** 1989 Aug;38(8):401–7 (Eng. Abstr.) (Ger)

[Histochemical studies of rat lungs after the short-term influence of soil dust] Jędrzejewska EA, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):773–83 (Eng. Abstr.) (Ger)

[The concentration of itraconazole in lung tissue in bronchoalveolar lavage (BAL) and in serum] Losch S, et al. **Prax Klin Pneumol** 1988 Jul;42(7):542–3 (Eng. Abstr.) (Ger)

[A clinical trial of astromicin, a new aminoglycoside antibiotic, in thoracotomized patients and astromicin concentrations in the lung tissue] Imaizumi M, et al. **Jpn J Antibiot** 1988 Nov;41(11):1635–49 (Eng. Abstr.) (Jpn)

[The study of the lung accumulation of I-123 IMP by the broncho-alveolar lavage] Itasaka M, et al. **Kaku Igaku** 1989 Feb;26(2):189–94 (Eng. Abstr.) (Jpn)

[Overestimation of myocardial viability due to an increase in thallium uptake by the lung] Tanaka T, et al. **Kaku Igaku** 1989 Jan;26(1):15–21 (Eng. Abstr.) (Jpn)

[Specific receptors for atrial natriuretic polypeptide and cyclic GMP production by particulate guanylate cyclase in human lung] Amano Y, et al. **Kokyu To Junkan** 1988 Sep;36(9):993–7 (Eng. Abstr.) (Jpn)

[The lung and neuropeptides] Kitamura S. **Kokyu To Junkan** 1989 May;37(5):477–82 (Jpn)

[Pharmacokinetics and the lung uptake of lidocaine during epidural anesthesia] Endo M, et al. **Masui** 1989 Jan; 38(1):59–65 (Eng. Abstr.) (Jpn)

[Studies on pre- and postoperative extravascular lung water in patients with primary lung cancer] Koizumi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1339–46 (Eng. Abstr.) (Jpn)

[Cigarette smoking and lung metabolism—effect of cigarette smoking on plasma levels of complement C3a and C5a in healthy volunteers] Kihira Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1029–32 (Eng. Abstr.) (Jpn)

[Effects of increased left atrial pressure, endotoxemia and pulmonary air embolism on the measurement of extravascular lung thermal volume] Kubo K, et al.

Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):825–32 (Eng. Abstr.) **(Jpn)**

[The effect of smoking on dynamics of N-isopropyl I-123 P-iodoamphetamine (I-123IMP) in the lung] Matsuse T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):653–7 (Eng. Abstr.) **(Jpn)**

[The effects of unilateral pulmonary artery occlusion on pulmonary extravascular water volume and broncho-alveolar lavage under unilateral pulmonary artery occlusion] Ono S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):876–80 (Eng. Abstr.) **(Jpn)**

[The role of sex and organogenetically active factors in the pathogenesis of hyaline membrane disease in newborn infants] Nożyński J, et al. **Patol Pol** 1988 Apr–Jun; 39(2):126–35 (Eng. Abstr.) **(Pol)**

[Pulmonary collagen] Kowal E, et al. **Pneumonol Pol** 1988 Aug;56(8):345–8 **(Pol)**

[Effect of macrophage decay products on the incorporation of H3-thymidine into pulmonary cells in rats] Privalova LI, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):66–9 (Eng. Abstr.) **(Rus)**

[Transport of a fluid in the lung interstitial space. A model of porous medium with distributed parameters] Serikov VB. **Biofizika** 1988 Jul–Aug;33(4):681–5 (Eng. Abstr.) **(Rus)**

[Plasminogen activators in malignant tissues and lungs of mice during metastatic spreading and administration of various pharmacological agents] Chubinskaia SG, et al. **Eksp Onkol** 1988;10(5):46–9 (Eng. Abstr.) **(Rus)**

[Determination of the volume of extravascular fluid in the lungs by electroimpedance indicators] Krivitskiĭ NM, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):589–95 **(Rus)**

[Kinetics of the transport of substances with various molecular weights from the blood into the lymph of the lungs (the role of transendothelial and interstitial mass transfer)] Serikov VB, et al. **Fiziol Zh SSSR** 1988 Jun; 74(6):839–46 (Eng. Abstr.) **(Rus)**

[Effect of space flight on the levels of volatile metabolites in the exhaled air of astronauts] Savina VP, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):47–50 (Eng. Abstr.) **(Rus)**

[Changes in the indices of hemodynamics and of the metabolism of bradykinin, angiotensin I and prostaglandin E1 in the lungs of rats with spontaneous hypertension exposed to a galvanic current on the chest cavity] Karpitskiĭ VV, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):32–5 (Eng. Abstr.) **(Rus)**

[Participation of the lungs in the absorption and liberation of biogenic amines in the postresuscitation period] Trubina IE, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):24–8 (Eng. Abstr.) **(Rus)**

[Thyroid status and metabolic activity in the lungs] Jovanović T, et al. **Srp Arh Celok Lek** 1986 Apr;114(4):369–74 (Eng. Abstr.) **(Scc)**

[Paraquat poisoning] Palomar M, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):58–60 (23 ref.) **(Spa)**

MICROBIOLOGY

Immunofluorescent staining of influenza virus antigen in fixed and paraffin-embedded tissue of experimentally infected hamsters. Lück PC, et al. **Acta Histochem (Jena)** 1989; 85(1):47–50

Transthoracic aspiration needle biopsy: value in the diagnosis of pulmonary infections. Conces DJ Jr, et al. **AJR** 1989 Jan;152(1):31–4

Evaluating the penetration of Cladosporium spores into the human respiratory system on the basis of aerobiological sampling results. Rantio-Lehtimäki A. **Allergy** 1989 Jan; 44(1):18–24

Comparison of tracheal aspirates and protected brush catheter specimens for identifying pathogenic bacteria in mechanically ventilated patients. Lambert RS, et al. **Am J Med Sci** 1989 Jun;297(6):377–82

Identification of Mycoplasma hyopneumoniae in formalin-fixed porcine lung, using an indirect immunoperoxidase method. Doster AR, et al. **Am J Vet Res** 1988 Oct;49(10):1719–21

Attachment of Mycoplasma bovoculi to bovine conjunctival epithelium and lung fibroblasts. Salih BA, et al. **Am J Vet Res** 1988 Oct;49(10):1661–4

Clearance of Pseudomonas aeruginosa in different rat lung models. Döring G, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1249–53

The effect of alveolar macrophage chemotaxis on bacterial clearance from the lung surface. Fisher ES, et al. **Am Rev Respir Dis** 1988 May;137(5):1129–34

Topically administered immunoglobulin reduces pulmonary respiratory syncytial virus shedding in owl monkeys. Hemming VG, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1269–70

Acute pneumonia in Zimbabwe: bacterial isolates by lung aspiration. Ikeogu MO. **Arch Dis Child** 1988 Oct; 63(10):1266–7

Mucoid Pseudomonas and the cystic fibrosis lung. Russell NJ. **Biochem Soc Trans** 1989 Jun;17(3):469–71

Virulence differences among three strains of Haemophilus somnus following intratracheal inoculation of calves. Groom SC, et al. **Can J Vet Res** 1988 Jul;52(3):349–54

Electron microscopic examination of cells of Pasteurella haemolytica-A1 in experimentally infected cattle. Morck DW, et al. **Can J Vet Res** 1988 Jul;52(3):343–8

Pulmonary host defense: defects that lead to chronic inflammation of the airway. Hornick DB. **Clin Chest Med** 1988 Dec;9(4):669–78 (83 ref.)

Fluorescence of Blastomyces and other fungi in Papanicolaou-stained pulmonary cytology preparations: comparison with light microscopy. Subramony C, et al. **Diagn Cytopathol** 1988;4(4):288–91

Legionella pneumophila: initial detection through evaluation of Giemsa-stained smears of a bronchial aspirate. Reitano M, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):125–9

Effect of oral immunization with Pseudomonas aeruginosa on the development of specific antibacterial immunity in the lungs. Freihorst J, et al. **Infect Immun** 1989 Jan; 57(1):235–8

Tracheal tube biofilm as a source of bacterial colonization of the lung. Inglis TJ, et al. **J Clin Microbiol** 1989 Sep; 27(9):2014–8

Influenza virus infection and bacterial clearance in young adult and aged mice. Wyde PR, et al. **J Gerontol** 1989 Sep;44(5):B118–24

Primary respiratory syncytial virus infection in mice. Graham BS, et al. **J Med Virol** 1988 Oct;26(2):153–62

Pulmonary antipneumococcal defenses after hemisplenectomy. Hebert JC. **J Trauma** 1989 Sep; 29(9):1217–20; discussion 1220–1

Pathogenicities of two CAR bacillus strains in mice and rats. Shoji Y, et al. **Jikken Dobutsu** 1988 Oct;37(4):447–53

Persistence of infection in mice inoculated intranasally with Cryptococcus neoformans. Anderson DA, et al. **Mycopathologia** 1988 Dec;104(3):163–9

An improved method for hemagglutinin extraction from feline herpesvirus type 1-infected cell line. Horimoto T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):177–83

Relationship between serotypes, dermonecrotic toxin production of Pasteurella multocida isolates and pneumonic lesions of porcine lung. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1200–6

Pulmonary clearance of nontypable Haemophilus influenzae. Hansen EJ, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S69–72 (20 ref.)

Cycloheximide increases endogenous retroviral RNA levels in murine liver and lung. Manenti G, et al. **Tumori** 1989 Jun 30;75(3):217–21

Isolation of Streptococcus suis from diseased pigs in Canada. Touil F, et al. **Vet Microbiol** 1988 Jun;17(2):171–7

Evaluation of ethylenediaminetetraacetic acid, tetrasodium salt dihydrate (EDTA)-Tween 20 treatment versus protease digestion of formalin-fixed tissue sections for detection of bovine respiratory syncytial virus antigen in infected ovine lung. Meehan JT, et al. **Vet Pathol** 1989 Jul;26(4):322–5

Increased severity of calf pneumonia associated with the appearance of Mycoplasma bovis in a rearing herd. Gourlay RN, et al. **Vet Rec** 1989 Apr 22;124(16):420–2

[Isolation and characteristics of nutritional variants of streptococci of animal origin] Skardová O. **Vet Med (Praha)** 1989 May;34(5):257–66 (Eng. Abstr.) **(Cze)**

[Lobar deposition of radioactively-labeled Pasteurella multocida aerosols in the lungs of piglets and calves] Heilmann P, et al. **Arch Exp Veterinarmed** 1988 Jul; 42(4):490–501 (Eng. Abstr.) **(Ger)**

[The disposition and clearance of inhaled bacteria (Staphylococcus aureus) in the lungs of piglets] Kastner P, et al. **Arch Exp Veterinarmed** 1989 May;43(3):379–89 (Eng. Abstr.) **(Ger)**

[Fluorescence serological and culture detection of Mycoplasma hyopneumoniae and Mycoplasma hyorhinis in swine lungs] Binder A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):11–3 (Eng. Abstr.) **(Ger)**

[Direct detection of Actinobacillus (Haemophilus) pleuropneumoniae in the lungs of swine] Bunka S, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):371–3 (Eng. Abstr.) **(Ger)**

[Diagnostic value of resected lung secretions to determine bacterial pathogens] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1311–8 (Eng. Abstr.) **(Jpn)**

[Pathogenicity of parainfluenza virus type 3 in mice] Suzuki T, et al. **Uirusu** 1988 Dec;38(2):131–2 **(Jpn)**

[Usefulness of bacteriologic examination of specimens obtained by fine-needle aspiration biopsy of the lungs in the diagnosis of tuberculosis] Sedlaczek A, et al. **Pneumonol Pol** 1988 Sep;56(9):406–10 (Eng. Abstr.) **(Pol)**

[Difficulties in the diagnosis of tuberculosis] Wiatr E, et al. **Pneumonol Pol** 1988 Sep;56(9):411–21 (Eng. Abstr.) **(Pol)**

PARASITOLOGY

Efficacy of ivermectin in oral drench and paste formulation against migrating larvae of experimentally inoculated Parascaris equorum. French DD, et al. **Am J Vet Res** 1989 Jul;50(7):1071–3

Tricyclic 2,4-diaminopyrimidines with broad antifolate activity and the ability to inhibit Pneumocystis carinii growth in cultured human lung fibroblasts in the presence of leucovorin. Rosowsky A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2677–84

Status of biogenic amines in lungs of Mastomys natalensis during development of Brugia malayi infection. Saxena JK, et al. **Indian J Med Res** 1988 Jul;88:26–8

Rapid separation of Pneumocystis carinii from lung lavage fluids. Pesanti EL, et al. **J Clin Microbiol** 1988 Aug; 26(8):1598–9

Silver staining of Pneumocystis carinii in the rat's lung. Schraufnagel DE, et al. **J Infect** 1989 Jan;18(1):39–44

Adherence of Pneumocystis carinii in lung cells during in vitro cultivation. Burnstein T, et al. **J Protozool** 1989 Jan–Feb;36(1):35S–37S; discussion 37S–38S

Proliferation of Pneumocystis trophozoites in human lymph nodes and in nude mice lungs. Matsumoto Y, et al. **J Protozool** 1989 Jan–Feb;36(1):33S–34S

Sporulated coccidian oocysts resembling Goussia Labbe, 1896 in the viscera of Nile crocodiles. Gardiner CH, et al. **J Wildl Dis** 1986 Oct;22(4):575–7

Identification of Pneumocystis carinii in immunodeficient mice. Sundberg JP, et al. **Lab Anim Sci** 1989 May; 39(3):213–8

Histological examination of the cellular reactions around schistosomula of Schistosoma mansoni in the lungs of sublethally irradiated and unirradiated, immune and control rats. Vignali DA, et al. **Parasitology** 1989 Feb;98 (Pt 1):57–65

[Seal deaths in the Wadden Sea by Sylt in 1988: significance of the high degree of lungworm cases with a hypersensitivity reaction] Breuer EM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):467–73 (Eng. Abstr.) **(Ger)**

[Low-frequency ultrasonics in the surgical treatment of pulmonary echinococcosis] Biriukov IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):61–7 (Eng. Abstr.) **(Rus)**

[Roentgenological diagnosis of pulmonary echinococcosis] Lopez-Malano DV. **Probl Tuberk** 1988;(6):46–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Pathologic features of various ventilatory strategies. Coalson JJ, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:108–16

On the mechanism of aspirin asthma. Viganò T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:543–7

Sulphur dioxide-induced airway hyperreactivity and pulmonary inflammation in dogs. Norris AA, et al. **Agents Actions** 1989 Mar;26(3–4):360–6

Rounded atelectasis of the lung: MR appearance. Verschakelen JA, et al. **AJR Am J Roentgenol** 1989 May; 152(5):965–6

Histamine release from human pulmonary mast cells induced by bacterial antigens. Brzezińska-Blaszczyk E, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):375–8

Silicon carbide in lung tissue of a worker in the abrasive industry. Hayashi H, et al. **Am J Ind Med** 1988;14(2):145–55

Pena-Shokeir I syndrome: a comparative pathological study. Abe J, et al. **Am J Med Sci** 1989 Feb;297(2):123–7

Enhanced macrophage-fibroblast interactions in the pulmonary interstitium increases fibrosis after silica injection to monocyte-depleted mice. Adamson IY, et al. **Am J Pathol** 1989 Feb;134(2):411–8

Ameliorating effect of an interferon inducer polyinosinic-polycytidylic acid on bleomycin-induced lung fibrosis in hamsters. Morphologic and biochemical evidence. Giri SN, et al. **Am J Pathol** 1988 Dec; 133(3):525–36

Evaluation of the contribution of tannin to the acute pulmonary inflammatory response against inhaled cotton mill dust. Lauque DE, et al. **Am J Pathol** 1988 Oct; 133(1):163–72

Sudden unexpected death in a neonate. Imaizumi SO, et al. **Am J Perinatol** 1989 Jul;6(3):281–3

Pulmonary vascular permeability and resistance measurements in control and ANTU-injured dog lungs. Allison RC, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1711–8

Flow cytometric identification and isolation of hypertrophic type II pneumocytes after partial pneumonectomy. Uhal BD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C528–36

Cytoplasts and Mo1-deficient neutrophils pretreated with plasma and LPS induce lung injury. Wencel ML, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H751–9

Diagnosis of pulmonary masses by fine-needle aspiration. Lovett JV, et al. **Am J Surg** 1988 Dec;156(6):441–5

Pathogenesis of naturally acquired bovine respiratory syncytial virus infection in calves: morphologic and serologic findings. Kimman TG, et al. **Am J Vet Res** 1989 May;50(5):684–93

Lung injury and neutrophil density during air embolization in sheep after leukocyte depletion with nitrogen mustard. Albertine KH. **Am Rev Respir Dis** 1988 Dec;138(6):1444–53

Open lung biopsy in patients with Hodgkin's disease and pulmonary infiltrates. Catterall JR, et al. **Am Rev Respir Dis** 1989 May;139(5):1274–9

Mineralogic correlates of fibrosis in chrysotile miners and millers. Churg A, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):891–6

Effect of tobacco smoking on the presence of asbestosis at postmortem and on the reading of irregular opacities on roentgenograms in asbestos-exposed workers [letter] Kraut A, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1567–9

Heterogeneity of pathologic lesions in familial primary pulmonary hypertension. Loyd JE, et al. **Am Rev Respir Dis** 1988 Oct;138(4):952–7

Lung volume maintenance prevents lung injury during high

frequency oscillatory ventilation in surfactant-deficient rabbits. McCulloch PR, et al. **Am Rev Respir Dis** 1988 May;137(5):1185–92

Evaluation of the in vitro and in vivo effects of cyclosporine on the lung T-lymphocyte alveolitis of active pulmonary sarcoidosis. Martinet Y, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1242–8

The National Institutes of Health Intermittent Positive-Pressure Breathing Trial: pathology studies. IV. The Destructive index. Matsuba K, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1439–45

Neutrophil accumulation and structural changes in nonpulmonary organs after acute lung injury induced by phorbol myristate acetate. Mizer LA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1017–26

Assessment of lung parenchymal destruction by using routine histologic tissue sections. Nagai A, et al. **Am Rev Respir Dis** 1989 Feb;139(2):313–9

Long-term pulmonary sequelae after Legionella pneumophila infection in the hamster. Parenti CM, et al. **Am Rev Respir Dis** 1989 Apr;139(4):988–95

Progressive lung injury over a one-year period after a single inhalation exposure to beryllium sulfate. Sendelbach LE, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1003–9

Guidelines for percutaneous transthoracic needle biopsy. This position paper of the American Thoracic Society was adopted by the ATS Board of Directors, June 1988. Sokolowski JW Jr, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):255–6

Cigarette smoking-induced changes in the number and differentiated state of pulmonary dendritic cells/Langerhans cells. Soler P, et al. **Am Rev Respir Dis** 1989 May;139(5):1112–7

Lymphocyte populations in lung tissue, bronchoalveolar lavage fluid, and peripheral blood in rats at various times during the development of silicosis. Struhar D, et al. **Am Rev Respir Dis** 1989 Jan;139(1):28–32

Cell recruitment into lung wall and airways of conventional and pathogen-free guinea pigs after inhalation of endotoxin. Venaille T, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1356–60

Acid aspiration in primates (a surprising experimental result) [letter] Raidoo DM, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):375–6

Rhodamine B fluorescence as a stain for amniotic fluid squames in maternal pulmonary embolism and fetal lungs. Shapiro SH, et al. **Ann Clin Lab Sci** 1988 Nov–Dec; 18(6):451–4

Emergency lung biopsy in immunocompromised pediatric patients. Foglia RP, et al. **Ann Surg** 1989 Jul;210(1):90–2

Lower torso ischemia-induced lung injury is leukocyte dependent. Klausner JM, et al. **Ann Surg** 1988 Dec; 208(6):761–7

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis. Ishida T, et al. **Ann Thorac Surg** 1989 Jul;48(1):90–5

Reperfusion injury in the lung preserved for 24 hours. Paull DE, et al. **Ann Thorac Surg** 1989 Feb;47(2):187–92

Histological and ultrastructural changes in the lungs of guinea pigs exposed to the extract of Erwinia herbicola. Kuś L, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984; 39:325–36

Comparison of transbronchial and open lung biopsies in interstitial lung diseases. Fortoul T, et al. **Arch Invest Med (Mex)** 1988 Jan–Mar;19(1):7–11

Pulmonary endocrine cells in pulmonary arterial disease. Gosney J, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):337–41

Effects of cardiopulmonary bypass on pulmonary leukostasis and complement activation. Howard RJ, et al. **Arch Surg** 1988 Dec;123(12):1496–501

Fetal lung growth in laryngeal atresia and tracheal agenesis. Scurry JP, et al. **Aust Paediatr J** 1989 Feb;25(1):47–51

Low temperature worsens mammalian oxygen toxicity. Jamieson D, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):639–43

Reactive oxygen metabolites and hyperoxic toxicity. Jamieson D. **Basic Life Sci** 1988;49:553–60 (37 ref.)

Role of polymorphonuclear leukocytes in hyperoxic lung injury. Prevention of neutrophil influx into the lung endothelium during oxygen exposure by ibuprofen. Das DK, et al. **Biomed Biochim Acta** 1988;47(12):1023–36

Domestic asbestos exposure, lung fibre burden, and pleural mesothelioma in a housewife. Huncharek M, et al. **Br J Ind Med** 1989 May;46(5):354–5

Correlation between fibre content of lung and disease in east London asbestos factory workers [letter] Rudd RM. **Br J Ind Med** 1989 May;46(5):358–9

Decrease in interleukin 2-induced vascular leakage in the lungs of mice by administration of recombinant interleukin 1 alpha in vivo. Puri RK, et al. **Cancer Res** 1989 Feb 15; 49(4):969–76

Comparative dose-response study on the pulmonary carcinogenicity of 1,6-dinitropyrene and benzo[a]pyrene in F344 rats. Iwagawa M, et al. **Carcinogenesis** 1989 Jul; 10(7):1285–90

Carborundum pneumoconiosis. Fibers in the mineral activate macrophages to produce fibroblast growth factors and sustain the chronic inflammatory disease. Bégin R, et al. **Chest** 1989 Apr;95(4):842–9

Pulmonary microcalcifications associated with Strongyloides stercoralis infection. Caceres MH, et al. **Chest** 1988 Oct; 94(4):862–5

Low-risk large-needle biopsy of chest lesions. Clore F, et al. **Chest** 1989 Sep;96(3):538–41

Open lung biopsy diagnosis of diffuse pulmonary infiltrates after marrow transplantation. Crawford SW, et al. **Chest** 1988 Nov;94(5):949–53

Helper inducer T cells in the lungs of sarcoidosis patients. Analysis of their pathogenic and clinical significance. Gerli R, et al. **Chest** 1989 Apr;95(4):811–6

Open lung biopsy in patients with non-Hodgkin's lymphoma and pulmonary infiltrates. McCabe RE, et al. **Chest** 1989 Aug;96(2):319–24

CF and emphysema [letter] McIntosh C. **Chest** 1989 Sep; 96(3):705–6

Poorly differentiated and undifferentiated lung tumors. Mackay B. **Chest** 1989 Jul;96(1 Suppl):38S–39S

Relationship between inflammatory processes and gas exchanges in pulmonary sarcoidosis. Martinot JB, et al. **Chest** 1989 Sep;96(3):550–6

Utility of the Wang 18-gauge transbronchial histology needle in the staging of bronchogenic carcinoma. Schenk DA, et al. **Chest** 1989 Aug;96(2):272–4

Severe pulmonary hypertension with diffuse smooth muscle proliferation of the lungs. Pulmonary tuberous sclerosis? Wagener OE, et al. **Chest** 1989 Jan;95(1):234–7

Transbronchial needle biopsy for histology specimens [editorial] Wang KP. **Chest** 1989 Aug;96(2):226–7

Indications for surgery based on lung biopsy in cases of ventricular septal defect and/or patent ductus arteriosus with severe pulmonary hypertension. Yamaki S, et al. **Chest** 1989 Jul;96(1):31–9

Pentoxifylline reduces pulmonary leucostasis and improves capillary patency in a rabbit peritonitis model. Tighe D, et al. **Circ Shock** 1989 Jun;28(2):159–64

Response of the rat lung to respirable fractions of composite fiber-epoxy dusts. Luchtel DL, et al. **Environ Res** 1989 Feb;48(1):57–69

An evaluation of the toxicity of carbon fiber composites for lung cells in vitro and in vivo. Martin TR, et al. **Environ Res** 1989 Aug;49(2):246–61

Talc deposition and effects after 20 days of repeated inhalation exposure of rats and mice to talc. Pickrell JA, et al. **Environ Res** 1989 Aug;49(2):233–45

Asbestos cement dust inhalation by hamsters. Wehner AP, et al. **Environ Res** 1978 Dec;17(3):367–89

Proliferation of pulmonary macrophages during the early phase of an acute graft-versus-host reaction in mice. Gartner JG, et al. **Exp Lung Res** 1988;14(6):781–96

Effect of murine gamma interferon on the cellular responses to bleomycin in mice. Hyde DM, et al. **Exp Lung Res** 1988; 14(5):687–704

A biochemical and morphological investigation of the early development of genetic emphysema in tight-skin mice. Gardi C, et al. **Exp Mol Pathol** 1989 Jun;50(3):398–410

Histopathological lung changes in immune complex mediated anaphylactic shock in humans elicited by dextran. Ljungström KG, et al. **Forensic Sci Int** 1988 Sep; 38(3–4):251–8

Rapid microwave fixation—a comparative morphometric study. Kayser K, et al. **Histochem J** 1988 Jun–Jul; 20(6–7):347–52

Minimal pathologic changes of the lung and asbestos exposure. Bellis D, et al. **Hum Pathol** 1989 Feb;20(2):102–6

Morphogenesis of abnormal elastic fibers in lungs of patients with panacinar and centriacinar emphysema. Fukuda Y, et al. **Hum Pathol** 1989 Jul;20(7):652–9

Surgical pathology of the lung in anti-basement membrane antibody-associated Goodpasture's syndrome. Lombard CM, et al. **Hum Pathol** 1989 May;20(5):445–51

The pathology of combined heart-lung transplantation: an autopsy study. Tazelaar HD, et al. **Hum Pathol** 1988 Dec; 19(12):1403–16

Rapid recovery of lung histology correlates with clearance of influenza virus by specific CD8+ cytotoxic T cells. Mackenzie CD, et al. **Immunology** 1989 Jul;67(3):375–81

Isolation and characterization of lung mast cells from rats with bleomycin-induced pulmonary fibrosis. Tomioka M, et al. **Immunology** 1989 Mar;66(3):439–44

Granulocyte-related bioincompatibility of hemodialysis: inhibition of oxidative metabolism, degranulation reaction, enzyme release and leukocyte sequestration in the lung. Kolb G, et al. **Int J Artif Organs** 1989 May;12(5):294–8

Comparison of nonbronchoscopic bronchoalveolar lavage to open lung biopsy for the bacteriologic diagnosis of pulmonary infections in mechanically ventilated patients. Gaussorgues P, et al. **Intensive Care Med** 1989;15(2):94–8

Effects of drug-induced pulmonary phospholipidosis on lung mechanics in rats. Camus P, et al. **J Appl Physiol** 1989 May;66(5):2437–45

Endotoxin-induced lung injury in rats: role of eicosanoids. Chang SW, et al. **J Appl Physiol** 1989 May;66(5):2407–18

Rabbit lung after inhalation of lithium chloride. Johansson A, et al. **J Appl Toxicol** 1988 Oct;8(5):373–5

Heart and lung hypertrophy, changes in blood volume, hematocrit and plasma renin activity in rats chronically exposed to increasing carbon monoxide concentrations. Penney DG, et al. **J Appl Toxicol** 1988 Jun;8(3):171–8

Sequence of morphologic events in experimental smoke inhalation. Linares HA, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):27–37

Computed tomography of fatal cerebral air embolism following percutaneous aspiration biopsy of the lung. Baker BK, et al. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):1082–3

Morphea profunda—a cutaneo-pulmonary variant with profuse sweating. Nakamura T, et al. **J Dermatol** 1989 Apr; 16(2):122–6

Cytotoxic T cells clear virus but augment lung pathology in mice infected with respiratory syncytial virus. Cannon MJ, et al. **J Exp Med** 1988 Sep 1;168(3):1163–8

Transbronchial biopsy has eliminated the need for endomyocardial biopsy in heart-lung recipients. Higenbottam T, et al. **J Heart Transplant** 1988 Nov–Dec; 7(6):435–9

Histologic changes in heart-lung transplant recipients during rejection episodes and at routine biopsy. Hutter JA, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):440–4

The effect of anti-intercellular adhesion molecule-1 on phorbol-ester-induced rabbit lung inflammation. Barton RW, et al. **J Immunol** 1989 Aug 15;143(4):1278–82

The effects of acute and chronic alcoholism on tumor necrosis factor and the inflammatory response. Nelson S, et al. **J Infect Dis** 1989 Sep;160(3):422–9

Compartmentalization of intraalveolar and systemic lipopolysaccharide-induced tumor necrosis factor and the pulmonary inflammatory response. Nelson S, et al. **J Infect Dis** 1989 Feb;159(2):189–94

Pulmonary endocrine cells in chronic bronchitis and emphysema. Gosney JR, et al. **J Pathol** 1989 Feb; 157(2):127–33

Mast cells in human lungs. Heard BE, et al. **J Pathol** 1989 Jan;157(1):59–63

Macrophages in bronchoalveolar lavage fluid are not representative of macrophages in granulomas of the lungs of BCG-infected mice. Nibbering PH, et al. **J Pathol** 1989 Mar;157(3):253–61

Percutaneous superfine-needle aspiration biopsy of intrathoracic lesions guided by simulator. Liu GS, et al. **J Surg Oncol** 1989 Feb;40(2):135–8

Gangrene of the lung. Phillips LG, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):114–8

Rat lung recovery from 3 days of continuous exposure to 0.75 ppm ozone. Bassett DJ, et al. **J Toxicol Environ Health** 1988;25(3):329–47

Study of the effects of ozone in emphysematous rats. Dormans JA, et al. **J Toxicol Environ Health** 1989; 26(1):1–18

Cadmium-enriched cigarette smoke-induced cytological and biochemical alterations in rat lungs. Gairola CG. **J Toxicol Environ Health** 1989;27(3):317–29

Effects of repeated inhalation exposures to 1-nitropyrene, benzo[a]pyrene, Ga2O3 particles, and SO2 alone and in combinations on particle clearance, bronchoalveolar lavage fluid composition, and histopathology. Wolff RK, et al. **J Toxicol Environ Health** 1989;27(1):123–38

Prevalence and pathology of nematode infections in the lungs of ringed seals (Phoca hispida) of the western arctic of Canada. Onderka DK. **J Wildl Dis** 1989 Apr;25(2):218–24

Diagnostic exercise: pneumonia in a rat. Dixon D, et al. **Lab Anim Sci** 1988 Dec;38(6):727–8

Reaction of the lung to air pollutant exposure. Kavet RI, et al. **Life Sci** 1974 Sep 1;15(5):849–61 (53 ref.)

Pathologic changes in pulmonary tissue of rabbits subjected to various types of vagotomy: truncal, selective and highly selective one. Głuszek S, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):79–83

Modulation of neutrophil mediated pulmonary damage: lessons learned from clinical disorders of neutrophils. Boxer LA. **Mead Johnson Symp Perinat Dev Med** 1986;(28):20–31 (13 ref.)

Pulmonary involvement in schistosomiasis mansoni. Greco DB, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:221–7

Inflation of lung biopsies for frozen section. Gianoulis M, et al. **Mod Pathol** 1988 Sep;1(5):357–8

Morphological criteria of diagnosis in lung tissue biopsies from diffuse interstitial pulmonary diseases. Eskenasy A. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):171–82

Sequential pathological studies in Japanese quails infected experimentally with Aspergillus fumigatus. Chaudhary SK, et al. **Mycopathologia** 1988 Sep;103(3):157–66

Histological and ultrastructural study of the inflammation evoked by Paracoccidioides brasiliensis antigen in previously immunized mice. Defaveri J, et al. **Mycopathologia** 1989 Jan;105(1):53–8

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 20–1989. A 33-year-old woman with exertional dyspnea and Raynaud's phenomenon. **N Engl J Med** 1989 May 18;320(20):1333–40

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 9–1989. A 32-year-old man with AIDS and a cavitary pulmonary lesion. **N Engl J Med** 1989 Mar 2;320(9):582–7

The effect of cigarette smoking on neutrophil kinetics in human lungs [see comments] MacNee W, et al. **N Engl J Med** 1989 Oct 5;321(14):924–8. **Comment in:** N Engl J Med 1989 Oct 5;321(14):968–70

Experimental meconium aspiration in guinea pigs. Jovanovic R, et al. **Obstet Gynecol** 1989 Apr;73(4):652–6

Mediastinoscopy: not needed preoperatively in CT-negative lung carcinoma? Liippo K, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):192–5

Diagnostic value of combined bronchoalveolar lavage and transbronchial lung biopsy. Fend F, et al. **Pathol Res Pract** 1989 Mar;184(3):312–7

Diminished radial count is found only postnatally in Down's syndrome. Cooney TP, et al. **Pediatr Pulmonol** 1988; 5(4):204–9

Influence of ventilatory technique on pulmonary baroinjury in baboons with hyaline membrane disease. Gerstmann DR, et al. **Pediatr Pulmonol** 1988;5(2):82–91

Persistent pulmonary hypertension of the newborn: pulmonary pathologic aspects. Patterson K, et al. **Perspect Pediatr Pathol** 1988;12:139–54 (58 ref.)

The laser in thoracoscopy. Boutin C. **Pneumologie** 1989 Feb; 43(2):96–7

Pathology of interstitial lung diseases. Corrin B. **Postgrad Med J** 1988;64 Suppl 4:17–25 (45 ref.)

Transthoracic image guided biopsy. Dick R. **Postgrad Med J** 1988 Jul;64(753):544–51

Pathogenetic mechanisms in the lung in systemic disease. du Bois RM. **Postgrad Med J** 1988;64 Suppl 4:103–10 (56 ref.)

Ultrasonically guided 19–gauge Surecut needle biopsy of apical and superior mediastinal tumors. Takeuchi K, et al. **Radiat Med** 1988 Nov–Dec;6(6):272–5

T1N0M0 lung cancer: evaluation with CT. Conces DJ Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):643–6

Transbronchial lung biopsy and bronchoalveolar lavage in diagnosis of diffuse infiltrative lung diseases. Poletti V, et al. **Respiration** 1988;54 Suppl 1:66–72

The Chiba needle for percutaneous lung biopsy. Chin WS, et al. **Singapore Med J** 1988 Aug;29(4):371–3

Local skin burn causes systemic (lung and kidney) endothelial cell injury reflected by increased circulating and decreased tissue factor VIII–related antigen. Gross MA, et al. **Surgery** 1989 Aug;106(2):310–6; discussion 316–7

Kinetics of the bronchoalveolar leucocyte response in rats during exposure to equal airborne mass concentrations of quartz, chrysotile asbestos, or titanium dioxide. Donaldson K, et al. **Thorax** 1988 Jul;43(7):525–33

Bleeding as a complication of fine needle lung biopsy. Doyle T, et al. **Thorax** 1988 Dec;43(12):1013–4

Rheumatoid arthritis with extensive lung lesions. Fellbaum C, et al. **Thorax** 1989 Jan;44(1):70–1

Influence of lung volume in sleep apnoea. Sériès F, et al. **Thorax** 1989 Jan;44(1):52–7

Inhalation toxicity of high flash aromatic naphtha. Clark DG, et al. **Toxicol Ind Health** 1989 May;5(3):415–28

Myocardial and pulmonary histopathologic changes. Rose AG, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):29–32

An analysis of pulmonary natural killer cell activity in F1–hybrid mice with acute graft–versus–host reactions. Gartner JG, et al. **Transplantation** 1988 Dec;46(6):879–86

Lung macrophages [editorial] Hammar SP. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):iii–v

Acute and persistent alterations in pulmonary inflammatory cells and airway mast cells induced by Sendai virus infection in neonatal rats [published erratum appears in Vet Pathol 1989 Mar;26(2):187] Castleman WL, et al. **Vet Pathol** 1989 Jan;26(1):18–25

Pathological lesions in the lungs of ducks infected with influenza A viruses. Cooley AJ, et al. **Vet Pathol** 1989 Jan; 26(1):1–5

Immunophenotype of pulmonary cellular infiltrates in sheep with visceral caseous lymphadenitis. Ellis JA. **Vet Pathol** 1988 Sep;25(5):362–8

Histopathologic and immunocytochemical studies of distemper in seals. Kennedy S, et al. **Vet Pathol** 1989 Mar; 26(2):97–103

Early bronchopulmonary lesions in rat lung after normobaric 100% oxygen exposure and their evolution. A light and electron microscopic study. Porte A, et al. **Virchows Arch [A]** 1989;414(2):135–45

Waldenström's macroglobulinemia. Report of an autopsy case presenting with a pulmonary manifestation. Tsuji M, et al. **Virchows Arch [A]** 1989;415(2):169–73

Comparison of respiratory secretion cytology and pulmonary histology in horses. Winder NC, et al. **Zentralbl Veterinarmed [A]** 1989 Jan;36(1):32–8

[Pathological changes in the lungs of patients with chronic kidney failure treated by hemodialysis] Georgiev G. **Khirurgiia (Sofiia)** 1988;41(4):33–4 **(Bul)**

[Protective effects of anti–oxidants in hepatic and pulmonary injuries subsequent to bowel ischemia] Sheng ZY. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):183–6, 14 (Eng. Abstr.) **(Chi)**

[The value of fluoroscopy—guided percutaneous transthoracic fine needle aspiration biopsy in diagnosis of thoracic diseases] Su WJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):223–6 (Eng. Abstr.) **(Chi)**

[Clinical experiences in transbronchial lung biopsy] Li LY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):330–2, 388 (Eng. Abstr.) **(Chi)**

[Percutaneous aspiration lung biopsy: a new method of localizing small– to medium–sized lesions] Ye YK. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):224–6, 255 (Eng. Abstr.) **(Chi)**

[Morphological studies on the lung of the rat exposed to aluminium dust] Sun MS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul;22(4):214–6 (Eng. Abstr.) **(Chi)**

[Effect of long–term administration of platelet activating factor on pulmonary response and morphology in the guinea pig] Mencia–Huerta JM, et al. **Allerg Immunol (Paris)** 1988 Dec;22 Suppl 10:21, 23–4 (Eng. Abstr.) **(Fre)**

[The lung in brain death. Anatomo–biological correlations for pulmonary transplantation] Pruvot FR, et al. **Presse Med** 1989 Mar 4;18(9):480–3 (Eng. Abstr.) **(Fre)**

[How to interpret a diagnostic test (letter)] Brohee D, et al. **Rev Med Brux** 1989 Mar;10(3):114–6 **(Fre)**

[Cell populations of the deep lung and circulating blood in silicosis. Contribution to physiopathological concepts] Chabbou A, et al. **Tunis Med** 1987 Mar;65(3):161–6 (Eng. Abstr.) **(Fre)**

[The simulation of histopathological diagnosis with the help of an automated image analysis system (VISIAC)] Kayser K, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):19–24 (Eng. Abstr.) **(Ger)**

[Soil dust as a factor which changes the histochemical picture of the rat lung] Kifer E, et al. **Gegenbaurs Morphol Jahrb** 1988;134(6):867–75 (Eng. Abstr.) **(Ger)**

[Asbestos and the lung. II] Konietzko N. **Med Klin** 1988 Jun 17;83(13–14):449–55 (105 ref.) **(Ger)**

[Thoracoscopy: surgical technic] Maassen W. **Pneumologie** 1989 Feb;43(2):53–4 (Eng. Abstr.) **(Ger)**

[The German Society of Pneumology and Tuberculosis. Recommendations for personnel and time requirements in pneumologic studies. Bronchoscopy, thoracoscopy, lung and pleura puncture] **Prax Klin Pneumol** 1988 Dec; 42(12):853–8 (13 ref.) **(Ger)**

[Surgical diagnostic methods in the thoracic area] Engelmann C. **Z Erkr Atmungsorgane** 1988;171(1):19–28 (19 ref.) (Eng. Abstr.) **(Ger)**

[Biopsy of lung tissue in the diagnosis of disseminated transformations] Lewaschow JN, et al. **Z Erkr Atmungsorgane** 1988;171(3):210–8 (Eng. Abstr.) **(Ger)**

[Cellular components in interstitial lung tissue in sudden infant death—immunohistochemical characterization] Ogbuihi S, et al. **Z Rechtsmed** 1989;102(2–3):133–42 (Eng. Abstr.) **(Ger)**

[Quantitative polarization microscopy demonstration of collagen type I and type III in histologic paraffin sections] Ogbuihi S, et al. **Z Rechtsmed** 1988;100(2–3):101–11 (Eng. Abstr.) **(Ger)**

[Changes in the ratio of collagen type I and III in the interlobular interstitium of the lung in sudden infant death—a pilot study] Ogbuihi S, et al. **Z Rechtsmed** 1988; 101(4):247–54 (Eng. Abstr.) **(Ger)**

[Lung changes in chronic polyarthritis] Bély M. **Zentralbl Allg Pathol** 1988;134(7):647–64 (Eng. Abstr.) **(Ger)**

[The histomorphology of granulomatous lipid pneumonia due to dietary fat aspiration in achalasia of the esophagus (megaesophagus)] Jäger J, et al. **Zentralbl Allg Pathol** 1988; 134(7):681–6 (Eng. Abstr.) **(Ger)**

[Classification of the lung conditions in cases of perinatal death] Plank J. **Zentralbl Allg Pathol** 1988;134(7):603–9 (31 ref.) (Eng. Abstr.) **(Ger)**

[Interstitial lung diseases of the interstitial–proliferative type] Schultz M, et al. **Zentralbl Allg Pathol** 1988;134(8):713–8 (Eng. Abstr.) **(Ger)**

[Pathomorphology of lung changes caused by gramoxone poisoning. Human pathologic and animal experimental studies] Vadnay I, et al. **Zentralbl Allg Pathol** 1988; 134(7):671–9 (Eng. Abstr.) **(Ger)**

[Use of computerized tomography as a guide in thoracic needle biopsies] D'Auria S, et al. **Arch Monaldi Mal Torace** 1987 May–Jun;42(3):219–29 (Eng. Abstr.) **(Ita)**

[The lungs in acquired immunodeficiency syndrome: on various histopathologic aspects] Perna A, et al. **Arch Monaldi Mal Torace** 1987 May–Jun;42(3):301–11 (Eng. Abstr.) **(Ita)**

[CT–guided percutaneous fine–needle biopsy in the histological characterization of mediastinal–pulmonary lesions] Casamassima F, et al. **Radiol Med (Torino)** 1988 Nov;76(5):438–42 (Eng. Abstr.) **(Ita)**

[Percutaneous needle biopsy of the lung. Critical review of 496 cases] Juliani G, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):530–3 (Eng. Abstr.) **(Ita)**

[An autopsied case of idiopathic interstitial pneumonia, showing a remarkably elevated serum level of CA 19–9] Okino T, et al. **Gan No Rinsho** 1989 Jan;35(1):69–73 (Eng. Abstr.) **(Jpn)**

[Pathology of early lung cancer] Shimosato Y. **Gan No Rinsho** 1988 Aug;34(10):1373–7 (Eng. Abstr.) **(Jpn)**

[Bronchiolitis obliterans organizing pneumonia] Kitaichi M, et al. **Kokyu To Junkan** 1988 Oct;36(10):1075–81 **(Jpn)**

[Thin slice CT of lung tumors. Pathohistologic correlative study of tumor edge] Itoh S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):833–40 (Eng. Abstr.) **(Jpn)**

[Assessment of bleomycin–induced pulmonary fibrosis by bronchoalveolar lavage] Fujino Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):180–7 (Eng. Abstr.) **(Jpn)**

[Comparative studies on radiological and pathological findings of idiopathic diffuse interstitial fibrosis of the lung] Iwai K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct;26(10):1042–51 (Eng. Abstr.) **(Jpn)**

[A case of bronchiolitis obliterans organizing pneumonia (BOOP) showing spontaneous remission after open lung biopsy] Ohno S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):904–10 (Eng. Abstr.) **(Jpn)**

[Ultrasonically guided aspiration needle biopsy in the diagnosis of intrapulmonary lesions] Saito T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep;26(9):970–4 (Eng. Abstr.) **(Jpn)**

[CT–guided needle aspiration biopsy for the diagnosis of intrathoracic lesions] Shinohara Y. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1052–61 (Eng. Abstr.) **(Jpn)**

[A case of necrotizing sarcoid granulomatosis diagnosed by open lung biopsy] Sugama Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):75–80 (Eng. Abstr.) **(Jpn)**

[The effect of foamy alveolar macrophages presented in bleomycin–injured rat lungs in pulmonary fibrosis] Suwabe A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):3–13 (Eng. Abstr.) **(Jpn)**

[A pathological study on fibrosis in autopsied lungs with pulmonary sarcoidosis] Takemura T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):386–93 (Eng. Abstr.) **(Jpn)**

[A case of squamous cell carcinoma of the lung associated with cavitation after chemotherapy, leading to development of adult respiratory distress syndrome and disseminated intravascular coagulation] Umeki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1067–73 (Eng. Abstr.) **(Jpn)**

[Application of transbronchial brushing for histological diagnosis of lung cancer] Yamakama H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):64–70 (Eng. Abstr.) **(Jpn)**

[Familial amyloid polyneuropathy presenting as recurrent hemoptysis and hemosputum: detection of amyloid deposition of the lung by transbronchial lung biopsy] Morita M, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep; 77(9):1435–9 **(Jpn)**

[CT–guided transcutaneous lung biopsy] Kawase Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):185–8 **(Jpn)**

[Morphofunctional status of fetal lungs in the presence of chronic obstructive bacterial pyelonephritis in pregnant females] Bubnova NI, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):64–6 **(Rus)**

[Ultrastructural characteristics of disorders of various non–respiratory functions of the lungs in endotoxic shock] Kharlanova NG, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):37–41 (Eng. Abstr.) **(Rus)**

[Dynamics of early morphologic shifts in the bronchopulmonary system in intranasal infection of mice with streptococcus group B] Bartazarian ND, et al. **Arkh Patol** 1989;51(5):26–32 (Eng. Abstr.) **(Rus)**

[Content of endocrine cells of the APUD–system of the lungs in cancer of that organ] Blinova SA. **Arkh Patol** 1988; 50(9):46–50 (Eng. Abstr.) **(Rus)**

[The question of the functional significance and origin of pulmonary "tumorlets"] Derizhanova IS, et al. **Arkh Patol** 1989;51(1):57–60 (Eng. Abstr.) **(Rus)**

[Mast cells of the lungs in experimental hyperergic pleurisy] Lipshits RU, et al. **Fiziol Zh** 1989 May–Jun;35(3):102–6 (Eng. Abstr.) **(Rus)**

[Intraoperative histologic verification of focal diseases of the lungs] Braude VI. **Grudn Khir** 1989 Mar–Apr;(2):59–63 (Eng. Abstr.) **(Rus)**

[Morphometry of the lungs in predicting late results of surgical correction of congenital heart defects with hypervolemia of the lesser circulation] Guliamov DS, et al. **Kardiologiia** 1988 Dec;28(12):112–3 **(Rus)**

[The role of open biopsy in the diagnosis of disseminated lung lesions] Slepukha IM, et al. **Klin Khir** 1988;(10):1–3 (Eng. Abstr.) **(Rus)**

[Transbronchial biopsy in the diagnosis of lung diseases in children] Filippov VP, et al. **Pediatriia** 1988;(10):52–4 **(Rus)**

[Diagnosis and evaluation of sarcoidosis by biopsy] Braude VI. **Probl Tuberk** 1988;(7):46–9 (Eng. Abstr.) **(Rus)**

[Significance of pulmonary APUD cells in the morphogenesis of bronchiectasis in children] Bubnova NI. **Probl Tuberk** 1988;(11):43–7 (Eng. Abstr.) **(Rus)**

[Open biopsy of the lungs in bilateral disseminated lesions] Slepukha IM, et al. **Probl Tuberk** 1988;(9):18–21 (Eng. Abstr.) **(Rus)**

[Clinical forms of tuberculosis with minimal destruction of pulmonary tissue] Smirnov GA, et al. **Probl Tuberk** 1989; (1):24–7 (Eng. Abstr.) **(Rus)**

[Morphofunctional characteristics of the lungs in experimental mycoplasmal and pneumococcal infection] Tomson VV, et al. **Probl Tuberk** 1988;(8):41–5 (Eng. Abstr.) **(Rus)**

[Diagnosis of cancer of the lung in patients with tuberculosis and subjects with post–tuberculosis changes of the lungs] Zhingel' IP, et al. **Probl Tuberk** 1989;(6):26–9? (Eng. Abstr.) **(Rus)**

[Tuberculosis and cancer of the lungs] Kogan EK, et al. **Sov Med** 1988;(10):18–20 (Eng. Abstr.) **(Rus)**

[Effect of the type of drowning on morphometric characteristics of the lungs] Karavaev MV. **Sud Med Ekspert** 1988 Oct–Dec;31(4):23–6 (Eng. Abstr.) **(Rus)**

[Histomorphologic changes in the lung tissue in death from overcooling] Os'minkin VA. **Sud Med Ekspert** 1988 Jul–Sep;31(3):27–9 (Eng. Abstr.) **(Rus)**

[Pathogenesis of protracted pneumonia] Maianskii DN, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):42–50 **(Rus)**

[Transthoracic aspiration biopsy using fine and superfine needles in the diagnosis of spherical formations in the lungs] Vinner MG, et al. **Vestn Rentgenol Radiol** 1988 May–Jun; (3):5–10 (Eng. Abstr.) (Rus)

[Wegener's granulomatosis with predominant lung involvement] Nesterov EN, et al. **Vrach Delo** 1988 Dec; (12):67–9 (Rus)

[The role of transbronchial lung biopsy in the diagnosis of diffuse lung disease] Debeljak A, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):149–52 (Eng. Abstr.) (Scr)

[Complications of transbronchial lung biopsy] Durković P. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):73–4 (Eng. Abstr.) (Scr)

[Hypoplasia and pulmonary hypertension in Down syndrome: prognostic evaluation using pulmonary biopsy] Tarroch X, et al. **Rev Esp Cardiol** 1989 May;42(5):348–50 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Systemic administration of N-acetylcysteine has no effect on postoperative lung function following elective upper laparotomy in lung healthy patients. Jepsen S, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):219–22

Pulmonary mechanics during high frequency ventilation. Fredberg JJ. **Acta Anaesthesiol Scand Suppl** 1989;90:170–1

Mobilization of mucus by airway oscillations. Freitag L, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:93–101

Aerodynamic valving in the avian lung. Scheid P, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:28–31 (10 ref.)

Convective mixing mechanisms in high frequency intermittent jet ventilation. Scherer PW, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:58–64

HFV and pulmonary physiology. Wagner PD. **Acta Anaesthesiol Scand Suppl** 1989;90:172–5

Effect of ventilatory frequency on fluid filtration rate in isolated perfused rabbit lungs. Martínez Ruiz R, et al. **Acta Cient Venez** 1988;39(2):151–4

Fenoterol treatment and desensitization of beta-adrenoceptors in rabbit foetal lung. Falkay G, et al. **Acta Physiol Hung** 1988;71(4):503–6

The physiological role of the lung in lymphocyte migration. Pabst R, et al. **Adv Exp Med Biol** 1988;237:553–8

Chemistry and pharmacology of PAF antagonists. Evaluation of changes at potential metabolism sites on activity and duration of activity. Handley DA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:367–70

Inhibition of thromboxane responses in the airway of the cat by SQ29,548 and OKY 1581. Kadowitz PJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:535–8

Determination of the effects of inhibition of pulmonary thromboxane A2 synthase activity, in vivo and in vitro. McNamara DB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:531–4

Effect of an oral thromboxane synthetase inhibitor (OKY-046) on antigen-induced bronchoconstriction in guinea pigs. Nambu F, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:528–30

Effect of chronic administration of platelet-activating factor (PAF) in the guinea-pig and the rat. Pignol B, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:371–6

Leukotrienes and human airways. Piper PJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:488–94

Responses to histamine and selective H2-receptor agonists in lung parenchymal strips from normal and sensitized guinea-pigs. Cortijo J, et al. **Agents Actions** 1989 Aug; 28(1–2):45–52

Involvement of protein kinase C in the histamine H1-receptor mediated contraction of guinea-pig lung parenchymal strips. Leurs R, et al. **Agents Actions** 1989 Apr; 27(1–2):180–3

Familial factors related to lung function in children aged 6–10 years. Results from the PAARC epidemiologic study. Kauffmann F, et al. **Am J Epidemiol** 1989 Jun; 129(6):1289–99

Genotypic and phenotypic similarities in pulmonary function among family members of adult monozygotic and dizygotic twins. Redline S, et al. **Am J Epidemiol** 1989 Apr; 129(4):827–36

Endocrine maturation and lung function in premature neonates of women with diabetes. Parker CR Jr, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):657–62

Biphasic cellular and tissue response of rat lungs after eight-day aerosol exposure to the silicon dioxide cristobalite. Absher MP, et al. **Am J Pathol** 1989 Jun; 134(6):1243–51

Breath-by-breath respiratory timing and volume control during periodic breathing. Carley DW, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R653–60

Pulmonary and peripheral lymph protein clearance during bacteremia after surgery. Charash WE, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1421–8

Decreased cardiopulmonary reflexes with aging in normotensive humans. Cléroux J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H961–8

Evidence for apical sodium channels in frog lung epithelial cells. Fischer H, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C764–71

Increased transvascular protein transport in lungs induced by nonthrombogenic gamma-thrombin. Garcia-Szabo RR, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1690–6

Effects of arginine vasopressin on hemodynamics and lung fluid balance in lambs. Gest AL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H641–7

Lymph flow during increases in pulmonary blood flow and microvascular pressure in dogs. Grimbert FA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1149–55

Extensive changes in collagen synthesis and degradation during compensatory lung growth. McAnulty RJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C754–9

Lung fibroblasts produce chemotactic factors for bronchial epithelial cells. Shoji S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L71–9

Effect of pulmonary perfusion on lung fluid filtration in young lambs. Teague WG, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1336–41

Lung surfactant: some historical perspectives leading to its cellular and molecular biology. Tierney DF. **Am J Physiol** 1989 Aug;257(2 Pt 1):L1–12 (114 ref.)

Pulmonary inflation reflex: its lack of physiological significance in coronary circulation of humans. Wilson RF, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H866–71

Indications and standards for cardiopulmonary sleep studies. American Thoracic Society. Medical Section of the American Lung Association [see comments] **Am Rev Respir Dis** 1989 Feb;139(2):559–68 (157 ref.). **Comment in:** Am Rev Respir Dis 1989 Jul;140(1):264–5

American Lung Association, American Thoracic Society, 1989 annual meeting. May 14–17, 1989, Cincinnati, Ohio. Abstracts. **Am Rev Respir Dis** 1989 Apr;139(4 Pt 2):A1–652

Assessing lung function in infants from the shape of forced expiratory flow-volume curves. Allen JL. **Am Rev Respir Dis** 1988 Sep;138(3):514–5 (15 ref.)

Inflammatory cells and the epithelium. Mast cell/nerve interactions in the lung in vitro and in vivo. Bienenstock J, et al. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S31–4

The lung matrix and inflammation: Part II. Biochemical and molecular mechanisms of fibrogenesis: implications for environmental lung disease. Brody AR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1056–7

Sex and race differences in the development of lung function [letter] Brooks LJ, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):855

Rapid short-term clearance of chrysotile compared with amosite asbestos in the guinea pig. Churg A, et al. **Am Rev Respir Dis** 1989 Apr;139(4):885–90

Clearance of Pseudomonas aeruginosa in different rat lung models. Döring G, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1249–53

Endotoxin-induced suppression of pulmonary antibacterial defenses against Staphylococcus aureus. Harris SE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1439–43

Transdiaphragmatic twitch pressure. Effects of lung volume and chest wall shape. Hubmayr RD, et al. **Am Rev Respir Dis** 1989 Mar;139(3):647–52

Short-term pulmonary function change in association with ozone levels. Kinney PL, et al. **Am Rev Respir Dis** 1989 Jan;139(1):56–61

Shape of forced expiratory flow-volume curves in infants. Le Souëf PN, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):590–7

Mechanical loads on the ventilatory muscles. A theoretical analysis. MacIntyre NR, et al. **Am Rev Respir Dis** 1989 Apr;139(4):968–73

The pulmonary clearance of smooth and rough strains of Pseudomonas aeruginosa. Martin HG, et al. **Am Rev Respir Dis** 1989 Jul;140(1):206–10

Lung function in Polynesians [letter] Neukirch F, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1511

Effect of alcohol consumption on emphysema or pulmonary function [letter] Pratt PC, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1358–9

The relationship between longitudinal change in pulmonary function and nonspecific airway responsiveness in children and young adults. Redline S, et al. **Am Rev Respir Dis** 1989 Jul;140(1):179–84

Sex and race differences in the development of lung function. Schwartz J, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1415–21

Analysis of spirometric data from a national sample of healthy 6- to 24-year-olds (NHANES II). Schwartz JD, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1405–14

On the temporal relationships between lung function and somatic growth. Sherrill DL, et al. **Am Rev Respir Dis** 1989 Sep;140(3):638–44

Influence of the "squeeze jacket" on lung function in young infants. Steinbrugger B, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1258–60

Evaluation of lung mechanics in rabbits using short duration flow pulses. Sullivan KJ, et al. **Am Rev Respir Dis** 1989 Jul;140(1):17–24

A comparison of anaesthetic breathing systems during spontaneous ventilation. An in-vitro study using a lung model. Chan AS, et al. **Anaesthesia** 1989 Mar;44(3):194–9

An evaluation of the incentive spirometer to improve lung function after cholecystectomy. O'Connor M, et al. **Anaesthesia** 1988 Sep;43(9):785–7

Resonance mode analysis for volume estimation of asymmetric branching structures. Raphael DT, et al. **Ann Biomed Eng** 1989;17(4):361–75

Lungs and ventilation in sauna. Laitinen LA, et al. **Ann Clin Res** 1988;20(4):244–8

Pulmonary function studies in healthy non-smoking men of Calcutta. Chatterjee S, et al. **Ann Hum Biol** 1988 Sep–Oct; 15(5):365–74

Effects of progressively increased doses of theophylline and of S 9795 on hemodynamics, blood gases and lung mechanics in dogs. Lejeune P, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:215–27

Testing children for pulmonary function. Sly PD, et al. **Aust Fam Physician** 1989 Jul;18(7):810–2

Lung volume of meat-type chickens. Julian RJ. **Avian Dis** 1989 Jan–Mar;33(1):174–6

The effects of dose of elemental mercury and first-pass circulation time on exhalation and organ distribution of inorganic mercury in rats. Magos L, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):85–9

The assessment of alpha 1 proteinase inhibitor form and function in lung lavage fluid from healthy subjects. Afford SC, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1065–74

Antileukoprotease, its role in the human lung. Kramps JA, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:83–7

The metabolic clearance of progesterone in the pregnant rat: absence of a physiological role for the lung. Waddell BJ, et al. **Biol Reprod** 1989 Jun;40(6):1188–93

Changes of the EMG and its relationship to the cardiopulmonary parameters during two-arm cranking of disabled men. Frauendorf H, et al. **Biomed Biochim Acta** 1989;48(5–6):S521–4

Lymphatic microcirculation in frog lung. Koyama T, et al. **Biorheology** 1988;25(1–2):219–26

Potentiation of leukotriene production following sequestration of neutrophils in isolated lungs: indirect evidence for intercellular leukotriene A4 transfer. Grimminger F, et al. **Blood** 1988 Nov;72(5):1687–92

New regression equations for predicting peak expiratory flow in adults. Nunn AJ, et al. **BMJ** 1989 Apr 22; 298(6680):1068–70

Continuous thoracic extradural 0.5% bupivacaine with or without morphine: effect on quality of blockade, lung function and the surgical stress response. Scott NB, et al. **Br J Anaesth** 1989 Mar;62(3):253–7

Controlled ventilation with a Mapleson A (Magill) breathing system: reassessment using a lung model. Tyler CK, et al. **Br J Anaesth** 1989 Apr;62(4):462–6

Ventilation—matching man, mode and machine. Oh TE. **Br J Hosp Med** 1988 Sep;40(3):216–20 (26 ref.)

Adaptation of the respiratory system. Milner AD, et al. **Br Med Bull** 1988 Oct;44(4):909–18 (37 ref.)

Respiratory system, lung, and chest wall mechanics in guinea pigs. Martins MA, et al. **Braz J Med Biol Res** 1988; 21(2):353–63 (25 ref.)

The action and metabolism of peptide leukotrienes in the isolated bullfrog lung. Heller RS, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):309–14

Influence of platelet-activating factor on leukotriene D4-induced contractions of the guinea pig parenchymal strip. Yaghi A, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):315–21

The validity generalization of distance run tests. Safrit MJ, et al. **Can J Sport Sci** 1988 Dec;13(4):188–96 (63 ref.)

Reproducibility of pulmonary mechanics measurements in dairy cattle. Gallivan GJ, et al. **Can J Vet Res** 1988 Jul; 52(3):293–8

Purification and some properties of a lung-derived growth factor that differentially stimulates the growth of tumor cells metastatic to the lung. Cavanaugh PG, et al. **Cancer Res** 1989 Jul 15;49(14):3928–33

Normal cardiopulmonary adjustments to pregnancy: cardiovascular evaluation. Cole PL, et al. **Cardiovasc Clin** 1989;19(3):37–56 (101 ref.)

Spirometry in healthy adult males in Botswana. Fox DH. **Cent Afr J Med** 1988 May;34(5):106–14

Measurements of components of resistance to breathing. Chiang ST, et al. **Chest** 1989 Aug;96(2):307–11

The relationship between lung volume and standard scalar ECG parameters in normal subjects. Parker JD, et al. **Chest** 1989 Mar;95(3):530–4

Influence of the extracellular matrix on type 2 cell differentiation. Rannels DE, et al. **Chest** 1989 Jul; 96(1):165–73 (78 ref.)

Measurements of ventilatory regulation. Burki NK. **Clin Chest Med** 1989 Jun;10(2):215–26 (37 ref.)

Pulmonary physiology in the postoperative period. Fairshter RD, et al. **Crit Care Clin** 1987 Apr;3(2):287–306 (104 ref.)

A new infant ventilator for normal and high-frequency ventilation: influence of tracheal tube on distal airway pressure during high-frequency ventilation. Chakrabarti MK, et al. **Crit Care Med** 1988 Nov;16(11):1142–6

Respiratory physiology. Rose CC, et al. **Emerg Med Clin North Am** 1989 May;7(2):187–204 (26 ref.)

Isolation and biological activity of corticostatic peptides (anti-ACTH). Zhu Q, et al. **Endocr Res** 1989; 15(1–2):129–49

Gas transfer in dog lungs during high-frequency ventilation. Piiper J, et al. **Eng Med** 1988 Oct;17(4):189–94

A rapid, non-invasive method for measuring total respiratory impedance in the horse. Young SS, et al. **Equine Vet J** 1989 Mar;21(2):99–105

Leukotrienes and the airways. Piper PJ. **Eur J Anaesthesiol** 1989 Jul;6(4):241–55 (84 ref.)

Transpulmonary pressure and phrenic activity in early inspiration. Luijendijk SC, et al. **Eur J Appl Physiol** 1988; 58(1-2):208-13

Effect of submaximal exercise at low temperatures on pulmonary function in healthy young men. Pekkarinen H, et al. **Eur J Appl Physiol** 1989;58(8):821-5

Recording pressure at the distal end of the endotracheal tube to measure respiratory impedance. Navajas D, et al. **Eur Respir J** 1989 Feb;2(2):178-84

Effects of rebreathing conditions and body size on normal human lung tissue volume. Polianski JM, et al. **Eur Respir J** 1989 Jan;2(1):78-83

Lung mechanics and activity of slowly adapting airway stretch receptors. Sant'Ambrogio FB, et al. **Eur Respir J** 1988 Aug;1(8):685-90

Local pulmonary activation of proteolytic enzymes after Escherichia-coli-induced lung injury in sheep. Andreasson S, et al. **Eur Surg Res** 1988;20(5-6):289-97

An 18-month study of the effects on hamster lungs of intratracheally administered human neutrophil elastase. Lucey EC, et al. **Exp Lung Res** 1988;14(5):671-86

Effects of SO2 exposure on canine pulmonary epithelial functions. Man SF, et al. **Exp Lung Res** 1989 Mar; 15(2):181-98

Neutrophil response following intratracheal instillation of collagen peptides into rat lungs. Riley DJ, et al. **Exp Lung Res** 1988;14(4):549-63

Effects of chlorinated amines on endothelial and epithelial barriers in vitro and ex vivo. Shasby DM, et al. **Exp Lung Res** 1989 May;15(3):345-57

Pharmacologic responsiveness of rat parenchymal strips, bronchi, and bronchioles. Szarek JL, et al. **Exp Lung Res** 1988;14(5):575-85

Reference values of age-independent lung parameters in healthy 7-10-14 year old boys. Gerginova M, et al. **Folia Med (Plovdiv)** 1987;29(2):25-33

Mucociliary clearance system of lung. Hira HS, et al. **Indian J Chest Dis Allied Sci** 1988 Apr-Jun;30(2):111-9 (29 ref.)

Some observations on pulmonary function tests in rice mill workers. Singh SK, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun;32(2):152-7

A least squares algorithm to determine the mechanical time constant distribution of the lung during forced expiration. Rotger M, et al. **Int J Biomed Comput** 1989 Mar;24(1):29-40

Acute effects of air pollution changes in schoolchildren: the Gardanne coal basin study. Charpin D, et al. **Int J Biometeorol** 1988 Nov;32(4):275-9

An automated method of separating patient from ventilator work on the lungs. Boom MJ, et al. **Int J Clin Monit Comput** 1988;5(4):235-42

Evaluation of methods for indirect calorimetry with a ventilated lung model. Braun U, et al. **Intensive Care Med** 1989;15(3):196-202

The acoustical input impedance of excised human lungs--measurements and model matching. Hudde H, et al. **J Acoust Soc Am** 1989 Aug;86(2):475-92

A possible role for PAF in allergen-induced late responses: modification by a selective antagonist. Abraham WM, et al. **J Appl Physiol** 1989 May;66(5):2351-7

Preferential axial flow during high-frequency oscillations: effects of gas density. Alleyne CM, et al. **J Appl Physiol** 1989 Feb;66(2):542-7

Pulmonary and ventilatory responses to pregnancy, immersion, and exercise. Berry MJ, et al. **J Appl Physiol** 1989 Feb;66(2):857-62

Lung expansion and the perialveolar interstitial pressure gradient. Bhattacharya J, et al. **J Appl Physiol** 1989 Jun; 66(6):2600-5

Partitioning of pulmonary resistance in dogs: effect of tidal volume and frequency. Brusasco V, et al. **J Appl Physiol** 1989 Mar;66(3):1190-6

Lung hyperinflation in isolated dog lungs during high-frequency oscillation. Cha EJ, et al. **J Appl Physiol** 1988 Sep;65(3):1172-9

Cholinergic component of histamine-induced bronchoconstriction in newborn guinea pigs. Clerici C, et al. **J Appl Physiol** 1989 May;66(5):2145-9

Inhibition by colchicine of phospholipid secretion induced by lung distension. Corbet AJ, et al. **J Appl Physiol** 1988 Oct;65(4):1710-5

Effect of airway closure on ventilation distribution. Crawford AB, et al. **J Appl Physiol** 1989 Jun;66(6):2511-5

High-frequency ventilation-induced apnea: interaction of frequency, volume, FRC, and CO2. Davenport PW, et al. **J Appl Physiol** 1989 May;66(5):2462-7

Substance P-induced effects in guinea pig lungs: effects of thiorphan and captopril. Drazen JM, et al. **J Appl Physiol** 1989 Mar;66(3):1364-72

Effect of pH on pulmonary vascular tone, reactivity, and arachidonate metabolism. Farrukh IS, et al. **J Appl Physiol** 1989 Jul;67(1):445-52

Site of recruitment in the pulmonary microcirculation. Hanson WL, et al. **J Appl Physiol** 1989 May;66(5):2079-83

Chest wall restriction limits high airway pressure-induced lung injury in young rabbits. Hernandez LA, et al. **J Appl Physiol** 1989 May;66(5):2364-8

Propagation of stress waves in inflated sheep lungs. Jahed M, et al. **J Appl Physiol** 1989 Jun;66(6):2675-80

Effects of lung volume, volume history, and methacholine on lung tissue viscance. Kariya ST, et al. **J Appl Physiol** 1989 Feb;66(2):977-82

Oxygen cost of breathing during fatiguing inspiratory resistive loads. McCool FD, et al. **J Appl Physiol** 1989 May;66(5):2045-55

Role of cardiopulmonary baroreflexes during dynamic exercise. Mack G, et al. **J Appl Physiol** 1988 Oct; 65(4):1827-32

Influence of body temperature on histamine-induced bronchoconstriction in guinea pigs. Macquin-Mavier I, et al. **J Appl Physiol** 1989 Mar;66(3):1054-8

Beta-endorphin activity and hypercapnic ventilatory responsiveness after marathon running. Mahler DA, et al. **J Appl Physiol** 1989 May;66(5):2431-6

Lung aeration and lung water dynamics in artificially ventilated newborn lambs. Maloney JE, et al. **J Appl Physiol** 1989 Jan;66(1):1-7

Measurement of alveolar gas volume by ambient pressure changes in isolated lungs. Martin RR, et al. **J Appl Physiol** 1988 Sep;65(3):1281-5

Methylene blue potentiates vascular reactivity in isolated rat lungs. Mazmanian GM, et al. **J Appl Physiol** 1989 Mar; 66(3):1040-5

Surface tension and pulmonary compliance in premature rabbits. Mercurio MR, et al. **J Appl Physiol** 1989 May; 66(5):2039-44

Pulmonary gas exchange in panting dogs. Meyer M, et al. **J Appl Physiol** 1989 Mar;66(3):1258-63

Reduction of lung perfusion increases VA/Q heterogeneity. Ohlsson J, et al. **J Appl Physiol** 1989 May;66(5):2423-30

Spontaneous injury in isolated sheep lungs: role of perfusate leukocytes and platelets. Pearse DB, et al. **J Appl Physiol** 1989 Mar;66(3):1287-96

Tachykinins mediate bronchoconstriction elicited by isocapnic hyperpnea in guinea pigs. Ray DW, et al. **J Appl Physiol** 1989 Mar;66(3):1108-12

Lobar contribution to VA/Q inequality during constant-flow ventilation. Schumacker PT, et al. **J Appl Physiol** 1988 Nov;65(5):2132-7

Frequency and amplitude effects during high-frequency vibration ventilation in dogs. Shabtai Y, et al. **J Appl Physiol** 1989 Mar;66(3):1127-35

Elastic properties of air- and liquid-filled lung parenchyma. Stamenovic D, et al. **J Appl Physiol** 1988 Dec; 65(6):2565-70

Pleural pressure increases during inspiration in the zone of apposition of diaphragm to rib cage. Urmey WF, et al. **J Appl Physiol** 1988 Nov;65(5):2207-12

Inhomogeneity during deflation of excised canine lungs. III. Single-breath O2 tests. Warner DO, et al. **J Appl Physiol** 1988 Oct;65(4):1775-81

Inhomogeneity during deflation of excised canine lungs. I. Alveolar pressures. Warner DO, et al. **J Appl Physiol** 1988 Oct;65(4):1757-65

Comparison of particle clearance and macrophage phagosomal motion in liver and lungs of rats. Weinstock SB, et al. **J Appl Physiol** 1988 Oct;65(4):1811-20

A new experimental approach for the study of cardiopulmonary physiology during early development. Wolfson MR, et al. **J Appl Physiol** 1988 Sep;65(3):1436-43

Regional mapping of gas transport during high-frequency and conventional ventilation. Yamada Y, et al. **J Appl Physiol** 1989 Mar;66(3):1209-18

Hyperoxic exposure alters gene expression in the lung. Induction of the tissue inhibitor of metalloproteinases mRNA and other mRNAs. Horowitz S, et al. **J Biol Chem** 1989 May 5;264(13):7092-5

Flow separation, an important mechanism in the formation of mean pulmonary pressure during high-frequency oscillation. Bush EH, et al. **J Biomech Eng** 1989 Feb; 111(1):17-23

A new computational model for expiratory flow from nonhomogeneous human lungs. Lambert RK. **J Biomech Eng** 1989 Aug;111(3):200-5

A numerical model of expired flow in a monoalveolar lung model subjected to pressure ramps. Thiriet M, et al. **J Biomech Eng** 1989 Feb;111(1):9-16

Lung is an important source of atrial natriuretic factor in experimental cardiomyopathy. Gutkowska J, et al. **J Clin Invest** 1989 May;83(5):1500-4

Effects of ageing on the cardiopulmonary receptor reflex in normotensive humans. Cléroux J, et al. **J Hypertens Suppl** 1988 Dec;6(4):S141-4

Biologic activity of a C2-derived peptide. Demonstration of a specific interaction with guinea pig lung tissues. Cholin S, et al. **J Immunol** 1989 Apr 1;142(7):2401-4

Comparison of the onset of H1-antagonism with acrivastine and terfenadine by histamine bronchial challenge in volunteers. Rolan PE, et al. **J Int Med Res** 1989;17 Suppl 2:35B-39B

Does seasonal employment in grain elevators increase nonspecific airways responsiveness? Dales RE, et al. **J Occup Med** 1988 Aug;30(8):613-6

Surfactant therapy and spontaneous diuresis. Bhat R, et al. **J Pediatr** 1989 Mar;114(3):443-7

Physiologic and methodologic issues regarding humidity therapy. Chatburn RL. **J Pediatr** 1989 Mar;114(3):416-20

Airway reactivity as determined by a cold air challenge in infants with bronchopulmonary dysplasia. Greenspan JS, et al. **J Pediatr** 1989 Mar;114(3):452-4

Assessment of pulmonary dynamics in normal newborns: a pneumotachographic method. Estol P, et al. **J Perinat Med** 1988;16(3):183-92 (12 ref.)

The effect of thyroidectomy in the fetal sheep on lung liquid reabsorption induced by adrenaline or cyclic AMP. Barker PM, et al. **J Physiol (Lond)** 1988 Dec;407:373-83

A thermal surface phenomenon in the rabbit lung: possible basis for the conversion of heat into work. Hills BA. **J Physiol (Lond)** 1988 Aug;402:463-71

Characteristics of speech breathing in young women. Hodge MM, et al. **J Speech Hear Res** 1989 Sep;32(3):466-80

Impaired pulmonary and cardiac function after maximal exercise. Rasmussen BS, et al. **J Sports Sci** 1988 Winter; 6(3):219-28

Lung function after prolonged lung preservation. Hachida M, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):911-9

Pulmonary function and airway responsiveness during long-term therapy with captopril [see comments] Boulet LP, et al. **JAMA** 1989 Jan 20;261(3):413-6. **Comment in:** JAMA 1989 Jul 7;262(1):29-30

Extravascular lung water with special reference to thoracotomy, manual lung manipulation and rapid fluid transfusion. Chiyotanda S. **Jpn J Surg** 1988 Jul;18(4):376-83

A steady state method of measuring carbon monoxide diffusing capacity of the lung of sheep. McNeil JS, et al. **Lab Anim Sci** 1989 Jan;39(1):33-6

Pulmonary flow resistance. Milic-Emili J. **Lung** 1989; 167(3):141-8 (20 ref.)

A new approach to measurement of lung mechanics. Park SS. **Lung** 1989;167(3):137-40

Biochemical development of the lung and regulation of surfactant secretion. Rooney SA. **Mead Johnson Symp Perinat Dev Med** 1987;(30):12-21 (74 ref.)

Construction of linear resistance units for a model lung. Mecklenburgh JS. **Med Biol Eng Comput** 1988 Sep; 26(5):552-4

Cardiorespiratory fitness in highly active versus inactive paraplegics. Davis GM, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):463-8

Eosinophilic chemotactic factors of anaphylaxis. Smith JA. **Methods Enzymol** 1988;162:170-4

Inhibition of pulmonary thromboxane A2 synthase activity and airway responses by CGS 13080. McNamara DB, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):29-41

Lung function and health attitudes and habits in professional wind musicians and vocalists. Schorr-Lesnick B. **Mt Sinai J Med (NY)** 1988 Sep;55(4):346-52

Noncomparability of cross-sectional and longitudinal estimates of lung growth in children. Pattishall EN, et al. **Pediatr Pulmonol** 1989;7(1):22-8

Effects of an aorticopulmonary shunt on lung fluid balance in the young lamb. Feltes TF, et al. **Pediatr Res** 1989 Aug; 26(2):94-7

Fluorocarbon ventilation: maximal expiratory flows and CO2 elimination. Koen PA, et al. **Pediatr Res** 1988 Sep; 24(3):291-6

A mathematical procedure for estimating the spatial relationships between lung function, somatic growth, and maturation. Sherrill DL, et al. **Pediatr Res** 1989 Mar; 25(3):316-21

Gas exchange during high frequency flow-interruption in rabbits before and after bronchoalveolar lavage. Sullivan KJ, et al. **Pediatr Res** 1988 Aug;24(2):203-8

Cardiovascular fitness in children with asthma correlates with psychologic functioning of the child. Strunk RC, et al. **Pediatrics** 1989 Sep;84(3):460-4

Cardiorespiratory reflex responses to static contraction of vascularly isolated hindleg muscles of the rat. Thimm F, et al. **Pflugers Arch** 1988 Jul;412(1-2):113-20

Role of phosphatidylserine in the cellular and subcellular lung distribution of quinidine in rats. Nishiura A, et al. **Pharm Res** 1988 Apr;5(4):209-13

Effect of increased acceleration on lung expansion in dogs: prone vs. supine body positions. Lai-Fook SJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S63-4

Bronchodilator effects of some liposome formulations of metaproterenol sulfate in guinea pigs. McCalden TA, et al. **Proc West Pharmacol Soc** 1988;31:129-32

Clearance of xenon-133 from the lung as an index of bronchomotor tone. Wong A, et al. **Proc West Pharmacol Soc** 1989;32:37-9

Free radical scavengers in the cardiopulmonary response to endotoxin. Traber DL, et al. **Prog Clin Biol Res** 1989; 308:885-90 (26 ref.)

Role of eicosanoids in relative oxygen tolerance of newborn rabbits. Holtzman RB, et al. **Prostaglandins** 1989 Apr; 37(4):481-91

Mechanical properties of isolated fetal miniature pig lungs after substitution with fluorocarbons [published erratum appears in Res Exp Med (Berl) 1989;189(1):76] Widjaja B, et al. **Res Exp Med (Berl)** 1988;188(6):425-32

Pleural liquid pressure in the zone of apposition and in the lung zone. Agostoni E, et al. **Respir Physiol** 1989 Mar; 75(3):357-70

Lung border sweep upon phrenic stimulation: dynamic fall in pleural liquid pressure. Agostoni E, et al. **Respir Physiol** 1989 Sep;77(3):379-94

Influence of lung volume on phrenic, hypoglossal and mylohyoid nerve activities. Bartlett D Jr, et al. **Respir Physiol** 1988 Jul;73(1):97-109

Mechanism of increased collateral airway resistance during inhomogeneous inflation of excised dog lungs. Fuller SD, et al. **Respir Physiol** 1988 Dec;74(3):253-63

Intrapulmonary receptors in the garter snake (Thamnophis sirtalis). Furilla RA, et al. **Respir Physiol** 1988 Dec;

74(3):311-22
Volume and pressure during transient added resistance. Green J, et al. **Respir Physiol** 1988 Nov;74(2):239-51
Effects of intrapulmonary CO2 and airway pressure on pulmonary vagal afferent activity in the alligator. Powell FL, et al. **Respir Physiol** 1988 Dec;74(3):285-98
Bird lung models show that convective inertia effects inspiratory aerodynamic valving. Wang N, et al. **Respir Physiol** 1988 Jul;73(1):111-24
Activities of pulmonary stretch receptors during ventilatory cycles without lung inflation. Zhou D, et al. **Respir Physiol** 1989 Aug;77(2):187-94
Normal reference values for regional pulmonary peripheral airspace epithelial permeability. Influence of pneumonectomy and the smoking habit. Todisco T, et al. **Respiration** 1989;55(2):84-93
Consistency of repeated flow-volume parameters in airway challenge studies. Witek TJ Jr, et al. **Respiration** 1988; 53(4):214-9
XXV Nordic Congress of Pneumonology. Göteborg, 1970. Abstracts. **Scand J Respir Dis Suppl** 1970;74:1-24
Comparative maximal exercise response of Malaysia ethnic groups. Duncan MT, et al. **Singapore Med J** 1988 Aug; 29(4):322-6
Pulmonary structure and function in swimmers. Cordain L, et al. **Sports Med** 1988 Nov;6(5):271-8 (33 ref.)
Relation of armspan to height and the prediction of lung function. Hibbert ME, et al. **Thorax** 1988 Aug;43(8):657-9
Relation of lung function and exercise capacity to mood and attitudes to health. King B, et al. **Thorax** 1989 May; 44(5):402-9
Vertical gradients of lung density in healthy supine men. Millar AB, et al. **Thorax** 1989 Jun;44(6):485-90
Forced expiratory indices in normal Libyan men. Shamssain MH. **Thorax** 1988 Nov;43(11):923-5
Clinical and radiographic study of activated carbon workers. Uragoda CG. **Thorax** 1989 Apr;44(4):303-4
Spirometry in healthy elderly Chinese. Woo J, et al. **Thorax** 1988 Aug;43(8):617-20
Normal values for quantitative parameters for evaluation of mucociliary clearance in lungs. Isawa T, et al. **Tohoku J Exp Med** 1989 Jun;158(2):119-31
Partitioning of large and small airway resistance in human measured by an anterograde catheter with a tip micromanometer. Takishima T, et al. **Tohoku J Exp Med** 1988 Sep;156(1):99-100
Prevention of pulmonary edema in autoperfusing heart-lung preparation by FUT-175 and leukocyte depletion. Naka Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1353-6
Pulmonary function of haplotype-matched and mismatched allografts in dogs treated with total-body irradiation, autologous marrow transplantation, methotrexate, and donor blood. Blumenstock DA, et al. **Transplantation** 1988 Oct;46(4):496-501
A critical assessment of pulmonary function testing in exercising ponies. Art T, et al. **Vet Res Commun** 1988; 12(1):25-39
[Aged smokers and lung function] Chen M. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan;22(1):17-9 (Eng. Abstr.) (Chi)
[Normal values and predictive equations of pulmonary function of healthy adults measured by electronic spirometer] Chen WB, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):184-8 (Eng. Abstr.) (Chi)
[Pulmonary ventilation/perfusion ratio] Guenard H. **J Physiol (Paris)** 1987;82(2):160-71 (19 ref.) (Eng. Abstr.) (Fre)
[Mucociliary function of 10 patients with ankylosing spondylarthritis with normal lung radiographs] Souquet PJ, et al. **Rev Mal Respir** 1988;5(6):615-7 (8 ref.) (Eng. Abstr.) (Fre)
[Optimization of ventilation in anesthesia. 5. Studies on the effect of different forms of ventilation on pulmonary hemodynamics, O2 transport and O2 utilization in tissue] Hakenbeck H, et al. **Anaesthesiol Reanim** 1988;13(6):351-62 (Eng. Abstr.) (Ger)
[Preoperative normvolemic hemodilution in heart surgery. Pulmonary changes with the use of new technics] Boldt J, et al. **Anaesthesist** 1989 Jun;38(6):294-301 (Eng. Abstr.) (Ger)
[Lung function and carboxyhemoglobin during the smog episode of January 1987] Wichmann HE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Nov; 187(1):31-43 (Eng. Abstr.) (Ger)
[Compensatory response of the residual lung after exeresis (ultrastructural study)] Marcello MF, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):89-96 (Ita)
[Normal spirometric values in the Sicilian population] La Paglia G, et al. **G Ital Med Lav** 1988 Jan;10(1):31-7 (Eng. Abstr.) (Ita)
[Evaluation of the respiratory function and prognostication of risk in thoracic-pulmonary surgery] Leonelli V, et al. **Minerva Anestesiol** 1988 Oct;54(10):431-7 (Eng. Abstr.) (Ita)
[A central mechanism augments ventilation of the dependent lung in the lateral decubitus position] Fukuda M, et al. **Masui** 1988 Jun;37(6):646-54 (Eng. Abstr.) (Jpn)
[The effects of the differential lung ventilation on efferent phrenic nerve activity in cats] Kasaba T, et al. **Masui** 1988 Jul;37(7):823-9 (Eng. Abstr.) (Jpn)
[Effects of alveolar pressure, intravascular pressure and extravascular lung water on the fluid filtration rate from the extra-alveolar vessels in the isolated dog lung] Soga T, et al. **Masui** 1988 Sep;37(9):1052-9 (Eng. Abstr.) (Jpn)
[Prediction of postoperative lung function after pulmonary resection] Yoshikawa K. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2437-46 (Eng. Abstr.) (Jpn)
[Current significance of physiological function tests—with special reference to cor pulmonale] Shiina S, et al. **Rinsho Byori** 1988 May;36(5):559-60 (Jpn)
[The phenomenon of the accumulation of biological and nonbiological corpuscular particles in mammalian lungs] Kaufman OIa, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):741-4 (Eng. Abstr.) (Rus)
[Experimental regeneration of the lungs] Perel'man MI, et al. **Biull Eksp Biol Med** 1989 May;107(5):612-5 (Eng. Abstr.) (Rus)
[Criteria of individual variations in the reactivity of the respiratory system] Berezovskiĭ VA, et al. **Fiziol Zh** 1989 May-Jun;35(3):62-7 (Eng. Abstr.) (Rus)
[Modeling of unstable heat-mass air exchange in the lungs] Ramm MS, et al. **Fiziol Zh** 1989 May-Jun;35(3):113-9 (Eng. Abstr.) (Rus)
[A method of recording super-slow physiologic processes in the rabbit brain and lungs in a chronic experiment] Bokarius VB, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):582-5 (Rus)
[Structure and dynamics of systemic organization of the cardiorespiratory function during the adaptation process of miners to occupational factors in deep coal mines] Perederiĭ GS, et al. **Gig Tr Prof Zabol** 1989;(1):27-30 (Eng. Abstr.) (Rus)
[Characteristics of temporary organization of the bronchopulmonary pattern in healthy persons and in patients with bronchial asthma] Alekseev MIu, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):15-24 (Eng. Abstr.) (Rus)
[Vascular conductance and critical closing pressure in the isolated canine lung in situ. Its natural history] Lupi-Herrera E, et al. **Arch Inst Cardiol Mex** 1988 Sep-Oct;58(5):395-407 (Eng. Abstr.) (Spa)
[Pulmonary function in elite Puerto Rican athletes] Frontera WR, et al. **Bol Asoc Med P R** 1989 Apr;81(4):125-9 (Spa)

PHYSIOPATHOLOGY

The complex problem of ARDS: pathophysiology, management. Lamy M. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):37-41 (51 ref.)
Role of lung volume in lung injury: HFO in the atelectasis-prone lung. Froese AB. **Acta Anaesthesiol Scand Suppl** 1989;90:126-30 (25 ref.)
Mechanisms of postoperative pulmonary dysfunction. Hedenstierna G. **Acta Chir Scand Suppl** 1989;550:152-8 (27 ref.)
The influence of anesthesia and postoperative analgesic management of lung function. Sydow FW. **Acta Chir Scand Suppl** 1989;550:159-65; discussion 165-8 (20 ref.)
Changes in airway responsiveness and beta- and alpha-1-adrenergic receptors in the lungs of guinea pigs with experimental asthma. Motojima S, et al. **Allergy** 1989 Jan;44(1):66-74
Pulmonary function as a predictor of coronary heart disease. Marcus EB, et al. **Am J Epidemiol** 1989 Jan;129(1):97-104
X-ray findings, lung function, and respiratory symptoms in black South African vermiculite workers. Hessel PA, et al. **Am J Ind Med** 1989;15(1):21-9
Lung function in workers exposed to soft paper dust. Järvholm B, et al. **Am J Ind Med** 1988;14(4):457-64
Asbestos-related pleural plaques and lung function. Oliver LC, et al. **Am J Ind Med** 1988;14(6):649-56
Prazosin in hypertensive patients with chronic bronchitis and asthma: a brief report. Chodosh S, et al. **Am J Med** 1989 Jan 23;86(1B):91-3
Increased lymphatic elimination of interstitial hyaluronan during E. coli sepsis in sheep. Lebel L, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1524-31
Erythrocytes reduce liquid filtration in injured dog lungs. Onizuka M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H515-9
Comparison of pathophysiologic changes in the lungs of calves challenge exposed with Escherichia coli-derived endotoxin and Pasteurella haemolytica, alone or in combination. Slocombe RF, et al. **Am J Vet Res** 1989 May; 50(5):701-7
Cardiopulmonary effects of high frequency positive-pressure ventilation versus jet ventilation in respiratory failure. Courtney SE, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):504-12
The eosinophil component of the alveolitis in idiopathic pulmonary fibrosis. Signs of eosinophil activation in the lung are related to impaired lung function. Hällgren R, et al. **Am Rev Respir Dis** 1989 Feb;139(2):373-7
Childhood asthma and adult lung function. Kelly WJ, et al. **Am Rev Respir Dis** 1988 Jul;138(1):26-30
Enhanced aerosol deposition in the lung with mild airways obstruction. Kim CS, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):422-6
Pulmonary and extrapulmonary contributors to hypoxemia in liver cirrhosis. Mélot C, et al. **Am Rev Respir Dis** 1989 Mar;139(3):632-40
The pulmonary neuroendocrine cell: a role in adult lung disease? [editorial] Miller YE. **Am Rev Respir Dis** 1989 Aug;140(2):283-4 (30 ref.)
Clinical determinants of abnormalities in pulmonary functions in survivors of the adult respiratory distress syndrome. Peters JI, et al. **Am Rev Respir Dis** 1989 May;139(5):1163-8
Spirometric abnormalities in young smokers correlate with increased chemiluminescence responses of activated blood phagocytes. Richards GA, et al. **Am Rev Respir Dis** 1989 Jan;139(1):181-7
The "destructive index" in nonemphysematous and emphysematous lungs. Morphologic observations and correlation with function. Saito K, et al. **Am Rev Respir Dis** 1989 Feb;139(2):308-12
Airway size and the rate of pulmonary function decline in grain handlers. Vedal S, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1584-8
Long-term follow-up of symptoms, pulmonary function, respiratory muscle strength, and exercise performance after botulism. Wilcox P, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):157-63
Relationships between lung computed tomographic density, gas exchange, and PEEP in acute respiratory failure. Gattinoni L, et al. **Anesthesiology** 1988 Dec;69(6):824-32
Perioperative pulmonary function in acute respiratory failure: effect of ventilator type and gas mixture. Schapera A, et al. **Anesthesiology** 1989 Sep;71(3):396-402
Effect of theophylline on improvement of the pulmonary function in the treatment of acute episodes of asthma: the influence of the severity of acute asthma. Sakamoto Y, et al. **Ann Allergy** 1989 Jul;63(1):21-7
Pulmonary function and maximal transrespiratory pressures in ankylosing spondylitis. Vanderschueren D, et al. **Ann Rheum Dis** 1989 Aug;48(8):632-5
Prediction of postoperative respiratory failure in patients undergoing lung resection for lung cancer. Nakahara K, et al. **Ann Thorac Surg** 1988 Nov;46(5):549-52
Postoperative preservation of pulmonary function in patients with chronic empyema thoracis: a one-stage operation. Nakaoka K, et al. **Ann Thorac Surg** 1989 Jun;47(6):848-52
Lung function eight years after neonatal ventilation. Andréasson B, et al. **Arch Dis Child** 1989 Jan;64(1):108-13
Lung function and bronchial responsiveness measured by forced oscillometry after bronchopulmonary dysplasia [letter] Chan KN, et al. **Arch Dis Child** 1989 Mar; 64(3):425-6
Respiratory disease and lung function in a tobacco industry. Kjaergaard SK, et al. **Arch Environ Health** 1989 May-Jun; 44(3):164-70
Pulmonary function and dysfunction in multiple sclerosis. Smeltzer SC, et al. **Arch Neurol** 1988 Nov;45(11):1245-9
Left lower lobe ventilation and its relation to cardiomegaly and posture. Alexander MS, et al. **BMJ** 1989 Jul 8; 299(6691):94
Peak expiratory flow in symptomless elderly smokers and ex-smokers. Gregg I, et al. **BMJ** 1989 Apr 22; 298(6680):1071-2
Lung function in the supine and lateral decubitus positions in anaesthetized infants and children. Larsson A, et al. **Br J Anaesth** 1989 Apr;62(4):378-84
Getting a patient off the ventilator. Branthwaite MA. **Br J Dis Chest** 1988 Jan;82(1):16-22 (8 ref.)
Progressive apical pleural fibrosis: a 'constrictive' ventilatory defect. Oliver RM, et al. **Br J Dis Chest** 1988 Oct; 82(4):439-43
Changes in lung function after working with the shotcrete lining method under compressed air conditions. Kessel R, et al. **Br J Ind Med** 1989 Feb;46(2):128-32
Occupational exposures and changes in pulmonary function over 13 years among residents of Cracow. Krzyżanowski M, et al. **Br J Ind Med** 1988 Nov;45(11):747-54
A survey into the respiratory effects of prolonged exposure to pulverised fuel ash. Schilling CJ, et al. **Br J Ind Med** 1988 Dec;45(12):810-7
Smoking and lung functions in sportsmen. De AK, et al. **Br J Sports Med** 1988 Jun;22(2):61-3
Lung function following treatment of malignant tumors with surgery, radiotherapy, or cyclophosphamide in childhood. A follow-up study after 11 to 27 years. Mäkipernaa A, et al. **Cancer** 1989 Feb 15;63(4):625-30
Pathophysiology of the congested lung. Szidon JP. **Cardiol Clin** 1989 Feb;7(1):39-48 (51 ref.)
Pulmonary function in long-term survivors of thoracoplasty. Bredin CP. **Chest** 1989 Jan;95(1):18-20
Abnormal airway function in individuals with the acquired immunodeficiency syndrome. O'Donnell CR, et al. **Chest** 1988 Nov;94(5):945-8
The effects of acute hypoxia and hypercapnia on pulmonary mechanics in normal subjects and patients with chronic pulmonary disease. Parsons PE, et al. **Chest** 1989 Jul; 96(1):96-101
Smoking and cotton dust effects in cotton textile workers. Schachter EN, et al. **Chest** 1989 May;95(5):997-1003
Bilateral carotid body resection for the relief of dyspnea in severe chronic obstructive pulmonary disease. Physiologic and clinical observations in three patients [published erratum appears in Chest 1989 Sep;96(3):706] Stulbarg MS, et al. **Chest** 1989 May;95(5):1123-8
Ventilation-perfusion imaging in evaluating regional lung function in nonpenetrating injury to the chest. Van Eeden SF, et al. **Chest** 1989 Mar;95(3):632-8

Thromboxane A2 mediates increased pulmonary microvascular permeability following limb ischemia. Klausner JM, et al. **Circ Res** 1989 Jun;64(6):1178–89

Effect of chronic myocardial infarction on vagal cardiopulmonary baroreflex. Minisi AJ, et al. **Circ Res** 1989 Aug;65(2):396–405

Cardiopulmonary response to intraperitoneal instillation of autologous unclotted blood in hemorrhagic shock. Coronado E, et al. **Circ Shock** 1988 Sep;26(1):107–14

Cardiopulmonary function as related to thromboxane A2 synthesis in experimental septic shock. Schützer KM, et al. **Circ Shock** 1988 Sep;26(1):27–40

Influence of terbutaline on endotoxin-induced lung injury. Sigurdsson GH, et al. **Circ Shock** 1988 Jul;25(3):153–63

Platelet activating factor in pulmonary pathobiology. McManus LM, et al. **Clin Chest Med** 1989 Mar;10(1):107–18 (93 ref.)

Alterations of the cardiopulmonary reflex with hypertension and aging in man. Giannattasio C, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:199–210

Ventilation/perfusion mismatch in interstitial fibrosis. Rawlinson J, et al. **Clin Nucl Med** 1988 Dec;13(12):878–9

Preliminary study of the effects of postoperative methylprednisolone therapy on lung function recovery in patients with chronic obstructive pulmonary disease. Fraser IM, et al. **Clin Pharm** 1989 Mar;8(3):214–9

Single and multiple breath nitrogen wash-out—closing volume and volume of trapped gas for detection of early airway obstruction. Dahlqvist M, et al. **Clin Physiol** 1989 Aug;9(4):389–98

Noninvasive monitoring of lung function during mechanical ventilation. Boysen PG, et al. **Crit Care Clin** 1988 Jul; 4(3):527–41 (31 ref.)

Noninvasive determination of effective (nonshunted) pulmonary blood flow in normal and injured lungs. Steinhart CM, et al. **Crit Care Med** 1989 Apr;17(4):349–53

Pulmonary permeability in coeliac disease and inflammatory bowel disease. Robertson DA, et al. **Digestion** 1989; 42(2):98–103

Effect of cement dust on lung function in Libyans. Shamssain MH, et al. **Ergonomics** 1988 Sep;31(9):1299–303

Diabetes mellitus, plasma glucose and lung function in a cross-sectional population study. Lange P, et al. **Eur Respir J** 1989 Jan;2(1):14–9

Role of lung volumes in sleep apnoea-related oxygen desaturation. Sériès F, et al. **Eur Respir J** 1989 Jan; 2(1):26–30

Lung function in patients with tracheobronchopathia osteochondroplastica. Tukiainen H, et al. **Eur Respir J** 1988 Jul;1(7):632–5

Temporary deterioration of pulmonary functions after injection sclerotherapy for cirrhotic patients with esophageal varices. Kitano S, et al. **Eur Surg Res** 1988; 20(5–6):298–303

Quartz exposure, retention, and early silicosis in sheep. Bégin R, et al. **Exp Lung Res** 1989 May;15(3):409–28

Pulmonary gallium uptake in rats with granulomatosis induced by complete Freund adjuvant. Stanislas-Leguern G, et al. **Exp Lung Res** 1988;14(4):445–58

Low dose of nitroglycerin failed to improve splanchnic hemodynamics in patients with cirrhosis: evidence for an impaired cardiopulmonary baroreflex function. Moreau R, et al. **Hepatology** 1989 Jul;10(1):93–7

Cardiopulmonary reflex before and after regression of left ventricular hypertrophy in essential hypertension. Grassi G, et al. **Hypertension** 1988 Sep;12(3):227–37

Formation of oedema and accumulation of eosinophils in the guinea pig lung. Inhibition by inhaled beta-stimulants. Fügner A. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):225–7

Lung function in simple complete transposition after intracardiac repair. Samánek M, et al. **Int J Cardiol** 1989 Jul;24(1):13–7

Breathlessness, chronic bronchitis and reduced pulmonary function as predictors of cardiovascular disease mortality among men in England, Scotland and the United States. Ebi-Kryston KL, et al. **Int J Epidemiol** 1989 Mar; 18(1):84–8

Respiratory symptoms and lung function in relation to passive smoking: a comparative study of American and French women. Kauffmann F, et al. **Int J Epidemiol** 1989 Jun; 18(2):334–44

Pediatric Hodgkin's disease: pulmonary, cardiac, and thyroid function following combined modality therapy. Mefferd JM, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):679–85

Effect of high frequency oscillatory ventilation on fluid filtration rate in isolated perfused rabbit lungs. Martinez-Ruiz R, et al. **Intensive Care Med** 1989; 15(3):155–9

Polymorphonuclear leukocyte cytoplasts mediate acute lung injury. Antony VB, et al. **J Appl Physiol** 1988 Aug; 65(2):706–13

Role of microvascular pressure in reactive oxygen-induced lung edema. Barnard JW, et al. **J Appl Physiol** 1989 Mar; 66(3):1486–93

Perfusion distribution and lung thermal volume in canine hydrochloric acid aspiration. Carlile PV, et al. **J Appl Physiol** 1988 Aug;65(2):750–9

Regional alveolar hypoxia does not affect air embolism-induced pulmonary edema. Cheney FW, et al. **J Appl Physiol** 1989 May;66(5):2369–73

Human recombinant tumor necrosis factor alpha infusion mimics endotoxemia in awake sheep. Johnson J, et al. **J Appl Physiol** 1989 Mar;66(3):1448–54

Ozone-induced changes in pulmonary function and bronchial responsiveness in asthmatics. Kreit JW, et al. **J Appl Physiol** 1989 Jan;66(1):217–22

Effect of elevated vascular pressure transients on protein permeability in the lung. Maron MB. **J Appl Physiol** 1989 Jul;67(1):305–10

Effects of unilateral nasal occlusion on ventilation and pulmonary resistance in infants. Martin RJ, et al. **J Appl Physiol** 1989 Jun;66(6):2522–6

Role of lung injury in the pathogenesis of hyaline membrane disease in premature baboons. Meredith KS, et al. **J Appl Physiol** 1989 May;66(5):2150–8

Effect of inhaled endotoxin on bronchial reactivity in asthmatic and normal subjects. Michel O, et al. **J Appl Physiol** 1989 Mar;66(3):1059–64

Distribution of bronchoconstrictor responses in isolated-perfused rat lung. Munoz NM, et al. **J Appl Physiol** 1989 Jan;66(1):202–9

Assessment of temporal changes in pulmonary edema with NMR imaging. Phillips DM, et al. **J Appl Physiol** 1989 Mar;66(3):1197–208

Responsiveness, inflammation, and effects of deep breaths on obstruction in mild asthma. Pliss LB, et al. **J Appl Physiol** 1989 May;66(5):2298–304

Early detection of pulmonary congestion and edema in dogs by using lung sounds. Ploysongsang Y, et al. **J Appl Physiol** 1989 May;66(5):2061–70

Effect of negative-pressure ventilation on lung water in permeability pulmonary edema. Skaburskis M, et al. **J Appl Physiol** 1989 May;66(5):2223–30

Impact of PEEP on lung mechanics and work of breathing in severe airflow obstruction. Smith TC, et al. **J Appl Physiol** 1988 Oct;65(4):1488–99

Effects of coronary ischemia on lung fluid balance in conscious sheep. Toyofuku T, et al. **J Appl Physiol** 1988 Aug;65(2):617–24

Saliva and serum theophylline concentration in management of asthma in children on sustained-release therapy. Iwasaki E, et al. **J Asthma** 1987;24(3):173–8

Impairment of inhibitory cardiopulmonary vagal reflexes in spontaneously hypertensive rats. Verberne AJ, et al. **J Auton Nerv Syst** 1988 Jun;23(1):63–8

Lack of hematogenous mediated pulmonary injury with smoke inhalation. Prien T, et al. **J Burn Care Rehabil** 1988 Sep–Oct;9(5):462–6

Lung function, smoking and survival in severe alpha 1-antitrypsin deficiency, PiZZ. Wu MC, et al. **J Clin Epidemiol** 1988;41(12):1157–65

Exercise intolerance, lactic acidosis, and abnormal cardiopulmonary regulation in exercise associated with adult skeletal muscle cytochrome c oxidase deficiency. Haller RG, et al. **J Clin Invest** 1989 Jul;84(1):155–61

Role of mast cells in anaphylaxis. Evidence for the importance of mast cells in the cardiopulmonary alterations and death induced by anti-IgE in mice. Martin TR, et al. **J Clin Invest** 1989 Apr;83(4):1375–83

Stratified impairment of pulmonary ventilation in "diffuse panbronchiolitis:" PET and CT studies. Murata K, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):48–53

Lung liquid secretion, flow and volume in response to moderate asphyxia in fetal sheep. Hooper SB, et al. **J Dev Physiol** 1988 Oct;10(5):473–85

Mechanical properties of rabbit lung with edema caused by exposure to ozone. Yokoyama E, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):95–108

Relationship of lung function loss to level of initial function: correcting for measurement error using the reliability coefficient. Irwig L, et al. **J Epidemiol Community Health** 1988 Dec;42(4):383–9

Sequential changes in pulmonary mechanics in the very low birth weight (less than or equal to 1000 grams) infant. Greenspan JS, et al. **J Pediatr** 1988 Oct;113(4):732–7

Strategies for the prevention of sudden unexplained infant death based on the hypothesis that intrapulmonary shunting with prolonged expiratory apnea is a major contributory mechanism. Southall DP, et al. **J Perinatol** 1989 Jun; 9(2):191–2

Plasma exudation. Correlation between Evans blue dye and radiolabeled albumin in guinea pig airways in vivo. Rogers DF, et al. **J Pharmacol Methods** 1989 Jul;21(4):309–15

Early detection of lung function abnormalities in infants with cystic fibrosis. Kraemer R. **J R Soc Med** 1989;82 Suppl 16:21–5

Pulmonary function in patients presenting with Raynaud's phenomenon without an underlying connective tissue disease. A prospective, longitudinal study. Aalbers R, et al. **J Rheumatol** 1989 Jan;16(1):36–41

Different effects of bleeding and soft-tissue trauma on pulmonary platelet trapping in pigs. Blomquist S, et al. **J Trauma** 1989 Jun;29(6):866–72

Assessment of induced bronchoconstriction in anesthetized cats by the end-inflation occlusion method. Baconnier P, et al. **Lung** 1989;167(3):149–61

Pulmonary function in childhood leukaemia survivors. Shaw NJ, et al. **Med Pediatr Oncol** 1989;17(2):149–54

Diminished lung function as a predisposing factor for wheezing respiratory illness in infants. Martinez FD, et al. **N Engl J Med** 1988 Oct 27;319(17):1112–7

Effect of lung resection on pulmonary function. A comparative study in different surgical procedures. Baldi S, et al. **Panminerva Med** 1989 Jan–Mar;31(1):19–21

Aerobic capacity in early paraplegia: implications for rehabilitation. Ellenberg M, et al. **Paraplegia** 1989 Aug; 27(4):261–8

Pulmonary function following mild respiratory tract infections ("common cold") in teenagers. Teculescu DB, et al. **Pediatr Pulmonol** 1988;5(4):198–203

Unusual ventilation-perfusion mismatch in partial anomalous venous return. Chanoine JP, et al. **Pediatr Radiol** 1988; 18(6):497–8

Croton oil pleurisy induces pulmonary hyperreactivity. Hernandez A, et al. **Pharmacol Res Commun** 1988 Nov; 20(11):983–92

Pathophysiology of the pulmonary circulation. Barer G. **Physiol Bohemoslov** 1989;38(1):1–12 (68 ref.)

Clinical presentations of asthma. Clark TJ. **Postgrad Med J** 1988;64 Suppl 4:64–7 (16 ref.)

Applied physiology of the respiratory pump. Pride NB. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:807–11 (11 ref.)

Hydroxyethyl starch and lung lymph flow in an ovine model of endotoxemia. Lübbesmeyer HJ, et al. **Prog Clin Biol Res** 1989;308:815–9

Hypertonic saline resuscitation: the neural component. Rocha e Silva M, et al. **Prog Clin Biol Res** 1989;299:303–10 (12 ref.)

Effect of large volume replacement with crystalloids on extravascular lung water in human septic shock syndrome. Zadrobilek E, et al. **Prog Clin Biol Res** 1989;308:809–13

Lung function and exercise performance in hyperthyroidism before and after treatment. Kendrick AH, et al. **Q J Med** 1988 Aug;68(256):615–27

Alveolar phospholipids, hyperventilation and temperature of conservation of rat lungs. Brondel L, et al. **Respir Physiol** 1989 Apr;76(1):119–28

Breathing pattern, lung inflation reflex and airway tone in acrylamide neuropathy. Hersch MI, et al. **Respir Physiol** 1989 May;76(2):257–76

Pulmonary function of nonsmoking patients with rheumatoid arthritis in the presence and absence of secondary Sjögren's syndrome, a controlled study. Andonopoulos AP, et al. **Respiration** 1988;53(4):251–8

Factors influencing the production of wheezes during expiratory maneuvers in normal subjects. Ploysongsang Y, et al. **Respiration** 1988;54(1):50–60

Defenses of the hamster lung against human neutrophil and porcine pancreatic elastase. Stone PJ, et al. **Respiration** 1988;54(1):1–15

Respiratory health of brickworkers in Cape Town, South Africa. Symptoms, signs and pulmonary function abnormalities. Myers JE, et al. **Scand J Work Environ Health** 1989 Jun;15(3):188–94

The lung inflammatory response to thermal injury: relationship between physiologic and histologic changes. Demling RH, et al. **Surgery** 1989 Jul;106(1):52–9

Differential lung function in an infant with the Swyer-James syndrome. Avital A, et al. **Thorax** 1989 Apr;44(4):298–302

Lung function in infants with cystic fibrosis. Beardsmore CS, et al. **Thorax** 1988 Jul;43(7):545–51

Fall in peak expiratory flow during haemodialysis in patients with chronic renal failure [letter] Beauchamp RK. **Thorax** 1989 Feb;44(2):159

Effects of posture on the distribution of pulmonary ventilation and perfusion in children and adults. Bhuyan U, et al. **Thorax** 1989 Jun;44(6):480–4

Assessment of work performance in asthma for determination of cardiorespiratory fitness and training capacity. Clark CJ, et al. **Thorax** 1988 Oct;43(10):745–9

Retrospective estimation of values for total lung capacity by plethysmography, helium gas dilution, and chest radiography in patients with cystic fibrosis. Cutrera R, et al. **Thorax** 1988 Nov;43(11):931–2

Abolition of methacholine induced bronchoconstriction by the hyperventilation of exercise or volition. Freedman S, et al. **Thorax** 1988 Aug;43(8):631–6

Morning-evening changes in airway responsiveness to methacholine in normal and asthmatic subjects: analysis using partial flow-volume curves. Heaton RW, et al. **Thorax** 1988 Sep;43(9):727–8

Bronchial responsiveness, lung mechanics, gas transfer, and corticosteroid response in patients with chronic airflow obstruction. James AL, et al. **Thorax** 1988 Nov; 43(11):916–22

Lung function after coronary artery surgery using the internal mammary artery and the saphenous vein. Jenkins SC, et al. **Thorax** 1989 Mar;44(3):209–11

Lung function 22–35 years after treatment of idiopathic spontaneous pneumothorax with talc poudrage or simple drainage. Lange P, et al. **Thorax** 1988 Jul;43(7):559–61

Functional similarities of asbestosis and cryptogenic fibrosing alveolitis. Markos J, et al. **Thorax** 1988 Sep;43(9):708–14

Reproducibility of walking test results in chronic obstructive airways disease [letter] Mostert R, et al. **Thorax** 1988 Dec; 43(12):1025–6

Ventilatory and heart rate responses to hypoxia and hypercapnia in patients with diabetes mellitus. Nishimura M, et al. **Thorax** 1989 Apr;44(4):251–7

Renal and pulmonary effects of angiotensin converting enzyme inhibition in chronic hypoxic lung disease. Oliver RM, et al. **Thorax** 1989 Jun;44(6):513–5

Assessment of variability of exercise tolerance limited by breathlessness. Peel ET, et al. **Thorax** 1988 Dec;

43(12):960–4
Exercise responses in patients treated for pulmonary tuberculosis by thoracoplasty. Phillips MS, et al. **Thorax** 1989 Apr;44(4):268–74
Radiographic measurement of total lung capacity in acute asthma. Rothstein MS, et al. **Thorax** 1989 Jun;44(6):510–2
Respiratory function in the morbidly obese before and after weight loss. Thomas PS, et al. **Thorax** 1989 May; 44(5):382–6
Transfer factor for carbon monoxide in patients with diabetes with and without microangiopathy. Weir DC, et al. **Thorax** 1988 Sep;43(9):725–6
Postoperative evolution of extrahepatic organ function. Snyder JV. **Transplant Proc** 1989 Jun;21(3):3508–10
Evidence for pulmonary dysfunction in all patients with symptomatic and asymptomatic cytomegalovirus (CMV) infection after renal transplantation. van Son WJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2065–8
Lung centroid pressure in immersed man. Taylor NA, et al. **Undersea Biomed Res** 1989 Jan;16(1):3–19.
[The changes in cardio–pulmonary function following smoke inhalation injury in goats] Chen FM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):45–8 (Eng. Abstr.) (Chi)
[Dry air induced constriction in peripheral lung] Shen CY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):157–62 (Eng. Abstr.) (Chi)
[Determination of positive judgment standards in lung function indices] Yuan YR, et al.
Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Sep;19(3):305–8 (Eng. Abstr.) (Chi)
[The importance of functional pulmonary tests in rheumatoid arthritis and systemic lupus erythematosus] Suchová H, et al. **Vnitr Lek** 1988 Nov;34(11):1069–75 (Eng. Abstr.) (Cze)
[Functional and immunologic involvement in human African trypanosomiasis caused by Trypanosoma gambiense] Tsala Mbala P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):490–501 (Eng. Abstr.) (Fre)
[Evaluation of the sequelae of occupational asthma] Rosenberg N, et al. **Rev Mal Respir** 1989;6(1):35–8 (Eng. Abstr.) (Fre)
[Cardiovascular and pulmonary changes in patients with an isolated cerebral lesion. II. Extravascular lung water and pulmonary gas exchange ("neurogenic lung edema")] Singbartl G. **Anaesthesist** 1989 Jul;38(7):360–74 (Eng. Abstr.) (Ger)
[Cardiopulmonary function disorders in collagenoses] Bilgin Y, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:240–1 (Eng. Abstr.) (Ger)
[Increased lung volume in inhalant provocation] Reier W, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:293–5 (Eng. Abstr.) (Ger)
[Progress in clinical respiratory physiology] Schindl R, et al. **Prax Klin Pneumol** 1988 Jul;42(7):576–7 (Eng. Abstr.) (Ger)
[Respiratory activity of the lungs as a sign of exacerbation of a lung tuberculoma] Gudz EA. **Radiol Diagn (Berl)** 1989; 30(1):27–32 (Eng. Abstr.) (Ger)
[Pathophysiology of chronic obstructive lung diseases] Grossenbacher M, et al. **Schweiz Rundsch Med Prax** 1989 Feb 7;78(6):113–7 (Eng. Abstr.) (Ger)
[A study of level of serum angiotensin I converting enzyme in patients with old and inactive pulmonary tuberculosis—in relation to pulmonary function (PO2,%VC,FEV1.0,%FEV1.0)] Morotomi Y, et al.
Kekkaku 1988 Nov;63(11):701–6 (Eng. Abstr.) (Jpn)
[Study on indication of unilateral pulmonary artery occlusion test in patients undergoing pneumonectomy] Maeda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):449–54 (Eng. Abstr.) (Jpn)
[Pneumonectomy in lung cancer in patients over 70 years old—prediction of postpneumonectomy pulmonary function] Nonoyama A, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Jul;36(7):1096–105 (Eng. Abstr.) (Jpn)
[Prediction of postpneumonectomy pulmonary function using perfusion lung scanning] Nonoyama A, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Oct;36(10):2221–8 (Eng. Abstr.) (Jpn)
[Relationships between extravascular lung water volume using thermal–dye dilution technique and pulmonary functions in patients undergoing pneumonectomy] Sakuma T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1039–43 (Eng. Abstr.) (Jpn)
[Evaluation of regional pulmonary ventilation by videodensitometry using a new X–ray image processor] Fujii T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug;26(8):842–50 (Eng. Abstr.) (Jpn)
[Pulmonary hemodynamics during exercise in anesthetized dogs with inspiratory loading and in patients with chronic obstructive pulmonary disease] Hida W, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Feb;27(2):143–8 (Eng. Abstr.) (Jpn)
[Lung function and morphometry in a canine model of papain–induced emphysema] Inoue M, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Nov; 26(11):1161–9 (Eng. Abstr.) (Jpn)
[A classification of crackles by the linear predictive coding method] Maeda Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun; 26(6):587–93 (Eng. Abstr.) (Jpn)
[Clinical usefulness of X–ray CT for diagnosis of emphysema as demonstrated by correlation with lung function and selective alveolobronchography] Nakano H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun; 26(6):602–11 (Eng. Abstr.) (Jpn)
[The relationship between lung function and the respiratory threshold of acetylcholine after asthmatic attack in children and adolescents] Odajima H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Nov; 26(11):1137–41 (Eng. Abstr.) (Jpn)
[Cor pulmonale from the view of pulmonary functions] Miyazato I, et al. **Rinsho Byori** 1988 May;36(5):578–82 (Jpn)
[Disorders of pulmonary function in patients with primary or embolic pulmonary hypertension] Czernicka–Cierpisz E, et al. **Kardiol Pol** 1988;31(10):614–20 (Eng. Abstr.) (Pol)
[Function of the lungs in patients with Hodgkin's disease after chemotherapy and radiotherapy] Milanowski A, et al. **Pediatr Pol** 1988 Nov;63(11):747–52 (Eng. Abstr.) (Pol)
[Current theories on the pathophysiology of septic shock] Cichocka–Jarosz E. **Przegl Lek** 1988;45(4):396–400 (28 ref.) (Pol)
[Effect of artificial ventilation of the lungs with end–positive expiratory pressure on extravascular water levels in the lungs] Bagdat'ev VE, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):55–7 (Eng. Abstr.) (Rus)
[The significance of respiration disorders in the development of postoperative pulmonary complications in patients with cancer of the stomach] Kassil' VL, et al.
Anesteziol Reanimatol 1989 Mar–Apr;(2):62–4 (Eng. Abstr.) (Rus)
[Status of the pulmonary surfactant system of the lungs and their morphofunctional maturity in full–term newborn infants with a history of chronic intrauterine fetal anoxia] Sergeeva DA, et al. **Pediatriia** 1989;(5):110 (Rus)
[Determination of indices of the functional state of the pneumocardial system in patients with tuberculosis of the lungs] **Probl Tuberk** 1989;(6):62–7 (Rus)
[Screening and detailed study of lung function in patients with pulmonary pathology] Nefedov VB. **Probl Tuberk** 1989;(4):9–11 (Eng. Abstr.) (Rus)
[Myocardial reaction and lung ventilation response to inhalation of the gaseous hypoxic mixture GGS–10 in patients with rheumatoid arthritis] Amosov IS, et al.
Ter Arkh 1989;61(5):62–4 (Eng. Abstr.) (Rus)
[Pathophysiological aspects of the development of airway disorders in coal miners] Lavrenova GV, et al.
Vestn Otorinolaringol 1988 May–Jun;(3):67–8 (Eng. Abstr.) (Rus)
[Use of a method of regulated breathing to improve pulmonary respiratory function and to enhance the efficacy of aerosol therapy] Triniak NG.
Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jan–Feb;(1):24–9 (Eng. Abstr.) (Rus)
[Morphofunctional changes of the lungs in chronic kidney failure treated by hemodialysis] Kornilov BE.
Vrach Delo 1988 Nov;(11):67–70 (Eng. Abstr.) (Rus)
[Changes in pulmonary function after ARDS] Toš L, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):127–32 (Eng. Abstr.) (Scr)

RADIATION EFFECTS

Radiation exposure and the effect of piroxicam and diclofenac on mediator release from isolated guinea–pig lung. Khayyal MT, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:247–63
Accuracy of inhomogeneity corrections in lung irradiated with high energy X–rays. Metcalfe PE, et al.
Australas Phys Eng Sci Med 1988 Apr–Jun;11(2):67–75
Structure–function analysis of angiotensin–converting enzyme inhibitors as modifiers of radiation–induced pulmonary endothelial dysfunction in rats. Ward WF, et al. **Br J Radiol** 1989 Apr;62(736):348–54
Reply to the letter of T. White and P. Wollmer [letter] Pillay M. **Eur J Nucl Med** 1989;15(3):168
Correlation among lung damage after radiation, amount of lipid peroxides, and antioxidant enzyme activities. Nozue M, et al. **Exp Mol Pathol** 1989 Apr;50(2):239–52
Quantitative scanning electron microscopic autoradiography of inhaled 239PuO2. Sanders CL, et al. **Health Phys** 1989 Mar;56(3):321–5
Direct estimation of latent time for radiation injury in late–responding normal tissues: gut, lung, and spinal cord. Bentzen SM, et al. **Int J Radiat Biol** 1989 Jan;55(1):27–43
Pitfalls in the assessment of late lung damage in irradiated mice: complications related to pleural effusion. Down JD, et al. **Int J Radiat Biol** 1989 Mar;55(3):473–8
Repair kinetics in mouse lung: a fast component at 1.1 Gy per fraction. Fowler JF, et al. **Int J Radiat Biol** 1989 Sep; 56(3):335–53
Pulmonary immune response of dogs after exposure to 239PuO2. Galvin JB, et al. **Int J Radiat Biol** 1989 Feb; 55(2):285–96
Re: Assessment of late lung damage. Parkins CS.
Int J Radiat Biol 1989 Mar;55(3):479–81
Lung density changes observed in vivo in rat lungs after irradiation: variations among and within individual lungs. el–Khatib E, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):745–54
The use of CT densitometry to predict lung toxicity in bone marrow transplant patients. el–Khatib EE, et al.
Int J Radiat Oncol Biol Phys 1989 Jan;16(1):85–94
Evaluation of lung dose correction methods for photon irradiations of thorax phantoms. el–Khatib EE, et al.
Int J Radiat Oncol Biol Phys 1989 Oct;17(4):871–8
The use of CT densitometry in the assessment of radiation–induced damage to the rat lung: a comparison with other endpoints. Lehnert S, et al.
Int J Radiat Oncol Biol Phys 1989 Jan;16(1):117–24
Response of the canine lung to fractionated irradiation: pathologic changes and isoeffect curves. McChesney SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):125–32
Serum markers for prediction of pulmonary radiation syndromes. Part I: Surfactant apoprotein. Rubin P, et al.
Int J Radiat Oncol Biol Phys 1989 Sep;17(3):553–8
Results of a prospective study evaluating the effects of mantle irradiation on pulmonary function. Smith LM, et al.
Int J Radiat Oncol Biol Phys 1989 Jan;16(1):79–84
Determination of parameters for the linear–quadratic model for radiation–induced lung damage [letter] Van Dyk J, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):695
Unilateral radiation pneumonitis in sheep: physiological changes and bronchoalveolar lavage. Tillman BF, et al.
J Appl Physiol 1989 Mar;66(3):1273–9
Acute toxicities associated with radiation in the second National Wilms' Tumor Study. Thomas PR, et al.
J Clin Oncol 1988 Nov;6(11):1694–8
Measured inhomogeneity correction factors for lung in electron beam treatments of the chest wall. Moldon C, et al. **Med Dosim** 1989;14(2):89–98
CT manifestation of neutron radiotherapy–induced changes in lung. Ohtomo K, et al. **Radiat Med** 1988 May–Jun; 6(3):130–4
Vascular and epithelial damage in the lung of the mouse after X rays or neutrons. Law MP, et al. **Radiat Res** 1989 Jan; 117(1):128–44
Radiation–induced changes in collagen isotypes I, III, and IV in the lung of LAF1 mouse: effects of time, dose, and WR–2721. Miller GG, et al. **Radiat Res** 1988 Sep; 115(3):515–32
Immunohistochemical quantitation of three collagen isotypes in perfused areas and nonperfused foci of the lungs of irradiated mice. Miller GG, et al. **Radiat Res** 1989 Jul; 119(1):32–8
A quantitative histological study of strain–dependent differences in the effects of irradiation on mouse lung during the early phase. Sharplin J, et al. **Radiat Res** 1989 Jul;119(1):1–14
A quantitative histological study of strain–dependent differences in the effects of irradiation on mouse lung during the intermediate and late phases. Sharplin J, et al.
Radiat Res 1989 Jul;119(1):15–31
Radiation–induced endothelial dysfunction and fibrosis in rat lung: modification by the angiotensin converting enzyme inhibitor CL242817. Ward WF, et al. **Radiat Res** 1989 Feb; 117(2):342–50
Effects of single doses of gamma–radiation on pig lung. Rezvani M, et al. **Radiother Oncol** 1989 Feb;14(2):133–42 (46 ref.)
Radiation–induced lung damage: dose–time–fractionation considerations. Van Dyk J, et al. **Radiother Oncol** 1989 Jan;14(1):55–69
Is there an influence of overall treatment time in the response of lung to fractionated radiotherapy? [letter] Van Dyk J, et al. **Radiother Oncol** 1989 Feb;14(2):169–73
Repair kinetics of mouse lung. Vegesna V, et al.
Radiother Oncol 1989 May;15(1):115–23
Main factors affecting the calculation of radiation dose to the lung from inhalation of radon daughters. Haque AK, et al. **Sci Total Environ** 1988 Aug 1;74:279–89
Pulmonary insults due to transfusions, radiation, and hyperoxia. Duane P. **Semin Respir Infect** 1988 Sep; 3(3):240–6 (84 ref.)
Early repair kinetics of intestine and lung in mice, after fast neutron and photon irradiation. Gregoire V, et al.
Strahlenther Onkol 1989 Apr;165(4):272–5
Tolerance of spinal cord, lung and rectum after fractionated pions and X–rays. van der Kogel AJ, et al.
Strahlenther Onkol 1989 Apr;165(4):286–9
[Lung function following irradiation in pediatric cancer patients] Huber A, et al. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1367–70 (Eng. Abstr.) (Ger)
[Lung injury caused by the inhalation of radioactive substances] Köhler D. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:263–6 (Eng. Abstr.) (Ger)
[Effects of electron radiation on lung tissue in the postoperative irradiation of breast carcinoma] Kocsis B, et al. **Strahlenther Onkol** 1988 Sep;164(9):533–5 (Eng. Abstr.) (Ger)
[Radiation pneumonitis. Morphology and pathogenesis] Schuh D, et al. **Zentralbl Allg Pathol** 1988;134(7):611–26 (36 ref.) (Eng. Abstr.) (Ger)
[Experimental studies on mechanisms and prevention of radiation pneumonitis] Hashimura T, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1989 Mar 25; 49(3):335–43 (Eng. Abstr.) (Jpn)
[Experimental effect of ultraviolet laser radiation on lung, tracheal and bronchial tissues] Vladimirtseva AL, et al.
Biull Eksp Biol Med 1989 May;107(5):566–8 (Eng. Abstr.) (Rus)
[Evaluation of the internal irradiation of humans after inhalation of radionuclides] Shcherbakova LM.

Gig Sanit 1988 Nov;(11):90–1 (Rus)
[Effect of the radiation energy on patient radiation load and on the imaging width in lung study] Gurvich AM, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):67–72 (Rus)
[Morphometric research in determining the absorbed dose in the lungs formed from aspirated radionuclides] Ivanov AE, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):60–5 (Eng. Abstr.) (Rus)
[Functional changes in the bronchoalveolar macrophages during the development of long-term radiation-induced pulmonary complications] Zherbin EA, et al. **Med Radiol (Mosk)** 1988 Nov;33(11):46–51 (Eng. Abstr.) (Rus)
[Lung histopathology during plutonium-238 incorporation] Zhorova ES, et al. **Radiobiologiia** 1989 Mar–Apr; 29(2):202–6 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Subcutaneous abscesses and pulmonary infiltrate due to actinomyces infection. Case report. Philipsen EK, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):675–7
Computed tomography of the lungs in acquired immunodeficiency syndrome. An early indicator of interstitial pneumonia. Hartelius H, et al. **Acta Radiol** 1988 Nov–Dec;29(6):641–4
Findings on chest radiographs after prophylactic pulmonary surfactant treatment of premature infants. Clarke EA, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):799–802
CT features of rounded atelectasis. McHugh K, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):257–60
Radiographic pulmonary congestion in end-stage congestive heart failure. Mahdyoon H, et al. **Am J Cardiol** 1989 Mar 1;63(9):625–7
Radiological case of the month. Pneumomediastinum and subcutaneous emphysema caused by diabetic hyperpnea. Bullaboy CA, et al. **Am J Dis Child** 1989 Jan;143(1):93–4
Unilateral hyperlucent lung due to interstitial pulmonary hemorrhage from aortic dissection. Colice GL, et al. **Am J Med** 1989 Feb;86(2):250–2
Pulmonary hemodynamics, gas exchange, and the severity of emphysema as assessed by quantitative CT scan in chronic bronchitis and emphysema. Biernacki W, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1509–15
Presumptive diagnosis and treatment of pulmonary tuberculosis based on radiographic findings. Gordin FM, et al. **Am Rev Respir Dis** 1989 May;139(5):1090–3
Effect of tobacco smoking on the presence of asbestosis at postmortem and on the reading of irregular opacities on roentgenograms in asbestos-exposed workers. Hnizdo E, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1207–12
High resolution computed tomography and lung function in asbestos-exposed workers with normal chest radiographs. Staples CA, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1502–8
Understanding images: correlation between computerized tomographic scans of lung structure with impaired function in ARDS [editorial] Zapol WM. **Anesthesiology** 1988 Dec; 69(6):812–4
The changing pattern of chronic lung disease of prematurity. Hyde I, et al. **Arch Dis Child** 1989 Apr;64(4):448–51
Factors influencing the reading of small irregular opacities in a radiological survey of asbestos miners in South Africa. Sluis-Cremer GK, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):237–43
Idiopathic bronchiolitis obliterans organizing pneumonia with peripheral infiltrates on chest roentgenogram. Bartter T, et al. **Arch Intern Med** 1989 Feb;149(2):273–9
Solitary pulmonary masses in progressive massive fibrosis: a diagnostic pitfall. Adams H. **Br J Clin Pract** 1988 Dec; 42(12):519–21
Cryptogenic bilateral fibrosing pleuritis. Buchanan DR, et al. **Br J Dis Chest** 1988 Apr;82(2):186–93
General practitioner referrals for static miniature chest radiography: indications and diagnostic yield. Simpson FG, et al. **Br J Dis Chest** 1988 Jan;82(1):76–8
China clay workers in the south west of England: analysis of chest radiograph readings, ventilatory capacity, and respiratory symptoms in relation to type and duration of occupation. Ogle CJ, et al. **Br J Ind Med** 1989 Apr; 46(4):261–70
Postmediastinoscopy changes in the chest radiograph. Don C, et al. **Can Assoc Radiol J** 1988 Dec;39(4):270–2
"Tooth be or not tooth be" [letter] Rusch RL, et al. **Can J Anaesth** 1988 Nov;35(6):669–70
Diminished translucency, a common roentgenographic feature of tropical pulmonary eosinophilia [letter] Chandra KS, et al. **Chest** 1989 Apr;95(4):940
Roentgenogram of the month. A middle-aged man with a right upper lobe mass. Rounded atelectasis of the right upper lobe with bilateral pleural thickening. Green D, et al. **Chest** 1989 Feb;95(2):435–7
Pulmonary nodule mimicked by ECG lead artifact. Kim T, et al. **Chest** 1989 Jan;95(1):237–8
Bronchoscopy to evaluate hemoptysis in older men with nonsuspicious chest roentgenograms. Lederle FA, et al. **Chest** 1989 May;95(5):1043–7
The prevalence of pulmonary hypertension in the United States. Adult population estimates obtained from measurements of chest roentgenograms from the NHANES II Survey. Rich S, et al. **Chest** 1989 Aug;96(2):236–41
Rounded atelectasis associated with end-stage renal disease. Yao L, et al. **Chest** 1989 Aug;96(2):441–3
Computed tomography of the pulmonary parenchyma. An overview. Zerhouni E. **Chest** 1989 Apr;95(4):901–7 (39 ref.)
Wilson–Mikity syndrome: a pulmonary disorder of premature infants. Harris VJ. **Chic Med Sch Q** 1970;30(1):50–8 (10 ref.)
A 48-year-old woman with large mass shadow in the right lower lung with cough, chest pain and fever [clinical conference] Lou FD, et al. **Chin Med J [Engl]** 1988 Sep; 101(9):695–9
Division of lobes and segments of lung on CT scan and topographical relation of segmental bronchi and related vessels. Shen ZW, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):723–30
Computed tomography findings in the Swyer-James syndrome. Norton KI, et al. **Clin Imaging** 1989 Mar; 13(1):48–50
Computed tomography appearances of pulmonary alveolar proteinosis. Murch CR, et al. **Clin Radiol** 1989 May; 40(3):240–3
Radiologic techniques in the treatment of the critically ill trauma patient. Minagi H, et al. **Crit Care Clin** 1986 Oct; 2(4):821–38 (24 ref.)
Whole lung pulmonary angiography in the intensive care unit with two portable chest x-rays. Rosengarten PL, et al. **Crit Care Med** 1989 Mar;17(3):274–8
Cadmium and chromium as markers of smoking in human lung tissue. Pääkkö P, et al. **Environ Res** 1989 Aug; 49(2):197–207
Clinical, radiographic, and bronchial cytologic features of cats with bronchial disease: 65 cases (1980–1986). Moise NS, et al. **J Am Vet Med Assoc** 1989 May 15; 194(10):1467–73
Segmental pulmonary anatomy in man: a method of study with angiography and single photon emission computed tomography. Palla A, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):247–51
'B-readers' and asbestos medical surveillance. Ducatman AM, et al. **J Occup Med** 1988 Aug;30(8):644–7
The chest radiograph after resection of pulmonary nodules with a neodymium-YAG laser. Holbert BL, et al. **J Thorac Imaging** 1989 Apr;4(2):82–6
Smoke inhalation injury: evaluation of radiographic manifestations and pulmonary dysfunction. Peitzman AB, et al. **J Trauma** 1989 Sep;29(9):1232–8; discussion 1238–9
Localization of inter-rib spaces for lung texture analysis and computer-aided diagnosis in digital chest images. Powell GF, et al. **Med Phys** 1988 Jul–Aug;15(4):581–7
Cavitation as an unusual roentgenographic manifestation of Pneumocystis carinii pneumonia in a patient with acquired immunodeficiency syndrome [published erratum appears in N Y State J Med 1989 Feb;89(2):96] Conetta R, et al. **N Y State J Med** 1988 Dec;88(12):652–3
Pulmonary manifestations of untreated adult T-cell leukemia on chest radiography. Kaneko K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):55–61
Imaging fibrosing alveolitis. Strickland B. **Postgrad Med J** 1988;64 Suppl 4:35–40 (5 ref.)
Radiological investigations of the chest, breast, head & neck. Bury R. **Practitioner** 1987 Nov 9;231(1438):1503–6, 1509 (3 ref.)
Radiographic type p pneumoconiosis: high-resolution CT. Akira M, et al. **Radiology** 1989 Apr;171(1):117–23
Anatomy of the minor fissure: evaluation with thin-section CT. Berkmen YM, et al. **Radiology** 1989 Mar;170(3 Pt 1):647–51
Offset electrocardiographic electrode simulating a pulmonary nodule on radiographs. Edwards ME, et al. **Radiology** 1989 Jul;172(1):281–2
Pulmonary cystic disease: comparison of Pneumocystis carinii pneumatoceles and bullous emphysema due to intravenous drug abuse. Gurney JW, et al. **Radiology** 1989 Oct; 173(1):27–31
Pulmonary edema localized in the right upper lobe accompanying mitral regurgitation. Gurney JW, et al. **Radiology** 1989 May;171(2):397–9
Artifacts on lung CT scans: removal with Fourier filtration. Helenon O, et al. **Radiology** 1989 May;171(2):572–4
Pulmonary parenchymal high-resolution CT: to be or not to be. Naidich DP. **Radiology** 1989 Apr;171(1):22–4 (42 ref.)
Right upper lobe versus right middle lobe: differentiation with thin-section, high-resolution CT. Otsuji H, et al. **Radiology** 1989 Sep;172(3):653–6
Pulmonary cysts associated with Pneumocystis carinii pneumonia in patients with AIDS. Sandhu JS, et al. **Radiology** 1989 Oct;173(1):33–5
Adult respiratory distress syndrome from overdose of tricyclic antidepressants. Varnell RM, et al. **Radiology** 1989 Mar;170(3 Pt 1):667–70
High-altitude pulmonary edema: findings at high-altitude chest radiography and physical examination. Vock P, et al. **Radiology** 1989 Mar;170(3 Pt 1):661–6
Limited small cell lung cancer treated by combined radiotherapy and chemotherapy: evaluation of a grading system of lung fibrosis. Arriagada R, et al. **Radiother Oncol** 1989 Jan;14(1):1–8
Roentgenographic chest examination in acquired immunodeficiency syndrome (AIDS). A review. Bighi S, et al. **Rays** 1988 Sep–Dec;13(3):23–6
Assessment of the efficacy of the pulmonary roentgen examination in a medico-sanitary unit. Marcu A, et al. **Sante Publique (Bucur)** 1989 Jan–Mar;32(1):47–57
Respiratory health of brickworkers in Cape Town, South Africa. Radiographic abnormalities. Myers JE, et al. **Scand J Work Environ Health** 1989 Jun;15(3):195–7
The pleuropulmonary manifestations of ankylosing spondylitis. Boushea DK, et al. **Semin Arthritis Rheum** 1989 May;18(4):277–81 (28 ref.)
Relationship of lung function to radiographic reading (ILO) in patients with asbestos related lung disease. Cotes JE, et al. **Thorax** 1988 Oct;43(10):777–83
Computed tomographic appearance of an oleothorax. Deboisblanc BP, et al. **Thorax** 1988 Jul;43(7):572–3
Syngamosis: two new Brazilian cases and evidence of a possible pulmonary cycle. Severo LC, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):467–8
Thoracic radiographic appearance during lung inflation in neonatal calves. Slocombe RF, et al. **Vet Res Commun** 1988; 12(2–3):259–72
[A correlative radiologic-pathologic study on the lungs of rabbit models of respiratory distress syndrome] Li TY. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr; 22(2):118–20 (Eng. Abstr.) (Chi)
[X-ray manifestations of trichinosis on chest radiograph (analysis of 15 cases)] Pu FS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):21–2 (Eng. Abstr.) (Chi)
[Investigation on segmental and lobar anatomy of the lung on CT image] Shen ZW. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):157–63 (Eng. Abstr.) (Chi)
[X-ray manifestation of pulmonary malignant tumor after cryosurgery] Wang JH. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):93–5 (Eng. Abstr.) (Chi)
[Idiopathic unilateral hyperlucent lung (analysis of 11 cases)] Wang QB. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb; 23(1):23–6 (Eng. Abstr.) (Chi)
[X-ray manifestations and pathologic basis of lung and pleural adjacent to peripheral pulmonary masses] Yang XM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr; 22(2):89–92 (Eng. Abstr.) (Chi)
[Imaging of the lung] Kivisaari A, et al. **Duodecim** 1988; 104(6):364–70 (Fin)
[Radiologic aspects of pneumonectomies] Boyer B, et al. **Ann Radiol (Paris)** 1989;32(3):201–7 (Eng. Abstr.) (Fre)
[Pneumonia? Diagnosis: aortic aneurysm which has ruptured in the upper left lobe of the lung] Frahm R, et al. **Radiologe** 1988 Sep;28(9):441–2 (Ger)
[Mycetoma-like manifestations in invasive pulmonary aspergillosis] Roos N, et al. **Radiologe** 1989 May; 29(5):232–6 (Eng. Abstr.) (Ger)
[Roentgen pathology of blunt bronchial injuries] Stark P, et al. **Radiologe** 1989 May;29(5):224–7 (Eng. Abstr.) (Ger)
[Pulmonary involvement in lymphangioleiomyomatosis: studies using high-resolution computed tomography] Guhl L. **ROFO** 1988 Dec;149(6):576–9 (Eng. Abstr.) (Ger)
[High-resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kullnig P, et al. **ROFO** 1989 Jul;151(1):32–5 (Eng. Abstr.) (Ger)
[MacLeod syndrome (letter)] Fiumicelli A. **Radiol Med (Torino)** 1988 Nov;76(5):507 (Ita)
[Early detection and differential diagnosis of metastatic lung tumor] Nakagawa K, et al. **Gan No Rinsho** 1988 Aug; 34(10):1467–77 (Eng. Abstr.) (Jpn)
[A case of Klebsiella pneumoniae pneumonia associated with bacteremia and a giant cavity on the chest roentgenogram] Maeda K, et al. **Kansenshogaku Zasshi** 1988 Aug; 62(8):728–33 (Eng. Abstr.) (Jpn)
[An experimental and clinical study of thin-slice high-resolution CT for lung detail] Otsuji H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):23–34 (Eng. Abstr.) (Jpn)
[A case of primary pulmonary cryptococcosis, showing diffuse infiltrative shadows in bilateral lung fields] Kobayashi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun;26(6):674–9 (Eng. Abstr.) (Jpn)
[A case of primary influenzal pneumonia] Suzuki A. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):778–81 (Eng. Abstr.) (Jpn)
[Gas exchange disturbance with pneumonia in the elderly in relation to quantitative estimate of roentgenologic infiltrates] Nagase T, et al. **Nippon Ronen Igakkai Zasshi** 1988 Jul;25(4):413–8 (Eng. Abstr.) (Jpn)
[Very low extension of the anterior segment of the right upper lobe and its diagnostic significance] Kubota H. **Rinsho Hoshasen** 1988 Jun;33(6):667–72 (Eng. Abstr.) (Jpn)
[CT findings of bronchiolo-alveolar carcinoma with special reference to the lucencies within abnormal shadows] Mori Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):85–90 (Eng. Abstr.) (Jpn)
[The pulmodiaphragmal ligament. An often misinterpreted normal variant] Prytz JF, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):204–6 (Eng. Abstr.) (Nor)
[Clinico-radiologic pleuropulmonary aspects of major collagenoses] Hascalovici M, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec;37(4):327–44 (Rum)
[Circumscribed pulmonary hyperlucency with cystic and

bullous aspects] Kaszonyi M, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct-Dec;37(4):351-70 (Eng. Abstr.) **(Rum)**

[Evolution and complications in a case of chylothorax caused by a tumor (lacking radiologic manifestation)] Mihăiţan F, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr-Jun;37(2):183-8 **(Rum)**

[Rational method for determining the optimum layer in tomograms of the lungs] Bukaev NB. **Probl Tuberk** 1989; (3):57-60 **(Rus)**

[X-ray morphologic analysis of spherical formations in the lungs] Smiltnieks EKh, et al. **Probl Tuberk** 1988;(8):21-3 (Eng. Abstr.) **(Rus)**

[Interpretation of the pulmonary picture] Kamenetskiĭ MS, et al. **Vestn Rentgenol Radiol** 1988 May-Jun;(3):60-6 (Eng. Abstr.) **(Rus)**

[Computed tomography of the lungs in patients with spontaneous pneumothorax] Kishkovskiĭ AN, et al. **Vestn Rentgenol Radiol** 1988 May-Jun;(3):10-5 (Eng. Abstr.) **(Rus)**

[X-ray variants of the roots of the lungs in silicosis] Korobova LA. **Vestn Rentgenol Radiol** 1988 May-Jun; (3):33-8 (Eng. Abstr.) **(Rus)**

[Lung study in bronchial asthma using x-ray pneumopolygraphy] Babiĭ IaS, et al. **Vrach Delo** 1989 Jan; (1):69-70 (Eng. Abstr.) **(Rus)**

[Radiodiagnostic features of the pulmonary form of Q fever] **Aiiku V. Med Pregl** 1989;42(1-2):36-9 (Eng. Abstr.) **(Scr)**

[Hemoptysis in patients with normal roentgenologic findings] Dangubić V, et al. **Vojnosanit Pregl** 1989 Mar-Apr; 46(2):101-4 (Eng. Abstr.) **(Scr)**

[Pulmonary infiltrates with eosinophilia] Amarillas Jiménez MA, et al. **Rev Clin Esp** 1988 Apr;182(7):388-9 **(Spa)**

[Benefits of bronchoscopy in hemoptysis and normal pulmonary X-rays in patients over 40 years of age] Johard U. **Lakartidningen** 1989 Mar 22;86(12):1069-70 (Eng. Abstr.) **(Swe)**

RADIONUCLIDE IMAGING

Nonthromboembolic causes of high-probability lung scans. Velchik MG, et al. **Am J Physiol Imaging** 1989;4(1):32-8

Reversible acute unilateral diminished pulmonary ventilation and perfusion caused by a mucous plug. Velchik MG, et al. **Am J Physiol Imaging** 1989;4(2):66-9

Patterns of pulmonary perfusion scans in normal subjects. IV. The prevalence of abnormal scans in smokers 30 to 49 years of age. Fedullo PF, et al. **Am Rev Respir Dis** 1989 May;139(5):1155-7

Chronic thromboembolic occlusion of main pulmonary artery does not reduce the lung clearance of 99mTc-DTPA. Meignan M, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1536-8

Comparisons of planar and tomographic gamma scintigraphy to measure the penetration index of inhaled aerosols. Phipps PR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1516-23

Initial experience with Technegas--a new ventilation agent. Fawdry RM, et al. **Australas Radiol** 1988 May;32(2):232-8

Anomalous superior vena cava causing non-visualization of the lungs in perfusion scintigraphy. Morgan A, et al. **Br J Radiol** 1989 Jan;62(733):78-9

Spontaneous abrupt changes in the distribution of ventilation: a cause for apparent mismatching on ventilation/perfusion scintigraphy. Peters AM, et al. **Br J Radiol** 1989 Jun; 62(738):536-43

Comparison of scintigraphic diagnostic criteria in suspected pulmonary embolism. Woods ER, et al. **Can Assoc Radiol J** 1989 Aug;40(4):194-7

Increased exercise thallium-201 lung uptake: a noninvasive prognostic index in two-vessel coronary artery disease. Miller DD, et al. **Can J Cardiol** 1988 Sep;4(6):270-6

Gallium lung scanning and bronchoalveolar lavage in crocidolite-exposed workers. Hayes AA, et al. **Chest** 1989 Jul;96(1):22-6

Homogeneity of bronchopulmonary distribution of 99mTc aerosol in normal subjects and in cystic fibrosis patients. Laube BL, et al. **Chest** 1989 Apr;95(4):822-30

Submaximal invasive exercise testing and quantitative lung scanning in the evaluation for tolerance of lung resection. Olsen GN, et al. **Chest** 1989 Feb;95(2):267-73

Transient pulmonary perfusion scintigraphic abnormalities in pulmonary air embolism. Sessler CN, et al. **Chest** 1989 Apr; 95(4):910-2

Demonstration of tumor microembolism by lung perfusion imaging. Davis PS, et al. **Clin Nucl Med** 1988 Jul;13(7):543

Chronic berylliosis. Demonstration by gallium-67 imaging and magnetic resonance imaging. Deseran MW, et al. **Clin Nucl Med** 1988 Jul;13(7):509-11

Unilateral absence of ventilation and perfusion due to thoracic aortic aneurysm. Duke RA, et al. **Clin Nucl Med** 1988 Dec;13(12):880-2

Ventilation/perfusion mismatch caused by emphysematous bullae. Goodgold HM, et al. **Clin Nucl Med** 1989 Jul; 14(7):475-8

Liver-spleen visualization following aerosol lung ventilation with technetium-99m DTPA. Goyer P, et al. **Clin Nucl Med** 1989 Feb;14(2):141-2

Perfusion lung scan in patients operated for transposition of the great arteries. Houzard C, et al. **Clin Nucl Med** 1989 Apr;14(4):268-70

Rapid resolution of massive pulmonary embolism due to streptokinase therapy: documented by ventilation/perfusion imaging. Langer JE, et al. **Clin Nucl Med** 1988 Dec;13(12):874-7

Attenuation defects caused by prominent clavicles and first ribs in perfusion lung imaging. Lee HK, et al. **Clin Nucl Med** 1988 Jul;13(7):545

Quantitative lung scans for prediction of post-radiotherapy pulmonary function. Moldofsky PJ, et al. **Clin Nucl Med** 1988 Sep;13(9):644-6

Gallium-67 lung uptake in extrinsic hypersensitivity pneumonitis. Nimkin K, et al. **Clin Nucl Med** 1989 Jun; 14(6):451-2

Unusual pattern of lung uptake of technetium-99m sulfur colloid seen on the liver scan of a patient with pulmonary tuberculosis. Stewart CA, et al. **Clin Nucl Med** 1989 Apr; 14(4):271-4

Pulmonary alveolar microlithiasis with the absence of technetium-99m MDP uptake of lungs. Turktas H, et al. **Clin Nucl Med** 1988 Dec;13(12):883-5

Bronchoalveolar lavage analysis, gallium-67 lung scanning and soluble interleukin-2 receptor levels in asbestos exposure. Delclos GL, et al. **Environ Res** 1989 Apr; 48(2):164-78

Development of an equine nuclear medicine facility for gamma camera imaging. Attenburrow DP, et al. **Equine Vet J** 1989 Mar;21(2):86-90

A breathing lung phantom for 81mKr lung ventilation studies its use in dosimetry and quality control. Camps JA, et al. **Eur J Nucl Med** 1988;14(11):529-32

Focal lung uptake of gallium-67 in patients with acquired immunodeficiency syndrome secondary to pneumocystis carinii pneumonia. Charron M, et al. **Eur J Nucl Med** 1988; 14(7-8):424-6

Lung water measurements with iodo-antipyrine. Chu RY, et al. **Eur J Nucl Med** 1988;14(11):538-41

MIBG versus HIPDM as a lung imaging agent [letter] Slosman DO, et al. **Eur J Nucl Med** 1988;14(12):639

131I-metaiodobenzylguanidine and 125I-iodoamphetamine. Parameters of lung endothelial cell function and pulmonary vascular area. Slosman DO, et al. **Eur J Nucl Med** 1989; 15(4):207-10

Determinants of diagnostic accuracy in pulmonary scintigraphy for pulmonary capillary protein leak associated with adult respiratory distress syndrome (ARDS): a technical note. Tatum J, et al. **Eur J Nucl Med** 1989;15(2):67-70

Comments on: "Changes in pulmonary mean transit time demonstrated by the scintigraphic first pass technique in patients receiving radiation therapy" [letter] White T, et al. **Eur J Nucl Med** 1988;14(11):577

Gallium-67 scanning in the staging of cryptogenetic fibrosing alveolitis and hypersensitivity pneumonitis. Vanderstappen M, et al. **Eur Respir J** 1988 Jun;1(6):517-22

Regional lung function testing in children. Ciofetta G, et al. **Eur Respir J [Suppl]** 1989 Mar;2(4):171S-180S (61 ref.)

Quantification of spatial blood flow distribution in isolated canine lung. Hakim TS, et al. **Invest Radiol** 1988 Jul; 23(7):498-504

Comparison of three tracers for detecting lung epithelial injury in anesthetized sheep. Peterson BT, et al. **J Appl Physiol** 1989 May;66(5):2374-83

Effect of regional pulmonary blood flow on extravascular lung water measurements with PET. Velazquez M, et al. **J Appl Physiol** 1988 Sep;65(3):1267-73

Asymptomatic pulmonary embolism in patients with deep vein thrombosis. Is it useful to take a lung scan to rule out this condition? Monreal M, et al. **J Cardiovasc Surg (Torino)** 1989 Jan-Feb;30(1):104-7

Dynamic ventilation scintigraphy: a comparison of parameter estimation gating models. Hack SN, et al. **J Nucl Med** 1988 Nov;29(11):1842-7

Comparison of technetium-99m pyrophosphate and technetium-99m DTPA aerosols for SPECT ventilation lung imaging. Isitman AT, et al. **J Nucl Med** 1988 Nov; 29(11):1761-7

Quantitation of postexercise lung thallium-201 uptake during single photon emission computed tomography. Kahn JK, et al. **J Nucl Med** 1989 Mar;30(3):288-94

Ventilation/perfusion mismatch caused by positive pressure ventilatory support. Kim CK, et al. **J Nucl Med** 1989 Jul; 30(7):1268-70

Diffuse lung uptake of technetium-99m sulfur colloid in malaria. Leclerc Y, et al. **J Nucl Med** 1989 Jan;30(1):117-9 (16 ref.)

Right-to-left shunting via persistent left superior vena cava identified by perfusion lung scintigraphy. Rosenbaum RC, et al. **J Nucl Med** 1989 Mar;30(3):412-4

Reversible pulmonary uptake and hypertrophic pulmonary osteoarthropathic distribution of technetium-99m methylene diphosphonate in a case of Pneumocystis carinii pneumonia. Vaquer RA, et al. **J Nucl Med** 1989 Sep; 30(9):1563-7

Is lung sequestration of indium-111-labeled granulocytes organ specific? Williams JH Jr, et al. **J Nucl Med** 1989 Sep;30(9):1531-7

Segmental pulmonary anatomy in man: a method of study with angiography and single photon emission computed tomography. Palla A, et al. **J Nucl Med Allied Sci** 1989 Jul-Sep;33(3):247-51

Monodisperse labeled aerosol to visualize airflow redistribution in the lung after a mucokinetic drug. Pulerà N, et al. **J Nucl Med Allied Sci** 1989 Jul-Sep;33(3):258-63

Severity of cardiac failure from the standpoint of pulmonary circulation: studies centered on distribution of pulmonary perfusion. Tanaka T, et al. **Jpn Circ J** 1989 Feb; 53(2):155-64

The particle size distribution of technegas and its influence on regional lung deposition. Strong JC, et al. **Nucl Med Commun** 1989 Jun;10(6):425-30

Pulmonary embolism after hip or knee replacement: postoperative changes on pulmonary scintigrams in asymptomatic patients. Foley M, et al. **Radiology** 1989 Aug; 172(2):481-5

Diagnostic implications of Ga-67 chest-scan patterns in human immunodeficiency virus-seropositive patients. Kramer EL, et al. **Radiology** 1989 Mar;170(3 Pt 1):671-6

Zones of increased perfusion (hot spots) on perfusion lung scans: correlation with pulmonary arteriograms. Meignan M, et al. **Radiology** 1989 Oct;173(1):47-52

External 113Inm and 99Tcm radiation detection of lung edema induced by oleic acid in the guinea pig. Hultkvist U, et al. **Res Exp Med (Berl)** 1988;188(4):277-88

The role of low molecular weight dextran on platelet pulmonary trapping during endotoxin-induced shock. al-Sarraf AA, et al. **Resuscitation** 1989 Feb;17(1):1-9

Standardized quantitative 67Ga scintigraphy in pulmonary sarcoidosis. Alberts C, et al. **Sarcoidosis** 1988 Sep;5(2):111-8

[Assessment of regional lung function using xenon-133 exhalation scintigraphy with reference to chronic obstructive airway diseases] Kämmer JC, et al. **Radiol Diagn (Berl)** 1988;29(5):753-9 (Eng. Abstr.) **(Ger)**

[SPECT-3-D reconstructions of lung perfusion in patients with thoracic space-occupying lesions] Beyer-Enke SA, et al. **ROFO** 1989 Feb;150(2):211-5 (Eng. Abstr.) **(Ger)**

[Combined 113Xe/99mTC human serum albumin microspheres lung scintigraphy in children with recurrent and chronic bronchitis] Fein R, et al. **Z Erkr Atmungsorgane** 1988;171(2):135-42 (Eng. Abstr.) **(Ger)**

[The measurement of bronchial mucociliary clearance using 99mTc for evaluating the success of the salt water cure] Mohorn M, et al. **Z Erkr Atmungsorgane** 1989;172(1):65-7 (Eng. Abstr.) **(Ger)**

[Exercise induced changes in the distribution of 81mKr and pulmonary response after an asthmatic episode] Nakagawa K, et al. **Arerugi** 1988 Oct;37(10):1007-15 (Eng. Abstr.) **(Jpn)**

[Imaging of ventilatory lung motion using perfusion lung scintigrams] Fujii T, et al. **Kaku Igaku** 1988 Apr; 25(4):301-10 (Eng. Abstr.) **(Jpn)**

[Evaluation of 99mTc-albumin distribution ratio in the cardiac chambers and lungs] Fujii T, et al. **Kaku Igaku** 1989 Jan;26(1):23-33 (Eng. Abstr.) **(Jpn)**

[Clinical assessment of uneven ventilation by factor analysis of Xe-133 washout scintigram] Honda N, et al. **Kaku Igaku** 1989 Apr;26(4):507-13 (Eng. Abstr.) **(Jpn)**

[Factor analysis in pulmonary dynamic studies using N-isopropyl-p-[123I]iodoamphetamine] Kosuda S, et al. **Kaku Igaku** 1989 Feb;26(2):271-7 **(Jpn)**

[Evaluation of lung scintigraphy using N-isopropyl-p-[123I]-iodoamphetamine] Shabana M. **Kaku Igaku** 1989 Apr;26(4):515-22 (Eng. Abstr.) **(Jpn)**

[Delayed lung scintigraphy with N-isopropyl-I-123-p-iodoamphetamine in lung cancer and inflammatory disease] Suematsu T, et al. **Kaku Igaku** 1989 Jan;26(1):45-53 (Eng. Abstr.) **(Jpn)**

[Clinical study on the mechanism of abnormal accumulation in lung scanning with N-isopropyl-p-123I-iodoamphetamine (123I-IMP)] Suga K, et al. **Kaku Igaku** 1988 Jul;25(7):625-31 (Eng. Abstr.) **(Jpn)**

[Evaluation of the cardiac performance in patients with coronary artery disease by the pulmonary blood volume change in exercise test] Tomiya H. **Kaku Igaku** 1989 Mar; 26(3):385-98 (Eng. Abstr.) **(Jpn)**

[Evaluation of imaging of the ventilatory lung motion in pulmonary diseases] Fujii T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):833-41 (Eng. Abstr.) **(Jpn)**

[Lung perfusion scintigraphy with 99mTc-MAA in 46 patients with chronic airway disease] Tomioka H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):975-82 (Eng. Abstr.) **(Jpn)**

[Evaluation of the severity of damage of the lungs in chronic nonspecific diseases based on a microstructural analysis of scintigrams] Vidiukov VI, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):35-8 (Eng. Abstr.) **(Rus)**

[Dynamic perfusion scintigraphy of the lungs in closed chest injury] Proskurina GB, et al. **Sov Med** 1988;(8):64-7 **(Rus)**

[Inhalation scintigraphy of the lungs and its clinical aspects] **Kamenjicki E, et al. Med Pregl** 1989;42(1-2):55-7 (Eng. Abstr.) **(Scr)**

[Perfusion scintigraphy of the lungs in the evaluation of the possibility of resection of bronchogenic carcinoma] Dangubić V, et al. **Vojnosanit Pregl** 1988 Nov-Dec; 45(6):417-20 (Eng. Abstr.) **(Scr)**

[Liver cirrhosis and hypoxemia: contribution of pulmonary scintigraphy (letter)] Verdú J, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):678 **(Spa)**

[Pulmonary vascular pathology in intravenous heroin addicts. A gammagraphic function study] de los Santos Sastre S, et al. **Rev Clin Esp** 1988 Jun;183(1):3-8 (Eng. Abstr.) **(Spa)**

SECRETION

EGF-induced PGE2 release is synergistically enhanced in retinoic acid treated fetal rat lung cells. Oberg KC, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1515–21

CP4: a pneumocyte-derived collagenous surfactant-associated protein. Evidence for heterogeneity of collagenous surfactant proteins. Persson A, et al. **Biochemistry** 1988 Nov 15;27(23):8576–84

Airway secretion: a cell-specific analysis. Basbaum CB, et al. **Horm Metab Res** 1988 Nov;20(11):661–7 (51 ref.)

Verapamil: a novel probe of surfactant secretion from rat type II pneumocytes. Warburton D, et al. **J Appl Physiol** 1989 Mar;66(3):1304–8

The use of transdermal scopolamine in the control of death rattle. Dawson HR. **J Palliat Care** 1989 Mar;5(1):31–3

Tumour necrosis factor in bronchopulmonary secretions of patients with adult respiratory distress syndrome. Millar AB, et al. **Lancet** 1989 Sep 23;2(8665):712–4

SURGERY

Proteolytic and lysosomal enzymes in acute trauma-induced lung injury in sheep. Andreasson S, et al. **Acta Chir Scand** 1989;155(1):1–6

Pulmonary resections in cystic fibrosis [letter; comment] Feigelson J. **Acta Paediatr Scand** 1989 Mar;78(2):317–8. **Comment on:** Acta Paediatr Scand 1988 Jul;77(4):569–75

Management of one-lung anesthesia in an anticoagulated patient. Herenstein R, et al. **Anesth Analg** 1988 Nov; 67(11):1120–2

Maintenance of oxygenation during one-lung ventilation. Effect of intermittent reinflation of the collapsed lung with oxygen. Malmkvist G. **Anesth Analg** 1989 Jun;68(6):763–6

Mixed venous oxygen saturation during thoracic anesthesia. Thys DM, et al. **Anesthesiology** 1988 Dec;69(6):1005–9

Preoperative pulmonary evaluation. Jackson CV. **Arch Intern Med** 1988 Oct;148(10):2120–7 (93 ref.)

Stapling air leaks [letter] Cole PH. **Chest** 1988 Nov;94(5):1118

Atypical resections of the lung: bronchoplasties, sleeve resections, and segmentectomies—their evolution and present status. Kittle CF. **Curr Probl Surg** 1989 Feb; 26(2):57–132 (302 ref.)

Bronchoplastic techniques for pediatric lung salvage. Black CT, et al. **J Pediatr Surg** 1988 Jul;23(7):653–6

Reinforced staple line in severely emphysematous lungs. Juettner FM, et al. **J Thorac Cardiovasc Surg** 1989 Mar; 97(3):362–3

Limited resections for lung cancer. Wetstein L, et al. **N J Med** 1989 Mar;86(3):197–200

New design for fixation of surgically obtained lung specimens. Barberà JA, et al. **Pathol Res Pract** 1989 Jun; 184(6):630–4

Peroral N-acetylcysteine as prophylaxis against bronchopulmonary complications of pulmonary surgery. Jepsen S, et al. **Scand J Thorac Cardiovasc Surg** 1989; 23(2):185–8

Bilobectomy in a 90-year-old patient. Linder A, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):190–2

Median sternotomy as an approach for pulmonary surgery. Watanabe Y, et al. **Thorac Cardiovasc Surg** 1988 Aug; 36(4):227–31

[Intraoperative use of fibrin sealant in pulmonary surgery. A prospective study on a series of 124 procedures] Grunenwald D. **Ann Chir** 1989;43(2):147–50 (Eng. Abstr.) **(Fre)**

[Relation of the fall in PO2 in ventilation of the lower lung in pulmonary surgery and the preoperative distribution of respiratory function] Fischler M, et al. **Ann Fr Anesth Reanim** 1988;7(5):365–9 (Eng. Abstr.) **(Fre)**

[Advantages and disadvantages of lung-sparing exeresis in bronchogenic cancer] Mucilli F, et al. **Ann Ital Chir** 1987; 59(1–6):309–16 (Eng. Abstr.) **(Ita)**

[Pulmonary atresia with an intact septum: indications for the neonatal surgical treatment guided by 2-dimensional and Doppler echocardiography] Gagliardi MG, et al. **G Ital Cardiol** 1989 Apr;19(4):315–8 (Eng. Abstr.) **(Ita)**

[Use of surgical staplers in pulmonary surgery] Occhipinti S, et al. **Minerva Chir** 1989 Feb 15;44(3):381–3 (14 ref.) **(Ita)**

[Assessment and application of pulmonary detachment procedure in chronic empyema] Imura Y, et al. **Kekkaku** 1988 Oct;63(10):645–50 (Eng. Abstr.) **(Jpn)**

[Influence of thoracotomy and pulmonary surgery on coagulation and fibrinolysis in the intra and postoperative period—experimental and clinical study] Sembo J. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):199–209 (Eng. Abstr.) **(Jpn)**

[A rare case of eosinophilic pleuritis treated by means of decortication] Oizumi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1206–9 (Eng. Abstr.) **(Jpn)**

[Transcranial electrostimulation in the immediate period following lung operations] Avrutskiĭ MIa, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):40–3 (Eng. Abstr.) **(Rus)**

[Hyperbaric oxygenation in the prevention and treatment of suppurative complications after operations on the lungs and pleura] Biriukov IuV, et al. **Grudn Khir** 1988 May–Jun; (3):49–51 (Eng. Abstr.) **(Rus)**

[Outcome in lung resection and pulmonectomy in disseminated forms of tuberculosis] Kariev TM, et al. **Grudn Khir** 1988 May–Jun;(3):45–8 (Eng. Abstr.) **(Rus)**

[Several aspects of septic shock in lung surgery] Lebedeva RN, et al. **Grudn Khir** 1989 May–Jun;(3):50–3 (Eng. Abstr.) **(Rus)**

[The experience of 700 operations on the lungs under high-frequency artificial ventilation] Zislin BD, et al. **Grudn Khir** 1988 Sep–Oct;(5):67–71 (Eng. Abstr.) **(Rus)**

[Dynamics of roentgeno-functional indices of the respiratory organs in patients with destructive tuberculosis in relation to the nature of the surgical intervention] Gapon'ko GA, et al. **Probl Tuberk** 1988;(11):30–3 (Eng. Abstr.) **(Rus)**

[Cavernotomy in patients with solitary lung] Krasnov VA, et al. **Probl Tuberk** 1989;(2):32–4 (Eng. Abstr.) **(Rus)**

[Anesthesiologic and resuscitation support for surgical interventions on the single lung in tuberculosis patients] Zhilin IuN, et al. **Probl Tuberk** 1988;(8):30–5 (Eng. Abstr.) **(Rus)**

[New suturing devices in pulmonary surgery] Lukomskiĭ GI, et al. **Sov Med** 1988;(11):22–4 (Eng. Abstr.) **(Rus)**

[Trans-sternal organ-sparing interventions in the surgical treatment of bilateral bullous diseases of the lungs] Vishnevskiĭ AA, et al. **Vestn Khir** 1988 Jul;141(7):7–11 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Heart and heart-lung transplantation. Jamieson SW. **Adv Cardiol** 1988;36:267–9

Human heart and lung transplantation. Tuna IC, et al. **Adv Surg** 1989;22:251–76 (37 ref.)

Bronchiolitis obliterans in heart-lung transplantation patients: radiologic findings in 11 patients. Skeens JL, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):253–6

The clinical spectrum, pathology, and clonal analysis of Epstein-Barr virus-associated lymphoproliferative disorders in heart-lung transplant recipients. Randhawa PS, et al. **Am J Clin Pathol** 1989 Aug;92(2):177–85

Double-lung transplant for advanced chronic obstructive lung disease. Cooper JD, et al. **Am Rev Respir Dis** 1989 Feb;139(2):303–7

Unexpectedly high incidence of Pneumocystis carinii infection after lung-heart transplantation. Implications for lung defense and allograft survival. Gryzan S, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1268–74

Lung rejection and bronchial hyperresponsiveness to methacholine and ultrasonically nebulized distilled water in heart-lung transplantation patients. Higenbottam T, et al. **Am Rev Respir Dis** 1989 Jul;140(1):52–7

The cough response to ultrasonically nebulized distilled water in heart-lung transplantation patients. Higenbottam T, et al. **Am Rev Respir Dis** 1989 Jul;140(1):58–61

Dynamic changes in soluble interleukin-2 receptor levels after lung or heart-lung transplantation. Lawrence EC, et al. **Am Rev Respir Dis** 1989 Sep;140(3):789–96

Unilateral lung transplantation in end-stage pulmonary emphysema. Mal H, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):797–802

Airway hyperreactivity in patients undergoing lung and heart/lung transplantation. Maurer JR, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1038–41

The radiographic appearances of infection and acute rejection of the lung after heart-lung transplantation. Millet B, et al. **Am Rev Respir Dis** 1989 Jul;140(1):62–7

Double lung transplantation for severe COPD: reversing the irreversible [editorial] Raffin TA. **Am Rev Respir Dis** 1989 Feb;139(2):301–2

Ventilation and breathing pattern during progressive hypercapnia and hypoxia after human heart-lung transplantation. Sanders MH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):38–44

Breathing during wakefulness and sleep after human heart-lung transplantation. Sanders MH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):45–51

Pulmonary disease caused by Mycobacterium chelonae in a heart-lung transplant recipient with obliterative bronchiolitis. Trulock EP, et al. **Am Rev Respir Dis** 1989 Sep;140(3):802–5

Core-cooling, heart-perfusion, lung-immersion technique provides successful cardiopulmonary preservation for heart-lung transplantation. Bando K, et al. **Ann Thorac Surg** 1988 Dec;46(6):625–30

Heart/heart-lung transplantation. The domino procedure. Cavarocchi NC, et al. **Ann Thorac Surg** 1989 Jul; 48(1):130–3

Herbert Sloan lecture. Lung transplantation. Cooper JD. **Ann Thorac Surg** 1989 Jan;47(1):28–44

Donor deep hypothermia or donor pretreatment with prostaglandin E1 and single pulmonary artery flush for heart-lung graft preservation: an experimental primate study. Harjula A, et al. **Ann Thorac Surg** 1988 Nov; 46(5):553–5

Extraction of cardiopulmonary grafts [letter] Kirk AJ, et al. **Ann Thorac Surg** 1989 Jul;48(1):145–6

Domino transplants. Sequential heart and heart-lung transplantation. Sutor S, et al. **AORN J** 1988 Nov; 48(5):876–89

Gastrointestinal cytomegalovirus infection in heart and heart-lung transplant recipients. Kaplan CS, et al. **Arch Intern Med** 1989 Sep;149(9):2095–100

Central nervous system infections in heart and heart-lung transplant recipients. Hall WA, et al. **Arch Neurol** 1989 Feb;46(2):173–7

Lung transplantation. Samuel Jason Mixter lecture. Pearson FG. **Arch Surg** 1989 May;124(5):535–8

Heart and heart/lung transplantation in children. Wilkinson JL. **Aust Paediatr J** 1989 Jun;25(3):117–8 (6 ref.)

Cancer after transplantation [letter] Aravot D, et al. **BMJ** 1988 Aug 20–27;297(6647):559

Cardiopulmonary response to dynamic exercise after heart and combined heart-lung transplantation. Banner NR, et al. **Br Heart J** 1989 Mar;61(3):215–23

Diastolic function after cardiac and heart-lung transplantation. Hausdorf G, et al. **Br Heart J** 1989 Aug; 62(2):123–32

Isolated lung transplantation: a review of problems and guide to anaesthesia. Conacher ID. **Br J Anaesth** 1988 Oct; 61(4):468–74 (22 ref.)

Radiologic findings in heart-lung transplantation: a preliminary experience. Holland SA, et al. **Can Assoc Radiol J** 1989 Apr;40(2):94–7

Cyclosporine-induced lymphoma following a unilateral lung transplant. The Toronto Lung Transplant Group. Rappaport DC, et al. **Can Assoc Radiol J** 1989 Apr; 40(2):110–1

Bronchial responsiveness to exercise after human cardiopulmonary transplantation. Glanville AR, et al. **Chest** 1989 Aug;96(2):281–6

The importance of cytomegalovirus in heart-lung transplant recipients. Hutter JA, et al. **Chest** 1989 Mar;95(3):627–31

Bronchocentric mycosis occurring in transplant recipients. Tazelaar HD, et al. **Chest** 1989 Jul;96(1):92–5

Single lung transplant—experience with a canine model. Hsu HK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):13–6

Unusual cause of entire lung ventilation-perfusion mismatch. Bergh JR, et al. **Clin Nucl Med** 1989 Jun;14(6):464–7

Dimethylthiourea flush improves transplant lung function following 24-hour cold preservation. Paull DE, et al. **Curr Surg** 1989 Jul–Aug;46(4):293–5

Lung rejection after transplantation. Higenbottam TW. **Eur Respir J** 1989 Jan;2(1):1–2

The pathobiology of heart-lung transplantation [editorial] Atkinson JB. **Hum Pathol** 1988 Dec;19(12):1367–8

Histopathologic diagnosis of rejection in lung allografts [letter] Kemnitz J, et al. **Hum Pathol** 1989 Aug;20(8):817

The pathology of combined heart-lung transplantation: an autopsy study. Tazelaar HD, et al. **Hum Pathol** 1988 Dec; 19(12):1403–16

Posttransplant lymphoproliferative disorders in heart-lung transplant recipients: primary presentation in the allograft. Yousem SA, et al. **Hum Pathol** 1989 Apr;20(4):361–9

Heart-lung transplantation. Bonser RS, et al. **Invest Radiol** 1989 Apr;24(4):310–22 (111 ref.)

Cytomegalovirus infections in heart and heart-lung transplant recipients. Wreghitt T. **J Antimicrob Chemother** 1989 Jun;23 Suppl E:49–60 (33 ref.)

Toxoplasmosis in heart and heart and lung transplant recipients. Wreghitt TG, et al. **J Clin Pathol** 1989 Feb; 42(2):194–9

The Nottingham Health Profile as a measure of quality of life following combined heart and lung transplantation. O'Brien BJ, et al. **J Epidemiol Community Health** 1988 Sep; 42(3):232–4

Extended cardiopulmonary preservation for heart-lung transplantation: a comparative study of superoxide dismutase. Bando K, et al. **J Heart Transplant** 1989 Jan–Feb;8(1):59–66

Technique of clinical double-lung transplantation. Bonser RS, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):298–303

Does central nervous system toxicity occur in transplant patients with hypocholesterolemia receiving cyclosporine? Cooper DK, et al. **J Heart Transplant** 1989 May–Jun; 8(3):221–4

Oxygen free radical scavengers to prevent pulmonary reperfusion injury after heart-lung transplantation. Cremer J, et al. **J Heart Transplant** 1989 Jul–Aug;8(4):330–6

The Registry of the International Society for Heart Transplantation: sixth official report—1989. Heck CF, et al. **J Heart Transplant** 1989 Jul–Aug;8(4):271–6

Transbronchial biopsy has eliminated the need for endomyocardial biopsy in heart-lung recipients. Higenbottam T, et al. **J Heart Transplant** 1988 Nov–Dec; 7(6):435–9

Cardiopulmonary preservation [letter] Hutter JA, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):312–3

Histologic changes in heart-lung transplant recipients during rejection episodes and at routine biopsy. Hutter JA, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):440–4

Cardiopulmonary preservation [letter] Robicsek F. **J Heart Transplant** 1988 Jul–Aug;7(4):313–4

Anomalous left superior vena cava in combined heart-lung transplantation. von Oppell UO, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):445–7

Storage and transport of heart and heart-lung donor organs with inflatable cushions and eutectoid cooling. Wheeldon DR, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):265–8

Regional pulmonary perfusion following human heart-lung transplantation. Lisbona R, et al. **J Nucl Med** 1989 Aug; 30(8):1297–301

The role of heart and lung transplantation in the treatment of cystic fibrosis. Geddes DM, et al. **J R Soc Med** 1989; 82 Suppl 16:49–53

Heart-lung transplant in a 5-year-old. Yazbeck J, et al. **J R Soc Med** 1988 Dec;81(12):737–8

Improved lung preservation using a dimethylthiourea flush.

Paull DE, et al. **J Surg Res** 1989 Apr;46(4):333–8
One-stage correction of interrupted aortic arch combined with heart-lung transplantation. Aranki S, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):285–8
Successful extended hypothermic cardiopulmonary preservation for heart-lung transplantation. Bando K, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):137–45; discussion 145–6
Pulmonary flow-resistance relationships in allografts after single lung transplantation in dogs. Eishi K, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):24–9
A new solution (UCLA formula) for lung preservation. Hachida M, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):513–20
Diagnosis of lung allograft rejection by bronchial intraepithelial Leu-7 positive T lymphocytes. Hruban RH, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):939–46
A new model for assessment of lung preservation. Jones MT, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):608–14
Heart and unilateral lung transplantation in patients with end-stage cardiopulmonary disease and previous thoracic operations. Kawaguchi A, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):343–9
Pulmonary venous anastomosis in lung transplantation without donor left atrium. Experimental and clinical results. LoCicero J 3d, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):582–6
Airway obstruction after autologous reimplantation of the porcine lobe. McGahren ED, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):587–92
Early results of single lung transplantation in patients with end-stage pulmonary fibrosis. McGregor CG, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):350–4
Simplified rat lung transplantation using a cuff technique. Mizuta T, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):578–81
Heart-lung transplantation. Technical modifications that may improve the early outcome. Vouhé PR, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):906–10
Unique aspects of heart and lung transplantation exhibited in the 'domino-donor' operation. Baumgartner WA, et al. **JAMA** 1989 Jun 2;261(21):3121–5
Lung allografts with and without omentopexy in canines—bronchofiberscopic and histologic observation of bronchial anastomosis healing. Shirakusa T, et al. **Jpn J Surg** 1989 Mar;19(2):246–50
Long-term anaesthesia with alfentanil and midazolam for lung transplantation in the dog. Flecknell PA, et al. **Lab Anim** 1989 Jul;23(3):278–84
Improved whole-body protein turnover after heart-lung transplantation [letter] Morrison WL, et al. **Lancet** 1988 Oct 8;2(8615):853–4
Cardiac and pulmonary replacement in the bicentenary year [editorial] Esmore DS. **Med J Aust** 1988 Dec 5–19; 149(11–12):578–80
Factors contributing to mortality in lung transplant recipients: an autopsy study. Cagle PT, et al. **Mod Pathol** 1989 Mar;2(2):85–9
Breathing patterns in recipients of heart-lung transplants [letter] **N Engl J Med** 1989 Mar 9;320(10):669–70
Evidence of an altered pattern of breathing during exercise in recipients of heart-lung transplants. Sciurba FC, et al. **N Engl J Med** 1988 Nov 3;319(18):1186–92
Atypical changes of respiratory epithelium after heart-lung transplantation. A case report. Bernardi P, et al. **Pathol Res Pract** 1989 May;184(5):514–8
Transplantation of lungs. Higenbottam T, et al. **Postgrad Med J** 1988;64 Suppl 4:120–4 (27 ref.)
Waiting for a transplant. Lebbern D. **Practitioner** 1988 Dec; 232(1460):1363–6
Single-lung transplantation: imaging features. Herman SJ, et al. **Radiology** 1989 Jan;170(1 Pt 1):89–93
Ganciclovir treatment of serious cytomegalovirus infection in heart and heart-lung transplant recipients. Keay S, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 3:S563–72
Recipient selection for heart-lung transplantation. Harjula AL, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):193–6
The status of transplantation of the human lung. Stevens JH, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):179–85 (58 ref.)
Lung transplantation: an emerging technology. Lawrence EC, et al. **Tex Med** 1988 Dec;84(12):61–7 (27 ref.)
Bronchial reactivity to methacholine after combined heart-lung transplantation. Banner NR, et al. **Thorax** 1988 Dec;43(12):955–9
Clinical experience in the management of pulmonary opportunist infection and rejection in recipients of heart-lung transplants. Penketh AR, et al. **Thorax** 1988 Oct; 43(10):762–9
Cardiopulmonary transplantation: current practice. Fragomeni LS, et al. **Transpl Int** 1988 Jul;1(2):103–8 (32 ref.)
Proceedings of the twelfth International Congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book II. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–2475
Twelfth international congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Proceedings. **Transplant Proc** 1989 Feb;21(1 Pt 1):1–1193
Donor core cooling for multiple organ retrieval: new application of portable cardiopulmonary bypass for transplantation. Adachi H, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1200–2
Lack of specialized antigen-presenting cells (IDCs) in donor heart, kidney, liver, and lung at transplantation. Amlot PL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):169–70
Prolonged survival of allotransplanted lungs in beagles conditioned with short term immunotherapy. Blumenstock DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):494–5
The lung donor: special considerations. Cooper JD. **Transplant Proc** 1988 Oct;20(5 Suppl 7):17–8
The effect of prostacyclin on reperfusion injury after pulmonary ischemia. Dammenhayn L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1363
The influence of HLA matching and lymphocytotoxic antibody status in heart-lung allograft recipients receiving cyclosporin and azathioprine. Festenstein H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):797–8
The characteristic histological changes associated with rejection in heart-lung transplant recipients. Hutter JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):435–6
Analysis of bronchoalveolar lavage and pulmonary alveolar surfactant for diagnosis of rejection and infection in heart-lung transplantation. Jurmann MJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2581–2
Sequential bronchoalveolar lavage studies from patients undergoing double lung and heart-lung transplant. Maurer JR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2585–7
Simplified rat lung transplantation using a cuff technique. Mizuta T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2601–2
Pulmonary function monitoring allows diagnosis of rejection in heart-lung transplant recipients. Otulana BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2583–4
Lung transplantation in the rat: cellular mechanisms of allograft rejection. Pepper JR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):470–2
Serial bronchoalveolar lavage in heart-lung transplant recipients: cytological and microbiologic findings. Prior C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2588–9
Acute graft-versus-host disease after lung transplantation. Prop J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2603–4
Lung transplantation in humans, with emphasis on en bloc technique for simultaneous bilateral transplantation without the heart. Raju S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2594–5
Thromboxane B2 and lung transplantation: correlation of rejection with levels detected in bronchoalveolar lavage. Santillan-Doherty P, et al. **Transplant Proc** 1989 Aug; 21(4):3650–2
The natural history of obliterative bronchiolitis and occlusive vascular disease of patients following heart-lung transplantation. Scott JP, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2592–3
Frequency of precursor cytotoxic T lymphocytes correlates with outcome following heart-lung and pancreatic islet transplantation. Stock PG, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):457–60
Early detection of lung rejection by measurement of bronchial mucosal blood flow using laser Doppler flowmeter. Tanabe H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2590–1
Reduced heart rejection in combined heart-lung transplants. Westra AL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):455–6
A study of Epstein-Barr virus infections in heart and heart and lung transplant recipients. Wreghitt TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2502–3
Distant organ procurement for heart and lung transplantation. Yacoub MH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2548–50
Feasibility of serial fine needle aspiration biopsies to monitor dog single lung allografts. Zhao Y, et al. **Transplant Proc** 1989 Aug;21(4):3653–4
Lung biopsy evaluation of acute rejection versus opportunistic infection in lung transplant patients. Cagle PT, et al. **Transplantation** 1989 Apr;47(4):713–5
Transbronchial lung biopsy for the diagnosis of rejection in heart-lung transplant patients. Higenbottam T, et al. **Transplantation** 1988 Oct;46(4):532–9
Evidence that the expression of class II MHC antigens is not diagnostic of lung allograft rejection. Hruban RH, et al. **Transplantation** 1989 Sep;48(3):529–30
A simple, working heart and lung transplant model for assessing preservation methods in the rabbit. Kaneko M, et al. **Transplantation** 1988 Oct;46(4):624–6
Cyclosporine-associated hypertension in cardiopulmonary transplantation. The beneficial effect of nifedipine on renal function. Kirk AJ, et al. **Transplantation** 1989 Sep; 48(3):428–30
Analysis of T cell subpopulations and cyclosporine levels in the blood of two neonates born to immunosuppressed heart-lung transplant recipients. Rose ML, et al. **Transplantation** 1989 Aug;48(2):223–6
Cyclosporine dosing in cystic fibrosis after transplantation [letter] Scott JP, et al. **Transplantation** 1989 Sep;48(3):543–4
Expression of MHC antigens in normal human lungs and transplanted lungs with obliterative bronchiolitis. Taylor PM, et al. **Transplantation** 1989 Sep;48(3):506–10
Mycotic aortic aneurysm after heart-lung transplantation. Thomson D, et al. **Transplantation** 1989 Jan;47(1):195–7
Pulmonary arteriosclerosis in long-term human heart-lung transplant recipients. Yousem SA, et al. **Transplantation** 1989 Mar;47(3):564–9
Efficacy of transbronchial lung biopsy in the diagnosis of bronchiolitis obliterans in heart-lung transplant recipients. Yousem SA, et al. **Transplantation** 1989 May;47(5):893–5
[Heart-lung transplantation] Dahl R, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):763–5 (Eng. Abstr.) (Dan)
[Heart-lung transplantation] Kristensen KS, et al. **Ugeskr Laeger** 1989 May 29;151(22):1382–6 (Eng. Abstr.) (Dan)
[Nifedipine in primary pulmonary hypertension while waiting for heart-lung transplantation] Petersen TI, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2087–8 (Eng. Abstr.) (Dan)
[Heart and heart-lung transplantation in the child. Indications, methods and results] Kachaner J, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:727–33 (Eng. Abstr.) (Fre)
[Practical aspects in the surveillance of heart and heart-lung grafts in children] Le Bidois J, et al. **Arch Fr Pediatr** 1988; 45 Suppl 1:755–9 (Eng. Abstr.) (Fre)
[Organ procurement in children. Surgical aspect] Revillon Y, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:709–11 (Eng. Abstr.) (Fre)
[Heart and heart-lung transplantation] Cabrol C, et al. **Chirurgie** 1988;114(4):284–95 (17 ref.) (Eng. Abstr.) (Fre)
[Lung transplantation] Dartevelle P, et al. **Nephrologie** 1988; 9(4):155–7 (0 ref.) (Eng. Abstr.) (Fre)
[Unilateral lung transplantation in panlobular emphysema] Pariente R, et al. **Presse Med** 1989 Feb 18;18(7):347–9 (Eng. Abstr.) (Fre)
[Pulmonary transplantation. Symposium. Clermont-Ferrand, 6 and 7 November 1987. Proceedings] **Rev Pneumol Clin** 1988;44(5):219–56 (Fre)
[Lung transplantation] Patterson GA. **Rev Pneumol Clin** 1988; 44(5):221–3 (Eng. Abstr.) (Fre)
[Heart-lung transplantation] Pavie A, et al. **Rev Pneumol Clin** 1988;44(5):232–42 (7 ref.) (Eng. Abstr.) (Fre)
[Heart-lung transplantation in children] Vouhe PR, et al. **Rev Pneumol Clin** 1988;44(5):229–31 (Eng. Abstr.) (Fre)
[The technic of combined heart-lung-transplantation] Reichart B. **Chirurg** 1988 Aug;59(8):519–25 (18 ref.) (Ger)
[Future prospects in heart and heart-lung transplantation] Kemkes BM, et al. **Fortschr Med** 1988 Dec 10;106(35):711–4 (19 ref.) (Eng. Abstr.) (Ger)
[Heart-lung transplantation for idiopathic pulmonary fibrosis] Potasman I, et al. **Harefuah** 1989 Mar 15;116(6):302–4 (Eng. Abstr.) (Heb)
[An experimental study on the heart and lung preservation and transplantation. Autoperfusion method and cardiac and pulmonary functions after transplantation] Nagabuchi M. **Hokkaido Igaku Zasshi** 1988 Sep;63(5):698–707 (Eng. Abstr.) (Jpn)
[Orthotopic heart-lung xenotransplantation using primates] Asai Y, et al. **Kyobu Geka** 1988 Dec;41(13):1061–4 (Eng. Abstr.) (Jpn)
[Experimental studies on reimplantation response after lung transplantation] Date H. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):510–21 (Eng. Abstr.) (Jpn)
[Histological observations of bronchial anastomotic healing in canine lung transplantation] Fujimura S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):914–22 (Eng. Abstr.) (Jpn)
[Detection of donor specific cytotoxic T lymphocyte activity in lung grafted mongrel dogs] Fujisawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):203–7 (Eng. Abstr.) (Jpn)
[Roentogenologic pathologic evaluation of allograft rejection in heart-lung transplantation—an experimental study in Japanese monkey] Kawauchi M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):455–62 (Eng. Abstr.) (Jpn)
[Current developments in heart-lung transplantation and unilateral lung transplantation] Mihăltan F. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun;37(2):109–16 (24 ref.) (Rum)
[Protection of the bronchial anastomosis with omental pedicle in unilateral lung transplant] Santillán-Doherty P, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):117–22 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Aspiration biopsy cytology of benign clear cell ("sugar") tumor of the lung. Nguyen GK. **Acta Cytol** 1989 Jul–Aug; 33(4):511–5
Scanning electron microscope study of the spatial organization of the air and blood conducting components of the avian lung (Gallus gallus variant domesticus). Maina JN. **Anat Rec** 1988 Oct;222(2):145–53
Scanning electron microscope study of the morphology of the reptilian lung: the Savanna monitor lizard Varanus exanthematicus and the pancake tortoise Malacochersus tornieri. Maina JN, et al. **Anat Rec** 1989 Aug;224(4):514–22
Microrheology and constitutive equation of soft tissue. Fung YC. **Biorheology** 1988;25(1–2):261–70
Mouse interstitial lung disease and pleuritis induction by human Mollicute-like organisms. Wirostko E, et al. **Br J Exp Pathol** 1988 Dec;69(6):891–902
Respiratory cancer in chrysotile textile and mining industries: exposure inferences from lung analysis. Sebastien P, et al. **Br J Ind Med** 1989 Mar;46(3):180–7
Isolation and reactivation of highly-coupled newt lung cilia.

Hard R, et al. **Cell Motil Cytoskeleton** 1988;10(1-2):271-84

Characterization of amniotic fluid lamellar bodies by resistive-pulse counting: relationship to measures of fetal lung maturity. Dubin SB. **Clin Chem** 1989 Apr;35(4):612-6

Multi-organ damage resulting from experimental faecal peritonitis. Tighe D, et al. **Clin Sci** 1989 Mar;76(3):269-76

Secretion of lamellar bodies in type II pneumocytes in organoid culture: effects of colchicine and cytochalasin B. Zimmermann B. **Exp Lung Res** 1989;15(1):31-47

Incidence of ferruginous bodies in the lungs during a 45-year period and mineralogical analysis of the core fibres and uncoated fibres. Shishido S, et al. **IARC Sci Publ** 1989; (90):229-38

The ultrastructure of epithelial cells of the distal lung. Penney DP. **Int Rev Cytol** 1988;111:231-69 (209 ref.)

Ultrastructural morphometric observations on the extramural aortico-pulmonary bodies of the domestic fowl. Taha AA, et al. **J Anat** 1988 Apr;157:169-73

Respiratory epithelial permeability after cigarette smoke exposure in guinea pigs. Burns AR, et al. **J Appl Physiol** 1989 May;66(5):2109-16

Siliceous pneumoconiosis in two dogs. Canfield PJ, et al. **J Comp Pathol** 1989 Feb;100(2):199-202

Isolation and characterization of fly ash from rat lung tissue. Rothenberg SJ, et al. **J Toxicol Environ Health** 1989; 27(4):487-508

Structural changes in lungs of magnesium-deficient weanling rats dying spontaneously or after spontaneous recovery from the seizure-shock episode. Possible methods for sudden infant death syndromes. Caddell JL, et al. **Magnesium** 1988;7(4):195-209

Into deepest lung with drug and camera. Akers TK, et al. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):315-20

Case 5. Adenovirus pneumonia in a newborn. Shikes RH, et al. **Pediatr Pathol** 1989;9(2):199-202

[Ultrastructural study of pulmonary parenchyma of dogs with severe steam respiratory burn (within 14 days after the burn)] Shi YA.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 May;1(2):27-9 (Eng. Abstr.) (Chi)

[Light microscopic and electron microscopic observations on pulmonary alveolar proteinosis] Zhu QR.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):344-6, 385-6 (Eng. Abstr.) (Chi)

[Compensatory response of the residual lung after exeresis (ultrastructural study)] Marcello MF, et al.
Boll Soc Ital Biol Sper 1989 Feb;65(2):89-96 (Ita)

[The surfactant system and ultrastructure of the lungs after surgical correction of cardiac defects during extracorporeal circulation] Perezhogin EV, et al. **Arkh Patol** 1989; 51(1):30-7 (Eng. Abstr.) (Rus)

[Characteristics of lung ultrastructure and variability mutability, mutation of the causative agent in experimental tuberculosis] Dzis' EI, et al. **Probl Tuberk** 1988;(12):42-5 (Eng. Abstr.) (Rus)

LUNG ABSCESS

Melioidosis, the great mimicker: a report of 10 cases from Malaysia. Yee KC, et al. **J Trop Med Hyg** 1988 Oct; 91(5):249-54

COMPLICATIONS

Streptococcus pyogenes pneumonia with abscess formation. McIntyre HD, et al. **Aust N Z J Med** 1989 Jun;19(3):248-9

Gardnerella vaginalis bacteremia from pulmonary abscess in a male alcohol abuser. Legrand JC, et al. **J Clin Microbiol** 1989 May;27(5):1132-4

Metastatic uterine leiomyosarcoma in association with recurrent lung abscess. Sheron N, et al. **Thorax** 1989 Jul; 44(7):597-8

[Diagnostic difficulties in pulmonary tuberculosis following pulmonary abscess (3 clinical cases)] Dobre V, et al.
Rev Ig [Pneumoftiziol] 1988 Apr-Jun;37(2):175-82 (Eng. Abstr.) (Rum)

DIAGNOSIS

Diagnosis of Legionella lung abscess by percutaneous needle aspiration. Dobranowski J, et al. **Can Assoc Radiol J** 1989 Feb;40(1):43-4

Amoebic lung abscesses. A case report. Snyders FA, et al. **S Afr Med J** 1989 Apr 1;75(7):344-6

[Bronchofibroscopy of cavitary pulmonary diseases] Hu HC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):282-4, 319 (Eng. Abstr.) (Chi)

DRUG THERAPY

[Interstitial electrophoresis in acute pleural and lung suppuration] Aleksejenko AW, et al.
Z Erkr Atmungsorgane 1988;171(3):219-23 (Eng. Abstr.) (Ger)

[A case report of sepsis and multiple lung abscess associated with purulent arthritis of knee joint due to methicillin resistant Staphylococcus aureus] Watanabe K, et al.
Kansenshogaku Zasshi 1988 Mar;62(3):266-72 (Eng. Abstr.) (Jpn)

[Non-operative sanitation of suppurative-septic foci] Lytkin MI, et al. **Vestn Khir** 1989 Feb;142(2):3-8 (Eng. Abstr.) (Rus)

ETIOLOGY

A case of postanginal sepsis. **Compr Ther** 1989 Jun;15(6):67

Candida lung abscesses complicating parenteral nutrition. O'Driscoll BR, et al. **Thorax** 1988 May;43(5):418-9

[Pulmonary mucormycosis caused by Absidia coerulea in a patient with lung cancer] Halweg H, et al.
Pneumonol Pol 1988 Jul;56(7):329-35 (Eng. Abstr.) (Pol)

[Pathogenesis and treatment of suppurative lung diseases] Muromskiĭ IuA, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):12-8 (Eng. Abstr.) (Rus)

[Lung abscess caused by Salmonella typhimurium] Il'ina NI, et al. **Vrach Delo** 1988 Jul;(7):14-5 (Rus)

IMMUNOLOGY

[Prognostic significance of the leukocyte interferon reaction in the treatment of acute surgical infection in children] Kutubidze RA, et al. **Klin Khir** 1988;(6):22-4 (Eng. Abstr.) (Rus)

[Antiviral cellular resistance in acute suppurative-destructive diseases of the lungs] Filev LV, et al.
Klin Med (Mosk) 1989 Feb;67(2):105-8 (Eng. Abstr.) (Rus)

[Characteristics of the functional activity of monocytes in acute suppurative-destructive lung diseases] Filev LV, et al. **Sov Med** 1988;(10):15-7 (Eng. Abstr.) (Rus)

[Immunological status of patients with acute lung abscesses] Usmanov NU, et al. **Vestn Khir** 1988 May;140(5):58-60 (Rus)

MICROBIOLOGY

Rhodococcus equi: an emerging opportunistic pathogen? Jones MR, et al. **Aust N Z J Med** 1989 Apr;19(2):103-7

[Isolation of non-spore-forming anaerobic bacteria from patients with tuberculosis of the lungs and other diseases of the respiratory organs] Kazarova TA, et al.
Probl Tuberk 1989;(1):48-51 (Eng. Abstr.) (Rus)

[Pleuropneumonia with abscess formation caused by TWAR] Kindmark CO, et al. **Lakartidningen** 1988 Dec 21; 85(51):4539-41 (Swe)

PATHOLOGY

[Intrathoracic gastric duplication with intrapulmonary abscesses and perforation into the bronchial system—pathologico-anatomic peculiarities and diagnostic problems] Wiersbitzky S, et al. **Z Erkr Atmungsorgane** 1988; 171(2):175-83 (Eng. Abstr.) (Ger)

[Nocardiosis of the lung] Zahradka W, et al.
Z Gesamte Inn Med 1988 Aug 15;43(16):471-2 (Eng. Abstr.) (Ger)

[Pulmonary abscess in subjacent congenital malformation in infants] Fernández Sánchez A, et al. **An Esp Pediatr** 1988 Nov;29(5):413-6 (Spa)

RADIOGRAPHY

An unusual neonatal case presentation: Streptococcus pneumoniae pneumonia with abscess and pneumatocele formation. Purdy GD, et al. **J Perinatol** 1987 Fall; 7(4):378-81 (16 ref.)

SURGERY

Percutaneous drainage of lung abscesses in infants. Cuestas RA, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):390-2

[The successful surgery of lung abscess formed from pulmonary aspergilloma in a patient with recurrence of acute promyelocytic leukemia during remission induction therapy] Nishimura S, et al. **Rinsho Ketsueki** 1989 Jan; 30(1):84-8 (Eng. Abstr.) (Jpn)

[A case of lung resection for chronic abscess in a patient with lymphogranulomatosis] Gagua RO, et al.
Grudn Khir 1988 May-Jun;(3):93-4 (Rus)

[Correction of disorders of the cardiovascular system and factors of humoral regulation in patients with suppurative processes of the lungs in the early postoperative period] Neĭmark II, et al. **Grudn Khir** 1988 Nov-Dec;(6):67-9 (Eng. Abstr.) (Rus)

[Treatment of patients with lung abscess by local administration of papain] Udod VM, et al. **Vestn Khir** 1989 Mar;142(3):24-7 (Eng. Abstr.) (Rus)

THERAPY

Aspiration pneumonia, necrotizing pneumonia, and lung abscess. Pennza PT. **Emerg Med Clin North Am** 1989 May; 7(2):279-307 (58 ref.)

Percutaneous drainage of chest abscesses in children. Ball WS Jr, et al. **Radiology** 1989 May;171(2):431-4

[The late results of treating abscesses of the lungs by filling them with a foaming polymeric compound] Lukomskiĭ GI, et al. **Grudn Khir** 1988 Sep-Oct;(5):47-50 (Eng. Abstr.) (Rus)

[Treatment of solitary cavitary formations of nonspecific etiology in the lungs of children] Rokitskiĭ MR, et al.
Khirurgiia (Mosk) 1988 Jul;(7):9-12 (Eng. Abstr.) (Rus)

[Long-term results of the treatment of acute suppurative destruction of the lungs in children] Siagailo PT, et al.
Klin Khir 1989;(6):23-6 (Eng. Abstr.) (Rus)

[Treatment of acute complicated abscess of the lungs] Grigor'ev EG, et al. **Vestn Khir** 1988 Aug;141(8):14-7 (Eng. Abstr.) (Rus)

[Diagnosis and treatment of acute abscesses of the lungs] Lamm IaE, et al. **Vestn Khir** 1988 Jun;140(6):13-7 (Eng. Abstr.) (Rus)

[Regeneration of the alveolar tree after suppurative-destructive diseases of the lungs] Muromskiĭ IuA, et al. **Vestn Khir** 1988 Jun;140(6):17-24 (Eng. Abstr.) (Rus)

[Use of lymphosorption detoxication in the treatment of lung abscesses and their complications] Samsonov VP.
Vestn Khir 1988 May;140(5):92-5 (Eng. Abstr.) (Rus)

VETERINARY

Corynebacterium pseudotuberculosis infection in goats. VI. Clinical and pathological changes after intravenous inoculation of the organism. Holstad G, et al.
Acta Vet Scand 1988;29(3-4):281-6

Pneumonia, lung abscesses and pleuritis in adult horses: a review of 51 cases. Mair TS, et al. **Equine Vet J** 1989 May; 21(3):175-80

Ultrasonography as a diagnostic aid in horses with anaerobic bacterial pleuropneumonia and/or pulmonary abscessation: 27 cases (1984-1986). Reimer JM, et al.
J Am Vet Med Assoc 1989 Jan 15;194(2):278-82

Immunophenotype of pulmonary cellular infiltrates in sheep with visceral caseous lymphadenitis. Ellis JA.
Vet Pathol 1988 Sep;25(5):362-8

LUNG CAPACITIES see **LUNG VOLUME MEASUREMENTS**

LUNG COMPLIANCE

Respiratory mechanics in acute quadriplegia. Lung and chest wall compliance and dimensional changes during respiratory maneuvers. Scanlon PD, et al.
Am Rev Respir Dis 1989 Mar;139(3):615-20

Evaluation of lung mechanics in rabbits using short duration flow pulses. Sullivan KJ, et al. **Am Rev Respir Dis** 1989 Jul;140(1):17-24

Comparison of the single breath and volume recruitment techniques in the measurement of total respiratory compliance in anesthetized infants and children. Shulman DL, et al. **Anesthesiology** 1989 Jun;70(6):921-7

Influence of terbutaline on endotoxin-induced lung injury. Sigurdsson GH, et al. **Circ Shock** 1988 Jul;25(3):153-63

The effects of increasing pulmonary stretch and posture on sinus arrhythmia. Adeoshun IO, et al.
Comp Biochem Physiol [A] 1989;93(1):281-3

The use of compliance in predicting early mortality after inhalation injury. Jones WG, et al. **Curr Surg** 1988 Jul-Aug; 45(4):309-12

Lung mechanics and their relationship to lung volumes in pulmonary sarcoidosis. Brådvik I, et al. **Eur Respir J** 1989 Jul;2(7):643-51

Comparison of the constant flow and occlusion methods for assessment of bronchoconstriction in guinea-pigs. Lorino AM, et al. **Eur Respir J** 1989 Jan;2(1):84-9

Density dependence of respiratory input impedance re-evaluated with a head generator minimizing upper airway shunt. Rotger M, et al. **Eur Respir J** 1988 May; 1(5):439-44

Elastic properties of the respiratory system in infants. Beardsmore CS, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(4):135S-139S (31 ref.)

Lung elasticity in children and adolescents. Zapletal A.
Eur Respir J [Suppl] 1989 Mar;2(4):140S-143S (24 ref.)

Direct measurement of static chest wall compliance in animal and human neonates. Davis GM, et al. **J Appl Physiol** 1988 Sep;65(3):1093-8

Effect of tidal volume and frequency on the temporal fall in lung compliance. Huang YC, et a.. **J Appl Physiol** 1988 Nov;65(5):2040-5

Influence of body temperature on histamine-induced bronchoconstriction in guinea pigs. Macquin-Mavier I, et al. **J Appl Physiol** 1989 Mar;66(3):1054-8

Surface tension and pulmonary compliance in premature rabbits. Mercurio MR, et al. **J Appl Physiol** 1989 May; 66(5):2039-44

Parametric evaluation of forced expiration using a numerical model. Elad D, et al. **J Biomech Eng** 1989 Aug;111(3):192-9

In vitro determination of lung airway compliance in small animals. Greenwald SE, et al. **Med Biol Eng Comput** 1988 Sep;26(5):497-502

Passive total respiratory system compliance and gas exchange in newborns with hyaline membrane disease. Dreizzen E, et al. **Pediatr Pulmonol** 1989;6(1):2-7

Identifying lung overdistention during mechanical ventilation by using volume-pressure loops. Fisher JB, et al.
Pediatr Pulmonol 1988;5(1):10-4

Mechanics of the ventilatory system in sedated infants: forced oscillations versus single-breath method. Marchal F, et al.
Pediatr Pulmonol 1988;5(1):19-26

Infants with cystic fibrosis: pulmonary function at diagnosis. Tepper RS, et al. **Pediatr Pulmonol** 1988;5(1):15-8

Volume and pressure during transient added resistance. Green J, et al. **Respir Physiol** 1988 Nov;74(2):239-51

Physiological analysis of extended-spectrum oscillometry. Wouters EF, et al. **Respiration** 1988;54(4):263-70

Influence of inertance on measurements of the mechanical properties of the bovine respiratory system. Lekeux P, et al. **Vet Res Commun** 1988;12(1):61-6

Influence of tidal volume on the compliance of the respiratory system in mechanically ventilated newborn

infants. Popow C, et al. **Wien Klin Wochenschr** 1989 Apr 28;101(9):323–6
[Lung compliance in chronic lung diseases] Karvonen J, et al. **Duodecim** 1988;104(18):1454–9 (11 ref.) (Fin)
[Pulmonary effects of steam] Laitinen LA, et al. **Duodecim** 1988;104(8):625–30 (44 ref.) (Fin)
[Automated monitoring of respiratory parameters in the anesthetized patient in mechanical respiration] Lorino AM, et al. **Ann Fr Anesth Reanim** 1988;7(6):479–85 (Eng. Abstr.) (Fre)
[Static compliance of the respiratory system following induced and spontaneous labor] Schatten C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:144–5 (Ger)
[Changes in lung compliance during extracorporeal gas exchange in the premature lamb] Dudenhausen JW, et al. **Z Geburtshilfe Perinatol** 1989 Jan–Feb;193(1):13–5 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Role of chemical mediators in bronchoconstriction induced by kerosene. García Mesa M, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):421–3
Relationship between alveolar saturated phosphatidylcholine pool sizes and compliance of preterm rabbit lungs. The effect of maternal corticosteroid treatment. Ikegami M, et al. **Am Rev Respir Dis** 1989 Feb;139(2):367–9
Alpha 1-adrenergic-induced airway obstruction in ponies with recurrent pulmonary disease. Scott JS, et al. **J Appl Physiol** 1988 Aug;65(2):687–92
Halothane decreases both tissue and airway resistances in excised canine lungs. Vettermann J, et al. **J Appl Physiol** 1989 Jun;66(6):2698–703
Changes in pulmonary mechanics following caffeine administration in infants with bronchopulmonary dysplasia. Davis JM, et al. **Pediatr Pulmonol** 1989;6(1):49–52
Structural and functional changes in lung tissue of mice fed with beta-aminopropionitrile fumarate, L-3-cis-hydroxyproline, and L-4-cis-hydroxyproline. Popow C, et al. **Respiration** 1988;54(2):132–8
[Effects of pentazocine on pulmonary airway dynamics of the rabbit] Taguchi H, et al. **Masui** 1988 Nov; 37(11):1359–63 (Eng. Abstr.) (Jpn)

LUNG DISEASE, INTERSTITIAL see PULMONARY FIBROSIS

LUNG DISEASES

see related
PULMONARY HEART DISEASE

American Lung Association, American Thoracic Society, 1989 annual meeting. May 14–17, 1989, Cincinnati, Ohio. Abstracts. **Am Rev Respir Dis** 1989 Apr;139(4 Pt 2):A1–652
Human retroviruses and lung involvement. Semenzato G, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1317–22
Nomenclature for pulmonary findings [letter] Yernault JC. **Ann Intern Med** 1989 Feb 1;110(3):248
Isolated pulmonary histiocytosis [letter] Arora NK, et al. **Arch Dis Child** 1989 Jan;64(1):178–9
The British Lung Foundation [editorial] Green M. **Br J Dis Chest** 1988 Apr;82(2):105–10
Nodular pulmonary amyloidosis: a case report and review of literature. Holmes S, et al. **Br J Dis Chest** 1988 Oct; 82(4):414–7 (23 ref.)
Melioidosis in a traveller—Quebec. Germain M, et al. **Can Dis Wkly Rep** 1989 May 27;15(21):109–11 (Eng, Fre)
XVI World Congress on Diseases of the Chest. 55th annual scientific assembly of the American College of Chest Physicians. October 30–November 3, 1989, Boston. **Chest** 1989 Aug;96(2 Suppl):109S–300S
31st Annual Aspen Lung Conference: Infections and the lung. Aspen, Colorado. **Chest** 1989 Mar;95(3 Suppl):171S–242S
A medical information relational database system (MIRDS). Budd JR, et al. **Comput Biomed Res** 1988 Oct;21(5):419–33
An unusual presentation of pneumatocele. Basu AK, et al. **Indian Pediatr** 1988 Sep;25(9):897–9
Necrotizing vasculitis with granulomatosis. Yevich I. **Int J Dermatol** 1988 Oct;27(8):540–6 (36 ref.)
The first published case of sarcoidosis in India [letter] Gupta SK. **J Assoc Physicians India** 1988 Nov;36(11):676–7
Caseating granuloma and sarcoidosis [letter] Mathur RS, et al. **J Assoc Physicians India** 1988 Nov;36(11):676
Lung volume reference values for blue collar workers not exposed to occupational respiratory hazards. Petersen MR, et al. **J Occup Med** 1988 Aug;30(8):626–32
Silo-filler's disease. Douglas WW, et al. **Mayo Clin Proc** 1989 Mar;64(3):291–304
Silo-filler's disease: a new perspective. Epler GR. **Mayo Clin Proc** 1989 Mar;64(3):368–70
Festschrift for Professor Margaret Turner-Warwick. **Postgrad Med J** 1988;64 Suppl 4:1–140
Pulmonary sarcoidosis—old problems and new insights. Benatar SR. **Postgrad Med J** 1988;64 Suppl 4:56–63 (53 ref.)
Interstitial lung disease and bronchial hyperreactivity. Selected papers from the meeting of the Italian Chapter of AACP. American College of Chest Physicians. Parma, May 26–27, 1987. **Respiration** 1988;54 Suppl 1:1–121
XXV Nordic Congress of Pneumonology. Göteborg, 1970. Abstracts. **Scand J Respir Dis Suppl** 1970;74:1–24
Abstracts of joint meeting of the British Thoracic and Tuberculosis Association and the Swedish Association for Lung Medicine. Uppsala, May 15th–17th 1975. **Scand J Respir Dis Suppl** 1975;93:1–15
Proceedings of the British Thoracic Society, 1988 winter meeting. 8 and 9 December, London. **Thorax** 1989 Apr; 44(4):314P–367P
Proceedings of the British Thoracic Society. 1988 summer meeting. 13–15 July, Newcastle upon Tyne. Abstracts [published erratum appears in Thorax 1989 Feb;44(2):160] **Thorax** 1988 Oct;43(10):803P–868P
[A review of pulmonary histiocytosis X] Laub M, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):371–4 (Eng. Abstr.) (Dan)
[Nosocomial pneumopathies of the resuscitated adult. I. Pathogenesis and diagnosis] Fraisse P, et al. **Cah Anesthesiol** 1988 Nov;36(7):521–5 (0 ref.) (Fre)
[French Language Society of Pneumology. List of members (1989)] **Rev Mal Respir** 1989;6(2 Suppl):1–20 (Fre)
[Plasma cell granuloma of the lung and mediastinum in a ten year old girl] Schuster A, et al. **Monatsschr Kinderheilkd** 1988 Nov;136(11):762–5 (Eng. Abstr.) (Ger)
[Respiration and the environment. Congress on Pneumology in the Upper Rhine. 8th meeting of the Southern German Society of Pneumology jointly with the College of Respiratory Pathology, Strasbourg. Freiburg i.Br., 17–20 June 1987] **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:195–414 (Ger)
[68th annual meeting of the Swiss Society of Pneumology and The Swiss Union Against Tuberculosis and Lung Diseases. Berne, 22–23 April 1988. Proceedings] **Schweiz Med Wochenschr** 1988 Sep 24;118(38):1331–85 (Ger)
[Swiss Society of Cardiology, Swiss Society of Pneumology, joint annual meeting. Lugano, 27–29 April 1989. Abstracts] **Schweiz Med Wochenschr Suppl** 1989;27:1–40 (Ger)
[Retention cysts of the lungs in children] Leniushkin AI, et al. **Gruda Khir** 1989 May–Jun;(3):41–6 (Eng. Abstr.) (Rus)
[Botryomycosis of the lung] Djurić V, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):133–6 (Eng. Abstr.) (Scr)
[Amyloidoma of the lungs] Dulizibarić J, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):53–7 (Eng. Abstr.) (Scr)
[Pulmonary infection caused by Mycobacterium chelonei. A case with a duration of more than 2 years (letter)] García del Palacio JI, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):318 (Spa)
[Histiocytosis X with pulmonary involvement. Study of 14 cases] Orriols R, et al. **Med Clin (Barc)** 1988 Oct 1; 91(10):365–70 (Eng. Abstr.) (Spa)
[Sarcoidosis. Current perspectives] Alvarez-Sala JL, et al. **Rev Clin Esp** 1989 Jun;185(2):51–4 (23 ref.) (Spa)

BLOOD

Serum levels of CA-50, CA-19.9, CA-125, CA-15.3, enolase and carcino-embryonic antigen in non neoplastic diseases of the lung. Marechal F, et al. **Anticancer Res** 1988 Jul–Aug;8(4):677–80
Role of pulmonary diseases and physical condition in the regulation of vasoactive hormones. Hietanen E, et al. **Clin Physiol** 1988 Dec;8(6):581–90
Serum calcium levels in various lung diseases. Torun M, et al. **J Clin Pharm Ther** 1989 Jun;14(3):231–4
Endotoxaemia, pulmonary complications, and thrombocytopenia in liver transplantation. Miyata T, et al. **Lancet** 1989 Jul 22;2(8656):189–91
[Blood levels of CA-50, CA-19.9, CA-125, enolase, CA-15.3 and carcinoembryonic antigen in non-cancerous bronchopulmonary pathology] Berthiot G, et al. **Rev Mal Respir** 1988;5(6):573–6 (Eng. Abstr.) (Fre)
[Secreted interleukin-2 receptor as a parameter of the activity of sarcoidosis] Strausz J, et al. **Dtsch Med Wochenschr** 1989 May 12;114(19):744–9 (Eng. Abstr.) (Ger)
[Serum fibronectin in nontuberculous bronchopulmonary pathology] Bălună R, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec;37(4):345–50 (Eng. Abstr.) (Rum)
[Serum lipid levels in patients with disseminated processes of the lungs] Belen'kaia TIu. **Probl Tuberk** 1989;(4):60–2 (Rus)
[Trace element content of the blood in patients with chronic nonspecific lung diseases] Tadzhiev FS, et al. **Probl Tuberk** 1988;(8):51–3 (Eng. Abstr.) (Rus)
[The phospholipid spectrum of the blood serum in patients with chronic non-specific pulmonary diseases during rehabilitation treatment] Ivanov EM, et al. **Ter Arkh** 1989; 61(3):94–7 (Eng. Abstr.) (Rus)
[Blood rheological disorders in heart failure in patients with chronic nonspecific lung diseases] Dudka PF, et al. **Vrach Delo** 1988 Jul;(7):8–10 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Utility of bronchoalveolar lavage in the diagnosis of drug-induced pulmonary toxicity. Huang MS, et al. **Acta Cytol** 1989 Jul–Aug;33(4):533–8
Sulphur dioxide-induced airway hyperreactivity and pulmonary inflammation in dogs. Norris AA, et al. **Agents Actions** 1989 Mar;26(3–4):360–6
Pulmonary air cyst associated with combination chemotherapy containing bleomycin [letter] Sella A, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):191
Nodular bleomycin toxicity. Cohen MB, et al. **Am J Clin Pathol** 1989 Jul;92(1):101–4 (11 ref.)
Pulmonary granulomatosis secondary to pentazocine abuse mimicking connective tissue diseases. Newell GC, et al. **Am J Med** 1988 Dec;85(6):890–2
Endotoxin-induced neutrophilic alveolitis and macrophage chemotaxin production in sheep. Duke SS, et al. **Am J Med Sci** 1988 Dec;296(6):381–6
Pulmonary angiotensin-converting enzyme activity in the oxygen-toxic sheep. Howell RE, et al. **Am Rev Respir Dis** 1988 Jul;138(1):160–6
Cobalt exposure and lung disease in tungsten carbide production. A cross-sectional study of current workers. Sprince NL, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1220–6
Deferoxamine infusion does not inhibit bleomycin-induced lung damage in the rat. Ward HE, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1356–9
Cocaine, pulmonary hemorrhage, and hemoptysis [letter] [published erratum appears in Ann Intern Med 1989 Jul 1;111(1):96] Godwin JE, et al. **Ann Intern Med** 1989 May 15;110(10):843
Nodular pneumonitis after cancer chemotherapy [letter] Talcott JA, et al. **Ann Intern Med** 1989 Jan 1;110(1):91
Amiodarone-induced pulmonary mass. Piccione W Jr, et al. **Ann Thorac Surg** 1989 Jun;47(6):918–9
Effects of ozone on respiratory function and structure. Lippmann M. **Annu Rev Public Health** 1989;10:49–67 (69 ref.)
Health status of funeral service workers exposed to formaldehyde. Holness DL, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):222–8
Self-reported short- and long-term respiratory effects among PVC-exposed firefighters. Markowitz JS. **Arch Environ Health** 1989 Jan–Feb;44(1):30–3
Pleuropulmonary disease during bromocriptine treatment of Parkinson's disease. McElvaney NG, et al. **Arch Intern Med** 1988 Oct;148(10):2231–6
Pulmonary toxicity of nitrofurantoin. Witten CM. **Arch Phys Med Rehabil** 1989 Jan;70(1):55–7 (27 ref.)
Respiratory failure caused by intratracheal saline: additive effect of xanthine oxidase. Saugstad OD, et al. **Biol Neonate** 1988;54(2):61–7
Changes in lung function after working with the shotcrete lining method under compressed air conditions. Kessel R, et al. **Br J Ind Med** 1989 Feb;46(2):128–32
Estimation of occupational hazards of the employees of a phosphate fertilizers plant. Renke W, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):5–16
The effect of lung concentrations of glutathione and vitamin E on the pulmonary toxicity of 3-methylindole. Kubow S, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):863–7
Nodular form of bleomycin-related pulmonary injury in patients with osteogenic sarcoma. Santrach PJ, et al. **Cancer** 1989 Aug 15;64(4):806–11 (33 ref.)
Role of thromboxane in interleukin 2-induced lung injury in sheep. Klausner JM, et al. **Cancer Res** 1989 Jul 1; 49(13):3542–9
Hospitalizations for pulmonary reactions following nitrofurantoin use. Jick SS, et al. **Chest** 1989 Sep; 96(3):512–5
Pleuropulmonary involvement during bromocriptine treatment. Kinnunen E, et al. **Chest** 1988 Nov;94(5):1034–6
Pulmonary hemorrhage in a cocaine abuser [letter; comment] Walek JW, et al. **Chest** 1989 Jul;96(1):222. **Comment on:** Chest 1988 Feb;93(2):427–9
Interspecies comparisons of lung responses to inhaled particles and gases. Warheit DB. **Crit Rev Toxicol** 1989; 20(1):1–29 (225 ref.)
Pulmonary oxygen toxicity in the guinea pig. Effect of indomethacin. Roberts JD Jr, et al. **Dev Pharmacol Ther** 1989;12(2):106–12
Early and long-term toxicity in the management of advanced germ cell testicular tumors. Strohmeyer T, et al. **Eur Urol** 1988;15(3–4):205–8
Ultrastructural effects of phosphorothionates and other inhibitors of lung monooxygenases: protection against trialkylphosphorothiolate-induced lung injury. Dinsdale D, et al. **Exp Lung Res** 1989 May;15(3):459–71
Therapy with red blood cells decreases hyperoxic pulmonary injury. Hoidal JR, et al. **Exp Lung Res** 1988;14 Suppl:977–85 (24 ref.)
Effects of intratracheal administration of xanthine plus xanthine oxidase on lung antioxidant enzymes, lipid peroxidation, and collagen in hamsters. Giri SN, et al. **Exp Mol Pathol** 1988 Dec;49(3):395–409
TDI—not so toxic? [letter] Diller W. **Food Chem Toxicol** 1988 Jun;26(6):576
Cardiac, renal, and pulmonary toxicity of several mitomycin derivatives in rats. Bregman CL, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):46–64
Lung toxicity after 13-week inhalation exposure to nickel oxide, nickel subsulfide, or nickel sulfate hexahydrate in F344/N rats and B6C3F1 mice. Dunnick JK, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):584–94
Peracute toxic effects of inhaled hydrogen sulfide and injected sodium hydrosulfide on the lungs of rats. Lopez A, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):367–73
Severe lung toxicity with a weekly low dose chemotherapy regimen in patients with non-Hodgkin's lymphoma. Quigley M, et al. **Hematol Oncol** 1988 Oct–Dec;6(4):319–24

A new method for predicting the outcome and survival period in paraquat poisoning. Suzuki K, et al. **Hum Toxicol** 1989 Jan;8(1):33–8

Small airways function in workers processing polyvinylchloride. Nielsen J, et al. **Int Arch Occup Environ Health** 1989;61(7):427–30

Pulmonary effects of zymosan activated plasma and phorbol myristate acetate in anaesthetized and awake rabbits. Opdahl H, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):237–51

Effectiveness of vitamin E and colchicine in amelioration of paraquat lung injuries using an experimental model. Shahar E, et al. **Isr J Med Sci** 1989 Feb;25(2):92–4

Detection of amiodarone pulmonary toxicity [letter] Kerin NZ, et al. **J Am Coll Cardiol** 1989 Jan;13(1):261–2

Effect of exogenous surfactant instillation on experimental acute lung injury. Harris JD, et al. **J Appl Physiol** 1989 Apr;66(4):1846–51

Rabbit lung after inhalation of lithium chloride. Johansson A, et al. **J Appl Toxicol** 1988 Oct;8(5):373–5

Acute pulmonary toxicity to nitrofurantoin. Chudnofsky CR, et al. **J Emerg Med** 1989 Jan–Feb;7(1):15–9

Pulmonary O2 toxicity: validation of the "60%" rule in cultured human lung endothelium [editorial] Kennedy TP. **J Lab Clin Med** 1989 Apr;113(4):399–400

Epidemiologic study of workers exposed to titanium dioxide. Chen JL, et al. **J Occup Med** 1988 Dec;30(12):937–42

Pulmonary toxicity of 4-ipomeanol. Gram TE. **Pharmacol Ther** 1989;43(2):291–7 (20 ref.)

The pulmonary toxicity of nitrosoureas. Smith AC. **Pharmacol Ther** 1989;41(3):443–60 (116 ref.)

Metabolism and pulmonary toxicity of butylated hydroxytoluene (BHT). Witschi H, et al. **Pharmacol Ther** 1989;42(1):89–113 (156 ref.)

Toxic effect of different viscosity hydrocarbons in the lung. Williamson LM, et al. **Proc West Pharmacol Soc** 1989; 32:313–5

Oleic acid lung injury increases plasma prostaglandin levels. Hageman JR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):157–64

Pulmonary infiltrates associated with noncytotoxic drugs. Rice KL. **Semin Respir Infect** 1988 Sep;3(3):229–39 (84 ref.)

Cytotoxic drug–induced lung injury. Snyder LS, et al. **Semin Respir Infect** 1988 Sep;3(3):217–28 (40 ref.)

Exacerbation of tallysomycin toxicity in rats by concurrent exposure to sublethal hyperoxia. Coursin DB, et al. **Toxicology** 1989 Apr;55(1–2):225–37

Early bronchopulmonary lesions in rat lung after normobaric 100% oxygen exposure and their evolution. A light and electron microscopic study. Porte A, et al. **Virchows Arch [A]** 1989;414(2):135–45

[Pulmonary injury following exposure chlorine gas—an analysis of four cases] Lin PS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):311–6 (Eng. Abstr.) (Chi)

[Thermal degradation of dibutyltin fluoride (DBTF) and pulmonary toxicity of combustion products in the rat and guinea pig. 2. Acute and subacute toxicity of effluent gases issuing from the thermolysis of DBTF] Anger JP, et al. **J Toxicol Clin Exp** 1985 May–Jun;5(3):171–83 (Eng. Abstr.) (Fre)

[Lung diseases and chemotherapy in cancerology] Caubarrère I, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):165–6 (Fre)

[Drug–induced pulmonary pathology] Junod AF. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:215–7 (Eng. Abstr.) (Fre)

[Diagnostic value of broncho–alveolar lavage in lung diseases caused by amiodarone (letter)] Perrichon M, et al. **Presse Med** 1989 Mar 11;18(10):542 (Fre)

[Pulmonary pathology due to cobalt and hard metals] van den Eeckhout AV, et al. **Rev Mal Respir** 1989;6(3):201–7 (34 ref.) (Eng. Abstr.) (Fre)

[2 cases of pulmonary paraffinosis] Dalphin JC, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):410–3 (Fre)

[Pneumopathies caused by salazosulfapyridine. A review of the literature apropos of a personal case] Fournier P, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):405–9 (34 ref.) (Fre)

[3 cases of pneumopathy during treatment of rheumatoid polyarthritis with methotrexate] Le Goff P, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):23–5 (20 ref.) (Fre)

[Acute pneumopathy during the treatment of severe rheumatoid polyarthritis with low fractionated doses of methotrexate administered orally] L'Hirondel JL, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):419–24 (23 ref.) (Fre)

[Studies on bronchopulmonary lesions caused by formaldehyde in homes] Köck M, et al. **Geogr Med** 1989; Suppl 2:23–32 (Ger)

[Radiological diagnosis of late effects on thoracic organs after chemotherapy and/or radiation therapy as well as after radionuclide therapy] John V, et al. **Strahlenther Onkol** 1988 Oct;164(10):619–28 (Eng. Abstr.) (Ger)

[Damage to the respiratory system caused by varnishes and paints] Maintz G, et al. **Z Gesamte Hyg** 1988 May; 34(5):274–8 (82 ref.) (Eng. Abstr.) (Ger)

[Pulmonary calcification in vitamin D poisoning in an infant] Bartolozzi G, et al. **Pediatr Med Chir** 1988 Sep–Oct; 10(5):541–2 (Eng. Abstr.) (Ita)

[Granuloma formation in mice by liposomes of new glycolipid containing mycolic acids, "trehalose 2,3,6'-trimycolate"] Yokoi F, et al. **Yakugaku Zasshi** 1989 Jan;109(1):46–51 (Eng. Abstr.) (Jpn)

[Pulmonary complications of various drug use] Wieczorek U, et al. **Wiad Lek** 1988 Apr 1;41(7):443–6 (34 ref.) (Eng. Abstr.) (Pol)

[Informativeness of roentgenologic diagnosis of amiodarone pneumopathy] Reingardene DI, et al. **Ter Arkh** 1989; 61(3):120–2 (Rus)

[Premorbid conditions in workers in the manufacture of polyethylene polyamine] Shpak BIu. **Vrach Delo** 1988 Oct; (10):109–10 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Unclassifiable pulmonary granulomatoses] Solov'eva IP, et al. **Probl Tuberk** 1988;(10):63–5 (Rus)

COMPLICATIONS

The effect of respiratory viral infections on patients with cystic fibrosis. Ramsey BW, et al. **Am J Dis Child** 1989 Jun;143(6):662–8

Pulmonary sporotrichosis with massive hemoptysis. Haponik EF, et al. **Am J Med Sci** 1989 Apr;297(4):251–3

Branch retinal vein occlusion in sarcoidosis. Kimmel AS, et al. **Am J Ophthalmol** 1989 May 15;107(5):561–2

Capillaritis and pulmonary hemorrhage in Wegener's granulomatosis [letter] Yoshikawa Y, et al. **Am J Surg Pathol** 1989 Jan;13(1):78–9

Concurrent Churg–Strauss syndrome and temporal arteritis in a young patient with pulmonary nodules. Amato MB, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1539–42

Pulmonary complications of AIDS: advances in diagnosis and treatment. Cohn DL, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1051–2

Gastroesophageal reflux and respiratory disorders: a review. Mansfield LE. **Ann Allergy** 1989 Mar;62(3):158–63 (63 ref.)

An unusual case of systemic lupus erythematosus with isolated hypoglossal nerve palsy, fulminant acute pneumonitis, and pulmonary amyloidosis. Chan CN, et al. **Ann Rheum Dis** 1989 Mar;48(3):236–9

Pleuropulmonary actinomycosis associated with a systemic–to–pulmonary artery fistula and contralateral metastatic back mass. Miller AR, et al. **Ann Thorac Surg** 1989 Feb;47(2):305–7

The use of mucolysed induced sputum for the identification of pulmonary pathogens associated with human immunodeficiency virus infection. Ng VL, et al. **Arch Pathol Lab Med** 1989 May;113(5):488–93

Hypercalcemia of sarcoidosis treated with cellulose sodium phosphate. Dwarakanathan A, et al. **Bone Miner** 1987 Jul; 2(4):333–6

Giant cell arteritis with pulmonary involvement. Doyle L, et al. **Br J Dis Chest** 1988 Jan;82(1):88–92

Idiopathic pulmonary hemosiderosis, complete heart block and celiac disease. Mah MW, et al. **Can J Cardiol** 1989 May;5(4):191–4

Pulmonary complications of AIDS: a clinical strategy. Edelson JD, et al. **Can Med Assoc J** 1989 Jun 1; 140(11):1281–7 (114 ref.)

Mycobacteriosis in patients with AIDS [letter] **Chest** 1988 Dec;94(6):1312–3

Sarcoidosis diagnosed in a patient with known HIV infection. Coots LE, et al. **Chest** 1989 Jul;96(1):201–2

Bilateral cavitary lung disease in a 29–year–old woman. MacLean JA, et al. **Chest** 1989 Sep;96(3):657–8

Recurrent lupus pneumonitis with pulmonary hemorrhage in systemic lupus erythematosus associated with chronic thyroiditis and antithyroid hormone autoantibodies. Ichikawa Y, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):309–13

Pulmonary hemorrhage and glomerulonephritis. Scheer RL. **Compr Ther** 1988 Nov;14(11):40–8 (19 ref.)

Mycobacterium kansasii and Pneumocystis carinii pneumonia in a patient with the acquired immunodeficiency syndrome. Vurma–Rapp U, et al. **Infection** 1989 Mar–Apr;17(2):88–9

Sarcoidosis: current concepts and case reports. Shapiro JS. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):211–7 (15 ref.)

Bilateral ankle pain secondary to sarcoidosis. Julsrud M. **J Am Podiatr Med Assoc** 1989 Mar;79(3):116–20

Adhesions as a cause of persistent spontaneous pneumothorax. Hoover EL, et al. **J Natl Med Assoc** 1989 Apr;81(4):464–6

Effect of cisapride on esophageal pH monitoring in children with reflux–associated bronchopulmonary disease. Saye Z, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):327–32

Undernutrition and altered T–cell homeostasis in children with severe chest diseases. Rambukkana A, et al. **J Trop Pediatr** 1988 Dec;34(6):282–8

Long–standing hiccup in a patient with sarcoidosis. Kondo T, et al. **Jpn J Med** 1989 Mar–Apr;28(2):212–5

Neurologic manifestations of pulmonary disease. Jozefowicz RF. **Neurol Clin** 1989 Aug;7(3):605–16 (33 ref.)

Pulmonary association in a case of chronic recurrent multifocal osteomyelitis. Kerem E, et al. **Pediatr Pulmonol** 1989;7(1):55–8

Cystic pulmonary lesions in patients with AIDS. Panicek DM. **Radiology** 1989 Oct;173(1):12–4

Exudative pericarditis in sarcoidosis. A case report and echocardiographic study. Diderholm E, et al. **Sarcoidosis** 1989 Mar;6(1):60–2

The importance of airway obstruction in sarcoidosis. Sharma OP, et al. **Sarcoidosis** 1988 Sep;5(2):119–20

Renal amyloidosis complicating sarcoidosis. Rainfray M, et al. **Thorax** 1988 May;43(5):422–3

Pulmonary infection with Nocardia caviae in a patient with diabetes mellitus and liver cirrhosis. Salh B, et al. **Thorax** 1988 Nov;43(11):933–4

Smoking and pulmonary sarcoidosis: effect of cigarette smoking on prevalence, clinical manifestations, alveolitis, and evolution of the disease. Valeyre D, et al. **Thorax** 1988 Jul;43(7):516–24

Pulmonary infarction with cavitation: case report. Becker DM, et al. **Va Med** 1989 May;116(5):215–7

Pulmonary disease at autopsy in patients with the acquired immunodeficiency syndrome. Wallace JM, et al. **West J Med** 1988 Aug;149(2):167–71

Nutrition and respiration. Rothkopf MM, et al. **World Rev Nutr Diet** 1988;56:43–55 (31 ref.)

Diagnosis and treatment of pulmonary disorders of patients with the acquired immunodeficiency syndrome (AIDS). Cone LA, et al. **Z Erkr Atmungsorgane** 1989;172(1):5–39 (237 ref.)

[Multifocal neurological signs and pulmonary sarcoidosis] Elovaara I, et al. **Duodecim** 1989;105(3):293–302 (Fin)

[Involvement of the lacrimal glands in sarcoidosis. Scintigraphic evaluation with gallium 67] Colombati S, et al. **Ophtalmologie** 1988 Oct;2(4):365–8 (Eng. Abstr.) (Fre)

[Deficiency in immunoglobulin G subsets associated with primary infectious pneumopathies in adults (letter)] Fraisse P, et al. **Presse Med** 1988 Oct 1;17(33):1704 (Fre)

[The association of sarcoidosis and AIDS (letter)] Gormand F, et al. **Presse Med** 1989 Feb 18;18(7):361 (Fre)

[Pulmonary manifestations of acquired immunodeficiency syndrome] de Wit S, et al. **Rev Mal Respir** 1988;5(6):551–64 (121 ref.) (Eng. Abstr.) (Fre)

[Pulmonary amyloidosis of the AA type associated with Hodgkin's disease] Pfitzenmeyer P, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):524–7 (9 ref.) (Fre)

[Idiopathic pulmonary hemosiderosis and rheumatoid arthritis. Apropos of a case] L'Huillier JP, et al. **Rev Pneumol Clin** 1988;44(3):136–9 (15 ref.) (Eng. Abstr.) (Fre)

[Pulmonary infections in patients with AIDS] Rust M. **Prax Klin Pneumol** 1988 Sep;42(9):689–92 (19 ref.) (Ger)

[Recurrent symptomatic spontaneous tension pneumothorax in sarcoidosis with honeycomb lung] Schamaun M, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1138–41 (Eng. Abstr.) (Ger)

[Late results of the surgical treatment of advanced valvular heart disease with preoperative major organ dysfunctions] Yamada O, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):974–9 (Eng. Abstr.) (Jpn)

[A case of idiopathic pulmonary hemosiderosis recurrent after remission of fifteen years and associated with Sjögren's syndrome] Iijima N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1191–4 (Eng. Abstr.) (Jpn)

[A surgical case of lung cancer associated with giant bulla] Koike R, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):766–9 (Eng. Abstr.) (Jpn)

[A case report of intrapulmonary bronchogenic cyst with tuberculosis] Matsumura A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):888–92 (16 ref.) (Eng. Abstr.) (Jpn)

[Idiopathic thrombocytopenic purpura in a patient with sarcoidosis] Nakata Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):700–6 (Eng. Abstr.) (Jpn)

[AIDS and its manifestations in the form of tuberculosis and other pathology of the lungs] Erokhin VV, et al. **Probl Tuberk** 1989;(1):67–71 (49 ref.) (Rus)

[Generalized sarcoidosis complicated by secondary amyloidosis] Mikhallova NI, et al. **Probl Tuberk** 1988; (11):64–5 (Rus)

[Effect of various broncholytics on bronchial patency and central hemodynamics in patients with pulmonary tuberculosis and other lung diseases] Vizel' AA. **Probl Tuberk** 1988;(9):27–31 (Eng. Abstr.) (Rus)

[Local use of common insulin in suppurative inflammation of the maxillary sinuses in patients with chronic bronchopulmonary diseases and diabetes mellitus] Mirzarasulov MR, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):82 (Rus)

[Myocardial infarction of the right ventricle with pulmonary bleeding] Muzykantova NR, et al. **Vrach Delo** 1989 Feb; (2):50–2 (Rus)

[Pulmonary lymphangiomyomatosis. A case in a male] Cubells Riero J, et al. **An Esp Pediatr** 1988 Sep;29(3):227–30 (14 ref.) (Eng. Abstr.) (Spa)

[Plasma cell granuloma of the lung and thrombocytosis: apropos of a case] Morell Bernabé JJ, et al. **An Esp Pediatr** 1989 Mar;30(3):215–6 (Spa)

[Rapidly progressive glomerulonephritis with granular deposits of immunoglobulins and pulmonary hemorrhage (letter)] Herra Sánchez A, et al. **Rev Clin Esp** 1988 May; 182(9):502–3 (Spa)

CONGENITAL

Clubbing due to neonatal lung disease. Elder DE, et al. **Acta Paediatr Scand** 1989 Jul;78(4):631–2

Congenital lesions of the lungs. Ferguson TB Jr.

Ann Thorac Surg 1989 Mar;47(3):481–2
[Pericardial effusion due to pulmonary lymphangiectasis] Diógenes MS, et al. **Arq Bras Cardiol** 1988 Aug; 51(2):185–92 (Eng. Abstr.) (Por)
[Congenital pulmonary lymphangiectasis secondary to obstruction of the pulmonary venous drainage] Sanza L, et al. **An Esp Pediatr** 1988 Jun;28(6):580–2 (Spa)

DIAGNOSIS

Chest sonography. Differentiation of pulmonary consolidation from pleural disease. Acunas B, et al. **Acta Radiol** 1989 May–Jun;30(3):273–5
Flexible fibre optic bronchoscopy in Ibadan: report of 6 years' experience. Awotedu AA, et al. **Afr J Med Med Sci** 1989 Jun;18(2):155–8
Transthoracic aspiration needle biopsy: value in the diagnosis of pulmonary infections. Conces DJ Jr, et al. **AJR** 1989 Jan;152(1):31–4
Diagnosis of pulmonary hemosiderosis by MR imaging. Rubin GD, et al. **AJR** 1989 Mar;152(3):573–4
Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease. Himelman RB, et al. **Am J Cardiol** 1989 Sep 1;64(8):528–33
Open lung biopsy in patients with Hodgkin's disease and pulmonary infiltrates. Catterall JR, et al. **Am Rev Respir Dis** 1989 May;139(5):1274–9
Peripheral T-cell lymphoma presenting with angioedema and diffuse pulmonary infiltrates. Harrison NK, et al. **Am Rev Respir Dis** 1988 Oct;138(4):976–80
Controversies in pediatric pulmonary medicine: infant pulmonary function tests. Wall M, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1069
Detection of nosocomial lung infection in ventilated patients [letter] Wunderink RG. **Am Rev Respir Dis** 1989 May; 139(5):1302–4
Pulmonary hemorrhage in a young infant [clinical conference] Kumar SR, et al. **Ann Allergy** 1989 Mar; 62(3):168–9, 209–11
Goodpasture's syndrome mimicking idiopathic pulmonary hemosiderosis. Katz SM, et al. **Ann Clin Lab Sci** 1989 Jul–Aug;19(4):280–6
Flexible transbronchial needle aspiration for the diagnosis of sarcoidosis. Wang KP, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):298–300
Idiopathic bronchiolitis obliterans organizing pneumonia with peripheral infiltrates on chest roentgenogram. Bartter T, et al. **Arch Intern Med** 1989 Feb;149(2):273–9
Clinical utility of bronchoalveolar lavage in a general hospital. Krieger B, et al. **Arch Intern Med** 1989 Jul; 149(7):1605–7
Role of broncho–alveolar lavage in the diagnosis of pulmonary disease. Khomenko AG. **Arch Monaldi Mal Torace** 1987 Mar–Apr;42(2):131–9
Testing children for pulmonary function. Sly PD, et al. **Aust Fam Physician** 1989 Jul;18(7):810–2
The role of bronchoalveolar lavage in the assessment of diffuse lung diseases. Gibson PG, et al. **Aust N Z J Med** 1989 Jun;19(3):281–91
Ultrasound in chest disease: 2. Lung and mediastinum. Fataar S. **Australas Radiol** 1988 Aug;32(3):302–8
Improved HPLC determination of urinary neopterin. Dewitte JD, et al. **Biomed Chromatogr** 1987;2(5):183–8
Immunohistochemical diagnosis of pulmonary eosinophilic granuloma on lung biopsy. Cagle PT, et al. **Chest** 1988 Dec;94(6):1133–7
Clinical implications of nuclear magnetic resonance lung research. Cutillo AG, et al. **Chest** 1989 Sep;96(3):643–52 (115 ref.)
Diagnosing sarcoidosis [letter] Davis SD, et al. **Chest** 1989 Aug;96(2):447–8
Bronchoscopy to evaluate hemoptysis in older men with nonsuspicious chest roentgenograms. Lederle FA, et al. **Chest** 1989 May;95(5):1043–7
Differentiation of sarcoidosis from tuberculosis using an enzyme–linked immunosorbent assay for the detection of antibodies against Mycobacterium tuberculosis. Levy H, et al. **Chest** 1988 Dec;94(6):1254–5
Type 3 procollagen peptide in bronchoalveolar lavage fluid. Poor indicator of course and prognosis in sarcoidosis. O'Connor C, et al. **Chest** 1989 Aug;96(2):339–44
Pulmonary infections in the immunocompromised host. Perspective on procedures [editorial] Tenholder MF. **Chest** 1988 Oct;94(4):676–8
Pulmonary infiltrates in immunocompromised patients. Diagnostic value of telescoping plugged catheter and bronchoalveolar lavage. Xaubet A, et al. **Chest** 1989 Jan; 95(1):130–5
Pulmonary alveolar microlithiasis with the absence of technetium–99m MDP uptake of lungs. Turktas H, et al. **Clin Nucl Med** 1988 Dec;13(12):883–5
Pulmonary diagnostic procedures in the critically ill. Krell WS. **Crit Care Clin** 1988 Apr;4(2):393–407 (74 ref.)
Antiproteases are increased in bronchoalveolar lavage in interstitial lung disease. Sibille Y, et al. **Eur Respir J** 1988 Jun;1(6):498–504
Use of flexible fiberoptic bronchoscopy in pulmonary diseases—analysis of outcome and prediction of clinically useful studies. Al–Quorain A, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep;30(3):167–75
Percussion of the chest re–visited: a comparison of the diagnostic value of ausculatory and conventional chest percussion. Bourke S, et al. **Ir J Med Sci** 1989 Apr; 158(4):82–4
Paediatric sarcoidosis. Gupta SK, et al. **J Assoc Physicians India** 1988 Feb;36(2):150–3
Enzyme–linked immunosorbent assay for the differential diagnosis of pulmonary tuberculosis and pulmonary diseases due to Mycobacterium avium–intracellulare complex. Amano H, et al. **Jpn J Med** 1989 Mar–Apr; 28(2):196–201
MRI findings in pulmonary sarcoidosis. Craig DA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):567–73
Pulmonary–function testing in children. Sly PD, et al. **Med J Aust** 1989 Jun 19;150(12):706–7
Nonneoplastic lung disease. Churg A, et al. **Mod Pathol** 1988 Jan;1(1):64–85
Mediastinoscopy: its changing role. Sakurai H, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):292–5
The contribution of discrimination analysis to the diagnostic decision in patients with lung carcinoma. Procházka J, et al. **Neoplasma** 1989;36(3):333–41
Intraspinal extension of an air cyst of the lung: case report. Andrews DW, et al. **Neurosurgery** 1989 Mar;24(3):414–7
Bronchoalveolar lavage: clinical role and quantitative assessment. Merrill W, et al. **Respiration** 1988;54 Suppl 1:3–8
The intensity of sarcoidosis alveolitis is related to albumin and IgG levels in BAL. Mori PA, et al. **Respiration** 1988; 54 Suppl 1:30–5
Radiology of sarcoidosis. James DG, et al. **Sarcoidosis** 1989 Mar;6(1):7–14 (17 ref.)
Pulmonary sarcoidosis: do cellular and immunochemical lung parameters exist that would separate subgroups of patients for prognosis? Reynolds HY. **Sarcoidosis** 1989 Mar;6(1):1–4 (45 ref.)
Thoracic actinomycosis. Jensen BM, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):181–4
Noninfectious pulmonary infiltrates. **Semin Respir Infect** 1988 Sep;3(3):179–288
Nocardiosis: a neglected chronic lung disease in Africa? Baily GG, et al. **Thorax** 1988 Nov;43(11):905–10
Hodgkin's disease with a granulomatous pulmonary presentation mimicking sarcoidosis. Daly PA, et al. **Thorax** 1988 May;43(5):407–9
Biopsy diagnosis and clinical outcome of persistent focal pulmonary lesions after marrow transplantation. Crawford SW, et al. **Transplantation** 1989 Aug;48(2):266–71
An unusual tumor of the lung. Postinflammatory pseudotumor (benign histiocytoma) of lung. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):325–31
Pulmonary nodules simulating metastasis of germ cell tumor after aggressive chemotherapy. Habuchi T, et al. **Urol Int** 1988;43(4):248–52
Hilar adenopathy and positive HIV antibody test: case report. Ingram CW, et al. **Va Med** 1989 Mar;116(3):122–4
[Clinical significance of cardionatrin in the diagnosis of deficiency of heart–lung qi] Wang WH, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):521–2, 515 (Eng. Abstr.) (Chi)
[The value of fluoroscopy—guided percutaneous transthoracic fine needle aspiration biopsy in diagnosis of thoracic diseases] Su WJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):223–6 (Eng. Abstr.) (Chi)
[Peroperative biopsy and cytologic diagnosis of pulmonary lesions] Kubálek V, et al. **Rozhl Chir** 1989 May; 68(5):297–301 (Eng. Abstr.) (Cze)
[Pseudotumoral lambda chain pulmonary amyloidosis] Ben Othman H, et al. **Rev Mal Respir** 1989;6(3):265–6 (Eng. Abstr.) (Fre)
[Aids in the diagnosis of sarcoidosis in 1988] Battesti JP. **Rev Med Interne** 1988 Sep–Oct;9(4):351–3 (Fre)
[Thoracoscopy in pulmonary histiocytosis X] Bayle JY, et al. **Rev Pneumol Clin** 1988;44(6):292–6 (25 ref.) (Eng. Abstr.) (Fre)
[Pulmonary tests in the office of the internist/general practitioner] Wacker J. **Schweiz Med Wochenschr** 1988 Aug 20;118(33):1182–6 (Eng. Abstr.) (Fre)
[Bacteriologic diagnosis in infectious lung diseases] Bouzouaia N. **Tunis Med** 1988 Aug–Sep;66(8–9):579–84 (Fre)
[Immunocytochemical studies in the diagnosis of pulmonary histiocytosis X] Braun OM, et al. **Dtsch Med Wochenschr** 1989 Jan 20;114(3):91–5 (Eng. Abstr.) (Ger)
[Pneumologic diagnosis in general practice] Nolte D. **Fortschr Med** 1989 Mar 30;107(10):46, 49–50, 53 (11 ref.) (Eng. Abstr.) (Ger)
[Diagnostic errors in pneumology] Ferlinz R, et al. **Internist (Berlin)** 1989 Apr;30(4):228–36 (20 ref.) (Ger)
[Bronchoscopic intervention in emergency and intensive care medicine] König G. **Internist (Berlin)** 1989 Feb;30(2):88–91 (35 ref.) (Ger)
[Thoracoscopy in thoracic wall processes] Greschuchna D. **Pneumologie** 1989 Feb;43(2):119–21 (Eng. Abstr.) (Ger)
[The German Society of Pneumology and Tuberculosis. Recommendations for personnel and time requirements in pneumologic studies. Bronchoscopy, thoracoscopy, lung and pleura puncture] **Prax Klin Pneumol** 1988 Dec; 42(12):853–8 (13 ref.) (Ger)
[Methods and technic of bronchoalveolar lavage] Costabel U. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:218–21 (Ger)
[Indications for proton spin tomography and computerized tomography in chest diagnoses] Dinkel E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:327–34 (47 ref.) (Eng. Abstr.) (Ger)
[MRT diagnosis of hemorrhagic lung infarct] Spielmann RP, et al. **ROFO** 1989 Jan;150(1):102–3 (Ger)
[Imaging procedures in parenchymatous lung processes] Elsasser S, et al. **Schweiz Med Wochenschr** 1988 Sep 24; 118(38):1359–66 (Eng. Abstr.) (Ger)
[Conventional tomography, computerized tomography and proton spin tomography in lung disorders] Vock P. **Schweiz Med Wochenschr** 1988 Sep 24;118(38):1348–55 (Eng. Abstr.) (Ger)
[Evaluating lung function in medical practice] Keller R, et al. **Ther Umsch** 1988 Aug;45(8):559–67 (38 ref.) (Eng. Abstr.) (Ger)
[The effect of diagnostic and therapeutic bronchoscopy in surgical intensive care medicine] Glaser F, et al. **Unfallchirurg** 1988 Dec;91(12):529–35 (Eng. Abstr.) (Ger)
[Sarcoidosis in the clinic and in research. Methods for determining disease activity] **Z Erkr Atmungsorgane** 1988; 170(3):283–305 (Ger)
[The clinical picture of sarcoidosis] Christ R. **Z Erkr Atmungsorgane** 1988;170(3):267–78 (Ger)
[The differential diagnosis of sarcoidosis] Eckert H. **Z Erkr Atmungsorgane** 1988;170(3):317–22 (Ger)
[Biopsy of lung tissue in the diagnosis of disseminated transformations] Lewaschow JN, et al. **Z Erkr Atmungsorgane** 1988;171(3):210–8 (Eng. Abstr.) (Ger)
[The Kveim test in the diagnosis of sarcoidosis] Reutgen H, et al. **Z Erkr Atmungsorgane** 1988;170(3):306–13 (Ger)
[Indications and limits of thoracoscopy in surgical diagnosis and therapy of lung diseases] Elfeldt R, et al. **Zentralbl Chir** 1989;114(5):281–5 (Eng. Abstr.) (Ger)
[Pulmonary eosinophilic granuloma in adults. Case histories and a review of the literature] Zompatori M, et al. **Radiol Med (Torino)** 1989 Apr;77(4):347–53 (30 ref.) (Eng. Abstr.) (Ita)
[The study of the lung accumulation of I–123 IMP by the broncho–alveolar lavage] Itasaka M, et al. **Kaku Igaku** 1989 Feb;26(2):189–94 (Eng. Abstr.) (Jpn)
[A case of pulmonary Waldenstrom's macroglobulinemia] Nii Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):670–3 (Eng. Abstr.) (Jpn)
[Ultrasonically guided aspiration needle biopsy in the diagnosis of intrapulmonary lesions] Saito T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep;26(9):970–4 (Eng. Abstr.) (Jpn)
[Recent progress in diagnosis of pulmonary diseases] Takizawa T. **Nippon Naika Gakkai Zasshi** 1988 Aug; 77(8):1186–90 (Jpn)
[Difficulties in the diagnosis of tuberculosis] Wiatr E, et al. **Pneumonol Pol** 1988 Sep;56(9):411–21 (Eng. Abstr.) (Pol)
[Value of bronchoscopic examination in the diagnosis of respiratory tract diseases. II. Bacteriological examinations. Sarcoidosis and tracheo–bronchial collapse] Owsiński J. **Przegl Lek** 1988;45(6):493–9 (Eng. Abstr.) (Pol)
[Segmental bronchoalveolar lavage with a flexible probe via a rigid bronchoscope in the differential diagnosis of mediastinopulmonary sarcoidosis] Faina AG. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):257–60 (Eng. Abstr.) (Rum)
[Jet high–frequency artificial ventilation of the lungs during fibrobronchoscopy] Kassil VL, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):53–5 (Eng. Abstr.) (Rus)
[The role of open biopsy in the diagnosis of disseminated lung lesions] Slepukha IM, et al. **Klin Khir** 1988;(10):1–3 (Eng. Abstr.) (Rus)
[Diagnosis of pulmonary lesions in histiocytosis X] Filippov VP, et al. **Klin Med (Mosk)** 1988 Dec;66(12):21–6 (25 ref.) (Rus)
[Transbronchial biopsy in the diagnosis of lung diseases in children] Filippov VP, et al. **Pediatriia** 1988;(10):52–4 (Rus)
[Cytologic research on bronchoalveolar washings in nonspecific lung diseases in children] Krivosheeva IM, et al. **Pediatriia** 1988;(6):99–102 (49 ref.) (Rus)
[Diagnosis of immunologic deficiency in children with lung diseases] Matveeva LA. **Pediatriia** 1988;(10):39–43 (Eng. Abstr.) (Rus)
[Differential diagnosis of middle lobe diseases] Babanova NG, et al. **Probl Tuberk** 1988;(9):23–6 (Eng. Abstr.) (Rus)
[A diagnostic program for studying mucociliary transport in patients with chronic nonspecific lung diseases] Chuchalin AG, et al. **Probl Tuberk** 1988;(8):13–6 (Eng. Abstr.) (Rus)
[Non–tuberculous diseases of the lungs in adolescents referred to tuberculosis hospitals] Ianchevskaia AA, et al. **Probl Tuberk** 1988;(9):21–3 (Eng. Abstr.) (Rus)
[Differential diagnosis of acute nonspecific diseases of the lungs and tuberculosis under the conditions at a rural tuberculosis hospital] Kalabukha AV, et al. **Probl Tuberk** 1989;(6):67–71 (Rus)
[Clinico–biochemical aspects of differential diagnosis of tuberculosis and sarcoidosis of the respiratory organs] Kostina ZI, et al. **Probl Tuberk** 1988;(7):21–5 (Eng. Abstr.) (Rus)
[Activities of the center for detection, treatment and

ambulatory observation of patients with sarcoidosis] Nesterovskiĭ IaI, et al. **Probl Tuberk** 1989;(4):11–3 (Eng. Abstr.) (Rus)

[Organization of the differential diagnosis of tuberculosis and other diseases of the lungs in patients with tuberculosis, suffering from psychic disorders] Shcherbatiuk AS, et al. **Probl Tuberk** 1989;(1):64–7 (Rus)

[Bronchoalveolar lavage in the diagnosis of respiratory tract diseases in children and adolescents] Filippov VP, et al. **Sov Med** 1989;(2):69–71 (Rus)

[Establishing the cause of death in pneumopathies] Gersamiia GK. **Sud Med Ekspert** 1989 Apr–Jun;32(2):6–8 (Eng. Abstr.) (Rus)

[Significance of van Merten's index in the diagnosis of ventilation–perfusion disorders and causes of respiratory insufficiency] Andreev VM, et al. **Ter Arkh** 1989; 61(4):105–7 (Eng. Abstr.) (Rus)

[Diagnostic errors in pulmonology] Bakulin MP, et al. **Ter Arkh** 1989;61(3):107–10 (Rus)

[Branching osteoplastic pneumopathy (description of 2 cases)] Il'kovich MM, et al. **Ter Arkh** 1988;60(7):124–5 (Rus)

[Thermographic diagnosis of acute and chronic non-specific pulmonary diseases] Lobenko AA, et al. **Ter Arkh** 1989; 61(4):107–10 (Eng. Abstr.) (Rus)

[Various aspects of the differential diagnosis of pulmonary dissemination in managing occupational diseases] Palagushina AI, et al. **Ter Arkh** 1989;61(5):94–9 (Rus)

[Modern criteria of sarcoidosis activity and approaches to glucocorticoid therapy] Shatalov NN, et al. **Ter Arkh** 1988; 60(10):125–9 (Eng. Abstr.) (Rus)

[Clinical significance of the immunochemical study of serum and tissue proteins of the sputum in pulmonary pathology] Trubnikov GA, et al. **Ter Arkh** 1988;60(12):66–70 (Eng. Abstr.) (Rus)

[A device for conducting artificial ventilation of the lungs using an injection method during bronchoscopy] Larionov AI, et al. **Vestn Khir** 1988 Dec;141(12):87 (Rus)

[An x-ray probe using glucocorticosteroids in the diagnosis of autoimmune lesions of the lungs] Parizhskiĭ ZM. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):38–41 (Eng. Abstr.) (Rus)

[The state of the protease-inhibitor system in the bronchoalveolar lavage of patients with diffuse lung diseases] Kaminskaia GO, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):100–4 (Eng. Abstr.) (Rus)

[Diagnosis and therapeutic procedure in giant air cysts of the lungs] Kharitonov VA, et al. **Vrach Delo** 1988 Jul; (7):13–4 (Rus)

[Recognition of microfocal disseminated involvement of the lungs (review of the literature)] Piiipchuk VN, et al. **Vrach Delo** 1989 May;(5):81–6 (25 ref.) (Rus)

[Immunoenzyme analysis in the diagnosis of chronic nonspecific lung diseases in children] Tarasishin LA, et al. **Vrach Delo** 1989 Apr;(4):119–20 (Eng. Abstr.) (Rus)

[The role of transbronchial lung biopsy in the diagnosis of diffuse lung disease] Debeljak A, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):149–52 (Eng. Abstr.) (Scr)

[The role of broncho-alveolar lavage in the diagnosis of pulmonary diseases] Khomenko AG. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):22–5 (Eng. Abstr.) (Scr)

[Surgical neonatal problems that require immediate early diagnosis] Boix-Ochoa J. **An Esp Pediatr** 1988 Sep;29 Suppl 33:13–6 (0 ref.) (Spa)

[Biopsy by transthoracic puncture. Experience in 284 cases] Alonso P, et al. **Gac Med Mex** 1988 May–Jun; 124(5–6):209–16 (Spa)

[Bronchoalveolar lavage and Langerhans cells (letter)] Verea Hernando H, et al. **Med Clin (Barc)** 1989 May 13; 92(18):718–9 (Spa)

[Fibrobronchoscopy in the diagnosis of the pulmonary complications in AIDS] García Satué JL, et al. **Rev Clin Esp** 1988 May;182(9):474–7 (Eng. Abstr.) (Spa)

DRUG THERAPY

Effect of etoposide and cyclophosphamide on an experimental pulmonary infection in mice. Calame W, et al. **Agents Actions** 1989 Jan;26(1–2):77–8

Transfer factor therapy of thoracic sarcoidosis. Vezendi S, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb; 17(1):35–7

Chemotherapy of the pulmonary mycoses. This Official Statement of the American Thoracic Society was adopted by the ATS Board of Directors, November 1987. **Am Rev Respir Dis** 1988 Oct;138(4):1078–81

Evaluation of the in vitro and in vivo effects of cyclosporine on the lung T-lymphocyte alveolitis of active pulmonary sarcoidosis. Martinet Y, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1242–8

The effects of prostaglandin E1 on lung injury complicating hyperdynamic sepsis in sheep. Sibbald WJ, et al. **Am Rev Respir Dis** 1989 Mar;139(3):674–81

Chemotherapeutic trial of pulmonary sarcoidosis: a possible etiotropic treatment. Giobbi A, et al. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):415–25

Monocrotaline-induced cardiopulmonary injury in rats. Modification by the neutrophil elastase inhibitor SC39026. Molteni A, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2411–9

Superiority of enviomycin or streptomycin over ethambutol in initial treatment of lung disease caused by Mycobacterium avium complex. Tsukamura M, et al. **Chest** 1989 May;95(5):1056–8

Effects of ibuprofen on neutrophil function and acute lung injury in canine endotoxin shock. Balk RA, et al. **Crit Care Med** 1988 Nov;16(11):1121–7

Prostaglandin E1 infusion fails to prevent hyperoxic lung injury in adult rabbits. Hageman JR, et al. **Crit Care Med** 1989 Apr;17(4):339–44

Effects of oral steroids on immunoglobulins in bronchoalveolar lavage fluid in active sarcoidosis. Spatafora M, et al. **Eur Respir J** 1988 Jun;1(6):505–9

Protection against pulmonary O2 toxicity by N-acetylcysteine. Wagner PD, et al. **Eur Respir J** 1989 Feb;2(2):116–26

Pulmonary tuberous sclerosis responds to progesterone treatment. Murray DP, et al. **Ir J Med Sci** 1988 Jun; 157(6):196–7

Serum and sputum concentrations of netilmicin in combination with acylureidopenicillin and cephalosporins in clinical treatment of pulmonary exacerbations in cystic fibrosis. Hjelte L, et al. **J Antimicrob Chemother** 1989 Jun; 23(6):885–90

Activity of FCE 22891 compared with cefuroxime axetil and cefixime in pulmonary and subcutaneous infections in mice. Rossi R, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:149–55

Recommended dosage change for amphotericin B [letter] Chechani V, et al. **J Infect Dis** 1989 Sep;160(3):555

Magnesium and the lungs. Mathew R, et al. **Magnesium** 1988; 7(4):173–87 (128 ref.)

The effect of superoxide dismutase on the pathogenesis of radiation-induced pulmonary damage in the rat. Malaker K, et al. **Pharmacol Ther** 1988;39(1–3):327–30

Inhaler therapy. Clarke SW. **Q J Med** 1988 May; 67(253):355–68 (32 ref.)

Use of the new quinolones in cystic fibrosis. Grenier B. **Rev Infect Dis** 1989 Jul–Aug;11 Suppl 5:S1245–52 (47 ref.)

Quinolones in the treatment of lower respiratory tract infections. Thys JP, et al. **Rev Infect Dis** 1989 Jul–Aug;11 Suppl 5:S1212–9 (53 ref.)

Immunomodulating drugs in pneumology. Catena E. **Sarcoidosis** 1989 Mar;6(1):II–VII (28 ref.)

Inhaled budesonide influences cellular and biochemical abnormalities in pulmonary sarcoidosis. Erkkilä S, et al. **Sarcoidosis** 1988 Sep;5(2):106–10

Inhaled corticosteroids and pulmonary sarcoidosis. Selroos O. **Sarcoidosis** 1988 Sep;5(2):104–5

Comparison of efficacy and tolerance of intravenously and orally administered ciprofloxacin in cystic fibrosis patients with acute exacerbations of lung infection. Strandvik B, et al. **Scand J Infect Dis Suppl** 1989;60:84–8

Examination of Motilium in the prevention of gastro-intestinal side-effects of different drugs used in pulmonology. Vadász I. **Ther Hung** 1988;36(4):202–5

Clinical experience in the management of pulmonary opportunist infection and rejection in recipients of heart-lung transplants. Penketh AR, et al. **Thorax** 1988 Oct; 43(10):762–9

[Evaluation of immunostimulating agents used in pulmonologic practice] Kis'ova K, et al. **Vutr Boles** 1989; 28(3):85–90 (Eng. Abstr.) (Bul)

[Therapeutic effect of nifedipine on the rabbit after injection of oleic acid] Zhao MW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):4–7, 61 (Eng. Abstr.) (Chi)

[Treatment of superinfections caused by pyocyanic bacillus in patients with mucoviscidosis. Efficacy of cefsulodin in combination with an aminoglycoside] Jehanne M. **Pathol Biol (Paris)** 1989 May;37(5):500–3 (Eng. Abstr.) (Fre)

[Favorable course under cotrimoxazole of excavated pneumopathy complicating rapidly progressive glomerulonephritis: Wegener's granulomatosis?] Pagniez D, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):143–6 (Fre)

[Fluoroquinolones: pharmacology, antibacterial spectrum and indications in pneumology] Underner M, et al. **Rev Pneumol Clin** 1989;45(1):14–22 (53 ref.) (Eng. Abstr.) (Fre)

[Treatment of bacterial broncho-pulmonary diseases] Ben Chaabane T. **Tunis Med** 1988 Aug–Sep;66(8–9):585–6 (Fre)

[Successful antibiotic treatment of a pulmonary infection with Nocardia asteroides (biovariety A3)] Ruppert S, et al. **Dtsch Med Wochenschr** 1988 Nov 18;113(46):1801–5 (Eng. Abstr.) (Ger)

[Therapy of sarcoidosis] Christ R, et al. **Z Erkr Atmungsorgane** 1988;170(3):314–6 (Ger)

[Cyclosporin A therapy of sarcoidosis] Vezendi S, et al. **Orv Hetil** 1988 Sep 18;129(38):2029–31 (Eng. Abstr.) (Hun)

[Use of aztreonam in the treatment of acute and flare-ups of chronic infectious bronchopneumopathies] Aquino G, et al. **Clin Ter** 1988 Jan 31;124(2):109–16 (Eng. Abstr.) (Ita)

[A case of sarcoidosis treated with deflazacort, a recently synthesized glucocorticoid] Letizia C, et al. **Clin Ter** 1988 Apr 30;125(2):129–33 (Eng. Abstr.) (Ita)

[Therapeutic effectiveness of ristomycin in the visceral form of actinomycosis (experimental research)] Agarunova IuS, et al. **Antibiot Khimioter** 1988 Aug;33(8):612–4 (Eng. Abstr.) (Rus)

[Effectiveness of various schedules of drug therapy of patients with sarcoidosis of the respiratory organs] Ozerova LV, et al. **Probl Tuberk** 1989;(3):37–41 (Eng. Abstr.) (Rus)

[Method of intrapulmonary therapy of lung diseases using needle jet injector] Provotorov VM, et al. **Probl Tuberk** 1989;(3):42–5 (Eng. Abstr.) (Rus)

[Antioxidants in clinical practice] Bobyrev VN, et al. **Ter Arkh** 1989;61(3):122–5 (55 ref.) (Rus)

[Effect of thymalin on immunologic reactivity of patients with non-specific lung diseases] Dovnar TE, et al. **Ter Arkh** 1989;61(3):69–71 (Eng. Abstr.) (Rus)

[Errors and rules in the practice of the aerosol therapy of bronchopulmonary diseases in children] Osin AIa. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):62–4 (Rus)

[Use of antibiotics in acute pneumopathies: therapeutic orientation system, based on clinical parameters] Lagos R, et al. **Rev Chil Pediatr** 1988 May–Jun;59(3):159–64 (Eng. Abstr.) (Spa)

ECONOMICS

Health care financing policy for hospitalized pulmonary medicine patients. Muñoz E, et al. **Chest** 1989 Jan; 95(1):174–8

Compensating victims of occupational lung disease: the physician's role in the system. Richman SI. **J Occup Med** 1989 Apr;31(4):335–8

ENZYMOLOGY

Behaviour of angiotensin converting enzyme, hydroxyproline and some protease inhibitors in pulmonary sarcoidosis. Masiak M, et al. **Adv Exp Med Biol** 1988;240:145–7

Proteolytic activities in bronchoalveolar lavage fluid correlate to stage and course of interstitial lung disease. Schmidt M, et al. **Adv Exp Med Biol** 1988;240:137–44

The role of cyclooxygenase and lipoxygenase mediators in oxidant-induced lung injury. Farrukh IS, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1343–9

Elastase activity of bronchoalveolar cells in advanced pulmonary sarcoidosis. Mordelet-Dambrine M, et al. **Eur Respir J** 1988 Aug;1(8):748–57

Local pulmonary activation of proteolytic enzymes after Escherichia-coli-induced lung injury in sheep. Andreasson S, et al. **Eur Surg Res** 1988;20(5–6):289–97

Association of elevated serum creatine kinase with lung disease and febrile illness. Theodor E. **Isr J Med Sci** 1989 Mar;25(3):153–6

Diminished activity of tartrate resistant acid phosphatase in alveolar macrophages from patients with active sarcoidosis. Barth J, et al. **Thorax** 1988 Nov;43(11):901–4

[Determination of angiotensin-converting enzyme activity in internal diseases] Danev S, et al. **Vutr Boles** 1988; 27(4):86–8 (Eng. Abstr.) (Bul)

[Elastases and pulmonary pathologies] Lafuma C. **Pathol Biol (Paris)** 1988 Nov;36(9):1124–32 (41 ref.) (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

NHLBI workshop summary. Longitudinal analysis in pulmonary disease epidemiology. Becklake MR, et al. **Am Rev Respir Dis** 1988 May;137(5):1241–3

Correlates of FEV1 and prevalence of pulmonary conditions in Japanese-American men. Marcus EB, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1398–404

An epidemiological study in an Anatolian village environmentally exposed to tremolite asbestos. Baris YI, et al. **Br J Ind Med** 1988 Dec;45(12):838–40

Environmental and health studies of farm workers in Swedish swine confinement buildings. Donham K, et al. **Br J Ind Med** 1989 Jan;46(1):31–7

Lipid infusions and lung disease in preterm neonates [letter] Feldman M, et al. **J Pediatr** 1989 Aug;115(2):331–2

Sarcoidosis in children: personal observations on age distribution. Kendig EL Jr. **Pediatr Pulmonol** 1989; 6(2):69–70

Application of a two-stage random effects model to longitudinal pulmonary function data from sarcoidosis patients. Vacek PM, et al. **Stat Med** 1989 Feb;8(2):189–200

[The changing spectrum of occupational diseases of the lung] Nordman H, et al. **Duodecim** 1988;104(6):473–9 (11 ref.) (Fin)

[Epidemiologic cross-sectional study of the prevalence of chronic bronchitis and lung function disorders in swine breeders and milkers] Barthel E, et al. **Z Erkr Atmungsorgane** 1989;172(2):143–9 (Eng. Abstr.) (Ger)

[Bronchologic studies in East Germany: current status and perspectives] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1988;171(2):103–10 (Eng. Abstr.) (Ger)

[Epidemiology of nonspecific pulmonary diseases in the Transbaikal region] Suleĭmanov SSh. **Ter Arkh** 1989; 61(3):72–5 (Eng. Abstr.) (Rus)

[Risk factors for the development of bronchopulmonary diseases in workers at a machine-building plant] Butenko GE, et al. **Vrach Delo** 1988 Oct;(10):100–2 (Eng. Abstr.) (Rus)

[Epidemiological study of the associations of Staphylococcus aureus and Pseudomonas aeruginosa in the pulmonology clinic] Sologub VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):8–11 (Eng. Abstr.) (Rus)

ETIOLOGY

Cytodiagnosis of Hodgkin's disease involving the lungs [letter] Suprun HZ. **Acta Cytol** 1989 May-Jun;33(3):418-9
On welding, wheezing, and whimsy. Morgan WK. **Am Ind Hyg Assoc J** 1989 Feb;50(2):59-69 (75 ref.)
Mycobacterium kansasii diffuse pulmonary infection in a patient with acquired immune deficiency syndrome. Successful therapy with an antituberculous regimen. Jacobson MA, et al. **Am J Clin Pathol** 1989 Feb;91(2):236-8
Acute systemic organ injury in term infants after asphyxia. Perlman JM, et al. **Am J Dis Child** 1989 May;143(5):617-20
Unilateral hyperlucent lung due to interstitial pulmonary hemorrhage from aortic dissection. Colice GL, et al. **Am J Med** 1989 Feb;86(2):250-2
Pulmonary hemorrhage associated with bullous pemphigoid of the lung. Kariya ST, et al. **Am J Med** 1989 Jan; 86(1):127-8
Pulmonary hemorrhage associated with bullous pemphigoid of the lung [letter] Klinger JR, et al. **Am J Med** 1989 May; 86(5):636-7
Cardiopulmonary toxicity of adoptive immunotherapy. Glauser FL, et al. **Am J Med Sci** 1988 Dec;296(6):406-12 (75 ref.)
Alveolar hemorrhage in Wegener's granulomatosis. Sanchez-Masiques J, et al. **Am J Med Sci** 1989 Jun; 297(6):390-3 (20 ref.)
Trauma and the neglected science of epidemiology [letter] Goris RJ. **Am J Surg** 1989 Aug;158(2):167-8
The lung matrix and inflammation: Part II. Biochemical and molecular mechanisms of fibrogenesis: implications for environmental lung disease. Brody AR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1056-7
Current issues in occupational lung disease. Lockey JE, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1047-50
Corticosteroids prevent acute lung dysfunction caused by thoracic irradiation in unanesthetized sheep. Loyd JE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1227-33
Firefighting acutely increases airway responsiveness. Sherman CB, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):185-90
Pulmonary haemorrhage, pulmonary infarction, and the lupus anticoagulant. Howe HS, et al. **Ann Rheum Dis** 1988 Oct; 47(10):869-72
Prospective study of pulmonary tolerance to radiotherapy or radiotherapy plus multidrug chemotherapy for loco-regional lung carcinoma. Choi NC, et al. **Antibiot Chemother** 1988;41:213-9
Pyoderma gangrenosum with pulmonary involvement. Vignon-Pennamen MD, et al. **Arch Dermatol** 1989 Sep; 125(9):1239-42
Lung function eight years after neonatal ventilation. Andréasson B, et al. **Arch Dis Child** 1989 Jan;64(1):108-13
Preoperative pulmonary evaluation. Jackson CV. **Arch Intern Med** 1988 Oct;148(10):2120-7 (93 ref.)
Pulmonary disease in progressive systemic sclerosis. A complication of gastroesophageal reflux and occult aspiration? Johnson DA, et al. **Arch Intern Med** 1989 Mar; 149(3):589-93
Acute hyperparathyroidism with systemic calcinosis. Report of a case. Khalil RA, et al. **Arch Intern Med** 1989 Mar; 149(3):681-4
Diffuse storage of vegetal wax hydrocarbons of dietary origin. Pathologic and chemical findings in a case. Duboucher C, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):423-8
Lung infection caused by Rhodococcus. Hart DH, et al. **Aust N Z J Med** 1988 Oct;18(6):790-1
Exercise, sports and pulmonary ailments in children. Mayol PM, et al. **Bol Asoc Med P R** 1988 Oct;80(10):377-83 (54 ref.)
Health hazards of firefighters: acute pulmonary effects after toxic exposures. Brandt-Rauf PW, et al. **Br J Ind Med** 1989 Mar;46(3):209-11
Respiratory and allergic symptoms in wool textile workers. Love RG, et al. **Br J Ind Med** 1988 Nov;45(11):727-41
Traumatic lung cyst. Ayuso JR, et al. **Can Assoc Radiol J** 1989 Jun;40(3):174-5
Lung function following treatment of malignant tumors with surgery, radiotherapy, or cyclophosphamide in childhood. A follow-up study after 11 to 27 years. Mäkipernaa A, et al. **Cancer** 1989 Feb 15;63(4):625-30
Combined effects of interferon alpha and interleukin 2 on the induction of a vascular leak syndrome in mice. Puri RK, et al. **Cancer Immunol Immunother** 1989;28(4):267-74
Personal and family history of lung disease as risk factors for adenocarcinoma of the lung. Wu AH, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7279-84
Left upper lobe torsion following lower lobe resection. Early recognition of a rare complication. Kucich VA, et al. **Chest** 1989 May;95(5):1146-7
Tumor necrosis factor-alpha. A multifaceted mediator of inflammation. Lynch JP 3d, et al. **Chest** 1989 Sep; 96(3):457-9
Longitudinal changes in pulmonary function following bone marrow transplantation. Prince DS, et al. **Chest** 1989 Aug; 96(2):301-6
Pulmonary manifestations in Behçet's syndrome. Raz I, et al. **Chest** 1989 Mar;95(3):585-9 (39 ref.)
Passive smoking: nuisance or health risk? Wiedemann HP. **Cleve Clin J Med** 1989 Mar-Apr;56(2):115-6
A new experimental model of in-situ immune complex disease of the lung. Boyce NW, et al. **Clin Exp Immunol** 1988 Jun;72(3):493-8
The role of monokines in granuloma formation in mice: the ability of interleukin 1 and tumor necrosis factor-alpha to induce lung granulomas. Kasahara K, et al. **Clin Immunol Immunopathol** 1989 Jun;51(3):419-25
ICU management of pulmonary dysfunction in neurosurgical patients. Popp AJ, et al. **Clin Neurosurg** 1989;35:71-92
Pulmonary complications from nasoenteral feeding tube insertion in an intensive care unit: incidence and prevention. Harris MR, et al. **Crit Care Med** 1989 Sep;17(9):917-9
Health effects of air pollutants: sulfuric acid, the old and the new. Amdur MO. **Environ Health Perspect** 1989 May; 81:109-13; discussion 121-2 (31 ref.)
Evidence supporting a role for active oxygen species in asbestos-induced toxicity and lung disease. Mossman BT, et al. **Environ Health Perspect** 1989 May;81:91-4 (27 ref.)
Preoperative evaluation for partial laryngectomy. Chow JM, et al. **Head Neck Surg** 1988 May-Jun;10(5):319-23
Pulmonary hemosiderosis in a child with cystic fibrosis. Valletta EA, et al. **Helv Paediatr Acta** 1989 Jun; 43(5-6):487-90
Correlation between lung fibre content and disease in East London asbestos factory workers. Wagner JC, et al. **IARC Sci Publ** 1989;(90):444-8
Lung function and respiratory symptoms among workers in a soft paper mill. Thorén K, et al. **Int Arch Occup Environ Health** 1989;61(7):467-71
Chronic non-specific lung disease and occupational exposures estimated by means of a job exposure matrix: the Zutphen Study. Heederik D, et al. **Int J Epidemiol** 1989 Jun;18(2):382-9
Massive pulmonary haemorrhage due to leptospirosis. Allen P, et al. **Intensive Care Med** 1989;15(5):322-4
Pulmonary disease following allogeneic bone marrow transplantation. Murray M, et al. **Ir J Med Sci** 1989 Feb; 158(2):36-9
The use of experimental airborne infections to monitor impairments in pulmonary defenses. Gardner DE. **J Appl Toxicol** 1988 Dec;8(6):385-8
Cardiorespiratory effects of immunotherapy with interleukin-2. Lee RE, et al. **J Clin Oncol** 1989 Jan; 7(1):7-20
Cow's milk-induced pulmonary hemosiderosis. Williams S, et al. **J La State Med Soc** 1989 Aug;141(8):19-22
Cardiovascular and respiratory complications after elective supratentorial craniotomy. Gilsanz F, et al. **J Neurosurg Sci** 1988 Oct-Dec;32(4):147-51
Platelet participation in the increased severity of endotoxin-induced pulmonary injury in aged rats. Durham SK, et al. **J Pathol** 1989 Apr;157(4):339-45
Risk factors for chronic lung disease in infants with birth weights of 751 to 1000 grams. Kraybill EN, et al. **J Pediatr** 1989 Jul;115(1):115-20
Long-term pulmonary sequelae of meconium aspiration syndrome. Swaminathan S, et al. **J Pediatr** 1989 Mar; 114(3):356-61
Low inspired gas temperature and respiratory complications in very low birth weight infants. Tarnow-Mordi WO, et al. **J Pediatr** 1989 Mar;114(3):438-42
Traumatic pulmonary pseudocyst. Report of twelve cases. Kato R, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):309-12
Pneumopathies of the graft-versus-host reaction. Alveolitis associated with an increased level of tumor necrosis factor mRNA and chronic interstitial pneumonitis. Piguet PF, et al. **Lab Invest** 1989 Jul;61(1):37-45
Smoking, anesthesia, and coronary bypass operation: a witches' cauldron? Gomez MN, et al. **Mayo Clin Proc** 1989 Jun;64(6):708-11
Role of preoperative cessation of smoking and other factors in postoperative pulmonary complications: a blinded prospective study of coronary artery bypass patients. Warner MA, et al. **Mayo Clin Proc** 1989 Jun;64(6):609-16
Morphogenesis and pathogenesis of chronic lung diseases. XVIII. Influence of cyclophosphamide on the evolution toward fibrosis of experimental lung granulomas: a quantitative analysis. Eskenasy A, et al. **Med Interne** 1982 Oct-Dec;20(4):299-306
A report of actinomycosis involving the lung and liver. Forgan-Smith JR, et al. **Med J Aust** 1989 Feb 6; 150(3):153-5
Pulmonary complications from small-diameter, flexible nasoenteric feeding tubes. Salzman GA. **Mo Med** 1986 Feb; 83(2):81-4
Lung pathogenesis. VIII. Relationships between alveolar surfactant disorders and development of lung diseases. Eskenasy A. **Morphol Embryol (Bucur)** 1989 Jan-Mar; 35(1):21-32 (52 ref.)
Prostaglandin E1-associated pathology of pulmonary microvasculature in newborn pups: similarity to findings in prostaglandin E1-treated human newborns. Goddard-Finegold J, et al. **Pediatr Pathol** 1989;9(3):251-60
Absence of long term pulmonary sequelae after mild meconium aspiration syndrome. Stevens JC, et al. **Pediatr Pulmonol** 1988;5(2):74-81
Prediction of abnormal pulmonary follow-up in premature infants [editorial] Bancalari E. **Pediatrics** 1988 Oct; 82(4):670-1
Abnormal pulmonary outcomes in premature infants: prediction from oxygen requirement in the neonatal period. Shennan AT, et al. **Pediatrics** 1988 Oct;82(4):527-32
Cervical Crohn's disease with oesophago-pulmonary fistula. Steel A, et al. **Postgrad Med J** 1988 Sep;64(755):706-9
Smoking-related disease in a VA hospital. Allen A. **Prev Med** 1988 Jul;17(4):440-8
Leukocyte induced pulmonary damage using intraperitoneal zymosan. Chiara O, et al. **Prog Clin Biol Res** 1989;308:73-6
The pathophysiological role of PAF in anaphylactic lung reaction in the guinea pig and in endotoxin shock evidenced by the specific PAF-antagonist WEB 2086. Heuer H, et al. **Prog Clin Biol Res** 1989;308:925-30
Mediators of acute lung injury in endotoxaemia. Parratt JR, et al. **Prog Clin Biol Res** 1989;308:357-69 (10 ref.)
Chemiluminescence-inducing radicals in experimental porcine septic shock lung. Reichle H, et al. **Prog Clin Biol Res** 1989;308:339-44
Occupational lung function impairment in never-smoking Danish welders. Lyngenbo O, et al. **Scand J Soc Med** 1989; 17(2):157-64
The lungs in systemic sclerosis (scleroderma): a review and new information. McCarthy DS, et al. **Semin Arthritis Rheum** 1988 May;17(4):271-83 (97 ref.)
Pulmonary insults due to transfusions, radiation, and hyperoxia. Duane P. **Semin Respir Infect** 1988 Sep; 3(3):240-6 (84 ref.)
Respiratory manifestations of connective tissue disease. Harmon KR, et al. **Semin Respir Infect** 1988 Sep; 3(3):258-73 (67 ref.)
Evidence for neutrophil-related acute lung injury after intestinal ischemia-reperfusion. Schmeling DJ, et al. **Surgery** 1989 Aug;106(2):195-201; discussion 201-2
Pulmonary haemorrhage in Henoch-Schönlein purpura. Markus HS, et al. **Thorax** 1989 Jun;44(6):525-6 (9 ref.)
Bronchoalveolar lavage in talc induced lung disease. Redondo AA, et al. **Thorax** 1988 Dec;43(12):1019-21
The pulmonary complications of bone marrow transplantation in adults [clinical conference] Noble PW. **West J Med** 1989 Apr;150(4):443-9
['Typically atypical'] Hoekstra MO, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):329-32 **(Dut)**
[Atypical mycobacteria causing generalized lung infections] Nurmela T, et al. **Duodecim** 1988;104(6):399-403 (15 ref.) **(Fin)**
[Sarcoidosis and hyperthyroidism] Damoiseaux P, et al. **Acta Clin Belg** 1988;43(5):344-8 (Eng. Abstr.) **(Fre)**
[Long-term oxygen therapy: does a toxic risk exist?] Housset B. **Agressologie** 1988 Jun;29(7):507-10 (29 ref.) (Eng. Abstr.) **(Fre)**
[Respiratory complications in status asthmaticus under mechanical ventilation (letter)] Jean G, et al. **Presse Med** 1988 Sep 10;17(30):1538-9 **(Fre)**
[Post-traumatic pulmonary hematomas. Apropos of 2 cases] Melloni B, et al. **Rev Mal Respir** 1989;6(3):267-70 (Eng. Abstr.) **(Fre)**
[Lung diseases during therapeutic aplasia: diagnostic and therapeutic strategy] Mayaud C, et al. **Rev Pneumol Clin** 1988;44(3):113-21 (66 ref.) (Eng. Abstr.) **(Fre)**
[The cured tuberculosis patient and his problems (a study of 374 cases)] Zaibi M, et al. **Tunis Med** 1989 Apr; 67(4):257-61 (Eng. Abstr.) **(Fre)**
[Asbestos-induced bronchopulmonary diseases] Reichel G. **Fortschr Med** 1989 Mar 20;107(9):205-9 (18 ref.) (Eng. Abstr.) **(Ger)**
[A 39-year-old heavy smoker with acute effort dyspnea and fever] Vogelmeier C, et al. **Internist (Berlin)** 1988 Sep; 29(9):638-41 **(Ger)**
[Rupture of the lung with repeated intrapulmonary hemorrhage] Koennecke HC, et al. **ROFO** 1988 Oct; 149(4):434-5 **(Ger)**
[An intrapulmonary hematoma induced by a Swan-Ganz catheter] Supra D, et al. **Rontgenblatter** 1989 Jun; 42(6):268-70 (Eng. Abstr.) **(Ger)**
[Radiological diagnosis of late effects on thoracic organs after chemotherapy and/or radiation therapy as well as after radionuclide therapy] John V, et al. **Strahlenther Onkol** 1988 Oct;164(10):619-28 (Eng. Abstr.) **(Ger)**
[Allergic lung diseases of animal origin] Balázs M. **Zentralbl Allg Pathol** 1988;134(7):639-46 (25 ref.) (Eng. Abstr.) **(Ger)**
[Pulmonary complications in acquired immunodeficiency syndrome (AIDS) and syndromes related to human immunodeficiency virus (HIV) infection] Gasparotto G, et al. **G Clin Med** 1988 Dec;69(12):755-65 (53 ref.) **(Ita)**
[Hematoma and pulmonary contusion as a consequence of closed injury of the thorax in childhood] Moro G, et al. **Minerva Chir** 1989 Mar 15;44(5):927-9 (Eng. Abstr.) **(Ita)**
[Aluminum lung as an occupational disease. Case reports] Avolio G, et al. **Minerva Med** 1989 Apr;80(4):411-4 (23 ref.) (Eng. Abstr.) **(Ita)**
[Post-traumatic inflammatory pseudotumor of the lung. Description of a case] Freschi P, et al. **Pediatr Med Chir** 1989 Jan-Feb;11(1):93-6 (Eng. Abstr.) **(Ita)**
[Pulmonary Raynaud's phenomenon] Kuwahira I, et al. **Kokyu To Junkan** 1989 Jun;37(6):617-23 **(Jpn)**
[Effect of nutritional treatment of esophageal cancer patients on pre and post-operative hemodynamic changes and postoperative lung complications] Yoshihara H. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):815-21 (Eng. Abstr.) **(Jpn)**
[Pulmonary vascular disease in shunted and nonshunted patients with tetralogy of Fallot] Yamaki S, et al.

Nippon Kyobu Geka Gakkai Zasshi 1989 Jan;37(1):62–7 (Eng. Abstr.) (Jpn)
[An autopsy case of pulmonary diffuse alveolar septal amyloidosis secondary to miliary tuberculosis] Higami Y, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Sep; 26(9):995–9 (Eng. Abstr.) (Jpn)
[An autopsy case of acute pulmonary hemorrhage in systemic lupus erythematosis] Ueno S, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Mar;26(3):284–8 (Eng. Abstr.) (Jpn)
[Use of occupational anamnesis at a lung department] Bakke P, et al. Tidsskr Nor Laegeforen 1988 Oct 30; 108(30):2729–30 (Eng. Abstr.) (Nor)
[Health damage caused by asbestos and other mineral fibers] Skaug V, et al. Tidsskr Nor Laegeforen 1989 Jun 10; 109(16):1786–9 (Eng. Abstr.) (Nor)
[Pulmonary changes in secondary hyperparathyroidism in terminal renal failure. Case report] Przedlacki J, et al. Pol Arch Med Wewn 1985 Apr;73(4):259–63 (Eng. Abstr.) (Pol)
[Chylopericardium and lymphatic pneumopathy due to mediastino-pulmonary congenital lymphangiectasis. Report of 3 cases] Reis NB, et al. Arq Bras Cardiol 1988 Jun;50(6):407–12 (Eng. Abstr.) (Por)
[The importance of upper respiratory tract infections in determining chronic pulmonary diseases] Hociotă D. Rev Chir [Otorinolaringol] 1989 Jan–Mar;34(1):1–10 (13 ref.) (Eng. Abstr.) (Rum)
[Leukotriene mediators in the pathogenesis of chronic pulmonary diseases] Păunescu E. Rev Ig [Pneumoftiziol] 1988 Jan–Mar;37(1):35–41 (17 ref.) (Rum)
[The significance of respiration disorders in the development of postoperative pulmonary complications in patients with cancer of the stomach] Kassil' VL, et al. Anesteziol Reanimatol 1989 Mar–Apr;(2):62–4 (Eng. Abstr.) (Rus)
[Visceral manifestations of chronic alcoholism] Miagkova LP, et al. Klin Med (Mosk) 1988 Jul;66(7):22–8 (59 ref.) (Rus)
[The role of sulfur-containing compounds in the pathogenesis and treatment of chronic nonspecific lung diseases] Solopov VN, et al. Klin Med (Mosk) 1988 Jun;66(6):60–3 (Eng. Abstr.) (Rus)
[Factors affecting the incidence of exacerbation and recurrence of intrathoracic sarcoidosis] Solodkovskiĭ ML. Sov Med 1989;(5):79–81 (Rus)
[Urgent problems of occupational pathology] Izmerov NF, et al. Ter Arkh 1988;60(9):13–7 (Rus)
[Characteristics of the pathogenesis of fibrosing alveolitis and sarcoidosis] Pokhodzeĭ IV, et al. Ter Arkh 1988; 60(10):129–32 (45 ref.) (Rus)
[Various aspects of the pathogenesis of cardiorespiratory disorders in acute pneumonia] Tatarkina ND, et al. Ter Arkh 1989;61(3):78–81 (Eng. Abstr.) (Rus)
[Solitary contusion hematoma of the lungs with air cysts] Kharitonov VA, et al. Vrach Delo 1989 Jan;(1):67–9 (Rus)
[Pleuropulmonary manifestations of rheumatoid arthritis (a review of the literature)] Sukhareva GE. Vrach Delo 1989 Mar;(3):51–5 (65 ref.) (Rus)
[Pulmonary changes in collagenoses] Kapellerová A, et al. Cesk Pediatr 1988 Aug;43(8):473–6 (29 ref.) (Slo)
[Syndrome of left heart hypoplasia, causing hydrops fetalis and congenital pulmonary lymphangiectasis] Herranz Jordán B, et al. An Esp Pediatr 1988 Jul;29(1):65–7 (Eng. Abstr.) (Spa)
[Analysis of the bacteriologic data obtained with a double-lumen distally-plugged telescopic catheter in the diagnosis of pulmonary infiltrates in patients on low mechanical ventilation] Sánchez Nieto JM, et al. Rev Clin Esp 1989 Feb;184(2):65–8 (Eng. Abstr.) (Spa)
[Pulmonary pathology in the alcoholic] Cicero-Sabido R, et al. Rev Invest Clin 1988 Jul–Sep;40(3):281–8 (75 ref.) (Spa)

GENETICS

Interleukin-2 receptor gene expression by bronchoalveolar lavage lymphocytes in pulmonary sarcoidosis. Müller-Quernheim J, et al. Am Rev Respir Dis 1989 Jul; 140(1):82–8
Expression of HLA class II genes in alveolar macrophages of patients with sarcoidosis. Spurzem JR, et al. Am Rev Respir Dis 1989 Jul;140(1):89–94
Personal and family history of lung disease as risk factors for adenocarcinoma of the lung. Wu AH, et al. Cancer Res 1988 Dec 15;48(24 Pt 1):7279–84
Application of molecular biology to pulmonary disease. Scoggin C. Clin Chest Med 1989 Mar;10(1):119–25 (32 ref.)
Molecular basis of the liver and lung disease associated with the alpha 1-antitrypsin deficiency allele Mmalton. Curiel DT, et al. J Biol Chem 1989 Aug 15;264(23):13938–45
Getting to the heart of genetic disease [news] Marx JL. Science 1989 Jan 20;243(4889):315–6
Pulmonary manifestations of tuberous sclerosis in first degree relatives. Slingerland JM, et al. Thorax 1989 Mar; 44(3):212–4
[The protease inhibitor system in children (in diseases of the lung, liver and hereditary alpha 1-antitrypsin deficiency)] Gillissen A, et al. Klin Padiatr 1989 Jan–Feb;201(1):6–10 (Eng. Abstr.) (Ger)
[Familial sarcoidosis. 4 cases from 2 families] Kronauer CM, et al. Schweiz Med Wochenschr 1988 Oct 15;118(41):1482–6 (28 ref.) (Eng. Abstr.) (Ger)
[Significance of determining the phenotypes of blood serum haptoglobin in infectious-inflammatory lung diseases] Nikitin AV, et al. Lab Delo 1989;(5):60–2 (Eng. Abstr.) (Rus)
[Genetic aspects of chronic lung diseases (early diagnosis and prevention)] Gembitskaia TE. Probl Tuberk 1989;(2):26–9 (Eng. Abstr.) (Rus)
[HLA-DR phenotype and DR/B haplotype in patients with sarcoidosis] Ketova NA. Probl Tuberk 1988;(12):49–50 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Interleukins in pulmonary sarcoidosis. Dissociative correlations of lung interleukins 1 and 2 with the intensity of alveolitis. Yamaguchi E, et al. Am Rev Respir Dis 1988 Sep;138(3):645–51
The influence of aminophylline on human neutrophils—possible protection of lung from proteolytic injury. Nowak D, et al. Arch Immunol Ther Exp (Warsz) 1988;36(3):351–60
Unconjugated pteridines in bronchoalveolar lavage as indicators of alveolar macrophage activation. Dhondt JL, et al. Chest 1989 Feb;95(2):348–51
Phenotype of blood monocytes and alveolar macrophages in interstitial lung disease. Hoogsteden HC, et al. Chest 1989 Mar;95(3):574–7
Expression of Fc receptors is suppressed in alveolar macrophages from patients with sarcoidosis. Hayashi S, et al. Clin Exp Immunol 1988 Sep;73(3):495–9
Phenotypic and functional changes in alveolar macrophages contribute to the pathogenesis of pulmonary sarcoidosis. Spiteri MA, et al. Clin Exp Immunol 1988 Dec;74(3):359–64
Inhaled corticosteroids can modulate the immunopathogenesis of pulmonary sarcoidosis. Spiteri MA, et al. Eur Respir J 1989 Mar;2(3):218–24
Granulocyte independence of pulmonary oxygen toxicity in the rat. Boyce NW, et al. Exp Lung Res 1989 May; 15(3):491–8
Altered gastrointestinal immune response in sarcoidosis. McCormick PA, et al. Gut 1988 Dec;29(12):1628–31
IgG antibody against formaldehyde human serum proteins: a comparison with other IgG antibodies against inhalant proteins and reactive chemicals. Patterson R, et al. J Allergy Clin Immunol 1989 Sep;84(3):359–66
Immune response to experimentally induced infection with respiratory syncytial virus: possible role in the development of pulmonary disease. Piedra PA, et al. J Gen Virol 1989 Feb;70 (Pt 2):325–33
Human pulmonary alveolar type 2 cells contain an apical membrane glycoprotein common to malignant cells. Brody JS, et al. Lab Invest 1988 Oct;59(4):522–30
Ultrastructural cytochemical analysis of oxygen radical-mediated immunoglobulin A immune complex induced lung injury in the rat. Warren JS, et al. Lab Invest 1989 May;60(5):651–8
Effect of protein and zinc deficiencies on vaccine efficacy in guinea pigs following pulmonary infection with Listeria. Coghlan LG, et al. Med Microbiol Immunol (Berl) 1988; 177(5):255–63
Cellular interactions in lung inflammation and immunity. Bienenstock J, et al. Postgrad Med J 1988;64 Suppl 4:111–9 (70 ref.)
Immune aspects of sarcoidosis. Poulter LW. Postgrad Med J 1988 Jul;64(753):536–43 (78 ref.)
Mast cells in bronchoalveolar lavage in sarcoidosis: correlation with alveolar lymphocytes. Rottoli P, et al. Respiration 1988;54 Suppl 1:42–8
Pulmonary hemorrhage and glomerulonephritis in the absence of anti-glomerular basement membrane antibody. Rotellar C, et al. South Med J 1988 Oct;81(10):1324–6 (13 ref.)
Effects of inhaled hexachlorobenzene aerosols on rat pulmonary host defenses. Sherwood RL, et al. Toxicol Ind Health 1989 May;5(3):451–61
Increased expression of HLA-DR antigen on alveolar macrophages in pulmonary diseases. Popp W, et al. Virchows Arch [A] 1989;414(5):393–7
[Comparative studies of bronchial secretions in children with chronic, nontuberculous lung diseases. 2. The detection of IgA, sIgA, IgG, IgM and albumin] Stelzner A, et al. Allerg Immunol (Leipz) 1988;34(2):87–97 (Eng. Abstr.) (Ger)
[Spontaneous interleukin 1 secretion by alveolar macrophages from the bronchoalveolar lavage of patients with active sarcoidosis] Barth J, et al. Immun Infekt 1989 Aug; 17(4):141–4 (Eng. Abstr.) (Ger)
[Immunologic characterization of lymphocytes using monoclonal antibodies and immunoglobulin determination in bronchoalveolar lavage in patients with sarcoidosis] Ballin A, et al. Prax Klin Pneumol 1988 Jul;42(7):544–6 (Eng. Abstr.) (Ger)
[The immunology of sarcoidosis] Eckert H. Z Erkr Atmungsorgane 1988;170(3):254–6 (Ger)
[Lung diseases caused by animal allergens] Balázs M, et al. Morphol Igazsagugyi Orv Sz 1988 Jul;28(3):208–15 (31 ref.) (Eng. Abstr.) (Hun)
[Two monoclonal antibodies, AMH-2 and AMH-3, reactive with alveolar macrophages and epithelioid cell granulomas] Akiyama J, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun;26(6):637–44 (Eng. Abstr.) (Jpn)
[Immunohistochemical analysis of immunocytes, cytokines and cytokine receptor in sarcoid granulomas using monoclonal antibodies] Tsuda T, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):851–62 (Eng. Abstr.) (Jpn)
[Anaerobic infection and its effect on the immune status of patients with acute destruction of the lungs] Levashev IuN, et al. Grudn Khir 1989 May-Jun;(3):46–9 (Eng. Abstr.) (Rus)
[Application of the test of rosette formation of neutrophils in lung diseases] Chernushenko EF, et al. Lab Delo 1988; (6):59–60 (Eng. Abstr.) (Rus)
[Localization of a defect in phagocytic function in sarcoidosis] Belokrinitskiĭ DV, et al. Probl Tuberk 1988; (11):54–8 (Eng. Abstr.) (Rus)
[Evaluation of the dynamics of sarcoidosis of the respiratory organs by complex examination of bronchoalveolar lavage fluid] Romanov VV, et al. Probl Tuberk 1988;(6):36–40 (Eng. Abstr.) (Rus)
[The effect of prednisolone on the functional status of phagocytic cells in the peripheral blood of patients with pulmonary sarcoidosis] Tyshko NA. Vrach Delo 1989 May; (5):88–90 (Eng. Abstr.) (Rus)

METABOLISM

Fibronectin in bronchoalveolar lavage fluid and plasma from children with chronic inflammation of lungs. Nagy B, et al. Acta Paediatr Scand 1988 Sep;77(5):727–33
Oxygen distribution and utilization after phorbol myristate acetate-induced lung injury. Dorinsky PM, et al. Am Rev Respir Dis 1988 Dec;138(6):1454–63
Pulmonary strategies of antioxidant defense. Heffner JE, et al. Am Rev Respir Dis 1989 Aug;140(2):531–54 (454 ref.)
Local abnormalities of coagulation and fibrinolysis and alveolar fibrin deposition in sheep with oleic acid-induced lung injury. Idell S, et al. Am Rev Respir Dis 1988 Nov; 138(5):1282–94
Pulmonary involvement in patients with HTLV-I-associated myelopathy: increased soluble IL-2 receptors in bronchoalveolar lavage fluid. Sugimoto M, et al. Am Rev Respir Dis 1989 Jun;139(6):1329–35
Generation of free radicals from freshly fractured silica dust. Potential role in acute silica-induced lung injury. Vallyathan V, et al. Am Rev Respir Dis 1988 Nov; 138(5):1213–9
Effect of acute lung injury on metabolism of adenine nucleotides in rat perfused lung. Grantham CJ, et al. Br J Pharmacol 1988 Aug;94(4):1029–36
Alteration of fate of vasoactive autacoids in pulmonary circulation following monocrotaline-induced lung vascular injury in rats. Ito K, et al. Br J Pharmacol 1988 Aug; 94(4):1167–74
Histochemical evaluation of lung collagen content in acute and chronic interstitial diseases. Saldiva PH, et al. Chest 1989 May;95(5):953–7
Lung compartmentalization of increased TNF releasing ability by mononuclear phagocytes in pulmonary sarcoidosis. Spatafora M, et al. Chest 1989 Sep;96(3):542–9
Metabolic functions of the lungs. Clin Chest Med 1989 Mar; 10(1):1–128
Free radical effects on lung metabolism. Jenkinson SG. Clin Chest Med 1989 Mar;10(1):37–47 (51 ref.)
Interpretation of metabolic function of the lung. Influence of perfusion, kinetics, and injury. Pitt BR, et al. Clin Chest Med 1989 Mar;10(1):1–12 (77 ref.)
Presence of high concentration of 7B2 in pleural effusion. Iguchi H, et al. Endocrinol Jpn 1988 Dec;35(6):885–9
Comparison of vitamin E levels in plasma, bronchoalveolar lavage, and lung tissues of adult pulmonary patients. Tangney CC, et al. J Am Coll Nutr 1989 Jun;8(3):203–14
Simultaneous measurement of lung clearance rates for Tc- and In-DTPA in normal and damaged lungs. O'Brodovich H, et al. J Appl Physiol 1989 May;66(5):2293–7
Diet and CO2-production in pediatric chronic pulmonary disease [letter] de Meer K, et al. J Pediatr Gastroenterol Nutr 1989 Jul;9(1):133–4
Immunocytochemical localization of epidermal growth factor in the developing human respiratory system and in acute and chronic lung disease in the neonate. Stahlman MT, et al. Lab Invest 1989 Apr;60(4):539–47
Relationship of naphthalene and 2-methylnaphthalene metabolism to pulmonary bronchiolar epithelial cell necrosis. Buckpitt AR, et al. Pharmacol Ther 1989; 41(1-2):393–410 (108 ref.)
Muscarinic receptor subtypes: implications for lung disease. Barnes PJ. Thorax 1989 Mar;44(3):161–7 (52 ref.)
Collagenase and fibronectin in bronchoalveolar lavage fluid in patients with sarcoidosis. O'Connor C, et al. Thorax 1988 May;43(5):393–400
[Pulmonary surfactants and respiratory tract diseases in adults] Liu MY, et al. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Jun; 11(3):176–9 (17 ref.) (Chi)
[Comparative studies of bronchial secretion in children with chronic, nontuberculous lung diseases. 1. Methodico-technical studies of secretion collection and interpretation of the results] Stelzner A, et al. Allerg Immunol (Leipz) 1988;34(2):73–86 (Eng. Abstr.) (Ger)
[Comparative studies of bronchial secretions in children with chronic, nontuberculous lung diseases. 3. The detection of lysozyme, transferrin, alpha 1-antitrypsin, alpha 2-macroglobulin, haptoglobin and alpha 1-acid

glycoprotein] Stelzner A, et al. **Allerg Immunol (Leipz)** 1988;34(2):99–108 (Eng. Abstr.) (Ger)
[A study on assay method for fucose and sialic acid contents in sputum and serum of patients with lung diseases] Fujisawa K, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun; 26(6):658–64 (Eng. Abstr.) (Jpn)
[Individual characteristics and effects of spasmolytics in relation to the oxidation phenotype of the marker preparation amidopyrine in children with digestive and respiratory diseases] Tarakhovskiĭ ML, et al. **Pediatriia** 1988;(4):43–7 (Eng. Abstr.) (Rus)
[Lipid peroxidation, antioxidants and proteinase inhibitors in lung diseases (a review of the literature)] Pilipchuk VN. **Vrach Delo** 1988 Aug;(8):62–7 (60 ref.) (Rus)

MICROBIOLOGY

Ankylosing spondylitis lung disease and Mycobacterium scrofulaceum. Levy H, et al. **Br J Dis Chest** 1988 Jan; 82(1):84–7
Mixed fusobacterium and actinomyces pulmonary infection. Case report. Ray MS, et al. **Clin Pediatr (Phila)** 1989 Sep; 28(9):426–8
Review of pulmonary brucellosis: a case report on brucellar pulmonary empyema. García-Rodriguez JA, et al.
Diagn Microbiol Infect Dis 1988 Sep;11(1):53–60 (52 ref.)
Evidence for the pathogenic role of Rhodococcus species in pulmonary diseases. Osoagbaka OU. **J Appl Bacteriol** 1989 Jun;66(6):497–506
Staphylococcus aureus capsular types and antibody response to lung infection in patients with cystic fibrosis. Albus A, et al. **J Clin Microbiol** 1988 Dec;26(12):2505–9
Antibodies to mycobacterial peptidoglycolipid and to crude protein antigens in sera from different categories of human subjects. Wayne LG, et al. **J Clin Microbiol** 1988 Nov; 26(11):2300–6
A case of lung infection caused by an unusual strain of Nocardia farcinica. Tsukamura M, et al.
Microbiol Immunol 1988;32(5):541–6
Changes of the biotype of Mycobacterium avium–Mycobacterium intracellulare complex causing lung disease in Japan. Miyachi T, et al. **Tubercle** 1988 Jun; 69(2):133–7
Mechanism of lung injury in cotton rats immunized with formalin-inactivated respiratory syncytial virus. Piedra PA, et al. **Vaccine** 1989 Feb;7(1):34–8
[The results of bacteriologic research on the bronchoalveolar lavage fluid and blood plasma in patients with sarcoidosis] Khomenko AG, et al. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep; 37(3):229–36 (Eng. Abstr.) (Fre)
[Anaerobic bacteria in pathology of the lungs and pleura] Mil'chenko KP, et al. **Mikrobiol Zh** 1987 Sep–Oct; 49(5):52–5 (Eng. Abstr.) (Rus)

MORTALITY

State of health and its association with death among old people at three-years follow-up. I. Lung function, circulation, sensory and motor apparatus. Sørensen KH. **Dan Med Bull** 1988 Dec;35(6):592–6
[Cause of death patterns during the decade 1977–1986 in Denmark in lung diseases, ischemic heart disease and cardiovascular disease] Mosbech J, et al. **Ugeskr Laeger** 1989 May 29;151(22):1395–6 (Dan)

PATHOLOGY

Allergic granulomatosis and angiitis (Churg–Strauss syndrome). Report of an autopsy case in a nonasthmatic patient. Sasaki A, et al. **Acta Pathol Jpn** 1988 Jun; 38(6):761–8
Macrophages in bronchoalveolar lavage fluid do not represent macrophages in granulomas of the lungs of BCG-infected mice. Nibbering PH, et al.
Agents Actions 1989 Jan;26(1–2):132–3
Reactive eosinophilic pleuritis. A sequela of pneumothorax in pulmonary eosinophilic granuloma. McDonnell TJ, et al. **Am J Clin Pathol** 1989 Jan;91(1):107–11
Migratory polyarthritis, pulmonary nodules, and chest pain in a 60-year-old man [clinical conference] Atkinson J, et al. **Am J Med** 1989 Feb;86(2):209–15
Lung injury and neutrophil density during air embolization in sheep after leukocyte depletion with nitrogen mustard. Albertine KH. **Am Rev Respir Dis** 1988 Dec;138(6):1444–53
Stimulation of bronchoalveolar lavage (BAL) and blood lymphocytes by Kveim antigen, tuberculin and concanavalin A in sarcoidosis. Lindahl M, et al.
Br J Dis Chest 1988 Oct;82(4):386–93
Bronchoalveolar lavage sampling of airway and alveolar cells. Robinson BW, et al. **Br J Dis Chest** 1988 Jan; 82(1):45–55
Correlation between fibre content of lung and disease in east London asbestos factory workers [letter] Rudd RM.
Br J Ind Med 1989 May;46(5):358–9
Helper inducer T cells in the lungs of sarcoidosis patients. Analysis of their pathogenic and clinical significance. Gerli R, et al. **Chest** 1989 Apr;95(4):811–6
De novo circumscribed pulmonary lobar cystic lymphatic anomaly in a young boy. A possible sequela of bronchopulmonary dysplasia. Karmazin N, et al. **Chest** 1989 May;95(5):1162–3
Cavitary lung disease with skin lesions. Leff JA, et al.
Chest 1989 Feb;95(2):457–8
Open lung biopsy in patients with non-Hodgkin's lymphoma and pulmonary infiltrates. McCabe RE, et al. **Chest** 1989 Aug;96(2):319–24
Relationship between inflammatory processes and gas exchanges in pulmonary sarcoidosis. Martinot JB, et al. **Chest** 1989 Sep;96(3):550–6
Bronchoalveolar lymphocytes in sarcoidosis [editorial] Rossman MD. **Chest** 1989 Apr;95(4):715–6
Severe pulmonary hypertension with diffuse smooth muscle proliferation of the lungs. Pulmonary tuberous sclerosis? Wagener OE, et al. **Chest** 1989 Jan;95(1):234–7
CD8+ cell-dominant alveolitis in pulmonary sarcoidosis. Yamaguchi E, et al. **Chest** 1989 Jan;95(1):228–31
A review of pulmonary cytopathology in the acquired immunodeficiency syndrome. Strigle SM, et al.
Diagn Cytopathol 1989;5(1):44–54 (88 ref.)
Histiocytosis X characterized by marked elevation of serum alkaline phosphatase and rapid destructive changes in the lung parenchyma. Hansen PB. **Eur Respir J** 1989 Feb; 2(2):188–9
Patterns of progression and markers of lung injury in rodents and subhuman primates exposed to hyperoxia. Fracica PJ, et al. **Exp Lung Res** 1988;14 Suppl:869–85
Pulmonary lymphatics in SIDS—a comparative morphometric study. Ogbuihi S, et al. **Forensic Sci Int** 1988 Nov;39(2):197–206
Pulmonary dirofilariasis: mimicry of well-differentiated squamous carcinoma [letter] Mizrachi HH, et al.
Hum Pathol 1989 Aug;20(8):818–9
Immunohistochemical analysis of calcitonin and calcitonin gene-related peptide in human lung. Tsutsumi Y.
Hum Pathol 1989 Sep;20(9):896–902
Generation of superoxide anion by alveolar macrophages in sarcoidosis: evidence for the activation of the oxygen metabolism in patients with high-intensity alveolitis. Cassatella MA, et al. **Immunology** 1989 Mar;66(3):451–8
Diffuse lung infiltration in a homosexual man without AIDS. Pohil R, et al. **J Am Osteopath Assoc** 1988 Sep;88(9):1115–7
Respiratory manifestations of viral hepatitis [letter] Varthakavi PK, et al. **J Assoc Physicians India** 1988 May; 36(5):348–9
Role of reactive oxygen species in reperfusion injury of the rabbit lung. Kennedy TP, et al. **J Clin Invest** 1989 Apr; 83(4):1326–35
Modulation of acute endotoxin pulmonary inflammation by a corticosteroid. Rylander R, et al.
J Clin Lab Immunol 1988 Oct;27(2):83–6
Does open lung biopsy affect treatment in patients with diffuse pulmonary infiltrates? Walker WA, et al.
J Thorac Cardiovasc Surg 1989 Apr;97(4):534–40
Bronchoalveolar lavage studies in uveitis patients without radiological intrathoracic involvement of sarcoidosis. Sugimoto M, et al. **Jpn J Med** 1989 Jan–Feb;28(1):50–4
A reversible model of acute lung injury based on ozone exposure. Bassett DJ, et al. **Lung** 1988;166(6):355–69
Effect of pyochelin on Pseudomonas cepacia respiratory infections. Sokol PA, et al. **Microb Pathog** 1988 Sep; 5(3):197–205
Significance of crystalline inclusions in lung granulomas. Visscher D, et al. **Mod Pathol** 1988 Nov;1(6):415–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 31–1989. A three-month-old boy with bilateral interstitial lung disease. **N Engl J Med** 1989 Aug 3;321(5):309–16
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. A 59-year-old woman with asthma and multiple pulmonary nodules. **N Engl J Med** 1989 Jan 12;320(2):108–16
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 44–1988. A 25-year-old man with multiple bone lesions, hilar lymphadenopathy, and a pericardial effusion. **N Engl J Med** 1988 Nov 3; 319(18):1209–16
Pathology of AIDS in children. Joshi VV. **Pathol Annu** 1989; 24 Pt 1:355–81 (54 ref.)
Combined sarcoidosis and disseminated visceral giant cell vasculitis. Marcussen N, et al. **Pathol Res Pract** 1989 Mar; 184(3):325–30
Validity of bronchoalveolar lavage in acute lung injury: recovered cells accurately reflect changes in the lung parenchyma. Weiland JE, et al. **Pathology** 1989 Jan; 21(1):59–62
Transthoracic image guided biopsy. Dick R.
Postgrad Med J 1988 Jul;64(753):544–51
Some connective tissue disorders of the lung. Turner-Warwick M. **Postgrad Med J** 1988 Jul; 64(753):497–504 (22 ref.)
Transbronchial lung biopsy and bronchoalveolar lavage in diagnosis of diffuse infiltrative lung diseases. Poletti V, et al. **Respiration** 1988;54 Suppl 1:66–72
Metastatic pulmonary calcification in sarcoidosis. Rohatgi PK. **Respiration** 1988;54(3):201–5
The lung in systemic vasculitis. Leatherman JW.
Semin Respir Infect 1988 Sep;3(3):274–88 (56 ref.)
Granulomatous diseases of the lung that mimic respiratory infections. Marinelli WA, et al. **Semin Respir Infect** 1988 Sep;3(3):181–202 (134 ref.)
Granulomatous vasculitides of the lung: a clinicopathologic approach to diagnosis and treatment. Warren J, et al.
South Med J 1989 Apr;82(4):481–91 (115 ref.)
Diagnosis of pulmonary disease in human immunodeficiency virus infection: role of transbronchial biopsy and bronchoalveolar lavage. Griffiths MH, et al. **Thorax** 1989 Jul;44(7):554–8
Six years' experience with perthoracic core needle biopsy in pulmonary lesions. Morgenroth A, et al. **Thorax** 1989 Mar;44(3):177–83
Benign lymphocytic angiitis and granulomatosis. Tukiainen H, et al. **Thorax** 1988 Aug;43(8):649–50
Prognostic value of bronchoalveolar lavage in sarcoidosis: the critical influence of disease presentation. Ward K, et al. **Thorax** 1989 Jan;44(1):6–12
Sarcoidosis in Africans: 12 cases with histological confirmation from Nigeria. Awotedu AA, et al.
Trans R Soc Trop Med Hyg 1987;81(6):1027–9
Lung macrophages [editorial] Hammar SP.
Ultrastruct Pathol 1989 Jul–Aug;13(4):iii–v
[Preliminary study on nasal cavity exfoliative cells in "lung diseases" in traditional Chinese medicine] Li H, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 Jun;8(6):333–5, 323 (Eng. Abstr.) (Chi)
[Needle biopsy of thoracic lesions (a clinical analysis of 410 cases)] Cui ZH.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):338–40, 385 (Eng. Abstr.) (Chi)
[Neutrophil and lung diseases] Kong XJ, et al.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Oct; 11(5):297–9 (15 ref.) (Chi)
[Clinical experiences in transbronchial lung biopsy] Li LY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):330–2, 388 (Eng. Abstr.) (Chi)
[Primary Waldenström's macroglobulinemia. Report of a case with pulmonary involvement] Jensen JB, et al.
Ugeskr Laeger 1989 Apr 24;151(17):1059–60 (Eng. Abstr.) (Dan)
[Broncho-alveolar lavage and connective tissue diseases] Voisin C, et al. **Ann Med Interne (Paris)** 1988;139(5):307–9 (Fre)
[Pulmonary interstitial pathology] Capron F. **Ann Pathol** 1989;9(1):20–32 (37 ref.) (Fre)
[The lung in brain death. Anatomo-biological correlations for pulmonary transplantation] Pruvot FR, et al.
Presse Med 1989 Mar 4;18(9):480–3 (Eng. Abstr.) (Fre)
[Pulmonary sarcoidosis simulating primary acute interstitial fibrosis at presentation. Clinical, radiologic, functional and bronchoalveolar cytologic study in 3 cases] Dugas M, et al. **Rev Mal Respir** 1989;6(3):243–50 (Eng. Abstr.) (Fre)
[Pseudotumoral amyloidosis of the lung] Quiot JJ, et al.
Rev Mal Respir 1989;6(3):275–6 (Eng. Abstr.) (Fre)
[Macrophage-lymphocyte alveolitis in pulmonary sarcoidosis. The role of T-lymphocytes and alveolar macrophages in the pathogenesis and monitoring of this disease] Rossi GA, et al. **Rev Mal Respir** 1988;5(5):511–8 (68 ref.) (Eng. Abstr.) (Fre)
[Transthoracic puncture and excavated pulmonary lesion. Diagnostic contribution and value of the extemporaneous cytologic test] Le Chevalier B, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):31–5 (Eng. Abstr.) (Fre)
[Pulmonary rheumatoid nodules indicative of rheumatoid polyarthritis] Troussier B, et al.
Rev Rhum Mal Osteoartic 1989 Apr;56(5):399–402 (23 ref.) (Fre)
[Pulmonary histiocytosis X. Pseudo-tumor forms] Attiaoui M, et al. **Tunis Med** 1987 Mar;65(3):219–24 (Eng. Abstr.) (Fre)
[The simulation of histopathological diagnosis with the help of an automated image analysis system (VISIAC)] Kayser K, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):19–24 (Eng. Abstr.) (Ger)
[The pathogenesis and importance of pulmonary corpora amylacea] Schellmann B, et al. **Pathologe** 1989 May; 10(3):182–5 (Ger)
[The differential diagnosis of lung ossifications] Hackl H.
Pneumologie 1989 Apr;43(4):210–2 (Eng. Abstr.) (Ger)
[Tumor-like courses in lung sarcoidosis (4 observations)] Schmidt A, et al. **Pneumologie** 1989 Jun;43(6):290–4 (Eng. Abstr.) (Ger)
[Bronchocentric granulomatosis] Stumpner J, et al.
Pneumologie 1989 Jan;43(1):32–5 (Eng. Abstr.) (Ger)
[Experiences with cytologic results in bronchoalveolar lavage (BAL) in various pneumologic diseases] de Wall N, et al. **Prax Klin Pneumol** 1988 Oct;42(10):753–8 (Eng. Abstr.) (Ger)
[Congenital and acquired cystic lung changes] Feichtinger I, et al. **Prax Klin Pneumol** 1988 Jul;42(7):553–6 (Eng. Abstr.) (Ger)
[Percentage of lymphocytes in bronchoalveolar lavage and conventional therapy decision making for patients with intrathoracic sarcoidosis] Grosser H, et al.
Prax Klin Pneumol 1988 Jun;42 Suppl 1:230–2 (Eng. Abstr.) (Ger)
[Sarcoidosis: how to diagnose it, when to treat it?] Kummer F, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:222–4 (Eng. Abstr.) (Ger)
[Bronchoscopy documentation] Schindl R, et al.
Prax Klin Pneumol 1988 Jul;42(7):573–5 (Eng. Abstr.) (Ger)
[T4/T8 ratio in bronchoalveolar lavage fluid: sensitivity and specificity for the diagnosis of sarcoidosis] Zaiss AW, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:233–4 (Eng. Abstr.) (Ger)
[The morphologic picture of sarcoidosis] Eckert H, et al.
Z Erkr Atmungsorgane 1988;170(3):245–53 (Ger)
[Biopsy procedures in sarcoidosis] Wiesner B, et al.

Z Erkr Atmungsorgane 1988;170(3):262–6 (Ger)

[Lymphoproliferative lung lesions (pseudolymphoma—malignant lymphoma] Brittig F, et al. Orv Hetil 1989 Feb 12;130(7):341–2, 345–7 (Eng. Abstr.) (Hun)

[Use of computerized tomography as a guide in thoracic needle biopsies] D'Auria S, et al. Arch Monaldi Mal Torace 1987 May–Jun;42(3):219–29 (Eng. Abstr.) (Ita)

[Anatomo–pathologic findings in 25 autopsy cases of AIDS] Giampalmo A, et al. Pathologica 1989 Jan–Feb; 81(1071):1–46 (150 ref.) (Eng. Abstr.) (Ita)

[A case report of plasma cell granuloma and a review of the literature with reference to its pathogenesis] Fujiyoshi Y, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun; 26(6):665–9 (20 ref.) (Eng. Abstr.) (Jpn)

[A case of primary nodular pulmonary amyloidosis] Honda A, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Oct; 26(10):1080–5 (12 ref.) (Eng. Abstr.) (Jpn)

[A clinico–pathological study of the mode of evolution of lymphangitis carcinomatosa of the lung] Satoh T, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Dec; 26(12):1243–8 (Eng. Abstr.) (Jpn)

[A case of necrotizing sarcoid granulomatosis diagnosed by open lung biopsy] Sugama Y, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jan;27(1):75–80 (Eng. Abstr.) (Jpn)

[A pathological study on fibrosis in autopsied lungs with pulmonary sarcoidosis] Takemura T, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Apr; 26(4):386–93 (Eng. Abstr.) (Jpn)

[Pulmonary Waldenström's macroglobulinemia—a case report] Masu M, et al. Rinsho Ketsueki 1989 Apr; 30(4):485–90 (Eng. Abstr.) (Jpn)

[Diagnostic value of bronchoalveolar lavage (BAL) in various diseases of the respiratory tract] Lasota A, et al. Pol Tyg Lek 1988 May 23;43(21):674–80 (Eng. Abstr.) (Pol)

[Value of bronchoscopic examination in the diagnosis of diseases of the respiratory tract. III. Bronchoalveolar lavage] Owsiński J. Przegl Lek 1988;45(8):620–2 (Eng. Abstr.) (Pol)

[Intraoperative histologic verification of focal diseases of the lungs] Braude VI. Grudn Khir 1989 Mar–Apr;(2):59–63 (Eng. Abstr.) (Rus)

[Study of the bronchoalveolar lavage fluid in bronchopulmonary suppurative diseases in children] Lishke AA, et al. Khirurgiia (Mosk) 1988 Jul;(7):25–8 (Eng. Abstr.) (Rus)

[Objectivization of the cytologic signs of changes in the bronchial epithelium in cancer and noncancerous diseases of the lungs] Loboda VI, et al. Lab Delo 1989;(4):38–41 (Eng. Abstr.) (Rus)

[Diagnosis and evaluation of sarcoidosis by biopsy] Braude VI. Probl Tuberk 1988;(7):46–9 (Eng. Abstr.) (Rus)

[Functional and roentgeno–morphological characteristics of peripheral bronchi in sarcoidosis of the lungs and intrathoracic lymph nodes] Evfim'evskiĭ VP, et al. Probl Tuberk 1988;(12):33–6 (Eng. Abstr.) (Rus)

[The significance of respiratory pathology in children in the development of bronchopulmonary diseases as adults] Rachinskiĭ SV. Probl Tuberk 1988;(11):10–4 (Eng. Abstr.) (Rus)

[Characteristics of conducting bronchoalveolar lavage in children and adolescents] Shesterina MV, et al. Probl Tuberk 1988;(6):19–22 (Eng. Abstr.) (Rus)

[Open biopsy of the lungs in bilateral disseminated lesions] Slepukha IM, et al. Probl Tuberk 1988;(9):18–21 (Eng. Abstr.) (Rus)

[A case of the pulmonary form of melioidosis with a favorable outcome] Petrunin IuP, et al. Ter Arkh 1988;60(11):136–7 (Rus)

[Transthoracic aspiration biopsy using fine and superfine needles in the diagnosis of spherical formations in the lungs] Vinner MG, et al. Vestn Rentgenol Radiol 1988 May–Jun; (3):5–10 (Eng. Abstr.) (Rus)

[A rare case of sarcoidosis] Kostiuk TE, et al. Vrach Delo 1988 Aug;(8):67–9 (Rus)

[Significance of the presence of mastocytes in bronchoalveolar lavage in the diagnostic evaluation of diffuse interstitial lung diseases] Moisés JA, et al. Med Clin (Barc) 1989 Apr 1;92(12):454–6 (Eng. Abstr.) (Spa)

[Open lung biopsy in immunocompromised patients with diffuse pulmonary infiltrates] Fernández Guerrero ML, et al. Rev Clin Esp 1989 May;184(9):473–6 (Eng. Abstr.) (Spa)

[Eosinophilic granuloma of the lung] Santibáñez LH, et al. Rev Med Chil 1987 Dec;115(12):1176–80 (Eng. Abstr.) (Spa)

[Bone marrow biopsy and sarcoidosis (letter)] Pedro–Botet Montoya J, et al. Sangre (Barc) 1989 Feb;34(1):76–7 (Spa)

PHYSIOPATHOLOGY

Ventilator–induced lung damage. Sykes MK. Acta Anaesthesiol Belg 1988;39(3 Suppl 2):43–4

Leukotrienes and the microvascular permeability of acute lung injury. Lonigro AJ, et al. Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:317–20

Lung functions in phosphate miners in Jordan: a pilot study. Samara N, et al. Am J Ind Med 1989;16(3):297–304

3. Epithelial injury. Mechanisms and cell biology of airway epithelial injury. Boucher RC, et al. Am Rev Respir Dis 1988 Dec;138(6 Pt 2):S41–4

Lung function impairment as a guide to exercise limitation in work–related lung disorders. Cotes JE, et al. Am Rev Respir Dis 1988 May;137(5):1089–93

Effects of oleic acid–, alpha–naphthylthiourea–, and phorbol myristate acetate–induced microvascular damage on indexes of pulmonary endothelial function in anesthetized dogs. Gardaz JP, et al. Am Rev Respir Dis 1988 Jun; 137(6):1350–5

Mepacrine impairs neutrophil response after acute lung injury in rats. Effects on neutrophil migration. Mikes PS, et al. Am Rev Respir Dis 1988 Dec;138(6):1464–70

Long–term follow–up of drug abusers with intravenous talcosis. Paré JP, et al. Am Rev Respir Dis 1989 Jan; 139(1):233–41

Granulocyte depletion prevents tumor necrosis factor–mediated acute lung injury in guinea pigs. Stephens KE, et al. Am Rev Respir Dis 1988 Nov;138(5):1300–7

Pentoxifylline decreases endotoxin–induced pulmonary neutrophil sequestration and extravascular protein accumulation in the dog. Welsh CH, et al. Am Rev Respir Dis 1988 Nov;138(5):1106–14

Physiologic effects of steep positioning in the surgical intensive care unit. Nelson LD, et al. Arch Surg 1989 Mar; 124(3):352–5

Getting a patient off the ventilator. Branthwaite MA. Br J Dis Chest 1988 Jan;82(1):16–22 (8 ref.)

Progressive apical pleural fibrosis: a 'constrictive' ventilatory defect. Oliver RM, et al. Br J Dis Chest 1988 Oct; 82(4):439–43

Altered function of pulmonary endothelium following monocrotaline–induced lung vascular injury in rats. Ito K, et al. Br J Pharmacol 1988 Aug;94(4):1175–83

Respiratory mechanics in the aging rat. Saldiva PH, et al. Braz J Med Biol Res 1988;21(4):863–8

Evaluation of endothelial injury in the human lung. Dawson CA, et al. Clin Chest Med 1989 Mar;10(1):13–24 (72 ref.)

Platelet activating factor in pulmonary pathobiology. McManus LM, et al. Clin Chest Med 1989 Mar;10(1):107–18 (93 ref.)

Evaluation of pulse oximetry as a continuous monitoring technique in the neonatal intensive care unit. Barrington KJ, et al. Crit Care Med 1988 Nov;16(11):1147–53

Adrenoceptors and the lung: their role in health and disease. Reinhardt D. Eur J Pediatr 1989 Jan;148(4):286–93 (97 ref.)

Lung mechanics and their relationship to lung volumes in pulmonary sarcoidosis. Brädvik I, et al. Eur Respir J 1989 Jul;2(7):643–51

V/Q and alveolar gas exchange in pulmonary sarcoidosis. Eklund A, et al. Eur Respir J 1989 Feb;2(2):135–44

The admission cardiorespiratory performance in relation to outcome in pediatric ICU patients. Sagy M, et al. Intensive Care Med 1988;14(6):646–9

Polymorphonuclear leukocyte cytoplasts mediate acute lung injury. Antony VB, et al. J Appl Physiol 1988 Aug; 65(2):706–13

Relationship of lung function loss to level of initial function: correcting for measurement error using the reliability coefficient. Irwig L, et al. J Epidemiol Community Health 1988 Dec;42(4):383–9

Spirometry: a simple but accurate gauge of cardiopulmonary health. Petty TL. Occup Health Saf 1989 Apr;58(4):40–2, 44–5

Adenosine in heart and lung disease. Proceedings of the first Cardiothoracic Institute Workshop. 30 March 1988, London. Abstracts. Postgrad Med J 1988 Oct;64(756):820–8

Sarcoidosis: correlation of pulmonary parenchymal pattern at CT with results of pulmonary function tests. Bergin CJ, et al. Radiology 1989 Jun;171(3):619–24

Assessment of pulmonary macrophage and neutrophil function in sequential bronchoalveolar lavage aspirates in sarcoidosis. Kelly CA, et al. Thorax 1988 Oct;43(10):787–91

[Who and what measures lung function in inflammation?] Sovijärvi AR. Duodecim 1988;104(6):371–7 (29 ref.) (Fin)

[Optimizing anesthesia ventilation. 4. Anesthesia ventilation with inspiratory plateau] Hakenbeck H, et al. Anaesthesiol Reanim 1988;13(4):213–26 (Eng. Abstr.) (Ger)

[Changes in lung function and cellular composition of bronchoalveolar lavage fluid during cortisone therapy of sarcoidosis in roentgenological stage II] Barth J, et al. Prax Klin Pneumol 1988 Jun;42 Suppl 1:225–6 (Eng. Abstr.) (Ger)

[Pathophysiology and clinical aspects of nocturnal hypoxemia] Rühle KH. Prax Klin Pneumol 1988 Jun;42 Suppl 1:383–6 (Eng. Abstr.) (Ger)

[Lung function and protease levels of BAL fluid in sarcoidosis II] Schmidt M, et al. Prax Klin Pneumol 1988 Jun;42 Suppl 1:227–9 (Eng. Abstr.) (Ger)

[Transition of chronic bronchopulmonary diseases of childhood into adulthood; risk factors] von der Hardt H. Prax Klin Pneumol 1988 Jun;42 Suppl 1:245–8 (Eng. Abstr.) (Ger)

[Working Group for Clinical Respiratory Physiology. Work session 1986. Bad Aussee, 11–13 September 1986. Abstracts] Wien Med Wochenschr Suppl 1987;102:1–47 (Ger)

[Contribution to pneumonology by the measurement of intrabronchial pH in situ] Marcatili S, et al. Arch Monaldi Mal Torace 1987 Jan–Feb;42(1):117–26 (Eng. Abstr.) (Ita)

[Mass spectometry and personal computer in the study of pulmonary gas exchange] Maselli R, et al. Arch Monaldi Mal Torace 1987 Jul–Aug;42(4):315–25 (Eng. Abstr.) (Ita)

[Effects of oxygen administration on mixed venous oxygenation and pulmonary hemodynamics in chronic pulmonary disease] Murata Y, et al. Kokyu To Junkan 1988 Jul;36(7):761–5 (Eng. Abstr.) (Jpn)

[Effect of low flow oxygen and nifedipine on ventilation and hemodynamics in chronic lung diseases] Mutoh T, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 May; 26(5):524–30 (Eng. Abstr.) (Jpn)

[Clinical studies on type III procollagen N terminal peptide and fibronectin in the sera and bronchoalveolar lavage fluids in patients with various pulmonary diseases] Takada K, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Jun; 26(6):594–601 (Eng. Abstr.) (Jpn)

[Indices of external respiratory function in female animal breeders] Pavlishchuk SA, et al. Gig Tr Prof Zabol 1989; (2):8–11 (Eng. Abstr.) (Rus)

[Pulmonary ventilation before surgery and the prognosis of pulmonary complications after cholecystectomy in elderly patients with concomitant cardiovascular pathology] Kozlova II. Klin Khir 1988;(10):13–4 (Eng. Abstr.) (Rus)

[Characteristics of the course of the postoperative period in patients with disseminated forms of tuberculosis and nonspecific lung diseases] Radionov BV, et al. Klin Khir 1988;(10):5–7 (Eng. Abstr.) (Rus)

[Restoration of normal bronchial reactivity as a criterion of complete remission in chronic nonspecific lung diseases] Zamotaev IP, et al. Klin Med (Mosk) 1988 Sep;66(9):36–9 (Eng. Abstr.) (Rus)

[Disorders of microcirculation and problems of their correction in children with severe surgical pathology] Stepanova NA. Pediatriia 1989;(5):57–63 (Rus)

[Screening and detailed study of lung function in patients with pulmonary pathology] Nefedov VB. Probl Tuberk 1989;(4):9–11 (Eng. Abstr.) (Rus)

[Adaptive reactions of patients with chronic nonspecific lung diseases] Klapchuk VV, et al. Vrach Delo 1988 Sep;(9):80–2 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Attenuation of acute lung injury in septic guinea pigs by pentoxifylline. Ishizaka A, et al. Am Rev Respir Dis 1988 Aug;138(2):376–82

Ineffectiveness of high–dose methylprednisolone in preventing parenchymal lung injury and improving mortality in patients with septic shock. Luce JM, et al. Am Rev Respir Dis 1988 Jul;138(1):62–8

Preoperative spirometry before abdominal operations. A critical appraisal of its predictive value. Lawrence VA, et al. Arch Intern Med 1989 Feb;149(2):280–5 (142 ref.)

7th Congress of the European Society of Pneumology (SEP). Budapest, 5th–9th September, 1988. Lung and infection prevention and screening. Abstracts. Eur Respir J 1988;1 Suppl 2:191S–408S

Protective role of sulfhydryl reagents in oxidant lung injury. Patterson CE, et al. Exp Lung Res 1988;14 Suppl:1005–19 (36 ref.)

Infection control in the long–term healthcare facility. Smith PW. Geriatrics 1989 Aug;44 Suppl A:11–4

Immunoprophylaxis of Chlamydia trachomatis lymphogranuloma venereum pneumonitis in mice by oral immunization. Cui ZD, et al. Infect Immun 1989 Mar; 57(3):739–44

Comparative effect of tiaprofenic acid and piroxicam alone and as adjuvants to antibilharzial therapy on pulmonary granuloma in unsensitized mice. Botros SS, et al. Int J Immunopharmacol 1988;10(5):601–7

Chest wall restriction limits high airway pressure–induced lung injury in young rabbits. Hernandez LA, et al. J Appl Physiol 1989 May;66(5):2364–8

A comparison of pulmonary complications in spinal cord–injured patients treated with two modes of spinal immobilization. Borkowski C. J Neurosci Nurs 1989 Apr; 21(2):79–85

Periodic examination of South African mine workers [comment] Frumkin H, et al. J Occup Med 1989 Jun; 31(6):563–5. Comment on: J Occup Med 1988 Jul;30(7):580–6

Improved pulmonary function in chronic quadriplegics after pulmonary therapy and arm ergometry. Walker J, et al. Paraplegia 1989 Aug;27(4):278–83

[International Union against Tuberculosis and Lung Disease] Pallisgaard G. Ugeskr Laeger 1989 Feb 20;151(8):511–2 (Dan)

[Nosocomial pneumopathies in resuscitation. II. Preventive and curative treatment] Chabrol JL, et al. Cah Anesthesiol 1989 Mar–Apr;37(2):101–5 (78 ref.) (Fre)

[An open letter to pneumologists (letter)] Guérin JC, et al. Rev Mal Respir 1988;5(4):413–4 (Fre)

[Effects of anti–platelet aggregating agents on peplomycin induced pulmonary toxicity in mice] Okada M, et al. Nippon Gan Chiryo Gakkai Shi 1989 Apr 20;24(4):793–7 (Eng. Abstr.) (Jpn)

[Organization of fluorographic examinations of the population in large cities] Loviagin EV, et al.

Probl Tuberk 1989;(1):7–12 (Eng. Abstr.) (Rus)
[Organization of phthisiological and pulmonological services at industrial plants] Smirnova LA, et al. Probl Tuberk 1989; (4):6–9 (Eng. Abstr.) (Rus)
[Integral approach to the prevention of major chronic non-infectious diseases] Chazova LV, et al.
Sov Zdravookhr 1989;(1):3–7 (Eng. Abstr.) (Rus)
[Implementation of an integrated program of prevention of chronic nonspecific diseases in the Kaishiador region of the Lithuanian SSR] Misiavichene IS, et al.
Sov Zdravookhr 1989;(4):31–4 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Cavitary pulmonary nodules in atypical collagen disease and lupoid drug reaction. Report of two cases. Muren C, et al. Acta Radiol 1989 May–Jun;30(3):281–4
Chronic lung diseases: specific diagnosis by using CT. Bergin CJ, et al. AJR Am J Roentgenol 1989 Jun;152(6):1183–8
Leptospirosis of the lung: radiographic findings in 58 patients. Im JG, et al. AJR Am J Roentgenol 1989 May;152(5):955–9
The CT findings of pulmonary sarcoidosis: analysis of 25 patients. Müller NL, et al. AJR Am J Roentgenol 1989 Jun;152(6):1179–82
Positron emission tomography: theory and its application to the study of lung disease. Schuster DP.
Am Rev Respir Dis 1989 Mar;139(3):818–40 (157 ref.)
The value of postoperative chest radiology after major abdominal surgery. Cooper MH, et al. Anaesthesia 1989 Apr;44(4):306–9
Characteristic radiographic features of pulmonary carcinoma associated with large bulla. Tsutsui M, et al.
Ann Thorac Surg 1988 Dec;46(6):679–83 (11 ref.)
Pulmonary alveolar microlithiasis. Cheong WY, et al.
Australas Radiol 1988 Aug;32(3):401–4
General practitioner referrals for static miniature chest radiography: indications and diagnostic yield. Simpson FG, et al. Br J Dis Chest 1988 Jan;82(1):76–8
Computed tomography of diffuse lung disease. Hansell DM, et al. Br J Hosp Med 1989 Mar;41(3):269–73 (32 ref.)
Dynamic contrast enhancement of asbestos-related pulmonary pseudotumours. Taylor PM. Br J Radiol 1988 Nov;61(731):1070–2
Residents' corner. Answer to case of the month #1. Gastric sarcoidosis. Mathieson JR. Can Assoc Radiol J 1989 Jun; 40(3):181
Pulmonary angiitis and granulomatosis: a review. Weisbrod GL. Can Assoc Radiol J 1989 Jun;40(3):127–34 (125 ref.)
Interstitial lung disease in a young child. Aggarwal S, et al. Chest 1989 Aug;96(2):389–90
A migratory infiltrate in a patient with hemoptysis and chest pain. Ghio AJ, et al. Chest 1989 Jul;96(1):195–6
Computed tomography of the pulmonary parenchyma. An overview. Zerhouni E. Chest 1989 Apr;95(4):901–7 (39 ref.)
Urinary neopterin excretion in pulmonary sarcoidosis: correlation to clinical course of the disease. Prior C, et al. Clin Chim Acta 1988 Oct 31;177(3):211–20
The use of a modified direct coronal computed tomographic technique for assessing thoraco-abdominal problems. Bar-Ziv J, et al. Gastrointest Radiol 1989 Summer; 14(3):205–8
Ectopic herniation of pulmonary cyst. Raj B, et al.
Indian J Chest Dis Allied Sci 1988 Apr–Jun;30(2):136–40
"Single-exposure" dual energy digital radiography in the detection of pulmonary nodules and calcifications. Oestmann JW, et al. Invest Radiol 1989 Jul;24(7):517–21
Use of routine chest radiography in the evaluation of fever in neutropenic pediatric oncology patients. Feusner J, et al. J Clin Oncol 1988 Nov;6(11):1699–702
Computed tomography in pulmonary sarcoidosis. Lynch DA, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):405–10
The Fleischner lecture: computed tomography of diffuse pulmonary disease. Genereux GP. J Thorac Imaging 1989 Jul;4(3):50–87 (60 ref.)
Localization of inter-rib spaces for lung texture analysis and computer-aided diagnosis in digital chest images. Powell GF, et al. Med Phys 1988 Jul–Aug;15(4):581–7
About the "lung nodule" article [letter; comment] Klostermyer BV. N C Med J 1989 Jun;50(6):349–50, Comment on: N C Med J 1989 Apr;50(4):185–6
Idiopathic unilateral hyperlucent lung. Patel H, et al.
N J Med 1989 Jul;86(7):557–60 (16 ref.)
The computed tomographic spectrum of thoracic sarcoidosis. Kuhlman JE, et al. Radiographics 1989 May;9(3):449–66
Pulmonary sarcoidosis: what are we learning from CT? Austin JH. Radiology 1989 Jun;171(3):603–4 (22 ref.)
Pulmonary infection after cardiac transplantation: clinical and radiologic correlations. Austin JH, et al. Radiology 1989 Jul;172(1):259–65
Sarcoidosis: correlation of pulmonary parenchymal pattern at CT with results of pulmonary function tests. Bergin CJ, et al. Radiology 1989 Jun;171(3):619–24
Pulmonary sarcoidosis: evaluation with high-resolution CT. Brauner MW, et al. Radiology 1989 Aug;172(2):467–71
Pulmonary histiocytosis X: evaluation with high-resolution CT. Brauner MW, et al. Radiology 1989 Jul;172(1):255–8
Pulmonary sarcoidosis in the older patient: conventional radiographic features. Conant EF, et al. Radiology 1988 Nov;169(2):315–9
Premature bullous pulmonary damage in AIDS: CT diagnosis. Kuhlman JE, et al. Radiology 1989 Oct; 173(1):23–6
Asbestos-related focal lung masses: manifestations on conventional and high-resolution CT scans. Lynch DA, et al. Radiology 1988 Dec;169(3):603–7
The use of CT in the examination of asbestos-exposed persons [editorial] McLoud TC. Radiology 1988 Dec;169(3):862–3
Chronic diffuse infiltrative lung disease: comparison of diagnostic accuracy of CT and chest radiography. Mathieson JR, et al. Radiology 1989 Apr;171(1):111–6
Pulmonary histiocytosis X: comparison of radiographic and CT findings. Moore AD, et al. Radiology 1989 Jul; 172(1):249–54
Sarcoidosis: correlation of extent of disease at CT with clinical, functional, and radiographic findings. Müller NL, et al. Radiology 1989 Jun;171(3):613–8
Pulmonary parenchymal disease: evaluation with high-resolution CT. Murata K, et al. Radiology 1989 Mar; 170(3 Pt 1):629–35
Pulmonary parenchymal high-resolution CT: to be or not to be. Naidich DP. Radiology 1989 Apr;171(1):22–4 (42 ref.)
Pulmonary cysts associated with Pneumocystis carinii pneumonia in patients with AIDS. Sandhu JS, et al.
Radiology 1989 Oct;173(1):33–5
Roentgenographic chest examination in acquired immunodeficiency syndrome (AIDS). A review. Bighi S, et al. Rays 1988 Sep–Dec;13(3):23–6
Relationship of lung function to radiographic reading (ILO) in patients with asbestos related lung disease. Cotes JE, et al. Thorax 1988 Oct;43(10):777–83
Pulmonary alveolar microlithiasis (a case report). Kanra G, et al. Turk J Pediatr 1988 Jan–Mar;30(1):61–7
[X-ray manifestations of trichinosis on chest radiograph (analysis of 15 cases)] Pu FS.
Chung Hua Fang She Hsueh Tsa Chih 1989 Feb;23(1):21–2 (Eng. Abstr.) (Chi)
[Experience of selective bronchography using propyliodone] Zhang ZM. Chung Hua Fang She Hsueh Tsa Chih 1988 Aug;22(4):212–5 (Eng. Abstr.) (Chi)
[Lung cysts] Polák J, et al. Cesk Radiol 1988 Aug; 42(4):225–36 (Eng. Abstr.) (Cze)
[Sarcoidosis] van Proosdij JM, et al.
Tijdschr Kindergeneeskd 1989 Apr;57(2):49–53 (Eng. Abstr.) (Dut)
[Imaging of the lung] Kivisaari A, et al. Duodecim 1988; 104(6):364–70 (Fin)
[Radiologic case of the month. Pneumatocele on infected intrapulmonary hematoma] Alembik Y, et al.
Arch Fr Pediatr 1988 Oct;45(8):573–4 (Fre)
[The pure visceral form of Niemann-Pick disease in children. Review of the literature apropos of a case] Coussement A, et al. J Radiol 1988 Dec;69(12):783–5 (15 ref.) (Eng. Abstr.) (Fre)
[Thoracic x-ray computed tomography in pneumology] Grenier P. Presse Med 1988 Nov 19;17(41):2194–6 (13 ref.) (Eng. Abstr.) (Fre)
[A specific etiology of radiologic cannon balls: sarcoidosis. Apropos of a case] Blanc-Jouvan F, et al.
Rev Mal Respir 1988;5(6):629–31 (Eng. Abstr.) (Fre)
[Pulmonary alveolar microlithiasis in 2 brothers] Radosavljevic G, et al. Rev Pneumol Clin 1988;44(4):202–4 (Eng. Abstr.) (Fre)
[Pulmonary involvement in lymphangioleiomyomatosis: studies using high-resolution computed tomography] Guhl L. ROFO 1988 Dec;149(6):576–9 (Eng. Abstr.) (Ger)
[High-resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kullnig P, et al. ROFO 1989 Jul;151(1):32–5 (Eng. Abstr.) (Ger)
[Pulmonary actinomycosis simulating disseminated pulmonary changes] Szántó J, et al. Orv Hetil 1988 Dec 11;129(50):2691–2 (Eng. Abstr.) (Hun)
[Nodular manifestations in rheumatoid arthritis. Description of a particularly interesting case] Cialente M, et al.
Arch Monaldi Mal Torace 1987 May–Jun;42(3):231–41 (Eng. Abstr.) (Ita)
[A case of racemose osteoplastic pneumopathy] D'Andrea E, et al. Radiol Med (Torino) 1989 Jun;77(6):701–3 (Ita)
[Application of computed radiography for the diagnosis of chest diseases] Shida H. Kokyu To Junkan 1988 Oct; 36(10):1059–66 (Jpn)
[An experimental and clinical study of thin-slice high-resolution CT for lung detail] Otsuji H, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1989 Jan 25; 49(1):23–34 (Eng. Abstr.) (Jpn)
[A case of sarcoidosis beginning with extensive ground-glass pattern on chest X-ray, accompanied with high fever and eosinophilia] Nakano Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jan; 27(1):98–106 (Eng. Abstr.) (Jpn)
[Very low extension of the anterior segment of the right upper lobe and its diagnostic significance] Kubota H.
Rinsho Hoshasen 1988 Jun;33(6):667–72 (Eng. Abstr.) (Jpn)
[Pulmonary retention cysts] Marciniak M, et al.
Pneumonol Pol 1988 Jun;56(6):283–7 (Eng. Abstr.) (Pol)
[Sarcoidosis—its radiophotographic detection] Ionescu N, et al. Rev Ig [Pneumoftiziol] 1988 Oct–Dec;37(4):371–5 (Eng. Abstr.) (Rum)
[Circumscribed pulmonary hyperlucency with cystic and bullous aspects] Kaszonyi M, et al.
Rev Ig [Pneumoftiziol] 1988 Oct–Dec;37(4):351–70 (Eng. Abstr.) (Rum)
[Roentgenokymography in the diagnosis of disorders of heart and lung function in spontaneous pneumothorax] Gusev NM, et al. Grudn Khir 1988 May–Jun;(3):68–72 (Eng. Abstr.) (Rus)
[Differential diagnosis of cavitary lesions of the lungs] Vishnevskiĭ AA, et al. Klin Med (Mosk) 1988 Oct; 66(10):14–21 (57 ref.) (Rus)
[Differential x-ray diagnosis of disseminated tuberculosis and sarcoidosis of the lungs] Khomenko AG, et al.
Probl Tuberk 1989;(1):16–21 (Eng. Abstr.) (Rus)
[Determining the optimal frequency of preventive fluorographic examination of the population] Shefer LB, et al. Probl Tuberk 1989;(2):6–9 (Eng. Abstr.) (Rus)
[X-ray diagnosis of histiocytosis X] Khomenko AG, et al. Ter Arkh 1988;60(10):132–6 (Eng. Abstr.) (Rus)
[Interpretation of the pulmonary picture] Kamenetskiĭ MS, et al. Vestn Rentgenol Radiol 1988 May–Jun;(3):60–6 (Eng. Abstr.) (Rus)
[Computed tomography in the diagnosis of bullous diseases of the lungs] Todua FI, et al. Vestn Rentgenol Radiol 1988 May–Jun;(3):15–8 (Eng. Abstr.) (Rus)
[Radiodiagnostic features of the pulmonary form of Q fever] Aŝiku V. Med Pregl 1989;42(1–2):36–9 (Eng. Abstr.) (Scr)
[The clinical and roentgenologic picture of pulmonary changes in systemic sclerosis] Presetnik M, et al.
Plucne Bolesti 1988 Jul–Dec;40(3–4):118–20 (Eng. Abstr.) (Scr)
[Unusual clinical and radiologic manifestations in Q fever (letter)] Rodríguez JL, et al. Rev Clin Esp 1989 Feb; 184(3):160–1 (Spa)
[Diagnostic imaging in pulmonary pathology] Farga V.
Rev Med Chil 1988 Aug;116(8):811–3 (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

Spontaneous abrupt changes in the distribution of ventilation: a cause for apparent mismatching on ventilation/perfusion scintigraphy. Peters AM, et al. Br J Radiol 1989 Jun; 62(738):536–43
Uptake and kinetics of Tc-99m hexakis 2-methoxy isobutyl isonitrile in benign and malignant lesions in the lungs. Hassan IM, et al. Clin Nucl Med 1989 May;14(5):333–40
Thoracic gallium uptake in patients with lymphomatoid granulomatosis. Tien R, et al. Clin Nucl Med 1988 Dec; 13(12):886–8
Scintigraphic images of Swyer-James syndrome. Köbernik R, et al. Eur J Nucl Med 1988;14(4):217–9
99mTc-DTPA clearance measured by a dual head gamma camera in healthy subjects and patients with sarcoidosis. Studies of reproducibility and relation to bronchoalveolar lavage findings. Thunberg S, et al. Eur J Nucl Med 1989; 15(2):71–7
Differential diagnosis of solitary pulmonary nodules with positron emission tomography using [11C]L-methionine. Kubota K, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):794–6
Lung diseases—the use of labelled granulocytes. Lavender JP, et al. Nucl Med Commun 1988 Oct;9(10):703–5
Standardized quantitative 67Ga scintigraphy in pulmonary sarcoidosis. Alberts C, et al. Sarcoidosis 1988 Sep;5(2):111–8
[Inhalation scintigraphy of the lung using the new ultrafine aerosol Technegas (published erratum appears in Nuklearmedizin 1989 Jun;28(3):46)] Kropp J, et al.
Nuklearmedizin 1989 Apr;28(2):113–20 (Eng. Abstr.) (Ger)
[Use of radioactive aerosols in the diagnosis of lung diseases] Köhn H, et al. Prax Klin Pneumol 1988 Jul;42(7):514–7 (Eng. Abstr.) (Ger)
[Clinical assessment of uneven ventilation by factor analysis of Xe-133 washout scintigram] Honda N, et al.
Kaku Igaku 1989 Apr;26(4):507–13 (Eng. Abstr.) (Jpn)
[Factor analysis in pulmonary dynamic studies using N-isopropyl-p-[123I]iodoamphetamine] Kosuda S, et al. Kaku Igaku 1989 Feb;26(2):271–7 (Jpn)
[A measurement of V/V distribution by intravenous injection of Kr-81m and Tc-99m-MAA—a comparative study with Xe-133 inhalation method] Ohtani Y, et al. Kaku Igaku 1988 Apr;25(4):323–9 (Eng. Abstr.) (Jpn)
[Evaluation of lung scintigraphy using N-isopropyl-p-[123I]-iodoamphetamine] Shabana M.
Kaku Igaku 1989 Apr;26(4):515–22 (Eng. Abstr.) (Jpn)
[Evaluation of imaging of the ventilatory lung motion in pulmonary diseases] Fujii T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):833–41 (Eng. Abstr.) (Jpn)
[An analysis of regional ventilation in pulmonary sarcoidosis by inspired 133Xe washout test] Kohno Y, et al.
Radioisotopes 1988 Jun;37(6):325–9 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

[The use of microwave resonance therapy on patients with chronic nonspecific lung diseases] Dziublik AA, et al.
Vrach Delo 1989 Mar;(3):55–6 (Eng. Abstr.) (Rus)

REHABILITATION

Pulmonary rehabilitation: the use of aerobic dance as a therapeutic exercise for asthmatic patients. Wolf SI, et al. Ann Allergy 1988 Nov;61(5):357–60
Chest physiotherapy: time for reappraisal. Sutton PP.
Br J Dis Chest 1988 Apr;82(2):127–37 (88 ref.)
Integrating physiological principles into the comprehensive management of cardiopulmonary dysfunction. Ross J, et

al. **Phys Ther** 1989 Apr;69(4):255–9 (45 ref.)

[Doctrinal and methodological premises of the implementation of a rehabilitation program in a psychogeriatric center] Morosini C. **G Gerontol Suppl** 1967; 37:5–55 (Eng. Abstr.) **(Ita)**

[Low-frequency magnetotherapy in the rehabilitative treatment of patients with nonspecific lung diseases] Krupennikov AI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):26–31 **(Rus)**

[The sanatorium–health resort rehabilitation of patients with chronic nonspecific lung diseases on the southern coast of the Crimea] Perederil VI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb;(1):31–8 **(Rus)**

SURGERY

Effect on pulmonary function of surgical treatment of bullous lung disease. Haerens M, et al. **Acta Clin Belg** 1988; 43(5):362–73

The surgical management of empyema thoracis in substance abuse patients: a 5–year experience. Hoover EL, et al. **Ann Thorac Surg** 1988 Nov;46(5):563–6

Surgical resection for complications of pulmonary tuberculosis. Reed CE, et al. **Ann Thorac Surg** 1989 Aug; 48(2):165–7

Epidural anesthesia in patients undergoing thoracic surgery. Temeck BK, et al. **Arch Surg** 1989 Apr;124(4):415–8

Laser–assisted parenchyma–sparing pulmonary resection. LoCicero J 3d, et al. **J Thorac Cardiovasc Surg** 1989 May; 97(5):732–6

Joint session of the German Society for Vascular Surgery and the German Society for Thoracic and Cardiovascular Surgery. (18th annual meeting). February 23–February 25, 1989, Munich. Abstracts. **Thorac Cardiovasc Surg** 1989 Feb; 37 Suppl 1:1–92 **(Eng, Ger)**

Torsion of a lung lobe: diagnosis and treatment. Larsson S, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):281–3

[Analysis of 57 cases of unilateral diseased lungs treated by pleuropneumonectomy] Wei CK, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):25–6, 60 (Eng. Abstr.) **(Chi)**

[2 cases of pulmonary excision in patients with acquired immunodeficiency syndrome. What is the role of surgery in AIDS?] Velly JF, et al. **Ann Chir** 1989;43(2):142–6 (Eng. Abstr.) **(Fre)**

[Surgical treatment of giant bullae] Kikuchi K. **Kokyu To Junkan** 1988 Aug;36(8):841–5 **(Jpn)**

[Emergency operation in impending rupture of aortic arch dissecting aneurysm—a case report of dissecting aortic aneurysm with adhesion to the lung after lobectomy] Hata T, et al. **Kyobu Geka** 1989 Feb;42(2):164–8 (Eng. Abstr.) **(Jpn)**

[A surgical case of bronchogenic cyst existing continuously in the intrapulmonary and posterior mediastinal regions] Nishioka E, et al. **Kyobu Geka** 1988 Dec;41(13):1082–4 (Eng. Abstr.) **(Jpn)**

[A case of traumatic heart and lung hernia] Yokokawa H, et al. **Kyobu Geka** 1988 Nov;41(12):1003–5 (Eng. Abstr.) **(Jpn)**

[Registration of a diagnosis in complications of surgical treatment of diseases of the lungs and heart] Kovalenko LV, et al. **Arkh Patol** 1988;50(6):57–61 (Eng. Abstr.) **(Rus)**

[The CO2 laser in the surgical treatmeat of suppurative processes in the lungs] Brekhov EI, et al. **Grudn Khir** 1989 Mar–Apr;(2):48–51 (Eng. Abstr.) **(Rus)**

[Changes in pulmonary ventilation and central hemodynamics in the postoperative period in patients with disseminated forms of tuberculosis and nonspecific lung diseases] Radionov BV, et al. **Grudn Khir** 1988 Jul–Aug; (4):54–6 (Eng. Abstr.) **(Rus)**

[Evaluation of the blood supply to the bronchial stump following resection of the lungs using a mechanical suture in the diagnosis and treatment of pulmonary hemorrhage] Volynskiĭ IuD, et al. **Grudn Khir** 1989 Jan–Feb;(1):52–5 (Eng. Abstr.) **(Rus)**

[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):68–72 (Eng. Abstr.) **(Rus)**

[Lung resection of isolated pseudotumorous amyloidosis] Marchuk IK, et al. **Klin Khir** 1988;(10):58 **(Rus)**

[Pulmonary lobectomy in a female patient with idiopathic pulmonary hemosiderosis] Frishman MN, et al. **Pediatriia** 1988;(6):97–8 **(Rus)**

[Resonance stimulation of regional ventilation of the lungs by sound vibration in the prevention of acute respiratory insufficiency] Bentsianov AD, et al. **Probl Tuberk** 1989; (2):61–5 **(Rus)**

THERAPY

Home oxygen therapy for chronic lung disease in extremely low–birth–weight infants. Hudak BB, et al. **Am J Dis Child** 1989 Mar;143(3):357–60

Evaluation of clinical competence in pulmonary disease. Hudson LD, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):1034–5

The impact of AIDS on pulmonary health care manpower [editorial] Snider GL. **Am Rev Respir Dis** 1988 Nov; 138(5):1101–2

Mandatory minute volume weaning in patients with pulmonary pathology. Davis S, et al. **Anaesth Intensive Care** 1989 May;17(2):170–4

Minitracheotomy in children. The management of sputum retention in older children by minitracheotomy. Allen PW, et al. **Anaesthesia** 1988 Sep;43(9):760–1

Chest physiotherapy [letter; comment] **BMJ** 1989 Mar 25; 298(6676):826–7. **Comment on:** BMJ 1989 Mar 4;298(6673):541–2

Chest physiotherapy [see comments] Selsby DS. **BMJ** 1989 Mar 4;298(6673):541–2 (36 ref.). **Comment in:** BMJ 1989 Mar 25;298(6676):826–7

Controversies in the management of pulmonary disease due to cystic fibrosis. Fick RB Jr, et al. **Chest** 1989 Jun; 95(6):1319–27 (50 ref.)

One–lung high–frequency ventilation in the management of an acquired neonatal pulmonary cyst. Randel RC, et al. **J Perinatol** 1989 Mar;9(1):66–8

Psychosocial management of chronic lung disorders. Singer L, et al. **Pediatrician** 1988;15(1–2):29–36 (67 ref.)

[Therapeutic leukapheresis in a leukostasis syndrome complicating chronic lymphoid leukemia] Alcalay D, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:53–4 (Eng. Abstr.) **(Fre)**

[Nosocomial environment in lung diseases: mycological aspects] Palmas F, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug;38(3–4):271–8 (Eng. Abstr.) **(Ita)**

[Therapeutic strategies of giant lung cyst] Uchida K, et al. **Kokyu To Junkan** 1988 Aug;36(8):827–31 **(Jpn)**

[Successful treatment of giant bulla by drainage with balloon catheter] Uyama T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2336–9 (Eng. Abstr.) **(Jpn)**

[Plasmapheresis in the combination therapy of patients with pyogenic destructive diseases of the lungs and pleura] Alekseeva ME, et al. **Grudn Khir** 1989 Jan–Feb;(1):59–62 (Eng. Abstr.) **(Rus)**

[Temporary endobronchial occlusion in surgical diseases of the lungs] Dotsenko AP, et al. **Grudn Khir** 1988 Nov–Dec; (6):59–62 (Eng. Abstr.) **(Rus)**

[Temporary occlusion of the bronchi in the treatment of complex suppurative destruction of the lungs] Gredzhev AF, et al. **Grudn Khir** 1989 Mar–Apr;(2):41–4 (Eng. Abstr.) **(Rus)**

[Modeling of pulmonary cysts and a method of their treatment] Ismailov DA, et al. **Grudn Khir** 1989 Jan–Feb; (1):48–52 (Eng. Abstr.) **(Rus)**

[Hemosorption in the complex therapy of severe forms of acute pneumonia and infectious destruction of the lungs] Levashev IuN, et al. **Grudn Khir** 1989 Mar–Apr;(2):51–5 (Eng. Abstr.) **(Rus)**

[Complex laser therapy of bacterial destruction of the lungs in children] Losev AA, et al. **Klin Khir** 1989;(6):52–3 (Eng. Abstr.) **(Rus)**

[Differentiated therapy of chronic nonspecific lung diseases] Dvoretskiĭ LI, et al. **Klin Med (Mosk)** 1988 Sep; 66(9):133–40 **(Rus)**

[10–year activities of the Leningrad inter–regional pediatric pulmonological center] Orlova NV, et al. **Pediatriia** 1988; (7):77–9 **(Rus)**

[Ambulatory care of patients with sarcoidosis] Kachurovskaia OS, et al. **Probl Tuberk** 1989;(5):62–5 **(Rus)**

[Integration of phthisiology and pulmonology in rural areas] Starchak AV. **Probl Tuberk** 1989;(2):58–60 **(Rus)**

[Angiographic diagnosis and roentgeno–endovascular surgery of disorders of the bronchial–pulmonary blood circulation in chronic nonspecific diseases of the lung] Grigor'ev EG, et al. **Vestn Rentgenol Radiol** 1988 May–Jun; (3):50–5 (Eng. Abstr.) **(Rus)**

[Comparative effectiveness of the sanatorium treatment of patients with bronchopulmonary diseases in the Leningrad health resort zone and at the climatotherapy sanatoria of Yalta and Kislovodsk] Filimonova GP, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):29–31 (Eng. Abstr.) **(Rus)**

URINE

Urinary neopterin in pulmonary sarcoidosis. Relationship to clinical and biologic assessment of the disease. Lacronique J, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1474–8

VETERINARY

Efficacy of water vapor–saturated air in the treatment of exercise–induced pulmonary hemorrhage in Thoroughbred racehorses. Sweeney CR, et al. **Am J Vet Res** 1988 Oct; 49(10):1705–7

Molecular cloning of complementary DNA from a pneumopathic strain of bovine viral diarrhea virus and its diagnostic application. Brock KV, et al. **Can J Vet Res** 1988 Oct;52(4):451–7

Correlation of humoral immune response with clinical presentation, pulmonary lesions and mortality patterns of goats experimentally infected with peste des petits ruminants virus. Olaleye OD, et al. **Cytobios** 1989; 57(230–231):141–7

Comparison of transtracheal aspirate and bronchoalveolar lavage cytology in 50 horses with chronic lung disease. Derksen FJ, et al. **Equine Vet J** 1989 Jan;21(1):23–6

Exercise–induced pulmonary hemorrhage in horses [letter] Brown CM. **J Am Vet Med Assoc** 1988 Sep 15;193(6):614–5

Microlithiasis associated with chronic bronchopneumonia in a cat. Brummer DG, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1061–4

Disseminated hemangiosarcoma in a horse. Johnson JE, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1429–31

Breath sound terminology in the veterinary literature. Roudebush P, et al. **J Am Vet Med Assoc** 1989 May 15; 194(10):1415–7

Ultrasonography of noncardiac thoracic diseases in small animals. Stowater JL, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):514–20 (30 ref.)

A histopathological study of pulmonary infection of mice with Mycobacterium lepraemurium. Ha DK, et al. **J Comp Pathol** 1988 Nov;99(4):421–9

Studies on the prevalence and the transmission of lung and stomach nematodes of the wild boar (Sus scrofa) in France. Humbert JF, et al. **J Wildl Dis** 1989 Jul;25(3):335–41

Immunohistochemical localisation of alpha–1–protease inhibitor in the horse. Winder NC, et al. **Res Vet Sci** 1989 May;46(3):354–7

Cardiopulmonary disease in the geriatric dog and cat. Miller MS, et al. **Vet Clin North Am [Small Anim Pract]** 1989 Jan;19(1):87–102 (16 ref.)

Pulmonary alveolar microlithiasis in Afghan pika (Ochotona rufescens rufescens). Madarame H, et al. **Vet Pathol** 1989 Jul;26(4):333–7

Comparison of respiratory secretion cytology and pulmonary histology in horses. Winder NC, et al. **Zentralbl Veterinarmed [A]** 1989 Jan;36(1):32–8

[The disposition and clearance of inhaled bacteria (Staphylococcus aureus) in the lungs of piglets] Kastner P, et al. **Arch Exp Veterinarmed** 1989 May;43(3):379–89 (Eng. Abstr.) **(Ger)**

[The dust and microbial content in a horse stable during the use of a dust–binding agent] Hartung J, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):368–70 (Eng. Abstr.) **(Ger)**

[Determination of complement in serum and tracheobronchial secretions of horses with chronic lung diseases] Grünig G, et al. **Schweiz Arch Tierheilkd** 1988 Oct;130(10):571–81 (Eng. Abstr.) **(Ger)**

LUNG DISEASES, FUNGAL

31st Annual Aspen Lung Conference: Infections and the lung. Aspen, Colorado. **Chest** 1989 Mar;95(3 Suppl):171S–242S

Allergic bronchopulmonary aspergillosis and fungoses. Greenberger PA. **Clin Chest Med** 1988 Dec;9(4):599–608 (51 ref.)

Histoplasmosis. Dijkstra JW. **Dermatol Clin** 1989 Apr; 7(2):251–8 (67 ref.)

Aspergillosis. Bodey GP, et al. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):413–37 (183 ref.)

Coccidioidomycosis. Bronnimann DA, et al. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):466–73 (78 ref.)

Blastomycosis. Davies SF, et al. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):474–9 (26 ref.)

Aspergillosis. Levitz SM. **Infect Dis Clin North Am** 1989 Mar;3(1):1–18 (141 ref.)

Clinical manifestations of pulmonary Aspergillus infections. Beaumont F. **Mycoses** 1988;31 Suppl 2:15–20 (14 ref.)

Chronic pulmonary histoplasmosis with an oral lesion. Cobb CM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):73–6

Community–acquired fungal pneumonias. Johnson PC, et al. **Semin Respir Infect** 1989 Mar;4(1):56–63 (44 ref.)

[A retrospective study of 115 cases of fungal pneumonia] Xu XQ, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan; 28(1):7–10, 60 (Eng. Abstr.) **(Chi)**

[Pneumopathy of unknown etiology in chronic lymphatic leukemia] Zuber M, et al. **Schweiz Rundsch Med Prax** 1988 Dec 6;77(49):1348–54 (9 ref.) (Eng. Abstr.) **(Ger)**

[Pulmonary megamycetoma. Case contribution] Motta GB, et al. **Minerva Chir** 1988 Apr 15;43(7):639–44 (Eng. Abstr.) **(Ita)**

[Diagnostic and therapeutic surgery of pulmonary mycoses] Zotti EF, et al. **Minerva Chir** 1989 Feb 15;44(3):387–90 (17 ref.) **(Ita)**

COMPLICATIONS

Experimental pulmonary histoplasmosis and emphysema. Graybill JR, et al. **Am Rev Respir Dis** 1988 May; 137(5):1193–7

Allogeneic bone marrow transplantation after partial lobectomy for aspergillosis of the lung. Schattenberg A, et al. **Bone Marrow Transplant** 1988 Sep;3(5):509–12

Calcification in bronchopulmonary sequestration. Samuels T, et al. **Can Assoc Radiol J** 1989 Apr;40(2):106–7

Pulmonary phaeohyphomycosis in a patient with hemoptysis. Barenfanger J, et al. **Chest** 1989 May;95(5):1158–60

Bilateral cavitary lung disease in a 29–year–old woman. MacLean JA, et al. **Chest** 1989 Sep;96(3):657–8

Factors associated with fatal hemoptysis in cancer patients. Panos RJ, et al. **Chest** 1988 Nov;94(5):1008–13

Trichosporon beigelii pneumonia in a neutropenic patient. Marin J, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):631–3

Saccharomyces cerevisiae pneumonia in a patient with acquired immune deficiency syndrome. Tawfik OW, et al. **J Clin Microbiol** 1989 Jul;27(7):1689–91 (12 ref.)

Invasive aspergillosis: an unusual manifestation of AIDS. Asnis DS, et al. **N Y State J Med** 1988 Dec;88(12):653–5

Empyema associated with pulmonary sporotrichosis. Fields CL, et al. **South Med J** 1989 Jul;82(7):910–3

Mycobacterium xenopi infection and aspergilloma. Johnston ID. **Tubercle** 1988 Jun;69(2):139–43 (7 ref.)

[Aspergilloma and tuberculous sequestration] Auregan G, et al. **Rev Pneumol Clin** 1988;44(4):190–1 (Eng. Abstr.) (Fre)

[Pulmonary aspergilloma appearing early] Moutet A, et al. **Rev Pneumol Clin** 1988;44(4):187–9 (Eng. Abstr.) (Fre)

[CT studies of the lung in opportunistic infections] Roos N, et al. **Rontgenblatter** 1989 Jul;42(7):302–6 (20 ref.) (Eng. Abstr.) (Ger)

[A case of disseminated mucormycosis] Teggi A, et al. **Recenti Prog Med** 1989 Jun;80(6):308–13 (20 ref.) (Eng. Abstr.) (Ita)

[A case of suspected allergic granulomatous angiitis following allergic bronchopulmonary fungal disease] Hagiwara O, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1224–8 (Eng. Abstr.) (Jpn)

[Successful management of massive hemoptysis, following pulmonary mycosis by bronchial artery embolization in a patient with acute lymphoblastic leukemia] Kamesaki H, et al. **Rinsho Ketsueki** 1989 Apr;30(4):563–7 (Eng. Abstr.) (Jpn)

[The successful surgery of lung abscess formed from pulmonary aspergilloma in a patient with recurrence of acute promyelocytic leukemia during remission induction therapy] Nishimura S, et al. **Rinsho Ketsueki** 1989 Jan; 30(1):84–8 (Eng. Abstr.) (Jpn)

CONGENITAL

Congenital candida pneumonia and sepsis: a case report and review of the literature. Gerberding KM, et al. **J Perinatol** 1989 Jun;9(2):159–61 (15 ref.)

DIAGNOSIS

Endogenous reactivation in blastomycosis. Ehni W. **Am J Med** 1989 Jun;86(6 Pt 2):831–2

Bronchoscopy in the diagnosis of pulmonary histoplasmosis. Prechter GC, et al. **Chest** 1989 May;95(5):1033–6

Pulmonary zygomycosis. A cause of positive lung scan diagnosed by bronchoalveolar lavage. Rozich J, et al. **Chest** 1989 Jan;95(1):238–40

Bronchoscopic aspect of pulmonary aspergilloma [letter] Verea-Hernando H, et al. **Chest** 1989 Mar;95(3):708–9

Aspergillus infection in the neutropenic host. Young LS. **Hosp Pract [Off]** 1989 May 30;24(5A):37–43

A profile of Aspergillus in lung diseases. Sahoo RC, et al. **J Assoc Physicians India** 1988 Dec;36(12):711–2

Pulmonary blastomycosis: a case report and review of the literature. Eleazer GP. **J S C Med Assoc** 1988 Nov; 84(11):535–9 (12 ref.)

Symptoms and routine laboratory abnormalities associated with coccidioidomycosis. Yozwiak ML, et al. **West J Med** 1988 Oct;149(4):419–21

[Pulmonary cryptococcosis: a current problem] Hotermans G, et al. **Rev Med Liege** 1988 Nov 1;43(21):698–703 (Fre)

[Coccidioidomycosis—differential diagnosis of lung infiltrates with peripheral eosinophilia] Koepke A, et al. **Dtsch Med Wochenschr** 1989 Feb 10;114(6):218–21 (Eng. Abstr.) (Ger)

[Pulmonary tuberculosis and mycotic infection—clinical and serological diagnosis] Iwata H, et al. **Kekkaku** 1989 Jan; 64(1):7–13 (Eng. Abstr.) (Jpn)

[Serological diagnosis of pulmonary aspergillosis by ELISA] Yamamoto S, et al. **Kekkaku** 1989 Jan;64(1):15–24 (Eng. Abstr.) (Jpn)

[A rare case of actinomycosis] Ishihara S, et al. **Kyobu Geka** 1988 May;41(6):529–31 (Eng. Abstr.) (Jpn)

[A case report of thoracic foreign body resembling fungus ball on chest X-P] Sasai T, et al. **Kyobu Geka** 1989 Feb; 42(2):138–40 (Eng. Abstr.) (Jpn)

[A case of primary pulmonary cryptococcosis, showing diffuse infiltrative shadows in bilateral lung fields] Kobayashi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun;26(6):674–9 (Eng. Abstr.) (Jpn)

[A case of primary pulmonary sporotrichosis] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):220–4 (Eng. Abstr.) (Jpn)

[Bronchopulmonary aspergillosis with pulmonary hypertension syndrome] Polushin OG. **Sov Med** 1988; (6):117–8 (Rus)

[Pulmonary histoplasmosis. Experience at the National Institute of Respiratory Diseases] Sada Díaz E, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):333–9 (Eng. Abstr.) (Spa)

[Serologic diagnosis of pulmonary mycoses caused by opportunistic organisms] López-Martínez R, et al. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):317–20 (Eng. Abstr.) (Spa)

DRUG THERAPY

Cerebral blastomycoma after ketoconazole therapy for respiratory tract blastomycosis. Pitrak DL, et al. **Am J Med** 1989 Jun;86(6 Pt 1):713–4

Aerosol amphotericin B is effective for prophylaxis and therapy in a rat model of pulmonary aspergillosis. Schmitt HJ, et al. **Antimicrob Agents Chemother** 1988 Nov; 32(11):1676–9

Cure of Curvularia pneumonia by amphotericin B in a patient with megakaryocytic leukemia [letter] Brubaker LH, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1178–9

Late dissemination of pulmonary blastomycosis during ketoconazole therapy. Hebert CA, et al. **Chest** 1989 Jan; 95(1):240–2

Chronic cavitary histoplasmosis. Failure of oral treatment with ketoconazole. Quinones CA, et al. **Chest** 1989 Apr; 95(4):914–6

Severe hemoptysis associated with pulmonary aspergilloma. Percutaneous intracavitary treatment. Shapiro MJ, et al. **Chest** 1988 Dec;94(6):1225–31

Fluconazole therapy for pulmonary mucormycosis complicating acute leukemia. Funada H, et al. **Jpn J Med** 1989 Mar–Apr;28(2):228–31

The treatment of aspergillosis and aspergilloma with itraconazole, clinical results of an open international study (1982–1987). De Beule K, et al. **Mycoses** 1988 Sep; 31(9):476–85

Multifocal systemic sporotrichosis with lobar pulmonary involvement. Velji AM, et al. **Scand J Infect Dis** 1988; 20(5):565–9 (13 ref.)

Itraconazole therapy for acute invasive pulmonary aspergillosis in heart transplantation. Faggian G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2506–7

[Clinical efficacy of fluconazole in the patient with pulmonary mycosis] Lee Y, et al. **Jpn J Antibiot** 1989 Jan; 42(1):138–43 (Eng. Abstr.) (Jpn)

[The clinical study of fluconazole against pulmonary mycosis. Effects of fluconazole on pulmonary cryptococcosis and aspergillosis, and its pharmacokinetics in patients] Nakashima M. **Jpn J Antibiot** 1989 Jan;42(1):127–37 (Eng. Abstr.) (Jpn)

[A clinical study of fluconazole in pulmonary aspergillosis] Yoneda R. **Jpn J Antibiot** 1989 Jan;42(1):40–6 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Studies on the epidemiology of Aspergillus fumigatus infections in a university hospital. Fanti F, et al. **Eur J Epidemiol** 1989 Mar;5(1):8–14

Incidence of nosocomial aspergillosis in patients with leukemia over a twenty-year period. Klimowski LL, et al. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):299–305

The spectrum of pulmonary aspergillosis. McCarthy G, et al. **Ir J Med Sci** 1988 Oct;157(10):316–20

Cluster of Malassezia furfur pulmonary infections in infants in a neonatal intensive-care unit. Richet HM, et al. **J Clin Microbiol** 1989 Jun;27(6):1197–200

ETIOLOGY

Geotrichosis: who is susceptible? [letter] Winer-Muram HT. **Chest** 1988 Dec;94(6):1315–6

Cunninghamella bertholletiae and Pneumocystis carinii pneumonia as a fatal complication of chronic lymphocytic leukemia. Reed AE, et al. **Hum Pathol** 1988 Dec; 19(12):1470–2

Pulmonary complications in diabetes mellitus. Hansen LA, et al. **Mayo Clin Proc** 1989 Jul;64(7):791–9 (57 ref.)

Disseminated Aspergillus terreus infection in immunocompromised hosts. Hara KS, et al. **Mayo Clin Proc** 1989 Jul;64(7):770–5

Invasive pulmonary aspergillosis. Report of a case. Salmassi S, et al. **Mo Med** 1986 Sep;83(9):626–30 (27 ref.)

Disseminated cryptococcosis in a patient with malignant lymphoma. Finke R, et al. **Mycoses** 1988;Suppl 1:102–8

Cunninghamella bertholletiae infection associated with deferoxamine therapy. Rex JH, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1187–94 (36 ref.)

[Obstructive bronchial aspergillosis of favorable course under corticoids in a HIV seropositive patient (letter)] Le Gros V, et al. **Ann Med Interne (Paris)** 1988;139(4):285–6 (Fre)

[Pulmonary aspergillomas and pancreatic localization in disseminated aspergillosis (letter)] Xerri L, et al. **Presse Med** 1988 Oct 1;17(33):1704 (Fre)

[Pulmonary mycosis as a complication of acute leukemia in the adult. Diagnostic study] Clini E, et al. **Recenti Prog Med** 1989 Mar;80(3):113–8 (Eng. Abstr.) (Ita)

[Invasive form of pulmonary aspergillosis in a patient with chronic lymphocytic leukemia successfully treated with amphotericin B] Korzeniewska-Kosela M, et al. **Pneumonol Pol** 1988 Aug;56(8):366–71 (Eng. Abstr.) (Pol)

[Mycotic complications in acute leukemia (personal observations and review of the literature)] Volkova MA, et al. **Ter Arkh** 1988;60(8):103–9 (57 ref.) (Eng. Abstr.) (Rus)

[An experimental model of pulmonary aspergillosis] Morozov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):14–7 (Eng. Abstr.) (Rus)

HISTORY

An early report of growth of an Aspergillus species on the wall of a lung cavity. Doyle L. **Thorax** 1989 Jan;44(1):66–7

IMMUNOLOGY

[Pulmonary cryptococcosis with spontaneous resolution—although with high serum cryptococcal antigen titer] Chen CH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):379–82 (Eng. Abstr.) (Chi)

MICROBIOLOGY

Multiseptate bodies in systemic phaeohyphomycosis diagnosed by fine needle aspiration cytology. Zaharopoulos P, et al. **Acta Cytol** 1988 Nov–Dec;32(6):885–91

Divergent patterns of pulmonary blastomycosis induced by conidia and yeasts in athymic and euthymic mice. Frey CL, et al. **Am Rev Respir Dis** 1989 Jul;140(1):118–24

Aspergillus terreus as a cause of invasive pulmonary aspergillosis. Moore CK, et al. **Chest** 1988 Oct;94(4):889–91

Mycological identification of pulmonary aspergilloma caused by Aspergillus oryzae with proliferating heads. Liao WQ, et al. **Chin Med J [Engl]** 1988 Aug;101(8):601–4

In vitro antifungal susceptibility of fungi isolated from respiratory tract of patients and other sources. Chaturvedi VP, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar; 30(1):36–40

Cavitating pneumonia due to Trichosporon beigelii in a patient with acute myeloid leukaemia. Santhosh-Kumar CR, et al. **J Infect** 1989 Jul;19(1):65–8

Morphological studies on clinical isolates of Aspergillus fumigatus. Leslie CE, et al. **J Med Vet Mycol** 1988; 26(6):335–41

Fatal pulmonary multiple infection with Aspergillus spec. and Candida tropicalis. Berger U, et al. **Mycoses** 1988;Suppl 1:39–46

[Yeasts: cause of infections of the respiratory tract?] Ringelmann R, et al. **Immun Infekt** 1989 Feb;17(1):13–7 (Eng. Abstr.) (Ger)

PATHOLOGY

Pulmonary consolidation with an air crescent sign in an immunocompromised woman [clinical conference] Silver SF, et al. **Can Assoc Radiol J** 1989 Jun;40(3):167–9

Invasive aspergillosis: clinical and pathological features of a new animal model. Spreadbury CL, et al. **J Med Vet Mycol** 1989;27(1):5–15

Sequential pathological studies in Japanese quails infected experimentally with Aspergillus fumigatus. Chaudhary SK, et al. **Mycopathologia** 1988 Sep;103(3):157–66

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 49–1988. A 40-year-old man with a persistent nodular density in the left lower lobe. **N Engl J Med** 1988 Dec 8;319(23):1530–7

[Cryptococcoma of the lung—a contribution to diagnosis and therapy] Schaberg T, et al. **Internist (Berlin)** 1988 Jul; 29(7):510–5 (49 ref.) (Ger)

[A clinicopathological study on opportunistic pulmonary mycoses] Tashiro T, et al. **Kansenshogaku Zasshi** 1988 Nov; 62(11):959–66 (Eng. Abstr.) (Jpn)

[An autopsy case of syndrome of overwhelming postsplenectomy infection with pulmonary hypertension and right ventricular failure] Yagi H, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):814–8 (Jpn)

[A case of pulmonary aspergillosis] Chernova TG, et al. **Probl Tuberk** 1988;(8):78 (Rus)

[A 64-year-old female patient with icterus and posterior development of a picture of right ocular disease (clinical conference)] Fernández-Guerrero M, et al. **Rev Clin Esp** 1989 May;184(9):485–92 (Spa)

PREVENTION & CONTROL

Nosocomial aspergillosis: how much protection for which patients? [editorial] Rhame FS. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):296–8

RADIOGRAPHY

Acute histoplasmosis: a modern appraisal. Ramírez Rivera J. **Bol Asoc Med P R** 1989 Mar;81(3):99–102

Unexplained right hilar mass. Darrow GL, et al. **Postgrad Med** 1989 Feb 1;85(2):241–2, 245

Late complications of tuberculosis. Kreel L. **Postgrad Med J** 1988 May;64(751):379–81

Solitary pulmonary granuloma with marked enhancement on dynamic CT scanning. Stark P, et al. **Radiologe** 1988 Oct; 28(10):489–90

Thoraco-pleural actinomycosis presenting like diffuse pulmonary embolism. Møller-Jensen B, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):284–6

[Bronchial arteriographic evaluation and surgical treatment of pulmonary aspergillosis] Lin CC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):436–43 (Eng. Abstr.) (Chi)

[The value of CT in the diagnosis and treatment of aspergilloma] Delplace PO, et al. **J Belge Radiol** 1988; 71(6):657–63 (Eng. Abstr.) (Fre)

[The computed tomographic spectrum of pulmonary aspergillosis] Kullnig P, et al. **Digitale Bilddiagn** 1988 Sep; 8(3):133–6 (Eng. Abstr.) (Ger)

[Paracoccidioidomycosis infections caused by an adventure vacation in the Amazon] Neveling F. **Prax Klin Pneumol** 1988 Sep;42(9):722–5 (Eng. Abstr.) (Ger)

[Aspergilloma in tuberculous cavities] Iwata H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug;

26(8):812–24 (Eng. Abstr.) (Jpn)
[Pulmonary cryptococcosis] Oba S, et al.
Rinsho Hoshasen 1989 Jan;34(1):155–6 (Jpn)
[A case of pulmonary aspergillosis followed with some radiologic observations] Yokoyama S, et al.
Rinsho Hoshasen 1988 Sep;33(9):1015–8 (Eng. Abstr.) (Jpn)

SURGERY

Survival of a recipient of renal transplantation after pulmonary phycomycosis. Hsu J, et al.
Ann Thorac Surg 1989 Apr;47(4):617–9
Surgery for pulmonary aspergilloma and pleural aspergillosis. Stamatis G, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):356–60
[Pulmonary aspergilloma. Opinions and surgical attitudes] Toty L. **Rev Pneumol Clin** 1988;44(4):163–5 (0 ref.) (Fre)
[Surgical exeresis in the therapy of pulmonary aspergilloma] Sgro M, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1205–8 (Eng. Abstr.) (Ita)
[A case of pulmonary mucormycosis accompanied by lymphocytic leukemia successfully treated by pulmonary lobectomy] Kondoh Y, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Apr;37(4):734–7 (14 ref.) (Eng. Abstr.) (Jpn)
[Surgical treatment of pulmonary aspergilloma] Saitoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1142–8 (Eng. Abstr.) (Jpn)

THERAPY

[Treatment of bronchopulmonary aspergilloma with Monaldi's endocavitary drainage and injections of amphotericin B. Apropos of 2 cases of bilateral aspergilloma] Gilbert P, et al. **Rev Pneumol Clin** 1988; 44(4):192–7 (Eng. Abstr.) (Fre)

TRANSMISSION

Invasive aspergillus infection: possible non-ward common source within the hospital environment. Hopkins CC, et al. **J Hosp Infect** 1989 Jan;13(1):19–25

VETERINARY

Pathologic, hematologic, and serologic changes in rabbits given T-2 mycotoxin orally and exposed to aerosols of Aspergillus fumigatus conidia. Niyo KA, et al.
Am J Vet Res 1988 Dec;49(12):2151–60
Invasive aspergillosis in an alpaca (Lama pacos). Severo LC, et al. **J Med Vet Mycol** 1989;27(3):193–5
Experimental aspergillosis in Japanese quails (Coturnix coturnix japonica). Clinical signs and haematological changes. Chaudhary SK, et al. **Mycopathologia** 1988 Jun; 102(3):179–84

LUNG DISEASES, OBSTRUCTIVE

Occupational exposures: evidence for a causal association with chronic obstructive pulmonary disease. Becklake MR.
Am Rev Respir Dis 1989 Sep;140(3 Pt 2):S85–91 (63 ref.)
Can today's treatment prevent tomorrow's obstruction? Flenley DC. **Br J Clin Pract Symp Suppl** 1988 Feb;59:25–38 (61 ref.)
Chronic airways disease—distribution and determinants, prevention and control. Reports and recommendations from a conference. October 6–7, 1988, Dubrovnik, Yugoslavia. **Chest** 1989 Sep;96(3 Suppl):301S–378S
Chronic obstructive pulmonary disease. Schneider SM.
Emerg Med Clin North Am 1989 May;7(2):237–54 (51 ref.)
Measuring health status in chronic airflow limitation. Guyatt G. **Eur Respir J** 1988 Jun;1(6):560–4
Carbon dioxide mandatory ventilation (CO2MV): a new method for weaning from mechanical ventilation. Description and comparative clinical study with I.M.V. and T. tube method in COPD patient. Chopin C, et al.
Int J Clin Monit Comput 1989 Jan;6(1):11–9
[Reduced or lost work capacity in chronic pneumopathies. Medicolegal evaluation trends in relation to the effects of the Law 222 of 6–12–1984] Serao F.
Arch Monaldi Mal Torace 1987 Mar–Apr;42(2):161–81 (Eng. Abstr.) (Ita)
[Occupational bronchopneumopathies] Sartorelli E.
G Clin Med 1988 Aug–Sep;69(8–9):483–92 (Ita)
[Algorithms and acute episodes of chronic obstructive lung disease] Martínez-Berganza Asensio A, et al.
Med Clin (Barc) 1988 Dec 10;91(20):788–95 (59 ref.) (Spa)

BLOOD

Do sleep studies contribute to the management of patients with severe chronic obstructive pulmonary disease? Connaughton JJ, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):341–4
Effect of exercise on atrial natriuretic peptide (ANP) levels in patients with COPD [letter] Nichol GM, et al.
Am Rev Respir Dis 1988 Aug;138(2):488
Correlates of arterial oxygenation during exercise in severe chronic obstructive pulmonary disease. D'Urzo AD, et al.
Chest 1989 Jan;95(1):13–7
Serum alpha 1 antitrypsin levels [letter] Bhambure NM, et al. **J Assoc Physicians India** 1988 Dec;36(12):742
Plasma and lipoprotein lipids and apolipoproteins AI, AII and B in patients with chronic airflow limitation. Bolton CH, et al. **J R Soc Med** 1989 Feb;82(2):91–2
Hemorrheologic changes in COPD patients with or without cor pulmonale. Wang TS, et al. **J Tongji Med Univ** 1988; 8(4):235–7
PaO2 increases with coughing in patients with chronic lung disease. Martinez W, et al. **Lung** 1988;166(5):287–91
Thyroid function and endocrine abnormalities in elderly patients with severe chronic obstructive lung disease [letter] Semple PD, et al. **Thorax** 1988 Nov;43(11):945–6
[Changes in the coagulation status of patients with chronic obstructive lung disease following the electrophoretic use of heparin] Marinov Kh, et al. **Vutr Boles** 1988;27(5):31–5 (Eng. Abstr.) (Bul)
[The changes in beta-adrenergic receptors and cyclic AMP levels of lymphocytes in patients with COPD] Gao DW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):27–9, 62 (Eng. Abstr.) (Chi)
[Demonstration of immunoreactive calcitonin in sera of lung cancer and COPD patients] Chen CF, et al.
Chung Hua I Hsueh Tsa Chih 1988 May;41(5):367–74 (Eng. Abstr.) (Chi)
[Chronic obstructive bronchopneumopathies. Changes in carbon dioxide pressure during sleep in environmental air and with oxygen] Aubry P, et al. **Presse Med** 1989 Apr 1;18(13):661–5 (Eng. Abstr.) (Fre)
[Oxygen saturation during sleep in chronic obstructive lung diseases before and after bronchodilator therapy. A controlled, prospective study in 36 patients] Schmid T, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1645–50 (Eng. Abstr.) (Ger)
[High plasma renin activity in chronic obstructive pulmonary disease] Nakano T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Oct; 26(10):1062–6 (Eng. Abstr.) (Jpn)
[Gas exchange and acid-base equilibrium of the blood in chronic obstructive lung diseases] Solomatin AS.
Sov Med 1989;(2):25–9 (62 ref.) (Rus)

CHEMICALLY INDUCED

Respiratory morbidity in workers exposed to asbestos in the primary manufacture of building materials. Robins TG, et al. **Am J Ind Med** 1988;14(4):433–48
Does aluminum smelting cause lung disease? Abramson MJ, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1042–57 (92 ref.)
Regional anomalies in chronic obstructive pulmonary disease; comparison with acid air pollution particulate characteristics. Winchester JW.
Arch Environ Contam Toxicol 1989 Jan–Apr; 18(1–2):291–306
Reversible airways obstruction and interstitial pneumonitis due to acetic acid. Rajan KG, et al. **Br J Ind Med** 1989 Jan;46(1):67–8
A case of chronic obstructive pulmonary disease after antimony exposure [letter] Gaillard MC, et al.
S Afr Med J 1988 Oct 15;74(8):426
[Timolol, betaxolol and befunolol in the treatment of glaucoma. Study of their bronchopulmonary effects] Pecori-Giraldi J, et al. **Fortschr Ophthalmol** 1988; 85(3):235–8 (Eng. Abstr.) (Ger)
[Allergenic, chemically irritating or toxic causes of obstructive respiratory tract disease] Krieger HG.
Off Gesundheitswes 1988 Aug–Sep;50(8–9):503–9 (39 ref.) (Eng. Abstr.) (Ger)

CLASSIFICATION

Difficulties in the classification of reversible obstructive airways disease. Ayres JG. **Br J Clin Pract Symp Suppl** 1987 Nov;53:53–8 (20 ref.)
Definitions and types of airflow limitation. Partridge MR. **Br J Clin Pract Symp Suppl** 1987 Nov;53:64–8 (9 ref.)
[Attempt at quantifying chronic respiratory tract disease] Harnoncourt K, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):491–2 (Eng. Abstr.) (Ger)

COMPLICATIONS

Microangiopathy of endoneurial vessels in hypoxemic chronic obstructive pulmonary disease (COPD). A quantitative ultrastructural study. Stoebner P, et al.
Acta Neuropathol (Berl) 1989;78(4):388–95
Nifedipine reduces pulmonary pressure and vascular tone during short- but not long-term treatment of pulmonary hypertension in patients with chronic obstructive pulmonary disease. Agostoni P, et al.
Am Rev Respir Dis 1989 Jan;139(1):120–5
Acute respiratory failure of chronic obstructive pulmonary disease. Derenne JP, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):1006–33 (454 ref.)
Hypoxemia during air travel in patients with chronic obstructive pulmonary disease. Dillard TA, et al.
Ann Intern Med 1989 Sep 1;111(5):362–7
Advising patients with pulmonary diseases on air travel. Gong H Jr. **Ann Intern Med** 1989 Sep 1;111(5):349–51 (19 ref.)
Aortic reconstruction in high-risk pulmonary patients. Robison JG, et al. **Ann Surg** 1989 Jul;210(1):112–7
Effect of triazolam on sleep and arterial oxygen saturation in patients with chronic obstructive pulmonary disease. Timms RM, et al. **Arch Intern Med** 1988 Oct; 148(10):2159–63
The effects of long term methyldopa in patients with hypoxic cor pulmonale. Evans TW, et al. **Br J Dis Chest** 1988 Oct; 82(4):405–13
Misdiagnosis of upper airway obstruction [letter] Steel A, et al. **Br J Hosp Med** 1989 May;41(5):498
Cor triatriatum masked by coexisting COPD in an adult. Leung WH, et al. **Chest** 1989 Sep;96(3):676–8
Rapidly progressive pneumonia in a patient with chronic obstructive pulmonary disease. Palmer LB, et al. **Chest** 1989 Jan;95(1):179–80
Sputum retention [letter] Stangel P. **Chest** 1989 Apr; 95(4):939–40
Comparison of once-daily cephalosporin regimens for community-acquired lower respiratory tract infections in patients with chronic lung disease. McCabe RE, et al.
Clin Ther 1989 May–Jun;11(3):304–14
Clinical trials with long-term treatment of pulmonary hypertension due to lung disease. Denolin H.
Eur Heart J 1988 Sep;9 Suppl J:29–32 (20 ref.)
Long-term treatment of chronic obstructive lung disease by Nifedipine: an 18-month haemodynamic study. Saadjian AY, et al. **Eur Respir J** 1988 Aug;1(8):716–20
Mexiletine for the treatment of ventricular arrhythmias associated with chronic obstructive pulmonary disease. Fracalossi C, et al. **G Ital Cardiol** 1989 Jan;19(1):46–52
Relative impact of smoking and reduced pulmonary function on peptic ulcer risk. A prospective study of Japanese men in Hawaii. Stemmermann GN, et al. **Gastroenterology** 1989 Jun;96(6):1419–24
Cough-induced syncope [clinical conference] Vincent JL, et al. **Intensive Care Med** 1988;14(6):591–4
Acute on chronic respiratory failure. Assessment and management of patients with COPD in the emergent setting. Schmidt GA, et al. **JAMA** 1989 Jun 16; 261(23):3444–53 (131 ref.)
One-year clinical study on nifedipine in the treatment of pulmonary hypertension in chronic obstructive lung disease. Vestri R, et al. **Respiration** 1988;54(2):139–44
Detection of pulmonary hypertension by Doppler echocardiography of the inferior vena cava in chronic airflow obstruction. Laaban JP, et al. **Thorax** 1989 May; 44(5):396–401
[The rule of changes in arterial blood gas in COPD patients with respiratory failure and efficacy of oxygen therapy] Rong ZS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug;11(4):199–201, 253 (Eng. Abstr.) (Chi)
[Advances in research on arrhythmia caused by chronic obstructive lung diseases] Sun ZL, et al.
Chung Hua Nei Ko Tsa Chih 1988 Mar;27(3):185–7 (16 ref.) (Eng. Abstr.) (Chi)
[Long-term study of disorders of heart rhythm in patients with chronic diseases of the respiratory system] Král B, et al. **Vnitr Lek** 1989 Jan;35(1):23–9 (Eng. Abstr.) (Cze)
[Smoking by young secondary school students and their parents; does it make a difference when a child has COPD?] Colombijn RM, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2057–60 (Eng. Abstr.) (Dut)
[Life threatening exacerbations of COPD in children] Frederikse WS, et al. **Ned Tijdschr Geneeskd** 1989 Jun 24; 133(25):1249–51 (Dut)
[Long-term treatment of pulmonary hypertension in chronic obstructive bronchopneumopathies with nifedipine. Hemodynamic study over 18 months] Saadjian A, et al.
Ann Cardiol Angeiol (Paris) 1989 Apr;38(4):197–202 (Eng. Abstr.) (Fre)
[Peripheral neuropathy in chronic bronchopathy. A study of 128 patients] Lerebours G, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:400–2 (Eng. Abstr.) (Fre)
[Treatment of nocturnal hypoxia in chronic obstructive bronchopneumopathies] Weitzenblum E, et al.
Prax Klin Pneumol 1988 Jun;42 Suppl 1:387–90 (Eng. Abstr.) (Fre)
[Left ventricular function in obstructive chronic bronchopneumopathy] Noseda A, et al. **Presse Med** 1989 May 13;18(19):967–71 (Eng. Abstr.) (Fre)
[Malnutrition and chronic obstructive bronchopathies] Aguilaniu B. **Rev Mal Respir** 1988;5(4):305–18 (78 ref.) (Eng. Abstr.) (Fre)
[Cough during the middle of the night—an early symptom of bronchial asthma?] Schlegel V. **Z Gesamte Inn Med** 1989 Jun 15;44(12):365–6 (Eng. Abstr.) (Ger)
[Precapillary arterial pulmonary hypertension and hemorrheologico-coagulation changes] Micillo E, et al.
Arch Monaldi Mal Torace 1987 Nov–Dec;42(6):585–91 (Eng. Abstr.) (Ita)
[Hypoxic pulmonary hypertension: nifedipine therapy] Agostoni P, et al. **Cardiologia** 1988 Oct;33(10):961–9 (Eng. Abstr.) (Ita)
[The treatment of arterial hypertension in the presence of bronchopneumopathies] Pessina AC, et al. **Cardiologia** 1988 Dec;33(12):1141–4 (18 ref.) (Eng. Abstr.) (Ita)
[Chronic respiratory insufficiency in the acute phase: a pathology of renewed resuscitation interest] Gritti G, et al. **Minerva Anestesiol** 1988 Nov;54(11):457–97 (116 ref.) (Ita)
[Evaluation using the Holter dynamic electrocardiographic method of arrhythmic phenomena in a group of patients with chronic respiratory disease] Chesi G, et al.
Minerva Cardioangiol 1988 May;36(5):211–4 (Eng. Abstr.) (Ita)
[Chronic obstructive bronchopneumopathy and ectodermal dysplasia] Ruggiero F, et al. **Pediatr Med Chir** 1988

May-Jun;10(3):251–4 (Eng. Abstr.) (Ita)
[Two cases of severe liver dysfunction (ischemic hepatopathy) associated with acute exacerbation of chronic obstructive lung disease] Nagai S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):760–5 (Eng. Abstr.) (Jpn)
[Nifedipine treatment of pulmonary hypertension as a complication of chronic obstructive diseases of the lungs] Paleev NR, et al. **Klin Med (Mosk)** 1989 Jun;67(6):117–20 (Rus)
[Disorders of the heart rhythm in patients with chronic obstructive lung diseases] Grosu AA, et al. **Ter Arkh** 1988; 60(12):133–6 (54 ref.) (Rus)
[Levels of blood theophylline in patients with acute bronchospasm] Martínez MJ, et al. **Rev Clin Esp** 1989 May; 184(9):470–2 (Eng. Abstr.) (Spa)

DIAGNOSIS

Longitudinal variability in airway responsiveness in a population-based sample of children and young adults. Intrinsic and extrinsic contributing factors. Redline S, et al. **Am Rev Respir Dis** 1989 Jul;140(1):172–8
Serum antioxidant activity as a determinant of pulmonary dysfunction in cigarette smokers. Bridges RB, et al. **Basic Life Sci** 1988;49:631–4
Air flow obstruction—what are the problems for the clinician? Howell JB. **Br J Clin Pract Symp Suppl** 1988 Feb;59:3–10 (18 ref.)
The diagnosis of obstructive lung disease. Koëter GH, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;59:17–9 (26 ref.)
The assessment of a computer administered questionnaire in the differential diagnosis of asthma and chronic airflow limitation. Bennett J, et al. **Br J Dis Chest** 1988 Jul; 82(3):268–73
Measurements of components of resistance to breathing. Chiang ST, et al. **Chest** 1989 Aug;96(2):307–11
Determinants of maximum exercise capacity in patients with chronic airflow obstruction. Dillard TA, et al. **Chest** 1989 Aug;96(2):267–71
Inventory of nutritional status in patients with COPD. Schols A, et al. **Chest** 1989 Aug;96(2):247–9
Comparison of PEFR and FEV1 in patients with varying degrees of airway obstruction. Effect of modest altitude. Vaughan TR, et al. **Chest** 1989 Mar;95(3):558–62
Single and multiple breath nitrogen wash-out—closing volume and volume of trapped gas for detection of early airway obstruction. Dahlqvist M, et al. **Clin Physiol** 1989 Aug;9(4):389–98
Chronic obstructive pulmonary disease. Flenley DC. **Dis Mon** 1988 Sep;34(9):537–99 (199 ref.)
Reproducibility of incremental maximal cycle ergometer tests in patients with mild to moderate obstructive lung diseases. Cox NJ, et al. **Lung** 1989;167(2):129–33
Effect of breathing pattern during inhalation challenge on the shape and position of the dose–response curve. Guillemi S, et al. **Lung** 1989;167(2):95–106
The influence of outliers on discrimination of chronic obturative lung disease. Krusińska E, et al. **Methods Inf Med** 1988 Oct;27(4):167–76
Mechanics of the ventilatory system in sedated infants: forced oscillations versus single-breath method. Marchal F, et al. **Pediatr Pulmonol** 1988;5(1):19–26
[A 5 to 10-year follow-up of patients with chronic obstructive pulmonary disease] Zhou XY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):271–4, 318 (Eng. Abstr.) (Chi)
[Use of prostanoids in the diagnosis and treatment of bronchial reactivity in children] Mrzena B, et al. **Cesk Pediatr** 1989 Jun;44(6):331–3 (Eng. Abstr.) (Cze)
[Promoting pneumologic basic diagnosis. Respiratory tract diseases are the cause of the majority of disability certificates—diagnosis with apparatus—possibilities for settlement] Schwing C. **Fortschr Med** 1989 Feb 10; 107(4):78–9 (Ger)
[Proceedings of the 2d Symposium on Oscillatory Measurement of Airway Resistance. Munich, 4–5 December 1988] **Pneumologie** 1989 Jul;43(7):319–409 (Ger)
[Oscillatory measurement of airway resistance with the custo vit in comparison with Oscillaire and whole body plethysmography] Fichter J, et al. **Pneumologie** 1989 Jul; 43(7):382–6 (Eng. Abstr.) (Ger)
[Report of a trial of polyfrequent oscillo-resistometry with the custo vit equipment] Glaser T, et al. **Pneumologie** 1989 Jul;43(7):369–75 (Eng. Abstr.) (Ger)
[Principle of solid-frequent oscillo-resistometry] Korn V. **Pneumologie** 1989 Jul;43(7):348–52 (Eng. Abstr.) (Ger)
[Theoretical and experimental studies of the diagnostic relevance and comparability of mechanical oscillation parameters] Müller E, et al. **Pneumologie** 1989 Jul; 43(7):339–47 (Eng. Abstr.) (Ger)
[Practical experiences with 2 oscillatory measuring procedures, Siregnost FD 5 and custo vit, in the assessment of chronic airway obstruction] Pleger E, et al. **Pneumologie** 1989 Jul;43(7):353–7 (Eng. Abstr.) (Ger)
[Expanded oscillo-resistometry—an independent method for studying lung function tests] Sebastiani O. **Pneumologie** 1989 Jul;43(7):363–8 (Eng. Abstr.) (Ger)
[Polyfrequent oscillometry measurement of airway resistance including the associated phase angle] Simm F. **Pneumologie** 1989 Jul;43(7):376–81 (Eng. Abstr.) (Ger)
[Optimizing monofrequent oscillometry] Smith HJ, et al. **Pneumologie** 1989 Jul;43(7):331–8 (Eng. Abstr.) (Ger)
[The value of pulsed Doppler echocardiography in noninvasive assessment of pulmonary hypertension in patients with chronic obstructive pulmonary disease] Burghuber OC, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):578–9 (Eng. Abstr.) (Ger)
[Improvement in measuring airway resistance by lowering the oscillatory frequency] Wuthe H, et al. **Prax Klin Pneumol** 1988 Nov;42(11):790–2 (Eng. Abstr.) (Ger)
[Evaluating lung function in medical practice] Keller R, et al. **Ther Umsch** 1988 Aug;45(8):559–67 (38 ref.) (Eng. Abstr.) (Ger)
[Diagnosis of chronic bronchopneumopathies in agriculture. Study Group of the Italian Medical Society of Occupational and Industrial Health] **G Ital Med Lav** 1988 Jan;10(1):3–18 (42 ref.) (Eng. Abstr.) (Ita)
[A case of chronic obstructive pulmonary disease associated with central alveolar hypoventilation diagnosed by exercise test] Fujiwara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):214–9 (Eng. Abstr.) (Jpn)
[Reaction of the bronchi to histamine provocation recorded by maximal expiratory flow-volume curves. I. Maximal expiratory flow rate (V'emax)] Pierzchała W, et al. **Pneumonol Pol** 1988 Jun;56(6):260–6 (Eng. Abstr.) (Pol)
[Characteristics of Doppler echocardiographic examination of the right heart in patients with lung diseases] Perlei VE, et al. **Klin Med (Mosk)** 1989 Jun;67(6):72–5 (Eng. Abstr.) (Rus)
[The use of standard microbial antigens in the serologic diagnosis of nonspecific diseases of the respiratory organs] Snitinskaia OS. **Lab Delo** 1989;(5):76–7 (Eng. Abstr.) (Rus)
[Obstructive syndrome in children with respiratory diseases] Bogadel'nikov IV, et al. **Pediatriia** 1988;(4):77–9 (Rus)
[Use of automatic systems for processing spirograms of patients with chronic nonspecific diseases of the lungs] Chumanskiĭ LI, et al. **Probl Tuberk** 1989;(3):73–5 (Rus)
[Experience with detecting patients with aspecific bronchopulmonary diseases at tuberculosis dispensaries] Korovkin VS, et al. **Probl Tuberk** 1988;(12):13–6 (Eng. Abstr.) (Rus)
[Detection of tuberculosis and nonspecific lung diseases in chemical industrial enterprises] Tolstykh SA. **Probl Tuberk** 1988;(10):8–13 (Eng. Abstr.) (Rus)
[Qualitative analysis of flow-volume curves of spirographic studies] Sil'vestrov VP, et al. **Ter Arkh** 1989;61(4):97–105 (Rus)

DRUG THERAPY

Inhaler technique in the elderly. Armitage JM, et al. **Age Ageing** 1988 Jul;17(4):275–8
Effects of withdrawal of sustained-release theophylline in patients with chronic obstructive lung disease. Aamodt T, et al. **Allergy** 1988 Aug;43(6):411–4
Effect of inhaled metaproterenol on exercise performance in patients with stable "fixed" airway obstruction. Berger R, et al. **Am Rev Respir Dis** 1988 Sep;138(3):624–9
Controversies in pulmonary medicine. Patients with COPD should be started initially on anticholinergic bronchodilators. Chapman KR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1074–5
Theophylline and diaphragmatic contractility. Investigation of a dose–response relationship. Foxworth JW, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1532–4
Interactive effects of systemically administered salbutamol and aminophylline in patients with chronic obstructive pulmonary disease. Georgopoulos D, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1499–503
Dose response to ipratropium as a nebulized solution in patients with chronic obstructive pulmonary disease. A three-center study. Gross NJ, et al. **Am Rev Respir Dis** 1989 May;139(5):1188–91
Absence of tachyphylaxis to inhaled atropine in patients with chronic obstructive pulmonary disease. Klaustermeyer WB, et al. **Am Rev Respir Dis** 1989 Sep;140(3):582–5
High-dose inhaled albuterol in severe chronic airflow limitation. Vathenen AS, et al. **Am Rev Respir Dis** 1988 Oct;138(4):850–5
Controversies in pulmonary medicine. Aminophylline should be administered for all acute exacerbations of COPD. Ziment I, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1070
A placebo-controlled comparison between the bronchodilatory effects of ipratropium bromide inhaled as a dry powder and by metered dose inhaler in chronic obstructive pulmonary disease. Gimeno F, et al. **Ann Allergy** 1988 Nov;61(5):341–3
Nebulised beclomethasone dipropionate in recurrent obstructive episodes after acute bronchiolitis. Carlsen KH, et al. **Arch Dis Child** 1988 Dec;63(12):1428–33
A comparison of the effect of ipratropium and albuterol in the treatment of chronic obstructive airway disease. Braun SR, et al. **Arch Intern Med** 1989 Mar;149(3):544–7
The use of theophylline in 'irreversible' chronic obstructive pulmonary disease. An update. Hill NS. **Arch Intern Med** 1988 Dec;148(12):2579–84 (91 ref.)
Aerosol bronchodilator delivery methods. Relative impact on pulmonary function and cost of respiratory care. Summer W, et al. **Arch Intern Med** 1989 Mar;149(3):618–23
Dose response relation to oral theophylline in severe chronic obstructive airways disease. Chrystyn H, et al. **BMJ** 1988 Dec 10;297(6662):1506–10
Response to oral theophylline in severe chronic obstructive airways disease [letter] Davidson AC, et al. **BMJ** 1989 Feb 25;298(6672):523–4
Is aminophylline useful in chronic obstructive pulmonary disease? When should corticosteroids be used? Figueroa Lebrón R. **Bol Asoc Med P R** 1988 Sep;80(9):340
Comparative study of the bronchodilating effects of (–)- and (+)-oxyphenonium bromide. Feitsma KG, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):683–7
Evidence of prednisolone induced mood change ('steroid euphoria') in patients with chronic obstructive airways disease. Swinburn CR, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):709–13
Nedocromil sodium: respiratory agent. Ayres JG. **Br J Clin Pract** 1987 Oct;41(10):971–3
A comparison of salbutamol and ipratropium in chronic bronchitis and chronic airflow limitation. Barnes D, et al. **Br J Clin Pract** 1988 Sep;42(9):372–6
Combined administration of controlled release theophylline and ranitidine: a 53-day controlled survey in patients with chronic obstructive lung disease (COLD) and peptic disease. Dal Negro R, et al. **Br J Clin Pract** 1987 Nov; 41(11):1004–8
Nedocromil sodium: a new therapeutic option for reversible obstructive airways disease. Orr TS. **Br J Clin Pract Symp Suppl** 1987 Nov;53:9–12 (10 ref.)
Terbutaline and diaphragm function in chronic obstructive pulmonary disease: a double-blind randomized clinical trial. Stoller JK, et al. **Br J Dis Chest** 1988 Jul;82(3):242–50
The use of high dose inhaled beclomethasone dipropionate as a means of assessing steroid responsiveness in obstructive airways disease. Wardman AG, et al. **Br J Dis Chest** 1988 Apr;82(2):168–71
A randomized controlled trial of methylprednisolone in the emergency treatment of acute exacerbations of COPD. Emerman CL, et al. **Chest** 1989 Mar;95(3):563–7
Almitrine decreases compliance of pulmonary arteries in COPD [letter] Hervé P, et al. **Chest** 1988 Nov; 94(5):1119–20
Effects of oral terbutaline in chronic airflow limitation. Maltbaek N, et al. **Chest** 1989 Jun;95(6):1248–52
The effects of nitrazepam and flunitrazepam on oxygen desaturation during sleep in patients with stable hypoxemic nonhypercapnic COPD. Midgren B, et al. **Chest** 1989 Apr; 95(4):765–8
Famotidine effects on theophylline pharmacokinetics in subjects affected by COPD. Comparison with cimetidine and placebo. Verdiani P, et al. **Chest** 1988 Oct;94(4):807–10
Serious infectious complications of corticosteroid therapy for COPD. Wiest PM, et al. **Chest** 1989 Jun;95(6):1180–4
The use of anticholinergic agents in the treatment of airways disease. Gross NJ. **Clin Chest Med** 1988 Dec;9(4):591–8
Preliminary study of the effects of postoperative methylprednisolone therapy on lung function recovery in patients with chronic obstructive pulmonary disease. Fraser IM, et al. **Clin Pharm** 1989 Mar;8(3):214–9
Use of ipratropium bromide in obstructive lung disease. Mann KV, et al. **Clin Pharm** 1988 Sep;7(9):670–80 (94 ref.)
Management of chronic obstructive pulmonary disease. Kesten S, et al. **Drugs** 1989 Jul;38(1):160–74 (74 ref.)
Dose-response and pharmacokinetic study with almitrine bismesylate after single oral administrations in COPD patients. Bury T, et al. **Eur Respir J** 1989 Jan;2(1):49–55
Effect of three different bronchodilators during an exacerbation of chronic obstructive pulmonary disease. Lloberes P, et al. **Eur Respir J** 1988 Jun;1(6):536–9
Portable oxygen therapy: use and benefit in hypoxaemic COPD patients on long-term oxygen therapy [published erratum appears in Eur Respir J 1989 Mar;2(3):292] Vergeret J, et al. **Eur Respir J** 1989 Jan;2(1):20–5
Rifampicin-isoniazid and delayed elimination of theophylline: a case report. Dal Negro R, et al. **Int J Clin Pharmacol Res** 1988;8(4):275–7
Chronopharmacodynamics and kinetics after symmetric and asymmetric multiple theophylline doses in patients with chronic obstructive pulmonary disease. Gimeno F, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):7–12
Depression, somatization and steroid use in chronic obstructive pulmonary disease. Gift AG, et al. **Int J Nurs Stud** 1989;26(3):281–6
Should study subjects see their previous responses: data from a randomized control trial. Guyatt GH, et al. **J Clin Epidemiol** 1989;42(9):913–20
Effect of nifedipine in chronic obstructive airways disease. Alkrishna B, et al. **J Indian Med Assoc** 1988 Nov; 86(11):295–7
Betaxolol in chronic obstructive pulmonary disease. Ofner S, et al. **J Ocul Pharmacol** 1987 Summer;3(2):171–6
A manifestation of theophylline toxicity. Williams J, et al. **J Tenn Med Assoc** 1989 Mar;82(3):127–8
Efficacy of flumazenil in COPD patient with therapeutic diazepam levels [letter] Appel M, et al. **Lancet** 1989 Feb 18;1(8634):392
Hazards of oxygen treatment in the ambulance [letter] Moore-Gillon J, et al. **Lancet** 1989 Apr 22;1(8643):904
Nebulised salbutamol with and without ipratropium bromide in acute airflow obstruction. O'Driscoll BR, et al. **Lancet** 1989 Jun 24;1(8652):1418–20
Reversing the irreversible [editorial] Drazen JM, et al. **N Engl J Med** 1989 Jun 8;320(23):1555–6
A randomized, controlled trial of theophylline in patients

with severe chronic obstructive pulmonary disease. Murciano D, et al. **N Engl J Med** 1989 Jun 8;320(23):1521–5

Arrhythmias during combined procaterol–aminophylline treatment. A review of the literature and a personal series with dynamic electrocardiography. Galietti F, et al. **Panminerva Med** 1988 Jul–Sep;30(3):173–6 (22 ref.)

The efficacy of inhaled beclomethasone in chronic obstructive airway disease. Hall TG, et al. **Pharmacotherapy** 1989;9(4):232–9

High dose ipratropium bromide—is it safe? Leak A, et al. **Practitioner** 1988 Jan;232(1441):9–10

Oral corticosteroids and histamine releasability of basophil granulocytes. Zimmermann I, et al. **Respiration** 1988; 54(2):115–8

Comparison of amoxycillin/clavulanate with amoxycillin in children and adults with chronic obstructive pulmonary disease and infection with Haemophilus influenzae. Jensen T, et al. **Scand J Infect Dis** 1988;20(5):517–24

Hypoxia, almitrine, and peripheral neuropathy. Howard P. **Thorax** 1989 Apr;44(4):247–50 (35 ref.)

Changes in day and night time oxygenation with protriptyline in patients with chronic obstructive lung disease. Sériès F, et al. **Thorax** 1989 Apr;44(4):275–9

Effect of diazepam on sleep in patients with chronic airflow obstruction. Wedzicha JA, et al. **Thorax** 1988 Sep; 43(9):729–30

[Intrapulmonary heparin] Huang SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):370–2 (17 ref.) (Chi)

[Treatment of chronic obstructive pulmonary disease with orally administered aminophylline] Zhong NS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):265–8, 317–8 (Eng. Abstr.) (Chi)

[Serum theophylline levels in chronic obstructive pulmonary disease patients receiving uniphyllin] Chang SC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):37–42 (Eng. Abstr.) (Chi)

[Effect of diltiazem on ventilation in healthy subjects and patients with chronic obstructive pulmonary disease] Zeng GB, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep; 27(9):548–50, 587 (Eng. Abstr.) (Chi)

[Hemodynamic effects of amrinone and comparison with dobutamine in patients with chronic respiratory insufficiency with pulmonary hypertension] Faitg R, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):333–7 (Fre)

[Effects of nifedipine in patients with chronic obstructive bronchitis and pulmonary hypertension undergoing artificial respiration] Turetta F, et al. **Ann Fr Anesth Reanim** 1989;8(3):267–72 (22 ref.) (Eng. Abstr.) (Fre)

[Naloxone and naltrexone in the treatment of chronic obstructive bronchopneumopathies (letter)] Caillaud D, et al. **Presse Med** 1988 Oct 29;17(38):2036 (Fre)

[Beta blocking drugs in chronic obstructive bronchopneumopathies] Durandet P, et al. **Rev Mal Respir** 1989;6(2):127–32 (25 ref.) (Eng. Abstr.) (Fre)

[Clinico–pharmacologic study of a new sustained–release oral salbutamol preparation in patients with obstructive airway disease] Bauer K, et al. **Arzneimittelforschung** 1989 Jul; 39(7):801–4 (Eng. Abstr.) (Ger)

[Modification of mucociliary clearance by a combination of theophylline with ambroxol and of ambroxol in monotherapy] Dorow P, et al. **Arzneimittelforschung** 1988 Jun;38(6):828–30 (Eng. Abstr.) (Ger)

[Recommendations for a stepwise plan of long–term drug therapy in obstructive airway diseases] Geisler LS. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1609–12 (Ger)

[Theophylline plus salbutamol in chronic bronchial obstruction. The additive effects of combination therapy in comparison with salbutamol monotherapy] Bossert J, et al. **Fortschr Med** 1989 Apr 10;107(11):255–8 (Eng. Abstr.) (Ger)

[Staged therapy of chronic obstructive respiratory tract diseases. Treatment of chronic obstructive respiratory tract diseases by the established physician] Hausen T. **Fortschr Med** 1989 Mar 20;107(9):210–3 (Eng. Abstr.) (Ger)

[Theophylline therapy: patient compliance and dosage. A clinical study] Kerschl J, et al. **Fortschr Med** 1988 Sep 20; 106(27):554–7 (Eng. Abstr.) (Ger)

[Bronchodilator effectiveness of theophylline] Kleinemeier HJ, et al. **Fortschr Med** 1988 Aug 20;106(24):499–502 (Eng. Abstr.) (Ger)

[Treatment of obstructive respiratory tract diseases. Principles of rational pharmacotherapy] Ulmer WT. **Fortschr Med** 1989 Jul 20;107(21):453–4 (Ger)

[Drugs of choice in obstructive respiratory tract diseases. Prof. Dr. med. Dr. h. c. W. T. Ulmer, Bochum, establishes the role of modern beta 2–sympathomimetic drugs and the possibility for new aerosol technics (interview)] Ulmer WT. **Fortschr Med** 1989 Mar 15;107(8):51 (Ger)

[The value of theophylline therapy in the treatment of obstructive respiratory tract diseases] Kublik A, et al. **Internist (Berlin)** 1988 Nov;29(11):727–33 (42 ref.) (Ger)

[Therapy of obstructive respiratory tract diseases. I: Beta 2–sympathomimetic drugs and anticholinergic agents (m–cholinergic receptor blockers)] Ukena D, et al. **Med Klin** 1989 Jun 15;84(6):294–302 (0 ref.) (Ger)

[Chronic obstructive respiratory tract diseases: standards and trends of antibiotic therapy] Feist H, et al. **Prax Klin Pneumol** 1988 Jul;42(7):529–32 (Eng. Abstr.) (Ger)

[Effect of prostaglandin El (alprostadil) on pulmonary hypertension in patients with chronic obstructive respiratory tract diseases (COPD)] Gassner A, et al. **Prax Klin Pneumol** 1988 Jul;42(7):521–4 (Eng. Abstr.) (Ger)

[Compliance improving measures in the treatment of obstructive lung diseases] Holzer R. **Prax Klin Pneumol** 1988 Jul;42(7):535–6 (Eng. Abstr.) (Ger)

[Increase of arterial oxygen pressure in therapy with theophylline in patients with obstructive ventilation disorder and partial respiratory insufficiency] Schmidt EW, et al. **Prax Klin Pneumol** 1988 Jul;42(7):600–2 (Eng. Abstr.) (Ger)

[Controlled treatment with a retard theophylline preparation] Wilke A, et al. **Prax Klin Pneumol** 1988 Jul;42(7):603–5 (Eng. Abstr.) (Ger)

[Comparative studies on the effectiveness of inhalant beta 2 mimetics therapy in patients with obstructive respiratory disorders] Würtemberger G, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:304–6 (Eng. Abstr.) (Ger)

[Inflammatory mediators in the pathogenesis of obstructive bronchial diseases: consequences for therapy] Hahn HL. **Verh Dtsch Ges Inn Med** 1988;94:364–75 (57 ref.) (Ger)

[Current problems of corticosteroid therapy in chronic obstructive respiratory tract diseases] Meister W. **Z Arztl Fortbild (Jena)** 1988;82(15):711–3 (16 ref.) (Ger)

[Effectiveness of aerosol treatment with spasmolytic agents of obstructive bronchitis in infancy and early childhood] Tatotschenko WK, et al. **Z Erkr Atmungsorgane** 1988; 171(2):168–74 (Eng. Abstr.) (Ger)

[Modification of pulmonary hypertension in patients with chronic obstructive lung diseases using calcium antagonists in an acute trial] Schauer J, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):50–4 (Eng. Abstr.) (Ger)

[Mezlocillin in bronchopneumopathy caused by neoplasm obstruction] Bruno CG. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):389–96 (Eng. Abstr.) (Ita)

[Use of a new delayed–release anhydrous theophylline by single daily administration in the treatment of reversible bronchial obstruction. Comparison with a delayed–release preparation administered twice daily] Baronti A, et al. **Clin Ter** 1987 Sep 30;122(6):437–40 (Eng. Abstr.) (Ita)

[Effectiveness and tolerance of a new molecule with secreto–dynamic activity: nesosteine] Gatto PG, et al. **Clin Ter** 1989 Jan 31;128(2):87–97 (Eng. Abstr.) (Ita)

[The grade of dyspnea in patients treated with a theophylline derivative (bamifylline) vs controlled–absorption theophylline] Giosuè S, et al. **Clin Ter** 1987 Dec 31; 123(6):457–63 (Eng. Abstr.) (Ita)

[Comparison of an antibiotic combination (amoxicillin + clavulanic acid) and cefaclor in the treatment of acute or flare–ups of chronic bronchopneumopathies] Moreo G, et al. **Clin Ter** 1988 Sep 30;126(6):411–6 (Eng. Abstr.) (Ita)

[Pirenzepine in the prevention of gastric intolerance to drugs used in pulmonary pathology] Guarino C, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):129–34 (Eng. Abstr.) (Ita)

[A controlled study on the action of a new formulation of ambroxol in asthmatiform bronchitis in children] Baldini G, et al. **Minerva Pediatr** 1989 Feb;41(2):91–5 (Eng. Abstr.) (Ita)

[Effect of the method of inhalation of Berodual on bronchodilation in patients over 60 years of age with diffuse bronchial obstruction] Czernicka–Cierpisz E, et al. **Pneumonol Pol** 1988 Oct;56(10):486–91 (Eng. Abstr.) (Pol)

[Combined treatment with selective beta1 adrenoblockaders and beta2 adrenostimulants in patients with myocardial infarction associated with chronic obstructive lung diseases] Aksel'rud MM, et al. **Kardiologiia** 1989 Jan; 29(1):78–83 (Eng. Abstr.) (Rus)

[Aerosol therapy of patients with lung diseases] Kokosov AN, et al. **Klin Med (Mosk)** 1988 Dec;66(12):108–13 (Rus)

[Use of euphylline and zaditen in the treatment of obstructive syndrome in children with allergic diathesis under ambulatory care] Sirenko OI, et al. **Pediatriia** 1988; (12):74–6 (Rus)

ENZYMOLOGY

[Changes of neutrophil elastase in COPD and the role of elastase in experimental pulmonary hypertension] Yan YZ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):324–6, 384 (Eng. Abstr.) (Chi)

[Elastase activity of the sputum and the functional activity of serum alpha 1–antitrypsin in patients with chronic obstructive pulmonary disease] Zhou SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):269–70, 318 (Eng. Abstr.) (Chi)

[Anti–elastolytic inhibitory capacity and IgA deficiency—contribution to the etiopathogenesis of COPD] Schultek T, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:307–8 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

Pulmonary functional impairment from years of arc welding. Kilburn KH, et al. **Am J Med** 1989 Jul;87(1):62–9

Trends in COPD morbidity and mortality in the United States. Feinleib M, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S9–18

Trends in COPD morbidity and mortality in Tecumseh, Michigan. Higgins MW, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S42–8

Respiratory hazards in hard metal workers: a cross sectional study. Meyer–Bisch C, et al. **Br J Ind Med** 1989 May; 46(5):302–9

Epidemiology of chronic airways diseases in Japan. Aoki M. **Chest** 1989 Sep;96(3 Suppl):343S–349S

Chronic airways disease in the United States. Trends and determinants. Higgins MW. **Chest** 1989 Sep;96(3 Suppl):328S–334S (26 ref.)

Chronic airways disease in the United Kingdom. Holland WW. **Chest** 1989 Sep;96(3 Suppl):318S–321S

Chronic airways disease in Poland. Recent trends. Wojtyniak B, et al. **Chest** 1989 Sep;96(3 Suppl):324S–328S

Epidemiology of chronic airways disease. Woolcock AJ. **Chest** 1989 Sep;96(3 Suppl):302S–306S

Epidemiologic studies of chronic respiratory diseases in some regions of China. Yan BY. **Chest** 1989 Sep;96(3 Suppl):339S–343S (30 ref.)

The epidemiology of respiratory tract pathogens in southern Netherlands. Davies BI, et al. **Eur Respir J** 1988 May; 1(5):415–20

Lung function in allogeneic bone marrow transplantation recipients. Rodríguez–Roisin R, et al. **Eur Respir J** 1989 Apr;2(4):359–65

Prevalence of benign oesophageal disease in the Danish population with special reference to pulmonary disease. Andersen LI, et al. **J Intern Med** 1989 Jun;225(6):393–402

Chronic obstructive lung disease in Copenhagen: cross–sectional epidemiological aspects. Lange P, et al. **J Intern Med** 1989 Jul;226(1):25–32

[The incidence and social medicine significance of chronic obstructive respiratory tract diseases in West Germany] Lauber B. **Pneumologie** 1989 Jan;43(1):10–9 (Eng. Abstr.) (Ger)

[The status of bronchitis in general practice of the established pneumologist (1953–1987)] Nödl N. **Prax Klin Pneumol** 1988 Jul;42(7):540–1 (Eng. Abstr.) (Ger)

[Epidemiology of chronic respiratory tract diseases in childhood] Wunderlich P. **Prax Klin Pneumol** 1988 Jul; 42(7):453–5 (Eng. Abstr.) (Ger)

[Chronic obstructive bronchopneumopathy in respiratory pathology in Taranto] Salamino V, et al. **Clin Ter** 1988 Jul 15;126(1):35–41 (Eng. Abstr.) (Ita)

[Prevalence and clinico–functional diagnosis of chronic nonspecific diseases of the lungs among the rural population of Uzbekistan] Ismailov ShU, et al. **Probl Tuberk** 1989; (6):19–21 (Eng. Abstr.) (Rus)

[Respiratory morbidity in the industrial region of Tarragona] Orozco López P. **Gac Sanit** 1988 Jan–Feb;2(4):22–5 (Eng. Abstr.) (Spa)

ETHNOLOGY

Ethnic differences in the prevalence of pulmonary airflow obstruction among grain workers. Horne SL, et al. **Chest** 1989 May;95(5):992–6

ETIOLOGY

Chronic respiratory disorders related to farming and exposure to grain dust in a rural adult community. Manfreda J, et al. **Am J Ind Med** 1989;15(1):7–19

Respiratory symptoms and ventilatory capacity in soy bean workers. Zuskin E, et al. **Am J Ind Med** 1988;14(2):157–65

Alcohol consumption and chronic obstructive pulmonary disease. Garshick E, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):373–8

The role of allergy and nonspecific airway hyperresponsiveness in the pathogenesis of chronic obstructive pulmonary disease. O'Connor GT, et al. **Am Rev Respir Dis** 1989 Jul;140(1):225–52 (227 ref.)

Viruses and airborne allergens as precipitants of obstructive respiratory difficulties in children. Korppi M. **Ann Clin Res** 1988;20(6):417–22

Obstructive lung disease after allogeneic marrow transplantation. Clinical presentation and course. Clark JG, et al. **Ann Intern Med** 1989 Sep 1;111(5):368–76

Occupational pollution. Becklake MR. **Chest** 1989 Sep;96(3 Suppl):372S–378S (65 ref.)

Domestic pollution as a factor causing respiratory health effects. Boleij JS, et al. **Chest** 1989 Sep;96(3 Suppl):368S–372S (33 ref.)

Acute respiratory infections as a risk factor for chronic airways disease. Buist AS. **Chest** 1989 Sep;96(3 Suppl):313S–314S

Asthma as a risk factor for chronic airways disease. Buist AS. **Chest** 1989 Sep;96(3 Suppl):314S–315S

Pollution (atmospheric, domestic, and occupational) as a risk factor for chronic airways disease. Chrétien J. **Chest** 1989 Sep;96(3 Suppl):316S–317S

Acute respiratory infections. Colley JR, et al. **Chest** 1989 Sep;96(3 Suppl):355S–360S (45 ref.)

Chronic airways disease. The smoking component. Crofton J, et al. **Chest** 1989 Sep;96(3 Suppl):349S–355S (108 ref.)

Smoking as a risk factor for chronic airways disease. Crofton J, et al. **Chest** 1989 Sep;96(3 Suppl):307S–312S

Atmospheric pollution. Waller RE. **Chest** 1989 Sep;96(3 Suppl):363S–368S (22 ref.)

Re: Hypocomplementemic urticarial vasculitis in a patient

with chronic obstructive pulmonary disease and pulmonary silicosis [letter] Strimlan CV, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):543–4

Ventilatory lung function and chronic chest symptoms among the inhabitants of urban areas with various levels of acid aerosols: prospective study in Cracow. Jedrychowski W, et al. **Environ Health Perspect** 1989 Feb; 79:101–7

The relation of airways responsiveness and atopy to the development of chronic obstructive lung disease. Sparrow D, et al. **Epidemiol Rev** 1988;10:29–47 (137 ref.)

Effects of occupational exposure and smoking on respiratory symptomatology and PFT in healthy panelists and COPD patients. Goren AI, et al. **Eur J Epidemiol** 1989 Mar; 5(1):58–64

A critical analysis of the relationship between parental smoking and pulmonary performance in children. Witorsch RJ, et al. **Off Gesundheitswes** 1989 Feb;51(2):78–83 (39 ref.)

The relationship between age and duration of asthma and the presence of persistent obstruction in asthma. Connolly CK, et al. **Postgrad Med J** 1988 Jun;64(752):422–5

[Chronic bronchial obstruction and the pathogenesis of emphysema] Huhti E. **Duodecim** 1988;104(6):463–6 (13 ref.) (Fin)

[Allergenic, chemically irritating or toxic causes of obstructive respiratory tract disease] Krieger HG. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):503–9 (39 ref.) (Eng. Abstr.) (Ger)

[Chronic obstructive pulmonary disease from the viewpoint of a specialist practice] Bum A. **Prax Klin Pneumol** 1988 Jul;42(7):525–6 (Eng. Abstr.) (Ger)

[A case of obstructive pneumonitis caused by anthracotic lymphadenopathy] Fukushima K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1096–101 (Eng. Abstr.) (Jpn)

[Two cases of obstructive lung disease associated with collagen vascular diseases] Kunitoh H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1291–6 (Eng. Abstr.) (Jpn)

GENETICS

Detection of an alteration of the alpha 2–macroglobulin gene in a patient with chronic lung disease and serum alpha 2–macroglobulin deficiency. Poller W, et al. **Hum Genet** 1989 Aug;83(1):93–6

[Pulmonary alveolar microlithiasis (disease in 2 siblings—case report)] Liebetrau G, et al. **Pneumologie** 1989 Aug; 43(8):464–8 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Antigenic drift of Haemophilus influenzae in patients with chronic obstructive pulmonary disease. Groeneveld K, et al. **Infect Immun** 1989 Oct;57(10):3038–44

The release of leukotrienes in the respiratory tract during infection with respiratory syncytial virus: role in obstructive airway disease. Volovitz B, et al. **Pediatr Res** 1988 Oct;24(4):504–7

[IgG subclass distribution in selected patients with long–term and severe chronic obstructive respiratory tract disease] Barth J, et al. **Prax Klin Pneumol** 1988 Jul;42(7):510–3 (Eng. Abstr.) (Ger)

[The role of infection] Schlick W. **Prax Klin Pneumol** 1988 Jul;42(7):495–7 (Eng. Abstr.) (Ger)

[Air pollution emissions and changes in lung function] Marth E, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):439–48 (Eng. Abstr.) (Ger)

[Cellular immunity in chronic nonspecific lung diseases] Khaitova NM, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):48–50 (Eng. Abstr.) (Rus)

METABOLISM

Association between nonspecific bronchial hyperreactivity and superoxide anion production by polymorphonuclear leukocytes in chronic airflow obstruction. Renkema TE, et al. **Agents Actions** 1989 Jan;26(1–2):52–4

Fluid balance in acute and chronic lung disease. Colice GL, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1052–3

Oxygen consumption of the respiratory muscles in normal and in malnourished patients with chronic obstructive pulmonary disease. Donahoe M, et al. **Am Rev Respir Dis** 1989 Aug;140(2):385–91

Sputum albumin in obstructive airways [letter] Persson CG. **Am Rev Respir Dis** 1988 Dec;138(6):1646–7

One year administration of almitrine bismesylate (Vectarion) to chronic obstructive pulmonary disease patients: pharmacokinetic analysis. Stavchansky S, et al. **Biopharm Drug Dispos** 1989 May–Jun;10(3):247–55

Theophylline disposition in patients with COLD with and without hypoxemia. du Souich P, et al. **Chest** 1989 May; 95(5):1028–32

Equations for the prediction of resting energy expenditure in chronic obstructive lung disease. Moore JA, et al. **Chest** 1988 Dec;94(6):1260–3

Metabolic acidosis during exercise in patients with chronic obstructive pulmonary disease. Use of the V–slope method for anaerobic threshold determination. Sue DY, et al. **Chest** 1988 Nov;94(5):931–8

Aerosol deposition in the human lung: effect of high–frequency oscillation on the deposition characteristics of an inhaled nebulized aerosol. Thomas SH, et al. **Clin Sci** 1988 Nov;75(5):535–42

Bronchodilator effect and serum theophylline level after combined treatment with fenoterol and theophylline in reversible chronic airflow obstruction. Lucena MI, et al. **Eur J Clin Pharmacol** 1988;35(6):669–71

Prediction of peak oxygen consumption in obstructive airway disease. Mahler DA, et al. **Med Sci Sports Exerc** 1988 Dec; 20(6):574–8

Beta adrenoceptor binding and induced relaxation in airway smooth muscle from patients with chronic airflow obstruction. van Koppen CJ, et al. **Thorax** 1989 Jan; 44(1):28–35

[Salivary theophylline concentration as an indirect parameter to monitor plasma theophylline levels] Wu J. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):196–8, 253 (Eng. Abstr.) (Chi)

[Assessment of mucociliary clearance using the radioaerosol method in chronic lung diseases] Gerasin VA, et al. **Ter Arkh** 1989;61(3):62–5 (Eng. Abstr.) (Rus)

[Renal retention of calcium in chronic obstructive pulmonary disease] Riancho A, et al. **Rev Clin Esp** 1988 Dec; 183(9):459–62 (Eng. Abstr.) (Spa)

MICROBIOLOGY

[The isolation of Mycoplasma from the bronchoalveolar lavage fluid and its antibody titer measurement in chronic obstructive pulmonary disease] Sun SJ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):275–8, 318–9 (Eng. Abstr.) (Chi)

[Respiratory pathogens in chronic obstructive pulmonary disease in the Guangzhou area] Yu GH. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Jun; 11(3):148–50, 191 (Eng. Abstr.) (Chi)

[The bacterial pathogen spectrum of the airway in children with chronic non–specific respiratory tract diseases] Wiersbitzky S, et al. **Z Arztl Fortbild (Jena)** 1989; 83(6):305–7 (Ger)

MORTALITY

The rise in chronic obstructive disease mortality. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S1–107

Prognosis in chronic obstructive pulmonary disease: results from multicenter clinical trials. Anthonisen NR. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S95–9

The course and prognosis of different types of chronic airflow limitation in a general population sample from Arizona: comparison with the Chicago "COPD" series. Burrows B. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S92–4

The epidemiology of cigarette smoking and its impact on chronic obstructive pulmonary disease. Davis RM, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S82–4

Survival data in patients with acute and chronic lung disease requiring mechanical ventilation. Hudson LD. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S19–24 (36 ref.)

The epidemiology of pulmonary function and COPD mortality in the multiple risk factor intervention trial. Kuller LH, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S76–81

Morbidity and mortality from chronic obstructive pulmonary disease. Manfreda J, et al. **Am Rev Respir Dis** 1989 Sep; 140(3 Pt 2):S19–26

Twenty–year trends in mortality from chronic obstructive pulmonary disease: the Honolulu Heart Program. Marcus EB, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S64–8

Prognosis of chronic obstructive pulmonary disease: the Dutch experience. Postma DS, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S100–5

Trends in mortality from chronic obstructive pulmonary disease among U.S. veterans: 1954 to 1979. Rogot E, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S69–75

Chronic obstructive pulmonary disease mortality in six U.S. cities. Speizer FE, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S49–55

International comparisons in COPD mortality. Thom TJ. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S27–34

Mortality from asthma and chronic obstructive pulmonary disease among workers in a soft paper mill: a case–referent study. Thorén K, et al. **Br J Ind Med** 1989 Mar;46(3):192–5

Determinants of weaning and survival among patients with COPD who require mechanical ventilation for acute respiratory failure. Menzies R, et al. **Chest** 1989 Feb; 95(2):398–405

From the Centers for Disease Control. Chronic obstructive pulmonary disease mortality—United States, 1986. **JAMA** 1989 Sep 8;262(10):1301–2

From the Centers for Disease Control. State–specific smoking–attributable chronic obstructive pulmonary disease mortality—United States, 1986. **JAMA** 1989 Sep 8;262(10):1303–4

Chronic obstructive pulmonary disease mortality—United States, 1986. **MMWR** 1989 Aug 18;38(32):549–52

State–specific smoking–attributable chronic obstructive pulmonary disease mortality—United States, 1986. **MMWR** 1989 Aug 18;38(32):552–4, 559–61

Asbestos inhalation and cigarette smoking make a lethal combination. Kronenberg RS. **Occup Health Saf** 1989 Mar; 58(3):50–6, 68

Trends in mortality from chronic obstructive airways disease in the United Kingdom. Backhouse A, et al. **Thorax** 1989 Jul;44(7):529–32

[Epidemiologic study of chronic respiratory tract diseases] Neuberger M. **Prax Klin Pneumol** 1988 Jul;42(7):479–81 (Eng. Abstr.) (Ger)

[Life expectancy of patients with chronic obstructive respiratory disease] Ulmer WT. **Z Gesamte Inn Med** 1988 Jun 15;43(12):335–7 (10 ref.) (Eng. Abstr.) (Ger)

PATHOLOGY

Patients with chronic bronchitis differ in their mast cell subtypes as compared with normal subjects. Van Overveld FJ, et al. **Agents Actions** 1989 Jan;26(1–2):60–2

Morphometric analysis of intraluminal mucus in airways in chronic obstructive pulmonary disease. Aikawa T, et al. **Am Rev Respir Dis** 1989 Aug;140(2):477–82

Chronic obstructive pulmonary disease: a definition and implications of structural determinants of airflow obstruction for epidemiology. Snider GL. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S3–8 (29 ref.)

Pulmonary alveolar microlithiasis—a case report and review of literature. Pant K, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):141–7 (34 ref.)

[Experimental study in the cat on the alveolar density and heterogeneity in the obstructed lung. Comparison with the emphysematous lung in the aged] Reichart E, et al. **Rev Mal Respir** 1989;6(2):161–7 (Eng. Abstr.) (Fre)

[Changes in the bronchial musculature in chronic obstructive respiratory tract diseases] Morgenroth K, et al. **Pneumologie** 1989 Mar;43(3):159–63 (Eng. Abstr.) (Ger)

[Clinically relevant mechanisms of mucus gland hypertrophy] Hahn HL. **Prax Klin Pneumol** 1988 Jul;42(7):504–9 (Eng. Abstr.) (Ger)

[Electron microscopy findings in chronic respiratory tract infections] Morgenroth K, et al. **Prax Klin Pneumol** 1988 Jul;42(7):482–4 (Eng. Abstr.) (Ger)

[Mucociliary transport and bronchial inflammation] Konietzko N. **Z Gesamte Inn Med** 1988 Jun 15;43(12):323–7 (17 ref.) (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

The effects of urapidil therapy on hemodynamics and gas exchange in exercising patients with chronic obstructive pulmonary disease and pulmonary hypertension. Adnot S, et al. **Am Rev Respir Dis** 1988 May;137(5):1068–74

Respiratory mechanics during the first day of mechanical ventilation in patients with pulmonary edema and chronic airway obstruction. Broseghini C, et al. **Am Rev Respir Dis** 1988 Aug;138(2):355–61

Cause of the raised wedge pressure on exercise in chronic obstructive pulmonary disease. Butler J, et al. **Am Rev Respir Dis** 1988 Aug;138(2):350–4

Role of CO2 responsiveness and breathing efficiency in determining exercise capacity of patients with chronic airway obstruction. Chonan T, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1488–93

The effects of chronic airflow limitation, increased dead space, and the pattern of ventilation on gas exchange during maximal exercise in advanced cystic fibrosis. Coates AL, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1524–31

Effect of posture, hydralazine, and nifedipine on hemodynamics, ventilation, and gas exchange in patients with chronic obstructive pulmonary disease. Corriveau ML, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1494–8

Effect of unsupported arm exercise on ventilatory muscle recruitment in patients with severe chronic airflow obstruction. Criner GJ, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):856–61

The effect of supplementary oral nutrition in poorly nourished patients with chronic obstructive pulmonary disease. Efthimiou J, et al. **Am Rev Respir Dis** 1988 May; 137(5):1075–82

Effects of oral morphine on breathlessness and exercise tolerance in patients with chronic obstructive pulmonary disease. Light RW, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):126–33

The effect of nasal flow on breathlessness in patients with chronic obstructive pulmonary disease. Liss HP, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1285–8

Effect of continuous positive airway pressure on respiratory sensation in patients with chronic obstructive pulmonary disease during submaximal exercise. O'Donnell DE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1185–91

Indomethacin and perception of dyspnea in chronic airflow obstruction. Schiffman GL, et al. **Am Rev Respir Dis** 1988 May;137(5):1094–8

Naloxone does not alter response to hypercapnia or resistive loading in chronic obstructive pulmonary disease. Simon PM, et al. **Am Rev Respir Dis** 1989 Jan;139(1):134–8

Body weight in chronic obstructive pulmonary disease. The National Institutes of Health Intermittent Positive–Pressure Breathing Trial. Wilson DO, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1435–8

Relationship between arterial blood gases and spirometry in acute exacerbations of chronic obstructive pulmonary disease. Emerman CL, et al. **Ann Emerg Med** 1989 May; 18(5):523–7

Dopamine effects on diaphragmatic strength during acute respiratory failure in chronic obstructive pulmonary disease. Aubier M, et al. **Ann Intern Med** 1989 Jan 1; 110(1):17–23

Respiratory muscle fatigue [letter] Sackner MA, et al. **Ann Intern Med** 1988 Nov 1;109(9):758

Muscarinic receptor sensitivity in airway smooth muscle of

patients with obstructive airway disease. Van Koppen CJ, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:238–44

Biochemical and cellular basis for circadian rhythms in obstructive lung disease and implications for theophylline therapy. Kunkel G, et al. **Arzneimittelforschung** 1988 Aug; 38(8A):1200–2 (27 ref.)

Comparative effects of bisoprolol and acebutolol in smokers with airway obstruction. Macquin-Mavier I, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):279–84

Occupational exposures and changes in pulmonary function over 13 years among residents of Cracow. Krzyżanowski M, et al. **Br J Ind Med** 1988 Nov;45(11):747–54

Pulmonary hypertension and right ventricular function in patients with COPD. Biernacki W, et al. **Chest** 1988 Dec; 94(6):1169–75

Pulmonary vascular hemodynamics in chronic lung disease patients with and without oxyhemoglobin desaturation during sleep. Fletcher EC, et al. **Chest** 1989 Apr; 95(4):757–64

Standard and double dose ipratropium bromide and combined ipratropium bromide and inhaled metaproterenol in COPD. LeDoux EJ, et al. **Chest** 1989 May;95(5):1013–6

Exercise responses during incremental and high intensity and low intensity steady state exercise in patients with obstructive lung disease and normal control subjects. Matthews JI, et al. **Chest** 1989 Jul;96(1):11–7

Respiratory muscle performance in normal elderly subjects and patients with COPD. Morrison NJ, et al. **Chest** 1989 Jan;95(1):90–4

DLco in COPD [letter] Owens GR, et al. **Chest** 1988 Oct; 94(4):897–8

The effects of acute hypoxia and hypercapnia on pulmonary mechanics in normal subjects and patients with chronic pulmonary disease. Parsons PE, et al. **Chest** 1989 Jul; 96(1):96–101

Steady-state breathing pattern responses to small inspiratory resistive loads in COPD patients. Application to weaning from mechanical ventilation. Pourriat JL, et al. **Chest** 1989 Feb;95(2):364–9

Noninvasive evaluation of pulmonary artery pressure during exercise by saline-enhanced Doppler echocardiography in chronic pulmonary disease. Himelman RB, et al. **Circulation** 1989 Apr;79(4):863–71

Pathophysiological aspects of predominant preload lowering on pulmonary circulation, gas exchange, and the biventricular function in patients with chronic obstructive lung disease. Seibold H, et al. **Clin Cardiol** 1988 Sep; 11(9):630–8

Pulmonary vascular resistance rises with lung volume on exercise in obstructed airflow disease. Schrijen FV, et al. **Clin Physiol** 1989 Apr;9(2):143–50

Evaluation of right ventricular function in man (with particular reference to lung diseases). Widimský J. **Cor Vasa** 1989;31(3):242–8 (37 ref.)

Importance of trigger sensitivity to ventilator response delay in advanced chronic obstructive pulmonary disease with respiratory failure. Gurevitch MJ, et al. **Crit Care Med** 1989 Apr;17(4):354–9

Is resistance to ischaemic conduction failure induced by hypoxia? Masson EA, et al. **Diabetologia** 1988 Oct; 31(10):762–5

Motor abnormalities of digestive and urinary tracts in patients on ventilator for acute exacerbation of chronic obstructive pulmonary disease. Bonmarchand G, et al. **Dig Dis Sci** 1989 Aug;34(8):1231–7

Sleep and oxyhemoglobin desaturation patterns in chronic obstructive pulmonary diseases. Manni R, et al. **Eur Neurol** 1988;28(5):275–8

Effects of hyperinflation on the respiratory muscles. Decramer M. **Eur Respir J** 1989 Apr;2(4):299–302 (50 ref.)

Estimates of mean alveolar gas in patients with chronic airways obstruction. Giannella-Neto A, et al. **Eur Respir J** 1989 May;2(5):451–60

Snoring or bubbling? [letter] Lens E. **Eur Respir J** 1989 Jul; 2(7):693

Exercise tolerance in chronic obstructive pulmonary disease: importance of active and passive components of the ventilatory system. Loiseau A, et al. **Eur Respir J** 1989 Jun;2(6):522–7 (36 ref.)

The relationship between reversibility and hyperreactivity. Postma DS, et al. **Eur Respir J** 1988 May;1(5):483–5 (5 ref.)

Immediate and late asthmatic responses induced by exercise in patients with reversible airflow limitation. Speelberg B, et al. **Eur Respir J** 1989 May;2(5):402–8

Bronchial hyperresponsiveness: the need for a distinction between hypersensitivity and excessive airway narrowing. Sterk PJ, et al. **Eur Respir J** 1989 Mar;2(3):267–74 (82 ref.)

Control of the larynx in patients with obstructive and restrictive pulmonary impairment. Yanai M, et al. **Eur Respir J** 1989 Jan;2(1):31–5

Influence of baseline airway obstruction and degree of smoking on bronchial reactivity in smokers. Srinivasan G, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun; 30(2):78–83

Effect of upper airway shunt and series properties on respiratory impedance measurements. Cauberghs M, et al. **J Appl Physiol** 1989 May;66(5):2274–9

Inspiratory pressure generation: comparison of subjects with COPD and age-matched normals. Levine S, et al. **J Appl Physiol** 1988 Aug;65(2):888–99

Impact of PEEP on lung mechanics and work of breathing in severe airflow obstruction. Smith TC, et al. **J Appl Physiol** 1988 Oct;65(4):1488–99

How does salbutamol improve the ventricular performance in patients with chronic obstructive pulmonary disease? Mols P, et al. **J Cardiovasc Pharmacol** 1988 Aug; 12(2):127–33

Atrial natriuretic factor in chronic obstructive lung disease with pulmonary hypertension. Physiological correlates and response to peptide infusion. Adnot S, et al. **J Clin Invest** 1989 Mar;83(3):986–93

Anaerobic threshold in chronic obstructive pulmonary disease. Chida M, et al. **J Hum Ergol (Tokyo)** 1987 Dec; 16(2):151–5

Pulmonary function in Parkinson's disease. Hovestadt A, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):329–33

Effects of alprazolam on respiratory drive, anxiety, and dyspnea in chronic airflow obstruction: a case study. Greene JG, et al. **Pharmacotherapy** 1989;9(1):34–8

Effects of captopril in patients with chronic obstructive pulmonary disease and secondary pulmonary hypertension. Patakas D, et al. **Postgrad Med J** 1988 Mar;64(749):193–5

Analysis of inspiratory mouth pressures. Criée CP. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:820–6

Dyspnoea and respiratory muscle function. Fitting JW. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:836–8 (12 ref.)

The respiratory muscles. Green M, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:827–35 (38 ref.)

Respiratory center output following zopiclone or diazepam administration in patients with pulmonary disease. Beaupré A, et al. **Respiration** 1988;54(4):235–40

Regional distribution of ventilation in chronic obstructive lung disease and the effect of salbutamol. Bell D, et al. **Respiration** 1988;54(3):179–89

Breathing pattern—gas exchange relation and acute effect of almitrine in severe chronic airflow obstruction. Damato S, et al. **Respiration** 1988;54(1):42–9

Physiological analysis of extended-spectrum oscillometry. Wouters EF, et al. **Respiration** 1988;54(4):263–70

Clinical and physiological follow-up of severe chronic obstructive lung disease. Brundin A, et al. **Scand J Respir Dis Suppl** 1972;79:1–50

Differential lung function in an infant with the Swyer-James syndrome. Avital A, et al. **Thorax** 1989 Apr;44(4):298–302

Combined use of non-invasive techniques to predict pulmonary arterial pressure in chronic respiratory disease. Bishop JM, et al. **Thorax** 1989 Feb;44(2):85–96

How many manoeuvres should be done to measure maximal inspiratory mouth pressure in patients with chronic airflow obstruction? Fiz JA, et al. **Thorax** 1989 May;44(5):419–21

Does right ventricular function predict survival in patients with chronic obstructive lung disease? France AJ, et al. **Thorax** 1988 Aug;43(8):621–6

Bronchial responsiveness, lung mechanics, gas transfer, and corticosteroid response in patients with chronic airflow obstruction. James AL, et al. **Thorax** 1988 Nov; 43(11):916–22

Supplemental oxygen and quality of sleep in patients with chronic obstructive lung disease. McKeon JL, et al. **Thorax** 1989 Mar;44(3):184–8

Reproducibility of walking test results in chronic obstructive airways disease [letter] Mostert R, et al. **Thorax** 1988 Dec; 43(12):1025–6

Renal and pulmonary effects of angiotensin converting enzyme inhibition in chronic hypoxic lung disease. Oliver RM, et al. **Thorax** 1989 Jun;44(6):513–5

Comparison of arm and leg ergometry in patients with moderate chronic obstructive lung disease. Owens GR, et al. **Thorax** 1988 Nov;43(11):911–5

Effects of an external resistance on maximum flow in chronic obstructive lung disease: implications for recognition of coincident upper airway obstruction. Robertson DR, et al. **Thorax** 1989 Jun;44(6):461–8

Effect of low dose nebulised morphine on exercise endurance in patients with chronic lung disease. Young IH, et al. **Thorax** 1989 May;44(5):387–90

Change in P wave height during progressive exercise in patients with chronic obstructive pulmonary disease. Hida W, et al. **Tohoku J Exp Med** 1989 Jan;157(1):79–80

[Dynamic changes in the functional respiratory indices in chronic obstructive lung disease] Marinov Kh, et al. **Vutr Boles** 1988;27(4):33–6 (Eng. Abstr.) **(Bul)**

[Determination of positive judgment standards in lung function indices] Yuan YR, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):305–8 (Eng. Abstr.) **(Chi)**

[Hyperoxia test during attempts to withdraw artificial ventilation] Pourriat JL, et al. **Agressologie** 1989 Apr; 30(4):217–21 (Eng. Abstr.) **(Fre)**

[The effect of almitrine dimesylate on pulmonary hemodynamics in healthy subjects and in patients with chronic obstructive bronchitis] Ansquer JC. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:409–10 (30 ref.) (Eng. Abstr.) **(Fre)**

[Chronic hypoxia and tissue adaptation (excluding the right heart) in chronic obstructive bronchopathies] Dekoster J, et al. **Rev Mal Respir** 1989;6(1):31–4 (35 ref.) (Eng. Abstr.) **(Fre)**

[The value of Doppler echocardiography in the diagnosis of pulmonary artery hypertension in chronic obstructive bronchopneumopathies] Didier A, et al. **Rev Mal Respir** 1988;5(6):583–7 (Eng. Abstr.) **(Fre)**

[Calcium antagonists and chronic obstructive bronchopneumopathies] Hilbert G, et al. **Rev Mal Respir** 1989;6(3):209–14 (Eng. Abstr.) **(Fre)**

[Frequency and severity of hypoxemia during sleep in COPD. Clinical and therapeutic impact] Meslier N, et al. **Rev Mal Respir** 1988;5(4):347–52 (Eng. Abstr.) **(Fre)**

[Relationship between hypercapnia and hypoxemia in chronic obstructive respiratory insufficiency] Similowski T, et al. **Rev Mal Respir** 1988;5(4):373–80 (Eng. Abstr.) **(Fre)**

[Airway resistance curves in obstructive respiratory tract diseases. 8 types of airway resistance curves in spontaneous respiration] Ulmer WT, et al. **Fortschr Med** 1988 Nov 20; 106(33):663–4, 665–6, 667 (13 ref.) (Eng. Abstr.) **(Ger)**

[Right ventricular function in patients with chronic obstructive pulmonary disease with and without pulmonary hypertension] Burghuber OC. **Prax Klin Pneumol** 1988 Jul; 42(7):518–20 (Eng. Abstr.) **(Ger)**

[Lung function and blood gas analysis studies in patients with COPD and respiratory insufficiency receiving almitrine medication with special reference to its clinical aspects] Hillebrand M, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:391–3 (Eng. Abstr.) **(Ger)**

[Are turning points to chronic disease detectable?] Kummer F. **Prax Klin Pneumol** 1988 Jul;42(7):488–90 **(Ger)**

[How definite is the long-term prognosis in obstructive lung diseases?] Mösenbacher A, et al. **Prax Klin Pneumol** 1988 Jul;42(7):527–8 (Eng. Abstr.) **(Ger)**

[Chronic respiratory tract diseases—onset of the disease] Muhar F. **Prax Klin Pneumol** 1988 Jul;42(7):451–2 (Eng. Abstr.) **(Ger)**

[Effect of almitrine, a chemoreceptor stimulator, on nocturnal hypercapnia and pulmonary artery pressure during O2 respiration in chronic obstructive lung disease] Rühle KH, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:411–4 (Eng. Abstr.) **(Ger)**

[Progress in clinical respiratory physiology] Schindl R, et al. **Prax Klin Pneumol** 1988 Jul;42(7):576–7 (Eng. Abstr.) **(Ger)**

[Arachidonic acid metabolism and chronic obstructive respiratory tract diseases: pathologic effects and perspectives for therapy] Slapke J, et al. **Prax Klin Pneumol** 1988 Jul;42(7):502–3 (Eng. Abstr.) **(Ger)**

[The significance of the cholinergic system for respiratory tract obstruction] Ulmer WT, et al. **Prax Klin Pneumol** 1988 Jul;42(7):498–501 (Eng. Abstr.) **(Ger)**

[Transition of chronic bronchopulmonary diseases of childhood into adulthood; risk factors] von der Hardt H. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:245–8 (Eng. Abstr.) **(Ger)**

[Changes in lung function in patients with chronic pancreatitis] Wieser O, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):557–8 (Eng. Abstr.) **(Ger)**

[Course and prognosis of chronic obstructive lung disease over 5 and 10 years] Brändli O, et al. **Schweiz Med Wochenschr** 1988 Sep 17;118(37):1314–20 (Eng. Abstr.) **(Ger)**

[Clinical aspects of obstructive pneumopathy (COPD)] Fueter R. **Schweiz Rundsch Med Prax** 1989 Feb 7; 78(6):118–20 (Eng. Abstr.) **(Ger)**

[Pathophysiology of chronic obstructive lung diseases] Grossenbacher M, et al. **Schweiz Rundsch Med Prax** 1989 Feb 7;78(6):113–7 (Eng. Abstr.) **(Ger)**

[Drug-induced bronchial asthma] Hummel S, et al. **Z Gesamte Inn Med** 1988 Jun 15;43(12):319–23 (35 ref.) (Eng. Abstr.) **(Ger)**

[Bronchial hyperreactivity: pathomechanisms, diagnosis and perspectives of therapy] Slapke J. **Z Gesamte Inn Med** 1988 Jun 15;43(12):313–9 (47 ref.) (Eng. Abstr.) **(Ger)**

[Pulmonary hypertension in chronic obstructive bronchopneumopathy (COBP): possible role of platelets] Carratù L, et al. **Arch Monaldi Mal Torace** 1987 Jan–Feb; 42(1):81–92 (31 ref.) (Eng. Abstr.) **(Ita)**

[Changes in pulmonary gas exchange in chronic obstructive bronchopneumopathies and their modifications induced by therapy] Prediletto R, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):56–9 (Eng. Abstr.) **(Ita)**

[Effects of differences in oxygen affinity on circulatory response to hypoxia] Kamada A. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):607–15 (Eng. Abstr.) **(Jpn)**

[The natural history of pulmonary emphysema and chronic bronchitis] Kurihara N, et al. **Kokyu To Junkan** 1988 Sep; 36(9):935–40 **(Jpn)**

[Pulmonary hemodynamics during exercise in anesthetized dogs with inspiratory loading and in patients with chronic obstructive pulmonary disease] Hida W, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):143–8 (Eng. Abstr.) **(Jpn)**

[Diagnosis and treatment of chronic obstructive bronchial disease] Takishima T. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1168–76 **(Jpn)**

[Reaction of the bronchi to histamine provocation recorded by maximal expiratory flow-volume curves. II. Respiratory homogeneity] Pierzchała W, et al. **Pneumonol Pol** 1988 Jun; 56(6):267–72 (Eng. Abstr.) **(Pol)**

[Function of respiratory muscles and their training in patients with chronic obstructive lung diseases] Walczak J. **Pneumonol Pol** 1988 Jun;56(6):254–9 (Eng. Abstr.) **(Pol)**

[Clinical study of pulmonary hypertension in chronic obstructive pulmonary disease] Mitre N, et al. **Arq Bras Cardiol** 1988 Feb;50(2):79–85 (Eng. Abstr.) **(Por)**

[Role of the rise of pressure in the pulmonary artery in the distribution of perfusion and gas exchange in bronchial obstruction] Putov NV, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):8–10 (Eng. Abstr.) (Rus)

[Clinical and pathophysiologic aspects of pulmonary hypertension] Paleev NR, et al. **Kardiologiia** 1988 Sep; 28(9):5–9 (Eng. Abstr.) (Rus)

[Kininergic processes at the developmental stage of pulmonary heart disease in patients with obstructive pulmonary pathology] Trubnikov GV, et al. **Kardiologiia** 1989 Mar;29(3):93–5 (Rus)

[Various characteristics of hemodynamics and gas exchange in patients with chronic obstructive lung diseases] Matkovskiĭ SK, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):50–3 (Rus)

[Dynamics of venous blood return in normal conditions and in patients with obstructive lung disease] Periel VE, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):28–31 (Eng. Abstr.) (Rus)

[Functional disorders of the respiratory muscles in chronic obstructive lung diseases] Chuchalin AG, et al. **Ter Arkh** 1988;60(8):126–32 (102 ref.) (Rus)

[Left ventricular function of patients with chronic obstructive lung diseases based on echocardiographic data] Dundukov NN, et al. **Vrach Delo** 1988 Oct;(10):35–7 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

The management of obstructive airways disease in a hostile environment. Proceedings of a symposium. Amsterdam, The Netherlands, 31st August–5th September 1987. **Br J Clin Pract Symp Suppl** 1988 Feb;59:1–42

Chronic obstructive lung disease prevention. Holland WW. **Br J Dis Chest** 1988 Jan;82(1):32–44 (42 ref.)

Research programs of the National Heart, Lung, and Blood Institute. Bethesda, Maryland, U.S.A. Roth CA, et al. **Cor Vasa** 1989;31(2):81–9

[The best ways of the control of inflammatory diseases of the lung] Gavrilenko AF, et al. **Probl Tuberk** 1989;(3):6–8 (Eng. Abstr.) (Rus)

[Organization of detection of patients with nonspecific diseases of the lung and their ambulatory care] Sidorova LD, et al. **Probl Tuberk** 1989;(3):8–11 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Psychiatric disorders in COPD with special reference to the usefulness of imipramine–diazepam combination. Sharma TN, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec; 30(4):263–8

Chronic respiratory illness and disability: a critical review of the psychosocial literature. Williams SJ. **Soc Sci Med** 1989;28(8):791–803 (91 ref.)

[Chronic obstructive respiratory tract diseases in childhood: prevention and intervention by psychological–medical ratings] Jedlicka–Köhler I, et al. **Prax Klin Pneumol** 1988 Jul;42(7):473–4 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Diagnosis of emphysema [editorial] Pratt PC. **Chest** 1988 Nov;94(5):903–4

Bulla versus pneumothorax: a diagnostic dilemma. Williams J, et al. **J Tenn Med Assoc** 1988 Nov;81(11):686–7

[Pulmonary infiltration and pronounced asthma] Hettich R, et al. **Internist (Berlin)** 1988 Dec;29(12):832–5 (Ger)

[Pulmonary artery hypertension in chronic obstructive lung disease. The place of morphometric studies in thoracic radiography] Dinkel E, et al. **Radiologe** 1989 Jun; 29(6):272–8 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Severe bronchospasm followed by respiratory arrest during thallium–dipyridamole imaging. Lette J, et al. **Chest** 1989 Jun;95(6):1345–7

[Assessment of regional lung function using xenon–133 exhalation scintigraphy with reference to chronic obstructive airway diseases] Kämmer JC, et al. **Radiol Diagn (Berl)** 1988;29(5):753–9 (Eng. Abstr.) (Ger)

[Lung perfusion scintigraphy with 99mTc–MAA in 46 patients with chronic airway disease] Tomioka H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):975–82 (Eng. Abstr.) (Jpn)

[Evaluation of the severity of damage of the lungs in chronic nonspecific diseases based on a microstructural analysis of scintigrams] Vidiukov VI, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):35–8 (Eng. Abstr.) (Rus)

REHABILITATION

Pulmonary rehabilitation in COPD patients with elevated PCO2. Foster S, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1519–23

Targeted inspiratory muscle training improves respiratory muscle function and reduces dyspnea in patients with chronic obstructive pulmonary disease. Harver A, et al. **Ann Intern Med** 1989 Jul 15;111(2):117–24

Pulmonary rehabilitation. Cockcroft A. **Br J Dis Chest** 1988 Jul;82(3):220–5 (10 ref.)

Inspiratory resistance training for pulmonary rehabilitation [letter] Beacham J, et al. **Chest** 1989 Sep;96(3):698–9

Applicability of a threshold loading device for inspiratory muscle testing and training in patients with COPD. Goldstein R, et al. **Chest** 1989 Sep;96(3):564–71

Increased muscle efficiency and sustained benefits in an outpatient community hospital–based pulmonary rehabilitation program. Holle RH, et al. **Chest** 1988 Dec; 94(6):1161–8 (35 ref.)

Objective evaluation of results of a pulmonary rehabilitation program in a community hospital. Mall RW, et al. **Chest** 1988 Dec;94(6):1156–60

Oxygen delivery for ambulatory patients. How the Micro–Trach increases mobility. Heimlich HJ. **Postgrad Med** 1988 Nov 1;84(6):68–73, 77–9 (14 ref.)

Exercise and training in patients with chronic obstructive lung disease. Cox NJ, et al. **Sports Med** 1988 Sep; 6(3):180–92 (64 ref.)

[Training results exemplified by 3 patient groups] Flicker M, et al. **Prax Klin Pneumol** 1988 Jul;42(7):628–33 (Eng. Abstr.) (Ger)

[Physical training in the rehabilitation of patients with chronic respiratory tract disease] Haber P. **Prax Klin Pneumol** 1988 Jul;42(7):625–7 (Eng. Abstr.) (Ger)

[Bronchial clearance by physical therapy] Siemon G. **Prax Klin Pneumol** 1988 Jul;42(7):637–8 (Eng. Abstr.) (Ger)

[Physical respiratory therapy with intrapulmonary percussion] Wolf C. **Prax Klin Pneumol** 1988 Jul; 42(7):639–40 (Eng. Abstr.) (Ger)

[Physical therapy in chronic obstructive lung diseases] Conradi E. **Z Gesamte Inn Med** 1988 Jun 15;43(12):328–30 (16 ref.) (Eng. Abstr.) (Ger)

[The basic principles of the health resort rehabilitation of patients with obstructive lung pathology] Boksha VG. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb;(1):6–11 (Rus)

[Impulse decimeter–wave therapy of patients with chronic nonspecific lung diseases at the medical rehabilitation stage] Krupennikov AI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb;(1):39–43 (Rus)

SURGERY

Double–lung transplant for advanced chronic obstructive lung disease. Cooper JD, et al. **Am Rev Respir Dis** 1989 Feb;139(2):303–7

Double lung transplantation for severe COPD: reversing the irreversible [editorial] Raffin TA. **Am Rev Respir Dis** 1989 Feb;139(2):301–2

Carotid body resection for COPD? Severinghaus JW. **Chest** 1989 May;95(5):1128–9

Bilateral carotid body resection for the relief of dyspnea in severe chronic obstructive pulmonary disease. Physiologic and clinical observations in three patients [published erratum appears in Chest 1989 Sep;96(3):706] Stulbarg MS, et al. **Chest** 1989 May;95(5):1123–8

THERAPY

Inspiratory muscle training with a pressure threshold breathing device in patients with chronic obstructive pulmonary disease [letter] Belman MJ, et al. **Am Rev Respir Dis** 1989 Mar;139(3):851–2

Weekly cuirass ventilation improves blood gases and inspiratory muscle strength in patients with chronic air–flow limitation and hypercarbia. Gutiérrez M, et al. **Am Rev Respir Dis** 1988 Sep;138(3):617–23

Inspiratory muscle training with a pressure threshold breathing device in patients with chronic obstructive pulmonary disease. Larson JL, et al. **Am Rev Respir Dis** 1988 Sep;138(3):689–96

Controversies in pulmonary medicine. Respiratory muscle training should be instituted in all COPD patients. Mahler DA, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1072

Improvement in exercise endurance in patients with chronic airflow limitation using continuous positive airway pressure. O'Donnell DE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1510–4

Evaluation of intermittent long–term negative–pressure ventilation in patients with severe chronic obstructive pulmonary disease. Zibrak JD, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1515–8

'Conchapak failure' [letter] Holloway AM. **Anaesth Intensive Care** 1989 Aug;17(3):386

Use of emergency medical services by patients with decompensated obstructive lung disease. Murata GH, et al. **Ann Emerg Med** 1989 May;18(5):501–6

Oxygen concentrators in the home [editorial] Bardsley P, et al. **BMJ** 1988 Dec 10;297(6662):1486–7

Nasal oxygen in exacerbations of ventilatory failure: an underappreciated risk. Davies RJ, et al. **BMJ** 1989 Jul 1; 299(6690):43–4

Long term oxygen therapy (LTOT) for chronic respiratory insufficiency. Sadoul P. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):42–8 (27 ref.)

Threshold pressure training, breathing pattern, and exercise performance in chronic airflow obstruction. Flynn MG, et al. **Chest** 1989 Mar;95(3):535–40

Relationship between improvement in exercise performance with supplemental oxygen and hypoxic ventilatory drive in patients with chronic airflow obstruction. Light RW, et al. **Chest** 1989 Apr;95(4):751–6

Efficacy of a pulsed oxygen delivery device during exercise in patients with chronic respiratory disease. Senn S, et al. **Chest** 1989 Sep;96(3):467–72

A new pendant oxygen–conserving cannula which allows pursed lips breathing. Tiep BL, et al. **Chest** 1989 Apr; 95(4):857–60

Chronic obstructive pulmonary disease. Flenley DC. **Dis Mon** 1988 Sep;34(9):537–99 (199 ref.)

Recommendations for long term oxygen therapy (LTOT). European Society of Pneumology Task Group. **Eur Respir J** 1989 Feb;2(2):160–4

A conservation device for oxygen therapy in COPD. Evans TW, et al. **Eur Respir J** 1988 Dec;1(10):959–61

Recommendations for long term oxygen therapy (LTOT). Report on an SEP (European Society of Pneumology) Task Group [letter] Ström K. **Eur Respir J** 1989 May;2(5):481

Effectiveness of oxygen concentrations of less than 100% before and after endotracheal suction in patients with chronic obstructive pulmonary disease. Rogge JA, et al. **Heart Lung** 1989 Jan;18(1):64–71

Measures of symptoms and life quality to predict emergent use of institutional health care resources in chronic obstructive airways disease. Traver GA. **Heart Lung** 1988 Nov;17(6 Pt 1):689–97

Respiratory compliance and resistance in mechanically ventilated patients with acute respiratory failure. Bernasconi M, et al. **Intensive Care Med** 1988;14(5):547–53

Targeted resistive ventilatory muscle training in chronic obstructive pulmonary disease. Belman MJ, et al. **J Appl Physiol** 1988 Dec;65(6):2726–35

Ventilatory and diaphragmatic EMG responses to negative–pressure ventilation in airflow obstruction. Rodenstein DO, et al. **J Appl Physiol** 1988 Oct;65(4):1621–6

Chiropractic management of chronic obstructive pulmonary disease. Masarsky CS, et al. **J Manipulative Physiol Ther** 1988 Dec;11(6):505–10

Chiropractic management of chronic obstructive pulmonary disease [letter] Meyer JJ. **J Manipulative Physiol Ther** 1989 Aug;12(4):314–6

Nocturnal home oxygen in the treatment of hypoxemic cystic fibrosis patients. Zinman R, et al. **J Pediatr** 1989 Mar; 114(3):368–77

Reappraisal of OP–1206, a prostaglandin E1 derivative in combination with low–flow oxygen inhalation therapy in chronic lung disease. Ishizaki T, et al. **Jpn J Med** 1989 Jan–Feb;28(1):34–40

Practical tips on prescribing home oxygen therapy. Petty TL. **Postgrad Med** 1988 Nov 1;84(6):83–5, 88–90

Mechanical assistance. Robert D, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:846–9

Training of the inspiratory muscles. Worth H. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:842–5 (31 ref.)

Supplemental oxygen and exercise ability in chronic obstructive airways disease. Davidson AC, et al. **Thorax** 1988 Dec;43(12):965–71

[Rehabilitation of diaphragm function in chronic obstructive pulmonary disease by external diaphragm pacing] Xie BX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Jun; 11(3):156–9, 191–2 (Eng. Abstr.) (Chi)

[Effect of air–anion on air disinfection in respiratory care units and treatment of patients with COPD] Zhang JS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):8–9, 61 (Eng. Abstr.) (Chi)

[Possible use of positive pressure oxygen inhalation in chronic bronchopulmonary obstruction] Dvořáková V, et al. **Vnitr Lek** 1988 Aug;34(8):807–12 (Eng. Abstr.) (Cze)

[Current concept of the indications and long–term results of long–term oxygen therapy in adults] Dautzenberg B, et al. **Agressologie** 1988 Jun;29(7):519–24 (26 ref.) (Eng. Abstr.) (Fre)

[Long–term oxygen therapy by transtracheal catheter] Leger P, et al. **Agressologie** 1988 Sep;29(8):595–602 (Eng. Abstr.) (Fre)

[Oxygen–conserving devices for delivery of long–term oxygen therapy] Leger P, et al. **Agressologie** 1988 Sep; 29(8):603–6 (Eng. Abstr.) (Fre)

[Preliminary evaluation, setting up and surveillance of long–term oxygen therapy at home] Muir JF. **Agressologie** 1988 Jun;29(7):511–7 (29 ref.) (Eng. Abstr.) (Fre)

[Physiopathologic justification of long–term oxygen therapy in chronic respiratory insufficiency] Weitzenblum E. **Agressologie** 1988 Jun;29(7):499–505 (38 ref.) (Eng. Abstr.) (Fre)

[Long–term oxygen therapy: current problems (patient selection)] Levi–Valensi P, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:403–8 (Eng. Abstr.) (Fre)

[Critical study of the indications for long–term oxygen therapy. Chronic obstructive bronchopneumopathies] Sadoul P, et al. **Rev Mal Respir** 1988;5(4):363–72 (45 ref.) (Eng. Abstr.) (Fre)

[Long–term oxygen therapy in Switzerland] Bongard JP, et al. **Schweiz Med Wochenschr** 1989 Jan 28;119(4):110–5 (Eng. Abstr.) (Fre)

[Patient education: a part of advanced respiratory therapy] Petro W. **Fortschr Med** 1988 Aug 30;106(25):503–4 (Ger)

[The German Society of Pneumology and Tuberculosis. Recommendations fo long–term oxygen therapy in severe chronic hypoxemia] **Pneumologie** 1989 May;43(5):233–5 (Ger)

[The patient of the pneumologist in 4 decades. Epidemiologic and socioeconomic viewpoints] Bum A.

Prax Klin Pneumol 1988 Jul;42(7):537–9 (Eng. Abstr.) (Ger)

[Respiratory therapy using "resistive breathing"] Hartl S, et al. **Prax Klin Pneumol** 1988 Jul;42(7):634–6 (Eng. Abstr.) (Ger)

[The spectrum of respiratory therapy in obstructive lung diseases] Keller R, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:309–13 (37 ref.) (Eng. Abstr.) (Ger)

[Patient education in the therapy of chronic obstructive respiratory tract diseases—the current status] Petro W. **Prax Klin Pneumol** 1988 Dec;42(12):859–66 (37 ref.) (Ger)

[Heart therapy in patients with lung diseases] Schilling W. **Prax Klin Pneumol** 1988 Jul;42(7):533–4 (Eng. Abstr.) (Ger)

[Transtracheal O2 administration in long-term oxygen therapy] Häggi J, et al. **Schweiz Med Wochenschr** 1988 Sep 17;118(37):1321–4 (Eng. Abstr.) (Ger)

[Clinical studies of the effect of physical training therapy on oxygen absorption and pulmonary artery pressure in persons with chronic obstructive lung diseases] Rabe U, et al. **Z Erkr Atmungsorgane** 1989;172(2):118–22 (Eng. Abstr.) (Ger)

[Chronic respiratory insufficiency and pulmonary heart disease—therapeutic aspects] Schilling W. **Z Gesamte Inn Med** 1988 Jun 15;43(12):331–5 (18 ref.) (Eng. Abstr.) (Ger)

[Chronic obstructive lung diseases II. Concluding remarks: "No cure in sight"] Schilling W. **Z Gesamte Inn Med** 1988 Jun 15;43(12):338–9 (Ger)

[Transtracheal oxygen therapy with oxycath: introduction technic, complications, results in 12 treated patients] Migliorini V, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):131–8 (Eng. Abstr.) (Ita)

[Exercise induced hypoxemia and exercise tolerance in patients with COPD and the benefits of oxygen supplementation] Kurihara N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):155–62 (Eng. Abstr.) (Jpn)

[Changes in oxygen saturation of arterial blood during controlled oxygen therapy using oxygen masks produced in Poland] Śliwiński P, et al. **Pneumonol Pol** 1988 Dec; 56(12):564–8 (Eng. Abstr.) (Pol)

[Effectiveness of pharmacologic and non-pharmacologic methods of restoring bronchial patency] Lunichkina IV, et al. **Klin Med (Mosk)** 1989 Jun;67(6):109–11 (Eng. Abstr.) (Rus)

[Clinical aspects, diagnosis and treatment of obstructive lung diseases among the population of Afghanistan] Malen'kil VP, et al. **Ter Arkh** 1988;60(8):68–71 (Eng. Abstr.) (Rus)

[Clinico-physiologic evaluation of the oscillatory modulation of breathing and vacuum massage as methods of respiratory physiotherapy in chronic obstructive diseases of the lungs] Zil'ber EA. **Vestn Akad Med Nauk SSSR** 1988;(9):35–9 (Eng. Abstr.) (Rus)

[The importance of bronchial drainage in the treatment of patients with chronic bronchial obstruction] Popović G. **Srp Arh Celok Lek** 1988 Jun;116(6):515–22 (Eng. Abstr.) (Scc)

[The effect of respiratory physical therapy on parameters of pulmonary ventilation] Popović G, et al. **Srp Arh Celok Lek** 1988 May;116(5):419–27 (Eng. Abstr.) (Scc)

[Long-term home oxygen therapy] Stangl B, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):171–8 (Eng. Abstr.) (Scr)

URINE

[Degradation of purine nucleotides in patients with chronic obstruction to airflow] Mateos Antón F, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):328–30 (Eng. Abstr.) (Spa)

VETERINARY

Partial divergence between airway inflammation and clinical signs in equine chronic pulmonary disease. Grünig G, et al. **Equine Vet J** 1989 Mar;21(2):145–8

Comparison of bronchodilators in alleviating clinical signs in horses with chronic obstructive pulmonary disease. Pearson EG, et al. **J Am Vet Med Assoc** 1989 May 1; 194(9):1287–91

Effects of atropine in ponies with recurrent airway obstruction. Broadstone RV, et al. **J Appl Physiol** 1988 Dec;65(6):2720–5

[New approaches to the secretolytic therapy of chronic bronchitis in dogs] Staudacher G, et al. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1;102(3):95–9 (Eng. Abstr.) (Ger)

LUNG DISEASES, PARASITIC

COMPLICATIONS

Acute Pancoast's syndrome caused by fungal infection. Shamji FM, et al. **Can J Surg** 1988 Nov;31(6):441–3 (3 ref.)

Bronchial and gastrointestinal cryptosporidiosis in AIDS. Goodstein RS, et al. **J Am Osteopath Assoc** 1989 Feb; 89(2):195–7

DIAGNOSIS

Pulmonary dirofilariasis: the great imitator of primary or metastatic lung tumor. A clinicopathologic analysis of seven cases and a review of the literature. Ro JY, et al. **Hum Pathol** 1989 Jan;20(1):69–76 (21 ref.)

Laboratory diagnosis of pulmonary toxoplasmosis in patients with acquired immunodeficiency syndrome. Derouin F, et al. **J Clin Microbiol** 1989 Jul;27(7):1661–3

[Pulmonary dirofilariasis found unexpectedly during thymectomy] Makiya K, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):325–30 (Eng. Abstr.) (Jpn)

[A case of Strongyloides stercoralis infection detected by examination of the sputum] Bednarski Z, et al. **Wiad Lek** 1988 Jul 1;41(13):890–3 (Eng. Abstr.) (Pol)

EPIDEMIOLOGY

[The application of the two-stage catalytic model in the epidemiology of paragonimiasis] Zhang JL. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):235–7 (Eng. Abstr.) (Chi)

ETIOLOGY

The man who loved drunken crabs. A case of pulmonary paragonimiasis. Sharma OP. **Chest** 1989 Mar;95(3):670–2

[Acquired immunodeficiency syndrome and cryptosporidiosis of the respiratory tract (letter)] Casals A, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):676 (Spa)

IMMUNOLOGY

Lung-phase immunity to Schistosoma mansoni. Flow cytometric analysis of macrophage activation states in vaccinated mice. Menson EN, et al. **J Immunol** 1989 Oct 1;143(7):2342–8

PATHOLOGY

Pulmonary microcalcifications associated with Strongyloides stercoralis infection. Caceres MH, et al. **Chest** 1988 Oct; 94(4):862–5

Pulmonary dirofilariasis. The largest single-institution experience. Risher WH, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):303–8

[Morphologic findings in systemic amebiasis. Apropos of 1 case] Ortiz J, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 2):717–9 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Pulmonary complications in AIDS: the radiographic manifestations. Cooper NB, et al. **J Med Assoc Ga** 1989 Apr;78(4):197–200

Syngamosis: two new Brazilian cases and evidence of a possible pulmonary cycle. Severo LC, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):467–8

SURGERY

[Two resected cases of pulmonary dirofilariasis] Hatta T, et al. **Kyobu Geka** 1988 Nov;41(12):1015–9 (10 ref.) (Eng. Abstr.) (Jpn)

VETERINARY

Efficacy of an in-feed ivermectin formulation against gastrointestinal helminths, lungworms, and sarcoptic mites in swine. Alva-Valdes R, et al. **Am J Vet Res** 1989 Aug; 50(8):1392–5

Prophylactic efficacy of an ivermectin sustained-release bolus against challenge exposure with gastrointestinal and pulmonary nematode infective larvae in calves. Alva-Valdes R, et al. **Am J Vet Res** 1988 Oct;49(10):1726–8

Evaluation of ivermectin for larvicidal effect in experimentally induced Parascaris equorum infections in pony foals. DiPietro JA, et al. **Am J Vet Res** 1988 Nov; 49(11):1983–5

Filaroides hirthi infection in two related dogs. Pinckney RD, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1287–8

What is your diagnosis? Fulminant parasitic pneumonia. Tidwell AS, et al. **J Am Vet Med Assoc** 1989 Apr 1; 194(7):957–8

The effects of Dictyocaulus viviparus infection on energy metabolism of calves. Verstegen MW, et al. **J Anim Sci** 1989 Jan;67(1):241–51

Occurrence of the lungworms Capillaria and Crenosoma spp. in British hedgehogs (Erinaceus europaeus). Majeed SK, et al. **J Comp Pathol** 1989 Jan;100(1):27–36

Parasitic pneumonia in a dog caused by a lung fluke of the genus Paragonimus. Van Rensburg IB, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):203–6

Fatal lungworm infection in an opossum. Duncan RB Jr, et al. **J Wildl Dis** 1989 Apr;25(2):266–9

Observations on the lungworm, Pneumostrongylus calcaratus, in impala (Aepyceros melampus) from Swaziland. Gallivan GJ, et al. **J Wildl Dis** 1989 Jan; 25(1):76–82

Prevalence and pathology of nematode infections in the lungs of ringed seals (Phoca hispida) of the western arctic of Canada. Onderka DK. **J Wildl Dis** 1989 Apr;25(2):218–24

Seasonal prevalence of protostrongylid and Dictyocaulus species of lungworms in Awassi sheep in north-west Syria. Thomson EF, et al. **Trop Anim Health Prod** 1988 Aug; 20(3):187–9

Epidemiological patterns of gastrointestinal and lung helminth infections in grazing calves in The Netherlands. Eysker M, et al. **Vet Parasitol** 1988 Jul;29(1):29–39

Netobimin in drinking water for treatment of bovine parasitic bronchitis: a field experiment. Jacobs DE, et al. **Vet Rec** 1988 Oct 15;123(16):411–3

Immunity to parasitic bronchitis of yearling cattle treated with ivermectin during their first grazing season. Taylor SM, et al. **Vet Rec** 1988 Oct 8;123(15):391–5

Efficacy of a homoeopathic prophylaxis against experimental infection of calves by the bovine lungworm Dictyocaulus viviparus. Taylor SM, et al. **Vet Rec** 1989 Jan 7;124(1):15–7

Efficacy of flubendazole against gastrointestinal and lung nematodes in pigs. Vanparijs O, et al. **Vet Rec** 1988 Sep 24;123(13):337–9

Clinical signs following experimental lungworm infection and natural bovine respiratory syncytial virus infection in calves. Verhoeff J, et al. **Vet Rec** 1988 Sep 24; 123(13):346–50

[A persistent case of kennel cough caused by Filaroides osleri] Boersema JH, et al. **Tijdschr Diergeneeskd** 1989 Jan 1;114(1):10–3 (Eng. Abstr.) (Dut)

[New anthelmintics and new treatment systems for the control of parasitic diseases of cattle in pastures] Rommel M, et al. **Angew Parasitol** 1989 May;30(2):101–9 (24 ref.) (Eng. Abstr.) (Ger)

[Seal deaths in the Wadden Sea by Sylt in 1988: significance of the high degree of lungworm cases with a hypersensitivity reaction] Breuer EM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):467–73 (Eng. Abstr.) (Ger)

LUNG LAVAGE FLUID see **BRONCHOALVEOLAR LAVAGE FLUID**

LUNG NEOPLASMS

Carcinoma of the penis as a metastasis. Pálfi Z, et al. **Acta Chir Hung** 1988;29(4):323–6

Pulmonary capillary hemangiomatosis. A report of three cases and a review of the literature. Faber CN, et al. **Am Rev Respir Dis** 1989 Sep;140(3):808–13 (14 ref.)

Vipoma syndrome simultaneously occurring with small-cell carcinoma of the lung [letter] Noseda A, et al. **Arch Intern Med** 1989 May;149(5):1223

'Benign' clear-cell tumor (sugar tumor) of the lung with hepatic metastases ten years after resection of pulmonary primary tumor [letter] Sale GE, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1177–8

Cell cycle-specific variation of intracellular plasminogen activator activity in cultured human alveolar epithelial carcinoma and rat hepatoma cells. Orfanoudakis G, et al. **Biol Cell** 1989;65(3):297–300

Rapidly expanding exophthalmos: an unusual presentation of small cell lung cancer. Spaide RF, et al. **Br J Ophthalmol** 1989 Jun;73(6):461–2

Bilateral testicular metastases of pulmonary small cell carcinoma: a rare incidental finding following orchiectomy for prostatic carcinoma. Stein A, et al. **Br J Urol** 1989 May;63(5):552

Metastases to pineal gland. Weber P, et al. **Cancer** 1989 Jan 1;63(1):164–5

Fifth World Conference on Lung Cancer. Interlaken, Switzerland, August 28–September 1, 1988. Proceedings. **Chest** 1989 Jul;96(1 Suppl):1S–107S

Cutaneous signs of cardiopulmonary disease. An earlobe lesion with a lung nodule. Cregler LL, et al. **Chest** 1989 Apr;95(4):908–9

A rare endobronchial neurilemmoma (Schwannoma). Feldhaus RJ, et al. **Chest** 1989 Feb;95(2):461–2

Lung cancer and bronchial hyporesponsiveness? [letter] Kawane H, et al. **Chest** 1988 Nov;94(5):1112

Summary of pathobiologic presentations. Sorenson GD. **Chest** 1989 Jul;96(1 Suppl):80S–81S

Spontaneous regression of squamous cell lung carcinoma with adrenal metastasis. Sperduto P, et al. **Chest** 1988 Oct; 94(4):887–9

Lung cancer and autocrine growth factors. Yamaguchi K, et al. **Chest** 1989 Jul;96(1 Suppl):29S–31S (13 ref.)

Detection of impending pericardial tamponade during skeletal imaging. Engeler CM, et al. **Clin Nucl Med** 1989 Jul;14(7):479–81

Lung cancer presenting as small bowel perforation. Shirani J, et al. **Conn Med** 1989 Aug;53(8):455–6 (16 ref.)

Asbestos-related malignancy. Talcott JA, et al. **Curr Probl Cancer** 1988 May–Jun;12(3):135–78 (179 ref.)

A review of the 5th World Conference on Lung Cancer held by the International Association for the Study of Lung Cancer. Kristjansen PE, et al. **Eur Respir J** 1989 Mar; 2(3):275–9

A case report of three synchronous stage I malignant neoplasms. Ringler GE, et al. **Gynecol Oncol** 1989 Apr; 33(1):116–20

Malignant fibrous histiocytoma of the lung. Palmer AS, et al. **IMJ** 1988 Nov;174(5):290–1

Primary lung melanoma. Bertola G, et al. **Ital J Surg Sci** 1989;19(2):187–9

Primary chemotherapy of brain metastasis in small-cell lung cancer. Lee JS, et al. **J Clin Oncol** 1989 Jul;7(7):916–22

The blood-brain barrier and response of C.N.S. metastases to chemotherapy. Toner GC, et al. **J Neurooncol** 1989 May; 7(1):21–4

Pulmonary blastoma in a neonate. Jetley NK, et al. **J Pediatr Surg** 1988 Nov;23(11):1009–10

Pulmonary lymphangiomyomatosis. Eisera NB, et al. **J R Soc Med** 1988 Oct;81(10):607–9

Metastatic malignancy associated with reflex sympathetic dystrophy. Ameratunga R, et al. **J Rheumatol** 1989 Mar; 16(3):406–7

Cancer is not for sissies. Knowlton CW. **J S C Med Assoc** 1988 Aug;84(8):414–7

Subcarinal pheochromocytoma—a case report. Peng PC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):233–8

Eigenimage filtering in MR imaging: an application in the abnormal chest wall. Haggar AM, et al. **Magn Reson Med** 1989 Jul;11(1):85–97

The Feulgen hydrolysis profiles of [corrected] a metastatic lung tumour in lymph node and a primary breast carcinoma [published erratum appears in Med Lab Sci 1988 Jan;45(1):preceding 1] Mays RG. **Med Lab Sci** 1987 Oct; 44(4):307–11

Atypical carcinoid tumor of the lung: a case report and discussion of the literature. Arishita GI, et al. **Milit Med** 1989 Aug;154(8):421–4 (12 ref.)

Man-in-the-barrel syndrome caused by cerebral metastases. Moore AP, et al. **Neurology** 1989 Aug;39(8):1134–5

Late appearance of a radiodense lesion at the site of an irradiated metastasis: neuropathological findings. Schnittker JB, et al. **Neurosurgery** 1988 Dec;23(6):785–8

Case 9. Hemorrhagic adrenal metastases from poorly differentiated adenocarcinoma of the lung. **Radiographics** 1989 Jan;9(1):109–11

Chronic metastatic arthritis as the first symptom of lung adenocarcinoma. Alvarez Lario B, et al. **Scand J Rheumatol** 1989;18(3):169–70

Osteolytic cortical destruction: an unusual pattern of skeletal metastases. Greenspan A, et al. **Skeletal Radiol** 1988; 17(6):402–6

Neoplasms metastatic to parathyroid glands [letter] Gattuso P, et al. **South Med J** 1988 Nov;81(11):1467

Bronchioalveolar carcinoma: emphasis on localized lesions. Merine D, et al. **South Med J** 1989 Apr;82(4):475–80

Metastasis-induced acute appendicitis in small cell bronchogenic carcinoma. Pang LC. **South Med J** 1988 Nov; 81(11):1461–2 (9 ref.)

Bierhoff et al. 'Hemangiopericytoma of the lung—a rare differential diagnosis of lung tumors' [letter] Jakob H, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):61

Mesenchymoma of the lung [letter] Watson DC, et al. **Thorax** 1988 Nov;43(11):946–7

[Computed tomography in brain metastases of bronchogenic carcinoma] Liu ZX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Jun; 11(3):139–41, 190 (Eng. Abstr.) **(Chi)**

[Diagnosis and treatment of cerebral metastasis from lung cancer] Huang Q. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):140–2 (Eng. Abstr.) **(Chi)**

[Pulmonary teratoma] Huang JR, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):700–6 (12 ref.) (Eng. Abstr.) **(Chi)**

[Intravascular sclerosing bronchioalveolar tumor and pregnancy] Kopecký J, et al. **Cesk Gynekol** 1989 Feb; 54(1):26–8 **(Cze)**

[Jejunal perforation indicating the metastatic extension of a bronchial neoplasm] Cavenaile JC, et al. **Acta Chir Belg** 1988 May-Jun;88(3):155–7 (Eng. Abstr.) **(Fre)**

[Analysis of 64 second primary cancers of the bronchi] Roeslin N, et al. **Ann Chir** 1989;43(2):125–9 (Eng. Abstr.) **(Fre)**

[Incidence of metastases and their distribution pattern in bronchial carcinoma. Autopsy findings during 5 decades (1935 to 1984)] Notter M, et al. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):343–9 (80 ref.) **(Ger)**

[Principles in the prevention, early diagnosis, treatment and after care of malignant neoplasms of the trachea, bronchus and lung] Ebeling K, et al. **Radiobiol Radiother (Berl)** 1988; 29(5):561–70 (Eng. Abstr.) **(Ger)**

[Ultrastructural aspects of intra- and extravascular coagulopathy in lung cancer] Engel U, et al. **Zentralbl Allg Pathol** 1988;134(6):531–8 (Eng. Abstr.) **(Ger)**

[Single suprarenal gland metastasis of lung cancer] Vincre G. **Minerva Chir** 1989 Feb 15;44(3):365–6 **(Ita)**

[Report of a case of lung cancer with metastasis to the myocardium which showed electrocardiographic findings similar to acute myocardial infarction and intramyocardial mass on echocardiography] Dazai Y, et al. **Kokyu To Junkan** 1989 Apr;37(4):461–5 (Eng. Abstr.) **(Jpn)**

[The natural history of lung cancer] Miyamoto H, et al. **Kokyu To Junkan** 1988 Sep;36(9):961–7 **(Jpn)**

[A case of multiple sclerosing hemangiomas of the lung and a review of the literature in Japan] Maezato K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):230–3 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Clinical data on fractures caused by neoplasm metastases to the bones] Jastrzębski T, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:89–91 (Eng. Abstr.) **(Pol)**

[Metastases of lung cancer to the lymph nodes simulating arteriosclerosis obliterans] Zwoliński J, et al. **Pneumonol Pol** 1988 Jun;56(6):288–9 **(Pol)**

[Study of lymph nodes in lung cancer in experimental animals using the indirect lymphography method and a computer] Feofilov GL, et al. **Grudn Khir** 1989 May-Jun;(3):59–64 (Eng. Abstr.) **(Rus)**

[A case of histiocytoma (malignant fibroxanthoma) of the lung] Shlain BI, et al. **Grudn Khir** 1988 Jul-Aug;(4):94–6 **(Rus)**

[Secondary tumor of the heart] Kalinkina OM, et al. **Kardiologiia** 1988 Oct;28(10):105–8 **(Rus)**

[Primary bronchial carcinoma in the Medical Center in Zadar] Barić D. **Plucne Bolesti** 1988 Jan-Jun;40(1–2):75–9 (Eng. Abstr.) **(Scr)**

[Metastasis in the corpus cavernosum of the penis as primary manifestation of epidermoid carcinoma of the lung (letter)] Ortiz Cansado A, et al. **Med Clin (Barc)** 1988 Jun 18; 91(4):159 **(Spa)**

[Spontaneous regression of pulmonary metastases in renal adenocarcinoma and a second neoplasm (adenocarcinoma of the lung) (letter)] Orbuch SJ, et al. **Medicina (B Aires)** 1985;45(1):89–90 **(Spa)**

[Characteristics of the incidence of bronchogenic carcinoma in extreme age groups] Escudero Bueno C, et al. **Rev Clin Esp** 1989 Jun;185(2):65–8 (Eng. Abstr.) **(Spa)**

ANALYSIS

Insensitive test for keratins [letter] Battifora H. **Am J Clin Pathol** 1988 Dec;90(6):751

Neuroendocrine differentiation in endocrine and nonendocrine lung carcinomas. Linnoila RI, et al. **Am J Clin Pathol** 1988 Dec;90(6):641–52

Immunocytochemical analysis of cytocentrifuged fine needle aspirates. A study based on lung tumors aspirated in vitro. Brown DC, et al. **Anal Quant Cytol Histol** 1989 Apr; 11(2):140–5

Simultaneous flow cytometric detection of nuclear DNA and tumor-associated antigens in lung cancers. Inoue S, et al. **Anal Quant Cytol Histol** 1988 Aug;10(4):243–50

Neuropeptides elevate cytosolic calcium in small-cell lung cancer cells. Moody TW, et al. **Ann N Y Acad Sci** 1988; 551:280–2

A glycopeptide from adenocarcinoma tissue of human lung. Masuda H, et al. **Biochem Med Metab Biol** 1988 Aug; 40(1):1–7

Comparison of glycopeptide in lung cancer tissues of different histological types. Masuda H, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):253–9

Isolation and sequencing of a new biologically active peptide from human lung carcinoma. Hsi KL, et al. **Biomed Chromatogr** 1986 Jun;1(3):119–22

Expression of epidermal growth factor receptor (EGF-R) in non-small cell lung cancer. Use of archival tissue and correlation of EGF-R with histology, tumour size, node status and survival. Dazzi H, et al. **Br J Cancer** 1989 May; 59(5):746–9

High concentrations of chromium in lung tissue from lung cancer patients. Anttila S, et al. **Cancer** 1989 Feb 1; 63(3):467–73

Expression of tachykinins by ileal and lung carcinoid tumors assessed by combined in situ hybridization, immunocytochemistry, and radioimmunoassay. Bishop AE, et al. **Cancer** 1989 Mar 15;63(6):1129–37

Pulmonary sclerosing hemangioma of the lung. A type II pneumocytoma by immunohistochemical and immunoelectron microscopic studies. Satoh Y, et al. **Cancer** 1989 Sep 15;64(6):1310–7

Immunohistological detection of fucosyl-GM1 ganglioside in human lung cancer and normal tissues with monoclonal antibodies. Brezicka FT, et al. **Cancer Res** 1989 Mar 1; 49(5):1300–5

Copurification of osteolytic and transforming growth factor beta activities produced by human lung tumor cells associated with humoral hypercalcemia of malignancy. Linkhart TA, et al. **Cancer Res** 1989 Jan 15;49(2):271–8

Immunoreactive gastrin-releasing peptide as a specific tumor marker in patients with small cell lung carcinoma. Maruno K, et al. **Cancer Res** 1989 Feb 1;49(3):629–32

A novel monoclonal antibody, SCCL 175, with specificity for small cell neuroendocrine carcinoma of the lung. Memoli VA, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7319–22

Generation of two murine monoclonal antibodies that can discriminate N-glycolyl and N-acetyl neuraminic acid residues of GM2 gangliosides. Miyake M, et al. **Cancer Res** 1988 Nov 1;48(21):6154–60

Stage-specific expression of SSEA-1-related antigens in the developing lung of human embryos and its relation to the distribution of these antigens in lung cancers. Miyake M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7150–8

Comparison of DNA adducts and sister chromatid exchange in lung cancer cases and controls. Perera F, et al. **Cancer Res** 1989 Aug 15;49(16):4446–51

Gastrin in human bronchogenic carcinomas: constant expression but variable processing of progastrin. Rehfeld JF, et al. **Cancer Res** 1989 Jun 1;49(11):2840–3

Differential expression of the gene encoding the novel pituitary polypeptide 7B2 in human lung cancer cells. Roebroek AJ, et al. **Cancer Res** 1989 Aug 1;49(15):4154–8

Characterization of epidermal growth factor receptor in primary human non-small cell lung cancer. Veale D, et al. **Cancer Res** 1989 Mar 1;49(5):1313–7

A comparison of asbestos burden in non-urban patients with and without lung cancer. Dodson RF, et al. **Cytobios** 1988; 56(224):7–15

Detection of the multidrug resistant phenotype in human tumours by monoclonal antibodies and the streptavidin-biotinylated phycoerythrin complex method. Volm M, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):743–9

Local increase of antiprotease and neutrophil elastase-alpha 1-proteinase inhibitor complexes in lung cancer. Marchandise FX, et al. **Eur Respir J** 1989 Jul;2(7):623–9

Non-small cell lung carcinomas with neuroendocrine features. A light microscopic, immunohistochemical and ultrastructural study of 11 cases. Mooi WJ, et al. **Histopathology** 1988 Sep;13(3):329–37

Glycosaminoglycans in lung carcinoma. Kawai T, et al. **Hum Pathol** 1988 Nov;19(11):1288–92

Glycosphingolipids in lectin-resistant variants of mouse Lewis lung carcinoma cells. Ugorski M, et al. **Int J Cancer** 1989 Jan 15;43(1):93–101

Analysis of lung air from patients with bronchogenic carcinoma and controls using gas chromatography-mass spectrometry. Preti G, et al. **J Chromatogr** 1988 Nov 18; 432:1–11

The use of neuroendocrine immunoperoxidase markers to predict chemotherapy response in patients with non-small-cell lung cancer. Graziano SL, et al. **J Clin Oncol** 1989 Oct;7(10):1398–406

Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells. Suzuki K, et al. **J Exp Med** 1989 Jun 1;169(6):1895–901

Expression of epidermal growth factor receptors in four histologic cell types of lung cancer. Kaseda S, et al. **J Surg Oncol** 1989 Sep;42(1):16–20

Epidermal growth factor receptors in cancer tissues of esophagus, lung, pancreas, colorectum, breast and stomach. Ozawa S, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1201–7

Expression of p64c-myc and neuroendocrine properties define three subclasses of small cell lung cancer. Bepler G, et al. **Oncogene** 1989 Jan;4(1):45–50

Serum and tissue trace metal levels in lung cancer. Díez M, et al. **Oncology** 1989;46(4):230–4

Is the profile of binding of a panel of neoglycoproteins useful as a diagnostic marker in human lung cancer? Kayser K, et al. **Pathol Res Pract** 1989 Jun;184(6):621–9

Expression of neuroendocrine markers (neuronspecific enolase, synaptophysin and bombesin) in carcinoma of the lung. Kayser K, et al. **Pathol Res Pract** 1988 Aug; 183(4):412–7

Microsequencing evidence for the maturation of human proopiomelanocortin into an 18 amino acid beta-melanocyte stimulating hormone [h beta MSH(5–22)] in nonpituitary tissue. Bertagna X, et al. **Peptides** 1989 Jan-Feb;10(1):83–7

TA 4-SCC versus CEA sensitivity for lung cancer. Pecchio F, et al. **Tumori** 1988 Aug 31;74(4):393–5

[A study on the distribution of fibronectin in pulmonary adenocarcinoma of mice] Wu PQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):231–4, 256 (Eng. Abstr.) **(Chi)**

[Alpha-hANP-like immunoreactivity in lung cancer] An SZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):171–3 (Eng. Abstr.) **(Chi)**

[A preliminary study for cellular, albumin and immunoglobulin components of bronchoalveolar lavage fluid in normal control, pulmonary T.B. and malignant lung diseases] Lin CC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):110–6 (Eng. Abstr.) **(Chi)**

BLOOD

Identification of vasopressin-like peptides in the plasma of a patient with the syndrome of inappropriate secretion of antidiuretic hormone and an oat cell carcinoma. Smitz S, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):567–74

Presence of thrombosis-inducing activity in plasma from patients with lung cancer. Maruyama M, et al. **Am Rev Respir Dis** 1989 Sep;140(3):778–81

Significance of serum ferritin concentrations in lung cancer and it's relation with cellular immunity. Sardas OS, et al. **Arch Toxicol Suppl** 1989;13:197–9

Serum zinc and angiotensin-converting enzyme levels in patients with lung cancer. Bakan N, et al. **Biofactors** 1988 Jul;1(2):177–8

The value of tumour markers in lung cancer. Gomm SA, et al. **Br J Cancer** 1988 Dec;58(6):797–804

Blood groups and lung cancer [letter] Roberts TE, et al. **Br J Cancer** 1988 Aug;58(2):278

Alpha 1-acid glycoprotein concentration and molecular heterogeneity: relationship to oxprenolol binding in serum from healthy volunteers and patients with lung carcinoma or cirrhosis. Fraeyman NF, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):733–40

Diagnostic and prognostic importance of tumor markers in lung cancer. Ulsperger E, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):21–31 (74 ref.)

Use of the copper/zinc ratio in the diagnosis of lung cancer. Diez M, et al. **Cancer** 1989 Feb 15;63(4):726–30

Lung carcinoid with Cushing's syndrome: control of serum ACTH and cortisol levels using SMS 201–995 (sandostatin). Hearn PR, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):181–5

Elevation of a novel pituitary protein (7B2) in the plasma in small cell carcinoma of the lung. Iguchi H, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1225–32

Serum antithrombin III and alpha-2-antiplasmin concentration in patients with lung carcinoma. Dąbrowska M, et al. **Folia Haematol (Leipz)** 1988;115(5):641-6

Serum concentration of alpha-2-macroglobulin, alpha-1-antitrypsin and alpha-2-antichymotrypsin in patients with lung carcinoma. Dąbrowska M, et al. **Folia Haematol (Leipz)** 1988;115(6):817-23

Serum levels of C-reactive protein in patients with pulmonary tuberculosis and malignant tumors of the chest. Maasilta P, et al. **Infection** 1989 Jan-Feb;17(1):13-4

Comparative analysis of CEA and SCC serum markers with IAP in human lung cancer. Castelli M, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):45-50

Serum methotrexate and human chorionic gonadotropin concentrations during five-day chemotherapy for low-risk metastatic gestational trophoblastic neoplasia. Hilgers RD, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):421-5

Evaluation of cancer patient leukocyte responses in the presence of physiologic and pharmacologic pyridoxine and pyridoxal levels. Gridley DS, et al. **J Clin Lab Anal** 1989; 3(2):95-100

Plasma renin levels in patients with thoracic neuroblastoma. Leckie B, et al. **J Pediatr Surg** 1989 Jun;24(6):601-3

Significance of serum sialoglycoproteins in patients with lung cancer. Patel PS, et al. **Neoplasma** 1989;36(1):53-9

Serum levels of beta-carotene, vitamin A, and zinc in male lung cancer cases and controls. Kune GA, et al. **Nutr Cancer** 1989;12(2):169-76

Thrombosis-inducing activity found in plasma from two patients with advanced lung cancer. Maruyama M, et al. **Oncology** 1989;46(4):251-4

Abnormal haemostasis in small cell lung cancer. Milroy R, et al. **Thorax** 1988 Dec;43(12):978-81

Correlation between serum tumor marker levels and tumor proliferation in small cell lung cancer. Lehtinen M, et al. **Tumour Biol** 1988;9(6):287-92

Establishment and evaluation of a radioimmunoassay for neuron-specific enolase. A marker for small cell lung cancer. Paus E, et al. **Tumour Biol** 1989;10(1):23-30

[Relation between serum neuron-specific enolase and CEA levels in the patients with lung cancer] Hou LP. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):219-21, 255 (Eng. Abstr.) **(Chi)**

[Demonstration of immunoreactive calcitonin in sera of lung cancer and COPD patients] Chen CF, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):367-74 (Eng. Abstr.) **(Chi)**

[Nutritional status of vitamin A and carotenes in miners and lung cancer patients] Luo XN. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):223-5 (Eng. Abstr.) **(Chi)**

[The behavior of trace elements in bronchial carcinoma] Dawczynski H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):344-7 (Eng. Abstr.) **(Ger)**

[An autopsied case of pulmonary blastoma with high serum alpha-fetoprotein and carcinoembryonic antigen levels] Kiura K, et al. **Gan No Rinsho** 1989 May;35(6):729-34 (Eng. Abstr.) **(Jpn)**

[Evaluation of sialyl SSEA-1 antigen in patients with lung cancer] Shiota T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1067-73 (Eng. Abstr.) **(Jpn)**

[The changes in lipid peroxides in platelet, thromboxane B2 and 6-keto prostaglandin F1 alpha in patients with primary lung cancer] Ikeda S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):579-86 (Eng. Abstr.) **(Jpn)**

[Effect of sera from patients with lung cancer on proliferative properties of lymphocytes from healthy blood donors] Plucińska M, et al. **Pneumonol Pol** 1988 Jul;56(7):302-8 (Eng. Abstr.) **(Pol)**

[Vitamin A level in the blood serum of patients with primary lung cancer] Słowik-Gabryelska A, et al. **Pneumonol Pol** 1988 Jul;56(7):309-13 (Eng. Abstr.) **(Pol)**

[The hemostatic system during and after surgery in lung cancer patients and its role in the development of postoperative complications] Madzhuga AV. **Anesteziol Reanimatol** 1988 Sep-Oct;(5):69-71 (Eng. Abstr.) **(Rus)**

[The content of tumor angiogenesis factor in the blood serum of C57Bl/6 mice during the growth and metastasis of transplanted tumors] Lisniak IA, et al. **Eksp Onkol** 1989; 11(4):76-7, 80 (Eng. Abstr.) **(Rus)**

[The components of the blood plasma fibrinolytic system in mice with Lewis lung carcinoma] Riabukha VN, et al. **Eksp Onkol** 1989;11(3):78-80 (Eng. Abstr.) **(Rus)**

[Natural killer cells in the peripheral blood of patients with tuberculosis, pneumonia and cancer of the lungs] Savula MM, et al. **Probl Tuberk** 1988;(11):47-9 (Eng. Abstr.) **(Rus)**

[Possible causes for an increased content of blood peptide hormones in small-cell lung cancer] Raikhlin NT, et al. **Vopr Onkol** 1989;35(2):203-7 (Eng. Abstr.) **(Rus)**

[Determination of trace elements, ceruloplasmin and blood proteins in pulmonary neoplasms] Giménez Martín E, et al. **Rev Esp Oncol** 1985;32(4):633-40 (Eng. Abstr.) **(Spa)**

[Protein C in neoplastic disease. Effect of chemotherapy on the protein C levels in patients with inoperable lung neoplasms] Navarro I, et al. **Sangre (Barc)** 1988 Oct; 33(5):347-51 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Technetium-99m HMPAO and SPECT in the assessment of blood flow in human lung tumours. Rowell NP, et al. **Br J Cancer** 1989 Jan;59(1):135-41

Tumor blood flow: the principal modulator of oxidative and glycolytic metabolism, and of the metabolic micromilieu of human tumor xenografts in vivo. Kallinowski F, et al. **Int J Cancer** 1989 Aug 15;44(2):266-72

[Investigation on the blood supply of bronchogenic carcinoma. A comparative study of perfusion in pulmonary squamous cell carcinoma rat model and selective bronchial arteriography in patients with lung cancer] Han MJ. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Aug;22(4):243-5 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Cancer mortality among a cohort of chromium pigment workers. Hayes RB, et al. **Am J Ind Med** 1989;16(2):127-33

Cumulative arsenic exposure and lung cancer in smelter workers: a dose-response study. Järup L, et al. **Am J Ind Med** 1989;15(1):31-41

Lung tumor induction upon long-term low-level inhalation of crystalline silica. Muhle H, et al. **Am J Ind Med** 1989; 15(3):343-6

Does aluminum smelting cause lung disease? Abramson MJ, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1042-57 (92 ref.)

Histopathology of sinonasal and lung cancers in nickel refinery workers. Sunderman FW Jr, et al. **Ann Clin Lab Sci** 1989 Jan-Feb;19(1):44-50

Contribution of polycyclic aromatic compounds to the carcinogenicity of sidestream smoke of cigarettes evaluated by implantation into the lungs of rats. Grimmer G, et al. **Cancer Lett** 1988 Dec 15;43(3):173-7

A study of tobacco carcinogenesis. XLII. Bioassay in A/J mice of some structural analogues of tobacco-specific nitrosamines. Hecht SS, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):141-5

Modification of transplacental tumorigenesis by 3-methylcholanthrene in mice by genotype at the Ah locus and pretreatment with beta-naphthoflavone. Anderson LM, et al. **Cancer Res** 1989 Apr 1;49(7):1676-81

Evaluation of the transplacental tumorigenicity of the tobacco-specific carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in mice. Anderson LM, et al. **Cancer Res** 1989 Jul 15;49(14):3770-5

Inhibition of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA adduct formation and tumorigenicity in the lung of F344 rats by dietary phenethyl isothiocyanate. Morse MA, et al. **Cancer Res** 1989 Feb 1;49(3):549-53

Induction of lung and exocrine pancreas tumors in F344 rats by tobacco-specific and Areca-derived N-nitrosamines. Rivenson A, et al. **Cancer Res** 1988 Dec 1;48(23):6912-7

The effects of bay-region methyl substitution on 6-nitrochrysene mutagenicity in Salmonella typhimurium and tumorigenicity in newborn mice. el-Bayoumy K, et al. **Carcinogenesis** 1989 Sep;10(9):1685-9

Comparative dose-response study on the pulmonary carcinogenicity of 1,6-dinitropyrene and benzo[a]pyrene in F344 rats. Iwagawa M, et al. **Carcinogenesis** 1989 Jul; 10(7):1285-90

Enhanced malignant phenotype of urethane-induced lung adenoma associated with sialoadenectomy in BALB/c mice. Smith GJ, et al. **Carcinogenesis** 1989 Jul;10(7):1169-73

A metabolite of butylated hydroxytoluene with potent tumor-promoting activity in mouse lung. Thompson JA, et al. **Carcinogenesis** 1989 Apr;10(4):773-5

Molecular mechanisms in chemically induced cancer. O'Connor PJ. **Chest** 1989 Jul;96(1 Suppl):24S-25S (13 ref.)

Lung cancer in rubber manufacturing workers: two case reports. Sokas RK, et al. **Del Med J** 1988 Oct;60(10):573-6

Hydralazine use in relation to cancers of the lung, colon, and rectum. Kaufman DW, et al. **Eur J Clin Pharmacol** 1989;36(3):259-64

Transplacental initiation of liver, lung, neurogenic, and connective tissue tumors by N-nitroso compounds in mice. Anderson LM, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):604-20

Effects of glycerol on lung and liver tumor development. Witschi H, et al. **Fundam Appl Toxicol** 1989 Jul; 13(1):174-80

Chronic inhalation exposure of rats to titanium dioxide dust. Trochimowicz HJ, et al. **J Appl Toxicol** 1988 Dec; 8(6):383-5

Epidemiologic study of workers exposed to titanium dioxide. Chen JL, et al. **J Occup Med** 1988 Dec;30(12):937-42

Lung cancer due to chloromethyl ethers: bias in cohort definition. Weiss W. **J Occup Med** 1989 Feb;31(2):102-5

Lung cancer in chromate workers: high-risk group for multiple lung cancer. Uyama T, et al. **J Surg Oncol** 1989 Aug;41(4):213-8

Pulmonary talc granulomatosis due to intravenous ritalin. Williams J, et al. **J Tenn Med Assoc** 1988 Sep;81(9):560-1

Enhancing effect of high fat diet on 4-nitroquinoline 1-oxide-induced pulmonary tumorigenesis in ICR male mice. Imaida K, et al. **Jpn J Cancer Res** 1989 Jun; 80(6):499-502

United States. Cancer risk from domestic radon. **Lancet** 1989 Jan 14;1(8629):93

Chemopreventive effect of antineoplaston A-10 on urethane-induced pulmonary neoplasm in mice. Eriguchi N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1560-5

Mouse skin tumors as predictors of human lung cancer for complex emissions: an overview. Nesnow S. **Prog Clin Biol Res** 1989;298:347-61 (30 ref.)

Comparative lung tumorigenicity of parent and mononitro-polynuclear aromatic hydrocarbons in the BLU:Ha newborn mouse assay. Busby WF Jr, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):555-63

Dose-response relationship of diethylnitrosamine-initiated tumors in neonatal balb/c mice: effect of phenobarbital promotion. Klaunig JE, et al. **Toxicol Pathol** 1988; 16(3):381-5

[Metachronous primary pulmonary cancers. Apropos of a new case report] Piperno D, et al. **Rev Mal Respir** 1989; 6(1):79-81 (Eng. Abstr.) **(Fre)**

[New knowledge on the cancer causing effect of diesel motor exhaust] Pott F, et al. **Z Gesamte Hyg** 1988 Dec; 34(12):686-9 (Eng. Abstr.) **(Ger)**

[Death risk due to tumors of the respiratory system in workers employed in chromate production] de Marco R, et al. **Med Lav** 1988 Sep-Oct;79(5):368-76 (Eng. Abstr.) **(Ita)**

[Combined long-term toxicity and carcinogenicity test of p-chloro-m-xylenol (PCMX) applied to female mouse skin] Momma J, et al. **Eisei Shikenjo Hokoku** 1988; (106):39-47 (Eng. Abstr.) **(Jpn)**

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369-73 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Reproducibility of tumour typing of lung carcinomas performed according to WHO's recommendation. Dale I, et al. **APMIS** 1989 Apr;97(4):351-6

Classification of lung cancer patients and controls by chromatography of modified nucleosides in serum. McEntire JE, et al. **Cancer Res** 1989 Feb 15;49(4):1057-62

Quantitative description of classic and variant small cell lung cancer cell lines by nuclear image cytometry. Broers JL, et al. **Cytometry** 1988 Sep;9(5):426-31

Prognostic implications of histopathologic subtyping in patients with surgically treated stage I or II adenocarcinoma of the lung. Sørensen JB, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):245-51

[The practical significance of morphometrical and immunohistochemical studies in distinguishing subtypes of small cell carcinoma of the lung] Xu YD. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):164-6 (Eng. Abstr.) **(Chi)**

[The role of risk factors in the development of lung cancer of various cell types] Abrahám E, et al. **Orv Hetil** 1989 Aug 13;130(33):1773-6 (Eng. Abstr.) **(Hun)**

[New TNM classification for lung cancer] Tsuchiya R. **Kokyu To Junkan** 1989 Apr;37(4):409-13 **(Jpn)**

[The new TNM classification (1987) of esophageal cancer and lung cancer] Kita M. **Rinsho Hoshasen** 1989 Jan; 34(1):159-60 **(Jpn)**

[The international TNM classification of bronchopulmonary cancer] Bercea O. **Rev Ig [Pneumoftiziol]** 1988 Jul-Sep; 37(3):193-202 (19 ref.) **(Rum)**

[Classification, diagnosis and treatment of x-ray-negative lung cancer] Kharchenko VP, et al. **Sov Med** 1988;(12):70-5 **(Rus)**

COMPLICATIONS

Two cases of necrotizing myelopathy associated with malignancy caused by herpes simplex virus type 2. Iwamasa T, et al. **Acta Neuropathol (Berl)** 1989;78(3):252-7

Paraneoplastic cortical cerebellar degeneration. A neuropathological study of an autopsy case in comparison with cortical cerebellar degeneration in alcoholics. Mizutani T, et al. **Acta Neuropathol (Berl)** 1988; 77(2):206-12

Spontaneous pneumothorax caused by metastatic hemangioendothelioma. Radiographic appearance and pathologic correlation. Takashima S, et al. **Acta Radiol** 1989 Mar-Apr;30(2):181-2

Bronchial impaction in lobar collapse: CT demonstration and pathologic correlation. Glazer HS, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):485-8

Aspergilloma within cavitating pulmonary adenocarcinoma. McGregor DH, et al. **Am J Clin Pathol** 1989 Jan; 91(1):100-3

Chronic beta-blocker therapy complicating the presentation of cardiac tamponade of malignancy. Pigman EC. **Am J Emerg Med** 1989 May;7(3):291-3

Comparison of smoking-related risk factors among black and white males. Sterling TD, et al. **Am J Ind Med** 1989; 15(3):319-33

Management of airway problems in lung cancer patients using the neodymium-yttrium-aluminum-garnet (Nd-YAG) laser and endobronchial radiotherapy. Lang N, et al. **Am J Surg** 1988 Dec;156(6):463-5

Thrombosis and lung cancer [editorial] Rickles FR. **Am Rev Respir Dis** 1989 Sep;140(3):573-5

Amphotericin B encapsulated in liposomes administered to cancer patients. Meunier F, et al. **Ann N Y Acad Sci** 1988;

544:598–610
Reflex sympathetic dystrophy associated with squamous cell carcinoma of the lung. Prowse M, et al. **Ann Rheum Dis** 1989 Apr;48(4):339–41
Complications of treatment of small cell carcinoma of the lung. Experience from a recent Canadian trial. Feld R, et al. **Antibiot Chemother** 1988;41:204–9
Late-onset syringomas of the upper extremities associated with a carcinoid tumor [letter] Berbis P, et al. **Arch Dermatol** 1989 Jun;125(6):848–9
Bazex's syndrome in a woman with pulmonary adenocarcinoma [letter] Martin RW 3d, et al. **Arch Dermatol** 1989 Jun;125(6):847–8
Restorative effect of muroctasin on leukopenia caused by anticancer chemotherapy in lung cancer. Comparative study by envelope method. Fukuoka M, et al. **Arzneimittelforschung** 1989 Jan;39(1):90–3
Bone marrow involvement in small cell carcinoma of lung. Hunter-Mellado RF, et al. **Bol Asoc Med P R** 1988 Oct; 80(10):369–72
Spinal cord compression in small cell lung cancer: a retrospective study of 610 patients. Goldman JM, et al. **Br J Cancer** 1989 Apr;59(4):591–3
Sjogren's syndrome and pulmonary lymphangiomyomatosis [letter] Desche P, et al. **Chest** 1988 Oct;94(4):898
Bilateral chylothorax with pulmonary Kaposi's sarcoma [letter] Pandya K, et al. **Chest** 1988 Dec;94(6):1316–7
Factors associated with fatal hemoptysis in cancer patients. Panos RJ, et al. **Chest** 1988 Nov;94(5):1008–13
Comparison of efficacy of mitomycin-C and corynebacterium parvum in the management of malignant pleural effusion. Yew WW, et al. **Chin Med J [Engl]** 1988 Oct;101(10):737–9
Catamenial hemoptysis—report of a case. Wu JY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):501–4
Empyema caused by Kingella denitrificans and Peptostreptococcus spp. in a patient with bronchogenic carcinoma. Molina R, et al. **Eur Respir J** 1988 Oct; 1(9):870–1
Bilateral spontaneous pneumothorax due to metastatic synovial sarcoma. Kapoor R, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):273–5
Cardiac tamponade as the initial presentation of malignancy. Aggarwal P, et al. **Int J Cardiol** 1989 Feb;22(2):157–9
Antibodies to parathyroid hormone-related protein lower serum calcium in athymic mouse models of malignancy-associated hypercalcemia due to human tumors. Kukreja SC, et al. **J Clin Invest** 1988 Nov; 82(5):1798–802
Infundibular metastasis and panhypopituitarism. Allen EM, et al. **J Natl Med Assoc** 1989 Mar;81(3):325–30
Isolated eosinophilia associated with a squamous cell lung cancer. Berkompas RJ. **J Tenn Med Assoc** 1989 May; 82(5):241–2
Extracardiac malignancies producing tamponade. Brazil MJ, et al. **Mo Med** 1987 Oct;84(10):650–2
Chorea and dystonia: a remote effect of carcinoma. Albin RL, et al. **Mov Disord** 1988;3(2):162–9
Electrodiagnostic evolution of carcinomatous sensory neuronopathy. Donofrio PD, et al. **Muscle Nerve** 1989 Jun; 12(6):508–13
Cerebrovascular complications of mucinous cancers [published erratum appears in 1989 May;39(5):745] Amico L, et al. **Neurology** 1989 Apr;39(4):522–6
Diagnostic results in secondary malignant pleural effusions. Cantó Armengod A. **Pneumologie** 1989 Feb;43(2):58–60
Prediction of the diagnostic utility of thoracoscopy in pleural effusion. Martensson G. **Pneumologie** 1989 Feb;43(2):72–5
Jugular vein thrombosis associated with distant malignancy. Carrington BM, et al. **Postgrad Med J** 1988 Jun; 64(752):455–8
Systemic sclerosis in association with multiple primary pulmonary malignancy—a marker of internal malignancy? Goodfield MJ, et al. **Postgrad Med J** 1988 Nov; 64(757):886–8
Unusual presentation of cancer-induced lactic acidosis [letter] Rao KS, et al. **Postgrad Med J** 1988 Jun;64(752):475
Necrotising pancreatitis and diabetes associated with disseminated small cell carcinoma of lung. Evans AT. **Scott Med J** 1988 Dec;33(6):377
Pulmonary Kaposi's sarcoma in two recipients of renal transplants. Gunawardena KA, et al. **Thorax** 1988 Aug; 43(8):653–6
Acanthosis nigricans associated with alveolar cell carcinoma. Menzies DG, et al. **Thorax** 1988 May;43(5):414–5
Fatal acute interstitial pneumonia induced by low-dose doxorubicin and vindesine. Isawa T, et al. **Tohoku J Exp Med** 1989 Jun;158(2):149–54
Diagnosis and treatment of pulmonary disorders of patients with the acquired immunodeficiency syndrome (AIDS). Cone LA, et al. **Z Erkr Atmungsorgane** 1989;172(1):5–39 (237 ref.)
Antibiotic treatment of patients with primary bronchial cancer. Csontos Z, et al. **Z Erkr Atmungsorgane** 1989; 172(2):106–11
[Arterial blood gas changes in patients with malignant airway obstruction treated with Nd-YAG laser under local anesthesia] Lee CM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):74–7 (Eng. Abstr.) (Chi)
[Hypercalcemia in bronchogenic carcinoma] Zatloukal P, et al. **Sb Lek** 1989 Mar;91(2–3):87–91 (Eng. Abstr.) (Cze)
[The association of lung cancer and atheromatous arterial disease] Lamour A, et al. **Ann Chir** 1989;43(2):133–7 (Eng. Abstr.) (Fre)
[Paraneoplastic neurological manifestations of pulmonary neoplasms. Apropos of 2 case reports] Buysschaert M, et al. **Rev Med Brux** 1988 Sep;9(6):313–6 (Eng. Abstr.) (Fre)
[Combination of scleroderma and non bronchiolo-alveolar bronchial carcinoma. Report of a case and short review of the literature] M'Raihi ML, et al. **Rev Pneumol Clin** 1988;44(4):198–201 (19 ref.) (Eng. Abstr.) (Fre)
[Polyradiculoneuritis disclosing cancer of the lung] M'Raihi L, et al. **Tunis Med** 1988 May;66(5):477–80 (5 ref.) (Eng. Abstr.) (Fre)
[Results of nutrition diagnostic studies in patients with bronchial cancer] Domnisch K, et al. **Infusionstherapie** 1989 Apr;16(2):88–91 (Eng. Abstr.) (Ger)
[Diagnostic problems in ectopic Cushing syndrome] Reincke M, et al. **Med Klin** 1988 Sep 2;83(17):559–64 (Eng. Abstr.) (Ger)
[The frequency of bronchial carcinoma in 1,000 autopsies of cases of silicosis] Tischendorf M, et al. **Z Erkr Atmungsorgane** 1989;172(2):112–7 (Eng. Abstr.) (Ger)
[Non-trauma-induced hemothorax—a certain leading symptom of a malignant tumor?] Klöti J, et al. **Z Kinderchir** 1989 Apr;44(2):115–8 (Eng. Abstr.) (Ger)
[Mezlocillin in bronchopneumopathy caused by neoplasm obstruction] Bruno CG. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):389–96 (Eng. Abstr.) (Ita)
[Hemocoagulative disorders and course of cancer of the lung] Dericoloso A, et al. **Arch Monaldi Mal Torace** 1987 Nov–Dec;42(6):579–84 (Eng. Abstr.) (Ita)
[Parietal infiltration of the superior vena cava during bronchogenic cancer: problems of treatment] Iarussi T, et al. **Chir Ital** 1988 Jun;40(3):219–24 (Eng. Abstr.) (Ita)
[Carney's triad. Apropos of a case of recurrent gastric leiomyosarcoma and bilateral pulmonary chondroma] Pignatelli V, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):577–9 (14 ref.) (Eng. Abstr.) (Ita)
[A case of primary lung cancer associated with diffuse panbronchiolitis] Kido T, et al. **Kyobu Geka** 1989 May; 42(5):409–12 (Eng. Abstr.) (Jpn)
[A case of lung cancer with an anomaly of the left pulmonary artery] Suzuki T, et al. **Kyobu Geka** 1988 Sep;41(10):817–9 (Eng. Abstr.) (Jpn)
[Pleuroperitoneal shunt for malignant pleural effusions] Sadahiro S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):1–6 (Eng. Abstr.) (Jpn)
[A case of squamous cell carcinoma of the lung associated with cavitation after chemotherapy, leading to development of adult respiratory distress syndrome and disseminated intravascular coagulation] Umeki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1067–73 (Eng. Abstr.) (Jpn)
[A case of pulmonary lymphangiomyomatosis with left chylothorax] Namba Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):412–3 (Jpn)
[A case of Eaton-Lambert syndrome with a clinical recovery following surgical removal of the tumor] Shimada T, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):707–12 (Jpn)
[A case of the oat cell carcinoma of the lung presenting as nephrotic syndrome and a review of literature in recent 20 years] Watanabe K, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1421–7 (20 ref.) (Jpn)
[An autopsy case of polymyositis-scleroderma overlap syndrome associated with lung cancer] Yuhara T, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):738–9 (Jpn)
[A case of hypertrophic osteoarthropathy secondary to lung cancer] Katsuyama N, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1117–8 (Jpn)
[A case of squamous cell carcinoma of the lung associated with muscular stiffness] Kinoshita I, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):372–5 (Eng. Abstr.) (Jpn)
[Pulmonary mucormycosis caused by Absidia coerulea in a patient with lung cancer] Halweg H, et al. **Pneumonol Pol** 1988 Jul;56(7):329–35 (Eng. Abstr.) (Pol)
[Evolution and complications in a case of chylothorax caused by a tumor (lacking radiologic manifestation)] Mihăiţan F, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun;37(2):183–8 (Rum)
[A complication of laser photodestruction of bronchial cancer] Shipulin PP, et al. **Klin Khir** 1988;(10):54 (Rus)
[A case of systemic lupus erythematosus associated with cancer of the lung] Mikhalev ID, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):68–70 (Rus)
[Intrapulmonary leiomyomatosis in interstitial lung diseases] Orekhov OO, et al. **Sov Med** 1988;(11):70–2 (Rus)
[Features of the diagnosis and treatment of paracancerous pneumonia in bronchogenic pulmonary carcinoma] Iakovlev VN, et al. **Ter Arkh** 1989;61(5):103–8 (Eng. Abstr.) (Rus)
[Pancytopenia in bronchogenic lung cancer] Kholoshina GI, et al. **Ter Arkh** 1989;61(3):128–9 (Rus)
[2 cases of tracheobronchomegaly in combination with cancer of the lungs] Krut'ko VS, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):84–7 (Rus)
[Lymphangioleiomyomatosis of the lungs as a cause of spontaneous bilateral pneumothorax (case report)] Tatlić B, et al. **Acta Chir Iugosl** 1988;35(2):215–23 (Eng. Abstr.) (Scr)
[Inappropriate secretion of antidiuretic hormone syndrome in patients with microcellular bronchial carcinoma] Tudorić N, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):9–12 (Eng. Abstr.) (Scr)
[Adenocarcinoma and active pulmonary tuberculosis (letter)] Fernández de Sevilla T, et al. **Rev Clin Esp** 1988 Apr; 182(7):393 (Spa)
[Acromegaly and lung cancer (letter)] Morales S, et al. **Rev Clin Esp** 1989 Apr;184(6):337–8 (Spa)
[Pleurodesis with tetracycline in neoplastic effusions. Is an acid pH necessary?] Varela G, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):143–6 (32 ref.) (Eng. Abstr.) (Spa)

CONGENITAL

[Congenital lymphangioma of the lung] Zimmermann H, et al. **Z Kinderchir** 1989 Apr;44(2):111–4 (Eng. Abstr.) (Ger)

DIAGNOSIS

Exfoliative cytology of multiple endobronchial granular cell tumor. Füzesi L, et al. **Acta Cytol** 1989 Jul–Aug;33(4):516–8
Aspiration biopsy cytology of benign clear cell ("sugar") tumor of the lung. Nguyen GK. **Acta Cytol** 1989 Jul–Aug; 33(4):511–5
Bronchoalveolar lavage in the assessment of pulmonary Hodgkin's disease. Wisecarver J, et al. **Acta Cytol** 1989 Jul–Aug;33(4):527–32
Recognizing lung pseudolymphoma (casuistic case). Mačák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:127–35
Changes of serum proteinase "cathepsin B-like" activity in patients with lung cancer and plasmocytoma after therapy. Vodvářka P, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:173–9
Flexible fibre optic bronchoscopy in Ibadan: report of 6 years' experience. Awotedu AA, et al. **Afr J Med Med Sci** 1989 Jun;18(2):155–8
Detection bias in the diagnostic pursuit of lung cancer. Wells CK, et al. **Am J Epidemiol** 1988 Nov;128(5):1016–26
Pulmonary and pleural involvements at initial diagnosis in children with malignant neoplasm. Ishii E, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):281–5
Diagnosis of pulmonary masses by fine-needle aspiration. Lovett JV, et al. **Am J Surg** 1988 Dec;156(6):441–5
The immunohistochemical diagnosis of mesothelioma. Differentiation of mesothelioma and lung adenocarcinoma. Ordóñez NG. **Am J Surg Pathol** 1989 Apr;13(4):276–91
Representativity and reproducibility of DNA malignancy grading in different carcinomas. Böcking A, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):81–6
Flow cytometric DNA analysis in the diagnosis of lung tumors. A comparison with conventional methods. Chretien MF, et al. **Anal Quant Cytol Histol** 1988 Aug; 10(4):251–5
Diagnostic significance of flow cytometric DNA analysis applied for the detection of cancer cells in bronchial washing fluid. Deinlein E, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):360–4
Screening for lung cancer [letter] Petty TL. **Ann Intern Med** 1989 Oct 1;111(7):620–1
Alveolar cell carcinoma of the lung: a retrospective analysis of 205 patients. Harpole DH, et al. **Ann Thorac Surg** 1988 Nov;46(5):502–7
Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis. Ishida T, et al. **Ann Thorac Surg** 1989 Jul;48(1):90–5
Thoracoscopy: a review of 121 consecutive surgical procedures. Page RD, et al. **Ann Thorac Surg** 1989 Jul; 48(1):66–8
Application of immunoperoxidase staining to the cell blocks from sputa and bronchial washings. Lyubsky S, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):94–5
Breast carcinoma in bronchoalveolar lavage. A cytologic and immunocytochemical study. Radio SJ, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):333–6
Aspiration biopsy of palpable lymph nodes and the diagnosis of lung carcinoma. Duggan CJ, et al. **Aust N Z J Med** 1989 Jun;19(3):241–3
Fibreoptic bronchoscopy in the elderly: 4 years' experience. Knox AJ, et al. **Br J Dis Chest** 1988 Jul;82(3):290–3
Primary pulmonary artery sarcoma mimicking pulmonary thromboembolism. Cook DJ, et al. **Can J Cardiol** 1988 Nov–Dec;4(8):393–6
Use of pulmonary capillary wedge aspirates for the antemortem diagnosis of pulmonary microvascular tumor. Safian RD, et al. **Cathet Cardiovasc Diagn** 1989 Jun; 17(2):112–5
The role of transthoracic needle biopsy [letter] Binder RE. **Chest** 1989 Feb;95(2):483–4
Clinical predictors of malignancy [letter] de Gracia J, et al. **Chest** 1989 Jan;95(1):251–2
Preoperative assessment of lung cancer. Drings P. **Chest** 1989 Jul;96(1 Suppl):42S–44S (10 ref.)
Bronchoscopy to evaluate hemoptysis in older men with nonsuspicious chest roentgenograms. Lederle FA, et al. **Chest** 1989 May;95(5):1043–7
Diagnosis of peripheral lung cancer in cases of tumors 2 cm

or less in size. Mori K, et al. **Chest** 1989 Feb;95(2):304–8

Pleural fluid neuron-specific enolase. A useful diagnostic marker for small cell lung cancer pleurisy. Shimokata K, et al. **Chest** 1989 Mar;95(3):602–3

Flow cytometric evaluation of bronchoscopic washings and lavage fluid for DNA aneuploidy as an adjunct in the diagnosis of lung cancer and tumors metastatic to the lung. Yoss EB, et al. **Chest** 1989 Jul;96(1):54–9

Occult lung carcinoma presenting with dysphagia. The value of computed tomography. Heater K, et al. **Clin Imaging** 1989 Jun;13(2):122–6

Magnetic resonance imaging and computed tomography findings in a patient with lymphomatoid granulomatosis. Mendelson DS, et al. **Clin Imaging** 1989 Jun;13(2):130–3

Small cell lung cancer. Goodman GE, et al.
Curr Probl Cancer 1989 Jan–Feb;13(1):1–54 (191 ref.)

My most unforgettable case. A workmanlike job. Levenson I. **Cutis** 1989 Mar;43(3):205

Bronchoscopic "resection" of small cell carcinoma. Watkin SW, et al. **Endoscopy** 1989 Jul;21(4):186–7

Neuron-specific enolase in the diagnosis of small-cell lung cancer with pleural effusion: a negative report. Pettersson T, et al. **Eur Respir J** 1988 Aug;1(8):698–700

Expression of the epithelial L1 antigen as an immunohistochemical marker of squamous cell carcinoma of the lung. Dale I, et al. **Histopathology** 1989 May; 14(5):493–502

Primary pulmonary lymphoma: a case diagnosed by bronchial cytology and immunocytochemistry. Gouldesbrough DR, et al. **Histopathology** 1988 Oct;13(4):465–7

Pulmonary capillary haemangiomatosis diagnosed during life. Wagenaar SS, et al. **Histopathology** 1989 Feb;14(2):212–4

Immunohistochemical distinction of malignant mesothelioma from pulmonary adenocarcinoma with anti-surfactant apoprotein, anti-Lewisa, and anti-Tn antibodies. Noguchi M, et al. **Hum Pathol** 1989 Jan;20(1):53–7

Pulmonary dirofilariasis: the great imitator of primary or metastatic lung tumor. A clinicopathologic analysis of seven cases and a review of the literature. Ro JY, et al. **Hum Pathol** 1989 Jan;20(1):69–76 (21 ref.)

A study of bronchoalveolar lavage fluid (BALF) in lung cancer—clinical, cytology and immunoglobulin profile. Jain N, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun; 30(2):103–10

Creatine kinase isoenzyme BB: a lung cancer associated marker. Neri B, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):19–22

Phosphohexose isomerase and carcinoembryonic antigen in the sera of patients with primary lung cancer. Santabárbara P, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):113–22

Serum neopterin levels in lung and breast cancer patients undergoing radiotherapy and/or chemotherapy. von Ingersleben G, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):135–9

Metastatic bone disease from occult carcinoma: a profile. Nottebaert M, et al. **Int Orthop** 1989;13(2):119–23

Solitary metastasis of the patella as the first manifestation of lung cancer. A case report. Pazzaglia UE, et al. **Int Orthop** 1989;13(1):75–6

Hilar masses: evaluation with CT-guided biopsy after negative bronchoscopic examination. Posteraro RH, et al. **Invest Radiol** 1988 Sep;23(9):699–700

The case of the painful buttock [clinical conference] Gotchall JI, et al. **Iowa Med** 1989 Jun;79(6):283–9

False positive diagnosis of bronchogenic carcinoma based on bronchoscopic brushing and sputum cytology. A surgical point of view. Lodi M, et al. **Ital J Surg Sci** 1988; 18(4):385–8

Malignant round cell tumor of the thoracopulmonary region in an adolescent [clinical conference] Parikh PM, et al. **J Assoc Physicians India** 1989 Mar;37(3):227–8

Tripe palms and malignancy. Cohen PR, et al.
J Clin Oncol 1989 May;7(5):669–78 (82 ref.)

High signal intensity lesions of the chest in MR imaging. Barakos JA, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):797–802

MR imaging of superior sulcus carcinoma. McLoud TC, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):233–9

Pulmonary lymphangioleiomyomatosis: CT and pathologic findings. Templeton PA, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):54–7

New technique boosts hopes for early lung cancer detection [news] Ruddon K. **J Natl Cancer Inst** 1988 Nov 2; 80(17):1354–5

Diagnosis of pulmonary hamartoma by bronchoscopic transbronchial biopsy. Panos RJ, et al.
J Natl Med Assoc 1989 Apr;81(4):460–3

Pulmonary septic emboli mimicking metastatic rhabdomyosarcoma. Stine KC, et al. **J Pediatr Surg** 1989 May;24(5):491–3

The role of magnetic resonance imaging in the assessment of patients with lung cancer: a comparison with computed tomography. Webb WR. **J Thorac Imaging** 1989 Apr; 4(2):65–75 (47 ref.)

Pulmonary hydatid seeding mimicking hematogenous metastases: sonographic diagnosis of hydatid rupture into the inferior vena cava. Segura JM, et al. **JCU** 1989 Feb; 17(2):112–4

Spectroscopic differences between human cancer and normal lung and breast tissues. Tang GC, et al.
Lasers Surg Med 1989;9(3):290–5

Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al.
Magn Reson Imaging 1989 Jan–Feb;7(1):55–60

Is a lung nodule always a lung nodule? Osteocartilaginous exostosis mimicking an apical lung mass [see comments] Milunski MR, et al. **N C Med J** 1989 Apr;50(4):185–6, **Comment in:** N C Med J 1989 Jun;50(6):349–50

The contribution of discrimination analysis to the diagnostic decision in patients with lung carcinoma. Procházka J, et al. **Neoplasma** 1989;36(3):333–41

Neuroendocrine carcinomas of the lung: clinical, radiologic, and pathologic correlation. Forster BB, et al. **Radiology** 1989 Feb;170(2):441–5

Transthoracic fine-needle aspiration guided by fluoroscopy: validity and complications with 19 operators. Mørkve O, et al. **Respiration** 1988;53(4):239–45

Diagnostic and prognostic importance of tumor markers in lung cancer. Ulsperger E, et al.
Suppl J Med Oncol Tumor Pharmacother 1988;1:21–31 (74 ref.)

Gestational choriocarcinoma presenting as endobronchial carcinoma. McLeod DT. **Thorax** 1988 May;43(5):410–1

Bronchoscopic evaluation of peripheral lung tumours. Shiner RJ, et al. **Thorax** 1988 Nov;43(11):887–9

Prospective evaluation of fine needle aspiration in the diagnosis of lung cancer. Veale D, et al. **Thorax** 1988 Jul; 43(7):540–4

Effects of age and smoking on the disaturated phosphatidylcholine content of bronchoalveolar lavage fluid. Yasuoka S, et al. **Tokushima J Exp Med** 1988 Jun; 35(1–2):5–12

Immunohistochemical evaluation of a panel of monoclonal antibodies for the diagnosis of small cell lung cancer. Fargion S, et al. **Tumori** 1988 Dec 31;74(6):713–8

An unusual tumor of the lung. Postinflammatory pseudotumor (benign histiocytoma) of lung. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):325–31

Carcinoid and atypical carcinoid (well-differentiated neuroendocrine carcinoma) of the lung. Erlandson RA. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):333–9

The costly oversight. **Wis Med J** 1988 Sep;87(9):33–4

[Pulmonary blastoma] Anavi B, et al. **Khirurgiia (Sofiia)** 1988; 41(6):19–23 (16 ref.) (Eng. Abstr.) (Bul)

[Bronchofibroscopy of cavitary pulmonary diseases] Hu HC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):282–4, 319 (Eng. Abstr.) (Chi)

[Diagnosis and treatment of N2 lung carcinoma] Hu HC, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb;11(1):42–5 (26 ref.) (Chi)

[Immunohistochemical study of lung cancer] Ren CL.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Apr; 11(2):79–81, 127 (Eng. Abstr.) (Chi)

[Diagnostic value of CEA assay combined with CA50 in malignant and benign effusion] Xu WB.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):327–9, 384 (Eng. Abstr.) (Chi)

[Analysis of the misdiagnosis of primary bronchogenic carcinoma] Zhao WD.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Apr; 11(2):77–8, 127 (Eng. Abstr.) (Chi)

[The serum levels of human calcitonin (hCT) and salmon calcitonin (sCT) in lung cancer patients] Yiin KT, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):517–22 (Eng. Abstr.) (Chi)

[Clinical value of determination of CEA in bronchoalveolar effusion fluid for detecting bronchogenic carcinoma] Zhang ZY. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):275–7 (Chi)

[Thoracoscopy using flexible fiberoptic bronchoscopy—a preliminary report of experimental and clinical studies] Zhang DH, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan; 28(1):3–6, 60 (Eng. Abstr.) (Chi)

[Checkout of cancer-specific proteins and application in diagnosis of lung cancer] Zhang QH, et al.
Chung Hua Nei Ko Tsa Chih 1988 Sep;27(9):541–3, 586–7 (Eng. Abstr.) (Chi)

[Study of CEA as a marker of cancer and its surrounding tissue in 145 cases of lung carcinoma] Jia XS.
Chung-hua Ping Li Hsueh Tsa Chih 1988 Sep;17(3):173–5 (Eng. Abstr.) (Chi)

[Monoclonal antibodies distinguishing human small cell lung cancer from non-small cell lung cancer] Ge XR, et al.
Shih Yen Sheng Wu Hsueh Pao 1988 Jun;21(2):251–5 (Eng. Abstr.) (Chi)

[Surveillance elements of pneumonectomy spaces. Comparison of MRI and x-ray CT] Laissy JP, et al.
Ann Chir 1988;42(8):602–5 (Eng. Abstr.) (Fre)

[Inflammatory pseudo-tumor of the lung in adults. 1 case (letter)] Quiot JJ, et al. **Presse Med** 1988 Nov 5; 17(39):2088–9 (Fre)

[Pseudotumoral lambda chain pulmonary amyloidosis] Ben Othman H, et al. **Rev Mal Respir** 1989;6(3):265–6 (Eng. Abstr.) (Fre)

[Decision analysis: application of a diagnostic and therapeutic strategy in cases of bronchial carcinoma] Junod AF, et al. **Rev Mal Respir** 1988;5(5):497–504 (30 ref.) (Eng. Abstr.) (Fre)

[Bronchial cancer with extension into the heart. Apropos of a case with magnetic resonance imaging] Van Viet H, et al. **Rev Mal Respir** 1989;6(3):277–80 (Eng. Abstr.) (Fre)

[Bioclinical conference of pneumology. Case no. 11—18 March 1986. Alveolar form of histiocytosis] Gerber F, et al. **Rev Pneumol Clin** 1988;44(3):151–5 (Fre)

[Tumor markers in the diagnosis and follow-up assessment of bronchial carcinoma] Fischbach W.
Dtsch Med Wochenschr 1989 May 19;114(20):800–5 (71 ref.) (Ger)

[Neuron-specific enolase as a tumor marker in small cell bronchial carcinoma] Gasser RW, et al.
Dtsch Med Wochenschr 1988 Nov 4;113(44):1708–13 (Eng. Abstr.) (Ger)

[Primary malignant fibrous histiocytoma of the lung] Weimar B, et al. **Dtsch Med Wochenschr** 1988 Dec 23; 113(51–52):2010–2 (Eng. Abstr.) (Ger)

[Diagnostic strategies of the lung] Drings P.
Langenbecks Arch Chir 1988;Suppl 2:417–26 (26 ref.) (Eng. Abstr.) (Ger)

[Diagnostic predictability of CEA and TPA tumor markers in bronchoalveolar lavage fluid] Loos U, et al.
Prax Klin Pneumol 1988 Jun;42 Suppl 1:235–7 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography—a diagnostic gain in bronchial cancer?] Mayer KH, et al.
Prax Klin Pneumol 1988 Jul;42(7):567–9 (Eng. Abstr.) (Ger)

[Circulating antineuronal antibodies—use of a paraneoplastic phenomenon as tumor marker in small cell bronchial carcinoma] Popp W, et al. **Prax Klin Pneumol** 1988 Aug; 42(8):665–7 (Eng. Abstr.) (Ger)

[Deterioration of general condition, decreased functional performance, exertional dyspnea (clinical conference)] Sütsch G, et al. **Schweiz Rundsch Med Prax** 1988 Nov 22; 77(47):1299–301 (Eng. Abstr.) (Ger)

[Prognostic significance of DNA ploidy and distribution of cell cycle phases in non-small cell bronchial cancer. A 5-year survival study] Volm M. **Versicherungsmedizin** 1989 Jan 1;41(1):2–5 (Eng. Abstr.) (Ger)

[Tumor markers in bronchus cancer] Gasser RW, et al.
Wien Klin Wochenschr 1989 Jul 14;101(14):476–9 (17 ref.) (Eng. Abstr.) (Ger)

[Indications and limits of thoracoscopy in surgical diagnosis and therapy of lung diseases] Elfeldt R, et al.
Zentralbl Chir 1989;114(5):281–5 (Eng. Abstr.) (Ger)

[Early diagnosis of pulmonary tumors in patients treated for laryngeal cancer] Croce A, et al.
Acta Otorhinolaryngol Ital 1989 Mar–Apr;9(2):139–47 (46 ref.) (Eng. Abstr.) (Ita)

[Diagnostic imaging of lung metastases] Gualdi GF, et al.
Clin Ter 1988 Jan 15;124(1):65–6 (Ita)

[Aneurysm of the innominate artery: pathology simulating pulmonary neoplasm] Dominici C, et al. **Minerva Chir** 1989 Apr 15;44(7):1107–10 (Eng. Abstr.) (Ita)

[Current fiberoptic bronchoscopic diagnosis of carcinoma of the lung] Paolini A, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1243–6 (Eng. Abstr.) (Ita)

[Histo-radiological and histo-bronchoscopic correlates in neoplastic pathology of the lung. Personal case series] Menichetti M, et al. **Minerva Med** 1988 Sep;79(9):775–8 (Eng. Abstr.) (Ita)

[Tissue polypeptide antigen. A new serum marker in pulmonary carcinoma] Purello D'Ambrosio F, et al.
Minerva Med 1989 Jul;80(7):687–8 (Ita)

[Determination of serum neuron-specific enolase in bronchial tumors of neuroendocrine origin] Rapellino M, et al.
Minerva Med 1988 Dec;79(12):1051–2 (Eng. Abstr.) (Ita)

[Comparison of endoscopic aspects and cytohistological patterns in primary lung neoplasia] Salatino G, et al.
Minerva Med 1988 Dec;79(12):1053–6 (Eng. Abstr.) (Ita)

[Preoperative functional assessment with a balloon catheter in fiber bronchoscopy of patients who are candidates for pneumonectomy in bronchial cancer] Varoli F, et al.
Minerva Med 1989 Jul;80(7):697–700 (Ita)

[Bronchogenic carcinoma with extramucosal development. Diagnostic problems] Pandolfo I, et al.
Radiol Med (Torino) 1989 Apr;77(4):342–6 (Eng. Abstr.) (Ita)

[Lymphomatoid granulomatosis. Lymphoma of a particular type which is very difficult to diagnose] Storti E.
Recenti Prog Med 1989 Mar;80(3):153–9 (Eng. Abstr.) (Ita)

[Bronchoscopic diagnosis of lung cancer in early stage] Kaneko M, et al. **Gan No Rinsho** 1988 Aug;34(10):1369–72 (Eng. Abstr.) (Jpn)

[Simultaneously diagnosed triple primary neoplasms—a case report] Murate T, et al. **Gan No Rinsho** 1989 May; 35(6):741–7 (Eng. Abstr.) (Jpn)

[Early detection and differential diagnosis of metastatic lung tumor] Nakagawa K, et al. **Gan No Rinsho** 1988 Aug; 34(10):1467–77 (Eng. Abstr.) (Jpn)

[Diagnosis of lung cancer] Yamaguchi Y. **Gan No Rinsho** 1989 Jan;Spec No:119–27 (Jpn)

[A clinical evaluation of the versatility of various tumor markers in diagnosing the primary carcinoma of the lung] Shimabukuro Z. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):281–93 (Eng. Abstr.) (Jpn)

[Transesophageal endoscopic ultrasonography in lung cancer involving mediastinal organs in the assessment of resectability] Sakio H, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Apr;37(4):650–7 (Eng. Abstr.) (Jpn)

[A monoclonal antibody reacting with squamous cellular tissues and application for cytological differential diagnosis

of lung cancers] Asaoka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):645–52 (Eng. Abstr.) (Jpn)

[Carcinoembryonic antigen in the solution of percutaneously aspirated specimens and its diagnostic value for peripheral lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1039–41 (Eng. Abstr.) (Jpn)

[Diagnostic value of pleural effusion carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific-enolase in patients with lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):519–23 (Eng. Abstr.) (Jpn)

[A case of intravascular bronchioloalveolar tumor with pleural effusion] Hayashi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1207–12 (Eng. Abstr.) (Jpn)

[A clinical study on squamous cell carcinoma-related antigen in pleural effusion] Suzuki K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):923–30 (Eng. Abstr.) (Jpn)

[A case of pulmonary neurilemmoma] Yamada Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):71–4 (Eng. Abstr.) (Jpn)

[A case of alpha fetoprotein-producing primary lung adenocarcinoma-analysis of lectin binding with AFP] Kurimoto I, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):83–4 (Jpn)

[Symposium on diagnosis and treatment of cancer. Recent progress. I. Diagnosis 2. Imaging diagnosis (3) Immunodetection of small cell lung cancer] Okabe T. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1655–7 (5 ref.) (Jpn)

[Recent advances of positron emission tomography and CT scan for the diagnosis of early cancer] Kubota K, et al. **Nippon Rinsho** 1989 May;47(5):1037–43 (Jpn)

[Definition, diagnosis and treatment of lung cancers] Masaoka A, et al. **Nippon Rinsho** 1989 May;47(5):1141–6 (Jpn)

[The detection of in situ bronchogenic carcinoma] Ono R, et al. **Nippon Rinsho** 1989 May;47(5):1022–30 (Jpn)

[Hypercalcemia of malignancy] Tomita A. **Rinsho Byori** 1989 Feb;37(2):138–42 (Jpn)

[MRI of bronchogenic carcinoma] Bittner RC, et al. **Rinsho Hoshasen** 1989 Jan;34(1):37–43 (Eng. Abstr.) (Jpn)

[A clinical study on CA 15-3, CEA, SCC-Ag in patients with squamous cell carcinoma of the lung] Moriya H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):63–6 (Eng. Abstr.) (Jpn)

[The clinical application of ultra-low field (0.02 T) MRI for the diagnosis of lung tumors] Nakayama Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):19–25 (Eng. Abstr.) (Jpn)

[A new diagnostic method of lung cancer by DNA-RFLP] Kawashima K, et al. **Seikagaku** 1989 Feb;61(2):105–8 (Jpn)

[Value of bronchoscopic examination in the diagnosis of diseases of the respiratory system. I. Neoplasms of the respiratory tract and tuberculosis] Owsiński J. **Przegl Lek** 1988;45(5):432–7 (Eng. Abstr.) (Pol)

[Use of emergency cytological studies in bronchoscopic diagnosis of pulmonary cancer] Murav'eva IA, et al. **Khirurgiia (Mosk)** 1989 May;(5):7–10 (Eng. Abstr.) (Rus)

[Neuroblastoma of the lung] Alekseenko AV, et al. **Klin Khir** 1989;(5):65 (Rus)

[Hemangiopericytoma of the lung] Marchuk IK, et al. **Klin Khir** 1989;(5):65–6 (Rus)

[Adenocarcinoma of the lung in a 25-year-old woman] Khallenko VA, et al. **Klin Med (Mosk)** 1988 Dec;66(12):103 (Rus)

[Diagnosis and treatment of lung cancer in patients with multiple primary malignant tumors] Machaladze ZO, et al. **Klin Med (Mosk)** 1988 Dec;66(12):65–9 (Rus)

[Bronchoalveolar cancer] Trakhtenberg AKn, et al. **Klin Med (Mosk)** 1988 Dec;66(12):33–40 (51 ref.) (Rus)

[Cytologic studies in the differential diagnosis of pulmonary tuberculosis and lung cancer] Piatnochka IT, et al. **Lab Delo** 1988;(12):47–9 (Eng. Abstr.) (Rus)

[Monoclonal antibodies to lung cancer antigens (a review of the literature)] Tkacheva GA. **Med Radiol (Mosk)** 1989 May;34(5):62–75 (65 ref.) (Rus)

[Characteristics of the diagnosis of bronchogenic carcinoma in patients with pulmonary tuberculosis] Piatnochka IT. **Probl Tuberk** 1988;(7):60–2 (Rus)

[Pulmonary carcinoid imitating tuberculoma in an adolescent] Shimko EP, et al. **Probl Tuberk** 1989;(3):72–3 (Rus)

[Diagnosis of cancer of the lung in patients with tuberculosis and subjects with post-tuberculosis changes of the lungs] Zhingel' IP, et al. **Probl Tuberk** 1989;(6):26–9? (Eng. Abstr.) (Rus)

[Local secretory immunity and its significance in the diagnosis of cancer and chronic suppurative-inflammatory diseases of the lungs] Kochetkova VA, et al. **Sov Med** 1989; (5):83–6 (Rus)

[New possibilities of using laboratory research in oncology] Sokolova II, et al. **Sov Med** 1988;(8):15–7 (Eng. Abstr.) (Rus)

[Diagnostic and treatment results in small-cell lung cancer detected during dispensary care] Denisov LE, et al. **Vopr Onkol** 1989;35(2):163–7 (Eng. Abstr.) (Rus)

[Clinical factors and the ultrastructural characteristics of the tumor in the prognosis of small-cell lung cancer] Glazkova TG, et al. **Vopr Onkol** 1989;35(2):207–14 (Eng. Abstr.) (Rus)

[Blood lipase activity in cancer patients] Shelestiuk PI, et al. **Vopr Onkol** 1989;35(7):801–5 (Eng. Abstr.) (Rus)

[A pneumonia-like form of bronchioloalveolar cancer] Shulutko ML, et al. **Vopr Onkol** 1989;35(3):294–9 (Eng. Abstr.) (Rus)

[Evaluation of diagnosis and treatment of various clinico-anatomical forms of lung cancer] Vagner RI, et al. **Vopr Onkol** 1989;35(7):805–9 (Eng. Abstr.) (Rus)

[Metastatic brain lesion in small-cell lung cancer] Voinarevich AO. **Vopr Onkol** 1989;35(2):199–203 (Eng. Abstr.) (Rus)

[Rare benign tumors of the lungs] Marchuk IK. **Vrach Delo** 1988 Sep;(9):85–7 (Eng. Abstr.) (Rus)

[Significance of entropy of the blood serum protein fractions in the differential diagnosis of pulmonary tuberculosis and cancer] Piatnochka IT, et al. **Vrach Delo** 1988 Sep;(9):79–80 (Eng. Abstr.) (Rus)

DIET THERAPY

[Effect of a limitation of the food ration on macrophage functional activity and angiogenesis in mice with metastasizing tumors] Sopotsinskaia EB, et al. **Vopr Pitan** 1988 Nov-Dec;(6):48–50 (Eng. Abstr.) (Rus)

DRUG THERAPY

Levamisole or placebo after effective chemotherapy for remission and survival prolongation in advanced human solid tumors—a double-blind randomized trial. Focan C, et al. **Acta Oncol** 1989;28(1):105–6

Pharmacokinetic study of high dose etoposide infusion in patients with small cell lung cancer. Green JA, et al. **Acta Oncol** 1988;27(6b):819–22

Results of a five-drug combination chemotherapy in non-small cell lung cancer. A phase II trial. Marechal F, et al. **Acta Oncol** 1988;27(5):537–9

Role of dose, schedule and route of administration of 5-formyltetra-hydrofolate: preclinical and clinical investigations. Rustum YM, et al. **Adv Exp Med Biol** 1988; 244:39–52

Photodynamic laser therapy to alleviate complete bronchial obstruction: comparison of CT and bronchoscopy to predict outcome. Zwirewich CV, et al. **AJR** 1988 Nov; 151(5):897–901

Alternating chemotherapy with or without VP-16 in extensive-stage small-cell lung cancer. Everson LK, et al. **Am J Clin Oncol** 1989 Aug;12(4):339–44

A pilot study of the Functional Living Index-Cancer (FLIC) Scale for the assessment of quality of life for metastatic lung cancer patients. An Eastern Cooperative Oncology Group study. Finkelstein DM, et al. **Am J Clin Oncol** 1988 Dec;11(6):630–3

Leukoencephalopathy in small cell lung cancer patients receiving prophylactic cranial irradiation. Frytak S, et al. **Am J Clin Oncol** 1989 Feb;12(1):27–33

Phase II study of iproplatin (CHIP) in previously treated small-cell lung cancer. Granfortuna JM, et al. **Am J Clin Oncol** 1989 Aug;12(4):355–7

Chemotherapy of advanced non-small-cell lung cancer: a randomized trial of three cis-platin-based chemotherapy regimens. Hainsworth JD, et al. **Am J Clin Oncol** 1989 Aug;12(4):345–9

Randomized phase II evaluation of iproplatin (CHIP) and carboplatin (CBDCA) in lung cancer. A Southeastern Cancer Study Group trial. Kramer BS, et al. **Am J Clin Oncol** 1988 Dec;11(6):643–5

Phase II trial of trimetrexate in patients with stage III and IV non-small-cell lung cancer. Kris MG, et al. **Am J Clin Oncol** 1989 Feb;12(1):24–6

A phase I-II study of sequential infusion VP-16 and cisplatin therapy in advanced lung cancer. Krook JE, et al. **Am J Clin Oncol** 1989 Apr;12(2):114–7

Etoposide and split-dose cisplatin in bronchogenic carcinoma. Lauer RC, et al. **Am J Clin Oncol** 1988 Dec; 11(6):634–5

Chemotherapy plus RA233 in the treatment of oat cell lung cancer. Lipton A, et al. **Am J Clin Oncol** 1989 Jun; 12(3):259–63

Chemotherapy of advanced non-small-cell lung cancer with cyclophosphamide, adriamycin, methotrexate, and procarbazine versus cisplatin and etoposide. A randomized study. Veronesi A, et al. **Am J Clin Oncol** 1988 Oct; 11(5):566–71

Etoposide and split-dose cisplatin in small-cell lung cancer. Wilke H, et al. **Am J Clin Oncol** 1988 Oct;11(5):572–8

Pulmonary Kaposi's sarcoma: clinical findings and results of therapy. Gill PS, et al. **Am J Med** 1989 Jul;87(1):57–61

Prognostic value of initial chemotherapy doses in limited small cell lung cancer. Arriagada R, et al. **Antibiot Chemother** 1988;41:194–8

Review of mechanisms of cell resistance to therapy in lung cancer. Bertino JR. **Antibiot Chemother** 1988;41:29–34 (15 ref.)

Reduced short-term neuropsychological performance in patients with nonsmall-cell lung cancer treated with cisplatin and etoposide. Kaasa S, et al. **Antibiot Chemother** 1988;41:226–31

Review of methodological problems in the interpretation of phase II trials in nonsmall-cell lung cancer. Sørensen JB, et al. **Antibiot Chemother** 1988;41:57–64 (23 ref.)

Prognostic factors in patients with small-cell lung cancer: preliminary results from a large randomised study. Souhami RL, et al. **Antibiot Chemother** 1988;41:77–82

Identification of patients at high risk of chemotherapy-induced toxicity in small-cell lung cancer. Souhami RL, et al. **Antibiot Chemother** 1988;41:220–5

Should chemotherapy response be evaluated separately in sequential chemotherapy-radiotherapy schedules in locally advanced nonsmall-cell lung carcinoma? Thomas F, et al. **Antibiot Chemother** 1988;41:138–41

Is chemotherapy necessary in the management of unresectable nonmetastatic nonsmall-cell lung cancer? Trovò MG, et al. **Antibiot Chemother** 1988;41:126–30 (18 ref.)

Induction chemotherapy with cisplatin, etoposide and vindesine before radiation therapy for nonsmall-cell lung cancer. A randomized study. Van Houtte P, et al. **Antibiot Chemother** 1988;41:131–7

Nucleoside analogues: 8. Some isomers of B.3839, the original 5-fluorouracil/nitrosourea molecular combination, and their effect on colon, breast and lung tumours in mice. McElhinney RS, et al. **Anticancer Drug Des** 1989 Jun; 4(1):1–20

Nucleoside analogues: 7. Effect on colon, breast and lung tumours in mice of 5-fluorouracil/nitrosourea molecular combinations incorporating alkoxy and oxidized sulphur functions. McElhinney RS, et al. **Anticancer Drug Des** 1989 Mar;3(4):255–69

Clinical pharmacology of gallium chloride after oral administration in lung cancer patients. Collery P, et al. **Anticancer Res** 1989 Mar-Apr;9(2):353–6

Effects of thymostimulin on chemotherapy-induced toxicity and long-term survival in small cell lung cancer patients. Macchiarini P, et al. **Anticancer Res** 1989 Jan-Feb; 9(1):193–6

Antitumor activity of norspermidine, a structural homologue of the natural polyamine spermidine. Prakash NJ, et al. **Anticancer Res** 1988 Jul-Aug;8(4):563–8

Treatment of small cell carcinoma with weekly combination chemotherapy. A pilot study. Tabbara IA, et al. **Anticancer Res** 1989 Jan-Feb;9(1):189–92

Tamoxifen withdrawal response. Report of a case. Belani CP, et al. **Arch Intern Med** 1989 Feb;149(2):449–50

Intrinsic drug resistance in a human lung carcinoma xenograft is associated with overexpression of multidrug-resistance DNA-sequences and of plasma membrane glycoproteins. Volm M, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1189–93

Phase I/II study of recombinant human granulocyte colony-stimulating factor in patients receiving intensive chemotherapy for small cell lung cancer. Bronchud M, et al. **Behring Inst Mitt** 1988 Aug;(83):327–9

Controlled trial of twelve versus six courses of chemotherapy in the treatment of small-cell lung cancer. Report to the Medical Research Council by its Lung Cancer Working Party. **Br J Cancer** 1989 Apr;59(4):584–90

In vitro and in vivo analysis of the effects of recombinant human granulocyte colony-stimulating factor in patients. Bronchud MH, et al. **Br J Cancer** 1988 Jul;58(1):64–9

A simple outpatient treatment with oral ifosfamide and oral etoposide for patients with small cell lung cancer (SCLC). Cerny T, et al. **Br J Cancer** 1989 Aug;60(2):258–61

Modification by vasoactive drugs of tumour destruction by photodynamic therapy with haematoporphyrin derivative. Cowled PA, et al. **Br J Cancer** 1989 Jun;59(6):904–9

Mitomycin, ifosfamide and cis-platin in non-small cell lung cancer: treatment good enough to compare. Cullen MH, et al. **Br J Cancer** 1988 Sep;58(3):359–61

VP-16 and carboplatin in previously untreated patients with extensive small cell lung cancer: a study of the National Cancer Institute of Canada Clinical Trials Group. Evans WK, et al. **Br J Cancer** 1988 Oct;58(4):464–8

Antitumour activity and pharmacokinetics of niosome encapsulated adriamycin in monolayer, spheroid and xenograft. Kerr DJ, et al. **Br J Cancer** 1988 Oct;58(4):432–6

Small cell lung cancer. Leonard RC. **Br J Cancer** 1989 Apr; 59(4):487–90

Development of drug resistance in a human epidermoid lung carcinoma xenograft line. Mattern J, et al. **Br J Cancer** 1988 Jul;58(1):30–3

Acute phase reaction during chemotherapy in small cell lung cancer. Milroy R, et al. **Br J Cancer** 1989 Jun;59(6):933–5

Patients at risk of chemotherapy-associated toxicity in small cell lung cancer. Morittu L, et al. **Br J Cancer** 1989 May; 59(5):801–4

Duration of chemotherapy in small cell lung cancer: a Cancer Research Campaign trial. Spiro SG, et al. **Br J Cancer** 1989 Apr;59(4):578–83

Inhibition of pulmonary metastases and enhancement of natural killer cell activity by methionine-enkephalin. Faith RE, et al. **Brain Behav Immun** 1988 Jun;2(2):114–22

Cisplatin and etoposide (VP-16) as a single regimen for small cell lung cancer. A phase II trial. Boni C, et al. **Cancer** 1989 Feb 15;63(4):638–42

Continuation of chemotherapy versus supportive care alone in patients with inoperable non-small cell lung cancer and stable disease after two or three cycles of MACC. Results of a randomized prospective study. Buccheri GF, et al. **Cancer** 1989 Feb 1;63(3):428–32

Supportive care versus supportive care and combination chemotherapy in metastatic non-small cell lung cancer. Does chemotherapy make a difference? Ganz PA, et al.

Cancer 1989 Apr 1;63(7):1271–8

Treatment of advanced non-small cell lung cancer with cisplatin, 5-fluorouracil, and mitomycin C. Hesketh PJ, et al. **Cancer** 1988 Oct 15;62(8):1466–70

Lymphomatoid granulomatosis. A case for aggressive therapy. Jenkins TR, et al. **Cancer** 1989 Sep 15;64(6):1362–5

Evaluation of the effects of chemotherapy in lung cancer by thoracic computed tomography. Mori K, et al. **Cancer** 1988 Dec 15;62(12):2631–4

The influence of chemotherapy on plasma coagulation and fibrinolytic systems in lung cancer patients. Ruiz MA, et al. **Cancer** 1989 Feb 15;63(4):643–8

A lethal neurotoxic reaction after intraventricular methotrexate administration. ten Hoeve RF, et al. **Cancer** 1988 Nov 15;62(10):2111–3

Failure of response to ifosfamide in squamous cell bronchogenic carcinoma [letter] Banks J, et al. **Cancer Chemother Pharmacol** 1989;23(2):128

Cisplatin with high-dose infusions of hydroxyurea to inhibit DNA repair. A phase II study in non-small-cell lung cancer. Cantwell BM, et al. **Cancer Chemother Pharmacol** 1989;23(4):252–4

Intensive chemotherapy with autologous bone marrow transplantation for small-cell lung cancer. Souhami RL, et al. **Cancer Chemother Pharmacol** 1989;24(5):321–5

Responsiveness of human lung cancer/nude mouse to antitumor agents in a model using clinically equivalent doses. Tashiro T, et al. **Cancer Chemother Pharmacol** 1989; 24(3):187–92

Cytolytic response of human T cells against allogeneic small cell lung carcinoma treated with interferon gamma. Weynants P, et al. **Cancer Immunol Immunother** 1988; 27(3):228–32

Phase II trial of oral idarubicin in advanced non-small cell lung cancer (NSCLC). Ardizzoni A, et al. **Cancer Invest** 1988;6(4):409–11

Antitumor activity and nucleic acid binding properties of dercitin, a new acridine alkaloid isolated from a marine Dercitus species sponge. Burres NS, et al. **Cancer Res** 1989 Oct 1;49(19):5267–74

Comparative antitumor properties in rodents of irreversible inhibitors of L-ornithine decarboxylase, used as such or as prodrugs. Claverie N, et al. **Cancer Res** 1989 Aug 15; 49(16):4466–71

Interleukin-2 in malignant pleural mesothelioma (and adenocarcinoma of the lung). The use of intrapleural and continuous intravenous infusions: preliminary results. Thatcher N, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:161–2

The value of combination chemotherapy and radiotherapy in the management of primary non-small-cell lung carcinoma in Alexandria. Moussa-Mahmoud I, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):704–6

Phase II trials of idarubicin, a new anthracycline. Rosso R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):694

Chronic administration of lonidamine in untreated non-small cell lung cancer of stage III M0-1. Scagliotti GV, et al. **Chemotherapy** 1989;35(1):64–8

Should we intensify the treatment of small cell lung cancer? Aisner J. **Chest** 1989 Jul;96(1 Suppl):64S–66S (27 ref.)

Optimum duration of treatment with combination chemotherapy for small cell lung cancer. Cullen MH. **Chest** 1989 Jul;96(1 Suppl):62S–64S (7 ref.)

Innovative chemotherapy. Xenografts and in vitro drug sensitivity testing. Gazdar AF. **Chest** 1989 Jul;96(1 Suppl):56S–59S (18 ref.)

A pyrrhic victory in small cell lung cancer. Russchen GH, et al. **Chest** 1989 Jun;95(6):1331–2

Oral etoposide for a 95-year-old patient with small cell lung cancer [letter] Smit EF, et al. **Chest** 1989 Mar;95(3):709–10

New treatments for small cell lung cancer. When to test. Smith IE. **Chest** 1989 Jul;96(1 Suppl):59S–61S (14 ref.)

Chemotherapy of small cell lung cancer. Smyth JF. **Chest** 1989 Jul;96(1 Suppl):61S–62S (6 ref.)

High-dose chemotherapy in lung cancer. Souhami RL. **Chest** 1989 Jul;96(1 Suppl):66S–68S (13 ref.)

Neoadjuvant vindesine, etoposide, and cisplatin for locally advanced non-small cell lung cancer. Final report of a phase 2 study. Vokes EE, et al. **Chest** 1989 Jul;96(1):110–3

Treatment of metastatic transitional cell carcinoma following renal transplantation. Wood DP Jr, et al. **Cleve Clin J Med** 1989 Jan-Feb;56(1):61–3

Combination chemotherapy including high dose methotrexate and radiotherapy, in the treatment of small cell carcinoma of the lung. Burdon JG, et al. **Clin Exp Pharmacol Physiol Suppl** 1979;5:17–21

Phase II study of 9-hydroxy-2-methyl-ellipticinium acetate (ellipticinium) in patients with advanced carcinoma of the lung. EORTC Lung Cancer Cooperative Group. Anderson G, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):909–10

Non small cell lung cancer (NSCLC). A prospective randomized trial with alternating chemotherapy CEP/MEC' versus no treatment. Cellerino R, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1839–43

Unexpected high toxicity in a phase II study of teniposide (VM-26) in elderly patients with untreated small cell lung cancer (SCLC). Cerny T, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1791–4

Selectivity of N-[2-(dimethylamino)ethyl]acridine-4-carboxamide towards Lewis lung carcinoma and human tumour cell lines in vitro. Finlay GJ, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):271–7

Oral etoposide preceding cisplatin in advanced non small cell lung cancer (NSCLC). A phase II study. Focan C, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1515–20

Three-year disease-free survivors of small cell lung cancer treated with combination chemotherapy with or without chest irradiation. Fukuoka M, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):331–6

Identification of new drugs in pretreated patients with small cell lung cancer. Giaccone G. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):411–3

Phase II studies of mitozolomide in melanoma, lung and ovarian cancer. Harding M, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):785–8

Chemotherapy in non-small cell lung cancer (NSCLC). Klastersky J. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1035–8 (28 ref.)

Intensive chemotherapy in SCLC. Klastersky J. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):929–32 (28 ref.)

A comparison of cis-platinum-vindesine and cis-platinum-etoposide combined with radiotherapy for previously untreated localized inoperable non-small cell lung cancer. Niitamo-Korhonen S, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1039–43

High-dose etoposide for meningeal carcinomatosis in patients with small cell lung cancer. Postmus PE, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):377–8

In vitro and in vivo evaluation of the indoloquinone EO-9 (NSC 382 459) against human small cell carcinoma of the lung. Roed H, et al. **Eur J Cancer Clin Oncol** 1989 Aug; 25(8):1197–201

Brain metastases of lung cancer: excessive toxicity of high dose VP 16 213 [letter] Viens P, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1905–6

Chemotherapy plus adjuvant surgery for local small cell lung cancer. Benfield GF, et al. **Eur J Surg Oncol** 1989 Aug; 15(4):341–4

Raynaud's phenomenon following cytotoxic chemotherapy successfully managed by dorsal sympathectomy. MacLeod PM, et al. **Eur J Surg Oncol** 1989 Feb;15(1):79–81

Smoking and effect of chemotherapy in small cell lung cancer [published erratum appears in Eur Respir J 1989 Jun;2(6):following 591] Bergman B, et al. **Eur Respir J** 1988 Dec;1(10):932–7

Chemotherapy with curative potential in small cell carcinoma of the lung. Markman M. **Hematol Oncol Clin North Am** 1988 Sep;2(3):375–82 (29 ref.)

Phase II study of tiazofurin (NSC 286193) in the treatment of advanced small cell bronchogenic carcinoma. Holoye PY, et al. **Invest New Drugs** 1988 Sep;6(3):217–8

Chemotherapy induction, consolidation radiotherapy and maintenance alternating chemotherapy in small cell carcinoma of the lung. Warner-Efrati E, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9–10):593–8

Biological activities of novel recombinant tumor necrosis factor having N-terminal amino acid sequences derived from cytotoxic factors produced by THP-1 cells. Soma G, et al. **J Biol Response Mod** 1988 Dec;7(6):587–95

Levels of neuron-specific enolase after chemotherapy do not predict a response in small cell lung cancer. Splinter TA, et al. **J Cancer Res Clin Oncol** 1988;114(6):641–3

A phase III study on intermittent versus weekly cisplatin and etoposide in the treatment of advanced non-small cell bronchogenic carcinoma. Lelli G, et al. **J Chemother** 1989 Apr;1(2):136–9

A phase II study with teniposide (VM26) in patients with progressed or relapsed small cell lung cancer (SCLC). Tummarello D, et al. **J Chemother** 1989 Feb;1(1):64–7 (14 ref.)

A randomized trial of anticoagulation with warfarin and of alternating chemotherapy in extensive small-cell lung cancer by the Cancer and Leukemia Group B. Chahinian AP, et al. **J Clin Oncol** 1989 Aug;7(8):993–1002

Etoposide combined with cyclophosphamide plus vincristine compared with doxorubicin plus cyclophosphamide plus vincristine and with high-dose cyclophosphamide plus vincristine in the treatment of small-cell carcinoma of the lung: a randomized trial of the Bristol Lung Cancer Study Group. Hong WK, et al. **J Clin Oncol** 1989 Apr;7(4):450–6

Cisplatin versus cisplatin plus etoposide in the treatment of advanced non-small-cell lung cancer. Lung Cancer Working Party, Belgium. Klastersky J, et al. **J Clin Oncol** 1989 Aug;7(8):1087–92

Phase I clinical investigation of amonafide. Saez R, et al. **J Clin Oncol** 1989 Sep;7(9):1351–8

A randomized trial to evaluate the effect of schedule on the activity of etoposide in small-cell lung cancer. Slevin ML, et al. **J Clin Oncol** 1989 Sep;7(9):1333–40

Systemic therapy for small-cell lung cancer: old themes replayed, new ones awaited. Viallet J, et al. **J Clin Oncol** 1989 Aug;7(8):985–7

Mechanism of action of the antitumour effect of K18. Fujii T, et al. **J Int Med Res** 1989 Mar-Apr;17(2):132–40

4-Ipomeanol: a novel investigational new drug for lung cancer. Christian MC, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1133–43 (70 ref.)

Cisplatin dose intensity in non-small cell lung cancer: phase II results of a day 1 and day 8 high-dose regimen. Gandara DR, et al. **J Natl Cancer Inst** 1989 May 10;81(10):790–4

Podophyllotoxins for brain metastases of small cell lung cancer. Haaxma-Reiche H, et al. **J Neurooncol** 1988 Nov; 6(3):231–2

In vitro photodynamic therapy of human lung cancer. Matthews W, et al. **J Surg Res** 1989 Sep;47(3):276–81

Phase II study of carboplatin in non-small cell lung cancer. Tamura T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):51–5

Phase II study of N-methylformamide, spirogermanium, and 4-demethoxydaunorubicin in the treatment of non-small cell lung cancer (EST 3583): an Eastern Cooperative Oncology Group study. Ettinger DS, et al. **Med Pediatr Oncol** 1989;17(3):197–201

Combination versus sequential single-agent chemotherapy in the treatment of patients with advanced non-small cell lung cancer. Niell HB, et al. **Med Pediatr Oncol** 1989;17(1):69–75

Dramatic response of pulmonary metastasis from prostatic cancer to LH-RH agonist treatment. Heyman J, et al. **Mt Sinai J Med** 1989 Mar;56(2):108–10

Hindering of tumor lung metastasizing with alpha-(4-cyclohexylphenyl)propionic acid in mice. Mamytbeková A, et al. **Neoplasma** 1989;36(3):327–32

Combination chemotherapy with methotrexate, adriamycin, cyclophosphamide and CCNU (MACC) for nonsmall cell lung cancer. 4-year experience with 92 patients. Buccheri G, et al. **Oncology** 1989;46(4):212–6

Effects of tauromustine, a water-soluble nitrosourea compound on NMU-1 murine lung tumor. Pratesi G, et al. **Oncology** 1989;46(2):132–5

Chemotherapy consisting of epirubicin, cisplatin, and etoposide followed by irradiation in stage III non-small cell lung cancer and chemotherapy alone in stage IV non-small cell lung cancer. Wils J, et al. **Oncology** 1988; 45(6):413–6

Improvement of oral lesions associated with malignant acanthosis nigricans after treatment of lung cancer. Nomachi K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):74–9

Encapsulation of doxorubicin in liver-targeted erythrocytes increases the therapeutic index of the drug in a murine metastatic model. Zocchi E, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2040–4

Perugia International Cancer Conference I. Chemotherapy of non-small cell lung cancer. June 17–18, 1988, Perugia, Italy. Proceedings. **Semin Oncol** 1988 Dec;15(6 Suppl 7):1–70

Cisplatin for small-cell lung cancer. Aisner J, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):2–9 (71 ref.)

Review of therapeutic trials of carboplatin in lung cancer. Bunn PA Jr. **Semin Oncol** 1989 Apr;16(2 Suppl 5):27–33 (37 ref.)

The expanding role of cisplatin in the treatment of non-small-cell lung cancer. Bunn PA Jr. **Semin Oncol** 1989 Aug;16(4 Suppl 6):10–21 (85 ref.)

Treatment of advanced non-small cell lung cancer (NSCLC): the "Umbria" cooperative study. Crinò L, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):52–5

Efficacy of Navelbine (NVB) in non-small cell lung cancer (NSCLC). Depierre A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):26–9

European experience with ifosfamide in non-small cell lung cancer. Drings P. **Semin Oncol** 1989 Feb;16(1 Suppl 3):22–30

Ifosfamide in small cell lung cancer. Einhorn LH. **Semin Oncol** 1989 Feb;16(1 Suppl 3):19–21 (18 ref.)

Ifosfamide in the treatment of non-small cell lung cancer. Ettinger DS. **Semin Oncol** 1989 Feb;16(1 Suppl 3):31–8 (46 ref.)

Combination chemotherapy confers modest survival advantage in patients with advanced non-small cell lung cancer: report of a Canadian multicenter randomized trial. Evans WK. **Semin Oncol** 1988 Dec;15(6 Suppl 7):42–5

The European Organization for Research and Treatment of Cancer (EORTC) trials of new agents for advanced non-small cell lung cancer. Giaccone G. **Semin Oncol** 1988 Dec;15(6 Suppl 7):46–8

Preoperative and adjuvant chemotherapy in non-small cell lung cancer. Gralla RJ. **Semin Oncol** 1988 Dec;15(6 Suppl 7):8–12

Experience of a German multicenter study group with ifosfamide in small cell lung cancer. Havemann K, et al. **Semin Oncol** 1989 Feb;16(1 Suppl 3):9–18

Neoadjuvant chemotherapy for non-small cell lung cancer: current North American experience. Ihde DC. **Semin Oncol** 1988 Dec;15(6 Suppl 7):3–7 (10 ref.)

Treatment of advanced non-small cell lung cancer: the Southwest Oncology Group experience. Livingston RB. **Semin Oncol** 1988 Dec;15(6 Suppl 7):37–41

Adjuvant chemotherapy of non-small cell lung cancer: a review. Marangolo M, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):13–7 (25 ref.)

Etoposide v etoposide and cisplatin in the treatment of advanced non-small cell lung cancer: a FONICAP randomized study. Rosso R, et al. **Semin Oncol** 1988 Dec; 15(6 Suppl 7):49–51

Basis for experimental chemotherapy in lung cancer. Sadler JG, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):32–6

Chemotherapy for advanced adenocarcinoma of the lung: the Copenhagen study and review of the literature. Sørensen JB. **Semin Oncol** 1988 Dec;15(6 Suppl 7):56–7

Chemotherapy for non-small cell lung cancer: a randomized trial of cisplatin/vindesine v no chemotherapy. Williams CJ, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):58–61

Intrinsic multidrug resistance in human lung carcinomas grown in nude mice. Volm M, et al.

Strahlenther Onkol 1989 Jul;165(7):524–6
Etoposide compared with the combination of vincristine, doxorubicin, and cyclophosphamide in the treatment of small cell lung cancer. McIlmurray MB, et al. **Thorax** 1989 Mar;44(3):215–9
Lymphangiomyomatosis: a respiratory illness with an endocrinologic therapy. Sieker HO, et al.
Trans Am Clin Climatol Assoc 1987;99:57–67
VP16, epirubicin and procarbazine in the treatment of advanced non-small-cell lung cancer. Altavilla G, et al. **Tumori** 1989 Apr 30;75(2):168–70
Pilot study with adriamycin and ifosfamide in small cell lung cancer. Bidoli P, et al. **Tumori** 1989 Feb 28;75(1):34–7
Six-drug sequential chemotherapy in non small cell lung cancer. A North Milan Group Study. Cattaneo MT, et al. **Tumori** 1988 Dec 31;74(6):719–23
Bleomycin, vincristine, mitomycin and cisplatin alternated with cyclophosphamide, 4'-epidoxorubicin and procarbazine in advanced non-small-cell lung cancer. Demicheli R, et al. **Tumori** 1988 Oct 31;74(5):563–6
Lonidamine versus polychemotherapy in advanced non-small-cell lung cancer. A preliminary analysis. Giaccone G, et al. **Tumori** 1989 Feb 28;75(1):43–6
Doppler echocardiographic assessment of left ventricular diastolic function in patients with primary lung cancer treated with doxorubicin. Maione S, et al. **Tumori** 1988 Dec 31;74(6):725–9
EPOH-ESLAF? [letter] Sampson WI. **West J Med** 1988 Jun; 148(6):708
[Fiberoptic bronchoscopy-gold vapor laser treatment of bronchogenic carcinoma] Deng WW.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Feb; 11(1):25–6, 63 (Eng. Abstr.) (Chi)
[Results of bronchial artery chemotherapy infusion in lung cancer—report of 82 cases] Pang QQ.
Chung Hua Chung Liu Tsa Chih 1989 Jan;11(1):60–3 (Eng. Abstr.) (Chi)
[Intra-arterial drug infusion via the bronchial artery in the treatment of bronchogenic carcinoma] Wang ZT.
Chung Hua Fang She Hsueh Tsa Chih 1988 Aug;22(4):216–9 (Eng. Abstr.) (Chi)
[Results of palliative chemotherapy in advanced small cell bronchial carcinoma] Fritze D, et al.
Dtsch Med Wochenschr 1988 Oct 28;113(43):1663–8 (Eng. Abstr.) (Ger)
[Chemotherapy of non-small cell bronchial cancer with ifosfamide in combination with cisplatin, etoposide or vindesine] Drings P, et al. **Onkologie** 1988;11 Suppl 2:47–56 (Eng. Abstr.) (Ger)
[Pretherapeutic prognostic factors in small cell bronchial cancer] Niederle N, et al. **Onkologie** 1988;11 Suppl 2:34–40 (Eng. Abstr.) (Ger)
[Hepatotoxicity with etoposide-ifosfamide combination therapy] Paschke R, et al. **Onkologie** 1988 Dec;11(6):273–5 (Eng. Abstr.) (Ger)
[Results of 2 multicenter therapy studies in inoperable non-small cell bronchial cancer] Wolf M, et al.
Onkologie 1988 Oct;11(5):222–31 (Eng. Abstr.) (Ger)
[Phase III therapy study in patients with small cell bronchial cancer] Zschaber R, et al. **Onkologie** 1988;11 Suppl 2:9–12 (Eng. Abstr.) (Ger)
[Adjuvant therapy of non-small cell bronchial cancer with mopidamol] Blaha H, et al. **Pneumologie** 1989 Jun; 43(6):299–304 (Eng. Abstr.) (Ger)
[Chemotherapy of bronchial carcinoma] Drings P.
Prax Klin Pneumol 1988 Jun;42 Suppl 1:340–3 (Eng. Abstr.) (Ger)
[Chemotherapy of bronchus carcinoma] Joss R, et al.
Schweiz Rundsch Med Prax 1989 Feb 14;78(7):159–62 (Eng. Abstr.) (Ger)
[Polychemotherapy of large cell carcinoma of the lung: a case of complete remission] Spaghi A, et al.
Medicina (Firenze) 1989 Jan–Mar;9(1):54–6 (Eng. Abstr.) (Ita)
[Successful CYVADIC combination chemotherapy of metastatic pulmonary lesions involving a mediastinal leiomyosarcoma—a case report] Mishima T, et al.
Gan No Rinsho 1989 Aug;35(9):1061–6 (Eng. Abstr.) (Jpn)
[A case of retrocecal appendicitis occurrence during effective chemotherapy in lung cancer] Satoh H, et al.
Gan No Rinsho 1989 Feb;35(3):389–92 (Eng. Abstr.) (Jpn)
[A case of mesopharyngeal carcinoma that showed a complete response to induction chemotherapy] Tsuruta Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1693–8 (Eng. Abstr.) (Jpn)
[Effect of cisplatinum (CDDP) and combined chemotherapy with CDDP on peripheral blood lymphocyte natural killer (NK) activity] Baba M, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3299–302 (Jpn)
[5-FU intra-arterial infusion and simultaneous irradiation in the treatment of esophageal cancer and metastatic lung cancer] Bohno K, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 2):2701–6 (Eng. Abstr.) (Jpn)
[Effect of the pulmonary artery infusion chemotherapy of non-small cel lung cancer] Fukuhara H, et al.
Gan To Kagaku Ryoho 1989 Jul;16(7):2469–72 (Jpn)
[Antitumor effects of 5-fluorouracil-bound organic silicon compound] Fukushima K. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3243–50 (Eng. Abstr.) (Jpn)
[A randomized phase II study of (2'R)-4'-O-tetrahydropyranyladriamycin and adriamycin in combination with vincristine and ACNU in small cell lung cancer—THP-ADM, VCR, ACNU vs ADM, VCR, ACNU] Hino M, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3143–8 (Eng. Abstr.) (Jpn)
[Combination chemotherapy with bronchial arterial infusion (BAI) and systemic chemotherapy in advanced non-small cell lung cancer] Houya I, et al.
Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):2697–700 (Eng. Abstr.) (Jpn)
[Adriamycin, cisplatin, and etoposide combination chemotherapy for small cell lung cancer] Irino S, et al.
Gan To Kagaku Ryoho 1989 Jun;16(6):2263–7 (Eng. Abstr.) (Jpn)
[A case of hepatocellular carcinoma (HCC) with lung metastasis which responded to chemotherapy with a single use of 1-hexylcarbamoyl-5-fluorouracil (HCFU)] Kanda Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):269–72 (Eng. Abstr.) (Jpn)
[Phase I study and early phase II of SM-108 (4-carbamoylimidazolium-5-olate) in lung cancer. SM-108 Study Group] Kimura K, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):113–21 (Eng. Abstr.) (Jpn)
[A comparative randomized phase II study of CDDP, CDDP-carboquone (CQ) and CDDP-etoposide as second-line chemotherapy in small cell lung cancer (SCLC)] Kobayashi K, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):207–12 (Eng. Abstr.) (Jpn)
[Combination chemotherapy of CDDP and etoposide in advanced non-small cell carcinoma of the lung] Kodama N, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3233–7 (Eng. Abstr.) (Jpn)
[Interventional DSA in lung cancer—bronchial artery infusion] Kuroda Y, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-1):1173–80 (Eng. Abstr.) (Jpn)
[A case of multiple pulmonary metastases from rectal cancer which responded completely to combination chemotherapy using 5'-DFUR and MMC] Matsuda M, et al.
Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 1):2659–62 (Eng. Abstr.) (Jpn)
[Pilot study of a continuous five-day intravenous infusion of cisplatin plus vindesine in advanced non-small cell lung cancer] Mori K, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2465–8 (Jpn)
[Peripheral neuropathy caused by cisplatin in patients with lung cancer] Murata M, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2283–8 (Eng. Abstr.) (Jpn)
[Critics and proposals for the response criteria of the Japan Lung Cancer Society] Ohnoshi T.
Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 1):311–5 (Eng. Abstr.) (Jpn)
[Small cell lung cancer: a retrospective analysis of results of chemotherapy and combined modality treatment] Ohnoshi T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1341–8 (Eng. Abstr.) (Jpn)
[Recent trends of chemotherapy in small cell lung cancer: a slow but steady progress] Ohnoshi T.
Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 1):2522–30 (41 ref.) (Eng. Abstr.) (Jpn)
[Pilot phase II study of 5-day continuous infusion of cisplatin in treatment of non-small cell lung cancer] Saito Y, et al.
Gan To Kagaku Ryoho 1989 May;16(5):2081–6 (Eng. Abstr.) (Jpn)
[Clinical study of combination chemotherapy with mitomycin C, vindesine and cisplatin (MVP therapy) in advanced non-small cell lung cancer] Setoguchi J, et al.
Gan To Kagaku Ryoho 1989 Jul;16(7):2399–403 (Eng. Abstr.) (Jpn)
[Phase I and pharmacokinetic study of KRN8602, a new morpholino anthracycline] Tabata M, et al.
Gan To Kagaku Ryoho 1989 Jul;16(7):2361–6 (Eng. Abstr.) (Jpn)
[Restorative effect of muroctasin, MDP-Lys (L 18), on leukopenia caused by anticancer chemotherapy in lung cancer—comparative study by envelope method] Takada M, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3095–101 (Eng. Abstr.) (Jpn)
[The pharmacokinetics of cisplatin and its influence on renal function according to different infusion methods (report II)—alleviation of renal impairment by bismuth subnitrate combined with ginseng and tang-koui ten] Takahashi A, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2405–10 (Eng. Abstr.) (Jpn)
[Pilot phase II study of hybrid chemotherapy of CAV-PVP in small cell lung cancer (SCLC)] Ueoka H, et al.
Gan To Kagaku Ryoho 1989 Jun;16(6):2251–5 (Eng. Abstr.) (Jpn)
[Clinical study on the role of preoperative chemotherapy in the advanced stage of non-small cell lung cancer] Shiba M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1089–95 (Eng. Abstr.) (Jpn)
[Vepesid and medroxyprogesterone in the treatment of disseminated malignant melanoma] Pawlicki M, et al.
Nowotwory 1988 Oct-Dec;38(4):267–73 (Eng. Abstr.) (Pol)
[Experimental antimetastatic activity of aclarubicin] Viadro MM, et al. **Antibiot Khimioter** 1988 Nov;33(11):845–8 (Eng. Abstr.) (Rus)
[Effect of staphylococcal enterotoxin A on the development of Lewis lung carcinoma in mice] Shcheglovitova ON, et al. **Eksp Onkol** 1989;11(1):73–4, 79 (Eng. Abstr.) (Rus)
[A method for choosing preparations that reduce the toxicity of cytostatics in experimental chemotherapy of tumors] Zueva EP, et al. **Farmakol Toksikol** 1989 Jan-Feb; 52(1):74–7 (Eng. Abstr.) (Rus)
[Prevention of bronchopulmonary inflammation in patients with lung cancer receiving cytostatic therapy] Viazitskiĭ PO, et al. **Klin Med (Mosk)** 1988 Jun;66(6):64–7 (Rus)
[Anticarcinogenic action of vitamins PP and B6 in the natulan initiation of malignant growth in mice] Draudin-Krylenko VA, et al. **Vopr Onkol** 1989;35(1):34–8 (Eng. Abstr.) (Rus)
[The results of the adjuvant chemotherapy of patients with small-cell lung cancer] Grants EA, et al. **Vopr Onkol** 1989; 35(2):172–4 (Eng. Abstr.) (Rus)
[The effectiveness of 2 systems of chemoradiation treatment in inoperable small-cell lung cancer] Mikhina ZP, et al. **Vopr Onkol** 1989;35(2):174–80 (Eng. Abstr.) (Rus)
[The effectiveness of chemoradiotherapy of malignant tumors using platidiam] Monakhov BV, et al. **Vopr Onkol** 1988; 34(9):1114–8 (Eng. Abstr.) (Rus)
[Eosinophilic granuloma of the lung. Complete response after treatment with thymic hormone (letter)] Martin Algarra S, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):394 (Spa)

ECONOMICS

Cost-effectiveness of CT scanning compared with mediastinoscopy in the preoperative staging of lung cancer. Eddy RJ. **Can Assoc Radiol J** 1989 Aug;40(4):189–93
Cost-effectiveness of cancer chemotherapy: an economic evaluation of a randomized trial in small-cell lung cancer. Goodwin PJ, et al. **J Clin Oncol** 1988 Oct;6(10):1537–47
Counting costs of care [editorial] McVie JC.
J Clin Oncol 1988 Oct;6(10):1529–31
[Economic analysis of temporary disability in lung cancer] Blinov NN, et al. **Sov Med** 1989;(5):61–4 (Rus)
[Economic evaluation of the degree of disability in lung cancer after its radical treatment] Komiakov IP, et al.
Sov Med 1989;(1):60–2 (Rus)

ENZYMOLOGY

Does circadian variation of "cathepsin B-like" activity exist in the serum of patients with lung cancer? Vodvárka P, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:153–60
Effect of hypercalcemia-producing tumor on 1,25(OH)2D3 biosynthesis in athymic mice. Kukreja SC, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):E309–14
Antileukoprotease-containing bronchiolar cells. Relationship with morphologic disease of small airways and parenchyma. Willems LN, et al. **Am Rev Respir Dis** 1989 May;139(5):1244–50
High amylase levels in neoplasm-related pleural effusion. Kramer MR, et al. **Ann Intern Med** 1989 Apr 1;110(7):567–9 (13 ref.)
Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells. Lison D, et al.
Biochem Pharmacol 1989 Jul 1;38(13):2107–12
The prognostic influence of serum neuron specific enolase in small cell lung cancer. Jørgensen LG, et al.
Br J Cancer 1988 Dec;58(6):805–7
Neuron-specific enolase and thymidine kinase as an aid to the diagnosis and treatment monitoring of small cell lung cancer. Fischbach W, et al. **Cancer** 1989 Mar 15; 63(6):1143–9
Characterization of pyruvate kinase from human rhabdomyosarcoma in relation to immunohistochemical and morphological criteria. Staal GE, et al. **Cancer** 1989 Feb 1;63(3):479–83
Altered function of protein kinase C and cyclic adenosine monophosphate-dependent protein kinase in a cell line derived from a mouse lung papillary tumor. Nicks KM, et al. **Cancer Res** 1989 Sep 15;49(18):5191–8
Expression of the glutathione S-transferase placental form in human lung carcinomas. Eimoto H, et al.
Carcinogenesis 1988 Dec;9(12):2325–7
Adenosine diphosphate ribosyl transferase responses to a standardized dose of hydrogen peroxide in the mononuclear leukocytes of patients with a diagnosis of cancer. Pero RW, et al. **Carcinogenesis** 1989 Sep;10(9):1657–64
Characteristic variations of serum alkaline DNase activity in relation to response to therapy and tumor prognosis in human lung cancer. Economidou-Karaoglou A, et al.
Eur J Cancer Clin Oncol 1988 Aug;24(8):1337–43
Neuron specific enolase, carcinoembryonic antigen and lactate dehydrogenase as indicators of disease activity in small cell lung cancer. Jørgensen LG, et al.
Eur J Cancer Clin Oncol 1989 Jan;25(1):123–8
A novel type of human alpha-amylase produced in lung carcinoid tumor. Tomita N, et al. **Gene** 1989 Mar 15; 76(1):11–8
Chain-fluorinated polyamines as tumor markers—IV. Comparison of 2-fluoroputrescine and 2,2-difluoroputrescine as substrates of spermidine synthase in vitro and in vivo. Dezeure F, et al. **Int J Biochem** 1988; 20(11):1299–312
Gelatin-degrading type IV collagenase isolated from human small cell lung cancer. Zucker S, et al.
Invasion Metastasis 1989;9(3):167–81
Neuron-specific enolase can be used as the sole guide to treat small-cell lung cancer patients in common clinical practice. Splinter TA, et al. **J Cancer Res Clin Oncol** 1989; 115(4):400–1

Lack of expression of aminoacylase-1 in small cell lung cancer. Evidence for inactivation of genes encoded by chromosome 3p. Miller YE, et al. **J Clin Invest** 1989 Jun; 83(6):2120-4

Lung cancer cells often express high levels of protein kinase C activity. Hirai M, et al. **Jpn J Cancer Res** 1989 Mar; 80(3):204-8

Clinical value of an amplified electrophoretic determination of enolase isoenzymes in small cell lung carcinoma patients. Batandier C, et al. **Scand J Clin Lab Invest** 1989 Feb; 49(1):33-42

[Observations on the activity and immunologic properties of CuZn-SOD of whole blood in cancer patients] Liu ZF, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):212-3 **(Chi)**

[Neuron specific enolase in small cell lung cancer] Lee HJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):465-71 (Eng. Abstr.) **(Chi)**

[Amylase-producing lung tumors] Lenler-Petersen P, et al. **Ugeskr Laeger** 1989 Jan 9;151(2):83-5 (Eng. Abstr.) **(Dan)**

[Monitoring of neuron specific enolase (NSE) in patients with a diagnosis of pulmonary microcytoma. Preliminary results] Bonardi G, et al. **G Ital Oncol** 1987 Oct-Dec;7(4):163-7 (Eng. Abstr.) **(Ita)**

[Two cases of amylase-producing lung cancer] Kamio T, et al. **Gan No Rinsho** 1989 May;35(6):735-40 (Eng. Abstr.) **(Jpn)**

[Alpha-amylase activity in patients with malignant neoplasm of the lungs] Rokicki W, et al. **Wiad Lek** 1988 Jun 1; 41(11):712-6 (Eng. Abstr.) **(Pol)**

[Enzymes as the markers of differentiation of malignant neoplasms] Golubev AM, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):58-62 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Re: "Statistical modelling of lung cancer and laryngeal cancer incidence in Scotland, 1960-1979" [letter] Boyle P, et al. **Am J Epidemiol** 1989 Jan;129(1):225-6

Time trends in occupational risks of lung cancer among Swedish men from 1961-1979. Carstensen JM, et al. **Am J Ind Med** 1989;15(4):441-8

Case-control study of lung cancer in Los Angeles county welders. Hull CJ, et al. **Am J Ind Med** 1989;16(1):103-12

Lung cancer among Dutch coal miners: a case-control study. Meijers JM, et al. **Am J Ind Med** 1988;14(5):597-604

Cigarette smoking and lung cancer in New Mexico. Samet JM, et al. **Am Rev Respir Dis** 1988 May;137(5):1110-3

Bronchogenic carcinoma in patients under age 40. Antkowiak JG, et al. **Ann Thorac Surg** 1989 Mar;47(3):391-3

Occupation, smoking, and lung cancer. Dave SK, et al. **Br J Ind Med** 1988 Nov;45(11):790-2

Lung cancer among glass fibre production workers: a case-control study. Gardner MJ, et al. **Br J Ind Med** 1988 Sep;45(9):613-8

Mortality and incidence of cancer among oil exposed workers in a Norwegian cable manufacturing company. Part 2. Mortality and cancer incidence 1953-84. Rønneberg A, et al. **Br J Ind Med** 1988 Sep;45(9):595-601

Lung cancer and air pollution in an industrial city--a geographical analysis. Shannon HS, et al. **Can J Public Health** 1988 Jul-Aug;79(4):255-9

Dietary vitamins A and C and lung cancer risk in Louisiana. Fontham ET, et al. **Cancer** 1988 Nov 15;62(10):2267-73

Reduction in risk of lung cancer among ex-smokers with particular reference to histologic type. Higgins IT, et al. **Cancer** 1988 Dec 1;62(11):2397-401

Incidence of lung cancer by histological type from a population-based registry. Anton-Culver H, et al. **Cancer Res** 1988 Nov 15;48(22):6580-3

Lung cancer risk, occupational exposure, and the debrisoquine metabolic phenotype. Caporaso N, et al. **Cancer Res** 1989 Jul 1;49(13):3675-9

Smoking and lung cancer in women: findings in a prospective study. Garfinkel L, et al. **Cancer Res** 1988 Dec 1; 48(23):6951-5

Lung cancer in Malawi: experience of bronchoscopy in Zomba General Hospital. Reeve PA. **Cent Afr J Med** 1989 Mar;35(3):355-8

Trends in lung cancer incidence worldwide. Parkin DM. **Chest** 1989 Jul;96(1 Suppl):5S-8S

Lung cancer--a worldwide health problem. Stanley K, et al. **Chest** 1989 Jul;96(1 Suppl):1S-5S (11 ref.)

Lung cancer in Israel, 1962-1982. I. Jews and Arabs. Rennert G, et al. **Eur J Epidemiol** 1988 Dec;4(4):461-9

A 10 year follow-up of semi-annual screening for early detection of lung cancer in the Erfurt County, GDR. Wilde J. **Eur Respir J** 1989 Jul;2(7):656-62

Synchronicity, multicentricity, and metachronicity of head and neck cancer. Shaha AR, et al. **Head Neck Surg** 1988 Mar-Apr;10(4):225-8

Estimating Rn-induced lung cancer in the United States. Lubin JH, et al. **Health Phys** 1989 Sep;57(3):417-27

Effects on health of non-occupational exposure to airborne mineral fibres. Gardner MJ, et al. **IARC Sci Publ** 1989; (90):375-97 (72 ref.)

Milk drinking, other beverage habits, and lung cancer risk. Mettlin C. **Int J Cancer** 1989 Apr 15;43(4):608-12

Proportion of lung cancers in males, due to occupation, in different areas of the USA. Vineis P, et al. **Int J Cancer** 1988 Dec 15;42(6):851-6

Smoking-adjusted incidence of lung cancer among Swedish men in different occupations. Carstensen JM, et al. **Int J Epidemiol** 1988 Dec;17(4):753-8

Multiple primary cancer in patients with cancer of the head and neck: second cancer of the head and neck, esophagus, and lung. Licciardello JT, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):467-76 (44 ref.)

Epidemiological studies of lung cancer in Japanese mustard gas workers. Nishimoto Y, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:95-101

Fifty-year trend in incidence rates of bronchogenic carcinoma by cell type in Olmsted County, Minnesota. Beard CM, et al. **J Natl Cancer Inst** 1988 Nov 2; 80(17):1404-7

Radon and lung cancer. Samet JM. **J Natl Cancer Inst** 1989 May 10;81(10):745-57 (91 ref.)

Primary cancer of the lung in women. Smith EB. **J Natl Med Assoc** 1989 Sep;81(9):945-8 (42 ref.)

Leads from the MMWR. Hospital discharge rates for four major cancers--United States, 1970-1986. **JAMA** 1988 Dec 16;260(23):3412, 3416

A comparative epidemiologic study on geographic distributions of cancers of the lung and the large intestine in Japan. Murata M, et al. **Jpn J Cancer Res** 1988 Sep; 79(9):1005-16

Epidemiologic survey on lung cancer with respect to cigarette smoking and plant diet. Sakai R. **Jpn J Cancer Res** 1989 Jun;80(6):513-20

Lung cancer in Australia. McLennan G, et al. **Med J Aust** 1989 Feb 20;150(4):206-7, 210-3

The rising epidemic of malignant mesothelioma [letter; comment] Orr KB. **Med J Aust** 1989 May 15;150(10):607 . **Comment on:** Med J Aust 1989 Mar 6;150(5):233-5

Lung cancer: a review of 589 Malaysian patients. Gopal P, et al. **Med J Malaysia** 1988 Dec;43(4):288-96 (13 ref.)

Lung cancer among young Malaysians. Menon MA. **Med J Malaysia** 1987 Sep;42(3):166-72

Trends in lung cancer incidence--United States, 1973-1986. **MMWR** 1989 Jul 28;38(29):505-6, 511-3

A case-control study of lung cancer in St. Francois County, 1976-1984. Brownson RC, et al. **Mo Med** 1987 Sep; 84(9):596-8

Radon in New Jersey. Klotz JB, et al. **N J Med** 1988 Nov; 85(11):901-4

Trends and patterns in lung cancer incidence in four cities of Eastern Europe, 1971-1980. Pawlega J, et al. **Neoplasma** 1988;35(6):635-41

Maternal malignancy metastatic to the products of conception: a review. Dildy GA 3d, et al. **Obstet Gynecol Surv** 1989 Jul;44(7):535-40 (55 ref.)

Lung cancer cell type and mining exposure. Davies JC, et al. **S Afr Med J** 1988 Dec 17;74(12):607-10

Lung cancer incidence among Swedish bakers and pastrycooks: geographical variation. Wicksell L, et al. **Scand J Soc Med** 1988;16(3):183-6

Cancer incidence among Danish stone workers. Guénel P, et al. **Scand J Work Environ Health** 1989 Aug;15(4):265-70

Risk of lung, larynx, pharynx and buccal cavity cancers among carbon electrode manufacturing workers. Moulin JJ, et al. **Scand J Work Environ Health** 1989 Feb;15(1):30-7

A case-control study of lung cancer in nonsmoking women. Shimizu H, et al. **Tohoku J Exp Med** 1988 Apr; 154(4):389-97

Evaluation in terms of annual incidence rate of lung cancer within the ULSSs of the Veneto region (Italy) from hospital discharge data (years 1980-1982). Bolzan M, et al. **Tumori** 1988 Dec 31;74(6):697-704

[The effect of air pollutants on the incidence of lung tumors in the GDR] Möhner M, et al. **Arch Geschwulstforsch** 1989; 59(1):37-43 (Eng. Abstr.) **(Ger)**

[Current trends in the epidemiology of smoking, passive smoking and lung cancer] Abelin T. **Schweiz Rundsch Med Prax** 1989 Jan 31;78(5):87-92 (40 ref.) (Eng. Abstr.) **(Ger)**

[Cancer of the lung: outlook on morbidity and improvement in diagnosis up to 1995] Denisov LE, et al. **Grudn Khir** 1988 Nov-Dec;(6):57-8 **(Rus)**

ETIOLOGY

Current nitrogen dioxide exposures among railroad workers. Woskie SR, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):346-53

The effect of dietary cholesterol and fat on the risk of lung cancer in Hawaii. Goodman MT, et al. **Am J Epidemiol** 1988 Dec;128(6):1241-55

Tar content of cigarettes in relation to lung cancer. Kaufman DW, et al. **Am J Epidemiol** 1989 Apr;129(4):703-11

Variation in smoking-related lung cancer risk among New Jersey women. Schoenberg JB, et al. **Am J Epidemiol** 1989 Oct;130(4):688-95

Those who were wrong. Vandenbroucke JP. **Am J Epidemiol** 1989 Jul;130(1):3-5

Lung cancer case-control study in a rubber manufacturing plant. Andjelkovich DA, et al. **Am J Ind Med** 1988; 14(5):559-74

On the statement by Jacques Dunnigan. Davis JM. **Am J Ind Med** 1988;14(5):629-30

Mortality among workers at a municipal waste incinerator. Gustavsson P. **Am J Ind Med** 1989;15(3):245-53

Relative risk of mesothelioma among railroad machinists exposed to chrysotile [letter; comment] Higgins I. **Am J Ind Med** 1989;15(4):483-6. **Comment on:** Am J Ind Med 1988;13(6):639-57

Obfuscation: a reply to Dr. Dunnigan. Lilienfeld DE. **Am J Ind Med** 1988;14(5):625-8

Mesothelioma in railroad workers [letter] McDonald C, et al. **Am J Ind Med** 1989;15(4):487-90

Is chrysotile a significant risk factor for mesothelioma? Ohlson CG. **Am J Ind Med** 1989;15(3):351-6

Linking chrysotile asbestos with mesothelioma [letter] Sluis-Cremer GK. **Am J Ind Med** 1988;14(5):631-2

Pneumothorax in pleuropulmonary Kaposi's sarcoma related to acquired immunodeficiency syndrome. Floris C, et al. **Am J Med** 1989 Jul;87(1):123-4

Compensation as a risk factor for lung cancer in smokers who switch from nonfilter to filter cigarettes. Augustine A, et al. **Am J Public Health** 1989 Feb;79(2):188-91

Environmental tobacco smoke and legal issues [letter] Halfen LN. **Am J Public Health** 1989 Oct;79(10):1433-4

Smoking and lung cancer. Hill GB. **Arch Intern Med** 1988 Dec;148(12):2538-9

An ecogenetic hypothesis for lung cancer in women. Horwitz RI, et al. **Arch Intern Med** 1988 Dec;148(12):2609-12

For debate: pet birds as an independent risk factor for lung cancer. Holst PA, et al. **BMJ** 1988 Nov 19; 297(6659):1319-21

Pet birds as a risk factor for lung cancer [letter] Jones KP, et al. **BMJ** 1989 Jan 14;298(6666):120

Lung cancer and passive smoking: predicted effects from a mathematical model for cigarette smoking and lung cancer. Darby SC, et al. **Br J Cancer** 1988 Dec;58(6):825-31

Alveolar cell carcinoma in a cook. Wardle EN. **Br J Clin Pract** 1988 Apr;42(4):173-4

Asbestos associated tumours in car mechanics. Järvholm B, et al. **Br J Ind Med** 1988 Sep;45(9):645-6

Silica, silicosis, and lung cancer. McDonald JC. **Br J Ind Med** 1989 May;46(5):289-91 (30 ref.)

Respiratory cancer in chrysotile textile and mining industries: exposure inferences from lung analysis. Sebastien P, et al. **Br J Ind Med** 1989 Mar;46(3):180-7

Mesothelioma and asbestos fiber type. Evidence from lung tissue analyses. McDonald JC, et al. **Cancer** 1989 Apr 15; 63(8):1544-7

Lung cancer in women and type of dwelling in relation to radon exposure. Svensson C, et al. **Cancer Res** 1989 Apr 1;49(7):1861-5

Apparent synergy between chrysotile asbestos and N-nitrosoheptamethyleneimine in the induction of pulmonary tumours in rats. Harrison PT, et al. **Carcinogenesis** 1988 Dec;9(12):2165-71

Urethane-induced lung adenomas in the first-generation progeny of irradiated male mice. Vorobtsova IE, et al. **Carcinogenesis** 1988 Nov;9(11):1931-4

A cell culture model of chemically and spontaneously derived mouse lung alveologenic carcinoma. Smith GJ, et al. **Cell Biol Toxicol** 1988 Sep;4(3):333-48

Asbestos in lung cancer [letter] Abraham JL. **Chest** 1989 Sep; 96(3):701-2

Diet and lung cancer. Miller AB, et al. **Chest** 1989 Jul;96(1 Suppl):8S-9S (20 ref.)

Serosanguineous pleural effusions in AIDS-associated Kaposi's sarcoma. O'Brien RF, et al. **Chest** 1989 Sep; 96(3):460-6

Quantitative models for lung cancer induced by cigarette smoke. Altshuler B. **Environ Health Perspect** 1989 May; 81:107-8; discussion 121-2 (14 ref.)

Multistage models for carcinogenesis. Freedman DA, et al. **Environ Health Perspect** 1989 May;81:169-88 (74 ref.)

Mesothelioma after crocidolite exposure during gas mask manufacture. McDonald AD, et al. **Environ Res** 1978 Dec; 17(3):340-6

Lung cancer in relation to residence in census tracts with toxic-waste disposal sites: a case-control study in Niagara County, New York. Polednak AP, et al. **Environ Res** 1989 Feb;48(1):29-41

Correlation of lung dose with Rn concentration, potential alpha-energy concentration and daughter surface deposition: a Monte Carlo analysis. Bierma TJ, et al. **Health Phys** 1989 Sep;57(3):429-37

Correction to BEIR IV report [letter] Ellett WH. **Health Phys** 1989 Feb;56(2):257

Cigarettes, Rn, cancer and health physics [letter] Hickey RJ. **Health Phys** 1988 Nov;55(5):821-4

Radon progeny exposure and lung cancer risk in New Mexico U miners: a case-control study. Samet JM, et al. **Health Phys** 1989 Apr;56(4):415-21

Bias in United States U miners' exposure data. Schiager KJ. **Health Phys** 1989 Jul;57(1):169-70

Primary pulmonary lymphoma: a re-appraisal of its histogenesis and its relationship to pseudolymphoma and lymphoid interstitial pneumonia. Addis BJ, et al. **Histopathology** 1988 Jul;13(1):1-17

Environmental tobacco smoke in the context of indoor air quality [editorial] Brown RC. **Hum Toxicol** 1989 Jan; 8(1):3-4

Man-made mineral fibres. **IARC Monogr Eval Carcinog Risks Hum** 1988;43:39-171 (286 ref.)

Radon. **IARC Monogr Eval Carcinog Risks Hum** 1988; 43:173-259 (372 ref.)

Fibre content of lung in amphibole- and chrysotile-induced mesothelioma: implications for environmental exposure.

Churg A, et al. **IARC Sci Publ** 1989;(90):314–8
Estimations of risk from environmental asbestos in perspective. Commins BT. **IARC Sci Publ** 1989;(90):476–85
Development and use of asbestos risk estimates. Hughes JM, et al. **IARC Sci Publ** 1989;(90):471–5
Biological effects of asbestos fibres on rat lung maintained in vitro. Michiels FM, et al. **IARC Sci Publ** 1989;(90):156–60
Translocation of subcutaneously injected chrysotile fibres: potential cocarcinogenic effect on lung cancer induced in rats by inhalation of radon and its daughters. Monchaux G, et al. **IARC Sci Publ** 1989;(90):161–6
Application of biological markers to the study of lung cancer causation and prevention. Perera FP, et al. **IARC Sci Publ** 1988;(89):451–9
Effect of choline and mineral fibres (chrysotile asbestos) on guinea-pigs. Sahu AP. **IARC Sci Publ** 1989;(90):185–9
Relation of environmental exposure to erionite fibres to risk of respiratory cancer. Simonato L, et al. **IARC Sci Publ** 1989;(90):398–405
Etiology of lung cancer at the Gejiu tin mine, China. Sun SQ. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:103–15
Frequency of multiple primary cancers and risk factors for lung and breast cancer patients. Watanabe S, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:275–82
Tumours of the respiratory tract in rats and hamsters following chronic inhalation of engine exhaust emissions. Brightwell J, et al. **J Appl Toxicol** 1989 Feb;9(1):23–31
Increased risk of lung cancer, non-Hodgkin's lymphoma, and leukemia following Hodgkin's disease. van Leeuwen FE, et al. **J Clin Oncol** 1989 Aug;7(8):1046–58
Tobacco menace and role of doctors [editorial] Chaudhuri A. **J Indian Med Assoc** 1988 Jul;86(7):173–4
Cigarette smoking and lung cancer: reanalysis of the British doctors' data. Moolgavkar SH, et al. **J Natl Cancer Inst** 1989 Mar 15;81(6):415–20
Uncertainties abound in radon research: lung cancer risk hard to quantify [news] Smigel K. **J Natl Cancer Inst** 1989 May 10;81(10):728–31
The debate over radon continues [news] Tilyou SM. **J Nucl Med** 1989 Jun;30(6):987–91, 996
Induction of thoracic malignancy in inorganic dust pneumoconiosis. Scatarige JC, et al. **J Thorac Imaging** 1988 Oct;3(4):67–79 (72 ref.)
Metastatic lung cancer in a young marijuana smoker [letter] Ferguson RP, et al. **JAMA** 1989 Jan 6;261(1):41–2
On air pollution, environmental tobacco smoke, radon, and lung cancer. Crawford WA. **JAPCA** 1988 Nov; 38(11):1386–91 (72 ref.)
Iron, asbestos, and carcinogenicity [letter] Weinberg ED. **Lancet** 1989 Jun 17;1(8651):1399–400
Lung cancer, the motor vehicle and its subtle influence on body functions. Robinson AA. **Med Hypotheses** 1989 Jan; 28(1):39–43
The risk of lung cancer from polycyclic aromatic hydrocarbons in Sydney air. Freeman DJ, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):612–5
Passive smoking and lung cancer: current evidence and ongoing studies at the International Agency for Research on Cancer. Saracci R, et al. **Mutat Res** 1989 Feb; 222(2):117–27
Population burden of lung cancer due to environmental tobacco smoke. Vainio H, et al. **Mutat Res** 1989 Feb; 222(2):137–40
Indoor radon and lung cancer. Samet JM, et al. **N Engl J Med** 1989 Mar 2;320(9):591–4
Passive smoking in New Zealand [letter] Kawachi I, et al. **N Z Med J** 1989 Sep 13;102(875):479
Radon and smokers [letter] Ellett WH. **Nature** 1988 Dec 8; 336(6199):512
Dietary and alcohol intake, smoking pattern, occupational risk, and family history in lung cancer patients: results of a case-control study in males. Pierce RJ, et al. **Nutr Cancer** 1989;12(3):237–48
Local energy deposited for alpha particles emitted from inhaled radon daughters. al-affan IA, et al. **Phys Med Biol** 1989 Jan;34(1):97–105
The BEIR IV report [letter] Ellett WH. **Radiat Res** 1988 Oct;116(1):173–4
Lung carcinomas in Sprague–Dawley rats after exposure to low doses of radon daughters, fission neutrons, or gamma rays. Lafuma J, et al. **Radiat Res** 1989 May;118(2):230–45
Promotion of pulmonary carcinogenesis by plutonium particle aggregation following inhalation of 239PuO2. Sanders CL, et al. **Radiat Res** 1988 Dec;116(3):393–405
Radon: is it a problem? Hart BL, et al. **Radiology** 1989 Sep; 172(3):593–9 (39 ref.)
Radiation enhancement of lung nodule formation in mice is not potentiated by treatment with a perfluorochemical emulsion and carbogen. Rockwell S, et al. **Radiother Oncol** 1989 Jan;14(1):49–53
Indoor radon exposure and active and passive smoking in relation to the occurrence of lung cancer. Axelson O, et al. **Scand J Work Environ Health** 1988 Oct;14(5):286–92
Lung cancer, smoking, and employment in foundries. Becher H, et al. **Scand J Work Environ Health** 1989 Feb; 15(1):38–42
Dietary vitamin A, beta-carotene and risk of epidermoid lung cancer among Chinese males. Ho SC, et al. **Singapore Med J** 1988 Jun;29(3):213–8
Primary pulmonary lymphoma in a patient with the acquired immune deficiency syndrome. Poelzleitner D, et al. **Thorax** 1989 May;44(5):438–9
Health assessment of environmental pollutants: proliferative and degenerative diseases. Stuart BO. **Toxicol Ind Health** 1988 Dec;4(4):461–7
Lung cancer in acute myelomonocytic leukemia: a report of two cases. Marra R, et al. **Tumori** 1988 Oct 31; 74(5):553–4
[Smoking and pulmonary diseases] Wang CL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):365–7 (15 ref.) (Chi)
[A case-control study of lung cancer and pulmonary tuberculosis] Zheng W. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Jun; 11(3):135–8, 190 (Eng. Abstr.) (Chi)
[Experimental study on lung carcinoma induced respectively by Aspergillus versicolor and Candida albcans cultures] Wang FR. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep; 17(3):170–2 (Eng. Abstr.) (Chi)
[A case-control study of female lung cancer at XuHui district in Shanghai] Li WX. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):93–5 (Eng. Abstr.) (Chi)
[Asbestos and health: from patient presentation to recognition of occupational diseases in The Netherlands] Burdorf A, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2162–7 (48 ref.) (Dut)
[Pulmonary papillomatosis] Leroy M, et al. **Ann Chir** 1989; 43(2):138–41 (18 ref.) (Eng. Abstr.) (Fre)
[Exposure and disposition in the genesis of bronchial cancer] Nowak D, et al. **Pneumologie** 1989 Mar;43(3):135–46 (172 ref.) (Ger)
[Lung injury caused by the inhalation of radioactive substances] Köhler D. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:263–6 (Eng. Abstr.) (Ger)
[Pulmonary changes in AIDS] Blum U, et al. **ROFO** 1989 Mar;150(3):255–9 (Eng. Abstr.) (Ger)
[The origin of bronchial carcinoma in siderofibrosis] Wiemann B, et al. **Z Erkr Atmungsorgane** 1988;171(1):82–4 (Eng. Abstr.) (Ger)
[Tumors of the lung attributable to occupational exposure] Merler E, et al. **Epidemiol Prev** 1988 Jun;10(35):4–6 (Ita)
[The proportion of tumors of the lung caused by occupational exposure: updating] Vineis P, et al. **Epidemiol Prev** 1988 Jun;10(35):7–10 (27 ref.) (Ita)
[Smoke, environmental contamination and lung cancer] Polizzi F. **Minerva Chir** 1989 Feb 15;44(3):367–71 (22 ref.) (Ita)
[Evaluation of primary multiple cancer manifesting exposure to asbestos] Kishimoto T, et al. **Gan No Rinsho** 1989 Jun; 35(7):825–7 (Eng. Abstr.) (Jpn)
[Pre-existing disorders of primary lung cancer: background analysis of multiple primary lung cancer—what are the initiation factors of carcinogenesis?] Nukiwa T, et al. **Kokyu To Junkan** 1988 Oct;36(10):1040–50 (88 ref.) (Jpn)
[Lung cancer and related environmental factors] Tokuoka S, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1013–22 (30 ref.) (Eng. Abstr.) (Jpn)
[Radon and risk of cancer] Rootwelt K. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2026–30 (Eng. Abstr.) (Nor)
[Indoor radon exposure and risk of lung cancer] Sanner T, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2023–5 (Eng. Abstr.) (Nor)
[Effect of the level of "tar" in tobacco smoke on the risk of the occurrence of malignant tumors] Zaridze DG. **Eksp Onkol** 1989;11(1):3–6 (16 ref.) (Eng. Abstr.) (Rus)
[Calculation of maximum permissible level of beryllium in the air based on the criterion of its carcinogenic effect] Parfenov IuD. **Gig Sanit** 1988 Jun;(6):59–62 (Rus)
[Evaluation of oncologic risk of patients with asbestosis based on an epidemiologic study] Gladkova EV, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):32–4 (Eng. Abstr.) (Rus)
[The etiology of Löfgren's syndrome] Markov IS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):126–9 (Eng. Abstr.) (Rus)
[Tumor formation in the lungs of mice of various strains during virus-chemical cocarcinogenesis and the action of immunostimulants] Shevchenko IN. **Mikrobiol Zh** 1987 Sep–Oct;49(5):70–6 (Eng. Abstr.) (Rus)
[Multiple primary malignant tumors and pulmonary tuberculosis] Kalinichev GA, et al. **Probl Tuberk** 1988; (9):71–2 (Rus)
[Tuberculosis and cancer of the lungs] Kogan EK, et al. **Sov Med** 1988;(10):18–20 (Eng. Abstr.) (Rus)
[Secondary intensification of influenza virus reproduction and the development of tumors in mice] Orlovskii AA, et al. **Vopr Onkol** 1989;35(2):215–20 (Eng. Abstr.) (Rus)
[Pulmonary infiltrates in an AIS patient] Amarilla Jiménez MA, et al. **Rev Clin Esp** 1988 Dec;183(9):493–4 (Spa)
[Tobacco and cancer—the connection is convincing] Larsson LG. **Lakartidningen** 1988 Sep 7;85(36):2858–63 (Swe)

GENETICS

Loss of heterozygosity in a gene coding for a thyroid hormone receptor in lung cancers. Leduc F, et al. **Am J Hum Genet** 1989 Feb;44(2):282–7
Genetic changes in the pathogenesis of lung cancer. Birrer MJ, et al. **Annu Rev Med** 1989;40:305–17 (106 ref.)
Amplification of oncogenes in lung carcinoma grafted in nude mice. Chauvin C, et al. **Anticancer Res** 1989 Mar–Apr; 9(2):449–52
An ecogenetic hypothesis for lung cancer in women [letter] Ness R, et al. **Arch Intern Med** 1989 Aug;149(8):1900
Debrisoquine metabolism and genetic predisposition to lung cancer. Law MR, et al. **Br J Cancer** 1989 May;59(5):686–7
Cellular protooncogenes are infrequently amplified in untreated non-small cell lung cancer. Slebos RJ, et al. **Br J Cancer** 1989 Jan;59(1):76–80
Detection of human probombesin mRNA in neuroendocrine (small cell) carcinoma of the lung. In situ hybridization with cRNA probe. Hamid QA, et al. **Cancer** 1989 Jan 15; 63(2):266–71
Image and flow DNA cytometry of small cell carcinoma of the lung. Oud PS, et al. **Cancer** 1989 Sep 15;64(6):1304–9
Involvement of chromosomes 1, 3, and i(8q) in lung adenocarcinoma [letter] Bello MJ, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):133–5
Acute nonlymphocytic leukemia following lung cancer in a patient with a consitutional supernumerary chromosome. Minamihisamatsu M, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):263–8
Localization of amplified c-myc and n-myc in small cell lung cancer cell lines. van der Hout AH, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):1–8
Relationship between the formation of promutagenic adducts and the activation of the K-ras protooncogene in lung tumors from A/J mice treated with nitrosamines. Belinsky SA, et al. **Cancer Res** 1989 Oct 1;49(19):5305–11
Identification and characterization of X-ray-induced proteins in human cells. Boothman DA, et al. **Cancer Res** 1989 Jun 1;49(11):2871–8
Karyotypic evolution of a human undifferentiated large cell carcinoma of the lung in tissue culture. Burholt DR, et al. **Cancer Res** 1989 Jun 15;49(12):3355–61
myc family gene abnormality in lung cancers and its relation to xenotransplantability. Gemma A, et al. **Cancer Res** 1988 Nov 1;48(21):6025–8
Concordant deletions of chromosome 3p and loss of heterozygosity for chromosomes 13 and 17 in small cell lung carcinoma. Mori N, et al. **Cancer Res** 1989 Sep 15; 49(18):5130–5
Incidence and possible clinical significance of K-ras oncogene activation in adenocarcinoma of the human lung. Rodenhuis S, et al. **Cancer Res** 1988 Oct 15;48(20):5738–41
Differential expression of the c-erbB-2 gene in human small cell and non-small cell lung cancer. Schneider PM, et al. **Cancer Res** 1989 Sep 15;49(18):4968–71
Expression and amplification of myc gene family in small cell lung cancer and its relation to biological characteristics. Takahashi T, et al. **Cancer Res** 1989 May 15;49(10):2683–8
Nuclear DNA content by cytofluorometry of stage I adenocarcinoma of the lung in relation to postoperative recurrence. Asamura H, et al. **Chest** 1989 Aug;96(2):312–8
Oncogenes and genetic abnormalities in lung cancer. Carney DN. **Chest** 1989 Jul;96(1 Suppl):25S–27S (20 ref.)
Oncogene expression detected by in situ hybridization in human primary lung cancer. Lee JH, et al. **Chest** 1988 Nov; 94(5):1046–9
Genetic events in the pathogenesis of lung cancer. Minna JD. **Chest** 1989 Jul;96(1 Suppl):17S–23S (126 ref.)
Factors possibly affecting the degree of malignancy in adenocarcinoma of the lung. DNA content and bromodeoxyuridine (BrdU) labeling index. Shimosato Y, et al. **Chest** 1989 Jul;96(1 Suppl):37S–38S
Expression of the hypervariable PUM locus in normal and malignant lung: the tumor-associated epitopes are present but masked in normal tissue. Griffiths B, et al. **Dis Markers** 1988 Jul–Sep;6(3):195–202
The human L-myc gene is expressed as two forms of protein in small cell lung carcinoma cell lines: detection by monoclonal antibodies specific to two myc homology box sequences. Ikegaki N, et al. **EMBO J** 1989 Jun;8(6):1793–9
Recurrent breast cancer and an adenocarcinoma of the lung occurring in one patient: c-myc oncogene amplification and K-ras codon 12 point mutation as tumour markers [letter] Slebos RJ, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1529–30
Chromosome translocation (2;13)(q37;q14) in a disseminated alveolar rhabdomyosarcoma. Engel R, et al. **Eur J Pediatr** 1988 Oct;148(1):69–71
The molecular genetics of human lung cancer. Slebos RJ, et al. **Eur Respir J** 1989 May;2(5):461–9 (87 ref.)
The distribution of debrisoquine metabolic phenotypes and implications for the suggested association with lung cancer risk. Caporaso N, et al. **Genet Epidemiol** 1989;6(4):517–24
Loss of heterozygosity at chromosomal regions 3p and 13q in non-small-cell carcinoma of the lung represents low-frequency events. Becker D, et al. **Genomics** 1989 Jan; 4(1):97–100
The DNF15S2 locus at 3p21 is transcribed in normal lung and small cell lung cancer. Naylor SL, et al. **Genomics** 1989 Apr;4(3):355–61
No abnormal C-band polymorphism in lung cancer patients. Kristoffersson U, et al. **Hereditas** 1989;110(3):201–2
Localization of polymorphic DNA probes frequently deleted in lung carcinoma. Albertson DG, et al. **Hum Genet** 1989 Sep;83(2):127–32
The H-2 class II genes and the susceptibility to the development of pulmonary adenoma in mice. Miyashita

N, et al. **Immunogenetics** 1989;29(1):14–8

Chromosomal deletions in lung cancer and renal cancer. Zbar B. **Important Adv Oncol** 1989;:41–60 (91 ref.)

Amplification and expression of different myc-family genes in a tumor specimen and 3 cell lines derived from one small-cell lung cancer patient during longitudinal follow-up. Kok K, et al. **Int J Cancer** 1989 Jul 15;44(1):75–8

Oncogene expression in small-cell lung cancer cell lines and a testicular germ-cell tumor: activation of the N-myc gene and decreased RB mRNA. Saksela K, et al. **Int J Cancer** 1989 Jul 15;44(1):182–5

Loss of tumorigenic potential by human lung tumor cells in the presence of antisense RNA specific to the ectopically synthesized alpha subunit of human chorionic gonadotropin. Rivera RT, et al. **J Cell Biol** 1989 Jun; 108(6):2423–34

Pro-opiomelanocortin gene expression and peptide secretion in human small-cell lung cancer cell lines. White A, et al. **J Mol Endocrinol** 1989 Jul;3(1):65–70

MDR1 gene expression in lung cancer. Lai SL, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1144–50

Glucocorticoid hormone effect on transplacental carcinogenesis and lung differentiation: influence of histocompatibility-2 complex. Oomen LC, et al. **J Natl Cancer Inst** 1989 Apr 5;81(7):512–7

Biochemical and cytogenetic studies of human lung cancers. Benfield JR, et al. **J Thorac Cardiovasc Surg** 1988 Dec; 96(6):840–8

Methylation status of epidermal growth factor receptor gene in lung carcinoma cells. Gamou S, et al. **Jpn J Cancer Res** 1988 Sep;79(9):989–95

Debrisoquine hydroxylation phenotype, acetylation phenotype, and ABO blood groups as genetic host factors of lung cancer risk. Roots I, et al. **Klin Wochenschr** 1988; 66 Suppl 11:87–97

Small-cell lung cancer after retinoblastoma [letter] Leonard RC, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1503

Cytogenetic studies in 11 patients with small cell carcinoma of the lung. De Fusco PA, et al. **Mayo Clin Proc** 1989 Feb;64(2):168–76

3p deletion and small cell lung carcinoma. Whang-Peng J. **Mayo Clin Proc** 1989 Feb;64(2):256–60 (28 ref.)

Multiple mechanisms for transcriptional regulation of the myc gene family in small-cell lung cancer. Krystal G, et al. **Mol Cell Biol** 1988 Aug;8(8):3373–81

Differential expression of a tropomyosin isoform in low- and high-metastatic Lewis lung carcinoma cells. Takenaga K, et al. **Mol Cell Biol** 1988 Sep;8(9):3934–7

Detection of 6-thioguanine resistance in human peripheral blood lymphocytes (PBL) of industrial workers and lung cancer patients. Tompa A, et al. **Mutat Res** 1989 Feb; 210(2):345–51

Unexpected effects on bacterial phenotype induced by expression of a tumour-amplified human sequence. Heighway J, et al. **Nucleic Acids Res** 1989 Sep 12; 17(17):6893–901

Loss of heterozygosity at the c-raf locus in small cell lung carcinoma. Sithanandam G, et al. **Oncogene** 1989 Apr; 4(4):451–5

Localization of human ERBA2 to the 3p22——3p24.1 region of chromosome 3 and variable deletion in small cell lung cancer. Drabkin H, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9258–62

Differential DNA sequence deletions from chromosomes 3, 11, 13, and 17 in squamous-cell carcinoma, large-cell carcinoma, and adenocarcinoma of the human lung. Weston A, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5099–103

Activation of the Ki-ras protooncogene in spontaneously occurring and chemically induced lung tumors of the strain A mouse. You M, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3070–4

Concurrent anaplastic bronchial cancer in identical twin brothers. Nores JM, et al. **Respiration** 1989;55(1):56–9

The genetic basis of susceptibility to lung tumors in mice [published erratum appears in Toxicology 1989 May 15;55(3):349] Malkinson AM. **Toxicology** 1989 Mar; 54(3):241–71 (119 ref.)

Immunohistochemical analysis of normal and mutated ras oncogene p21 expression in human pulmonary and pleural neoplasms. Radosevich JA, et al. **Virchows Arch [B]** 1989; 56(6):377–83

[Cytogenetic studies of lung cancer] Fang Y. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):249–52 (Eng. Abstr.) **(Chi)**

[Chromosome of transplantable lung adenocarcinoma cell line (LA-795)] Ling LH. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):406–9 (Eng. Abstr.) **(Chi)**

[Imprints of cigarette smoking on DNA in the human] Hubert-Habart M. **Bull Cancer (Paris)** 1989;76(3):223–6 **(Fre)**

[Oncogenes and bronchial cancer] Brambilla E, et al. **Rev Mal Respir** 1988;5(6):535–49 (67 ref.) (Eng. Abstr.) **(Fre)**

[Recent progress in the biology of small cell bronchial carcinoma] Thomas F, et al. **Rev Mal Respir** 1988; 5(5):451–61 (69 ref.) (Eng. Abstr.) **(Fre)**

[Amplification of protooncogene c-myc in human lung tumors] Kayser K, et al. **Verh Dtsch Ges Pathol** 1988; 72:265–7 (Eng. Abstr.) **(Ger)**

[Prognostic significance of the nuclear DNA content of a small adenocarcinoma of the lung] Isobe H, et al. **Gan No Rinsho** 1988 Oct;34(12):1667–71 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary carcinoma presenting flow cytometrical heterogeneity of the nuclear DNA content between its primary focus and the metastatic foci] Yamaoka N, et al. **Gan No Rinsho** 1989 Apr;35(5):632–8 (Eng. Abstr.) **(Jpn)**

[Expression of ras gene product p21 in human lung adenocarcinoma] Funato T, et al. **Rinsho Byori** 1988 Oct; 36(10):1182–6 **(Jpn)**

[Variability and inheritability of the "level of endogenous SH groups" trait in cell and clone populations of transplantable rat tumors] Ismailov BI, et al. **Eksp Onkol** 1989;11(3):73–6 (Eng. Abstr.) **(Rus)**

HISTORY

Hugh Morriston Davies and lobectomy for cancer, 1912. Meyer JA. **Ann Thorac Surg** 1988 Oct;46(4):472–4

[About the illness of Karl Marx] Altunkov PG. **Klin Med (Mosk)** 1989 Feb;67(2):140–3 **(Rus)**

IMMUNOLOGY

Immunological aspects of tumor-macrophage interactions. Remels L, et al. **Adv Exp Med Biol** 1988;233:49–59

Glial fibrillary acidic protein immunoreactivity in human respiratory tract cartilages and pulmonary chondromatous hamartomas. Viale G, et al. **Am J Pathol** 1988 Nov; 133(2):363–73

Monoclonal antibody-mediated detection of lung cancer antigens in serum. Schepart BS, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1434–8

Immunohistochemical detection of human lung and gastric cancer antigen in human salivary gland tumors. Tsuzi T, et al. **Anticancer Res** 1989 Mar-Apr;9(2):327–39

Assessment of phenotype of blood lymphocyte subsets prior and after PWM stimulation in patients with lung carcinoma. Jeżewska E, et al. **Arch Geschwulstforsch** 1989;59(1):31–6

Antitumour potential of pleural cavity macrophages in lung cancer patients without malignant effusion. Kimura S, et al. **Br J Cancer** 1989 Apr;59(4):535–9

Expression of the small cell carcinoma antigens of cluster-5 and cluster-5A in primary lung tumours. Maier A, et al. **Br J Cancer** 1989 May;59(5):692–5

Immunophenotype of small cell lung carcinoma. Expression of NKH-1 and transferrin receptor and absence of most myeloid antigens. Doria MI Jr, et al. **Cancer** 1988 Nov 1;62(9):1939–45

Elevation of sialyl stage-specific mouse embryonic antigen levels in pleural effusion in patients with adenocarcinoma of the lung. Iguchi H, et al. **Cancer** 1989 Apr 1; 63(7):1327–30

Different immune functions of peripheral blood, regional lymph node, and tumor infiltrating lymphocytes in lung cancer patients. Nakamura H, et al. **Cancer** 1988 Dec 15; 62(12):2489–97

Immunocompetence in lung cancer patients: analysis of serological and cellular parameters. Pierri I, et al. **Cancer Detect Prev** 1988;13(2):95–101

Characterization of the antigen identified by Po66. A monoclonal antibody raised against a lung squamous cell carcinoma. Martin A, et al. **Cancer Immunol Immunother** 1989;29(2):118–24

Importance of MHC antigen expression on solid tumors in the in vitro interaction with autologous blood lymphocytes. Vánky F, et al. **Cancer Immunol Immunother** 1988; 27(3):213–22

The functional deficiency of B lymphocytes in patients with lung cancer is due to inadequate T-cell help and excessive suppression by T and non-T cells. Venkataraman M, et al. **Cancer Invest** 1989;7(1):7–16

Cell surface glycoprotein associated with human lung tumors that is similar to but distinct from the epidermal growth factor receptor. Chen FA, et al. **Cancer Res** 1989 Jul 1; 49(13):3642–9

Characterization of a malignant phenotype-associated cell surface glycoprotein common to various human tumor cells and preferentially expressed on adenocarcinoma of the lung. Motté P, et al. **Cancer Res** 1989 Mar 15;49(6):1349–56

Phenotypic heterogeneity studied by immunohistochemistry and aneuploidy in non-small cell lung cancers. Pujol JL, et al. **Cancer Res** 1989 May 15;49(10):2797–802

Human lung carcinoma monoclonal antibody specific for the Thomsen-Friedenreich antigen. Stein R, et al. **Cancer Res** 1989 Jan 1;49(1):32–7

Augmentation of lymphokine-activated killer cell cytotoxicity by monoclonal antibodies against human small cell lung carcinoma. Tong AW, et al. **Cancer Res** 1989 Aug 1;49(15):4103–8

Chemiluminescence and antibody-dependent, cell-mediated cytotoxicity between human alveolar macrophages and peripheral blood monocytes in smokers, nonsmokers, and lung cancer patients. Lin CC, et al. **Chest** 1989 Mar; 95(3):553–7

Monoclonal antibodies in lung cancer. Stahel RA. **Chest** 1989 Jul;96(1 Suppl):27S–29S (19 ref.)

Airway secretory IgA concentrations in patients with lung cancer. Evaluation of the uninvolved lung. Wesselius LJ, et al. **Chest** 1989 Jun;95(6):1265–8

Defective antibody-dependent tumour cell lysis by neutrophils from cancer patients. Dallegri F, et al. **Clin Exp Immunol** 1989 Jul;77(1):58–61

In vitro activation of lymphocytes from nonsmall cell cancer patients by interleukin 2 and anti-CD3 antibody. Pisani RJ, et al. **Clin Immunol Immunopathol** 1989 Mar; 50(3):348–63

Role of T-lymphocytes in production of a cancer-associated protein factor in serum from lung cancer patients. Kotlar HK, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1763–70

Production of bronchial papilloma with calcitonin-like immunoreactivity in rats exposed to urban ambient air. Ito T, et al. **Exp Pathol** 1989;36(2):89–96

The activity of neutrophil myeloperoxidase in patients with lung carcinoma. Dąbrowska M, et al. **Folia Haematol (Leipz)** 1988;115(5):613–9

Monoclonal antibody directed against neuroendocrine properties of both normal and malignant cells. Okuda T, et al. **Hybridoma** 1988 Dec;7(6):569–81

A murine monoclonal antibody raised against human non-small cell carcinoma of the lung. Stein R, et al. **Hybridoma** 1988 Dec;7(6):555–67

Lewis lung carcinoma cells enhance the synthesis of C3 and are opsonized by C3 secreted from murine macrophages. Lipari M, et al. **Immunobiology** 1988 Jul;177(3):233–44

Monoclonal anti-idiotypic antibody mimicking a tumor-associated sialoglycoprotein antigen induces humoral immune response against human small-cell lung carcinoma. Barth A, et al. **Int J Cancer** 1989 May 15; 43(5):896–900

Human lung cancer—a comparative study of the levels of circulating immune complexes in pulmonary blood draining the tumor area and peripheral venous blood. Bukh A, et al. **Int J Cancer** 1989 May 15;43(5):837–40

Immunochemical characterization of adenocarcinoma-associated antigen YH206. Hinoda Y, et al. **Int J Cancer** 1988 Nov 15;42(5):653–8

Differential expression of cell adhesion molecules in variants of K1735 melanoma cells differing in metastatic capacity. Linnemann D, et al. **Int J Cancer** 1989 Apr 15;43(4):709–12

Properties of recombinant interleukin 2-cultured tumor-infiltrating lymphocytes in human lung cancer. Yano T, et al. **Int J Cancer** 1989 Apr 15;43(4):619–23

Regulation of the metastasis of murine ocular melanoma by natural killer cells. Harning R, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1909–15

Early lung cancer detection: monoclonal antibody staining of exfoliated cells in sputum. Bernal SD, et al. **J Clin Oncol** 1988 Nov;6(11):1676–8 (10 ref.)

Sensitive and specific monoclonal antibody recognition of human lung cancer antigen on preserved sputum cells: a new approach to early lung cancer detection. Tockman MS, et al. **J Clin Oncol** 1988 Nov;6(11):1685–93

Lack of correlation between levels of MHC class I antigen and susceptibility to lysis of small cellular lung carcinoma (SCLC) by natural killer cells. Stam NJ, et al. **J Immunol** 1989 Jun 1;142(11):4113–7

Effects of botulinum neurotoxin and Lambert-Eaton myasthenic syndrome IgG at mouse nerve terminals. Lande S, et al. **J Neural Transm Park Dis Dement Sect** 1989; 1(3):229–42

Immunohistological characterization of human monoclonal antibody against lung cancer. Yano T, et al. **J Surg Oncol** 1988 Oct;39(2):108–13

Pre- and postoperative sequential study on the immunosuppressive activity of serum and cell-free skin bleb fluid of patients with lung cancer and esophageal cancer. Zhou QH, et al. **J Surg Oncol** 1989 Jun;41(2):121–7

Quantitative distribution of cluster 1 small cell lung cancer antigen in cancerous and non-cancerous tissues, cultured cells and sera. Hirano T, et al. **Jpn J Cancer Res** 1989 Apr;80(4):348–55

Circulating antineuronal antibodies in small cell lung cancer. Popp W, et al. **Lung** 1988;166(4):243–51

Neuronal antinuclear antibodies in a patient with Lambert-Eaton myasthenic syndrome and small-cell lung carcinoma. Dropcho EJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):249–51

Immunohistochemical study of carcinoembryonic antigen (CEA) in lung carcinoma by five monoclonal antibodies. Hiraoka K, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1; 10(3):237–46

[Phagocytic activity in various lung tumors] Mikhova Ts, et al. **Eksp Med Morfol** 1988;27(3):39–43 (Eng. Abstr.) **(Bul)**

[Activated cells in the peripheral blood in lung cancer] Qian L. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):18–21, 62 (Eng. Abstr.) **(Chi)**

[Generation and identify of a panel of monoclonal antibodies against carcinoma of the lung] Liu LA. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):352–6 (Eng. Abstr.) **(Chi)**

[CEA distribution in BALF of lung cancer patients] Xu WB. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):371–3 (Eng. Abstr.) **(Chi)**

[Immunomodulation of cimetidine in mice] Sun B, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):89–93 (Eng. Abstr.) **(Chi)**

[The major histocompatibility system in bronchogenic carcinoma] Měřička O, et al. **Sb Lek** 1988 Oct;90(10):314–7 (Eng. Abstr.) **(Cze)**

[Immunohistochemical findings in primary and secondary adenocarcinoma of the lung] Brockmann M, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:368–9 (Eng. Abstr.)

(Ger)
[The unusually favorable prognosis of multiple primary bronchial carcinoma—the consequence of natural killer cell elevation and increased interleukin 2 receptor expression?] Plat U, et al. **Z Erkr Atmungsorgane** 1989;172(2):150–4 (Eng. Abstr.) (Ger)
[Postoperative sequential testing of cytotoxic activity against the autologous and allogeneic tumor cells in patients with primary lung resected cancer] Fujisawa T, et al. **Gan No Rinsho** 1988 Nov;34(14):1922–6 (Eng. Abstr.) (Jpn)
[A comparison of the sialyl SSEA-1 antigen and CEA in the histology of malignant mesothelioma, with special reference to adenocarcinoma of the lung] Kishimoto T, et al. **Gan No Rinsho** 1988 Nov;34(14):1951–5 (Eng. Abstr.) (Jpn)
[A clinical study of a multiregression analysis on the NK activity and related clinical factors in patients with lung cancer] Ogata H, et al. **Gan No Rinsho** 1989 Apr; 35(5):554–9 (Eng. Abstr.) (Jpn)
[Activation of neutrophil function by MDP-Lys(L 18)] Hirota M, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):219–24 (Eng. Abstr.) (Jpn)
[Determination of various tumor markers, with special reference to sialyl SSEA-1 antigen in lung cancer] Satoh H, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2917–22 (Eng. Abstr.) (Jpn)
[Effect of radiation on the expression of tumor-associated antigens of human lung adenocarcinoma cells—an immunologic study using monoclonal antibodies] Hareyama M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1553–62 (Eng. Abstr.) (Jpn)
[Effect of concomitant pathology on the indicators of cellular immunity in cancer of the lungs] Bulbuk GA, et al. **Sov Med** 1989;(4):122 (Rus)
[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor-bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) (Rus)
[Circulating E receptor in the peripheral blood of patients with lung cancer] Sleptsova LA, et al. **Vestn Khir** 1988 Jul;141(7):72–3 (Rus)
[Neutrophil granulocyte function in patients with malignant neoplasms] Cherdyntseva NV, et al. **Vopr Onkol** 1989; 35(4):429–33 (Eng. Abstr.) (Rus)
[Preliminary information on a new technic for the determination of circulating immunocomplexes using L1210 cells and immunoenzyme analysis. Observations in patients with cancer] Castellanos J, et al. **Rev Esp Oncol** 1985;32(4):583–93 (Spa)

METABOLISM

Tumour markers in broncho-alveolar lavage. Alvarez-Sala R, et al. **Acta Oncol** 1989;28(2):290–1
Combined choriocarcinoma and adenocarcinoma of the lung. Adachi H, et al. **Acta Pathol Jpn** 1989 Feb;39(2):147–52
Lipoxygenase regulation of membrane expression of tumor cell glycoproteins and subsequent metastasis. Honn KV, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:439–43
Synthesis of type I homotrimer collagen molecules by cultured human lung adenocarcinoma cells. Rupard JH, et al. **Am J Pathol** 1988 Nov;133(2):316–26
Increased levels of vaccenic acid in bronchogenic carcinoma tissue. Lawson N, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):125–31
Effects of the combination of acivicin and cis-diamminedichloroplatinum(II) on thymidylate synthesis of A549 lung cancer cells. Futami H, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):31–7
A23187 and protein kinase C activators stimulate phosphatidylinositol metabolism and prostaglandin synthesis in a human lung cancer cell line. Rapuano BE, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):644–52
Cholecystokinin elevates cytosolic calcium in small cell lung cancer cells. Staley J, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):605–10
A novel bombesin receptor antagonist inhibits autocrine signals in a small cell lung carcinoma cell line. Trepel JB, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1383–9
Modulation of bombesin-induced phosphatidylinositol hydrolysis in a small-cell lung-cancer cell line. Trepel JB, et al. **Biochem J** 1988 Oct 15;255(2):403–10
Comparative cellular uptake and cytotoxicity of a complex of daunomycin-low density lipoprotein in human squamous lung tumour cell monolayers. Kerr DJ, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3981–6
Glutathione and related enzyme activity in human lung cancer cell lines. Carmichael J, et al. **Br J Cancer** 1988 Oct;58(4):437–40
The respiratory behavior of Lewis carcinoma cells—existence of a cyanide-resistant respiration. Miralpeix M, et al. **Cancer Biochem Biophys** 1989 May; 10(3):227–33
Evidence for prostanoid biosynthesis as a biochemical feature of certain subclasses of non-small cell carcinomas of the lung as determined in established cell lines derived from human lung tumors. Hubbard WC, et al. **Cancer Res** 1989 Feb 15;49(4):826–32
Correlation of multidrug resistance with decreased drug accumulation, altered subcellular drug distribution, and increased P-glycoprotein expression in cultured SW-1573 human lung tumor cells. Keizer HG, et al. **Cancer Res** 1989 Jun 1;49(11):2988–93
Effects of aromatic isothiocyanates on tumorigenicity, O6-methylguanine formation, and metabolism of the tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in A/J mouse lung. Morse MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2894–7
Effects of the pH dependence of 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide-formazan absorption on chemosensitivity determined by a novel tetrazolium-based assay. Plumb JA, et al. **Cancer Res** 1989 Aug 15;49(16):4435–40
Successful resection of alpha-fetoprotein-producing lung cancer. Saka H, et al. **Chest** 1988 Oct;94(4):879–80
Clinical significance of mucin-like high molecular weight glycoprotein originated from lung cancer as tumor marker. Imokawa M, et al. **Clin Chim Acta** 1989 Mar 15; 180(1):45–58
Influence of metallic carcinogenesis in lung and colorectal neoplasia. Metals in neoplastic processes. Martín Mateo MC, et al. **Clin Physiol Biochem** 1988;6(6):321–6
Influence of copper and zinc on urethan-induced adenoma development in mice. Blakley BR. **Drug Nutr Interact** 1988; 5(4):395–401
Presence of high concentration of 7B2 in pleural effusion. Iguchi H, et al. **Endocrinol Jpn** 1988 Dec;35(6):885–9
Production of salivary type alpha-amylase in human lung cancer. Nakamura Y, et al. **Gene** 1989 Apr 15;77(1):107–12
Histopathologic evaluation of application of labeled neoglycoproteins in primary bronchus carcinoma. Kayser K, et al. **Hum Pathol** 1989 Apr;20(4):352–60
Sterically hindered analogues of diacylglycerols. Synthesis, binding to the phorbol ester receptor and metabolism in A549 human lung carcinoma cells. Laughton CA, et al. **Int J Cancer** 1989 Aug 15;44(2):320–4
Androgen receptors, androgen-dependent proliferation, and 5 alpha-reductase activity of small-cell lung cancer cell lines. Maasberg M, et al. **Int J Cancer** 1989 Apr 15; 43(4):685–91
Solubility of Freon 22 in human blood and lung tissue. Varene N, et al. **J Appl Physiol** 1989 May;66(5):2468–71
Kinetics of calcitonin receptor internalization in lung cancer (BEN) and osteogenic sarcoma (UMR 106-06) cells. Findlay DM, et al. **J Bone Miner Res** 1986 Jun;1(3):277–83
Increased renal calcium reabsorption in an animal model of hypercalcemia of human malignancy. Shipley PJ, et al. **J Bone Miner Res** 1988 Oct;3(5):555–60
Effects of bombesin on human small cell lung cancer cells: evidence for a subset of bombesin non-responsive cell lines. Kado-Fong H, et al. **J Cell Biochem** 1989 Aug;40(4):431–7
Membrane association of the hyaluronate stimulatory factor from LX-1 human lung carcinoma cells. Knudson W, et al. **J Cell Biochem** 1988 Nov;38(3):165–77
Identification of a tumor cell receptor for VGVAPG, an elastin-derived chemotactic peptide. Blood CH, et al. **J Cell Biol** 1988 Nov;107(5):1987–93
Spontaneous changes in intermediate filament protein expression patterns in lung cancer cell lines. Broers JL, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):91–108
Ectopic production of parathyroid hormone by small cell lung cancer in a patient with hypercalcemia. Yoshimoto K, et al. **J Clin Endocrinol Metab** 1989 May;68(5):976–81
Synthesis and tumor uptake of 5-82Br- and 5-131I-labeled 5-halo-1-(2-fluoro-2-deoxy-beta-D-ribofuranosyl)= uracils. Mercer JR, et al. **J Med Chem** 1989 Jun; 32(6):1289–94
Carbon-11-L-methionine uptake with PET as a predictor of prognosis for bronchogenic carcinoma patients [letter] Shin WJ, et al. **J Nucl Med** 1989 Aug;30(8):1420–2
Distribution of hematoporphyrin derivative in normal and malignant tissue. Hara N, et al. **Jpn J Exp Med** 1988 Jun; 58(3):139–43
Small cell lung cancer bombesin receptors are antagonized by reduced peptide bond analogues. Mahmoud S, et al. **Life Sci** 1989;44(5):367–73
Magnesium alterations and pharmacokinetic data in gallium-treated lung cancer patients. Collery P, et al. **Magnesium** 1989;8(1):56–64
Resting energy expenditure in lung and colon cancer. Nixon DW, et al. **Metabolism** 1988 Nov;37(11):1059–64
Lectin histochemistry of normal lung and pulmonary adenocarcinoma. Kawai T, et al. **Mod Pathol** 1988 Nov; 1(6):485–92
Multiple peptide hormone producing adenocarcinoma of lung with neurotensin and CRF-like immunoreactivity. Dämmrich J, et al. **Pathol Res Pract** 1988 Nov;183(6):670–4
Pulmonary blastomas. Immunohistochemical investigations of three cases. Dienemann D, et al. **Pathol Res Pract** 1989 Mar;184(3):306–11
Distribution of vitamin B12 R-binder in lung tumors. Implications for cell differentiation. Ogawa K, et al. **Pathol Res Pract** 1989 Feb;184(2):234–41
Influence of L-methionine-deprived total parenteral nutrition on the tumor tissue and plasma amino acids fraction and the host metabolism: experimental study with Sato lung carcinoma-bearing rats. Goseki N, et al. **Tohoku J Exp Med** 1989 Mar;157(3):251–60
Surfactant production by neoplastic type II pneumocytes. Vazquez M, et al. **Ultrastruct Pathol** 1988 Nov-Dec; 12(6):605–12
[Intracellular uptake and accumulation of metaiodobenzylguanidine in neuroblastoma cells and small cell carcinoma of the lung] Melino G. **Minerva Pediatr** 1989 Mar;41(3):123–8 (Eng. Abstr.) (Ita)
[Effect of uracil on the both reactions, 5-fluorouracil degradation into 2-fluoro-beta-alanine and 5-fluorouracil splitting from tegafur in human tumor] Kono A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2663–5 (Jpn)
[Studies on pre- and postoperative extravascular lung water in patients with primary lung cancer] Koizumi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1339–46 (Eng. Abstr.) (Jpn)
[Ectopic hormone production by neoplasms] Yamaji T. **Rinsho Byori** 1988 Dec;36(12):1386–92 (Jpn)

MICROBIOLOGY

Evidence of viral replication in HBsAg positive patients with hepatocellular carcinoma: measurement of serum hepatitis B virus deoxyribonucleic acid (HBV-DNA). Guan R, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):8–11

MORTALITY

Re: "Radiation doses and cause-specific mortality among workers at a nuclear materials fabrication plant" [letter; comment] Mole RH. **Am J Epidemiol** 1989 Mar; 129(3):639–40, **Comment on:** Am J Epidemiol 1988 Feb;127(2):255–66
Mortality among employees of an Ontario factory that manufactured construction materials using chrysotile asbestos and coal tar pitch. Finkelstein MM. **Am J Ind Med** 1989;16(3):281–7
Large cell carcinoma of the lung: a highly aggressive tumor with dismal prognosis. Downey RS, et al. **Ann Thorac Surg** 1989 Jun;47(6):806–8
Lung cancer in the meat industry. Coggon D, et al. **Br J Ind Med** 1989 Mar;46(3):188–91
Cancer mortality in relation to measures of occupational exposure to crocidolite at Wittenoom Gorge in Western Australia. de Klerk NH, et al. **Br J Ind Med** 1989 Aug; 46(8):529–36
Smoking, occupational exposure to rubber, and lung cancer. Zhang ZF, et al. **Br J Ind Med** 1989 Jan;46(1):12–5
The effect of tumor size and tumor cell DNA content on the survival of patients with stage I adenocarcinoma of the lung. Cibas ES, et al. **Cancer** 1989 Apr 15;63(8):1552–6
The percentage of aneuploid cells is significantly correlated with survival in accurately staged patients with stage 1 resected squamous cell lung cancer and long-term follow up. van Bodegom PC, et al. **Cancer** 1989 Jan 1;63(1):143–7
Lung cancer mortality trends in Canada from 1931 to 1982. Vakil DV. **Cancer Detect Prev** 1988;13(2):87–93
More lung cancer but better survival. Implications of secular trends in "necropsy surprise" rates. Chan CK, et al. **Chest** 1989 Aug;96(2):291–6
Survival experience following Nd:YAG laser photoresection for primary bronchogenic carcinoma. Desai SJ, et al. **Chest** 1988 Nov;94(5):939–44
Prognosis in patients with small cell lung cancer. Osterlind K. **Dan Med Bull** 1989 Feb;36(1):15–24 (91 ref.)
Mortality in a historical cohort of bus drivers. Paradis G, et al. **Int J Epidemiol** 1989 Jun;18(2):397–402
Multistage modelling of lung cancer mortality in asbestos textile workers. Pearce N. **Int J Epidemiol** 1988 Dec; 17(4):747–52
Prognostic factors in patients with lung cancer. Milstein D, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9–10):588–92
Prognostic factors in small-cell carcinoma of the lung: an analysis of 1,521 patients. Spiegelman D, et al. **J Clin Oncol** 1989 Mar;7(3):344–54
Reanalysis of lung cancer mortality in a National Cancer Institute study on mortality among industrial workers exposed to formaldehyde. Sterling TD, et al. **J Occup Med** 1988 Nov;30(11):895–901
Continuing high lung cancer mortality among ex-amosite asbestos factory workers and a pilot study of individual anti-smoking advice. Gardner MJ, et al. **J Soc Occup Med** 1988 Autumn;38(3):69–72
Carcinoma of the lung. Evaluation of satellite nodules as a factor influencing prognosis after resection. Deslauriers J, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):504–12
From the Centers for Disease Control. Chronic disease reports: deaths from lung cancer—United States, 1986. **JAMA** 1989 Sep 1;262(9):1170, 1172
Lung cancer mortality among nonsmoking uranium miners exposed to radon daughters. Roscoe RJ, et al. **JAMA** 1989 Aug 4;262(5):629–33
Lung cancer that is not attributable to smoking [letter] [published erratum appears in JAMA 1989 Aug 18;262(7):904] Schneiderman MA, et al. **JAMA** 1989 May 12;261(18):2635–6
Geographic pattern of lung cancer in Japan and its environmental correlations. Minowa M, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1017–23
Prognostic factors in small cell lung cancer: multivariate analysis in the National Cancer Center Hospital (Japan). Shinkai T, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):135–41
Chronic disease reports: deaths from lung cancer—United States, 1986. **MMWR** 1989 Jul 28;38(29):501–5
Deaths from lung cancer and ischaemic heart disease due

to passive smoking in New Zealand. Kawachi I, et al. **N Z Med J** 1989 Jul 12;102(871):337–40

Deaths from lung cancer and ischaemic heart disease due to passive smoking in New Zealand [letter] Lee PN. **N Z Med J** 1989 Aug 23;102(874):448

Trends in smoking and lung cancer mortality in Switzerland. La Vecchia C, et al. **Prev Med** 1988 Nov;17(6):712–24

Prognostic factors for patients with inoperable non-small cell lung cancer, limited disease. The importance of patients' subjective experience of disease and psychosocial well-being. Kaasa S, et al. **Radiother Oncol** 1989 Jul; 15(3):235–42

Encouraging trends in lung cancer mortality in Texas, 1970 to 1986. Spitz MR, et al. **Tex Med** 1989 Mar;85(3):42–4

Mortality for tracheal, bronchial and lung cancer: possibilities and limits in data quality-control. Guidi E, et al. **Tumori** 1988 Aug 31;74(4):369–75

Long-term survivors of small-cell carcinoma of the lung. Jubelirer SJ. **W V Med J** 1989 May;85(5):183–6

Recent trends in lung and breast cancer mortality in California women [letter] Kizer KW, et al. **West J Med** 1988 Oct;149(4):466–7

Trends in lung cancer mortality in Wisconsin. Remington PL, et al. **Wis Med J** 1989 Jun;88(6):34–8

Cancers of the stomach, lung and breast: mortality trends and control strategies. Stanley K, et al. **World Health Stat Q** 1988;41(3–4):107–14

Lung cancer risks of underground miners: cohort and case-control studies. Archer VE. **Yale J Biol Med** 1988 May-Jun;61(3):183–93 (36 ref.)

Models for the analysis of radon-exposed populations. Lubin JH. **Yale J Biol Med** 1988 May-Jun;61(3):195–214 (58 ref.)

[Cause of death patterns during the decade 1977–1986 in Denmark in lung diseases, ischemic heart disease and cardiovascular disease] Mosbech J, et al. **Ugeskr Laeger** 1989 May 29;151(22):1395–6 **(Dan)**

[Demonstration of independent cellular prognostic factors in squamous cell carcinoma of the lung] Volm M, et al. **Strahlenther Onkol** 1989 Aug;165(8):587–92 (Eng. Abstr.) **(Ger)**

[Tumor mortality in a cohort of glass industry workers] Cordioli G, et al. **Epidemiol Prev** 1987 Mar;9(30):16–8 (Eng. Abstr.) **(Ita)**

[Carcinogenic risk for resin producers exposed to formaldehyde: extension of follow-up] Bertazzi PA, et al. **Med Lav** 1989 Mar-Apr;80(2):111–22 (Eng. Abstr.) **(Ita)**

[Cause of death in silicotics in Sardinia (1964–1977)] Carta P, et al. **Med Lav** 1988 Nov-Dec;79(6):431–43 (Eng. Abstr.) **(Ita)**

[Lung tumors and occupational exposure in an industrial area of northern Italy] Ciccone G, et al. **Med Lav** 1988 Jan-Feb; 79(1):54–64 (Eng. Abstr.) **(Ita)**

[Clinical and control studies of cancer of the lungs. Smoking and employment in metallurgy] Jędrychowski W, et al. **Przegl Lek** 1989;46(3):329–33 (Eng. Abstr.) **(Pol)**

[Late clinical results in the surgical treatment of bronchopulmonary neoplasm in an advanced stage] Albu A, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan-Mar;37(1):69–76 **(Rum)**

[The prognosis of small-cell cancer and malignant carcinoid of the lung] Frank GA, et al. **Vopr Onkol** 1989;35(2):192–8 (Eng. Abstr.) **(Rus)**

[The immediate results of the surgical treatment of lung cancer in patients over 70 years of age] Kharchenko VP, et al. **Vopr Onkol** 1989;35(3):342–7 (Eng. Abstr.) **(Rus)**

[Survival of patients with disseminated small-cell lung cancer] Korman DB, et al. **Vopr Onkol** 1989;35(2):187–92 (Eng. Abstr.) **(Rus)**

[Lung tumors in women in the area of Split with emphasis on survival] Mišc K, et al. **Plucne Bolesti** 1988 Jan-Jun; 40(1-2):80–3 (Eng. Abstr.) **(Ser)**

NURSING

A randomized clinical trial of home nursing care for lung cancer patients. McCorkle R, et al. **Cancer** 1989 Sep 15; 64(6):1375–82

PATHOLOGY

Cytology of plasma cell myeloma in bronchial washing. Riazmontazer N, et al. **Acta Cytol** 1989 Jul-Aug; 33(4):519–22

So-called sclerosing hemangioma of the lung. An immunohistochemical, histochemical and ultrastructural study. Fukayama M, et al. **Acta Pathol Jpn** 1988 May; 38(5):627–42

Pulmonary adenoma and endocrine cell hyperplasia in Syrian golden hamster treated with 4-nitroquinoline 1-oxide. Ito T, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1097–104

Computed tomography and mediastinoscopy in the assessment of resectability of lung cancer. Lähde S, et al. **Acta Radiol** 1989 Mar-Apr;30(2):169–73

Influence of gangliosides on the metastatic process. Gullino PM. **Adv Exp Med Biol** 1988;233:211–4

Glycosaminoglycan (GAG) metabolism as a potential target to prevent metastasis formation. Kopper L, et al. **Adv Exp Med Biol** 1988;233:367–75

MHC antigens expressed on 3LL metastatic variants: correlation with the expression of a TSP-180 protein. Sacchi A, et al. **Adv Exp Med Biol** 1988;233:141–50

Dendriform pulmonary ossification. Report of two cases with unique findings. Joines RW, et al. **Am J Clin Pathol** 1989 Apr;91(4):398–402

The role of the saccomano technique in sputum cytopathologic diagnosis of lung cancer. Perlman EJ, et al. **Am J Clin Pathol** 1989 Jan;91(1):57–60

Immunohistochemical study of lung adenocarcinoma using monoclonal antibody for 60-kilodalton antigen in type II pneumocytes and nonciliated bronchiolar epithelial cells. Comparison with two antisurfactant apoprotein antibodies. Suehiro T, et al. **Am J Clin Pathol** 1989 Aug;92(2):150–8

Transbronchial fine-needle aspiration. Reliability and limitations. Wagner ED, et al. **Am J Clin Pathol** 1989 Jul; 92(1):36–41

Extensive bone marrow necrosis in patients with cancer and tumor necrosis factor activity in plasma. Knupp C, et al. **Am J Hematol** 1988 Dec;29(4):215–21

Linking chrysotile asbestos with mesothelioma. Dunnigan J. **Am J Ind Med** 1988;14(2):205–9

Histologic types of lung cancers among male Japanese copper smelter workers. Tokudome S, et al. **Am J Ind Med** 1988; 14(2):137–43

Study of lung cancer histologic types, occupation, and smoking in Missouri. Zahm SH, et al. **Am J Ind Med** 1989; 15(5):565–78

Burkitt's lymphoma presenting as an endobronchial lesion. Richert-Boe KE, et al. **Am J Med** 1988 Dec;85(6):864–6

The expression of the platelet-derived and transforming growth factor genes in human nonsmall lung cancer cell lines is related to tumor stroma formation in nude mice tumors. Bergh J. **Am J Pathol** 1988 Dec;133(3):434–9

Immunohistochemical demonstration of Clara cell antigen in lung tumors of bronchiolar origin induced by N-nitrosodiethylamine in Syrian golden hamsters. Rehm S, et al. **Am J Pathol** 1989 Jan;134(1):79–87

Differentiation of adenocarcinoma of the lung from mesothelioma. Periodic acid-Schiff, monoclonal antibodies B72.3, and Leu M1. Warnock ML, et al. **Am J Pathol** 1988 Oct;133(1):30–8

Observations on bronchiolo-alveolar carcinomas with special emphasis on localized lesions. A clinicopathological, ultrastructural, and immunohistochemical study of 11 cases. Axiotis CA, et al. **Am J Surg Pathol** 1988 Dec; 12(12):918–31

Signet ring melanoma, S-100 negative [letter] Bonetti F, et al. **Am J Surg Pathol** 1989 Jun;13(6):522–3

Lymphoepithelioma-like carcinoma of the lung. Butler AE, et al. **Am J Surg Pathol** 1989 Aug;13(8):632–9

Primary malignant melanoma of the lung. Bagwell SP, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1543–7

Guidelines for percutaneous transthoracic needle biopsy. This position paper of the American Thoracic Society was adopted by the ATS Board of Directors, June 1988. Sokolowski JW Jr, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):255–6

Cytomorphometry of large cell carcinoma of the lung. Burns TR, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):48–52

Morphologic and immunocytochemical studies of bronchioloalveolar carcinoma at Duke University Medical Center, 1968–1986. Elson CE, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):261–74

A quantitative cytologic study of sputum in early squamous cell bronchogenic carcinoma. Saito Y, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):365–70

Standardized thionin-eosin stain in bronchial cytology. A substitute for hematoxylin-eosin Y staining. Schulte E, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):131–9

The effect of sampling on quantitative nuclear image features in histologic sections of lung carcinomas. Thunnissen FB, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):355–9

Quantitative pathologic analysis of first and second primary cancers in double tumors of the lung. van Bodegom PC, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):43–7

Mucoepidermoid lung tumors. Heitmiller RF, et al. **Ann Thorac Surg** 1989 Mar;47(3):394–9

Hazards of transthoracic needle biopsy of the lung. Lillington GA. **Ann Thorac Surg** 1989 Aug;48(2):163–4

Chest wall implantation of lung cancer after thin-needle aspiration biopsy. Seyfer AE, et al. **Ann Thorac Surg** 1989 Aug;48(2):284–6

The malignancy of large cell lung carcinomas [editorial] Yesner R. **Ann Thorac Surg** 1989 Jun;47(6):796–7

Inhibition by retinoids of in vitro invasive ability of human lung carcinoma cells. Fazely F, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1387–91

Vitamin B6 responsive growth of human tumors. Fortmeyer HP, et al. **Anticancer Res** 1988 Jul-Aug;8(4):813–8

Multicellular aggregates from human tumor cell lines for radiation studies. Schwachöfer JH, et al. **Anticancer Res** 1989 Mar-Apr;9(2):441–8

Malignant transformation of host cells by a human small cell lung cancer xenografted into nude mice. Soranzo C, et al. **Anticancer Res** 1989 Mar-Apr;9(2):361–6

Immunocytochemical detection of a resistance-associated glycoprotein in tissue culture cells, ascites tumors and human tumor xenografts by Mab 265/F4. Volm M, et al. **Anticancer Res** 1988 Jul-Aug;8(4):531–5

Histopathological and immunohistochemical analysis of lung tumors: description of a convenient technique for use with fine needle biopsy. Nordgren H, et al. **APMIS** 1989 Feb; 97(2):136–42

Morphofunctional characteristics of silver-stained nucleoli of tumor cells in a patient with dimorphous pulmonary carcinoma. Mamaev N, et al. **Arch Geschwulstforsch** 1988; 58(6):379–86

Bilateral vocal cord paralysis with respiratory failure. A presenting manifestation of bronchogenic carcinoma. Baumann MH, et al. **Arch Intern Med** 1989 Jun; 149(6):1453–4

Sclerosing hemangioma of the lung. An immunohistochemical study of intermediate filaments and endothelial markers. Alvarez-Fernandez E, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):121–4

Benign clear cell ('sugar') tumor of lung [letter] Dail DH. **Arch Pathol Lab Med** 1989 Jun;113(6):573–4

Primary choriocarcinoma of the lung in a man. Sullivan LG. **Arch Pathol Lab Med** 1989 Jan;113(1):82–3

Cases from the aerospace medicine residents' teaching file. Case #29. Evaluation and management of an aviator [clinical conference] Pepper LJ, et al. **Aviat Space Environ Med** 1989 Jan;60(1):80–2

A comparison of patient survival and tumour growth kinetics in human bronchogenic carcinoma. Kerr KM, et al. **Br J Cancer** 1988 Oct;58(4):419–22

High dose etoposide for brain metastases of small cell lung cancer. A phase II study. The EORTC Lung Cancer Cooperative Group. Postmus PE, et al. **Br J Cancer** 1989 Feb;59(2):254–6

Enhanced cytostatic activity of the sesquiterpene lactone eupatoriopicrin by glutathione depletion. Woerdenbag HJ, et al. **Br J Cancer** 1989 Jan;59(1):68–75

Transbronchial aspiration of subcarinal lymph nodes. Blainey AD, et al. **Br J Dis Chest** 1988 Apr;82(2):149–54

Clinical relevance of histologic subtyping in small cell lung cancer. Bepler G, et al. **Cancer** 1989 Jul 1;64(1):74–9

Heterotransplantation of small cell lung carcinoma into nude mice. Stability of the phenotypic characters. Brambilla E, et al. **Cancer** 1989 Sep 15;64(6):1238–47

Morphometric and morphologic evaluations in stage III non-small cell lung cancers. Prognostic significance of quantitative assessment of infiltrating lymphoid cells. Lee TK, et al. **Cancer** 1989 Jan 15;63(2):309–16

Efficacy of computed tomography of the thorax and upper abdomen and whole-body gallium scintigraphy for staging of lung cancer. MacMahon H, et al. **Cancer** 1989 Oct 1; 64(7):1404–8

Pleuropulmonary blastoma. The so-called pulmonary blastoma of childhood. Manivel JC, et al. **Cancer** 1988 Oct 15;62(8):1516–26 (49 ref.)

Mediastinoscopy incision site metastasis. Implications for radiotherapeutic treatment. Rate WR, et al. **Cancer** 1989 Jan 1;63(1):68–9

Bone marrow involvement in small cell lung cancer. Clinical significance and correlation with routine laboratory variables. Tritz DB, et al. **Cancer** 1989 Feb 15;63(4):763–6

Failure of preoperative staging to assess unresectability in M0 bronchogenic carcinoma. Weiman DS, et al. **Cancer** 1989 Feb 15;63(4):767–8

The relative effectiveness of analogues of cisplatin in the experimental chemotherapy of human non-small-cell lung cancer and neuroblastoma grown as multicellular spheroids. Russell J, et al. **Cancer Chemother Pharmacol** 1989;23(2):111–4

Chromosome changes in a brain metastasis of a large cell lung cancer. Selypes A, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):181–4

Effects of hyperoxia on B16-F10 cells in vivo. Margaretten NC, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):119–25

Selective implantation and growth in rats and mice of experimental liver metastasis in acinar zone one. Barberá-Guillem E, et al. **Cancer Res** 1989 Jul 15; 49(14):4003–10

Characterization of three small cell lung cancer cell lines established from one patient during longitudinal follow-up. Berendsen HH, et al. **Cancer Res** 1988 Dec 1;48(23):6891–9

Differential response to treatment with the bis(ethyl)polyamine analogues between human small cell lung carcinoma and undifferentiated large cell lung carcinoma in culture. Casero RA Jr, et al. **Cancer Res** 1989 Feb 1;49(3):639–43

Resistance mechanisms in three human small cell lung cancer cell lines established from one patient during clinical follow-up. de Vries EG, et al. **Cancer Res** 1989 Aug 1; 49(15):4175–8

Chemosensitivity and radiosensitivity of small cell lung cancer cell lines studied by a newly developed 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) hybrid assay. Hida T, et al. **Cancer Res** 1989 Sep 1;49(17):4785–90

Characterization of a human small cell lung carcinoma cell line with acquired resistance to cis-diamminedichloroplatinum(II) in vitro. Hospers GA, et al. **Cancer Res** 1988 Dec 1;48(23):6803–7

Immunological and pharmacological removal of small cell lung cancer cells from bone marrow autografts. Humblet Y, et al. **Cancer Res** 1989 Sep 15;49(18):5058–61

Lung cancer-associated monoclonal antibody 15 that recognizes cell growth-related membrane antigens gp85/45 and its growth-inhibitory effect on human lung cancer cells in vitro. Kamma H, et al. **Cancer Res** 1989 Sep 15; 49(18):5118–22

In vitro photodynamic therapy of human lung cancer: investigation of dose-rate effects. Matthews W, et al. **Cancer Res** 1989 Apr 1;49(7):1718–21

Expression of type IV collagenase and procollagen genes and its correlation with the tumorigenic, invasive, and

metastatic abilities of oncogene-transformed human bronchial epithelial cells. Ura H, et al. **Cancer Res** 1989 Aug 15;49(16):4615–21

Antiproliferative and differentiative effect of granulocyte-macrophage colony-stimulating factor on a variant human small cell lung cancer cell line. Yamashita Y, et al. **Cancer Res** 1989 Oct 1;49(19):5334–8

A novel vitronectin receptor integrin (alpha v beta x) is responsible for distinct adhesive properties of carcinoma cells. Cheresh DA, et al. **Cell** 1989 Apr 7;57(1):59–69

Effect of cellular glutathione depletion on cadmium-induced cytotoxicity in human lung carcinoma cells. Kang YJ, et al. **Cell Biol Toxicol** 1987 Dec;3(4):347–60

Small-cell lung cancer—the clinical relevance of the histopathological classification and some biological aspects. Hirsch FR. **Chemioterapia** 1987 Jun;6(2 Suppl):696–8 (4 ref.)

Low-risk large-needle biopsy of chest lesions. Clore F, et al. **Chest** 1989 Sep;96(3):538–41

Advances in the biology of lung cancer. Clinical significance of neuroendocrine differentiation. Gazdar AF. **Chest** 1989 Jul;96(1 Suppl):39S–41S (15 ref.)

Radiologic staging of lung cancer using CT and MRI. Glazer GM. **Chest** 1989 Jul;96(1 Suppl):44S–47S (46 ref.)

The clinical relevance of recent developments in pathology and biology of small cell lung cancer. Hirsch FR, et al. **Chest** 1989 Jul;96(1 Suppl):34S–37S (49 ref.)

Open lung biopsy in patients with non-Hodgkin's lymphoma and pulmonary infiltrates. McCabe RE, et al. **Chest** 1989 Aug;96(2):319–24

Multicentricity of adenocarcinoma of the lung. McElvaney G, et al. **Chest** 1989 Jan;95(1):151–4

Poorly differentiated and undifferentiated lung tumors. Mackay B. **Chest** 1989 Jul;96(1 Suppl):38S–39S

Diagnosing thymic neoplasia [letter] Miller RR. **Chest** 1989 Sep;96(3):702–3

Value of the new TNM staging system for lung cancer. Mountain CF. **Chest** 1989 Jul;96(1 Suppl):47S–49S

Utility of the Wang 18-gauge transbronchial histology needle in the staging of bronchogenic carcinoma. Schenk DA, et al. **Chest** 1989 Aug;96(2):272–4

Echocardiography vs CT in lung cancer [letter] Stark P. **Chest** 1989 Aug;96(2):447

Vacuole sign and small node sign in early peripheral lung cancer. Pathologic basis and diagnostic value. Yang XM, et al. **Chin Med J [Engl]** 1988 Nov;101(11):818–22

Clinical analysis of lung cancer patients with mediastinal involvement. Lai SL, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):383–8

Tumor cell adhesion to frozen lymph node sections—an in vitro correlate of lymphatic metastasis. Brodt P. **Clin Exp Metastasis** 1989 May-Jun;7(3):343–52

Stimulation of tumor cell growth in vitro by a monoclonal antibody to a tumor specific protein (TSP-180) present on the cell surface of 3LL cells. Sacchi A, et al. **Clin Exp Metastasis** 1989 Jan-Feb;7(1):41–54

A 61-year old woman with a 1-month history of cough [clinical conference] Morrison K, et al. **Clin Imaging** 1989 Mar;13(1):90–4

Abdominal CT in the staging of small cell carcinoma of the lung. Whitley NO, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):103–16 (27 ref.)

Fine needle aspiration of the lung at the Medical Center of Delaware: a retrospective review of 243 patients. Mitchell ML, et al. **Del Med J** 1989 Jun;61(6):263–6, 269–71

The aspiration cytology of pulmonary hamartomas. Dunbar F, et al. **Diagn Cytopathol** 1989;5(2):174–80

Fine-needle aspiration cytology of pulmonary carcinosarcoma with immunocytochemical and ultrastructural observations. Finley JL, et al. **Diagn Cytopathol** 1988;4(3):239–43

Intranuclear inclusions in carcinoid tumors [letter] Hemelt DM. **Diagn Cytopathol** 1989;5(1):113–4

Identification of features of metaplastic cells in sputum for the detection of squamous-cell carcinoma of the lung. Swank PR, et al. **Diagn Cytopathol** 1989;5(1):98–103

Simultaneous standard light microscopy and immunohistology on bronchoscopically procured lung cancer specimens. Berendsen HH, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):915–21

Immunohistology of lung cancer. Carney DN. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):9–11

Generation and expansion of lymphokine-activated killer cells from lymph node lymphocytes in human lung cancer. Yano T, et al. **Eur J Cancer Clin Oncol** 1989 Feb; 25(2):201–8

Influence of T and N stages on long-term survival in resectable small cell lung cancer. Angeletti CA, et al. **Eur J Surg Oncol** 1989 Aug;15(4):337–40

Percutaneous transthoracic needle aspiration biopsy: a case report of implantation metastasis. Sacchini V, et al. **Eur J Surg Oncol** 1989 Apr;15(2):179–83

Small cell lung cancer cell lines: pure and variant types can be distinguished by their extracellular matrix synthesis. Scarpa S, et al. **Eur Respir J** 1988 Jul;1(7):639–44

Blocking of lectin-like adhesion molecules on pulmonary cells inhibits lung sarcoma L-1 colonization in BALB/c-mice. Roszkowski W, et al. **Experientia** 1989 Jun 15;45(6):584–8

Rapid microwave fixation—a comparative morphometric study. Kayser K, et al. **Histochem J** 1988 Jun-Jul; 20(6-7):347–52

Langerhans cells in human lung tumours: an immunohistological study. Fox SB, et al. **Histopathology** 1989 Mar;14(3):269–75

Familial mesothelioma: a report of two families. Hammar SP, et al. **Hum Pathol** 1989 Feb;20(2):107–12

Role of arterial occlusion in pulmonary scar cancers. Kolin A, et al. **Hum Pathol** 1988 Oct;19(10):1161–7

Pulmonary scar cancers [letter] Kung IT. **Hum Pathol** 1989 Jun;20(6):605–6

Primary bronchopulmonary fibrosarcoma of childhood and adolescence: reassessment of a low-grade malignancy. Clinicopathologic study of five cases and review of the literature. Pettinato G, et al. **Hum Pathol** 1989 May; 20(5):463–71 (51 ref.)

Eosinophilic intracytoplasmic globules in pulmonary adenocarcinomas: a histochemical, immunohistochemical, and ultrastructural study of six cases. Scroggs MW, et al. **Hum Pathol** 1989 Sep;20(9):845–9

Immunohistochemical analysis of calcitonin and calcitonin gene-related peptide in human lung. Tsutsumi Y. **Hum Pathol** 1989 Sep;20(9):896–902

Extraosseous giant cell tumour of lung. Bobhate SK, et al. **Indian J Cancer** 1989 Mar;26(1):37–40

Influence of shear stress on tumor-cell adhesion to endothelial-cell extracellular matrix and its modulation by fibronectin. Bastida E, et al. **Int J Cancer** 1989 Jun 15; 43(6):1174–8

Effects of activators of protein kinase C, including bryostatins 1 and 2, on the growth of A549 human lung carcinoma cells. Dale IL, et al. **Int J Cancer** 1989 Jan 15;43(1):158–63

Invasion and metastasis of Lewis lung carcinoma in the mouse uterus. Maharajan V, et al. **Invasion Metastasis** 1989; 9(5):310–24

Increased contraenvironmental-pressure cell division capability: a decisive force in metastasis and invasion of mouse lung adenocarcinoma cell lines. Saiga T, et al. **Invasion Metastasis** 1989;9(4):254–68

Tumor volume and treatment outcome in small cell lung carcinoma. Whitley NO, et al. **Invest Radiol** 1989 Aug; 24(8):581–4

Percutaneous fine needle aspiration of pulmonary mass lesions—a critical examination of the accuracy of cell typing of malignant tumours. Kealy WF, et al. **Ir J Med Sci** 1989 Apr;158(4):85–7

Kaposi's sarcoma involving the lung in patients with the acquired immunodeficiency syndrome. Kaplan LD, et al. **J Acquir Immune Defic Syndr** 1988;1(1):23–30

Lung, breast, and colorectal cancer: the relationship between extent of disease and age at diagnosis. Mor V, et al. **J Am Geriatr Soc** 1988 Oct;36(10):873–6

Collapse of the left lung secondary to bronchial carcinoid tumour. Mathur RS, et al. **J Assoc Physicians India** 1988 Mar;36(3):233–5

Quantitative bone histomorphometry in nude mice bearing a human squamous cell lung cancer. Kukreja SC, et al. **J Bone Miner Res** 1988 Jun;3(3):341–6

Effect of N-acetylcysteine on the antiproliferative action of X-rays or bleomycin in cultured human lung tumor cells. Wanamarta AH, et al. **J Cancer Res Clin Oncol** 1989; 115(4):340–4

Insertion of the v-Ha-ras oncogene induces differentiation of calcitonin-producing human small cell lung cancer. Mabry M, et al. **J Clin Invest** 1989 Jul;84(1):194–9

Neuroendocrine differentiation: a prognostic feature of non-small-cell lung cancer? [editorial] Baylin SB. **J Clin Oncol** 1989 Oct;7(10):1375–6

Combined small-cell and non-small-cell lung cancer. Mangum MD, et al. **J Clin Oncol** 1989 May;7(5):607–12

Lack of relationship between in vitro tumor cell growth and prognosis in extensive-stage small-cell lung cancer. Stevenson HC, et al. **J Clin Oncol** 1989 Jul;7(7):923–31

Primary nonepithelial lesions of the lung: a ten-year community hospital experience. Taylor FM 3d. **J Fla Med Assoc** 1988 Oct;75(10):665–9

Multiple myeloma with two rate complications. Chugh SN, et al. **J Indian Med Assoc** 1988 Sep;86(9):246–8

Invasive and metastatic potential of a v-Ha-ras-transformed human bronchial epithelial cell line. Bonfil RD, et al. **J Natl Cancer Inst** 1989 Apr 19;81(8):587–94

Correlation of growth capacity of human tumor cells in hard agarose with their in vivo proliferative capacity at specific metastatic sites. Li L, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1406–12

Influence of docosahexaenoic acid on cisplatin resistance in a human small cell lung carcinoma cell line. Timmer-Bosscha H, et al. **J Natl Cancer Inst** 1989 Jul 19; 81(14):1069–75

Inhibition and promotion of differentiated-like phenotype of a human lung carcinoma in athymic mice by natural and recombinant forms of transforming growth factor-beta. Twardzik DR, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1182–5

Relationship between histologic type of primary lung cancer and carbon-11-L-methionine uptake with positron emission tomography. Fujiwara T, et al. **J Nucl Med** 1989 Jan;30(1):33–7

Peripheral carcinoid tumours of the lung: a clinicopathological study. Abdi EA, et al. **J Surg Oncol** 1988 Nov;39(3):190–6

Accuracy of cytologic diagnosis and cytotyping of sputum in primary lung cancer: analysis of 161 cases. Liang XM. **J Surg Oncol** 1989 Feb;40(2):107–11

Percutaneous superfine-needle aspiration biopsy of intrathoracic lesions guided by simulator. Liu GS, et al. **J Surg Oncol** 1989 Feb;40(2):135–8

Neuroendocrine neoplasms of the lung. A clinicopathologic update. Warren WH, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):321–32 (60 ref.)

Pulmonary blastoma—report of a case. Deng BH, et al. **J Tongji Med Univ** 1988;8(1):56–9 (11 ref.)

Effects of nitrogen dioxide and ozone on blood-borne cancer cell colonization of the lungs. Richters A. **J Toxicol Environ Health** 1988;25(3):383–90

Echocardiographic detection of left atrial extension of bronchial carcinoma. Popovic AD, et al. **JAMA** 1989 Mar 10;261(10):1478–80

Pleural lavage cytology immediately after thoracotomy as a prognostic factor for patients with lung cancer. Kondo H, et al. **Jpn J Cancer Res** 1989 Mar;80(3):233–7

The effects of vincristine and doxorubicin on the clonogenic cells of a human lung cancer cell line in methylcellulose and suspension culture. Yamashita Y, et al. **Jpn J Cancer Res** 1989 Mar;80(3):277–82

An autopsy study of lung cancer with special reference to the relationship between cigarette smoking and histological differentiation of adenocarcinoma and squamous cell carcinoma. Morita T, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):94–101

Differentiation markers as an aid in the histological diagnosis of small-cell carcinoma of the lung: synopsis of intermediate filament protein and synaptophysin expression. Leube RE, et al. **Klin Wochenschr** 1988;66 Suppl 11:80–6 (77 ref.)

A metastatic adenocarcinoma of lung simulating humeral head osteonecrosis. Kawai K, et al. **Kobe J Med Sci** 1988 Apr;34(2):47–53

Transbronchial needle aspiration in the practice of bronchoscopy. Gay PC, et al. **Mayo Clin Proc** 1989 Feb; 64(2):158–62

Lung cancer cell type and asbestos body lung content. Preliminary results of a surgical series-based study. Andrion A, et al. **Med Lav** 1988 Jan-Feb;79(1):19–23

Prognostic indicators for survival in stage I carcinoma of the lung: a histologic study of 47 surgically resected cases. Elson CE, et al. **Mod Pathol** 1988 Jul;1(4):288–91

Leiomyomatous neoplasms of the lung: a clinical, histologic, and immunohistochemical study. Gal AA, et al. **Mod Pathol** 1989 May;2(3):209–16

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 17-1989. A 58-year-old man with cavitary lung disease. **N Engl J Med** 1989 Apr 27;320(17):1130–9

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 32-1989. A 61-year-old man with multiple pulmonary nodules, solid and cavitary. **N Engl J Med** 1989 Aug 10;321(6):375–85

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 28-1989. A 65-year-old man with pulmonary infiltrates and an axillary mass. **N Engl J Med** 1989 Jul 13;321(2):102–10

Serum lactate dehydrogenase in small-cell lung cancer [letter] Van den Brande P, et al. **N Engl J Med** 1989 Jan 5;320(1):61

Pulmonary oncocytoma. de Jesus MG, et al. **N Y State J Med** 1989 Aug;89(8):477–80 (10 ref.)

Value of bilateral iliac crest needle biopsy for pretherapeutic tumor staging of bronchogenic carcinomas. Manegold C, et al. **Oncology** 1989;46(4):226–9

Conversion of Lewis lung carcinoma into ascitic form. Sato T, et al. **Oncology** 1989;46(3):188–92

Mediastinoscopy: not needed preoperatively in CT-negative lung carcinoma? Liippo K, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):192–5

What's new in lung tumor heterogeneity? Müller KM, et al. **Pathol Res Pract** 1988 Dec;184(1):108–15 (73 ref.)

Pulmonary atypical carcinoid tumor with marked alphafetoprotein production and features of an adenocarcinoma differentiation. Ohtsuki H, et al. **Pathol Res Pract** 1988 Dec;184(1):86–97

Immunohistochemical identification of exocrine and neuroendocrine subsets of large cell lung carcinomas. Piehl MR, et al. **Pathol Res Pract** 1988 Nov;183(6):675–82

Thyroid inclusion in the lung. Metastasis of an occult papillary carcinoma or ectopia? Simon M, et al. **Pathol Res Pract** 1989 Feb;184(2):263–67; discussion 268–70

Angiocentric B-cell lymphoma of the lung in an immunocompromised boy. Drut R. **Pediatr Pathol** 1988; 8(4):395–400

Effects of lysozyme on spleen and lungs in mice with Lewis lung carcinoma. Ceschia V, et al. **Pharmacol Res Commun** 1988 Jul;20(7):615–6

Lipoxygenase products regulate IRGpIIb/IIIa receptor mediated adhesion of tumor cells to endothelial cells, subendothelial matrix and fibronectin. Honn KV, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):130–5

Rhode Island Hospital [clinical conference] Wachtel TJ. **R I Med J** 1988 Aug;71(8):311–8

Ultrasonically guided 19-gauge Surecut needle biopsy of apical and superior mediastinal tumors. Takeuchi K, et al. **Radiat Med** 1988 Nov-Dec;6(6):272–5

Percutaneous thin needle biopsy of malignant and nonmalignant thoracic lesions. Polák J, et al. **Radiol Diagn (Berl)** 1989;30(2):177–82

Malignant neoplasms arising in cystic hamartomas of the lung

in childhood. Hedlund GL, et al. **Radiology** 1989 Oct; 173(1):77–9

CT of bronchogenic carcinoma: indeterminate mediastinal invasion [editorial] McLoud TC. **Radiology** 1989 Oct; 173(1):15–6

Radiosensitivity related to neuroendocrine and endodermal differentiation in lung carcinoma lines. Duchesne G, et al. **Radiother Oncol** 1988 Oct;13(2):153–61

Effects of physiological oxygen environment on drug-induced cell lethality of multicellular tumor spheroids from human lung cancer. Inoue S, et al. **Sei Cancer Ther** 1989;5(1):13–22

Comparative histopathology of human epidermoid lung carcinoma xenografts. Bak M Jr, et al. **Strahlenther Onkol** 1989 Jul;165(7):485–6

Vitamin B6 responsive growth of human lung cancers in nude mice. Krauhausen U, et al. **Strahlenther Onkol** 1989 Jul; 165(7):562–3

Pulmonary lymphangiomyomatosis: report of a case. Jih KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):490–4

Relevance of nuclear DNA content to tumor clonogenic assay in lung cancer. Lee YC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):611–5

Hemangiopericytoma of the lung—a rare differential diagnosis of lung tumors. Bierhoff E, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):292–4

A case of carcinoma in intralobar pulmonary sequestration. Gatzinsky P, et al. **Thorac Cardiovasc Surg** 1988 Oct; 36(5):290–1

Malignant change in a benign pulmonary hamartoma. Basile A, et al. **Thorax** 1989 Mar;44(3):232–3

Bronchioloalveolar carcinoma presenting as a thin walled cavity in a young man. De Jong PM, et al. **Thorax** 1989 Mar;44(3):230–1

Malignant primary pulmonary paraganglioma. Hangartner JR, et al. **Thorax** 1989 Feb;44(2):154–6

Synchronous pulmonary carcinoid tumour and non-Hodgkin's lymphoma: report of two cases. Juettner FM, et al. **Thorax** 1989 Jun;44(6):516–8

Histopathological characterization of a novel monoclonal antibody, MLuC1, reacting with lung carcinomas. Agresti R, et al. **Tumori** 1988 Aug 31;74(4):401–10

Morphological characterization of Lewis lung carcinoma (3LL). A light and electron microscopic study. Garcia-Sanz M, et al. **Tumori** 1989 Feb 28;75(1):23–7

Small-cell lung cancer: importance of fiberoptic bronchoscopy in the evaluation of complete remission. Tondini M, et al. **Tumori** 1989 Jun 30;75(3):266–8

Copper histochemistry of 5 murine tumors and their respective metastases. Fuchs AG, et al. **Tumour Biol** 1989; 10(1):38–45

Human lung cancer nodules in organotypic culture: no evidence of correlation between the antiproliferative effects of interferons and the induction of 2',5'-oligoadenylate synthetase. Martyré MC, et al. **Tumour Biol** 1988;9(5):263–9

Percutaneous transthoracic needle aspiration lung biopsy in the community hospital. Thompson R, et al. **W V Med J** 1989 Jun;85(6):227–8

Metastasis to the colon from primary bronchogenic carcinoma presenting as occult gastrointestinal bleeding—report of a case. Wegener M, et al. **Z Gastroenterol** 1988 Jul;26(7):358–62

[A morphologic analysis of 1,000 bronchial biopsies] Bai YQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):334–7, 385 (Eng. Abstr.) (Chi)

[Pathologic findings and prognosis in 1286 patients with pulmonary carcinoma] Huang ZY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):330–3, 384–5 (Eng. Abstr.) (Chi)

[Clinical pathological analysis of 222 cases of necrotic carcinoma] Li M. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):209–12, 254 (Eng. Abstr.) (Chi)

[Heterogenicity of small cell lung carcinoma and the rationale of combined modality therapy] Li XK. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):299–301 (22 ref.) (Chi)

[Pathologic analysis of 302 primary bronchogenic adenocarcinomas] Huang ZY. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):280–3 (Eng. Abstr.) (Chi)

[Bone marrow examination in small cell lung cancer—report of 87 cases] Jin AD. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):309–12 (Eng. Abstr.) (Chi)

[Establishment of human small cell lung carcinoma cell line (LTEP-sm 1) in nude mice and in vitro] Lai BT. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):253–5 (Eng. Abstr.) (Chi)

[Pathologic findings of small cell lung cancer (SCLC) after chemotherapy—analysis of 48 cases] Lin ZQ. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):452–4 (Eng. Abstr.) (Chi)

[Spontaneous metastasis of clonal cell subpopulations of human lung giant cell carcinoma after subcutaneous inoculation in nude mice] Lu YL. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):1–7 (Eng. Abstr.) (Chi)

[Small bowel perforation secondary to metastatic carcinoma of lung] Hwang GS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):159–64 (16 ref.) (Eng. Abstr.) (Chi)

[Primary carcinomas of the lung and upper respiratory tract] Jeng GJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May; 41(5):363–6 (Eng. Abstr.) (Chi)

[Pathological study of bronchiole-alveolar carcinoma: a comparative study of histology, immunohistochemistry and ultrastructure] Yan PS, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):167–9 (Eng. Abstr.) (Chi)

[Malignant genitourinary tumor accompany with multiorgan primary malignant tumors: report of 15 cases] Hong BF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):105–6, 126 (Eng. Abstr.) (Chi)

[Percutaneous aspiration lung biopsy: a new method of localizing small- to medium-sized lesions] Ye YK. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):224–6, 255 (Eng. Abstr.) (Chi)

[Ultrasound-guided percutaneous needle biopsy in diseases of the chest] Yin XJ. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):107–8, 126 (Eng. Abstr.) (Chi)

[Purification and completion of LA795 Vv-Vt in vivo-in vitro system] Sun JR. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):303–5 (Eng. Abstr.) (Chi)

[A pathologic study of pulmonary adenocarcinoma in mice induced by N-methyl-N'-nitro-N-nitrosoguanidine] Wang XJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):376–9 (Eng. Abstr.) (Chi)

[Multiple pulmonary fibroleiomyomatous hamartoma: report of a case] Wan CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):190–3 (Chi)

[Intravascular sclerosing bronchioalveolar tumor and the so-called sclerosing pneumocytoma] Horáček J, et al. **Cesk Patol** 1988 Nov;24(4):218–24 (Eng. Abstr.) (Cze)

[CT-guided transthoracic biopsy] Lorentzen T, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2743–6 (Eng. Abstr.) (Dan)

[Direct mediastinal lymphatic drainage of primary pulmonary carcinomas. Anatomical and surgical study] Riquet M, et al. **Ann Chir** 1988;42(8):574–85 (37 ref.) (Eng. Abstr.) (Fre)

[Intravascular sclerosing broncho-alveolar tumor (IVSBAT). Case of an aggressive form with pseudo-hemopathic clinical manifestation] Delcourt A, et al. **Arch Anat Cytol Pathol** 1988;36(3):96–9 (Eng. Abstr.) (Fre)

[Bronchial cytology in the diagnosis of broncho-pulmonary cancer in Tunisia] Mzabi-Regaya S, et al. **Arch Inst Pasteur Tunis** 1988 Jan-Apr;65(1-2):81–6 (Eng. Abstr.) (Fre)

[Contribution and limits of x-ray computed tomography and magnetic resonance imaging in evaluating the extent of primary cancers of the bronchi] Laurent F, et al. **Bull Cancer (Paris)** 1988;75(9):903–16 (Eng. Abstr.) (Fre)

[Pulmonary leiomyosarcoma. Apropos of a case of systemic disease of the vascular muscle cell localized in the lung (letter)] Gullino D, et al. **J Chir (Paris)** 1988 Aug-Sep; 125(8–9):537–9 (Fre)

[How to interpret a diagnostic test (letter)] Brohee D, et al. **Rev Med Brux** 1989 Mar;10(3):114–6 (Fre)

[Recent data on the microbiology of broncho-pulmonary cancer] M'Raihi ML, et al. **Tunis Med** 1987 Dec; 65(12):745–8 (8 ref.) (Eng. Abstr.) (Fre)

[Current aspects of a new staging classification of bronchial cancer and its clinical consequences] Vogt-Moykopf I, et al. **Chirurg** 1989 Jan;60(1):16–23 (Ger)

[Bronchus cancer and pregnancy] Brühwiler H, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):654–5 (Eng. Abstr.) (Ger)

[The simulation of histopathological diagnosis with the help of an automated image analysis system (VISIAC)] Kayser K, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):19–24 (Eng. Abstr.) (Ger)

[Primary bronchial tumor in childhood—a case report] Heydolph F, et al. **Kinderarztl Prax** 1989 Jun;57(6):289–93 (Eng. Abstr.) (Ger)

[Leiomyosarcoma of the pulmonary artery—report of 2 cases from clinic practice and review of the literature] Wagner R, et al. **Langenbecks Arch Chir** 1988;373(4):243–7 (29 ref.) (Eng. Abstr.) (Ger)

[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. **Pathologe** 1989 Jul; 10(4):228–33 (Ger)

[Intravascular bronchioloalveolar tumor following interstitial giant cell pneumonia] Hackl H. **Pathologe** 1989 Jan; 10(1):57–60 (Ger)

[Mesothelioma register now in Bochum] Müller KM. **Pathologe** 1988 Jul;9(4):258–9 (Ger)

[Changes in the criteria for detection of asbestos-induced diseases in the new occupational disease ordinance] Otto H. **Pathologe** 1988 Nov;9(6):375–7 (Ger)

[Tumor-like courses in lung sarcoidosis (4 observations)] Schmidt A, et al. **Pneumologie** 1989 Jun;43(6):290–4 (Eng. Abstr.) (Ger)

[Simultaneous occurrence of fibrosis and tumors of the lung] Liebetrau G. **Prax Klin Pneumol** 1988 Jun;42(6):419–22 (Eng. Abstr.) (Ger)

[Multiple pulmonary coin lesions, disseminated adenofibroleiomyomatosis—a case report] Velcovsky HG. **Prax Klin Pneumol** 1988 Aug;42(8):675–8 (Eng. Abstr.) (Ger)

[Clinical staging of bronchial carcinoma] Russi EW. **Schweiz Rundsch Med Prax** 1989 Feb 14;78(7):145–8 (Eng. Abstr.) (Ger)

[The frequency and localization of hematogenic distant metastases of bronchial carcinoma] Schulz G. **Z Erkr Atmungsorgane** 1989;172(2):99–105 (Eng. Abstr.) (Ger)

[Intrathoracic gastric duplication with intrapulmonary abscesses and perforation into the bronchial system—pathologico-anatomic peculiarities and diagnostic problems] Wiersbitzky S, et al. **Z Erkr Atmungsorgane** 1988; 171(2):175–83 (Eng. Abstr.) (Ger)

[The so-called lung adenomatosis of sheep—an interesting pneumopathy from the comparative pathologic view] Johannsen U. **Zentralbl Allg Pathol** 1988;134(7):691–700 (44 ref.) (Eng. Abstr.) (Ger)

[Intracranial ependymoma with extraneural metastases] Schreiber D, et al. **Zentralbl Allg Pathol** 1989;135(1):57–64 (43 ref.) (Eng. Abstr.) (Ger)

[Simultaneous occurrence of bronchogenic carcinoma and bronchioloalveolar dysplasia] Károlyi P, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):282–6 (Eng. Abstr.) (Hun)

[Lymphoproliferative lung lesions (pseudolymphoma—malignant lymphoma] Brittig F, et al. **Orv Hetil** 1989 Feb 12;130(7):341–2, 345–7 (Eng. Abstr.) (Hun)

[Metastasis in the kidney] Császár L, et al. **Orv Hetil** 1989 Feb 26;130(9):467–9 (Eng. Abstr.) (Hun)

[Metastatic routes in lung cancer] Károlyi P. **Orv Hetil** 1988 Aug 21;129(34):1805–6, 1809–10 (Eng. Abstr.) (Hun)

[Histologic classification of lung cancers and reproducibility of diagnoses based on 10 years' autopsy material] Károlyi P. **Orv Hetil** 1989 Jun 11;130(24):1273–6 (20 ref.) (Eng. Abstr.) (Hun)

[Primary mixed cell renal adenocarcinoma following spinocellular carcinoma of the lung. Report of a rare case] Legramandi C, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):99–102 (Eng. Abstr.) (Ita)

[Current technics of biopsy of the mediastinum: 1) mediastinoscopy] Giampaglia F, et al. **Arch Monaldi Mal Torace** 1987 Sep-Oct;42(5):459–76 (11 ref.) (Eng. Abstr.) (Ita)

[Changes in monocyte chemotaxis in patients with primary lung neoplasia] Merlini C, et al. **G Ital Chemioter** 1987 Jan-Dec;34(1-3):41–5 (Eng. Abstr.) (Ita)

[A possible visceralization in a case of cutaneous T cell lymphoma under treatment with recombinant interferon alfa 2 (letter)] Tulli A, et al. **G Ital Dermatol Venereol** 1988 May;123(5):262 (Ita)

[Localization of bronchogenic carcinoma in smokers and non-smokers] Rizzo S. **G Ital Oncol** 1987 Jan-Mar; 7(1):23–4 (Eng. Abstr.) (Ita)

[Bronchogenic carcinoma invading the thoracic wall. The results of surgical treatment] Forni E, et al. **Minerva Med** 1989 Jul;80(7):679–83 (Ita)

[Clinical significance of cell kinetics in lung cancer] Grignani F, et al. **Minerva Med** 1989 Mar;80(3):195–7 (Eng. Abstr.) (Ita)

[Pulmonary carcinoma. The effect of assessing histologic type on the prognosis] Santangelo A, et al. **Minerva Med** 1989 Jul;80(7):689–91 (Ita)

[A case of tuberous sclerosis: anatomo-pathologic description] Fontanini G, et al. **Pathologica** 1989 Mar-Apr; 81(1072):195–202 (Eng. Abstr.) (Ita)

[Osteoclastoma-like giant cell tumor of the lung] Frau G, et al. **Pathologica** 1989 Jan-Feb;81(1071):91–5 (Eng. Abstr.) (Ita)

[Bronchopulmonary carcinoma. Anatomico-radiologic correlations of growth dynamics] Chiodera P, et al. **Radiol Med (Torino)** 1989 Jan-Feb;77(1-2):9–36 (Ita)

[Percutaneous needle biopsy of the lung. Critical review of 496 cases] Juliani G, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):530–3 (Eng. Abstr.) (Ita)

[A case of metastatic neoplasm of the heart] Galati A, et al. **Recenti Prog Med** 1988 Dec;79(12):493–5 (Eng. Abstr.) (Ita)

[Squamous cell carcinoma of the lung metastasized solitary cystic formation in the cerebellum] Fukuoka K, et al. **Gan No Rinsho** 1989 Sep;35(10):1160–4 (Eng. Abstr.) (Jpn)

[A case of synchronous double primary malignant neoplasms (malignant astrocytoma, and lung cancer) diagnosed by autopsy] Hashimoto H, et al. **Gan No Rinsho** 1989 Apr; 35(5):639–45 (Eng. Abstr.) (Jpn)

[Double primary malignant tumors involving a lung cancer] Hayakawa K, et al. **Gan No Rinsho** 1989 Apr;35(5):560–3 (Eng. Abstr.) (Jpn)

[Evaluation of double cancers of the lung and stomach] Kishimoto T, et al. **Gan No Rinsho** 1988 Sep;34(11):1565–7 (Eng. Abstr.) (Jpn)

[Morphometrical study on prognosis of stage I pulmonary adenocarcinoma] Kurita S, et al. **Gan No Rinsho** 1988 Sep; 34(11):1550–3 (Eng. Abstr.) (Jpn)

[A case of S 100 protein-positive large cell carcinoma—its pathological study] Nakamura S, et al. **Gan No Rinsho** 1989 May;35(6):664–8 (Eng. Abstr.) (Jpn)

[Pathology of early lung cancer] Shimosato Y. **Gan No Rinsho** 1988 Aug;34(10):1373–7 (Eng. Abstr.) (Jpn)

[Selective brushings for all branches of the bronchi: diagnostic values thereof in patients with

roentgenographically occult lung cancer and borderline lesions] Sato M, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-3):1633-8 (Eng. Abstr.) (Jpn)

[Recent advances in pathology and biology of small cell lung cancer] Shimosato Y. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2513-21 (38 ref.) (Eng. Abstr.) (Jpn)

[A case of double cancer: renal pelvic transitional cell carcinoma and lung squamous cell carcinoma] Kubota M, et al. **Hinyokika Kiyo** 1988 May;34(5):866-9 (13 ref.) (Eng. Abstr.) (Jpn)

[A case of pulmonary blastoma associated with a cystic lesion in adult] Inaoka M, et al. **Kyobu Geka** 1988 Oct; 41(11):921-3 (Eng. Abstr.) (Jpn)

[Systemic tumor emboli from primary bronchogenic carcinoma] Misawa Y, et al. **Kyobu Geka** 1989 Feb; 42(2):108-14 (13 ref.) (Eng. Abstr.) (Jpn)

[Intravascular bronchioloalveolar tumor] Shirakusa T, et al. **Kyobu Geka** 1988 Jul;41(8):636-40 (18 ref.) (Eng. Abstr.) (Jpn)

[The lethal and kinetic effects of carboplatin studied using the human tumor clonogenic assay and flow cytometry] Fujikane T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1525-37 (Eng. Abstr.) (Jpn)

[Quantitative analysis of tumor cells and tumor infiltrating lymphocytes in primary lung cancer patients] Mitsunaga S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1467-72 (Eng. Abstr.) (Jpn)

[Bronchoscopic findings of small cell lung cancer] Ono R, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20; 23(11):2663-8 (Eng. Abstr.) (Jpn)

[Establishment and characterization of human lung adenocarcinoma cell line KUM.LK-2 which produces spontaneous lung metastasis by subcutaneous implantation in nude mice] Inufusa H. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1075-82 (Eng. Abstr.) (Jpn)

[Diagnosis of mediastinal lymphnode metastasis of primary lung cancer by 67Ga-ECT] Matsui R, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):894-905 (Eng. Abstr.) (Jpn)

[A clinico-pathological study of lymph nodes (intrapulmonary, hilar, mediastinal, and prescalene) in patients with lung cancer--influence of metastasis, dissection, and immunological responses on late survival] Yamaguchi A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2529-43 (Eng. Abstr.) (Jpn)

[Pulmonary psuedolymphoma combined with malignant lymphoma of the parotid gland] Hashimoto A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr;26(4):421-5 (Eng. Abstr.) (Jpn)

[Application of transbronchial brushing for histological diagnosis of lung cancer] Yamakama H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):64-70 (Eng. Abstr.) (Jpn)

[Primary choriocarcinoma of the lung (a case report of male subject and review of the literature)] Endou T, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1404-9 (17 ref.) (Jpn)

[A case of pseudolymphoma of the lung and submandibular gland] Oshita F, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):48-53 (Jpn)

[Pineal metastatic tumor from lung cancer initially caused by neurological abnormalities of pineal body tumor] Keyaki A, et al. **No Shinkei Geka** 1989 May;17(5):495-9 (Eng. Abstr.) (Jpn)

[CT-guided transcutaneous lung biopsy] Kawase Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):185-8 (Jpn)

[Cellular infiltrates in lung cancer as a prognostic indicator] Lipińska R, et al. **Pneumonol Pol** 1988 Jul;56(7):297-301 (Eng. Abstr.) (Pol)

[Mediastinoscopy by a pre-scalenic route as an alternative for staging of neoplasms of the upper lobe of the left lung] Bongiovani HL, et al. **Rev Paul Med** 1988 Jul-Aug; 106(4):235-7 (Eng. Abstr.) (Por)

[Heterogenous carcinoma of the lung (letter)] Soares FA, et al. **Rev Paul Med** 1987 Nov-Dec;105(6):347-8 (Por)

[Small-cell bronchopulmonary cancer. New data on its cellular biology] Popescu I. **Rev Ig [Pneumoftiziol]** 1988 Jan-Mar;37(1):27-34 (24 ref.) (Rum)

[Content of endocrine cells of the APUD-system of the lungs in cancer of that organ] Blinova SA. **Arkh Patol** 1988; 50(9):46-50 (Eng. Abstr.) (Rus)

[The question of the functional significance and origin of pulmonary "tumorlets"] Derizhanova IS, et al. **Arkh Patol** 1989;51(1):57-60 (Eng. Abstr.) (Rus)

[Clinico-morphologic characterization of lung metastases from osteogenic sarcoma during chemotherapy] Fedenko AN, et al. **Arkh Patol** 1989;51(3):22-8 (Eng. Abstr.) (Rus)

[Morphogenesis of peripheral cancer of the lung] Kogan EA, et al. **Arkh Patol** 1988;50(6):26-34 (Eng. Abstr.) (Rus)

[Sclerosing pulmonary hemangioma] Nepomniashchaia EM, et al. **Arkh Patol** 1989;51(2):67-70 (Eng. Abstr.) (Rus)

[Tumor-like endothelial proliferation in the thrombosed pulmonary trunk] Nesterov EN. **Arkh Patol** 1988; 50(11):70-3 (Eng. Abstr.) (Rus)

[Cerebellar atrophy and myasthenic syndrome of the Lambert-Eaton type] Sanadze AG, et al. **Klin Med (Mosk)** 1988 Sep;66(9):118-21 (Rus)

[Metastasis of lung cancer to the small intestine with its perforation] Shatikhin VA, et al. **Klin Med (Mosk)** 1988 Aug;66(8):135-6 (Rus)

[Objectivization of the cytologic signs of changes in the bronchial epithelium in cancer and noncancerous diseases of the lungs] Loboda VI, et al. **Lab Delo** 1989;(4):38-41 (Eng. Abstr.) (Rus)

[Selection for a decrease in metastatic potential in a cell population of transplantable rat rhabdomyosarcoma RA-2] Guzhova IV, et al. **Tsitologiia** 1988 Dec;30(12):1482-7 (Eng. Abstr.) (Rus)

[Granular cell tumor of the lung] Bobylev NV, et al. **Vestn Khir** 1987 Dec;139(12):56-8 (Rus)

[Multiple lung hamartomas (a case report)] Adamian AA, et al. **Vopr Onkol** 1989;35(2):227-9 (Rus)

[Benign clear-cell tumor of the lung (a case report)] Ganul VL, et al. **Vopr Onkol** 1989;35(2):226-7 (Rus)

[Acute malignant histiocytosis in a patient with Liebow's lymphomatoid granulomatosis (a case report)] Krylov AA, et al. **Vopr Onkol** 1988;34(9):1119-22 (Rus)

[Clinical evaluation of the small-cell and poorly differentiated forms of squamous-cell and glandular lung cancers] Pirogov AI, et al. **Vopr Onkol** 1989;35(2):154-8 (Eng. Abstr.) (Rus)

[2 cases of histiocytoma of the lung] Kurennaia SS. **Vrach Delo** 1989 Jun;(6):75-6 (Rus)

[Cytology of bronchial carcinoma] Pongrac I, et al. **Plucne Bolesti** 1988 Jul-Dec;40(3-4):140-4 (Eng. Abstr.) (Scr)

[Oat cell carcinoma of the esophagus. Apropos of a case] Fleischer I, et al. **Acta Gastroenterol Latinoam** 1988; 18(1):53-5 (Eng. Abstr.) (Spa)

[Interlobar invasion as a sign of endobronchial hamartoma (letter)] Blázquez JA, et al. **Rev Clin Esp** 1988 Oct; 183(6):333-4 (Spa)

[Contributions to the study of pulmonary carcinoma. Review of 138 cases] Bascuas Méliz S, et al. **Rev Esp Oncol** 1985; 32(4):733-40 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

The biology of lung cancer. A review. Carney DN. **Acta Oncol** 1989;28(1):1-5 (23 ref.)

Action potentials of cultured human oat cells: whole-cell measurements with the patch-clamp technique. Johansson S, et al. **Acta Physiol Scand** 1989 Apr;135(4):573-8

Long-term post-thoracotomy cancer pain management with interpleural bupivacaine. Fineman SP. **Anesth Analg** 1989 May;68(5):694-7

Assessment of exercise oxygen consumption: reply [letter] Wetstein L, et al. **Ann Thorac Surg** 1989 Apr;47(4):639

Thromboembolic events in patients with malignant superior vena cava syndrome and the role of anticoagulation. Adelstein DJ, et al. **Cancer** 1988 Nov 15;62(10):2258-62

The suffering associated with lung cancer. Benedict S. **Cancer Nurs** 1989 Feb;12(1):34-40

Bidirectional control of membrane expression and/or activation of the tumor cell IRGpIIb/IIIa receptor and tumor cell adhesion by lipoxygenase products of arachidonic acid and linoleic acid. Grossi IM, et al. **Cancer Res** 1989 Feb 15;49(4):1029-37

Beta-endorphin and neurotensin stimulate in vitro clonal growth of human SCLC cells. Davis TP, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):283-5

Membrane-bound protein kinase C modulates receptor affinity and chemotactic responsiveness of Lewis lung carcinoma sublines to an elastin-derived peptide. Blood CH, et al. **J Biol Chem** 1989 Jun 25;264(18):10614-20

Effects of cisplatin on parathyroid hormone- and human lung tumor-induced bone resorption. Abramson EC, et al. **J Bone Miner Res** 1988 Oct;3(5):541-6

Factor derived from human lung carcinoma associated with hypercalcemia mimics the effects of parathyroid hormone on phosphate transport in cultured renal epithelia. Pizurki L, et al. **J Bone Miner Res** 1988 Apr;3(2):233-9

Lambert-Eaton myasthenic syndrome: a review. Newsom-Davis J. **Monogr Allergy** 1988;25:116-24 (29 ref.)

[Hann syndrome: remission of diabetes insipidus by functional failure of the anterior pituitary gland] Honti J, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):414-5 (Eng. Abstr.) (Ger)

[New prognostic factors in lung cancer] Modini C, et al. **G Ital Oncol** 1988 Jan-Mar;8(1):33-6 (Eng. Abstr.) (Ita)

[Effect of morphine in cancer pain] Nukariya N, et al. **Gan No Rinsho** 1989 Jan;35(1):51-4 (Eng. Abstr.) (Jpn)

[Regional distribution of perfusion and ventilation in hamartoangiomyomatosis of the lung] Tominaga S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):147-52 (Eng. Abstr.) (Jpn)

[Preoperative status of the function of external respiration and postoperative complications in patients with lung cancer] Shekhonina DA, et al. **Anesteziol Reanimatol** 1988 Jul-Aug;(4):54-6 (Eng. Abstr.) (Rus)

[Myelo- and lymphopoiesis and the adrenal cortex function in small cell lung cancer] Sokolova II, et al. **Sov Med** 1988; (7):23-5 (Eng. Abstr.) (Rus)

[Characteristics of the growth rate of small-cell lung cancer] Korman DB. **Vopr Onkol** 1989;35(2):158-63 (18 ref.) (Eng. Abstr.) (Rus)

[Comparative analysis of disorders of neuromuscular conduction in patients with botulism and Eaton-Lambert myasthenic syndrome] Sanadze AG, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):102-7 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Lung cancer chemoprevention with retinol palmitate. Preliminary data from a randomized trial on stage Ia non small-cell lung cancer. Pastorino U, et al. **Acta Oncol** 1988; 27(6b):773-82

Lung cancer: the early detection challenge. Pendergrass HP, et al. **Am Fam Physician** 1988 Nov;38(5):82, 85-6

Screening for lung cancer. Eddy DM. **Ann Intern Med** 1989 Aug 1;111(3):232-7 (27 ref.)

Drug treatments for metastasis of the Lewis lung carcinoma: lack of correlation between inhibition of lung metastasis and survival. Merriman RL, et al. **Cancer Res** 1989 Aug 15;49(16):4509-16

Effects of alkyl chain length on the inhibition of NNK-induced lung neoplasia in A/J mice by arylalkyl isothiocyanates. Morse MA, et al. **Carcinogenesis** 1989 Sep; 10(9):1757-9

Chemoprevention of lung cancer. Problems and progress. Greenwald P, et al. **Chest** 1989 Jul;96(1 Suppl):14S-17S (11 ref.)

Diet and lung cancer. Miller AB, et al. **Chest** 1989 Jul;96(1 Suppl):8S-9S (20 ref.)

High and low parenteral infusion rates decrease pulmonary metastasis in mice bearing Lewis lung carcinoma. Bryant MS, et al. **Curr Surg** 1989 Mar-Apr;46(2):113-5

Evidence for host-mediated antitumor effects of lysozyme in mice bearing the MCa mammary carcinoma. Sava G, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1737-43

Lungs for life. Basile RB. **J La State Med Soc** 1988 Jul; 140(7):19-20

Etretinate blood levels in monitoring of compliance and contamination in a chemoprevention trial. Browman GP, et al. **J Natl Cancer Inst** 1989 May 10;81(10):795-8

Changes in cigarette smoking and dietary behavior of children after six years of school-based intervention [editorial] Henderson MM. **J Natl Cancer Inst** 1989 Jul 5;81(13):972-3

Vegetable consumption and lung cancer risk: a population-based case-control study in Hawaii. Le Marchand L, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1158-64

Considerations in the development of lung cancer screening tools. Mulshine JL, et al. **J Natl Cancer Inst** 1989 Jun 21; 81(12):900-6 (66 ref.)

Primary prevention of cancer among children: changes in cigarette smoking and diet after six years of intervention. Walter HJ, et al. **J Natl Cancer Inst** 1989 Jul 5;81(13):995-9

Lung cancer and smoking: the science of applying preventive strategies [editorial] Wynder EL. **J Natl Cancer Inst** 1989 Mar 15;81(6):388-9

Effectiveness of the United Steel Workers of America Coke Oven Intervention Program. Parkinson DK, et al. **J Occup Med** 1989 May;31(5):464-72

Mass screening for lung cancer. **Natl Inst Health Consensus Dev Conf Summ** 1977-78;1:32-4 (0 ref.)

Compensation as a risk factor for lung cancer in smokers who switch from nonfilter to filter cigarettes. Augustine A, et al. **Prog Clin Biol Res** 1989;293:221-30

A double-blind randomized trial with beta-carotene and retinol in persons at high risk of lung cancer due to occupational asbestos exposures and/or cigarette smoking. Omenn GS. **Public Health Rev** 1988;16(1-2):99-125

Cancer Board attacks tobacco. Culliton BJ. **Science** 1989 Feb 17;243(4893):889

Screening for lung cancer. McGee JM. **Semin Surg Oncol** 1989;5(3):179-85 (46 ref.)

The prevention of cancer--a prudent approach. Lee HP. **Singapore Med J** 1988 Jun;29(3):196

Immunostimulating staphylococcal lipoteichoic acid prevents pulmonary tumor colonization in BALB/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):213-8

[Protective effects of selenium, zinc and copper on lung cancer] Chen Q. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul;22(4):221-4 (Eng. Abstr.) (Chi)

[Principles for prevention, early detection, treatment and after-care of malignant neoplasms of the trachea, bronchus and lung] **Z Erkr Atmungsorgane** 1989;172(2):159-68 (Ger)

[Methodological consideration on evaluation of lung cancer screening program: one-step process and two-step process] Hamajima N, et al. **Gan No Rinsho** 1989 Jan;35(2):183-7 (Eng. Abstr.) (Jpn)

[A study of a mass screening for both lung tuberculosis and cancer in Yaizu city--mass screening system and its results] Hida K. **Kekkaku** 1988 Jun;63(6):461-8 (Jpn)

[Inhibition of pulmonary metastasis in mice by OK-432--MCT emulsion administrated enterally] Masuyama K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1300-6 (Eng. Abstr.) (Jpn)

[Cost-effectiveness analysis of the mass screening of lung cancer] Iinuma T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1342-8 (Eng. Abstr.) (Jpn)

[Method of mass screening and detection rate of early lung cancer] Saito Y, et al. **Nippon Rinsho** 1989 May; 47(5):1000-5 (Jpn)

[Quality control of the mass examination of pulmonary cancer] Matsuura S. **Rinsho Byori** 1988 Jul;36(7):775-80 (Jpn)

[Basic principles of mass screening of patients with asbestosis] Gladkova EV. **Gig Tr Prof Zabol** 1989;(4):4–7 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Quality of life during chemotherapy in non–small cell lung cancer patients. Fernandez C, et al. **Acta Oncol** 1989; 28(1):29–33

Quality of life of lung cancer patients in a randomized clinical trial evaluated by a psychosocial well–being questionnaire. Kaasa S, et al. **Acta Oncol** 1988;27(4):335–42

Psychosocial well–being of patients with inoperable non–small cell lung cancer. The importance of treatment–and disease–related factors. Kaasa S, et al. **Acta Oncol** 1988; 27(6b):829–35

Quality of life assessment in patients with carcinoma of the lung. Feld R. **Chest** 1989 Jul;96(1 Suppl):105S–107S (11 ref.)

Problems in assessing quality of life (QL) of lung cancer patients in clinical trials. Hürny C, et al. **Chest** 1989 Jul; 96(1 Suppl):102S–105S (26 ref.)

Longitudinal analysis of psychological adaptation among family members of patients with cancer. Ell K, et al. **J Psychosom Res** 1988;32(4–5):429–38

Is media information that smoking causes illness a self–fulfilling prophecy? Grossarth–Maticek R, et al. **Psychol Rep** 1989 Aug;65(1):177–8

[Psychosocial aspects of lung cancer—experiences from a curator's point of view] Björkman B. **Lakartidningen** 1988 Nov 9;85(45):3831–3 (Swe)

RADIOGRAPHY

Problems in radiographic detection and diagnosis of lung cancer. Hayabuchi N, et al. **Acta Radiol** 1989 Mar–Apr; 30(2):163–7

The diagnosis of pulmonary nodules: comparison between standard and inverse digitized images and conventional chest radiographs. Sheline ME, et al. **AJR** 1989 Feb; 152(2):261–3

Frequency of extrathoracic metastases from bronchogenic carcinoma in patients with normal–sized hilar and mediastinal lymph nodes on CT. Sider L, et al. **AJR** 1988 Nov;151(5):893–5

Pulmonary lymphangioleiomyomatosis: high–resolution CT findings in four cases. Rappaport DC, et al. **AJR Am J Roentgenol** 1989 May;152(5):961–4

Evaluation of intrathoracic extent of lung cancer by plain chest radiography, computed tomography, and magnetic resonance imaging. Batra P, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1456–62

Isolated pulmonary nodules in head and neck cancer patients. Sercarz J, et al. **Ann Otol Rhinol Laryngol** 1989 Feb; 98(2):113–8

Characteristic radiographic features of pulmonary carcinoma associated with large bulla. Tsutsui M, et al. **Ann Thorac Surg** 1988 Dec;46(6):679–83 (11 ref.)

Pleuropulmonary haemangiopericytoma masquerading as a post–infective encysted pleural effusion. Page AC, et al. **Br J Dis Chest** 1988 Oct;82(4):426–30

Gastro–oesophageal leiomyoblastomas and multiple pulmonary chondromas: an incomplete variant of Carney's triad. Mazas–Artasona L, et al. **Br J Radiol** 1988 Dec; 61(732):1181–4

Lymphomatoid granulomatosis: a review of 12 cases. Prénovault JM, et al. **Can Assoc Radiol J** 1988 Dec; 39(4):263–6

Stump neuroma masquerading as recurrent malignancy on chest roentgenogram. Donnal JF, et al. **Chest** 1989 Mar; 95(3):684–5

Endobronchial hamartoma associated with bronchiololoalveolar cell carcinoma. Mompoint D, et al. **Chest** 1988 Nov;94(5):1094–6

Evaluation of digital unsharp masking and local contrast stretching as applied to chest radiographs. Rogowska J, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):817–27

Lymphomatoid granulomatosis: a case report. Ferrell KD, et al. **Indiana Med** 1988 Dec;81(12):1029–31

The role of yearly chest radiography in the early detection of lung cancer following oral cancer. Stalpers LJ, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):99–103

Abdominal computed tomography in patients with small cell lung cancer. O'Neill H, et al. **Ir J Med Sci** 1988 Nov; 157(11):344–7

Non–Hodgkin's lymphoma with unusual pulmonary involvement [letter] Ajmani A, et al. **J Assoc Physicians India** 1988 Jul;36(7):461–3

Pulmonary carcinoid tumors: CT assessment. Magid D, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):244–7

Computed tomography of inflation–fixed lungs: the beaded septum sign of pulmonary metastases. Ren H, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):411–6

Intravascular bronchioloalveolar tumor: CT and pathologic correlation. Ross GJ, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):240–3 (15 ref.)

Computed tomography in the diagnosis of asbestos–related thoracic disease. Gamsu G, et al. **J Thorac Imaging** 1989 Jan;4(1):61–7 (25 ref.)

Triple primary lung cancer: a case report [letter] Barnes DJ, et al. **Med J Aust** 1989 Aug 21;151(4):236–7

Quantum phenomena proposed as mechanism for radiographic corona structures associated with pulmonary masses. Jacobson JI. **Panminerva Med** 1988 Jul–Sep; 30(3):133–43

Unexplained right hilar mass. Darrow GL, et al. **Postgrad Med** 1989 Feb 1;85(2):241–2, 245

Pulmonary endometriosis mimicking an acute abdomen. Grunewald RA, et al. **Postgrad Med J** 1988 Nov; 64(757):865–6

Chest CT of unresectable lung cancer. Gay SB, et al. **Radiographics** 1988 Jul;8(4):735–48

Conventional and high resolution computed tomography in the diagnosis of asbestos–related diseases. Lynch DA, et al. **Radiographics** 1989 May;9(3):523–51

T1N0M0 lung cancer: evaluation with CT. Conces DJ Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):643–6

Offset electrocardiographic electrode simulating a pulmonary nodule on radiographs. Edwards ME, et al. **Radiology** 1989 Jul;172(1):281–2

Indeterminate mediastinal invasion in bronchogenic carcinoma: CT evaluation. Glazer HS, et al. **Radiology** 1989 Oct;173(1):37–42

Solitary pulmonary nodules: evaluation with a CT reference phantom. Huston J 3d, et al. **Radiology** 1989 Mar;170(3 Pt 1):653–6

Tumors of the bronchi: role of evaluation with CT. Mayr B, et al. **Radiology** 1989 Sep;172(3):647–52

Pulmonary parenchymal disease: evaluation with high–resolution CT. Murata K, et al. **Radiology** 1989 Mar; 170(3 Pt 1):629–35

Impact of CT scan on therapeutic management of lung cancer. Pirtoli L, et al. **Rays** 1988 Sep–Dec;13(3):65–9

Multiple vanishing tumours simulating pulmonary neoplasms. A case report. van Gelderen WF. **S Afr Med J** 1989 May 20;75(10):498–9

Computed tomography of the brain, chest, and abdomen in the preoperative assessment of non–small cell lung cancer. Grant D, et al. **Thorax** 1988 Nov;43(11):883–6

Bilateral multiple cavities in bronchiolar carcinoma. Nakano T, et al. **Thorax** 1988 May;43(5):412–3

Angiotropic large cell lymphoma presenting as interstitial lung disease. Tan TB, et al. **Thorax** 1988 Jul;43(7):578–9

[Selective bronchial arteriography and infusion chemotherapy in patients with bronchogenic carcinoma] Wu YM. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr;11(2):74–6, 126–7 (Eng. Abstr.) (Chi)

[The diagnostic value of CTscan in hidden lung cancer lesions of chest X–ray film] Yang XF. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):213–5, 254–5 (Eng. Abstr.) (Chi)

[Analysis of x–ray feature of selective bronchial arterography in 41 cases] Zhang W. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):216–7, 255 (Eng. Abstr.) (Chi)

[X–ray manifestation of pulmonary malignant tumor after cryosurgery] Wang JH. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):93–5 (Eng. Abstr.) (Chi)

[The pathologic basis of "vacuole sign" and its value in the early diagnosis of lung cancer] Xiao XS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):81–4 (Eng. Abstr.) (Chi)

[The pathologic basis of pleural indentation sign in lung cancer] Xiao XS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):85–8 (Eng. Abstr.) (Chi)

[X–ray manifestations and pathologic basis of lung and pleural adjacent to peripheral pulmonary masses] Yang XM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr; 22(2):89–92 (Eng. Abstr.) (Chi)

[Clinical applications of selective bronchial arteriography and bronchial artery infusion] Zhang FC. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):93–6 (Eng. Abstr.) (Chi)

[An X–ray–pathologic correlation of the lung–nodule interface in peripheral lung cancer vs. pulmonary tuberculoma] Ma K. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):682–4, 48 (Eng. Abstr.) (Chi)

[Excavated pulmonary image disclosing Hodgkin's disease (letter)] Bergeron C, et al. **Ann Med Interne (Paris)** 1989; 140(1):53–4 (23 ref.) (Fre)

[Slow–developing uni–nodular or circumscribed bronchiolo–alveolar cancer] Roegel E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:363–7 (Eng. Abstr.) (Fre)

[The contribution of computerized tomography to the diagnosis of diffuse pulmonary lymphangiomyomatosis. Apropos of a case] Blanchon F, et al. **Rev Mal Respir** 1989; 6(1):75–8 (Eng. Abstr.) (Fre)

[The role of x–ray computed tomography in the preoperative evaluation of primary bronchopulmonary cancer] Jammoussi M, et al. **Tunis Med** 1988 Aug–Sep;67; 66(8–9):599–604 (Eng. Abstr.) (Fre)

[Misinterpretation of a metastatic process within the scope of Sudeck's dystrophy. A case report] Sim E. **Aktuel Traumatol** 1989 Apr;19(2):85–9 (Eng. Abstr.) (Ger)

[Phantom tumor in left heart failure] Kweider M, et al. **Pneumologie** 1989 May;43(5):259–61 (Eng. Abstr.) (Ger)

[Evaluation of the status of the regional lymph nodes in patients with bronchial carcinoma based on the diameter of the lymph nodes as measured in the computer tomogram] Schmidt M, et al. **Radiol Diagn (Berl)** 1988;29(6):827–33 (Eng. Abstr.) (Ger)

[Rare manifestation and unusual course of lymphoplasmocytic immunocytoma] Frahm R, et al. **ROFO** 1989 Jan;150(1):100–1 (Ger)

[The liquefactive behavior of bronchial carcinomas and their metastases from the radiological viewpoint] Görich J, et al. **ROFO** 1989 May;150(5):531–5 (Eng. Abstr.) (Ger)

[High–resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kullnig P, et al. **ROFO** 1989 Jul;151(1):32–5 (Eng. Abstr.) (Ger)

[Cost–benefit analysis of thoracic computerized tomography as exemplified in the N–staging of bronchial carcinoma] Keller R, et al. **Schweiz Med Wochenschr** 1988 Sep 24; 118(38):1366–70 (Eng. Abstr.) (Ger)

[Radiological diagnosis of bronchus carcinoma] Vock P. **Schweiz Rundsch Med Prax** 1989 Feb 14;78(7):149–54 (Eng. Abstr.) (Ger)

[Limitations and possibilities of detecting lung cancer by fluoroscopic screening of the population] Abrahám E, et al. **Orv Hetil** 1989 Jul 30;130(31):1657–61 (Eng. Abstr.) (Hun)

[Primary malignant fibrous histiocytoma of the lung] Vezendi S, et al. **Orv Hetil** 1989 Mar 12;130(11):577–9 (Eng. Abstr.) (Hun)

[Pulmonary blastoma. A childhood case report and review of the literature] Talenti E, et al. **Radiol Med (Torino)** 1989 May;77(5):549–51 (15 ref.) (Ita)

[CT assessment of encephalic and suprarenal spread of "operable" pulmonary neoplasms. Preliminary results] Volterrani L, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):354–5 (Eng. Abstr.) (Ita)

[Clinical application of dynamic CT] Endow M, et al. **Gan No Rinsho** 1989 Apr;35(5):597–604 (Eng. Abstr.) (Jpn)

[Conventional X–ray and CT diagnosis of lung cancer] Kono M, et al. **Gan No Rinsho** 1988 Aug;34(10):1349–67 (Eng. Abstr.) (Jpn)

[Thin slice CT of lung tumors. Pathohistologic correlative study of tumor edge] Itoh S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):833–40 (Eng. Abstr.) (Jpn)

[CT diagnosis of synchronous multiple primary lung carcinomas] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):687–93 (Eng. Abstr.) (Jpn)

[Primary malignant fibrous histiocytoma of the lung characterized by continuous fever and a nodular shadow] Satoh N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr;26(4):426–32 (Eng. Abstr.) (Jpn)

[A case of metastatic lung tumor showing multiple cavities] Takakuwa O, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1307–12 (Eng. Abstr.) (Jpn)

[Roentgenologic evaluation of indrawn parietal pleura] Kubota H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):51–7 (Eng. Abstr.) (Jpn)

[Distinguishing benign from malignant pulmonary nodules by gradient analysis of digitized chest radiographs] Kuriyama K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):75–8 (Eng. Abstr.) (Jpn)

[CT findings of bronchiolo–alveolar carcinoma with special reference to the lucencies within abnormal shadows] Mori Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):85–90 (Eng. Abstr.) (Jpn)

[Two cases of primary pulmonary non–Hodgkin lymphoma] Nakayama T, et al. **Rinsho Hoshasen** 1989 Jan;34(1):177–80 (Eng. Abstr.) (Jpn)

[The CT images of peripheral adenocarcinoma—comparison with the positive group and negative in pre–operative diagnosis] Suzuki S, et al. **Rinsho Hoshasen** 1989 Jan; 34(1):59–62 (Eng. Abstr.) (Jpn)

[Clinical evaluation of lung tumors by broncho–arterial DSA—compared with conventional film method and analysis by time density curve] Suzuki S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):67–73 (Eng. Abstr.) (Jpn)

[Cavitating malignant neoplasms in the lung] Takashima S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):45–50 (Eng. Abstr.) (Jpn)

[Bronchography with barium sulfate in the diagnosis of pulmonary tumors] Gârlonţa V, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec;37(4):377–84 (Eng. Abstr.) (Rum)

[Retrospective analysis of fluorograms of patients with newly detected tuberculosis and cancer of the lungs] Nechaeva OB. **Probl Tuberk** 1988;(9):15–8 (Eng. Abstr.) (Rus)

[X–ray morphologic analysis of spherical formations in the lungs] Smiltnieks EKh, et al. **Probl Tuberk** 1988;(8):21–3 (Eng. Abstr.) (Rus)

[Supplemental criteria of the differential x–ray diagnosis of peripheral cancer and tuberculoma of the lungs] Anastas'ev VS. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):65–71 (Eng. Abstr.) (Rus)

[Differential diagnosis of hamartochondromas] Blinova OA, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):81–3 (Rus)

[Macrostructural analysis of peripheral lung cancer by computed tomography] Rabkin IKh, et al. **Vopr Onkol** 1989;35(4):423–8 (Eng. Abstr.) (Rus)

[Woman of fertile age with pleural effusion and an interstitial lung pattern] Gómez–León N, et al. **Rev Clin Esp** 1988 Jun;183(2):95–6 (Spa)

RADIONUCLIDE IMAGING

Immunolocalisation and imaging of small cell cancer xenografts by the IgG2a monoclonal antibody SWA11. Smith A, et al. **Br J Cancer** 1989 Feb;59(2):174–8

Microscopic tumour embolism: an unusual cause of ventilation–perfusion mismatch. Rawlinson J, et al. **Br J Radiol** 1988 Oct;61(730):956–7

57Co–bleomycin scintigraphy for the staging of lung cancer. Nieweg OE, et al. **Cancer** 1989 Mar 15;63(6):1119–22

57Co–bleomycin scintigraphy in the detection of brain metastases of lung cancer. Nieweg O, et al. **Clin Neurol Neurosurg** 1988;90(2):109–11

Thallium–201 accumulation in an unsuspected bronchogenic carcinoma. Fakier DR, et al. **Clin Nucl Med** 1989 Jun; 14(6):460–1

Uptake and kinetics of Tc–99m hexakis 2–methoxy isobutyl isonitrile in benign and malignant lesions in the lungs. Hassan IM, et al. **Clin Nucl Med** 1989 May;14(5):333–40

Diffuse muscle uptake of technetium–99M MDP in a patient with lung cancer. Krasnow AZ, et al. **Clin Nucl Med** 1988 Jul;13(7):538–40

Two cases of adenocarcinoma of the lung in which thallium–201 gave a better delineation of metastatic lesions than gallium–67. Togawa T, et al. **Clin Nucl Med** 1989 Mar;14(3):197–201

Mechanism of 201Tl uptake in tumours. Sehweil AM, et al. **Eur J Nucl Med** 1989;15(7):376–9

Iodine–131 MIBG scintigraphy in small cell lung cancer. Wadler S, et al. **Eur J Nucl Med** 1989;15(2):108–10

Compartmental biodistribution of a monoclonal antibody against human lung adenocarcinoma grown in athymic mice. Shani J, et al. **Int J Rad Appl Instrum [B]** 1989; 16(1):33–40

Differential diagnosis of solitary pulmonary nodules with positron emission tomography using [11C]L–methionine. Kubota K, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):794–6

Thallium–201 single photon emission computed tomography in the evaluation of suspected lung cancer. Tonami N, et al. **J Nucl Med** 1989 Jun;30(6):997–1004

Scintigraphy in lung cancer [editorial] McKillop JH, et al. **Nucl Med Commun** 1988 Dec;9(12):943–5

Bone scintigraphy in patients with breast cancer, pulmonary cancer, uterine cervix cancer, and prostatic cancer. Statistical study of spinal accumulation cases. Morishita S, et al. **Spine** 1989 Aug;14(8):784–9

Yield of total body GA–67 scintigraphy in the staging of non–small cell lung cancer. Buccheri G, et al. **Tumori** 1989 Feb 28;75(1):38–42

[Re: 57Co–bleomycin scintigraphy for the preoperative detection and staging of lung tumors (letter)] Georgi P. **Nuklearmedizin** 1989 Aug;28(4):162 **(Ger)**

[Lung perfusion–ventilation scintigraphy in squamous cell carcinoma of the lung] Beyer–Enke SA, et al. **ROFO** 1989 Jun;150(6):680–3 (Eng. Abstr.) **(Ger)**

[SPECT–3–D reconstructions of lung perfusion in patients with thoracic space–occupying lesions] Beyer–Enke SA, et al. **ROFO** 1989 Feb;150(2):211–5 (Eng. Abstr.) **(Ger)**

[Experimental radioimmunoimaging of human lung small cell carcinoma xenograft H–69 by NCC–ST–433 monoclonal antibody] Kubota T, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):393–8 (Eng. Abstr.) **(Jpn)**

[The comparative study with Ga–67 and I–123 IMP in malignant melanoma] Kubo K, et al. **Kaku Igaku** 1988 Dec; 25(12):1329–35 (Eng. Abstr.) **(Jpn)**

[Delayed lung scintigraphy with N–isopropyl–I–123–p–iodoamphetamine in lung cancer and inflammatory disease] Suematsu T, et al. **Kaku Igaku** 1989 Jan;26(1):45–53 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of Tl–201 single photon emission computed tomography in patients with suspected bronchogenic carcinoma] Tonami N, et al. **Kaku Igaku** 1988 Dec;25(12):1381–94 (Eng. Abstr.) **(Jpn)**

[Evaluation of SPECT with 67Ga and 201Tl in patients with primary lung cancer] Tanabe M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1445–50 (Eng. Abstr.) **(Jpn)**

[Radionuclide angiography in lung cancer] Lopez–Maisno V, et al. **Probl Tuberk** 1988;(12):37–9 (Eng. Abstr.) **(Rus)**

[Perfusion scintigraphy of the lungs in the evaluation of the possibility of resection of bronchogenic carcinoma] Dangubić V, et al. **Vojnosanit Pregl** 1988 Nov–Dec; 45(6):417–20 (Eng. Abstr.) **(Ser)**

RADIOTHERAPY

Intraluminal irradiation for inoperable obstructing endobronchial carcinoma of the lung. Stokes SH, et al. **Ala Med** 1989 Jul;59(1):19–22

Acute secondary effects in the esophagus in patients undergoing radiotherapy for carcinoma of the lung. Mascarenhas F, et al. **Am J Clin Oncol** 1989 Feb; 12(1):34–40

Neutron radiation therapy for unresectable non–small–cell carcinoma of the lung. A review. Stewart G, et al. **Am J Clin Oncol** 1989 Aug;12(4):290–4 (21 ref.)

Pacemaker failure associated with therapeutic radiation. Brooks C, et al. **Am J Emerg Med** 1988 Nov;6(6):591–3

Prospective study of pulmonary tolerance to radiotherapy or radiotherapy plus multidrug chemotherapy for loco–regional lung carcinoma. Choi NC, et al. **Antibiot Chemother** 1988;41:213–9

Radioimmunotherapy of transplanted small cell lung cancer with 131I–labelled monoclonal antibody. Yoneda S, et al. **Br J Cancer** 1988 Sep;58(3):292–5

Upper–half body irradiation for oat cell carcinoma of the bronchus. Stockdale AD, et al. **Br J Radiol** 1989 Jun; 62(738):563–4

Concomitant 5–fluorouracil infusion and high–dose radiation for stage III non–small cell lung cancer. Lokich J, et al. **Cancer** 1989 Sep 1;64(5):1021–5

Small–cell lung cancer: radiotherapy aspects. Hagen S. **Chemioterapia** 1987 Jun;6(2 Suppl):702–3 (3 ref.)

How should thoracic radiotherapy be given in limited small cell lung cancer? Arriagada R. **Chest** 1989 Jul;96(1 Suppl):78S–80S

High–LET radiation therapy of non–small cell lung cancer. Austin–Seymour M, et al. **Chest** 1989 Jul;96(1 Suppl):72S–73S (4 ref.)

Effect of radiation therapy on bronchial obstruction due to bronchogenic carcinoma. Chetty KG, et al. **Chest** 1989 Mar;95(3):582–4

Altered fractionation for non–small cell carcinoma of the lung. Rationale for the prospective trials of the Radiation Therapy Oncology Group. Cox JD, et al. **Chest** 1989 Jul; 96(1 Suppl):68S–69S (7 ref.)

Radiotherapy in non–small cell lung cancer. An overview. Tubiana M. **Chest** 1989 Jul;96(1 Suppl):85S–87S (0 ref.)

Resolution of hypertrophic pulmonary osteoarthropathy after radiotherapy in the absence of lung tumor response. Campeau RJ, et al. **Clin Nucl Med** 1989 Jun;14(6):453–5

Quantitative lung scans for prediction of post–radiotherapy pulmonary function. Moldofsky PJ, et al. **Clin Nucl Med** 1988 Sep;13(9):644–6

The use of simultaneous radiotherapy and 5–flurouracil in patients with inoperable squamous cell lung cancer. Kelly SA, et al. **Clin Radiol** 1989 May;40(3):311–3

Pemphigus vulgaris following cobalt therapy for bronchial carcinoma. Girolomoni G, et al. **Dermatologica** 1989; 178(1):37–8

Radiation sensitivity of human lung cancer cell lines. Carmichael J, et al. **Eur J Cancer Clin Oncol** 1989 Mar; 25(3):527–34

The role of external beam radiotherapy in the treatment of small–cell lung cancer. Vicini F, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):383–91 (52 ref.)

The association of adult respiratory distress syndrome (ARDS) with thoracic irradiation (RT). Byhardt RW, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1441–6

Importance of radiation dose in achieving improved loco–regional tumor control in limited stage small–cell lung carcinoma: an update. Choi NC, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):307–10

Phase I/II study of treatment of locally advanced (T3T4) non–oat cell lung cancer with high dose radiotherapy (rapid fractionation): Radiation Therapy Oncology Group Study. Emami B, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1021–5

Endobronchial irradiation for malignant airway obstruction. Mehta MP, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):847–51

Irradiation synchronized with respiration gate. Ohara K, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):853–7

Thoracic irradiation with or without levamisole (NSC #177023) in unresectable non–small cell carcinoma of the lung: a phase III randomized trial of the RTOG. Perez CA, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1337–46

The effect of arterial oxygen content on the results of radiation therapy for epidermoid bronchogenic carcinoma. Sasai K, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1477–81

Radiation therapy alone or combined with misonidazole in the treatment of locally advanced non–oat cell lung cancer: report of an RTOG prospective randomized trial. Simpson JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1483–91

Impact of initial quality control review on study outcome in lung and head/neck cancer studies—review of the Radiation Therapy Oncology Group experience. Wallner PE, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):893–900 (7 ref.)

Endobronchial brachytherapy. Phillips TW. **J Med Assoc Ga** 1988 Oct;77(10):780–1

Impact of CT information on the treatment planning for lung tumors. Muller–Runkel R, et al. **Med Dosim** 1989; 14(1):9–15

The influence of ionization chamber and phantom design on the measurement of lung dose in photon beams. Rice RK, et al. **Med Phys** 1988 Nov–Dec;15(6):884–90

Torticollis following radiation therapy. Landan I, et al. **Mov Disord** 1987;2(4):317–9

Preoperative radiotherapy in the combined treatment of lung cancer patients. Trakhtenberg AKh, et al. **Neoplasma** 1988; 35(4):459–65

Failure of development of the growing breast after radiation therapy. Rosenfield NS, et al. **Pediatr Radiol** 1989; 19(2):124–7

The relative radioresponsiveness of small cell lung cancer. Ampil FL. **Radiat Med** 1988 Nov–Dec;6(6):282–4

CT manifestation of neutron radiotherapy–induced changes in lung. Ohtomo K, et al. **Radiat Med** 1988 May–Jun; 6(3):130–4

Unresectable non–oat cell carcinoma of the lung: definitive radiation therapy. Mantravadi RV, et al. **Radiology** 1989 Sep;172(3):851–5

Proton NMR relaxation times of experimental Lewis lung carcinoma after irradiation. Le Moyec L, et al. **Radiother Oncol** 1988 Sep;13(1):1–8

Radiotherapy as an alternative to surgery in elderly patients with resectable lung cancer. Noordijk EM, et al. **Radiother Oncol** 1988 Oct;13(2):83–9

Curative radiotherapy of early operable non–small cell lung cancer. Zhang HX, et al. **Radiother Oncol** 1989 Feb; 14(2):89–94

Fractionated irradiation under ambient conditions of human NSCLC transplanted into nude mice: effect of different fractionation schedules and of radiotherapy and vindesine. Hinkelbein W, et al. **Strahlenther Onkol** 1989 Jul; 165(7):519–20

Radiotherapy of choroidal metastases. Hoogenhout J, et al. **Strahlenther Onkol** 1989 May;165(5):375–9

Lack of radiosensitization in Lewis lung carcinoma and a murine plasmacytoma by MTDQ and MTDQ–DA. Schlappack OK, et al. **Strahlenther Onkol** 1988 Nov; 164(11):684–8

Phase II study of cyclophosphamide, doxorubicin, and vincristine (CAV) and etoposide plus cisplatin (EP) alternating chemotherapy combined with radiotherapy in small cell lung cancer. Park YJ, et al. **Yonsei Med J** 1989; 30(1):30–7

Non–surgical therapy of lung cancer—a critical review by a respiratory physician. Spiro SG. **Z Erkr Atmungsorgane** 1988;171(1):29–39 (20 ref.)

[Lung tissue volume changes before and after treatment of radiation pneumonitis] Zheng WC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):347–9, 386 (Eng. Abstr.) **(Chi)**

[Radiotherapy of bronchogenic carcinoma] Weberová D, et al. **Cas Lek Cesk** 1988 Jul 29;127(31):980–3 (Eng. Abstr.) **(Cze)**

[Value of postoperative radiotherapy in T3 or N+ bronchial cancer. Apropos of 113 cases] Baillet F, et al. **Ann Med Interne (Paris)** 1988;139(5):354–8 (12 ref.) (Eng. Abstr.) **(Fre)**

[Interstitial brachytherapy using 125–iodine seeds in non–curatively resected bronchial carcinoma] Schaberg T, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:370–2 (Eng. Abstr.) **(Ger)**

[Indications and results in radiotherapy of bronchial carcinomas] Wannenmacher M. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:352–6 (Eng. Abstr.) **(Ger)**

[Radiotherapy of bronchial carcinoma] Schmidt B. **Rontgenblatter** 1988 Dec;41(12):504–11 (74 ref.) (Eng. Abstr.) **(Ger)**

[Radiotherapy of bronchus carcinoma] Greiner R. **Schweiz Rundsch Med Prax** 1989 Feb 14;78(7):163–9 (66 ref.) (Eng. Abstr.) **(Ger)**

[Is short–term follow–up by skeletal scintigraphy of use in deciding on curative irradiation of inoperable non–small cell bronchial carcinoma? The experiences with 363 cases] Broemel T, et al. **Strahlenther Onkol** 1989 Jan;165(1):43–6 (Eng. Abstr.) **(Ger)**

[Effects of radiotherapy on lymphocyte populations in lung cancer] Gava A, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):475–8 (Eng. Abstr.) **(Ita)**

[State III large cell carcinoma of the lung cured by radiotherapy—a case report] Ishino Y, et al. **Gan No Rinsho** 1988 Nov;34(14):1985–9 (Eng. Abstr.) **(Jpn)**

[A case of a 10–year survivor with squamous cell carcinoma of the lung, treated with radiation after an exploratory thoracotomy] Iwasaki M, et al. **Gan No Rinsho** 1989 Jul; 35(8):939–42 (Eng. Abstr.) **(Jpn)**

[Clinical application of multiple fractions per day in lung and esophageal cancer] Kikuchi Y. **Gan No Rinsho** 1988 Oct;34(13):1773–82 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of squamous cell lung cancer] Nakama M, et al. **Gan No Rinsho** 1988 Nov;34(14):1927–35 (Eng. Abstr.) **(Jpn)**

[Two color analysis of peripheral lymphocyte subsets in patients with cancers during and after radiotherapy] Nakatsugawa S, et al. **Gan No Rinsho** 1988 Oct; 34(13):1789–98 (Eng. Abstr.) **(Jpn)**

[Radiation therapy of lung metastases] Takegawa Y. **Gan No Rinsho** 1988 Aug;34(9):1121–9 (Eng. Abstr.) **(Jpn)**

[The role of radiotherapy in the treatment of small–cell lung cancer] Niibe H, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 1):2531–6 (Eng. Abstr.) **(Jpn)**

[Long–term survival in inoperable small cell carcinoma of the lung] Ono R, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1491–7 (Eng. Abstr.) **(Jpn)**

[Effects of perfluorochemical emulsion on the timing of administration and irradiation in tumor bearing mice] Hishikawa–Itoh Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1032–9 (Eng. Abstr.) **(Jpn)**

[Result of radiation therapy in non–resectable lung cancer] Kataoka M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):717–26 (Eng. Abstr.) **(Jpn)**

[Results of radiotherapy in lung cancer] Kusumoto S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;

48(9):1177–82 (Eng. Abstr.) (Jpn)
[Results of radiotherapy for lung cancer. Therapeutic factors affecting survival] Ono K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):988–94 (Eng. Abstr.) (Jpn)
[Afterloading interstitial brachytherapy combined with external radiation and surgery in the treatment of locally far-advanced lung cancer and esophageal cancer] Takagi I. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2200–12 (Eng. Abstr.) (Jpn)
[A case of radiation myelitis following radiotherapy in lung cancer] Ogata N, et al. **Rinsho Hoshasen** 1989 Jan; 34(1):181–4 (Eng. Abstr.) (Jpn)
[The role of radiotherapy in the treatment of patients with small cell carcinoma of the lungs] Reinfuss M. **Nowotwory** 1988 May–Jun;38(3):187–92 (38 ref.) (Eng. Abstr.) (Pol)
[Radiation and chemoradiation therapy of patients with cancer of the lung following exploratory thoracotomy] Sakun FT, et al. **Klin Khir** 1989;(5):8–10 (Eng. Abstr.) (Rus)
[Densitometry of tomograms in evaluating the results of radiotherapy of peripheral cancer of the lung] Goncharenko GV, et al. **Med Radiol (Mosk)** 1989 Apr; 34(4):16–8 (Rus)
[Prognosis of survival time in year prior to the start of radiotherapy of epidermoid carcinoma] Laktionov KP, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):38–42 (Eng. Abstr.) (Rus)
[Optimal conditions for irradiating central cancer of the lung using high-energy photon beams] Panshin GA, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):11–6 (Eng. Abstr.) (Rus)
[Indices of hemodynamics and external respiration in patients with cancer of the lung treated with preoperative irradiation] Kharchenko VP, et al. **Sov Med** 1988;(9):89–93 (Rus)
[The effectiveness of 2 systems of chemoradiation treatment in inoperable small-cell lung cancer] Mikhina ZP, et al. **Vopr Onkol** 1989;35(2):174–80 (Eng. Abstr.) (Rus)
[Evaluation of the efficacy of intensive preoperative irradiation of patients with lung cancer] Vagner RI, et al. **Vopr Onkol** 1989;35(6):721–6 (Eng. Abstr.) (Rus)
[Optimization of radiotherapy of lung carcinoma] Baumöhl J, et al. **Cesk Radiol** 1988 Oct;42(5):349–56 (Eng. Abstr.) (Slo)
[Immediate relief in malignant respiratory tract neoplasms by endoscopic neodymium-YAG laser treatment] Karlsson SE, et al. **Lakartidningen** 1989 Apr 12;86(15):1373–5 (Eng. Abstr.) (Swe)
[Laser therapy of lung tumors] Wiman LG, et al. **Lakartidningen** 1989 May 17;86(20):1879–80 (Swe)

REHABILITATION

[Evaluation of quality of life in patients with long-term chemotherapy of advanced pulmonary cancer] Kanazawa M, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2473–5 (Jpn)

SECONDARY

Computed tomography and conventional radiography in intrathoracic metastases from non-seminomatous testicular tumor. Lien HH, et al. **Acta Radiol** 1988 Sep–Oct; 29(5):547–9
Type IV collagenolytic activity linkage with the metastatic phenotype induced by ras transfection. Garbisa S, et al. **Adv Exp Med Biol** 1988;233:179–86
Drug-induced tumor progression in a rat rhabdomyosarcoma. Pauwels C, et al. **Adv Exp Med Biol** 1988;233:385–93
Pulmonary metastasizing hemangiopericytoma. Heckmayr M, et al. **Am J Clin Oncol** 1988 Dec;11(6):636–42
Malignant ameloblastoma with pulmonary metastasis and hypercalcemia. Report of an autopsy case and review of the literature. Inoue N, et al. **Am J Clin Pathol** 1988 Oct; 90(4):474–81 (35 ref.)
Epithelioid sarcoma with diffuse bone marrow metastases and associated leukemoid reaction. A case report and brief literature review. Rosenberg AE, et al. **Am J Clin Pathol** 1988 Dec;90(6):723–6 (16 ref.)
Malignant blue nevus with metastases to the lung. Kuhn A, et al. **Am J Dermatopathol** 1988 Oct;10(5):436–41
Prostatic carcinoma with lung metastases in a former bagasse worker; LH-RH analogs as an alternative therapy [clinical conference] Comaru-Schally AM, et al. **Am J Med Sci** 1988 Nov;296(5):348–53
Pulmonary metastases in patients with low-grade endometrial stromal sarcoma. Clinicopathologic findings with immunohistochemical characterization. Abrams J, et al. **Am J Surg Pathol** 1989 Feb;13(2):133–40
Cavitary pulmonary metastases in angiosarcoma. Diagnosis by transthoracic needle aspiration. Aronchick JM, et al. **Am Rev Respir Dis** 1989 Jan;139(1):252–3
Resection of metastatic lung tumor: the evaluation of histologic appearance in the lung. Shirakusa T, et al. **Am Surg** 1988 Nov;54(11):655–8
Subacute cor pulmonale due to tumor embolization to the lungs. He XW, et al. **Angiology** 1989 Jan;40(1):11–7
Ameloblastoma metastatic to the lung. Clay RP, et al. **Ann Plast Surg** 1989 Feb;22(2):160–2
Left atrial tumor embolization during pulmonary resection: review of literature and report of two cases. Mansour KA, et al. **Ann Thorac Surg** 1988 Oct;46(4):455–6
Antimetastatic effect of amiloride in an animal tumour model. Kellen JA, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1373–6
Lung and cervical lymph-node metastasis after cortisone enhancement in hamster cheek-pouch carcinogenesis. Kage T, et al. **Arch Oral Biol** 1988;33(6):459–61
Metastasizing leiomyoma of the uterus. Ford JM, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):154–5
Hypertrophic pulmonary osteoarthropathy and nasopharyngeal carcinoma in a young Chinese patient. Wallington MM, et al. **Australas Radiol** 1988 Nov; 32(4):444–7
Warfarin inhibits metastasis of Mtln3 rat mammary carcinoma without affecting primary tumour growth. McCulloch P, et al. **Br J Cancer** 1989 Feb;59(2):179–83
Human interferons inhibit experimental metastases of a human melanoma cell line in nude mice. Ramani P, et al. **Br J Cancer** 1988 Sep;58(3):350–4
The inhibition of murine lung metastasis by synthetic polypeptides [poly(arg-gly-asp) and poly(tyr-ile-gly-ser-arg)] with a core sequence of cell adhesion molecules. Saiki I, et al. **Br J Cancer** 1989 Feb; 59(2):194–7
A case of ameloblastic carcinoma with pulmonary metastases. Dorner L, et al. **Br J Oral Maxillofac Surg** 1988 Dec; 26(6):503–10
Spontaneous regression of subcutaneous and pulmonary metastases from renal carcinoma. Thomas PJ, et al. **Br J Urol** 1989 Jan;63(1):102–3
Surgical resection of pulmonary metastases from colorectal cancer. 10-year follow-up. Goya T, et al. **Cancer** 1989 Oct 1;64(7):1418–21
Miliary pulmonary neuroblastoma. A risk of autologous bone marrow transplantation? Graeve JL, et al. **Cancer** 1988 Nov 15;62(10):2125–7
Benign metastasizing giant cell tumors of bone. A DNA flow cytometric study. Ladanyi M, et al. **Cancer** 1989 Oct 1; 64(7):1521–6
Metastatic gestational choriocarcinoma. Unusual pathologic variant following therapy. Mazur MT. **Cancer** 1989 Apr 1;63(7):1370–7
Dedifferentiated parosteal osteosarcoma of the femur with aneuploidy and lung metastases. van Oven MW, et al. **Cancer** 1989 Feb 15;63(4):807–11
Influence of mouse uterus on the metastatic patterns of tumour cells. Maharajan P, et al. **Cancer Lett** 1988 Dec 1;43(1-2):33–6
Purification and some properties of a lung-derived growth factor that differentially stimulates the growth of tumor cells metastatic to the lung. Cavanaugh PG, et al. **Cancer Res** 1989 Jul 15;49(14):3928–33
Effect of combined therapy with lymphokine-activated killer cells, interleukin 2 and specific monoclonal antibody on established B16 melanoma lung metastases. Eisenthal A, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7140–5
Effects of reciprocal changes of diets differing in fat content on pulmonary metastasis from the 13762 rat mammary tumor. Katz EB, et al. **Cancer Res** 1989 May 1; 49(9):2477–84
A human tumor lung metastasis model in athymic nude rats. Kjønniksen I, et al. **Cancer Res** 1989 Sep 15;49(18):5148–52
Adoptive immunotherapy as an adjunctive treatment to thoracic irradiation for pulmonary tumor deposits in mice. Milas L, et al. **Cancer Res** 1989 Sep 15;49(18):4979–82
Inhibition of the metastasis of murine malignant melanoma by synthetic polymeric peptides containing core sequences of cell-adhesive molecules. Saiki I, et al. **Cancer Res** 1989 Jul 15;49(14):3815–22
Characterization of a melanoma antigen with a mouse-specific epitope recognized by a monoclonal antibody with antimetastatic ability. Sakiyama H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7173–8
Modulation of prostaglandin biosynthesis in hypoxic murine mammary adenocarcinoma cells by misonidazole. Shalinsky DR, et al. **Cancer Res** 1989 Jul 15;49(14):3853–6
Effects on C3H mouse mammary cancer of changing from a high fat to a low fat diet before, at, or after puberty. Silverman J, et al. **Cancer Res** 1989 Jul 15;49(14):3857–60
The value of bronchial washings and bronchoalveolar lavage in the diagnosis of lymphangitic carcinomatosis. Levy H, et al. **Chest** 1988 Nov;94(5):1028–30
Late pleuropulmonary metastases of a cerebral ependymoma. Lioté HA, et al. **Chest** 1988 Nov;94(5):1097–8
Pulmonary alveolar proteinosis. Occurrence with metastatic melanoma to lung. Schiller V, et al. **Chest** 1989 Feb; 95(2):466–7
Low-molecular-weight membrane component inhibits the metastatic phenotype of B16-F10 melanoma. Keren Z, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):315–28
Inhibition of protein synthesis, pulmonary localization and pulmonary tumour formation by drug-treated tumour cells as a means of predicting their chemosensitivity. Lai T, et al. **Clin Exp Metastasis** 1989 Jul–Aug;7(4):427–36
Loss of spontaneous metastasizing potential in mouse mammary tumors. Vaage J. **Clin Exp Metastasis** 1989 May–Jun;7(3):373–8
The relationship between lymphogenous and hematogenous metastasis in rats bearing the MT-100-TC mammary carcinoma. Ward PM, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):253–64
Aggressive infantile fibromatosis. Pulmonary metastases documented by plain film and computed tomography. Shankwiler RA, et al. **Clin Imaging** 1989 Jun;13(2):127–9
Suppression of T4 secretion in a metastatic follicular carcinoma. Boucher A, et al. **Clin Invest Med** 1989 Jun; 12(3):162–4
Demonstration of tumor microembolism by lung perfusion imaging. Davis PS, et al. **Clin Nucl Med** 1988 Jul;13(7):543
Tc-99m MDP uptake by metastatic chondrosarcoma in the lung. Mekhmandarov S, et al. **Clin Nucl Med** 1989 May; 14(5):369–71
Metastatic papillary thyroid carcinoma with normal serum thyroglobulin level. Miller JH, et al. **Clin Nucl Med** 1988 Sep;13(9):652–3
Giant-cell tumor of bone with pulmonary metastases. Six case reports and a review of the literature. Bertoni F, et al. **Clin Orthop** 1988 Dec;(237):275–85 (24 ref.)
Benign metastasizing giant-cell tumor of bone. Report of three cases and review of the literature. Maloney WJ, et al. **Clin Orthop** 1989 Jun;(243):208–15 (28 ref.)
Anterior extrathecal ependymoma with systemic metastases—a case report and review of the literature. Thornton AS, et al. **Clin Radiol** 1988 Sep;39(5):562–4 (15 ref.)
Metastatic eccrine sweat gland carcinoma: case report. Borradori L, et al. **Dermatologica** 1988;177(5):295–9
Endocrine and immune effects of melatonin therapy in metastatic cancer patients. Lissoni P, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):789–95
The value of yearly chest X-ray in patients with stage I breast cancer. Vestergaard A, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):687–9
Spontaneous regression of pulmonary metastases and long-term survival of a patient with metastatic renal cell carcinoma, after immunostimulation with bacillus Calmette-Guérin and extirpation of brain and contralateral lung metastases. Martínez-Piñeiro L, et al. **Eur Urol** 1988; 15(1-2):146–9
Radioimmunolocation of hepatic and pulmonary metastasis of human colon adenocarcinoma. Takahashi H, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1317–29
Glassy cell carcinoma of the endometrium responsive to megestrol acetate. Dawson EC, et al. **Gynecol Oncol** 1989 Apr;33(1):121–4
Pulmonary metastasis from carcinoma of the uterine cervix. Imachi M, et al. **Gynecol Oncol** 1989 May;33(2):189–92
Pulmonary lymphangitic carcinomatosis secondary to cervical carcinoma: a case report. Kennedy KE, et al. **Gynecol Oncol** 1989 Feb;32(2):253–6
Pulmonary lymphangitic carcinomatosis from hypopharyngeal adenosquamous carcinoma. Zieske LA, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):195–8
Establishment of a murine malignant fibrous histiocytoma cell line (DIM-L) with lung metastatic potential. Yamamoto H, et al. **In Vitro Cell Dev Biol** 1989 Jun; 25(6):484–5
Spontaneous pneumothorax and pneumomediastinum in metastatic lung disease. Sharma S, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):125–32 (15 ref.)
Pulmonary metastases from Ewing's sarcoma—presenting as spontaneous pneumothorax in a young child. Singla R, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):148–53
Ewing's sarcoma of rib with pulmonary and neurological manifestations [letter] Singh D, et al. **Indian Pediatr** 1988 Nov;25(11):1130–2
New high O2 carrying perfluorochemical emulsions: toxicity, radiosensitivity of GM-CFC and development of metastases in mice. Lartigau E, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1153–6
The alteration in the pattern of pulmonary metastasis with adjuvant chemotherapy in osteosarcoma. Yamaguchi H, et al. **Int Orthop** 1988;12(4):305–8
Tabulation of results on the heterogeneity of cellular characteristics among cells from B16 mouse melanoma cell lines with different colonization potentials. A summary of sixty reports. Maslow DE. **Invasion Metastasis** 1989; 9(3):182–91 (72 ref.)
Cellular glycoproteins correlating with pulmonary-colonizing potential in B16 melanoma. Narita T. **Invasion Metastasis** 1989;9(1):1–14
Combination chemotherapy in metastatic tumors of unknown origin. 5-Fluorouracil, adriamycin and mitomycin C for adenocarcinomas and adriamycin, vinblastine and mitomycin C for anaplastic carcinomas. Sulkes A, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):604–10
Alpha-2 interferon therapy for cutaneous T cell lymphoma. Tulli A. **J Am Acad Dermatol** 1989 Apr;20(4):686–7
Synovial cell sarcoma with pulmonary metastases—a case report. Aggarwal P, et al. **J Assoc Physicians India** 1988 Oct;36(10):617–8
Metastatic choriocarcinoma with respiratory distress and haemoperitoneum. Shah SV, et al. **J Assoc Physicians India** 1988 Jul;36(7):454–5
Relation of H-2 expression on murine RCT(+) sarcoma cells to lung colonization and sensitivity to NK cells. Masuyama K, et al. **J Cancer Res Clin Oncol** 1988;114(5):487–92
Metastatic malignant meningioma. Slavin ML. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):55–9
The modulation of fluorouracil with leucovorin in metastatic colorectal carcinoma: a prospective randomized phase III trial. Gastrointestinal Tumor Study Group. Petrelli N, et al. **J Clin Oncol** 1989 Oct;7(10):1419–26

Chorioadenoma destruens: an unusual clinical profile. Gupta S, et al. **J Indian Med Assoc** 1988 Nov;86(11):303–4

Inhibition of tumor cell–induced platelet aggregation and experimental tumor metastasis by the synthetic Gly–Arg–Gly–Asp–Ser peptide. Ugen KE, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1461–6

Papillary meningioma with pulmonary metastasis. Case report. Fukushima T, et al. **J Neurosurg** 1989 Mar; 70(3):478–82

Detection and treatment of lung metastases of differentiated thyroid carcinoma in patients with normal chest X-rays. Schlumberger M, et al. **J Nucl Med** 1988 Nov; 29(11):1790–4

Mandibular ameloblastoma with metastasis to the lungs and lymph nodes: a case report and review of the literature. Ueda M, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):623–8 (44 ref.)

Clear cell odontogenic carcinoma: report of three cases with pulmonary and lymph node metastases. Bang G, et al. **J Oral Pathol Med** 1989 Feb;18(2):113–8

Histological evidence of natural killer cell aggregation against malignant melanoma induced by adoptive immunotherapy with lymphokine–activated killer cells. Yamamura T, et al. **J Pathol** 1989 Mar;157(3):201–4

Pulmonary metastases in children: results of surgical treatment. Di Lorenzo M, et al. **J Pediatr Surg** 1988 Aug; 23(8):762–5

Precision excision of pulmonary metastases—a useful technique. Waldron DJ, et al. **J R Soc Med** 1989 Feb; 82(2):115–6

Lung metastases after curative or noncurative irradiation of microscopic primary melanomas. Nathanson SD, et al. **J Surg Oncol** 1989 May;41(1):33–8

Lung resection for metastatic sarcomas: total survival from primary treatment. Pastorino U, et al. **J Surg Oncol** 1989 Apr;40(4):275–80

Site-directed metastasis: a model to study site variations in treatment response. Casey ME, et al. **J Surg Res** 1988 Nov; 45(5):443–51

Isolated pulmonary metastases from carcinoma of the prostate: a case report and deoxyribonucleic acid analysis using flow cytometry. Bromberg WD, et al. **J Urol** 1989 Jan;141(1):137–9

Effects of a combination of cyclophosphamide and human recombinant interleukin 2 on pulmonary metastasis after the surgical removal of a 3–methylcholanthrene–induced primary tumor in autochthonous mice. Hosokawa M, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1147–54

Experimental model for metastasis of intraocular melanoma: preventive role of natural killer cells. Yokoyama T, et al. **Jpn J Ophthalmol** 1989;33(1):76–84

Occult papillary carcinoma of the thyroid with pulmonary lymphangitic spread diagnosed by lung biopsy. Fend F, et al. **Klin Wochenschr** 1989 Jul 3;67(13):687–90

The clinical course of lung metastases from breast cancer. Schlappack OK, et al. **Klin Wochenschr** 1988 Sep 1; 66(17):790–5

Pulmonary nodules resembling bronchioloalveolar carcinoma in adolescent cancer patients. Travis WD, et al. **Mod Pathol** 1988 Sep;1(5):372–7 (53 ref.)

Genetic tagging of tumor cells with retrovirus vectors: clonal analysis of tumor growth and metastasis in vivo. Korczak B, et al. **Mol Cell Biol** 1988 Aug;8(8):3143–9

Pulmonary microvascular cytology in the diagnosis of lymphangitic carcinomatosis. Masson RG, et al. **N Engl J Med** 1989 Jul 13;321(2):71–6

Treatment of mice with anti–asialo–GM1 antibody or poly–I:C: effects on metastasis dissociable from modulation of macrophage antitumor activity. Riser BL, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):305–15

Metastatic native renal carcinoma in renal transplant recipients. O'Donnell C, et al. **Nephrol Dial Transplant** 1988;3(5):690–3

Uptake of 99Tcm–MDP in lung metastasis from osteosarcoma: clinical and animal studies. Tsuji T, et al. **Nucl Med Commun** 1988 Dec;9(12):947–54

The effect of dietary fat on metastasis of the Lewis lung carcinoma and the BALB/c mammary carcinoma. Scholar EM, et al. **Nutr Cancer** 1989;12(2):109–19

The effect of diets enriched in cabbage and collards on murine pulmonary metastasis. Scholar EM, et al. **Nutr Cancer** 1989;12(2):121–6

Metastasizing pleomorphic adenoma arising in the soft palate. Wermuth DJ, et al. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):505–8

Peribronchial calcification and ossification—an unusual pattern of metastatic osteosarcoma. Widdowson DJ, et al. **Pediatr Radiol** 1988;18(6):490

Alveolar soft–part sarcoma: a hormone–sensitive tumour? Pang JA, et al. **Postgrad Med J** 1988 May;64(751):386–8

Hemopneumothorax due to pulmonary metastasis with malignant hemangioendothelioma: CT and pathological findings. Hihara T, et al. **Radiat Med** 1988 Sep–Oct; 6(5):213–5

Time course of development of metastasis in irradiated Lewis lung carcinoma: relationship between primary tumor volume and metastasis. Ohizumi Y, et al. **Radiat Med** 1988 Jul–Aug;6(4):179–84

General case of the day. Massive pulmonary microtumor embolism. VanZandt TF, et al. **Radiographics** 1989 Mar; 9(2):355–8

Extracranial metastases from medulloblastoma: the radiological appearance of one case. Calderazzi A, et al. **Rays** 1987 Sep–Dec;12(3):31–4

Spontaneous regression of cerebral and pulmonary metastases in renal cell carcinoma. Omland H, et al. **Scand J Urol Nephrol** 1989;23(2):159–60

Prognostic factors of adult metastatic renal carcinoma: a multivariate analysis. de Forges A, et al. **Semin Surg Oncol** 1988;4(3):149–54

Interferon therapy of metastatic renal cell cancer. Muss HB. **Semin Surg Oncol** 1988;4(3):199–203 (31 ref.)

Case report 501: Alveolar soft parts sarcoma with pulmonary metastases. Munk PL, et al. **Skeletal Radiol** 1988; 17(6):454–7

Diagnosis and treatment of metastatic ameloblastoma. Eliasson AH, et al. **South Med J** 1989 Sep;82(9):1165–8 (18 ref.)

Malignant transformation of recurrent meningioma with pulmonary metastases. LeMay DR, et al. **Surg Neurol** 1989 May;31(5):365–8

Surgical management of multiple lung metastases of different origin. Vaghei R, et al. **Surgery** 1989 Jun;105(6):797–800

Spontaneous pneumothorax due to metastatic carcinoma of the rectum [letter] Sharma S, et al. **Thorax** 1989 Jan;44(1):80

Metastatic uterine leiomyosarcoma in association with recurrent lung abscess. Sheron N, et al. **Thorax** 1989 Jul; 44(7):597–8

Relationship between primary tumor volume and lung metastasis in Lewis lung carcinoma (I). Assay for time course of development of metastasis. Ohizumi Y, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):229–35

Relationship between primary tumor volume and lung metastasis in Lewis lung carcinoma (II). Tumor bed effect. Ohizumi Y, et al. **Tokai J Exp Clin Med** 1987 Nov; 12(4):237–42

Enhanced cancer metastasis after monocrotaline–induced lung injury. Vincic L, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):259–70

The effect of storage on the metastatic potential of tumor cells collected in autologous blood. An animal model. Lane TA. **Transfusion** 1989 Jun;29(5):418–20

Effect of blood transfusions and surgery on metastatic growth and immune parameters in a rat model. Marquet RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):586–7

Pulmonary nodules simulating metastasis of germ cell tumor after aggressive chemotherapy. Habuchi T, et al. **Urol Int** 1988;43(4):248–52

Methods and prognosis of the extirpation of pulmonary metastases following tumor nephrectomy. Schott G, et al. **Urol Int** 1988;43(5):272–4

Spontaneous regression of pulmonary metastases from renal cell carcinoma. Davis SD, et al. **Urology** 1989 Feb; 33(2):141–4

Atypical metastases from transitional vesical carcinoma. Peterson NE. **Urology** 1989 Sep;34(3):148–51 (27 ref.)

Metastasis from basal cell carcinoma. Dierberg WJ, et al. **Va Med** 1988 Dec;115(12):584–7 (35 ref.)

[Aggressive pulmonary metastasectomy for metastatic renal cell carcinoma—6 cases report] Hsu HS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):379–84 **(Chi)**

[Physicians as judges , the new type of physician–in chief?] Riis P. **Nord Med** 1988;103(8–9):231–2 **(Dan)**

[Anatomo–clinical conference. Hôpital de la Pitié–Salpêtrière. Case no 3–1988. Focal pulmonary images and inflammatory syndrome 7 years after nephrectomy of cancer] Piette JC, et al. **Ann Med Interne (Paris)** 1988; 139(6):432–9 **(Fre)**

[Regression and slowing of the growth of human pulmonary metastases induced by piroxicam, an inhibitor of prostaglandin synthesis] Breau JL, et al. **Bull Cancer (Paris)** 1989;76(3):321–8 (Eng. Abstr.) **(Fre)**

[Metastatic cancer of the kidney. What can be done today?] Chautard D, et al. **J Urol (Paris)** 1988;94(7):307–16 (79 ref.) (Eng. Abstr.) **(Fre)**

[Surgical treatment of pulmonary metastases] Depadt G. **Pathol Biol (Paris)** 1989 Feb;37(2):176–8 **(Fre)**

[Invasive thymoma with pulmonary metastasis. Complete remission 5 years after surgery and chemotherapy using the CHOP–BLEO protocol] Wurtz A, et al. **Rev Mal Respir** 1988;5(6):651–4 (Eng. Abstr.) **(Fre)**

[False pulmonary metastases. Apropos of 8 cases] Bellamy J, et al. **Rev Pneumol Clin** 1989;45(1):31–3 (Eng. Abstr.) **(Fre)**

[Treatment of metastatic adrenal carcinoma with suramin] Allolio B, et al. **Dtsch Med Wochenschr** 1989 Mar 10; 114(10):381–4 (Eng. Abstr.) **(Ger)**

[Spontaneous remission of lung metastases in renal cell carcinoma] Müller GA, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):420–3 (Eng. Abstr.) **(Ger)**

[Status of skeletal scintigraphy, lung roentgen image and liver sonography in the follow–up of breast cancer] Schünemann H. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):379–84 (Eng. Abstr.) **(Ger)**

[Surgical therapy of lung metastases: correlation of the clinical course and growth behavior in the nude mouse model] Ortlieb H, et al. **Helv Chir Acta** 1988 Nov; 55(4):449–53 (Eng. Abstr.) **(Ger)**

[Hyperthyroidism caused by a hormone–producing follicular thyroid cancer] Scherübl H, et al. **Klin Wochenschr** 1989 Mar 1;67(5):304–7 (Eng. Abstr.) **(Ger)**

[Spontaneous regression of lung metastasis in renal cell carcinoma with expectoration of a part of the metastasis] Eissler M. **Med Klin** 1989 Feb 15;84(2):118–9 **(Ger)**

[Successful combination therapy of a metastatic Triton tumor in a 5–year–old boy] Glöckel U, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):471–4 (Eng. Abstr.) **(Ger)**

[Experience with a high–dose therapy concept in metastatic differentiated thyroid cancer] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):266–71 (Eng. Abstr.) **(Ger)**

[Results of treatment in primary disseminated osteosarcoma. Analysis of the follow–up of patients in the cooperative osteosarcoma studies COSS–80 and COSS–82] Winkler K, et al. **Onkologie** 1989 Apr;12(2):92–6 (Eng. Abstr.) **(Ger)**

[The influence of breathing technic on the visualization of lung metastases in computed tomography] Görich J, et al. **Rontgenblatter** 1989 Apr;42(4):170–1 (Eng. Abstr.) **(Ger)**

[Resection of lung metastases of colorectal cancer. Indications and indication limits] Scheele J, et al. **Zentralbl Chir** 1989;114(10):639–54 (Eng. Abstr.) **(Ger)**

[Cutaneous leiomyosarcoma (description of a case)] Salerno L, et al. **Ann Osp Maria Vittoria Torino** 1987–88; 30(1):94–100 (Eng. Abstr.) **(Ita)**

[An autopsy case of parotid clear cell carcinoma with cerebellar invasion and metastasis to the lung] Hirakawa E, et al. **Gan No Rinsho** 1988 Oct;34(12):1705–9 (Eng. Abstr.) **(Jpn)**

[A resected case of metastatic lung cancer after curative operation in appendiceal cancer] Morohoshi T, et al. **Gan No Rinsho** 1989 Mar;35(4):537–40 (Eng. Abstr.) **(Jpn)**

[A case of lung metastasis of thyroid cancer with endobronchial polypoid growth] Takata T, et al. **Gan No Rinsho** 1989 Jun;35(7):840–4 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Role of NK cells in lung metastasis immunosurveillance] Kobayashi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1233–45 (77 ref.) (Eng. Abstr.) **(Jpn)**

[Timing of UFT administration combined with surgical operation in pulmonary metastasis of rat mammary carcinoma] Li XB, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2381–5 (Eng. Abstr.) **(Jpn)**

[Mammary gland carcinoma treated by large–dose medroxyprogesterone acetate of which pulmonary metastases disappeared and a selection of hormone, chemoimmunological treatment] Matsumoto S, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2457–9 (Eng. Abstr.) **(Jpn)**

[A case of complete resolution of multiple metastases of advanced renal cell carcinoma following partial jejunotomy in intestinal metastases and interferon therapy] Miyata M, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1783–8 (Eng. Abstr.) **(Jpn)**

[Spontaneous regression of lung metastasis of renal cell carcinoma: a case report] Yoshino S, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2167–9 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of renal cell carcinoma associated with pulmonary metastasis] Yamashita Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):759–64 (Eng. Abstr.) **(Jpn)**

[Facilitation of tumor metastasis to the lung by operative stress in the rat—influence of adrenocortical hormones and preoperative administration of OK–432] Kida H, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1692–8 (Eng. Abstr.) **(Jpn)**

[Surgical treatment and indication for metastatic lung tumor] Tatsuta M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):598–604 (Eng. Abstr.) **(Jpn)**

[Effect of OK–432 on spontaneous lung metastases from murine fibrosarcoma in the preirradiated tissue] Ito H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1261–8 (Eng. Abstr.) **(Jpn)**

[Thin–section computed tomography of intrapulmonary metastases after surgical resection of lung cancer] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):48–54 (Eng. Abstr.) **(Jpn)**

[A case of benign metastasizing leiomyoma with pulmonary metastases] Kondo K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2131–5 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of pulmonary metastases from osteogenic sarcoma–significance of aggressive resection of bilateral multiple metastases and tumors invading adjacent organs] Maeda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):344–9 (Eng. Abstr.) **(Jpn)**

[Pulmonary metastasis of carotid body tumor—a case report of remarks on its surgical removal] Morita R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2494–8 (26 ref.) (Eng. Abstr.) **(Jpn)**

[A case of spontaneous pneumothorax due to metastasis of urinary bladder carcinoma to the lung] Hamamoto Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):225–9 (Eng. Abstr.) **(Jpn)**

[Disappearance of lung metastases from hepatocellular carcinoma following PSK administration] Hara Y, et al. **Rinsho Hoshasen** 1988 Jun;33(6):731–4 (Eng. Abstr.) **(Jpn)**

[A case of spontaneous pneumothorax caused by a metastatic giant tumor] Kurihara Y, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):1011–4 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnosis of metastatic foci. Selected problems of the

management tactics and an evaluation of diagnostic possibilities of currently used radiologic methods] Pruszyński B. **Pol Przegl Radiol (Warszawa)** 1988 May-Jun; 52(3):165–9 (Eng. Abstr.) (Pol)

[Late metastases after treatment of laryngeal cancer] Szymczyk K, et al. **Wiad Lek** 1988 Aug 1;41(15):1011–3 (Eng. Abstr.) (Pol)

[Changes in the efferent impulsation in the vagus nerves during the metastasis of Lewis lung carcinoma in mice] Syromiatnikov AV, et al. **Eksp Onkol** 1989;11(3):47–50 (Eng. Abstr.) (Rus)

[Interaction of the plasma membranes of the cells of tumors metastastic to the lungs with the target organ] Zolotareva AG, et al. **Eksp Onkol** 1989;11(1):39–43 (Eng. Abstr.) (Rus)

[Long-term recurrent course of basalioma with metastasis to the lung] Ryndin VD, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):101–3 (Rus)

[Repeat surgery of intrapulmonary metastases] Biriukov IuV, et al. **Vopr Onkol** 1988;34(11):1379–84 (Eng. Abstr.) (Rus)

[The role of an immunologic mechanism in the occurrence of postoperative metastases in mice] Iunker VM, et al. **Vopr Onkol** 1988;34(12):1471–7 (Eng. Abstr.) (Rus)

[Characteristics of the growth and regression of metastases of malignant testicular tumors to the lungs during chemotherapy] Lichinitser MR, et al. **Vopr Onkol** 1989; 35(4):482–4 (Rus)

[Pneumothorax associated with pulmonary metastasis of germinal neoplasms] Menor F, et al. **Arch Esp Urol** 1988 Jul-Aug;41(6):427–30 (Eng. Abstr.) (Spa)

[Nodular pulmonary leiomyomatosis (benign metastasising leiomyoma)] Roncoroni AJ, et al. **Medicina (B Aires)** 1988; 48(2):179–85 (Eng. Abstr.) (Spa)

[Pulmonary metastases as the presenting form of a malignant hemangiopericytoma (letter)] Cabello J, et al. **Rev Clin Esp** 1988 May;182(9):504–5 (Spa)

[Surgery of pulmonary metastases. Review of 25 cases] Mañes Bonet N, et al. **Rev Clin Esp** 1988 Jul;183(3):132–5 (Eng. Abstr.) (Spa)

SECRETION

Glucagonoma syndrome and bronchial carcinoma. Hunstein W, et al. **Ann Intern Med** 1988 Dec 1;109(11):920–1

The release of bombesin-like peptides from small cell lung cancer cells. Moody TW, et al. **Ann N Y Acad Sci** 1988; 547:351–9

Ectopic ACTH and adrenal myelolipoma. Sieber SC, et al. **Conn Med** 1989 Jan;53(1):7–10 (21 ref.)

Ectopic release of GHRH and ACTH from an adenoid cystic carcinoma resulting in acromegaly and complicated by pituitary infarction. Southgate HJ, et al. **Postgrad Med J** 1988 Feb;64(748):145–8

[Malignant carcinoid tumor of the lungs secreting ectopic ACTH and secondary Cushing's syndrome in a 9-year-old boy] Kogan MB, et al. **Pediatriia** 1989;(2):89–90 (Rus)

SURGERY

Resection of pulmonary metastases from squamous carcinoma of the head and neck. Mazer TM, et al. **Am J Surg** 1988 Oct;156(4):238–42

Preoperative assessment as a predictor of mortality and morbidity after lung resection. Markos J, et al. **Am Rev Respir Dis** 1989 Apr;139(4):902–10

Systemic air embolism during laser bronchoscopy. Peachey T, et al. **Anaesthesia** 1988 Oct;43(10):872–5

Anesthetic management for oophorectomy in a patient with lymphangiomyomatosis. Smith MB, et al. **Anesthesiology** 1989 Mar;70(3):548–50

Recurrence and survival following resection of bronchioloalveolar carcinoma of the lung—The Lung Cancer Study Group experience. Grover FL, et al. **Ann Surg** 1989 Jun;209(6):779–90

Significance of extramucosal residual tumor at the bronchial resection margin. Kaiser LR, et al. **Ann Thorac Surg** 1989 Feb;47(2):265–9

Superior vena cava bypass: use of the azygos vein. Lee AW, et al. **Ann Thorac Surg** 1988 Dec;46(6):686–7

Effect of perioperative blood transfusion on outcome in patients with surgically resected lung cancer. Moores DW, et al. **Ann Thorac Surg** 1989 Mar;47(3):346–51

Prediction of postoperative respiratory failure in patients undergoing lung resection for lung cancer. Nakahara K, et al. **Ann Thorac Surg** 1988 Nov;46(5):549–52

The importance of surgery to non-small cell carcinoma of lung with mediastinal lymph node metastasis. Naruke T, et al. **Ann Thorac Surg** 1988 Dec;46(6):603–10

The "incomplete" resection [editorial] Shields TW. **Ann Thorac Surg** 1989 Apr;47(4):487–8

Carney's triad. McLaughlin SJ, et al. **Aust N Z J Surg** 1988 Aug;58(8):679–81 (10 ref.)

Current operative morbidity associated with elective surgical resection for lung cancer. Deslauriers J, et al. **Can J Surg** 1989 Sep;32(5):335–9

Does the surgical trauma of "exploratory thoracotomy" affect survival of patients with bronchogenic carcinoma? Paul A, et al. **Can J Surg** 1989 Sep;32(5):322–7

Resection of pulmonary metastases in osteosarcoma. A retrospective analysis of 44 patients. Belli L, et al. **Cancer** 1989 Jun 15;63(12):2546–50

Pleural and lung cryobiopsies during thoracoscopy. Bonniot JP, et al. **Chest** 1989 Mar;95(3):492–3

Surgical treatment of primary lung cancer and solitary intracranial metastasis. Catinella FP, et al. **Chest** 1989 May; 95(5):972–5

Minimal resection for bronchogenic carcinoma. Should this be standard therapy? Crabbe MM, et al. **Chest** 1989 May; 95(5):968–71 (20 ref.)

Extended operations for T3–T4 primary lung cancers. Indications and results. Dartevelle P, et al. **Chest** 1989 Jul; 96(1 Suppl):51S–53S

Limited resection in the treatment of stage I non-small cell lung cancer; an overview. Ginsberg RJ. **Chest** 1989 Jul;96(1 Suppl):50S–51S (11 ref.)

Echocardiography in determining nonresectability of carcinoma of the lung. A brief report. Howard ML, et al. **Chest** 1988 Dec;94(6):1306–7

Bronchoplastic and bronchovascular procedures of the tracheobronchial tree in the management of primary lung cancer. Naruke T. **Chest** 1989 Jul;96(1 Suppl):53S–56S

Pleuroperitoneal shunt for pneumonectomy cavity malignant effusion. Pope AR, et al. **Chest** 1989 Sep;96(3):686–8

Contemporary operative management of pulmonary metastases of colorectal origin. Brister SJ, et al. **Dis Colon Rectum** 1988 Oct;31(10):786–92

Therapy of small cell lung cancer: the use of surgery [letter] Müller LC, et al. **Eur J Cancer Clin Oncol** 1989 Jan; 25(1):145–6

Chemotherapy plus adjuvant surgery for local small cell lung cancer. Benfield GF, et al. **Eur J Surg Oncol** 1989 Aug; 15(4):341–4

The current state of intraoperative interstitial brachytherapy in lung cancer. Hilaris BS, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1347–54 (33 ref.)

Bronchopulmonary carcinoids: report of nine surgically treated cases. Frigo F, et al. **Ital J Surg Sci** 1988; 18(3):267–73

Survival after incomplete resection or exploratory thoracotomy in patients with advanced non small cell lung cancer. Ratto GB, et al. **Ital J Surg Sci** 1988;18(4):377–83

Multiple tumor emboli after lung resection. Schneiderman J, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):496–8

Orthotopic heart transplantation eleven years after left pneumonectomy. Goenen M, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):309–11

Endobronchial Nd:YAG laser surgery. Jung SS, et al. **J Ky Med Assoc** 1989 May;87(5):227–9

Recent trends in pulmonary resection. Koury AM, et al. **J Miss State Med Assoc** 1989 Feb;30(2):33–6

Surgical treatment of patients with small cell carcinoma of the lung: a histochemical and immunohistochemical study. Ishida T, et al. **J Surg Oncol** 1989 Mar;40(3):188–93

Lung resection for metastatic sarcomas: total survival from primary treatment. Pastorino U, et al. **J Surg Oncol** 1989 Apr;40(4):275–80

Evolving role of surgical treatment in limited-disease small cell lung carcinoma. Sridhar KS, et al. **J Surg Oncol** 1989 Mar;40(3):155–61

Effect of splenectomy upon the growth of B16-F10 melanoma and its relation to the interferon system. Stoll HL 3d, et al. **J Surg Oncol** 1989 Feb;40(2):79–84

Management of tumor adherent to the vertebral column. DeMeester TR, et al. **J Thorac Cardiovasc Surg** 1989 Mar; 97(3):373–8

Metastasectomy for soft tissue sarcoma. Further evidence for efficacy and prognostic indicators. Jablons D, et al. **J Thorac Cardiovasc Surg** 1989 May;97(5):695–705

Extended operation for lung cancer invading the aortic arch and superior vena cava [letter] McElvein RB. **J Thorac Cardiovasc Surg** 1989 May;97(5):798–9

Extended operation for lung cancer invading the aortic arch and superior vena cava. Nakahara K, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):428–33

The chest radiograph after resection of pulmonary nodules with a neodymium-YAG laser. Holbert BL, et al. **J Thorac Imaging** 1989 Apr;4(2):82–6

Limited resections for lung cancer. Wetstein L, et al. **N J Med** 1989 Mar;86(3):197–200

Surgical treatment of bronchopulmonary carcinoid tumours. Breederveld RS, et al. **Neth J Surg** 1989 Aug;41(4):82–4

Repeat mediastinoscopy. Puhakka HJ. **ORL J Otorhinolaryngol Relat Spec** 1989;51(1):62–6

Survival after surgical treatment of lung cancer. Tarkka M, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):241–6

Solitary coin lesion in patients with malignant melanoma: an indication for thoracotomy? Jüttner FM, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):232–3

Bilobectomy in a 90-year-old patient. Linder A, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):190–2

Recommendations on diagnosis, staging, and surgical therapy of lung cancer. Maassen W, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):295–306 (Eng, Ger)

Further evidence of the benefits of surgery in the combined management of small cell lung cancer [letter] Salzer GM, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):161

Surgical treatment of multiple primary lung cancers. Verhagen AF, et al. **Thorac Cardiovasc Surg** 1989 Apr; 37(2):107–11

Diathermy resection and radioactive gold grains for palliation of obstruction due to recurrence of bronchial carcinoma after external irradiation. Ledingham SJ, et al. **Thorax** 1989 Jan;44(1):48–51

Results of resection for bronchogenic carcinoma in patients over the age of 80. Shirakusa T, et al. **Thorax** 1989 Mar; 44(3):189–91

Prognosis after nonradical resections for small cell lung carcinoma (SCLC). Bedini AV, et al. **Tumori** 1989 Feb 28;75(1):31–3

Surgical resection in the treatment of stages I–II of small cell lung carcinoma (SCLC). Cataldo I, et al. **Tumori** 1989 Feb 28;75(1):28–30

Inquiry between European thoracic surgeons and chest physicians about the mandatory examinations before operating a lung cancer. Serrano S, et al. **Z Erkr Atmungsorgane** 1989;172(2):85–9

[Post-operative pleural infection of lung cancer and its influence on survival] Cai LF. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):57–9 (Eng. Abstr.) (Chi)

[Clinical analysis of 106 surgically treated cases of stage I non-small cell lung cancer] Wu HS. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):150–2 (Chi)

[Lumpectomy of the lung with an electrotome] Cui ZH, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):174–5, 192 (Eng. Abstr.) (Chi)

[Pneumonectomy in lung cancer: an analysis of 74 cases] Xu JX. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):227–9, 255 (Eng. Abstr.) (Chi)

[Pulmonary artery reconstruction and bronchoplastic procedures in the treatment of lung cancer] Zhao ZW, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):176–8, 192 (Eng. Abstr.) (Chi)

[Results of surgical treatment of pulmonary carcinoma in patients over 60 years of age] Cermák S, et al. **Rozhl Chir** 1989 Feb;68(2):94–9 (Eng. Abstr.) (Cze)

[The results of surgical treatment of lung cancer] Simek J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(3):305–16 (Eng. Abstr.) (Cze)

[A fatal complication following pneumonectomy] de Lange JJ, et al. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):32–4 (Eng. Abstr.) (Dut)

[Paraplegia caused by extradural spinal hematoma after radical pulmonary lobectomy in cancer] Batellier J, et al. **Ann Chir** 1989;43(3):210–4 (10 ref.) (Eng. Abstr.) (Fre)

[Surgical treatment of 48 primary peripheral, non-small cell lung cancers equal to or greater than 8 cm. Prognostic factors and 5 years' survival] Gamondes JP, et al. **Ann Chir** 1989;43(2):151–6 (Eng. Abstr.) (Fre)

[Second primary cancers of the bronchi treated surgically (recurrence excluded). Results of a national survey (1987)] Levasseur P, et al. **Ann Chir** 1989;43(2):130–2 (Eng. Abstr.) (Fre)

[Surgical excision in solitary lung by midline sternotomy. Apropos of an original case] Wihlm JM, et al. **Ann Chir** 1988;42(8):571–3 (11 ref.) (Eng. Abstr.) (Fre)

[Results of surgical treatment of primary bronchopulmonary cancer. Retrospective study of a series of 1319 cases] Siaojia T, et al. **Chirurgie** 1988;114(3):211–6 (12 ref.) (Eng. Abstr.) (Fre)

[Pancoast's tumor: multi-disciplinary treatment and combined cervico-thoracic approach] Merlini M, et al. **Helv Chir Acta** 1989 Jan;55(5):727–30 (Eng. Abstr.) (Fre)

[Exploratory thoracotomies for unresectable lung cancer] Witzig JA, et al. **Helv Chir Acta** 1989 Jan;55(5):723–5 (Eng. Abstr.) (Fre)

[Surgical treatment of pulmonary metastases] Depadt G. **Pathol Biol (Paris)** 1989 Feb;37(2):176–8 (Fre)

[Indications and results in the surgical treatment of bronchopulmonary cancers] Roeslin N, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:344–6 (Eng. Abstr.) (Fre)

[Operable bronchial cancer: can it be done better? (letter)] Fréour P. **Rev Mal Respir** 1988;5(4):411 (Fre)

[Prognosis of surgically treated bronchopulmonary cancer. Apropos of 42 cases] Attiaoui M, et al. **Tunis Med** 1987 Jun-Jul;65(6–7):375–8 (Eng. Abstr.) (Fre)

[Trends in surgery of bronchial cancer 1972–1984] Stulz P, et al. **Helv Chir Acta** 1988 Nov;55(4):445–8 (Eng. Abstr.) (Ger)

[Surgical therapy of bronchial cancer] Vogt-Moykopf I, et al. **Langenbecks Arch Chir** 1988;Suppl 2:109–17 (Eng. Abstr.) (Ger)

[Malignant fibrous histiocytoma of the lung] Ditzen W, et al. **Med Klin** 1989 Jun 15;84(6):314–8 (38 ref.) (Ger)

[The German Society of Pneumonology and Tuberculosis and the German Society of Thoracic and Cardiovascular Surgery. Recommendations for diagnosis, staging and surgical therapy of bronchial cancer] **Prax Klin Pneumol** 1988 Oct;42(10):735–41 (Ger)

[Survival rate following operation for bronchial cancer—relation to tumor stage and histology] Eckersberger F, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):583–4 (Eng. Abstr.) (Ger)

[Surgery of lung metastases of extrapulmonary tumors] Hasse J. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:347–51 (Eng. Abstr.) (Ger)

[Surgical treatment of bronchus carcinoids] Huwer H, et al. **Prax Klin Pneumol** 1988 Nov;42(11):787–9 (Eng. Abstr.) (Ger)

[Long-term survival following pneumonectomy, chemotherapy and radiotherapy in central small cell bronchial cancer] Lexer G, et al. **Prax Klin Pneumol** 1988 Jul;42(7):588–9 (Eng. Abstr.) (Ger)

[Bronchial carcinoma with mediastinal lymph node metastases—an indication for surgery?] Merkle NM, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:360–2 (8 ref.) (Eng. Abstr.) (Ger)

[The value of mediastinal lymphadenectomy in centrally located non-oat cell carcinoma] Weitensfelder W, et al. **Prax Klin Pneumol** 1988 Jul;42(7):590–1 (Eng. Abstr.) (Ger)

[Results of resection treatment of locally limited bronchial carcinoma (Stages I and II)] Schamaun M, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1406–11 (16 ref.) (Eng. Abstr.) (Ger)

[Surgery of bronchus carcinoma] Huber A. **Schweiz Rundsch Med Prax** 1989 Feb 14;78(7):155–8 (Eng. Abstr.) (Ger)

[Resection of pulmonary metastases: indications, surgical technic, results and prognostic factors] Eckersberger F, et al. **Wien Klin Wochenschr** 1989 Jan 20;101(2):69–75 (Eng. Abstr.) (Ger)

[Principles of prevention, early detection, treatment and after-care of malignant neoplasms of the trachea, bronchus and lung] Ebeling K, et al. **Zentralbl Chir** 1988; 113(17):1136–45 (Ger)

[Treatment of small cell bronchial carcinoma with reference to stage classification] Wolff H, et al. **Zentralbl Chir** 1988; 113(17):1081–6 (Eng. Abstr.) (Ger)

[Advantages and disadvantages of lung-sparing exeresis in bronchogenic cancer] Mucilli F, et al. **Ann Ital Chir** 1987; 59(1–6):309–16 (Eng. Abstr.) (Ita)

[Pneumonectomy and resection-anastomosis in malignant tumors of the lung. Problems of surgical radicalism and postoperative physiopathology] Catrambone G, et al. **Minerva Chir** 1988 Apr 15;43(7):593–600 (Eng. Abstr.) (Ita)

[Role of surgery in undifferentiated small cell carcinoma of the lung. Preliminary results of an international multicenter study] Crisci C, et al. **Minerva Chir** 1989 Feb 28; 44(4):589–98 (Ita)

[Computerized multivariate analysis of the evaluation of the prognosis of the cancer of the lung after excision surgery] Di Giorgio A, et al. **Minerva Chir** 1988 May 15;43(9):751–8 (Eng. Abstr.) (Ita)

[Systematic hilar and mediastinal lymphadenectomy in pulmonary exeresis in cancer cases] Pellegrini GF, et al. **Minerva Chir** 1989 Feb 15;44(3):385–6 (Ita)

[Surgical treatment of stage III lung cancer invading the thoracic wall (non Pancoast)] Ricci C, et al. **Minerva Chir** 1989 Feb 15;44(3):349–53 (Ita)

[Long-term results of radical surgical therapy of pulmonary carcinoma] Roviaro GC, et al. **Minerva Chir** 1989 Feb 15; 44(3):355–9 (Ita)

[Sleeve resection: possibilities and risks] Sartori F, et al. **Minerva Chir** 1989 Feb 15;44(3):361–4 (14 ref.) (Ita)

[The surgical therapy of stage-III pulmonary cancer. Comments on 71 cases] Briccoli A, et al. **Minerva Med** 1989 Jul;80(7):677–8 (Ita)

[Adjuvant surgery of limited-disease pulmonary microcytoma and the role of TNM classification. A review of the authors' own experience] Varoli F, et al. **Minerva Med** 1989 Jul;80(7):693–5 (Ita)

[Modified surgical methods in gastrointestinal and lung cancers] Nakagawa K, et al. **Gan No Rinsho** 1988 Aug; 34(10):1519–23 (Eng. Abstr.) (Jpn)

[Surgical treatment of small cell lung cancer] Wada H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2537–43 (Eng. Abstr.) (Jpn)

[Surgical resection of pulmonary metastasis from genitourinary cancers] Nakagawa S, et al. **Hinyokika Kiyo** 1989 Feb;35(2):225–9 (Eng. Abstr.) (Jpn)

[Application of the Nd-YAG laser for operation of multiple pulmonary metastases] Doi O, et al. **Kyobu Geka** 1988 Oct; 41(11):890–2 (Eng. Abstr.) (Jpn)

[Three cases of pulmonary resection in bronchiolo-alveolar cell carcinoma of the lung] Kaneda M, et al. **Kyobu Geka** 1988 Jul;41(8):652–5 (Eng. Abstr.) (Jpn)

[Surgery of apical lung cancer invading the chest wall—a new approach to apical thorax by dislocation of sterno-clavicular joint] Kusajima K. **Kyobu Geka** 1988 May;41(6):475–9 (Eng. Abstr.) (Jpn)

[Operative technics for invasive apical lung cancer] Masaoka A. **Kyobu Geka** 1988 May;41(6):469–74 (6 ref.) (Jpn)

[A case of bilateral multiple lung cancer resected by synchronous bilateral thoracotomy] Minami H, et al. **Kyobu Geka** 1989 Mar;42(3):195–8 (Eng. Abstr.) (Jpn)

[Surgical indication in lung cancer and evaluation of extended combined resection] Nishimura Y, et al. **Kyobu Geka** 1988 Sep;41(10):797–800 (Eng. Abstr.) (Jpn)

[Surgical treatment of metastatic lung cancer arising from the colon and rectum] Sasai T, et al. **Kyobu Geka** 1989 Jun;42(6):460–2 (Eng. Abstr.) (Jpn)

[A case of pulmonary lymphangiomyomatosis associated with renal angiomyolipoma] Suzuki T, et al. **Kyobu Geka** 1988 May;41(6):525–8 (Eng. Abstr.) (Jpn)

[Four operative cases of lung carcinoma with intra-atrial extension via the pulmonary vein] Kodama K, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):2010–8 (Eng. Abstr.) (Jpn)

[Surgical treatment in pulmonary metastases of colorectal cancer] Kondo D, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):75–81 (Eng. Abstr.) (Jpn)

[Multidisciplinary (multimodality) treatment of lung cancer—with special reference to surgical treatment] Yutaka Y. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1339–42 (10 ref.) (Eng. Abstr.) (Jpn)

[Endoscopic Nd-YAG laser therapy of tracheobronchial lesions] Eguchi S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1153–66 (Eng. Abstr.) (Jpn)

[Surgical treatment of small cell carcinoma of the lung] **Nippon Kyobu Geka Gakkai Zasshi** 1987 May;35(5):690–701 (Jpn)

[A resected case of malignant melanoma originated in the lung] Arita M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2117–21 (22 ref.) (Eng. Abstr.) (Jpn)

[The diagnostic value of computed tomography during lymphangiography on the postoperative chylothorax in lung cancer] Fujisawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):379–82 (Eng. Abstr.) (Jpn)

[Surgical treatment of lung cancer with chest wall invasion] Higashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):404–10 (Eng. Abstr.) (Jpn)

[A case of chest wall tumor developed 13 years after surgery of small cell lung cancer] Inoue K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2484–8 (Eng. Abstr.) (Jpn)

[Scalene node biopsy in resectable primary lung cancer] Koike T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):870–3 (Eng. Abstr.) (Jpn)

[Pneumonectomy of lung cancer diagnosed 21 years after irradiation of 6000 rads for hilar lymphadenopathy] Morota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2655–61 (Eng. Abstr.) (Jpn)

[A case of concomitant surgery of advanced valvular disease and lung cancer under cardiopulmonary bypass] Nakao M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):551–4 (Eng. Abstr.) (Jpn)

[Multiple primary cancers in surgically resected lung cancer patients] Nishiyama H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):56–61 (Eng. Abstr.) (Jpn)

[Pneumonectomy in lung cancer in patients over 70 years old—prediction of postpneumonectomy pulmonary function] Nonoyama A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1096–105 (Eng. Abstr.) (Jpn)

[A study on the alteration of hemodynamics in patients with pulmonary operation and the signification of unilateral pulmonary artery occlusion test—using hemodynamogram] Ohishi A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1106–15 (Eng. Abstr.) (Jpn)

[The treatment of chylothorax following pulmonary resection in lung cancer] Sasai T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1044–8 (Eng. Abstr.) (Jpn)

[Median sternotomy in resection of bilateral multiple metastatic lung tumors] Tatsuta M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2255–62 (Eng. Abstr.) (Jpn)

[The follow-up study of the patients with infiltrated lung cancer to the bronchial stump after pulmonary resection] Terada Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2263–6 (Eng. Abstr.) (Jpn)

[Combined resection of the aorta for lung cancer invading the descending aorta] Tokuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):947–54 (Eng. Abstr.) (Jpn)

[The discussion of the need of mediastinal lymph node dissection in the surgical treatment of lung cancer] Yasumitsu T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):664–70 (Eng. Abstr.) (Jpn)

[A case of pseudolymphoma of the lung with cough and fever] Kimura S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):92–7 (Eng. Abstr.) (Jpn)

[A surgical case of lung cancer associated with giant bulla] Koike R, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):766–9 (Eng. Abstr.) (Jpn)

[A case report of multiple pulmonary leiomyofibroadenomatous hamartomas] Sawada K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1033–8 (8 ref.) (Eng. Abstr.) (Jpn)

[A case of so-called "sugar tumor" of the lung] Marciniak M, et al. **Pneumonol Pol** 1988 Dec;56(12):569–71 (Eng. Abstr.) (Pol)

[Surgical treatment of tracheobronchopulmonary cancer] Coman C, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr-Jun; 37(2):131–6 (Eng. Abstr.) (Rum)

[Effect of surgical treatment on the natural killer activity in lung cancer patients] Ancheva m, et al. **Eksp Onkol** 1989; 11(2):39–41 (Eng. Abstr.) (Rus)

[Recurrence of multiple hamartomas of the lung] Dzhugostran VIa, et al. **Grudn Khir** 1988 Nov-Dec;(6):90–1 (Rus)

[Extensive operations in stage I and II lung cancer] Samkharadze ShP. **Grudn Khir** 1988 May-Jun;(3):42–5 (Eng. Abstr.) (Rus)

[Bronchioloalveolar cancer] Trakhtenberg AKh, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):50–5 (Eng. Abstr.) (Rus)

[The effect of combination cryosurgical treatment on the natural resistance of patients with cancer of the lung] Kindzel'skiĭ LP, et al. **Klin Khir** 1989;(5):15–6 (Eng. Abstr.) (Rus)

[Lung cancer in patients under 40 years of age] Kharchenko VP, et al. **Sov Med** 1989;(5):89–92 (Rus)

[Surgical treatment of stage I adenocarcinoma of the lung (T1N0M0)] Pirogov AI, et al. **Sov Med** 1988;(11):73–5 (Rus)

[Results of cooperative studies on the combined treatment of cancer of the lungs including postoperative polychemotherapy] Trakhtenberg AKh, et al. **Sov Med** 1989;(1):92–5 (Rus)

[Simultaneous nephrectomy and lobectomy of the lung in cancer of the kidney] Orlov VA, et al. **Urol Nefrol (Mosk)** 1988 May-Jun;(3):63–4 (Rus)

[Use of taktivin in postoperative intensive therapy in oncology] Gadalov VP, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):68–73 (Eng. Abstr.) (Rus)

[Results of various methods of combined treatment of patients with squamous cell carcinoma of the lung] Goldobenko GV, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):12–5 (Eng. Abstr.) (Rus)

[Preoperative radiation therapy in the treatment of lung cancer] Medvedev VN, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):15–9 (Eng. Abstr.) (Rus)

[Disability of patients with lung cancer after surgical treatment] Artemkina NI, et al. **Vestn Khir** 1989 Jan; 142(1):38–41 (Eng. Abstr.) (Rus)

[Mediastinal lymphadenectomy in diffuse forms of lung cancer] Kotliarov EV, et al. **Vestn Khir** 1988 Aug; 141(8):18–21 (Eng. Abstr.) (Rus)

[Comparative characteristics of reactions of central hemodynamics to the exfusion of blood and plasma in surgical diseases] Singaevskiĭ SB, et al. **Vestn Khir** 1988 Dec;141(12):71–3 (Eng. Abstr.) (Rus)

[Conservative surgery in extensive forms of lung cancer] Kotliarov EV, et al. **Vopr Onkol** 1989;35(7):860–3 (Eng. Abstr.) (Rus)

[Evaluation of diagnosis and treatment of various clinico-anatomical forms of lung cancer] Vagner RI, et al. **Vopr Onkol** 1989;35(7):805–9 (Eng. Abstr.) (Rus)

[Endobronchial hamartoma. Report of 3 new cases (letter)] Marco Jordán L, et al. **Rev Clin Esp** 1989 Jan;184(1):47 (Spa)

THERAPY

Antitumor effect of natural human tumor necrosis factor-beta against Lewis lung carcinoma in mice and its synergistic potentiation by interferon. Nishiyama Y, et al. **Acta Med Okayama** 1989 Feb;43(1):17–27

Toxicity, physical function and everyday activity reported by patients with inoperable non-small cell lung cancer in a randomized trial (chemotherapy versus radiotherapy). Kaasa S, et al. **Acta Oncol** 1988;27(4):343–9

An unusual case of renal cancer showing mixed tumor response to interferon. Abdi EA, et al. **Am J Med** 1987 Dec;83(6):1147–50

Clinical use of a monoclonal antibody to bombesin-like peptide in patients with lung cancer. Mulshine JL, et al. **Ann N Y Acad Sci** 1988;547:360–72

Preoperative chemotherapy and irradiation for stage III non-small cell lung cancer. Faber LP, et al. **Ann Thorac Surg** 1989 May;47(5):669–75; discussion 676–7

Treatment modalities in lung cancer. Workshop on Combined Radiotherapy and Chemotherapy Modalities in Lung Cancer. Le Havre, June 9–13, 1987. Proceedings. **Antibiot Chemother** 1988;41:1–248

Combined modalities in the treatment of small cell carcinoma of the lung. A review of current standings. Aisner J. **Antibiot Chemother** 1988;41:142–9 (37 ref.)

Review of unconventional combinations of radiotherapy and chemotherapy in lung cancer. Arriagada R. **Antibiot Chemother** 1988;41:150–4 (22 ref.)

Consensus report on combined radiotherapy and chemotherapy modalities in lung cancer. Arriagada R, et al. **Antibiot Chemother** 1988;41:232–41 (17 ref.)

Use of the triangular test in the analysis of randomized clinical trials when the response criterion is censored: application to two trials in lung cancer. Bénichou J, et al. **Antibiot Chemother** 1988;41:83–91

Review of sequential radio-chemotherapy schedules in the treatment of lung cancer. Bleehen NM. **Antibiot Chemother** 1988;41:115–25 (45 ref.)

Reassessment of loco-regional failure rate in relation with radiation dose in combined modality approach of multidrug chemotherapy and radiotherapy for limited-stage small-cell lung carcinoma. Choi NC, et al. **Antibiot Chemother** 1988;41:70–6

Role of small doses of radiotherapy combined with chemotherapy in non-small cell lung cancer. Dionet C, et al. **Antibiot Chemother** 1988;41:163–7

Sequential wide field irradiation and systemic chemotherapy as part of the induction treatment of small cell lung cancer. Hurman DC, et al. **Antibiot Chemother** 1988;41:168–75

How should we report results of clinical trials of combined chemotherapy and chest irradiation in limited stage small cell lung cancer? Ihde DC. **Antibiot Chemother** 1988;

41:65–9 (7 ref.)
Review of concurrent chemotherapy/radiotherapy combinations in small cell lung cancer. Ihde DC, et al. **Antibiot Chemother** 1988;41:92–5 (7 ref.)
The National Cancer Institute experience with early and late effects of combined modality therapy in small cell lung cancer. Johnson BE, et al. **Antibiot Chemother** 1988; 41:210–2
Concurrent chemo–radiotherapy in small cell lung cancer. Lange OF. **Antibiot Chemother** 1988;41:102–8
Review of toxicity and long–term sequelae in lung cancer. Le Chevalier T. **Antibiot Chemother** 1988;41:199–203 (25 ref.)
Experience of the Institut Gustave–Roussy in alternating radiotherapy and chemotherapy schedules as induction treatment in limited small–cell lung cancer. Le Chevalier T, et al. **Antibiot Chemother** 1988;41:190–3
The relationship of experimental, theoretical and clinical studies of alternating chemotherapy and radiotherapy in the management of lung cancer. Looney WB, et al. **Antibiot Chemother** 1988;41:35–47 (24 ref.)
The integration of multifractionated radiotherapy into combined chemotherapeutic–radiotherapeutic approaches to lung cancer treatment. Looney WB, et al. **Antibiot Chemother** 1988;41:176–83 (14 ref.)
Concurrent radiotherapy and chemotherapy in lung cancer at the Princess Margaret Hospital. Payne DG, et al. **Antibiot Chemother** 1988;41:96–101
Preliminary results of combination chemotherapy and sequential accelerated fractionation radiation therapy in limited–stage small cell carcinoma of the lung. Evaluation of measures for reduction of toxicity and effect on complete response rate. Scher H, et al. **Antibiot Chemother** 1988; 41:184–9
Intensive chemotherapy and thoracic irradiation as induction treatment in limited–stage small–cell lung cancer. Souhami RL, et al. **Antibiot Chemother** 1988;41:155–62
Concurrent twice–daily radiotherapy plus platinum–etoposide chemotherapy for the treatment of limited small cell lung cancer: a preliminary report. Turrisi AT, et al. **Antibiot Chemother** 1988;41:109–14
Intrapleural BCG in postsurgical stage I non–small cell lung cancer. Macchiarini P, et al. **Anticancer Res** 1989 Mar–Apr; 9(2):391–3
The solitary pulmonary nodule. Geddes DM, et al. **BMJ** 1989 Jan 14;298(6666):67–8
High–dose etoposide and autologous bone marrow transplantation as intensification treatment in small cell lung cancer: a pilot study. Marangolo M, et al. **Bone Marrow Transplant** 1989 Jul;4(4):405–8
Recent advances in the treatment of small cell lung cancer. Hosker HS, et al. **Br J Hosp Med** 1989 Aug;42(2):129–32 (24 ref.)
Limited small cell lung cancer: possible prognostic impact of initial chemotherapy doses. Arriagada R, et al. **Bull Cancer (Paris)** 1989;76(6):604–15
Referral of lung cancer patients to university hospital cancer centers. A population–based study in two rural states. Greenberg ER, et al. **Cancer** 1988 Oct 15;62(8):1647–52
Specific active lung cancer immunotherapy. Immune correlates of clinical responses and an update of immunotherapy trials evaluations. Hollinshead A, et al. **Cancer** 1988 Oct 15;62(8):1662–71
Development of postoperative intrathoracic chemo–thermotherapy for lung cancer with objective of improving local cure. Kodama K, et al. **Cancer** 1989 Oct 1;64(7):1422–8
High–dose, multiple–alkylator chemotherapy with autologous bone marrow reinfusion in patients with advanced non–small cell lung cancer. Williams SF, et al. **Cancer** 1989 Jan 15;63(2):238–42
Ifosfamide, mitomycin and radiotherapy in non–small–cell lung cancer. Chetiyawardana SD, et al. **Cancer Chemother Pharmacol** 1989;24(2):102–4
Cyclophosphamide, vincristine, cisplatin, VP–16 and radiation therapy in extensive small–cell lung cancer. A Southwest Oncology Group Study. Collins C, et al. **Cancer Chemother Pharmacol** 1989;24(2):128–32
Amelioration of experimental lung metastasis in mice by therapy with anti–CD3 monoclonal antibodies. Hoskin DW, et al. **Cancer Immunol Immunother** 1989;29(3):226–30
In vivo antitumor activity demonstrated with squamous carcinoma reactive monoclonal antibody–Vinca immunoconjugates. Johnson DA, et al. **Cancer Immunol Immunother** 1988;27(3):241–5
Synergistic induction of lymphokine (IL–2)–activated killer activity by IL–2 and the polysaccharide lentinan, and therapy of spontaneous pulmonary metastases. Yamasaki K, et al. **Cancer Immunol Immunother** 1989;29(2):87–92
Induction of lymphokine–activated killer cytotoxicity with interleukin–2 and tumor necrosis factor–alpha against primary lung cancer targets. Yang SC, et al. **Cancer Immunol Immunother** 1989;29(3):193–8
Treatment toxicities in long–term survivors of limited small cell lung cancer. Frytak S, et al. **Cancer Invest** 1988; 6(6):669–76
Peaks, valleys, and plateaus in small cell lung cancer [editorial] Kris MG. **Cancer Invest** 1988;6(6):743–4
Multimodality treatment for small–cell bronchial carcinomas. Eržen J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):700–1 (3 ref.)
Multimodality treatment of small–cell bronchial carcinomas: problems of evaluation and staging. The Cooperative ISC Lung Cancer Study Group. Karrer K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):698–700 (3 ref.)
Combined immunotherapy and chemotherapy with tuftsin plus cyclophosphamide in the treatment of non–small–cell carcinoma of the lung. Warner E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):706–8
Report of the IASLC Le Havre Workshop. Arriagada R, et al. **Chest** 1989 Jul;96(1 Suppl):82S–83S
Hyperthermia in the management of lung cancer. The current situation. Bleehen NM. **Chest** 1989 Jul;96(1 Suppl):69S–71S (29 ref.)
Adjuvant therapy for non–small cell lung cancer. Evans WK. **Chest** 1989 Jul;96(1 Suppl):87S–91S (29 ref.)
Treatment of N2 non–small cell lung cancer (NSCLC). Klastersky J, et al. **Chest** 1989 Jul;96(1 Suppl):83S–85S (0 ref.)
Report on the IASLC Le Havre Workshop on combined modality treatment in small cell lung cancer. Le Chevalier T, et al. **Chest** 1989 Jul;96(1 Suppl):73S–74S
Autocrine growth factors as therapeutic targets in lung cancer. Mulshine JL, et al. **Chest** 1989 Jul;96(1 Suppl):31S–34S (26 ref.)
Combined modality treatment of small cell lung cancer. Salazar OM. **Chest** 1989 Jul;96(1 Suppl):74S–78S (26 ref.)
In vitro chemical eradication of small cell lung cancer: application in autologous bone marrow transplantation. Benard J, et al. **Eur J Cancer Clin Oncol** 1988 Oct; 24(10):1561–6
A randomized clinical trial comparing systemic radiotherapy versus chemotherapy versus local radiotherapy in small cell lung cancer. Hüttner J, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):933–7
Post–operative intrapleural BCG in lung cancer. Law MR, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1527–8
Anticachectin/tumor necrosis factor–alpha antibodies attenuate development of cachexia in tumor models. Sherry BA, et al. **FASEB J** 1989 Jun;3(8):1956–62
Surgery for cure followed by combined modality treatment for small cell bronchial carcinoma. ISC Lung Cancer Study Group. Karrer K, et al. **Int J Clin Pharmacol Res** 1988; 8(6):415–21
In vivo diagnosis and therapy of human tumors with monoclonal antibodies: selection of antibodies and preliminary clinical studies in small cell carcinoma of the lung. Mulshine JL, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):159–62 (19 ref.)
Interaction between the microtubule inhibitor tubulozole and gamma–irradiation in murine tumors in vivo. Distelmans W, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):177–82
Therapy of advanced solid tumors in mice using chemotherapy in combination with interleukin–2 with and without lymphokine–activated killer cells. Kedar E, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):494–504
Adenocarcinoma of lung and sigmoid colon. Phillips JR, et al. **J Arkansas Med Soc** 1988 Jul;85(2):105–6
Tumor response to interferon inducer and radiation effect of serum interferon levels. Lvovsky EA, et al. **J Biol Regul Homeost Agents** 1988 Jan–Mar;2(1):1–6
Effect of murine alpha–, beta–, and gamma–interferons in combination with alpha–difluoromethylornithine, an inhibitor of polyamine biosynthesis, on the tumor growth and metastasis of B16 melanoma and Lewis lung carcinoma in mice. Sunkara PS, et al. **J Biol Response Mod** 1989 Apr; 8(2):170–9
Complete remission of paraneoplastic sensorimotor neuropathy: a case associated with small–cell lung cancer responsive to chemotherapy, plasma exchange, and radiotherapy. Weissman DE, et al. **J Clin Apheresis** 1989; 5(1):3–6
Pharmacokinetics and toxicity of inhaled human interferon–alpha in patients with lung cancer. Kinnula V, et al. **J Interferon Res** 1989 Aug;9(4):419–23
Inhibition of growth of human lung adenocarcinoma cell lines by anti–transforming growth factor–alpha monoclonal antibody. Imanishi K, et al. **J Natl Cancer Inst** 1989 Feb 1;81(3):220–3
Treatment of Askin Rosai tumor—need for a more aggressive approach. Parikh PM, et al. **J Surg Oncol** 1988 Oct; 39(2):126–8
Neoadjuvant chemotherapy in marginally resectable stage III M0 non–small cell lung cancer: long–term follow–up in 41 patients. Skarin A, et al. **J Surg Oncol** 1989 Apr; 40(4):266–74
Primary choriocarcinoma of the lung: report of a case treated with intensive multimodality therapy and review of the literature. Sridhar KS, et al. **J Surg Oncol** 1989 Jun; 41(2):93–7 (40 ref.)
Surgical adjuvant therapy of non–small–cell lung cancer. Holmes EC. **J Surg Oncol Suppl** 1989;1:26–33 (21 ref.)
The importance of surgical and multimodality treatment for small cell bronchial carcinoma. Karrer K, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):168–76
A prospective study of adjuvant surgical resection after chemotherapy for limited small cell lung cancer. A University of Toronto Lung Oncology Group study. Shepherd FA, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):177–86
Enhancement of therapeutic effect of interleukin–2 on spontaneous pulmonary metastases of Lewis lung carcinoma by killer helper factor associated with increased induction of killer activity. Fukuta K, et al. **Jpn J Cancer Res** 1989 Jun;80(6):562–7
Inhibition of colony formation of drug–resistant human tumor cell lines by combinations of interleukin–2–activated killer cells and antitumor drugs. Ohtsu A, et al. **Jpn J Cancer Res** 1989 Mar;80(3):265–70
Tumour–infiltrating lymphocytes and interleukin–2 in treatment of advanced cancer. Kradin RL, et al. **Lancet** 1989 Mar 18;1(8638):577–80
Treatment of haemangioendotheliomas with alpha interferon [letter] Orchard PJ, et al. **Lancet** 1989 Sep 2;2(8662):565–7
Changing concepts in the management of patients with lung cancer [letter] Ball D, et al. **Med J Aust** 1988 Nov 21; 149(10):566–7
Changing concepts in the management of patients with lung cancer [letter] Mackintosh JF. **Med J Aust** 1989 Feb 20; 150(4):226–7
Quality of life and care in leukemia, myeloma and non–malignant disease. Opinions of patients and relatives, and effects of geography and time. Osby E, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):133–41
Small cell lung cancer: the Wilford Hall experience. Baisden CE, et al. **Milit Med** 1988 Aug;153(8):406–8
Treatment of pulmonary hemangiomatosis with recombinant interferon alfa–2a. White CW, et al. **N Engl J Med** 1989 May 4;320(18):1197–200
Five–year results of combined chemotherapy and mediastinal radiation therapy in small cell lung cancer. Bonfill X, et al. **Oncology** 1989;46(2):91–5
Limited small cell lung cancer treated by combined radiotherapy and chemotherapy: evaluation of a grading system of lung fibrosis. Arriagada R, et al. **Radiother Oncol** 1989 Jan;14(1):1–8
A randomized study evaluating radiotherapy versus chemotherapy in patients with inoperable non–small cell lung cancer [letter] Bull CA, et al. **Radiother Oncol** 1988 Aug;12(4):339, 341–2
Radiotherapy and synergism drugs in the treatment of inoperable non–oatcell lung carcinoma. Leoni M, et al. **Rays** 1987 Sep–Dec;12(3):101–6
Combined radiation therapy and daily low–dose cisplatin for inoperable, locally advanced non–small cell lung cancer: results of a phase II trial. Boven E, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):18–9
Chemotherapy/radiation therapy plus/minus lonidamine in the treatment of non–small cell lung cancer (limited disease): preliminary results. Gallo–Curcio C, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):26–31
A randomized clinical trial comparing radiation therapy v radiation therapy plus cis–dichlorodiammine platinum (II) in the treatment of locally advanced non–small cell lung cancer. Soresi E, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):20–5
Management of endobronchial tumors: a comparative study. McCaughan JS Jr, et al. **Semin Surg Oncol** 1989;5(1):38–47
Indomethacin–enhanced immunotherapy of pulmonary metastases using IL–2 and IFN–alpha. Kim B, et al. **Surgery** 1989 Aug;106(2):248–55; discussion 255–6
Diagnosis and first–line treatment of patients with lung cancer in Italian general hospitals. G.I.V.I.O. (Interdisciplinary Group for Cancer Evaluation). **Tumori** 1989 Apr 30;75(2):163–7
Studies on a biological response modifying LYSAT from Propionibacterium avidum KP 40. Pulverer G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):237–45
[Combined modality treatment of small cell lung cancer by chemotherapy, radiotherapy, immunotherapy and Chinese traditional medicine] Cha RJ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):41–4, 63 (Eng. Abstr.) (Chi)
[Effect of combined transfer of irradiated allo–lymphocytes and LAK cells on pulmonary metastasis of mammary carcinoma (SST–2) in SHR rats] Li SZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):85–8 (Eng. Abstr.) (Chi)
[Small cell carcinoma of the lung: radiotherapy of the residual tumor after 8 weeks of chemotherapy] Bennedbaek O, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):755–7 (Eng. Abstr.) (Dan)
[Modifications in the treatment of lung cancer] Mattson K, et al. **Duodecim** 1988;104(6):414–20 (16 ref.) (Fin)
[Therapeutic advances in small cell bronchial cancers] Arriagada R, et al. **Presse Med** 1988 Oct 22;17(36):1851–6 (35 ref.) (Eng. Abstr.) (Fre)
[Where are we with the treatment of bronchial cancer? (letter)] Ribet M. **Rev Mal Respir** 1989;6(1):89–90 (Fre)
[Joint position paper of the directors of the Pneumonophthisiological Society of Czechoslovakia and the Society for Pulmonology and Tuberculosis of the German Democratic Republic on the problems of ambulatory pulmonology in the care of patients with bronchial carcinoma] **Z Erkr Atmungsorgane** 1989; 172(2):169–71 (Ger)
[Laser treatment of cancer] Hayata Y, et al. **Gan No Rinsho** 1989 Jan;Spec No:42–8 (Jpn)
[The clinical picture of terminally ill patients with lung cancer] Homma T, et al. **Gan No Rinsho** 1989 Jul; 35(8):891–4 (Eng. Abstr.) (Jpn)
[Treatment of lung cancer] Tomita M. **Gan No Rinsho** 1989 Jan;Spec No:128–37 (Jpn)
[Combined treatment of endoscopic laser irradiation and

radiotherapy in lung cancer] Ono R, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1418-24 (Eng. Abstr.) (Jpn)

[Endocrine therapy of lung cancer] Sagara N, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):859-61 (Jpn)

[The use of direct current in the local destruction of cancer tissues] Yokoyama M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1412-7 (Eng. Abstr.) (Jpn)

[A case of renal cell carcinoma with lung metastases successfully treated by interferon-beta] Komeda H, et al. **Hinyokika Kiyo** 1989 Apr;35(4):637-41 (Eng. Abstr.) (Jpn)

[Treatment of small cell carcinoma of the lung] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):954-61 (Jpn)

[Simultaneously combined treatment by carotid artery infusion, whole brain irradiation, intrathecal infusion and intravenous systemic chemotherapy of patients with brain metastasis and relapse of pulmonary small cell carcinoma] Kobayashi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2696-702 (Eng. Abstr.) (Jpn)

[A case of advanced renal cell carcinoma achieved complete response by a sequential combination therapy with gamma interferon and OK-432 (streptococcal preparation)] Nakamura S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1103-7 (Eng. Abstr.) (Jpn)

[Evaluation of usefulness of tumor markers in the management of lung cancer] Ariyoshi Y. **Rinsho Byori** 1989 Feb;37(2):113-7 (Jpn)

[High dose melphalan and autologous bone marrow transplantation in the treatment of small cell carcinoma of the lung] Wist E, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2271-4 (Eng. Abstr.) (Nor)

[The combined use of cryosurgery and solcoseryl in treating malignant neoplasms] Mosienko VS, et al. **Eksp Onkol** 1989; 11(2):69-71 (Eng. Abstr.) (Rus)

[Effect of splenic cells sensitized with staphylococcal enterotoxin A on the metastasis of Lewis lung carcinoma in mice] Shcheglovitova ON, et al. **Eksp Onkol** 1989; 11(2):54-7 (Eng. Abstr.) (Rus)

[Effects of low-frequency ultrasound on tumors cells in experimental animals] Biriukov IuV, et al. **Gruda Khir** 1989 May-Jun;(3):64-9 (Eng. Abstr.) (Rus)

[Effect of preoperative radiation therapy on the immediate results of bronchoplastic operations in lung cancer] Zharkov VV, et al. **Gruda Khir** 1988 Sep-Oct;(5):58-61 (Eng. Abstr.) (Rus)

[Lobectomy with wedge resection of the bronchus in surgical and combination treatment of cancer of the lung] Kharchenko VP, et al. **Khirurgiia (Mosk)** 1988 Nov; (11):46-50 (Eng. Abstr.) (Rus)

[Late results of the combined treatment of lung cancer with preoperative radiation therapy] Trakhtenberg AKh, et al. **Sov Med** 1988;(12):12-5 (Eng. Abstr.) (Rus)

[The therapeutic procedure at the 1st stage of the combined therapy of patients with small-cell ling cancer] Bolko AV, et al. **Vopr Onkol** 1989;35(2):167-72 (Eng. Abstr.) (Rus)

[The results of the conservative treatment of patients with small-cell lung cancer] Bychko MB, et al. **Vopr Onkol** 1989; 35(2):180-4 (Eng. Abstr.) (Rus)

[The role of ascorbic acid in the combined preoperative preparation of cancer patients] Gorozhanskaia EG, et al. **Vopr Onkol** 1989;35(4):436-41 (Eng. Abstr.) (Rus)

[Late results of the combined treatment of small-cell lung cancer] Perel'man MI, et al. **Vopr Onkol** 1989;35(2):184-6 (Eng. Abstr.) (Rus)

[Small-cell lung cancer] Perevodchikova NI. **Vopr Onkol** 1989;35(2):151-4 (Rus)

[High-energy YAG laser as an aid for patients threatened with suffocation] Lindgren S. **Lakartidningen** 1988 Nov 2; 85(44):3658-9, 3662 (Swe)

ULTRASTRUCTURE

Application of Grimelius argyrophil staining to the study of tumour ultrastructure. II. Effects of resin embedding: Epon. Soranzo L, et al. **Acta Histochem (Jena)** 1988; 84(2):127-39

So-called sclerosing hemangioma of the lung with nuclear inclusion bodies. Immunohistochemical study of a case. Aiba M, et al. **Acta Pathol Jpn** 1988 Jul;38(7):873-81

Immunohistochemical detection of steroid receptors in a case of pulmonary lymphangioleiomyomatosis. Colley MH, et al. **Am J Surg Pathol** 1989 Sep;13(9):803-7

Electron microscopic observations in in situ and microinvasive bronchogenic squamous cell carcinoma. Imai T, et al. **J Pathol** 1988 Nov;156(3):241-9

Freeze-fracture study of the intercellular junctions in bronchiolo-alveolar carcinoma (Clara cell type). Swift JG, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):239-47

The spectrum and significance of bronchioloalveolar carcinomas. Clayton F. **Pathol Annu** 1988;23 Pt 2:361-94 (89 ref.)

An electron microscopic study of hemopoietic tissues in the course of Lewis lung carcinoma. Hardy C, et al. **Scanning Microsc** 1988 Sep;2(3):1587-91

Case for the panel. Intranuclear paracrystalline structures. Murray AB, et al. **Ultrastruct Pathol** 1989 Jul-Aug; 13(4):457-63

[Ultrastructural and immunohistochemical study of primary small cell carcinoma of the lung] Liu HR. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):285-8, 319 (Eng. Abstr.) (Chi)

[Use of SEM-EDX-WDX analysis in studying the etiology of lung cancer in tin miners of Yunnan] Sun SQ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):254-6, 18 (Eng. Abstr.) (Chi)

[The multipotentiality in differentiation and heterogeneity of lung carcinoma cells: analysis of 62 cases of primary lung carcinoma] Ma Y. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):176-8 (Eng. Abstr.) (Chi)

[Ultrastructural evaluation of pulmonary adenocarcinoma. I. Cytologically homogeneous phenotypes] Miřejovský P. **Cesk Patol** 1989 Mar;25(1):1-8 (Eng. Abstr.) (Cze)

[Ultrastructural evaluation of pulmonary adenocarcinoma. II. Phenotype heterogeneity and classification] Miřejovský P. **Cesk Patol** 1989 Mar;25(1):9-15 (Eng. Abstr.) (Cze)

[Differentiation of the extracellular matrix in histologically distinct differentiated lung tumors] Fisseler-Eckhoff A, et al. **Verh Dtsch Ges Pathol** 1988;72:272-7 (Eng. Abstr.) (Ger)

URINE

Hypouricemia and urate excretion in small cell lung carcinoma patients with syndrome of inappropriate antidiuresis. Sørensen JB, et al. **Acta Oncol** 1988;27(4):351-5

[Urinary polyamines measured by HPLC in lung cancer] Zen XL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):22-4, 62-3 (Eng. Abstr.) (Chi)

VETERINARY

Parosteal osteosarcoma of the mandible in a dog. Brogdon JD, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1079-81

Use of cisplatin for control of metastatic malignant mesenchymoma and hypertrophic osteopathy in a dog. Hahn KA, et al. **J Am Vet Med Assoc** 1989 Aug 1; 195(3):351-3

Classification of primary lung tumors in dogs: 210 cases (1975-1985). Ogilvie GK, et al. **J Am Vet Med Assoc** 1989 Jul 1;195(1):106-8

Prognostic factors for tumor remission and survival in dogs after surgery for primary lung tumor: 76 cases (1975-1985). Ogilvie GK, et al. **J Am Vet Med Assoc** 1989 Jul 1; 195(1):109-12

Pleural effusion resulting from malignant hepatoblastoma in a horse. Prater PE, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):383-5

Primary malignant pulmonary neoplasia in two horses. Schultze AE, et al. **J Am Vet Med Assoc** 1988 Aug 15; 193(4):477-80

Multiplicity of spontaneous lung tumors in CD-1 mice. Maita K, et al. **J Toxicol Sci** 1989 May;14(2):87-90

Retrovirus-associated ovine pulmonary carcinoma (sheep pulmonary adenomatosis) and lymphoid interstitial pneumonia. I. Lesion development and age susceptibility. Rosadio RH, et al. **Vet Pathol** 1988 Nov;25(6):475-83

LUNG PURPURA WITH NEPHRITIS see GOODPASTURE'S SYNDROME

LUNG VOLUME MEASUREMENTS

Role of lung volume in lung injury: HFO in the atelectasis-prone lung. Froese AB. **Acta Anaesthesiol Scand Suppl** 1989;90:126-30 (25 ref.)

Gas flow distribution and tidal volume during distal high frequency jet ventilation in dogs. Tamsma TJ, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:75-8

Hypnotic and nonhypnotic control of ventilation. Anderson EL Jr, et al. **Am J Clin Hypn** 1988 Oct;31(2):118-28

Railroad workers with pleural plaques: I. Spirometric and nitrogen washout investigation on smoking and nonsmoking asbestos-exposed workers. Hjortsberg U, et al. **Am J Ind Med** 1988;14(6):635-41

Railroad workers with pleural plaques: II. Small airway dysfunction among asbestos-exposed workers. Hjortsberg U, et al. **Am J Ind Med** 1988;14(6):643-7

Asbestos-related pleural plaques and lung function. Oliver LC, et al. **Am J Ind Med** 1988;14(6):649-56

Respiratory symptoms and ventilatory capacity in soy bean workers. Zuskin E, et al. **Am J Ind Med** 1988;14(2):157-65

Pressure-volume curves in smokers. Comparison with alpha-1-antitrypsin deficiency. Eidelman DH, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1452-8

Voluntary versus reflex regulation of maximal exercise flow: volume loops. Klas JV, et al. **Am Rev Respir Dis** 1989 Jan;139(1):150-6

Transtracheal oxygen decreases inspired minute ventilation [letter] Williams MH Jr. **Am Rev Respir Dis** 1989 Aug; 140(2):562

The lung volume at which shunting occurs with inhalation anesthesia. Dueck R, et al. **Anesthesiology** 1988 Dec; 69(6):854-61

Residual volume as a tool in body fat prediction. Forsyth R, et al. **Ann Nutr Metab** 1988;32(2):62-7

Influence of acute isocapnic hypoxia on bronchial calibre and "expiratory reserve" volume in dogs. Watney GC, et al. **Br J Anaesth** 1988 Oct;61(4):407-12

A method for measuring tidal volume during high frequency jet ventilation. Young JD, et al. **Br J Anaesth** 1988 Nov; 61(5):601-5

End-tidal carbon dioxide (CO_2) monitoring in small animals. Smith KJ, et al. **Brain Res Bull** 1989 Mar;22(3):579-82

The relationship between lung volume and standard scalar ECG parameters in normal subjects. Parker JD, et al. **Chest** 1989 Mar;95(3):530-4

PEEP, auto-PEEP, and waterfalls. Tobin MJ, et al. **Chest** 1989 Sep;96(3):449-51

Measurement of lung volumes. Ries AL. **Clin Chest Med** 1989 Jun;10(2):177-86 (49 ref.)

Single and multiple breath nitrogen wash-out--closing volume and volume of trapped gas for detection of early airway obstruction. Dahlqvist M, et al. **Clin Physiol** 1989 Aug;9(4):389-98

Pulmonary vascular resistance rises with lung volume on exercise in obstructed airflow disease. Schrijen FV, et al. **Clin Physiol** 1989 Apr;9(2):143-50

Acid fog: effects on respiratory function and symptoms in healthy and asthmatic volunteers. Hackney JD, et al. **Environ Health Perspect** 1989 Feb;79:159-62

Effects of inhalation of acidic compounds on pulmonary function in allergic adolescent subjects. Koenig JQ, et al. **Environ Health Perspect** 1989 Feb;79:173-8

Acute lung function responses to ambient acid aerosol exposures in children. Raizenne ME, et al. **Environ Health Perspect** 1989 Feb;79:179-85

Effects of occupational exposure and smoking on respiratory symptomatology and PFT in healthy panelists and COPD patients. Goren AI, et al. **Eur J Epidemiol** 1989 Mar; 5(1):58-64

Do lung volumes change with sleep state in the neonate? Stokes GM, et al. **Eur J Pediatr** 1989 Jan;148(4):360-4

Relationships between essential fatty acid levels, pulmonary function and fat absorption in pre-adolescent cystic fibrosis children with good clinical scores. Thompson GN. **Eur J Pediatr** 1989 Jan;148(4):327-9

Inhalation rate of sodium cromoglycate determines plasma pharmacokinetics and protection against AMP-induced bronchoconstriction in asthma. Richards R, et al. **Eur Respir J** 1988 Dec;1(10):896-901

The single breath nitrogen washout test. Sixt R. **Eur Respir J [Suppl]** 1989 Mar;2(4):167S-170S

Exercise end-expiratory lung volumes in lean and moderately obese women. Babb TG, et al. **Int J Obes** 1989 Feb; 13(1):11-9

Single breath N2 washout in papain-induced pulmonary emphysema. Hachenberg T, et al. **Intensive Care Med** 1989; 15(5):308-13

Partitioning of pulmonary resistance in dogs: effect of tidal volume and frequency. Brusasco V, et al. **J Appl Physiol** 1989 Mar;66(3):1190-6

Effect of tidal volume and frequency on the temporal fall in lung compliance. Huang YC, et al. **J Appl Physiol** 1988 Nov;65(5):2040-5

Thoracic gas volume in rabbits by low-frequency ambient pressure changes. Lyttle BD, et al. **J Appl Physiol** 1988 Sep;65(3):1444-8

Relationship between maximal expiratory flows and lung volumes in growing humans. Martin TR, et al. **J Appl Physiol** 1988 Aug;65(2):822-8

Interpretation of the krypton-81m dynamic series: the distribution of a tidal breath. Shykoff BE, et al. **J Appl Physiol** 1988 Dec;65(6):2648-55

Nifedipine and pulmonary functions in bronchial asthma [letter] Sharma SK, et al. **J Assoc Physicians India** 1988 May;36(5):350-1

Pulmonary function in Parkinson's disease. Hovestadt A, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):329-33

Lung volume reference values for blue collar workers not exposed to occupational respiratory hazards. Petersen MR, et al. **J Occup Med** 1988 Aug;30(8):626-32

Relationships among pulmonary diffusing capacity, lung volumes and maximal oxygen consumption. Farrell PA, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):387-93

The value of the flow-volume loop in diagnosing upper airway obstruction. Williams J, et al. **J Tenn Med Assoc** 1989 Jan;82(1):11-2

Changes in pharyngeal properties after uvulopalatopharyngoplasty. Wright S, et al. **Laryngoscope** 1989 Jan;99(1):62-5

"Oxygenator on bypass": a controlling device for studying the respiratory feedback system. Vanderhoeft P, et al. **Life Support Syst** 1983;1 Suppl 1:354-6

Effect of breathing pattern during inhalation challenge on the shape and position of the dose-response curve. Guillemi S, et al. **Lung** 1989;167(2):95-106

Upright and supine flow-volume curves in patients with OSA. Nahmias J, et al. **N J Med** 1989 Feb;86(2):115-9

Changes in functional residual capacity in response to bronchodilator therapy among young asthmatic children. Greenough A, et al. **Pediatr Pulmonol** 1989;7(1):8-11

A correction formula for computing specific airway resistance from a single-step measurement. Haluszka J, et al. **Pediatr Pulmonol** 1989;6(2):118-21

Infants with cystic fibrosis: pulmonary function at diagnosis. Tepper RS, et al. **Pediatr Pulmonol** 1988;5(1):15-8

Constancy of individual exponents for inspired lung volume: a comment on Harver (1987). Da Silva JA, et al. **Percept Mot Skills** 1989 Feb;68(1):193-4

Analysis of inspiratory mouth pressures. Criée CP. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:820-6

High-frequency oscillatory ventilation may increase airway closure. Filuk RB, et al. **Respir Physiol** 1988 Nov; 74(2):163-75

Maximum respiratory pressures in morbidly obese subjects.

Kelly TM, et al. **Respiration** 1988;54(2):73–7
Influence of controlled breathing with diminished tidal volume on hypoxic heart rate response in man. Kimura H, et al. **Respiration** 1988;54(2):103–9
Increasing the functional residual capacity may reverse obstructive sleep apnea. Sériès F, et al. **Sleep** 1988 Aug; 11(4):349–53
Retrospective estimation of values for total lung capacity by plethysmography, helium gas dilution, and chest radiography in patients with cystic fibrosis. Cutrera R, et al. **Thorax** 1988 Nov;43(11):931–2
Vertical gradients of lung density in healthy supine men. Millar AB, et al. **Thorax** 1989 Jun;44(6):485–90
Radiographic measurement of total lung capacity in acute asthma. Rothstein MS, et al. **Thorax** 1989 Jun;44(6):510–2
Does end-tidal CO2 pressure (PETCO2) reflect hepatic metabolism during orthotopic liver transplantation (OLTX)? Neidecker J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2339–40
Influence of tidal volume on the compliance of the respiratory system in mechanically ventilated newborn infants. Popow C, et al. **Wien Klin Wochenschr** 1989 Apr 28;101(9):323–6
[Lung function and physical performance in patients with mucoviscidosis] Leupold W. **Z Erkr Atmungsorgane** 1988; 171(2):190–8 (25 ref.) (Eng. Abstr.) **(Ger)**
[Lung volume during general anesthesia] Shulman D, et al. **Harefuah** 1989 Apr 16;116(8):426–9 (41 ref.) **(Heb)**
[Limitations and applicability of predicted values of the main spirometric parameters in a childhood population] La Rosa M, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):369–75 (Eng. Abstr.) **(Ita)**
[A measurement of V/V distribution by intravenous injection of Kr–81m and Tc–99m–MAA—a comparative study with Xe–133 inhalation method] Ohtani Y, et al. **Kaku Igaku** 1988 Apr;25(4):323–9 (Eng. Abstr.) **(Jpn)**
[Slow recovery of the end–tidal PCO2 after hyperventilation provocation test in hyperventilation syndrome (HVS)] Nishioka Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):378–85 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Volume monitor malfunction caused by an overhead operating room light [letter] Cotter TP, et al. **Anesthesiology** 1989 Jun;70(6):1022
A programmable system for acquisition and reduction of respiratory physiological data. Jenkins JS, et al. **Ann Biomed Eng** 1989;17(1):93–108
Comparison of two different mouthpieces for the measurement of Pimax and Pemax in normal and weak subjects. Koulouris N, et al. **Eur Respir J** 1988 Oct; 1(9):863–7
Evaluation of the flow–volume loop as an intra–operative monitor of respiratory mechanics in infants. Brown K, et al. **Pediatr Pulmonol** 1989;6(1):8–13
[Principle of solid–frequent oscillo–resistometry] Korn V. **Pneumologie** 1989 Jul;43(7):348–52 (Eng. Abstr.) **(Ger)**
[To what extent are oscillometric data of a simple resistor–volume model physically recordable?] Vogel J, et al. **Pneumologie** 1989 Jul;43(7):324–30 (Eng. Abstr.) **(Ger)**
[Report of experience with the Pedersen expansion calibrator in the calibration of a pneumotachograph] Eltschka R, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:324–6 (Eng. Abstr.) **(Ger)**

METHODS

Resonance mode analysis for volume estimation of asymmetric branching structures. Raphael DT, et al. **Ann Biomed Eng** 1989;17(4):361–75
Sources of error in flow–volume curves. Effect of expired volume measured at the mouth vs that measured in a body plethysmograph. Coates AL, et al. **Chest** 1988 Nov; 94(5):976–82
Differences in plethysmographic lung volumes. Effects of linked vs unlinked spirometry. Williams JH Jr, et al. **Chest** 1989 Jan;95(1):117–23
Assessment of thoracic gas volume by low–frequency ambient pressure changes in children. Peslin R, et al. **Eur Respir J** 1988 Jul;1(7):594–9
Measurement of alveolar gas volume by ambient pressure changes in isolated lungs. Martin RR, et al. **J Appl Physiol** 1988 Sep;65(3):1281–5
Effect of immersion on lung capacities and volumes: implications for the densitometric estimation of relative body fat. Withers RT, et al. **J Sports Sci** 1989 Spring; 7(1):21–30
[The PEEP wave: an automated technic for bedside determination of the volume/pressure ratio in the lungs of ventilated patients] Putensen C, et al. **Anaesthesist** 1989 Apr;38(4):214–9 (Eng. Abstr.) **(Ger)**

STANDARDS

Lung volumes in neonates and infants. Gaultier C. **Eur Respir J [Suppl]** 1989 Mar;2(4):130S–134S (58 ref.)

LUPUS

Lupus vulgaris—a report of 3 cases. Bourke J, et al. **Ir J Med Sci** 1988 May;157(5):154–6

CHEMICALLY INDUCED

Sulphasalazine–induced lupus–like syndrome with cardiac tamponade in a patient with ulcerative colitis [letter] Deboever G, et al. **Am J Gastroenterol** 1989 Jan;84(1):85–6
Anti–Ro–positive lupus and hereditary angioneurotic edema. A 7–year follow–up with worsening of lupus under danazol treatment. Guillet G, et al. **Dermatologica** 1988;177(6):370–5
Lupus–like syndrome in a mother and newborn following administration of hydralazine; a case report. Yemini M, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb; 30(2):193–7

COMPLICATIONS

Malignant melanoma arising in the scar of lupus vulgaris and response to treatment with topical azelaic acid. Sowden J, et al. **Clin Exp Dermatol** 1988 Sep;13(5):353–6

DIAGNOSIS

Disseminated lupus vulgaris presenting as granulomatous folliculitis. Hruza GJ, et al. **Int J Dermatol** 1989 Jul–Aug; 28(6):388–92
Scleritis as the presenting manifestation of procainamide–induced lupus. Turgeon PW, et al. **Ophthalmology** 1989 Jan;96(1):68–71

ETIOLOGY

Lupus vulgaris following BCG vaccination [letter] Kanwar AJ, et al. **Int J Dermatol** 1988 Sep;27(7):525–6

IMMUNOLOGY

Acquired von Willebrand's syndrome with lupus–like serology. Igarashi N, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):32–5
Neonatal lupus syndrome and microtubular structure. Nitta Y, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):54–8

MICROBIOLOGY

Detection of measles virus genome in blood leucocytes of patients with certain autoimmune diseases. Andjaparidze OG, et al. **Arch Virol** 1989;105(3–4):287–91
Lupus vulgaris with numerous tubercle bacilli. Duhra P, et al. **Clin Exp Dermatol** 1988 Jan;13(1):31–3
Lupus vulgaris caused by Mycobacterium bovis. Haas H, et al. **Isr J Med Sci** 1989 Jan;25(1):42–4

PATHOLOGY

The neonatal lupus syndrome. Maddison PJ. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):169–72 (43 ref.)
Unusual clinical manifestations of cutaneous tuberculosis. Sehgal VN, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):334–8

LUPUS ERYTHEMATOSUS, CHRONIC CUTANEOUS see **LUPUS ERYTHEMATOSUS, DISCOID**

LUPUS ERYTHEMATOSUS, CUTANEOUS

Lupus erythematosus. **Clin Dermatol** 1985 Jul–Sep;3(3):1–146
Subacute cutaneous lupus erythematosus. Sontheimer RD. **Clin Dermatol** 1985 Jul–Sep;3(3):58–68
Subacute cutaneous lupus erythematosus in Iceland. Mooney E, et al. **Int J Dermatol** 1989 Mar;28(2):104–6
Subacute cutaneous lupus erythematosus: a decade's perspective. Sontheimer RD. **Med Clin North Am** 1989 Sep; 73(5):1073–90 (62 ref.)

CHEMICALLY INDUCED

Subacute cutaneous lupus erythematosus during PUVA therapy for psoriasis: case report and review of the literature. Dowdy MJ, et al. **Arthritis Rheum** 1989 Mar; 32(3):343–6 (19 ref.)
Subacute cutaneous lupus erythematosus associated with hydrochlorothiazide therapy. Fine RM. **Int J Dermatol** 1989 Jul–Aug;28(6):375–6
Subacute cutaneous lupus erythematosus lesions precipitated by griseofulvin. Miyagawa S, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):343–6
Subacute cutaneous lupus erythematosus–like eruption caused by hydrochlorothiazide. Parodi A, et al. **Photodermatol** 1989 Apr;6(2):100–2
[Subacute cutaneous lupus erythematosus caused by chrysotherapy in rheumatoid arthritis (letter)] Balsa A, et al. **Rev Clin Esp** 1988 May;182(9):505–6 **(Spa)**

CLASSIFICATION

[Lichen planus and lichen erythematosus: their interrelations] Hallak N. **Przegl Dermatol** 1988 Sep–Oct;75(5):392–6 (23 ref.) **(Pol)**

COMPLICATIONS

Phototests in patients with various forms of lupus erythematosus. Wolska H, et al. **Int J Dermatol** 1989 Mar; 28(2):98–103
Neonatal lupus erythematosus with a high anticardiolipin antibody titer. Unusual variant of neonatal lupus erythematosus or early–onset systemic lupus erythematosus? Katayama I, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):490–2
Cutaneous lesions in systemic lupus erythematosus. Watson R. **Med Clin North Am** 1989 Sep;73(5):1091–111 (54 ref.)
Neonatal rheumatic disorders. View of the pediatrician. Goldsmith DP. **Rheum Dis Clin North Am** 1989 May; 15(2):287–305 (106 ref.)
[Coexistence of porphyria cutanea tarda and lupus erythematosus] Morvay M, et al. **Dermatol Monatsschr** 1989;175(1):20–7 (Eng. Abstr.) **(Ger)**
[Acquired deficiency of C1 esterase inhibitor, persistent eyelid edema and subcutaneous lupus erythematosus] Wozel G, et al. **Dermatol Monatsschr** 1988;174(12):741–7 (Eng. Abstr.) **(Ger)**
[Chilblain lupus erythematosus] Uter W, et al. **Hautarzt** 1988 Sep;39(9):602–5 (Eng. Abstr.) **(Ger)**
[Is coexistence of lichen erythematosus and lichen planus a new nosologic entity?] Hallak N, et al. **Przegl Dermatol** 1988 Sep–Oct;75(5):363–71 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Lupus band test: clinical applications. Jordon RE. **Clin Dermatol** 1985 Jul–Sep;3(3):113–22 (53 ref.)
Clinical distribution of anticentromere antibody in Japanese patients. Soma Y, et al. **Dermatologica** 1989;178(1):16–9

DRUG THERAPY

Management of cutaneous lupus erythematosus. Tuffanelli DL. **Clin Dermatol** 1985 Jul–Sep;3(3):123–30
[Three lianas syrup in treating 302 cases of various types of lupus erythematosus] Qin WZ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):604–6, 582 (Eng. Abstr.) **(Chi)**

ETIOLOGY

[Subacute lupus erythematosus? (letter)] Gilsanz Fernández C, et al. **Rev Clin Esp** 1989 Jun;185(2):105–6 **(Spa)**

GENETICS

Neonatal lupus in twins. Lawrence N, et al. **South Med J** 1989 May;82(5):657–60

IMMUNOLOGY

Human immunodeficiency virus–neutralizing serum samples in healthy control subjects with resolved subacute cutaneous lupus erythematosus [letter] Allen AD, et al. **Arch Dermatol** 1988 Nov;124(11):1724–5
Subacute cutaneous lupus erythematosus. Genetic markers and clinical and immunological binding in patients. Johansson–Stephansson E, et al. **Arch Dermatol** 1989 Jun; 125(6):791–6
Pathogenesis of cutaneous lupus erythematosus. Norris DA, et al. **Clin Dermatol** 1985 Jul–Sep;3(3):20–35
A monoclonal Ro–antibody and the serum of a Ro–positive patient with subacute cutaneous lupus erythematosus (SCLE) react with basal layers of human epidermis. Mayet WJ, et al. **Eur J Clin Invest** 1988 Oct;18(5):465–71
Anti–Ro antibodies and neonatal lupus. Petri M, et al. **Rheum Dis Clin North Am** 1989 May;15(2):335–60 (173 ref.)
Mononuclear leucocyte function in patients with lichen planus and cutaneous lupus erythematosus during chemotherapy with clofazimine. Zeis BM, et al. **S Afr Med J** 1989 Feb 18;75(4):161–2
[Anti–cardiolipin antibodies in lupus erythematosus] Robert E, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb; 124(1–2):5–7 (Eng. Abstr.) **(Ita)**

METABOLISM

Pattern of cutaneous immunoglobulin G deposition in subacute cutaneous lupus erythematosus is reproduced by infusing purified anti–Ro (SSA) autoantibodies into human skin–grafted mice. Lee LA, et al. **J Clin Invest** 1989 May; 83(5):1556–62

PATHOLOGY

Histopathology of cutaneous lupus erythematosus. Hood AF, et al. **Clin Dermatol** 1985 Jul–Sep;3(3):36–48
A case of multiple urate deposition, without gouty attacks, in a patient with systemic lupus erythematosus. Kurita Y, et al. **Cutis** 1989 Mar;43(3):273–5
Metastatic malignant melanoma arising from a common blue nevus in a patient with subacute cutaneous lupus erythematosus. Modly C, et al. **Dermatologica** 1989; 178(3):171–5 (19 ref.)
Subacute cutaneous lupus erythematosus: clinicopathologic findings in thirteen cases. Herrero C, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1057–62
Papular lesions and cutaneous lupus erythematosus: a comparative clinical and histological study using monoclonal antibodies. McHugh NJ, et al. **J Rheumatol** 1988 Jul;15(7):1097–103
[Pemphigus erythematosus with the histologic picture of pemphigus vulgaris. Pathogenetic considerations based on a case] Audring H, et al. **Dermatol Monatsschr** 1988; 174(7):386–94 (Eng. Abstr.) **(Ger)**

LUPUS ERYTHEMATOSUS, DISCOID

Pemphigus erythematosus: a report of five cases with review of literature. Kohli A, et al. **J Med Assoc Thai** 1988 Oct; 71(10):575–80

Chronic cutaneous lupus erythematosus. Hymes SR, et al. **Med Clin North Am** 1989 Sep;73(5):1055–71 (60 ref.)

BLOOD

[Analysis of serum concentrations of zinc, copper, manganese and the copper–zinc ratio in discoid lupus erythematosus with stepwise regression] Yu HS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):207–10, 254 (Eng. Abstr.) (Chi)

CHEMICALLY INDUCED

Lichen planus following procainamide-induced lupus erythematosus. Sherertz EF. **Cutis** 1988 Jul;42(1):51–3

COMPLICATIONS

Discoid lupus keratitis. Raizman MB, et al. **Arch Ophthalmol** 1989 Apr;107(4):545–7

Diffuse soft tissue calcifications (calcinosis cutis) in a patient with discoid lupus erythematosus. Johansson E, et al. **Clin Exp Dermatol** 1988 May;13(3):193–6

Vitiligo and disseminated discoid lupus erythematosus. Khare AK, et al. **Indian J Dermatol** 1988 Jul;33(3):37–9

Lupus erythematosus in a patient with long-standing multiple sclerosis. Berk MA, et al. **J Am Acad Dermatol** 1988 Nov; 19(5 Pt 2):969–72

Podiatric implications of lupus erythematosus. Lagana FJ, et al. **J Am Podiatr Med Assoc** 1988 Nov;78(11):577–83

Surgical excision of trauma-induced verrucous lupus erythematosus. Eskreis BD, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1296–9

Coexistent discoid lupus erythematosus and psoriasis: a therapeutic dilemma. Bolton GG. **J Miss State Med Assoc** 1989 Jun;30(6):181–2

[Congenital ischemic onychodystrophy (Iso–Kikuchi syndrome) and chronic lupus erythematosus] Bittar EQ, et al. **Hautarzt** 1988 Nov;39(11):750–2 (Eng. Abstr.) (Ger)

DIAGNOSIS

The age of miracles hadn't passed. Weissmann G. **Hosp Pract [Off]** 1988 Oct 15;23(10):45–6, 48–9, 53

Rowell's syndrome. Report of a case. Parodi A, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):374–7 (8 ref.)

Lupus: the 'wolf bite' that may be more than skin deep. Reich M. **J Am Osteopath Assoc** 1989 Feb;89(2):242–5

Leu 8-positive cells in discoid lupus erythematosus and Jessner–Kanof's lymphocytic infiltrate of the skin [letter] Merot Y, et al. **J Cutan Pathol** 1988 Dec;15(6):412–3

Direct immunofluorescence studies on skin biopsies in lupus erythematosus. Joshi R, et al. **J Postgrad Med** 1988 Jul; 34(3):165–8

[Direct immunofluorescent technic of analyzing fibrinogen in the differential diagnosis of certain diseases of the oral mucous membrane] Yu SF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):22–3, 62 (Eng. Abstr.) (Chi)

[Lupus erythematosus-like tinea faciei] Dietschi R, et al. **Schweiz Rundsch Med Prax** 1988 Oct 25;77(43):1171–4 (Eng. Abstr.) (Ger)

DRUG THERAPY

Danazol and discoid lupus [letter] Englert HJ, et al. **Br J Dermatol** 1988 Sep;119(3):407–9

Erythema multiforme occurring in association with lupus erythematosus during therapy with doxycycline. Lewis-Jones MS, et al. **Clin Exp Dermatol** 1988 Jul; 13(4):245–7

Resistant discoid lupus erythematosus of palms and soles: successful treatment with azathioprine. Ashinoff R, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):961–5

[The visual system in 30 subjects with discoid lupus erythematosus treated with hydroxychloroquine] Rossi A, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):189–92 (Eng. Abstr.) (Ita)

ETIOLOGY

Discoid lupus erythematosus exacerbated by x-ray irradiation. Eedy DJ, et al. **Clin Exp Dermatol** 1988 May; 13(3):202–3

IMMUNOLOGY

Discoid lupus erythematosus associated with the anticardiolipin syndrome [letter] Berth-Jones J, et al. **Br J Dermatol** 1989 Mar;120(3):469–70

Vitronectin colocalizes with Ig deposits and C9 neoantigen in discoid lupus erythematosus and dermatitis herpetiformis, but not in bullous pemphigoid. Dahlbäck K, et al. **Br J Dermatol** 1989 Jun;120(6):725–33

Anticardiolipin and antinuclear antibodies in discoid lupus erythematosus—their clinical significance. Mayou SC, et al. **Clin Exp Dermatol** 1988 Nov;13(6):389–92

Familial properdin deficiency associated with chronic discoid lupus erythematosus. Holme ER, et al. **Clin Exp Immunol** 1989 Apr;76(1):76–81

Chilblain lupus erythematosus and antiphospholipid antibody syndrome. Allegue F, et al. **J Am Acad Dermatol** 1988 Nov; 19(5 Pt 1):908–10

Mononuclear leucocyte function in patients with lichen planus and cutaneous lupus erythematosus during chemotherapy with clofazimine. Zeis BM, et al. **S Afr Med J** 1989 Feb 18;75(4):161–2

Oral lesions of lupus erythematosus patients in relation to other chronic inflammatory oral diseases: an immunologic study. Sanchez R, et al. **Scand J Dent Res** 1988 Dec; 96(6):569–78

[Detection of SSA/Ro antibody in patients with systemic lupus erythematosus, discoid lupus erythematosus and cutaneous photosensitivity. A comparative study] Carazzai AM, et al. **Rev Paul Med** 1988 Mar–Apr;106(2):71–4 (Eng. Abstr.) (Por)

[Immunologic and immunogenetic heterogeneity of systemic and discoid lupus erythematosus] Konenkov VI, et al. **Ter Arkh** 1989;61(5):31–4 (Eng. Abstr.) (Rus)

METABOLISM

Interferon response to dipyridamole in lupus erythematosus patients. Konstantinov K, et al. **Br J Dermatol** 1989 Jul; 121(1):59–63

PATHOLOGY

Expression of lymphocyte activation markers in benign cutaneous T cell infiltrates. Discoid lupus erythematosus versus lichen ruber planus. Sundqvist KG, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):292–5

Squamous-cell carcinoma of the scalp arising in lesions of discoid lupus erythematosus. Sulica VI, et al. **Am J Dermatopathol** 1988 Apr;10(2):137–41

Discoid lupus erythematosus—variants and clinical associations. Callen JP. **Clin Dermatol** 1985 Jul–Sep; 3(3):49–57

Podiatric pathology of lupus erythematosus. McCarthy DJ, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):281–90 (12 ref.)

A histopathologic study of oral mucosal lupus erythematosus. Karjalainen TK, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):547–54

[Keratotic lesions of the oral cavity. Notes on histopathologic differential diagnosis in leukoplakia, lichen planus, lupus erythematosus. Cases investigation] Galliano D, et al. **Minerva Stomatol** 1989 Apr;38(4):481–7 (12 ref.) (Eng. Abstr.) (Ita)

VETERINARY

Lupus erythematosus in small animals. Shanley KJ. **Clin Dermatol** 1985 Jul–Sep;3(3):131–8

LUPUS ERYTHEMATOSUS DISSEMINATUS see **LUPUS ERYTHEMATOSUS, SYSTEMIC**

LUPUS ERYTHEMATOSUS, SUBACUTE CUTANEOUS see **LUPUS ERYTHEMATOSUS, CUTANEOUS**

LUPUS ERYTHEMATOSUS, SYSTEMIC

see related
LE CELLS

Bilateral distal tibial osteonecrosis in systemic lupus erythematosus [letter] Outwater E, et al. **AJR** 1989 Apr; 152(4):895–6

Systemic lupus erythematosus and pregnancy. Gatenby PA. **Aust N Z J Med** 1989 Jun;19(3):261–78 (137 ref.)

Lupus erythematosus. **Clin Dermatol** 1985 Jul–Sep;3(3):1–146

Lupus erythematosus in neonates, children, and adolescents. Spraker MK. **Clin Dermatol** 1985 Jul–Sep;3(3):105–12

Hierarchical time-oriented approaches to missing data inference. Albridge KM, et al. **Comput Biomed Res** 1988 Aug;21(4):349–66

Systemic lupus erythematosus in northern India: a review of 329 cases. Malaviya AN, et al. **J Assoc Physicians India** 1988 Aug;36(8):476–80, 484

Obstetric anesthesia and systemic lupus erythematosus. Abouleish E. **Middle East J Anesthesiol** 1988 Jun; 9(5):435–46 (15 ref.)

Rheumatic disease in childhood. Hollister JR. **Pediatrician** 1988;15(1–2):65–72 (7 ref.)

Systemic lupus erythematosus. Hughes GR. **Postgrad Med J** 1988 Jul;64(753):517–21 (14 ref.)

Pregnancy and lupus: prognostic indicators and response to treatment. Englert HJ, et al. **Q J Med** 1988 Feb; 66(250):125–36

[Congenital atrioventricular block and maternal lupus erythematosus. Histologic discovery of tumor of the atrioventricular node] Fontaliran F, et al. **Arch Mal Coeur** 1989 Apr;82(4):609–13 (Eng. Abstr.) (Fre)

[Influence of sex hormones on systemic lupus erythematosus] Sthoeger Z, et al. **Harefuah** 1988 Dec 15;115(12):382–4 (42 ref.) (Heb)

BLOOD

Intracellular contents of cyclic nucleotides in neutrophils and lymphocytes from patients with systemic lupus erythematosus. Shingu M, et al. **Arch Dermatol Res** 1989; 281(3):203–5

Serum levels of interleukin-2 receptor and activity of rheumatic diseases characterized by immune system activation. Campen DH, et al. **Arthritis Rheum** 1988 Nov; 31(11):1358–64

Genetic analysis of CR1 expression on erythrocytes of patients with systemic lupus erythematosus. Cohen JH, et al. **Arthritis Rheum** 1989 Apr;32(4):393–7

Tumor necrosis factor in the serum of patients with systemic lupus erythematosus. Maury CP, et al. **Arthritis Rheum** 1989 Feb;32(2):146–50

Altered metabolism of poly(ADP-ribose) in the peripheral blood lymphocytes of patients with systemic lupus erythematosus. Sibley JT, et al. **Arthritis Rheum** 1989 Aug; 32(8):1045–9

MX homologous protein in mononuclear cells from patients with systemic lupus erythematosus. von Wussow P, et al. **Arthritis Rheum** 1989 Jul;32(7):914–8

TMP-reactive autoantibodies in human SLE sera demonstrate thymine-dependent oligonucleotide specificity. Munns TW, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):204–10

DNA on membrane receptors: a target for monoclonal anti-DNA antibody induced by a nucleoprotein shed in systemic lupus erythematosus. Rieber M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1441–7

Inhibition of phospholipid and platelet-dependent prothrombinase activity in the plasma of patients with lupus anticoagulants. Galli M, et al. **Br J Haematol** 1989 Aug; 72(4):549–55

Abnormal fibrinolytic activity in systemic lupus erythematosus and possible mechanisms. Chu P, et al. **Br J Rheumatol** 1988 Dec;27(6):436–9

Anticardiolipin antibodies in systemic lupus erythematosus. Danao-Camara T, et al. **Cleve Clin J Med** 1989 Jul–Aug; 56(5):525–8

Splenic infarction. A new thrombotic manifestation of the circulating lupus anticoagulant. Obarski TP, et al. **Cleve Clin J Med** 1989 Mar–Apr;56(2):174–6

Nuclear phosphotyrosyl-protein with DNA-binding ability in peripheral blood mononuclear cells from systemic lupus erythematosus patients. Deguchi Y, et al. **Clin Exp Immunol** 1989 Mar;75(3):343–8

Random locomotion and phagocytosis of monocytes in undiluted normal serum and in undiluted SLE serum. Rydgren L, et al. **Clin Exp Rheumatol** 1988 Oct–Dec; 6(4):355–9

Clinical manifestations and laboratory findings in patients with lupus anticoagulants. Kornberg A, et al. **Eur J Haematol** 1989 Jan;42(1):90–5

Lupus anticoagulants: misnomer, paradox, riddle, epiphenomenon. Triplett DA, et al. **Hematol Pathol** 1988; 2(3):121–43 (157 ref.)

Serum levels of RHP and of unbound C1q in rheumatoid arthritis and systemic lupus erythematosus. Rosano CL, et al. **Inflammation** 1988 Aug;12(4):351–60

Elevated levels of the 90 kd heat shock protein in a proportion of SLE patients with active disease. Norton PM, et al. **J Autoimmun** 1989 Apr;2(2):187–95

Biochemical and immunological heterogeneity of the Ro ribonucleoprotein particles. Analysis with sera specific for the RohY5 particle. Boire G, et al. **J Clin Invest** 1989 Jul; 84(1):270–9

Complement fixation by solid phase immune complexes. Reduced capacity in SLE sera. Baatrup G, et al. **J Clin Lab Immunol** 1988 Jun;26(2):73–9

Changes in inducible nuclear factors with specific binding ability to c-myc gene fragments in peripheral blood mononuclear cells from systemic lupus erythematosus patients. Deguchi Y, et al. **J Clin Lab Immunol** 1989 Feb; 28(2):61–7

Interferon alpha associated with systemic lupus erythematosus is not intrinsically acid labile. Yee AM, et al. **J Exp Med** 1989 Mar 1;169(3):987–93

Hyperviscosity syndrome as the initial manifestation of systemic lupus erythematosus. Jara LJ, et al. **J Rheumatol** 1989 Feb;16(2):225–30

Further characterization of interleukin-2 production by lymphocytes of patients with systemic lupus erythematosus. Linker-Israeli M, et al. **J Rheumatol** 1988 Aug; 15(8):1216–22

Lymphokine production in rheumatoid arthritis and systemic lupus erythematosus. McKenna RM, et al. **J Rheumatol** 1988 Nov;15(11):1639–42

Changes of neutrophil elastase and alpha 1-antitrypsin in systemic lupus erythematosus. Zhang XH, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):26–9

Presence of interferon and anti-interferon in patients with systemic lupus erythematosus. von Wussow P, et al. **Rheumatol Int** 1988;8(5):225–30

The value of serum laminin P1 in monitoring disease activity in patients with systemic lupus erythematosus. Schneider M, et al. **Scand J Rheumatol** 1988;17(5):417–22

IgG Fc receptors in sera from patients with rheumatoid arthritis and systemic lupus erythematosus. Ulvestad E, et al. **Scand J Rheumatol Suppl** 1988;75:203–8

Endothelial damage and hypofibrinolysis in systemic lupus erythematosus [letter] Angles-Cano E. **Thromb Haemost** 1989 Apr 25;61(2):322

[Lupus anticoagulant] Huang ZL. **Chung Hua Nei Ko Tsa Chih** 1988 May;27(5):318–21 (20 ref.) (Chi)

[Circulating anticoagulants of the lupus type and pregnancy] Edelman P. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(7):931 (Fre)

[Lupus anticoagulant in a patient with systemic lupus

erythematosus complicating marked bleeding tendency] Onda H, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1256–62 (Eng. Abstr.) **(Jpn)**

[Blood serum glycosaminoglycans in assessing the degree of activity in systemic lupus erythematosus] Piriev BA, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun;(2):29–34 (Eng. Abstr.) **(Rus)**

[Changes in the renin–aldosterone axis in systemic lupus erythematosus (published erratum appears in Med Clin (Barc) 1988 Oct 15;91(12):444)] Aguirre C, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):206–10 (Eng. Abstr.) **(Spa)**

[Hematologic abnormalities in generalized lupus erythematosus] Romero García F, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):119–24 (Eng. Abstr.) **(Spa)**

[Presentation of 20 cases of lupus anticoagulant. Proposal for a methodology for its study] Mompel Sanjuán A, et al. **Sangre (Barc)** 1988 Aug;33(4):306–9 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Serial CSF immunoglobulins in CNS SLE [letter] Temesvári P. **J Rheumatol** 1988 Oct;15(10):1592

Ibuprofen–induced meningitis in an elderly patient with systemic lupus erythematosus. Gilbert GJ, et al. **South Med J** 1989 Apr;82(4):514–5

CHEMICALLY INDUCED

Pulmonary thromboembolism associated with procainamide induced lupus syndrome and anticardiolipin antibodies. Asherson RA, et al. **Ann Rheum Dis** 1989 Mar;48(3):232–5

Methyldopa–induced systemic lupus erythematosus. Nordstrom DM, et al. **Arthritis Rheum** 1989 Feb; 32(2):205–8

Synovial fluid characteristics and the lupus erythematosus cell phenomenon in drug–induced lupus. Findings in three patients and review of pertinent literature. Vivino FB, et al. **Arthritis Rheum** 1989 May;32(5):560–8

Acute laryngeal stridor with respiratory arrest in drug induced systemic lupus erythematosus. Chong WK, et al. **BMJ** 1988 Sep 10;297(6649):660–61

Carbamazepine–induced systemic lupus erythematosus. Drory VE, et al. **Clin Neuropharmacol** 1989 Apr; 12(2):115–8

Cadralazine challenge in patients with previous hydralazine–induced lupus: a 6–month study. Pålsson L, et al. **Clin Pharmacol Ther** 1989 Aug;46(2):177–81

Cardiac tamponade associated with drug–induced systemic lupus erythematosus. Mohindra SK, et al. **Crit Care Med** 1989 Sep;17(9):961–2

Seek and find [editorial] Ninos NP. **Crit Care Med** 1989 Sep; 17(9):965

Procainamide–induced circulating anticoagulants in a congenitally–deficient factor XI patient. Clyne LP, et al. **Folia Haematol (Leipz)** 1989;116(2):239–44

Immunomodulatory effects of procainamide metabolites: their implications in drug–related lupus. Adams LE, et al. **J Lab Clin Med** 1989 Apr;113(4):482–92

B cell activation in patients with active procainamide induced lupus. Forrester J, et al. **J Rheumatol** 1988 Sep;15(9):1384–8

Chorea as the initial presentation of oral contraceptive related systemic lupus erythematosus [letter] Iskander MK, et al. **J Rheumatol** 1989 Jun;16(6):850–1

Drug–induced lupus. **J Tenn Med Assoc** 1988 Sep;81(9):579

Propylthiouracil–induced systemic lupus erythematosus [letter] Horton RC, et al. **Lancet** 1989 Sep 2;2(8662):568

Complement system protein C4 and susceptibility to hydralazine–induced systemic lupus erythematosus. Speirs C, et al. **Lancet** 1989 Apr 29;1(8644):922–4

Fatal hydralazine–induced systemic lupus erythematosus [letter] Sturman SG, et al. **Lancet** 1988 Dec 3;2(8623):1304

[Primary investigation of drug–induced lupus] Jiang M. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):379–80 (Eng. Abstr.) **(Chi)**

[Gold–induced systemic lupus erythematosus] Körholz D, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):644–6 (Eng. Abstr.) **(Ger)**

[Drug–induced lupus] Fossati C. **Clin Ter** 1987 Jan 31; 120(2):149–54 (82 ref.) (Eng. Abstr.) **(Ita)**

[Systemic lupus erythematosus during therapy with oral estrogen–progestin. Considerations apropos of a case] Gueli N, et al. **Clin Ter** 1987 May 31;121(4):299–304 (Eng. Abstr.) **(Ita)**

[A case of isoniazid–induced systemic lupus erythematosus] Umeki S. **Kekkaku** 1988 Nov;63(11):713–7 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus after taking oral contraceptives] Kawai T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):710–1 **(Jpn)**

[The drug–induced lupus syndrome] Gritsiuk AI, et al. **Ter Arkh** 1988;60(10):87–92 (87 ref.) **(Rus)**

CLASSIFICATION

Analysis of the 1982 ARA lupus criteria data set by recursive partitioning methodology: new insights into the relative merit of individual criteria. Edworthy SM, et al. **J Rheumatol** 1988 Oct;15(10):1493–8

Subset of systemic lupus erythematosus with late onset. Liu HW, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Oct;4(10):547–52

[Subgroups of patients with systemic lupus erythematosus] Folomeeva OM. **Ter Arkh** 1989;61(5):26–31 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Hyperpigmented acral papular mucinosis, systemic lupus erythematosus and universal alopecia. Lacour JP, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):212–6 (21 ref.)

Myelofibrosis and pancytopenia in systemic lupus erythematosus. el Mouzan MI, et al. **Acta Haematol (Basel)** 1988;80(4):219–21

Myelopathy, ascites and pleural effusion in systemic lupus erythematosus. Waga S, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):78–84

Frequency of mitral valve prolapse in systemic lupus erythematosus, progressive systemic sclerosis and mixed connective tissue disease. Comens SM, et al. **Am J Cardiol** 1989 Feb 1;63(5):369–70

Hemorrhagic acalculous cholecystitis in systemic lupus erythematosus [letter] Raijman I, et al. **Am J Gastroenterol** 1989 Apr;84(4):445–7

Cerebrovascular disease and antiphospholipid antibodies in systemic lupus erythematosus, lupus–like disease, and the primary antiphospholipid syndrome. Asherson RA, et al. **Am J Med** 1989 Apr;86(4):391–9

Aortic insufficiency and mitral regurgitation in patients with systemic lupus erythematosus and the antiphospholipid syndrome. Chartash EK, et al. **Am J Med** 1989 Apr; 86(4):407–12

Cardiac tamponade as the presenting manifestation of systemic lupus erythematosus. Ehrenfeld M, et al. **Am J Med** 1989 May;86(5):626–7

Antiphospholipid antibodies, valvular heart disease and systemic lupus erythematosus [letter] Khamashta MA, et al. **Am J Med** 1989 May;86(5):633–4

Gastrointestinal vasculitis and pneumatosis intestinalis due to systemic lupus erythematosus: successful treatment with pulse intravenous cyclophosphamide. Laing TJ. **Am J Med** 1988 Oct;85(4):555–8

Valvulitis in systemic lupus erythematosus [letter] Mitchell SR, et al. **Am J Med** 1989 Apr;86(4):510

Successful management of Mycoplasma hominis septic arthritis involving a cementless prosthesis. Nylander N, et al. **Am J Med** 1989 Sep;87(3):348–52

Systemic lupus erythematosus presenting with portal venous thrombosis. Pertuiset E, et al. **Am J Med** 1989 Apr; 86(4):501–2

Clinically significant valvular heart disease in systemic lupus erythematosus. Straaton KV, et al. **Am J Med** 1988 Nov; 85(5):645–50

Systemic lupus erythematosus presenting initially with acute pancreatitis and a review of the literature. Eaker EY, et al. **Am J Med Sci** 1989 Jan;297(1):38–41 (41 ref.)

Surgical morbidity in patients with systemic lupus erythematosus. Papa MZ, et al. **Am J Surg** 1989 Mar; 157(3):295–8

Lupus, thrombotic thrombocytopenic purpura, and antiphospholipid antibodies [letter] Asherson RA, et al. **Ann Neurol** 1989 Mar;25(3):312–3

Lupus optic neuritis with negative serology. Deutsch TA, et al. **Ann Ophthalmol** 1988 Oct;20(10):383–4

An unusual case of systemic lupus erythematosus with isolated hypoglossal nerve palsy, fulminant acute pneumonitis, and pulmonary amyloidosis. Chan CN, et al. **Ann Rheum Dis** 1989 Mar;48(3):236–9

Steroid resistant pleural effusion in systemic lupus erythematosus treated with tetracycline pleurodesis. Gilleece MH, et al. **Ann Rheum Dis** 1988 Dec;47(12):1031–2

Pulmonary haemorrhage, pulmonary infarction, and the lupus anticoagulant. Howe HS, et al. **Ann Rheum Dis** 1988 Oct; 47(10):869–72

Transverse myelitis occurring during pregnancy in a patient with systemic lupus erythematosus. Marabani M, et al. **Ann Rheum Dis** 1989 Feb;48(2):160–2

Avascular necrosis of bone in systemic lupus erythematosus: possible role of haemostatic abnormalities. Nagasawa K, et al. **Ann Rheum Dis** 1989 Aug;48(8):672–6

Overwhelming pneumococcal bacteraemia in systemic lupus erythematosus. Petros D, et al. **Ann Rheum Dis** 1989 Apr; 48(4):333–5

Acute transverse myelopathy complicating systemic lupus erythematosus. Propper DJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):512–5 (32 ref.)

Systemic lupus erythematosus and thyrotoxicosis: a hitherto little recognised association. Rodrigué S, et al. **Ann Rheum Dis** 1989 May;48(5):424–7

Cerebellar ataxia in systemic lupus erythematosus: three case reports. Singh RR, et al. **Ann Rheum Dis** 1988 Nov; 47(11):954–6

Prevalence and expression of photosensitivity in systemic lupus erythematosus. Wysenbeek AJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):461–3

Malabsorption and systemic lupus erythematosus [letter] Braester A, et al. **Arch Intern Med** 1989 Aug;149(8):1901 (6 ref.)

Headache in patients with systemic lupus erythematosus: clinical and telethermographic findings [letter] Anzola GP, et al. **Arch Neurol** 1988 Oct;45(10):1061–2

Gluteal abscess causing sciatica in a patient with systemic lupus erythematosus. Shames JL, et al. **Arch Phys Med Rehabil** 1989 May;70(5):410–1

Multiple autoimmune diseases in a predisposed patient [letter] Laukaitis JP, et al. **Arthritis Rheum** 1989 Jan;32(1):119–20

Intracardiac thrombus in systemic lupus erythematosus associated with lupus anticoagulant [letter] Lubbe WF, et al. **Arthritis Rheum** 1988 Nov;31(11):1453–4

Comment on the article by Stafford–Brady et al [letter] Merry P, et al. **Arthritis Rheum** 1989 Aug;32(8):1053–4

Neuropsychiatric manifestations of systemic lupus erythematosus. Buchbinder R, et al. **Aust N Z J Med** 1988 Aug;18(5):679–84

Protein–losing enteropathy in systemic lupus erythematosus. Edmunds SE, et al. **Aust N Z J Med** 1988 Dec;18(7):868–71 (18 ref.)

Acute pancreatitis due to Hodgkin's disease in a patient with systemic lupus erythematosus. Liang R. **Aust N Z J Med** 1988 Oct;18(6):812–3

The heart in systemic lupus erythematosus [clinical conference] Barker RA. **BMJ** 1989 Jul 22;299(6693):245–7

Systemic lupus erythematosus and acute intermittent porphyria. Allard SA, et al. **Br J Rheumatol** 1989 Jun; 28(3):254–6

Systemic lupus erythematosus and periodic peritonitis (FMF) [letter] Bakir F, et al. **Br J Rheumatol** 1989 Feb;28(1):81–2

Systemic lupus erythematosus and monoclonal gammopathy [letter] Font J, et al. **Br J Rheumatol** 1988 Oct;27(5):412–3

Anterior spinal artery syndrome in systemic lupus erythematosus. Markusse HM, et al. **Br J Rheumatol** 1989 Aug;28(4):344–6

Chronic aseptic meningitis in a patient with systemic lupus erythematosus. Lancman ME, et al. **Can J Neurol Sci** 1989 Aug;16(3):354–6

Ruptured hepatic artery aneurysms in a patient with systemic lupus erythematosus: case report. Trambert J, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):32–4

Cutaneous vasculitis in the LE patient. Synkowski DR, et al. **Clin Dermatol** 1985 Jul–Sep;3(3):88–95

Cutaneous disease in systemic lupus erythematosus. Wechsler HL. **Clin Dermatol** 1985 Jul–Sep;3(3):79–87

Systemic lupus erythematosus, pulmonary hypertension and adult respiratory distress syndrome (ARDS). Asherson RA, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):301–4

The expanding spectrum of Libman Sacks endocarditis: the role of antiphospholipid antibodies. Asherson RA, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):225–8 (70 ref.)

Recurrent lupus pneumonitis with pulmonary hemorrhage in systemic lupus erythematosus associated with chronic thyroiditis and antithyroid hormone autoantibodies. Ichikawa Y, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):309–13

Mycobacterium fortuitum in systemic lupus erythematosus. Laborde H, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):291–3

Bilateral recurrent laryngeal nerve palsy in systemic lupus erythematosus. Saluja S, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):81–3

Primary intracerebral lymphoma in systemic lupus erythematosus treated with immunosuppressives. Cras P, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):200–5 (62 ref.)

Fatal outcome of pelvic radiotherapy for carcinoma of the cervix in a patient with systemic lupus erythematosis. Olivotto IA, et al. **Clin Radiol** 1989 Jan;40(1):83–4

Unusual eye manifestations in systemic lupus erythematosus patients. Drosos AA, et al. **Clin Rheumatol** 1989 Mar; 8(1):49–53

Pure red–cell aplasia in systemic lupus erythematosus. Nossent JC, et al. **Clin Rheumatol** 1988 Dec;7(4):527–9

Endomyocardial biopsy in diagnosis and management of cardiovascular manifestations of systemic lupus erythematosus (SLE). Tamburino C, et al. **Clin Rheumatol** 1989 Mar;8(1):108–12

CT demonstration of brain infarcts due to deep venous thrombosis in systemic lupus erythematosus. Shah ZR, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):241–3

The wolf inside. Stone J. **Del Med J** 1988 Nov;60(11):647–9

Protein–losing enteropathy in systemic lupus erythematosus. Diagnosis and monitoring immunosuppressive therapy by alpha–1–antitrypsin clearance in stool. Benner KG, et al. **Dig Dis Sci** 1989 Jan;34(1):132–5

Serum urate, complement 3 and pre–eclampsia in patients with systemic lupus erythematosus. Lao TT, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):7–13

Crohn disease in systemic lupus erythematosus: a case report. Nagata M, et al. **Eur J Pediatr** 1989 Apr;148(6):525–6 (7 ref.)

Primary testicular manifestation of systemic lupus erythematosus. Kuehn MW, et al. **Eur Urol** 1989;16(1):72–3

Drug–induced mononucleosis–like hepatic injury in a patient with systemic lupus erythematosus. Takegoshi K, et al. **Gastroenterol Jpn** 1989 Feb;24(1):65–9

The hand in systemic lupus erythematosus. Dray GJ. **Hand Clin** 1989 May;5(2):145–55 (27 ref.)

Unilateral vaso–occlusive retinopathy in quiescent condition of systemic lupus erythematosus. Hayasaka S, et al. **Hiroshima J Med Sci** 1989 Mar;38(1):35–8

Cross–sectional echocardiography in the diagnosis of Libman–Sachs endocarditis. Walley T. **Int J Cardiol** 1988 Sep;20(3):406–9

Myasthenia gravis and lupus erythematosus. Ciaccio M, et al. **Int J Dermatol** 1989 Jun;28(5):317–20

Bullous systemic lupus erythematosus. Fleming MG, et al. **Int J Dermatol** 1989 Jun;28(5):321–6 (24 ref.)

Nervous system involvement in systemic lupus erythematosus. Denburg JA, et al. **Isr J Med Sci** 1988 Dec;

24(12):754–8 (32 ref.)
Acute visual loss in systemic lupus erythematosus. Rubin BR, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):73–7
Vocal cord palsy in a patient of systemic lupus erythematosus [letter] Sharma A, et al. **J Assoc Physicians India** 1988 Nov; 36(11):674–5
Cardiac involvement in SLE—more unfamiliar than uncommon [letter] Turakhia DP.
J Assoc Physicians India 1988 Dec;36(12):740
A giant calcifying pseudocyst seen in a patient with overlap syndrome. Hashiro M, et al. **J Dermatol** 1989 Apr; 16(2):146–9
Systemic lupus erythematosus with tibial arteritis and foot gangrene. Ferreiro JE, et al. **J Fla Med Assoc** 1988 Dec; 75(12):801–4
Kluver–Bucy syndrome in systemic lupus erythematosus. Oliveira V, et al. **J Neurol** 1989 Jan;236(1):55–6
Autonomic neuropathy in systemic lupus erythematosus [letter] Arruda WO, et al.
J Neurol Neurosurg Psychiatry 1989 Apr;52(4):539–40
Positron emission tomography in cases of chorea with different underlying disease [letter] Lang AE, et al.
J Neurol Neurosurg Psychiatry 1988 Jul;51(7):1010–1
Pure red cell aplasia in procainamide induced systemic lupus erythematosus. Report and review of the literature. Agudelo CA, et al. **J Rheumatol** 1988 Sep;15(9):1431–2 (13 ref.)
Budd Chiari syndrome, visceral arterial occlusions, recurrent fetal loss and the "lupus anticoagulant" in systemic lupus erythematosus. Asherson RA, et al. **J Rheumatol** 1989 Feb; 16(2):219–24
Sarcoidosis: atypical presentation associated with features of systemic lupus erythematosus. Askari A, et al.
J Rheumatol 1988 Oct;15(10):1578–9
Laxity and rupture of the patellar tendon in systemic lupus erythematosus. Association with secondary hyperparathyroidism. Babini SM, et al. **J Rheumatol** 1988 Jul;15(7):1162–5
Systemic lupus erythematosus and concurrent cytomegalovirus vasculitis: diagnosis by antemortem skin biopsy. Bulpitt KJ, et al. **J Rheumatol** 1989 May; 16(5):677–80
Primary malignant lymphoma of the spleen in systemic lupus erythematosus. Buskila D, et al. **J Rheumatol** 1989 Jul; 16(7):993–6
Central nervous system manifestations in juvenile systemic lupus erythematosus: a problem of management. Davies UM, et al. **J Rheumatol** 1988 Nov;15(11):1720–1
Relationship between antiphospholipid antibodies and recurrent fetal loss in patients with systemic lupus erythematosus and apparently healthy women. Deleze M, et al. **J Rheumatol** 1989 Jun;16(6):768–72
Serious bacterial cellulitis of the periorbital area in two patients with systemic lupus erythematosus. Derksen RH, et al. **J Rheumatol** 1988;15(5):840–4
Pernicious anemia, Hashimoto's thyroiditis and Sjögren's in a woman with SLE and autoimmune hemolytic anemia [letter] Feld S, et al. **J Rheumatol** 1989 Feb;16(2):258–9
Successive unfolding of two different collagen vascular diseases in the same patient. Gertner E, et al.
J Rheumatol 1989 Jan;16(1):126–7
Severe congestive lupus cardiomyopathy complicated by an intracavitary thrombus: a clinical and echocardiographic followup. Gur H, et al. **J Rheumatol** 1988 Aug; 15(8):1278–80
Nodular transformation of the liver in a patient with systemic lupus erythematosus [letter] Hubscher O, et al.
J Rheumatol 1989 Mar;16(3):410–2
Ulcerative proctitis in juvenile systemic lupus erythematosus after ibuprofen treatment. Khoury MI. **J Rheumatol** 1989 Feb;16(2):217–8
Systemic lupus erythematosus presenting with lingual infarction. Korn S, et al. **J Rheumatol** 1988 Aug; 15(8):1281–3
Pseudotumor cerebri in systemic lupus erythematosus. Li EK, et al. **J Rheumatol** 1989 Jan;16(1):113–6
Allopurinol hypersensitivity in a patient with coexistent systemic lupus erythematosus and tophaceous gout. McDonald J, et al. **J Rheumatol** 1988;15(5):865–8
Salmonella septic arthritis in systemic lupus erythematosus. The importance of chronic carrier state. Medina F, et al. **J Rheumatol** 1989 Feb;16(2):203–8
Patellar tendon rupture in systemic lupus erythematosus. Pritchard CH, et al. **J Rheumatol** 1989 Jun;16(6):786–8
Pulmonary hypertension in systemic lupus erythematosus. Simonson JS, et al. **J Rheumatol** 1989 Jul;16(7):918–25
Polyarticular Salmonella bacterial arthritis in a patient with systemic lupus erythematosus. van de Laar MA, et al.
J Rheumatol 1989 Feb;16(2):231–4
SLE with interstitial cystitis, reversible hydronephrosis and intestinal manifestations [letter] Vicencio GP, et al.
J Rheumatol 1989 Feb;16(2):250–1
Pericardial tamponade complicating systemic lupus erythematosus. Zashin SJ, et al. **J Rheumatol** 1989 Mar; 16(3):374–7 (30 ref.)
Ureteral obstruction caused by vasculitis. Baskin L, et al.
J Urol 1989 Apr;141(4):933–5
Systemic lupus erythematosus presenting with pericardial tamponade and lupus pneumonitis. Inase N, et al.
Jpn J Med 1989 May–Jun;28(3):362–5
Complications in the treatment of systemic lupus erythematosus. Maldykowa H, et al. **Mater Med Pol** 1988 Oct–Dec;20(4):267–71
Autoimmune disease in pregnancy. Dombroski RA.
Med Clin North Am 1989 May;73(3):605–21 (113 ref.)
Scintillating scotoma as the first symptom of systemic lupus erythematosus. Honda Y.
Metab Pediatr Syst Ophthalmol 1987;10(1):22–3
Blepharospasm and autoimmune diseases. Jankovic J, et al. **Mov Disord** 1987;2(3):159–63
Systemic lupus erythematosus of the central nervous system: 2. Molecular theories and models for mental disease. Moskowitz N. **Mt Sinai J Med (NY)** 1989 Jan;56(1):23–9
Valvular heart disease in systemic lupus erythematosus [letter] **N Engl J Med** 1989 Mar 16;320(11):739–41
Acute transverse myelopathy as the initial manifestation of probable systemic lupus erythematosus in a child. Linssen WH, et al. **Neuropediatrics** 1988 Nov;19(4):212–5
Aseptic necrosis of the femoral head supervening on systemic lupus erythematosus in identical twins—case report. Itoman M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun; 62(6):609–15
Severe acquired hypocholesterolemia: two case reports.
Nutr Rev 1989 Jul;47(7):202–7 (25 ref.)
Systemic lupus erythematosus and pregnancy. Out HJ, et al. **Obstet Gynecol Surv** 1989 Aug;44(8):585–91 (62 ref.)
An autopsy case of congenital complete heart block in a newly born of a mother with systemic lupus erythematosus. Ishibashi–Ueda H, et al. **Pediatr Cardiol** 1988;9(3):157–61
Systemic lupus erythematosus with Libman–Sachs endocarditis in a 9–month–old infant with neonatal lupus erythematosus and congenital heart block. Jordan JM, et al. **Pediatrics** 1989 Sep;84(3):574–8
Fatal Stevens–Johnson syndrome following urography with iopamidol in systemic lupus erythematosus. Savill JS, et al. **Postgrad Med J** 1988 May;64(751):392–4
Psychiatric and neurological manifestations in systemic lupus erythematosus. Lim L, et al. **Q J Med** 1988 Jan; 66(249):27–38
Systemic lupus erythematosus. Mintz G, et al.
Rheum Dis Clin North Am 1989 May;15(2):255–74
AA amyloidosis associated with systemic lupus erythematosus. ter Borg EJ, et al. **Rheumatol Int** 1988; 8(3):141–3
Tendon rupture in systemic lupus erythematosus. Furie RA, et al. **Semin Arthritis Rheum** 1988 Nov;18(2):127–33 (42 ref.)
Cardiovascular involvement in systemic lupus erythematosus. Mandell BF. **Semin Arthritis Rheum** 1987 Nov;17(2):126–41 (133 ref.)
Chronic lupus peritonitis with ascites: review of the literature with a case report. Schousboe JT, et al.
Semin Arthritis Rheum 1988 Nov;18(2):121–6 (42 ref.)
Ceftazidime in febrile SLE patients. Boey ML, et al.
Singapore Med J 1988 Aug;29(4):393–5
Cryptococcosis of the liver in a systemic lupus erythematosus patient. Fong KY, et al. **Singapore Med J** 1988 Jun; 29(3):309–10
Reversible profound neurologic deficits associated with transient cranial CT abnormalities and systemic lupus erythematosus. Golloub CA, et al. **South Med J** 1989 May; 82(5):650–2
Multiple small–vessel occlusions in systemic lupus erythematosus [letter] Asherson RA, et al. **Stroke** 1989 Jan; 20(1):127–9
Frequency, etiology, and prevention of stroke in patients with systemic lupus erythematosus. Futrell N, et al. **Stroke** 1989 May;20(5):583–91
Intermittent claudication and limb–threatening ischemia in systemic lupus erythematosus and in SLE–like disease: a report of two cases and review of the literature. Bakker FC, et al. **Surgery** 1989 Jul;106(1):21–5 (32 ref.)
Coexistence of porphyria cutanea tarda and systemic lupus erythematosus. Nicholson GD, et al.
West Indian Med J 1988 Dec;37(4):232–5
[Systemic lupus erythematosus and pregnancy] Schwarz P, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1033–5 (Eng. Abstr.) **(Dan)**
[Pseudotumoral lupus anetoderma. Child chorea. Development over 28 years] Schnitzler L, et al.
Ann Dermatol Venereol 1988;115(6–7):679–84 (20 ref.) (Eng. Abstr.) **(Fre)**
[Salmonella typhi murium spondylodiscitis in systemic lupus (letter)] Choukroun G, et al. **Ann Med Interne (Paris)** 1988; 139(6):446–7 **(Fre)**
[Acute systemic lupus erythematosus associated with exudative enteropathy. Apropos of a case. Review of the literature] Azais–Noblinski B, et al. **Ann Radiol (Paris)** 1988; 31(3):183–7 (17 ref.) (Eng. Abstr.) **(Fre)**
[Abdominal manifestations of acute systemic lupus erythematosus. Apropos of a case of intestinal obstruction] Arsac M, et al. **Chirurgie** 1988;114(2):125–9 (Eng. Abstr.) **(Fre)**
[Primary sclerosing cholangitis and systemic lupus erythematosus] Lamy P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):962–4 (15 ref.) (Eng. Abstr.) **(Fre)**
[Seropositivity for the human immunodeficiency virus in systemic lupus erythematosus (letter)] Manigand G, et al. **Presse Med** 1988 Oct 29;17(38):2034 **(Fre)**
[Cortical blindness in systemic lupus erythematosus] Durand JM, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):59–61 (8 ref.) **(Fre)**
[Coronary trunk involvement in systemic lupus erythematosus. Possible role of corticotherapy. Apropos of a case] Sahaghian M, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):147–9 (18 ref.) **(Fre)**
[Coexistence of porphyria cutanea tarda and lupus erythematosus] Morvay M, et al. **Dermatol Monatsschr** 1989;175(1):20–7 (Eng. Abstr.) **(Ger)**
[Hyperkinetic mutism within the scope of consciousness disorder in a case of systemic lupus erythematosus] Kurokawa Y, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):89–96 (Eng. Abstr.) **(Ger)**
[Joint pain, facial skin eruption (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13; 77(50):1383–5 (Eng. Abstr.) **(Ger)**
[Nervous system involvement in systemic lupus erythematosus (editorial)] Denburg YA. **Harefuah** 1989 Apr 2;116(7):389–91 **(Heb)**
[Cardiac and cardiopulmonary changes in systemic lupus erythematosus] Nagyhegyi G, et al. **Orv Hetil** 1989 Jan 29;130(5):215–9 (34 ref.) (Eng. Abstr.) **(Hun)**
[Systemic lupus erythematosus and pregnancy] Pozsonyi T, et al. **Orv Hetil** 1989 Jul 2;130(27):1427–32 (443 ref.) (Eng. Abstr.) **(Hun)**
[Dermal vasculitis in rheumatoid arthritis and systemic lupus erythematosus. A study using capillaroscopy of the nailfold] Binaghi F, et al. **Minerva Cardioangiol** 1988 Jun; 36(6):305–10 (Eng. Abstr.) **(Ita)**
[Ischemic necrosis of femoral condyles in systemic lupus erythematosus] Caldore M, et al. **Minerva Pediatr** 1989 Jan; 41(1):41–4 (Eng. Abstr.) **(Ita)**
[Systemic lupus erythematosus with multiple myeloma] Umemura T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Dec; 98(14):1495–503 (22 ref.) (Eng. Abstr.) **(Jpn)**
[A case of coronary artery bypass using saphenous vein for LMT lesion in a patient with systemic lupus erythematosus] Yamaguchi A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1008–11 (Eng. Abstr.) **(Jpn)**
[An autopsy case of acute pulmonary hemorrhage in systemic lupus erythematosis] Ueno S, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Mar;26(3):284–8 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus with multiple organ thromboses] Anzai K, et al.
Nippon Naika Gakkai Zasshi 1989 May;78(5):650–4 **(Jpn)**
[A case of systemic lupus erythematosus developing malignant lymphoma] Fujimoto S, et al.
Nippon Naika Gakkai Zasshi 1988 Dec;77(12):1892–3 **(Jpn)**
[Complete recovery from severe organic brain damage in a patient with systemic lupus erythematosus] Hirohata S, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1710–3 **(Jpn)**
[A case of systemic lupus erythematosus complicated with dissecting aortic aneurysm] Kimura K, et al.
Nippon Naika Gakkai Zasshi 1989 Apr;78(4):591–2 **(Jpn)**
[A case of systemic lupus erythematosus complicated with vascular occlusion of the aorta and renal artery] Kohzuki M, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):713–7 **(Jpn)**
[A case of thrombotic thrombocytopenic purpura (TTP) complicated with systemic lupus erythematosus (SLE)] Koyama T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun; 77(6):823–6 **(Jpn)**
[A case of autoimmune hemolytic anemia, mixed warm and cold antibody type associated with systemic lupus erythematosus] Mori K, et al.
Nippon Naika Gakkai Zasshi 1988 Aug;77(8):1224–8 **(Jpn)**
[Diagnosis of pulmonary hypertension in patients with systemic lupus erythematosus with special reference to pulsed Doppler technique] Shimizu M, et al.
Nippon Naika Gakkai Zasshi 1989 May;78(5):700–1 **(Jpn)**
[Relationship between collagen disease and malignancy] Takashina N, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):30–4 **(Jpn)**
[Transverse myelopathy and Gottron's sign associated with systemic lupus erythematosus in an elderly woman—a case report] Shimamoto Y, et al.
Nippon Ronen Igakkai Zasshi 1988 May;25(3):309–15 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus with neurological manifestations as initial symptoms] Yoshimoto T, et al.
No Shinkei Geka 1989 May;17(5):489–93 (17 ref.) (Eng. Abstr.) **(Jpn)**
[A case with SLE showing acquired low plasma F.XIII level followed by severe hematoma characteristic of F.XIII deficiency] Okubo S, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1522–6 (Eng. Abstr.) **(Jpn)**
[Central nervous system involvement in systemic lupus erythematosus—investigation by multivariate analysis] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1988 Apr; 28(4):361–4 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus associated with lateral medullary syndrome and unilateral internuclear ophthalmoplegia] Sugie Y, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):75–9 (Eng. Abstr.) **(Jpn)**
[A male patient with lupus cystitis complicated by ascites] Haruki K, et al. **Ryumachi** 1988 Aug;28(4):240–6 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus associated with meningitis, myelitis, and bilateral optic neuritis] Ichiki S, et al. **Ryumachi** 1989 Apr;29(2):126–33 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus with apallic syndrome disclosed central nervous system abnormality by electroencephalogram from early stage] Mukai M, et al. **Ryumachi** 1988 Oct;28(5):354–9 (Eng. Abstr.) **(Jpn)**

[Joint deformity in patients with systemic lupus erythematosus] Nishino M, et al. **Ryumachi** 1988 Aug; 28(4):247–54 (Eng. Abstr.) **(Jpn)**

[A case of anti-phospholipid antibody syndrome presenting chorea as an initial manifestation] Nogawa S, et al. **Ryumachi** 1989 Apr;29(2):134–42 (Eng. Abstr.) **(Jpn)**

[Systemic lupus erythematosus with involvement of the central nervous system] Ivanova MM, et al. **Klin Med (Mosk)** 1989 Jun;67(6):15–20 (37 ref.) **(Rus)**

[Pulmonary and pleural changes in children with systemic lupus erythematosus] Fedoseeva NA, et al. **Pediatriia** 1989; (5):45–51 **(Rus)**

[A case of systemic lupus erythematosus associated with cancer of the lung] Mikhalev ID, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):68–70 **(Rus)**

[Aortal defects in systemic lupus erythematosus] Alekberova ZS, et al. **Ter Arkh** 1989;61(5):35–8 (Eng. Abstr.) **(Rus)**

[Clinico-instrumental methods of diagnosing aseptic femur head necrosis in patients with systemic lupus erythematosus] Tsurko VV, et al. **Ter Arkh** 1988; 60(12):77–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the thrombohemorrhagic syndrome in patients with systemic lupus erythematosus] Angelutsa PA, et al. **Vrach Delo** 1989 Jan;(1):50–2 (Eng. Abstr.) **(Rus)**

[Systemic lupus erythematosus in children with renal and hematologic manifestations. Relation to anti-nDNA antibodies] Martínez-Cordero E, et al. **Bol Med Hosp Infant Mex** 1989 Jan;46(1):11–21 (Eng. Abstr.) **(Spa)**

[Multiple aneurysms and cerebral vasculitis in systemic lupus erythematosus] Atanes Sandoval A, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):577–9 (Eng. Abstr.) **(Spa)**

[Systemic lupus erythematosus and end-stage chronic renal insufficiency. Therapeutic perspectives (editorial)] Font J, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):573–6 **(Spa)**

[Systemic lupus erythematosus and non-Hodgkin's lymphoma] García Díaz JD, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):37–8 **(Spa)**

[Lupus myocarditis with severe heart insufficiency (letter)] López Soto A, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):277 **(Spa)**

[Unexpected presence of hepatitis B virus DNA in hepatocytes of patients with chronic autoimmune (lupoid) hepatitis] Muñoz Calvo B. **Med Clin (Barc)** 1989 May 13; 92(18):681–3 (Eng. Abstr.) **(Spa)**

[Libman-Sacks endocarditis and anticardiolipin antibodies (letter)] Sacanella E, et al. **Med Clin (Barc)** 1989 May 13; 92(18):716–7 **(Spa)**

[Eclampsia as a form of onset of systemic lupus erythematosus during pregnancy (letter)] Cerqueira MJ, et al. **Rev Clin Esp** 1988 Nov;183(8):443–4 **(Spa)**

[Nervous system lupus (letter)] Chicharro Serrano ML. **Rev Clin Esp** 1988 Oct;183(5):278 **(Spa)**

[Papulonodular mucinosis and late-onset systemic lupus erythematosus associated with Hashimoto's thyroiditis and Sjogren's syndrome (letter)] Galofré J, et al. **Rev Clin Esp** 1989 May;184(8):446–7 **(Spa)**

[Subacute lupus erythematosus? (letter)] Gilsanz Fernández C, et al. **Rev Clin Esp** 1989 Jun;185(2):105–6 **(Spa)**

[Infection in systemic lupus erythematosus] Juega J, et al. **Rev Clin Esp** 1989 Mar;184(5):245–6 (Eng. Abstr.) **(Spa)**

[Optic neuritis and systemic lupus erythematosus (letter)] Lahoz Rallo C, et al. **Rev Clin Esp** 1989 Mar;184(4):216 **(Spa)**

[Hashimoto's thyroiditis associated with systemic lupus erythematosus (letter)] Martín Escobar E, et al. **Rev Clin Esp** 1989 Apr;184(6):334–5 **(Spa)**

[Late-onset systemic lupus erythematosus] Pallarés L, et al. **Rev Clin Esp** 1988 Oct;183(5):253–4 (15 ref.) (Eng. Abstr.) **(Spa)**

[Perforation of the colon in systemic lupus erythematosus (letter)] Molina Boix M, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):187–8 **(Spa)**

[Hematologic abnormalities in systemic lupus erythematosus (letter)] Kraus A, et al. **Rev Invest Clin** 1989 Jan–Mar; 41(1):93–6 **(Spa)**

CONGENITAL

Postnatal progression from second- to third-degree heart block in neonatal lupus syndrome. Geggel RL, et al. **J Pediatr** 1988 Dec;113(6):1049–52

[The newborn infant of a mother with lupus] Bodemer C, et al. **Presse Med** 1988 Nov 19;17(41):2161–3 **(Fre)**

DIAGNOSIS

Magnetic resonance imaging versus computed tomographic scanning in neuropsychiatric systemic lupus erythematosus. Sewell KL, et al. **Am J Med** 1989 May;86(5):625–6

Diagnostic and therapeutic problems in two patients with antiphospholipid antibodies, heart valve lesions, and transient ischaemic attacks. Asherson RA, et al. **Ann Rheum Dis** 1988 Nov;47(11):947–53

Neonatal lupus erythematosus syndrome [letter] O'Neill PE, et al. **Arch Dermatol** 1988 Dec;124(12):1869–70

Reliability and validity of six systems for the clinical assessment of disease activity in systemic lupus erythematosus. Liang MH, et al. **Arthritis Rheum** 1989 Sep; 32(9):1107–18

Diagnosis of central nervous system lupus. O'Connor P. **Can J Neurol Sci** 1988 Aug;15(3):257–60 (29 ref.)

Lupus band test: clinical applications. Jordon RE. **Clin Dermatol** 1985 Jul–Sep;3(3):113–22 (53 ref.)

Late-onset systemic lupus erythematosus presenting as polymyalgia rheumatica. Maragou M, et al. **Clin Rheumatol** 1989 Mar;8(1):91–7

The diagnostic features of SLE. Rothfield NF. **Hosp Pract [Off]** 1989 Jan 30;24(1A):37–46

Lupus: the 'wolf bite' that may be more than skin deep. Reich M. **J Am Osteopath Assoc** 1989 Feb;89(2):242–5

The contribution of direct immunofluorescence to the diagnosis of lupus erythematosus. Williams RE, et al. **J Cutan Pathol** 1989 Jun;16(3):122–5

Direct immunofluorescence studies on skin biopsies in lupus erythematosus. Joshi R, et al. **J Postgrad Med** 1988 Jul; 34(3):165–8

Angioimmunoblastic lymphadenopathy presenting as SLE with GI protein loss [letter] Becker NJ, et al. **J Rheumatol** 1988 Sep;15(9):1452–4

SLE in the elderly—is it really SLE or systemic Sjögren's syndrome? [editorial] Bell DA. **J Rheumatol** 1988; 15(5):723–4

"Latent lupus". Ganczarczyk L, et al. **J Rheumatol** 1989 Apr; 16(4):475–8

What is SLE? [editorial] Lockshin MD. **J Rheumatol** 1989 Apr;16(4):419–20

Recurrent aseptic meningitis followed by transverse myelitis as a presentation of systemic lupus erythematosus. Sands ML, et al. **J Rheumatol** 1988;15(5):862–4

Congenital heart block in successive pregnancies: a case report and evaluation of risk with therapeutic consideration. Scheib JS, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):481–4

Ischemic stroke in a girl with lupus anticoagulant. Kelley RE, et al. **Pediatr Neurol** 1987 Jan–Feb;3(1):58–61

[Cerebral infarction in systemic lupus erythematosus] Overbeck S, et al. **Ugeskr Laeger** 1989 Feb 13;151(7):449–50 (Eng. Abstr.) **(Dan)**

[Correlation of Sm antibodies and clinical symptoms in systemic lupus erythematosus] Serfling U, et al. **Dermatol Monatsschr** 1988;174(11):667–70 (Eng. Abstr.) **(Ger)**

[Follow-up in systemic lupus erythematosus] Krause A, et al. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1383 (Eng. Abstr.) **(Ger)**

[A case of systemic lupus erythematosus with lupus anticoagulant, complicating cerebral infarction and habitual abortions] Izumi R, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):740–1 **(Jpn)**

[Analysis of systemic lupus erythematosus (SLE) involving the central nervous system by magnetic resonance imaging (MRI)] Suzuki K, et al. **Ryumachi** 1989 Apr;29(2):88–96 (Eng. Abstr.) **(Jpn)**

[Systemic lupus erythematosus with changes of the nervous system and eyes in a 16-year-old girl] Romicka AM, et al. **Pediatr Pol** 1988 Jul;63(7):446–9 **(Pol)**

[Diagnosis of systemic lupus erythematosus in children and adolescents in the light of our observations (based on the criteria of the ARA)] Rostropowicz-Denisiewicz K, et al. **Pediatr Pol** 1988 Jul;63(7):424–30 (Eng. Abstr.) **(Pol)**

[The place for a method of demonstrating native anti-DNA antibodies in the diagnosis of systemic lupus erythematosus using an indirect immunofluorescence technic] Dima I, et al. **Rev Med Interna [Med Interna]** 1988 May-Jun; 40(3):259–66 (Eng. Abstr.) **(Rum)**

[Clinical manifestations of the initial period of systemic lupus erythematosus in children] Isaeva LA, et al. **Pediatriia** 1989; (6):61–5 **(Rus)**

[Evolution and current characteristics of the clinical picture and course of systemic lupus erythematosus in children] Isaeva LA, et al. **Pediatriia** 1989;(4):18–23 (Eng. Abstr.) **(Rus)**

[Infarction-like ECG changes in lupus pericarditis] Sarkisian NM, et al. **Ter Arkh** 1988;60(7):90–1 **(Rus)**

[Transitory (presystemic) forms of lupus erythematosus and characteristics of their immunotherapy] Gorbunov VF, et al. **Vestn Dermatol Venerol** 1989;(3):26–9 (Eng. Abstr.) **(Rus)**

[Clinical significance of the immunologic differences between pseudolupus and lupus] Andelković Z, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):370–4 **(Scr)**

[Systemic lupus erythematosus as syndrome of anticardiolipin antibodies (letter)] Sanz Moreno J, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):398–9 **(Spa)**

DIET THERAPY

Effect of eicosapentaenoic acid rich menhaden oil and MaxEPA on the autoimmune disease of Mrl/l mice. Westberg G, et al. **Int Arch Allergy Appl Immunol** 1989; 88(4):454–61

The therapeutic effects of dietary fatty acid supplementation in the autoimmune disease of the MRL-mp-lpr/lpr mouse. Watson J, et al. **Int J Immunopharmacol** 1988;10(4):467–71

DRUG THERAPY

Endometrial carcinoma following chronic anovulation in a premenopausal woman with systemic lupus erythematosus. Sekiya S, et al. **Acta Obstet Gynecol Scand** 1988;67(6):553–6

Efficacy of antimalarials in systemic lupus erythematosus. Rothfield N. **Am J Med** 1988 Oct 14;85(4A):53–6

Administration of gonadotropin-releasing hormone analog as adjunctive therapy in women with systemic lupus erythematosus [letter] Catania A, et al. **Arthritis Rheum** 1989 Sep;32(9):1186–8

Steroid induced exophthalmos. A case report. Fan CJ, et al. **Australas Radiol** 1989 May;33(2):182–3

A 47-year-old woman presenting with a 20-year history of SLE. Hughes GR. **Br J Rheumatol** 1989 Aug;28(4):349

Improved survival in murine lupus as the result of selenium supplementation. O'Dell JR, et al. **Clin Exp Immunol** 1988 Aug;73(2):322–7

Use of high-dose intravenous immunoglobulin in systemic lupus erythematosus: report of three cases. Corvetta A, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):295–9

Effect of FK-506, a novel immunosuppressive drug on murine systemic lupus erythematosus. Takabayashi K, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):110–7

Recombinant interleukin-2 therapy of systemic lupus erythematosus in the New Zealand black/New Zealand white mouse. Owen KL, et al. **J Biol Response Mod** 1989 Aug;8(4):366–74

Effect of vitamin A treatment on the immune reactivity of patients with systemic lupus erythematosus. Vien CV, et al. **J Clin Lab Immunol** 1988 May;26(1):33–5

Exogenous glucocorticoid eliminates or reverses circadian blood pressure variations. Imai Y, et al. **J Hypertens** 1989 Feb;7(2):113–20

Effect of captopril on murine systemic lupus erythematosus disease. Herlitz H, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S684–6

Axillary vein thrombosis after nitrogen mustard therapy for SLE [letter] Quismorio FP Jr, et al. **J Rheumatol** 1988 Nov; 15(11):1732–3

NSAID usage patterns by rheumatologists in the treatment of SLE. Wallace DJ, et al. **J Rheumatol** 1989 Apr; 16(4):557–60

Aseptic necrosis and glucocorticosteroids in systemic lupus erythematosus: a reevaluation. Weiner ES, et al. **J Rheumatol** 1989 May;16(5):604–8 (15 ref.)

Alternate-day corticosteroid treatment, mood and plasma HVA in patients with systemic lupus erythematosus. Joffe RT, et al. **Neuropsychobiology** 1988;19(1):17–9

Intravenous cyclophosphamide therapy of severe SLE. McCune WJ, et al. **Rheum Dis Clin North Am** 1989 Aug; 15(3):455–77 (135 ref.)

Effective methylprednisolone "pulse" therapy in myeloerythroid aplasia associated with systemic lupus erythematosus: case report and literature review. Yamauchi K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):337–41 (21 ref.)

Immediate effects of methylprednisolone pulse therapy on the immune response. Lee SK, et al. **Yonsei Med J** 1988; 29(4):373–8

[Intravenous pulsed therapy with prednisolone hemisuccinate in severe forms of systemic lupus erythematosus] Solakov P, et al. **Vutr Boles** 1988;27(5):72–3 (Eng. Abstr.) **(Bul)**

[Three lianas syrup in treating 302 cases of various types of lupus erythematosus] Qin WZ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):604–6, 582 (Eng. Abstr.) **(Chi)**

[Observation on the treatment of systemic lupus erythematous with a Gentiana macrophylla complex tablet and a minimal dose of prednisone] Yuan ZZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):156–7, 133–4 (Eng. Abstr.) **(Chi)**

[Current developments in the diagnosis and therapy of cytomegalovirus infections] Bresser P, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):455–7 (Eng. Abstr.) **(Dut)**

[Recurrent avascular bone necrosis in systemic lupus] Abu-Shakra M, et al. **Harefuah** 1989 Feb 15;116(4):197–9 (Eng. Abstr.) **(Heb)**

[A case of lupus cystitis] Kunimi K, et al. **Hinyokika Kiyo** 1989 Apr;35(4):685–8 (Eng. Abstr.) **(Jpn)**

[Primary malignant lymphoma of the brain following immunosuppressive therapy of systemic lupus erythematosus] Matsuura T, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):730–5 **(Jpn)**

[Systemic lupus erythematosus associated with autoimmune hemolytic anemia and diversified symptoms responsive to methylprednisolone pulse therapy: a case report] Ushiroda S, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):736–7 **(Jpn)**

[Multicenter cooperative study of immunosuppressive therapy of systemic lupus erythematosus—a report of Therapy Research Division of Research Committee for Autoimmune Diseases, the Ministry of Health and Welfare] Ichikawa Y, et al. **Ryumachi** 1988 Aug;28(4):230–9 (Eng. Abstr.) **(Jpn)**

[Results of prednisolone pulse therapy of children with systemic lupus erythematosus] Kartasheva VI, et al. **Pediatriia** 1989;(2):57–62 **(Rus)**

[Clinical effectiveness of prospidin in systemic lupus erythematosus (results of a 6-month follow-up)] Benenson EV, et al. **Ter Arkh** 1989;61(5):21–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Circulating anti-elastase in systemic lupus erythematosus

[letter] Nässberger L, et al. **Lancet** 1989 Mar 4;1(8636):509
[Significance of low serum creatine phosphokinase level in patients with systemic lupus erythematosus] Teramoto N, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(4):417–23 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Epidemiologic study of systemic lupus erythematosus in Fukuoka population. Kameda S. **Fukuoka Igaku Zasshi** 1988 Aug;79(8):571–8
Systemic lupus erythematosus in black South Africans. Dessein PH, et al. **S Afr Med J** 1988 Oct 15;74(8):387–9 (25 ref.)
Male lupus: retrospective analysis of the clinical and laboratory features of 52 patients, with a review of the literature. Kaufman LD, et al. **Semin Arthritis Rheum** 1989 Feb;18(3):189–97 (86 ref.)

ETIOLOGY

Lupus erythematosus and rheumatoid arthritis—groups of defects in microdebridement (polygenetic defects exceeding the fault tolerance threshold—a consequence of natural defense mechanisms). Stone OJ.
Med Hypotheses 1988 Dec;27(4):327–32
[The pathogenesis of systemic lupus erythematosus—data and considerations] Graninger W, et al. **Acta Med Austriaca** 1988;15(5):150–4 (32 ref.) (Eng. Abstr.) **(Ger)**
[A case of systemic lupus erythematosus following thymectomy in myasthenia gravis] Kinoshita I, et al.
Nippon Naika Gakkai Zasshi 1988 Dec;77(12):1894–5 (6 ref.) **(Jpn)**
[A case of systemic lupus erythematosus with lupus nephritis occurring in Crohn's disease] Sugimoto M, et al.
Nippon Naika Gakkai Zasshi 1989 Apr;78(4):583–4 **(Jpn)**
[Interleukin 1 and systemic lupus erythematosus] Sierakowski S, et al. **Przegl Lek** 1988;45(9):693–6 (44 ref.) **(Pol)**
[The significance of immunogenetic factors in the pathogenesis of systemic lupus erythematosus] Matveikov GP, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):17–23 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular genetics of murine lupus models. Theofilopoulos AN, et al. **Adv Immunol** 1989;46:61–109 (150 ref.)
Major histocompatibility complex genes in systemic lupus erythematosus, Sjögren's syndrome, and polymyositis. Arnett FC, et al. **Am J Med** 1988 Dec 23;85(6A):38–41 (15 ref.)
Major histocompatibility complex associations with systemic lupus erythematosus. Fronek Z, et al. **Am J Med** 1988 Dec 23;85(6A):42–4
Genetic contributions to lupus-like disease in NZB/NZW mice. Kotzin BL, et al. **Am J Med** 1988 Dec 23; 85(6A):29–31
C4 concentrations and C4 deficiency alleles in systemic lupus erythematosus. Wilson WA, et al. **Ann Rheum Dis** 1989 Jul;48(7):600–4
Expression of an endogenous retroviral transcript is associated with murine lupus. Krieg AM, et al.
Arthritis Rheum 1989 Mar;32(3):322–9
Plasma DNA in systemic lupus erythematosus. Characterization of cloned base sequences. Li JZ, et al.
Arthritis Rheum 1989 Jun;32(6):726–33
Nonlinkage of the T cell receptor alpha, beta, and gamma genes to systemic lupus erythematosus in multiplex families. Wong DW, et al. **Arthritis Rheum** 1988 Nov;31(11):1371–6
Immunogenetics of SLE and primary Sjögren's syndrome. Ng YC, et al. **Baillieres Clin Rheumatol** 1988 Dec; 2(3):623–47 (133 ref.)
Transcriptional and post-transcriptional mechanisms are responsible for the increased expression of c-myc protooncogene in lymphocytes from patients with systemic lupus erythematosus. Eleftheriades EG, et al.
Clin Immunol Immunopathol 1989 Sep;52(3):507–15
C3 alleles in diseases associated with C3 activation. Welch TR, et al. **Dis Markers** 1987 Jun;5(2):81–7
Major histocompatibility complex extended haplotypes in systemic lupus erythematosus. Welch TR, et al.
Dis Markers 1988 Oct–Dec;6(4):247–55
The VH gene sequences of anti-DNA antibodies in two different strains of lupus-prone mice are highly related. Eilat D, et al. **Eur J Immunol** 1989 Jul;19(7):1241–6
Segregation of lymphocyte low-molecular-weight DNA and antinuclear-antibodies in a family with systemic lupus erythematosus in first cousins. Levcovitz H, et al.
Hum Genet 1988 Nov;80(3):253–8
C4A gene deletion and HLA associations in black Americans with systemic lupus erythematosus. Olsen ML, et al.
Immunogenetics 1989;30(1):27–33
Gm allogenotype distribution and lack of HLA-DR, Gm interaction in SLE and CREST/PSS. Jazwinska EC, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):261–5
Molecular cloning of cDNA encoding the p70 (Ku) lupus autoantigen. Reeves WH, et al. **J Biol Chem** 1989 Mar 25; 264(9):5047–52
Association of HLA-DR2/DR4 heterozygosity with systemic lupus erythematosus in Japanese patients. Hirose S, et al. **J Rheumatol** 1988 Oct;15(10):1489–92
Complement receptor 1 (CR1) on erythrocytes of patients with systemic lupus erythematosus. Kawaguchi T, et al. **Jinrui Idengaku Zasshi** 1988 Dec;33(4):451–60
Expression of lymphokine genes in splenic lymphocytes of autoimmune mice. Umland S, et al. **Mol Immunol** 1989 Jul; 26(7):649–56
Systemic lupus erythematosus: learning disability in the male offspring of female patients and relationship to laterality. Lahita RG. **Psychoneuroendocrinology** 1988;13(5):385–96
Development of autoimmunity in MRL/lpr mice and the effects of drugs on this murine disease. Bartlett RR, et al. **Scand J Rheumatol Suppl** 1988;75:290–9
Neonatal lupus in twins. Lawrence N, et al.
South Med J 1989 May;82(5):657–60
HLA-A,B,C, and DR antigens, GLO I and Bf marker profiles in 75 Cape coloured patients with systemic lupus erythematosus (SLE). Klemp P, et al. **Tissue Antigens** 1988 Jul;32(1):12–6
[Familial lupus and Adie's tonic pupil (letter)] Herson D, et al. **Ann Med Interne (Paris)** 1989;140(1):56–7 (17 ref.) **(Fre)**
[Molecular genetic analysis of autoantibody production in systemic lupus erythematosus] Strohal R, et al.
Wien Klin Wochenschr 1988 Dec 2;100(23):753–60 (52 ref.) (Eng. Abstr.) **(Ger)**
[Neonatal lupus erythematosus] Mayet WJ, et al.
Z Rheumatol 1989 Mar-Apr;48(2):57–62 (62 ref.) (Eng. Abstr.) **(Ger)**
[A pair of identical twin sisters concordant for systemic lupus erythematosus] Oura T, et al.
Nippon Naika Gakkai Zasshi 1989 Mar;78(3):408–9 **(Jpn)**
[Immunologic analysis of families with complement receptor deficiency] Yokota E, et al. **Nippon Rinsho** 1988 Sep; 46(9):2040–5 **(Jpn)**
[HLA-A and HLA-B antigens in patients with systemic lupus erythematosus with renal involvement] Yoshinari NH, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Sep–Oct; 43(5):228–31 (Eng. Abstr.) **(Por)**
[Characteristics of the development and health status of children born to mothers with systemic lupus erythematosus] Ermakova TM. **Pediatriia** 1989;(4):23–6 (Eng. Abstr.) **(Rus)**
[Comparative clinico-immunologic and microcirculation studies in families of patients with type 1 diabetes mellitus and systemic lupus erythematosus] Nasonova VA, et al. **Vestn Akad Med Nauk SSSR** 1989;(5):22–8 (Eng. Abstr.) **(Rus)**
[Lupus nephropathy in childhood and familial lupus. Genetic study of a family] Gómez Campdera FJ, et al.
Med Clin (Barc) 1989 Apr 15;92(14):543–6 (Eng. Abstr.) **(Spa)**

HISTORY

Lupus erythematosus. Historical perspectives. Callen JP.
Clin Dermatol 1985 Jul-Sep;3(3):1–3

IMMUNOLOGY

The lupus anticoagulant in systemic lupus erythematosus. Rowell NR, et al. **Acta Derm Venereol (Stockh)** 1989; 69(2):111–5
Correlation between the levels of antinuclear antibodies, anti-DNA antibodies, and complement in systemic lupus erythematosus. Nguyen CP, et al. **Acta Med Hung** 1988; 45(2):145–59
Anti-granulocyte antibodies in immune neutropenia and autoimmune disorders. Sipos A, et al.
Acta Paediatr Hung 1988–89;29(1–2):97–100
T cell up-regulation of B cells via their idiotypes contributing to the development of systemic lupus erythematosus. A hypothesis. Hahn BH, et al. **Am J Med** 1988 Dec 23; 85(6A):32–4
Clinical significance of a single test for anti-cardiolipin antibodies in patients with systemic lupus erythematosus. Kalunian KC, et al. **Am J Med** 1988 Nov;85(5):602–8
Immune response to the RNA protein particles in systemic lupus erythematosus. A distinctive dichotomy. Reichlin M, et al. **Am J Med** 1988 Dec 23;85(6A):35–7 (14 ref.)
Familial occurrence of impaired interleukin-2 activity and increased peripheral blood B cells actively secreting immunoglobulins in systemic lupus erythematosus. Sakane T, et al. **Am J Med** 1989 Apr;86(4):385–90
The prevalence and biologic significance of lupus anticoagulant and anticardiolipin antibodies in a general obstetric population. Lockwood CJ, et al.
Am J Obstet Gynecol 1989 Aug;161(2):369–73
Organ-specific antibodies against ovary in patients with systemic lupus erythematosus. Moncayo-Naveda H, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1227–9
Comparison of tanned cell hemagglutination and counter immunoelectrophoresis test in the detection of antibodies to extractable nuclear antigens (ENA) and to DNA in the systemic lupus erythematosus. Depiante-Depaoli M, et al.
Ann Biol Clin (Paris) 1989;47(5):247–51
Idiotypic analyses of anti-DNA antibodies in systemic lupus and monoclonal gammopathy. Davidson A, et al.
Ann Inst Pasteur Immunol 1988 Nov-Dec;139(6):645–50
Autoantibody reactive integral membrane antigens of thymocytes and brain. Narendran A, et al.
Ann N Y Acad Sci 1988;540:466
Terminal complement complexes (SC5b-9) in cerebrospinal fluid in autoimmune nervous system diseases. Sanders ME, et al. **Ann N Y Acad Sci** 1988;540:387–8
Antiphospholipid antibodies: a risk factor for occlusive ocular vascular disease in systemic lupus erythematosus and the 'primary' antiphospholipid syndrome. Asherson RA, et al.
Ann Rheum Dis 1989 May;48(5):358–61
Relation of antivimentin antibodies to anticardiolipin antibodies in systemic lupus erythematosus. Blaschek MA, et al. **Ann Rheum Dis** 1988 Sep;47(9):708–16
Clinical and autoantibody correlations in Orientals with systemic lupus erythematosus. Boey ML, et al.
Ann Rheum Dis 1988 Nov;47(11):918–23
Hypercatabolism of C3 and C4 in active and inactive systemic lupus erythematosus. Charlesworth JA, et al.
Ann Rheum Dis 1989 Feb;48(2):153–9
Specificity of anti-Sm antibodies by ELISA for systemic lupus erythematosus: increased sensitivity of detection using purified peptide antigens. Field M, et al.
Ann Rheum Dis 1988 Oct;47(10):820–5
Anticardiolipin versus lupus anticoagulant tests: no final judgment [letter] Harris EN. **Ann Rheum Dis** 1989 Jan; 48(1):84–5
Disease activity in systemic lupus erythematosus related to a range of antibodies binding DNA and synthetic polynucleotides. Isenberg DA, et al. **Ann Rheum Dis** 1988 Sep;47(9):717–24
Immunoblotting profiles in 55 systemic lupus erythematosus sera lacking precipitating antibodies to extractable nuclear antigens. Meyer O, et al. **Ann Rheum Dis** 1989 Jul; 48(7):594–9
Low avidity antibodies to double stranded DNA in systemic lupus erythematosus: a longitudinal study of their clinical significance. Nossent JC, et al. **Ann Rheum Dis** 1989 Aug; 48(8):677–82
Lymphocytotoxic antibodies in systemic lupus erythematosus: studies of their temperature dependence, binding characteristics, and specificity in vitro. Peake PW, et al. **Ann Rheum Dis** 1988 Sep;47(9):725–32
Correlation of the activation of the fourth component of complement (C4) with disease activity in systemic lupus erythematosus. Senaldi G, et al. **Ann Rheum Dis** 1988 Nov; 47(11):913–7
Anticardiolipin antibodies in systemic lupus erythematous [letter] Snowden N, et al. **Ann Rheum Dis** 1989 Jan; 48(1):80–2
Does rheumatoid factor protect lupus patients from the development of nephritis? Turner-Stokes L, et al.
Ann Rheum Dis 1989 Jan;48(1):14–6
The inhibition of protein synthesis by IgG containing anti-ribosome P autoantibodies from systemic lupus erythematosus patients. Stacey DW, et al.
Arch Biochem Biophys 1988 Nov 15;267(1):398–403
Does an association exist between PCT and SLE? Results of a study on autoantibodies in 158 patients affected with PCT. Griso D, et al. **Arch Dermatol Res** 1989;281(4):291–2
Release of leukotriene C4 from human monocytes: defects in patients with systemic lupus erythematosus. Yamane K, et al. **Arerugi** 1988 May;37(5):301–8
Genetic studies of Ro (SS-A) and La (SS-B) autoantibodies in families with systemic lupus erythematosus and primary Sjögren's syndrome. Arnett FC, et al. **Arthritis Rheum** 1989 Apr;32(4):413–9
An antibody that inhibits in vitro bone marrow proliferation in a patient with systemic lupus erythematosus and aplastic anemia. Bailey FA, et al. **Arthritis Rheum** 1989 Jul; 32(7):901–5
High-grade atrioventricular heart block in an adult with systemic lupus erythematosus: the association of nuclear RNP (U1 RNP) antibodies, a case report, and review of the literature. Bilazarian SD, et al. **Arthritis Rheum** 1989 Sep;32(9):1170–4 (26 ref.)
Autoantibodies to intracellular proteins in human systemic lupus erythematosus are not due to random polyclonal B cell activation. Gharavi AE, et al. **Arthritis Rheum** 1988 Nov;31(11):1337–45
Reduced numbers of complement receptor type 1 on erythrocytes are associated with increased levels of anticardiolipin antibodies. Findings in patients with systemic lupus erythematosus and the antiphospholipid syndrome. Hammond A, et al. **Arthritis Rheum** 1989 Mar; 32(3):259–64
A novel neuronal antigen identified by sera from patients with systemic lupus erythematosus. Hanly JG, et al.
Arthritis Rheum 1988 Dec;31(12):1492–9
A model for disease heterogeneity in systemic lupus erythematosus. Relationships between histocompatibility antigens, autoantibodies, and lymphopenia or renal disease. Harley JB, et al. **Arthritis Rheum** 1989 Jul;32(7):826–36
Correlation of anti-Ro antibody with photosensitivity rash in systemic lupus erythematosus patients. Mond CB, et al.
Arthritis Rheum 1989 Feb;32(2):202–4
High-dose, pulse intravenous methylprednisolone enhances Fc gamma receptor-mediated mononuclear phagocyte function in systemic lupus erythematosus. Salmon JE, et al. **Arthritis Rheum** 1989 Jun;32(6):717–25
HLA-DR antigens and anticardiolipin antibodies in northern Italian systemic lupus erythematosus patients. Savi M, et al. **Arthritis Rheum** 1988 Dec;31(12):1568–70
DNA-anti-DNA complexes account for part of the antihistone activity found in patients with systemic lupus erythematosus. Subiza JL, et al. **Arthritis Rheum** 1989 Apr; 32(4):406–12
Antilymphocyte antibodies against CD4+2H4+ cell populations in patients with systemic lupus erythematosus. Tanaka S, et al. **Arthritis Rheum** 1989 Apr;32(4):398–405
Sequential development of antibodies to specific Sm

polypeptides in a patient with systemic lupus erythematosus: evidence for independent regulation of anti-double-stranded DNA and anti-Sm antibody production. ter Borg EJ, et al. **Arthritis Rheum** 1988 Dec; 31(12):1563–7

Lymphocyte subset T4/T8 ratio in systemic lupus erythematosus: correlation with disease activity, laboratory abnormalities and treatment. Nilganuwonge S, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):23–8

A kinetic study of erythrocyte-DNA/anti-DNA immune complex association and dissociation reactions in systemic lupus erythematosus. Meryhew NL, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):470–6

Anti-Epstein-Barr virus antibodies in systemic lupus erythematosus. Origgi L, et al. **Boll Ist Sieroter Milan** 1988; 67(2):116–22

Skin lesions associated with circulating lupus anticoagulant. Alegre VA, et al. **Br J Dermatol** 1989 Mar;120(3):419–29

Systemic lupus erythematosus with complement deficiency and IgA anti-cardiolipin antibody. Markey AC, et al. **Br J Dermatol** 1988 Nov;119(5):633–7

Dust- and rod-like particles in cutaneous biopsies of patients with systemic lupus erythematosus [letter] Sepp N, et al. **Br J Dermatol** 1989 Jun;120(6):851–3

A comparison of autoantibodies and common DNA antibody idiotypes in SLE patients and their spouses. Isenberg DA, et al. **Br J Rheumatol** 1988 Dec;27(6):431–5

Photosensitivity and anti-Ro (SS-A) antibodies in black patients with systemic lupus erythematosus (SLE). Sutej PG, et al. **Br J Rheumatol** 1989 Aug;28(4):321–4

Neuropsychological correlates of serum lymphocytotoxic antibodies in systemic lupus erythematosus. Denburg SD, et al. **Brain Behav Immun** 1988 Sep;2(3):222–34

IL-2 antibody production in lupus mice. Ishizaka S, et al. **Cell Immunol** 1989 Jan;118(1):100–7

A preliminary study on T lymphocyte subsets in systemic lupus erythematosus. Yang JL, et al. **Chin Med J [Engl]** 1988 Sep;101(9):665–70

Serum interleukin-2 receptor in systemic lupus erythematosus and rheumatoid arthritis. Lee GL, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):16–22

The ANA profile: quality and cost-effective laboratory utilization [published erratum appears in Cleve Clin J Med 1989 Jul-Aug;56(5):548] Clough JD, et al. **Cleve Clin J Med** 1989 May;56(3):245–8

Antinuclear and anticytoplasmic antibodies in lupus erythematosus. Kulick KB, et al. **Clin Dermatol** 1985 Jul-Sep;3(3):4–19

Presence of an IL-3-producing suppressor T cell resistant to cyclosporin A in the peripheral blood of patients with systemic lupus erythematosus. Alcocer-Varela, et al. **Clin Exp Immunol** 1988 Sep;73(3):424–9

Analysis of negatively charged dye-binding antibodies reactive with double-stranded DNA and heparan sulfate in serum from patients with rheumatic diseases. Aotsuka S, et al. **Clin Exp Immunol** 1988 Sep;73(3):436–42

Anti-histone antibodies (ELISA and immunoblot) in canine lupus erythematosus. Brinet A, et al. **Clin Exp Immunol** 1988 Oct;74(1):105–9

B lymphocyte activation in systemic lupus erythematosus: spontaneous production of IgG antibodies to DNA and environmental antigens in cultures of blood mononuclear cells. Dar O, et al. **Clin Exp Immunol** 1988 Sep;73(3):430–5

Individual variation in the isotype profile of anti-histone autoantibodies in systemic lupus erythematosus. Fellows G, et al. **Clin Exp Immunol** 1988 Jun;72(3):440–5

Phenotypic expression of Vicia villosa binding T cell subsets, as markers of contrasuppressor cells in systemic lupus erythematosus. Fortune F, et al. **Clin Exp Immunol** 1988 Oct;74(1):100–4

Resistance to tolerance induction to human gammaglobulin (HGG) in autoimmune BXSB/MpJ mice: functional analysis of antigen-presenting cells and HGG-specific T helper cells. Garnier JL, et al. **Clin Exp Immunol** 1988 Aug; 73(2):283–8

Monoclonal hybridoma anti-cardiolipin antibodies from SLE mice. Ichikawa K, et al. **Clin Exp Immunol** 1988 Oct; 74(1):110–4

Heterogeneity of B cell responsiveness to interleukin 4, interleukin 6 and low molecular weight B cell growth factor in discrete stages of B cell activation in patients with systemic lupus erythematosus. Kitani A, et al. **Clin Exp Immunol** 1989 Jul;77(1):31–6

Anti-thyroid peroxidase antibody activity in sera of patients with systemic lupus erythematosus. Kohno Y, et al. **Clin Exp Immunol** 1989 Feb;75(2):217–21

Antibody binding of macromolecular DNA and RNA in the plasma of SLE patients. Krapf F, et al. **Clin Exp Immunol** 1989 Mar;75(3):336–42

Characterization of lymphocytes that suppress IL-2 production in systemic lupus erythematosus. Linker-Israeli M, et al. **Clin Exp Immunol** 1988 Aug;73(2):236–41

Circulating colony-forming units of granulocytes and monocytes/macrophages in systemic lupus erythematosus. López-Karpovitch X, et al. **Clin Exp Immunol** 1989 Jul; 77(1):43–6

Quantification of lupus anti-ribosome P antibodies using a recombinant P2 fusion protein and determination of the predicted amino acid sequence of the autoantigen in patients' mononuclear cells. Magsaam J, et al. **Clin Exp Immunol** 1989 May;76(2):165–71

C3b receptor (CR1) on phagocytic cells from SLE patients: analysis of the defect and familial study. Mir A, et al. **Clin Exp Immunol** 1988 Sep;73(3):461–6

The specificity of anti-cardiolipin antibodies from syphilis patients and from patients with systemic lupus erythematosus. Mouritsen S, et al. **Clin Exp Immunol** 1989 May;76(2):178–83

T lymphocyte activation in systemic lupus erythematosus analysed by proliferative response to nucleoplasmic proteins on nitrocellulose immunoblots. Pham BN, et al. **Clin Exp Immunol** 1989 Aug;77(2):168–74

OKT4+ T cell deficiency and an association of immunoglobulin deficiency in systemic lupus erythematosus. Raziuddin S, et al. **Clin Exp Immunol** 1988 Jun;72(3):446–9

Accessory cell activity of monocytes in anti-DNA antibody production in systemic lupus erythematosus. Sasaki T, et al. **Clin Exp Immunol** 1989 Jul;77(1):37–42

Polyspecific human and murine antibodies to diphtheria and tetanus toxoids and phospholipids. Sutjita M, et al. **Clin Exp Immunol** 1988 Aug;73(2):191–7

Relationship between anti-cardiolipin and anti-endothelial cell antibodies in systemic lupus erythematosus. Vismara A, et al. **Clin Exp Immunol** 1988 Nov;74(2):247–53

Reversible interleukin-2 response defects in systemic lupus erythematosus. Warrington RJ, et al. **Clin Exp Immunol** 1989 Aug;77(2):163–7

Constant isotype pattern of anti-dsDNA antibodies in patients with systemic lupus erythematosus. Winkler TH, et al. **Clin Exp Immunol** 1988 Jun;72(3):434–9

Activated T lymphocytes in the peripheral blood of patients with systemic lupus erythematosus induce B cells to produce immunoglobulin. Inghirami G, et al. **Clin Exp Rheumatol** 1988 Jul-Sep;6(3):269–76

Anti-histone antibodies in SLE and other autoimmune diseases. Shoenfeld Y, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):265–71

In vitro lymph node and peripheral blood lymphocyte responses to influenza immunization in patients with systemic lupus erythematosus. Turner-Stokes L, et al. **Clin Exp Rheumatol** 1989 Jan-Feb;7(1):71–4

Monocyte function in systemic lupus erythematosus. Boswell J, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):271–8

Simultaneous use of multiple serologic tests in assessing clinical activity in systemic lupus erythematosus. Cronin ME, et al. **Clin Immunol Immunopathol** 1989 Apr; 51(1):99–109

Deficient interleukin-2-activated killer cell cytotoxicity in patients with systemic lupus erythematosus. Froelich CJ, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):132–45

Role of interleukin 2 in inducing normalization of natural killer activity in systemic lupus erythematosus. Gaspar ML, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):204–14

B cell hyperresponsiveness to interleukin 2 and the age-associated decline in murine lupus. Sekigawa I, et al. **Clin Immunol Immunopathol** 1989 May;51(2):172–84

Lack of correlation between HLA types and anti-idiotypic production in family members of a lupus patient. Suenaga R, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):126–32

Private idiotypes on human polyclonal IgG anti-DNA antibodies are not expressed on coexisting IgM anti-DNA antibodies in systemic lupus erythematosus. Suenaga R, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):251–60

Expression of TLiSA1 on T cells from patients with rheumatoid arthritis and systemic lupus erythematosus. Tabata H, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):366–75

IgG subclasses of PEG precipitable IgG in systemic lupus erythematosus sera. Morland C, et al. **Clin Nephrol** 1989 Apr;31(4):204–9

Splenic and renal infarction in systemic lupus erythematosus: association with anti-cardiolipin antibodies. Arnold MH, et al. **Clin Rheumatol** 1988 Sep;7(3):406–10

Decreased fibrinolytic capacity and increased von Willebrand factor levels as indicators of endothelial cell dysfunction in patients with lupus anticoagulant. Nilsson TK, et al. **Clin Rheumatol** 1989 Mar;8(1):58–63

Size polymorphism of the erythrocyte complement receptor type 1 (CR1) in systemic lupus erythematosus induced by hydralazine. Mitchell JA, et al. **Complement Inflamm** 1989; 6(2):88–93

Measurement of complement proteins C2 and B in systemic lupus erythematosus and septic shock. Oglesby TJ, et al. **Complement Inflamm** 1989;6(1):27–35

Cutaneous necrosis associated with the lupus anticoagulant. Francès C, et al. **Dermatologica** 1989;178(4):194–201

Possible role of H2O2-mediated complement activation and cytokines-mediated fibroblasts superoxide generation on skin inflammation. Shingu M, et al. **Dermatologica** 1989;179 Suppl 1:107–12

Changes of immunoregulatory cells induced by acoustic stress in patients with systemic lupus erythematosus, sarcoidosis, and in healthy controls. Hinrichsen H, et al. **Eur J Clin Invest** 1989 Aug;19(4):372–7

Antibodies to HLA class I promoter-binding proteins in sera from patients with systemic lupus erythematosus. Le Bouteiller P, et al. **Eur J Immunol** 1989 Apr;19(4):735–9

The role of anti-idiotypic antibodies in the induction of experimental systemic lupus erythematosus in mice. Mendlovic S, et al. **Eur J Immunol** 1989 Apr;19(4):729–34

Systemic lupus erythematosus of childhood onset: correlation between T cells expressing early and late activation antigens and disease activity. Hara T, et al. **Eur J Pediatr** 1989 Jun;148(7):626–9

Loss in transformed cells of cell cycle regulation of expression of a nuclear protein recognized by SLE patient antisera. Nikaido T, et al. **Exp Cell Res** 1989 May; 182(1):284–9

Isolation of cDNA clones encoding the human Sm B/B' auto-immune antigen and specifically reacting with human anti-Sm auto-immune sera. Sharpe NG, et al. **FEBS Lett** 1989 Jul 3;250(2):585–90

Complement split products and the pathogenesis of SLE. Abramson SB, et al. **Hosp Pract [Off]** 1988 Dec 15; 23(12):45–56 (9 ref.)

Lupus erythematosus cell formation by a monoclonal antibody derived from an autoimmune MRL/Mp-lpr/lpr mouse. Kanai Y, et al. **Immunol Lett** 1989 Jan 15;20(1):9–13

Antibody to poly(ADP-ribose) is an indicator of obstetric complications in pregnant patients with systemic lupus erythematosus. Kanai Y, et al. **Immunol Lett** 1989 Jun 1; 21(3):217–22

A unique monoclonal antibody derived from a lupus-prone mouse with multiple bindings to autoantigens associated with rheumatic disease. Kanai Y, et al. **Immunol Lett** 1988 Sep;19(1):15–20

Detection of antibodies to the antigens involving differentiation of myeloid cells in sera from patients with systemic lupus erythematosus. Kitagawa H, et al. **Immunol Lett** 1989 Jun 1;21(3):227–35

The antigen/receptor specificity of antigranulocyte antibodies in patients with SLE. Sipos A, et al. **Immunol Lett** 1988 Dec;19(4):329–34

Autoimmunity: polyclonal activation or antigen induction? Dziarski R. **Immunol Today** 1988 Nov;9(11):340–2 (39 ref.)

CD8+ cells sustain spontaneous IgG production in SLE [letter] Linker-Israeli M. **Immunol Today** 1989 Feb;10(2):36

T-cell interactions in autoimmunity: insights from a murine model of graft-versus-host disease. Via CS, et al. **Immunol Today** 1988 Jul-Aug;9(7-8):207–13 (28 ref.)

Specific inhibition of the DNA-anti-DNA immune reaction by low molecular weight anionic compounds. Ben-Chetrit E, et al. **Immunology** 1988 Nov;65(3):479–85

Clinical relevance of the estimation of antibodies to single stranded DNA in systemic lupus erythematosus. Misra R, et al. **Indian J Med Res** 1988 May;87:463–7

Reactivity of autoantibodies in systemic lupus erythematosus with synthetic core histone peptides. Muller S, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):288–96

Relation between the level of IgG subclasses and infections in patients with systemic lupus erythematosus. Tokano Y, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):55–8

Induction of experimental systemic lupus erythematosus in mice. Mozes E, et al. **Isr J Med Sci** 1988 Dec;24(12):741–4

Serial studies of the IgG subclass and functional affinity of DNA antibodies in systemic lupus erythematosus. Devey ME, et al. **J Autoimmun** 1988 Oct;1(5):483–94

Effect of in vivo injection of recombinant human interleukin-2 on peritoneal macrophages from MRL-lpr/lpr mice. Dugas B, et al. **J Autoimmun** 1988 Apr; 1(2):195–206

Characterization of two anti-DNA antibodies bearing distinct idiotypes. Correlation with clinical manifestations. Suenaga R, et al. **J Autoimmun** 1989 Jun;2(3):297–306

The role of Lyt-2+ T cells in the regulation of autoimmunity in murine lupus. Wofsy D. **J Autoimmun** 1988 Apr; 1(2):207–17

The role of the idiotypic network in the induction of experimental systemic lupus erythematosus. Mozes E, et al. **J Cell Biochem** 1989 Jun;40(2):173–81

Alteration by heat shock and immunological characterization of Drosophila small nuclear ribonucleoproteins. Wright-Sandor LG, et al. **J Cell Biol** 1989 Jun; 108(6):2007–16

Antiidiotypic antibodies against anti-DNA antibodies in sera of families of lupus patients. Abdou NI, et al. **J Clin Immunol** 1989 Jan;9(1):16–21

Analysis of autoantibody specificities in selected systemic lupus erythematosus (SLE) sera. Francoeur AM. **J Clin Immunol** 1989 May;9(3):248–55

Anti-SM and anti-U1-RNP lupus antibody fine specificities. Francoeur AM. **J Clin Immunol** 1989 May;9(3):256–63

Clinical relapse in systemic lupus erythematosus: correlation with antecedent elevation of urinary free light-chain immunoglobulin. Hopper JE, et al. **J Clin Immunol** 1989 Jul;9(4):338–50

Increased serum levels of soluble interleukin-2 receptor in patients with systemic lupus erythematosus and rheumatoid arthritis. Semenzato G, et al. **J Clin Immunol** 1988 Nov; 8(6):447–52

Incidence of anti-DNA idiotype-positive cells in human peripheral blood. Takai O, et al. **J Clin Immunol** 1989 Jul; 9(4):313–21

Oligonucleotide linked to human gammaglobulin specifically diminishes anti-DNA antibody formation in cultured lymphoid cells from patients with systemic lupus erythematosus. Borel Y, et al. **J Clin Invest** 1988 Dec; 82(6):1901–7

Acquired congenital heart block. Pattern of maternal antibody response to biochemically defined antigens of the SSA/Ro-SSB/La system in neonatal lupus. Buyon JP, et al. **J Clin Invest** 1989 Aug;84(2):627–34

Expression in systemic lupus erythematosus of an idiotype

common to DNA-binding and nonbinding monoclonal antibodies produced by normal human lymphoid cells. Cairns E, et al. **J Clin Invest** 1989 Mar;83(3):1002–9

Induction of excessive B cell proliferation and differentiation by an in vitro stimulus in culture in human systemic lupus erythematosus. Suzuki N, et al. **J Clin Invest** 1989 Mar; 83(3):937–44

Defective expression of the 2H4 molecule after autologous mixed lymphocyte reaction activation in systemic lupus erythematosus patients. Takeuchi T, et al. **J Clin Invest** 1988 Oct;82(4):1288–94

Microplate ELISA for detection of antibodies to DNA in patients with systemic lupus erythematosus: specificity and correlation with Farr radioimmunoassay. Sutjita M, et al. **J Clin Lab Anal** 1989;3(1):34–40

Detection of two associated precipitating autoantibodies (DA1 and DA2) in sera from patients with systemic lupus erythematosus. Asero R, et al. **J Clin Lab Immunol** 1988 Jun;26(2):63–6

Regulation of plasma complement C4 and factor b levels in murine systemic lupus erythematosus. Garlepp MJ, et al. **J Clin Lab Immunol** 1989 Mar;28(3):137–41

B-cell proliferation and differentiation in systemic lupus erythematosus and mixed connective tissue disease. Kallenberg CG, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):55–61

Low responsiveness to the anti Leu 4 antibody by T cells from patients with active systemic lupus erythematosus. Kaneoka H, et al. **J Clin Lab Immunol** 1989 Jan;28(1):15–26

Binding of complement component C5 to model immune complexes and the use of anti-C5 antibodies for determination of C5-containing circulating immune complexes. Larsson A, et al. **J Clin Lab Immunol** 1989 Jan; 28(1):5–9

Impaired accessory cell function of monocytes in systemic lupus erythematosus. Muryoi T, et al. **J Clin Lab Immunol** 1989 Mar;28(3):123–8

Circulating immune complexes in systemic lupus erythematosus: a reappraisal of the solid phase C1q radioimmunoassay. Woodroffe AJ, et al. **J Clin Lab Immunol** 1988 May;26(1):5–7

Deletion of potentially self-reactive T cell receptor specificities in L3T4–, Lyt-2– T cells of lpr mice [published erratum appears in J Exp Med 1989 Apr 1;169(4):1515–6] Kotzin BL, et al. **J Exp Med** 1988 Dec 1;168(6):2221–9

Autoantibodies to the constitutive 73-kD member of the hsp70 family of heat shock proteins in systemic lupus erythematosus. Minota S, et al. **J Exp Med** 1988 Oct 1; 168(4):1475–80

A branched, synthetic octapeptide of ubiquitinated histone H2A as target of autoantibodies. Plaué S, et al. **J Exp Med** 1989 May 1;169(5):1607–17

Functional heterogeneity of L3T4+ T cells in MRL-lpr/lpr mice. L3T4+ T cells suppress major histocompatibility complex-self-restricted L3T4+ T helper cell function in association with autoimmunity. Via CS, et al. **J Exp Med** 1988 Dec 1;168(6):2165–81

Human cytomegalovirus RNAs immunoprecipitated by multiple systemic lupus erythematosus antisera. Lord PC, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2383–96

Association between anti-Sm and anti-ribosomal P protein autoantibodies in human systemic lupus erythematosus and MRL/lpr mice. Elkon KB, et al. **J Immunol** 1989 Sep 1; 143(5):1549–54

Probing the normal and autoimmune B cell repertoire with Epstein-Barr virus. Frequency of B cells producing monoreactive high affinity autoantibodies in patients with Hashimoto's disease and systemic lupus erythematosus. Nakamura M, et al. **J Immunol** 1988 Dec 15; 141(12):4165–72

Inhibitory effect of anti-class II antibody on the spontaneous activation of B cells in patients with systemic lupus erythematosus. Analysis with IL-1 production and IL-1 receptor expression. Tanaka Y, et al. **J Immunol** 1989 Sep 1;143(5):1584–90

Perturbation of experimental ultraviolet light-induced erythema by passive transfer of serum from subacute cutaneous lupus erythematosus patients. Davis TL, et al. **J Invest Dermatol** 1989 Apr;92(4):573–7

Ro(SS-A) positive Sjogren's/lupus erythematosus (SC/LE) overlap patients are associated with the HLA-DR3 and/or DRw6 phenotypes. Provost TT, et al. **J Invest Dermatol** 1988 Oct;91(4):369–71

Immunohistologically definable light chain restriction in autoimmune disease [letter] Pollard KM, et al. **J Pathol** 1988 Dec;156(4):349–52

Increased frequencies of Sm and nRNP autoantibodies in American blacks compared to whites with systemic lupus erythematosus. Arnett FC, et al. **J Rheumatol** 1988 Dec; 15(12):1773–6

Recurrent deep vein thrombosis and Addison's disease in "primary" antiphospholipid syndrome. Asherson RA, et al. **J Rheumatol** 1989 Mar;16(3):378–80

Effect of in vitro ultraviolet radiation on the binding capacity of anti-DNA and DNA in systemic lupus erythematosus. Becker NJ, et al. **J Rheumatol** 1989 Jun;16(6):773–6

Lupus pneumonitis and anti-SSA(Ro) antibodies. Boulware DW, et al. **J Rheumatol** 1989 Apr;16(4):479–81

IgG and IgM anticardiolipin antibodies in patients with lupus with anticardiolipin antibody associated clinical syndromes. Cronin ME, et al. **J Rheumatol** 1988;15(5):795–8

Fall in antiphospholipid antibody at time of thromboocclusive episodes in systemic lupus erythematosus. Drenkard C, et al. **J Rheumatol** 1989 May;16(5):614–7

Deficiency of the 9th component of complement (C9) in a patient with systemic lupus erythematosus. Kawai T, et al. **J Rheumatol** 1989 Apr;16(4):542–3

Clinical significance of antibodies to histones in systemic lupus erythematosus. Kohda S, et al. **J Rheumatol** 1989 Jan;16(1):24–8

Pneumatosis cystoides intestinalis and benign pneumoperitoneum in a patient with antinuclear antibody negative systemic lupus erythematosus. Pruitt RE, et al. **J Rheumatol** 1988 Oct;15(10):1575–7

Evidence of a new antigen–antibody system (anti-Mic-1) in patients with systemic lupus erythematosus and hyperthyroidism. Salazar-Páramo M, et al. **J Rheumatol** 1989 Feb;16(2):175–80

The relationship of anticardiolipin antibodies to disease manifestations in pediatric systemic lupus erythematosus. Shergy WJ, et al. **J Rheumatol** 1988 Sep;15(9):1389–94

IgG subclass distribution of anticardiolipin antibody in patients with systemic lupus erythematosus. Tsutsumi A, et al. **J Rheumatol** 1988 Dec;15(12):1764–7

Antidouble stranded DNA antibody assays in systemic lupus erythematosus: correlations of longitudinal antibody measurements. Ward MM, et al. **J Rheumatol** 1989 May; 16(5):609–13

Cardiolipin antibodies and null alleles of C4 in black Americans with systemic lupus erythematosus. Wilson WA, et al. **J Rheumatol** 1988 Dec;15(12):1768–72

Complete C4B deficiency in black Americans with systemic lupus erythematosus. Wilson WA, et al. **J Rheumatol** 1988 Dec;15(12):1855–8

Antimyosin antibodies and constrictive pericarditis in lupus erythematosus. Wolf RE, et al. **J Rheumatol** 1988 Aug; 15(8):1284–7

Renal infarction associated with anti-phospholipid antibodies in systemic lupus erythematosus and "lupus-like" disease [letter] Asherson RA, et al. **J Urol** 1988 Nov;140(5):1028

Circulating immune complexes in patients with systemic lupus erythematosus. Yen JH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Oct; 4(10):565–73

Immunohistochemical demonstration of complement components in formalin-fixed and paraffin-embedded renal tissues. Yamashina M, et al. **Lab Invest** 1989 Feb; 60(2):311–6

T cell subsets in patients with systemic lupus erythematosus. Kucharz EJ, et al. **Med Interne** 1988 Jul-Sep;26(3):227–33

Systemic lupus erythematosus and complement. Schur PH. **Nephrologie** 1988;9(2):53–60 (115 ref.)

Studies on circulating immune complexes. III: Kinetics of the immunoglobulin class of circulating immune complexes in systemic lupus erythematosus. Miura Y. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):201–9

Presence of antibodies to ubiquitin during the autoimmune response associated with systemic lupus erythematosus. Muller S, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8176–80

Association of quantitative anticardiolipin antibody levels with fetal loss and time of loss in systemic lupus erythematosus. Loizou S, et al. **Q J Med** 1988 Jul; 68(255):525–31

Disorders associated with antibodies to endothelial cells. Cines DB. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S705–11 (45 ref.)

Anti-Ro antibodies and neonatal lupus. Petri M, et al. **Rheum Dis Clin North Am** 1989 May;15(2):335–60 (173 ref.)

Association of class I, II, and III MHC gene products with systemic lupus erythematosus. Results of a Central European multicenter study. Hartung K, et al. **Rheumatol Int** 1989;9(1):13–8

T-cell adhesion to endothelial cells in systemic lupus erythematosis. Haskard DO, et al. **Rheumatol Int** 1989; 9(1):33–7

Cellular regulation of anti-nRNP antibody synthesis is different from that of anti-DNA antibody synthesis in patients with systemic lupus erythematosus. Hosono O, et al. **Rheumatol Int** 1988;8(4):177–83

Nature of IgG anti-lymphocyte autoantibody-reactive molecules shed from activated T cells in systemic lupus erythematosus. Minota S, et al. **Rheumatol Int** 1988; 8(4):165–70

Anti-Sm and anti-DNA antibodies in paired serum and synovial fluid samples from patients with SLE. Pollard KM, et al. **Rheumatol Int** 1988;8(5):197–204

Oral lesions of lupus erythematosus patients in relation to other chronic inflammatory oral diseases: an immunologic study. Sanchez R, et al. **Scand J Dent Res** 1988 Dec; 96(6):569–78

Autoantibody activity of cryoglobulins and sera in systemic lupus erythematosus. Association of IgM class rheumatoid factors with Raynaud's syndrome. Gripenberg M, et al. **Scand J Rheumatol** 1988;17(4):249–54

Defective phagocytosis, decreased tumour necrosis factor-alpha production, and lymphocyte hyporesponsiveness predispose patients with systemic lupus erythematosus to infections. Yu CL, et al. **Scand J Rheumatol** 1989;18(2):97–105

Binding specificity of lupus anticoagulants and anticardiolipin antibodies. McNeil HP, et al. **Thromb Res** 1988 Dec 15; 52(6):609–19

HLA class I (Bg) antigens on red cells of SLE patients: a serological study with polyclonal and monoclonal antibodies. Giles CM, et al. **Vox Sang** 1989;56(4):254–61

[The importance of HLA antigens for the prognosis of the course and effect of treatment in systemic lupus erythematosus] Benovolenskaia LI, et al. **Vutr Boles** 1988; 27(6):48–52 (Eng. Abstr.) (Bul)

[Measurement of anticardiolipin antibodies and its significance in systemic lupus erythematosus] Bao CD, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):74–7, 125 (Eng. Abstr.) (Chi)

[The clinical significance of antinuclear autoantibodies in systemic lupus erythematosus] Wu H, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):747–9, 782 (Eng. Abstr.) (Chi)

[Antiphospholipid antibodies: clinical significance in systemic lupus erythematosus] Zhou DC, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):78–80, 125 (Eng. Abstr.) (Chi)

[The effect of interleukin-2 on peripheral lymphocytes and monocytes. III. Proliferative and cytotoxic effects in vitro in patients with systemic erythematosus and progressive polyarthritis] Jira M, et al. **Cas Lek Cesk** 1988 Dec 23; 127(52):1609–12 (Eng. Abstr.) (Cze)

[Lymphocyte subpopulations in the peripheral blood in systemic erythematosis] Strejček J, et al. **Cas Lek Cesk** 1988 Aug 26;127(35):1103–7 (Eng. Abstr.) (Cze)

[Response of peripheral blood lymphocytes to antigenically nonspecific mitogens in systemic erythematosus] Strejček J, et al. **Cas Lek Cesk** 1989 Jun 16;128(25):781–3 (Eng. Abstr.) (Cze)

[Autoantibodies in systemic erythematosis. I. Incidence of antibodies against the CEM T-lymphocyte line] Jira M, et al. **Vnitr Lek** 1988 Nov;34(11):1062–8 (Eng. Abstr.) (Cze)

[Disseminated lupus erythematosus and pregnancy] Derksen RH, et al. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1025–9 (Dut)

[SLE and pregnancy] Kaaja R, et al. **Duodecim** 1989; 105(6):507–15 (53 ref.) (Fin)

["False" HIV serology in lupus (letter)] Taillan B, et al. **Presse Med** 1989 May 6;18(18):940 (Fre)

[Lupus anticoagulants, thrombosis and accidental interruption of pregnancy] David JL. **Rev Med Liege** 1988 Nov 15;43(22):737–40 (Fre)

[Anti-Sm and anti-RNP antibodies detected by immunoblotting in disseminated lupus erythematosus] Lussiez V, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):35–8 (Fre)

[Characterization by immunoblotting (western blot) of anti-RNP antibodies in 36 connective tissue disease patients of whom 26 had mixed connective tissue disease. Comparison with 28 lupus patients with anti-Sm antibodies] Meyer O, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):39–44 (Fre)

[Serological indicators in systemic lupus of the central nervous system] Avinoach I, et al. **Harefuah** 1988 Apr 15; 114(8):387–90 (54 ref.) (Heb)

[The lupus anticoagulant and its clinical significance] Udvardy M. **Orv Hetil** 1989 Jan 1;130(1):9–12 (36 ref.) (Eng. Abstr.) (Hun)

[Impaired dendritic cell function (cluster formation) in patients with systemic lupus erythematosus] Imai F, et al. **Arerugi** 1988 Nov;37(11):1111–7 (Eng. Abstr.) (Jpn)

[Immunology in internal medicine. 2. Immune complexes and diseases] Morito T. **Nippon Naika Gakkai Zasshi** 1988 Oct; 77(10):1498–501 (Jpn)

[A case of systemic lupus erythematosus (SLE) associated with anti-thyrotropin (TSH) autoantibodies] Sakata S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):571–2 (Jpn)

[Immunology in internal medicine. 3. Complement and diseases] Yukiyama Y. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1502–5 (Jpn)

[Clinical study of complement receptor abnormalities] Aikawa T. **Nippon Rinsho** 1988 Sep;46(9):2035–9 (Jpn)

[Progress in clinical methods of complement system analysis and data interpretation] Inai S. **Nippon Rinsho** 1988 Sep; 46(9):2046–53 (Jpn)

[Serological and immunohistochemical studies in pregnant women with systemic lupus erythematosus] Sakui H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):249–56 (Eng. Abstr.) (Jpn)

[The role of interleukin 2 in disorders of immunologic regulation in systemic lupus erythematosus] Kucharz EJ. **Pol Tyg Lek** 1988 May 16;43(20):619–22 (Pol)

[IgA and IgD deficiencies associated with chronic active hepatitis and systemic lupus erythematosus] Litwiniszyn-Krzewicka K, et al. **Pol Tyg Lek** 1988 May 16;43(20):638–9 (Eng. Abstr.) (Pol)

[The direct immunofluorescence skin test in systemic lupus erythematosus. Correlation with the clinical stage of the disease, laboratory changes and nephropathy] dos Santos RF, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul-Aug; 43(4):197–200 (Eng. Abstr.) (Por)

[Evaluation of immune complexes detected by monoclonal rheumatoid factor and conglutinin in systemic lupus erythematosus] Taliberti BH, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Sep-Oct; 43(5):237–9 (Eng. Abstr.) (Por)

[Detection of SSA/Ro antibody in patients with systemic lupus erythematosus, discoid lupus erythematosus and cutaneous photosensitivity. A comparative study] Carazzai

AM, et al. **Rev Paul Med** 1988 Mar–Apr;106(2):71–4 (Eng. Abstr.) (Por)

[Immunoglobulin E in systemic lupus erythematosus] Garumova LM, et al. **Klin Med (Mosk)** 1989 Jun;67(6):91–4 (Rus)

[The role of anti–phospholipid antibodies in the development of thrombotic complications and in obstetrical pathology] Prudnikova LZ, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):59–64 (Eng. Abstr.) (Rus)

[Circulating immune complexes in the serum of patients with SLE] Sykulev IuK, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):46–9 (Rus)

[Disturbance of immunogenesis in patients with systemic lupus erythematosus] Adamian NV, et al. **Ter Arkh** 1989; 61(5):43–5 (Eng. Abstr.) (Rus)

[Clinical value of determining the levels of lupus anticoagulant and anti–cardiolipin antibodies] Alekberova ZS, et al. **Ter Arkh** 1988;60(7):84–7 (Eng. Abstr.) (Rus)

[Immunologic and immunogenetic heterogeneity of systemic and discoid lupus erythematosus] Konenkov VI, et al. **Ter Arkh** 1989;61(5):31–4 (Eng. Abstr.) (Rus)

[Le cells in the "skin window" in patients with systemic lupus erythematosus] Kozlovskaia LV, et al. **Ter Arkh** 1988; 60(7):88–90 (Rus)

[Hemorheologic disturbances and circulating immune complexes in patients with rheumatic diseases] Loskutova TT, et al. **Ter Arkh** 1989;61(5):51–5 (Rus)

[Circulating immune complexes and clinico–immunologic subtypes of systemic lupus erythematosus. II] Nasonov EL, et al. **Ter Arkh** 1989;61(5):38–43 (Eng. Abstr.) (Rus)

[Clinico–immunologic characteristics of patients with systemic lupus erythematosus living in a hot climate] Rasulov UR. **Ter Arkh** 1989;61(5):121–5 (Rus)

[Circulation of intestinal infection in the families of patients with rheumatic diseases and the state of humoral immunity to enterobacterial antigens] Nasonova VA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):56–60 (Eng. Abstr.) (Rus)

[Antibodies reacting with the antigens of the human immunodeficiency virus in systemic lupus erythematosus: false positive results or a sign of viral infection] Nasonov EL, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):504–9 (Rus)

[The antiphospholipid antibody syndrome: a new clinical and therapeutic viewpoint in systemic lupus erythematosus] Bravo–Vargas G, et al. **Gac Med Mex** 1988 Jan–Feb; 124(1–2):39–42 (Spa)

[Sneddon syndrome and antiphospholipid antibodies (letter)] Montalbán J. **Med Clin (Barc)** 1988 Sep 10;91(7):277 (Spa)

[Antiphospholipid antibodies in systemic lupus erythematosus: incidence, significance and relation to lupus nephritis] Zea Mendoza A, et al. **Med Clin (Barc)** 1989 May 20;92(19):724–8 (Eng. Abstr.) (Spa)

METABOLISM

Decreased expression of interleukin–2 binding molecules (p70/75) in T cells from patients with systemic lupus erythematosus. Tanaka T, et al. **Arthritis Rheum** 1989 May; 32(5):552–9

Interferon response to dipyridamole in lupus erythematosus patients. Konstantinov K, et al. **Br J Dermatol** 1989 Jul; 121(1):59–63

C–myc gene binding factors in peripheral blood mononuclear cells from patients with systemic lupus erythematosus (SLE). Deguchi Y, et al. **Clin Exp Immunol** 1989 Aug; 77(2):157–62

Significance of histamine metabolism in skin lesions of human and murine lupus erythematosus. Furukawa F, et al. **Dermatologica** 1989;179 Suppl 1:128

Evidence that the interferon–induced Daudi cell human lupus inclusions are de novo synthesized complexes of ribonucleoprotein and membrane. Rich SA, et al. **J Biol Chem** 1989 Feb 25;264(6):3529–37

Production of B cell–stimulating factors by B cells in patients with systemic lupus erythematosus. Tanaka Y, et al. **J Immunol** 1988 Nov 1;141(9):3043–9

Rheumatoid factor in patients with systemic lupus erythematosus. Feldman D, et al. **J Rheumatol** 1989 May; 16(5):618–22

Interleukin–6 (IL–6) and acute phase proteins in the disease course of patients with systemic lupus erythematosus. Swaak AJ, et al. **Rheumatol Int** 1989;8(6):263–8

Endothelial prostacyclin release in systemic lupus erythematosus. Coade SB, et al. **Thromb Haemost** 1989 Feb 28;61(1):97–100

[Gonadotropic and sex hormones in women with systemic lupus erythematosus] Ivanova AV, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):3–8 (Eng. Abstr.) (Rus)

[Connective tissue metabolism in systemic lupus erythematosus, systemic scleroderma and rheumatoid arthritis] Lebedev DA. **Revmatologiia (Moskva)** 1988 Apr–Jun;(2):72–8 (65 ref.) (Rus)

MICROBIOLOGY

Legionella pneumophila isolated in pure culture from the ascites of a patient with systemic lupus erythematosus. Nomura S, et al. **Am J Med** 1989 Jun;86(6 Pt 2):833–4

Lack of relation between human T–lymphotropic virus type I infection and systemic lupus erythematosus in Jamaica, West Indies. Murphy EL Jr, et al. **J Acquir Immune Defic Syndr** 1988;1(1):18–22

[Persistence of the measles virus genome in some autoimmune diseases] Andzhaparidze OG, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):92–5 (Rus)

MORTALITY

Outcome and survival in systemic lupus erythematosus. Bresnihan B. **Ann Rheum Dis** 1989 Jun;48(6):443–5 (11 ref.)

Systemic lupus erythematosus. I. Outcome and survival: Dutch experience with 110 patients studied prospectively. Swaak AJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):447–54

Systemic lupus erythematosus. II. Observations on the occurrence of exacerbations in the disease course: Dutch experience with 110 patients studied prospectively. Swaak AJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):455–60

Mortality of Jamaican patients with systemic lupus erythematosus. Harris EN, et al. **Br J Rheumatol** 1989 Apr; 28(2):113–7

Morbidity and mortality of rheumatic and diffuse connective tissue diseases. LeRoy EC. **Trans Assoc Life Insur Med Dir Am** 1989;72:101–4 (5 ref.)

[The survival of patients with systemic lupus erythematosus] Andreev T, et al. **Vutr Boles** 1988;27(6):63–6 (Eng. Abstr.) (Bul)

PATHOLOGY

Hematoxylin–stained bodies and tissue LE cells in a skeletal muscle biopsy. McMullan DT, et al. **Am J Clin Pathol** 1988 Dec;90(6):731–3

Unexpected renal biopsy findings in a febrile systemic lupus erythematosus patient with worsening renal function and heavy proteinuria. Hebert LA, et al. **Am J Kidney Dis** 1989 Jun;13(6):504–7

Headache, mental status changes, and death in a 36–year–old woman with lupus [clinical conference] **Am J Med** 1989 Jan;86(1):94–102

Circumventricular organs in chronic serum sickness: a model for cerebral lupus. Peress NS, et al. **Biol Psychiatry** 1989 Aug;26(4):397–407

Interstitial foam cells in renal biopsies: an aid in differentiating idiopathic membranoproliferative glomerulonephritis (type I) and membranoproliferative glomerulonephritis associated with systemic lupus erythematosus. Poucell S, et al. **Child Nephrol Urol** 1988–89;9(1–2):106–11

Severe aortic stenosis in systemic lupus erythematosus and mucopolysaccharidosis type II (Hunter's syndrome). Zimmermann B 3d, et al. **Clin Cardiol** 1988 Oct; 11(10):723–5

SLE and pregnancy. Baguley E, et al. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):183–5 (26 ref.)

Peripheral white matter lesions of the spinal cord with changes in small arachnoid arteries in systemic lupus erythematosus. Nakano I, et al. **Clin Neuropathol** 1989 Mar–Apr;8(2):102–8

Is MCTD a distinct entity? Comparison of clinical and laboratory findings in MCTD, SLE, PSS, and RA patients. De Clerck LS, et al. **Clin Rheumatol** 1989 Mar;8(1):29–36

A case of multiple urate deposition, without gouty attacks, in a patient with systemic lupus erythematosus. Kurita Y, et al. **Cutis** 1989 Mar;43(3):273–5

Lupus erythematosus cells in pleural fluid [letter] Makashir R, et al. **Diagn Cytopathol** 1988;4(3):273–4

Cytoplasmic inclusions in renal disease [letter] **Hum Pathol** 1989 Jun;20(6):606–8

Warthin–Finkeldey–like giant cells in a patient with systemic lupus erythematosus. Kubota K, et al. **Hum Pathol** 1988 Nov;19(11):1358–9

Lupus lymphadenitis: report of a case with immunohistologic studies on frozen sections. Medeiros LJ, et al. **Hum Pathol** 1989 Mar;20(3):295–9

Bilateral renal malacoplakia in systemic lupus erythematosus and adrenogenital syndrome. Mohácsi G, et al. **Int Urol Nephrol** 1989;21(1):31–8

Podiatric pathology of lupus erythematosus. McCarthy DJ, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):281–90 (12 ref.)

Hemocytopenia in systemic lupus erythematosus. Relationship to antiphospholipid antibodies. Delezé M, et al. **J Rheumatol** 1989 Jul;16(7):926–30

Gelatinous transformation of bone marrow in systemic lupus erythematosus. Ng MH, et al. **J Rheumatol** 1989 Jul; 16(7):989–92

Multipotent hemopoietic progenitor cells in patients with systemic lupus erythemstosus. Otsuka T, et al. **J Rheumatol** 1988 Jul;15(7):1085–90

Precise relaxation time measurements of normal–appearing white matter in inflammatory central nervous system disease. Miller DH, et al. **Magn Reson Med** 1989 Sep; 11(3):331–6

Cutaneous lesions in systemic lupus erythematosus. Watson R. **Med Clin North Am** 1989 Sep;73(5):1091–111 (54 ref.)

Unusual subepithelial electron–dense deposits in a case of systemic lupus erythematosus. Shah DJ, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):77–82

[Phenotype analysis of peripheral blood T lymphocytes from SLE patients by flow cytometry] Zhu LP. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):57–62 (Eng. Abstr.) (Chi)

[Involvement of the renal interstitium in systemic diseases (I)] Kenouch S, et al. **Nephrologie** 1988;9(2):61–5 (0 ref.) (Eng. Abstr.) (Fre)

[Lupus vasculitis] Kahn MF, et al. **Recenti Prog Med** 1988 Jul–Aug;79(7–8):323–9 (Fre)

[Analysis of infiltrating cells in the lesional skin of the autoimmune diseases–pemphigus, pemphigoid, and lupus erythematosus] Hayakawa K. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1023–8 (Eng. Abstr.) (Jpn)

[A case report of myocardial infarction in a patient with systemic lupus erythematosus with marked atherosclerotic lesions demonstrated by autopsy] Tsuji M, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):700–4 (Jpn)

[Disseminated lupus erythematosus. Review of 20 cases] Ferreira FN, et al. **Acta Med Port** 1988 Jan–Feb;1(1):17–28 (77 ref.) (Eng. Abstr.) (Por)

[The microcirculatory system and smooth muscle cells of major arteries in various rheumatic diseases] Kaminskiĭ IuV, et al. **Arkh Patol** 1989;51(4):9–15 (Eng. Abstr.) (Rus)

[Clinical presentation of systemic lupus erythematosus as a massive pleural effusion with a mesothelial reaction (letter)] Barrios Alonso V, et al. **Rev Clin Esp** 1989 Feb; 184(2):109–10 (Spa)

[The association of rheumatoid arthritis and systemic lupus erythematosus (letter)] Nolla Solé JM, et al. **Rev Clin Esp** 1989 Mar;184(4):209 (Spa)

[52–year–old woman with chronic diarrhea, intermittent fever, abdominal pain and segmental bulging of the small intestine (clinical conference)] Uscanga L, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):199–206 (Spa)

PHYSIOPATHOLOGY

Neurophysiological tests in neurolupus. Paiva T, et al. **Acta Med Port** 1988 Jul–Dec;1(4–6):261–4

Pregnancy does not cause systemic lupus erythematosus to worsen. Lockshin MD. **Arthritis Rheum** 1989 Jun; 32(6):665–70

Frequency–resolving ability in systemic lupus erythematosus. Narula AA, et al. **Br J Audiol** 1989 Feb;23(1):69–72

Treatment of lithium induced tremor with atenolol. Davé M. **Can J Psychiatry** 1989 Mar;34(2):132–3

The diaphragm in SLE [letter] Laroche CM, et al. **Chest** 1988 Nov;94(5):1115

Scintigraphic quantitation of splenic function in SLE: correlation with IgM levels in serum. Wilson WA, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):251–5

Myocardial involvement in systemic lupus erythematosus detected by magnetic resonance imaging. Been M, et al. **Eur Heart J** 1988 Nov;9(11):1250–6

Autoimmune disease and cochlear pathology in the C3H/lpr strain mouse. Trune DR, et al. **Hear Res** 1989 Mar; 38(1–2):57–66

Clinical profile of systemic lupus erythematosus in western India. Amin SN, et al. **J Assoc Physicians India** 1988 Aug; 36(8):473–5

Anti–DNA antibodies bind directly to renal antigens and induce kidney dysfunction in the isolated perfused rat kidney. Raz E, et al. **J Immunol** 1989 May 1;142(9):3076–82

Autonomic neuropathy in systemic lupus erythematosus [letter] Gledhill RF, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1238–40

Tendinous laxity and Jaccoud's syndrome in patients with systemic lupus erythematosus. Possible role of secondary hyperparathyroidism. Babini SM, et al. **J Rheumatol** 1989 Apr;16(4):494–8

Functional asplenia in childhood onset systemic lupus erythematosus. Malleson P, et al. **J Rheumatol** 1988 Nov; 15(11):1648–52

Assessment of utero–placental blood flow velocity wave forms in a pregnant patient with systemic lupus erythematosus. Meizner I, et al. **JCU** 1988 Jan;16(1):55–7

Brainstem auditory evoked potentials with increased stimulus rate in patients suffering from systemic lupus erythematosus. Fradis M, et al. **Laryngoscope** 1989 Mar; 99(3):325–9

Outcome in systemic lupus erythematosus: a prospective study of patients from a defined population. Jonsson H, et al. **Medicine (Baltimore)** 1989 May;68(3):141–50

Murine lupus. Datta SK. **Methods Enzymol** 1988;162:385–412

Regional cerebral glucose metabolism in SLE chorea: further evidence that striatal hypometabolism is not a correlate of chorea. Guttman M, et al. **Mov Disord** 1987;2(3):201–10

Transient Lambert–Eaton myasthenic syndrome associated with systemic lupus erythematosus. Bromberg MB, et al. **Muscle Nerve** 1989 Jan;12(1):15–9

Pulmonary blood flow in systemic lupus erythematosus: in response to the comments from Doctor Wraight [letter] Yamauchi K, et al. **Nucl Med Commun** 1989 Mar; 10(3):190–2

Systemic lupus erythematosus in the first decade of life. Lehman TJ, et al. **Pediatrics** 1989 Feb;83(2):235–9

Plasminogen activation in plasma of patients with systemic lupus erythematosus. Negoro N, et al. **Rheumatol Int** 1989; 8(6):273–7

[The importance of functional pulmonary tests in rheumatoid arthritis and systemic lupus erythematosus] Suchová H, et al. **Vnitr Lek** 1988 Nov;34(11):1069–75 (Eng. Abstr.) (Cze)

[Functional–morphological studies on the blood–cerebrospinal fluid and blood–brain barriers in mice with spontaneous lupus–like disorders] Miyoshi N. **Seishin Shinkeigaku Zasshi** 1988;90(8):589–611 (Eng.

Abstr.) (Jpn)
[Pregnancy and labor in a patient with systemic lupus erythematosus] Brodziński W, et al. **Ginekol Pol** 1988 Dec; 59(12):752–4 (Eng. Abstr.) (Pol)
[Systemic lupus erythematosus: study of 48 patients with emphasis on renal involvement] Boas M de L, et al. **AMB Rev Assoc Med Bras** 1988 Sep–Oct;34(5):165–74 (32 ref.) (Eng. Abstr.) (Por)
[Subclinical renal tubular dysfunction in systemic lupus erythematosus] Aguirre C, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):201–5 (Eng. Abstr.) (Spa)
[Nonspecific bronchial hyperreactivity in rheumatoid arthritis and systemic lupus erythematosus] Ancić P, et al. **Rev Med Chil** 1988 May;116(5):415–9 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

[Prevention of systemic lupus erythematosus] Kardaszewicz E, et al. **Pol Tyg Lek** 1988 May 16;43(20):623–5 (Eng. Abstr.) (Pol)

PSYCHOLOGY

[Social adjustment and intellectual performance of children and adolescents with systemic lupus erythematosus and dermatomyositis] Turowska A, et al. **Pediatr Pol** 1988 Jul; 63(7):450–6 (Pol)

RADIONUCLIDE IMAGING

[Clinical laboratory and radioisotope characteristics of kidney involvement in systemic lupus erythematosus] Matvelkov GP, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun;(2):26–9 (Eng. Abstr.) (Rus)

RADIOTHERAPY

Total lymphoid irradiation. Helfgott SM. **Rheum Dis Clin North Am** 1989 Aug;15(3):577–82 (29 ref.)

SURGERY

Long-term outcome of renal transplantation in patients with systemic lupus erythematosus. Bumgardner GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2031–2

THERAPY

Successful plasma infusion treatment of a patient with C2 deficiency and systemic lupus erythematosus: clinical experience over forty-five months. Steinsson K, et al. **Arthritis Rheum** 1989 Jul;32(7):906–13
A new DNA immune adsorbent for hemoperfusion in SLE therapy: a clinical trial. Yang Y, et al. **Artif Organs** 1988 Oct;12(5):444–6
Plasma exchange for cerebral lupus erythematosus [letter] Unterweger B, et al. **Biol Psychiatry** 1988 Dec;24(8):946–7
Chronic therapy with recombinant tumor necrosis factor-alpha in autoimmune NZB/NZW F1 mice. Gordon C, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):421–34
Aerobic exercise in the management of rheumatic diseases. Labowitz RJ, et al. **Del Med J** 1988 Nov;60(11):659–62
Alleviation of autoimmunity in BXSB mice by monoclonal alloantibody to Ly-5 (CD45). Yakura H, et al. **Eur J Immunol** 1989 Aug;19(8):1505–8
Treatment of murine lupus with monoclonal antibody to L3T4. I. Effects on the distribution and function of lymphocyte subsets and on the histopathology of autoimmune disease. Wofsy D, et al. **J Autoimmun** 1988 Oct;1(5):415–31
Extracorporeal removal of anti-DNA antibodies in systemic lupus erythematosus using DNA-collagen films. Laville M, et al. **Life Support Syst** 1983;1 Suppl 1:65–70
Immunoadsorbent (IM-P) plasma perfusion in patients with rheumatoid arthritis or SLE. Yamazaki Z, et al. **Life Support Syst** 1983;1 Suppl 1:98–101
The therapeutic potential of plasmapheresis in systemic lupus erythematosus (SLE). Swaak AJ. **Neth J Med** 1988 Oct; 33(3–4):155–9
Trial of IgG therapy for lupus nephritis—report of two cases with a successful response. Okano M, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):145–9
[The possibilities of selecting an adequate therapy of systemic lupus erythematosus based on the results of HLA typing] Lesniak OM. **Vutr Boles** 1988;27(6):52–5 (Eng. Abstr.) (Bul)
[Use of plasmapheresis in therapy of systemic lupus erythematosus: a controlled study] Zielinski C, et al. **Acta Med Austriaca** 1988;15(5):155–8 (Eng. Abstr.) (Ger)
[Induction of remission in severe lupus erythematosus by intensified therapy] Euler HH, et al. **Immun Infekt** 1989 Apr;17(2):51–3 (Eng. Abstr.) (Ger)
[The effectiveness of specific removal of anti-DNA antibodies in vivo—an application of anti-DNA antibody immunoadsorption in NZBxNZW F1 hybrid mice] Kiyohara A. **Nippon Hifuka Gakkai Zasshi** 1988 Jun; 98(7):689–95 (Eng. Abstr.) (Jpn)
[Effects of high dose gamma globulin therapy on systemic lupus erythematosus] Saida Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1219–29 (Eng. Abstr.) (Jpn)
[A case of systemic lupus erythematosus with severe neutropenia and the effect of high dose globulin therapy] Nagano N, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):59–63 (12 ref.) (Jpn)
[Clinico-immunologic analysis of sorption methods of treatment of rheumatoid arthritis and systemic lupus erythematosus] Venalis AI, et al. **Ter Arkh** 1989;61(5):6–10 (Eng. Abstr.) (Rus)

URINE

Debrisoquine hydroxylation phenotype in SLE patients. Seideman P, et al. **Scand J Rheumatol** 1989;18(1):63–4

VETERINARY

Lupus erythematosus in small animals. Shanley KJ. **Clin Dermatol** 1985 Jul–Sep;3(3):131–8

LUPUS GLOMERULONEPHRITIS see **LUPUS NEPHRITIS**

LUPUS NEPHRITIS

BLOOD

Modeling percentage change: a potential linear mirage. Suissa S, et al. **J Clin Epidemiol** 1989;42(9):843–8
[Changes of laboratory hematologic indices in patients with chronic glomerulopathies following treatment with superhigh doses of cyclophosphamide] Tishkov I, et al. **Vutr Boles** 1989;28(1):82–6 (Eng. Abstr.) (Bul)

COMPLICATIONS

Thrombotic microangiopathy in lupus nephritis. Porri MT, et al. **Adv Exp Med Biol** 1989;252:35–9
Nephrotic syndrome, hematuria, and hypocomplementemia in a case of mesangial lupus nephritis evolving later to a membranous lesion. Bakir AA, et al. **Am J Med** 1989 May; 86(5):609–11
A model for disease heterogeneity in systemic lupus erythematosus. Relationships between histocompatibility antigens, autoantibodies, and lymphopenia or renal disease. Harley JB, et al. **Arthritis Rheum** 1989 Jul;32(7):826–36
CAPD and systemic diseases. Cantaluppi A. **Clin Nephrol** 1988;30 Suppl 1:S8–12 (36 ref.)
Lupus nephritis and autoimmunity in patients with insulin-resistant diabetes mellitus. Fine RM. **Int J Dermatol** 1988 Oct;27(8):553–4
Lupus nephritis and pregnancy [editorial] **Lancet** 1989 Jul 8;2(8654):82–3
[Ischemic heart disease in three young adults with lupus nephritis] Suzuki S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):527–33 (16 ref.) (Jpn)

DIAGNOSIS

A "state model" of renal function in systemic lupus erythematosus: its value in the prediction of outcome in 292 patients. Edworthy SM, et al. **J Rheumatol** 1989 Jan; 16(1):29–35
Serial assessment of glomerular filtration rate in lupus nephropathy. Petri M, et al. **Kidney Int** 1988 Dec; 34(6):832–9
[Studies of protein clearance in detecting early renal involvement of lupus erythematosus] Gräfenstein K, et al. **Z Gesamte Inn Med** 1989 Jun 15;44(12):358–60 (Eng. Abstr.) (Ger)
[Clinically silent diffuse proliferative lupus glomerulonephritis (letter)] Aragón A, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):397–8 (Spa)

DRUG THERAPY

Ciclosporin in the treatment of lupus nephritis. Favre H, et al. **Am J Nephrol** 1989;9 Suppl 1:57–60
Beneficial effect of prostaglandin E1 in three cases of lupus nephritis with nephrotic syndrome. Nagayama Y, et al. **Ann Allergy** 1988 Oct;61(4):289–95
Acute nonlymphocytic leukemia following short-term, intermittent, intravenous cyclophosphamide treatment of lupus nephritis. Gibbons RB, et al. **Arthritis Rheum** 1988 Dec;31(12):1552–4
Intermittent intravenous cyclophosphamide therapy for lupus nephritis. Lehman TJ, et al. **J Pediatr** 1989 Jun; 114(6):1055–60
Lupus nephritis in childhood: cyclophosphamide—yes or no? [editorial] McEnery PT, et al. **J Pediatr** 1989 Jun; 114(6):993–4
Lupus nephropathy in New Zealand F1 hybrid mice treated by (–)15-deoxyspergualin. Okubo M, et al. **Kidney Int** 1988 Oct;34(4):467–73
Treatment of murine lupus nephritis with cyclophosphamide or total lymphoid irradiation. Waer M, et al. **Kidney Int** 1988 Nov;34(5):678–82
Thromboxane antagonism in lupus nephritis [letter; comment] Kallenberg CG, et al. **N Engl J Med** 1989 Aug 3; 321(5):330–1. **Comment on:** N Engl J Med 1989 Feb 16;320(7):421–5
Improvement of renal function with selective thromboxane antagonism in lupus nephritis [see comments] Pierucci A, et al. **N Engl J Med** 1989 Feb 16;320(7):421–5. **Comment in:** N Engl J Med 1989 Aug 3;321(5):330–1
Lupus nephritis: efficacy of monthly pulse therapy with intravenous methylprednisolone. Harisdangkul V, et al. **South Med J** 1989 Mar;82(3):321–7
[Evaluation of long-term immunotherapy in patients with lupus nephritis] Zitňan D, et al. **Vnitr Lek** 1989 Feb; 35(2):137–44 (Eng. Abstr.) (Slo)

ENZYMOLOGY

Cytochrome P-450 mediated metabolism in active murine systemic lupus erythematosus. Baer AN, et al. **J Rheumatol** 1989 Mar;16(3):335–8

ETIOLOGY

Lupus nephritis: pathogenesis, course and management. Balow JE. **Adv Exp Med Biol** 1989;252:3–15 (65 ref.)
The wolf inside. Stone J. **Del Med J** 1988 Nov;60(11):647–9
[Systemic lupus erythematosus and pregnancy] Pozsonyi T, et al. **Orv Hetil** 1989 Jul 2;130(27):1427–32 (443 ref.) (Eng. Abstr.) (Hun)
[A case of systemic lupus erythematosus with lupus nephritis occurring in Crohn's disease] Sugimoto M, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):583–4 (Jpn)

GENETICS

Genetics of experimental lupus nephritis: non-H-2 factors determine susceptibility for renal involvement in murine chronic graft-versus-host disease. Bruijn JA, et al. **Clin Exp Immunol** 1989 May;76(2):284–9
Local extrahepatic expression of complement genes C3, factor B, C2, and C4 is increased in murine lupus nephritis. Passwell J, et al. **J Clin Invest** 1988 Nov;82(5):1676–84
Increased tumor necrosis factor and IL-1 beta gene expression in the kidneys of mice with lupus nephritis. Boswell JM, et al. **J Immunol** 1988 Nov 1;141(9):3050–4
Histopathological characteristics of the kidney in recombinant inbred mice established from MRL/lpr x AKR crossing. Dissociation of severity of lupus nephritis from the degree of lymphadenopathy. Makino M, et al. **Virchows Arch [B]** 1988;56(1):59–65

IMMUNOLOGY

Effect of long-term normalization of serum complement levels on the course of lupus nephritis. Laitman RS, et al. **Am J Med** 1989 Aug;87(2):132–8
Complement and immune complex nephritis. Paccaud JP, et al. **Am J Nephrol** 1989;9 Suppl 1:2–6 (39 ref.)
Enhanced MHC class II expression in renal proximal tubules precedes loss of renal function in MRL/lpr mice with lupus nephritis. Wuthrich RP, et al. **Am J Pathol** 1989 Jan; 134(1):45–51
Does rheumatoid factor protect lupus patients from the development of nephritis? Turner-Stokes L, et al. **Ann Rheum Dis** 1989 Jan;48(1):14–6
Idiotypic characteristics of immunoglobulins associated with systemic lupus erythematosus. Studies of antibodies deposited in glomeruli of humans. Kalunian KC, et al. **Arthritis Rheum** 1989 May;32(5):513–22
Changes in B lymphocyte function in rheumatoid arthritis and lupus nephritis after total lymphoid irradiation. Solovera JJ, et al. **Arthritis Rheum** 1988 Dec; 31(12):1481–91
A monoclonal DNA-binding autoantibody causes a deterioration in renal function in MRL mice with lupus disease. Lake RA, et al. **Clin Exp Immunol** 1988 Jul; 73(1):103–10
Fluorocytometric analysis of anti-HLA class 2 autoantibodies in patients with lupus nephritis. Brunati C, et al. **Clin Nephrol** 1989 May;31(5):253–8
Anti-glomerular basement membrane antibody and linear glomerular immunofluorescence in a patient with systemic lupus erythematosus [letter] Richards NT, et al. **Clin Nephrol** 1988 Aug;30(2):115–6
Significance of antinuclear antibody (ANA) immunofluorescent patterns and titers in systemic lupus erythematosus nephritis. Akbar S, et al. **Henry Ford Hosp Med J** 1988;36(2):121–9 (29 ref.)
Characterization of circulating immune complexes detected by monoclonal rheumatoid factor and conglutinin radioimmunoassays in SLE nephritis. Nishida SK, et al. **J Clin Lab Immunol** 1988 Dec;27(4):163–9
Treatment of murine lupus with F(ab')2 fragments of monoclonal antibody to L3T4. Suppression of autoimmunity does not depend on T helper cell depletion. Carteron NL, et al. **J Immunol** 1989 Mar 1;142(5):1470–5
Ig VH gene family repertoire of plasma cells derived from lupus-prone MRL/lpr and MRL/++ mice. Komisar JL, et al. **J Immunol** 1989 Jul 1;143(1):340–7
T cell tolerance to self antigens in New Zealand hybrid mice with lupus-like disease. Kotzin BL, et al. **J Immunol** 1989 Jul 1;143(1):89–94
Allogeneic MHC antigen requirements for lupus-like autoantibody production and nephritis in murine graft-vs-host disease. Portanova JP, et al. **J Immunol** 1988 Nov 15;141(10):3370–6
T cell receptor alpha/beta expressing double-negative (CD4-/CD8-) and CD4+ T helper cells in humans augment the production of pathogenic anti-DNA autoantibodies associated with lupus nephritis. Shivakumar S, et al. **J Immunol** 1989 Jul 1;143(1):103–12
Plasmapheresis influences the immune response affecting T cell subsets. Giacchino F, et al. **Life Support Syst** 1983;1 Suppl 1:118–21
Immunotactoid glomerulopathy with fingerprint immune deposits. A variant of lupus nephritis? Lai FM, et al.

Virchows Arch [A] 1989;415(2):181–6

[Immunological analysis in primary renal disease and lupus nephritis] Ohtsuka H. **Fukuoka Igaku Zasshi** 1988 Sep; 79(9):668–73 (Eng. Abstr.) **(Jpn)**

[The direct immunofluorescence skin test in systemic lupus erythematosus. Correlation with the clinical stage of the disease, laboratory changes and nephropathy] dos Santos RF, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):197–200 (Eng. Abstr.) **(Por)**

[Immunologic changes in patients with lupus activity and renal involvement] Rey GL, et al. **Medicina (B Aires)** 1988; 48(2):141–6 (Eng. Abstr.) **(Spa)**

METABOLISM

Histones have high affinity for the glomerular basement membrane. Relevance for immune complex formation in lupus nephritis. Schmiedeke TM, et al. **J Exp Med** 1989 Jun 1;169(6):1879–94

Increased class I and class II MHC products and mRNA in kidneys of MRL-lpr/lpr mice during autoimmune nephritis and inhibition by cyclosporine. Halloran PF, et al. **J Immunol** 1988 Oct 1;141(7):2303–12

PATHOLOGY

Clinical outcome of three discrete histologic patterns of injury in severe lupus glomerulonephritis. Schwartz MM, et al. **Am J Kidney Dis** 1989 Apr;13(4):273–83

Lupus as a renal disease. Balow JE. **Hosp Pract [Off]** 1988 Oct 15;23(10):129–35, 139–40, 142–6

Cytoplasmic inclusions in renal disease [letter] **Hum Pathol** 1989 Jun;20(6):606–8

Outcome of the acute glomerular injury in proliferative lupus nephritis. Chagnac A, et al. **J Clin Invest** 1989 Sep; 84(3):922–30

Prognostic factors in diffuse proliferative lupus glomerulonephritis. Magil AB, et al. **Kidney Int** 1988 Oct; 34(4):511–7

Pattern of lupus nephritis in Malaysia. Norella Kong B, et al. **Med J Malaysia** 1988 Sep;43(3):200–5

Vascular lesions in lupus nephritis. Grishman E, et al. **Mod Pathol** 1988 May;1(3):235–41

The relationship of infiltrating renal leucocytes to disease activity in lupus and cryoglobulinaemic glomerulonephritis. Castiglione A, et al. **Nephron** 1988;50(1):14–23

Quantitative analysis of interstitial alterations in lupus nephritis. Fujii K, et al. **Virchows Arch [A]** 1988; 414(1):45–52

[Alterations of glomerular basement membrane and electron dense deposits in various renal diseases—an electron microscopic study using periodic acid methenamine silver stain and immunohistochemical techniques] Mase D. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):671–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Prognostic determinants in lupus nephritis. Coratelli P, et al. **Adv Exp Med Biol** 1989;252:17–34

The role of thromboxane A2 in experimental and human models of chronic glomerular damage. Patrono C, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:199–202 (10 ref.)

Renal effects of nonsteroidal anti-inflammatory drugs and thromboxane receptor antagonists in chronic glomerular disease. Cinotti GA, et al. **Am J Nephrol** 1989;9 Suppl 1:47–50

RADIONUCLIDE IMAGING

[Clinical laboratory and radioisotope characteristics of kidney involvement in systemic lupus erythematosus] Matvelkov GP, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun;(2):26–9 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Treatment of murine lupus nephritis with cyclophosphamide or total lymphoid irradiation. Waer M, et al. **Kidney Int** 1988 Nov;34(5):678–82

SURGERY

Transplantation of patients with lupus nephritis [letter] Pollock CA, et al. **Am J Nephrol** 1988;8(3):257

Renal transplantation and end-stage lupus nephropathy in the cyclosporine and precyclosporine eras. Zara CP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1648–51

Single-center 1–15-year results of renal transplantation in patients with systemic lupus erythematosus. Bumgardner GL, et al. **Transplantation** 1988 Nov;46(5):703–9

[Renal transplantation in patients with disseminated lupus erythematosus] de Azevedo LS, et al. **AMB Rev Assoc Med Bras** 1988 Mar–Apr;34(2):48–53 (Eng. Abstr.) **(Por)**

THERAPY

Changes in B lymphocyte function in rheumatoid arthritis and lupus nephritis after total lymphoid irradiation. Solovera JJ, et al. **Arthritis Rheum** 1988 Dec; 31(12):1481–91

Prospective multicentre trial on the short-term effects of plasma exchange versus cytotoxic drugs in steroid-resistant lupus nephritis. Derksen RH, et al. **Neth J Med** 1988 Oct; 33(3–4):168–77

The therapeutic potential of plasmapheresis in systemic lupus erythematosus (SLE). Swaak AJ. **Neth J Med** 1988 Oct; 33(3–4):155–9

[Clinical application of plasma cryoprecipitation] Yu YS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):673–6, 716 (Eng. Abstr.) **(Chi)**

[Preliminary results of studying the effectiveness of hemosorption in the complex treatment of children with lupus nephritis] Isaeva LA, et al. **Pediatriia** 1989;(5):26–31 (Eng. Abstr.) **(Rus)**

[New therapeutics in lupus nephritis (editorial)] Fariñas MC, et al. **Med Clin (Barc)** 1989 Feb 25;92(7):258–60 **(Spa)**

LUPUS VULGARIS see **LUPUS**

LURCHER MICE see **MICE, NEUROLOGIC MUTANTS**

LURIA-NEBRASKA NEUROPSYCHOLOGICAL BATTERY see under **NEUROPSYCHOLOGICAL TESTS**

LUTEAL MAINTENANCE see **CORPUS LUTEUM MAINTENANCE**

LUTEAL PHASE

Premenstrual exacerbation of bulimia [letter] McDaniel WW. **Am J Psychiatry** 1989 Jun;146(6):807–8

Angiogenesis in the postovulatory primate endometrium: the coiled arteriolar system. Kaiserman-Abramof IR, et al. **Anat Rec** 1989 Aug;224(4):479–89

Pattern of ovarian progesterone secretion during the luteal phase of the ovine estrous cycle. Alecozay AA, et al. **Biol Reprod** 1988 Sep;39(2):287–94

Formation of ovarian follicular cysts and corpora lutea after treatment with antihistamine or indomethacin in prepubertal gilts. Hall JA, et al. **Biol Reprod** 1989 Mar; 40(3):565–9

The basalis of the primate endometrium: a bifunctional germinal compartment. Padykula HA, et al. **Biol Reprod** 1989 Mar;40(3):681–90

The effect of a low-fat diet on luteal-phase prolactin and oestradiol concentrations and erythrocyte phospholipids in normal premenopausal women. Williams CM, et al. **Br J Nutr** 1989 May;61(3):651–61

A premenstrual urticarial eruption treated with bilateral oophorectomy and hysterectomy. Mayou SC, et al. **Clin Exp Dermatol** 1988 Mar;13(2):114–6

Luteinized unruptured follicle syndrome. Haines CJ. **Clin Reprod Fertil** 1987 Dec;5(6):321–32 (28 ref.)

Effects of domperidone and thyrotropin-releasing hormone on secretion of luteinizing hormone and prolactin during the luteal phase and following induction of luteal regression in sheep. Deaver DR, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):95–102

Predictive value of the FSH:LH ratio on follicular and luteal phase characteristics of the human menstrual cycle. Rotten D, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul; 28(3):229–39

Evaluation of luteal phase [letter] **Fertil Steril** 1988 Oct; 50(4):675–7

The incidence of luteal phase defect in normal, fertile women, determined by serial endometrial biopsies. Davis OK, et al. **Fertil Steril** 1989 Apr;51(4):582–6

Assessing the early luteal phase in in vitro fertilization cycles: relationships between plasma steroids, endometrial receptors, and endometrial histology. Forman RG, et al. **Fertil Steril** 1989 Feb;51(2):310–6

Luteal phase deficiency [letter] Goldzieher JW, et al. **Fertil Steril** 1989 Jan;51(1):197–8

Noninvasive evaluation of cardiovascular hemodynamics during multiple follicular stimulation, late luteal phase and early pregnancy. La Sala GB, et al. **Fertil Steril** 1989 May; 51(5):796–802

How precise is histologic dating of endometrium using the standard dating criteria? Li TC, et al. **Fertil Steril** 1989 May;51(5):759–63

Effects of progesterone on luteinizing hormone release and estradiol/progesterone ratio in the luteal phase of women superovulated for in vitro fertilization and embryo transfer. Mahadevan MM, et al. **Fertil Steril** 1988 Dec;50(6):935–7

Endometrial biopsy in the cycle of conception: histologic and lectin histochemical evaluation. Mazur MT, et al. **Fertil Steril** 1989 May;51(5):764–9

Twenty-four-hour progesterone and luteinizing hormone profiles in the midluteal phase of the infertile patient: correlation with other indicators of luteal phase insufficiency. Olive DL, et al. **Fertil Steril** 1989 Apr; 51(4):587–92

The effect of interobserver variation in dating endometrial histology on the diagnosis of luteal phase defects. Scott RT, et al. **Fertil Steril** 1988 Dec;50(6):888–92

Pulsatile secretion of prolactin and luteinizing hormone and their synchronous relationship during the human menstrual cycle. Masaoka K, et al. **Gynecol Endocrinol** 1988 Dec; 2(4):293–303

Inadequate luteal phase usually indicates ovulatory dysfunction: observations from serial hormone and ultrasound monitoring of 115 cycles. Petsos P, et al. **Gynecol Endocrinol** 1987 Mar;1(1):37–45

Serum levels of pregnancy-associated endometrial alpha 2-globulin (alpha 2-PEG) during normal menstrual and combined oral contraceptive cycles and relationship to immunohistological localization. Wood PL, et al. **Hum Reprod** 1989 Feb;4(2):140–6

Bromocriptine versus progesterone therapy for infertility related to luteal phase defects in hyperprolactinemic patients. Check JH, et al. **Int J Fertil** 1989 May–Jun; 34(3):209–14

Dynamics of steroid biosynthesis during the luteal-placental shift in rhesus monkeys. Ellinwood WE, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):348–55

Plasma gastrointestinal hormones during spontaneous and induced menstrual cycles. Holst N, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1160–6

The roles of estradiol and progesterone in decreasing luteinizing hormone pulse frequency in the luteal phase of the menstrual cycle. Nippoldt TB, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):67–76

Decreased follicular phase gonadotropin secretion is associated with impaired estradiol and progesterone secretion during the follicular and luteal phases in normally menstruating women. Schweiger U, et al. **J Clin Endocrinol Metab** 1989 May;68(5):888–92

Correlation between endometrial biopsy and luteal phase plasma progesterone in women complaining for couple infertility. Noci I, et al. **J Endocrinol Invest** 1988 May; 11(5):361–3

Maintenance therapy of cyclical mastalgia using low-dose danazol. Harrison BJ, et al. **J R Coll Surg Edinb** 1989 Apr; 34(2):79–81

Interovarian relationship in the secretion of progesterone during the luteal phase of the capuchin monkey (Cebus apella). Nagle CA, et al. **J Reprod Fertil** 1989 Mar; 85(2):389–96

Ovarian response to hCG treatment during the oestrous cycle in heifers. Price CA, et al. **J Reprod Fertil** 1989 May; 86(1):303–8

Use of a gonadotropin-releasing hormone agonist analogue for treatment of cyclic auditory dysfunction. Andreyko JL, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):506–9

Comparison of late luteal phase endometrial biopsies using the Novak curette or PIPELLE endometrial suction curette. Hill GA, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):443–5

Correlation of endometrial maturation with four methods of estimating day of ovulation. Shoupe D, et al. **Obstet Gynecol** 1989 Jan;73(1):88–92

Luteal phase hyperprolactinemia during ovulation induction with human menopausal gonadotropins: incidence, recurrence, and effect on pregnancy rates. Tippet PD, et al. **Obstet Gynecol** 1989 Apr;73(4):613–6

[Endometrial estradiol and progesterone receptors in women with various clinical forms of luteal insufficiency] Levchenko RG, et al. **Akush Ginekol (Mosk)** 1989 Apr; (4):18–21 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Does prolonged dopaminergic blockade alter the LH pulsatile secretion in normal cycling and postmenopausal women? Rossmanith WG, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):147–52

Luteal deficiency caused by human ovarian follicular fluid peptide in post-partum marmosets, Callithrix jacchus. Nandedkar TD, et al. **Contraception** 1989 Jul;40(1):101–9

Shortening of luteal phase in common marmosets by sheep ovarian follicular fluid peptide. Nandedkar TD, et al. **Contraception** 1989 Jul;40(1):91–100

The influence of stimulation regimes and luteal phase support on the outcome of IVF. Macnamee MC, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:43–52 (36 ref.)

The luteal phase and early pregnancy after combined GnRH-agonist/HMG treatment for superovulation in IVF or GIFT. Smitz J, et al. **Hum Reprod** 1988 Jul;3(5):585–90

Effects of preovulatory tamoxifen in regularly cycling women on folliculogenesis, oocyte recovery and luteal function. Thatcher SS, et al. **Hum Reprod** 1988 Nov; 3(8):935–8

Atenolol treatment of late luteal phase dysphoric disorder. Rausch JL, et al. **J Affective Disord** 1988 Sep–Oct; 15(2):141–7

Stimulatory effects of purified human follicle-stimulating hormone on estradiol production in the human luteal phase. Ohara A, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):359–63

Oxytocin infusion from day 10 after oestrus extends the luteal phase in non-pregnant cattle. Gilbert CL, et al. **J Reprod Fertil** 1989 May;86(1):203–10

Serotonin receptors, buspirone, and premenstrual syndrome [letter] Anderson IM. **Lancet** 1989 Sep 9;2(8663):615

Effect of naloxone on the growth hormone response to clonidine in normal women during the mid-luteal phase. Phipps WR, et al. **Psychoneuroendocrinology** 1989; 14(1–2):137–43

[Chorionic gonadotropin support of the luteal phase following in vitro fertilization and embryo transfer. Randomized comparison with oral progesterone in protocols using triptoreline (letter)] Buvat J, et al. **Presse Med** 1989 Mar 11;18(10):539 **(Fre)**

LUTEAL REGRESSION see **CORPUS LUTEUM REGRESSION**

LUTEIN CELLS see under **CORPUS LUTEUM**

LUTEINIZING HORMONE see LH

LUTEINIZING HORMONE, ALPHA SUBUNIT see GLYCOPROTEIN HORMONES, ALPHA SUBUNIT

LUTEINIZING HORMONE RECEPTORS see RECEPTORS, LH

LUTEINOMA see THECA CELL TUMOR

LUTEMBACHER'S SYNDROME see under HEART SEPTAL DEFECTS, ATRIAL

LUTEOLYTIC AGENTS

Ovulation induction for in-vitro-fertilization and embryo transfer applying decapeptyl (DTRP-6 LH/RH) in combination with HMG or FSH. Mettler L, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):245-51

[Effects of prostaglandin F2 alpha on steroidogenesis of the PMSG-hCG primed rat ovary in luteolysis] Takagi K. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1024-37 (Eng. Abstr.) (Jpn)

ADMINISTRATION & DOSAGE

Abolishment of the positive feedback mechanism: a criterion for temporary medical hypophysectomy by LH-RH agonist. Shadmi AL, et al. **Gynecol Endocrinol** 1987 Mar; 1(1):1-11

Monthly administration of the LH-RH analogue decapeptyl for long-term treatment of ovarian dysfunctions and estrogen-dependent disorders. Geisthoevel F, et al. **Int J Fertil** 1989 Jul-Aug;34(4):262-70

ANTAGONISTS & INHIBITORS

Effects of pregnancy, oxytocin, ovine trophoblast protein-1 and their interactions on endometrial production of prostaglandin F2 alpha in vitro in perifusion chambers. Vallet JL, et al. **Prostaglandins** 1989 Jul;38(1):113-24

PHARMACOLOGY

Induction of ovulation with D-Trp6-LHRH combined with purified FSH in patients with polycystic ovarian disease. Ayalon D, et al. **Gynecol Endocrinol** 1988 Dec;2(4):319-30

The effect of different LH-RH agonists on the levels of immunoreactive gonadotropins. Insler V, et al. **Gynecol Endocrinol** 1988 Dec;2(4):305-12

THERAPEUTIC USE

Gonadotropin-releasing hormone (GnRH) agonists in the management of endometriosis: a review. Henzl MR. **Clin Obstet Gynecol** 1988 Dec;31(4):840-56 (57 ref.)

[Treatment of precocious puberty with an LH-RH agonist (D-TRP6-LH-RH delayed-release microcapsules)] Canlorbe P, et al. **Bull Acad Natl Med (Paris)** 1988 Nov; 172(8):1091-8 (Eng. Abstr.) (Fre)

[Premature luteinization and its treatment with an LH/RH analog] Schurz B, et al. **Gynakol Rundsch** 1988;28 Suppl 2:180-2 (Ger)

LUTEOMA see THECA CELL TUMOR

LUTHERAN BLOOD-GROUP SYSTEM

Characterization of the serum In(Lu)-related antigen: identification of a serum protein related to erythrocyte p80. Lucas MG, et al. **Blood** 1989 Feb;73(2):596-600

GENETICS

Evidence that SE is distal to LU on chromosome 19q. Zelinski T, et al. **Transfusion** 1989 May;29(4):304-5

IMMUNOLOGY

Lutheran related antibodies. Daniels G. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):447-52

Report on group 8 (Lutheran) antibodies. Judson PA, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):433-40

Test results of four monoclonal antibodies against markers of the Lutheran system. Okubo Y, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):463-6

Serological and immunochemical characterization of "Lutheran-related" monoclonal antibodies 9 W 11, 9 W 13, 13 W 1 and 32 W 2. Poole J, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):453-61

Immunological specificities of four Lutheran related monoclonal antibodies. Rouger P, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):441-6

Serological and biochemical characterization of monoclonal antibodies against red cell markers related to expression of Lutheran blood group antigens. Telen MJ, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):421-8

Preliminary serological studies of 4 monoclonal antibody samples with "Lutheran" specificities. Zelinski T, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):429-32

Identification, by immunoblotting, of the structures carrying Lutheran and para-Lutheran blood group antigens. Daniels G, et al. **Vox Sang** 1989;57(2):137-41

LUTROPIN see LH

LUTROPIN RECEPTORS see RECEPTORS, LH

LUTZOMYIA see PSYCHODIDAE

LY ANTIGENS see ANTIGENS, LY

LYASES

Large scale preparation and characterization of mucopolysaccharase contamination free heparinase. Yang VC, et al. **Appl Biochem Biotechnol** 1987 Sep-Dec;16:35-50

Chemical modification of tryptophanase by chloramine T: a possible involvement of the methionine residue in enzyme activity. Oda T, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):178-83

ANALYSIS

Identification of a pterin derivative in Escherichia coli DNA photolyase. Wang BY, et al. **Biochemistry** 1988 Jun 14; 27(12):4222-6

An HPLC assay for rat liver ferrochelatase activity. Li FM, et al. **Biomed Chromatogr** 1987;2(4):164-8

Properties of membrane bound ferrochelatase purified from baboon liver mitochondria. Posnett SJ, et al. **Int J Biochem** 1988;20(8):845-55

Immunohistochemical localization of glutamine transaminase K, a rat kidney cysteine conjugate beta-lyase, and the relationship to the segment specificity of cysteine conjugate nephrotoxicity. Jones TW, et al. **Mol Pharmacol** 1988 Nov; 34(5):621-7

Cysteine conjugate beta-lyase of rat kidney cytosol: characterization, immunocytochemical localization, and correlation with hexachlorobutadiene nephrotoxicity. MacFarlane M, et al. **Toxicol Appl Pharmacol** 1989 Apr; 98(2):185-97

[Study of the HLA system and glyoxalase in 31 insulin-dependent diabetics free from micro and macro-angiopathies after more than a 20-year development] Pointel JP, et al. **J Mal Vasc** 1989;14(1):1-9 (Eng. Abstr.) (Fre)

[The rapid identification of E. coli by the detection of 3 enzymes] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1;102(3):93-5 (Eng. Abstr.) (Ger)

[A minimal synthetic medium for determining cystine desulfohydrolase in Vibrio cholerae] Naumshina MS, et al. **Lab Delo** 1988;(9):62-3 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Specificity of S-adenosyl-L-methionine in the inactivation and the labeling of 1-aminocyclopropane-1-carboxylate synthase isolated from tomato fruits. Satoh S, et al. **Arch Biochem Biophys** 1989 May 15;271(1):107-12

Quantitation of multiple pathways for the metabolism of nephrotoxic cysteine conjugates using selective inhibitors of L-alpha-hydroxy acid oxidase (L-amino acid oxidase) and cysteine conjugate beta-lyase. Stevens JL, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):297-303

The interaction of monofluorofumarate with adenylosuccinate lyase. Kim SC, et al. **J Enzym Inhib** 1988; 2(3):153-61

Inhibition of yeast glyoxalase I by biologically active peptides. Kraus JL, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):105-10

Inhibition of glyoxalase I by new squaric acid derivatives. Kraus JL, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):467-70

[Inhibitory effects and spectral changes in pig testicular cytochrome P-450(17 alpha-hydroxylase/lyase) by 20 beta-hydroxy-C21-steroids] Nakajin S, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1188-95 (Eng. Abstr.) (Jpn)

[Serotonin inhibition of photoenzymatic decomposition of thymine dimers in DNA] Ivanova EV, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov-Dec;(6):936-9 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Vitamin K (menaquinone) biosynthesis in bacteria: high-performance liquid chromatographic assay of the overall synthesis of o-succinylbenzoic acid and of 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylic acid synthase. Popp JL, et al. **Anal Biochem** 1989 May 1; 178(2):306-10

The synthesis of murine ferrochelatase in vitro and in vivo. Karr SR, et al. **Biochem J** 1988 Sep 15;254(3):799-803

BLOOD

Zinc chelatase in human lymphocytes: detection of the enzymatic defect in erythropoietic protoporphyria. Nunn AV, et al. **Anal Biochem** 1988 Oct;174(1):146-50

Modification of the glyoxalase system in human red blood cells by glucose in vitro. Thornalley PJ. **Biochem J** 1988 Sep 15;254(3):751-5

Optimization of efficiency in the glyoxalase pathway. Creighton DJ, et al. **Biochemistry** 1988 Sep 20; 27(19):7376-84

Ferrochelatase activity in human lymphocytes, as quantified by a new high-performance liquid-chromatographic method. Rossi E, et al. **Clin Chem** 1988 Dec;34(12):2481-5

The human red blood cell glyoxalase system in diabetes mellitus. Thornalley PJ, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):115-20

Decreased leukocyte ferrochelatase activity in erythropoietic protoporphyria. Kondo M, et al. **J Dermatol** 1989 Apr; 16(2):116-21

Glyoxalase activity in human red blood cells fractioned by age. McLellan AC, et al. **Mech Ageing Dev** 1989 Apr; 48(1):63-71

[Determination of glyoxalase 1 groups in liquid and dried blood by polyacrylamide gel electrophoresis] Svirskiĭ MS, et al. **Sud Med Ekspert** 1988 Jul-Sep;31(3):36-8 (Eng. Abstr.) (Rus)

DEFICIENCY

Adenylosuccinase deficiency: an inborn error of purine nucleotide synthesis. Jaeken J, et al. **Eur J Pediatr** 1988 Nov;148(2):126-31

Screening for inborn errors of purine synthesis [letter] Jaeken J, et al. **Lancet** 1989 Mar 4;1(8636):500

Regional brain glucose utilization in adenylosuccinase-deficient patients measured by positron emission tomography [published erratum appears in Pediatr Res 1989 Feb;25(2):118] De Volder AG, et al. **Pediatr Res** 1988 Aug;24(2):238-42

[Prenatal diagnosis of enzymopathies of the urea cycle] Chadefaux B, et al. **Ann Biol Clin (Paris)** 1988;46(7):471-6 (36 ref.) (Eng. Abstr.) (Fre)

DIAGNOSTIC USE

Determination of plasma pyridoxal phosphate levels using a modified apotryptophanase assay. Edwards P, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):158-63

GENETICS

Nutritional and hormonal regulation of mRNA abundance for arginine biosynthetic enzymes in kidney. Morris SM Jr, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):230-7

Molecular cloning and nucleotide sequence of rat brain argininosuccinate lyase cDNA with an extremely long 5'-untranslated sequence: evidence for the identity of the brain and liver enzymes. Kawamoto S, et al. **Brain Res Mol Brain Res** 1989 May;5(3):235-41

The Saccharomyces cerevisiae ARO1 gene. An example of the co-ordinate regulation of five enzymes on a single biosynthetic pathway. Duncan K, et al. **FEBS Lett** 1988 Dec 5;241(1-2):83-8

Isolation and nucleotide sequence of a sesquiterpene cyclase gene from the trichothecene-producing fungus Fusarium sporotrichioides. Hohn TM, et al. **Gene** 1989 Jun 30; 79(1):131-8

cDNA sequence, interspecies comparison, and gene mapping analysis of argininosuccinate lyase. Todd S, et al. **Genomics** 1989 Jan;4(1):53-9

Coupling of heme attachment to import of cytochrome c into yeast mitochondria. Studies with heme lyase-deficient mitochondria and altered apocytochromes c. Dumont ME, et al. **J Biol Chem** 1988 Nov 5;263(31):15928-37

Construction and characterization of vaccine strains of Salmonella harboring mutations in two different aro genes. Dougan G, et al. **J Infect Dis** 1988 Dec;158(6):1329-35

Phylogeny of metabolic pathways: O-acetylserine sulphydrylase A is homologous to the tryptophan synthase beta subunit. Levy S, et al. **Mol Microbiol** 1988 Nov; 2(6):777-83

DNA photolyase in E. coli: effects on UV mutagenesis by plasmids expressing the phr gene. Yamamoto K, et al. **Mutat Res** 1989 Aug;226(4):259-62

Existence and expression of photoreactivation repair genes in various yeast species. Yasui A, et al. **Mutat Res** 1989 Jan;217(1):3-10

Molecular characterization of a gene encoding a photolyase from Streptomyces griseus. Kobayashi T, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4731-44

Nucleotide sequence of the threonine synthase (thrC) gene of Brevibacterium lactofermentum. Malumbres M, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9859

Structure of the rat argininosuccinate lyase gene: close similarity to chicken delta-crystallin genes. Matsubasa T, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):592-6

Cloning the mRNA encoding 1-aminocyclopropane-1-carboxylate synthase, the key enzyme for ethylene biosynthesis in plants. Sato T, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6621-5

HLA-A,B,C, and DR antigens, GLO I and Bf marker profiles in 75 Cape coloured patients with systemic lupus erythematosus (SLE). Klemp P, et al. **Tissue Antigens** 1988 Jul;32(1):12-6

ISOLATION & PURIFICATION

Selective elution of rodent glutathione S-transferases and glyoxalase I from the S-hexyglutathione-Sepharose affinity matrix. Hayes JD. **Biochem J** 1988 Nov 1;255(3):913-22

Cystathionase: high-performance liquid chromatography. Molecular cloning in lambda gt11. Nonradioactive immunodetection of fusion protein. Shuster AM, et al. **Biochimie** 1989 Apr;71(4):599-604

Purification and partial characterization of 1-aminocyclopropane-1-carboxylate synthase from tomato pericarp. Van der Straeten D, et al. **Eur J Biochem** 1989 Jul 1;182(3):639-47

A microbial carbon-phosphorus bond cleavage enzyme requires two protein components for activity. Murata K, et al. **J Bacteriol** 1989 Aug;171(8):4504–6

Dichloromethane dehalogenase with improved catalytic activity isolated from a fast-growing dichloromethane-utilizing bacterium. Scholtz R, et al. **J Bacteriol** 1988 Dec;170(12):5698–704

Purification and properties of Methanobacterium thermoautotrophicum DNA photolyase. Kiener A, et al. **J Biol Chem** 1989 Aug 15;264(23):13880–7

[Gamma-cystathionase: the non-ideal gel filtration high performance liquid chromatography. Physico-chemical and immunochemical characteristics of the enzyme] Gabikov AG, et al. **Mol Biol (Mosk)** 1988 May-Jun; 22(3):787–93 (Eng. Abstr.) **(Rus)**

METABOLISM

Interaction of rat brain cytidylate cyclase with phospholipids. Mori S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1502–7

Detection of carbon-phosphorus lyase activity in cell free extracts of Enterobacter aerogenes. Murata K, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):190–5

Evidence for a singlet intermediate in catalysis by Escherichia coli DNA photolyase and evaluation of substrate binding determinants. Jordan SP, et al. **Biochemistry** 1988 Dec 13; 27(25):8915–23

Mechanistic deductions from kinetic isotope effects and pH studies of pyridoxal phosphate dependent carbon-carbon lyases: Erwinia herbicola and Citrobacter freundii tyrosine phenol-lyase. Kiick DM, et al. **Biochemistry** 1988 Sep 20; 27(19):7333–8

Mechanistic deductions from multiple kinetic and solvent deuterium isotope effects and pH studies of pyridoxal phosphate dependent carbon-carbon lyases: Escherichia coli tryptophan indole-lyase. Kiick DM, et al. **Biochemistry** 1988 Sep 20;27(19):7339–44

Reconstitution of Escherichia coli DNA photolyase with various folate derivatives. Wang B, et al. **Biochemistry** 1989 Feb 7;28(3):1148–52

Expression of glyoxalase, glutathione peroxidase and glutathione S-transferase isoenzymes in different bovine tissues. Hayes JD, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):21–9

The activity and reaction specificity of tyrosine phenol-lyase regulated by monovalent cations. Demidkina TV, et al. **Biochimie** 1989 Apr;71(4):565–71

Role of cysteine residues in tryptophanase for monovalent cation-induced activation. Tokushige M, et al. **Biochimie** 1989 Jun;71(6):711–20

Conformational changes in the active site of tryptophanase revealed by the circular dichroism method. Zakomirdina LN, et al. **Biochimie** 1989 Apr;71(4):545–50

HPLC determination of ferrochelatase activity in human liver. Roberts RG. **Biomed Chromatogr** 1987;2(2):71–5

Delta aminolevulinic acid dehydratase and ferrochelatase activities during chronic lead exposure in mice. Torra M, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):476–81

Preparation of branched hexassaccharides by the action of a viral lyase on Klebsiella K14 polysaccharide. Parolis H, et al. **Carbohydr Res** 1988 Oct 15;182(1):127–34

Cystathionase activity and glutathione metabolism in redifferentiating rat hepatocyte primary cultures. Meredith MJ. **Cell Biol Toxicol** 1987 Dec;3(4):361–77

Glyoxalase activity and cell proliferation in Burkitt's lymphoma and transformed lymphoblast cells in vitro. Hooper NI, et al. **Cell Mol Biol** 1988;34(4):399–405

Thioacylating agents as ultimate intermediates in the beta-lyase catalysed metabolism of S-(pentachloro-butadienyl)-L-cysteine. Dekant W, et al. **Chem Biol Interact** 1988;67(1–2):139–48

Fluorometric studies on the role of calcium in substrate binding to 3-ketovalidoxylamine A C-N lyase. Takeuchi M, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3540–5

Photoreactivating enzyme in the blind cave fish, Anoptichthys jordani. Woodhead AD, et al. **Comp Biochem Physiol [B]** 1979;63(1):73–6

Bioactivation of nephrotoxic haloalkenes by glutathione conjugation: formation of toxic and mutagenic intermediates by cysteine conjugate beta-lyase. Dekant W, et al. **Drug Metab Rev** 1989;20(1):43–83 (181 ref.)

Tyrosine phenol-lyase from Citrobacter intermedius. Factors controlling substrate specificity. Faleev NG, et al. **Eur J Biochem** 1988 Nov 1;177(2):395–401

Modulation of hepatic ferrochelatase activity by dietary manipulation of mitochondrial phospholipid fatty acyl groups. Kools AM, et al. **Hepatology** 1989 Apr;9(4):557–61

Liver ferrochelatase from normal and hexachlorobenzene porphyric rats. Studies on their properties. Rios de Molina MC, et al. **Int J Biochem** 1989;21(2):219–25

An in vivo complex with DNA photolyase blocks UV mutagenesis targeted at a thymine-cytosine dimer in Escherichia coli. Ruiz-Rubio M, et al. **J Bacteriol** 1988 Nov;170(11):5371–4

Persulfide generated from L-cysteine inactivates tyrosine aminotransferase. Requirement for a protein with cysteine oxidase activity and gamma-cystathionase. Hargrove JL. **J Biol Chem** 1988 Nov 25;263(33):17262–9

Role of cytochrome c heme lyase in the import of cytochrome c into mitochondria. Nicholson DW, et al. **J Biol Chem** 1988 Dec 15;263(35):19034–42

Biogenesis of cytochrome c1. Role of cytochrome c1 heme lyase and of the two proteolytic processing steps during import into mitochondria. Nicholson DW, et al. **J Biol Chem** 1989 Jun 15;264(17):10156–68

Evidence that cysteine 298 is in the active site of tryptophan indole-lyase. Phillips RS, et al. **J Biol Chem** 1989 Jun 25; 264(18):10627–32

Coproporphyrinogen oxidase, protoporphyrinogen oxidase and ferrochelatase activities in human liver biopsies with special reference to alcoholic liver disease. Li F, et al. **J Hepatol** 1989 Jan;8(1):86–93

Photoreactivation of the thymine dimer containing DNA octamer d(GCGTTGCG).d(CGCAACGC) by the photoreactivating enzyme from Anacystis midulans. Kemmink J, et al. **J Photochem Photobiol -B-** 1988 Mar; 1(3):323–8

Involvement of cystathionase in the formation of alkane-thiols from corresponding cysteine conjugates. Tomisawa H, et al. **Xenobiotica** 1988 Sep;18(9):1029–37

[Glyoxalase I and its application to production of S-lactoylglutathione] Rhee H, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1610–4 (24 ref.) **(Jpn)**

[Pyridoxal phosphate-dependent enzymes of sulfur amino acid metabolism] Gabibov AG, et al. **Biokhimiia** 1989 May; 54(5):726–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Transient appearance of photolyase-induced break-sensitive sites in the DNA of ultraviolet light-irradiated Syrian hamster fetal cells. Pirsel M, et al. **Mutat Res** 1989 Jan; 217(1):39–43

PHYSIOLOGY

Role of enzyme-bound 5,10-methenyltetrahydropteroylpolyglutamate in catalysis by Escherichia coli DNA photolyase. Hamm-Alvarez S, et al. **J Biol Chem** 1989 Jun 5;264(16):9649–56

URINE

Urine test for adenylosuccinase deficiency in autistic children [letter] Maddocks J, et al. **Lancet** 1989 Jan 21;1(8630):158–9

LYCINE see **BETAINE**

LYCOREMINE see **GALANTHAMINE**

LYE see under **CAUSTICS**

LYELL'S SYNDROME see **EPIDERMAL NECROLYSIS, TOXIC**

LYING

Psychiatric aspects of lying [letter] Aldrich CK. **Am J Psychiatry** 1989 Mar;146(3):405

Lying and the paranoid personality [letter] Tobak M. **Am J Psychiatry** 1989 Jan;146(1):125

Children's allegations of sexual abuse [letter] Whitehurst T. **Am J Psychiatry** 1989 Jul;146(7):947

Psychiatric aspects of lying [letter] Wolf JM. **Am J Psychiatry** 1988 Dec;145(12):1611

Children's use of a verbal-nonverbal consistency principle to infer truth and lying. Rotenberg KJ, et al. **Child Dev** 1989 Apr;60(2):309–22

Effects of deceptive self-reports of quitting on the results of treatment trials for smoking: a quantitative assessment. Weissfeld JL, et al. **J Clin Epidemiol** 1989;42(3):231–43

The utility of MMPI subtle, obvious scales for detecting fake good and fake bad response sets. Peterson GW, et al. **J Clin Psychol** 1989 Jul;45(4):575–83

Lies and lamentation—a solid no to euthanasia. Scott JF. **J Palliat Care** 1988 May;4(1–2):119–21

Detecting faking on the Rorschach: computer versus expert clinical judgment. Kahn MW, et al. **J Pers Assess** 1988 Fall;52(3):516–23

Physicians' attitudes toward using deception to resolve difficult ethical problems. Novack DH, et al. **JAMA** 1989 May 26;261(20):2980–5

Prosecution for misleading advertisements [editorial] Brahams D. **Med Leg J** 1988;56 (Pt 3):105–7

"Perjury is not a crime". Mayfield FH. **Surg Neurol** 1989 Jan;31(1):71–5

Spurious complaints of the sexual abuse of children. Mansheim PA. **Va Med** 1988 Sep;115(9):431–3

PSYCHOLOGY

Lying by children: why children say one thing, do another? Paniagua FA. **Psychol Rep** 1989 Jun;64(3 Pt 1):971–84 (29 ref.)

LYME DISEASE

Lyme disease and related disorders. **Ann N Y Acad Sci** 1988; 539:1–513

Central nervous system manifestations of Lyme disease. Pachner AR, et al. **Arch Neurol** 1989 Jul;46(7):790–5

Lyme disease: a world-wide borreliosis. Sigal LH. **Clin Exp Rheumatol** 1988 Oct-Dec;6(4):411–21 (156 ref.)

Laboratory aspects of Lyme borreliosis. Barbour AG. **Clin Microbiol Rev** 1988 Oct;1(4):399–414 (178 ref.)

Lyme disease in children and adolescents. Reed AM, et al. **Compr Ther** 1989 Jan;15(1):31–6 (22 ref.)

Lyme disease: an annotated bibliography. National Institute of Arthritis and Musculoskeletal and Skin Diseases. **Conn Med** 1989 Jul;53(7):419–22

Lyme disease. **Conn Med** 1989 Jun;53(6):319–77

Sharing the task of Lyme disease. Public education [editorial] Considine NL. **Conn Med** 1989 Jun;53(6):366

Legal implications of uncertainty in lyme disease. Williams N. **Conn Med** 1989 Jun;53(6):373

Lyme disease [editorial] McCarthy JT. **Cutis** 1989 Aug; 44(2):107

Lyme disease. Duffy J. **Infect Dis Clin North Am** 1987 Sep; 1(3):511–27 (57 ref.)

Lyme disease. Krafchik B. **Int J Dermatol** 1989 Mar; 28(2):71–4 (24 ref.)

Fulminant refractory Lyme disease. Manning PG. **Iowa Med** 1989 Jun;79(6):277–80

Is Lyme disease a health threat for your students? Pinger RR, et al. **J Am Coll Health** 1989 Jan;37(4):177–9

Lyme disease: prevalence and clinical importance of Borrelia burgdorferi specific IgG in forestry workers. Guy EC, et al. **Lancet** 1989 Mar 4;1(8636):484–6

Lyme disease. Steere AC. **N Engl J Med** 1989 Aug 31; 321(9):586–96 (162 ref.)

Selected tickborne infections. A review of Lyme disease, Rocky Mountain spotted fever, and babesiosis. Zaki MH. **N Y State J Med** 1989 Jun;89(6):320–35 (78 ref.)

Lyme disease: a review for primary health care providers. McKenna DF. **Nurse Pract** 1989 Mar;14(3):18, 20, 22 passim (21 ref.)

Lyme disease. The hidden pandemic. Hamilton DR. **Postgrad Med** 1989 Apr;85(5):303–8, 313–4 (39 ref.)

Lyme disease. A review [published erratum appears in R I Med J 1989 Feb;72(2):44] Jost EE, et al. **R I Med J** 1988 Dec;71(12):463–73 (0 ref.)

Lyme disease: a confusing multisystem borreliosis. Lane KL, et al. **South Med J** 1989 Sep;82(9):1147–52 (63 ref.)

Lyme disease. Pachner AR. **Trends Neurosci** 1989 May; 12(5):177–81 (40 ref.)

[The occurrence of Lyme borreliosis (Lyme disease and its European variant) in the Brno region from the viewpoint of the neurologist] Strnad P, et al. **Cesk Neurol Neurochir** 1988 Sep;51(5):291–7 **(Cze)**

[Lyme disease] Ruel M, et al. **Ann Med Interne (Paris)** 1989; 139(8):555–74 (333 ref.) **(Fre)**

[Lyme disease in the child] Lebesait A, et al. **Arch Fr Pediatr** 1989 Apr;46(4):287–92 (66 ref.) **(Fre)**

[A new type of spirochete infection: Lyme disease] Kawabata M. **Nippon Rinsho** 1988 Dec;46(12):2762–8 (20 ref.) **(Jpn)**

[Lyme disease] Kulifalova P. **Acta Univ Palacki Olomuc Fac Med** 1988;120:251–4 (Eng. Abstr.) **(Rus)**

[Erythema chronicum migrans caused by Borrelia burgdorferi (published erratum appears in Med Clin (Barc) 1988 Nov 5;91(15):569)] Rodríguez Torres A, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):297–9 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Penetration of doxycycline into cerebrospinal fluid in patients treated for suspected Lyme neuroborreliosis. Dotevall L, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1078–80

COMPLICATIONS

Lyme Borrelia positive serology associated with spontaneous abortion in an endemic Italian area. Carlomagno G, et al. **Acta Eur Fertil** 1988 Sep-Oct;19(5):279–81

Meningoradiculoneuritis mimicking vertebral disc herniation. A "neurosurgical" complication of Lyme-borreliosis. Meier C, et al. **Acta Neurochir (Wien)** 1989;98(1–2):42–6

Otoneurological symptomatology in Lyme disease. Krejcova H, et al. **Adv Otorhinolaryngol** 1988;42:210–2

Lyme disease concurrent with human immunodeficiency virus infection. Garcia-Monco JC, et al. **Am J Med** 1989 Sep;87(3):325–8

The expanding ophthalmologic spectrum of Lyme disease [see comments] Aaberg TM. **Am J Ophthalmol** 1989 Jan 15;107(1):77–80. **Comment in:** Am J Ophthalmol 1989 Jun 15;107(6):684–5

Pseudotumor cerebri syndrome associated with Lyme disease. Jacobson DM, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):81–2

Lyme disease keratitis. Orlin SE, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):678–80

Lyme carditis: an important cause of reversible heart block [see comments] McAlister HF, et al. **Ann Intern Med** 1989 Mar 1;110(5):339–45 (48 ref.). **Comment in:** Ann Intern Med 1989 Jul 1;111(1):90

Seronegative Lyme disease and transitory atrioventricular block [letter; comment] Pikelj F, et al. **Ann Intern Med** 1989 Jul 1;111(1):90. **Comment on:** Ann Intern Med 1989 Mar 1;110(5):339–45

Chronic neurologic manifestations of erythema migrans borreliosis. Ackermann R, et al. **Ann N Y Acad Sci** 1988; 539:16–23

Clinical manifestations and epidemiological characteristics of Lyme disease in Hailin county, Heilongjiang Province, China. Ai CX, et al. **Ann N Y Acad Sci** 1988;539:302–13

Early and late cutaneous manifestations in Ixodes-borne borreliosis (erythema migrans borreliosis, Lyme

borreliosis). Asbrink E, et al. **Ann N Y Acad Sci** 1988; 539:4–15 (51 ref.)
Treatment of erythema chronicum migrans of Lyme disease. Berger BW. **Ann N Y Acad Sci** 1988;539:346–51
The role of interleukin-1 in the pathogenesis of Lyme disease. Habicht GS, et al. **Ann N Y Acad Sci** 1988;539:80–6
Nervous system abnormalities in Lyme disease. Halperin JJ, et al. **Ann N Y Acad Sci** 1988;539:24–34
Treatment of Lyme borreliosis with emphasis on neurological disease. Sköldenberg B, et al. **Ann N Y Acad Sci** 1988; 539:317–23 (15 ref.)
Pathogenesis of Lyme arthritis. Implications for rheumatic disease. Steere AC. **Ann N Y Acad Sci** 1988;539:87–92 (13 ref.)
Lyme disease: ocular manifestations. Bertuch AW, et al. **Ann Ophthalmol** 1988 Oct;20(10):376–8
Complete heart block as the sole presentation of Lyme disease. Kimball SA, et al. **Arch Intern Med** 1989 Aug; 149(8):1897–8
The Lyme spirochete: another cause of Reiter's syndrome? Arnett FC. **Arthritis Rheum** 1989 Sep;32(9):1182–4 (17 ref.)
Lyme disease with acute purulent meningitis [published erratum appears in Br Med J [Clin Res] 1988 Oct 15;297(6654):950] Bourke SJ, et al. **BMJ** 1988 Aug 13; 297(6646):460
Transient complete AV block in Lyme disease. Electrophysiologic observations. van der Linde MR, et al. **Chest** 1989 Jul;96(1):219–21
Lyme disease: neurologic manifestations. Sorensen RW. **Compr Ther** 1989 Jul;15(7):16–22 (24 ref.)
Erythema chronicum migrans as the presenting manifestation of juvenile chronic myelocytic leukemia. Inoue S, et al. **Cutis** 1989 Apr;43(4):333–7
Lyme myocarditis diagnosed by indium-111-antimyosin antibody scintigraphy. Casáns I, et al. **Eur J Nucl Med** 1989;15(6):330–1
Meningitis due to Borrelia burgdorferi in the initial stage of Lyme disease. Huppertz HI, et al. **Eur J Pediatr** 1989 Feb;148(5):428–30
Relapsing or reinfectious lyme hepatitis. Schoen RT. **Hepatology** 1989 Feb;9(2):335–6
Lyme disease. A review and case report with pedal symptoms. Notari MA, et al. **J Am Podiatr Med Assoc** 1989 May;79(5):244–6 (10 ref.)
Ocular disease in Caribbean patients with serologic evidence of Lyme borreliosis. Winward KE, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):65–70
Panuveitis with positive serological tests for syphilis and Lyme disease. Zierhut M, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):71–5; discussion 76–8
Demonstration of spirochetes in cardiac biopsies of patients with Lyme disease. de Koning J, et al. **J Infect Dis** 1989 Jul;160(1):150–3
Locked-in state in Borrelia burgdorferi meningitis. Merlo A, et al. **J Neurol** 1989 Jul;236(5):305–6
Seroconversion to Borrelia burgdorferi in a patient with juvenile arthritis in Ontario, Canada. Laxer RM, et al. **J Rheumatol** 1988 Oct;15(10):1580–2
Hearing impairment in patients with antibody production against Borrelia burgdorferi antigen. Hanner P, et al. **Lancet** 1989 Jan 7;1(8628):13–5
Acute neuroborreliosis in a patient previously infected with Borrelia burgdorferi [letter] Lawton NF, et al. **Lancet** 1989 Aug 12;2(8659):390
Paralysis of recurrent laryngeal nerve in Lyme disease [letter] Schroeter V, et al. **Lancet** 1988 Nov 26;2(8622):1245
Carpal tunnel syndrome in Lyme borreliosis. Halperin JJ, et al. **Muscle Nerve** 1989 May;12(5):397–400
Lyme neuroborreliosis: central nervous system manifestations. Halperin JJ, et al. **Neurology** 1989 Jun; 39(6):753–9
Temporary pacing in complete heart block due to Lyme disease: a case report. Lőrincz I, et al. **PACE** 1989 Aug; 12(8):1433–6 (24 ref.)
Lyme disease: acute focal meningoencephalitis in a child. Feder HM Jr, et al. **Pediatrics** 1988 Dec;82(6):931–4 (31 ref.)
Acquired transient autoimmune reactions in Lyme arthritis: correlation between rheumatoid factor and disease activity. Goebel KM, et al. **Scand J Rheumatol Suppl** 1988;75:314–7
Late stage Lyme borreliosis in children. Leff RD, et al. **South Med J** 1989 Aug;82(8):954–6
[Arrhythmia as a major manifestation of Lyme borreliosis] Bartuněk P, et al. **Cas Lek Cesk** 1989 Jun 9;128(24):756–60 (Eng. Abstr.) **(Cze)**
[Lyme disease in otoneurology practice] Bojar M, et al. **Cesk Otolaryngol** 1988 Jul;37(4):217–26 (Eng. Abstr.) **(Cze)**
[Heart involvement in Lyme disease] Lomíček M, et al. **Vnitr Lek** 1988 Oct;34(10):1024–7 (Eng. Abstr.) **(Cze)**
[Cardiological disorders in patients with Lyme borreliosis] Blaauw AA, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12; 132(46):2111–4 (Eng. Abstr.) **(Dut)**
[Pacemaker implantation for complete atrioventricular block due to Lyme borreliosis] Kuiper H, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2109–11 (Eng. Abstr.) **(Dut)**
[Cardiologic disorders in patients with Lyme borreliosis (letter)] Plötz F, et al. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):416 **(Dut)**
[Cardiac manifestations of Lyme disease. Apropos of a case] Hannebicque G, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):87–90 (12 ref.) (Eng. Abstr.) **(Fre)**
[Rheumatologic manifestations of Lyme disease] Giraudet JS, et al. **Ann Med Interne (Paris)** 1988;139(7):460–3 (Eng. Abstr.) **(Fre)**
[Lyme myocarditis without auriculoventricular conduction disorders (letter)] Fauchier JP, et al. **Presse Med** 1988 Oct 29;17(38):2036–7 **(Fre)**
[Meningo-radiculitis in Lyme disease resistant to penicillin G (letter)] Gourmelen O, et al. **Presse Med** 1989 Mar 18; 18(11):584 **(Fre)**
[Neurologic forms of Lyme disease. 12 cases] Viader F, et al. **Rev Neurol (Paris)** 1989;145(5):362–8 (42 ref.) (Eng. Abstr.) **(Fre)**
[Lyme arthritis and reflex sympathetic dystrophy. An uncommon but logical association] Huaux JP, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):781–3 (26 ref.) **(Fre)**
[Articular involvement in Swiss patients with a Borrelia burgdorferi infection—report of 8 cases] Gerster JC. **Schweiz Rundsch Med Prax** 1989 May 23;78(21):614–6 (Eng. Abstr.) **(Fre)**
[Limb and joint pain in Lyme disease. An important differential neurologic diagnosis] von Albert HH. **Fortschr Med** 1989 Aug 10;107(23):493–5 (Eng. Abstr.) **(Ger)**
[Prognosis of peripheral facial paralysis in Lyme borreliosis (Garin-Bujadoux, Bannwarth meningopolyradiculitis)] Laubert A, et al. **HNO** 1989 Apr;37(4):158–61 (Eng. Abstr.) **(Ger)**
[Intermittent fever attacks. Lyme disease without erythema chronicum migrans] Gräf P, et al. **Internist (Berlin)** 1988 Nov;29(11):778–80 **(Ger)**
[Lyme borreliosis and its significance for the ENT physician] Diehl GE, et al. **Laryngorhinootologie** 1989 Feb;68(2):81–7 (Eng. Abstr.) **(Ger)**
[Rare late manifestations of erythema migrans disease] Schlotfeldt D, et al. **Med Klin** 1988 Jul 15;83(15):475–6, 502 **(Ger)**
[Lyme borreliosis—the most frequent cause of acute peripheral facial paralysis in childhood] Christen HJ, et al. **Monatsschr Kinderheilkd** 1989 Mar;137(3):151–7 (Eng. Abstr.) **(Ger)**
[Borrelia encephalitis and catatonia in adolescence] Neumärker KJ, et al. **Nervenarzt** 1989 Feb;60(2):115–9 **(Ger)**
[Neurologic manifestations of Lyme borreliosis] Matschke HJ, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb; 41(2):65–74 (38 ref.) (Eng. Abstr.) **(Ger)**
[Atrioventricular block in Lyme carditis] Roelli H, et al. **Schweiz Med Wochenschr** 1989 Jan 21;119(3):81–3 (Eng. Abstr.) **(Ger)**
[Chronic atrophic acrodermatitis as a late manifestation of Lyme borreliosis] Liszkay G, et al. **Orv Hetil** 1988 Oct 2;129(40):2143–5 (Eng. Abstr.) **(Hun)**
[Lesions of the joints in Lyme disease] Anan'eva LP, et al. **Sov Med** 1988;(5):46–9 (23 ref.) **(Rus)**

DIAGNOSIS

Late cutaneous Lyme disease: acrodermatitis chronica atrophicans. Kaufman LD, et al. **Am J Med** 1989 Jun;86(6 Pt 2):828–30
The diagnosis of Lyme disease: rewards and perils. Barbour AG. **Ann Intern Med** 1989 Apr 1;110(7):501–2 (20 ref.)
Lyme carditis in The Netherlands [letter] Blaauw AA, et al. **Ann Intern Med** 1989 Aug 1;111(3):261–2
Serologic diagnosis of Lyme disease. Magnarelli LA. **Ann N Y Acad Sci** 1988;539:154–61 (50 ref.)
Lyme borreliosis in Romania. Crăcea E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan-Mar; 47(1):17–21
An adsorption procedure to increase the specificity of enzyme-linked immunosorbent assays for Lyme disease without decreasing sensitivity. Fawcett PT, et al. **Arthritis Rheum** 1989 Aug;32(8):1041–4
Lyme disease. O'Neill PM, et al. **Br J Hosp Med** 1988 Oct; 40(4):284–9 (55 ref.)
Imported case of Bannwarth's syndrome (chronic lymphocytic meningoradiculitis or Lyme meningitis). Salit IE, et al. **Can Dis Wkly Rep** 1988 Feb 27;14(8):31–4 **(Eng, Fre)**
Lyme disease: diagnosis by observation. Longworth DL. **Cleve Clin J Med** 1989 May;56(3):230, 233
Lyme arthritis presenting as adult onset Still's disease. Cimmino MA, et al. **Clin Exp Rheumatol** 1989 May-Jun; 7(3):305–8 (22 ref.)
Atypical Lyme borreliosis. Bartenhagen NH. **Conn Med** 1988 Nov;52(11):639–40
Practicing in Lyme disease territory. Buebendorf DP, et al. **Conn Med** 1989 Jun;53(6):375
Laboratory analyses for Lyme disease. Magnarelli LA. **Conn Med** 1989 Jun;53(6):331–4 (37 ref.)
A message to physicians [editorial] Murray P. **Conn Med** 1989 Jun;53(6):365
Lyme disease in Italy: isolation of Borrelia burgdorferi from a patient. Burioni R, et al. **Eur J Epidemiol** 1988 Dec; 4(4):506–10
Extrapyramidal features in central Lyme borreliosis. Kohlhepp W, et al. **Eur Neurol** 1989;29(3):150–5
Lyme disease: a case report. Lane R. **J Am Coll Health** 1989 Jan;37(4):180–1
Ocular manifestations of Lyme disease. Park M. **J Am Optom Assoc** 1989 Apr;60(4):284–9
Serodiagnosis of erythema migrans and acrodermatitis chronica atrophicans by the Borrelia burgdorferi flagellum enzyme-linked immunosorbent assay. Hansen K, et al. **J Clin Microbiol** 1989 Mar;27(3):545–51
Fluoroimmunoassay studies with solubilized antigens from Borrelia burgdorferi. Hechemy KE, et al. **J Clin Microbiol** 1989 Aug;27(8):1854–8
Detection of antigens in urine of mice and humans infected with Borrelia burgdorferi, etiologic agent of Lyme disease. Hyde FW, et al. **J Clin Microbiol** 1989 Jan;27(1):58–61
Comparison of immunofluorescence and enzyme linked immunosorbent assays for diagnosing Lyme disease. Cutler SJ, et al. **J Clin Pathol** 1989 Aug;42(8):869–71
Serodiagnosis of early Lyme disease: analysis of IgM and IgG antibody responses by using an antibody-capture enzyme immunoassay. Berardi VP, et al. **J Infect Dis** 1988 Oct;158(4):754–60
Enzyme-linked immunosorbent assays for Lyme disease: reactivity of subunits of Borrelia burgdorferi. Magnarelli LA, et al. **J Infect Dis** 1989 Jan;159(1):43–9
Lyme disease: of ticks and titers. Eichenfield AH, et al. **J Pediatr** 1989 Feb;114(2):328–33 (37 ref.)
Diagnosis of Lyme disease. **Lancet** 1989 Jul 22;2(8656):198–9 (27 ref.)
Lyme disease in Missouri. Ferguson JL, et al. **Mo Med** 1988 Oct;85(10):666–8
Lyme disease meningopolyneuritis simulating malignant lymphoma. Szyfelbein WM, et al. **Mod Pathol** 1988 Nov; 1(6):464–8
Latent Lyme neuroborreliosis: presence of Borrelia burgdorferi in the cerebrospinal fluid without concurrent inflammatory signs. Pfister HW, et al. **Neurology** 1989 Aug; 39(8):1118–20
The onset of bilateral uveitis in an elderly man with fever, headache, and a rash. Wong T. **Ophthalmic Surg** 1989 Feb; 20(2):154, 156
Lyme hysteria [editorial] Sautter RD. **Wis Med J** 1989 Jul; 88(7):5
[Determination of serum antibody to Burgdorferi spirrila and its clinical application in Lyme disease] Shi GY. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):641–2 **(Chi)**
[The clinical and serologic investigation in 15 cases of Lyme disease] Shi GY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):689–91, 717 (Eng. Abstr.) **(Chi)**
[Joint symptoms following a tick bite; Lyme arthritis in The Netherlands (letter)] Korff K-J, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1595–6 **(Dut)**
[Lyme borreliosis: a clinical diagnosis (2 cases) (letter)] Ruel M. **Ann Med Interne (Paris)** 1989;140(3):231–2 **(Fre)**
[Suspected syphilis during pregnancy due to cross reactions in Borrelia infection] Enders G, et al. **Dtsch Med Wochenschr** 1988 Sep 30;113(39):1511–4 (Eng. Abstr.) **(Ger)**
[Acute multifocal placoid pigment epitheliopathy with inflammatory CSF findings. A special form of borreliosis?] Tönjes W, et al. **Dtsch Med Wochenschr** 1989 May 19; 114(20):793–5 (Eng. Abstr.) **(Ger)**
[Unusual manifestations of Lyme borreliosis. A contribution to the clinical spectrum of this disease group] Detmar U, et al. **Hautarzt** 1989 Jul;40(7):423–9 (Eng. Abstr.) **(Ger)**
[Clinical manifestation of Lyme borreliosis in childhood] Huber A, et al. **Klin Padiatr** 1989 Mar-Apr;201(2):133–5 (Eng. Abstr.) **(Ger)**
[Neuroborreliosis: progressive encephalomyelitis with cerebral vasculitis] Lock G, et al. **Monatsschr Kinderheilkd** 1989 Feb;137(2):101–4 (Eng. Abstr.) **(Ger)**
[A case from practice (128). Patient: Mr. B. L., born 1947, engineer] Fritschi J. **Schweiz Rundsch Med Prax** 1989 Jan 24;78(4):74–5 **(Ger)**
[Etiologic diagnosis of cases of autochthonous Borrelia burgdorferi infection (Lyme disease)] Crăcea E, et al. **Rev Ig [Bacteriol]** 1988 Jul-Sep;33(3):239–44 (Eng. Abstr.) **(Rum)**
[Clinical picture of the acute period in tick-borne Lyme borreliosis] Mebel' VD, et al. **Med Parazitol (Mosk)** 1988 May-Jun;(3):30–3 (Eng. Abstr.) **(Rus)**
[Characteristics of the clinical diagnosis and treatment of tick-borne borreliosis (Lyme disease)] Ivanov KS, et al. **Voen Med Zh** 1988 Aug;(8):40–3 **(Rus)**
[Clinical characteristics of tick-borne spirochete infection (Lyme disease)] Dekonenko EP, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):15–8 (Eng. Abstr.) **(Rus)**
[Lyme disease with a 12-year course and serologic diagnosis (letter)] Guerrero A, et al. **Rev Clin Esp** 1989 May; 184(9):503–4 **(Spa)**

DRUG THERAPY

The expanding ophthalmologic spectrum of Lyme disease [letter; comment] Baum J, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):684–5. **Comment on:** Am J Ophthalmol 1989 Jan 15;107(1):77–80
New chemotherapeutic approaches in the treatment of Lyme borreliosis. Luft BJ, et al. **Ann N Y Acad Sci** 1988; 539:352–61
A perspective on therapy of Lyme infection. Neu HC. **Ann N Y Acad Sci** 1988;539:314–6 (13 ref.)
Antibiotic therapy of early European Lyme borreliosis and

acrodermatitis chronica atrophicans. Weber K, et al. **Ann N Y Acad Sci** 1988;539:324–45

Treatment of Lyme disease. Schoen RT. **Conn Med** 1989 Jun;53(6):335–7 (21 ref.)

Treatment of Lyme disease. Schoen RT. **Conn Med** 1988 Nov;52(11):641–3

Comparative antimicrobial activity of the new macrolides against Borrelia burgdorferi. Preac-Mursic V, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):651–3

High-dose intravenous penicillin G does not prevent further progression in early neurological manifestation of Lyme borreliosis. Kohler J, et al. **Infection** 1989 Jul–Aug; 17(4):216–7

Treatment of Lyme disease. **Med Lett Drugs Ther** 1989 Jun 16;31(794):57–9

[How are neurologic manifestations of Lyme borreliosis treated?] Pfister HW. **Nervenarzt** 1988 Nov;59(11):687–9 (21 ref.) (Ger)

[Therapy problems of Lyme borreliosis] Schmutzhard E. **Padiatr Padol** 1989;24(1):63–8 (20 ref.) (Eng. Abstr.) (Ger)

[Lyme disease. Recurrence of the skin lesion after treatment (letter)] García Cors M, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):395 (Spa)

EPIDEMIOLOGY

Surveillance for Lyme disease in Alabama. Woernle CH. **Ala Med** 1989 Apr;58(10):19–20

The geographic distribution of Lyme disease in the United States. Ciesielski CA, et al. **Ann N Y Acad Sci** 1988; 539:283–8

European Lyme borreliosis. Stanek G, et al. **Ann N Y Acad Sci** 1988;539:274–82 (32 ref.)

Lyme arthritis in Europe: comparisons with reports from North America [letter] Herzer P. **Ann Rheum Dis** 1988 Sep;47(9):789–90

Lyme arthritis in Spain [letter] Nogueras A, et al. **Ann Rheum Dis** 1989 Jan;48(1):82–3

Lyme disease—Connecticut. **Can Dis Wkly Rep** 1988 Feb 27;14(8):34–6 (Eng, Fre)

Lyme disease in Manitoba. Sekla L, et al. **Can Dis Wkly Rep** 1989 Jul 8;15(27):137–41 (Eng, Fre)

Lyme disease in Canada—1989 update. Todd MJ, et al. **Can Dis Wkly Rep** 1989 Jul 8;15(27):135–7 (Eng, Fre)

The epidemiology of Lyme disease in Connecticut. Cartter ML, et al. **Conn Med** 1989 Jun;53(6):320–3

Reinfection with Borrelia burgdorferi. Cartter ML, et al. **Conn Med** 1989 Jun;53(6):376–7

National surveillance of Lyme disease, 1987–1988. Tsai TF, et al. **Conn Med** 1989 Jun;53(6):324–6

Analogous cases of Lyme disease. McEnroe WD. **Folia Parasitol (Praha)** 1988;35(4):377–8

Lyme disease: a review and an outlook for Indiana. Pinger RR, et al. **Indiana Med** 1989 Apr;82(4):268–72 (25 ref.)

Infections following tickbites. Tick-borne encephalitis and Lyme borreliosis—a prospective epidemiological study from Tyrol. Schmutzhard E, et al. **Infection** 1988 Sep–Oct; 16(5):269–72

Lyme borreliosis in the Soviet Union: a cooperative US–USSR report. Dekonenko EJ, et al. **J Infect Dis** 1988 Oct;158(4):748–53

Lyme and other tick-borne diseases acquired in South Carolina in 1988: a survey of 1,331 physicians. Schuman SH, et al. **J S C Med Assoc** 1989 Jul;85(7):311–4

Lyme disease—United States, 1987 and 1988. **MMWR** 1989 Oct 6;38(39):668–72

Lyme disease—Canada. **MMWR** 1989 Oct 6;38(39):677–8

Rapid emergence of a focal epidemic of Lyme disease in coastal Massachusetts. Lastavica CC, et al. **N Engl J Med** 1989 Jan 19;320(3):133–7

Lyme borreliosis and other tick-borne diseases in Rhode Island [published erratum appears in R I Med J 1989 Feb;72(2):44] Hyland KE, et al. **R I Med J** 1988 Dec; 71(12):475–84

Lyme disease in northern California [letter] Werra RJ. **West J Med** 1989 Aug;151(2):206–7

[Epidemiology of Lyme disease] Leclercq M. **Rev Med Liege** 1988 Oct 1;43(19):640–3 (Fre)

[Lyme disease, erythema migrans disease, borreliosis (review)] Bengert O. **Berl Munch Tierarztl Wochenschr** 1989 May 1;102(5):170–4 (127 ref.) (Eng. Abstr.) (Ger)

[Lyme disease in the area of Belgrade. 1st reported cases] Dmitrović R, et al. **Vojnosanit Pregl** 1988 May–Jun; 45(3):179–82 (Eng. Abstr.) (Scr)

[Incidence and clinical spectrum of Borrelia burgdorferi infection in Spain. Study group for Lyme disease in Spain (letter)] Guerrero A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):438–9 (Spa)

[Spirochete infected ticks (Ixodes ricinus)—risks even in Norrland] Jaenson TG, et al. **Lakartidningen** 1989 Jul 26; 86(30–31):2584 (Swe)

ETIOLOGY

Ticks parasitizing humans in a Lyme disease endemic area of southern New York State. Falco RC, et al. **Am J Epidemiol** 1988 Nov;128(5):1146–52

Occupational risk of Lyme disease in endemic areas of New York State. Smith PF, et al. **Ann N Y Acad Sci** 1988; 539:289–301

Lyme borreliosis: discovery of the causative agent [letter] Lavoie PE. **Arch Neurol** 1989 Feb;46(2):125

A tick, in time, may cause Lyme (disease). Reich M. **J Am Osteopath Assoc** 1989 Jul;89(7):948–51

Characterization of a circular plasmid from Borrelia burgdorferi, etiologic agent of Lyme disease. Hyde FW, et al. **J Clin Microbiol** 1988 Oct;26(10):2203–5

[Pseudo-obstruction of the colon following tick bite injury] Autschbach R, et al. **Chirurg** 1989 May;60(5):365–7 (Ger)

[Lyme disease] Groehlich B, et al. **Pol Tyg Lek** 1988 Jul 18;43(29):956–9 (18 ref.) (Pol)

HISTORY

Catching the bug: how scientists found the cause of Lyme disease and why we're not out of the woods yet. Lang J. **Conn Med** 1989 Jun;53(6):357–64

Lyme disease: a historical perspective. Newman JH. **Del Med J** 1988 Nov;60(11):651–3

Erythema migrans: a chronicle. Dammin GJ. **Rev Infect Dis** 1989 Jan–Feb;11(1):142–51

IMMUNOLOGY

Specific immune responses in Lyme borreliosis. Characterization of T cell and B cell responses to Borrelia burgdorferi. Dattwyler RJ, et al. **Ann N Y Acad Sci** 1988; 539:93–102

Lyme disease: antigens of Borrelia burgdorferi and immune responses to them. Habicht GS. **Ann N Y Acad Sci** 1988; 539:112–4

Immunoglobulin G subclasses specific to Borrelia burgdorferi in patients with Lyme disease. Hechemy KE, et al. **Ann N Y Acad Sci** 1988;539:162–9

Isolation and characterization of Borrelia burgdorferi-specific and autoreactive T-cell lines from the cerebrospinal fluid of patients with Lyme meningoradiculomyelitis. Martin R, et al. **Ann N Y Acad Sci** 1988;540:449–51

Borrelia burgdorferi—specific and autoreactive T-cell lines from cerebrospinal fluid in Lyme radiculomyelitis. Martin R, et al. **Ann Neurol** 1988 Oct;24(4):509–16

Demonstration of antigen-specific T cells and histopathological alterations in mice experimentally inoculated with Borrelia burgdorferi. Schaible UE, et al. **Infect Immun** 1989 Jan;57(1):41–7

Autoreactive T cells in rheumatic disease (1). Analysis of growth frequencies and autoreactivity of T cells in patients with rheumatoid arthritis and Lyme disease. Schlesier M, et al. **J Autoimmun** 1989 Feb;2(1):31–49

Clinical and neuroimmunological findings in chronic Borrelia burgdorferi radiculomyelitis (Lyme disease). Mertens HG, et al. **J Neuroimmunol** 1988 Dec;20(2–3):309–14 (32 ref.)

Association of HLA-DR2 antigen with serum IgG antibodies against Borrelia burgdorferi in Bannwarth's syndrome. Wokke JH, et al. **J Neurol** 1988 Sep;235(7):415–7

Isolation of interleukin 1 from joint fluids of patients with Lyme disease. Beck G, et al. **J Rheumatol** 1989 Jun; 16(6):800–6

Seronegative neuroborreliosis [letter] Guy EC, et al. **Lancet** 1989 Feb 25;1(8635):441

Diagnosing Lyme disease: the contribution of serologic testing. Duffy J, et al. **Mayo Clin Proc** 1988 Nov; 63(11):1116–21

Seronegative Lyme disease [letter] **N Engl J Med** 1989 May 11;320(19):1279–80

Seronegative Lyme disease. Dissociation of specific T- and B-lymphocyte responses to Borrelia burgdorferi. Dattwyler RJ, et al. **N Engl J Med** 1988 Dec 1; 319(22):1441–6

Lyme disease, 1988: immunologic manifestations and possible immunopathogenetic mechanisms. Sigal LH. **Semin Arthritis Rheum** 1989 Feb;18(3):151–67 (177 ref.)

Lyme-borreliosis and possible association with HLA-antigens. Pflüger KH, et al. **Tissue Antigens** 1989 Mar;33(3):375–81

[The results of clinico-immunologic research on patients with tick-borne Lyme borreliosis] Dekonenko EP, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):55–8 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Spirochetes in the spleen of a patient with chronic Lyme disease. Cimmino MA, et al. **Am J Clin Pathol** 1989 Jan; 91(1):95–7

Human necrotizing splenitis caused by Borrelia burgdorferi. Rank EL, et al. **Am J Clin Pathol** 1989 Apr;91(4):493–8

The continuing saga of Lyme disease [editorial] Benenson AS. **Am J Public Health** 1989 Jan;79(1):9–10

Interaction of Lyme disease spirochetes with cultured eucaryotic cells. Thomas DD, et al. **Infect Immun** 1989 Apr;57(4):1324–6

Ultrastructure of Borrelia burgdorferi in tissues of patients with Lyme disease. Hulínská D, et al. **J Basic Microbiol** 1989;29(2):73–83

Ear punch biopsy method for detection and isolation of Borrelia burgdorferi from rodents. Sinsky RJ, et al. **J Clin Microbiol** 1989 Aug;27(8):1723–7

Adherence of the Lyme disease spirochete to glial cells and cells of glial origin. Garcia-Monco JC, et al. **J Infect Dis** 1989 Sep;160(3):497–506

Cultivation of Borrelia burgdorferi from joint fluid three months after treatment of facial palsy due to Lyme borreliosis [letter] Schmidli J, et al. **J Infect Dis** 1988 Oct; 158(4):905–6

[Spirochetes isolated from the blood of three cases of Lyme disease with neurologic abnormalities] Wen YX, et al. **Wei Sheng Wu Hsueh Pao** 1988 Sep;28(3):275–8 (Eng. Abstr.) (Chi)

PARASITOLOGY

[Comparative evaluation of 2 methods for demonstrating Borrelia in ticks—the vectors of Lyme disease] Kovalevskii IuV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):75–7 (Eng. Abstr.) (Rus)

PATHOLOGY

Histopathology of Lyme arthritis in LSH hamsters. Hejka A, et al. **Am J Pathol** 1989 May;134(5):1113–23

Clinical pathologic correlations of Lyme disease by stage. Duray PH, et al. **Ann N Y Acad Sci** 1988;539:65–79

Synovial fluid eosinophilia in Lyme disease. Kay J, et al. **Arthritis Rheum** 1988 Nov;31(11):1384–9

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 51–1988. A 92-year-old woman with several cranial-nerve defects and weakness of the left leg. **N Engl J Med** 1988 Dec 22;319(25):1654–62

Eosinophilic lymphadenitis in Lyme disease. Ramakrishnan T, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):180–1

[Acrodermatitis chronic atrophicans and sclerodermiform skin changes in Borrelia infection] Langer K, et al. **Hautarzt** 1988 Oct;39(10):647–51 (Eng. Abstr.) (Ger)

[Lyme-borreliosis with Bannwarth's syndrome—report on the first patients registered in Croatia] Maček P, et al. **Lijec Vjesn** 1988 Aug;110(8):269–73 (Eng. Abstr.) (Scr)

[Lyme disease evolving over 12 years (letter)] Villar A, et al. **Rev Clin Esp** 1988 Oct;183(5):280–1 (Spa)

PHYSIOPATHOLOGY

Clinical manifestations of Lyme disease in the United States. Trock DH, et al. **Conn Med** 1989 Jun;53(6):327–30 (34 ref.)

[Lyme disease. Clinical, biological and developmental aspects. 29 cases in the Orléans region] Benhamou CL, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):647–53 (40 ref.) (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

Vector tick populations and Lyme disease. A summary of control strategies. Schulze TL, et al. **Ann N Y Acad Sci** 1988;539:204–11

Prospects for suppressing transmission of Lyme disease. Spielman A. **Ann N Y Acad Sci** 1988;539:212–20

Lyme disease prevention—knowledge, beliefs, and behaviors among high school students in an endemic area. Cartter ML, et al. **Conn Med** 1989 Jun;53(6):354–6

Lyme disease and antibiotic prophylaxis. Fabrizio T. **Conn Med** 1989 Jun;53(6):376

Ode to that dammini Ixodes. Robinson CH. **Conn Med** 1989 Jun;53(6):375

Lyme disease prevention: personal protection and prospects for tick control. Stafford KC 3d. **Conn Med** 1989 Jun; 53(6):347–51 (24 ref.)

The ominous spread of Borrelia burgdorferi infection [news] Reotutar R. **J Am Vet Med Assoc** 1989 May 15; 194(10):1387–91

A prospective study of tick bites in an endemic area for Lyme disease. Costello CM, et al. **J Infect Dis** 1989 Jan; 159(1):136–9

Ticks, tetracycline, and backyard terrorism. Bryan CS. **J S C Med Assoc** 1989 Jul;85(7):341–3

Lyme disease [letter] Hamlet N, et al. **N Engl J Med** 1989 Jun 15;320(24):1626–7

RADIOGRAPHY

[Lyme borreliosis—a case report] Aust F, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):329–34 (Eng. Abstr.) (Ger)

THERAPY

[A case of pacemaker-dependent Lyme carditis] Borgmann H, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):247–8 (Eng. Abstr.) (Ger)

TRANSMISSION

Comparing the relative potential of rodents as reservoirs of the Lyme disease spirochete (Borrelia burgdorferi). Mather TN, et al. **Am J Epidemiol** 1989 Jul;130(1):143–50

Re: "Seasonal variation of transmission risk of Lyme disease and human babesiosis" [letter] Waltner-Toews D, et al. **Am J Epidemiol** 1988 Dec;128(6):1383–4

Potential for exposure to tick bites in recreational parks in a Lyme disease endemic area. Falco RC, et al. **Am J Public Health** 1989 Jan;79(1):12–5

Lyme borreliosis in California. Acarological, clinical, and epidemiological studies. Lane RS, et al. **Ann N Y Acad Sci** 1988;539:192–203

Lyme disease and migrating birds in the Saint Croix River Valley. Weisbrod AR, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1921–4

Lyme disease in Canada [published erratum appears in Can Dis Wkly Rep 1988 Jul 2;14(26):115] Bollegraaf E. **Can Dis Wkly Rep** 1988 Jun 4;14(22):95–7 (Eng, Fre)

Ecology of Lyme disease. Anderson JF. **Conn Med** 1989 Jun;

53(6):343–6 (54 ref.)
Lyme disease and pregnancy. Cartter ML, et al. **Conn Med** 1989 Jun;53(6):341–2
A prospective study of tick bites in an endemic area for Lyme disease. Costello CM, et al. **Conn Med** 1989 Jun; 53(6):338–40
Transmission of Lyme disease spirochetes (Borrelia burgdorferi). Piesman J. **Exp Appl Acarol** 1989 Jun; 7(1):71–80 (51 ref.)
Intensity and duration of Borrelia burgdorferi and Babesia microti infectivity in rodent hosts. Piesman J. **Int J Parasitol** 1988 Jul;18(5):687–9
Ticks and biting insects infected with the etiologic agent of Lyme disease, Borrelia burgdorferi. Magnarelli LA, et al. **J Clin Microbiol** 1988 Aug;26(8):1482–6
Host associations of ticks (Acari: Ixodidae) parasitizing medium-sized mammals in a Lyme disease endemic area of southern New York. Fish D, et al. **J Med Entomol** 1989 May;26(3):200–9
Lyme disease in California: interrelationship of Ixodes pacificus (Acari: Ixodidae), the western fence lizard (Sceloporus occidentalis), and Borrelia burgdorferi. Lane RS, et al. **J Med Entomol** 1989 Jul;26(4):272–8
Ability to Ixodes scapularis, Dermacentor variabilis, and Amblyomma americanum (Acari: Ixodidae) to acquire, maintain, and transmit Lyme disease spirochetes (Borrelia burgdorferi). Piesman J, et al. **J Med Entomol** 1988 Sep; 25(5):336–9
Competence of a rabbit-feeding Ixodes (Acari: Ixodidae) as a vector of the Lyme disease spirochete. Telford SR 3d, et al. **J Med Entomol** 1989 Mar;26(2):118–21
Incompetence of catbirds as reservoirs for the Lyme disease spirochete (Borrelia burgdorferi). Mather TN, et al. **J Parasitol** 1989 Feb;75(1):66–9
Increased risk of Lyme disease for cat owners [letter] Curran KL, et al. **N Engl J Med** 1989 Jan 19;320(3):183
Ticks, Lyme disease, and spotted fever. Imperato PJ. **N Y State J Med** 1989 Jun;89(6):313–4
Lyme disease—another transfusion risk? Aoki SK, et al. **Transfusion** 1989 Sep;29(7):646–5 (60 ref.)
Is Ixodes (ixodiopsis) angustus a vector of Lyme disease in Washington State? Damrow T, et al. **West J Med** 1989 May;150(5):580–2
Prevalence of Borrelia burgdorferi in Ixodes ricinus ticks in Berlin (West). Kahl O, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):434–40

VETERINARY

An animal model for Lyme arthritis. Barthold SW, et al. **Ann N Y Acad Sci** 1988;539:264–73
Epidemiologic studies of Lyme disease in horses and their public health significance. Cohen D, et al. **Ann N Y Acad Sci** 1988;539:244–57
Lyme borreliosis in domestic animals. Levy SA. **Conn Med** 1989 Jun;53(6):352–3 (19 ref.)
Taking a second hard look at Borrelia burgdorferi [letter] Green RT, et al. **J Am Vet Med Assoc** 1989 Sep 1; 195(5):562–3
Antigenically variable Borrelia burgdorferi isolated from cottontail rabbits and Ixodes dentatus in rural and urban areas. Anderson JF, et al. **J Clin Microbiol** 1989 Jan; 27(1):13–20
Greater risk of Borrelia burgdorferi infection in dogs than in people [letter] Eng TR, et al. **J Infect Dis** 1988 Dec; 158(6):1410–1
Lameness and asymptomatic Borrelia burgdorferi seropositivity in dogs [letter] Greene RT. **J Infect Dis** 1989 Aug;160(2):346–7
Complete heart block in a dog seropositive for Borrelia burgdorferi. Similarity to human Lyme carditis. Levy SA, et al. **J Vet Intern Med** 1988 Jul–Sep;2(3):138–44
Borrelia sp. infection in coyotes, black-tailed jack rabbits and desert cottontails in southern Texas. Burgess EC, et al. **J Wildl Dis** 1989 Jan;25(1):47–51
Experimental inoculation of mallard ducks (Anas platyrhynchos platyrhynchos) with Borrelia burgdorferi. Burgess EC. **J Wildl Dis** 1989 Jan;25(1):99–102
Lagomorphs as sentinels for surveillance of borreliosis in the far western United States. Lane RS, et al. **J Wildl Dis** 1989 Apr;25(2):189–93

LYMECYCLINE see under **TETRACYCLINES**

LYMNAEA

The actions of three volatile general anaesthetics on withdrawal responses of the pond-snail Lymnaea stagnalis (L.). Girdlestone D, et al. **Comp Biochem Physiol [C]** 1989; 92(1):39–43
Molluscicidal agents from Khaya grandifoliola. Makanga B, et al. **Trop Med Parasitol** 1989 Jun;40(2):117–8
Molluscicidal activity of Solanum aculeatum (family: Solanaceae) berries against Biomphalaria pfeifferi, Bulinus globosus and Lymnaea natalensis. Mkoji GM, et al. **Trop Med Parasitol** 1989 Jun;40(2):119–20

ANALYSIS

Characterization of pre- and postsynaptic dopamine receptors in Lymnaea. Audesirk TE. **Comp Biochem Physiol [C]** 1989;93(1):115–9
Detection of mRNA molecules coding for neuropeptide hormones of the pond snail Lymnaea stagnalis by radioactive and non-radioactive in situ hybridization: a model study for mRNA detection. Dirks RW, et al. **J Histochem Cytochem** 1989 Jan;37(1):7–14
A comparison of four techniques for mapping the distribution of serotonin and serotonin-containing neurons in fixed and living ganglia of the snail, Lymnaea. Kemenes G, et al. **J Neurocytol** 1989 Apr;18(2):193–208
Structure of one of the neuropeptides of the egg-laying hormone precursor of Lymnaea. Dictus WJ, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):23–9

DRUG EFFECTS

The impairment of mobility and development in freshwater snails (Physa fontinalis and Lymnaea stagnalis) caused by herbicides. Kosanke GJ, et al. **Comp Biochem Physiol [C]** 1988;90(2):373–9
Comparative studies of the effect of thiourea and BHC on behaviour and mortality in adult snails of the species Lymnaea stagnalis and on their egg masses. Bhide M. **Folia Morphol (Praha)** 1989;37(1):13–8
[Effects of a sublethal concentration of molluscacide (CuCl2) on the reproductive activity and movements of the molluscan host Lymnaea truncatula Müller] Rondelaud D. **Ann Rech Vet** 1988;19(4):273–8 (Eng. Abstr.) **(Fre)**
[Combined and alternate control of Lymnaea truncatula Müller: comparative study of 3 technics for spreading of the molluscacide] Rondelaud D. **Ann Rech Vet** 1988; 19(4):279–82 (Eng. Abstr.) **(Fre)**

GENETICS

Isolation, characterization, and evolutionary aspects of a cDNA clone encoding multiple neuropeptides involved in the stereotyped egg-laying behavior of the freshwater snail Lymnaea stagnalis. Vreugdenhil E, et al. **J Neurosci** 1988 Nov;8(11):4184–91

GROWTH & DEVELOPMENT

[Comparison of growth of Fossaria cubensis and Pseudosuccinea columella (Mollusca: Pulmonata: Lymnaeidae), intermediate hosts of Fasciola hepatica in Cuba] Ferrer López JR, et al. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):29–35 (Eng. Abstr.) **(Spa)**

METABOLISM

Quantitative immunoelectron microscopy and tannic acid study of dynamics of neurohaemal and non-synaptic peptide release by the caudodorsal cells of Lymnaea stagnalis. Schmidt ED, et al. **Brain Res** 1989 Jun 12; 489(2):325–37
Uptake and distribution of copper sulphate and its effect on the respiration rate of the hemocyanin-producing freshwater snail Lymnaea natalensis. Wolmarans CT, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):214–21
Immunocytochemical demonstration of a novel system of neuroendocrine peptidergic neurons in the pond snail Lymnaea stagnalis, with antisera to the teleostean hormone hypocalcin and mammalian parathyroid hormone. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):29–38
Effect of injected organ homogenates on tissue lipid metabolites of uninfected snail host Lymnaea luteola. Rao MR, et al. **Indian J Exp Biol** 1988 Aug;26(8):647–8
Inositol uptake and metabolism in molluscan neuronal tissue. Tuersley MD, et al. **J Neurochem** 1988 Nov;51(5):1610–6
Post-translational processing in model neuroendocrine systems: precursors and products that coordinate reproductive activity in Aplysia and Lymnaea. Nagle GT, et al. **J Neurosci Res** 1989 Aug;23(4):359–70 (55 ref.)

PARASITOLOGY

Trichobilharzia ocellata: influence of infection on the interaction between the dorsal body hormone, a female gonadotropic hormone, and the follicle cells in the gonad of the intermediate snail host Lymnaea stagnalis. de Jong-Brink M, et al. **Exp Parasitol** 1989 Jan;68(1):93–8
On the viability of Fasciola gigantica metacercariae ingested by Lymnaea auricularia. Yadav SC, et al. **J Helminthol** 1988 Dec;62(4):303–4
Experimental infection of Japanese Lymnaea snails with Australian Fasciola hepatica. Itagaki T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1085–91
Possible role of reactive forms of oxygen in in vitro killing of Schistosoma mansoni sporocysts by hemocytes of Lymnaea stagnalis. Dikkeboom R, et al. **Parasitol Res** 1988; 75(2):148–54
[Abnormal restoration of the digestive gland of Lymnaea glabra Müller and L. truncatula Müller infested with Fasciola hepatica L.] Rondelaud D, et al. **Parasitol Res** 1988;75(2):165–6 **(Fre)**
[Susceptibility of Lymnaea (Pseudosuccinea) columella (Say, 1817) exposed to infection by miracidia of Fasciola hepatica (Linnaeus, 1758)] Dacal AR, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct;30(5):361–9 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Sensitivity of freshwater pulmonate snails, Lymnaea luteola L., to heavy metals. Khangarot BS, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):208–13
The morphology and electrophysiology of the neurones of the paired pedal ganglia of Lymnaea stagnalis (L.). Kyriakides M, et al. **Comp Biochem Physiol [A]** 1989; 93(4):861–76
Developmental and comparative aspects of nonsynaptic release by the egg-laying controlling caudodorsal cells of basommatophoran snails. Schmidt ED, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):17–28
[Functional characteristics of potassium channels in the somatic membrane of neurons of Lymnaea stagnalis of various ages] Frol'kis VV, et al. **Neirofiziologiia** 1989; 21(1):3–7 (Eng. Abstr.) **(Rus)**
[Changes in neuronal excitability elicited by subthreshold depolarization as a possible mechanism of interval-selective interrelations in the central nervous system] Vartanian GA, et al. **Neirofiziologiia** 1989;21(3):291–9 (Eng. Abstr.) **(Rus)**
[Morphologic characteristics of the RPDI neuron in the pond snail and its participation in the processing of multimodality sensory information] Zaitsev OV, et al. **Neirofiziologiia** 1988;20(6):785–93 (Eng. Abstr.) **(Rus)**
[Morphologic characteristics and responses of the neurons of the right parietal ganglion in Lymnaea stagnalis to stimulation of the sensory structures] Shuvalova NE, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):708–14 (Eng. Abstr.) **(Rus)**
[Cellular analog of instrumental behavior on single mollusk neurons during automatic intracellular electrostimulation] Verbnyĭ IaI, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun; 38(3):489–96 (Eng. Abstr.) **(Rus)**

LYMPH

Effects of sustained lymph drainage on cardiovascular function and thoracic duct lymph in sheep. Valenzuela GJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R867–74
Alteration of epicardial lymphatics in lymphostatic canine hearts. Okada E. **Heart Vessels** 1988;4(4):215–20
Lymphatic bullae arising as a complication of second-intention healing. Moranz JF, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):874–7
Fibrin glue for the treatment of persistent lymphatic drainage. Giberson WG, et al. **J Pediatr Surg** 1988 Dec;23(12):1188–9
Lymphorrhea as postoperative complication of living donor nephrectomy: a case report. Fernandez A, et al. **J Urol** 1988 Dec;140(6):1514–5
Combined monitoring of thoracic duct and lung lymph during E. coli sepsis in awake sheep. Smith L, et al. **Lymphology** 1988 Sep;21(3):169–77
[Seroma: a complication of systemic-pulmonary shunt with a tubular prosthesis] Marianeschi SM, et al. **Cardiologia** 1989 Mar;34(3):271–4 (Eng. Abstr.) **(Ita)**
[Use of lymphosorption detoxication in the treatment of lung abscesses and their complications] Samsonov VP. **Vestn Khir** 1988 May;140(5):92–5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Effects of scalding injury on the components of rabbit paw lymph. Hiroto Y, et al. **Burns Incl Therm Inj** 1988 Aug; 14(4):313–9
The lymphatic route. V. Distribution of human natural interferon-beta in rabbit plasma and lymph. Bocci V, et al. **J Interferon Res** 1988 Oct;8(5):633–40
Characterization of dog prenodal peripheral lymph lipoproteins. Evidence for the peripheral formation of lipoprotein-unassociated apoA-I with slow pre-beta electrophoretic mobility. Lefevre M, et al. **J Lipid Res** 1988 Sep;29(9):1139–48
Epidermal cell thymocyte activity factor/interleukin 1 (ETAF/IL)-like activity in lymph drained from normal human skin. Olszewski WL, et al. **Lymphology** 1988 Jun; 21(2):118–23
The pharmacokinetics of intravenously administered diazepam in the rat influenced by composition of the lymph. Lamka J, et al. **Physiol Bohemoslov** 1989;38(3):259–66

CYTOLOGY

The migration of lymphocyte subsets from blood to lymph in the normal rat. Westermann J, et al. **Adv Exp Med Biol** 1988;237:547–51
Cardiorespiratory and cellular changes with interleukin 2 infusion in sheep. Glauser FL, et al. **J Appl Physiol** 1989 Jan;66(1):128–34
A single step centrifugation method for the enrichment of veiled cells from canine afferent lymph. Galkowska H, et al. **J Immunol Methods** 1989 Jan 17;116(2):207–12
Effect of local hyperthermia on lymph immune cells and lymphokines of normal human skin. Olszewski WL, et al. **J Surg Oncol** 1989 Jun;41(2):109–16
The composition of inflammatory cells infiltrating rejecting heart allografts in rats is not reflected in the blood or lymph. Sanden M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):467
[Determining the type of drowning based on the levels of blood in the thoracic duct lymph] Isaev IuS. **Sud Med Ekspert** 1989 Jan–Mar;32(1):23–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The rapid induction by interleukin-2 of pulmonary

microvascular permeability. Klausner JM, et al. **Ann Surg** 1989 Jan;209(1):119–28

Effect of histamine on tracheobronchial afferent and caudal mediastinal efferent lymph. McClure DE, et al. **Exp Lung Res** 1989 Mar;15(2):199–211

The lymphogogue action of calcium dobesilate on the flow of lymph from the thoracic duct of anesthetized and mobile guinea pigs. Piller NB. **Lymphology** 1988 Jun;21(2):124–7

[The immunodepressive and lympholytic action of kortifen] Pykhtina AA, et al. **Farmakol Toksikol** 1988 Sep–Oct; 51(5):72–4 (Eng. Abstr.) (Rus)

[Lymph–blood microcirculatory shifts in the intestines during histamine action] Kul baev IS, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):847–52 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Substrate specificity and inhibitors of a capillary injury–related protease from sheep lung lymph. Orlowski M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):125–36

Lymph esterases of the house mouse (Mus musculus)—I. Identification and possible origins of abdominal lymph esterases. Augenstein U, et al. **Comp Biochem Physiol [B]** 1988;91(1):171–7

Lymph esterases of the house mouse (Mus musculus)—II. The role of esterase–2 in fat resorption. Wassmer B, et al. **Comp Biochem Physiol [B]** 1988;91(1):179–85

Phospholipase A activities in ascites, serum, lymph, and urine in acute pancreatitis following pancreas stimulation with secretin–ceruletid. Zirngibl H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):141–3

Dopamine–beta–hydroxylase in dog lymph—effect of sympathetic activation. Ngai SH, et al. **Life Sci** 1974 Jun 16;14(12):2431–9

[Total activity and isofermentation of lactate dehydrogenases in peripheral lymph in relation to lymphatic flow] Gubanova EI, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:529–31 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Traffic and proliferative responses of recirculating lymphocytes in fetal calves. Hein WR, et al. **Immunology** 1988 Aug;64(4):621–6

The induction of immunologic unresponsiveness by antigen pretreatment is mediated by a CD4 T cell that appears transiently in the spleen and subsequently in the TDL. Quigley RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):377–8

METABOLISM

Rat intestinal lymph osmolarity during glucose and oleic acid absorption. Bohlen HG, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G438–46

Intestinal absorption and lymphatic transport of fish oil (MaxEPA) in the rat. Chernenko GA, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):95–102

Total lymphatic clearance of protein from the renal interstitium. Atkins JL, et al. **Contrib Nephrol** 1988; 68:238–44

The lymphatic route. VI. Distribution of recombinant interferon–alpha 2 in rabbit and pig plasma and lymph. Bocci V, et al. **J Biol Response Mod** 1988 Aug;7(4):390–400

Studies on intestinal lymphatic absorption of drugs. I. Lymphatic absorption of alkyl ester derivatives and alpha–monoglyceride derivatives of drugs. Sugihara J, et al. **J Pharmacobiodyn** 1988 May;11(5):369–76

Contribution of plasma protein and lipoproteins to intestinal lymph: comparison of long–chain with medium–chain triglyceride duodenal infusion. Sipahi AM, et al. **Lymphology** 1989 Mar;22(1):13–9

Origin of intestinal lymph cholesterol in rats: contribution from luminal absorption, mucosal synthesis and filtration from plasma. Vasconcelos KS, et al. **Lymphology** 1989 Mar; 22(1):4–12

Effect of phosphatidylcholine on peritoneal transport and lymphatic absorption in a CAPD patient with sclerosing peritonitis. Struijk DG, et al. **Nephron** 1989;51(4):577–8

PGE2 concentrations in renal venous plasma and renal lymph during basal and stimulated conditions in the dog. Hohenfellner RM, et al. **Pflugers Arch** 1989 Apr; 413(6):673–5

Anesthesia–associated depression of peripheral node lymphocyte traffic and antibody production in sheep accompanied by elevations in arachidonic acid metabolites in efferent lymph. Spruck CH, et al. **Transplant Proc** 1988 Dec;20(6):1169–74

[Biliary pancreatic, and lymphatic excretion of mitomycin C and adriamycin on celiac arterial infusion in dogs] Sasaki Y, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3301–3 (Jpn)

[Experimental study on the development of endotoxemia in biliary tract infection with special reference to lymphatic pathway at controlled biliary duct pressure] Kodama T. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1978–89 (Eng. Abstr.) (Jpn)

[Accumulation of gentamicin in biological fluids, organs and tissues during regional lymphotropic therapy with antibiotics] Buianov VM, et al. **Antibiot Khimioter** 1989 Apr;34(4):294–8 (Eng. Abstr.) (Rus)

[Phospholipid transport into the intestinal lymph and portal blood of calves in relation to the physical form of the feed ration] Aliev AA, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):995–1000 (Eng. Abstr.) (Rus)

[Kinetics of the transport of substances with various molecular weights from the blood into the lymph of the lungs (the role of transendothelial and interstitial mass transfer)] Serikov VB, et al. **Fiziol Zh SSSR** 1988 Jun; 74(6):839–46 (Eng. Abstr.) (Rus)

PATHOLOGY

Functional characteristics of veiled cells from canine prenodal lymph. Dabrowski MI, et al. **Immunobiology** 1989 Feb;178(4–5):316–28

PHYSIOLOGY

Proteolytic and lysosomal enzymes in acute trauma–induced lung injury in sheep. Andreasson S, et al. **Acta Chir Scand** 1989;155(1):1–6

Evaluation of the effects of lymph drainage by a thoracic duct fistula in experimental peritonitis. Olofsson P. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):453–9

Lymphatic transport from normal and synovitic knees in rabbits. Reimann I, et al. **Acta Orthop Scand** 1989 Apr; 60(2):185–7

Effects of outflow pressure on fetal lymph flow. Brace RA. **Am J Obstet Gynecol** 1989 Feb;160(2):494–7

Decreased vascular contraction and elastic stiffening after intramural lymphostasis. Bérczi V, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1289–94

Pulmonary and peripheral lymph protein clearance during bacteremia after surgery. Charash WE, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1421–8

Effect of pulmonary perfusion on lung fluid filtration in young lambs. Teague WG, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1336–41

Capillary permeability to endogenous macromolecules in the equine digit. Allen D Jr, et al. **Am J Vet Res** 1988 Sep; 49(9):1609–12

The role of lymphatic drainage in peritoneal mass transfer. Hallett MD, et al. **Artif Organs** 1989 Feb;13(1):28–34

Plasma apolipoprotein A–I levels and bile lipid secretion during thoracic duct drainage in the rat. Nilsson A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):231–6

Reflex modulation of lymphatic pumping in sheep. McHale NG, et al. **Circ Res** 1989 Jun;64(6):1165–71

Regulation of the interstitial volume in the renal cortex. Pinter GG. **Contrib Nephrol** 1988;68:245–9

Substance P increases lymphocyte traffic and lymph flow through peripheral lymph nodes of sheep. Moore TC, et al. **Immunology** 1989 May;67(1):109–14

Arterial pulsation and lymph formation in an isolated sheep hindlimb preparation. McGeown JG, et al. **J Physiol (Lond)** 1988 Nov;405:595–604

Lymph flow dynamics into the thoracic duct of the rat. Yamada S, et al. **Jpn J Physiol** 1988;38(5):729–33

Effect of acute venous hypertension on erythrocyte, leukocyte, and plasma protein extravasation in the dog hindlimb. Bryla P, et al. **Lymphology** 1989 Jun;22(2):67–75

Coagulation of sheep intestinal and prefemoral lymph. Hanley CA, et al. **Lymphology** 1988 Jun;21(2):110–5

HGF induction in normal rat by transferring agents and lymph from liver–injured rat. Takahashi N. **Naturwissenschaften** 1988 Oct;75(10):519–21

Pharmacological reduction of lymphatic absorption from the peritoneal cavity increases net ultrafiltration and solute clearances in peritoneal dialysis. Mactier RA, et al. **Nephron** 1988;50(3):229–32

Hydroxyethyl starch and lung lymph flow in an ovine model of endotoxemia. Lübbesmeyer HJ, et al. **Prog Clin Biol Res** 1989;308:815–9

Reconsidering the immunologic privilege and lymphatic drainage of the anterior chamber of the eye. Niederkorn JY, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):259–60

Aspects of the blood–lymph–barrier in shock. Arturson G. **Ups J Med Sci** 1988;93(2):193–200 (8 ref.)

[The lymphatic system and lymph drainage of the testis of the Peking drake (Anas platyrhynchos, L.)] Kremer A, et al. **Anat Histol Embryol** 1988 Sep;17(3):246–57 (Eng. Abstr.) (Ger)

[Radionuclide studies of lymph flow in the extremities during treatment of transcondyle brachial fractures] Sveĭnikov AA, et al. **Radiol Diagn (Berl)** 1988;29(5):783–9 (Eng. Abstr.) (Ger)

[New knowledge of the structural principle of lymph formation] Castenholz A, et al. **Z Lymphol** 1989 Jul; 13(1):23–31 (25 ref.) (Eng. Abstr.) (Ger)

[Lymph mobilization] Froneberg W, et al. **Z Lymphol** 1989 Jul;13(1):39–41 (25 ref.) (Eng. Abstr.) (Ger)

[Physiology of the lymph vessel system] Hauck G. **Z Lymphol** 1989 Jul;13(1):32–61 (10 ref.) (Eng. Abstr.) (Ger)

[Experimental and clinical studies of the mechanism of effect of manual lymph drainage therapy] Hutzschenreuter P, et al. **Z Lymphol** 1989 Jul;13(1):62–4 (Eng. Abstr.) (Ger)

[Experimental and clinical study on the lymphatic pathway draining from the distal esophagus and gastric cardia] Natsugoe S. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):364–76 (Eng. Abstr.) (Jpn)

[Lymphatic flow of the remnant stomach] Noguchi Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):852–62 (Eng. Abstr.) (Jpn)

[Abnormal lymph flow in breast cancer—lymph node scintigraphy] Nakazato T, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):699–700 (Jpn)

[Data on the physiology and physiopathology of lymph circulation of the nasal mucosa] Bucur A. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):135–41 (9 ref.) (Eng. Abstr.) (Rum)

[Characteristics of the volume of lymph flow in relation to the body weight of animals] Bulekbaeva LE. **Fiziol Zh SSSR** 1989 Mar;75(3):407–9 (Rus)

[The mechanism of lymphodynamics in orthostatic dogs during postnatal ontogenesis] Bulekbaeva LE, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):66–71 (Eng. Abstr.) (Rus)

[Lympho– and hemodynamic reactions during the contraction of the skeletal musculature of the hindlimb in dogs] Kim TD, et al. **Fiziol Zh SSSR** 1988 Aug; 74(8):1158–62 (Eng. Abstr.) (Rus)

[Interrelations of macro– and microhemodynamics and lymph outflow in the cat liver during stimulation of the hepatic nerves] Kostiushina NV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):359–66 (Eng. Abstr.) (Rus)

[Radionuclide diagnosis of disorders of the central lymph dynamics in thoracic duct pathology] Bykov SA, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):27–9 (Eng. Abstr.) (Rus)

[Morpho–functional basis for the choice of lymph nodes for surgical reconstruction of lymph flow routes from the transplanted kidney] Lazarev KL, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):52–8 (Eng. Abstr.) (Rus)

[Characteristics of portal–lymphatic hypertension and surgical treatment of patients with cirrhosis of the liver and persistent ascites] Nazyrov FG, et al. **Vestn Khir** 1989 Feb;142(2):104–6 (Rus)

[The volume rate of lymph flow in dogs in postnatal ontogeny] Bulekbaeva LE. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):599–600 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

[Ultraviolet irradiation of lymphoplasma in combination with lymphocytapheresis in the treatment of patients with diseases of the blood system] Archvadze VG, et al. **Vestn Khir** 1989 Feb;142(2):87–90 (Eng. Abstr.) (Rus)

SECRETION

Increased lymphatic elimination of interstitial hyaluronan during E. coli sepsis in sheep. Lebel L, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1524–31

Contribution of the liver to thoracic duct lymph flow in a motionless subject. Mobley WP, et al. **Lymphology** 1989 Jun;22(2):81–4

Effect of halothane anesthesia on mesenteric intralymphatic pressure in the rat. Takeshita T, et al. **Lymphology** 1989 Jun;22(2):97–9

LYMPH NODE EXCISION

Vascular anomalies and retroperitoneal lymphadenectomy (RLA). Fehér M, et al. **Acta Chir Hung** 1988;29(3):269–72

Low–risk breast cancer patients treated by mastectomy and lower axillary dissection. The present status of the Danish Breast Cancer Cooperative Group Trial 77–A. Axelsson CK, et al. **Acta Oncol** 1988;27(6A):605–9

Pretreatment surgical staging in cervical carcinoma: therapeutic efficacy of pelvic lymph node resection. Downey GO, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1055–61

Stage IB adenocarcinoma of the cervix treated by radical hysterectomy and pelvic lymph node dissection. Greer BE, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1509–13; discussion 1513–4

Lymphoscintigraphy as a guide to treatment in malignant melanoma. Woods JE, et al. **Ann Plast Surg** 1989 Feb; 22(2):150–5

The importance of surgery to non–small cell carcinoma of lung with mediastinal lymph node metastasis. Naruke T, et al. **Ann Thorac Surg** 1988 Dec;46(6):603–10

Extent of lymph node dissection in melanoma of the trunk or lower extremity. Coit DG, et al. **Arch Surg** 1989 Feb; 124(2):162–6

Is extensive lymphadenectomy necessary for surgical treatment of intramucosal carcinoma of the stomach? Iriyama K, et al. **Arch Surg** 1989 Mar;124(3):309–11

The significance of the parametrium in the operative treatment of cervical cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):879–88

The significance of pelvic and para–aortic lymphadenectomy in the operative treatment of ovarian cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):157–65 (10 ref.)

The effect of chemotherapy on lymph node metastases in ovarian cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):167–71 (5 ref.)

Pelvic and para–aortic lymphadenectomy in cancer of the ovary. Di Re F, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):131–42 (13 ref.)

The rationale of pelvic lymphadenectomy in patients with stage Ib cancer of the cervix: a diagnostic or therapeutic procedure? Kjorstad KE. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):905–11

Lymph node metastasis and retroperitoneal lymphadenectomy in ovarian cancer. Wu PC, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):143–55 (9 ref.)

Radical retroperitoneal node dissection after chemotherapy for testicular tumours. Williams SN, et al. **Br J Urol** 1989 Jun;63(6):641–3

Significance of lateral node dissection for advanced rectal carcinoma at or below the peritoneal reflection. Moriya Y, et al. **Dis Colon Rectum** 1989 Apr;32(4):307–15

Breast cancer: risk of axillary recurrence in node-negative patients following partial dissection of the axilla. Graversen HP, et al. **Eur J Surg Oncol** 1988 Oct;14(5):407–12

Carcinoma of the uterine cervix stage I and IIA: results of surgical treatment: complications, recurrence and survival. Kenter GG, et al. **Eur J Surg Oncol** 1989 Feb;15(1):55–60

Significance of incisional biopsy in breast carcinoma: results from a clinical trial with intended excisional biopsy. Watt-Boolsen S, et al. **Eur J Surg Oncol** 1989 Feb; 15(1):33–7

Bilateral paraaortic lymphadenectomy in the presence of double inferior vena cava. Ashraf M, et al. **Gynecol Oncol** 1989 May;33(2):251–4

Radical hysterectomy with pelvic lymph node dissection for treatment of cervical cancer: a clinical review of 954 cases. Lee YN, et al. **Gynecol Oncol** 1989 Feb;32(2):135–42

Ogilvie's syndrome of colonic pseudo-obstruction: a complication of radical hysterectomy with pelvic and paraaortic lymphadenectomy. Singh P, et al. **Gynecol Oncol** 1989 Mar;32(3):390–3

The significance of regional lymph node dissection in the surgical management of breast cancer. Noguchi M, et al. **Jpn J Surg** 1989 Jan;19(1):21–8

Medullary thyroid carcinoma in children. Telander RL, et al. **Minn Med** 1988 Oct;71(10):619–20

Value of and indications for pelvic lymph node dissection in the staging of prostate cancer. Middleton RG. **NCI Monogr** 1988;(7):41–3

Bilateral pelvic lymphadenectomy and radical retropubic prostatectomy for stage C or D1 adenocarcinoma of the prostate: possible beneficial effect of adjuvant treatment. Zincke H. **NCI Monogr** 1988;(7):109–15

Indications for pelvic lymph node dissection in patients with clinically confined carcinoma of the prostate. Gibbons RP. **Prog Clin Biol Res** 1989;303:301–6 (23 ref.)

Lymphatic spread in renal cell carcinoma: have retroperitoneal lymph node dissection a therapeutic advantage? Gilloz A, et al. **Prog Clin Biol Res** 1989; 303:729–30

Value of retroperitoneal lymphadenectomy after chemotherapy for non-seminomatous testicular tumor with lymph node metastases. Le Guillou M, et al. **Prog Clin Biol Res** 1989;303:813

Management of yolk sac carcinoma of the testis clinical stage I: lymphadenectomy vs. no lymphadenectomy. Pow-Sang JE, et al. **Prog Clin Biol Res** 1989;303:791–8

Retroperitoneal lymph node dissection (RPLND) post chemotherapy for non-seminomatous testicular neoplasms: what is the significance of residual masses at scanner control after chemotherapy and should they be removed? Solé-Balcells F, et al. **Prog Clin Biol Res** 1989;303:759–62

Cosmetic results following lumpectomy, axillary dissection and radiotherapy for small breast cancers. Dewar JA, et al. **Radiother Oncol** 1988 Aug;12(4):273–80

Pelvic lymphadenectomy as staging before definitive treatment of prostatic carcinoma. Elfving P, et al. **Scand J Urol Nephrol Suppl** 1988;110:155–61

The value of regional lymph node dissection in genitourinary cancer. Skinner DG. **Semin Surg Oncol** 1989;5(4):235–9

Modified retroperitoneal lymphadenectomy for patients with clinical stage I testicular cancer. Richie JP. **Semin Urol** 1988 Aug;6(3):216–22

Graft manipulation prior to small intestinal transplantation. Gundlach M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2894–5

Significance of salvage lymphadenectomy in the therapeutical concept of advanced nonseminomatous germ cell tumors. Staehler G, et al. **Urol Int** 1989;44(2):84–6

Use of limited retroperitoneal lymphadenectomy in nonseminomatous germ cell tumors. Sherlag AP, et al. **Urology** 1989 May;33(5):355–7

Modified neck dissection for patients with nonadvanced, differentiated carcinoma of the thyroid. Ozaki O, et al. **World J Surg** 1988 Dec;12(6):825–9

[Simultaneous 2-team extraperitoneal pelvic lymph node dissection and bleomycin lavage in invasive cancer of the vulva] Karag'ozov A. **Akush Ginekol (Sofiia)** 1988; 27(6):72–6 (25 ref.) (Eng. Abstr.) (Bul)

[Excision of colorectal cancers: what can be expected of lymph node excision?] Pol B, et al. **Ann Chir** 1989; 43(1):68–72 (Eng. Abstr.) (Fre)

[Respiratory obstruction during anesthesia in children with malignant mediastinal lymphoma] Montange F, et al. **Ann Fr Anesth Reanim** 1988;7(6):520–3 (Eng. Abstr.) (Fre)

[Technics of extensive lymph node curettage in cancer of the esophagus] Lasser P, et al. **J Chir (Paris)** 1989 Jan; 126(1):40–4 (Eng. Abstr.) (Fre)

[Improved actuarial results in the treatment of kidney cancer by systematic lymph node excision] De Bruyn W, et al. **J Urol (Paris)** 1989;95(3):133–7 (Eng. Abstr.) (Fre)

[Effect of tumor size and lymph node status on the prognosis of pancreatic cancer] Bittner R, et al. **Chirurg** 1989 Apr; 60(4):240–5 (Eng. Abstr.) (Ger)

[Side effects and complications in breast-saving therapy of breast cancer] Engel K, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):367–74 (Eng. Abstr.) (Ger)

[Results of treatment of 177 stage Ib and IIa cervix cancers at the Zurich University Gynecologic Clinic] Hammer F, et al. **Gynakol Rundsch** 1989;29(2):78–92 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the stomach] Häring R, et al. **Langenbecks Arch Chir** 1988; Suppl 2:275–81 (18 ref.) (Eng. Abstr.) (Ger)

[The value of mediastinal lymphadenectomy in centrally located non-oat cell carcinoma] Weitensfelder W, et al. **Prax Klin Pneumol** 1988 Jul;42(7):590–1 (Eng. Abstr.) (Ger)

[Causes, prevention and therapy of complications of lymphadenectomy following tumor nephrectomy] Fabricius PG, et al. **Urologe [A]** 1988 Jul;27(4):221–4 (Eng. Abstr.) (Ger)

[Retroperitoneal lymphadenectomy in non-seminomatous stage I, IIa and IIb testicular tumors] Jaeger P, et al. **Urologe [A]** 1988 Sep;27(5):251–5 (Eng. Abstr.) (Ger)

[Scintigraphic studies of the lymph nodes in patients with melanoma following lymph node excision] Török L, et al. **Z Hautkr** 1988 Oct 15;63(10):822–7 (Eng. Abstr.) (Ger)

[Giant cell tumor with regional lymph node metastasis] Scharfe U, et al. **Zentralbl Chir** 1988;113(22):1496–500 (Ger)

[Lumpectomy with axillary lymph node excision and subsequent irradiation of the small breast cancer] Winzer KJ, et al. **Zentralbl Chir** 1989;114(1):20–31 (Eng. Abstr.) (Ger)

[Follow-up of node-negative patients with breast cancer] Meinen K, et al. **Zentralbl Gynakol** 1989;111(1):19–28 (Eng. Abstr.) (Ger)

[Role of lymphadenectomy in endometrial carcinoma: analysis of the literature] Franchi M, et al. **Ann Ostet Ginecol Med Perinat** 1988 Nov-Dec; 109(6):351–60 (68 ref.) (Eng. Abstr.) (Ita)

[Indications for regional lymphadenectomy in skin melanomas: a problem still in debate. Personal experience and review of the literature] Leo E, et al. **G Ital Oncol** 1989 Jan-Mar;9(1):27–30 (21 ref.) (Eng. Abstr.) (Ita)

[Role of lymphadenectomy in the surgical treatment of cancer of the rectum] Crucitti F, et al. **Minerva Chir** 1989 Feb 28;44(4):715–8 (Ita)

[Value of axillary lymphadenectomy in malignant tumors of the breast. Apropos of 135 controlled cases] Viti M, et al. **Minerva Chir** 1989 Apr 30;44(8):1285–8 (Eng. Abstr.) (Ita)

[How, when and why to perform lymphadenectomy in tumors of the left colon and intraperitoneal rectum] Zanetti PP, et al. **Minerva Chir** 1988 Jun 30;43(12):1055–60 (Eng. Abstr.) (Ita)

[The significance and the indication to dissect para-aortic lymph nodes in esophageal and cardiac cancers] Aikou T, et al. **Gan No Rinsho** 1988 Oct;34(12):1677–83 (Eng. Abstr.) (Jpn)

[Extensive lymphadenectomy in thoracic esophageal carcinoma] Mori S, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-1):1044–50 (Eng. Abstr.) (Jpn)

[Limit of conservative surgery based on significance of extrapleural parasternal node dissection and intramammary cancer residuals after excisional biopsy in breast cancer] Asagoe T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2499–506 (Eng. Abstr.) (Jpn)

[Study on the lymphatic flow of the lower gastric region for radical lymphadenectomy in advanced lower gastric cancer] Kodama M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1008–13 (Eng. Abstr.) (Jpn)

[Lymph node metastasis of early gastric cancer and lymph node dissection] Yoshikawa T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1506–8 (Eng. Abstr.) (Jpn)

[Pelvic lymph node dissection for invasive bladder cancer] Isaka S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar; 80(3):402–6 (Eng. Abstr.) (Jpn)

[A study of prevention of ejaculatory disturbance after retroperitoneal lymph node dissection in testicular tumor] Kihara K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1982–90 (Eng. Abstr.) (Jpn)

[A clinico-pathological study of lymph nodes (intrapulmonary, hilar, mediastinal, and prescalene) in patients with lung cancer—influence of metastasis, dissection, and immunological responses on late survival] Yamaguchi A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2529–43 (Eng. Abstr.) (Jpn)

[The discussion of the need of mediastinal lymph node dissection in the surgical treatment of lung cancer] Yasumitsu T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):664–70 (Eng. Abstr.) (Jpn)

[Extended hysterectomy with sparing of the ovaries and their transposition to a non-pelvic site (beyond the field of irradiation)] Stelmachów J, et al. **Ginekol Pol** 1988 Nov; 59(11):676–80 (Eng. Abstr.) (Pol)

[Large-fractional preoperative irradiation combined with organ-sparing operations in stage I and II cancer of the breast] Kharchenko VP, et al. **Sov Med** 1989;(1):15–7 (Eng. Abstr.) (Rus)

[Mediastinal lymphadenectomy in diffuse forms of lung cancer] Kotliarov EV, et al. **Vestn Khir** 1988 Aug; 141(8):18–21 (Eng. Abstr.) (Rus)

[Indications for preventive regional lymphadenectomy in primary melanoma of the skin of the head and neck] Vagner RI, et al. **Vestn Khir** 1988 Oct;141(10):8–12 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Focal renal infarction after retroperitoneal lymph-node dissection: CT diagnosis. Zissin R, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):325–6

Complications of pelvic lymphadenectomy in patients with endometrial adenocarcinoma. Babilonti L, et al. **Eur J Gynaecol Oncol** 1989;10(2):131–3

Surgical exploration of enlarged lymph nodes at the root of the neck. de Souza FM, et al. **J Otolaryngol** 1989 Apr; 18(3):112–5

Small bowel intussusception: an unusual complication of retroperitoneal lymph node dissection. Thrasher JB, et al. **J Urol** 1989 Sep;142(3):826–7

Massive lymphocele following pelvic lymphadenectomy for staging of prostatic cancer. Brawer MK, et al. **Lymphology** 1989 Mar;22(1):36–41

Pelvic and paraaortic lymphadenectomy complications. D'Addato F, et al. **Panminerva Med** 1988 Jul-Sep; 30(3):156–63 (67 ref.)

Nerve-sparing techniques in retroperitoneal lymphadenectomy in patients with low-stage testicular cancer. Jewett MA, et al. **Semin Urol** 1988 Aug;6(3):233–7

[Severe hyponatremia after cervical lymph node excision] Périé-Vintras AC, et al. **Cah Anesthesiol** 1988 Jun-Jul; 36(4):303–5 (Fre)

INSTRUMENTATION

Axillary dissection: use of a mechanical retractor. Delaney JP. **Am J Surg** 1989 Apr;157(4):436–7

METHODS

Total mastectomy with special reference to surgical technique, extent of axillary dissection and complications. Watt-Boolsen S, et al. **Acta Oncol** 1988;27(6A):663–5

Critical assessment of supraomohyoid neck dissection. Spiro JD, et al. **Am J Surg** 1988 Oct;156(4):286–9

Radionuclide-guided radical surgery for cervical cancer. Gitsch E, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec; 2(4):867–75

Pelvic and para-aortic lymphadenectomy in cervical cancer. Winter R, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec; 2(4):857–66 (34 ref.)

An analysis of survival and voiding, sexual function after wide iliopelvic lymphadenectomy in patients with carcinoma of the rectum, compared with conventional lymphadenectomy. Hojo K, et al. **Dis Colon Rectum** 1989 Feb;32(2):128–33

Resectable breast cancer: axillary dissection sparing pectoralis muscles and nerves. Muscolino G, et al. **Eur J Surg Oncol** 1988 Oct;14(5):429–33

Extraperitoneal versus transperitoneal selective paraaortic lymphadenectomy in the pretreatment surgical staging of advanced cervical carcinoma (a Gynecologic Oncology Group study). Weiser EB, et al. **Gynecol Oncol** 1989 Jun; 33(3):283–9

Supraomohyoid neck dissection: rationale, indications, and surgical technique. Medina JE, et al. **Head Neck** 1989 Mar-Apr;11(2):111–22

Nerve sparing retroperitoneal lymphadenectomy in clinical stage I, low stage II and after chemotherapy in stage III nonseminomatous testicular cancer. Javadpour N. **Prog Clin Biol Res** 1988;277:53–62

Improved exposure for dissection of axillary lymph nodes performed in conjunction with lumpectomy for carcinoma of the breast. Wolberg WH. **Surg Gynecol Obstet** 1989 Apr; 168(4):361–2

Strategy for lymphadenectomy of gastric cancer. Boku T, et al. **Surgery** 1989 May;105(5):585–92

[Technic and results of lymph node excision using pelvic lymphadenoscopy] Francannet P, et al. **Ann Urol (Paris)** 1988;22(5):369–72 (Eng. Abstr.) (Fre)

[Lymphadenectomy in stomach cancer] Denecke H. **Chirurg** 1989 Mar;60(3):133–8 (15 ref.) (Ger)

[Lymphadenectomy as the primary therapy of colorectal cancers] Herfarth C, et al. **Chirurg** 1989 Mar;60(3):139–47 (14 ref.) (Ger)

[Axillary lymphadenectomy in breast cancer] Jaeger K. **Chirurg** 1989 Mar;60(3):153–6 (14 ref.) (Ger)

[Retroperitoneal lymphadenectomy in testicular tumors] Mast GJ, et al. **Chirurg** 1989 Mar;60(3):148–52 (15 ref.) (Ger)

[Lymphadenectomy of the neck] Schwemmle K. **Chirurg** 1989 Mar;60(3):125–32 (15 ref.) (Ger)

[Results of radical radioisotope surgery of cervix cancer] Gitsch E, et al. **Geburtshilfe Frauenheilkd** 1989 May; 49(5):428–31 (Eng. Abstr.) (Ger)

[Local late sequelae following breast saving therapy of breast cancer: problem cases and possibilities for their correction] Lüscher NJ, et al. **Helv Chir Acta** 1989 Apr;55(6):861–8 (Eng. Abstr.) (Ger)

[En-bloc resection of the esophagus in esophageal cancer] Siewert JR, et al. **Langenbecks Arch Chir** 1988; 373(6):367–76 (Eng. Abstr.) (Ger)

[Axillary lymph node excision in breast carcinoma] Rageth

JC, et al. **Schweiz Rundsch Med Prax** 1988 Nov 29; 77(48):1318–21 (Eng. Abstr.) (Ger)

[Indications, technics and results of lymphadenectomy in malignant tumors of the parotid and submandibular glands] Campana FP, et al. **Ann Ital Chir** 1987;59(1–6):45–56 (Eng. Abstr.) (Ita)

[Inguino–iliac obstruction lymphadenectomy. Surgical technic] Belli F, et al. **G Ital Oncol** 1988 Apr–Jun;8(2):75–8 (Eng. Abstr.) (Ita)

[Systematic hilar and mediastinal lymphadenectomy in pulmonary exeresis in cancer cases] Pellegrini GF, et al. **Minerva Chir** 1989 Feb 15;44(3):385–6 (Ita)

[Modified surgical treatment of tumors] Nishi M. **Gan No Rinsho** 1988 Aug;34(10):1505–7 (Eng. Abstr.) (Jpn)

[Modified surgery and combination with radiotherapy in tumors] Uchida M, et al. **Gan No Rinsho** 1988 Aug; 34(10):1511–4 (Eng. Abstr.) (Jpn)

[Modified radical lymph node dissection in the treatment of gastric cancer invading the gastric serosa] Kaibara N, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1521–3 (Eng. Abstr.) (Jpn)

[Stratified removal of the lymph nodes during resection of advanced carcinoma in the upper part of the stomach] Suzuki H. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1513–6 (Eng. Abstr.) (Jpn)

["Super–extensive lymph node dissection" for advanced gastric cancer] Tokuda H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1528–30 (Eng. Abstr.) (Jpn)

MORTALITY

[Lymph node dissection of carcinoma of the thoracic esophagus: has prognosis of patients with esophageal carcinoma been improved by lymph node dissection?] Fijita H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2447–55 (Eng. Abstr.) (Jpn)

LYMPH NODE HYPERPLASIA, GIANT see **GIANT LYMPH NODE HYPERPLASIA**

LYMPH NODE SYNDROME, MUCOCUTANEOUS see **MUCOCUTANEOUS LYMPH NODE SYNDROME**

LYMPH NODES

Gastrinoma in a mesenteric lymph node. Kitagawa M, et al. **Am J Gastroenterol** 1989 Jun;84(6):660–2 (16 ref.)

The natural history of human breast cancer. The relationship between involvement of axillary lymph nodes and the initiation of distant metastases. Koscielny S, et al. **Br J Cancer** 1989 May;59(5):775–82

Expression and sequences of T cell receptor beta–chain variable genes in the enlarged lymph nodes of C57BL/6–lpr/lpr mice. Ohga S, et al. **Clin Exp Immunol** 1989 Jul;77(1):130–6

Heterotopic ossification: a case report and immunohistochemical observations. Randall JC, et al. **Hum Pathol** 1989 Jan;20(1):86–8

[Study of lymph nodes in lung cancer in experimental animals using the indirect lymphography method and a computer] Feofilov GL, et al. **Grudn Khir** 1989 May–Jun;(3):59–64 (Eng. Abstr.) (Rus)

ANALYSIS

Keratin immunoreactivity in extrafollicular reticular cells of the lymph node [letter] Iuzzolino P, et al. **Am J Clin Pathol** 1989 Feb;91(2):239–40

Localization of actin in the wall of the subcapsular sinus of sheep haemal nodes. Gargiulo AM, et al. **Basic Appl Histochem** 1989;33(1):53–6

Lymphocyte population in spleen and lymph node in Hodgkin's lymphoma. Datta U, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):21–6

S–100 protein detection in "follicular macrophages" of mouse lymphoid organs by ABC immunoperoxidase method. Carbone A, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):36–40

Immunoelectron microscopic localization of laminin, type IV collagen, and type III pN–collagen in reticular fibers of human lymph nodes. Karttunen T, et al. **J Histochem Cytochem** 1989 Mar;37(3):279–86

Studies of c–myb gene regulation in MRL–lpr/lpr mice. Identification of a 5' c–myb nuclear protein binding site and high levels of binding factors in nuclear extracts of lpr/lpr lymph node cells. Mountz JD, et al. **J Immunol** 1989 Jan 1;142(1):328–35

The Feulgen hydrolysis profiles of [corrected] a metastatic lung tumour in lymph node and a primary breast carcinoma [published erratum appears in Med Lab Sci 1988 Jan;45(1):preceding 1] Mays RG. **Med Lab Sci** 1987 Oct; 44(4):307–11

Immunoperoxidase staining in the detection of lymph node metastases in stage I breast cancer. Raymond WA, et al. **Pathology** 1989 Jan;21(1):11–5

Immunohistological analysis of human fetal lymph nodes. Westerga J, et al. **Scand J Immunol** 1989 Jan;29(1):103–12

Nature of yellow–brown bodies. Histochemical and ultrastructural studies on the brown pigment. Senba M, et al. **Zentralbl Allg Pathol** 1989;135(4):351–5

Immunohistochemical localization of S–100 protein and lysozyme in canine lymph nodes and lymphomas. Fondevila D, et al. **Zentralbl Veterinarmed [A]** 1989 Jan; 36(1):71–7

ANATOMY & HISTOLOGY

Pathways between lymph vessels and sinuses in lymph nodes: a study in horses. Heath TJ, et al. **Anat Rec** 1989 Apr; 223(4):420–4

Normal lymph node size in the mediastinum: a retrospective study in two patient groups. Ingram CE, et al. **Clin Radiol** 1989 Jan;40(1):35–9

HEV–like vessels in lymphoid and non–lymphoid tissues. Freemont AJ. **Int J Tissue React** 1988;10(2):85–8

Pathways of lymph flow to and from the medulla of lymph nodes in sheep. Heath TJ, et al. **J Anat** 1987 Dec; 155:177–88

Sonographic appearance of normal intramammary lymph nodes. Gordon PB, et al. **J Ultrasound Med** 1988 Oct; 7(10):545–8

Springing test for differentiating a cervical rib tip from a supraclavicular lymph node. Venkatesh Rao PS. **Jpn J Surg** 1988 Sep;18(5):606–7

Passageway for recirculating lymphocytes in lymph node of the rat. He YC, et al. **Lymphology** 1988 Dec;21(4):239–41

[Lymph nodes of the axillary region in the Chinese] Fu XY. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):237–9, 256 (Eng. Abstr.) (Chi)

[Histologic study of a bovine lymph node before and after antigenic stimulation. 1. Histology, cytology and histometry] Femenia F, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):305–20 (Eng. Abstr.) (Fre)

[Applied aspects of anatomy of the lumbar lymph nodes and their vessels] Borziak EI. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):48–57 (Eng. Abstr.) (Rus)

[Structure of the arterial bed in human lymph nodes] Maksimov VV. **Arkh Anat Gistol Embriol** 1988 Aug; 95(8):44–8 (Eng. Abstr.) (Rus)

[Structure of the mesenteric lymph nodes in fetuses and offspring of white rats under the effect of indomethacin on the mother–fetus system] Morozova EV. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):48–55 (Eng. Abstr.) (Rus)

[Individual and sexual characteristics of the common iliac lymph nodes in elderly persons] Shvetsov EV. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):53–8 (Eng. Abstr.) (Rus)

[Spatial–temporal organization of the deep cortex of the lymph node] Smirnova TS, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):69–75 (Eng. Abstr.) (Rus)

[The anatomy of the lymph nodes in the walls of the human urinary tract] Sapin MR, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct;(5):47–50 (Eng. Abstr.) (Rus)

[Roentgeno–anatomical study of inguinal, pelvic and lumbar lymph nodes] Borziak EI, et al. **Vopr Onkol** 1988; 34(10):1205–19 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Vascular system of lymph nodes: vascular density of AILD and malignant lymphomas with special reference to HEV. Muramatsu T. **Fukushima J Med Sci** 1987 Jun;33(1):17–28

Blood vessels within lymph nodes: a comparison between pigs and sheep. Spalding HJ, et al. **Res Vet Sci** 1989 Jan; 46(1):43–8

[Primary lymph node infarct and malignant non Hodgkin's lymphoma. Description of a case] Angelucci D, et al. **Pathologica** 1989 Jan–Feb;81(1071):83–9 (Eng. Abstr.) (Ita)

[Structural organization of post–capillary venules in the somatic lymph nodes during total overheating of the body] Borodin IuI, et al. **Arkh Anat Gistol Embriol** 1988 Sep; 95(9):65–71 (Eng. Abstr.) (Rus)

CYTOLOGY

The expression of lymphocyte adhesion molecules on cultured high endothelial cells. Ager A, et al. **Adv Exp Med Biol** 1988;237:471–6

Interdigitating cells and dendritic cells of the mouse identified by monoclonal antibodies: interaction with lymphocyte subsets. Breel M, et al. **Adv Exp Med Biol** 1988;237:757–63

Establishment of lymph node derived endothelial cell lines which show lymphoid cell binding. Harder R, et al. **Adv Exp Med Biol** 1988;237:465–70

Localization, isolation and histochemical characterization of macrophages in the gut and mesenteric lymph nodes of the rat. Sminia T, et al. **Adv Exp Med Biol** 1988;237:621–6

Surface IgD phenotype of rat germinal centre precursor cells. Vonderheide RH, et al. **Adv Exp Med Biol** 1988;237:239–43

An electron microscopic study of cells with steroid–secreting morphology in the paraaortic lymph node of the hamster. Kimura M, et al. **Anat Rec** 1989 Feb;223(2):139–51

Thy–1 positive tingible body macrophages (TBM) in mouse lymph nodes. Smith JP, et al. **Anat Rec** 1988 Dec; 222(4):380–90

Tumor cell adhesion to frozen lymph node sections—an in vitro correlate of lymphatic metastasis. Brodt P. **Clin Exp Metastasis** 1989 May–Jun;7(3):343–52

Lymph node macrophage heterogeneity: the phenotypic and functional characterization of two distinct populations of macrophages from rat lymph node. Chao D, et al. **Eur J Immunol** 1989 Jul;19(7):1273–81

Fine needle aspiration cytology in superficial lymph nodes: an analysis of 266 cases. Martelli G, et al. **Eur J Surg Oncol** 1989 Feb;15(1):13–6

Warthin–Finkeldey–like giant cells in a patient with systemic lupus erythematosus. Kubota K, et al. **Hum Pathol** 1988 Nov;19(11):1358–9

Molecular and functional properties of novel T cell subsets in C3H–gld/gld and nude mice. Implications for thymic and extrathymic maturation. Yui K, et al. **Immunol Rev** 1988 Aug;104:121–55 (92 ref.)

Differential effect of cyclosporine in vivo on the distribution of T cell subsets in the thymus, spleen, and lymph nodes. Hiramine C, et al. **Transplantation** 1989 Mar;47(3):499–503

Lymphocyte recirculation in cattle: patterns of localization by mammary and mesenteric lymph node lymphocytes. Harp JA, et al. **Vet Immunol Immunopathol** 1988 Dec; 20(1):31–9

[A study of lymphocyte subsets in human normal tonsil and lymph node] Ge ZH, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):75–85 (Eng. Abstr.) (Chi)

[Immune local lymph node cells inhibit viral propagation in murine herpetic keratitis] Kazami N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1461–5 (Eng. Abstr.) (Jpn)

[Dynamics of changes in cell composition in the lymphoid tissue of somatic lymph nodes during total overheating of the body] Borodin IuI, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):75–80 (Eng. Abstr.) (Rus)

[Changes in the cell population of the thymus–dependent area of the regional lymph nodes following skin flap grafting] Katinas GS, et al. **Arkh Anat Gistol Embriol** 1988 Sep; 95(9):49–53 (Eng. Abstr.) (Rus)

[A method of evaluating the cellular composition of the lymph nodes] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):85–9 (Rus)

[The temporal organization of the complex nodule in the lymph node] Smirnova TS, et al. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):58–64 (Eng. Abstr.) (Rus)

DRUG EFFECTS

The endolymphatic perfusion of lymph nodes with toxic materials. Hall JG, et al. **Br J Exp Pathol** 1989 Jun; 70(3):283–92

Substance P increases lymphocyte traffic and lymph flow through peripheral lymph nodes of sheep. Moore TC, et al. **Immunology** 1989 May;67(1):109–14

Structural requirements for hydantoins and 2–thiohydantoins to induce lymphoproliferative popliteal lymph node reactions in the mouse. Kammüller ME, et al. **Int J Immunopharmacol** 1988;10(8):997–1010

Immunopathological signs in mice treated with mercury compounds—I. Identification by the popliteal lymph node assay of responder and nonresponder strains. Stiller–Winkler R, et al. **Int J Immunopharmacol** 1988; 10(4):475–84

Lymph node siderosis in trypan blue treated rats. Dumont AE. **Lymphology** 1988 Dec;21(4):234–8

Histologic changes in dog lymph nodes after endolymphatic application of bleomycin oil suspension. Hirnle P, et al. **Lymphology** 1989 Jun;22(2):100–2

Evidence for tumor reduction in refractory or relapsed B–CLL patients with infusional interleukin–2. Kay NE, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):475–8

[Pathomorphologic and hematologic studies of the immunotoxicity of the phenoxyalkane acid mecoprop in rats] Moeller T, et al. **Z Gesamte Hyg** 1989 May; 35(5):258–60 (Eng. Abstr.) (Ger)

EMBRYOLOGY

Immuno–architecture of human fetal lymphoid tissues. Timens W, et al. **Virchows Arch [A]** 1988;413(6):563–71

ENZYMOLOGY

Terminal deoxynucleotidyl transferase–positive B cell precursors in fetal lymph nodes and extrahemopoietic tissues. Cattoretti G, et al. **Eur J Immunol** 1989 Mar; 19(3):493–500

IMMUNOLOGY

Detection of Epstein–Barr virus–associated antigen in fine needle aspiration smears from cervical lymph nodes in the diagnosis of nasopharyngeal carcinoma. Chan MK, et al. **Acta Cytol** 1989 May–Jun;33(3):351–4

Changes in lymphocyte binding and expression of His 22 of high endothelial venules in rat lymph nodes after occlusion of afferent lymph flow. Hendriks HR, et al. **Adv Exp Med Biol** 1988;237:485–90

Thymus–independent type 2 responses in lymph nodes. Liu YJ, et al. **Adv Exp Med Biol** 1988;237:113–7

Changes in the germinal centre and lymphocytic corona after peritoneal inflammation. Steer HW. **Adv Exp Med Biol** 1988;237:251

The effects of bacterial lipopolysaccharide (LPS) on high endothelial venules, T lymphocytes and interdigitating cells in mouse lymph nodes. Twisk AJ, et al. **Adv Exp Med Biol** 1988;237:807–11

Application of an immunofluorescence assay for Crohn's

disease using primed nude mouse lymph nodes to a United States/Mexican border population. Zuckerman MJ, et al. **Am J Med Sci** 1988 Oct;296(4):260–5

The tissue distribution of Ia- and IgM-positive cells in adult and newborn miniature pigs. Horák V, et al. **Anat Histol Embryol** 1989 Jun;18(2):157–64

Primary in situ immune response in popliteal lymph nodes and spleen of mice after subcutaneous immunization with thymus-dependent or thymus-independent (type 1 and 2) antigens. Delemarre FG, et al. **Anat Rec** 1989 Feb; 223(2):152–7

Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):753–8

A murine local lymph node assay for the identification of contact allergens. Assay development and results of an initial validation study. Kimber I, et al. **Arch Toxicol** 1989; 63(4):274–82

The popliteal lymphnode assay (PLNA) in rodents: a simple functional test for detecting sensitizing effects of xenobiotics. Gleichmann E, et al. **Arch Toxicol Suppl** 1989; 13:188–90

Induction of proliferation and blast transformation by interferon in human malignant and non-malignant lymph node B cells. Ostlund L, et al. **Blood** 1989 Jun;73(8):2171–81

Different immune functions of peripheral blood, regional lymph node, and tumor infiltrating lymphocytes in lung cancer patients. Nakamura H, et al. **Cancer** 1988 Dec 15; 62(12):2489–97

In vivo administration of Fab' fragments of anti-L3T4 (GK1.5) antibody inhibits the T helper cell function of murine lymph node cells. Street NE, et al. **Cell Immunol** 1989 Apr 15;120(1):75–81

Phenotypic characterization of lymphokine-activated killer cells from human lymph node lymphocytes. Yano T, et al. **Cell Immunol** 1989 Sep;122(2):578–84

Exercise stress alters murine lymphocyte subset distribution in spleen, lymph nodes and thymus. Hoffman-Goetz L, et al. **Clin Exp Immunol** 1989 May;76(2):307–10

Tetanus toxoid complexed with heterologous antibody can induce germinal centre formation and B cell memory in mice without evoking a detectable anti-toxin response. Kraft R, et al. **Clin Exp Immunol** 1989 Apr;76(1):138–43

Enhanced interferon-gamma (IFN) production by lymph node cells from autoimmune (MRL/l, MRL/n) mice. Manolios N, et al. **Clin Exp Immunol** 1989 May;76(2):301–6

Lymphoid immunohistochemistry of macaque primates. Ormerod LD, et al. **Clin Exp Immunol** 1988 Dec; 74(3):435–42

Immunological changes in human breast cancer. Contreras Ortiz O, et al. **Eur J Gynaecol Oncol** 1988;9(6):502–14

Anti-high endothelial venule monoclonal antibody HECA-452 recognizes plasmacytoid T cells and delineates an "extranodular" compartment in the reactive lymph node. Facchetti F, et al. **Immunol Lett** 1989 Mar; 20(4):277–81

Dendritic cell accumulation in draining lymph nodes during the induction phase of contact allergy in mice. Kinnaird A, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):202–10

Accessory cell function of dendritic cells from lymph nodes containing Mycobacterium leprae induced granulomas. Verghese S, et al. **Int Arch Allergy Appl Immunol** 1988; 87(4):392–9

Lymphokine-activated killer-cell function of lymphocytes from peripheral blood, regional lymph nodes and tumor tissues of patients with oral cancer. Tatake RJ, et al. **Int J Cancer** 1989 Apr 15;43(4):560–6

The popliteal lymph node assay in mice to screen for the immune disregulating potential of chemicals—a preliminary study. Kammüller ME, et al. **Int J Immunopharmacol** 1989; 11(3):293–300

Association between CAM 5.2 and anti-CD1a reactivity in lymph nodes and gastrointestinal tract epithelium. Jack AS, et al. **J Clin Pathol** 1989 Mar;42(3):271–4

T lymphocytes in genital lymph nodes protect mice from intravaginal infection with herpes simplex virus type 2. McDermott MR, et al. **J Infect Dis** 1989 Mar;159(3):460–6

Germinal center B cells and mixed leukocyte reactions. Monfalcone AP, et al. **J Leukoc Biol** 1989 Sep;46(3):181–8

The immune response of the sheep popliteal lymph node to a purified phenoloxidase from larval cuticle of the sheep ectoparasite, Lucilia cuprina. Barrett M, et al. **J Parasitol** 1989 Feb;75(1):70–5

Antitumor effect of PSK: role of regional lymph nodes and enhancement of concomitant and sinecomitant immunity in the mouse. Ebina T, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):158–66

The role of lymph node cells in the inhibition of metastasis by subcutaneous injection of Lactobacillus casei in mice. Matsuzaki T, et al. **Med Microbiol Immunol (Berl)** 1988; 177(5):245–53

Human homologue of mouse lymph node homing receptor: evolutionary conservation at tandem cell interaction domains. Siegelman MH, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5562–6

Immune response in deep cervical lymph nodes and spleen in the mouse after antigen deposition in different intracerebral sites. Widner H, et al. **Scand J Immunol** 1988 Nov;28(5):563–71

Cutaneous T cell lymphoma: immunocytochemical study on activation/proliferation and differentiation associated antigens in lymph nodes, skin, and peripheral blood. Küng E, et al. **Virchows Arch [A]** 1988;413(6):539–49

[Adoptive transfer of immunity against Nippostrongylus brasiliensis in mice. In vitro restimulation of immune cells before their transfer] Rhalem A, et al. **C R Acad Sci [III]** 1989;309(2):53–7 (Eng. Abstr.) **(Fre)**

[The effect of interleukin-2 eyedrops on the cytotoxic T lymphocyte activity in the cervical lymph nodes of mice with corneal herpes infection] Kajiwara R. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1675–81 (Eng. Abstr.) **(Jpn)**

[Natural killer (NK) activity of peripheral blood and regional lymph nodes in patients with genitourinary malignant tumors. 1. NK activity of peripheral blood in patients with genitourinary malignant tumors] Yamashita M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):659–65 (Eng. Abstr.) **(Jpn)**

[Natural killer (NK) activity of peripheral blood and regional lymph nodes in patients with genitourinary malignant tumors. 2. NK activity and T-lymphocyte subsets in peripheral blood and regional lymph nodes] Yamashita M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May; 80(5):666–73 (Eng. Abstr.) **(Jpn)**

[The nature of the factors in immune lymph nodes that stimulate humoral and cellular immune reactions] Novikov VI, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):460–2 (Eng. Abstr.) **(Rus)**

[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor-bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) **(Rus)**

[Immunomorphologic characteristics of the tonsils and their lymph nodes in human fetuses] Khlystova ZS, et al. **Vestn Otorinolaringol** 1989 Mar-Apr;(2):55–8 (Eng. Abstr.) **(Rus)**

[Lymphocytes of the blood, regional lymph nodes and tumor tissue in breast cancer] Bazhenov SM, et al. **Vopr Onkol** 1988;34(9):1040–8 (68 ref.) **(Rus)**

INNERVATION

Ultrastructural analysis of lymph node innervation in the rat. Novotny GE. **Acta Anat (Basel)** 1988;133(1):57–61

[Adrenergic innervation of lymph nodes and the thoracic duct] Chzhao LKh, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):33–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Transport of immune complexes from the subcapsular sinus into the lymph node follicles of the rat. Kamperdijk EW, et al. **Adv Exp Med Biol** 1988;237:191–6

Prompt elevations of PGE2 and thromboxane A2 metabolites in peripheral node efferent lymph of sheep following drainage area immunization. Moore TC, et al. **Immunopharmacology** 1989 Mar-Apr;17(2):73–80

Fructose-2,6-bisphosphate in rat mesenteric lymph nodes. Abuelgassim AO, et al. **Int J Biochem** 1988;20(10):1185–8

IL-1 and PGE2 productions by the regional lymph node cells from DNFB-sensitized mice. Natsuaki M, et al. **J Dermatol** 1989 Apr;16(2):111–5

IL-2 production, IL-2 receptor expression, and IL-2 responsiveness of spleen and mesenteric lymph node cells from inbred mice infected with Trichinella spiralis. Zhu DH, et al. **J Immunol** 1989 May 1;142(9):3262–7

Retention and clearance of inhaled submicron carbon black particles. Strom KA, et al. **J Toxicol Environ Health** 1989; 26(2):183–202

The uptake of anticancer drugs by tumor tissues and lymph node and the effectiveness of postoperative adjuvant chemotherapy on survival time. Arima S, et al. **Jpn J Surg** 1989 Mar;19(2):177–81

HBV and HIV expression in lymph nodes of HIV positive LAS patients: histology and in situ hybridization. Pezzella M, et al. **Mol Cell Probes** 1989 Jun;3(2):125–32

Mouse lymph node homing receptor cDNA clone encodes a glycoprotein revealing tandem interaction domains. Siegelman MH, et al. **Science** 1989 Mar 3;243(4895):1165–72

Fibrinolysis resistant fibrin deposits in lymph nodes with Hodgkin's disease. Adány R, et al. **Thromb Haemost** 1988 Oct 31;60(2):293–7

[Accumulation of gentamicin in biological fluids, organs and tissues during regional lymphotropic therapy with antibiotics] Buianov VM, et al. **Antibiot Khimioter** 1989 Apr;34(4):294–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Expression of HIV in lymph node cells of LAS patients. Immunohistology, in situ hybridization, and identification of target cells. Baroni CD, et al. **Am J Pathol** 1988 Dec; 133(3):498–506

Expression of RNA and antigens of human immunodeficiency virus type-1 (HIV-1) in lymph nodes from HIV-1 infected individuals. Schuurman HJ, et al. **Am J Pathol** 1988 Dec;133(3):516–24

Distribution of persistent Salmonella typhimurium infection in internal organs of swine. Wood RL, et al. **Am J Vet Res** 1989 Jul;50(7):1015–21

Immunity to Brucella abortus induced in mice by popliteal lymph node restricted strain 19 vaccination. Plommet M, et al. **Ann Rech Vet** 1989;20(1):73–81

Effects of clindamycin and metronidazole on the intestinal colonization and translocation of enterococci in mice. Wells CL, et al. **Antimicrob Agents Chemother** 1988 Dec; 32(12):1769–75

Follicular dendritic cells in HIV-induced lymphadenopathy and AIDS. Racz P, et al. **APMIS Suppl** 1989;8:16–23 (80 ref.)

Interaction of HIV and EBV at lymphoid tissue level: immunohistochemistry and in situ hybridization. Uccini S, et al. **APMIS Suppl** 1989;8:28–32

Simple intestinal obstruction causes bacterial translocation in man. Deitch EA. **Arch Surg** 1989 Jun;124(6):699–701

Human papillomavirus 16 DNA in cervical cancers and in lymph nodes of cervical cancer patients: a diagnostic marker for early metastases? Fuchs PG, et al. **Int J Cancer** 1989 Jan 15;43(1):41–4

Bacterial translocation in patients with colorectal cancer [letter] Vincent P, et al. **J Infect Dis** 1988 Dec; 158(6):1395–6

Detection of simian immunodeficiency virus in macaque lymph nodes with a SIVmac envelope probe. Wyand MS, et al. **J Med Primatol** 1989;18(3–4):209–15

Genetic susceptibility to mucosal damage leads to bacterial translocation in a murine burn model. Ma L, et al. **J Trauma** 1989 Sep;29(9):1245–51

Human herpesvirus 6 in lymph nodes [letter] **Lancet** 1989 Jan 7;1(8628):40–1

Mycobacterium avium-Mycobacterium intracellulare infection limited to the skin and lymph nodes in patients with AIDS. Barbaro DJ, et al. **Rev Infect Dis** 1989 Jul-Aug;11(4):625–8

[Bacterial sampling using lymph node puncture-aspiration. A study of 50 patients with leprosy] Latapi-Contreras F, et al. **Acta Leprol (Geneve)** 1988 Jan-Mar;(108):7–16 (Eng. Abstr.) **(Fre)**

[Detection of HTLV-I/ATLV by using the culture of lymph node lymphocytes with adult T-cell leukemia/lymphoma] Takasaki T, et al. **Kansenshogaku Zasshi** 1989 May; 63(5):549–54 (Eng. Abstr.) **(Jpn)**

[Propionibacterium acnes in the biopsied lymph nodes of sarcoidosis patients demonstrated by an immunofluorescence and immunoperoxidase staining technics] Igarashi R, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):507–11 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

Proliferation of Pneumocystis trophozoites in human lymph nodes and in nude mice lungs. Matsumoto Y, et al. **J Protozool** 1989 Jan-Feb;36(1):33S–34S

PATHOLOGY

Prognostic significance of lymph node status in stage III breast cancer. Baldursson G. **Acta Oncol** 1988;27(4):317–21

Importance of tumor cells in axillary node sinus margins ('clandestine' metastases) discovered by serial sectioning in operable breast carcinoma. Friedman S, et al. **Acta Oncol** 1988;27(5):483–7

Lymphangiomyomatosis—immunohistochemical analysis of a case presenting with enlarged inguinal lymph nodes and without pulmonary involvement. Osterborg A, et al. **Acta Oncol** 1989;28(2):287–9

Frequency and types of chest wall recurrences among node negative breast cancer patients. Ottesen G, et al. **Acta Oncol** 1988;27(6A):601–4

Peliosis hepatis. An unusual case involving the spleen and lymph nodes. Kubosawa H, et al. **Acta Pathol Jpn** 1989 Mar;39(3):212–5

Plasmacytoid monocytes (so-called plasmacytoid T-cells) in Kikuchi's lymphadenitis. An immunohistologic study. Facchetti F, et al. **Am J Clin Pathol** 1989 Jul;92(1):42–50

Primary lymph node presentation of angiocentric lymphoma associated with features of a hemophagocytic syndrome. Kueck BD, et al. **Am J Hematol** 1989 Feb;30(2):104–11

Brucellosis and sinus histiocytosis with massive lymphadenopathy. Yao JD, et al. **Am J Med** 1989 Jan; 86(1):111–4

The nature of the lymphocytes surrounding Reed-Sternberg cells in nodular lymphocyte predominance and in other types of Hodgkin's disease. Poppema S. **Am J Pathol** 1989 Aug;135(2):351–7

Histomorphometry in the assessment of prognosis in stage II malignant melanoma. Cochran AJ, et al. **Am J Surg Pathol** 1989 Jul;13(7):600–4

Lymphadenopathy of Kimura's disease. Hui PK, et al. **Am J Surg Pathol** 1989 Mar;13(3):177–86

Kimura's disease. Involvement of regional lymph nodes and distinction from angiolymphoid hyperplasia with eosinophilia. Kuo TT, et al. **Am J Surg Pathol** 1988 Nov; 12(11):843–54

Lympho-cutaneous Kaposi's sarcoma in an African pediatric AIDS case. Bouquety JC, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):323–5

Reactive lymphoid hyperplasia after omega-3 fatty acid supplementation [letter] Ogden P, et al. **Ann Intern Med** 1988 Nov 15;109(10):843–4

Sinus histiocytosis with massive lymphadenopathy: bilateral orbital involvement spanning 17 years. Marion JR, et al. **Ann Ophthalmol** 1989 Feb;21(2):55–8

Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy. Miller RR, et al.

Ann Thorac Surg 1989 Aug;48(2):247–50

Persistent palpable cervical lymph nodes in Nigerian children. Ademiluyi SA, et al. **Ann Trop Paediatr** 1988 Sep; 8(3):153–6

The value of lymph node histology in human immunodeficiency virus related persistent generalized lymphadenopathy. Gerstoft J, et al. **APMIS Suppl** 1989; 8:24–7

Lymphadenopathy in HIV infection: histological classification and staging. Ost A, et al. **APMIS Suppl** 1989; 8:7–15

Elliptical lymph nodes [letter] Miller JM. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):994–5

Salivary gland lymph nodes. The site of lymphadenopathies and lymphomas associated with human immunodeficiency virus infection. Ioachim HL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1224–8

Myoid cell differentiation in true thymic hyperplasia and lymphoid hyperplasia. Judd RL, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1140–4

Lymph node hemangioma. Kasznica J, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):804–7 (8 ref.)

Benign vascular proliferation in a lymph node following acute toxoplasmosis. A differential diagnosis from Kaposi's sarcoma. Rousselet MC, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1264–6

Lymph node biopsy in patients with human immunodeficiency virus infections. Davis JM, et al. **Arch Surg** 1988 Nov;123(11):1349–52

Aspiration biopsy of palpable lymph nodes and the diagnosis of lung carcinoma. Duggan CJ, et al. **Aust N Z J Med** 1989 Jun;19(3):241–3

Primary muco-epidermoid carcinoma arising in a parotid lymph node. Adkins GF, et al. **Aust N Z J Surg** 1989 May; 59(5):433–5

A study of lymph node imprints and its correlation with tissue section. Rahman AJ. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):81–6

Isolation of Reed–Sternberg cells from lymph nodes of Hodgkin's disease patients. Sitar G, et al. **Blood** 1989 Jan; 73(1):222–9

Transbronchial aspiration of subcarinal lymph nodes. Blainey AD, et al. **Br J Dis Chest** 1988 Apr;82(2):149–54

The value of immunocytochemical staining of lymph node aspirates in diagnostic cytology. Oertel J, et al. **Br J Haematol** 1988 Nov;70(3):307–16

The Rosai Dorfman syndrome in a 50-year-old male. Thomson ER, et al. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):39–45

Identification and importance of lymphocyte subpopulations in the regional lymph nodes of breast cancer patients. Khuri N, et al. **Can J Surg** 1989 Jan;32(1):23–6

Prevention of doxorubicin-induced hematotoxicity in mice by interleukin 1. Eppstein DA, et al. **Cancer Res** 1989 Jul 15;49(14):3955–60

Clinical analysis of lung cancer patients with mediastinal involvement. Lai SL, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):383–8

Replating efficiency of metastatic melanoma cells from lymph node and subcutaneous sites does not predict patient survival. Meyskens FL Jr, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):627–32

Extraneural metastasis of a brainstem astrocytoma in a child: clinicopathological report. Rosemberg S, et al. **Clin Neuropathol** 1988 May–Jun;7(3):131–3

Massive lymphoma of the mediastinum, chest wall, and axilla. Stewart CA, et al. **Clin Nucl Med** 1989 Mar;14(3):210–1

Fine-needle aspiration cytology of superficial lymph nodes. Cardillo MR. **Diagn Cytopathol** 1989;5(2):166–73

Familial hemophagocytic lymphohistiocytosis. Lachman MF, et al. **Diagn Cytopathol** 1988;4(2):121–4

Fine-needle aspiration cytology of histiocytosis X: a case report. Layfield LJ, et al. **Diagn Cytopathol** 1988;4(2):140–3

Can immunohistology improve detection of lymph-node metastases in large-bowel cancer? Makin CA, et al. **Dis Colon Rectum** 1989 Feb;32(2):99–102

The diagnostic value of lymphnode biopsies in Benin-City, Nigeria. Adedeji MO, et al. **East Afr Med J** 1989 Feb; 66(2):127–33

Common variable immunodeficiency syndrome and nodular lymphoid hyperplasia in the small intestine. Bästlein C, et al. **Endoscopy** 1988 Sep;20(5):272–5

Delayed mononucleosis syndrome in sinus histiocytes with massive lymphadenopathy [letter] Levene NA, et al. **Eur J Haematol** 1989 May;42(5):507

Novel functions and cellular interaction of human lymphoid stromal cells with lymphoid cell lines in vitro. Ohkawa H, et al. **Exp Hematol** 1989 Jan;17(1):30–3

Magnetic resonance imaging in hemochromatosis: extrahepatic iron deposition. Housman JF, et al. **Gastrointest Radiol** 1989 Winter;14(1):59–60

Granuloma inguinale of cervical lymph nodes simulating tuberculous lymphadenitis: two case reports and review of published reports. Freinkel AL. **Genitourin Med** 1988 Oct;64(5):339–43 (22 ref.)

The importance of parametrial lymph nodes in the treatment of cervical cancer. Girardi F, et al. **Gynecol Oncol** 1989 Aug;34(2):206–11

Preoperative CT study of lymph nodes in cervical cancer—its correlation with histological findings. Matsukuma K, et al. **Gynecol Oncol** 1989 May;33(2):168–71

Angiofollicular lymph node hyperplasia associated with myelofibrosis case report and immunologic marker studies. Bleiweiss IJ, et al. **Hematol Oncol** 1988 Oct–Dec; 6(4):275–84

Vascular transformation of lymph node sinuses in a patient with liver cirrhosis. A case report. Yokozaki H, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):89–92

Rapid microwave fixation—a comparative morphometric study. Kayser K, et al. **Histochem J** 1988 Jun–Jul; 20(6–7):347–52

Mammary carcinoma arising in benign axillary epithelial lymph node inclusions [letter] Fechner RE. **Histopathology** 1989 Apr;14(4):434–5

Benign axillary epithelial lymph node inclusions—a histological pitfall. Holdsworth PJ, et al. **Histopathology** 1988 Aug;13(2):226–8

Progressive lymph node histology and its prognostic value in patients with acquired immunodeficiency syndrome and AIDS-related complex. Chadburn A, et al. **Hum Pathol** 1989 Jun;20(6):579–87

Plasmacytoid monocytes (so-called plasmacytoid T cells) in granulomatous lymphadenitis. Facchetti F, et al. **Hum Pathol** 1989 Jun;20(6):588–93

Lupus lymphadenitis: report of a case with immunohistologic studies on frozen sections. Medeiros LJ, et al. **Hum Pathol** 1989 Mar;20(3):295–9

Splenic marginal zone lymphocytes and related cells in the lymph node: a morphologic and immunohistochemical study. van Krieken JH, et al. **Hum Pathol** 1989 Apr; 20(4):320–5

The pathologic profile of invasive breast cancer–ii) changes in the harboring mammary tissue and regional lymphnodes. Mehtani VG, et al. **Indian J Pathol Microbiol** 1987 Oct; 30(4):415–22

Increased immunoglobulin E Fc receptor bearing cells in germinal centers of hyperimmunoglobulinemia E patients. Mitani S, et al. **Int Arch Allergy Appl Immunol** 1988; 87(1):63–9

Dissemination in cutaneous leishmaniasis. 3. Lymph node involvement. al-Gindan Y, et al. **Int J Dermatol** 1989 May; 28(4):248–54

Silica granuloma of a lymph node. Ligthelm AJ, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):352–3

Lymphocytic enteritis in a filly. Clark ES, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1281–3

A comparative study of the nodular and diffuse variants of lymphocyte-predominant Hodgkin's disease. Borg-Grech A, et al. **J Clin Oncol** 1989 Sep;7(9):1303–9

Mediastinal adenopathy and endobronchial involvement in metastatic renal cell carcinoma. Merine D, et al. **J Comput Tomogr** 1988 Jul;12(3):216–9

Phenotypic and functional analysis of the cellular response in regional lymphoid tissue during an acute virus infection. Lynch F, et al. **J Immunol** 1989 May 15;142(10):3592–8

Synchronous extra-parotid Warthin's tumour. Nishikawa H, et al. **J Laryngol Otol** 1989 Aug;103(8):792–3

Interest in frozen section examination of margins and lymph nodes in laryngeal surgery. Remacle M, et al. **J Laryngol Otol** 1988 Sep;102(9):818–21

Enlarged cervical lymph node due to African histoplasmosis. Rivron RP, et al. **J Laryngol Otol** 1988 Oct;102(10):945–6

Metastasizing glioblastoma multiforme diagnosed during life of patients: case report and review of literature. Shuangshoti S, et al. **J Med Assoc Thai** 1988 Jun; 71(6):329–39 (76 ref.)

Cat scratch fever presenting as a submental swelling. Mintz SM, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1015–8 (33 ref.)

Sampling of jugulo-digastric lymph nodes in oral cancer. Saka SM, et al. **J Oral Pathol Med** 1989 Feb;18(2):123–4

Diagnostic fine needle core biopsy of deep lymph nodes for the diagnosis of lymphoma in patients unfit for surgery. Wotherspoon AC, et al. **J Pathol** 1989 Jun;158(2):115–21

Characterization of lymph node histology in adult onset Still's disease. Valente RM, et al. **J Rheumatol** 1989 Mar; 16(3):349–54

Immunohistochemical analysis of mesocolic lymph node cells in human colorectal cancer. Miura S, et al. **J Surg Oncol** 1989 Feb;40(2):119–27

Post-chemotherapy lymph node histology in radiologically normal patients with metastatic nonseminomatous testicular cancer. Fossâ SD, et al. **J Urol** 1989 Mar;141(3):557–9

Occult papillary carcinoma of the thyroid with pulmonary lymphangitic spread diagnosed by lung biopsy. Fend F, et al. **Klin Wochenschr** 1989 Jul 3;67(13):687–90

AIDS. Case for diagnosis series, 1988 military medicine. Angritt P, et al. **Milit Med** 1988 Aug;153(8):M49–56

Pathology of the lymph node and spleen in systemic mast cell disease. Travis WD, et al. **Mod Pathol** 1988 Jan; 1(1):4–14

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 28–1989. A 65-year-old man with pulmonary infiltrates and an axillary mass. **N Engl J Med** 1989 Jul 13;321(2):102–10

Prediction of relapse or survival in patients with node-negative breast cancer by DNA flow cytometry. Clark GM, et al. **N Engl J Med** 1989 Mar 9;320(10):627–33

A randomized clinical trial evaluating tamoxifen in the treatment of patients with node-negative breast cancer who have estrogen-receptor-positive tumors. Fisher B, et al. **N Engl J Med** 1989 Feb 23;320(8):479–84

Efficacy of adjuvant chemotherapy in high-risk node-negative breast cancer. An intergroup study. Mansour EG, et al. **N Engl J Med** 1989 Feb 23; 320(8):485–90

Immunoblotting for breast carcinoma in infiltrated lymph nodes. Hakim AA, et al. **Naturwissenschaften** 1988 Jul; 75(7):361–2

Lymph node biopsy in chronic lymphocytic leukemia: prognostic significance of histopathological, morphometry and immunohistological findings. Raphael M, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):379–83

Fine-needle aspiration of inguinal lymph nodes in gynecologic practice. Crosby JH, et al. **Obstet Gynecol** 1989 Feb;73(2):281–4

Morbidity of lymph node sampling in cancers of the uterine corpus and cervix. Moore DH, et al. **Obstet Gynecol** 1989 Aug;74(2):180–4

Primary Kaposi's of an intraparotid lymph node in a non-immunocompromised patient. Josephson J, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):341–3

Fine needle aspiration biopsy of lymph nodes. Pitts WC, et al. **Pathol Annu** 1988;23 Pt 2:329–60 (47 ref.)

The reliability of histologically negative axillary lymph nodes in breast cancer. Preliminary report. Apostolikas N, et al. **Pathol Res Pract** 1988 Dec;184(1):35–8

Induction of lymph follicle formation with endotoxin lipopolysaccharide in the draining lymph node of athymic nude mice. Hoshi H, et al. **Pathol Res Pract** 1988 Dec; 184(1):60–8

A new form of alpha-chain disease with generalized lymph node involvement. Takahashi K, et al. **Pathol Res Pract** 1988 Nov;183(6):717–23

Clinical diagnosis of neck lumps: a practical guide. Friedberg J. **Pediatr Ann** 1988 Oct;17(10):620–2, 624–6, 628 (7 ref.)

Magnetic resonance imaging of discrete and conglomerate retroperitoneal lymph node masses. Lawson TL, et al. **Radiographics** 1985 Nov;5(6):971–84

Pelvic cancers: staging of 139 cases with lymphography and fine-needle aspiration biopsy. Chagnon S, et al. **Radiology** 1989 Oct;173(1):103–6

Parasternal sonography of the internal mammary vessels: technique, normal anatomy, and lymphadenopathy. Scatarige JC, et al. **Radiology** 1989 Aug;172(2):453–7

Chronic cholecystitis with lymphoid hyperplasia. Albores-Saavedra J, et al. **Rev Invest Clin** 1989 Apr–Jun; 41(2):159–64

Adjuvant therapy after surgery for breast cancer—should women without axillary node involvement be candidates [editorial] Dent DM, et al. **S Afr Med J** 1989 Jun 3; 75(11):513–4

Number and size of lymph nodes and node metastases in rectal carcinomas. Dworák O. **Surg Endosc** 1989;3(2):96–9

Onchocerciasis in north Yemen: retrospective diagnosis of five cases in lymph node biopsies. Abdel-Hameed AA. **Trop Geogr Med** 1988 Oct;40(4):373–5

Lymph node cytology. Mills JN. **Vet Clin North Am Small Anim Pract** 1989 Jul; 19(4):697–717 (32 ref.)

Antitumor effects of endotoxin against solid murine Meth A tumors of different ages. Quantitative histology of the tumors and regional lymph nodes. Kuper CF, et al. **Virchows Arch [B]** 1988;56(1):51–8

Haemangiomatous lesions of lymph nodes. Report of two cases and review of literature. Hański W. **Zentralbl Allg Pathol** 1988;134(8):731–5 (9 ref.)

[Immunohistochemical studies of metastasis of achromatic melanoma to the lymph nodes] Popov A, et al. **Eksp Med Morfol** 1988;27(3):35–9 (Eng. Abstr.) **(Bul)**

[Cytological examination of lymph node puncture biopsy collected after prior lymphography] Stárek J, et al. **Cas Lek Cesk** 1988 Aug 5;127(32):1014–8 (Eng. Abstr.) **(Cze)**

[Sinus histiocytosis and massive lymphadenopathy] Miettinen M. **Duodecim** 1988;104(19):1515–22 **(Fin)**

[Current role of pre-scalene biopsy in the pretherapeutic evaluation of invasive cancer of the uterine cervix] Rodier JF, et al. **J Chir (Paris)** 1989 May;126(5):319–26 (Eng. Abstr.) **(Fre)**

[Peripheral subpleural intrapulmonary lymph nodes. Apropos of a clinical case and an anatomical case] Riquet M, et al. **Rev Pneumol Clin** 1988;44(4):181–6 (23 ref.) (Eng. Abstr.) **(Fre)**

["Visible" is not necessarily "pathologic". New criteria for lymph nodes—ultrasonic diagnosis is even more precise (interview)] Bönhof JA. **Fortschr Med** 1989 Aug 10; 107(23):25–6 **(Ger)**

[Epithelial growth factor receptors (EGF-R) and DNA flow cytometry in addition to lymph node and hormone receptor status as prognostic factors in primary breast cancer] Costa SD, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):375–8 (Eng. Abstr.) **(Ger)**

[Proliferation index, axillary lymph node status, hormone receptors and age as prognostic factors in primary breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:104–8 (Eng. Abstr.) **(Ger)**

[Flow cytophotometry parameters, hormone receptors and axillary lymph node status as prognostic factors in primary breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):705–9 (Eng. Abstr.) **(Ger)**

[The status of computerized tomography in the diagnosis of primary cervix cancer] Räber G, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):17–23 (Eng. Abstr.) **(Ger)**

[The prognostic value of lymphangiosis carcinomatosa and malignancy grading in T1/T2-N0 cancers of the breast using 10 or fewer examined axillary lymph nodes] Stauch G, et al. **Gebartshilfe Frauenheilkd** 1989 Mar;49(3):283–8 (Eng. Abstr.) (Ger)

[The immunohistochemical growth fraction (Ki–67) of breast cancers: relations to tumor spread, tumor morphology and receptor testing] Weikel W, et al. **Gebartshilfe Frauenheilkd** 1989 Mar;49(3):277–82 (Eng. Abstr.) (Ger)

[Lymph node sonography in the after care of malignant melanoma] Stutte H, et al. **Hautarzt** 1989 Jun;40(6):344–9 (Eng. Abstr.) (Ger)

[Pathologic-anatomic parameters for the prognosis of invasive breast cancer following amputation or saving the breast] Torhorst J. **Helv Chir Acta** 1989 Apr;55(6):823–9 (21 ref.) (Eng. Abstr.) (Ger)

[The relevance of sonographic diagnosis of cervical lymph nodes in tumors of the head and neck] Koch T, et al. HNO 1989 Apr;37(4):144–7 (Eng. Abstr.) (Ger)

[Biological significance of estrogen receptor status in axillary lymph node metastases of invasive ductal breast cancers] Horst HA, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1160–6 (Eng. Abstr.) (Ger)

[Detection and assessment of cervical lymph node metastases in head–neck tumors. A comparison of methods] Heppt W, et al. **Laryngorhinootologie** 1989 Jun;68(6):327–32 (Eng. Abstr.) (Ger)

[Malignant centroblastic–centrocytic lymphoma: a differential diagnostic alternative in syphilis II] Leicht E, et al. **Med Klin** 1989 May 15;84(5):271–2 (Ger)

[Comparison of the receptor content and growth fraction of breast cancers and their axillary lymph node metastases] Fleige B, et al. **Pathologe** 1989 Jan;10(1):12–5 (Ger)

[Lymph node metastasis of a "squamous cell carcinoma" as a manifestation of occult breast cancer] Ronay G, et al. **Pathologe** 1988 Sep;9(5):309–12 (Ger)

[Study of the lymph nodes in the mandibulofacial region and the neck using ultrasonic tomography] Saratschev E, et al. **Radiol Diagn (Berl)** 1988;29(4):625–7 (Eng. Abstr.) (Ger)

[Differential diagnostic importance of sonographically detected lymph node enlargement of the liver hilum in non–malignant liver diseases] Kathrein H, et al. **Ultraschall Med** 1989 Jun;10(3):127–31 (Eng. Abstr.) (Ger)

[Size relations of the spleen and lymph nodes in normal and pathologic processes] Watzinger F, et al. **Ultraschall Med** 1989 Feb;10(1):29–32 (Eng. Abstr.) (Ger)

[Surgical diagnostic methods in the thoracic area] Engelmann C. **Z Erkr Atmungsorgane** 1988;171(1):19–28 (19 ref.) (Eng. Abstr.) (Ger)

[Associated glomerulonephritis in immunocytoma] Klette H. **Z Gesamte Ina Med** 1988 Sep 1;43(17):488–91 (Eng. Abstr.) (Ger)

[Lymphography in prostatic cancer] Fischer U, et al. **Z Lymphol** 1988 Jul;12(1):15–8 (Ger)

[Retrospective immunohistologic search for metastases using monoclonal anti–cytokeratin antibodies in lymph nodes of patients with stage Ib–IIb cervix cancer dying within 5 years] Domke N, et al. **Zentralbl Gynakol** 1989;111(4):230–4 (Eng. Abstr.) (Ger)

[Involvement of pelvic lymph nodes in ovarian cancer] Seitzer D, et al. **Zentralbl Gynakol** 1988;110(18):1132–7 (Eng. Abstr.) (Ger)

[Importance of the invasion of the gastric wall and regional lymph nodes in the prognosis of stomach carcinoma] Vitale M, et al. **Minerva Chir** 1988 Apr 30;43(8):677–81 (Eng. Abstr.) (Ita)

[Thin–needle aspiration cytology of palpable lymph nodes. Analysis of 702 consecutive cases] Ciarmiello G, et al. **Minerva Med** 1988 Sep;79(9):753–9 (Eng. Abstr.) (Ita)

[Stromal reaction and lymph node changes in laryngeal carcinoma] Dessy E, et al. **Pathologica** 1987 Sep–Oct; 79(1063):599–607 (Eng. Abstr.) (Ita)

[An evaluation of scalene lymph node metastasis in patients with gynecologic malignancies] Matsukuma K, et al. **Gan No Rinsho** 1989 Jan;35(2):275–9 (Eng. Abstr.) (Jpn)

[A primary gastric adenosquamous carcinoma with remarkable lymphatic metastasis diagnosed by the stomach and lymph node biopsy] Shigematsu T, et al. **Gan No Rinsho** 1989 Feb;35(3):421–6 (Eng. Abstr.) (Jpn)

[A case of hepatocellular carcinoma with a duodenal invasion from metastatic lymph node] Sone Y, et al. **Gan No Rinsho** 1989 May;35(6):756–60 (9 ref.) (Eng. Abstr.) (Jpn)

[Immunologic significance for regional lymph node histology in uterine cervical cancer] Kinugasa M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):7–15 (Eng. Abstr.) (Jpn)

[Scalene node biopsy in resectable primary lung cancer] Koike T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):870–3 (Eng. Abstr.) (Jpn)

[A clinico–pathological study of lymph nodes (intrapulmonary, hilar, mediastinal, and prescalene) in patients with lung cancer—influence of metastasis, dissection, and immunological responses on late survival] Yamaguchi A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2529–43 (Eng. Abstr.) (Jpn)

[Chromosomal abnormalities in cells of lymph node in two patients with IBL–like T–cell lymphoma] Sadamori N, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1109–14 (10 ref.) (Eng. Abstr.) (Jpn)

[The role of the lymph nodes in the generalization of the process in experimental apical periodontitis] Iaroshenko IF, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:403–7 (Eng. Abstr.) (Rus)

[Lymphoid nodules of the urinary bladder in man] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1988 Jul;95(7):41–7 (Eng. Abstr.) (Rus)

[Morphologic changes of the small intestine and lymph nodes in alpha–chain disease] Zhuravlev AP, et al. **Arkh Patol** 1988;50(8):74–80 (Eng. Abstr.) (Rus)

[The morphology of mesenteric lymph nodes in Whipple's disease] Zolotarevskiĭ VB, et al. **Arkh Patol** 1988; 50(10):63–7 (Eng. Abstr.) (Rus)

[The cytologic picture of lymph nodes in leukemias of the granulocytic type] Lazarev IM. **Lab Delo** 1988;(10):35–7 (Eng. Abstr.) (Rus)

[Pathogenesis of immunologic deficiency in the initial stage of lymphogranulomatosis in children] Torubarova NA, et al. **Pediatriia** 1989;(2):38–42 (Eng. Abstr.) (Rus)

[A case of generalized sarcoidosis with lesions of the intrathoracic lymph nodes and the central and peripheral nervous systems] Repnitskaia ZD, et al. **Probl Tuberk** 1988; (10):71–2 (Rus)

[Regional lymph nodes and mortality in breast cancer] Spirina NV, et al. **Sov Med** 1989;(4):123 (Rus)

[Possibilities of clinico–laboratory diagnosis of the lymphoadenopathy stage of infection with human immunodeficiency virus] Irova TI, et al. **Ter Arkh** 1988; 60(7):14–6 (Rus)

[Follicular hyperplasia of the regional lymph nodes in stomach cancer and its prognostic significance] Bugrov VV, et al. **Vopr Onkol** 1989;35(1):17–21 (Eng. Abstr.) (Rus)

[Analysis of endothoracic perforation of the lymph nodes in our patients over a 5–year–period] Milković D, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):63–4 (Eng. Abstr.) (Scr)

[Intensive lymphoid hyperplasia of the peripancreatic ganglia and extrahepatic cholestasis in Sjögren's syndrome. Report of an unusual case] Guma CL, et al. **Acta Gastroenterol Latinoam** 1988;18(4):263–8 (Eng. Abstr.) (Spa)

[Value of thin–needle aspiration puncture of peripheral lymph nodes in primary health care services (letter)] Buitrago Ramírez F, et al. **Med Clin (Barc)** 1988 Dec 10;91(20):798 (Spa)

[Lymph node biopsy in the diagnosis of endemic non–filarial elephantiasis (podoconiosis) (letter)] Campo E, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):117 (Spa)

[Mixed cryoglobulinemia and reactive retroperitoneal lymph node hyperplasia (letter)] García Ruiz C, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):238–9 (Spa)

[Lymph node puncture: past, present and future (letter)] Oliva H. **Med Clin (Barc)** 1988 Jun 25;91(5):199 (Spa)

[Extramedullary blast crisis in chronic myeloid leukemia] Cervantes F, et al. **Sangre (Barc)** 1989 Apr;34(2):96–8 (Eng. Abstr.) (Spa)

[Multicentric abdominal angiofollicular hyperplasia: a clinical variant with exclusive involvement of the liver and abdominal lymph nodes] Montalbán C, et al. **Sangre (Barc)** 1989 Aug;34(4):285–91 (Eng. Abstr.) (Spa)

[Suspected atypical, mycobacterium infection in a child with a neck nodule] Tordai P, et al. **Lakartidningen** 1989 Mar 29;86(13):1173–4 (Swe)

PHYSIOLOGY

A lymphocyte molecule implicated in lymph node homing is a member of the cartilage link protein family. Stamenkovic I, et al. **Cell** 1989 Mar 24;56(6):1057–62

CD4+ lymphocytes are extracted from blood by peripheral lymph nodes at different rates from other T cell subsets and B cells. Washington EA, et al. **Eur J Immunol** 1988 Dec;18(12):2093–6

Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. Streeter PR, et al. **J Cell Biol** 1988 Nov;107(5):1853–62

Two populations of mast cells on fibroblast monolayers: correlation of quantitative microscopy and functional activity. Hammel I, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):13–9

Comparative aspects of T cell activation in vivo following stimulation with anti–CD3 MAB, allogeneic cells and Trypanosoma cruzi. Pereira GM, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:284–90

Development of antitumor reactivity in regional draining lymph nodes from tumor–immunized and tumor–bearing murine hosts. Stephenson KR, et al. **Surgery** 1989 Apr; 105(4):523–8

[Morpho–functional basis for the choice of lymph nodes for surgical reconstruction of lymph flow routes from the transplanted kidney] Lazarev KL, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):52–8 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Whole body X–irradiation and repopulation with syngeneic bone marrow have no significant effect on basophils and mast cell compartment of murine lymph nodes. Wlodarski KH. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):433–7

Radiological protection and the lymphatic system: the induction of leukaemia consequent upon the internal irradiation of the tracheobronchial lymph nodes and the gastrointestinal tract wall. Baverstock KF, et al. **Int J Radiat Biol** 1989 Jan;55(1):129–40 (27 ref.)

Elective pelvic irradiation in stage A2, B carcinoma of the prostate: analysis of RTOG 77–06. Asbell SO, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1307–16

Pelvic node irradiation [letter] Brandenburg W, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):882

The influence of pelvic node irradiation on prognosis [letter] Zagars GK, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):882

Variations in the incidence of vertebral bone metastases by irradiation of the internal mammary chain in breast cancer. Valentini V, et al. **Rays** 1988 Jan–Apr;13(1):83–8

RADIOGRAPHY

Computed tomography and conventional radiography in intrathoracic metastases from non–seminomatous testicular tumor. Lien HH, et al. **Acta Radiol** 1988 Sep–Oct; 29(5):547–9

Contrast enhancement of pathologic lymph nodes demonstrated by computed tomography. Magnusson A, et al. **Acta Radiol** 1989 May–Jun;30(3):307–10

CT of Kimura disease. Smith JR, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S34–6

Left gastric and coeliac lymph nodes: a problem area for C.T. staging of carcinoma of the gastro–oesophageal junction. Lee WB. **Australas Radiol** 1988 May;32(2):230–1

Non–Hodgkin's lymphoma in Rotter's nodes: a case report. Ampil FL. **J Arkansas Med Soc** 1989 Jan;85(8):332–3

Anterior diaphragmatic lymph nodes. Libshitz I, et al. **Lymphology** 1988 Jun;21(2):99–104

[Study of the lymph nodes in the jaw and facial region and in the neck using computed tomography] Saratschev E. **Radiol Diagn (Berl)** 1988;29(3):417–22 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Re: Woods et al: lymphoscintigraphy as a guide to treatment in malignant melanoma [letter] Bennett JE. **Ann Plast Surg** 1989 Sep;23(3):275

Lymphoscintigraphy as a guide to treatment in malignant melanoma. Woods JE, et al. **Ann Plast Surg** 1989 Feb; 22(2):150–5

Radionuclide–guided radical surgery for cervical cancer. Gitsch E, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec; 2(4):867–75

Radioimmunodetection of lymph node invasion in prostatic cancer. The use of iodine 123 (123I)–labeled monoclonal anti–prostatic acid phosphatase (PAP) 227 A F(ab')2 antibody fragments in vivo. Leroy M, et al. **Cancer** 1989 Jul 1;64(1):1–5

Preoperative cutaneous lymphoscintigraphy in malignant melanoma. Lock–Andersen J, et al. **Cancer** 1989 Jan 1; 63(1):77–82

Immunolymphoscintigraphy for the detection of lymph node metastases from breast cancer. Tjandra JJ, et al. **Cancer Res** 1989 Mar 15;49(6):1600–8

Significance of nodal uptake on indium 111 labeled leukocyte scans. Oates E, et al. **Clin Nucl Med** 1989 Apr;14(4):282–5

Positive indium–111 leukocyte image following antigenic stimulation in a 15–month–old female child. Walton AJ, et al. **Clin Nucl Med** 1989 Jan;14(1):70–1

The use of lymphoscintigraphy in treatment planning of primary breast cancer. Hunt MA, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):597–606

True measurement of the angle in a slant hole collimator [letter] Fawcett HD. **J Nucl Med** 1988 Oct;29(10):1745–6

Ultrasonic guidance for internal mammary lymphoscintigraphy [letter] Neils EW, et al. **J Nucl Med** 1988 Oct;29(10):1744–5

Verification of peritoneo–pleural fluid communication and mediastinal lymph nodes by intraperitoneal injection of technetium–99m albumin colloid [letter] Shih WJ, et al. **J Nucl Med** 1989 Apr;30(4):559–60

New simplified lymphoscintigraphic technique in patients with breast cancer. Terui S, et al. **J Nucl Med** 1989 Jul; 30(7):1198–204

Parasternal lymphoscintigraphy using 99Tcm–dextran. Karayalcin B, et al. **Nucl Med Commun** 1988 Sep; 9(9):657–62

201 thallium–chloride use in the radioisotopic pre–operative study of the lymphnodes of the neck. Mc'ica V, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):193–6

Radioimaging of lymph node involvement in prostatic carcinoma. Kontturi M, et al. **Scand J Urol Nephrol Suppl** 1988;110:113–7

[A new lymph node imaging agent—99mTc–polyphase liposome oleatis (99mTc–plo)] Yu BF. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):270–3 (Eng. Abstr.) (Chi)

[Initial results in man of immunolymphoscintigraphy of cancer of the prostate] Teillac P, et al. **Ann Med Interne (Paris)** 1989;140(1):20–4 (Eng. Abstr.) (Fre)

[Lymphoscintigraphic studies in the mandibular, facial and neck region] Saratschev E, et al. **Radiol Diagn (Berl)** 1988; 29(4):629–33 (Eng. Abstr.) (Ger)

[Scintigraphic studies of the lymph nodes in patients with melanoma following lymph node excision] Török L, et al. **Z Hautkr** 1988 Oct 15;63(10):822–7 (Eng. Abstr.) **(Ger)**

[Usefulness of gallium 67 in research into the need for radical cervical lymph node dissection in patients with head and neck carcinomas] Basso Ricci S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):471–4 (Eng. Abstr.) **(Ita)**

[Study of mammary lymph node scintigraphy by Tc-99m labeled activated carbon microspheres] Maeda M, et al. **Kaku Igaku** 1988 Aug;25(8):809–12 (Eng. Abstr.) **(Jpn)**

[Diagnosis of mediastinal lymphnode metastasis of primary lung cancer by 67Ga-ECT] Matsui R, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):894–905 (Eng. Abstr.) **(Jpn)**

[Abnormal lymph flow in breast cancer—lymph node scintigraphy] Nakazato T, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):699–700 **(Jpn)**

SECRETION

In situ demonstration of the activity of 3 beta-hydroxysteroid dehydrogenase on steroid hormone secreting cells within the paraaortic lymph nodes of golden hamster. Tohya K, et al. **Experientia** 1989 Aug 15;45(8):750–3

SURGERY

Management of localised prostatic carcinoma. Inglis JA, et al. **Br J Urol** 1989 Jul;64(1):66–8

[Lymphedema and lymphonodovenous anastomosis. Preposal of a technical modification] Languasco GB, et al. **Angiologia** 1989 Jan-Feb;41(1):11–6 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Erythrophagocytosis in the caprine hemal node. Ezeasor DN, et al. **Acta Anat (Basel)** 1989;134(4):341–5

Porcine colonic lymphoglandular complex: distribution, structure, and epithelium. Morfitt DC, et al. **Am J Anat** 1989 Jan;184(1):41–51

An electron microscopic study of the acupuncture or moxibustion stimulated regional skin and lymph node in experimental animals. Kimura M, et al. **Am J Chin Med** 1988;16(3–4):159–67

Comparative morphometric analysis of nuclear area and shape in peripheral T-zone lymphomas and in paracortical areas of normal and reactive lymph nodes. Tosi P, et al. **Anal Quant Cytol Histol** 1988 Aug;10(4):285–93

Direct contact between reticular fibers and migratory cells in the paracortex of mouse lymph nodes: a morphological and quantitative study. Hayakawa M, et al. **Arch Histol Cytol** 1988 Jul;51(3):233–40

Ultrastructural evidence for lymphatic capillaries in the primate choroid. Krebs W, et al. **Arch Ophthalmol** 1988 Nov;106(11):1615–6

Cytogenetic studies of Hodgkin's disease. Analysis of involved lymph nodes from 12 patients. Dennis TR, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):201–8

Development of follicular dendritic cells in lymph nodes of B-cell-depleted mice. Cerny A, et al. **Cell Tissue Res** 1988 Nov;254(2):449–54

Two statistical approaches to nuclei shape and size in a morphometric description of lymph node sections in non-Hodgkin's lymphoma. Lesty C, et al. **Cytometry** 1989 Jan;10(1):28–36

Lymphoid microenvironments in the thymus and lymph node. van Ewijk W, et al. **Scanning Microsc** 1988 Dec; 2(4):2129–40

Ultrastructural morphometric study of follicular center lymphocytes: II. Analyses of cleaved-cell populations do not support the Lukes-Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul-Aug;13(4):393–404

Ultrastructural morphometric study of follicular center lymphocytes: I. Nuclear characteristics and the Lukes-Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul-Aug;13(4):373–91

[Transmission electron microscopy in the differential diagnosis of non-Hodgkin's lymphoma using fine-needle aspirates] Lubiński J, et al. **Patol Pol** 1988 Jul-Sep; 39(3):177–88 (Eng. Abstr.) **(Pol)**

LYMPHADENITIS

The swollen neck. Cervical lymphadenitis, parotitis, thyroiditis, and infected cysts. Brook I. **Infect Dis Clin North Am** 1988 Mar;2(1):221–36 (56 ref.)

CHEMICALLY INDUCED

[Chronic lymphadenitis secondary to aluminum silicate deposits (letter)] García del Moral Garrido R, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):77–8 **(Spa)**

COMPLICATIONS

Subcorneal pustular dermatosis (Sneddon-Wilkinson disease) with amicrobial lymph node suppuration and aseptic spleen abscesses. Dallot A, et al. **Br J Dermatol** 1988 Dec; 119(6):803–7

Filarial mediastinal lymphadenitis. Another cause of superior vena caval syndrome. Seetharaman ML, et al. **Chest** 1988 Oct;94(4):871–2

Group B streptococcal cellulitis and adenitis concurrent with meningitis. Rathore MH. **Clin Pediatr (Phila)** 1989 Sep; 28(9):411

Case 1, 1988. Head tilt in a young girl associated with neck pain and limitation of neck movement. Shale H, et al. **Mov Disord** 1988;3(4):347–51

Kikuchi's disease as a cause of fever of unknown origin [letter] Pearl D, et al. **N Engl J Med** 1989 Apr 27; 320(17):1147–8

[Subacute necrotizing lymphadenitis with pancytopenia and proliferation of histiocytes in bone marrow] Inaba T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1120–4 (Eng. Abstr.) **(Jpn)**

[Necrosis of the tissues of the retromandibular and retroauricular areas and the lateral surface of the neck as a consequence of the self-treatment of lymphadenitis] Khar'kov LV, et al. **Stomatologiia (Mosk)** 1989 May-Jun; 68(3):83–4 **(Rus)**

DIAGNOSIS

Histiocytic necrotizing lymphadenitis (Kikuchi's disease). Sterman BM, et al. **Head Neck** 1989 Jul-Aug;11(4):349–52

Bacterial lymphadenitis with the picture of a lymphoepithelioid cell lymphoma—Lennert's lymphoma. Kaiserling E, et al. **Histopathology** 1989 Feb;14(2):161–78

Fever and a swollen lymph node. Landman D. **Hosp Pract [Off]** 1989 Jan 15;24(1):138, 140, 142

Histiocytic necrotizing lymphadenitis. Shirakusa T, et al. **Postgrad Med J** 1988 Feb;64(748):107–9

Kikuchi's histiocytic necrotizing lymphadenitis: an analysis of 108 cases with emphasis on differential diagnosis. Dorfman RF, et al. **Semin Diagn Pathol** 1988 Nov; 5(4):329–45

[Swelling in the neck; not always a lymph node] de Jong KP, et al. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):913–5 **(Dut)**

[Usefulness of immunohistochemical tests in the diagnosis of lymphomas. Review of 134 cases of lymph node biopsies] Fruttero A, et al. **Pathologica** 1988 May-Jun; 80(1067):253–77 (41 ref.) (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Cervical lymphadenitis in adults [letter] Golledge CL. **Med J Aust** 1989 May 1;150(9):541

Cervical lymphadenitis in childhood: which antibiotic agent? Wright JE. **Med J Aust** 1989 Feb 6;150(3):150–1 (16 ref.)

[Clinical studies on sultamicillin in pediatrics] Sekiguchi T, et al. **Jpn J Antibiot** 1988 Dec;41(12):1959–64 (Eng. Abstr.) **(Jpn)**

[Use of Rokitamycin dry syrup in cases of upper deep cervical lymphadenitis and otitis media with exudatives] Mukai S, et al. **Kansenshogaku Zasshi** 1989 Feb; 63(2):98–102 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Lymphadenitis associated with BCG vaccination: a report of an outbreak in Harare, Zimbabwe. Ray CS, et al. **Cent Afr J Med** 1988 Dec;34(12):281–6

Sexually transmitted diseases. Genital ulceration with regional adenopathy. Krockta WP, et al. **Infect Dis Clin North Am** 1987 Mar;1(1):217–33 (108 ref.)

Lymphocutaneous nocardiosis in Pennsylvania. Hessen MT, et al. **Pa Med** 1988 Nov;91(11):54, 56, 58

Clinical diagnosis of neck lumps: a practical guide. Friedberg J. **Pediatr Ann** 1988 Oct;17(10):620–2, 624–6, 628 (7 ref.)

Diagnostic usefulness of mycobacterial skin test antigens in childhood lymphadenitis. Del Beccaro MA, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):206–10

Periodic fever associated with aphthous stomatitis, pharyngitis and cervical adenitis. Feder HM Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):186–7

Acute inguinal lymphadenitis associated with Yersinia enterocolitica. Narain JP. **South Med J** 1989 Mar; 82(3):401–2

[Clinical observation of acute cervical lymphadenitis in children] Chou NS, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):389–92 (Eng. Abstr.) **(Chi)**

[Cervical lymph node inflammation in children] Pain F, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):525–30 (17 ref.) (Eng. Abstr.) **(Fre)**

[A case from practice (133). Female patient: J. L., born 1957, secretary] Moucka J. **Schweiz Rundsch Med Prax** 1989 Mar 7;78(10):273–4 **(Ger)**

[Cervical adenitis caused by atypical mycobacteria in childhood] Boqué Genovard MA. **An Esp Pediatr** 1988 Oct; 29(4):284–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Impairment in T-lymphocyte responses during early infection with the human immunodeficiency virus. Bentin J, et al. **J Clin Immunol** 1989 Mar;9(2):159–68

[Antibody levels in women with toxoplasmosis of the lymph nodes] Andrzejewska I. **Pol Tyg Lek** 1988 Nov 7; 43(45):1444–6 **(Pol)**

MICROBIOLOGY

Human herpesvirus 6 in lymph nodes [letter] **Lancet** 1989 Jan 7;1(8628):40–1

Cervical lymphadenitis in childhood: which antibiotic agent? Wright JE. **Med J Aust** 1989 Feb 6;150(3):150–1 (16 ref.)

Generalized suppurative lymphadenitis with typhoidal salmonellosis. Naqvi SH, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):882–3

PATHOLOGY

Two cases of acquired toxoplasmic lymphadenitis. Light and electron microscopic and immunohistochemical studies. Ito M, et al. **Acta Pathol Jpn** 1988 Dec;38(12):1565–73

Plasmacytoid monocytes (so-called plasmacytoid T-cells) in Kikuchi's lymphadenitis. An immunohistologic study. Facchetti F, et al. **Am J Clin Pathol** 1989 Jul;92(1):42–50

Persistent palpable cervical lymph nodes in Nigerian children. Ademiluyi SA, et al. **Ann Trop Paediatr** 1988 Sep; 8(3):153–6

Secondary syphilis of the tonsil. Shimizu T, et al. **Arch Otorhinolaryngol** 1989;246(2):117–20

Dermatopathic lymphadenitis. The spectrum and significance of its morphologic features. Gould E, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1145–50

A fatal case of multicentric Kikuchi's histiocytic necrotizing lymphadenitis. Chan JK, et al. **Cancer** 1989 May 1; 63(9):1856–62

Histiocytic necrotizing lymphadenitis without granulocytic infiltration (Kikuchi's lymphadenitis). Morphological and immunohistochemical study of eight cases. Rivano MT, et al. **Histopathology** 1987 Oct;11(10):1013–27

Plasmacytoid monocytes (so-called plasmacytoid T cells) in granulomatous lymphadenitis. Facchetti F, et al. **Hum Pathol** 1989 Jun;20(6):588–93

Lupus lymphadenitis: report of a case with immunohistologic studies on frozen sections. Medeiros LJ, et al. **Hum Pathol** 1989 Mar;20(3):295–9

Kikuchi's disease—apparent malignancy of a neck mass. Buckley JG, et al. **J Laryngol Otol** 1988 Oct;102(10):941–4

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 23-1989. A 25-year-old woman with a right pulmonary density 14 months after a right upper lobectomy for an atypical carcinoid tumor. **N Engl J Med** 1989 Jun 8;320(23):1540–50

The disappearance of germinal centers in chronic lymphadeno-hepato-splenomegaly syndrome in childhood: report of three cases. Nezelof C, et al. **Pediatr Pathol** 1989; 9(1):57–71

[Cytodiagnosis of the lymph nodes] Fontana S. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:19–26 (8 ref.) **(Ita)**

[Necrotizing histiocytic lymphadenitis (Kikuchi and Fujimoto's disease)] Sulfaro S, et al. **Pathologica** 1988 Jan-Feb;80(1065):1–15 (Eng. Abstr.) **(Ita)**

[A case of subacute necrotizing lymphadenitis with high titer of serum gamma-interferon] Hirayama M, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1736–7 **(Jpn)**

[Outline of proliferative disorders in the mononuclear phagocytic system—necrotizing lymphadenitis] Wakasa H, et al. **Nippon Rinsho** 1989 Mar;47(3):610–5 **(Jpn)**

RADIOTHERAPY

[Pneumonectomy of lung cancer diagnosed 21 years after irradiation of 6000 rads for hilar lymphadenopathy] Morota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2655–61 (Eng. Abstr.) **(Jpn)**

VETERINARY

Corynebacterium pseudotuberculosis infection in goats. VI. Clinical and pathological changes after intravenous inoculation of the organism. Holstad G, et al. **Acta Vet Scand** 1988;29(3–4):281–6

Corynebacterium pseudotuberculosis infection in goats. VII. Clinical, pathological, serological and hematological changes after subcutaneous inoculation of the organism. Holstad G, et al. **Acta Vet Scand** 1988;29(3–4):287–94

A seroepidemiological investigation of Corynebacterium pseudotuberculosis infection in sheep flocks in southern Norway. Kuria JK, et al. **Acta Vet Scand** 1989;30(1):107–8

Serological investigation of Corynebacterium pseudotuberculosis infection in sheep—correlation between the hemolysis inhibition test and the ELISA test. Kuria JK, et al. **Acta Vet Scand** 1989;30(1):109–10

The use of a microagglutination assay for the detection of antibodies to Corynebacterium pseudotuberculosis in naturally infected sheep and goat flocks. Menzies PI, et al. **Can J Vet Res** 1989 Jul;53(3):313–8

The distribution of ferritin, lactoferrin and transferrin in granulomatous lymphadenitis of bovine paratuberculosis. Momotani E, et al. **J Comp Pathol** 1988 Aug;99(2):205–14

Immunophenotype of pulmonary cellular infiltrates in sheep with visceral caseous lymphadenitis. Ellis JA. **Vet Pathol** 1988 Sep;25(5):362–8

[Caseous lymphadenitis in goats in Gelderland: prospects for its control] ter Laak EA, et al. **Tijdschr Diergeneeskd** 1988 Dec 15;113(24):1362–5 (Eng. Abstr.) **(Dut)**

LYMPHADENITIS, TUBERCULOUS see **TUBERCULOSIS, LYMPH NODE**

LYMPHADENOPATHY-ASSOCIATED ANTIBODIES see **HIV ANTIBODIES**

LYMPHADENOPATHY-ASSOCIATED ANTIGENS see **HIV ANTIGENS**

LYMPHADENOPATHY-ASSOCIATED VIRUS see HIV

LYMPHADENOPATHY, IMMUNOBLASTIC see IMMUNOBLASTIC LYMPHADENOPATHY

LYMPHADENOPATHY SYNDROME see AIDS-RELATED COMPLEX

LYMPHANGIECTASIS

CHEMICALLY INDUCED

Penicillamine dermatopathy with lymphangiectases. A clinical, immunohistologic, and ultrastructural study [published erratum appears in Arch Dermatol 1989 May;125(5):646] Goldstein JB, et al. **Arch Dermatol** 1989 Jan;125(1):92–7

COMPLICATIONS

Conjunctival hemorrhagic lymphangiectasis. Chelsky MP, et al. **J Am Optom Assoc** 1988 Sep;59(9):676–8

CONGENITAL

Congenital lymphangiectasia with fetal cystic hygroma: report of two cases with coexistent Down's syndrome. Weingast GR, et al. **JCU** 1988 Nov–Dec;16(9):663–8

[Pericardial effusion due to pulmonary lymphangiectasis] Diógenes MS, et al. **Arq Bras Cardiol** 1988 Aug; 51(2):185–92 (Eng. Abstr.) (Por)

[Chylopericardium and lymphatic pneumopathy due to mediastino-pulmonary congenital lymphangiectasis. Report of 3 cases] Reis NB, et al. **Arq Bras Cardiol** 1988 Jun;50(6):407–12 (Eng. Abstr.) (Por)

[Congenital pulmonary lymphangiectasis secondary to obstruction of the pulmonary venous drainage] Sansa L, et al. **An Esp Pediatr** 1988 Jun;28(6):580–2 (Spa)

ETIOLOGY

[Syndrome of left heart hypoplasia, causing hydrops fetalis and congenital pulmonary lymphangiectasis] Herranz Jordán B, et al. **An Esp Pediatr** 1988 Jul;29(1):65–7 (Eng. Abstr.) (Spa)

PATHOLOGY

De novo circumscribed pulmonary lobar cystic lymphatic anomaly in a young boy. A possible sequela of bronchopulmonary dysplasia. Karmazin N, et al. **Chest** 1989 May;95(5):1162–3

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 31–1989. A three-month-old boy with bilateral interstitial lung disease. **N Engl J Med** 1989 Aug 3;321(5):309–16

RADIOGRAPHY

The computed tomographic appearances of lymphangiectasia in the pelvis. Fairlie NC, et al. **Clin Radiol** 1988 Sep; 39(5):560–1

VETERINARY

Acquired cutaneous lymphangiectasis in a dog. White SD, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1093–4

LYMPHANGIECTASIS, INTESTINAL see under PROTEIN-LOSING ENTEROPATHIES

LYMPHANGIOENDOTHELIOMA see LYMPHANGIOMA

LYMPHANGIOENDOTHELIOMA, MALIGNANT see LYMPHANGIOSARCOMA

LYMPHANGIOMA

Intra-abdominal lymphangioma. Roisman I, et al. **Br J Surg** 1989 May;76(5):485–9 (65 ref.)

Giant cystic hygroma of the posterior mediastinum. Curley SA, et al. **J Pediatr Surg** 1989 Apr;24(4):398–400

Lymphangioma circumscriptum of the vulva: case report and review of the literature. Abu-Hamad A, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):496–9 (18 ref.)

[Cystic lymphangioma of the liver. Presentation of a clinical case] Clerici D, et al. **Minerva Chir** 1989 Apr 15; 44(7):1139–41 (Eng. Abstr.) (Ita)

[Lymphangioma of the mediastinum—a case report] Abe Y, et al. **Kyobu Geka** 1988 Dec;41(13):1085–9 (19 ref.) (Eng. Abstr.) (Jpn)

[A case of mediastinal cystic lymphangioma—case reports and review of the literature in Japan] Date H, et al. **Kyobu Geka** 1989 Jun;42(6):469–73 (17 ref.) (Eng. Abstr.) (Jpn)

[Giant cystic lymphangioma of the abdominal cavity] Volobuev NN, et al. **Khirurgiia (Mosk)** 1989 May;(5):127–8 (Rus)

COMPLICATIONS

Posterior mediastinal lymphangioma presenting with thoracic inlet compression. Scholefield JH, et al. **Br J Hosp Med** 1989 Feb;41(2):183–4

Surgical management of parapharyngeal cystic hygroma causing sudden airway obstruction. Hamoir M, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):406–10

Lymphangioma and cystic hygroma. Correction of facial growth disharmony and obstructive sleep apnea. Jasper RD, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):152–4

Intestinal lymphangiomas: a rare cause of intestinal obstruction. Neidich GA, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):122–4

Achondrogenesis type II (Langer–Saldino) in association with jugular lymphatic obstruction sequence. Wenstrom KD, et al. **Prenat Diagn** 1989 Jul;9(7):527–32

Neck and thorax venous aneurysm: association with cystic hygroma. Joseph AE, et al. **Radiology** 1989 Jan;170(1 Pt 1):109–12

Obstructive sleep apnea induced by a parapharyngeal cystic hygroma in an infant. Kahn A, et al. **Sleep** 1985 Dec; 8(4):363–6

Reversible renal hypertension due to renal hygroma. Savin H, et al. **Urology** 1989 Apr;33(4):317–9

[A complication of adrenal cystic lymphangioma: hemorrhage (letter)] Berthet B, et al. **Presse Med** 1989 May 6;18(18):939 (Fre)

[Successful treatment of a cheilothorax in lymphangiomatosis of the ribs (Gorham–Stout syndrome)] Romero J, et al. **Schweiz Med Wochenschr** 1989 May 20;119(20):671–7 (Eng. Abstr.) (Ger)

[A case of lymphangioma of the transverse colon with intussusception] Kubo S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1686–9 (Jpn)

CONGENITAL

Congenital cystic hygroma of the neck diagnosed prenatally: outcome with normal and abnormal karyotype. Abramowicz JS, et al. **Prenat Diagn** 1989 May;9(5):321–7 (41 ref.)

[Congenital lymphangioma of the lung] Zimmermann H, et al. **Z Kinderchir** 1989 Apr;44(2):111–4 (Eng. Abstr.) (Ger)

DIAGNOSIS

Spontaneous resolution of a cystic neck mass in a fetus with normal karyotype. Distell BM, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):380–2

MR characteristics of subdural hematomas and hygromas at 1.5 T. Fobben ES, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):589–95

First-trimester and early second-trimester diagnosis of nuchal cystic hygroma by transvaginal sonography: diverse prognosis of the septated from the nonseptated lesion. Bronshtein M, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):78–82

Thoracic neuroblastoma presenting as a cystic hygroma. Ganick DJ, et al. **Arch Dis Child** 1988 Oct;63(10):1270–1

Prenatal diagnosis and management in fetuses with cystic hygromata colli. Gembruch U, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):241–55

Prenatal ultrasonic diagnosis of cystic hygroma associated with fetal hydrops—report of two cases. Meizner I, et al. **Isr J Med Sci** 1989 Jan;25(1):51–3

CT and MR imaging in cystic abdominal lymphangiomatosis. Cutillo DP, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):534–6

Regression of nuchal cystic hygroma in utero. Macken MB, et al. **J Ultrasound Med** 1989 Feb;8(2):101–3

Congenital lymphangiectasia with fetal cystic hygroma: report of two cases with coexistent Down's syndrome. Weingast GR, et al. **JCU** 1988 Nov–Dec;16(9):663–8

Antenatal detection of cystic hygroma. Cohen MM, et al. **Obstet Gynecol Surv** 1989 Jun;44(6):481–90 (65 ref.)

Congenital cystic hygroma of the neck diagnosed prenatally: outcome with normal and abnormal karyotype. Abramowicz JS, et al. **Prenat Diagn** 1989 May;9(5):321–7 (41 ref.)

Resolution of cystic hygroma [letter] Darby BG. **Prenat Diagn** 1989 Jun;9(6):447

Prenatal diagnosis of abdominal cystic hygroma. Kozlowski KJ, et al. **Prenat Diagn** 1988 Jul;8(6):405–9

Normal sonographic appearance of the fetal neck late in the first trimester: the pseudomembrane. Hertzberg BS, et al. **Radiology** 1989 May;171(2):427–9

Lymphangiomas in children: MR imaging. Siegel MJ, et al. **Radiology** 1989 Feb;170(2):467–70

[Ocular lymphangioma] Pan YJ, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):230–2 (Eng. Abstr.) (Chi)

[Pericardial hemolymphangioma. Apropos of a case] Nataf P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1137–40 (Eng. Abstr.) (Fre)

[Pelvic cystic lymphangioma. Apropos of a case in an adult] Azais O, et al. **J Radiol** 1989 Mar;70(3):209–12 (22 ref.) (Eng. Abstr.) (Fre)

[Splenic lymphangioma: a case report] Bagnolesi P, et al. **Radiol Med (Torino)** 1989 Apr;77(4):424–6 (Ita)

[Prenatal diagnosis of cystic hygroma] Heggelund B, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2733–4 (Eng. Abstr.) (Nor)

[Cystic lymphangioma of suprarenal gland] Sanromá Ortueta I, et al. **Arch Esp Urol** 1988 Sep;41(7):550–2 (Eng. Abstr.) (Spa)

ETIOLOGY

Acute and chronic pericholangiolitis in association with multifocal hepatic lymphangiomatosis. Sathyavagiswaran L, et al. **Hum Pathol** 1989 Jun;20(6):601–3

[Subacute intracranial subdural hygroma after lumbar puncture (letter)] Alari E, et al. **Presse Med** 1988 Sep 17; 17(31):1590 (Fre)

GENETICS

Exacerbation of familial renal lymphangiomatosis during pregnancy. Meredith WT, et al. **AJR** 1988 Nov; 151(5):965–6

PATHOLOGY

Endoscopic diagnosis of lymphangioma of the small intestine. Shigematsu A, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1289–93

Lymphangiolipoma of the mesentery. Radivoyevitch MA, et al. **Am Surg** 1989 Jul;55(7):435–7 (16 ref.)

Primary lymphangioma of the thyroid gland. Gardner DF, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1084–5

Lymphangioma of the large intestine. Report of a case. Kuramoto S, et al. **Dis Colon Rectum** 1988 Nov; 31(11):900–5 (30 ref.)

Bluish dome-shaped nodule of the lip. Miller CS, et al. **J Am Dent Assoc** 1989 Jun;118(6):745–7

Lymphangioendothelioma of the liver in a neonate. Peters ME, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):115–8

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 5–1089. A 27-year-old Greek woman with portal-vein thrombosis and an epigastric mass. **N Engl J Med** 1989 Feb 2;320(5):301–10

Cavernous lymphangioma of the vulva. Brown JV, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):877–9

[Clinico-pathological analysis of ocular lymphangioma] Zheng BH. **Chung Hua Yen Ko Tsa Chih** 1988 Jan; 24(1):21–3 (Eng. Abstr.) (Chi)

[A case of lymphangioma of penis] Takeyama M, et al. **Hinyokika Kiyo** 1989 Mar;35(3):523–5 (4 ref.) (Eng. Abstr.) (Jpn)

[A case of intrascrotal lymphangioma] Takeyama M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1258–60 (Eng. Abstr.) (Jpn)

[Changes in the neural elements of lymphangiomas in children of various ages] Kushch NL, et al. **Klin Khir** 1989; (6):32–4 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Spontaneous resolution of fetal cystic hygroma and hydrops in Turner syndrome. Mostello DJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):862–5

RADIOGRAPHY

Late-onset cystic hygromas: the role of CT. Woods D, et al. **Can Assoc Radiol J** 1989 Jun;40(3):159–61

Retroperitoneal lymphangioma. A case report. Wang HH, et al. **S Afr Med J** 1989 Jun 3;75(11):548–50

[Disseminated osseous lymphangiomatosis. Apropos of 6 case reports] Daoud S, et al. **Chir Pediatr** 1988;29(6):342–8 (Eng. Abstr.) (Fre)

[CT diagnosis of cystic hygroma] Stark P, et al. **Radiologe** 1989 Feb;29(2):82–4 (Eng. Abstr.) (Ger)

[A case of cystic lymphangioma with niveau formation] Soejima Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec;26(12):1313–7 (Eng. Abstr.) (Jpn)

[Two cases of retroperitoneal lymphangioma] Sohma M, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1147–50 (8 ref.) (Eng. Abstr.) (Jpn)

[Woman of fertile age with pleural effusion and an interstitial lung pattern] Gómez-León N, et al. **Rev Clin Esp** 1988 Jun;183(2):95–6 (Spa)

SURGERY

Synchronous cystic hygromas. Davis C Jr. **IMJ** 1988 Nov; 174(5):292–4

The use of YAG-tipped contact laser in removing orbital lymphangiomas [letter] Hornblass A. **Plast Reconstr Surg** 1989 Feb;83(2):397

[Right inguino-pelvic cystic lymphangioma (published erratum appears in Chir Pediatr 1988;29(5):294)] Hoeffel JC, et al. **Chir Pediatr** 1988;29(4):219–21 (Eng. Abstr.) (Fre)

[3 cases of splenic angiomatosis] Cortese F, et al. **Minerva Chir** 1988 Apr 15;43(7):633–7 (Eng. Abstr.) (Ita)

[A case of cystic lymphangioma of the retroperitoneum] Goi M, et al. **Minerva Chir** 1988 Jun 30;43(12):1087–8 (Eng. Abstr.) (Ita)

[Multiple intracerebral hemorrhages immediately after surgical excision of middle fossa arachnoid cysts and evacuation of chronic subdural hygroma. Case report] Mori H, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):142–5 (Eng. Abstr.) (Jpn)

THERAPY

Hemolymphangioma in a neonate—a therapeutic problem—case history. Beninson J, et al. **Angiology** 1988 Dec;39(12):1043–7

Conservative management of childhood orbital

lymphangioma. Wilson ME, et al. **Ophthalmology** 1989 Apr; 96(4):484–9

VETERINARY

Vascular malformations and angiomatous lesions in horses: a review of 10 cases. Platt H. **Equine Vet J** 1987 Nov; 19(6):500–4

Response to radiation therapy of recurrent lymphangioma in a dog. Turrel JM, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1432–4

LYMPHANGIOMYOMA see under LYMPHOPROLIFERATIVE DISORDERS

LYMPHANGIOSARCOMA

ETIOLOGY

[Post–mastectomy lymphangiosarcoma (Stewart–Treves syndrome). Report of a case and review of the literature] Quadros LG, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):238–40 (7 ref.) (Eng. Abstr.) **(Por)**

PATHOLOGY

Postmastectomy low–grade angiosarcoma. An unusual case clinically resembling a lymphangioma circumscriptum. Drachman D, et al. **Am J Dermatopathol** 1988 Jun; 10(3):247–51

[Stewart–Treves syndrome of the edematous arm following breast cancer operation] Gregl A, et al. **Z Lymphol** 1988 Dec;12(2):66–83 (186 ref.) (Eng. Abstr.) **(Ger)**

SECONDARY

[Solitary retroperitoneal metastasis of lymphangiosarcoma of the amputation stump] Krawzak HW, et al. **Zentralbl Chir** 1989;114(10):677–80 **(Ger)**

SURGERY

[A case of post–mastectomy lymphangiosarcoma] Coster B, et al. **Acta Chir Belg** 1988 Nov–Dec;88(6):381–3 (Eng. Abstr.) **(Dut)**

[Stewart–Treves syndrome and lymphangiosarcoma] Deutschmann W, et al. **Chirurg** 1988 Sep;59(9):605–9 (Eng. Abstr.) **(Ger)**

VETERINARY

Lymphangiosarcoma and haemangiosarcoma in a cat. Swayne DE, et al. **J Comp Pathol** 1989 Jan;100(1):91–6

LYMPHANGITIS

COMPLICATIONS

Elephantiasis nostras: an eight–year observation of progressive nonfilarial elephantiasis of the lower extremity. Sanders LJ, et al. **Cutis** 1988 Nov;42(5):406–11

Bilateral massive ovarian oedema—report of a case due to lymphangiitis carcinomatosa. Wong SY. **Virchows Arch [A]** 1989;414(4):355–8

ETIOLOGY

Gallium scan finding in a patient with suppurative lymphangitis secondary to sporotrichosis. Yip TC, et al. **Clin Nucl Med** 1989 Feb;14(2):144

Lymphocutaneous nocardiosis in Pennsylvania. Hessen MT, et al. **Pa Med** 1988 Nov;91(11):54, 56, 58

[Anatomo–clinical conference. Hôpital de la Pitié–Salpêtrière. Case no 3–1988. Focal pulmonary images and inflammatory syndrome 7 years after nephrectomy of cancer] Piette JC, et al. **Ann Med Interne (Paris)** 1988; 139(6):432–9 **(Fre)**

[Lymphedema of the lower limbs secondary to neoplastic lymphangitis caused by mucin–producing adenocarcinoma of the stomach. 2 case reports] Arcuri V, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2103–6 (Eng. Abstr.) **(Ita)**

HISTORY

Gabriel Andral (1797–1876) and the first reports of lymphangitis carcinomatosa. Doyle L. **J R Soc Med** 1989 Aug;82(8):491–3

PATHOLOGY

[Interstitial lung disease of unclear etiology (clinical conference)] Villiger B, et al. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1142–6 **(Ger)**

[Lymphangitis carcinomatosa] Tóth A, et al. **Z Hautkr** 1988 Dec 15;63(12):1037–41 (Eng. Abstr.) **(Ger)**

[A clinico–pathological study of the mode of evolution of lymphangitis carcinomatosa of the lung] Satoh T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1243–8 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Acute suppurative adenoiditis [letter] Weir MR, et al. **Am J Dis Child** 1989 Sep;143(9):998

SURGERY

[Lymphologic aspects of infection and the approach in lymphology. 2 new concepts in peripheral vascular surgery] Brunner U, et al. **Vasa** 1988;17(4):275–82 (21 ref.) (Eng. Abstr.) **(Ger)**

LYMPHAPHERESIS see LEUKAPHERESIS

LYMPHATIC DISEASES

see related
CHYLOTHORAX
LEUKEMIA, LYMPHOCYTIC
LYMPHOMA

CT diagnosis of splenic multifocal lesions and abdominal lymphoadenopathy secondary to sarcoidosis. Alvarez FJ, et al. **Comput Med Imaging Graph** 1988 Jul–Aug; 12(4):255–7

Sarcoidosis in children. Gupta SK, et al. **Indian Pediatr** 1988 Jan;25(1):88–92

Reactive lymphadenopathies. **Semin Diagn Pathol** 1988 Nov; 5(4):312–90

[A rare case of lymphatic cyst of the gastric wall] Del Cimmuto P, et al. **Minerva Chir** 1988 Sep 30;43(18):1509–13 (Eng. Abstr.) **(Ita)**

[Lymphadenopathies and diseases with manifestations of autoimmunity] Ghiringhelli P, et al. **Minerva Med** 1988 Sep;79(9):761–74 (169 ref.) (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Silicone lymphadenopathy in a long distance runner: complication of a silastic prosthesis. Rogers LA, et al. **Hum Pathol** 1988 Oct;19(10):1237–9

Silica granuloma of a lymph node. Ligthelm AJ, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):352–3

The topography of mercurial lymphadenopathy in brown Norway rats. Levine S, et al. **Lymphology** 1988 Sep; 21(3):161–8

[Carbamazepine causes skin eruption, fever and lymphadenopathy] Malanin G, et al. **Duodecim** 1989; 105(8):784–7 **(Fin)**

COMPLICATIONS

More on sinus histiocytosis with massive lymphadenopathy [letter] Pesce CM, et al. **Am J Clin Pathol** 1988 Nov; 90(5):639–40

Idiopathic entero–colic lymphocytic phlebitis. A cause of ischemic intestinal necrosis. Saraga EP, et al. **Am J Surg Pathol** 1989 Apr;13(4):303–8

Lymphadenopathy in an inner–city population consisting principally of intravenous drug abusers with suspected acquired immunodeficiency syndrome. Hewlett D Jr, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1275–9

Ocular involvement in sinus histiocytosis with massive lymphadenopathy. Karcioglu ZA, et al. **Br J Ophthalmol** 1988 Oct;72(10):793–5

Dermatomyositis and granulomatous myopathy associated with sarcoidosis. Lipton JH, et al. **Can J Neurol Sci** 1988 Nov;15(4):426–9

Spontaneous increase and decrease of thoracic lymphadenopathy and SACE in sarcoidosis. Lhote F, et al. **Eur Respir J** 1988 Oct;1(9):874–5

Abdominal cryptococcoma in AIDS: a case report. Scalfano FP Jr, et al. **J Comput Tomogr** 1988 Jul;12(3):237–9

Peripheral T–cell lymphoma with bilateral submandibular lymphadenopathy. Ozaki M. **J Oral Maxillofac Surg** 1989 Apr;47(4):417–21

Eosinophilic granulomatous lymphadenopathy: association with hyper–IgE and eosinophilia. Kaplinsky C, et al. **Pediatr Pathol** 1988;8(4):377–84

[Sinus histiocytosis with cutaneous lesions and thoracic herpes zoster] Delisle B, et al. **Ann Dermatol Venereol** 1988; 115(11):1205–7 **(Fre)**

[A case of obstructive pneumonitis caused by anthracotic lymphadenopathy] Fukushima K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1096–101 (Eng. Abstr.) **(Jpn)**

[A case of idiopathic plasmacytic lymphadenopathy with polyclonal hyperimmunoglobulinemia concurrent with severe anemia and hyperviscosity syndrome] Iseki T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1250–5 (Eng. Abstr.) **(Jpn)**

[A case of chylorrhea in the lumen of the large intestine] Loginov AS, et al. **Ter Arkh** 1988;60(7):126–7 **(Rus)**

[Rosai–Dorfman disease: an unusual cause of secondary ureterohydronephrosis] Isa Kroon WA, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):484–7 (Eng. Abstr.) **(Spa)**

[Pulmonary lymphangiomyomatosis. A case in a male] Cubells Riero J, et al. **An Esp Pediatr** 1988 Sep;29(3):227–30 (14 ref.) (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital pyelolymphatic fistula in a child with chyluria. Greig JD, et al. **Br J Urol** 1989 May;63(5):550–1

DIAGNOSIS

Sinus histiocytosis with massive lymphadenopathy. Salmon JF, et al. **Am J Ophthalmol** 1989 May 15;107(5):549–50

Amyloid tumour of the breast simulating carcinoma. Goonatillake HD, et al. **Aust N Z J Surg** 1988 Jul; 58(7):589–90

A study of lymph node imprints and its correlation with tissue section. Rahman AJ. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):81–6

The value of immunocytochemical staining of lymph node aspirates in diagnostic cytology. Oertel J, et al. **Br J Haematol** 1988 Nov;70(3):307–16

Clinical and laboratory findings at presentation in persistent generalized lymphadenopathy vs malignant lymphoma. Zagonel V, et al. **Cancer Detect Prev** 1988;12(1–6):225–9

The pre–AIDS syndromes. Asymptomatic carriers, thrombocytopenic purpura, persistent generalized lymphadenopathy, and AIDS–related complex. Abrams DI. **Infect Dis Clin North Am** 1988 Jun;2(2):343–51 (38 ref.)

Significance of specific immunoglobulin M in the chronological diagnosis of 38 cases of toxoplasmic lymphadenopathy. Del Bono V, et al. **J Clin Microbiol** 1989 Sep;27(9):2133–5

Sinus histiocytosis with massive lymphadenopathy and tracheobronchial lesions: CT and MR findings. Okada K, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1039–40

Echographic studies of superficial lymphadenopathies. Miyauchi S, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):263–7

Mucinous cystadenoma simulating renal transplant lymphocele. Kliewer MA, et al. **JCU** 1989 Feb; 17(2):119–22

Antibody testing and counseling of dental patients at risk for human immunodeficiency virus (HIV) infection and associated clinical findings. Murrah VA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):432–9

[Cervicofacial actinomycosis. Apropos of 2 atypical locations] Klotz G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):105–7 (Eng. Abstr.) **(Fre)**

[Alteration in general status and polyadenopathies in a 66–year–old man (clinical conference)] Longrée L, et al. **Rev Med Liege** 1988 Oct 1;43(19):633–9 **(Fre)**

[Sonographic findings in silicone–induced granulomas and lymphadenopathy following mammaplastic surgery] Herzog P, et al. **Dtsch Med Wochenschr** 1989 Jul 28; 114(30):1157–60 (Eng. Abstr.) **(Ger)**

[Ultrasound in internal medicine. The spleen and lymph nodes] Kremer H, et al. **Verh Dtsch Ges Inn Med** 1988; 94:576–81 **(Ger)**

[Analysis of mediastinal lymphadenopathy in sarcoidosis with transesophageal ultrasonic endoscopy; influences on cardiovascular system] Dambara T, et al. **Rinsho Hoshasen** 1989 Jan;34(1):137–46 (Eng. Abstr.) **(Jpn)**

[Tuberculin–cytochemical test in the differential diagnosis of silicosis and silicotuberculosis with intrathoracic adenopathy] Tambovtseva ID, et al. **Gig Tr Prof Zabol** 1989;(1):14–9 (Eng. Abstr.) **(Rus)**

[Modern criteria of sarcoidosis activity and approaches to glucocorticoid therapy] Shatalov NN, et al. **Ter Arkh** 1988; 60(10):125–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Effects of therapy with aminaftone on chronic venous and lymphatic stasis] De Anna D, et al. **Minerva Cardioangiol** 1989 May;37(5):251–4 (Eng. Abstr.) **(Ita)**

[Effectiveness of various schedules of drug therapy of patients with sarcoidosis of the respiratory organs] Ozerova LV, et al. **Probl Tuberk** 1989;(3):37–41 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Lymph nodes in South African children [letter] Wessels G, et al. **S Afr Med J** 1989 May 6;75(9):453

ETIOLOGY

Kawasaki disease and cervical adenopathy. April MM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):512–4

Acute perirenal lymphocele formation 8 years after renal transplantation. Thompson TJ, et al. **Aust N Z J Surg** 1989 Jul;59(7):583–5

Pathogenic significance of interleukin–6 (IL–6/BSF–2) in Castleman's disease. Yoshizaki K, et al. **Blood** 1989 Sep; 74(4):1360–7

Delayed lymphocoele following neck dissection. Chantarasak DN, et al. **Br J Plast Surg** 1989 May;42(3):339–40

Calcification of axillary lymph nodes following BCG vaccination. Burdeny DA, et al. **Can Assoc Radiol J** 1989 Apr;40(2):92–3

Leukemic lymphadenopathy: diagnosis by fine needle aspiration. Dunphy CH, et al. **Hematol Pathol** 1989; 3(1):35–44

Gianotti–Crosti syndrome associated with Epstein–Barr virus infection. Lowe L, et al. **J Am Acad Dermatol** 1989 Feb; 20(2 Pt 2):336–8 (15 ref.)

Lymphorrhea as postoperative complication of living donor nephrectomy: a case report. Fernandez A, et al. **J Urol** 1988 Dec;140(6):1514–5

Retroperitoneal lymphocele after abdominal aortic surgery. Garrett HE Jr, et al. **J Vasc Surg** 1989 Sep;10(3):245–53

Clinical and serological features of human herpesvirus–6 infection in three adults. Niederman JC, et al. **Lancet** 1988 Oct 8;2(8615):817–9

Massive lymphocele following pelvic lymphadenectomy for staging of prostatic cancer. Brawer MK, et al. **Lymphology** 1989 Mar;22(1):36–41

Lymph node siderosis in trypan blue treated rats. Dumont AE. **Lymphology** 1988 Dec;21(4):234–8

A significant illness that was produced by the white-tailed spider, Lampona cylindrata [letter; comment] Gray M. **Med J Aust** 1989 Jul 17;151(2):114–6. **Comment on:** Med J Aust 1989 Apr 3;150(7):401–3

Generalized lymphadenopathy in continuous ambulatory peritoneal dialysis patients associated with Staphylococcus epidermidis infection. Pollock CA, et al. **Nephron** 1989; 52(1):81–2

Fever, lymphadenopathy and shock in a 16-year-old girl. Moolenaar W, et al. **Neth J Med** 1988 Aug;33(1–2):37–40

Infectious mononucleosis: a cause of bilateral hilar lymphadenopathy. Friedland JS, et al. **Postgrad Med J** 1988 Oct;64(756):799–800

Coxsackie B3 virus: an unusual cause of unilateral mediastinal nodal enlargement. Gris P, et al. **Respiration** 1988; 53(4):246–50

Mediterranean spotted fever presenting as oculoglandular syndrome. Espejo E, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):642

Hansen's disease: a cause of lymphadenopathy in endemic areas. Satti MB, et al. **Trop Geogr Med** 1989 Jan;41(1):80–4

[Anatomo-clinical conference. Hôpital de la Pitié-Salpêtrière. Case n. 1—1988. Lymph nodes, spleen and hypoglycemia] Guillevin L, et al. **Ann Med Interne (Paris)** 1988;139(3):219–26 (Fre)

[Lymphocele and kidney transplantation] Moukarzel M, et al. **Ann Urol (Paris)** 1989;23(2):103–7 (Eng. Abstr.) (Fre)

[Cervicofacial hydatidosis. Apropos of 7 cases] Ennouri A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):169–71 (Eng. Abstr.) (Fre)

[The spectrum of lymphadenopathy in HIV-positive patients. Prospective analysis of 45 cases] Domínguez A, et al. **Rev Clin Esp** 1989 Feb;184(2):57–60 (Eng. Abstr.) (Spa)

GENETICS

Quantity of nuclear DNA in malignancies and benign lymphadenopathies associated with Epstein-Barr virus. Lehtinen T, et al. **J Clin Pathol** 1989 Jul;42(7):699–704

Histopathological characteristics of the kidney in recombinant inbred mice established from MRL/lpr x AKR crossing. Dissociation of severity of lupus nephritis from the degree of lymphadenopathy. Makino M, et al. **Virchows Arch [B]** 1988;56(1):59–65

IMMUNOLOGY

Impaired T-lymphocyte-dependent immune responses to microbial antigens in patients with HIV-1-associated persistent generalized lymphadenopathy. Ballet JJ, et al. **Aids** 1988 Aug;2(4):291–7

The in vitro influence of rIL2 on the B-cell dysfunction in patients with persistent generalized lymph node enlargement (PGL) or AIDS. Kekow J, et al. **Cancer Detect Prev** 1988;12(1–6):231–6

MICROBIOLOGY

Primary lymphocutaneous Nocardia brasiliensis infection: three case reports and a review of the literature. Schwartz JG, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):113–20 (26 ref.)

Incubation periods in six models of intraperitoneally injected scrapie depend mainly on the dynamics of agent replication within the nervous system and not the lymphoreticular system. Kimberlin RH, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2953–60

Mycobacterium malmoense infection presenting as a mediastinal mass in a child [letter] Griffiths D, et al. **J Infect** 1989 Jul;19(1):83–4

Mycobacterium avium-Mycobacterium intracellulare infection limited to the skin and lymph nodes in patients with AIDS. Barbaro DJ, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):625–8

[The results of bacteriologic research on the bronchoalveolar lavage fluid and blood plasma in patients with sarcoidosis] Khomenko AG, et al. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep; 37(3):229–36 (Eng. Abstr.) (Fre)

PARASITOLOGY

Lymphatic leishmaniasis in India. Nandy A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):411

PATHOLOGY

Extensive bone marrow necrosis in patients with cancer and tumor necrosis factor activity in plasma. Knupp C, et al. **Am J Hematol** 1988 Dec;29(4):215–21

Is parotid lymphadenopathy a new disease or part of AIDS? Shaha A, et al. **Am J Surg** 1988 Oct;156(4):297–300

Lymphadenopathy of Kimura's disease. Hui PK, et al. **Am J Surg Pathol** 1989 Mar;13(3):177–86

Occult tumor cells in lymph nodes [letter; comment] Kern WH. **Am J Surg Pathol** 1989 May;13(5):430–2. **Comment on:** Am J Surg Pathol 1988 Aug;12(8):612–8

Meningeal nodules with features of extranodal sinus histiocytosis with massive lymphadenopathy. Song SK, et al. **Am J Surg Pathol** 1989 May;13(5):406–12

Intranodal hemorrhagic spindle-cell tumor with "amianthoid" fibers. Report of six cases of a distinctive mesenchymal neoplasm of the inguinal region that stimulates Kaposi's sarcoma. Suster S, et al. **Am J Surg Pathol** 1989 May;13(5):347–57

Palisaded myofibroblastoma. A benign mesenchymal tumor of lymph node. Weiss SW, et al. **Am J Surg Pathol** 1989 May;13(5):341–6

Sinus histiocytosis with massive lymphadenopathy. Sneige N, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):241–2

Salivary gland lymph nodes. The site of lymphadenopathies and lymphomas associated with human immunodeficiency virus infection. Ioachim HL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1224–8

Cutaneous chylous reflux. Chern LC, et al. **Br J Dermatol** 1989 May;120(5):695–700

Lymphatic cyst of the penis. Brooks SG, et al. **Br J Urol** 1989 Mar;63(3):329–30

Fine needle aspiration biopsy in the management of children and young adults with peripheral lymphadenopathy. Kardos TF, et al. **Cancer** 1989 Feb 15;63(4):703–7

Fine-needle aspiration cytology of superficial lymph nodes. Cardillo MR. **Diagn Cytopathol** 1989;5(2):166–73

The diagnostic value of lymphnode biopsies in Benin-City, Nigeria. Adedeji MO, et al. **East Afr Med J** 1989 Feb; 66(2):127–33

Sinus histiocytosis with massive lymphadenopathy (Rosai-Dorfman disease). Nawroz IM, et al. **Histopathology** 1989 Jan;14(1):91–9 (28 ref.)

Immunohistology of the benign lymphoepithelial lesion in AIDS-related lymphadenopathy: a case report. Kornstein MJ, et al. **Hum Pathol** 1988 Nov;19(11):1359–61

Immunohistochemical characterization of the histiocytes in sinus histiocytosis with massive lymphadenopathy: analysis of an extranodal case. Lopez P, et al. **Hum Pathol** 1989 Jul;20(7):711–5

Unexplained lymphadenopathy in family practice. An evaluation of the probability of malignant causes and the effectiveness of physicians' workup. Fijten GH, et al. **J Fam Pract** 1988 Oct;27(4):373–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 44-1988. A 25-year-old man with multiple bone lesions, hilar lymphadenopathy, and a pericardial effusion. **N Engl J Med** 1988 Nov 3; 319(18):1209–16

Primary Kaposi's of an intraparotid lymph node in a non-immunocompromised patient. Josephson J, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):341–3

Pathology of AIDS in children. Joshi VV. **Pathol Annu** 1989; 24 Pt 1:355–81 (54 ref.)

Mediastinoscopy in the investigation of primary mediastinal lymphadenopathy. Pattison CW, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):177–9

Reactive lymphadenopathies. Burke JS. **Semin Diagn Pathol** 1988 Nov;5(4):312–6 (16 ref.)

Light- and electron-microscopic studies on multinucleated giant cells in sarcoid granuloma: new aspects of asteroid and Schaumann bodies. Kirkpatrick CJ, et al. **Ultrastruct Pathol** 1988 Nov–Dec;12(6):581–97

[Sinus histiocytosis and massive lymphadenopathy] Miettinen M. **Duodecim** 1988;104(19):1515–22 (Fin)

[Fine needle aspiration in otorhinolaryngologic pathology. Cases and results] Chiesa F, et al. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:39–46 (Ita)

[Ischemic stenosis of the ileum with reactive parietal and lymph-nodal angioendotheliomatous hyperplasia] Di Blasi A, et al. **Pathologica** 1989 Jan–Feb;81(1071):63–9 (Eng. Abstr.) (Ita)

[Cytophagic histiocytic panniculitis—a T cell disorder with proliferation of macrophages?] Iwasaki M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1235–47 (34 ref.) (Eng. Abstr.) (Jpn)

[Various characteristics of the structure of the cardiac lymphatic bed and the morphofunctional basis of its insufficiency] Gavrish AS. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):45–53 (Eng. Abstr.) (Rus)

[Functional and roentgeno-morphological characteristics of peripheral bronchi in sarcoidosis of the lungs and intrathoracic lymph nodes] Evfim'evskiĭ VP, et al. **Probl Tuberk** 1988;(12):33–6 (Eng. Abstr.) (Rus)

[Significance of lymph node histology in patients with human immunodeficiency virus infection] Flores JM, et al. **Rev Clin Esp** 1988 Sep;183(4):170–4 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Immunohistochemical, electron microscopic and in situ hybridization evidence for the involvement of lymphatics in the spread of HIV-1. Tenner-Rácz K, et al. **Aids** 1988 Aug;2(4):299–309

Retrosternal hemorrhage: an experimental model for study of lymphatic leakage. Levine S, et al. **Lymphology** 1988 Jun;21(2):105–9

RADIOGRAPHY

Computed tomography of hepatic oil embolism following lymphangiography. Lorigan JG, et al. **Clin Radiol** 1989 May;40(3):259–61

Computed tomography and magnetic resonance imaging of dilated lumbar lymphatic trunks. Williams MP, et al. **Clin Radiol** 1989 May;40(3):321–2

Effect of respiration on nasopharyngeal radiographs when assessing adenoidal enlargement. Britton PD. **J Laryngol Otol** 1989 Jan;103(1):71–3

The computed tomographic spectrum of thoracic sarcoidosis. Kuhlman JE, et al. **Radiographics** 1989 May;9(3):449–66

Lymphadenopathy in primary biliary cirrhosis: CT observations. Outwater E, et al. **Radiology** 1989 Jun; 171(3):731–3

[Indirect sublingual lymphography in the jaw and facial region and the neck] Saratschev E. **Radiol Diagn (Berl)** 1988;29(3):411–6 (Eng. Abstr.) (Ger)

[CT diagnosis of the postoperative mediastinal lymphocele] Gamroth A, et al. **ROFO** 1989 Mar;150(3):356–7 (Ger)

[Dynamics of interstitial silicosis in relation to the state of the intrathoracic lymphatic system] Korobova LA. **Probl Tuberk** 1989;(6):44–7 (Eng. Abstr.) (Rus)

[Lympho-renal fistula in lymphatic imaging] Jurgová T, et al. **Cesk Radiol** 1989 Mar;43(2):102–8 (Eng. Abstr.) (Slo)

RADIONUCLIDE IMAGING

Failure of indium-111 leukocyte scanning to detect nodal involvement with Mycobacterium avium-intracellulare infection in the acquired immunodeficiency syndrome. Bach MC. **Clin Nucl Med** 1989 May;14(5):367–8

Use of lymphoscintigraphy in chyluria. Pettit J, et al. **Urology** 1988 Oct;32(4):367–9

[Radionuclide diagnosis of disorders of the central lymph dynamics in thoracic duct pathology] Bykov SA, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):27–9 (Eng. Abstr.) (Rus)

SURGERY

Primary disorders of the lymphatic vessels—a unified concept. Levine C. **J Pediatr Surg** 1989 Mar;24(3):233–40

[Lymphocele following kidney transplantation] Mosimann F, et al. **Helv Chir Acta** 1989 Jun;56(1–2):107–10 (Eng. Abstr.) (Fre)

[Experiences with percutaneous drainage of abscesses and pseudocysts] Freitag J, et al. **Zentralbl Chir** 1989; 114(7):462–6 (Eng. Abstr.) (Ger)

THERAPY

Management of lymphocysts after radical gynecologic surgery. Mann WJ, et al. **Gynecol Oncol** 1989 May; 33(2):248–50

Lymphoceles: percutaneous treatment with povidone-iodine sclerosis. Gilliland JD, et al. **Radiology** 1989 Apr; 171(1):227–9

Povidone-iodine sclerosis of pelvic lymphoceles: a prospective study. Cohan RH, et al. **Urol Radiol** 1988; 10(4):203–6

[A case of a para bile duct lymphatic cyst with polycystic disease: a para bile duct lymphatic cyst treated with pure ethanol injection after ultrasonic drainage] Nishino M, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1446–9 (Jpn)

[Ambulatory care of patients with sarcoidosis] Kachurovskaia OS, et al. **Probl Tuberk** 1989;(5):62–5 (Rus)

VETERINARY

Arterial thromboembolic disease in a dog with blastomycosis localized in a hilar lymph node. Ware WA, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):847–9

Lymph node cytology. Mills JN. **Vet Clin North Am Small Anim Pract** 1989 Jul; 19(4):697–717 (32 ref.)

LYMPHATIC IRRADIATION

Comprehensive lymphatic irradiation for stage II–III non-Hodgkin's lymphoma. Mendenhall NP, et al. **Am J Clin Oncol** 1989 Jun;12(3):190–4

Advanced Hodgkin disease (clinical stages IIIB and IV): low relapse rate after brief chemotherapy followed by high-dose total lymphoid irradiation. Colonna P, et al. **Am J Hematol** 1989 Mar;30(3):121–7

Radiotherapy or surgery for subclinical cervical node metastases. Chow JM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):981–4

Lymphoid irradiation in intractable rheumatoid arthritis. Long-term followup of patients treated with 750 rads or 2,000 rads. Soden M, et al. **Arthritis Rheum** 1989 May; 32(5):523–30

Changes in B lymphocyte function in rheumatoid arthritis and lupus nephritis after total lymphoid irradiation. Solovera JJ, et al. **Arthritis Rheum** 1988 Dec; 31(12):1481–91

Total lymphoid irradiation preceding bone marrow transplantation for chronic myeloid leukaemia. James ND, et al. **Clin Radiol** 1989 Mar;40(2):195–8

Significance of para-aortic node irradiation in the treatment of cervical cancer. Horii T, et al. **Gynecol Oncol** 1988 Nov; 31(3):371–83

Results of whole abdominopelvic irradiation with nodal boost for patients with endometrial cancer at high risk of failure in the peritoneal cavity. A prospective clinical trial at the Mayo Clinic. Martinez A, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):431–46

Total lymphoid irradiation retards evolution of articular erosions in collagen induced arthritis. Lindsley HB, et al. **J Rheumatol** 1988;15(5):742–4

Treatment of murine lupus nephritis with cyclophosphamide

or total lymphoid irradiation. Waer M, et al. **Kidney Int** 1988 Nov;34(5):678–82

The effects of total lymphoid irradiation upon corneal vascularization in the rat following chemical cautery. Suvarnamani C, et al. **Radiat Res** 1989 Feb;117(2):259–72

Total lymphoid irradiation. Helfgott SM. **Rheum Dis Clin North Am** 1989 Aug;15(3):577–82 (29 ref.)

Renal cadaveric transplantation in diabetics using total lymphoid irradiation or cyclosporin A. A controlled randomized study. Leuven Collaborative Transplantation Group. Waer M, et al. **Transpl Int** 1988 Jul;1(2):64–8

The use of total lymphoid irradiation (TLI) for prevention of rejection of T-lymphocyte depleted bone marrow allografts in non-malignant hematological disorders. Slavin S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3053–4

Total lymphoid irradiation allows allogeneic bone marrow engraftment without GVHD in dogs but requires MHC matching. Stewart GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2962–3

A synergistic effect of total lymphoid irradiation, cyclosporine, and splenectomy in a hamster-to-rat hepatic xenograft model. Yamaguchi Y, et al. **Transplant Proc** 1989 Jun;21(3):3556

[Radiotherapy using the total lymphatic irradiation technic as the primary treatment of Hodgkin's disease] Rašovská O, et al. **Cesk Radiol** 1986 Oct;40(5):339–44 (Eng. Abstr.) **(Cze)**

[Is radiotherapy of the lymph node stages useful after the conservative treatment of the initial stage of breast carcinoma?] Gava A, et al. **Radiol Med (Torino)** 1989 May; 77(5):517–20 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Growth in children following irradiation for bone marrow transplantation. Bushhouse S, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):134–40

Gastro-duodenal morbidity of para-aortic and iliac lymph node irradiation using a single anterior 16 MV X-ray field. Pradhan DG, et al. **Clin Radiol** 1988 Jul;39(4):438–41

METHODS

[Modification of the method of irradiation of breast cancer using Gammatron S] Jarema A, et al. **Nowotwory** 1988 Apr-Jun;38(2):109–18 (Eng. Abstr.) **(Pol)**

[External respiratory function during the combined treatment of breast cancer with the 254Cf irradiation of the parasternal lymph nodes] Mashnin AD. **Med Radiol (Mosk)** 1989 Jul;34(7):58–61 (Eng. Abstr.) **(Rus)**

MORTALITY

Deaths after total lymphoid irradiation for multiple sclerosis [letter] Cook SD, et al. **Lancet** 1989 Jul 29;2(8657):277–8

LYMPHATIC METASTASIS

Treatment of biliary obstruction caused by metastatic cancer. Bear HD, et al. **Am J Surg** 1989 Apr;157(4):381–5; discussion 385

Factors affecting the incidence of lymph node metastases in small cancers of the breast. Reger V, et al. **Am J Surg** 1989 May;157(5):501–2

Neuroendocrine activity in metastatic breast carcinomas. Nesland JM, et al. **APMIS Suppl** 1988;2:204–14

The prognostic significance of lymph node metastases after preoperative chemotherapy for locally advanced breast cancer. McCready DR, et al. **Arch Surg** 1989 Jan; 124(1):21–5

Isolation and properties of cell lines from the metastasising rat mammary tumour SMT-2A. Rudland PS, et al. **Br J Cancer** 1989 Jun;59(6):854–64

Relation of tumor size, lymph node status, and survival in 24,740 breast cancer cases. Carter CL, et al. **Cancer** 1989 Jan 1;63(1):181–7

Association of low nm23 RNA levels in human primary infiltrating ductal breast carcinomas with lymph node involvement and other histopathological indicators of high metastatic potential. Bevilacqua G, et al. **Cancer Res** 1989 Sep 15;49(18):5185–90

Relationship of spontaneous regional lymph node metastases to dose of local irradiation of primary B16 melanomas. Nathanson SD, et al. **Cancer Res** 1989 Aug 15; 49(16):4412–6

Immunolymphoscintigraphy for the detection of lymph node metastases from breast cancer. Tjandra JJ, et al. **Cancer Res** 1989 Mar 15;49(6):1600–8

Transformed NIH 3T3 cells expressing human melanoma N-ras oncogene metastasize to lymph node in nude mice. Jouanneau J, et al. **Clin Exp Metastasis** 1989 Jul-Aug; 7(4):391–403

New, simple model of mesenteric lymph node metastases in the rat. Nagel JD, et al. **Clin Exp Metastasis** 1989 Jul-Aug; 7(4):453–9

Ras oncogene and the acquisition of metastasizing properties by rectal adenocarcinoma. Michelassi F, et al. **Dis Colon Rectum** 1989 Aug;32(8):665–8

Epidermal growth factor receptor in human breast cancer: correlation with steroid hormone receptors and axillary lymph node involvement [published erratum appears in Eur J Cancer Clin Oncol 1989 Mar;25(3):577] Battaglia F, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1685–90

Breast cancer: risk of axillary recurrence in node-negative patients following partial dissection of the axilla. Graversen HP, et al. **Eur J Surg Oncol** 1988 Oct;14(5):407–12

The importance of parametrial lymph nodes in the treatment of cervical cancer. Girardi F, et al. **Gynecol Oncol** 1989 Aug;34(2):206–11

Significance of lymphoplasmocytic infiltration around tumor cell in the prediction of regional lymph node metastases in patients with invasive squamous cell carcinoma of the vulva: a clinicopathologic study. Husseinzadeh N, et al. **Gynecol Oncol** 1989 Aug;34(2):200–5

Carcinoma of the ovary presenting as obstructive jaundice. Rosenblatt M, et al. **Gynecol Oncol** 1989 Mar;32(3):385–9

Metastatic papillary carcinoma of the thyroid: the significance of extranodal extension. Spires JR, et al. **Head Neck** 1989 May-Jun;11(3):242–6

Metastatic melanoma of the parotid lymph nodes. Ord RA. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):165–7

Does node location affect the incidence of distant metastases in head and neck squamous cell carcinoma? Ellis ER, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):293–7

Unexplained lymphadenopathy in family practice. An evaluation of the probability of malignant causes and the effectiveness of physicians' workup. Fijten GH, et al. **J Fam Pract** 1988 Oct;27(4):373–6

Presence of PAF-acether in human breast carcinoma: relation to axillary lymph node metastasis. Pitton C, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1298–302

Clear cell odontogenic carcinoma: report of three cases with pulmonary and lymph node metastases. Bang G, et al. **J Oral Pathol Med** 1989 Feb;18(2):113–8

Testicular malignancy associated with massive inguinal adenopathy and life threatening hemorrhage. Lichtman SM, et al. **N Y State J Med** 1989 Aug;89(8):482–3

Immunoblotting for breast carcinoma in infiltrated lymph nodes. Hakim AA, et al. **Naturwissenschaften** 1988 Jul; 75(7):361–2

Evaluation of histopathologic parameters in predicting cervical lymph node metastasis of oral and oropharyngeal carcinomas. Shingaki S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):683–8

Osteosarcoma—presumed lymph node metastases in two cases. English R, et al. **Skeletal Radiol** 1989;18(4):289–93

Peroperative diagnosis and treatment of metastases to the regional lymph nodes in papillary carcinoma of the thyroid gland. Hamming JF, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):107–14 (52 ref.)

[Lymph node failure in epithelioma of the glottic floor treated by partial laryngeal surgery. Apropos of 432 patients] Laccourreye O, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):330–7 (Eng. Abstr.) **(Fre)**

[Evaluation of the treatment of thoracic esophageal carcinoma by the pattern of recurrence] Kato H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1468–70 (Eng. Abstr.) **(Jpn)**

[Transitional infiltrating carcinoma of the bladder significant in its spread to regional lymph nodes] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 May;42(4):345–52 (Eng. Abstr.) **(Spa)**

[Cervical metastases as the presenting form of a hepatocarcinoma (letter)] Domingo C, et al. **Rev Clin Esp** 1988 May;182(9):507–8 **(Spa)**

DIAGNOSIS

Preoperative assessment of mesorectal lymph node involvement in rectal cancer. Beynon J, et al. **Br J Surg** 1989 Mar;76(3):276–9

The value of bronchial washings and bronchoalveolar lavage in the diagnosis of lymphangitic carcinomatosis. Levy H, et al. **Chest** 1988 Nov;94(5):1028–30

Can immunohistology improve detection of lymph-node metastases in large-bowel cancer? Makin CA, et al. **Dis Colon Rectum** 1989 Feb;32(2):99–102

Intra-operative diagnosis of lymph node metastases in gynaecological practice using imprint cytology. Bhabra K, et al. **Eur J Gynaecol Oncol** 1989;10(2):117–24

The clinical value of lymphography in cervical cancer, FIGO-stage Ib-IIa. Swart E, et al. **Eur J Gynaecol Oncol** 1989;10(2):85–90

Benign axillary epithelial lymph node inclusions—a histological pitfall. Holdsworth PJ, et al. **Histopathology** 1988 Aug;13(2):226–8

Real-time ultrasound, axillary mammography, and clinical examination in the detection of axillary lymph node metastases in breast cancer patients. Pamilo M, et al. **J Ultrasound Med** 1989 Mar;8(3):115–20

Fluorescence of metastasized lymph nodes in esophageal cancer following the administration of intravenous eosin yellow using a laser beam. Takase Y, et al. **Jpn J Surg** 1988 Jul;18(4):415–8

Magnetic resonance imaging of discrete and conglomerate retroperitoneal lymph node masses. Lawson TL, et al. **Radiographics** 1985 Nov;5(6):971–84

Experimental lymph node metastases: enhanced detection with MR lymphography. Weissleder R, et al. **Radiology** 1989 Jun;171(3):835–9

Axillary metastasis in breast cancer: when, how, and why? Hartveit F. **Semin Surg Oncol** 1989;5(2):126–36 (55 ref.)

Modern thoughts on lymph nodes in breast cancer. Sacre R. **Semin Surg Oncol** 1989;5(2):118–25 (53 ref.)

[Cytological examination of lymph node puncture biopsy collected after prior lymphography] Stárek J, et al. **Cas Lek Cesk** 1988 Aug 5;127(32):1014–8 (Eng. Abstr.) **(Cze)**

[Diagnosis of pelvic lymph node involvement in carcinoma of the prostate] Babjuk M, et al. **Rozhl Chir** 1989 Mar; 68(3):196–201 (Eng. Abstr.) **(Cze)**

[Diseases of the lymphatic system of the head and neck region. A comparative study of MRI and CT] Schedel H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):158–67 (Eng. Abstr.) **(Ger)**

["Visible" is not necessarily "pathologic". New criteria for lymph nodes—ultrasonic diagnosis is even more precise (interview)] Bönhof JA. **Fortschr Med** 1989 Aug 10; 107(23):25–6 **(Ger)**

[Palpation and sonography of lymph node metastasis of the neck] Leicher-Düber A, et al. **Roentgenblatter** 1989 May; 42(5):195–8 (Eng. Abstr.) **(Ger)**

[Lymph node metastases in the thoraco-cervical transitional region in thoracic esophageal cancer—with ultrasonic detection and a comment on the guide lines] Yoshinaka H, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):496–503 (Eng. Abstr.) **(Jpn)**

[Comparison of ultrasound and computed tomography (CT) for the diagnosis of paraaortic lymphnode metastasis in patients with gynecologic malignancies] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):55–60 (Eng. Abstr.) **(Jpn)**

[Left supraclavicular adenopathy as a presenting feature of occult prostatic adenocarcinoma (letter)] González Serrano M, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):439 **(Spa)**

DRUG THERAPY

Peer review and the NCI's clinical alert on node-negative breast cancer [letter] Feinberg BA. **JAMA** 1989 Feb 3; 261(5):695–6

[Case report of a complete regression of para-aortic lymph node metastasis from bladder cancer by oral administration of UFT] Nakano E, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):415–7 (Eng. Abstr.) **(Jpn)**

[Chemotherapeutic effect on metastatic tumors] Takahashi H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1255–9 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Scalene lymph node biopsy in the preoperative evaluation of patients with recurrent cervical cancer. Manetta A, et al. **Gynecol Oncol** 1989 Jun;33(3):332–4

METABOLISM

Androgens, adrenal androgen precursors, and their metabolism in untreated primary tumors and lymph node metastases of human prostatic cancer. Klein H, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S30–6

PATHOLOGY

Lung and cervical lymph-node metastasis after cortisone enhancement in hamster cheek-pouch carcinogenesis. Kage T, et al. **Arch Oral Biol** 1988;33(6):459–61

Pathologic quiz case 2. Nasopharyngeal carcinoma with cervical nodal metastasis. Nuss DW, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):998, 1001

DNA index and cell cycle analysis of primary breast cancer and synchronous axillary lymph node metastases. Feichter GE, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):17–22

Identification and importance of lymphocyte subpopulations in the regional lymph nodes of breast cancer patients. Khuri N, et al. **Can J Surg** 1989 Jan;32(1):23–6

Patterns of the first lymph node metastases in patients with cutaneous malignant melanoma of axial localization. Lock-Andersen J, et al. **Cancer** 1988 Nov 1;62(9):2073–7

An index for estimating the probability of lymph node metastasis in rectal cancers. Lymph node metastasis and the histopathology of actively invasive regions of cancer. Morodomi T, et al. **Cancer** 1989 Feb 1;63(3):539–43

Tumor cell adhesion to frozen lymph node sections—an in vitro correlate of lymphatic metastasis. Brodt P. **Clin Exp Metastasis** 1989 May-Jun;7(3):343–52

The relationship between lymphogenous and hematogenous metastasis in rats bearing the MT-100-TC mammary carcinoma. Ward PM, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):253–64

The prognostic role of progesterone receptor status and age in relation to axillary node status in breast cancer patients. Collett K, et al. **Eur J Cancer Clin Oncol** 1989 Jun; 25(6):959–64

Fine needle aspiration cytology in superficial lymph nodes: an analysis of 266 cases. Martelli G, et al. **Eur J Surg Oncol** 1989 Feb;15(1):13–6

Comparison of the detection of breast carcinoma metastases by routine histological diagnosis and by immunohistochemical staining. Berry N, et al. **Eur Surg Res** 1988;20(4):225–32

Mandibular ameloblastoma with metastasis to the lungs and lymph nodes: a case report and review of the literature. Ueda M, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):623–8 (44 ref.)

Morphological and functional variations in the transplantable lymph node metastasis of a human tongue carcinoma. Arnold W, et al. **Strahlenther Onkol** 1989 Jul;165(7):490–1

Intraprostatic tumor location and pelvic lymph node

metastatic pattern in early prostate cancer. Nseyo UO, et al. **Urology** 1989 Mar;33(3):171–4

[Supraclavicular lymph node metastasis from carcinoma of the uterine cervix after radiotherapy—analysis of 219 patients] Yao ZH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):230–2 (Eng. Abstr.) (Chi)

[Direct mediastinal lymphatic drainage of primary pulmonary carcinomas. Anatomical and surgical study] Riquet M, et al. **Ann Chir** 1988;42(8):574–85 (37 ref.) (Eng. Abstr.) (Fre)

[Interstitial lung disease of unclear etiology (clinical conference)] Villiger B, et al. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1142–6 (Ger)

[Cytodiagnosis of the lymph nodes] Fontana S. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:19–26 (8 ref.) (Ita)

[Anatomo-clinical considerations on lymphatic metastasis of cancer of the stomach] Vitale M, et al. **Minerva Chir** 1988 Jun 30;43(12):1049–54 (48 ref.) (Eng. Abstr.) (Ita)

[An immunohistological study of metastatic adenocarcinoma of the lymph node: is it useful in diagnosing a primary tumor?] Hamaya K, et al. **Gan No Rinsho** 1988 Nov; 34(14):1956–60 (Eng. Abstr.) (Jpn)

[The pathogenesis of perineural tumor invasion—a computer reconstruction study on its relation with a lymphatic spread in human and experimental carcinomas of the bile duct] Suzuki M, et al. **Gan No Rinsho** 1988 Dec;34(15):2080–90 (Eng. Abstr.) (Jpn)

[Immunologic significance for regional lymph node histology in uterine cervical cancer] Kinugasa M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):7–15 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

Radiotherapy or surgery for subclinical cervical node metastases. Chow JM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):981–4

Significance of para-aortic node irradiation in the treatment of cervical cancer. Horii T, et al. **Gynecol Oncol** 1988 Nov; 31(3):371–83

The role of lymph node cells in the inhibition of metastasis by subcutaneous injection of Lactobacillus casei in mice. Matsuzaki T, et al. **Med Microbiol Immunol (Berl)** 1988; 177(5):245–53

[Improved treatment of thoracic esophageal cancer based on a retrospective study of recurrence following resection] Fujita H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1471–4 (Eng. Abstr.) (Jpn)

[Problems in therapy of thoracic esophageal cancer in view of recurrence in the lymph nodes] Onoda S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1465–7 (Eng. Abstr.) (Jpn)

[Lymph node metastasis of early gastric cancer and lymph node dissection] Yoshikawa T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1506–8 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Computed tomography and conventional radiography in intrathoracic metastases from non-seminomatous testicular tumor. Lien HH, et al. **Acta Radiol** 1988 Sep–Oct; 29(5):547–9

Contrast enhancement of pathologic lymph nodes demonstrated by computed tomography. Magnusson A, et al. **Acta Radiol** 1989 May–Jun;30(3):307–10

Calcifications in metastatic breast carcinoma in axillary lymph nodes. Helvie MA, et al. **AJR** 1988 Nov; 151(5):921–2

Computed tomography scanning and post-lymphangiogram radiography in the follow-up of patients with metastatic testicular cancer. Williams MP, et al. **Clin Radiol** 1989 Jan; 40(1):47–50

Preoperative CT study of lymph nodes in cervical cancer—its correlation with histological findings. Matsukuma K, et al. **Gynecol Oncol** 1989 May;33(2):168–71

Biliary carcinoma: CT evaluation of extrahepatic spread. Engels JT, et al. **Radiology** 1989 Jul;172(1):35–40

[Evaluation of the status of the regional lymph nodes in patients with bronchial carcinoma based on the diameter of the lymph nodes as measured in the computer tomogram] Schmidt M, et al. **Radiol Diagn (Berl)** 1988;29(6):827–33 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

The detection of axillary lymph node metastases from breast cancer by radiolabelled monoclonal antibodies: a prospective study. Tjandra JJ, et al. **Br J Cancer** 1989 Feb; 59(2):296–302

[Progress in evaluating lymphatic spread in cancer of rectum: endoscopic rectal lymphoscintigraphy] Arnaud JP, et al. **J Chir (Paris)** 1989 Mar;126(3):179–82 (Eng. Abstr.) (Fre)

[Role of lymphoscintigraphy in the postoperative study of the patient operated on for cancer of the breast] Pasta V, et al. **Ann Ital Chir** 1987;59(1–6):343–50 (Ita)

RADIOTHERAPY

The case in developing countries for routine postoperative radiotherapy after mastectomy in patients with histologically positive axillary nodes. Sankaranarayanan R, et al. **Am J Clin Oncol** 1989 Feb;12(1):78–80

[Radiation therapy of hypopharyngeal carcinoma with special reference to nodal control] Teshima T, et al. **Rinsho Hoshasen** 1988 Jun;33(6):651–6 (Eng. Abstr.) (Jpn)

SURGERY

Strategy for lymphadenectomy of gastric cancer. Boku T, et al. **Surgery** 1989 May;105(5):585–92

Lymph node involvement as the only prognostic factor in curative resected gastric carcinoma: a multivariate analysis. Msika S, et al. **World J Surg** 1989 Jan–Feb;13(1):118–23; discussion 123

[Surgical treatment of recurrent breast carcinoma in the axilla] Roukema JA, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2060–2 (Eng. Abstr.) (Dut)

[Postoperative lymph node scintigraphy in patients with malignant melanoma] Török L, et al. **Orv Hetil** 1989 Jan 29;130(5):227–30 (Eng. Abstr.) (Hun)

[Systematic hilar and mediastinal lymphadenectomy in pulmonary exeresis in cancer cases] Pellegrini GF, et al. **Minerva Chir** 1989 Feb 15;44(3):385–6 (Ita)

THERAPY

[Effects of combined therapy with irradiation, cisplatin and vindesine in lymph node recurrence of esophageal cancer] Okuyama K, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3173–7 (Eng. Abstr.) (Jpn)

LYMPHATIC RADIATION THERAPY see LYMPHATIC IRRADIATION

LYMPHATIC SYSTEM

[Direct mediastinal lymphatic drainage of primary pulmonary carcinomas. Anatomical and surgical study] Riquet M, et al. **Ann Chir** 1988;42(8):574–85 (37 ref.) (Eng. Abstr.) (Fre)

[Effects of vagotomy on the lymphatic system of the small intestine] Dzhumabaev SU, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):42–5 (Eng. Abstr.) (Rus)

[Lymphotropic antibacterial therapy and the stimulation of lymphatic drainage in the combined treatment of peritonitis in children] Sultanbaev TZh, et al. **Klin Khir** 1988;(6):43–5 (Eng. Abstr.) (Rus)

ANALYSIS

Substance P and gastrin releasing peptide in bovine mesenteric lymphatic vessels: chemical characterization and action. Foy WL, et al. **Peptides** 1989 May–Jun; 10(3):533–7

Immunohistochemical differentiation between lymphangiographically verified lymphatic vessels and blood vessels. Hultberg BM, et al. **Virchows Arch [A]** 1989; 414(3):209–15

ANATOMY & HISTOLOGY

Microscopic and ultrastructural study of the lymphatic system in the human parotid gland. Marchetti C, et al. **Acta Anat (Basel)** 1989;134(2):106–12

Drainage of the prelymphatics of the brain via the adventitia of the vertebral artery. Wang HJ, et al. **Acta Anat (Basel)** 1989;134(1):67–71

Lymphatic anatomy: functional nodal basins. Eberbach MA, et al. **Ann Plast Surg** 1989 Jan;22(1):25–31

The distribution and structure of the lymphatic system in dog atrioventricular valves. Noguchi T, et al. **Arch Histol Cytol** 1988 Oct;51(4):361–70

A search for lymphatic drainage of the monkey orbit. McGetrick JJ, et al. **Arch Ophthalmol** 1989 Feb; 107(2):255–60

A contribution to knowledge of lymphatic vessels morphology in the ovary of the cat. Ricciardi MP, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):381–4

The renal lymphatic system: a brief review. O'Morchoe CC, et al. **Contrib Nephrol** 1988;68:230–7 (14 ref.)

Structure and distribution of lymphatic capillaries and fenestrated blood capillaries in the conduction system of the rabbit heart. Shimada T, et al. **Heart Vessels** 1988; 4(3):123–7

Light microscopy of the lymphatics of the human atrial wall and lymphatic drainage of supraventricular pacemakers. Eliášková M, et al. **Int Angiol** 1989 Jan–Mar;8(1):1–6

An investigation of the topography of the lymphatic system of the grey kangaroo (Macropus giganteus). 1. The superficial lymphatic system. Hopwood PR. **J Anat** 1988 Apr;157:181–95

The lymphatic drainage of the epididymis and of the ductus deferens of the rat, with reference to the immune response to vasectomy. McDonald SW, et al. **J Anat** 1988 Jun; 158:57–64

Structure and function of lymphatics. Ryan TJ. **J Invest Dermatol** 1989 Aug;93(2 Suppl):18S–24S (60 ref.)

Direct lymphatic drainage of lung segments to the mediastinal nodes. An anatomic study on 260 adults. Riquet M, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):623–32

Topography and ultrastructure of kidney lymphatics in some hibernating bats. Azzali G, et al. **Lymphology** 1988 Dec; 21(4):212–23

The lymphatic drainage of the pericardial space in the dog. Miller AJ, et al. **Lymphology** 1988 Dec;21(4):227–33

Abdominal nodal connexions of the lymphatics of the lung (18.03.1988). Riquet M, et al. **Surg Radiol Anat** 1988; 10(3):251–2

[Anatomical study of lymph vessels accompanying the cephalic vein] Ding ZH, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):48–9, 62 (Eng. Abstr.) (Chi)

[The lymphatic system and lymph drainage of the testis of the Peking drake (Anas platyrhynchos, L.)] Kremer A, et al. **Anat Histol Embryol** 1988 Sep;17(3):246–57 (Eng. Abstr.) (Ger)

[Examining the initial lymph vessels of the guinea pig ear using an extension technic] Lubach D, et al. **Vasa Suppl** 1988;23:37–40 (Ger)

[Morphology and function of the human spleen. Enzyme histochemical and electron microscopy studies of the splenic lymphatic vessels, nerves and connective tissue structures] Heusermann U. **Veroff Pathol** 1988;129:1–165 (280 ref.) (Eng. Abstr.) (Ger)

[New knowledge of the structural principle of lymph formation] Castenholz A, et al. **Z Lymphol** 1989 Jul; 13(1):23–31 (25 ref.) (Eng. Abstr.) (Ger)

[Cyclic changes in lymph vessels in the pig uterus. Studies of the endometrium] Fabian G. **Z Lymphol** 1988 Jul; 12(1):36–9 (Eng. Abstr.) (Ger)

[Morphostructural features of the pleural lymphatic circulation in the pig] Paino G, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):289–94 (Eng. Abstr.) (Ita)

[Laryngeal lymphatic vessels of rats] Nakagawa M, et al. **Kaibogaku Zasshi** 1988 Dec;63(6):522–30 (Eng. Abstr.) (Jpn)

[Experimental and clinical study on the lymphatic pathway draining from the distal esophagus and gastric cardia] Natsugoe S. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):364–76 (Eng. Abstr.) (Jpn)

[Applied aspects of anatomy of the lumbar lymph nodes and their vessels] Borziak EI. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):48–57 (Eng. Abstr.) (Rus)

[The anlage of the duodenal lymphatic bed: morphogenetic prerequisites, structure and importance] Petrenko VM. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):56–61 (Eng. Abstr.) (Rus)

[Individual and age-related differences in the anatomy of the main deferent lymphatic vessels of the human heart and their applied significance] Tukachev SV. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):20–6 (Eng. Abstr.) (Rus)

[Role of the lymphatic vessels in the spread of infections of the male genital tract] Vagnola J, et al. **Arch Esp Urol** 1988 May;41(4):265–7 (Eng. Abstr.) (Spa)

BLOOD SUPPLY

[The vasa vasorum of peripheral lymph vessels in the human] Schäfer K. **Z Lymphol** 1989 Jul;13(1):37–8 (Eng. Abstr.) (Ger)

CYTOLOGY

Decrease by chronic energy intake restriction of cellular proliferation in the intestinal epithelium and lymphoid organs in autoimmunity-prone mice. Ogura M, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5918–22

[Differentiation pathways of normal and malignant cells of the lymphatic system] Stein H, et al. **Verh Dtsch Ges Pathol** 1988;72:57–85 (82 ref.) (Eng. Abstr.) (Ger)

DRUG EFFECTS

The role of alpha- and beta-adrenoceptors in the response to noradrenaline of lymphatic vessels isolated from the bovine mesentery. Mahe L, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):31–9

Studies on intestinal lymphatic absorption of drugs. II. Glyceride prodrugs for improving lymphatic absorption of naproxen and nicotinic acid. Sugihara J, et al. **J Pharmacobiodyn** 1988 Aug;11(8):555–62

Isoproterenol inhibits the increase in microvascular membrane permeability produced by bradykinin. Mullins RJ, et al. **J Trauma** 1989 Aug;29(8):1053–63; discussion 1063–4

Effect of halothane anesthesia on mesenteric intralymphatic pressure in the rat. Takeshita T, et al. **Lymphology** 1989 Jun;22(2):97–9

Halothane-induced changes in contractions of mesenteric lymphatics of the rat. Takeshita T, et al. **Lymphology** 1988 Jun;21(2):128–30

The effect of anesthetics on lymphatic contractility. McHale NG, et al. **Microvasc Res** 1989 Jan;37(1):70–6

Dual effects of histamine on spontaneous activity in isolated bovine mesenteric lymphatics. Watanabe N, et al. **Microvasc Res** 1988 Nov;36(3):239–49

Modulation of fluid pumping in isolated bovine mesenteric lymphatics by a thromboxane/endoperoxide analogue. Elias RM, et al. **Prostaglandins** 1988 Jul;36(1):97–106

[Pharmacologic agents that stimulate the drainage function of the lymphatic system] Borodin IuI, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):106–10 (41 ref.) (Eng. Abstr.) (Rus)

[Reactive characteristics of the peripheral lymphatic and

blood vessels under the influence of histamine] Toporova SG. **Fiziol Zh SSSR** 1988 Aug;74(8):1163–70 **(Rus)**

[Endolymphatic antegrade infusion of drugs in the treatment of suppurative–inflammatory diseases] Sinenchenko GI. **Vestn Khir** 1988 Oct;141(10):143–5 (32 ref.) **(Rus)**

EMBRYOLOGY

Thoracic duct lymph flow and its measurement in chronically catheterized sheep fetus. Brace RA. **Am J Physiol** 1989 Jan;256(1 Pt 2):H16–20

Traffic and proliferative responses of recirculating lymphocytes in fetal calves. Hein WR, et al. **Immunology** 1988 Aug;64(4):621–6

ENZYMOLOGY

Cerium–induced light–microscopic demonstration of 5'–nucleotidase activity in the lymphatic capillaries of the proximal oesophagus of the rat. Werner JA, et al. **Acta Histochem (Jena)** 1989;85(1):15–21

Enzyme–histochemical visualization of lymphatic capillaries in the mouse tongue: light and electron microscopic study. Kato S, et al. **Okajimas Folia Anat Jpn** 1989 Mar; 65(6):391–403

GROWTH & DEVELOPMENT

Monoclonal antibodies specific to native murine T–cell receptor gamma delta: analysis of gamma delta T cells during thymic ontogeny and in peripheral lymphoid organs. Itohara S, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5094–8

[The mechanism of lymphodynamics in orthostatic dogs during postnatal ontogenesis] Bulekbaeva LE, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):66–71 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Lymphocyte homing. Kieran MW, et al. **Res Immunol** 1989 May;140(4):399–450 (266 ref.)

INJURIES

Study of venous and lymphatic components in the production of edema following femoropopliteal by–pass. A comparative scintigraphy and radiologic study. Herreros J, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct; 29(5):540–6

INNERVATION

Release of [3H]–noradrenaline from the sympathetic nerves to bovine mesenteric lymphatic vessels and its modification by alpha–agonists and antagonists. Allen JM, et al. **Br J Pharmacol** 1988 Jul;94(3):823–33

[Lymph mobilization] Froneberg W, et al. **Z Lymphol** 1989 Jul;13(1):39–41 (25 ref.) (Eng. Abstr.) **(Ger)**

METABOLISM

Albumin uptake by renal lymphatics with and without obstruction of the renal vein. Threefoot SA, et al. **Am J Cardiol** 1989 Aug 2;64(6):51C–56C

Intestinal apolipoprotein B–48 synthesis and lymphatic cholesterol transport are lower in swine fed high fat, high cholesterol diet with soy protein than with casein. Ho HT, et al. **Atherosclerosis** 1989 May;77(1):15–23

Beta–adrenoceptor–mediated facilitation of [3H]–noradrenaline release from the intramural nerves of bovine mesenteric lymphatic vessels. Allen JM, et al. **Br J Pharmacol** 1989 Jan;96(1):45–50

Enteric solid dispersion of ciclosporin A (CiA) having potential to deliver CiA into lymphatics. Takada K, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):471–4

Lymphatic and portal absorption of vitamin E in aging rats. Hollander D, et al. **Dig Dis Sci** 1989 May;34(5):768–72

Neurotransmitters and lymphatic–vascular transfer of prostaglandin F2 alpha stimulate ovarian oxytocin output in sheep. Heap RB, et al. **J Endocrinol** 1989 Jul; 122(1):147–59

Selective transfer of cyclosporin to thoracic lymphatic systems by the application of lipid microspheres. Yanagawa A, et al. **J Microencapsul** 1989 Apr–Jun;6(2):161–4

Lymphatic transport of recombinant human tumor necrosis factor in rats. Kojima K, et al. **J Pharmacobiodyn** 1988 Oct;11(10):700–6

Postinflammatory increase of lymphatic absorption from the peritoneal cavity: role of diaphragmatic stomata. Levine S, et al. **Microcirc Endothelium Lymphatics** 1988 Oct; 4(5):399–413

[Possible participation of lymphatic uptake of endogenous endotoxin: preliminary report] Kikuchi M, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1929 **(Jpn)**

PATHOLOGY

Mechanisms of invasion and lymphatic penetration in human colorectal cancer. Carr I, et al. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):507–16

Limbal lymphangiogenesis after corneal injury: an autoradiographic study. Junghans BM, et al. **Curr Eye Res** 1989 Jan;8(1):91–100

Pulmonary lymphatics in SIDS—a comparative morphometric study. Ogbuihi S, et al. **Forensic Sci Int** 1988 Nov;39(2):197–206

Alteration of epicardial lymphatics in lymphostatic canine hearts. Okada E. **Heart Vessels** 1988;4(4):215–20

Lymphatic vessel invasion is an independent prognostic factor for survival in colorectal cancer. Minsky BD, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):311–8

Lymphatic system in human dilated cardiomyopathy. Marchetti C, et al. **J Submicrosc Cytol Pathol** 1988 Oct; 20(4):701–8

Abnormal lung lymphatics and respiratory failure. Moss SF, et al. **Thorax** 1989 May;44(5):432–3

[The diffuse lymphatic system of the nasal mucosa in allergic rhinitis] Cuccurullo L, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):51–6 (Eng. Abstr.) **(Fre)**

[Pathomorphology of the intestine and regional lymphatic system in pseudotuberculosis] Isachkoa LM, et al. **Arkh Patol** 1988;50(9):22–8 (Eng. Abstr.) **(Rus)**

[Pathogenetic basis of the diagnosis and treatment of lymphedema of the lower extremities] Potashov LV, et al. **Kardiologiia** 1989 Mar;29(3):63–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Immunohistochemical, electron microscopic and in situ hybridization evidence for the involvement of lymphatics in the spread of HIV–1. Tenner–Rácz K, et al. **Aids** 1988 Aug;2(4):299–309

Intestinal lymphatic flow during portal venous hypertension. Dunbar BS, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G94–8

Intestinal microvascular exchange during lipid absorption. Granger DN, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G690–5

Lymph flow during increases in pulmonary blood flow and microvascular pressure in dogs. Grimbert FA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1149–55

Estimation of Lymphatic Absorption and Intraperitoneal Volume During Hypertonic Peritoneal Dialysis [letter] Flessner MF, et al. **ASAIO Trans** 1989 Apr–Jun; 35(2):178–81

Effect of two week lymphatic occlusion on the mechanical properties of dog femoral arteries. Nádasy GL, et al. **Atherosclerosis** 1989 Aug;78(2–3):251–60

Mechanism of T cell proliferation in vivo: analysis of IL–2 receptor expression and activation of c–myc and c–myb oncogenes during lymphatic regeneration. Sihvola M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):181–8

Lymphatic microcirculation in frog lung. Koyama T, et al. **Biorheology** 1988;25(1–2):219–26

Alpha–and beta–components of the popliteal efferent lymph flow response to intra–arterial catecholamine infusions in the sheep. Thornbury KD, et al. **Blood Vessels** 1989; 26(2):107–18

The role of lymphatics in removing pleural liquid in discrete hydrothorax. Nakamura T, et al. **Eur Respir J** 1988 Oct; 1(9):826–31

HEV–like vessels in lymphoid and non–lymphoid tissues. Freemont AJ. **Int J Tissue React** 1988;10(2):85–8

Difference in main lymphatic pathways from the lower esophagus and gastric cardia. Aikou T, et al. **Jpn J Surg** 1989 May;19(3):290–5

Kinetics of peritoneal dialysis in children: role of lymphatics. Mactier RA, et al. **Kidney Int** 1988 Jul;34(1):82–8

The role of the lymphatics in aiding regression of hypokalemic lesions in rat cardiac muscle. Tepper SH, et al. **Lymphology** 1989 Mar;22(1):42–50

Suppression of fluid pumping in isolated bovine mesenteric lymphatics by interleukin–1: interaction with prostaglandin E2. Hanley CA, et al. **Microvasc Res** 1989 Mar;37(2):218–29

[Physiology of the lymph vessel system] Hauck G. **Z Lymphol** 1989 Jul;13(1):32–61 (10 ref.) (Eng. Abstr.) **(Ger)**

[Dynamic activity of the splenic lymphocytes during the modelling of chronic denervation–delymphatization of the kidneys in mice] Shestakova NK, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):572–4 (Eng. Abstr.) **(Rus)**

[Rate of movement of lymph in the upper and lower extremities] Sveshnikoc AA, et al. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):863–7 **(Rus)**

[Characteristics of the volume of lymph flow in relation to the body weight of animals] Bulekbaeva LE. **Fiziol Zh SSSR** 1989 Mar;75(3):407–9 **(Rus)**

[The relation of lymph flow and microcirculation in the cat liver under the effect of serotonin and bradykinin] Kul baev IS, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):555–61 (Eng. Abstr.) **(Rus)**

[Active and passive mechanical properties of the wall of the lymphangion] Lobov GI, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):218–26 (Eng. Abstr.) **(Rus)**

[Self–regulation of the pump function of the lymphangion] Lobov GI, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):977–86 (Eng. Abstr.) **(Rus)**

[Participation of the lymphatic system in cerebrospinal fluid drainage in intracranial hypertension (experimental research)] Atchabarov BA, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):45–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The role of lymphatic flow in edema formation of nephrotic syndrome. Beach RE, et al. **Am J Med Sci** 1989 Jun; 297(6):339–42

The lymphedema chaos: a lancet. Földi E, et al. **Ann Plast Surg** 1989 Jun;22(6):505–15

Mesenteric lymphatic function after total small–intestinal transplantation in rats. Clark E, et al. **Curr Surg** 1989 Mar–Apr;46(2):115–7

Decompression sickness with subsequent lymphatic manifestation following recompression treatment: a case report in a heavy drinker. Ikeda T, et al. **Tokai J Exp Clin Med** 1988 Jun;13(2):79–83

[Study on the lymphatic flow of the lower gastric region for radical lymphadenectomy in advanced lower gastric cancer] Kodama M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1008–13 (Eng. Abstr.) **(Jpn)**

[Evaluation of blood and lymphatic vascularization in post–traumatic edema of the legs] Pawelec R. **Ann Acad Med Stetin** 1988;34:177–90 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Depletion and repopulation of lymphocytes in Peyer's patches of mice after total lymphoid irradiation. Ermak TH, et al. **Lab Invest** 1988 Nov;59(5):591–7

Late somatic effects in mice after total lymphoid irradiation. Covelli V, et al. **Radiat Res** 1988 Dec;116(3):503–10

Long–term follow–up of kidney grafts in high–risk patients under TLI and CsA therapy. Cortesini R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1790–2

Function and numbers of natural killer (NK) cells in patients conditioned with total lymphoid irradiation (TLI). Gray CM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1800–1

Total lymphoid irradiation and cyclosporine prolongs cardiac allograft survival in the sensitized rat model. Harland RC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1118–9

Long–term clinical studies of high–risk renal retransplant recipients given total lymphoid irradiation. Kaufman DB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1798–9

Total lymphoid irradiation (TLI) in the cyclosporine era—use of TLI in resistant cardiac allograft rejection. Levin B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1793–5

Total lymphoid irradiation—current status. Myburgh JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):826–8

Induction of immunologic tolerance after allogeneic thymus transplantation and total lymphoid irradiation. Palathumpat V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1108–9

Synergistic efficacy of staged total lymphoid irradiation and cyclosporine in the preoperative preparation of high–risk hyperimmunized canine renal allograft recipients. Sonoda K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1116–7

Soluble suppressor factor occurring in tolerant baboons conditioned with total lymphoid irradiation. Stark JH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1110–1

Factors determining the success rate of total lymphoid irradiation in clinical kidney transplantation. Waer M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1796–7

Prolongation effect of a small dose of FK506, cyclosporine, or azathioprine on renal allografts in dogs treated with fractionated lymphoid irradiation and donor bone marrow cell infusion. Watanabe K, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):1112–5

The inmunosuppressive mechanism of total lymphoid irradiation. I. The effect on IL–2 production and IL–2 receptor expression. Field EH, et al. **Transplantation** 1989 Sep;48(3):499–505

The synergistic effect of total–lymphoid irradiation with extracted donor alloantigen in inducing transplantation unresponsiveness. Florence LS, et al. **Transplantation** 1989 Jan;47(1):156–62

Cardiac allograft prolongation in mice treated with combined posttransplantation total–lymphoid irradiation and anti–L3T4 antibody therapy. Trager DK, et al. **Transplantation** 1989 Apr;47(4):587–91

RADIOGRAPHY

Microradiographic demonstration of human intrarenal microlymphatic pathways. Cuttino JT Jr, et al. **Urol Radiol** 1989;11(2):83–7

[Roentgenologic investigation of collateral lymphatic pathways after ligation of the thoracic duct] Umbetov TZh, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):59–64 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Technetium–99m haemaccel: a new lymphoscintigraphic agent. Sadek S, et al. **Am J Physiol Imaging** 1989;4(2):46–9

Comments to "Quantitative Lymphoscintigraphy" [letter] Stewart G, et al. **Eur J Nucl Med** 1989;15(3):167

Evaluation in vitro and in vivo of two labelling techniques of different 99mTc–dextrans for lymphoscintigraphy. Wingårdh K, et al. **Eur J Nucl Med** 1989;15(3):146–51

Quality control of 99mTc–labeled dextran for lymphoscintigraphy. Yang KT, et al. **Eur J Nucl Med** 1989; 15(4):171–3

Lymphoscintigraphy in the management of patients with cutaneous melanoma. Erickson KK, et al. **J Okla State Med Assoc** 1988 May;81(5):275–9

Abnormalities of lymphatic drainage in lower extremities: a lymphoscintigraphic study. Collins PS, et al. **J Vasc Surg** 1989 Jan;9(1):145–52

Noninvasive evaluation of the swollen extremity: experiences with 190 lymphoscintigraphic examinations. Gloviczki P, et al. **J Vasc Surg** 1989 May;9(5):683–9; discussion 690

Whole body lymphangioscintigraphy in ferrets chronically

infected with Brugia malayi. Witte M, et al. **Lymphology** 1988 Dec;21(4):251–7

Whole-body lymphangioscintigraphy: preferred method for initial assessment of the peripheral lymphatic system. McNeill GC, et al. **Radiology** 1989 Aug;172(2):495–502

The lymphatic system: diagnostic imaging studies. Weissleder R, et al. **Radiology** 1989 Aug;172(2):315–7

Endoscopic lymphoscintigraphy. A new tool for target surgery of rectal cancer. Miscusi G, et al. **Surg Endosc** 1987;1(2):113–7

[Clinical evaluation of 99mTc-dextran internal mammary lymphoscintigraphy] Guan CT, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):426–9 (Eng. Abstr.) (Chi)

[The surgical concept of malignant melanoma with special reference to lymphatic drainage scintigraphy] Wölbling RH, et al. **Hautarzt** 1988 Sep;39(9):581–3 (Eng. Abstr.) (Ger)

[Lymphoscintigraphy of the breast using labeled activated carbon by 99mTc: preliminary report] Saeki T, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1752 (Jpn)

SURGERY

Microlymphatic bypass in obstructive lymphoedema. Ho LC, et al. **Br J Plast Surg** 1988 Sep;41(5):475–84

Summary and prospects of fourteen years' experience with treatment of chyluria by microsurgery. Zhao WP, et al. **Eur Urol** 1988;15(3–4):219–22

The treatment of lymphedema of the extremities with microsurgical lympho-venous anastomoses. Olszewski WL. **Int Angiol** 1988 Oct–Dec;7(4):312–21 (9 ref.)

A new technique of microlympho-venous anastomoses. Experimental study. al Assal F, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):552–5

Experience with microlymphaticovenous anastomoses for congenital and acquired lymphoedema. Ipsen T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):233–6

[Results of microsurgical lymphovenous anastomoses in lymphedema—report of 110 cases] Huang GK. **Langenbecks Arch Chir** 1989;374(4):194–9 (Eng. Abstr.) (Ger)

[Renal artery thrombosis following surgical treatment of chyluria] Takigawa H, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1631–4 (Eng. Abstr.) (Jpn)

[Efficacy of lymphovenous anastomoses in the treatment of lymphedema of the lower extremities] Potashov LV, et al. **Klin Khir** 1988;(7):14–6 (Eng. Abstr.) (Rus)

[Lymphovenous anastomoses in the prevention of post-mastectomy edema of the arm] Pronin VI, et al. **Sov Med** 1989;(4):32–5 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Adipose veno-lymphatic transfer for management of post-radiation lymphedems. Pho RW, et al. **J Reconstr Microsurg** 1989 Jan;5(1):45–54

ULTRASTRUCTURE

An electron microscopic study of lymphatics in the dermal lesions of human leprosy. Mukherjee A, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):506–10

The fine structure of the amphibian lymph heart. Liu ZY, et al. **Lymphology** 1989 Mar;22(1):25–30

The fine structure of the amphibian lymph sac. Liu ZY, et al. **Lymphology** 1989 Mar;22(1):31–5

Weibel-Palade bodies in endothelial cells of normal thoracic ducts and deep cervical lymphatics in rabbits. Magari S, et al. **Lymphology** 1988 Jun;21(2):93–8

Morphological characters of the absorbing peripheral lymphatic vessel by TEM, SEM and three-dimensional models. Azzali G, et al. **Prog Clin Biol Res** 1989;295:487–92

Microvascular aspects of myocardial lymphatic vessels in the dog by scanning electron microscopy. Esperança-Pina JA. **Prog Clin Biol Res** 1989;295:435–41

SEM of immunohematopoietic tissues. Fujita T. **Prog Clin Biol Res** 1989;295:493–500

Interpretation of structural patterns appearing on corrosion casts of small blood and initial lymphatic vessels. Castenholz A. **Scanning Microsc** 1989 Mar;3(1):315–25

The lymphatic vascular system of some hibernating mammalians kidney. Azzali G, et al. **Z Mikrosk Anat Forsch** 1988;102(6):945–61

[Fine morphology of the lymphatics and tissue spaces in the liver parenchyma in man and its significance in hepatobiliary surgery] Klika E, et al. **Rozhl Chir** 1989 Feb; 68(2):103–9 (Eng. Abstr.) (Cze)

[Various characteristics of the structure of the cardiac lymphatic bed and the morphofunctional basis of its insufficiency] Gavrish AS. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):45–53 (Eng. Abstr.) (Rus)

LYMPHEDEMA

The pathophysiology of lymphedema and the action of benzo-pyrones in reducing it. Casley-Smith JR, et al. **Lymphology** 1988 Sep;21(3):190–4 (13 ref.)

Creation of distal canine limb lymphedema. Chen HC, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1022–6

[Endemic non-filarial elephantiasis of the lower limbs: podoconiosis] Corachán M. **Med Clin (Barc)** 1988 Jun 11; 91(3):97–100 (Spa)

BLOOD

[Prolactin and steroid hormones in the blood in local disorders of the lymph-plasma circulation in breast cancer patients] Berzin SA, et al. **Sov Med** 1988;(12):16–9 (Eng. Abstr.) (Rus)

COMPLICATIONS

Vesiculobullous cutaneous lymphatic reflux. Groff JW, et al. **Cutis** 1988 Jul;42(1):31–2

Recurrent septic arthritis and Milroy's disease. Albornoz MA, et al. **J Rheumatol** 1988 Nov;15(11):1726–8

[Lymphangiosarcoma following mastectomy: review of the literature apropos of 2 recent cases of Stewart-Treves syndrome] Defraigne JO, et al. **Acta Chir Belg** 1989 Jan-Feb;89(1):29–33 (22 ref.) (Eng. Abstr.) (Fre)

[Stewart-Treves syndrome and lymphangiosarcoma] Deutschmann W, et al. **Chirurg** 1988 Sep;59(9):605–9 (Eng. Abstr.) (Ger)

CONGENITAL

Necrotizing fasciitis in congenital lymphedema. Case report. **Kiser T, et al. Acta Chir Scand** 1988 Nov-Dec; 154(11–12):665–6

Congenital lymphoedema in a child—an unusual diagnosis of ankle oedema seen at a peripheral hospital. A case report. Zöllner EW, et al. **S Afr Med J** 1989 Apr 1;75(7):340–2

DIAGNOSIS

The importance of volumetry, lymphscintigraphy and computer tomography in the diagnosis of brachial edema after mastectomy. Göltner E, et al. **Lymphology** 1988 Sep; 21(3):134–43

31P-MR spectroscopy of skeletal muscle in a lymphedematous arm. Kiricuta IC, et al. **Lymphology** 1989 Jun;22(2):93–6

Evaluation of leg edema using a multifrequency impedance meter in patients with lymphatic obstruction. Watanabe R, et al. **Lymphology** 1989 Jun;22(2):85–92

[Diagnosis and treatment of lymphedema of the extremities] Lisitsyn KM, et al. **Voen Med Zh** 1988 Oct;(10):33–5 (Rus)

DRUG THERAPY

Coumarin and 7-hydroxycoumarin treatment of canine obstructive lymphoedema. Knight KR, et al. **Clin Sci** 1989 Jul;77(1):69–76

EPIDEMIOLOGY

Endemic non-filarial elephantiasis in Iringa District, Tanzania: a study of 30 patients. de Lalla F, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):895–7

ETIOLOGY

Influence of adjuvant irradiation on the development of late arm lymphedema and impaired shoulder mobility after mastectomy for carcinoma of the breast. Ryttov N, et al. **Acta Oncol** 1988;27(6A):667–70

Elephantiasis nostras: an eight-year observation of progressive nonfilarial elephantiasis of the lower extremity. Sanders LJ, et al. **Cutis** 1988 Nov;42(5):406–11

An unusual cause of lymphoedema—confirmed by isotopic lymphangiography. Lozano F, et al. **Eur J Vasc Surg** 1988 Apr;2(2):129–31

Acquired pachydermatoglyphy. A cutaneous sign of internal malignancy. Pujol RM, et al. **Int J Dermatol** 1988 Dec; 27(10):688–9 (9 ref.)

Lymphedema, lymphocytic myocarditis, and sarcoidlike granulomatosis. Manifestations of Whipple's disease. Southern JF, et al. **JAMA** 1989 Mar 10;261(10):1467–70

Lymphedema in the developing and developed world: contrasts and prospects [editorial] Witte MH, et al. **Lymphology** 1988 Dec;21(4):242–3

Lymphoedema of the legs as a result of lymphangiomyomatosis. A case report and review of the literature. van Lith JM, et al. **Neth J Med** 1989 Jun; 34(5–6):310–6 (29 ref.)

Lymphatic obstruction as a cause of oedema in rheumatoid arthritis. Wijnands MJ, et al. **Neth J Med** 1988 Oct; 33(3–4):140–3

[Insufficiency of the cervical lymph vessel system; lymphostatic encephalopathy and retinopathy following cervical block dissection] Földi M. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):435–7 (6 ref.) (Eng. Abstr.) (Ger)

[A case from practice (128). Patient: Mr. B. L., born 1947, engineer] Fritschi J. **Schweiz Rundsch Med Prax** 1989 Jan 24;78(4):74–5 (Ger)

[Cases from an edema consultation] Fischer U. **Z Lymphol** 1988 Jul;12(1):1–4 (Ger)

[Differential diagnosis of edemas] Herpertz U. **Z Lymphol** 1988 Dec;12(2):42–7 (0 ref.) (Eng. Abstr.) (Ger)

[Secondary lymphedema in gynecologic neoplasms] Lotze W, et al. **Zentralbl Gynakol** 1989;111(2):92–8 (10 ref.) (Eng. Abstr.) (Ger)

[Lymphedema of the lower limbs secondary to neoplastic lymphangitis caused by mucin-producing adenocarcinoma of the stomach. 2 case reports] Arcuri V, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2103–6 (Eng. Abstr.) (Ita)

[Evaluation of blood and lymphatic vascularization in post-traumatic edema of the leg] Pawelec R. **Ann Acad Med Stetin** 1988;34:177–90 (Eng. Abstr.) (Pol)

[Post-mastectomy lymphangiosarcoma (Stewart-Treves syndrome). Report of a case and review of the literature] Quadros LG, et al. **Rev Paul Med** 1988 Jul-Aug; 106(4):238–40 (7 ref.) (Eng. Abstr.) (Por)

[Pathogenetic basis of the diagnosis and treatment of lymphedema of the lower extremities] Potashov LV, et al. **Kardiologiia** 1989 Mar;29(3):63–6 (Eng. Abstr.) (Rus)

[Lymphedema of the anterior abdominal wall in an obese female patient] Savchenko TV, et al. **Khirurgiia (Mosk)** 1989 May;(5):128–9 (Rus)

[Microcirculatory disorders of the arm in post-mastectomy edema] Mogilevskiĭ IL, et al. **Sov Med** 1989;(4):15–20 (Eng. Abstr.) (Rus)

GENETICS

[Hereditary congenital lymphedema with pseudosexual ambiguity] Sarda P, et al. **J Genet Hum** 1988 Aug; 36(4):353–60 (Eng. Abstr.) (Fre)

PATHOLOGY

Podoconiosis in Aequatorial Guinea. Report of two cases from different geological environments. Corachan M, et al. **Trop Geogr Med** 1988 Oct;40(4):359–64

[Verrucous elephantiasis: a maximum variant of lymphedema] Schmeller W, et al. **Hautarzt** 1989 May;40(5):276–80 (Eng. Abstr.) (Ger)

[Congestive lymphostatic papillomatosis] Stöberl C, et al. **Hautarzt** 1988 Jul;39(7):441–6 (Eng. Abstr.) (Ger)

[Vascular tumors XI: Stewart-Treves syndrome] Leu HJ, et al. **Vasa** 1988;17(4):297–300 (Eng. Abstr.) (Ger)

[Lymphangitis carcinomatosa] Tóth A, et al. **Z Hautkr** 1988 Dec 15;63(12):1037–41 (Eng. Abstr.) (Ger)

[Stewart-Treves syndrome of the edematous arm following breast cancer operation] Gregl A, et al. **Z Lymphol** 1988 Dec;12(2):66–83 (186 ref.) (Eng. Abstr.) (Ger)

[Lymph node biopsy in the diagnosis of endemic non-filarial elephantiasis (podoconiosis) (letter)] Campo E, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):117 (Spa)

PHYSIOPATHOLOGY

Lack of correlation of oedema with electrical resistance of tissue [letter] Casley-Smith JR. **Br J Plast Surg** 1988 Sep; 41(5):558–9

Skin flow and swelling in post-phlebitic limbs. Belcaro G, et al. **Vasa** 1989;18(2):136–9

[Secondary leg edema—experimental study] Gregl A. **Z Lymphol** 1988 Dec;12(2):48–53 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

[Decrease of postoperative edema following arterial reconstruction of the thigh by aprotinin] Greve H, et al. **Vasa Suppl** 1988;23:276–9 (Ger)

[Lymphovenous anastomoses in the prevention of post-mastectomy edema of the arm] Pronin VI, et al. **Sov Med** 1989;(4):32–5 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Clinical use of indirect lymphography in different forms of leg edema. Partsch H, et al. **Lymphology** 1988 Sep; 21(3):152–60

[Use of computer tomography in the diagnosis and differential diagnosis of lymphedema of the extremities] Prokeš B, et al. **Cesk Radiol** 1988 Aug;42(4):252–8 (Eng. Abstr.) (Cze)

[Morphometric results with indirect lymphography] Wilding R, et al. **Vasa Suppl** 1988;26:214–9 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Lymphedema of the lower extremities: evaluation by microcolloidal imaging. Intenzo CM, et al. **Clin Nucl Med** 1989 Feb;14(2):107–10

Tc-99m serum albumin lymphoscintigraphy of upper limbs. Nawaz K, et al. **Clin Nucl Med** 1989 May;14(5):384–6

Noninvasive evaluation of the swollen extremity: experiences with 190 lymphoscintigraphic examinations. Gloviczki P, et al. **J Vasc Surg** 1989 May;9(5):683–9; discussion 690

Lymphoscintigraphy to confirm the clinical diagnosis of lymphedema. Golueke PJ, et al. **J Vasc Surg** 1989 Sep; 10(3):306–12

Factorial analysis of dynamic lymphoscintigraphy in lower limb lymphoedema. Baulieu F, et al. **Nucl Med Commun** 1989 Feb;10(2):109–19

[Lymph scintigraphy in edema of the extremities] Reuland P, et al. **Z Lymphol** 1989 Jul;13(1):54–6 (Eng. Abstr.) (Ger)

[Isotopic lymphangiogammagraphy] Samaniego E, et al. **Angiologia** 1988 Nov-Dec;40(6):212–4 (Eng. Abstr.) (Spa)

REHABILITATION

[Unilateral secondary postmastectomy arm lymphedema. Study of inpatient physical therapy] Pfaff A. **Z Lymphol** 1988 Jul;12(1):19–23 (Ger)

[Unilateral secondary postmastectomy lymphedema of the arm. Study of inpatient physical therapy (II)] Pfaff A.

Z Lymphol 1988 Dec;12(2):54–65 (Ger)

SURGERY

The use of suction curettage as adjunct to the management of lymphedema. Louton RB, et al. Ann Plast Surg 1989 Apr;22(4):354–7

Primary lymphedema of the scrotum: surgical treatment and reconstruction. Martínez RE, et al. Ann Plast Surg 1988 Oct;21(4):354–7

Liposuction on a lymphedematous arm. Nava VM, et al. Ann Plast Surg 1988 Oct;21(4):366–8

Lymphedema of the face. Parsa FD, et al. Ann Plast Surg 1989 Aug;23(2):178–81

Microlymphatic bypass in obstructive lymphoedema. Ho LC, et al. Br J Plast Surg 1988 Sep;41(5):475–84

Suction lipectomy in the management of limb lymphedema. Sando WC, et al. Clin Plast Surg 1989 Apr;16(2):369–73

The treatment of lymphedema of the extremities with microsurgical lympho–venous anastomoses. Olszewski WL. Int Angiol 1988 Oct–Dec;7(4):312–21 (9 ref.)

Adipose veno–lymphatic transfer for management of post–radiation lymphedema. Pho RW, et al. J Reconstr Microsurg 1989 Jan;5(1):45–54

Experience with microlymphaticovenous anastomoses for congenital and acquired lymphoedema. Ipsen T, et al. Scand J Plast Reconstr Surg Hand Surg 1988;22(3):233–6

[Breast reconstruction combined with treatment of chronic lymphedema of the arm] Muller GH. Ann Chir Plast Esthet 1989;34(1):83–5 (Eng. Abstr.) (Fre)

[Efficacy of lympho–venous anastomosis] Krylov VS, et al. J Mal Vasc 1988;13(4):335–7 (Eng. Abstr.) (Fre)

[Surgical treatment of lymphedema] Berger A. Langenbecks Arch Chir 1989;374(4):193 (Ger)

[Results of microsurgical lymphovenous anastomoses in lymphedema—report of 110 cases] Huang GK. Langenbecks Arch Chir 1989;374(4):194–9 (Eng. Abstr.) (Ger)

[Lymphologic aspects of infection and the approach in lymphology. 2 new concepts in peripheral vascular surgery] Brunner U, et al. Vasa 1988;17(4):275–82 (21 ref.) (Eng. Abstr.) (Ger)

[Efficacy of lymphovenous anastomoses in the treatment of lymphedema of the lower extremities] Potashov LV, et al. Klin Khir 1988;(7):14–6 (Eng. Abstr.) (Rus)

[A personal technic using a pediculate flap in the treatment of postmastectomy lymphedema] Alejo Enrici E, et al. Angiologia 1989 May–Jun;41(3):112–6 (23 ref.) (Eng. Abstr.) (Spa)

[Lymphedema and lymphonodovenous anastomosis. Preposal of a technical modification] Languasco GB, et al. Angiologia 1989 Jan–Feb;41(1):11–6 (Eng. Abstr.) (Spa)

THERAPY

The lymphedema chaos: a lancet. Földi E, et al. Ann Plast Surg 1989 Jun;22(6):505–15

Treatment of lymphedema with a multicompartmental pneumatic compression device [letter] Bastien MR, et al. J Am Acad Dermatol 1989 May;20(5 Pt 1):853–4

Microwave: an alternative to electric heating in the treatment of peripheral lymphedema. Chang TS, et al. Lymphology 1989 Mar;22(1):20–4

Heating and chronic lymphedema [editorial] Ryan TJ. Lymphology 1989 Mar;22(1):2–3

Physical therapy for lymphoedema [letter] Casley–Smith JR, et al. Med J Aust 1989 May 1;150(9):542–3

Fluid translocation measurement. A method to study pneumatic compression treatment of postmastectomy lymphoedema. Mridha M, et al. Scand J Rehabil Med 1989; 21(2):63–9

[Preliminary study of the lymphology unit at the hospital of La Ferté–Macé (Orne)] Orhan J. Phlebologie 1989 Apr–Jun;42(2):195–200 (Eng. Abstr.) (Fre)

[The effects of pressotherapy on cardiovascular hemodynamics] Dereppe H, et al. Rev Med Brux 1989 May; 10(5):185–6 (Eng. Abstr.) (Fre)

[Treatment of lymphedema of the extremities using pneumatic lymph drainage. Principles and indications] Bardi K, et al. Tunis Med 1987 Mar;65(3):203–6 (Eng. Abstr.) (Fre)

["Tertiary" lymphedema—procedures in lymph drainage therapy] Einfeldt H, et al. Z Lymphol 1989 Jul;13(1):57–61 (Eng. Abstr.) (Ger)

[Lymph drainage therapy in secondary lymphedema caused by Kaposi sarcoma] Einfeldt H. Z Lymphol 1989 Jul; 13(1):19–22 (9 ref.) (Eng. Abstr.) (Ger)

[Experimental and clinical studies of the mechanism of effect of manual lymph drainage therapy] Hutzschenreuter P, et al. Z Lymphol 1989 Jul;13(1):62–4 (Eng. Abstr.) (Ger)

[Manual lymph drainage in migraine treatment—a pathophysiologic explanatory model] Trettin H. Z Lymphol 1989 Jul;13(1):48–53 (17 ref.) (Eng. Abstr.) (Ger)

[Pneumocompression in the complex treatment of patients with lymphedema of the extremities] Driuk NF, et al. Klin Khir 1988;(7):17–9 (Eng. Abstr.) (Rus)

[Choice of the optimal regimen for pneumatic compression in treating patients with postmastectomy edema of the upper extremity] Gerasimenko VN, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1988 Nov–Dec; (6):54–5 (Rus)

VETERINARY

Congenital lymphoedema in an Ayrshire–Friesian crossbred female calf. Mulei CM, et al. Aust Vet J 1989 Jul; 66(7):227–8

LYMPHOBLASTIC LEUKEMIA see **LEUKEMIA, LYMPHOCYTIC**

LYMPHOBLASTIC LEUKEMIA, ACUTE see **LEUKEMIA, LYMPHOCYTIC, ACUTE**

LYMPHOBLASTIC LEUKEMIA, ACUTE, ADULT see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L2**

LYMPHOBLASTIC LEUKEMIA, ACUTE, CALLA–POSITIVE see **LEUKEMIA, CALLA–POSITIVE**

LYMPHOBLASTIC LEUKEMIA, ACUTE, CHILDHOOD see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L1**

LYMPHOBLASTIC LEUKEMIA, ACUTE, L1 see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L1**

LYMPHOBLASTIC LEUKEMIA, ACUTE, L2 see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L2**

LYMPHOBLASTIC LEUKEMIA, ACUTE, NON–B, NON–T see **LEUKEMIA, NULL–CELL**

LYMPHOBLASTIC LEUKEMIA, ACUTE, T–CELL see **LEUKEMIA, T–CELL, ACUTE**

LYMPHOBLASTIC LEUKEMIA, CHRONIC see **LEUKEMIA, LYMPHOCYTIC, CHRONIC**

LYMPHOCELE see under **LYMPHATIC DISEASES**

LYMPHOCYTAPHERESIS see **LEUKAPHERESIS**

LYMPHOCYTE ACTIVATING FACTOR see **INTERLEUKIN 1**

LYMPHOCYTE ACTIVATION see **LYMPHOCYTE TRANSFORMATION**

T–LYMPHOCYTE ANTIGEN RECEPTOR ALPHA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, ALPHA CHAIN T–CELL ANTIGEN RECEPTOR**

T–LYMPHOCYTE ANTIGEN RECEPTOR BETA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, BETA CHAIN T–CELL ANTIGEN RECEPTOR**

T–LYMPHOCYTE ANTIGEN RECEPTOR GAMMA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, GAMMA CHAIN T–CELL ANTIGEN RECEPTOR**

LYMPHOCYTE COOPERATION

Modification of tumor cells by a low dose of Newcastle disease virus. II. Augmented tumor–specific T cell response as a result of CD4+ and CD8+ immune T cell cooperation. Schild H, et al. Cancer Immunol Immunother 1989;28(1):22–8

T cell clones providing helper function for IgE synthesis release soluble factor(s) that induce IgE production in human B cells: possible role for interleukin 4 (IL–4). Maggi E, et al. Clin Exp Immunol 1988 Jul;73(1):57–62

Studies on the mechanism of polyclonal B cell stimulation by TH2 cells. Lohoff M, et al. Eur J Immunol 1989 Jan; 19(1):77–81

Back–stimulation of B lymphocytes binding to helper T cell surface antigens. Martinez C, et al. Eur J Immunol 1988 Dec;18(12):1895–9

Antigen presentation by liposomes as model system for T–B cell interaction. Walden P. Eur J Immunol 1988 Nov; 18(11):1851–4

Tolerization during pregnancy: impact on the development of antigen–specific help and suppression. Zöller M. Eur J Immunol 1988 Dec;18(12):1937–43

Local T–T cell and T–B cell interactions: a cellular automaton approach. Hogeweg P. Immunol Lett 1989 Aug; 22(2):113–22

CD8+ cells sustain spontaneous IgG production in SLE [letter] Linker–Israeli M. Immunol Today 1989 Feb;10(2):36

Suppression of human IgA–B–cell maturation by IgA–binding factors requires T cells. Millet I, et al. Int Arch Allergy Appl Immunol 1988;87(4):367–70

Distinct features of dendritic cells and anti–Ig activated B cells as stimulators of the primary mixed leukocyte reaction. Metlay JP, et al. J Exp Med 1989 Jan 1;169(1):239–54

Role of the LFA3–CD2 interaction in human specific B cell differentiation. Emilie D, et al. J Immunol 1988 Sep 15; 141(6):1912–8

Characterization of the effector mechanism of help for antigen–presenting and bystander resting B cell growth mediated by Ia–restricted Th2 helper T cell lines. Whalen BJ, et al. J Immunol 1988 Oct 1;141(7):2230–9

Evidence for defects in accessory and T cell subsets in mice expressing the xid defect. Clayberger C, et al. J Mol Cell Immunol 1985;2(2):61–9

A cloned T cell line that selectively augments antibody responses of phosphorylcholine–specific B cells bearing the T15 idiotype. Dunn EB, et al. J Mol Cell Immunol 1986; 2(4):209–17

Small and large B cells respond differently to T cell–derived B cell growth and differentiation factors. Layton JE, et al. J Mol Cell Immunol 1985;2(3):155–67

Limiting dilution analysis of proliferating and helper T cells in the in vivo immune response to KLH: derepression of helper T cells at moderately increased frequencies. Maier B, et al. J Mol Cell Immunol 1986;2(5):293–305

Cognate interactions between helper T cells and B cells. I. Cloning and helper activity of a lymphokine–dependent helper T cell clone (Th–3). Noelle RJ, et al. J Mol Cell Immunol 1989;4(3):161–73; discussion 173–5

A model system for the analysis of B–cell activation and effector T–cell functions. T cell–dependent B–cell responses facilitated by anti–I–A antibodies. Pereira P, et al. Scand J Immunol 1989 Jan;29(1):49–56

Regulation of lymphokine release involving a novel form of T–T collaboration. Gill RG, et al. Transplant Proc 1989 Feb;21(1 Pt 3):2700–2

The helper T lymphocyte as a secretory cell. Constitutive versus regulated secretion. Taplits MS, et al. Year Immunol 1989;4:147–58 (57 ref.)

[Mechanisms of cellular cooperation in the normal brain and in pathology] Kiselëv OI, et al. Fiziol Cheloveka 1988 May–Jun;14(3):491–509 (77 ref.) (Rus)

[Change in the cooperation of T– and B–lymphocytes during the immune response of ram erythrocytes in the presence of liver injury by carbon tetrachloride] Bryzgina TM. Fiziol Zh 1989 Jan–Feb;35(1):25–30 (Eng. Abstr.) (Rus)

[Characteristics of the cellular cooperation in the connective tissue base of the gingiva in periodontitis] Lopunova ZhK, et al. Stomatologiia (Mosk) 1989 May–Jun;68(3):11–5 (Eng. Abstr.) (Rus)

[Opsonic cooperation in the neutrophil phagocytosis system in acute myeloblastic leukemia] Guseva SA. Vrach Delo 1989 Jan;(1):58–61 (Eng. Abstr.) (Rus)

[Characteristics of the immunocyte cooperation in 2 strains of mice opposite in their sensitivity to dermaphytoses during the immune response to antigens of the causative agent] Medvedev IuA, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Jun;(6):69–73 (Eng. Abstr.) (Rus)

[Evaluation of lymphocyte cooperative interaction with neutrophils by the stimulation of lymphokine production in erysipelatous inflammation] Tsoi IG. Zh Mikrobiol Epidemiol Immunobiol 1988 Oct;(10):59–64 (Eng. Abstr.) (Rus)

LYMPHOCYTE CULTURE TEST, MIXED see **LEUKOCYTE CULTURE TEST, MIXED**

LYMPHOCYTE DEPLETION

Lymphocytapheresis in a patient with severe aplastic anemia. Ito T, et al. Acta Haematol (Basel) 1988;80(3):167–70

The effect of in vivo T helper and T suppressor lymphocyte depletion on wound healing. Barbul A, et al. Ann Surg 1989 Apr;209(4):479–83

High incidence of early leukemic relapse in patients given cyclosporin and T cell depleted HLA–identical sibling marrow transplants for acute leukemia in first remission. Atkinson K, et al. Aust N Z J Med 1988 Jun;18(4):587–93

Enhanced survival but reduced engraftment in murine recipients of recombinant granulocyte/macrophage colony–stimulating factor following transplantation of T–cell–depleted histoincompatible bone marrow. Blazar BR, et al. Blood 1988 Oct;72(4):1148–54

Immune reconstitution following bone marrow transplantation: comparison of recipients of T–cell depleted marrow with recipients of conventional marrow grafts. Keever CA, et al. Blood 1989 Apr;73(5):1340–50

Mixed hematopoietic chimerism after allogeneic transplantation with lymphocyte–depleted bone marrow is not associated with a higher incidence of relapse. Schattenberg A, et al. Blood 1989 Apr;73(5):1367–72

Lymphocyte depletion of donor bone marrow by counterflow centrifugal elutriation: results of a phase I clinical trial. Wagner JE, et al. Blood 1988 Oct; 72(4):1168–76

Bone marrow transplantation for patients with chronic myeloid leukaemia: T–cell depletion with Campath–1 reduces the incidence of graft–versus–host disease but may increase the risk of leukaemic relapse. Apperley JF, et al. Bone Marrow Transplant 1986 May;1(1):53–66

Interstitial pneumonitis in T cell–depleted bone marrow transplantation. Breuer R, et al. Bone Marrow Transplant 1988 Nov;3(6):625–30

T cell depletion in bone marrow transplantation for leukemia: current results and future directions. Butturini A, et al. Bone Marrow Transplant 1988 May;3(3):185–92 (37 ref.)

The recovery of resistance to alloengraftment following lethal irradiation and administration of T cell–depleted syngeneic bone marrow. Chester CH, et al. Bone Marrow Transplant 1989 Mar;4(2):195–200

Optimal conditions for in vitro T cell depletion of human

bone marrow by Campath-1a plus complement as demonstrated by limiting dilution analysis. Frame JN, et al. **Bone Marrow Transplant** 1989 Jan;4(1):55–61

Irradiated donor buffy coat following T cell–depleted bone marrow transplants. Gratwohl A, et al. **Bone Marrow Transplant** 1988 Nov;3(6):577–82

Thymus and B cell reconstitution in severe combined immunodeficiency after transplantation of monoclonal antibody depleted parental mismatched bone marrow. Hong R, et al. **Bone Marrow Transplant** 1987 Apr; 1(4):405–9

Preliminary characterization of functional residual host–type T lymphocytes following conditioning for allogeneic HLA–matched bone marrow transplantation (BMT). Kedar E, et al. **Bone Marrow Transplant** 1988 Mar; 3(2):129–40

Immunomagnetic removal of B–lymphoma cells from human bone marrow: a procedure for clinical use. Kvalheim G, et al. **Bone Marrow Transplant** 1988 Jan;3(1):31–41

Transient engraftment of T cell–depleted allogeneic bone marrow in mice improves survival rate following lethal irradiation. Lapidot T, et al. **Bone Marrow Transplant** 1988 Mar;3(2):157–64

Graft–versus–host disease following transplantation of 'one log' versus 'two log' T–lymphocyte–depleted bone marrow from HLA–identical donors. Löwenberg B, et al. **Bone Marrow Transplant** 1986 Dec;1(2):133–40

Alternative donor sources in HLA–mismatched marrow transplantation: T cell depletion of surgically resected cadaveric marrow. Lucas PJ, et al. **Bone Marrow Transplant** 1988 May;3(3):211–20

Prolonged remission of Epstein–Barr virus associated lymphoma secondary to T cell–depleted bone marrow transplantation. Lyttelton MP, et al. **Bone Marrow Transplant** 1988 Nov;3(6):641–6

Prevention of graft rejection in allogeneic bone marrow transplantation: I. Preclinical studies with antithymocyte globulins. Mallay GP, et al. **Bone Marrow Transplant** 1989 Jan;4(1):107–12

Anti LFA1 monoclonal antibody for the prevention of graft rejection after T cell–depleted HLA–matched bone marrow transplantation for leukemia in adults. Maraninchi D, et al. **Bone Marrow Transplant** 1989 Mar;4(2):147–50

Laboratory control in predicting clinical efficacy of T cell–depletion procedures used for prevention of graft–versus–host disease: importance of limiting dilution analysis. Marciniak E, et al. **Bone Marrow Transplant** 1988 Nov;3(6):589–98

T cell depletion in allogenic bone marrow transplantation. Progress and problems. Marmont AM. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:229–32 (62 ref.)

Graft failure in patients receiving T cell–depleted HLA–identical allogeneic marrow transplants. Martin PJ, et al. **Bone Marrow Transplant** 1988 Sep;3(5):445–56

T cell depletion in bone marrow transplantation. Poynton CH. **Bone Marrow Transplant** 1988 Jul;3(4):265–79 (125 ref.)

T cell depleted bone marrow transplantation in acute myeloblastic leukaemia: the way ahead. Prentice HG, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:225–8 (24 ref.)

Prevention of leukemic relapse after transplantation with lymphocyte depleted marrow by intensification of the conditioning regimen with a 6–day continuous infusion of anthracyclines. Raemaekers J, et al. **Bone Marrow Transplant** 1989 Mar;4(2):167–71

T–cell depletion does not affect long–term human bone marrow culture. Rio B, et al. **Bone Marrow Transplant** 1987 Feb;1(3):311–5

Incomplete chimerism in erythroid, myeloid and B lymphocyte lineage after T cell–depleted allogeneic bone marrow transplantation. Schouten HC, et al. **Bone Marrow Transplant** 1988 Sep;3(5):407–12

Allogeneic bone marrow transplantation for adult leukaemia with soy bean lectin fractionated marrow. Slocombe GW, et al. **Bone Marrow Transplant** 1986 May;1(1):31–9

Depletion of T cells from bone marrow for allogeneic transplantation: quantitation of lymphocyte subclasses remaining in marrow following depletion [letter] Trigg ME, et al. **Bone Marrow Transplant** 1989 Jul;4(4):454–5

Evaluation of a monoclonal IgM antibody for purging of bone marrow for autologous transplantation. Zola H, et al. **Bone Marrow Transplant** 1987 Feb;1(3):297–301

Depletion of human T cells from bone marrow by monoclonal antibodies and complement. Lieu CW, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):349–56

Anti–IgM treatment of C57BL/6–lpr/lpr mice: depletion of B cells reduces lpr gene–induced lymphoproliferation and mononuclear cell vasculitis. Cerny A, et al. **Clin Exp Immunol** 1989 Jul;77(1):124–9

Selective elimination of autoreactive lymphocytes with immunotoxins. Krolick KA. **Clin Immunol Immunopathol** 1989 Mar;50(3):273–82 (54 ref.)

T–cell depletion versus methotrexate as GvHD–prophylaxis in allogeneic bone marrow transplantation for leukaemia. Wiesneth M, et al. **Eur J Haematol** 1988 Sep;41(3):243–9

T–cell depletion by monoclonal antibodies does not prevent granuloma formation in mice. Pincelli C, et al. **Exp Cell Biol** 1988;56(5):229–35

Low antigen density leukemia cells: selection and comparative resistance to antibody–mediated marrow purging. Janssen WE, et al. **Exp Hematol** 1989 Mar; 17(3):252–7

Induction of immune resistance against L1210 lymphatic leukemia in mice after chemoradiotherapy of the leukemia and reconstitution with bone marrow purged from the leukemia with mafosfamide. Skórski T, et al. **Exp Hematol** 1988 Oct;16(9):782–4

Human hybridoma suppressor factor (HSF) inhibits IL2 production in addition to suppressing immunoglobulin production. Murakami M, et al. **Hybridoma** 1988 Dec; 7(6):595–608

In vivo depression of lymphocyte traffic in sheep by VIP and HIV (AIDS)–related peptides. Moore TC, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):181–9

Infectious complications after allogeneic bone marrow transplantation with and without T–cell depletion of donor marrow. Schmeiser T, et al. **Infection** 1989 May–Jun; 17(3):124–30

Antigen–specific lymphocyte clone elimination and reappearance in guinea pigs using 125I–labelled horse serum albumin. Pongrácz J, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):260–2

Technical modifications in hyperfractionated total body irradiation for T–lymphocyte deplete bone marrow transplant. Lawton CA, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):319–22

Effects of L3T4+ lymphocyte depletion on acute murine cytomegalovirus infection. Erlich KS, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1765–71

Persistent suppression of virus–specific cytotoxic T cell responses after transient depletion of CD4+ T cells in vivo. Goronzy JJ, et al. **J Immunol** 1989 Jun 15;142(12):4435–40

The in vivo depletion of V beta 17a+ T cells results in the inhibition of reticulum cell sarcoma growth in SJL/J mice. Evidence for the use of anticlonotypic antibody therapy in the control of malignancy. Katz JD, et al. **J Immunol** 1989 Aug 15;143(4):1387–95

Evidence that Mls–2 antigens which delete V beta 3+ T cells are controlled by multiple genes. Pullen AM, et al. **J Immunol** 1989 May 1;142(9):3033–7

Organ–specific autoimmune disease induced in mice by elimination of T cell subsets. V. Neonatal administration of cyclosporin A causes autoimmune disease. Sakaguchi S, et al. **J Immunol** 1989 Jan 15;142(2):471–80

Effects of T cell depletion in radiation bone marrow chimeras. I. Evidence for a donor cell population which increases allogeneic chimerism but which lacks the potential to produce GVHD. Sykes M, et al. **J Immunol** 1988 Oct 1;141(7):2282–8

An investigation of allogeneic pregnancy in multiparous mice subjected to in vivo depletion of CD8 (Ly2)–positive lymphocytes by monoclonal antibody treatment. Sulila P, et al. **J Reprod Immunol** 1988 Dec;14(3):235–45

Minimal residual leukaemia in chronic myeloid leukaemia patients after T–cell depleted bone–marrow transplantation [letter] Bartram CR, et al. **Lancet** 1989 Jun 3;1(8649):1260

Clonal deletion of B lymphocytes in a transgenic mouse bearing anti–MHC class I antibody genes. Nemazee DA, et al. **Nature** 1989 Feb 9;337(6207):562–6

Autologous bone marrow purging by lymphokine–activated killer cells: rationale and prospects. Nasr S, et al. **Pathol Immunopathol Res** 1988;7(6):477–82 (33 ref.)

Bone marrow transplantation with T–cell depleted allografts for the treatment of severe beta thalassemia major. Or R, et al. **Prog Clin Biol Res** 1989;309:217–22

Specific depletion of mature T lymphocytes from human bone marrow. Geisler C, et al. **Scand J Immunol** 1989 May; 29(5):617–25

Engraftment of T–depleted major histocompatibility complex–mismatched bone marrow in T–deficient versus natural killer–deficient recipients. Schofer O, et al. **Scand J Immunol** 1989 May;29(5):627–9

Elimination of CD8+ T cells in vivo does not break induced immunospecific tolerance to experimental allergic neuritis in rats. Strigård K, et al. **Scand J Immunol** 1988 Sep; 28(3):325–30

Induction of stable chimerism and elimination of graft–versus–host disease by depletion of T lymphocytes from bone marrow using immunomagnetic beads. Hoffman AL, et al. **Surgery** 1989 Aug;106(2):354–63

A trial of alloreactive T–cell depletion using biotinylated galactose oxidase for the prevention of acute graft–versus–host diseases. Yabe H, et al. **Tokai J Exp Clin Med** 1988 Dec;13(4–5):227–38

Effect of cytotoxic monoclonal antibody depletion of T–lymphocyte subpopulations on bleomycin–induced lung damage in C57BL/6J mice. Janick–Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):474–84

Selective depletion of marrow–T cytotoxic lymphocytes (CD8) in the prevention of graft–versus–host disease after allogeneic bone–marrow transplantation. Maraninchi D, et al. **Transpl Int** 1988 Jul;1(2):91–4

Survival of cytotoxic T–cell clones (Tc) in vivo and their ability to effect skin allograft rejection in T–cell depleted mice. Berens ES, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):138–9

Selective depletion of CD8 positive T–lymphocytes for prevention of graft–versus–host disease following allogeneic bone marrow transplantation. Champlin R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2947–8

Depletion of accessory cells strongly reduces immunogenicity of T–depleted bone marrow, and thus may facilitate its engraftment. Dreger P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2949–51

Cytomegalovirus infection and disease after T cell depleted allogeneic bone marrow transplantation for malignant hematologic diseases. Engelhard D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3101–2

A new approach to the prevention of graft–versus–host disease using XomaZyme–H65 following histo–incompatible partially T–depleted marrow grafts. Henslee PJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3004–7

Suppressive phenomena and absence of clonal deletion evidenced by limiting dilution analysis (LDA) of donor–specific IL2 secreting cells (IL2 SC) and cytotoxic precursors (CTLp). Lantz O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):367–8

MHC fully allogeneic bone transplantation after physical T–cell depletion with magnetic microspheres (MAMIS). Leyhausen G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2943–6

Efficacy and toxicity of a conditioning regimen with continuous infusion of anthracyclines in lymphocyte–depleted bone marrow transplantation. Raemaekers J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2960–1

Engraftment of allogeneic bone marrow following administration of anti–T cell monoclonal antibodies and low–dose irradiation. Sharabi Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):233–5

The use of total lymphoid irradiation (TLI) for prevention of rejection of T–lymphocyte depleted bone marrow allografts in non–malignant hematological disorders. Slavin S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3053–4

Results of four different protocols for prophylaxis against graft–versus–host disease. Tollemar J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3008–10

Function and partial characterization of inducible immunogenic accessory cells in lymphocyte–free rat bone marrow (LXBM). Wottge HU, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2985–6

Successful islet allografting requires depletion of both Lyt–2+ and L3T4+ cells. Yamamoto H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2707–8

The influence of T cell depletion on recovery of T cell proliferation to herpesviruses and Candida after allogeneic bone marrow transplantation. de Gast GC, et al. **Transplantation** 1989 Jul;48(1):111–5

T cell depletion of human bone marrow. Comparison of Campath–1 plus complement, anti–T cell ricin A chain immunotoxin, and soybean agglutinin alone or in combination with sheep erythrocytes or immunomagnetic beads. Frame JN, et al. **Transplantation** 1989 Jun; 47(6):984–8

Abrogation of tissue immunogenicity by immunotoxin treatment of human fetal pancreas. Hullett DA, et al. **Transplantation** 1988 Nov;46(5):771–3

Bone marrow purging for multiple myeloma by avidin–biotin immunoadsorption. Lemoli RM, et al. **Transplantation** 1989 Feb;47(2):385–7

L–leucyl–L–leucine methyl ester treatment of canine marrow and peripheral blood cells. Inhibition of proliferative responses with maintenance of the capacity for autologous marrow engraftment. Raff RF, et al. **Transplantation** 1988 Nov;46(5):655–60

[The rheologic effects of ultraviolet irradiation of autologous blood with and without lymphocytes] Belgrad D, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):284–6 (Eng. Abstr.) **(Ger)**

[Prevention of graft versus host disease by in vitro depletion of T lymphocytes with monoclonal antibodies (Campath–1) in patients undergoing bone marrow transplantation] Iriondo A, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):488–92 (Eng. Abstr.) **(Spa)**

METHODS

Monoclonal rat anti–human lymphocyte antibody Campath–1 binds to T and B lymphocytes but effectively lyses only T cells. Gazitt Y, et al. **Bone Marrow Transplant** 1987 Dec; 2(4):427–33

B–LYMPHOCYTE DIFFERENTIATION ANTIGENS see **ANTIGENS, DIFFERENTIATION, B LYMPHOCYTE**

B–LYMPHOCYTE GENE REARRANGEMENT see **GENE REARRANGEMENT, B–LYMPHOCYTE**

T–LYMPHOCYTE GENE REARRANGEMENT see **GENE REARRANGEMENT, T–LYMPHOCYTE**

B–LYMPHOCYTE HEAVY CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, B–LYMPHOCYTE, HEAVY CHAIN**

B–LYMPHOCYTE KAPPA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, B–LYMPHOCYTE, LIGHT CHAIN**

B–LYMPHOCYTE LAMBDA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, B–LYMPHOCYTE, LIGHT CHAIN**

B-LYMPHOCYTE LIGHT CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, B-LYMPHOCYTE, LIGHT CHAIN**

LYMPHOCYTE MITOGENIC FACTOR see **INTERLEUKIN 2**

B-LYMPHOCYTE MU CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, B-LYMPHOCYTE, HEAVY CHAIN**

LYMPHOCYTE TRANSFORMATION

Expression of lymphocyte activation markers in benign cutaneous T cell infiltrates. Discoid lupus erythematosus versus lichen ruber planus. Sundqvist KG, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):292–5

Activated interstitial and intraepithelial thyroid lymphocytes in autoimmune thyroid disease. Cohen SB, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):161–6

T lymphocyte activation in euthyroid Graves' ophthalmopathy: soluble interleukin 2 receptor release, cellular interleukin 2 receptor expression and interleukin 2 production. Lai KN, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):602–9

Proliferation of B cells from chronic lymphocytic leukemia is selectively promoted by B cell growth factor. Alvarez-Mon M, et al. **Acta Haematol (Basel)** 1989; 81(2):91–7

Cell-mediated toxicity of interleukin-2-activated lymphocytes against autologous and allogeneic human myeloma cells. Shimazaki C, et al. **Acta Haematol (Basel)** 1988;80(4):203–9

Functional analysis of an Epstein–Barr virus–nontransformed human B cell line. Yasuda Y, et al. **Acta Haematol (Basel)** 1988;80(3):139–44

Analysis of activation markers on tonsillar T lymphocytes. Plum J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:113–7

Modulation of immunological abnormalities of growth hormone–deficient children by growth hormone treatment. Matsuura M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):53–7

Relationship between acupuncture-induced immunity and the regulation of central neurotransmitter system in rabbits—II. Effect of the endogenous opioid peptides on the regulation of acupuncture-induced immune reaction. Zhao JC, et al. **Acupunct Electrother Res** 1989;14(1):1–7

A new marker of T lymphocyte activation in type I diabetes. Cavanaugh J, et al. **Adv Exp Med Biol** 1988;246:79–84

Function of the antigen receptor in T cell activation. Goldsmith MA, et al. **Adv Exp Med Biol** 1988;234:195–211 (39 ref.)

Decreased mitogenic response of murine spleen cells following intraperitoneal injection of serovar-specific glycopeptidolipid antigens from the Mycobacterium avium complex. Hooper LC, et al. **Adv Exp Med Biol** 1988; 239:309–25

Reversibility of loss of homing receptor expression following activation. Jung TM, et al. **Adv Exp Med Biol** 1988; 237:519–24

Germinal center B cells present antigen obtained in vivo to T cells in vitro and stimulate mixed lymphocyte reactions. Kosco MH, et al. **Adv Exp Med Biol** 1988;237:883–8

Postoperative activation of tumor specific T cells by immunization with virus-modified tumor cells and effects on metastasis. Schirrmacher V, et al. **Adv Exp Med Biol** 1988;233:91–6

Loss of tumorigenicity following in vitro MuLV infection is associated with induction of peritoneal natural killer cell activity. Thiel K, et al. **Adv Exp Med Biol** 1988;239:169–83

Anti-pokeweed mitogen antiserum inhibits and enhances blastogenesis of mononuclear cells induced by pokeweed mitogen. Uiterdijk HG, et al. **Agents Actions** 1988 Aug; 25(1–2):106–14

Impaired T-lymphocyte-dependent immune responses to microbial antigens in patients with HIV-1-associated persistent generalized lymphadenopathy. Ballet JJ, et al. **Aids** 1988 Aug;2(4):291–7

Cell-mediated immune proliferative responses to HIV-1 of chimpanzees vaccinated with different vaccinia recombinant viruses. Van Eendenburg JP, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):41–50

Effect of HBV antigens and their immune complexes on the PHA induced lymphocyte proliferation. Modulatory influence on interleukin-2 activity. Stachowski J, et al. **Allerg Immunol (Leipz)** 1989;35(1):39–49

Lymphocyte blastogenesis in children with cow's milk hypersensitivity after its elimination from the diet. Brarda OA, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb; 17(1):45–8

T cell responses to a Parietaria judaica pollen extract: comparison between Parietaria-sensitive patients, other atopics and healthy controls. Di Felice G, et al. **Allergy** 1989 Jul;44(5):322–9

Immunomodulating properties of lymphocytes activated by farmer's lung associated bacterium Thermoactinomyces vulgaris in vitro. Jägerroos HJ. **Allergy** 1988 Nov; 43(8):586–92

Clonal B-cell proliferation in an infant with congenital HIV infection and immune thrombocytopenia. Voelkerding KV, et al. **Am J Clin Pathol** 1988 Oct;90(4):470–4

Restriction of blood and marrow CLL-B cells to free L-chain Ig secretion: implication for normal B-cell function and control. Hopper JE, et al. **Am J Hematol** 1988 Nov;29(3):125–33

BSF-2/IL-6 does not augment Ig secretion but stimulates proliferation in myeloma cells. Tanabe O, et al. **Am J Hematol** 1989 Aug;31(4):258–62

Nonspecific cytotoxicity of recombinant interleukin-2 activated lymphocytes. Bechard DE, et al. **Am J Med Sci** 1989 Jul;298(1):28–33

Lymphocyte proliferative responses of patients with ocular toxoplasmosis to parasite and retinal antigens. Nussenblatt RB, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):632–41

Detection of activated T lymphocytes in the human atherosclerotic plaque. Hansson GK, et al. **Am J Pathol** 1989 Jul;135(1):169–75

Analysis of a murine B cell lymphoma, CH44, with an associated non-neoplastic T cell population. I. Proliferation of normal T lymphocytes is induced by a secreted product of the malignant B cells. Willoughby PB, et al. **Am J Pathol** 1988 Dec;133(3):507–15

Hydatidiform mole macromolecules inhibit interleukin-2-mediated murine lymphocyte proliferation in vitro. Bennett WA, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):76–80

Delineation between T- and B-suppressive molecules from human seminal plasma: I. Partial characterization of a 180-kD protein inhibiting the B response to T-independent antigens. Bouvet JP, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):87–93

Immunologic and hematologic responses in ponies with experimentally induced Strongylus vulgaris infection. Bailey M, et al. **Am J Vet Res** 1989 Aug;50(8):1386–91

Alterations in bovine lymphocyte function during the periparturient period. Kehrli ME Jr, et al. **Am J Vet Res** 1989 Feb;50(2):215–20

Cell-mediated immune responses of suckling pigs inoculated with attenuated or virulent transmissible gastroenteritis virus. Welch SK, et al. **Am J Vet Res** 1988 Aug; 49(8):1228–34

The eosinophil component of the alveolitis in idiopathic pulmonary fibrosis. Signs of eosinophil activation in the lung are related to impaired lung function. Hällgren R, et al. **Am Rev Respir Dis** 1989 Feb;139(2):373–7

Interleukin-2 and lymphokine activated killer cells: promises and cautions. Glassman AB. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):51–5 (12 ref.)

Are cognitive receptors involved in "non-specific" mhc-unrestricted lytic activity? Bolhuis RL, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug;139(4):460–5

Natural lymphocyte activation in postnatal development of germ-free and conventional mice. Forni L, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):245–56

Lymphokine-activated killer cells: analysis of their anti-tumour efficacy in vitro and in vivo. Hiserodt JC, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug;139(4):466–78

Activated lymphocyte cytotoxicity: concepts and confusions. Wolf JA Jr, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug; 139(4):435–8

Lymphocyte activation: modulatory effects mediated by interactions between cell adhesion molecules. Anderson P, et al. **Ann N Y Acad Sci** 1988;551:347–52; discussion 353

Proliferative responses to acetylcholine receptor peptides in myasthenia gravis. Berrih-Aknin S, et al. **Ann N Y Acad Sci** 1988;540:504–5

Functional analysis of CD2, CD4, and CD8 in T-cell activation. Bierer BE, et al. **Ann N Y Acad Sci** 1988; 532:199–206 (15 ref.)

Accessory cell competence of human glial cells in mitogenic activation of resting peripheral T cells. Cashman N, et al. **Ann N Y Acad Sci** 1988;540:498–500

Generation and analysis of a T-lymphocyte somatic mutant for studying molecular aspects of signal transduction by the antigen receptor. Goldsmith MA, et al. **Ann N Y Acad Sci** 1988;546:91–103 (31 ref.)

Lymphokine-activated killer cells. Induction and function. Grimm EA, et al. **Ann N Y Acad Sci** 1988;532:380–6 (22 ref.)

Role of soluble cytotoxic factors in lymphokine-activated killer cell (LAK)-mediated cytotoxicity. Hiserodt JC, et al. **Ann N Y Acad Sci** 1988;532:395–404 (78 ref.)

Role of Ti/CD3, Thy-1, and Ly-6 in cytolytic T-cell activation analyzed with Ti loss variants. Langlet C, et al. **Ann N Y Acad Sci** 1988;532:33–43

Activation of thymocytes and T cells by interleukin-6. Le JM, et al. **Ann N Y Acad Sci** 1989;557:444–52; discussion 452–3

Interleukin-6 is produced by epidermal cells and plays an important role in the activation of human T-lymphocytes and natural killer cells. Luger TA, et al. **Ann N Y Acad Sci** 1989;557:405–14

Developmental biology of T lymphocytes. Deletion of autoreactive T cells and impact of the alpha, beta receptor on the CD4/CD8 phenotype. von Boehmer H, et al. **Ann N Y Acad Sci** 1988;546:104–8 (11 ref.)

Cross-linking of T-cell receptors is insufficient to induce IL-2 responsiveness (activation) in resting Lyt-2+ T cells. IL-4 or RIF are essential as second signal. Wagner H, et al. **Ann N Y Acad Sci** 1988;532:128–35

Correlation of immunological studies and disease progression in chronic progressive multiple sclerosis. Trotter JL, et al. **Ann Neurol** 1989 Feb;25(2):172–8

Selective depletion and activation of CD8+ lymphocytes from peripheral blood of patients with polymyalgia rheumatica and giant cell arteritis. Dasgupta B, et al. **Ann Rheum Dis** 1989 Apr;48(4):307–11

In vitro cell-mediated immunity after thermal injury is not impaired. Density gradient purification of mononuclear cells is associated with spurious (artifactual) immunosuppression. Xu DZ, et al. **Ann Surg** 1988 Dec; 208(6):768–75

Prenatal immune priming in malaria: antigen-specific blastogenesis of cord blood lymphocytes from neonates born in a setting of holoendemic malaria. Desowitz RS. **Ann Trop Med Parasitol** 1988 Apr;82(2):121–5

The biologic roles of CD2, CD4, and CD8 in T-cell activation. Bierer BE, et al. **Annu Rev Immunol** 1989; 7:579–99 (87 ref.)

Clonal expansion versus functional clonal inactivation: a costimulatory signalling pathway determines the outcome of T cell antigen receptor occupancy. Mueller DL, et al. **Annu Rev Immunol** 1989;7:445–80 (140 ref.)

Impact of adjuvant chemotherapy on spontaneous and poke week mitogen triggered immunoglobulin secretion of blood lymphocytes in operable breast cancer. Blomgren H, et al. **Anticancer Res** 1988 Jul–Aug;8(4):839–44

Dialysis membrane interference in human T-lymphocyte proliferation assays. Bligaard N, et al. **APMIS** 1989 Apr; 97(4):361–6

Activated lymphocytes in the peripheral blood of asymptomatic HBsAg carriers. Raptopoulou-Gigi M. **APMIS** 1989 Feb;97(2):190–2

Major depressive disorder and immunity. Role of age, sex, severity, and hospitalization. Schleifer SJ, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):81–7

Graft-induced polyclonal activation of B cells. I. Alloantigen-induced humoral response in mice. Paczek L, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):735–41

Graft-induced polyclonal activation of B cells. II. Humoral response of renal allograft recipients (RAR). Paczek L, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):743–52

Mitogenic stimulation of mouse lymphoid cells by Aleuria aurantia agglutinin. Pajtasz E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):133–9

Secretion of interleukin 1 (IL-1) by peritoneal macrophages upon contact with syngeneic T cells is Ia-restricted and antigen-independent process. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):661–71

Membrane-bound anti-CD3 monoclonal antibodies trigger cytolytic T-lymphocyte-mediated tumor lysis. Mentzer SJ, et al. **Arch Surg** 1988 Oct;123(10):1280–5

Inflammatory and immunological responses to murine cytomegalovirus in resistant CBA mice. Price P, et al. **Arch Virol** 1989;104(1–2):35–51

Autoantibodies to intracellular proteins in human systemic lupus erythematosus are not due to random polyclonal B cell activation. Gharavi AE, et al. **Arthritis Rheum** 1988 Nov;31(11):1337–45

Effect of hemodialysis on T lymphocyte subsets, con-A-activated suppressor cell activity, and interleukin-2 receptor expression on lymphocytes in chronic uremic patients. Tchórzewski H, et al. **Artif Organs** 1989 Jun; 13(3):185–9

The influence of microtiter plates from different suppliers on lymphocyte proliferation. Wang SS, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):3–6

Effects of gastric cancer cells on lymphocyte proliferation. Wu CW, et al. **Asian Pac J Allergy Immunol** 1988 Jun; 6(1):29–32

Extremely low frequency pulsed electromagnetic fields increase cell proliferation in lymphocytes from young and aged subjects. Cossarizza A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):692–8

Alpha-fetoprotein gene expression in human lymphoblastoid cells and in PHA-stimulated normal T-lymphocytes. Lafarge-Frayssinet C, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):112–8

Anti HLA class I monoclonal antibody effect on PKC kinetics in PHA activated human peripheral blood mononuclear and E+ cells. Poltronieri L, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):46–53

Mechanism of T cell proliferation in vivo: analysis of IL-2 receptor expression and activation of c-myc and c-myb oncogenes during lymphatic regeneration. Sihvola M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):181–8

PGE2-induced cyclic AMP accumulation in human CD4+ T cells is strongly enhanced during the CD2-mediated activatory process. Theodorou I, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1396–402

Cholera toxin partially inhibits the T-cell response to phytohaemagglutinin through the ADP-ribosylation of a 45 kDa membrane protein. Nel AE, et al. **Biochem J** 1988 Dec 1;256(2):383–90

Phosphorylation of two cytosolic proteins. An early event of T-cell activation. Peyron JF, et al. **Biochem J** 1989 Mar 1;258(2):505–10

Mitogenic signaling pathways regulating expression of c-myc and ornithine decarboxylase genes in bovine T-lymphocytes. Morris DR, et al. **Biochemistry** 1988 Nov 15;27(23):8689–93

Structurally distinct plasma membrane regions give rise to extracellular membrane vesicles in normal and transformed lymphocytes. Armstrong MJ, et al.

Biochim Biophys Acta 1988 Dec 8;946(1):106–12
Role of Ca2+ in the regulation of hormone receptor exposure during lymphocyte activation. Jy W, et al.
Biochim Biophys Acta 1989 Aug 7;983(2):153–60
Mitogen-stimulated lymphocyte proliferation and pituitary hormones in major depression. Darko DF, et al.
Biol Psychiatry 1989 Jun;26(2):145–55
B-cell reconstitution after autologous bone marrow transplantation: increase in serum CD23 ("IgE-binding factor") precedes IgE and B-cell regeneration. Bengtsson M, et al. Blood 1989 Jun;73(8):2139–44
TCR gamma delta bearing lymphocyte clones with lymphokine-activated killer activity against autologous leukemic cells. Bensussan A, et al. Blood 1989 Jun; 73(8):2077–80
Human normal CD5+ B lymphocytes can be induced to differentiate to CD5– B lymphocytes with germinal center cell features. Caligaris-Cappio F, et al. Blood 1989 Apr; 73(5):1259–63
Studies of in vitro activated CD5+ B cells. Freedman AS, et al. Blood 1989 Jan;73(1):202–8
Induction of proliferation and blast transformation by interferon in human malignant and non-malignant lymph node B cells. Ostlund L, et al. Blood 1989 Jun;73(8):2171–81
Macrophage colony-stimulating factor (CSF-1) is expressed by spontaneously outgrown EBV-B cell lines and activated normal B lymphocytes. Reisbach G, et al. Blood 1989 Aug 15;74(3):959–64
Endogenously generated activated killer cells circulate after autologous and allogeneic marrow transplantation but not after chemotherapy. Reittie JE, et al. Blood 1989 Apr; 73(5):1351–8
T-cell activation and subset patterns are altered in B-CLL and correlate with the stage of the disease. Tötterman TH, et al. Blood 1989 Aug 1;74(2):786–92
Leukemic cells from some adult T-cell leukemia patients proliferate in response to interleukin-4. Uchiyama T, et al. Blood 1988 Oct;72(4):1182–6
Leukemic cells from a chronic T-lymphocytic leukemia patient proliferated in response to both interleukin-2 and interleukin-4 without prior stimulation and produced interleukin-2 mRNA with stimulation. Umadome H, et al. Blood 1988 Oct;72(4):1177–81
Adherent lymphokine-activated killer cells in chronic myelogenous leukemia: a benign cell population with potent cytotoxic activity. Verfaillie C, et al. Blood 1989 Aug 1;74(2):793–7
Identification of activated T cells and the suppressor/inducer subset in patients suffering from severe aplastic anemia. Köller U, et al. Blut 1989 Jan;58(1):21–6
Induction of lymphokine-activated killer cell against human leukemia cells in vitro. Teichmann JV, et al. Blut 1989 Jul;59(1):21–4
T cell subpopulations defined by monoclonal antibodies after HLA-identical sibling marrow transplantation. II. Activated and functional subsets of helper-inducer and cytotoxic-suppressor subpopulations defined by two-colour fluorescence flow cytometry. Atkinson K.
Bone Marrow Transplant 1986 Dec;1(2):121–32
Ultrastructural studies of a lysosomal enzyme during lymphocyte activation. Bou-Gharios G, et al.
Br J Exp Pathol 1988 Oct;69(5):661–70
Heterogenous response of B cell chronic lymphocytic leukaemia (B-CLL) cells to anti-human IgM antibody (anti-mu) and B cell stimulatory factor 1 (BSF-1). Kawano M, et al. Br J Haematol 1989 Jan;71(1):47–51
Influence of early rearing on lymphocyte proliferation responses in juvenile rhesus monkeys. Coe CL, et al.
Brain Behav Immun 1989 Mar;3(1):47–60
Effects of Newcastle disease virus administration to mice on the metabolism of cerebral biogenic amines, plasma corticosterone, and lymphocyte proliferation. Dunn AJ, et al. Brain Behav Immun 1987 Sep;1(3):216–30
Conditioned tolerance to drug-induced (poly I:C) natural killer cell activation: effects of drug-dosage and context-specificity parameters. Dyck DG, et al.
Brain Behav Immun 1987 Sep;1(3):251–66
Behaviorally conditioned suppression of mitogen-induced proliferation and immunoglobulin production: effect of time span between conditioning and reexposure to the conditioning stimulus. Kusnecov AW, et al.
Brain Behav Immun 1988 Sep;2(3):198–211
Effects on immune responses by chronic stress are modulated by aging. Odio M, et al. Brain Behav Immun 1987 Sep; 1(3):204–15
Effect of differential housing and time on immune reactivity to sheep erythrocytes and Candida. Rabin BS, et al.
Brain Behav Immun 1987 Sep;1(3):267–75
Phytohaemagglutinin responsiveness of peripheral lymphocytes and survival in patients with primary breast cancer. Burford-Mason A, et al.
Breast Cancer Res Treat 1989 Jul;13(3):243–50
Effects of vaccines on the canine immune system. Phillips TR, et al. Can J Vet Res 1989 Apr;53(2):154–60
In vitro study of the modification by bleomycin of thymidine phosphorylation activity in lectin-stimulated normal human lymphocytes. Sharif A, et al. Cancer Biochem Biophys 1988 Jul;10(1):17–24
Is T-cell activation an unfavourable sign in i.v.-drug addicts infected with HIV? Fuchs DN, et al.
Cancer Detect Prev 1988;12(1–6):277–82
Preactivated T cells in cancer patients with poor prognosis. Fuchs DN, et al. Cancer Detect Prev 1988;12(1–6):97–103
Tumor-infiltrating lymphocytes: in vitro characterization of morphological and phenotypical changes. Halpern J, et al.
Cancer Detect Prev 1988;13(1):1–7
Lymphokine-activated suppressor (LAS) cells in patients with gastric carcinoma. Ebihara T, et al.
Cancer Immunol Immunother 1989;28(3):218–24
Inhibition of lymphokine-activated killer cell generation by cultured tumor cell lines in vitro. Guillou PJ, et al.
Cancer Immunol Immunother 1989;28(1):43–53
Monocyte-dependent, serum-borne suppressor of induction of lymphokine-activated killer cells in lymphocytes from melanoma patients. Itoh K, et al.
Cancer Immunol Immunother 1989;29(1):57–62
Influence of the donors' clinical status on in vitro and in vivo tumor-cytotoxic activation of interleukin-2-exposed lymphocytes and their circulation in different organs. Rodolfo M, et al. Cancer Immunol Immunother 1989; 28(2):136–42
Effects of injection routes of growing tumors and PSK or OK-432 on antiproliferative activity of mouse serum. Ryoyama C, et al. Cancer Immunol Immunother 1989; 28(2):101–6
Production of cytokines after lipopolysaccharide stimulation of murine spleen cells during lymphoma development in AKR mice. Vaillier D, et al.
Cancer Immunol Immunother 1989;29(1):35–42
Auto-tumor lysis by blood lymphocytes in vitro. Strongly activated lymphocytes lack selectivity. Vánky F, et al.
Cancer Immunol Immunother 1989;29(2):125–32
Auto-tumor recognition following in vitro induction of MHC antigen expression on solid human tumors: stimulation of lymphocytes and generation of cytotoxicity against the original MHC-antigen-negative tumor cells. Vánky F, et al. Cancer Immunol Immunother 1989;28(1):17–21
Serum levels of the low-affinity interleukin-2 receptor molecule (TAC) during IL-2 therapy reflect systemic lymphoid mass activation. Voss SD, et al.
Cancer Immunol Immunother 1989;29(4):261–9
Synergistic induction of lymphokine (IL-2)-activated killer activity by IL-2 and the polysaccharide lentinan, and therapy of spontaneous pulmonary metastases. Yamasaki K, et al. Cancer Immunol Immunother 1989;29(2):87–92
Role of interleukin-2 and interferon-gamma in induction of activated natural killer cells from mice primed in vivo and subsequently challenged in vitro with the streptococcal preparation OK432. Yamaue H, et al.
Cancer Immunol Immunother 1989;29(2):79–86
Properties of glucocorticoid receptors in Epstein-Barr virus-transformed lymphocytes from patients with familial cortisol resistance. Iida S, et al. Cancer Res 1989 Apr 15; 49(8 Suppl):2214s–2216s
Patterns of methionine auxotrophy in normal and neoplastic cells: the methionine independence of lymphocyte mitogenesis and low frequency of the methionine-dependent phenotype in human tumors. Judde JG, et al. Cancer Res 1988 Dec 1;48(23):6775–9
Cyclosporin immunosuppression mediated by calcium/sodium imbalance. Kimball PM, et al.
Cancer Res 1989 Feb 15;49(4):877–82
Lymphokine-activated killer activity in long-term cultures with anti-CD3 plus interleukin 2: identification and isolation of effector subsets. Ochoa AC, et al.
Cancer Res 1989 Feb 15;49(4):963–8
In vitro and in vivo activation of B-lymphocytes: a flow cytometric study of chromatin structure employing 7-aminoactinomycin D. Stokke T, et al. Cancer Res 1988 Dec 1;48(23):6708–14
Activation induces a rapid reorganization of spectrin in lymphocytes. Lee JK, et al. Cell 1988 Dec 2;55(5):807–16
Immunosuppressive properties of synthetic peptides derived from CD4 and HLA-DR antigens. Mazerolles F, et al. Cell 1988 Nov 4;55(3):497–504
Evidence that the leukocyte-common antigen is required for antigen-induced T lymphocyte proliferation. Pingel JT, et al. Cell 1989 Sep 22;58(6):1055–65
Quantitative evaluation of changes in the microtubule content of lymphocytes. Bilej M, et al. Cell Biol Int Rep 1989 Apr; 13(4):337–43
Antigen-specific regulation of T lymphocyte proliferative responses to contact-sensitizing chemicals in the guinea pig. Baker D, et al. Cell Immunol 1989 Mar;119(1):153–9
The anti-T cell monoclonal antibody 9.3 (anti-CD28) provides a helper signal and bypasses the need for accessory cells in T cell activation with immobilized anti-CD3 and mitogens. Baroja ML, et al. Cell Immunol 1989 Apr 15; 120(1):205–17
Sheep erythrocyte rosetting induces multiple alterations in T lymphocyte function: inhibition of T cell receptor activity and stimulation of T11/CD2. Breitmeyer JB, et al. Cell Immunol 1989 Oct 1;123(1):118–33
Human T cell activation induced by a monoclonal mouse IgG3 anti-CD3 antibody (RIV9) requires binding of the Fc part of the antibody to the monocytic 72-kDa high-affinity Fc receptor (FcRI). Ceuppens JL, et al.
Cell Immunol 1989 Jan;118(1):136–46
Accessory cell function of human melanoma cells in mitogen-induced T cell proliferation. Cordiali-Fei P, et al. Cell Immunol 1988 Oct 1;116(1):149–62
Lack of a role of monocytes in the inhibition by monoclonal antibodies to monomorphic and polymorphic determinants of HLA class I antigens of PHA-P-induced peripheral blood mononuclear cell proliferation. De Felice M, et al.
Cell Immunol 1989 Aug;122(1):164–77
Interleukin-1-independent activation of human T lymphocytes stimulated by anti-CD3 and a Hodgkin's disease cell line with accessory cell activity. Ellis TM, et al. Cell Immunol 1988 Oct 15;116(2):352–66
Identification of I-A beta-chain residues critical for T cell recognition of peptide antigens. Esch TR, et al.
Cell Immunol 1989 Oct 1;123(1):226–35
T lymphocyte activation by staphylococcal enterotoxins: role of class II molecules and T cell surface structures. Fleischer B, et al. Cell Immunol 1989 Apr 15;120(1):92–101
Antigen presented in the local lymph node by cells from dimethylbenzanthracene-treated murine epidermis activates suppressor cells. Halliday GM, et al.
Cell Immunol 1988 Dec;117(2):289–302
A monoclonal antibody to human B lymphoblastoid cells activates human and murine T lymphocytes. Hardy B, et al. Cell Immunol 1989 Jan;118(1):22–9
Altered immune response patterns in murine syngeneic pregnancy: presence of natural null suppressor cells in maternal spleen identifiable by monoclonal antibodies. Hoskin DW, et al. Cell Immunol 1989 Apr 15;120(1):42–60
OKT4 monoclonal antibody-induced activation of an autoreactive T-cell clone. Ioannides CG, et al.
Cell Immunol 1989 Oct 1;123(1):244–52
IL-4, but not IL-5, can act synergistically with B cell activating factor (BCAF) to induce proliferation of resting B cells. Jankovic DL, et al. Cell Immunol 1988 Nov; 117(1):165–76
PHA activation of encephalitogenic T cells: in vitro line selection overcomes splenic suppression. Jones RE, et al.
Cell Immunol 1989 Oct 1;123(1):60–9
Activation of B lymphocytes with human serum-treated zymosan. Kai C, et al. Cell Immunol 1988 Oct 15; 116(2):467–74
Natural killer cells can enhance the proliferative responses of B lymphocytes. Katz P, et al. Cell Immunol 1989 Apr 15;120(1):270–6
The role of CD4 in antigen-independent activation of isolated single T lymphocytes. Kelso A, et al. Cell Immunol 1988 Oct 1;116(1):99–111
Inhibition of lymphocyte activation with anti-transferrin receptor Mabs: a comparison of three reagents and further studies of their range of effects and mechanism of action. Kemp JD, et al. Cell Immunol 1989 Aug;122(1):218–30
Induction of suppressor cells to T- and B-cell proliferative responses and immunoglobulin production by monoclonal antibodies recognizing the CD3 T-cell differentiation antigen. Kunicka JE, et al. Cell Immunol 1988 Oct 1; 116(1):195–215
Lysis of P3HR-1 cells induced to enter the viral cycle by antibody-dependent and independent immunological mechanisms. Kurakata S, et al. Cell Immunol 1989 Oct 1; 123(1):134–47
Early activation and cell cycle entry of resting B cells after Fab-anti-Ig treatment: role of receptor crosslinking. Lagoo A, et al. Cell Immunol 1989 Jan;118(1):53–67
Direct activation of human B lymphocytes by Candida albicans-derived mannan antigen. Mangeney M, et al.
Cell Immunol 1989 Sep;122(2):329–37
Suppressor factor secreted by T hybridoma established from peripheral blood lymphocytes of a bone marrow transplantation patient. I. Establishment of human T-cell hybridoma and partial characterization of suppressor factor. Matsuo T, et al. Cell Immunol 1988 Oct 15; 116(2):450–66
Interleukins 1 and 2 production and responsiveness in the early stages of retroviral infections of mice. Matteucci D, et al. Cell Immunol 1989 Apr 15;120(1):10–20
Regulation of IgG responses by helper and suppressor T cells activated by pneumococcal capsular polysaccharides. Milligan GN, et al. Cell Immunol 1989 Mar;119(1):222–32
A specific defect in the proliferative capacity of B cells from old mice stimulated with autoreactive T cells. Nagarkatti PS, et al. Cell Immunol 1989 Apr 15;120(1):102–13
The BCL1 B lymphoma responds to IL-4, IL-5, and GM-CSF. O'Garra A, et al. Cell Immunol 1989 Oct 1; 123(1):189–200
Suppression of lymphocyte alloreactivity by early gestational human decidua. I. Characterization of suppressor cells and suppressor molecules. Parhar RS, et al. Cell Immunol 1988 Oct 15;116(2):392–410
PGE2-mediated immunosuppression by first trimester human decidual cells blocks activation of maternal leukocytes in the decidua with potential anti-trophoblast activity. Parhar RS, et al. Cell Immunol 1989 Apr 15;120(1):61–74
Measles virus-induced suppression of lymphocyte proliferation. Sanchez-Lanier M, et al. Cell Immunol 1988 Oct 15;116(2):367–81
Regulatory role of monomorphic and polymorphic determinants of HLA class I antigens in the proliferation of T cells stimulated by autologous and allogeneic B and T lymphoid cells. Santoli D, et al. Cell Immunol 1988 Oct 15;116(2):263–73
Long-term growth of human WGA-activated T-lymphocytes without feeder cells. Siwicki JK.
Cell Immunol 1989 Sep;122(2):563–8
Inhibitory effects of anti-CD2 monoclonal antibodies on interleukin 2 production and interleukin 2 receptor expression in anti-CD3-induced T cell activation. Stohl W, et al. Cell Immunol 1989 May;120(2):351–65

Differential immunomodulation by anti-CD2 monoclonal antibodies of anti-CD3-induced T cell activation: dependence upon the individual anti-CD3 monoclonal antibody used for activation. Stohl W, et al. **Cell Immunol** 1988 Oct 1;116(1):73–85

Activation of human T cells with the physiological regulator of protein kinase C. Subramaniam A, et al. **Cell Immunol** 1988 Oct 15;116(2):439–49

CD3Ti+ human thymocyte-derived clones displaying a differential response to activation via CD3Ti and CD2. Testi R, et al. **Cell Immunol** 1989 Sep;122(2):350–64

T cell responses to streptococcal antigens in rats: relation to susceptibility to streptococcal cell wall–induced arthritis. van den Broek MF, et al. **Cell Immunol** 1988 Oct 1; 116(1):216–29

The interaction of CD2 with its LFA-3 ligand expressed by autologous erythrocytes results in enhancement of B cell responses. Virella G, et al. **Cell Immunol** 1988 Oct 15;116(2):308–19

Cell-mediated immune responses to poliovirus. I. Conditions for induction, characterization of effector cells, and cross-reactivity between serotypes for delayed hypersensitivity and T cell proliferative responses. Wang KG, et al. **Cell Immunol** 1989 Apr 1;119(2):252–62

Expression of Thomsen-Friedenreich (TF) antigens on lymphocytes. II. Loss of cryptic TF antigens during mitogenic activation of human T and B lymphocytes. Wolf MF, et al. **Cell Immunol** 1989 Jul;121(2):366–71

Resistance of lymphokine-activated T lymphocytes to cell-mediated cytotoxicity. Zanovello P, et al. **Cell Immunol** 1989 Sep;122(2):450–60

Expression of CD9 antigen on normal activated human B cells. Zeleznik-Le NJ, et al. **Cell Immunol** 1989 Oct 1; 123(1):70–82

Interleukin 2 promotes expression of an interleukin 2 receptor and proliferation of T cells stimulated with non-mitogenic dose of concanavalin A. Komada H, et al. **Cell Struct Funct** 1989 Apr;14(2):193–7

Biochemical diagnosis of Hunter syndrome on Epstein-Barr virus–transformed lymphoblastoid cell lines. Morabito E, et al. **Clin Chim Acta** 1989 May 15;181(2):125–33

Use of an autologous reaction in vitro to assess contributions of T and B lymphocytes to immune hyperreactivity of atopics. Duke-Cohan JS, et al. **Clin Exp Allergy** 1989 Mar; 19(2):163–8

Functional analysis of lymphocytes subpopulations in experimental cocaine abuse. I. Dose-dependent activation of lymphocyte subsets. Bagasra O, et al. **Clin Exp Immunol** 1989 Aug;77(2):289–93

Anti-IgM treatment of C57BL/6-1pr/1pr mice: depletion of B cells reduces 1pr gene–induced lymphoproliferation and mononuclear cell vasculitis. Cerny A, et al. **Clin Exp Immunol** 1989 Jul;77(1):124–9

B lymphocyte activation in systemic lupus erythematosus: spontaneous production of IgG antibodies to DNA and environmental antigens in cultures of blood mononuclear cells. Dar O, et al. **Clin Exp Immunol** 1988 Sep;73(3):430–5

The majority of the activated T cells in the blood of insulin-dependent diabetes mellitus (IDDM) patients are CD4+. De Berardinis P, et al. **Clin Exp Immunol** 1988 Aug;73(2):255–9

Decreased proliferative activity associated with activation markers in patients with alcoholic liver cirrhosis. Devière J, et al. **Clin Exp Immunol** 1988 Jun;72(3):377–82

Cellular activation without proliferation to B cell growth factor and interleukin 2 in chronic lymphocytic leukaemia B cells stimulated with phorbol ester plus calcium ionophore. Engel P, et al. **Clin Exp Immunol** 1989 Apr; 76(1):61–7

The role of human alveolar macrophages in the allogeneic and autologous mixed leucocyte reactions. Ettensohn DB, et al. **Clin Exp Immunol** 1989 Mar;75(3):432–7

HLA class II mRNA accumulation by activated human T cells following growth in conditioned medium. Gansbacher B, et al. **Clin Exp Immunol** 1989 Jun;76(3):440–5

Mechanisms other than polyclonal B cell activation possibly involved in Epstein-Barr virus–induced autoimmunity. Garzelli C, et al. **Clin Exp Immunol** 1989 Jun;76(3):412–6

Synovial T lymphocyte recognition of organisms that trigger reactive arthritis. Gaston JS, et al. **Clin Exp Immunol** 1989 Jun;76(3):348–53

Phenotypic study of CD4+ and CD8+ lymphocyte subsets in relation to cytomegalovirus carrier status and its correlate with pokeweed mitogen-induced B lymphocyte differentiation. Gratama JW, et al. **Clin Exp Immunol** 1989 Aug;77(2):245–51

Blastogenic responses to Pneumocystis carinii among patients with human immunodeficiency (HIV) infection. Hagler DN, et al. **Clin Exp Immunol** 1988 Oct;74(1):7–13

Specific maternal anti-fetal lymphoproliferative responses and their regulation by natural immunosuppressive factors. Hoskin DW, et al. **Clin Exp Immunol** 1989 May;76(2):262–7

Lymphocyte transformation induced by autologous cells. XVI: Distinctive role of discrete regions of class I MHC antigens in the autologous mixed leucocyte reaction. Innes JB, et al. **Clin Exp Immunol** 1989 Feb;75(2):280–5

Lymphocyte subpopulations in Bancroftian filariasis: activated (DR+) CD8+ T cells in patients with chronic lymphatic obstruction. Lal RB, et al. **Clin Exp Immunol** 1989 Jul;77(1):77–82

Impaired mitogen responses of the non-leukaemic B cells from patients with chronic lymphocytic leukaemia. Morgan A, et al. **Clin Exp Immunol** 1989 Aug;77(2):239–44

Defective DNA synthesis by T cells in acquired 'common-variable' hypogammaglobulinaemia on stimulation with mitogens. North ME, et al. **Clin Exp Immunol** 1989 Apr;76(1):19–23

T lymphocyte activation in systemic lupus erythematosus analysed by proliferative response to nucleoplasmic proteins on nitrocellulose immunoblots. Pham BN, et al. **Clin Exp Immunol** 1989 Aug;77(2):168–74

Placental protein 14 (PP14) inhibits the synthesis of interleukin-2 and the release of soluble interleukin-2 receptors from phytohaemagglutinin-stimulated lymphocytes. Pockley AG, et al. **Clin Exp Immunol** 1989 Aug;77(2):252–6

Cellular immune responses to Plasmodium falciparum antigens in Gambian children during and after an acute attack of falciparum malaria. Riley EM, et al. **Clin Exp Immunol** 1988 Jul;73(1):17–22

Possible involvement of the CD4 molecule in a late activation event on CD4+ T cell proliferation in the human autologous mixed lymphocyte reaction. Sakane T, et al. **Clin Exp Immunol** 1989 Feb;75(2):269–74

Measles virus inhibits lymphocyte proliferation in vitro by two different mechanisms. Salonen R, et al. **Clin Exp Immunol** 1989 Mar;75(3):376–80

Unresponsiveness to Con A in spleen cell cultures of M. lepraemurium-infected mice is dependent on a defective expression of high-affinity IL-2 receptors rather than on a lack of IL-2 production. Turcotte R, et al. **Clin Exp Immunol** 1989 Apr;76(1):126–31

Relative strength of the mitogenic and interleukin-2–production–inducing activities of staphylococcal exotoxins presumed to be causative exotoxins of toxic shock syndrome: toxic shock syndrome toxin-1 and enterotoxins A, B and C to murine and human T cells. Uchiyama T, et al. **Clin Exp Immunol** 1989 Feb; 75(2):239–44

An in vitro model for the induction of angiotensin-converting enzyme in sarcoidosis: possible parallels to the immune response. Vuk-Pavlović Z, et al. **Clin Exp Immunol** 1988 Jun;72(3):499–504

Lymphocyte sensitization to Aspergillus fumigatus in allergic bronchopulmonary aspergillosis. Walker CA, et al. **Clin Exp Immunol** 1989 Apr;76(1):34–40

Reversible interleukin-2 response defects in systemic lupus erythematosus. Warrington RJ, et al. **Clin Exp Immunol** 1989 Aug;77(2):163–7

Polyclonal proliferation of activated suppressor/cytotoxic T cells with transient depression of natural killer cell function in acute infectious mononucleosis. Williams ML, et al. **Clin Exp Immunol** 1989 Jul;77(1):71–6

Activated T lymphocytes in the peripheral blood of patients with systemic lupus erythematosus induce B cells to produce immunoglobulin. Inghirami G, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):269–76

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. Johnston C, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):391–3

Characterization of activated lymphocytes in colon cancer. Ebert EC, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):72–81

Intracellular mechanisms of lymphoid cell activation. Fresa K, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):8–19 (34 ref.)

Stimulatory effect of CD5 antibody on B cells from patients with rheumatoid arthritis. Hara M, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):223–30

The role of T cell phenotypes in decreased lymphoproliferation of the elderly. Matour D, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):82–99

The alternative pathway of T cell activation: biology, pathophysiology, and perspectives for immunopharmacology. Meuer SC, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S133–9 (32 ref.)

Inhibition of thymocyte mitogenic responses by coculture with thymic epithelial cells. Munoz-Blay T, et al. **Clin Immunol Immunopathol** 1989 May;51(2):275–93

Interleukin 2 responsive T cell clones from rheumatoid and normal subjects: proliferative responses to connective tissue elements. Ofosu-Appiah WA, et al. **Clin Immunol Immunopathol** 1989 Feb;50(2):264–71

The interaction of interleukin 2 with its receptor in the generation of suppressor T cells in antigen-specific and antigen-nonspecific systems in vitro. Oh-Ishi T, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):447–59

In vitro activation of lymphocytes from nonsmall cell cancer patients by interleukin 2 and anti-CD3 antibody. Pisani RJ, et al. **Clin Immunol Immunopathol** 1989 Mar; 50(3):348–63

Suppression of autologous mixed leukocyte reaction in type 1 diabetes mellitus by in vivo–activated T lymphocytes. Räsänen L, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):406–13

In vitro induction of T cell–dependent B cell differentiation in patients with common varied immunodeficiency. Stohl W, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):273–82

Interleukin 2 as an inducer of proliferation in Klebsiella-stimulated human B cells. Stüber F, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):386–91

Purification of a glycosaminoglycan-stimulatory lymphokine from supernatants of in vitro–activated human mononuclear cells. Tsao M, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):122–31

Autologous CD8-positive cells suppress T cell proliferation in response to thyroid antigens in Hashimoto's thyroiditis. Weetman AP. **Clin Immunol Immunopathol** 1989 May; 51(2):303–10

Immune alterations associated with T lymphocyte activation and regulation in retinitis pigmentosa patients. Williams LL, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):380–9

Inhibition of bovine peripheral blood mononuclear cell blastogenesis by fractionated mammary secretion. Torre PM, et al. **Comp Biochem Physiol [B]** 1989;92(1):157–65

Responder T-cell subsets and antigenic stimulus in mixed lymphocyte–hepatocyte culture. Bumgardner GL, et al. **Curr Surg** 1989 Jan–Feb;46(1):20–3

DNA analysis of stimulated lymphocytes by automatic sampling for flow cytometry. Azzolina LS, et al. **Cytometry** 1988 Sep;9(5):508–11

Soluble mediators can replace helper T cells in the activation of resting B lymphocytes: evidence for a human B cell activating factor. Diu A, et al. **Dev Biol Stand** 1988;69:51–6

The involvement of tumor necrosis factor–alpha (TNF-alpha) in immunomodulation and in septic shock. Espevik T, et al. **Dev Biol Stand** 1988;69:139–42

Establishment of dye-uptake method (A375 assay) for quantitative measurement of IL-1: correlation with LAF assay. Nakano K, et al. **Dev Biol Stand** 1988;69:93–101

Ontogeny of mitogen responsive lymphocytes in the bovine fetus. Jensen J, et al. **Dev Comp Immunol** 1988 Summer; 12(3):685–92

Chicken-activated-T-lymphocyte-antigen (CATLA) recognized by monoclonal antibody INN-CH 16 represents the IL-2 receptor. Schauenstein K, et al. **Dev Comp Immunol** 1988 Fall;12(4):823–31

Influence of interferon gamma on B cell replication. Vetvicka V, et al. **Dev Comp Immunol** 1988 Summer;12(3):657–68

The effect of zinc status on the immune function of diabetic rats. Mooradian AD, et al. **Diabetologia** 1983 Sep; 31(9):703–7

Persistent reduction of CD4/CD8 lymphocyte ratio and cell activation before the onset of type 1 (insulin-dependent) diabetes. Al-Sakkaf L, et al. **Diabetologia** 1989 May; 32(5):322–5

Binding specificity and intramolecular signal transmission of uncleaved insulin proreceptor in transformed lymphocytes from a patient with extreme insulin resistance. Sasaoka T, et al. **Diabetologia** 1989 Jun;32(6):371–7

Suppression of concanavalin A–induced responses in splenic lymphocytes by activated macrophages in the non-obese diabetic mouse. Yokono K, et al. **Diabetologia** 1989 Jan; 32(1):67–73

The LFA-1 antigen in human B lymphocyte activation. Zola H, et al. **Dis Markers** 1989 Apr–Jun;7(2):95–104

Uptake and subcellular distribution of cadmium in resting and mitogen-activated lymphocytes and its relationship to a metallothioncin-like protein. Sgagias M, et al. **Environ Res** 1989 Aug;49(2):262–70

Mitogen activation of human lymphocytes from normal and acute lymphocytic leukemia (ALL) subjects. Russo SA, et al. **Enzyme** 1989;41(4):217–26

Expression of human lactotransferrin receptors in phytohemagglutinin-stimulated human peripheral blood lymphocytes. Isolation of the receptors by antiligand-affinity chromatography. Mazurier J, et al. **Eur J Biochem** 1989 Feb 1;179(2):481–7

Fc gamma RII expression in resting and activated B lymphocytes. Amigorena S, et al. **Eur J Immunol** 1989 Aug; 19(8):1379–85

Concomitant production of different lymphokines in activated T cells. Andersson U, et al. **Eur J Immunol** 1988 Dec;18(12):2081–4

Functional interaction between B cell subpopulations defined by CD23 expression. Armitage RJ, et al. **Eur J Immunol** 1988 Nov;18(11):1753–60

T cell activation via the CD2 molecule is associated with protein kinase C translocation from the cytosol to the plasma membrane. Bagnasco M, et al. **Eur J Immunol** 1989 May;19(5):823–7

Processing requirements for T cell activation by Mycoplasma arthritidis–derived mitogen. Bauer A, et al. **Eur J Immunol** 1988 Dec;18(12):2109–12

Cyclic AMP-mediated alteration of the CD2 activation process in human T lymphocytes. Preferential inhibition of the phosphoinositide cycle-related transduction pathway. Bismuth G, et al. **Eur J Immunol** 1988 Sep; 18(9):1351–7

Human T cell activation: differential response to anti-CD28 as compared to anti-CD3 monoclonal antibodies. Bjorndahl JM, et al. **Eur J Immuaol** 1989 May;19(5):881–7

Alternative molecular form of human T cell–specific antigen CD27 expressed upon T cell activation. Borst J, et al. **Eur J Immunol** 1989 Feb;19(2):357–64

Regulation of human B cell activation and antibody production by non-major histocompatibility complex–restricted cytotoxic T lymphocytes. Boué F, et al. **Eur J Immunol** 1989 Mar;19(3):529–35

Differential activation of cytokine genes in normal CD4-bearing T cells is stimulus dependent. Carding SR, et al. **Eur J Immunol** 1989 Feb;19(2):231–8

Expression and function of AIM, an activation inducer

molecule of human lymphocytes, is dependent on the activation of protein kinase C. Cebrián M, et al. **Eur J Immunol** 1989 May;19(5):809–15

Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on human T lymphocytes. Chang HC, et al. **Eur J Immunol** 1989 Jun;19(6):1045–51

T cell interactions generated by synthetic peptides covalently linked to a carrier. Childerstone A, et al. **Eur J Immunol** 1989 Jan;19(1):169–76

Expression and characterization of the interleukin 2 receptor in Theileria parva–infected bovine lymphocytes. Coquerelle TM, et al. **Eur J Immunol** 1989 Apr;19(4):655–9

Human Ig superfamily CTLA-4 gene: chromosomal localization and identity of protein sequence between murine and human CTLA-4 cytoplasmic domains. Dariavach P, et al. **Eur J Immunol** 1988 Dec;18(12):1901–5

Expression and regulation of CD5 on in vitro activated human B cells. Freedman AS, et al. **Eur J Immunol** 1989 May;19(5):849–55

Evidences for protein kinase C. Activation in T lymphocytes by stimulation of either the CD2 or CD3 antigens. Friedrich B, et al. **Eur J Immunol** 1989 Jan;19(1):17–23

Stimulation–dependent lymphokine mRNA levels in human mononuclear cells. Gauchat JF, et al. **Eur J Immunol** 1988 Sep;18(9):1441–6

Cytokine mRNA levels in antigen–stimulated peripheral blood mononuclear cells. Gauchat JF, et al. **Eur J Immunol** 1989 Jun;19(6):1079–85

Interleukin 4 and soluble CD23 as progression factors for human B lymphocytes: analysis of their interactions with agonists of the phosphoinositide "dual pathway" of signalling. Gordon J, et al. **Eur J Immunol** 1988 Oct; 18(10):1561–5

Intracellular events associated with inhibition of B cell activation by monoclonal antibodies to HLA class II antigens. Holte H, et al. **Eur J Immunol** 1989 Jul; 19(7):1221–5

Functional responsiveness in vitro and in vivo of alpha/beta T cell receptors expressed by the B2A2 (J11d)– subset of CD4–8– thymocytes. Howe RC, et al. **Eur J Immunol** 1989 Jan;19(1):25–30

T cell dependence of the "natural" autoreactive B cell activation in the spleen of normal mice. Huetz F, et al. **Eur J Immunol** 1988 Oct;18(10):1615–22

Antigen–independent activation of T cells mediated by a novel cell surface heterodimer (Tp135–145). Isler P, et al. **Eur J Immunol** 1988 Oct;18(10):1491–8

Molecular analysis of T cell receptor gamma gene expression in allo–activated splenic T cells of adult mice. Jones B, et al. **Eur J Immunol** 1988 Dec;18(12):1907–15

Immunoregulation through CD8 (Ly–2): state of aggregation with the alpha/beta/CD3 T cell receptor controls interleukin 2–dependent T cell growth. Jönsson JI, et al. **Eur J Immunol** 1989 Feb;19(2):253–60

Schwann cells co–cultured with stimulated T cells and antigen express major histocompatibility complex (MHC) class II determinants without interferon–gamma pretreatment: synergistic effects of interferon–gamma and tumor necrosis factor on MHC class II induction. Kingston AE, et al. **Eur J Immunol** 1989 Jan;19(1):177–83

Role of CD2 cross–linking in cytoplasmic calcium responses and T cell activation. Ledbetter JA, et al. **Eur J Immunol** 1988 Oct;18(10):1601–8

Studies on the mechanism of polyclonal B cell stimulation by TH2 cells. Lohoff M, et al. **Eur J Immunol** 1989 Jan; 19(1):77–81

Intradomain H–2Kd/Dd recombinants define the same regions as crucial for recognition by alloreactive or major histocompatibility complex–restricted cytolytic T cells. Maryanski JL, et al. **Eur J Immunol** 1989 Jan;19(1):193–6

CD4+CD45R+ cells are preferentially activated through the CD2 pathway. Matsuyama T, et al. **Eur J Immunol** 1988 Sep;18(9):1473–6

Clonal analysis of human T cell activation by the Mycoplasma arthritidis mitogen (MAS). Matthes M, et al. **Eur J Immunol** 1988 Nov;18(11):1733–7

Lymphokine mRNA and T cell multireceptor mRNA of the Ig super gene family are reciprocally modulated during human T cell activation. Paillard F, et al. **Eur J Immunol** 1988 Oct;18(10):1643–6

Activation of the phosphatidylinositol metabolic pathway by low molecular weight B cell growth factor. Renard D, et al. **Eur J Immunol** 1988 Nov;18(11):1705–11

Induction of T cell function via the gp33/27 activation inducer molecule (AIM) requires co–expression of the CD3/TcR complex. Rincón M, et al. **Eur J Immunol** 1989 May;19(5):959–62

Prostaglandin E2 and the increase of intracellular cAMP inhibit the expression of interleukin 2 receptors in human T cells. Rincón M, et al. **Eur J Immunol** 1988 Nov; 18(11):1791–6

MLR3 molecule is an activation antigen shared by human B, T lymphocytes and T cell precursors. Risso A, et al. **Eur J Immunol** 1989 Feb;19(2):323–8

Interleukin 2 receptor expression and interleukin 2 production in exponentially growing T cells: major differences between in vivo and in vitro proliferating T lymphocytes. Rocha B, et al. **Eur J Immunol** 1989 Jun;19(6):1137–45

Enhanced responsiveness of human memory T cells to CD2 and CD3 receptor–mediated activation. Sanders ME, et al. **Eur J Immunol** 1989 May;19(5):803–8

Triggering of the alternative pathway of human T cell activation involves members of the T 200 family of glycoproteins. Schraven B, et al. **Eur J Immunol** 1989 Feb; 19(2):397–403

B cell–stimulating activity of lymphoid cell membrane fractions. Sekita K, et al. **Eur J Immunol** 1988 Sep; 18(9):1405–10

Functional characterization of the CD45R (2H4) molecule on CD8 (T8) cells in the autologous mixed lymphocyte reaction system. Takeuchi T, et al. **Eur J Immunol** 1989 Apr;19(4):747–55

Activation of the interleukin 2 pathway precedes CD3–T cell receptor expression in thymic development. Differential growth requirements of early and mature intrathymic subpopulations. Toribio ML, et al. **Eur J Immunol** 1989 Jan;19(1):9–15

Activation of human B lymphocytes through CD40 and interleukin 4. Vallé A, et al. **Eur J Immunol** 1989 Aug; 19(8):1463–7

Expression of CD23 antigen is not necessary for human 12–kDa B cell growth factor–mediated B cell proliferation. Vazquez A, et al. **Eur J Immunol** 1988 Oct;18(10):1647–9

Cell surface antigen CD5 is a marker for activated human B cells. Werner–Favre C, et al. **Eur J Immunol** 1989 Jul; 19(7):1209–13

Peripheral tolerance mechanisms prevent the development of autoreactive T cells in chimeras grafted with two minor incompatible thymuses. Zamoyska R, et al. **Eur J Immunol** 1989 Jan;19(1):111–7

Clinical studies on cell–mediated immunity in patients with urinary bladder carcinoma. Depression of cell–mediated immunity by adherent cells. Ikemoto S, et al. **Eur Urol** 1988;15(3–4):252–5

Diminished heat–shock protein synthesis following mitogen stimulation of lymphocytes from aged donors. Faassen AE, et al. **Exp Cell Res** 1989 Aug;183(2):326–34

Reduced proliferation in T lymphocytes in aged humans is predominantly in the CD8+ subset, and is unrelated to defects in transmembrane signaling which are predominantly in the CD4+ subset. Grossmann A, et al. **Exp Cell Res** 1989 Feb;180(2):367–82

Quiescent human lymphocytes do not contain DNA strand breaks detectable by alkaline elution. Jostes R, et al. **Exp Cell Res** 1989 Jun;182(2):513–20

Transient nuclear location of the IL–2 receptor during T cell activation. Jothy S, et al. **Exp Mol Pathol** 1989 Feb; 50(1):84–91

Inhibition of poly(ADP–ribosyl)ation does not prevent lymphocyte entry into the cell cycle. Marini M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):146–50

Core histone acetylation during lymphocyte activation. Profumo A, et al. **FEBS Lett** 1989 Jul 3;250(2):297–300

Characteristics of the neonatal spleen cell subpopulation in mice which suppresses lymphocyte proliferative response to mitogen stimulation. Mazur–Kolecka B, et al. **Folia Biol (Krakow)** 1988;36(1–2):127–38

Natural killer, lymphokine–activated killer and interferon–gamma producing activities of peripheral blood– and regional lymph node–mononuclear cells in 23 cases of colorectal cancer. Matsunaga H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):527–33

Anti–IgM antibodies inhibit IgM expression in lipopolysaccharide–stimulated normal murine B–cells: study of RNA metabolism and translation. Chen U. **Gene** 1988 Dec 10;72(1–2):209–17

The role of ionic signals in early gene induction during T cell activation. Kelly K, et al. **Gene Amplif Anal** 1986; 4:197–206

Study of some early immunological parameters in aging humans. Amadori A, et al. **Gerontology** 1988;34(5–6):277–83

Lymphokine–activated killer (LAK) cell phenomenon in cluster headache. "In vitro" activation by recombinant interleukin–2. Giacovazzo M, et al. **Headache** 1989 Mar; 29(3):177–9

Determination of proliferative fractions detected by immunohistochemistry with the monoclonal antibodies to bromodeoxyuridine and Ki–67 in malignant lymphomas. Kawauchi K, et al. **Hematol Oncol** 1989 Jul–Aug; 7(4):257–65

Primary biliary cirrhosis: lymphocyte subsets and function in a time frame [letter] Konikoff F, et al. **Hepatology** 1989 Oct;10(4):525–6

The autologous mixed lymphocyte reaction in primary biliary cirrhosis: analysis of activation and blastogenesis of autoreactive T lymphocytes. Lindor KD, et al. **Hepatology** 1988 Nov–Dec;8(6):1555–9

Mitotic cells in different lymphocyte subsets in unfractionated cultures stimulated by phytohaemagglutinin or pokeweed mitogen. Kovanen PE, et al. **Hereditas** 1989;110(1):69–74

Signal transduction in lymphocyte activation through crosslinking of HLA class I molecules. Gilliland LK, et al. **Hum Immunol** 1989 Aug;25(4):269–89

Involvement of "accessory" and antigen receptor molecules in human helper T cell clone activation studied by monoclonal antibody inhibition. Pawelec G, et al. **Hum Immunol** 1989 Jan;24(1):41–50

Comparison of signals delivered through CD3 and CD2 for T–cell activation: the role of calcium influx and interleukin 1. Wakasugi H, et al. **Hum Immunol** 1988 Nov;23(3):163–78

Non–H–2 involvement in antigen–specific T cell proliferative responses. I. Different blocking effect of anti–class II monoclonal antibodies between B6 and BALB.B mice on antigen–specific T cell activation. Aosai F, et al. **Immunobiology** 1988 Jul;177(3):278–92

Role of interleukin 1 in mycoplasma mitogen–induced proliferation of human T cells. Bauer A, et al. **Immunobiology** 1989 Mar;179(1):124–30

Induction of responsiveness to IL 2 in Con A–stimulated rat lymphoid cells requires synergistic action of IL 1 and the accessory cell membrane. Stoeck M, et al. **Immunobiology** 1988 Sep;177(4–5):460–4

Proliferative response of cloned CTL line 10B–5 upon stimulation with soluble clonotypic monoclonal antibody and its blocking by anti–Lyt–2 antibody. Udono H, et al. **Immunobiology** 1989 Feb;178(4–5):390–400

The Ly–10 antigen is a marker of mouse–activated T lymphocytes. Chan MM, et al. **Immunogenetics** 1988; 28(6):425–32

Multigene control of Mlsc. Click RE, et al. **Immunogenetics** 1988;28(6):412–6

The in vitro proliferative response of lymphoid cells of mice infected with Salmonella enteritidis 11RX. Kotlarski I, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):19–29

Resting (IL–2 non–responsive) precursors of human T cell receptor gamma delta–positive cells (TCR1 cells) are activated by a two signal process. Warren HS. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):121–6

Seasonal differences in the rhythmicity of human male and female lymphocyte blastogenic responses. Boctor FN, et al. **Immunol Invest** 1989 Jul;18(6):775–84

Flow cytometric analysis of lymphocyte activation in the mixed lymphocyte response. Prince HE, et al. **Immunol Invest** 1988 Jun;17(4):309–19

Role of inositol starvation on ecto–5'–nucleotidase activity during mitogen–induced lymphocyte activation. Hauschildt S, et al. **Immunol Lett** 1988 Sep;19(1):71–6

Up–regulation of receptors for IgA on activated human B lymphocytes. Millet I, et al. **Immunol Lett** 1988 Oct; 19(2):153–7

The classical and alternate pathways of T cell activation are impaired in leprosy. Muthukkaruppan V, et al. **Immunol Lett** 1988 Sep;19(1):55–8

Impaired lymphocyte stimulation induced by long–term training. Papa S, et al. **Immunol Lett** 1989 Jul;22(1):29–33

Recombinant interleukin 2 inhibits pokeweed mitogen–induced proliferation of human adult peripheral blood and cord blood mononuclear cells. Punnonen J, et al. **Immunol Lett** 1988 Jul;18(3):231–6

Phosphatidylinositol–anchored membrane proteins and lymphocyte activation. Robinson PJ, et al. **Immunol Lett** 1988 Oct;19(2):85–93 (75 ref.)

Lymphocyte activation: changes in intracellular adenosine triphosphate and deoxyribonucleic acid synthesis. White AG, et al. **Immunol Lett** 1989 Jul;22(1):47–50

Immunoregulation of lymphoproliferation in vitro by monocytes and their subpopulations. I. The induction of suppressor T cells in long term cultures and the role of MHC class II determinants and preliminary characteristics. Zembala M, et al. **Immunol Lett** 1988 Aug;18(4):275–80

Antigen processing for presentation to T lymphocytes: function, mechanisms, and implications for the T–cell repertoire. Berzofsky JA, et al. **Immunol Rev** 1988 Dec; 106:5–31 (88 ref.)

The biochemistry and cell biology of antigen processing. Chain BM, et al. **Immunol Rev** 1988 Dec;106:33–58 (87 ref.)

The role of intracellular acidification in antigen processing. McCoy KL, et al. **Immunol Rev** 1988 Dec;106:129–47 (42 ref.)

T–cell reactivity and tolerance to Mlsa–encoded antigens. MacDonald HR, et al. **Immunol Rev** 1989 Feb;107:89–108 (62 ref.)

Antigen–presenting function of B lymphocytes. Pierce SK, et al. **Immunol Rev** 1988 Dec;106:149–80 (74 ref.)

T–cell responses and tolerance to Mlsa determinants. Webb SR, et al. **Immunol Rev** 1989 Feb;107:141–58 (40 ref.)

A reassessment of the mechanisms of antigen–specific T–cell–dependent B–cell activation. Abbas AK. **Immunol Today** 1988 Mar;9(3):89–94 (53 ref.)

The Mls system: non–MHC genes that encode strong T–cell stimulatory determinants. Abe R, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):230–5 (50 ref.)

Autoimmunity: polyclonal activation or antigen induction? Dziarski R. **Immunol Today** 1988 Nov;9(11):340–2 (59 ref.)

Cross–linking of CD4 and CD8 with the T–cell receptor complex: quaternary complex formation and T–cell repertoire selection. Emmrich F. **Immunol Today** 1988 Oct; 9(10):296–300 (52 ref.)

T–cell activation in health and disease [news] Feldmann M. **Immunol Today** 1988 May;9(5):121–4

Do CD4 or CD8 molecules provide a regulatory signal in T–cell activation? Fleischer B, et al. **Immunol Today** 1988 May;9(5):132–4

Transmembrane signals in the activation of T lymphocytes by mitogenic antigens. Hadden JW. **Immunol Today** 1988 Jul–Aug;9(7–8):235–9 (25 ref.)

The regulation of intracellular signals during lymphocyte activation. Imboden JB. **Immunol Today** 1988 Jan;9(1):17–8

Cellular events during memory T–cell activation in vitro: the UCHL1 (180,000 MW) determinant is newly synthesized after mitosis. Akbar AN, et al. **Immunology** 1989 Feb;66(2):213–8

Antigen–bound C3b and C4b enhance antigen–presenting cell function in activation of human T–cell clones. Arvieux J, et al. **Immunology** 1988 Oct;65(2):229–35

Activation of swine peripheral blood lymphocytes with human recombinant interleukin-2. Bhagyam RC, et al. **Immunology** 1988 Aug;64(4):607–13

Immunoregulatory effects of cloned T cells on B-cell responses: comparison of autoimmune and non-autoimmune derived clones. Bocchieri MH. **Immunology** 1989 Apr;66(4):526–31

T-cell activation. I. Evidence for a functional linkage between class I MHC antigens and the Tc-Ti complex. Brams P, et al. **Immunology** 1989 Mar;66(3):348–53

Antigen presentation in the sheep: generation of antigen-specific T-cell lines. Bujdoso R, et al. **Immunology** 1989 Apr;66(4):559–64

Autocrine regulation of T-lymphocyte proliferation: differential induction of IL-2 and IL-2 receptor. Cantrell DA, et al. **Immunology** 1988 Nov;65(3):343–9

Activation of normal murine B cells by Echinococcus granulosus. Cox DA, et al. **Immunology** 1989 May; 67(1):16–20

Early lymphocyte activation molecule defined by the monoclonal antibody MLR-3: biochemical and functional studies. Delia D, et al. **Immunology** 1988 Aug;64(4):593–8

The use of antigen-bearing nitrocellulose particles derived from Western blots to study proliferative responses to 27 antigenic fractions from Mycobacterium leprae in patients and controls. Filley E, et al. **Immunology** 1989 May; 67(1):75–80

Characterization of two CD23 monoclonal antibodies with reactivity distinct from other antibodies within this cluster of differentiation. Goff LK, et al. **Immunology** 1988 Oct; 65(2):213–20

IL-2 and IL-4 can co-modulate the generation of cytotoxic T cells through CD8- CD4- splenic lymphocytes. Good MF, et al. **Immunology** 1989 Jun;67(2):225–30

Mitogenic stimulation of human B lymphocytes via the inositol phospholipid 'dual pathway' of signalling requires persistent activation of both second messenger arms. Gordon J, et al. **Immunology** 1988 Nov;65(3):493–4

Recruitment of virgin B cells into an immune response is restricted to activation outside lymphoid follicles. Gray D. **Immunology** 1988 Sep;65(1):73–9

Activation and proliferation of normal resting human T lymphocytes in serum-free culture: role of IL-4 and IL-6. Habetswallner D, et al. **Immunology** 1988 Nov;65(3):357–64

Signal delivery by physical interaction and soluble factors from accessory cells in the induction of receptor-mediated T-cell proliferation. Synergistic effect of BSF-2/IL-6 and IL-1. Kawakami K, et al. **Immunology** 1989 Jul; 67(3):314–20

Unique mixed lymphocyte-stimulating determinants in Ed alpha gene-introduced C57BL/6 transgenic mice. Kimoto M, et al. **Immunology** 1989 Jun;67(2):154–9

An assessment of phosphoinositide hydrolysis in antigenic signal transduction in lymphocytes. King SL. **Immunology** 1988 Sep;65(1):1–7 (76 ref.)

The autonomy of CD8+ T cells in vitro and in vivo. Mason DW, et al. **Immunology** 1988 Oct;65(2):249–57

Functional properties of intra-epithelial lymphocytes from mouse small intestine. IV. Investigation of the proliferative capacity of IEL using phorbol ester and calcium ionophore. Mowat AM, et al. **Immunology** 1989 Mar;66(3):398–403

T-cell-derived factor B151-TRF1/IL-5 activates blastoid cells among unprimed B cells to induce a polyclonal differentiation into immunoglobulin M-secreting cells. Murakami S, et al. **Immunology** 1988 Oct;65(2):221–8

Antigen-dependent and -independent proliferative T-cell populations in the peritoneal exudate cells of immunized mice. Nitta T, et al. **Immunology** 1989 Apr;66(4):532–8

Abnormal T-cell activation in chronic hepatitis B viral infection: a consequence of monocyte dysfunction? Nouri-Aria KT, et al. **Immunology** 1988 Aug;64(4):733–8

Cyclic adenosine 3',5'-monophosphate metabolism in activated T-cell clones. Oksenberg D, et al. **Immunology** 1989 Aug;67(4):484–8

Activated adherent large granular lymphocytes/natural killer (LGL/NK) cells change their migratory behaviour. Pirelli A, et al. **Immunology** 1988 Dec;65(4):651–3

Antigen presentation in brain: brain endothelial cells are poor stimulators of T-cell proliferation. Pryce G, et al. **Immunology** 1989 Feb;66(2):207–12

Activation of a murine T-cell hybridoma by cationized bacteria. Shapiro DN, et al. **Immunology** 1989 Aug; 67(4):478–83

Effects on rat T-helper cell proliferation by syngeneic epidermal cells exposed to IFN-gamma in vivo. Skoglund C, et al. **Immunology** 1989 Feb;66(2):190–5

The role of CD4+ lymphocytes in the activation of non-specific suppressor cells by antigen. Stefanovic H, et al. **Immunology** 1989 Jul;67(3):339–43

Studies on the monocyte dependence of T-cell proliferation induced by monoclonal antibodies directed against regions I and II of the CD2 antigen. van Lier R, et al. **Immunology** 1989 Jul;67(3):333–8

Selective suppressive effects of Trypanosoma cruzi on activated human lymphocytes. Beltz LA, et al. **Infect Immun** 1989 Aug;57(8):2301–5

Identification of functional antigenic segments of toxic shock syndrome toxin 1 by differential immunoreactivity and by differential mitogenic responses of human peripheral blood mononuclear cells, using active toxin fragments. Edwin C, et al. **Infect Immun** 1989 Jul;57(7):2230–6

Selective proliferation of natural killer cells among monocyte-depleted peripheral blood mononuclear cells as a result of stimulation with staphylococcal enterotoxin B. Garcia-Peñarrubia P, et al. **Infect Immun** 1989 Jul; 57(7):2057–65

Differential modulation of lymphocyte proliferative responses and lymphokine secretion in mice during development of immunity to Chlamydia psittaci. Guagliardi LE, et al. **Infect Immun** 1989 May;57(5):1561–7

Cellular immune responses of leprosy contacts to fractionated Mycobacterium leprae antigens. Lee SP, et al. **Infect Immun** 1989 Aug;57(8):2475–80

Roles of interferon and cellular adhesion molecules in bacterial activation of human natural killer cells. Lindemann RA. **Infect Immun** 1989 Jun;57(6):1702–6

Differential regulation of in vitro humoral and cellular immune responsiveness in Brugia pahangi-infected jirds. Prier RC, et al. **Infect Immun** 1988 Dec;56(12):3052–7

Plasmodium falciparum schizont sonic extracts suppress lymphoproliferative responses to mitogens and antigens in malaria-immune adults. Riley EM, et al. **Infect Immun** 1989 Oct;57(10):3181–8

CD8+ T cells inhibit Plasmodium falciparum-induced lymphoproliferation and gamma interferon production in cell preparations from some malaria-immune individuals. Riley EM, et al. **Infect Immun** 1989 Apr;57(4):1281–4

Inhibition of activated nonresponder C3H/HeJ lymphocytes by lipopolysaccharide endotoxin. Sultzer BM, et al. **Infect Immun** 1988 Dec;56(12):3040–5

Cell surface molecules involved in early events in T-cell mitogenic stimulation by staphylococcal enterotoxins. Vroegop SM, et al. **Infect Immun** 1989 Jun;57(6):1816–4

In vitro reactivities of blood lymphocytes from symptomatic and asymptomatic pigeon breeders to antigen and mitogens. Bouic PJ, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):222–8

Proliferation of interleukin 2 dependent cytotoxic T cell line cells. Different protein kinase C activators achieve the same maximal promotion, but with distinct dose-response profiles. Gavériaux C, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):294–6

Behaviour of guinea pig T cells stimulated by antigen, allo-antigen and mitogen. Healey DG, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):134–42

Suppression of human IgA-B-cell maturation by IgA-binding factors requires T cells. Millet I, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):367–70

Induction of T-helper cell activity by fragments of rye grass pollen extract produced by digestion with chymotrypsin. Standring R, et al. **Int Arch Allergy Appl Immunol** 1988; 87(4):337–41

Effect of magnesium deficiency on interleukin production by Fisher rats: effect of interleukins on reduced in vitro lymphocyte responses to concanavalin A and lipopolysaccharide. Yiangou M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):217–21

Triggering of neoplastic B cells via surface IgM and the cell surface antigens CD20 and CDw40. Responses differ from normal blood B cells and are restricted to certain morphologic subsets. Beiske K, et al. **Int J Cancer** 1988 Oct 15;42(4):521–8

c-fos proto-oncogene expression in human NK/LGL cells: expression is not constitutive and is associated with functional activation. Colotta F, et al. **Int J Cancer** 1988 Nov 15;42(5):709–11

Ganglioside GM2 expression on human melanoma cells correlates with sensitivity to lymphokine-activated killer cells. Hoon DS, et al. **Int J Cancer** 1989 May 15; 43(5):857–62

A functional and phenotypic comparison of murine natural killer (NK) cells and lymphokine-activated killer (LAK) cells. Hoskin DW, et al. **Int J Cancer** 1989 May 15; 43(5):940–8

Generation and partial characterization of melanoma sublines resistant to lymphokine activated killer (LAK) cells. Relevance to doxorubicin resistance. Rivoltini L, et al. **Int J Cancer** 1989 May 15;43(5):880–5

Lymphokine-activated killer-cell function of lymphocytes from peripheral blood, regional lymph nodes and tumor tissues of patients with oral cancer. Tatake RJ, et al. **Int J Cancer** 1989 Apr 15;43(4):560–6

Recruitment and activation of tumor-specific immune T cells in situ: functional studies using a sponge matrix model. Zangemeister U, et al. **Int J Cancer** 1989 Feb 15;43(2):310–6

The effect of RU 41740 on the in vitro maturation of human B-cells. Durandy A, et al. **Int J Immunopharmacol** 1988; 10(7):851–4

Lymphocyte activation with release of soluble mediators induced by Thermoactinomyces vulgaris in vitro. Jägerroos HJ, et al. **Int J Immunopharmacol** 1989;11(1):1–7

Human monocytes exposed to Biostim (RU 41740) alter lymphocyte mitogenesis: mechanisms of action. Viland H, et al. **Int J Immunopharmacol** 1988;10(7):879–87

Lymphoproliferation and in vitro antibody synthesis in leprosy patients. Yandava CN, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):633–40

Prevention of metastatic spread by postoperative immunotherapy with virally modified autologous tumor cells. III. Postoperative activation of tumor-specific CTLP from mice with metastases requires stimulation with the specific antigen plus additional signals. von Hoegen P, et al. **Invasion Metastasis** 1989;9(2):117–33

Immunopathogenesis of Sjögren's syndrome. Moutsopoulos HM. **Isr J Med Sci** 1988 Dec;24(12):737–9 (26 ref.)

Impaired mitogen-induced lymphocyte responses and the hypothalamic-pituitary-adrenal axis in depressive disorders. Cosyns P, et al. **J Affective Disord** 1989 Jan–Feb; 16(1):41–8

High recombinant interleukin-2 sensitivity of peripheral blood lymphocytes from patients with myasthenia gravis: correlations with clinical parameters. Cohen-Kaminsky S, et al. **J Autoimmun** 1989 Jun;2(3):241–58

A role for MHC class II antigens in B-cell activation. Mooney N, et al. **J Autoimmun** 1989 Jun;2 Suppl:215–23

Increased assembly of clathrin occurs in response to mitogenic activation of murine lymphocytes. Corvera S, et al. **J Biol Chem** 1989 Jul 25;264(21):12568–72

Lipoproteins may provide fatty acids necessary for human lymphocyte proliferation by both low density lipoprotein receptor-dependent and -independent mechanisms. Cuthbert JA, et al. **J Biol Chem** 1989 Aug 15; 264(23):13468–74

The expression of prothymosin alpha gene in T lymphocytes and leukemic lymphoid cells is tied to lymphocyte proliferation. Gómez-Márquez J, et al. **J Biol Chem** 1989 May 25;264(15):8451–4

T cell activation induces rapid tyrosine phosphorylation of a limited number of cellular substrates. Hsi ED, et al. **J Biol Chem** 1989 Jun 25;264(18):10836–42

Promotion of lymphocyte growth by high density lipoproteins (HDL). Physiological significance of the HDL binding site. Jürgens G, et al. **J Biol Chem** 1989 May 25; 264(15):8549–56

Modulation of T cell activation by differential regulation of the phosphorylation of two cytosolic proteins. Implication of both Ca2+ and cyclic AMP-dependent protein kinases. Mary D, et al. **J Biol Chem** 1989 Aug 25;264(24):14498–502

Human T-lymphocyte activation is associated with changes in O-glycan biosynthesis. Piller F, et al. **J Biol Chem** 1988 Oct 15;263(29):15146–50

The role of protein kinase C in T lymphocyte proliferation. Existence of protein kinase C-dependent and -independent pathways. Redondo JM, et al. **J Biol Chem** 1988 Nov 25; 263(33):17467–70

The suppressive effect of subeschar tissue fluid upon in vitro cell-mediated immunologic function. Ferrara JJ, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):584–8

Transforming growth factor beta 1 (TGF-beta 1) receptor expression on resting and mitogen-activated T cells. Ellingsworth L, et al. **J Cell Biochem** 1989 Apr; 39(4):439–500

Cholera toxin inhibits the increase in cytoplasmic free calcium induced via the CD2 pathway of human T-lymphocyte activation. Nunes J, et al. **J Cell Biochem** 1989 Apr;39(4):391–400

Effect of macrophages on the translocation of protein kinase C in concanavalin A-stimulated lymphocytes. Grove DS, et al. **J Cell Physiol** 1989 Mar;138(3):561–7

The defect in peripheral blood B-cell activation in patients with multiple myeloma is not due to a deficiency in the production of B-cell growth and differentiation factors. Commes T, et al. **J Clin Immunol** 1989 Jan;9(1):65–73

Activation of genetically major histocompatibility complex (MHC) class II-deficient B lymphocytes. Durandy A, et al. **J Clin Immunol** 1989 Mar;9(2):125–31

Evidence of a plasma-mediated "window" of immunodeficiency in rats following trauma. Mills CD, et al. **J Clin Immunol** 1989 Mar;9(2):139–50

Early lymphocyte transformation abnormalities in human immunodeficiency virus infection. Ridley DJ, et al. **J Clin Immunol** 1989 Mar;9(2):119–24

Proliferation of highly purified T cells in response to signaling via surface receptors requires cell-cell contact. Schwartz D, et al. **J Clin Immunol** 1989 Mar;9(2):151–8

Activation of clones producing self-reactive antibodies by foreign antigen and antiidiotype antibody carrying the internal image of the antigen. Bailey NC, et al. **J Clin Invest** 1989 Sep;84(3):744–56

Lymphocyte proliferative responses to human immunodeficiency virus antigens in vitro. Krowka JF, et al. **J Clin Invest** 1989 Apr;83(4):1198–203

Human immunodeficiency virus infection of helper T cell clones. Early proliferative defects despite intact antigen-specific recognition and interleukin 4 secretion. Laurence J, et al. **J Clin Invest** 1989 Jun;83(6):1843–8

Profile of human T cell response to leishmanial antigens. Analysis by immunoblotting. Melby PC, et al. **J Clin Invest** 1989 Jun;83(6):1868–75

Normal human intestinal B lymphocytes. Increased activation compared with peripheral blood. Peters MG, et al. **J Clin Invest** 1989 Jun;83(6):1827–33

Defective expression of the 2H4 molecule after autologous mixed lymphocyte reaction activation in systemic lupus erythematosus patients. Takeuchi T, et al. **J Clin Invest** 1988 Oct;82(4):1288–94

Interleukin 2 production, proliferative response, and receptor expression by cord blood mononuclear cells. Fairfax CA, et al. **J Clin Lab Immunol** 1988 Oct;27(2):63–7

Dissociated production of interleukin-2 and immune gamma-interferon by phytohaemoagglutinin stimulated peripheral mononuclear cells in type 1 (insulin-dependent) diabetes. Giordano C, et al. **J Clin Lab Immunol** 1988 Oct; 27(2):73–6

PHA stimulation of peripheral blood lymphocytes in oral lichen planus. Abnormality localized between interleukin-2

receptor ligand formation and gamma-interferon secretion. Konttinen YT, et al. J Clin Lab Immunol 1989 Jan; 28(1):33–7
Blastogenic responses of human lymphocytes to a streptococcal preparation OK-432 and its fractions. Tanaka T, et al. J Clin Lab Immunol 1989 Feb;28(2):91–6
Effect of anergy on in vitro sensitization with keyhole limpet hemocyanin of peripheral blood lymphocytes. Ulrich F, et al. J Clin Lab Immunol 1988 Aug;26(4):175–8
Interleukin 1 production during accessory cell-dependent mitogenesis of T lymphocytes. Bhardwaj N, et al. J Exp Med 1989 Mar 1;169(3):1121–36
Synergistic T cell activation via the physiological ligands for CD2 and the T cell receptor. Bierer BE, et al. J Exp Med 1988 Sep 1;168(3):1145–56
Ia-mediated signal transduction leads to proliferation of primed B lymphocytes. Cambier JC, et al. J Exp Med 1989 Sep 1;170(3):877–86
Fc gamma R(CD16) interaction with ligand induces Ca2+ mobilization and phosphoinositide turnover in human natural killer cells. Role of Ca2+ in Fc gamma R(CD16)-induced transcription and expression of lymphokine genes. Cassatella MA, et al. J Exp Med 1989 Feb 1;169(2):549–67
Triggering of T cell proliferation through AIM, an activation inducer molecule expressed on activated human lymphocytes. Cebrián M, et al. J Exp Med 1988 Nov 1; 168(5):1621–37
Monoclonal antibody to a triggering structure expressed on rat natural killer cells and adherent lymphokine-activated killer cells. Chambers WH, et al. J Exp Med 1989 Apr 1;169(4):1373–89
Regulation of T lymphocyte proliferation. Interleukin 2-mediated induction of c-myb gene expression is dependent on T lymphocyte activation state. Churilla AM, et al. J Exp Med 1989 Jul 1;170(1):105–21
Interleukin 4 inhibits the proliferation but not the differentiation of activated human B cells in response to interleukin 2. Defrance T, et al. J Exp Med 1988 Oct 1; 168(4):1321–37
Dissecting human T cell responses against Bordetella species. De Magistris MT, et al. J Exp Med 1988 Oct 1; 168(4):1351–62
Independent regulation of Ca2+ entry and release from internal stores in activated B cells. Gelfand EW, et al. J Exp Med 1989 Jul 1;170(1):315–20
In situ hybridization for interleukin 2 and interleukin 2 receptor mRNA in T cells activated in the presence or absence of cyclosporin A. Granelli-Piperno A. J Exp Med 1988 Nov 1;168(5):1649–58
Phenotypic and functional alteration of CD4+ T cells after antigen stimulation. Resolution of two populations of memory T cells that both secrete interleukin 4. Hayakawa K, et al. J Exp Med 1989 Jun 1;169(6):2245–50
A monoclonal antibody to a constant determinant of the rat T cell antigen receptor that induces T cell activation. Differential reactivity with subsets of immature and mature T lymphocytes. Hünig T, et al. J Exp Med 1989 Jan 1; 169(1):73–86
B cell activation and the establishment of Epstein-Barr virus latency. Hurley EA, et al. J Exp Med 1988 Dec 1; 168(6):2059–75
An antigen-independent contact mechanism as an early step in T cell-proliferative responses to dendritic cells. Inaba K, et al. J Exp Med 1989 Aug 1;170(2):527–42
Autologous tumor-specific cytotoxic T lymphocytes in the infiltrate of human metastatic melanomas. Activation by interleukin 2 and autologous tumor cells, and involvement of the T cell receptor. Itoh K, et al. J Exp Med 1988 Oct 1;168(4):1419–41
Dengue virus-specific human T cell clones. Serotype crossreactive proliferation, interferon gamma production, and cytotoxic activity. Kurane I, et al. J Exp Med 1989 Sep 1;170(3):763–75
Reconstruction of the immunogenic peptide RNase(43–56) by identification and transfer of the critical residues into an unrelated peptide backbone. Lorenz RG, et al. J Exp Med 1989 Jul 1;170(1):203–15
Primary stimulation by dendritic cells induces antiviral proliferative and cytotoxic T cell responses in vitro. Macatonia SE, et al. J Exp Med 1989 Apr 1;169(4):1255–64
Murine hepatic accessory cells support the proliferation of Th1 but not Th2 helper T lymphocyte clones. Magilavy DB, et al. J Exp Med 1989 Sep 1;170(3):985–90
Expression of a functional CD3-Ti antigen/MHC receptor in the absence of surface CD2. Analysis with clonal Jurkat cell mutants. Moingeon P, et al. J Exp Med 1988 Dec 1; 168(6):2077–90
Recombinant interleukin 7, pre-B cell growth factor, has costimulatory activity on purified mature T cells. Morrissey PJ, et al. J Exp Med 1989 Mar 1;169(3):707–16
Human T cell activation. IV. T cell activation and proliferation via the early activation antigen EA 1. Nakamura S, et al. J Exp Med 1989 Mar 1;169(3):677–89
Structural and functional studies of the early T lymphocyte activation 1 (Eta-1) gene. Definition of a novel T cell-dependent response associated with genetic resistance to bacterial infection. Patarca R, et al. J Exp Med 1989 Jul 1;170(1):145–61
The Bb fragment of complement factor B acts as a B cell growth factor. Peters MG, et al. J Exp Med 1988 Oct 1; 168(4):1225–35
Activation of natural killer cells via the p75 interleukin 2 receptor. Phillips JH, et al. J Exp Med 1989 Jul 1; 170(1):291–6
A small number of anti-CD3 molecules on dendritic cells stimulate DNA synthesis in mouse T lymphocytes. Romani N, et al. J Exp Med 1989 Mar 1;169(3):1153–68
Triggering T cells by otherwise inert hybrid anti-CD3/antitumor antibodies requires encounter with the specific target cell. Roosnek E, et al. J Exp Med 1989 Jul 1;170(1):297–302
Leukocyte function-associated antigen 1 is an activation molecule for human T cells. Wacholtz MC, et al. J Exp Med 1989 Aug 1;170(2):431–48
Bacterial cell wall-induced immunosuppression. Role of transforming growth factor beta. Wahl SM, et al. J Exp Med 1988 Oct 1;168(4):1403–17
A novel activation pathway for mature thymocytes. Costimulation of CD2 (T,p50) and CD28 (T,p44) induces autocrine interleukin 2/interleukin 2 receptor-mediated cell proliferation. Yang SY, et al. J Exp Med 1988 Oct 1; 168(4):1457–68
Expression of glycoprotein D of herpes simplex virus type 1 in a recombinant baculovirus: protective responses and T cell recognition of the recombinant-infected cell extracts. Krishna S, et al. J Gen Virol 1989 Jul;70 (Pt 7):1805–14
Staphylococcal enterotoxin B stimulation of BALB/c lymphocyte mitogenesis and potential relationship to the Mls response. Buxser S, et al. J Immunogenet 1988 Feb-Jun; 15(1-3):153–9
Synergy between stimulator cells in the induction of the anti-Mlsa response. DeKruyff RH, et al. J Immunogenet 1988 Feb-Jun;15(1-3):135–43
Multidirectional interactions in an Mls-disparate response. Goldbach J, et al. J Immunogenet 1988 Feb-Jun; 15(1-3):145–52
An external stimulus that mimics Mls locus responses. Janeway CA, et al. J Immunogenet 1988 Feb-Jun; 15(1-3):161–8
Temperature requirements and kinetics of T cell signaling. Velocity of triggering correlates with functional effects of anti-CD3 mAb. Abdi K, et al. J Immunol 1989 May 1; 142(9):2971–80
Hemorrhage produces abnormalities in lymphocyte function and lymphokine generation. Abraham E, et al. J Immunol 1989 Feb 1;142(3):899–906
Differential recognition of Leishmania aethiopica antigens by lymphocytes from patients with local and diffuse cutaneous leishmaniasis. Evidence for antigen-induced immune suppression. Akuffo HO, et al. J Immunol 1988 Oct 1;141(7):2461–6
HIV-1-specific B cell activation. A major constituent of spontaneous B cell activation during HIV-1 infection. Amadori A, et al. J Immunol 1989 Oct 1;143(7):2146–52
Monoclonal antibodies reactive with the T cell receptor zeta chain: production and characterization using a new method. Anderson P, et al. J Immunol 1989 Sep 15;143(6):1899–904
Anti-CD3 + IL-2-stimulated murine killer cells. In vitro generation and in vivo antitumor activity. Anderson PM, et al. J Immunol 1989 Feb 15;142(4):1383–94
An IL-1 inhibitor from human monocytes. Production and characterization of biologic properties. Arend WP, et al. J Immunol 1989 Sep 15;143(6):1851–8
Generation of T cell repertoire. Two distinct mechanisms for generation of T suppressor cells, T helper cells, and T augmenting cells. Asano Y, et al. J Immunol 1989 Jan 15;142(2):365–73
Generation and characterization of continuous lines of CD8+ suppressor T lymphocytes. Aune TM, et al. J Immunol 1989 Jun 1;142(11):3731–9
Induction of aggregation and enhancement of proliferation and IL-2 secretion in human T cells by antibodies to CD43. Axelsson B, et al. J Immunol 1988 Nov 1;141(9):2912–7
Use of lymphokine-activated killer cells to prevent bone marrow graft rejection and lethal graft-vs-host disease. Azuma E, et al. J Immunol 1989 Sep 1;143(5):1524–9
Role of lymphokine-activated killer cells as mediators of veto and natural suppression. Azuma E, et al. J Immunol 1988 Oct 15;141(8):2601–6
Development of cellular immunity to individual soluble antigens of Treponema pallidum during experimental syphilis. Baker-Zander SA, et al. J Immunol 1988 Dec 15; 141(12):4363–9
IL-2 receptors on circulating natural killer cells and T lymphocytes. Similarity in number and affinity but difference in transmission of the proliferation signal. Ben Aribia MH, et al. J Immunol 1989 Jan 15;142(2):490–9
Impact of genetically regulated T cell proliferation on acquired resistance to Listeria monocytogenes. Berche P, et al. J Immunol 1989 Feb 1;142(3):932–9
The 28-kDa/32-kDa activation antigen EA 1. Further characterization and signal requirements for its expression. Bjorndahl JM, et al. J Immunol 1988 Dec 15; 141(12):4094–100
Regulation of CD4 and CD8 surface expression on human thymocyte subpopulations by triggering through CD2 and the CD3-T cell receptor. Blue ML, et al. J Immunol 1989 Jan 15;142(2):374–80
The CD2 ligand LFA-3 activates T cells but depends on the expression and function of the antigen receptor. Bockenstedt LK, et al. J Immunol 1988 Sep 15; 141(6):1904–11
Activation of normal human B cells through their antigen receptor induces membrane expression of IL-1 alpha and secretion of IL-1 beta. Bonnefoy JY, et al. J Immunol 1989 Aug 1;143(3):864–9
T lymphocyte cloning from rejected human kidney allograft. Recognition repertoire of alloreactive T cell clones. Bonneville M, et al. J Immunol 1988 Dec 15; 141(12):4187–95
Lineage and stage specificity of isotype switching in humans. Borzillo GV, et al. J Immunol 1988 Nov 15;141(10):3625–33
Heterologous cross-linking of Lyt-2 (CD8) to the alpha beta-T cell receptor is more effective in T cell activation than homologous alpha beta-T cell receptor cross-linking. Boyce NW, et al. J Immunol 1988 Nov 1;141(9):2882–8
A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes. Brown KD, et al. J Immunol 1989 Jan 15;142(2):679–87
Late events in B cell activation. Expression of membrane alkaline phosphatase activity. Burg DL, et al. J Immunol 1989 Jan 15;142(2):381–7
Requirements for stimulation of autoreactive T cells by thymic stroma. Burstyn D, et al. J Immunol 1989 Sep 1; 143(5):1422–5
Differential activation requirements for virgin and memory T cells. Byrne JA, et al. J Immunol 1988 Nov 15; 141(10):3249–57
Triggering of co-mitogenic signals in T cell proliferation by anti-LFA-1 (CD18, CD11a), LFA-3, and CD7 monoclonal antibodies. Carrera AC, et al. J Immunol 1988 Sep 15;141(6):1919–24
Polymeric C3dg primes human B lymphocytes for proliferation induced by anti-IgM. Carter RH, et al. J Immunol 1989 Sep 15;143(6):1755–60
Genetic restriction and fine specificity of human T cell clones reactive with rabies virus. Celis E, et al. J Immunol 1988 Oct 15;141(8):2721–8
Mouse fetal thymus lobes cultured in IL-2 generate CD3+, TCR-gamma delta-expressing CD4-/CD8+ and CD4-/CD8- cells. Ceredig R, et al. J Immunol 1989 May 15;142(10):3353–60
Properties of anti-idiotypic T cell lines propagated with syngeneic B lymphocytes. I. T cells bind intact idiotypes and discriminate between the somatic idiotypic variants in a manner similar to the anti-idiotopic antibodies. Cerny J, et al. J Immunol 1988 Dec 1;141(11):3718–25
Human T cell activation with phytohemagglutinin. The function of IL-6 as an accessory signal. Ceuppens JL, et al. J Immunol 1988 Dec 1;141(11):3868–74
Activation events in hapten-specific B cells from tolerant mice. Chace JH, et al. J Immunol 1988 Nov 15; 141(10):3258–62
Distinct patterns of lymphokine requirement for the proliferation of various subpopulations of activated thymocytes in a single cell assay. Chen WF, et al. J Immunol 1989 Sep 1;143(5):1598–605
Tumor targets stimulate IL-2 activated killer cells to produce interferon-gamma and tumor necrosis factor. Chong AS, et al. J Immunol 1989 Mar 15;142(6):2133–9
Stimulation of PIP2 hydrolysis by aluminum fluoride in resting T cell subsets of normal and autoimmune-prone lpr mice. Coggeshall KM, et al. J Immunol 1989 Aug 1; 143(3):780–6
Stimulation of mouse lymphocytes by a mitogen derived from Mycoplasma arthritidis. VII. Responsiveness is associated with expression of a product(s) of the V beta 8 gene family present on the T cell receptor alpha/beta for antigen. Cole BC, et al. J Immunol 1989 Jun 15;142(12):4131–7
Isolation of a low molecular weight inhibitor of lymphocyte proliferation from tumorous ascites. Cornelius JG, et al. J Immunol 1988 Sep 15;141(6):2175–80
Epstein-Barr virus preferentially induces proliferation of primed B cells. Crain MJ, et al. J Immunol 1989 Sep 1; 143(5):1543–8
Stimulation via the CD3 and CD28 molecules induces responsiveness to IL-4 in CD4+CD29+CD45R- memory T lymphocytes. Damle NK, et al. J Immunol 1989 Sep 15;143(6):1761–7
Rapid T cell receptor modulation accompanies lack of in vitro mitogenic responsiveness of double negative T cells to anti-CD3 monoclonal antibody in MRL/Mp-lpr mice. Davignon JL, et al. J Immunol 1988 Sep 15;141(6):1848–54
Polymorphic residues on the I-A beta chain modulate the stimulation of T cell clones specific for the N-terminal peptide of the autoantigen myelin basic protein. Davis CB, et al. J Immunol 1989 Oct 1;143(7):2083–93
The induction of T cell unresponsiveness by rapidly modulating CD3. Davis LS, et al. J Immunol 1989 Feb 15;142(4):1084–94
Decay-accelerating factor functions as a signal transducing molecule for human T cells. Davis LS, et al. J Immunol 1988 Oct 1;141(7):2246–52
Purified lymphocyte function-associated antigen-3 (LFA-3) activates human thymocytes via the CD2 pathway. Denning SM, et al. J Immunol 1988 Nov 1;141(9):2980–5
Differential surface expression of class II isotypes on activated CD4 and CD8 cells correlates with levels of locus-specific mRNA. Diedrichs M, et al. J Immunol 1989 May 1;142(9):3275–80
Activation and infection of B cells by Epstein-Barr virus. Role of calcium mobilization and of protein kinase C translocation. Dugas B, et al. J Immunol 1988 Dec 15;

141(12):4344–51
An alternative pathway of induction of lymphokine production by T lymphocyte clones. Dunn DE, et al. J Immunol 1989 Jun 1;142(11):3847–56
Bone marrow progenitor cells induce a regulatory autologous proliferative T lymphocyte response. Emerson SG, et al. J Immunol 1989 Feb 1;142(3):766–72
Species-specific structural differences in the alpha 1 + alpha 2 domains determine the frequency of murine cytotoxic T cell precursors stimulated by human and murine class I molecules. Engelhard VH, et al. J Immunol 1988 Sep 15;141(6):1835–9
Stimulation of murine T cell subsets with anti-CD3 antibody. Age-related defects in the expression of early activation molecules. Ernst DN, et al. J Immunol 1989 Mar 1; 142(5):1413–21
T help requirements for the generation of an in vivo IgE response: a late acting form of T cell help other than IL-4 is required for IgE but not for IgG1 production. Finkelman FD, et al. J Immunol 1989 Jan 15;142(2):403–8
IL-4 is required to generate and sustain in vivo IgE responses. Finkelman FD, et al. J Immunol 1988 Oct 1; 141(7):2335–41
Transferrin receptor synthesis is an early event in B cell activation. Futran J, et al. J Immunol 1989 Aug 1; 143(3):787–92
Na+/H+ exchange activation mediates the lipopolysaccharide-induced proliferation of human B lymphocytes and is impaired in malignant B-chronic lymphocytic leukemia lymphocytes. Gaidano G, et al. J Immunol 1989 Feb 1;142(3):913–8
Antiproliferative effect of IFN-gamma in immune regulation. III. Differential selection of TH1 and TH2 murine helper T lymphocyte clones using recombinant IL-2 and recombinant IFN-gamma. Gajewski TF, et al. J Immunol 1989 Jul 1;143(1):15–22
Activation of human T cell clones and Jurkat cells by cross-linking class I MHC molecules. Geppert TD, et al. J Immunol 1989 Jun 1;142(11):3763–72
Activation of cord T lymphocytes. I. Evidence for a defective T cell mitogenesis induced through the CD2 molecule. Gerli R, et al. J Immunol 1989 Apr 15; 142(8):2583–9
Generation of somatic variants of a B cell hybrid mediated by a non-cytolytic L3T4+ idiotype-specific T cell. Ghosh SK, et al. J Immunol 1989 Jan 15;142(2):409–15
Obligatory role of IFN-gamma in induction of lymphokine-activated and T lymphocyte killer activity, but not in boosting of natural cytotoxicity. Giovarelli M, et al. J Immunol 1988 Oct 15;141(8):2831–6
Induction of lysis by T cell receptor gamma delta+/CD3+ T lymphocytes via CD2 requires triggering via the T11.1 epitope only. Goedegebuure PS, et al. J Immunol 1989 Mar 15;142(6):1797–802
Inverse relationship between proliferation and differentiation in a human TNP-specific B cell line. Cell cycle dependence of antibody secretion. Golding B, et al. J Immunol 1988 Oct 15;141(8):2564–8
Evidence that T cell activation is required for HIV-1 entry in CD4+ lymphocytes. Gowda SD, et al. J Immunol 1989 Feb 1;142(3):773–80
Growth factor production and requirements during the proliferative response of human T lymphocytes to anti-CD3 monoclonal antibody. Granelli-Piperno A, et al. J Immunol 1989 Jun 15;142(12):4138–43
Spatial and temporal characteristics of the increase in intracellular Ca2+ induced in cytotoxic T lymphocytes by cellular antigen. Gray LS, et al. J Immunol 1988 Oct 1;141(7):2424–30
A 19-kDa human erythrocyte molecule H19 is involved in rosettes, present on nucleated cells, and required for T cell activation. Comparison of the roles of H19 and LFA-3 molecules in T cell activation. Groux H, et al. J Immunol 1989 May 1;142(9):3013–20
Anti-CD45 inhibition of human B cell proliferation depends on the nature of activation signals and the state of B cell activation. A study with anti-IgM and anti-CDw40 antibodies. Gruber MF, et al. J Immunol 1989 Jun 15; 142(12):4144–52
Generation and characterization of purified adherent lymphokine-activated killer cells in mice. Gunji Y, et al. J Immunol 1989 Mar 1;142(5):1748–54
Antigen-specific, MHC-restricted B cell activation by cell-free Th2 cell products. Synergy between antigen-specific helper factors and IL-4. Guy R, et al. J Immunol 1989 Sep 1;143(5):1433–40
Mechanisms of immune memory. T cell activation and CD3 phosphorylation correlates with Ta1 (CDw26) expression. Hafler DA, et al. J Immunol 1989 Apr 15;142(8):2590–6
Anti-Qa-2-induced T cell activation. The parameters of activation, the definition of mitogenic and nonmitogenic antibodies, and the differential effects on CD4+ vs CD8+ T cells. Hahn AB, et al. J Immunol 1989 Jul 15; 143(2):407–13
Characterization of three serine esterases isolated from human IL-2 activated killer cells. Hameed A, et al. J Immunol 1988 Nov 1;141(9):3142–7
The role of dendritic cells as stimulators of minor lymphocyte-stimulating locus-specific T cell responses in the mouse. I. Differential capacity of dendritic cells to stimulate minor lymphocyte-stimulating locus-reactive T cell hybridomas and the primary anti-minor lymphocyte-stimulating locus mixed lymphocyte reaction. Hamilos DL, et al. J Immunol 1989 Feb 15;142(4):1069–78
Schistosoma mansoni: the host immune response to egg antigens. I. Partial characterization of cellular and humoral responses to pI fractions of soluble egg antigens. Harn DA, et al. J Immunol 1989 Mar 15;142(6):2061–6
The mapping of epitopes of the 18-kDa protein of Mycobacterium leprae recognized by murine T cells in a proliferation assay. Harris DP, et al. J Immunol 1989 Sep 15;143(6):2006–12
Induction of activation antigens on human natural killer cells mediated through the Fc-gamma receptor. Harris DT, et al. J Immunol 1989 Oct 1;143(7):2401–6
Activation of Lyt-2+ (CD8+) and L3T4+ (CD4+) T cell subsets by anti-receptor antibody. Hathcock KS, et al. J Immunol 1989 Apr 1;142(7):2181–6
Human newborn natural killer cell responses to activation by monoclonal antibodies. Effect of culture with herpes simplex virus. Hayward A, et al. J Immunol 1989 Feb 15; 142(4):1139–43
Mapping of epitopes recognized by alloreactive cytotoxic T lymphocytes using inhibition by MHC peptides. Heath WR, et al. J Immunol 1989 Sep 1;143(5):1441–6
IL-6 is an intermediate in IL-1-induced thymocyte proliferation. Helle M, et al. J Immunol 1989 Jun 15; 142(12):4335–8
Induction and activity of class II-restricted, Lyt-2+ cytolytic T lymphocytes specific for the influenza H5 hemagglutinin. Hioe CE, et al. J Immunol 1989 Apr 1; 142(7):2482–8
Role of IL-2 in the generation of CD4+ suppressors of human B cell responsiveness. Hirohata S, et al. J Immunol 1989 May 1;142(9):3104–12
T cell regulation of human B cell proliferation and differentiation. Regulatory influences of CD45R+ and CD45R- T4 cell subsets. Hirohata S, et al. J Immunol 1989 Apr 15;142(8):2597–607
Effects of in vivo administration of anti-CD3 monoclonal antibody on T cell function in mice. II. In vivo activation of T cells. Hirsch R, et al. J Immunol 1989 Feb 1; 142(3):737–43
Human lymphocyte proliferative response to a sporozoite T cell epitope correlates with resistance to falciparum malaria. Hoffman SL, et al. J Immunol 1989 Feb 15; 142(4):1299–303
HIV-induced immunodeficiency. Relatively preserved phytohemagglutinin as opposed to decreased pokeweed mitogen responses may be due to possibly preserved responses via CD2/phytohemagglutinin pathway. Hofmann B, et al. J Immunol 1989 Mar 15;142(6):1874–80
Clonogenic potential of murine CD4+8+ thymocytes. Direct demonstration using a V beta 6-specific proliferative stimulus in Mlsa mice. Howe RC, et al. J Immunol 1989 Aug 1;143(3):793–7
CD44 contributes to T cell activation. Huet S, et al. J Immunol 1989 Aug 1;143(3):798–801
HLA class I-related impairment in IL-2 production and lymphocyte response to microbial antigens in reactive arthritis. Inman RD, et al. J Immunol 1989 Jun 15; 142(12):4256–60
Cytotoxic T lymphocyte responses to minor H-43 alloantigens in H-43a and H-43b mice. Both anti-H-43b and anti-H-43a CTL activities are generated exclusively in the context of the same H-2Kb restriction element. Ishikawa H, et al. J Immunol 1988 Nov 1;141(9):2918–23
Induction of class I MHC-restricted, peptide-specific cytolytic T lymphocytes by peptide priming in vivo. Ishioka GY, et al. J Immunol 1989 Aug 15;143(4):1094–100
Activation by IL-2, but not IL-4, up-regulates the expression of the p55 subunit of the IL-2 receptor on IL-2- and IL-4-dependent T cell lines. Jankovic DL, et al. J Immunol 1989 May 1;142(9):3113–20
A new lymphocyte-specific gene which encodes a putative Ca2+-binding protein is not expressed in transformed T lymphocyte lines. Jongstra J, et al. J Immunol 1988 Dec 1;141(11):3999–4004
Down-regulation of homing receptors after T cell activation. Jung TM, et al. J Immunol 1988 Dec 15;141(12):4110–7
Molecular analysis of the dissociation between IL-2 production and proliferation in a response of a T cell clone to the antigen presented by B cells. Kakiuchi T, et al. J Immunol 1988 Nov 15;141(10):3278–84
Non-specifically activated human peripheral blood mononuclear cells are cytotoxic for human keratinocytes in vitro. Kalish RS. J Immunol 1989 Jan 1;142(1):74–80
Molecular interactions required for triggering alloantigen-specific cytolytic T lymphocytes. Kane KP, et al. J Immunol 1989 Jun 15;142(12):4153–60
Requirement for delivery of signals by physical interaction and soluble factors from accessory cells in the induction of receptor-mediated T cell proliferation. Effectiveness of IFN-gamma modulation of accessory cells for physical interaction with T cells. Kawakami K, et al. J Immunol 1989 Mar 15;142(6):1818–25
IL-4 induces the specific rearrangement of gamma 1 genes on the expressed and unexpressed chromosomes of lipopolysaccharide-activated normal murine B cells. Kepron MR, et al. J Immunol 1989 Jul 1;143(1):334–9
CD45-protein tyrosine phosphatase cross-linking inhibits T cell receptor CD3-mediated activation in human T cells. Kiener PA, et al. J Immunol 1989 Jul 1;143(1):23–8
Trypanosoma cruzi reduces the number of high-affinity IL-2 receptors on activated human lymphocytes by suppressing the expression of the p55 and p70 receptor components. Kierszenbaum F, et al. J Immunol 1989 Jul 1;143(1):275–9
Protein kinase C-dependent and -independent mechanisms of cloned murine T cell proliferation. The role of protein kinase C translocation and protein kinase C activity. Kim DK, et al. J Immunol 1989 Jan 15;142(2):616–22
Inhibition of lipopolysaccharide activation of 70Z/3 cells by anti-lipopolysaccharide antibodies. Kirkland TN, et al. J Immunol 1988 Nov 1;141(9):3208–13
Induction of c-fos and c-myc expression during B cell activation by IL-4 and immunoglobulin binding ligands. Klemsz MJ, et al. J Immunol 1989 Aug 1;143(3):1032–9
Characteristics of B cell proliferation and activation in murine AIDS. Klinman DM, et al. J Immunol 1989 Feb 15; 142(4):1144–9
Recovery of activated cytotoxic T cells from minor H incompatible tumor graft rejection sites. Ksander BR, et al. J Immunol 1989 Jul 15;143(2):426–31
Requirements for suppressor cell activation. Role of accessory cells. Kuchroo VK, et al. J Immunol 1989 Apr 1;142(7):2192–9
Athymic nude CD4+8- T cells produce IL-2 but fail to proliferate in response to mitogenic stimuli. Kung JT, et al. J Immunol 1988 Dec 1;141(11):3691–6
Regulation of parasite antigen-induced T cell growth factor activity and proliferative responsiveness in Brugia pahangi-infected jirds. Leiva LE, et al. J Immunol 1989 Feb 15;142(4):1304–9
Co-recognition of endogenous antigens with HLA-DR1 by alloreactive human T cell clones. Lombardi G, et al. J Immunol 1989 Feb 1;142(3):753–9
Cell-mediated immune response toward viral envelope and core antigens in gibbon apes (Hylobates lar) chronically infected with human immunodeficiency virus-1. Lusso P, et al. J Immunol 1988 Oct 1;141(7):2467–73
Characterization of anti-CD8-resistant cytolytic T lymphocytes induced by multivalent cross-linking of CD8 on precursor cells. McCarthy SA, et al. J Immunol 1989 Oct 1;143(7):2112–9
Induction of anti-CD8 resistant cytotoxic T lymphocytes by anti-CD8 antibodies. Functional evidence for T cell signaling induced by multi-valent cross-linking of CD8 on precursor cells. McCarthy SA, et al. J Immunol 1988 Dec 1;141(11):3737–46
On the extraordinary capacity of allogeneic epidermal Langerhans cells to prime cytotoxic T cells in vivo. McKinney EC, et al. J Immunol 1989 Sep 1;143(5):1560–4
Influence of T cells on the expression of lymphokine-activated killer cell activity and in vivo tissue distribution. Maghazachi AA, et al. J Immunol 1988 Dec 1;141(11):4039–46
Activation of T lymphocytes through the Ly-6 pathway is defective in A strain mice. Malek TR, et al. J Immunol 1989 Jul 15;143(2):439–45
Encephalitogenic and proliferative responses of Lewis rat lymphocytes distinguished by position 75- and 80-substituted peptides of myelin basic protein. Mannie MD, et al. J Immunol 1989 Apr 15;142(8):2608–16
Suppressor T cells regulating the cell-mediated immune response to Pseudomonas aeruginosa can be generated by immunization with anti-bacterial T cells. Markham RB, et al. J Immunol 1988 Dec 1;141(11):3975–9
Lymphocyte activation provokes modification of a lymphocyte-specific protein tyrosine kinase (p56lck). Marth JD, et al. J Immunol 1989 Apr 1;142(7):2430–7
The generation of alloreactive cytotoxic T lymphocytes requires the expression of ecto-5'nucleotidase activity. Massaia M, et al. J Immunol 1988 Dec 1;141(11):3768–75
Differential effects of amino acid substitutions in the beta-sheet floor and alpha-2 helix of HLA-A2 on recognition by alloreactive viral peptide-specific cytotoxic T lymphocytes. Mattson DH, et al. J Immunol 1989 Aug 15;143(4):1101–7
Autoimmune syndrome after induction of neonatal tolerance to alloantigens. CD4+ T cells from the tolerant host activate autoreactive F1 B cells. Merino J, et al. J Immunol 1989 Oct 1;143(7):2202–8
Synergistic interactions of IL-1 and IL-6 in T cell activation. Mitogen but not antigen receptor-induced proliferation of a cloned T helper cell line is enhanced by exogenous IL-6. Mizutani H, et al. J Immunol 1989 Aug 1;143(3):896–901
Macrophages and T cells do not express Mlsa determinants. Molina IJ, et al. J Immunol 1989 Jul 1;143(1):39–44
Production of human bone marrow-derived suppressor factor. Effect on antibody synthesis and lectin-activated cell proliferation. Mortari F, et al. J Immunol 1988 Nov 1;141(9):3037–42
An accessory cell-derived costimulatory signal acts independently of protein kinase C activation to allow T cell proliferation and prevent the induction of unresponsiveness. Mueller DL, et al. J Immunol 1989 Apr 15;142(8):2617–28
IL-4 regulation of murine lymphokine-activated killer activity in vitro. Effects on the IL-2-induced expansion, cytotoxicity, and phenotype of lymphokine-activated killer effectors. Mulé JJ, et al. J Immunol 1989 Jan 15; 142(2):726–33
Functional analysis of mononuclear cells infiltrating into tumors. IV. Purification and functional characterization of cytotoxic cell-generating factor. Murakami T, et al. J Immunol 1988 Dec 15;141(12):4235–42

Macrophage factors which enhance the mixed leukocyte reaction initiated by dendritic cells. Naito K, et al. J Immunol 1989 Mar 15;142(6):1834–9

Induction of IL-6 (B cell stimulatory factor-2/IFN-beta 2) production by HIV. Nakajima K, et al. J Immunol 1989 Jan 15;142(2):531–6

A novel T cell-activating molecule (THAM) highly expressed on CD4-CD8- murine thymocytes. Naquet P, et al. J Immunol 1988 Dec 15;141(12):4101–9

Effect of Mlsa on antigen presentation to class II-restricted T cells. Needleman BW, et al. J Immunol 1988 Dec 1; 141(11):3760–7

Cognate interactions between helper T cells and B cells. III. Contact-dependent, lymphokine-independent induction of B cell cycle entry by activated helper T cells. Noelle RJ, et al. J Immunol 1989 Sep 15;143(6):1807–14

Cellular mechanisms in B lymphocyte activation and tolerance. Nossal GJ. J Immunol 1988 Oct 1;141(7 Suppl):S21–4 (18 ref.)

Epitopes of the Mycobacterium tuberculosis 65-kilodalton protein antigen as recognized by human T cells. Oftung F, et al. J Immunol 1988 Oct 15;141(8):2749–54

Bone marrow cells from allogeneic bone marrow chimeras inhibit the generation of cytotoxic lymphocyte responses against both donor and recipient cells. Ogasawara M, et al. J Immunol 1988 Nov 15;141(10):3306–12

In vitro generation of suppressor T cells. Induction of CD3+, IgH-restricted suppressor cells. O'Hara RM Jr, et al. J Immunol 1988 Nov 1;141(9):2935–42

Studies of sublines selected for loss of HLA expression from an EBV-transformed lymphoblastoid cell line. Changes in sensitivity to cytotoxic T cells activated by allostimulation and natural killer cells activated by IFN or IL-2. Ohlén C, et al. J Immunol 1989 May 1;142(9):3336–41

Generation and functional characterization of T cell lines and clones specific for Schistosoma japonicum egg antigen in humans. Ohta N, et al. J Immunol 1988 Oct 1; 141(7):2445–50

An 80 to 85 kilodalton human phosphoglycoprotein associated with cell activation. Omary MB, et al. J Immunol 1988 Nov 15;141(10):3492–7

IL-4-responsive human helper T cell clones are resistant to growth inhibition by tumor necrosis factor-alpha. Pawelec GP, et al. J Immunol 1989 Aug 1;143(3):902–6

Cloned and expressed human Fc receptor for IgG mediates anti-CD3-dependent lymphoproliferation. Peltz GA, et al. J Immunol 1988 Sep 15;141(6):1891–6

Cell proliferation and differentiation in the fetal and early postnatal mouse thymus. Penit C, et al. J Immunol 1989 May 15;142(10):3369–77

IL-4 (B cell stimulatory factor 1) overcomes Fc gamma receptor-mediated inhibition of mouse B lymphocyte proliferation without affecting inhibition of c-myc mRNA induction. Phillips NE, et al. J Immunol 1988 Dec 15; 141(12):4243–9

Mitogenic stimulation of human B lymphocytes by the mannose-specific adhesin on Escherichia coli type 1 fimbriae. Ponniah S, et al. J Immunol 1989 Feb 1; 142(3):992–8

Monoclonal antibodies to murine CD3 epsilon define distinct epitopes, one of which may interact with CD4 during T cell activation. Portoles P, et al. J Immunol 1989 Jun 15; 142(12):4169–75

Restricted expression of mitogen-induced high affinity IL-2 receptors in aging mice. Proust JJ, et al. J Immunol 1988 Dec 15;141(12):4209–16

Transfusion induces blood donor-specific suppressor cells. Quigley RL, et al. J Immunol 1989 Jan 15;142(2):463–70

Synergistic activation of granulocyte-macrophage colony-stimulating factor production by IL-1 and IL-2 in murine Th1 cells. Quill H, et al. J Immunol 1989 Oct 1;143(7):2242–7

Lymphocytes stimulated by allogeneic B cell lines cleave the third component of complement and fix C3 fragments. Their nonspecific lytic capacity is elevated against complement receptor type 2-carrying targets. Ramos OF, et al. J Immunol 1989 Jan 1;142(1):217–23

Engagement of CD4 and CD8 accessory molecules is required for T cell maturation. Ramsdell F, et al. J Immunol 1989 Sep 1;143(5):1467–71

Evidence for an intercellular covalent reaction essential in antigen-specific T cell activation. Rhodes J. J Immunol 1989 Sep 1;143(5):1482–9

V gene rearrangement is required to fully activate the hypermutation mechanism in B cells. Roes J, et al. J Immunol 1989 Feb 1;142(3):1022–6

IL-4 induces LFA-1 and LFA-3 expression on Burkitt's lymphoma cell lines. Requirement of additional activation by phorbol myristate acetate for induction of homotypic cell adhesions. Rousset F, et al. J Immunol 1989 Sep 1; 143(5):1490–8

Role of CD2 in activation and cytotoxic function of CD8/Leu-7-positive T cells. Rüthlein J, et al. J Immunol 1988 Dec 1;141(11):3791–7

Identification of T epitopes within a potential Plasmodium falciparum vaccine antigen. A study of human lymphocyte responses to repeat and nonrepeat regions of Pf155/RESA [published erratum appears in J Immunol 1989 Apr 15;142(8):2968] Rzepczyk CM, et al. J Immunol 1988 Nov 1;141(9):3197–202

Activation of human cytolytic cells through CD2/T11. Comparison of the requirements for the induction and direction of lysis of tumor targets by T cells and NK cells. Scott CF Jr, et al. J Immunol 1989 Jun 1;142(11):4105–12

Effector cell expression of NK1.1, a murine natural killer cell-specific molecule, and ability of mice to reject bone marrow allografts. Sentman CL, et al. J Immunol 1989 Mar 15;142(6):1847–53

C3 synthetic peptides support growth of human CR2-positive lymphoblastoid B cells. Servis C, et al. J Immunol 1989 Apr 1;142(7):2207–12

Molecular events during B lymphocyte differentiation. Induction of endogenous mouse mammary tumor proviral envelope transcripts after B cell stimulation. Sharma S, et al. J Immunol 1988 Oct 1;141(7):2510–8

Suppression of lymphokine-activated killer induction by neutrophils. Shau HY, et al. J Immunol 1988 Dec 15; 141(12):4395–402

Lymphocytes generated by in vivo priming and in vitro sensitization demonstrate therapeutic efficacy against a murine tumor that lacks apparent immunogenicity. Shu SY, et al. J Immunol 1989 Jul 15;143(2):740–8

Activation of eosinophils in cancer patients treated with IL-2 and IL-2-generated lymphokine-activated killer cells. Silberstein DS, et al. J Immunol 1989 Mar 15;142(6):2162–7

Mechanism of mononuclear cell activation by an anti-CD43 (sialophorin) agonistic antibody. Silverman LB, et al. J Immunol 1989 Jun 15;142(12):4194–200

Detection and characterization of a B cell stimulatory factor (BSF-TC) derived from a bone marrow stromal cell line. Simpson L, et al. J Immunol 1989 Jun 1;142(11):3894–900

Induction of the H-2 D antigen during B cell activation. Southern SO, et al. J Immunol 1989 Jan 1;142(1):336–42

A role for class I MHC antigens in responses of activated B lymphocytes. Southern SO, et al. J Immunol 1989 May 15;142(10):3384–91

Mature T cells generated from single thymic clones are phenotypically and functionally heterogeneous. Spangrude GJ, et al. J Immunol 1988 Sep 15;141(6):1877–90

Characterization of T helper 1 and 2 cell subsets in normal mice. Helper T cells responsible for IL-4 and IL-5 production are present as precursors that require priming before they develop into lymphokine-secreting cells. Swain SL, et al. J Immunol 1988 Nov 15;141(10):3445–55

Human B cell proliferation in response to IL-4 is associated with enhanced production of B cell-derived growth factors. Tadmori W, et al. J Immunol 1989 Feb 1; 142(3):826–32

Responsiveness of fetal and adult CD4-, CD8- thymocytes to T cell activation. Takashi T, et al. J Immunol 1989 Apr 15;142(8):2641–6

Inhibitory effect of anti-class II antibody on the spontaneous activation of B cells in patients with systemic lupus erythematosus. Analysis with IL-1 production and IL-1 receptor expression. Tanaka Y, et al. J Immunol 1989 Sep 1;143(5):1584–90

IL-1 is an autocrine growth factor for T cell clones. Tartakovsky B, et al. J Immunol 1988 Dec 1;141(11):3863–7

T cell activation via Leu-23 (CD69). Testi R, et al. J Immunol 1989 Aug 15;143(4):1123–8

Leu 23 induction as an early marker of functional CD3/T cell antigen receptor triggering. Requirement for receptor cross-linking, prolonged elevation of intracellular [Ca++] and stimulation of protein kinase C. Testi R, et al. J Immunol 1989 Mar 15;142(6):1854–60

Antibodies to 5'-nucleotidase (CD73), a glycosyl-phosphatidylinositol-anchored protein, cause human peripheral blood T cells to proliferate. Thompson LF, et al. J Immunol 1989 Sep 15;143(6):1815–21

Soluble CD8 during T cell activation. Tomkinson BE, et al. J Immunol 1989 Apr 1;142(7):2230–6

Feline cytotoxic large granular lymphocytes induced by recombinant human IL-2. Tompkins MB, et al. J Immunol 1989 Jul 15;143(2):749–54

Regulation of isotype production by IL-4 and IL-5. Effects of lymphokines on Ig production depend on the state of activation of the responding B cells. Tonkonogy SL, et al. J Immunol 1989 Jun 15;142(12):4351–60

Enhancing effect of anti-HLA class I monoclonal antibodies on T cell proliferation induced via CD2 molecule. Turco MC, et al. J Immunol 1988 Oct 1;141(7):2275–81

An ongoing in vivo immune response affects the abundancy and differentiation of lymphokine-activated killer cell precursors, but does not influence their broad spectrum target reactivity. Vanhaesebroeck B, et al. J Immunol 1989 Aug 15;143(4):1396–402

T4 cell activation by immobilized phytohemagglutinin: differential capacity to induce IL-2 responsiveness and IL-2 production. Vine JB, et al. J Immunol 1988 Oct 15; 141(8):2593–600

Patterns of costimulation of T cell clones by cross-linking CD3, CD4/CD8, and class I MHC molecules. Wacholtz MC, et al. J Immunol 1989 Jun 15;142(12):4201–12

Lymphokine-independent induction of macrophage membrane IL-1 by autoreactive T cells recognizing either class I or class II MHC determinants. Wasik MA, et al. J Immunol 1988 Nov 15;141(10):3456–62

T cell activation by preformed, long-lived Ia-peptide complexes. Quantitative aspects. Watts TH. J Immunol 1988 Dec 1;141(11):3708–14

Analysis of T hybridomas prepared from a T cell clone with three specificities. Recognition of self + X and allo-H-2 determinants segregates from recognition of Mlsa determinants. Webb SR, et al. J Immunol 1988 Sep 15; 141(6):1828–34

Tyrosine phosphorylation of the human T cell antigen receptor zeta-chain: activation via CD3 but not CD2. Weissman AM, et al. J Immunol 1988 Nov 15; 141(10):3532–6

Activation of cloned human natural killer cells via Fc gamma RIII. Werfel T, et al. J Immunol 1989 Feb 15;142(4):1102–6

Autoreactive T cells in MRL/Mpr-lpr/lpr mice. Characterization of the lymphokines produced and analysis of antigen-presenting cells required. Weston KM, et al. J Immunol 1988 Sep 15;141(6):1941–8

Expression of lymphocyte adhesion receptors for high endothelium in primates. Anatomic partitioning and linkage to activation. Willerford DM, et al. J Immunol 1989 May 15;142(10):3416–22

Signal transduction during human natural killer cell activation: inositol phosphate generation and regulation by cyclic AMP. Windebank KP, et al. J Immunol 1988 Dec 1;141(11):3951–7

Phenotypic characterization of the post-thymic differentiation of human alloantigen-specific CD8+ cytotoxic T lymphocytes. Yamashita N, et al. J Immunol 1989 Sep 1;143(5):1518–23

Inhibition of anti-IgM and growth factor-induced proliferation of guinea pig B cells by one of two distinct Fc gamma receptors on the cells. Yamashita T, et al. J Immunol 1988 Nov 1;141(9):2889–94

Virus-induced polyclonal cytotoxic T lymphocyte stimulation. Yang HY, et al. J Immunol 1989 Mar 1; 142(5):1710–8

Differential in vitro activation of CD4+CD8- and CD8+CD4- herpes simplex virus-specific human cytotoxic T cells. Yasukawa M, et al. J Immunol 1989 Sep 15;143(6):2051–7

Purification and amino acid analysis of two human monocyte chemoattractants produced by phytohemagglutinin-stimulated human blood mononuclear leukocytes. Yoshimura T, et al. J Immunol 1989 Mar 15; 142(6):1956–62

Human T cell leukemia/lymphoma virus type I infection of a CD4+ proliferative/cytotoxic T cell clone progresses in at least two distinct phases based on changes in function and phenotype of the infected cells. Yssel H, et al. J Immunol 1989 Apr 1;142(7):2279–89

Recruitment and activation of tumor-specific immune T cells in situ. CD8+ cells predominate the secondary response in sponge matrices and exert both delayed-type hypersensitivity-like and cytotoxic T lymphocyte activity. Zangemeister-Wittke U, et al. J Immunol 1989 Jul 1; 143(1):379–85

Age-related changes in the capability of the bone marrow to generate B cells. Zharhary D. J Immunol 1988 Sep 15; 141(6):1863–9

Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors. Zipfel PF, et al. J Immunol 1989 Mar 1;142(5):1582–90

The detection by immunofluorescence of distinct cell populations producing interleukin-1 alpha and interleukin-1 beta in activated human peripheral blood. Barkley D, et al. J Immunol Methods 1989 Jun 21; 120(2):277–83

Expansion of lymphokine-activated killer cells for clinical use utilizing a novel culture device. Colborn D, et al. J Immunol Methods 1989 May 12;119(2):247–54

Requirements for the generation of memory B cells in vivo and their subsequent activation in vitro for the production of antigen-specific hybridomas. De Boer M, et al. J Immunol Methods 1988 Oct 4;113(1):143–9

Determination of cytotoxic T lymphocyte activity by time-resolved fluorometry using europium-labelled concanavalin A-stimulated cells as targets. Granberg C, et al. J Immunol Methods 1988 Nov 10;114(1–2):191–5

Prospective partition analysis of independently assorted sets. Accessory elements supporting clonal lymphoid activation by mitogens. Kettman J, et al. J Immunol Methods 1988 Nov 10;114(1–2):235–41

A simple and sensitive bioassay for the detection of IL-2 activity. Leivestad T, et al. J Immunol Methods 1988 Nov 10;114(1–2):95–9

Inhibition of antibody production at high cell density following mitogen stimulation and isotype switching in vitro. McHeyzer-Williams MG, et al. J Immunol Methods 1989 Apr 21;119(1):9–17

In vitro detection of lymphokines produced by in vivo activated lymphocytes. Mohler KM, et al. J Immunol Methods 1989 Jul 6;121(1):67–73

Detection of activated lymphocyte subsets by fluorescence and MTT staining. Schauer U, et al. J Immunol Methods 1989 Jan 17;116(2):221–7

A fluorescence-based assay for quantitation of lymphokine-activated killer cell activity. Volgmann T, et al. J Immunol Methods 1989 Apr 21;119(1):45–51

Phytohemagglutinin mitogenic response of normal individuals vaccinated with hepatitis B vaccine. Filion LG, et al. J Infect Dis 1989 Sep;160(3):398–404

A prospective study of the effects of acyclovir treatment on the HSV-2 lymphoproliferative response of persons with frequently recurring HSV-2 genital infections. Frenkel L, et al. J Infect Dis 1989 May;159(5):845–50

T cell response to soluble cryptococcal antigens after recovery from cryptococcal infection. Hoy JF, et al.

J Infect Dis 1989 Jan;159(1):116–9
Cell–mediated immunity to recombinant human immunodeficiency virus (HIV) antigens in HIV–infected populations. Reddy MM, et al. **J Infect Dis** 1989 Jan; 159(1):120–2
Lymphokine–activated killer (LAK) activity against autologous malignant tumors of the skin. Fukui Y, et al. **J Invest Dermatol** 1988 Oct;91(4):319–22
Optimization of an in vitro lymphocyte blastogenesis assay for predictive assessment of immunologic responsiveness to contact sensitizers. Robinson MK. **J Invest Dermatol** 1989 Jun;92(6):860–7
Mononuclear cells from human lung parenchyma support antigen–induced T lymphocyte proliferation. Nicod LP, et al. **J Leukoc Biol** 1989 Apr;45(4):336–44
Mitochondrial biogenesis during the activation of lymphocytes by mitogens: the immunosuppressive action of tetracyclines. Van den Bogert C, et al. **J Leukoc Biol** 1989 Aug;46(2):128–33
Proliferative T–cell response to HIV envelope glycoprotein in immunized and infected primates and human beings. Krohn K, et al. **J Med Primatol** 1989;18(3–4):363–9
Correlative studies of blastogenic responses and interleukin 1 production by mononuclear cells from patients with zoopathogenic fungal infections. Deepe GS Jr, et al. **J Med Vet Mycol** 1989;27(3):159–68
Regulation of lymphocyte proliferation after influenza virus infection of human mononuclear leukocytes. Roberts NJ Jr, et al. **J Med Virol** 1989 Mar;27(3):179–87
Activation of help and contrasuppression as essential prerequisites for immune response. Andrighetto G, et al. **J Mol Cell Immunol** 1987;3(4):199–214
The synergistic effects of anti–IgM and monoclonal anti–Ia antibodies in induction of murine B lymphocyte activation. Baluyut AR, et al. **J Mol Cell Immunol** 1988;4(1):45–57
Activation of murine B cells from different tissues with different mitogens. II. Isotype distribution of secreted immunoglobulins in the presence and absence of IL–4–containing T cell supernatants. Bossie A, et al. **J Mol Cell Immunol** 1987;3(4):221–6
Activation of murine B cells with Salmonella typhimurium mitogen (STM), lipopolysaccharide (LPS), and dextran sulfate (DxS). I. Cell–cycle analysis and induction of cytoplasmic immunoglobulin. Brooks KH, et al. **J Mol Cell Immunol** 1987;3(4):215–9
Acquisition of paralytic activity by inducer cells. Hu SK, et al. **J Mol Cell Immunol** 1984;1(2):91–100
The role of the murine L3T4 molecule in T cell activation: differential effects of anti–L3T4 on activation by monoclonal anti–receptor antibodies. Janeway CA Jr, et al. **J Mol Cell Immunol** 1987;3(2):121–31
The syngeneic T–T lymphocyte reaction (STTLR). II. Induction of primary T anti–T cell cytotoxic responses in vitro in T cell cultures stimulated with syngeneic self–reactive T cells. Suzuki H, et al. **J Mol Cell Immunol** 1986;2(6):345–57
The syngeneic T–T lymphocyte reaction (STTLR). I. Induction of primary T anti–T cell proliferative responses in T cell cultures stimulated with self– and antigen–reactive T cells. Suzuki H, et al. **J Mol Cell Immunol** 1986; 2(6):331–44
The role of L3T4 in T cell activation: L3T4 may be both an Ia–binding protein and a receptor that transduces a negative signal. Tite JP, et al. **J Mol Cell Immunol** 1986; 2(4):179–90
Major histocompatibility complex–restricted and unrestricted activation of helper T cell lines by liposome–bound antigens. Walden P, et al. **J Mol Cell Immunol** 1986; 2(4):191–7
Peptides of myelin basic protein stimulate T lymphocytes from patients with multiple sclerosis. Baxevanis CN, et al. **J Neuroimmunol** 1989 Mar;22(1):23–30
Lymphocyte proliferative response to glial cells in SJL/J mice immunized with rat whole spinal cord and rat myelin basic protein. Jewtoukoff V, et al. **J Neuroimmunol** 1989 Jan;21(1):81–6
Evidence for multiple human T cell recognition sites on myelin basic protein. Richert JR, et al. **J Neuroimmunol** 1989 Jun;23(1):55–66
Peripheral blood lymphocyte phenotype and function in multiple sclerosis. Hughes PJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1187–92
Immunological studies on patients with optic neuritis without evidence of multiple sclerosis. Kinnunen E, et al. **J Neurol Sci** 1989 Mar;90(1):43–52
Human T lymphocyte response to myelin basic protein: selection of T lymphocyte lines from MBP–responsive donors. Vandenbark AA, et al. **J Neurosci Res** 1989 May; 23(1):21–30
Does occult monoclonal proliferation of non–malignant T cells cause secondary immunopathological disorders? Goudie RB, et al. **J Pathol** 1989 Jun;158(2):91–2
Inhibitory effects of rabbit antisera on mitogenic activity of Actinobacillus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **J Periodont Res** 1989 May;24(3):165–70
Polyclonal B–cell activation in periodontitis. Tew J, et al. **J Periodont Res** 1989 Jul;24(4):225–41 (189 ref.)
Blastogenic response and immunoglobulin production by inflamed gingival lymphocytes from dogs. Yamashita K, et al. **J Periodont Res** 1988 Sep;23(5):322–7
Human gingival Langerhans cells as accessory cells in mitogen induced T cell responses. Newcomb GM, et al. **J Periodontol** 1988 Dec;59(12):811–5
Suppression of lymphocyte proliferation in vitro by macromolecules in the vesicle fluid and tissue extracts of hydatidiform mole. Cowan BD, et al. **J Reprod Immunol** 1989 Mar;15(1):39–49
Suppression of lymphocyte proliferation by proteins secreted by cultured Sertoli cells. Wyatt CR, et al. **J Reprod Immunol** 1988 Oct;14(1):27–40
Rheumatoid T lymphocyte MHC class II expression: in vitro stimulation produces normal MHC class II expression, independent of proliferation. Kirkham BW, et al. **J Rheumatol** 1989 Mar;16(3):270–5
Ficoll–Hypaque leukocyte preparations from burned patients contain activated nonlymphoid cell populations that take up thymidine. Deitch EA, et al. **J Trauma** 1989 Mar; 29(3):277–83
Inhibition of T–lymphocyte mitogenic responses and effects on cell functions by bovine herpesvirus 1. Carter JJ, et al. **J Virol** 1989 Apr;63(4):1525–30
Dengue virus–specific murine T–lymphocyte proliferation: serotype specificity and response to recombinant viral proteins. Rothman AL, et al. **J Virol** 1989 Jun; 63(6):2486–91
Identification, using synthetic peptides, of the minimum amino acid sequence from the retroviral transmembrane protein p15E required for inhibition of lymphoproliferation and its similarity to gp21 of human T–lymphotropic virus types I and II. Ruegg CL, et al. **J Virol** 1989 Aug; 63(8):3250–6
Inhibition of lymphoproliferation by a synthetic peptide with sequence identity to gp41 of human immunodeficiency virus type 1. Ruegg CL, et al. **J Virol** 1989 Aug; 63(8):3257–60
Evaluation of the whole blood lymphocyte transformation assay for scrub typhus exposure: adaptability to field sample collection. Lim TS, et al. **Jpn J Med Sci Biol** 1988 Apr; 41(2):57–68
Encephalitozoon cuniculi infection in MRL/MPJ–LPR (lymphoproliferation) mice. Liu JJ, et al. **Lab Anim Sci** 1988 Dec;38(6):685–8
Toxicity of human recombinant interleukin–2 in rats. Pathologic changes are characterized by marked lymphocytic and eosinophilic proliferation and multisystem involvement. Anderson TD, et al. **Lab Invest** 1989 Mar; 60(3):331–46
Toxicity of human recombinant interleukin–2 in the mouse is mediated by interleukin–activated lymphocytes. Separation of efficacy and toxicity by selective lymphocyte subset depletion. Anderson TD, et al. **Lab Invest** 1988 Nov; 59(5):598–612
Soluble interleukin–2 receptors in serum and bile of liver transplant recipients. Adams DH, et al. **Lancet** 1989 Mar 4;1(8636):469–71
Depressed PMNC blastogenic response in patients with cancer of the head and neck: a study of IL–2 production, IL–2 consumption, and IL–2 receptor expression. Eskinazi DP, et al. **Laryngoscope** 1989 Feb;99(2):151–7
Limiting dilution analysis of the frequency of IL2 responsive T cells in lymph nodes involved by B–cell non–Hodgkin's lymphomas. Bonnefoix T, et al. **Leuk Res** 1989;13(4):323–9
Proliferation of leukemic B cells in response to SAC and anti–mu. Evidence for different modes of action and comparison to proliferation and differentiation induced by conditioned medium. Steinberg J, et al. **Leuk Res** 1988; 12(7):559–66
Regeneration of functional and activated NK and T sub–subset cells in the marrow and blood after autologous bone marrow transplantation: a prospective phenotypic study with 2/3–color FACS analysis. Bengtsson M, et al. **Leukemia** 1989 Jan;3(1):68–75
Residual T lymphocytes, and not malignant B cells, proliferate upon mitogenic stimulation. Kluin–Nelemans HC, et al. **Leukemia** 1989 Oct;3(10):715–7
Phytohemagglutinin induced proliferation by aged lymphocytes: reduced expression of high affinity interleukin–2 receptors and interleukin–2 secretion. Froelich CJ, et al. **Life Sci** 1988;43(20):1583–90
Time–dependent enhancement of lymphocyte activation by mitogens after exposure to isolation or water scheduling. Jessop JJ, et al. **Life Sci** 1988;43(14):1133–40
Functional characteristics of lymphocytes in chronic renal failure: in vitro response to mitogens. Nanni Costa A, et al. **Life Support Syst** 1983;1 Suppl 1:88–91
Activation of T cells by interleukin 1 involves internalization of interleukin 1. Falk W, et al. **Lymphokine Res** 1989 Fall; 8(3):263–8
Recombinant interleukin 4 (RIL4) inhibits interleukin 2–induced activation of peripheral blood lymphocytes. Han X, et al. **Lymphokine Res** 1988 Fall;7(3):227–35
Age–related changes in the proliferative kinetics of phytohemagglutinin–stimulated lymphocytes. Analysis by uptake of tritiated precursors of DNA, RNA and proteins, and by flow cytometry. Lucivero G, et al. **Mech Ageing Dev** 1988 Jun;43(3):259–67
Autolymphocyte therapy. Osband M, et al. **Med Hypotheses** 1988 Aug;26(4):259–62
Lymphocyte subpopulations and clonal repertoires participate in immune response to acute T. cruzi infection. Minoprio P, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:356–9
Comparative aspects of T cell activation in vivo following stimulation with anti–CD3 MAB, allogeneic cells and Trypanosoma cruzi. Pereira GM, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:284–90
Depletion of L3T4+ T lymphocytes during acute Trypanosoma cruzi infection abolish macrophage and B lymphocyte activation but not tissue inflammatory reaction. Russo M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:527–38
Reduced proliferative response of mouse spleen cells to mitogens during infection with Salmonella typhimurium or Listeria monocytogenes. Brunner H, et al. **Microb Pathog** 1989 Apr;6(4):265–76
During recovery from cytomegalovirus infection T–lymphocyte subsets become selectively responsive to activation and have depressed interleukin 2 (IL2) secretion and IL2 receptor expression. Nicholas JA, et al. **Microb Pathog** 1987 Jan;2(1):37–47
Epstein–Barr virus immunosuppression: II. Generation of nonspecific suppressor T lymphocytes in vitro. Sundar SK, et al. **Microb Pathog** 1987 Apr;2(4):259–67
Characterization of activation of a partially defective B cell subpopulation with immunocompetence restricted to IgM and IgA. Nakaniwa H, et al. **Microbiol Immunol** 1989; 33(3):245–56
Polyclonal B–cell stimulative and immunosuppressive activities at different developmental stages of Trypanosoma gambiense. Oka M, et al. **Microbiol Immunol** 1988; 32(11):1175–7
Iron and transferrin uptake by phytohemagglutinin–stimulated human peripheral blood lymphocytes. Taylor PG, et al. **Microbiol Immunol** 1988; 32(9):949–55
A simple and rapid method to evaluate lymphocyte response to mitogens. Giorgio A, et al. **Microbiologica** 1989 Apr; 12(2):151–5
Lymphocyte proliferative response to rabies virus antigen. Melino G, et al. **Microbiologica** 1989 Jul;12(3):215–23
In vitro blastogenesis of porcine peripheral blood lymphocytes. Onyekaba C. **Microbiologica** 1988 Jul; 11(3):201–5
Oncogene cooperation in lymphocyte transformation: malignant conversion of E mu–myc transgenic pre–B cells in vitro is enhanced by v–H–ras or v–raf but not v–abl. Alexander WS, et al. **Mol Cell Biol** 1989 Jan;9(1):67–73
Isolation and structural characterization of the human 4F2 heavy–chain gene, an inducible gene involved in T–lymphocyte activation. Gottesdiener KM, et al. **Mol Cell Biol** 1988 Sep;8(9):3809–19
Mitogen–induced genes are subject to multiple pathways of regulation in the initial stages of T–cell activation. Irving SG, et al. **Mol Cell Biol** 1989 Mar;9(3):1034–40
Regulation of 4F2 heavy–chain gene expression during normal human T–cell activation can be mediated by multiple distinct molecular mechanisms. Lindsten T, et al. **Mol Cell Biol** 1988 Sep;8(9):3820–6
T–cell activation signals and human T–cell leukemia virus type I–encoded p40x protein activate the mouse granulocyte–macrophage colony–stimulating factor gene through a common DNA element. Miyatake S, et al. **Mol Cell Biol** 1988 Dec;8(12):5581–7
Alterations of the lymphocyte–specific protein tyrosine kinase (p56lck) during T–cell activation. Veillette A, et al. **Mol Cell Biol** 1988 Oct;8(10):4353–61
Complexity of the primary genetic response to mitogenic activation of human T cells. Zipfel PF, et al. **Mol Cell Biol** 1989 Mar;9(3):1041–8
Effects of various forms of monoclonal anti–Fc gamma R II (2.4G2) on B lymphocyte responses. Dickler HB, et al. **Mol Immunol** 1988 Nov;25(11):1169–74
Transmembrane signals in the activation of T–lymphocytes by lectin mitogens. Hadden JW. **Mol Immunol** 1988 Nov; 25(11):1105–12 (51 ref.)
The binding of IgG1 containing immune complexes to the FcR of allogenically activated T cells induces changes in the membrane potential and the cell surface charge. Huckel C, et al. **Mol Immunol** 1988 Jun;25(6):517–25
Mode of antigen presentation required for triggering of T cell response: analysis by use of azobenzenearsonate–tyrosine derivatives as antigens and L cells transfected with I–Ak genes as antigen presenting cells. Saito S, et al. **Mol Immunol** 1988 Jun;25(6):569–75
T–cell colony formation in homosexual men with anti–human immunodeficiency virus. Wakabayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):80–5
Clinical implications of CLL cell proliferation in vitro. Juliusson G, et al. **Nouv Rev Fr Hematol** 1988; 30(5–6):399–401
Elevated serum levels of soluble interleukin–2 receptors in HIV infection: no correlation with activated T cells. Lang JM, et al. **Nouv Rev Fr Hematol** 1989;31(1):9–11
Chronic B–lymphocytic leukemia—expression of B cell activation markers in relation to activity of the disease. Tötterman TH, et al. **Nouv Rev Fr Hematol** 1988; 30(5–6):279–81
Transcriptional regulation of two cytotoxic T lymphocyte–specific serine protease genes. Lobe CG, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5765–79
Lymphocyte activation by recombinant interleukin–2 in ovarian cancer patients. Boyer PJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):793–7
Influence of stressor predictability and behavioral control on lymphocyte reactivity, antibody responses and neuroendocrine activation in rats. Mormede P, et al.

Physiol Behav 1988;43(5):577–83

1H-nuclear magnetic resonance (NMR) spectroscopic study of B lymphocytes stimulated with lipopolysaccharide (LPS). Ohsaka A, et al. **Physiol Chem Phys Med NMR** 1988;20(3):167–70

Ion transport, membrane potential, and cytoplasmic pH in lymphocytes: changes during activation. Grinstein S, et al. **Physiol Rev** 1989 Apr;69(2):417–81 (253 ref.)

Lymphocyte activation in oral lichen planus. Malmström M, et al. **Proc Finn Dent Soc** 1989;85(2):109–17 (19 ref.)

T cells specific for alpha-beta interface regions of hemoglobin recognize the isolated subunit but not the tetramer and indicate presentation without processing. Atassi MZ, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6729–33

Changes in CD45 isoform expression accompany antigen-induced murine T-cell activation. Birkeland ML, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6734–8

Surface immunoglobulin-mediated B-cell activation in the absence of detectable elevations in intracellular ionized calcium: a model for T-cell-independent B-cell activation. Brunswick M, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6724–8

Human interleukin 7: molecular cloning and growth factor activity on human and murine B-lineage cells. Goodwin RG, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):302–6

Stress-induced alterations of immunity in hypophysectomized rats. Keller SE, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9297–301

CD45 regulates signal transduction and lymphocyte activation by specific association with receptor molecules on T or B cells. Ledbetter JA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8628–32

Role of interleukin 1 in the activation of T lymphocytes. Lichtman AH, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9699–703

Activated B cells can deliver help for the in vitro generation of antiviral cytotoxic T cells. Liu Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4629–33

T-cell mitogenesis stimulates the synthesis of a mRNA species coding for a 43-kDa peptide reactive with CM-H-9, a monoclonal antibody specific for placental isoferritin. Moroz C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3282–5

Cell proliferation and thymocyte subset reconstitution in sublethally irradiated mice: compared kinetics of endogenous and intrathymically transferred progenitors. Penit C, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5547–51

Activation of human T lymphocytes: differential effects of CD3- and CD8-mediated signals. Samstag Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9689–93

Lysozyme-induced inhibition of the lymphocyte response to mitogenic lectins. Varaldo PE, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):54–62

Membrane activation in immunologically relevant cells. **Prog Allergy** 1988;42:1–312

The initiation of human T lymphocyte activation. Imboden JB, et al. **Prog Allergy** 1988;42:246–79 (162 ref.)

Factors, receptors and signals for B lymphocyte activation. Kishimoto T. **Prog Allergy** 1988;42:280–305 (113 ref.)

Alternative pathways for T lymphocyte activation. Shevach EM. **Prog Clin Biol Res** 1989;288:127–40

The decisive role of Na,K-ATPase in stimulation process of T-lymphocytes. Szamel M, et al. **Prog Clin Biol Res** 1988;268B:449–56

Isolation and characterisation of lymphoblastoid cells from cattle and deer affected with 'sheep-associated' malignant catarrhal fever. Reid HW, et al. **Res Vet Sci** 1989 Jul; 47(1):90–6

Lymphocyte blastogenesis and cellular cytotoxicity in a congenital infection of bovine fetuses related to epizootic bovine abortion. Spezialetti R, et al. **Res Vet Sci** 1989 Mar; 46(2):160–7

Polyclonal B-cell activation in human malaria: relevance to the development of anti-sporozoite specific immune response and of immunopathology in individuals from endemic areas (Rondonia State—Brazil). Daniel-Ribeiro C, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):415–8

Human lymphocytes produce both leukocyte migration inhibition (LIF) and stimulation (MStF) factors after mitogen, alloantigens or antigen activation. Favila-Castillo L, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun;30(2):111–5

Activated T lymphocytes, rheumatoid factor and erythrocyte sedimentation rate assays in rheumatoid arthritis. Bartfeld H, et al. **Rheumatol Int** 1988;8(3):131–3

Nature of IgG anti-lymphocyte autoantibody-reactive molecules shed from activated T cells in systemic lupus erythematosus. Minota S, et al. **Rheumatol Int** 1988; 8(4):165–70

Activation of peripheral blood lymphocytes in patients with primary Sjögren's syndrome. Youinou P, et al. **Rheumatol Int** 1988;8(3):125–30

Partial inefficiency of T cell receptors gamma/delta composed of a heavy (55-kD) gamma chain to mediate cell activation upon binding to specific monoclonal antibodies. Mingari MC, et al. **Ric Clin Lab** 1989 Jan–Mar; 19(1):39–44

Effect of BrdU on the number of nucleoli and the frequency of satellite associations in PHA-stimulated lymphocytes. Balíček P.

Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove 1988;31(5):473–82

T-cell chemiluminescence. A novel aspect of T-cell membrane activation studied with a Jurkat tumour cell line. Benichou G, et al. **Scand J Immunol** 1989 Aug;30(2):265–9

Monoclonal antibodies against leucoagglutinin-reactive human T-lymphocyte surface components. II. Studies on the mechanism of K46M-induced activation and determination of the frequency of responding cells. Berzins T, et al. **Scand J Immunol** 1988 Dec;28(6):773–82

Requirements for induction of activation and proliferation of human B cells analysed with anti-idiotype monoclonal antibodies. de Rie MA, et al. **Scand J Immunol** 1989 Aug; 30(2):249–57

Production of gamma interferon in Mls disparate interactions. Goldbach J, et al. **Scand J Immunol** 1988 Nov;28(5):529–35

Accessory cell-dependent T-cell activation via Ti-CD3. Involvement of CD2-LFA-3 interactions. Halvorsen R, et al. **Scand J Immunol** 1988 Sep;28(3):277–84

Induction of interleukin-2 production in CD4+ and CD8+ T-cell subsets after activation via CD3 and CD2. Halvorsen R, et al. **Scand J Immunol** 1988 Oct;28(4):449–55

Monoclonal antibodies against leucoagglutinin-reactive human T-lymphocyte surface components. I. Characterization of cellular binding sites. Hammarström ML, et al. **Scand J Immunol** 1988 Dec;28(6):759–71

Antibodies to beta 2-microglobulin, the light-chain component of class I histocompatibility molecules, provide an activation signal to human lymphocytes. Hashimoto S, et al. **Scand J Immunol** 1989 Sep;30(3):339–45

The generation of guinea pig T-cell lines reactive to antigens from Mycobacterium tuberculosis. Selected lines induce erythematous skin reactions. Hasløv K, et al. **Scand J Immunol** 1989 Mar;29(3):281–8

Kinetic analysis of lymphokine-activated killer (LAK) cells: lytic parameters and determination of LAK cell frequency. LeFever A, et al. **Scand J Immunol** 1989 Apr;29(4):417–26

Ability of pure resting CD8+ human T cells to respond to alloantigen. Leivestad T, et al. **Scand J Immunol** 1989 May; 29(5):543–53

A model system for the analysis of B-cell activation and effector T-cell functions. T cell-dependent B-cell responses facilitated by anti-I-A antibodies. Pereira P, et al. **Scand J Immunol** 1989 Jan;29(1):49–56

Regulation of growth and differentiation of pre-activated B lymphocytes. Rajasekar R, et al. **Scand J Immunol** 1988 Nov;28(5):509–18

Detection of individual interleukin 4- and gamma interferon-producing murine spleen cells after activation with T-cell mitogens. Sander B, et al. **Scand J Immunol** 1989 Sep;30(3):315–20

Spontaneous lymphocyte proliferation during trauma and infection. Soop M, et al. **Scand J Immunol** 1988 Dec; 28(6):659–65

Enhanced T-cell-activation due to combined stimulation by both endothelial cells and monocytes. Teitel JM, et al. **Scand J Immunol** 1989 Feb;29(2):165–73

Effect of physical exercise on blood mononuclear cell subpopulations and in vitro proliferative responses. Tvede N, et al. **Scand J Immunol** 1989 Mar;29(3):383–9

T-cell phenotypes after stimulation of human mononuclear cells by pokeweed mitogen or pokeweed mitogen bound to erythrocytes. Uiterdijk HG, et al. **Scand J Immunol** 1989 May;29(5):563–71

Responsiveness of T cells to mutant major histocompatibility complex class I antigen. II. Role of stimulator-type accessory cells with reference to interleukin 1 production. Watanabe H, et al. **Scand J Immunol** 1989 Mar;29(3):343–51

Induction of CD43 expression during activation and terminal differentiation of human B cells. Wikén M, et al. **Scand J Immunol** 1988 Oct;28(4):457–64

Enhancement of human B-cell proliferation by a monoclonal antibody to CD43. Wikén M, et al. **Scand J Immunol** 1989 Mar;29(3):363–70

Studies on the role of CD43 in human B-cell activation and differentiation. Wikén M, et al. **Scand J Immunol** 1989 Mar; 29(3):353–61

Evidence for activation of rheumatoid synovial T lymphocytes—development of rheumatoid T cell clones. Førre O, et al. **Scand J Rheumatol Suppl** 1988;76:153–60 (33 ref.)

Interactions between the immune system and connective tissue in arthritis: aspects on T-cell activation. Gudmundsson S, et al. **Scand J Rheumatol Suppl** 1988; 76:117–24 (43 ref.)

The T cell system in rheumatoid arthritis: activated or defective? Kitas GD, et al. **Scand J Rheumatol Suppl** 1988; 76:161–73 (43 ref.)

Abnormalities of T cell activation in the rheumatoid synovium detected with monoclonal antibodies to CD3. Talal N, et al. **Scand J Rheumatol Suppl** 1988;76:175–82

Contingent genetic regulatory events in T lymphocyte activation. Crabtree GR. **Science** 1989 Jan 20; 243(4889):355–61

In vivo administration of anti-CD3 prevents malignant progressor tumor growth. Ellenhorn JD, et al. **Science** 1988 Oct 28;242(4878):569–71

G1/S transition in normal human T-lymphocytes requires the nuclear protein encoded by c-myb. Gewirtz AM, et al. **Science** 1989 Jul 14;245(4914):180–3

Activation of gamma delta T cells in the primary immune response to Mycobacterium tuberculosis. Janis EM, et al. **Science** 1989 May 12;244(4905):713–6

Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway. Lindstein T, et al. **Science** 1989 Apr 21;244(4902):339–43

Distribution of interleukin-2 receptors in activated T-lymphocyte subsets in vitro. Lai KN, et al. **Singapore Med J** 1988 Aug;29(4):333–6

Sleep deprivation in the rat: VII. Immune function. Benca RM, et al. **Sleep** 1989 Feb;12(1):47–52

Immunoregulatory properties of pulmonary surfactant: effect of lung lining fluid on proliferation of human blood lymphocytes. Wilsher ML, et al. **Thorax** 1988 May; 43(5):354–9

T cell activation. Stobo JD. **Trans Am Clin Climatol Assoc** 1987;99:196–202 (4 ref.)

Induction of lymphokine-activated killer and natural killer cell activities from cryopreserved lymphocytes. Kawai H, et al. **Transfusion** 1988 Nov–Dec;28(6):531–5

Lymphokine-activated killer cell generation and recovery. Comparison of an automated cell processing device and a manual procedure. Ryan T, et al. **Transfusion** 1989 Jul–Aug;29(6):491–5

Use of monoclonal antibodies to study in vivo and in vitro-activated lymphocytes. Aversa GG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):349–50

Expression of adhesion molecules by human renal tubular cells in culture and binding of activated lymphocytes. Bishop A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):314–5

The role of accessory molecules in lymphocyte activation. Boyd AW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):38–40

Dose-dependent activation of murine T cells following in vivo administration of anti-murine CD3. Ellenhorn JD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1013–4

Immune response of rat small bowel lymphocytes. Ennulat NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2898–9

Cytoplasmic free calcium concentration and inhibition in MLC after blood transfusion. Hiroshi T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1810–3

Effect of anti-common leucocyte (CD45R, CD45) monoclonal antibodies on human lymphocyte activation: their potential for modifying kidney dendritic cells. Kraft N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1023–5

A human-mouse T-cell hybridoma-derived lymphokine inhibits thymidine uptake of T-lymphocytes. Laus R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):96–7

A monoclonal antibody, 7G5 (CD7), induces modulation of Tp40 and inhibits proliferation in the allogeneic and autologous mixed lymphocyte reactions. Lazarovits AI, et al. **Transplant Proc** 1988 Dec;20(6):1253–7

Modulation of CD7 is associated with inhibition of T cell proliferation in response to tetanus toxoid and phytohemagglutinin. Lazarovits AI, et al. **Transplant Proc** 1989 Apr;21(2):3325–7

Receptor-mediated endocytosis of IL-2 by PHA stimulated lymphocytes. Lee TP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):100–2

Dissociated expression of receptors for interleukin 2 and transferrin in the presence of preformed suppressor T cells and interleukin 2. Loertscher R. **Transplant Proc** 1988 Dec; 20(6):1258–9

The RT6 T cell antigen: its role in the identification of functional subsets and in T cell activation. Lubaroff DM, et al. **Transplant Proc** 1989 Apr;21(2):3251–4

Functional T cells in human renal allograft fine-needle aspirates. McKenna RM, et al. **Transplant Proc** 1988 Dec; 20(6):1237–8

Incubation of T cell or monocytic cell lines with 1,25-dihydroxyvitamin D3 before mitogen stimulation potentiates IL-2 and IL-1 beta mRNA levels. Prehn JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):90–1

Induction of suppressor T cells by cytokines. Rich RR, et al. **Transplant Proc** 1988 Dec;20(6):1156–7 (7 ref.)

Characteristics of alloreactive rat T cell lines established from low and high rejecting orthotopic liver transplants. Ruiz P, et al. **Transplant Proc** 1989 Apr;21(2):3286–8

Induction of suppressor T cells in vitro by an autologous alloreactive T cell line propagated from a DSBT-enhanced rat renal allograft. Ruiz P, et al. **Transplant Proc** 1989 Apr; 21(2):3289–91

Different modes of T-cell activation by monoclonal antibodies to the alpha/beta T-cell receptor and the CD3 complex. Schlitt HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):147–8

Autoreactive T cells isolated during graft-versus-host disease (GvHD) may be involved in the generation of an anti-leukemic effect after bone marrow transplantation (BMT). Schneider EM, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3018–21

Alloantigen-induced activation of nude rat lymphocytes results in a selective expansion of CD4+ cells. Schwinzer R, et al. **Transplant Proc** 1989 Apr;21(2):3249–50

Signaling via the T-cell antigen receptor heterodimer and the CD2 antigen: a novel, synergistic pathway for activation of T-cells. Suthanthiran M. **Transplant Proc** 1989 Feb;21(1 Pt 1):340–1

Different activation signals detected by fixation of stimulator cells. Sutherland RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):178–9

Incidence of anti-host cytotoxic and proliferative T cell responses after HLA-identical bone marrow transplantation (BMT). van Els C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2987–8

Cellular activation in the graft and in blood during CMV disease. von Willebrand E, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2080–1

1–Oleolyl–2–glycerol stimulates immunoglobulin production in human peripheral blood mononuclear cells independent of T–cell activation. Yamaguchi DT, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):203–4

Analysis of spontaneous blastogenesis profiles in recipients of renal allografts. Yoon YS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1925

Verapamil selectively inhibits expression of interleukin–2 messenger RNA in mitogen activated mononuclear blood cells. Zanker B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):85–7

Factors affecting proliferation of nonimmune murine T cells in vitro. Zhou P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):171–3

Limiting dilution analysis for alloreactive, TCGF–secretory T cells. Two related LDA methods that discriminate between unstimulated precursor T cells and in vivo–alloactivated T cells. Bishop DK, et al. **Transplantation** 1989 Apr;47(4):671–7

The influence of T cell depletion on recovery of T cell proliferation to herpesviruses and Candida after allogeneic bone marrow transplantation. de Gast GC, et al. **Transplantation** 1989 Jul;48(1):111–5

Human suppressor T cells induced in vitro with an autologous renal allograft–derived T cell line. II. Activity and specificity of a soluble suppressor factor. Emara M, et al. **Transplantation** 1989 Feb;47(2):364–71

Specific unresponsiveness in rats with prolonged cardiac allograft survival after treatment with cyclosporine. II. Sequential changes in alloreactivity of T cell subsets. Hall BM, et al. **Transplantation** 1989 Jun;47(6):1030–3

Differential regulation of activation–associated receptor expression on CD4– and CD8–positive T lymphocytes by allosensitized suppressor T cells. Loertscher R, et al. **Transplantation** 1989 Sep;48(3):473–8

Lymphokine production by MLR–reactive reaction lymphocytes obtained from normal mice and mice rendered tolerant of class II MHC antigens. Mohler KM, et al. **Transplantation** 1989 Apr;47(4):625–33

Development and evaluation of a limiting dilution analysis technique that can discriminate in vivo alloactivated cytotoxic T lymphocytes from their naive CTL precursors. Orosz CG, et al. **Transplantation** 1989 Jan;47(1):189–94

Similarities in long–term alloreactive T cell lines propagated from transfusion–enhanced and control–rejecting rat renal allografts. Ruiz P, et al. **Transplantation** 1989 Feb; 47(2):390–4

Transmembrane signalling via the T cell antigen receptor heterodimer and the CD2 antigen. A synergistic pathway for activation of T cells. Suthanthiran M. **Transplantation** 1989 Feb;47(2):348–51

Biodistribution of an anti–interleukin 2 receptor monoclonal antibody in rat recipients of a heart allograft, and its use as a rejection marker in gamma scintigraphy. Thedrez P, et al. **Transplantation** 1989 Sep;48(3):367–71

In vivo activity of mixed lymphocyte response–generated suppressor cells and ability to prolong cardiac allograft survival in rats. Turka LA, et al. **Transplantation** 1989 Feb; 47(2):388–90

Regulation of jird lymphocyte responsiveness to fractionated antigens of Brugia pahangi. Michaud LA, et al. **Trop Med Parasitol** 1988 Dec;39(4):317–21

A new procedure for large scale production and freezing of lymphokine activated killer (LAK) cells to be used in adoptive immunotherapy of cancer. Gambacorti–Passerini C, et al. **Tumori** 1988 Oct 31;74(5):523–30

Ultrastructural morphometric study of follicular center lymphocytes: I. Nuclear characteristics and the Lukes–Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):373–91

Ultrastructural morphometric study of follicular center lymphocytes: II. Analyses of cleaved–cell populations do not support the Lukes–Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):393–404

Assessment of in vitro lymphokine activated killer (LAK) cell activity against renal cancer cell lines and its suppression by serum factor using crystal violet assay. Kanamaru H, et al. **Urol Res** 1989;17(4):259–64

Influence of immunomodulatory agents on bovine humoral and cellular immune responses to parenteral inoculation with bovine rotavirus vaccines. Archambault D, et al. **Vet Microbiol** 1988 Aug;17(4):323–34

In vitro secretion of bovine immunoglobulins during pokeweed mitogen or pokeweed mitogen and antigen activation of lymphocytes. Olobo JO, et al. **Vet Res Commun** 1989;13(3):193–7

T cell activation via cell–surface antigens other than the CD3/T cell receptor complex. Yokoyama WM, et al. **Year Immunol** 1989;4:110–46 (143 ref.)

On the suitability of the MTT–assay for the evaluation of mitogenic lymphocyte blastogenesis in swine. Reubel GH, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):35–42

Alterations in neutrophil phagocytosis and lymphocyte blastogenesis in dairy cows around parturition. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):337–45

[Study of cell–mediated immune response to BCG and cholera vaccines in vitro in carriers of HLA–DR2 and HLA–DR3 antigens] Lalchev S, et al. **Eksp Med Morfol** 1988;27(3):6–9 (Eng. Abstr.) **(Bul)**

[The influences of intracerebroventricular injection of dihydroxyphenylserine in rabbits and electrical stimulation of locus coeruleus in rats upon the increase of electro–acupuncture–induced immune functions] Zhao JC, et al. **Chen Tzu Yen Chiu** 1988;13(2):119–23 (Eng. Abstr.) **(Chi)**

[Effects of mitogen–activated lymphocytes on glomerular polyanion (GPA) in rats] Cheng XJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):691–2, 48 (Eng. Abstr.) **(Chi)**

[Immunoregulatory effects of ascites of tumor–bearing mice] Jia FL. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):426–9 (Eng. Abstr.) **(Chi)**

[Accessory effect of mouse B lymphocytes in Con–A response] Yin TG, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):363–6 (Eng. Abstr.) **(Chi)**

[Accessory effect of human B lymphocytes in T cell mitogen responses] Yin TG, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):161–8 (Eng. Abstr.) **(Chi)**

[The effect of interleukin–2 on peripheral lymphocytes and monocytes. III. Proliferative and cytotoxic effects in vitro in patients with systemic erythematosus and progressive polyarthritis] Jira M, et al. **Cas Lek Cesk** 1988 Dec 23; 127(52):1609–12 (Eng. Abstr.) **(Cze)**

[Response of peripheral blood lymphocytes to antigenically nonspecific mitogens in systemic erythematosus] Strejček J, et al. **Cas Lek Cesk** 1989 Jun 16;128(25):781–3 (Eng. Abstr.) **(Cze)**

[Origin of autoimmune mechanisms] Kurki P. **Duodecim** 1988; 104(11):823–30 (62 ref.) **(Fin)**

[T lymphocyte activation induced in vivo by the first injection of OKT3 monoclonal antibodies] Chatenoud L, et al. **C R Acad Sci [III]** 1988;307(19):833–6 (Eng. Abstr.) **(Fre)**

[HLA class II typing in chronic myeloid leukemia with the complement fixation test using phytohemagglutinin–activated lymphocytes in the presence of interleukin 2 and gamma interferon] Raffoux C, et al. **Rev Fr Transfus Hemobiol** 1989 Jun;32(3):193–202 (Eng. Abstr.) **(Fre)**

[Regulation of cell growth exemplified by T lymphocytes] Hückel C. **Allerg Immunol (Leipz)** 1989;35(2):79–99 (85 ref.) (Eng. Abstr.) **(Ger)**

[Functional capacity of T cell subpopulations in mice. II. Effect of allogeneically stimulated T–cell subpopulations on the primary MLR] Hückel C, et al. **Allerg Immunol (Leipz)** 1988;34(3):159–67 (Eng. Abstr.) **(Ger)**

[Interleukin 1 (IL 1)] Nausch M, et al. **Allerg Immunol (Leipz)** 1989;35(2):101–22 (164 ref.) (Eng. Abstr.) **(Ger)**

[Polyclonal B–cell activation by so–called immunopotentiation (immunostimulants)] Kekow J, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28–29):1101–6 (Eng. Abstr.) **(Ger)**

[Lymphocyte transformation test following stimulation with a protein factor from neutrophilic granulocytes (PMNL) in psoriasis patients] Ruszczak Z, et al. **Hautarzt** 1988 Dec; 39(12):787–90 (Eng. Abstr.) **(Ger)**

[The lymphocyte transformation test for detecting immunologic inner ear deafness] Berger P, et al. **HNO** 1989 Apr;37(4):153–7 (Eng. Abstr.) **(Ger)**

[Chronic streptococcal tonsillitis: significance of specific blastogenic response test and possibilities of its clinical applications] Sartoris A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):605–15 (Eng. Abstr.) **(Ita)**

[Effect of peripheral dendritic cell on the concanavalin A response to T cells] Suzuki T, et al. **Arerugi** 1988 Jul; 37(7):461–4 (Eng. Abstr.) **(Jpn)**

[Activation of human CD8+ suppressor T cells by an antigen specific CD4+T cell line] Fukunaga M. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):906–13 (Eng. Abstr.) **(Jpn)**

[Immunological studies on peripheral blood lymphocytes from patients with chronic liver diseases. Especially on T cell functions] Hidaka K. **Fukuoka Igaku Zasshi** 1988 Jul; 79(7):497–513 (Eng. Abstr.) **(Jpn)**

[Studies on B cell function and non–specific B cell activation in patients with chronic liver diseases] Hirota K. **Fukuoka Igaku Zasshi** 1988 Jul;79(7):514–28 (Eng. Abstr.) **(Jpn)**

[Production of human monoclonal autoantibodies that react with islet–cell–surface antigens by EBV–transformed lymphocytes: new method of preselection of ICSA producing lymphocyte by protein A magnetic microspheres] Tsushima S. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):573–88 (Eng. Abstr.) **(Jpn)**

[Flowcytometric analysis of lymphocytes proliferated in vitro by PPD] Harada Y, et al. **Kekkaku** 1989 Feb;64(2):79–84 (Eng. Abstr.) **(Jpn)**

[Effects of serum immunosuppressive factors on the cytotoxicity of lymphokine–activated killer (LAK) cells induced by recombinant interleukin 2(R–IL2)] Takao H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):992–8 (Eng. Abstr.) **(Jpn)**

[Lymphocyte proliferation test to Dermatophagoides farinae in patients with atopic dermatitis] Kawaguchi H, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1077–83 (Eng. Abstr.) **(Jpn)**

[Characterization of human peripheral blood lymphocytes cultured with recombinant interleukin 2] Morita T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):780–7 (Eng. Abstr.) **(Jpn)**

[The accessory cell function of human alveolar macrophages in antigen–induced T–lymphocyte proliferative responses] Ohtsuka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):745–50 (Eng. Abstr.) **(Jpn)**

[T cell colony formation and interleukin–1,2 productivity in patients with chronic renal failure] Itagaki N. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1847–51 **(Jpn)**

[Analysis of tumor specific immunological response in the patients with malignant brain tumors by the mixed lymphocyte–tumor cell reaction] Yoshida S, et al. **No To Shinkei** 1988 Nov;40(11):1067–73 (Eng. Abstr.) **(Jpn)**

[A determination of lymphocyte blastoid transformation by a flow cytometry] Hara A, et al. **Rinsho Byori** 1988 Jun; 36(6):710–4 **(Jpn)**

[Pleiotropic functions of BSF–2/IL–6] Matsuda T, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1317–22 **(Jpn)**

[HLA molecules and disease predisposition] Thorsby E. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1535–8 (Eng. Abstr.) **(Nor)**

[Effect of sera from patients with lung cancer on proliferative properties of lymphocytes from healthy blood donors] Plucińska M, et al. **Pneumonol Pol** 1988 Jul;56(7):302–8 (Eng. Abstr.) **(Pol)**

[Correlated parameters of immune reactivity, hormonal balance and lipid metabolism during pregnancy in healthy women] Dashkevich VE, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):65–7 **(Rus)**

[Cytotoxic and suppressor activity of human peripheral blood lymphocytes stimulated by interleukin–2 and phytohemagglutinin before and after fractionation in the percoll gradient] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):327–30 (Eng. Abstr.) **(Rus)**

[Use of the lymphocyte blast transformation reaction for evaluating cellular immunity function] Korneeva MN, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):469–71 **(Rus)**

[Cytostatic action of the peritoneal cells of Syrian hamsters on transformed cells] Lavnikova NA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):333–5 (Eng. Abstr.) **(Rus)**

[Stimulation of phosphoinositide turnover is an important but not a sole condition for activation of human T–lymphocyte proliferation by phytohemagglutinin and interleukin 2] Korichneva IL, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb; 304(1):221–4 **(Rus)**

[Flow cytofluorimetric analysis of the proliferative activity of lymphocytes in a culture with phytohemagglutinin] Nikulin BA, et al. **Lab Delo** 1989;(4):34–8 (Eng. Abstr.) **(Rus)**

[Effect of an Opisthorchis infestation on the clinical course of typhoid and its outcome. 2. The effect of an Opisthorchis infestation on changes in lymphocyte blast transformation in typhoid infection] Lepekhin AV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):26–9 (Eng. Abstr.) **(Rus)**

[Assessment of the intensity of lymphocyte blast transformation in the crypts of the palatal tonsils by using DNA cytophotometry] Bogdanova MS, et al. **Tsitologiia** 1988 Jun;30(6):699–704 (Eng. Abstr.) **(Rus)**

[Cytogenetic instability, the ability to produce interferon and immunoreactivity of blood lymphocytes in patients with schizophrenia] Il'inskikh NN, et al. **Tsitologiia** 1989 Apr; 31(4):484–8 (Eng. Abstr.) **(Rus)**

[Lymphocyte blast transformation to HBsAg and HBcAg in patients with various clinical forms of hepatitis B] Savitskiĭ GI, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):559–61 (Eng. Abstr.) **(Rus)**

[Characteristics of the immunologic response to Mycoplasma pneumoniae as a polyclonal lymphocyte activator] Lisin VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug; (8):108–11 (Eng. Abstr.) **(Rus)**

[Serum immunosuppressive activity of patients undergoing urologic surgery] Gil Salom M, et al. **Actas Urol Esp** 1988 Nov–Dec;12(6):544–8 (Eng. Abstr.) **(Spa)**

[Lymphocyte response to mitogens and antigens in pleurisy] Ribera E, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):131–4 (Eng. Abstr.) **(Spa)**

[Lymphocyte transformation in allergy to penicillin] Aguilar Mézquita JE, et al. **Rev Alerg Mex** 1989 May–Jun; 36(3):117–23 (Eng. Abstr.) **(Spa)**

[Analysis of the proliferative response to PHA, LPS, PWM, and con A in various inbred mouse strains] Rueda G, et al. **Sangre (Barc)** 1988 Aug;33(4):314–7 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

In vitro effect of human growth hormone on lymphocyte transformation and lymphocyte growth factors secretion. Schimpff RM, et al. **Acta Endocrinol (Copenh)** 1989 Jun; 120(6):745–52

Hepatoprotective and immunomodulatory effects of antioxidant therapy. Láng I, et al. **Acta Med Hung** 1988; 45(3–4):287–95

Estradiol potentiates poke–weed mitogen–induced B cell

stimulation in multiple sclerosis and healthy subjects. Kalman B, et al. **Acta Neurol Scand** 1989 Apr;79(4):340–6

Ochratoxin A as a suppressor of mitogen-induced blastogenesis of porcine blood lymphocytes. Holmberg T, et al. **Acta Vet Scand** 1988;29(2):219–23

Two phases of ornithine decarboxylase activation during lymphocyte mitogenesis. Mustelin T, et al. **Adv Exp Med Biol** 1988;250:301–13

Diminished proliferative response of con A-blast cells to interleukin 2 in adult rats exposed to ethanol in utero. Norman DC, et al. **Alcoholism (NY)** 1989 Feb;13(1):69–72

Action of 2'-deoxycoformycin on mitogen-induced lymphoproliferation in the neonatal period. Romo A, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug;16(4):243–7

Inhibition of lymphocyte proliferation by ovine trophoblast protein-1 and a high molecular weight glycoprotein produced by the peri-implantation sheep conceptus. Newton GR, et al. **Am J Reprod Immunol** 1989 Mar; 19(3):99–107

Suppression of lymphocyte activation by a soluble factor released from the human placental chorionic membrane: chemical analysis and functional characterization. Skibin A, et al. **Am J Reprod Immunol** 1989 Mar;19(3):85–91

Actions of steroids and prostaglandins secreted by the placenta and uterus of the cow and ewe on lymphocyte proliferation in vitro. Low BG, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):71–5

Effect of arachidonic acid metabolites on thymocyte proliferation. Delebassée S, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug;139(4):383–99

Changes in T-cell subpopulations in multiple sclerosis [letter] Achiron A, et al. **Ann Neurol** 1989 Aug;26(2):291–2

Dietary fat modulation of in vitro lymphocyte function. Alexander NJ, et al. **Ann Nutr Metab** 1988;32(4):192–9

Isolation of bovine colostral lymphocytes: in vitro blastogenic responsiveness to concanavalin A and bovine rotavirus. Archambault D, et al. **Ann Rech Vet** 1988;19(3):169–74

Defective T-cell surface antigen expression after mitogen stimulation. An index of lymphocyte dysfunction after controlled murine injury. Gadd MA, et al. **Ann Surg** 1989 Jan;209(1):112–8

Interleukin 2 and interferon-gamma affect human B cells at different stages of activation. Punnonen J, et al. **APMIS** 1989 Mar;97(3):200–6

Assessment of phenotype of blood lymphocyte subsets prior and after PWM stimulation in patients with lung carcinoma. Jeżewska E, et al. **Arch Geschwulstforsch** 1989;59(1):31–6

Production of lymphokine-activated lymphocytes. Lysis of human head and neck squamous cell carcinoma cell lines. Alessi DM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):725–30

Inhibitory effect of interleukin-1 on the in vitro PHA-stimulated lymphocytes of some blood donors. Olinescu A, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jul–Dec;47(3–4):289–97

The immune-enhancing effect of perioperative thymopentin administration in elderly patients undergoing major surgery. Faist E, et al. **Arch Surg** 1988 Dec;123(12):1449–53

Stimulation of phosphoinositide signaling pathway in murine B lymphocytes by a novel guanosine analog, 7-thia-8-oxoguanosine. Parandoosh Z, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1306–11

The inhibitory effect of PGE2 on T cell activation is not associated with inhibition of PKC translocation. Piau JP, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1299–305

Polyamine metabolism in chronic lymphocytic leukemia. Canellakis ZN, et al. **Biochem Int** 1989 Apr;18(4):741–9

Induction of asparagine synthetase during lymphocyte activation by phytohemagglutinin. Hongo S, et al. **Biochem Int** 1989 Mar;18(3):661–6

Proliferative effect of high density lipoprotein (HDL) and HDL fractions (HDL1,2, HDL3) on virus transformed lymphoblastoid cells. Favre G, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):118–24

Effects of cadmium on lymphocyte activation. Grazia Cifone M, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):25–32

Comparison of in vivo and in vitro glucocorticoid sensitivity in depression: relationship to the dexamethasone suppression test. Lowy MT, et al. **Biol Psychiatry** 1988 Oct;24(6):619–30

Murine thymocytes proliferate in direct response to interleukin-7. Conlon PJ, et al. **Blood** 1989 Sep; 74(4):1368–73

Long-term acyclovir prophylaxis in bone marrow transplant recipients and lymphocyte proliferation responses to herpes virus antigens in vitro. Ljungman P, et al. **Bone Marrow Transplant** 1986 Dec;1(2):185–92

Effect of sulphasalazine and its metabolites on mitogen induced transformation of lymphocytes—clues to its clinical action? Sheldon P, et al. **Br J Rheumatol** 1988 Oct; 27(5):344–9

Modulation of the immune response by proopiomelanocortin derived peptides. II. Influence of adrenocorticotropic hormone on the rise in intracellular free calcium concentration after T cell activation. Kavelaars A, et al. **Brain Behav Immun** 1988 Mar;2(1):57–66

Inescapable shock, shock controllability, and mitogen stimulated lymphocyte proliferation. Maier SF, et al. **Brain Behav Immun** 1988 Jun;2(2):87–91

Effect of neuropeptides and monoamines on lymphocyte activation. Nordlind K, et al. **Brain Behav Immun** 1988 Dec;2(4):282–92 (91 ref.)

The differential effect with time of neuropeptides on the proliferative responses of murine Peyer's patch and splenic lymphocytes. Scicchitano R, et al. **Brain Behav Immun** 1987 Sep;1(3):231–7

Hemispheric asymmetry in the effects of cerebral cortical ablations on mitogen-induced lymphoproliferation and plasma prolactin levels in female rats. LaHoste GJ, et al. **Brain Res** 1989 Mar 27;483(1):123–9

Recombinant interleukin-2 activates peripheral blood lymphocytes from children with acute leukemia to kill autologous leukemic cells. Findley HW Jr, et al. **Cancer** 1988 Nov 1;62(9):1928–31

Mitogenic, immunoadjuvancy, and genetic studies on fatty acyl maltose. Bissonnette E, et al. **Cancer Immunol Immunother** 1988;27(3):272–7

Partial correction of defective generation of lymphokine-activated killer cells in patients with chronic myelogenous leukaemia after in vivo treatment with interferon-alpha (Wellferon). Pawelec G, et al. **Cancer Immunol Immunother** 1989;29(1):63–6

Modulation of lymphocyte proliferation and immunoglobulin production by transferrin-gallium. Chitambar CR, et al. **Cancer Res** 1989 Mar 1;49(5):1125–9

Synergy of human recombinant interleukin 1 with interleukin 2 in the generation of lymphokine-activated killer cells. Crump WL 3d, et al. **Cancer Res** 1989 Jan 1;49(1):149–53

Differences between in vivo and in vitro activation of cancer patient lymphocytes by recombinant interleukin 2: possible role for lymphokine-activated killer cell infusion in the in vivo-induced activation. Gambacorti-Passerini C, et al. **Cancer Res** 1989 Sep 15;49(18):5230–4

Involvement of both Tac and non-Tac interleukin 2-binding peptides in the interleukin 2-dependent proliferation of human tumor-infiltrating lymphocytes. Yagita M, et al. **Cancer Res** 1989 Mar 1;49(5):1154–9

Modulation of natural killer activity by 12-O-tetradecanoylphorbol-13-acetate and benzoyl peroxide in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1988 Nov;9(11):1943–51

The mechanisms involved in the activation of human natural killer cells by staphylococcal enterotoxin B. Bankhurst AD, et al. **Cell Immunol** 1989 Aug;122(1):108–21

Antigen-specific inhibition of the IL-2-driven proliferation of myelin basic protein-reactive, human T cells. Burns J, et al. **Cell Immunol** 1989 Aug;122(1):122–30

T cell activation induced by anti-CD3 antibodies requires prolonged stimulation of protein kinase C. Davis LS, et al. **Cell Immunol** 1989 Jan;118(1):208–21

Human recombinant interleukin 2-activated sheep lymphocytes lyse sheep pulmonary microvascular endothelial cells. Duke SS, et al. **Cell Immunol** 1989 Aug; 122(1):188–99

Comparison of mitogenic responses of young and old rhesus monkey T cells to lectins and interleukins 2 and 4. Eylar EH, et al. **Cell Immunol** 1989 Jul;121(2):328–35

Potentiation of the proliferative response of human B lymphocytes to low molecular weight B cell growth factor (LMW-BCGF) by fibroblast growth factors (FGFs). Genot E, et al. **Cell Immunol** 1989 Sep;122(2):424–39

Stimulation of AIDS lymphocytes with calcium ionophore (A23187) and phorbol ester (PMA): studies of cytoplasmic free Ca, IL-2 receptor expression, IL-2 production, and proliferation. Hofmann B, et al. **Cell Immunol** 1989 Mar; 119(1):14–21

Defective T-cell activation by Mycoplasma arthritidis mitogen is restored by interferon-gamma. Pischedda F, et al. **Cell Immunol** 1989 Apr 15;120(1):188–94

Interleukin-4 enhances peritoneal B cell stimulation induced by phorbol ester. Rothstein TL. **Cell Immunol** 1989 May; 120(2):450–9

Demonstration of a direct inhibitory effect of cyclosporine on normal human T-cells with two novel models of T-cell activation as probes. Sehajpal P, et al. **Cell Immunol** 1989 Apr 15;120(1):195–204

Effects of thymosin on soybean lectin responsiveness of thymic small lymphocyte subsets from streptozotocin-induced diabetic rats. Okimoto T, et al. **Cell Mol Biol** 1988;34(5):465–72

Four sulfhydryl-modifying compounds cause different structural damage but similar functional damage in murine lymphocytes. Duncan DD, et al. **Chem Biol Interact** 1988; 68(1–2):137–52

The effects of coumarin derivatives on the immunological system of man. Berkarda B. **Chemioterapia** 1987 Jun;6(2 Suppl):224–5

Antibiotics and immunity: effects of antibiotics on mitogen responsiveness of lymphocytes and interleukin-2 production. Ibrahim MS, et al. **Chemioterapia** 1988 Dec; 7(6):369–72

In vitro and in vivo action of cyclosporin A on the induction of human interleukin-2 receptor alpha and beta chains. Caillat-Zucman S, et al. **Clin Exp Immunol** 1989 Aug; 77(2):184–90

Immunotoxic potential of N-ethyl, N-nitrosourea (ENU) in CD1 mice. Jayasekara S, et al. **Clin Exp Immunol** 1989 Aug;77(2):294–8

Heterogeneity of B cell responsiveness to interleukin 4, interleukin 6 and low molecular weight B cell growth factor in discrete stages of B cell activation in patients with systemic lupus erythematosus. Kitani A, et al. **Clin Exp Immunol** 1989 Jul;77(1):31–6

MAC technique (morphology antibody chromosomes) in phenotypic identification of proliferating NK and T cells in interleukin-2-stimulated lymphocyte cultures. Kovanen PE, et al. **Clin Exp Immunol** 1989 Mar;75(3):407–13

Functional heterogeneity in the process of T lymphocyte activation; barium blocks several modes of T cell activation, but spares a functionally unique subset of PHA-activable T cells. Peçanha LT, et al. **Clin Exp Immunol** 1989 May;76(2):311–6

The role of interleukin 2 in the regulation of proliferation and IgM synthesis of human newborn mononuclear cells. Punnonen J. **Clin Exp Immunol** 1989 Mar;75(3):421–6

Inhibition of ConA-induced proliferative response in human lymphocytes by podophyllotoxin and a detergent, Tween80. Månsson B, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):405–7

Rejection of bone marrow transplant and resistance of alloantigen reactive cells to in vivo deoxyadenosine in adenosine deaminase deficiency. Cowan MJ, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):242–50

Effects of retinoids on human thymus-dependent and thymus-independent mitogenesis. Dillehay DL, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):100–8

B cell function in acquired "common-variable" hypogammaglobulinemia: proliferative responses to lymphokines. Farrant J, et al. **Clin Immunol Immunopathol** 1989 May;51(2):196–204

1,25-Dihydroxyvitamin D3 (calcitriol) suppresses concanavalin A-stimulated human T cell proliferation through monocytes. Haq AU. **Clin Immunol Immunopathol** 1989 Mar;50(3):364–73

Effect of interferon-gamma on the abnormality of T cell activation in NZB mice. Minoda M, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):283–91

Enhanced beta 2-microglobulin levels in lymphocyte culture supernatants from patients with idiopathic nephrotic syndrome: inhibition of lymphocyte activation by cyclosporine. Robeva R, et al. **Clin Nephrol** 1988 Oct; 30(4):211–5

Influence of sodium diethyldithiocarbamate (Imuthiol) on lymphocyte function and growth in weanling pigs. Flaming KP, et al. **Comp Immunol Microbiol Infect Dis** 1988; 11(3–4):181–7

Monoclonal antibodies directed at human T lymphocyte activation antigens cross react with concanavalin A-stimulated canine and baboon peripheral blood lymphocytes. Greenlee PG, et al. **Dev Comp Immunol** 1988 Fall;12(4):865–77

Oral administration of cyclosporin does not prevent expansion of antigen-specific, gut-associated, and spleen lymphocyte populations during Chlamydia trachomatis proctitis in nonhuman primates. Zeitz M, et al. **Dig Dis Sci** 1989 Apr;34(4):585–95

Flow cytometric analysis of oxidative product formation in phytohemagglutinin-stimulated ethanol-treated immune mononuclear cells. Rouahi N, et al. **Drug Alcohol Depend** 1989 Jan;23(1):55–62

The therapeutic potential of neuropeptides and monoamines as antagonists of lymphocyte activation. Nordlind K, et al. **Drug Des Deliv** 1989 Jun;4(4):273–8 (54 ref.)

Lectin-stimulated lymphocyte responses: use and misuse in clinical research. Smith CJ, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):269–78

The specificity of the lymphocyte transformation test in a patient with hypersensitivity reactions to pyrazolone compounds. A 10-week follow-up study before and after rechallenge. Brattig NW, et al. **Eur J Clin Pharmacol** 1988; 35(1):39–45

Treatment of pure red cell aplasia with ciclosporin: suppression of activated T suppressor/cytotoxic and NK-like cells in marrow and blood correlates with haematological response. Tötterman TH, et al. **Eur J Haematol** 1988 Sep;41(3):204–11

The influence of cyclosporin A on the alternative pathways of human T cell activation in vitro. Bloemena E, et al. **Eur J Immunol** 1989 May;19(5):943–6

Synergy between interleukin 4 and interleukin 2 conveys resistance to cyclosporin A during primary in vitro activation of murine CD8 cytotoxic T cell precursors. Bubeck R, et al. **Eur J Immunol** 1989 Apr;19(4):625–30

Correlation between ribosylation of pertussis toxin substrates and inhibition of peptidoglycan-, muramyl dipeptide- and lipopolysaccharide-induced mitogenic stimulation in B lymphocytes. Dziarski R. **Eur J Immunol** 1989 Jan; 19(1):125–30

Cyclic AMP has the ability to influence multiple events during B cell stimulation. Holte H, et al. **Eur J Immunol** 1988 Sep;18(9):1359–66

Complex Ca2+ flux inhibition as primary mechanism of staurosporine-induced impairment of T cell activation. Kubbies M, et al. **Eur J Immunol** 1989 Aug;19(8):1393–8

Characterization and growth factor requirements of SJL lymphomas. II. Interleukin 5 dependence of the in vitro cell line, cRCS-X, and influence of other cytokines. Lasky JL, et al. **Eur J Immunol** 1989 Feb;19(2):365–71

Suppressive effect of interferon-gamma on the BCL1 cell-dependent interleukin 5 bioassay. Lohoff M, et al. **Eur J Immunol** 1989 Jul;19(7):1327–9

Comparison of interleukin 2 and 12-O-tetradecanoylphorbol 13-acetate as signals for protein kinase C activation in purified human T lymphocytes. Mahé Y, et al.

Eur J Immunol 1988 Dec;18(12):2029–36

Inhibition of interleukin 2–induced proliferation of cloned murine T cells by glucocorticoids. Possible involvement of an inhibitory protein. Redondo JM, et al. **Eur J Immunol** 1988 Oct;18(10):1555–9

Inhibition by chlorpromazine of lymphokine–specific mRNA expression in human thymocytes. Schleuning MJ, et al. **Eur J Immunol** 1989 Aug;19(8):1491–5

A cytokine, lymphocyte blastogenesis inhibitory factor (LBIF), arrests mitogen–stimulated T lymphocytes at early G1 phase with no influence on interleukin 2 production and interleukin 2 receptor light chain expression. Sugimura K, et al. **Eur J Immunol** 1989 Aug;19(8):1357–64

Carcinogenic and non–carcinogenic fluorene derivatives: induction of thymocyte stimulating serum factors by 2–acetylaminofluorene (AAF) and their synergy with lymphocyte mitogens. Danz M, et al. **Exp Pathol** 1988; 34(4):217–21

Role of the CD21 antigen in lymphocyte transformation by Epstein–Barr virus. Boyd AW, et al. **Immunol Cell Biol** 1988 Apr;66 (Pt 2):159–65

Human retrovirus–related synthetic peptides inhibit T lymphocyte proliferation. Cianciolo GJ, et al. **Immunol Lett** 1988 Sep;19(1):7–13

Immunomodulating properties of the N–(1–deoxy–D–fructos–1yl) derivative of amphotericin B in mice. Henry–Toulmé N, et al. **Immunol Lett** 1989 Jan 15;20(1):63–7

Gangliosides suppression of murine lymphoproliferation and interleukin 1 production. Jeng KC, et al. **Immunol Lett** 1988 Dec;19(4):335–40

A human embryo fibroblast–derived peptide suppresses the zymosan–induced biochemical activation in human polymorphonuclear leukocytes. Okai Y. **Immunol Lett** 1989 Jan 15;20(1):41–6

Effect of serine proteinase from Staphylococcus aureus on in vitro stimulation of human lymphocytes. Prokešová L, et al. **Immunol Lett** 1988 Oct;19(2):127–32

Insulin–like growth factor–1 increases the mitogenic response of human peripheral blood lymphocytes to phytohemagglutinin. Roldan A, et al. **Immunol Lett** 1989 Jan 15;20(1):5–8

Inhibition of the CD3–mediated calcium signal by protein kinase C activators in human T (Jurkat) lymphoblastoid cells. Tordai A, et al. **Immunol Lett** 1989 Jan 15;20(1):47–52

Interleukin 7: effects on early events in lymphopoiesis. Henney CS. **Immunol Today** 1989 May;10(5):170–3 (8 ref.)

Analysis of the B–cell growth–promoting activity of human IL–4, the co–stimulatory assay with anti–immunoglobulin antibodies. Comparison with the B–cell growth–promoting activity of other lymphokines. Almerigogna F, et al. **Immunology** 1989 Jun;67(2):244–50

Differential responsiveness of human B lymphocytes to phorbol ester and calcium ionophore based on their state of activation. Inglés J, et al. **Immunology** 1989 Jul; 67(3):359–64

Inhibition of T–lymphocyte activation by the immunosuppressive drug FK–506. Kay JE, et al. **Immunology** 1989 Aug;67(4):473–7

Regulation of lymphocyte proliferation in contact sensitivity: homeostatic mechanisms and a possible explanation of antigenic competition. Kimber I, et al. **Immunology** 1989 Apr;66(4):577–82

Differential role for ADP–ribosylation in gene expression during the activation of T lymphocytes by various stimuli. King SL, et al. **Immunology** 1989 Jun;67(2):258–62

IL–2–induced polyclonal proliferation of human peripheral blood lymphocytes: functional and phenotypic characteristics of proliferating cells. Mookerjee BK, et al. **Immunology** 1989 Feb;66(2):176–82

The effect of leucyl–leucine methyl ester on proliferation and Ig secretion of EBV–transformed human B lymphocytes. Ohlin M, et al. **Immunology** 1989 Apr; 66(4):485–90

Interactive effects of pertussis toxin and the phorbol ester tumour promotor, phorbol dibutyrate, on T–lymphocyte mitogenesis and the expression of phenotypic determinants. Strnad CF, et al. **Immunology** 1989 Apr;66(4):539–45

Effect of recombinant human tumour necrosis factor beta (TNF beta) on activation, proliferation and differentiation of human B lymphocytes. Zola H, et al. **Immunology** 1989 Jun;67(2):231–6

Differential effect of mixed D1/D2 and selective D2 dopaminergic antagonists on mouse T and B lymphocyte proliferation and interleukin production in vitro. Boukhris W, et al. **Immunopharmacol Immunotoxicol** 1988; 10(4):501–12

Suppressive and enhancing effect of T–2 toxin on murine lymphocyte activation and interleukin 2 production. Holt PS, et al. **Immunopharmacol Immunotoxicol** 1988; 10(3):365–85

Lymphocyte activation, iron uptake and release by human mononuclear leukocytes in the presence of desferrioxamine. Taylor PG, et al. **Immunopharmacol Immunotoxicol** 1988; 10(2):165–78

The effects of protein kinase inhibitors on lymphocyte blastogenesis and GVHD–induced splenomegaly. Wepsic HT, et al. **Immunopharmacol Immunotoxicol** 1989; 11(1):81–99

Suppression of lymphocyte mitogenesis by tamoxifen. Baral E, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):57–62

Tetranactin, a macrotetrolide antibiotic, suppresses in vitro proliferation of human lymphocytes and generation of cytotoxicity. Callewaert DM, et al. **Immunopharmacology** 1988 Jul–Aug;16(1):25–32

The opioid specificity of beta–endorphin enhancement of murine lymphocyte proliferation. Gilmore W, et al. **Immunopharmacology** 1989 Jan–Feb;17(1):19–30

Suppression of allograft immunity by 3,4,5,3',4',5'–hexachlorobiphenyl. II. Effects of exposure on mixed lymphocyte reactivity and induction of suppressor cell activity in vitro. Kerkvliet NI, et al. **Immunopharmacology** 1988 Jul–Aug;16(1):13–23

Opposite effects of the catecholamines dopamine and norepinephrine on murine polyclonal B–cell activation. Kouassi E, et al. **Immunopharmacology** 1988 Nov–Dec; 16(3):125–37

Short–term somatostatin infusion affects T lymphocyte responsiveness in humans. Malec P, et al. **Immunopharmacology** 1989 Jan–Feb;17(1):45–9

Prevention of human helper T–cell clone activation by cyclosporin A also blocks secretion of granulocyte/macrophage colony stimulating activity. Pawelec G, et al. **Immunopharmacology** 1988 Nov–Dec; 16(3):207–16

Sodium diethyldithiocarbamate restores T lymphocyte proliferation, interleukin–2 production and NK activity in cyclophosphamide–immunosuppressed animals. Rejas MT, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):191–7

CCA [N–(2–carboxyphenyl)–4–chloroanthranilic acid disodium salt], a newly developed immunomodulating drug, suppresses T–cell activation by acting on macrophages. Takeuchi T, et al. **Inflammation** 1989 Apr; 13(2):125–35

Potent mitogenic activity of staphylococcal enterotoxin A requires induction of interleukin 2. Johnson HM, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):87–90

Effect of ricin on the proliferation of rat spleen and mesenteric lymph node cells. Kemeny DM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):231–3

Cotton bract tannin: a novel human T–lymphocyte mitogen and a possible causative agent of byssinosis. Vuk–Pavlović Z, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):14–8

Inosiplex enhances the growth of Epstein–Barr nuclear antigen–positive B–cells from patients with rheumatoid arthritis and infectious mononucleosis. Becker H, et al. **Int J Immunopharmacol** 1988;10(4):439–43

Stage–specific distinctions in potassium channel blocker control of T–lymphocyte activation. Dos Reis GA, et al. **Int J Immunopharmacol** 1988;10(3):217–26

Biochemical events associated with inhibition of B–cell proliferation by phorbol diesters. Germolec DR, et al. **Int J Immunopharmacol** 1988;10(8):953–65

Beta blockers may induce in C57BL/6 mice a polyclonal activation of lymphocytes which is not mediated by beta adrenergic receptors. In S, et al. **Int J Immunopharmacol** 1988;10(7):901–6

Suppression by delta–9–tetrahydrocannabinol of interleukin 2–induced lymphocyte proliferation and lymphokine–activated killer cell activity. Kawakami Y, et al. **Int J Immunopharmacol** 1988;10(4):485–8

Altered lymphocyte proliferation of immunized rats after neurological manipulation with capsaicin. Nilsson G, et al. **Int J Immunopharmacol** 1988;10(6):747–51

Stimulatory effects of bestatin on human B–cell colony formation. Otsuka T, et al. **Int J Immunopharmacol** 1988; 10(5):587–91

Murine polyclonal T–lymphocyte activation induced by phytohemmagglutinin; differential lymphokine requirements of two unusual activation pathways defined by resistance to blockade by barium and by cyclosporin A. Peçanha LM, et al. **Int J Immunopharmacol** 1989; 11(2):149–56

Enkephalin activity on antigen–induced proliferation of human peripheral blood mononucleate cells. Roscetti G, et al. **Int J Immunopharmacol** 1988;10(7):819–23

Effects of cyclosporin A on in vitro lymphocyte response to autologous or allogeneic stimulation: influence of HLA phenotypes. Scorza R, et al. **Int J Immunopharmacol** 1988; 10(5):619–25

The effect of metals on IL–2–related lymphocyte proliferation. Warner GL, et al. **Int J Immunopharmacol** 1988;10(5):629–37

Enhancement of allo–responsiveness of human lymphocytes by acemannan (Carrisyn). Womble D, et al. **Int J Immunopharmacol** 1988;10(8):967–74

Cellular immunity and suppressor T cell function in asthmatic children on prolonged theophylline therapy. Bibi H, et al. **Int J Tissue React** 1988;10(5):305–10

Immunoregulation of human natural killer cells (NK) by corticosteroids: inhibitory effect of culture supernatants. Nair MP, et al. **J Allergy Clin Immunol** 1988 Dec; 82(6):1089–97

In vivo effects of deoxyspergualin (NKT–01) on lymphocyte activation in response to alloantigens. Yoshikawa Y, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1675–80

Effects of itraconazole on mitogen stimulated human mononuclear leucocytes. Manzella JP, et al. **J Antimicrob Chemother** 1989 Jan;23(1):95–7

Inhibition of cytotoxic T lymphocyte–mediated lysis and cellular proliferation by isoquinoline sulfonamide protein kinase inhibitors. Evidence for the involvement of protein kinase C in lymphocyte function. Juszczak RJ, et al. **J Biol Chem** 1989 Jan 15;264(2):810–5

Coordination and reversibility of signals for proliferative activation and interleukin–2 mRNA production in resting human T lymphocytes by phorbol ester and calcium ionophore. McCrady CW, et al. **J Biol Chem** 1988 Dec 5;263(34):18537–44

Histidine–rich glycoprotein blocks T cell rosette formation and modulates both T cell activation and immunoregulation. Shatsky M, et al. **J Biol Chem** 1989 May 15;264(14):8254–9

Recombinant interleukin–2–activated intracavitary lymphocytes: phenotypic characteristics and effector function. Umiel T, et al. **J Biol Response Mod** 1989 Aug; 8(4):409–21

Human monocyte/macrophage activation and interleukin 1 generation by biomedical polymers. Miller KM, et al. **J Biomed Mater Res** 1988 Aug;22(8):713–31

Comparison of phorbol–12–myristate–13–acetate and dioctanoyl–sn–glycerol in the activation of EL4/6.1 thymoma cells. Stoeck M, et al. **J Cell Physiol** 1989 Mar; 138(3):541–7

Inhibition of interleukin–1 production by 1,25–dihydroxyvitamin D3. Tsoukas CD, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):127–33

Bacterial toxins affect early events of T lymphocyte activation. Stewart SJ, et al. **J Clin Invest** 1989 Jan; 83(1):234–42

Fractionated extract of Astragalus membranaceus, a Chinese medicinal herb, potentiates LAK cell cytotoxicity generated by a low dose of recombinant interleukin–2. Chu DT, et al. **J Clin Lab Immunol** 1988 Aug;26(4):183–7

Effect of K+ channel blockers on anti–immunoglobulin–induced murine B cell proliferation. Gollapudi SV, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):121–5

Recombinant interleukin–2 by continuous infusion and adoptive transfer of recombinant interleukin–2–activated cells in patients with advanced cancer. Paciucci PA, et al. **J Clin Oncol** 1989 Jul;7(7):869–78

Interleukin 5 enhances interleukin 2–mediated lymphokine–activated killer activity. Aoki T, et al. **J Exp Med** 1989 Aug 1;170(2):583–8

Differential effect of alpha–interferons on CD4– and CD8–positive lymphocytes in chronic hepatitis B virus carriers. Nouri–Aria KT, et al. **J Hepatol** 1988 Aug;7(1):1–6

Transcriptional regulation of transferrin receptor expression by cultured lymphoblastoid T cells treated with phorbol diesters. Alcantara O, et al. **J Immunol** 1989 Mar 1; 142(5):1719–26

Chymotryptic–type protease inhibitors block the increase in Ca2+ and Il–2 production in activated Jurkat T cells. Auberger P, et al. **J Immunol** 1989 Feb 15;142(4):1253–9

Antibodies against a peptide representative of a conserved region of human IFN–alpha. Differential effects on the antiviral and antiproliferative effects of IFN. Barasoain I, et al. **J Immunol** 1989 Jul 15;143(2):507–12

Lipoxygenase inhibitors enhance the proliferation of human B cells. Behrens TW, et al. **J Immunol** 1989 Oct 1; 143(7):2285–94

Human T cell activation by phorbol esters and diacylglycerol analogues. Berry N, et al. **J Immunol** 1989 Sep 1; 143(5):1407–13

CR2 ligands modulate human B cell activation. Bohnsack JF, et al. **J Immunol** 1988 Oct 15;141(8):2569–76

Mechanisms of T cell activation by the calcium ionophore ionomycin. Chatila T, et al. **J Immunol** 1989 Aug 15; 143(4):1283–9

Multiple low dose streptozotocin induces systemic MHC expression in mice by triggering T cells to release IFN–gamma. Cockfield SM, et al. **J Immunol** 1989 Feb 15;142(4):1120–8

Human peripheral lymphocyte growth regulation and response to phorbol esters is linked to synthesis and phosphorylation of the cytosolic protein, prosolin. Cooper HL, et al. **J Immunol** 1989 Aug 1;143(3):956–63

Human recombinant IL–4 induces activated B lymphocytes to produce IgG and IgM. Defrance T, et al. **J Immunol** 1988 Sep 15;141(6):2000–5

A synergistic interaction of IL–6 and IL–1 mediates the thymocyte–stimulating activity produced by recombinant IL–1–stimulated fibroblasts. Elias JA, et al. **J Immunol** 1989 Jan 15;142(2):509–14

Enhancement of IL–2–induced T cell proliferation by a novel factor(s) present in murine spleen dendritic cell–T cell culture supernatants. Everson MP, et al. **J Immunol** 1989 Feb 15;142(4):1183–94

Immunostimulation of C3H/HeJ lymphoid cells by R–chemotype lipopolysaccharide preparations. Flebbe L, et al. **J Immunol** 1989 Jan 15;142(2):642–52

Lymphokine–activated tumor inhibition in mice. Ability of a nonapeptide of the human IL–1 beta to recruit anti–tumor reactivity in recipient mice. Forni G, et al. **J Immunol** 1989 Jan 15;142(2):712–8

Pre–exposure of human B cells to recombinant IL–1 enhances subsequent proliferation. Freedman AS, et al. **J Immunol** 1988 Nov 15;141(10):3398–404

Activation of CD 4–, CD 8– thymocytes with IL 4 vs IL 1 + IL 2. Gause WC, et al. **J Immunol** 1988 Oct 1; 141(7):2240–5

Cyclosporin A–mediated inhibition of mitogen–induced gene transcription is specific for the mitogenic stimulus and cell type. Gunter KC, et al. **J Immunol** 1989 May 1; 142(9):3286–91

IL-4 bypasses the immune suppressive effect of cyclosporin A during the in vitro induction of murine cytotoxic T lymphocytes. Heeg K, et al. **J Immunol** 1988 Oct 1; 141(7):2330-4

Activation of human T lymphocytes by bryostatin. Hess AD, et al. **J Immunol** 1988 Nov 15;141(10):3263-9

Derivation of a T cell line that is highly responsive to IL-4 and IL-2 (CT.4R) and of an IL-2 hyporesponsive mutant of that line (CT.4S). Hu-Li J, et al. **J Immunol** 1989 Feb 1;142(3):800-7

IL-4 regulates IL-2 induction of lymphokine-activated killer activity from human lymphocytes. Kawakami Y, et al. **J Immunol** 1989 May 15;142(10):3452-61

Cholera toxin discriminates between murine T lymphocyte proliferation stimulated by activators of protein kinase C and proliferation stimulated by IL-2. Possible role for intracellular cAMP. Kim DK, et al. **J Immunol** 1988 Nov 15;141(10):3429-37

Cellular and biochemical responses of human T lymphocytes stimulated with streptococcal M proteins. Kotb M, et al. **J Immunol** 1989 Feb 1;142(3):966-70

Cyclosporin A inhibits initiation but not progression of human T cell proliferation triggered by phorbol esters and calcium ionophores. Kumagai N, et al. **J Immunol** 1988 Dec 1;141(11):3747-52

The cell cycle block and lysis of an activated T cell hybridoma are distinct processes with different Ca2+ requirements and sensitivity to cyclosporine A. Mercep M, et al. **J Immunol** 1989 Jun 1;142(11):4085-92

Promotion of human T lymphocyte proliferation by IL-4. Mitchell LC, et al. **J Immunol** 1989 Mar 1;142(5):1548-57

Selective abrogation of alloreactivity via priming in the presence of aphidicolin, a specific inhibitor of DNA polymerase. Morecki S, et al. **J Immunol** 1989 Aug 1; 143(3):838-43

The effects of IL-4 on human natural killer cells. A potent regulator of IL-2 activation and proliferation. Nagler A, et al. **J Immunol** 1988 Oct 1;141(7):2349-51

Agents that mimic antigen receptor signaling inhibit proliferation of cloned murine T lymphocytes induced by IL-2. Nau GJ, et al. **J Immunol** 1988 Nov 15; 141(10):3557-63

Inhibition of lymphokine-activated killer cell-mediated cytotoxicity by phorbol ester. Nishimura T, et al. **J Immunol** 1989 Mar 15;142(6):2155-61

Modulation of CD3- large granular lymphocyte functions by agonist and antagonists of protein kinase C: effects on NK and lymphokine-activated killer activity and production of IFN-gamma. Ortaldo JR, et al. **J Immunol** 1989 Jul 1;143(1):366-71

Preferential proliferation of immature B lineage cells in long-term stromal cell-dependent cultures with IL-4. Peschel C, et al. **J Immunol** 1989 Mar 1;142(5):1558-68

Immunosuppressive properties of electrophoretically "slow" and "fast" form alpha 2-macroglobulin. Effects on cell-mediated cytotoxicity and (allo-) antigen-induced T cell proliferation. Petersen CM, et al. **J Immunol** 1989 Jan 15;142(2):629-35

Tumor necrosis factor-alpha as a proliferative signal for an IL-2-dependent T cell line: strict species specificity of action. Ranges GE, et al. **J Immunol** 1989 Feb 15; 142(4):1203-8

Anti-Ig antibody inhibits the phorbol ester-induced stimulation of peritoneal B cells. Rothstein TL, et al. **J Immunol** 1988 Dec 15;141(12):4089-93

Pretreatment of cloned helper T lymphocytes with IL-2 induces unresponsiveness to antigen and concanavalin A, associated with decreased inositol phosphate and diacylglycerol production. Schell SR, et al. **J Immunol** 1989 Sep 1;143(5):1499-505

Inhibition of human natural killer cell activity by the protein kinase C inhibitor 1-(5-isoquinolinesulfonyl)-2-methylpiperazine is an early but post-binding event. Steele TA, et al. **J Immunol** 1988 Nov 1;141(9):3164-9

Immortalization of EBV-infected B cells is not influenced by exogenous signals acting on B cell proliferation. Effects of mutant EL-4 thymoma cells and transforming growth factor-beta. Straub C, et al. **J Immunol** 1989 Jan 1; 142(1):87-93

The immunosuppressant FK506 selectively inhibits expression of early T cell activation genes. Tocci MJ, et al. **J Immunol** 1989 Jul 15;143(2):718-26

Modulation of IL-2-induced human B cell proliferation in the presence of human 50-kDa B cell growth factor and IL-4. Vazquez A, et al. **J Immunol** 1989 Jan 1;142(1):94-9

Leukotriene B4 enhances activation, proliferation, and differentiation of human B lymphocytes. Yamaoka KA, et al. **J Immunol** 1989 Sep 15;143(6):1996-2000

Partial purification and characterization of a factor produced by mitogen-stimulated sheep mononuclear cells with thymocyte-activating and cartilage-degrading properties. Harkiss GD, et al. **J Immunol Methods** 1989 Feb 24; 117(2):231-41

Lymphocyte function tests in cirrhotic patients under treatment with spironolactone and potassium canrenoate. Cuppone R, et al. **J Int Med Res** 1988 Nov-Dec; 16(6):436-42

Synthetic retinoids inhibit the antigen presenting properties of epidermal cells in vitro. Dupuy P, et al. **J Invest Dermatol** 1989 Oct;93(4):455-9

Effect of fibronectin on antigen-induced lymphoproliferation and antibody synthesis in rats. Rybski JA, et al. **J Leukoc Biol** 1989 Jan;45(1):35-45

Immunomodulatory effect of bovine PTH extract on lymphocyte response to plant mitogens. Elias AN, et al. **J Med** 1988;19(2):109-17

Effect of benzodiazepines on the proliferation of mouse spleen lymphocytes in vitro. Pawlikowski M, et al. **J Neural Transm** 1988;73(2):161-6

Stimulation of rat B-lymphocyte proliferation by corticotropin-releasing factor. McGillis JP, et al. **J Neurosci Res** 1989 Jul;23(3):346-52

In vitro immunologic studies on a population of workers exposed to phthalic and tetrachlorophthalic anhydride. Flaherty DK, et al. **J Occup Med** 1988 Oct;30(10):785-90

Screening blood test identifies subclinical beryllium disease. Kreiss K, et al. **J Occup Med** 1989 Jul;31(7):603-8

B cell activation in patients with active procainamide induced lupus. Forrester J, et al. **J Rheumatol** 1988 Sep;15(9):1384-8

In vitro ozone exposure inhibits mitogen-induced lymphocyte proliferation and IL-2 production. Becker S, et al. **J Toxicol Environ Health** 1989;26(4):469-83

Cimetidine-mediated augmentation of lymphocyte responses to phytohemagglutinin in gastric cancer patients. Kurosu Y, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):56-61

Adverse effects of antitubercular drugs and significance of measurement of the drug-stimulating lymphocyte transformation rate. Umeki S. **Jpn J Med** 1989 May-Jun; 28(3):335-40

Immunomodulation of cimetidine in healthy volunteers. Brockmeyer NH, et al. **Klin Wochenschr** 1989 Jan 4; 67(1):26-30

Human interleukin 4 regulates the phenotype of lymphocytes generated during mixed lymphocyte culture and inhibits the IL-2-induced development of LAK function in normal and leukaemic cells. Jin BQ, et al. **Leuk Res** 1989; 13(4):297-305

Diverse effects of three furocoumarins on human lymphocyte proliferation. Arslan P, et al. **Life Sci** 1989;44(26):2097-104

The phytohemagglutinin response of human peripheral blood lymphocytes as a function of donor age: a re-examination using BrdU-Hoechst flow cytometry. Schindler D, et al. **Mech Ageing Dev** 1988 Sep;44(3):253-63

Effects of serine proteinase from Staphylococcus aureus V8 cells on Con A stimulation of human lymphocytes. Porwit-Bobr Z, et al. **Microbiologica** 1989 Apr; 12(2):139-42

In vitro effect of PTH on normal T cell functions. Shasha SM, et al. **Nephron** 1988;50(3):212-6

The inhibitory effects of colchicine, vinblastine and cytochalasin D on lymphocyte blastogenic responses. Tajima M, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):403-7

In vitro effects of B cell growth and maturation factor on B-CLL lymphocytes. Karray S, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):275-8

Modulation of mitogen-induced spleen cell proliferation and the antibody-forming cell response by beta-endorphin in vivo. Kusnecov AW, et al. **Peptides** 1989 Mar-Apr; 10(2):473-9

Interleukin 7 is a T-cell growth factor. Chazen GD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5923-7

Triiodothyronine affects the phytohemagglutinin to concanavalin A proliferative response ratio in sex-linked dwarf chickens. Erf GF, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):5-12

Interference of the flavonoid compound cianidanol with macrophage function and lymphocyte activating mechanisms. Daniel PT, et al. **Prog Clin Biol Res** 1988; 280:205-9

Use of cyproterone acetate to lower circulating corticosterone and its effects on lymphocytes in domestic fowl. Davison TF, et al. **Res Vet Sci** 1989 Jan;46(1):105-9

Effect of selenium on sheep lymphocyte responses to mitogens. Larsen HJ, et al. **Res Vet Sci** 1988 Jul;45(1):11-5

Mononuclear leucocyte function in patients with lichen planus and cutaneous lupus erythematosus during chemotherapy with clofazimine. Zeis BM, et al. **S Afr Med J** 1989 Feb 18;75(4):161-2

Trypsin does not reconstitute responsiveness to lipopolysaccharide in the strain C3H/HeJ, but is a B-cell mitogen-like lipopolysaccharide, stimulating a different subpopulation. Cardell S, et al. **Scand J Immunol** 1989 Feb; 29(2):143-9

Recombinant protein A of non-staphylococcal origin is not mitogenic for human peripheral lymphocytes. Mitogenicity of natural protein A is caused by a contaminant. Persson U, et al. **Scand J Immunol** 1989 Feb;29(2):151-8

Sulfadoxine specific lymphocyte transformation in a patient with eosinophilic pneumonia induced by sulfadoxine-pyrimethamine (Fansidar). Daniel PT, et al. **Thorax** 1989 Apr;44(4):307-9

Modulating effect of growth hormone (GH) on PHA-induced lymphocyte proliferation. Bozzola M, et al. **Thymus** 1988-89;12(3):157-65

HLA-DR beta III and HLA-DP induce comparable proliferation in primary mixed lymphocyte culture. Schroeijers WE, et al. **Tissue Antigens** 1988 Sep;32(3):145-9

Suppression of lymphocyte proliferation by hexamethylene diamine. Luebke RW, et al. **Toxicology** 1989 Jun 16; 56(3):301-13

Anthralin, a non-phorbol tumor promoter, fails to inhibit metabolic cooperation in mutant human fibroblasts, but inhibits phytohemagglutinin-induced lymphocyte blastogenesis in vitro. Si EC, et al. **Toxicology** 1988 Dec 30;53(2-3):199-212

Factors in the liquid portion of stored blood inhibit the proliferative response in mixed lymphocyte cultures. Vliet WC, et al. **Transfusion** 1989 Jan;29(1):41-5

The effects of prednisolone and cyclosporin A on monocyte-dependent and -independent human T-cell proliferation in vitro. Bloemena E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):861-5

Drug-drug interaction between cyclosporine and agents affecting calcium-dependent lymphocyte proliferation. Colombani PM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):840-1

Comparison of the in vitro immunosuppressive effects of cyclosporine A and its metabolites. Copeland KR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1449-52

Cyclosporine A inhibits lymphocyte activation at more than one site in vivo. Lai KN, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):878-80

Cyclosporin A and prednisolone: an additive inhibitory effect of cell proliferation and interleukin-2 production. Manfro RC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1457-9

Catalase increases lymphocyte proliferation in mixed lymphocyte culture. Rush DN, et al. **Transplant Proc** 1988 Dec;20(6):1271-3

Immune signals involved in cyclosporine and methylprednisolone inhibition of A23187 ionophore induced proliferation. Schandene L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):82-3

The effect of exogenous lymphokines on immunoglobulin production and lymphocyte proliferation in renal transplant patients. Cardella CJ, et al. **Transplantation** 1989 Feb; 47(2):300-4

The inhibitory effect of cyclosporine on the nuclear proliferative response to a variety of T cell activators. Citterio F, et al. **Transplantation** 1989 Feb;47(2):334-8

Effect of a novel immunosuppressive agent, FK506, on mitogen-induced inositol phospholipid degradation in rat thymocytes. Fujii Y, et al. **Transplantation** 1989 Jun; 47(6):1081-3

Suppression of cytotoxic T cell induction in vivo by prodigiosin 25-C. Nakamura A, et al. **Transplantation** 1989 Jun;47(6):1013-6

Effect of a new immunosuppressive agent, FK506, on human lymphocyte responses in vitro. I. Inhibition of expression of alloantigen-activated suppressor cells, as well as induction of alloreactivity. Yoshimura N, et al. **Transplantation** 1989 Feb;47(2):351-6

Enhancement of methotrexate cytotoxicity by modulation of proliferative activity in normal and neoplastic T lymphocytes and in a myeloid leukemia cell line. Ciaiolo C, et al. **Tumori** 1988 Oct 31;74(5):537-42

AL 721: a potent membrane modulating agent of human T-lymphocytes? Offner FA, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):597-9

Suggested mode of action of D-penicillamine as an immunosuppressive agent in rheumatoid arthritis. Lipsky PE. **Z Rheumatol** 1988;47 Suppl 1:6-8

Suppression of mitogenic activity of T lymphocytes by subtoxic concentration of ammonia in blood. Kluciński W, et al. **Zentralbl Veterinarmed** [A] 1988 Sep;35(8):561-6

Effect of ketone bodies on the mitogenic response of bovine milk lymphocytes. Kluciński W, et al. **Zentralbl Veterinarmed** [A] 1988 Sep;35(8):626-31

The effect of vitamin E on the cell-mediated immune response in pigs. Jensen M, et al. **Zentralbl Veterinarmed** [B] 1988 Aug;35(7):549-55

[Effect of a tablet to prevent epidemic hemorrhagic fever on immunologic function and plasma cyclic nucleotides] Chen ZQ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul; 8(7):414-5, 389-90 (Eng. Abstr.) **(Chi)**

[Effects of the seeds of Ziziphus spinosa hu on the immune function of mice] Lang XC, et al. **Chung Yao Tung Pao** 1988 Nov;13(11):43-5, 64 (Eng. Abstr.) **(Chi)**

[Demonstration by lymphocyte transformation test of the allergic genesis in a case of acute hepatitis] Federmann G, et al. **Dtsch Med Wochenschr** 1988 Oct 28;113(43):1676-9 (Eng. Abstr.) **(Ger)**

[Effect of gold on lymphocyte stimulation by influenza A in chronic polyarthritis] Wruck K, et al. **Z Rheumatol** 1988 May-Jun;47(3):139-42 (Eng. Abstr.) **(Ger)**

[DNA damage and repair in human lymphocytes under the activation of molecular oxygen] Binková B, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):676-8 (Eng. Abstr.) **(Rus)**

[The stimulating action of lipopolysaccharide and muramyl dipeptide on the activation of mononuclear cells in human peripheral blood by recombinant interleukin-2 in vitro] Rakhmilevich AL, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):698-701 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of lymphocyte adrenoreceptors on antitumor immunity in vitro] Kharkevich DD, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):61-4 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of T-lymphocytes by thymus mitogenic factor on the somatotropic function of the hypophysis] Jighi KN, et al. **Fiziol Zh** 1988 Jul-Aug; 34(4):96-8 (Eng. Abstr.) **(Rus)**

[Functional activity of nonspecific suppressors and indicators of lymphocyte blast transformation in patients with

occupational allergy] Dovzhanskiĭ IS.
Gig Tr Prof Zabol 1988 Nov;(11):51–3 **(Rus)**
[Effect of the immunomodulator meitonium on the cyclic nucleotide system of T-lymphocytes in experimental tuberculosis] Kostromin AP, et al. **Probl Tuberk** 1988; (10):55–9 (Eng. Abstr.) **(Rus)**
[The surface phenotype and enzymatic cytochemical markers of B cells during pokeweed mitogen activation] Evsev'eva AI, et al. **Tsitologiia** 1989 May;31(5):569–75 (Eng. Abstr.) **(Rus)**
[Effect of the tumor promoter TPA on the distribution of PHA-stimulated human lymphocytes by cell cycle phases] Vinogradov AE, et al. **Tsitologiia** 1988 Aug;30(8):983–90 (Eng. Abstr.) **(Rus)**
[Effect of the superoxide radical on lymphocyte proliferation stimulated by a mitogen] Vol'skiĭ NN, et al. **Tsitologiia** 1988 Jul;30(7):898–902 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Ultraviolet B light inactivates bone marrow T lymphocytes but spares hematopoietic precursor cells. Deeg HJ, et al. **Blood** 1989 Feb;73(2):369–71
Lymphocyte responsiveness after irradiation in canine and human intestinal allografts. Tattersall C, et al. **Curr Surg** 1989 Jan–Feb;46(1):16–9
Inhibition of human lymphocyte stimulation by visible light and phthalocyanine photosensitization: mitogen and wavelength dependency. Kol R, et al. **Int J Radiat Biol** 1989 Jun;55(6):1015–22
Comparisons of dose-response parameters for radiation-induced acentric fragments and micronuclei observed in cytokinesis-arrested lymphocytes. Littlefield LG, et al. **Mutagenesis** 1989 Jul;4(4):265–70
Inactivation of bone marrow T-lymphocytes by ultraviolet light. Deeg HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2938
Differential sensitivity of human leukocyte subpopulations to ultraviolet light. Spielberg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):180–1

LYMPHOCYTES

see related
ANTILYMPHOCYTE SERUM
Differential cell counting in fraction-collected milk from dairy cows. Ostensson K, et al. **Acta Vet Scand** 1988; 29(3–4):493–500
Simultaneous determination of absolute total lymphocyte and CD4+ lymphocyte levels in peripheral blood by flow cytometry. Prince HE, et al. **Am J Clin Pathol** 1989 Aug; 92(2):206–9
Adrenocortical and heterophil/lymphocyte responses to challenge in hens showing short or long tonic immobility reactions. Beuving G, et al. **Br Poult Sci** 1989 Mar; 30(1):175–84
Biostatistical considerations for quality assessment of immunologic measurements used in clinical and longitudinal studies. Gelman R, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):28–37 (4 ref.)
Tumour imaging of indium-111 oxine-labelled autologous lymphocytes as a staging method in Hodgkin's disease. Grimfors G, et al. **Eur J Haematol** 1989 Mar;42(3):276–83
Characteristics of inflammatory cells in urethral smears from men with non-gonococcal urethritis. Shahmanesh M. **Genitourin Med** 1989 Jan;65(1):18–21
Substance P increases lymphocyte traffic and lymph flow through peripheral lymph nodes of sheep. Moore TC, et al. **Immunology** 1989 May;67(1):109–14
Recovery of functional human lymphocytes from Leukotrap filters. Longley RE, et al. **J Immunol Methods** 1989 Jul 6;121(1):33–8
Total peripheral lymphocyte count and T-cell percentage in patients with breast cancer. Jain P, et al. **J Indian Med Assoc** 1988 Jun;86(6):143–5
Hematologic dysfunction in Lassa fever. Fisher-Hoch S, et al. **J Med Virol** 1988 Oct;26(2):127–35
In vivo tracing of indium-111 oxine-labeled human peripheral blood mononuclear cells in patients with lymphatic malignancies. Müller C, et al. **J Nucl Med** 1989 Jun;30(6):1005–11
Detecting rejection of canine cardiac allograft with indium-111 lymphocytes [letter] Petronis J. **J Nucl Med** 1988 Dec;29(12):2018–9
Evaluation of immune status in pediatric recipients of hepatic orthografts. Payne H, et al. **J Pediatr Surg** 1988 Sep; 23(9):825–8
Synovial fluid lymphocytes in eosinophilic fasciitis. Campbell SM, et al. **J Rheumatol** 1989 Feb;16(2):239–44
A cDNA clone inducible in human tonsillar lymphocytes by a tumor promoter codes for a novel protein of the beta-thromboglobulin superfamily. Obaru K, et al. **Mol Immunol** 1989 Apr;26(4):423–6
Increased frequency of spontaneous and X-ray-induced chromosomal aberrations in lymphocytes from neonates and the influence of caffeine—an in vitro study. Karsdon J, et al. **Mutat Res** 1989 May;226(1):13–9
Detection of somatic mutants in man: HPRT mutations in lymphocytes and hemoglobin mutations in erythrocytes. Tates AD, et al. **Mutat Res** 1989 Jul;213(1):73–82
114Inm oxine-labelled lymphocytes—therapeutic applications. Hamilton D, et al. **Nucl Med Commun** 1988 Oct;9(10):797–802
Targeting of lymphocytes with 111In-labelled monoclonal antibodies. Loutfi I, et al. **Nucl Med Commun** 1988 Oct; 9(10):787–96
Multiple concurrent stressors in chicks. 3. Effects on plasma corticosterone and the heterophil:lymphocyte ratio. McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):522–7
A routine method for storing lymphocytes for repeated isolation of DNA. Jørgensen BR, et al. **Prenat Diagn** 1988 Nov;8(9):687–90
Chromosomes of older humans are more prone to aminopterine-induced breakage. Esposito D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1302–6
Gene test begins [news] Culliton BJ. **Science** 1989 May 26; 244(4907):913
Relation between immunocytological features of bronchoalveolar lavage fluid and clinical indices in sarcoidosis. Ainslie GM, et al. **Thorax** 1989 Jun;44(6):501–9
Intestinal absorption of colostral lymphoid cells in newborn piglets. Tuboly S, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):75–85
[Lymphocytic adenohypophysitis (letter)] Borensztein P, et al. **Ann Med Interne (Paris)** 1989;140(3):219–21 (14 ref.) **(Fre)**
[Treatment using lymphocytapheresis of severe forms of Crohn's disease. Preliminary results] Faradji A, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:55–9 (Eng. Abstr.) **(Fre)**
[High-resolution x-ray computed tomography in lymphoid interstitial pneumonia] Vilgrain V, et al. **J Radiol** 1989 Mar; 70(3):167–73 (23 ref.) (Eng. Abstr.) **(Fre)**
[Lymphocyte contamination in thrombocyte concentrates from individual blood stores] Aulmann HM, et al. **Beitr Infusionther** 1988;21:109–12 **(Ger)**
[Percentage of lymphocytes in bronchoalveolar lavage and conventional therapy decision making for patients with intrathoracic sarcoidosis] Grosser H, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:230–2 (Eng. Abstr.) **(Ger)**
[Increased serum lactate dehydrogenase and changes in its isozymes pattern correlated to the atypical lymphocytes in adult rubella] Kawai K, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):500–5 **(Jpn)**
[Experimental and theoretical study of the dynamics of lymphopoiesis during prolonged irradiation] Zukhbaia TM, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):626–31 (Eng. Abstr.) **(Rus)**
[The significance of the modern leukogram in clinical practice] Vinogradova IuE, et al. **Ter Arkh** 1989; 61(1):121–4 **(Rus)**

ANALYSIS

Beta-adrenergic binding sites and membrane fluidity of guinea pig lymphocytes. Loesberg C, et al. **Agents Actions** 1989 Jan;26(1–2):55–6
Hydrophobic probe's fluorescence intensity. 3-methoxybenzanthrone (3-MBA) in bronchial asthma and urticaria patients lymphocyte membranes. Pytsky VI, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug; 16(4):237–42
Zinc concentrations in pure populations of peripheral blood neutrophils, lymphocytes and monocytes. Goode HF, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):89–95
Intracellular contents of cyclic nucleotides in neutrophils and lymphocytes from patients with systemic lupus erythematosus. Shingu M, et al. **Arch Dermatol Res** 1989; 281(3):203–5
Properties of three monoclonal antibodies that recognize an 80-kDa phytohemagglutinin-binding glycoprotein from porcine lymphocytes. Faucher S, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):224–32
Detection of nearest neighbors to specific fluorescently tagged ligands in rod outer segment and lymphocyte plasma membranes by photosensitization of 5-iodonaphthyl 1-azide. Raviv Y, et al. **Biochemistry** 1989 Feb 7; 28(3):1313–9
Intracellular free calcium concentration in lymphocytes of patients with muscular dystrophies. Mechler F, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):227–30
Specialized protein tyrosine kinase proto-oncogenes in hematopoietic cells. Perlmutter RM, et al. **Biochim Biophys Acta** 1989 Feb;948(3):245–62 (138 ref.)
Sialic acid content and sialyltransferase activity in lymphocytes from neonates. Komlos L, et al. **Biol Neonate** 1988;54(5):270–4
Flow cytometric analysis of the Hermes homing-associated antigen on human lymphocyte subsets. de los Toyos J, et al. **Blood** 1989 Aug 1;74(2):751–60
Influence of adjuvant tamoxifen on blood lymphocytes. Rotstein S, et al. **Breast Cancer Res Treat** 1988 Sep; 12(1):75–9
Properties of glucocorticoid receptors in Epstein-Barr virus-transformed lymphocytes from patients with familial cortisol resistance. Iida S, et al. **Cancer Res** 1989 Apr 15; 49(8 Suppl):2214s–2216s
Sialic acids in human lymphocytes. Qualitative and quantitative alterations in cancer cases. Holzhauser R, et al. **Carbohydr Res** 1988 Nov 15;183(1):89–95
A lymphocyte molecule implicated in lymph node homing is a member of the cartilage link protein family. Stamenkovic I, et al. **Cell** 1989 Mar 24;56(6):1057–62
Wheat germ agglutinin fracture-label of Golgi apparatus membranes in proliferating cells. Lotti LV, et al. **Cell Biol Int Rep** 1988 Aug;12(8):597–605
Fc receptors for IgE (Fc epsilon R) on human lymphoid cells: inducible expression of Fc epsilon RII (CD23) on lymphocytes and detection by monoclonal anti-Fc epsilon RII antibody. Ohno I, et al. **Cell Immunol** 1989 Jul; 121(2):433–46
Decreased beta-adrenergic receptor density and catecholamine response in male cigarette smokers. A study of monozygotic twin pairs discordant for smoking. Laustiola KE, et al. **Circulation** 1988 Nov;78(5 Pt 1):1234–40
Quantifying manganese in lymphocytes to assess manganese nutritional status. Matsuda A, et al. **Clin Chem** 1989 Sep; 35(9):1939–41
Decreased cytosolic free calcium concentration in lymphocytes of magnesium-supplemented DOCA-salt hypertensive rats. Suzuki H, et al. **Clin Exp Hypertens [A]** 1989;11(3):487–500
A subset of human rosetted lymphocytes contains previously unidentified histamine. Khan MM, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):147–59
Distinct phenotypic composition of diffuse interstitial and perivascular focal infiltrates in renal allografts: a morphometric analysis of cellular infiltration under conventional immunosuppressive therapy and under cyclosporine A. Guettier C, et al. **Clin Nephrol** 1988 Aug; 30(2):97–105
DNA analysis of stimulated lymphocytes by automatic sampling for flow cytometry. Azzolina LS, et al. **Cytometry** 1988 Sep;9(5):508–11
Elevated mRNA levels of major histocompatibility complex class II genes in lymphocytes of autoimmune BB rats. Holowachuk EW, et al. **Diabetes** 1988 Dec;37(12):1637–40
Genetic polymorphism of a lymphocyte protein (p75) with six different alleles studied by two-dimensional electrophoresis: qualitative and quantitative data. Waldinger D, et al. **Electrophoresis** 1988 Oct;9(10):666–71
Two-dimensional electrophoresis of human lymphocyte proteins: two-dimensional polymorphisms and paternity testing. Waldinger D, et al. **Electrophoresis** 1988 Aug; 9(8):375–9
Disulfide-linked receptors for mitogenic lectins on piglet lymphocytes. Chilson OP, et al. **Eur J Immunol** 1988 Oct; 18(10):1581–6
Analysis of human lymphocyte protein expression. I. Identification of subpopulation markers by two-dimensional polyacrylamide gel electrophoresis. Willard-Gallo KE, et al. **Eur J Immunol** 1988 Sep; 18(9):1453–61
Characterization and partial purification of a high-molecular-mass, calmodulin-binding, tyrosyl-phosphorylated protein from lymphocyte plasma membranes. Kostka G. **Exp Cell Res** 1989 Mar;181(1):85–93
The content of fatty acids in leukemic lymphocytes in vitro in cattle. Madej JA, et al. **Folia Histochem Cytobiol** 1989; 27(2):83–8
Genetic analyses of restriction fragment length polymorphisms using high molecular weight DNA from sperm or lymphocytes embedded in agarose. Mage RG, et al. **Gene Anal Tech** 1988 Sep–Oct;5(5):94–6
Premenstrual increase of intracellular magnesium levels in women with ovulatory, asymptomatic menstrual cycles. Facchinetti F, et al. **Gynecol Endocrinol** 1988 Sep; 2(3):249–56
Cytochemical profile of lymphocytes in haemophilia patients at risk of AIDS. Gamba G, et al. **Haematologia (Budap)** 1989;22(2):101–8
Lymphocyte surface ferritin in malignant and inflammatory diseases. Steinhoff G, et al. **Haematologia (Budap)** 1988; 21(4):199–203
Aberrant expression of the K-ras proto-oncogene in B-cell malignancies. Lee J, et al. **Hematol Pathol** 1988;2(4):229–37
Understanding Romanowsky staining. 2. The staining mechanism of suspension-fixed cells, including influences of specimen morphology on the Romanowsky-Giemsa effect. Horobin RW, et al. **Histochemistry** 1989;91(1):77–80
Detection of Thy-1 on cell surface of human T lymphoid cell lines by a monoclonal antibody. Wang IY, et al. **Hybridoma** 1988 Dec;7(6):529–40
Detection of styrene oxide-DNA adducts in lymphocytes of a worker exposed to styrene. Liu SF, et al. **IARC Sci Publ** 1988;(89):217–22
O-acetylated sialic acids in gangliosides from pig spleen lymphocytes. Hueso P, et al. **Ital J Biochem** 1988 Sep–Oct; 37(5):302–9
Elevated levels of the 90 kd heat shock protein in a proportion of SLE patients with active disease. Norton PM, et al. **J Autoimmun** 1989 Apr;2(2):187–95
Alpha- and beta-adrenoceptors in hypertension. II. Platelet alpha 2- and lymphocyte beta 2-adrenoceptors in children of parents with essential hypertension. A model for the pathogenesis of the genetically determined hypertension. Michel MC, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):432–9
Heterogeneity of the Ro/SSA antigen. Different molecular forms in lymphocytes and red blood cells. Rader MD, et al. **J Clin Invest** 1989 Apr;83(4):1293–8
Human tumor infiltrating lymphocytes. Analysis of lymphokine mRNA expression and relevance to cancer immunotherapy. Belldegrun A, et al. **J Immunol** 1989 Jun 15;142(12):4520–6
Characterization of the CB antigen, a DNA-binding protein

recognized by autoantibodies and which has a differential expression in lymphoid cells. Juarez C, et al. **J Immunol** 1988 Dec 1;141(11):3841–6

Evaluation of the expression of IFN–gamma in lymphocytes using a monoclonal antibody and flow cytometry. Caruso A, et al. **J Immunol Methods** 1988 Oct 4;113(1):37–43

Measurement of cytoplasmic calcium in lymphocytes using flow cytometry. Kinetic studies and single cell analysis. Griffioen AW, et al. **J Immunol Methods** 1989 Jun 2; 120(1):23–7

In vitro detection of lymphokines produced by in vivo activated lymphocytes. Mohler KM, et al. **J Immunol Methods** 1989 Jul 6;121(1):67–73

Assessment of anti–HLA antibodies in sera being tested for platelet reactivity by a platelet lymphocyte immunofluorescence test (PLIFT). Muylle L, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):187–90

Human lymphocyte messenger RNA activity profiles in type I and type II diabetes: a tool for classification of metabolic disease. Mariash CN, et al. **J Lab Clin Med** 1988 Nov; 112(5):627–33

Is lymphocyte magnesium concentration a reflection of intracellular magnesium concentration? Wong NL, et al. **J Lab Clin Med** 1988 Dec;112(6):721–6

Search for a common DNA fragment in B27+ AS+ lymphocytes and an E. coli strain from a patient with AS [letter] Njoo FL, et al. **J Rheumatol** 1989 Apr;16(4):561–2

Gene amplification to detect fetal nucleated cells in pregnant women [letter] Adinolfi M, et al. **Lancet** 1989 Aug 5; 2(8658):328–9

S–100 antigen and calmodulin in human leukemic cells. Wada H, et al. **Leuk Res** 1989;13(1):65–9

Comparison of magnesium in human lymphocytes and mononuclear blood cells. Yang XY, et al. **Magnesium** 1989; 8(2):100–5

Sialic acid content and sialyltransferase activity in human lymphocytes with advancing age. Allalouf D, et al. **Mech Ageing Dev** 1988 Jul;44(1):45–50

Detection of lymphocytic Fc receptors with 125I–labelled protein A. Villu C, et al. **Med Interne** 1982 Apr–Jun; 20(2):159–63

Lymphocyte–specific Ca2+–binding protein LSP1 is associated with the cytoplasmic face of the plasma membrane. Klein DP, et al. **Mol Cell Biol** 1989 Jul; 9(7):3043–8

The use of clone–specific anti–VJ junction oligonucleotides to identify minor clonal lymphoid populations. d'Auriol L, et al. **Nouv Rev Fr Hematol** 1989;31(2):125–8

Electrotransfection of human lymphoid and myeloid cell lines. Döffinger R, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11840

Rapid detection of octamer binding proteins with 'mini–extracts', prepared from a small number of cells. Schreiber E, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6419

Analysis of ovine peripheral blood lymphocyte subsets following Ficoll–Hypaque separation or erythrocyte lysis. Alders RG, et al. **Res Vet Sci** 1988 Sep;45(2):253–4

Cytoplasmic free Ca2+ and the intracellular pH of lymphocytes. Grinstein S, et al. **Soc Gen Physiol Ser** 1987; 42:215–28 (34 ref.)

DNA analysis of circulating blood mononuclear cells for diagnosis of rejection in heart transplant patients. Caca K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2523–4

Sister chromatid exchanges in calves with hereditary zinc deficiency (lethal trait A 46). Bosma AA, et al. **Vet Q** 1988 Oct;10(4):230–3

[Identification of dopamine–D2 receptors on lymphocytes using the binding technic] Della Bella S, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):73–5 (Eng. Abstr.) (Ita)

[Analysis of infiltrating cells in the lesional skin of the autoimmune diseases–pemphigus, pemphigoid, and lupus erythematosus] Hayakawa K. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1023–8 (Eng. Abstr.) (Jpn)

[Fc epsilon receptor on lymphocytes in children with bronchial asthma: two color analysis using flow cytometry] Bando Y, et al. **Rinsho Byori** 1989 Apr;37(4):397–400 (Jpn)

[Behavior of lymphocyte magnesium in heart diseases. Report of 3 cases] Faintuch JJ, et al. **Arq Bras Cardiol** 1988 Feb; 50(2):125–7 (Eng. Abstr.) (Por)

[The density of lymphocyte beta 2–adrenoreceptors and blood plasma catecholamines in patients with dilated cardiomyopathy] Gabrusenko SA, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):6–9 (Eng. Abstr.) (Rus)

[Cytophotometric analysis of the DNA level of peripheral blood lymphocytes in patients with skin lymphoma] Bogdanova MS. **Gematol Transfuziol** 1989 May;34(5):42–5 (Rus)

[Study of the DNA structure of peripheral blood leukocytes, proliferating lymphoid and tumor cells according to the rate of alkaline denaturation of DNA lysates] Moskaleva EIu, et al. **Gematol Transfuziol** 1989 Apr;34(4):40–2 (Eng. Abstr.) (Rus)

[Determination of the sensitivity to glucocorticoids in vitro] Mil'ko VI, et al. **Lab Delo** 1989;(2):27–8 (Eng. Abstr.) (Rus)

[Glucocorticoid receptors of the liver and blood lymphocytes in acute cholecystitis] Golikov PP, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):36–9 (Eng. Abstr.) (Rus)

[Identification of lymphocytes with histamine receptors in intestinal mucosa of the rat] Ventura Juárez J, et al. **Arch Invest Med (Mex)** 1988 Jan–Mar;19(1):1–5 (Eng. Abstr.) (Spa)

CLASSIFICATION

Subsets of tonsillar lymphocytes and activated cells in each subset analysed by three–color flow cytometry. Sugiyama M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:138–47

Analysis of lymphocyte phenotype in human thymomas. Berrih–Aknin S, et al. **Adv Exp Med Biol** 1988;237:369–74

The separation of immunocyte subpopulations by use of various lectins. Osawa T. **Adv Exp Med Biol** 1988; 228:83–104 (62 ref.)

Lymphocyte subsets in pre–diabetes. Riley WJ, et al. **Adv Exp Med Biol** 1988;246:109–14

Lymphocyte subpopulations in high endothelial venules and lymphatic capillaries of bronchus–associated lymphoid tissue (BALT) in the rat. Otsuki Y, et al. **Am J Anat** 1989 Feb;184(2):139–46

Bronchoalveolar lavage cell and lymphocyte phenotype profiles in healthy asbestos–exposed shipyard workers. Wallace JM, et al. **Am Rev Respir Dis** 1989 Jan;139(1):33–8

Immunocytochemical characterization of round cells in human semen using monoclonal antibodies and the APAAP–technique. Schöbel WA, et al. **Andrologia** 1989 Jul–Aug;21(4):370–6

Lymphocyte subsets after stroke. Członkowska A, et al. **Ann N Y Acad Sci** 1988;540:608–10

Assessment of phenotype of blood lymphocyte subsets prior and after PWM stimulation in patients with lung carcinoma. Jeżewska E, et al. **Arch Geschwulstforsch** 1989;59(1):31–6

Lymphocyte subpopulations during acute and convalescence phases of malaria. Tongtawe P, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):11–8

Lymphocyte subpopulation with low membrane potential in the blood of cyclosporin– and prednisone–treated patients: in vivo selectivity for T4 subset. Aszalos A, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):25–9

Immunohistochemical characterization of lymphocyte populations in carp (Cyprinus carpio L.). Schneider B, et al. **Biomed Biochim Acta** 1989;48(1):159–63

Variations in the percentages of lymphocyte subtypes during the menstrual cycle in women. Eichler F, et al. **Biomed Pharmacother** 1988;42(4):285–7

CD7+, CD4–, CD8– acute leukemia: a syndrome of malignant pluripotent lymphohematopoietic cells. Kurtzberg J, et al. **Blood** 1989 Feb;73(2):381–90

Lymphocyte subsets in normal human bone marrow harvested for routine clinical transplantation. Batinić D, et al. **Bone Marrow Transplant** 1989 May;4(3):229–32

An investigation of circulating and in situ lymphocyte subsets and Langerhans cells in the skin and cervix of patients with chronic renal failure. McKerrow KJ, et al. **Br J Dermatol** 1989 Jun;120(6):745–55

In situ immunophenotyping of lymphocytes in human bone marrow: an immunohistochemical study. Horny HP, et al. **Br J Haematol** 1989 Mar;71(3):313–21

Immune cells in a case of postherpetic marginal trophic ulcer. Geboes K, et al. **Br J Ophthalmol** 1989 Mar;73(3):191–6

Flow cytometric surface light chain analysis of lymphocyte–rich effusions. A useful adjunct to cytologic diagnosis [published erratum appears in Cancer 1989 Oct 1;64(7):1436] Ibrahim RE, et al. **Cancer** 1989 May 15; 63(10):2024–9

Immunological analysis and characterization of lymphocyte subsets in specimens of human hepatocellular carcinomas and metastatic liver cancers. Yuh K, et al. **Cancer Immunol Immunother** 1989;28(1):1–8

Characterization of murine thymocyte subpopulations reacting with Dolichos biflоris agglutinin. Scofield K, et al. **Cell Immunol** 1989 Apr 15;120(1):114–25

Immunocytology in malignant pleural mesothelioma. Expression of tumor markers and distribution of lymphocyte subsets. Guzman J, et al. **Chest** 1989 Mar; 95(3):590–5

Lymphocyte subsets in acute rheumatic fever and rheumatic heart disease. Bhatia R, et al. **Clin Cardiol** 1989 Jan; 12(1):34–8

Lymphocyte subsets in bronchoalveolar lavage fluid obtained from stable asthmatics, and their correlations with bronchial responsiveness. Kelly CA, et al. **Clin Exp Allergy** 1989 Mar;19(2):169–75

Lymphocyte subpopulations in the blood of sheep persistently infected with border disease virus. Burrells C, et al. **Clin Exp Immunol** 1989 Jun;76(3):446–51

Macrophage and lymphocyte subpopulations in magnifying endoscopic lesions of Crohn's disease. Giorchetti P, et al. **Clin Exp Immunol** 1988 Jun;72(3):373–6

Flow cytometric analysis of pulmonary lymphocytes from mice infected with respiratory syncytial virus. Openshaw PJ. **Clin Exp Immunol** 1989 Feb;75(2):324–8

Immunohistochemical analysis of the retrobulbar tissues in Graves' ophthalmopathy. Weetman AP, et al. **Clin Exp Immunol** 1989 Feb;75(2):222–7

Lymphocyte subsets of the peripheral blood in Sjögren's syndrome and rheumatoid arthritis. Ichikawa Y, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):55–61

Immunophenotyping in a multicenter study: the Transfusion Safety Study experience. Fletcher MA, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):38–47

Procedural guidelines for performing immunophenotyping by flow cytometry. Landay AL, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):48–60 (32 ref.)

Lymphocyte immunophenotyping at the Centers for Disease Control: the program and special studies. Nicholson JK, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):61–7 (12 ref.)

Department of Army lymphocyte immunophenotyping quality assurance program. Rickman WJ, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):85–95

Lymphocyte subset analysis to predict progression to AIDS in a cohort of homosexual men in San Francisco. Stites DP, et al. **Clin Immunol Immunopathol** 1989 Jul; 52(1):96–103

Immunohistochemical identification of infiltrating mononuclear cells in tubulointerstitial nephritis associated with Sjögren's syndrome. Matsumura R, et al. **Clin Nephrol** 1988 Dec;30(6):335–40

Lymphopenia and deranged lymphocyte subsets in nasopharyngeal carcinoma. Cheng PN, et al. **Clin Otolaryngol** 1989 Feb;14(1):53–9

Interlaboratory comparison of flow cytometric lymphocyte phenotyping analyses: implications for standardization and quality control. Green WF, et al. **Cytometry Suppl** 1988; 3:23–8

Flow cytometric analysis of circulating lymphocytes following human marrow transplantation. Smith BR. **Cytometry Suppl** 1988;3:48–51 (2 ref.)

The natural history of lymphocyte subsets infiltrating the pancreas of NOD mice. Signore A, et al. **Diabetologia** 1989 May;32(5):282–9

Interrelations of lymphocyte subset values, human immunodeficiency virus antibodies, and HIV antigen levels of homosexual males in San Francisco. Krowka JF, et al. **Diagn Clin Immunol** 1988;5(6):381–7

The effects of splenic irradiation on lymphocyte subpopulations in chronic B–lymphocytic leukemia. Terstappen LW, et al. **Eur J Haematol** 1988 Nov; 41(5):496–505

Phenotypes of peripheral blood lymphoid cells in patients with asbestos–related pleural lesions. Ozesmi M, et al. **Eur Respir J** 1988 Dec;1(10):938–42

Lymphocyte subset counting by immunoperoxidase using an automated routine hematologic analyzer. d'Onofrio G, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):137–42

Immunocytochemical characterization of the unusual large granular lymphocytes in human endometrium throughout the menstrual cycle. King A, et al. **Hum Immunol** 1989 Mar;24(3):199–205

Lymphocyte subpopulations in sheep during the early stage of experimental infection with bovine leukaemia virus. Dimmock CK, et al. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):141–5

Follicular cells of tonsils metabolise more deoxycytidine than other cell populations. Horváth L, et al. **Immunol Lett** 1989 Aug;22(2):161–6

Site–directed differences in the immune response to the fetus. Gogolin–Ewens KJ, et al. **Immunology** 1989 Feb; 66(2):312–7

Subpopulations of lymphocytes in the mammary gland of sheep. Lee CS, et al. **Immunology** 1989 Mar;66(3):388–93

Presence of a distinct CD8+ and CD5– leucocyte subpopulation in the sheep liver. Meeusen E, et al. **Immunology** 1988 Aug;64(4):615–9

Lymphocyte subsets in jejunal and ileal Peyer's patches of normal and gnotobiotic minipigs. Rothkötter HJ, et al. **Immunology** 1989 May;67(1):103–8

T–cell receptor expression in intestinal intra–epithelial lymphocyte subpopulations of normal and athymic mice. Viney JL, et al. **Immunology** 1989 Apr;66(4):583–7

Lymphocyte population in spleen and lymph node in Hodgkin's lymphoma. Datta U, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):21–6

Intra–epithelial lymphocytes and non–lymphoid cells in the human nasal mucosa. Hameleers DM, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):317–22

Flow cytometric analysis of lymphocyte populations in guinea pig blood and spleen. Ia antigen expression and the effects of immunosuppressive agents. McPhee CA, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):275–80

Changes in lymphocyte subpopulations in peripheral blood of splenectomized patients. Brodsky E, et al. **Isr J Med Sci** 1988 Dec;24(12):702–5

Characteristics of lymphocytes cultured from murine viral myocarditis specimens: a preliminary and technical report. Kishimoto C, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):799–802

Ribavirin treatment of murine coxsackievirus B3 myocarditis with analyses of lymphocyte subsets. Kishimoto C, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1334–41

Treatment of murine lupus with monoclonal antibody to L3T4. I. Effects on the distribution and function of lymphocyte subsets and on the histopathology of autoimmune disease. Wofsy D, et al. **J Autoimmun** 1988 Oct;1(5):415–31

Changes in lymphocyte subset distribution aid in the differential diagnosis of renal allograft dysfunction. Rees JC, et al. **J Clin Lab Anal** 1989;3(4):222–31

Flow cytometric analysis of lymphocyte subpopulations in infants with congenital heart disease. Slade HB, et al. **J Clin Lab Anal** 1989;3(1):14–20

Lymphocyte subset alterations in patients with alcoholic hepatitis. Roselle GA, et al. **J Clin Lab Immunol** 1988 Aug; 26(4):169–73

Phenotypic and functional analysis of the cellular response in regional lymphoid tissue during an acute virus infection. Lynch F, et al. **J Immunol** 1989 May 15;142(10):3592–8

Lymphocyte subset analysis by flow cytometry. Comparison of three different staining techniques and effects of blood storage. Ashmore LM, et al. **J Immunol Methods** 1989 Mar 31;118(2):209–15

A simple hemagglutination method for the detection of cell surface antigens. Kokkinopoulos D, et al. **J Immunol Methods** 1989 Apr 21;119(1):59–63

Acute effects of single doses of recombinant interferon–gamma on blood cell counts and lymphocyte subsets in patients with advanced renal cell cancer. Aulitzky WE, et al. **J Interferon Res** 1989 Aug;9(4):425–33

Bovine peripheral blood leukocyte population dynamics following treatment with recombinant bovine interferon–alpha I1. Griebel PJ, et al. **J Interferon Res** 1989 Apr;9(2):245–57

Lymphocyte populations with different sensitivity to cyclosporin have different plasma membrane potentials. Aszalos A, et al. **J Med** 1987;18(5–6):351–74

Lymphocyte subsets alteration in patients with argentine hemorrhagic fever. Vallejos DA, et al. **J Med Virol** 1989 Feb;27(2):160–3

Lymphocytes: the Third World [editorial] Janeway CA Jr. **J Mol Cell Immunol** 1985;2(2):57–9

Lymphocyte subtyping in aseptic and bacterial inflammation of the CNS. Bamborschke S, et al. **J Neuroimmunol** 1988 Dec;20(2–3):179–80

Abnormal lymphocyte profiles and leukotriene B4 status in a patient with Crohn's disease and severe periodontitis. Engel LD, et al. **J Periodontol** 1988 Dec;59(12):841–7

In situ lymphocyte subpopulations from active versus stable periodontal sites. Reinhardt RA, et al. **J Periodontol** 1988 Oct;59(10):656–70

Lymphocyte subsets in patients with acute myopericarditis, arrhythmias and dilated cardiomyopathy. Koga Y, et al. **Jpn Circ J** 1989 Jan;53(1):78–86

Lymphatic subpopulations and their transition in myocardial tissue and peripheral blood of patients with biopsy–proven myocarditis. Saito T, et al. **Jpn Circ J** 1989 Jan;53(1):1–6

Lymphocyte subpopulations of peripheral blood in tsutsugamushi disease. Utsunomiya A, et al. **Kansenshogaku Zasshi** 1989 May;63(5):451–6

Human interleukin 4 regulates the phenotype of lymphocytes generated during mixed lymphocyte culture and inhibits the IL–2–induced development of LAK function in normal and leukaemic cells. Jin BQ, et al. **Leuk Res** 1989; 13(4):297–305

Enumeration of lymphocyte sub–populations: a comparative study of whole blood and gradient centrifugation methods. Macey MG, et al. **Med Lab Sci** 1988 Apr;45(2):187–91

Effect of ciclosporin on lymphocyte subpopulations and immunoglobulin production in IgA nephropathy. Lai KN, et al. **Nephron** 1989;52(4):307–12

Study of lymphocyte subpopulations in a group of patients with tuberculosis unresponsive to antibiotic treatment. Giorgis GE, et al. **Panminerva Med** 1988 Apr–Jun; 30(2):96–8

Immunophenotyping of normal lymphocytes. Fleisher TA, et al. **Pathol Immunopathol Res** 1988;7(5):305–18 (45 ref.)

Application of lymphocyte immunophenotyping in selected diseases. Marti GE, et al. **Pathol Immunopathol Res** 1988; 7(5):319–37 (120 ref.)

Inter–laboratory survey of lymphocyte immunophenotyping. Waxdal MJ, et al. **Pathol Immunopathol Res** 1988; 7(5):345–56

Effect of dietary restriction and aging on lymphocyte subsets in germfree and conventional Lobund–Wistar rats. Kim YB, et al. **Prog Clin Biol Res** 1989;287:117–26

Peripheral lymphocyte subpopulations in selective IgA deficiency. Porto MH, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):294–7

Spontaneous and induced immunoglobulin synthesis and anti–neutrophil cytoplasm antibodies in Wegener's granulomatosis: relation to leukocyte subpopulations in blood and active lesions. Rasmussen N, et al. **Rheumatol Int** 1988;8(4):153–8

Phenotypic characterization of mononuclear cells and class II antigen expression in angular cheilitis infected by Candida albicans or Staphylococcus aureus. Ohman SC, et al. **Scand J Dent Res** 1989 Apr;97(2):178–85

Hypothesis: immunological help is reciprocally delivered between different subpopulations of lymphocytes. Liu Y, et al. **Scand J Immunol** 1989 Sep;30(3):277–83

Flow cytometric analysis of lymphoma and lymphoma–like disorders. Little JV, et al. **Semin Diagn Pathol** 1989 Feb; 6(1):37–54 (52 ref.)

The lymphocyte subpopulations involved in cytotoxicity generated by co–culture with autologous and allogeneic Epstein–Barr virus–transformed cell line. Minakuchi J, et al. **Tohoku J Exp Med** 1988 Jun;155(2):107–15

Immunophenotyping of peripheral blood lymphocytes in the diagnosis of acute graft–versus–host disease. Jennings CD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2999–3003

Comparison of lymphocyte subsets of peripheral blood and grafts in renal transplant recipients. Tashiro M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1859–60

MLC and AMLR activate E–rosette negative T–CFC. Tice DG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):205–7

Serial monitoring of peripheral blood lymphocyte subsets in cardiac allograft rejection in the rat. Eidelman FJ, et al. **Transplantation** 1989 Jun;47(6):1079–81

Immunohistochemical detection of tissue–infiltrating lymphocytes in bladder tumors. Tsujihashi H, et al. **Urol Int** 1989;44(1):5–9

The use of fluorescent probes as markers for sheep lymphocyte subpopulations. Outterridge PM, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):141–51

[A study of lymphocyte subsets in human normal tonsil and lymph node] Ge ZH, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):75–85 (Eng. Abstr.) (Chi)

[Lymphocyte subpopulations in the peripheral blood in systemic erythematosis] Strejček J, et al. **Cas Lek Cesk** 1988 Aug 26;127(35):1103–7 (Eng. Abstr.) (Cze)

[Analysis of lymphocyte subpopulations of the bladder following endovesical immunotherapy using BCG] Peuchmaur M, et al. **Ann Urol (Paris)** 1989;23(3):246–50 (Eng. Abstr.) (Fre)

[Subpopulations of lymphocytes in onchocercal nodules] Mbakop A, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):259–61 (Eng. Abstr.) (Fre)

[Early anomalies of CD4 and CD20 lymphocyte cycles in human immunodeficiency virus] Martini E, et al. **Presse Med** 1988 Nov 19;17(41):2167–8, 2171–2 (Eng. Abstr.) (Fre)

[Lymphocyte subpopulations in patients with skin basalioma of the trunk] Röcken M, et al. **Z Hautkr** 1989 Mar 15; 64(3):212–7 (Eng. Abstr.) (Ger)

[Phenotype expression and production of IL–2 by tonsillar and blood lymphocytes in patients with tonsil pathology] Bussi M, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr; 9(2):149–59 (Eng. Abstr.) (Ita)

[In situ lymphocyte subpopulation in alopecia areata after treatment with squaric acid dibutyl ester] Rosso R, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):575–7 (Ita)

[Changes in lymphocyte subsets with post–operative chemotherapy in breast carcinoma—a study of using two color analysis] Kimura M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2621–5 (Eng. Abstr.) (Jpn)

[Immunological studies of pulmonary infection with atypical mycobacteria I. Enumeration of lymphocyte subsets in the peripheral blood] Harada Y, et al. **Kekkaku** 1988 Aug; 63(8):555–61 (Eng. Abstr.) (Jpn)

[Lymphatic subsets in myocardial tissue and peripheral blood of biopsy proven myocarditis] Saito T, et al. **Kokyu To Junkan** 1988 Nov;36(11):1179–83 (Jpn)

[Monoclonal antibody–defined phenotypes of tumor–infiltrating–lymphocyte subpopulations of esophageal cancer—compared with intra–noncancerous esophageal tissue and peripheral blood: preliminary report] Tahara H, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec; 89(12):2031 (Jpn)

[Serial analysis of peripheral lymphocyte subsets in patients with gastric cancer] Tanaka T, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):360–71 (Eng. Abstr.) (Jpn)

[A study on lymphocyte subsets of peripheral blood and synovial fluid using monoclonal antibodies in patients with rheumatoid arthritis] Kajino A. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):179–86 (Eng. Abstr.) (Jpn)

[Lymphocyte subpopulations in children with steroid responsive nephrotic syndrome] Hirose H. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1293–304 (Eng. Abstr.) (Jpn)

[A study of lymphocyte subset distribution and HLA–DR antigen expression in peripheral blood and in mucosa of the stomach, small intestine and colon] Hirata I, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2380–8 (Eng. Abstr.) (Jpn)

[Analysis of lymphocyte subpopulation and subsets in patients with idiopathic cardiomyopathy] Sakai H, et al. **Rinsho Byori** 1988 Jun;36(6):705–9 (Jpn)

[The changes in lymphocytes subpopulation and subsets in patients using different types of cardiopulmonary bypass] Sakai H, et al. **Rinsho Byori** 1989 Apr;37(4):390–6 (Jpn)

[Study of circulating lymphocytes by monoclonal antibodies in myasthenia gravis] Marchiori PE, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):248–53 (Eng. Abstr.) (Por)

[Lymphocyte subpopulations in patients with allergic dermatoses estimated using monoclonal antibodies] Sergeev IuV, et al. **Lab Delo** 1988;(7):50–3 (Eng. Abstr.) (Rus)

[T and B lymphocytes] Sepić–Grahovac D, et al. **Neurologija** 1988;37(1–2):39–47 (Eng. Abstr.) (Scr)

[Study of immune response in pregnancy. I. Lymphocyte populations] Rejas M, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):641–4 (Eng. Abstr.) (Spa)

CYTOLOGY

Determination of the growth fraction by means of immunostainings with monoclonal antibody Ki–67. Gerdes J. **Acta Histochem Suppl (Jena)** 1988;36:437–46

The expression of lymphocyte adhesion molecules on cultured high endothelial cells. Ager A, et al. **Adv Exp Med Biol** 1988;237:471–6

Morphological studies on mitogen and antigen presentation by human and rabbit cells. Balfour BM, et al. **Adv Exp Med Biol** 1988;237:843–8

Physical interaction between dendritic cells and lymphocytes is not LFA–1 mediated. Buss E, et al. **Adv Exp Med Biol** 1988;237:849–54

Homing receptor expression and migration of activated lymphocytes. Hamann A, et al. **Adv Exp Med Biol** 1988; 237:311–8

Establishment of lymph node derived endothelial cell lines which show lymphoid cell binding. Harder R, et al. **Adv Exp Med Biol** 1988;237:465–70

Changes in lymphocyte binding and expression of His 22 of high endothelial venules in rat lymph nodes after occlusion of afferent lymph flow. Hendriks HR, et al. **Adv Exp Med Biol** 1988;237:485–90

Interactions between lymphoid cells and a thymic stromal cell line in vitro. Hugo P, et al. **Adv Exp Med Biol** 1988; 237:357–62

Lymphocyte migration molecules. Jalkanen S, et al. **Adv Exp Med Biol** 1988;237:21–9 (28 ref.)

Migration and lodging of Peyer's patch IgA precursor cells in the gut lamina propria. Tseng J. **Adv Exp Med Biol** 1988; 237:615–9

Proliferation of large granular lymphocytes in the rat. Vaage JT, et al. **Adv Exp Med Biol** 1988;237:457–61

Characterization of cell populations, reappearing in the mouse spleen after elimination by liposome encapsulated dichloromethylene diphosphonate: reappearance of marginal zone lymphocytes is independent of marginal zone macrophages. van Rooijen N, et al. **Adv Exp Med Biol** 1988;237:889–93

Lymphocyte homing. Yednock TA, et al. **Adv Immunol** 1989; 44:313–78 (271 ref.)

A method for measuring lymphocyte proliferation in mixed lymphocyte cultures using a nuclear proliferation antigen, Ki–67, and flow cytometry. Palutke M, et al. **Am J Clin Pathol** 1989 Apr;91(4):417–21

ATFresno: a phenotype linking ataxia–telangiectasia with the Nijmegen breakage syndrome. Curry CJ, et al. **Am J Hum Genet** 1989 Aug;45(2):270–5

Trophic effects of first–trimester human trophoblasts and human chorionic gonadotropin on lymphocyte proliferation. Yagel S, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):946–53

Granular mucosal lymphocytes in porcine small intestine. Chu RM, et al. **Am J Vet Res** 1988 Sep;49(9):1456–9

Separation of bovine lymphocytes and granulocytes from blood by use of elutriation. Khansari N, et al. **Am J Vet Res** 1989 Aug;50(8):1263–5

Keratinocytes produce a lymphocyte inhibitory factor which is partially reversible by an antibody to transforming growth factor–beta. Nickoloff BJ. **Ann N Y Acad Sci** 1988; 548:312–20

Oncogene expression and regulation in normal lymphocytes and lymphocytes from patients with autoimmune diseases. Boumpas DT, et al. **Anticancer Res** 1988 Sep–Oct; 8(5A):977–84 (51 ref.)

Unravelling the complexity of intrathymic cell–cell interactions. Kyewski B. **APMIS** 1988 Dec;96(12):1049–60 (101 ref.)

Inhibition of cell proliferation by basic proteins from bull seminal plasma. Derwenskus KH, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):284–92

The effect of Staphylococcus aureus enterotoxin A on proliferation of lymphoid and nerve cells. Alakhov VYu, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):563–7

Sézary cell morphology induced in peripheral blood lymphocytes: re–evaluation. Chu AC, et al. **Blood** 1989 May 1;73(6):1603–7

Locomotion of white blood cells: a biophysical analysis. de Boisfleury–Chevance A, et al. **Blood Cells** 1989; 15(2):315–33

Sister chromatid exchange induced by etheno–ATP derivatives in vitro. Conner MK, et al. **Cancer Res** 1989 Jul 15;49(14):3839–43

Adhesion molecules controlling lymphocyte migration. Stoolman LM. **Cell** 1989 Mar 24;56(6):907–10 (19 ref.)

High endothelial venule morphology and function are inducible in germ–free mice: a possible role for interferon–gamma. Manolios N, et al. **Cell Immunol** 1988 Nov;117(1):136–51

Growth of IM–9 human lymphoblasts in serum–free medium: stimulation by glucocorticoids. Straus DS. **Cell Tissue Kinet** 1988 Mar;21(2):115–22

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. A reply [letter] Afane M, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):336–7

Immunocytochemical characterization of lymphocyte development in human embryonic and fetal livers. Abe J. **Clin Immunol Immunopathol** 1989 Apr;51(1):13–21

Lymphoid–restricted stem cells. Phillips RA, et al. **Curr Top Microbiol Immunol** 1988;141:11–5

Chromosomal aberrations in peripheral lymphocytes of cotton field workers exposed to pesticides. Rupa DS, et al. **Environ Res** 1989 Jun;49(1):1–6

Cytoplasmic CD3+ surface CD8+ lymphocytes develop as a thymus–independent lineage in chick–quail chimeras. Bucy RP, et al. **Eur J Immunol** 1989 Aug;19(8):1449–55

Proliferation of lymphocyte subsets in the adult rat: a comparison of different lymphoid organs. Westermann J, et al. **Eur J Immunol** 1989 Jun;19(6):1087–93

High yields of specific hybridomas obtained by electrofusion of murine lymphocytes immunized in vivo or in vitro. van Duijn G, et al. **Exp Cell Res** 1989 Aug;183(2):463–72
Inhibition of lymphocyte proliferation by antibodies to prolactin. Hartmann DP, et al. **FASEB J** 1989 Aug; 3(10):2194–202
The [Ca2+]i increase induced in murine thymocytes by extracellular ATP does not involve ATP hydrolysis and is not related to phosphoinositide metabolism. el-Moatassim C, et al. **FEBS Lett** 1989 Jan 2;242(2):391–6
The human blastocyst produces a soluble factor(s) that interferes with lymphocyte proliferation. Segars JH, et al. **Fertil Steril** 1989 Sep;52(3):381–7
The method of demonstration of prometaphase chromosomes. Panasiuk B, et al. **Folia Morphol (Warsz)** 1987;46(1–2):99–105
Cytogenetic methodologies for gene mapping and comparative analyses in mammalian cell culture systems. Modi WS, et al. **Gene Anal Tech** 1987 Jul–Aug;4(4):75–85
High-resolution studies on late-replicating segments (G + C bands) in mammalian chromosomes. Iannuzzi L, et al. **Hereditas** 1989;110(1):43–50
The breakpoints of spontaneous chromosome aberrations in lymphocytes from patients with non-Hodgkin's lymphoma are nonrandomly distributed. Johansson B, et al. **Hereditas** 1988;108(2):243–9
Mitotic cells in different lymphocyte subsets in unfractionated cultures stimulated by phytohaemagglutinin or pokeweed mitogen. Kovanen PE, et al. **Hereditas** 1989;110(1):69–74
Admixture of intact or lysed platelets to lymphocyte cultures results in higher chromosome aberration frequencies. Toor MA, et al. **Hereditas** 1988;108(2):219–21
Mechanisms and regulation of lymphocyte migration. Duijvestijn A, et al. **Immunol Today** 1989 Jan;10(1):23–8 (60 ref.)
Cytological analysis of lymphocytes [news] Micklem HS. **Immunol Today** 1988 Jan;9(1):1–2
The spleen in lymphocyte migration. Pabst R. **Immunol Today** 1988 Feb;9(2):43–5
Analysis of cell division among subpopulations of lymphoid cells in sheep. II. Peripheral lymphocytes. McClure S, et al. **Immunology** 1988 Nov;65(3):401–4
Cytokinetics and SCE baselines in rat and human lymphocytes during successive divisions in the presence of different culture media. Sinha AK, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):927–30
Studies of spontaneous proliferation of mononuclear cells in human immunodeficiency virus (HIV-1)-infected individuals. deShazo RD, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):34–9
Plasma membrane lipid organization and the adherence of differentiating lymphocytes to macrophages. Del Buono BJ, et al. **J Cell Physiol** 1989 Jan;138(1):61–9
Effect of initial treatment of chronic inflammatory periodontal disease in adults on spontaneous peripheral blood lymphocyte proliferation. Evans RI, et al. **J Clin Periodontol** 1989 May;16(5):271–7
Propagation and characterization of lymphocytes from rejecting human cardiac allografts. Carlquist JF, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):397–406
Lymphocyte growth from cardiac allograft biopsy specimens with no or minimal cellular infiltrates: association with subsequent rejection episode. Weber T, et al. **J Heart Transplant** 1989 May–Jun;8(3):233–40
Monocyte-lymphocyte discrimination in a new microtitre-based adhesion assay. Bath PM, et al. **J Immunol Methods** 1989 Mar 10;118(1):59–65
A single step centrifugation method for the enrichment of veiled cells from canine afferent lymph. Galkowska H, et al. **J Immunol Methods** 1989 Jan 17;116(2):207–12
Cytometric analysis of the proliferative capacity of HUT 102 lymphoblasts exposed to long-wave UV light and psoralen. Hornicek FJ, et al. **J Invest Dermatol** 1989 Jul;93(1):96–9
Macrophages, lymphocytes and major histocompatibility complex (HLA) class II antigens in adult human sensory and sympathetic ganglia. Esiri MM, et al. **J Neuroimmunol** 1989 Aug;23(3):187–93
Stimulatory effect of corticotropin-releasing neurohormone on human lymphocyte proliferation and interleukin-2 receptor expression. Singh VK. **J Neuroimmunol** 1989 Aug; 23(3):257–62
Reduction in uterine intra-epithelial lymphocytes during early gestation in pigs. King GJ. **J Reprod Immunol** 1988 Oct;14(1):41–6
Depletion and repopulation of lymphocytes in Peyer's patches of mice after total lymphoid irradiation. Ermak TH, et al. **Lab Invest** 1988 Nov;59(5):591–7
The nature of the adherent hemopoietic cells in human long-term bone marrow cultures (HLTBMCs): presence of lymphocytes and plasma cells next to the myelomonocytic population. Berneman ZN, et al. **Leukemia** 1989 Sep;3(9):648–61
Passageway for recirculating lymphocytes in lymph node of the rat. He YC, et al. **Lymphology** 1988 Dec;21(4):239–41
Age-related changes in the proliferative kinetics of phytohemagglutinin-stimulated lymphocytes. Analysis by uptake of tritiated precursors of DNA, RNA and proteins, and by flow cytometry. Lucivero G, et al. **Mech Ageing Dev** 1988 Jun;43(3):259–67
Effect of co-incubation with cytomegalovirus on growth of interleukin 2-dependent lymphocytes. Numazaki K, et al. **Microb Pathog** 1988 Feb;4(2):137–44
The analysis of immature lymphoid precursors stored in longterm bone marrow culture. Miyazoe I, et al. **Microbiol Immunol** 1988;32(6):607–20
Analysis of chromosomes in peripheral blood lymphocytes of styrene-exposed workers. Jablonická A, et al. **Mutat Res** 1988 Oct;206(2):167–9
In vitro induction of chromosome damage by sulphasalazine in human lymphocytes. Mackay JM, et al. **Mutat Res** 1989 Jan;222(1):27–36
Effect of cisplatin on con A agglutinability of different lymphoid cells of Swiss albino rats. Prasad SB. **Neoplasma** 1989;36(2):171–7
Effect of superoxide dismutase on X-ray induced chromosome aberrations and cell cycle delay in muntjac lymphocytes. Chatterjee A, et al. **Pharmacol Ther** 1988; 39(1–3):323–5
Chromosomes of older humans are more prone to aminopterine-induced breakage. Esposito D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1302–6
Lymphocyte antigen Leu-19 as a molecular marker of regeneration in human skeletal muscle. Schubert W, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):307–11
Cell volume regulation in lymphocytes. Deutsch C, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):260–76 (66 ref.)
Lymphocyte recirculation in cattle: patterns of localization by mammary and mesenteric lymph node lymphocytes. Harp JA, et al. **Vet Immunol Immunopathol** 1988 Dec; 20(1):31–9
An improved method for the isolation of enriched canine peripheral blood mononuclear cell and peripheral blood lymphocyte preparations. Wunderli PS, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):335–44
[Differentiation pathways of normal and malignant cells of the lymphatic system] Stein H, et al. **Verh Dtsch Ges Pathol** 1988;72:57–85 (82 ref.) (Eng. Abstr.) (Ger)
[Morphometric observations on anisotropy of lymphocyte membranes] Manodoro V, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):597–603 (Eng. Abstr.) (Ita)
[Mechanisms of the formation of micronuclei in human lymphocyte cultures exposed to mitomycin C] Shinkawa K, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):628–33 (Eng. Abstr.) (Jpn)
[Ellipsoids of the spleen (ellipsoid macrophagal-lymphoid sheaths] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):5–13 (32 ref.) (Eng. Abstr.) (Rus)
[Problem of the expediency of studying a new biological phenomenon "emperipolesis"] Mikhallovskaia EV. **Gematol Transfuziol** 1989 Mar;34(3):60–2 (Rus)
[Effect of chromosomal constitution with respect to the sex chromosomes on the proliferative activity of human lymphocytes] Nazarenko SA, et al. **Genetika** 1988 Dec; 24(12):2219–25 (Eng. Abstr.) (Rus)
[A micromethod of preparing a pure suspension of lymphocytes] Kirzon SS, et al. **Lab Delo** 1988;(9):46–8 (Eng. Abstr.) (Rus)
[A morphometric method of studying blood lymphocytes] Liberman LN, et al. **Lab Delo** 1989;(2):18–20 (Eng. Abstr.) (Rus)
[Lymphopoietic characteristics in acute hypobaric hypoxia] Filev LV, et al. **Tsitologiia** 1988 Oct;30(10):1242–6 (Eng. Abstr.) (Rus)
[Active metabolites of vitamin D as mediators of the processes of cell proliferation and differentiation. 1. Lymphocytes] Pletsityĭ KD. **Vopr Med Khim** 1988 Sep–Oct;34(5):9–14 (41 ref.) (Rus)
[Radiosensitivity of chromosomes and the kinetics of division of peripheral lymphocytes in individuals with an aneuploid karyotype] Konečná H, et al. **Bratisl Lek Listy** 1988 Aug; 89(8):615–8 (Eng. Abstr.) (Slo)

DRUG EFFECTS

Studies of food allergy—lymphocyte blastogenesis to ovalbumin or bovine serum albumin for detection of allergens in hen's egg and cow's milk allergy. Kondo N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):667–71
Ochratoxin A as a suppressor of mitogen-induced blastogenesis of porcine blood lymphocytes. Holmberg T, et al. **Acta Vet Scand** 1988;29(2):219–23
A pharmacologic study of the relationship between lymphocyte function and surface antigen expression. Bliven ML, et al. **Agents Actions** 1988 Aug;25(1–2):86–93
Actions of nonsteroidal anti-inflammatory drugs on the functions of lymphocytes. Rainsford KD. **Agents Actions Suppl** 1988;24:54–65 (47 ref.)
Effect of acute ethanol intake and hangover on the levels of plasma and urinary catecholamines and lymphocytic beta-adrenergic receptors. Heikkonen E, et al. **Alcoholism (NY)** 1989 Feb;13(1):20–4
alpha-Linolenic acid and long-chain omega-3 fatty acid supplementation in three patients with omega-3 fatty acid deficiency: effect on lymphocyte function, plasma and red cell lipids, and prostanoid formation. Bjerve KS, et al. **Am J Clin Nutr** 1989 Feb;49(2):290–300
Cell cycle perturbation and cell death after exposure of a human lymphoblastoid cell strain to N-methyl-N'-nitro-N-nitrosoguanidine. Black KA, et al. **Am J Pathol** 1989 Jan;134(1):53–61
Systemic effects of vitamin D. Reichel H, et al. **Annu Rev Med** 1989;40:71–8 (30 ref.)
Production of lymphokine-activated lymphocytes. Lysis of human head and neck squamous cell carcinoma cell lines. Alessi DM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):725–30
Immunosuppressive effects of the macrolide antibiotic bafilomycin towards lymphocytes and lymphoid cell lines. Heinle S, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1130–3
Azathioprine lymphocytotoxicity. Potentially lethal damage by its imidazole derivatives. Sauer H, et al. **Arzneimittelforschung** 1988 Jun;38(6):820–4
Enhanced protein phosphorylation, IL-2 receptor expression, and IL-2 production precede cellular proliferation in lymphocytes oxidized by periodic acid. Malinin GI, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):590–4
Growth hormone, lymphocytes and macrophages. Kelley KW. **Biochem Pharmacol** 1989 Mar 1;38(5):705–13 (103 ref.)
Modulation of lymphocyte nuclear matrix organization in vivo by 5,6-dichloro-1-beta-D-ribofuranosyl benzimidazole: an autoradiographic and immunofluorescence study. Chaly N, et al. **Biol Cell** 1988; 63(1):9–17
Glucocorticosteroids induce DNA fragmentation in human lymphoid leukemia cells. Distelhorst CW. **Blood** 1988 Oct; 72(4):1305–9
Potentiation of methotrexate lymphocytotoxicity in vitro by inhibitors of nucleoside transport. Hughes JM, et al. **Br J Cancer** 1989 Mar;59(3):381–4
Tumour cell products inhibit both functional and immunoreactive interleukin 2 production by human blood lymphocytes. Nelson M, et al. **Br J Cancer** 1989 Aug; 60(2):161–3
Spontaneous and interleukin 2 induced secretion of tumour necrosis factor and gamma interferon following autologous marrow transplantation or chemotherapy. Heslop HE, et al. **Br J Haematol** 1989 Jun;72(2):122–6
Sister chromatid exchange analysis in lymphocytes of workers exposed to hexavalent chromium. Nagaya T, et al. **Br J Ind Med** 1989 Jan;46(1):48–51
Contrasting in vitro lymphocyte chemotactic activity of the hydroxyl enantiomers of 12-hydroxy-5,8,10,14-eicosatetraenoic acid. Bacon KB, et al. **Br J Pharmacol** 1988 Nov;95(3):966–74
In vitro effect of monocrotophos on human lymphocytes. Rupa DS, et al. **Bull Environ Contam Toxicol** 1988 Nov; 41(5):737–41
Recombinant human interleukin-2-induced mitogenic proliferation of in vitro unstimulated bovine intestinal lymphocytes. Nagi AM, et al. **Can J Vet Res** 1989 Jan; 53(1):68–75
Functional and phenotypic analysis of tumor-infiltrating lymphocytes isolated from human primary and metastatic liver tumors and cultured in recombinant interleukin-2. Takagi S, et al. **Cancer** 1989 Jan 1;63(1):102–11
Enhancement of murine mixed lymphocyte response by 1,1-dimethylhydrazine: characterization and possible mechanism. Tarr MJ, et al. **Cancer Detect Prev** 1988; 12(1–6):573–81
Intraperitoneal administration of human recombinant interferon-alpha in patients with ovarian cancer: effects on lymphocyte phenotype and cytotoxicity. Lichtenstein A, et al. **Cancer Res** 1988 Oct 15;48(20):5853–9
Effect of swainsonine on stimulation and cell cycle progression of human lymphocytes. Myc A, et al. **Cancer Res** 1989 Jun 1;49(11):2879–83
The production of chromosomal alterations in human lymphocytes by drugs known to interfere with the activity of DNA topoisomerase II. I. m-AMSA. Andersson HC, et al. **Carcinogenesis** 1989 Jan;10(1):123–30
The relationship between O6-alkylguanine alkyltransferase activity and sensitivity to alkylation-induced sister chromatid exchanges in human lymphoblastoid cell lines. Schwartz JL, et al. **Carcinogenesis** 1989 Apr;10(4):681–5
Hydroxy- and hydroperoxy-6,8,11,14-eicosatetraenoic acids induce DNA strand breaks in human lymphocytes. Weitberg AB, et al. **Carcinogenesis** 1989 Jun;10(6):1029–31
Effects of enalapril on lymphocyte sodium, potassium, magnesium and calcium levels in patients with severe congestive heart failure. Abraham AS, et al. **Cardiology** 1988;75(5):338–43
Effect of chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on sister chromatid exchange levels in peripheral lymphocytes of the rhesus monkey. Lim M, et al. **Cell Biol Toxicol** 1987 Sep; 3(3):279–84
Indomethacin augments in vitro proliferative responses of Lewis rat lymphocytes to myelin basic protein. Implications for experimental autoimmune encephalomyelitis. Mannie MD, et al. **Cell Immunol** 1989 Jun;121(1):196–212
Full replacement of 2-mercaptoethanol by cysteine plus selenium compounds in augmenting DNA synthesis of mitogen-stimulated mouse spleen lymphocytes. Ishii T, et al. **Cell Struct Funct** 1989 Jun;14(3):287–97
Four sulfhydryl-modifying compounds cause different structural damage but similar functional damage in murine lymphocytes. Duncan DD, et al. **Chem Biol Interact** 1988; 68(1–2):137–52
Placental protein 14 (PP14) inhibits the synthesis of interleukin-2 and the release of soluble interleukin-2 receptors from phytohaemagglutinin-stimulated lymphocytes. Pockley AG, et al. **Clin Exp Immunol** 1989 Aug;77(2):252–6

Decreased myometrial beta-adrenoceptors in women receiving beta 2-adrenergic tocolytic therapy: correlation with lymphocyte beta-adrenoceptors. Michel MC, et al. **Clin Pharmacol Ther** 1989 Jan;45(1):1-8

Effect of sodium diethyldithiocarbamate, Corynebacterium parvum and mycobacterium cell wall extract on in vitro blastogenic responses of bovine blood lymphocytes. Archambault D, et al. **Cornell Vet** 1989 Jan;79(1):11-24

Factors that influence formation of sister chromatid exchanges in human blood lymphocytes. Das BC. **CRC Crit Rev Toxicol** 1988;19(1):43-86 (387 ref.)

Indomethacin inhibition of IL-2-induced splenocyte proliferation. Franceschi D, et al. **Curr Surg** 1988 Nov-Dec;45(6):474-6

Synergistic effect of DAPI and thymidylate stress conditions on the induction of common fragile sites. Rocchi A, et al. **Cytogenet Cell Genet** 1988;48(1):51-4

Oral administration of cyclosporin does not prevent expansion of antigen-specific, gut-associated, and spleen lymphocyte populations during Chlamydia trachomatis proctitis in nonhuman primates. Zeitz M, et al. **Dig Dis Sci** 1989 Apr;34(4):585-95

Effects of metal ions on cyprinid fish immune response: in vitro effects of Zn2+ and Mn2+ on the mitogenic response of carp pronephros lymphocytes. Ghanmi Z, et al. **Ecotoxicol Environ Safety** 1989 Apr;17(2):183-9

The effects of acrylamide on mouse germ-line and somatic cell chromosomes. Backer LC, et al. **Environ Mol Mutagen** 1989;13(3):218-26

Individual and strain differences in patterns of long-term persistence of urethane-induced sister chromatid exchanges (SCEs) in mouse lymphocytes and their relation to carcinogen susceptibility. Endo A, et al. **Environ Mol Mutagen** 1988;12(4):375-83

Synergistic induction of cytogenetic damage by alkylating antineoplastics and 5-azacytidine in human lymphocytes. Ioannidou E, et al. **Environ Mol Mutagen** 1989;14(1):6-12

Effects of 3'-azido-3'-deoxythymidine (AZT) on short-term cultured human peripheral blood lymphocytes. Tauris P, et al. **Eur J Clin Invest** 1989 Apr;19(2):167-71

Effects of pertussis toxin and indomethacin on murine lymphocytes in the bronchoalveolar lavage fluids. Torre D, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):209-12

Effects of two different hydrocortisone doses on human peripheral blood lymphocyte nucleologram. Malacarne P, et al. **Folia Biol (Praha)** 1989;35(1):13-8

Nucleologram variations in circulating lymphocytes after chemotherapy. Malacarne P, et al. **Folia Biol (Praha)** 1986; 32(5):349-53

Uptake and metabolism of T-2 toxin in relation to its cytotoxicity in lymphoid cells. Porcher JM, et al. **Food Chem Toxicol** 1988 Jul;26(7):587-93

Mutagen-induced chromosome fragility within peripheral blood lymphocytes of head and neck cancer patients. Schantz SP, et al. **Head Neck** 1989 Jul-Aug;11(4):337-42

Expression of folate-sensitive fragile sites in lymphocyte chromosomes. Fuster C, et al. **Hum Genet** 1989 Feb; 81(3):243-6

Micronuclei in cytokinesis-blocked lymphocytes as an index of occupational exposure to alkylating cytostatic drugs. Yager JW, et al. **IARC Sci Publ** 1988;(89):213-6

Lymphocyte motility and lymphocyte chemoattractant factors. Berman JS, et al. **Immunol Invest** 1988 Nov-Dec; 17(8-9):625-77 (185 ref.)

Induction of tumor necrosis factor synthesis in human monocytes treated by transcriptional inhibitors. Voitenok NN, et al. **Immunol Lett** 1989 Jan 15;20(1):77-82

Inhibition by glucocorticoids of mitogen-dependent histamine biosynthesis caused by histidine decarboxylase in cultured mouse spleen cells and peritoneal adherent cells. Oh C, et al. **Immunology** 1988 Nov;65(3):433-6

Spleen lymphocyte populations and expression of activation markers in rats treated with the potent new immunosuppressive agent FK-506. Woo J, et al. **Immunology** 1988 Sep;65(1):153-5

Effects of lentinan on cytotoxic functions of human lymphocytes. Péter G, et al. **Immunopharmacol Immunotoxicol** 1988;10(2):157-63

Aspirin and thymosin increase interleukin-2 and interferon-gamma production by human peripheral blood lymphocytes. Hsia J, et al. **Immunopharmacology** 1989 May-Jun;17(3):167-73

In vivo depression of lymphocyte traffic in sheep by VIP and HIV (AIDS)-related peptides. Moore TC, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):181-9

Potent mitogenic activity of staphylococcal enterotoxin A requires induction of interleukin 2. Johnson HM, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):87-90

Effect of ricin on the proliferation of rat spleen and mesenteric lymph node cells. Kemeny DM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):231-3

Modulation of lymphocyte and monocyte responses in vitro by 9-deoxy-delta 9-prostaglandin D2 and 9-deoxy-delta 9-delta 12-prostaglandin D2. Petrini B, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):388-91

Effects of insulin on pyruvate dehydrogenase in circulating lymphocytes from normal and diabetic rats. Rinaudo MT, et al. **Int J Biochem** 1988;20(7):667-74

Chromosomal aberrations in lymphocytes of patients treated with melphalan. Mamuris Z, et al. **Int J Cancer** 1989 Jan 15;43(1):80-6

Phenotypic and functional characteristics of tumor-associated lymphocytes in patients with malignant ascites receiving intraperitoneal infusions of recombinant interleukin-2 (rIL-2). Melioli G, et al. **Int J Cancer** 1989 Feb 15;43(2):231-4

Properties of recombinant interleukin 2-cultured tumor-infiltrating lymphocytes in human lung cancer. Yano T, et al. **Int J Cancer** 1989 Apr 15;43(4):619-23

The muscarinic agonist pilocarpine inhibits DNA and interferon-gamma synthesis in peripheral blood mononuclear cells. Arzt ES, et al. **Int J Immunopharmacol** 1989;11(3):275-81

Oral treatment with RU 41.740 (Biostim) in patients with advanced colorectal cancer: influence on the blood lymphocyte population. Blomgren H, et al. **Int J Immunopharmacol** 1989;11(1):71-6

Studies on the immunosuppressive properties of 7,25-dihydroxycholesterol--I. Reduction of interleukin production by treated lymphocytes. Moog C, et al. **Int J Immunopharmacol** 1988;10(5):511-8

Effects of ketotifen on the responsiveness of peripheral blood lymphocyte beta-adrenergic receptors. Polson JB, et al. **Int J Immunopharmacol** 1988;10(6):657-63

Procainamide hydroxylamine lymphocyte toxicity--I. Evidence for participation by hemoglobin. Roberts SM, et al. **Int J Immunopharmacol** 1989;11(4):419-27

Opposite effects of amines on lymphocyte- and monocyte-mediated ADCC. Serebrinsky G, et al. **Int J Immunopharmacol** 1988;10(5):555-61

Increased capacity of lymphocytes to lyse tumor cells in vitro and production of lymphotoxins after cisplatin treatment. Sodhi A, et al. **Int J Immunopharmacol** 1988;10(6):753-61

The effect of non-steroidal anti-inflammatory drugs on phytohaemagglutinin stimulated lymphocytes: relevance to possible therapeutic immunosuppression by fenclofenac. Spiers EM, et al. **Int J Immunopharmacol** 1988;10(3):261-9

Blocking of lymphocyte surface binding sites for the soluble suppressor factor by protein-bound polysaccharide, PSK. Toge T, et al. **Int J Immunopharmacol** 1989;11(1):9-12

Effect of cytosine arabinoside on the human immunosystem: metabolism and cytotoxicity studied with mitogen-stimulated normal blood lymphocytes in vitro. Vilpo JA, et al. **Int J Immunopharmacol** 1988;10(5):593-600

Study on the interference of ticlopidine on the immune system. Barcellini W, et al. **Int J Tissue React** 1988; 10(3):183-8

Effects of retinoic acid and phorbol ester on lymphocytes and monocytes in B-lymphocytic leukemia. Polliack A, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9-10):522-32

Glucocorticoid-induced lymphocytolysis is not mediated by an induced endonuclease. Alnemri ES, et al. **J Biol Chem** 1989 Mar 5;264(7):4104-11

Effects of coumarin (1,2-benzopyrone) on lymphocyte, natural killer cell, and monocyte functions in vitro. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):70-85

Effects of coumarin (1,2-benzopyrone) and cimetidine on peripheral blood lymphocytes, natural killer cells, and monocytes in patients with advanced malignancies. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):62-9

Transient decrease in IL-2-responsive lymphocytes 24 hours after initiation of continuous IL-2 infusion in cancer patients. Weil-Hillman G, et al. **J Biol Response Mod** 1988 Oct;7(5):424-37

Cytogenetic effects of N-nitrosodiethanolamine (NDELA) and NDELA-monoacetate in human lymphocytes. Dittberner U, et al. **J Cancer Res Clin Oncol** 1988; 114(6):575-8

Involvement and relative importance of at least two distinct mechanisms in the effects of 2-mercaptoethanol on murine lymphocytes in culture. Pruett SB, et al. **J Cell Physiol** 1989 Oct;141(1):40-5

Actin depolymerization and inhibition of capping induced by pentoxifylline in human lymphocytes and neutrophils. Rao KM, et al. **J Cell Physiol** 1988 Dec;137(3):577-82

Effects of phorbol esters on shape and locomotion of human blood lymphocytes. Wilkinson PC, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):645-55

Immune function in patients treated with phenytoin. Burks AW, et al. **J Child Neurol** 1989 Jan;4(1):25-9

Increase in H-Y antigen-positive lymphocytes in hirsute women: effects of cyproterone acetate and estradiol treatment. Amice V, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):58-62

Oligonucleotide linked to human gammaglobulin specifically diminishes anti-DNA antibody formation in cultured lymphoid cells from patients with systemic lupus erythematosus. Borel Y, et al. **J Clin Invest** 1988 Dec; 82(6):1901-7

Effect of recombinant soluble CD4 on human peripheral blood lymphocyte responses in vitro. Liu MA, et al. **J Clin Invest** 1988 Dec;82(6):2176-80

Influence of methisoprinol (isoprinosine) on HIV-infected human lymphocytes: in vitro immunological, virological, and ultrastructural studies. De Simone C, et al. **J Clin Lab Anal** 1989;3(1):26-33

Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al. **J Clin Microbiol** 1989 Aug;27(8):1748-53

Bovine vitamin A and beta-carotene intake and lactational status. 2. Responsiveness of mitogen-stimulated peripheral blood lymphocytes to vitamin A and beta-carotene challenge in vitro. Tjoelker LW, et al. **J Dairy Sci** 1988 Nov;71(11):3120-7

Resistance of cytolytic lymphocytes to perforin-mediated killing. Lack of correlation with complement-associated homologous species restriction. Jiang SB, et al. **J Exp Med** 1988 Dec 1;168(6):2207-19

Effects of the immunomodulator LS 2616 on lymphocyte subpopulations in murine Coxsackievirus B3 myocarditis. Ilbäck NG, et al. **J Immunol** 1989 May 1;142(9):3225-8

Intravenously injected sialidase inactivates attachment sites for lymphocytes on high endothelial venules. Rosen SD, et al. **J Immunol** 1989 Mar 15;142(6):1895-902

Inhibition of lymphocyte recirculation by murine interferon: effects of various interferon preparations and timing of administration. Mann EA, et al. **J Interferon Res** 1989 Feb; 9(1):35-51

Interferon-induced inhibition of lymphocyte circulation: lack of effect on humoral immune responses to T-dependent or T-independent antigens. Mann EA, et al. **J Interferon Res** 1988 Dec;8(6):735-43

Inhibition of antiskin allograft immunity by infusions with syngeneic photoinactivated effector lymphocytes. Perez M, et al. **J Invest Dermatol** 1989 May;92(5):669-76

Concentration and time-dependent inter-relationships for cytotoxicities of nitrogen mustard drugs against lymphoblasts in-vitro. Ehrsson H, et al. **J Pharm Pharmacol** 1988 Dec;40(12):834-7

Levels of the 90kd heat shock protein and resistance to glucocorticoid-mediated cell killing in a range of human and murine lymphocyte cell lines. Norton PM, et al. **J Steroid Biochem** 1989 Aug;33(2):149-54

Diverse effects of three furocoumarins on human lymphocyte proliferation. Arslan P, et al. **Life Sci** 1989;44(26):2097-104

Endotoxin-induced reduction of beta-adrenergic binding sites on splenic lymphocytes in vivo and in vitro: its modulation by anterior hypothalamic lesions. Van Oosterhout AJ, et al. **Life Sci** 1989;44(1):57-65

Enhancement of interleukin-2 production in human lymphocytes by two new quinolone derivatives. Zehavi-Willner T, et al. **Lymphokine Res** 1989 Spring; 8(1):35-46

Study of the in vitro cell proliferation of lymphocytes from Manson's schistosomiasis patients treated with praziquantel. Almeida TM, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:243

Effects of serine proteinase from Staphylococcus aureus V8 cells on Con A stimulation of human lymphocytes. Porwit-Bobr Z, et al. **Microbiologica** 1989 Apr; 12(2):139-42

In vitro induction of sister-chromatid exchanges after G0 exposure of human lymphocytes to five naphthofurans. Lasne C, et al. **Mutagenesis** 1989 Jan;4(1):27-30

Specificity of melphalan-induced rearrangements and their transmission through cell divisions. Mamuris Z, et al. **Mutagenesis** 1989 Mar;4(2):133-9

Analysis of cytogenetic damage induced in cultured human lymphocytes by the pyrethroid insecticides cypermethrin and fenvalerate. Puig M, et al. **Mutagenesis** 1989 Jan; 4(1):72-4

Effect of 3-aminobenzamide on chromosome damage in human blood lymphocytes adapted to bleomycin. Vijayalaxmi, et al. **Mutagenesis** 1989 May;4(3):187-9

Variable sister-chromatid exchange response in human lymphocytes exposed in vitro to gossypol acetic acid. Best RG, et al. **Mutat Res** 1988 Oct;206(2):227-33

Lack of sister-chromatid exchange induction by polymethyl methacrylate bone cement in human lymphocytes cultured in vitro. Bigatti MP, et al. **Mutat Res** 1989 Sep;227(1):21-4

A comparison of sister-chromatid exchange in mouse peripheral blood lymphocytes exposed in vitro and in vivo to phosphoramide mustard and 4-hydroxycyclophosphamide. Bryant MF, et al. **Mutat Res** 1989 Mar;222(3):271-7

Long-term, low-dose benzo[a]pyrene-induced mutation in human lymphoblasts competent in xenobiotic metabolism. Danheiser SL, et al. **Mutat Res** 1989 Jan;210(1):143-7

Cytotoxic and genotoxic effects of extracellular generated singlet oxygen in human lymphocytes in vitro. Decuyper-Debergh D, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):11-4

Aroclor-1254-induced rat-liver S9 causes chromosomal aberrations in CHO cells but not human lymphocytes: a role for active oxygen? Kirkland DJ, et al. **Mutat Res** 1989 Sep;214(1):115-22

Genotoxicity of coal fly ash, assessed in vitro in Salmonella typhimurium and human lymphocytes, and in vivo in an occupationally exposed population. Kleinjans JC, et al. **Mutat Res** 1989 Sep;224(1):127-34

Enhancement of cytogenetic damage by chlorpromazine in human lymphocytes treated with alkylating antineoplastics and caffeine. Lialiaris T, et al. **Mutat Res** 1988 Nov; 206(3):361-5

Induction of sister-chromatid exchanges by direct and indirect mutagens in human lymphocytes, co-cultured with intact rat liver cells. Effect of enzyme induction and preservation of the liver cells by freezing in liquid nitrogen. Lindahl-Kiessling K, et al. **Mutat Res** 1989 Mar; 211(1):77-87

Sister-chromatid exchanges in lymphocytes of workers exposed to trichloroethylene. Nagaya T, et al. **Mutat Res** 1989 Mar;222(3):279-82

Triethylene melamine-induced sister-chromatid exchange in murine lymphocytes exposed in vivo. Neft RE, et al. **Mutat Res** 1989 Apr;222(4):323–8

Mutagenicity of acrylonitrile and its metabolite 2-cyanoethylene oxide in human lymphoblasts in vitro. Recio L, et al. **Mutat Res** 1988 Oct;206(2):297–305

Analysis of sister-chromatid exchanges, cell kinetics and mitotic index in lymphocytes of smoking pesticide sprayers. Rupa DS, et al. **Mutat Res** 1989 Jun;223(2):253–8

Chromosomal sensitivity of lymphocytes from individuals with therapy-related acute nonlymphocytic leukemia. Schwartz JL, et al. **Mutat Res** 1989 Apr;216(2):119–26

Increased frequency of sister-chromatid exchange induced by dothistromin in CHO cells and human lymphocytes. Skinnider L, et al. **Mutat Res** 1989 Mar;222(3):167–70

Detection of 6-thioguanine resistance in human peripheral blood lymphocytes (PBL) of industrial workers and lung cancer patients. Tompa A, et al. **Mutat Res** 1989 Feb; 210(2):345–51

Resistance and cross-resistance to chromosome damage in human blood lymphocytes adapted to bleomycin. Vijayalaxmi, et al. **Mutat Res** 1989 Mar;211(1):1–5

Effect of nicotinic acid supplementation in vivo on oxygen radical-induced genetic damage in human lymphocytes. Weitberg AB. **Mutat Res** 1989 Aug;216(4):197–201

Restoration of immune response by levamisole in B-77 virus induced tumor-bearing rats. Kalafut F, et al. **Neoplasma** 1988;35(4):369–78

Membrane fluidity of equine, bovine and canine lymphocytes during stimulation with concanavalin A. Tajima M, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):621–3

Folate status of patients on low-dose methotrexate therapy. **Nutr Rev** 1989 Feb;47(2):43–5 (17 ref.)

A membrane fluidizing factor in sera from Duchenne muscular dystrophy patients: effect on lymphocyte membranes of incubation in patient and control lipoproteins. Hübner C, et al. **Pediatr Res** 1989 Jun; 25(6):656–9

Influence of substance P and substance P—sequences on immunocompetent cells. Paegelow I, et al. **Pharmazie** 1989 Feb;44(2):145–6

Fluorinated 4-quinolones induce hyperproduction of interleukin 2. Riesbeck K, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2809–13

Genetic conditioning of the in vitro human lymphocyte sensitivity to cyclosporin-A. Scorza R, et al. **Recenti Prog Med** 1988 Jul-Aug;79(7–8):338–42

Forskolin potentiates isoproterenol induced beta adrenoceptor desensitization in intact human lymphocytes. Yu JL, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):3–16

Use of cyproterone acetate to lower circulating corticosterone and its effects on lymphocytes in domestic fowl. Davison TF, et al. **Res Vet Sci** 1989 Jan;46(1):105–9

Effect of ciprofloxacin on human lymphocytes—laboratory studies. Forsgren A, et al. **Scand J Infect Dis Suppl** 1989; 60:39–45 (20 ref.)

Toxic and DNA-damaging activities of the fungicides mancozeb and thiram (TMTD) on human lymphocytes in vitro. Perocco P, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):75–81

Alteration of bronchoalveolar lavage cell populations following bleomycin treatment in mice. Janick-Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):465–73

Mitotic arrest induced by fenvalerate in human lymphocyte cultures. Carbonell E, et al. **Toxicol Lett** 1989 Jul;48(1):45–8

Genotoxic effects of MeCCNU on human peripheral blood lymphocytes. Vyas RC, et al. **Toxicol Lett** 1988 Nov; 44(1–2):153–9

Toxicity of fenclor 42 in mice: effects on immunocompetent cells. Franco P, et al. **Toxicology** 1989 Feb;54(2):207–18

Effects of aflatoxin B1 on murine lymphocytic functions. Reddy RV, et al. **Toxicology** 1989 Jan;54(1):31–44

Effect of FK-506 and cyclosporine on human lymphocyte responses in vitro. Beck Y, et al. **Transplant Proc** 1989 Jun; 21(3):3464–7

Vesico-ureteric reflux and lymphoid resistance to in vitro steroid: adverse risk factors for renal transplantation. Dumble LJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2179–81

New method of immunosuppression by selective destruction of CTL by a photodynamic effect. Satomi S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1134–6

Immunosuppressive activity, lymphocyte subset analysis, and acute toxicity of FK-506 in the rat. A comparative and combination study with cyclosporine. Stephen M, et al. **Transplantation** 1989 Jan;47(1):60–5

Effect of a new immunosuppressive agent, FK506, on human lymphocyte responses in vitro. II. Inhibition of the production of IL-2 and gamma-IFN, but not B cell-stimulating factor 2. Yoshimura N, et al. **Transplantation** 1989 Feb;47(2):356–9

Effect of ethanol extract of cancer patients' serum on the vulnerability of lymphocytes to cortisol. Klein A, et al. **Tumour Biol** 1988;9(5):233–40

[The micronuclei detection test in stimulated human peripheral lymphocytes using cytochalasin B] Kočišlová J, et al. **Cas Lek Cesk** 1989 Apr 28;128(18):568–70 (Eng. Abstr.) (Cze)

[Sister chromatid exchange and accidental exposure to phenyl-mercury acetate] Mudry de Pargament MD, et al. **Bol Estud Med Biol** 1987 Jul-Dec;35(3–4):207–11 (Eng. Abstr.) (Fre)

[Determination of the 8-methoxypsoralen spectrum of action in vitro on lymphocytes] Gast W, et al. **Dermatol Monatsschr** 1988;174(7):419–20 (Ger)

[The combined effect of cisplatin and aclarubicin on human lymphocytes in vitro] Chen JT, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):67–71 (Eng. Abstr.) (Jpn)

[DNA damage and repair in human lymphocytes under the activation of molecular oxygen] Binková B, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):676–8 (Eng. Abstr.) (Rus)

[Effects of adrenoreceptor stimulation on in vitro spontaneous lymphocyte adhesion] Kharkevich DD. **Biull Eksp Biol Med** 1989 Jan;107(1):54–6 (Eng. Abstr.) (Rus)

[Enhanced inhibition of splenic lymphocyte proliferation by 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57Bl/10 (Ah+Ah+) mice compared to DBA/2 (AhAh) mice] Pavliak AL, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):331–3 (Eng. Abstr.) (Rus)

[Effect of oxoplatin and platidiam on human melanoma strains and functional activity of blood lymphocytes in athymic mice] Bukharova IK, et al. **Eksp Onkol** 1988; 10(5):55–7 (Eng. Abstr.) (Rus)

[Comparative evaluation of the effect of carbidine and levamisole on the E-rosette-forming activity of the lymphocytes in alcoholic intoxication] Proskuriakova TV, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):94–8 (Eng. Abstr.) (Rus)

[Interrelation of the expression of lymphocyte Fc receptors modified by prostaglandins and isoproterenol with the level of lipid metabolism] Izvekova VA, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):466–71 (Rus)

[Cytogenetic effect of thalidastine in a culture of human peripheral blood lymphocytes] Khadzhidekova V, et al. **Genetika** 1988 Dec;24(12):2237–42 (Eng. Abstr.) (Rus)

[Mechanism of action of interferon is linked to its ability to protect the cell from interstrand cross-linking of DNA, induced by 8-methoxypsoralen, activated by long-wave UV-light] Makedonov GN, et al. **Genetika** 1989 Mar; 25(3):552–4 (Eng. Abstr.) (Rus)

[A method of determining the cortisol-resistant fraction of lymphocytes in microvolumes] Chonka IaV, et al. **Lab Delo** 1988;(10):29–31 (Eng. Abstr.) (Rus)

[The effect of heparin on the structure of the nuclear chromatin of lymphocytes] Iusupova LB. **Lab Delo** 1989; (1):29–30 (Eng. Abstr.) (Rus)

[The modifying action of methylmethane sulfonate on unscheduled DNA synthesis in the UV irradiation of human peripheral blood lymphocytes] Genter EI, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):562–4 (Eng. Abstr.) (Rus)

[The patterns of colchicine-induced death of lymphoid cells] Afanas'ev VN, et al. **Tsitologiia** 1988 Sep;30(9):1108–16 (Eng. Abstr.) (Rus)

[Effect of natural human leukocyte interferon on cell cycle kinetics, the frequency of sister chromatid exchanges and chromosome aberrations in fopurin-treated human lymphocytes] Lazutka IuS, et al. **Tsitologiia** 1989 May; 31(5):544–8 (Eng. Abstr.) (Rus)

[Effect of interferon on the number of cytogenetic disorders occurring in human cultured lymphocytes treated with thio-TEPA and fotrin] Sarkisian TF, et al. **Tsitologiia** 1988 Dec;30(12):1491–4 (Eng. Abstr.) (Rus)

[Cytometric method of determining the parameters of the interaction of synthetic immunostimulants with the lymphocytic surface] Shcherbukhin VV, et al. **Tsitologiia** 1988 Oct;30(10):1218–25 (Eng. Abstr.) (Rus)

[Effect of the tumor promoter TPA on the distribution of PHA-stimulated human lymphocytes by cell cycle phases] Vinogradov AE, et al. **Tsitologiia** 1988 Aug;30(8):983–90 (Eng. Abstr.) (Rus)

[Effect of the superoxide radical on lymphocyte proliferation stimulated by a mitogen] Vol'skiĭ NN, et al. **Tsitologiia** 1988 Jul;30(7):898–902 (Eng. Abstr.) (Rus)

[The effect of levamisole on the functional activity and fatty acid composition of lymphocytes after the damage of cell membranes with tetrachloromethane] Gubskiĭ IuI, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):64–8 (Eng. Abstr.) (Rus)

[Effect of detergent and glycerin on the efficacy of nasal immunotherapy with allergens and on the level of the lymphocyte subpopulation in the organs of local immunity] Sukhodoeva GS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):94–8 (Eng. Abstr.) (Rus)

[Synergism of bromodeoxyuridine and mitomycin C in the production of chromosomal aberrations in Fanconi's anemia] Frías S, et al. **Rev Invest Clin** 1989 Jan-Mar; 41(1):31–5 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Effect of free radical scavengers on superoxide dismutase (SOD) enzyme in patients with alcoholic cirrhosis. Fehér J, et al. **Acta Med Hung** 1988;45(3–4):265–76

Increased cytosol aminopeptidase and lactate dehydrogenase in serum originating from lymphocytes in measles and rubella infection. Sugaya N, et al. **Am J Dis Child** 1988 Dec;142(12):1352–5

Zinc chelatase in human lymphocytes: detection of the enzymatic defect in erythropoietic protoporphyria. Nunn AV, et al. **Anal Biochem** 1988 Oct;174(1):146–50

Two mechanisms of spermidine/spermine N1-acetyltransferase-induction. Matsui-Yuasa I, et al. **Arch Biochem Biophys** 1989 Jan;268(1):209–14

Lymphocyte alpha-glucosidase in late-onset glycogenosis type II. Kuriyama M, et al. **Arch Neurol** 1989 Apr; 46(4):460–2

Phosphorylation of p56lck by external ATP in intact cells. Allée G, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):51–7

Neutral endopeptidase 24.11 and angiotensin converting enzyme like activity in CALLA positive and CALLA negative lymphoid cells. Beaumont A, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1323–9

Phorbol ester activation of phospholipase D in human monocytes but not peripheral blood lymphocytes. Kinsky SC, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):788–93

Solubilization, characterization, and detergent interactions of lymphocyte 5'-nucleotidase. Loe DW, et al. **Biochem Cell Biol** 1989 Apr-May;67(4–5):214–23

Inhibition of lymphocyte 5'-nucleotidase by lectins: effects of lectin specificity and cross-linking ability. Sharom FJ, et al. **Biochem Cell Biol** 1988 Jul;66(7):715–23

Zinc can activate cellular acidic alpha-D-glucosidase activity. Lin CY, et al. **Biochem Genet** 1988 Jun; 26(5–6):323–9

Induction of asparagine synthetase during lymphocyte activation by phytohemagglutinin. Hongo S, et al. **Biochem Int** 1989 Mar;18(3):661–6

Biochemical studies on lymphoblastoid cells with inherited N-acetyl-glucosamine 1-phosphotransferase deficiency (I-cell disease). Okada S, et al. **Biochem Int** 1988 Aug; 17(2):375–83

Differential expression of glutathione transferases by native and cultured human lymphocytes. Jones SM, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4586–90

Swelling of the Golgi apparatus and decrease of galactosyltransferase in polyamine-deficient bovine lymphocytes and epithelium of mouse small intestine. Sakamaki Y, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1083–9

Cytosine photoproduct-DNA glycosylase in Escherichia coli and cultured human cells. Weiss RB, et al. **Biochemistry** 1989 Feb 21;28(4):1488–92

Characterization of monoamine oxidase activity present in human granulocytes and lymphocytes. Balsa MD, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):140–4

DNA polymerase alpha-DNA primase from human lymphoblasts. Bialek G, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):290–7

Relation between the activity of poly(A)polymerase and the levels of protein synthesis in the lymphocytes of patients with chronic lymphocytic leukemia. Gounaris A, et al. **Blut** 1988 Nov;57(5):293–6

Modulation of human lymphocyte O6-alkylguanine-DNA alkyltransferase by streptozotocin in vivo. Gerson SL. **Cancer Res** 1989 Jun 1;49(11):3134–8

Studies of topoisomerase-specific antitumor drugs in human lymphocytes using rabbit antisera against recombinant human topoisomerase II polypeptide. Hwang JL, et al. **Cancer Res** 1989 Feb 15;49(4):958–62

Heterogeneity of O6-alkylguanine-DNA alkyltransferase activity in peripheral blood lymphocytes: relationship between this activity in lymphocytes and in lymphoblastoid lines from normal controls and from patients with Hodgkin's disease or non-Hodgkin's lymphoma. Sagher D, et al. **Cancer Res** 1989 Oct 1;49(19):5339–44

Depressed activities of purine enzymes in lymphocytes of patients infected with human immunodeficiency virus. Renouf JA, et al. **Clin Chem** 1989 Jul;35(7):1478–81

Ferrochelatase activity in human lymphocytes, as quantified by a new high-performance liquid-chromatographic method. Rossi E, et al. **Clin Chem** 1988 Dec;34(12):2481–5

Alpha-L-fucosidase activity in normal human lymphocytes. Roger L, et al. **Clin Chim Acta** 1989 Apr 14;180(3):303–10

Lymphocytes are the preferred cells for the measurement of blood coproporphyrinogen oxidase activity. Rossi E, et al. **Clin Chim Acta** 1989 Apr 28;181(1):115–7

I-cell disease: evidence for a mannose 6-phosphate independent pathway for translocation of lysosomal enzymes in lymphoblastoid cells. Tsuji A, et al. **Clin Chim Acta** 1988 Aug 15;176(1):115–21

Dipeptidyl peptidase IV—subcellular localization, activity and kinetics in lymphocytes from control subjects, immunodeficient patients and cord blood. Harland C, et al. **Clin Exp Immunol** 1988 Nov;74(2):201–5

Activity of adenosine deaminase and purine nucleoside phosphorylase in erythrocytes and lymphocytes of man, horse and cattle. Tax WJ, et al. **Comp Biochem Physiol [B]** 1978;61(3):439–41

Dipeptidyl peptidases of human lymphocytes. Lojda Z. **Czech Med** 1988;11(4):181–94

Lymphocyte (Na,K) ATPase-dependent 86Rb+ uptake in human obesity. Bozzo C, et al. **Diabete Metab** 1988 Sep-Oct;14(5):646–52

The behaviour of pyruvate dehydrogenase in circulating lymphocytes from diabetic children. Rinaudo MT, et al. **Diabetologia** 1989 Apr;32(4):245–8

Mevalonate kinase in lysates of cultured human fibroblasts and lymphoblasts: kinetic properties, assay conditions, carrier detection and measurement of residual activity in

a patient with mevalonic aciduria. Gibson KM, et al. **Enzyme** 1989;41(1):47–55

Mitogen activation of human lymphocytes from normal and acute lymphocytic leukemia (ALL) subjects. Russo SA, et al. **Enzyme** 1989;41(4):217–26

Deoxycytidine kinase is constitutively expressed in human lymphocytes: consequences for compartmentation effects, unscheduled DNA synthesis, and viral replication in resting cells. Arnér ES, et al. **Exp Cell Res** 1988 Oct;178(2):335–42

Complete cDNA encoding a putative phospholipase C from transformed human lymphocytes. Ohta S, et al. **FEBS Lett** 1988 Dec 19;242(1):31–5

Immunoquantitation of 80 kDa diacylglycerol kinase in pig and human lymphocytes and several other cells. Yamada K, et al. **FEBS Lett** 1989 Feb 27;244(2):402–6

Effect of mercury and combined effect of mercury and dimethylsulphoxide (DMSO) on the activity of acetylcholinesterase (AchE–E.C. 3.1.1.7) of rat lymphocytes during in vitro incubation. Miszta H, et al. **Folia Haematol (Leipz)** 1989;116(1):151–5

Effect of silibinin on the activity and expression of superoxide dismutase in lymphocytes from patients with chronic alcoholic liver disease. Fehér J, et al. **Free Radic Res Commun** 1987;3(6):373–7

Lymphocyte enzymes and tobacco smoking [letter] Moszczyński P, et al. **Haematologica (Pavia)** 1989 Mar–Apr; 74(2):224–5

Interferon-associated lymphocyte 2',5'-oligoadenylate synthetase in acute and chronic viral hepatitis. Heathcote J, et al. **Hepatology** 1989 Jan;9(1):105–9

Insulin modulation of pyruvate dehydrogenase in human circulating lymphocytes. Curto M, et al. **Int J Biochem** 1988;20(11):1211–7

Generation of an active protein-tyrosine kinase from lymphocytes by proteolysis. Zioncheck TF, et al. **J Biol Chem** 1988 Dec 15;263(35):19195–202

Effect of macrophages on the translocation of protein kinase C in concanavalin A–stimulated lymphocytes. Grove DS, et al. **J Cell Physiol** 1989 Mar;138(3):561–7

Determination of adenosine deaminase and purine nucleoside phosphorylase activities using high-performance liquid chromatographic and radiochromatographic methods. Boháček J, et al. **J Chromatogr** 1988 Dec 30;434(2):439–45

Inhibition of human lymphocyte cyclic nucleotide phosphodiesterases by the chlorinated adenosine analog DTA–35. Hurwitz MY, et al. **J Enzym Inhib** 1987; 1(4):267–74

Surface aminopeptidase activity of human lymphocytes. I. Biochemical and biologic properties of intact cells. Amoscato AA, et al. **J Immunol** 1989 Feb 15; 142(4):1245–52

Enzymatic analysis in lymphocytes and erythrocytes from six patients with different phenotypes of phosphorylase kinase deficiency. Kikuchi M, et al. **J Inherited Metab Dis** 1988;11(3):315–8

Cigarette smoke impairment of human lymphocyte function by inhibition of transglutaminase. Berntorp K, et al. **J Intern Med** 1989 Aug;226(2):73–9

Relation between cell cycle stage and the activity of DNA-synthesizing enzymes in cultured human lymphoblasts: investigations on cells separated according to DNA content by way of a cell sorter. Pelka-Fleischer R, et al. **Leukemia** 1989 May;3(5):380–5

Aryl hydrocarbon hydroxylase induction in human lymphocyte cultures by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Kouri RR, et al. **Life Sci** 1974 Nov 1;15(9):1585–95

The enzymatic deficiencies in lymphocytes of smokers. Moszczyński P, et al. **Med Interne** 1989 Jan–Mar;27(1):41–6

Beta-adrenergic desensitization reduces the sensitivity of adenylate cyclase for magnesium in permeabilized lymphocytes. Feldman RD. **Mol Pharmacol** 1989 Mar; 35(3):304–10

Absence of significant RNA-dependent DNA polymerase activity in lymphocytes from patients with Kawasaki syndrome. Melish ME, et al. **Nature** 1989 Jan 19; 337(6204):288–90

Analysis of the activity and phosphorylation of the lck protein in lymphoid cells. Hurley TR, et al. **Oncogene** 1989 Mar;4(3):265–72

Oxidation of [U-14C]succinic semialdehyde in cultured human lymphoblasts: measurement of residual succinic semialdehyde dehydrogenase activity in 11 patients with 4-hydroxybutyric aciduria. Pattarelli PP, et al. **Pediatr Res** 1988 Oct;24(4):455–60

Lymphocyte adenylate cyclase: a model for putative adrenergic-cholinergic imbalances in affective disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Nov;21(6):436–7

A rapid separation procedure to analyse phosphorylation of two putative protein kinase C substrates in intact lymphocytes. Brattsand G, et al. **Scand J Immunol** 1989 Aug;30(2):233–40

Color-contrast staining of two different lymphocyte subpopulations: a two-color modification of alkaline phosphatase monoclonal anti-alkaline phosphatase complex technique. Wagner L, et al. **Stain Technol** 1988 May; 63(3):129–36

[Dipeptidylpeptidase IV in lymphocytes and lymphatic organs in humans] Sedo A, et al. **Cesk Fysiol** 1989; 38(1):69–84 (101 ref.) (Cze)

[Increased levels of total lactate dehydrogenase in isolated peripheral blood lymphocytes in patients on a chronic intermittent dialysis program] Matějčková M, et al. **Vnitr Lek** 1988 Oct;34(10):974–8 (Eng. Abstr.) (Cze)

[Ultraenzymatic studies of the biological membranes of lymphoid cells in mice, carriers of transplantable leukemia L 1210] Madej JA, et al. **Arch Exp Veterinarmed** 1988 May; 42(3):419–29 (Eng. Abstr.) (Ger)

[Effects of dioxin congeners on aryl hydrocarbon hydroxylase activity] Nagayama J, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):196–200 (Eng. Abstr.) (Jpn)

[Effects of 3-methylsulphonyl-4,5,3',4-tetrachlorobiphenyl and 7,8-benzoflavone on aryl hydrocarbon hydroxylase activity] Nagayama J, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):201–9 (Eng. Abstr.) (Jpn)

[Isolation and analysis of Ca/Mg-dependent endonuclease from cell nuclei of human splenocytes] Sokolova IA, et al. **Biokhimiia** 1988 Jul;53(7):1163–73 (Eng. Abstr.) (Rus)

[Chrono-physiological characteristics of the enzymatic status of lymphocytes and thrombocytes in healthy children in the early postnatal ontogenesis] Gadzhiev AA, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):635–9 (Rus)

[Enzymatic status of lymphocytes and various aspects of prognosis of the course of chronic lymphocytic leukemia] Tsyba NN, et al. **Gematol Transfuziol** 1989 May;34(5):22–6 (Eng. Abstr.) (Rus)

[The seasonal rhythm of changes in adenosine cyclic monophosphate phosphodiesterase activity in the lymphocytes of human peripheral blood] Kochetkova MN, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):782–5 (Eng. Abstr.) (Rus)

[Species-specific reactions of succinate dehydrogenase of lymphocytes in animals to acute hypoxic hypoxia and its relation to the radiation resistance of the body] Antipov VV, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr; 23(2):63–6 (Eng. Abstr.) (Rus)

[Specificity of fragmentation of DNA from pBR322 plasmid by Ca,Mg-dependent endonuclease from cell nuclei of human lymphocytes] Khodarev NN, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):26–32 (Eng. Abstr.) (Rus)

[Characteristics of the effect of Ca/Mg-dependent endonuclease from cell nuclei of human lymphocytes on J kappa-cluster of immunoglobulin genes] Morozov AIu, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):26–9 (Eng. Abstr.) (Rus)

[Lymphocyte and thrombocyte dehydrogenase activity in the early neonatal period in newborn infants with intrauterine hypotrophy] Deshchekina MF, et al. **Pediatriia** 1988; (8):23–5 (Eng. Abstr.) (Rus)

[Cytochemical criteria of the prognosis of the postoperative course of esophageal atresia and tracheoesophageal fistulas in newborn infants] Proshchitskaia EL. **Pediatriia** 1988; (7):109–10 (Rus)

[Activity of serum and lymphocyte serine proteases of patients with diabetes mellitus and the possibility of using protease blockers in combined therapy] Efimov AS, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):3–7 (Eng. Abstr.) (Rus)

[Value of cytochemical tests in nephrology] Artem'eva VB, et al. **Ter Arkh** 1988;60(7):74–8 (Eng. Abstr.) (Rus)

[The importance of studying the acid phosphatase of the blood serum and bone marrow lymphoblasts and polymorphonuclear neutrophils in the prognosis of the course of acute lymphoblastic leukemia] Vaiuta NP, et al. **Ter Arkh** 1988;60(5):33–5 (Eng. Abstr.) (Rus)

[Changes in the activity of nonspecific alpha-naphthyl acetate esterase in the peripheral blood lymphocytes of psoriasis patients] Moszczyński P, et al. **Vestn Dermatol Venerol** 1988;(5):22–4 (Eng. Abstr.) (Rus)

[Dynamic cytochemical indices of the blood of flight personnel] Pashchenko PS. **Voen Med Zh** 1988 Jul;(7):55–7 (Rus)

IMMUNOLOGY

Deficiency of lymphocyte lectin-dependent cytotoxicity in myelodysplastic syndromes. Fontana L, et al. **Acta Haematol (Basel)** 1989;82(1):1–6

Direct immunogold staining technique based on monoclonal antibodies: an immediate approach to the immunostaining of lymphocytes. Küster U, et al. **Acta Histochem (Jena)** 1988;84(1):23–9

Hepatoprotective and immunomodulatory effects of antioxidant therapy. Láng I, et al. **Acta Med Hung** 1988; 45(3–4):287–95

Activation of macrophages by lymphokines from specifically sensitized lymphocytes with Yersinia pseudotuberculosis. Neychev H, et al. **Acta Microbiol Bulg** 1988;22:22–7

Effect of hyperbaric oxygen treatment on immunological parameters in multiple sclerosis. Nyland H, et al. **Acta Neurol Scand** 1989 Apr;79(4):306–10

Lymphocytes subclasses and function in patients with optic neuritis in childhood with special reference to multiple sclerosis. Riikonen R, et al. **Acta Neurol Scand** 1988 Jul; 78(1):58–64

Mononuclear cell infiltrate and HLA-DR expression in low grade astrocytomas. An immunohistological study of 23 cases. Rossi ML, et al. **Acta Neuropathol (Berl)** 1988; 76(3):281–6

Autologous immune response of tonsillar lymphocytes. Ikawa T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:125–32

Immune response of tonsillar B lymphocytes. Yamanaka N, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:148–52

Modulation of immunological abnormalities of growth hormone–deficient children by growth hormone treatment. Matsuura M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):53–7

Diabetic lymphocytes transfer and beta cell functions. Basabe JC, et al. **Adv Exp Med Biol** 1988;246:101–7

Subpopulations of non-lymphoid cells in bronchus associated lymphoid tissue and lung of the mouse. Breel M, et al. **Adv Exp Med Biol** 1988;237:607–13

Interdigitating cells and dendritic cells of the mouse identified by monoclonal antibodies: interaction with lymphocyte subsets. Breel M, et al. **Adv Exp Med Biol** 1988;237:757–63

Reactivity of human lymphocyte clones to autologous metastatic melanoma cells. Fossati G, et al. **Adv Exp Med Biol** 1988;233:73–80

Expression and regulation of an antigen specific for endothelium involved in human lymphocyte homing. Horst E, et al. **Adv Exp Med Biol** 1988;237:477–84

A monoclonal antibody which reacts specifically with a population of bovine lymphocytes lacking B cell and T cell markers. Morrison WI, et al. **Adv Exp Med Biol** 1988; 237:591–6

Potential therapeutic use of autologous human lymphocytes in metastatic melanoma: in vivo interleukin 2–activated peripheral blood lymphocytes and in vitro activated peripheral blood and tumor-infiltrating lymphocytes. Parmiani G, et al. **Adv Exp Med Biol** 1988;233:453–8

Effect of chronic administration of platelet-activating factor (PAF) in the guinea-pig and the rat. Pignol B, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:371–6

Isoferritins in HIV infection: relation to clinical stage, CD8 lymphocyte binding and the pathogenesis of AIDS. Moroz C, et al. **Aids** 1989 Jan;3(1):11–6

Multiple myeloma: relationship between light chain isotype suppression, labelling index of plasma cells, and CD38 expression on peripheral blood lymphocytes. Joshua DE, et al. **Am J Hematol** 1988 Sep;29(1):5–11

Antibodies and immune profiles of individuals occupationally exposed to formaldehyde: six case reports. Thrasher JD, et al. **Am J Ind Med** 1988;14(4):479–88

Newborn lymphocyte subpopulations: the influence of labor. Pittard WB 3d, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):151–4

Nuclear antigens in neoplastic lymphocytes of B cell and T cell non-Hodgkin's lymphomas. Dardick I, et al. **Am J Pathol** 1989 Jan;134(1):213–22

Treatment of recurrent spontaneous abortion by immunization with paternal lymphocytes: correlates with outcome. Gatenby PA, et al. **Am J Reprod Immunol** 1989 Jan;19(1):21–7

Early pregnancy loss, premature and low birth weight delivery, and increased maternal lymphocyte cytotoxicity. Varga PJ, et al. **Am J Reprod Immunol** 1989 Apr; 19(4):136–40

Inhibition of lymphocyte-mediated antibacterial activity by human seminal plasma. De Simone C, et al. **Am J Reprod Immunol Microbiol** 1988 May;17(1):1–4

Monoclonal antibody GB24 recognizes a trophoblast-lymphocyte cross-reactive antigen. Hsi BL, et al. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):21–7

Lymphocyte function in obstructive jaundice. Fraser IA, et al. **Am J Surg** 1989 Apr;157(4):405–9; discussion 409

Thyroid and immunologic status of dogs with perianal fistula. Killingsworth CR, et al. **Am J Vet Res** 1988 Oct; 49(10):1742–6

Phenotypical and functional analysis of bronchoalveolar lavage lymphocytes in patients with HIV infection. Agostini C, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1609–15

Joint report of the Third International Bovine Lymphocyte Antigen (BoLA) Workshop, Helsinki, Finland, 27 July 1986. Bull RW, et al. **Anim Genet** 1989;20(1):109–32

Joint Report of the Fifth International Workshop on Lymphocyte Alloantigens of the Horse, Baton Rouge, Louisiana, 31 October–1 November 1987. Lazary S, et al. **Anim Genet** 1988;19(4):447–56

A comparison of lymphocyte antigen specificities in Norwegian and Swiss goats. Nesse LL, et al. **Anim Genet** 1989;20(1):71–7

Regulation of immune functions by human surfactant. Shimizu M, et al. **Ann Allergy** 1988 Dec;61(6):459–62

Isolation of human lymphocyte cell lines reactive with whole human myelin. Burns J, et al. **Ann N Y Acad Sci** 1988; 540:367–8

Responsiveness of myasthenia gravis lymphocytes to recombinant interleukin-2. Cohen-Kaminsky S, et al. **Ann N Y Acad Sci** 1988;540:506–7

Use of chemiluminescence to evaluate the influence of antifungal agents on immune cell function. Fromtling RA, et al. **Ann N Y Acad Sci** 1988;544:270–83

Blood and thymic lymphocyte responses to peptide sequences of the acetylcholine receptor in myasthenia gravis. Harcourt G, et al. **Ann N Y Acad Sci** 1988;540:354–6

Impaired human leukocyte antigen-restricted measles virus-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. **Ann Neurol** 1989 Mar;25(3):272–80

The lymphocyte saga continues [editorial] McFarlin DE. **Ann Neurol** 1989 May;25(5):503–5

Expanded Fc receptor bearing 'third population' lymphocytes in rheumatoid arthritis: analysis by cell partitioning in two-polymer aqueous phase systems [letter] Michalski JP, et al. **Ann Rheum Dis** 1988 Oct;47(10):878–9
Cytolysis of mammary tumor targets by resting, interleukin-2 stimulated and in vitro cultured peripheral blood lymphocytes from breast cancer patients. Brenner BG, et al. **Anticancer Res** 1988 Jul–Aug;8(4):653–8
Differential reconstitution of zidovudine-induced inhibition of mitogenic responses by interleukin-2 in peripheral blood mononuclear cells from patients with human immunodeficiency virus infection. Nokta MA, et al. **Antiviral Res** 1989 May–Jun;11(4):191–202
Immune functions in inflammatory bowel and coeliac diseases. Soppi E, et al. **APMIS** 1988 Sep;96(9):850–6
Reduced level of sex-specific antigen (H–Y antigen) on lymphocytes in some patients with bilateral cryptorchidism. Fedder J, et al. **Arch Androl** 1989;22(1):67–75
Lymphocytotoxic autoantibodies in progressive systemic sclerosis. Herrmann K, et al. **Arch Dermatol Res** 1988; 280(7):399–404
Normal IgA production by peripheral blood lymphocytes in dermatitis herpetiformis and linear IgA dermatosis. Wojnarowska F, et al. **Arch Dermatol Res** 1989; 280(8):494–6
Bovine leucosis virus challenge infection of calves following application of BL-3 cells. Ristau E, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):155–8
Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):753–8
Enhancement of mouse erythrocyte rosette formation of human lymphocytes by interferon gamma. Dobozy A, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):731–4
Shedding of Fc receptor from mononuclear cells and their ability of binding IgG1 and IgG3 anti-Rh/D antibodies. Mašlanka K, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(1):15–22
FcR+ lymphocytes and ADCC in tumor-bearing adult and aging rats. Nowak JJ, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):45–53
Effect of copper-dextran complex (C-79) on the immunity indices in normothermic rabbits and in postpyrogenic fever. Obmińska-Domoradzka B. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):273–85
Lymphocyte-induced angiogenesis assay—in cutaneous malignancies and cutaneous and genital warts. Szmurło A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):85–7
Some biological properties of outer membrane proteins of Shigella. Witkowska D, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):759–62
The anti-tumor effect of in vitro tumor-stimulated autologous peripheral blood lymphocytes measured by the subrenal capsule assay. Kürten C, et al. **Arch Otorhinolaryngol** 1989;246(2):105–8
Lymphocyte phenotype and function changes in burn patients after intravenous IgG therapy. Burleson DG, et al. **Arch Surg** 1988 Nov;123(11):1379–82
Human autoantibody secreted by immortalized lymphocyte cell line against the 68K polypeptide of the U1 small nuclear ribonucleoprotein. Chen JT, et al. **Arthritis Rheum** 1988 Oct;31(10):1265–71
The expression and function of CD3 and CD5 in patients with primary Sjögren's syndrome. Dauphinée MJ, et al. **Arthritis Rheum** 1989 Apr;32(4):420–9
A positive association between resistance to ovine footrot and particular lymphocyte antigen types. Outteridge PM, et al. **Aust Vet J** 1989 Jun;66(6):175–9
Pathogenesis of Marek's disease virus-induced local lesions. 1. Lesion characterization and cell line establishment. Calnek BW, et al. **Avian Dis** 1989 Apr–Jun;33(2):291–302
1-Oleoyl-2-acetylglycerol promotes immunoglobulin production independent of cell proliferation in human peripheral blood mononuclear cells. Yamaguchi DT, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1319–26
Dehydroisoandrosterone prevention of autoimmune disease in NZB/W F1 mice: lack of an effect on associated immunological abnormalities. Matsunaga A, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):265–71
Amino-acid sequence homology of a polymorphic cellular protein from human lymphocytes and the chaperonins from Escherichia coli (groEL) and chloroplasts (Rubisco-binding protein). Waldinger D, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1185–9
Stress lymphocytes and the dexamethasone suppression test in major depressive disorders. Miyauchi K, et al. **Biol Psychiatry** 1989 Apr 15;25(8):1021–8
Sialyl SSEA-1 antigen as a carbohydrate marker of human natural killer cells and immature lymphoid cells. Ohmori K, et al. **Blood** 1989 Jul;74(1):255–61
The Reed-Sternberg cell/lymphocyte rosette. I. Properties of rosettes formed between Hodgkin's cell lines and allogeneic lymphocytes. Flavell DJ, et al. **Br J Cancer** 1989 Feb;59(2):165–73
EBNA-1: a virally induced nuclear antigen of primate lymphocytes and its expression in Drosophila cells. MacGillivray AJ, et al. **Br J Cancer Suppl** 1988 Dec;9:93–7
Stimulation of bronchoalveolar lavage (BAL) and blood lymphocytes by Kveim antigen, tuberculin and concanavalin A in sarcoidosis. Lindahl M, et al. **Br J Dis Chest** 1988 Oct;82(4):386–93
Cytokine-induced enhancement of the susceptibility of hairy cell leukaemia lymphocytes to natural killer cell lysis. Cordingley FT, et al. **Br J Haematol** 1988 Sep;70(1):37–41
Changes in the immunologic phenotype and T cell gene rearrangements during the clinical course of an unusual T cell CLL. Mak T, et al. **Br J Haematol** 1988 Nov; 70(3):384–6
Immunology and veterinary science. Mackay CR, et al. **Br Vet J** 1989 Mar–Apr;145(2):185–90 (21 ref.)
Shock-induced modulation of lymphocyte responsiveness and natural killer activity: differential mechanisms of induction. Cunnick JE, et al. **Brain Behav Immun** 1988 Jun; 2(2):102–13
Effects on immune responses by chronic stress are modulated by aging. Odio M, et al. **Brain Behav Immun** 1987 Sep; 1(3):204–15
The differential effect with time of neuropeptides on the proliferative responses of murine Peyer's patch and splenic lymphocytes. Scicchitano R, et al. **Brain Behav Immun** 1987 Sep;1(3):231–7
Visceral leishmaniasis: a disease associated with inability of lymphocytes to activate macrophages to kill leishmania. Carvalho EM, et al. **Braz J Med Biol Res** 1988;21(1):85–92
Correlations between acute lymphoid leukemia (ALL) immunophenotype and clinical and laboratory data at presentation. A study of 350 patients. Garand R, et al. **Cancer** 1989 Oct 1;64(7):1437–46
Different immune functions of peripheral blood, regional lymph node, and tumor infiltrating lymphocytes in lung cancer patients. Nakamura H, et al. **Cancer** 1988 Dec 15; 62(12):2489–97
In vitro study of the modification by bleomycin of thymidine phosphorylation activity in lectin-stimulated normal human lymphocytes. Sharif A, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):17–24
A morphological analysis of an in vitro model of cytotoxic antitumor activity. Bielat KL, et al. **Cancer Detect Prev** 1988;12(1–6):1–7
Amelioration of experimental lung metastasis in mice by therapy with anti-CD3 monoclonal antibodies. Hoskin DW, et al. **Cancer Immunol Immunother** 1989;29(3):226–30
Granulocyte-monocyte-colony-stimulating factor augments the cytotoxic capacity of lymphocytes and monocytes in antibody-dependent cellular cytotoxicity. Masucci G, et al. **Cancer Immunol Immunother** 1989;29(4):288–92
Lysis by interleukin 2-stimulated tumor-infiltrating lymphocytes of autologous and allogeneic tumor target cells. Radrizzani M, et al. **Cancer Immunol Immunother** 1989;28(1):67–73
Comparative effect of rat and fetal calf serum on measurement of the natural tumoricidal activity of rat lymphocytes, macrophages and polymorphonuclear cells. Reisser D, et al. **Cancer Immunol Immunother** 1989; 28(1):34–6
Importance of MHC antigen expression on solid tumors in the in vitro interaction with autologous blood lymphocytes. Vánky F, et al. **Cancer Immunol Immunother** 1988; 27(3):213–22
Auto-tumor recognition following in vitro induction of MHC antigen expression on solid human tumors: stimulation of lymphocytes and generation of cytotoxicity against the original MHC-antigen-negative tumor cells. Vánky F, et al. **Cancer Immunol Immunother** 1989;28(1):17–21
Serum levels of the low-affinity interleukin-2 receptor molecule (TAC) during IL-2 therapy reflect systemic lymphoid mass activation. Voss SD, et al. **Cancer Immunol Immunother** 1989;29(4):261–9
Differences between in vivo and in vitro activation of cancer patient lymphocytes by recombinant interleukin 2: possible role for lymphokine-activated killer cell infusion in the in vivo-induced activation. Gambacorti-Passerini C, et al. **Cancer Res** 1989 Sep 15;49(18):5230–4
Immunohistological and functional analyses of lymphoid infiltrates in human glioblastomas. Kuppner MC, et al. **Cancer Res** 1988 Dec 1;48(23):6926–32
Antitumor activity and surface phenotypes of human glioma-infiltrating lymphocytes after in vitro expansion in the presence of interleukin 2. Sawamura Y, et al. **Cancer Res** 1989 Apr 1;49(7):1843–9
Lymphokine-activated killer activity induced by in vivo interleukin 2 therapy: predominant role for lymphocytes with increased expression of CD2 and leu19 antigens but negative expression of CD16 antigens. Weil-Hillman G, et al. **Cancer Res** 1989 Jul 1;49(13):3680–8
Immunotherapy with interleukin-2 by constant infusion with and without adoptive cell transfer and with weekly doxorubicin. Paciucci PA, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:67–81
Stimulation of a major subset of lymphocytes expressing T cell receptor gamma delta by an antigen derived from Mycobacterium tuberculosis. O'Brien RL, et al. **Cell** 1989 May 19;57(4):667–74
Ontogeny of the chick embryo spleen—a cytological study. Yassine F, et al. **Cell Differ Dev** 1989 Jun;27(1):29–45
Immunological function of kidney-infiltrating lymphocytes from aged NZB mice. Bocchieri MH. **Cell Immunol** 1989 Sep;122(2):569–77
Anti-Ia monoclonal antibody (10-2.16) inhibits lymphocyte-high endothelial venule (HEV) interaction. Manolios N, et al. **Cell Immunol** 1988 Nov;117(1):152–64
Cell surface tumor necrosis factor (TNF) accounts for monocyte- and lymphocyte-mediated killing of TNF-resistant target cells. Peck R, et al. **Cell Immunol** 1989 Aug;122(1):1–10
Preferential expression of neo-CRP epitopes on the surface of human peripheral blood lymphocytes. Samberg NL, et al. **Cell Immunol** 1988 Oct 1;116(1):86–98
Molecular mimicry between uveitopathogenic site of retinal S-antigen and Escherichia coli protein: induction of experimental autoimmune uveitis and lymphocyte cross-reaction. Singh VK, et al. **Cell Immunol** 1989 Aug; 122(1):262–73
Immunoregulatory effects of a suppressor factor from healthy pregnant women's lymphocytes after progesterone induction. Szekeres-Bartho J, et al. **Cell Immunol** 1989 Sep; 122(2):281–94
Expression of Thomsen-Friedenreich (TF) antigens on lymphocytes. II. Loss of cryptic TF antigens during mitogenic activation of human T and B lymphocytes. Wolf MF, et al. **Cell Immunol** 1989 Jul;121(2):366–71
Expression of Thomsen-Friedenreich (TF) antigens on lymphocytes. I. Distribution of cryptic and exposed TF antigens on murine lymphocytes from different lymphoid organs: detection with an anti-TF monoclonal antibody and peanut agglutinin. Wolf MF, et al. **Cell Immunol** 1989 Jul;121(2):360–5
Expression of interleukin-2 receptor (IL-2R) in feline peripheral blood lymphocytes. Iwamoto K, et al. **Cell Mol Biol** 1989;35(3):279–84
Immunopharmacological studies of ribavirin, a broad-spectrum antiviral agent. Borghi C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):660–3
Plaque-forming cell response in short-term cultures of peripheral blood lymphocytes from AIDS patients, HTLV-III/LAV-positive patients without AIDS or ARC, and normal controls. Tauris P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):636–7
Further studies on the relative contributions of chemotherapeutic and immunostimulant activity of amphotericin B to its efficacy as an antifungal agent. Vecchiarelli A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):170–2
Immunologic monitoring of the cardiac transplant patient. Kotylo PK, et al. **Chest** 1988 Oct;94(4):834–6
A study of lymphocyte kinetics in nasopharyngeal carcinoma with indium III oxine-labelled lymphocytes. Cheng PN, et al. **Clin Exp Immunol** 1988 Dec;74(3):398–403
H-Y antiserum recognizes male-specific and non-specific components in human lymphocytes. Farber CM, et al. **Clin Exp Immunol** 1988 Aug;73(2):204–7
Flow cytometric and morphologic studies of HNK1+ (Leu 7+) lymphocytes in relation to cytomegalovirus carrier status. Gratama JW, et al. **Clin Exp Immunol** 1988 Nov; 74(2):190–5
Anti-cardiolipin antibodies in infectious mononucleosis react with the membrane of activated lymphocytes. Misra R, et al. **Clin Exp Immunol** 1989 Jan;75(1):35–40
Serum lymphocytotoxic activity in leprosy. Rasheed FN, et al. **Clin Exp Immunol** 1989 Jun;76(3):391–7
Cellular immune responses of hydatid patients to Echinococcus granulosus antigens. Siracusano A, et al. **Clin Exp Immunol** 1988 Jun;72(3):400–5
Immunologic effects on peripheral lymphoid cells from patients with chronic hepatitis type B during administration of recombinant interleukin 2. Yamaguchi S, et al. **Clin Exp Immunol** 1988 Oct;74(1):1–6
Immunological patterns in monoarticular juvenile rheumatoid arthritis. Agosti E, et al. **Clin Exp Rheumatol** 1988 Jul–Sep; 6(3):319–24
In vitro lymph node and peripheral blood lymphocyte responses to influenza immunization in patients with systemic lupus erythematosus. Turner-Stokes L, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):71–4
Intrathyroidal HLA-DR-positive lymphocytes in Hashimoto's disease: increases in CD8 and Leu7 cells. Aozasa M, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):516–22
Regulation of the production of secretory and membrane immunoglobulin during lymphocyte development. Brown SL, et al. **Clin Immunol Immunopathol** 1989 Feb; 50(2):155–70 (57 ref.)
Limiting dilution analysis of in vivo-activated (IL-2 responsive) peripheral blood lymphocytes in HIV-1-infected subjects. Donnenberg AD, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):91–8
Immunoregulatory effects of alpha-endorphin, beta-endorphin, methionine-enkephalin, and adrenocorticotropic hormone on anti-tetanus toxoid antibody synthesis by human lymphocytes. Munn NA, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):376–85
Characteristics of in vitro production of mucosal antibody to respiratory syncytial virus in tonsillar tissue lymphocytes. Okamoto Y, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):299–307
Properties of the immunosuppressive factor induced by murine cytomegalovirus. Hudson JB, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1–2):39–46
Immune response following surgical trauma. Gupta S. **Crit Care Clin** 1987 Apr;3(2):405–15 (33 ref.)
Suppression of CML reactivity by non-T cells from miniature swine tolerant of a class I mismatched renal allograft. Kortz EO, et al. **Curr Surg** 1989 Mar–Apr; 46(2):107–10

B and T cell responses induced by interleukin-6. Van Snick J, et al. **Curr Top Microbiol Immunol** 1988;141:181-4
Comprehensive quality assessment approach for flow cytometric immunophenotyping of human lymphocytes. Edwards BS, et al. **Cytometry** 1989 Jul;10(4):433-41
Surface immunoglobulin on lymphocytes of the tortoise Agrionemys horsfieldii. Andreas EM, et al. **Dev Comp Immunol** 1989 Spring;13(2):167-75
Effects of cyclosporin A and insulin on peripheral lymphocytes in BB/W rats. Suzuki M, et al. **Diabetes Res** 1988 Jul;8(3):123-8
Macrophage infiltration precedes and is a prerequisite for lymphocytic insulitis in pancreatic islets of pre-diabetic BB rats. Hanenberg H, et al. **Diabetologia** 1989 Feb; 32(2):126-34
The effect of zinc status on the immune function of diabetic rats. Mooradian AD, et al. **Diabetologia** 1988 Sep; 31(9):703-7
Cell surface antibodies in type 1 (insulin-dependent) diabetic patients. II. Presence of immunoglobulins M which bind to lymphocytes. Segers O, et al. **Diabetologia** 1989 Aug; 32(8):618-23
Immunoresponsiveness in hemophilia: lymphocyte- and phagocyte-mediated functions. Antonaci S, et al. **Diagn Clin Immunol** 1988;5(6):318-25
Interactions of lymphocytes with bacterial antigens. Jirillo E, et al. **Diagn Clin Immunol** 1988;5(6):279-83 (31 ref.)
Monoclonal antibodies to CD18 and CD11A (LFA-1) distinguish Down's syndrome (trisomy 21) from normal lymphoblastoid cells. Robson AJ, et al. **Dis Markers** 1989 Jul-Sep;7(3):169-80
Peyer's patch-specific lymphocyte homing receptors consist of a VLA-4-like alpha chain associated with either of two integrin beta chains, one of which is novel. Holzmann B, et al. **EMBO J** 1989 Jun;8(6):1735-41
The mucosa of the male genital tract; part of the common mucosal secretory immune system? Fritz FJ, et al. **Eur J Immunol** 1989 Mar;19(3):475-9
Cell-mediated immunity in pigeon breeders' lung: the effect of removal from antigen exposure. Johnson MA, et al. **Eur Respir J** 1989 May;2(5):445-50
Quiescent human lymphocytes do not contain DNA strand breaks detectable by alkaline elution. Jostes R, et al. **Exp Cell Res** 1989 Jun;182(2):513-20
Effect of lymphocytes and serum from probands before and after manifestation of type 1 (insulin-dependent) diabetes on rat islets in vitro. Köhler E, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):182-8
Carcinogenic and non-carcinogenic fluorene derivatives: induction of thymocyte stimulating serum factors by 2-acetylaminofluorene (AAF) and their synergy with lymphocyte mitogens. Danz M, et al. **Exp Pathol** 1988; 34(4):217-21
Effects of sleep deprivation on human immune functions. Moldofsky H, et al. **FASEB J** 1989 Jun;3(8):1972-7
Seminal vesicles: a source of trophoblast lymphocyte cross-reactive antigen. Thaler CJ, et al. **Fertil Steril** 1989 Sep;52(3):463-8
Effect of (+)cyanidanol-3 on cellular immune reactions and on superoxide dismutase activity in vitro. Láng I, et al. **Free Radic Res Commun** 1987;4(1):51-60
Cell surface markers and cellular immune response associated with rheumatic heart disease: complex segregation analysis. Rich SS, et al. **Genet Epidemiol** 1988;5(6):463-70
Immunoglobulin secretion by isolated intestinal lymphocytes: spontaneous production and T-cell regulation in normal small intestine and in patients with coeliac disease. Crabtree JE, et al. **Gut** 1989 Mar;30(3):347-54
Role of the newborn's sex in mixed maternal-newborn lymphocyte culture reactivity. Komlos L, et al. **Gynecol Obstet Invest** 1989;27(2):62-9
Human monoclonal antibodies directed against ovarian carcinoma. Werner M, et al. **Gynecol Oncol** 1989 Aug; 34(2):148-54
Peripheral blood lymphocyte changes after benign gastrointestinal surgery. Role of thymostimulin in reversing the postoperative immunodepression seen in humans. Garcia-Valdecasas JC, et al. **Hepatogastroenterology** 1988 Oct;35(5):219-22
The thymus--what's new? Henry K. **Histopathology** 1989 May;14(5):537-48 (117 ref.)
From the neuroendocrinology of lymphocytes toward a molecular basis of the network theory. Carr DJ, et al. **Horm Res** 1989;31(1-2):76-80 (28 ref.)
Mitogen-induced human IgG subclass expression. II. IgG1 and IgG3 subclasses are preferentially stimulated by a combination of Staphylococcus aureus Cowan I and pokeweed mitogen. Butch AW, et al. **Hum Immunol** 1989 Mar;24(3):207-18
Stability of specific immunoglobulin secretion by EBV-transformed lymphoblastoid cells and human-murine heterohybridomas. Glasky MS, et al. **Hybridoma** 1989 Aug; 8(4):377-89
Morphological differentiation of human lymphocyte subpopulations following polyclonal stimulation with bacteria and lectin. Braun MG, et al. **Immunobiology** 1988 Jul;177(3):220-32
Comparison of NK activity in mouse spleen and peripheral blood lymphocytes. Yron I, et al. **Immunobiology** 1988 Sep; 177(4-5):449-59
Phenotypic characterization of immature lymphoid cells in human umbilical cord blood. Bradstock KF, et al. **Immunol Cell Biol** 1988 Oct-Dec;66 (Pt 5-6):387-94
The p24 leucocyte membrane antigen: modulation associated with lymphocyte activation and differentiation. Zola H, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):63-70
Multiplication of herpes simplex virus in large granular lymphocytes that co-fractionate with human natural killer cell activity. Strickland P, et al. **Immunol Invest** 1989 Jul; 18(6):785-95
Detection of individual interleukin 2-producing cells after anti-CD3 antibody activation. Andersson U, et al. **Immunol Lett** 1989 Jan 31;20(2):115-20
Binding of immunoglobulin G to peripheral blood lymphocytes. Hajela K, et al. **Immunol Lett** 1988 Oct; 19(2):159-62
The different effect of alpha and gamma interferons and interleukin 2 on the expression of CD2, CD3, CD4 and CD8 antigens in comparison to histocompatibility antigens of human lymphocytes. Kotlán B, et al. **Immunol Lett** 1988 Aug;18(4):259-68
Interleukin 2-activated large granular lymphocytes: cytotoxic efficiency and mechanism of killing of tumor cell lines. Savary CA, et al. **Immunol Lett** 1989 May; 21(2):145-51
The adenylate cyclase-cAMP-protein kinase A pathway and regulation of the immune response. Kammer GM. **Immunol Today** 1988 Jul-Aug;9(7-8):222-9 (97 ref.)
Lymphocyte receptors, signals and cytokines at Newport Beach [news] Klaus GG. **Immunol Today** 1988 Jun; 9(6):157-9
Multiple mechanisms of lymphocyte-mediated killing. Young JD, et al. **Immunol Today** 1988 May;9(5):140-4 (64 ref.)
CD2 and other surface molecules in the regulation of non-MHC-restricted cytolytic function. Chan WC, et al. **Immunology** 1989 May;67(1):56-61
Early lymphocyte activation molecule defined by the monoclonal antibody MLR-3: biochemical and functional studies. Delia D, et al. **Immunology** 1988 Aug;64(4):593-8
Traffic and proliferative responses of recirculating lymphocytes in fetal calves. Hein WR, et al. **Immunology** 1988 Aug;64(4):621-6
A new antigenic determinant on intra-epithelial lymphocytes and its association with CD45. Kilshaw PJ, et al. **Immunology** 1989 Jun;67(2):160-6
Preparation and characterization of murine monoclonal antibodies to swine lymphocyte antigens. Lie WR, et al. **Immunology** 1988 Aug;64(4):599-605
Characterization of a 95,000 molecule on sheep leucocytes homologous to murine Pgp-1 and human CD44. Mackay CR, et al. **Immunology** 1988 Sep;65(1):93-9
Mechanism of innate immunity to amoebic infection in guineapigs. Bhatti HS, et al. **Indian J Med Res** 1989 Mar; 89:105-9
Selective suppressive effects of Trypanosoma cruzi on activated human lymphocytes. Beltz LA, et al. **Infect Immun** 1989 Aug;57(8):2301-5
Differential modulation of lymphocyte proliferative responses and lymphokine secretion in mice during development of immunity to Chlamydia psittaci. Guagliardi LE, et al. **Infect Immun** 1989 May;57(5):1561-7
Modulation of macrophage Ia expression by lipopolysaccharide: stem cell requirements, accessory lymphocyte involvement, and IA-inducing factor production. Wentworth PA, et al. **Infect Immun** 1989 Jul; 57(7):2028-36
Antichlamydial specificity of conjunctival lymphocytes during experimental ocular infection. Whittum-Hudson JA, et al. **Infect Immun** 1989 Oct;57(10):2977-83
In vitro reactivities of blood lymphocytes from symptomatic and asymptomatic pigeon breeders to antigen and mitogens. Bouic PJ, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2-3):222-8
Gliadin antibody production by small intestinal lymphocytes from patients with coeliac disease. Ciclitira PJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):246-9
Human monoclonal antibody against human lymphocytic cells. A human monoclonal antibody that reacts preferentially with human lymphocytic cells. Harpprecht J, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):400-4
Accessory cell function of human vascular endothelial cells in pokeweed-mitogen-stimulated immunoglobulin production by peripheral blood lymphocytes. Hashimoto Y, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):11-6
Isotype-specific suppression of IgE synthesis in a human myeloma cell line (U-266) by an IgE-binding protein derived from normal human peripheral blood cells. Jernberg H, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1-2):114-5
Lymphocyte analysis in a patient with X-linked agammaglobulinemia and isolated growth hormone deficiency after development of echovirus dermatomyositis and meningoencephalitis. Wagner DK, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):143-8
Re-targeting of human lymphocytes expressing the T-cell receptor gamma/delta to ovarian carcinoma cells by the use of bispecific monoclonal antibodies. Ferrini S, et al. **Int J Cancer** 1989 Aug 15;44(2):245-50
Delayed-type hypersensitivity to tumor antigens co-expressed with immunogenic determinants induced by xenogenization. Puccetti P, et al. **Int J Cancer** 1989 Feb 15;43(2):279-84
Human tumor-infiltrating lymphocyte (TIL) cytotoxicity facilitated by anti-T-cell receptor antibody. Schoof DD, et al. **Int J Cancer** 1989 Aug 15;44(2):219-24
Inhibition by Trypanosoma cruzi of interferon-gamma production by mitogen-stimulated mouse spleen cells. Beltz LA, et al. **Int J Parasitol** 1989 Aug;19(5):555-9
The relationship between ovine lymphocyte antigens and parasitological and production parameters in Romney sheep. Douch PG, et al. **Int J Parasitol** 1989 Feb; 19(1):35-41
Low molecular weight immunosuppressors secreted by adult Nematospiroides dubius. Monroy FG, et al. **Int J Parasitol** 1989 Feb;19(1):125-7
Imaging pattern of previously in vitro sensitized and interleukin-2 expanded autologous lymphocytes in human cancer. Mukherji B, et al. **Int J Rad Appl Instrum [B]** 1988; 15(4):419-27
Problems of immune surveillance over the cytodifferentiation state and some cellular mechanisms of natural antitumor resistance. Fel'VYa, et al. **Int Rev Cytol** 1988;110:157-203 (206 ref.)
Class II antigens on retinal vascular endothelium, pericytes, macrophages, and lymphocytes of the rat. Fujikawa LS, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):66-73
A cell line and clones of lymphocytes from a healthy donor, with specificity to S-antigen. Hirose S, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1636-41
Allergen-specific induction of interleukin-2 (IL-2) responsiveness in lymphocytes from children with asthma. II. Regulation of IL-2 responsiveness by supernatants of normal lymphocytes. Noma T, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):255-62
Allergen-specific induction of interleukin-2 (IL-2) responsiveness in lymphocytes from children with asthma. I. Antigen specificity and initial events of the induction. Yoshizawa I, et al. **J Allergy Clin Immunol** 1989 Aug; 84(2):246-55
Influence of ofloxacin and pefloxacin on human lymphocyte immunoglobulin secretion and on polymorphonuclear leucocyte superoxide anion production. Fantoni M, et al. **J Antimicrob Chemother** 1988 Aug;22(2):193-6
'Fetal-type' B and T lymphocytes in rheumatoid arthritis and primary Sjögren's syndrome. Plater-Zyberk C, et al. **J Autoimmun** 1989 Jun;2 Suppl:233-41
Molecular characterization of the lymphoid V(D)J recombination activity. Blackwell TK, et al. **J Biol Chem** 1989 Jun 25;264(18):10327-30 (82 ref.)
Lipoproteins may provide fatty acids necessary for human lymphocyte proliferation by both low density lipoprotein receptor-dependent and -independent mechanisms. Cuthbert JA, et al. **J Biol Chem** 1989 Aug 15; 264(23):13468-74
Promotion of lymphocyte growth by high density lipoproteins (HDL). Physiological significance of the HDL binding site. Jürgens G, et al. **J Biol Chem** 1989 May 25; 264(15):8549-56
Isolation and identification of trophoblast lymphocyte cross-reactive (TLX) antigens from human lymphocytes. Kim IC. **J Biol Chem** 1989 Jun 15;264(17):9780-4
Analysis of the methylation state of the T cell receptor beta chain gene in T cells and large granular lymphocytes. Sakamoto S, et al. **J Biol Chem** 1989 Jan 5;264(1):251-8
Tumor-infiltrating lymphocytes cultured in recombinant interleukin-2: enhancement of growth, cytotoxicity, and phenotypic expression of cytotoxic T-cell antigens by cyclophosphamide given intravenously prior to tumor harvest. Lafreniere R, et al. **J Biol Response Mod** 1989 Jun;8(3):238-51
Induction of tumor-infiltrating lymphocytes in human malignant melanoma metastases by immunization to melanoma antigen vaccine. Oratz R, et al. **J Biol Response Mod** 1989 Aug;8(4):355-8
Application of intracellular ATP determination in lymphocytes for HLA-typing. Beckers B, et al. **J Biolumin Chemilumin** 1986 Sep;1(2):47-51
Monoclonal antibodies to human lymphocyte homing receptors define a novel class of adhesion molecules on diverse cell types. Picker LJ, et al. **J Cell Biol** 1989 Aug; 109(2):927-37
Isolation of specific lymphocyte receptors by high-performance immunoaffinity chromatography. Phillips TM, et al. **J Chromatogr** 1988 Jul 1;444:13-20
High-performance affinity isolation of lymphocyte membrane receptors on biotinylated antigen and avidin-coated beads. Phillips TM, et al. **J Chromatogr** 1988 Dec 23;458:185-92
Decreased lymphocyte function-associated antigen-1 molecule expression on peripheral blood lymphocytes from patients with Graves' disease. Guerin V, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):648-53
Serologic properties of the triple antibody-sandwich-lymphocyte-agglutination assay (TASLA). Hewitt CW, et al. **J Clin Lab Immunol** 1989 Jan;28(1):45-50
Kaposi's sarcoma in Zimbabwe. II. Peripheral lymphocytes, immunoglobulin G levels and HIV antibody positivity. Wilcock G, et al. **J Clin Lab Immunol** 1988 Sep;27(1):25-8
Expression of gamma interferon on circulating lymphocytes in viral infections. Caruso A, et al. **J Clin Microbiol** 1989 Jun;27(6):1426-9
Tumor localization of adoptively transferred indium-111 labeled tumor infiltrating lymphocytes in patients with metastatic melanoma. Fisher B, et al. **J Clin Oncol** 1989 Feb;7(2):250-61

Leu 8-positive cells in discoid lupus erythematosus and Jessner-Kanof's lymphocytic infiltrate of the skin [letter] Merot Y, et al. **J Cutan Pathol** 1988 Dec;15(6):412-3

Periparturient hypocalcemia in cows: effects on peripheral blood neutrophil and lymphocyte function. Kehrli ME Jr, et al. **J Dairy Sci** 1989 May;72(5):1188-96

Disease resistance and immune response genes in cattle: strategies for their detection and evidence of their existence. Lewin HA. **J Dairy Sci** 1989 May;72(5):1334-48 (93 ref.)

Function and regulation of lymphocyte-mediated immune responses: relevance to bovine mastitis. Nonnecke BJ, et al. **J Dairy Sci** 1989 May;72(5):1313-27 (118 ref.)

Lympho-epidermal interactions in patients receiving human Langerhans cell free cultured epidermal allografts as a skin substitute. Demidem A, et al. **J Dermatol (Tokyo)** 1988 Apr; 15(2):104-10

Recent observations regarding interferon, keratinocytes and lymphocytes in vitro and in vivo. Nickoloff BJ. **J Dermatol (Tokyo)** 1988 Apr;15(2):93-8

CD59, an LY-6-like protein expressed in human lymphoid cells, regulates the action of the complement membrane attack complex on homologous cells. Davies A, et al. **J Exp Med** 1989 Sep 1;170(3):637-54

In vivo administration of histoincompatible lymphocytes leads to rapid functional deletion of cytotoxic T lymphocyte precursors. Martin DR, et al. **J Exp Med** 1989 Sep 1;170(3):679-90

Isolation and chromosomal localization of cDNAs encoding a novel human lymphocyte cell surface molecule, LAM-1. Homology with the mouse lymphocyte homing receptor and other human adhesion proteins. Tedder TF, et al. **J Exp Med** 1989 Jul 1;170(1):123-33

Differential effect of alpha-interferons on CD4- and CD8-positive lymphocytes in chronic hepatitis B virus carriers. Nouri-Aria KT, et al. **J Hepatol** 1988 Aug;7(1):1-6

Capping of HLA antigens in human lymphocytes as followed by immunogold label-fracture. Pavan A, et al. **J Histochem Cytochem** 1989 Oct;37(10):1489-96

The expression of murine alloantigens on blood lymphocytes. Scott BM, et al. **J Immunogenet** 1988 Oct-Dec; 15(5-6):281-93

Hemorrhage produces abnormalities in lymphocyte function and lymphokine generation. Abraham E, et al. **J Immunol** 1989 Feb 1;142(3):899-906

Differential recognition of Leishmania aethiopica antigens by lymphocytes from patients with local and diffuse cutaneous leishmaniasis. Evidence for antigen-induced immune suppression. Akuffo HO, et al. **J Immunol** 1988 Oct 1;141(7):2461-6

Immunostimulation of C3H/HeJ lymphoid cells by R-chemotype lipopolysaccharide preparations. Flebbe L, et al. **J Immunol** 1989 Jan 15;142(2):642-52

IL-4 regulates IL-2 induction of lymphokine-activated killer activity from human lymphocytes. Kawakami Y, et al. **J Immunol** 1989 May 15;142(10):3452-61

Monoclonal antibodies against the CD44 [In(Lu)-related p80], and Pgp-1 antigens in man recognize the Hermes class of lymphocyte homing receptors. Picker LJ, et al. **J Immunol** 1989 Mar 15;142(6):2046-51

Spontaneous association of purified major histocompatibility class I antigens with recipient cells after removal of detergent. Eriksson H. **J Immunol Methods** 1988 Nov 25; 115(1):133-9

In vitro priming of human lymphocytes to heterologous insulins. Parkar BA, et al. **J Immunol Methods** 1989 Jun 21;120(2):159-65

Effects of the supernatants of mixed lymphocyte cultures and decidual cell line cultures on mouse embryo development in vitro. Fukuda A, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):59-64

Long-term regulation of interferon production by lymphocytes from children inoculated with live measles virus vaccine. Nakayama T, et al. **J Infect Dis** 1988 Dec; 158(6):1386-90

Suppression of purified protein derivative-induced interleukin-2 production by interaction of CD16 (Leu 11 reactive) lymphocytes and adherent mononuclear cells in tuberculosis. Toossi Z, et al. **J Infect Dis** 1989 Feb; 159(2):352-6

Defective lymphocyte chemotaxis in patients with AIDS [letter] Torre D, et al. **J Infect Dis** 1988 Dec;158(6):1398-9

Direct receptor:receptor interactions between T and B lymphocytes: idiotypic restriction in the antibody response to a cloned helper T cell receptor. Janeway CA Jr, et al. **J Mol Cell Immunol** 1987;3(2):83-94

Expansion of idiotype positive B cells in maternally idiotype suppressed mice. Victor-Kobrin C, et al. **J Mol Cell Immunol** 1984;1(6):331-46

Effect of benzodiazepines on the proliferation of mouse spleen lymphocytes in vitro. Pawlikowski M, et al. **J Neural Transm** 1988;73(2):161-6

Lewis rat lymphoid dendritic cells can efficiently present homologous myelin basic protein to encephalitogenic lymphocytes. Gautam AM, et al. **J Neuroimmunol** 1989 Apr;22(2):113-21

Lymphocyte proliferative response to glial cells in SJL/J mice immunized with rat whole spinal cord and rat myelin basic protein. Jewtoukoff V, et al. **J Neuroimmunol** 1989 Jan;21(1):81-6

Responsiveness to P2 of blood- and cauda equina-derived lymphocytes in experimental allergic neuritis in the Lewis rat: preliminary characterisation of a P2-specific cauda equina-derived T cell line. Taylor WA, et al. **J Neuroimmunol** 1988 Oct;19(4):279-89

Analysis of mixed lymphocyte-tumor culture in patients with malignant brain tumor. Yoshida S, et al. **J Neurosurg** 1989 Sep;71(3):398-402

Effects of dietary leucine, alpha-ketoisocaproate and isovalerate on antibody production and lymphocyte blastogenesis in growing lambs. Kuhlman G, et al. **J Nutr** 1988 Dec;118(12):1564-9

Blastogenic response and immunoglobulin production by inflamed gingival lymphocytes from dogs. Yamashita K, et al. **J Periodont Res** 1988 Sep;23(5):322-7

Persistent synovial lymphocyte responses to mumps and adenovirus antigens. Ford DK, et al. **J Rheumatol** 1988 Nov;15(11):1717-9

Synovial lymphocyte responses to microbial antigens differentiate the arthritis of enteric reactive arthritis from the arthritis of inflammatory bowel disease. Ford DK, et al. **J Rheumatol** 1988 Aug;15(8):1239-42

Effect of local hyperthermia on lymph immune cells and lymphokines of normal human skin. Olszewski WL, et al. **J Surg Oncol** 1989 Jun;41(2):109-16

Immunoresponse of tissue infiltrating lymphocytes in bladder tumors. Tsujihashi H, et al. **J Urol** 1989 Jun;141(6):1467-70

Soluble extracts from a lymphoblastoid cell line modulate simian immunodeficiency syndrome (SAIDS) evolution. Viza D, et al. **J Virol Methods** 1988 Sep;21(1-4):241-53

A correlation between the expression of CD 8 antigen and specific cytotoxicity of tumor-infiltrating lymphocytes. Okada Y, et al. **Jpn J Cancer Res** 1989 Mar;80(3):249-56

Production of human heterophile antibodies. III. In vitro specific stimulation and immortalization of human lymphocytes. Mori T, et al. **Jpn J Exp Med** 1989 Apr; 59(2):65-72

The clinical relevance of lymphocyte marker studies in the diagnosis of lymphoma. Harris NL. **Kelo J Med** 1989 Jun; 38(2):152-66 (30 ref.)

Maternal immune responses to the fetus in early pregnancy and recurrent miscarriage. Sargent IL, et al. **Lancet** 1988 Nov 12;2(8620):1099-104

In-utero transplantation of stem cells in bare lymphocyte syndrome [letter] Touraine JL, et al. **Lancet** 1989 Jun 17; 1(8651):1382

Phytohemagglutinin induced proliferation by aged lymphocytes: reduced expression of high affinity interleukin-2 receptors and interleukin-2 secretion. Froelich CJ, et al. **Life Sci** 1988;43(20):1583-90

Lung lymphocytes in bleomycin-induced pulmonary disease. Karpel JP, et al. **Lung** 1989;167(3):163-72

Lymphokine production by human peripheral blood lymphocytes: analysis by in situ hybridization. Qiu G, et al. **Lymphokine Res** 1988 Winter;7(4):385-92

In vitro blastogenesis of porcine peripheral blood lymphocytes. Onyekaba C. **Microbiologica** 1988 Jul; 11(3):201-5

Use of tumor-infiltrating lymphocytes and interleukin-2 in the immunotherapy of patients with metastatic melanoma. A preliminary report. Rosenberg SA, et al. **N Engl J Med** 1988 Dec 22;319(25):1676-80

Lymphocytes infiltrating ovarian carcinoma: modulation of functional activity by intraperitoneal treatment with biological response modifiers. Allavena P, et al. **Nat Immun Cell Growth Regul** 1988;7(4):230-8 (27 ref.)

Adherent lymphokine-activated natural killer cells in normal and severe combined immunodeficiency mice: large granular lymphocytes with natural killer cell phenotype and high cytolytic activity. Chang HL, et al. **Nat Immun Cell Growth Regul** 1989;8(2):89-99

Phagocytosis of autologous lymphocytes by cervical preneoplastic and neoplastic cells. Ghoneum M, et al. **Nat Immun Cell Growth Regul** 1988;7(4):239-48

Ovarian-tumor-infiltrating lymphocytes: phenotype and antitumor activity. Lotzová E. **Nat Immun Cell Growth Regul** 1988;7(4):226-9

A human lymphoid-specific transcription factor that activates immunoglobulin genes is a homoeobox protein. Scheidereit C, et al. **Nature** 1988 Dec 8;336(6199):551-7

Lymphocyte differentiation. Not all in a name [news] Shaw S. **Nature** 1989 Apr 13;338(6216):539-40

Human T-cell receptor expression [letter] Spencer J, et al. **Nature** 1989 Feb 2;337(6206):416

Anti-acetylcholine receptor antibody specificities in serum and in thymic cell culture supernatants from myasthenia gravis patients. Heidenreich F, et al. **Neurology** 1988 Nov; 38(11):1784-8

Augmentative effect of lentinan on immune responses of pelvic lymph node lymphocytes in patients with uterine cervical cancer. Shimizu Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1557-8

Utilization of tumour-sensitized ('educated') and radiolabelled lymphocytes for tumour localization. Spencer RP, et al. **Nucl Med Commun** 1988 Oct;9(10):783-6

Lymphocyte phenotypes in the abomasal mucosa of sheep infected with Haemonchus contortus. Gorrell MD, et al. **Parasite Immunol** 1988 Nov;10(6):661-74

Lymphocyte subpopulations of sheep in protective immunity to Taenia hydatigena. Meeusen E, et al. **Parasite Immunol** 1989 Mar;11(2):169-81

Macrophage activation in vitro by lymphocytes from Leishmania major infected healer and non-healer mice. Pham TV, et al. **Parasite Immunol** 1988 Jul;10(4):353-68

Macrophage-mediated cytostasis and lymphocyte cytotoxicity in cattle immunized with Theileria annulata sporozoites or macroschizont-infected cell lines. Preston PM, et al. **Parasite Immunol** 1988 Nov;10(6):631-47

Simultaneous expression of activated lymphoid cell-associated and granulocytic cell-associated antigens on Hodgkin's and Reed-Sternberg cells in Hodgkin's disease. Abe M, et al. **Pathol Res Pract** 1988 Aug; 183(4):418-24

IgE receptor-bearing lymphocytes in allergic and nonallergic children. Kim KM, et al. **Pediatr Res** 1988 Aug;24(2):254-7

Quantitative differences in Ia antigen expression in the spleens of 15I5-B congenic and inbred chickens as defined by a new monoclonal antibody. Lillehoj HS, et al. **Poult Sci** 1988 Nov;67(11):1525-35

Binding site for IgE of the human lymphocyte low-affinity Fc epsilon receptor (Fc epsilon RII/CD23) is confined to the domain homologous with animal lectins. Bettler B, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7118-22

A secreted form of the human lymphocyte cell surface molecule CD8 arises from alternative splicing. Giblin P, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):998-1002

Double-negative (CD4-CD8-) lymphocytes bearing T-cell receptor alpha and beta chains in normal human skin. Groh V, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5059-63

Interleukin 1 and tumor necrosis factor inhibit cardiac myocyte beta-adrenergic responsiveness. Gulick T, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6753-7

Quantifying the infectivity of human immunodeficiency virus. Layne SP, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4644-8

An immunoregulatory role of human trophoblasts. Saji F, et al. **Prog Clin Biol Res** 1989;294:435-46

Age, cellular immunity and the HP axis in major depression. Darko DF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):713-20

Considerations on the role of the plasminogen activators/plasmin system in the generation of conditions for more efficient interaction of malignant cells with large granular lymphocytes. Juranić Z, et al. **Res Immunol** 1989 Mar-Apr;140(3):281-3

Lymphocyte homing. Kieran MW, et al. **Res Immunol** 1989 May;140(4):399-450 (266 ref.)

Nature of IgG anti-lymphocyte autoantibody-reactive molecules shed from activated T cells in systemic lupus erythematosus. Minota S, et al. **Rheumatol Int** 1988; 8(4):165-70

Independent clinical significance of HIV antigen determination and CD4 counts in anti-HIV positive patients. Skinhøj P, et al. **Scand J Infect Dis** 1989; 21(2):149-53

Lymphocyte subsets in two cases of acute malaria of pregnancy and in cases of uncomplicated falciparum malaria in western Thailand. Desowitz RS, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):165-7

Immunologic studies on myasthenia gravis. II: A new chemotactic factor for lymphocytes found in patients with myasthenia gravis. Annoh T, et al. **Surgery** 1989 May; 105(5):615-24

The in vivo distribution of human peripheral blood lymphocytes and lymphokine-activated killer cells adoptively transferred in human pancreatic cancer-bearing nude mice. Marincola FM, et al. **Surgery** 1989 Jan; 105(1):79-85

Modulating effect of growth hormone (GH) on PHA-induced lymphocyte proliferation. Bozzola M, et al. **Thymus** 1988-89;12(3):157-65

Low susceptibility of trophozoites of virulent Entamoeba histolytica to cellular and antibody-dependent cellular cytotoxicity by guinea-pig effector cells. Saxena A, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):933-7

Use of monoclonal antibodies to study in vivo and in vitro-activated lymphocytes. Aversa GG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):349-50

An immune monitoring program for controlling immunosuppressive therapy. Baehr RV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1189-91

Expression of adhesion molecules by human renal tubular cells in culture and binding of activated lymphocytes. Bishop A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):314-5

Increased risk of rejection in renal transplant recipients with in vitro cyclosporin-resistant lymphoid responses. Bowes LG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1470-1

In vitro immunosuppressive effects of murine hepatocyte cytosol. Bumgardner GL, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):1134-5

Specific immunological tolerance/optimal graft function in the absence of immunosuppressive therapy. Burrows L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):369-72

Effects of cyclosporin on nuclear function of transplant recipient lymphocytes. Citterio F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1465-6

Specificity of the nuclear effect of cyclosporine on the immune cells. Citterio F, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):842-3

Identification of the lymphocyte epitopes with which clinically effective polyclonal ALG reacts. Condie RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):973-6

Comparison of the in vitro immunosuppressive effects of

cyclosporine A and its metabolites. Copeland KR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1449–52

Accelerated graft arteriosclerosis is enhanced by sensitization of the recipient to donor lymphocytes. Cramer DV, et al. **Transplant Proc** 1989 Aug;21(4):3714–5

Bone marrow cells that prolong graft survival in ALS-treated mice: characterization for markers related to lymphocyte ontogeny. De Fazio SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):267–8

Immune response of rat small bowel lymphocytes. Ennulat NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2898–9

The inhibition of cell mediated cytotoxicity by 16,16 dimethyl PGE2. Flye MW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1156–7

Immunomanipulation of the response to cardiac allo and xenoreactive leukocytes. Fuzesi L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):537–9

Phenotypic analysis of mononuclear cells infiltrating rat renal allografts during ongoing rejection. Hamashima T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):356–7

Lymphocyte parameters in liver graft recipients receiving prophylactic OKT3 or conventional triple therapy. Hamilton G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2255–6

Differential in vivo function of splenocytes and lymphocytes harvested from rejecting allografts. Heidecke CD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):184–5

The interleukins as lymphocyte growth factors. Henney CS. **Transplant Proc** 1989 Feb;21(1 Pt 1):22–5 (27 ref.)

Allogeneic lymphocyte cytotoxicity in New Zealand nude rats. Heslop BF. **Transplant Proc** 1989 Apr;21(2):3273–4

Immunosuppression failure: a function of lymphocyte steroid and cyclosporin resistance. House AK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1573–4

Expression of class I and class II major histocompatibility complex (MHC) antigens in rejecting human heart grafts. Ippoliti G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):445–6

The reversal of cyclosporin A–mediated suppression of allogeneic induced monocyte procoagulant activity by H2 antagonists in–vitro. Kim P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):844–7

Expression of immune cell surface markers in vivo and immune competence in mice by dietary nucleotides. Kulkarni A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):121–4

Splenectomy abrogates the ability of thoracic duct lymphocytes of tolerant rats to transfer suppression. Lim SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):480–1

The effect of a pretransplant blood transfusion on lymphokine production in patients with renal failure. McKenna RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1827

Cyclosporin A and prednisolone: an additive inhibitory effect of cell proliferation and interleukin–2 production. Manfro RC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1457–9

Effect of HLA class II antigen in in vitro and in vivo cellular responses. Matsuno N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):158–9

Comparison of dithiothreitol (DTT) treatment and absorption using autologous EBV-transformed lymphoblastoid cell lines for the depletion of autoreactive antibodies. Nicholls C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):774–6

Monoclonal antibodies recognizing shared molecules on endothelial cells and leukocytes. O'Connell PJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):115–6

Analysis of infiltrating lymphocytes from fine needle aspiration biopsies in kidney transplant patients by a rapid and sensitive immunomagnetic method. Pfeffer PF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):354–5

Relevance of immunological parameters to detect allograft rejection in heart transplant recipients. Renna Molajoni E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2534–6

The effect of steroids on the production of non–IFN–gamma MHC class II inducing mediators. Ruers TJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):125–6

Role of canine hepatic sinusoidal lining cells in the immune response. Sakagami K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):411–5

Receptor–mediated cellular uptake of cyclosporine. Sanghvi A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):858–9

Interleukin–2 receptor as an immunodiagnostic tool to differentiate rejection from nephrotoxicity. Smith AY, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1462–4

Anesthesia–associated depression of peripheral node lymphocyte traffic and antibody production in sheep accompanied by elevations in arachidonic acid metabolites in efferent lymph. Spruck CH, et al. **Transplant Proc** 1988 Dec;20(6):1169–74

Failure of cyclosporine A to affect generation of large granular lymphocytes (OX–8+, OX–19–) and natural killer cell activity following systemic cyclophosphamide administration and immunization in the rat. Stewart LS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):871–2

Suppression in class II MHC tolerance is mediated by Ia–specific lymphocytes that fail to mature into allodestructive effectors. Streilein JW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):236–7

Cyclosporin A and G inhibition of cytokine production. Szturm K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):857

Treatment of presensitization with IL–2 receptor antibody plus alloantigen. Tyler JD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1010–2

Stimulation of allogeneic and autologous MLR by subpopulations of human monocytes. Uren S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):208–10

Limiting dilution analysis of alloreactive precursors is more discriminatory than MLR to evaluate functional histocompatibility. Valle MT, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):685–6

Appearance of ART–18–positive (IL–2R) cells in peripheral blood and spleen after donor–specific blood transfusion (DST) in rats differing across the major histocompatibility complex. Wasowska B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1177–8

Additive inhibitory effect of cyclosporine and verapamil may occur through different mechanisms that may be dependent or independent of the slow calcium channel. Weir MR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):866–70

Analysis of spontaneous blastogenesis profiles in recipients of renal allografts. Yoon YS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1925

The identification of lymphocyte phenotypes in peripheral blood of long–term renal allograft patients. Ziegelbaum M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):373–4

In vitro cytotoxicity in adult Xenopus generated against larval targets and minor histocompatibility antigens. Horton TL, et al. **Transplantation** 1989 May;47(5):880–2

Donor–specific lysis of human kidney proximal tubular epithelial cells by renal allograft–infiltrating lymphocytes. Miltenburg AM, et al. **Transplantation** 1989 Aug; 48(2):296–302

Mediation of the induction of immunologic unresponsiveness following antigen pretreatment by a CD4 (W3/25+) T cell appearing transiently in the splenic compartment and subsequently in the TDL. Quigley RL, et al. **Transplantation** 1989 Apr;47(4):689–96

Interleukin 2 receptor expression on peripheral blood lymphocytes in association with renal allograft rejection. Reed MH, et al. **Transplantation** 1989 Sep;48(3):361–6

Propagation of alloreactive lymphocytes from histologically negative endomyocardial biopsies from heart transplant patients. Association with subsequent histological evidence of allograft rejection. Weber T, et al. **Transplantation** 1989 Sep;48(3):430–5

Monoclonal immunoglobulin gene rearrangement in peripheral lymphocytes of a patient with multiple myeloma. Palumbo AP, et al. **Tumori** 1989 Feb 28;75(1):1–3

In vitro activation of lymphocytes by interleukin 2 in patients with renal cell carcinoma. Ziegelbaum MM, et al. **Urology** 1989 Feb;33(2):106–9

Reactivity of eleven anti–human leucocyte monoclonal antibodies with lymphocytes from several domestic animals. Aasted B, et al. **Vet Immunol Immunopathol** 1988 Jul;19(1):31–8

Isolation and characterization of lymphocytes from bovine intestinal epithelium and lamina propria. Clough ER, et al. **Vet Immunol Immunopathol** 1988 Jul;19(1):39–49

Lytic function of bovine lymphokine–activated killer cells from a normal and a malignant catarrhal fever virus–infected animal. Cook CG, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):105–18

In vivo effects of a thymosin alpha 1–containing colostral whey product on neutrophils and lymphocytes from lactating cows without and with experimentally induced Staphylococcus aureus mastitis. Kehrli ME Jr, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):149–63

Theileria parva in cattle: characterization of infected lymphocytes and the immune responses they provoke. Morrison WI, et al. **Vet Immunol Immunopathol** 1989 Feb; 20(3):213–37 (86 ref.)

Enumeration of lymphocyte subsets in peripheral blood of rhesus monkeys prior to and following monocyte removal using a modified indirect avidin–biotin immunoperoxidase technique. Tryphonas H, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):119–26

Lymphocyte mediated cell lysis. Meuer SC, et al. **Virchows Arch [B]** 1989;57(1):1–9 (78 ref.)

Ability of monoclonal anti–D antibodies to promote the binding of red cells to lymphocytes, granulocytes and monocytes. Merry AH, et al. **Vox Sang** 1989;56(1):48–53

Intestinal microflora of BALB/c–mice and function of local immune cells. Roszkowski K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):270–9

The effect of vitamin E on the cell–mediated immune response in pigs. Jensen M, et al. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):549–55

[Immunohistochemical studies of metastasis of achromatic melanoma to the lymph nodes] Popov A, et al. **Eksp Med Morfol** 1988;27(3):35–9 (Eng. Abstr.) **(Bul)**

[Abnormal cellular immunity in rheumatoid arthritis] Xu WD, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb; 28(2):112–4 (18 ref.) **(Chi)**

[Effect of recombinant interleukin 2 on peripheral blood lymphocytes in vitro. IV. Cytotoxicity of lymphocytes in patients with malignant tumors] Jira M, et al. **Cas Lek Cesk** 1988 Nov 11;127(46):1422–4 (Eng. Abstr.) **(Cze)**

[Immunohistological identification of elements of non–neoplastic lymphatic tissue—determination of membrane markers using monoclonal antibodies] Kulhánková J, et al. **Cesk Patol** 1988 Aug;24(3):179–84 (Eng. Abstr.) **(Cze)**

[A simple model for verifying the effects of a focused shock wave from our generator on erythrocytes and lymphocytes] Beneš J, et al. **Sb Lek** 1989 Apr;91(4):123–8 (Eng. Abstr.) **(Cze)**

[Cellular targets of immunoglobulins eluted from the placenta] Cohen JH, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):601–6 (Eng. Abstr.) **(Fre)**

[Hodgkin's disease—immunological aspects] Plat M, et al. **Allerg Immunol (Leipz)** 1988;34(3):139–58 (120 ref.) (Eng. Abstr.) **(Ger)**

[Lymphoreticular cells in the human endometrial stroma] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):845–9 (Eng. Abstr.) **(Ger)**

[Streptozocin–sensitized lymphocytes suppress the glucose–stimulated insulin secretion of the islands of Langerhans] Linn T, et al. **Immun Infekt** 1988 Dec; 16(6):226–9 (Eng. Abstr.) **(Ger)**

[Beta adrenergic receptors of lymphocytes in children with respiratory allergies] Bittera I, et al. **Orv Hetil** 1988 Aug 28;129(35):1861–2, 1865 (Eng. Abstr.) **(Hun)**

[Modifications of immunoenzymatic aspects of B–cell chronic lymphocytic leukemia lymphocytes incubated in vitro with polyclonal B–cell activators and alpha–interferon] Lanza F. **Medicina (Firenze)** 1988 Jan–Mar;8(1):68–70 (Eng. Abstr.) **(Ita)**

[Blood zinc in patients with Down's syndrome and its relations with their immune status] Colombo ML, et al. **Minerva Pediatr** 1989 Feb;41(2):71–5 (Eng. Abstr.) **(Ita)**

[Identification and characterization of effector lymphocytes lysing autologous tumor cells] Kumagai K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1462–8 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Cellular immune response of bladder tumor patients: effects of aging on cytotoxic activity against T24] Kato M. **Hinyokika Kiyo** 1988 Aug;34(8):1363–9 (Eng. Abstr.) **(Jpn)**

[Interferon production and natural killer activity of peripheral blood lymphocytes obtained from patients with multiple sclerosis] Maruo Y. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):521–33 (Eng. Abstr.) **(Jpn)**

[Quantitative and functional study of peripheral lymphocytes in patients with alopecia areata] Tanaka M. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):809–15 (Eng. Abstr.) **(Jpn)**

[A study of immune surveillance for bladder tumor. III. The study of immunocompetence of tissue infiltrating lymphocytes in bladder tumors] Tsujihashi H. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):977–84 (Eng. Abstr.) **(Jpn)**

[Cytotoxic activity of peripheral blood lymphocyte in patients with head and neck malignant tumor] Ishida H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul; 91(7):991–1001 (Eng. Abstr.) **(Jpn)**

[Interleukin–2 production and receptor expression of alveolar lymphocytes stimulated by Propionibacterium acnes in sarcoidosis] Mori Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):42–50 (Eng. Abstr.) **(Jpn)**

[Recent topics on Alzheimer's disease. Immunological study of Alzheimer's disease] Iwamoto N, et al. **Nippon Rinsho** 1988 Jul;46(7):1611–5 **(Jpn)**

[Biochemistry of the physiopathologic and clinical aspects of free radicals in the immune response and autoimmune diseases] Shingu M. **Nippon Rinsho** 1988 Oct; 46(10):2208–16 **(Jpn)**

[Effects of anticonvulsants on cellular immunity] Okamoto Y, et al. **No To Shinkei** 1989 Mar;41(3):299–304 (Eng. Abstr.) **(Jpn)**

[Separation and functional analysis of tumor–infiltrating lymphocytes in brain tumor tissues] Saito T, et al. **No To Shinkei** 1988 Dec;40(12):1137–42 (Eng. Abstr.) **(Jpn)**

[A determination of lymphocyte blastoid transformation by a flow cytometry] Hara A, et al. **Rinsho Byori** 1988 Jun; 36(6):710–4 **(Jpn)**

[Comparative study on in vitro lymphocytotoxicity and mitogenicity of different antilymphocyte globulin (ALG) preparations] Kawano Y, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):327–31 (Eng. Abstr.) **(Jpn)**

[An analysis of lymphocyte surface markers in HTLV–I–associated myelopathy (HAM)] Kuwasaki N, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1192–6 (Eng. Abstr.) **(Jpn)**

[Effect of sera from patients with lung cancer on proliferative properties of lymphocytes from healthy blood donors] Ptucińska M, et al. **Pneumonol Pol** 1988 Jul;56(7):302–8 (Eng. Abstr.) **(Pol)**

[Proline–rich–polypeptide from ovine colostrum (PRP): its structure and properties. II] Janusz M. **Postepy Hig Med Dosw** 1988 May–Jun;42(3):237–59 (58 ref.) **(Pol)**

[Effect of lymphoid cells of Peyer's patches on the immunologic response in mice] Gryglewski A, et al. **Przegl Lek** 1988;45(11):765–9 (Eng. Abstr.) **(Pol)**

[Changes in the natural killer activity of lymphocytes in peripheral blood of patients with purulent–septic diseases under the effect of extracorporeal perfusion of pig spleen sections] Zhidkov KP, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):37–40 (Eng. Abstr.) **(Rus)**

[Reaction of lymphocytes of the endometrium to the intrauterine administration of antigens] Iakhnitsa AG, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):74–7 (Eng. Abstr.) **(Rus)**

[Variability of sensitivity of lymphocytes from healthy donors

to antiproliferative effect of dexamethasone and HLA antigens] Kalashnikova EA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):334–6 (Eng. Abstr.) (Rus)

[Cytostatic action of the peritoneal cells of Syrian hamsters on transformed cells] Lavnikova NA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):333–5 (Eng. Abstr.) (Rus)

[Dynamic activity of the splenic lymphocytes during the modelling of chronic denervation–delymphatization of the kidneys in mice] Shestakova NK, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):572–4 (Eng. Abstr.) (Rus)

[A panel of monoclonal antibodies against human lymphocyte antigens] Filatov AV, et al. **Eksp Onkol** 1989;11(2):28–32 (Eng. Abstr.) (Rus)

[Characteristics of lymphocyte autoantigens] Etkin AF, et al. **Gematol Transfuziol** 1989 Mar;34(3):30–5 (Eng. Abstr.) (Rus)

[Immunoenzyme cytochemical studies in oncohematology] Mechetner EB, et al. **Gematol Transfuziol** 1989 Feb; 34(2):57–60 (Rus)

[Genetic differences of antigens controlled by Y chromosome ensure the inactivation of bone marrow stem cells by syngeneic murine lymphocytes] Semenkov VF, et al. **Genetika** 1988 Sep;24(9):1602–7 (Eng. Abstr.) (Rus)

[Histamine-related reactions in patients with byssinosis] Grishina TI, et al. **Gig Tr Prof Zabol** 1989;(4):22–4 (Eng. Abstr.) (Rus)

[Anaerobic infection and its effect on the immune status of patients with acute destruction of the lungs] Levashev IuN, et al. **Grudn Khir** 1989 May–Jun;(3):46–9 (Eng. Abstr.) (Rus)

[Use of antilymphocytic gamma globulin to monitor the course of viral hepatitis B] Gerasun BA, et al. **Lab Delo** 1989;(1):46–9 (Eng. Abstr.) (Rus)

[Results of active immunotherapy of children with acute lymphoblastic leukemia using cultured lymphoblast cell lines during remission] Makhonova LA, et al. **Pediatriia** 1989;(2):35–8 (Eng. Abstr.) (Rus)

[Various immunologic indices in primary chronic adrenal insufficiency] Sil'nitskiĭ PA, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):3–7 (Eng. Abstr.) (Rus)

[Allogeneic lymphocyte induction in vivo of highly active T-killers specific for the molecule of the H-2 class-I complex and the detection of their receptors in vitro] Brondz BD, et al. **Tsitologiia** 1988 Oct;30(10):1232–41 (Eng. Abstr.) (Rus)

[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor-bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) (Rus)

[Instability of immunoglobulin expression during differentiation induction in the human lymphoblastoid cell line RPMI–6410t] Seregina TM, et al. **Tsitologiia** 1988 May; 30(5):606–10 (Eng. Abstr.) (Rus)

[Possibilities of using anti-HLA sera in modulating the functional properties of lymphocytes and passive immunotherapy] Levin VI, et al. **Vestn Akad Med Nauk SSSR** 1988;(7):57–62 (Eng. Abstr.) (Rus)

[Prognostic immunologic pretransplantation monitoring in clinical kidney allotransplantation] Sochnev AM, et al. **Vestn Akad Med Nauk SSSR** 1988;(7):63–70 (Eng. Abstr.) (Rus)

[A specific stimulation test of the peripheral blood lymphocytes in the diagnosis of syphilis] Astaf'ev AV, et al. **Vestn Dermatol Venerol** 1989;(5):16–9 (Eng. Abstr.) (Rus)

[The specific lymphocytolysis reaction in syphilis patients] Rodin IuA, et al. **Vestn Dermatol Venerol** 1988;(11):57–9 (Eng. Abstr.) (Rus)

[Lymphocyte subpopulations in carriers of antibodies to the human immunodeficiency virus] Savitskiĭ GI, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):697–9 (Eng. Abstr.) (Rus)

[Interferon responses of various populations of lymphocytes of inbred mice with various degrees of sensitivity to the western equine encephalitis virus] Tazulakhova EB, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):72–6 (Eng. Abstr.) (Rus)

[Reactivity of human lymphocytes to yeast-like and mold fungi] Maianskiĭ AN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):49–52 (Eng. Abstr.) (Rus)

[Cytopathogenic action of peripheral blood lymphocytes in patient with brucellosis] Mukovozova LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):93–7 (Eng. Abstr.) (Rus)

[Circulating L-lymphocytes in brucellosis patients] Mukovozova LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):98–101 (Eng. Abstr.) (Rus)

[Dynamic immunologic reactivity of schizophrenics during psychopharmacotherapy as exemplified by virus-induced reactions of the blood lymphocytes] Nevidimova TI, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):81–7 (Eng. Abstr.) (Rus)

[Cellular immunity in patients with psoriasis] Mutevelić-Arslanagić N. **Acta Med Iugosl** 1989;43(1):13–20 (Eng. Abstr.) (Scr)

[Study of immune response in pregnancy. II. Lymphocyte function (published erratum appears in Med Clin (Barc) 1989 Mar 25;92(11):412)] Rejas M, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):645–8 (Eng. Abstr.) (Spa)

METABOLISM

Effects of operations on lymphocyte glucocorticoid receptors. Krasznai A, et al. **Acta Chir Hung** 1989; 30(1):39–43

Effects of glycosylation inhibitors on human growth hormone receptor in cultured human lymphocytes. Asakawa K, et al. **Acta Endocrinol (Copenh)** 1988 Dec; 119(4):517–24

Lymphocytic sodium and potassium pump function in Bartter's syndrome. Jest P, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):61–6

Significance of lymphocytes and blood vessel changes for edema formation in polyradiculoneuritis. Seitz RJ, et al. **Acta Neuropathol (Berl)** 1988;76(6):564–73

DNA synthesis and nucleoside metabolism in human tonsillar lymphocyte subpopulations. Staub M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:118–24

Density and functioning of human lymphocytic beta-adrenergic receptors during prolonged physical exercise. Miiki T. **Acta Physiol Scand** 1989 Aug; 136(4):569–74

Programmed cell death and adenine deoxynucleotide metabolism in human lymphocytes. Carson DA, et al. **Adv Enzyme Regul** 1988;27:395–404

Spermidine in mammalian lymphocytes and sea urchin embryos: uptake and labeling of macromolecules. Canellakis ZN. **Adv Exp Med Biol** 1988;250:423–34

Uptake of polyamines by human lymphocytes and their effect on lactate formation from glucose. Fasulo L, et al. **Adv Exp Med Biol** 1988;250:509–16

Characterization of lymphocyte beta-adrenergic receptors at rest and during exercise in ambulatory patients with chronic congestive heart failure. Mancini DM, et al. **Am J Cardiol** 1989 Feb 1;63(5):307–12

Serum IgA and the production of IgA by peripheral blood and bone marrow lymphocytes in patients with primary IgA nephropathy: evidence for the bone marrow as the source of mesangial IgA. van den Wall Bake AW, et al. **Am J Kidney Dis** 1988 Nov;12(5):410–4

Porcine malignant hyperthermia susceptibility: halothane-induced increase in cytoplasmic free calcium in lymphocytes. O'Brien PJ, et al. **Am J Vet Res** 1989 Jan; 50(1):131–5

Effect of interleukin-2 and mitogen on in vitro immunoglobulin production by peripheral blood lymphocytes from patients with selective IgM deficiency. Moffitt JE, et al. **Ann Allergy** 1988 Dec;61(6):424–7

Beta-adrenoceptor changes in blood lymphocytes and altered drug responsiveness. Brodde OE, et al. **Ann Clin Res** 1988; 20(5):311–23

Tachyphylaxis with amrinone therapy: association with sequestration and down-regulation of lymphocyte beta-adrenergic receptors. Maisel AS, et al. **Ann Intern Med** 1989 Feb 1;110(3):195–201

Interleukin-2 release from lymphocytes of patients with head and neck cancer. Wustrow TP, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):179–84

Lack of dynamic lipid changes after binding of interleukin 2 in chronic lymphatic leukemia lymphocytes indicates defective transmembrane signalling. Daefler S, et al. **Anticancer Res** 1989 May–Jun;9(3):743–8

The significance of 3H-thymidine degradation in cell culture experiments with special reference to rheumatoid arthritis. Nykänen PJ, et al. **APMIS** 1988 Sep;96(9):768–72

Identification of low density lipoprotein receptor abnormalities by assaying functional receptors on proliferating lymphocytes. Cuthbert JA, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1 Suppl):I43–9

Altered metabolism of poly(ADP-ribose) in the peripheral blood lymphocytes of patients with systemic lupus erythematosus. Sibley JT, et al. **Arthritis Rheum** 1989 Aug; 32(8):1045–9

A familial hyperalphalipoproteinemia with low uptake of high density lipoproteins into peripheral lymphocytes. Kobayashi J, et al. **Atherosclerosis** 1988 Oct;73(2–3):105–11

In vivo and in vitro phosphorylation of murine lymphocyte differentiation antigen CD5. Griffith LC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):536–41

Alpha-fetoprotein gene expression in human lymphoblastoid cells and in PHA-stimulated normal T-lymphocytes. Lafarge-Frayssinet C, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):112–8

Azidothymidine inhibits mitogen stimulated growth and DNA-repair in human peripheral lymphocytes. Munch-Petersen B. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1369–75

Polyamines in murine splenic lymphocytes. Marsh LL, et al. **Biochem Int** 1988 Dec;17(6):1071–8

Effect of cyclosporin A and ionophores on the intracellular pH of lymphocytes as measured by flow cytometry. Tron L, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):164–70

3-Deazaadenosine 5'-triphosphate: a novel metabolite of 3-deazaadenosine in mouse leukocytes. Prus KL, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):509–17

Vesicle-to-cell protein transfer: insertion of band 3, the erythrocyte anion transporter, into lymphoid cells. Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4655–9

Determination of the LDL receptor binding capacity of human lymphocytes by immunocytofluorimetric assay. Benhamamouch S, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):45–53

Carnitine and acylcarnitine levels of human peripheral blood lymphocytes and mononuclear phagocytes. Cress AP, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):135–9

Glucose, glutamine and ketone body utilisation by resting and concanavalin A activated rat splenic lymphocytes. O'Rourke AM, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):342–5

Effect of thapsigargin on cytoplasmic Ca2+ and proliferation of human lymphocytes in relation to AIDS. Scharff O, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):257–64

Effects of linoleic acid and mitogenic stimulation on the fatty acid composition of human lymphocytes. Shires SE, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):74–8

Anthracycline incorporation in human lymphocytes. Kinetics of uptake and nuclear concentration. Tarasiuk J, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):109–17

Inhibition of mitochondrial protein synthesis influences the glucocorticoid sensitivity of lymphoid cells. Van den Bogert C, et al. **Biochim Biophys Acta** 1988 Dec 9; 972(3):302–10

Correlation of the dispersion state of pyrene cerebroside sulfate and its uptake and degradation by cultured cells. Viani P, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):20–7

Polyamines in lymphocytes from patients infected by human immunodeficiency virus. Colombatto S, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):745–8

Utilization of medium-chain triglycerides and octanoic acid by cultured human fibroblasts and lymphoblasts. Lemmen C, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1267–73

Lymphocyte beta-adrenoreceptor density in patients with unipolar depression and normal controls. Magliozzi JR, et al. **Biol Psychiatry** 1989 May;26(1):15–25

New class of 19F pH indicators: fluoroanilines. Deutsch CJ, et al. **Biophys J** 1989 Apr;55(4):799–804

Premature maternal separation and lymphocyte function. Ackerman SH, et al. **Brain Behav Immun** 1988 Jun; 2(2):161–5

[3H]spiperone binding to lymphocyte in extrapyramidal disease and in aging. Członkowska A, et al. **Brain Behav Immun** 1987 Sep;1(3):197–203

Cholinergic receptors of lymphocytes. Maśliński W. **Brain Behav Immun** 1989 Mar;3(1):1–14 (84 ref.)

Cellular metabolism of 5,6-dihydro-5-azacytidine and its incorporation into DNA and RNA of human lymphoid cells CEM/O and CEM/dCk(-). Avramis VI, et al. **Cancer Chemother Pharmacol** 1989;24(3):155–60

Interleukin-2 activity and the response of peripheral blood lymphocytes in patients with gynecologic malignancies. Iwano I, et al. **Cancer Detect Prev** 1988;12(1–6):583–8

Monocyte-dependent, serum-borne suppressor of induction of lymphokine-activated killer cells in lymphocytes from melanoma patients. Itoh K, et al. **Cancer Immunol Immunother** 1989;29(1):57–62

Production of cytokines after lipopolysaccharide stimulation of murine spleen cells during lymphoma development in AKR mice. Vaillier D, et al. **Cancer Immunol Immunother** 1989;29(1):35–42

The heme biosynthetic pathway in lymphocytes of patients with malignant lymphoproliferative disorders. Schoenfeld N, et al. **Cancer Lett** 1988 Dec 1;43(1–2):43–8

Chlorambucil pharmacokinetics and DNA binding in chronic lymphocytic leukemia lymphocytes. Bank BB, et al. **Cancer Res** 1989 Feb 1;49(3):554–9

Characterization of trimetrexate transport in human lymphoblastoid cells and development of impaired influx as a mechanism of resistance to lipophilic antifolates. Fry DW, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):6986–91

Cytotoxicity of interleukin 2-toxin toward lymphocytes from patients with adult T-cell leukemia. Kiyokawa T, et al. **Cancer Res** 1989 Jul 15;49(14):4042–6

Diet-induced DNA damage and altered nucleotide metabolism in lymphocytes from methyl-donor-deficient rats. James SJ, et al. **Carcinogenesis** 1989 Jul;10(7):1209–14

Evidence for substantial formation of r-7,t-8-dihydroxy-c-9,10-oxy-7,8,9,10-tetrahydrobenzo[a]pyrene- deoxyguanosine in human lymphocytes treated in vitro with benzo[a]pyrene. Pavanello S, et al. **Carcinogenesis** 1989 May;10(5):945–7

Lymphocyte potassium and magnesium concentrations as prognostic factors after acute myocardial infarction [letter] Elin RJ, et al. **Cardiology** 1989;76(3):243–7

Quantitative evaluation of changes in the microtubule content of lymphocytes. Bilej M, et al. **Cell Biol Int Rep** 1989 Apr; 13(4):337–43

Lymphocytes treated with natural alfa-interferon produce a chemotactic factor for human neutrophils. Spisani S, et al. **Cell Biol Int Rep** 1989 Feb;13(2):163–9

A cooperative transition theory applied to the kinetics of ionic exchanges in cells. Negendank W. **Cell Biophys** 1988 Oct;13(2):93–117

The role of lymphocytes and monocytes in hematopoietic growth factor production by peripheral blood mononuclear cells. Kaushansky K, et al. **Cell Immunol** 1989 Aug; 122(1):62–70

Measurement of the cytosolic free calcium ion concentration of individual lymphocytes by microfluorometry using quin 2 or fura-2. Komada H, et al. **Cell Struct Funct** 1989 Apr;

14(2):141–50

Differential role of cation and anion exchange in lymphocyte pH regulation. Grinstein S, et al. **Ciba Found Symp** 1988; 139:70–86 (12 ref.)

Reduced lymphocyte stimulatory guanine nucleotide regulatory protein and beta-adrenergic receptors in congestive heart failure and reversal with angiotensin converting enzyme inhibitor therapy. Horn EM, et al. **Circulation** 1988 Dec;78(6):1373–9

Lymphocyte basal cyclic AMP production predicts blood pressure. Mills P, et al. **Clin Exp Hypertens [A]** 1989; 11(3):521–30

Lymphocyte beta 2-adrenergic receptors in essential hypertension: studies in basal conditions and after dynamic exercise. Parcerisa X, et al. **Clin Exp Hypertens [A]** 1989; 11 Suppl 1:303–9

Interleukin 2 receptor expression by human blood lymphocytes after vaccination with pneumococcal polysaccharides. Tvede N, et al. **Clin Exp Immunol** 1989 Jun;76(3):404–11

Transcriptional and post-transcriptional mechanisms are responsible for the increased expression of c-myc protooncogene in lymphocytes from patients with systemic lupus erythematosus. Eleftheriades EG, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):507–15

Correlation of blood pressure in normotensive and hypertensive individuals with platelet but not lymphocyte intracellular free calcium concentrations. Pritchard K, et al. **Clin Sci** 1989 Jun;76(6):631–5

Changes in the number of beta-adrenergic receptors of lymphocytes in patients with varying degrees of congestive heart failure. Okada N, et al. **Clin Ther** 1989 May-Jun; 11(3):373–81

Peptide-based radioimmunoassay for insulin receptor. Detection of insulin-stimulated downregulation in IM-9 lymphocytes. McFarland KC, et al. **Diabetes** 1989 Aug; 38(8):987–90

Binding specificity and intramolecular signal transmission of uncleaved insulin proreceptor in transformed lymphocytes from a patient with extreme insulin resistance. Sasaoka T, et al. **Diabetologia** 1989 Jun;32(6):371–7

Glutathione, glutathione S-transferase and glutathione reductase in human erythrocytes and lymphocytes as a function of sex. al-Turk WA, et al. **Drug Des Deliv** 1987 Feb;1(3):237–43

Expression and regulation of c-erb-A mRNA from lymphocytes in patients with thyroid dysfunction. Nagayama Y, et al. **Endocrinol Jpn** 1988 Jun;35(3):463–7

Lymphokines from concanavalin-A-stimulated lymphocytes regulate rat granulosa cell steroidogenesis in vitro. Gorospe WC, et al. **Endocrinology** 1988 Nov;123(5):2462–71

Release of growth hormone binding protein from IM-9 lymphocytes by endopeptidase is dependent on sulfhydryl group inactivation. Trivedi B, et al. **Endocrinology** 1988 Nov;123(5):2201–6

Uptake and subcellular distribution of cadmium in resting and mitogen-activated lymphocytes and its relationship to a metallothionein-like protein. Sgagias M, et al. **Environ Res** 1989 Aug;49(2):262–70

Personality factors predisposing to depression correlate significantly negatively with M1-muscarinic and beta-adrenergic receptor densities on blood cells. Moises HW, et al. **Eur Arch Psychiatry Neurol Sci** 1988; 237(4):209–17

Expression of human lactotransferrin receptors in phytohemagglutinin-stimulated human peripheral blood lymphocytes. Isolation of the receptors by antiligand-affinity chromatography. Mazurier J, et al. **Eur J Biochem** 1989 Feb 1;179(2):481–7

Inhibitory effect of nonviable preparations from human immunodeficiency virus 1 on inositol phospholipid metabolism. Müller WE, et al. **Eur J Biochem** 1989 Aug 1;183(2):391–6

Increased number of ouabain binding sites in lymphocytes from borderline hypertensives. Nielsen JR, et al. **Eur J Clin Invest** 1989 Feb;19(1):72–7

Ferritin synthesis in peripheral blood lymphocytes following in vitro stimulation. Pattanapanyasat K. **Eur J Haematol** 1989 May;42(5):454–9

Expression and function of AIM, an activation inducer molecule of human lymphocytes, is dependent on the activation of protein kinase C. Cebrián M, et al. **Eur J Immunol** 1989 May;19(5):809–15

Mitogenic lectins bind to the antigen receptor on human lymphocytes. Chilson OP, et al. **Eur J Immunol** 1989 Feb; 19(2):389–96

Human lamina propria lymphocytes bear homing receptors and bind selectively to mucosal lymphoid high endothelium. Jalkanen S, et al. **Eur J Immunol** 1989 Jan; 19(1):63–8

Adhesion of lymphoid cells to the carboxyl-terminal heparin-binding domains of fibronectin. Liao NS, et al. **Exp Cell Res** 1989 Apr;181(2):348–61

Extremely low frequency pulsed electromagnetic fields increase interleukin-2 (IL-2) utilization and IL-2 receptor expression in mitogen-stimulated human lymphocytes from old subjects. Cossarizza A, et al. **FEBS Lett** 1989 May 8; 248(1-2):141–4

Aphidicolin inhibition of gamma-radiation-induced DNA repair in human lymphocyte subpopulations. van Rensburg EJ, et al. **Gen Pharmacol** 1989;20(4):433–6

Characteristics of lymphocyte beta-adrenoceptors in essential hypertension: effects of propranolol treatment and dynamic exercise. Parfyonova EV, et al. **Health Psychol** 1988;7 Suppl:33–52

Up-regulation of IGF-I receptors on IM-9 cells by IGF-II peptides. Werther GA, et al. **Horm Metab Res** 1989 Mar; 21(3):109–12

Qualitative dissimilarities of insulin and proinsulin binding and action in vitro at IM 9-lymphocytes. Rausch UW, et al. **Horm Metab Res Suppl** 1988;18:89–92

Dietary calcium and cell membrane abnormality in genetic hypertension. Furspan PB, et al. **Hypertension** 1989 Jun; 13(6 Pt 2):727–30

Interleukin 2-induced protein phosphorylation/dephosphorylation in human non-adherent peripheral blood mononuclear cells: initial phosphorylation of two 75-kDa proteins. Hamann W, et al. **Immunol Lett** 1989 Jul;22(1):51–8

Role of inositol starvation on ecto-5'-nucleotidase activity during mitogen-induced lymphocyte activation. Hauschildt S, et al. **Immunol Lett** 1988 Sep;19(1):71–6

Receptors on lymphocytes for endogenous splenic glycosaminoglycans. Bradbury MG, et al. **Immunology** 1989 Apr;66(4):546–53

Adhesion of lymphocytes to cerebral microvascular cells: effects of interferon-gamma, tumour necrosis factor and interleukin-1. Hughes CC, et al. **Immunology** 1988 Aug; 64(4):677–81

Influence of IL-2 and IL-4 on the IgE synthesis and the IgE-binding factor (sCD23) production by human lymphocytes in vitro. Knöller I, et al. **Immunology** 1989 Mar;66(3):368–75

Endotoxic-lipopolysaccharide-specific binding proteins on lymphoid cells of various animal species: association with endotoxin susceptibility. Roeder DJ, et al. **Infect Immun** 1989 Apr;57(4):1054–8

Increased immunoglobulin E Fc receptor bearing cells in germinal centers of hyperimmunoglobulinemia E patients. Mitani S, et al. **Int Arch Allergy Appl Immunol** 1988; 87(1):63–9

Fructose-2,6-bisphosphate in rat mesenteric lymph nodes. Abuelgassim AO, et al. **Int J Biochem** 1988;20(10):1185–8

Influence of lipid peroxidation and hydrogen peroxide on muscarinic cholinergic receptors and ATP level in rat myocytes and lymphocytes. Gajewski M, et al. **Int J Tissue React** 1988;10(5):281–90

Studies on the sugar chains of interferon-gamma from human peripheral-blood lymphocytes. Yamamoto S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):1034–9

Increased assembly of clathrin occurs in response to mitogenic activation of murine lymphocytes. Corvera S, et al. **J Biol Chem** 1989 Jul 25;264(21):12568–72

Regulation of low density lipoprotein receptor gene expression in human lymphocytes. Cuthbert JA, et al. **J Biol Chem** 1989 Jan 15;264(2):1298–304

Distinct subsets of somatostatin receptors on cultured human lymphocytes. Sreedharan SP, et al. **J Biol Chem** 1989 Jan 15;264(2):949–52

Properties of parathyroid hormone receptors on circulating bovine lymphocytes. Yamamoto I, et al. **J Bone Miner Res** 1988 Jun;3(3):289–95

Effect of mitogen and lymphokine stimulation on proteoglycan synthesis by lymphocytes. Bartold PM, et al. **J Cell Physiol** 1989 Jul;140(1):82–90

In vitro production of interleukin-2 by lymphocytes in whole blood and isolated culture. Lyte M. **J Clin Lab Immunol** 1988 Aug;26(4):189–93

Adenine nucleotide concentrations in peripheral blood lymphocytes from patients with common variable hypogammaglobulinaemia and B-cell chronic lymphatic leukaemia. Shah T, et al. **J Clin Lab Immunol** 1988 May; 26(1):9–12

Human gamma interferon strongly upregulates its own gene expression in peripheral blood lymphocytes. Hardy KJ, et al. **J Exp Med** 1989 Sep 1;170(3):1021–6

Adrenoceptors on blood cells in patients with essential hypertension before and after mental stress. Graafsma SJ, et al. **J Hypertens** 1989 Jul;7(7):519–24

Lectin-induced phosphatidylinositol metabolism in lymphocytes is potentiated by macrophages. Grier CE 3d, et al. **J Immunol** 1988 Oct 15;141(8):2585–92

Hepatitis B core antigen-specific IFN-gamma production of peripheral blood mononuclear cells in patients with chronic hepatitis B virus infection. Inoue M, et al. **J Immunol** 1989 Jun 1;142(11):4006–11

Prostaglandin E precursor fatty acids inhibit human IL-2 production by a prostaglandin E-independent mechanism. Santoli D, et al. **J Immunol** 1989 Aug 15;143(4):1303–9

Physical association between MHC class I and class II molecules detected on the cell surface by flow cytometric energy transfer. Szöllösi J, et al. **J Immunol** 1989 Jul 1; 143(1):208–13

Binding of mitogenic plant lectins to human lymphocytes. Flow cytometric analysis. Serke S, et al. **J Immunol Methods** 1989 Jul 26;121(2):231–5

Evidence for both endogenous and exogenous sources of the sphingomyelin storage in lymphoid cell lines from patients with Niemann-Pick disease types A and B. Levade T, et al. **J Inherited Metab Dis** 1988;11(2):151–7

Production of interferon-alpha induced by dsRNA in human peripheral blood mononuclear cell cultures: role of priming by dsRNA-induced interferons-gamma and -beta. Lepe-Zuniga JL, et al. **J Interferon Res** 1989 Aug; 9(4):445–56

Heat shock proteins in normal and leukemic blood cells. Vokes EE, et al. **J Interferon Res** 1989 Apr;9(2):195–204

Nucleotides in lymphocytes of human subjects with zinc deficiency. Meftah S, et al. **J Lab Clin Med** 1989 Aug; 114(2):114–9

Changes in lymphocyte beta-adrenergic receptor density and noradrenaline content of the spleen are early indicators of immune reactivity in acute experimental allergic encephalomyelitis in the Lewis rat. Mackenzie FJ, et al. **J Neuroimmunol** 1989 Jul;23(2):93–100

Characterization of opiate binding sites on membranes of rat lymphocytes. Ovadia H, et al. **J Neuroimmunol** 1989 Feb; 21(2-3):93–102

DNA strand break accumulation, thymidylate synthesis and NAD levels in lymphocytes from methyl donor-deficient rats. James SJ, et al. **J Nutr** 1989 Apr;119(4):661–4

Elevated production of interleukin-2 by lymphocytes from children with acute leukemia. Ridgway D, et al. **J Pediatr** 1989 Mar;114(3):384–91

Lymphokine production in rheumatoid arthritis and systemic lupus erythematosus. McKenna RM, et al. **J Rheumatol** 1988 Nov;15(11):1639–42

Immunoglobulin synthesis by peripheral blood lymphocytes in patients with ankylosing spondylitis. Warmold A, et al. **J Rheumatol** 1988 Sep;15(9):1410–4

Sodium chloride sensitivity, intracellular sodium concentration in erythrocytes and lymphocytes, and renin profile in essential hypertension. Kido K, et al. **Jpn Circ J** 1989 Feb;53(2):101–7

Intracellular sodium concentration in lymphocytes and erythrocytes of patients with essential hypertension. Oshima T, et al. **Jpn Heart J** 1988 May;29(3):271–8

Production of interferon by human peripheral lymphocytes stimulated with rubella virus. Nakayama T, et al. **Kitasato Arch Exp Med** 1988 Dec;61(4):187–93

Calcium dependence of beta-adrenoceptor mediated cyclic AMP accumulation in human lymphocytes. Borst S, et al. **Life Sci** 1988;43(13):1021–9

The age-related decline in interleukin-3 expression in mice. Li DD, et al. **Life Sci** 1988;43(15):1215–22

Short-term delay in blood processing does not alter basal or isoproterenol-stimulated cyclic AMP accumulation in human lymphocytes. Mills PJ, et al. **Life Sci** 1989; 44(25):1917–20

Study of some lymphocyte metabolic parameters in diabetes mellitus. Cheta D, et al. **Med Interne** 1982 Jan-Mar; 20(1):25–32

Metabolism of glutamine in lymphocytes. Brand K, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):29–33

The effect of fatty acids on the vulnerability of lymphocytes to cortisol. Klein A, et al. **Metabolism** 1989 Mar; 38(3):278–81

Regulation of leucine transport and oxidation in peripheral human lymphocytes by glutamine. Schauder P, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):56–8

Iron and transferrin uptake by phytohemagglutinin-stimulated human peripheral blood lymphocytes. Taylor PG, et al. **Microbiol Immunol** 1988; 32(9):949–55

The effect of adenine nucleotides on the rate and fate of glutamine utilization by incubated mitochondria isolated from rat mesenteric lymph nodes. Curi R, et al. **Mol Cell Biochem** 1989 Mar 16;86(1):71–6

The bcl-2 candidate proto-oncogene product is a 24-kilodalton integral-membrane protein highly expressed in lymphoid cell lines and lymphomas carrying the t(14;18) translocation. Chen-Levy Z, et al. **Mol Cell Biol** 1989 Feb; 9(2):701–10

A major myristylated substrate of protein kinase C and protein kinase C itself are differentially regulated during murine B- and T-lymphocyte development and activation. Hornbeck P, et al. **Mol Cell Biol** 1989 Sep;9(9):3727–35

Comparison of vasoactive intestinal peptide-mediated protein phosphorylation in human lymphoblasts and colonic epithelial cells. O'Dorisio MS, et al. **Mol Immunol** 1989 Jun;26(6):583–90

Human lymphocytes aged in vivo have reduced levels of methylation in transcriptionally active and inactive DNA. Drinkwater RD, et al. **Mutat Res** 1989 Jan;219(1):29–37

A cloned octamer transcription factor stimulates transcription from lymphoid-specific promoters in non-B cells. Müller MM, et al. **Nature** 1988 Dec 8;336(6199):544–51

Cellulosic membranes and leukocytes are not effective for in vitro generation of beta 2-microglobulin [letter] Bonucchi D, et al. **Nephrol Dial Transplant** 1988;3(5):708

Estimation of beta-2-microglobulin production from lymphocytes in hemodialysis patients [letter] Shishido K, et al. **Nephron** 1989;51(1):132–3

Alpha 1-acid glycoprotein in bovine lymphocytes. Iwata H, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):996–1002

Amplification of human minisatellites by the polymerase chain reaction: towards DNA fingerprinting of single cells. Jeffreys AJ, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):10953–71

Expression of the gangliosides GD3 and GD2 on lymphocytes in tissue sections of melanoma. Hersey P, et al. **Pathology** 1989 Jan;21(1):51–8

Beta-adrenergic receptors of lymphocytes in children with allergic respiratory diseases. Bittera I, et al. **Pediatr Pulmonol** 1988;5(2):69–73

Eicosanoid metabolism by lymphocytes: do all human

nucleated cells generate eicosanoids? Goldyne ME. **Pharmacol Res** 1989 May-Jun;21(3):241-5 (26 ref.)

Ion transport, membrane potential, and cytoplasmic pH in lymphocytes: changes during activation. Grinstein S, et al. **Physiol Rev** 1989 Apr;69(2):417-81 (253 ref.)

Structural homology between lymphocyte receptors for high endothelium and class III extracellular matrix receptor. Gallatin WM, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4654-8

The role of transcobalamin II in the methionine dependency of human lymphocytes. Hall CA, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):217-22

Lymphocytes and arachidonic acid metabolism. Goldyne ME. **Prog Allergy** 1988;44:140-52 (54 ref.)

Effects of calcium channel blockers and ketotifen on beta 2 adrenergic receptor regulation in intact human lymphocytes. Hui KK, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):3-19

Human lymphocytes produce both leukocyte migration inhibition (LIF) and stimulation (MStF) factors after mitogen, alloantigens or antigen activation. Favila-Castillo L, et al. **Rev Latinoam Microbiol** 1988 Apr-Jun;30(2):111-5

Propranolol attenuates exercise-induced increment in human lymphocytic beta-adrenergic receptors. Mäki T, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):357-63

Increased 22Na+-influx in lymphocytes from offspring of essential hypertensive patients. Nielsen JR, et al. **Scand J Clin Lab Invest** 1989 May;49(3):293-300

Effect of freezing and ultrasonication on the density of human lymphocyte beta 2-adrenoceptors. Santala M, et al. **Scand J Clin Lab Invest** 1989 Jun;49(4):323-7

Assessment of effects of amino acids and branched chain keto acids on leucine oxidation in human lymphocytes. Schäfer G, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):531-6

Cytoplasmic free calcium concentration and inhibition in MLC after blood transfusion. Hiroshi T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1810-3

Increased cyclosporine uptake by cells pretreated with FK506 and evidence for binding of both drugs to a common intracellular protein. Sanghvi A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1050-2

Albumin and the unique pattern of inhibitors of cortisol catabolism by lymphocytes in serum of cancer patients. Klein A, et al. **Tumour Biol** 1989;10(3):149-52

Are all lymphoid blasts in the cell cycle? DNA synthesis in the lymphoid tissues of the dog. Wiedemann G, et al. **Virchows Arch [B]** 1989;56(6):407-12

[Effect of traditional Chinese medicine on primary hypothyroidism in relation to nuclear T3 receptors of lymphocytes] Kuang AK. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):650-3, 643 (Eng. Abstr.) (Chi)

[The changes in beta-adrenergic receptors and cyclic AMP levels of lymphocytes in patients with COPD] Gao DW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):27-9, 62 (Eng. Abstr.) (Chi)

[Beta adrenergic receptors in patients with untreated and verapamil-treated hypertrophic cardiomyopathy] Kölbel F, et al. **Sb Lek** 1988 Jul;90(7):218-22 (Eng. Abstr.) (Cze)

[Experimental study on cytotoxicity of zirconium compounds in vitro (1)] Sima S, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):895-900 (Eng. Abstr.) (Jpn)

[Interferon-gamma production in vitro by peripheral lymphocytes from patients with retinitis pigmentosa] Morimoto A, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul; 92(7):1161-5 (Eng. Abstr.) (Jpn)

[Human monoclonal antibody constructed by lymphocytes from pancreatic cancer patients] Tanaka H. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):93-101 (Eng. Abstr.) (Jpn)

[Association of intracellular free calcium concentration in lymphocytes with acute hypotensive response to nifedipine in patients with essential hypertension] Shingu T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):635-40 (Jpn)

[Effect of alcohol on the leukocyte system. IV. Cytochemical and immunologic evaluation of the functional state of peripheral blood lymphocytes in alcoholics] Pietruczuk M, et al. **Przegl Lek** 1988;45(9):675-9 (Eng. Abstr.) (Pol)

[Biochemical studies of the supernatant of leukemia cell cultures] Kiersnowska-Rogowska B. **Rocz Akad Med Bialymstoku** 1984-85;29-30:21-52 (Eng. Abstr.) (Pol)

[Cyclic AMP level in peripheral blood lymphocytes in patients with peptic ulcer before and after treatment with cimetidine] Klimczak J, et al. **Wiad Lek** 1988 Jul 1; 41(13):855-9 (Eng. Abstr.) (Pol)

[Dependence of kinetic constants of intact human lymphocyte beta2-adrenoreceptors on the nature of the radioligands used] Krasnikova TL, et al. **Biokhimiia** 1989 Feb;54(2):235-43 (Eng. Abstr.) (Rus)

[Interrelation of degradation processes of purine nucleotides and their biosynthetic transformation in the blood cells of patients with acute leukemia] Filanovskaia LI, et al. **Eksp Onkol** 1989;11(4):59-63 (Eng. Abstr.) (Rus)

[Purine compound transport and metabolism in the thymus and spleen lymphocytes of C3HA mice during the growth of hepatoma 22] Pimenov AM, et al. **Eksp Onkol** 1989; 11(4):33-7 (Eng. Abstr.) (Rus)

[Effect of helium and argon on the oxygen uptake by lymphocytes] Govorukha TN, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):93-5 (Eng. Abstr.) (Rus)

[Mechanisms of DNA repair disorders in human cells. Genome instability in lymphocytes of patients with myopathy related to DNA repair disorders] Chekova VV, et al. **Genetika** 1988 Dec;24(12):2202-7 (Eng. Abstr.) (Rus)

[Effect of long-term anti-orthostatic hypokinesia on tissue sensitivity to glucocorticoids] Vorob'ev DV, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):85-6 (Rus)

[Interaction of insulin with lymphocyte plasma membrane receptors after experimental burn injury] Mikaelian NP, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):42-5 (Eng. Abstr.) (Rus)

[Comparative cytofluorimetry of the lymphocytes and neutrophils after acridine orange and rivanol SO_2 staining in various infectious pathologies in premature infants] Karachunskiĭ AI, et al. **Pediatriia** 1988;(8):40-4 (Rus)

[Functional disorders of lymphocytes in children with bronchial asthma] Safronova ON, et al. **Pediatriia** 1988; (7):110-1 (Rus)

[The interleukin system and the energy enzyme activity in lymphocytes of patients with newly detected pulmonary tuberculosis] Mishin VIu, et al. **Probl Tuberk** 1988;(6):55-9 (Eng. Abstr.) (Rus)

[Features of absorption of cortisol by peripheral blood cells in patients with bronchial asthma] Trofimov VI, et al. **Ter Arkh** 1989;61(3):40-2 (Eng. Abstr.) (Rus)

[Changes in the content of potassium, sodium and potassium influx in human peripheral blood lymphocytes during long-term cultivation with phytohemagglutinin] Ezhevskiĭ SA, et al. **Tsitologiia** 1988 May;30(5):573-81 (Eng. Abstr.) (Rus)

[Interaction between insulin and its receptor in lymphocyte plasma membranes during burn trauma in rats] Mikaelian NP. **Vopr Med Khim** 1988 Sep-Oct;34(5):96-8 (Eng. Abstr.) (Rus)

[Mechanism of activating the lymphocyte glucocorticoid receptor in acute myocardial infarct] Petrichenko IE, et al. **Vopr Med Khim** 1989 May-Jun;35(3):64-8 (Eng. Abstr.) (Rus)

[Polyamines of lymphocytes in animals in an experimental tumor process] Zaletok SP, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):22-6 (Eng. Abstr.) (Rus)

[Decreased capacity of the peripheral blood lymphocytes for excisional DNA repair in disseminated sclerosis] Moskaleva EIu, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):87-8 (Eng. Abstr.) (Rus)

[Disorders of interleukin 2 biosynthesis by peripheral blood lymphocytes in patients with schizophrenia] Sekirina TP, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):95-7 (Eng. Abstr.) (Rus)

[Increase in number and exagerated increment during exercise of lymphocyte beta 2-adrenergic receptors in essential mild arterial hypertension] Parcerisa X, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):570-2 (Eng. Abstr.) (Spa)

MICROBIOLOGY

Isolation of HIV-1 from small volumes of heparinized whole blood [letter] Bayliss GJ, et al. **Aids** 1989 Jan;3(1):45

Detection of measles virus genome in blood leucocytes of patients with certain autoimmune diseases. Andjaparidze OG, et al. **Arch Virol** 1989;105(3-4):287-91

Lysis of chicken lymphocytes by infectious bursal disease viruses. Lam KM. **Avian Dis** 1988 Oct-Dec;32(4):818-21

Properties of producer and non-producer clones of a Marek's disease turkey lymphoblastoid cell line. Nazerian K, et al. **Avian Dis** 1988 Jul-Sep;32(3):486-93

Lack of evidence for a role of T-cell-associated retroviruses as an etiology of schizophrenia. Feenstra A, et al. **Biol Psychiatry** 1989 Feb 15;25(4):421-30

Secretion of parathyroid hormone-like activity from human T-cell lymphotropic virus type I-infected lymphocytes. Fukumoto S, et al. **Cancer Res** 1989 Jul 15;49(14):3849-52

Isolation of human immunodeficiency virus from peripheral blood lymphocytes stored in various transport media and frozen at -60 degrees C. Gallo D, et al. **J Clin Microbiol** 1989 Jan;27(1):88-90

Maintenance of Marek's disease herpesvirus latency in vitro by a factor found in conditioned medium. Buscaglia C, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2809-18

Detection of HTLV-1 DNA by polymerase chain reaction in alveolar lymphocytes of patients with tropical spastic paraparesis [letter] Desgranges C, et al. **J Infect Dis** 1989 Jul;160(1):162-3

Viral protein R of human immunodeficiency virus types 1 and 2 is dispensable for replication and cytopathogenicity in lymphoid cells. Dedera D, et al. **J Virol** 1989 Jul; 63(7):3205-8

Cell-to-cell transmission of human immunodeficiency virus type 1 in the presence of azidothymidine and neutralizing antibody. Gupta P, et al. **J Virol** 1989 May;63(5):2361-5

Investigation of varicella-zoster virus infection of lymphocytes by in situ hybridization. Koropchak CM, et al. **J Virol** 1989 May;63(5):2392-5

Retrovirus-like sequences in Graves' disease: implications for human autoimmunity. Ciampolillo A, et al. **Lancet** 1989 May 20;1(8647):1096-100

Augmentation of in-vitro HIV replication in peripheral blood mononuclear cells of AIDS and ARC patients by tumour necrosis factor [letter] Michihiko S, et al. **Lancet** 1989 May 27;1(8648):1206-7

Efficient primary isolation of human immunodeficiency virus. Pietroboni GR, et al. **Med J Aust** 1989 Apr 3;150(7):376-7

Susceptibility of mitogen and non-mitogen treated pig lymphocytes to four strains of pseudorabies virus (PRV). Onyekaba C. **Microbiologica** 1988 Jul;11(3):207-11

Adherence of specific yogurt micro-organisms to human peripheral blood lymphocytes. De Simone C, et al. **Microbios** 1988;55(222):49-57

Saliva shown to inhibit HIV-1 infectivity [news] Glaser V. **N Y State J Med** 1988 Aug;88(8):452

Characteristics of lymphocytes appearing in persistent lymphocytosis induced experimentally in cattle by bovine leukemia virus infection. Kono Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):70-8

Bovine platelet-derived factor showing mitogenic activity on bovine leukemia virus-infected lymphocytes. Tsukiyama K, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):746-53

Epstein-Barr virus (EBV) infection by cocultivation of fibroblast-dominant cell line and EBV-transformed lymphocytes. Furukawa M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):69-76

Mutually exclusive use of viral promoters in Epstein-Barr virus latently infected lymphocytes. Woisetschlaeger M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6498-502

Co-cultivation of human herpesvirus 6 and HIV1 from blood lymphocytes. Agut H, et al. **Res Virol** 1989 Jan-Feb; 140(1):23-6

Unexpectedly high levels of HIV-1 RNA and protein synthesis in a cytocidal infection. Somasundaran M, et al. **Science** 1988 Dec 16;242(4885):1554-7

FeLV-induced immunosuppression through alterations in signal transduction: changes in intracellular free calcium levels. Wright KA, et al. **Vet Immunol Immunopathol** 1989 May;21(1):47-53

Molecular cloning, complete nucleotide sequence, and gene structure of the provirus genome of a retrovirus produced in a human lymphoblastoid cell line. Oda T, et al. **Virology** 1988 Dec;167(2):468-76

Differences in Epstein-Barr virus (EBV) receptors expression on various human lymphoid targets and their significance to EBV-cell interaction. Stocco R, et al. **Virus Res** 1988 Oct;11(3):209-25

Determination of lymphocyte count necessary for isolating bovine leukaemia virus (BLV) from BLV-infected cattle and correlation between lymphocyte count and antibody titre. Koyama H, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):648-53

[Correlation between serum p24 antigen and the isolation of human immunodeficiency virus (HIV) from the lymphocytes of subjects with HIV infection] Angarano G, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):739-45 (Eng. Abstr.) (Ita)

[The presence of nucleotide sequences of the hepatitis B virus in peripheral lymphocytes of patients with acute hepatitis B] Lai ME, et al. **Minerva Med** 1989 Apr;80(4):335-9 (Eng. Abstr.) (Ita)

[Detection of HTLV-I/ATLV by using the culture of lymph node lymphocytes with adult T-cell leukemia/lymphoma] Takasaki T, et al. **Kansenshogaku Zasshi** 1989 May; 63(5):549-54 (Eng. Abstr.) (Jpn)

[Viral particles identical to HTLV-I in lymphocyte cultures of an asymptomatic woman whose serum contained antibodies against HTLV-I and HTLV-III/LAV-I and LAV-II] Cardoso EA, et al. **Acta Med Port** 1988 Jan-Feb; 1(1):5-7 (Eng. Abstr.) (Por)

[Infection of peripheral blood lymphocytes in sheep with bovine leukemia virus in vitro] Banders UT, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan;(1):25-9 (Eng. Abstr.) (Rus)

PARASITOLOGY

Isolation of Theileria parva schizonts from infected lymphoblastoid cells. Sugimoto C, et al. **Acta Trop (Basel)** 1988 Sep;45(3):203-16

Expression and characterization of the interleukin 2 receptor in Theileria parva-infected bovine lymphocytes. Coquerelle TM, et al. **Eur J Immunol** 1989 Apr;19(4):655-9

Isolation and characterization of RNA from the intracellular parasite Theileria parva. Gerhards J, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):15-24

The use of amphotericin B in prevention of Trypanosoma theileri growth in bovine cell culture. Lostrie-Trussart N, et al. **Vet Parasitol** 1988 Jul;29(1):9-17

In vitro stimulation of pony peripheral blood lymphocytes by a soluble fraction of Trypanosoma evansi. Ahmed JS, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):462-6

PATHOLOGY

Lymphocyte subpopulations in malignant ascites of serous papillary ovarian adenocarcinoma. An immunocytochemical study. Guzman J, et al. **Acta Cytol** 1988 Nov-Dec;32(6):811-5

Cytoproteic CSF findings in 33 MS patients: usefulness for diagnosis. Pereira S, et al. **Acta Neurol Scand** 1989 Feb; 79(2):170-2

The mononuclear cell infiltrate compared with survival in high-grade astrocytomas. Rossi ML, et al. **Acta Neuropathol (Berl)** 1989;78(2):189-93

Cis-diamminedichloroplatinum(II) toxicity in human melanoma cells and lymphocytes as related to cellular

platinum accumulation, DNA cross-linking and inhibition of DNA synthesis. Hansson J, et al. **Acta Oncol** 1988; 27(4):383–92

Changes in cell shapes and cytokeratins of epithelial cells during the infiltration of lymphocytes in the human palatine tonsils. Sato Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:48–52

Uncommon type of meningiomas with conspicuous plasmo-lymphocytic infiltration. An immunohistochemical and histochemical study. Ohmori T, et al. **Acta Pathol Jpn** 1989 Mar;39(3):190–4

Thymic hyperplasia in myasthenia gravis: immunohistological abnormalities and responsiveness to recombinant IL2. Cohen-Kaminsky S, et al. **Adv Exp Med Biol** 1988;237:375–81

Exercise in coxsackie B3 myocarditis: effects on heart lymphocyte subpopulations and the inflammatory reaction. Ilbäck NG, et al. **Am Heart J** 1989 Jun;117(6):1298–302

Epicardial lymphocytes: an autopsy study. Grimley CE, et al. **Am J Cardiovasc Pathol** 1988;2(3):225–9

M cells and granular mononuclear cells in Peyer's patch domes of mice depleted of their lymphocytes by total lymphoid irradiation. Ermak TH, et al. **Am J Pathol** 1989 Mar;134(3):529–37

Hodgkin's disease, lymphocyte predominance type, nodular—further evidence for a B cell derivation. L & H variants of Reed–Sternberg cells express L26, a pan B cell marker. Pinkus GS, et al. **Am J Pathol** 1988 Nov; 133(2):211–7

Lymphocyte populations in lung tissue, bronchoalveolar lavage fluid, and peripheral blood in rats at various times during the development of silicosis. Struhar D, et al. **Am Rev Respir Dis** 1989 Jan;139(1):28–32

Peripheral nerve vasculitis: immune characterization of the vascular lesions. Kissel JT, et al. **Ann Neurol** 1989 Mar; 25(3):291–7

Effect of indomethacin on swelling, lymphocyte influx, and cartilage proteoglycan depletion in experimental arthritis. Pettipher ER, et al. **Ann Rheum Dis** 1989 Aug;48(8):623–7

Changes in lymphocyte number and phenotype in seven lymphoid compartments after thermal injury. Organ BC, et al. **Ann Surg** 1989 Jul;210(1):78–89

The lymphoepithelial phenomenon of the stomach. A case report. Rubio CA, et al. **APMIS** 1988 Oct;96(10):898–900

Lymphocytes and macrophages of the epidermis and dermis in lesional psoriatic skin, but not epidermal Langerhans cells, are depleted by treatment with cyclosporin A. Gupta AK, et al. **Arch Dermatol Res** 1989;281(4):219–26

Endomyocardial lymphocytic infiltrates in cardiac transplant recipients. Incidence and characterization. Kottke-Marchant K, et al. **Arch Pathol Lab Med** 1989 Jun; 113(6):690–8

Immunohistochemical analysis of lymphoid and macrophage cell subsets and their immunologic activation markers in temporal arteritis. Influence of corticosteroid treatment. Cid MC, et al. **Arthritis Rheum** 1989 Jul;32(7):884–93

Phenotypic analysis of synovial tissue and peripheral blood lymphocytes isolated from patients with rheumatoid arthritis. Cush JJ, et al. **Arthritis Rheum** 1988 Oct; 31(10):1230–8

Detection of clonally expanded salivary gland lymphocytes in Sjögren's syndrome. Freimark B, et al. **Arthritis Rheum** 1989 Jul;32(7):859–69

Changes in lymphocyte infiltration of the synovial membrane and the clinical course of rheumatoid arthritis. Rooney M, et al. **Arthritis Rheum** 1989 Apr;32(4):361–9

Hematogones: a multiparameter analysis of bone marrow precursor cells. Longacre TA, et al. **Blood** 1989 Feb; 73(2):543–52

Extracellular adenosine triphosphate increases cation permeability of chronic lymphocytic leukemic lymphocytes. Wiley JS, et al. **Blood** 1989 Apr;73(5):1316–23

'Clover leaf' nucleus of atypical lymphocytes in infectious mononucleosis. Inoue S. **Br J Haematol** 1988 Nov; 70(3):381–3

Lymphocytic infiltrates and epithelial HLA-DR expression in lip salivary glands in connective tissue disease patients lacking sicca: a prospective study. Lindahl G, et al. **Br J Rheumatol** 1989 Aug;28(4):293–8

Lymphocytic infiltration in juvenile thyroid carcinoma. Kamma H, et al. **Cancer** 1988 Nov 1;62(9):1988–93

Preferential homing of tumor-infiltrating lymphocytes in tumor-bearing mice. Ames IH, et al. **Cancer Immunol Immunother** 1989;29(2):93–100

Sensitivity of rat and mouse peripheral blood lymphocytes to BaP adduction and SCE formation. Kligerman AD, et al. **Carcinogenesis** 1989 Jun;10(6):1041–5

Isolation of multicellular complexes of follicular dendritic cells and lymphocytes: immunophenotypical characterization, electron microscopy and culture studies. Ennas MG, et al. **Cell Tissue Res** 1989 Jul;257(1):9–15

Characterization of activated lymphocytes in colon cancer. Ebert EC, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):72–81

Jessner and Kanof's lymphocytic infiltration of the skin: a familial variant. Ashworth J, et al. **Dermatologica** 1988; 177(2):120–2

Changes of immunoregulatory cells induced by acoustic stress in patients with systemic lupus erythematosus, sarcoidosis, and in healthy controls. Hinrichsen H, et al. **Eur J Clin Invest** 1989 Aug;19(4):372–7

Lymphocytic gastritis: a newly described entity: a retrospective endoscopic and histological study. Haot J, et al. **Gut** 1988 Sep;29(9):1258–64

Significance of lymphoplasmocytic infiltration around tumor cell in the prediction of regional lymph node metastases in patients with invasive squamous cell carcinoma of the vulva: a clinicopathologic study. Husseinzadeh N, et al. **Gynecol Oncol** 1989 Aug;34(2):200–5

Determination of proliferative fractions detected by immunohistochemistry with the monoclonal antibodies to bromodeoxyuridine and Ki-67 in malignant lymphomas. Kawauchi K, et al. **Hematol Oncol** 1989 Jul–Aug; 7(4):257–65

T-cell receptor gamma chain gene rearrangement in acute myelogenous leukemia—evidence for lymphoid lineage prematurity. Lee MS, et al. **Hematol Pathol** 1987;1(2):93–8

The spleen in Hodgkin's disease. An immunohistochemical study of lymphocyte subpopulations and macrophages. Falk S, et al. **Histopathology** 1988 Aug;13(2):139–48

Chronic carotid glomitis. Khan Q, et al. **Histopathology** 1989 May;14(5):471–81

Lymphocytic ("microscopic") colitis: a comparative histopathologic study with particular reference to collagenous colitis. Lazenby AJ, et al. **Hum Pathol** 1989 Jan;20(1):18–28

Splenic marginal zone lymphocytes and related cells in the lymph node: a morphologic and immunohistochemical study. van Krieken JH, et al. **Hum Pathol** 1989 Apr; 20(4):320–5

Pinocchio cells: morphologically atypical immunologically heterogeneous lymphocytes induced by treatment with interleukin 2. Paciucci PA, et al. **Immunol Lett** 1988 Dec; 19(4):313–20

In vitro proliferative responses of spleen lymphocytes from rats bearing progressive or regressive tumors induced by cell variants of a syngeneic colon carcinoma. Dearden-Badet MT, et al. **Int J Cancer** 1989 Feb 15; 43(2):334–9

Peripheral leukocytes in psoriasis. Liu CH, et al. **Int J Dermatol** 1988 Nov;27(9):638–41

Conjunctival lymphocyte subsets in trachoma. Burd EM, et al. **Int Ophthalmol** 1988;12(1):53–7

Dendritic cell–lymphocyte clusters that form spontaneously in rheumatoid arthritis synovial effusions differ from clusters formed in human mixed leukocyte reactions. Tsai V, et al. **J Clin Invest** 1988 Nov;82(5):1731–45

A comparative study of the nodular and diffuse variants of lymphocyte-predominant Hodgkin's disease. Borg-Grech A, et al. **J Clin Oncol** 1989 Sep;7(9):1303–9

Pathology of the spleen in large granular lymphocyte leukaemia [letter] Griffiths DF, et al. **J Clin Pathol** 1989 Aug;42(8):885

Mechanisms of tumor necrosis factor alpha-induced lymphopenia, neutropenia, and biphasic neutrophilia: a study of lymphocyte recirculation and hematologic interactions of TNF alpha with endogenous mediators of leukocyte trafficking. Ulich TR, et al. **J Leukoc Biol** 1989 Feb;45(2):155–67

Lymphocyte–myelin sheath interactions in acute experimental allergic encephalomyelitis. Blakemore WF, et al. **J Neuroimmunol** 1989 Jun;23(1):19–24

In vitro modulation of lymphocyte proliferation by prednisolone and interferon-alpha in patients with HTLV-I-associated myelopathy (HAM). Ijichi S, et al. **J Neuroimmunol** 1989 Jul;23(2):175–8

DNA repair, sensitivity to gamma radiation and to heat shock in lymphocytes from acute, untreated multiple sclerosis patients. Sola P, et al. **J Neuroimmunol** 1989 Jan;21(1):23–9

Isolation and in vitro growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes. Sawamura Y, et al. **J Neurosurg** 1988 Nov;69(5):745–50

Lymphocytic gastritis versus varioliform gastritis. A historical series revisited. Haot J, et al. **J Pathol** 1989 May; 158(1):19–22

Lymphocytic enterocolitis in patients with 'refractory sprue'. DuBois RN, et al. **JAMA** 1989 Aug 18;262(7):935–7

Changes in lymphocyte subsets following multiple administration of recombinant interleukin-2 plus recombinant interferon-beta or -gamma in tumor-bearing mice. Iigo M, et al. **Jpn J Cancer Res** 1989 Jun;80(6):554–61

Granular lymphocyte proliferative disorders: report of 12 cases and review of the literature. Oshimi K. **Leukemia** 1988 Oct;2(10):617–27 (124 ref.)

Cytomorphological characteristics of lymphocytes in children during remission of acute lymphoblastic leukaemia lasting many years. Kopeć-Szlęzak J, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):168–70

Lymphocytic hypophysitis. Report of 3 new cases and review of the literature. Cosman F, et al. **Medicine (Baltimore)** 1989 Jul;68(4):240–56 (71 ref.)

The presence of lymphocytes in a toxically induced demyelinating process of the central nervous system. Graça DL. **Microsc Electron Biol Celular** 1988 Jun;12(1):17–21

Chromosome instability in lymphocytes from a patient with Werner's syndrome is not associated with DNA repair defects. Stefanini M, et al. **Mutat Res** 1989 May; 219(3):179–85

Spontaneous lymphoblastoid transformation of cells obtained from human tonsils. Takimoto T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):77–82

Lymphocyte autofluorescence: a screening procedure for neurodegenerative diseases. Hawkins EP, et al. **Pediatr Neurol** 1986 May–Jun;2(3):160–6

Light and electron microscopic study of juvenile neuronal ceroid-lipofuscinosis lymphocytes. Kimura S, et al. **Pediatr Neurol** 1988 May–Jun;4(3):148–52

Lymphocyte/monocyte-ratio correlates with survival from infections and multi-organ failure following polytrauma. Holch MW, et al. **Prog Clin Biol Res** 1989;308:769–73

Prognostic value of bronchoalveolar lavage in sarcoidosis: the critical influence of disease presentation. Ward K, et al. **Thorax** 1989 Jan;44(1):6–12

Immunopathology of graft-versus-host disease in the upper gastrointestinal tract. Nakhleh RE, et al. **Transplantation** 1989 Jul;48(1):61–5

Site of influx of inflammatory white cells into a rejecting rat renal allograft. Renkonen R, et al. **Transplantation** 1989 Apr;47(4):577–9

Inflammatory cell infiltrate in distal ureteral segments from patients with reflux. Josifidis HT, et al. **Urology** 1989 Sep; 34(3):131–3

Large granular lymphocyte tumor in a horse. Grindem CB, et al. **Vet Pathol** 1989 Jan;26(1):86–8

Gastric carcinoma with lymphoid stroma. Analysis using mucin histochemistry and immunohistochemistry. Lertprasertsuke N, et al. **Virchows Arch [A]** 1989; 414(3):231–41

[Heterogeneity of large granular lymphocyte leukemia. 2 cases] Troussard X, et al. **Ann Med Interne (Paris)** 1988; 139(5):336–40 (Eng. Abstr.) (Fre)

[Sister chromatid exchange and cellular kinetics in lymphocytes of patients with adenoma and colonic cancer (published erratum appears in Gastroenterol Clin Biol 1989 Mar;13(3):331)] Slavutsky I, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):935–40 (36 ref.) (Eng. Abstr.) (Fre)

[Image analysis of the differentiation status of lymphatic cells in malignant non-Hodgkin lymphomas and tonsils] Bergmann M, et al. **Verh Dtsch Ges Pathol** 1988;72:354–9 (Eng. Abstr.) (Ger)

[Response of human lymphocytes to phytohemagglutinin (PHA) as measured by fluorescence polarization technique—differences between malignant conditions and benign or healthy conditions] Tenzaki T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):817–25 (Eng. Abstr.) (Jpn)

[Aggressive large granular lymphocyte leukemia with E+, CD2+, CD3-, CD8-, CD16-, OKM1-, OKT10+, OKIa-1+ and Leu7- surface phenotype] Maekawa T, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2323–8 (Eng. Abstr.) (Jpn)

[Morphology of the palatine tonsil lymphocytes in chronic tonsillitis using data of electron microscopic radioautography] Chikovani NV, et al. **Arkh Patol** 1989; 51(2):55–9 (Eng. Abstr.) (Rus)

[Changes in primordial lymphoid organs in chronic glomerulonephritis] Rakitianskaia IA, et al. **Klin Med (Mosk)** 1989 Feb;67(2):58–60 (Eng. Abstr.) (Rus)

[The nucleolar apparatus of the lymphocytes in the peripheral blood of subjects with a history of infectious mononucleosis] Modestova EV. **Lab Delo** 1988;(10):41–2 (Eng. Abstr.) (Rus)

[Myelo- and lymphopoiesis and the adrenal cortex function in small cell lung cancer] Sokolova II, et al. **Sov Med** 1988; (7):23–5 (Eng. Abstr.) (Rus)

[Large granule-containing lymphocytes in the peripheral blood of patients with lymphoproliferative diseases] Kindzel'skiĭ LP, et al. **Vrach Delo** 1988 Sep;(9):62–4 (Eng. Abstr.) (Rus)

[Rheumatoid arthritis evolving over 13 years with proliferation of large granular lymphocytes (letter)] Monteagudo M, et al. **Med Clin (Barc)** 1988 Oct 22; 91(13):517 (Spa)

PHYSIOLOGY

Homing receptors and metastasis. Sher BT, et al. **Adv Cancer Res** 1988;51:361–90 (120 ref.)

Endocytic stripping of ligands from migrant lymphocytes in high endothelial venules (HEV): implications for immunomodulation vs viral pathogenesis. Anderson AO, et al. **Adv Exp Med Biol** 1988;237:525–31

HEV development and trypsin-inhibitable localization of lymphocytes in the reaction to intradermal PHA: a receptor-dependent immigration and possible model for peripheral CMI reactions? Binns RM, et al. **Adv Exp Med Biol** 1988;237:541–6

Thymus homing and reconstitution in split dose irradiated preleukemic mice. Defresne MP, et al. **Adv Exp Med Biol** 1988;237:383–6

Regulation of functional and morphological aspects of high endothelium in mouse. Duijvestijn AM, et al. **Adv Exp Med Biol** 1988;237:491–7

Interactions between follicular dendritic cells and lymphoid cells. Heinen E, et al. **Adv Exp Med Biol** 1988;237:181–4

Lymphocyte emigration from the ovine thymus: characterization of lymphatic emigrants and venous emigrants. Miyasaka M, et al. **Adv Exp Med Biol** 1988; 237:559–63

The physiological role of the lung in lymphocyte migration. Pabst R, et al. **Adv Exp Med Biol** 1988;237:553–8

Expression of specific isoforms of protein 4.1 in erythroid and non-erythroid tissues. Tang TK, et al. **Adv Exp Med Biol** 1988;241:81–95

The migration of lymphocyte subsets from blood to lymph

in the normal rat. Westermann J, et al. **Adv Exp Med Biol** 1988;237:547–51

Large granular lymphocytes from B–chronic lymphocytic leukemia patients inhibit normal B cell proliferation. Perri RT, et al. **Am J Hematol** 1989 Jul;31(3):166–72

Artefactual low lymphocyte activity caused by platelet contamination in the mononuclear cell preparations. Rueda F, et al. **Am J Hematol** 1989 Jun;31(2):126–7

Decreased membrane fluidity of lymphocytes from patients with juvenile neuronal ceroid–lipofuscinosis. Kohlschütter A, et al. **Am J Med Genet Suppl** 1988;5:203–7

Ca2+ induces charybdotoxin–sensitive membrane potential changes in rat lymphocytes. Grinstein S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C197–206

Bronchial epithelial cells release chemotactic activity for lymphocytes. Robbins RA, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):L109–15

Volume regulation of human lymphocytes by aldosterone in isotonic media. Wehling M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E170–4

Influence of sarcoptic mange and cold and ambient temperature on blastogenic responses of lymphocytes and serum cortisol concentrations of pigs. Wooten–Sasdi E, et al. **Am J Vet Res** 1988 Sep;49(9):1555–9

Blood lymphocyte beta–adrenergic receptors in multiple sclerosis. Arnason BG, et al. **Ann N Y Acad Sci** 1988; 540:585–8

Immune neuroendocrine interactions: implications for reproductive physiology. Blalock JE, et al. **Ann N Y Acad Sci** 1989;564:261–6 (22 ref.)

Dietary fat modulation of in vitro lymphocyte function. Alexander NJ, et al. **Ann Nutr Metab** 1988;32(4):192–9

Nutritional requirements for growth of human lymphocytes. Shive W, et al. **Annu Rev Nutr** 1988;8:81–97 (78 ref.)

Mechanism of staphylococcal serine proteinase inactivation by lymphocytes and granulocytes. Ochalek T, et al. **Antonie Van Leeuwenhoek** 1989;55(4):383–92

Role of interferon–gamma in cutaneous trafficking of lymphocytes with emphasis on molecular and cellular adhesion events. Nickoloff BJ. **Arch Dermatol** 1988 Dec; 124(12):1835–43 (98 ref.)

Modulatory effect of sera from scleroderma patients on lymphocyte–induced angiogenesis. II. Effector cells for the enhancing effect of acrosclerodermа patients' sera. Polakowski IJ, et al. **Arch Dermatol Res** 1988;280(7):395–8

Quantitative and qualitative study of the restoration by cytokines of mononuclear cell delivery to skin test sites in anergic surgical patients. MacPhee M, et al. **Arch Surg** 1988 Dec;123(12):1470–3

Beta–endorphin receptors on cultured and freshly isolated lymphocytes from normal subjects. Borboni P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):642–8

Extremely low frequency pulsed electromagnetic fields increase cell proliferation in lymphocytes from young and aged subjects. Cossarizza A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):692–8

Ligand and voltage gated sodium channels may regulate electrogenic pump activity in human, mouse and rat lymphocytes. Pieri C, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):999–1002

Dielectric properties of mouse lymphocytes and erythrocytes. Asami K, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):49–55

The interaction of platinum and anthrapyrazole antitumor drugs with mouse thymocytes studied by terbium fluorescence. Simpkins H, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):25–32

Cholesterogenesis and cell division in phytohemagglutinin–stimulated human lymphocytes: a comparative study with several inhibitors. Tabacik C, et al. **Biochim Biophys Acta** 1989 May 10;1011(2–3):149–57

Quantitative evaluation of rat lymphocyte adsorption on microdomain structured surfaces of poly(2–hydroxyethyl methacrylate)/polyamine. Maruyama A, et al. **Biomaterials** 1988 Nov;9(6):471–81

Regulation of expression of a human intercellular adhesion molecule (ICAM–1) during lymphohematopoietic differentiation. Boyd AW, et al. **Blood** 1989 May 15; 73(7):1896–903

The biology of interleukin–6. Kishimoto T. **Blood** 1989 Jul; 74(1):1–10 (76 ref.)

Lymphoid differentiation of the hematopoietic stem cell that reconstitutes total erythropoiesis of a genetically anemic W/Wv mouse. Nakano T, et al. **Blood** 1989 Apr; 73(5):1175–9

Clonal expansion of lymphocytes bearing the gamma delta T–cell receptor in a patient with large granular lymphocyte disorder. Vie H, et al. **Blood** 1989 Jul;74(1):285–90

Immune reconstitution following peripheral blood stem cell autografting [letter] To LB, et al. **Bone Marrow Transplant** 1987 Jun;2(1):111–2

Corticosteroids inhibit the differentiation of U937 cells induced by the combination of lymphocyte–conditioned media and calcitriol. Dodd RC, et al. **Bone Miner** 1987 Jul;2(4):281–90

Enhanced adhesion of autologous lymphocytes to gamma–interferon–treated human endothelial cells in vitro. Thornhill MH, et al. **Br J Exp Pathol** 1989 Feb;70(1):59–64

Lymphohaemopoietic antigens of cultured human glomerular epithelial cells. van der Woude FJ, et al. **Br J Exp Pathol** 1989 Feb;70(1):73–82

Suppression of lymphocyte blastogenesis by sera from calves transported by road. **Murata H. Br Vet J** 1989 May–Jun; 145(3):257–62

Brain neocortex immunomodulation in rats. Barnéoud P, et al. **Brain Res** 1988 Dec 6;474(2):394–8

Effect of vitamin D deficiency on macrophage and lymphocyte function in the rat. Wientroub S, et al. **Calcif Tissue Int** 1989 Feb;44(2):125–30

Macrophage and lymphocyte potentiation of syngeneic tumor cell and host fibroblast collagenolytic activity in rats. Dabbous MK, et al. **Cancer Res** 1988 Dec 1;48(23):6832–6

Identification of a murine Peyer's patch–specific lymphocyte homing receptor as an integrin molecule with an alpha chain homologous to human VLA–4 alpha. Holzmann B, et al. **Cell** 1989 Jan 13;56(1):37–46

Adhesion of lymphoid cells to fibroblasts in tissue culture. Abraham D, et al. **Cell Immunol** 1989 Aug;122(1):33–47

Norepinephrine and serotonin content of the murine spleen: its relationship to lymphocyte beta–adrenergic receptor density and the humoral immune response in vivo and in vitro. Fuchs BA, et al. **Cell Immunol** 1988 Dec; 117(2):339–51

Differential interleukin–2 and interferon–gamma production by human lymphocyte cultures exceptionally resistant to Epstein–Barr virus immortalization. Gosselin J, et al. **Cell Immunol** 1989 Sep;122(2):440–9

Stimulation of lymphocyte migration by endotoxin, tumor necrosis factor, and interferon. Issekutz TB, et al. **Cell Immunol** 1989 Apr 15;120(1):165–73

Suppression of lymphocyte alloreactivity by early gestational human decidua. I. Characterization of suppressor cells and suppressor molecules. Parhar RS, et al. **Cell Immunol** 1988 Oct 15;116(2):392–410

Characterization of interleukin 2–expanded human peripheral blood lymphocytes: not only NKH–1+–NK cells but also NKH–1+ and NKH–1– T cells are LAK effectors. Saito H, et al. **Cell Immunol** 1988 Dec;117(2):253–63

Regulation of lymphocyte motility by macrophages: characterization of a lymphocyte migration inhibitory factor derived from a macrophage–like cell line. Ye S, et al. **Cell Immunol** 1989 Aug;122(1):231–43

An immunohistochemical study on the postnatal development of rat nasal–associated lymphoid tissue (NALT). Hameleers DM, et al. **Cell Tissue Res** 1989; 256(2):431–8

Circadian hematologic time structure in the elderly. Swoyer J, et al. **Chronobiol Int** 1989;6(2):131–7

Isolation and functional studies of granulated lymphocytes in first trimester human decidua. Ritson A, et al. **Clin Exp Immunol** 1989 Aug;77(2):263–8

Interactions of aging and annual rhythms on the recovery of cryopreserved murine splenic lymphocytes. Brock MA, et al. **Cryobiology** 1989 Jun;26(3):256–64

Osmotic response of lymphocytes measured by means of forward light scattering: theoretical considerations. Sloot PM, et al. **Cytometry** 1988 Nov;9(6):636–41

The tumor progression–associated human melanoma antigen P3.58 mediates monocyte–lymphocyte interactions in vitro. Johnson JP, et al. **Eur J Immunol** 1988 Dec;18(12):2097–100

Significance of alteration in biodistribution of labeled lymphocytes exposed to stannous ion. Tatum JL, et al. **Eur J Nucl Med** 1989;15(4):201–3

Inhibition of poly(ADP–ribosyl)ation does not prevent lymphocyte entry into the cell cycle. Marini M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):146–50

Effect of plasma fibronectin on the adhesive properties of human peripheral lymphocytes. Altankov G, et al. **Haematologia (Budap)** 1989;22(2):115–23

Laron dwarfism: cellular unresponsiveness to GH demonstrated on cultured lymphocytes by a cytochemical method. Spadoni GL, et al. **Horm Metab Res** 1988 Jul; 20(7):450–2

Distribution models of recirculating lymphocytes. Farooqi ZH, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):355–62

Lymphocyte homing. **Immunol Rev** 1989 Apr;108:5–161

Homing receptors and vascular addressins: cell adhesion molecules that direct lymphocyte traffic. Berg EL, et al. **Immunol Rev** 1989 Apr;108:5–18 (44 ref.)

Molecules and regulation in lymphocyte migration. Hamann A, et al. **Immunol Rev** 1989 Apr;108:19–44 (72 ref.)

Integrin molecules involved in lymphocyte homing to Peyer's patches. Holzmann B, et al. **Immunol Rev** 1989 Apr; 108:45–61 (46 ref.)

Lymphocyte migration patterns in organ allograft recipients. Kupiec–Weglinski JW, et al. **Immunol Rev** 1989 Apr; 108:63–82 (70 ref.)

Heterogeneity of lymphocyte homing physiology: several mechanisms operate in the control of migration to lymphoid and non–lymphoid organs in vivo. Pabst R, et al. **Immunol Rev** 1989 Apr;108:83–109 (91 ref.)

Mechanisms of human lymphocyte migration and their role in the pathogenesis of disease. Pals ST, et al. **Immunol Rev** 1989 Apr;108:111–33 (90 ref.)

The role of the LFA–1/ICAM–1 interaction in human leukocyte homing and adhesion. Wawryk SO, et al. **Immunol Rev** 1989 Apr;108:135–61 (69 ref.)

Mechanisms of lymphocyte migration [letter] Hall JG. **Immunol Today** 1989 May;10(5):148–9

Lymphoid cell regulation of hematopoiesis [published erratum appears in Int J Cell Cloning 1989 Mar;7(2):138] Pantel K, et al. **Int J Cell Cloning** 1989 Jan;7(1):2–12 (69 ref.)

Stimulation of heart contractility by supernatants from lectin–activated lymphocytes. Role of IL–2. Fink SB, et al. **Int J Immunopharmacol** 1989;11(4):367–70

Cation transport in lymphoblastoid cell lines established from bipolar manic–depressive patients. Banks RE, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):259–67

Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. Streeter PR, et al. **J Cell Biol** 1988 Nov;107(5):1853–62

Evolutionary conservation of tissue–specific lymphocyte–endothelial cell recognition mechanisms involved in lymphocyte homing. Wu NW, et al. **J Cell Biol** 1988 Nov;107(5):1845–51

Hyperthermic effects in vitro on the peripheral lymphocytes isolated from three cases of malignant lymphoma/leukemia. Nakayama J, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):31–6

Staining of surface antigen on migrating lymphocytes in the chemotaxis membrane. I: Complement C5 attracts helper/inducer T cell much more than suppressor/cytotoxic T cell and NK cell. Hayashi Y, et al. **J Exp Pathol** 1989 Summer;4(3):181–92

The cell biology of aging: immunological models. Miller RA. **J Gerontol** 1989 Jan;44(1):B4–8 (67 ref.)

Human peripheral lymphocyte growth regulation and response to phorbol esters is linked to synthesis and phosphorylation of the cytosolic protein, prosolin. Cooper HL, et al. **J Immunol** 1989 Aug 1;143(3):956–63

Molecular mechanisms of lymphocyte extravasation. III. The loss of lymphocyte extravasation potential induced by pertussis toxin is not mediated via the activation of protein kinase C. Huang K, et al. **J Immunol** 1989 Jul 1; 143(1):229–38

Cell cycle progression of glutathione–depleted human peripheral blood mononuclear cells is inhibited at S phase. Messina JP, et al. **J Immunol** 1989 Sep 15;143(6):1974–81

The use of mouse serum and the presence of non–adherent cells for the culture of mouse macrophages. Grace S, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):21–6

In vivo localization of lymphocytes labelled with low concentrations of Hoechst 33342. Loeffler D, et al. **J Immunol Methods** 1989 Apr 21;119(1):95–101

Immunohistological localization and characterization of FITC–labelled lymphocytes. A rapid and inexpensive method for studying migration. Willführ KU, et al. **J Immunol Methods** 1989 Jun 2;120(1):29–36

Fibroblast matrix and surface components that mediate cell–to–cell interaction with lymphocytes. Abraham D, et al. **J Invest Dermatol** 1989 Sep;93(3):335–40

Lymphocyte adhesion to endothelial cells in vitro: models for the study of normal lymphocyte recirculation and lymphocyte emigration into chronic inflammatory lesions. Cavender DE. **J Invest Dermatol** 1989 Aug;93(2 Suppl):88S–95S (90 ref.)

Lymphocyte recognition of psoriatic endothelium: evidence for a tissue–specific receptor/ligand interaction. Chin YH, et al. **J Invest Dermatol** 1989 Aug;93(2 Suppl):82S–87S (31 ref.)

Time–dependent effects of isolation on lymphocyte and adrenocortical activity. Jessop JJ, et al. **J Neuroimmunol** 1989 Jul;23(2):143–7

Effect of Mycobacterium leprae–infected Schwann cells and their supernatant on lymphocyte neuroglia interaction. Mehta R, et al. **J Neuroimmunol** 1989 Apr;22(2):149–55

Tumor–infiltrating lymphocytes and histocompatibility antigens in primary intracranial germinomas. Saito T, et al. **J Neurosurg** 1989 Jan;70(1):81–5

The relationship between the distribution of lymphoid cells in the skin and in vitro adhesion to connective tissue. Jack AS, et al. **J Pathol** 1989 Mar;157(3):205–12

Do vascular addressins mediate tissue specific lymphocyte extravasation? Spencer J, et al. **J Pathol** 1988 Sep; 156(1):1–3 (19 ref.)

Enterocyte–lymphocyte interactions in the follicle–associated epithelium of the mouse Peyer's patch. Cremaschi D, et al. **J Physiol (Lond)** 1989;408:605–16

Maturation of the immune response: a computational model. Weinand RG, et al. **J Theor Biol** 1988 Aug 22;133(4):409–28

The visna virus long terminal repeat directs expression of a reporter gene in activated macrophages, lymphocytes, and the central nervous systems of transgenic mice. Small JA, et al. **J Virol** 1989 May;63(5):1891–6

Toxicity of human recombinant interleukin–2 in the mouse is mediated by interleukin–activated lymphocytes. Separation of efficacy and toxicity by selective lymphocyte subset depletion. Anderson TD, et al. **Lab Invest** 1988 Nov; 59(5):598–612

Lymphocyte emperipolesis in AIDS. Shields JW. **Lymphology** 1989 Jun;22(2):62–6

Age–related changes in functions of peripheral blood phagocytes. Rabatić S, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):223–9

Lymphocyte– and macrophage–derived growth factors. Wahl SM. **Methods Enzymol** 1988;163:715–31

Denatured proteins as chemotactic agents: mitogens as lymphocyte locomotion activators. Wilkinson PC. **Methods Enzymol** 1988;162:180–92

A comparison of mutation induction at the tk and hprt loci in human lymphoblastoid cells; quantitative differences are due to an additional class of mutations at the autosomal tk locus. Liber HL, et al. **Mutat Res** 1989 Feb;216(1):9–17

Repair of sister–chromatid exchange–inducing lesions in

mutagen-treated cultures of human whole blood and purified fresh or frozen lymphocytes. Murli H, et al. **Mutat Res** 1988 Nov;202(1):125-32

The influence of alpha-tocopherol and pyritinol on oxidative DNA damage and lipid peroxidation in human lymphocytes. Topinka J, et al. **Mutat Res** 1989 Mar; 225(3):131-6

The mucosal vascular addressin is a tissue-specific endothelial cell adhesion molecule for circulating lymphocytes. Nakache M, et al. **Nature** 1989 Jan 12; 337(6203):179-81

HGF induction in normal rat by transferring agents and lymph from liver-injured rat. Takahashi N. **Naturwissenschaften** 1988 Oct;75(10):519-21

Effect of thiols on beta 2-adrenoceptors in human mononuclear leucocytes. Liebl B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):523-8

Role of lymphocytes in dogs experimentally re-challenged with canine transmissible sarcoma. Mizuno S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):86-95

Lexicographer-scientists and the plasticity of lymphocytes. Kaplan DR. **Perspect Biol Med** 1988 Autumn;32(1):31-7

Killing of target cells by lymphocytes: a mechanistic view. Young JD. **Physiol Rev** 1989 Jan;69(1):250-314 (419 ref.)

Modulation of autologous mixed lymphocyte reaction by pharmacological agents affecting adrenergic receptor. Zeman K, et al. **Pol J Pharmacol Pharm** 1988 Sep-Oct; 40(5):459-63

Isolation and DNA sequence of a cDNA clone encoding a lymphocyte adhesion receptor for high endothelium. Idzerda RL, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4659-63

Stimulatory effects of opioid neuropeptides on locomotory activity and conformational changes in invertebrate and human immunocytes: evidence for a subtype of delta receptor. Stefano GB, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6307-11

Lymphoid cells of the liver. Bengoechea AB. **Revis Biol Celular** 1988;16:35-68 (284 ref.)

Regulation of intercellular adhesion molecule-1 expression on endothelial cells with correlation to lymphocyte-endothelial binding. Renkonen R. **Scand J Immunol** 1989 Jun;29(6):717-21

Migration pattern of lymphocyte subsets in the normal rat and the influence of splenic tissue. Westermann J, et al. **Scand J Immunol** 1989 Feb;29(2):193-201

Interactions between surface molecules and the cytoskeleton in the lymphocyte. Bennett JC. **Trans Am Clin Climatol Assoc** 1987;99:119-25 (23 ref.)

Lymphocyte migration patterns in small bowel transplants. Lear PA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2881-2

[Changes of erythrocyte and lymphocyte membrane fluidity after plasma extraction in children with type II homozygous hypercholesterolemia] Motta C, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:83-5 (Eng. Abstr.) (Fre)

[Role of interleukin 1 in lymphocyte migration during rheumatoid synovitis] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):533-7 (30 ref.) (Fre)

[Lymphocytic beta-2-adrenergic receptor density and function in children] Galal O. **Monatsschr Kinderheilkd** 1989 Apr;137(4):213-7 (Eng. Abstr.) (Ger)

[Regulation of intracellular pH by Na+/H+ exchange in human lymphocytes] Weinlich M, et al. **Wien Klin Wochenschr** 1989 May 26;101(11):380-5 (Eng. Abstr.) (Ger)

[The role of drugs and lymphocytes in granulocyte-macrophage colony formation in patients with drug induced agranulocytosis] Kobashi H, et al. **Rinsho Ketsueki** 1989 Mar;30(3):282-8 (Eng. Abstr.) (Jpn)

[Physicochemical and functional properties of the peripheral blood lymphocytes in ischemic heart disease] Gorbatenkova EA, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):322-4 (Eng. Abstr.) (Rus)

[Effect of concanavalin A on the intracellular concentration of calcium ions and transmembrane potential of lymphocytes of the rabbit] Nalivaĭko ED, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):84-7 (Eng. Abstr.) (Rus)

["Spontaneous" oscillations of the cell surface in the frequency interval of 0.2-30 Hz] Krol' AIu, et al. **Tsitologiia** 1989 May;31(5):556-62 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Prolonged defects of interleukin-2 production, responsiveness, and receptor expression in patients with acute lymphoblastic leukemia. Borzy MS, et al. **Blood** 1989 May 1;73(6):1608-14

RADIATION EFFECTS

Relationship between in vitro and in vivo radiosensitivity of lymphocytes in chronic lymphocytic leukemia. Schrek R, et al. **Acta Haematol (Basel)** 1988;80(3):129-33

Chromosome studies on human lymphocytes following treatment with radioactive iodine in vitro. Ardito G, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):131-8

Structural damage to lymphocyte nuclei by H2O2 or gamma irradiation is dependent on the mechanism of OH. radical production. Allan IM, et al. **Br J Cancer** 1988 Jul;58(1):34-7

In vitro induction of chromosomal aberrations in human lymphocytes, with and without boron 10, by radiations concerned in boron neutron capture therapy. Lloyd DC, et al. **Br J Radiol** 1988 Dec;61(732):1136-41

Antipain-mediated suppression of X-ray-induced chromosomal aberrations in human lymphocytes. Afzal V, et al. **Carcinogenesis** 1989 Jul;10(7):1193-6

Quiescent human peripheral blood lymphocytes do not contain a sizable amount of preexistent DNA single-strand breaks. Boerrigter ME, et al. **Exp Cell Res** 1989 Feb; 180(2):569-73

Age-related decrease in an early step of DNA-repair of normal human lymphocytes exposed to ultraviolet-irradiation. Roth M, et al. **Exp Cell Res** 1989 Jan;180(1):171-7

Effect of heterogeneity of human population in cell radiosensitivity on the extrapolation of dose-response relationships to low doses. Filyushkin IV, et al. **Health Phys** 1989 Sep;57(3):385-91

Cytogenetic analysis of blood lymphocytes from X-ray radiographers. Shubber EK, et al. **Int Arch Occup Environ Health** 1989;61(6):385-9

The induction of micronuclei in human lymphocytes by in vitro irradiation with alpha particles from plutonium-239. Bilbao A, et al. **Int J Radiat Biol** 1989 Sep;56(3):287-92

Chromosomal aberrations in cynomolgus peripheral lymphocytes during and after fractionated whole-body gamma-irradiation. Guedeney G, et al. **Int J Radiat Biol** 1989 May;55(5):861-70

Rapid human chromosome aberration analysis using fluorescence in situ hybridization [published erratum appears in Int J Radiat Biol 1989 Aug;56(2):201] Lucas JN, et al. **Int J Radiat Biol** 1989 Jul;56(1):35-44

Induction of the adaptive response by X-rays is dependent on radiation intensity. Shadley JD, et al. **Int J Radiat Biol** 1989 Jul;56(1):107-18

DNA repair and replication in lymphocytes from smokers exposed in vitro to UV light. Celotti L, et al. **Mutagenesis** 1989 Mar;4(2):82-6

Mitogenic stimulation may induce an anti-mutagenic repair system in human lymphocytes. Sanderson BJ, et al. **Mutagenesis** 1986 Mar;1(2):131-3

Adaptive response after X-irradiation of human lymphocytes? Schmid E, et al. **Mutagenesis** 1989 Mar; 4(2):87-9

The identification of micronucleated chromosomes: a possible assay for aneuploidy. Thomson EJ, et al. **Mutagenesis** 1988 Sep;3(5):415-8

Production of chromosome aberrations, micronuclei, and sister-chromatid exchanges by 24-keV epithermal neutrons in human G0 lymphocytes. Aghamohammadi SZ, et al. **Mutat Res** 1989 Apr;211(2):225-30

Time-effect relationship of chromosome aberrations in peripheral lymphocytes after radiation therapy for seminoma. Bauchinger M, et al. **Mutat Res** 1989 Apr; 211(2):265-72

Variability of the adaptive response to ionizing radiations in humans. Bosi A, et al. **Mutat Res** 1989 Mar;211(1):13-7

Chromosomal aberrations and DNA repair ability of in vitro irradiated white blood cells of monkeys previously exposed to total body irradiation. Guedeney G, et al. **Mutat Res** 1989 Jun;212(2):159-66

The effect of deoxynucleosides on repair of DNA breaks in UVC-irradiated human lymphocytes. Holmberg M. **Mutat Res** 1989 Jul;218(1):33-9

Simultaneous detection of DNA strand breaks and unscheduled DNA synthesis in mutagen-treated human lymphocytes in the absence of hydroxyurea. Holmberg M, et al. **Mutat Res** 1988 Nov;202(1):111-8

Chromosomal aberrations induced by low-dose gamma-irradiation. Study of R-banded chromosomes of human lymphocytes. Lefrançois D, et al. **Mutat Res** 1989 Jun;212(2):167-72

The effect of 3-aminobenzamide on X-ray induction of chromosome aberrations in Down syndrome lymphocytes. MacLaren RA, et al. **Mutat Res** 1989 Jan;222(1):1-7

A comparison of chromosomal aberrations induced by in vivo radiotherapy in human sperm and lymphocytes. Martin RH, et al. **Mutat Res** 1989 May;226(1):21-30

Effects of 50-hertz electromagnetic fields on proliferation and on chromosomal alterations in human peripheral lymphocytes untreated or pretreated with chemical mutagens. Rosenthal M, et al. **Mutat Res** 1989 Feb; 210(2):329-35

Adaptive response of human lymphocytes to low-level radiation from radioisotopes or X-rays. Sankaranarayanan K, et al. **Mutat Res** 1989 Mar;211(1):7-12

Radiosensitivity of lymphocytes from patients with Alzheimer's disease. Smith TA, et al. **Mutat Res** 1989 Jan; 217(1):11-7

Increased chromosomal radiosensitivity in patients undergoing radioimmunoglobulin therapy. Xiao SQ, et al. **Mutat Res** 1989 Sep;227(1):39-45

Effects of administering tocopherol after irradiation on survival and proliferation of murine lymphocytes. Roy RM, et al. **Pharmacol Ther** 1988;39(1-3):393-5

Recent studies on mechanisms in photoimmunology. Krutmann J, et al. **Photochem Photobiol** 1988 Dec; 48(6):787-98 (112 ref.)

Screening for interindividual differences in radiosensitivity by means of the micronucleus assay in human lymphocytes. Huber R, et al. **Radiat Environ Biophys** 1989;28(2):113-20

DNA repair after gamma irradiation in lymphocytes exposed to low-frequency pulsed electromagnetic fields. Cossarizza A, et al. **Radiat Res** 1989 Apr;118(1):161-8

Time dependence of chromosomal aberrations induced in human and monkey lymphocytes by acute and fractionated exposure to 60Co. Guedeney G, et al. **Radiat Res** 1988 Nov;116(2):254-62

Frequency of micronuclei in lymphocytes from in vitro gamma-irradiated human peripheral blood. Khadzhidekova V. **Radiobiol Radiother (Berl)** 1989;30(2):157-61

Differential sensitivity of human leukocyte subpopulations to ultraviolet light. Spielberg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):180-1

Suppression of the DTH response in miniature swine by pretreatment with ultraviolet light-irradiated blood lymphocytes. Taura Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):261-2

[Ultrastructural findings in ultraviolet-irradiated lymphocytes and granulocytes] Gast W, et al. **Dermatol Monatsschr** 1988;174(12):762-5 (Ger)

[The rheologic effects of ultraviolet irradiation of autologous blood with and without lymphocytes] Belgrad D, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):284-6 (Eng. Abstr.) (Ger)

[Effect of intravascular laser irradiation of the blood on blood cells in pancreatitis] Dmitriev AE, et al. **Klin Med (Mosk)** 1989 May;67(5):108-10 (Eng. Abstr.) (Rus)

[Stimulating effect of long-term small-dose radiation on lymphopoiesis in mammals] Zukhbaia TM, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):47-51 (Eng. Abstr.) (Rus)

[Estimation of absorbed dose based on the results of cytogenetic studies of lymphocyte cultures from subjects exposed in the accident at the Chernobyl Atomic Power Station] Piatkin EK, et al. **Med Radiol (Mosk)** 1989 Jun; 34(6):52-7 (Eng. Abstr.) (Rus)

[Effect of hyperthermia on the yield of chromosome aberrations during the irradiation of human G1-stage lymphocytes with 252Cf and 60Co sources of various dosage intensities] Potetnia OI, et al. **Med Radiol (Mosk)** 1989 May;34(5):54-7 (Eng. Abstr.) (Rus)

[General similarities and differences in the postradiation death of various animal species and of man] Afanas'ev VN, et al. **Radiobiologiia** 1988 Nov-Dec;28(6):731-6 (Eng. Abstr.) (Rus)

[The distribution of chromosome aberrations after gamma and neutron irradiation among cells in various stages of the mitotic cycle in a human lymphocyte culture] Demina EA. **Radiobiologiia** 1989 Jul-Aug;29(4):485-91 (Eng. Abstr.) (Rus)

[A model of the stochastic dynamics of interphase lymphocyte death] Kosevich AM, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):147-50 (Eng. Abstr.) (Rus)

[The synergism of the action of gamma radiation and cardiovascular preparations on lymphoid cells in culture] Narimanov AA, et al. **Radiobiologiia** 1989 Mar-Apr; 29(2):188-91 (Eng. Abstr.) (Rus)

[Assessment of the degree of severity of radiation lesions in dogs using densitometric-geometric parameters of the blood lymphocytes] Ogandzhanian EE, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):226-9 (Eng. Abstr.) (Rus)

[Change in the replicative synthesis of DNA and in respiration during gamma-irradiation of cultured human lymphocytes] Sellanov AS, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):607-10 (Eng. Abstr.) (Rus)

[Comparative frequency of chromosome aberrations in a human lymphocyte culture depending on the mode of neutron irradiation] Sevan'kaev AV, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):264-6 (Eng. Abstr.) (Rus)

[The spectra of de novo synthesized proteins in the early stages of radiation death of lymphocytes in the rat thymus] Zhivotovskiĭ BD, et al. **Radiobiologiia** 1988 Nov-Dec; 28(6):737-44 (Eng. Abstr.) (Rus)

[UV-induced unscheduled DNA synthesis in differentiated and dedifferentiated lymphocytes from human peripheral blood under the action of DNA-repair and -replication inhibitors] Genter EI, et al. **Tsitologiia** 1989 Feb;31(2):215-9 (Eng. Abstr.) (Rus)

[Sister chromatid exchanges, during x-irradiation, in the blood lymphocytes of patients with hereditary diseases and radioresistant DNA synthesis] Pleskach NM, et al. **Tsitologiia** 1988 Jun;30(6):739-44 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Labelling of interleukin 2 with 123 iodine and its administration to animals susceptible to diabetes for the visualization of lymphocytic infiltration in the pancreas] Signore A, et al. **Minerva Endocrinol** 1988 Oct-Dec; 13(4):279-85 (Eng. Abstr.) (Ita)

TRANSPLANTATION

Blast cells transfer experimental hypersensitivity pneumonitis in guinea pigs. Schuyler M, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1449-55

Failure of specific adoptive immunotherapy owing to survival and outgrowth of variant cells. Hines DL. **Cancer Immunol Immunother** 1989;28(4):241-7

In vivo and in vitro synergistic antitumor effect of interleukin-2-cultured tumor-bearer spleen cells and immune fresh spleen cells. Kan N, et al. **Cancer Immunol Immunother** 1989;28(4):260-6

Treatment of glioma with intratumoral instillation of autologous lymphocytes. Bhagwati SN. **Childs Nerv Syst** 1989 Feb;5(1):38-40

Inhibitor of granulocyte-macrophage colony formation in plasma of mice rendered apiastic by allogeneic lymph node cells. Chiu KM, et al. **Exp Hematol** 1989 May;17(4):335-9

Neuraminidase pretreatment of donor lymphocytes and graft-versus-host disease. Stacey NH, et al. **Exp Hematol** 1989 Mar;17(3):273-7

Use of regression analysis and the complement-dependent cytotoxicity typing assay for predicting lymphoid chimerism. Henson LE, et al. **J Immunol Methods** 1988 Nov 10;114(1-2):139-44

Replication of donor lymphocytes in recipients is not essential for the passive transfer of allergic encephalomyelitis. Willenborg DO, et al. **J Neuroimmunol** 1988 Oct; 19(4):317-28

Implantation of dispersed cells into primate brain. Plunkett RJ, et al. **J Neurosurg** 1989 Mar;70(3):441-5

Sensitivity of scintigraphy with 111In-lymphocytes for detection of cardiac allograft rejection. Eisenberg SB, et al. **J Surg Res** 1988 Dec;45(6):549-55

Transfusions and graft-versus-host disease [editorial] **Lancet** 1989 Mar 11;1(8637):529-30

Evidence for the in vivo production of interleukin-3 in lethally irradiated mice transplanted with syngeneic murine splenocytes. Hirokawa M, et al. **Leuk Res** 1989; 13(2):145-50

Gene transfer to humans approved in face of advice [news] Palca J. **Nature** 1988 Oct 13;335(6191):577

Autolymphocyte therapy: previous experience and future prospects. Osband ME, et al. **Pathol Immunopathol Res** 1988;7(6):483-93

Transplantation tolerance correlates with high levels of T- and B-lymphocyte activity. Bandeira A, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):272-6

Labeled therapy. A gene-transfer experiment may improve a cancer treatment. Beardsley TM. **Sci Am** 1989 Feb; 260(2):24-5

Gene transfer test: so far, so good [news] Culliton BJ. **Science** 1989 Sep 22;245(4924):1323

The immunosuppressive effect of heat-treated cells: the influence of dosage and haplotype. Baird MA, et al. **Transplant Proc** 1989 Apr;21(2):3296-7

Investigations into the mechanisms responsible for immunosuppression induced by heat-treated cells. Baird MA, et al. **Transplant Proc** 1989 Apr;21(2):3298-9

Infertility treated with donor specific lymphocytes in recurrent idiopathic spontaneous abortion. Bernstein IL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):565

Effects of donor splenocytes treated with mitomycin C on rat hepatic, cardiac, and intestinal allografts. Bollinger RB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):213-4

Role of recombinant interleukin-2 (rIL-2) and large granular lymphocytes (LGLs) in acute rat graft-versus-host disease (GVHD). Clancy J Jr, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):88-9

A comparison of 51chromium and Hoechst 33342 for monitoring lymphocyte migration in vivo. Cranston D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):192-3

Persistence of anti-donor helper T cells secreting interleukin 4 after neonatal induction of transplantation tolerance. Goldman M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):238-9

Use of posttransplant-administered peripheral blood lymphocytes for prolonging allograft survival in ALS-treated mice. Gozzo JJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):269-70

Differential effects of azathioprine (Aza), cyclosporine A (CsA) and dexamethasone (Dexa) on lymphokine mediated inflammation (LMI) in rejecting allografts. Mellert J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):98-9

Transplant outcome with donor specific buffy-coat and lymphocyte-transfused patients. Okazaki H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1832-3

Allogeneic lymphocytes are rejected in hyperacute fashion by enhanced rats bearing a heart allograft from the same donor. Olszewski WL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):244-5

Functional and phenotypic characteristics of suppressor T-cells in unresponsive rats pretreated with UV-B irradiated donor lymphocytes combined with peritransplant cyclosporine. Oluwole SF, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):484-6

Comparison of natural elimination of i.v. transplanted lymphoid and nonlymphoid cells by unsensitized allogeneic and syngeneic recipients. Orlewska E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):190-1

Kidney transplantation in the inbred rat preimmunized with donor strain spleen cells. Seki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):395-7

Are DST/allograft-induced suppressor cells donor specific? Wakely E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):488-90

Prolongation of rat renal allograft survival by portal venous inoculation with donor lymphocytes. Yoshimura N, et al. **Transplant Proc** 1989 Apr;21(2):3268-70

Prolongation of skin allograft survival in antilymphocyte serum-treated mice by posttransplant administration of peripheral blood lymphocytes. De Fazio SR, et al. **Transplantation** 1989 Jul;48(1):163-5

Prolonged minor allograft survival in intravenously primed mice. Effect of recipient's age and of prior immunity to minor H antigens on the priming cells. Johnson LL. **Transplantation** 1989 Jun;47(6):1017-20

Depression of the induction of murine delayed-type hypersensitivity responses without prolongation of cardiac allograft survival by intravenous neuraminidase-treated allogeneic lymphocytes. Samlowski WE, et al. **Transplantation** 1989 Mar;47(3):560-4

Variable allograft responses to pretreatment with donor splenocytes treated with mitomycin C in the rat. Yamaguchi Y, et al. **Transplantation** 1989 Feb;47(2):360-3

[Prolongation of rat renal allograft survival by portal administration with allogenic cells] Hamashima T, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1317 **(Jpn)**

[Effect of perioperative intraportal administration of donor lymphocytes on skin allografts in rat: preliminary report] Lee CJ, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):456 **(Jpn)**

[Studies of the treatment of recurrent abortion with husband's lymphocytes] Fujii T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):115-21 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Sister chromatid exchanges in peripheral lymphocytes of children vaccinated against rubella and measles-mumps-rubella. Kitsiou S, et al. **Acta Paediatr Scand** 1988 Nov;77(6):879-84

Lymphocyte micronuclei and sister chromatid exchanges among Canadian federal laboratory employees. Narod SA, et al. **Am J Ind Med** 1988;14(4):449-56 (28 ref.)

Structurally distinct plasma membrane regions give rise to extracellular membrane vesicles in normal and transformed lymphocytes. Armstrong MJ, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):106-12

No detectable increase in sister chromatid exchanges in lymphocytes from mycosis fungoides patients after topical treatment with nitrogen mustard. Studstrup L, et al. **Br J Dermatol** 1988 Dec;119(6):711-5

Ultrastructural descriptions of interactions between tumor-infiltrating lymphocytes and tumor cells in an in vitro model of culture in serum-free medium. Halpern JN, et al. **Cancer Detect Prev** 1988;13(3-4):213-23

Sister chromatid exchanges in the lymphocytes of patients with oral leukoplakia. Ghosh R, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):177-82

Sister chromatid exchanges in lymphocytes of early cases of nasopharyngeal carcinoma and in 100 healthy subjects. Hu YC, et al. **Cell Biol Toxicol** 1987 Sep;3(3):321-5

Differential silver staining in lymphocytes and lymphoblastoid cell cultures. Martin-DeLeon PA, et al. **Cytobios** 1988;55(221):113-23

Frequency and distribution of mitomycin C-induced structural chromosome aberrations in lymphocytes from non-Hodgkin lymphoma patients. Johansson B, et al. **Cytogenet Cell Genet** 1988;48(2):79-83

Micronuclei in binucleated lymphocytes of mice following exposure to gamma radiation. Erexson GL, et al. **Environ Mol Mutagen** 1989;13(2):128-32

HLA molecule--cytoskeleton associations induced by cross-linking with specific antibodies. Hašková V, et al. **Folia Biol (Praha)** 1988;34(6):372-9

The X-ray microanalysis method for investigation of chemical composition of normal and pathologic human peripheral blood lymphocytes. Pilch J, et al. **Folia Haematol (Leipz)** 1988;115(5):727-35

The lymphocytic basophilia after incubation of blood smears in distilled water. Smetana K, et al. **Folia Haematol (Leipz)** 1988;115(5):701-9

Frequency and size distribution of micronuclei in lymphocytes stimulated with phytohemagglutinin and pokeweed mitogen in workers exposed to piperazine. Högstedt B, et al. **Hereditas** 1988;109(1):139-42

Frequencies of micronuclei in human peripheral blood lymphocytes stimulated in vitro by phytohemagglutinin and pokeweed mitogen. Högstedt B, et al. **Hereditas** 1988; 109(1):53-5

Breakprone chromosome bands in lymphocytes from sarcoma patients do not coincide with bands involved in primary sarcoma-associated chromosome rearrangements. Mertens F, et al. **Hereditas** 1988;109(1):119-24

Expression of fragile sites in human sperm and lymphocyte chromosomes. Benet J, et al. **Hum Genet** 1989 Feb; 81(3):239-42

Effects of folate in culture medium on common fragile sites in lymphocyte chromosomes from normal and leukemic children. Green RJ, et al. **Hum Genet** 1988 Dec;81(1):9-12

SCE variability in lymphocytes and fibroblasts. A controlled study. Lukusa T, et al. **Hum Genet** 1988 Oct;80(2):117-23

Spleen lymphocytes and haemopoiesis in the mouse embryo. Sasaki K, et al. **J Anat** 1988 Oct;160:27-37

Increased numbers of spontaneous micronuclei in blood lymphocytes and cultures fibroblasts of individuals with familial cutaneous malignant melanoma. Weichenthal M, et al. **J Cancer Res Clin Oncol** 1989;115(3):264-8

Nucleolar organiser regions in lymphocytes of patients with chronic lymphocytic leukaemia [letter] Kaur P, et al. **J Clin Pathol** 1988 Dec;41(12):1338

Morphology and immunology of circulating cells in leukaemic phase of follicular lymphoma. Melo JV, et al. **J Clin Pathol** 1988 Sep;41(9):951-9

Colloidal gold label observed with a high resolution backscattered electron imaging in mouse lymphocytes. Takata K, et al. **J Electron Microsc (Tokyo)** 1988; 37(6):346-50

Chromosome aberrations in peripheral blood lymphocytes of welders and characterization of their exposure by biological samples analysis. Elias Z, et al. **J Occup Med** 1989 May;31(5):477-83

Ultrastructural characteristics of the contact zones between Langerhans cells and lymphocytes. Concha M, et al. **J Pathol** 1988 Sep;156(1):29-36

Chromosome fragility of lymphocytes from breast cancer patients in relation to epidemiologic data. Ochi H, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1024-30

Expression of fragile site 8q22 in peripheral blood lymphocytes taken from patients with acute leukemia M2 having t(8;21)(q22;q22). Furuya T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):23-5

In vivo and in vitro ultrastructural alterations induced by human immunodeficiency virus in human lymphoid cells. Yoffe B, et al. **Lab Invest** 1989 Sep;61(3):303-9

Chromosome aberrations and sister chromatid exchanges (SCEs) in peripheral blood lymphocyte cultures of untreated leprosy patients. D'Souza D, et al. **Lepr Rev** 1988 Jun;59(2):121-5

Instability of cellular structures of lymphocytes in patients in long-standing remission after treatment withdrawal in acute lymphoblastic leukaemia. Kopeć-Szlęzak J, et al. **Mater Med Pol** 1988 Apr-Jun;20(2):120-3

The pattern of changes of nucleoli and lysosomes in the lymphocytes of children with acute lymphoblastic leukaemia during maintenance treatment and after its withdrawal. Kopeć-Szlęzak J, et al. **Mater Med Pol** 1988 Apr-Jun;20(2):124-7

Membrane protein organization of peripheral blood lymphocytes from healthy young and aged adults. Rivich DA, et al. **Mech Ageing Dev** 1988 Oct;45(1):65-74

"Urchin-like" lymphocytes and monocytes. Manolescu N, et al. **Med Interne** 1982 Apr-Jun;20(2):157-8

Morphometric analysis of follicular center cells: a new approach. Pelstring RJ, et al. **Mod Pathol** 1988 Jul; 1(4):262-7

Utilization of rat lymphocytes for the in vitro chromosomal aberration assay. Sinha AK, et al. **Mutagenesis** 1989 Mar; 4(2):147-53

Time course of enhancement of chromosomal aberration production in human lymphocytes by post-treatment with aphidicolin following X-irradiation in G2. Bender MA. **Mutat Res** 1989 Aug;213(2):175-83

Comparative study of sister-chromatid exchanges and chromosomal aberrations induced by airborne particulates from an urban and a highly industrialized location in human lymphocyte cultures. Hadnagy W, et al. **Mutat Res** 1989 Jan-Feb;225(1-2):27-32

The distribution of MspI-induced breaks in human lymphocyte chromosomes and its relationship to common fragile sites. Porfirio B, et al. **Mutat Res** 1989 Aug; 213(2):117-24

Chromosomal aberrations in bone marrow and peripheral blood cells from the same rats. Sinha AK, et al. **Mutat Res** 1989 May;226(1):65-7

Effect of antirheumatic drugs on lymphocyte membrane fluidity in rheumatoid arthritis: a fluorescence polarization study. Beccerica E, et al. **Pharmacology** 1989;38(1):16-22

Effect of BrdU on the number of nucleoli and the frequency of satellite associations in PHA-stimulated lymphocytes. Balíček P. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(5):473-82

Dynamic analyses of lymphoblast membranes exposed to alpha interferon using flow cytometry and fluorescence recovery after photobleaching. Balint E, et al. **Scanning Microsc** 1988 Dec;2(4):2153-63

Tubuloreticular reorganization of cytomembranes in cells treated with human alpha interferons--a review. Grimley PM, et al. **Scanning Microsc** 1988 Dec;2(4):2141-51 (89 ref.)

Ultrastructural morphometric study of follicular center lymphocytes: II. Analyses of cleaved-cell populations do not support the Lukes-Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul-Aug;13(4):393-404

Ultrastructural morphometric study of follicular center lymphocytes: I. Nuclear characteristics and the Lukes-Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul-Aug;13(4):373-91

Frequent occurrence of microtubuloreticular complexes encountered during routine ultrastructural examination at a children's hospital. Mills AE, et al. **Ultrastruct Pathol** 1988 Nov-Dec;12(6):599-604

Lymphocytosis of large granular lymphocytes in three dogs. Wellman ML, et al. **Vet Pathol** 1989 Mar;26(2):158-63

The effect of family background on body weight and on the number and morphological changes of lymphocytes in old age. Regius O, et al. **Z Gerontol** 1989 Mar-Apr; 22(2):96-100

The relationship between ultrastructure and function of formed elements in camel blood. 2. The lymphocytes. Abdo MS, et al. **Z Mikrosk Anat Forsch** 1988;102(4):598-603

[Electron microscopic study of internalization stages of cellular receptors for insulin and alpha-1-thymosin] Marinova Ts, et al. **Eksp Med Morfol** 1989;28(1):50-4 (Eng.

Abstr.) (Bul)
[Evaluation of the immunologic response in various types of bone grafts using lymphocytic nucleoli activity] Janovec M, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):234–9 (Eng. Abstr.) (Cze)
[Changes in lymphocyte nucleoli in hypotrophic neonates] Slavíková M, et al. **Cesk Pediatr** 1989 Jan;44(1):54–5 (Cze)
[Morphological changes in the nucleus in lymphocytes in neonates with hyperbilirubinemia] Slavíková M, et al. **Cesk Pediatr** 1989 Mar;44(3):180–1 (Cze)
[Scanning electron microscopy studies in the detection of apo-B,E receptor activity of the lymphocyte membrane for diagnostic verification of genetically determined disorders of lipid metabolism] Gläser C, et al. **Wien Klin Wochenschr** 1988 Sep 23;100(18):613–8 (Eng. Abstr.) (Ger)
[Ultrastructural characteristics of virus-producing lymphocytes in bovine leukemia] Shishkov VP, et al. **Arkh Patol** 1989;51(4):45–53 (Eng. Abstr.) (Rus)
[Incidence of chromosome aberrations and sister chromatid exchange in the lymphocytes of workers in the aluminum industry] Sedova KS. **Gig Tr Prof Zabol** 1988 Oct;(10):50–1 (Rus)
[Morphologic changes of the nucleolar system of lymphocytes as the indicator of sensitivity to tuberculin and Toxoplasma antigen] Gavrilova LO, et al. **Pediatriia** 1989;(7):43–7 (Eng. Abstr.) (Rus)
[Characteristics of the silver-stained nucleoli in blast elements of various diameters from patients with acute leukemia] Mamaev NN, et al. **Tsitologiia** 1988 Dec;30(12):1478–82 (Eng. Abstr.) (Rus)

B LYMPHOCYTES

see related
LYMPHOCYTE COOPERATION

Complete remission of an AIDS-related B-cell lymphoma with one course of chemotherapy followed by zidovudine treatment [letter] van den Berg-Wolf MG, et al. **Aids** 1988 Aug;2(4):319–20
In situ demonstration of Epstein-Barr viral genomes in viral-associated B cell lymphoproliferations. Weiss LM, et al. **Am J Pathol** 1989 Mar;134(3):651–9
Molecular design of materials for cell separation. Kataoka K. **Artif Organs** 1988 Dec;12(6):511–3
Simultaneous presentation of T- and B-cell malignant lymphoma with bcl-2 gene involvement. Cotter FE, et al. **Blood** 1989 Apr;73(5):1387–8
Responsiveness of B-cll cells to growth factors [letter] Drexler HG. **Blood** 1988 Oct;72(4):1435–6
Assessment of bone marrow infiltration in B-cell non-Hodgkin's lymphoma (NHL). Dorey EL, et al. **Br J Cancer** 1989 May;59(5):772–4
Circulating monoclonal B lymphocytes in multiple myeloma. Chiu EK, et al. **Br J Haematol** 1989 May;72(1):28–31
T-cell receptor genes expression in B-cell leukaemias. Narni F, et al. **Br J Haematol** 1989 Jul;72(3):343–9
Identification of normal B-cell counterparts of neoplastic cells which secrete cold agglutinins of anti-I and anti-i specificity. Stevenson FK, et al. **Br J Haematol** 1989 May; 72(1):9–15
Interrelationship between autoimmunity and B-lymphoid cell oncogenesis in humans. Bataille R, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):319–28 (137 ref.)
Mechanisms in B-cell neoplasia. Workshop at the National Cancer Institute, National Institutes of Health, Bethesda, MD, USA, March 23–25, 1988. Proceedings. **Curr Top Microbiol Immunol** 1988;141:1–340
The development of three distinct avian B cell lymphomas. Humphries EH, et al. **Curr Top Microbiol Immunol** 1988; 141:58–66
Primary B cell lymphoma of the thyroid and its relationship to Hashimoto's thyroiditis. Hyjek E, et al. **Hum Pathol** 1988 Nov;19(11):1315–26
Monoclonal antibody Leu-22 (L60) permits the demonstration of some neoplastic T cells in routinely fixed and paraffin-embedded tissue sections. Wieczorek R, et al. **Hum Pathol** 1988 Dec;19(12):1434–43
Peripheral B lymphocyte percentage as an indicator of subclinical progression of bovine leukemia virus infection. Lewin HA, et al. **J Dairy Sci** 1988 Sep;71(9):2526–34
Evaluation of T cells, B cells and Ig. in tissues of human cutaneous leishmaniasis. Morsy TA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):57–66
A novel protein from cloned human B-cell line displays IL-1 bioactivity [letter] Bertoglio J, et al. **J Immunol** 1988 Oct 15;141(8):2869–70
Immunotherapy of established murine B cell lymphoma. Combination of idiotype immunization and cyclophosphamide. Campbell MJ, et al. **J Immunol** 1988 Nov 1;141(9):3227–33
Idiotypic vaccination as a treatment for a B cell lymphoma. George AJ, et al. **J Immunol** 1988 Sep 15;141(6):2168–74
Separation of B and T lymphocytes by a hybrid field-flow fractionation/adhesion chromatography technique. Bigelow JC, et al. **J Immunol Methods** 1989 Feb 24; 117(2):289–93
Constitutive production of lymphokines by cloned murine B-cell lymphomas—CH12 B lymphoma produces interleukin-4. O'Garra A, et al. **J Mol Cell Immunol** 1989; 4(3):149–58; discussion 158–9
Use of deoxyribonucleic acid probes in the identification of cell origin and detection of cellular contamination in human lymphoblastoid cell lines. Naeim F, et al. **Lab Invest** 1989 Mar;60(3):347–52
Covalent binding to alpha-macroglobulins of a protein with free SH groups produced by activated B cells: blocking by D-penicillamine and gold compounds. Schlesinger C, et al. **Mol Immunol** 1989 Mar;26(3):255–67
B-cell malignant lymphoma associated with monoclonal macroglobulinemia and cryoglobulinemia. Nozaki H, et al. **Tokai J Exp Clin Med** 1988 Dec;13(4–5):245–51
T and B lymphocytes in horses persistently infected with equine infectious anaemia virus. Valpotić I, et al. **Vet Res Commun** 1989;13(1):57–65
[Early disturbance of the circadian rhythm of T and B lymphocytes in human immunodeficiency virus infection] Bourin P, et al. **C R Acad Sci [III]** 1989;308(16):431–6 (Eng. Abstr.) (Fre)
[HLA class II typing of peripheral blood B lymphocytes separated using monoclonal antibodies] Lepage V, et al. **Rev Fr Transfus Hemobiol** 1989 Apr;32(2):135–40 (Eng. Abstr.) (Fre)
[Labelling of B lymphocytes from the peripheral blood of swine] Hruban V, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):764–8 (Eng. Abstr.) (Ger)
[A case from practice (139). Female patient: B.L., 1915, former working woman, housewife] Bucher H. **Schweiz Rundsch Med Prax** 1989 May 16;78(20):593–5 (Ger)

ANALYSIS

B-lymphocyte-derived erythroid burst-promoting activity is distinct from other known lymphokines. Feldman L, et al. **Blood** 1989 May 15;73(7):1814–20
B-lymphocytic hairy cells contain no HTLV-II DNA sequences. Lion T, et al. **Blood** 1988 Oct;72(4):1428–30
Isolation and characterization of growth factor(s) from a human B-cell lymphoma. Sahasrabuddhe CG, et al. **Blood** 1989 Apr;73(5):1149–56
Spontaneous expression of a low affinity Fc receptor for IgA (Fc alpha R) on human B cell lines. Millet I, et al. **Clin Exp Immunol** 1989 May;76(2):268–73
A comparative study of in vitro proliferative responses to mitogens and immunoglobulin production in patients with inflammatory muscle disease. Cambridge G, et al. **Clin Exp Rheumatol** 1989 Jan-Feb;7(1):27–33
Restriction fragment analysis of V preB and lambda 5 within the genus Mus. D'Hoostelaere LA, et al. **Eur J Immunol** 1989 Jan;19(1):37–42
Immunoglobulin subunits of murine B lymphocytes: structure and associations with other membrane proteins. Vogel L, et al. **Immunology** 1989 Jun;67(2):251–7
Muscarinic cholinergic binding sites on rat lymphocytes. Costa LG, et al. **Immunopharmacology** 1988 Nov-Dec; 16(3):139–49
Mapping of linear B-cell epitopes of the S2 subunit of pertussis toxin. Schmidt W, et al. **Infect Immun** 1989 Feb; 57(2):438–45
The expression of IgE Fc receptors on lymphocytes of allergic patients. Spiegelberg HL. **Int Rev Immunol** 1987 Jan;2(1):63–74 (35 ref.)
Presence of ACTH and its receptor on a B lymphocytic cell line: a possible autocrine function for a neuroendocrine hormone. Bost KL, et al. **J Biol Regul Homeost Agents** 1987 Jan-Mar;1(1):23–7
Operation Everest II: alterations in the immune system at high altitudes. Meehan R, et al. **J Clin Immunol** 1988 Sep; 8(5).397–406
Interleukin 6 gene expression in normal and neoplastic B cells. Freeman GJ, et al. **J Clin Invest** 1989 May;83(5):1512–8
Presence of a non-HLA B cell antigen in rheumatic fever patients and their families as defined by a monoclonal antibody. Khanna AK, et al. **J Clin Invest** 1989 May; 83(5):1710–6
T200 alternate exon use in murine lymphoid cells determined by reverse transcription-polymerase chain reaction. Chang HL, et al. **J Immunol** 1989 Jul 1;143(1):315–21
A single VH gene is utilized predominantly in anti-BrMRBC hybridomas derived from purified Ly-1 B cells. Definition of the VH11 family. Hardy RR, et al. **J Immunol** 1989 May 15;142(10):3643–51
Analysis of VH gene replacement events in a B cell lymphoma. Kleinfield RW, et al. **J Immunol** 1989 Jun 15; 142(12):4475–82
The human B lymphocyte and carcinoma antigen, CDw40, is a phosphoprotein involved in growth signal transduction. Paulie S, et al. **J Immunol** 1989 Jan 15;142(2):590–5
Restricted Ig variable region gene expression among Ly-1+ B cell lymphomas. Pennell CA, et al. **J Immunol** 1988 Oct 15;141(8):2788–96
Isolation of cDNAs encoding the CD19 antigen of human and mouse B lymphocytes. A new member of the immunoglobulin superfamily. Tedder TF, et al. **J Immunol** 1989 Jul 15;143(2):712–7
Epstein-Barr virus latent infection membrane protein increases vimentin expression in human B-cell lines. Birkenbach M, et al. **J Virol** 1989 Sep;63(9):4079–84
Functional and molecular characterization of B cell line derived interleukin-1 alpha. Vyth-Dreese FA, et al. **Leukemia** 1989 Aug;3(8):585–92
B-cell markers in the human kidney. Fleming S, et al. **Nephrol Dial Transplant** 1989;4(2):85–91
Common chronic lymphatic leukemia antigen (cCLLa): distribution, fate and clinical applications. Faguet GB. **Nouv Rev Fr Hematol** 1988;30(5–6):305–10
CD1 expression in B-CLL cells. Merle-Béral H, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):327–30
A Ph1 chromosome positive B cell line expresses the fusion protein P 210. Munker R, et al. **Nouv Rev Fr Hematol** 1989; 31(1):39–43
Use of a cross reacting anti-idiotype to identify normal counterparts of neoplastic cells. Stevenson FK, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):299–300
CD4, CD8 and NK subsets in B-CLL. Vuillier F, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):331–4
Ly-1 B-cell clones similar to human chronic lymphocytic leukemias routinely develop in older normal mice and young autoimmune (New Zealand Black-related) animals. Stall AM, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7312–6
Lymphocyte subpopulations and serum immunoglobulin E (IgE) levels in ascariasis. Saraçlar Y, et al. **Turk J Pediatr** 1988 Jul-Sep;30(3):135–43
[The lymphocytes of chronic lymphoid leukemia. Diagnostic, physiologic and prognostic significance] Binet JL. **Bull Acad Natl Med** 1989 Jan;173(1):73–6; discussion 77 (Eng. Abstr.) (Fre)
[Detection of interleukin-2 and growth factor activity of B-lymphocytes of the cerebrospinal fluid in patients with various lesions of the central nervous system] Kulikov VV, et al. **Fiziol Cheloveka** 1988 Nov-Dec;14(6):922–6 (Rus)

CLASSIFICATION

Lymphocyte subsets of maxillary mucosa in chronic inflammation. Nishimoto K, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3–4):291–8
Pre-B cells and B lymphocytes in human cord blood and adult peripheral blood. Okino F. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):195–201
The aberrancy of immunophenotype and immunoglobulin status as indicators of prognosis in B cell diffuse large cell lymphoma. Spier CM, et al. **Am J Pathol** 1988 Oct; 133(1):118–26
Probing the human B-cell repertoire with EBV: polyreactive antibodies and CD5+ B lymphocytes. Casali P, et al. **Annu Rev Immunol** 1989;7:513–35 (71 ref.)
An immunohistological examination of inflammatory cell infiltration in primary testicular seminomas. Strutton GM, et al. **Aust N Z J Surg** 1989 Feb;59(2):169–72
Human normal CD5+ B lymphocytes can be induced to differentiate to CD5- B lymphocytes with germinal center cell features. Caligaris-Cappio F, et al. **Blood** 1989 Apr; 73(5):1259–63
Studies of in vitro activated CD5+ B cells. Freedman AS, et al. **Blood** 1989 Jan;73(1):202–8
A novel leukemia cell line, MR-87, with positive Philadelphia chromosome and negative breakpoint cluster region rearrangement coexpressing myeloid and early B-cell markers. Okamura J, et al. **Blood** 1988 Oct; 72(4):1261–8
Identification and importance of lymphocyte subpopulations in the regional lymph nodes of breast cancer patients. Khuri N, et al. **Can J Surg** 1989 Jan;32(1):23–6
Quantitative analysis of T and B lymphocytes and their subpopulations of irradiated mouse by scanning microspectrophotometry. Cui YF, et al. **Chin Med J [Engl]** 1988 Jul;101(7):473–7
Lymphocyte immunophenotyping of B-cell lymphomas: a flow cytometric analysis of neoplastic and nonneoplastic cells in 271 cases. de Martini RM, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):365–79
The increase of non-MHC-restricted cytotoxic cells (gamma/delta-TCR-bearing T cells or NK cells) and the abnormal differentiation of B cells in Wiskott-Aldrich syndrome. Morio T, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):279–90
Functional interaction between B cell subpopulations defined by CD23 expression. Armitage RJ, et al. **Eur J Immunol** 1988 Nov;18(11):1753–60
Subpopulations of B lymphocytes in germinal centers, II. A germinal center B cell subpopulation expresses sIgD and CD23. Nahm MH, et al. **Immunol Lett** 1989 Jun 1; 21(3):201–8
B lymphocyte subsets in Hashimoto's thyroiditis. Suranyi P, et al. **Immunol Lett** 1989 Aug;22(2):147–50
An activation antigen on a subpopulation of B lymphocytes identified by the monoclonal antibody CMRF-17. Peach SF, et al. **Immunology** 1989 Jul;67(3):351–8
Leu-1(CD5) B cell subpopulation in patients with various liver diseases—special reference to hepatitis B virus carrier and to changes caused by prednisolone therapy. Yamada H, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):409–16
Clonal diversity in the B cell repertoire of patients with X-linked agammaglobulinemia. Anker R, et al. **J Exp Med** 1989 Jun 1;169(6):2109–19
Restricted immunoglobulin variable region gene usage by normal Ly-1 (CD5+) B cells that recognize phosphatidyl choline. Mercolino TJ, et al. **J Exp Med** 1989 Jun 1; 169(6):1869–77
Occurrence of mature B (IgM+, B220+) and T (CD3+) lymphocytes in scid mice. Carroll AM, et al. **J Immunol** 1989 Aug 15;143(4):1087–93
Alteration of the B cell surface phenotype, immune response to phosphocholine and the B cell repertoire in M167 mu

plus kappa transgenic mice. Kenny JJ, et al. **J Immunol** 1989 Jun 15;142(12):4466–74

In vivo effects of hyperdiploid Ly-1+ B cells of NZB origin. Ravoche ES, et al. **J Immunol** 1988 Dec 15;141(12):4133–9

Unique V gene usage by B-Ly1 cell lines, and a discordance between isotype switch commitment and variable region hypermutation. Braun J, et al. **J Mol Cell Immunol** 1989; 4(3):121–7; discussion 127–8

Small and large B cells respond differently to T cell–derived B cell growth and differentiation factors. Layton JE, et al. **J Mol Cell Immunol** 1985;2(3):155–67

Are xid B lymphocytes representative of any normal B cell population. A commentary. Mosier DE. **J Mol Cell Immunol** 1985;2(2):70

Clonotypic analysis of the fetal B cell repertoire: evidence for an early and predominant expression of idiotypes associated with the VH 36–60 family. Teale JM, et al. **J Mol Cell Immunol** 1986;2(5):283–92

Higher T-cell imbalance and growth factor receptor expression in B-cell chronic lymphocytic leukemia (B-CLL) as compared to monoclonal B-cell lymphocytosis of undetermined significance (B-MLUS). Garcia C, et al. **Leuk Res** 1989;13(1):31–7

Abnormal distribution of CD8 subpopulation in B-chronic lymphocytic leukemia identified by flow cytometry. Terstappen LW, et al. **Leuk Res** 1988;12(7):551–7

Lymphocyte subpopulations and clonal repertoires participate in immune response to acute T. cruzi infection. Minoprio P, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:356–9

Comparative analysis of normal and malignant CD5+ B lymphocytes. Riva M, et al. **Nouv Rev Fr Hematol** 1988; 30(5–6):289–91

Chronic B-lymphocytic leukemia—expression of B cell activation markers in relation to activity of the disease. Tötterman TH, et al. **Nouv Rev Fr Hematol** 1988; 30(5–6):279–81

Is autoantibody production related to particular B-cell subsets and variable region genes? Dighiero G, et al. **Pathol Immunopathol Res** 1987;6(5–6):371–89 (116 ref.)

Phenotypical and functional characterization of the idiotype–positive blood B cells in multiple myeloma. Bloem AC, et al. **Scand J Immunol** 1988 Dec;28(6):791–9

[T, B, NK/K cells and their subsets in normal pregnancy and puerperium] Nasu M, et al. **Rinsho Byori** 1989 Mar; 37(3):273–8 **(Jpn)**

[Use of pan-T and pan-B panels of xenogenic sera for the quantitative evaluation of T and B subpopulations of lymphocytes in the blood of donors and patients with acute leukemia] Kochetkova GA, et al. **Lab Delo** 1988;(11):57–61 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Pattern of distribution of early B lineage cells in rat bone marrow. Hermans M, et al. **Adv Exp Med Biol** 1988; 237:53–6

The de novo generation of germinal centers is an oligoclonal process. Kroese FG, et al. **Adv Exp Med Biol** 1988; 237:245–50

In vivo localization of B lymphocyte progenitor cells in mouse bone marrow. Osmond DG, et al. **Adv Exp Med Biol** 1988;237:45–51

Chicken B lymphocyte differentiation: bursal microenvironment and differences in ontogeny between normal and SPF birds. Ramm HC, et al. **Adv Exp Med Biol** 1988;237:69–74

B cell precursor populations in fetal and neonatal rat liver: frequency, topography and antigenic phenotype. Veldhuis GJ, et al. **Adv Exp Med Biol** 1988;237:57–62

Surface IgD phenotype of rat germinal centre precursor cells. Vonderheide RH, et al. **Adv Exp Med Biol** 1988;237:239–43

Large granular lymphocytes from B-chronic lymphocytic leukemia patients inhibit normal B cell proliferation. Perri RT, et al. **Am J Hematol** 1989 Jul;31(3):166–72

Stable expression and somatic hypermutation of antibody V regions in B-cell developmental pathways. Kocks C, et al. **Annu Rev Immunol** 1989;7:537–59 (139 ref.)

Interleukin-1 inhibition of B lymphopoiesis is reversible. Dorshkind K. **Blood** 1988 Dec;72(6):2053–5

The basic study on kappa–lambda imaging by delta-curve for the detection of a monoclonal B-cell population in the peripheral blood. Nakano M, et al. **Blood** 1988 Nov; 72(5):1461–6

Simultaneous application of immunolabelling and in situ hybridization to detect the origin of B and T lymphocytes in a case of acute lymphocytic leukaemia after bone marrow transplantation. Khokhar MT, et al. **Bone Marrow Transplant** 1989 Jul;4(4):363–6

bcl-2–immunoglobulin transgenic mice demonstrate extended B cell survival and follicular lymphoproliferation. McDonnell TJ, et al. **Cell** 1989 Apr 7;57(1):79–88

Adenosine 3',5'-cyclic monophosphate modulates the mitogenic responses of murine B lymphocytes. Cohen DP, et al. **Cell Immunol** 1989 Jun;121(1):113–24

Lipopolysaccharide-induced murine B cell proliferation: a role of protein kinase C. Gupta S, et al. **Cell Immunol** 1988 Dec;117(2):425–9

IL-4, but not IL-5, can act synergistically with B cell activating factor (BCAF) to induce proliferation of resting B cells. Jankovic DL, et al. **Cell Immunol** 1988 Nov; 117(1):165–76

Growth inhibition of Epstein–Barr virus–transformed B cells by anti-HLA-DR antibody L243: possible relationship to L243-induced down-regulation of CD23 antigen expression. Kabelitz D, et al. **Cell Immunol** 1989 Apr 15; 120(1):21–30

Activation of B lymphocytes with human serum–treated zymosan. Kai C, et al. **Cell Immunol** 1988 Oct 15; 116(2):467–74

Regulation of in vitro PWM-induced IgG secretion in humans. O'Gorman MR, et al. **Cell Immunol** 1989 Feb; 118(2):435–47

Effect of growth and differentiation stimuli on the development of antigen-responsive B cells in fetal liver. Teale JM, et al. **Cell Immunol** 1988 Dec;117(2):389–98

CD8 suppressor cell activity and its effect on CD4 helper cell–dependent growth of SJL/J B-cell lymphomas. Thrush GR, et al. **Cell Immunol** 1989 Sep;122(2):555–62

Proliferation kinetics of human B- and T-lymphocytes. Miller K. **Cell Tissue Kinet** 1987 Nov;20(6):611–5

B cell precursors in bone marrow: in vivo proliferation, localization, stimulation by activated macrophages and implications for oncogenesis. Osmond DG, et al. **Curr Top Microbiol Immunol** 1988;141:2–10

Regulation of B-cell populations. MacLennan IC, et al. **Curr Top Pathol** 1989;79:37–57 (73 ref.)

B-cell growth and differentiation factors. Callard RE. **Dev Biol Stand** 1988;69:43–9

N-myc transgene promotes B lymphoid proliferation, elicits lymphomas and reveals cross-regulation with c-myc. Rosenbaum H, et al. **EMBO J** 1989 Mar;8(3):749–55

Induction of differentiation in human leukemic B cells by interleukin 2 alone: differential effect on the expression of mu and J chain genes. Emilie D, et al. **Eur J Immunol** 1988 Oct;18(10):1479–83

Glucocorticosteroid–dependent synergy between interleukin 1 and interleukin 6 for human B lymphocyte differentiation. Emilie D, et al. **Eur J Immunol** 1988 Dec;18(12):2043–7

B cell precursors in chick embryos surgically bursectomized at 72 h of incubation. Lassila O, et al. **Eur J Immunol** 1988 Nov;18(11):1867–70

B lymphopoiesis on stromal cell clone: stromal cell clones acting on different stages of B cell differentiation. Nishikawa S, et al. **Eur J Immunol** 1988 Nov; 18(11):1767–71

Evidence that precursor cells of monocytes and B-lymphocytes are closely related. Wong AK, et al. **Exp Hematol** 1989 Oct;17(9):968–73

The B-cell–specific Oct-2 protein contains POU box- and homeo box–type domains. Clerc RG, et al. **Genes Dev** 1988 Dec;2(12a):1570–81

Selection for B cells with productive IgL gene rearrangements occurs in the bursa of Fabricius during chicken embryonic development. McCormack WT, et al. **Genes Dev** 1989 Jun;3(6):838–47

Growth of B cell colonies independent of T cell contact. Fernandez LA, et al. **Immunol Lett** 1989 Aug;22(2):167–71

Cell cycle control of a Burkitt lymphoma cell line: responsiveness to growth signals engaging the C3D/EBV receptor. Pernegger G, et al. **Immunology** 1988 Oct; 65(2):237–41

Pre-B cells. **Int Rev Immunol** 1987 Mar;2(3):241–338

Long-term culture systems for analysis of early B lymphocyte development. Denis KA, et al. **Int Rev Immunol** 1987 Mar;2(3):285–305 (70 ref.)

Some facts about the progenitors of murine B lymphocytes. Kincade PW, et al. **Int Rev Immunol** 1987 Mar;2(3):263–83 (112 ref.)

B lymphocyte progenitors in mouse bone marrow. Osmond DG, et al. **Int Rev Immunol** 1987 Mar;2(3):241–61 (76 ref.)

Distribution of B-lymphocytes in the areas of bursal and cloacal lymphoid infiltration. Dolfi A, et al. **J Anat** 1988 Oct;160:201–10

Regulation of the product of a possible human cell cycle control gene CDC2Hs in B-cells by alpha-interferon and phorbol ester. Thomas NS. **J Biol Chem** 1989 Aug 15; 264(23):13697–700

cAMP-mediated growth inhibition of a B-lymphoid precursor cell line Reh is associated with an early transient delay in G2/M, followed by an accumulation of cells in G1. Blomhoff HK, et al. **J Cell Physiol** 1988 Dec; 137(3):583–7

Impaired late suppression of Epstein–Barr virus (EBV)–induced immunoglobulin synthesis: a common feature of autoimmune disease. Shore A, et al. **J Clin Immunol** 1989 Mar;9(2):103–10

Cloning of phenotypically different human lymphocytes originating from a single stem cell. Hakoda M, et al. **J Exp Med** 1989 Apr 1;169(4):1265–76

Clonal and molecular characteristics of the human IgE–committed B cell subset. MacKenzie T, et al. **J Exp Med** 1989 Feb 1;169(2):407–30

C3 synthetic peptides support growth of human CR2-positive lymphoblastoid B cells. Servis C, et al. **J Immunol** 1989 Apr 1;142(7):2207–12

Regulation of B-cell differentiation: anti-mu antibodies have opposite effects on differentiation stimulated by bacterial lipopolysaccharide and 8-mercaptoguanosine. Rollins-Smith LA, et al. **J Mol Cell Immunol** 1988; 4(1):9–19

Stimulation of rat B-lymphocyte proliferation by corticotropin-releasing factor. McGillis JP, et al. **J Neurosci Res** 1989 Jul;23(3):346–52

The elimination of malignant B lymphocytes from human bone marrow using monoclonal antibodies DLC-48 and LN-1 and human serum: a preclinical study. Winter JN, et al. **Leuk Res** 1989;13(1):71–6

Differentiation of Burkitt lymphoma cells by hexamethylenbisacetamide. Semmel M, et al. **Mol Biol Rep** 1988–89;13(3):151–7

Early pre-B-cell transformation induced by the v-fms oncogene in long-term mouse bone marrow cultures. Borzillo GV, et al. **Mol Cell Biol** 1989 Sep;9(9):3973–81

Functional maturation of murine B lymphocyte precursors—III. Soluble factors involved in the regulation of growth and differentiation. Gisler RH, et al. **Mol Immunol** 1988 Nov;25(11):1113–27

Characterization of a presecretory phase in B-cell differentiation. King LB, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2814–8

Neonatal administration of prolactin antiserum alters the developmental pattern of T- and B-lymphocytes in the thymus and spleen of BALB/c female mice. Russell DH, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7404–7

In vitro effects of recombinant interleukin 7 on growth and differentiation of bone marrow pro-B- and pro-T-lymphocyte clones and fetal thymocyte clones. Takeda S, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1634–8

Selected phenotypic and cloning properties of a bovine lymphoblastoid cell line, BL20. Olobo JO, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):165–72

Increase in B-cells in the pancreatic remnant after partial pancreatectomy in pigs. An immunocytochemical and functional study. Löhr M, et al. **Virchows Arch [B]** 1989; 56(4):277–86

[Secondary follicles in the thymus. Immunohistologic characterization of B lymphocytes using monoclonal antibodies] Kupper H, et al. **Zentralbl Allg Pathol** 1989; 135(3):269–75 (Eng. Abstr.) **(Ger)**

[Presence of immunocompetent cells in human fetal brain] Ennas MG, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep–Oct;109(5):279–83 (Eng. Abstr.) **(Ita)**

[Inhibitory effect of lipopolysaccharides, natural lipid A and synthetic lipid A on growth of murine B cell lines, CYG 34 and CYG 101] Honda F, et al. **Nippon Saikingaku Zasshi** 1988 Jul;43(4):837–43 (Eng. Abstr.) **(Jpn)**

[Molecular mechanisms regulating B cell growth and differentiation—special reference to TRF/IL-5 and its receptor] Takatsu K. **Tanpakushitsu Kakusan Koso** 1988 Oct;33(13):2333–43 (73 ref.) **(Jpn)**

[Effectiveness of formation of murine B-hybridomas by using various polyethylene glycols] Paniutich AV. **Gematol Transfuziol** 1988 Dec;33(12):47–51 **(Rus)**

[Reversible suppression and activation of immunoglobulin genes in differentiated IgG+ cells from human RPMI-6410t B-cells] Seregina TM, et al. **Ontogenez** 1988 Jul–Aug;19(4):366–70 (Eng. Abstr.) **(Rus)**

[Comparative study of murine B-cells obtained by 2 different methods proliferating long-term in vitro] Volgareva GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):80–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

5-fluorodeoxyuridine decreases the effect of arabinofuranosyl-cytosine in undifferentiated human B lymphocytes. Spasokukotskaja T, et al. **Acta Biochim Biophys Hung** 1988;23(2):159–73

Interleukin 2 and interferon-gamma affect human B cells at different stages of activation. Punnonen J, et al. **APMIS** 1989 Mar;97(3):200–6

Modulation of murine T and B cell reactivity after short-term cadmium exposure in vivo. Hurtenbach U, et al. **Arch Toxicol** 1988 Aug;62(1):22–8

Inhibition of polyamine synthesis in human B lymphocytes during primary infection with Epstein–Barr virus (EBV) blocks cellular DNA synthesis but not the expression of EBV-encoded nuclear antigens (EBNA). Aman P, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):945–52

Phosphorylation of class I histocompatibility antigens in human B lymphocytes. Regulation by phorbol esters and insulin. Peyron JF, et al. **Biochem J** 1988 Dec 15; 256(3):763–8

Proliferative effect of high density lipoprotein (HDL) and HDL fractions (HDL1,2, HDL3) on virus transformed lymphoblastoid cells. Favre G, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):118–24

Tumor necrosis factor induces proliferation of neoplastic B cells from chronic lymphocytic leukemia. Digel W, et al. **Blood** 1989 Apr;73(5):1242–6

The in vitro influence of rIL2 on the B-cell dysfunction in patients with persistent generalized lymph node enlargement (PGL) or AIDS. Kekow J, et al. **Cancer Detect Prev** 1988;12(1–6):231–6

Effect of phytohemagglutinin and interleukin-2 on malignant and nonmalignant B and T lymphocytes. Porwit A, et al. **Cancer Detect Prev** 1988;12(1–6):91–6

Regulation of hybridoma B-cell proliferation by immunoglobulin-binding factor. Teillaud JL, et al. **Cancer Detect Prev** 1988;12(1–6):115–23

Interleukin 2 regulates antigen-specific immunoglobulin response of naive murine B cells. Isakov N, et al. **Cell Immunol** 1989 May;120(2):366–74

Interleukin-4 enhances peritoneal B cell stimulation induced by phorbol ester. Rothstein TL. **Cell Immunol** 1989 May;

120(2):450–9
Synthesis of [Glu34]human splenin (hSP) and examination of its immunological effect on the reduced B-lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):391–6
The effect of antithyroid drugs on B and T cell activity in vitro. Wilson R, et al. **Clin Endocrinol (Oxf)** 1988 Apr; 28(4):389–97
B cell hyperresponsiveness to interleukin 2 and the age-associated decline in murine lupus. Sekigawa I, et al. **Clin Immunol Immunopathol** 1989 May;51(2):172–84
Recombinant interleukin-7 supports the growth of normal B lymphocyte precursors. Lee G, et al. **Curr Top Microbiol Immunol** 1988;141:16–8
The same external signal differentially induced the c-myc expression in Burkitt lymphoma and B-lymphoblastoid cell lines. Numoto M. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1727–35
1,25-Dihydroxyvitamin D3 inhibits myelopoiesis but not B-lymphopoiesis in long-term bone marrow cultures. Dorshkind K, et al. **Exp Hematol** 1989 Jun;17(5):436–42
Induction of plasmacytoid and hairy cell features by phorbol esters (TPA) in B-lymphoma cells: attempted correlation with disease activity. Gazitt Y, et al. **Hematol Oncol** 1988 Oct-Dec;6(4):307–18
Effect of recombinant human granulocyte-macrophage colony-stimulating factor (rhuGM-CSF) on normal peripheral B lymphocytes and B lymphoblastoid cell lines. Haas R, et al. **Immunol Lett** 1989 Jan 31;20(2):133–8
Immunomodulating properties of the N-(1-deoxy-D-fructos-lyl) derivative of amphotericin B in mice. Henry-Toulmé N, et al. **Immunol Lett** 1989 Jan 15;20(1):63–7
Phorbol ester and calcium ionophore are sufficient to promote cell replication in cultures of quiescent human B lymphocytes. Flores-Romo L, et al. **Immunology** 1989 Feb;66(2):228–32
Differential responsiveness of human B lymphocytes to phorbol ester and calcium ionophore based on their state of activation. Inglés J, et al. **Immunology** 1989 Jul; 67(3):359–64
The effect of leucyl-leucine methyl ester on proliferation and Ig secretion of EBV-transformed human B lymphocytes. Ohlin M, et al. **Immunology** 1989 Apr; 66(4):485–90
Differential effect of mixed D1/D2 and selective D2 dopaminergic antagonists on mouse T and B lymphocyte proliferation and interleukin production in vitro. Boukhris W, et al. **Immunopharmacol Immunotoxicol** 1988; 10(4):501–12
Distinct effects of aminopterin on stimulation of T and B lymphocytes with mitogen. Holáň V, et al. **Immunopharmacology** 1989 Jul-Aug;18(1):23–30
Opposite effects of the catecholamines dopamine and norepinephrine on murine polyclonal B-cell activation. Kouassi E, et al. **Immunopharmacology** 1988 Nov-Dec; 16(3):125–37
Inosiplex enhances the growth of Epstein-Barr nuclear antigen-positive B-cells from patients with rheumatoid arthritis and infectious mononucleosis. Becker H, et al. **Int J Immunopharmacol** 1988;10(4):439–43
Biochemical events associated with inhibition of B-cell proliferation by phorbol diesters. Germolec DR, et al. **Int J Immunopharmacol** 1988;10(8):953–65
Stimulatory effects of bestatin on human B-cell colony formation. Otsuka T, et al. **Int J Immunopharmacol** 1988; 10(5):587–91
Effect of K+ channel blockers on anti-immunoglobulin-induced murine B cell proliferation. Gollapudi SV, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):121–5
Estrogen induces normal murine CD5+ B cells to produce autoantibodies. Ansar Ahmed S, et al. **J Immunol** 1989 Apr 15;142(8):2647–53
Human recombinant IL-4 induces activated B lymphocytes to produce IgG and IgM. Defrance T, et al. **J Immunol** 1988 Sep 15;141(6):2000–5
Pre-exposure of human B cells to recombinant IL-1 enhances subsequent proliferation. Freedman AS, et al. **J Immunol** 1988 Nov 15;141(10):3398–404
IL-3 and stromal cell-derived factor synergistically stimulate the growth of pre-B cell lines cloned from long-term lymphoid bone marrow cultures. Rennick D, et al. **J Immunol** 1989 Jan 1;142(1):161–6
8-Mercaptoguanosine overcomes unresponsiveness of human neonatal B cells to polysaccharide antigens. Rijkers GT, et al. **J Immunol** 1988 Oct 1;141(7):2313–6
Synergistic inhibition of Epstein-Barr virus: transformation of B lymphocytes by alpha and gamma interferon and by 3'-azido-3'-deoxythymidine. Lin JC, et al. **J Infect Dis** 1989 Feb;159(2):248–54
Regulation of antibody production in vitro by granulocyte-macrophage colony stimulating factor. Grabstein K, et al. **J Mol Cell Immunol** 1986;2(4):199–207
The effect of T cell-derived lymphokines on the levels of isotype-specific RNA in normal B cells. Jones S, et al. **J Mol Cell Immunol** 1985;2(3):143–53
Beta-endorphin suppresses rat plaque-forming cell response by a non-opioid mechanism. Hemmick LM, et al. **J Neuroimmunol** 1989 Jun;23(1):67–71
Bone marrow stromal cell regulation of B-lymphopoiesis. II. Mechanisms of hydroquinone inhibition of pre-B cell maturation. King AG, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):582–90
B cell activation in patients with active procainamide induced lupus. Forrester J, et al. **J Rheumatol** 1988 Sep;15(9):1384–8
B cell suppressing and CD8+ T cell enhancing effects of photosensitive dye platonin in humans. Kondo N, et al. **J Rheumatol** 1989 Jul;16(7):936–9
Effect of plant polysaccharides on T and B lymphocytes in normal and tumor transplanted mice. Gu YX, et al. **J Tradit Chin Med** 1988 Sep;8(3):198–202
Effect of plant polysaccharides on T and B lymphocytes in tumor transplanted mice irradiated by X-ray. Gu YX, et al. **J Tradit Chin Med** 1988 Dec;8(4):277–81
Comments on "The molecular basis for the differential sensitivity of B and T lymphocytes to growth inhibition by thymidine and 5-fluorouracil" [letter] Srivastava BI. **Leuk Res** 1988;12(8):699
Cloning of in vivo-derived thioguanine-resistant human B cells. Hakoda M, et al. **Mutat Res** 1989 Jan;210(1):29–34
Establishment and characterization of a new human B lymphoblastoid cell line that responds to a B cell growth factor. Goto Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1042–51
Effects of tumour necrosis factor and alpha interferon on chronic B cell malignancies. Bianchi AC, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):317–9
In vitro effects of B cell growth and maturation factor on B-CLL lymphocytes. Karray S, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):275–8
Trypsin does not reconstitute responsiveness to lipopolysaccharide in the strain C3H/HeJ, but is a B-cell mitogen-like lipopolysaccharide, stimulating a different subpopulation. Cardell S, et al. **Scand J Immunol** 1989 Feb; 29(2):143–9
Antibody production in rats after long-term exposure to formaldehyde. Holmström M, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):328–33
Effects of leukocidin from Fusobacterium necrophorum on bovine peripheral leukocytes in vitro. Kanoe M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):463–9
[Immunopharmacologic study in mice of 2 beta-1, 3, beta-1, 6 polysaccharides (scleroglucan and PSAT) on the activation of macrophages and T lymphocytes] Bousquet M, et al. **Ann Rech Vet** 1989;20(2):165–73 (Eng. Abstr.) **(Fre)**
[Evaluation of humoral immunity in children with growth hormone deficiency] Moretta A, et al. **Medicina (Firenze)** 1988 Oct-Dec;8(4):428–9 (Eng. Abstr.) **(Ita)**
[Effect of preparations on the intracellular cAMP and prostaglandin E content and on the functional activity of antigen-induced B-suppressors] Borisova LS, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):65–9 (Eng. Abstr.) **(Rus)**
[The surface phenotype and enzymatic cytochemical markers of B cells during pokeweed mitogen activation] Evsev'eva AI, et al. **Tsitologiia** 1989 May;31(5):569–75 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Immunolocalization of matrix metalloproteinase 3 (stromelysin) in rheumatoid synoviocytes (B cells): correlation with rheumatoid arthritis. Okada Y, et al. **Ann Rheum Dis** 1989 Aug;48(8):645–53
Decreased B lymphocyte ecto-5'nucleotidase and increased adenosine deaminase in mononuclear cells from patients infected with human immunodeficiency virus. Dalh Christensen L, et al. **APMIS** 1988 Oct;96(10):882–8
B-lymphocytic cell line Raji expresses the leukotriene A4 hydrolase gene but not the 5-lipoxygenase gene. Medina JF, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):740–5
Purification and characterization of proteins with associated tyrosine protein kinase activity from human B lymphocytes. Semmel M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1128–34
Beta-1,4-mannosyl-glycoprotein beta-1,4-N-acetylglucosaminyltransferase III activity in human B and T lymphocyte lines and in tonsillar B and T lymphocytes. Narasimhan S, et al. **Biochem Cell Biol** 1988 Aug;66(8):889–900
Biosynthesis, processing, and extracellular release of alpha-L-fucosidase in lymphoid cell lines of different genetic origins. DiCioccio RA, et al. **Biochem Genet** 1988 Jun;26(5-6):401–20
Multiple enzymes related to differentiation of lymphocyte subpopulations in man. Aoyagi T, et al. **Biochem Int** 1989 Feb;18(2):383–9
Inhibition of orotidylate decarboxylase by 4(5H)-oxo-1-beta-D-ribofuranosylpyrazolo[3,4-d] pyrimidine-3-thiocarboxamide (APR-TC) in B lymphoblasts. Activation by adenosine kinase. Dee Nord L, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4697–705
Antioxidant enzymes in lymphocytes from normal subjects and patients with chronic lymphocytic leukaemia: increased glutathione peroxidase activity in CLL B lymphocytes. Farber CM, et al. **Br J Haematol** 1989 May;72(1):32–5
Alkaline phosphatase-positive B cell lymphomas. Abe M, et al. **Eur J Haematol** 1988 Sep;41(3):223–9
Expression of tartrate-resistant acid phosphatase in B-CLL treated with phorbol ester or phorbol ester plus calcium ionophore. Drexler HG, et al. **Eur J Haematol** 1988 Sep; 41(3):250–7
Terminal deoxynucleotidyl transferase-positive B cell precursors in fetal lymph nodes and extrahemopoietic tissues. Cattoretti G, et al. **Eur J Immunol** 1989 Mar; 19(3):493–500
Induction of expression of protein disulphide-isomerase during lymphocyte maturation stimulated by bacterial lipopolysaccharide. Paver JL, et al. **FEBS Lett** 1989 Jan 2;242(2):357–62
Unique pattern of cleavage of vasoactive intestinal peptide by human lymphocytes. Goetzl EJ, et al. **Immunology** 1989 Apr;66(4):554–8
Activation of protein kinase C modulates the adenylate cyclase effector system of B-lymphocytes. Wiener E, et al. **J Biol Chem** 1989 Mar 15;264(8):4324–8
Late events in B cell activation. Expression of membrane alkaline phosphatase activity. Burg DL, et al. **J Immunol** 1989 Jan 15;142(2):381–7
An in situ study of B-lymphocytopoiesis in rat bone marrow. Topographical arrangement of terminal deoxynucleotidyl transferase-positive cells and pre-B cells. Hermans MH, et al. **J Immunol** 1989 Jan 1;142(1):67–73
Expression of alkaline phosphatase in murine B lymphocytes. Correlation with B cell differentiation into Ig secretion. Marquez C, et al. **J Immunol** 1989 May 1;142(9):3187–92
Cell type-specific transcriptional regulation of the human adenosine deaminase gene. Lattier DL, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1061–76

IMMUNOLOGY

Lymphocytes subset in hyperandrogenic women with polycystic ovarian disease. Turi A, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):155–7
Proliferation of B cells from chronic lymphocytic leukemia is selectively promoted by B cell growth factor. Alvarez-Mon M, et al. **Acta Haematol (Basel)** 1989; 81(2):91–7
Functional analysis of an Epstein-Barr virus-nontransformed human B cell line. Yasuda Y, et al. **Acta Haematol (Basel)** 1988;80(3):139–44
Estradiol potentiates poke-weed mitogen-induced B cell stimulation in multiple sclerosis and healthy subjects. Kalman B, et al. **Acta Neurol Scand** 1989 Apr;79(4):340–6
Experimental otitis media in mice. Immunohistochemical observations. Ichimiya I, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:148–53
Deterioration of B cell proliferation correlates with dendritic reticulum cell destruction in germinal centers of an AIDS patient. Case study. Mori S, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1205–14
Structure, function, and genetics of human B cell-associated surface molecules. Clark EA, et al. **Adv Cancer Res** 1989; 52:81–149 (376 ref.)
Both Ly-1 B cells and conventional B cells make autoantibodies to bromelain-treated autologous erythrocytes. Andrew E, et al. **Adv Exp Med Biol** 1988; 237:119–23
The involvement of T-cells in the stimulatory effect of a water-in-oil emulsion on the B-cell response. Bianchi AT, et al. **Adv Exp Med Biol** 1988;237:855–60
IgG subclass distribution in juvenile human tonsil: IgG3 and IgG4 results of specific antibody production using synthetic peptides. Boersma WJ, et al. **Adv Exp Med Biol** 1988; 237:125–32
B lymphoma cells process and present their endogenous IG: implications for network theory. Bogen B, et al. **Adv Exp Med Biol** 1988;237:877–82
Enrichment of germinal centre cells. Brown AN, et al. **Adv Exp Med Biol** 1988;237:227–32
Induction of immunosuppressive B-lymphocytes with components of Candida albicans. Cuff CF, et al. **Adv Exp Med Biol** 1988;239:367–78 (30 ref.)
Memory B cells but not virgin B cells are activated in germinal centers. Gray D. **Adv Exp Med Biol** 1988; 237:209–14
Is the survival of memory B cells dependent on the persistence of antigen? Gray D. **Adv Exp Med Biol** 1988; 237:203–7
Heterogeneity in the expression of B-cell antigen in non-Hodgkin's lymphoma. Jones DB, et al. **Adv Exp Med Biol** 1988;237:139–44
Germinal center B cells present antigen obtained in vivo to T cells in vitro and stimulate mixed lymphocyte reactions. Kosco MH, et al. **Adv Exp Med Biol** 1988;237:883–8
CBA/N mice have marginal zone B cells with normal surface immunoglobulin phenotype. Liu YJ, et al. **Adv Exp Med Biol** 1988;237:105–11
Thymus-independent type 2 responses in lymph nodes. Liu YJ, et al. **Adv Exp Med Biol** 1988;237:113–7
Memory B cells generated in T cell-dependent antibody responses colonise the splenic marginal zone. Oldfield S, et al. **Adv Exp Med Biol** 1988;237:93–8
Marginal zone B cells and the localisation of antigen on follicular dendritic cells. Oldfield S, et al. **Adv Exp Med Biol** 1988;237:99–104
The germinal center precursor cell is surface mu and delta positive. Seijen HG, et al. **Adv Exp Med Biol** 1988; 237:233–7
FDC-iccosome mediated antigen delivery to germinal center B cells, antigen processing and presentation to T cells. Szakal AK, et al. **Adv Exp Med Biol** 1988;237:197–202

A subpopulation of germinal center B cells differentiate directly into antibody forming cells upon secondary immunization. Tew JG, et al. **Adv Exp Med Biol** 1988; 237:215–20

Response of the chicken bursal stroma to treatment with cyclophosphamide and IBD virus. Wilson TJ, et al. **Adv Exp Med Biol** 1988;237:75–80

Synthetic T and B cell recognition sites: implications for vaccine development. Milich DR. **Adv Immunol** 1989; 45:195–282 (485 ref.)

Immunodominant B-cell epitopes of the HIV-1 envelope recognized by infected and immunized hosts. Goudsmit J. **Aids** 1988;2 Suppl 1:S41–5 (26 ref.)

Assessment of responses of normal human B lymphocytes to different isolates of human immunodeficiency virus: role of normal donor and of cell line used to prepare viral isolate. Spickett G, et al. **AIDS Res Hum Retroviruses** 1989 Jun;5(3):355–66

Development of specific human mab's by a small scale electrofusion technique: the influence of some physical and chemical factors on hybridoma yield of human peripheral blood lymphocytes XCB–F7 fusions. Glaser RW, et al. **Allerg Immunol (Leipz)** 1989;35(2):123–32

Monocytoid B-cell lymphoma with bone marrow and peripheral blood involvement at presentation. Carbone A, et al. **Am J Clin Pathol** 1989 Aug;92(2):228–36 (37 ref.)

Cellular immunoregulatory aspects of IgA nephropathy. Sakai H. **Am J Kidney Dis** 1988 Nov;12(5):430–2 (19 ref.)

T cell up–regulation of B cells via their idiotypes contributing to the development of systemic lupus erythematosus. A hypothesis. Hahn BH, et al. **Am J Med** 1988 Dec 23; 85(6A):32–4

Familial occurrence of impaired interleukin-2 activity and increased peripheral blood B cells actively secreting immunoglobulins in systemic lupus erythematosus. Sakane T, et al. **Am J Med** 1989 Apr;86(4):385–90

Astrocytes and microglia in human brain share an epitope recognized by a B–lymphocyte–specific monoclonal antibody (LN–1). Dickson DW, et al. **Am J Pathol** 1989 Jul;135(1):135–47

Hodgkin's disease, lymphocyte predominance type, nodular—further evidence for a B cell derivation. L & H variants of Reed–Sternberg cells express L26, a pan B cell marker. Pinkus GS, et al. **Am J Pathol** 1988 Nov; 133(2):211–7

Correlation between B-cell mitogenicity and immunosuppressor effects of a protein released by porcine monocytes infected with African swine fever virus. Arala–Chaves MP, et al. **Am J Vet Res** 1988 Nov; 49(11):1955–61

B-cell compartment in the thymus of patients with myasthenia gravis and control subjects. Christensson B, et al. **Ann N Y Acad Sci** 1988;540:293–7

Specific immune responses in Lyme borreliosis. Characterization of T cell and B cell responses to Borrelia burgdorferi. Dattwyler RJ, et al. **Ann N Y Acad Sci** 1988; 539:93–102

IL–6 is the principal factor produced by synovia of patients with rheumatoid arthritis that induces B–lymphocytes to secrete immunoglobulins. Nawata Y, et al. **Ann N Y Acad Sci** 1989;557:230–8, discussion 239

A monocyte–derived B cell growth factor is IFN–beta 2/BSF–2/IL–6. Tosato G, et al. **Ann N Y Acad Sci** 1989; 557:181–90, discussion 190–1

Characterization of B cells and IA expression in Sindbis virus encephalitis. Tyor WR, et al. **Ann N Y Acad Sci** 1988; 540:491–2

Mouse IL–6. A hybridoma growth factor with multiple effects on normal B and T cells. Van Snick J, et al. **Ann N Y Acad Sci** 1989;557:206–13, discussion 213–4

Spontaneously increased B cell growth factor and B cell differentiation factor activities in the synovial fluid of patients with rheumatoid arthritis. Mulero J, et al. **Ann Rheum Dis** 1989 May;48(5):400–5

CD5 positive B lymphocytes: a link between autoimmunity and B–cell oncogenesis. Bataille R, et al. **Anticancer Res** 1988 Jul–Aug;8(4):707–10 (43 ref.)

Graft–induced polyclonal activation of B cells. I. Alloantigen–induced humoral response in mice. Paczek L, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):735–41

Graft–induced polyclonal activation of B cells. II. Humoral response of renal allograft recipients (RAR). Paczek L, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):743–52

Mitogenic stimulation of mouse lymphoid cells by Aleuria aurantia agglutinin. Pajtasz E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):133–9

Generation and preliminary characterization of three mouse monoclonal antibodies reacting with human B lymphocytes. Skibiński G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):465–70

Establishment of antigen–specific and MHC–restricted B cell hybridoma clones: a model for studying antigen presentation to T cell lines and clones. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):395–408

Antigen presentation to T cell lines and clones by peritoneal macrophages, peritoneal B cells and antigen–specific B cell hybridomas. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):409–22

Herpes simplex virus type 1 infection in mice with severe combined immunodeficiency (SCID). Minagawa H, et al. **Arch Virol** 1988;103(1–2):73–82

Stimulation of phosphoinositide signaling pathway in murine B lymphocytes by a novel guanosine analog, 7–thia–8–oxoguanosine. Parandoosh Z, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1306–11

A new interleukin with pleiotropic activities. Kishimoto T, et al. **Bioessays** 1988 Jul;9(1):11–5 (26 ref.)

Polyclonal IgG synthesis of mononuclear cells induced by the homopolymer of 4,6–dideoxy–4–formamido–alpha–D–mannopyranosyl units isolated from Brucella melitensis. Montag T, et al. **Biomed Biochim Acta** 1988;47(6):537–42

B–cell restricted saporin immunotoxins: activity against B–cell lines and chronic lymphocytic leukemia cells. Bregni M, et al. **Blood** 1989 Feb 15;73(3):753–62

B–cell dysfunction following human bone marrow transplantation: functional–phenotypic dissociation in the early posttransplant period. Kagan JM, et al. **Blood** 1989 Aug 1;74(2):777–85

Induction of proliferation and blast transformation by interferon in human malignant and non–malignant lymph node B cells. Ostlund L, et al. **Blood** 1989 Jun;73(8):2171–81

The human myeloma cell line LP–1: a versatile model in which to study early plasma–cell differentiation and c–myc activation. Pegoraro L, et al. **Blood** 1989 Mar;73(4):1020–7

Monoclonal rat anti–human lymphocyte antibody Campath–1 binds to T and B lymphocytes but effectively lyses only T cells. Gazitt Y, et al. **Bone Marrow Transplant** 1987 Dec; 2(4):427–33

B–lymphocytes from melanoma patients and normal individuals react with melanoma cells but also with irrelevant antigens. Damato BE, et al. **Br J Cancer** 1988 Aug;58(2):182–5

Circulating monotypic B–cells in multiple myeloma: association with lambda paraproteins. Bagg A, et al. **Br J Haematol** 1989 Jun;72(2):167–72

T–cell lymphocytic leukaemia with the CD4+, CD45R+, CD29– surface phenotype functioned as T suppressor inducer for B–cell immunoglobulin synthesis [letter] Imamura N, et al. **Br J Haematol** 1989 Apr;71(4):566–7

Heterogenous response of B cell chronic lymphocytic leukaemia (B–CLL) cells to anti–human IgM antibody (anti–mu) and B cell stimulatory factor 1 (BSF–1). Kawano M, et al. **Br J Haematol** 1989 Jan;71(1):47–51

CD1 expression on B–CLL lymphocytes [published erratum appears in Br J Haematol 1989 Jun;72(2):300] Merle–Beral H, et al. **Br J Haematol** 1989 Feb;71(2):209–12

T and B cell reactivity to extraocular and skeletal muscle in Graves' ophthalmopathy. Weetman AP, et al. **Br J Ophthalmol** 1989 May;73(5):323–7

The responsiveness of mice B–lymphocytes to neuromediators during an immune reaction. Ado AD, et al. **Brain Behav Immun** 1988 Mar;2(1):79–85

Primary immunodeficiency diseases: a presentation of 6 cases. de Araujo AC, et al. **Braz J Med Biol Res** 1988;21(5):915–7

Splenic immune responses following treadmill exercise in mice. Hoffman–Goetz L, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1415–9

Autoimmunity and B–cell dysfunction in chronic proliferative disorders of large granular lymphocytes/natural killer cells. Bassan R, et al. **Cancer** 1989 Jan 1;63(1):90–5

The functional deficiency of B lymphocytes in patients with lung cancer is due to inadequate T–cell help and excessive suppression by T and non–T cells. Venkataraman M, et al. **Cancer Invest** 1989;7(1):7–16

Alpha–interferon receptors in malignant B–cells from patients with chronic lymphocytic leukemia: relation to induction of 2'–5'–oligoadenylate synthetase and blast transformation. Ostlund L, et al. **Cancer Res** 1989 Jun 15;49(12):3425–30

Two new monoclonal antibodies, EPB–1 and EPB–2, reactive with human lymphoma. Pawlak–Byczkowska EJ, et al. **Cancer Res** 1989 Aug 15;49(16):4568–77

Endocytosis and degradation of monoclonal antibodies targeting human B–cell malignancies. Press OW, et al. **Cancer Res** 1989 Sep 1;49(17):4906–12

Effect of doxorubicin on mouse hybridoma B cells: stimulation of immunoglobulin synthesis and secretion. Teillaud JL, et al. **Cancer Res** 1989 Sep 15;49(18):5123–9

Hemorrhage in mice produces alterations in B cell repertoires. Abraham E, et al. **Cell Immunol** 1989 Aug; 122(1):208–17

Human peripheral blood T helper cell–induced B cell activation results in B cell surface expression of the CD23 (BLAST–2) antigen. Crow MK, et al. **Cell Immunol** 1989 Jun;121(1):99–112

Regulatory role of CD19 molecules in B–cell activation and differentiation. de Rie MA, et al. **Cell Immunol** 1989 Feb; 118(2):368–81

Many different levels of maturation and commitment are present in nontransformed cells identified serologically as pre–B cells. Griffin JA, et al. **Cell Immunol** 1989 Apr 1; 119(2):393–401

A monoclonal antibody to human B lymphoblastoid cells activates human and murine T lymphocytes. Hardy B, et al. **Cell Immunol** 1989 Jan;118(1):22–9

Suppression of B cell responses by natural killer cells is mediated through direct effects on T cells. Katz P, et al. **Cell Immunol** 1989 Mar;119(1):130–42

Natural killer cells can enhance the proliferative responses of B lymphocytes. Katz P, et al. **Cell Immunol** 1989 Apr 15;120(1):270–6

Characterization of B–cell populations bearing Fc epsilon receptor II. Kehry MR, et al. **Cell Immunol** 1989 Feb; 118(2):504–15

Induction of suppressor cells to T– and B–cell proliferative responses and immunoglobulin production by monoclonal antibodies recognizing the CD3 T–cell differentiation antigen. Kunicka JE, et al. **Cell Immunol** 1988 Oct 1; 116(1):195–215

Lysis of P3HR–1 cells induced to enter the viral cycle by antibody–dependent and independent immunological mechanisms. Kurakata S, et al. **Cell Immunol** 1989 Oct 1; 123(1):134–47

Early activation and cell cycle entry of resting B cells after Fab–anti–Ig treatment: role of receptor crosslinking. Lagoo A, et al. **Cell Immunol** 1989 Jan;118(1):53–67

The epitope specificity and tissue reactivity of four murine monoclonal anti–CD22 antibodies. Li JL, et al. **Cell Immunol** 1989 Jan;118(1):85–99

Direct activation of human B lymphocytes by Candida albicans–derived mannan antigen. Mangeney M, et al. **Cell Immunol** 1989 Sep;122(2):329–37

Immunological studies of aging. Normal B–cell repertoire in aged mice: studies at a clonal level. Marcenaro L, et al. **Cell Immunol** 1989 Mar;119(1):202–10

Splenic B cells and antigen–specific B cells process anti–Ig in a similar manner. Myers CD, et al. **Cell Immunol** 1989 Jun;121(1):174–84

A specific defect in the proliferative capacity of B cells from old mice stimulated with autoreactive T cells. Nagarkatti PS, et al. **Cell Immunol** 1989 Apr 15;120(1):102–13

The BCL1 B lymphoma responds to IL–4, IL–5, and GM–CSF. O'Garra A, et al. **Cell Immunol** 1989 Oct 1; 123(1):189–200

The interaction of CD2 with its LFA–3 ligand expressed by autologous erythrocytes results in enhancement of B cell responses. Virella G, et al. **Cell Immunol** 1988 Oct 15;116(2):308–19

Regulation of autoimmunity in normal and rheumatoid individuals by bone marrow–derived natural suppressor cells and their suppressor factor: BDSF. Weingust RW, et al. **Cell Immunol** 1989 Aug;122(1):154–63

Expression of Thomsen–Friedenreich (TF) antigens on lymphocytes. II. Loss of cryptic TF antigens during mitogenic activation of human T and B lymphocytes. Wolf MF, et al. **Cell Immunol** 1989 Jul;121(2):366–71

Expression of CD9 antigen on normal activated human B cells. Zeleznik–Le NJ, et al. **Cell Immunol** 1989 Oct 1; 123(1):70–82

Polymerization of additional actin is not required for capping of surface antigens in B–lymphocytes. Jackman WT, et al. **Cell Motil Cytoskeleton** 1989;12(1):23–32

Use of an autologous reaction in vitro to assess contributions of T and B lymphocytes to immune hyperreactivity of atopics. Duke–Cohan JS, et al. **Clin Exp Allergy** 1989 Mar; 19(2):163–8

Functional analysis of lymphocytes subpopulations in experimental cocaine abuse. I. Dose–dependent activation of lymphocyte subsets. Bagasra O, et al. **Clin Exp Immunol** 1989 Aug;77(2):289–93

Coordinate expansion of 'fetal type' lymphocytes (TCR gamma delta+T and CD5+B) in rheumatoid arthritis and primary Sjögren's syndrome. Brennan F, et al. **Clin Exp Immunol** 1989 Aug;77(2):175–8

Anti–IgM treatment of C57BL/6–lpr/lpr mice: depletion of B cells reduces lpr gene–induced lymphoproliferation and mononuclear cell vasculitis. Cerny A, et al. **Clin Exp Immunol** 1989 Jul;77(1):124–9

B lymphocyte activation in systemic lupus erythematosus: spontaneous production of IgG antibodies to DNA and environmental antigens in cultures of blood mononuclear cells. Dar O, et al. **Clin Exp Immunol** 1988 Sep;73(3):430–5

Spontaneous Ig secretion and DNA synthesis in lymphoblastoid B cells appearing after surgery. Di Padova F, et al. **Clin Exp Immunol** 1988 Oct;74(1):41–6

Cellular activation without proliferation to B cell growth factor and interleukin 2 in chronic lymphocytic leukaemia B cells stimulated with phorbol ester plus calcium ionophore. Engel P, et al. **Clin Exp Immunol** 1989 Apr; 76(1):61–7

HBsAg–induced antigen–specific T and B lymphocyte responses in chronic hepatitis B virus carriers and immune individuals. Fernan A, et al. **Clin Exp Immunol** 1989 May; 76(2):222–6

Mechanisms other than polyclonal B cell activation possibly involved in Epstein–Barr virus–induced autoimmunity. Garzelli C, et al. **Clin Exp Immunol** 1989 Jun;76(3):412–6

Phenotypic study of CD4+ and CD8+ lymphocyte subsets in relation to cytomegalovirus carrier status and its correlate with pokeweed mitogen–induced B lymphocyte differentiation. Gratama JW, et al. **Clin Exp Immunol** 1989 Aug;77(2):245–51

Antisera to human IgE can also recognize IgA and IgM molecules as produced by selected B lymphoblastoid cell lines. Hendriks RW, et al. **Clin Exp Immunol** 1988 Nov; 74(2):305–10

Immunomodulation by methimazole therapy in Graves' disease: rapid changes in activation stage of circulating regulatory T cell subsets, B cells and NK cells. Karlsson FA, et al. **Clin Exp Immunol** 1988 Nov;74(2):258–63

In vitro IgM and IgM rheumatoid factor production in response to Staphylococcus aureus Cowan I and pokeweed mitogen: the contribution of CD5+ (Leu 1) B cells. Karsh J, et al. **Clin Exp Immunol** 1989 Aug;77(2):179–83

Heterogeneity of B cell responsiveness to interleukin 4,

interleukin 6 and low molecular weight B cell growth factor in discrete stages of B cell activation in patients with systemic lupus erythematosus. Kitani A, et al. **Clin Exp Immunol** 1989 Jul;77(1):31–6

Tetanus toxoid complexed with heterologous antibody can induce germinal centre formation and B cell memory in mice without evoking a detectable anti-toxin response. Kraft R, et al. **Clin Exp Immunol** 1989 Apr;76(1):138–43

Epstein–Barr–virus–transformed lymphoblastoid cell lines derived from patients with X-linked agammaglobulinaemia and Wiskott–Aldrich syndrome: responses to B cell growth and differentiation factors. Lau YL, et al. **Clin Exp Immunol** 1989 Feb;75(2):190–5

Changes in the phenotype and immunoglobulin secretion of human B cells following co–culture with cells of an EBV+ lymphoblastoid line or fusion with mouse plasmacytoma cells. Studies in short–term and long–term culture. Ling NR, et al. **Clin Exp Immunol** 1989 Feb;75(2):311–6

T cell clones providing helper function for IgE synthesis release soluble factor(s) that induce IgE production in human B cells: possible role for interleukin 4 (IL–4). Maggi E, et al. **Clin Exp Immunol** 1988 Jul;73(1):57–62

Impaired mitogen responses of the non–leukaemic B cells from patients with chronic lymphocytic leukaemia. Morgan A, et al. **Clin Exp Immunol** 1989 Aug;77(2):239–44

Suppression of polyclonal B cell proliferation mediated by supernatants from human myeloma bone marrow cell cultures. Peest D, et al. **Clin Exp Immunol** 1989 Feb; 75(2):252–7

Clonal B cell expansions in patients with essential mixed cryoglobulinaemia. Perl A, et al. **Clin Exp Immunol** 1989 Apr;76(1):54–60

Antigen stimulated IgM secretion by circulating B lymphocytes in patients with benign and malignant IgG gammopathy. Relationship to stage of disease. Pollack S, et al. **Clin Exp Immunol** 1989 Jan;75(1):12–7

IgD production and other lymphocyte functions in HIV infection: immaturity and activation of B cells at different clinical stages. Rogers LA, et al. **Clin Exp Immunol** 1989 Jan;75(1):7–11

Activated T lymphocytes in the peripheral blood of patients with systemic lupus erythematosus induce B cells to produce immunoglobulin. Inghirami G, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):269–76

Decreased production of suppressive–B–cell factor by synovial membrane B–lymphocytes in rheumatoid arthritis. Pisko EJ, et al. **Clin Exp Rheumatol** 1988 Jul–Sep; 6(3):239–45

B cell function in acquired "common–variable" hypogammaglobulinemia: proliferative responses to lymphokines. Farrant J, et al. **Clin Immunol Immunopathol** 1989 May;51(2):196–204

Stimulatory effect of CD5 antibody on B cells from patients with rheumatoid arthritis. Hara M, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):223–30

Establishment of a bromelain–treated isologous red blood cell reactive B cell clone by somatic hybridization. Iwasaki T, et al. **Clin Immunol Immunopathol** 1989 Oct;53(1):78–86

T helper cell–induced CD23 (BLAST–2) expression: an activation marker for the high density fraction of human B cells. Jover JA, et al. **Clin Immunol Immunopathol** 1989 Oct;53(1):99–112

In vitro induction of T cell–dependent B cell differentiation in patients with common varied immunodeficiency. Stohl W, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):273–82

Interleukin 2 as an inducer of proliferation in Klebsiella–stimulated human B cells. Stüber F, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):386–91

Type analysis of oligosaccharide chains on human and murine MHC class II alpha chains by the lectin–nitrocellulose sheet method. Katagiri YU, et al. **Comp Biochem Physiol [B]** 1989;93(2):259–63

B–cell–derived human interleukin 1. Bertoglio JH. **CRC Crit Rev Immunol** 1988;8(4):299–313 (127 ref.)

Disruption of the putative c–myc auto–regulation mechanism in a human B cell line. Martinotti S, et al. **Curr Top Microbiol Immunol** 1988;141:264–8

Soluble CD23/BLAST–2 (S–CD23/Blast–2) and its role in B cell proliferation. Swendeman SL, et al. **Curr Top Microbiol Immunol** 1988;141:157–64

Localization of monoclonal B–cell populations through the use of Komogorov–Smirnov D–value and reduced chi–square contours. Bagwell CB, et al. **Cytometry** 1988 Sep;9(5):469–76

Molecular biology of T cell–derived lymphokines: structure and biology of interleukin 4. Arai N, et al. **Dev Biol Stand** 1988;69:57–63

Soluble mediators can replace helper T cells in the activation of resting B lymphocytes: evidence for a human B cell activating factor. Diu A, et al. **Dev Biol Stand** 1988;69:51–6

Responses of human B–cells to recombinant lymphokines. Gallagher G, et al. **Dev Biol Stand** 1988;69:65–73

BCGFLMW–sensitivity of human B–cell lines in the MTT–cleavage assay. Russmann E. **Dev Biol Stand** 1988; 69:75–8

Influence of interferon gamma on B cell replication. Vetvicka V, et al. **Dev Comp Immunol** 1988 Summer;12(3):657–68

The LFA–1 antigen in human B lymphocyte activation. Zola H, et al. **Dis Markers** 1989 Apr–Jun;7(2):95–104

Effect of lymphokines on B–cell responses to Mycobacterium tuberculosis: a comparison of in vitro secreted antibodies by Epstein Barr virus transmitted B–cell and non–transformed peripheral blood B–cells from the same donor. Githui WA. **East Afr Med J** 1988 Dec;65(12):829–37

Isolation of scid pre–B cells that rearrange kappa light chain genes: formation of normal signal and abnormal coding joins. Blackwell TK, et al. **EMBO J** 1989 Mar;8(3):735–42

Rapid induction of transcription of unrearranged S gamma 1 switch regions in activated murine B cells by interleukin 4. Esser C, et al. **EMBO J** 1989 Feb;8(2):483–8

B lymphocyte lineage–restricted expression of mb–1, a gene with CD3–like structural properties. Sakaguchi N, et al. **EMBO J** 1988 Nov;7(11):3457–64

Identification of a novel lymphoid specific octamer binding protein (OTF–2B) by proteolytic clipping bandshift assay (PCBA). Schreiber E, et al. **EMBO J** 1988 Dec 20; 7(13):4221–9

A B–lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas. Stamenkovic I, et al. **EMBO J** 1989 May; 8(5):1403–10

Immunoelectron microscopic demonstration of antigenic sites on lymphoid cells using a human monoclonal antibody (Ha6D3). Hansmann ML, et al. **Eur J Haematol** 1989 Jul; 43(1):35–40

B lymphocyte function in multiple myeloma: analysis of T cell– and monocyte–dependent antibody production. Petersen J, et al. **Eur J Haematol** 1989 Feb;42(2):193–201

Identical forms of the CD2 antigen expressed by mouse T and B lymphocytes. Altevogt P, et al. **Eur J Immunol** 1989 Aug;19(8):1509–12

Fc gamma RII expression in resting and activated B lymphocytes. Amigorena S, et al. **Eur J Immunol** 1989 Aug; 19(8):1379–85

The immune response of BALB/c mice to influenza hemagglutinin: commonality of the B cell and T cell repertoires and their relevance to antigenic drift. Barnett BC, et al. **Eur J Immunol** 1989 Mar;19(3):515–21

Human immune response to group A streptococcal carbohydrate (A–CHO). III. Comparison of the efficiencies of anti–idiotopic antibody and of nominal antigen in the induction of IgM anti–A–CHO–producing B cells. Bloem AC, et al. **Eur J Immunol** 1988 Dec;18(12):1959–64

Regulation of human B cell activation and antibody production by non–major histocompatibility complex–restricted cytotoxic T lymphocytes. Boué F, et al. **Eur J Immunol** 1989 Mar;19(3):529–35

Long–lasting thymus–independent immune responses to anti–idiotype lipopolysaccharide conjugates require continuous B cell renewal. Burlen O, et al. **Eur J Immunol** 1988 Sep;18(9):1433–9

Interferon–alpha can synergize with interleukin 2 for human in vitro antibody response. Delfraissy JF, et al. **Eur J Immunol** 1988 Sep;18(9):1379–84

Expression and regulation of CD5 on in vitro activated human B cells. Freedman AS, et al. **Eur J Immunol** 1989 May;19(5):849–55

The structural requirements for class II (I–Ad)–restricted T cell recognition of influenza hemagglutinin: B cell epitopes define T cell epitopes. Graham CM, et al. **Eur J Immunol** 1989 Mar;19(3):523–8

Regulation by interleukin 2 of CD23 expression of leukemic and normal B cells: comparison with interleukin 4. Hivroz C, et al. **Eur J Immunol** 1989 Jun;19(6):1025–30

Intracellular events associated with inhibition of B cell activation by monoclonal antibodies to HLA class II antigens. Holte H, et al. **Eur J Immunol** 1989 Jul; 19(7):1221–5

T cell dependence of the "natural" autoreactive B cell activation in the spleen of normal mice. Huetz F, et al. **Eur J Immunol** 1988 Oct;18(10):1615–22

A predominant idiotype independent of specificity, or Ig and H–2 allotypes, is found in the primary but not the secondary murine antibody response to lysozyme. Kaplan MA, et al. **Eur J Immunol** 1988 Oct;18(10):1567–74

Marginal zone macrophages and their role in the immune response against T–independent type 2 antigens: modulation of the cells with specific antibody. Kraal G, et al. **Eur J Immunol** 1989 Apr;19(4):675–80

Permanent alteration of the murine Ly–1 B repertoire due to selective depletion of Ly–1 B cells in neonatal animals. Lalor PA, et al. **Eur J Immunol** 1989 Mar;19(3):501–6

Characterization and growth factor requirements of SJL lymphomas. II. Interleukin 5 dependence of the in vitro cell line, cRCS–X, and influence of other cytokines. Lasky JL, et al. **Eur J Immunol** 1989 Feb;19(2):365–71

Interleukin (IL) 4 counteracts the helper effect of IL2 on antigen–activated human B cells. Llorente L, et al. **Eur J Immunol** 1989 Apr;19(4):765–9

Studies on the mechanism of polyclonal B cell stimulation by TH2 cells. Lohoff M, et al. **Eur J Immunol** 1989 Jan; 19(1):77–81

Interleukin 4 induces synthesis of IgE and IgG4 in human B cells. Lundgren M, et al. **Eur J Immunol** 1989 Jul; 19(7):1311–5

Back–stimulation of B lymphocytes binding to helper T cell surface antigens. Martinez C, et al. **Eur J Immunol** 1988 Dec;18(12):1895–9

At least three distinct B cell epitopes reside in the C–terminal half of La protein, as determined by a recombinant DNA approach. Rauh AJ, et al. **Eur J Immunol** 1988 Dec; 18(12):2049–57

Co–cross–linking of surface immunoglobulin Fc gamma receptors on B lymphocytes uncouples the antigen receptors from their associated G protein. Rigley KP, et al. **Eur J Immunol** 1989 Mar;19(3):481–5

MLR3 molecule is an activation antigen shared by human B, T lymphocytes and T cell precursors. Risso A, et al. **Eur J Immunol** 1989 Feb;19(2):323–8

Autoreactive T cells in mercury–induced autoimmunity. Demonstration by limiting dilution analysis. Rossert J, et al. **Eur J Immunol** 1988 Nov;18(11):1761–6

B cell–stimulating activity of lymphoid cell membrane fractions. Sekita K, et al. **Eur J Immunol** 1988 Sep; 18(9):1405–10

xid mice fail to express an anti–dextran immune response but carry alpha(1–3)dextran–specific lymphocytes in their potential repertoire. Selinka HC, et al. **Eur J Immunol** 1988 Nov;18(11):1727–32

Expression and ontogeny of murine CD2. Sen J, et al. **Eur J Immunol** 1989 Jul;19(7):1297–302

PB76: a novel surface glycoprotein preferentially expressed on mouse pre–B cells and plasma cells detected by the monoclonal antibody G–5–2. Strasser A. **Eur J Immunol** 1988 Nov;18(11):1803–10

Longitudinal study of leukocyte functions in homosexual men seroconverted for HIV: rapid and persistent loss of B cell function after HIV infection. Terpstra FG, et al. **Eur J Immunol** 1989 Apr;19(4):667–73

Activation of human B lymphocytes through CD40 and interleukin 4. Vallé A, et al. **Eur J Immunol** 1989 Aug; 19(8):1463–7

Expression of CD23 antigen is not necessary for human 12–kDa B cell growth factor–mediated B cell proliferation. Vazquez A, et al. **Eur J Immunol** 1988 Oct;18(10):1647–9

Endogenous interleukin 6 plays an obligatory role in interleukin 4–dependent human IgE synthesis. Vercelli D, et al. **Eur J Immunol** 1989 Aug;19(8):1419–24

Antigen presentation by liposomes as model system for T–B cell interaction. Walden P. **Eur J Immunol** 1988 Nov; 18(11):1851–4

Cell surface antigen CD5 is a marker for activated human B cells. Werner–Favre C, et al. **Eur J Immunol** 1989 Jul; 19(7):1209–13

B cell memory to thymus–independent antigens type 1 and type 2: the role of lipopolysaccharide in B memory induction. Zhang J, et al. **Eur J Immunol** 1988 Sep; 18(9):1417–24

Tolerization during pregnancy: impact on the development of antigen–specific help and suppression. Zöller M. **Eur J Immunol** 1988 Dec;18(12):1937–43

Postnatal B cell development: influence of trinitrobenzenesulfonic acid treatment during pregnancy. Zöller M. **Eur J Immunol** 1988 Dec;18(12):1931–6

The immunomodulatory effects of interferon–gamma on mature B–lymphocyte responses. Jurado A, et al. **Experientia** 1989 Jun 15;45(6):521–6 (42 ref.)

Nuclear disintegration of target cells by killer B lymphocytes from tumor–bearing mice. Lopez DM, et al. **FASEB J** 1989 Jan;3(1):37–43

Predictions of linear T–cell and B–cell epitopes in proteins encoded by HIV–1, HIV–2 and SIVMAC and the conservation of these sites between strains. Zvelebil MJ, et al. **FEBS Lett** 1988 Dec 19;242(1):9–21

An enzyme–linked immunosorbent assay for detecting the chicken B cells. Benda V, et al. **Folia Biol (Praha)** 1986; 32(5):325–33

Recovery from polyclonal tolerance: simulation analysis. Doležal J, et al. **Folia Biol (Praha)** 1989;35(3):164–70

Simulation analysis of the mechanism of escape from immunoglobulin suppression. Doležal J, et al. **Folia Biol (Praha)** 1988;34(5):330–5

Anti–IgM antibodies inhibit IgM expression in lipopolysaccharide–stimulated normal murine B–cells: study of RNA metabolism and translation. Chen U. **Gene** 1988 Dec 10;72(1–2):209–17

The half–life of immunoglobulin mRNA increases during B–cell differentiation: a possible role for targeting to membrane–bound polysomes. Mason JO, et al. **Genes Dev** 1988 Aug;2(8):1003–11

Is the Hodgkin cell a T– or B–lymphocyte? Recent evidence from geno– and immunophenotypic analysis and in–vitro cell lines. Drexler HG, et al. **Hematol Oncol** 1989 Mar–Apr; 7(2):95–113 (83 ref.)

Bare lymphocyte syndrome: altered HLA class II expression in B cell lines derived from two patients. Hume CR, et al. **Hum Immunol** 1989 May;25(1):1–11

Thymic medullary cells expressing B lymphocyte antigens. Hofmann WJ, et al. **Hum Pathol** 1988 Nov;19(11):1280–7

The monoclonal antimonocyte antibody My4 stains B lymphocytes and two distinct monocyte subsets in human peripheral blood. Ziegler–Heitbrock HW, et al. **Hybridoma** 1988 Dec;7(6):521–7

Delayed type hypersensitivity (DTH) in anti–IgM–treated B cell–depleted mice: analysis of induction and effector phase. Herrmann P, et al. **Immunobiology** 1988 Sep; 177(4–5):382–9

Mapping of antibody specificities to VH gene families. Kelsoe G, et al. **Immunogenetics** 1989;29(5):288–96

Immunization with syngeneic Sendai virus–infected cells induce no MHC–restricted antibodies but antibodies specific for H–2 class I determinants. Kievits F, et al. **Immunogenetics** 1989;29(2):108–11

Circulating human T and B lymphocytes express the p55 interleukin–2 receptor molecule (TAC, CD25). Zola H, et

al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):233–7
Presentation of antigen to T lymphocytes by non–immune B–cell hybridoma clones: evidence for specific and non–specific presentation. Cohly HH, et al. **Immunol Invest** 1989 Jun;18(5):651–6
Presentation of antigen to T lymphocytes by non–immune B–cell hybridoma clones: evidence for specific and non–specific presentation. Cohly HH, et al. **Immunol Invest** 1988 Aug–Oct;17(6–7):615–20
IgA B cell differentiation. Harriman GR, et al. **Immunol Invest** 1989 Jan–May;18(1–4):17–28
Autoreactive T cell hybridoma–derived B cell stimulatory factor(s) governing IgA isotype immunoglobulin production by murine Peyer's patch B cells. Kawanishi H, et al. **Immunol Invest** 1988 Aug–Oct;17(6–7):587–613
Correlation of presentation of insulin with surface I–Ad and A alpha and A beta mRNA expression by cloned B lymphoma hybridoma variants. Bernard NF, et al. **Immunol Lett** 1988 Oct;19(2):143–51
A human lymphoblastoid B line with an abnormally large MHC class II beta chain. Cohen BB, et al. **Immunol Lett** 1988 Sep;19(1):21–6
Bovine leukemia virus (BLV)–infected B–cells express a marker similar to the CD5 T cell marker. Depelchin A, et al. **Immunol Lett** 1989 Jan 15;20(1):69–76
Proliferation of resting B cells is modulated by CR2 and CR1. Fingeroth JD, et al. **Immunol Lett** 1989 Jun 15; 21(4):291–301
Local T–T cell and T–B cell interactions: a cellular automaton approach. Hogeweg P. **Immunol Lett** 1989 Aug; 22(2):113–22
Interleukin–2 induced killer cell activity against Epstein–Barr virus–immortalized human B cells. Kundu SK, et al. **Immunol Lett** 1989 Mar;20(4):299–304
Up–regulation of receptors for IgA on activated human B lymphocytes. Millet I, et al. **Immunol Lett** 1988 Oct; 19(2):153–7
Induction of experimental autoimmune thyroiditis in B cell–depleted mice. Rayfield LS, et al. **Immunol Lett** 1989 Jan 15;20(1):21–7
Is rapid proliferation in B centroblasts linked to somatic mutation in memory B cell clones? Zhang J, et al. **Immunol Lett** 1988 Aug;18(4):297–9
The immune response to the hapten NP in C57BL/6 mice: insights into the structure of the B–cell repertoire. Blier PR, et al. **Immunol Rev** 1988 Oct;105:27–43 (34 ref.)
A reassessment of the mechanisms of antigen–specific T–cell–dependent B–cell activation. Abbas AK. **Immunol Today** 1988 Mar;9(3):89–94 (53 ref.)
B cells on the podium: regulatory roles of surface and secreted immunoglobulins. Manca F, et al. **Immunol Today** 1988 Oct;9(10):300–3 (27 ref.)
Mutual cell interactions and the selection of immune repertoires: implication in autoimmunity. Marcos MA, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):204–7 (45 ref.)
T– and B–cell recognition of hepatitis B viral antigens. Milich DR. **Immunol Today** 1988 Dec;9(12):380–6 (51 ref.)
The establishment of monoclonal antigen–specific B–cell lines. Tisch R, et al. **Immunol Today** 1988 May;9(5):145–50 (46 ref.)
Analysis of the B–cell growth–promoting activity of human IL–4, the co–stimulatory assay with anti–immunoglobulin antibodies. Comparison with the B–cell growth–promoting activity of other lymphokines. Almerigogna F, et al. **Immunology** 1989 Jun;67(2):244–50
Idiotypic and anti–idiotypic B–B cell interaction is controlled by major histocompatibility complex–restricted regulation. Bitoh S, et al. **Immunology** 1989 Apr;66(4):479–84
Immunoregulatory effects of cloned T cells on B–cell responses: comparison of autoimmune and non–autoimmune derived clones. Bocchieri MH. **Immunology** 1989 Apr;66(4):526–31
Expression of low–affinity receptor for IgE (Fc epsilon RII, CD23) and IgE–BF (soluble CD23) release by lymphoblastoid B–cell line RPMI–8866 and human peripheral lymphocytes of normal and atopic donors. Bujanowski–Weber J, et al. **Immunology** 1989 Apr; 66(4):505–11
The marmoset B–lymphoblastoid cell line (B95–8) produces and responds to B–cell growth and differentiation factors: role of shed CD23 (sCD23). Callard RE, et al. **Immunology** 1988 Nov;65(3):379–84
Activation of normal murine B cells by Echinococcus granulosus. Cox DA, et al. **Immunology** 1989 May; 67(1):16–20
Membrane–associated complement factor H on lymphoblastoid cell lines Raji expresses a co–factor activity for the factor I–mediated cleavage of C3b. Demares MJ. **Immunology** 1989 Aug;67(4):553–6
Mitogenic stimulation of human B lymphocytes via the inositol phospholipid 'dual pathway' of signalling requires persistent activation of both second messenger arms. Gordon J, et al. **Immunology** 1988 Nov;65(3):493–4
Recruitment of virgin B cells into an immune response is restricted to activation outside lymphoid follicles. Gray D. **Immunology** 1988 Sep;65(1):73–9
Protein malnutrition reduces the IgA immune response to oral antigen by altering B–cell and suppressor T–cell functions. McGee DW, et al. **Immunology** 1988 Aug; 64(4):697–702
T–cell–derived factor B151–TRF1/IL–5 activates blastoid cells among unprimed B cells to induce a polyclonal differentiation into immunoglobulin M–secreting cells. Murakami S, et al. **Immunology** 1988 Oct;65(2):221–8
An in vitro model of allergen–dependent IgE synthesis by human B lymphocytes: comparison of the response of an atopic and a non–atopic individual to Dermatophagoides spp. (house dust mite). O'Hehir RE, et al. **Immunology** 1989 Apr;66(4):499–504
Obligatory role of macrophages in dengue virus antigen presentation to B lymphocytes. Rizvi N, et al. **Immunology** 1989 May;67(1):38–43
Increased expression of surface IgM but not IgD or IgG on human B cells in response to IL–4. Shields JG, et al. **Immunology** 1989 Feb;66(2):224–7
Effect of recombinant human tumour necrosis factor beta (TNF beta) on activation, proliferation and differentiation of human B lymphocytes. Zola H, et al. **Immunology** 1989 Jun;67(2):231–6
Elucidation of cellular targets responsible for tetrachlorodibenzo–p–dioxin (TCDD)–induced suppression of antibody responses: I. The role of the B lymphocyte. Dooley RK, et al. **Immunopharmacology** 1988 Nov–Dec; 16(3):167–80
Modulation of lymphocyte motility by beta–endorphin and met–enkephalin. Ye S, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):81–9
T and B cells in borderline (BB) leprosy. Biggins T, et al. **Indian J Lepr** 1988 Jan;60(1):21–5
Human IgE response: virus–activated IgE secretors are interleukin–2–dependent cells. Chan MA, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):90–7
Lipopolysaccharide–reactive B cells against bromelain–treated mouse erythrocytes: preferential migration to and survival in the peritoneal cavity. Kawaguchi S. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):275–80
Immunoglobulin synthesis and gene rearrangement in ataxia–telangiectasia B–lymphoblastoid cell lines. Kumar S, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):264–8
Interleukin 4 acts on both high– and low–density murine B cell subpopulations to induce IgE and IgG1 synthesis in vitro. Lebrun P, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):108–10
Induction of IgE synthesis in anti–IgM–activated nonatopic human B cells by recombinant interleukin–3. Matsumoto T, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):24–30
Suppression of human IgA–B–cell maturation by IgA–binding factors requires T cells. Millet I, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):367–70
Fc–epsilon–receptor–bearing lymphocytes in patients with clonorchiasis. Watanabe N, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):103–7
Detection and characterization of IgE–producing cells in patients with clonorchiasis. Yanagihara Y, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):197–201
A mathematical model of extracorporeal antibody removal in autoimmune disease. Waniewski J, et al. **Int J Artif Organs** 1989 Jul;12(7):471–6
Triggering of neoplastic B cells via surface IgM and the cell surface antigens CD20 and CDw40. Responses differ from normal blood B cells and are restricted to certain morphologic subsets. Beiske K, et al. **Int J Cancer** 1988 Oct 15;42(4):521–8
Limiting dilution cloning of B cells from patients with multiple myeloma: emergence of non–malignant B–cell lines. Clofent G, et al. **Int J Cancer** 1989 Apr 15; 43(4):578–86
A phenotypic study of cells from Burkitt lymphoma and EBV–B–lymphoblastoid lines and their relationship to cells in normal lymphoid tissues. Ling NR, et al. **Int J Cancer** 1989 Jan 15;43(1):112–8
Immunophenotypic similarities of mediastinal clear–cell lymphoma and sinusoidal (monocytoid) B cells. Möller P, et al. **Int J Cancer** 1989 Jan 15;43(1):10–6
Immunophenotypic characterization of follicle–center–cell–derived non–Hodgkin's lymphomas. Sakthivel R, et al. **Int J Cancer** 1989 Apr 15;43(4):624–30
Identification of a human epithelial cell surface protein sharing an epitope with the C3d/Epstein–Barr virus receptor molecule of B lymphocytes. Young LS, et al. **Int J Cancer** 1989 May 15;43(5):786–94
The effect of RU 41740 on the in vitro maturation of human B–cells. Durandy A, et al. **Int J Immunopharmacol** 1988; 10(7):851–4
Alloimmune B–lymphocytes modify the myocardium contractility–inducing release of SRS–A. Genaro AM, et al. **Int J Immunopharmacol** 1988;10(5):563–8
Lymphoproliferation and in vitro antibody synthesis in leprosy patients. Yandava CN, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):633–40
Characterization of multireactive autoantibodies and identification of Leu–1+ B lymphocytes as cells making antibodies binding multiple self and exogenous molecules. Casali P, et al. **Int Rev Immunol** 1988 Mar;3(1–2):17–45 (40 ref.)
Repertoire expression in surface immunoglobulin–negative bone marrow B cell precursors. Neil GA, et al. **Int Rev Immunol** 1987 Mar;2(3):307–20 (67 ref.)
Bone marrow pre–B cells and the clonal anergy theory of immunologic tolerance. Nossal GJ. **Int Rev Immunol** 1987 Mar;2(3):321–38 (39 ref.)
Fc receptor–bearing T cells and Ig binding factors as class–specific suppressors of polyclonally activated human B cells. Revillard JP, et al. **Int Rev Immunol** 1987 Jan; 2(2):183–201 (44 ref.)
Regulatory influences of neonatal multispecific antibodies on the developing B cell repertoire. Vakil M, et al. **Int Rev Immunol** 1988 Mar;3(1–2):117–31 (37 ref.)
Sex hormones, CD5+ (Lyl+) B–cells, and autoimmune diseases. Talal N, et al. **Isr J Med Sci** 1988 Dec;24(12):725–8
Human B–cell epitopes of HIV–2 transmembrane protein are similarly spaced as in HIV–1. Goudsmit J, et al. **J Acquir Immune Defic Syndr** 1989;2(3):297–302
Antigenicity of linear B–cell epitopes in the C1, V1, and V3 region of HIV–1 gp 120. van Tijn DA, et al. **J Acquir Immune Defic Syndr** 1989;2(3):303–6
Immune cell parameters in severely depressed patients: negative findings. Maes M, et al. **J Affective Disord** 1989 Sep–Oct;17(2):121–8
Failure of B cells in common variable immunodeficiency to transit from proliferation to differentiation is associated with altered B cell surface–molecule display. Saxon A, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):44–55
Investigations of intrinsic abnormalities in DNA–specific B lymphocytes from autoimmune mice. Aldo–Benson M. **J Autoimmun** 1989 Jun;2(3):269–82
Chronic lymphocytic leukemic (CLL) cells secrete multispecific autoantibodies. Bröker BM, et al. **J Autoimmun** 1988 Oct;1(5):469–81
Are Ly–1 B cells important in autoimmune disease? Herzenberg LA, et al. **J Autoimmun** 1989 Jun;2 Suppl:225–31 (16 ref.)
A role for MHC class II antigens in B–cell activation. Mooney N, et al. **J Autoimmun** 1989 Jun;2 Suppl:215–23
CD5–expressing B lymphocytes in the blood and salivary glands of patients with primary Sjögren's syndrome. Youinou P, et al. **J Autoimmun** 1988 Apr;1(2):185–94
Cytotoxic T–cells and antibody–producing cells isolated from liver and spleen of immunized rats. Malter M, et al. **J Cancer Res Clin Oncol** 1989;115(2):157–60
Murine B–cell stimulatory factor–1 (BSF–1)/interleukin–4 (IL–4) is a multilineage colony–stimulating factor that acts directly on primitive hemopoietic progenitors. Kishi K, et al. **J Cell Physiol** 1989 Jun;139(3):463–8
The defect in peripheral blood B–cell activation in patients with multiple myeloma is not due to a deficiency in the production of B–cell growth and differentiation factors. Commes T, et al. **J Clin Immunol** 1989 Jan;9(1):65–73
Activation of genetically major histocompatibility complex (MHC) class II–deficient B lymphocytes. Durandy A, et al. **J Clin Immunol** 1989 Mar;9(2):125–31
Detection of hepatitis B surface antigen (HBsAg) in peripheral blood mononuclear cells of patients with acute and chronic active hepatitis B. Roisman FR, et al. **J Clin Immunol** 1989 Jan;9(1):10–5
Probing the human B–cell repertoire: isolation of Epstein–Barr virus (EBV)–transformed human B lymphocytes making antibodies with a common idiotope that have different antigen–binding specificities. Uchigata Y, et al. **J Clin Immunol** 1988 Nov;8(6):459–63
Phenotypic characteristics of thymic B lymphocytes in myasthenia gravis. Zweiman B, et al. **J Clin Immunol** 1989 May;9(3):242–7
Normal human intestinal B lymphocytes. Increased activation compared with peripheral blood. Peters MG, et al. **J Clin Invest** 1989 Jun;83(6):1827–33
Induction of excessive B cell proliferation and differentiation by an in vitro stimulus in culture in human systemic lupus erythematosus. Suzuki N, et al. **J Clin Invest** 1989 Mar; 83(3):937–44
Mercury induced B–cell activation and antinuclear antibodies in mice. Hultman P, et al. **J Clin Lab Immunol** 1989 Mar; 28(3):143–50
B–cell proliferation and differentiation in systemic lupus erythematosus and mixed connective tissue disease. Kallenberg CG, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):55–61
The tonsils are superior to the peripheral blood as sources of mononuclear cells for B–cell purification. Punnonen J, et al. **J Clin Lab Immunol** 1988 Sep;27(1):29–33
Ia–mediated signal transduction leads to proliferation of primed B lymphocytes. Cambier JC, et al. **J Exp Med** 1989 Sep 1;170(3):877–86
Alternative V kappa gene rearrangements in a murine B cell lymphoma. An explantation for idiotypic heterogeneity. Carroll WL, et al. **J Exp Med** 1988 Nov 1;168(5):1607–20
Transforming growth factor beta specifically enhances IgA production by lipopolysaccharide–stimulated murine B lymphocytes. Coffman RL, et al. **J Exp Med** 1989 Sep 1;170(3):1039–44
Interleukin 4 inhibits the proliferation but not the differentiation of activated human B cells in response to interleukin 2. Defrance T, et al. **J Exp Med** 1988 Oct 1; 168(4):1321–37
Translocation t(14;18) in B cell lymphomas as a cause for defective immunoglobulin production. de Jong D, et al. **J Exp Med** 1989 Mar 1;169(3):613–24
Independent regulation of Ca2+ entry and release from internal stores in activated B cells. Gelfand EW, et al. **J Exp Med** 1989 Jul 1;170(1):315–20
B cell activation and the establishment of Epstein–Barr virus latency. Hurley EA, et al. **J Exp Med** 1988 Dec 1; 168(6):2059–75
Functional immunoglobulin light chain genes are replaced by ongoing rearrangements of germline V kappa genes to

downstream J kappa segment in a murine B cell line. Levy S, et al. **J Exp Med** 1989 Jul 1;170(1):1–13

Feedback inhibition of immunoglobulin gene rearrangement by membrane mu, but not by secreted mu heavy chains [published erratum appears in J Exp Med 1989 Jun 1;169(6):2269] Manz J, et al. **J Exp Med** 1988 Oct 1; 168(4):1363–81

Distinct features of dendritic cells and anti-Ig activated B cells as stimulators of the primary mixed leukocyte reaction. Metlay JP, et al. **J Exp Med** 1989 Jan 1;169(1):239–54

Isolation and characterization of a B lymphocyte mutant with altered signal transduction through its antigen receptor. Monroe JG, et al. **J Exp Med** 1989 Mar 1;169(3):1059–70

Strain variation in the frequency of Abelson murine leukemia virus–transformed fetal liver pre–B cells bearing complete immunoglobulin heavy chain rearrangements. Osman GE, et al. **J Exp Med** 1988 Dec 1;168(6):2023–30

The Bb fragment of complement factor B acts as a B cell growth factor. Peters MG, et al. **J Exp Med** 1988 Oct 1; 168(4):1225–35

The MRC OX–22– CD4+ T cells that help B cells in secondary immune responses derive from naive precursors with the MRC OX–22+ CD4+ phenotype. Powrie F, et al. **J Exp Med** 1989 Mar 1;169(3):653–62

Interleukin 5 and interleukin 2 cooperate with interleukin 4 to induce IgG1 secretion from anti–Ig–treated B cells. Purkerson JM, et al. **J Exp Med** 1988 Sep 1;168(3):1175–80

Production of autoantibodies by CD5–expressing B lymphocytes from patients with chronic lymphocytic leukemia. Sthoeger ZM, et al. **J Exp Med** 1989 Jan 1; 169(1):255–68

Interleukin 7 production and function in stromal cell–dependent B cell development. Sudo T, et al. **J Exp Med** 1989 Jul 1;170(1):333–8

Induction of human IgE synthesis requires interleukin 4 and T/B cell interactions involving the T cell receptor/CD3 complex and MHC class II antigens. Vercelli D, et al. **J Exp Med** 1989 Apr 1;169(4):1295–307

Restricted tissue distribution of Mlsa determinants. Stimulation of Mlsa–reactive T cells by B cells but not by dendritic cells or macrophages. Webb SR, et al. **J Exp Med** 1989 Jan 1;169(1):1–12

Target and effector cell fusion accounts for B lymphocyte–mediated lysis of mouse hepatitis virus–infected cells. Wysocka M, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1465–72

Detection of intracytoplasmic immunoglobulin by flow cytometry in B–cell malignancies. Bardales RH, et al. **J Histochem Cytochem** 1989 Jan;37(1):83–9

Sequential double immunocytochemical staining for in situ identification of an auto–anti–allotype immune response in allotype–suppressed rabbits. Claassen E, et al. **J Histochem Cytochem** 1988 Dec;36(12):1455–61

A background–free assay for cells forming antibody to glucose oxidase coupled with an enzyme–linked immunosorbent assay (ELISA) to quantitate antibody secretion. Hard RC Jr, et al. **J Histochem Cytochem** 1989 Jun;37(6):909–12

Augmented in vitro presentation of Mls determinants after anti–immunoglobulin–induced B cell activation: ontogeny and role of purified B cells. Ryan JJ, et al. **J Immunogenet** 1988 Feb–Jun;15(1–3):121–33

HIV–1–specific B cell activation. A major constituent of spontaneous B cell activation during HIV–1 infection. Amadori A, et al. **J Immunol** 1989 Oct 1;143(7):2146–52

Cognate interactions between helper T cells and B cells. II. Dissection of cognate help by using a class II–restricted, antigen–specific, IL–2–dependent helper T cell clone. Bartlett WC, et al. **J Immunol** 1989 Sep 15;143(6):1745–54

Lipoxygenase inhibitors enhance the proliferation of human B cells. Behrens TW, et al. **J Immunol** 1989 Oct 1; 143(7):2285–94

Adoptive T cell transfer of autoimmune nonobese diabetic mouse diabetes does not require recruitment of host B lymphocytes. Bendelac A, et al. **J Immunol** 1988 Oct 15; 141(8):2625–8

CR2 ligands modulate human B cell activation. Bohnsack JF, et al. **J Immunol** 1988 Oct 15;141(8):2569–76

Activation of normal human B cells through their antigen receptor induces membrane expression of IL–1 alpha and secretion of IL–1 beta. Bonnefoy JY, et al. **J Immunol** 1989 Aug 1;143(3):864–9

Polymeric C3dg primes human B lymphocytes for proliferation induced by anti–IgM. Carter RH, et al. **J Immunol** 1989 Sep 15;143(6):1755–60

Differential L chain expression in the antibody responses to phosphorylcholine of adult bone marrow or peritoneum–derived B lymphocytes. Cazenave PA, et al. **J Immunol** 1989 Jan 1;142(1):8–11

Properties of anti–idiotypic T cell lines propagated with syngeneic B lymphocytes. I. T cells bind intact idiotypes and discriminate between the somatic idiotypic variants in a manner similar to the anti–idiotopic antibodies. Cerny J, et al. **J Immunol** 1988 Dec 1;141(11):3718–25

Activation events in hapten–specific B cells from tolerant mice. Chace JH, et al. **J Immunol** 1988 Nov 15; 141(10):3258–62

Low natural antibody and low in vivo tumor resistance, in xid–bearing B–cell deficient mice. Chow DA, et al. **J Immunol** 1989 May 15;142(10):3702–6

Epstein–Barr virus preferentially induces proliferation of primed B cells. Crain MJ, et al. **J Immunol** 1989 Sep 1; 143(5):1543–8

Effect of liposome encapsulation on antigen presentation in vitro. Comparison of presentation by peritoneal macrophages and B cell tumors. Dal Monte P, et al. **J Immunol** 1989 Mar 1;142(5):1437–43

Induction of antigen–specific antibody responses in primed and unprimed B cells. Functional heterogeneity among Th1 and Th2 T cell clones. DeKruyff RH, et al. **J Immunol** 1989 Apr 15;142(8):2575–82

Generation of somatic variants of a B cell hybrid mediated by a non–cytolytic L3T4+ idiotype–specific T cell. Ghosh SK, et al. **J Immunol** 1989 Jan 15;142(2):409–15

Inverse relationship between proliferation and differentiation in a human TNP–specific B cell line. Cell cycle dependence of antibody secretion. Golding B, et al. **J Immunol** 1988 Oct 15;141(8):2564–8

Identification of a human endothelial cell antigen with monoclonal antibody 44G4 produced against a pre–B leukemic cell line. Gougos A, et al. **J Immunol** 1988 Sep 15;141(6):1925–33

Biochemical characterization of the 44G4 antigen from the HOON pre–B leukemic cell line. Gougos A, et al. **J Immunol** 1988 Sep 15;141(6):1934–40

The targeting of CD4+ T lymphocytes to a B cell lymphoma. A comparison of anti–CD3–anti–idiotype antibody conjugates and antigen–anti–idiotype antibody conjugates. Gravelle M, et al. **J Immunol** 1989 Jun 1; 142(11):4079–84

Anti–CD45 inhibition of human B cell proliferation depends on the nature of activation signals and the state of B cell activation. A study with anti–IgM and anti–CDw40 antibodies. Gruber MF, et al. **J Immunol** 1989 Jun 15; 142(12):4144–52

Antigen–specific, MHC–restricted B cell activation by cell–free Th2 cell products. Synergy between antigen–specific helper factors and IL–4. Guy R, et al. **J Immunol** 1989 Sep 1;143(5):1433–40

Regulation of antigen–presentation–I. IFN–gamma induces antigen–presenting properties on B cells. Hawrylowicz CM, et al. **J Immunol** 1988 Dec 15;141(12):4083–8

Characterization of the immunodeficiency of RIIS/J [corrected] mice. I. Association with the CD5 (LY–1) [corrected] B cell lineage [published erratum appears in J Immunol 1989 May 15;142(10):3728] Hiernaux JR, et al. **J Immunol** 1989 Mar 15;142(6):1813–7

Role of IL–2 in the generation of CD4+ suppressors of human B cell responsiveness. Hirohata S, et al. **J Immunol** 1989 May 1;142(9):3104–12

T cell regulation of human B cell proliferation and differentiation. Regulatory influences of CD45R+ and CD45R– T4 cell subsets. Hirohata S, et al. **J Immunol** 1989 Apr 15;142(8):2597–607

Molecular analysis of the dissociation between IL–2 production and proliferation in a response of a T cell clone to the antigen presented by B cells. Kakiuchi T, et al. **J Immunol** 1988 Nov 15;141(10):3278–84

Further studies of the role of transforming growth factor–beta in human B cell function. Kehrl JH, et al. **J Immunol** 1989 Sep 15;143(6):1868–74

Patterns of Ig V region expression among neonatal hemagglutinin–responsive B cells. Evidence for non–random VH gene representation during later stages of development. Kienker LJ, et al. **J Immunol** 1988 Nov 15;141(10):3634–41

Inhibition of lipopolysaccharide activation of 70Z/3 cells by anti–lipopolysaccharide antibodies. Kirkland TN, et al. **J Immunol** 1988 Nov 1;141(9):3208–13

Characteristics of B cell proliferation and activation in murine AIDS. Klinman DM, et al. **J Immunol** 1989 Feb 15; 142(4):1144–9

Normal B cell precursors responsive to recombinant murine IL–7 and inhibition of IL–7 activity by transforming growth factor–beta. Lee G, et al. **J Immunol** 1989 Jun 1; 142(11):3875–83

Alloantigen presentation by B cells. Requirement for IL–1 and IL–6. McKenzie D. **J Immunol** 1988 Nov 1; 141(9):2907–11

BP–3 alloantigen. A cell surface glycoprotein that marks early B lineage cells and mature myeloid lineage cells in mice. McNagny KM, et al. **J Immunol** 1988 Oct 15; 141(8):2551–6

B cell response pathways regulated by IL–5 and IL–2. Secretory microH chain–mRNA and J chain mRNA expression are separately controlled events. Matsui K, et al. **J Immunol** 1989 Apr 15;142(8):2918–23

Autoimmune syndrome after induction of neonatal tolerance to alloantigens. CD4+ T cells from the tolerant host activate autoreactive F1 B cells. Merino J, et al. **J Immunol** 1989 Oct 1;143(7):2202–8

Regulation of B lymphocytes by natural killer cells. Role of IFN–gamma. Michael A, et al. **J Immunol** 1989 Feb 15;142(4):1095–101

Membrane IgD and membrane IgM differ in capacity to transduce inhibitory signals within the same human B cell clonal populations. Mongini PK, et al. **J Immunol** 1989 Sep 1;143(5):1565–74

Induction of IL–6 (B cell stimulatory factor–2/IFN–beta 2) production by HIV. Nakajima K, et al. **J Immunol** 1989 Jan 15;142(2):531–6

Cognate interactions between helper T cells and B cells. III. Contact–dependent, lymphokine–independent induction of B cell cycle entry by activated helper T cells. Noelle RJ, et al. **J Immunol** 1989 Sep 15;143(6):1807–14

Cellular mechanisms in B lymphocyte activation and tolerance. Nossal GJ. **J Immunol** 1988 Oct 1;141(7 Suppl):S21–4 (18 ref.)

Polyvalent human immunodeficiency virus synthetic immunogen comprised of envelope gp120 T helper cell sites and B cell neutralization epitopes. Palker TJ, et al. **J Immunol** 1989 May 15;142(10):3612–9

Preferential proliferation of immature B lineage cells in long–term stromal cell–dependent cultures with IL–4. Peschel C, et al. **J Immunol** 1989 Mar 1;142(5):1558–68

Mitogenic stimulation of human B lymphocytes by the mannose–specific adhesin on Escherichia coli type 1 fimbriae. Ponniah S, et al. **J Immunol** 1989 Feb 1; 142(3):992–8

Lymphocytes stimulated by allogeneic B cell lines cleave the third component of complement and fix C3 fragments. Their nonspecific lytic capacity is elevated against complement receptor type 2–carrying targets. Ramos OF, et al. **J Immunol** 1989 Jan 1;142(1):217–23

V gene rearrangement is required to fully activate the hypermutation mechanism in B cells. Roes J, et al. **J Immunol** 1989 Feb 1;142(3):1022–6

Anti–Ig antibody inhibits the phorbol ester–induced stimulation of peritoneal B cells. Rothstein TL, et al. **J Immunol** 1988 Dec 15;141(12):4089–93

Prostaglandin E2–dependent induction of B cell unresponsiveness. Role of surface Ig and Fc receptors. Schad V, et al. **J Immunol** 1989 Oct 1;143(7):2127–32

Detection and characterization of a B cell stimulatory factor (BSF–TC) derived from a bone marrow stromal cell line. Simpson L, et al. **J Immunol** 1989 Jun 1;142(11):3894–900

Efficiency of antigen presentation after antigen targeting to surface IgD, IgM, MHC, Fc gamma RII, and B220 molecules on murine splenic B cells. Snider DP, et al. **J Immunol** 1989 Jul 1;143(1):59–65

A role for class I MHC antigens in responses of activated B lymphocytes. Southern SO, et al. **J Immunol** 1989 May 15;142(10):3384–91

Immortalization of EBV–infected B cells is not influenced by exogenous signals acting on B cell proliferation. Effects of mutant EL–4 thymoma cells and transforming growth factor–beta. Straub C, et al. **J Immunol** 1989 Jan 1; 142(1):87–93

Human B cell proliferation in response to IL–4 is associated with enhanced production of B cell–derived growth factors. Tadmori W, et al. **J Immunol** 1989 Feb 1; 142(3):826–32

Inhibitory effect of anti–class II antibody on the spontaneous activation of B cells in patients with systemic lupus erythematosus. Analysis with IL–1 production and IL–1 receptor expression. Tanaka Y, et al. **J Immunol** 1989 Sep 1;143(5):1584–90

Regulation of isotype production by IL–4 and IL–5. Effects of lymphokines on Ig production depend on the state of activation of the responding B cells. Tonkonogy SL, et al. **J Immunol** 1989 Jun 15;142(12):4351–60

Responses of B cells from autoimmune mice to IL–5. Umland SP, et al. **J Immunol** 1989 Mar 1;142(5):1528–35

Modulation of IL–2–induced human B cell proliferation in the presence of human 50–kDa B cell growth factor and IL–4. Vazquez A, et al. **J Immunol** 1989 Jan 1;142(1):94–9

Idiotype variants emerging after anti–idiotype monoclonal antibody therapy of a murine B cell lymphoma. Weiner GJ, et al. **J Immunol** 1989 Jan 1;142(1):343–51

Characterization of the effector mechanism of help for antigen–presenting and bystander resting B cell growth mediated by Ia–restricted Th2 helper T cell lines. Whalen BJ, et al. **J Immunol** 1988 Oct 1;141(7):2230–9

Leukotriene B4 enhances activation, proliferation, and differentiation of human B lymphocytes. Yamaoka KA, et al. **J Immunol** 1989 Sep 15;143(6):1996–2000

Inhibition of anti–IgM and growth factor–induced proliferation of guinea pig B cells by one of two distinct Fc gamma receptors on the cells. Yamashita T, et al. **J Immunol** 1988 Nov 1;141(9):2889–94

Increased proportion of B cell hybridomas secreting monoclonal antibodies of desired specificity in cultures containing macrophage–derived hybridoma growth factor (IL–6). Bazin R, et al. **J Immunol Methods** 1989 Jan 17; 116(2):245–9

In vitro stimulation of immune spleen cells enhances the number of anti–lipid A–producing hybridomas. Erich T, et al. **J Immunol Methods** 1989 Mar 10;118(1):17–24

Detection and isolation of antigen–specific B cells by the fluorescence activated cell sorter (FACS). Hoven MY, et al. **J Immunol Methods** 1989 Feb 24;117(2):275–84

In vitro assays to study role of T cell–derived factors on human B lymphocytes should take into consideration inhibiting effect of large granular lymphocyte subset (CD5–,CD16+) that can contaminate B cell preparations. Lobo PI, et al. **J Immunol Methods** 1988 Dec 9; 115(2):239–46

Lymphocyte function tests in cirrhotic patients under treatment with spironolactone and potassium canrenoate. Cuppone R, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):436–42

Effect of interleukin 1 on the induction and maintenance of B cell tolerance in vitro. Duan JM, et al. **J Leukoc Biol** 1989 Apr;45(4):329–35

Immunohistochemical analysis of non–Hodgkin's lymphomas with the monoclonal antibody to follicular center

lymphocytes reactive in paraffin sections. Bhoopat L, et al. **J Med Assoc Thai** 1989 Apr;72(4):207–11

Accentuated antibody response to paramyxoviruses in individuals infected with human immunodeficiency virus. Kövamees J, et al. **J Med Virol** 1988 Sep;26(1):41–8

The synergistic effects of anti-IgM and monoclonal anti-Ia antibodies in induction of murine B lymphocyte activation. Baluyut AR, et al. **J Mol Cell Immunol** 1988;4(1):45–57

Generation and use of an antigen-specific hybrid to study B-cell function. Bankert RB, et al. **J Mol Cell Immunol** 1987;3(5):279–91

Activation of murine B cells from different tissues with different mitogens. II. Isotype distribution of secreted immunoglobulins in the presence and absence of IL-4-containing T cell supernatants. Bossie A, et al. **J Mol Cell Immunol** 1987;3(4):221–6

Inducible Ig heavy chain switching in an IgM+ Ly-1 B cell line. Evidence for a state of switch commitment. Braun J, et al. **J Mol Cell Immunol** 1988;4(2):105–19

Activation of murine B cells with Salmonella typhimurium mitogen (STM), lipopolysaccharide (LPS), and dextran sulfate (DxS). I. Cell-cycle analysis and induction of cytoplasmic immunoglobulin. Brooks KH, et al. **J Mol Cell Immunol** 1987;3(4):215–9

Evidence for defects in accessory and T cell subsets in mice expressing the xid defect. Clayberger C, et al. **J Mol Cell Immunol** 1985;2(2):61–9

A cloned T cell line that selectively augments antibody responses of phosphorylcholine-specific B cells bearing the T15 idiotype. Dunn EB, et al. **J Mol Cell Immunol** 1986; 2(4):209–17

Anti-mu antibody blocks LPS driven B cell differentiation by suppressing specific mRNAs. Flahart RE, et al. **J Mol Cell Immunol** 1987;3(2):61–8

B cell-deprived mice lack functional expression of certain T suppressor cell subsets. Flood PM, et al. **J Mol Cell Immunol** 1984;1(3):167–76

An essential role for interleukin 1 and a dual function for interleukin 2 in the immune response of murine B lymphocytes to sheep erythrocytes. Hoffmann MK, et al. **J Mol Cell Immunol** 1987;3(1):29–36

The IgE antibody system: mature, peripheral B lymphocytes exert regulatory influences on the IgE systems of self-reconstituting, sublethally irradiated mice. Katz DH, et al. **J Mol Cell Immunol** 1984;1(2):83–9

Induced differentiation of a B cell lymphoma with known antigen specificity. LoCascio NJ, et al. **J Mol Cell Immunol** 1984;1(3):177–90

Biochemical and ultrastructural characterization of a novel cell structure associated with immunoglobulin secretion in B-lymphocytes. Mazzaferro PK, et al. **J Mol Cell Immunol** 1987;3(5):293–306

Cognate interactions between helper T cells and B cells. I. Cloning and helper activity of a lymphokine-dependent helper T cell clone (Th-3). Noelle RJ, et al. **J Mol Cell Immunol** 1989;4(3):161–73; discussion 173–5

Possible involvement of Ly-1 B cells in the effector phase of IgG suppression mediated by suppressor T cell factor. Ono K, et al. **J Mol Cell Immunol** 1987;3(3):167–75

Differential induction of class II gene expression in murine pre-B-cell lines by B-cell stimulatory factor-1 and by antibodies to B-cell surface antigens. Polla BS, et al. **J Mol Cell Immunol** 1988;3(6):363–73

Enhancement of B lymphocyte secretory differentiation by a Ly 1+,2-,Qa-1+ helper T cell subset that sees both antigen and determinants on immunoglobulin. Rohrer JW, et al. **J Mol Cell Immunol** 1983;1(1):50–64

Lymphoma models for B cell activation and tolerance. V. Anti-Ig mediated growth inhibition is reversed by phorbol myristate acetate but does not involve changes in cytosolic free calcium. Scott DW, et al. **J Mol Cell Immunol** 1987; 3(2):109–20

Polyclonal B-cell activation by a B-cell differentiation factor B151-TRF2. IV. B151-TRF2-responsive F1 B cells consist of two separate populations capable of recognizing only one of the parental I-A products expressed on B cells. Takaháma Y, et al. **J Mol Cell Immunol** 1987;3(3):177–94

Molecules recognized by anti-idiotypic monoclonal antibodies to the B cell lymphoma, BCL1. Tamura GS, et al. **J Mol Cell Immunol** 1987;3(4):243–53

Antigen-dependent selection of B lymphoma cells varying in Ia density by cloned antigen-specific L3T4a+ T cells: a possible in vitro model for B cell adaptive differentiation. Tite JP, et al. **J Mol Cell Immunol** 1984;1(4):253–65

The C mu gene is transcribed in IgG bearing B lymphocytes. Weiss EA, et al. **J Mol Cell Immunol** 1987;3(2):69–81

Molecular basis for the inhibition of LPS induced differentiation by anti-immunoglobulin. Yuan D. **J Mol Cell Immunol** 1987;3(3):133–44

Human B cell lines secreting IgM antibody specific for myelin basic protein. Zhang JW, et al. **J Neuroimmunol** 1989 Aug; 23(3):249–56

Distribution of plasma cells secreting antibodies against nervous tissue antigens during experimental allergic encephalomyelitis enumerated by a nitrocellulose immunospot assay. Zachau AC, et al. **J Neurol Sci** 1989 Jul;91(3):323–36

CD1c antigens are present in normal and neoplastic B-cells. Smith ME, et al. **J Pathol** 1988 Oct;156(2):169–77

Immune functions in children treated with biosynthetic growth hormone. Church JA, et al. **J Pediatr** 1989 Sep; 115(3):420–3

Immunohistochemical study of lymphoplasmacytic infiltrate and epithelial HLA-DR expression in the rectal and colonic mucosae of children with ulcerative colitis. Arató A, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):172–80

Immunoregulatory defects in juvenile rheumatoid arthritis. Comparison between patients with the systemic or polyarticular forms. Alarcon-Riquelme ME, et al. **J Rheumatol** 1988 Oct;15(10):1547–50

Rheumatoid adherent synovial cells produce B cell differentiation factor activity neutralizable by antibody to B cell stimulatory factor-2/interleukin 6. Harigai M, et al. **J Rheumatol** 1988 Nov;15(11):1616–22

In vitro immunoglobulin production by lymphocytes of patients with juvenile rheumatoid arthritis: effects of Staphylococcus aureus Cowan I stimulation and monocyte depletion. Oen K, et al. **J Rheumatol** 1988 Oct; 15(10):1539–46

Terminal B-cell maturation and immunoglobulin (Ig) synthesis in vitro in patients with major injury. Faist E, et al. **J Trauma** 1989 Jan;29(1):2–9

The relationship between the percentage of circulating B cells, corticosteroid levels, and other immunologic parameters in thermally injured patients. Kagan RJ, et al. **J Trauma** 1989 Feb;29(2):208–13

Negative modulation of Epstein-Barr virus episomes by a human B-cell growth factor. Morgan J, et al. **J Virol** 1989 Jul;63(7):3190–4

Immune markers in the diagnosis of malignant lymphomas. Jaffe ES. **J Virol Methods** 1988 Sep;21(1–4):265–73 (33 ref.)

Predominance of Borrelia burgdorferi specific B cells in cerebrospinal fluid in neuroborreliosis. Baig S, et al. **Lancet** 1989 Jul 8;2(8654):71–4

Proliferation of leukemic B cells in response to SAC and anti-mu. Evidence for different modes of action and comparison to proliferation and differentiation induced by conditioned medium. Steinberg J, et al. **Leuk Res** 1988; 12(7):559–66

Expression of the B8.7 antigen on hairy cells and relation with the LMW-BCGF response. Génot E, et al. **Leukemia** 1989 May;3(5):367–72

Differences in blood T and NK cell populations between chronic lymphocytic leukemia of B cell type (B-CLL) and monoclonal B-lymphocytosis of undetermined significance (B-MLUS). Kimby E, et al. **Leukemia** 1989 Jul;3(7):501–4

Residual T lymphocytes, and not malignant B cells, proliferate upon mitogenic stimulation. Kluin-Nelemans HC, et al. **Leukemia** 1989 Oct;3(10):715–7

Interleukin 1 and interleukin 1 receptors in human B-cell lines. Bertoglio J. **Lymphokine Res** 1989 Fall;8(3):301–4

Human B cell activating factor (BCAF): production by a human T cell tumor line. Fevrier M, et al. **Lymphokine Res** 1989 Spring;8(1):59–67

The role of recombinant IL-2 and IL-1 in murine B cell differentiation. Fotedar R, et al. **Lymphokine Res** 1988 Winter;7(4):393–402

Functional bioassays for B cell growth factors using polyclonally activated murine spleen B cells. Ruuth E, et al. **Lymphokine Res** 1989 Summer;8(2):147–58

Biochemical characterization of B cell stimulatory factors for lipopolysaccharide-preactivated B cell blasts: distinction from other known lymphokines. Ruuth E, et al. **Lymphokine Res** 1988 Winter;7(4):359–69

Aging-associated intrinsic defects in IgA production by murine Peyer's patch B cells stimulated by autoreactive Peyer's patch T cell hybridoma-derived B cell stimulatory factors (BSF). Kawanishi H, et al. **Mech Ageing Dev** 1989 Jul;49(1):61–78

Active rosette-forming lymphocytes in chronic hepatitis. Stanciu L, et al. **Med Interne** 1982 Oct-Dec;20(4):277–82

Characterization of activation of a partially defective B cell subpopulation with immunocompetence restricted to IgM and IgA. Nakaniwa H, et al. **Microbiol Immunol** 1989; 33(3):245–56

Polyclonal B-cell stimulative and immunosuppressive activities at different developmental stages of Trypanosoma gambiense. Oka M, et al. **Microbiol Immunol** 1988; 32(11):1175–7

NF-kappa B binds within a region required for B-cell-specific expression of major histocompatibility complex class II gene E alpha d. Blanar MA, et al. **Mol Cell Biol** 1989 Feb;9(2):844–6

Novel B-cell precursors blocked at the stage of DJH recombination. Ramakrishnan L, et al. **Mol Cell Biol** 1988 Dec;8(12):5216–23

Differential expression of a zinc finger-encoding gene in response to positive versus negative signaling through receptor immunoglobulin in murine B lymphocytes. Seyfert VL, et al. **Mol Cell Biol** 1989 May;9(5):2083–8

Transcription of HLA class II genes in the absence of B-cell-specific octamer-binding factor. Stimac E, et al. **Mol Cell Biol** 1988 Sep;8(9):3734–9

Identification of a novel bone marrow-derived B-cell progenitor population that coexpresses B220 and Thy-1 and is highly enriched for Abelson leukemia virus targets. Tidmarsh GF, et al. **Mol Cell Biol** 1989 Jun;9(6):2665–71

Membrane immunoglobulin-cytoskeletal interactions—II. Biochemical analysis of cytoskeletally associated IgM. Albrecht DL, et al. **Mol Immunol** 1989 Jun;26(6):575–82

Regulatory effects of IgG-BF on hybridoma B cells. molecular characterization of variant cell lines. Brunati S, et al. **Mol Immunol** 1988 Nov;25(11):1133–42

Effects of various forms of monoclonal anti-Fc gamma R II (2.4G2) on B lymphocyte responses. Dickler HB, et al. **Mol Immunol** 1988 Nov;25(11):1169–74

Cross-reaction of a monoclonal antibody to human MHC class II molecules with rabbit B cells. Dubiski S, et al. **Mol Immunol** 1988 Aug;25(8):713–8

Organ reactive autoantibodies from non-immunized adult BALB/c mice are polyreactive and express non-biased VH gene usage. Hartman AB, et al. **Mol Immunol** 1989 Apr; 26(4):359–70

Characterization of gp39, a B-lymphocyte associated differentiation antigen which is also present on granulocytes and macrophages. Lauzon GJ, et al. **Mol Immunol** 1988 Sep;25(9):829–41

Immunoglobulin (Fc) receptors on murine T- and B-lymphocytes: investigations using tumor models. Lynch RG, et al. **Mol Immunol** 1988 Nov;25(11):1151–7 (35 ref.)

Autoreactive B-cell repertoire in mice with chronic graft versus host disease. Rolink AG, et al. **Mol Immunol** 1988 Nov;25(11):1217–22

Heterogeneity in the B1 (CD20) cell surface molecule expressed by human B-lymphocytes. Tedder TF, et al. **Mol Immunol** 1988 Dec;25(12):1321–30

Seronegative Lyme disease. Dissociation of specific T- and B-lymphocyte responses to Borrelia burgdorferi. Dattwyler RJ, et al. **N Engl J Med** 1988 Dec 1; 319(22):1441–6

Antigen presentation by B cells [letter] Bottomly K, et al. **Nature** 1989 Jan 5;337(6202):24

Binding of labelled influenza matrix peptide to HLA DR in living B lymphoid cells. Ceppellini R, et al. **Nature** 1989 Jun 1;339(6223):392–4

B-cell memory is short-lived in the absence of antigen. Gray D, et al. **Nature** 1988 Nov 3;336(6194):70–3

Clonal deletion of B lymphocytes in a transgenic mouse bearing anti-MHC class I antibody genes. Nemazee DA, et al. **Nature** 1989 Feb 9;337(6207):562–6

Killing of antigen-reactive B cells by class II-restricted, soluble antigen-specific CD8+ cytolytic T lymphocytes. Shinohara N, et al. **Nature** 1988 Dec 1;336(6198):481–4

Suppression of the immune response by cytotoxic T cells [news] Simpson E. **Nature** 1988 Dec 1;336(6198):426

The B-cell binding site on human immunoglobulin E. Vercelli D, et al. **Nature** 1989 Apr 20;338(6217):649–51

Autoimmunity and glomerulonephritis after neonatal induction of lymphoid chimerism in mice: role of donor B cells and host T cells. Abramowicz D, et al. **Nephrol Dial Transplant** 1988;3(4):399–404

Immunohistological identification of T and B cells in normal and malignant tissues of the uterine endometrium. Mizuuchi H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):349–56

An attempt to explain disordered immunity and hypogammaglobulinemia in B-CLL. Dighiero G. **Nouv Rev Fr Hematol** 1988;30(5–6):283–8 (39 ref.)

Flow cytometric analysis of normal B lymphoid development. Loken MR, et al. **Pathol Immunopathol Res** 1988;7(5):357–70

Antigen-driven immunoglobulin production by human colostral lymphocytes. Slade HB, et al. **Pediatr Res** 1989 Mar;25(3):295–9

Epstein-Barr virus-transformed pro-B cells are prone to illegitimate recombination between the switch region of the mu chain gene and other chromosomes. Altiok E, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6333–7

Transplantation tolerance correlates with high levels of T- and B-lymphocyte activity. Bandeira A, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):272–6

Haplotype-specific differences in signaling by transfected class II molecules to a Ly-1+ B-cell clone. Bishop GA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5933–7

Alternative splicing of HLA-DQB transcripts and secretion of HLA-DQ beta-chain proteins: allelic polymorphism in splicing and polyadenylylation sites. Briata P, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1003–7

Surface immunoglobulin-mediated B-cell activation in the absence of detectable elevations in intracellular ionized calcium: a model for T-cell-independent B-cell activation. Brunswick M, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6724–8

Cross-linking of interleukin 4 to surface molecules on murine T and B lymphocytes. Fernandez-Botran R, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4235–9

Human interleukin 7: molecular cloning and growth factor activity on human and murine B-lineage cells. Goodwin RG, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):302–6

Small nuclear RNA-associated proteins are immunologically related as revealed by mapping of autoimmune reactive B-cell epitopes. Habets WJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4674–8

Turnover of Ia-peptide complexes is facilitated in viable antigen-presenting cells: biosynthetic turnover of Ia vs. peptide exchange. Harding CV, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4230–4

Immunoglobulin lambda light-chain-related genes 14.1 and 16.1 are expressed in pre-B cells and may encode the human immunoglobulin omega light-chain protein. Hollis GF, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5552–6

Stepwise intracional maturation of antibody affinity through somatic hypermutation. Kocks C, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8206–10

Light-chain gene expression before heavy-chain gene rearrangement in pre-B cells transformed by Epstein-Barr

virus. Kubagawa H, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2356–60

CD45 regulates signal transduction and lymphocyte activation by specific association with receptor molecules on T or B cells. Ledbetter JA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8628–32

Activated B cells can deliver help for the in vitro generation of antiviral cytotoxic T cells. Liu Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4629–33

Sequence of the Lyb–2 B–cell differentiation antigen defines a gene superfamily of receptors with inverted membrane orientation. Nakayama E, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1352–6

Sudden appearance of anti–protein IgG1–forming cell precursors early during primary immunization. Nossal GJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4679–83

Influence of dietary energy restriction on the numbers and proportions of Ly–1+ B lymphocytes in autoimmunity–prone mice. Ogura M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4225–9

A single antigen–specific B cell can conjugate to either a type 1 or a type 2 helper T cell. Sanders VM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7724–8

Toxic shock syndrome toxin 1 binds to major histocompatibility complex class II molecules [published erratum appears in Proc Natl Acad Sci U S A 1989 Sep;86(18):7138] Scholl P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4210–4

The octamer motif is a B–lymphocyte–specific regulatory element of the HLA–DR alpha gene promoter. Sherman PA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6739–43

Murine "viable motheaten" mutation reveals a gene critical to the development of both B and T lymphocytes. Sidman CL, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6279–82

Immunoglobulin heavy–chain switching may be directed by prior induction of transcripts from constant–region genes. Stavnezer J, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7704–8

IgE secretion by Epstein–Barr virus–infected purified human B lymphocytes is stimulated by interleukin 4 and suppressed by interferon gamma. Thyphronitis G, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5580–4

B–cell–specific and interferon–gamma–inducible regulation of the HLA–DR alpha gene. Tsang SY, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8598–602

Immunobiologic differences between normal and leukemic human B–cell precursors. Uckun FM, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8603–7

Altered I–A protein–mediated transmembrane signaling in B cells that express truncated I–Ak protein. Wade WF, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6297–301

Immunoglobulin receptor signaling depends on the carboxyl terminus but not the heavy–chain class. Webb CF, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1977–81

B–lymphoma cells process and present their endogenous immunoglobulin to major histocompatibility complex–restricted T cells. Weiss S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):282–6

Monoclonal antibodies specific for murine CD2 reveal its presence on B as well as T cells. Yagita H, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):645–9

Identity of human B–cell line cytotoxic lymphokine with tumor necrosis factor type beta. Yamanaka HI, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1343–7

Influence of the valency and hydrophobicity of an antigen on its efficiency of processing and presentation by antigen–specific B cells. Bernard NF, et al. **Res Immunol** 1989 Jun–Aug;140(5–6):563–79

Immunocompetence of peritoneal B cells. Huetz F, et al. **Res Immunol** 1989 Jan;140(1):75–87 (81 ref.)

B cells and antibodies in MS. Link H, et al. **Res Immunol** 1989 Feb;140(2):219–26; discussion 245–8 (30 ref.)

Immune system of swine: dissection of mononuclear leucocyte subpopulations by means of two–colour cytofluorometric analysis. Saalmüller A, et al. **Res Vet Sci** 1988 Nov;45(3):311–6

Polyclonal B–cell activation in human malaria: relevance to the development of anti–sporozoite specific immune response and of immunopathology in individuals from endemic areas (Rondonia State—Brazil). Daniel–Ribeiro C, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):415–8

Short–chain fatty acids and other intestinal microflora–associated characteristics in faeces of patients with severe B–cell immunodeficiency. Nilssen DE, et al. **Scand J Gastroenterol** 1989 Jan;24(1):21–7

Characterization of human CD4+ T–cell clones that secrete helper factor(s) for B–cell proliferation and maturation. Berzins T, et al. **Scand J Immunol** 1988 Nov;28(5):519–27

Requirements for induction of activation and proliferation of human B cells analysed with anti–idiotype monoclonal antibodies. de Rie MA, et al. **Scand J Immunol** 1989 Aug; 30(2):249–57

T– and B–cell functions in IgA–deficient patients. Klemola TK, et al. **Scand J Immunol** 1988 Sep;28(3):301–6

Most B cells in acute Trypanosoma cruzi infection lack parasite specificity. Minoprio F, et al. **Scand J Immunol** 1988 Nov;28(5):553–61

Regulation of IgG1 and IgE synthesis by interleukin 4 in mouse B cells. Moon HB, et al. **Scand J Immunol** 1989 Sep;30(3):355–61

A model system for the analysis of B–cell activation and effector T–cell functions. T cell–dependent B–cell responses facilitated by anti–I–A antibodies. Pereira P, et al. **Scand J Immunol** 1989 Jan;29(1):49–56

The influence of C3–coated homologous erythrocytes on pokeweed–mitogen–induced polyclonal differentiation of human B cells. Rasmussen JM, et al. **Scand J Immunol** 1989 Aug;30(2):209–17

Generation of high–rate ovalbumin–specific antibody–secreting cells in cultures of human peripheral blood B cells obtained from non–immunized blood donors. 't Hart LA, et al. **Scand J Immunol** 1988 Nov;28(5):583–9

Susceptibility to tolerance induction of bursal and peripheral B cells. Vainio O, et al. **Scand J Immunol** 1988 Nov; 28(5):639–44

Induction of CD43 expression during activation and terminal differentiation of human B cells. Wikén M, et al. **Scand J Immunol** 1988 Oct;28(4):457–64

Enhancement of human B–cell proliferation by a monoclonal antibody to CD43. Wikén M, et al. **Scand J Immunol** 1989 Mar;29(3):363–70

Comparison between thymus– and spleen–derived B–cell hybridomas. Zöller M. **Scand J Immunol** 1989 Aug; 30(2):271–5

Immunoregulatory lymphokines in rheumatoid joints. III. B cell growth promoting activity of cells eluted from rheumatoid synovial tissue. Hovdenes J, et al. **Scand J Rheumatol** 1988;17(5):371–8

The significance of CD5+ B cells in rheumatic diseases. Maini RN, et al. **Scand J Rheumatol Suppl** 1988;76:237–42 (22 ref.)

Phenotypic and functional features of CD5+ B lymphocytes in rheumatoid arthritis. Plater–Zyberk C, et al. **Scand J Rheumatol Suppl** 1988;75:76–83

Quantitative analysis of precursors frequency of rheumatoid factor (RF) producing human B cells. Vischer TL, et al. **Scand J Rheumatol Suppl** 1988;75:123–6

The importance of CD5–positive B cells in nonorgan–specific autoimmune diseases. Youinou P, et al. **Scand J Rheumatol Suppl** 1988;76:243–9 (23 ref.)

On the production of immunoglobulins in the central nervous system: an involvement of B cell stimulatory factor 2/interleukin 6 produced intrathecally? Fontana A, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):38–9

Living with your self. Appenzeller T. **Sci Am** 1988 Nov; 259(5):30, 34

A DNA binding protein regulated by IL–4 and by differentiation in B cells. Boothby M, et al. **Science** 1988 Dec 16;242(4885):1559–62

Induction of B cell unresponsiveness to noninherited maternal HLA antigens during fetal life. Claas FH, et al. **Science** 1988 Sep 30;241(4874):1815–7

B cell clones in rheumatoid arthritis. Steinitz M. **Springer Semin Immunopathol** 1988;10(2–3):181–8 (45 ref.)

A polymorphic monoclonal antibody, PLM10, that reacts with B–cell lines carrying HLA–DPw1, DPw5, and DP "Cp63". Maeda H, et al. **Tissue Antigens** 1989 Mar; 33(3):421–4

Outcome of donor specific transfusion renal transplants across B cell positive crossmatches. Balakrishnan K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1836

Transplantation tolerance to MHC antigens in chicken B cell chimeras: effect of chimerism on the transferability of tolerance. Lehtonen L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):252–6

Recombinant interleukin 4 and partially purified low–molecular–weight B–cell growth factor stimulate normal resting human T lymphocytes. Martinez O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):74–6

Comparison of dithiothreitol (DTT) treatment and absorption using autologous EBV–transformed lymphoblastoid cell lines for the depletion of autoreactive antibodies. Nicholls C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):774–6

Renal allograft survival in CSA–treated patients with positive donor–specific B cell crossmatches. Noreen HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):691–2

Positive B cell crossmatches: specificity of antibody and graft outcome. Phelan DL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):687–8

Human monoclonal antibodies to B lymphocyte cell surface antigens: a study of the primary alloantibody response. Power DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):119–20

Different activation signals detected by fixation of stimulator cells. Sutherland RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):178–9

IgG–anti–immunoglobulin induced by immunization with antibody–coated blood cells: mechanism for B–cell suppression? Terness P, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):153–5

B lymphocytes from stable renal transplant patients do not respond to exogenous lymphokines: comparison of azathioprine and cyclosporin treated patients. Weissgarten J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):393–4

1–Oleolyl–2–glycerol stimulates immunoglobulin production in human peripheral blood mononuclear cells independent of T–cell activation. Yamaguchi DT, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):203–4

Resolution of the B cell–positive crossmatch by a modified flow cytometric procedure. Farley TJ, et al. **Transplantation** 1989 Sep;48(3):535–7

Confirmation of the heterogeneity of posttransplant Epstein–Barr virus–associated B cell proliferations by immunoglobulin gene rearrangement analyses. Hanto DW, et al. **Transplantation** 1989 Mar;47(3):458–64

Developmental coupling of expression of the Igh–linked minor antigen H–40 to membrane immunoglobulin expression. Schreiber KL, et al. **Transplantation** 1989 Aug; 48(2):331–8

Retroviral–mediated transfer and expression of hepatitis B e antigen in human primary skin fibroblasts and Epstein–Barr virus–transformed B lymphocytes. Raney AK, et al. **Virology** 1989 Jan;168(1):31–9

Expression of EBNA–3 family in fresh B lymphocytes infected with Epstein–Barr virus. Sawada K, et al. **Virology** 1989 Jan;168(1):22–30

Postpartum immunologic–mediated pulmonary edema associated with transfusion of blood containing an anti–B–lymphocyte antibody. Newman RS, et al. **West J Med** 1989 May;150(5):584–6

The tolerance defect. Properties and fate of tolerant B cells in adult mice. Chace JH, et al. **Year Immunol** 1989;4:181–92 (51 ref.)

Studies on lymphocyte subpopulations and cell–mediated immunity in patients with chronic renal failure. Park K, et al. **Yonsei Med J** 1988;29(2):109–16

Analysis of Mycobacterium tuberculosis genoma and production of a recombinant protein containing specific B and T cell antigenic determinants—new approaches to second generation antituberculosis vaccines. Colizzi V, et al. **Z Erkr Atmungsorgane** 1989;172(1):40–52

[Chronic lymphocytic leukemia. II. Differentiation of various forms of chronic lymphocytic leukemia by cytological and immunological indicators] Popova L, et al. **Vutr Boles** 1988; 27(3):76–80 (Eng. Abstr.) **(Bul)**

[Accessory effect of mouse B lymphocytes in Con–A response] Yin TG, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):363–6 (Eng. Abstr.) **(Chi)**

[Lymphocyte system and relative resistance of inbred mice to Trypanosoma brucei brucei] Makumyaviri AM, et al. **Ann Inst Pasteur Immunol** 1988 Sep–Oct;139(5):545–56 (Eng. Abstr.) **(Fre)**

[Immune response: current aspects] Cerottini JC. **Rev Med Suisse Romande** 1989 Mar;109(3):201–3 **(Fre)**

[Cellular immunologic parameters in thyroid diseases] Beyer PA, et al. **Acta Med Austriaca** 1989;16(1):6–7 (Eng. Abstr.) **(Ger)**

[Polyclonal B–cell activation by so–called immunopotentiation (immunostimulants)] Kekow J, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28–29):1101–6 (Eng. Abstr.) **(Ger)**

[Immunophenotyping of lymphoreticular cells in the human decidua] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):553–6 (Eng. Abstr.) **(Ger)**

[In vivo and in vitro suppression of lymphocyte function in paranasal sinus mycoses] Loidolt D, et al. **Laryngorhinootologie** 1989 Jul;68(7):407–10 (Eng. Abstr.) **(Ger)**

[Correlations between lymphocytes and female hormonal factors (letter)] Deák Bárdos G. **Orv Hetil** 1988 Jun 19; 129(25):1343 **(Hun)**

[Effect of lobenzarit disodium (CCA) on B cell differentiation to antibody secreting cells] Imai F, et al. **Arerugi** 1989 Jan; 38(1):36–40 (Eng. Abstr.) **(Jpn)**

[Studies on B cell function and non–specific B cell activation in patients with chronic liver diseases] Hirota K. **Fukuoka Igaku Zasshi** 1988 Jul;79(7):514–28 (Eng. Abstr.) **(Jpn)**

[Functional and structural analysis of the Lyb–2 system] Ashida T, et al. **Hokkaido Igaku Zasshi** 1989 Jan;64(1):10–7 (Eng. Abstr.) **(Jpn)**

[A study on maternal humoral immune responses to villous trophoblast using Epstein–Barr virus] Fujino T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):660–4 (Eng. Abstr.) **(Jpn)**

[Pleiotropic functions of BSF–2/IL–6] Matsuda T, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1317–22 **(Jpn)**

[Peripheral blood T– and B lymphocytes in children with bronchial asthma] Kosowska S. **Folia Med Cracov** 1987; 28(3–4):267–81 (Eng. Abstr.) **(Pol)**

[Evaluation of various indicators of cellular immunity in persons exposed to work environment in the Masovian Refinery and Petrochemical Plants in Plock] Tchórzewski H, et al. **Med Pr** 1988;39(2):100–7 (Eng. Abstr.) **(Pol)**

[Physiological interferons and their role in the body. I. Biological activities of interferons] Blach–Olszewska Z. **Postepy Hig Med Dosw** 1988 May–Jun;42(3):260–95 (165 ref.) (Eng. Abstr.) **(Pol)**

[Interleukins—hormones of the immune system] Bogdanikowa B. **Postepy Hig Med Dosw** 1988 Nov–Dec; 42(6):589–600 (68 ref.) (Eng. Abstr.) **(Pol)**

[Disorders of cellular immunity in systemic scleroderma] Sierakowski SJ, et al. **Przegl Lek** 1988;45(7):592–7 (74 ref.) **(Pol)**

[Immunologic methods of prognosis and diagnosis of late pregnancy toxemia] Allamazian EK, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):39–41 (Eng. Abstr.) **(Rus)**

[Characteristics of T and B components of the immune system in miscarriage of different etiology] Barsegian OK,

et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):23–7 (Eng. Abstr.) (Rus)

[Age-related changes in the indicators of immunological homeostasis in women with intact menstrual rhythm] Khait OV. **Akush Ginekol (Mosk)** 1989 Feb;(2):61–6 (Eng. Abstr.) (Rus)

[Several parameters of cellular immunity in uncomplicated pregnancy and in threatened abortion] Timoshenko LV, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):27–9 (Eng. Abstr.) (Rus)

[Effect of gestoses on the status of the immune and adrenal systems in newborn infants] Volkova NN, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):35–8 (Eng. Abstr.) (Rus)

[B-cell regulation of proliferative activity of hematopoietic stem cell under antigenic action] Kozlov VA, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):242–4 (Rus)

[Natural killer cells lysing the blood B-lymphocytes of patients with chronic lympholeukemia] Khonina NA, et al. **Eksp Onkol** 1988;10(4):44–6 (Eng. Abstr.) (Rus)

[Change in the cooperation of T- and B-lymphocytes during the immune response of ram erythrocytes in the presence of liver injury by carbon tetrachloride] Bryzgina TM. **Fiziol Zh** 1989 Jan–Feb;35(1):25–30 (Eng. Abstr.) (Rus)

[Lymphocyte subpopulations of the peripheral blood in multiple myeloma patients studied by the immunocytochemical PAP method using monoclonal antibodies] Abramenko IV, et al. **Gematol Transfuziol** 1988 Aug;33(8):38–41 (Eng. Abstr.) (Rus)

[Immunologic variants of acute lymphoblastic leukemia in adults and its correlation with cytochemical and various clinical parameters] Bulycheva TI, et al. **Gematol Transfuziol** 1989 May;34(5):13–9 (Eng. Abstr.) (Rus)

[Characteristics of monoclonal B-lymphocytes in multiple myeloma in various phases of the disease] Golenkov AK, et al. **Gematol Transfuziol** 1988 Oct;33(10):16–9 (Eng. Abstr.) (Rus)

[The content of lymphopoietic differentiation antigens on the membrane of blood lymphoid cells in patients with bone marrow hypoplasia studied using monoclonal antibodies] Miterev GIu, et al. **Gematol Transfuziol** 1988 Oct; 33(10):10–5 (Eng. Abstr.) (Rus)

[Changes in the immune system in long-term carbon tetrachloride poisoning] Kolpashchikova IF. **Gig Sanit** 1988 Dec;(12):81–3 (Rus)

[Immunologic status of children living in a region with an increased level of nitrates in the drinking water] Kozliuk AS, et al. **Gig Sanit** 1989 Mar;(3):19–22 (Eng. Abstr.) (Rus)

[Immunity after exposure to radiation] Shubik VM. **Gig Sanit** 1989 Jan;(1):25–8 (Eng. Abstr.) (Rus)

[Characteristics of immunologic reactivity of workers at an epoxy resin plant] Chernykh LV, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):48–50 (Rus)

[Effect of occupational factors of deep coal mines on the immunological status of miners] Donchenko LI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):53–4 (Rus)

[Differentiated immunocorrective therapy of dust-induced bronchitis in machine builders] Kleiner AI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):19–21 (Eng. Abstr.) (Rus)

[The T- and B-lymphocyte count as a prognostic test in patients with acute suppurative surgical diseases] Vinnichenko BI, et al. **Klin Khir** 1989;(1):36–7 (Eng. Abstr.) (Rus)

[Antiviral cellular resistance in acute suppurative-destructive diseases of the lungs] Filev LV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):105–8 (Eng. Abstr.) (Rus)

[A new immunogenetic marker of rheumatism] Kilasoniia LO, et al. **Klin Med (Mosk)** 1989 Jun;67(6):64–6 (Eng. Abstr.) (Rus)

[Indicators of cellular and humoral immunity during the process of healing of stomach ulcer] Sheptulin AA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):40–6 (Eng. Abstr.) (Rus)

[A bacterial adhesion method for identification of human B-lymphocytes] Ledvanov MIu, et al. **Lab Delo** 1988; (12):57–9 (Rus)

[Comparative study of the T- and B-cell immunity systems in human and animal embryogenesis] Khlystova ZS, et al. **Ontogenez** 1988 May–Jun;19(3):327–31 (Eng. Abstr.) (Rus)

[Clinico-immunologic characteristics of hepatitis A in children with chronic opisthorchiasis] Pomogaeva AP, et al. **Pediatriia** 1989;(7):23–7 (Eng. Abstr.) (Rus)

[Clinico-immunologic characteristics of opisthorchiasis in children living in a natural focus of the disease] Pomogaeva AP, et al. **Pediatriia** 1989;(4):109–10 (Rus)

[Functional activity of neutrophils and lymphocytes in hypertension] Ananchenko VG, et al. **Sov Med** 1988; (7):32–5 (Eng. Abstr.) (Rus)

[Immunological aspects of hyperplastic processes, precancerous conditions and cancer of the endometrium during the post-menopausal period] Kadagidze ZG, et al. **Sov Med** 1988;(7):25–9 (Rus)

[Immunologic parameters in burns] Shkrob LO, et al. **Sov Med** 1988;(7):17–20 (Eng. Abstr.) (Rus)

[Study of the characteristics of various hematologic diseases using monoclonal antibodies LT1, LT2 and LT7] Filatov AV, et al. **Ter Arkh** 1989;61(2):104–8 (Eng. Abstr.) (Rus)

[Clinico-immunological changes in patients with chronic pancreatitis and their correction during the treatment] Gubergrits NB. **Ter Arkh** 1989;61(2):18–21 (Eng. Abstr.) (Rus)

[Current concepts of the effect of corticosteroids on the functioning of the immune system] Zernov AA, et al. **Ter Arkh** 1988;60(8):132–6 (81 ref.) (Rus)

[Immunological indicators and superoxide dismutase activity in the erythrocytes of patients with viral hepatitis] Zhurkin AT, et al. **Ter Arkh** 1989;61(2):58–60 (Eng. Abstr.) (Rus)

[Cells-boosters as the modulators of immunogenesis] Pisarev VM, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):58–68 (Eng. Abstr.) (Rus)

[Disorders of immunologic reactivity in patients with destructive pancreatitis with functional insufficiency of the liver] Koval'chuk VI, et al. **Vestn Khir** 1988 Jul;141(7):45–9 (Eng. Abstr.) (Rus)

[Immunomorphologic characteristics of the tonsils and their lymph nodes in human fetuses] Khlystova ZS, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):55–8 (Eng. Abstr.) (Rus)

[Study of various immunologic indicators in patients with laryngopharyngeal cancer before and after administration of T-activin] Nummaev GM, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):67 (Rus)

[Indicators of the activity of the immune system during laser therapy of vasomotor rhinitis] Tulebaev RK, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):46–9 (Eng. Abstr.) (Rus)

[Lymphocytes of the blood, regional lymph nodes and tumor tissue in breast cancer] Bazhenov SM, et al. **Vopr Onkol** 1988;34(9):1040–8 (68 ref.) (Rus)

[Modification during experimental flavivirus infection of the formation of a B-cell immunologic memory to heterologous antigen] Vargin VV, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):476–9 (Rus)

[Effect of the microclimate of salt mines on T- and B-lymphocyte function in bronchial asthma patients] Simionka IuM, et al. **Vrach Delo** 1989 Mar;(3):57–9 (Eng. Abstr.) (Rus)

[The ratio of various lymphocyte populations in bacillary dysentery and nonspecific ulcerative colitis] Burmistrova AL. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):64–7 (Eng. Abstr.) (Rus)

[Immunocompetent cells in organs of local and systemic immunity in intact and sensitized guinea pigs upon specific intranasal immunotherapy] Nugmanova ZhS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):92–6 (Eng. Abstr.) (Rus)

[A study of the ability of Bordetella pertussis toxin to induce the formation of B-suppressors] Pinegin BV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):69–73 (Eng. Abstr.) (Rus)

[Immunological changes in common vitiligo] Vignale R, et al. **Med Cutan Ibero Lat Am** 1988;16(4):343–7 (Eng. Abstr.) (Spa)

[Study of immunoglobulin synthesis using the hemolytic plaque technic in lymphoproliferative syndromes of B-cell lineage] González Echeverría FJ, et al. **Sangre (Barc)** 1988 Aug;33(4):269–76 (Eng. Abstr.) (Spa)

METABOLISM

Malignant chronic lymphocytic leukemia B cells elaborate soluble factors that down-regulate T cell and NK function. Burton JD, et al. **Am J Hematol** 1989 Feb;30(2):61–7

Restriction of blood and marrow CLL-B cells to free L-chain Ig secretion: implication for normal B-cell function and control. Hopper JE, et al. **Am J Hematol** 1988 Nov;29(3):125–33

Production of B-cell growth factor interleukin 2 and gamma interferon by peripheral blood lymphocytes from patients with chronic lymphocytic leukemia of B-cell type. Rossi JF, et al. **Am J Hematol** 1988 Dec;29(4):183–8

Mechanism of class switching. Birshtein BK, et al. **Ann N Y Acad Sci** 1988;546:34–42 (21 ref.)

Expression of immunoglobulin genes in transgenic mice and transfected cells. Storb U, et al. **Ann N Y Acad Sci** 1988; 546:51–6 (24 ref.)

12S,19- and 12S,20-dihydroxyeicosanoids: novel 12S-hydroxy-5,8-cis-10-trans-14-cis-eicosatetraenoic acid metabolites formed by hydroxylation and reduction in murine lymphocytes. Danilowicz RM, et al. **Arch Biochem Biophys** 1989 May 15;271(1):72–83

Glycoprotein biosynthesis in B lymphocytes: induction of protein N-glycosylation, RNA synthesis, and DNA synthesis by phorbol ester plus ionomycin is blocked by protein kinase inhibitors. Rush JS, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):305–16

Modulation of voltage-dependent potassium channels in B lymphocytes. Choquet D, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3797–802 (55 ref.)

An Epstein-Barr virus-transformed B cell line produces autoregulatory interleukin-1 that regulates bone remodeling. Hanazawa S, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):57–63

B-cell reconstitution after autologous bone marrow transplantation: increase in serum CD23 ("IgE-binding factor") precedes IgE and B-cell regeneration. Bengtsson M, et al. **Blood** 1989 Jun;73(8):2139–44

Evidence that large granular lymphocytes from B-CLL patients with hypogammaglobulinemia down-regulate B-cell immunoglobulin synthesis [published erratum appears in Blood 1989 Jun;73(8):2232] Kay NE, et al. **Blood** 1989 Mar;73(4):1016–9

Macrophage colony-stimulating factor (CSF-1) is expressed by spontaneously outgrown EBV-B cell lines and activated normal B lymphocytes. Reisbach G, et al. **Blood** 1989 Aug 15;74(3):959–64

Leukemic B-cell precursors express functional receptors for human interleukin-3. Uckun FM, et al. **Blood** 1989 Feb; 73(2):533–42

Leukemic B-cell precursors constitutively express functional receptors for human interleukin-1. Uckun FM, et al. **Blood** 1989 Aug 1;74(2):761–76

Autocrine production of pre-B-cell stimulating activity by a variety of transformed murine pre-B-cell lines. Lemoine FM, et al. **Cancer Res** 1988 Nov 15;48(22):6438–43

In vitro and in vivo activation of B-lymphocytes: a flow cytometric study of chromatin structure employing 7-aminoactinomycin D. Stokke T, et al. **Cancer Res** 1988 Dec 1;48(23):6708–14

Studies on the influence of the internal environment on autoantibody production by B cells. Klinman DM, et al. **Cell Immunol** 1988 Dec;117(2):360–8

Cadmium-induced synthesis of metallothioneins in human T and B cell purified by a fluorescence activated cell sorter. Yamada H, et al. **Chem Biol Interact** 1989;70(1–2):117–26

Regulation of c-myc gene transcription in B lymphocytes: mechanisms of negative and positive control. Buckler AJ, et al. **Curr Top Microbiol Immunol** 1988;141:238–46

Interleukin-2 receptor is functionally linked with in vitro activation of B cells isolated from non-Hodgkin's lymphomas. Garraud O, et al. **Diagn Clin Immunol** 1988; 5(6):417–20

Human interleukin 4 down-regulates the surface expression of CD5 on normal and leukemic B cells. Defrance T, et al. **Eur J Immunol** 1989 Feb;19(2):293–9

Correlation between ribosylation of pertussis toxin substrates and inhibition of peptidoglycan-, muramyl dipeptide- and lipopolysaccharide-induced mitogenic stimulation in B lymphocytes. Dziarski R. **Eur J Immunol** 1989 Jan; 19(1):125–30

T helper cells grown with hapten-modified cultured Langerhans' cells produce interleukin 4 and stimulate IgE production by B cells. Hauser C, et al. **Eur J Immunol** 1989 Feb;19(2):245–51

Cytoplasmic alkalinization produced by the combination of anti-immunoglobulin antibody plus cytochalasin D in murine B lymphocytes. van Haelst-Pisani C, et al. **Exp Cell Res** 1989 Jul;183(1):251–6

Zinc increases phorbol ester receptors in intact B-cells, neutrophil polymorphs and platelets. Forbes IJ, et al. **FEBS Lett** 1989 Apr 24;247(2):445–7

Protein kinase C activators inhibit the antigen receptor-coupled polyphosphoinositide phosphodiesterase in murine B lymphocytes. Harnett MM, et al. **FEBS Lett** 1988 Nov 7;239(2):281–4

Differential binding of IL-1 alpha and IL-1 beta to receptors on B and T cells. Scapigliati G, et al. **FEBS Lett** 1989 Jan 30;243(2):394–8

The regulation of immunoglobulin production by B cells in patients with endometriosis. Badawy SZ, et al. **Fertil Steril** 1989 May;51(5):770–3

Susceptibility to lipid peroxidation and accumulation of fluorescent products with age is greater in T-cells than B-cells. Hendricks LC, et al. **Free Radic Biol Med** 1988; 5(3):145–54

Chemiluminescence response of human B-cell lines. Kapp A, et al. **Free Radic Res Commun** 1987;2(4–6):337–41

Characterization of B cells in severe combined immunodeficiency disease. Small TN, et al. **Hum Immunol** 1989 Jul;25(3):181–93

B lymphocyte derived hematopoietic growth factors. Pluznik DH, et al. **Immunol Invest** 1989 Jan–May;18(1–4):103–16

Antigen-presenting function of B lymphocytes. Pierce SK, et al. **Immunol Rev** 1988 Dec;106:149–80 (74 ref.)

Human mAbs produced by primary in-vitro immunization. Borrebaeck CA. **Immunol Today** 1988 Nov;9(11):355–9 (63 ref.)

The expression of immunoglobulin genes. Neuberger MS, et al. **Immunol Today** 1988 Sep;9(9):278–81 (53 ref.)

Functional and phenotypic analysis of human T-cell clones which stimulate IgE production in vitro. Quint DJ, et al. **Immunology** 1989 May;67(1):68–74

Alloimmunization-induced changes in beta-adrenoceptor expression and cAMP on B lymphocytes. Genaro AM, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):63–70

Study of serum IgE, T and B lymphocytes in bronchial asthma. Gupta S, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):233–41

Ability of alpha (but not beta) form interleukin-1 to support DNA synthesis in human tonsillar B cells. Gallagher G, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):357–9

Time course of intracellular associations, processing, and cleavages of Ii forms and class II major histocompatibility complex molecules. Nguyen QV, et al. **J Biol Chem** 1989 Jan 25;264(3):1631–7

Evidence that the interferon-induced Daudi cell human lupus inclusions are de novo synthesized complexes of ribonucleoprotein and membrane. Rich SA, et al. **J Biol Chem** 1989 Feb 25;264(6):3529–37

Phosphorylation of the CD20 phosphoprotein in resting B lymphocytes. Regulation by protein kinase C. Valentine

MA, et al. **J Biol Chem** 1989 Jul 5;264(19):11282–7

Demonstration and partial characterization of the interferon-gamma receptor on human B lymphocytes. Nakagawa T, et al. **J Cell Biochem** 1989 Aug;40(4):417–30

Epitope-directed processing of specific antigen by B lymphocytes. Davidson HW, et al. **J Cell Biol** 1989 Jul; 109(1):85–92

Human natural killer (NK) cells produce a late-acting B-cell differentiation activity. Kimata H, et al. **J Clin Immunol** 1988 Sep;8(5):381–9

Correction of the molecular defect in B lymphocytes from X-linked agammaglobulinemia by cell fusion. Schwaber J, et al. **J Clin Invest** 1988 Oct;82(4):1471–6

Production of lymphotoxin by isolated human tonsillar B lymphocytes and B lymphocyte cell lines. Sung SS, et al. **J Clin Invest** 1989 Jul;84(1):236–43

Recombinant murine IL-5 induces high rate IgA synthesis in cycling IgA-positive Peyer's patch B cells. Beagley KW, et al. **J Immunol** 1988 Sep 15;141(6):2035–42

Biochemical characteristics and partial amino acid sequence of the receptor-like human B cell and carcinoma antigen CDw40. Braesch-Andersen S, et al. **J Immunol** 1989 Jan 15;142(2):562–7

Different patterns of inositol polyphosphate production are seen in B lymphocytes after cross-linking of sIg by anti-Ig antibody or by a multivalent anti-Ig antibody dextran conjugate. Brunswick M, et al. **J Immunol** 1989 Sep 1; 143(5):1414–21

Differential expression of functional adrenocorticotropic hormone receptors by subpopulations of lymphocytes. Clarke BL, et al. **J Immunol** 1989 Jul 15;143(2):464–9

Endocytosis of antigen, anti-idiotype, and anti-immunoglobulin antibodies and receptor re-expression by murine B cells. Drake JR, et al. **J Immunol** 1989 Sep 15;143(6):1768–76

Activation and infection of B cells by Epstein-Barr virus. Role of calcium mobilization and of protein kinase C translocation. Dugas B, et al. **J Immunol** 1988 Dec 15; 141(12):4344–51

Origin and fate of IgE-bearing lymphocytes. II. Modulation of IgE isotype expression on Peyer's patch cells by feeding with certain bacteria and bacterial cell wall components or by thymectomy. Durkin HG, et al. **J Immunol** 1989 Sep 15;143(6):1777–83

Binding of staphylococcal enterotoxin A to HLA-DR on B cell lines. Fischer H, et al. **J Immunol** 1989 May 1; 142(9):3151–7

Transferrin receptor synthesis is an early event in B cell activation. Futran J, et al. **J Immunol** 1989 Aug 1; 143(3):787–92

Na+/H+ exchange activation mediates the lipopolysaccharide-induced proliferation of human B lymphocytes and is impaired in malignant B-chronic lymphocytic leukemia lymphocytes. Gaidano G, et al. **J Immunol** 1989 Feb 1;142(3):913–8

IFN-gamma and prostaglandin E2 inhibit IL-4-induced expression of Fc epsilon R2/CD23 on B lymphocytes through different mechanisms without altering binding of IL-4 to its receptor. Galizzi JP, et al. **J Immunol** 1988 Sep 15;141(6):1982–8

Ig lambda-producing B cells do not show feedback inhibition of gene rearrangement. Gollahon KA, et al. **J Immunol** 1988 Oct 15;141(8):2771–80

Regulation of antigen presentation. II. Anti-Ig and IL-2 induce IL-1 production by murine splenic B cells. Hawrylowicz CM, et al. **J Immunol** 1989 May 15; 142(10):3361–8

Origin of the autoreactive anti-type II collagen response. II. Specificities, antibody isotypes and usage of V gene families of anti-type II collagen B cells. Holmadhl R, et al. **J Immunol** 1989 Mar 15;142(6):1881–6

Production of multiple lymphokines by the A20.1 B cell lymphoma after cross-linking of membrane Ig by immobilized anti-Ig. Justement LB, et al. **J Immunol** 1989 Aug 1;143(3):881–9

Superinduction of the murine B cell Fc epsilon RII by T helper cell clones. Role of IL-4. Keegan AD, et al. **J Immunol** 1989 Jun 1;142(11):3868–74

IL-4 induces the specific rearrangement of gamma 1 genes on the expressed and unexpressed chromosomes of lipopolysaccharide-activated normal murine B cells. Kepron MR, et al. **J Immunol** 1989 Jul 1;143(1):334–9

Induction of c-fos and c-myc expression during B cell activation by IL-4 and immunoglobulin binding ligands. Klemsz MJ, et al. **J Immunol** 1989 Aug 1;143(3):1032–9

A novel VHDJH to JH joining that induces H chain production in an Ig-null immature B cell line. Komori T, et al. **J Immunol** 1989 Aug 1;143(3):1040–5

IL-4 induces loss of B lymphocyte Fc gamma R II ligand binding capacity. Laszlo G, et al. **J Immunol** 1988 Nov 15;141(10):3416–21

The effects of IL-4 and IL-5 on the IgA response by murine Peyer's patch B cell subpopulations. Lebman DA, et al. **J Immunol** 1988 Sep 15;141(6):2050–6

IgE receptor on human lymphocytes. IV. Further analysis of its structure and of the role of N-linked carbohydrates. Letellier M, et al. **J Immunol** 1988 Oct 1;141(7):2374–81

Clonal analysis of autoantibody-producing cell precursors in the preimmune B cell repertoire. McHeyzer-Williams MG, et al. **J Immunol** 1988 Dec 15;141(12):4118–23

The DJH complex remains active in recombination to VH segments after the loss of mu-chain expression in mu-positive pre-B cells. Maeda T, et al. **J Immunol** 1989 May 15;142(10):3652–6

Superoxide-dependent nitroblue tetrazolium reduction and expression of cytochrome b-245 components by human tonsillar B lymphocytes and B cell lines. Maly FE, et al. **J Immunol** 1989 Feb 15;142(4):1260–7

Characterization of the murine T cell receptor for IgE (Fc epsilon RII). Demonstration of shared and unshared epitopes with the B cell Fc epsilon RII. Mathur A, et al. **J Immunol** 1988 Oct 15;141(8):2661–7

Expression, distribution and specificity of Fc receptors for IgM on murine B cells. Mathur A, et al. **J Immunol** 1988 Sep 15;141(6):1855–62

Indiscriminate representation of VH-gene families in the murine B lymphocyte responses to Trypanosoma cruzi. Minoprio P, et al. **J Immunol** 1989 Jun 1;142(11):4017–21

Probing the normal and autoimmune B cell repertoire with Epstein-Barr virus. Frequency of B cells producing monoreactive high affinity autoantibodies in patients with Hashimoto's disease and systemic lupus erythematosus. Nakamura M, et al. **J Immunol** 1988 Dec 15; 141(12):4165–72

B cells expressing Ig transgenes respond to a T-dependent antigen only in the presence of Ia-compatible T cells. O'Brien RL, et al. **J Immunol** 1988 Nov 15;141(10):3335–41

Identification of high affinity receptors for vasoactive intestinal peptide on human lymphocytes of B cell lineage. O'Dorisio MS, et al. **J Immunol** 1989 May 15; 142(10):3533–6

Monoclonal rheumatoid factor-secreting cells in a patient with mixed cryoglobulinemia. Homogeneity and stability of the idiotypic production and in vitro idiotypic suppression. Pasquali JL, et al. **J Immunol** 1989 Sep 15; 143(6):1826–31

IL-4 (B cell stimulatory factor 1) overcomes Fc gamma receptor-mediated inhibition of mouse B lymphocyte proliferation without affecting inhibition of c-myc mRNA induction. Phillips NE, et al. **J Immunol** 1988 Dec 15; 141(12):4243–9

IL-4 induces LFA-1 and LFA-3 expression on Burkitt's lymphoma cell lines. Requirement of additional activation by phorbol myristate acetate for induction of homotypic cell adhesions. Rousset F, et al. **J Immunol** 1989 Sep 1; 143(5):1490–8

Degradation of a monoclonal anti-mu chain antibody in a human surface IgM-positive B cell line starts in prelysosomal vesicle. Ruud E, et al. **J Immunol** 1988 Nov 1;141(9):2951–8

Processing and presentation of insulin. II. Evidence for intracellular, plasma membrane-associated and extracellular degradation of human insulin by antigen-presenting B cells. Semple JW, et al. **J Immunol** 1989 Jun 15;142(12):4184–93

Molecular events during B lymphocyte differentiation. Induction of endogenous mouse mammary tumor proviral envelope transcripts after B cell stimulation. Sharma S, et al. **J Immunol** 1988 Oct 1;141(7):2510–8

Binding the low affinity Fc epsilon R on B cells suppresses ongoing human IgE synthesis. Sherr E, et al. **J Immunol** 1989 Jan 15;142(2):481–9

Production of human cells expressing individual transferred HLA-A,-B,-C genes using an HLA-A,-B,-C null human cell line. Shimizu Y, et al. **J Immunol** 1989 May 1; 142(9):3320–8

Clonal analysis of autoantibody-producing cell precursors in the preimmune B cell repertoire [letter] Sinclair NR. **J Immunol** 1989 May 15;142(10):3726–7

Differential regulation of murine B cell Fc gamma RII expression by CD4+ T helper subsets. Snapper CM, et al. **J Immunol** 1989 Oct 1;143(7):2133–41

Induction of the H-2 D antigen during B cell activation. Southern SO, et al. **J Immunol** 1989 Jan 1;142(1):336–42

Immunomodulatory role of IL-4 on the secretion of Ig by human B cells. Splawski JB, et al. **J Immunol** 1989 Mar 1;142(5):1569–75

Production of B cell-stimulating factors by B cells in patients with systemic lupus erythematosus. Tanaka Y, et al. **J Immunol** 1988 Nov 1;141(9):3043–9

Expression of IL-1 receptors on human peripheral B cells. Tanaka Y, et al. **J Immunol** 1989 Jan 1;142(1):167–72

Production of an IL-1-like factor by 3B6 EBV-infected B cells [letter] Wakasugi H, et al. **J Immunol** 1989 Apr 1; 142(7):2569–70

Role of transcriptional termination in the regulation of mu mRNA expression in B lymphocytes. Weiss EA, et al. **J Immunol** 1989 Aug 1;143(3):1046–52

MHC class II transcription in different mouse cell types. Differential requirement for protein synthesis between B cells and macrophages. Woodward JG, et al. **J Immunol** 1989 Jun 1;142(11):4062–9

Requirements for the generation of memory B cells in vivo and their subsequent activation in vitro for the production of antigen-specific hybridomas. De Boer M, et al. **J Immunol Methods** 1988 Oct 4;113(1):143–9

Expression and regulation of interleukin-1 mRNA and interleukin-1 receptors in human B-cell lines. Bertoglio J, et al. **J Mol Cell Immunol** 1989;4(3):139–47; discussion 148

Expression of intracisternal A-type particles is increased when a B-cell lymphoma differentiates into an immunoglobulin-secreting cell. Wiest DL, et al. **J Virol** 1989 Feb;63(2):659–68

Production of human B cell hybridomas with interleukin 2 receptors selected by a new selective medium, HAT-neo. Ikewaki N. **Kitasato Arch Exp Med** 1988 Dec;61(4):225–35

The DNA synthesis of leukemic (L2C) guinea pig B lymphocytes involves a permanent activation of protein kinase C without corresponding phosphoinositide hydrolysis. Vial HJ, et al. **Leuk Res** 1989;13(7):583–94

Phorbol ester and B cell-stimulatory factor synergize to induce B-chronic lymphocytic leukemia cells to simultaneous immunoglobulin secretion and DNA synthesis. Carlsson M, et al. **Leukemia** 1988 Nov; 2(11):734–44

T cell receptor gene rearrangements in B-precursor acute lymphoblastic leukemia correlate with age and the stage of B cell differentiation. Nuss R, et al. **Leukemia** 1988 Nov; 2(11):722–7

Age-related changes of proliferative response, kinetics of expression of protooncogenes after the mitogenic stimulation and methylation level of the protooncogene in purified human lymphocyte subsets. Deguchi Y, et al. **Mech Ageing Dev** 1988 Aug;44(2):153–68

Measurement of phosphoinositide hydrolysis in isolated cell membrane preparations. Chien MM, et al. **Methods Enzymol** 1989;168:338–47

New B-lymphocyte-specific enhancer-binding protein. Dorn A, et al. **Mol Cell Biol** 1989 Jan;9(1):312–20

Anatomy of a new B-cell-specific enhancer. Koch W, et al. **Mol Cell Biol** 1989 Jan;9(1):303–11

The in vitro translation product of the murine lambda 5 gene contains a functional signal peptide. Jongstra J, et al. **Mol Immunol** 1988 Aug;25(8):687–93

Cross-linking of membrane IgM on B CLL cells. Grillot-Courvalin C, et al. **Nouv Rev Fr Hematol** 1988; 30(5–6):301–4

Immunoglobulin V gene utilization in chronic lymphocytic leukemia and non-Hodgkin's B cell lymphomas. Kipps TJ. **Nouv Rev Fr Hematol** 1988;30(5–6):293–8 (34 ref.)

Nucleotide sequence of an immunoglobulin D-J gene fusion from a B-cell prolymphocytic leukaemia. Kennedy MA, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4879

1H-nuclear magnetic resonance (NMR) spectroscopic study of B lymphocytes stimulated with lipopolysaccharide (LPS). Ohsaka A, et al. **Physiol Chem Phys Med NMR** 1988;20(3):167–70

Coordinate viral induction of tumor necrosis factor alpha and interferon beta in human B cells and monocytes. Goldfeld AE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1490–4

Conserved upstream sequences of human class II major histocompatibility genes enhance expression of class II genes in wild-type but not mutant B-cell lines. Sloan JH, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8186–90

Overexpression of the human BCL-2 gene product results in growth enhancement of Epstein-Barr virus-immortalized B cells. Tsujimoto Y. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1958–62

Factors, receptors and signals for B lymphocyte activation. Kishimoto T. **Prog Allergy** 1988;42:280–305 (113 ref.)

The immune response to bacterial dextrans. VI. No correlation between the frequency of cells expressing a major anti-dextran idiotype and the idiotype profiles of specific antibody responses. Lundkvist I, et al. **Scand J Immunol** 1989 Apr;29(4):427–37

Heterogeneity of degradation of B-cell endocytosed monoclonal antibodies reacting with different sIgM epitopes. Ruud E, et al. **Scand J Immunol** 1989 Mar; 29(3):299–308

Antigen processing: an interim report. Pierce SK, et al. **Trends Biochem Sci** 1988 Jan;13(1):27–9 (20 ref.)

[24,25-Dihydroxyvitamin D3 modulates the effect of 1alpha-hydroxyvitamin D3 on B lymphocyte maturation in chickens] Babarykin DA, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):82–6 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

T-cells inhibit Friend murine leukemia virus infection of B-cells in vitro. Isaak DD, et al. **Cell Immunol** 1989 May; 120(2):375–86

Authentication of a human lymphoblastoid cell line producing a retrovirus and the infectivity of human T-cell and B-cell lines with the virus. Oda T, et al. **Cell Mol Biol** 1988;34(5):529–37

Infection of B lymphocytes by the human immunodeficiency virus and their susceptibility to cytotoxic cells. Malkovský M, et al. **Eur J Immunol** 1988 Sep;18(9):1315–21

Surface marker characterization of EBV-carrying cells in blood of healthy seropositive individuals. Lewin N, et al. **Immunobiology** 1988 Jul;177(3):211–9

Altered expression of the Salmonella typhimurium-specific B-cell repertoire in mice chronically treated with antibodies to immunoglobulin D. Fultz MJ, et al. **Infect Immun** 1989 Feb;57(2):432–7

Epstein-Barr virus-positive recipient type B-cells survive in a "complete chimera" after allogeneic bone-marrow transplantation. Gerhartz HH, et al. **Int J Cancer** 1988 Nov 15;42(5):672–6

Epstein-Barr virus and a tumour-promoting phorbol ester use similar mechanisms in the stimulation of human B-cell proliferation. Guy GR, et al. **Int J Cancer** 1989 Apr 15; 43(4):703–8

Induction of Epstein-Barr virus in B-lymphoblastoid cells by human immunodeficiency virus type 1. Lai PK, et al.

Int J Cancer 1989 Jun 15;43(6):1104–11
Epstein–Barr virus–infected B cells persist in the circulation of acyclovir–treated virus carriers. Yao QY, et al. Int J Cancer 1989 Jan 15;43(1):67–71
Epstein–Barr virus latent gene expression during the initiation of B cell immortalization. Allday MJ, et al. J Gen Virol 1989 Jul;70 (Pt 7):1755–64
Persistent replication of herpes simplex virus type 1 in JOK–1 cells. Thiele K, et al. J Gen Virol 1989 Jul;70 (Pt 7):1907–11
Mouse hepatitis virus 3 replication in T and B lymphocytes correlate with viral pathogenicity. Lamontagne L, et al. J Immunol 1989 Jun 15;142(12):4458–65
Susceptibility to AZT of HIV–1 variants grown in Epstein–Barr virus–transformed B cell lines. Tremblay M, et al. J Infect Dis 1989 Jul;160(1):31–6
Persistent productive HIV infection in EBV–transformed B lymphocytes. Tozzi V, et al. J Med Virol 1989 Jan; 27(1):19–24
Identification and some properties of a unique DNA polymerase from cells infected with human B–lymphotropic virus. Bapat AR, et al. J Virol 1989 Mar; 63(3):1400–3
Influence of Burkitt's lymphoma and primary B cells on latent gene expression by the nonimmortalizing P3J–HR–1 strain of Epstein–Barr virus. Rooney C, et al. J Virol 1989 Apr; 63(4):1531–9
Soluble gp350/220 and deletion mutant glycoproteins block Epstein–Barr virus adsorption to lymphocytes. Tanner J, et al. J Virol 1988 Dec;62(12):4452–64
Localization of Epstein–Barr virus envelope glycoproteins on the inner nuclear membrane of virus–producing cells. Torrisi MR, et al. J Virol 1989 Feb;63(2):828–32
Epstein–Barr virus latent infection membrane protein alters the human B–lymphocyte phenotype: deletion of the amino terminus abolishes activity. Wang D, et al. J Virol 1988 Nov;62(11):4173–84
Human B–lymphotropic virus (human herpesvirus–6). Ablashi DV, et al. J Virol Methods 1988 Sep;21(1–4):29–48 (24 ref.)
Epstein–Barr virus silver anniversary. Lancet 1989 May 27; 1(8648):1171–3 (30 ref.)
Heterogeneity of HIV–1 replication and antigen expression in EBV–transformed B cell lines. Tremblay M, et al. Leukemia 1988 Dec;2(12 Suppl):233S–240S
Genetic analysis of immortalizing functions of Epstein–Barr virus in human B lymphocytes. Hammerschmidt W, et al. Nature 1989 Aug 3;340(6232):393–7
Cycloheximide–resistant gene of Epstein–Barr virus in freshly infected B lymphocytes. Yamamoto M, et al. Virology 1989 May;170(1):307–10
[Human B lymphotropic virus (HBLV) or human herpesvirus (HHV–6)] Prou O, et al. Rev Fr Transfus Hemobiol 1989 Jun;32(3):203–13 (45 ref.) (Eng. Abstr.) (Fre)

PATHOLOGY

Colony–stimulating factors in B–cell colony formation in patients with B–cell chronic lymphocytic leukemia. Ishiyama T, et al. Acta Haematol (Basel) 1989;81(1):10–4
Auer–rod–like inclusions in cells of B–lymphocytic lineage [letter] Lemez P. Acta Haematol (Basel) 1988;80(3):177–8
Relationship between lymphocyte size and enzyme activities in two morphological variants of B–chronic lymphocytic leukaemia. Vives Corrons JL, et al. Acta Haematol (Basel) 1989;82(1):22–6
The distribution of immunocompetent cells in the compartments of the palatine tonsils in bacterial and viral infections of the upper respiratory tract. Bernstein JM, et al. Acta Otolaryngol Suppl (Stockh) 1988;454:153–62
Clonal B–cell proliferation in an infant with congenital HIV infection and immune thrombocytopenia. Voelkerding KV, et al. Am J Clin Pathol 1988 Oct;90(4):470–4
Polyclonal B–cell lymphocytosis and hypergammaglobulinemia in patients with Gaucher disease. Marti GE, et al. Am J Hematol 1988 Dec;29(4):189–94
Testicular tumor as the first manifestation of B–lymphoid blastic crisis in a case of Ph–positive chronic myelogenous leukemia. Ohyashiki JH, et al. Am J Hematol 1988 Nov; 29(3):164–7
Response of neoplasms of B cell lineage to the proliferative effects of B cell growth factor and the phorbol ester TPA. Kinney MC, et al. Am J Pathol 1989 Apr;134(4):913–23
Primary multilobulated B–cell lymphoma of the breast. Elavathil LJ, et al. Arch Pathol Lab Med 1989 Sep; 113(9):1081–4
Establishment of two Epstein–Barr virus negative Burkitt cell lines from a patient with AIDS and B–cell lymphoma. Ganser A, et al. Blood 1988 Oct;72(4):1255–60
Monocytoid B–cell lymphoma: its evolution and relationship to other low–grade B–cell neoplasms. Traweek ST, et al. Blood 1989 Feb;73(2):573–8
Prognostic significance of splenic follicle size in splenectomized idiopathic thrombocytopenic purpura patients. Arendt T, et al. Blut 1988 Dec;57(6):347–9
Autoimmunity and second malignancy in large granular lymphocytic leukaemia. Bassan R, et al. Bone Marrow Transplant 1989 Jan;4 Suppl 1:149–50
B cell acute lymphoblastic leukemia (ALL) in donor cells following bone marrow transplantation for T cell ALL. Feig SA, et al. Bone Marrow Transplant 1988 Jul;3(4):331–7
Thymus and B cell reconstitution in severe combined immunodeficiency after transplantation of monoclonal antibody depleted parental mismatched bone marrow. Hong R, et al. Bone Marrow Transplant 1987 Apr; 1(4):405–9
Abnormal in vitro differentiation of clonogenic B–cells in common acute lymphoblastic leukemia in complete remission. A marker for minimal residual disease? Bréard J, et al. Bull Soc Sci Med Grand Duche Luxemb 1989 Mar–Apr;126(1):47–50
Plasmacellular hyperplasia after allogeneic bone marrow transplantation. Schuurman HJ, et al. Cancer Detect Prev 1988;12(1–6):643–55
Immunosialadenitis (Sjögren's syndrome) and lymphoproliferation. Schmid U, et al. Clin Exp Rheumatol 1989 Mar–Apr;7(2):175–80
Abnormal development of B cells and B cell progenitors in autoimmune (NZB x NZW)F1 mice. Riley RL, et al. Clin Immunol Immunopathol 1989 Jun;51(3):372–85
B cell proliferation in follicles, germinal centre formation and the site of neoplastic transformation in Burkitt's lymphoma. MacLennan IC, et al. Curr Top Microbiol Immunol 1988;141:138–48
Chronic B–cell lymphocytosis. Perreault C, et al. Eur J Haematol 1989 Apr;42(4):361–7
Cytogenetic studies on prolymphocytic leukemia. 1. B–cell prolymphocytic leukemia. Brito–Babapulle V, et al. Hematol Pathol 1987;1(1):27–33
Do pathologic features predict prognosis in diffuse large B–cell lymphoma? Vago JF, et al. Hematol Pathol 1987; 1(4):217–25
Abnormalities of B cell activation and immunoregulation in patients with chronic inflammatory liver diseases. Sieber G, et al. Immunobiology 1988 Dec;178(3):215–23
Somatic mutations in B lymphocytes: new perspectives in tolerance research? Nossal GJ. Immunol Cell Biol 1988 Apr; 66 (Pt 2):105–10 (30 ref.)
Use of monoclonal antibodies (UCHL1, Ki–B3) against T and B cell antigens in routine paraffin–embedded skin biopsy specimens. Sterry W, et al. J Am Acad Dermatol 1989 Jul;21(1):98–107
Bone marrow cells from young and old New Zealand black mice can reconstitute B lymphocytes in severe combined immunodeficient recipients. Dorshkind K, et al. J Autoimmun 1989 Apr;2(2):173–86
Characterization of B lymphocytes present in the demyelinating lesions induced by Theiler's virus [published erratum appears in J Immunol 1989 Sep 15;143(6):2081] Cash E, et al. J Immunol 1989 Aug 1;143(3):984–8
Establishment of a leukemic cell model for studying human pre–B to B cell differentiation. Wörmann B, et al. J Immunol 1989 Jan 1;142(1):110–7
T cell development in B cell deficient mice. III. Restriction specificity of suppressor T cell factor(s) produced in mice treated chronically with rabbit anti–mouse mu chain antibody. HayGlass KT, et al. J Mol Cell Immunol 1985; 2(2):107–17
Polymorphic reticulosis: a malignant lymphoma of B–cell lineage. Lin CZ, et al. Laryngoscope 1989 Mar;99(3):307–10
B cell maturation in chronic lymphocytic leukemia. III. Effect of recombinant cytokines on leukemic B cell proliferation. Nerl C, et al. Leukemia 1988 Dec;2(12 Suppl):50S–56S
Stepwise progression of B cell malignancy occurred in a bone marrow stromal cell–dependent pre–B cell clone. Ogawa M, et al. Leukemia 1989 Apr;3(4):282–8
The effect of 12–O–tetradecanoylphorbol–13–acetate (TPA) on leukemic cells from chronic B cell leukemia. Tokumine Y, et al. Leukemia 1989 Jul;3(7):516–21
Circulating buttock cells in non–Hodgkin's lymphoma. Verbunt RJ, et al. Leukemia 1989 Aug;3(8):578–84
Proliferative effect of interleukin–3 on normal and leukemic human B cell precursors. Wörmann B, et al. Leukemia 1989 Jun;3(6):399–404
Intravascular lymphomatosis (malignant angioendotheliomatosis). A B–cell neoplasm expressing surface homing receptors. Ferry JA, et al. Mod Pathol 1988 Nov;1(6):444–52
Differentiation in vitro of a leukemia virus–induced B–cell lymphoma into macrophages. Hanecak R, et al. Mol Cell Biol 1989 May;9(5):2264–8
Clinical implication of chromosomal aberrations in chronic B–lymphocytic leukaemia cells. Gahrton G, et al. Nouv Rev Fr Hematol 1988;30(5–6):389–92
Growth of E mu–myc transgenic B–lymphoid cells in vitro and their evolution toward autonomy. Langdon WY, et al. Oncogene Res 1988;3(3):271–9
Immunohistochemical characterization of a B–cell signet ring cell lymphoma. Report of a case. Uccini S, et al. Pathol Res Pract 1988 Aug;183(4):497–504
In vivo induction of malignant transformation of nude mouse B lymphocytes by a human multiple myeloma. Gao TX, et al. Sci Sin [B] 1988 Aug;31(8):953–61
Transformation and plasmacytoid differentiation of EBV–infected human B lymphoblasts by ras oncogenes. Seremetis S, et al. Science 1989 Feb 3;243(4891):660–3
Abnormal in vitro differentiation of clonogenic B–cells in common acute lymphoblastic leukemia in complete remission. A marker for minimal residual disease? Bréard J, et al. Suppl J Med Oncol Tumor Pharmacother 1988; 1:47–50
Establishment and characterization of an Epstein–Barr virus negative B–cell lymphoma cell line and successful heterotransplantation. Nozawa Y, et al. Tohoku J Exp Med 1988 Dec;156(4):319–30
[B– and T–lymphocyte compartments in the spleen in idiopathic thrombocytopenic purpura] Arendt T, et al. Folia Haematol (Leipz) 1988;115(5):711–8 (Eng. Abstr.) (Ger)
[Retrospective marker analyses performed with blood and bone marrow smears using an immunoenzyme procedure (alkaline phosphatase–anti–alkaline phosphatase technic)] Ebener U, et al. Klin Padiatr 1989 Jul–Aug;201(4):242–6 (Eng. Abstr.) (Ger)
[Primary mediastinal, clear cell B–cell lymphoma is an epithelium–associated thymus lymphoma] Möller P, et al. Pathologe 1989 Jul;10(4):234–9 (Ger)
[Effect of T cells on B cell colony formation in patients with B–chronic lymphocytic leukemia] Abe S, et al. Rinsho Ketsueki 1988 Jul;29(7):1036–40 (Eng. Abstr.) (Jpn)
[Which cells in the differentiation process become precursors of B–cell chronic lymphoid leukemia?] Rupniewska ZM, et al. Postepy Hig Med Dosw 1988 May–Jun;42(3):315–38 (183 ref.) (Eng. Abstr.) (Pol)
[Which cells during the process of differentiation give rise to chronic B–cell lymphocytic leukemia? I.] Rupniewska ZM, et al. Postepy Hig Med Dosw 1988 Mar–Apr; 42(2):198–223 (205 ref.) (Eng. Abstr.) (Pol)
[Electron microscopy and electron autoradiography examinations of the palatine tonsils in relation to age] Tokhadze TL, et al. Vestn Otorinolaringol 1988 May–Jun; (3):39–42 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Rat immunoglobulin genes have comparable patterns of JH rearrangement in normal peripheral B cells and in pre–B and cultured TdT+ cells from bone marrow. Hunt SV, et al. Adv Exp Med Biol 1988;237:63–8
Migration of newly–produced virgin B cells from bone marrow to secondary lymphoid organs. Lortan JE, et al. Adv Exp Med Biol 1988;237:87–92
Control of recombination events during lymphocyte differentiation. Heavy chain variable region gene assembly and heavy chain class switching. Alt FW, et al. Ann N Y Acad Sci 1988;546:9–24 (39 ref.)
Antibody–producing cells in CSF and peripheral blood. A new principle for evaluation of B–cell response in inflammatory nervous system diseases. Link H, et al. Ann N Y Acad Sci 1988;540:277–81
Cells and molecules that regulate B lymphopoiesis in bone marrow. Kincade PW, et al. Annu Rev Immunol 1989; 7:111–43 (207 ref.)
Autoantibodies to intracellular proteins in human systemic lupus erythematosus are not due to random polyclonal B cell activation. Gharavi AE, et al. Arthritis Rheum 1988 Nov;31(11):1337–45
Changes in B lymphocyte function in rheumatoid arthritis and lupus nephritis after total lymphoid irradiation. Solovera JJ, et al. Arthritis Rheum 1988 Dec; 31(12):1481–91
The protein CDP, but not CP1, footprints on the CCAAT region of the gamma–globin gene in unfractionated B–cell extracts. Superti–Furga G, et al. Biochim Biophys Acta 1989 Mar 1;1007(2):237–42
Extranodal noncutaneous lymphoid hyperplasias represent a continuous spectrum of B–cell neoplasia: demonstration by molecular genetic analysis. Knowles DM, et al. Blood 1989 May 1;73(6):1635–45
Diversity in inhibitory effects of IFN–gamma and IFN–alpha A on the induced DNA synthesis of a hairy cell leukemia B lymphocyte clone reflects the nature of the activating ligand. Mongini P, et al. Blood 1988 Nov;72(5):1553–9
Cross–lineage gene rearrangements in human leukemic B–precursor cells occur frequently with V–DJ rearrangements of IgH genes. Nosaka T, et al. Blood 1989 Jul;74(1):361–8
In vitro stimulation of B–cell induces differentiation and not proliferation [letter] Barnett D, et al. Br J Haematol 1989 May;72(1):113
Identification of an epitope in the major envelope protein of Epstein–Barr virus that mediates viral binding to the B lymphocyte EBV receptor (CR2). Nemerow GR, et al. Cell 1989 Feb 10;56(3):369–77
Activation of immunoglobulin kappa gene rearrangement correlates with induction of germline kappa gene transcription. Schlissel MS, et al. Cell 1989 Sep 8; 58(5):1001–7
B–cell–mediated depression of the granulomatous response to BCG in mice. Campa M, et al. Cell Immunol 1989 Apr 1;119(2):279–85
Fc fragment from human IgG induces PGE2 secretion. II. Negative regulation in B cell differentiation. Carosella ED, et al. Cell Immunol 1989 Jul;121(2):261–8
Human B cell differentiation by Fc fragment. III. Effect of IL–1 and IL–2 on differentiation of human B lymphocytes induced by Fc fragments of human IgG. Carosella ED, et al. Cell Immunol 1989 Jul;121(2):269–79
Potentiation of the proliferative response of human B lymphocytes to low molecular weight B cell growth factor (LMW–BCGF) by fibroblast growth factors (FGFs). Genot E, et al. Cell Immunol 1989 Sep;122(2):424–39
B cell dependent T cell function blocked by perinatal exposure of mice to anti–IgM antibodies. Gordon J, et al. Cell Immunol 1989 Jun;121(1):125–33
A role for Lys–His–Gly–NH2 in avian and murine B cell development. Lassila O, et al. Cell Immunol 1989 Sep;

122(2):319–28
A phenotypic and functional analysis of long-lived B and T lymphocytes. Levy M, et al. **Cell Immunol** 1988 Dec; 117(2):327–38
Pre-pre-B cells containing only cytoplasmic B220 can be induced by dendritic cells and T cells to differentiate in vitro. Saleh F, et al. **Cell Immunol** 1989 Oct 1;123(1):44–59
Negative trans-acting factors extinguish Ia expression in B cell-L 929 somatic cell hybrids. Stuart PM, et al. **Cell Immunol** 1989 Sep;122(2):391–404
Experimental autoimmune thyroiditis in mice chronically treated from birth with anti-IgM antibodies. Vladutiu AO. **Cell Immunol** 1989 Jun;121(1):49–59
Induction of human B cell differentiation by Fc region activators. I. Identification of an active tetrapeptide. Hobbs MV, et al. **Clin Immunol Immunopathol** 1989 Feb; 50(2):251–63
Germline antibody V regions as determinants of clonal persistence and malignant growth in the B cell compartment. Förster I, et al. **EMBO J** 1988 Dec 1; 7(12):3693–703
Repetitive usage of immunoglobulin VH and D gene segments in CD5+ Ly-1 B clones of (NZB x NZW)F1 mice. Tarlinton D, et al. **EMBO J** 1988 Dec 1; 7(12):3705–10
Nuclear factor NF-kappa B can interact functionally with its cognate binding site to provide lymphoid-specific promoter function. Wirth T, et al. **EMBO J** 1988 Oct; 7(10):3109–13
Immunoglobulin VH gene expression in Ly-1+ and conventional B lymphocytes. Andrade L, et al. **Eur J Immunol** 1989 Jun;19(6):1117–22
Interleukin 2 and low molecular weight B cell growth factor are T cell-replacing factors for different subpopulations of human B cells. Callard RE, et al. **Eur J Immunol** 1988 Oct;18(10):1635–8
Interleukin 4 and soluble CD23 as progression factors for human B lymphocytes: analysis of their interactions with agonists of the phosphoinositide "dual pathway" of signalling. Gordon J, et al. **Eur J Immunol** 1988 Oct; 18(10):1561–5
Cross-linking of membrane IgM on B CLL cells: dissociation between intracellular free Ca2+ mobilization and cell proliferation. Hivroz C, et al. **Eur J Immunol** 1988 Nov; 18(11):1811–7
Cyclic AMP has the ability to influence multiple events during B cell stimulation. Holte H, et al. **Eur J Immunol** 1988 Sep;18(9):1359–66
Bu-1 antigen expression as a marker for B cell precursors in chicken embryos. Houssaint E, et al. **Eur J Immunol** 1989 Feb;19(2):239–43
B cell precursors are present in the thymus during early development. Kimoto H, et al. **Eur J Immunol** 1989 Jan; 19(1):97–104
Feedback regulation of murine Ly-1 B cell development. Lalor PA, et al. **Eur J Immunol** 1989 Mar;19(3):507–13
Emigration of B cells from chicken bursa of Fabricius. Lassila O. **Eur J Immunol** 1989 May;19(5):955–8
Tolerance to class I major histocompatibility complex antigens in chicken B cell chimeras. Effect of B cell depletion on transferability of tolerance. Lehtonen L, et al. **Eur J Immunol** 1989 Mar;19(3):425–31
Membrane-bound IgM obstructs B cell development in transgenic mice. Müller W, et al. **Eur J Immunol** 1989 May; 19(5):923–8
The epigenetic influences of bone marrow and fetal liver stroma cells on the developmental potential of Ly-1+ pro-B lymphocyte clones. Palacios R, et al. **Eur J Immunol** 1989 Feb;19(2):347–56
Biased immunoglobulin variable region gene expression by Ly-1 B cells due to clonal selection. Pennell CA, et al. **Eur J Immunol** 1989 Jul;19(7):1289–95
Activation of the phosphatidylinositol metabolic pathway by low molecular weight B cell growth factor. Renard D, et al. **Eur J Immunol** 1988 Nov;18(11):1705–11
Membrane IgM cross-linking is not coupled to protein kinase C translocation in WEHI-231 B lymphoma cells. Sarthou P, et al. **Eur J Immunol** 1989 Jul;19(7):1247–52
Interleukin 5 is a differentiation factor for IgA B cells. Schoenbeck S, et al. **Eur J Immunol** 1989 Jun;19(6):965–9
Transcription of protooncogenes during stimulation of normal human B lymphocytes. Smeland EB, et al. **Eur J Immunol** 1988 Nov;18(11):1847–50
Physiology of murine B lymphocytes. I. Life-spans of anti-mu and haptenated Ficoll (thymus-independent antigen)-reactive B cells. Udhayakumar V, et al. **Eur J Immunol** 1988 Oct;18(10):1593–9
CD4+ lymphocytes are extracted from blood by peripheral lymph nodes at different rates from other T cell subsets and B cells. Washington EA, et al. **Eur J Immunol** 1988 Dec;18(12):2093–6
The B cell repertoire. Paige CJ, et al. **FASEB J** 1989 May; 3(7):1818–24 (50 ref.)
The human Vpre B gene is located on chromosome 22 near a cluster of V lambda gene segments. Bauer SR, et al. **Immunogenetics** 1988;28(5):328–33
Identification of multiple isoforms of the low-affinity human IgG Fc receptor. Seki T. **Immunogenetics** 1989;30(1):5–12
B cells at the molecular level. Birshtein BK. **Immunol Today** 1988 Jul-Aug;9(7–8):187–9
'B-cell factors' are pleiotropic. O'Garra A, et al. **Immunol Today** 1988 Feb;9(2):45–54 (189 ref.)
Adhesion of T and B lymphocytes to fibroblasts in tissue culture. Abraham D, et al. **Immunology** 1988 Nov; 65(3):385–92
Recombinant IL-4 and IFN-gamma activate locomotor capacity in human B lymphocytes. Wilkinson PC, et al. **Immunology** 1989 Jun;67(2):237–43
Epstein-Barr virus-transformed human B lymphocytes endocytose autologous and heterologous red blood cells. Garzelli C, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):312–6
Properties of interleukin-1 and interferon-gamma receptors in B lymphoid cell line. Bomsztyk K, et al. **J Biol Chem** 1989 Apr 15;264(11):6052–7
Cytoplasmic to nuclear translocation of RNA polymerase I is required for lipopolysaccharide-induced nucleolar RNA synthesis and subsequent DNA synthesis in murine B lymphocytes. Halleck MS, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):101–9
Regulation of IgE synthesis in humans. Vercelli D, et al. **J Clin Immunol** 1989 Mar;9(2):75–83 (81 ref.)
Interleukins and IgA synthesis. Human and murine interleukin 6 induce high rate IgA secretion in IgA-committed B cells. Beagley KW, et al. **J Exp Med** 1989 Jun 1;169(6):2133–48
Correlation of CD2 binding and functional properties of multimeric and monomeric lymphocyte function-associated antigen 3. Dustin ML, et al. **J Exp Med** 1989 Feb 1;169(2):503–17
Interactions between receptors for interleukin 2 and interleukin 4 on lines of helper T cells (HT-2) and B lymphoma cells (BCL1). Fernandez-Botran R, et al. **J Exp Med** 1989 Feb 1;169(2):379–91
Heterogeneity of lymphocyte calcium metabolism is caused by T cell-specific calcium-sensitive potassium channel and sensitivity of the calcium ATPase pump to membrane potential. Ishida Y, et al. **J Exp Med** 1988 Sep 1; 168(3):839–52
Interleukin 4 causes isotype switching to IgE in T cell-stimulated clonal B cell cultures. Lebman DA, et al. **J Exp Med** 1988 Sep 1;168(3):853–62
Early human IgH gene assembly in Epstein-Barr virus-transformed fetal B cell lines. Preferential utilization of the most JH-proximal D segment (DQ52) and two unusual VH-related rearrangements. Nickerson KG, et al. **J Exp Med** 1989 Apr 1;169(4):1391–403
B cell progenitors have different growth requirements before and after immunoglobulin heavy chain commitment. Sauter H, et al. **J Exp Med** 1988 Oct 1;168(4):1511–6
Production of tumor necrosis factor/cachectin by human B cell lines and tonsillar B cells. Sung SS, et al. **J Exp Med** 1988 Nov 1;168(5):1539–51
Transcriptional control of MHC class II gene expression during differentiation from B cells to plasma cells. Dellabona P, et al. **J Immunol** 1989 Apr 15;142(8):2902–10
Role of the LFA3-CD2 interaction in human specific B cell differentiation. Emilie D, et al. **J Immunol** 1988 Sep 15; 141(6):1912–8
Expression of adhesion structures during B cell development in man. Kansas GS, et al. **J Immunol** 1989 May 1; 142(9):3058–62
Bone marrow stromal cell regulation of B-lymphopoiesis. I. The role of macrophages, IL-1, and IL-4 in pre-B cell maturation. King AG, et al. **J Immunol** 1988 Sep 15; 141(6):2016–26
Cholera toxin promotes B cell isotype differentiation. Lycke N, et al. **J Immunol** 1989 Jun 1;142(11):3781–7
B cell maturation in the chicken Harderian gland. Mansikka A, et al. **J Immunol** 1989 Mar 15;142(6):1826–33
Characterization of lymphokines mediating B cell growth and differentiation from monoclonal anti-CD3 antibody-stimulated T cells. Sherris D, et al. **J Immunol** 1989 Apr 1;142(7):2343–51
Human recombinant IL-3 stimulates B cell differentiation. Tadmori W, et al. **J Immunol** 1989 Mar 15;142(6):1950–5
Recombinant soluble Fc epsilon receptor II (Fc epsilon RII/CD23) has IgE binding activity but no B cell growth promoting activity. Uchibayashi N, et al. **J Immunol** 1989 Jun 1;142(11):3901–8
Cholera toxin-sensitive and insensitive signaling via surface Ig. Warner GL, et al. **J Immunol** 1989 Jul 15;143(2):458–63
Age-related changes in the capability of the bone marrow to generate B cells. Zharhary D. **J Immunol** 1988 Sep 15; 141(6):1863–9
Germinal center B cells and mixed leukocyte reactions. Monfalcone AP, et al. **J Leukoc Biol** 1989 Sep;46(3):181–8
The role of immunoglobulin and B cells in T cell ontogeny and repertoire formation—a commentary. Janeway CA Jr, et al. **J Mol Cell Immunol** 1985;2(2):118–20
Obligatory role of B cells and adherent accessory cells in the transfer of a defect in morphine-mediated antinociception in C57BL/6J-bg/bg (beige-J) mice. Kimball ES, et al. **J Neuroimmunol** 1989 May;22(3):185–92
The effects of anesthesia and surgery on lymphocyte populations and function in infants and children. Platt MP, et al. **J Pediatr Surg** 1989 Sep;24(9):884–7
Polyclonal B-cell activation in periodontitis. Tew J, et al. **J Periodont Res** 1989 Jul;24(4):225–41 (189 ref.)
Abnormal lymphocyte profiles and leukotriene B4 status in a patient with Crohn's disease and severe periodontitis. Engel LD, et al. **J Periodontol** 1988 Dec;59(12):841–7
Interleukins and the immune system 2. O'Garra A. **Lancet** 1989 May 6;1(8645):1003–5 (30 ref.)
Interleukins and the immune system 1. O'Garra A. **Lancet** 1989 Apr 29;1(8644):943–7 (38 ref.)
T-cell receptor gene rearrangement in B-cell non-Hodgkin's lymphoma: correlation with methylation and expression. Leber BF, et al. **Leuk Res** 1989;13(6):473–81
Polyclonal B-cell activation (PBA). What have we learned from the study of malaria? Ribeiro CD. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:633–48 (73 ref.)
Depletion of L3T4+ T lymphocytes during acute Trypanosoma cruzi infection abolish macrophage and B lymphocyte activation but not tissue inflammatory reaction. Russo M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:527–38
B cell dependent T lymphocyte responses in leishmaniasis. Sacks DL. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:506–13
Induction of murine B cell proliferation and immunoglobulin synthesis by some bacterial ribosomes. Lafont S, et al. **Microbiol Immunol** 1988;32(10):1043–58
B-cell control region at the 5' end of a major histocompatibility complex class II gene: sequences and factors. Dorn A, et al. **Mol Cell Biol** 1988 Oct;8(10):3975–87
Selective transformation of primitive lymphoid cells by the BCR/ABL oncogene expressed in long-term lymphoid or myeloid cultures. Young JC, et al. **Mol Cell Biol** 1988 Oct; 8(10):4079–87
Spontaneous sister-chromatid exchange frequencies in human B and T lymphocytes at BrdU borderline concentrations for sister-chromatid differentiation. Miller K. **Mutat Res** 1988 Nov;202(1):97–101
Deregulated BCL2 expression enhances growth of a human B cell line. Reed JC, et al. **Oncogene** 1989 Sep;4(9):1123–7
Expression of oncogenes in normal and transformed murine B lymphocytes. DeCino P, et al. **Oncogene Res** 1988; 3(1):33–7
Ca2+-activated K+ channels in lymphocytes. Mahaut-Smith MP, et al. **Pflugers Arch** 1989;414 Suppl 1:S164–5
Synthesis of germ-line gamma 1 immunoglobulin heavy-chain transcripts in resting B cells: induction by interleukin 4 and inhibition by interferon gamma. Berton MT, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2829–33
Physiological significance of thymic B lymphocytes: an appraisal. Marcos MA, et al. **Res Immunol** 1989 Mar-Apr; 140(3):275–9 (33 ref.)
Effects of phorbol esters on B-cell gene expression. Högbom E, et al. **Scand J Immunol** 1988 Oct;28(4):481–6
B-cell differentiation in the chicken: expression of immunoglobulin genes in the bursal and peripheral lymphocytes. Mansikka A, et al. **Scand J Immunol** 1989 Mar;29(3):325–31
Regulation of growth and differentiation of pre-activated B lymphocytes. Rajasekar R, et al. **Scand J Immunol** 1988 Nov;28(5):509–18
Studies on the role of CD43 in human B-cell activation and differentiation. Wikén M, et al. **Scand J Immunol** 1989 Mar; 29(3):353–61
Regulation of human B lymphocyte responsiveness. Lipsky PE, et al. **Scand J Rheumatol Suppl** 1988;76:229–35 (19 ref.)
B lymphocytes, B cell clones and rheumatoid factor antibodies in rheumatoid inflammation. Natvig JB, et al. **Scand J Rheumatol Suppl** 1988;76:217–27 (62 ref.)
Modulating activity of B lymphocytes on haemopoiesis (II)—the purification of proliferation amplifying factor (PAF). Yao ZJ, et al. **Sci Sin [B]** 1988 Jun;31(6):702–9
Induction of kappa transcription by interferon-gamma without activation of NF-kappa B. Briskin M, et al. **Science** 1988 Nov 18;242(4881):1036–7
Mechanism of interleukin-2 signaling: mediation of different outcomes by a single receptor and transduction pathway. Tigges MA, et al. **Science** 1989 Feb 10;243(4892):781–6
Are peripheral blood lymphocytes the source of elevated B-2-microglobulin in renal transplant recipients? Kobryn A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):302–3
[Accessory effect of human B lymphocytes in T cell mitogen responses] Yin TG, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):161–8 (Eng. Abstr.) **(Chi)**
[Malignant lymphoma and lymphoid leukemia induced in sheep by a bovine leukemia virus: a model of B-lymphocyte malignant hemopathy] Parodi AL. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):895–905 (Eng. Abstr.) **(Fre)**
[The biological action spectrum of the secretory products of the human B-cell lymphoblastoid line RPMI-6410t] Seregina TM, et al. **Ontogenez** 1988 May-Jun;19(3):240–6 (Eng. Abstr.) **(Rus)**
[Interleukin-1-like factor from human B-lymphocytes transformed by the Epstein-Barr virus] Kotov AIu, et al. **Tsitologiia** 1989 Feb;31(2):226–33 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Post-irradiation regeneration of early B-lymphocyte precursor cells in mouse bone marrow. Park YH, et al. **Immunology** 1989 Mar;66(3):343–7
Effect of gamma radiation on resting B lymphocytes. II. Functional characterization of the antigen-presentation defect. Ashwell JD, et al. **J Immunol** 1988 Oct 15; 141(8):2536–44
Differential radiosensitivity among B cell subpopulations.

Riggs JE, et al. **J Immunol** 1988 Sep 15;141(6):1799–807
Radioresistant pseudo–colony formation in the PHA–leukocyte feeder colony assay. Kluin–Nelemans JC, et al. **Leuk Res** 1988;12(11–12):917–22
Different mutations responsible for the elevated sister–chromatid exchange frequencies in Bloom syndrome and X–irradiated B–lymphoblastoid cell lines originating from acute leukemia. Shiraishi Y, et al. **Mutat Res** 1989 Apr;211(2):273–8
Increased sister–chromatid exchanges (SCEs) and chromosomal fragilities by BrdU in a human mutant B–lymphoblastoid cell line. Taguchi T, et al. **Mutat Res** 1989 Mar;211(1):43–9
Induction and repair of DNA damage in gamma–irradiated human lymphoblasts: irradiation in the presence and absence of misonidazole. Hentosh P. **Radiat Res** 1988 Sep; 115(3):436–47
[Effects of radiotherapy on lymphocyte populations in lung cancer] Gava A, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):475–8 (Eng. Abstr.) (Ita)

SECRETION

Human B cell lines can be triggered to secrete an interleukin 2–like molecule. Benjamin D, et al. **Cell Immunol** 1989 Jun; 121(1):30–48
Autostimulatory growth factors produced by Sjögren's syndrome B cell lines. Takei M, et al. **Clin Immunol Immunopathol** 1989 Oct;53(1):123–35

TRANSPLANTATION

Adoptive transfer of gut mucosal antitoxin memory by isolated B cells 1 year after oral immunization with cholera toxin. Lycke N, et al. **Infect Immun** 1989 Apr;57(4):1137–41
B–cell transplants to immunodeficient xid neonates do not imprint their helper T cells. Quintans J, et al. **J Mol Cell Immunol** 1988;4(2):97–103

ULTRASTRUCTURE

Development of follicular dendritic cells in lymph nodes of B–cell–depleted mice. Cerny A, et al. **Cell Tissue Res** 1988 Nov;254(2):449–54
Postreplication labeling of E–leaflet molecules: membrane immunoglobulins localized in sectioned, labeled replicas examined by TEM and HVEM. Dinchuk JE, et al. **J Electron Microsc Tech** 1987 Sep;7(1):1–16
Some ultrastructural aspect of T and B lymphocytes and their significance in chronic internal diseases with immune component. Micu D, et al. **Med Interne** 1982 Jan–Mar; 20(1):3–8
[Ribosome levels in T– and B lymphocytes in B–cell chronic lymphocytic leukemia] Morozova EO, et al. **Gematol Transfuziol** 1989 May;34(5):26–8 (Eng. Abstr.) (Rus)

T LYMPHOCYTES

see related

LYMPHOCYTE COOPERATION

The correlation of mononuclear cell phenotype in endomyocardial biopsies with clinical history and cardiac dysfunction. Kolbeck PC, et al. **Am J Clin Pathol** 1989 Jan;91(1):37–44
Suppression by bone marrow but not by blood T lymphocytes of autologous and allogeneic granulocytic stem cells in a case of lymphoproliferative T–cell syndrome. Marinof C, et al. **Am J Hematol** 1989 May;31(1):65–6
Dialysis membrane interference in human T–lymphocyte proliferation assays. Bligaard N, et al. **APMIS** 1989 Apr; 97(4):361–6
Molecular design of materials for cell separation. Kataoka K. **Artif Organs** 1988 Dec;12(6):511–3
Enhanced survival but reduced engraftment in murine recipients of recombinant granulocyte/macrophage colony–stimulating factor following transplantation of T–cell–depleted histoincompatible bone marrow. Blazar BR, et al. **Blood** 1988 Oct;72(4):1148–54
Simultaneous presentation of T– and B–cell malignant lymphoma with bcl–2 gene involvement. Cotter FE, et al. **Blood** 1989 Apr;73(5):1387–8
Immune reconstitution following bone marrow transplantation: comparison of recipients of T–cell depleted marrow with recipients of conventional marrow grafts. Keever CA, et al. **Blood** 1989 Apr;73(5):1340–50
Human marrow T cell dose correlates with severity of subsequent acute graft–versus–host disease. Atkinson K, et al. **Bone Marrow Transplant** 1987 Jun;2(1):51–7
The recovery of resistance to alloengraftment following lethal irradiation and administration of T cell–depleted syngeneic bone marrow. Chester CH, et al. **Bone Marrow Transplant** 1989 Mar;4(2):195–200
Optimal conditions for in vitro T cell depletion of human bone marrow by Campath–1a plus complement as demonstrated by limiting dilution analysis. Frame JN, et al. **Bone Marrow Transplant** 1989 Jan;4(1):55–61
Transient engraftment of T cell–depleted allogeneic bone marrow in mice improves survival rate following lethal irradiation. Lapidot T, et al. **Bone Marrow Transplant** 1988 Mar;3(2):157–64
Alternative donor sources in HLA–mismatched marrow transplantation: T cell depletion of surgically resected cadaveric marrow. Lucas PJ, et al. **Bone Marrow Transplant** 1988 May;3(3):211–20
T cell depletion in bone marrow transplantation. Poynton CH. **Bone Marrow Transplant** 1988 Jul;3(4):265–79 (125 ref.)
T–cell depletion does not affect long–term human bone marrow culture. Rio B, et al. **Bone Marrow Transplant** 1987 Feb;1(3):311–5
Phenotypic and genotypic heterogeneity of peripheral T–cell lymphoma. Smith JL, et al. **Br J Cancer** 1988 Dec; 58(6):723–9
Precision and accuracy of absolute lymphocyte counts. Koepke JA, et al. **Clin Immunol Immunopathol** 1989 Jul; 52(1):19–27 (22 ref.)
T–cell subpopulations of fetuses infected by Toxoplasma gondii [letter] Lecolier B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):572–3
T–cell depletion versus methotrexate as GvHD–prophylaxis in allogeneic bone marrow transplantation for leukaemia. Wiesneth M, et al. **Eur J Haematol** 1988 Sep;41(3):243–9
The predictive value of T–lymphocyte counts in breast cancer patients treated by endocrine manipulation. Paterson AG, et al. **Eur J Surg Oncol** 1989 Apr;15(2):131–7
T–cell and plasma cell populations in coeliac small intestinal mucosa in relation to dermatitis herpetiformis. Jenkins D, et al. **Gut** 1989 Jul;30(7):955–8
Development and characterisation of T lymphocyte lines from human small intestinal biopsies [published erratum appears in Gut 1989 Jun;30(6):892] Kelleher D, et al. **Gut** 1989 Apr;30(4):460–7
T cells in follicular centroblastic/centrocytic (cleaved follicular centre cell) lymphomas at diagnosis, relapse and transformation. Swerdlow SH, et al. **Hematol Oncol** 1989 Sep–Oct;7(5):355–63
Monoclonal antibody Leu–22 (L60) permits the demonstration of some neoplastic T cells in routinely fixed and paraffin–embedded tissue sections. Wieczorek R, et al. **Hum Pathol** 1988 Dec;19(12):1434–43
Ontogeny, morphology and tissue distribution of a unique subset of CD4–CD8– sheep T lymphocytes. McClure SJ, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):215–21
Infectious complications after allogeneic bone marrow transplantation with and without T–cell depletion of donor marrow. Schmeiser T, et al. **Infection** 1989 May–Jun; 17(3):124–30
Pagetoid reticulosis: a T–cell lymphoproliferative disorder of the skin. Fine RM. **Int J Dermatol** 1988 Nov;27(9):617–8
T lymphocytes in the trigeminal ganglia of rabbits during corneal HSV infection. Gebhardt BM, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1683–91
Histometric studies on cellular infiltrates of tuberculin tests in patients with haemophilia. Lowe JG, et al. **J Clin Pathol** 1989 Feb;42(2):184–7
Evaluation of T cells, B cells and Ig. in tissues of human cutaneous leishmaniasis. Morsy TA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):57–66
Separation of B and T lymphocytes by a hybrid field–flow fractionation/adhesion chromatography technique. Bigelow JC, et al. **J Immunol Methods** 1989 Feb 24; 117(2):289–93
Total peripheral lymphocyte count and T–cell percentage in patients with breast cancer. Jain P, et al. **J Indian Med Assoc** 1988 Jun;86(6):143–5
In situ localization of T lymphocyte subsets in human paracoccidioidomycosis. Moscardi–Bacchi M, et al. **J Med Vet Mycol** 1989;27(3):149–58
Does occult monoclonal proliferation of non–malignant T cells cause secondary immunopathological disorders? Goudie RB, et al. **J Pathol** 1989 Jun;158(2):91–2
Photopheresis therapy of cutaneous T cell lymphoma. Heald PW, et al. **Kelo J Med** 1988 Jun;37(2):155–67
Evidence for an osteoblast–activating factor in a patient with peripheral T–cell lymphoma and osteosclerosis. Hüfner M, et al. **Klin Wochenschr** 1989 Apr 3;67(7):402–7
Use of deoxyribonucleic acid probes in the identification of cell origin and detection of cellular contamination in human lymphoblastoid cell lines. Naeim F, et al. **Lab Invest** 1989 Mar;60(3):347–52
Minimal residual leukaemia in chronic myeloid leukaemia patients after T–cell depleted bone–marrow transplantation [letter] Bartram CR, et al. **Lancet** 1989 Jun 3;1(8649):1260
Phenotype and function of Japanese adult T–cell leukaemia cells [letter] Imamura N, et al. **Lancet** 1989 Jul 22; 2(8656):214
Reduced CD4 + T cells and severe oral candidiasis in absence of HIV infection [letter] Pankhurst C, et al. **Lancet** 1989 Mar 25;1(8639):672
Very high frequency of lymphoma induction by a chemical carcinogen in pim–1 transgenic mice. Breuer M, et al. **Nature** 1989 Jul 6;340(6228):61–3
Pseudoachondroplasia with immune deficiency. Kultursay N, et al. **Pediatr Radiol** 1988;18(6):505–8
Identification, cloning, and characterization of an immune activation gene. Lipes MA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9704–8
Bone marrow transplantation with T–cell depleted allografts for the treatment of severe beta thalassemia major. Or R, et al. **Prog Clin Biol Res** 1989;309:217–22
Specific depletion of mature T lymphocytes from human bone marrow. Geisler C, et al. **Scand J Immunol** 1989 May; 29(5):617–25
Can bone marrow transplantation be offered to more patients in south east Scotland? Craig JI, et al. **Scott Med J** 1988 Oct;33(5):326–8
Number of T–lymphocytes in the remnant liver after partial hepatectomy in rats. Lee CS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):787–90
Thymic T–cell lymphoma with the CD8+ (OX–8), CD4+ (W3/25) phenotype, induced in F344/NCr rats by nitroso–2–hydroxypropylurea. Konishi N, et al. **Thymus** 1988–89;12(4):225–37
HLA–DR beta III and HLA–DP induce comparable proliferation in primary mixed lymphocyte culture. Schroeijers WE, et al. **Tissue Antigens** 1988 Sep;32(3):145–9
Depletion of accessory cells strongly reduces immunogenicity of T–depleted bone marrow, and thus may facilitate its engraftment. Dreger P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2949–51
A new approach to the prevention of graft–versus–host disease using XomaZyme–H65 following histo–incompatible partially T–depleted marrow grafts. Henslee PJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3004–7
MHC fully allogeneic bone transplantation after physical T–cell depletion with magnetic microspheres (MAMIS). Leyhausen G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2943–6
T cell depletion of human bone marrow. Comparison of Campath–1 plus complement, anti–T cell ricin A chain immunotoxin, and soybean agglutinin alone or in combination with sheep erythrocytes or immunomagnetic beads. Frame JN, et al. **Transplantation** 1989 Jun; 47(6):984–8
T and B lymphocytes in horses persistently infected with equine infectious anaemia virus. Valpotić I, et al. **Vet Res Commun** 1989;13(1):57–65
[Early disturbance of the circadian rhythm of T and B lymphocytes in human immunodeficiency virus infection] Bourin P, et al. **C R Acad Sci [III]** 1989;308(16):431–6 (Eng. Abstr.) (Fre)
[GH–dependency of lymphocyte multiplication factor with a low molecular weight] Schimpff RM, et al. **C R Acad Sci [III]** 1989;309(1):29–33 (Eng. Abstr.) (Fre)
[Chronic granulocytopenia as a main symptom of T gamma–lymphocytosis] Krieger G, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1064–8 (Eng. Abstr.) (Ger)
[Prediction of the onset of AIDS employing MT–4 cells] Kurimura T, et al. **Nippon Rinsho** 1989 Jan;47(1):183–6 (Jpn)
[Effects of urologic surgery on lymphocyte subpopulations] Gil Salom M, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):171–6 (Eng. Abstr.) (Spa)
[Erythrophagocytic T–cell lymphoma: clinical entity similar to malignant histiocytosis. Role of immunology and study of the genetic rearrangement of T cells in determination of the diagnosis] Neira L, et al. **An Esp Pediatr** 1988 Oct; 29 Suppl 34:156–8 (Spa)
[Prevention of graft versus host disease by in vitro depletion of T lymphocytes with monoclonal antibodies (Campath–1) in patients undergoing bone marrow transplantation] Iriondo A, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):488–92 (Eng. Abstr.) (Spa)
[Genotype study of T receptors in the diagnosis and classification of leukemias and lymphomas] Soler J, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):135–8 (Eng. Abstr.) (Spa)

ANALYSIS

Expression of lymphocyte activation markers in benign cutaneous T cell infiltrates. Discoid lupus erythematosus versus lichen ruber planus. Sundqvist KG, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):292–5
Immunoelectron microscopic study of S–100 beta–positive human T–lymphocytes with special reference to double immunostaining. Ohtsuki Y, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1167–73
Follicular lymphoid hyperplasia of the skin with high content of Ki–1 positive lymphocytes. Eckert F, et al. **Am J Dermatopathol** 1989 Aug;11(4):345–52
Interleukin–2 receptor gene expression by bronchoalveolar lavage lymphocytes in pulmonary sarcoidosis. Müller–Quernheim J, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):82–8
Expression of human interleukin–3 (multi–CSF) is restricted to human lymphocytes and T–cell tumor lines. Niemeyer CM, et al. **Blood** 1989 Mar;73(4):945–51
Interleukin–2 secretion by synovial fluid lymphocytes in rheumatoid arthritis. Ruschen S, et al. **Br J Rheumatol** 1988 Oct;27(5):350–6
The use of oncofetal ferritin–bearing lymphocytes as a marker for the screening, diagnosis, and follow–up of patients with early breast malignancy screening of 3400 women. Moroz C, et al. **Cancer** 1989 Aug 1;64(3):691–7
Preferential clonogenic deficit of CD8–positive T–lymphocytes infiltrating human solid tumors. Miescher S, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):6992–8
Expression characteristics of two potential T cell mediator genes. Kwon BS, et al. **Cell Immunol** 1989 Jul;121(2):414–22
A comparative study of in vitro proliferative responses to mitogens and immunoglobulin production in patients with inflammatory muscle disease. Cambridge G, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):27–33
Thymocyte circular DNA excised from T cell receptor

alpha–delta gene complex. Okazaki K, et al. **EMBO J** 1988 Jun;7(6):1669–74

Alternative molecular form of human T cell–specific antigen CD27 expressed upon T cell activation. Borst J, et al. **Eur J Immunol** 1989 Feb;19(2):357–64

Developmentally regulated expression of the neural cell adhesion molecule (NCAM) by mouse thymocytes. Brunet JF, et al. **Eur J Immunol** 1989 May;19(5):837–41

The intermediate–affinity interleukin (IL)2 receptor expressed on Theileria annulata–infected cells comprises a single IL 2–binding protein. Partial characterization of bovine IL2 receptors. Herrmann T, et al. **Eur J Immunol** 1989 Jul;19(7):1339–42

Schwann cells co–cultured with stimulated T cells and antigen express major histocompatibility complex (MHC) class II determinants without interferon–gamma pretreatment: synergistic effects of interferon–gamma and tumor necrosis factor on MHC class II induction. Kingston AE, et al. **Eur J Immunol** 1989 Jan;19(1):177–83

The methylation state of the T cell antigen receptor beta chain gene in subpopulations of mouse thymocytes. Sakamoto S, et al. **Eur J Immunol** 1989 May;19(5):873–9

Characterization of T–cell–receptor gamma (TRG) gene rearrangements in alloreactive T–cell clones. Moisan JP, et al. **Hum Immunol** 1989 Feb;24(2):95–110

Human leucocyte surface glycoprotein CDw44 and lymphocyte homing receptor are identical molecules. Stefanová I, et al. **Immunogenetics** 1989;29(6):402–4

Chemical composition and tissue distribution of the human CDw44 glycoprotein. Flanagan BF, et al. **Immunology** 1989 Jun;67(2):167–75

Muscarinic cholinergic binding sites on rat lymphocytes. Costa LG, et al. **Immunopharmacology** 1988 Nov–Dec; 16(3):139–49

Immuno–competent cells in the murine epididymis. Nashan D, et al. **Int J Androl** 1989 Feb;12(1):85–94

The expression of IgE Fc receptors on lymphocytes of allergic patients. Spiegelberg HL. **Int Rev Immunol** 1987 Jan;2(1):63–74 (35 ref.)

Novel primary thymic defect with T lymphocytes expressing gamma delta T cell receptor. Geisler C, et al. **J Clin Pathol** 1989 Jul;42(7):705–11

Expression of human T cell receptor–gamma delta structural forms. Band H, et al. **J Immunol** 1989 May 15; 142(10):3627–33

Molecular cloning and characterization of a novel murine T cell surface antigen, YE1/48. Chan PY, et al. **J Immunol** 1989 Mar 1;142(5):1727–36

T200 alternate exon use in murine lymphoid cells determined by reverse transcription–polymerase chain reaction. Chang HL, et al. **J Immunol** 1989 Jul 1;143(1):315–21

Differential surface expression of class II isotypes on activated CD4 and CD8 cells correlates with levels of locus–specific mRNA. Diedrichs M, et al. **J Immunol** 1989 May 1;142(9):3275–80

Distribution and ontogeny of CD2 expression by murine T cells. Duplay P, et al. **J Immunol** 1989 May 1; 142(9):2998–3005

Expression and function of the UM4D4 antigen in human thymus. Fox DA, et al. **J Immunol** 1989 Oct 1; 143(7):2166–75

Immunodominant sites of human T cell lymphotropic virus type 1 envelope protein for murine helper T cells. Kurata A, et al. **J Immunol** 1989 Sep 15;143(6):2024–30

Macrophages and T cells do not express Mlsa determinants. Molina IJ, et al. **J Immunol** 1989 Jul 1;143(1):39–44

Gene isolation with human T lymphocyte probes. Isolation of a gene that expresses an epitope recognized by T cells specific for Mycobacterium bovis BCG and pathogenic mycobacteria. Mustafa AS, et al. **J Immunol** 1988 Oct 15; 141(8):2729–33

A novel T cell–activating molecule (THAM) highly expressed on CD4–CD8– murine thymocytes. Naquet P, et al. **J Immunol** 1988 Dec 15;141(12):4101–9

Possible association between IL–2 receptors and class I HLA molecules on T cells. Sharon M, et al. **J Immunol** 1988 Nov 15;141(10):3512–5

Purification and analysis of an antigen–specific suppressor factor from a T cell hybridoma specific for phenyltrimethylamino hapten. Webb DR, et al. **J Immunol** 1989 Jan 1;142(1):224–9

A common epitope on human myelin basic protein and the human T lymphocyte CD3 molecule. Zhang JW, et al. **J Immunol** 1989 Jun 1;142(11):3917–22

Analysis of guinea pig leukocyte antigens using interspecies T cell hybrids. Schäfer H, et al. **J Immunol Methods** 1989 Mar 31;118(2):169–77

Comparison of thymocyte and T lymphocyte gangliosides from C3H/HeN and C3H/HeJ mice. Yohe HC, et al. **J Leukoc Biol** 1988 Dec;44(6):521–8

Sequestration of virus–specific T cells in the cerebrospinal fluid of a patient with varicella zoster viral meningoencephalitis. Duby AD, et al. **J Neuroimmunol** 1989 Mar;22(1):63–8

Evidence for multiple human T cell recognition sites on myelin basic protein. Richert JR, et al. **J Neuroimmunol** 1989 Jun;23(1):55–66

Arthritogenic effects of Mycoplasma arthritidis T cell mitogen in rats. Cannon GW, et al. **J Rheumatol** 1988; 15(5):735–41

From the National Institutes of Health. Raub W. **JAMA** 1989 Sep 1;262(9):1158

Higher T–cell imbalance and growth factor receptor expression in B–cell chronic lymphocytic leukemia (B–CLL) as compared to monoclonal B–cell lymphocytosis of undetermined significance (B–MLUS). Garcia C, et al. **Leuk Res** 1989;13(1):31–7

Abnormalities in T–cell associated rearrangement of T–cell receptor gamma chain genes in B–cell chronic lymphocytic leukemia. Leber BF, et al. **Leuk Res** 1989;13(3):259–66

Magnesium content and concentration of mononuclear and T lymphocyte blood cells. Huang CM, et al. **Magnesium** 1988;7(4):219–24

Isolation of CD4– CD8– mycobacteria–reactive T lymphocyte clones from rheumatoid arthritis synovial fluid. Holoshitz J, et al. **Nature** 1989 May 18;339(6221):226–9

Stable expression of the tax gene of type I human T–cell leukemia virus in human T cells activates specific cellular genes involved in growth. Wano Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9733–7

Recognition of idiotypic structures in the thymus. Zöller M. **Scand J Immunol** 1989 May;29(5):579–88

Lymphocyte subpopulations and serum immunoglobulin E (IgE) levels in ascariasis. Saraçlar Y, et al. **Turk J Pediatr** 1988 Jul–Sep;30(3):135–43

[Expression of the interleukin–2 receptor in T lymphocytes of the rheumatoid synovial membrane] Ballardini P, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):85–7 (Eng. Abstr.) **(Ita)**

CLASSIFICATION

Simultaneous enumeration of T–cell subsets and macrophages in bronchoalveolar lavage fluids by immunoenzyme double staining. Comparison with conventional immunofluorescence. van Maarsseveen TC, et al. **Acta Cytol** 1989 Jul–Aug;33(4):550–6

A prospective study of the Koebner reaction and T lymphocytes in uninvolved psoriatic skin. Baker BS, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):430–4

Hyperkeratosis lenticularis perstans (Flegel's disease). In situ characterization of T cell subsets and Langerhans' cells. Büchner SA. **Acta Derm Venereol (Stockh)** 1988;68(4):341–5

T lymphocyte subpopulations in myelodysplastic syndromes. Carpani G, et al. **Acta Haematol (Basel)** 1989;81(4):173–5

Follow up of T cells subsets and anti–trisaccharide IgM antibody levels of leprosy patients during daily multidrug therapy. Desforges S, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:169–70

Lymphocyte subsets of maxillary mucosa in chronic inflammation. Nishimoto K, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):291–8

Anatomic distribution and localization of immunocompetent cells in normal mouse endolymphatic sac. Takahashi M, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):409–16

Which T cells are relevant to resistance against Listeria monocytogenes infection? Kaufmann SH. **Adv Exp Med Biol** 1988;239:135–50 (36 ref.)

Sites of the defects leading to autoimmunity in the spontaneously diabetic BB rat. Scott J, et al. **Adv Exp Med Biol** 1988;246:53–62

Cutaneous leishmaniasis: relative role of T cell subsets. Titus R, et al. **Adv Exp Med Biol** 1988;239:121–34 (21 ref.)

Immunomodulating properties of lymphocytes activated by farmer's lung associated bacterium Thermoactinomyces vulgaris in vitro. Jägerroos HJ. **Allergy** 1988 Nov; 43(8):586–92

Characterization of human cardiac infiltrating cells post transplantation. I. Phenotypic and functional alloreactivity. Ahmed–Ansari A, et al. **Am J Cardiovasc Pathol** 1988; 2(3):193–210

Mycosis fungoides. Detection of OKT6+ cells by cytofluorographic analysis in one case. Cintorino M, et al. **Am J Dermatopathol** 1987 Apr;9(2):114–9

Immunologic assessment of a cluster of asymptomatic HTLV–I–infected individuals in New Orleans. deShazo RD, et al. **Am J Med** 1989 Jan;86(1):65–70

Analysis of T lymphocyte subsets in tamarins with colitis and colon cancer. Lee YC, et al. **Am J Med Sci** 1989 Feb; 297(2):118–22

Plasmacytoid T cells. Immunohistochemical evidence for their monocyte/macrophage origin. Facchetti F, et al. **Am J Pathol** 1988 Oct;133(1):15–21

Intraepithelial T–lymphocyte subsets in the airways of normal subjects and of patients with chronic bronchitis. Fournier M, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):737–42

The effects of cigarette smoking on T cell subsets. A population–based survey of healthy caucasians. Tollerud DJ, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1446–51

Immunodiagnosis and immunotherapy in autistic children. Singh VK, et al. **Ann N Y Acad Sci** 1988;540:602–4

Selective depletion and activation of CD8+ lymphocytes from peripheral blood of patients with polymyalgia rheumatica and giant cell arteritis. Dasgupta B, et al. **Ann Rheum Dis** 1989 Apr;48(4):307–11

The structure, function, and molecular genetics of the gamma/delta T cell receptor. Raulet DH. **Annu Rev Immunol** 1989;7:175–207 (116 ref.)

T–lymphocyte subsets in the lesional skin of allogeneic and autologous bone marrow transplant patients. Paller AS, et al. **Arch Dermatol** 1988 Dec;124(12):1795–801

T–cell alterations in late postpoliomyelitis. Ginsberg AH, et al. **Arch Neurol** 1989 May;46(5):497–501

Effect of hemodialysis on T lymphocyte subsets, con–A–activated suppressor cell activity, and interleukin–2 receptor expression on lymphocytes in chronic uremic patients. Tchórzewski H, et al. **Artif Organs** 1989 Jun; 13(3):185–9

Peripheral blood lymphocyte subsets and natural killer cell number and function during alpha–interferon treatment for hairy cell leukemia. Gibson J, et al. **Aust N Z J Med** 1988 Dec;18(7):897–9

An immunohistological examination of inflammatory cell infiltration in primary testicular seminomas. Strutton GM, et al. **Aust N Z J Surg** 1989 Feb;59(2):169–72

Gangliosides of murine T lymphocyte subpopulations. Müthing J, et al. **Biochemistry** 1989 Apr 4;28(7):2923–9

Cellular reactions to polyester arterial prostheses impregnated with cross–linked albumin: in vivo studies in mice. Merhi Y, et al. **Biomaterials** 1989 Jan;10(1):56–8

Identification of activated T cells and the suppressor/inducer subset in patients suffering from severe aplastic anemia. Köller U, et al. **Blut** 1989 Jan;58(1):21–6

T cell subpopulations defined by monoclonal antibodies after HLA–identical sibling marrow transplantation. II. Activated and functional subsets of helper–inducer and cytotoxic–suppressor subpopulations defined by two–colour fluorescence flow cytometry. Atkinson K. **Bone Marrow Transplant** 1986 Dec;1(2):121–32

Cytomegalovirus immunity and T lymphocytes in bone marrow donors and acute graft–versus–host disease. Gratama JW, et al. **Bone Marrow Transplant** 1986 Dec; 1(2):141–6

Preliminary characterization of functional residual host–type T lymphocytes following conditioning for allogeneic HLA–matched bone marrow transplantation (BMT). Kedar E, et al. **Bone Marrow Transplant** 1988 Mar; 3(2):129–40

Increase in the suppressor–inducer T cell subset in multiple myeloma and monoclonal gammopathy of undetermined significance. Shapira R, et al. **Br J Haematol** 1989 Feb; 71(2):223–5

Thymic response to thermal injury in mice: I. Alterations of thymocyte subsets studied by flow cytometry and immunohistochemistry. Colić M, et al. **Burns** 1989 Jun; 15(3):155–61

Identification and importance of lymphocyte subpopulations in the regional lymph nodes of breast cancer patients. Khuri N, et al. **Can J Surg** 1989 Jan;32(1):23–6

Recombinant human tumor necrosis factor mediates regression of a murine sarcoma in vivo via Lyt–2+ cells. Asher AL, et al. **Cancer Immunol Immunother** 1989; 28(2):153–6

Characterization of T–lymphocyte subpopulations infiltrating primary breast cancer. Bilik R, et al. **Cancer Immunol Immunother** 1989;28(2):143–7

The thymus has two functionally distinct populations of immature alpha beta + T cells: one population is deleted by ligation of alpha beta TCR. Finkel TH, et al. **Cell** 1989 Sep 22;58(6):1047–54

Fractionation of T cell subsets on Ig anti–Ig columns: isolation of helper T cells from nonresponder mice, demonstration of antigen–specific T suppressor cells, and selection of CD–3 negative variants of Jurkat T cells. Rubin B, et al. **Cell Immunol** 1989 Apr 1;119(2):327–40

Selective stimulation of human thymocyte subpopulations by recombinant IL–4 and IL–3. Ueno Y, et al. **Cell Immunol** 1989 Feb;118(2):382–93

T lymphocyte subpopulation in early and late schistosomal hepatosplenomegaly. Hassan T, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):213–4

Pleural T–lymphocyte subsets in amiodarone–associated pleuropneumonitis. Akoun GM, et al. **Chest** 1989 Mar; 95(3):596–7

Human immunodeficiency virus–related lymphocytic alveolitis. Guillon JM, et al. **Chest** 1988 Dec;94(6):1264–70

Quantitative analysis of T and B lymphocytes and their subpopulations of irradiated mouse by scanning microspectrophotometry. Cui YF, et al. **Chin Med J [Engl]** 1988 Jul;101(7):473–7

A preliminary study on T lymphocyte subsets in systemic lupus erythematosus. Yang JL, et al. **Chin Med J [Engl]** 1988 Sep;101(9):665–70

Serum HIV antigen and anti–P24–antibodies in 200 HIV seropositive patients: correlation with CD4 and CD8 lymphocyte subsets. Andrieu JM, et al. **Clin Exp Immunol** 1988 Jul;73(1):1–5

T cell receptor gamma/delta+ lymphocyte subsets during HIV infection. Autran B, et al. **Clin Exp Immunol** 1989 Feb;75(2):206–10

Functional analysis of lymphocytes subpopulations in experimental cocaine abuse. I. Dose–dependent activation of lymphocyte subsets. Bagasra O, et al. **Clin Exp Immunol** 1989 Aug;77(2):289–93

The majority of the activated T cells in the blood of insulin–dependent diabetes mellitus (IDDM) patients are CD4+. De Berardinis P, et al. **Clin Exp Immunol** 1988 Aug;73(2):255–9

Analysis of CD4–positive T cell subpopulation in sarcoidosis. Gerli R, et al. **Clin Exp Immunol** 1988 Aug;73(2):226–9

Phenotypic study of CD4+ and CD8+ lymphocyte subsets in relation to cytomegalovirus carrier status and its correlate with pokeweed mitogen–induced B lymphocyte differentiation. Gratama JW, et al. **Clin Exp Immunol** 1989 Aug;77(2):245–51

Focal lymphocytic infiltration in the adrenal cortex of the elderly: immunohistological analysis of infiltrating lymphocytes. Hayashi Y, et al. **Clin Exp Immunol** 1989 Jul;77(1):101–5

Exercise stress alters murine lymphocyte subset distribution in spleen, lymph nodes and thymus. Hoffman–Goetz L, et al. **Clin Exp Immunol** 1989 May;76(2):307–10

MAC technique (morphology antibody chromosomes) in phenotypic identification of proliferating NK and T cells in interleukin–2–stimulated lymphocyte cultures. Kovanen PE, et al. **Clin Exp Immunol** 1989 Mar;75(3):407–13

Characterization of lymphocytes that suppress IL–2 production in systemic lupus erythematosus. Linker–Israeli M, et al. **Clin Exp Immunol** 1988 Aug;73(2):236–41

Absence of gradient of thyrotropin receptor antibody and T cell subset distribution between thyroid and peripheral venous blood in patients with Graves' disease prepared for surgery with carbimazole and potassium iodide. Wilson R, et al. **Clin Exp Immunol** 1988 Aug;73(2):265–8

Developmental changes of double–negative (CD3+ 4–8–) T cells in human peripheral blood. Yachie A, et al. **Clin Exp Immunol** 1989 May;76(2):258–61

Symposium: "Evaluation of the immune system during HIV infection and AIDS: T cell subsets". November 3, 1988, San Francisco, CA. **Clin Immunol Immunopathol** 1989 Jul; 52(1):1–132

Predominance of T cells that express CD45R in the CD4+ helper/inducer lymphocyte subset of neonates. Bradley LM, et al. **Clin Immunol Immunopathol** 1989 Jun; 51(3):426–35

T–cell subset alterations in HIV–infected homosexual men: NIAID Multicenter AIDS cohort study. Giorgi JV, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):10–8

Identification of mononuclear cells and T cell subsets in rheumatic valvulitis. Kemeny E, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):225–37

Pathogenesis of ovine lentivirus–induced arthritis: phenotypic evaluation of T lymphocytes in synovial fluid, synovium, and peripheral circulation. Kennedy–Stoskopf S, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):323–30

Report of the workshop on the evaluation of T–cell subsets during HIV infection and AIDS. Kidd PG, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):3–9

Alterations in thymocyte subpopulations in Down's syndrome (trisomy 21). Larocca LM, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):175–86

Development of antibodies to HIV–1 is associated with an increase in circulating CD3+CD4–CD8– lymphocytes. Margolick JB, et al. **Clin Immunol Immunopathol** 1989 Jun; 51(3):348–61

The role of T cell phenotypes in decreased lymphoproliferation of the elderly. Matour D, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):82–99

The increase of non–MHC–restricted cytotoxic cells (gamma/delta–TCR–bearing T cells or NK cells) and the abnormal differentiation of B cells in Wiskott–Aldrich syndrome. Morio T, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):279–90

Results of the flow cytometry ACTG quality control program: analysis and findings. Paxton H, et al. **Clin Immunol Immunopathol** 1989 Jul;52(1):68–84

Age–related changes in naive and memory CD4+ T cells in healthy human children. Pirruccello SJ, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):341–5

Subpopulations of T alpha cells in patients with IgA nephropathy: correlation between T alpha 4 cells and in vitro IgA production. Yasumoto Y, et al. **Clin Immunol Immunopathol** 1989 May;51(2):232–9

Metabolic state does not influence lymphocyte subsets in type 1 diabetic patients. Buschard K, et al. **Diabetes Res** 1988 Sep;9(1):15–8

Tuberculous pleural effusions: lymphocyte phenotypes in comparison with other lymphocyte–rich effusions. Guzman J, et al. **Diagn Cytopathol** 1989;5(2):139–44

T–cell populations in liver and renal transplant recipients with infectious esophagitis. Brouillette DE, et al. **Dig Dis Sci** 1989 Jan;34(1):92–6

Reduction in T lymphocyte subpopulations following acute exposure to 4 ppm nitrogen dioxide. Damji KS, et al. **Environ Res** 1989 Aug;49(2):217–24

HIV–serology and lymphocyte subsets in relation to therapy and clinical development in haemophiliacs. Böttiger B, et al. **Eur J Haematol** 1988 Nov;41(5):459–66

Differential activation of cytokine genes in normal CD4–bearing T cells is stimulus dependent. Carding SR, et al. **Eur J Immunol** 1989 Feb;19(2):231–8

Monoclonal antibodies which react with the T cell receptor gamma/delta recognize different subsets of CD3+WT31– T lymphocytes. Ferrini S, et al. **Eur J Immunol** 1989 Jan; 19(1):57–61

L3T4+ T cells promoting susceptibility to murine cutaneous leishmaniasis express the surface marker Ly–24 (Pgp–1). Moll H, et al. **Eur J Immunol** 1989 Feb;19(2):307–14

T cell malignancy in Richter's syndrome presenting as hyper IgM. Induction and characterization of a novel CD3+, CD4–, CD8+ T cell subset from phytohemagglutinin–stimulated patient's CD3+, CD4+, CD8+ leukemic T cells. Raziuddin S, et al. **Eur J Immunol** 1989 Mar;19(3):469–74

Expression of disulfide–linked and non–disulfide–linked forms of the T cell receptor gamma/delta heterodimer in human intestinal intraepithelial lymphocytes. Spencer J, et al. **Eur J Immunol** 1989 Jul;19(7):1335–8

Distribution of T cell subsets in follicular fluid. Droesch K, et al. **Fertil Steril** 1988 Oct;50(4):618–21

Distribution of T cell subsets in follicular fluid [letter] Hill JA, et al. **Fertil Steril** 1989 Apr;51(4):736–7

Premature menopause: monoclonal antibody defined T lymphocyte abnormalities and antiovarian antibodies. Rabinowe SL, et al. **Fertil Steril** 1989 Mar;51(3):450–4

Labelling of a T lymphocyte subpopulation with monoclonal antibody bound to colloidal gold. Correlation with the indirect immunofluorescence method. Korčáková L, et al. **Folia Biol (Praha)** 1988;34(4):209–14

Abnormalities of the intestinal immune system in AIDS. Rodgers VD, et al. **Gastroenterol Clin North Am** 1988 Sep; 17(3):487–94 (19 ref.)

Same peculiar subset of HML1 + lymphocytes present within normal intestinal epithelium is associated with tumoral epithelium of gastrointestinal carcinomas. Jarry A, et al. **Gut** 1988 Dec;29(12):1632–8

Changes in intraepithelial lymphocyte subpopulations in coeliac disease and enteropathy associated T cell lymphoma (malignant histiocytosis of the intestine). Spencer J, et al. **Gut** 1989 Mar;30(3):339–46

Primary biliary cirrhosis: lymphocyte subsets and function in a time frame [letter] Konikoff F, et al. **Hepatology** 1989 Oct;10(4):525–6

Phenotype and function of peripheral blood and bone marrow T–cell colonies: identification of DC3–, 4–, 8–autoreactive T cells. Autran B, et al. **Hum Immunol** 1989 Feb;24(2):111–24

T–cell identification of a private DQw5 subtype associated with DR1: contribution of endogenous peptide? Sell TW, et al. **Hum Immunol** 1989 Mar;24(3):219–28

Mouse strain differences in subset distribution and T cell antigen receptor expression among CD4–CD8– thymocytes. Shortman K, et al. **Immunol Cell Biol** 1988 Oct–Dec;66 (Pt 5–6):423–33

T cell subsets in DTH, protection and granuloma formation in primary and secondary Listeria infection in mice: superior role of Lyt–2+ cells in acquired immunity. Mielke ME, et al. **Immunol Lett** 1988 Nov;19(3):211–5 (57 ref.)

T–cell lineages, repertoire selection and tolerance induction. MacDonald HR, et al. **Immunol Rev** 1988 Aug;104:157–82 (84 ref.)

Tolerance to self antigens shapes the T–cell repertoire. Pullen AM, et al. **Immunol Rev** 1989 Feb;107:125–39 (50 ref.)

Speculations on the specificity of suppression. Batchelor JR, et al. **Immunol Today** 1989 Feb;10(2):37–40 (32 ref.)

Subpopulations of human peripheral T gamma delta lymphocytes. Triebel F, et al. **Immunol Today** 1989 Jun; 10(6):186–8

The tissue distribution of T lymphocytes expressing different CD45 polypeptides. Janossy G, et al. **Immunology** 1989 Apr;66(4):517–25

A role for CD4+ but not CD8+ T cells in immunity to Schistosoma mansoni induced by 20 krad–irradiated and Ro 11–3128–terminated infections. Vignali DA, et al. **Immunology** 1989 Aug;67(4):466–72

Development of resistance to Trypanosoma cruzi in mice depends on a viable population of L3T4+ (CD4+) T lymphocytes. Araujo FG. **Infect Immun** 1989 Jul; 57(7):2246–8

Heterogeneity of CD4–positive human T–cell clones which recognize the surface protein antigen of Rickettsia typhi. Carl M, et al. **Infect Immun** 1989 Apr;57(4):1276–80

T cell immunophenotypes and DR antigen expression in intravenous drug users. Relationship to human immunodeficiency virus serology. Lin RY, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):263–8

Mononuclear cell phenotyping in a hemodialysis population. Ramirez G, et al. **Int J Artif Organs** 1988 Sep;11(5):361–5

Serum levels of soluble interleukin–2 receptors and their relation to CD4/CD8 ratio in patients with advanced solid tumors [letter] Tancini G, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):123–4

T lymphocyte subsets in leprosy. A study of 24 Egyptian patients. Ashamalla L, et al. **Int J Dermatol** 1989 Sep; 28(7):451–3

Endocrine, hematological and immunological changes in surgical patients undergoing general anesthesia. Costa A, et al. **Ital J Surg Sci** 1989;19(1):41–9

T lymphocyte subset changes in human immunodeficiency virus infection. Brinchmann JE, et al. **J Acquir Immune Defic Syndr** 1989;2(4):398–403

Patterns of T lymphocyte changes with human immunodeficiency virus infection: from seroconversion to the development of AIDS. Lang W, et al. **J Acquir Immune Defic Syndr** 1989;2(1):63–9

Serum neopterin changes in HIV–infected subjects: indicator of significant pathology, CD4 T cell changes, and the development of AIDS. Melmed RN, et al. **J Acquir Immune Defic Syndr** 1989;2(1):70–6

CD4 percentage, CD4 number, and CD4:CD8 ratio in HIV infection: which to choose and how to use. Taylor JM, et al. **J Acquir Immune Defic Syndr** 1989;2(2):114–24

Benign and malignant forms of erythroderma: cutaneous immunophenotypic characteristics. Abel EA, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1089–95

Biochemical epidemiology in community–based studies: practical lessons from a study of T–cell subsets. Brown LM, et al. **J Clin Epidemiol** 1989;42(6):561–8

T–lymphocyte subsets and delayed type hypersensitivity as classification parameters for HIV infection among drug–addicts. Lazzarin A, et al. **J Clin Lab Immunol** 1988 Apr;25(4):157–60

A novel subset of CD2–, CD3/T cell receptor alpha/beta+ human peripheral blood T cells. Phenotypic and functional characterization of interleukin 2–dependent CD2–CD3+ T cell clones. Kabelitz D, et al. **J Exp Med** 1989 Aug 1; 170(2):559–69

Identification of pre–T cells in human peripheral blood. Extrathymic differentiation of CD7+CD3– cells into CD3+ gamma/delta+ or alpha/beta+ T cells. Preffer FI, et al. **J Exp Med** 1989 Jul 1;170(1):177–90

Age– and sex–related changes of the lymphocyte subsets in healthy individuals: an analysis by two–dimensional flow cytometry. Goto M, et al. **J Gerontol** 1989 Mar; 44(2):M51–6

Cytoimmunologic monitoring and heart transplantation. Hanson CA, et al. **J Heart Transplant** 1988 Nov–Dec; 7(6):424–9

Compartmentalization of a CD4+ T lymphocyte subpopulation in tuberculous pleuritis. Barnes PF, et al. **J Immunol** 1989 Feb 15;142(4):1114–9

T cell–induced Ig allotypic suppression in mice. II. Both CD4+ CD8– and CD4– CD8+ T cell subsets from sensitized Igha mice are required to induce suppression of Igh–1b allotype expression. Benaroch P, et al. **J Immunol** 1989 Jan 1;142(1):1–7

Expression of ets genes in mouse thymocyte subsets and T cells. Bhat NK, et al. **J Immunol** 1989 Jan 15;142(2):672–8

T lymphocyte cloning from rejected human kidney allograft. Recognition repertoire of alloreactive T cell clones. Bonneville M, et al. **J Immunol** 1988 Dec 15; 141(12):4187–95

Tissue localization and CD8 accessory molecule expression of T gamma delta cells in humans. Bucy RP, et al. **J Immunol** 1989 May 1;142(9):3045–9

Differential activation requirements for virgin and memory T cells. Byrne JA, et al. **J Immunol** 1988 Nov 15; 141(10):3249–57

Occurrence of mature B (IgM+, B220+) and T (CD3+) lymphocytes in scid mice. Carroll AM, et al. **J Immunol** 1989 Aug 15;143(4):1087–93

Genetic restriction and fine specificity of human T cell clones reactive with rabies virus. Celis E, et al. **J Immunol** 1988 Oct 15;141(8):2721–8

Distinct patterns of lymphokine requirement for the proliferation of various subpopulations of activated thymocytes in a single cell assay. Chen WF, et al. **J Immunol** 1989 Sep 1;143(5):1598–605

Human postnatal CD4– CD8– CD3– thymic T cell precursors differentiate in vitro into T cell receptor delta–bearing cells. Denning SM, et al. **J Immunol** 1989 May 1;142(9):2988–97

Increment in the Ta1+ cells in the peripheral blood and thyroid tissue of patients with Graves' disease. Eguchi K, et al. **J Immunol** 1989 Jun 15;142(12):4233–40

IL–1 induces high affinity IL–2 receptor expression of CD4–8– thymocytes. Falk W, et al. **J Immunol** 1989 Jul 15;143(2):513–7

Characterization of human peripheral lymphocytes expressing the CD3–gamma/delta complex with anti–receptor monoclonal antibodies. Faure F, et al. **J Immunol** 1988 Nov 15;141(10):3357–60

Host resistance to cyclosporine induced syngeneic graft–versus–host disease. Requirement for two distinct lymphocyte subsets. Fischer AC, et al. **J Immunol** 1989 Aug 1;143(3):827–32

Activation of CD 4–, CD 8– thymocytes with IL 4 vs IL 1 + IL 2. Gause WC, et al. **J Immunol** 1988 Oct 1; 141(7):2240–5

Activation of Lyt–2+ (CD8+) and L3T4+ (CD4+) T cell subsets by anti–receptor antibody. Hathcock KS, et al. **J Immunol** 1989 Apr 1;142(7):2181–6

Systematic development of distinct T cell receptor–gamma delta T cell subsets during fetal ontogeny. Houlden BA, et al. **J Immunol** 1988 Dec 1;141(11):3753–9

The activation of IL–2 transcription in L3T4+ and Lyt–2+ lymphocytes during virus infection in vivo. Kasaian MT, et al. **J Immunol** 1989 Feb 15;142(4):1287–92

Helper–independent CD8+ cytotoxic T lymphocytes express IL–1 receptors and require IL–1 for secretion of IL–2. Klarnet JP, et al. **J Immunol** 1989 Apr 1;142(7):2187–91

Athymic nude CD4+8– T cells produce IL–2 but fail to proliferate in response to mitogenic stimuli. Kung JT, et al. **J Immunol** 1988 Dec 1;141(11):3691–6

Lymphomas with acquired mouse mammary tumor virus proviruses resemble distinct prethymic and intrathymic phenotypes defined in vivo. Meyers S, et al. **J Immunol** 1989 May 1;142(9):3342–50

Identification of a T cell subset using a rabbit antibody raised against a T suppressor molecule. North J, et al. **J Immunol** 1988 Oct 1;141(7):2268–74

Encephalitogenic T cell clones with variant receptor specificity. Offner H, et al. **J Immunol** 1988 Dec 1; 141(11):3828–32

Analysis of the functional capabilities of CD3+CD4–CD8– and CD3+CD4+CD8+ human T cell clones. Patel SS, et al. **J Immunol** 1989 Aug 15;143(4):1108–17

Phenotypic and functional characterization of human T cell clones. Patel SS, et al. **J Immunol** 1988 Dec 1; 141(11):3726–36

Steroid sensitivity of thymocyte subpopulations during

intrathymic differentiation. Effects of 17 beta-estradiol and dexamethasone on subsets expressing T cell antigen receptor or IL-2 receptor. Screpanti I, et al. **J Immunol** 1989 May 15;142(10):3378–83

Two monoclonal antibodies identify thymic-repopulating cells in mouse bone marrow. Spangrude GJ, et al. **J Immunol** 1989 Jan 15;142(2):425–30

Mature T cells generated from single thymic clones are phenotypically and functionally heterogeneous. Spangrude GJ, et al. **J Immunol** 1988 Sep 15;141(6):1877–90

The stem cell antigens Sca-1 and Sca-2 subdivide thymic and peripheral T lymphocytes into unique subsets. Spangrude GJ, et al. **J Immunol** 1988 Dec 1; 141(11):3697–707

Immature, double negative (CD4-,CD8-) rat thymocytes do not express IL-2 receptors. Takács L, et al. **J Immunol** 1988 Dec 1;141(11):3810–8

Constitutive expression of a phosphorylated activation antigen (Leu 23) by CD3bright human thymocytes. Testi R, et al. **J Immunol** 1988 Oct 15;141(8):2557–63

CD8+CD4- lymphocyte lines can harbor the AIDS virus in vitro. Tsubota H, et al. **J Immunol** 1989 Aug 1; 143(3):858–63

Qa-2 expression in the adult murine thymus. A unique marker for a mature thymic subset. Vernachio J, et al. **J Immunol** 1989 Jan 1;142(1):48–56

A novel cell type responsible for marrow graft rejection in mice. T cells with NK phenotype cause acute rejection of marrow grafts. Yankelevich B, et al. **J Immunol** 1989 May 15;142(10):3423–30

Isolation of functionally active T cell receptor gamma delta-bearing lymphocytes from human peripheral blood. Bosnes V, et al. **J Immunol Methods** 1989 Mar 31; 118(2):251–5

T lymphocyte subsets and viral infections in Sardinian parenteral drug abusers: relationship to HIV infection. Farci P, et al. **J Med Virol** 1989 Feb;27(2):81–6

Evidence for defects in accessory and T cell subsets in mice expressing the xid defect. Clayberger C, et al. **J Mol Cell Immunol** 1985;2(2):61–9

T-cell subsets in the cerebrospinal fluid and blood of patients with multiple sclerosis. Kölmel HW, et al. **J Neuroimmunol** 1988 Dec;20(2-3):229–32

T-lymphocyte subsets in recurrent aphthous ulceration. Pedersen A, et al. **J Oral Pathol Med** 1989 Jan;18(1):59–60

Quantification and distribution of lymphocyte subsets and Langerhans cells in normal human oral mucosa and skin. van Loon LA, et al. **J Oral Pathol Med** 1989 Apr; 18(4):197–201

T cells and T-cell subsets in periodontal diseases. Meng HX, et al. **J Periodont Res** 1989 Mar;24(2):121–6

In situ activated T lymphocytes in active versus stable periodontal lesions. Reinhardt RA, et al. **J Periodont Res** 1988 Sep;23(5):295–302

Natural killer cell activity and lymphocyte subsets in parenteral heroin abusers and long-term methadone maintenance patients. Novick DM, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):606–10

Changes of peripheral T-cell subsets in asplenic W256 tumor-bearing rats. Ge YG, et al. **J Surg Oncol** 1989 Sep; 42(1):60–8

Studies on lymphocyte subpopulations and NK cell activities in epileptic patients. Wang XL, et al. **J Tongji Med Univ** 1989;9(1):25–8

Two-color immunofluorescence flow cytometric analysis of lymphocytes in long-term renal allograft recipients. Ziegelbaum M, et al. **J Urol** 1989 Mar;141(3):492–4

Herpes simplex virus-induced stromal keratitis: role of T-lymphocyte subsets in immunopathology. Newell CK, et al. **J Virol** 1989 Feb;63(2):769–75

Predominant CD4 T-lymphocyte tropism of human herpesvirus 6-related virus. Takahashi K, et al. **J Virol** 1989 Jul;63(7):3161–3

Lymphocytosis of large granular lymphocytes associated with anemia and neutropenia: proof of monoclonality of the LGL-population, but benign clinical course. Serke S, et al. **Klin Wochenschr** 1989 Jun 1;67(11):588–91

Alterations in T cell subsets in multiple sclerosis and other autoimmune diseases [letter] Sanders ME, et al. **Lancet** 1988 Oct 29;2(8618):1021

Regeneration of functional and activated NK and T sub-subset cells in the marrow and blood after autologous bone marrow transplantation: a prospective phenotypic study with 2/3-color FACS analysis. Bengtsson M, et al. **Leukemia** 1989 Jan;3(1):68–75

Differences in blood T and NK cell populations between chronic lymphocytic leukemia of B cell type (B-CLL) and monoclonal B-lymphocytosis of undetermined significance (B-MLUS). Kimby E, et al. **Leukemia** 1989 Jul;3(7):501–4

Lymphocyte subpopulations and clonal repertoires participate in immune response to acute T. cruzi infection. Minoprio P, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:356–9

CD4+ T cell subsets in experimental cutaneous leishmaniasis. Scott P, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:256–9

During recovery from cytomegalovirus infection T-lymphocyte subsets become selectively responsive to activation and have depressed interleukin 2 (IL2) secretion and IL2 receptor expression. Nicholas JA, et al. **Microb Pathog** 1987 Jan;2(1):37–47

Abnormal T-cell subsets in normal persons [letter] Macy EM, et al. **N Engl J Med** 1988 Dec 15;319(24):1608–9

Analysis of T cell subsets in patients with malignant brain tumors. Yoshida S, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):970–3

Glomerular T cell and monocyte populations in patients with IgA nephropathy. Tomino Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):221–6

Long-term observation of immunologic reconstitution after allogeneic bone marrow transplantation: differences in recovery among functional T cell subsets. Shiobara S, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):55–62

Human CD3 gamma delta + activated lymphocytes exhibit killer activity in vitro against autologous leukemic cells. Bensussan A, et al. **Nouv Rev Fr Hematol** 1989;31(2):129–32

T-lymphocyte subpopulations in acute unilateral optic neuritis. Guy JR, et al. **Ophthalmology** 1989 Jul; 96(7):1054–7

Clonal heterogeneity of synovial fluid T lymphocytes from patients with rheumatoid arthritis. Duby AD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6206–10

Positive selection of a T-cell subpopulation in the thymus in which it develops. Iwabuchi K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5089–93

The effect of burn injury and zinc nutriture on fecal endogenous zinc, tissue zinc distribution, and T-lymphocyte subset distribution using a murine model. Shippee RL, et al. **Proc Soc Exp Biol Med** 1988 Oct; 189(1):31–8

Significance of thymus differential ratio in immunologic status of graft tolerance. Otani Y, et al. **Res Exp Med (Berl)** 1988;188(4):305–17

T-lymphocyte subsets in the multiple sclerosis lesion. Sobel RA. **Res Immunol** 1989 Feb;140(2):208–11; discussion 245–8 (19 ref.)

Thymic accessory cells required for the increased responsiveness of thymocyte subpopulations to interleukin 1-like monokine in guinea pigs. Aida Y, et al. **Scand J Immunol** 1988 Sep;28(3):285–92

Identification of alpha beta and gamma delta T cell receptor-positive cells. Geisler C, et al. **Scand J Immunol** 1988 Dec;28(6):741–5

Ability of pure resting CD8+ human T cells to respond to alloantigen. Leivestad T, et al. **Scand J Immunol** 1989 May; 29(5):543–53

T-cell phenotypes after stimulation of human mononuclear cells by pokeweed mitogen or pokeweed mitogen bound to erythrocytes. Uiterdijk HG, et al. **Scand J Immunol** 1989 May;29(5):563–71

Temporal analysis of murine lymphocyte subpopulations by monoclonal antibodies and dual-color flow cytometry after burn and nonburn injury. Hansbrough JF, et al. **Surgery** 1989 Jul;106(1):69–80

NOD mice with high incidence of type 1 diabetes are not T lymphocytopenic. Satoh J, et al. **Tohoku J Exp Med** 1988 Jun;155(2):151–8

Ability of a CD4-positive, MRC OX22 "low" T-cell subpopulation to initiate renal allograft rejection in the athymic nude rat. Bradley JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):326–7

Phenotypic and functional analysis of T cells derived from mice developing a lethal graft-versus-host reaction (GVHR) to non-H-2 antigens. Bruley-Rosset M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3039–41

Selective depletion of CD8 positive T-lymphocytes for prevention of graft-versus-host disease following allogeneic bone marrow transplantation. Champlin R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2947–8

Correlation of interleukin-2 receptor positive circulating lymphocytes and acute cardiac rejection. Fieguth HG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2517–8

Different repopulation kinetics of CD3+, 4+ and or 8+ T cells and CD3+, 4-, 8- T cells after allogeneic bone marrow transplantation. Gratama JW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2978–9

Contribution of T-cell subset monitoring of renal transplant recipients in the cyclosporine era. Khanuja PS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1852–3

Selective allogenic donor T cell subsets in experimental bone marrow transplantation. Korngold R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2940–2 (21 ref.)

Differential immunoregulatory effect of allosensitized suppressor T cells on CD4- and CD8-positive T lymphocytes. Loertscher R. **Transplant Proc** 1988 Dec; 20(6):1184–5

The RT6 T cell antigen: its role in the identification of functional subsets and in T cell activation. Lubaroff DM, et al. **Transplant Proc** 1989 Apr;21(2):3251–4

Comparison of CD4 and CD8 T cell reactivity in high-responder and low-responder strain combinations in the rat. McConnell MV, et al. **Transplant Proc** 1989 Apr; 21(2):3294–5

Inverted ratio of CD4/aB heterodimer T cell antigen receptor (TCR aB) to CD8/TCR aB on sorted Leu-7+ (HNK-1) lymphocyte subset in long-term renal allograft recipients. Rodriguez SG, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):257–8

Characteristics of alloreactive rat T cell lines established from low and high rejecting orthotopic liver transplants. Ruiz P, et al. **Transplant Proc** 1989 Apr;21(2):3286–8

Early development of the T cell subset responsible for delayed-type hypersensitivity after syngeneic bone marrow transplantation. Sakumoto M, et al. **Transplant Proc** 1989 Jun;21(3):3455–60

Alloantigen-induced activation of nude rat lymphocytes results in a selective expansion of CD4+ cells. Schwinzer R, et al. **Transplant Proc** 1989 Apr;21(2):3249–50

T-lymphocyte subsets: major histocompatibility antigens rejection of H-2K or H-2I region disparate skin allografts by either Lyt-2+ or L3T4+ T-lymphocyte subset. Smith DM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):162–4

Inversion of CD4+ T cell subsets in chronic renal failure. Soto-Aguilar MC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1979–82

Two-color fluorescence activated flow cytometric analysis of T cells in fine needle aspirates for diagnosis of rejection. Thomas JM, et al. **Transplant Proc** 1989 Aug;21(4):3611–3

Immunosuppressive activity, T-cell subset analysis, and acute toxicity of FK-506 in rats. Thomson AW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1048–9

Effector cells of lethal graft-versus-host disease (GVHD) in nude mice. Uenaka A, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3031–2

Successful islet allografting requires depletion of both Lyt-2+ and L3T4+ cells. Yamamoto H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2707–8

Specific unresponsiveness in rats with prolonged cardiac allograft survival after treatment with cyclosporine. II. Sequential changes in alloreactivity of T cell subsets. Hall BM, et al. **Transplantation** 1989 Jun;47(6):1030–3

Differential effect of cyclosporine in vivo on the distribution of T cell subsets in the thymus, spleen, and lymph nodes. Hiramine C, et al. **Transplantation** 1989 Mar;47(3):499–503

Analysis of T cell subpopulations and cyclosporine levels in the blood of two neonates born to immunosuppressed heart-lung transplant recipients. Rose ML, et al. **Transplantation** 1989 Aug;48(2):223–6

Immunologic diagnosis of kidney rejection using FACS analysis of graft-infiltrating functional and activated T and NK cell subsets. Tötterman TH, et al. **Transplantation** 1989 May;47(5):817–23

Expansion of a CD 3+4-8- TCR alpha/beta- T lymphocyte population in renal allograft recipients. Volk HD, et al. **Transplantation** 1989 Mar;47(3):556–8

Evidence that class I-restricted response to Thy-1 antigen requires L3T4+ cells and macrophages but not Lyt-2+ cells. Zhou P, et al. **Transplantation** 1989 Jun;47(6):1089–92

T lymphocyte population dynamics and function following a primary bovine herpesvirus type-1 infection. Griebel PJ, et al. **Viral Immunol** 1987–88;1(4):287–304

Transfusion history, T cell subsets and natural killer cytotoxicity in patients with colorectal cancer. Tartter PI, et al. **Vox Sang** 1989;56(2):80–4

[A preliminary study on the changes of T-cell subsets in patients with aplastic anemia treated with qigong] Yao BS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jun;9(6):341–2, 324 (Eng. Abstr.) (Chi)

[Effect of Chinese herbal drugs on T-cell subsets and immune function in chronic senile bronchitis] Zhang TZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):658–9, 644 (Eng. Abstr.) (Chi)

[Activated cells in the peripheral blood in lung cancer] Qian L. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):18–21, 62 (Eng. Abstr.) (Chi)

[T cell subsets in peripheral blood and spleen in malignant hepatoma bearing rats] Ge YG. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):417–20 (Eng. Abstr.) (Chi)

[Effect of splenectomy on the growth of W256 carcinosarcoma and T cell subsets of peripheral blood in rat] Ge YG. **Chung Hua Chung Liu Tsa Chih** 1989 Jan; 11(1):8–11 (Eng. Abstr.) (Chi)

[Determination of T lymphocyte subpopulations and their relation to HLA antigens in type 1 diabetes mellitus] Ye ZB. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):205–7, 16 (Eng. Abstr.) (Chi)

[T-cell subpopulation of bronchoalveolar lavage fluid in patients of sarcoidosis and hypersensitivity pneumonitis—2 cases report] Lin CC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):67–74 (Eng. Abstr.) (Chi)

[A study on T lymphocyte subpopulations in peripheral blood of schizophrenics] Fang YQ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):225–6, 255 (Eng. Abstr.) (Chi)

[Establishment of cell-sorting technique with flowcytometer] Zhu LP. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):368–70 (Eng. Abstr.) (Chi)

[Phenotype analysis of peripheral blood T lymphocytes from SLE patients by flow cytometry] Zhu LP. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):57–62 (Eng. Abstr.) (Chi)

[Malignant peripheral T-cell lymphomas: morphologic and immunopathologic bases of the classification proposed by Lennert and Suchi] Le Tourneau A, et al. **Ann Med Interne (Paris)** 1988;139(7):464–8 (27 ref.) (Eng. Abstr.) (Fre)

[Large granular lymphocytic leukemia: a new entity?] Leporrier M, et al. **Rev Med Interne** 1989 Jan–Feb; 10(1):19–21 (Fre)

[Osteocalcin and anomalies of cellular immunity in rheumatoid polyarthritis] Fouquet B, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):577–82 (Eng. Abstr.) (Fre)

[Effect of the method on the results of determining T-cell subpopulations] Neubauer A, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):414–6 (Eng. Abstr.) (Ger)

[Differences in electrophoretic mobility and cytochemistry of leukemic T-cells with identical immunologic phenotype (CD1 positive)] Rychly J, et al. **Folia Haematol (Leipz)** 1988;115(6):837–45 (Eng. Abstr.) (Ger)

[Evaluation of T lymphocytes and lymphocyte subpopulations in patients with pleural effusion] D'Andrea A, et al. **Arch Monaldi Mal Torace** 1987 Nov–Dec; 42(6):555–61 (Eng. Abstr.) (Ita)

[Changes in the lymphocyte subpopulations in a patient with orthotopic transplant of the liver] Cavallini M, et al. **Minerva Chir** 1989 Jun 30;44(12):1651–4 (Eng. Abstr.) (Ita)

[The OKT4/OKT8 ratio in benign monoclonal gammopathies] La Rosa L, et al. **Minerva Med** 1988 Dec; 79(12):1049–50 (Eng. Abstr.) (Ita)

[Analytical research on cellular immunity in HBV carrier state: studies on the AMLR and T cell subsets] Shimoide Y. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):767–82 (Eng. Abstr.) (Jpn)

[Two color analysis of peripheral lymphocyte subsets in patients with cancers during and after radiotherapy] Nakatsugawa S, et al. **Gan No Rinsho** 1988 Oct; 34(13):1789–98 (Eng. Abstr.) (Jpn)

[NK activity and T cell subsets in percutaneous ethanol injection therapy of liver cancer—effect of lentinan with combined use] Yamamoto S, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3291–4 (Jpn)

[Immune local lymph node cells inhibit viral propagation in murine herpetic keratitis] Kazami N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1461–5 (Eng. Abstr.) (Jpn)

[Effect of intratumoral administration of OK-432 on breast cancer—analysis of T cell subsets of tumor infiltrating lymphocytes by using the immunohistological stainings—preliminary report] Hosokawa T, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):316 (Jpn)

[Natural killer (NK) activity of peripheral blood and regional lymph nodes in patients with genitourinary malignant tumors. 2. NK activity and T-lymphocyte subsets in peripheral blood and regional lymph nodes] Yamashita M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May; 80(5):666–73 (Eng. Abstr.) (Jpn)

[Studies on immune deficiency in chronic renal failure. I. Lymphocyte subset and ConA-induced suppressor cell activity in chronic hemodialysis patients] Yoshida K. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):713–9 (Eng. Abstr.) (Jpn)

[The relation between the localization of H. influenzae and inflammatory cells in patients with diffuse panbronchiolitis and other chronic lower respiratory tract infections] Hamada K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov;26(11):1154–60 (Eng. Abstr.) (Jpn)

[Distribution of T cell subsets and DR antigen positive T cells in peripheral blood and in intestinal mucosa of inflammatory bowel disease] Hayashi K. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):182–92 (Eng. Abstr.) (Jpn)

[A study of lymphocyte subsets in the peripheral blood, liver and spleen of patients with idiopathic portal hypertension (IPH)] Kato N. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):736–47 (Eng. Abstr.) (Jpn)

[T, B, NK/K cells and their subsets in normal pregnancy and puerperium] Nasu M, et al. **Rinsho Byori** 1989 Mar; 37(3):273–8 (Jpn)

[Analysis of peripheral blood T cell subsets in patients with MG by two-color method] Kanazawa H, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):808–11 (Eng. Abstr.) (Jpn)

[Monoclonal antibodies in studying indices of cellular immunity in patients with erysipelas] Frolov VM, et al. **Lab Delo** 1989;(6):71–2 (Rus)

[Use of pan-T and pan-B panels of xenogenic sera for the quantitative evaluation of T and B subpopulations of lymphocytes in the blood of donors and patients with acute leukemia] Kochetkova GA, et al. **Lab Delo** 1988;(11):57–61 (Eng. Abstr.) (Rus)

[The lymphocytotoxic test as a method of identifying subpopulations of T lymphocytes using monoclonal antibodies] Sochnev AM, et al. **Lab Delo** 1989;(3):29–32 (Eng. Abstr.) (Rus)

[Cytofluorimetric analysis of blood lymphocyte subpopulations detected using monoclonal antibodies in patients with type I diabetes mellitus] Gruzov MA, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):36–8 (Eng. Abstr.) (Rus)

[Serum and immunological markers of progression to acquired immunodeficiency syndrome in hemophiliacs] Navarro MD, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):405–8 (Eng. Abstr.) (Spa)

[Study of T lymphocyte subpopulations in patients with leprosy, using incubation with theophylline] Bottasso O, et al. **Med Cutan Ibero Lat Am** 1988;16(5):397–401 (Eng. Abstr.) (Spa)

[Polymorphous light eruption. Study of the infiltrate with monoclonal antibodies] Lecha M, et al. **Med Cutan Ibero Lat Am** 1988;16(6):451–4 (Eng. Abstr.) (Spa)

CYTOLOGY

A study of early events during T cell differentiation in thymic grafted nude mice. Chapman CC, et al. **Adv Exp Med Biol** 1988;237:323–31

A low density fraction of bone marrow cells enriched in prothymocyte activity. Ezine S, et al. **Adv Exp Med Biol** 1988;237:307–13

Thymic stromal elements defined by M.Abs: ontogeny, and modulation in vivo by immunosuppression. Godfrey DI, et al. **Adv Exp Med Biol** 1988;237:269–75

T lymphocyte precursors migrate towards chemotactic peptides secreted by embryonic or juvenile thymus. Imhof BA, et al. **Adv Exp Med Biol** 1988;237:565–70

M receptor and differentiation of T lymphocytes in the developing human thymus. Isaković K, et al. **Adv Exp Med Biol** 1988;237:339–44

Vascular thymus transplantation in rats: a new method to study thymocyte kinetics. Kampinga J, et al. **Adv Exp Med Biol** 1988;237:333–8

Postnatal development of non-lymphoid and lymphoid cell populations in situ in diabetes-prone BB rats. van Rees EP, et al. **Adv Exp Med Biol** 1988;237:737–43

Molecular and cellular events of T cell development. Fowlkes BJ, et al. **Adv Immunol** 1989;44:207–64 (274 ref.)

T lymphocyte development and maturation in horses. Perryman LE, et al. **Anim Genet** 1988;19(4):343–8 (13 ref.)

Preferential binding of monocytes and Leu 2+ T lymphocytes to interferon-gamma treated cultured skin endothelial cells and keratinocytes. Nickoloff BJ, et al. **Arch Dermatol Res** 1988;280(4):235–45

Effect of neuropeptides present in skin on the proliferation of human peripheral blood mononuclear cells and T cells. Reusch MK, et al. **Arch Dermatol Res** 1988;280(5):279–81

Mouse T-T hybridomas expressing receptors for syngeneic erythrocytes. Skibiński G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):423–31

Effect of pH on giant cell formation induced by human immunodeficiency virus (HIV). Yoshiyama H, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):973–9

Interleukin-6 (B-cell stimulatory factor 2)-dependent growth of a Lennert's lymphoma-derived T-cell line (KT-3). Shimizu S, et al. **Blood** 1988 Nov;72(5):1826–8

T lymphocyte depletion of human peripheral blood and bone marrow using monoclonal antibodies and magnetic microspheres. Gee AP, et al. **Bone Marrow Transplant** 1987 Aug;2(2):155–63

CD3+, 4+ and/or 8+ T cells and CD3+, 4-, 8- T cells repopulate at different rates after allogeneic bone marrow transplantation. Gratama JW, et al. **Bone Marrow Transplant** 1989 May;4(3):291–6

Simultaneous application of immunolabelling and in situ hybridization to detect the origin of B and T lymphocytes in a case of acute lymphocytic leukaemia after bone marrow transplantation. Khokhar MT, et al. **Bone Marrow Transplant** 1989 Jul;4(4):363–6

Characterization of rat T cell precursors sorted by chemotactic migration toward thymotaxin. Deugnier MA, et al. **Cell** 1989 Mar 24;56(6):1073–83

Separation and characterization of human T lymphocytes with varying adhesiveness for endothelial cells. Cavender DE, et al. **Cell Immunol** 1988 Nov;117(1):111–26

Kinetics of thymus repopulation by intrathymic progenitors after intravenous injection: evidence for successive repopulation by an IL-2R+, Pgp-1- and by an IL-2R-, Pgp-1+ progenitor. Lesley J, et al. **Cell Immunol** 1988 Dec;117(2):378–88

Activation of human T cells with the physiological regulator of protein kinase C. Subramaniam A, et al. **Cell Immunol** 1988 Oct 15;116(2):439–49

Interaction between thymocytes and thymus-derived macrophages. I. Surface components participating in mutual recognition. Zeira M, et al. **Cell Immunol** 1988 Dec; 117(2):264–76

Interaction between thymocytes and thymus-derived macrophages. II. Engulfment of thymocytes by macrophages. Zeira M, et al. **Cell Immunol** 1988 Dec; 117(2):277–88

Proliferation kinetics of human B- and T-lymphocytes. Miller K. **Cell Tissue Kinet** 1987 Nov;20(6):611–5

Depletion of human T cells from bone marrow by monoclonal antibodies and complement. Lieu CW, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):349–56

Neopterin estimation compared with the ratio of T-cell subpopulations in persons infected with human immunodeficiency virus-1. Fuchs D, et al. **Clin Chem** 1988 Dec;34(12):2415–7

Proliferation in vitro of Lyt2-,L3T4- thymocytes shows responsiveness to interleukin 1. Chaudhri G, et al. **Clin Exp Immunol** 1988 Jul;73(1):51–6

Origin of T lymphocyte colony-forming cells in cell populations depleted of sheep erythrocyte rosette forming cells. Roy C, et al. **Clin Exp Immunol** 1988 Jul;73(1):46–50

Kinetics of T lymphocyte development. Janossy G, et al. **Curr Top Pathol** 1989;79:59–99 (143 ref.)

Interleukin 7 (murine pre-B cell growth factor/lymphopoietin 1) stimulates thymocyte growth: regulation by transforming growth factor beta. Chantry D, et al. **Eur J Immunol** 1989 Apr;19(4):783–6

Cross-linking of the T cell antigen receptor interferes with the generation of CD4+8+ thymocytes from their immediate CD4-8+ precursors. Hünig T. **Eur J Immunol** 1988 Dec;18(12):2089–92

Clonal analysis of human T lymphocytes infiltrating the liver in chronic active hepatitis B and primary biliary cirrhosis. Meuer SC, et al. **Eur J Immunol** 1988 Sep;18(9):1447–52

Clonal analysis of CD4-CD8- human thymocytes expressing a T cell receptor gamma/delta chain. Direct evidence for the de novo expression of CD8 surface antigen and of cytolytic activity against tumor targets. Mingari MC, et al. **Eur J Immunol** 1988 Nov;18(11):1831–4

In vivo dynamics of CD4-8- thymocytes. Proliferation, renewal and differentiation of different cell subsets studied by DNA biosynthetic labeling and surface antigen detection. Penit C, et al. **Eur J Immunol** 1988 Sep; 18(9):1343–50

CD4+CD8+ thymocytes develop into CD4 or CD8 single-positive cells in athymic nude mice. Tamauchi H, et al. **Eur J Immunol** 1988 Nov;18(11):1859–62

Both virgin and memory T cells cluster with dendritic cells during autologous and allogeneic mixed leukocyte reaction. Vakkila J. **Eur J Immunol** 1989 Jun;19(6):1003–8

Mitogen-induced preferential synthesis of proteins during the G0 to S phase transition in human lymphocytes. Haire RN, et al. **Exp Cell Res** 1988 Nov;179(1):65–78

Characterization of colony-forming cells in the human thymus: evidence for a suppressor mechanism. Dalloul AH, et al. **Exp Hematol** 1989 Aug;17(7):774–8

Signal requirements for the generation of T-lymphocytes from T-depleted bone marrow cells: a sequential study. Lecron JC, et al. **Exp Hematol** 1989 Aug;17(7):785–90

Adenosine 3',5'-cyclic monophosphate (cAMP) inhibits phorbol ester-induced growth of an IL-2-dependent T cell line. Goto Y, et al. **FEBS Lett** 1988 Nov 7;239(2):165–8

Cercopithecus aethiops monkey as a reliable model for in vitro study of T cell depletion of bone marrow with Campath-1 plus complement. Phan DT, et al. **Folia Haematol (Leipz)** 1989;116(1):97–106

Development of thymocytes in organ culture: migrant cells with natural killer cell characteristics. Skinner MA, et al. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):107–14

Studies on thymocyte subpopulations in guinea pigs: in vivo differentiation of bromodeoxyuridine labelled cells, with special reference to rosette-forming ability. Sandberg G, et al. **Immunol Lett** 1989 Jun 1;21(3):249–55

Distinct functions of CD8(CD4) are utilized at different stages of T-lymphocyte differentiation. Eichmann K, et al. **Immunol Rev** 1989 Jun;109:39–75 (95 ref.)

Analysis of cell division among subpopulations of lymphoid cells in sheep. I. Thymocytes. McClure S, et al. **Immunology** 1988 Nov;65(3):393–9

Contact-mediated maturational effects of thymic stromal cells on murine thymocytes in culture. Savion S, et al. **Immunology** 1989 Aug;67(4):496–501

Cyclosporin A and anti-Ia antibody cause a maturation defect of CD4+8- cells in organ-cultured fetal thymus. Takeuchi Y, et al. **Immunology** 1989 Mar;66(3):362–7

Human immunodeficiency virus cell entry: new insights into the fusion mechanism. Burny A, et al. **J Acquir Immune Defic Syndr** 1988;1(6):579–82 (31 ref.)

Impaired late suppression of Epstein-Barr virus (EBV)-induced immunoglobulin synthesis: a common feature of autoimmune disease. Shore A, et al. **J Clin Immunol** 1989 Mar;9(2):103–10

Analysis of the first two waves of thymus homing stem cells and their T cell progeny in chick-quail chimeras. Coltey M, et al. **J Exp Med** 1989 Aug 1;170(2):543–57

Cloning of phenotypically different human lymphocytes originating from a single stem cell. Hakoda M, et al. **J Exp Med** 1989 Apr 1;169(4):1265–76

Early events in human T cell ontogeny. Phenotypic characterization and immunohistologic localization of T cell precursors in early human fetal tissues [published erratum appears in J Exp Med 1989 Feb 1;169(2):603] Haynes BF, et al. **J Exp Med** 1988 Sep 1;168(3):1061–80

Clonal expansion of human T lymphocytes initiated by dendritic cells. Langhoff E, et al. **J Exp Med** 1989 Jan 1;169(1):315–20

Vicia villosa agglutinin separates freshly isolated Peyer's Patch T cells into interleukin 5- or interleukin 2-producing subsets. Schoenbeck S, et al. **J Exp Med** 1989 Apr 1; 169(4):1491–6

Essential role of the interleukin 2-interleukin 2 receptor pathway in thymocyte maturation in vivo. Tentori L, et al. **J Exp Med** 1988 Nov 1;168(5):1741–7

Involvement of the interleukin 2 pathway in the rearrangement and expression of both alpha/beta and gamma/delta T cell receptor genes in human T cell precursors. Toribio ML, et al. **J Exp Med** 1988 Dec 1; 168(6):2231–49

Improved cell depletion in a panning technique using covalent binding of immunoglobulins to surface modified polystyrene dishes. Larsson PH, et al. **J Immunol Methods** 1989 Jan 17;116(2):293–8

The in vivo behavior of T cell clones: altered migration due to loss of the lymphocyte surface homing receptor. Dailey MO, et al. **J Mol Cell Immunol** 1985;2(1):27–36

The role of immunoglobulin and B cells in T cell ontogeny and repertoire formation—a commentary. Janeway CA Jr, et al. **J Mol Cell Immunol** 1985;2(2):118–20

A closer look at T cell differentiation. Kyewski B. **Lab Invest** 1988 Nov;59(5):561–3 (31 ref.)

A sicca syndrome in HIV infection: association with HLA-DR5 and CD8 lymphocytosis. Itescu S, et al. **Lancet** 1989 Aug 26;2(8661):466–8

Strategies of immune reconstitution: effects of lymphokines on murine T cell development in vitro and in vivo. Hadden JW, et al. **Life Sci** 1989;44(13):v–xii

In vivo influence of the anti-B220 monoclonal antibody administration of the T cell differentiation in mice. Assensi V, et al. **Microbiol Immunol** 1989;33(4):329–39

Antibodies to CD3/T-cell receptor complex induce death by apoptosis in immature T cells in thymic cultures. Smith CA, et al. **Nature** 1989 Jan 12;337(6203):181–4

Acid alpha-naphthyl acetate esterase (ANAE) staining of porcine lymphocytes. Inoue T, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1169–76

Effects of monoclonal antibodies (anti-CD3, 4, 8) under the presence of interleukin-2 (IL-2) on human T-cell colony formation derived from peripheral blood. Wakabayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):774–82

Immunogenic functions of folliculo-stellate cells of the normal human pituitary? Günzl HJ, et al. **Pathol Res Pract** 1988 Sep;183(5):634–5

Transformation to continuous growth of primary human T lymphocytes by human T-cell leukemia virus type I X-region genes transduced by a Herpesvirus saimiri vector. Grassmann R, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3351–5

Neonatal administration of prolactin antiserum alters the developmental pattern of T- and B-lymphocytes in the thymus and spleen of BALB/c female mice. Russell DH, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7404–7

In vitro effects of recombinant interleukin 7 on growth and differentiation of bone marrow pro-B- and pro-T-lymphocyte clones and fetal thymocyte clones. Takeda S, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1634–8

T-cell adhesion to endothelial cells in systemic lupus erythematosis. Haskard DO, et al. **Rheumatol Int** 1989; 9(1):33–7

Fibroblast-activating factor production by interleukin (IL)-2 dependent T-cell clones from rheumatoid arthritis patients and normal donors. Ofosu-Appiah WA, et al. **Rheumatol Int** 1988;8(5):219–24

Immunocytology of synovial fluid cells. A prognostic indicator in inflammatory arthritis? Poulter LW, et al. **Scand J Rheumatol** 1988;17(3):213–7

G1/S transition in normal human T-lymphocytes requires the nuclear protein encoded by c-myb. Gewirtz AM, et al. **Science** 1989 Jul 14;245(4914):180–3

Growth of single T cells and single thymocytes in a high cloning efficiency filler-cell free microculture system. Chen WF, et al. **Thymus** 1988;12(1):51–68

T cell monitoring in kidney transplantation. Mestre M, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 6):52–5

[Effects of hematopoietic growth factor (GM-CSF: granulocyte-macrophage colony-stimulating factor) on thymocyte proliferation induced by interleukin-1 (IL-1)] Herbelin A, et al. **C R Acad Sci [III]** 1989;309(7):221–7 (Eng. Abstr.) **(Fre)**

[The effect of Campath-1 on T- and NK-cells] Schofer O, et al. **Immun Infekt** 1988 Aug;16(4):143–7 (Eng. Abstr.) **(Ger)**

[Presence of immunocompetent cells in human fetal brain] Ennas MG, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep-Oct;109(5):279–83 (Eng. Abstr.) **(Ita)**

[Demonstration of the lymphokine mechanism of the reinforcement of lymphoid proliferation during liver regeneration in mice] Rakhmilevich AL. **Ontogenez** 1989 Mar-Apr;20(2):192–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Long-lasting effects of cyclophosphamide on lymphocytes in peripheral blood and spinal fluid. Uitdehaag BM, et al. **Acta Neurol Scand** 1989 Jan;79(1):12–7

Effect of histamine on the T-cell colony formation of PHA-stimulated cells. Meretey K, et al. **Agents Actions** 1989 Apr;27(1-2):215–7

Biochemical pharmacology of zidovudine in human T-lymphoblastoid cells (CEM). Avramis VI, et al. **Aids** 1989 Jul;3(7):417–22

Alcohol exposure in utero results in diminished T-cell function and alterations in brain corticotropin-releasing factor and ACTH content. Redei E, et al. **Alcoholism (N Y)** 1989 Jun;13(3):439–43

Effect of arachidonic acid metabolites on thymocyte proliferation. Delebassée S, et al. **Ann Inst Pasteur Immunol** 1988 Jul-Aug;139(4):383–99

Beneficial effect of monoclonal antibody to interleukin 2 receptor on activated T cells in rheumatoid arthritis. Kyle V, et al. **Ann Rheum Dis** 1989 May;48(5):428–9

Glucocorticoids activate a suicide process in thymocytes through an elevation of cytosolic Ca2+ concentration. McConkey DJ, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):365–70

Modulation of murine T and B cell reactivity after short-term cadmium exposure in vivo. Hurtenbach U, et al. **Arch Toxicol** 1988 Aug;62(1):22–8

Inhibition of phytohemagglutinine-induced T lymphocyte proliferation by 6-(octadecyldithio)purine, a novel liposomal prodrug of 6-mercaptopurine. Daniel PT, et al. **Arch Toxicol Suppl** 1989;13:179–82

The diacylglycerol analogue, 1,2-sn-dioctanoylglycerol, induces an increase in cytosolic free Ca2+ and cytosolic acidification of T lymphocytes through a protein kinase C-independent process. Ebanks R, et al. **Biochem J** 1989 Mar 15;258(3):689–98

Monosialoganglioside GM1 increases survival of thymocytes. Ernström U, et al. **Biosci Rep** 1989 Feb;9(1):119–27

Heparin inhibits specific glycosyltransferase activities in interleukin 2 activated murine T cells. Schwarting GA, et al. **Biosci Rep** 1988 Aug;8(4):389–99

Synthesis of deacetylthymosin beta 11 and its effect on the impaired T-lymphocytes of a uremic patient with common variable immunodeficiency. Abiko T, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):576–88

T-lymphocyte killing by T101-ricin A-chain immunotoxin: pH-dependent potentiation with lysosomotropic amines. Casellas P, et al. **Blood** 1988 Oct;72(4):1197–202

Effects of interleukin-2 and interferon-alpha A/D treatment on lymphocytes from tumour-bearing mice. Ligo M, et al. **Br J Cancer** 1989 Jun;59(6):883–8

Intralesional cyclosporin in psoriasis: effects on T lymphocyte and dendritic cell subpopulations. Baker BS, et al. **Br J Dermatol** 1989 Feb;120(2):207–13

Inhibition of interleukin-2 secretion by factor VIII concentrates: a possible cause of immunosuppression in haemophiliacs. Thorpe R, et al. **Br J Haematol** 1989 Mar; 71(3):387–91

2-deoxy-D-glucose modulation of T-lymphocyte reactivity: differential effects on lymphoid compartments. Lysle DT, et al. **Brain Behav Immun** 1988 Sep;2(3):212–21

Effect of dam's accumulated tissue PCBs on mouse filial T-cell population and T-cell subpopulations. Takagi Y, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):443–50

Effect of phytohemagglutinin and interleukin-2 on malignant and nonmalignant B and T lymphocytes. Porwit A, et al. **Cancer Detect Prev** 1988;12(1-6):91–6

Effect of low-dose cyclophosphamide therapy on specific and nonspecific T cell-dependent immune responses of spleen cells from mice bearing large MOPC-315 plasmacytomas. Wise JA, et al. **Cancer Immunol Immunother** 1988;27(3):191–7

Interferon-induced inhibition of Moloney sarcoma virus-transformed cells: requirement for T-cells. Skicki-Mullen MB, et al. **Cancer Res** 1989 Feb 1; 49(3):522–7

Selective decrease in Leu8-negative T cell subpopulations following treatment with recombinant interferon-alpha 2a (rIFN-alpha 2a). Martínez-Maza O, et al. **Cell Immunol** 1988 Nov;117(1):89–98

Demonstration of a direct inhibitory effect of cyclosporine on normal human T-cells with two novel models of T-cell activation as probes. Sehajpal P, et al. **Cell Immunol** 1989 Apr 15;120(1):195–204

Direct T-cell effects of minoxidil. Fiedler VC, et al. **Clin Dermatol** 1988 Oct-Dec;6(4):148–51

The effect of antithyroid drugs on B and T cell activity in vitro. Wilson R, et al. **Clin Endocrinol (Oxf)** 1988 Apr; 28(4):389–97

In vitro and in vivo action of cyclosporin A on the induction of human interleukin-2 receptor alpha and beta chains. Caillat-Zucman S, et al. **Clin Exp Immunol** 1989 Aug; 77(2):184–90

The inhibitory effects of mycobacterial lipoarabinomannan and polysaccharides upon polyclonal and monoclonal human T cell proliferation. Moreno C, et al. **Clin Exp Immunol** 1988 Nov;74(2):206–10

Functional heterogeneity in the process of T lymphocyte activation; barium blocks several modes of T cell activation, but spares a functionally unique subset of PHA-activable T cells. Peçanha LT, et al. **Clin Exp Immunol** 1989 May;76(2):311–6

2-Mercaptoethanol and n-acetylcysteine enhance T cell colony formation in AIDS and ARC. Wu J, et al. **Clin Exp Immunol** 1989 Jul;77(1):7–10

1,25-Dihydroxyvitamin D3 (calcitriol) suppresses concanavalin A-stimulated human T cell proliferation through monocytes. Haq AU. **Clin Immunol Immunopathol** 1989 Mar;50(3):364–73

Effect of interferon-gamma on the abnormality of T cell activation in NZB mice. Minoda M, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):283–91

Effect of high/low dietary linoleic acid levels on the function and fatty acid composition of T-lymphocytes of normal and diabetic rats. Singh B, et al. **Diabetes Res** 1988 Jul; 8(3):129–34

Action of nedocromil sodium and sodium cromoglycate on cloned human allergen-specific CD4+ T lymphocytes. O'Hehir RE, et al. **Drugs** 1989;37 Suppl 1:23–5; discussion 69–77

Glycosylation of human leukocyte locus A molecules is dependent on the cell type. Merlu B, et al. **Eur J Biochem** 1989 May 15;181(3):755–60

Effect of cyclosporin A on T cell immunity. I. Dose-dependent suppression of different murine T helper cell pathways. Fukuzawa M, et al. **Eur J Immunol** 1989 Jan;19(1):49–56

Inhibition of interleukin 2-induced proliferation of cloned murine T cells by glucocorticoids. Possible involvement of an inhibitory protein. Redondo JM, et al. **Eur J Immunol** 1988 Oct;18(10):1555–9

A cytokine, lymphocyte blastogenesis inhibitory factor (LBIF), arrests mitogen-stimulated T lymphocytes at early G1 phase with no influence on interleukin 2 production and interleukin 2 receptor light chain expression. Sugimura K, et al. **Eur J Immunol** 1989 Aug;19(8):1357–64

Involvement of tryptase-related cellular protease(s) in human immunodeficiency virus type 1 infection. Hattori T, et al. **FEBS Lett** 1989 May 8;248(1-2):48–52

Vinblastine sensitivity of leukaemic lymphoblasts modulated by serum lipid. Holmes KT, et al. **FEBS Lett** 1989 Feb 13;244(1):103–7

Effects of cyclosporin A on progressive and regressive tumors induced by two cancer lines derived from a single colon carcinoma chemically induced in the rat. Shimizu T, et al. **Immunobiology** 1989 Feb;178(4-5):401–15

Iron exerts a specific inhibitory effect on CD2 expression of human PBL. Carvalho GS, et al. **Immunol Lett** 1988 Oct;19(2):163–7

Preferential enhancement by 2-mercaptoethanol of IL-2 responsiveness of T blast cells from old over young mice is associated with potentiated protein kinase C translocation. Fong TC, et al. **Immunol Lett** 1989 Jan 31; 20(2):149–54

Insulin-like growth factor-1 increases the mitogenic response of human peripheral blood lymphocytes to phytohemagglutinin. Roldan A, et al. **Immunol Lett** 1989 Jan 15;20(1):3–8

Interleukin 1 induction of a serine esterase in a murine T cell line is inhibited by fetal calf serum. Schlegel-Haueter SE, et al. **Immunol Lett** 1989 Jan 15;20(1):35–9

Inhibition of the CD3-mediated calcium signal by protein kinase C activators in human T (Jurkat) lymphoblastoid cells. Tordai A, et al. **Immunol Lett** 1989 Jan 15;20(1):47–52

Anti-schistosomal activity of cyclosporin A: studies on murine spleen cells and the influence of a cyclosporin antagonist on resistance to infection. Brannan LR, et al. **Immunology** 1989 Jul;67(3):382–7

TGF beta down-regulates TLiSA1 expression and inhibits the differentiation of precursor lymphocytes into CTL and LAK cells. Jin B, et al. **Immunology** 1989 Apr;66(4):570–6

Inhibition of T-lymphocyte activation by the immunosuppressive drug FK-506. Kay JE, et al. **Immunology** 1989 Aug;67(4):473–7

Interactive effects of pertussis toxin and the phorbol ester tumour promotor, phorbol dibutyrate, on T-lymphocyte mitogenesis and the expression of phenotypic determinants. Strnad CF, et al. **Immunology** 1989 Apr;66(4):539–45

Differential effect of mixed D1/D2 and selective D2 dopaminergic antagonists on mouse T and B lymphocyte proliferation and interleukin production in vitro. Boukhris W, et al. **Immunopharmacol Immunotoxicol** 1988; 10(4):501–12

Sodium aurothiomalate inhibits T cell responses to interleukin-2. Harth M, et al. **Immunopharmacol Immunotoxicol** 1988;10(2):141–56

Quantitative and functional change in T cells of primiparous mice following injection of benzo(a)pyrene at the second trimester of pregnancy. Urso P, et al. **Immunopharmacol Immunotoxicol** 1988;10(2):195–217

Selected human T cell lines respond to thymopoietin with intracellular cyclic GMP elevations. Baker B, et al. **Immunopharmacology** 1988 Sep-Oct;16(2):115–22

Distinct effects of aminopterin on stimulation of T and B lymphocytes with mitogen. Holáň V, et al. **Immunopharmacology** 1989 Jul-Aug;18(1):23–30

Short-term somatostatin infusion affects T lymphocyte responsiveness in humans. Malec P, et al. **Immunopharmacology** 1989 Jan-Feb;17(1):45–9

Effect of PGE1 treatment on in vitro thymocyte function of normal and autoimmune mice. Whittum-Hudson J, et al. **Immunopharmacology** 1988 Sep-Oct;16(2):71–8

Effect of levamisole on T cell in minimal change nephrotic syndrome. Dayal R, et al. **Indian Pediatr** 1988 Dec; 25(12):1184–7

CCA [N-(2-carboxyphenyl)-4-chloroanthranilic acid disodium salt], a newly developed immunomodulating drug, suppresses T-cell activation by acting on macrophages. Takeuchi T, et al. **Inflammation** 1989 Apr; 13(2):125–35

Cotton bract tannin: a novel human T-lymphocyte mitogen and a possible causative agent of byssinosis. Vuk-Pavlović Z, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):14–8

Clinical trial with clofazimine for treating erythema dyschromicum perstans. Evaluation of cell-mediated immunity. Piquero-Martín J, et al. **Int J Dermatol** 1989 Apr;28(3):198–200

Immunomodulating properties of cianidanol on responsiveness and function of human peripheral blood T-cells and K-cells. Berg AU, et al. **Int J Immunopharmacol** 1988;10(4):387–94

The combined administration of thymomodulin and interleukin 2 reverses T-cell unresponsiveness in mice infected with Mycobacterium bovis-BCG. Colizzi V, et al. **Int J Immunopharmacol** 1988;10(3):271–5

Evidence that 8-methoxypsoralen (8-MOP) is a T-lymphocyte immunomodulatory agent. Cox GW, et al. **Int J Immunopharmacol** 1988;10(6):773–81

Stage-specific distinctions in potassium channel blocker control of T-lymphocyte activation. Dos Reis GA, et al. **Int J Immunopharmacol** 1988;10(3):217–26

Inhibition of phytohemagglutinin (PHA) induced human T-cell colonies by methylprednisolone. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):237–45

Inhibiton of the colony-forming capacity of human T-lymphocytes exerted by theophylline. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):299–302

Thymosin, interleukins, isoprinosine and imuthiol do not reconstitute T-cells in athymic nude mice. Hadden JW,

et al. **Int J Immunopharmacol** 1989;11(1):13–9

Mechanism of lithium-induced augmentation of T-cell proliferation. Kucharz EJ, et al.
Int J Immunopharmacol 1988;10(3):253–9

Murine polyclonal T-lymphocyte activation induced by phytohemmagglutinin; differential lymphokine requirements of two unusual activation pathways defined by resistance to blockade by barium and by cyclosporin A. Peçanha LM, et al. **Int J Immunopharmacol** 1989; 11(2):149–56

Different pathways for deoxyguanosine toxicity in T-lymphocytes of various developmental stages. Scharenberg JG, et al. **Int J Immunopharmacol** 1988; 10(6):675–86

Silybin inhibition of human T-lymphocyte activation. Meroni PL, et al. **Int J Tissue React** 1988;10(3):177–81

Selective killing of human T cell lymphotropic virus type I-transformed cell lines by a damavaricin Fc derivative. Ito S, et al. **J Antibiot (Tokyo)** 1989 May;42(5):779–87

The effect of thymic substances on T circulating cells of patients treated for Hodgkin's disease. Chiesi T, et al.
J Biol Regul Homeost Agents 1988 Oct–Dec;2(4):193–8

Induction of competence and progression signals in human T lymphocytes by phorbol esters and calcium ionophores. Kumagai N, et al. **J Cell Physiol** 1988 Nov;137(2):329–36

Inhibition of interleukin-1 production by 1,25-dihydroxyvitamin D3. Tsoukas CD, et al.
J Clin Endocrinol Metab 1989 Jul;69(1):127–33

Human T cell responses to dengue virus antigens. Proliferative responses and interferon gamma production. Kurane I, et al. **J Clin Invest** 1989 Feb;83(2):506–13

Requirement for T cells and effect of lymphokines in successful chemotherapy for an intracellular infection. Experimental visceral leishmaniasis. Murray HW, et al.
J Clin Invest 1989 Apr;83(4):1253–7

Bacterial toxins affect early events of T lymphocyte activation. Stewart SJ, et al. **J Clin Invest** 1989 Jan; 83(1):234–42

Dexamethasone-induced bovine T-lymphocyte suppression and the effect upon susceptibility to sheep scab mite (Acari: Psoroptidae) infestation. Pruett JH, et al.
J Econ Entomol 1989 Feb;82(1):175–9

Charybdotoxin blocks voltage-gated K+ channels in human and murine T lymphocytes. Sands SB, et al.
J Gen Physiol 1989 Jun;93(6):1061–74

A new interpretation of the involvement of serotonin in delayed-type hypersensitivity. Serotonin-2 receptor antagonists inhibit contact sensitivity by an effect on T cells. Ameisen JC, et al. **J Immunol** 1989 May 1; 142(9):3171–9

Immunomodulation by low-dose methotrexate. I. Methotrexate selectively inhibits Lyt-2+ cells in murine acute graft-versus-host reactions. Gibbons JJ Jr, et al.
J Immunol 1989 Mar 15;142(6):1867–73

Activation of a suicide process of thymocytes through DNA fragmentation by calcium ionophores and phorbol esters. Kizaki H, et al. **J Immunol** 1989 Sep 15;143(6):1790–4

Effect of cyclosporin A on lymphopoiesis. I. Absence of mature T cells in thymus and periphery of bone marrow transplanted mice treated with cyclosporin A. Kosugi A, et al. **J Immunol** 1989 May 1;142(9):3026–32

Cyclosporin A inhibits initiation but not progression of human T cell proliferation triggered by phorbol esters and calcium ionophores. Kumagai N, et al. **J Immunol** 1988 Dec 1;141(11):3747–52

Agents that mimic antigen receptor signaling inhibit proliferation of cloned murine T lymphocytes induced by IL-2. Nau GJ, et al. **J Immunol** 1988 Nov 15; 141(10):3557–63

Selective inhibition of antigen presentation to cloned T cells by protease inhibitors [published erratum appears in J Immunol 1989 Mar 1;142(5):1781] Puri J, et al.
J Immunol 1988 Nov 15;141(10):3313–7

Organ-specific autoimmune disease induced in mice by elimination of T cell subsets. V. Neonatal administration of cyclosporin A causes autoimmune disease. Sakaguchi S, et al. **J Immunol** 1989 Jan 15;142(2):471–80

Partial purification and characterization of a factor produced by mitogen-stimulated sheep mononuclear cells with thymocyte-activating and cartilage-degrading properties. Harkins GD, et al. **J Immunol Methods** 1989 Feb 24; 117(2):231–41

Biological activity of recombinant murine interleukin-6 in interleukin-1 T cell assays. Suda T, et al.
J Immunol Methods 1989 Jun 21;120(2):173–8

Selenium and the immune response: 1. Modulation of alloreactive human lymphocyte functions in vitro. Petrie HT, et al. **J Leukoc Biol** 1989 Mar;45(3):207–14

T cell receptor binding and unrestricted reactivity to GLT in somatic variants of an I-Ek specific T cell hybrid. MacNeil IA, et al. **J Mol Cell Immunol** 1985;2(2):71–9

Loss of leukoregulin up-regulation of natural killer but not lymphokine-activated killer lymphocytotoxicity in human papillomavirus 16 DNA-immortalized cervical epithelial cells. Furbert-Harris PM, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1080–5

Inhibition of lymphocyte function by glioblastoma-derived transforming growth factor beta 2. Kuppner MC, et al.
J Neurosurg 1989 Aug;71(2):211–7

Effect of prednisone on DR-positive T cells in children with chronic active hepatitis B. Pignata C, et al.
J Pediatr Gastroenterol Nutr 1989 Apr;8(3):288–91

Potential use of an antagonist of cAMP-dependent protein kinase to block inhibition and modulate T-cell receptor-triggered activation of cytotoxic T-lymphocytes. Takayama H, et al. **J Pharm Sci** 1989 Jan;78(1):8–10

Effect of insulin on the production and action of interleukin 1. Feng ZH, et al. **J Tongji Med Univ** 1988;8(4):208–12

Changes in T-lymphocyte subpopulations and natural killer cells following exposure to ambient levels of nitrogen dioxide. Richters A, et al. **J Toxicol Environ Health** 1988; 25(2):247–56

Immunologic effects of perinatal exposure of rats to dioctyltin dichloride. Smialowicz RJ, et al.
J Toxicol Environ Health 1988;25(4):403–22

Effect of plant polysaccharides on T and B lymphocytes in normal and tumor transplanted mice. Gu YX, et al.
J Tradit Chin Med 1988 Sep;8(3):198–202

Effect of plant polysaccharides on T and B lymphocytes in tumor transplanted mice irradiated by X-ray. Gu YX, et al. **J Tradit Chin Med** 1988 Dec;8(4):277–81

Somatic mutation in peripheral lymphocytes of former workers at the Okunojima poison gas factory. Yanagida J, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1276–83

Comments on "The molecular basis for the differential sensitivity of B and T lymphocytes to growth inhibition by thymidine and 5-fluorouracil" [letter] Srivastava BI.
Leuk Res 1988;12(8):699

Magnesium counteracts nickel-induced suppression of T lymphocyte response to concanavalin A. Kasprzak KS, et al. **Magnesium** 1988;7(3):166–72

Aging decreases beta-endorphin enhancement of T-cell mitogenesis in mice. Norman DC, et al.
Mech Ageing Dev 1988 Aug;44(2):185–91

Effect of the immunomodulator LF 1695 on T-lymphocytes and macrophages. Activity in HIV infection. Touraine JL.
Med Oncol Tumor Pharmacother 1989;6(1):59–61 (6 ref.)

Lymphocyte stem cell alterations following perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Fine JS, et al. **Mol Pharmacol** 1989 Jan;35(1):18–25

Abnormal differentiation of thymocytes in mice treated with cyclosporin A. Gao EK, et al. **Nature** 1988 Nov 10; 336(6195):176–9

Effect of iron on T-cell colony formation in patients with iron deficiency anemia. Wakabayashi Y, et al.
Nippon Ketsueki Gakkai Zasshi 1988 Jul;51(4):691–7

Inhibition of human T cell responses by hydrogen peroxide. Freed BM, et al. **Pharmacol Ther** 1988;39(1–3):267–8

Immune response versus susceptibility to Marek's disease. Calnek BW, et al. **Poult Sci** 1989 Jan;68(1):17–26

Specific inhibition of the T-cell response to myelin basic protein by the synthetic copolymer Cop 1. Teitelbaum D, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9724–8

Effects of some lipophilic xenobiotics on T-lymphocytes using a modified rosette inhibition test. Heinzow BG, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):277–80

Recombinant human tumour necrosis factor beta (lymphotoxin) lacks chemotactic activity for human peripheral blood neutrophils, monocytes, and T cells. Mrowietz U, et al. **Scand J Immunol** 1989 Sep;30(3):373–7

Effects of 12-O-tetradecanoyl phorbol-13-acetate (TPA) on rat thymocytes. Sasaki R, et al. **Scand J Immunol** 1989 Apr; 29(4):485–8

Abnormal distribution of T cell subsets in the thymus of cyclosporin A (CsA)-treated mice. Hiramine C, et al.
Thymus 1988;11(4):243–52

Differential lymphocyte growth-modifying effects of oxidants: changes in cytosolic Ca+2. Duncan DD, et al.
Toxicol Appl Pharmacol 1989 Sep 15;100(3):485–97

The inhibitory effect of cyclosporine on the nuclear proliferative response to a variety of T cell activators. Citterio F, et al. **Transplantation** 1989 Feb;47(2):334–8

Evaluation of antihuman T lymphocyte saporin immunotoxins potentially useful in human transplantation. Siena S, et al. **Transplantation** 1988 Nov;46(5):747–53

Enhancement of methotrexate cytotoxicity by modulation of proliferative activity in normal and neoplastic T lymphocytes and in a myeloid leukemia cell line. Ciaiolo C, et al. **Tumori** 1988 Oct 31;74(5):537–42

AL 721: a potent membrane modulating agent of human T-lymphocytes? Offner FA, et al.
Wien Klin Wochenschr 1988 Sep 9;100(17):597–9

Suggested mode of action of D-penicillamine as an immunosuppressive agent in rheumatoid arthritis. Lipsky PE. **Z Rheumatol** 1988;47 Suppl 1:6–8

Effects of leukocidin from Fusobacterium necrophorum on bovine peripheral leukocytes in vitro. Kanoe M, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Jun; 268(4):463–9

Suppression of mitogenic activity of T lymphocytes by subtoxic concentration of ammonia in blood. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):561–6

Effect of ketone bodies on the mitogenic response of bovine milk lymphocytes. Kluciński W, et al.
Zentralbl Veterinarmed [A] 1988 Sep;35(8):626–31

[Effect of manganese dichloride on the graft vs host activity of splenic lymphocytes in mice] Divanian Kh, et al.
Eksp Med Morfol 1988;27(4):17–9 (Eng. Abstr.) **(Bul)**

[The study of immunotoxicity of butyl glycidyl ether] Xue B, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan; 22(1):11–3 (Eng. Abstr.) **(Chi)**

[Effects of radix Rehmanniae and processed radix Rehmanniae on some immune functions in mice] Cao ZL, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):22–4, 62–3 (Eng. Abstr.) **(Chi)**

[Immunopharmacologic study in mice of 2 beta-1, 3, beta-1, 6 polysaccharides (scleroglucan and PSAT) on the activation of macrophages and T lymphocytes] Bousquet M, et al. **Ann Rech Vet** 1989;20(2):165–73 (Eng. Abstr.) **(Fre)**

[Concerning "The effect of i.v. gamma globulin on T lymphocytes and on interleukin-2 secretionin infectious mononucleosis" by R.E. Martin du Pan, B. Koechli and R.C. Martin du Pan, Schweiz. med. Wschr. 1988; 118: 680–686 (letter)] Martin du Pan RE, et al.
Schweiz Med Wochenschr 1988 Dec 24;118(51):1962–4 **(Fre)**

[Structure function relations of immunologically relevant molecules: impact of gene technology] Wagner H.
Arzneimittelforschung 1989 Jun;39(6):741–2 (Eng. Abstr.) **(Ger)**

[Effects of thymosin alpha 1 on peanut agglutinin receptors in murine thymocytes] Baldassarre AM, et al.
Boll Soc Ital Biol Sper 1988 Feb;64(2):109–13 (Eng. Abstr.) **(Ita)**

[Hematologic effects of exposure to ozone] Lisiewicz J, et al. **Przegl Lek** 1989;46(3):363–8 (61 ref.) **(Pol)**

[Influence of Bacillus intermedius RNAase on thymus cell composition and T-lymphocyte differentiation in an experiment] Kurinenko BM, et al. **Antibiot Khimioter** 1989 Feb;34(2):129–33 (Eng. Abstr.) **(Rus)**

[Effects of psychotropic drugs of the phenothiazine series on matrix activity of thymocyte DNA and glucocorticoid receptor interactions] Golikov PP. **Biull Eksp Biol Med** 1989 Jan;107(1):56–8 (Eng. Abstr.) **(Rus)**

[T-lymphocyte precursors—the target cells of thymocyte growth factor] Protsak EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):462–4 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of T-lymphocytes by thymus mitogenic factor on the somatotropic function of the hypophysis] Jighi KN, et al. **Fiziol Zh** 1988 Jul–Aug; 34(4):96–8 (Eng. Abstr.) **(Rus)**

[The action of antitumor preparations on the rosette-forming function of lymphocytes] Shabalin VN, et al.
Gematol Transfuziol 1988 Aug;33(8):6–12 (Eng. Abstr.) **(Rus)**

[Effect of glucocorticosteroid hormones on T lymphocytes in patients with pulmonary tuberculosis] Basov PV.
Probl Tuberk 1989;(4):30–3 (Eng. Abstr.) **(Rus)**

[Effect of the immunomodulator meitonium on the cyclic nucleotide system of T-lymphocytes in experimental tuberculosis] Kostromin AP, et al. **Probl Tuberk** 1988; (10):55–9 (Eng. Abstr.) **(Rus)**

[Effect of interleukin 2 on blast proliferative activity and expression of T-cell markers in patients with acute lymphoblastic leukemia] Tsvelbakh AS, et al. **Ter Arkh** 1988;60(5):24–9 (Eng. Abstr.) **(Rus)**

[Induction of the traits of the differentiated T-cell phenotype in the blast cells of patients with acute lymphoblastic leukemia. I. The expression of T-cell markers as affected by different inducers] Kazhdan IIa, et al. **Tsitologiia** 1988 Jun;30(6):745–50 (Eng. Abstr.) **(Rus)**

[Effect of mitogenic stimulation and heat shock on protein syntheses in human T cells] Margulis BA, et al.
Tsitologiia 1989 Mar;31(3):355–9 (Eng. Abstr.) **(Rus)**

[Induction of the traits of the T-cell differentiated phenotype in a blast cell population from patients with acute lymphoblastic leukemia. II. Parallel changes in the antigenic characteristics and functional properties of blast cells as affected by inducers] Tsvelbakh AS, et al.
Tsitologiia 1988 Jun;30(6):751–6 (Eng. Abstr.) **(Rus)**

[Effect of histamine on the rosette-forming capacity of T-lymphocytes in immunization with ADPT vaccine and its components] Kamalova MN, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):106–8 (Eng. Abstr.) **(Rus)**

[Effect of a streptococcal allergen on the rosette-forming capacity of the T-lymphocytes in erysipelas patients] Tsoi IG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun; (6):76–80 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Human fetal liver as a valuable source of haemopoietic stem cells for allogeneic bone marrow transplantation. Phan DT, et al. **Haematologia (Budap)** 1989;22(1):25–35

ENZYMOLOGY

Dipeptidyl amino peptidase IV cytochemistry in circulating lymphocytes from HIV-I-seropositive subjects. De Pasquale A, et al. **Acta Haematol (Basel)** 1989;81(1):19–21

The T cell specific serine proteinase TSP-1: biochemical characterization, genetic analysis, and functional role. Simon HG, et al. **Adv Exp Med Biol** 1988;240:535–45

Decreased B lymphocyte ecto-5'nucleotidase and increased adenosine deaminase in mononuclear cells from patients infected with human immunodeficiency virus. Dalh Christensen L, et al. **APMIS** 1988 Oct;96(10):882–8

Manipulation of plasma membrane physical state affects desaturase activity in rat lymphocytes. Garcia Zevallos M, et al. **Arch Biochem Biophys** 1989 Jun;271(2):546–52

Anti HLA class I monoclonal antibody effect on PKC kinetics in PHA activated human peripheral blood mononuclear and E+ cells. Poltronieri L, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):46–53

High pressure liquid chromatography of cyclic nucleotide phosphodiesterase from purified human T-lymphocytes. Robicsek SA, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):554–60

Beta-1,4-mannosyl-glycoprotein beta-1,4-N-acetylglucosaminyltransferase III activity in human B and T lymphocyte lines and in tonsillar B and T lymphocytes. Narasimhan S, et al. **Biochem Cell Biol** 1988 Aug;66(8):889–900

Multiple enzymes related to differentiation of lymphocyte subpopulations in man. Aoyagi T, et al. **Biochem Int** 1989 Feb;18(2):383–9

The association of type 1, type 2A and type 2B phosphatases with the human T lymphocyte plasma membrane. Alexander DR, et al. **Biochem J** 1988 Dec 15;256(3):885–92

O6-methylguanine-DNA methyltransferase content in human lymphocytes following surgical trauma. Klaude M, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):171–6

Human T-lymphoblast deoxycytidine kinase: purification and properties. Datta NS, et al. **Biochemistry** 1989 Jan 10; 28(1):114–23

Superoxide dismutase activity in thymus cell suspension: effects of methionine-enkephalin and morphine. Endröczi E, et al. **Biomed Biochim Acta** 1988;47(12):1007–11

Interleukin-2 induces proliferation of T lymphocyte mutants lacking protein kinase C. Mills GB, et al. **Cell** 1988 Oct 7;55(1):91–100

Protein kinase C is required for responses to T cell receptor ligands but not to interleukin-2 in T cells. Valge VE, et al. **Cell** 1988 Oct 7;55(1):101–12

Molecular analyses of in vivo hypoxanthine-guanine phosphoribosyltransferase mutations in human T-lymphocytes: II. Demonstration of a clonal amplification of hprt mutant T-lymphocytes in vivo. Nicklas JA, et al. **Environ Mol Mutagen** 1988;12(3):271–84

Longitudinal study of the in vivo hprt mutant frequency in human T-lymphocytes as determined by a cell cloning assay. O'Neill JP, et al. **Environ Mol Mutagen** 1989; 13(4):289–93

Novel structures CTLA-2 alpha and CTLA-2 beta expressed in mouse activated T cells and mast cells and homologous to cysteine proteinase proregions. Denizot F, et al. **Eur J Immunol** 1989 Apr;19(4):631–5

Evidences for protein kinase C. Activation in T lymphocytes by stimulation of either the CD2 or CD3 antigens. Friedrich B, et al. **Eur J Immunol** 1989 Jan;19(1):17–23

Interleukin-2 induces a rapid increase in ornithine decarboxylase mRNA in a cloned murine T lymphocytic cell line. Legraverend C, et al. **Exp Cell Res** 1989 Mar; 181(1):273–81

Interleukin-2 regulates the activity of ornithine decarboxylase in a cloned murine T lymphocytic cell line: evidence for a protein kinase C-dependent pathway. Legraverend C, et al. **Exp Cell Res** 1989 Mar;181(1):282–8

Changes of dipeptidyl peptidase (DP IV) activity in the T lymphocytes of rats following administration of ACTH, dexamethasone and opiates. Korányi L, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):61–8

Human T cell specific proteinase (HuTSP) is encoded by the T cell and natural killer cell specific human Hanukah factor (HuHF) gene. Fruth U, et al. **FEBS Lett** 1988 Sep 12;237(1–2):45–8

Pertussis toxin activates protein kinase C and a tyrosine protein kinase in the human T cell line Jurkat. Thom RE, et al. **FEBS Lett** 1989 Feb 13;244(1):181–4

Carbonic anhydrase activity in peripheral T-lymphocytes and appearance of the activity during their maturation in the thymus. A histochemical demonstration. Parkkila S, et al. **Histochemistry** 1989;91(6):479–82

Mg2+-dependent adenosine triphosphatase: an enzyme marker for ovine T lymphocytes. Alders RG, et al. **Immunol Cell Biol** 1988 Oct-Dec;66 (Pt 5-6):361–7

Kinases and phosphatases in T-cell activation. Alexander DR, et al. **Immunol Today** 1989 Jun;10(6):200–5 (67 ref.)

Unique pattern of cleavage of vasoactive intestinal peptide by human lymphocytes. Goetzl EJ, et al. **Immunology** 1989 Apr;66(4):554–8

Kinetic properties and inhibition of human T lymphoblast deoxycytidine kinase. Datta NS, et al. **J Biol Chem** 1989 Jun 5;264(16):9359–64

Two-dimensional analysis of interleukin 2-regulated tyrosine kinase activation mediated by the p70–75 beta subunit of the interleukin 2 receptor. Farrar WL, et al. **J Biol Chem** 1989 Jul 25;264(21):12562–7

Effects of nucleotides on the activity of phospholipase C in rabbit thymus lymphocytes. Differences in assays using endogenous [3H]inositol-prelabeled membranes or exogenous [3H]phosphatidylinositol 4,5-bisphosphate as substrate. Sommermeyer H, et al. **J Biol Chem** 1989 Jan 15;264(2):906–9

The selectivity of cathepsin D suggests an involvement of the enzyme in the generation of T-cell epitopes. van Noort JM, et al. **J Biol Chem** 1989 Aug 25;264(24):14159–64

Multiple glycosylated forms of T cell-derived interleukin 3 (IL-3). Heterogeneity of IL-3 from physiological and nonphysiological sources. Ziltener HJ, et al. **J Biol Chem** 1988 Oct 5;263(28):14511–7

An inhibitor specific for the mouse T-cell associated serine proteinase 1 (TSP-1) inhibits the cytolytic potential of cytoplasmic granules but not of intact cytolytic T cells. Simon MM, et al. **J Cell Biochem** 1989 May;40(1):1–13

Characterization of protein kinase C and its isoforms in human T lymphocytes. Beyers AD, et al. **J Immunol** 1988 Nov 15;141(10):3463–70

Evidence that a kinase distinct from protein kinase C induces CD3 gamma-subunit phosphorylation without a concomitant down-regulation in CD3 antigen expression. Cantrell DA, et al. **J Immunol** 1989 Mar 1;142(5):1626–30

IL-2 regulation of tyrosine kinase activity is mediated through the p70–75 beta-subunit of the IL-2 receptor. Ferris DK, et al. **J Immunol** 1989 Aug 1;143(3):870–6

Deficient protein kinase C-dependent Na+/H+ exchanger activity in T cells from bone marrow transplantation recipients. Izquierdo M, et al. **J Immunol** 1989 Oct 1; 143(7):2185–92

Absence of transcription of lck (lymphocyte specific protein tyrosine kinase) message in IL-2-independent, HTLV-I-transformed T cell lines. Koga Y, et al. **J Immunol** 1989 Jun 15;142(12):4493–9

Establishment and characterization of adenosine deaminase-deficient human T cell lines. Kohn DB, et al. **J Immunol** 1989 Jun 1;142(11):3971–7

Heterogeneity of protein kinase C isoenzyme gene expression in human T cell lines. Protein kinase C-beta is not required for several T cell functions. Koretzky GA, et al. **J Immunol** 1989 Sep 1;143(5):1692–5

T cell recognition of bovine ribonuclease. Self/non-self discrimination at the level of binding to the I-Ak molecule. Lorenz RG, et al. **J Immunol** 1988 Dec 15;141(12):4124–8

Lymphocyte activation provokes modification of a lymphocyte-specific protein tyrosine kinase (p56lck). Marth JD, et al. **J Immunol** 1989 Apr 1;142(7):2430–7

Functional characterization of ecto-5'-nucleotidase-positive and -negative human T lymphocytes. Thompson LF, et al. **J Immunol** 1989 Mar 1;142(5):1518–22

Transcriptional activation of lck by retrovirus promoter insertion between two lymphoid-specific promoters. Adler HT, et al. **J Virol** 1988 Nov;62(11):4113–22

Demonstration of the increase in serine esterase-positive T cells in hairy-cell leukemia patients undergoing alpha-interferon therapy. Wagner L, et al. **Leukemia** 1989 May;3(5):373–9

Alterations of the lymphocyte-specific protein tyrosine kinase (p56lck) during T-cell activation. Veillette A, et al. **Mol Cell Biol** 1988 Oct;8(10):4353–61

Identification of a novel site specific endonuclease produced by Mycoplasma fermentans: discovery while characterizing DNA binding proteins in T lymphocyte cell lines. Halden NF, et al. **Nucleic Acids Res** 1989 May 11;17(9):3491–9

Cell type-specific transcriptional regulation of the human adenosine deaminase gene. Lattier DL, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1061–76

Rapid activation of the T-cell tyrosine protein kinase pp56lck by the CD45 phosphotyrosine phosphatase. Mustelin T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6302–6

Dipeptidyl peptidase IV in human T lymphocytes. Impaired induction of interleukin 2 and gamma interferon due to specific inhibition of dipeptidyl peptidase IV. Schön E, et al. **Scand J Immunol** 1989 Feb;29(2):127–32

GROWTH & DEVELOPMENT

Human T lymphocyte clones: influence of culture conditions and optimization of proliferative assays. Lundin KE, et al. **Scand J Immunol** 1989 Jul;30(1):83–9

IMMUNOLOGY

HLA class II restriction specificity for nickel-reactive T lymphocytes. Emtestam L, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):395–401

Localized bullous pemphigoid, a T cell-mediated disease? Electron microscopic and immunologic studies. van Joost T, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):341–4

T lymphocyte activation in euthyroid Graves' ophthalmopathy: soluble interleukin 2 receptor release, cellular interleukin 2 receptor expression and interleukin 2 production. Lai KN, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):602–9

Lymphocytes subset in hyperandrogenic women with polycystic ovarian disease. Turi A, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):155–7

Changes in peripheral blood mononuclear cell subpopulations during antithymocyte globulin therapy for severe aplastic anemia. López-Karpovitch X, et al. **Acta Haematol (Basel)** 1989;81(4):176–80

Alteration of T cell subset pattern among in vitro M. leprae-stimulated blood lymphocytes of leprosy patients. Corbeau P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:171–2

Concentration dependent functional responsiveness to subcellular antigenic extracts of BCG and different mycobacterial PPDs, of tuberculin (Mtb-PPD) reactive human T-cell lines. Das PK, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:164–8

T lymphocytes, mononuclear phagocytes, Schwann cells and Mycobacterium leprae. Kaufmann SH, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:141–8

Limiting dilution of murine T cell response to mycobacterial antigens. Launois P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:179–80

Immortalization of rat spleen and thymus T cells by human T-cell leukemia virus type I. Akagi T, et al. **Acta Med Okayama** 1989 Jun;43(3):143–51

Immunological studies in focal epilepsy. Eeg-Olofsson O, et al. **Acta Neurol Scand** 1988 Nov;78(5):358–68

Immunity assessment in the early stages of amyotrophic lateral sclerosis: a study of virus antibodies and lymphocyte subsets. Provinciali L, et al. **Acta Neurol Scand** 1988 Dec; 78(6):449–54

T cell populations in the lacrimal gland during aging. Gudmundsson OG, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):490–7

Experimental otitis media in mice. Immunohistochemical observations. Ichimiya I, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:148–53

Analysis of activation markers on tonsillar T lymphocytes. Plum J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:113–7

Immunoglobulin and T-cell receptor gene rearrangement in leukemia and lymphoma. Kawa-Ha K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):534–8

T lymphocyte subsets in Mediterranean spotted fever. Herrero-Herrero JI, et al. **Acta Trop (Basel)** 1988 Sep; 45(3):195–202

The identification of murine Peyer's patch T cell-derived factors which enhance IgA responses. Beagley KW, et al. **Adv Exp Med Biol** 1988;237:641–7

The involvement of T-cells in the stimulatory effect of a water-in-oil emulsion on the B-cell response. Bianchi AT, et al. **Adv Exp Med Biol** 1988;237:855–60

T cells and epithelial expression of HLA class II determinants in relation to putative M cells of follicle-associated epithelium in human Peyer's patches. Bjerke K, et al. **Adv Exp Med Biol** 1988;237:695–8

What T cells tell macrophages to do during resistance to listeriosis. Campbell PA. **Adv Exp Med Biol** 1988;239:13–22 (41 ref.)

A new marker of T lymphocyte activation in type I diabetes. Cavanaugh J, et al. **Adv Exp Med Biol** 1988;246:79–84

Structural and cellular changes in the mouse thymus during pregnancy. Clarke AG. **Adv Exp Med Biol** 1988;237:363–8

Activated inflammatory T lymphocytes in rheumatoid synovitis—effect of cyclosporine A and anti-Tac. Førre O, et al. **Adv Exp Med Biol** 1988;237:393–5

Role of the galt contrasuppressor T cell circuit in isotype-specific immunoregulation. Fujihashi K, et al. **Adv Exp Med Biol** 1988;237:649–53

Synovial T cells detect polymorphism of class II HLA antigens. Gaston JS, et al. **Adv Exp Med Biol** 1988; 237:387–92

Chemically-initiated hyperglycemia: streptozotocin-specific T lymphocyte reactions. Gleichmann H, et al. **Adv Exp Med Biol** 1988;246:93–100

Function of the antigen receptor in T cell activation. Goldsmith MA, et al. **Adv Exp Med Biol** 1988;234:195–211 (39 ref.)

Regulatory T cell control of autoimmune destruction of beta cells in the BB rat. Greiner DL, et al. **Adv Exp Med Biol** 1988;246:379–85

Germinal center B cells present antigen obtained in vivo to T cells in vitro and stimulate mixed lymphocyte reactions. Kosco MH, et al. **Adv Exp Med Biol** 1988;237:883–8

Mycobacterium tuberculosis antigen specific human T-cell lines are cytolytic to autologous antigen pulsed macrophages. Kumararatne DS, et al. **Adv Exp Med Biol** 1988;237:401–6

Immunoregulation in epidermis: glucocorticoids induced epidermal cell derived inhibitor of interleukin 1 activity. Lukić ML, et al. **Adv Exp Med Biol** 1988;237:833–7

Correlation of IL2 production and lymphoid tissue make-up in two inbred strains of rats. Mostarica-Stojković M, et al. **Adv Exp Med Biol** 1988;237:407–11

Evidence for contrasuppression in patients with Crohn's disease. Raedler A, et al. **Adv Exp Med Biol** 1988; 237:655–63

Activated Fc alpha T cells in Crohn's disease are involved in regulation of IgA. Raedler A, et al. **Adv Exp Med Biol** 1988;237:665–73

Inhibition of splenic T lymphocytes and accessory cell interaction by anti-mac-1 (monoclonal antibody to complement receptor type 3). el Rouby S, et al. **Adv Exp Med Biol** 1988;237:397–400

In vitro binding of L3T4-Lyt-2- Pgp-1+ thymocytes to thymic accessory cells. el Rouby S, et al. **Adv Exp Med Biol** 1988;237:351–6

Postoperative activation of tumor specific T cells by immunization with virus-modified tumor cells and effects on metastasis. Schirrmacher V, et al. **Adv Exp Med Biol** 1988;233:91–6

FDC-iccosome mediated antigen delivery to germinal center B cells, antigen processing and presentation to T cells. Szakal AK, et al. **Adv Exp Med Biol** 1988;237:197–202

The protective role of T cells in immunity to malaria. Weidanz WP, et al. **Adv Exp Med Biol** 1988;239:99–111 (34 ref.)

Synthetic T and B cell recognition sites: implications for vaccine development. Milich DR. **Adv Immunol** 1989; 45:195–282 (485 ref.)

Molecular biology and function of CD4 and CD8. Parnes JR. **Adv Immunol** 1989;44:265–311 (226 ref.)

Origin and significance of autoreactive T cells. Zauderer M. **Adv Immunol** 1989;45:417–37 (65 ref.)

Joint inflammation induced by a mature macrophage cell line and cloned MT4+, Lyt-2- T cells in allogeneic mice. Klasen IS, et al. **Agents Actions** 1989 Jan;26(1-2):202–5

Antigenic structures recognized by T cells: towards the rational design of an AIDS vaccine. Cease KB, et al.

Aids 1988;2 Suppl 1:S95–101 (63 ref.)
T-cell response towards HIV in infected individuals with and without zidovudine therapy, and in HIV-exposed sexual partners. Ranki A, et al. **Aids** 1989 Feb;3(2):63–9
In vivo effect of chronic ethanol abuse on membrane alpha 1-glycoprotein of lymphocytes and immune response to various stimulating agents. Stefanini GF, et al. **Alcoholism (N Y)** 1989 Jun;13(3):444–8
T cell responses to a Parietaria judaica pollen extract: comparison between Parietaria-sensitive patients, other atopics and healthy controls. Di Felice G, et al. **Allergy** 1989 Jul;44(5):322–9
Leu-22: a preferential marker for T-lymphocytes in paraffin sections. Staining profile in T- and B-cell lymphomas, Hodgkin's disease, other lymphoproliferative disorders, myeloproliferative diseases, and various neoplastic processes. Said JW, et al. **Am J Clin Pathol** 1989 May; 91(5):542–9
Large cell mycosis fungoides at the tumor stage. Unusual T8, T4, T6 phenotypic expression. Horiuchi Y, et al. **Am J Dermatopathol** 1988 Feb;10(1):54–8
Correlation between lymphocyte and monocyte function in patients with chronic non-A, non-B hepatitis [letter] Castilla A, et al. **Am J Gastroenterol** 1989 Aug;84(8):978
Circulating LAK-1 cells and autologous mixed lymphocyte reaction in patients with hepatocellular carcinoma. Stefanini GF, et al **Am J Gastroenterol** 1989 Apr; 84(4):396–9
A polyclonal CD4+ and CD8+ lymphocytosis in a patient doubly infected with HTLV-I and HIV-1: a clinical and molecular analysis. Ehrlich GD, et al. **Am J Hematol** 1989 Mar;30(3):128–39
Cellular immunoregulatory aspects of IgA nephropathy. Sakai H. **Am J Kidney Dis** 1988 Nov;12(5):430–2 (19 ref.)
Effect of parathyroidectomy on T cell functions in patients with primary hyperparathyroidism. Shasha SM, et al. **Am J Nephrol** 1989;9(1):25–9
Detection of activated T lymphocytes in the human atherosclerotic plaque. Hansson GK, et al. **Am J Pathol** 1989 Jul;135(1):169–75
Reactivity of T cells in mycosis fungoides exhibiting marked epidermotropism with the monoclonal antibody HML-1 that defines a membrane molecule on human mucosal lymphocytes. Sperling M, et al. **Am J Pathol** 1989 May; 134(5):955–60
Analysis of a murine B cell lymphoma, CH44, with an associated non-neoplastic T cell population. I. Proliferation of normal T lymphocytes is induced by a secreted product of the malignant B cells. Willoughby PB, et al. **Am J Pathol** 1988 Dec;133(3):507–15
Immune mediators increase adherence of T-lymphocytes to human lung fibroblasts. Hampson F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C336–40
Aberrant T cell-mediated immunity in untreated schizophrenic patients: deficient interleukin-2 production. Villemain F, et al. **Am J Psychiatry** 1989 May;146(5):609–16
Changes of lymphocyte subsets in normal pregnant and postpartum women: postpartum increase in NK/K (Leu 7) cells. Iwatani Y, et al. **Am J Reprod Immunol Microbiol** 1988 Oct;18(2):52–5
Immune response of humans to the circumsporozoite protein of Plasmodium falciparum: limited T cell response to the immunodominant central repeat region. Campbell JR, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):232–5
Granuloma formation in Schistosoma japonicum infected nude mice: the effects of reconstitution with L3T4+ or Lyt2+ splenic cells. Cheever AW, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):66–71
Immunodeficiency in young pigs. Hammerberg C, et al. **Am J Vet Res** 1989 Jun;50(6):868–74
Peanut agglutinin as a surface marker for canine T lymphocytes. Turnwald GH, et al. **Am J Vet Res** 1988 Dec;49(12):2076–80
Cell-mediated immune responses of suckling pigs inoculated with attenuated or virulent transmissible gastroenteritis virus. Welch SK, et al. **Am J Vet Res** 1988 Aug; 49(8):1228–34
Antigen-independent binding of T-cells by dendritic cells and alveolar macrophages in the rat. Kradin RL, et al. **Am Rev Respir Dis** 1989 Jan;139(1):207–11
Cutaneous sclerosis, aplastic anemia, and antithymocyte globulin [letter] Fenaux P, et al. **Ann Intern Med** 1989 Apr 1;110(7):575–6
Regulation of human T-cell proliferation and CTL development by human recombinant interleukin-4. Acres RB, et al. **Ann N Y Acad Sci** 1988;532:1–7
Lymphocyte-mediated cytolysis. Effectors, lytic signals, and the mechanism whereby early membrane derangements result in target-cell death. Berke G. **Ann N Y Acad Sci** 1988;532:314–35 (61 ref.)
Functional analysis of CD2, CD4, and CD8 in T-cell activation. Bierer BE, et al. **Ann N Y Acad Sci** 1988; 532:199–206 (15 ref.)
Accessory cell competence of human glial cells in mitogenic activation of resting peripheral T cells. Cashman N, et al. **Ann N Y Acad Sci** 1988;540:498–500
Specific immune responses in Lyme borreliosis. Characterization of T cell and B cell responses to Borrelia burgdorferi. Dattwyler RJ, et al. **Ann N Y Acad Sci** 1988; 539:93–102
Cell-mediated immunity in virus infections of the central nervous system. Doherty PC. **Ann N Y Acad Sci** 1988; 540:228–39 (94 ref.)
A study of persistent viral infections using nude mice and a temperature-sensitive mutant of vesicular stomatitis virus. Doll SC, et al. **Ann N Y Acad Sci** 1988;540:678–80
Monoclonal antibodies against the P2 protein of peripheral myelin and d18 protein of PC 12 cells bind to antigen-presenting cells and inhibit T-cell activation. Dwyer DS, et al. **Ann N Y Acad Sci** 1988;540:452–4
Synergism in the pathogenesis of EAE induced by an MBP-specific T-cell line and monoclonal antibodies to galactocerebroside or a myelin oligodendroglial glycoprotein. Fierz W, et al. **Ann N Y Acad Sci** 1988; 540:360–3
Tumor-infiltrating lymphocytes in patients with renal-cell carcinoma. Finke JH, et al. **Ann N Y Acad Sci** 1988; 532:387–94
T-cell clones specific to acetylcholine receptor, its subunits, and peptides. Fujii Y, et al. **Ann N Y Acad Sci** 1988; 540:357–9
A T cell- and natural killer cell-specific, trypsin-like serine protease. Implications of a cytolytic cascade. Gershenfeld HK, et al. **Ann N Y Acad Sci** 1988;532:367–79 (112 ref.)
Anti-CD4 and anti-CD2 monoclonal antibody infusions in subjects with multiple sclerosis. Immunosuppressive effects and human antimouse responses. Hafler DA, et al. **Ann N Y Acad Sci** 1988;540:557–9
Suppression of P2-T-cell line mediated experimental autoimmune neuritis by interleukin-2 receptor blockade. Hartung HP, et al. **Ann N Y Acad Sci** 1988;540:563–5
Clonal modulation of experimental allergic encephalomyelitis by a monoclonal antibody directed to the T-cell receptor. Heber-Katz E, et al. **Ann N Y Acad Sci** 1988;540:576–7
Activation of thymocytes and T cells by interleukin-6. Le JM, et al. **Ann N Y Acad Sci** 1989;557:444–52; discussion 452–3
Interleukin-6 is produced by epidermal cells and plays an important role in the activation of human T-lymphocytes and natural killer cells. Luger TA, et al. **Ann N Y Acad Sci** 1989;557:405–14
Alterations in the pattern of MHC restriction of T cells in relapsing murine experimental allergic encephalomyelitis. McCarron RM, et al. **Ann N Y Acad Sci** 1988;540:349–51
Isolation and characterization of Borrelia burgdorferi-specific and autoreactive T-cell lines from the cerebrospinal fluid of patients with Lyme meningoradiculomyelitis. Martin R, et al. **Ann N Y Acad Sci** 1988;540:449–51
Expression of T-cell receptors by functionally distinct subsets of immature adult thymocytes. Miescher GC, et al. **Ann N Y Acad Sci** 1988;532:8–17 (41 ref.)
The veto phenomenon in T-cell regulation. Miller RG, et al. **Ann N Y Acad Sci** 1988;532:170–6 (48 ref.)
Fine specificity of T-cell-mediated immune responses of susceptible and resistant strains in Theiler's murine encephalomyelitis virus-induced demyelinating disease. Miller SD, et al. **Ann N Y Acad Sci** 1988;540:674–7
Attenuated T-lymphocyte lines as vaccinating agents against experimental autoimmune encephalomyelitis. Offner H, et al. **Ann N Y Acad Sci** 1988;540:540–2
Effects on experimental allergic neuritis in rats by in vivo treatment with monoclonal anti-T-cell antibodies. Olsson T, et al. **Ann N Y Acad Sci** 1988;540:560–2
Function of granule perforin and esterases in T cell-mediated reactions. Components required for delivery of molecules to target cells. Podack ER, et al. **Ann N Y Acad Sci** 1988; 532:292–302 (29 ref.)
Fine specificities of myelin basic protein-specific human T-cell clones. Richert JR, et al. **Ann N Y Acad Sci** 1988; 540:345–8
Anti-CD4 monoclonal antibody therapy of experimental allergic encephalomyelitis in longtailed macaques. Rose LM, et al. **Ann N Y Acad Sci** 1988;540:581–4
Cellular interactions resulting in skin-allograft rejection. Rosenberg AS, et al. **Ann N Y Acad Sci** 1988;532:76–85
Experimental allergic encephalomyelitis mediated by murine encephalitogenic T-cell lines specific for myelin proteolipid apoprotein. Satoh J, et al. **Ann N Y Acad Sci** 1988;540:343–4
Glioblastoma-cell-derived T-cell suppressor factor (G-TsF). Sequence analysis and biologic mechanism of G-TsF. Siepl C, et al. **Ann N Y Acad Sci** 1988;540:437–9
The influence of MHC gene products on the generation of an antigen-specific T-cell repertoire. Sorger SB, et al. **Ann N Y Acad Sci** 1988;532:18–32
The sensitization phase of T-cell-mediated immunity. Steinman RM, et al. **Ann N Y Acad Sci** 1988;546:80–90 (48 ref.)
Autoimmune demyelination in the central nervous system. Tabira T. **Ann N Y Acad Sci** 1988;540:187–201 (26 ref.)
Analysis of helper T-cell specificity involved in the antibody response to the acetylcholine receptor. Tami JA, et al. **Ann N Y Acad Sci** 1988;540:340–2
Human T-cell response to human and heterologous myelin basic proteins. Tournier-Lasserve E, et al. **Ann N Y Acad Sci** 1988;540:594–6
Response of rat encephalitogenic T cells to synthetic peptides of guinea pig myelin basic protein. Vandenbark AA, et al. **Ann N Y Acad Sci** 1988;540:337–9
Mouse IL-6. A hybridoma growth factor with multiple effects on normal B and T cells. Van Snick J, et al. **Ann N Y Acad Sci** 1989;557:206–13, discussion 213–4
Antibody cross-reactivity between myelin basic protein and CD3 antigen of T cells. Implications for autoimmunity. Weber W, et al. **Ann N Y Acad Sci** 1988;540:470–1
Changes in T-cell subsets in experimental allergic neuritis. Yamashita T, et al. **Ann N Y Acad Sci** 1988;540:720–2
Changes in T-cell subpopulations in multiple sclerosis [letter] Achiron A, et al. **Ann Neurol** 1989 Aug;26(2):291–2
Dual-label immunocytochemistry of the active multiple sclerosis lesion: major histocompatibility complex and activation antigens. Hayashi T, et al. **Ann Neurol** 1988 Oct; 24(4):523–31
Neurological autoimmune disease and the trimolecular complex of T-lymphocytes. Hohlfeld R. **Ann Neurol** 1989 Jun;25(6):531–8 (89 ref.)
Borrelia burgdorferi—specific and autoreactive T-cell lines from cerebrospinal fluid in Lyme radiculomyelitis. Martin R, et al. **Ann Neurol** 1988 Oct;24(4):509–16
Activated T-lymphocytes with polyclonal gammopathy in patients with human T-lymphotropic virus type I—associated myelopathy. Mori M, et al. **Ann Neurol** 1988 Aug;24(2):280–2
Immune and metabolic effects of arginine in the surgical patient. Daly JM, et al. **Ann Surg** 1988 Oct;208(4):512–23
Defective T-cell surface antigen expression after mitogen stimulation. An index of lymphocyte dysfunction after controlled murine injury. Gadd MA, et al. **Ann Surg** 1989 Jan;209(1):112–8
In vitro cell-mediated immunity after thermal injury is not impaired. Density gradient purification of mononuclear cells is associated with spurious (artifactual) immunosuppression. Xu DZ, et al. **Ann Surg** 1988 Dec; 208(6):768–75
T-cell recognition of minor lymphocyte stimulating (Mls) gene products. Abe R, et al. **Annu Rev Immunol** 1989; 7:683–708 (96 ref.)
The biologic roles of CD2, CD4, and CD8 in T-cell activation. Bierer BE, et al. **Annu Rev Immunol** 1989; 7:579–99 (87 ref.)
The cellular basis of T-cell memory. Cerottini JC, et al. **Annu Rev Immunol** 1989;7:77–89 (54 ref.)
T-cell responses and immunity to experimental infection with leishmania major. Müller I, et al. **Annu Rev Immunol** 1989; 7:561–78 (47 ref.)
Antigen recognition by class I-restricted T lymphocytes. Townsend A, et al. **Annu Rev Immunol** 1989;7:601–24 (133 ref.)
Manipulation of T-cell responses with monoclonal antibodies. Waldmann H. **Annu Rev Immunol** 1989;7:407–44 (160 ref.)
Bone marrow transplantation in the rat. Lytic functions of inflammatory leukocytes during acute graft-versus-host disease. Renkonen R, et al. **APMIS** 1989 Feb;97(2):147–52
Mitogenic stimulation of mouse lymphoid cells by Aleuria aurantia agglutinin. Pajtasz E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):133–9
Secretion of interleukin 1 (IL-1) by peritoneal macrophages upon contact with syngeneic T cells is Ia-restricted and antigen-independent process. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):661–71
Establishment of antigen-specific and MHC-restricted B cell hybridoma clones: a model for studying antigen presentation to T cell lines and clones. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):395–408
Antigen presentation to T cell lines and clones by peritoneal macrophages, peritoneal B cells and antigen-specific B cell hybridomas. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):409–22
Diffuse large-cell lymphoma of B-cell origin and deficient T-cell function in a patient with rheumatoid arthritis. Weir AB 3d, et al. **Arch Intern Med** 1989 Jul;149(7):1688–90
The human peripheral Ts lymphocytes are endowed with a heat stable E receptor. Olinescu A, et al. **Arch Roum Pathol Exp Microbiol** 1987 Oct-Dec; 46(4):311–20
The immune-enhancing effect of perioperative thymopentin administration in elderly patients undergoing major surgery. Faist E, et al. **Arch Surg** 1988 Dec;123(12):1449–53
Effect of timing of lymphokine presentation on generation of cytotoxic T lymphocytes. Stringfellow MM, et al. **Arch Surg** 1989 Jan;124(1):81–4
Biological significance of the antibody response to HIV antigens expressed on the cell surface [published erratum appears in Arch Virol 1989;105(1-2):following 140] Goudsmit J, et al. **Arch Virol** 1988;103(3-4):189–206
Herpes simplex virus type 1 infection in mice with severe combined immunodeficiency (SCID). Minagawa H, et al. **Arch Virol** 1988;103(1-2):73–82
Very late activation antigen on synovial fluid T cells from patients with rheumatoid arthritis and other rheumatic diseases. Laffon A, et al. **Arthritis Rheum** 1989 Apr; 32(4):386–92
Reply to the letter by Hoffman. Re: HLA-D region epitopes associated with juvenile arthritis:recognition by alloreactive T cell clones and alloantisera. Arthritis Rheum 30:744–751, 1987 [letter] Myers LK, et al. **Arthritis Rheum** 1988 Oct;31(10):1334–5
Correlation of rheumatoid factor level with the number of CD4+ circulating T lymphocytes in rheumatoid arthritis patients [letter] Rème T, et al. **Arthritis Rheum** 1989 Apr; 32(4):505–6
Nonlinkage of the T cell receptor alpha, beta, and gamma genes to systemic lupus erythematosus in multiplex families. Wong DW, et al. **Arthritis Rheum** 1988 Nov;31(11):1371–6
Evidence that a GTP binding protein regulates

phosphorylation of the CD3 antigen in human T lymphocytes. Davies AA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):328–34

Characteristic mode of action of gangliosides in selective modulation of CD4 on human T lymphocytes. Kawaguchi T, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):1050–9

The inhibitory effect of PGE2 on T cell activation is not associated with inhibition of PKC translocation. Piau JP, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1299–305

Conformation-dependent recognition of a protein by T cells requires presentation without processing. Atassi MZ, et al. **Biochem J** 1989 May 1;259(3):731–5

Cholera toxin partially inhibits the T-cell response to phytohaemagglutinin through the ADP-ribosylation of a 45 kDa membrane protein. Nel AE, et al. **Biochem J** 1988 Dec 1;256(2):383–90

T-cell recognition and antigen presentation of myoglobin. Protein recognition by site-specific T-cell clones is influenced by amino acid substitutions outside the site. Yoshioka M, et al. **Biochem J** 1989 Mar 15;258(3):645–51

Mitogenic signaling pathways regulating expression of c-myc and ornithine decarboxylase genes in bovine T-lymphocytes. Morris DR, et al. **Biochemistry** 1988 Nov 15;27(23):8689–93

Molecular cytochemistry of CD3 and CD4 antigens in human lymphocytes as studied by label-fracture and by fracture-label. Pavan A, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):158–68

Mechanisms of Mycobacterium leprae-specific T-cell deficiency in lepromatous leprosy. Bach MA, et al. **Biochimie** 1988 Aug;70(8):1013–8 (50 ref.)

The human T-cell rearranging gamma (TRG) genes and the gamma T-cell receptor. Lefranc MP. **Biochimie** 1988 Jul; 70(7):901–8 (62 ref.)

Molecular biology of T-cell-derived lymphokines: a model system for proliferation and differentiation of hemopoietic cells. Arai K, et al. **Bioessays** 1986 Oct;5(4):166–71 (30 ref.)

Models for MHC-restricted T-cell antigen recognition. Norcross MA. **Bioessays** 1986 Oct;5(4):153–7 (31 ref.)

Immunogenicity: role of dendritic cells. Steinman R, et al. **Bioessays** 1989 May;10(5):145–52 (57 ref.)

Murine thymocytes proliferate in direct response to interleukin-7. Conlon PJ, et al. **Blood** 1989 Sep; 74(4):1368–73

T cells in B-cell chronic lymphocytic leukemia: quantitative assessment of cytotoxic and interleukin-2-producing lymphocyte precursors by limiting dilution analysis. Janssen O, et al. **Blood** 1989 May 1;73(6):1622–6

Colony forming T lymphocyte deficit in the development of feline retrovirus induced immunodeficiency syndrome. Quackenbush SL, et al. **Blood** 1989 Feb;73(2):509–16

T-cell activation and subset patterns are altered in B-CLL and correlate with the stage of the disease. Tötterman TH, et al. **Blood** 1989 Aug 1;74(2):786–92

Leukemic cells from some adult T-cell leukemia patients proliferate in response to interleukin-4. Uchiyama T, et al. **Blood** 1988 Oct;72(4):1182–6

Leukemic cells from a chronic T-lymphocytic leukemia patient proliferated in response to both interleukin-2 and interleukin-4 without prior stimulation and produced interleukin-2 mRNA with stimulation. Umadome H, et al. **Blood** 1988 Oct;72(4):1177–81

T cells and myeloid progenitors in patients with severe aplastic anemia (SAA). Bacigalupo A, et al. **Blood Cells** 1988;14(2–3):485–96

Bone marrow transplantation for patients with chronic myeloid leukaemia: T-cell depletion with Campath-1 reduces the incidence of graft-versus-host disease but may increase the risk of leukaemic relapse. Apperley JF, et al. **Bone Marrow Transplant** 1986 May;1(1):53–66

Interstitial pneumonitis in T cell-depleted bone marrow transplantation. Breuer R, et al. **Bone Marrow Transplant** 1988 Nov;3(6):625–30

The role of T-cells in preventing relapse in chronic myelogenous leukemia [published erratum appears in Bone Marrow Transplant 1988 May;3(3):245] [see comments] Butturini A, et al. **Bone Marrow Transplant** 1987 Dec; 2(4):351–4. **Comment in:** Bone Marrow Transplant 1989 May;4(3):333

T cell-depleted allogeneic bone marrow transplantation in a case of childhood idiopathic myelofibrosis. Cahn JY, et al. **Bone Marrow Transplant** 1987 Aug;2(2):209–11

Monoclonal rat anti-human lymphocyte antibody Campath-1 binds to T and B lymphocytes but effectively lyses only T cells. Gazitt Y, et al. **Bone Marrow Transplant** 1987 Dec; 2(4):427–33

Irradiated donor buffy coat following T cell-depleted bone marrow transplants. Gratwohl A, et al. **Bone Marrow Transplant** 1988 Nov;3(6):577–82

Prolonged remission of Epstein-Barr virus associated lymphoma secondary to T cell-depleted bone marrow transplantation. Lyttelton MP, et al. **Bone Marrow Transplant** 1988 Nov;3(6):641–6

Anti LFA1 monoclonal antibody for the prevention of graft rejection after T cell-depleted HLA-matched bone marrow transplantation for leukemia in adults. Maraninchi D, et al. **Bone Marrow Transplant** 1989 Mar;4(2):147–50

Laboratory control in predicting clinical efficacy of T cell-depletion procedures used for prevention of graft-versus-host disease: importance of limiting dilution analysis. Marciniak E, et al. **Bone Marrow Transplant** 1988 Nov;3(6):589–98

The effect of T lymphocyte depletion on susceptibility to influenza virus infection and development of anti-viral immunity in lethally irradiated mice reconstituted with syngeneic bone marrow grafts. Mumcuoglu M, et al. **Bone Marrow Transplant** 1987 Dec;2(4):403–12

Diversity in migration of CD4 and CD8 lymphocytes in different microanatomical compartments of the skin in the tuberculin reaction in man. Beck JS, et al. **Br J Exp Pathol** 1988 Dec;69(6):771–80

Murine mercury-induced immune-complex disease: effect of cyclophosphamide treatment and importance of T-cells. Hultman P, et al. **Br J Exp Pathol** 1989 Jun;70(3):227–36

False positive tests and serum sickness [letter] Abramson N, et al. **Br J Haematol** 1988 Nov;70(3):388–9

Bone marrow histopathology of patients with severe aplastic anaemia before treatment and at follow-up. de Planque MM, et al. **Br J Haematol** 1989 Jul;72(3):439–44

Changes in the immunologic phenotype and T cell gene rearrangements during the clinical course of an unusual T cell CLL. Mak T, et al. **Br J Haematol** 1988 Nov; 70(3):384–6

Cytotoxic potential of anti-CD7 immunotoxin (WT1-ricin A) to purge ex vivo malignant T cells in bone marrow. Preijers FW, et al. **Br J Haematol** 1989 Feb;71(2):195–201

Phenotypic and functional T cell subset abnormalities in patients with aplastic anaemia and hypogammaglobulinaemia. Raziuddin S, et al. **Br J Haematol** 1988 Nov;70(3):283–7

T and B cell reactivity to extraocular and skeletal muscle in Graves' ophthalmopathy. Weetman AP, et al. **Br J Ophthalmol** 1989 May;73(5):323–7

Sympathetic neural modulation of the immune system. I. Depression of T cell immunity in vivo and vitro following chemical sympathectomy. Madden KS, et al. **Brain Behav Immun** 1989 Mar;3(1):72–89

Suppression of P2-T cell line-mediated experimental autoimmune neuritis by interleukin-2 receptor targeted monoclonal antibody ART 18. Hartung HP, et al. **Brain Res** 1989 Jun 5;489(1):120–8

Evidence for a T-cell related factor as the cause of demyelination in mice following Semliki Forest virus infection. Jenkins HG, et al. **Brain Res** 1988 Aug 30; 459(1):145–7

Primary immunodeficiency diseases: a presentation of 6 cases. de Araujo AC, et al. **Braz J Med Biol Res** 1988;21(5):915–7

T-cell receptor antibodies in the immunohistochemical studies of normal and malignant lymphoid cells. Chan WC, et al. **Cancer** 1988 Nov 15;62(10):2118–24

Fulminant clonal expansion of large granular lymphocytes. Characterization of their morphology, phenotype, genotype, and function. Ohno T, et al. **Cancer** 1988 Nov 1;62(9):1918–27

Immune restoration and/or augmentation of local graft versus host reaction by traditional Chinese medicinal herbs. Sun Y, et al. **Cancer** 1983 Jul 1;52(1):70–3

T-cell-rich lymphoproliferative disorders. Morphologic and immunologic differential diagnoses. Winberg CD, et al. **Cancer** 1988 Oct 15;62(8):1539–55

Constitutive expression of HLA class II antigens on EBV positive malignant cells from nasopharyngeal carcinoma: possible involvement in T cell infiltration. Busson P, et al. **Cancer Detect Prev** 1988;12(1–6):363–8

Is T-cell activation an unfavourable sign in i.v.-drug addicts infected with HIV? Fuchs DN, et al. **Cancer Detect Prev** 1988;12(1–6):277–82

Preactivated T cells in cancer patients with poor prognosis. Fuchs DN, et al. **Cancer Detect Prev** 1988;12(1–6):97–103

Implantation of a gelatin-sponge as a model for effector recruitment. Tumor growth inhibition by T-lymphocytes recovered from a site of tumor rejection. Akporiaye ET, et al. **Cancer Immunol Immunother** 1989;29(3):199–204

Preadministration of a T-suppressor factor enhances tumor immunity in DBA/2 mice. Deal H, et al. **Cancer Immunol Immunother** 1989;28(3):193–8

Heterogeneous lymphokine-activated killer cell precursor populations. Development of a monoclonal antibody that separates two populations of precursors with distinct culture requirements and separate target-recognition repertoires. Fox BA, et al. **Cancer Immunol Immunother** 1989;29(3):155–66

Antitumor activity in vitro in chronic myelogenous leukaemia revealed after treating peripheral cells with cytosine arabinoside. Pawelec G, et al. **Cancer Immunol Immunother** 1989;29(4):242–6

The mode of recognition of tumor antigens by noncytolytic-type antitumor T cells: role of antigen-presenting cells and their surface class I and class II H-2 molecules. Sakamoto K, et al. **Cancer Immunol Immunother** 1988;27(3):261–6

Modification of tumor cells by a low dose of Newcastle disease virus. II. Augmented tumor-specific T cell response as a result of CD4+ and CD8+ immune T cell cooperation. Schild H, et al. **Cancer Immunol Immunother** 1989;28(1):22–8

Immunotherapy of tumor-bearing mice utilizing virus help. Shimizu Y, et al. **Cancer Immunol Immunother** 1988; 27(3):223–7

Lysis of antigenically unrelated tumor cells mediated by Lyt 2+ splenic T-cells from melphalan-cured MOPC-315 tumor bearers. Barker E, et al. **Cancer Res** 1989 Sep 15; 49(18):5007–15

Interleukin 2 requirement for the in vitro generation of antitumor cytotoxicity by thymocytes from melphalan-cured MOPC-315 tumor bearers. Mokyr MB, et al. **Cancer Res** 1989 Feb 15;49(4):870–6

Cooperation between early acting delayed-type hypersensitivity T-cells and cultured effector cells in tumor rejection. Trial J. **Cancer Res** 1988 Nov 1;48(21):5922–6

Enhancement of the effectiveness of Lyt-2+ T-cells for adoptive chemoimmunotherapy by short-term exposure of tumor-bearer spleen cells to polyethylene glycol and/or melphalan. Wise JA, et al. **Cancer Res** 1989 Jul 1; 49(13):3613–9

Positive selection of the T cell repertoire: where and when does it occur? Benoist C, et al. **Cell** 1989 Sep 22; 58(6):1027–33

Antigen/MHC-specific T cells are preferentially exported from the thymus in the presence of their MHC ligand. Berg LJ, et al. **Cell** 1989 Sep 22;58(6):1035–46

Human CD2 3'-flanking sequences confer high-level, T cell-specific, position-independent gene expression in transgenic mice. Greaves DR, et al. **Cell** 1989 Mar 24; 56(6):979–86

MHC restriction, alloreactivity, and thymic education: a common link? Kourilsky P, et al. **Cell** 1989 Feb 10; 56(3):327–9 (23 ref.)

A T cell clone expresses two T cell receptor alpha genes but uses one alpha beta heterodimer for allorecognition and self MHC-restricted antigen recognition. Malissen M, et al. **Cell** 1988 Oct 7;55(1):49–59

Evidence that the leukocyte-common antigen is required for antigen-induced T lymphocyte proliferation. Pingel JT, et al. **Cell** 1989 Sep 22;58(6):1055–65

Inhibition of an allospecific T cell hybridoma by soluble class I proteins and peptides: estimation of the affinity of a T cell receptor for MHC. Schneck J, et al. **Cell** 1989 Jan 13;56(1):47–55

Acquisition of immunologic self-tolerance. Schwartz RH. **Cell** 1989 Jun 30;57(7):1073–81 (56 ref.)

The gamma delta T cell receptor and class Ib MHC-related proteins: enigmatic molecules of immune recognition. Strominger JL. **Cell** 1989 Jun 16;57(6):895–8 (25 ref.)

The V beta-specific superantigen staphylococcal enterotoxin B: stimulation of mature T cells and clonal deletion in neonatal mice. White J, et al. **Cell** 1989 Jan 13;56(1):27–35

T cell recognition as the target for immune intervention in autoimmune disease. Wraith DC, et al. **Cell** 1989 Jun 2; 57(5):709–15 (43 ref.)

Study on the possible factors influencing the expression of H-2 restriction specificity and Ir phenotype of antigen-specific proliferative T cells with various types of radiation chimeras. Aizawa S, et al. **Cell Immunol** 1988 Nov;117(1):199–208

Antigen-specific regulation of T lymphocyte proliferative responses to contact-sensitizing chemicals in the guinea pig. Baker D, et al. **Cell Immunol** 1989 Mar;119(1):153–9

A novel monoclonal antibody, 1B3.1, binds to a new epitope of the VLA-1 molecule. Bank I, et al. **Cell Immunol** 1989 Sep;122(2):416–23

The anti-T cell monoclonal antibody 9.3 (anti-CD28) provides a helper signal and bypasses the need for accessory cells in T cell activation with immobilized anti-CD3 and mitogens. Baroja ML, et al. **Cell Immunol** 1989 Apr 15; 120(1):205–17

Experimental synovitis induced by collagen-specific T cell lines. Brahn E, et al. **Cell Immunol** 1989 Feb;118(2):491–503

Sheep erythrocyte rosetting induces multiple alterations in T lymphocyte function: inhibition of T cell receptor activity and stimulation of T11/CD2. Breitmeyer JB, et al. **Cell Immunol** 1989 Oct 1;123(1):118–33

Human T cell activation induced by a monoclonal mouse IgG3 anti-CD3 antibody (RIV9) requires binding of the Fc part of the antibody to the monocytic 72-kDa high-affinity Fc receptor (FcRI). Ceuppens JL, et al. **Cell Immunol** 1989 Jan;118(1):136–46

Detection of a Thy-1 precursor in human T lymphoma cell lines. Chao CC, et al. **Cell Immunol** 1989 May;120(2):430–8

Human T lymphocytes expressing the C3b/C4b complement receptor type one (CR1, CD35) belong to Fc gamma receptor-positive CD4-positive T cells. Cohen JH, et al. **Cell Immunol** 1989 Jul;121(2):383–90

T cell activation induced by anti-CD3 antibodies requires prolonged stimulation of protein kinase C. Davis LS, et al. **Cell Immunol** 1989 Jan;118(1):208–21

Role of the CD45 (T-200) molecule in anti-CD3-triggered T cell-mediated cytotoxicity. Deem RL, et al. **Cell Immunol** 1988 Nov;117(1):99–110

Comparison of mitogenic responses of young and old rhesus monkey T cells to lectins and interleukins 2 and 4. Eylar EH, et al. **Cell Immunol** 1989 Jul;121(2):328–35

T lymphocyte activation by staphylococcal enterotoxins: role of class II molecules and T cell surface structures. Fleischer B, et al. **Cell Immunol** 1989 Apr 15;120(1):92–101

Depletion of L3T4+ and Lyt-2+ cells by rat monoclonal antibodies alters the development of adoptively transferred experimental autoimmune thyroiditis. Flynn JC, et al. **Cell Immunol** 1989 Sep;122(2):377–90

A monoclonal antibody to human B lymphoblastoid cells activates human and murine T lymphocytes. Hardy B, et al. **Cell Immunol** 1989 Jan;118(1):22–9

Age-related changes in the degeneracy of the mouse T-cell repertoire. Helfrich BA, et al. **Cell Immunol** 1989 Jan;

118(1):1–9
Augmentation of lymphocyte responses by monoclonal antibodies to the gangliosides GD3 and GD2: the role of protein kinase C, cyclic nucleotides, and intracellular calcium. Hersey P, et al. **Cell Immunol** 1989 Apr 1; 119(2):263–78
Rat T-cell lines specific to a nonimmunodominant determinant of a retinal protein (IRBP) produce uveoretinitis and pinealitis. Hu LH, et al. **Cell Immunol** 1989 Aug;122(1):251–61
Migration of putative progenitor T cells in response to thymus-derived chemotactic factors. Imaizumi A, et al. **Cell Immunol** 1989 May;120(2):301–13
T cell line specific for bacterial peptidoglycan subunit: possible role of the COOH-terminal amino acid of the disaccharide tetrapeptide in binding to the T cell receptor. Katsuki M, et al. **Cell Immunol** 1989 Jul;121(2):391–7
CD4+ CD8+ cells are rare among in vitro activated mouse or human T lymphocytes. Kelly K, et al. **Cell Immunol** 1988 Dec;117(2):414–24
Peripheral but not thymic T cells participate in an autoreactive T cell network. Kennedy DW, et al. **Cell Immunol** 1988 Nov;117(1):177–87
Induction of suppressor cells to T- and B-cell proliferative responses and immunoglobulin production by monoclonal antibodies recognizing the CD3 T-cell differentiation antigen. Kunicka JE, et al. **Cell Immunol** 1988 Oct 1; 116(1):195–215
The role of T cell receptors in non-MHC-restricted cytotoxicity. Lauzon RJ, et al. **Cell Immunol** 1989 Feb; 118(2):265–84
Con A-stimulated thymocytes produce interleukin 2 after removal of Lyt-1 positive cells. Lindqvist C, et al. **Cell Immunol** 1988 Oct 1;116(1):12–23
Persistence of the irradiated host component in thymocyte populations from bone marrow radiation chimeras infected with lymphocytic choriomeningitis virus. Lynch F, et al. **Cell Immunol** 1989 Feb;118(2):482–90
Clonotypic heterogeneity of Lewis rat T cells specific for the encephalitogenic 68–86 region of myelin basic protein. Mannie MD, et al. **Cell Immunol** 1989 Sep;122(2):534–47
A specific defect in the proliferative capacity of B cells from old mice stimulated with autoreactive T cells. Nagarkatti PS, et al. **Cell Immunol** 1989 Apr 15;120(1):102–13
Aging and immunity to tuberculosis: prolonged survival of old mice infected with Mycobacterium tuberculosis by adoptive immunization with memory-immune T lymphocytes. Orme IM. **Cell Immunol** 1989 Jan; 118(1):229–33
Biological response modifier as antigen: OK432-specific T-cell clone as an anti-tumor effector cell. Ozaki S, et al. **Cell Immunol** 1989 May;120(2):477–81
T cell subsets mediating lethal graft versus host disease: demonstration that synergy between CD4+ and CD8+ T cells is the predominant mechanism in low responder rat strains. Pearce NW, et al. **Cell Immunol** 1989 Sep; 122(2):517–23
The C57BL/6 nude, beige mouse: a model of combined T cell and NK effector cell immunodeficiency. Pflumio F, et al. **Cell Immunol** 1989 Apr 15;120(1):218–29
Defective T-cell activation by Mycoplasma arthritidis mitogen is restored by interferon-gamma. Pischedda F, et al. **Cell Immunol** 1989 Apr 15;120(1):188–94
Expression of non-MHC-restricted T cell antigen-binding molecules by thymic lymphocytes. Rellahan BL, et al. **Cell Immunol** 1989 Oct 1;123(1):166–76
Antiviral T cell competence and restriction specificity of mixed allogeneic (P1 + P2——P1) irradiation chimeras. Rüedi E, et al. **Cell Immunol** 1989 Jun;121(1):185–95
Pre-pre-B cells containing only cytoplasmic B220 can be induced by dendritic cells and T cells to differentiate in vitro. Saleh F, et al. **Cell Immunol** 1989 Oct 1;123(1):44–59
Treatment of mouse thymus cells with phosphatidylinositol-specific phospholipase C preferentially abrogates their reactivity with autoantibodies to the Thy-1 antigen. Schlesinger M, et al. **Cell Immunol** 1989 Mar;119(1):22–9
The role of T cells in immunoglobulin class switching of specific antibody production system in vitro in humans. Shinomiya N, et al. **Cell Immunol** 1989 Feb;118(2):239–49
Nature of the thymocytes associated with dendritic cells and macrophages in thymic rosettes. Shortman K, et al. **Cell Immunol** 1989 Mar;119(1):85–100
Sequence homology between yeast histone H3 and uveitopathogenic site of S-antigen: lymphocyte cross-reaction and adoptive transfer of the disease. Singh VK, et al. **Cell Immunol** 1989 Mar;119(1):211–21
Long-term growth of human WGA-activated T-lymphocytes without feeder cells. Siwicki JK. **Cell Immunol** 1989 Sep;122(2):563–8
Identification of a DTH-inducing T-cell epitope on the E2 membrane protein of Semliki Forest virus. Snijders A, et al. **Cell Immunol** 1989 Oct 1;123(1):23–35
Differential immunomodulation by anti-CD2 monoclonal antibodies of anti-CD3-induced T cell activation: dependence upon the individual anti-CD3 monoclonal antibody used for activation. Stohl W, et al. **Cell Immunol** 1988 Oct 1;116(1):73–85
Inhibitory effects of anti-CD2 monoclonal antibodies on interleukin 2 production and interleukin 2 receptor expression in anti-CD3-induced T cell activation. Stohl W, et al. **Cell Immunol** 1989 May;120(2):351–65
Regulation of human T-cell production of interleukin 2 by Leu 11 (CD16) positive large granular lymphocytes. Toossi Z, et al. **Cell Immunol** 1989 Feb;118(2):413–24
Impaired autoreactive T cell-induced T cell-T cell interaction in aged mice. Udhayakumar V, et al. **Cell Immunol** 1988 Oct 15;116(2):299–307
T cell responses to streptococcal antigens in rats: relation to susceptibility to streptococcal cell wall-induced arthritis. van den Broek MF, et al. **Cell Immunol** 1988 Oct 1; 116(1):216–29
Neonatal tolerance induction to Mlsa. II. T cells induce tolerance to Mlsa. Waite DJ, et al. **Cell Immunol** 1988 Nov; 117(1):78–88
CD8+ T lymphocyte control of HIV replication in cultured CD4+ cells varies among infected individuals. Walker CM, et al. **Cell Immunol** 1989 Apr 1;119(2):470–5
Cell-mediated immune responses to poliovirus. I. Conditions for induction, characterization of effector cells, and cross-reactivity between serotypes for delayed hypersensitivity and T cell proliferative responses. Wang KG, et al. **Cell Immunol** 1989 Apr 1;119(2):252–62
Subpopulations of mature murine thymocytes: properties of CD4-CD8+ and CD4+CD8- thymocytes lacking the heat-stable antigen. Wilson A, et al. **Cell Immunol** 1988 Dec;117(2):312–26
Enhanced H-2 expression and T-cell-dependent rejection after intracerebral transplantation of the murine lymphoma YAC-1. Yamasaki T, et al. **Cell Immunol** 1989 May; 120(2):387–95
Resistance of lymphokine-activated T lymphocytes to cell-mediated cytotoxicity. Zanovello P, et al. **Cell Immunol** 1989 Sep;122(2):450–60
Effects of thymosin on soybean lectin responsiveness of thymic small lymphocyte subsets from streptozotocin-induced diabetic rats. Okimoto T, et al. **Cell Mol Biol** 1988;34(5):465–72
Interleukin 2 promotes expression of an interleukin 2 receptor and proliferation of T cells stimulated with non-mitogenic dose of concanavalin A. Komada H, et al. **Cell Struct Funct** 1989 Apr;14(2):193–7
Synthesis of human thymopoietin (hTP) and examination of its immunological effect on the impaired blastogenic response of T-lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2506–16
The effects of coumarin derivatives on the immunological system of man. Berkarda B. **Chemioterapia** 1987 Jun;6(2 Suppl):224–5
An analysis of in vitro T cell responsiveness in nontuberculous mycobacterial infection. Tsuyuguchi I, et al. **Chest** 1988 Oct;94(4):822–9
Immunopathological study on human cartilage allografts. Si LS, et al. **Chin Med J [Engl]** 1989 Jan;102(1):12–7
Treatment of severe aplastic anemia: comparison of bone marrow transplantation to immunotherapy. Tzeng CH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):21–8
Monoclonal antibody therapy for prevention of acute coxsackievirus B3 myocarditis in mice. Kishimoto C, et al. **Circulation** 1989 Jun;79(6):1300–8
Use of an autologous reaction in vitro to assess contributions of T and B lymphocytes to immune hyperreactivity of atopics. Duke-Cohan JS, et al. **Clin Exp Allergy** 1989 Mar; 19(2):163–8
HLA class II restriction specificity of Dermatophagoides spp. reactive T lymphocyte clones that support IgE synthesis. Lamb JR, et al. **Clin Exp Allergy** 1989 Jul;19(4):389–93 (32 ref.)
T cell responses in allergic rhinitis, asthma and atopic dermatitis. Sustiel A, et al. **Clin Exp Allergy** 1989 Jan; 19(1):11–8 (63 ref.)
HLA-DR expression in the vascular lesion and circulating T lymphocytes of patients with giant cell arteritis. Andersson R, et al. **Clin Exp Immunol** 1988 Jul;73(1):82–7
A new T cell subset expressing B220 and CD4 in lpr mice: defects in the response to mitogens and in the production of IL-2. Asano T, et al. **Clin Exp Immunol** 1988 Oct; 74(1):36–40
T cell distribution is different in follicle-associated epithelium of human Peyer's patches and villous epithelium. Bjerke K, et al. **Clin Exp Immunol** 1988 Nov;74(2):270–5
Coordinate expansion of 'fetal type' lymphocytes (TCR gamma delta+T and CD5+B) in rheumatoid arthritis and primary Sjögren's syndrome. Brennan F, et al. **Clin Exp Immunol** 1989 Aug;77(2):175–8
Immune cell functions in iron overload. de Sousa M. **Clin Exp Immunol** 1989 Jan;75(1):1–6 (61 ref.)
HBsAg-induced antigen-specific T and B lymphocyte responses in chronic hepatitis B virus carriers and immune individuals. Fernan A, et al. **Clin Exp Immunol** 1989 May; 76(2):222–6
One half of the CD11b+ human peripheral blood T lymphocytes coexpresses the S-100 protein. Ferrari C, et al. **Clin Exp Immunol** 1988 Jun;72(3):357–61
Phenotypic expression of Vicia villosa binding T cell subsets, as markers of contrasuppressor cells in systemic lupus erythematosus. Fortune F, et al. **Clin Exp Immunol** 1988 Oct;74(1):100–4
Synovial T lymphocyte recognition of organisms that trigger reactive arthritis. Gaston JS, et al. **Clin Exp Immunol** 1989 Jun;76(3):348–53
Single strand DNA breaks in mitogen stimulated T lymphocytes are religated by a mechanism independent of accessory cells. Harrison DJ, et al. **Clin Exp Immunol** 1989 Jan;75(1):113–7
Mechanism of a lymphocyte abnormality associated with HLA-B8/DR3 in clinically healthy individuals. Hashimoto S, et al. **Clin Exp Immunol** 1989 Jun;76(3):317–23
Non-productive infection of human newborn blood mononuclear cells with herpes simplex virus: effect on T cell activation, IL-2 production and proliferation. Hayward A, et al. **Clin Exp Immunol** 1988 Nov; 74(2):196–200
Response of synovial fluid T cell clones to Yersinia enterocolitica antigens in patients with reactive Yersinia arthritis. Hermann E, et al. **Clin Exp Immunol** 1989 Mar; 75(3):365–70
Clonal analysis of liver-derived T cells of patients with primary biliary cirrhosis. Hoffmann RM, et al. **Clin Exp Immunol** 1989 May;76(2):210–5
Selective T cell subset depletion with anti-CD4 and anti-CD8 intact ricin immunotoxins. Izquierdo M, et al. **Clin Exp Immunol** 1988 Nov;74(2):300–4
MHC class I and class I-like gene product expression by malignant T cells: relationships between CD1a, HLA-ABC and beta 2-microglobulin. Jones RA, et al. **Clin Exp Immunol** 1988 Dec;74(3):454–8
Correlation of immunoregulatory function with cell phenotype in cord blood lymphocytes. Kingsley G, et al. **Clin Exp Immunol** 1988 Jul;73(1):40–5
Decreased expression of CD7 occurs in rheumatoid arthritis. Lazarovits AI, et al. **Clin Exp Immunol** 1988 Jun; 72(3):470–5
Lymphocyte-mediated regulation of platelet activation during desensitization in patients with hymenoptera venom hypersensitivity. Ledru E, et al. **Clin Exp Immunol** 1988 Aug;73(2):198–203
Limit dilution analysis of peripheral blood T lymphocytes specific to periodontopathic bacteria. Mahanonda R, et al. **Clin Exp Immunol** 1989 Feb;75(2):245–51
Accessory cell heterogeneity in lepromatous leprosy; dendritic cells and not monocytes support T cell responses. Mittal A, et al. **Clin Exp Immunol** 1989 May;76(2):233–9
Stimulation of mucosal T cells in situ with anti-CD3 antibody: location of the activated T cells and their distribution within the mucosal micro-environment. Monk T, et al. **Clin Exp Immunol** 1988 Nov;74(2):216–22
Experimental zinc deficiency: effects on cellular responses and the affinity of humoral antibody. Moulder K, et al. **Clin Exp Immunol** 1989 Aug;77(2):269–74
Effect of age on the human high affinity interleukin 2 receptor of phytohaemagglutinin stimulated peripheral blood lymphocytes. Nagel JE, et al. **Clin Exp Immunol** 1989 Feb;75(2):286–91
Modulatory anti-T antibody on mature human lymphocytes. Nouri A, et al. **Clin Exp Immunol** 1988 Aug;73(2):208–13
Participation of suppressor-inducer cells in the suppression of adjuvant arthritis by transfer of spleen cells expanded by T cell growth factor. Ogawa H, et al. **Clin Exp Immunol** 1988 Jun;72(3):476–80
T lymphocyte activation in systemic lupus erythematosus analysed by proliferative response to nucleoplasmic proteins on nitrocellulose immunoblots. Pham BN, et al. **Clin Exp Immunol** 1989 Aug;77(2):168–74
Phenotype and functional properties of Vicia villosa agglutinin (VVA) binding T cells in patients with Crohn's disease: detection of contrasuppressor activity in patients lacking extra-intestinal manifestations, abscesses and fistulas. Raedler A, et al. **Clin Exp Immunol** 1988 Nov; 74(2):264–9
Evidence that the Mitsuda reaction to Mycobacterium leprae can be mediated by lymphocytes responsive to Mycobacterium tuberculosis. Roberts PP, et al. **Clin Exp Immunol** 1988 Jun;72(3):390–3
Possible involvement of the CD4 molecule in a late activation event on CD4+ T cell proliferation in the human autologous mixed lymphocyte reaction. Sakane T, et al. **Clin Exp Immunol** 1989 Feb;75(2):269–74
Measles virus inhibits lymphocyte proliferation in vitro by two different mechanisms. Salonen R, et al. **Clin Exp Immunol** 1989 Mar;75(3):376–80
T lymphocytes of the human colonic mucosa: functional and phenotypic analysis. Smart CJ, et al. **Clin Exp Immunol** 1988 Jul;73(1):63–9
Functional and phenotypical studies of the Leu-4 (CD3)+, Leu-1 (CD5)- T lymphocyte. Srour EF, et al. **Clin Exp Immunol** 1988 Jul;73(1):34–9
Cell-mediated immunity to pancreatic islet cells in the non-obese diabetic (NOD) mouse: in vitro characterization and time course study. Timsit J, et al. **Clin Exp Immunol** 1988 Aug;73(2):260–4
Unresponsiveness to Con A in spleen cell cultures of M. lepraemurium-infected mice is dependent on a defective expression of high-affinity IL-2 receptors rather than on a lack of IL-2 production. Turcotte R, et al. **Clin Exp Immunol** 1989 Apr;76(1):126–31
Relative strength of the mitogenic and interleukin-2-production-inducing activities of staphylococcal exotoxins presumed to be causative exotoxins of toxic shock syndrome: toxic shock syndrome toxin-1 and enterotoxins A, B and C to murine and human T cells. Uchiyama T, et al. **Clin Exp Immunol** 1989 Feb; 75(2):239–44
Lymphocyte sensitization to Aspergillus fumigatus in allergic bronchopulmonary aspergillosis. Walker CA, et al. **Clin Exp Immunol** 1989 Apr;76(1):34–40

CD4 and CD8 cell responses to herpes simplex virus in Behçet's disease. Young C, et al. **Clin Exp Immunol** 1988 Jul;73(1):6–10

Activated T lymphocytes in the peripheral blood of patients with systemic lupus erythematosus induce B cells to produce immunoglobulin. Inghirami G, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):269–76

In vivo use of monoclonal antibodies against murine T cell antigens. Ghobrial RR, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):486–506

Investigation of the clonality of lymphocytes in Hashimoto's thyroiditis using immunoglobulin and T-cell receptor gene probes. Katzin WE, et al. **Clin Immunol Immunopathol** 1989 May;51(2):264–74

The alternative pathway of T cell activation: biology, pathophysiology, and perspectives for immunopharmacology. Meuer SC, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S133–9 (32 ref.)

Inhibition of thymocyte mitogenic responses by coculture with thymic epithelial cells. Munoz-Blay T, et al. **Clin Immunol Immunopathol** 1989 May;51(2):275–93

Sex difference in the CD4 + CD45R+ T lymphocytes in normal individuals and its selective decrease in women with idiopathic thrombocytopenic purpura. Mylvaganam R, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):473–85

Interleukin 2 responsive T cell clones from rheumatoid and normal subjects: proliferative responses to connective tissue elements. Ofosu-Appiah WA, et al. **Clin Immunol Immunopathol** 1989 Feb;50(2):264–71

Suppression of autologous mixed leukocyte reaction in type I diabetes mellitus by in vivo-activated T lymphocytes. Räsänen L, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):406–13

In vitro induction of T cell-dependent B cell differentiation in patients with common varied immunodeficiency. Stohl W, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):273–82

Expression of TLiSA1 on T cells from patients with rheumatoid arthritis and systemic lupus erythematosus. Tabata H, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):366–75

Immune alterations associated with T lymphocyte activation and regulation in retinitis pigmentosa patients. Williams LL, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):380–9

In vitro study of expression of interleukin-2 receptors in T-lymphocytes from patients with IgA nephropathy. Lai KN, et al. **Clin Nephrol** 1988 Dec;30(6):330–4

A defect in immunoregulatory synovial fluid T cells in Behçet's syndrome. Alcocer-Varela J, et al. **Clin Rheumatol** 1989 Mar;8(1):80–6

Production and control of specificity of a goat anti-bovine thymocytes antiserum. Person JM, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(2):125–37

In vitro study of the cross-sensitivity of hair dye using hapten-specific lymphocytes. Shigematsu T, et al. **Contact Dermatitis** 1988 Jul;19(1):30–5

Responder T-cell subsets and antigenic stimulus in mixed lymphocyte-hepatocyte culture. Bumgardner GL, et al. **Curr Surg** 1989 Jan–Feb;46(1):20–3

Splenic adherent cells induce T cell hyporesponsiveness in experimental hepatic failure. Roughneen PT, et al. **Curr Surg** 1989 Jan–Feb;46(1):36–8

Cell-mediated immune reaction in the mechanism of blister formation in bullous pemphigoid. Takiguchi Y, et al. **Dermatologica** 1989;179 Suppl 1:137

Molecular biology of T cell-derived lymphokines: structure and biology of interleukin 4. Arai N, et al. **Dev Biol Stand** 1988;69:57–63

Monoclonal antibodies directed at human T lymphocyte activation antigens cross react with concanavalin A-stimulated canine and baboon peripheral blood lymphocytes. Greenlee PG, et al. **Dev Comp Immunol** 1988 Fall;12(4):865–77

Structural, functional relationship of thymus derived cells of the lizard Calotes versicolor. Manickasundari M, et al. **Dev Comp Immunol** 1988 Summer;12(3):603–10

Effect of cyclosporin on interleukin 2-related T-lymphocyte parameters in IDDM patients. Chatenoud L, et al. **Diabetes** 1989 Feb;38(2):249–56

In vitro relationship of CD4 cells from type I diabetic patients and xenogeneic beta-cell membranes. Segain JP, et al. **Diabetes** 1989 May;38(5):634–40

Role of CD4+ T-lymphocytes in rejection by mice of fetal pig proislet xenografts. Wilson JD, et al. **Diabetes** 1989 Jan;38 Suppl 1:217–9

A study of cell-mediated immunity in type 1 diabetes using an antigen presentation assay. d'Amore F, et al. **Diabetic Med** 1989 Mar;6(2):144–8

Persistent reduction of CD4/CD8 lymphocyte ratio and cell activation before the onset of type 1 (insulin-dependent) diabetes. Al-Sakkaf L, et al. **Diabetologia** 1989 May; 32(5):322–5

Suppression of concanavalin A-induced responses in splenic lymphocytes by activated macrophages in the non-obese diabetic mouse. Yokono K, et al. **Diabetologia** 1989 Jan; 32(1):67–73

Colonic mucosal T lymphocytes in ulcerative colitis: expression of CD7 antigen in relation to MHC class II (HLA-D) antigens. Trejdosiewicz LK, et al. **Dig Dis Sci** 1989 Sep;34(9):1449–56

T-cell responses in hydatid disease patients. Chemtai AK, et al. **East Afr Med J** 1988 Dec;65(12):820–3

Human T cells recognize polymorphic and non-polymorphic regions of the Plasmodium falciparum circumsporozoite protein. Guttinger M, et al. **EMBO J** 1988 Aug;7(8):2555–8

Clonal sketches of the immune response. Lanzavecchia A. **EMBO J** 1988 Oct;7(10):2945–51 (48 ref.)

A second subunit of CD8 is expressed in human T cells. Norment AM, et al. **EMBO J** 1988 Nov;7(11):3433–9

T cell tolerance to Mlsa encoded antigens in T cell receptor V beta 8.1 chain transgenic mice. Pircher H, et al. **EMBO J** 1989 Mar;8(3):719–27

Ubiquitous and lymphocyte-specific factors are involved in the induction of the mouse interleukin 2 gene in T lymphocytes. Serfling E, et al. **EMBO J** 1989 Feb; 8(2):465–73

A novel, inducible and T cell-specific enhancer located at the 3' end of the T cell receptor alpha locus. Winoto A, et al. **EMBO J** 1989 Mar;8(3):729–33

A CD8 polypeptide that is lost after passing the Golgi but before reaching the cell surface: a novel sorting mechanism. Zamoyska R, et al. **EMBO J** 1988 Aug;7(8):2359–67

T-lymphocyte subpopulations in multiple sclerosis—do they help to judge immunosuppressive therapy? Henneberg A, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(2):94–6

Dephosphorylation of the human T lymphocyte CD3 antigen. Alexander D, et al. **Eur J Biochem** 1989 Apr 15; 181(1):55–65

Role of T-lymphocytes in production of a cancer-associated protein factor in serum from lung cancer patients. Kotlar HK, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1763–70

Immunoelectron microscopic demonstration of antigenic sites on lymphoid cells using a human monoclonal antibody (Ha6D3). Hansmann ML, et al. **Eur J Haematol** 1989 Jul; 43(1):35–40

B lymphocyte function in multiple myeloma: analysis of T cell- and monocyte-dependent antibody production. Petersen J, et al. **Eur J Haematol** 1989 Feb;42(2):193–201

Decreased TcR-CD3+ T cell numbers in healthy aged humans. Evidence that T cell defects are masked by a reciprocal increase of TcR-CD3- CD2+ natural killer cells. Alés-Martínez JE, et al. **Eur J Immunol** 1988 Nov; 18(11):1827–30

Identical forms of the CD2 antigen expressed by mouse T and B lymphocytes. Altevogt P, et al. **Eur J Immunol** 1989 Aug;19(8):1509–12

Expression and functional role of CD23 on T cells. Armitage RJ, et al. **Eur J Immunol** 1989 Jan;19(1):31–5

The biochemical characterization of E2, a T cell surface molecule involved in rosettes. Aubrit F, et al. **Eur J Immunol** 1989 Aug;19(8):1431–6

T cell activation via the CD2 molecule is associated with protein kinase C translocation from the cytosol to the plasma membrane. Bagnasco M, et al. **Eur J Immunol** 1989 May;19(5):823–7

The immune response of BALB/c mice to influenza hemagglutinin: commonality of the B cell and T cell repertoires and their relevance to antigenic drift. Barnett BC, et al. **Eur J Immunol** 1989 Mar;19(3):515–21

Processing requirements for T cell activation by Mycoplasma arthritidis-derived mitogen. Bauer A, et al. **Eur J Immunol** 1988 Dec;18(12):2109–12

Neonatal induction of allogeneic tolerance prevents T cell-mediated autoimmunity in NOD mice. Bendelac A, et al. **Eur J Immunol** 1989 Apr;19(4):611–6

Human T cell activation: differential response to anti-CD28 as compared to anti-CD3 monoclonal antibodies. Bjorndahl JM, et al. **Eur J Immunol** 1989 May;19(5):881–7

The influence of cyclosporin A on the alternative pathways of human T cell activation in vitro. Bloemena E, et al. **Eur J Immunol** 1989 May;19(5):943–6

Differential pattern of T cell recognition of the 65-kDa mycobacterial antigen following immunization with the whole protein or peptides. Brett SJ, et al. **Eur J Immunol** 1989 Jul;19(7):1303–10

Detection and characterization of functional T cells in mice with severe combined immune deficiency. Carroll AM, et al. **Eur J Immunol** 1988 Dec;18(12):1965–71

T cell interactions generated by synthetic peptides covalently linked to a carrier. Childerstone A, et al. **Eur J Immunol** 1989 Jan;19(1):169–76

Specificity of human T lymphocytes expressing a gamma/delta T cell antigen receptor. Recognition of a polymorphic determinant of HLA class I molecules by a gamma/delta clone. Ciccone E, et al. **Eur J Immunol** 1989 Jul;19(7):1267–71

T-immunogenic peptides are constituted of rare sequence patterns. Use in the identification of T epitopes in the human immunodeficiency virus gag protein. Claverie JM, et al. **Eur J Immunol** 1988 Oct;18(10):1547–53

CD8+CD11b+ peripheral blood T lymphocytes contain lymphokine-activated killer cell precursors. Dianzani U, et al. **Eur J Immunol** 1989 Jun;19(6):1037–44

Cloned T cells provide help for malaria-specific polyclonal antibody responses. Goldring JP, et al. **Eur J Immunol** 1989 Mar;19(3):559–61

T cell response to myoglobin: a comparison of T cell clones in high-responder and low-responder mice. Gorai I, et al. **Eur J Immunol** 1988 Sep;18(9):1329–35

Ontogeny of expression of UCHL1 antigen on TcR-1+ (CD4/8) and TcR delta+ T cells. Hayward AR, et al. **Eur J Immunol** 1989 Apr;19(4):771–3

In vivo depletion of BoT4 (CD4) and of non-T4/T8 lymphocyte subsets in cattle with monoclonal antibodies. Howard CJ, et al. **Eur J Immunol** 1989 Apr;19(4):757–64

Ontogenic development of autoantibody repertoires in spleen and peritoneal cavity of normal mice: examples of T cell-dependent and -independent reactivities. Huetz F, et al. **Eur J Immunol** 1989 Jul;19(7):1195–201

T cell dependence of the "natural" autoreactive B cell activation in the spleen of normal mice. Huetz F, et al. **Eur J Immunol** 1988 Oct;18(10):1615–22

Molecular analysis of T cell receptor gamma gene expression in allo-activated splenic T cells of adult mice. Jones B, et al. **Eur J Immunol** 1988 Dec;18(12):1907–15

Mechanism of skin allograft enhancement across an H-2 class I mutant difference. Evidence for involvement of veto cells. Kast WM, et al. **Eur J Immunol** 1988 Dec;18(12):2105–8

Human tonsillar dendritic cell-induced T cell responses: analysis of molecular mechanisms using monoclonal antibodies. King PD, et al. **Eur J Immunol** 1989 Apr; 19(4):581–7

Structural and serological heterogeneity of gamma/delta T cell antigen receptor expression in thymus and peripheral blood. Lanier LL, et al. **Eur J Immunol** 1988 Dec; 18(12):1985–92

Kinetic analysis of Ly-6 gene induction in a T lymphoma by interferons and interleukin 1, and demonstration of Ly-6 inducibility in diverse cell types. LeClair KP, et al. **Eur J Immunol** 1989 Jul;19(7):1233–9

Inhibition of T cell response with peptides is influenced by both peptide-binding specificity of major histocompatibility complex molecules and susceptibility of T cells to blocking. Lehmann PV, et al. **Eur J Immunol** 1989 Jun;19(6):1071–7

The majority of mouse spontaneous rosette-forming cells of thymic origin belong to the Ly-2+ subset. Lepault F, et al. **Eur J Immunol** 1989 Apr;19(4):605–9

Pgp-1hi T lymphocytes accumulate with age in mice and respond poorly to concanavalin A. Lerner A, et al. **Eur J Immunol** 1989 Jun;19(6):977–82

Macrophage activation by interferon-gamma from host-protective T cells is inhibited by interleukin (IL)3 and IL4 produced by disease-promoting T cells in leishmaniasis. Liew FY, et al. **Eur J Immunol** 1989 Jul; 19(7):1227–32

Functional and biochemical characterizations of avian T lymphocyte antigens identified by monoclonal antibodies. Lillehoj HS, et al. **Eur J Immunol** 1988 Dec;18(12):2059–65

T cell immunity or tolerance as a consequence of self antigen presentation. Lin RH, et al. **Eur J Immunol** 1989 Jan; 19(1):105–10

Mouse strain variation in Ly-24 (Pgp-1) expression by peripheral T cells and thymocytes: implications for T cell differentiation. Lynch F, et al. **Eur J Immunol** 1989 Feb; 19(2):223–9

Gamma/delta T cells express a unique surface molecule appearing late during thymic development. Mackay CR, et al. **Eur J Immunol** 1989 Aug;19(8):1477–83

Maturation of the delayed-type hypersensitivity response in SJL mice: absence of effector cell induction. Matsushima GK, et al. **Eur J Immunol** 1988 Sep;18(9):1411–6

Clonal analysis of human T cell activation by the Mycoplasma arthritidis mitogen (MAS). Matthes M, et al. **Eur J Immunol** 1988 Nov;18(11):1733–7

Limiting dilution analysis of proliferative responses in human lymphocyte populations defined by the monoclonal antibody UCHL1: implications for differential CD45 expression in T cell memory formation. Merkenschlager M, et al. **Eur J Immunol** 1988 Nov;18(11):1653–61

HIV-specific T lymphocyte immunity in mice immunized with a recombinant vaccinia virus. Michel F, et al. **Eur J Immunol** 1988 Dec;18(12):1917–24

Analysis of T cell receptor gamma chains from adult CD4-CD8- thymocytes. Moore MW, et al. **Eur J Immunol** 1989 Aug;19(8):1501–4

Immunity to experimental infection with Leishmania major: generation of protective L3T4+ T cell clones recognizing antigen(s) associated with live parasites. Müller I, et al. **Eur J Immunol** 1989 May;19(5):865–71

T cell responses of normal individuals towards recombinant protein antigens of Mycobacterium tuberculosis. Munk ME, et al. **Eur J Immunol** 1988 Nov;18(11):1835–8

T cell responses to fractionated Mycobacterium leprae antigens in leprosy. The lepromatous nonresponder defect can be overcome in vitro by stimulation with fractionated M. leprae components. Ottenhoff TH, et al. **Eur J Immunol** 1989 Apr;19(4):707–13

Schistosoma mansoni-specific rat T cell clones. II. Different effects of adult worm-specific T cell clones in immunocompetent and nude infected rats. Pestel J, et al. **Eur J Immunol** 1989 Aug;19(8):1457–62

Definition of the thymic generative lineage by selective expression of high molecular weight isoforms of CD45 (T200). Pilarski LM, et al. **Eur J Immunol** 1989 Apr; 19(4):589–97

Inhibition of the responses of a cloned CD4+ T cell line to different class II major histocompatibility complex ligands by anti-CD4 and by anti-receptor Fab fragments are directly related. Portoles P, et al. **Eur J Immunol** 1989 Jan;19(1):83–7

Resistance to experimental autoimmune encephalomyelitis induced by neonatal tolerization to myelin basic protein: clonal elimination vs. regulation of autoaggressive

lymphocytes. Qin YF, et al. **Eur J Immunol** 1989 Feb; 19(2):373–80

MLR3 molecule is an activation antigen shared by human B, T lymphocytes and T cell precursors. Risso A, et al. **Eur J Immunol** 1989 Feb;19(2):323–8

Autoreactive T cells in mercury-induced autoimmunity. Demonstration by limiting dilution analysis. Rossert J, et al. **Eur J Immunol** 1988 Nov;18(11):1761–6

Enhanced responsiveness of human memory T cells to CD2 and CD3 receptor-mediated activation. Sanders ME, et al. **Eur J Immunol** 1989 May;19(5):803–8

Inhibition by chlorpromazine of lymphokine-specific mRNA expression in human thymocytes. Schleuning MJ, et al. **Eur J Immunol** 1989 Aug;19(8):1491–5

Triggering of the alternative pathway of human T cell activation involves members of the T 200 family of glycoproteins. Schraven B, et al. **Eur J Immunol** 1989 Feb; 19(2):397–403

Expression and ontogeny of murine CD2. Sen J, et al. **Eur J Immunol** 1989 Jul;19(7):1297–302

The molecular context of determinants within the priming antigen establishes a hierarchy of T cell induction: T cell specificities induced by peptides of beta-galactosidase vs. the whole antigen. Shivakumar S, et al. **Eur J Immunol** 1989 Apr;19(4):681–7

Functional characterization of the CD45R (2H4) molecule on CD8 (T8) cells in the autologous mixed lymphocyte reaction system. Takeuchi T, et al. **Eur J Immunol** 1989 Apr;19(4):747–55

T cells recognize both conformational and cryptic determinants on the insulin molecule. Thomas JW, et al. **Eur J Immunol** 1989 Mar;19(3):557–8

Cultured keratinocyte grafts are recognized, but not rejected by CD8+ T cells in vivo. Tinois E, et al. **Eur J Immunol** 1989 Jun;19(6):1031–5

Two monoclonal antibodies specific for the T cell receptor V alpha 8. Tomonari K, et al. **Eur J Immunol** 1989 Jun; 19(6):1131–5

Human T cell clones with specificity for insulinoma cell antigens. Van Vliet E, et al. **Eur J Immunol** 1989 Jan; 19(1):213–6

Endogenous interleukin 6 plays an obligatory role in interleukin 4-dependent human IgE synthesis. Vercelli D, et al. **Eur J Immunol** 1989 Aug;19(8):1419–24

Deletion of Mls-reactive T cells in H-2-compatible but Mls-incompatible bone marrow chimeras. Yoshikai Y, et al. **Eur J Immunol** 1989 Jun;19(6):1009–13

Down-regulation of murine collagen-induced arthritis by a T cell hybridoma. Kresina TF. **Exp Cell Biol** 1988; 56(1–2):86–102

Diminished heat-shock protein synthesis following mitogen stimulation of lymphocytes from aged donors. Faassen AE, et al. **Exp Cell Res** 1989 Aug;183(2):326–34

Human T-cell mediated response to homologous lens antigen. Simpson W, et al. **Exp Eye Res** 1989 Jan;48(1):49–54

Antilymphocytic antibodies and marrow transplantation. IX. T-cell depletion in marrow donors with C1q high and low affinity antibodies for suppression of GVHD in fully mismatched mice. Antica M, et al. **Exp Hematol** 1989 Oct; 17(9):942–7

Bronchoalveolar lavage T-cell and Ia antigen quantitation by flow cytometry in acute and chronic experimental hypersensitivity pneumonitis. Upadrashta BS, et al. **Exp Lung Res** 1989 May;15(3):359–73

Eimeria tenella and E. acervulina: lymphokines secreted by an avian T cell lymphoma or by sporozoite-stimulated immune T lymphocytes protect chickens against avian coccidiosis. Lillehoj HS, et al. **Exp Parasitol** 1989 Jul; 69(1):54–64

T cell immunity to malaria sporozoites. Schofield L. **Exp Parasitol** 1989 Apr;68(3):357–64 (45 ref.)

The role of TH1 and TH2 cells in experimental cutaneous leishmaniasis. Scott P. **Exp Parasitol** 1989 Apr;68(3):369–72 (18 ref.)

The binding of ligands to the 55 kDa component of the interleukin-2 receptor triggers increased turnover of phosphate bound to an 85 kDa protein. Evidence for the role of cyclic AMP. Mire-Sluis AR, et al. **FEBS Lett** 1989 Jan 30;243(2):280–4

Transforming growth factors beta 1 and beta 2 as well as milk growth factor decrease anti-CD3-induced proliferation of human lymphocytes without inhibiting the anti-CD3-mediated increase of [Ca2+]i and the activation of protein kinase C. Stoeck M, et al. **FEBS Lett** 1989 Jun 5;249(2):289–92

Conformation of a T cell stimulating peptide in aqueous solution. Waltho JP, et al. **FEBS Lett** 1989 Jul 3; 250(2):400–4

Predictions of linear T-cell and B-cell epitopes in proteins encoded by HIV-1, HIV-2 and SIVMAC and the conservation of these sites between strains. Zvelebil MJ, et al. **FEBS Lett** 1988 Dec 19;242(1):9–21

Interleukin 2 receptor bearing T lymphocytes in patients with chronic liver disease. Kakumu S, et al. **Gastroenterol Jpn** 1988 Aug;23(4):408–13

Lymphocyte subpopulations in mother and newborn: correlation with sex of the newborn and number of pregnancies. Komlos L, et al. **Gynecol Obstet Invest** 1989; 27(3):143–7

Deficiency of autologous mixed lymphocyte reaction in long-term bone marrow transplant recipients without clinical chronic graft versus host disease. Conte R, et al. **Haematologica (Pavia)** 1988 Jul-Aug;73(4):297–301

T-cell markers in tumor-infiltrating lymphocytes of head and neck cancer. Snyderman CH, et al. **Head Neck** 1989 Jul-Aug;11(4):331–6

Flow cytometric analysis of lymphocyte subsets in peripheral blood of chronic headache patients. Gilman-Sachs A, et al. **Headache** 1989 May;29(5):290–4

Is the Hodgkin cell a T- or B-lymphocyte? Recent evidence from geno- and immunophenotypic analysis and in-vitro cell lines. Drexler HG, et al. **Hematol Oncol** 1989 Mar-Apr; 7(2):95–113 (83 ref.)

Morphological, immunophenotypical and isoenzymatic profiles of human leukemia cells and derived T-cell lines. Drexler HG, et al. **Hematol Oncol** 1989 Mar-Apr; 7(2):115–25

A monoclonal antibody 1A6 to T-cell recognizes a common antigen expressed on lymphocytes from normal and leukemic patients, and inhibits NK cell activity. Togashi H, et al. **Hematol Oncol** 1989 May-Jun;7(3):233–42

The autologous mixed lymphocyte reaction in primary biliary cirrhosis: analysis of activation and blastogenesis of autoreactive T lymphocytes. Lindor KD, et al. **Hepatology** 1988 Nov-Dec;8(6):1555–9

Effects of anti-interleukin-2 receptor antibody and cyclosporin A on human T cell proliferation in primary mixed lymphocyte reaction. Oiwa K, et al. **Hiroshima J Med Sci** 1989 Mar;38(1):1–6

T-cell vaccination against autoimmune disease. Cohen IR. **Hosp Pract [Off]** 1989 Feb 15;24(2):57–64

Epitopic analysis of HLA DR molecule expression on alloreactive T-cell clones. Bonneville M, et al. **Hum Immunol** 1988 Nov;23(3):207–21

A human suppressor T-cell factor that inhibits T-cell replication by interaction with the IgM-Fc receptor (CD7). Emara M, et al. **Hum Immunol** 1989 Jun;25(2):87–102

T lymphocyte clones recognizing an HLA-DQw3.2-associated epitope involving residue 57 on the DQ beta chain. Lundin KE, et al. **Hum Immunol** 1988 Aug;22(4):235–46

Variants of HLA-DRw52 defined by T lymphocyte clones. Mickelson EM, et al. **Hum Immunol** 1988 Aug;22(4):263–74

Alloactivated HLA class II-positive T-cell lines induce IL-2 reactivity but lack accessory cell function in mixed leukocyte culture. Odum N, et al. **Hum Immunol** 1989 Jun; 25(2):135–48

Serological identification of thymocyte differentiation antigens. Park S, et al. **Hum Immunol** 1988 Jul;22(3):151–62

Human platelet alloantigens Bra/Brb are expressed on the very late activation antigen 2 (VLA-2) of T lymphocytes. Santoso S, et al. **Hum Immunol** 1989 Aug;25(4):237–46

A novel T-cell-defined HLA-DR polymorphism not predicted from the linear amino acid sequence. Termijtelen A, et al. **Hum Immunol** 1989 Sep;26(1):47–58

Comparison of signals delivered through CD3 and CD2 for T-cell activation: the role of calcium influx and interleukin 1. Wakasugi H, et al. **Hum Immunol** 1988 Nov;23(3):163–78

Low-grade intestinal lymphoma of intraepithelial T lymphocytes with concomitant enteropathy-associated T cell lymphoma: case report suggesting a possible histogenetic relationship. Alfsen GC, et al. **Hum Pathol** 1989 Sep;20(9):909–13

Production of a rat T cell hybridoma that stably expresses the T cell differentiation marker RT6.2. Koch F, et al. **Hybridoma** 1988 Aug;7(4):341–53

Human suppressor factors constitutively produced by T-T cell hybridomas: functional and biochemical characterization. Kunicka JE, et al. **Hybridoma** 1989 Apr; 8(2):127–51

Different CD45 and CD45R epitopes involved in T cell proliferation and NK cytotoxicity. Ruiz-Cabello F, et al. **Hybridoma** 1989 Feb;8(1):1–11

Hybridoma-derived human suppressor factors: differential effects on mouse lymphocytes. Telerman A, et al. **Hybridoma** 1989 Feb;8(1):25–36

Human immunosuppressive factors produced by T cell hybridoma. Tsunetsugu-Yokota Y, et al. **Hybridoma** 1989 Aug;8(4):391–400

Non-H-2 involvement in antigen-specific T cell proliferative responses. I. Different blocking effect of anti-class II monoclonal antibodies between B6 and BALB.B mice on antigen-specific T cell activation. Aosai F, et al. **Immunobiology** 1988 Jul;177(3):278–92

Role of interleukin 1 in mycoplasma mitogen-induced proliferation of human T cells. Bauer A, et al. **Immunobiology** 1989 Mar;179(1):124–30

Suppression of interleukin 2 production by sera obtained from hypersensitivity granuloma-bearing mice with defective T cell-mediated immune responses. Kobayashi K, et al. **Immunobiology** 1989 Feb;178(4–5):329–39

In vitro primary induction of T cells mediating delayed footpad reaction and acquired cellular resistance to Listeria monocytogenes. Mitsuyama M, et al. **Immunobiology** 1988 Jul;177(3):254–66

T-cell receptor V beta 5 usage defines reactivity to a human T-cell receptor monoclonal antibody. Lipoldova M, et al. **Immunogenetics** 1989;30(3):162–8

T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. Tomonari K, et al. **Immunogenetics** 1988;28(6):445–51

T lymphocytes in infectious mononucleosis; effect of IL-2 on the outgrowth of Epstein-Barr virus-infected cells. Misko IS, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):49–55

Circulating human T and B lymphocytes express the p55 interleukin-2 receptor molecule (TAC, CD25). Zola H, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):233–7

Reoviruses as probes of the gut mucosal T cell population. Cebra JJ, et al. **Immunol Invest** 1989 Jan-May; 18(1–4):545–58

Conformation-dependent recognition of a protein by T-lymphocytes: apomyoglobin-specific T-cell clone recognizes conformational changes between apomyoglobin and myoglobin. Cohly HH, et al. **Immunol Invest** 1988 Jun; 17(4):337–42

Presentation of antigen to T lymphocytes by non-immune B-cell hybridoma clones: evidence for specific and non-specific presentation. Cohly HH, et al. **Immunol Invest** 1989 Jun;18(5):651–6

Presentation of antigen to T lymphocytes by non-immune B-cell hybridoma clones: evidence for specific and non-specific presentation. Cohly HH, et al. **Immunol Invest** 1988 Aug-Oct;17(6–7):615–20

Autoreactive T cell hybridoma-derived B cell stimulatory factor(s) governing IgA isotype immunoglobulin production by murine Peyer's patch B cells. Kawanishi H, et al. **Immunol Invest** 1988 Aug-Oct;17(6–7):587–613

CD45 and the thymus. Beverley PC. **Immunol Lett** 1989 Jun 1;21(3):199–200

Effect of hypertonicity and monensin on CD3/TCR surface expression in human T cells. Dallanegra A, et al. **Immunol Lett** 1988 Oct;19(2):115–20

Comparative mitogenic response of old and young rhesus monkey T cells to lectin from Erythrina cristagalli. Eylar EH, et al. **Immunol Lett** 1989 Jul;22(1):13–6

Anti-high endothelial venule monoclonal antibody HECA-452 recognizes plasmacytoid T cells and delineates an "extranodular" compartment in the reactive lymph node. Facchetti F, et al. **Immunol Lett** 1989 Mar; 20(4):277–81

Expression of the Thy-1 gene in human T lymphoid cell lines. Feng SH, et al. **Immunol Lett** 1988 Oct;19(2):109–13

Local T-T cell and T-B cell interactions: a cellular automaton approach. Hogeweg P. **Immunol Lett** 1989 Aug; 22(2):113–22

Cytokine modulation of HLA-DR expression on proliferating cord blood T cells. Hurme M, et al. **Immunol Lett** 1989 Feb;20(3):217–22

Esculetin inhibits T cell activation without suppressing IL-2 production or IL-2 receptor expression. Kabelitz D, et al. **Immunol Lett** 1989 Feb;20(3):241–5

The nature and functions of inducer factor and suppressor factor in T cell dialysates. Lawrence HS, et al. **Immunol Lett** 1989 Apr;21(1):75–80

Application of a human T cell line derived from a Sézary syndrome patient for human interleukin 4 assay. Maeda M, et al. **Immunol Lett** 1988 Aug;18(4):247–53

T cells in transplantation immunity. Mitchison NA. **Immunol Lett** 1989 Apr;21(1):15–9 (21 ref.)

Experimentally induced cutaneous leishmaniasis: are L3T4+ T cells that promote parasite growth distinct from those mediating resistance? Müller I, et al. **Immunol Lett** 1988 Nov;19(3):251–9

The classical and alternate pathways of T cell activation are impaired in leprosy. Muthukkaruppan V, et al. **Immunol Lett** 1988 Sep;19(1):55–8

Effect of an autoreactive T cell clone from (NZB x NZW)F1 mice on the production of anti-DNA antibodies in vivo and in vitro. Naiki M, et al. **Immunol Lett** 1988 Aug; 18(4):281–7

An immunodominant site of acetylcholine receptor in experimental myasthenia mapped with T lymphocyte clones and synthetic peptides. Pachner AR, et al. **Immunol Lett** 1989 Feb;20(3):199–204

Selective expression of CD45 isoforms and of maturation antigens during human thymocyte differentiation: observations and hypothesis. Pilarski LM, et al. **Immunol Lett** 1989 Jun 1;21(3):187–98 (59 ref.)

Characterization of the immune response to intracerebral inoculation of Theiler's murine encephalomyelitis virus: fine protein specificity of the splenic T cell and humoral antibody response. Scheu AK, et al. **Immunol Lett** 1989 May;21(2):171–6

Minor transplantation antigens: their role in shaping the T cell repertoire. Simpson E, et al. **Immunol Lett** 1989 Apr; 21(1):39–44 (41 ref.)

HIV and HIV-infected cells differentially activate the human complement system independent of antibody. Sölder BM, et al. **Immunol Lett** 1989 Aug;22(2):135–45

T cell reactivity of defined peptides from a major Plasmodium falciparum vaccine candidate: the Pf155/RESA antigen. Troye-Blomberg M, et al. **Immunol Lett** 1988 Nov;19(3):229–33

Alloreactive T cell recognition of the HLA-DR beta N-terminal polymorphic region. Ulrich RG, et al. **Immunol Lett** 1989 Jun 15;21(4):285–90

Gamma delta antigen receptors of Thy-1+ dendritic epidermal cells: implications for thymic differentiation. Allison JP, et al. **Immunol Res** 1988;7(4):292–302

T-cell subsets, bm mutants, and the mechanisms of allogeneic skin graft rejection. Auchincloss H Jr, et al. **Immunol Res** 1989;8(2):149–64 (42 ref.)

Effect of graft-versus-host reaction on thymic function. Fukuzawa M, et al. **Immunol Res** 1988;7(3):239–46 (26 ref.)

Antigen presenting cells. Hamilos DL. **Immunol Res** 1989; 8(2):98–117 (106 ref.)

Thymic selection of the T-cell repertoire. Kruisbeek AM, et al. **Immunol Res** 1988;7(4):318–28 (43 ref.)
Influence of bone marrow-derived Ia-bearing cells on the selection of the T-cell repertoire. Matis LA, et al. **Immunol Res** 1988;7(4):329–38
Antigen processing. **Immunol Rev** 1988 Dec;106:1–222
T-cell tolerance, Mls and MHC antigens. **Immunol Rev** 1989 Feb;107:1–202
Properties of the Mls system: a revised formulation of Mls genetics and an analysis of T-cell recognition of Mls determinants. Abe R, et al. **Immunol Rev** 1989 Feb;107:5–28 (49 ref.)
Antigen processing for presentation to T lymphocytes: function, mechanisms, and implications for the T-cell repertoire. Berzofsky JA, et al. **Immunol Rev** 1988 Dec; 106:5–31 (88 ref.)
The biochemistry and cell biology of antigen processing. Chain BM, et al. **Immunol Rev** 1988 Dec;106:33–58 (87 ref.)
Role of IgD and T delta cells in the regulation of the humoral immune response. Coico RF, et al. **Immunol Rev** 1988 Oct; 105:45–67 (61 ref.)
Processing requirements for the recognition of insulin fragments by murine T cells. Gradehandt G, et al. **Immunol Rev** 1988 Dec;106:59–75 (37 ref.)
Mechanisms of antigen processing. Harding CV, et al. **Immunol Rev** 1988 Dec;106:77–92 (32 ref.)
T-cell responses to Mls and to bacterial proteins that mimic its behavior. Janeway CA Jr, et al. **Immunol Rev** 1989 Feb; 107:61–88 (78 ref.)
Processing and presentation of self proteins. Lorenz R, et al. **Immunol Rev** 1988 Dec;106:115–27 (27 ref.)
The role of intracellular acidification in antigen processing. McCoy KL, et al. **Immunol Rev** 1988 Dec;106:129–47 (42 ref.)
T-cell reactivity and tolerance to Mlsa-encoded antigens. MacDonald HR, et al. **Immunol Rev** 1989 Feb;107:89–108 (62 ref.)
T-cell tolerance in transgenic mice expressing major histocompatibility class I molecules in defined tissues. Miller JF, et al. **Immunol Rev** 1989 Feb;107:109–23 (37 ref.)
The expression of CD4 and CD8 accessory molecules on mature T cells is not random but correlates with the specificity of the alpha beta receptor for antigen. von Boehmer H, et al. **Immunol Rev** 1989 Jun;109:143–51 (36 ref.)
T-cell responses and tolerance to Mlsa determinants. Webb SR, et al. **Immunol Rev** 1989 Feb;107:141–58 (40 ref.)
Idiotypic regulation of T cells in graft-versus-host disease and autoimmunity. Wilson DB. **Immunol Rev** 1989 Feb; 107:159–77 (45 ref.)
The Mls system: non-MHC genes that encode strong T-cell stimulatory determinants. Abe R, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):230–5 (50 ref.)
Interleukin 1 and T-cell activation [letter] Campos-Neto A, et al. **Immunol Today** 1988 May;9(5):131
Expression of TCR types on gut intraepithelial lymphocytes [letter] Carter L, et al. **Immunol Today** 1988 Dec; 9(12):368–9
How important is the L3T4 antigen to L3T4+ cell function in vivo? Charlton B, et al. **Immunol Today** 1988 Jun; 9(6):165–7
Influence of antigen processing on immune responsiveness. Delovitch TL, et al. **Immunol Today** 1988 Jul–Aug; 9(7–8):216–8 (30 ref.)
Gamma-interferon in intracellular microbial infections [letter] Dijkmans R, et al. **Immunol Today** 1988 Dec; 9(12):369
T-cell activation in health and disease [news] Feldmann M. **Immunol Today** 1988 May;9(5):121–4
Stop and go in the thymus. Fink PJ. **Immunol Today** 1988 Dec;9(12):377–80 (22 ref.)
Koch's postulates and the molecular biology of T-cell function. Fitch F, et al. **Immunol Today** 1988 Feb;9(2):41–3
Do CD4 or CD8 molecules provide a regulatory signal in T-cell activation? Fleischer B, et al. **Immunol Today** 1988 May;9(5):132–4
CD8+ T lymphocytes in intracellular microbial infections. Kaufmann SH. **Immunol Today** 1988 Jun;9(6):168–74 (58 ref.)
Ly-24 (Pgp-1) expression by thymocytes and peripheral T cells. Lynch F, et al. **Immunol Today** 1988 Jan;9(1):7–10
Mutual cell interactions and the selection of immune repertoires: implication in autoimmunity. Marcos MA, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):204–7 (45 ref.)
T- and B-cell recognition of hepatitis B viral antigens. Milich DR. **Immunol Today** 1988 Dec;9(12):380–6 (51 ref.)
Do CD4 and CD8 control T-cell activation via a specific tyrosine protein kinase? Mustelin T, et al. **Immunol Today** 1989 Jun;10(6):189–92 (46 ref.)
Why peptides? Their possible role in the evolution of MHC-restricted T-cell recognition. Nagy ZA, et al. **Immunol Today** 1989 Apr;10(4):132–8 (62 ref.)
The long road to functional maturity for developing T cells. Rothenberg EV. **Immunol Today** 1989 Apr;10(4):116–7
Antigen-presenting cells for unprimed T cells. Sprent J, et al. **Immunol Today** 1989 Jan;10(1):17–23 (40 ref.)
T-cell interactions in autoimmunity: insights from a murine model of graft-versus-host disease. Via CS, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):207–13 (28 ref.)
The thymus selects the useful, neglects the useless and destroys the harmful. von Boehmer H, et al. **Immunol Today** 1989 Feb;10(2):57–61 (34 ref.)
Virus-triggered AIDS: a T-cell-mediated immunopathology? Zinkernagel RM. **Immunol Today** 1988 Dec;9(12):370–2 (44 ref.)
Cellular events during memory T-cell activation in vitro: the UCHL1 (180,000 MW) determinant is newly synthesized after mitosis. Akbar AN, et al. **Immunology** 1989 Feb;66(2):213–8
Specific inhibition of OKT3-driven T-cell mitogenesis by an anti HLA-class I monoclonal antibody. Beckman I, et al. **Immunology** 1988 Nov;65(3):373–8
The cellular basis of the local graft-versus-host reaction in rat kidney. Bolton EM, et al. **Immunology** 1988 Oct; 65(2):285–91
T-cell activation. I. Evidence for a functional linkage between class I MHC antigens and the Tc-Ti complex. Brams P, et al. **Immunology** 1989 Mar;66(3):348–53
Antigen presentation in the sheep: generation of antigen-specific T-cell lines. Bujdoso R, et al. **Immunology** 1989 Apr;66(4):559–64
Autocrine regulation of T-lymphocyte proliferation: differential induction of IL-2 and IL-2 receptor. Cantrell DA, et al. **Immunology** 1988 Nov;65(3):343–9
HLA-DR-positive leucocyte subpopulations in human skin include dendritic cells, macrophages, and CD7-negative T cells. Davis AL, et al. **Immunology** 1988 Dec; 65(4):573–81
In vivo treatment with an appropriate anti-Thy-1.2 monoclonal antibody abrogates hybrid resistance to Thy-1.1+ virus-immune effector T cells. Doherty PC, et al. **Immunology** 1989 Apr;66(4):631–3
A novel mechanism for the selection of isotype-specific antibody responses: the role of intestinal T cells in the regulation of IgA synthesis by the anti-suppressor circuit. Ernst PB, et al. **Immunology** 1988 Sep;65(1):59–66
Restricted expression of CD2 among subsets of sheep thymocytes and T lymphocytes. Giegerich GW, et al. **Immunology** 1989 Mar;66(3):354–61
Activation and proliferation of normal resting human T lymphocytes in serum-free culture: role of IL-4 and IL-6. Habetswallner D, et al. **Immunology** 1988 Nov;65(3):357–64
Limiting-dilution analysis of T cells extracted from solid human lung tissue: comparison of precursor frequencies for proliferative responses and lymphokine production between lung and blood T cells from individual donors. Holt PG, et al. **Immunology** 1988 Aug;64(4):649–54
Signal delivery by physical interaction and soluble factors from accessory cells in the induction of receptor-mediated T-cell proliferation. Synergistic effect of BSF-2/IL-6 and IL-1. Kawakami K, et al. **Immunology** 1989 Jul; 67(3):314–20
Construction of a rat T-cell hybridoma cDNA expression library and isolation of a cDNA clone for the rat T-cell differentiation marker RT6.2. Koch F, et al. **Immunology** 1989 Jul;67(3):344–50
Naturally occurring mouse antibodies against T-cell-secreted chondroitin sulphate proteoglycan. Levitt D. **Immunology** 1988 Aug;64(4):587–92
Binding of monoclonal antibody to CD16 causes calcium mobilization in large granular lymphocytes but inhibits NK killing. Macintyre EA, et al. **Immunology** 1989 Mar; 66(3):459–65
Human dendritic cells stimulate allogeneic T cells in the absence of IL-1. McKenzie JL, et al. **Immunology** 1989 Jul;67(3):290–7
Antigen-induced neutrophil chemotactic factor from cloned human T lymphocytes. Maestrelli P, et al. **Immunology** 1988 Dec;65(4):605–9
The autonomy of CD8+ T cells in vitro and in vivo. Mason DW, et al. **Immunology** 1988 Oct;65(2):249–57
Mapping of IgG subclass and T-cell epitopes on HIV proteins by synthetic peptides. Mathiesen T, et al. **Immunology** 1989 Aug;67(4):453–9
Inhibitory effects of monoclonal antibodies to a synthetic peptide of influenza haemagglutinin on the processing and presentation of viral antigens to class II-restricted T-cell clones. Mills KH. **Immunology** 1988 Nov;65(3):365–71
Functional properties of intra-epithelial lymphocytes from mouse small intestine. IV. Investigation of the proliferative capacity of IEL using phorbol ester and calcium ionophore. Mowat AM, et al. **Immunology** 1989 Mar;66(3):398–403
Antigen-dependent and -independent proliferative T-cell populations in the peritoneal exudate cells of immunized mice. Nitta T, et al. **Immunology** 1989 Apr;66(4):532–8
Abnormal T-cell activation in chronic hepatitis B viral infection: a consequence of monocyte dysfunction? Nouri-Aria KT, et al. **Immunology** 1988 Aug;64(4):733–8
MHC class II restriction specificity of cloned human T lymphocytes reactive with Dermatophagoides farinae (house dust mite). O'Hehir RE, et al. **Immunology** 1988 Aug;64(4):627–31
Antigen presentation in brain: brain endothelial cells are poor stimulators of T-cell proliferation. Pryce G, et al. **Immunology** 1989 Feb;66(2):207–12
Functional and phenotypic analysis of human T-cell clones which stimulate IgE production in vitro. Quint DJ, et al. **Immunology** 1989 May;67(1):68–74
Activation of a murine T-cell hybridoma by cationized bacteria. Shapiro DN, et al. **Immunology** 1989 Aug; 67(4):478–83
Cultivation of bluetongue virus-specific ovine T cells and their cross-reactivity with different serotype viruses. Takamatsu H, et al. **Immunology** 1989 Feb;66(2):258–63
Studies on the monocyte dependence of T-cell proliferation induced by monoclonal antibodies directed against regions I and II of the CD2 antigen. van Lier R, et al. **Immunology** 1989 Jul;67(3):333–8
Neonatal development of lymphoid organs and specific immune responses in situ in diabetes-prone BB rats. van Rees EP, et al. **Immunology** 1988 Nov;65(3):465–72
Brain neocortex and imuthiol regulate the expression of MHC antigens on mouse T lymphocytes. Renoux G, et al. **Immunopharmacol Immunotoxicol** 1988;10(2):219–29
Effect of BCG upon functional and phenotypic immune markers in rats bearing the Dunning R3327 MAT-LyLu prostatic adenocarcinoma. Rubenstein M, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):579–96
A comparative study on the immunological effects of bovine and porcine thymic extracts: induction of lymphoproliferative response and enhancement of interleukin-2, gamma-interferon and tumor necrotic factor production in vitro on cord blood lymphocytes. Lin CY, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):1–10
Sodium diethyldithiocarbamate restores T lymphocyte proliferation, interleukin-2 production and NK activity in cyclophosphamide-immunosuppressed animals. Rejas MT, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):191–7
Human hybridoma suppressor factor acts selectively on CD4+ cells. Tomita Y, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):199–205
Modulation of lymphocyte motility by beta-endorphin and met-enkephalin. Ye S, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):81–9
T and B cells in borderline (BB) leprosy. Biggins T, et al. **Indian J Lepr** 1988 Jan;60(1):21–5
Early rosette forming T cell—a marker of cellular immunodeficiency in PEM [letter] Fakhir S, et al. **Indian Pediatr** 1988 Oct;25(10):1017–8
Vaccination with Mycobacterium bovis BCG affects the distribution of Fc receptor-bearing T lymphocytes in experimental pulmonary tuberculosis. Bartow RA, et al. **Infect Immun** 1989 May;57(5):1374–9
T-cell recognition of the 18-kilodalton antigen of Mycobacterium leprae. Dockrell HM, et al. **Infect Immun** 1989 Jul;57(7):1979–83
Comparison of T-cell responses in self-limiting versus progressive visceral Leishmania donovani infections in golden hamsters. Gifawesen C, et al. **Infect Immun** 1989 Oct;57(10):3091–6
Cellular immune responses of leprosy contacts to fractionated Mycobacterium leprae antigens. Lee SP, et al. **Infect Immun** 1989 Aug;57(8):2475–80
Identification of antigens recognized by T cells in human leishmaniasis: analysis of T-cell clones by immunoblotting. Melby PC, et al. **Infect Immun** 1989 Oct;57(10):2971–6
Autoimmunity in Chagas' disease: specific inhibition of reactivity of CD4+ T cells against myosin in mice chronically infected with Trypanosoma cruzi. Rizzo LV, et al. **Infect Immun** 1989 Sep;57(9):2640–4
Demonstration of antigen-specific T cells and histopathological alterations in mice experimentally inoculated with Borrelia burgdorferi. Schaible UE, et al. **Infect Immun** 1989 Jan;57(1):41–7
Brucella abortus regulates bovine macrophage-T-cell interaction by major histocompatibility complex class II and interleukin-1 expression. Splitter GA, et al. **Infect Immun** 1989 Apr;57(4):1151–7
Francisella tularensis-specific T-cell clones are human leukocyte antigen class II restricted, secrete interleukin-2 and gamma interferon, and induce immunoglobulin production. Surcel HM, et al. **Infect Immun** 1989 Sep; 57(9):2906–8
Roles of CD4- and CD8-bearing T lymphocytes in the immune response to the erythrocytic stages of Plasmodium chabaudi. Süss G, et al. **Infect Immun** 1988 Dec; 56(12):3081–8
T-cell-mediated immunity in persistent Mycobacterium intracellulare infections in mice. Takashima T, et al. **Infect Immun** 1988 Nov;56(11):2782–7
T-cell modulation of the antibody response to bacterial polysaccharide antigens. Taylor CE, et al. **Infect Immun** 1989 Jan;57(1):180–5
Characterization of protective T cells in the acquired response to Leishmania donovani in genetically determined cure (H-2b) and noncure (H-2d) mouse strains. Ulczak OM, et al. **Infect Immun** 1989 Sep;57(9):2892–9
Cell surface molecules involved in early events in T-cell mitogenic stimulation by staphylococcal enterotoxins. Vroegop SM, et al. **Infect Immun** 1989 Jun;57(6):1816–4
Formation of IgE-binding factors by lymphocytes of HIV-infected patients. Carini C, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):116–8
T lymphocytes in allergen-induced late-phase reactions and asthma. Frew AJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):63–7
Phenotypic and cellular changes associated with loss of antigen-induced function in Epstein-Barr virus-specific human T-cell hybrids. Gallagher G. **Int Arch Allergy Appl Immunol** 1989;88(3):353–6
Behaviour of guinea pig T cells stimulated by antigen, allo-antigen and mitogen. Healey DG, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):134–42
Responses of antigen-specific long-term murine T cell lines to wheat gliadin fractions. Howdle PD, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):269–74

Suppression of human IgA-B-cell maturation by IgA-binding factors requires T cells. Millet I, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):367–70

Clonal analysis of the cellular immune response to the house dust mite Dermatophagoides farinae. O'Hehir R, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):170–2

IgE-dependent killing of Schistosoma mansoni schistosomula by human platelets: modulation by T cell products. Pancré V, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):371–5

Role of interleukin 4 and gamma interferon in the regulation of human IgE synthesis: possible alterations in atopic patients. Romagnani S, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):111–3

Demonstration of C3d and the terminal complement complex on thymic large granular lymphocytes and common thymocytes after incubation with naturally thymocytotoxic serum. Sandberg G, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):239–46

Modulation of total IgE levels in serum of normal and athymic nude BALB/c mice by T cells and exogenous antigenic stimulation. Savelkoul HF, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):113–9

Fc-epsilon-receptor-bearing lymphocytes in patients with clonorchiasis. Watanabe N, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):103–7

A new immunotoxin built by linking a hemolytic toxin to a monoclonal antibody specific for immature T lymphocytes. Avila AD, et al. **Int J Cancer** 1988 Oct 15; 42(4):568–71

Potentiation of adoptive immunotherapy by cis-diamminedichloroplatinum(II), but not by doxorubicin, on a disseminated mouse lymphoma and its association with reduction of tumor burden. Formelli F, et al. **Int J Cancer** 1988 Dec 15;42(6):952–7

T-lymphocyte subsets in patients with idiopathic dilated cardiomyopathy. Huber KC, et al. **Int J Cardiol** 1989 Jan; 22(1):59–66

HLA-DR-restricted antigen-induced proliferation and cytotoxicity mediated by CD4+ T-cell clones from subjects vaccinated with killed M. leprae. Mustafa AS, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):1–11

Determination of E-rosette-forming lymphocytes in aged subjects with Taichiquan exercise. Sun XS, et al. **Int J Sports Med** 1989 Jun;10(3):217–9

T cell factors involved in the isotype-specific regulation of the IgE antibody response. Ishizaka K. **Int Rev Immunol** 1987 Jan;2(1):1–26 (61 ref.)

Regulation of the human IgE antibody response. Leung DY, et al. **Int Rev Immunol** 1987 Jan;2(1):75–91 (44 ref.)

The molecular basis of MHC-restricted antigen recognition by T cells. Saito T, et al. **Int Rev Immunol** 1988 Apr; 3(3):147–74 (101 ref.)

Isotype-specific recognition and regulation by T cells studied with tumor models. Waldschmidt TJ, et al. **Int Rev Immunol** 1987 Jan;2(2):203–20 (57 ref.)

Histoimmunological characterization of the cellular reaction to liver metastases induced by colon cancer cells in syngeneic rats. Martin M, et al. **Invasion Metastasis** 1989; 9(4):216–30

Vaccination against experimental autoimmune disease using autoimmune T-lymphocytes. Cohen IR. **Isr J Med Sci** 1988 Dec;24(12):734–6 (27 ref.)

Immunopathogenesis of Sjögren's syndrome. Moutsopoulos HM. **Isr J Med Sci** 1988 Dec;24(12):737–9 (26 ref.)

Interleukin-1 and interleukin-2 production by peripheral blood mononuclear cells of patients with rheumatoid arthritis. Rozenbaum M, et al. **Isr J Med Sci** 1989 Jul; 25(7):372–6

Inhibitory influences of envelope glycoproteins of HIV-1 on normal immune responses. Chirmule N, et al. **J Acquir Immune Defic Syndr** 1988;1(5):425–30

HIV-1 infection abolishes CD4 biosynthesis but not CD4 mRNA. Yuille MA, et al. **J Acquir Immune Defic Syndr** 1988;1(2):131–7

Immune cell parameters in severely depressed patients: negative findings. Maes M, et al. **J Affective Disord** 1989 Sep-Oct;17(2):121–8

In vitro immunosuppressive properties of spergualins to murine T cell response. Fujii H, et al. **J Antibiot (Tokyo)** 1989 May;42(5):788–94

T-cell activation in health and disease. Disorders of immune regulation, infection and autoimmunity. Oxford, 25–29 September 1988. Papers from an international meeting. Oxford, UK, September 25–29, 1988. **J Autoimmun** 1989 Jun;2 Suppl:1–264

T-cell antigen receptor alpha chain polymorphisms in insulin-dependent diabetes. Bhatia E, et al. **J Autoimmun** 1988 Oct;1(5):389–97

T cells expressing gamma delta chain receptors in rheumatoid arthritis. Brennan FM, et al. **J Autoimmun** 1988 Aug; 1(4):319–26

The importance of the crystalline surface layer protein antigens of rickettsiae in T-cell immunity. Carl M, et al. **J Autoimmun** 1989 Jun;2 Suppl:81–91 (30 ref.)

Role of interleukin-4 in T-cell ontogeny: changes in cell surface phenotype and lymphokine production of immature thymocytes after culture with interleukin-4 and phorbol ester. Guidos C, et al. **J Autoimmun** 1989 Jun;2 Suppl:141–53

Type I diabetes in NOD mice is not associated with insulin-specific, autoreactive T cells. Hurtenbach U, et al. **J Autoimmun** 1989 Apr;2(2):151–61

Non-MHC-restricted, tissue-specific T cells recognizing autologous oligodendrocytes in the normal SJL/J mouse. Jewtoukoff V, et al. **J Autoimmun** 1988 Oct;1(5):433–44

Two distinct mechanisms of interleukin-2 gene expression in human T lymphocytes. June CH, et al. **J Autoimmun** 1989 Jun;2 Suppl:55–65

The mycobacterial GroEL stress protein: a common target of T-cell recognition in infection and autoimmunity. Lamb JR, et al. **J Autoimmun** 1989 Jun;2 Suppl:93–100

The role of autoreactive T-cell lines in the restoration of the immune response to sheep red blood cells in C57Bl/6-lpr/lpr mice. Latta SL, et al. **J Autoimmun** 1989 Feb;2(1):15–24

The 4F2 heavy chain gene: a molecular model of inducible gene expression in human T cells. Leiden JM, et al. **J Autoimmun** 1989 Jun;2 Suppl:67–79

Analysis of T-cell receptor usage in activated T-cell clones from Hashimoto's thyroiditis and Graves' disease. Lipoldova M, et al. **J Autoimmun** 1989 Feb;2(1):1–13

T-cell reactivity in myasthenia gravis. Newsom-Davis J, et al. **J Autoimmun** 1989 Jun;2 Suppl:101–8

Functional and phenotypic properties of T-cell clones which regulate IgE synthesis. Quint DJ, et al. **J Autoimmun** 1989 Jun;2 Suppl:131–40

Autoreactive T cells in rheumatic disease (1). Analysis of growth frequencies and autoreactivity of T cells in patients with rheumatoid arthritis and Lyme disease. Schlesier M, et al. **J Autoimmun** 1989 Feb;2(1):31–49

Defective induction of T-cell help and natural killing following anti-CD3 stimulation of autoimmune lymphocytes. Tovar Z, et al. **J Autoimmun** 1988 Aug; 1(4):327–37

Activators of protein kinase C up-regulate the cell surface expression of CD2 and CD5 T cell glycoproteins. Carrera AC, et al. **J Biol Chem** 1989 Sep 15;264(26):15650–5

Triggering of T-lymphocytes via either T3-Ti or T11 surface structures opens a voltage-insensitive plasma membrane calcium-permeable channel: requirement for interleukin-2 gene function. Gardner P, et al. **J Biol Chem** 1989 Jan 15;264(2):1068–76

T cell activation induces rapid tyrosine phosphorylation of a limited number of cellular substrates. Hsi ED, et al. **J Biol Chem** 1989 Jun 25;264(18):10836–42

Coordination and reversibility of signals for proliferative activation and interleukin-2 mRNA production in resting human T lymphocytes by phorbol ester and calcium ionophore. McCrady CW, et al. **J Biol Chem** 1988 Dec 5;263(34):18537–44

Lymphocyte surface antigen L25 is a member of the integrin receptor superfamily. McIntyre BW, et al. **J Biol Chem** 1989 Aug 15;264(23):13745–50

Human T-lymphocyte activation is associated with changes in O-glycan biosynthesis. Piller F, et al. **J Biol Chem** 1988 Oct 15;263(29):15146–50

The role of protein kinase C in T lymphocyte proliferation. Existence of protein kinase C-dependent and -independent pathways. Redondo JM, et al. **J Biol Chem** 1988 Nov 25; 263(33):17467–70

Analysis of the methylation state of the T cell receptor beta chain gene in T cells and large granular lymphocytes. Sakamoto S, et al. **J Biol Chem** 1989 Jan 5;264(1):251–8

Histidine-rich glycoprotein blocks T cell rosette formation and modulates both T cell activation and immunoregulation. Shatsky M, et al. **J Biol Chem** 1989 May 15;264(14):8254–9

Interferon gamma does not induce antiviral resistance in T lymphocytes. Zucca M, et al. **J Biol Regul Homeost Agents** 1988 Jan-Mar;2(1):15–8

In vitro induction of antigen specific antibody synthesis and proliferation of T lymphocytes with acellular pertussis vaccines, pertussis toxin and filamentous haemagglutinin in humans. Wiertz EJ, et al. **J Biol Stand** 1989 Apr; 17(2):181–90

Inhibition of lymphocyte blastogenesis caused by suppression of interleukin-2 receptor sites after thermal injury. Ferrara JJ, et al. **J Burn Care Rehabil** 1989 Mar-Apr;10(2):119–24

Cholera toxin inhibits the increase in cytoplasmic free calcium induced via the CD2 pathway of human T-lymphocyte activation. Nunes J, et al. **J Cell Biochem** 1989 Apr;39(4):391–400

Cytoskeletal involvement in the sequential capping of rat thymocyte surface glycoproteins. Turner CE, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):309–19

Nontoxic nodular goiter and papillary thyroid carcinoma are not associated with peripheral blood lymphocyte sensitization to thyroid cells. Aguayo J, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):145–9

Phenotypic and functional analysis at the clonal level of infiltrating T lymphocytes in papillary carcinoma of the thyroid: prevalence of cytolytic T cells with natural killer-like or lymphokine-activated killer activity. Bagnasco M, et al. **J Clin Endocrinol Metab** 1989 Oct; 69(4):832–6

Impairment in T-lymphocyte responses during early infection with the human immunodeficiency virus. Bentin J, et al. **J Clin Immunol** 1989 Mar;9(2):159–68

Regulation of IgA synthesis and immune response by T cells and interleukins. McGhee JR, et al. **J Clin Immunol** 1989 May;9(3):175–99 (192 ref.)

Proliferation of highly purified T cells in response to signaling via surface receptors requires cell-cell contact. Schwartz D, et al. **J Clin Immunol** 1989 Mar;9(2):151–8

Structural basis of antigen recognition by T lymphocytes. Implications for vaccines. Berzofsky JA. **J Clin Invest** 1988 Dec;82(6):1811–7 (89 ref.)

T cell receptor gamma and delta rearrangements in hematologic malignancies. Relationship to lymphoid differentiation. Griesinger F, et al. **J Clin Invest** 1989 Aug; 84(2):506–16

A juxta-membrane epitope on the human acetylcholine receptor recognized by T cells in myasthenia gravis. Harcourt GC, et al. **J Clin Invest** 1988 Oct;82(4):1295–300

Profile of human T cell response to leishmanial antigens. Analysis by immunoblotting. Melby PC, et al. **J Clin Invest** 1989 Jun;83(6):1868–75

Autoimmune T lymphocytes in myasthenia gravis. Determination of target epitopes using T lines and recombinant products of the mouse nicotinic acetylcholine receptor gene. Melms A, et al. **J Clin Invest** 1989 Mar; 83(3):785–90

Local xenogeneic graft-versus-host reaction: a measure of T-cell function in asymptomatic HBsAg carriers. Burek B, et al. **J Clin Lab Immunol** 1988 Oct;27(2):69–72

Interleukin 2 production, proliferative response, and receptor expression by cord blood mononuclear cells. Fairfax CA, et al. **J Clin Lab Immunol** 1988 Oct;27(2):63–7

Dissociated production of interleukin-2 and immune gamma-interferon by phytohaemoagglutinin stimulated peripheral mononuclear cells in type I (insulin-dependent) diabetes. Giordano C, et al. **J Clin Lab Immunol** 1988 Oct; 27(2):73–6

Low responsiveness to the anti Leu 4 antibody by T cells from patients with active systemic lupus erythematosus. Kaneoka H, et al. **J Clin Lab Immunol** 1989 Jan;28(1):15–26

PHA stimulation of peripheral blood lymphocytes in oral lichen planus. Abnormality localized between interleukin-2 receptor ligand formation and gamma-interferon secretion. Konttinen YT, et al. **J Clin Lab Immunol** 1989 Jan; 28(1):33–7

Effect of anergy on in vitro sensitization with keyhole limpet hemocyanin of peripheral blood lymphocytes. Ulrich F, et al. **J Clin Lab Immunol** 1988 Aug;26(4):175–8

Association of human immunodeficiency virus (HIV) p24 antigenemia with decrease in CD4+ lymphocytes and onset of acquired immunodeficiency syndrome during the early phase of HIV infection [published erratum appears in J Clin Microbiol 1989 Jul;27(7):1705] Rinaldo C, et al. **J Clin Microbiol** 1989 May;27(5):880–4

T-lymphocyte clones responsive to Shigella flexneri. Zwillich SH, et al. **J Clin Microbiol** 1989 Mar;27(3):417–21

Definitive identification of human T cells in formalin fixed paraffin wax embedded tissue. Francis ND, et al. **J Clin Pathol** 1988 Aug;41(8):900–3

Mechanisms influencing the immunodominance of T cell determinants. Adorini L, et al. **J Exp Med** 1988 Dec 1; 168(6):2091–104

Interleukin 1 production during accessory cell-dependent mitogenesis of T lymphocytes. Bhardwaj N, et al. **J Exp Med** 1989 Mar 1;169(3):1121–36

Molecular genetic analysis of 178 I-Abm12-reactive T cells. Bill J, et al. **J Exp Med** 1989 Jan 1;169(1):115–33

Structure and specificity of T cell receptor gamma/delta on major histocompatibility complex antigen-specific CD3+, CD4-, CD8- T lymphocytes. Bluestone JA, et al. **J Exp Med** 1988 Nov 1;168(5):1899–916

T cell-mediated inhibition of the transfer of autoimmune diabetes in NOD mice. Boitard C, et al. **J Exp Med** 1989 May 1;169(5):1669–80

A beta polymorphic residues responsible for class II molecule recognition by alloreactive T cells. Buerstedde JM, et al. **J Exp Med** 1989 May 1;169(5):1645–54

Both rat and mouse T cell receptors specific for the encephalitogenic determinant of myelin basic protein use similar V alpha and V beta chain genes even though the major histocompatibility complex and encephalitogenic determinants being recognized are different. Burns FR, et al. **J Exp Med** 1989 Jan 1;169(1):27–39

Diversity of the class II (I-Ak/I-Ek)-restricted T cell repertoire for influenza hemagglutinin and antigenic drift. Six nonoverlapping epitopes on the HA1 subunit are defined by synthetic peptides. Burt DS, et al. **J Exp Med** 1989 Aug 1;170(2):383–97

Recognition of oligonucleotide-encoded T cell epitopes introduced into a gene unrelated to the original antigen. Chimini G, et al. **J Exp Med** 1989 Jan 1;169(1):297–302

Regulation of T lymphocyte proliferation. Interleukin 2-mediated induction of c-myb gene expression is dependent on T lymphocyte activation state. Churilla AM, et al. **J Exp Med** 1989 Jul 1;170(1):105–21

Specific lysis of allogeneic cells after activation of CD3-lymphocytes in mixed lymphocyte culture. Ciccone E, et al. **J Exp Med** 1988 Dec 1;168(6):2403–8

Peptide-specific prevention of experimental allergic encephalomyelitis. Neonatal tolerance induced to the dominant T cell determinant of myelin basic protein. Clayton JP, et al. **J Exp Med** 1989 May 1;169(5):1681–91

The heme moiety of cytochrome c is an autoreactive Ir gene-restricted T cell epitope. Cooper HM, et al. **J Exp Med** 1988 Sep 1;168(3):1127–43

Streptococcal cell wall arthritis. Passive transfer of disease with a T cell line and crossreactivity of streptococcal cell wall antigens with Mycobacterium tuberculosis. DeJoy SQ, et al. **J Exp Med** 1989 Aug 1;170(2):369–82

T cells sensitized to synthetic HLA-DR3 peptide give

evidence of continuous presentation of denatured HLA-DR3 molecules by HLA-DP. de Koster HS, et al. J Exp Med 1989 Mar 1;169(3):1191–6

Establishment of human double-positive thymocyte clones. De Libero G, et al. J Exp Med 1989 Jul 1;170(1):303–8

Human T cell clones define S1 subunit as the most immunogenic moiety of pertussis toxin and determine its epitope map. De Magistris MT, et al. J Exp Med 1989 May 1;169(5):1519–32

Dissecting human T cell responses against Bordetella species. De Magistris MT, et al. J Exp Med 1988 Oct 1; 168(4):1351–62

Fidelity of the repertoire in T cell reconstituted athymic nude rats. Preservation of a deficit in alloresponsiveness over one year. Drayson MT, et al. J Exp Med 1989 Sep 1; 170(3):691–702

Self recognition by T cells. I. Bystander killing of target cells bearing syngeneic MHC antigens. Duke RC. J Exp Med 1989 Jul 1;170(1):59–71

Class II major histocompatibility complex-restricted T cells specific for a virion structural protein that do not recognize exogenous influenza virus. Evidence that presentation of labile T cell determinants is favored by endogenous antigen synthesis. Eisenlohr LC, et al. J Exp Med 1989 Mar 1; 169(3):921–31

Correlation of structure with T cell responses of the three members of the HLA-DRw52 allelic series. Gorski J, et al. J Exp Med 1989 Sep 1;170(3):1027–32

Human lymphocytes bearing T cell receptor gamma/delta are phenotypically diverse and evenly distributed throughout the lymphoid system. Groh V, et al. J Exp Med 1989 Apr 1;169(4):1277–94

Functional consequences of anti-sense RNA-mediated inhibition of CD8 surface expression in a human T cell clone. Hambor JE, et al. J Exp Med 1988 Oct 1; 168(4):1237–45

Elimination of CD4+ suppressor T cells from susceptible BALB/c mice releases CD8+ T lymphocytes to mediate protective immunity against Leishmania. Hill JO, et al. J Exp Med 1989 May 1;169(5):1819–27

Neuraminidase-treated macrophages stimulate allogenic CD8+ T cells in the presence of exogenous interleukin 2. Hirayama Y, et al. J Exp Med 1988 Oct 1;168(4):1443–56

A monoclonal antibody to a constant determinant of the rat T cell antigen receptor that induces T cell activation. Differential reactivity with subsets of immature and mature T lymphocytes. Hünig T, et al. J Exp Med 1989 Jan 1; 169(1):73–86

An antigen-independent contact mechanism as an early step in T cell-proliferative responses to dendritic cells. Inaba K, et al. J Exp Med 1989 Aug 1;170(2):527–42

Macrophages phagocytose thymic lymphocytes with productively rearranged T cell receptor alpha and beta genes. Inaba K, et al. J Exp Med 1988 Dec 1;168(6):2279–94

Site-restricted persistent cytomegalovirus infection after selective long-term depletion of CD4+ T lymphocytes. Jonjić S, et al. J Exp Med 1989 Apr 1;169(4):1199–212

Identification of CD2-/CD3+ T cells in fetal human tissue. Kabelitz D, et al. J Exp Med 1988 Nov 1;168(5):1941–6

Inhibition of MHC class II-restricted T cell response by Lyt-2 alloantigen. Kanagawa O, et al. J Exp Med 1989 Sep 1;170(3):901–12

Deletion of potentially self-reactive T cell receptor specificities in L3T4-, Lyt-2- T cells of lpr mice [published erratum appears in J Exp Med 1989 Apr 1;169(4):1515–6] Kotzin BL, et al. J Exp Med 1988 Dec 1;168(6):2221–9

Human TCR-gamma+/delta+, CD8+ T lymphocytes recognize tetanus toxoid in an MHC-restricted fashion. Kozbor D, et al. J Exp Med 1989 May 1;169(5):1847–51

Dengue virus-specific human T cell clones. Serotype crossreactive proliferation, interferon gamma production, and cytotoxic activity. Kurane I, et al. J Exp Med 1989 Sep 1;170(3):763–75

T cell receptor gene usage in the response to lambda repressor cI protein. An apparent bias in the usage of a V alpha gene element. Lai MZ, et al. J Exp Med 1988 Sep 1;168(3):1081–97

Positive selection determines T cell receptor V beta 14 gene usage by CD8+ T cells. Liao NS, et al. J Exp Med 1989 Jul 1;170(1):135–43

Reconstruction of the immunogenic peptide RNase(43–56) by identification and transfer of the critical residues into an unrelated peptide backbone. Lorenz RG, et al. J Exp Med 1989 Jul 1;170(1):203–15

Expression of two distinct T cell receptor alpha/beta heterodimers by an antigen-specific T cell clone. Matis LA, et al. J Exp Med 1988 Dec 1;168(6):2379–84

Acquired resistance to Listeria monocytogenes is mediated by Lyt-2+ T cells independently of the influx of monocytes into granulomatous lesions. Mielke ME, et al. J Exp Med 1989 Aug 1;170(2):589–94

Genetic control of T cell responsiveness to the Friend murine leukemia virus envelope antigen. Identification of class II loci of the H-2 as immune response genes. Miyazawa M, et al. J Exp Med 1988 Nov 1;168(5):1587–605

Expression of a functional CD3-Ti antigen/MHC receptor in the absence of surface CD2. Analysis with clonal Jurkat cell mutants. Moingeon P, et al. J Exp Med 1988 Dec 1; 168(6):2077–90

Human peripheral blood lymphocytes bearing T cell receptor gamma/delta. Expression of CD8 differentiation antigen correlates with the expression of the 55-kD, C gamma 2-encoded gamma chain. Moretta A, et al. J Exp Med 1988 Dec 1;168(6):2349–54

Recombinant interleukin 7, pre-B cell growth factor, has costimulatory activity on purified mature T cells. Morrissey PJ, et al. J Exp Med 1989 Mar 1;169(3):707–16

Human T cell activation. IV. T cell activation and proliferation via the early activation antigen EA 1. Nakamura S, et al. J Exp Med 1989 Mar 1;169(3):677–89

Interleukin 1-induced, T cell-mediated regression of immunogenic murine tumors. Requirement for an adequate level of already acquired host concomitant immunity. North RJ, et al. J Exp Med 1988 Dec 1;168(6):2031–43

T cell determinants of myelin basic protein include a unique encephalitogenic I-E-restricted epitope for Lewis rats. Offner H, et al. J Exp Med 1989 Aug 1;170(2):355–67

Structure of the gamma/delta T cell receptor of a human thymocyte clone. Okada A, et al. J Exp Med 1988 Oct 1;168(4):1481–6

MHC-restricted recognition of immunogenic T cell epitopes of pertussis toxin reveals determinants in man distinct from the ADP-ribosylase active site. Oksenberg JR, et al. J Exp Med 1988 Nov 1;168(5):1855–64

Structural and functional studies of the early T lymphocyte activation 1 (Eta-1) gene. Definition of a novel T cell-dependent response associated with genetic resistance to bacterial infection. Patarca R, et al. J Exp Med 1989 Jul 1;170(1):145–61

Toxicity and therapeutic efficacy of high-dose interleukin 2. In vivo infusion of antibody to NK-1.1 attenuates toxicity without compromising efficacy against murine leukemia. Peace DJ, et al. J Exp Med 1989 Jan 1; 169(1):161–73

Identical peptides recognized by MHC class I- and II-restricted T cells. Perkins DL, et al. J Exp Med 1989 Jul 1;170(1):279–89

I-A alpha polymorphic residues that determine alloreactive T cell recognition. Pierres M, et al. J Exp Med 1989 May 1;169(5):1655–68

Xenogeneic skin graft rejection is especially dependent on CD4+ T cells. Pierson RN 3d, et al. J Exp Med 1989 Sep 1;170(3):991–6

The MRC OX-22- CD4+ T cells that help B cells in secondary immune responses derive from naive precursors with the MRC OX-22+ CD4+ phenotype. Powrie F, et al. J Exp Med 1989 Mar 1;169(3):653–62

Borna disease, a progressive meningoencephalomyelitis as a model for CD4+ T cell-mediated immunopathology in the brain. Richt JA, et al. J Exp Med 1989 Sep 1; 170(3):1045–50

Presentation of exogenous protein antigens by dendritic cells to T cell clones. Intact protein is presented best by immature, epidermal Langerhans cells. Romani N, et al. J Exp Med 1989 Mar 1;169(3):1169–78

Antigen recognition by MHC-incompatible cells of a human mismatched chimera. Roncarolo MG, et al. J Exp Med 1988 Dec 1;168(6):2139–52

Triggering T cells by otherwise inert hybrid anti-CD3/antitumor antibodies requires encounter with the specific target cell. Roosnek E, et al. J Exp Med 1989 Jul 1;170(1):297–302

Antibody to the murine type 3 complement receptor inhibits T lymphocyte-dependent recruitment of myelomonocytic cells in vivo. Rosen H, et al. J Exp Med 1989 Feb 1; 169(2):535–48

Structural and binding analysis of a two domain extracellular CD2 molecule. Sayre PH, et al. J Exp Med 1989 Mar 1; 169(3):995–1009

Mixed chimerism and permanent specific transplantation tolerance induced by a nonlethal preparative regimen. Sharabi Y, et al. J Exp Med 1989 Feb 1;169(2):493–502

Clonal deletion of self-reactive T cells in irradiation bone marrow chimeras and neonatally tolerant mice. Evidence for intercellular transfer of Mlsa. Speiser DE, et al. J Exp Med 1989 Aug 1;170(2):595–600

Graft-versus-host-related immunosuppression is induced in mixed chimeras by alloresponses against either host or donor lymphohematopoietic cells. Sykes M, et al. J Exp Med 1988 Dec 1;168(6):2391–6

Deletion of autospecific T cells in T cell receptor (TCR) transgenic mice spares cells with normal TCR levels and low levels of CD8 molecules. Teh HS, et al. J Exp Med 1989 Mar 1;169(3):795–806

Primary virus-induced lymphomas evade T cell immunity by failure to express viral antigens. Vasmel WL, et al. J Exp Med 1989 Apr 1;169(4):1233–54

Induction of human IgE synthesis requires interleukin 4 and T/B cell interactions involving the T cell receptor/CD3 complex and MHC class II antigens. Vercelli D, et al. J Exp Med 1989 Apr 1;169(4):1295–307

Functional heterogeneity of L3T4+ T cells in MRL-lpr/lpr mice. L3T4+ T cells suppress major histocompatibility complex-self-restricted L3T4+ T helper cell function in association with autoimmunity. Via CS, et al. J Exp Med 1988 Dec 1;168(6):2165–81

Leukocyte function-associated antigen 1 is an activation molecule for human T cells. Wacholtz MC, et al. J Exp Med 1989 Aug 1;170(2):431–48

Restricted tissue distribution of Mlsa determinants. Stimulation of Mlsa-reactive T cells by B cells but not by dendritic cells or macrophages. Webb SR, et al. J Exp Med 1989 Jan 1;169(1):1–12

Lack of immunodominance in the T cell response to herpes simplex virus glycoprotein D after administration of infectious virus. Yamashita K, et al. J Exp Med 1989 Sep 1;170(3):997–1002

A novel activation pathway for mature thymocytes. Costimulation of CD2 (T,p50) and CD28 (T,p44) induces autocrine interleukin 2/interleukin 2 receptor-mediated cell proliferation. Yang SY, et al. J Exp Med 1988 Oct 1; 168(4):1457–68

Multiple discrete encephalitogenic epitopes of the autoantigen myelin basic protein include a determinant for I-E class II-restricted T cells. Zamvil SS, et al. J Exp Med 1988 Sep 1;168(3):1181–6

Characterization of the antigen-reactive T cell line mediating in vivo delayed type hypersensitivity established by antigen-induced interleukin 2. Kobayashi K, et al. J Exp Pathol 1989 Summer;4(3):163–79

T cell-dependent induction of antibody against foot-and-mouth disease virus in a mouse model. Collen T, et al. J Gen Virol 1989 Feb;70 (Pt 2):395–403

Effects of L3T4+ lymphocyte depletion on acute murine cytomegalovirus infection. Erlich KS, et al. J Gen Virol 1989 Jul;70 (Pt 7):1765–71

Expression of glycoprotein D of herpes simplex virus type 1 in a recombinant baculovirus: protective responses and T cell recognition of the recombinant-infected cell extracts. Krishna S, et al. J Gen Virol 1989 Jul;70 (Pt 7):1805–14

Syncytium formation and destruction of bystander CD4+ cells cocultured with T cells persistently infected with human immunodeficiency virus as demonstrated by flow cytometry. Schols D, et al. J Gen Virol 1989 Sep;70 (Pt 9):2397–408

Peripheral blood and portal tract lymphocyte populations in primary sclerosing cholangitis. Snook JA, et al. J Hepatol 1989 Jul;9(1):36–41

Mls determinants recognized by T cells. Abe R, et al. J Immunogenet 1988 Feb-Jun;15(1–3):11–9

High frequency of Mlsa-reactivity among Ab-restricted, H-Y-specific T cell clones. Frangoulis B, et al. J Immunogenet 1988 Feb-Jun;15(1–3):101–9

Cross-linking of Ly 6-linked alloantigens: association between ThB and Ly 5. Houlden BA, et al. J Immunogenet 1989 Feb;16(1):33–43

An external stimulus that mimics Mls locus responses. Janeway CA, et al. J Immunogenet 1988 Feb-Jun; 15(1–3):161–8

T cells define new alloantigens controlled by a gene(s) in the Mls region on mouse chromosome 1. Kimura S, et al. J Immunogenet 1988 Feb-Jun;15(1–3):31–7

Mls allo-determinants are recognized in an MHC class II antigen-dependent but unrestricted fashion by a discrete set of T cells. Macphail S, et al. J Immunogenet 1988 Feb-Jun;15(1–3):87–99

Comparison of rat and rat-mouse chimeric anti-murine CD4 antibodies in vitro. Chimeric antibodies lyse low-density CD4+ cells. Alters SE, et al. J Immunol 1989 Mar 15; 142(6):2018–23

Impact of genetically regulated T cell proliferation on acquired resistance to Listeria monocytogenes. Berche P, et al. J Immunol 1989 Feb 1;142(3):932–9

Human T cell activation by phorbol esters and diacylglycerol analogues. Berry N, et al. J Immunol 1989 Sep 1; 143(5):1407–13

Expression of CD1 and class I MHC antigens by human thymocytes. Blue ML, et al. J Immunol 1989 Apr 15; 142(8):2714–20

TCR gamma delta cells—minor redundant T cell subset or specialized immune system component? Bluestone JA, et al. J Immunol 1989 Mar 15;142(6):1785–8 (40 ref.)

Fine specificity of T cell recognition of the same peptide in association with different I-A molecules. Brett SJ, et al. J Immunol 1989 Aug 1;143(3):771–9

Immune dysfunction associated with graft-vs-host reaction in mice transplanted across minor histocompatibility barriers. II. Reversible defect in T-dependent antibody responses. Budhecha S, et al. J Immunol 1989 Jun 1; 142(11):3740–5

Requirements for stimulation of autoreactive T cells by thymic stroma. Burstyn D, et al. J Immunol 1989 Sep 1; 143(5):1422–5

Triggering of co-mitogenic signals in T cell proliferation by anti-LFA-1 (CD18, CD11a), LFA-3, and CD7 monoclonal antibodies. Carrera AC, et al. J Immunol 1988 Sep 15;141(6):1919–24

Properties of anti-idiotypic T cell lines propagated with syngeneic B lymphocytes. I. T cells bind intact idiotypes and discriminate between the somatic idiotypic variants in a manner similar to the anti-idiotopic antibodies. Cerny J, et al. J Immunol 1988 Dec 1;141(11):3718–25

Human T cell activation with phytohemagglutinin. The function of IL-6 as an accessory signal. Ceuppens JL, et al. J Immunol 1988 Dec 1;141(11):3868–74

Mechanisms of T cell activation by the calcium ionophore ionomycin. Chatila T, et al. J Immunol 1989 Aug 15; 143(4):1283–9

Stimulation of mouse lymphocytes by a mitogen derived from Mycoplasma arthritidis. VII. Responsiveness is associated with expression of a product(s) of the V beta 8 gene family present on the T cell receptor alpha/beta for antigen. Cole BC, et al. J Immunol 1989 Jun 15;142(12):4131–7

Polymorphic residues on the I-A beta chain modulate the stimulation of T cell clones specific for the N-terminal peptide of the autoantigen myelin basic protein. Davis CB,

et al. J Immunol 1989 Oct 1;143(7):2083–93
Decay-accelerating factor functions as a signal transducing molecule for human T cells. Davis LS, et al. J Immunol 1988 Oct 1;141(7):2246–52
Human T cell recognition of polymorphic epitopes from malaria circumsporozoite protein. de Groot AS, et al. J Immunol 1989 Jun 1;142(11):4000–5
Delineation of several DR-restricted tetanus toxin T cell epitopes. Demotz S, et al. J Immunol 1989 Jan 15; 142(2):394–402
Pleiotropic effects of the Bcg gene. II. Genetic restriction of responses to mitogens and allogeneic targets. Denis M, et al. J Immunol 1988 Dec 1;141(11):3988–93
Purified lymphocyte function-associated antigen-3 (LFA-3) activates human thymocytes via the CD2 pathway. Denning SM, et al. J Immunol 1988 Nov 1;141(9):2980–5
An alternative pathway of induction of lymphokine production by T lymphocyte clones. Dunn DE, et al. J Immunol 1989 Jun 1;142(11):3847–56
Murine cell lines stably expressing the influenza virus hemagglutinin gene introduced by a recombinant retrovirus vector are constitutive targets for MHC class I- and class II-restricted T lymphocytes. Eager KB, et al. J Immunol 1989 Oct 1;143(7):2328–35
Bone marrow progenitor cells induce a regulatory autologous proliferative T lymphocyte response. Emerson SG, et al. J Immunol 1989 Feb 1;142(3):766–72
Stimulation of murine T cell subsets with anti-CD3 antibody. Age-related defects in the expression of early activation molecules. Ernst DN, et al. J Immunol 1989 Mar 1; 142(5):1413–21
Enhancement of IL-2-induced T cell proliferation by a novel factor(s) present in murine spleen dendritic cell-T cell culture supernatants. Everson MP, et al. J Immunol 1989 Feb 15;142(4):1183–94
A role for Lyt-2+ T cells in resistance to cutaneous leishmaniasis in immunized mice. Farrell JP, et al. J Immunol 1989 Mar 15;142(6):2052–6
The evolution of MHC restrictions in antigen recognition by T cells in a haploidentical bone marrow transplant recipient. Geha RS, et al. J Immunol 1989 Jul 1;143(1):84–8
Activation of human T cell clones and Jurkat cells by cross-linking class I MHC molecules. Geppert TD, et al. J Immunol 1989 Jun 1;142(11):3763–72
Activation of cord T lymphocytes. I. Evidence for a defective T cell mitogenesis induced through the CD2 molecule. Gerli R, et al. J Immunol 1989 Apr 15; 142(8):2583–9
Characterization of primary T cell subsets mediating rejection of pancreatic islet grafts. Gill RG, et al. J Immunol 1989 Oct 1;143(7):2176–8
Early influx of Listeria-reactive T lymphocytes in liver of mice genetically resistant to listeriosis. Goossens PL, et al. J Immunol 1988 Oct 1;141(7):2451–5
The targeting of CD4+ T lymphocytes to a B cell lymphoma. A comparison of anti-CD3-anti-idiotype antibody conjugates and antigen-anti-idiotype antibody conjugates. Gravelle M, et al. J Immunol 1989 Jun 1; 142(11):4079–84
A 19-kDa human erythrocyte molecule H19 is involved in rosettes, present on nucleated cells, and required for T cell activation. Comparison of the roles of H19 and LFA-3 molecules in T cell activation. Groux H, et al. J Immunol 1989 May 1;142(9):3013–20
Mechanisms of immune memory. T cell activation and CD3 phosphorylation correlates with Ta1 (CDw26) expression. Hafler DA, et al. J Immunol 1989 Apr 15;142(8):2590–6
Anti-Qa-2-induced T cell activation. The parameters of activation, the definition of mitogenic and nonmitogenic antibodies, and the differential effects on CD4+ vs CD8+ T cells. Hahn AB, et al. J Immunol 1989 Jul 15; 143(2):407–13
The role of dendritic cells as stimulators of minor lymphocyte-stimulating locus-specific T cell responses in the mouse. I. Differential capacity of dendritic cells to stimulate minor lymphocyte-stimulating locus-reactive T cell hybridomas and the primary anti-minor lymphocyte-stimulating locus mixed lymphocyte reaction. Hamilos DL, et al. J Immunol 1989 Feb 15;142(4):1069–78
The mapping of epitopes of the 18-kDa protein of Mycobacterium leprae recognized by murine T cells in a proliferation assay. Harris DP, et al. J Immunol 1989 Sep 15;143(6):2006–12
IL-6 is an intermediate in IL-1-induced thymocyte proliferation. Helle M, et al. J Immunol 1989 Jun 15; 142(12):4335–8
Activation of human T lymphocytes by bryostatin. Hess AD, et al. J Immunol 1988 Nov 15;141(10):3263–9
Human T cell clones present antigen [corrected and republished article originally printed in J Immunol 1989 Mar 1;142(5):1429–36] Hewitt CR, et al. J Immunol 1989 Jul 15;143(2):762–9
Effects of in vivo administration of anti-CD3 monoclonal antibody on T cell function in mice. II. In vivo activation of T cells. Hirsch R, et al. J Immunol 1989 Feb 1; 142(3):737–43
Human lymphocyte proliferative response to a sporozoite T cell epitope correlates with resistance to falciparum malaria. Hoffman SL, et al. J Immunol 1989 Feb 15; 142(4):1299–303
Isolation of protective T cells from BALB/cJ mice chronically infected with Leishmania donovani. Holaday B, et al. J Immunol 1988 Sep 15;141(6):2132–7
Clonogenic potential of murine CD4+8+ thymocytes. Direct demonstration using a V beta 6-specific proliferative stimulus in Mlsa mice. Howe RC, et al. J Immunol 1989 Aug 1;143(3):793–7
CD44 contributes to T cell activation. Huet S, et al. J Immunol 1989 Aug 1;143(3):798–801
Molecular analysis of the dissociation between IL-2 production and proliferation in a response of a T cell clone to the antigen presented by B cells. Kakiuchi T, et al. J Immunol 1988 Nov 15;141(10):3278–84
The in vivo depletion of V beta 17a+ T cells results in the inhibition of reticulum cell sarcoma growth in SJL/J mice. Evidence for the use of anticlonotypic antibody therapy in the control of malignancy. Katz JD, et al. J Immunol 1989 Aug 15;143(4):1387–95
Requirement for delivery of signals by physical interaction and soluble factors from accessory cells in the induction of receptor-mediated T cell proliferation. Effectiveness of IFN-gamma modulation of accessory cells for physical interaction with T cells. Kawakami K, et al. J Immunol 1989 Mar 15;142(6):1818–25
CD45-protein tyrosine phosphatase cross-linking inhibits T cell receptor CD3-mediated activation in human T cells. Kiener PA, et al. J Immunol 1989 Jul 1;143(1):23–8
Cholera toxin discriminates between murine T lymphocyte proliferation stimulated by activators of protein kinase C and proliferation stimulated by IL-2. Possible role for intracellular cAMP. Kim DK, et al. J Immunol 1988 Nov 15;141(10):3429–37
Cellular and biochemical responses of human T lymphocytes stimulated with streptococcal M proteins. Kotb M, et al. J Immunol 1989 Feb 1;142(3):966–70
T cell tolerance to self antigens in New Zealand hybrid mice with lupus-like disease. Kotzin BL, et al. J Immunol 1989 Jul 1;143(1):89–94
Escherichia coli-specific T lymphocytes in experimental pyelonephritis. Kurnick JT, et al. J Immunol 1988 Nov 1;141(9):3220–6
Analysis of the interaction of peptide hen egg white lysozyme (34–45) with the I-Ak molecule. Lambert LE, et al. J Immunol 1989 Aug 1;143(3):802–7
Regulation of parasite antigen-induced T cell growth factor activity and proliferative responsiveness in Brugia pahangi-infected jirds. Leiva LE, et al. J Immunol 1989 Feb 15;142(4):1304–9
Suppression of experimental autoimmune encephalomyelitis by oral administration of myelin basic protein. II. Suppression of disease and in vitro immune responses is mediated by antigen-specific CD8+ T lymphocytes. Lider O, et al. J Immunol 1989 Feb 1;142(3):748–52
Lyt-2+ T cell-mediated protection against listeriosis. Protection correlates with phagocyte depletion but not with IFN-gamma production. Lukacs K, et al. J Immunol 1989 Apr 15;142(8):2879–86
Influence of T cells on the expression of lymphokine-activated killer cell activity and in vivo tissue distribution. Maghazachi AA, et al. J Immunol 1988 Dec 1;141(11):4039–46
Activation of T lymphocytes through the Ly-6 pathway is defective in A strain mice. Malek TR, et al. J Immunol 1989 Jul 15;143(2):439–45
Encephalitogenic and proliferative responses of Lewis rat lymphocytes distinguished by position 75- and 80-substituted peptides of myelin basic protein. Mannie MD, et al. J Immunol 1989 Apr 15;142(8):2608–16
In vivo effects in mice of an anti-T cell immunotoxin. Marcucci F, et al. J Immunol 1989 Apr 15;142(8):2955–60
Variable region cDNA sequences and antigen binding specificity of mouse monoclonal antibodies to isomaltosyl oligosaccharides coupled to proteins. T-dependent analogues of alpha(1——6)dextran. Matsuda T, et al. J Immunol 1989 Feb 1;142(3):863–70
Characterization of Mycobacterium leprae cell wall-associated proteins with the use of T lymphocyte clones. Mehra V, et al. J Immunol 1989 Apr 15; 142(8):2873–8
Molecular study of the T cell repertoire in family contacts and patients with leprosy. Mendez-Samperio P, et al. J Immunol 1989 May 15;142(10):3599–604
Promotion of human T lymphocyte proliferation by IL-4. Mitchell LC, et al. J Immunol 1989 Mar 1;142(5):1548–57
Thymic stroma-derived T cell growth factor (TSTGF). IV. Capacity of TSTGF to promote the growth of L3T4-Lyt-2- thymocytes by synergy with phorbol myristate acetate or various IL. Mizushima Y, et al. J Immunol 1989 Feb 15;142(4):1195–202
An accessory cell-derived costimulatory signal acts independently of protein kinase C activation to allow T cell proliferation and prevent the induction of unresponsiveness. Mueller DL, et al. J Immunol 1989 Apr 15;142(8):2617–28
Effect of Mlsa on antigen presentation to class II-restricted T cells. Needleman BW, et al. J Immunol 1988 Dec 1; 141(11):3760–7
B cells expressing Ig transgenes respond to a T-dependent antigen only in the presence of Ia-compatible T cells. O'Brien RL, et al. J Immunol 1988 Nov 15;141(10):3335–41
Epitopes of the Mycobacterium tuberculosis 65-kilodalton protein antigen as recognized by human T cells. Oftung F, et al. J Immunol 1988 Oct 15;141(8):2749–54
Generation and functional characterization of T cell lines and clones specific for Schistosoma japonicum egg antigen in humans. Ohta N, et al. J Immunol 1988 Oct 1; 141(7):2445–50
Cloned and expressed human Fc receptor for IgG mediates anti-CD3-dependent lymphoproliferation. Peltz GA, et al. J Immunol 1988 Sep 15;141(6):1891–6
The molecular basis of granuloma formation in schistosomiasis. III. In vivo effects of a T cell-derived suppressor effector factor and IL-2 on granuloma formation. Perrin PJ, et al. J Immunol 1989 Jul 15; 143(2):649–54
Modulation of experimental allergic encephalomyelitis with anti-T suppressor factor antibodies. Perry LL, et al. J Immunol 1988 Nov 1;141(9):3016–21
Monoclonal antibodies to murine CD3 epsilon define distinct epitopes, one of which may interact with CD4 during T cell activation. Portoles P, et al. J Immunol 1989 Jun 15; 142(12):4169–75
Ricin A-chain containing immunotoxins directed against different epitopes on the CD2 molecule differ in their ability to kill normal and malignant T cells. Press OW, et al. J Immunol 1988 Dec 15;141(12):4410–7
Evidence that Mls-2 antigens which delete V beta 3+ T cells are controlled by multiple genes. Pullen AM, et al. J Immunol 1989 May 1;142(9):3033–7
Characterization of granuloma T lymphocyte function from Schistosoma mansoni-infected mice. Ragheb S, et al. J Immunol 1989 May 1;142(9):3239–46
Functional sites on the A alpha-chain. Polymorphic residues involved in antigen presentation to insulin-specific, Ab alpha:Ak beta-restricted T cells. Reske-Kunz AB, et al. J Immunol 1989 Sep 1;143(5):1472–81
Evidence for an intercellular covalent reaction essential in antigen-specific T cell activation. Rhodes J. J Immunol 1989 Sep 1;143(5):1482–9
Modified MHC restriction of donor-origin T cells in humans with severe combined immunodeficiency transplanted with haploidentical bone marrow stem cells. Roberts JL, et al. J Immunol 1989 Sep 1;143(5):1575–9
Effects of neonatal injections of anti-CD3 epsilon monoclonal antibodies on the T cell functions of adult mice. Rueff-Juy D, et al. J Immunol 1989 Jun 1;142(11):3788–95
Identification of T epitopes within a potential Plasmodium falciparum vaccine antigen. A study of human lymphocyte responses to repeat and nonrepeat regions of Pf155/RESA [published erratum appears in J Immunol 1989 Apr 15;142(8):2968] Rzepczyk CM, et al. J Immunol 1988 Nov 1;141(9):3197–202
Characterization of "regulatory" idiotope-specific T cell clones to a monoclonal anti-idiotypic antibody mimicking a tumor-associated antigen (TAA). Saeki Y, et al. J Immunol 1989 Feb 1;142(3):1046–52
T cell recognition of HIV synthetic peptides in a natural infection. Schrier RD, et al. J Immunol 1989 Feb 15; 142(4):1166–76
Recognition of HIV glycoprotein gp120 by T cells. Role of monocyte CD4 in the presentation of gp120. Siliciano RF, et al. J Immunol 1989 Mar 1;142(5):1506–11
Mechanism of mononuclear cell activation by an anti-CD43 (sialophorin) agonistic antibody. Silverman LB, et al. J Immunol 1989 Jun 15;142(12):4194–200
Responsiveness of fetal and adult CD4-, CD8- thymocytes to T cell activation. Takashi T, et al. J Immunol 1989 Apr 15;142(8):2641–6
Characterization of a CD3-like rat T cell surface antigen recognized by a monoclonal antibody. Tanaka T, et al. J Immunol 1989 Apr 15;142(8):2791–5
T cell activation via Leu-23 (CD69). Testi R, et al. J Immunol 1989 Aug 15;143(4):1123–8
Antibodies to 5'-nucleotidase (CD73), a glycosyl-phosphatidylinositol-anchored protein, cause human peripheral blood T cells to proliferate. Thompson LF, et al. J Immunol 1989 Sep 15;143(6):1815–21
Soluble CD8 during T cell activation. Tomkinson BE, et al. J Immunol 1989 Apr 1;142(7):2230–6
Enhancing effect of anti-HLA class I monoclonal antibodies on T cell proliferation induced via CD2 molecule. Turco MC, et al. J Immunol 1988 Oct 1;141(7):2275–81
T4 cell activation by immobilized phytohemagglutinin: differential capacity to induce IL-2 responsiveness and IL-2 production. Vine JB, et al. J Immunol 1988 Oct 15; 141(8):2593–600
T cell activation by preformed, long-lived Ia-peptide complexes. Quantitative aspects. Watts TH. J Immunol 1988 Dec 1;141(11):3708–14
Analysis of T hybridomas prepared from a T cell clone with three specificities. Recognition of self + X and allo-H-2 determinants segregates from recognition of Mlsa determinants. Webb SR, et al. J Immunol 1988 Sep 15; 141(6):1828–34
Autoreactive T cells in MRL/Mpr-lpr/lpr mice. Characterization of the lymphokines produced and analysis of antigen-presenting cells required. Weston KM, et al. J Immunol 1988 Sep 15;141(6):1941–8
Autoantibody in MRL/Mp-lpr/lpr mice. A monoclonal antibody specific for the abnormal T cells from mice bearing the lpr/lpr gene. Yamada K, et al. J Immunol 1989 Apr 15;142(8):2702–7
A murine T lymphocyte antigen belongs to a supergene family of type II integral membrane proteins. Yokoyama WM, et al. J Immunol 1989 Aug 15;143(4):1379–86
Mitogenic activation of human T cells induces two closely

related genes which share structural similarities with a new family of secreted factors. Zipfel PF, et al. **J Immunol** 1989 Mar 1;142(5):1582–90

Measurement of cytoplasmic calcium in lymphocytes using flow cytometry. Kinetic studies and single cell analysis. Griffioen AW, et al. **J Immunol Methods** 1989 Jun 2; 120(1):23–7

Requirements for screening recombinant DNA libraries for T cell epitope expression. Guttinger M, et al. **J Immunol Methods** 1989 Jul 26;121(2):225–30

A sandwich CD7–ELISA for detection of solubilized CD7 from normal and leukemic T cells. Jung LK, et al. **J Immunol Methods** 1989 Jan 6;116(1):137–44

A simple and sensitive bioassay for the detection of IL-2 activity. Leivestad T, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):95–9

Detection of activated lymphocyte subsets by fluorescence and MTT staining. Schauer U, et al. **J Immunol Methods** 1989 Jan 17;116(2):221–7

Isolation of encephalitogenic CD4+ T cell clones in the rat. Cloning methodology and interferon-gamma secretion. Sedgwick JD, et al. **J Immunol Methods** 1989 Jul 26; 121(2):185–96

Molecular analysis of HTLV-I proviral integration and T cell receptor arrangement indicates that T cells in tropical spastic paraparesis are polyclonal. Greenberg SJ, et al. **J Infect Dis** 1989 Apr;159(4):741–4

T cell response to soluble cryptococcal antigens after recovery from cryptococcal infection. Hoy JF, et al. **J Infect Dis** 1989 Jan;159(1):116–9

Functional versus phenotypic analysis of T cells in subjects seropositive for the human immunodeficiency virus: a prospective study of in vitro responses to Cryptococcus neoformans. Hoy JF, et al. **J Infect Dis** 1988 Nov; 158(5):1071–8

T lymphocytes in genital lymph nodes protect mice from intravaginal infection with herpes simplex virus type 2. McDermott MR, et al. **J Infect Dis** 1989 Mar;159(3):460–6

Deficient display of CD3 on lymphocytes of patients with chronic fatigue syndrome [letter] Subirá ML, et al. **J Infect Dis** 1989 Jul;160(1):165–6

Lymphocyte function tests in cirrhotic patients under treatment with spironolactone and potassium canrenoate. Cuppone R, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):436–42

In vitro T cell responses in patients with cystic fibrosis and allergic bronchopulmonary aspergillosis. Knutsen AP, et al. **J Lab Clin Med** 1989 Apr;113(4):428–35

Activation of human T lymphocytes by crosslinking of anti-CD3 monoclonal antibodies. Dixon JF, et al. **J Leukoc Biol** 1989 Sep;46(3):214–20

Requirements for histoplasmin presentation by accessory cells to a Histoplasma capsulatum-reactive T-cell line. Harris JE, et al. **J Leukoc Biol** 1989 Feb;45(2):105–13

Mononuclear cells from human lung parenchyma support antigen-induced T lymphocyte proliferation. Nicod LP, et al. **J Leukoc Biol** 1989 Apr;45(4):336–44

Proliferative T-cell response to HIV envelope glycoprotein in immunized and infected primates and human beings. Krohn K, et al. **J Med Primatol** 1989;18(3–4):363–9

The Ia molecule of the antigen-presenting cell plays a critical role in immune response gene regulation of T cell activation. Heber-Katz E, et al. **J Mol Cell Immunol** 1983; 1(1):3–18

The role of the murine L3T4 molecule in T cell activation: differential effects of anti-L3T4 on activation by monoclonal anti-receptor antibodies. Janeway CA Jr, et al. **J Mol Cell Immunol** 1987;3(2):121–31

The effect of T cell-derived lymphokines on the levels of isotype-specific RNA in normal B cells. Jones S, et al. **J Mol Cell Immunol** 1985;2(3):143–53

Relationship of human cord blood mononuclear cell lines, established by the HTLV-I integration, to expression of T-cell phenotypes and the T-cell receptor gene rearrangement. Miwa H, et al. **J Mol Cell Immunol** 1987; 3(1):43–8

Autoreactive T cells with atypical MHC restriction from MRL-lpr/lpr mice: forbidden clones revisited. Naparstek Y, et al. **J Mol Cell Immunol** 1988;4(1):35–43

T lymphocytes from irradiation chimeras repopulated with 13-day fetal liver cells recognize antigens only in association with self-MHC products. Nisbet-Brown E, et al. **J Mol Cell Immunol** 1986;2(4):235–42

Self antigenic mimicry and Ir gene control of T cell responsiveness—a commentary. Rock KL. **J Mol Cell Immunol** 1985;2(2):80–1

Selection of thymocyte MHC restriction specificity in vitro. Rock KL, et al. **J Mol Cell Immunol** 1984;1(5):311–20

Signals required for activation and growth of autoimmune T lymphocytes. Santoro TJ, et al. **J Mol Cell Immunol** 1984;1(6):347–56

Interaction between genes of chromosome 12 and I-region genes in the control of the arsonate-specific T cell repertoire. Seman M, et al. **J Mol Cell Immunol** 1984; 1(4):223–35

The expressed T cell repertoire is hierarchical: the precise focus of lysozyme-specific T cell clones is dependent upon the structure of the immunogen. Shastri N, et al. **J Mol Cell Immunol** 1984;1(6):369–79

Endogenous synthesis of Ia antigens by a cloned T cell line. Singh SK, et al. **J Mol Cell Immunol** 1984;1(3):147–56

The syngeneic T-T lymphocyte reaction (STTLR). I. Induction of primary T anti-T cell proliferative responses in T cell cultures stimulated with self- and antigen-reactive T cells. Suzuki H, et al. **J Mol Cell Immunol** 1986; 2(6):331–44

The syngeneic T-T lymphocyte reaction (STTLR). II. Induction of primary T anti-T cell cytotoxic responses in vitro in T cell cultures stimulated with syngeneic self-reactive T cells. Suzuki H, et al. **J Mol Cell Immunol** 1986;2(6):345–57

The role of L3T4 in T cell activation: L3T4 may be both an Ia-binding protein and a receptor that transduces a negative signal. Tite JP, et al. **J Mol Cell Immunol** 1986; 2(4):179–90

Alpha/beta heterodimeric T-cell receptor expression early in thymocyte differentiation. Toribio ML, et al. **J Mol Cell Immunol** 1988;3(6):347–62

Human anti-idiotypic T lymphocyte clones are activated by autologous anti-rabies virus antibodies presented in association with HLA-DQ molecules. UytdeHaag F, et al. **J Mol Cell Immunol** 1987;3(3):145–55

Combination immunotherapy for cancer: synergistic antitumor interactions of interleukin-2, alfa interferon, and tumor-infiltrating lymphocytes. Rosenberg SA, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1393–7

Generation of cytotoxic factor by human large granular lymphocytes during interaction with autologous tumor cells: lysis of fresh human tumor cells. Uchida A, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1398–403

Suppressive activity of long-term myelin basic protein-specific SJL T cell lines. Barzaga-Gilbert ME, et al. **J Neuroimmunol** 1989 Aug;23(3):241–7

T cell lines selected with synthetic peptides are highly encephalitogenic in SJL/J mice. Bourdette DN, et al. **J Neuroimmunol** 1989 May;22(3):255–60

An immunoelectron microscopical study of the expression of class II MHC and a T lymphocyte surface marker during chronic relapsing experimental allergic encephalomyelitis. Butter C, et al. **J Neuroimmunol** 1988 Nov;20(1):45–51

Absence of a correlation between T lymphocyte subsets and clinical activity in relapsing-remitting multiple sclerosis. Capra R, et al. **J Neuroimmunol** 1989 Mar;22(1):41–5

Chronic relapsing experimental allergic encephalomyelitis in SJL mice following the adoptive transfer of an epitope-specific T cell line. Fallis RJ, et al. **J Neuroimmunol** 1989 Apr;22(2):93–105

Myelin-specific T lymphocytes in multiple sclerosis patients and healthy individuals. Kitze B, et al. **J Neuroimmunol** 1988 Dec;20(2–3):237

Virus-specific and autoreactive T cell lines isolated from cerebrospinal fluid of a patient with chronic rubella panencephalitis. Martin R, et al. **J Neuroimmunol** 1989 Jun; 23(1):1–10

A T cell epitope for experimental allergic neuritis is an amphipathic alpha-helical structure. Olee T, et al. **J Neuroimmunol** 1989 Feb;21(2–3):235–40

Responsiveness to P2 of blood- and cauda equina-derived lymphocytes in experimental allergic neuritis in the Lewis rat: preliminary characterisation of a P2-specific cauda equina-derived T cell line. Taylor WA, et al. **J Neuroimmunol** 1988 Oct;19(4):279–89

Analysis of immunoglobulin and T cell receptor gene rearrangements in the thymus of myasthenia gravis patients. Tesch H, et al. **J Neuroimmunol** 1989 Feb;21(2–3):169–76

Intercellular interactions in myelin-specific autoimmunity. Wekerle H. **J Neuroimmunol** 1988 Dec;20(2–3):211–6

Selection of encephalitogenic rat T-lymphocyte clones recognizing an immunodominant epitope on myelin basic protein. Chou YK, et al. **J Neurosci Res** 1989 Feb; 22(2):181–7

Response of human T lymphocyte lines to myelin basic protein: association of dominant epitopes with HLA class II restriction molecules. Chou YK, et al. **J Neurosci Res** 1989 Jun;23(2):207–16

Role of antibodies in T cell–mediated experimental allergic encephalomyelitis. Hashim GA, et al. **J Neurosci Res** 1988 Sep;21(1):1–5 (19 ref.)

Human T lymphocyte response to myelin basic protein: selection of T lymphocyte lines from MBP-responsive donors. Vandenbark AA, et al. **J Neurosci Res** 1989 May; 23(1):21–30

Immunomagnetic separation of infiltrating T lymphocytes from brain tumors. Bosnes V, et al. **J Neurosurg** 1989 Aug; 71(2):218–23

Analysis of variables associated with promotion of resistance and its abrogation in T cell–reconstituted nude mice infected with Leishmania major. Moll H, et al. **J Parasitol** 1988 Dec;74(6):993–8

Antigen presentation by Toxoplasma gondii–infected cells to CD4+ proliferative T cells and CD8+ cytotoxic cells. Yano A, et al. **J Parasitol** 1989 Jun;75(3):411–6

Immune functions in children treated with biosynthetic growth hormone. Church JA, et al. **J Pediatr** 1989 Sep; 115(3):420–3

Immunohistochemical study of lymphoplasmacytic infiltrate and epithelial HLA-DR expression in the rectal and colonic mucosae of children with ulcerative colitis. Arató A, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):172–80

Human gingival Langerhans cells as accessory cells in mitogen induced T cell responses. Newcomb GM, et al. **J Periodontol** 1988 Dec;59(12):811–5

Thymocyte maturity in male and female hypogonadal mice and the effect of preoptic area brain grafts. Moscovitz HC, et al. **J Reprod Immunol** 1988 Aug;13(3):263–75

Interleukin-2 production by human fetal lymphocytes. Saito S, et al. **J Reprod Immunol** 1988 Dec;14(3):247–55

Restriction fragment length polymorphism of T cell receptor alpha and beta chain genes in patients with ankylosing spondylitis. Durand JP, et al. **J Rheumatol** 1988 Jul; 15(7):1115–8

Rheumatoid T lymphocyte MHC class II expression: in vitro stimulation produces normal MHC class II expression, independent of proliferation. Kirkham BW, et al. **J Rheumatol** 1989 Mar;16(3):270–5

B cell suppressing and CD8+ T cell enhancing effects of photosensitive dye platonin in humans. Kondo N, et al. **J Rheumatol** 1989 Jul;16(7):936–9

In vitro immunoglobulin production by lymphocytes of patients with juvenile rheumatoid arthritis: effects of Staphylococcus aureus Cowan I stimulation and monocyte depletion. Oen K, et al. **J Rheumatol** 1988 Oct; 15(10):1539–46

Effect of elimination of OX-19+ and OX-8+ T-cell subsets upon pancreatic allograft survival. Roza AM, et al. **J Surg Res** 1989 Apr;46(4):395–9

Immunomodulation in C57Bl/6 mice following consumption of halogenated aromatic hydrocarbon–contaminated coho salmon (Oncorhynchus kisutch) from Lake Ontario. Cleland GB, et al. **J Toxicol Environ Health** 1989; 27(4):477–86

Ficoll–Hypaque leukocyte preparations from burned patients contain activated nonlymphoid cell populations that take up thymidine. Deitch EA, et al. **J Trauma** 1989 Mar; 29(3):277–83

Altered expression of lymphocyte Il-2 receptors in burned patients. Xiao GX, et al. **J Trauma** 1988 Dec;28(12):1669–72

Class I and class II HLA antigen expression by transitional cell carcinoma of the bladder: correlation with T-cell infiltration and BCG treatment. Stefanini GF, et al. **J Urol** 1989 Jun;141(6):1449–53

Murine cell–mediated immune response recognizes an enterovirus group-specific antigen(s). Beck MA, et al. **J Virol** 1989 Oct;63(10):4148–56

Inhibition of T-lymphocyte mitogenic responses and effects on cell functions by bovine herpesvirus 1. Carter JJ, et al. **J Virol** 1989 Apr;63(4):1525–30

Class II–restricted T-cell clones to a synthetic peptide of influenza virus hemagglutinin differ in their fine specificities and in the ability to respond to virus. Ffrench RA, et al. **J Virol** 1989 Jul;63(7):3087–94

Trojan horse lymphocytes: a vesicular stomatitis virus-specific T-cell clone lyses target cells by carrying virus. Hom RC, et al. **J Virol** 1989 Oct;63(10):4157–64

Mapping an antibody–binding site and a T-cell–stimulating site on the 1A protein of respiratory syncytial virus. Nicholas JA, et al. **J Virol** 1988 Dec;62(12):4465–73

Dengue virus-specific murine T-lymphocyte proliferation: serotype specificity and response to recombinant viral proteins. Rothman AL, et al. **J Virol** 1989 Jun; 63(6):2486–91

Treatment of encephalomyocarditis virus–induced central nervous system demyelination with monoclonal anti-T-cell antibodies. Sriram S, et al. **J Virol** 1989 Oct;63(10):4242–8

T-cell–mediated clearance of mouse hepatitis virus strain JHM from the central nervous system. Sussman MA, et al. **J Virol** 1989 Jul;63(7):3051–6

Herpes simplex virus (HSV)-specific proliferative and cytotoxic T-cell responses in humans immunized with an HSV type 2 glycoprotein subunit vaccine. Zarling JM, et al. **J Virol** 1988 Dec;62(12):4481–5

Immune markers in the diagnosis of malignant lymphomas. Jaffe ES. **J Virol Methods** 1988 Sep;21(1–4):265–73 (33 ref.)

Antithymocyte globulin hypersensitivity in bone marrow failure patients. Bielory L, et al. **JAMA** 1988 Dec 2; 260(21):3164–7

Selective suppression of the generation of anti-tumor L3T4+ but not of Lyt-2+ T cell–mediated immunity in the tumor-bearing state. Sano H, et al. **Jpn J Cancer Res** 1988 Jul;79(7):857–65

Tumor-specific T cells which form clusters with dendritic cells and tumor cells and deliver macrophage-activating factors. Yamaguchi Y, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):141–9

An immunogold cell labelling method for rat T lymphocytes. Evans GO, et al. **Lab Anim** 1988 Oct;22(4):332–4

The regulation of autoantibody production in Heymann's nephritis by T lymphocyte subsets. Cheng IK, et al. **Lab Invest** 1988 Dec;59(6):780–8

Synovial fluid T cells and 65 kD heat-shock protein [letter] **Lancet** 1988 Oct 8;2(8615):856–7

Fail-safe mechanism against autoimmunity [letter] Iwatani Y, et al. **Lancet** 1989 May 20;1(8647):1141

Limiting dilution analysis of the frequency of IL2 responsive T cells in lymph nodes involved by B-cell non-Hodgkin's lymphomas. Bonnefoix T, et al. **Leuk Res** 1989;13(4):323–9

Expression of MHC class I and class I–like gene products on the cell membrane of mature and immature T cells. Jones RA, et al. **Leuk Res** 1988;12(10):799–804

Residual T lymphocytes, and not malignant B cells, proliferate upon mitogenic stimulation. Kluin-Nelemans HC, et al. **Leukemia** 1989 Oct;3(10):715–7

Plasmapheresis influences the immune response affecting T cell subsets. Giacchino F, et al. **Life Support Syst** 1983;1 Suppl 1:118–21

Functional characteristics of lymphocytes in chronic renal

failure: in vitro response to mitogens. Nanni Costa A, et al. **Life Support Syst** 1983;1 Suppl 1:88–91
Activation of T cells by interleukin 1 involves internalization of interleukin 1. Falk W, et al. **Lymphokine Res** 1989 Fall; 8(3):263–8
Direct demonstration that an antigen-specific suppressor factor purified from extracts of T cell hybridomas binds antigen and bears I-J determinants. Krupen KI, et al. **Lymphokine Res** 1988 Winter;7(4):429–44
Lymphocyte immunophenotyping in an elderly population: age, sex and medication effects—a flow cytometry study. Dworsky R, et al. **Mech Ageing Dev** 1989 Jun;48(3):255–66
An age-related loss of the isogeneic barrier to the successful passive cell transfer of antimicrobial immunity in mice. Orme IM. **Mech Ageing Dev** 1988 Dec;46(1–3):29–32
Active rosette-forming lymphocytes in chronic hepatitis. Stanciu L, et al. **Med Interne** 1982 Oct–Dec;20(4):277–82
Limiting dilution analysis of T cell unresponsiveness to mycobacteria in advanced disseminated tuberculosis. Gilardini Montani MS, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):235–44
Immunological response in experimentally reactivated toxoplasmosis in mice. Goyal M, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):269–78
Therapy of secondary T-cell immunodeficiencies with biological substances and drugs. Hadden JW, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):11–7 (34 ref.)
Frequency of Leishmania-reactive T cells in lesions of American mucocutaneous leishmaniasis (AMCL) patients. Its relevance in the process of healing or aggravation of the disease. Conceição-Silva F, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:403–6
Identification of Trypanosoma cruzi antigens recognized by T cells and immune sera from chagasic patients. Gazzinelli RT, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:272–9
Altered lymphocyte proliferation and cytokine release in hepatosplenic schistosomiasis mansoni in Brazil. Zwingenberger K, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:273–6
Metabolic time course and immunologic concomitants of adoptive transfer of type I diabetes in the BB rat. Yale JF, et al. **Metabolism** 1988 Nov;37(11):1015–20
Enumeration of Listeria monocytogenes-reactive L3T4+ T cells activated during infection. Kaufmann SH. **Microb Pathog** 1986 Jun;1(3):249–60
Listeria monocytogenes reactive T lymphocytes in healthy individuals. Munk ME, et al. **Microb Pathog** 1988 Jul; 5(1):49–54
T cell hybridomas define the class II MHC-restricted response to vesicular stomatitis virus infection. Petrarca MA, et al. **Microb Pathog** 1988 Nov;5(5):319–32
Possible regulation of autologous mixed lymphocyte reaction by OKM1+ NK cells. Goto M, et al. **Microbiol Immunol** 1988;32(5):519–28
Strain differences in the early development of the thymus-dependent cells: precocity of T lineage cells in AKR mice as compared to those in C3H mice. Katsume C, et al. **Microbiol Immunol** 1989;33(4):313–28
Enhancement of antigen-presenting function of dendritic cells with culture supernatants of mouse peritoneal macrophages stimulated with certain particulate substances. Miyazaki H, et al. **Microbiol Immunol** 1988;32(10):1033–42
Depression of T cell-mediated immunity and enhancement of autoantibody production by natural infection with microorganisms in spontaneously hypertensive rats (SHR). Takeichi N, et al. **Microbiol Immunol** 1988;32(12):1235–44
Interleukin-2 and increased natural killer activity in mice experimentally infected with Aspergillus niger. Benedetto N, et al. **Microbiologica** 1988 Oct;11(4):339–45
Isolation and structural characterization of the human 4F2 heavy-chain gene, an inducible gene involved in T-lymphocyte activation. Gottesdiener KM, et al. **Mol Cell Biol** 1988 Sep;8(9):3809–19
Mitogen-induced genes are subject to multiple pathways of regulation in the initial stages of T-cell activation. Irving SG, et al. **Mol Cell Biol** 1989 Mar;9(3):1034–40
Regulation of 4F2 heavy-chain gene expression during normal human T-cell activation can be mediated by multiple distinct molecular mechanisms. Lindsten T, et al. **Mol Cell Biol** 1988 Sep;8(9):3820–6
T-cell activation signals and human T-cell leukemia virus type I-encoded p40x protein activate the mouse granulocyte-macrophage colony-stimulating factor gene through a common DNA element. Miyatake S, et al. **Mol Cell Biol** 1988 Dec;8(12):5581–7
Complexity of the primary genetic response to mitogenic activation of human T cells. Zipfel PF, et al. **Mol Cell Biol** 1989 Mar;9(3):1041–8
Solid-phase antigen binding by purified immunoproteins from antigen-specific monoclonal T cell hybridomas. Bristow CL, et al. **Mol Immunol** 1989 Jul;26(7):611–24
Molecular mechanisms regulating the expression of murine T-cell Fc gamma receptor II. Daëron M, et al. **Mol Immunol** 1988 Nov;25(11):1143–50
Transmembrane signals in the activation of T-lymphocytes by lectin mitogens. Hadden JW. **Mol Immunol** 1988 Nov; 25(11):1105–12 (51 ref.)
A monoclonal antigen-binding T cell immunoprotein: antigenic relatedness to T cell receptor beta chain FR1 V and J peptide segments: physicochemical distinctiveness from classical immunoglobulins and T cell receptor heterodimers. Hubbard RA, et al. **Mol Immunol** 1989 May; 26(5):447–56
Lysis of CR2-carrying cells by natural killer cells and by activated T-lymphocytes is enhanced by C3 fragments. Klein E, et al. **Mol Immunol** 1988 Nov;25(11):1063–6
Immunoglobulin (Fc) receptors on murine T- and B-lymphocytes: investigations using tumor models. Lynch RG, et al. **Mol Immunol** 1988 Nov;25(11):1151–7 (35 ref.)
Mode of antigen presentation required for triggering of T cell response: analysis by use of azobenzenearsonate-tyrosine derivatives as antigens and L cells transfected with I-Ak genes as antigen presenting cells. Saito S, et al. **Mol Immunol** 1988 Jun;25(6):569–75
The murine T-lymphocyte response to tyrosine-azobenzenearsonate. Characteristics of a low responder haplotype T-cell clone. Spragg J, et al. **Mol Immunol** 1988 Nov;25(11):1223–9
Biochemical properties of a novel rabbit thymocyte specific class I-like antigen. Wang CR, et al. **Mol Immunol** 1988 Sep;25(9):945–52
T-lymphocyte specificity differences to horse cytochrome c in different lymphoid cell compartments. Wang KM, et al. **Mol Immunol** 1988 Aug;25(8):795–8
Interleukin-2 secretion in vivo and in vitro by synovial fluid lymphocytes in rheumatoid arthritis. Warnatz H, et al. **Mol Immunol** 1988 Nov;25(11):1209–11
Systemic reaction to the anti-T-cell monoclonal antibody OKT3 in relation to serum levels of tumor necrosis factor and interferon-gamma [corrected] [letter] [published erratum appears in N Engl J Med 1989 Jul 6;321(1):63] Chatenoud L, et al. **N Engl J Med** 1989 May 25; 320(21):1420–1
Seronegative Lyme disease. Dissociation of specific T- and B-lymphocyte responses to Borrelia burgdorferi. Dattwyler RJ, et al. **N Engl J Med** 1988 Dec 1; 319(22):1441–6
Novel T-lymphocyte population in combined immunodeficiency with features of graft-versus-host disease. Wirt DP, et al. **N Engl J Med** 1989 Aug 10; 321(6):370–4
Epithelial homing of lambda delta T cells? [letter] **Nature** 1989 Sep 14;341(6238):113–4
Preferential expression of the T-cell receptor V beta 3 gene by Mlsc reactive T cells. Abe R, et al. **Nature** 1988 Oct 27;335(6193):827–30
Cotransfection of ICAM-1 and HLA-DR reconstitutes human antigen-presenting cell function in mouse L cells. Altmann DM, et al. **Nature** 1989 Apr 6;338(6215):512–4
Resident pulmonary lymphocytes expressing the gamma/delta T-cell receptor. Augustin A, et al. **Nature** 1989 Jul 20;340(6230):239–41
Class I cross-restricted T cells reveal low responder allele due to processing of viral antigen. Bodmer HC, et al. **Nature** 1989 Feb 16;337(6208):653–5
Intestinal intraepithelial lymphocytes are a distinct set of gamma delta T cells. Bonneville M, et al. **Nature** 1988 Dec 1;336(6198):479–81
Physical association between MHC class I molecules and immunogenic peptides. Bouillot M, et al. **Nature** 1989 Jun 8;339(6224):473–5
The CD2 antigen associates with the T-cell antigen receptor CD3 antigen complex on the surface of human T lymphocytes. Brown MH, et al. **Nature** 1989 Jun 15; 339(6225):551–3
Soluble CD4 blocks the infectivity of diverse strains of HIV and SIV for T cells and monocytes but not for brain and muscle cells. Clapham PR, et al. **Nature** 1989 Jan 26; 337(6205):368–70
High-affinity binding of staphylococcal enterotoxins A and B to HLA-DR. Fraser JD. **Nature** 1989 May 18; 339(6221):221–3
Self-tolerance alters T-cell receptor expression in an antigen-specific MHC restricted immune response. Fry AM, et al. **Nature** 1988 Oct 27;335(6193):830–2
Human gamma delta+ T cells respond to mycobacterial heat-shock protein. Haregewoin A, et al. **Nature** 1989 Jul 27;340(6231):309–12
Positive selection of antigen-specific T cells in thymus by restricting MHC molecules. Kisielow P, et al. **Nature** 1988 Oct 20;335(6192):730–3
Productive dual infection of human CD4+ T lymphocytes by HIV-1 and HHV-6. Lusso P, et al. **Nature** 1989 Jan 26;337(6205):370–3
Positive selection of CD4+ thymocytes controlled by MHC class II gene products. MacDonald HR, et al. **Nature** 1988 Dec 1;336(6198):471–3
Presentation of antigen, foreign major histocompatibility complex proteins and self by thymus cortical epithelium. Marrack P, et al. **Nature** 1989 Apr 6;338(6215):503–5
Does T-cell tolerance require a dedicated antigen-presenting cell? Matzinger P, et al. **Nature** 1989 Mar 2;338(6210):74–6
Lymphocytes bearing antigen-specific gamma delta T-cell receptors accumulate in human infectious disease lesions. Modlin RL, et al. **Nature** 1989 Jun 15;339(6225):544–8
CD2-mediated adhesion facilitates T lymphocyte antigen recognition function. Moingeon P, et al. **Nature** 1989 May 25;339(6222):312–4
Do tolerant T cells exist? [news] Mueller DL. **Nature** 1989 Jun 15;339(6225):513–4
The T-cell repertoire is heavily influenced by tolerance to polymorphic self-antigens. Pullen AM, et al. **Nature** 1988 Oct 27;335(6193):796–801
Clonal anergy induced in mature V beta 6+ T lymphocytes on immunizing Mls-1b mice with Mls-1a expressing cells. Rammensee HG, et al. **Nature** 1989 Jun 15;339(6225):541–4
Immunology. Antigens for gamma/delta T cells [news] Raulet DH. **Nature** 1989 Jun 1;339(6223):342–3
A pentapeptide as minimal antigenic determinant for MHC class I-restricted T lymphocytes. Reddehase MJ, et al. **Nature** 1989 Feb 16;337(6208):651–3
Cyclosporin A inhibits activation-induced cell death in T-cell hybridomas and thymocytes. Shi YF, et al. **Nature** 1989 Jun 22;339(6226):625–6
A malaria T-cell epitope recognized in association with most mouse and human MHC class II molecules. Sinigaglia F, et al. **Nature** 1988 Dec 22–29;336(6201):778–80
Diversity of gamma delta T-cell receptors on murine intestinal intra-epithelial lymphocytes. Takagaki Y, et al. **Nature** 1989 Jun 29;339(6227):712–4
Qa-1 restricted recognition of foreign antigen by a gamma delta T-cell hybridoma. Vidović D, et al. **Nature** 1989 Aug 24;340(6235):646–50
Thymic selection process induced by hybrid antibodies. Zepp F, et al. **Nature** 1988 Dec 1;336(6198):473–5
Positive selection of CD4-CD8+ T cells in the thymus of normal mice. Zuñiga-Pflucker JC, et al. **Nature** 1989 Mar 2;338(6210):76–8
A mechanism by which human breast carcinoma cells escape the host immune system. Hakim AA. **Neoplasma** 1988; 35(6):691–705
Comparison of the effects of anti-Thy-1.2 monoclonal antibody and xenogeneic antithymocyte serum on the development of Sal tumor allograft in mice. Sobotková E, et al. **Neoplasma** 1988;35(4):361–7
Autoimmunity and glomerulonephritis after neonatal induction of lymphoid chimerism in mice: role of donor B cells and host T cells. Abramowicz D, et al. **Nephrol Dial Transplant** 1988;3(4):399–404
In vitro effect of PTH on normal T cell functions. Shasha SM, et al. **Nephron** 1988;50(3):212–6
Cytotoxic T-cell response to influenza A subunit vaccine in patients with type 1 diabetes mellitus. Diepersloot RJ, et al. **Neth J Med** 1989 Aug;35(1–2):68–75
Expression of immune system-associated antigens by cells of the human central nervous system: relationship to the pathology of Alzheimer's disease. Rogers J, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):339–49
Immunocytochemical characterization of the macrophage and lymphocyte infiltrate in the brain in six cases of human encephalitis of varied aetiology. Esiri MM, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug;15(4):289–305
Neuroendocrine regulation of immunogenesis in alcoholism. Aliev NA. **Neurosci Behav Physiol** 1988 Nov–Dec; 18(6):519–21
IgG-Fc-receptor positive and negative T cells from feline leukemia virus-infected cats. Chuma T, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):699–705
Distribution of chicken globule leucocytes detected by anti-thymocyte serum. Kitagawa H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):638–47
Augmented production of gamma interferon in mice experimentally infected with Toxoplasma gondii. Shirahata T, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):380–8
T-cell colony formation in homosexual men with anti-human immunodeficiency virus. Wakabayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):80–5
Immunohistological identification of T and B cells in normal and malignant tissues of the uterine endometrium. Mizuuchi H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):349–56
Molecular basis of the immune response. Steinmetz M, et al. **Nucleic Acids Symp Ser** 1988;(19):85–7
Immunity to coccidiosis: T-cell control of infection with Eimeria vermiformis in mice does not require co-operation with inflammatory cells. Rose ME, et al. **Parasite Immunol** 1989 May;11(3):231–9
Modulation of mitogen-induced spleen cell proliferation and the antibody-forming cell response by beta-endorphin in vivo. Kusnecov AW, et al. **Peptides** 1989 Mar–Apr; 10(2):473–9
Behaviorally conditioned suppression of murine T-cell dependent but not T-cell independent antibody responses. Schulze GE, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):859–65
Structural features of T-cell recognition: applications to vaccine design. Berzofsky JA. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):535–44 (62 ref.)
A possible basis for major histocompatibility complex-restricted T-cell recognition. Davis MM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12;323(1217):521–4
Structural requirements and biological significance of interactions between peptides and the major histocompatibility complex. Grey HM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):545–52
Recognition of the HLA class II-peptide complex by T-cell receptor: reversal of major histocompatibility complex restriction of a T-cell clone by a point mutation in the peptide determinant. Rothbard JB, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):553–64
Immunocompetent cells producing humoral mediators of bone tissue mineral metabolism during space flight

simulation. Lesniak AT, et al. **Physiologist** 1989 Feb;32(1 Suppl):S53–6

Release of IgD–binding factor by T cells under the influence of interleukin 2, interleukin 4, or cross–linked IgD. Amin AR, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9179–83

T cells specific for alpha–beta interface regions of hemoglobin recognize the isolated subunit but not the tetramer and indicate presentation without processing. Atassi MZ, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6729–33

Transplantation tolerance correlates with high levels of T– and B–lymphocyte activity. Bandeira A, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):272–6

Changes in CD45 isoform expression accompany antigen–induced murine T–cell activation. Birkeland ML, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6734–8

Surface immunoglobulin–mediated B–cell activation in the absence of detectable elevations in intracellular ionized calcium: a model for T–cell–independent B–cell activation. Brunswick M, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6724–8

Formation of IgE–binding factors by T cells of patients infected with human immunodeficiency virus type 1. Carini C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9214–8

Interleukin 7 is a T–cell growth factor. Chazen GD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5923–7

TCR3: a third T–cell receptor in the chicken. Chen CH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2351–5

cDNA isolated from a human T–cell library encodes a member of the protein–tyrosine–phosphatase family. Cool DE, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5257–61

Major histocompatibility complex class I–restricted activation of cloned T cells by a soluble protein in the absence of accessory cells. Dick T, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2316–20

Phorbol esters potentiate the induction of class I HLA expression by interferon alpha. Erusalimsky JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1973–6

Cross–linking of interleukin 4 to surface molecules on murine T and B lymphocytes. Fernandez–Botran R, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4235–9

Tumor necrosis factor alpha induces expression of human immunodeficiency virus in a chronically infected T–cell clone. Folks TM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2365–8

Human T cells expressing the gamma/delta T–cell receptor (TcR–1): C gamma 1– and C gamma 2–encoded forms of the receptor correlate with distinctive morphology, cytoskeletal organization, and growth characteristics. Grossi CE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1619–23

Turnover of Ia–peptide complexes is facilitated in viable antigen–presenting cells: biosynthetic turnover of Ia vs. peptide exchange. Harding CV, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4230–4

A T–cell–specific transcriptional enhancer element 3' of C alpha in the human T–cell receptor alpha locus. Ho IC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6714–8

Thymotaxin: a thymic epithelial peptide chemotactic for T–cell precursors [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(6):1992] Imhof BA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7699–703

Different gamma delta T–cell receptors are expressed on thymocytes at different stages of development. Ito K, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):631–5

Monoclonal antibodies specific to native murine T–cell receptor gamma delta: analysis of gamma delta T cells during thymic ontogeny and in peripheral lymphoid organs. Itohara S, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5094–8

Variable region (V delta) gene segment most frequently utilized in adult thymocytes is 3' of the constant (C delta) region. Iwashima M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8161–5

Coexpression of granulocyte–macrophage colony–stimulating factor, gamma interferon, and interleukins 3 and 4 is random in murine alloreactive T–lymphocyte clones. Kelso A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9189–93

Vaccine T–cell epitope selection by a peptide competition assay. Kilgus J, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1629–33

Group–specific, major histocompatibility complex class I–restricted cytotoxic responses to human immunodeficiency virus 1 (HIV–1) envelope proteins by cloned peripheral blood T cells from an HIV–1–infected individual. Koenig S, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8638–42

T–cell receptor delta–chain diversity in peripheral lymphocytes. Lacy MJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1023–6

Interleukin 2–dependent and interleukin 2–independent pathways of regulation of thymocyte function by interleukin 6. Le JM, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8643–7

CD45 regulates signal transduction and lymphocyte activation by specific association with receptor molecules on T or B cells. Ledbetter JA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8628–32

Heightened complement sensitivity of acquired immunodeficiency syndrome lymphocytes related to diminished expression of decay–accelerating factor. Lederman MM, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4205–9

Role of interleukin 1 in the activation of T lymphocytes. Lichtman AH, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9699–703

Allorecognition of DR1 by T cells from a DR4/DRw13 responder mimics self–restricted recognition of endogenous peptides. Lombardi G, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4190–4

Persistence of collagen type II–specific T–cell clones in the synovial membrane of a patient with rheumatoid arthritis. Londei M, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):636–40

Tumor necrosis factor alpha induces proteins that bind specifically to kappa B–like enhancer elements and regulate interleukin 2 receptor alpha–chain gene expression in primary human T lymphocytes. Lowenthal JW, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2331–5

Two genetically identical antigen–presenting cell clones display heterogeneity in antigen processing. Michalek MT, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3316–20

Mitogenicity and down–regulation of high–affinity interleukin 2 receptor by YTA–1 and YTA–2, monoclonal antibodies that recognize 75–kDa molecules on human large granular lymphocytes. Nakamura Y, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1318–22

Thymocytes expressing CD8 differentiate into CD4+ cells following intrathymic injection. Nikolić–Zugić J, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8633–7

Two monoclonal rat antibodies with specificity for the beta–chain variable region V beta 6 of the murine T–cell receptor. Payne J, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7695–8

A murine early thymocyte developmental sequence is marked by transient expression of the interleukin 2 receptor. Pearse M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1614–8

Cell proliferation and thymocyte subset reconstitution in sublethally irradiated mice: compared kinetics of endogenous and intrathymically transferred progenitors. Penit C, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5547–51

Susceptibility to rheumatoid arthritis maps to a T–cell epitope shared by the HLA–Dw4 DR beta–1 chain and the Epstein–Barr virus glycoprotein gp110. Roudier J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5104–8

Involvement of distinct murine T–cell receptors in the autoimmune encephalitogenic response to nested epitopes of myelin basic protein. Sakai K, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8608–12

Activation of human T lymphocytes: differential effects of CD3– and CD8–mediated signals. Samstag Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9689–93

Relative contribution of "determinant selection" and "holes in the T–cell repertoire" to T–cell responses. Schaeffer EB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4649–53

Toxic shock syndrome toxin 1 binds to major histocompatibility complex class II molecules [published erratum appears in Proc Natl Acad Sci U S A 1989 Sep;86(18):7138] Scholl P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4210–4

Molecular heterogeneity of gamma delta T–cell antigen receptors expressed by CD4– CD8– T–cell clones from normal donors: both disulfide– and non–disulfide–linked receptors are delta TCS1+. Seki H, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2326–30

Murine "viable motheaten" mutation reveals a gene critical to the development of both B and T lymphocytes. Sidman CL, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6279–82

Human immunodeficiency virus can infect CD4–negative human fibroblastoid cells. Tateno M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4287–90

CD28 activation pathway regulates the production of multiple T–cell–derived lymphokines/cytokines. Thompson CB, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1333–7

Human immunodeficiency virus–infected T cells and monocytes are killed by monoclonal human anti–gp41 antibodies coupled to ricin A chain. Till MA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1987–91

Deletion of the cytoplasmic region of the CD3 epsilon subunit does not prevent assembly of a functional T–cell receptor. Transy C, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7108–12

Mouse hematopoietic stem–cell antigen Sca–1 is a member of the Ly–6 antigen family. van de Rijn M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4634–8

B–lymphoma cells process and present their endogenous immunoglobulin to major histocompatibility complex–restricted T cells. Weiss S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):282–6

Chromatin configuration of the human CD2 gene locus during T–cell development. Wotton D, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4195–9

Monoclonal antibodies specific for murine CD2 reveal its presence on B as well as T cells. Yagita H, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):645–9

The initiation of human T lymphocyte activation. Imboden JB, et al. **Prog Allergy** 1988;42:246–79 (162 ref.)

Monoclonal antibodies for immunosuppression. Waldmann H, et al. **Prog Allergy** 1988;45:16–30 (70 ref.)

Treatment of autoimmune diseases with monoclonal antibodies. Wofsy D. **Prog Allergy** 1988;45:106–20 (59 ref.)

The T lymphocyte–mediated immune reaction in polytrauma. Cebulla M, et al. **Prog Clin Biol Res** 1989;308:517–21

Immunoregulatory functions of paf–acether (platelet–activating factor). Dulioust A, et al. **Prog Clin Biol Res** 1988;282:87–96 (35 ref.)

First experience with immunomodulation in septic shock. Josten C, et al. **Prog Clin Biol Res** 1989;308:989–94

Maternal T lymphocytes in human decidualized endometrium. Kanzaki H, et al. **Prog Clin Biol Res** 1989; 294:447–57

Alternative pathways for T lymphocyte activation. Shevach EM. **Prog Clin Biol Res** 1989;288:127–40

The decisive role of Na,K–ATPase in stimulation process of T–lymphocytes. Szamel M, et al. **Prog Clin Biol Res** 1988;268B:449–56

Effect of prostaglandin E in multiple experimental models. VI. Effect on T–cell subsets. Waymack JP, et al. **Prostaglandins** 1989 Sep;38(3):345–53

T–cell specificity and clonality in multiple sclerosis. Bach MA. **Res Immunol** 1989 Feb;140(2):216–9; discussion 245–8 (24 ref.)

A positive signal is transduced via surface CD4 molecules. Carrel S, et al. **Res Immunol** 1989 Jun–Aug;140(5–6):545–61

Immune system of swine: dissection of mononuclear leucocyte subpopulations by means of two–colour cytofluorometric analysis. Saalmüller A, et al. **Res Vet Sci** 1988 Nov;45(3):311–6

Regulation of T cell responsiveness against mycobacterial antigens by HLA class 2 immune response genes. de Vries RR. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S400–3 (19 ref.)

In vitro analysis of the cellular mechanisms involved in immunity to tuberculosis. Kaufmann SH. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S448–54

Identification of mycobacterial antigens recognized by T lymphocytes. Lamb JR, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S443–7 (19 ref.)

Stimulation of T cells and induction of interferon by toxic shock syndrome toxin 1. Micusan VV, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S305–12

Introduction to the immunology of tuberculosis. Piessens WF. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S436–42 (30 ref.)

Nature of IgG anti–lymphocyte autoantibody–reactive molecules shed from activated T cells in systemic lupus erythematosus. Minota S, et al. **Rheumatol Int** 1988; 8(4):165–70

Partial inefficiency of T cell receptors gamma/delta composed of a heavy (55–kD) gamma chain to mediate cell activation upon binding to specific monoclonal antibodies. Mingari MC, et al. **Ric Clin Lab** 1989 Jan–Mar; 19(1):39–44

Restriction fragment length polymorphism analysis of T–cell receptor genes in inflammatory bowel disease. Katakura S, et al. **Scand J Gastroenterol** 1989 Apr;24(3):381–4

T–cell response to anti–CD2 monoclonal antibodies in Down's syndrome. Bertotto A, et al. **Scand J Immunol** 1989 Jul;30(1):39–43

Monoclonal antibodies against leucoagglutinin–reactive human T–lymphocyte surface components. II. Studies on the mechanism of K46M–induced activation and determination of the frequency of responding cells. Berzins T, et al. **Scand J Immunol** 1988 Dec;28(6):773–82

T lymphocytes in human gut epithelium preferentially express the alpha/beta antigen receptor and are often CD45/UCHL1–positive. Brandtzaeg P, et al. **Scand J Immunol** 1989 Jul;30(1):123–8

Human CD4–8– –derived clones. Phenotypic and functional characteristics and variation between donors in patterns of T–cell receptor gamma gene rearrangements. Christmas SE. **Scand J Immunol** 1989 Jun;29(6):699–708

Accessory cell–dependent T–cell activation via Ti–CD3. Involvement of CD2–LFA–3 interactions. Halvorsen R, et al. **Scand J Immunol** 1988 Sep;28(3):277–84

Monoclonal antibodies against leucoagglutinin–reactive human T–lymphocyte surface components. I. Characterization of cellular binding sites. Hammarström ML, et al. **Scand J Immunol** 1988 Dec;28(6):759–71

Antibodies to beta 2–microglobulin, the light–chain component of class I histocompatibility molecules, provide an activation signal to human lymphocytes. Hashimoto S, et al. **Scand J Immunol** 1989 Sep;30(3):339–45

The generation of guinea pig T–cell lines reactive to antigens from Mycobacterium tuberculosis. Selected lines induce erythematous skin reactions. Hasløv K, et al. **Scand J Immunol** 1989 Mar;29(3):281–8

Expression of activation markers on CD4+ and CD8+ cells from synovial fluid, synovial tissue, and peripheral blood of patients with inflammatory arthritides. Hovdenes J, et al. **Scand J Immunol** 1989 Jun;29(6):631–9

A functional study of purified CD4+ and CD8+ cells isolated from synovial fluid of patients with rheumatoid arthritis and other arthritides. Hovdenes J, et al. **Scand J Immunol** 1989 Jun;29(6):641–9

T– and B–cell functions in IgA–deficient patients. Klemola TK, et al. **Scand J Immunol** 1988 Sep;28(3):301–6

Induction of high–affinity interleukin 2 receptors on human T lymphocytes. The role of calcium and protein kinase C. Larsen CS, et al. **Scand J Immunol** 1989 Sep;30(3):285–94

T-cell recognition of measles virus haemagglutinin studied in a mouse model. Mäkelä MJ, et al. **Scand J Immunol** 1989 May;29(5):597–607

Intracellular recognition events eliminate self-reactive T cells. Miller JF, et al. **Scand J Immunol** 1988 Oct; 28(4):389–95 (59 ref.)

Lymphocyte extracellular matrix interactions. Induction of interferon by connective tissue components. Ofosu-Appiah W, et al. **Scand J Immunol** 1989 May;29(5):517–25

A model system for the analysis of B-cell activation and effector T-cell functions. T cell-dependent B-cell responses facilitated by anti-I-A antibodies. Pereira P, et al. **Scand J Immunol** 1989 Jan;29(1):49–56

Detection of individual interleukin 4- and gamma interferon-producing murine spleen cells after activation with T-cell mitogens. Sander B, et al. **Scand J Immunol** 1989 Sep;30(3):315–20

Enhanced T-cell-activation due to combined stimulation by both endothelial cells and monocytes. Teitel JM, et al. **Scand J Immunol** 1989 Feb;29(2):165–73

T-cell response to purified protein derivative after removal of Langerhans' cells from epidermal cell suspensions containing keratinocytes expressing class II transplantation antigens. Tjernlund U, et al. **Scand J Immunol** 1988 Dec; 28(6):667–73

Responsiveness of T cells to mutant major histocompatibility complex class I antigen. II. Role of stimulator-type accessory cells with reference to interleukin 1 production. Watanabe H, et al. **Scand J Immunol** 1989 Mar;29(3):343–51

Are idiotypic peptides from variable domains critical for T-dependent production of rheumatoid factors? Hannestad K, et al. **Scand J Rheumatol Suppl** 1988;75:97–101

Living with your self. Appenzeller T. **Sci Am** 1988 Nov; 259(5):30, 34

Preemptive strike. Beardsley TM. **Sci Am** 1989 Jan;260(1):26, 28

A Mycobacterium leprae-specific human T cell epitope cross-reactive with an HLA-DR2 peptide. Anderson DC, et al. **Science** 1988 Oct 14;242(4876):259–61

Influence of the major histocompatibility complex on positive thymic selection of V beta 17a+ T cells. Blackman MA, et al. **Science** 1989 Apr 14;244(4901):214–7

Demethylated CD8 gene in CD4+ T cells suggests that CD4+ cells develop from CD8+ precursors. Carbone AM, et al. **Science** 1988 Nov 25;242(4882):1174–6

In vivo administration of anti-CD3 prevents malignant progressor tumor growth. Ellenhorn JD, et al. **Science** 1988 Oct 28;242(4878):569–71

Activators of protein kinase C induce dissociation of CD4, but not CD8, from p56lck. Hurley TR, et al. **Science** 1989 Jul 28;245(4916):407–9

Activation of gamma delta T cells in the primary immune response to Mycobacterium tuberculosis. Janis EM, et al. **Science** 1989 May 12;244(4905):713–6

V beta-specific stimulation of human T cells by staphylococcal toxins. Kappler J, et al. **Science** 1989 May 19;244(4906):811–3

The neutrophil-activating protein (NAP-1) is also chemotactic for T lymphocytes. Larsen CG, et al. **Science** 1989 Mar 17;243(4897):1464–6

In vivo modulation of cytolytic activity and Thy-1 expression in TCR-gamma delta+ intraepithelial lymphocytes. Lefrancois L, et al. **Science** 1989 Mar 31; 243(4899):1716–8

Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway. Lindstein T, et al. **Science** 1989 Apr 21;244(4902):339–43

Control of experimental autoimmune encephalomyelitis by T cells responding to activated T cells. Lohse AW, et al. **Science** 1989 May 19;244(4906):820–2

What T cells see and how they see it [news] Marx JL. **Science** 1988 Nov 11;242(4880):863–5

Structure and specificity of a class II MHC alloreactive gamma delta T cell receptor heterodimer. Matis LA, et al. **Science** 1989 Aug 18;245(4919):746–9

Class II MHC molecules are specific receptors for staphylococcus enterotoxin A. Mollick JA, et al. **Science** 1989 May 19;244(4906):817–20

Kaposi's sarcoma cells: long-term culture with growth factor from retrovirus-infected CD4+ T cells. Nakamura S, et al. **Science** 1988 Oct 21;242(4877):426–30

T cell signaling. Perlmutter RM. **Science** 1989 Jul 28; 245(4916):344

Murine MHC polymorphism and T cell specificities. Roy S, et al. **Science** 1989 May 5;244(4904):572–5

Neonatal thymectomy results in a repertoire enriched in T cells deleted in adult thymus. Smith H, et al. **Science** 1989 Aug 18;245(4919):749–52

Developmental biology of T cell receptors. Strominger JL. **Science** 1989 May 26;244(4907):943–50 (63 ref.)

Distribution of interleukin-2 receptors in activated T-lymphocyte subsets in vitro. Lai KN, et al. **Singapore Med J** 1988 Aug;29(4):333–6

Analysis of T cell clones in rheumatoid arthritis. Feldmann M, et al. **Springer Semin Immunopathol** 1988;10(2–3):157–67 (24 ref.)

The role of T cell—macrophage interactions in tuberculosis. Kaufmann SH, et al. **Springer Semin Immunopathol** 1988; 10(4):337–58 (82 ref.)

T lymphocytes in synovia of patients with rheumatoid arthritis. Stamenkovic I, et al. **Springer Semin Immunopathol** 1988;10(2–3):169–80 (57 ref.)

The effects of leukemosuppressive immunotherapy on thymic infectious cell centers in AKR mice. Buckheit RW Jr, et al. **Thymus** 1988–89;12(3):143–56

Do circulating OKT6-reactive cells belong to Langerhans cell lineage? Dezutter-Dambuyant C, et al. **Thymus** 1988; 11(4):207–19

Characterization of the in vitro interaction between thymocytes and a medullary thymic epithelial cell line. Hugo P, et al. **Thymus** 1988;12(1):27–37

Comparative study of in vitro CD1a and HLA-class I antigens endocytosis by human thymocytes and Langerhans cells. Ray A, et al. **Thymus** 1988–89; 12(4):239–52

Cell-mediated immunity in patients with sickle cell anaemia. Sanhadji K, et al. **Thymus** 1988–89;12(4):203–13

A T cell clone defining a common DP/DR determinant in strong linkage disequilibrium with HLA-A9. Magli MC, et al. **Tissue Antigens** 1988 Nov;32(5):259–66

HLA-DR beta III and HLA-DP induce comparable proliferation in primary mixed lymphocyte culture. Schroeijers WE, et al. **Tissue Antigens** 1988 Sep;32(3):145–9

Mixed lymphocyte reaction in interferon-gamma treated (NZB x NZW)F1 mice. Funauchi M, et al. **Tohoku J Exp Med** 1989 Jun;158(2):155–61

Effect of cytotoxic monoclonal antibody depletion of T-lymphocyte subpopulations on bleomycin-induced lung damage in C57BL/6J mice. Janick-Buckner D, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):474–84

T cell activation. Stobo JD. **Trans Am Clin Climatol Assoc** 1987;99:196–202 (4 ref.)

Reduced efficacy of chemotherapy of Plasmodium chabaudi in T cell-deprived mice. Myint Lwin, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):899–902

Antithymocyte globulin for steroid resistant rejection in renal transplant recipients immunosuppressed with triple therapy. Richardson AJ, et al. **Transpl Int** 1989 Apr;2(1):27–32

ATG overdose in a kidney-grafted patient. Clinical course and possible implications. Zlabinger GJ, et al. **Transpl Int** 1988 Oct;1(3):168–71

Transplantation of highly sensitized patients based on crossmatches using DTT-treated sera. Alarif L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):742–4

Failure to induce chimerism or tolerance in mice with monoclonal anti-T cell antibodies plus allogeneic bone marrow infusion. Auchincloss H Jr, et al. **Transplant Proc** 1988 Dec;20(6):1190–3

Immunosuppression by cyclosporine in vivo need not block effector T-cell function in mice. Auchincloss H Jr. **Transplant Proc** 1989 Feb;21(1 Pt 1):860

Cyclosporin-induced autoimmunity: a role for marrow-derived cells presenting self antigens in the thymus. Babcock SK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):220–1

In vitro and in vivo alloreactivity of T-cell lines from rat renal allografts. Baldwin WM 3d, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):379–80

Antiidiotypic responses in the suppression of allograft rejection. Batchelor JR. **Transplant Proc** 1989 Feb;21(1 Pt 1):57–8 (18 ref.)

Survival of cytotoxic T-cell clones (Tc) in vivo and their ability to effect skin allograft rejection in T-cell depleted mice. Berens ES, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):138–9

The effects of prednisolone and cyclosporin A on monocyte-dependent and -independent human T-cell proliferation in vitro. Bloemena E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):861–5

Large-scale preparation of polyclonal rabbit gamma globulins against a human cytotoxic CD4+ T-cell clone. Bonneville M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):970–2

Cross-linking of Lyt-2 (CD8) to the T cell antigen receptor optimally activates T lymphocytes. Boyce NW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):133–7

The role of accessory molecules in lymphocyte activation. Boyd AW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):38–40

L3T4+,LyT2- and LyT2+,L3T4- T cells participate in the generation of allospecific cytotoxicity in response to MHC class I+ hepatocytes. Bumgardner GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):421–2

A monoclonal antibody reacting to a new 33 kd T cell epitope inhibits the mixed lymphocyte response. Cardella CJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1031

Clinical significance of a blood vessel crossmatch in patients with a positive current T cell crossmatch [published erratum appears in Transplant Proc 1989 Jun;21(3):following Table of Contents] Cerilli J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):758–9

Depletion of RT6+ T lymphocytes prolongs skin allograft in rats. Chen-Woan M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):165–8

Synthesis and analysis of peptide to murine CD4 molecules. Clark GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):211–2

The successful use of repeated courses of OKT3 for hepatic allograft rejection using %T3 cells to adjust dose. Colonna JO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2247–8

Induction of long-term transplantation tolerance, chimerism, and host-versus-graft disease: interrelationship and cellular requirements. DeNardin AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):265–6

Renal transplantation efficacy is dependent on pretransplantation immunologic monitoring. Drannik GN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1926–9

Dose-dependent activation of murine T cells following in vivo administration of anti-murine CD3. Ellenhorn JD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1013–4

Toward the definition of nominal tissue-associated kidney tubular cell-surface epitope(s) which cause autologous and allogeneic T cell immune reactivity. Esquenazi V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):311–3

A polymorphic monocyte antigen recognized by a T-cell clone. Farrell C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):649–50

Effector T-cell repertoire selection in human allograft rejection. Finn OJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):346–8

T-cell clones recognizing MHC products. Flomenberg N. **Transplant Proc** 1989 Feb;21(1 Pt 1):35–7

Discordant expression of CD3 and T-cell receptor antigens on lymphocytes from patients treated with OKT3. Gebel HM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1745–6

Modulation of insulitis following thymus transplantation. Georgiou HM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):215–7

Regulation of lymphokine release involving a novel form of T-T collaboration. Gill RG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2700–2

Renal parenchymal damage in the local renal GVH reaction is mediated by CD4+ cells. Gracie JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):331–2

Generation of effector T cells expressing chimeric T cell receptor with antibody type-specificity. Gross G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):127–30

Early detection of viral infection in liver graft recipients by immune monitoring. Hamilton G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2266–7

How is the thymus affected by alterations in immunologic environment? Hayashi S, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):322–3

Suppression of the humoral response to anti-CD3 mAB by pretreatment with anti-CD4 mAB. Hirsch R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1015–6

Molecular analysis of FcR of T cells and other cell types. Hogarth PM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):44–5

Antirejection treatment with anti-thymocyte globulin in renal transplant recipients treated with cyclosporine as basic immunosuppression. Hoitsma AJ, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 6):12–3

Usefulness of CD3 or CD6 anti-T monoclonal antibodies in the treatment of acute corneal graft rejection. Ippoliti G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3133–4

Decreased frequency of alloantigen-specific T cells following immunosuppression with extracted donor histocompatibility antigen and a brief course of cyclosporine. Ito T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):248–51

Prospective study of kidney transplantation across positive T warm crossmatches. Iwaki Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):693

Relationship of DR3 T cell recognition determinants to DNA sequence. Johnson A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):624–5

The effects of OKT3 anti-rejection therapy on in situ allograft infiltrating lymphocytes. Kerr PG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):977–8

Cyclosporine A inhibits lymphocyte activation at more than one site in vivo. Lai KN, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):878–80

Suppressive phenomena and absence of clonal deletion evidenced by limiting dilution analysis (LDA) of donor-specific IL2 secreting cells (IL2 SC) and cytotoxic precursors (CTLp). Lantz O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):367–8

A human-mouse T-cell hybridoma-derived lymphokine inhibits thymidine uptake of T-lymphocytes. Laus R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):96–7

Modulation of CD7 is associated with inhibition of T cell proliferation in response to tetanus toxoid and phytohemagglutinin. Lazarovits AI, et al. **Transplant Proc** 1989 Apr;21(2):3325–7

Reversal of an immune response gene effect by point mutation in the antigen sequence. Lechler RI, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):618–20

Receptor-mediated endocytosis of IL-2 by PHA stimulated lymphocytes. Lee TP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):100–2

Endogenous peptides contribute to the ligand recognized by anti-DR1 human alloreactive T cells. Lombardi G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):142–4

OKT3-directed T cell selection for rapid HLA and crossmatch testing. McAlack RF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):728–9

The role of major histocompatibility molecules in antigen-specific immune responses. McCluskey J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):591–4 (56 ref.)

Functional T cells in human renal allograft fine-needle aspirates. McKenna RM, et al. **Transplant Proc** 1988 Dec; 20(6):1237–8

Recombinant interleukin 4 and partially purified low-molecular-weight B-cell growth factor stimulate normal resting human T lymphocytes. Martinez O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):74–6

Immunopathological changes in the spleen of BALB/c mice

treated with either cyclosporine A or cyclosporine G. Masri MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):952–3

Tolerance and the thymus. Miller JF. **Transplant Proc** 1989 Feb;21(1 Pt 1):59–60

Anti-T cell monoclonal antibodies for in vivo treatment of cardiac allograft rejection in mice. Mottram PL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1020–1

In vitro estimates of biological potency of equine antihuman thymocyte globulin (ATGAM). Nail SL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):968–9

Reactivity of patient antisera to OKT3 with a panel of CD3 monoclonal antibodies. Nashan B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):985–6

Comparison of dithiothreitol (DTT) treatment and absorption using autologous EBV-transformed lymphoblastoid cell lines for the depletion of autoreactive antibodies. Nicholls C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):774–6

Limiting dilution analysis: a new approach to identify the status of allograft recipients. Nikaein A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2286–9

Evidence for expression of class II MHC public determinants detected by T-cell clones. Nikaein A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):626–7

An overview of the use of the monoclonal antibody OKT3 in renal transplantation. Norman DJ. **Transplant Proc** 1988 Dec;20(6):1248–52 (26 ref.)

Class II antigen and interleukin-2 expression in renal allograft recipients. Nowaczyk M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):1002

Incubation of T cell or monocytic cell lines with 1,25-dihydroxyvitamin D3 before mitogen stimulation potentiates IL-2 and IL-1 beta mRNA levels. Prehn JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):90–1

The induction of immunologic unresponsiveness by antigen pretreatment is mediated by a CD4 T cell that appears transiently in the spleen and subsequently in the TDL. Quigley RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):377–8

In situ and systemic cellular immunity associated with orthotopic rat liver allograft acceptance or rejection. Ruiz P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):416–20

Association of CD7 and CD3 molecules on the T cell surface. Sandrin MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):103–4

Different modes of T-cell activation by monoclonal antibodies to the alpha/beta T-cell receptor and the CD3 complex. Schlitt HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):147–8

Phenotypic analysis of CD3 + alpha/beta TCR-cells in allograft recipients and in normal lymphoid tissue. Schwinzer R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):111–2

The T lymphocyte CD2 antigen—genetic and functional studies. Sewell WA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):41–3 (32 ref.)

Engraftment of allogeneic bone marrow following administration of anti-T cell monoclonal antibodies and low-dose irradiation. Sharabi Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):233–5

Basis for differing biological immunosuppressive potencies of monoclonal and polyclonal T cell antibodies. Sherburne CG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1036–9

The human antimouse reaction to OKT3: cross-reactive pattern analysis using a large group of anti-CD3 and isotypic monoclonal antibodies. Shield CF 3d, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):981–4

Antiidiotypic antibodies: production in vitro by EBV-transformed lymphoblastoid cell lines and immunochemical characterization of idiotypic receptors on T-cells. Singal DP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):333–5

A common trigger molecule (TrgS) for secretion of lytic factor is expressed on cells that participate in non-MHC restricted cellular cytotoxicity. Stein-Streilein J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):105–7

Analysis of T lymphocytes cultured from cardiac biopsies following heart transplantation—appearance of cells expressing both CD4 and CD8 antigens. Suitters AJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):468–9

Enhanced expression of a novel cytotoxicity-linked serine esterase by T lymphocytes during allograft rejection. Sunder-Plassmann G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):301

Signaling via the T-cell antigen receptor heterodimer and the CD2 antigen: a novel, synergistic pathway for activation of T-cells. Suthanthiran M. **Transplant Proc** 1989 Feb;21(1 Pt 1):340–1

Different activation signals detected by fixation of stimulator cells. Sutherland RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):178–9

Antilymphocytic antibodies and marrow transplantation: ATG suppresses antiantibody formation against monoclonal anti-T-cell antibodies. Thierfelder S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3055–7

Regulation of human allograft rejection: kidney-infiltrating suppressor inducer and suppressor effector T-cells are reduced during rejection. Totterman TH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):359–60

RIV-9: a mouse IgG3 anti-human CD3 monoclonal antibody with strong antigen modulating and T cell eliminating properties. Vaessen LM, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):1026–7

Treatment of acute cellular kidney allograft rejection with T10B9.1A-31A anti T-cell monoclonal antibody. Waid TH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1778–84

T-lymphocytes are necessary for fatal graft vs host disease after small bowel transplantation. Wallander J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2896–7

Differential cytokine production by natural killer cells and T cells of the alpha beta and gamma delta T-cell receptor classes. Warren HS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):77

Patterns of MHC class II antigen expression (HLA-DR, DP, and DQ) on peripheral blood T lymphocytes in patients after liver transplant. Winkler M, et al. **Transplant Proc** 1989 Aug;21(4):3627–8

Comparison of a monoclonal anti-T cell antibody vs ATG as prophylaxis after heart transplantation. Wollenek G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2499–501

A new immunosuppressive agent, FK506, inhibits the expression of alloantigen-activated suppressor cells as well as the induction of alloreactivity. Yoshimura N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1045–7

Verapamil selectively inhibits expression of interleukin-2 messenger RNA in mitogen activated mononuclear blood cells. Zanker B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):85–7

Factors affecting proliferation of nonimmune murine T cells in vitro. Zhou P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):171–3

Reactivation of latent rat cytomegalovirus by a combination of immunosuppression and administration of allogeneic immunocompetent cells. Bruning JH, et al. **Transplantation** 1989 May;47(5):917–8

Afferent and efferent pathways in T cell responses to MHC class I+, II-hepatocytes. Bumgardner GL, et al. **Transplantation** 1989 Jan;47(1):163–70

The influence of T cell depletion on recovery of T cell proliferation to herpesviruses and Candida after allogeneic bone marrow transplantation. de Gast GC, et al. **Transplantation** 1989 Jul;48(1):111–5

Phenotype and function of T lymphocytes infiltrating the skin during graft-versus-host disease following allogeneic bone marrow transplantation. Kasten-Sportès C, et al. **Transplantation** 1989 Apr;47(4):621–4

Induction of antiidiotypic antibodies by donor-specific blood transfusions. Establishment of a human-mouse hybridoma secreting the MLR-inhibiting factor. Kawamura T, et al. **Transplantation** 1989 Sep;48(3):459–63

Neutralization of immunosuppression by antibodies against variable as well as constant regions of monoclonal anti-Thy-1 xenoantibodies and their ability to be suppressed by initial T cell depletion. Kremmer E, et al. **Transplantation** 1989 Apr;47(4):641–6

Differential regulation of activation-associated receptor expression on CD4- and CD8-positive T lymphocytes by allosensitized suppressor T cells. Loertscher R, et al. **Transplantation** 1989 Sep;48(3):473–8

Modulation of the major histocompatibility complex antigen and the immunogenicity of islet allografts. Markmann JF, et al. **Transplantation** 1989 Sep;48(3):478–86

Immunohistochemical analyses of skin graft rejection in mice. Kinetics of lymphocyte infiltration in grafts of limited immunogenetic disparity. Mayer TG, et al. **Transplantation** 1988 Dec;46(6):890–9

Effects of Thy-1+ cell depletion on the capacity of donor lymphoid cells to induce tolerance across an entire MHC disparity in sublethally irradiated adult hosts. Pierce GE, et al. **Transplantation** 1989 Aug;48(2):289–96

Differential IL-2 receptor expression in renal allograft recipients treated with an anti-IL-2-receptor antibody. Ramos EL, et al. **Transplantation** 1989 Sep;48(3):415–20

Specific recognition of human leukemic cells by allogeneic T cell lines. Sosman JA, et al. **Transplantation** 1989 Sep; 48(3):486–95

Transmembrane signalling via the T cell antigen receptor heterodimer and the CD2 antigen. A synergistic pathway for activation of T cells. Suthanthiran M. **Transplantation** 1989 Feb;47(2):348–51

Biodistribution of an anti-interleukin 2 receptor monoclonal antibody in rat recipients of a heart allograft, and its use as a rejection marker in gamma scintigraphy. Thedrez P, et al. **Transplantation** 1989 Sep;48(3):367–71

Evidence that initial T cell depletion suppresses antiantibody formation and preserves immunosuppression after polyclonal ATG. Thienfelder S, et al. **Transplantation** 1989 Sep;48(3):511–4

T cell depletion for graft-versus-host-disease prophylaxis. A perspective on engraftment in mice and humans. Vallera DA, et al. **Transplantation** 1989 May;47(5):751–60 (127 ref.)

Impairment of allograft tumor immunity by isotype-like suppression of antigen-specific T cell factors. Van Loveren H, et al. **Transplantation** 1989 Mar;47(3):504–12

Phenotypic and functional characterization of T cell clones following allogeneic bone marrow transplantation. Viale M, et al. **Transplantation** 1989 May;47(5):838–43

The human T-cell receptor gamma (TRG) genes. Lefranc MP, et al. **Trends Biochem Sci** 1989 Jun;14(6):214–8 (50 ref.)

Mink infected with Aleutian disease virus have an elevated level of CD8-positive T-lymphocytes. Aasted B. **Vet Immunol Immunopathol** 1989 Mar;20(4):375–85

Two monoclonal antibodies (CC17, CC29) recognizing an antigen (Bo5) on bovine T lymphocytes, analogous to human CD5. Howard CJ, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):127–39

Molecular studies of T-lymphocytes from cattle infected with bovine leukemia virus. Williams DL, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):307–23

T cell clones: tools to investigate host-parasite relationships. Lammie PJ. **Vet Parasitol** 1988 Sep;29(2–3):159–70 (39 ref.)

An immunogold labelling method for the enumeration of canine T-lymphocytes. Evans GO, et al. **Vet Q** 1988 Oct; 10(4):273–6

Resistance to Rhipicephalus evertsi evertsi in immunosuppressed rabbits. Njau BC. **Vet Res Commun** 1989;13(2):93–102

T-cell imbalances and NK activity in varicella-zoster virus infections. Cauda R, et al. **Viral Immunol** 1987;1(2):145–52

T cell cross-reactivity among viruses of the paramyxoviridae. Ziola B, et al. **Viral Immunol** 1987;1(2):111–9

The gamma delta T cell receptor. Koning F, et al. **Year Immunol** 1989;4:94–109 (64 ref.)

Thy-1, CD4 and CD8 in T cell development. Wadsworth S, et al. **Year Immunol** 1989;4:59–73 (55 ref.)

T cell antigen receptor: structure, assembly and function. Weissman AM, et al. **Year Immunol** 1989;4:74–93 (87 ref.)

T cell activation via cell-surface antigens other than the CD3/T cell receptor complex. Yokoyama WM, et al. **Year Immunol** 1989;4:110–46 (143 ref.)

Studies on lymphocyte subpopulations and cell-mediated immunity in patients with chronic renal failure. Park K, et al. **Yonsei Med J** 1988;29(2):109–16

Analysis of Mycobacterium tuberculosis genoma and production of a recombinant protein containing specific B and T cell antigenic determinants—new approaches to second generation antituberculosis vaccines. Colizzi V, et al. **Z Erkr Atmungsorgane** 1989;172(1):40–52

[Chronic lymphocytic leukemia. II. Differentiation of various forms of chronic lymphocytic leukemia by cytological and immunological indicators] Popova L, et al. **Vutr Boles** 1988; 27(3):76–80 (Eng. Abstr.) (Bul)

[Study of the relation of the typology of nephrotic syndrome and red cell C3b receptor, T cell function] Ding PZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):218–9, 197 (Eng. Abstr.) (Chi)

[Effects of smoking on immunity] Yin BY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):368–9 (14 ref.) (Chi)

[Preliminary study on HBsAg-specific T cell clones] Zhang DF. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):137–9, 12 (Eng. Abstr.) (Chi)

[The value of active T-rosette-forming cells in urine in diagnosis of acute reject reaction] Xiao XR. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):367–9, 384 (Eng. Abstr.) (Chi)

[Effect of tonsillar macrophages on several immune functions] Cai FF. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):125–8 (Eng. Abstr.) (Chi)

[Augmentation effect of selenium on IL-2 production of lymphocytes without affecting IL-2 reasponsiveness] Zhang SR. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug;10(4):244–8 (Eng. Abstr.) (Chi)

[Effects of praziquantel on the immunological response in mice infected with Schistosoma japonicum] Wu GZ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):163–6 (Eng. Abstr.) (Chi)

[Accessory effect of human B lymphocytes in T cell mitogen responses] Yin TG, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):161–8 (Eng. Abstr.) (Chi)

[Autoantibodies in systemic erythematosis. I. Incidence of antibodies against the CEM T-lymphocyte line] Jíra M, et al. **Vnitr Lek** 1988 Nov;34(11):1062–8 (Eng. Abstr.) (Cze)

[Leukocyte adhesion molecules and their clinical significance] Hurme M, et al. **Duodecim** 1988; 104(19):1507–14 (29 ref.) (Fin)

[Lymphocyte system and relative resistance of inbred mice to Trypanosoma brucei brucei] Makumyaviri AM, et al. **Ann Inst Pasteur Immunol** 1988 Sep-Oct;139(5):545–56 (Eng. Abstr.) (Fre)

[Immunology of transplantation] Chatenoud L, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:693–7 (Eng. Abstr.) (Fre)

[T lymphocyte activation induced in vivo by the first injection of OKT3 monoclonal antibodies] Chatenoud L, et al. **C R Acad Sci [III]** 1988;307(19):833–6 (Eng. Abstr.) (Fre)

[Immune response: current aspects] Cerottini JC. **Rev Med Suisse Romande** 1989 Mar;109(3):201–3 (Fre)

[Prognostic value of an interleukin 2 inhibitor present in the synovial fluid in rheumatoid polyarthritis] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):53–5 (Fre)

[Cellular immunologic parameters in thyroid diseases] Beyer PA, et al. **Acta Med Austriaca** 1989;16(1):6–7 (Eng. Abstr.) (Ger)

[T-cell subpopulations and suppressor activity in atopic and infection-induced asthma] Gamkrelidse A, et al. **Allerg Immunol (Leipz)** 1988;34(4):255–9 (Eng. Abstr.) (Ger)

[Regulation of cell growth exemplified by T lymphocytes] Hückel C. **Allerg Immunol (Leipz)** 1989;35(2):79–99 (85 ref.) (Eng. Abstr.) (Ger)

[Functional capacity of T cell subpopulations in mice. II.

Effect of allogeneically stimulated T-cell subpopulations on the primary MLR] Hückel C, et al. **Allerg Immunol (Leipz)** 1988;34(3):159–67 (Eng. Abstr.) (Ger)

[The binding behavior and functional significance of Fc receptors for IgG on T lymphocytes of the mouse] Hückel C, et al. **Allerg Immunol (Leipz)** 1988;34(2):109–18 (Eng. Abstr.) (Ger)

[Interleukin 1 (IL 1)] Nausch M, et al. **Allerg Immunol (Leipz)** 1989;35(2):101–22 (164 ref.) (Eng. Abstr.) (Ger)

[The rosette test with sensitized sheep erythrocytes, acid phosphatase and alpha-naphthylacetate esterase in an acid medium: comparative immunocytochemical T-cell exhibition in Hodgkin's disease] Plat M, et al. **Folia Haematol (Leipz)** 1989;116(1):87–95 (Ger)

[Immunophenotyping of lymphoreticular cells in the human decidua] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):553–6 (Eng. Abstr.) (Ger)

[The behavior of membrane receptors of peripheral blood lymphocytes in bullous pemphigoid] Schaller J, et al. **Hautarzt** 1989 May;40(5):296–303 (Eng. Abstr.) (Ger)

[Molecular mechanisms of cellular interaction in immune regulation of hematopoiesis] Burdach S, et al. **Klin Padiatr** 1988 May-Jun;200(3):165–70 (16 ref.) (Eng. Abstr.) (Ger)

[In vivo and in vitro suppression of lymphocyte function in paranasal sinus mycoses] Loidolt D, et al. **Laryngorhinootologie** 1989 Jul;68(7):407–10 (Eng. Abstr.) (Ger)

[Interleukin 2 secretion by lymphocytes of patients with squamous cell cancer of the oropharynx or larynx] Wustrow TP. **Laryngorhinootologie** 1989 Feb;68(2):110–7 (Eng. Abstr.) (Ger)

[Lymphokine-induced suppression of erythropoiesis by normal T lymphocytes and retrovirus-associated lymphoproliferative disease] Burdach S, et al. **Onkologie** 1989 Jun;12(3):116–9 (Eng. Abstr.) (Ger)

[Immunologic characterization of lymphocytes using monoclonal antibodies and immunoglobulin determination in bronchoalveolar lavage in patients with sarcoidosis] Ballin A, et al. **Prax Klin Pneumol** 1988 Jul;42(7):544–6 (Eng. Abstr.) (Ger)

[Immunocytologic and immunohistochemical methods of detection in exogenous allergic alveolitis] Popp W, et al. **Prax Klin Pneumol** 1988 Jul;42(7):549–50 (Eng. Abstr.) (Ger)

[Immunologic tolerance] Hengartner H. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):735–40 (Eng. Abstr.) (Ger)

[The immunology of aging: immunoregulatory role of lipoproteins] Huber LA. **Wien Klin Wochenschr** 1989 Jun 23;101(13):440–6 (Eng. Abstr.) (Ger)

[Human interleukin 2: molecular biology, physiology and clinical possibilities] Körner IJ, et al. **Z Arztl Fortbild (Jena)** 1988;82(23):1171–4 (12 ref.) (Ger)

[What role do intestinal T-lymphocytes play in the pathogenesis of hyperregenerative (sprue-typical) changes in the intestinal mucosa?] Zeitz M. **Z Gastroenterol** 1988 Dec;26(12):767–8 (Ger)

[Circulating T cells in patients with breast or genital cancers in the pre-therapeutic phase] Strache RR, et al. **Zentralbl Gynakol** 1989;111(12):816–23 (Eng. Abstr.) (Ger)

[Distribution of T-lymphocyte subpopulations in the mucosa of the small intestine in children with celiac disease] Arató A, et al. **Orv Hetil** 1988 Oct 30;129(44):2353–8 (33 ref.) (Eng. Abstr.) (Hun)

[Changes in T lymphocyte subgroups and their effect in chronic B-lymphoid leukemia] Burger T, et al. **Orv Hetil** 1988 Oct 9;129(41):2189–93 (26 ref.) (Eng. Abstr.) (Hun)

[T lymphocyte subpopulation in respiratory allergy] Nagy L, et al. **Orv Hetil** 1988 Sep 25;129(39):2079–81 (Eng. Abstr.) (Hun)

[Incidence of somatic mutations of the lymphocytes in subjects working in an environment with cancer risk] Tompa A, et al. **Orv Hetil** 1989 Jul 23;130(30):1603–7 (Eng. Abstr.) (Hun)

[Lymphocyte subpopulations in multiple sclerosis (MS). A contribution] Nuccetelli F, et al. **Minerva Med** 1989 Mar; 80(3):189–93 (Eng. Abstr.) (Ita)

[Immunological studies on peripheral blood lymphocytes from patients with chronic liver diseases. Especially on T cell functions] Hidaka K. **Fukuoka Igaku Zasshi** 1988 Jul; 79(7):497–513 (Eng. Abstr.) (Jpn)

[Future perspectives on tumor-specific immunotherapy using hapten-reactive T cell activity] Hamaoka T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):886–96 (Eng. Abstr.) (Jpn)

[Fundamental and clinical aspects of adoptive immunotherapy with tumor-infiltrating lymphocytes] Yahata G, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1474–82 (Eng. Abstr.) (Jpn)

[Immunopathological analysis of T and non-T cell involvement in corneal inflammation caused by HSV type-1 infection] Kimura T, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):124–31 (Eng. Abstr.) (Jpn)

[The effect of angiotensin II on the accessory function of BALF macrophages in the cases of sarcoidosis of long duration] Nagai S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):957–64 (Eng. Abstr.) (Jpn)

[T cell colony formation and interleukin-1,2 productivity in patients with chronic renal failure] Itagaki N. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1847–51 (Jpn)

[Antithymocyte globulin and antilymphocyte globulin treatments in two cases of severe aplastic anemia] Suzuki M, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul; 77(7):1056–61 (Jpn)

[Interleukin 2 (IL-2) production in patients with mixed connective tissue disease (MCTD) and its relevance to the diagnosis and clinical features] Umehara H, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):649–55 (Jpn)

[A case of 4-4'-diaminodiphenyl sulfone (DDS) syndrome associated with marked T-cell proliferation and low serum-IgA] Yamamoto M, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):852–7 (Jpn)

[Roles of macrophages and dendritic cells in the initiation of immune responses] Muramatsu S. **Nippon Rinsho** 1989 Mar;47(3):519–25 (Jpn)

[The ability of cord blood T cells to produce IL-6] Matsuzaki N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb; 41(2):225–6 (Jpn)

[Age-associated changes in immune functions] Hara H, et al. **Rinsho Byori** 1988 Oct;36(10):1152–7 (Jpn)

[Selected indicators of immunity in patients with chronic osteomyelitis] Pyzio A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):313–7 (Eng. Abstr.) (Pol)

[Peripheral blood T- and B lymphocytes in children with bronchial asthma] Kosowska S. **Folia Med Cracov** 1987; 28(3-4):267–81 (Eng. Abstr.) (Pol)

[Evaluation of various indicators of cellular immunity in persons exposed to work environment in the Masovian Refinery and Petrochemical Plants in Plock] Tchórzewski H, et al. **Med Pr** 1988;39(2):100–7 (Eng. Abstr.) (Pol)

[Surface phenotypes of peripheral blood mononuclear cells in multiple sclerosis] Wender M, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):177–83 (Eng. Abstr.) (Pol)

[Immunologic disorder in children with hemophilia] Boguslawska-Jaworska J, et al. **Pediatr Pol** 1988 May; 63(5):319–25 (Eng. Abstr.) (Pol)

[The role of interleukin 2 in disorders of immunologic regulation in systemic lupus erythematosus] Kucharz EJ. **Pol Tyg Lek** 1988 May 16;43(20):619–22 (Pol)

[Various parameters of cellular immunity in persons exposed to petroleum derivatives] Zeman K, et al. **Pol Tyg Lek** 1988 May 16;43(20):626–30 (Eng. Abstr.) (Pol)

[Physiological interferons and their role in the body. I. Biological activities of interferons] Blach-Olszewska Z. **Postepy Hig Med Dosw** 1988 May-Jun;42(3):260–95 (165 ref.) (Eng. Abstr.) (Pol)

[Interleukins—hormones of the immune system] Bogdanikowa B. **Postepy Hig Med Dosw** 1988 Nov-Dec; 42(6):589–600 (68 ref.) (Eng. Abstr.) (Pol)

[Immunologic disorders in patients with recurrent herpes simplex] Majewski S, et al. **Przegl Dermatol** 1988 Mar-Apr; 75(2):107–12 (Eng. Abstr.) (Pol)

[Disorders of cellular immunity in systemic scleroderma] Sierakowski SJ, et al. **Przegl Lek** 1988;45(7):592–7 (74 ref.) (Pol)

[Modulation of immunologic response by parasitic invasion] Bany J. **Wiad Parazytol** 1988;34(4-6):497–501 (Eng. Abstr.) (Pol)

[Immunologic methods of prognosis and diagnosis of late pregnancy toxemia] Allamazian EK, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):39–41 (Eng. Abstr.) (Rus)

[Characteristics of T and B components of the immune system in miscarriage of different etiology] Barsegian OK, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):23–7 (Eng. Abstr.) (Rus)

[Changes in the functional status of lymphocytes in patients with chronic salpingo-oophoritis treated by normobaric hypoxia] Burlev VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):27–9 (Eng. Abstr.) (Rus)

[Age-related changes in the indicators of immunological homeostasis in women with intact menstrual rhythm] Khait OV. **Akush Ginekol (Mosk)** 1989 Feb;(2):61–6 (Eng. Abstr.) (Rus)

[Several parameters of cellular immunity in uncomplicated pregnancy and in threatened abortion] Timoshenko LV, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):27–9 (Eng. Abstr.) (Rus)

[Effect of gestoses on the status of the immune and adrenal systems in newborn infants] Volkova NN, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):35–8 (Eng. Abstr.) (Rus)

[Effect of turinal and progesterone combined with chorionic gonadotropin on cellular immunity during the treatment of threatened abortion in the first and second trimesters] Zhuchenko PG, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):24–7 (Eng. Abstr.) (Rus)

[Changes in the cell population of the thymus-dependent area of the regional lymph nodes following skin flap grafting] Katinas GS, et al. **Arkh Anat Gistol Embriol** 1988 Sep; 95(9):49–53 (Eng. Abstr.) (Rus)

[Monoclonal antibodies ICO-20 against human thymocyte antigen T10] Baryshnikov AIu, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):324–6 (Eng. Abstr.) (Rus)

[Shedding of mouse thymocyte receptors for autologous erythrocytes under the influence of oligopeptide thymic factor] Bezvershenko IA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):470–1 (Eng. Abstr.) (Rus)

[Receptors for polysaccharides of group A streptococci on human thymic lymphocytes. Stimulation of their expression by action of adenosine, theophylline and supernatant of thymocytes] Gnezditskaia EV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):467–9 (Eng. Abstr.) (Rus)

[Stimulation of phosphoinositide turnover is an important but not a sole condition for activation of human T-lymphocyte proliferation by phytohemagglutinin and interleukin 2] Korichneva IL, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb; 304(1):221–4 (Rus)

[Changes in sensitivity of lymphocyte cholinergic receptors in patients with breast cancer] Kharkevich DD, et al. **Eksp Onkol** 1988;10(5):38–40 (Eng. Abstr.) (Rus)

[Change in the cooperation of T- and B-lymphocytes during the immune response of ram erythrocytes in the presence of liver injury by carbon tetrachloride] Bryzgina TM. **Fiziol Zh** 1989 Jan-Feb;35(1):25–30 (Eng. Abstr.) (Rus)

[Effect of the neuromediator systems of the neostriatum on immunocompetent cells] Aliev NA. **Fiziol Zh SSSR** 1988 Dec;74(12):1738–42 (Eng. Abstr.) (Rus)

[Lymphocyte subpopulations of the peripheral blood in multiple myeloma patients studied by the immunocytochemical PAP method using monoclonal antibodies] Abramenko IV, et al. **Gematol Transfuziol** 1988 Aug;33(8):38–41 (Eng. Abstr.) (Rus)

[Monoclonal antibodies BCA-16 against surface T-cell antigen in healthy persons and in patients with leukemia] Bulycheva TI, et al. **Gematol Transfuziol** 1988 Dec; 33(12):45–7 (Rus)

[Immunologic variants of acute lymphoblastic leukemia in adults and its correlation with cytochemical and various clinical parameters] Bulycheva TI, et al. **Gematol Transfuziol** 1989 May;34(5):13–9 (Eng. Abstr.) (Rus)

[The content of lymphopoietic differentiation antigens on the membrane of blood lymphoid cells in patients with bone marrow hypoplasia studied using monoclonal antibodies] Miterev GIu, et al. **Gematol Transfuziol** 1988 Oct; 33(10):10–5 (Eng. Abstr.) (Rus)

[Changes in the immune system in long-term carbon tetrachloride poisoning] Kolpashchikova IF. **Gig Sanit** 1988 Dec;(12):81–3 (Rus)

[Immunologic status of children living in a region with an increased level of nitrates in the drinking water] Kozliuk AS, et al. **Gig Sanit** 1989 Mar;(3):19–22 (Eng. Abstr.) (Rus)

[Immunity after exposure to radiation] Shubik VM. **Gig Sanit** 1989 Jan;(1):25–8 (Eng. Abstr.) (Rus)

[Experience using immunocorrecting agents in workers engaged in the manufacture of graphite and asbestos products] Bezzub SL, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):27–9 (Eng. Abstr.) (Rus)

[Characteristics of immunologic reactivity of workers at an epoxy resin plant] Chernykh LV, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):48–50 (Rus)

[Effect of occupational factors of deep coal mines on the immunological status of miners] Donchenko LI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):53–4 (Rus)

[Functional activity of nonspecific suppressors and indicators of lymphocyte blast transformation in patients with occupational allergy] Dovzhanskiĭ IS. **Gig Tr Prof Zabol** 1988 Nov;(11):51–3 (Rus)

[Differentiated immunocorrective therapy of dust-induced bronchitis in machine builders] Kleĭner A.I, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):19–21 (Eng. Abstr.) (Rus)

[Changes in the rosette-forming capacity of peripheral blood lymphocytes in patients with ischemic heart disease after administration of atherogenic lipoproteins] Vasil'chenko EM, et al. **Kardiologiia** 1989 Feb;29(2):53–6 (Eng. Abstr.) (Rus)

[The T- and B-lymphocyte count as a prognostic test in patients with acute suppurative surgical diseases] Vinnichenko BI, et al. **Klin Khir** 1989;(1):36–7 (Eng. Abstr.) (Rus)

[Antiviral cellular resistance in acute suppurative-destructive diseases of the lungs] Filev LV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):105–8 (Eng. Abstr.) (Rus)

[Cellular immunity in chronic nonspecific lung diseases] Khaitova NM, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):48–50 (Eng. Abstr.) (Rus)

[Indicators of cellular and humoral immunity during the process of healing of stomach ulcer] Sheptulin AA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):40–6 (Eng. Abstr.) (Rus)

[Changes in the expression of the surface antigens of thymocytes during their cultivation with macrophages] Anfalova TV, et al. **Ontogenez** 1989 May-Jun;20(3):294–9 (Eng. Abstr.) (Rus)

[Comparative study of the T- and B-cell immunity systems in human and animal embryogenesis] Khlystova ZS, et al. **Ontogenez** 1988 May-Jun;19(3):327–31 (Eng. Abstr.) (Rus)

[Changes in the effect of thymocytes, fractionated by size, from adrenalectomized mice on the CFUc count in the bone marrow after irradiation] Moroz BB, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):29–32 (Eng. Abstr.) (Rus)

[Characteristics of the immune and neuroendocrine systems in children with thymomegaly] Dadambaev ET, et al. **Pediatriia** 1989;(5):100–3 (71 ref.) (Rus)

[Significance of acetylation phenotype and several immunologic parameters of the mother for the health status of the newborn infants] Ivanova VV, et al. **Pediatriia** 1989;(6):110 (Rus)

[Clinico–immunologic characteristics of opisthorchiasis in children living in a natural focus of the disease] Pomogaeva AP, et al. **Pediatriia** 1989;(4):109–10 (Rus)

[Clinico–immunologic characteristics of hepatitis A in children with chronic opisthorchiasis] Pomogaeva AP, et al. **Pediatriia** 1989;(7):23–7 (Eng. Abstr.) (Rus)

[Pathogenesis of immunologic deficiency in the initial stage of lymphogranulomatosis in children] Torubarova NA, et al. **Pediatriia** 1989;(2):38–42 (Eng. Abstr.) (Rus)

[Immunology and immunogenetics of tuberculosis: current status and prospects of research development] Averbakh MM, et al. **Probl Tuberk** 1989;(2):65–8 (56 ref.) (Rus)

[Changes in the cyclic nucleotide system of T–lymphocytes in experimental tuberculosis in animals] Kostromin AP, et al. **Probl Tuberk** 1988;(11):50–4 (Eng. Abstr.) (Rus)

[Significance of the changes in the level of expression of HLA antigens on the surface of T lymphocytes in differential diagnosis of joint diseases of different nature] Konenkov VI, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):36–40 (Eng. Abstr.) (Rus)

[Functional activity of neutrophils and lymphocytes in hypertension] Ananchenko VG, et al. **Sov Med** 1988;(7):32–5 (Eng. Abstr.) (Rus)

[Effect of concomitant pathology on the indicators of cellular immunity in cancer of the lungs] Bulbuk GA, et al. **Sov Med** 1989;(4):122 (Rus)

[Immunological aspects of hyperplastic processes, precancerous conditions and cancer of the endometrium during the post–menopausal period] Kadagidze ZG, et al. **Sov Med** 1988;(7):25–9 (Rus)

[Disorders of immunity in alcoholic patients with myocardial infarction] Medvedev VM, et al. **Sov Med** 1989;(2):3–5 (Eng. Abstr.) (Rus)

[Immunologic parameters in burns] Shkrob LO, et al. **Sov Med** 1988;(7):17–20 (Eng. Abstr.) (Rus)

[Factors affecting the incidence of exacerbation and recurrence of intrathoracic sarcoidosis] Solodkovskiĭ ML. **Sov Med** 1989;(5):79–81 (Rus)

[Regional lymph nodes and mortality in breast cancer] Spirina NV, et al. **Sov Med** 1989;(4):123 (Rus)

[Aging and immunological reactivity in lung pathology] Tsarev VN. **Sov Med** 1988;(5):6–7 (Eng. Abstr.) (Rus)

[Difficulties in the immunologic and clinical control of nonspecific immunotherapy of bronchial asthma] Bobkova LP, et al. **Ter Arkh** 1988;60(8):109–14 (Rus)

[Study of the characteristics of various hematologic diseases using monoclonal antibodies LT1, LT2 and LT7] Filatov AV, et al. **Ter Arkh** 1989;61(2):104–8 (Eng. Abstr.) (Rus)

[Characteristics of secondary immunologic deficiency in children with chronic hepatitis B and the methods of its correction] Gol'zand IV, et al. **Ter Arkh** 1989;61(2):72–6 (Eng. Abstr.) (Rus)

[Clinico–immunological changes in patients with chronic pancreatitis and their correction during the treatment] Gubergrits NB. **Ter Arkh** 1989;61(2):18–21 (Eng. Abstr.) (Rus)

[Subpopulations of immunocompetent cells in patients with liver cirrhosis studied using monoclonal antibodies] Podymova SD, et al. **Ter Arkh** 1988;60(11):49–53 (Rus)

[Prognostic value of studying the cellular immunity in ulcerative lesions of the stomach] Uspenskiĭ VM, et al. **Ter Arkh** 1989;61(2):21–3 (Eng. Abstr.) (Rus)

[Current concepts of the effect of corticosteroids on the functioning of the immune system] Zernov AA, et al. **Ter Arkh** 1988;60(8):132–6 (81 ref.) (Rus)

[Immunological indicators and superoxide dismutase activity in the erythrocytes of patients with viral hepatitis] Zhurkin AT, et al. **Ter Arkh** 1989;61(2):58–60 (Eng. Abstr.) (Rus)

[Morphological characteristics of the transplanted kidney and immunological indicators in patients treated by a standard schedule and with cyclosporin A and low doses of prednisolone] Morozova MM, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):38–42 (Eng. Abstr.) (Rus)

[Cells–boosters as the modulators of immunogenesis] Pisarev VM, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):58–68 (Eng. Abstr.) (Rus)

[Disorders of immunologic reactivity in patients with destructive pancreatitis with functional insufficiency of the liver] Koval'chuk VI, et al. **Vestn Khir** 1988 Jul;141(7):45–9 (Eng. Abstr.) (Rus)

[Changes in various indicators of the immune system in patients with diffuse toxic goiter after surgical treatment] Nugmanova LB, et al. **Vestn Khir** 1988 May;140(5):55 (Rus)

[Circulating E receptor in the peripheral blood of patients with lung cancer] Sleptsova LA, et al. **Vestn Khir** 1988 Jul;141(7):72–3 (Rus)

[The role of T–lymphocyte subpopulations in keratoplasty of burn leukoma] Gundorova RA, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):19–23 (Eng. Abstr.) (Rus)

[Immunocorrective therapy of herpetic keratitis] Stukalov ES, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):74–6 (Rus)

[Diagnostic value of immunologic methods in rhinosinusogenic cerebral arachnoiditis] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):3–6 (Eng. Abstr.) (Rus)

[Immunomorphologic characteristics of the tonsils and their lymph nodes in human fetuses] Khlystova ZS, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):55–8 (Eng. Abstr.) (Rus)

[Study of various immunologic indicators in patients with laryngopharyngeal cancer before and after administration of T–activin] Nummaev GM, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):67 (Rus)

[Indicators of the activity of the immune system during laser therapy of vasomotor rhinitis] Tulebaev RK, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):46–9 (Eng. Abstr.) (Rus)

[Dynamics of clinico–immunological indicators in children with neurodermatitis during climatotherapy] Tuleutaeva GA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun;(3):29–31 (Eng. Abstr.) (Rus)

[Lymphocytes of the blood, regional lymph nodes and tumor tissue in breast cancer] Bazhenov SM, et al. **Vopr Onkol** 1988;34(9):1040–8 (68 ref.) (Rus)

[Disorders of the immune system in benign lesions and cancer of the breast] Derevnina NA, et al. **Vopr Onkol** 1989;35(7):810–6 (Eng. Abstr.) (Rus)

[Ascorbic acid level and the indicators of cellular immunity in patients with hepatitis A during pathogenetic therapy] Vasil'ev VS, et al. **Vopr Pitan** 1988 Jul–Aug;(4):31–4 (Eng. Abstr.) (Rus)

[Effect of the microclimate of salt mines on T– and B–lymphocyte function in bronchial asthma patients] Simfonka IuM, et al. **Vrach Delo** 1989 Mar;(3):57–9 (Eng. Abstr.) (Rus)

[The ratio of various lymphocyte populations in bacillary dysentery and nonspecific ulcerative colitis] Burmistrova AL. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):64–7 (Eng. Abstr.) (Rus)

[The effect of histamine on the rosette–forming ability of T–lymphocytes upon immunization with DPT vaccine and its components] Kamalova MN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):83–5 (Eng. Abstr.) (Rus)

[Use of the leukocyte adherence inhibition reaction for assessing the effectiveness of vaccination against measles] Mikheeva IV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):33–6 (Eng. Abstr.) (Rus)

[Immunocompetent cells in organs of local and systemic immunity in intact and sensitized guinea pigs upon specific intranasal immunotherapy] Nugmanova ZhS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):92–6 (Eng. Abstr.) (Rus)

[Evaluation of lymphocyte cooperative interaction with neutrophils by the stimulation of lymphokine production in erysipelatous inflammation] Tsoĭ IG. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):59–64 (Eng. Abstr.) (Rus)

[Characteristics of functional disorders of the dermal T–lymphocytes and macrophages in the basic clinical forms of erysipelas] Tsoĭ IG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):101–6 (Eng. Abstr.) (Rus)

[Characteristics of cellular immunity in multiple sclerosis] Demina TL, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):35–41 (Eng. Abstr.) (Rus)

[Study of immunologic parameters in parenteral drug addicts (PDA) with condylomata acuminata] Marzo Lopez MC, et al. **Med Cutan Ibero Lat Am** 1988;16(3):187–91 (Eng. Abstr.) (Spa)

[Immunological changes in common vitiligo] Vignale R, et al. **Med Cutan Ibero Lat Am** 1988;16(4):343–7 (Eng. Abstr.) (Spa)

[Treatment of severe aplastic anemia with bone marrow transplants or with antithymocyte globulin. Evaluation of 27 patients] Arranz R, et al. **Rev Clin Esp** 1989 Feb;184(3):121–4 (Eng. Abstr.) (Spa)

METABOLISM

Effect of hydrocortisone on BFU–E growth and on burst–promoting activity of T lymphocytes in man. Morra L, et al. **Acta Haematol (Basel)** 1989;82(1):16–21

Expression of growth factor/receptor genes in postthymic T cell malignancies. Su IJ, et al. **Am J Pathol** 1989 Sep;135(3):439–45

Internal pH–sensitive site couples Cl–(–)HCO3– exchange to Na+–H+ antiport in lymphocytes. Mason MJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C428–33

Regulation of Na+ and K+ contents in rat thymocytes. Senn N, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C12–8

Interaction of endogenous opioids and developing T lymphocytes. Bailey D, et al. **Ann N Y Acad Sci** 1988;540:702–3

Trace metals, surface receptors and growth of human normal and leukemic lymphocytes. Carpentieri U, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1393–7

Urinary 5–HIAA and VMA and their relationship with immunoregulatory cells in stress administered subjects. Khan NA, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):717–21

Decreased expression of interleukin–2 binding molecules (p70/75) in T cells from patients with systemic lupus erythematosus. Tanaka T, et al. **Arthritis Rheum** 1989 May;32(5):552–9

Detection of enhancer binding proteins recognizing the human immunodeficiency virus long terminal repeat by in situ gel retardation. Brini AT, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):268–75

Activation of HIV–enhancer binding activity by mild detergents in human T cells. Harel–Bellan A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):238–43

Serine and tyrosine phosphorylation of 28– and 35–kDa proteins of human T lymphocytes stimulated by streptococcal M protein. Kotb M, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):803–10

Alpha–fetoprotein gene expression in human lymphoblastoid cells and in PHA–stimulated normal T–lymphocytes. Lafarge–Frayssinet C, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):112–8

Induction of poly(ADP–ribose) polymerase gene expression in lectin–stimulated human T lymphocytes is dependent on protein synthesis [published erratum appears in Biochem Biophys Res Commun 1988 Dec 30;157(3):1444] Menegazzi M, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):995–9

Agonist but not phorbol ester induced desensitization of human lymphocyte prostaglandin receptor is dependent on tubulin polymerization. Nordstedt C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1046–50

Mechanism of T cell proliferation in vivo: analysis of IL–2 receptor expression and activation of c–myc and c–myb oncogenes during lymphatic regeneration. Sihvola M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):181–8

A protein kinase C pseudosubstrate peptide inhibits phosphorylation of the CD3 antigen in streptolysin–O–permeabilized human T lymphocytes. Alexander DR, et al. **Biochem J** 1989 Jun 15;260(3):893–901

Regulation of purine deoxynucleoside phosphorylation by deoxycytidine kinase from human leukemic blast cells. Sarup JC, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2601–7

Alterations of cellular lipids in rat thymocytes during cell cycle progression. Gross G, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):220–6

Interaction of amphotericin B and its N–fructosyl derivative with murine thymocytes: a comparative study using fluorescent membrane probes. Henry–Toulmé N, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):245–52

Studies on the incorporation of precursors into purine and pyrimidine nucleotides via 'de novo' and 'salvage' pathways in normal lymphocytes and lymphoblastic cell–line cells. Marijnen YM, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):148–55

Rapid methylation of genomic DNA in proliferating T–cells from bovine thymocytes. Sano H, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):274–81

T cells from eosinophilic patients produce interleukin–5 with interleukin–2 stimulation. Enokihara H, et al. **Blood** 1989 May 15;73(7):1809–13

Phorbol ester induces expression and function of interleukin–2 receptors on a human leukemic cell line with a T–cell precursor phenotype. Kees UR. **Blood** 1988 Nov;72(5):1524–9

Stress–induced decline in immune responsiveness in C3H/HeJ mice: relation to endocrine alterations and tumor growth. Kandil O, et al. **Brain Behav Immun** 1988 Mar;2(1):32–49

Modulation of the immune response by proopiomelanocortin derived peptides. II. Influence of adrenocorticotropic hormone on the rise in intracellular free calcium concentration after T cell activation. Kavelaars A, et al. **Brain Behav Immun** 1988 Mar;2(1):57–66

Pleiotropy and redundancy: T cell–derived lymphokines in the immune response. Paul WE. **Cell** 1989 May 19;57(4):521–4 (14 ref.)

In situ hybridization analysis of the age–associated decline in IL–2 mRNA expressing murine T cells. Fong TC, et al. **Cell Immunol** 1989 Jan;118(1):199–207

Murine anti–CD3 monoclonal antibody induces potent cytolytic activity in both T and NK cell populations. Staňková J, et al. **Cell Immunol** 1989 Jun;121(1):13–29

Macrophage chemotactic factor (MCF) produced by a human T cell hybridoma clone. Yoshizuka N, et al. **Cell Immunol** 1989 Oct 1;123(1):212–25

Cadmium–induced synthesis of metallothioneins in human T and B cell purified by a fluorescence activated cell sorter. Yamada H, et al. **Chem Biol Interact** 1989;70(1–2):117–26

Dysregulation of arachidonic acid release and metabolism by atopic mononuclear cells. Lans DM, et al. **Clin Exp Allergy** 1989 Jan;19(1):37–44

HLA class II mRNA accumulation by activated human T cells following growth in conditioned medium. Gansbacher B, et al. **Clin Exp Immunol** 1989 Jun;76(3):440–5

Defective DNA synthesis by T cells in acquired 'common–variable' hypogammaglobulinaemia on stimulation with mitogens. North ME, et al. **Clin Exp Immunol** 1989 Apr;76(1):19–23

Antibody valence and induced signal transduction: the role of antibody valence in anti–CD3–induced signal

transduction in isolated normal T cells. Melton LB, et al. **Clin Immunol Immunopathol** 1989 Feb;50(2):171–83
Multiple mechanisms regulate c-myc gene expression during normal T cell activation. Lindsten T, et al. **EMBO J** 1988 Sep;7(9):2787–94
The conformation of the CD3 complex on T lymphocytes is modified by calcium ions. Breittmayer JP, et al. **Eur J Immunol** 1989 Feb;19(2):405–8
T cell receptor beta chain usage in myelin basic protein-specific rat T lymphocytes. Chluba J, et al. **Eur J Immunol** 1989 Feb;19(2):279–84
The gene for human lymphocyte homing receptor is located on chromosome 11. Forsberg UH, et al. **Eur J Immunol** 1989 Feb;19(2):409–12
Expression of the p75 interleukin 2-binding protein on CD3+4-8-Tac- cells from autoimmune MRL/MP-lpr/lpr mice. Gutierrez-Ramos JC, et al. **Eur J Immunol** 1989 Jan; 19(1):201–4
Immunoregulation through CD8 (Ly-2): state of aggregation with the alpha/beta/CD3 T cell receptor controls interleukin 2-dependent T cell growth. Jönsson JI, et al. **Eur J Immunol** 1989 Feb;19(2):253–60
The abnormal T lymphocytes in lpr mice transcribe interferon-gamma and tumor necrosis factor-alpha genes spontaneously in vivo. Murray L, et al. **Eur J Immunol** 1989 Mar;19(3):563–5
Production of macrophage-, granulocyte-, granulocyte-macrophage- and multi-colony-stimulating factor by peripheral blood cells. Oster W, et al. **Eur J Immunol** 1989 Mar;19(3):543–7
Functional expression of CD28 on T cell antigen receptor gamma/delta-bearing T lymphocytes. Testi R, et al. **Eur J Immunol** 1989 Jan;19(1):185–8
Activation of the interleukin 2 pathway precedes CD3-T cell receptor expression in thymic development. Differential growth requirements of early and mature intrathymic subpopulations. Toribio ML, et al. **Eur J Immunol** 1989 Jan;19(1):9–15
Low burst-promoting activity (BPA) production by cord mononuclear cells is due to functional immaturity of monocytes. Iwai Y, et al. **Exp Hematol** 1988 Dec; 16(11):912–5
Transient nuclear location of the IL-2 receptor during T cell activation. Jothy S, et al. **Exp Mol Pathol** 1989 Feb; 50(1):84–91
Inhibitors of arachidonic acid metabolism eliminate the increase in cytosolic free calcium induced by the mitogen concanavalin A in rat thymocytes. Gukovskaya AS, et al. **FEBS Lett** 1989 Feb 27;244(2):461–4
Regulation of tetrahydrobiopterin synthesis during lectin stimulation of human peripheral blood lymphocytes. Kerler F, et al. **FEBS Lett** 1989 Jul 3;250(2):622–4
CD3/T-cell receptor coupling to a pertussis and cholera toxin-insensitive G-protein. Kvanta A, et al. **FEBS Lett** 1989 Jul 3;250(2):536–40
Differential binding of IL-1 alpha and IL-1 beta to receptors on B and T cells. Scapigliati G, et al. **FEBS Lett** 1989 Jan 30;243(2):394–8
Inhibition by staurosporine of mitogen-induced calcium mobilisation in human T lymphoblasts. Ward SG, et al. **FEBS Lett** 1988 Nov 7;239(2):363–6
Susceptibility to lipid peroxidation and accumulation of fluorescent products with age is greater in T-cells than B-cells. Hendricks LC, et al. **Free Radic Biol Med** 1988; 5(3):145–54
Interferon-gamma receptors on T cells in patients with chronic liver disease. Kakumu S, et al. **Hepatogastroenterology** 1988 Aug;35(4):158–61
Mapping of allospecific T-cell recognition sites encoded by the HLA-DR4 beta 1-chain. Weyand CM, et al. **Hum Immunol** 1989 Feb;24(2):133–43
Assignment of the human lymphocyte homing receptor gene to the short arm of chromosome 11. Forsberg UH, et al. **Immunogenetics** 1989;29(6):405–7
Interleukin-2 induced mitogenesis of human peripheral blood T-lymphocytes: role of accessory cells. Mookerjee BK, et al. **Immunol Invest** 1989 Jun;18(5):697–711
Thymic lymphoma cells as a model for complex-formation between thymocytes and thymic medullary epithelial cells. Hugo P, et al. **Immunol Lett** 1989 Jul;22(1):73–7
Induction of calcium influx in immature T lymphocytes by anti-FT-1 monoclonal antibody. Kasai M, et al. **Immunol Lett** 1988 Dec;19(4):283–6
Brain neocortex modulation of mitogen-induced interleukin 2, but not interleukin 1, production. Neveu PJ, et al. **Immunol Lett** 1989 Jun 15;21(4):307–10
Circadian variations of human lymphocytes are not responsible for contradictory or variable results in studies of IL-2 production. Smith C, et al. **Immunol Lett** 1989 Jan 15;20(1):15–9
Pathways of processing of insulin by antigen-presenting cells. Delovitch TL, et al. **Immunol Rev** 1988 Dec;106:195–222 (95 ref.)
Facts on the fragmentation of antigens in presenting cells, on the association of antigen fragments with MHC molecules in cell-free systems, and speculation on the cell biology of antigen processing. Werdelin O, et al. **Immunol Rev** 1988 Dec;106:181–93 (40 ref.)
Very early (VEA) and very late (VLA) activation antigens have distinct functions in T lymphocyte activation. Yokoyama WM, et al. **Immunol Rev** 1989 Jun;109:153–76 (40 ref.)
Cross-linking of CD4 and CD8 with the T-cell receptor complex: quaternary complex formation and T-cell repertoire selection. Emmrich F. **Immunol Today** 1988 Oct; 9(10):296–300 (52 ref.)
The T-cell repertoire for antigen and MHC. Marrack P, et al. **Immunol Today** 1988 Oct;9(10):308–15 (64 ref.)
Directional release of lymphokines from T cells. Mosmann TR. **Immunol Today** 1988 Oct;9(10):306–7
Histamine synthesis by mouse T lymphocytes through induced histidine decarboxylase. Aoi R, et al. **Immunology** 1989 Feb;66(2):219–23
Synthesis and apparent secretion of prothymosin alpha by different subpopulations of calf and rat thymocytes. Franco FJ, et al. **Immunology** 1989 Jun;67(2):263–8
Differential role for ADP-ribosylation in gene expression during the activation of T lymphocytes by various stimuli. King SL, et al. **Immunology** 1989 Jun;67(2):258–62
Cyclic adenosine 3',5'-monophosphate metabolism in activated T-cell clones. Oksenberg D, et al. **Immunology** 1989 Aug;67(4):484–8
Study of serum IgE, T and B lymphocytes in bronchial asthma. Gupta S, et al. **Indian J Chest Dis Allied Sci** 1988 Oct-Dec;30(4):233–41
Binding of mercuric chloride to nuclear proteins in human peripheral blood T lymphocytes. Holst M, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):381–3
Different modulating effects of the monoamines adrenaline, noradrenaline, and serotonin on the DNA synthesis response of human peripheral blood T lymphocytes activated by mercuric chloride and nickel sulfate. Nordlind K, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):317–20
Effect of magnesium deficiency on interleukin production by Fisher rats: effect of interleukins on reduced in vitro lymphocyte responses to concanavalin A and lipopolysaccharide. Yiangou M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):217–21
Stromal cells of hemopoietic origin. Zipori D, et al. **Int J Cell Cloning** 1989 Sep;7(5):281–91 (84 ref.)
Expression of interleukin 2 receptors in T cells transformed by strains of Herpesvirus saimiri representing three DNA subgroups. Medveczky PG, et al. **Intervirology** 1989; 30(4):213–26
T lymphocytes and monocytes bind to keratinocytes in frozen sections of biopsy specimens of normal skin treated with gamma interferon. Nickoloff BJ, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):736–43
Differential exposure of the major gangliosides in rabbit thymocytes to Vibrio cholerae neuraminidase. Iwamori M, et al. **J Biochem (Tokyo)** 1989 May;105(5):723–7
12-O-tetradecanoylphorbol 13-acetate induces DNA cleavage at linker regions in mouse thymocytes. Kizaki H, et al. **J Biochem (Tokyo)** 1989 May;105(5):673–5
The isolation and characterization of the murine T cell antigen receptor zeta chain gene. Baniyash M, et al. **J Biol Chem** 1989 Aug 5;264(22):13252–7
The expression of prothymosin alpha gene in T lymphocytes and leukemic lymphoid cells is tied to lymphocyte proliferation. Gómez-Márquez J, et al. **J Biol Chem** 1989 May 25;264(15):8451–4
Modulation of T cell activation by differential regulation of the phosphorylation of two cytosolic proteins. Implication of both Ca2+ and cyclic AMP-dependent protein kinases. Mary D, et al. **J Biol Chem** 1989 Aug 25;264(24):14498–502
4,4'-Diisothiocyanatostilbene-2,2'-disulfonic acid inhibits CD3-T cell antigen receptor-stimulated Ca2+ influx in human T lymphocytes. Rosoff PM, et al. **J Biol Chem** 1988 Dec 25;263(36):19535–40
Interaction of histidine-rich glycoprotein with human T lymphocytes. Saigo K, et al. **J Biol Chem** 1989 May 15; 264(14):8249–53
Photoinhibition of 2-amino-2-carboxybicyclo[2,2,1]heptane transport by O-diazoacetyl-L-serine. An initial step in identifying the L-system amino acid transporter. Segel GB, et al. **J Biol Chem** 1989 Oct 5;264(28):16399–402
Monokines: stimulatory and inhibitory regulator molecules of myelopoiesis in vitro. Oster W, et al. **J Biol Regul Homeost Agents** 1988 Jul-Sep;2(3):134–8
Structure and expression of lck transcripts in human lymphoid cells. Perlmutter RM, et al. **J Cell Biochem** 1988 Oct;38(2):117–26
Pre-Golgi degradation of newly synthesized T-cell antigen receptor chains: intrinsic sensitivity and the role of subunit assembly. Bonifacino JS, et al. **J Cell Biol** 1989 Jul; 109(1):73–83
Selective degradation of T cell antigen receptor chains retained in a pre-Golgi compartment. Chen C, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2149–61
The nuclear matrix protein, numatrin (B23), is associated with growth factor-induced mitogenesis in Swiss 3T3 fibroblasts and with T lymphocyte proliferation stimulated by lectins and anti-T cell antigen receptor antibody. Feuerstein N, et al. **J Cell Biol** 1988 Nov;107(5):1629–42
Tumor promoter 12-0-tetradecanoyl-phorbol-13-acetate (TPA) can reduce the Ca-transporting ability of Ca-ionophores in T lymphocytes: the involvement of intracellular heavy metal ions. Csermely P, et al. **J Cell Physiol** 1989 Mar;138(3):593–602
Defective control of cytoplasmic calcium concentration in T lymphocytes from old mice. Miller RA, et al. **J Cell Physiol** 1989 Jan;138(1):175–82
Detection of colony-stimulating factor messenger RNA in single T cells by in situ hybridization. Williamson DJ, et al. **J Cell Physiol** 1989 May;139(2):245–52
Diacylglycerol and calcium induce rapid enhancement of A-system amino acid transport by independent mechanisms in human T-lymphocytes. Woodlock TJ, et al. **J Cell Physiol** 1989 Oct;141(1):33–9
1 Alpha,25-dihydroxyvitamin D3 receptor distribution and effects in subpopulations of normal human T lymphocytes. Provvedini DM, et al. **J Clin Endocrinol Metab** 1989 Apr; 68(4):774–9
Rearrangement of variable region T cell receptor gamma genes in acute lymphoblastic leukemia. V gamma gene usage differs in mature and immature T cells. Hara J, et al. **J Clin Invest** 1989 Apr;83(4):1277–83
Bias toward use of a specific T cell receptor beta-chain variable region in a subgroup of individuals with sarcoidosis. Moller DR, et al. **J Clin Invest** 1988 Oct; 82(4):1183–91
Impaired interleukin-2 production by T-lymphocytes in polycythemia vera. Paul CC, et al. **J Clin Lab Anal** 1989; 3(2):84–7
Keratinocyte growth regulation by the products of immune cells. Hancock GE, et al. **J Exp Med** 1988 Oct 1; 168(4):1395–402
T cell receptor beta gene has two downstream DNase I hypersensitive regions. Possible mechanisms of tissue- and stage-specific gene regulation. Hashimoto Y. **J Exp Med** 1989 Jun 1;169(6):2097–107
Murine T cells express a cell surface receptor for multiple extracellular matrix proteins. Identification and characterization with monoclonal antibodies. Maxfield SR, et al. **J Exp Med** 1989 Jun 1;169(6):2173–90
Expression of different combinations of interleukins by human T cell leukemic cell lines that are clonally related. Noma T, et al. **J Exp Med** 1989 May 1;169(5):1853–8
A small number of anti-CD3 molecules on dendritic cells stimulate DNA synthesis in mouse T lymphocytes. Romani N, et al. **J Exp Med** 1989 Mar 1;169(3):1153–68
Divalent ion trapping inside potassium channels of human T lymphocytes. Grissmer S, et al. **J Gen Physiol** 1989 Apr; 93(4):609–30
Aging and the mobilization of intracellular calcium by phytohemagglutinin in human T cells. Lustyik G, et al. **J Gerontol** 1989 Mar;44(2):B30–6
Transcriptional regulation of transferrin receptor expression by cultured lymphoblastoid T cells treated with phorbol diesters. Alcantara O, et al. **J Immunol** 1989 Mar 1; 142(5):1719–26
Monoclonal antibodies reactive with the T cell receptor zeta chain: production and characterization using a new method. Anderson P, et al. **J Immunol** 1989 Sep 15;143(6):1899–904
Chymotryptic-type protease inhibitors block the increase in Ca2+ and Il-2 production in activated Jurkat T cells. Auberger P, et al. **J Immunol** 1989 Feb 15;142(4):1253–9
IL-2 receptors on circulating natural killer cells and T lymphocytes. Similarity in number and affinity but difference in transmission of the proliferation signal. Ben Aribia MH, et al. **J Immunol** 1989 Jan 15;142(2):490–9
Regulation of CD4 and CD8 surface expression on human thymocyte subpopulations by triggering through CD2 and the CD3-T cell receptor. Blue ML, et al. **J Immunol** 1989 Jan 15;142(2):374–80
The CD2 ligand LFA-3 activates T cells but depends on the expression and function of the antigen receptor. Bockenstedt LK, et al. **J Immunol** 1988 Sep 15; 141(6):1904–11
Changes in inducibility of IL-2 receptor alpha-chain and T cell-receptor expression during thymocyte differentiation in the mouse. Boyer PD, et al. **J Immunol** 1989 Jun 15;142(12):4121–30
Avian T cells expressing gamma delta receptors localize in the splenic sinusoids and the intestinal epithelium. Bucy RP, et al. **J Immunol** 1988 Oct 1;141(7):2200–5
Isolation of murine fetal thymus cell lines after infection with recombinant retroviruses containing the v-myc and v-Ha-ras oncogenes. Cattermole JA, et al. **J Immunol** 1989 Jun 1;142(11):3746–53
Differential expression of functional adrenocorticotropic hormone receptors by subpopulations of lymphocytes. Clarke BL, et al. **J Immunol** 1989 Jul 15;143(2):464–9
Multiple low dose streptozotocin induces systemic MHC expression in mice by triggering T cells to release IFN-gamma. Cockfield SM, et al. **J Immunol** 1989 Feb 15;142(4):1120–8
Stimulation of PIP2 hydrolysis by aluminum fluoride in resting T cell subsets of normal and autoimmune-prone lpr mice. Coggeshall KM, et al. **J Immunol** 1989 Aug 1; 143(3):780–6
Cell surface comodulation of CD4 and T cell receptor by anti-CD4 monoclonal antibody. Cole JA, et al. **J Immunol** 1989 Jul 15;143(2):397–402
Rapid T cell receptor modulation accompanies lack of in vitro mitogenic responsiveness of double negative T cells to anti-CD3 monoclonal antibody in MRL/Mp-lpr mice. Davignon JL, et al. **J Immunol** 1988 Sep 15;141(6):1848–54
The induction of T cell unresponsiveness by rapidly modulating CD3. Davis LS, et al. **J Immunol** 1989 Feb 15;142(4):1084–94
Introduction of T cell receptor (TCR)-alpha cDNA has differential effects on TCR-gamma delta/CD3 expression by PEER and Lyon-1 cells. De Waal Malefyt R, et al. **J Immunol** 1989 May 15;142(10):3634–42
Inhibition of CD4+ T cell function by the HIV envelope

protein, gp120. Diamond DC, et al. **J Immunol** 1988 Dec 1;141(11):3715–7

IL–1 signaling for IL–2 production in T cells involves a rise in phosphatidylserine synthesis. Didier M, et al. **J Immunol** 1988 Nov 1;141(9):3078–80

Enumeration of single IFN–gamma–producing cells in mice during viral and bacterial infection. Gessner A, et al. **J Immunol** 1989 Feb 15;142(4):1293–8

Growth factor production and requirements during the proliferative response of human T lymphocytes to anti–CD3 monoclonal antibody. Granelli–Piperno A, et al. **J Immunol** 1989 Jun 15;142(12):4138–43

Allotypes of the constant region of the rabbit T cell receptor beta–2 chain. Harindranath N, et al. **J Immunol** 1989 May 1;142(9):3292–7

Nude mice produce a T cell–derived antigen–binding factor that mediates the early component of delayed–type hypersensitivity. Herzog WR, et al. **J Immunol** 1989 Mar 15;142(6):1803–12

Activation by IL–2, but not IL–4, up–regulates the expression of the p55 subunit of the IL–2 receptor on IL–2– and IL–4–dependent T cell lines. Jankovic DL, et al. **J Immunol** 1989 May 1;142(9):3113–20

Evidence for the involvement of three distinct signals in the induction of IL–2 gene expression in human T lymphocytes. June CH, et al. **J Immunol** 1989 Jul 1; 143(1):153–61

Down–regulation of homing receptors after T cell activation. Jung TM, et al. **J Immunol** 1988 Dec 15;141(12):4110–7

Association of cytoskeletal re–organization with capping of the complement decay–accelerating factor on T lymphocytes. Kammer GM, et al. **J Immunol** 1988 Nov 1;141(9):2924–8

Two different molecular pathways account for low IL–2 receptor and c–myc mRNA expression by lpr Lyt–2– L3T4– T cells. Katagiri K, et al. **J Immunol** 1988 Sep 15; 141(6):2145–52

Trypanosoma cruzi reduces the number of high–affinity IL–2 receptors on activated human lymphocytes by suppressing the expression of the p55 and p70 receptor components. Kierszenbaum F, et al. **J Immunol** 1989 Jul 1;143(1):275–9

Expression of C gamma 4 T cell receptors and lack of isotype exclusion by dendritic epidermal T cell lines. Koning F, et al. **J Immunol** 1988 Sep 15;141(6):2057–62

Prevalence of antigen receptor variants in human T cell lines and tumors. Maecker HT, et al. **J Immunol** 1989 Feb 15; 142(4):1395–404

Spontaneous T cell antigen receptor variants of a human T leukemia cell line. Maecker HT, et al. **J Immunol** 1988 Nov 1;141(9):2994–3002

Secretion of colony–stimulating factors by T cell clones. Role in adoptive protection against Listeria monocytogenes. Magee DM, et al. **J Immunol** 1989 Oct 1;143(7):2336–41

Tumor necrosis factor synergistically acts with IFN–gamma to regulate Ly–6A/E expression in T lymphocytes, thymocytes and bone marrow cells. Malek TR, et al. **J Immunol** 1989 Mar 15;142(6):1929–36

Bivalent binding of an anti–CD3 antibody to Jurkat cells induces association of the T cell receptor complex with the cytoskeleton. Marano N, et al. **J Immunol** 1989 Aug 1;143(3):931–8

Protein kinase C modulates actin conformation in human T lymphocytes. Phatak PD, et al. **J Immunol** 1988 Nov 1; 141(9):2929–34

T cell antigen receptors in autoimmunity. Posnett DN, et al. **J Immunol** 1988 Sep 15;141(6):1963–9

IL–2 receptor expression in autoimmune MRL–lpr/lpr mice. The expanded L3T4–, Lyt–2– population does not express p75 and cannot generate functional high–affinity IL–2 receptors. Rosenberg YJ, et al. **J Immunol** 1989 Oct 1; 143(7):2216–22

Capacity of intact proteins to bind to MHC class II molecules. Sette A, et al. **J Immunol** 1989 Aug 15;143(4):1265–7

Requirements for modulation of the CD4 molecule in response to phorbol myristate acetate. Role of the cytoplasmic domain. Sleckman BP, et al. **J Immunol** 1989 Mar 1;142(5):1457–62

T cell receptor–gamma and –delta genes preferentially utilized by adult thymocytes for the surface expression. Takagaki Y, et al. **J Immunol** 1989 Mar 15;142(6):2112–21

The immunosuppressant FK506 selectively inhibits expression of early T cell activation genes. Tocci MJ, et al. **J Immunol** 1989 Jul 15;143(2):718–26

Macrophage–mediated suppression of con A–induced IL–2 production in spleen cells from syphilitic rabbits. Tomai MA, et al. **J Immunol** 1989 Jul 1;143(1):309–14

Signaling through T lymphocyte surface proteins, TCR/CD3 and CD28, activates the HIV–1 long terminal repeat. Tong–Starksesen SE, et al. **J Immunol** 1989 Jan 15; 142(2):702–7

Patterns of costimulation of T cell clones by cross–linking CD3, CD4/CD8, and class I MHC molecules. Wacholtz MC, et al. **J Immunol** 1989 Jun 15;142(12):4201–12

Tyrosine phosphorylation of the human T cell antigen receptor zeta–chain: activation via CD3 but not CD2. Weissman AM, et al. **J Immunol** 1988 Nov 15; 141(10):3532–6

The expression and sequences of T cell antigen receptor beta–chain genes in the thymus at an early stage after sublethal irradiation. Yuuki H, et al. **J Immunol** 1989 May 15;142(10):3683–91

Flow cytometric studies of the binding of monoclonal antibodies OKT3, OKT4 and OKT8. Oonishi T, et al. **J Immunol Methods** 1988 Dec 9;115(2):159–67

Detection of clonal T–cell receptor gene rearrangements in the peripheral blood of patients with mycosis fungoides/Sezary syndrome. Weiss LM, et al. **J Invest Dermatol** 1989 Apr;92(4):601–4

Germinal center B cells and mixed leukocyte reactions. Monfalcone AP, et al. **J Leukoc Biol** 1989 Sep;46(3):181–8

Capacities of a newly established thymic stromal cell clone to express Ia antigens and to produce interleukin–6, colony–stimulating factor, and thymic stroma–derived T–cell growth factor. Ogata M, et al. **J Leukoc Biol** 1989 Jan;45(1):69–78

Selective potentiation of lymphocyte–derived macrophage chemotactic factor release in complete Freund's adjuvant–treated guinea pigs. Sakata K, et al. **J Leukoc Biol** 1989 Aug;46(2):144–51

Recycling class I MHC antigens: dynamics of internalization, acidification, and ligand–degradation in murine T lymphoblasts. Tse DB, et al. **J Mol Cell Immunol** 1986; 2(6):315–29

High affinity dopamine binding to mouse thymocytes and Mytilus edulis (Bivalvia) hemocytes. Stefano GB, et al. **J Neuroimmunol** 1989 Jan;21(1):67–74

Indole amine deficiency in blood and cerebrospinal fluid from patients with human immunodeficiency virus infection. Larsson M, et al. **J Neurosci Res** 1989 Aug;23(4):441–6

Production of interferon by human peripheral lymphocytes stimulated with rubella virus. Nakayama T, et al. **Kitasato Arch Exp Med** 1988 Dec;61(4):187–93

The isolation of the human delta chain gene and its expression in normal T cells and T cell leukemias. Champagne E, et al. **Leukemia** 1988 Nov;2(11):717–21

Adult T cell leukemia cell lines that originated from primary leukemic clones also had a defect of expression of CD3–T cell receptor complex. Shirono K, et al. **Leukemia** 1988 Nov;2(11):728–33

Age–related changes of proliferative response, kinetics of expression of protooncogenes after the mitogenic stimulation and methylation level of the protooncogene in purified human lymphocyte subsets. Deguchi Y, et al. **Mech Ageing Dev** 1988 Aug;44(2):153–68

Age–related changes of expression of IL–2 receptor subunits and kinetics of IL–2 internalization in T cells after mitogenic stimulation. Hara H, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):167–75

Measurements of cytoplasmic pH and cellular volume for detection of Na+/H+ exchange in lymphocytes. Grinstein S, et al. **Methods Enzymol** 1989;173:777–90

Purification and characterization of a T lymphocyte–derived differentiation–inducing factor for human promyelocytic cell line (HL–60) and its relationship to lymphotoxin. Shimizu Y, et al. **Microbiol Immunol** 1989;33(6):489–501

Phosphorylation of 2',3'–dideoxyinosine by cytosolic 5'–nucleotidase of human lymphoid cells. Johnson MA, et al. **Mol Pharmacol** 1989 Aug;36(2):291–5

Interleukin–4 mediates CD8 induction on human CD4+ T–cell clones. Paliard X, et al. **Nature** 1988 Oct 13; 335(6191):642–4

Effect of supernatants derived from T lymphocyte culture in minimal change nephrotic syndrome on rat kidney capillaries. Maruyama K, et al. **Nephron** 1989;51(1):73–6

[3H]N–methylscopolamine binding to muscarinic receptors in human peripheral blood lymphocytes: characterization, localization on T–lymphocyte subsets and age–dependent changes. Eva C, et al. **Neuropharmacology** 1989 Jul; 28(7):719–26

Elevated serum levels of soluble interleukin–2 receptors in HIV infection: no correlation with activated T cells. Lang JM, et al. **Nouv Rev Fr Hematol** 1989;31(1):9–11

Construction of cDNA libraries from small numbers of cells using sequence independent primers. Tam AW, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1269

Expression, methylation and chromatin structure of the p53 gene in untransformed and human T–cell leukemia virus type I–transformed human T–lymphocytes. Lübbert M, et al. **Oncogene** 1989 May;4(5):643–51

Absence of unsaturated fatty acid synthesis in murine T lymphocytes. Buttke TM, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6133–7

Developmental control of lymphokine gene expression in fetal thymocytes during T–cell ontogeny. Carding SR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3342–5

T–cell interleukin 1 receptor cDNA expressed in Chinese hamster ovary cells regulates functional responses to interleukin 1. Curtis BM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3045–9

cDNA sequences of two inducible T–cell genes. Kwon BS, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1963–7

Restricted production of interleukin 4 by activated human T cells. Lewis DB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9743–7

T–cell mitogenesis stimulates the synthesis of a mRNA species coding for a 43–kDa peptide reactive with CM–H–9, a monoclonal antibody specific for placental isoferritin. Moroz C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3282–5

Leukotriene A4, conversion to leukotriene B4 in human T–cell lines. Fu JY, et al. **Prostaglandins** 1988 Aug; 36(2):241–8

Thymic hormones and prostaglandins. I. Lack of stimulation of prostaglandin production by thymic hormones. Homo–Delarche F, et al. **Prostaglandins** 1989 Aug; 38(2):183–96

Production of leukocyte migration inhibition factor (LIF) and migration stimulation factor (MStF) by CD4+ and CD8+ human lymphocytes subsets and T–cell clones. Méndez–Samperio P, et al. **Rev Invest Clin** 1989 Apr–Jun; 41(2):107–15

T–cell chemiluminescence. A novel aspect of T–cell membrane activation studied with a Jurkat tumour cell line. Benichou G, et al. **Scand J Immunol** 1989 Aug;30(2):265–9

Production of gamma interferon in Mls disparate interactions. Goldbach J, et al. **Scand J Immunol** 1988 Nov;28(5):529–35

Increased thymic size and thymocyte interleukin 2 production in androgen–resistant mice. Olsen NJ, et al. **Scand J Immunol** 1989 Jun;29(6):733–8

Structure and function of the erythrocyte receptor CD2 on human T lymphocytes: a review. Sayre PH, et al. **Scand J Rheumatol Suppl** 1988;76:131–44 (47 ref.)

A monoclonal antibody, 7G5 (CD7), induces modulation of Tp40 and inhibits proliferation in the allogeneic and autologous mixed lymphocyte reactions. Lazarovits AI, et al. **Transplant Proc** 1988 Dec;20(6):1253–7

Effect of a novel immunosuppressive agent, FK506, on mitogen–induced inositol phospholipid degradation in rat thymocytes. Fujii Y, et al. **Transplantation** 1989 Jun; 47(6):1081–3

Antigen processing: an interim report. Pierce SK, et al. **Trends Biochem Sci** 1988 Jan;13(1):27–9 (20 ref.)

High affinity interleukin 2 receptors in HTLV–I–infected T cells can mediate signals for gene expression. Sakitani M, et al. **Virus Genes** 1987 Nov;1(1):35–47

[Isolation and characteristics of differentiation factor synthesized by mouse lymphocytes] Bogdanov ME, et al. **Dokl Akad Nauk SSSR** 1989;305(6):1490–4 **(Rus)**

[Immunologic mechanisms of regulating calcium metabolism in human bone tissue (production of osteoclast–activating factor) during long–term anti–orthostatic hypokinesia] Konstantinova IV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):38–42 (Eng. Abstr.) **(Rus)**

[Cytogenetic instability, the ability to produce interferon and immunoreactivity of blood lymphocytes in patients with schizophrenia] Il'inskikh NN, et al. **Tsitologiia** 1989 Apr; 31(4):484–8 (Eng. Abstr.) **(Rus)**

[Interleukin 2–stimulated formation of ATP in T cell particles enriched with plasma membranes] Karelin AA, et al. **Vopr Med Khim** 1989 May–Jun;35(3):120–5 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

HIV replication can be blocked by recombinant human interferon beta. Michaelis B, et al. **Aids** 1989 Jan;3(1):27–31

Characterization of HTLV–I in a T–cell line established from a patient with myelopathy. Nakamura T, et al. **Arch Neurol** 1989 Jan;46(1):35–7

Survival of human immunodeficiency virus in blood culture systems. Hodinka RL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1251–4

Human T–cell leukemia virus minus strand transcription in infected T–cells. Larocca D, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1006–13

A simple assay based on HIV infection preventing the reclustering of MT–4 cells. Szucs G, et al. **Bull WHO** 1988; 66(6):729–37

Authentication of a human lymphoblastoid cell line producing a retrovirus and the infectivity of human T–cell and B–cell lines with the virus. Oda T, et al. **Cell Mol Biol** 1988;34(5):529–37

Characterization of HTLV–I isolates and T lymphoid cell lines derived from French West Indian patients with tropical spastic paraparesis. Gessain A, et al. **Int J Cancer** 1989 Feb 15;43(2):327–33

Flow cytometric method to demonstrate whether anti–HIV–1 agents inhibit virion binding to T4+ cells. Schols D, et al. **J Acquir Immune Defic Syndr** 1989; 2(1):10–5

New antifungal antibiotics, benanomicins A and B inhibit infection of T–cell with human immunodeficiency virus (HIV) and syncytium formation by HIV. Hoshino H, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):344–6

Replication of the human immunodeficiency virus 1 and impaired differentiation of T cells after in vitro infection of bone marrow immature T cells. Lunardi–Iskandar Y, et al. **J Clin Invest** 1989 Feb;83(2):610–5

Mouse thymic virus (MTLV). A mammalian herpesvirus cytolytic for CD4+ (L3T4+) T lymphocytes. Morse SS, et al. **J Exp Med** 1989 Feb 1;169(2):591–6

Coevolution of virulent virus and resistant cells as a mechanism of persistence of herpes simplex virus type 1 in a human T lymphoblastoid cell line. Cummings PJ, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):97–106

Evidence for latency of Japanese encephalitis virus in T lymphocytes. Mathur A, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):461–5

In situ detection of human immunodeficiency virus (HIV) nucleic acid in H9 cells using nonradioactive DNA probes and an image cytophotometry system. Donovan RM, et al. **J Histochem Cytochem** 1988 Dec;36(12):1573–7

Monokine regulation of human immunodeficiency virus–1 expression in a chronically infected human T cell clone. Clouse KA, et al. **J Immunol** 1989 Jan 15;142(2):431–8

Mouse hepatitis virus 3 replication in T and B lymphocytes correlate with viral pathogenicity. Lamontagne L, et al.

J Immunol 1989 Jun 15;142(12):4458–65
MHC and non–MHC genes regulate elimination of lymphocytic choriomeningitis virus and antiviral cytotoxic T lymphocyte and delayed–type hypersensitivity mediating T lymphocyte activity in parallel. Thomsen AR, et al. J Immunol 1989 Feb 15;142(4):1333–41
Measurement of binding specificity between T cell lymphomas and murine leukemia viruses. O'Neill HC, et al. J Immunol Methods 1989 Aug 15;122(1):79–90
Effects of different interferons on the replication of herpes simplex virus in human T lymphocytes. Thiele K, et al. J Interferon Res 1988 Aug;8(4):507–15
Identification of proteins specific for human herpesvirus 6–infected human T cells. Balachandran N, et al. J Virol 1989 Jun;63(6):2835–40
Identification of the SL3–3 virus enhancer core as a T–lymphoma cell–specific element. Boral AL, et al. J Virol 1989 Jan;63(1):76–84
Selectable recombinant herpesvirus saimiri is capable of persisting in a human T–cell line. Grassmann R, et al. J Virol 1989 Apr;63(4):1818–21
The promoter–regulatory region of the major immediate–early gene of human cytomegalovirus responds to T–lymphocyte stimulation and contains functional cyclic AMP–response elements. Hunninghake GW, et al. J Virol 1989 Jul;63(7):3026–33
Infection efficiency of T lymphocytes with amphotropic retroviral vectors is cell cycle dependent. Springett GM, et al. J Virol 1989 Sep;63(9):3865–9
Inhibition of human T–cell leukemia virus type I replication in primary human T cells that express antisense RNA. von Rüden T, et al. J Virol 1989 Feb;63(2):677–82
Clonal T–cell lymphoproliferation containing Epstein–Barr (EB) virus DNA in a patient with chronic active EB virus infection. Ishihara S, et al. Jpn J Cancer Res 1989 Feb; 80(2):99–101
Replication of human immunodeficiency virus in two T–cell lines and their application as antigens for immunofluorescence. Kawatani T, et al. Microbiol Immunol 1988;32(5):491–8
Activation of the GM–CSF promoter by HTLV–I and –II tax proteins. Nimer SD, et al. Oncogene 1989 Jun;4(6):671–6
Regulation of viral expression of human immunodeficiency virus in vitro by an antisense phosphorothioate oligodeoxynucleotide against rev (art/trs) in chronically infected cells. Matsukura M, et al. Proc Natl Acad Sci U S A 1989 Jun;86(11):4244–8
Involvement of a leukocyte adhesion receptor (LFA–1) in HIV–induced syncytium formation. Hildreth JE, et al. Science 1989 Jun 2;244(4908):1075–8
The reservoir for HIV–1 in human peripheral blood is a T cell that maintains expression of CD4 [published erratum appears in Science 1989 Aug 18;245(4919):preceding 694] Schnittman SM, et al. Science 1989 Jul 21;245(4915):305–8
Herpes simplex virus type 2 infection of unstimulated human T–lymphocytes. Kucera LS, et al. Viral Immunol 1989; 2(1):11–6
Host cell resistance to mouse hepatitis virus type 3 is expressed in vitro in macrophages and lymphocytes. Lamontagne L, et al. Viral Immunol 1989;2(1):37–45
MT–4 plaque formation can distinguish cytopathic subtypes of the human immunodeficiency virus (HIV). Tateno M, et al. Virology 1988 Nov;167(1):299–301
Human immunodeficiency virus infection studied in CD4–expressing human–murine T–cell hybrids. Tersmette M, et al. Virology 1989 Feb;168(2):267–73
Tissue specific phenotypes of polyomavirus A and B enhancer transpositions and duplications: positional and nonpositional effects on replication in lymphoid cells. Campbell BA, et al. Virus Genes 1987 Nov;1(1):23–34
[Use of a continuous human T–lymphocyte H9 culture for screening chemical preparations that suppress the reproduction of the human immunodeficiency virus] Nesterchuk SL, et al. Vopr Virusol 1988 Sep–Oct; 33(5):565–9 (Eng. Abstr.) (Rus)

PARASITOLOGY

Theileria parva: reappearance of schizonts in infected lymphoblastoid cells treated with parvaquone is dependent on interleukin 2–like growth factors. Brown WC, et al. Exp Parasitol 1989 Apr;68(3):308–25
Parasite exposure elicits a preferential T–cell response involved in protective immunity against Eimeria species in chickens primed by an internal–image anti–idiotypic antibody. Bhogal BS, et al. Infect Immun 1989 Sep; 57(9):2804–10
Trypanosoma theileri associated with T–lymphocytes isolated from a latently infected cow. Griebel PJ, et al. J Protozool 1989 Jul–Aug;36(4):415–21
Theileria parva (Muguga) infects bovine T–lymphocytes in vivo and induces coexpression of BoT4 and BoT8. Emery DL, et al. Parasite Immunol 1988 Jul;10(4):379–91

PATHOLOGY

The distribution of immunocompetent cells in the compartments of the palatine tonsils in bacterial and viral infections of the upper respiratory tract. Bernstein JM, et al. Acta Otolaryngol Suppl (Stockh) 1988;454:153–62
Plasmacytoid monocytes (so–called plasmacytoid T–cells) in Kikuchi's lymphadenitis. An immunohistologic study. Facchetti F, et al. Am J Clin Pathol 1989 Jul;92(1):42–50
Giant lymph node hyperplasia of the hyaline vascular type with plasmacytoid T–cells and presentation in infancy. Hunt SJ, et al. Am J Clin Pathol 1989 Mar;91(3):344–7
The correlation of mononuclear cell phenotype in endomyocardial biopsies with clinical history and cardiac dysfunction. Kolbeck PC, et al. Am J Clin Pathol 1989 Jan;91(1):37–44
Sjögren's syndrome with specific cutaneous manifestations and multifocal clonal T–cell populations progressing to a cutaneous pleomorphic T–cell lymphoma. van der Valk PG, et al. Am J Clin Pathol 1989 Sep;92(3):357–61
Skin tumor of T accessory cells (interdigitating reticulum cells) with high content of T lymphocytes. Hui PK, et al. Am J Dermatopathol 1987 Apr;9(2):129–37 (43 ref.)
T–cell signet–ring cell proliferation in the skin simulating true histiocytic lymphoma. van der Putte SC, et al. Am J Dermatopathol 1987 Apr;9(2):120–8
Characterization of interstitial infiltrating cells in Berger's disease. Sabadini E, et al. Am J Kidney Dis 1988 Oct; 12(4):307–15
Marrow hypoplasia associated with a monoclonal CD8 large granular lymphocyte proliferation: reversal with cyclophosphamide and prednisone. Lust JA, et al. Am J Med 1989 Aug;87(2):214–7
The nature of the lymphocytes surrounding Reed–Sternberg cells in nodular lymphocyte predominance and in other types of Hodgkin's disease. Poppema S. Am J Pathol 1989 Aug;135(2):351–7
Human nasal polyp epithelial basophil/mast cell and eosinophil colony–stimulating activity. The effect is T–cell–dependent. Ohnishi M, et al. Am Rev Respir Dis 1988 Sep;138(3):560–4
T–cell subsets in peripheral blood of patients with newly diagnosed and posttreatment Hodgkin's and non–Hodgkin's lymphomas. Analysis by monoclonal antibody staining and flow cytometry. De Angelis P, et al. Anal Quant Cytol Histol 1988 Aug;10(4):235–42
Cytologic and flow cytometric DNA analysis of multinucleated tumor cells and derived microcells. Rampoldi E, et al. Anal Quant Cytol Histol 1989 Feb; 11(1):59–66
Identification of T cells in early dermal lymphocytic infiltrates in avian scleroderma. van de Water J, et al. Arthritis Rheum 1989 Aug;32(8):1031–40
Localization of T lymphocytes and macrophages in fibrous and complicated human atherosclerotic plaques. Hansson GK, et al. Atherosclerosis 1988 Aug;72(2–3):135–41
Clinical features and outcome in childhood T–cell leukemia–lymphoma according to stage of thymocyte differentiation: a Pediatric Oncology Group Study. Crist WM, et al. Blood 1988 Dec;72(6):1891–7
Angiocentric immunoproliferative lesions: a clinicopathologic spectrum of post–thymic T–cell proliferations. Lipford EH Jr, et al. Blood 1988 Nov; 72(5):1674–81
Long–term growth of malignant thymocytes in vitro. Smith SD, et al. Blood 1989 Jun;73(8):2182–7
T–cell nonmalignant clonal proliferation in ataxia telangiectasia: a cytological, immunological, and molecular characterization. Stern MH, et al. Blood 1989 Apr; 73(5):1285–90
Immune dysregulation in monoclonal gammopathies. Massaia M, et al. Bone Marrow Transplant 1989 Jan;4 Suppl 1:165–7
Depletion of T cells from bone marrow for allogeneic transplantation: quantitation of lymphocyte subclasses remaining in marrow following depletion [letter] Trigg ME, et al. Bone Marrow Transplant 1989 Jul;4(4):454–5
Prognostic value of spontaneous peripheral blood T–colony forming cells in T–cell acute lymphoblastic leukaemia in complete remission: an update evaluation [letter] Allouche M, et al. Br J Haematol 1989 Jun;72(2):291–3
CD8+ cell–dominant alveolitis in pulmonary sarcoidosis. Yamaguchi E, et al. Chest 1989 Jan;95(1):228–31
Alterations in T–lymphocyte subpopulations in type I diabetes. Exploration of genetic influence in identical twins. Johnston C, et al. Diabetes 1988 Nov;37(11):1484–8
Clonal rearrangement of the T–cell receptor gamma gene associated with a bizarre lymphoproliferative syndrome. Coupe M, et al. Eur J Haematol 1988 Sep;41(3):289–94
Biochemical and immunologic abnormalities in peripheral blood T lymphocytes of patients with hemophilia A. Dianzani U, et al. Eur J Haematol 1988 Oct;41(4):334–40
The chronic proliferative disease of large granular lymphocytes. Bassan R, et al. Haematologica (Pavia) 1989 Jan–Feb;74(1):85–94 (134 ref.)
Peripheral T–cell lymphoma presenting as hemophagocytic syndrome. Chan EY, et al. Hematol Oncol 1989 Jul–Aug; 7(4):275–85
Leu–9 (CD 7) positivity in acute leukemias: a marker of T–cell lineage? Ben–Ezra J, et al. Hematol Pathol 1987; 1(3):147–56
Defective T cell colony formation and IL–2 receptor expression in HIV–infected homosexuals: relationship between functional abnormalities and CD4 cell numbers. Winkelstein A, et al. J Acquir Immune Defic Syndr 1989; 2(4):353–8
An absence of human leukocyte antigen–DR and a decreased expression of beta 2–microglobulin on tumor cells of basal cell carcinoma: no influence on the peritumoral immune infiltrate. Habets JM, et al. J Am Acad Dermatol 1989 Jan; 20(1):47–52
Use of monoclonal antibodies (UCHL1, Ki–B3) against T and B cell antigens in routine paraffin–embedded skin biopsy specimens. Sterry W, et al. J Am Acad Dermatol 1989 Jul;21(1):98–107
Demonstration of clonal proliferation of T lymphocytes in early neoplastic disease. Studies with probes for the beta–chain of the T cell receptor and human T cell lymphotropic virus type I. Tanaka T, et al. J Am Acad Dermatol 1989 Aug;21(2 Pt 1):218–23
Trisomy 21 (Down's syndrome): autoimmunity, aging and monoclonal antibody–defined T–cell abnormalities. Rabinowe SL, et al. J Autoimmun 1989 Feb;2(1):25–30
Picking winners and losers in diffuse small–cell lymphomas [editorial] Fisher RI. J Clin Oncol 1989 Aug;7(8):991–2
Numbers of host "helper" T cells and proliferating cells predict survival in diffuse small–cell lymphomas. Medeiros LJ, et al. J Clin Oncol 1989 Aug;7(8):1009–17
Mature T–lineage leukemia with growth factor–induced multilineage differentiation. Griesinger F, et al. J Exp Med 1989 Mar 1;169(3):1101–20
Absence of RT6+ T cells in diabetes–prone biobreeding/Worcester rats is due to genetic and cell developmental defects. Angelillo M, et al. J Immunol 1988 Dec 15;141(12):4146–51
Delayed thymocyte maturation in the trisomy 16 mouse fetus. Berger CN, et al. J Immunol 1989 Jul 15;143(2):389–96
Lymphocyte entry into inflammatory tissues in vivo. Qualitative differences of high endothelial venule–like vessels in sponge matrix allografts vs isografts. Bishop DK, et al. J Immunol 1989 Jun 15;142(12):4219–24
The relationship between infiltrating CD4+ lymphocytes, activated eosinophils, and the magnitude of the allergen–induced late phase cutaneous reaction in man. Frew AJ, et al. J Immunol 1988 Dec 15;141(12):4158–64
T cell development in B cell deficient mice. III. Restriction specificity of suppressor T cell factor(s) produced in mice treated chronically with rabbit anti–mouse mu chain antibody. HayGlass KT, et al. J Mol Cell Immunol 1985; 2(2):107–17
T cell lines established from multiple sclerosis cerebrospinal fluid T cells using human retroviruses. Merrill JE, et al. J Neuroimmunol 1989 Feb;21(2–3):213–26
Plasmacytoid T cells in a case of lymphocytic infiltration of skin. A component of the skin–associated lymphoid tissue? Facchetti F, et al. J Pathol 1988 Aug;155(4):295–300
Plasmacytoid monocytes (so–called plasmacytoid T cells) in Hodgkin's disease. Facchetti F, et al. J Pathol 1989 May; 158(1):57–65
A strategy for demonstrating the clonal origin of small numbers of T lymphocytes in histopathological specimens. Goudie RB. J Pathol 1989 Jul;158(3):261–5
A case of chronic myelogenous leukemia with T lymphoblastic and megakaryoblastic mixed crisis. Iwamasa K, et al. Jpn J Med 1989 Jan–Feb;28(1):89–95
In vitro amplification of T cell gamma gene rearrangements: a new tool for the assessment of minimal residual disease in acute lymphoblastic leukemias. d'Auriol L, et al. Leukemia 1989 Feb;3(2):155–8
Acute lymphoblastic leukemia with the 4;11 translocation exhibiting early T cell features. Lo Coco F, et al. Leukemia 1989 Jan;3(1):79–82
Immunohistologic pattern of the portal T–lymphocyte infiltration in hepatic allograft rejection. Perkins JD, et al. Mayo Clin Proc 1989 May;64(5):565–9
HLA–DR–expressing cells and T–lymphocytes in sural nerve biopsies. Schrøder HD, et al. Muscle Nerve 1988 Aug; 11(8):864–70
Immunohistochemical and in vitro functional analysis of pineal–germinoma infiltrating lymphocytes: report of a case. Sawamura Y, et al. Neurosurgery 1989 Sep; 25(3):454–7; discussion 457–8
Angio–immunoblastic lymphadenopathy (AIL) or T–cell malignant lymphoma of AIL–type. A histopathological, immunohistochemical and ultrastructural study of 8 cases. Caulet S, et al. Pathol Res Pract 1988 Nov;183(6):724–34
Oligoclonal T cell proliferative disorder in combined immunodeficiency. Frenkel J, et al. Pediatr Res 1988 Nov; 24(5):622–7
Senescence of T cells: a potential consequence of the Maillard reaction? Miller RA. Prog Clin Biol Res 1989;304:249–57 (30 ref.)
Modulation of lymphocytic infiltrates in C4 mouse mammary tumors. Wei WZ, et al. Prog Clin Biol Res 1989;288:195–9
T cell clones in rheumatoid arthritis (RA). Hain N, et al. Scand J Rheumatol Suppl 1988;76:145–52 (37 ref.)
Induction of stable chimerism and elimination of graft–versus–host disease by depletion of T lymphocytes from bone marrow using immunomagnetic beads. Hoffman AL, et al. Surgery 1989 Aug;106(2):354–63
Studies on chromosome aberrations of peripheral T lymphocytes in cadaveric kidney allograft recipients. Ding Z. Transplant Proc 1989 Feb;21(1 Pt 3):3205–8
[Langerhans cells and T lymphocytes in dysplasia and cancer of the uterine cervix. An immunohistochemical study] Chomette G, et al. Arch Anat Cytol Pathol 1988; 36(5–6):212–7 (Eng. Abstr.) (Fre)
[Macrophage–lymphocyte alveolitis in pulmonary sarcoidosis. The role of T–lymphocytes and alveolar macrophages in the pathogenesis and monitoring of this disease] Rossi GA, et al. Rev Mal Respir 1988;5(5):511–8 (68 ref.) (Eng. Abstr.) (Fre)
[B– and T–lymphocyte compartments in the spleen in idiopathic thrombocytopenic purpura] Arendt T, et al.

Folia Haematol (Leipz) 1988;115(5):711–8 (Eng. Abstr.) (Ger)

[Carcinoma spinocellulare and cutaneous T-cell lymphomas] Brüngger A, et al. Hautarzt 1989 Apr;40(4):203–7 (Eng. Abstr.) (Ger)

[Retrospective marker analyses performed with blood and bone marrow smears using an immunoenzyme procedure (alkaline phosphatase-anti-alkaline phosphatase technic)] Ebener U, et al. Klin Padiatr 1989 Jul–Aug;201(4):242–6 (Eng. Abstr.) (Ger)

[Cytophagic histiocytic panniculitis—a T cell disorder with proliferation of macrophages?] Iwasaki M, et al. Nippon Hifuka Gakkai Zasshi 1988 Nov;98(12):1235–47 (34 ref.) (Eng. Abstr.) (Jpn)

[Electron microscopy and electron autoradiography examinations of the palatine tonsils in relation to age] Tokhadze TL, et al. Vestn Otorinolaringol 1988 May–Jun; (3):39–42 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Effect of supernatants of dermal leprosy granulomas on lymphocyte morphology and function. Narayanan RB, et al. Acta Leprol (Geneve) 1988 Jan–Mar;(108):17–27

A study on graft-versus-host reaction (GVHR) by Simonsen's splenomegaly assay. Cells and antigen systems involved in induction of GVHR. Onoé K, et al. Acta Pathol Jpn 1989 Feb;39(2):101–10

Impact of IgD receptor-positive T cells on the immune response. Coico RF, et al. Adv Exp Med Biol 1988; 237:861–70

Role of immunocompetent cells in the regulation of human megakaryocytopoiesis in vitro. Detrick RA, et al. Adv Exp Med Biol 1988;241:199–215

Exogenous and endogenous regulations of human megakaryocytopoiesis. Gewirtz AM. Adv Exp Med Biol 1988;241:149–64

Reversibility of loss of homing receptor expression following activation. Jung TM, et al. Adv Exp Med Biol 1988; 237:519–24

Homing receptor expression in grafts of purified thymic epithelium. Perry GA, et al. Adv Exp Med Biol 1988; 237:345–9

The binding of antigen presenting cells to T lymphocytes. Steinman RM, et al. Adv Exp Med Biol 1988;237:31–41 (56 ref.)

The effects of bacterial lipopolysaccharide (LPS) on high endothelial venules, T lymphocytes and interdigitating cells in mouse lymph nodes. Twisk AJ, et al. Adv Exp Med Biol 1988;237:807–11

Malignant chronic lymphocytic leukemia B cells elaborate soluble factors that down-regulate T cell and NK function. Burton JD, et al. Am J Hematol 1989 Feb;30(2):61–7

T cell up-regulation of B cells via their idiotypes contributing to the development of systemic lupus erythematosus. A hypothesis. Hahn BH, et al. Am J Med 1988 Dec 23; 85(6A):32–4

Opioid receptors on murine splenocytes. Possible coupling to K+ channels. Carr DJ, et al. Ann N Y Acad Sci 1988; 540:694–7

Generation and analysis of a T-lymphocyte somatic mutant for studying molecular aspects of signal transduction by the antigen receptor. Goldsmith MA, et al. Ann N Y Acad Sci 1988;546:91–103 (31 ref.)

Membrane structures involved in the proliferation and differentiation of T-cell precursors. Larocca LM, et al. Ann N Y Acad Sci 1988;551:378–9

Neuroleukin secretion is highly regulated in T cells but constitutive in C6 glioma cells. Spear GT, et al. Ann N Y Acad Sci 1988;540:407–8

Developmental biology of T lymphocytes. Deletion of autoreactive T cells and impact of the alpha, beta receptor on the CD4/CD8 phenotype. von Boehmer H, et al. Ann N Y Acad Sci 1988;546:104–8 (11 ref.)

Immunity to Brucella abortus induced in mice by popliteal lymph node restricted strain 19 vaccination. Plommet M, et al. Ann Rech Vet 1989;20(1):73–81

An immuno-electron microscopic study on interactions among dendritic cells, macrophages and lymphocytes in the human palatine tonsil. Okato S, et al. Arch Histol Cytol 1989 Jul;52(3):231–40

Relative and absolute numbers of T lymphocyte subpopulations and NK cells in male population in relation to age. Zeman K, et al. Arch Immunol Ther Exp (Warsz) 1988;36(6):673–7

T cell regulated hematopoiesis—molecular interactions in hematopoietic control by CD2 and interleukin 2. Burdach S, et al. Behring Inst Mitt 1988 Aug;(83):56–67

Mechanism of regulating human leukemia cell growth and differentiation by a lymphokine. Chiao JW, et al. Biochem Biophys Res Commun 1989 Jun 15;161(2):583–8

Phosphorylation of two cytosolic proteins. An early event of T-cell activation. Peyron JF, et al. Biochem J 1989 Mar 1;258(2):505–10

TEA prevents inactivation while blocking open K+ channels in human T lymphocytes. Grissmer S, et al. Biophys J 1989 Jan;55(1):203–6

Immunophenotypic and cytogenetic analysis of Molt-3 and Molt-4: human T-lymphoid cell lines with rearrangement of chromosome 7. Greenberg JM, et al. Blood 1988 Nov; 72(5):1755–60

Rearrangement and expression of T-cell receptor delta genes in T-cell acute lymphoblastic leukemias. van Dongen JJ, et al. Blood 1989 Jul;74(1):334–42

In vitro inhibition of normal human hematopoiesis by marrow CD3+, CD8+, HLA-DR+, HNK1+ lymphocytes. Vinci G, et al. Blood 1988 Nov;72(5):1616–21

Antigen specificity and function of human T lymphocyte clones reactive with mycobacteria. Lamb JR, et al. Br Med Bull 1988 Jul;44(3):600–10 (34 ref.)

Brain modulation of the immune system: association between lymphocyte responsiveness and paw preference in mice. Neveu PJ, et al. Brain Res 1988 Aug 9;457(2):392–4

Immunoregulation of murine plasmacytoma. II. Target selectivity of anomalous killer cells and role of immune T cells for the induction. Hayashida I, et al. Cancer Invest 1989;7(1):27–38

Intervention of T-cells in transportation of mouse mammary tumor virus (milk factor) to mammary gland cells in vivo. Tsubura A, et al. Cancer Res 1988 Nov 15;48(22):6555–9

Expression of a hybrid immunoglobulin-T cell receptor protein in transgenic mice. Becker ML, et al. Cell 1989 Sep 8;58(5):911–21

T cell function and expression are dramatically altered in T cell receptor V gamma 1.1J gamma 4C gamma 4 transgenic mice. Ferrick DA, et al. Cell 1989 May 5; 57(3):483–92

Role of the octamer motif in hybrid cell extinction of immunoglobulin gene expression: extinction is dominant in a two enhancer system. Yu H, et al. Cell 1989 Aug 11; 58(3):441–8

Restoration of T-cell function in nude mice by grafting the epitheliomesenchymal thymic rudiment from 10-day-old euthymic embryos. Khazaal I, et al. Cell Differ Dev 1989 May;26(3):211–20

Accessory cell function of human melanoma cells in mitogen-induced T cell proliferation. Cordiali-Fei P, et al. Cell Immunol 1988 Oct 1;116(1):149–62

Interleukin-1-independent activation of human T lymphocytes stimulated by anti-CD3 and a Hodgkin's disease cell line with accessory cell activity. Ellis TM, et al. Cell Immunol 1988 Oct 15;116(2):352–66

Regulation of HLA-DR, DP, and DQ expression in activated T cells. Gansbacher B, et al. Cell Immunol 1988 Nov; 117(1):22–34

B cell dependent T cell function blocked by perinatal exposure of mice to anti-IgM antibodies. Gordon J, et al. Cell Immunol 1989 Jun;121(1):125–33

Immunohistological analysis of immigration of thymocyte-precursors into the thymus: evidence for immigration of peripheral T cells into the thymic medulla. Hirokawa K, et al. Cell Immunol 1989 Mar;119(1):160–70

T-cells inhibit Friend murine leukemia virus infection of B-cells in vitro. Isaak DD, et al. Cell Immunol 1989 May; 120(2):375–86

Suppression of B cell responses by natural killer cells is mediated through direct effects on T cells. Katz P, et al. Cell Immunol 1989 Mar;119(1):130–42

A phenotypic and functional analysis of long-lived B and T lymphocytes. Levy M, et al. Cell Immunol 1988 Dec; 117(2):327–38

A role for L3T4+ T cells and their lymphokines in the generation of suppressor effector (TS3) cells. O'Hara RM Jr, et al. Cell Immunol 1988 Oct 15;116(2):423–38

Regulatory role of monomorphic and polymorphic determinants of HLA class I antigens in the proliferation of T cells stimulated by autologous and allogeneic B and T lymphoid cells. Santoli D, et al. Cell Immunol 1988 Oct 15;116(2):263–73

Monoclonal antibody internalization and degradation during modulation of the CD3/T-cell receptor complex. Schaffar L, et al. Cell Immunol 1988 Oct 1;116(1):52–9

CD3Ti+ human thymocyte-derived clones displaying a differential response to activation via CD3Ti and CD2. Testi R, et al. Cell Immunol 1989 Sep;122(2):350–64

Adherence of alloreactive lymphocytes to human arterial endothelial cell monolayers. Colson YL, et al. Clin Exp Immunol 1989 Aug;77(2):206–10

The recruitment of lymphocytes into the skin by T cell lymphokines: the role of gamma-interferon. Issekutz TB, et al. Clin Exp Immunol 1988 Jul;73(1):70–5

Modulation of monocyte complement synthesis by lymphocytes and lymphocyte-conditioned media. Lappin D, et al. Clin Exp Immunol 1989 Apr;76(1):86–91

Interleukin 1 derived from human endothelial cells enhances the binding and chemotactic step of T lymphocyte emigration. Miossec P, et al. Clin Exp Immunol 1988 Aug; 73(2):250–4

Induction of macrophage membrane interleukin 1 expression by T-cell dependent and T-cell independent pathways is inhibited by cyclosporin A. Wasik MA, et al. Clin Immunol Immunopathol 1989 Aug;52(2):331–40

Phylogeny of lymphocyte heterogeneity: the thymus of the channel catfish. Ellsaesser CF, et al. Dev Comp Immunol 1988 Fall;12(4):787–99

T-lymphocyte dysfunction in the elderly associated with zinc deficiency and subnormal nucleoside phosphorylase activity: effect of zinc supplementation. Cossack ZT. Eur J Cancer Clin Oncol 1989 Jun;25(6):973–6

Cell-mediated inhibition of granulopoiesis in vitro in patients with acute myeloid leukemia in remission. Sallerfors B, et al. Eur J Haematol 1989 Feb;42(2):164–72

Concomitant production of different lymphokines in activated T cells. Andersson U, et al. Eur J Immunol 1988 Dec;18(12):2081–4

Collagen receptor on T lymphocytes and the control of lymphocyte motility. Arencibia I, et al. Eur J Immunol 1989 May;19(5):929–34

A monoclonal antibody to LFA-3, the CD2 ligand, specifically immobilizes major histocompatibility complex proteins. Bierer BE, et al. Eur J Immunol 1989 Apr; 19(4):661–5

Cyclic AMP-mediated alteration of the CD2 activation process in human T lymphocytes. Preferential inhibition of the phosphoinositide cycle-related transduction pathway. Bismuth G, et al. Eur J Immunol 1988 Sep; 18(9):1351–7

Evidence that protein kinase C differentially regulates the human T lymphocyte CD2 and CD3 surface antigens. Cantrell DA, et al. Eur J Immunol 1988 Sep;18(9):1391–6

Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on human T lymphocytes. Chang HC, et al. Eur J Immunol 1989 Jun;19(6):1045–51

Rearranging sequence located in the intron of the human T cell receptor gamma chain gene constant region. Chen Z, et al. Eur J Immunol 1989 Apr;19(4):637–42

Most human CD3+WT31- clones with T cell receptor C gamma 1 rearrangements show strong non-MHC-restricted cytotoxic activity in contrast to those with C gamma 2 rearrangements. Christmas SE. Eur J Immunol 1989 Apr;19(4):741–6

Stable expression of the cDNA encoding the human T lymphocyte-specific CD2 antigen in murine L cells. Clipstone NA, et al. Eur J Immunol 1988 Oct;18(10):1541–5

Acceleration of the onset of diabetes in NOD mice by thymectomy at weaning. Dardenne M, et al. Eur J Immunol 1989 May;19(5):889–95

Selective production of interleukin 3 (IL3) and granulocyte-macrophage colony-stimulating factor (GM-CSF) in vitro by murine L3T4+ T cells: lack of spontaneous IL3 and GM-CSF production by Ly-2-/L3T4- lpr subset. Davignon JL, et al. Eur J Immunol 1988 Sep;18(9):1367–72

Morphologic and functional characterization of human peripheral blood T cells expressing the T cell receptor gamma/delta. Ferrini S, et al. Eur J Immunol 1989 Jul; 19(7):1183–8

Increased cyclic AMP levels block interleukin 2-induced protein kinase C substrate phosphorylation but not the mitogenic response. Friedrich B, et al. Eur J Immunol 1989 Jun;19(6):1111–6

Thymocyte development: an analysis of T cell receptor gene expression in 519 newborn thymocyte hybridomas. Happ MP, et al. Eur J Immunol 1989 Jul;19(7):1317–25

Antigen-independent activation of T cells mediated by a novel cell surface heterodimer (Tp135–145). Isler P, et al. Eur J Immunol 1988 Oct;18(10):1491–8

Regulatory effects of human IgE-binding factors in the IgE synthesis by human and rat lymphocytes. Kisaki T, et al. Eur J Immunol 1988 Nov;18(11):1663–70

Complex Ca2+ flux inhibition as primary mechanism of staurosporine-induced impairment of T cell activation. Kubbies M, et al. Eur J Immunol 1989 Aug;19(8):1393–8

The effects of anti-CD2 antibodies on the differentiation of mouse thymocytes. Kyewski BA, et al. Eur J Immunol 1989 May;19(5):951–4

Antibodies against the T cell receptor/CD3 complex interfere with distinct intra-thymic cell-cell interactions in vivo: correlation with arrest of T cell differentiation. Kyewski BA, et al. Eur J Immunol 1989 May;19(5):857–63

Role of CD2 cross-linking in cytoplasmic calcium responses and T cell activation. Ledbetter JA, et al. Eur J Immunol 1988 Oct;18(10):1601–8

Unusual expression of CD2 in sheep: implications for T cell interactions. Mackay CR, et al. Eur J Immunol 1988 Nov; 18(11):1681–8

Age-associated increase in the expression of T cell antigen receptor gamma chain genes in mice. Matsuzaki G, et al. Eur J Immunol 1988 Nov;18(11):1779–84

Lymphokine mRNA and T cell multireceptor mRNA of the Ig super gene family are reciprocally modulated during human T cell activation. Paillard F, et al. Eur J Immunol 1988 Oct;18(10):1643–6

Thymocyte clones from 14-day mouse embryos. II. Transcription of T3 gamma gene may precede rearrangement of TcR delta and expression of T3 delta, T3 epsilon and T11 genes. Pelkonen J, et al. Eur J Immunol 1988 Sep;18(9):1337–41

T lymphocyte heterogeneity in old and young mice: functional defects in T cells selected for poor calcium signal generation. Philosophe B, et al. Eur J Immunol 1989 Apr; 19(4):695–9

Interleukin 1 and tumor necrosis factor enhance transcription from the SV40 early promoter in a T cell line. Plaetinck G, et al. Eur J Immunol 1989 May;19(5):897–904

Prostaglandin E2 and the increase of intracellular cAMP inhibit the expression of interleukin 2 receptors in human T cells. Rincón M, et al. Eur J Immunol 1988 Nov; 18(11):1791–6

Induction of T cell function via the gp33/27 activation inducer molecule (AIM) requires co-expression of the CD3/TcR complex. Rincón M, et al. Eur J Immunol 1989 May;19(5):959–62

Interleukin 2 receptor expression and interleukin 2 production in exponentially growing T cells: major differences between in vivo and in vitro proliferating T lymphocytes.

Rocha B, et al. **Eur J Immunol** 1989 Jun;19(6):1137–45
Peripheral T lymphocytes: expansion potential and homeostatic regulation of pool sizes and CD4/CD8 ratios in vivo. Rocha B, et al. **Eur J Immunol** 1989 May; 19(5):905–11
Loss of interleukin 2 dependence in cloned interleukin 2–dependent rat T lymphocyte x BW5147 hybridomas is not associated with segregation of a specific pair of rat chromosomes. Somoza C, et al. **Eur J Immunol** 1989 Jul; 19(7):1177–81
Coordinated V gamma and V delta gene segment rearrangements in human T cell receptor gamma/delta+ lymphocytes. Sturm E, et al. **Eur J Immunol** 1989 Jul; 19(7):1261–5
A novel human V delta gene expressed predominantly in the Ti gamma A fraction of gamma/delta+ peripheral lymphocytes. Triebel F, et al. **Eur J Immunol** 1988 Dec; 18(12):2021–7
Human T cells and interleukin 4 inhibit the release of interleukin 1 induced by lipopolysaccharide in serum–free cultures of autologous monocytes. Weiss L, et al. **Eur J Immunol** 1989 Jul;19(7):1347–50
T–cell depletion by monoclonal antibodies does not prevent granuloma formation in mice. Pincelli C, et al. **Exp Cell Biol** 1988;56(5):229–35
Human T lymphocytes possess a limited in vitro life span. Perillo NL, et al. **Exp Gerontol** 1989;24(3):177–87
Regulation of T–lymphopoiesis by arachidonic acid metabolites. Miller AM, et al. **Exp Hematol** 1989 Feb; 17(2):198–202
Trypanosoma musculi: characterization of the T–lymphocyte dependency of immunity by selective immunomodulation of the mouse, Mus musculus. House RV, et al. **Exp Parasitol** 1988 Oct;67(1):104–15
Ontogeny of T lymphocytes in the pig. Trebichavský I, et al. **Folia Microbiol (Praha)** 1988;33(4):329–31
Neuroendocrinology of the thymus. Geenen V, et al. **Horm Res** 1989;31(1–2):81–4 (39 ref.)
Expression of Ly–6A/E alloantigens in thymocyte and T–lymphocyte subsets: variability related to the Ly–6a and Ly–6b haplotypes. Codias EK, et al. **Immunogenetics** 1989; 29(2):98–107
The antigen receptor of an autoreactive T–cell clone from human rheumatic synovia. Hinkkanen AE, et al. **Immunogenetics** 1989;29(2):131–3
Expression of the Q8/9d gene by T cells of the mouse. Matsuura A, et al. **Immunogenetics** 1989;30(3):156–61
Identification of multiple isoforms of the low–affinity human IgG Fc receptor. Seki T. **Immunogenetics** 1989;30(1):5–12
Functional characteristics of 197+ CD4– CD8– sheep T lymphocytes: expansion and differentiation of peripheral T cells. McClure SJ, et al. **Immunol Cell Biol** 1989 Aug; 67 (Pt 4):223–31
Prethymic and intrathymic mouse T–cell progenitors. Growth requirements and analysis of the expression of genes encoding TCR/T3 components and other T–cell–specific molecules. Palacios R, et al. **Immunol Rev** 1988 Aug;104:5–27 (80 ref.)
Molecular indices of functional competence in developing T cells. Rothenberg EV, et al. **Immunol Rev** 1988 Aug; 104:29–53 (88 ref.)
Developmental status and reconstitution potential of subpopulations of murine thymocytes. Scollay R, et al. **Immunol Rev** 1988 Aug;104:81–120 (71 ref.)
Human T–cell precursors: involvement of the IL–2 pathway in the generation of mature T cells. Toribio ML, et al. **Immunol Rev** 1988 Aug;104:55–79 (139 ref.)
Molecular and functional properties of novel T cell subsets in C3H–gld/gld and nude mice. Implications for thymic and extrathymic maturation. Yui K, et al. **Immunol Rev** 1988 Aug;104:121–55 (92 ref.)
Transmembrane signals in the activation of T lymphocytes by mitogenic antigens. Hadden JW. **Immunol Today** 1988 Jul–Aug;9(7–8):235–9 (25 ref.)
Ontogeny of T–cell precursors: a model for the initial stages of human T–cell development. Haynes BF, et al. **Immunol Today** 1989 Mar;10(3):87–91
The transcapsular route: a new way for (self–) antigens to by–pass the blood–thymus barrier? Nieuwenhuis P, et al. **Immunol Today** 1988 Dec;9(12):372–5 (23 ref.)
Adhesion of T and B lymphocytes to fibroblasts in tissue culture. Abraham D, et al. **Immunology** 1988 Nov; 65(3):385–92
The role of T cells in mouse cytomegalovirus myocarditis. Lawson CM, et al. **Immunology** 1989 May;67(1):132–4
Adoptively transferred experimental allergic encephalomyelitis in chimeric rats: identification of transferred cells in the lesions of the central nervous system. Matsumoto Y, et al. **Immunology** 1988 Sep;65(1):23–9
A diffusible lymphokine produced by CD8+ T lymphocytes suppresses HIV replication. Walker CM, et al. **Immunology** 1989 Apr;66(4):628–30
A multifunctional cytokine (IL–6/BSF–2) and its receptor. Hirano T, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):29–33 (33 ref.)
Antigen–specific lymphocyte clone elimination and reappearance in guinea pigs using 125I–labelled horse serum albumin. Pongrácz J, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):260–2
Allergen–specific human T cell clones: derivation, specificity, and activation requirements. Gurka G, et al. **J Allergy Clin Immunol** 1989 May;83(5):945–54
T–cell functional defects in rheumatoid arthritis: intrinsic or extrinsic? Kitas GD, et al. **J Autoimmun** 1988 Aug; 1(4):339–51
Analysis of electrophoretic mobility histograms of mouse splenocytes and thymocytes during tumor growth and after combined chemotherapy and immunotherapy. Iwaguchi T, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):157–66
Identification and characterization of the T lymphocyte adhesion receptor for an alternative cell attachment domain (CS–1) in plasma fibronectin. Wayner EA, et al. **J Cell Biol** 1989 Sep;109(3):1321–30
Functional immunoregulatory T–cell abnormalities in cystic fibrosis patients. Lahat N, et al. **J Clin Immunol** 1989 Jul; 9(4):287–95
Regulation of IgE synthesis in humans. Vercelli D, et al. **J Clin Immunol** 1989 Mar;9(2):75–83 (81 ref.)
The nylon wool adherence of rat mononuclear cells: physical, chemical and biological influences. McFadden RG. **J Clin Lab Immunol** 1988 Aug;26(4):201–8
Isolation and characterization of (gamma, delta) CD4+ T cell clones derived from human fetal liver cells. Aparicio P, et al. **J Exp Med** 1989 Sep 1;170(3):1009–14
Synergistic T cell activation via the physiological ligands for CD2 and the T cell receptor. Bierer BE, et al. **J Exp Med** 1988 Sep 1;168(3):1145–56
Triggering of T cell proliferation through AIM, an activation inducer molecule expressed on activated human lymphocytes. Cebrián M, et al. **J Exp Med** 1988 Nov 1; 168(5):1621–37
Dissection of the human CD2 intracellular domain. Identification of a segment required for signal transduction and interleukin 2 production. Chang HC, et al. **J Exp Med** 1989 Jun 1;169(6):2073–83
Lineage–specific expression of a T cell receptor variable gene promoter controlled by upstream sequences. Diamond DJ, et al. **J Exp Med** 1989 Apr 1;169(4):1213–31
Correlation of CD2 binding and functional properties of multimeric and monomeric lymphocyte function–associated antigen 3. Dustin ML, et al. **J Exp Med** 1989 Feb 1;169(2):503–17
Cytokines in chronic inflammatory arthritis. I. Failure to detect T cell lymphokines (interleukin 2 and interleukin 3) and presence of macrophage colony–stimulating factor (CSF–1) and a novel mast cell growth factor in rheumatoid synovitis. Firestein GS, et al. **J Exp Med** 1988 Nov 1; 168(5):1573–86
Co–internalization of the p55 and p70 subunits of the high–affinity human interleukin 2 receptor. Evidence for a stable ternary receptor complex. Fung MR, et al. **J Exp Med** 1988 Nov 1;168(5):1923–8
In situ hybridization for interleukin 2 and interleukin 2 receptor mRNA in T cells activated in the presence or absence of cyclosporin A. Granelli–Piperno A. **J Exp Med** 1988 Nov 1;168(5):1649–58
Heterogeneity of lymphocyte calcium metabolism is caused by T cell–specific calcium–sensitive potassium channel and sensitivity of the calcium ATPase pump to membrane potential. Ishida Y, et al. **J Exp Med** 1988 Sep 1; 168(3):839–52
The SJL/J T cell response to both spontaneous and transplantable syngeneic reticulum cell sarcoma is mediated predominantly by the V beta 17a+ T cell clonotype. Katz JD, et al. **J Exp Med** 1988 Nov 1;168(5):1553–62
Predominant variable region gene usage by gamma/delta T cell receptor–bearing cells in the adult thymus. Korman AJ, et al. **J Exp Med** 1988 Sep 1;168(3):1021–40
Rare peripheral T cells migrate to and persist in normal mouse thymus. Michie SA, et al. **J Exp Med** 1988 Nov 1;168(5):1929–34
Direct evidence for binding of CD8 to HLA class I antigens. Rosenstein Y, et al. **J Exp Med** 1989 Jan 1;169(1):149–60
Postnatal disappearance of self–reactive (V beta 6+) cells from the thymus of Mlsa mice. Implications for T cell development and autoimmunity. Schneider R, et al. **J Exp Med** 1989 Jun 1;169(6):2149–58
Diversity and structure of human T cell receptor delta chain genes in peripheral blood gamma/delta–bearing T lymphocytes. Takihara Y, et al. **J Exp Med** 1989 Feb 1; 169(2):393–405
Cloning and characterization of a cDNA for a new mouse T cell growth factor (P40). Van Snick J, et al. **J Exp Med** 1989 Jan 1;169(1):363–8
Role of CD4 in thymocyte selection and maturation. Zuñiga–Pflücker JC, et al. **J Exp Med** 1989 Jun 1; 169(6):2085–96
Induction of aggregation and enhancement of proliferation and IL–2 secretion in human T cells by antibodies to CD43. Axelsson B, et al. **J Immunol** 1988 Nov 1;141(9):2912–7
A role for the thymic epithelium in the selection of pre–T cells from murine bone marrow. Bauvois B, et al. **J Immunol** 1989 Aug 15;143(4):1077–86
The expression of T cell receptor–associated proteins during T cell ontogeny in man. Campana D, et al. **J Immunol** 1989 Jan 1;142(1):57–66
Alpha beta T cell receptor and CD3 transduce different signals in immature T cells. Implications for selection and tolerance. Finkel TH, et al. **J Immunol** 1989 May 1; 142(9):3006–12
Developmental potential of CD4–8– thymocytes. Peripheral progeny include mature CD4–8– T cells bearing alpha beta T cell receptor. Guidos CJ, et al. **J Immunol** 1989 Jun 1;142(11):3773–80
Immature and advanced patterns of T cell receptor gene rearrangement among lymphocytes in splenic culture. Hurwitz JL, et al. **J Immunol** 1989 Apr 1;142(7):2533–9
Calcium–dependent killing of immature thymocytes by stimulation via the CD3/T cell receptor complex. McConkey DJ, et al. **J Immunol** 1989 Sep 15;143(6):1801–6
The cell cycle block and lysis of an activated T cell hybridoma are distinct processes with different Ca2+ requirements and sensitivity to cyclosporine A. Mercéep M, et al. **J Immunol** 1989 Jun 1;142(11):4085–92
Is a natural ligand of the T lymphocyte CD2 molecule a sulfated carbohydrate? Parish CR, et al. **J Immunol** 1988 Nov 15;141(10):3498–504
Engagement of CD4 and CD8 accessory molecules is required for T cell maturation. Ramsdell F, et al. **J Immunol** 1989 Apr 1;142(7):1467–71
IL–1 as adjuvant. Role of T cells in the augmentation of specific antibody production by recombinant human IL–1 alpha. Reed SG, et al. **J Immunol** 1989 May 1; 142(9):3129–33
A functional role for signal transduction via the cytoplasmic domains of MHC class II proteins. St–Pierre Y, et al. **J Immunol** 1989 Aug 1;143(3):808–12
Characterization of lymphokines mediating B cell growth and differentiation from monoclonal anti–CD3 antibody–stimulated T cells. Sherris D, et al. **J Immunol** 1989 Apr 1;142(7):2343–51
IL–2 secretion is pertussis toxin sensitive in a T lymphocyte hybridoma. Stanley JB, et al. **J Immunol** 1989 May 15; 142(10):3546–52
Correlation between the biologic functions and the generation of lymphokines in T cell clones. Tartakovsky B, et al. **J Immunol** 1989 Apr 15;142(8):2695–701
Precursor immigration and thymocyte succession during larval development and metamorphosis in Xenopus. Turpen JB, et al. **J Immunol** 1989 Jan 1;142(1):41–7
Effect of IL–7 on the growth of fetal thymocytes in culture. Watson JD, et al. **J Immunol** 1989 Aug 15;143(4):1215–22
Characterization of cells comprising murine thymocyte multicellular complexes. Wood GW, et al. **J Immunol** 1988 Oct 1;141(7):2221–9
Specific assays for cytokine production by T cells. Mosmann TR, et al. **J Immunol Methods** 1989 Jan 17;116(2):151–8
Lymphocyte adhesion to psoriatic dermal endothelium is mediated by a tissue–specific receptor/ligand interaction. Sackstein R, et al. **J Invest Dermatol** 1988 Nov;91(5):423–8
In vitro migration of L3T4+ cloned T cells to epidermis: possible role for keratinocyte–derived factors. Shiohara T, et al. **J Invest Dermatol** 1989 Mar;92(3):360–5
Interactions between endogenous glucocorticoids and inflammatory responses in normal and tumor–bearing mice: role of T cells. Normann S, et al. **J Leukoc Biol** 1988 Dec; 44(6):551–8
Peptides of myelin basic protein stimulate T lymphocytes from patients with multiple sclerosis. Baxevanis CN, et al. **J Neuroimmunol** 1989 Mar;22(1):23–30
Infiltration of immune T cells in the brain of mice with herpes simplex virus–induced encephalitis. Chan WL, et al. **J Neuroimmunol** 1989 Aug;23(3):195–201
Functional study of T lymphocyte responsiveness in patients with dementia of the Alzheimer type. Leonardi A, et al. **J Neuroimmunol** 1989 Mar;22(1):19–22
Flavivirus infection up–regulates the expression of class I and class II major histocompatibility antigens on and enhances T cell recognition of astrocytes in vitro. Liu Y, et al. **J Neuroimmunol** 1989 Feb;21(2–3):157–68
Local enhancement of major histocompatibility complex (MHC) class I and II expression and cell infiltration in experimental allergic encephalomyelitis around axotomized motor neurons. Maehlen J, et al. **J Neuroimmunol** 1989 Jul;23(2):125–32
Flow cytometric quantitation of T cell phenotypes in cerebrospinal fluid and peripheral blood of homosexual men with and without antibodies to human immunodeficiency virus, type I. Margolick JB, et al. **J Neuroimmunol** 1988 Nov;20(1):73–81
Analysis of the provirus genome integrated in T cell lines established from the cerebrospinal fluid of patients with human T lymphotropic virus type I–associated myelopathy (HAM). Nishimura M, et al. **J Neuroimmunol** 1988 Nov; 20(1):33–7
The effects of anesthesia and surgery on lymphocyte populations and function in infants and children. Platt MP, et al. **J Pediatr Surg** 1989 Sep;24(9):884–7
Analysis of site of action of a choriocarcinoma–derived immunoregulatory factor on IL–2–mediated T cell responses. Matsuzaki N, et al. **J Reprod Immunol** 1989 Jul; 15(3):181–94
Two distinct mechanisms involved in the infiltration of lymphocytes into tumors. Shijubo N, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1111–8
Role for T lymphocytes in silica–induced pulmonary inflammation. Hubbard AK. **Lab Invest** 1989 Jul; 61(1):46–52
Adhesion molecules in inflammatory skin disease. **Lancet** 1989 Sep 2;2(8662):540–1 (23 ref.)
Interleukins and the immune system 1. O'Garra A. **Lancet** 1989 Apr 29;1(8644):943–7 (38 ref.)
Interleukins and the immune system 2. O'Garra A. **Lancet** 1989 May 6;1(8645):1003–5 (30 ref.)
Control of in vivo differentiation of myeloid leukemic cells. Lotem J, et al. **Leukemia** 1988 Dec;2(12 Suppl):24S–37S

Distinct regulatory effects of IL-4 and TNF-alpha during CD3-dependent and CD3-independent initiation of human T-cell activation. Damle NK, et al. **Lymphokine Res** 1989 Summer;8(2):85-97

Immunity versus immunobiology of infections: an outsider's view on lymphocyte repertoires, activities and organization in normal and infected mice. Coutinho A. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:236-9

Protective T cell responses in BALB/c mice infected with Leishmania donovani. Holaday B, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:517-21

Role of L3T4+ T cells in the immunopathology of chronic experimental Chagas' disease. Hontebeyrie-Joskowicz M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:539-45

Comparative aspects of T cell activation in vivo following stimulation with anti-CD3 MAB, allogeneic cells and Trypanosoma cruzi. Pereira GM, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:284-90

B cell dependent T lymphocyte responses in leishmaniasis. Sacks DL. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:506-13

A sensitive IL-1 thymocyte co-stimulator assay using a novel beta-D-galactoside specific lectin from the beetle, Allomyrina dichotoma. Sakai Y, et al. **Microbiol Immunol** 1989;33(7):569-77

The binding of IgG1 containing immune complexes to the FcR of allogenically activated T cells induces changes in the membrane potential and the cell surface charge. Huckel C, et al. **Mol Immunol** 1988 Jun;25(6):517-25

Hprt mutations and karyotype abnormalities in T-cell clones from healthy subjects and melphalan-treated ovarian carcinoma patients. He SM, et al. **Mutat Res** 1989 Feb; 210(2):353-8

Spontaneous sister-chromatid exchange frequencies in human B and T lymphocytes at BrdU borderline concentrations for sister-chromatid differentiation. Miller K. **Mutat Res** 1988 Nov;202(1):97-101

An immunodeficiency characterized by defective signal transduction in T lymphocytes. Chatila T, et al. **N Engl J Med** 1989 Mar 16;320(11):696-702

Defective signal transduction in T lymphocytes [letter] Michel MC, et al. **N Engl J Med** 1989 Aug 17;321(7):475-6

Distinct antigen receptor repertoires of two classes of murine epithelium-associated T cells. Asarnow DM, et al. **Nature** 1989 Sep 7;341(6237):60-2

Deletion of self-reactive T cells before entry into the thymus medulla. Hengartner H, et al. **Nature** 1988 Nov 24; 336(6197):388-90

The generation of mature T cells requires interaction of the alpha beta T-cell receptor with major histocompatibility antigens. Scott B, et al. **Nature** 1989 Apr 13;338(6216):591-3

Decrease with aging of the function of canine lymphocyte blastformation by using the glucose consumption test. Ejima H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):840-1

Role of T lymphocytes in the suppression of hematopoiesis: hematopoietic suppressive factors and their mRNA expression in activated T lymphocytes. Harada M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1531-9

Possible roles of activated T lymphocytes and gamma-interferon in patients with aplastic anemia. Kojima S. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1590-6

Forskolin effects on the voltage-gated K+ conductance of human T cells. Krause D, et al. **Pflugers Arch** 1988 Jul; 412(1-2):133-40

Ca2+-activated K+ channels in lymphocytes. Mahaut-Smith MP, et al. **Pflugers Arch** 1989;414 Suppl 1:S164-5

Specific inhibition of cell-surface T-cell receptor expression by antisense oligodeoxynucleotides and its effect on the production of an antigen-specific regulatory T-cell factor. Zheng H, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3758-62

A phenotypic analysis of T lymphocytes isolated from the brains of mice with allogeneic neural transplants. Nicholas MK, et al. **Prog Brain Res** 1988;78:249-59

Activated T lymphocytes, rheumatoid factor and erythrocyte sedimentation rate assays in rheumatoid arthritis. Bartfeld H, et al. **Rheumatol Int** 1988;8(3):131-3

Induction of interleukin-2 production in CD4+ and CD8+ T-cell subsets after activation via CD3 and CD2. Halvorsen R, et al. **Scand J Immunol** 1988 Oct;28(4):449-55

Dynamics of complex formation between thymocytes and thymic medullary epithelial cells. Hugo P, et al. **Scand J Immunol** 1989 Apr;29(4):399-408

Plasticity of T-cell function. II. Transient induction of CD8 (Ly-2) expression in cloned EL-4 lymphoma cells depending on cell density. Melchers I, et al. **Scand J Immunol** 1989 Jul;30(1):99-109

The influence of T cells on homogeneous immunoglobulins in sera of athymic nude mice during aging. van den Akker TW, et al. **Scand J Immunol** 1988 Sep;28(3):359-65

Evidence for activation of rheumatoid synovial T lymphocytes—development of rheumatoid T cell clones. Førre O, et al. **Scand J Rheumatol Suppl** 1988;76:153-60 (33 ref.)

Interactions between the immune system and connective tissue in arthritis: aspects on T-cell activation. Gudmundsson S, et al. **Scand J Rheumatol Suppl** 1988; 76:117-24 (43 ref.)

The T cell system in rheumatoid arthritis: activated or defective? Kitas GD, et al. **Scand J Rheumatol Suppl** 1988; 76:161-73 (43 ref.)

Abnormalities of T cell activation in the rheumatoid synovium detected with monoclonal antibodies to CD3. Talal N, et al. **Scand J Rheumatol Suppl** 1988;76:175-82

Contingent genetic regulatory events in T lymphocyte activation. Crabtree GR. **Science** 1989 Jan 20; 243(4889):355-61

T cell CD3-zeta eta heterodimer expression and coupling to phosphoinositide hydrolysis. Mercep M, et al. **Science** 1988 Oct 28;242(4878):571-4

Changes of biophysical characteristics of rat thymocytes with age [letter] Sungurov AYu, et al. **Thymus** 1988-89; 12(4):265-7

The role of CD8+ and CD4+ cells in rejection of multiple minor H-disparate skin grafts. Ichikawa T, et al. **Transplantation** 1989 May;47(5):909-10

Promotion of fetal liver engraftment by T cells in a murine semiallogeneic model without graft-versus-host reaction. Navarro J, et al. **Transplantation** 1989 May;47(5):871-6

Treatment of acute cellular rejection in renal transplantation patients on ciclosporin with antithymocyte globulin. Arndt R, et al. **Urol Int** 1988;43(3):139-44

Consequences of exposure to ionizing radiation for effector T cell function in vivo. Rouse BT, et al. **Viral Immunol** 1989;2(2):69-78

The role of the thymus in the pathogenesis of hind-limb paralysis induced by ts1, a mutant of Moloney murine leukemia virus-TB. Prasad G, et al. **Virology** 1989 Apr; 169(2):332-40

[Effect of T cells on B cell colony formation in patients with B-chronic lymphocytic leukemia] Abe S, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1036-40 (Eng. Abstr.) **(Jpn)**

[Effect of myelopeptides on bone marrow T-iymphocyte precursors] Petrov RV, et al. **Dokl Akad Nauk SSSR** 1989; 305(3):764-7 **(Rus)**

[Increased reactivity of microcirculation and T lymphocytes to adrenaline in sailors during long sea voyages] Okhotnikov SV, et al. **Fiziol Cheloveka** 1988 Jul-Aug; 14(4):686-92 **(Rus)**

[Characteristics of subpopulations of t-lymphocytes taking part in the regulation of myelopoiesis during a stress reaction] Gold'berg ED, et al. **Patol Fiziol Eksp Ter** 1988 Jul-Aug;(4):29-32 (Eng. Abstr.) **(Rus)**

[Modification of the regulatory effects of thymocytes on hematopoiesis in irradiated mice as affected by heterologous immunoglobulin G and low-dose ionizing radiation] Lebedev VG, et al. **Radiobiologiia** 1988 Sep-Oct; 28(5):672-6 (Eng. Abstr.) **(Rus)**

[Accessory molecules of the intercellular interaction of T-lymphocytes as physiologically active peptides of the cell membrane] Leskov VP, et al. **Vestn Akad Med Nauk SSSR** 1989;(4):83-9 (65 ref.) **(Rus)**

[Study of cellular immunity in patients with acute cholecystitis] Arias JI, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):451-3 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Ultraviolet B light inactivates bone marrow T lymphocytes but spares hematopoietic precursor cells. Deeg HJ, et al. **Blood** 1989 Feb;73(2):369-71

Molecular analyses of in vivo hprt mutant T cells from atomic bomb survivors. Hakoda M, et al. **Environ Mol Mutagen** 1989;13(1):25-33

Comparative human cellular radiosensitivity: II. The survival following gamma-irradiation of unstimulated (G0) T-lymphocytes, T-lymphocyte lines, lymphoblastoid cell lines and fibroblasts from normal donors, from ataxia-telangiectasia patients and from ataxia-telangiectasia heterozygotes. Cole J, et al. **Int J Radiat Biol** 1988 Dec; 54(6):929-43

Is the NAD-poly (ADP-ribose) polymerase system the trigger in radiation-induced death of mouse thymocytes? Denisenko MF, et al. **Int J Radiat Biol** 1989 Sep; 56(3):277-85

Early postirradiation chromatin degradation in thymocytes. Soldatenkov VA, et al. **Int J Radiat Biol** 1989 Jun; 55(6):943-51

Nuclear protein synthesis in thymocytes of X-irradiated rats. Zhivotovsky BD, et al. **Int J Radiat Biol** 1988 Dec; 54(6):999-1006

Regulation of murine lymphokine production in vivo. Ultraviolet radiation exposure depresses IL-2 and enhances IL-4 production by T cells through an IL-1-dependent mechanism. Araneo BA, et al. **J Immunol** 1989 Sep 15; 143(6):1737-44

T cell subsets and disease progression after total lymphoid irradiation in chronic progressive multiple sclerosis. Troiano R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):980-3

In vivo mutant T cell frequency in atomic bomb survivors carrying outlying values of chromosome aberration frequencies. Hakoda M, et al. **Mutat Res** 1988 Nov; 202(1):203-8

Chromosome aberrations in peripheral lymphocytes and radiation dose to active bone marrow in patients treated for cancer of the cervix. Kleinerman RA, et al. **Radiat Res** 1989 Jul;119(1):176-90

Determination of in vivo and in vitro radiosensitivity of mouse splenic T-lymphocytes using a T-cell cloning technique. Dohi S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):13-22

Inactivation of bone marrow T-lymphocytes by ultraviolet light. Deeg HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2938

[Effects of radiotherapy on lymphocyte populations in lung cancer] Gava A, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):475-8 (Eng. Abstr.) **(Ita)**

[Changes in T lymphocyte functions after UV irradiation] Orlicz-Welcz B, et al. **Med Dosw Mikrobiol** 1988; 40(2):103-8 (Eng. Abstr.) **(Pol)**

[Study of changes in the surface of irradiated thymocytes using a method of separating cells in a 2-phase water-polymer system] Mumanzhinov VV, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):636-9 (Eng. Abstr.) **(Rus)**

[Characteristics of the degradation of thymus lymphocyte DNA in the early periods after irradiation] Soldatenkov VA, et al. **Radiobiologiia** 1989 May-Jun;29(3):291-5 **(Rus)**

[The possible nature and species specificity of a protein factor enabling the solubilization of chromatin from thymocytes of irradiated animals] Soldatenkov VA, et al. **Radiobiologiia** 1989 May-Jun;29(3):296-9 **(Rus)**

SECRETION

Adult T leukemia cells produce a lymphokine that augments interleukin 2 receptor expression. Teshigawara K, et al. **J Mol Cell Immunol** 1985;2(1):17-26

TRANSPLANTATION

T-cell vaccination. Cohen IR, et al. **Immunol Today** 1988 Nov;9(11):332-5

T-cell-mediated protection of mice against virulent Mycobacterium tuberculosis. Leveton C, et al. **Infect Immun** 1989 Feb;57(2):390-5

The current status of T-lymphocyte apheresis (TLA) treatment of Crohn's disease. Bicks RO, et al. **J Clin Gastroenterol** 1989 Apr;11(2):136-8

Cloned L3T4+ T lymphocytes protect mice against Listeria monocytogenes by secreting IFN-gamma. Magee DM, et al. **J Immunol** 1988 Nov 1;141(9):3203-7

T cell receptor beta-chain selection in human allograft rejection. Miceli MC, et al. **J Immunol** 1989 Jan 1; 142(1):81-6

Effects of T cell depletion in radiation bone marrow chimeras. I. Evidence for a donor cell population which increases allogeneic chimerism but which lacks the potential to produce GVHD. Sykes M, et al. **J Immunol** 1988 Oct 1;141(7):2282-8

Two specific T cell factors that initiate immune responses in murine allograft systems. A comparison of biologic functions. Vandebriel RJ, et al. **J Immunol** 1989 Jul 1; 143(1):66-73

Tumour-infiltrating lymphocytes and interleukin-2 in treatment of advanced cancer. Kradin RL, et al. **Lancet** 1989 Mar 18;1(8638):577-80

Effect of sensitized T cell transfer on mouse hepatitis virus type 4 infection in athymic nude mice. Kyuwa S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):219-21

Specific adoptive immunotherapy. Greenberg PD, et al. **Prog Clin Biol Res** 1989;288:349-61

Engraftment of T-depleted major histocompatibility complex-mismatched bone marrow in T-deficient versus natural killer-deficient recipients. Schofer O, et al. **Scand J Immunol** 1989 May;29(5):627-9

Phenotypic characterization of T-suppressor lymphocytes induced by orthotopic rat liver transplantation. Gassel HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):429-30

Autologous peripheral blood stem cell transplantation: analysis of autografted cells and lymphocyte recovery. Kiesel S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3084-8

Fate of donor T cells in systemic graft-versus-host reaction. Matsubayashi Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3036-8

Induction of intestinal graft-versus-host reactions across mutant major histocompatibility antigens by T lymphocyte subsets in mice. Mowat AM, et al. **Transplantation** 1989 May;47(5):857-63

Effect of T cell supplementation to fetal liver cells transplanted into isogeneic mice. Navarro J, et al. **Transplantation** 1988 Nov;46(5):779-82

[Cultivation of human tumor infiltrating lymphocytes for use in adoptive immunotherapy] Sekine T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1469-73 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Nuclear contour irregularity correlates with Leu-9-, Leu-8-cells in benign lymphoid infiltrates of skin. An ultrastructural morphometric and quantitative immunophenotypic analysis suggesting the normal T-cell counterpart to the malignant mycosis fungoides/Sézary cell. Payne CM, et al. **Am J Dermatopathol** 1988 Oct; 10(5):377-89

The vacuolated glycogen-laden leukemic lymphocytes of a T-cell lymphoproliferative disorder. Krauss JS, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):937-40

Activation induces a rapid reorganization of spectrin in lymphocytes. Lee JK, et al. **Cell** 1988 Dec 2;55(5):807-16

Karyotypes of human T-lymphocyte clones. Lambert B, et al. **IARC Sci Publ** 1988;(89):469-76

Plasma membrane lipid composition of vinblastine sensitive

and resistant human leukaemic lymphoblasts. May GL, et al. **Int J Cancer** 1988 Nov 15;42(5):728–33
Identification of the interleukin-2 receptor (IL-2R) on human leukemic T cells using colloidal gold and scanning electron microscopy. Helinski EH, et al. **J Med** 1988; 19(5–6):353–68
Chromosome damage induced in cord blood T-lymphocytes infected in vitro by HTLV-I. Chieco-Bianchi L, et al. **Leukemia** 1988 Dec;2(12 Suppl):223S–232S
Some ultrastructural aspect of T and B lymphocytes and their significance in chronic internal diseases with immune component. Micu D, et al. **Med Interne** 1982 Jan–Mar; 20(1):3–8
Nuclear morphology of follicular center cell-associated T-cells: an immunoultrastructural study of follicular hyperplasia and follicular center cell lymphomas. Swerdlow SH, et al. **Mod Pathol** 1988 Jul;1(4):268–73
A chromosome study of 6-thioguanine-resistant mutants in T lymphocytes of Hiroshima atomic bomb survivors. Kodama Y, et al. **Mutat Res** 1989 Sep;227(1):31–8
T-cell chronic lymphocytic leukaemia: the spectrum of mature T-cell disorders. Matutes E, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):347–51
Molecular analysis of a t(14;14) translocation in leukemic T-cells of an ataxia telangiectasia patient. Russo G, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):602–6
Synovial dendritic cells and T cells in rheumatoid arthritis. Tsai V, et al. **Scand J Rheumatol Suppl** 1988;74:79–88 (35 ref.)
[Electron microscopic observation on spleen T lymphocyte in animal model of lepromatous leprosy] Wang B, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):342–5 (Eng. Abstr.) **(Chi)**
[Ultrastructural characteristics of immunologic subvariants of acute T-cell lymphoblastic leukemia] Muskhelishvili LV, et al. **Eksp Onkol** 1989;11(4):56–8, 73 (Eng. Abstr.) **(Rus)**
[Ribosome levels in T- and B lymphocytes in B-cell chronic lymphocytic leukemia] Morozova EO, et al. **Gematol Transfuziol** 1989 May;34(5):26–8 (Eng. Abstr.) **(Rus)**

T LYMPHOCYTES, CYTOTOXIC

see related

CYTOTOXICITY, IMMUNOLOGIC

Frequency analysis of cytotoxic T lymphocyte precursors—possible relevance to HLA-matched unrelated donor bone marrow transplantation. Kaminski E, et al. **Bone Marrow Transplant** 1988 Mar;3(2):149–55
T lymphocyte subset abnormalities and HLA antigens in scleroderma (systemic sclerosis). Barnett AJ, et al. **Clin Exp Immunol** 1989 Apr;76(1):24–9
Polyclonal proliferation of activated suppressor/cytotoxic T cells with transient depression of natural killer cell function in acute infectious mononucleosis. Williams ML, et al. **Clin Exp Immunol** 1989 Jul;77(1):71–6
Tumor-specific cytolysis by lymphocytes infiltrating human melanomas. Topalian SL, et al. **J Immunol** 1989 May 15; 142(10):3714–25
Variation in T helper cell/T cytotoxic-suppressor cell index during cardiac operations. Navarro M, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):962–6
The molecular basis of renal transplant rejection. Krensky AM, et al. **Semin Nephrol** 1989 Mar;9(1):116–9 (24 ref.)

ANALYSIS

Lymphocytotoxins in leprosy. Kaur I, et al. **Indian J Lepr** 1989 Apr;61(2):164–8
Fine mapping of an H-2Kk restricted cytotoxic T lymphocyte epitope in SV40 T antigen by using in-frame deletion mutants and a synthetic peptide. Rawle FC, et al. **J Immunol** 1988 Oct 15;141(8):2734–9
Identification and characterization of a membrane-bound cytotoxin of murine cytolytic lymphocytes that is related to tumor necrosis factor/cachectin. Liu CC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3286–90
[Cytotoxic molecules, perforin and serine esterase in cytotoxic T lymphocyte] Koizumi H. **Arerugi** 1989 Jan; 38(1):41–8 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

A large proportion of T lymphocytes lack CD5 expression after bone marrow transplantation. Bierer BE, et al. **Blood** 1989 Apr;73(5):1359–66
Detection of major histocompatibility complex class I-restricted, HIV-specific cytotoxic T lymphocytes in the blood of infected hemophiliacs. Koup RA, et al. **Blood** 1989 May 15;73(7):1909–14
Human T lymphocytes expressing gamma/delta T cell antigen receptor. Moretta L, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S117–23
Tumor cell lysis by T cells distinct from NK cells and alloantigen-specific cytotoxic T cells. Thiele DL, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):405–23
Phenotypic and functional analysis of murine CD3+,CD4-,CD8- TCR-gamma delta-expressing peripheral T cells. Cron RQ, et al. **J Immunol** 1989 Jun 1;142(11):3754–62
Unusually high frequencies of HIV-specific cytotoxic T lymphocytes in humans. Hoffenbach A, et al. **J Immunol** 1989 Jan 15;142(2):452–62
Functional alterations of herpes simplex virus-specific CD4+ multifunctional T cell clones following infection with human T lymphotropic virus type I. Inatsuki A, et al. **J Immunol** 1989 Aug 15;143(4):1327–33
Functional and phenotypic alterations in T cell subsets during the course of MAIDS, a murine retrovirus-induced immunodeficiency syndrome. Morse HC 3d, et al. **J Immunol** 1989 Aug 1;143(3):844–50
Resistance of primary CD8+ cytotoxic T lymphocytes to lysis by cytotoxic granules from cloned T cell lines. Nagler-Anderson C, et al. **J Immunol** 1988 Nov 15; 141(10):3299–305
Characteristics of cytotoxic thyroglobulin-specific T cell hybridomas. Remy JJ, et al. **J Immunol** 1989 Feb 15; 142(4):1129–33
Role of CD2 in activation and cytotoxic function of CD8/Leu-7-positive T cells. Rüthlein J, et al. **J Immunol** 1988 Dec 1;141(11):3791–7
Differences in surface phenotype between cytolytic and non-cytolytic CD4+ T cells. MHC class II-specific cytotoxic T lymphocytes lack Leu 8 antigen and express CD2 in high density. Takada S, et al. **J Immunol** 1989 May 1;142(9):3038–44
HLA-restricted lysis of herpes simplex virus-infected monocytes and macrophages mediated by CD4+ and CD8+ T lymphocytes. Torpey DJ 3d, et al. **J Immunol** 1989 Feb 15;142(4):1325–32
Phenotypic characterization of the post-thymic differentiation of human alloantigen-specific CD8+ cytotoxic T lymphocytes. Yamashita N, et al. **J Immunol** 1989 Sep 1;143(5):1518–23
Human T cell leukemia/lymphoma virus type I infection of a CD4+ proliferative/cytotoxic T cell clone progresses in at least two distinct phases based on changes in function and phenotype of the infected cells. Yssel H, et al. **J Immunol** 1989 Apr 1;142(7):2279–89
Role of cytotoxic T cells in experimental myocarditis. Van Houten N, et al. **Springer Semin Immunopathol** 1989; 11(1):61–8 (30 ref.)
CD4+/Leu-7+ large granular lymphocytes in long-term renal allograft recipients. A subset of atypical T cells. Legendre CM, et al. **Transplantation** 1989 Jun;47(6):964–71

CYTOLOGY

Cell biology of cytotoxic and helper T cell functions: immunofluorescence microscopic studies of single cells and cell couples. Kupfer A, et al. **Annu Rev Immunol** 1989; 7:309–37 (103 ref.)
Theoretical and experimental studies on cross-bridge migration during cell disaggregation. Tozeren A, et al. **Biophys J** 1989 Mar;55(3):479–87
A previously unrecognized large fraction of cytotoxic lymphocyte precursors is present in CD4+ human peripheral blood T cells. Kabelitz D, et al. **Cell Immunol** 1989 Feb;118(2):285–97
Histamine regulates the generation of human cytolytic T lymphocytes. Khan MM, et al. **Cell Immunol** 1989 Jun; 121(1):60–73
Effect of immunodepletion of MHC class II-positive cells from pancreatic islets on generation of cytotoxic T-lymphocytes in mixed islet-lymphocyte coculture. Stock PG, et al. **Diabetes** 1989 Jan;38 Suppl 1:157–60
Expression of T cell receptor gamma-chain in murine cytotoxic T cells: analysis of a highly transcribed nonrearranged gene cluster. Schulz M, et al. **Exp Cell Biol** 1988;56(4):181–9
Growth requirements of T cell hybridomas obtained by the fusion between a mouse cytolytic T cell line and the rat tumor C58NTD. Silva A, et al. **Hybridoma** 1989 Feb; 8(1):61–71
Lymphokine-induced cytotoxic cell generation in thymus and spleen cell cultures. Biasi G, et al. **J Biol Regul Homeost Agents** 1987 Jul–Sep;1(3):119–25
Transforming growth factors beta slow down cell-cycle progression in a murine interleukin-2 dependent T-cell line. Stoeck M, et al. **J Cell Physiol** 1989 Oct;141(1):65–73
Species-specific structural differences in the alpha 1 + alpha 2 domains determine the frequency of murine cytotoxic T cell precursors stimulated by human and murine class I molecules. Engelhard VH, et al. **J Immunol** 1988 Sep 15;141(6):1835–9
Establishment of a human T-cell clone cytotoxic for both autologous and allogeneic hepatocytes from chronic hepatitis patients with type non-A, non-B virus. Imawari M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2883–7
Enumeration of cytotoxic T-lymphocyte precursor frequencies in normals and renal allograft recipients using limiting dilution analysis: evidence for HLA-DR restricted regulatory cells of cytotoxic T-lymphocytes. Kenyon NS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):336–7

DRUG EFFECTS

Influence of cyclosporine on CTL behavior in vitro and in vivo. Orosz CG, et al. **Ann N Y Acad Sci** 1988;532:119–27 (27 ref.)
Direct and indirect modes of action of cyclosporine on cytotoxic T lymphocytes. Paetkau V, et al. **Ann N Y Acad Sci** 1988;532:405–12 (22 ref.)
Effect of IL-2 in vitro on CTL generation in spleen cells of young and old mice: asialo GM1+ cells are required for the apparent restoration of the CTL response. Bloom ET, et al. **Cell Immunol** 1989 Mar;119(1):73–84
Alpha-difluoromethylornithine, an inhibitor of polyamine biosynthesis, augments cyclosporin A inhibition of cytolytic T lymphocyte induction. Bowlin TL, et al. **Clin Exp Immunol** 1989 Jul;77(1):151–6
Treatment of pure red cell aplasia with ciclosporin: suppression of activated T suppressor/cytotoxic and NK-like cells in marrow and blood correlates with haematological response. Tötterman TH, et al. **Eur J Haematol** 1988 Sep;41(3):204–11
Allosensitization in IL-2-containing limiting dilution cultures generates cytotoxic T lymphocytes (CTL) rather than LAK cells reactive with a syngeneic nonimmunogenic murine tumor. Leshem B, et al. **Immunol Lett** 1989 Jan 15;20(1):53–8
Proteinase-like activity in the cytotoxic factor produced by T cells during dengue virus infection. Khanna M, et al. **Immunology** 1989 May;67(1):32–7
Inhibition of the generation of cytotoxic lymphocytes by potassium ion channel blockers. Sharma B. **Immunology** 1988 Sep;65(1):101–5
Suppression of allograft immunity by 3,4,5,3',4',5'-hexachlorobiphenyl. I. Effects of exposure on tumor rejection and cytotoxic T cell activity in vivo. Kerkvliet NI, et al. **Immunopharmacology** 1988 Jul–Aug; 16(1):1–12
Effects of calcium ionophore and phorbol ester on class-II-restricted virus-specific human cytotoxic T cell clones. Richert JR, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):178–83
Suppression of murine cytotoxic T-lymphocyte induction following exposure to 7,12-dimethylbenz[A]anthracene: dysfunction of antigen recognition. House RV, et al. **Int J Immunopharmacol** 1989;11(2):207–15
Target cell specificity of immunosuppression in murine lymphocytes exposed to 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxy-9,10-anthracenedione dihydrochloride (AEAD). House RV, et al. **Int J Immunopharmacol** 1989;11(1):85–93
Selective immunosuppression following exposure to a novel anthraquinone, 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxy-9,10-anthracenedione dihydrochloride (AEAD). House RV, et al. **Int J Immunopharmacol** 1989;11(1):95–101
In vivo mechanisms of alloreactivity—IV. Cyclosporine differentially impairs accumulation of donor-reactive CTL but not donor-reactive alloantibody in murine sponge matrix allografts. Orosz CG, et al. **Int J Immunopharmacol** 1988;10(3):305–16
The effect of prostaglandins and indomethacin on cytotoxic T-lymphocytes and their precursors. Skinner M, et al. **Int J Immunopharmacol** 1989;11(3):267–73
The requirements for triggering of lysis by cytolytic T lymphocyte clones. II. Cyclosporin A inhibits TCR-mediated exocytosis by only selectively inhibits TCR-mediated lytic activity by cloned CTL. Lancki DW, et al. **J Immunol** 1989 Jan 15;142(2):416–24
Functional analysis of mononuclear cells infiltrating into tumors. V. A. soluble factor involved in the regulation of cytotoxic/suppressor T cell infiltration into tumors. Shijubo N, et al. **J Immunol** 1989 Apr 15;142(8):2961–7
Biochemical characterization of the inhibitory effect of CsA on cytolytic T lymphocyte effector functions. Trenn G, et al. **J Immunol** 1989 Jun 1;142(11):3796–802
Effects of arachidonic acid metabolites and other compounds on the CTLL assay for interleukin-2. Eskandari MK, et al. **J Immunol Methods** 1989 Mar 10;118(1):85–9
Selenium and the immune response: 2. Enhancement of murine cytotoxic T-lymphocyte and natural killer cell cytotoxicity in vivo. Petrie HT, et al. **J Leukoc Biol** 1989 Mar;45(3):215–20
Potential use of an antagonist of cAMP-dependent protein kinase to block inhibition and modulate T-cell receptor-triggered activation of cytotoxic T-lymphocytes. Takayama H, et al. **J Pharm Sci** 1989 Jan;78(1):8–10
Inhibitory effect of reversible serine protease inhibitors on the activity of cytotoxic T lymphocytes. Arakawa K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1152–3
New method of immunosuppression by selective destruction of CTL by a photodynamic effect. Satomi S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1134–6
Suppression of cytotoxic T cell induction in vivo by prodigiosin 25-C. Nakamura A, et al. **Transplantation** 1989 Jun;47(6):1013–6
Blocking of interleukin-2 production, but not the tissue destruction induced by cytotoxic T cells, by cyclosporine. Noble RL, et al. **Transplantation** 1989 Feb;47(2):322–6
[Effects of retinoids on tumor specific immune response in mice] Hu XZ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):407–10 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Protease nexin-1 complexes and inhibits T cell serine proteinase-1. Gurwitz D, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):300–4
Organization of two genes encoding cytotoxic T lymphocyte-specific serine proteases CCPI and CCPII. Lobe CG, et al. **Biochemistry** 1988 Sep 6;27(18):6941–6
Localization, implications for function, and gene expression of chymotrypsin-like proteinases of cytotoxic RNK-16

lymphocytes. Zunino SJ, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):331–40

The isolation and characterization of two cytotoxic T-lymphocyte-specific serine protease genes. Bleackley RC. **Curr Top Microbiol Immunol** 1989;140:67–80 (53 ref.)

A serine protease-encoding gene that marks activated cytotoxic T cells in vivo and in vitro. Hershberger RJ, et al. **Curr Top Microbiol Immunol** 1989;140:81–92 (50 ref.)

Granzymes: a family of serine proteases in granules of cytolytic T lymphocytes. Jenne DE, et al. **Curr Top Microbiol Immunol** 1989;140:33–47 (52 ref.)

Expression of cytoplasmic granules with T cell-associated serine proteinase-1 activity in Ly-2+(CD8+) T lymphocytes responding to lymphocytic choriomeningitis virus in vivo. Kramer MD, et al. **Eur J Immunol** 1989 Jan; 19(1):151–6

Genomic organization and chromosomal assignment for a serine protease gene (CSPB) expressed by human cytotoxic lymphocytes. Klein JL, et al. **Genomics** 1989 Jul;5(1):110–7

Murine lymphocytes with natural killer activity express CTL-derived serine protease genes. Anderson SK, et al. **Immunology** 1989 Jun;67(2):269–73

Proliferation of interleukin 2 dependent cytotoxic T cell line cells. Different protein kinase C activators achieve the same maximal promotion, but with distinct dose-response profiles. Gavériaux C, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):294–6

Induction of target cell DNA release by the cytotoxic T lymphocyte granule protease granzyme A. Hayes MP, et al. **J Exp Med** 1989 Sep 1;170(3):933–46

Isolation and sequence analysis of serine protease cDNAs from mouse cytolytic T lymphocytes. Kwon BS, et al. **J Exp Med** 1988 Nov 1;168(5):1839–54

The role of Ca2+ and Mg2+ in the cytotoxic T lymphocyte reaction and in the secretion of N alpha-benzyloxycarbonyl-L-lysine thiobenzyl ester-serine esterase by human T cell clones. Blanchard D, et al. **J Immunol** 1989 Apr 1;142(7):2173–80

Protein kinase C-dependent and -independent mechanisms of cloned murine T cell proliferation. The role of protein kinase C translocation and protein kinase C activity. Kim DK, et al. **J Immunol** 1989 Jan 15;142(2):616–22

Characterization of granzymes A and B isolated from granules of cloned human cytotoxic T lymphocytes. Krähenbühl O, et al. **J Immunol** 1988 Nov 15; 141(10):3471–7

The generation of alloreactive cytotoxic T lymphocytes requires the expression of ecto-5'nucleotidase activity. Massaia M, et al. **J Immunol** 1988 Dec 1;141(11):3768–75

Antigen-specific, but not natural killer, activity of T cell receptor-gamma delta cytotoxic T lymphocyte clones involves secretion of N alpha-benzyloxycarbonyl-L-lysine thiobenzyl ester serine esterase and influx of Ca2+ ions. Spits H, et al. **J Immunol** 1989 Sep 1;143(5):1506–11

Inhibition of lymphocyte protease granzyme A by antithrombin III. Masson D, et al. **Mol Immunol** 1988 Dec; 25(12):1283–9

Transcriptional regulation of two cytotoxic T lymphocyte-specific serine protease genes. Lobe CG, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5765–79

N-alpha-benzyloxycarbonyl-L-lysine thiobenzyl ester (BLT) serine esterase in human cytolytic effector cells and cell line targets. Somersalo K, et al. **Scand J Immunol** 1989 Apr;29(4):459–67

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Immunological studies of the pathogenesis of multiple sclerosis. Cell-mediated cytotoxicity by peripheral blood lymphocytes against basic protein of myelin, encephalitogenic peptide, cerebrosides and gangliosides. Frick E. **Acta Neurol Scand** 1989 Jan;79(1):1–11

Effector mechanisms against neuroblastoma cells and their modulation by lymphokines. Iwami T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):483–91

Use of recombinant vaccinia viruses to examine cytotoxic T lymphocyte recognition of individual viral proteins. Yewdell J, et al. **Adv Exp Med Biol** 1988;239:151–61 (40 ref.)

In situ localization of HuHF serine protease mRNA and cytotoxic cell-associated antigens in human dermatoses. A novel method for the detection of cytotoxic cells in human tissues. Wood GS, et al. **Am J Pathol** 1988 Nov; 133(2):218–25

Effectors, repertoire and receptors involved in lymphocyte-mediated mhc-unrestricted cytotoxicity. Lanier LL, et al. **Ann Inst Pasteur Immunol** 1988 Jul-Aug; 139(4):450–6

Activated lymphocyte cytotoxicity: concepts and confusions. Wolf JA Jr, et al. **Ann Inst Pasteur Immunol** 1988 Jul-Aug; 139(4):435–8

Regulation of human T-cell proliferation and CTL development by human recombinant interleukin-4. Acres RB, et al. **Ann N Y Acad Sci** 1988;532:1–7

Immunoregulation in rapidly progressive multiple sclerosis. Arnason BG, et al. **Ann N Y Acad Sci** 1988;540:4–12 (25 ref.)

Cytotoxic T cells in influenza infection. Askonas BA, et al. **Ann N Y Acad Sci** 1988;532:230–7 (26 ref.)

Down-regulation of cytotoxic T lymphocyte generation by two distinct suppressor-cell systems. Battisto JR, et al. **Ann N Y Acad Sci** 1988;532:177–98

Suppression of human cytotoxic T lymphocyte responses by adherent peripheral blood leukocytes. Bernstein DC, et al. **Ann N Y Acad Sci** 1988;532:207–13

A molecular-genetic analysis of cytotoxic T lymphocyte function. Bleackley RC, et al. **Ann N Y Acad Sci** 1988; 532:359–66 (22 ref.)

Linked recognition of helper and cytotoxic antigenic determinants for the generation of cytotoxic T lymphocytes. Cassell D, et al. **Ann N Y Acad Sci** 1988; 532:51–60

Phenotypic identification of memory cytolytic T lymphocytes in a subset of Lyt-2+ cells. Cerottini JC, et al. **Ann N Y Acad Sci** 1988;532:68–75 (19 ref.)

Interleukin-6. Multiple activities in regulation of the hematopoietic and immune systems. Clark SC. **Ann N Y Acad Sci** 1989;557:438–43 (14 ref.)

Impaired measles-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. **Ann N Y Acad Sci** 1988;540:645–8

Early events in target-cell lysis by cytotoxic T cells. Engelhard VH, et al. **Ann N Y Acad Sci** 1988;532:303–13

Donor-directed cytotoxic T cells and other inflammatory components of acute allograft rejection. Häyry P, et al. **Ann N Y Acad Sci** 1988;532:86–105 (48 ref.)

Cooperation between helper T cells and cytotoxic T lymphocyte precursors. Husmann LA, et al. **Ann N Y Acad Sci** 1988;532:158–69

Recognition of intracellular measles virus antigens by HLA class II restricted measles virus-specific cytotoxic T lymphocytes. Jacobson S, et al. **Ann N Y Acad Sci** 1988; 540:352–3

Analysis of HLA-A3 determinants recognized by MHC-restricted and alloreactive cytotoxic T lymphocytes using site-directed mutagenesis. Jelachich ML, et al. **Ann N Y Acad Sci** 1988;532:214–20

Cytotoxic response of cultured tumor infiltrating lymphocytes to autologous human glioblastoma cells. Kuppner MC, et al. **Ann N Y Acad Sci** 1988;540:401–2

Role of Ti/CD3, Thy-1, and Ly-6 in cytolytic T-cell activation analyzed with Ti loss variants. Langlet C, et al. **Ann N Y Acad Sci** 1988;532:33–43

Recovery from acute virus infection. Role of cytotoxic T lymphocytes in the elimination of lymphocytic choriomeningitis virus from spleens of mice. Lehmann-Grube F, et al. **Ann N Y Acad Sci** 1988; 532:238–56 (61 ref.)

Virus-specific cytotoxic T cells in multiple sclerosis. McFarland HF, et al. **Ann N Y Acad Sci** 1988;532:273–9

Cytotoxic T lymphocytes. Their relevance in herpesvirus infections. Martin S, et al. **Ann N Y Acad Sci** 1988; 532:257–72

Dendritic cells and antigen presentation in the regulation of cytotoxic T lymphocyte responses against viruses and transplantation antigens. Melief CJ, et al. **Ann N Y Acad Sci** 1988;532:280–91 (35 ref.)

Development of cytolytic T lymphocytes in thymus culture requires a cytokine sharing homology with IL-6 alpha. Ming JE, et al. **Ann N Y Acad Sci** 1989;557:396–403; discussion 403–4

Genes encoding T-cell antigens. Parnes JR. **Ann N Y Acad Sci** 1988;546:109–15 (32 ref.)

Soluble antigen-specific helper molecules active in the induction of cytotoxic T lymphocytes. Pilarski LM, et al. **Ann N Y Acad Sci** 1988;532:136–48 (29 ref.)

Cytokines involved in the generation of cytolytic effector T lymphocytes. Plate JM, et al. **Ann N Y Acad Sci** 1988; 532:149–57 (14 ref.)

Cyclic AMP-dependent protein kinase as a part of the possible down-regulating pathway in the antigen receptor-regulated cytotoxic T lymphocyte conjugate formation and granule exocytosis. Sitkovsky MV, et al. **Ann N Y Acad Sci** 1988;532:350–8 (15 ref.)

Tissue destruction resulting from the interaction of cytotoxic T cells and their targets. Steinmuller D, et al. **Ann N Y Acad Sci** 1988;532:106–18 (48 ref.)

Cytotoxic T cells in autoimmune disease of the central nervous system. Sun D, et al. **Ann N Y Acad Sci** 1988; 532:221–9

Murine graft-versus-host disease as a model for the development of autoimmunity. Relevance of cytotoxic T lymphocytes. Via CS, et al. **Ann N Y Acad Sci** 1988; 532:44–50

Melanoma-specific cytotoxic T cells generated from peripheral blood lymphocytes. Implications of a renewable source of precursors for adoptive cellular immunotherapy. Slingluff CL Jr, et al. **Ann Surg** 1989 Aug;210(2):194–202

Predominance of "memory" T cells (CD4+, CDw29+) over "naive" T cells (CD4+, CD45R+) in both normal and diseased human skin. Bos JD, et al. **Arch Dermatol Res** 1989;281(1):24–30

Membrane-bound anti-CD3 monoclonal antibodies trigger cytolytic T-lymphocyte-mediated tumor lysis. Mentzer SJ, et al. **Arch Surg** 1988 Oct;123(10):1280–5

CD4 cytotoxic T lymphocyte differentiation. Bensussan A. **Biochimie** 1988 Jul;70(7):937–41

Antigen-specific recognition of autologous leukemia cells and allogeneic class-I MHC antigens by IL-2-activated cytotoxic T cells from a patient with acute T-cell leukemia. Fisch P, et al. **Blood** 1989 Jul;74(1):343–53

Low molecular weight B-cell growth factor and recombinant interleukin-2 are together able to generate cytotoxic T lymphocytes with LAK activity from the bone marrow cells of children with acute lymphoblastic leukemia. Zhou MX, et al. **Blood** 1989 Sep;74(4):1355–9

Generation of CD8 cytolytic T cells early after autologous or allogeneic bone marrow transplantation. Charmot D, et al. **Bone Marrow Transplant** 1987 Aug;2(2):183–94

T cell depletion in allogenic bone marrow transplantation. Progress and problems. Marmont AM. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:229–32 (62 ref.)

DTIC xenogenized lines obtained from an L1210 clone: clonal analysis of cytotoxic T lymphocyte reactivity. Marelli O, et al. **Br J Cancer** 1988 Aug;58(2):171–5

Retargeting of cytolytic T lymphocytes by heteroaggregated (bispecific) antibodies. Barr IG, et al. **Cancer Detect Prev** 1988;12(1–6):439–50

MHC nonrestricted cytotoxic T cell clones with selective specificity from patients with transitional cell carcinoma (TCC) of the urinary bladder. Hansson Y, et al. **Cancer Immunol Immunother** 1988;27(3):205–12

Auto-tumor lysis by blood lymphocytes in vitro. Strongly activated lymphocytes lack selectivity. Vánky F, et al. **Cancer Immunol Immunother** 1989;29(2):125–32

Cytolytic response of human T cells against allogeneic small cell lung carcinoma treated with interferon gamma. Weynants P, et al. **Cancer Immunol Immunother** 1988; 27(3):228–32

Lysis of antigenically unrelated tumor cells mediated by Lyt 2+ splenic T-cells from melphalan-cured MOPC-315 tumor bearers. Barker E, et al. **Cancer Res** 1989 Sep 15; 49(18):5007–15

Modification of host antitumor defense mechanisms in mice by progressively growing tumor. Maccubbin DL, et al. **Cancer Res** 1989 Aug 1;49(15):4216–24

Importance of Lyt 2+ T-cells in the curative effectiveness of a low dose of melphalan for mice bearing a large MOPC-315 tumor. Mokyr MB, et al. **Cancer Res** 1989 Aug 15;49(16):4597–606

Identification by monoclonal antibody of the tumor antigen of a human autologous breast cancer cell that is involved in cytotoxicity by a cytotoxic T-cell clone. Okubo M, et al. **Cancer Res** 1989 Jul 15;49(14):3950–4

Induction of high-grade tumor-specific immunity in a host using a cytotoxic T-lymphocyte clone specific for a stable tumor antigen on murine leukemia L1210. Rahman SM, et al. **Cancer Res** 1988 Nov 15;48(22):6450–4

Presentation of CMV immediate-early antigen to cytolytic T lymphocytes is selectively prevented by viral genes expressed in the early phase. Del Val M, et al. **Cell** 1989 Jul 28;58(2):305–15

Structure of the gene of tum- transplantation antigen P91A: the mutated exon encodes a peptide recognized with Ld by cytolytic T cells. Lurquin C, et al. **Cell** 1989 Jul 28; 58(2):293–303

Correlations of in vivo growth of CTL-susceptible and -resistant variant tumor cell lines in CTL-responder AKR.H-2b:Fv-1b and -nonresponder AKR.H-2b mice. Azuma H, et al. **Cell Immunol** 1988 Oct 1;116(1):123–34

Role of different lymphocyte subsets in human anti-viral T cell cultures. Gomez A, et al. **Cell Immunol** 1989 Feb; 118(2):312–27

Human cytotoxic lymphocytes. IV. Frequency and clonal specificity of CD8+CD16-(Leu2+Leu11-) and CD16+CD3-(Leu11+Leu4-) cytotoxic lymphocyte precursors activated by alloantigen or K562 stimulator cells. Kabelitz D. **Cell Immunol** 1989 Jul;121(2):298–305

Murine models of autoimmune diabetes: nonspecific cytotoxic lymphocytes derived from pancreatic islets in the presence of IL-2. Kay TW, et al. **Cell Immunol** 1989 May; 120(2):341–50

Immunoactive products of human placenta. I. An immunoregulatory factor obtained from explant cultures of human placenta inhibits CTL generation and cytotoxic effector activity. Menu E, et al. **Cell Immunol** 1989 Apr 1;119(2):341–52

Immune recognition by cytotoxic T lymphocytes of minor histocompatibility antigens expressed on a murine colon carcinoma line. Mosley RL, et al. **Cell Immunol** 1989 Aug; 122(1):200–7

Augmentation of the generation of cytotoxic T lymphocytes against syngeneic tumor cells by recombinant human tumor necrosis factor. Nakano K, et al. **Cell Immunol** 1989 Apr 15;120(1):154–64

CD4+ cytolytic T cell clones restricted to HLA class II, DR beta I, and DR beta III chains. Noguchi M, et al. **Cell Immunol** 1989 Oct 1;123(1):96–107

Hierarchy of cytotoxic T cell clones. I. Reversal of resistance to lysis and killing between anti-hapten cytotoxic T cells. Skinner M, et al. **Cell Immunol** 1989 Sep;122(2):461–70

Hierarchy of cytotoxic T cell clones. II. Intracloncal triggering of lysis by hapten-specific CTL. Skinner M, et al. **Cell Immunol** 1989 Sep;122(2):471–82

Class I gene regulation of haplotype preference may influence antiviral immunity in vivo. Thomsen AR, et al. **Cell Immunol** 1989 Sep;122(2):365–76

Human myelin basic protein-specific cytolytic T lymphocyte clones are functionally restricted by HLA class II gene products. Weber WE, et al. **Cell Immunol** 1989 Apr 15; 120(1):145–53

Tumor-derived activated cells: preliminary laboratory and clinical results. Oldham RK, et al. **Clin Chem** 1989 Aug; 35(8):1576–80

Modulation of cellular anti-tumour responses by tumour-specific T suppressor lymphocytes. Haubeck HD,

et al. **Clin Exp Immunol** 1988 Oct;74(1):47–52

Lymphocyte subpopulations in Bancroftian filariasis: activated (DR+) CD8+ T cells in patients with chronic lymphatic obstruction. Lal RB, et al. **Clin Exp Immunol** 1989 Jul;77(1):77–82

Defective generation of alloreactive cytotoxic T lymphocytes (CTL) in human monoclonal gammopathies. Massaia M, et al. **Clin Exp Immunol** 1988 Aug;73(2):214–8

Nucleosomal fragments in serum may directly reflect cell–mediated cytotoxic activity in vivo. Boender PJ, et al. **Clin Immunol Immunopathol** 1989 Oct;53(1):87–98

Cell–mediated immune response in patients with type IIa, type IIb and type IV primary hyperlipoproteinaemia. Antonaci S, et al. **Cytobios** 1988;54(218–219):181–9

Two–color flow cytometry analysis in alopecia areata. Lutz G, et al. **Dermatologica** 1989;178(2):64–6

Generation of cell–mediated cytotoxicity in vitro. Braakman E, et al. **Dev Biol Stand** 1988;69:169–75 (36 ref.)

Generation of allospecific cytolytic T–lymphocytes stimulated by pure pancreatic beta–cells in absence of Ia+ dendritic cells. Stock PG, et al. **Diabetes** 1989 Jan;38 Suppl 1:161–4

Genetic evidence favouring cytotoxic T cell forbidden clones as the cause of insulin–dependent diabetes mellitus. Knight A, et al. **Diabetes Res** 1988 Sep;9(1):1–4

Cytolytic T cells recognize a chimeric MHC class I antigen expressed in influenza A infected transgenic mice. Jefferies WA, et al. **EMBO J** 1988 Nov;7(11):3423–31

Regulation of human B cell activation and antibody production by non–major histocompatibility complex–restricted cytotoxic T lymphocytes. Boué F, et al. **Eur J Immunol** 1989 Mar;19(3):529–35

Synergy between interleukin 4 and interleukin 2 conveys resistance to cyclosporin A during primary in vitro activation of murine CD8 cytotoxic T cell precursors. Bubeck R, et al. **Eur J Immunol** 1989 Apr;19(4):625–30

Low doses of interleukin 2 induce bystander cell lysis by antigen–specific CD4+ inflammatory T cell clones in short–term assay. Gromkowski SH, et al. **Eur J Immunol** 1988 Sep;18(9):1385–9

Cytotoxic T lymphocyte recognition of HLA–A2 antigens in normal and HLA–Cw3–transgenic mice. Hämmerling GJ, et al. **Eur J Immunol** 1989 Apr;19(4):599–604

Functional responsiveness in vitro and in vivo of alpha/beta T cell receptors expressed by the B2A2 (J11d)– subset of CD4–8– thymocytes. Howe RC, et al. **Eur J Immunol** 1989 Jan;19(1):25–30

Modulation on immunogenicity by HLA–B27 subtype polymorphism. Jaraquemada D, et al. **Eur J Immunol** 1988 Dec;18(12):1945–50

Class I alloantigen is sufficient for cytolytic T lymphocyte binding and transmembrane signaling. Kane KP, et al. **Eur J Immunol** 1988 Dec;18(12):1925–9

Absence of homologous restriction factor does not affect CTL–mediated cytolysis. Krähenbühl OP, et al. **Eur J Immunol** 1989 Jan;19(1):217–9

Alloreactive cytotoxic T cells induce DNA fragmentation in peritoneal macrophages: evidence for target cell killing by cytotoxic T cells in vivo. Liu Y, et al. **Eur J Immunol** 1989 Jun;19(6):1153–5

Antigen recognition by H–2–restricted cytolytic T lymphocytes: inhibition of cytolysis by anti–CD8 monoclonal antibodies depends upon both concentration and primary sequence of peptide antigen. Maryanski JL, et al. **Eur J Immunol** 1988 Nov;18(11):1863–6

Intradomain H–2Kd/Dd recombinants define the same regions as crucial for recognition by alloreactive or major histocompatibility complex–restricted cytolytic T cells. Maryanski JL, et al. **Eur J Immunol** 1989 Jan;19(1):193–6

Molecules relevant for T cell–target cell interaction are present in cytolytic granules of human T lymphocytes. Peters PJ, et al. **Eur J Immunol** 1989 Aug;19(8):1469–75

Specificity of proliferative response of human CD8 clones to mycobacterial antigens. Rees A, et al. **Eur J Immunol** 1988 Dec;18(12):1881–7

Alloantigen pretreatment induces a down–regulation of the in vivo subsequent development of cytotoxic T lymphocytes directed against linked alloantigens. Schutze MP, et al. **Eur J Immunol** 1989 Aug;19(8):1365–71

Regulatory role of the CD8 antigen in both CD3 and CD2 monoclonal antibody–induced nonspecific cytotoxicity of class I– and class II–allospecific cytotoxic T cell clones. Van Seventer GA, et al. **Eur J Immunol** 1988 Dec; 18(12):1973–8

Cytotoxic T lymphocytes in reticuloendotheliosis virus–infected chickens. Weinstock D, et al. **Eur J Immunol** 1989 Feb;19(2):267–72

Mechanism of recovery from acute virus infection. VIII. Treatment of lymphocytic choriomeningitis virus–infected mice with anti–interferon–gamma monoclonal antibody blocks generation of virus–specific cytotoxic T lymphocytes and virus elimination. Wille A, et al. **Eur J Immunol** 1989 Jul;19(7):1283–8

Peripheral tolerance mechanisms prevent the development of autoreactive T cells in chimeras grafted with two minor incompatible thymuses. Zamoyska R, et al. **Eur J Immunol** 1989 Jan;19(1):111–7

Induction and regulation of cytotoxic T cells by microbial antigens and recombinant interleukin 2. Piccolella E, et al. **Folia Biol (Praha)** 1988;34(5):316–29

Blood lymphocytes from ankylosing spondylitis patients fail to induce disease–specific cytotoxic T lymphocytes. Breur–Vriesendorp BS, et al. **Hum Immunol** 1989 Jul; 25(3):149–55

Human allograft–derived T–cell lines: donor class I– and class II–directed cytotoxicity and repertoire stability in sequential biopsies. Miceli MC, et al. **Hum Immunol** 1988 Jul;22(3):185–98

Specific suppression of mixed lymphocyte reactions by alloactivated cells is correlated with cytotoxicity. Vandekerckhove BA, et al. **Hum Immunol** 1989 Mar; 24(3):183–94

Rabies virus–specific T cell hybridomas: identification of class II MHC–restricted T–cell epitopes using synthetic peptides. Celis E, et al. **Hybridoma** 1989 Jun;8(3):263–75

In vitro functional characterization of SAG–3—a naturally occurring monoclonal antibody in NZB mice: specificity toward functional T cell subsets. Surh CD, et al. **Hybridoma** 1988 Dec;7(6):609–25

Kinetics of cellular cytotoxicity mediated by cloned cytotoxic T lymphocytes. Callewaert DM, et al. **Immunobiology** 1988 Dec;178(3):203–14

Proliferative response of cloned CTL line 10B–5 upon stimulation with soluble clonotypic monoclonal antibody and its blocking by anti–Lyt–2 antibody. Udono H, et al. **Immunobiology** 1989 Feb;178(4–5):390–400

T cell–recognized antigenic peptides derived from the cellular genome are not protein degradation products but can be generated directly by transcription and translation of short subgenic regions. A hypothesis. Boon T, et al. **Immunogenetics** 1989;29(2):75–9

The Ly–10 antigen is a marker of mouse–activated T lymphocytes. Chan MM, et al. **Immunogenetics** 1988; 28(6):425–32

Mouse cytotoxic T cells can recognize HLA–B27 antigen without H–2 restriction. Samaan A, et al. **Immunogenetics** 1989;29(3):210–2

Resting (IL–2 non–responsive) precursors of human T cell receptor gamma delta–positive cells (TCR1 cells) are activated by a two signal process. Warren HS. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):121–6

Further evidence for H–2–unrestricted induction of minor histocompatibility antigens–specific T cell immunity in vivo. Mizoguchi K, et al. **Immunol Lett** 1988 Sep;19(1):41–7

CTL–mediated cytolysis: perforin and alternative pathways? Nabholz M, et al. **Immunol Lett** 1989 Feb;20(3):179–80

Interleukin 5 is a differentiation factor for cytotoxic T lymphocytes. Ramos T. **Immunol Lett** 1989 Jun 15; 21(4):277–83

Cytotoxic T lymphocyte recognition sites on influenza virus hemagglutinin. Torres JV, et al. **Immunol Lett** 1988 Sep; 19(1):49–53

Interplay between the TCR/CD3 complex and CD4 or CD8 in the activation of cytotoxic T lymphocytes. de Vries JE, et al. **Immunol Rev** 1989 Jun;109:119–41 (106 ref.)

An in–vitro model for tumor immunotherapy with antibody heteroconjugates. Jung G, et al. **Immunol Today** 1988 Sep; 9(9):257–60 (55 ref.)

Pathways of viral antigen processing and presentation to CTL: defined by the mode of virus entry? Long EO, et al. **Immunol Today** 1989 Feb;10(2):45–8 (28 ref.)

CTL: virus control cells first and cytolytic cells second? DNA fragmentation, apoptosis and the prelytic halt hypothesis. Martz E, et al. **Immunol Today** 1989 Mar; 10(3):79–86

How do cytotoxic T lymphocytes avoid self–lysis? Young JD, et al. **Immunol Today** 1988 Jan;9(1):14–5

Genetic and stimulator cell requirements for generation and activation of minor histocompatibility antigen–specific memory cytotoxic T–lymphocyte precursors. Ando KI, et al. **Immunology** 1988 Aug;64(4):661–7

Influenza–specific cytotoxic T–cell recognition is inhibited by peptides unrelated in both sequence and MHC restriction. Bodmer HC, et al. **Immunology** 1989 Feb; 66(2):163–9

Granulocyte precursors are the principal cells in bone marrow that stimulate allospecific cytolytic T–lymphocyte responses. Czitrom AA, et al. **Immunology** 1988 Aug; 64(4):655–60

IL–2 and IL–4 can co–modulate the generation of cytotoxic T cells through CD8– CD4– splenic lymphocytes. Good MF, et al. **Immunology** 1989 Jun;67(2):225–30

Limiting–dilution analysis of human CTL differentiation. Requirement for a lymphokine–mediated differentiation signal. Horohov DW, et al. **Immunology** 1988 Sep; 65(1):119–24

TGF beta down–regulates TLiSA1 expression and inhibits the differentiation of precursor lymphocytes into CTL and LAK cells. Jin B, et al. **Immunology** 1989 Apr;66(4):570–6

Rapid recovery of lung histology correlates with clearance of influenza virus by specific CD8+ cytotoxic T cells. Mackenzie CD, et al. **Immunology** 1989 Jul;67(3):375–81

Monoclonal antibodies to ovine SBU–T8 and SBU–T6 bind analogous molecules on bovine lymphocytes. O'Reilly KL, et al. **Immunology** 1989 Jun;67(2):176–80

In vivo localization of a bispecific antibody which targets human T lymphocytes to lyse human colon cancer cells. Barr IG, et al. **Int J Cancer** 1989 Mar 15;43(3):501–7

Different class I antigen oligosaccharides on a murine tumor and a lectin–resistant variant are not responsible for the differential recognition of the tumors by CTL. Degen E, et al. **Int J Cancer** 1989 May 15;43(5):828–36

Proliferative and cytolytic potentials of purified human tumor–infiltrating T lymphocytes. Impaired response to mitogen–driven stimulation despite T–cell receptor expression. Miescher S, et al. **Int J Cancer** 1988 Nov 15; 42(5):659–66

Recruitment and activation of tumor–specific immune T cells in situ: functional studies using a sponge matrix model. Zangemeister U, et al. **Int J Cancer** 1989 Feb 15;43(2):310–6

Methyl–acetylenicputrescine (MAP), an inhibitor of polyamine biosynthesis, reduces the frequency and cytolytic activity of alloantigen–induced LyT 2.2 positive lymphocytes in vivo. Bowlin TL, et al. **Int J Immunopharmacol** 1989;11(3):259–65

Suppression of cytolytic function in murine lymphocytes exposed to 1,4–bis[(2–aminoethyl)amino]–5,8–dihydroxy–9,10–anthracenedione dihydrochloride (AEAD): inhibition of proliferation by cytotoxic T–lymphocyte precursors. House RV, et al. **Int J Immunopharmacol** 1989;11(3):301–8

Prevention of metastatic spread by postoperative immunotherapy with virally modified autologous tumor cells. III. Postoperative activation of tumor–specific CTLP from mice with metastases requires stimulation with the specific antigen plus additional signals. von Hoegen P, et al. **Invasion Metastasis** 1989;9(2):117–33

Immunotherapy of experimental autoimmune encephalomyelitis (EAE): differential effect of anti–IL–2 receptor antibody therapy on actively induced and T–line mediated EAE of the Lewis rat. Engelhardt B, et al. **J Autoimmun** 1989 Feb;2(1):61–73

Inhibition of cytotoxic T lymphocyte–mediated lysis and cellular proliferation by isoquinoline sulfonamide protein kinase inhibitors. Evidence for the involvement of protein kinase C in lymphocyte function. Juszczak RJ, et al. **J Biol Chem** 1989 Jan 15;264(2):810–5

Glutathione regulates interleukin–2 activity on cytotoxic T–cells. Liang CM, et al. **J Biol Chem** 1989 Aug 15; 264(23):13519–23

Cytotoxic T–cells and antibody–producing cells isolated from liver and spleen of immunized rats. Malter M, et al. **J Cancer Res Clin Oncol** 1989;115(2):157–60

Mechanisms of lymphocyte–mediated lysis. Joag S, et al. **J Cell Biochem** 1989 Mar;39(3):239–52 (114 ref.)

Intercellular adhesion molecule–1 (ICAM–1) is involved in the cytolytic T lymphocyte interaction with a human synovial cell line. Mentzer SJ, et al. **J Cell Physiol** 1988 Oct;137(1):173–8

T–cell–mediated cytolysis: analysis of killer and target cell deformability and deformation during conjugate formation. Foa C, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):561–73

Phenotypic and functional analysis at the clonal level of infiltrating T lymphocytes in papillary carcinoma of the thyroid: prevalence of cytolytic T cells with natural killer–like or lymphokine–activated killer activity. Bagnasco M, et al. **J Clin Endocrinol Metab** 1989 Oct; 69(4):832–6

Enhanced peripheral blood T–cell cytotoxicity in inflammatory bowel disease. Shanahan F, et al. **J Clin Immunol** 1989 Jan;9(1):55–64

Role of keratinocytes in human recurrent herpetic lesions. Ability to present herpes simplex virus antigen and act as targets for T lymphocyte cytotoxicity in vitro. Cunningham AL, et al. **J Clin Invest** 1989 Feb;83(2):490–6

Amplification of altered self–reactive cytolytic T lymphocyte responses by cloned, allospecific human Th cells. Friedman SM, et al. **J Clin Invest** 1988 Nov;82(5):1722–30

Murine cytotoxic T lymphocyte recognition of individual influenza virus proteins. High frequency of nonresponder MHC class I alleles. Bennink JR, et al. **J Exp Med** 1988 Nov 1;168(5):1935–9

Cytotoxic T lymphocytes from HLA–A2 transgenic mice specific for HLA–A2 expressed on human cells. Bernhard EJ, et al. **J Exp Med** 1988 Sep 1;168(3):1157–62

The MHC molecule I–E is necessary but not sufficient for the clonal deletion of V beta 11–bearing T cells. Bill J, et al. **J Exp Med** 1989 Apr 1;169(4):1405–19

Human cytomegalovirus–specific cytotoxic T cells. Relative frequency of stage–specific CTL recognizing the 72–kD immediate early protein and glycoprotein B expressed by recombinant vaccinia viruses. Borysiewicz LK, et al. **J Exp Med** 1988 Sep 1;168(3):919–31

Cytotoxic T cells clear virus but augment lung pathology in mice infected with respiratory syncytial virus. Cannon MJ, et al. **J Exp Med** 1988 Sep 1;168(3):1163–8

Induction of ovalbumin–specific cytotoxic T cells by in vivo peptide immunization. Carbone FR, et al. **J Exp Med** 1989 Mar 1;169(3):603–12

Prostaglandins from human T suppressor/cytotoxic cells modulate natural killer antibacterial activity. Garcia–Peñarrubia P, et al. **J Exp Med** 1989 Aug 1; 170(2):601–6

A 15 amino acid fragment of influenza nucleoprotein synthesized in the cytoplasm is presented to class I–restricted cytotoxic T lymphocytes. Gould K, et al. **J Exp Med** 1989 Sep 1;170(3):1051–6

The generation of antigen–specific, major histocompatibility complex–restricted cytotoxic T lymphocytes of the CD4+ phenotype. Enhancement by the cutaneous administration of interleukin 2. Hancock GE, et al. **J Exp Med** 1989 Mar 1;169(3):909–19

Autologous tumor–specific cytotoxic T lymphocytes in the infiltrate of human metastatic melanomas. Activation by interleukin 2 and autologous tumor cells, and involvement of the T cell receptor. Itoh K, et al. **J Exp Med** 1988 Oct

1;168(4):1419–41
T cell memory. Long–term persistence of virus–specific cytotoxic T cells. Jamieson BD, et al. J Exp Med 1989 Jun 1;169(6):1993–2005
Interleukin 4 promotes the growth of tumor–infiltrating lymphocytes cytotoxic for human autologous melanoma. Kawakami Y, et al. J Exp Med 1988 Dec 1;168(6):2183–91
FBL–reactive CD8+ cytotoxic and CD4+ helper T lymphocytes recognize distinct Friend murine leukemia virus–encoded antigens. Klarnet JP, et al. J Exp Med 1989 Feb 1;169(2):457–67
Active immunization against virus infections due to antigenic drift by induction of crossreactive cytotoxic T lymphocytes. Kuwano K, et al. J Exp Med 1989 Apr 1; 169(4):1361–71
Resistance of cytolytic lymphocytes to perforin–mediated killing. Induction of resistance correlates with increase in cytotoxicity. Liu CC, et al. J Exp Med 1989 Jun 1; 169(6):2211–25
Primary stimulation by dendritic cells induces antiviral proliferative and cytotoxic T cell responses in vitro. Macatonia SE, et al. J Exp Med 1989 Apr 1;169(4):1255–64
Clonal analysis of cytotoxic and regulatory T cell responses against human melanoma. Mukherji B, et al. J Exp Med 1989 Jun 1;169(6):1961–76
The recombinant 65–kD heat shock protein of Mycobacterium bovis Bacillus Calmette–Guerin/M. tuberculosis is a target molecule for CD4+ cytotoxic T lymphocytes that lyse human monocytes. Ottenhoff TH, et al. J Exp Med 1988 Nov 1;168(5):1947–52
Presentation of the H–Y antigen on Langerhans' cell–negative corneal grafts downregulates the cytotoxic T cell response and converts responder strain mice into phenotypic nonresponders. Peeler JS, et al. J Exp Med 1988 Nov 1;168(5):1749–66
Defective presentation to class I–restricted cytotoxic T lymphocytes in vaccinia–infected cells is overcome by enhanced degradation of antigen. Townsend A, et al. J Exp Med 1988 Oct 1;168(4):1211–24
A cytotoxic T lymphocyte inhibits acquired immunodeficiency syndrome virus replication in peripheral blood lymphocytes. Tsubota H, et al. J Exp Med 1989 Apr 1;169(4):1421–34
Class I MHC can present an endogenous peptide to cytotoxic T lymphocytes. Whitton JL, et al. J Exp Med 1989 Sep 1;170(3):1033–8
Lysis of human melanoma cells by autologous cytolytic T cell clones. Identification of human histocompatibility leukocyte antigen A2 as a restriction element for three different antigens. Wölfel T, et al. J Exp Med 1989 Sep 1;170(3):797–810
Cytotoxic T lymphocytes specific for self tumor immunoglobulin express T cell receptor delta chain. Wright A, et al. J Exp Med 1989 May 1;169(5):1557–64
Thymic selection of H–2–incompatible bone marrow cells in SCID mice. Differences in T help for induction of B cell IgG responses versus cytotoxic T cells. Zinkernagel RM, et al. J Exp Med 1988 Sep 1;168(3):1187–92
Recognition of respiratory syncytial virus fusion protein by mouse cytotoxic T cell clones and a human cytotoxic T cell line. Cannon MJ, et al. J Gen Virol 1989 Jan;70 (Pt 1):79–87
Frequency analysis of simian virus 40–specific cytotoxic T lymphocyte precursors in the high responder C57BL/6 mouse strain. Jennings SR, et al. J Gen Virol 1988 Oct;69 (Pt 10):2493–503
Identification of cytolytic lymphocytes in West Nile virus–infected murine central nervous system. Liu Y, et al. J Gen Virol 1989 Mar;70 (Pt 3):565–73
Humoral and cytotoxic T cell immune responses to internal and external structural proteins of simian virus 5 induced by immunization with solid matrix–antibody–antigen complexes. Randall RE, et al. J Gen Virol 1988 Oct;69 (Pt 10):2505–16
Influenza virus–specific T cells lead to early interferon gamma in lungs of infected hosts: development of a sensitive radioimmunoassay. Taylor PM, et al. J Gen Virol 1989 Apr;70 (Pt 4):975–8
Cytotoxic T lymphocyte recognition of hybrid MHC class I molecules. Kanda T, et al. J Immunogenet 1988 Oct–Dec; 15(5–6):295–305
Differential expression of the ASGM1 antigen on anti–reovirus and alloreactive cytotoxic T lymphocytes (CTL). Parker SE, et al. J Immunogenet 1988 Aug; 15(4):215–26
Temperature requirements and kinetics of T cell signaling. Velocity of triggering correlates with functional effects of anti–CD3 mAb. Abdi K, et al. J Immunol 1989 May 1; 142(9):2971–80
Cytotoxic T lymphocyte–induced loss of target cell adhesion and lysis involve common and separate signaling pathways. Abrams SI, et al. J Immunol 1989 Mar 15;142(6):1789–96
Target cell lysis by cytotoxic T lymphocytes that lack detectable hemolytic perforin activity. Allbritton NL, et al. J Immunol 1988 Nov 15;141(10):3243–8
Cytotoxic T lymphocyte clones from peripheral blood and from tumor site detect intratumor heterogeneity of melanoma cells. Analysis of specificity and mechanisms of interaction. Anichini A, et al. J Immunol 1989 May 15; 142(10):3692–701
A virus–specific CD4+ cell–mediated cytolytic activity revealed by CD8+ cell elimination regularly develops in uncloned human antiviral cell lines [published erratum appears in J Immunol 1989 Jun 1;142(11):4118] Bourgault I, et al. J Immunol 1989 Jan 1;142(1):252–6
Heterologous cross–linking of Lyt–2 (CD8) to the alpha beta–T cell receptor is more effective in T cell activation than homologous alpha beta–T cell receptor cross–linking. Boyce NW, et al. J Immunol 1988 Nov 1;141(9):2882–8
Mouse fetal thymus lobes cultured in IL–2 generate CD3+, TCR–gamma delta–expressing CD4–/CD8+ and CD4–/CD8– cells. Ceredig R, et al. J Immunol 1989 May 15;142(10):3353–60
Active suppression of host–vs graft reaction in pregnant mice. IX. Soluble suppressor activity obtained from allopregnant mouse decidua that blocks the cytolytic effector response to IL–2 is related to transforming growth factor–beta. Clark DA, et al. J Immunol 1988 Dec 1;141(11):3833–40
The role of HLA class I antigens in recognition of melanoma cells by tumor–specific cytotoxic T lymphocytes. Evidence for shared tumor antigens. Darrow TL, et al. J Immunol 1989 May 1;142(9):3329–35
Antipeptide antibody specific for the N–terminal of soluble immune response suppressor neutralizes concanavalin A and IFN–induced suppressor cell activity in an in vitro cytotoxic T lymphocyte response. Devens BH, et al. J Immunol 1988 Nov 1;141(9):3148–54
T lymphocyte cytotoxicity with natural varicella–zoster virus infection and after immunization with live attenuated varicella vaccine. Diaz PS, et al. J Immunol 1989 Jan 15; 142(2):636–41
Naturally occurring cytotoxic T lymphocyte precursors with specificity for an Ig idiotype. Dohi Y, et al. J Immunol 1988 Dec 1;141(11):3804–9
Cytotoxic lymphocyte–derived lytic granules do not induce DNA fragmentation in target cells. Duke RC, et al. J Immunol 1988 Oct 1;141(7):2191–4
Enhancement of mixed leukocyte reaction and cytotoxic antitumor responses by heparin. Dziarski R. J Immunol 1989 Jul 1;143(1):356–65
Chronic relapsing experimental allergic encephalomyelitis. Cytotoxicity effected by a class II restricted T cell line specific for an encephalitogenic epitope. Fallis RJ, et al. J Immunol 1989 Oct 1;143(7):2160–5
Inhibition of human natural killer cell activity by platelet–derived growth factor. II. Membrane binding studies, effects of recombinant IFN–alpha and IL–2, and lack of effect on T cell and antibody–dependent cellular cytotoxicity. Gersuk GM, et al. J Immunol 1988 Dec 1; 141(11):4031–8
Induction of lysis by T cell receptor gamma delta+/CD3+ T lymphocytes via CD2 requires triggering via the T11.1 epitope only. Goedegebuure PS, et al. J Immunol 1989 Mar 15;142(6):1797–802
Cloned cytotoxic T lymphocytes as target cells. II. Polarity of lysis revisited. Gorman K, et al. J Immunol 1988 Oct 1;141(7):2211–5
Persistent suppression of virus–specific cytotoxic T cell responses after transient depletion of CD4+ T cells in vivo. Goronzy JJ, et al. J Immunol 1989 Jun 15;142(12):4435–40
Pertussis toxin effects on T lymphocytes are mediated through CD3 and not by pertussis toxin catalyzed modification of a G protein. Gray LS, et al. J Immunol 1989 Mar 1;142(5):1631–8
Effects of anti–Lyt–2 and anti–L3T4 monoclonal antibodies on the function of cytotoxic T lymphocyte/helper T lymphocyte hybrid T cell clones. Havran WL, et al. J Immunol 1988 Sep 15;141(6):1808–12
Delineation of determinants on HLA–B7 and HLA–B27 that are necessary for cytolytic T cell recognition by using inter– and intra–domain recombinants. Healy F, et al. J Immunol 1989 Oct 1;143(7):2357–63
A study of functionally active amino acids involved in the interaction of HLA–A2 or HLA–A3 molecules with cytolytic T lymphocytes. Healy F, et al. J Immunol 1988 Oct 1;141(7):2487–96
Mapping of epitopes recognized by alloreactive cytotoxic T lymphocytes using inhibition by MHC peptides. Heath WR, et al. J Immunol 1989 Sep 1;143(5):1441–6
IL–4 bypasses the immune suppressive effect of cyclosporin A during the in vitro induction of murine cytotoxic T lymphocytes. Heeg K, et al. J Immunol 1988 Oct 1; 141(7):2330–4
Induction and activity of class II–restricted, Lyt–2+ cytolytic T lymphocytes specific for the influenza H5 hemagglutinin. Hioe CE, et al. J Immunol 1989 Apr 1; 142(7):2482–8
A panel of unique HLA–A2 mutant molecules define epitopes recognized by HLA–A2–specific antibodies and cytotoxic T lymphocytes. Hogan KT, et al. J Immunol 1989 Mar 15;142(6):2097–104
Cytotoxic T lymphocyte–defined epitope differences between HLA–A2.1 and HLA–A2.2 map to two distinct regions of the molecule. Hogan KT, et al. J Immunol 1988 Dec 1;141(11):4005–11
Identification by site–directed mutagenesis of amino acid residues contributing to serologic and CTL–defined epitope differences between HLA–A2.1 and HLA–A2.3. Hogan KT, et al. J Immunol 1988 Oct 1;141(7):2519–25
Distinct restriction of complement– and cell–mediated lysis. Hollander N, et al. J Immunol 1989 Jun 1;142(11):3913–6
Derivation of a T cell line that is highly responsive to IL–4 and IL–2 (CT.4R) and of an IL–2 hyporesponsive mutant of that line (CT.4S). Hu–Li J, et al. J Immunol 1989 Feb 1;142(3):800–7
Cytotoxic T lymphocyte responses to minor H–43 alloantigens in H–43a and H–43b mice. Both anti–H–43b and anti–H–43a CTL activities are generated exclusively in the context of the same H–2Kb restriction element. Ishikawa H, et al. J Immunol 1988 Nov 1;141(9):2918–23
Induction of class I MHC–restricted, peptide–specific cytolytic T lymphocytes by peptide priming in vivo. Ishioka GY, et al. J Immunol 1989 Aug 15;143(4):1094–100
Resistance of cytolytic lymphocytes to perforin–mediated killing. Murine cytotoxic T lymphocytes and human natural killer cells do not contain functional soluble homologous restriction factor or other specific soluble protective factors. Jiang S, et al. J Immunol 1989 Sep 1;143(5):1453–60
Cell–mediated suppression of HIV–specific cytotoxic T lymphocytes. Joly P, et al. J Immunol 1989 Oct 1; 143(7):2193–201
Cytotoxic T lymphocyte recognition of secreted HLA class I molecules. Kahn–Perles B, et al. J Immunol 1989 May 1;142(9):3021–5
Non–specifically activated human peripheral blood mononuclear cells are cytotoxic for human keratinocytes in vitro. Kalish RS. J Immunol 1989 Jan 1;142(1):74–80
Molecular interactions required for triggering alloantigen–specific cytolytic T lymphocytes. Kane KP, et al. J Immunol 1989 Jun 15;142(12):4153–60
Induction of antigen–specific parasiticidal cytotoxic T cell splenocytes by a major membrane protein (P30) of Toxoplasma gondii. Khan IA, et al. J Immunol 1988 Nov 15;141(10):3600–5
Efficiency and effectiveness of cloned virus–specific cytotoxic T lymphocytes in vivo. Klavinskis LS, et al. J Immunol 1989 Sep 15;143(6):2013–6
Natural killer (NK)–like cytotoxic activity of allospecific T cell receptor–gamma,delta+ T cell clones. Distinct receptor–ligand interactions mediate NK–like and allospecific cytotoxicity. Koide J, et al. J Immunol 1989 Jun 15;142(12):4161–8
Target cell lysis by cytotoxic T lymphocytes redirected by antibody–coated polystyrene beads. Kolber MA, et al. J Immunol 1989 Sep 1;143(5):1461–6
Recovery of activated cytotoxic T cells from minor H incompatible tumor graft rejection sites. Ksander BR, et al. J Immunol 1989 Jul 15;143(2):426–31
Anti–idiotypic antibodies against UV–induced tumor–specific CTL clones. Preparation in syngeneic combination. Kuribayashi K, et al. J Immunol 1988 Dec 1; 141(11):4074–80
Immune recognition of AIDS virus antigens by human and murine cytotoxic T lymphocytes. Langlade–Demoyen P, et al. J Immunol 1988 Sep 15;141(6):1949–57
Cytotoxic T cell responses in HLA–A2.1 transgenic mice. Recognition of HLA alloantigens and utilization of HLA–A2.1 as a restriction element. Le AX, et al. J Immunol 1989 Feb 15;142(4):1366–71
Effects of treatment with IL–2 receptor specific monoclonal antibody in mice. Inhibition of cytotoxic T cell responses but not of T help. Leist TP, et al. J Immunol 1989 Jul 15;143(2):628–32
Co–recognition of endogenous antigens with HLA–DR1 by alloreactive human T cell clones. Lombardi G, et al. J Immunol 1989 Feb 1;142(3):753–9
Characterization of anti–CD8–resistant cytolytic T lymphocytes induced by multivalent cross–linking of CD8 on precursor cells. McCarthy SA, et al. J Immunol 1989 Oct 1;143(7):2112–9
Induction of anti–CD8 resistant cytotoxic T lymphocytes by anti–CD8 antibodies. Functional evidence for T cell signaling induced by multi–valent cross–linking of CD8 on precursor cells. McCarthy SA, et al. J Immunol 1988 Dec 1;141(11):3737–46
On the extraordinary capacity of allogeneic epidermal Langerhans cells to prime cytotoxic T cells in vivo. McKinney EC, et al. J Immunol 1989 Sep 1;143(5):1560–4
IFN–treated neuroblastoma cell lines remain resistant to T cell–mediated allo–killing, and susceptible to non–MHC–restricted cytotoxicity. Main EK, et al. J Immunol 1988 Nov 1;141(9):2943–50
Recognition by cytotoxic T lymphocytes of Qa–2 antigens. Sensitivity of Qa–2 molecules to phosphatidylinositol–specific phospholipase C. Mann D, et al. J Immunol 1988 Sep 15;141(6):1813–8
An H–2Ld hybrid molecule with a Qa–2 alpha–3 domain and phosphatidyl–inositol anchor is not recognized by H–2Ld–specific cytotoxic T lymphocytes. Mann DW, et al. J Immunol 1989 Jan 1;142(1):318–22
IL–2 and IFN–gamma are two necessary lymphokines in the development of cytolytic T cells. Maraskovsky E, et al. J Immunol 1989 Aug 15;143(4):1210–4
Two epitopes and one agretope map to a single HLA–A2 peptide recognized by H–2–restricted T cells. Martinon F, et al. J Immunol 1989 May 15;142(10):3489–94
Differential effects of amino acid substitutions in the beta–sheet floor and alpha–2 helix of HLA–A2 on recognition by alloreactive viral peptide–specific cytotoxic T lymphocytes. Mattson DH, et al. J Immunol 1989 Aug 15;143(4):1101–7
Role of lymphokine–secreting CD8+ T cells in cytotoxic T lymphocyte responses against vaccinia virus. Mizuochi T, et al. J Immunol 1989 Jan 1;142(1):270–3
A virus–sensitive suppressor cell is involved in the regulation of human allospecific T cell–mediated cytotoxicity. Muluk

SC, et al. J Immunol 1989 Oct 1;143(7):2209–15
Functional analysis of mononuclear cells infiltrating into tumors. IV. Purification and functional characterization of cytotoxic cell–generating factor. Murakami T, et al. J Immunol 1988 Dec 15;141(12):4235–42
Destruction of pancreatic islet cells by cytotoxic T lymphocytes in nonobese diabetic mice. Nagata M, et al. J Immunol 1989 Aug 15;143(4):1155–62
Arsonate–specific murine T cell clones. V. Antigen presentation by L cells transfected with normal and mutant class II genes. Norton FL, et al. J Immunol 1989 Jul 15; 143(2):446–51
Bone marrow cells from allogeneic bone marrow chimeras inhibit the generation of cytotoxic lymphocyte responses against both donor and recipient cells. Ogasawara M, et al. J Immunol 1988 Nov 15;141(10):3306–12
Studies of sublines selected for loss of HLA expression from an EBV–transformed lymphoblastoid cell line. Changes in sensitivity to cytotoxic T cells activated by allostimulation and natural killer cells activated by IFN or IL–2. Ohlén C, et al. J Immunol 1989 May 1;142(9):3336–41
Evidence for multiple lytic pathways used by cytotoxic T lymphocytes. Ostergaard HL, et al. J Immunol 1989 Oct 1;143(7):2120–6
Competition between unrelated peptides recognized by H–2–Kd restricted T cells. Pala P, et al. J Immunol 1988 Oct 1;141(7):2289–94
Antigen specific and MHC nonrestricted cytotoxicity of T cell receptor alpha beta+ and gamma delta+ human T cell clones isolated in IL–4. Paliard X, et al. J Immunol 1989 Jul 15;143(2):452–7
Immunosuppressive properties of electrophoretically "slow" and "fast" form alpha 2–macroglobulin. Effects on cell–mediated cytotoxicity and (allo–) antigen–induced T cell proliferation. Petersen CM, et al. J Immunol 1989 Jan 15;142(2):629–35
Inhibition of cytotoxic T cell lysis by anti–CD8 monoclonal antibodies: studies with CD3–targeted cytolysis of nominal antigen–negative targets. Quinones RR, et al. J Immunol 1989 Apr 1;142(7):2200–6
Tumor necrosis factor–alpha as a proliferative signal for an IL–2–dependent T cell line: strict species specificity of action. Ranges GE, et al. J Immunol 1989 Feb 15; 142(4):1203–8
Mouse anti–adenovirus cytotoxic T lymphocytes. Inhibition of lysis by E3 gp19K but not E3 14.7K. Rawle FC, et al. J Immunol 1989 Sep 15;143(6):2031–7
Accessory signals in murine cytolytic T cell responses. Dual requirement for IL–1 and IL–6. Renauld JC, et al. J Immunol 1989 Sep 15;143(6):1894–8
Evidence for involvement of the gamma, delta T cell antigen receptor in cytotoxicity mediated by human alloantigen–specific T cell clones. Rivas A, et al. J Immunol 1989 Mar 15;142(6):1840–6
Activation of human cytolytic cells through CD2/T11. Comparison of the requirements for the induction and direction of lysis of tumor targets by T cells and NK cells. Scott CF Jr, et al. J Immunol 1989 Jun 1;142(11):4105–12
A single amino acid substitution in HLA–A2 can alter the selection of the cytotoxic T lymphocyte repertoire that responds to influenza virus matrix peptide 55–73. Shimojo N, et al. J Immunol 1989 Jul 15;143(2):558–64
Class I MHC–restricted recognition of cells expressing a gene encoding a 41 amino acid product of the influenza hemagglutinin. Sweetser MT, et al. J Immunol 1988 Nov 15;141(10):3324–8
Lethal graft–vs–host disease induced by a class II MHC antigen only disparity is not mediated by cytotoxic T cells. Thiele DL, et al. J Immunol 1988 Nov 15;141(10):3377–82
Antiviral immunity induced by recombinant nucleoprotein of influenza A virus. I. Characteristics and cross–reactivity of T cell responses. Tite JP, et al. J Immunol 1988 Dec 1;141(11):3980–7
Characterization of the T cell–mediated cellular cytotoxicity during acute infectious mononucleosis. Tomkinson BE, et al. J Immunol 1989 Jul 15;143(2):660–70
Tumor–specific cytolysis by lymphocytes infiltrating human melanomas. Topalian SL, et al. J Immunol 1989 May 15; 142(10):3714–25
Inhibition of erythroid progenitor growth is mediated by cytotoxic lymphocytes and not by natural killer cells or IFN–gamma. Torok–Storb B, et al. J Immunol 1989 Sep 15;143(6):1837–42
Expression of retrovirus–related, cytotoxic T lymphocyte– and transplantation–defined antigens in NIH/3T3 transfectants after a single passage in nude mice. Traversari C, et al. J Immunol 1989 Apr 15;142(8):2887–94
Measles virus–specific human T cell clones. Characterization of specificity and function of CD4+ helper/cytotoxic and CD8+ cytotoxic T cell clones. van Binnendijk RS, et al. J Immunol 1989 Apr 15;142(8):2847–54
Consequences of self–presentation of peptide antigen by cytolytic T lymphocytes. Vitiello A, et al. J Immunol 1989 Sep 1;143(5):1512–7
Normal hematopoietic progenitor cells and malignant lymphohematopoietic cells show different susceptibility to direct cell–mediated MHC–non–restricted lysis by T cell receptor–/CD3–, T cell receptor gamma delta+/CD3+ and T cell receptor–alpha beta+/CD3+ lymphocytes. Voogt PJ, et al. J Immunol 1989 Mar 1;142(5):1774–80
HIV–1 GP120–mediated immune suppression and lymphocyte destruction in the absence of viral infection. Weinhold KJ, et al. J Immunol 1989 May 1;142(9):3091–7
Virus–induced polyclonal cytotoxic T lymphocyte stimulation. Yang HY, et al. J Immunol 1989 Mar 1; 142(5):1710–8
Differential in vitro activation of CD4+CD8– and CD8+CD4– herpes simplex virus–specific human cytotoxic T cells. Yasukawa M, et al. J Immunol 1989 Sep 15;143(6):2051–7
Recruitment and activation of tumor–specific immune T cells in situ. CD8+ cells predominate the secondary response in sponge matrices and exert both delayed–type hypersensitivity–like and cytotoxic T lymphocyte activity. Zangemeister–Wittke U, et al. J Immunol 1989 Jul 1; 143(1):379–85
Determination of cytotoxic T lymphocyte activity by time–resolved fluorometry using europium–labelled concanavalin A–stimulated cells as targets. Granberg C, et al. J Immunol Methods 1988 Nov 10;114(1–2):191–5
Kinetic assay of cytotoxic T lymphocyte clones. I. Methodology and data analysis. Jenski LJ, et al. J Immunol Methods 1989 Feb 24;117(2):181–90
Kinetic assay of cytotoxic T lymphocyte clones. II. Comparison of primary and secondary responses and lectin–dependent cytotoxicity. Jenski LJ. J Immunol Methods 1989 Feb 24;117(2):191–8
An [35S]methionine cytotoxicity assay requiring small numbers of effector and target cells. Stedman KE, et al. J Immunol Methods 1989 May 12;119(2):291–4
Analysis of cytotoxic T cell precursor frequencies directed against individual HLA–A and –B alloantigens. Zhang L, et al. J Immunol Methods 1989 Jul 6;121(1):39–45
Varicella–zoster virus–specific HLA–restricted cytotoxicity of normal immune adult lymphocytes after in vitro stimulation. Cooper EC, et al. J Infect Dis 1988 Oct; 158(4):780–8
Liver–derived cytotoxic T cells in hepatitis A virus infection. Vallbracht A, et al. J Infect Dis 1989 Aug;160(2):209–17
Limiting dilution analysis of induced unresponsiveness to trinitrophenyl: increased suppression of cytotoxic T precursor cells at unchanged frequencies. Cooper JM, et al. J Mol Cell Immunol 1985;2(2):83–94
Human cytotoxic T lymphocytes. III. Large numbers of peripheral blood T cells clonally develop into allorestricted anti–viral cytotoxic T cell populations in vitro. Kabelitz D, et al. J Mol Cell Immunol 1987;3(1):49–60
Measles virus–polypeptide specificity of the cytotoxic T–lymphocyte response in multiple sclerosis. Dhib–Jalbut S, et al. J Neuroimmunol 1989 Feb;21(2–3):205–12
Virus–specific cytotoxic T lymphocytes in multiple sclerosis: a normal mumps virus response adds support for a distinct impairment in the measles virus response. Goodman AD, et al. J Neuroimmunol 1989 May;22(3):201–9
Persistence of measles virus in rat brain neurons is promoted by depletion of CD8+ T cells. Maehlen J, et al. J Neuroimmunol 1989 Feb;21(2–3):149–55
In vitro functional blocking of myelin basic protein–specific cytolytic human T lymphocyte clones by immunosuppressive drugs and monoclonal antibodies. Weber WE, et al. J Neuroimmunol 1989 Mar;22(1):1–9
Antigen presentation by Toxoplasma gondii–infected cells to CD4+ proliferative T cells and CD8+ cytotoxic cells. Yano A, et al. J Parasitol 1989 Jun;75(3):411–6
Murine trophoblast can be killed by allospecific cytotoxic T lymphocytes generated in GIBCO Opti–MEM medium. Drake BL, et al. J Reprod Immunol 1989 Mar;15(1):71–7
Immunological studies in recurrent spontaneous abortion: effects of immunization of women with paternal mononuclear cells on lymphocytotoxic and mixed lymphocyte reaction blocking antibodies and correlation with sharing of HLA and pregnancy outcome. Smith JB, et al. J Reprod Immunol 1988 Nov;14(2):99–113
Autocytotoxic cells in rheumatoid synovial fluids. Sugiyama E, et al. J Rheumatol 1989 Mar;16(3):276–9
Diagnosis of lung allograft rejection by bronchial intraepithelial Leu–7 positive T lymphocytes. Hruban RH, et al. J Thorac Cardiovasc Surg 1988 Dec;96(6):939–46
Modulation of acute and latent herpes simplex virus infection in C57BL/6 mice by adoptive transfer of immune lymphocytes with cytolytic activity. Bonneau RH, et al. J Virol 1989 Mar;63(3):1480–4
Molecular basis for cytolytic T–lymphocyte recognition of the murine cytomegalovirus immediate–early protein pp89. Del Val M, et al. J Virol 1988 Nov;62(11):3965–72
HLA class II–restricted presentation of cytoplasmic measles virus antigens to cytotoxic T cells. Jacobson S, et al. J Virol 1989 Apr;63(4):1756–62
Polymorphism of cytotoxic T–lymphocyte clones that recognize a defined nine–amino–acid immunodominant domain of lymphocytic choriomeningitis virus glycoprotein. Joly E, et al. J Virol 1989 May;63(5):1845–51
Molecularly engineered vaccine which expresses an immunodominant T–cell epitope induces cytotoxic T lymphocytes that confer protection from lethal virus infection. Klavinskis LS, et al. J Virol 1989 Oct; 63(10):4311–6
Rotavirus–specific protein synthesis is not necessary for recognition of infected cells by virus–specific cytotoxic T lymphocytes. Offit PA, et al. J Virol 1989 Aug; 63(8):3279–83
Rotavirus–specific cytotoxic T lymphocytes appear at the intestinal mucosal surface after rotavirus infection. Offit PA, et al. J Virol 1989 Aug;63(8):3507–12
Polyomavirus DNA is damaged in target cells during cytotoxic T–lymphocyte–mediated killing. Sellins KS, et al. J Virol 1989 Feb;63(2):572–8
Molecular analyses of a five–amino–acid cytotoxic T–lymphocyte (CTL) epitope: an immunodominant region which induces nonreciprocal CTL cross–reactivity. Whitton JL, et al. J Virol 1989 Oct;63(10):4303–10
Herpes simplex virus (HSV)–specific proliferative and cytotoxic T–cell responses in humans immunized with an HSV type 2 glycoprotein subunit vaccine. Zarling JM, et al. J Virol 1988 Dec;62(12):4481–5
Cell surface antigens of radiation leukemia virus–induced BALB/c leukemias defined by syngeneic cytotoxic T lymphocytes. Kaneko Y, et al. Jpn J Cancer Res 1989 Mar; 80(3):257–64
Augmentation of human cytotoxic T lymphocytes against autologous tumor by a factor released from human monocytic leukemia cell line. Maeda N, et al. Jpn J Cancer Res 1989 Jun;80(6):537–45
Requirement of Ia–positive nylon wool adherent cells for activation of cytotoxic T–lymphocytes specific to melanocyte–associated antigens in patients with Vogt–Koyanage–Harada's disease. Maezawa N, et al. Jpn J Ophthalmol 1988;32(3):348–57
Electron microscopic and immunohistochemical examinations of pancreatic beta cell destruction by cytotoxic T lymphocytes in NOD mice. Hayakawa M. Kobe J Med Sci 1988 Dec;34(6):237–48
Do CD4–positive cytotoxic T cells damage islet beta cells in type I diabetes? de Berardinis P, et al. Lancet 1988 Oct 8;2(8615):823–4
Reduction of cytotoxic antibodies after continuous ambulatory peritoneal dialysis in highly sensitised patients [letter] Latta K, et al. Lancet 1988 Oct 8;2(8615):847–8
Enhanced in vitro bone marrow cell migration and T–lymphocyte responses in aged mice given subcutaneous thymic epithelial cell grafts. Haar JL, et al. Mech Ageing Dev 1989 Mar;47(3):207–19
T cell subsets in patients with systemic lupus erythematosus. Kucharz EJ, et al. Med Interne 1988 Jul–Sep;26(3):227–33
Immune responses of mice after conjunctival exposure to Chlamydia trachomatis serovar A. Barsoum IS, et al. Med Microbiol Immunol (Berl) 1988;177(6):349–56
The reovirus–specific cytotoxic T cell response is not restricted to serotypically unique epitopes associated with the virus hemagglutinin. London SD, et al. Microb Pathog 1989 Jan;6(1):43–50
VSV G protein induces murine cytolytic T lymphocytes. Reiss CS, et al. Microb Pathog 1986 Jun;1(3):261–7
T cell–mediated cytotoxicity against dengue–infected target cells. Pang T, et al. Microbiol Immunol 1988;32(5):511–8
Class I MHC–restricted cytotoxic T cells efficiently recognize haemagglutinin that is defective in protein folding and cell surface expressions. Jennings PA, et al. Mol Immunol 1988 Dec;25(12):1371–6
Targeted cytotoxic cells as a novel form of cancer immunotherapy. Segal DM, et al. Mol Immunol 1988 Nov; 25(11):1099–103
Tumor–infiltrating lymphocytes and interleukin–2 in melanomas [letter] Sondel PM, et al. N Engl J Med 1989 May 25;320(21):1418–9
Cytolytic T–lymphocyte response to isolated class I H–2 proteins and influenza peptides. Kane KP, et al. Nature 1989 Jul 13;340(6229):157–9
HIV–1 gag–specific cytotoxic T lymphocytes defined with recombinant vaccinia virus and synthetic peptides. Nixon DF, et al. Nature 1988 Dec 1;336(6198):484–7
Substitution at residue 227 of H–2 class I molecules abrogates recognition by CD8–dependent, but not CD8–independent, cytotoxic T lymphocytes. Potter TA, et al. Nature 1989 Jan 5;337(6202):73–5
Killing of antigen–reactive B cells by class II–restricted, soluble antigen–specific CD8+ cytolytic T lymphocytes. Shinohara N, et al. Nature 1988 Dec 1;336(6198):481–4
Suppression of the immune response by cytotoxic T cells [news] Simpson E. Nature 1988 Dec 1;336(6198):426
The T cell receptor from an influenza–A specific murine CTL clone. Palmer MS, et al. Nucleic Acids Res 1989 Mar 25;17(6):2353
Evaluation of cytotoxic lymphocytes and their parasite strain specificity from African buffalo infected with Theileria parva. Baldwin CL, et al. Parasite Immunol 1988 Jul; 10(4):393–403
Recognition of influenza virus proteins by cytotoxic T lymphocytes. Townsend A, et al. Philos Trans R Soc Lond [Biol] 1989 Jun 12; 323(1217):527–33
Specific, major histocompatibility complex–unrestricted recognition of tumor–associated mucins by human cytotoxic T cells. Barnd DL, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7159–63
Class I major histocompatibility complex–restricted cytolytic T lymphocytes recognize a limited number of sites on the influenza hemagglutinin. Braciale TJ, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):277–81
Universal bispecific antibody for targeting tumor cells for destruction by cytotoxic T cells. Gilliland LK, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7719–23
Oligodendrocyte–specific autoreactive T cells using an alpha/beta T–cell receptor kill their target without self restriction. Jewtoukoff V, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2824–8

Recognition of xeno-(HLA, SLA) major histocompatibility complex antigens by mouse cytotoxic T cells is not H-2 restricted: a study with transgenic mice. Kievits F, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):617-20

Cytolytic T-cell clones against an autologous human melanoma: specificity study and definition of three antigens by immunoselection. Knuth A, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2804-8

Activated B cells can deliver help for the in vitro generation of antiviral cytotoxic T cells. Liu Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4629-33

Cloning, analysis, and expression of murine perforin 1 cDNA, a component of cytolytic T-cell granules with homology to complement component C9. Lowrey DM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):247-51

Effect of mutations and variations of HLA-A2 on recognition of a virus peptide epitope by cytotoxic T lymphocytes. McMichael AJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9194-8

Creation of H-2 class I epitopes using synthetic peptides: recognition by alloreactive cytotoxic T lymphocytes. Olson CA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1031-5

Major histocompatibility complex class I-specific cytolytic T cells, derived from gld mice, lacking Thy-1, CD4, and CD8. Wadsworth S, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1018-22

Cloned helper and cytotoxic T lymphocytes as effector cells in adoptive immunotherapy of murine leukemia. Bookman MA, et al. **Prog Clin Biol Res** 1989;288:141-9

Virus modified tumor cell vaccines for active specific immunotherapy of micrometastases: expansion and activation of tumor-specific T cells. Schirrmacher V, et al. **Prog Clin Biol Res** 1989;288:391-9

24th forum in immunology. HIV-specific cytotoxic T lymphocytes. **Res Immunol** 1989 Jan;140(1):89-124

T-cell-mediated cytotoxicity against HIV in seropositive patients: a physiopathological approach. Autran B, et al. **Res Immunol** 1989 Jan;140(1):103-7; discussion 120-1 (15 ref.)

Why high levels of virus-specific CTL persist in HIV1-infected individuals. Koup RA, et al. **Res Immunol** 1989 Jan;140(1):92-5; discussion 118-9 (17 ref.)

HIV-specific cytotoxic T lymphocytes and their possible implications in the future vaccine against AIDS. Langlade-Demoyen P, et al. **Res Immunol** 1989 Jan; 140(1):95-9; discussion 119-20 (25 ref.)

HIV-gag-specific cytotoxic T lymphocytes. Nixon DF, et al. **Res Immunol** 1989 Jan;140(1):107-10; discussion 121 (11 ref.)

HIV-specific cytotoxic T lymphocytes. Plata F. **Res Immunol** 1989 Jan;140(1):89-91 (15 ref.)

Multiple cytotoxic effector cells are induced by infection with the human immunodeficiency virus. Rivière Y, et al. **Res Immunol** 1989 Jan;140(1):110-5; discussion 121 (39 ref.)

How do CD8+ T lymphocytes control HIV replication in vivo? Walker CM. **Res Immunol** 1989 Jan;140(1):115-8; discussion 122-3 (17 ref.)

Evaluation of the induction of specific cytotoxic T lymphocytes following immunization of F1 hybrid mice with rabies antigens. Morgeaux S, et al. **Res Virol** 1989 May-Jun;140(3):193-206

Distinct patterns of virus-specific T cell-mediated cytolysis of transformed versus primary target cells. Baenziger J, et al. **Scand J Immunol** 1988 Oct;28(4):411-23

Specificity of gamma delta receptor-bearing cytotoxic T lymphocytes isolated from human peripheral blood. Bosnes V, et al. **Scand J Immunol** 1989 Jun;29(6):723-31

Functional heterogeneity in allospecific cytotoxic T lymphocyte clones. III. Direct correlation between development of syngeneic cytotoxicity and loss of veto activity; implications for the mechanism of veto action. Claesson MH, et al. **Scand J Immunol** 1989 Apr;29(4):493-7

Sideways killing: the cytolysis of Fc receptor-bearing cells through bridging to cytolytic T lymphocytes by antibodies specific for the T-cell receptor-T3 complex. Ito M, et al. **Scand J Immunol** 1989 Jun;29(6):659-69

Natural killer cells and cytotoxic T cells induce DNA fragmentation in both human and murine target cells in vitro. Liu Y, et al. **Scand J Immunol** 1989 Jul;30(1):31-7

Vaccinia-interleukin 2 recombinant virus or exogenous interleukin 2 does not alter the magnitude or immune response gene defects of the cytotoxic T-cell response to vaccinia virus in vivo. Müllbacher A, et al. **Scand J Immunol** 1989 Jan;29(1):1-6

Elimination of CD8+ T cells in vivo does not break induced immunospecific tolerance to experimental allergic neuritis in rats. Strigård K, et al. **Scand J Immunol** 1988 Sep; 28(3):325-30

T cells against a bacterial heat shock protein recognize stressed macrophages. Koga T, et al. **Science** 1989 Sep 8; 245(4922):1112-5

A single amino acid interchange yields reciprocal CTL specificities for HIV-1 gp160. Takahashi H, et al. **Science** 1989 Oct 6;246(4926):118-21

Brefeldin A specifically inhibits presentation of protein antigens to cytotoxic T lymphocytes. Yewdell JW, et al. **Science** 1989 Jun 2;244(4908):1072-5

HLA-DP antigens provide the proliferative impetus for the generation of cytotoxic T lymphocytes. Buc M, et al. **Tissue Antigens** 1988 Nov;32(5):291-4

Survival of cytotoxic T-cell clones (Tc) in vivo and their ability to effect skin allograft rejection in T-cell depleted mice. Berens ES, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):138-9

Priming of cytotoxic T lymphocyte precursors by donor-specific transfusions and modulation post transplant in relation to steroid withdrawal. Burlingham WJ, et al. **Transplant Proc** 1988 Dec;20(6):1166-8

Bone marrow cells that prolong graft survival in ALS-treated mice: suppressor activity in mixed cell culture. De Fazio SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):228-30

Induction of long-term transplantation tolerance, chimerism, and host-versus-graft disease: interrelationship and cellular requirements. DeNardin AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):265-6

Frequency of T cytotoxic cells correlates with the immune status of organ allograft recipients. Ito T, et al. **Transplant Proc** 1989 Apr;21(2):3282-5

Modulation of arachidonic acid metabolism and cytotoxic T lymphocyte function. Jendrisak M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):174-7

Differential modulation of macrophage function by allosensitized helper and cytotoxic T-lymphocyte clones. Jordan ML, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):160-1

Alloreactive cytotoxic T-cell frequency analysis and HLA matching for bone marrow transplants from HLA matched unrelated donors. Kaminski E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2976-7

Suppressive phenomena and absence of clonal deletion evidenced by limiting dilution analysis (LDA) of donor-specific IL2 secreting cells (IL2 SC) and cytotoxic precursors (CTLp). Lantz O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):367-8

Effects of 15-deoxyspergualin on the induction of cytotoxic T lymphocytes and bone marrow suppression. Nishimura K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1104-7

Immunosuppressive mode of action of deoxyspergualin in mice, as compared with cyclosporine A and mizoribine. Okubo M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1085-7

Donor-specific cytotoxic T-cell alloreactivity in successfully engrafted high-risk cornea patients. Ruiz P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3153-5

Autoreactive T cells isolated during graft-versus-host disease (GvHD) may be involved in the generation of an anti-leukemic effect after bone marrow transplantation (BMT). Schneider EM, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3018-21

Frequency of precursor cytotoxic T lymphocytes correlates with outcome following heart-lung and pancreatic islet transplantation. Stock PG, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):457-60

Incidence of anti-host cytotoxic and proliferative T cell responses after HLA-identical bone marrow transplantation (BMT). van Els C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2987-8

Transfusion-induced skin allograft enhancement across an H-2 class-I mismatch is caused by a clonal deletion of donor-specific cytotoxic T-lymphocyte precursors within the allograft. van Twuyver E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1169-70

Cytotoxic cells alone are not sufficient to mediate renal graft rejection. Wood KJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):338-9

Evidence that cytotoxic lymphocytes alter and traverse allogeneic endothelial cell monolayers. Bender JR, et al. **Transplantation** 1989 Jun;47(6):1047-53

Regulation of cytotoxic T lymphocyte-mediated graft rejection following bone marrow transplantation. Bierer BE, et al. **Transplantation** 1988 Dec;46(6):835-9

Polyclonal rabbit gamma globulins against a human cytotoxic CD4+ T cell clone. I. Clone characteristics and antiblast globulin preparation. Bonneville M, et al. **Transplantation** 1989 Aug;48(2):253-60

Fine specificity of xenogeneic antigen recognition by human T cells. Gress RE, et al. **Transplantation** 1989 Jul;48(1):93-8

Polyclonal rabbit gamma globulins against a human cytotoxic CD4 T cell clone. II. Use in prevention of rejection in kidney transplantation: a pilot study. Hourmant M, et al. **Transplantation** 1989 Aug;48(2):260-3

Differential expression of helper versus effector activity in mice rendered neonatally tolerant of class II MHC antigens. Mohler KM, et al. **Transplantation** 1989 Apr;47(4):633-40

Development and evaluation of a limiting dilution analysis technique that can discriminate in vivo alloactivated cytotoxic T lymphocytes from their naive CTL precursors. Orosz CG, et al. **Transplantation** 1989 Jan;47(1):189-94

In vivo mechanisms of alloreactivity. V. Influence of graft implantation on the activation and redistribution of graft-reactive CTL. Orosz CG, et al. **Transplantation** 1989 Sep;48(3):519-23

Similarities in long-term alloreactive T cell lines propagated from transfusion-enhanced and control-rejecting rat renal allografts. Ruiz P, et al. **Transplantation** 1989 Feb; 47(2):390-4

Developmental coupling of expression of the Igh-linked minor antigen H-40 to membrane immunoglobulin expression. Schreiber KL, et al. **Transplantation** 1989 Aug; 48(2):331-8

Lack of secondary suppressor response in enhanced allografted rats with endogenous suppressor activity in spleen and diminished cytotoxic T cell response. Weir MR, et al. **Transplantation** 1988 Nov;46(5):731-9

Immunosuppression by anti-CD4 treatment in vivo. Persistence of secondary antiviral immune responses. Weyand CM, et al. **Transplantation** 1989 Jun;47(6):1034-8

The regulation of herpes simplex virus-specific CTL induction by suppressor cells. Horohov DW, et al. **Viral Immunol** 1987 Spring;1(1):55-68

Induction of measles virus-specific human cytotoxic T cells by purified measles virus nucleocapsid and hemagglutinin polypeptides. Jacobson S, et al. **Viral Immunol** 1987-88; 1(3):153-62

Kinetics and specificity at the clonal level of the cytotoxic T lymphocyte response to influenza pneumonia. Jaffe PA, et al. **Viral Immunol** 1987-88;1(4):259-66

Generation of IL-2 dependent bovine cytotoxic T lymphocyte clones reactive against BHV-1 infected target cells: loss of genetic restriction and virus specificity. Lawman MJ, et al. **Viral Immunol** 1987-88;1(3):163-76

Recognition of the PB1, neuraminidase, and matrix proteins of influenza virus A/NT/60/68 by cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1989 Jun; 170(2):477-85

A region of the influenza A/NT/60/68 PB2 protein containing an antigenic determinant recognized by murine H-2Dd restricted cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1988 Nov;167(1):261-8

Localization of an immunorecessive epitope on SV40 T antigen by H-2Db-restricted cytotoxic T-lymphocyte clones and a synthetic peptide. Tanaka Y, et al. **Virology** 1989 Jul;171(1):205-13

[Eosinophil response and IgE production. II. Regulation of eosinophil response by T cells mediating delayed-type hypersensitivity reaction] Nakamine H, et al. **Arerugi** 1988 May;37(5):294-300 (Eng. Abstr.) **(Jpn)**

[Analyses of HLA antigens using cytotoxic T lymphocyte clones] Tajima Y. **Hokkaido Igaku Zasshi** 1988 Jul; 63(4):635-43 (Eng. Abstr.) **(Jpn)**

[The effect of interleukin-2 eyedrops on the cytotoxic T lymphocyte activity in the cervical lymph nodes of mice with corneal herpes infection] Kajiwara R. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1675-81 (Eng. Abstr.) **(Jpn)**

[The functional maturation of Langerhans cells in CTL induction during tissue culture] Daita Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):627-33 (Eng. Abstr.) **(Jpn)**

[Cytotoxic effector cells specific for Epstein-Barr nuclear antigen positive nasopharyngeal hybrid cells are present in patients with infectious mononucleosis] Furukawa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov; 91(11):1831-6 (Eng. Abstr.) **(Jpn)**

[Detection of donor specific cytotoxic T lymphocyte activity in lung grafted mongrel dogs] Fujisawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):203-7 (Eng. Abstr.) **(Jpn)**

[The mechanisms of cell-mediated cytotoxicity: signal requirements for cytolytic molecule release] Nishimura T. **Tanpakushitsu Kakusan Koso** 1988 Aug;33(10):1696-701 (36 ref.) **(Jpn)**

[Perforines. The killer proteins of the lymphocytes] Hetland G. **Tidsskr Nor Laegeforen** 1988 Oct 10;108(28):2394-6 (Eng. Abstr.) **(Nor)**

[Cytotoxic and suppressor activity of human peripheral blood lymphocytes stimulated by interleukin-2 and phytohemagglutinin before and after fractionation in the percoll gradient] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):327-30 (Eng. Abstr.) **(Rus)**

[Conditions for antitumor cytotoxic T-lymphocyte formation and inhibition of their activity by T-suppressors in mixed culture of human lymphocytes and tumor cells] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):473-6 (Eng. Abstr.) **(Rus)**

[Autospecific antileukemia cytotoxic lymphocytes induced by interleukin-2 and their use for elimination of leukemic cells from human bone marrow in vitro] Mitskevich PB, et al. **Gematol Transfuziol** 1989 Apr;34(4):30-5 (Eng. Abstr.) **(Rus)**

[Killer activity and lymphocytotoxicity of the blood serum in children with pyelonephritis] Chebotareva VD, et al. **Pediatriia** 1988;(10):16-20 (Eng. Abstr.) **(Rus)**

[The development of cytotoxic T lymphocytes in HLA-D/DR identity] Porubská S, et al. **Bratisl Lek Listy** 1989 Feb;90(2):115-9 (Eng. Abstr.) **(Slo)**

[Specific cell-mediated cytotoxicity in patients with cerebral infarct] Lešický O, et al. **Cesk Neurol Neurochir** 1989 Mar; 52(2):84-8 (Eng. Abstr.) **(Slo)**

METABOLISM

Impaired human leukocyte antigen-restricted measles virus-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. **Ann Neurol** 1989 Mar;25(3):272-80

The structure of the mouse lymphocyte pore-forming protein perforin. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):1-10

TCR gamma delta bearing lymphocyte clones with lymphokine-activated killer activity against autologous leukemic cells. Bensussan A, et al. **Blood** 1989 Jun; 73(8):2077-80

The cytolytic T lymphocyte--reply to commentary [letter]

Berke G. **Immunol Lett** 1989 Mar;20(4):331–2

A functional analysis of hematopoietic growth factor production from class I and class II human alloreactive T cell clones [published erratum appears in Int J Cell Cloning 1989 Jan;7(1):67] Mangan KF, et al. **Int J Cell Cloning** 1988 Sep;6(5):324–40

Recognition of influenza A matrix protein by HLA-A2-restricted cytotoxic T lymphocytes. Use of analogues to orientate the matrix peptide in the HLA-A2 binding site. Gotch F, et al. **J Exp Med** 1988 Dec 1; 168(6):2045–57

In vivo expression of perforin by CD8+ lymphocytes during an acute viral infection. Young LH, et al. **J Exp Med** 1989 Jun 1;169(6):2159–71

Comparison of phosphorylation and internalization of the antigen receptor/CD3 complex, CD8, and class I MHC-encoded proteins on T cells. Role of intracytoplasmic domains analyzed with hybrid CD8/class I molecules. Boyer C, et al. **J Immunol** 1989 Sep 15; 143(6):1905–14

Spatial and temporal characteristics of the increase in intracellular Ca2+ induced in cytotoxic T lymphocytes by cellular antigen. Gray LS, et al. **J Immunol** 1988 Oct 1;141(7):2424–30

Regulation of lymphocyte tumor necrosis factor receptors by IL-2. Owen-Schaub LB, et al. **J Immunol** 1989 Oct 1;143(7):2236–41

Monoclonal antibodies (G1.4, D7.5) induce secretion of lytic factors from natural killer and T lymphocytes. Stein-Streilein J, et al. **J Leukoc Biol** 1989 Sep; 46(3):199–213

Phosphorylcholine acts as a Ca2+-dependent receptor molecule for lymphocyte perforin. Tschopp J, et al. **Nature** 1989 Jan 19;337(6204):272–4

Oestrogen and human T lymphocytes: presence of specific receptors in the T-suppressor/cytotoxic subset. Stimson WH. **Scand J Immunol** 1988 Sep;28(3):345–50

Selective depletion of marrow-T cytotoxic lymphocytes (CD8) in the prevention of graft-versus-host disease after allogeneic bone-marrow transplantation. Maraninchi D, et al. **Transpl Int** 1988 Jul;1(2):91–4

MICROBIOLOGY

MHC and non-MHC genes regulate elimination of lymphocytic choriomeningitis virus and antiviral cytotoxic T lymphocyte and delayed-type hypersensitivity mediating T lymphocyte activity in parallel. Thomsen AR, et al. **J Immunol** 1989 Feb 15;142(4):1333–41

PARASITOLOGY

In vitro infection of bovine alloreactive cytotoxic T cell lines with sporozoites of Theileria annulata and T parva. Innes EA, et al. **Res Vet Sci** 1989 May;46(3):367–74

PATHOLOGY

The pseudo-Sézary syndrome with CD8 phenotype in a patient with the acquired immunodeficiency syndrome (AIDS). Janier M, et al. **Ann Intern Med** 1989 May 1; 110(9):738–40

Human pancreatic extract and rat pancreatic islet homogenate-coated chicken erythrocytes as targets of lymphocyte-mediated cytotoxicity in type I diabetic patients. Horváth M, et al. **Exp Clin Endocrinol** 1989 May; 93(2-3):151–6

PHYSIOLOGY

Understanding the biology of non-mhc-restricted cytotoxicity: toward new approaches in the treatment of cancer? Michon JM, et al. **Ann Inst Pasteur Immunol** 1988 Jul-Aug;139(4):433–5

Cytotoxic T cells. Biology and relevance to disease. **Ann N Y Acad Sci** 1988;532:1–489

Molecular mechanisms of lymphocyte-mediated killing. Young JD, et al. **Braz J Med Biol Res** 1988;21(6):1145–53 (29 ref.)

Contributions of host and donor T cells to the inflammatory process in murine lymphocytic choriomeningitis. Doherty PC, et al. **Cell Immunol** 1988 Oct 15;116(2):475–81

Suppression of lymphocyte alloreactivity by early gestational human decidua. II. Characterization of the suppressor mechanisms. Lala PK, et al. **Cell Immunol** 1988 Oct 15; 116(2):411–22

Secretion of a suppressor cell inducing factor by an interleukin 3-dependent cell line with natural cytotoxic activity. III. Comparison with other interleukin 3-dependent cell lines. Pope BL, et al. **Cell Immunol** 1988 Oct 1;116(1):1–11

Detection of perforin and granzyme A mRNA in infiltrating cells during infection of mice with lymphocytic choriomeningitis virus. Müller C, et al. **Eur J Immunol** 1989 Jul;19(7):1253–9

The cytolytic T lymphocyte and its mode of action. Berke G. **Immunol Lett** 1989 Feb;20(3):169–78 (76 ref.)

Is suppression a function of class II—restricted cytotoxic T cells? Lanzavecchia A. **Immunol Today** 1989 May; 10(5):157–9

Analysis of cytotoxic T cell responses to intracameral allogeneic tumors. Ksander BR, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):323–9

In vivo administration of histoincompatible lymphocytes leads to rapid functional deletion of cytotoxic T lymphocyte precursors. Martin DR, et al. **J Exp Med** 1989 Sep 1;170(3):679–90

Avidity dictates the lytic capacity of human cytolytic T lymphocyte clones with similar fine specificity against murine cells expressing HLA-B27 antigen. Calvo V, et al. **J Immunol** 1988 Dec 1;141(11):3798–803

Responses of mouse lymphocytes to extracellular adenosine 5'-triphosphate (ATP). Lymphocytes with cytotoxic activity are resistant to the permeabilizing effects of ATP. Di Virgilio F, et al. **J Immunol** 1989 Sep 15;143(6):1955–60

Free fatty acid perturbation of transmembrane signaling in cytotoxic T lymphocytes. Richieri GV, et al. **J Immunol** 1989 Oct 1;143(7):2302–10

A T cell receptor-associated GTP-binding protein triggers T cell receptor-mediated granule exocytosis in cytotoxic T lymphocytes. Schrezenmeier H, et al. **J Immunol** 1988 Dec 1;141(11):3785–90

Cytokines alter target cell susceptibility to lysis. II. Evaluation of tumor infiltrating lymphocytes. Stötter H, et al. **J Immunol** 1989 Mar 1;142(5):1767–73

Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma. Miyatake S, et al. **J Neurosurg** 1988 Nov;69(5):751–9

Differences in activities of murine retroviral long terminal repeats in cytotoxic T lymphocytes and T-lymphoma cells. LoSardo JE, et al. **J Virol** 1989 Mar;63(3):1087–94

Increased sensitivity of tumor cells to immune defense cells following treatment with antineoplastic agents in vitro. Ujiie T. **Jpn J Exp Med** 1989 Feb;59(1):17–26

In vivo leishmanicidal mechanisms in tegumentary leishmaniasis. Ultra-structural observations. Freitas LA, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:372–5

How do cytotoxic T lymphocytes work in vivo? Mullbacher A, et al. **Microb Pathog** 1987 Nov;3(5):315–8 (24 ref.)

Induction of tumor necrosis factor-alpha and -beta and interferon-gamma mRNA by interleukin 2 in murine lymphocytic cell lines. Weil D, et al. **Oncogene Res** 1988; 3(4):409–14

Cell lines cultured at high density are resistant to lysis by tumor necrosis factor and natural cytotoxic cells. Patek PQ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):234–9

How killer cells kill. Young JD, et al. **Sci Am** 1988 Jan; 258(1):38–44 (0 ref.)

Production of interleukin-6 in vitro parallels development of cytotoxic T lymphocytes from murine thymocytes. Stringfellow MM, et al. **Surgery** 1989 Aug;106(2):332–8

Characterization of a specific inhibitor of IL2-mediated proliferation from serum of Plasmodium berghei infected mice. Natarajan K, et al. **Trop Med Parasitol** 1988 Sep; 39(3):203–7

RADIATION EFFECTS

Suppression of T-lymphocyte cytotoxicity following exposure to 60-Hz sinusoidal electric fields. Lyle DB, et al. **Bioelectromagnetics** 1988;9(3):303–13

Radiation sensitivity of resting and activated nonspecific cytotoxic cells of T lineage and NK lineage. Zarcone D, et al. **Blood** 1989 May 1;73(6):1615–21

The effect of ultraviolet B irradiation on delayed-type hypersensitivity, cytotoxic T lymphocyte activity, and skin graft rejection. Tamaki K, et al. **Transplantation** 1989 Feb; 47(2):372–6

TRANSPLANTATION

Tumor immunotherapy [letter] Manson LA. **Immunol Today** 1989 Feb;10(2):36

[Basic and clinical study of adoptive immunotherapy using cytotoxic T lymphocyte (CTL) against cancers] Kitsukawa K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1448–54 (Eng. Abstr.) **(Jpn)**

[Study of head and neck cancer treatment by administration of autologous cytotoxic lymphocyte induced by stimulation with tumor cell—effect of adoptive immunotherapy by intra arterial infusion of killer cells stimulated by allogeneic tumor in patients with lingual and maxillary carcinoma] Ishikawa T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2082–8 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Activation of secretion and surface alteration of cytolytic T-lymphocytes interacting with target cells. Bykovskaya SN, et al. **Biomed Pharmacother** 1988;42(7):461–8

Comparison of the structure of the murine interleukin 2 (IL 2) receptor on cytotoxic and helper T cell lines by chemical cross-linking of 125I-labeled IL 2 [published erratum appears in Eur J Immunol 1989 Jan;19(1):221] Foxwell B, et al. **Eur J Immunol** 1988 Oct;18(10):1515–9

The reorientation of the Golgi apparatus and the microtubule-organizing center in the cytotoxic effector cell is a prerequisite in the lysis of bound target cells. Kupfer A, et al. **J Mol Cell Immunol** 1985;2(1):37–49

T LYMPHOCYTES, HELPER see **HELPER CELLS**

T LYMPHOCYTES, INDUCER see **HELPER CELLS**

T4 LYMPHOCYTES

see related
ACQUIRED IMMUNODEFICIENCY SYNDROME

Decline in CD4+ cell numbers reflects increase in HIV-1 replication. De Wolf F, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):433–40

Test may predict which patients with HIV infection will develop AIDS [news] Eyster ME. **Am Fam Physician** 1989 Mar;39(3):276

Simultaneous determination of absolute total lymphocyte and CD4+ lymphocyte levels in peripheral blood by flow cytometry. Prince HE, et al. **Am J Clin Pathol** 1989 Aug; 92(2):206–9

Predictive markers for the acquired immunodeficiency syndrome (AIDS) in hemophiliacs: persistence of p24 antigen and low T4 cell count. Eyster ME, et al. **Ann Intern Med** 1989 Jun 15;110(12):963–9

Lymphocyte subpopulation with low membrane potential in the blood of cyclosporin- and prednisone-treated patients: in vivo selectivity for T4 subset. Aszalos A, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):25–9

Decreased levels of circulating CD4+ T lymphocytes during normal human pregnancy. Castilla JA, et al. **J Reprod Immunol** 1989 May;15(2):103–11

Maternal T cells and human pregnancy outcome. Milns NR, et al. **J Reprod Immunol** 1989 May;15(2):175–8

Reduced CD4+ count, infections, and immune thrombocytopenia without HIV infection [letter] Daus H, et al. **Lancet** 1989 Sep 2;2(8662):559

[T4/T8 ratio in bronchoalveolar lavage fluid: sensitivity and specificity for the diagnosis of sarcoidosis] Zaiss AW, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:233–4 (Eng. Abstr.) **(Ger)**

[Prognostic significance of the T4 lymphocyte count in patients infected with CDC Class II and III HIV] Rüttimann S, et al. **Schweiz Med Wochenschr** 1988 Dec 10;118(49):1844–6 (Eng. Abstr.) **(Ger)**

ANALYSIS

Impaired T-lymphocyte-dependent immune responses to microbial antigens in patients with HIV-1-associated persistent generalized lymphadenopathy. Ballet JJ, et al. **Aids** 1988 Aug;2(4):291–7

CLASSIFICATION

Amplification of suppressor inducer pathway with monoclonal antibody, anti-2H4, identifying a novel epitope of the common leukocyte antigen/T200 antigen. Takeuchi T, et al. **Cell Immunol** 1989 Jan;118(1):68–84

A novel CD3-J11d+ subset of CD4+CD8- cells repopulating thymus in radiation bone marrow chimeras. Matsumoto K, et al. **Eur J Immunol** 1989 Jul;19(7):1203–7

Functional heterogeneity of CD4+ T cells in leishmaniasis. Liew FY. **Immunol Today** 1989 Feb;10(2):40–5 (50 ref.)

Subsets of rat CD4+ T cells express different variants of the leukocyte-common antigen: functions and developmental relationships of the subsets. Powrie F, et al. **J Autoimmun** 1989 Jun;2 Suppl:25–32 (32 ref.)

A subset of memory CD4+ helper T lymphocytes identified by expression of Pgp-1. Butterfield K, et al. **J Exp Med** 1989 Apr 1;169(4):1461–6

Murine CD4+ T cell subsets defined. Hayakawa K, et al. **J Exp Med** 1988 Nov 1;168(5):1825–38

Clonal analysis of functionally distinct human CD4+ T cell subsets. Rotteveel FT, et al. **J Exp Med** 1988 Nov 1; 168(5):1659–73

[Caution in the interpretation of CD4 lymphocyte count after splenectomy in patients with HIV infection (letter)] Boudes P, et al. **Ann Med Interne (Paris)** 1988;139(7):523 **(Fre)**

CYTOLOGY

Characterization of the subset of immature thymocytes which can undergo rapid in vitro differentiation. Nikolić-Zugić J, et al. **Eur J Immunol** 1989 Apr;19(4):649–53

Patterns of CD4+ cell changes after HIV-1 infection indicate the existence of a codeterminant of AIDS. Detels R, et al. **J Acquir Immune Defic Syndr** 1988;1(4):390–5

Predictors of decline in CD4 lymphocytes in a cohort of homosexual men infected with human immunodeficiency virus. Muñoz A, et al. **J Acquir Immune Defic Syndr** 1988; 1(4):396–404

Reduced CD4+ T cells and candidiasis in absence of HIV infection [letter] Gatenby PA. **Lancet** 1989 May 6; 1(8645):1027–8

DRUG EFFECTS

The effect of cyclosporine A on infection of susceptible cells by human immunodeficiency virus type 1. Wainberg MA, et al. **Blood** 1988 Dec;72(6):1904–10

Effect of cyclosporin A on T cell immunity. II. Defective thymic education of CD4 T helper cell function in cyclosporin A-treated mice. Fukuzawa M, et al. **Eur J Immunol** 1989 Jun;19(6):1147–52

The D-mannose-specific lectin from Gerardia savaglia blocks binding of human immunodeficiency virus type I to H9 cells and human lymphocytes in vitro. Müller WE, et al. **J Acquir Immune Defic Syndr** 1988;1(5):453–8

A highly reliable, sensitive, flow cytometric/fluorometric assay for the evaluation of the anti-HIV activity of antiviral compounds in MT-4 cells. Schols D, et al. **J Immunol Methods** 1988 Nov 10;114(1-2):27–32

Selective killing of CD4+ and CD8+ cells with immunotoxins containing saporin. Barbieri L, et al.

Scand J Immunol 1989 Sep;30(3):369–72

IMMUNOLOGY

Monocyte defect causes decreased autoMLR in multiple sclerosis patients. Baxevanis CN, et al. **Adv Exp Med Biol** 1988;237:839–42

Expression of HIV antigens at the surface of infected T4 cells: immunoelectron microscopic evidence of an immunogenic phase prior to the viral release. Desportes I, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):107–14

CD4+, CD8+ cells, IgE and prick test in infants allergic to cow's milk. Vanella L, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):327–31

Large cell mycosis fungoides at the tumor stage. Unusual T8, T4, T6 phenotypic expression. Horiuchi Y, et al. **Am J Dermatopathol** 1988 Feb;10(1):54–8

In vivo anti–tumour activity of recombinant human tumour necrosis factor–alpha against Meth–A sarcoma requires L3T4–positive T cells. Palladino MA, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):299–301

Loss of functional suppression is linked to decreases in circulating suppressor–inducer (CD4+ 2H4+) T cells in multiple sclerosis. Chofflon M, et al. **Ann N Y Acad Sci** 1988;540:330–2

Epidermal lymphocyte chemotactic factor specifically attracts OKT4–positive lymphocytes. Zachariae C, et al. **Arch Dermatol Res** 1988;280(6):354–7

Major depressive disorder and immunity. Role of age, sex, severity, and hospitalization. Schleifer SJ, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):81–7

T4+ cell production of interferon gamma and the clinical spectrum of patients at risk for and with acquired immunodeficiency syndrome [letter; comment] Torseth J. **Arch Intern Med** 1989 May;149(5):1224, 1226. **Comment on:** Arch Intern Med 1988 Jul;148(7):1613–6

Requirements for flare reactions of joint inflammation induced in mice by cloned MT4+, Lyt–2– T cells. Klasen IS, et al. **Arthritis Rheum** 1989 Mar;32(3):330–7

Lymphocyte subset T4/T8 ratio in systemic lupus erythematosus: correlation with disease activity, laboratory abnormalities and treatment. Nilganuwonge S, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):23–8

Defective T suppressor–inducer cell function in human immune deficiency virus–seropositive hemophilia patients. Sjamsoedin–Visser LJ, et al. **Blood** 1988 Nov;72(5):1474–7

CD4+ T cells appear capable of initiating graft–versus–host disease across non–major histocompatibility complex (MHC) barriers in man. Atkinson K, et al. **Bone Marrow Transplant** 1987 Jun;2(1):79–84

OKT4/OKT8 ratio in asymptomatic heroin addicts. Marra R, et al. **Br J Addict** 1989 Jul;84(7):815–6

Anti–CD4 monoclonal antibodies enhance phorbol 12–myristate, 13–acetate–induced activation of human T cells. Favero J, et al. **Cell Immunol** 1989 Sep;122(2):307–18

Vascular endothelial cells enhance T cell responses by markedly augmenting IL–2 concentrations. Guinan EC, et al. **Cell Immunol** 1989 Jan;118(1):166–77

Increased proportion of CD4+CDw29+CD45R–UCHL–1+ lymphocytes in the cerebrospinal fluid of both multiple sclerosis patients and healthy individuals. Hedlund G, et al. **Cell Immunol** 1989 Feb;118(2):406–12

OKT4 monoclonal antibody–induced activation of an autoreactive T–cell clone. Ioannides CG, et al. **Cell Immunol** 1989 Oct 1;123(1):244–52

A previously unrecognized large fraction of cytotoxic lymphocyte precursors is present in CD4+ human peripheral blood T cells. Kabelitz D, et al. **Cell Immunol** 1989 Feb;118(2):285–97

The role of CD4 in antigen–independent activation of isolated single T lymphocytes. Kelso A, et al. **Cell Immunol** 1988 Oct 1;116(1):99–111

CD4+ cytolytic T cell clones restricted to HLA class II, DR beta I, and DR beta III chains. Noguchi M, et al. **Cell Immunol** 1989 Oct 1;123(1):96–107

Regulation of in vitro PWM–induced IgG secretion in humans. O'Gorman MR, et al. **Cell Immunol** 1989 Feb; 118(2):435–47

Prevention and reversal of experimental autoimmune thyroiditis (EAT) in mice by administration of anti–L3T4 monoclonal antibody at different stages of disease development. Stull SJ, et al. **Cell Immunol** 1988 Nov; 117(1):188–98

CD8 suppressor cell activity and its effect on CD4 helper cell–dependent growth of SJL/J B–cell lymphomas. Thrush GR, et al. **Cell Immunol** 1989 Sep;122(2):555–62

Human myelin basic protein–specific cytolytic T lymphocyte clones are functionally restricted by HLA class II gene products. Weber WE, et al. **Cell Immunol** 1989 Apr 15; 120(1):145–53

Evidence for an involvement of T4+ cytotoxic T cells in tumor immunity. Woods G, et al. **Cell Immunol** 1989 Jan; 118(1):126–35

Resistance to experimental autoimmune thyroiditis: L3T4+ cells as mediators of both thyroglobulin–activated and TSH–induced suppression. Kong YM, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):38–54

A monoclonal antibody to murine CD45R distinguishes CD4 T cell populations that produce different cytokines. Bottomly K, et al. **Eur J Immunol** 1989 Apr;19(4):617–23

Reversal by interferon–gamma of inhibition of delayed–type hypersensitivity induction by anti–CD4 or anti–interleukin 2 receptor (CD25) monoclonal antibodies. Evidence for the physiological role of the CD4+ TH1+ subset in mice. Diamantstein T, et al. **Eur J Immunol** 1988 Dec; 18(12):2101–3

Low doses of interleukin 2 induce bystander cell lysis by antigen–specific CD4+ inflammatory T cell clones in short–term assay. Gromkowski SH, et al. **Eur J Immunol** 1988 Sep;18(9):1385–9

In vivo depletion of BoT4 (CD4) and of non–T4/T8 lymphocyte subsets in cattle with monoclonal antibodies. Howard CJ, et al. **Eur J Immunol** 1989 Apr;19(4):757–64

Murine enterocytes can present soluble antigen to specific class II–restricted CD4+ T cells. Kaiserlian D, et al. **Eur J Immunol** 1989 Aug;19(8):1513–6

CD4+CD45R+ cells are preferentially activated through the CD2 pathway. Matsuyama T, et al. **Eur J Immunol** 1988 Sep;18(9):1473–6

Regulatory circuits in autoimmunity: recruitment of counter–regulatory CD8+ T cells by encephalitogenic CD4+ T line cells. Sun D, et al. **Eur J Immunol** 1988 Dec;18(12):1993–9

In vitro T cell responses to a candidate Epstein–Barr virus vaccine: human CD4+ T cell clones specific for the major envelope glycoprotein gp340. Ulaeto D, et al. **Eur J Immunol** 1988 Nov;18(11):1689–97

AIDS: a syndrome of immune dysregulation, dysfunction, and deficiency. Edelman AS, et al. **FASEB J** 1989 Jan; 3(1):22–30

Remission of Crohn's disease after human immunodeficiency virus infection. James SP. **Gastroenterology** 1988 Dec; 95(6):1667–9

Defective immunoregulation in primary biliary cirrhosis: CD4+, Leu–8+ T cells have abnormal activation and suppressor function in vitro. Suou T, et al. **Hepatology** 1989 Oct;10(4):408–13

Activation of human CD8+ suppressor T cells by an antigen–specific CD4+ T–cell line in vitro. Fukunaga M, et al. **Hum Immunol** 1989 Jul;25(3):157–68

Apparent loss of 2H4+ T cells in peripheral blood lymphocytes of normal donors: a 2H4–specific artefact unique to T cells. Serra HM, et al. **Hum Immunol** 1988 Dec;23(4):281–8

Murine macrophage cell line AP284 presents antigen to cloned MT4+, Lyt–2– T cells in vitro and in vivo. Klasen IS, et al. **Immunobiology** 1988 Dec;178(3):261–74

Production of IL–2 and IFN by TH2 clones. Yokoyama A, et al. **Immunol Lett** 1989 May;21(2):119–25

CD4 expression and function in HLA class II–specific T cells. Biddison WE, et al. **Immunol Rev** 1989 Jun;109:5–15 (36 ref.)

A functional dichotomy in CD4+ T lymphocytes. Bottomly K. **Immunol Today** 1988 Sep;9(9):268–74 (36 ref.)

Phenotypic and functional heterogeneity of CD4+ T cells. Powrie F, et al. **Immunol Today** 1988 Sep;9(9):274–7 (29 ref.)

A functional dichotomy in CD4+ T lymphocytes [letter] Rudd CE. **Immunol Today** 1988 Dec;9(12):367–8

A role for CD4+ but not CD8+ T cells in immunity to Schistosoma mansoni induced by 20 krad–irradiated and Ro 11–3128–terminated infections. Vignali DA, et al. **Immunology** 1989 Aug;67(4):466–72

Roles of CD4– and CD8–bearing T lymphocytes in the immune response to the erythrocytic stages of Plasmodium chabaudi. Süss G, et al. **Infect Immun** 1988 Dec; 56(12):3081–8

T lymphocytes and cervical intraepithelial neoplasia. Turner MJ, et al. **Ir J Med Sci** 1988 Jun;157(6):184

Lymphocyte subclasses and depression. Denney DR, et al. **J Abnorm Psychol** 1988 Nov;97(4):499–502

Epidermodysplasia verruciformis and cell–mediated immunity [letter] Leibovici V, et al. **J Am Acad Dermatol** 1988 Sep;19(3):577–8

L3T4 effector cells in multiple organ–localized autoimmune disease in nude mice grafted with embryonic rat thymus. Ikeda H, et al. **J Exp Med** 1988 Dec 1;168(6):2397–402

Site–restricted persistent cytomegalovirus infection after selective long–term depletion of CD4+ T lymphocytes. Jonjić S, et al. **J Exp Med** 1989 Apr 1;169(4):1199–212

FBL–reactive CD8+ cytotoxic and CD4+ helper T lymphocytes recognize distinct Friend murine leukemia virus–encoded antigens. Klarnet JP, et al. **J Exp Med** 1989 Feb 1;169(2):457–67

Distinct features of dendritic cells and anti–Ig activated B cells as stimulators of the primary mixed leukocyte reaction. Metlay JP, et al. **J Exp Med** 1989 Jan 1;169(1):239–54

The recombinant 65–kD heat shock protein of Mycobacterium bovis Bacillus Calmette–Guerin/M. tuberculosis is a target molecule for CD4+ cytotoxic T lymphocytes that lyse human monocytes. Ottenhoff TH, et al. **J Exp Med** 1988 Nov 1;168(5):1947–52

Immunoregulation of cutaneous leishmaniasis. T cell lines that transfer protective immunity or exacerbation belong to different T helper subsets and respond to distinct parasite antigens. Scott P, et al. **J Exp Med** 1988 Nov 1; 168(5):1675–84

Stimulation via the CD3 and CD28 molecules induces responsiveness to IL–4 in CD4+CD29+CD45R– memory T lymphocytes. Damle NK, et al. **J Immunol** 1989 Sep 15;143(6):1761–7

Interdependence of CD4+ T cells and malarial spleen in immunity to Plasmodium vinckei vinckei. Relevance to vaccine development. Kumar S, et al. **J Immunol** 1989 Sep 15;143(6):2017–23

Autoimmune syndrome after induction of neonatal tolerance to alloantigens. CD4+ T cells from the tolerant host activate autoreactive F1 B cells. Merino J, et al. **J Immunol** 1989 Oct 1;143(7):2202–8

Differential in vitro activation of CD4+CD8– and CD8+CD4– herpes simplex virus–specific human cytotoxic T cells. Yasukawa M, et al. **J Immunol** 1989 Sep 15;143(6):2051–7

A novel and simple procedure for determining T cell epitopes in protein antigens. Demotz S, et al. **J Immunol Methods** 1989 Aug 15;122(1):67–72

Antigen presentation by B cells [letter] Bottomly K, et al. **Nature** 1989 Jan 5;337(6202):24

CD4+ lymphocyte function with early human immunodeficiency virus infection. Gurley RJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1993–7

Specific interaction of aurintricarboxylic acid with the human immunodeficiency virus/CD4 cell receptor. Schols D, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3322–6

Psychological and immunological predictors of genital herpes recurrence. Kemeny ME, et al. **Psychosom Med** 1989 Mar–Apr;51(2):195–208

Psychoimmunological dysregulation in multiple sclerosis. Foley FW, et al. **Psychosomatics** 1988 Fall;29(4):398–403

Synergism between HIV gp120 and gp120–specific antibody in blocking human T cell activation. Mittler RS, et al. **Science** 1989 Sep 22;245(4924):1380–2

CD4+ lymphocytes play a dominant role in murine xenograft rejection. Pierson RN 3d, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):519

Polyclonal rabbit gamma globulins against a human cytotoxic CD4+ T cell clone. I. Clone characteristics and antiblast globulin preparation. Bonneville M, et al. **Transplantation** 1989 Aug;48(2):253–60

Polyclonal rabbit gamma globulins against a human cytotoxic CD4 T cell clone. II. Use in prevention of rejection in kidney transplantation: a pilot study. Hourmant M, et al. **Transplantation** 1989 Aug;48(2):260–3

Differential regulation of activation–associated receptor expression on CD4– and CD8–positive T lymphocytes by allosensitized suppressor T cells. Loertscher R, et al. **Transplantation** 1989 Sep;48(3):473–8

Adoptive immunity in immune–deficient scid/scid mice. I. Differential requirements of naive and primed lymphocytes for CD4+ T cells during rejection of minor histocompatibility antigen–disparate skin grafts. Roopenian DC, et al. **Transplantation** 1988 Dec;46(6):899–904

[Kaposi sarcoma. T4 lymphocytes secrete growth factor (news)] **Fortschr Med** 1989 Mar 10;107(7):15 **(Ger)**

[AIDS. Excessive decrease in T4 lymphocytes] **Fortschr Med** 1988 Nov 20;106(33):15 **(Ger)**

[HIV–1 infection: pathogenesis of immune suppression] Stingl G. **Wien Med Wochenschr** 1988 Oct 31;138(19–20):487–92 (58 ref.) (Eng. Abstr.) **(Ger)**

[Cell membrane changes and skin diseases] Rácz I. **Z Hautkr** 1988 Oct 15;63(10):840–5 (Eng. Abstr.) **(Ger)**

[10–month follow–up of 181 anti–HIV positive patients] Macor A, et al. **Epidemiol Prev** 1988 Jun;10(35):47–51 (Eng. Abstr.) **(Ita)**

METABOLISM

Inhibition of soluble CD4 therapy by antibodies to HIV [letter] Callahan LN, et al. **Lancet** 1989 Sep 23; 2(8665):734–5

MICROBIOLOGY

Origin of the HIV–susceptible human CD4+ cell line H9 [letter] Mann DL, et al. **AIDS Res Hum Retroviruses** 1989 Jun;5(3):253–5

Induction of expression of HIV in latently or chronically infected cells. Rosenberg ZF, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):1–4 (54 ref.)

Entry of human immunodeficiency virus (HIV) into MT–2, human T cell leukemia virus carrier cell line [published erratum appears in Arch Virol 1989;105(1–2):following 140] Goto T, et al. **Arch Virol** 1988;102(1–2):29–38

Regulatory pathways governing HIV–1 replication. Cullen BR, et al. **Cell** 1989 Aug 11;58(3):423–6 (25 ref.)

Influence of sulfated carbohydrates on the accessibility of CD4 and other CD molecules on the cell surface and implications for human immunodeficiency virus infection. Thiele B, et al. **Eur J Immunol** 1989 Jun;19(6):1161–4

Mouse thymic virus (MTLV). A mammalian herpesvirus cytolytic for CD4+ (L3T4+) T lymphocytes. Morse SS, et al. **J Exp Med** 1989 Feb 1;169(2):591–6

New CD4(+) cell line susceptible to infection by HIV–1. Tremblay M, et al. **J Med Virol** 1989 Aug;28(4):243–9

The herpes simplex virus immediate–early protein, ICP4, is required to potentiate replication of human immunodeficiency virus in CD4+ lymphocytes. Albrecht MA, et al. **J Virol** 1989 May;63(5):1861–8

PHYSIOLOGY

Disappearance of CD4 lymphocyte circadian cycles after autologous bone marrow transplantation. Martini E, et al. **Biomed Pharmacother** 1988;42(5):357–9

Masking of veto function in vivo by activated CD4+ T lymphocytes. Rammensee HG, et al. **Eur J Immunol** 1989 Apr;19(4):643–8

CD4+ lymphocytes are extracted from blood by peripheral

lymph nodes at different rates from other T cell subsets and B cells. Washington EA, et al. **Eur J Immunol** 1988 Dec;18(12):2093–6

T cell regulation of human B cell proliferation and differentiation. Regulatory influences of CD45R+ and CD45R– T4 cell subsets. Hirohata S, et al. **J Immunol** 1989 Apr 15;142(8):2597–607

Depletion of L3T4+ T lymphocytes during acute Trypanosoma cruzi infection abolish macrophage and B lymphocyte activation but not tissue inflammatory reaction. Russo M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:527–38

Suppressor effects and cyclic AMP accumulation by the CD29 molecule of CD4+ lymphocytes. Groux H, et al. **Nature** 1989 May 11;339(6220):152–4

Induction of interleukin-2 production in CD4+ and CD8+ T-cell subsets after activation via CD3 and CD2. Halvorsen R, et al. **Scand J Immunol** 1988 Oct;28(4):449–55

AIDS virus coat activates T cells [news] Barnes DM. **Science** 1988 Oct 28;242(4878):515

[The structures in the immunological circuits—the role of CD4+ T cells] Tada T. **Arerugi** 1988 Oct;37(10):975–9 (7 ref.) **(Jpn)**

TRANSPLANTATION

Vaccination against experimental autoimmune encephalomyelitis using a subencephalitogenic dose of autoimmune effector cells (1). Characteristics of vaccination. Beraud E, et al. **J Autoimmun** 1989 Feb; 2(1):75–86

Vaccination against experimental autoimmune encephalomyelitis using a subencephalitogenic dose of autoimmune effector T cells. (2). Induction of a protective anti-idiotypic response. Lider O, et al. **J Autoimmun** 1989 Feb;2(1):87–99

LYMPHOCYTES, NULL

IMMUNOLOGY

Cell populations in human early pregnancy decidua: characterization and isolation of large granular lymphocytes by flow cytometry. Starkey PM, et al. **Immunology** 1988 Sep;65(1):129–34

Natural suppressor cells. Maier T, et al. **Prog Clin Biol Res** 1989;288:235–44 (35 ref.)

METABOLISM

A novel VHDJH to JH joining that induces H chain production in an Ig–null immature B cell line. Komori T, et al. **J Immunol** 1989 Aug 1;143(3):1040–5

Production of human cells expressing individual transferred HLA–A,–B,–C genes using an HLA–A,–B,–C null human cell line. Shimizu Y, et al. **J Immunol** 1989 May 1; 142(9):3320–8

RADIATION EFFECTS

[Effects of radiotherapy on lymphocyte populations in lung cancer] Gava A, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):475–8 (Eng. Abstr.) **(Ita)**

T LYMPHOCYTES, REGULATORY

see related
LYMPHOCYTE COOPERATION

CLASSIFICATION

IL–2 and IL–4 can co–modulate the generation of cytotoxic T cells through CD8– CD4– splenic lymphocytes. Good MF, et al. **Immunology** 1989 Jun;67(2):225–30

The selection of effector T cell phenotype by contrasuppression modulates susceptibility to autoimmune injury. Kelly CJ, et al. **J Immunol** 1988 Nov 1;141(9):3022–8

In vitro generation of suppressor T cells. Induction of CD3+, IgH–restricted suppressor cells. O'Hara RM Jr, et al. **J Immunol** 1988 Nov 1;141(9):2935–42

T cells as helpers and suppressor cells in immunity. Sorensen CM, et al. **Prog Clin Biol Res** 1989;288:109–18

DRUG EFFECTS

Effects of neuraminidase on the regulation of erythropoiesis: III: Characterization of carbohydrate moieties on the surface of thymic regulatory cells that interact with erythroid colony–forming cells. La Russa VF, et al. **Exp Hematol** 1989 May;17(4):351–6

IMMUNOLOGY

Lymphocyte subset T4/T8 ratio in systemic lupus erythematosus: correlation with disease activity, laboratory abnormalities and treatment. Nilganuwonge S, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):23–8

Rheumatoid factor blocks regulatory Fc signals. Panoskaltsis A, et al. **Cell Immunol** 1989 Oct 1;123(1):177–88

Immunomodulation by methimazole therapy in Graves' disease: rapid changes in activation stage of circulating regulatory T cell subsets, B cells and NK cells. Karlsson FA, et al. **Clin Exp Immunol** 1988 Nov;74(2):258–63

Immunoglobulin secretion by isolated intestinal lymphocytes: spontaneous production and T–cell regulation in normal small intestine and in patients with coeliac disease. Crabtree JE, et al. **Gut** 1989 Mar;30(3):347–54

Examination of the differential characteristics of amplifier and contrasuppressor T cells. Baker PJ, et al. **Immunobiology** 1988 Sep;177(4–5):438–48

Frequencies and interactions of regulatory T cells. I. The balance between help and suppression regulates the primary immune response to keyhole limpet hemocyanin in vitro. Maier B, et al. **Immunobiology** 1989 Mar;179(1):68–85

Anti–idiotypic T cells in human schistosomiasis. Doughty BL, et al. **Immunol Invest** 1989 Jan–May;18(1–4):373–88

Immunoregulatory effects of cloned T cells on B–cell responses: comparison of autoimmune and non–autoimmune derived clones. Bocchieri MH. **Immunology** 1989 Apr;66(4):526–31

Mucosal T cell networks: role of Fc alpha R+ T cells and Ig BF alpha in the regulation of the IgA response. Kiyono H, et al. **Int Rev Immunol** 1987 Jan;2(2):157–82 (77 ref.)

T–cell clone anti–clone interactions. Effects on suppressor and helper activities. Naor D, et al. **J Autoimmun** 1989 Jun;2 Suppl:3–14

Regulatory T–cell function in primary humoral immunodeficiency states. Eskola J, et al. **J Clin Lab Immunol** 1989 Feb;28(2):55–60

Clonal analysis of cytotoxic and regulatory T cell responses against human melanoma. Mukherji B, et al. **J Exp Med** 1989 Jun 1;169(6):1961–76

A role for isotype–specific binding factors in the regulation of IgA– and IgG–specific responses by the anti/contrasuppressor T cell circuit. Ernst PB, et al. **J Immunol** 1989 Sep 1;143(5):1426–32

Generation of somatic variants of a B cell hybrid mediated by a non–cytolytic L3T4+ idiotype–specific T cell. Ghosh SK, et al. **J Immunol** 1989 Jan 15;142(2):409–15

Suppressor T cells in mice made unresponsive to skin allografts. Ishii N, et al. **J Invest Dermatol** 1988 Oct; 91(4):333–5

Regulation of in vitro cytotoxic T lymphocyte generation. III. Interactions or regulatory T cell subsets in suppressor and target populations. Schwartz A, et al. **J Mol Cell Immunol** 1984;1(4):237–52

Functional analysis of human T cell subsets defined by monoclonal antibodies. VI. Distinct and opposing immunoregulatory functions within the OKT8+ population. Thomas Y, et al. **J Mol Cell Immunol** 1984; 1(2):103–13

Reduced levels of T suppressor/cytotoxic lymphocytes in semen from vasovasostomized men: relationship to sperm autoantibodies. Witkin SS, et al. **J Reprod Immunol** 1988 Dec;14(3):283–90

Suppressive effect of macrophages on interferon–gamma production by human peripheral lymphocytes stimulated with Mycoplasma pneumoniae. Nakayama T, et al. **Microbiol Immunol** 1988;32(9):985–90

Prevention of tumor growth and enhancement of cell–mediated immunity by an antigen–specific contrasuppressor factor from a T cell hybridoma. Friedman AM, et al. **Prog Clin Biol Res** 1989;288:281–8

Contrasuppression, tolerance, and tumor immunity. Green DR, et al. **Prog Clin Biol Res** 1989;288:245–58 (43 ref.)

T–cell–induced chronic immunoglobulin allotypic suppression in mouse. Benaroch P, et al. **Res Immunol** 1989 Mar–Apr;140(3):307–13; discussion 339–45 (33 ref.)

Antigen–specific regulatory T–cell factors and the T–cell receptor. Green DR, et al. **Res Immunol** 1989 Mar–Apr; 140(3):294–8; discussion 339–45

Characteristics of carrier–specific regulatory T cells. Ishizaka K, et al. **Res Immunol** 1989 Mar–Apr;140(3):299–302; discussion 339–45 (22 ref.)

[2 forms of antigamete immunity in infertility of inflammatory origin and the level of regulatory T–lymphocytes] Chernyshov VP, et al. **Akush Ginekol (Mosk)** 1988 Aug; (8):34–7 (Eng. Abstr.) **(Rus)**

[Immunoregulatory disorders and activation of the immune system in dilated cardiomyopathy] Nasonov EL, et al. **Ter Arkh** 1988;60(7):25–30 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of in vivo neuraminidase on the regulation of erythropoiesis. II: Modulation of erythroid colony formation by thymic regulatory cells. La Russa VF, et al. **Exp Hematol** 1989 Feb;17(2):106–9

Wound healing in nude mice: a study on the regulatory role of lymphocytes in fibroplasia. Barbul A, et al. **Surgery** 1989 Jun;105(6):764–9

[Phenotypic and functional characteristics of the subpopulations of regulatory T–lymphocytes participating in the stimulation of hemopoiesis during stress] Dygai AM, et al. **Biull Eksp Biol Med** 1989 May;107(5):590–3 (Eng. Abstr.) **(Rus)**

T LYMPHOCYTES, SUPPRESSOR see **SUPPRESSOR CELLS**

LYMPHOCYTIC CHORIOMENINGITIS

COMPLICATIONS

[Lymphocytic choriomeningitis causing unilateral deafness] Ormay I, et al. **Orv Hetil** 1989 Apr 9;130(15):789–91 (Eng. Abstr.) **(Hun)**

ENZYMOLOGY

Expression of cytoplasmic granules with T cell–associated serine proteinase–1 activity in Ly–2+(CD8+) T lymphocytes responding to lymphocytic choriomeningitis virus in vivo. Kramer MD, et al. **Eur J Immunol** 1989 Jan; 19(1):151–6

GENETICS

The activation of IL–2 transcription in L3T4+ and Lyt–2+ lymphocytes during virus infection in vivo. Kasaian MT, et al. **J Immunol** 1989 Feb 15;142(4):1287–92

MHC and non–MHC genes regulate elimination of lymphocytic choriomeningitis virus and antiviral cytotoxic T lymphocyte and delayed–type hypersensitivity mediating T lymphocyte activity in parallel. Thomsen AR, et al. **J Immunol** 1989 Feb 15;142(4):1333–41

The combination of major histocompatibility complex (MHC) and non–MHC genes influences murine lymphocytic choriomeningitis virus pathogenesis. Eyler YL, et al. **Scand J Immunol** 1989 May;29(5):527–33

IMMUNOLOGY

Recovery from acute virus infection. Role of cytotoxic T lymphocytes in the elimination of lymphocytic choriomeningitis virus from spleens of mice. Lehmann–Grube F, et al. **Ann N Y Acad Sci** 1988; 532:238–56 (61 ref.)

Contributions of host and donor T cells to the inflammatory process in murine lymphocytic choriomeningitis. Doherty PC, et al. **Cell Immunol** 1988 Oct 15;116(2):475–81

Persistence of the irradiated host component in thymocyte populations from bone marrow radiation chimeras infected with lymphocytic choriomeningitis virus. Lynch F, et al. **Cell Immunol** 1989 Feb;118(2):482–90

Mechanism of recovery from acute virus infection. VIII. Treatment of lymphocytic choriomeningitis virus–infected mice with anti–interferon–gamma monoclonal antibody blocks generation of virus–specific cytotoxic T lymphocytes and virus elimination. Wille A, et al. **Eur J Immunol** 1989 Jul;19(7):1283–8

Virus–triggered AIDS: a T–cell–mediated immunopathology? Zinkernagel RM. **Immunol Today** 1988 Dec;9(12):370–2 (44 ref.)

The complementary roles of cellular and humoral immunity in resistance to re–infection with LCM virus. Thomsen AR, et al. **Immunology** 1988 Sep;65(1):9–15

Major histocompatibility complex–linked susceptibility or resistance to disease caused by a noncytopathic virus varies with the disease parameter evaluated. Leist T, et al. **J Exp Med** 1989 Jul 1;170(1):269–77

Phenotypic and functional analysis of the cellular response in regional lymphoid tissue during an acute virus infection. Lynch F, et al. **J Immunol** 1989 May 15;142(10):3592–8

Enhanced virus replication and inhibition of lymphocytic choriomeningitis virus disease in anti–gamma interferon–treated mice. Leist TP, et al. **J Virol** 1989 Jun; 63(6):2813–9

On the production of immunoglobulins in the central nervous system: an involvement of B cell stimulatory factor 2/interleukin 6 produced intrathecally? Fontana A, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):38–9

METABOLISM

Viral infection of neurons can depress neurotransmitter mRNA levels without histologic injury. Lipkin WI, et al. **Brain Res** 1988 Jun 7;451(1–2):333–9

In vivo expression of perforin by CD8+ lymphocytes during an acute viral infection. Young LH, et al. **J Exp Med** 1989 Jun 1;169(6):2159–71

Enumeration of single IFN–gamma–producing cells in mice during viral and bacterial infection. Gessner A, et al. **J Immunol** 1989 Feb 15;142(4):1293–8

MICROBIOLOGY

Lymphocytic choriomeningitis virus selectively alters differentiated but not housekeeping functions: block in expression of growth hormone gene is at the level of transcriptional initiation. Klavinskis LS, et al. **Virology** 1989 Feb;168(2):232–5

PHYSIOPATHOLOGY

On the cellular source and function of interleukin 6 produced in the central nervous system in viral diseases. Frei K, et al. **Eur J Immunol** 1989 Apr;19(4):689–94

Detection of perforin and granzyme A mRNA in infiltrating cells during infection of mice with lymphocytic choriomeningitis virus. Müller C, et al. **Eur J Immunol** 1989 Jul;19(7):1253–9

PREVENTION & CONTROL

Anti–viral protection and prevention of lymphocytic choriomeningitis or of the local footpad swelling reaction in mice by immunization with vaccinia–recombinant virus expressing LCMV–WE nucleoprotein or glycoprotein. Hany M, et al. **Eur J Immunol** 1989 Mar;19(3):417–24

Tumor necrosis factor inhibits the development of viral meningitis or induces rapid death depending on the severity of inflammation at time of administration. Doherty PC, et al. **J Immunol** 1989 May 15;142(10):3576–80

Molecularly engineered vaccine which expresses an immunodominant T-cell epitope induces cytotoxic T lymphocytes that confer protection from lethal virus infection. Klavinskis LS, et al. **J Virol** 1989 Oct; 63(10):4311-6

LYMPHOCYTIC CHORIOMENINGITIS VIRUS

GENETICS

Detection of virus-specific RNA-dependent RNA polymerase activity in extracts from cells infected with lymphocytic choriomeningitis virus: in vitro synthesis of full-length viral RNA species. Fuller-Pace FV, et al. **J Virol** 1989 May;63(5):1938-44

Homologous interference of lymphocytic choriomeningitis virus involves a ribavirin-susceptible block in virus replication. Géssner A, et al. **J Virol** 1989 Apr; 63(4):1827-32

The primary structure of the lymphocytic choriomeningitis virus L gene encodes a putative RNA polymerase. Salvato M, et al. **Virology** 1989 Apr;169(2):377-84

GROWTH & DEVELOPMENT

MHC and non-MHC genes regulate elimination of lymphocytic choriomeningitis virus and antiviral cytotoxic T lymphocyte and delayed-type hypersensitivity mediating T lymphocyte activity in parallel. Thomsen AR, et al. **J Immunol** 1989 Feb 15;142(4):1333-41

IMMUNOLOGY

The incidence of diabetes in BB rats is decreased following acute LCMV infection. Dyrberg T, et al. **Adv Exp Med Biol** 1988;246:397-402

Recovery from acute virus infection. Role of cytotoxic T lymphocytes in the elimination of lymphocytic choriomeningitis virus from spleens of mice. Lehmann-Grube F, et al. **Ann N Y Acad Sci** 1988; 532:238-56 (61 ref.)

Class I gene regulation of haplotype preference may influence antiviral immunity in vivo. Thomsen AR, et al. **Cell Immunol** 1989 Sep;122(2):365-76

Anti-viral protection and prevention of lymphocytic choriomeningitis or of the local footpad swelling reaction in mice by immunization with vaccinia-recombinant virus expressing LCMV-WE nucleoprotein or glycoprotein. Hany M, et al. **Eur J Immunol** 1989 Mar;19(3):417-24

In vivo treatment with an appropriate anti-Thy-1.2 monoclonal antibody abrogates hybrid resistance to Thy-1.1+ virus-immune effector T cells. Doherty PC, et al. **Immunology** 1989 Apr;66(4):631-3

T cell memory. Long-term persistence of virus-specific cytotoxic T cells. Jamieson BD, et al. **J Exp Med** 1989 Jun 1;169(6):1993-2005

Efficiency and effectiveness of cloned virus-specific cytotoxic T lymphocytes in vivo. Klavinskis LS, et al. **J Immunol** 1989 Sep 15;143(6):2013-6

Polymorphism of cytotoxic T-lymphocyte clones that recognize a defined nine-amino-acid immunodominant domain of lymphocytic choriomeningitis virus glycoprotein. Joly E, et al. **J Virol** 1989 May;63(5):1845-51

Molecularly engineered vaccine which expresses an immunodominant T-cell epitope induces cytotoxic T lymphocytes that confer protection from lethal virus infection. Klavinskis LS, et al. **J Virol** 1989 Oct; 63(10):4311-6

Virus-induced delayed-type hypersensitivity reaction is sequentially mediated by CD8+ and CD4+ T lymphocytes. Moskophidis D, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3291-5

Distinct patterns of virus-specific T cell-mediated cytolysis of transformed versus primary target cells. Baenziger J, et al. **Scand J Immunol** 1988 Oct;28(4):411-23

Neutralizing epitopes of lymphocytic choriomeningitis virus are conformational and require both glycosylation and disulfide bonds for expression. Wright KE, et al. **Virology** 1989 Aug;171(2):417-26

ISOLATION & PURIFICATION

Comparison of isolation in cell culture with conventional and modified mouse antibody production tests for detection of murine viruses. de Souza M, et al. **J Clin Microbiol** 1989 Jan;27(1):185-7

PATHOGENICITY

The combination of major histocompatibility complex (MHC) and non-MHC genes influences murine lymphocytic choriomeningitis virus pathogenesis. Eyler YL, et al. **Scand J Immunol** 1989 May;29(5):527-33

PHYSIOLOGY

Enhanced virus replication and inhibition of lymphocytic choriomeningitis virus disease in anti-gamma interferon-treated mice. Leist TP, et al. **J Virol** 1989 Jun; 63(6):2813-9

Virtue in viruses. Kinoshita J. **Sci Am** 1988 Apr;258(4):36

Lymphocytic choriomeningitis virus selectively alters differentiated but not housekeeping functions: block in expression of growth hormone gene is at the level of transcriptional initiation. Klavinskis LS, et al. **Virology** 1989 Feb;168(2):232-5

LYMPHOCYTIC LEUKEMIA see **LEUKEMIA, LYMPHOCYTIC**

B-LYMPHOCYTIC LEUKEMIA see **LEUKEMIA, B-CELL**

T-LYMPHOCYTIC LEUKEMIA see **LEUKEMIA, T-CELL**

LYMPHOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, LYMPHOCYTIC, ACUTE**

T-LYMPHOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, T-CELL, ACUTE**

B-LYMPHOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, B-CELL, ACUTE**

LYMPHOCYTIC LEUKEMIA, ACUTE, B- AND T-CELL see **LEUKEMIA, MIXED-CELL**

LYMPHOCYTIC LEUKEMIA, B-CELL see **LEUKEMIA, B-CELL**

LYMPHOCYTIC LEUKEMIA, B-CELL, ACUTE see **LEUKEMIA, B-CELL, ACUTE**

LYMPHOCYTIC LEUKEMIA, CALLA-POSITIVE see **LEUKEMIA, CALLA-POSITIVE**

LYMPHOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, LYMPHOCYTIC, CHRONIC**

B-LYMPHOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, B-CELL, CHRONIC**

T-LYMPHOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, T-CELL, CHRONIC**

LYMPHOCYTIC LEUKEMIA, CHRONIC, B-CELL see **LEUKEMIA, B-CELL, CHRONIC**

LYMPHOCYTIC LEUKEMIA, L1 see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L1**

LYMPHOCYTIC LEUKEMIA, L2 see **LEUKEMIA, LYMPHOCYTIC, ACUTE, L2**

LYMPHOCYTIC LEUKEMIA, L3 see **LEUKEMIA, B-CELL, ACUTE**

LYMPHOCYTIC LEUKEMIA, NULL-CELL see **LEUKEMIA, NULL-CELL**

LYMPHOCYTIC LEUKEMIA, T-CELL see **LEUKEMIA, T-CELL**

LYMPHOCYTIC LEUKEMIA, T-CELL, ACUTE see **LEUKEMIA, T-CELL, ACUTE**

LYMPHOCYTIC LEUKEMIA, T-CELL, CHRONIC see **LEUKEMIA, T-CELL, CHRONIC**

LYMPHOCYTOPENIA see **LYMPHOPENIA**

LYMPHOCYTOSIS

BLOOD

Differences in blood T and NK cell populations between chronic lymphocytic leukemia of B cell type (B-CLL) and monoclonal B-lymphocytosis of undetermined significance (B-MLUS). Kimby E, et al. **Leukemia** 1989 Jul;3(7):501-4

CEREBROSPINAL FLUID

Lymphocytic meningitis of elusive etiology. Riefler JF 3d. **Hosp Pract [Off]** 1989 Jan 30;24(1A):33-4

Cerebrospinal fluid cell counts and chemistries in bacterial meningitis. Arevalo CE, et al. **South Med J** 1989 Sep; 82(9):1122-7

[Lymphocytic meningoradiculitis (Bannwarth's syndrome)] Aho K, et al. **Duodecim** 1988;104(19):1550-3 **(Fin)**

COMPLICATIONS

Lithium carbonate failed to modify the neutropenia associated with large granular lymphocyte proliferation [letter] Sgarabotto D, et al. **Acta Haematol (Basel)** 1989; 81(2):114-5

Association of large granular lymphocyte/natural killer cell proliferative disease and second hematologic malignancy. Bassan R, et al. **Am J Hematol** 1988 Oct;29(2):85-93

Steroid-responsive pure red cell aplasia associated with natural killer cell lymphocytosis. Tefferi A, et al. **Am J Hematol** 1989 Jul;31(3):211-2

Chronic T cell lymphoproliferative disorder and pure red cell aplasia. Further characterization of cell-mediated inhibition of erythropoiesis and clinical response to cytotoxic chemotherapy. Akard LP, et al. **Am J Med** 1987 Dec;83(6):1069-74

Sinusoidal lymphocytosis of the liver in Felty's syndrome with a review of the liver involvement in Felty's syndrome. Cohen ML, et al. **J Clin Gastroenterol** 1989 Feb;11(1):92-4 (12 ref.)

Spontaneous improvement of juvenile rheumatoid arthritis after T lymphocytosis with suppressor phenotype and function. Ichikawa M, et al. **J Clin Lab Immunol** 1988 Dec; 27(4):197-201

Increasing intrathecal lymphocytosis and immunoglobulin G production in neurologically asymptomatic HIV-1 infection. Andersson MA, et al. **J Neuroimmunol** 1988 Oct; 19(4):291-304

Stroke and anticardiolipin antibodies in a patient with rheumatoid arthritis and large granular lymphocyte proliferation [letter] Monteagudo M, et al. **J Rheumatol** 1988 Oct;15(10):1589-90

[Neutropenia and granular T lymphocytosis in a patient with Sjögren's syndrome] Astorga G, et al. **Rev Med Chil** 1988 Apr;116(4):369-70 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Indurated plaques and nodules on the face. Lymphocytoma cutis. Schweitzer WJ, et al. **Arch Dermatol** 1989 Sep; 125(9):1266, 1268-9

[Chronic granulocytopenia as a main symptom of T gamma-lymphocytosis] Krieger G, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1064-8 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Polyclonal B-cell lymphocytosis and hypergammaglobulinemia in patients with Gaucher disease. Marti GE, et al. **Am J Hematol** 1988 Dec;29(4):189-94

Prevalence of granular lymphocyte proliferation in patients with rheumatoid arthritis and neutropenia. Saway PA, et al. **Am J Med** 1989 Mar;86(3):303-7

Large granular lymphocytosis associated with rheumatoid arthritis. Samanta A, et al. **Ann Rheum Dis** 1988 Oct; 47(10):873-5

Bronchoalveolar T-lymphocytosis in HTLV-1-associated myelopathy [letter] Sugimoto M, et al. **Chest** 1989 Mar; 95(3):708

Tularemia and atypical lymphocytosis. Gelfand MS, et al. **J Tenn Med Assoc** 1989 Aug;82(8):417-8

Acute lymphocytosis after trauma—early recognition of the high-risk patient? Pinkerton PH, et al. **J Trauma** 1989 Jun; 29(6):749-51

Kinetics of lymphocyte subpopulations in dengue hemorrhagic fever/dengue shock syndrome. Sarasombath S, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec;19(4):649-56

[Lymphocyte alveolitis and paraplegia associated with HTLV-I (letter)] Couderc LJ, et al. **Presse Med** 1988 Oct 1;17(33):1703 **(Fre)**

[Cytotoxic NK cells: their role and function in the body. IV. The role of the NK cells in antiviral and antitumor immunity and the pathologic proliferation of the NK cells] Frydecka I. **Przegl Lek** 1988;45(6):539-42 **(Pol)**

GENETICS

A sicca syndrome in HIV infection: association with HLA-DR5 and CD8 lymphocytosis. Itescu S, et al. **Lancet** 1989 Aug 26;2(8661):466-8

IMMUNOLOGY

A polyclonal CD4+ and CD8+ lymphocytosis in a patient doubly infected with HTLV-I and HIV-1: a clinical and molecular analysis. Ehrlich GD, et al. **Am J Hematol** 1989 Mar;30(3):128-39

Epidermodysplasia verruciformis accompanied by large granular lymphocytosis. Report of a case and immunological studies. Aizawa H, et al. **Arch Dermatol** 1989 May;125(5):660-5

Monoclonality in human T-cell disorders. Reis MD, et al. **Blood Rev** 1987 Jun;1(2):89-96 (66 ref.)

Autoimmunity and B-cell dysfunction in chronic proliferative disorders of large granular lymphocytes/natural killer cells. Bassan R, et al. **Cancer** 1989 Jan 1;63(1):90-5

METABOLISM

Higher T-cell imbalance and growth factor receptor expression in B-cell chronic lymphocytic leukemia (B-CLL) as compared to monoclonal B-cell lymphocytosis of undetermined significance (B-MLUS). Garcia C, et al. **Leuk Res** 1989;13(1):31-7

PATHOLOGY

Myelodysplasia with bone marrow lymphocytosis and fibrosis mimicking recurrent Hodgkin's disease [see comments] Gottlieb CA, et al. **Am J Clin Pathol** 1989 Jan; 91(1):6-11. **Comment in:** Am J Clin Pathol 1989 Jul;92(1):127-8

Chronic B-cell lymphocytosis. Perreault C, et al. **Eur J Haematol** 1989 Apr;42(4):361-7

Lymphocytosis of large granular lymphocytes associated with anemia and neutropenia: proof of monoclonality of the LGL-population, but benign clinical course. Serke S, et al. **Klin Wochenschr** 1989 Jun 1;67(11):588-91

[Prognostic significance of lymphocytic infiltration in malignant melanoma of the choroid] Göllnitz R, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):660–5 (Eng. Abstr.) (Ger)

[Chronic granular T lymphocytosis of undetermined significance] Paladini G, et al. **Recenti Prog Med** 1989 May; 80(5):252–60 (71 ref.) (Eng. Abstr.) (Ita)

THERAPY

Agranulocytosis associated with T-gamma-lymphocytosis: no improvement of peripheral blood granulocyte count with human-recombinant granulocyte-macrophage colony-stimulating factor (GM-CSF). Thomssen C, et al. **Br J Haematol** 1989 Jan;71(1):157–8

VETERINARY

Development and serial passage of persistent lymphocytosis associated with bovine leukemia virus infection in cattle. Kono Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):60–9

Characteristics of lymphocytes appearing in persistent lymphocytosis induced experimentally in cattle by bovine leukemia virus infection. Kono Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):70–8

Lymphocytosis of large granular lymphocytes in three dogs Wellman ML, et al. **Vet Pathol** 1989 Mar;26(2):158–63

LYMPHOCYTOTOXIC ANTIBODIES see ANTILYMPHOCYTE SERUM

LYMPHOGRANULOMA INGUINALE see LYMPHOGRANULOMA VENEREUM

LYMPHOGRANULOMA, MALIGNANT see HODGKIN'S DISEASE

LYMPHOGRANULOMA VENEREUM

BLOOD

The persistence of Chlamydia trachomatis elementary body cell walls in human polymorphonuclear leucocytes and induction of a chemiluminescent response. Zvillich M, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):95–104

COMPLICATIONS

Lymphogranuloma venereum conjunctivitis with a marginal corneal perforation. Buus DR, et al. **Ophthalmology** 1988 Jun;95(6):799–802

DIAGNOSIS

Screening and treatment of chlamydial infections [letter] **N Engl J Med** 1989 Oct 12;321(15):1046–8

Lymphogranuloma venereum in a pregnant woman. Heaton S, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):148–9

[A case of inguinal lymphogranulomatosis] Blinova OV, et al. **Vrach Delo** 1989 Jan;(1):71–2 (Rus)

DRUG THERAPY

Oral administration of cyclosporin does not prevent expansion of antigen-specific, gut-associated, and spleen lymphocyte populations during Chlamydia trachomatis proctitis in nonhuman primates. Zeitz M, et al. **Dig Dis Sci** 1989 Apr;34(4):585–95

PATHOLOGY

[Femorogluteal manifestation of lymphogranuloma venereum] Lindmaier A, et al. **Hautarzt** 1989 May; 40(5):308–11 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Immunoprophylaxis of Chlamydia trachomatis lymphogranuloma venereum pneumonitis in mice by oral immunization. Cui ZD, et al. **Infect Immun** 1989 Mar; 57(3):739–44

LYMPHOGRAPHY

The role of lymphography in chylothorax following thoracic surgery. Ngan H, et al. **Br J Radiol** 1988 Nov; 61(731):1032–6

The clinical value of lymphography in cervical cancer, FIGO-stage Ib–IIa. Swart E, et al. **Eur J Gynaecol Oncol** 1989;10(2):85–90

Indirect lymphography with iotrolan. Partsch H, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:178–81

Lymphography in the initial evaluation of endometrial carcinoma. Galakhoff C, et al. **Gynecol Oncol** 1988 Oct; 31(2):276–84 (26 ref.)

Clinical and radiologic staging of locally advanced and inoperable bladder carcinoma. Shirkhoda A, et al. **J Comput Tomogr** 1988 Oct;12(4):298–302

Are lymphangiograms necessary before placing patients with nonseminomatous testicular tumors on surveillance? Wishnow KI, et al. **J Urol** 1989 May;141(5):1133–5

Patent blue V encapsulation in liposomes: potential applicability to endolympatic therapy and preoperative chromolymphography. Hirnle P, et al. **Lymphology** 1988 Sep;21(3):187–9

Lymphography in clinically localized prostate cancer. Castellino RA. **NCI Monogr** 1988;(7):37–9

Pelvic cancers: staging of 139 cases with lymphography and fine-needle aspiration biopsy. Chagnon S, et al. **Radiology** 1989 Oct;173(1):103–6

Non-Hodgkin lymphoma: influence of lymphography, CT, and bone marrow biopsy on staging and management. Pond GD, et al. **Radiology** 1989 Jan;170(1 Pt 1):159–64

The lymphatic system: diagnostic imaging studies. Weissleder R, et al. **Radiology** 1989 Aug;172(2):315–7

[Lymphangiography in ovarian cancer] Lang JH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):29–31, 58 (Eng. Abstr.) (Chi)

[Cytological examination of lymph node puncture biopsy collected after prior lymphography] Stárek J, et al. **Cas Lek Cesk** 1988 Aug 5;127(32):1014–8 (Eng. Abstr.) (Cze)

[Lymphography and x-ray computed tomography in the evaluation of lymph node invasiveness in cancer of the bladder. Comparison of their diagnostic value] Leguay O, et al. **J Radiol** 1989 Mar;70(3):191–5 (24 ref.) (Eng. Abstr.) (Fre)

[Spontaneous chylothorax: its diagnosis through a combination of lymphography and CT] Schumacher KA, et al. **ROFO** 1989 Jul;151(1):108–9 (Ger)

[Lymphography in prostatic cancer] Fischer U, et al. **Z Lymphol** 1988 Jul;12(1):15–8 (Ger)

[The role of lymphography in melanoma of the limbs. Personal experience] Ettorre GC, et al. **Radiol Med (Torino)** 1989 May;77(5):512–6 (Eng. Abstr.) (Ita)

[Clinical and pathological study of lymphography of carcinoma of the uterine cervix] Itoh J, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2618–29 (Eng. Abstr.) (Jpn)

[Study of lymph nodes in lung cancer in experimental animals using the indirect lymphography method and a computer] Feofilov GL, et al. **Grudn Khir** 1989 May–Jun;(3):59–64 (Eng. Abstr.) (Rus)

[Lymphography in clinical variants of posttraumatic edema] Adamian AA, et al. **Vestn Akad Med Nauk SSSR** 1989; (3):66–70 (Eng. Abstr.) (Rus)

[Roentgeno-anatomical study of inguinal, pelvic and lumbar lymph nodes] Borziak EI, et al. **Vopr Onkol** 1988; 34(10):1205–19 (Eng. Abstr.) (Rus)

[Indications for lymphography in carcinoma of the uterine cervix] Lazić J, et al. **Srp Arh Celok Lek** 1988 Oct; 116(10):923–32 (Eng. Abstr.) (Sec)

[Lympho-renal fistula in lymphatic imaging] Jurgová T, et al. **Cesk Radiol** 1989 Mar;43(2):102–8 (Eng. Abstr.) (Slo)

ADVERSE EFFECTS

Case of the month. A rare diversion? Wardlaw JM, et al. **Br J Radiol** 1989 Aug;62(740):759–60

Computed tomography of hepatic oil embolism following lymphangiography. Lorigan JG, et al. **Clin Radiol** 1989 May;40(3):259–61

Localized hepatic oil embolization following lymphography. Bruna J. **Lymphology** 1988 Dec;21(4):224–6

Oil contrast lymphography and respiratory function. Bruna J, et al. **Lymphology** 1988 Sep;21(3):178–80

METHODS

Endoscopic indirect lymphography in gastric cancer. Karanov SI. **Endoscopy** 1988 Sep;20(5):241–3

Clinical use of indirect lymphography in different forms of leg edema. Partsch H, et al. **Lymphology** 1988 Sep; 21(3):152–60

Interstitial lymphangiography: initial clinical experience with a dimeric nonionic contrast agent. Weissleder H, et al. **Radiology** 1989 Feb;170(2):371–4

[Indirect lymphography: indications, technic, clinical results] Gmeinwieser J, et al. **ROFO** 1988 Dec;149(6):642–7 (Eng. Abstr.) (Ger)

[Morphometric results with indirect lymphography] Wilding R, et al. **Vasa Suppl** 1988;26:214–9 (Eng. Abstr.) (Ger)

[Lymphography] Hayashi S, et al. **Rinsho Hoshasen** 1988 Oct; 33(11):1499–505 (Jpn)

[Isotopic lymphangiogammagraphy] Samaniego E, et al. **Angiologia** 1988 Nov–Dec;40(6):212–4 (Eng. Abstr.) (Spa)

LYMPHOID CELLS see LYMPHOCYTES

LYMPHOID IRRADIATION see LYMPHATIC IRRADIATION

LYMPHOID LEUKEMIA see LEUKEMIA, LYMPHOCYTIC

LYMPHOID TISSUE

see related
ADENOIDS
SPLEEN
THYMUS GLAND
TONSIL

Ocular lymphoid hyperplasia. Duker JS, et al. **Arch Ophthalmol** 1989 Mar;107(3):446–7

T cell receptor gene trans-rearrangements: chimeric gamma-delta genes in normal lymphoid tissues. Tycko B, et al. **Science** 1989 Sep 15;245(4923):1242–6

ANALYSIS

In vivo immunohistochemical identification of tumor necrosis factor/cachectin in human lymphoid tissue. McCall JL, et al. **Am J Pathol** 1989 Sep;135(3):421–5

Immunophenotypic characterization of mononuclear phagocytes and dendritic cells in lymphoid organs of the rhesus monkey. Ringler DJ, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):349–64

Phenotypic expression of cells of stationary elements in human lymphoid tissues. A histochemical and immunohistochemical study. Hsu SM. **Hematol Pathol** 1987;1(1):45–56

Cloning and characterization of a murine band 3-related cDNA from kidney and from a lymphoid cell line. Alper SL, et al. **J Biol Chem** 1988 Nov 15;263(32):17092–9

Detection of IL-1 alpha and IL-1 beta gene expression by in situ hybridization. Tissue localization of IL-1 mRNA in the normal C57BL/6 mouse. Takács L, et al. **J Immunol** 1988 Nov 1;141(9):3081–95

[Study of the DNA structure of peripheral blood leukocytes, proliferating lymphoid and tumor cells according to the rate of alkaline denaturation of DNA lysates] Moskaleva EIu, et al. **Gematol Transfuziol** 1989 Apr;34(4):40–2 (Eng. Abstr.) (Rus)

ANATOMY & HISTOLOGY

Meckel's diverticle: a gut associated lymphoid organ in chickens. Jeurissen SH, et al. **Adv Exp Med Biol** 1988; 237:599–605

Structure and function of bronchus-associated lymphoid tissue (BALT). Sminia T, et al. **Crit Rev Immunol** 1989; 9(2):119–50 (140 ref.)

The distribution of mucosal lymphoid nodules in the equine respiratory tract. Mair TS, et al. **J Comp Pathol** 1988 Aug; 99(2):159–68

Gut-associated lymphoid tissue in the large intestine of calves. I. Distribution and histology. Liebler EM, et al. **Vet Pathol** 1988 Nov;25(6):503–8

[Perivascular lymphoid follicles—the organs of the immune system of the skin] Chernyshenko LV, et al. **Vestn Dermatol Venerol** 1988;(7):22–4 (Eng. Abstr.) (Rus)

CYTOLOGY

Subpopulations of non-lymphoid cells in bronchus associated lymphoid tissue and lung of the mouse. Breel M, et al. **Adv Exp Med Biol** 1988;237:607–13

Interactions between follicular dendritic cells and lymphoid cells. Heinen E, et al. **Adv Exp Med Biol** 1988;237:181–4

Quantification and class distribution of immunoglobulin-secreting cells in mucosal tissues of the chicken. Koch G, et al. **Adv Exp Med Biol** 1988;237:633–9

Migration of newly-produced virgin B cells from bone marrow to secondary lymphoid organs. Lortan JE, et al. **Adv Exp Med Biol** 1988;237:87–92

Morphological diversity of DRC-1 positive cells: human follicular dendritic cells and their relatives. Terashma K, et al. **Adv Exp Med Biol** 1988;237:157–63

Immunohistochemical study on cultured FDC-C enriched lymphoid cell populations. Tsunoda R, et al. **Adv Exp Med Biol** 1988;237:177–80

Postnatal development of non-lymphoid and lymphoid cell populations in situ in diabetes-prone BB rats. van Rees EP, et al. **Adv Exp Med Biol** 1988;237:737–43

Occurrence of lymphohaemopoietic tissue in the meninges of the stingray Dasyatis akajei (Elasmobranchii, chondricthyes). Chiba A, et al. **Am J Anat** 1988 Nov; 183(3):268–76

Aberrant expression of T cell and B cell markers in myelocyte/monocyte/histiocyte-derived lymphoma and leukemia cells. Is the infrequent expression of T/B cell markers sufficient to establish a lymphoid origin for Hodgkin's Reed-Sternberg cells? Hsu SM, et al. **Am J Pathol** 1989 Jan;134(1):203–12

Comparison of flow cytometric data obtained using fresh and paraffin-embedded lymphoid tissue. Grace J, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):67–71

Human normal CD5+ B lymphocytes can be induced to differentiate to CD5- B lymphocytes with germinal center cell features. Caligaris-Cappio F, et al. **Blood** 1989 Apr; 73(5):1259–63

Mathematical analysis of haemopoietic grafted cell renewal and migration through the allogeneic or syngeneic mouse host. Spach C, et al. **Cell Tissue Kinet** 1988 Jul;21(4):285–99

Nasal lymphoid tissue in the rat. Spit BJ, et al. **Cell Tissue Res** 1989 Jan;255(1):193–8

Organization of the vimentin system and its spatial relationship to the microtubule complex during the division of mammalian cells growing attached and in suspension. Paulin-Levasseur M, et al. **Eur J Cell Biol** 1989 Jun; 49(1):189–95

Proliferation of lymphocyte subsets in the adult rat: a comparison of different lymphoid organs. Westermann J, et al. **Eur J Immunol** 1989 Jun;19(6):1087–93

Absence of secretory component expression by epithelial cells overlying rabbit gut-associated lymphoid tissue. Pappo J, et al. **Gastroenterology** 1988 Nov;95(5):1173–7

Immunohistochemical heterogeneity of macrophage subpopulations in human lymphoid tissues. Baroni CD, et

al. **Histopathology** 1987 Oct;11(10):1029–42

An immunohistochemical study of lymphoid tissue in human endometrium. Marshall RJ, et al. **Int J Gynecol Pathol** 1988; 7(3):225–35

Proliferation of macrophage subpopulations in the adult rat: comparison of various lymphoid organs. Westermann J, et al. **J Leukoc Biol** 1989 Sep;46(3):263–9

Human growth hormone stimulates somatomedin C/insulin-like growth factor I production by the human lymphoid cell line, IM-9. Palmer JM, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):167–73

Monoclonal antibodies as probes for defining cellular subsets in the bone marrow, thymus, bursa of fabricius, and spleen of the chicken. Jeurissen SH, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):225–38

DRUG EFFECTS

Effect of trichothecene mycotoxins (satratoxin H and T-2 toxin) on the lymphoid organs of mice. Glávits R, et al. **Acta Vet Hung** 1988;36(1–2):37–41

Lymphoid tissue responses to emulsified perfluorochemicals: comparative aspects. Lowe KC, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):495–504

Different sensitivity to the dexamethasone treatment of the lymphoid organs of Rana perezi in two different seasons. Garrido E, et al. **Dev Comp Immunol** 1989 Winter; 13(1):57–64

Effects of immunosuppressive chemicals on lymphoid development in foetal thymus organ cultures. d'Argy R, et al. **Pharmacol Toxicol** 1989 Jan;64(1):33–8

[Effect of low-molecular toxic substances on the organs of the immune system in mothers and their offspring] Borodin IuI, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):41–5 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Ontogenic development of gut-associated lymphoid tissue in the rat. An immunohistochemical study. Nakamura S, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1267–83

A contribution to the prenatal development of the lymphatic tissue of the parotid gland. Holibka V. **Acta Univ Palacki Olomuc Fac Med** 1988;120:421–8

ENZYMOLOGY

[Dipeptidylpeptidase IV in lymphocytes and lymphatic organs in humans] Sedo A, et al. **Cesk Fysiol** 1989; 38(1):69–84 (101 ref.) **(Cze)**

GROWTH & DEVELOPMENT

Ontogeny of the lymphoid organs in an Antarctic teleost, Harpagifer antarcticus (Notothenioidei: Perciformes). O'Neill JG. **Dev Comp Immunol** 1989 Winter;13(1):25–33

Neonatal development of lymphoid organs and specific immune responses in situ in diabetes-prone BB rats. van Rees EP, et al. **Immunology** 1988 Nov;65(3):465–72

[Lymphoid tissue during phylo- and ontogenesis] Chernyshenko LV, et al. **Vrach Delo** 1989 Feb;(2):72–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Serous otitis media and immunological reactions in the middle ear mucosa. van der Baan S, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec;106(5–6):428–34

Changes in size and cell populations in lymphoid organs during Plasmodium chabaudi infection in resistant and susceptible mice. Rae D, et al. **Adv Exp Med Biol** 1988; 239:113–20

Induction of class II MHC antigen expression in rat organs after systemic application of recombinant gamma interferon. Steiniger B, et al. **Adv Exp Med Biol** 1988; 237:795–9

Immune response to vaccination. Osburn BI, et al. **Adv Vet Sci Comp Med** 1989;33:93–108 (68 ref.)

An animal model demonstration of enhanced clearance of nontypable Haemophilus influenzae from the respiratory tract after antigen stimulation of gut-associated lymphoid tissue. Wallace FJ, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):311–6

Induction of antigen-specific IgA-forming cells in the upper respiratory mucosa. Watanabe N, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):523–9

Distribution of rotavirus antigen in intestinal lymphoid tissues: potential role in development of the mucosal immune response to rotavirus. Dharakul T, et al. **Clin Exp Immunol** 1988 Oct;74(1):14–9

Immune-related alterations in aged gut-associated lymphoid tissues in mice. Kawanishi H, et al. **Dig Dis Sci** 1989 Feb; 34(2):175–84

The lymph follicle: a hard nut to crack. Heinen E, et al. **Immunol Today** 1988 Jul-Aug;9(7–8):240–3 (42 ref.)

Terminal complement complex (TCC) and S-protein (vitronectin) on follicular dendritic cells in human lymphoid tissues. Halstensen TS, et al. **Immunology** 1988 Oct;65(2):193–7

The tissue distribution of T lymphocytes expressing different CD45 polypeptides. Janossy G, et al. **Immunology** 1989 Apr;66(4):517–25

Quantification of antigen-specific antibody-secreting cells in the small intestine and other lymphoid organs of mice after oral booster immunization. Van der Heijden PJ, et al. **Immunology** 1989 Mar;66(3):404–9

Complement activation in human lymphoid germinal centres. Zwirner J, et al. **Immunology** 1989 Feb;66(2):270–7

A phenotypic study of cells from Burkitt lymphoma and EBV-B-lymphoblastoid lines and their relationship to cells in normal lymphoid tissues. Ling NR, et al. **Int J Cancer** 1989 Jan 15;43(1):112–8

Relative V beta transcript levels in thymus and peripheral lymphoid tissues from various mouse strains. Inverse correlation of I-E and Mls expression with relative abundance of several V beta transcripts in peripheral lymphoid tissues. Okada CY, et al. **J Exp Med** 1989 May 1;169(5):1703–19

Lewis rat lymphoid dendritic cells can efficiently present homologous myelin basic protein to encephalitogenic lymphocytes. Gautam AM, et al. **J Neuroimmunol** 1989 Apr;22(2):113–21

Immunologic structures and functions of the gut. Gebbers JO, et al. **Schweiz Arch Tierheilkd** 1989;131(5):221–38 (96 ref.)

Immunogenicity of lymphoid cells and vascularized organs for the non-MHC antigen EAG-1. Paul LC, et al. **Transplant Proc** 1989 Apr;21(2):3255–6

The effect of steroids on the regulation of major histocompatibility complex-class II expression on nonlymphoid tissue. Ruers TJ, et al. **Transplantation** 1989 Mar;47(3):492–9

Immunohistological demonstration of lymphocyte surface antigens in postmortem lymphoid tissues. Wintzer HO, et al. **Virchows Arch [A]** 1988;413(6):581–9

[The lymphoid system of the digestive tract in man] Jarry A, et al. **Ann Pathol** 1988;8(4–5):265–75 (36 ref.) **(Fre)**

INNERVATION

Sympathetic noradrenergic innervation of immune organs. Felten DL, et al. **Brain Behav Immun** 1988 Dec; 2(4):293–300 (57 ref.)

Noradrenergic sympathetic innervation of lymphoid organs. Felten SY, et al. **Prog Allergy** 1988;43:14–36 (79 ref.)

METABOLISM

The bcl-2 gene in primary B cell lymphoma of mucosa-associated lymphoid tissue (MALT). Pan L, et al. **Am J Pathol** 1989 Jul;135(1):7–11

Hematopoietic, lymphopoietic, and proinflammatory cytokines produced by human and murine keratinocytes. Kupper TS, et al. **Ann N Y Acad Sci** 1988;548:262–70 (15 ref.)

Deoxycytidine is salvaged not only into DNA but also into phospholipid precursors. II. Ara-C does not inhibit the later process in lymphoid cells. Sasvári-Székely M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1158–67

Uptake and degradation of hyaluronan in lymphatic tissue. Fraser JR, et al. **Biochem J** 1988 Nov 15;256(1):153–8

Extracellular matrix of lymphoid tissues in the chick. Colombatti A, et al. **J Histochem Cytochem** 1989 May; 37(5):757–63

Immunofluorescence analysis of IgA binding by human mononuclear cells in blood and lymphoid tissue. Chevailler A, et al. **J Immunol** 1989 Apr 1;142(7):2244–9

Recombinant human interferon alpha-2a: delivery to lymphoid tissue by selected modes of application. Supersaxo A, et al. **Pharm Res** 1988 Aug;5(8):472–6

Gene transfer from targeted liposomes to specific lymphoid cells by electroporation. Machy P, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8027–31

MICROBIOLOGY

A survey of Epstein-Barr virus DNA in lymphoid tissue. Frequent detection in Hodgkin's disease. Staal SP, et al. **Am J Clin Pathol** 1989 Jan;91(1):1–5

Cellular localization of simian immunodeficiency virus in lymphoid tissues. I. Immunohistochemistry and electron microscopy. Ringler DJ, et al. **Am J Pathol** 1989 Feb; 134(2):373–83

Cellular localization of simian immunodeficiency virus in lymphoid tissues. II. In situ hybridization. Wyand MS, et al. **Am J Pathol** 1989 Feb;134(2):385–93

Vibrio cholerae O1 adherence to villi and lymphoid follicle epithelium: in vitro model using formalin-treated human small intestine and correlation between adherence and cell-associated hemagglutinin levels. Yamamoto T, et al. **Infect Immun** 1988 Dec;56(12):3241–50

PATHOLOGY

Otitis media with effusion and tubal tonsil (video). Honda K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:218–21

A morphological and immunohistochemical study of lymphoid germinal centers in synovial and lymph node tissues from rheumatoid arthritis patients with special reference to complement components and their receptors. Imai Y, et al. **Acta Pathol Jpn** 1989 Feb;39(2):127–34

A combined cytochemical and immunocytochemical method for simultaneous visualization of cytoplasmic enzyme reactivity and cell surface antigens in cell suspensions. Gloghini A, et al. **Am J Clin Pathol** 1989 Jan;91(1):67–71

A comparison between monoclonal antibody MT2 and immunoglobulin staining in the differential diagnosis of follicular lymphoid proliferations in routinely fixed wax-embedded biopsies. Norton AJ, et al. **Am J Pathol** 1989 Jan;134(1):63–70

Lymphoid infiltrates of the orbit and conjunctiva. A morphologic and immunophenotypic study of 99 cases. Medeiros LJ, et al. **Am J Surg Pathol** 1989 Jun;13(6):459–71

Massive follicular lymphoid hyperplasia in experimental allergic conjunctivitis. Local antibody production. Khatami M, et al. **Arch Ophthalmol** 1989 Mar;107(3):433–8

Bone marrow lymphoid nodules in myeloproliferative disorders: association with the nonmyelosclerotic phases of idiopathic myelofibrosis and immunological significance. Cervantes F, et al. **Br J Haematol** 1988 Nov;70(3):279–82

Morphometric and morphologic evaluations in stage III non-small cell lung cancers. Prognostic significance of quantitative assessment of infiltrating lymphoid cells. Lee TK, et al. **Cancer** 1989 Jan 15;63(2):309–16

Prevention of murine coxsackie B3 viral myocarditis and associated lymphoid organ atrophy with recombinant human leucocyte interferon alpha A/D. Kishimoto C, et al. **Cardiovasc Res** 1988 Oct;22(10):732–8

Lymphoid nodules in skin biopsies from dogs, cats, and horses with nonneoplastic dermatoses. Scott DW. **Cornell Vet** 1989 Jul;79(3):267–72

Acute pathological effects on rats of orally administered wortmannin-containing preparations and purified wortmannin from Fusarium oxysporum. Gunther R, et al. **Food Chem Toxicol** 1989 Mar;27(3):173–9

Rectal lymphoid tissue [letter] Sweeney EC. **Histopathology** 1988 Jul;13(1):119–20

Cytometric studies on lymphoid cells from normal and leukaemic AKR mice. Joshi DS, et al. **Indian J Exp Biol** 1988 Jul;26(7):492–6

High endothelial venules present in lymphoid cell accumulations in thyroids affected by autoimmune disease: a study in men and BB rats of functional activity and development. Kabel PJ, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):744–51

Bizarre lymphoid cells in serous effusion of a dog with mediastinal lymphoma. Madewell BR, et al. **J Comp Pathol** 1988 Aug;99(2):229–33

Reactive lymphoid hyperplasia of the hard palate. Davila MA, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1103–5

Application of the AgNOR method to cell imprints of lymphoid tissue. Boldy DA, et al. **J Pathol** 1989 Jan; 157(1):75–9

Plasmacytoid T cells in a case of lymphocytic infiltration of skin. A component of the skin-associated lymphoid tissue? Facchetti F, et al. **J Pathol** 1988 Aug;155(4):295–300

Nasopharyngeal lymphatic tissue hypertrophy in HIV-infected patients [letter] Barzan L, et al. **Lancet** 1989 Jan 7;1(8628):42–3

Acute thymus involution during infancy and childhood: immunohistology of the thymus and peripheral lymphoid tissues after acute illness. van Baarlen J, et al. **Pediatr Pathol** 1989;9(3):261–75

Rheumatoid lymphoid dendritic cells—characteristics and functions. Waalen K, et al. **Scand J Rheumatol Suppl** 1988; 76:47–60 (53 ref.)

Studies of intestinal lymphoid tissue. XI—The immunopathology of cell-mediated reactions in gluten sensitivity and other enteropathies. Marsh MN. **Scanning Microsc** 1988 Sep;2(3):1663–84

Bronchial casts associated with hilar lymphatic and pulmonary lymphoid abnormalities. Wiggins J, et al. **Thorax** 1989 Mar;44(3):226–7

Conjunctiva-associated lymphoid tissue (CALT) in normal and Bordetella avium-infected turkeys. Fix AS, et al. **Vet Pathol** 1989 May;26(3):222–30

[Malignant lymphoma of mucosa-associated lymphoid tissue (letter)] Diebold J. **Ann Pathol** 1988;8(4–5):340 **(Fre)**

[Combined reaction of the lymphoid organs and the adrenals to stress in mature animals subjected to cold in the early period of postnatal ontogeny] Borodin IuI, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):73–8 (Eng. Abstr.) **(Rus)**

[Changes in tissue basophils of skin and lymphoid organs in total, deep hypothermia] Sukhanov AF, et al. **Arkh Anat Gistol Embriol** 1989 May;96(5):59–62 (Eng. Abstr.) **(Rus)**

[A case of Jessner-Kanof lymphocytic infiltration of the skin] Romanenko VN, et al. **Vestn Dermatol Venerol** 1988; (5):55–7 **(Rus)**

PHYSIOLOGY

Heterogeneity of lymphocyte homing physiology: several mechanisms operate in the control of migration to lymphoid and non-lymphoid organs in vivo. Pabst R, et al. **Immunol Rev** 1989 Apr;108:83–109 (91 ref.)

VH repertoire in progeny of long term lymphoid-cultured cells used to reconstitute immunodeficient mice. Denis KA, et al. **J Immunol** 1989 May 1;142(9):2981–7

Lymphoid organ weights and organ:body weight ratios of growing beagles. Yang TJ, et al. **Lab Anim** 1989 Apr; 23(2):143–6

Thymidine kinase obliteration: creation of transgenic mice with controlled immune deficiency. Heyman RA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2698–702

[Effect of temperature on the spontaneous rhythmic activity of the neurons in the spinal centers of the frog lymphatic hearts] Ruchinskaia TIu, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):212–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of lymphoid irradiation on clinical course, lymphocyte count, and T-cell subsets in chronic progressive multiple sclerosis. Cook SD, et al. **Ann N Y Acad Sci** 1988;540:533-4

Total lymphoid irradiation reduces IgG autoantibody production and enhances specific antibody responses in NZB/NZW F1 mice. Fariñas MC, et al. **Cell Immunol** 1989 Jul;121(2):423-32

Acquired immune tolerance to cadaveric renal allografts. A study of three patients treated with total lymphoid irradiation. Strober S, et al. **N Engl J Med** 1989 Jul 6; 321(1):28-33

ULTRASTRUCTURE

Lymphocyte subpopulations in high endothelial venules and lymphatic capillaries of bronchus-associated lymphoid tissue (BALT) in the rat. Otsuki Y, et al. **Am J Anat** 1989 Feb;184(2):139-46

Microanatomy of lymphoid tissue during humoral immune responses: structure function relationships. Szakal AK, et al. **Annu Rev Immunol** 1989;7:91-109 (51 ref.)

Distribution of B-lymphocytes in the areas of bursal and cloacal lymphoid infiltration. Dolfi A, et al. **J Anat** 1988 Oct;160:201-10

M cell in the immune system of the lung. Pankow W, et al. **Respiration** 1988;54(4):209-19 (55 ref.)

Gut-associated lymphoid tissue in the large intestine of calves. II. Electron microscopy. Liebler EM, et al. **Vet Pathol** 1988 Nov;25(6):509-15

LYMPHOKINES

Human non-interferon macrophage activating factor: biological and biochemical characterization. Lee JC, et al. **Adv Exp Med Biol** 1988;239:217-21

Lymphokine regulation of macrophage effector activities. Nacy CA, et al. **Adv Exp Med Biol** 1988;239:1-11 (12 ref.)

Molecular aspects of receptors and binding factors for IgE. Metzger H. **Adv Immunol** 1988;43:277-312 (159 ref.)

Neutrophil migration induced by inflammatory stimuli is reduced by macrophage depletion. Souza GE, et al. **Agents Actions** 1988 Jul;24(3-4):377-80

Lead inhibits oxidative metabolism of macrophages exposed to macrophage-activating factor. Buchmüller-Rouiller Y, et al. **Biochem J** 1989 Jun 1;260(2):325-32

The production of arthritis in the guinea-pig by intra-articular reaction between lymphokines and inflammatory leucocytes. Limb GA, et al. **Br J Exp Pathol** 1989 Aug;70(4):443-56

International Union of Immunological Societies. Nomenclature Committee Working Group on Lymphokines [letter] Paul WE. **Cell Immunol** 1988 Dec; 117(2):430-2

International Union of Immunological Societies. Nomenclature committee working group on lymphokines [letter] Paul WE. **Clin Immunol Immunopathol** 1988 Dec; 49(3):498-500

Lymphokine nomenclature. Paul WE. **Immunol Today** 1988 Dec;9(12):366-7

Pathogenicity of Mycobacterium avium for human monocytes: absence of macrophage-activating factor activity of gamma interferon. Toba H, et al. **Infect Immun** 1989 Jan;57(1):239-44

Role of lymphokine-activated killer cells as mediators of veto and natural suppression. Azuma E, et al. **J Immunol** 1988 Oct 15;141(8):2601-6

Lymphokine-activated tumor inhibition in mice. Ability of a nonapeptide of the human IL-1 beta to recruit anti-tumor reactivity in recipient mice. Forni G, et al. **J Immunol** 1989 Jan 15;142(2):712-8

International Union of Immunological Societies. Nomenclature Committee Working Group on Lymphokines. Paul WE. **J Immunol Methods** 1988 Nov 25;115(1):1-2

Intratumoral LAK cell and interleukin-2 therapy of human gliomas. Barba D, et al. **J Neurosurg** 1989 Feb;70(2):175-82

Sixth International Lymphokine Workshop. October 23-27, 1988, Evian, Savoie, France. **Lymphokine Res** 1988 Fall; 7(3):247-339

Cancer immunotherapy: current status of treatment with interleukin 2 and lymphokine-activated killer cells. van Hazlst-Pisani CM, et al. **Mayo Clin Proc** 1989 Apr; 64(4):451-65 (111 ref.)

Identification of the Fc gamma RII-related component of murine IgG-BF. Blank U, et al. **Mol Immunol** 1989 Feb; 26(2):107-14

Sequence identity [letter] Freemont P, et al. **Nature** 1989 Jun 15;339(6225):516

Fc receptors, immunoglobulin-binding factors and B chronic lymphocytic leukemia. Fridman WH, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):311-5 (37 ref.)

Leukoregulin. Evans CH. **Prog Clin Biol Res** 1989;288:259-70 (22 ref.)

Antigen-specific T-cell factors and drug research. Webb DR. **Prog Drug Res** 1988;32:9-20 (60 ref.)

The soluble immune response suppressor pathway in nephrotic syndrome. Schnaper HW. **Semin Nephrol** 1989 Mar;9(1):107-11 (38 ref.)

[A new high-yield continuous cell culture system and its clinical application in adoptive immunotherapy with LAK cells] Noto T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1893-8 (Eng. Abstr.) **(Jpn)**

[Mass culture of LAK cells by a hollow-fiber bioreactor system] Tanji Y, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-3):1888-92 (Eng. Abstr.) **(Jpn)**

[Macrophage-activating factor] Taniyama T. **Nippon Rinsho** 1989 Mar;47(3):534-9 **(Jpn)**

ANALYSIS

Interleukin-2 inhibitor and measurement of interleukin-2 in synovial fluid of patients with rheumatoid arthritis [letter] Emery P, et al. **Arthritis Rheum** 1988 Dec;31(12):1590-1

B-cell reconstitution after autologous bone marrow transplantation: increase in serum CD23 ("IgE-binding factor") precedes IgE and B-cell regeneration. Bengtsson M, et al. **Blood** 1989 Jun;73(8):2139-44

B-lymphocyte-derived erythroid burst-promoting activity is distinct from other known lymphokines. Feldman L, et al. **Blood** 1989 May 15;73(7):1814-20

Purification and characterization of phosphohexose isomerase from human gastrointestinal carcinoma and its potential relationship to neuroleukin. Baumann M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7018-21

Cytoplasmic factors involved in erythroid differentiation in mouse erythroleukemia (MEL) cells. Watanabe T, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:105-9 (10 ref.)

Occupational allergy in an entomological research centre. II. Identification of IgE-binding proteins from developmental stages of the blowfly Lucilia cuprina and other species of adult flies. Baldo BA, et al. **Clin Exp Allergy** 1989 Jul;19(4):411-7

Detection and characterization of IgE-binding factors (IgE-BF) within supernatants of the cell line RPMI-8866, normal human sera and sera from atopic patients. Bujanowski-Weber J, et al. **Immunology** 1988 Sep; 65(1):53-8

Production of an interleukin-1 inhibitor by cell line P388D1 murine macrophages stimulated with Haemophilus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **Infect Immun** 1988 Nov;56(11):2801-7

Study of the cellular origin of histamine release inhibitory factor using highly purified subsets of mononuclear cells. Alam R, et al. **J Immunol** 1989 Oct 1;143(7):2280-4

Immunofluorescence analysis of IgA binding by human mononuclear cells in blood and lymphoid tissue. Chevailler A, et al. **J Immunol** 1989 Apr 1;142(7):2244-9

Identification of a macrophage-activating factor in granules of the RNK large granular lymphocyte leukemia. Roussel E, et al. **J Immunol** 1989 Jan 15;142(2):543-8

The detection and enumeration of cytokine-secreting cells in mice and man and the clinical application of these assays. Hutchings PR, et al. **J Immunol Methods** 1989 Jun 2; 120(1):1-8

In vitro detection of lymphokines produced by in vivo activated lymphocytes. Mohler KM, et al. **J Immunol Methods** 1989 Jul 6;121(1):67-73

Quantitative immunoassay of recombinant murine neuroleukin. Spear GT, et al. **Neuroscience** 1988 Oct; 27(1):41-8

The leukocyte inhibitory factor and circulating immune complex in leprosy patients. Kim SJ, et al. **Yonsei Med J** 1988;29(4):316-20

[Prognostic value of an interleukin 2 inhibitor present in the synovial fluid in rheumatoid polyarthritis] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):53-5 **(Fre)**

[Indirect detection of lymphokines with the help of SDS-conditioned macrophages] Wagner H. **Z Med Lab Diagn** 1988;29(8):431-6 (Eng. Abstr.) **(Ger)**

[Trophic factors acting on glial growth and differentiation] Kato T, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug; 33(10):1667-73 (69 ref.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Deoxycytidine, insulin and epidermal growth factor overcome the effect of two natural inhibitors of the haemopoietic system. Schunk H, et al. **APMIS Suppl** 1988; 2:120-9

Megakaryocyte colony-stimulating factor and burst-promoting activity in LPS-treated mouse spleen cell-conditioned medium. Sugimoto M, et al. **Exp Cell Biol** 1988;56(5):245-53

Soluble fragments of the low-affinity IgE receptor (CD23) inhibit the spontaneous migration of U937 monocytic cells: neutralization of MIF-activity by a CD23 antibody. Flores-Romo L, et al. **Immunology** 1989 Aug;67(4):547-9

Regulation of lymphokine response during reinfection by influenza virus. Production of a factor that inhibits lymphokine activity. Beck MA, et al. **J Immunol** 1989 May 15;142(10):3560-7

Lead inhibits intracellular killing of Leishmania parasites and extracellular cytolysis of target cells by macrophages exposed to macrophage activating factor. Mauël J, et al. **J Leukoc Biol** 1989 May;45(5):401-9

Impairment of allograft tumor immunity by isotype-like suppression of antigen-specific T cell factors. Van Loveren H, et al. **Transplantation** 1989 Mar;47(3):504-12

BIOSYNTHESIS

In vitro effect of human growth hormone on lymphocyte transformation and lymphocyte growth factors secretion. Schimpff RM, et al. **Acta Endocrinol (Copenh)** 1989 Jun; 120(6):745-52

Effect of hydrocortisone on BFU-E growth and on burst-promoting activity of T lymphocytes in man. Morra L, et al. **Acta Haematol (Basel)** 1989;82(1):16-21

Regulation of erythropoietin and burst-promoting activity production in patients with aplastic anemia and iron deficiency anemia. Takeichi N, et al. **Acta Haematol (Basel)** 1988;80(3):145-52

Production of an interleukin-1 inhibitory factor by human alveolar macrophages from normals and allergic asthmatic patients. Gosset P, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):40-6

Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):753-8

Erythroid burst-promoting activity produced by interleukin-1-stimulated endothelial cells is granulocyte-macrophage colony-stimulating factor. Segal GM, et al. **Blood** 1988 Oct;72(4):1364-7

The role of CD4 in antigen-independent activation of isolated single T lymphocytes. Kelso A, et al. **Cell Immunol** 1988 Oct 1;116(1):99-111

Decreased production of suppressive-B-cell factor by synovial membrane B-lymphocytes in rheumatoid arthritis. Pisko EJ, et al. **Clin Exp Rheumatol** 1988 Jul-Sep; 6(3):239-45

Production of interleukin-1 inhibitors by the murine macrophage cell line P388D1 which produces interleukin-1. Isono N, et al. **Dermatologica** 1989;179 Suppl 1:134

Concomitant production of different lymphokines in activated T cells. Andersson U, et al. **Eur J Immunol** 1988 Dec;18(12):2081-4

Monocytes and impaired leukocyte migration inhibitory factor production in head and neck squamous carcinoma. Beauchamp ML, et al. **Head Neck Surg** 1988 Jan-Feb; 10(3):187-94

Relationship of human macrophage agglutination factor to other fibronectins. Godfrey HP, et al. **Immunology** 1989 Jul;67(3):321-7

Limiting-dilution analysis of T cells extracted from solid human lung tissue: comparison of precursor frequencies for proliferative responses and lymphokine production between lung and blood T cells from individual donors. Holt PG, et al. **Immunology** 1988 Aug;64(4):649-54

A comparative study on the immunological effects of bovine and porcine thymic extracts: induction of lymphoproliferative response and enhancement of interleukin-2, gamma-interferon and tumor necrotic factor production in vitro on cord blood lymphocytes. Lin CY, et al. **Immunopharmacology** 1989 Jul-Aug;18(1):1-10

Modulation of macrophage Ia expression by lipopolysaccharide: stem cell requirements, accessory lymphocyte involvement, and IA-inducing factor production. Wentworth PA, et al. **Infect Immun** 1989 Jul; 57(7):2028-36

Formation of IgE-binding factors by lymphocytes of HIV-infected patients. Carini C, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):116-8

The effect of preseasonal immunotherapy on the production of histamine-releasing factor (HRF) by mononuclear cells from patients with seasonal asthma: results of a double-blind, placebo-controlled, randomized study. Kuna P, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):816-24

Hemorrhage produces abnormalities in lymphocyte function and lymphokine generation. Abraham E, et al. **J Immunol** 1989 Feb 1;142(3):899-906

Participation of IL-4 in the formation of IgD-binding factors by antigen-primed mouse spleen cells. Adachi M, et al. **J Immunol** 1988 Oct 1;141(7):2358-66

Cellular origin of histamine-releasing factor produced by peripheral blood mononuclear cells. Alam R, et al. **J Immunol** 1989 Jun 1;142(11):3951-6

An IL-1 inhibitor from human monocytes. Production and characterization of biologic properties. Arend WP, et al. **J Immunol** 1989 Sep 15;143(6):1851-8

Influence of recombinant IL-4, IFN-alpha, and IFN-gamma on the production of human IgE-binding factor (soluble CD23). Delespesse G, et al. **J Immunol** 1989 Jan 1; 142(1):134-8

Production of multiple lymphokines by the A20.1 B cell lymphoma after cross-linking of membrane Ig by immobilized anti-Ig. Justement LB, et al. **J Immunol** 1989 Aug 1;143(3):881-9

Correlation between the biologic functions and the generation of lymphokines in T cell clones. Tartakovsky B, et al. **J Immunol** 1989 Apr 15;142(8):2695-701

Autoreactive T cells in MRL/Mpr-lpr/lpr mice. Characterization of the lymphokines produced and analysis of antigen-presenting cells required. Weston KM, et al. **J Immunol** 1988 Sep 15;141(6):1941-8

Interleukin-1 inhibitor production by human mononuclear leukocytes and leukocyte subpopulations exposed to respiratory syncytial virus: analysis and comparison with the response to influenza virus. McCarthy DO, et al. **J Leukoc Biol** 1989 Sep;46(3):189-98

Constitutive production of lymphokines by cloned murine B-cell lymphomas—CH12 B lymphoma produces interleukin-4. O'Garra A, et al. **J Mol Cell Immunol** 1989; 4(3):149-58; discussion 158-9

Androgen-induced production of colony-stimulating factor

(CSF) and colony-inhibitory factor (CIF) in the submandibular gland in female mice. Shimizu M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):352–6

Production of a factor inhibiting tumor cell migration by spleen cells from tumor-bearing mice. Rsichev I, et al. **Jpn J Med Sci Biol** 1988 Apr;41(2):49–56

Lymphokine production by human peripheral blood lymphocytes: analysis by in situ hybridization. Qiu G, et al. **Lymphokine Res** 1988 Winter;7(4):385–92

Production of interleukin 1 inhibitors by the murine macrophage cell line P388D1 which produces interleukin 1. Isono N, et al. **Microbiol Immunol** 1989;33(1):43–57

Dendritic cell activating factor produced by mouse macrophage hybridoma. Ito A, et al. **Microbiol Immunol** 1988;32(10):1059–72

Enhancement of antigen-presenting function of dendritic cells with culture supernatants of mouse peritoneal macrophages stimulated with certain particulate substances. Miyazaki H, et al. **Microbiol Immunol** 1988;32(10):1033–42

Mast cell lines produce lymphokines in response to cross-linkage of Fc epsilon RI or to calcium ionophores. Plaut M, et al. **Nature** 1989 May 4;339(6219):64–7

Inhibitor of normal granulopoiesis produced by cells of MDS patients. Cukrová V, et al. **Neoplasma** 1989;36(1):83–9

Effect of Lactobacillus casei: formation of interferon and macrophage activating factor in mice in vivo. Kuwabara M, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):665–72

Role of T lymphocytes in the suppression of hematopoiesis: hematopoietic suppressive factors and their mRNA expression in activated T lymphocytes. Harada M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1531–9

Formation of IgE-binding factors by T cells of patients infected with human immunodeficiency virus type 1. Carini C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9214–8

Production of leukocyte migration inhibition factor (LIF) and migration stimulation factor (MStF) by CD4+ and CD8+ human lymphocytes subsets and T-cell clones. Méndez-Samperio P, et al. **Rev Invest Clin** 1989 Apr-Jun; 41(2):107–15

Human lymphocytes produce both leukocyte migration inhibition (LIF) and stimulation (MStF) factors after mitogen, alloantigens or antigen activation. Favila-Castillo L, et al. **Rev Latinoam Microbiol** 1988 Apr-Jun;30(2):111–5

Kupffer cells may autoregulate interleukin 1 production by producing interleukin 1 inhibitor and prostaglandin E2. Shirahama M, et al. **Scand J Immunol** 1988 Dec; 28(6):719–25

The effect of a pretransplant blood transfusion on lymphokine production in patients with renal failure. McKenna RM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1827

Lymphokine production in cyclosporine-treated renal transplant recipients. McKenna RM, et al. **Transplant Proc** 1988 Dec;20(6):1245–7

Suppression in class II MHC tolerance is mediated by Ia-specific lymphocytes that fail to mature into allodestructive effectors. Streilein JW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):236–7

Cyclosporin A and G inhibition of cytokine production. Szturm K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):857

Lymphokine production by MLR-reactive reaction lymphocytes obtained from normal mice and mice rendered tolerant of class II MHC antigens. Mohler KM, et al. **Transplantation** 1989 Apr;47(4):625–33

Clonal analysis of the T-cell response of mice to herpes simplex virus: correlation between lymphokine production in vitro and the induction of delayed-type hypersensitivity and antiviral activity in vivo. Seid M, et al. **Viral Immunol** 1987 Spring;1(1):35–44

BLOOD

Insulin-like growth factor I binding proteins in dairy cows, calves and bulls. Ronge H, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):153–60

Hemopoietic regulatory factors in human hemopoietic failures. Nissen C. **Blood Cells** 1988;14(2-3):521–31

High interleukin-6 serum levels and increased production by leucocytes in alcoholic liver cirrhosis. Correlation with IgA serum levels and lymphokines production. Deviere J, et al. **Clin Exp Immunol** 1989 Aug;77(2):221–5

Determination of serum cholestatic factor level by ELISA in drug-induced allergic hepatitis. Kioka K, et al. **Gastroenterol Jpn** 1988 Dec;23(6):624–8

Evidence for an osteoblast-activating factor in a patient with peripheral T-cell lymphoma and osteosclerosis. Hüfner M, et al. **Klin Wochenschr** 1989 Apr 3;67(7):402–7

Answer to the letter of J.W.M. van der Meer [letter] Romijn JA, et al. **Neth J Med** 1989 Apr;34(3-4):168

Inhibitory factors to hematopoiesis in aplastic anemia and pure red cell aplasia. Hanada T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1572–80

A simple method for determination of interleukin-2-inhibitory activity of serum or plasma. Kucharz EJ, et al. **Z Med Lab Diagn** 1988;29(4):196–200

[Effect of PUVA therapy on migration modulating serum factors in psoriasis] Westphal HJ, et al. **Dermatol Monatsschr** 1988;174(7):407–13 (Eng. Abstr.) (Ger)

GENETICS

Molecular biology of T-cell-derived lymphokines: a model system for proliferation and differentiation of hemopoietic cells. Arai K, et al. **Bioessays** 1986 Oct;5(4):166–71 (30 ref.)

Pleiotropy and redundancy: T cell-derived lymphokines in the immune response. Paul WE. **Cell** 1989 May 19; 57(4):521–4 (14 ref.)

Genomic cloning and heterologous expression of human differentiation-stimulating factor. Lowe DG, et al. **DNA** 1989 Jun;8(5):351–9

Bovine papilloma virus encoded E2 protein activates lymphokine genes through DNA elements, distinct from the consensus motif, in the long control region of its own genome. Heike T, et al. **EMBO J** 1989 May;8(5):1411–7

Differential activation of cytokine genes in normal CD4-bearing T cells is stimulus dependent. Carding SR, et al. **Eur J Immunol** 1989 Feb;19(2):231–8

Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on human T lymphocytes. Chang HC, et al. **Eur J Immunol** 1989 Jun;19(6):1045–51

Lymphokine mRNA and T cell multireceptor mRNA of the Ig super gene family are reciprocally modulated during human T cell activation. Paillard F, et al. **Eur J Immunol** 1988 Oct;18(10):1643–6

Inhibition by chlorpromazine of lymphokine-specific mRNA expression in human thymocytes. Schleuning MJ, et al. **Eur J Immunol** 1989 Aug;19(8):1491–5

Fc gamma R(CD16) interaction with ligand induces Ca2+ mobilization and phosphoinositide turnover in human natural killer cells. Role of Ca2+ in Fc gamma R(CD16)-induced transcription and expression of lymphokine genes. Cassatella MA, et al. **J Exp Med** 1989 Feb 1;169(2):549–67

Cloning and characterization of a cDNA for a new mouse T cell growth factor (P40). Van Snick J, et al. **J Exp Med** 1989 Jan 1;169(1):363–8

Expression of lymphokine genes in splenic lymphocytes of autoimmune mice. Umland S, et al. **Mol Immunol** 1989 Jul; 26(7):649–56

CD28 activation pathway regulates the production of multiple T-cell-derived lymphokines/cytokines. Thompson CB, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1333–7

Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway. Lindstein T, et al. **Science** 1989 Apr 21;244(4902):339–43

Lymphokine production in allografts--analysis of RNA by northern blotting. Dallman MJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):296–8

Lymphokine transcription in vascularized mouse heart grafts: effects of "tolerance" induction. Lowry RP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):72–3

[Cloning and structural analysis of complementary DNA of the human neuroleukin gene] Shakhov AN, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1273–6 (Rus)

IMMUNOLOGY

Activation of macrophages by lymphokines from specifically sensitized lymphocytes with Yersinia pseudotuberculosis. Neychev H, et al. **Acta Microbiol Bulg** 1988;22:22–7

The identification of murine Peyer's patch T cell-derived factors which enhance IgA responses. Beagley KW, et al. **Adv Exp Med Biol** 1988;237:641–7

Effect of autogenic bacterial antigens on the production of histamine releasing factor by mononuclear cells from intrinsic asthmatic patients. Kuna P, et al. **Allergy** 1988 Oct;43(7):511–8

Soluble antigen-specific helper molecules active in the induction of cytotoxic T lymphocytes. Pilarski LM, et al. **Ann N Y Acad Sci** 1988;532:136–48 (29 ref.)

Therapeutic uses of interleukin-2 and lymphokine-activated killer (LAK) cells. Richards JM. **Blood Rev** 1989 Jun; 3(2):110–9 (109 ref.)

Soluble mediators can replace helper T cells in the activation of resting B lymphocytes: evidence for a human B cell activating factor. Diu A, et al. **Dev Biol Stand** 1988;69:51–6

Responses of human B-cells to recombinant lymphokines. Gallagher G, et al. **Dev Biol Stand** 1988;69:65–73

Respective rôle of lymphokines and monokines in macrophage activation. Virelizier JL, et al. **Dev Biol Stand** 1988;69:115–9

Eimeria tenella and E. acervulina: lymphokines secreted by an avian T cell lymphoma or by sporozoite-stimulated immune T lymphocytes protect chickens against avian coccidiosis. Lillehoj HS, et al. **Exp Parasitol** 1989 Jul; 69(1):54–64

Lymphokines and the intestinal immune response. Role in inflammatory bowel disease. Fiocchi C. **Immunol Invest** 1989 Jan-May;18(1-4):91–102 (28 ref.)

Autoreactive T cell hybridoma-derived B cell stimulatory factor(s) governing IgA isotype immunoglobulin production by murine Peyer's patch B cells. Kawanishi H, et al. **Immunol Invest** 1988 Aug-Oct;17(6-7):587–613

The role of lymphokines in common variable hypogammaglobulinemia. Spickett GP, et al. **Immunol Today** 1989 Jun;10(6):192–4 (34 ref.)

Human lymphokine-activated killer cells develop syngeneic killing ability. Gallagher G, et al. **Immunology** 1989 Mar; 66(3):471–4

The production of a macrophage-activating factor from rainbow trout Salmo gairdneri leucocytes. Graham S, et al. **Immunology** 1988 Oct;65(2):293–7

A T-lymphocyte-derived factor that enhances IgG-dependent release of leukotriene B4 (LTB4) from human neutrophils. Tsai JJ, et al. **Immunology** 1988 Nov; 65(3):449–56

Ganglioside GM2 expression on human melanoma cells correlates with sensitivity to lymphokine-activated killer cells. Hoon DS, et al. **Int J Cancer** 1989 May 15; 43(5):857–62

Generation and partial characterization of melanoma sublines resistant to lymphokine activated killer (LAK) cells. Relevance to doxorubicin resistance. Rivoltini L, et al. **Int J Cancer** 1989 May 15;43(5):880–5

Lymphokine-activated killer-cell function of lymphocytes from peripheral blood, regional lymph nodes and tumor tissues of patients with oral cancer. Tatake RJ, et al. **Int J Cancer** 1989 Apr 15;43(4):560–6

Restoration of anti-interleukin-1 depressed natural killer activity by human recombinant interferon alpha or gamma, human recombinant interleukin-2 and indomethacin. Conti P, et al. **Int J Immunopharmacol** 1988;10(8):907–11

The isotypic circuit: immunoglobulins, Fc receptors and immunoglobulin binding factors. Fridman WH, et al. **Int Rev Immunol** 1987 Jan;2(2):221–40 (77 ref.)

T cell factors involved in the isotype-specific regulation of the IgE antibody response. Ishizaka K. **Int Rev Immunol** 1987 Jan;2(1):1–26 (61 ref.)

IgE class-specific regulatory factor(s) and Fc epsilon receptors on lymphocytes. Suemura M, et al. **Int Rev Immunol** 1987 Jan;2(1):27–42 (26 ref.)

Collagen arthritis in rats, arthritogenic lymphokines and other aspects. Trentham DE. **Int Rev Immunol** 1988 Sep; 4(1):25–33 (21 ref.)

Lymphokine-induced cytotoxic cell generation in thymus and spleen cell cultures. Biasi G, et al. **J Biol Regul Homeost Agents** 1987 Jul-Sep;1(3):119–25

Functional domains of the CD11a adhesion molecule in lymphokine activated killer (LAK)-mediated cytolysis. Mentzer SJ, et al. **J Clin Lab Immunol** 1988 Dec; 27(4):155–61

Effect of local hyperthermia on lymph immune cells and lymphokines of normal human skin. Olszewski WL, et al. **J Surg Oncol** 1989 Jun;41(2):109–16

Tumor-specific T cells which form clusters with dendritic cells and tumor cells and deliver macrophage-activating factors. Yamaguchi Y, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):141–9

Hormonal activities of lymphokines, monokines, and other cytokines. Smith EM. **Prog Allergy** 1988;43:121–39 (93 ref.)

Immunoregulatory lymphokines in rheumatoid joints. III. B cell growth promoting activity of cells eluted from rheumatoid synovial tissue. Hovdenes J, et al. **Scand J Rheumatol** 1988;17(5):371–8

Immunologic tolerance: collaboration between antigen and lymphokines. Nossal GJ. **Science** 1989 Jul 14; 245(4914):147–53 (43 ref.)

The in vivo distribution of human peripheral blood lymphocytes and lymphokine-activated killer cells adoptively transferred in human pancreatic cancer-bearing nude mice. Marincola FM, et al. **Surgery** 1989 Jan; 105(1):79–85

IgA-specific Fc receptor and immunoglobulin factor. Yodoi J. **Tokai J Exp Clin Med** 1988 Dec;13(4-5):171–4 (24 ref.)

Lymphokine-activated killer (LAK) cells are identical to the uterine granulated metrial gland (GMG) cells. Ginsburg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):186–9

[Effect of neutrophilokines on the immune response in mice] Dolgushin II, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):330–1 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Preparative isoelectric focusing in ampholine electrofocusing columns versus immobiline polyacrylamide gel for the purification of biologically active leukoregulin. Evans CH, et al. **Anal Biochem** 1989 Mar;177(2):358–63

Regulation of new osteoclast formation by a bone cell-derived macromolecular factor. Dickson IR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1383–90

Purification of erythropoiesis-stimulating activity (ESA) from one Actinomycetes strain. Sugie M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):888–94

Inhibition of differentiation and affinity purification with a monoclonal antibody to a myeloid cell differentiation-inducing protein. Shabo Y, et al. **Blood** 1988 Nov;72(5):1543–9

Purification of a glycosaminoglycan-stimulatory lymphokine from supernatants of in vitro-activated human mononuclear cells. Tsao M, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):122–31

Characterization of a human monocyte cytotoxicity-inducing factor (MCF). Jones CM, et al. **Immunobiology** 1988 Dec; 178(3):229–49

Purification of a suppressor lymphokine (SL) from a human T-cell line. Abolhassani M, et al. **Immunol Invest** 1989 Jul; 18(6):741–51

Characterization and partial purification of a non-interferon macrophage activating factor produced by human leukemic T cell line. Kutsukake H, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):661–6

Macrophage differentiation inducing factor from human monocytic cells is equivalent to murine leukemia inhibitory factor. Abe T, et al. **J Biol Chem** 1989 May 25; 264(15):8941–5

Purification and sequencing of glycosylation variants of BSF-1, as a MAF, from the EL-4 leukaemia cell line.

Sutton C, et al. **J Biol Stand** 1989 Jan;17(1):65–74

Purification and further characterization of human mononuclear cell histamine-releasing factor. Baeza ML, et al. **J Clin Invest** 1989 Apr;83(4):1204–10

Suppressor cell–inducing factor: a new lymphokine secreted by a natural suppressor cell line with natural cytotoxic activity. I. Purification to apparent homogeneity and initial characterization of suppressor cell–inducing factor. Almawi WY, et al. **J Immunol** 1988 Oct 15;141(8):2529–35

Structures of histamine-releasing peptides formed by the action of acid proteases on mammalian albumin(s). Carraway RE, et al. **J Immunol** 1989 Sep 1;143(5):1680–4

Isolation of a low molecular weight inhibitor of lymphocyte proliferation from tumorous ascites. Cornelius JG, et al. **J Immunol** 1988 Sep 15;141(6):2175–80

IgE–binding protein. Subcellular location and gene expression in many murine tissues and cells. Gritzmacher CA, et al. **J Immunol** 1988 Oct 15;141(8):2801–6

Leukotriene release enhancing factor. Purification, specific allergen induction, and further biologic properties. Tsai JJ, et al. **J Immunol** 1989 Mar 1;142(5):1661–8

T cell induction of macrophage IL–1 during antigen presentation. Characterization of a lymphokine mediator and comparison of TH1 and TH2 subsets. Weaver CT, et al. **J Immunol** 1989 May 15;142(10):3469–76

Two distinct mechanisms involved in the infiltration of lymphocytes into tumors. Shijubo N, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1111–8

Purification and characterization of a T lymphocyte–derived differentiation–inducing factor for human promyelocytic cell line (HL–60) and its relationship to lymphotoxin. Shimizu Y, et al. **Microbiol Immunol** 1989;33(6):489–501

[An attempt at identification of osteoclastic activation factors implicated in myeloma] Bataille R, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):539–40 (Fre)

[Isolation of macrophage-activating phospholipid from Listeria monocytogenes] Jakoniuk P, et al. **Med Dosw Mikrobiol** 1989;41(1):15–21 (Eng. Abstr.) (Pol)

METABOLISM

Erythropoietin–dependent and erythropoietin–producing cell lines. Implications for research and for leukemia therapy. Hankins WD, et al. **Ann N Y Acad Sci** 1989;554:21–8 (17 ref.)

TH1 and TH2 cells: different patterns of lymphokine secretion lead to different functional properties. Mosmann TR, et al. **Annu Rev Immunol** 1989;7:145–73 (114 ref.)

Immunoglobulin–binding factors. Fridman WH, et al. **Immunol Lett** 1989 Mar;20(4):249–54 (48 ref.)

Directional release of lymphokines from T cells. Mosmann TR. **Immunol Today** 1988 Oct;9(10):306–7

Expression of low–affinity receptor for IgE (Fc epsilon RII, CD23) and IgE–BF (soluble CD23) release by lymphoblastoid B–cell line RPMI–8866 and human peripheral lymphocytes of normal and atopic donors. Bujanowski–Weber J, et al. **Immunology** 1989 Apr; 66(4):505–11

Influence of IL–2 and IL–4 on the IgE synthesis and the IgE–binding factor (sCD23) production by human lymphocytes in vitro. Knöller I, et al. **Immunology** 1989 Mar;66(3):368–75

Mechanism of action of the migration stimulating factor produced by fetal and cancer patient fibroblasts: effect on hyaluronic and synthesis. Schor SL, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):737–46

Release of interleukin 1 inhibitory activity (contra–IL–1) by human monocyte–derived macrophages infected with human immunodeficiency virus in vitro and in vivo. Locksley RM, et al. **J Clin Invest** 1988 Dec;82(6):2097–105

Human tumor infiltrating lymphocytes. Analysis of lymphokine mRNA expression and relevance to cancer immunotherapy. Belldegrun A, et al. **J Immunol** 1989 Jun 15;142(12):4520–6

Production of lymphokine mRNA by CD45R+ and CD45R– helper T cells from human peripheral blood and by human CD4+ T cell clones. Salmon M, et al. **J Immunol** 1989 Aug 1;143(3):907–12

Development and regional expression of chicken neuroleukin (glucose–6–phosphate isomerase) messenger RNA. Hallböök F, et al. **J Neurosci Res** 1989 Jun;23(2):142–51

Multiple cytokine activities and loss of interleukin 2 inhibitor in synovial fluids of patients with rheumatoid arthritis. Yamagata N, et al. **J Rheumatol** 1988 Nov;15(11):1623–7

Lymphokine activity in malignant effusions after intracavitary viral oncolysate. Freedman RS, et al. **Lymphokine Res** 1989 Summer;8(2):115–22

Lymphokines and monokines in the neuroendocrine system. Benveniste EN. **Prog Allergy** 1988;43:84–120 (152 ref.)

[Immunologic mechanisms of regulating calcium metabolism in human bone tissue (production of osteoclast–activating factor) during long–term anti–orthostatic hypokinesia] Konstantinova IV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):38–42 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Multiple organ failure during interleukin–2 administration and LAK cells infusion. Sculier JP, et al. **Intensive Care Med** 1988;14(6):666–7

PHARMACOLOGY

An adoptive immunotherapy of patients with medulloblastoma by lymphokine–activated killer cells (LAK). Okamoto Y, et al. **Acta Neurochir (Wien)** 1988; 94(1–2):47–52

Expression and regulation of an antigen specific for endothelium involved in human lymphocyte homing. Horst E, et al. **Adv Exp Med Biol** 1988;237:477–84

The effects of lymphokines and monokines on human sperm fertilizing ability in the zona–free hamster egg penetration test. Hill JA, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1154–9

Immune activation and psychoneurogenic stress modulate corticosterone–releasing effects of lymphokines and ACTH. Torres–Aleman I, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):R839–45

Lysis of human malignant mesothelioma cells by natural killer (NK) and lymphokine–activated killer (LAK) cells. Manning LS, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1369–74

Recombinant human lymphokines induce changes in visual evoked potentials in the rabbit. Brosnan CF, et al. **Ann N Y Acad Sci** 1988;540:571–2

Epidermal lymphocyte chemotactic factor specifically attracts OKT4–positive lymphocytes. Zachariae C, et al. **Arch Dermatol Res** 1988;280(6):354–7

Production of lymphokine–activated lymphocytes. Lysis of human head and neck squamous cell carcinoma cell lines. Alessi DM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):725–30

Modifications of plasma lipids, lipoproteins and apolipoproteins in advanced cancer patients treated with recombinant interleukin–2 and autologous lymphokine–activated killer cells. Malmendier CL, et al. **Atherosclerosis** 1988 Oct;73(2–3):173–80

Mechanism of regulating human leukemia cell growth and differentiation by a lymphokine. Chiao JW, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):583–8

Production of interleukin 6 and its relation to the macrophage differentiation of mouse myeloid leukemia cells (M1) treated with differentiation–inducing factor and 1 alpha,25–dihydroxyvitamin D3. Miyaura C, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):660–6

Effects of lymphokines and immune complexes on murine placental cell growth in vitro. Armstrong DT, et al. **Biol Reprod** 1989 Mar;40(3):466–74

In vitro and in vivo cytokine–induced facilitation of immunohematopoietic reconstitution in mice undergoing bone marrow transplantation. Kedar E, et al. **Bone Marrow Transplant** 1988 Jul;3(4):297–314

Procoagulant induction by human lymphokine and interferon gamma/PMA on a myelomonocytic cell line, RC2a. Geczy CL, et al. **Br J Haematol** 1988 Oct;70(2):211–8

Lymphokines facilitate maturation of oligodendrocytes in vitro. Suzumura A, et al. **Brain Res** 1989 Feb 20; 480(1–2):51–7

Regulation of hybridoma B–cell proliferation by immunoglobulin–binding factor. Teillaud JL, et al. **Cancer Detect Prev** 1988;12(1–6):115–23

Induction of human monocyte susceptibility to lymphokine–activated killer cell lysis by granulocyte–macrophage colony–stimulating factor. Blanchard DK, et al. **Cancer Res** 1989 Sep 15; 49(18):5037–43

Effect of combined therapy with lymphokine–activated killer cells, interleukin 2 and specific monoclonal antibody on established B16 melanoma lung metastases. Eisenthal A, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7140–5

Correspondence re: John R. Yanelli et al., Enhancement of Human Lymphokine–activated Killer Cell Cytolysis and a Method for Increasing Lymphokine–activated Killer Cell Yields to Cancer Patients. Cancer Res., 48: 5696–5700, 1988 [letter] Favrot MC, et al. **Cancer Res** 1989 Aug 1; 49(15):4369

Low deformability of lymphokine–activated killer cells as a possible determinant of in vivo distribution. Sasaki A, et al. **Cancer Res** 1989 Jul 15;49(14):3742–6

Enhanced antimetastatic activity of lymphokine–activated killer cells purified and expanded by their adherence to plastic. Schwarz RE, et al. **Cancer Res** 1989 Mar 15; 49(6):1441–6

Enhancement of human lymphokine–activated killer cell cytolysis and a method for increasing lymphokine–activated killer cell yields to cancer patients. Yannelli JR, et al. **Cancer Res** 1988 Oct 15;48(20):5696–700

Regulation of constitutive and lymphokine–induced Ia expression by murine alpha–fetoprotein. Crainie M, et al. **Cell Immunol** 1989 Jan;118(1):41–52

Lymphokine–activated killer cells derived from murine bone marrow: age–associated difference in precursor cell populations demonstrated by response to interferon. Kawakami K, et al. **Cell Immunol** 1988 Oct 1;116(1):163–71

Inhibition of murine lymphokine–activated killer (LAK) cell activity by adherent cells. Longley RE, et al. **Cell Immunol** 1989 Jul;121(2):225–36

The BCL1 B lymphoma responds to IL–4, IL–5, and GM–CSF. O'Garra A, et al. **Cell Immunol** 1989 Oct 1; 123(1):189–200

Lymphokine–activated killer cells in rats: generation of natural killer cells and lymphokine–activated killer cells from bone marrow progenitor cells. Sarneva M, et al. **Cell Immunol** 1989 Feb;118(2):448–57

Anti–idiotype antibody reactive with a target molecule for mouse lymphokine–activated killer cells. Sato N, et al. **Cell Immunol** 1989 Jul;121(2):217–24

Regulation of murine macrophage function by IL–4. I. Activation of macrophages by a T–T cell hybridoma is due to IL–4. Somers SD, et al. **Cell Immunol** 1989 Aug; 122(1):178–87

L–fucose blocks MIF/MAF priming of rabbit alveolar macrophages for a PMA–induced oxidative response. Umehara K, et al. **Cell Immunol** 1989 Mar;119(1):67–72

Target cell–directed inactivation and IL–2–dependent reactivation of LAK cells. Xiao J, et al. **Cell Immunol** 1989 Sep;122(2):295–306

Leukoregulin–induced translocation of protein kinase C activity in K562 cells. Barnett SC, et al. **Clin Exp Immunol** 1988 Sep;73(3):505–9

Modulation of Fc and C3b receptor expression on guinea–pig macrophages by lymphokines. Limb GA, et al. **Clin Exp Immunol** 1988 Nov;74(2):171–6

Human retinal pigment epithelial cells differentially express MHC class II (HLA, DP, DR and DQ) antigens in response to in vitro stimulation with lymphokine or purified IFN–gamma. Liversidge JM, et al. **Clin Exp Immunol** 1988 Sep;73(3):489–94

B cell function in acquired "common–variable" hypogammaglobulinemia: proliferative responses to lymphokines. Farrant J, et al. **Clin Immunol Immunopathol** 1989 May;51(2):196–204

B–cell growth and differentiation factors. Callard RE. **Dev Biol Stand** 1988;69:43–9

Effect of lymphokines on B–cell responses to Mycobacterium tuberculosis: a comparison of in vitro secreted antibodies by Epstein Barr virus transmitted B–cell and non–transformed peripheral blood B–cells from the same donor. Githui WA. **East Afr Med J** 1988 Dec;65(12):829–37

Lymphokines from concanavalin–A–stimulated lymphocytes regulate rat granulosa cell steroidogenesis in vitro. Gorospe WC, et al. **Endocrinology** 1988 Nov;123(5):2462–71

Activation of the phosphatidylinositol metabolic pathway by low molecular weight B cell growth factor. Renard D, et al. **Eur J Immunol** 1988 Nov;18(11):1705–11

Defective function of lymphokine–activated killer cells and natural killer cells in patients with hepatocellular carcinoma. Saibara T, et al. **Hepatology** 1989 Mar; 9(3):471–6

Lymphokine receptor interactions. Banchereau J. **Immunol Today** 1989 Mar;10(3):73–6

Limiting–dilution analysis of human CTL differentiation. Requirement for a lymphokine–mediated differentiation signal. Horohov DW, et al. **Immunology** 1988 Sep; 65(1):119–24

Cytokine activation of murine macrophages for in vitro killing of Entamoeba histolytica trophozoites. Denis M, et al. **Infect Immun** 1989 Jun;57(6):1750–6

Discrepancy in the abilities of lymphokines and bacteria to mediate tumor protection in vivo and/or tumoricidal activity by macrophages in vitro. Keller R, et al. **Int J Cancer** 1989 Sep 15;44(3):512–7

Cytokines and pancreatic cancer. The effect of rIFN–gamma, HuLeIFN, rTNF–alpha, and LAK–cells on pancreatic and other gastrointestinal tumors in vitro. Kühl JS, et al. **Int J Pancreatol** 1989 Mar;4(2):207–19

Lymphokines in autoimmunity—rcles of interferons in systemic lupus erythematosus and other autoimmune disorders. Schattner A. **Isr J Med Sci** 1988 Dec; 24(12):728–31

Effect of commercial peritoneal dialysis fluids on the lytic function of lymphokine–activated killer cells. Moore AL, et al. **J Biol Response Mod** 1988 Aug;7(4):401–8

Bone resorption by isolated chick osteoclasts in culture is stimulated by murine spleen cell supernatant fluids (osteoclast–activating factor) and inhibited by calcitonin and prostaglandin E2. de Vernejoul MC, et al. **J Bone Miner Res** 1988 Feb;3(1):69–80

Effect of mitogen and lymphokine stimulation on proteoglycan synthesis by lymphocytes. Bartold PM, et al. **J Cell Physiol** 1989 Jul;140(1):82–90

Identification of a histamine release inhibitory factor produced by human mononuclear cells in vitro. Alam R, et al. **J Clin Invest** 1988 Dec;82(6):2056–62

A phase II study of interleukin–2 and lymphokine–activated killer cells in patients with metastatic malignant melanoma. Dutcher JP, et al. **J Clin Oncol** 1989 Apr;7(4):477–85

Interleukin–2 and lymphokine–activated killer cell therapy of solid tumors: analysis of toxicity and management guidelines. Margolin KA, et al. **J Clin Oncol** 1989 Apr; 7(4):486–98

Monoclonal antibody to a triggering structure expressed on rat natural killer cells and adherent lymphokine–activated killer cells. Chambers WH, et al. **J Exp Med** 1989 Apr 1;169(4):1373–89

Interaction of lymphokine–activated killer cells with susceptible targets does not induce second messenger generation and cytolytic granule exocytosis. Zanovello P, et al. **J Exp Med** 1989 Sep 1;170(3):665–77

Comparative effect of recombinant IL–1, –2, –3, –4, and –6, IFN–gamma, granulocyte–macrophage–colony–stimulating factor, tumor necrosis factor–alpha, and histamine–releasing factors on the secretion of histamine from basophils. Alam R, et al. **J Immunol** 1989 May 15;142(10):3431–5

Endotoxin suppresses the generation of O2– and H2O2 by

"resting" and lymphokine-activated human blood-derived macrophages. Rellstab P, et al. **J Immunol** 1989 Apr 15; 142(8):2813–20

Oxidative responses of rabbit alveolar macrophages: comparative priming activities of MIF/MAF, sera, and serum components. Hayakawa H, et al. **J Leukoc Biol** 1989 Mar;45(3):231–8

Candidacidal mechanisms of peritoneal macrophages activated with lymphokines or gamma-interferon. Brummer E, et al. **J Med Microbiol** 1989 Mar;28(3):173–81

Cognate interactions between helper T cells and B cells. I. Cloning and helper activity of a lymphokine-dependent helper T cell clone (Th-3). Noelle RJ, et al. **J Mol Cell Immunol** 1989;4(3):161–73; discussion 173–5

Loss of leukoregulin up-regulation of natural killer but not lymphokine-activated killer lymphocytotoxicity in human papillomavirus 16 DNA-immortalized cervical epithelial cells. Furbert-Harris PM, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1080–5

Neurotrophic activity of monomeric glucophosphoisomerase was blocked by human immunodeficiency virus (HIV-1) and peptides from HIV-1 envelope glycoprotein. Mizrachi Y. **J Neurosci Res** 1989 Jun;23(2):217–24

Susceptibility of Eimeria bovis and Toxoplasma gondii to oxygen intermediates and a new mathematical model for parasite killing. Hughes HP, et al. **J Parasitol** 1989 Aug; 75(4):489–97

Immunotherapy of solid tumor by intratumoral infusion of lymphokine-activated killer cells. Yamaki T, et al. **Jpn J Cancer Res** 1988 Aug;79(8):903–8

Combined effects of differentiation-inducing factor and other cytokines on induction of differentiation of mouse myeloid leukemic cells. Yamamoto-Yamaguchi Y, et al. **Jpn J Cancer Res** 1989 Feb;80(2):115–21

Cytotoxic effects on viable human leukemic cells by combinations of lymphokine activated killer cells and monoclonal antibodies. Vasilopoulos G, et al. **Leuk Res** 1989;13(1):87–91

Strategies of immune reconstitution: effects of lymphokines on murine T cell development in vitro and in vivo. Hadden JW, et al. **Life Sci** 1989;44(13):v–xii

Regulatory effects of IgG-BF on hybridoma B cells. molecular characterization of variant cell lines. Brunati S, et al. **Mol Immunol** 1988 Nov;25(11):1133–42

Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251–60

Ewing's sarcoma: ex vivo sensitivity towards natural and lymphokine-activated killing. Atzpodien J, et al. **Oncology** 1988;45(6):437–43

Lymphokine activated killer cells research in China. Ba DN. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):170–4 (18 ref.)

Suppression of lymphokine activated killer (LAK) cells by immunosuppressive substance. Hamada F, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):81–95

[Immunological studies on chronic active Epstein-Barr virus infection in children—low spontaneous cytotoxicity and lymphokine augmented spontaneous cytotoxicity against Raji cells] Wakiguchi H, et al. **Arerugi** 1989 Feb; 38(2):98–103 (Eng. Abstr.) **(Jpn)**

[Effects of the cholestatic factor and the prostaglandin E1 derivative on the level of cAMP in isolated hepatocytes of rats] Kioka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):45–9 (Eng. Abstr.) **(Jpn)**

[Phenotypes of leukemic cells from chronic B cell leukemia and their proliferative responses to several kinds of mitogens or lymphokines: PHA or phorbol ester (TPA) induces a high responsibility to B cell growth factor (BCGF) in the leukemic cells] Takeuchi H. **Rinsho Ketsueki** 1988 Dec;29(12):2241–9 (Eng. Abstr.) **(Jpn)**

[Isolation and characteristics of differentiation factor synthesized by mouse lymphocytes] Bogdanov ME, et al. **Dokl Akad Nauk SSSR** 1989;305(6):1490–4 **(Rus)**

PHYSIOLOGY

Demonstration of leukocyte-immobilizing activity in normal human plasma. Kalmár L, et al. **Acta Med Hung** 1988; 45(3–4):313–21

Effect of lymphokines on bioluminescence activity of polymorphonuclear granulocytes. Molnár I, et al. **Acta Paediatr Hung** 1988–89;29(1–2):113–4

Effector mechanisms against neuroblastoma cells and their modulation by lymphokines. Iwami T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):483–91

Lymphokine-induced macrophage resistance to infection with Leishmania major. Belosevic M, et al. **Adv Exp Med Biol** 1988;239:239–44

Identification and characterization of a non-interferon antileishmanial macrophage activating factor (antileishmanial MAF). Van Niel A, et al. **Adv Exp Med Biol** 1988;239:231–7

Lymphokine-activated killer cells: analysis of their anti-tumour efficacy in vitro and in vivo. Hiserodt JC, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug;139(4):466–78

Lymphokine-activated killer cells. Induction and function. Grimm EA, et al. **Ann N Y Acad Sci** 1988;532:380–6 (22 ref.)

Role of soluble cytotoxic factors in lymphokine-activated killer cell (LAK)-mediated cytotoxicity. Hiserodt JC, et al. **Ann N Y Acad Sci** 1988;532:395–404 (78 ref.)

Erythroid burst-promoting activity of purified recombinant human GM-CSF and interleukin-3: studies with anti-GM-CSF and anti-IL-3 sera and studies in serum-free cultures. Sonoda Y, et al. **Blood** 1988 Oct;72(4):1381–6

Lymphokines as inhibitors of hematopoietic cell proliferation. Raghavachar A, et al. **Blood Cells** 1988;14(2–3):471–84 (30 ref.)

Rat lymphokines control the migration of nonsensitized lymphocytes. McFadden RG, et al. **Cell Immunol** 1989 Feb; 118(2):345–57

Stimulation of macrophage antibody-dependent killing of tumor targets by recombinant lymphokine factors and M-CSF. Nakoinz I, et al. **Cell Immunol** 1988 Oct 15; 116(2):331–40

A role for L3T4+ T cells and their lymphokines in the generation of suppressor effector (TS3) cells. O'Hara RM Jr, et al. **Cell Immunol** 1988 Oct 15;116(2):423–38

Regulation of lymphocyte motility by macrophages: characterization of a lymphocyte migration inhibitory factor derived from a macrophage-like cell line. Ye S, et al. **Cell Immunol** 1989 Aug;122(1):231–43

Stimulation-dependent lymphokine mRNA levels in human mononuclear cells. Gauchat JF, et al. **Eur J Immunol** 1988 Sep;18(9):1441–6

Regulatory effects of human IgE-binding factors in the IgE synthesis by human and rat lymphocytes. Kisaki T, et al. **Eur J Immunol** 1988 Nov;18(11):1663–70

Natural killer, lymphokine-activated killer and interferon-gamma producing activities of peripheral blood- and regional lymph node-mononuclear cells in 23 cases of colorectal cancer. Matsunaga H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):527–33

Human IgE-binding factors. Delespesse G, et al. **Immunol Today** 1989 May;10(5):159–64 (52 ref.)

A diffusible lymphokine produced by CD8+ T lymphocytes suppresses HIV replication. Walker CM, et al. **Immunology** 1989 Apr;66(4):628–30

Human Fc epsilon R II and IgE-binding factors. Delespesse G, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):18–22 (31 ref.)

Isotype-specific suppression of IgE synthesis in a human myeloma cell line (U-266) by an IgE-binding protein derived from normal human peripheral blood cells. Jernberg H, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):114–5

Conditioned media from cultured blood cells of atopic individuals can induce differentiation in the human basophilic leukemia cell line KU812. Matsson P, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):122–5

Suppression of human IgA-B-cell maturation by IgA-binding factors requires T cells. Millet I, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):367–70

Murine polyclonal T-lymphocyte activation induced by phytohemagglutinin; differential lymphokine requirements of two unusual activation pathways defined by resistance to blockade by barium and by cyclosporin A. Peçanha LM, et al. **Int J Immunopharmacol** 1989; 11(2):149–56

Maintenance of Marek's disease herpesvirus latency in vitro by a factor found in conditioned medium. Buscaglia C, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2809–18

Responsiveness to human mononuclear cell-derived histamine-releasing factor. Studies of allergic status and the role of IgE. Baeza ML, et al. **J Immunol** 1988 Oct 15;141(8):2688–92

A role for isotype-specific binding factors in the regulation of IgA- and IgG-specific responses by the anti/contrasuppressor T cell circuit. Ernst PB, et al. **J Immunol** 1989 Sep 1;143(5):1426–32

Initial characterization of a lymphokine pathway for the immunologic induction of tumor necrosis factor-alpha release from human peripheral blood mononuclear cells. Kornbluth RS, et al. **J Immunol** 1988 Sep 15;141(6):2006–15

Cognate interactions between helper T cells and B cells. III. Contact-dependent, lymphokine-independent induction of B cell cycle entry by activated helper T cells. Noelle RJ, et al. **J Immunol** 1989 Sep 15;143(6):1807–14

Leukocyte inhibitory factor stimulates neutrophil-endothelial cell adhesion. Schainberg H, et al. **J Immunol** 1988 Nov 1;141(9):3055–60

Recombinant soluble Fc epsilon receptor II (Fc epsilon RII/CD23) has IgE binding activity but no B cell growth promoting activity. Uchibayashi N, et al. **J Immunol** 1989 Jun 1;142(11):3901–8

Two specific T cell factors that initiate immune responses in murine allograft systems. A comparison of biologic functions. Vandebriel RJ, et al. **J Immunol** 1989 Jul 1; 143(1):66–73

Osteoclast activating factor is now interleukin-1 beta: historical perspective and biological implications. Jandinski JJ. **J Oral Pathol** 1988 Apr;17(4):145–52 (118 ref.)

Control of in vivo differentiation of myeloid leukemic cells. Lotem J, et al. **Leukemia** 1988 Dec;2(12 Suppl):24S–37S

Inhibitors of chemotaxis. Maderazo EG, et al. **Methods Enzymol** 1988;162:223–35

Spontaneous release of histamine from basophils and histamine-releasing factor in patients with atopic dermatitis and food hypersensitivity [see comments] Sampson HA, et al. **N Engl J Med** 1989 Jul 27;321(4):228–32. **Comment in:** N Engl J Med 1989 Jul 27;321(4):255–7

A dialysable acid factor from human leukocyte extracts activates tumor cell lysis mediated by human monocytes and natural killer cells. Hamprecht KH, et al. **Onkologie** 1989 Jun;12(3):120–7

Lymphokine-activated killer cytotoxicity in neonatal mononuclear cells: in vitro responses to tumor cell lines from pediatric solid tumors. Chin T, et al. **Pediatr Res** 1989 Feb;25(2):156–60

IgE-binding factors: their possible role in the regulation of IgE synthesis. Delespesse G, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):75–92 (86 ref.)

Regulation of lymphokine release involving a novel form of T-T collaboration. Gill RG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2700–2

A human-mouse T-cell hybridoma-derived lymphokine inhibits thymidine uptake of T-lymphocytes. Laus R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):96–7

Differential effects of azathioprine (Aza), cyclosporine A (CsA) and dexamethasone (Dexa) on lymphokine mediated inflammation (LMI) in rejecting allografts. Mellert J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):98–9

Monokines, lymphokines, and the brain. Sternberg EM. **Year Immunol** 1989;5:205–17 (53 ref.)

[Regulation of immunoglobulin A response by lymphokines] Zeitz M. **Z Gastroenterol** 1988 Jul;26(7):388–90 **(Ger)**

[Lymphokine and hemopoietic cell differentiation] Suda T. **Tanpakushitsu Kakusan Koso** 1988 Oct;33(13):2397–402 **(Jpn)**

[Demonstration of the lymphokine mechanism of the reinforcement of lymphoid proliferation during liver regeneration in mice] Rakhmilevich AL. **Ontogenez** 1989 Mar–Apr;20(2):192–8 (Eng. Abstr.) **(Rus)**

SECRETION

Neuroleukin secretion is highly regulated in T cells but constitutive in C6 glioma cells. Spear GT, et al. **Ann N Y Acad Sci** 1988;540:407–8

Secretion of a suppressor cell inducing factor by an interleukin 3-dependent cell line with natural cytotoxic activity. III. Comparison with other interleukin 3-dependent cell lines. Pope BL, et al. **Cell Immunol** 1988 Oct 1;116(1):1–11

Substance P modulates lymphokine activities in supernatants of cultured human duodenal biopsies. Hart R, et al. **Immunol Lett** 1988 Oct;19(2):133–6

Differential modulation of lymphocyte proliferative responses and lymphokine secretion in mice during development of immunity to Chlamydia psittaci. Guagliardi LE, et al. **Infect Immun** 1989 May;57(5):1561–7

Peripheral blood mononuclear cells from AIDS patients release but do not respond to antigen-stimulated NK-activating lymphokines. Lapham CK, et al. **J Clin Lab Anal** 1989;3(1):8–13

Adult T leukemia cells produce a lymphokine that augments interleukin 2 receptor expression. Teshigawara K, et al. **J Mol Cell Immunol** 1985;2(1):17–26

Myeloid cell differentiation: the differentiation inducing factors of myeloid leukemia cells. Olsson I, et al. **Leukemia** 1988 Dec;2(12 Suppl):16S–23S

Alterations in lymphokine secretion during leukemogenesis. Ofir R, et al. **Lymphokine Res** 1988 Fall;7(3):217–26

Release of IgD-binding factor by T cells under the influence of interleukin 2, interleukin 4, or cross-linked IgD. Amin AR, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9179–83

The helper T lymphocyte as a secretory cell. Constitutive versus regulated secretion. Taplits MS, et al. **Year Immunol** 1989;4:147–58 (57 ref.)

[The biological action spectrum of the secretory products of the human B-cell lymphoblastoid line RPMI-641Ot] Seregina TM, et al. **Ontogenez** 1988 May–Jun;19(3):240–6 (Eng. Abstr.) **(Rus)**

[Evaluation of lymphocyte cooperative interaction with neutrophils by the stimulation of lymphokine production in erysipelatous inflammation] Tsoi IG. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):59–64 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Interactions of cytokines in the host. Lundholm K. **Acta Chir Scand Suppl** 1989;549:31–4 (38 ref.)

Cytokines: biological function and clinical use. Galvani DW. **J R Coll Physicians Lond** 1988 Oct;22(4):226–31

Clinical trials with biological response modifiers in rheumatic diseases. Scheinberg MA. **J Rheumatol** 1988 Jul; 15(7):1056–7

Immunological and preventive effects of combined inoculation of theilerial lymphokine and immunostimulant against Theileria sergenti infection. Kawamura S, et al. **Kitasato Arch Exp Med** 1988 Apr;61(1):29–50

Adoptive cancer immunotherapy utilizing lymphokine activated killer cells and gamma interferon activated killer monocytes. Lacerna LV Jr, et al. **Pharmacol Ther** 1988; 38(3):453–65 (89 ref.)

[Endogenous regulators of hematopoiesis and their role in the therapy of leukemias] Svirnovskiĭ AI. **Ter Arkh** 1988; 60(5):152–6 (70 ref.) **(Rus)**

URINE

Urinary interleukins in patients receiving intravesical Bacillus Calmette-Guerin therapy for superficial bladder cancer. Fleischmann JD, et al. **Cancer** 1989 Oct 1;64(7):1447–54

Urinary interleukin-2 inhibition in patients with cystitis. Fleischmann JD, et al. **Immunol Invest** 1989 Jul; 18(6):825-31

LYMPHOMA

Primary gastric lymphoma in Auckland, New Zealand. Shaw JH, et al. **Aust N Z J Surg** 1989 Apr;59(4):325-8

Annual congress of the Austrian and German Societies of Hematology and Oncology. Salzburg, October 2-5, 1988. Abstracts. **Blut** 1988 Oct;57(4):175-284

Use of imaging in the management of lymphoma. Golding SJ. **Br J Hosp Med** 1989 Feb;41(2):152-4, 156-7 (31 ref.)

Thymic lymphoma cells as a model for complex-formation between thymocytes and thymic medullary epithelial cells. Hugo P, et al. **Immunol Lett** 1989 Jul;22(1):73-7

Extramedullary leukemia with central facial palsy originated from poorly differentiated abdominal lymphoma. Kilinç Y, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):281-6

Primary malignant lymphoma of the deep tissues of the hand. Hung LK, et al. **J Hand Surg [Am]** 1988 Sep;13(5):683-6

Cavernous sinus syndrome as the presentation of malignant lymphoma: case report and review of the literature. Delpassand ES, et al. **Neurosurgery** 1988 Oct;23(4):501-4 (19 ref.)

Small round cell tumors. Pritchard DJ.
Orthop Clin North Am 1989 Jul;20(3):367-75 (23 ref.)

Primary malignant lymphoma of the rectum. Hirakata K, et al. **Pediatr Radiol** 1989;19(6-7):474-6

[Primary gastric malignant lymphoma: a clinical analysis of 32 cases] Fang DC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):677-9, 716 (Eng. Abstr.) (Chi)

[Malignant lymphoma of the stomach] Kostka R, et al. **Rozhl Chir** 1989 May;68(5):306-11 (Eng. Abstr.) (Cze)

[Primary malignant lymphomas of the gastrointestinal system] Pandolfi U, et al. **Chir Ital** 1988 Apr;40(2):134-45 (23 ref.) (Eng. Abstr.) (Ita)

[Nodular lymphoid hyperplasia of the colon] Carella G, et al. **Clin Ter** 1988 Sep 30;126(6):431-4 (Eng. Abstr.) (Ita)

[Primary lymphoma of the stomach. Clinical and prognostic analysis of our experience and 20 years' literature] Manfe AZ, et al. **Minerva Chir** 1989 May 15;44(9):1325-34 (75 ref.) (Eng. Abstr.) (Ita)

[Malignant lymphoma] Shirakawa S, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):951-8 (Eng. Abstr.) (Jpn)

[Familial primary intracranial malignant lymphoma] Ikeda M, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):128-31 (Eng. Abstr.) (Jpn)

[Primary intracranial malignant lymphoma. Report of nine cases] Matsumoto M, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1186-92 (Eng. Abstr.) (Jpn)

[Six cases of intrathoracic Castleman lymphoma] Nakagawa K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1195-200 (Eng. Abstr.) (Jpn)

[Bifocal malignant lymphoma of the stomach] Pasierbski JJ, et al. **Wiad Lek** 1988 Apr 15;41(8):518-9 (Eng. Abstr.) (Pol)

[Primary cerebral lymphomas: diagnostic and therapeutic aspects] Graus F. **Med Clin (Barc)** 1989 Mar 11; 92(9):338-40 (36 ref.) (Spa)

ANALYSIS

Determination of the growth fraction by means of immunostainings with monoclonal antibody Ki-67. Gerdes J. **Acta Histochem Suppl (Jena)** 1988;36:437-46

Distribution of calcitonin- and somatostatin-containing cells in thyroid lymphoma and in Hashimoto's thyroiditis. Baschieri L, et al. **Appl Pathol** 1989;7(2):99-104

Flow cytometric analysis of lymphomas. Braylan RC, et al. **Arch Pathol Lab Med** 1989 Jun;113(6):627-33 (48 ref.)

Expression of interleukin-2 receptor beta subunit in hematopoietic malignancies. Rosolen A, et al. **Blood** 1989 May 15;73(7):1968-72

DNA analysis by flow cytometry in cutaneous T-cell lymphomas. Ralfkiaer E, et al. **Br J Dermatol** 1989 May; 120(5):597-605

Purification and characterization of the 90-kDa heat-shock protein from mammalian tissues. Yonezawa N, et al. **Eur J Biochem** 1988 Oct 15;177(1):1-7

Cell surface biochemical and metastatic properties of Lens culinaris hemagglutinin-binding variants of a murine large cell lymphoma. Tressler RJ, et al. **Invasion Metastasis** 1988; 8(6):351-63

In situ hybridization for the detection of low copy numbers of c-abl oncogene mRNA in lymphoma cells: technical approach and comparison with results with anti-oncoprotein antibodies. Greil R, et al. **Lab Invest** 1989 Apr;60(4):574-82

A Thy-1 negative lymphoma cell variant defective in the formation of glycosyl-phosphatidylinositol membrane protein anchors. Teng MH, et al. **Mol Immunol** 1989 Apr; 26(4):391-402

BLOOD

Association between tumour status and serum lipoprotein cholesterol in hemopoietic malignancy. Venkatanarayanan S, et al. **Biochem Int** 1988 Sep;17(3):499-507

Thymidine kinase in neoplastic haematological diseases: confirmations, doubts and new findings [letter] Musto P, et al. **Haematologica (Pavia)** 1988 Nov-Dec;73(6):545-6

Expression of pro-opiomelanocortin gene and quantification of adrenocorticotropic hormone-like immunoreactivity in human normal peripheral mononuclear cells and lymphoid and myeloid malignancies. Buzzetti R, et al.
J Clin Invest 1989 Feb;83(2):733-7

A new serologic staging system for large-cell lymphomas based on initial beta 2-microglobulin and lactate dehydrogenase levels. Swan F Jr, et al. **J Clin Oncol** 1989 Oct;7(10):1518-27

Hyperthermic effects in vitro on the peripheral lymphocytes isolated from three cases of malignant lymphoma/leukemia. Nakayama J, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):31-6

Incidence and clinical significance of peripheral and bone marrow basophilia. Arnalich F, et al. **J Med** 1987; 18(5-6):293-303

Granulocyte-macrophage colony-stimulating factor to harvest circulating haemopoietic stem cells for autotransplantation. Gianni AM, et al. **Lancet** 1989 Sep 9; 2(8663):580-5

Osmotic fragility, sialic acid content and survival of circulating erythrocytes in anemic tumor-bearing mice. Ray MR, et al. **Neoplasma** 1989;36(2):155-60

[Cytophotometric analysis of the DNA level of peripheral blood lymphocytes in patients with skin lymphoma] Bogdanova MS. **Gematol Transfuziol** 1989 May;34(5):42-5 (Rus)

[Autoradiography of lymph cells in the blood of patients with malignant lymphoma] Soboleva TN, et al. **Lab Delo** 1988; (12):27-33 (Eng. Abstr.) (Rus)

[Incidence of monoclonal components in lymphoproliferative syndromes. Apropos of 234 cases] Giraldo MP, et al. **Sangre (Barc)** 1989 Apr;34(2):112-6 (Eng. Abstr.) (Spa)

BLOOD SUPPLY

Acute mononeuropathy with angiotropic lymphoma. Vital C, et al. **Acta Neuropathol (Berl)** 1989;78(1):105-7

CEREBROSPINAL FLUID

Immunocytochemical identification of meningeal leukemia and lymphoma: poly-L-lysine-coated slides permit multimarker analysis even with minute cerebrospinal fluid cell specimens. Kranz BR, et al. **Blood** 1989 May 15; 73(7):1942-50

The significance of leukemia and lymphoma cells in cerebrospinal fluid contaminated by blood containing malignant cells: a probabilistic approach based on the Poisson frequency distribution. Stanley MW, et al.
Diagn Cytopathol 1988;4(3):193-5

CHEMICALLY INDUCED

Deaths and tumors among workers grinding stainless steel. Svensson BG, et al. **Am J Ind Med** 1989;15(1):51-9

Benzene and lymphoma. Young N. **Am J Ind Med** 1989; 15(5):495-8

Lymphoproliferative cancer and other malignancy in patients with rheumatoid arthritis treated with azathioprine: a 20 year follow up study. Silman AJ, et al.
Ann Rheum Dis 1988 Dec;47(12):988-92

Cyclosporine-induced lymphoma following a unilateral lung transplant. The Toronto Lung Transplant Group. Rappaport DC, et al. **Can Assoc Radiol J** 1989 Apr; 40(2):110-1

Inducibility of thymic lymphomas in female Hsd: (ICR)BR mice following subcutaneous injection of ethyl- and isopropyl methanesulfonate. Segal A, et al. **Cancer Lett** 1989 Mar;44(3):199-204

Development of cutaneous pseudolymphoma following ciclosporin therapy of actinic reticuloid.
Thestrup-Pedersen K, et al. **Dermatologica** 1988; 177(6):376-81

Case report of antiepileptic drug hypersensitivity reaction: pseudolymphoma syndrome. Black DM, et al.
Fam Pract Res J 1989 Spring-Summer;8(2):107-11 (11 ref.)

Induction of uterine hemangioendothelioma and lymphoma in (C57BL/6N x C3H/2N)F1 mice by oral administration of azathioprine. Ito A, et al. **Jpn J Cancer Res** 1989 May; 80(5):419-23

Very high frequency of lymphoma induction by a chemical carcinogen in pim-1 transgenic mice. Breuer M, et al.
Nature 1989 Jul 6;340(6228):61-3

Thymic T-cell lymphoma with the CD8+ (OX-8), CD4+ (W3/25) phenotype, induced in F344/NCr rats by nitroso-2-hydroxypropylurea. Konishi N, et al. **Thymus** 1988-89;12(4):225-37

CLASSIFICATION

Immunologic classification of lymphoma and lymphoid leukemia. Foon KA, et al. **Blood Rev** 1987 Jun;1(2):77-88 (133 ref.)

Lymphomas with acquired mouse mammary tumor virus proviruses resemble distinct prethymic and intrathymic phenotypes defined in vivo. Meyers S, et al. **J Immunol** 1989 May 1;142(9):3342-50

Updated Kiel classification for lymphomas [editorial] Wright DH. **J Pathol** 1989 Apr;157(4):283-4

Classification of primary gut lymphomas [letter] Hall PA, et al. **Lancet** 1988 Oct 22;2(8617):958

Classifying primary gut lymphomas [letter] Hall PA, et al. **Lancet** 1988 Dec 3;2(8623):1317

Classifying primary gut lymphomas [letter] Isaacson PG, et al. **Lancet** 1988 Nov 12;2(8620):1148-9

Characterization of cell markers in type B retroviral-induced thymic lymphomas--I. Surface antigen phenotype and karyotype in developing and primary lymphomas. Mueller RE, et al. **Leuk Res** 1989;13(7):553-9

Characterization of cell markers in type B retroviral-induced thymic lymphomas--II. Surface antigen phenotype, karyotype and proviral integration pattern in cultured lymphoma cells and cloned lines. Mueller RE, et al.
Leuk Res 1989;13(7):561-71

Morphometric analysis of follicular center cells: a new approach. Pelstring RJ, et al. **Mod Pathol** 1988 Jul; 1(4):262-7

Prognostic factors in malignant lymphomas. Coiffier B. **Nouv Rev Fr Hematol** 1989;31(2):141-3

The usefulness of phenotypic and genotypic studies in malignant lymphoma and related disorders. Henni T, et al. **Nouv Rev Fr Hematol** 1989;31(2):143-4

[Preliminary analysis of 18 cases of malignant lymphoma by immunohistological method with various monoclonal and polyclonal antibodies] Yao ZR.
Chung Hua Chung Liu Tsa Chih 1988 Jul;10(4):274-6 (Eng. Abstr.) (Chi)

[Classification of malignant lymphomas with regard to classification of skin lymphomas as applied to our patients] Kerekes Z, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(5):601-14 (Eng. Abstr.) (Cze)

[Research methods in lymphoma classification] Franssila K. **Duodecim** 1989;105(11):1040-54 (22 ref.) (Fin)

[Malignant peripheral T-cell lymphomas: morphologic and immunopathologic bases of the classification proposed by Lennert and Suchi] Le Tourneau A, et al.
Ann Med Interne (Paris) 1988;139(7):464-8 (27 ref.) (Eng. Abstr.) (Fre)

[Cutaneous lymphomas] Le Bourgeois JP, et al.
Ann Radiol (Paris) 1988;31(7-8):455-64 (28 ref.) (Eng. Abstr.) (Fre)

[Malignant lymphoma--from the view of the clinician] Rák K. **Orv Hetil** 1988 Dec 18;129(51):2723-7 (26 ref.) (Eng. Abstr.) (Hun)

[An outline of proliferative disorders in the mononuclear phagocytic system--classification and diagnosis]
Kawashima K. **Nippon Rinsho** 1989 Mar;47(3):571-6 (Jpn)

[Cytologic classification of precancer and cancer of the endometrium and esophagus and of malignant lymphomas] Puchkov IuG, et al. **Vopr Onkol** 1988;34(9):1075-9 (Eng. Abstr.) (Rus)

[Historical evolution of the classification of lymphomas] Espinós Pérez D. **An R Acad Nac Med (Madr)** 1989; 106(1):45-70 (Spa)

[Genotype study of T receptors in the diagnosis and classification of leukemias and lymphomas] Soler J, et al.
Med Clin (Barc) 1988 Jun 18;91(4):135-8 (Eng. Abstr.) (Spa)

COMPLICATIONS

A case of complete atrioventricular block due to malignant lymphoma. Shigenobu M, et al. **Acta Med Okayama** 1988 Dec;42(6):355-8

Spontaneous bacterial peritonitis associated with ascites due to malignant lymphoma [letter] Gonciarz M, et al.
Am J Gastroenterol 1989 Aug;84(8):988

Successful combination therapy with acyclovir and vidarabine for disseminated varicella zoster virus infection with retinal involvement in a patient with B-cell lymphoma and adult T-cell leukemia. Moriyama K, et al.
Am J Med 1988 Dec;85(6):885-6

Endobronchial Richter's syndrome. A rare manifestation of chronic lymphocytic leukemia. Snyder LS, et al.
Am Rev Respir Dis 1988 Oct;138(4):980-3

High incidence of primary cerebral lymphoma in tumor-induced central neurogenic hyperventilation. Pauzner R, et al. **Arch Neurol** 1989 May;46(5):510-2 (21 ref.)

Bilateral Baker's cyst as the presenting symptom of paraneoplastic syndrome. Shapira A, et al.
Arch Orthop Trauma Surg 1988;107(6):385-7

Vitamin D metabolite-mediated hypercalcemia and hypercalciuria patients with AIDS- and non-AIDS-associated lymphoma. Adams JS, et al.
Blood 1989 Jan;73(1):235-9

Infection of human T-cell leukemia virus type I and development of human T-cell leukemia lymphoma in patients with hematologic neoplasms: a possible linkage to blood transfusion. Chen YC, et al. **Blood** 1989 Jul; 74(1):388-94

Nail dystrophy in cutaneous T-cell lymphoma. Dalziel KL, et al. **Br J Dermatol** 1989 Apr;120(4):571-4

Acne vulgaris and malignancy. Sheehan-Dare RA, et al.
Br J Dermatol 1988 Nov;119(5):669-73

Thrombotic microangiopathy in three patients with cured lymphoma. Carey RW, et al. **Cancer** 1989 Apr 1; 63(7):1393-7

Opportunistic Strongyloides stercoralis infection in lymphoma patients. Report of a case and review of the literature. Genta RM, et al. **Cancer** 1989 Apr 1; 63(7):1407-11 (32 ref.)

Piperacillin plus amikacin versus cefotaxime plus amikacin in neutropenic and feverish patients with malignant

hemopathies. Pavone V, et al. **Chemioterapia** 1988 Oct; 7(5):330–5
Factors associated with fatal hemoptysis in cancer patients. Pancs RJ, et al. **Chest** 1988 Nov;94(5):1008–13
Lymphoplasmacytoid lymphoma occurring in a patient with dermatitis herpetiformis [letter] Sen V, et al. **Clin Lab Haematol** 1988;10(3):357–8
Lymphoma and acquired immunodeficiency syndrome: cytogenetic and molecular correlates. Botti AC, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):939–41
Oral infections and fever in immunocompromised patients with haematologic malignancies. Bergmann OJ. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):207–13
Emergency abdominal surgery in patients with acute leukemia and lymphoma. Storti S, et al. **Ital J Surg Sci** 1988;18(4):361–3
Adult celiac disease, small and medium vessel cutaneous necrotizing vasculitis, and T cell lymphoma. Alegre VA, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):973–8
Fatal cutaneous T cell lymphoma in a child with atopic dermatitis. Lange–Vejlsgaard G, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):954–8
Pyoderma vegetans: association with diffuse T cell lymphoma (large cell type). Welch KJ, et al. **J Am Acad Dermatol** 1989 Apr;20(4):691–3
Two patients illustrating lymphoma transition and response to therapy in Sjögren's syndrome. Talal N, et al. **J Autoimmun** 1988 Apr;1(2):171–84
Optic neuropathy associated with chronic lymphomatous meningitis. Coppeto JR, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):39–45
Malignancies in the acquired immunodeficiency syndrome. Tucker JA. **J Electron Microsc Tech** 1988 Jan;8(1):137–58 (118 ref.)
Susceptibility to acyclovir of herpes simplex virus: emergence of resistance in patients with lymphoid and myeloid neoplasia. Gray JJ, et al. **J Infect** 1989 Jul;19(1):31–40
Laryngeal oedema complicating thyroid lymphoma. Watson C. **J Laryngol Otol** 1988 Oct;102(10):947–50
Central nervous system AIDS. Tucker T. **J Neurol Sci** 1989 Feb;89(2–3):119–33 (65 ref.)
Primary malignant lymphoma of the spleen in systemic lupus erythematosus. Buskila D, et al. **J Rheumatol** 1989 Jul; 16(7):993–6
Sjögren's syndrome following gastrectomy and chemotherapy for gastric malignant lymphoma. Monno S, et al. **Jpn J Med** 1989 May–Jun;28(3):399–401
Reduction of systemic fungal infections in patients with hematological malignancies, neutropenia, and prolonged fever by early amphotericin B therapy. Zimmermann–Hösli MB, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1010–4
Recurrent fever in Sjögren's syndrome [clinical conference] Lloyd AR, et al. **Med J Aust** 1989 Aug 7;151(3):163–4, 166–7
Primary CNS lymphoma presenting as multiple sclerosis. A case study. Bender GP, et al. **Minn Med** 1989 Mar; 72(3):157–60
Primary CNS lymphoma presenting as a choreic movement disorder followed by segmental dystonia. Poewe WH, et al. **Mov Disord** 1988;3(4):320–5
T-cell leukemic lymphomatosis [letter] Vital C, et al. **Neurology** 1989 Sep;39(9):1272–3
Nocardial infection in patients with neoplastic disease. Berkey P, et al. **Rev Infect Dis** 1989 May–Jun;11(3):407–12
Malignant lymphoma of the posterior mediastinum with transverse myelopathy. Ando K, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):58–60
Lymphoma and chylous ascites. Hufford S, et al. **West J Med** 1988 May;148(5):581–3
[Disorders of the nervous system in hemoblastoses in childhood] Kučerová J, et al. **Cesk Pediatr** 1988 Sep; 43(9):555–6 (Cze)
[Infection in malignant blood disorders] Ruutu P. **Duodecim** 1989;105(11):1130–7 (32 ref.) (Fin)
[Eosinophilic pustular folliculitis disclosing high-grade rapidly fatal T lymphoma] Roger H, et al. **Ann Dermatol Venereol** 1988;115(11):1209–12 (Fre)
[Waldenström's disease with diffuse large immunoblastic cell lymphoma and chronic urticaria (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1989;140(1):51–2 (5 ref.) (Fre)
[Idiopathic granulomatous hepatitis and lymphoma of serous membranes] Buffet C, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):305–8 (21 ref.) (Eng. Abstr.) (Fre)
[Lymphoma and AIDS] Gisselbrecht C. **Pathol Biol (Paris)** 1989 Feb;37(2):111–3 (Fre)
[Anatomo-clinical conference. Apropos of a subacute dementia syndrome with cutaneous lesions responding to corticoids in a 71-year-old woman] Fridman V, et al. **Rev Med Liege** 1989 Mar 1;44(5):192–6 (Fre)
[T-cell lymphoma associated with sprue] Ormann W, et al. **Dtsch Med Wochenschr** 1989 Sep 1;114(35):1324–7 (Eng. Abstr.) (Ger)
[Kaposi's sarcoma and lymphoproliferative neoplasms] Nini G, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):425–9 (Eng. Abstr.) (Ita)
[Intestinal invagination caused by primary lymphoma of the ileum] Ferraris R, et al. **Minerva Chir** 1988 Apr 15; 43(7):619–23 (Eng. Abstr.) (Ita)
[Coilocytitoc CIN III in a patient with T-cell lymphoma and HTLV I positive] Alberico S, et al. **Minerva Ginecol** 1988 Dec;40(12):733–6 (Eng. Abstr.) (Ita)
[Pleural effusion in lymphoma. Description of an unusual case] Cantore M, et al. **Recenti Prog Med** 1988 May; 79(5):210–1 (Eng. Abstr.) (Ita)
[Spontaneous association of a chronic lympho- and myeloproliferative disease in the same patient. Description of 2 cases] Guzzini F, et al. **Recenti Prog Med** 1988 Sep; 79(9):365–9 (Eng. Abstr.) (Ita)
[Therapeutic effects of imipenem/cilastatin sodium against severe infections in patients with hematopoietic disorders. Hanshin Infection Study Group] Tatsumi N, et al. **Jpn J Antibiot** 1989 May;42(5):1065–76 (Eng. Abstr.) (Jpn)
[A clinical evaluation of injectable fluconazole in the treatment of deep mycosis associated with hematological malignancy] Toyama K, et al. **Jpn J Antibiot** 1989 Jan; 42(1):47–54 (Eng. Abstr.) (Jpn)
[Angiotropic B-cell lymphoma associated with the secretion of inappropriate antidiuretic hormone (SIADH): an autopsy case] Okubo A, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):802–7 (20 ref.) (Jpn)
[A case of primary hypothalamic malignant lymphoma with diabetes insipidus] Hirata K, et al. **No Shinkei Geka** 1989 May;17(5):461–6 (Eng. Abstr.) (Jpn)
[A case of ileal malignant lymphoma formation with ileosigmoid fistula] Shimizu H, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1715–8 (Eng. Abstr.) (Jpn)
[Malignant lymphoma complicated with marked chylothorax] Kondo K, et al. **Rinsho Ketsueki** 1988 Jul; 29(7):1093–6 (7 ref.) (Eng. Abstr.) (Jpn)
[Biclonal gammopathy in a patient with immunoblastic lymphadenopathy like T cell lymphoma] Murakami M, et al. **Rinsho Ketsueki** 1989 Jan;30(1):116–21 (Eng. Abstr.) (Jpn)
[Spontaneous rupture of the spleen in a case of malignant lymphoma] Sugawara M, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1427–31 (11 ref.) (Eng. Abstr.) (Jpn)
[Neurologic complications in acute leukemia and malignant lymphoma] Nowacki P, et al. **Pol Tyg Lek** 1988 Dec 12; 43(50):1611–4 (Pol)
[Primary lymphoma of the small bowel and malabsorption] Sambuelli A, et al. **Acta Gastroenterol Latinoam** 1988; 18(1):43–52 (Eng. Abstr.) (Spa)
[Antiphospholipid syndrome in a patient with T-cell skin lymphoma] Allegue F, et al. **Med Cutan Ibero Lat Am** 1989; 17(1):49–51 (19 ref.) (Eng. Abstr.) (Spa)
[Fever and adenopathy in a patient with myeloma (clinical conference)] **Rev Clin Esp** 1988 Oct;183(6):318–25 (Spa)
[Acute abdomen caused by a perforated gastric lymphoma (letter)] Martínez Martínez J, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):183–4 (Spa)
[Lymphomas. IV. Correlative changes and association with other diseases] Báez Villaseñor J. **Rev Invest Clin** 1969 Apr–Jun;21(2):175–84 (10 ref.) (Eng. Abstr.) (Spa)
[Dacie syndrome and lymphoma (letter)] Lobato-Mendizábal E. **Rev Invest Clin** 1989 Jan–Mar;41(1):91 (Spa)

DIAGNOSIS

Primary cardiac lymphoma initially diagnosed by routine cytology. Case report and literature review. Castelli MJ, et al. **Acta Cytol** 1989 May–Jun;33(3):355–8 (14 ref.)
Analysis of immunoglobulin and T-cell receptor gene rearrangement in cytologic specimens. Davey DD, et al. **Acta Cytol** 1989 Sep–Oct;33(5):583–90
Primary malignant lymphoma of the uterine corpus and cervix. Report of a case with immunocytochemical analysis. Matsuyama T, et al. **Acta Cytol** 1989 Mar–Apr; 33(2):228–32
Fine needle aspiration cytology and immunocytochemistry in the diagnosis of lymphoid lesions of the thyroid gland. Tani E, et al. **Acta Cytol** 1989 Jan–Feb;33(1):48–52
Recognizing lung pseudolymphoma (casuistic case). Mačák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:127–35
Lymphomatous involvement of the trigeminal nerve and Meckel cave: CT and MR appearance. De Pena CA, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S15–7
Primary intracranial CNS lymphoma: MR manifestations. Schwaighofer BW, et al. **AJNR** 1989 Jul–Aug;10(4):725–9
Hepatic lymphoma in cyclosporine-treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501–3
The diagnosis of splenic lymphoma by MR imaging: value of superparamagnetic iron oxide. Weissleder R, et al. **AJR** 1989 Jan;152(1):175–80
Transvenous biopsy diagnosis of cardiac lymphoma in an AIDS patient. Andress JD, et al. **Am Heart J** 1989 Aug; 118(2):421–3
Esthesioneuroblastoma or malignant lymphoma? A case report. Falkson CB. **Am J Clin Oncol** 1988 Dec; 11(6):669–71
Gastric large cell lymphoma expressing cytokeratin but no leukocyte common antigen. A diagnostic dilemma. de Mascarel A, et al. **Am J Clin Pathol** 1989 Apr;91(4):478–81
Formalin-resistant leukocyte surface antigens in the diagnosis of cutaneous malignant lymphomas. Hauschild A, et al. **Am J Pathol** 1989 Jul;135(1):177–84
Peripheral T-cell lymphoma presenting with angioedema and diffuse pulmonary infiltrates. Harrison NK, et al. **Am Rev Respir Dis** 1988 Oct;138(4):976–80
Primary gastric lymphoma and pseudolymphoma. Jung SS, et al. **Am Surg** 1988 Oct;54(10):594–7
Molecular genetic analysis in the diagnosis of lymphoma in fine needle aspiration biopsies. I. Lymphomas versus benign lymphoproliferative disorders. Lubiński J, et al. **Anal Quant Cytol Histol** 1988 Dec;10(6):391–8
Molecular genetic analysis in the diagnosis of lymphoma in fine needle aspiration biopsies. II. Lymphomas versus nonlymphoid malignant tumors. Lubiński J, et al. **Anal Quant Cytol Histol** 1988 Dec;10(6):399–404
Obstructive manifestations of thyroid lymphoma. Van Ruiswyk J, et al. **Arch Intern Med** 1989 Jul;149(7):1575–7
Solitary intraocular lymphoma as an initial presentation of widespread disease. Fredrick DR, et al. **Arch Ophthalmol** 1989 Mar;107(3):395–7
Immunophenotypic characterization of an unusual T-cell lymphoma presenting as anterior uveitis. A clinicopathologic case report. Goldey SH, et al. **Arch Ophthalmol** 1989 Sep;107(9):1349–53
Membrane antigen analysis in the diagnosis of lymphoid leukemias and lymphomas. Differential diagnosis, prognosis as related to immunophenotype, and recommendations for testing. Deegan MJ. **Arch Pathol Lab Med** 1989 Jun; 113(6):606–18 (146 ref.)
Pott's disease masquerading as vertebral lymphoma. Stockdale AD, et al. **Br J Clin Pract** 1988 Sep;42(9):389–91
Prognostic factors in the diagnosis and treatment of primary central nervous system lymphoma. Pollack IF, et al. **Cancer** 1989 Mar 1;63(5):939–47
Clinical and laboratory findings at presentation in persistent generalized lymphadenopathy vs malignant lymphoma. Zagonel V, et al. **Cancer Detect Prev** 1988;12(1–6):225–9
Flow cytometry in the diagnosis of lymphomas. Parker JW. **Cytometry Suppl** 1988;3:38–43 (30 ref.)
Marker discrepancy as a diagnostic criterion for lymphoid neoplasms. Sun T, et al. **Diagn Clin Immunol** 1988; 5(6):393–9
Recurrent endometrial adenocarcinoma: presentation as a splenic mass mimicking malignant lymphoma. Gilks CB, et al. **Gynecol Oncol** 1989 May;33(2):209–11 (13 ref.)
A heralding sign of lymphoma [letter] Zohar Y, et al. **Head Neck** 1989 Jul–Aug;11(4):370
Lymphoma presenting as a salivary gland mass. Schusterman MA, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):411–5
The use of monoclonal antibodies and immunohistochemical techniques in lymphomas: review and outlook. Hsu SM. **Hematol Pathol** 1988;2(3):183–97 (61 ref.)
Differential diagnosis between T-cell lymphoma and Hodgkin's disease: the value of mitotic counts and pericapsular infiltration. Nguyen D, et al. **Hematol Pathol** 1989;3(2):63–71
Diagnostic interpretation of T gamma gene rearrangement: effect of polyclonal T cells. Uppenkamp M, et al. **Hematol Pathol** 1988;2(1):15–24
Primary lymphoma of the liver: a more optimistic point of view. Anthony PP. **Hepatology** 1989 Jan;9(1):165–7
Primary pulmonary lymphoma: a case diagnosed by bronchial cytology and immunocytochemistry. Gouldesbrough DR, et al. **Histopathology** 1988 Oct;13(4):465–7
Bacterial lymphadenitis with the picture of a lymphoepithelioid cell lymphoma—Lennert's lymphoma. Kaiserling E, et al. **Histopathology** 1989 Feb;14(2):161–78
Uterine leiomyomas with lymphoid infiltration simulating lymphoma. A report of seven cases. Ferry JA, et al. **Int J Gynecol Pathol** 1989;8(3):263–70
Cutaneous Ki-1 lymphoma: pathology, immunology and clinical characteristics. Kadin ME. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:187–95
Mental illness, lymphoma and Scianna antibody. Gauger DW, et al. **Iowa Med** 1989 Jul;79(7):341–2
Onset of primary brain T-lymphoma simulating a progressive leukoencephalopathy. Provinciali L, et al. **Ital J Neurol Sci** 1988 Aug;9(4):377–81
Demonstration of clonal proliferation of T lymphocytes in early neoplastic disease. Studies with probes for the beta-chain of the T cell receptor and human T cell lymphotropic virus type I. Tanaka T, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):218–23
Primary gastrointestinal lymphoma—a diagnostic challenge. Nanivadekar SA, et al. **J Assoc Physicians India** 1988 Jul; 36(7):409–10
Primary hepatic lymphoma [letter] Yapp R 3d, et al. **J Clin Gastroenterol** 1988 Oct;10(5):584–5
Comparison of phenotyping and genotyping of lymphoid neoplasms. Sun T, et al. **J Clin Lab Anal** 1989;3(3):156–62
Ghost-cell tumor of the optic chiasm. Primary CNS lymphoma. Gray RS, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):98–104
Immune markers in the diagnosis of malignant lymphomas. Jaffe ES. **J Virol Methods** 1988 Sep;21(1–4):265–73 (33 ref.)
Diagnosis and differential diagnosis of progressive lymphoproliferation and malignant lymphoma in persistent active herpesvirus infection. Krueger GR, et al. **J Virol Methods** 1988 Sep;21(1–4):255–64 (20 ref.)
Ultrasound in the diagnosis of lymphoma: a review. Jackson FI, et al. **JCU** 1989 Mar–Apr;17(3):145–71 (25 ref.)
Ultrasonographic and computed tomographic features of renal sinus lymphoma. Ruchman RB, et al. **JCU** 1988 Jan; 16(1):35–40
Monoclonal antibody (HML-1) labelling of T-cell lymphomas [letter] **Lancet** 1989 Jan 28;1(8631):223–4
Trends in lymphoma diagnosis. **Lancet** 1989 Feb 4; 1(8632):249–50 (12 ref.)
Trends in lymphoma diagnosis [letter] Chan JK, et al.

Lancet 1989 Apr 15;1(8642):837

The use of antibodies to intermediate filament proteins in the differential diagnosis of stomach lymphoma versus poorly differentiated carcinoma, using small tissue samples obtained from routine biopsies during endoscopy. Starzyńska T. **Mater Med Pol** 1988 Oct–Dec;20(4):227–32

Thyrotoxicosis simulating lymphoma. A case report. Ramanathan M. **Med J Malaysia** 1988 Mar;43(1):59–61

Lyme disease meningopolyneuritis simulating malignant lymphoma. Szyfelbein WM, et al. **Mod Pathol** 1988 Nov; 1(6):464–8

Comparison of multi echo and contrast–enhanced MR scans: image contrast and delineation of intracranial tumors. Schörner W, et al. **Neuroradiology** 1989;31(2):140–7

Periradicular lymphoma: differentiation from inflammation. Keyes GG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):230–5

Therapy–relevant discrepancies between diagnoses of institutional pathologists and experienced hematopathologists in the diagnosis of malignant lymphoma. Stel HV, et al. **Pathol Res Pract** 1989 Feb; 184(2):242–7

Toothpick perforation mimicking jejunal lymphoma. Blankfield RP, et al. **Postgrad Med** 1989 Aug;86(2):265–6, 271

Primary thyroid lymphoma: comparison of CT and US assessment. Takashima S, et al. **Radiology** 1989 May; 171(2):439–43

Flow cytometric analysis of lymphoma and lymphoma–like disorders. Little JV, et al. **Semin Diagn Pathol** 1989 Feb; 6(1):37–54 (52 ref.)

Serum lipid–bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:17–20

Transrectal ultrasonography in the evaluation of rectal and extrarectal disease. Zainea GG, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):153–6

Lymphoreticular disorders masquerading as rheumatic disease syndromes. Lakhanpal S, et al. **Tex Med** 1989 May; 85(5):46–9

Urine cytology in a case of B–cell lymphoma in a transplanted kidney. Gupta R, et al. **Transplant Proc** 1989 Aug;21(4):3585–7

The secret in a casual parenthesis. Murphy–Greenwood MA. **Wis Med J** 1988 Sep;87(9):13, 15

[Nonmalignant lymphoid disorders of the chest: a report of 4 cases with a review of literature] Li LY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):45–7, 63 (Eng. Abstr.) (Chi)

[Large B cell lymphoma of the mediastinum. 6 cases] Wurtz A, et al. **Ann Chir** 1989;43(2):165–70 (12 ref.) (Eng. Abstr.) (Fre)

[Respiratory obstruction during anesthesia in children with malignant mediastinal lymphoma] Montange F, et al. **Ann Fr Anesth Reanim** 1988;7(6):520–3 (Eng. Abstr.) (Fre)

[Malignant lymphoma of parotid origin mimicking Melkersson–Rosenthal syndrome] Beuchat L, et al. **J Fr Ophtalmol** 1988;11(10):657–60 (Eng. Abstr.) (Fre)

[Primary meningeal and cerebral lymphoma. Study of a case with 8 years' follow–up] Pou Serradell A, et al. **Rev Neurol (Paris)** 1989;145(3):231–5 (Eng. Abstr.) (Fre)

[Diseases of the lymphatic system of the head and neck region. A comparative study of MRI and CT] Schedel H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):158–67 (Eng. Abstr.) (Ger)

[Malignant tumor–like abdominal lymphoma in Whipple's disease] Kortsik CS, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28–29):1107–9 (Eng. Abstr.) (Ger)

[Pseudolymphoma of the stomach] Blum U, et al. **ROFO** 1989 Mar;150(3):246–9 (Eng. Abstr.) (Ger)

[Possibilities of abdominal ultrasonic diagnosis in the clinical follow up of malignant lymphomas] Rosta A, et al. **Orv Hetil** 1989 Sep 10;130(37):1987–92 (Eng. Abstr.) (Hun)

[Significance of ultrasonic studies of the splenic hilus in malignant lymphoma] Rosta A, et al. **Orv Hetil** 1989 Feb 19;130(8):395–7 (32 ref.) (Eng. Abstr.) (Hun)

[Magnetic resonance in the evaluation of patients with lymphoma] Gualdi GF, et al. **Clin Ter** 1988 Nov 15; 127(3):227–9 (Ita)

[Role of endoscopy in the diagnosis of gastric lymphomas: remarks on a case] Saffiotti O, et al. **G Clin Med** 1988 Oct; 69(10):581–4 (Eng. Abstr.) (Ita)

[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):152–7 (Eng. Abstr.) (Ita)

[Diagnosis of malignant lymphoma] Minato K. **Gan No Rinsho** 1989 Jan;Spec No:579–92 (Jpn)

[Diagnosis of leukemia and lymphoma] Urabe A. **Gan No Rinsho** 1988 Aug;34(10):1445–8 (Eng. Abstr.) (Jpn)

[IgG (kappa type) binding macroamylasemia complicated with immunoblastic lymphadenopathy–like T cell lymphoma] Okada S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):519–22 (Jpn)

[A comparative study on utility of flow–cytometry and electron microscopy in differentiation of T– and B–cell lymphomas] Nakahama M, et al. **Rinsho Byori** 1989 Apr; 37(4):366–74 (Jpn)

[Ultrasonic evaluation of two cases of primary lymphoma of the intestine] Matsumoto K, et al. **Rinsho Hoshasen** 1989 May;34(5):625–8 (Eng. Abstr.) (Jpn)

[Location of malignant lymphoma in the gastrointestinal tract] Płużańska A, et al. **Pol Tyg Lek** 1988 Dec 12; 43(50):1631–3 (Pol)

[Primary malignant lymphomas of the digestive tract. Morphologic and clinical analysis of 100 cases] Kemona A, et al. **Przegl Lek** 1989;46(5):448–50 (Eng. Abstr.) (Pol)

[Difficulties in the gastroscopic diagnosis of gastric lymphoma] Kryszewski A, et al. **Wiad Lek** 1988 Aug 1; 41(15):1028–32 (Eng. Abstr.) (Pol)

[Cancerous diseases in children (I)] Nicolau S. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Apr–Jun; 37(2):125–33 (Rum)

[Immunoenzyme cytochemical studies in oncohematology] Mechetner EB, et al. **Gematol Transfuziol** 1989 Feb; 34(2):57–60 (Rus)

[Lymphoma of the skin with vesicular eruptions] Raznatovskil IM, et al. **Vestn Dermatol Venerol** 1988; (11):70–1 (Eng. Abstr.) (Rus)

[Erythrophagocytic T–cell lymphoma: clinical entity similar to malignant histiocytosis. Role of immunology and study of the genetic rearrangement of T cells in determination of the diagnosis] Neira L, et al. **An Esp Pediatr** 1988 Oct; 29 Suppl 34:156–8 (Spa)

[Common variable immunodeficiency. Report of a case simulating lymphoma (letter)] Belmonte E, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):597 (Spa)

[Pseudohemopathy caused by rhabdomyosarcoma] Woessner S, et al. **Med Clin (Barc)** 1989 May 20;92(19):738–41 (Eng. Abstr.) (Spa)

[Mesencephalic hematoma as the presenting form of cerebral lymphoma (letter)] D'Olhaberriague L, et al. **Rev Clin Esp** 1989 May;184(8):450–2 (Spa)

DRUG THERAPY

A case of cutaneous T cell lymphoma treated with recombinant interleukin 2 (rIL–2). Nagatani T, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):504–8

Mitoxantrone, vincristine, and dexamethasone in patients with refractory lymphoma. Paciucci PA, et al. **Am J Clin Oncol** 1989 Aug;12(4):327–31

Lymphoma chemotherapy as remission inducing treatment in rheumatoid arthritis [letter] Sheldon PJ. **Ann Rheum Dis** 1989 Feb;48(2):174–5

Antitumor activity of norspermidine, a structural homologue of the natural polyamine spermidine. Prakash NJ, et al. **Anticancer Res** 1988 Jul–Aug;8(4):563–8

Diffuse large cell lymphoma: a teaching hospital experience [published erratum appears in Aust N Z J Med 1989 Aug;19(4):357] Marks DI, et al. **Aust N Z J Med** 1989 Apr; 19(2):159–61

High–dose cyclophosphamide in the treatment of refractory lymphomas and solid tumor malignancies. Collins C, et al. **Cancer** 1989 Jan 15;63(2):228–32

Side effects and emotional distress during cancer chemotherapy. Love RR, et al. **Cancer** 1989 Feb 1; 63(3):604–12

Ifosfamide–induced renal tubular defects. Patterson WP, et al. **Cancer** 1989 Feb 15;63(4):649–51

Chemotherapy in the management of intraocular lymphoma. Strauchen JA, et al. **Cancer** 1989 May 15;63(10):1918–21

Pharmacology studies of 1–beta–D–arabinofuranosylcytosine in pediatric patients with leukemia and lymphoma after a biochemically optimal regimen of loading bolus plus continuous infusion of the drug. Avramis VI, et al. **Cancer Res** 1989 Jan 1;49(1):241–7

Immunospecific targeting of cytosine arabinonucleoside–containing liposomes to the idiotype on the surface of a murine B–cell tumor in vitro and in vivo. Bankert RB, et al. **Cancer Res** 1989 Jan 15;49(2):301–8

Treatment of cutaneous T cell lymphoma with intermediate doses of interferon alpha 2a. Nicolas JF, et al. **Dermatologica** 1989;179(1):34–7

Prinzmetal's angina during cyclophosphamide therapy. Stefenelli T, et al. **Eur Heart J** 1988 Oct;9(10):1155–7

Combination chemotherapy for primary small intestinal lymphoma in the Middle East. el Saghir NS, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):851–6

Treatment of cutaneous T cell lymphoma with 2'–deoxycoformycin (pentostatin). Dang–Vu AP, et al. **J Am Acad Dermatol** 1988 Oct;19(4):692–8

Long–term efficacy, curative potential, and carcinogenicity of topical mechlorethamine chemotherapy in cutaneous T cell lymphoma. Vonderheid EC, et al. **J Am Acad Dermatol** 1989 Mar;20(3):416–28

LNH–84 regimen: a multicenter study of intensive chemotherapy in 737 patients with aggressive malignant lymphoma. Coiffier B, et al. **J Clin Oncol** 1989 Aug; 7(8):1018–26

Long–term follow–up and analysis for prognostic factors for patients with limited–stage diffuse large–cell lymphoma treated with initial chemotherapy with or without adjuvant radiotherapy. Jones SE, et al. **J Clin Oncol** 1989 Sep; 7(9):1186–91

Combined modality therapy for localized aggressive lymphoma: enough or too much? [editorial] Longo DL. **J Clin Oncol** 1989 Sep;7(9):1179–81

Treatment of localized aggressive lymphomas with combination chemotherapy followed by involved–field radiation therapy. Longo DL, et al. **J Clin Oncol** 1989 Sep; 7(9):1295–302

Chemotherapy with dexamethasone, high–dose cytarabine, and cisplatin for parenchymal brain lymphoma. McLaughlin P, et al. **J Natl Cancer Inst** 1988 Nov 2; 80(17):1408–12

High–dose methotrexate for non–AIDS primary central nervous system lymphoma. Report of 13 cases. Gabbai AA, et al. **J Neurosurg** 1989 Feb;70(2):190–4

Extracorporeal photochemotherapy for cutaneous T–cell lymphoma. **Med Lett Drugs Ther** 1988 Oct 7;30(776):96 (4 ref.)

GM–CSF treatment in aplasia after cytotoxic therapy. Gattringer C, et al. **Onkologie** 1989 Feb;12(1):16–8

Experience with ifosfamide combinations in malignant lymphomas. Cabanillas F. **Semin Oncol** 1989 Feb;16(1 Suppl 3):78–81 (4 ref.)

Long term survival after treatment of disseminated T cell lymphoma presenting with tracheal obstruction in a patient with coeliac disease. Seddon DJ, et al. **Thorax** 1989 Jun; 44(6):519–20

[Treatment of malignant lymphoma] Shimoyama M. **Gan No Rinsho** 1989 Jan;Spec No:593–604 (Jpn)

[Cancer curable by chemotherapy: malignant lymphoma] Horikoshi N. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1335–40 (18 ref.) (Eng. Abstr.) (Jpn)

[Diffuse B–cell lymphoma of anterior mediastinum cured by short–term administration of CDDP–containing regimen] Inoue H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):3003–5 (Eng. Abstr.) (Jpn)

[Phase II study of SM–108 (4–carbamoylimidazolium–5–olate) in hematological malignancies] Kimura K, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):123–30 (Eng. Abstr.) (Jpn)

[Current status of chemotherapy in the treatment of malignant lymphomas] Ohnoshi T, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):1989–96 (28 ref.) (Eng. Abstr.) (Jpn)

[A case of chemotherapy by the transarterial catheter with reservoir against malignant lymphoma of the colon] Sawaguchi Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2978–81 (Eng. Abstr.) (Jpn)

[Urotoxicity of enocitabine (BH–AC) and aclarubicin (ACM) in pediatric patients with hematological malignancies] Fujiwara F, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1388–93 (Eng. Abstr.) (Jpn)

[Salvage chemotherapy with a combination of VP–16, ifosfamide, procarbazine, prednisolone, bleomycin and methotrexate (VIPP–BM) for refractory malignant lymphoma] Ohnishi K, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):289–96 (Eng. Abstr.) (Jpn)

[Monitoring of methotrexate treatment of children with proliferative diseases of the hematopoietic system] Boguslawska–Jaworska J, et al. **Pol Tyg Lek** 1988 Aug 15; 43(33):1053–6 (Eng. Abstr.) (Pol)

ENZYMOLOGY

Increased degradation of protein kinase C without diminution of mRNA level after treatment of WEHI–231 B lymphoma cells with phorbol esters. Mizuguchi J, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1311–7

Matrix heparan sulphate, but not endothelial cell surface heparan sulphate, is degraded by highly metastatic mouse lymphoma cells. Hennes R, et al. **Br J Cancer** 1988 Aug; 58(2):186–8

Behavior of activities of thymidine metabolizing enzymes in human leukemia–lymphoma cells. Shiotani T, et al. **Cancer Res** 1989 Mar 1;49(5):1090–4

Inhibition of glycinamide ribonucleotide formyltransferase and other folate enzymes by homofolate polyglutamates in human lymphoma and murine leukemia cell extracts. Thorndike J, et al. **Cancer Res** 1989 Jan 1;49(1):158–63

Benign transient hyperphosphatasemia in an adult with malignant lymphoma [letter] Maekawa M, et al. **Clin Chem** 1989 May;35(5):897

Endopeptidase activities associated with the plasma membrane compartment of an antigen–presenting B cell. Chain BM, et al. **Clin Exp Immunol** 1989 Jan;75(1):87–92

Expression of protein kinase C subspecies in human leukemia–lymphoma cell lines. Sawamura S, et al. **FEBS Lett** 1989 Apr 24;247(2):353–7

Difference in cell surface 5'–nucleotidase activity, protein iodination and membrane properties between mouse lymphoma and rat adenocarcinoma cell variants with low and high–metastatic potential. Haeffner EW, et al. **Int J Biochem** 1988;20(9):929–35

Lymphoma protein kinase C is associated with the transmembrane glycoprotein, GP85, and may function in GP85–ankyrin binding. Kalomiris EL, et al. **J Biol Chem** 1989 May 15;264(14):8113–9

Expression of enolases in B cell tumors. Oka K, et al. **Lab Invest** 1989 Jan;60(1):38–44

EPIDEMIOLOGY

Increasing incidence of primary brain lymphoma in the US. Eby NL, et al. **Cancer** 1988 Dec 1;62(11):2461–5

Has the incidence of primary gastric lymphoma increased? Hayes J, et al. **Cancer** 1989 May 15;63(10):2073–6

Cancer registration of leukaemias and lymphomas: results of a comparison with a specialist registry. Alexander F, et al. **Community Med** 1989 May;11(2):81–9

Clustering of Burkitt's lymphoma and other high-grade malignant lymphoproliferative diseases, but not acute lymphoblastic leukaemia among socio-economically deprived Nigerians. Williams CK. **East Afr Med J** 1988 Apr;65(4):253–63

Incidence of cancers of the brain, the lymphatic tissues, and of leukemia and the use of pesticides among Quebec's rural farm population, 1982–1983. Godon D, et al. **Geogr Med** 1989;19:213–32

Malignant lymphoma in Hawaii-Japanese: a retrospective morphologic survey. Yanagihara ET, et al. **Hematol Oncol** 1989 May–Jun;7(3):219–32

Nation-wide study of lethal mid-line granuloma in Japan: frequencies of wegener's granulomatosis, polymorphic reticulosis, malignant lymphoma and other related conditions. Aozasa K, et al. **Int J Cancer** 1989 Jul 15; 44(1):63–6

Malignant lymphoma in African children: three decades of discovery. O'Conor GT. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:137–47 (55 ref.)

Increased incidence of malignant lymphoma in AIDS: a comparison of risk groups and possible etiologic factors. Beckhardt RN, et al. **Mt Sinai J Med (NY)** 1988 Oct; 55(5):383–9

Tumourigenesis by partial body X-irradiation in mice. Sato F, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1161–8

Malignant lymphomas in agricultural and forestry workers in England and Wales. Balarajan R. **Public Health** 1988 Nov;102(6):585–92

Increased frequency of posttransplant lymphomas in patients treated with cyclosporin, azathioprine, and prednisone. Smith JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3199–200

[A review of childhood cases of malignant lymphoma in Osaka, Japan] Ohsawa M, et al. **Gan No Rinsho** 1989 Apr; 35(5):609–13 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

The role of Epstein-Barr virus in lymphomas of HIV-carriers. Ernberg I, et al. **APMIS Suppl** 1989;8:58–61

A case report of central nervous system lymphoma following immunosuppression. Ingram J, et al. **Australas Radiol** 1989 May;33(2):163–4

Precursor T-cell lymphoma associated with human immunodeficiency virus type 1 (HIV-1) infection. First reported case. Ruff P, et al. **Cancer** 1989 Jul 1;64(1):39–42

Malignant lymphomas in patients with or at risk for AIDS: a report of 50 cases observed in Italy. Monfardini S, et al. **Cancer Detect Prev** 1988;12(1–6):237–41

HIV-related malignant lymphoma: clinical aspects, treatment, and pathogenesis. Gill PS, et al. **Cancer Invest** 1988;6(4):413–6

Development of lymphoma in the thymus of AKR mice treated with the lymphomagenic virus SL 3-3. Hays EF, et al. **Cancer Res** 1989 Aug 1;49(15):4225–30

Primary intracerebral lymphoma in systemic lupus erythematosus treated with immunosuppressives. Cras P, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):200–5 (62 ref.)

Neuropathological findings in an autopsy series of italian subjects with AIDS. Giampalmo A, et al. **Clin Neuropathol** 1989 May–Jun;8(3):120–5

The development of three distinct avian B cell lymphomas. Humphries EH, et al. **Curr Top Microbiol Immunol** 1988; 141:58–66

Bursal stem cells as targets for myc-induced preneoplastic proliferation and maturation arrest. Neiman PE, et al. **Curr Top Microbiol Immunol** 1988;141:67–74

Endobronchial pseudolymphoma associated with Sjögren's syndrome. Report of a case. Miyazaki N, et al. **Endoscopy** 1989 Mar;21(2):99–101

Primary pulmonary lymphoma: a re-appraisal of its histogenesis and its relationship to pseudolymphoma and lymphoid interstitial pneumonia. Addis BJ, et al. **Histopathology** 1988 Jul;13(1):1–17

Lymphomatoid granulomatosis and malignant lymphoma of the central nervous system in the acquired immunodeficiency syndrome. Anders KH, et al. **Hum Pathol** 1989 Apr;20(4):326–34

Retrovirally induced murine B-cell tumors rarely show proviral integration in sites common in T-cell tumors. Matthews EA, et al. **Int J Cancer** 1989 Jun 15;43(6):1120–5

X-linked lymphoproliferative syndrome provides clues to the pathogenesis of Epstein-Barr virus-induced lymphomagenesis. Purtilo DT, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:149–58

Environment and malignancies of the lymphatic system. Ramot B, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:87–94 (31 ref.)

Pleural effusion as a presentation of AIDS-related lymphoma. Sider L, et al. **Invest Radiol** 1989 Feb; 24(2):150–3

Pseudolymphoma of the earlobes due to ear piercing. Zilinsky I, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):666–8

Strain dependency of B and T lymphoma development in immunoglobulin heavy chain enhancer (E mu)-myc transgenic mice. Yukawa K, et al. **J Exp Med** 1989 Sep 1;170(3):711–26

Receptor mediated leukemogenesis: murine leukemia virus interacts with BCL1 lymphoma cell surface IgM. McGrath MS, et al. **J Mol Cell Immunol** 1987;3(4):227–42

Herpesvirus saimiri strains from three DNA subgroups have different oncogenic potentials in New Zealand white rabbits. Medveczky MM, et al. **J Virol** 1989 Sep; 63(9):3601–11

Evidence for an infective cause of childhood leukaemia: comparison of a Scottish new town with nuclear reprocessing sites in Britain [see comments] Kinlen L. **Lancet** 1988 Dec 10;2(8624):1323–7. **Comment in:** Lancet 1989 Jan 14;1(8629):94–5

Ecotropic virus involvement in spontaneous B-cell lymphomas of CWD/LeAgl mice. Angel JM, et al. **Leuk Res** 1989;13(5):417–25

Evidence of recombinant ecotropic provirus integration in thymic lymphomas induced by direct or indirect radiation effects. Baylac-Kalabokias H, et al. **Leuk Res** 1989; 13(2):131–43

Induction of B-cell lymphomas in athymic NIH Swiss nu/nu mice. Yang SS, et al. **Leukemia** 1988 Dec;2(12 Suppl):114S–124S

Induction of a rat T cell lymphoma-leukemia by magnesium deficiency—a study of fetal defense against maternal neoplasia. Hass GM, et al. **Magnesium** 1989;8(1):45–55

AIDS-related small bowel lymphoma presenting with perforation [letter] Sheridan R, et al. **Milit Med** 1989 Jul; 154(7):381–2

Acceleration of B-lymphoid tumorigenesis in E mu-myc transgenic mice by v-H-ras and v-raf but not v-abl. Langdon WY, et al. **Oncogene Res** 1989;4(4):253–8

The dose-response relationships for myeloid leukemia and malignant lymphoma in BC3F1 mice. Covelli V, et al. **Radiat Res** 1989 Sep;119(3):553–61

The genesis of Thy-1-lymphomas in NFS mice exposed to X irradiation. Mori N, et al. **Radiat Res** 1989 Jan; 117(1):35–46

Malignant lymphomas in patients with human immunodeficiency virus infection. Hersh EM, et al. **Recent Results Cancer Res** 1988;112:54–62

Malignant lymphomas and HIV infection. Huhn D, et al. **Recent Results Cancer Res** 1988;112:63–8

Malignant lymphomas in patients with or at risk for AIDS in Italy. Monfardini S. **Recent Results Cancer Res** 1988; 112:37–45

A poorly differentiated lymphoma of donor origin in a renal allograft recipient. Hjelle B, et al. **Transplantation** 1989 Jun; 47(6):945–8

Radiation-induced lymphomas developing during cyclosporine treatment. Hooghe R, et al. **Transplantation** 1989 Aug;48(2):342–4

[Target cells and tissue microenvironment in the development of thymic lymphomas in mice: a model for the study of the role of host factors in carcinogenesis] Boniver J, et al. **Bull Mem Acad R Med Belg** 1988;143(1–2):114–22 (Eng. Abstr.) **(Fre)**

[Acquired C1 esterase inhibitor deficiency, Gougerot-Sjögren syndrome and B lymphoma] Fain O, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):487–9 (22 ref.) **(Fre)**

[AIDS manifestations in the gastrointestinal tract] Dancygier H. **Fortschr Med** 1989 Apr 10;107(11):240–3 (20 ref.) (Eng. Abstr.) **(Ger)**

[Lymphomas and cytopenias in AIDS] Hoelzer D. **Verh Dtsch Ges Inn Med** 1988;94:506–11 (16 ref.) **(Ger)**

[Internal and neurologic manifestations of the acquired immunodeficiency syndrome] Zielinski C. **Wien Med Wochenschr** 1988 Oct 31;138(19–20):517–20 (57 ref.) (Eng. Abstr.) **(Ger)**

[A case of malignant lymphoma, an anemone cell tumor of the leg, arising from osteomyelitis] Suzuki T, et al. **Gan No Rinsho** 1988 Sep;34(11):1595–602 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus developing malignant lymphoma] Fujimoto S, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1892–3 **(Jpn)**

[Primary malignant lymphoma of the brain following immunosuppressive therapy of systemic lupus erythematosus] Matsuura T, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):730–5 **(Jpn)**

[Transplantability and immunogenicity in mice of lymphoma Nk/Ly cells modified by concanavalin A and neuraminidase] Bratus' GG, et al. **Eksp Onkol** 1989; 11(3):35–8 (Eng. Abstr.) **(Rus)**

[The etiology of Löfgren's syndrome] Markov IS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):126–9 (Eng. Abstr.) **(Rus)**

[Cerebral lymphoma and acquired immunodeficiency syndrome (letter)] Salinas-Argente R, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):316 **(Spa)**

GENETICS

Differential effect of benzamide on NAD+ content and the frequency of chromatid aberrations in X-irradiated L5178Y-R and L5178Y-S cells. Szumiel I, et al. **Acta Oncol** 1988;27(6b):851–5

Immunoglobulin and T-cell receptor gene rearrangement in leukemia and lymphoma. Kawa-Ha K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):534–8

Somatic mutations in the Ig VH genes of human B cell lymphoma. Levy S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):561–5

Refractoriness to chemotherapy and poor survival related to abnormalities of chromosomes 17 and 7 in lymphoma. Cabanillas F, et al. **Am J Med** 1989 Aug;87(2):167–72

Immunophenotypic and antigen receptor gene rearrangement analysis in T cell neoplasia. Knowles DM. **Am J Pathol** 1989 Apr;134(4):761–85 (214 ref.)

Primary B cell gastric lymphoma. A genotypic analysis. Spencer J, et al. **Am J Pathol** 1989 Sep;135(3):557–64

Proto-oncogenes, growth factor genes, receptor genes, differentiation genes and structural rearrangements in human cancer. De Brackeleer M. **Anticancer Res** 1988 Nov–Dec;8(6):1325–8

T-cell receptor delta/alpha rearrangements in lymphoid neoplasms. Dyer MJ. **Blood** 1989 Aug 15;74(3):1073–83

Phenotypic heterogeneity of spontaneous lymphomas of CWD mice. Thomas CY, et al. **Blood** 1989 Jan;73(1):240–7

Retroviruses and malignant lymphoma. Norley SG, et al. **Blut** 1989 May;58(5):221–7 (30 ref.)

Cytogenetics of T-cell malignant lymphoma. Report of 17 cases and review of the chromosomal breakpoints [published erratum appears in Cancer Genet Cytogenet 1989 Mar;38(1):141] Berger R, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):123–30 (54 ref.)

Involvement of c-myc oncogene in lymphoma cell lines with no detectable chromosome rearrangement of band 8q24. Ohno H, et al. **Cancer Genet Cytogenet** 1989 Jul 1; 40(1):73–82

Cytogenetic characterization of a high-grade murine B-cell lymphoma. van Berlo RJ, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):25–31

Different homing pattern of isolated mouse lymphoma cells correlates with a different chromosomal pattern. van Berlo RJ, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):33–42

Clonal immunoglobulin gene rearrangements and normal T-cell receptor, bcl-2, and c-myc genes in primary cutaneous B-cell lymphomas. Delia D, et al. **Cancer Res** 1989 Sep 1;49(17):4901–5

Genetic control of resistance to 3-methylcholanthrene-induced T-cell lymphoma in mice. Ishizaka ST, et al. **Cancer Res** 1989 Mar 1;49(5):1214–9

Nucleic acid flow cytometry in large cell lymphoma. McLaughlin P, et al. **Cancer Res** 1988 Nov 15;48(22):6614–9

Molecular genetics of leukemia and lymphoma. Lovell MA. **Clin Chem** 1989 Jul;35(7 Suppl):B43–7 (48 ref.)

Mechanisms in B-cell neoplasia. Workshop at the National Cancer Institute, National Institutes of Health, Bethesda, MD, USA, March 23–25, 1988. Proceedings. **Curr Top Microbiol Immunol** 1988;141:1–340

Recombinant inbred mouse strains: models for studying the molecular genetic basis of myeloid tumorigenesis. Copeland NG, et al. **Curr Top Microbiol Immunol** 1989;149:45–57 (46 ref.)

Evidence for the involvement of pim-2, a new common proviral insertion site, in progression of lymphomas. Breuer ML, et al. **EMBO J** 1989 Mar;8(3):743–8

IgH enhancer-mediated deregulation of N-myc gene expression in transgenic mice: generation of lymphoid neoplasias that lack c-myc expression. Dildrop R, et al. **EMBO J** 1989 Apr;8(4):1121–8

N-myc transgene promotes B lymphoid proliferation, elicits lymphomas and reveals cross-regulation with c-myc. Rosenbaum H, et al. **EMBO J** 1989 Mar;8(3):749–55

N-myc is frequently activated by proviral insertion in MuLV-induced T cell lymphomas. van Lohuizen M, et al. **EMBO J** 1989 Jan;8(1):133–6

Gene order, amplification, and rearrangement of chromosome band 11q23 in hematologic malignancies. Yunis JJ, et al. **Genomics** 1989 Jul;5(1):84–90

Molecular genetic approaches in the diagnosis and classification of lymphoid malignancies. Krolewski JJ, et al. **Hematol Pathol** 1989;3(2):45–61 (85 ref.)

Chromosomal characteristics of malignant lymphoma. Fleischman EW, et al. **Hum Genet** 1989 Jul;82(4):343–8

Novel region within the V kappa gene promoter is responsible for tissue and stage-specific expression of immunoglobulin genes in human lymphoid neoplasms. Kossakowska AE, et al. **Immunology** 1989 Mar; 66(3):328–34

Relationship between tumorigenicity and the dosage of lymphoma- vs. normal-parent-derived chromosome 15 in somatic cell hybrids between lymphoma cells with rearranged pvt-1 gene and normal cells. Uno M, et al. **Int J Cancer** 1989 Aug 15;44(2):353–9

Distinct chromosomal abnormalities in murine leukemia virus-induced T- and B-cell lymphomas. Vasmel WL, et al. **Int J Cancer** 1989 Jun 15;43(6):1112–9

Studies of immunoglobulin and T cell receptor gene rearrangement in cutaneous B and T cell lymphomas. Liang G, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):457–60

Alternative V kappa gene rearrangements in a murine B cell lymphoma. An explantation for idiotypic heterogeneity. Carroll WL, et al. **J Exp Med** 1988 Nov 1;168(5):1607–20

Locus-specific regulation of Kd, Dd, and Ld class I genes in the BALB/c S49 lymphoma sublines. Beck Keeney J, et al. **J Immunol** 1989 Oct 1;143(7):2364–73

Analysis of VH gene replacement events in a B cell lymphoma. Kleinfield RW, et al. **J Immunol** 1989 Jun 15; 142(12):4475–82

Dual genotype in cutaneous T cell lymphoma: immunoglobulin gene rearrangement in clonal T cell malignancy [letter] Bignon YJ, et al. **J Invest Dermatol** 1989 May;92(5):775

CD4+ cutaneous T-cell lymphomas show the phenotype of helper/inducer T cells (CD45RA-, CDw29+). Sterry W, et al. **J Invest Dermatol** 1989 Sep;93(3):413-6

Resistance of STS/A mice to lymphoma induction by X-irradiation. Okumoto M, et al. **J Radiat Res (Tokyo)** 1989 Mar;30(1):135-9

The Mlvi-1 locus involved in the induction of rat T-cell lymphomas and the pvt-1/Mis-1 locus are identical. Koehne CF, et al. **J Virol** 1989 May;63(5):2366-9

The molecular analysis of chromosomal translocations as a diagnostic, epidemiological and potentially prognostic tool in lymphoid neoplasia. Magrath I, et al. **J Virol Methods** 1988 Sep;21(1-4):275-89 (29 ref.)

Gene expression of terminal deoxynucleotidyl transferase in neoplastic cells of leukemia and lymphoma. Oiwa K, et al. **Jpn J Cancer Res** 1989 Apr;80(4):331-4

Detecting t(14;18) in paraffin-embedded lymphoma tissue [letter] Hickish T, et al. **Lancet** 1989 Jul 22;2(8656):218-9

Cytogenetically unrelated clones in hematological neoplasms. Heim S, et al. **Leukemia** 1989 Jan;3(1):6-8

Cytogenetic abnormalities in a secondary lymphoma complicating cardiac transplantation. Olopade OL, et al. **Leukemia** 1989 Apr;3(4):303-4

Structure of the murine lck gene and its rearrangement in a murine lymphoma cell line. Garvin AM, et al. **Mol Cell Biol** 1988 Aug;8(8):3058-64

A bcr-v-abl oncogene induces lymphomas in transgenic mice. Hariharan IK, et al. **Mol Cell Biol** 1989 Jul; 9(7):2798-805

A human immunoglobulin gene reduces the incidence of lymphomas in c-Myc-bearing transgenic mice. Nussenzweig MC, et al. **Nature** 1988 Dec 1; 336(6198):446-50

Alternate structures and stabilities of c-myc RNA in a bursal lymphoma cell line. Schubach WH, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11171-86

Lymphomagenesis in E mu-myc transgenic mice can involve ras mutations. Alexander WS, et al. **Oncogene** 1989 May; 4(5):575-81

Allelic variation of the c-raf-1 proto-oncogene in human lymphoma and leukemia. Trench GC, et al. **Oncogene** 1989 Apr;4(4):507-10

cDNA clones from autocrine thymic lymphoma cells encode two mitogenic proteins, a serine protease and a truncated T-cell receptor beta-chain. Bogenberger J, et al. **Oncogene Res** 1988;3(4):301-12

Expression of oncogenes in normal and transformed murine B lymphocytes. DeCino P, et al. **Oncogene Res** 1988; 3(1):33-7

C-myc activation in an unusual retrovirus-induced avian T-lymphoma resembling Marek's disease: proviral insertion 5' of exon one enhances the expression of an intron promoter. Isfort R, et al. **Oncogene Res** 1987;2(1):81-94

Common sites of viral integration in lymphomas arising in AKXD recombinant inbred mouse strains. Mucenski ML, et al. **Oncogene Res** 1987;2(1):33-48

v-cbl, an oncogene from a dual-recombinant murine retrovirus that induces early B-lineage lymphomas. Langdon WY, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1168-72

Activation of the Mlvi-1/mis1/pvt-1 locus in Moloney murine leukemia virus-induced T-cell lymphomas. Tsichlis PN, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5487-91

Molecular genetics of lymphoid tumorigenesis. Haluska FG, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:269-80 (29 ref.)

Metabolic correction of defects in the lipid anchoring of Thy-1 in lymphoma mutants. Gupta D, et al. **Science** 1988 Dec 9;242(4884):1446-8

[Chromosome and gene abnormalities in malignant blood diseases] de la Chapelle A, et al. **Duodecim** 1989; 105(11):1102-16 (52 ref.) (Fin)

[Molecular analysis of mouse major histocompatibility complex class I gene expression of tumors growing in the brain] Yamasaki T, et al. **No Shinkei Geka** 1989 Mar; 17(3):229-37 (Eng. Abstr.) (Jpn)

[Chromosomal abnormalities in cells of lymph node in two patients with IBL-like T-cell lymphoma] Sadamori N, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1109-14 (10 ref.) (Eng. Abstr.) (Jpn)

HISTORY

From mushrooms to molecular biology. 100 years of skin tumours with particular reference to cutaneous lymphoma. Smith NP. **Br J Dermatol** 1988 Oct;119(4):487-94

IMMUNOLOGY

Peripheral T-cell lymphomas. Immunologic and enzyme histochemical analysis of 15 cases. Yoshida H, et al. **Acta Pathol Jpn** 1989 Jan;39(1):55-65

B lymphoma cells process and present their endogenous IG: implications for network theory. Bogen B, et al. **Adv Exp Med Biol** 1988;237:877-82

Monocytoid B-cell lymphoma with bone marrow and peripheral blood involvement at presentation. Carbone A, et al. **Am J Clin Pathol** 1989 Aug;92(2):228-36 (37 ref.)

Aberrant expression of T cell and B cell markers in myelocyte/monocyte/histiocyte-derived lymphoma and leukemia cells. Is the infrequent expression of T/B cell markers sufficient to establish a lymphoid origin for Hodgkin's Reed-Sternberg cells? Hsu SM, et al. **Am J Pathol** 1989 Jan;134(1):203-12

The aberrancy of immunophenotype and immunoglobulin status as indicators of prognosis in B cell diffuse large cell lymphoma. Spier CM, et al. **Am J Pathol** 1988 Oct; 133(1):118-26

Analysis of a murine B cell lymphoma, CH44, with an associated non-neoplastic T cell population. I. Proliferation of normal T lymphocytes is induced by a secreted product of the malignant B cells. Willoughby PB, et al. **Am J Pathol** 1988 Dec;133(3):507-15

CD5 positive B lymphocytes: a link between autoimmunity and B-cell oncogenesis. Bataille R, et al. **Anticancer Res** 1988 Jul-Aug;8(4):707-10 (43 ref.)

Monoclonal antibodies IPO-3 and IPO-10 against human B cell differentiation antigens. Pinchouk VG, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1377-80

Induction of proliferation and blast transformation by interferon in human malignant and non-malignant lymph node B cells. Ostlund L, et al. **Blood** 1989 Jun;73(8):2171-81

Thromboses during cytotoxic chemotherapy [letter] Milne A, et al. **BMJ** 1988 Sep 3;297(6648):624

T-cell receptor antibodies in the immunohistochemical studies of normal and malignant lymphoid cells. Chan WC, et al. **Cancer** 1988 Nov 15;62(10):2118-24

B-cell lymphoma marking only with anti-epithelial membrane antigen. Mark AS, et al. **Cancer** 1989 Jun 1; 63(11):2152-5

Modification of tumor cells by a low dose of Newcastle disease virus. II. Augmented tumor-specific T cell response as a result of CD4+ and CD8+ immune T cell cooperation. Schild H, et al. **Cancer Immunol Immunother** 1989;28(1):22-8

Antitumor activity of murine neutrophils demonstrated by cytometric analysis. Ackermann MF, et al. **Cancer Res** 1989 Feb 1;49(3):528-32

Two new monoclonal antibodies, EPB-1 and EPB-2, reactive with human lymphoma. Pawlak-Byczkowska EJ, et al. **Cancer Res** 1989 Aug 15;49(16):4568-77

Endocytosis and degradation of monoclonal antibodies targeting human B-cell malignancies. Press OW, et al. **Cancer Res** 1989 Sep 1;49(17):4906-12

T-helper-cell-specific monoclonal antibody inhibits growth of B-cell lymphomas in syngeneic SJL/J mice. Alisauskas RM, et al. **Cell Immunol** 1989 Apr 1;119(2):286-303

Detection of a Thy-1 precursor in human T lymphoma cell lines. Chao CC, et al. **Cell Immunol** 1989 May;120(2):430-8

Enhanced H-2 expression and T-cell-dependent rejection after intracerebral transplantation of the murine lymphoma YAC-1. Yamasaki T, et al. **Cell Immunol** 1989 May; 120(2):387-95

Isolation and immunological characterization of a group of new B lymphomas from CBA mice. Udhayakumar V, et al. **Clin Immunol Immunopathol** 1989 May;51(2):240-51

Erythrophagocytic T-cell lymphoma: immunologic and cytogenetic evidence for a clonal malignancy of the CD8-positive T-cell subclass. Lawrence HJ, et al. **Dis Markers** 1988 Jul-Sep;6(3):141-50

Rearrangement of TCR gamma chain gene involving JP1 suggests early thymocyte origin of peripheral T-cell lymphoma. Leber BF, et al. **Eur J Haematol** 1989 Apr; 42(4):368-74

Ki-1 (CD30) antigen is released by Ki-1-positive tumor cells in vitro and in vivo. I. Partial characterization of soluble Ki-1 antigen and detection of the antigen in cell culture supernatants and in serum by an enzyme-linked immunosorbent assay. Josimovic-Alasevic O, et al. **Eur J Immunol** 1989 Jan;19(1):157-62

T cell malignancy in Richter's syndrome presenting as hyper IgM. Induction and characterization of a novel CD3+, CD4-, CD8+ T cell subset from phytohemagglutinin-stimulated patient's CD3+, CD4+, CD8+ leukemic T cells. Raziuddin S, et al. **Eur J Immunol** 1989 Mar;19(3):469-74

Long-term persistence of human anti-murine antibody responses following radioimmunodetection and radioimmunotherapy of cutaneous T-cell lymphoma patients using 131I-T101. Goldman-Leikin RE, et al. **Exp Hematol** 1988 Nov;16(10):861-4

Myelomonocytic-associated antigens in a case of genotypically, phenotypically and functionally B-cell lymphoma. Grignani F, et al. **Haematologica (Pavia)** 1988 May-Jun;73(3):173-7

Lymphoma phenotyping in formalin-fixed and paraffin wax-embedded tissues: II. Profiles of reactivity in the various tumour types. Norton AJ, et al. **Histopathology** 1989 Jun;14(6):557-79 (200 ref.)

Lymphoma phenotyping in formalin-fixed and paraffin wax-embedded tissues. I. Range of antibodies and staining patterns. Norton AJ, et al. **Histopathology** 1989 May; 14(5):437-46 (0 ref.)

A retrospective study of follicular lymphomas. West KP, et al. **Histopathology** 1989 Jun;14(6):629-36

A case of a Ki-1 large cell anaplastic lymphoma with ultrastructural features. Burns BF, et al. **Hum Pathol** 1989 Apr;20(4):393-6

A cytotoxic monoclonal antibody that binds to human B cells, T cells, monocytes, and a subset of lymphomas. Samoszuk MK, et al. **Hybridoma** 1989 Aug;8(4):427-34

Neutrophil function tests in disseminated malignancies. Gomathinayagam D, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):397-400

Immunophenotypic similarities of mediastinal clear-cell lymphoma and sinusoidal (monocytoid) B cells. Möller P, et al. **Int J Cancer** 1989 Jan 15;43(1):10-6

Components of immune function studied with lymphoid tumors. Lynch RG. **Int Rev Immunol** 1986 Jul; 1(3-4):335-48 (84 ref.)

Prevention of metastatic spread by postoperative immunotherapy with virally modified autologous tumor cells. III. Postoperative activation of tumor-specific CTLP from mice with metastases requires stimulation with the specific antigen plus additional signals. von Hoegen P, et al. **Invasion Metastasis** 1989;9(2):117-33

Killing of virus-induced thymic lymphoma cells obtained from primary and early transfers by activated macrophages. Boteach D, et al. **Isr J Med Sci** 1988 Sep-Oct; 24(9-10):518-21

Ki-1-positive cutaneous large cell lymphoma of T cell type: report of an indolent subtype. Lindholm JS, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):342-8 (26 ref.)

Kinetics and characterization of intercellular adhesion molecule-1 (ICAM-1) expression on keratinocytes in various inflammatory skin lesions and malignant cutaneous lymphomas. Vejlsgaard GL, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):782-90

The role of caldesmon in the regulation of receptor capping in mouse T-lymphoma cell. Walker G, et al. **J Biol Chem** 1989 Jan 5;264(1):496-500

T-cell lymphomas: immunologic, histologic, clinical, and therapeutic analysis of 63 cases. Coiffier B, et al. **J Clin Oncol** 1988 Oct;6(10):1584-9

Aberrant phenotypes in peripheral T cell lymphomas. Hastrup N, et al. **J Clin Pathol** 1989 Apr;42(4):398-402

Peripheral T cell lymphoma: value of bone marrow trephine immunophenotyping. White DM, et al. **J Clin Pathol** 1989 Apr;42(4):403-8

Natural resistance against lymphoma grafts conveyed by H-2Dd transgene to C57BL mice. Höglund P, et al. **J Exp Med** 1988 Oct 1;168(4):1469-74

Relationship of variable region genes expressed by a human B cell lymphoma secreting pathologic anti-Pr2 erythrocyte autoantibodies. Silberstein LE, et al. **J Exp Med** 1989 May 1;169(5):1631-43

Mixed isotype class II antigen expression. A novel class II molecule is expressed on a murine B cell lymphoma. Spencer JS, et al. **J Exp Med** 1989 Mar 1;169(3):625-40

Primary virus-induced lymphomas evade T cell immunity by failure to express viral antigens. Vasmel WL, et al. **J Exp Med** 1989 Apr 1;169(4):1233-54

Detection of intracytoplasmic immunoglobulin by flow cytometry in B-cell malignancies. Bardales RH, et al. **J Histochem Cytochem** 1989 Jan;37(1):83-9

Molecular analysis of H-2-deficient lymphoma lines. Distinct defects in biosynthesis and association of MHC class I heavy chains and beta 2-microglobulin observed in cells with increased sensitivity to NK cell lysis. Ljunggren HG, et al. **J Immunol** 1989 Apr 15;142(8):2911-7

Idiotype variants emerging after anti-idiotype monoclonal antibody therapy of a murine B cell lymphoma. Weiner GJ, et al. **J Immunol** 1989 Jan 1;142(1):343-51

Induced differentiation of a B cell lymphoma with known antigen specificity. LoCascio NJ, et al. **J Mol Cell Immunol** 1984;1(3):177-90

Lymphoma models for B cell activation and tolerance. V. Anti-Ig mediated growth inhibition is reversed by phorbol myristate acetate but does not involve changes in cytosolic free calcium. Scott DW, et al. **J Mol Cell Immunol** 1987; 3(2):109-20

Molecules recognized by anti-idiotypic monoclonal antibodies to the B cell lymphoma, BCL1. Tamura GS, et al. **J Mol Cell Immunol** 1987;3(4):243-53

Human herpesvirus-6 (HHV-6, HBLV) in sarcoidosis and lymphoproliferative disorders. Biberfeld P, et al. **J Virol Methods** 1988 Sep;21(1-4):49-59

The clinical relevance of lymphocyte marker studies in the diagnosis of lymphoma. Harris NL. **Kelo J Med** 1989 Jun; 38(2):152-66 (30 ref.)

Is coeliac disease a premalignant state? [letter] Moroz C, et al. **Lancet** 1988 Oct 15;2(8616):903-4

Performance of multistep immunochemical reactions by counterflow isotachophoresis on nitrocellulose membranes--I. Immunoblotting. Abelev GI, et al. **Mol Immunol** 1989 Jan;26(1):41-7

Immunoglobulin (Fc) receptors on murine T- and B-lymphocytes: investigations using tumor models. Lynch RG, et al. **Mol Immunol** 1988 Nov;25(11):1151-7 (35 ref.)

Signalling through sIgA on a novel murine B lymphoma. Monroe JG, et al. **Mol Immunol** 1989 Jul;26(7):593-9

Shared idiotypes expressed by human B-cell lymphomas. Miller RA, et al. **N Engl J Med** 1989 Sep 28;321(13):851-7

Central nervous system lymphomas and immunodeficiency. Maiuri F. **Neurol Res** 1989 Mar;11(1):2-5 (48 ref.)

Immunological response in the mouse brain: I. Transplantation immunity to mouse lymphoma graft. Keyaki A, et al. **Nippon Geka Hokan** 1988 May 1; 57(3):191-201

Biochemical classification of circulating immune complexes in human malignant melanoma and hematologic neoplasms. Queen WD, et al. **Oncology** 1989;46(1):14-25

Interleukin receptors in lymphoid lesions. Relevance to diagnosis, biology, and therapy. Strauchen JA. **Pathol Annu** 1989;24 Pt 2:149-65 (34 ref.)

B-lymphoma cells process and present their endogenous immunoglobulin to major histocompatibility

complex-restricted T cells. Weiss S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):282-6

Plasticity of T-cell function. II. Transient induction of CD8 (Ly-2) expression in cloned EL-4 lymphoma cells depending on cell density. Melchers I, et al. **Scand J Immunol** 1989 Jul;30(1):99-109

Activation of an excluded immunoglobulin allele in a human B lymphoma cell line. Berinstein N, et al. **Science** 1989 Apr 21;244(4902):337-9

Cutaneous T cell lymphoma with suppressor phenotype and function. Salmeron G, et al. **South Med J** 1989 Apr; 82(4):520-4

Cholera toxin induced tolerance to murine allografts. Tsugita M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):276-7

Colloidal gold as immunocytochemical marker for the detection of leukocyte cell surface antigens. Its potential for the study of leukemia and lymphoma. De Waele M. **Verh K Acad Geneeskd Belg** 1988;50(6):561-74 (41 ref.)

[IgD paraproteinemia in immunocytoma] Papakonstantinou G, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1029-33 (Eng. Abstr.) **(Ger)**

[EB virus-associated tumors-opportunistic B cell lymphoma, Burkitt's lymphoma, nasopharyngeal carcinoma] Mizuno F. **Nippon Rinsho** 1989 Feb;47(2):481-6 **(Jpn)**

METABOLISM

Cellular retinol-binding protein in mucosa, in benign and malignant non-squamous cell tumours of the head and neck. Wahlberg P, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):313-20

Childhood lymphoma. A clinicopathological and immunohistological study of 58 cases. Mizugami T, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1149-66

Expression of growth factor/receptor genes in postthymic T cell malignancies. Su IJ, et al. **Am J Pathol** 1989 Sep; 135(3):439-45

Prolactin differentially affects bacterial toxin-induced ADP-ribosylation of Nb2 lymphoma cell membrane proteins. Barkey RJ, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):776-82

The interleukin-1 receptor in Raji human B-lymphoma cells. Molecular characterization and evidence for receptor-mediated activation of gene expression. Horuk R, et al. **Biochem J** 1989 Jun 15;260(3):657-63

Interaction of beta-adrenergic receptors with the inhibitory guanine nucleotide-binding protein of adenylate cyclase in membranes prepared from cyc- S49 lymphoma cells. Abramson SN, et al. **Biochem Pharmacol** 1988 Nov 15; 37(22):4289-97

Lymphoma-vesicle interactions: vesicle adsorption, membrane fragmentation, and intermembrane protein transfer [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4645-55

Production of growth factors by malignant lymphoma cell lines. Tweeddale M, et al. **Blood** 1989 Aug 1;74(2):572-8

A possible autocrine role for interleukin-6 in two lymphoma cell lines. Yee C, et al. **Blood** 1989 Aug 1;74(2):798-804

Melphalan transport into human malignant lymphoid cells differs from the murine equivalent in vitro. Millar BC, et al. **Br J Cancer** 1989 May;59(5):710-3

Nucleoside transport in acute leukaemia and lymphoma: close relation to proliferative rate. Wiley JS, et al. **Br J Haematol** 1989 Feb;71(2):203-7

Metabolism in hematologic malignancy. Humberstone DA, et al. **Cancer** 1988 Oct 15;62(8):1619-24

Production of cytokines after lipopolysaccharide stimulation of murine spleen cells during lymphoma development in AKR mice. Vaillier D, et al. **Cancer Immunol Immunother** 1989;29(1):35-42

Nucleoside uptake and membrane fluidity studies on N-trifluoroacetyladriamycin-14-O-hemiadipate-treated human leukemia and lymphoma cells. Lameh J, et al. **Cancer Res** 1989 Jun 1;49(11):2905-8

The potential use of microcalorimetry in predictive tests of the action of antineoplastic drugs on mammalian cells. Schön A, et al. **Cytobios** 1988;55(220):33-9

Primary lymphoma of the liver showing immunohistochemical evidence of T-cell origin. Successful management by right trisegmentectomy. Andreola S, et al. **Dig Dis Sci** 1988 Dec;33(12):1632-6

Properties of vasoactive-intestinal-peptide receptors and beta-adrenoceptors in the murine radiation leukemia-virus-induced lymphoma cell line BL/VL3. Abello J, et al. **Eur J Biochem** 1989 Aug 1;183(2):263-7

Homologous and heterologous regulation of the helodermin/vasoactive-intestinal-peptide response in the murine radiation leukemia-virus-induced lymphoma cell line BL/VL3. Abello J, et al. **Eur J Biochem** 1989 Aug 1;183(2):269-74

Alteration of beta-2-microglobulin level in malignant lymphoproliferative diseases after a high dose of alpha-2-recombinant interferon. Opat P, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1295-8

Immunoreactive cytokeratins in plasmacytomas. Wotherspoon AC, et al. **Histopathology** 1989 Feb; 14(2):141-50

Phorbol myristate acetate induces IL-2 secretion by HUT 78 cells by a mechanism independent of protein kinase C translocation. Kelleher D, et al. **Immunology** 1988 Nov; 65(3):351-5

Incorporation of monoclonal antibodies into cells by osmotic permeabilization. Effect on cellular metabolism. Chakrabarti R, et al. **J Biol Chem** 1989 May 15; 264(14):8214-21

Kinetic pulse-chase labeling study of the glucocorticoid receptor in mouse lymphoma cells. Effect of glucocorticoid and antiglucocorticoid hormones on intracellular receptor half-life. Distelhorst CW, et al. **J Biol Chem** 1989 Aug 5;264(22):13080-5

Accumulation of cAMP and calcium in S49 mouse lymphoma cells following hyposmotic swelling. Watson PA. **J Biol Chem** 1989 Sep 5;264(25):14735-40

Production of multiple lymphokines by the A20.1 B cell lymphoma after cross-linking of membrane Ig by immobilized anti-Ig. Justement LB, et al. **J Immunol** 1989 Aug 1;143(3):881-9

Constitutive production of lymphokines by cloned murine B-cell lymphomas--CH12 B lymphoma produces interleukin-4. O'Garra A, et al. **J Mol Cell Immunol** 1989; 4(3):149-58; discussion 158-9

Identification of components of differentiation-inducing activity of human T-cell lymphoma cells by induction of differentiation in human myeloid leukemia cells. Hemmi H, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):952-6

The bcl-2 candidate proto-oncogene product is a 24-kilodalton integral-membrane protein highly expressed in lymphoid cell lines and lymphomas carrying the t(14;18) translocation. Chen-Levy Z, et al. **Mol Cell Biol** 1989 Feb; 9(2):701-10

Energy supply of the mitotic cell cycle and the Na+/H+-antiport in ascites tumors. Kazmin SD, et al. **Neoplasma** 1989;36(2):139-47

Selective binding of leukemia and lymphoma cell lines to lectins. Sugii S. **Nippon Juigaku Zasshi** 1989 Feb; 51(1):231-3

Cancer antigens are expressed in a carcinogen-transformed Bloom syndrome B-lymphoblastoid cell line. Shiraishi Y, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8211-5

Forskolin binding to intact S49 lymphoma cells. Barber R. **Second Messengers Phosphoproteins** 1988;12(1):59-71

[Lectin receptors--histochemical markers in the study of leukemias and lymphomas] Gluzman DF, et al. **Eksp Onkol** 1988;10(6):9-16 (52 ref.) (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

EBV-DNA in lymphoid tissue [letter] Chappuis BB, et al. **Am J Clin Pathol** 1989 Aug;92(2):255-6

Molecular characterization of a transforming retrovirus involved in pre-B cell lymphomas. Langdon WY, et al. **Curr Top Microbiol Immunol** 1988;141:27-30

Absence of antibodies to HTLV-I/II in French patients with hematological malignancies [letter] Agius G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):815-6

Replication of latent Epstein-Barr virus genomes in normal and malignant lymphoid cells. Adams A, et al. **Int J Cancer** 1989 Sep 15;44(3):560-4

Measurement of binding specificity between T cell lymphomas and murine leukemia viruses. O'Neill HC, et al. **J Immunol Methods** 1989 Aug 15;122(1):79-90

Identification of the SL3-3 virus enhancer core as a T-lymphoma cell-specific element. Boral AL, et al. **J Virol** 1989 Jan;63(1):76-84

Distinct segments within the enhancer region collaborate to specify the type of leukemia induced by nondefective Friend and Moloney viruses. Golemis E, et al. **J Virol** 1989 Jan;63(1):328-37

Mouse mammary tumor virus proviruses in T-cell lymphomas lack a negative regulatory element in the long terminal repeat. Hsu CL, et al. **J Virol** 1988 Dec; 62(12):4644-52

Absence of mouse mammary tumor virus proviral amplification in chemically induced lymphomas of RF/J mice. Kraft R, et al. **J Virol** 1989 Jul;63(7):3200-4

Identification of a common helper provirus integration site in Abelson murine leukemia virus-induced lymphoma DNA. Poirier Y, et al. **J Virol** 1988 Nov;62(11):3985-92

Human B-lymphotropic virus (human herpesvirus-6). Ablashi DV, et al. **J Virol Methods** 1988 Sep;21(1-4):29-48 (24 ref.)

Epstein-Barr virus associated B-cell lymphomas in AIDS and after organ transplantation [letter] Thomas JA, et al. **Lancet** 1989 May 13;1(8646):1075-6

Detection of Epstein-Barr virus in CNS lymphomas by in-situ hybridization. Bashir RM, et al. **Neurology** 1989 Jun; 39(6):813-7

Induction of multiple independent T-cell lymphomas in rats inoculated with MOloney murine leukemia virus. Bellacosa A, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4269-72

MORTALITY

Re: "Increased mortality in amateur radio operators due to lymphatic and hematopoietic malignancies" [letter] Kurt TL. **Am J Epidemiol** 1988 Dec;128(6):1384-5

Prognosis of aggressive lymphomas: a study of five prognostic models with patients included in the LNH-84 regimen. Coiffier B, et al. **Blood** 1989 Aug 1;74(2):558-64

PATHOLOGY

Gastric pseudolymphoma. Vuylsteke P, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):326-8

The role of fine needle aspiration cytology in the diagnosis of lymphoma. Carter TR, et al. **Acta Cytol** 1988 Nov-Dec; 32(6):848-53 (17 ref.)

Intraocular lymphoma. Cytologic diagnosis and the role of immunologic markers. Ljung BM, et al. **Acta Cytol** 1988 Nov-Dec;32(6):840-7

Fine needle aspiration cytology and immunocytochemistry of large cell lymphomas expressing the Ki-1 antigen. Tani E, et al. **Acta Cytol** 1989 May-Jun;33(3):359-62

Multiple myeloma--transformation to high-grade malignant lymphoma. Wahlin A, et al. **Acta Oncol** 1988;27(4):411-3

Primary adrenal lymphoma. Report of an autopsy case. Abe J, et al. **Acta Pathol Jpn** 1988 Jul;38(7):929-39

Primary gastric malignant lymphoma. A morphological and immunohistochemical study of 38 cases. Ishido T, et al. **Acta Pathol Jpn** 1989 Apr;39(4):229-34

Pseudolymphoma of the thyroid. Mizukami Y, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1329-36

Peripheral T-cell lymphoma with helper T-cell phenotype (Leu 3a+ Leu 8-). Segami H, et al. **Acta Pathol Jpn** 1988 May;38(5):591-603

Morphological correlates between bone marrow findings in patients with lymphocytic ML (CCL and immunocytoma) and clinical staging. Mačák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:211-22

Changes in metastasis formation and distinct cell surface molecules in adhesion variants of a metastatic murine tumor. Altevogt P, et al. **Adv Exp Med Biol** 1988;233:253-8

Primary cardiac B-cell lymphoma. Proctor MS, et al. **Am Heart J** 1989 Jul;118(1):179-81

Warthin's tumor with malignant lymphoma. DNA analysis of paraffin-embedded tissue. Bunker ML, et al. **Am J Clin Pathol** 1989 Mar;91(3):341-4

Immunohistochemical analysis of peripheral T-cell lymphoma in Japanese patients. Doi S, et al. **Am J Clin Pathol** 1989 Feb;91(2):152-8

Fine-needle aspiration cytology of peripheral T-cell lymphoma. A cytologic, immunologic, and cytometric study. Katz RL, et al. **Am J Clin Pathol** 1989 Feb; 91(2):120-31

T-cell malignancy following B-cell lymphoma in remission. Shimizu K, et al. **Am J Clin Pathol** 1989 Sep;92(3):362-6

Sjögren's syndrome with specific cutaneous manifestations and multifocal clonal T-cell populations progressing to a cutaneous pleomorphic T-cell lymphoma. van der Valk PG, et al. **Am J Clin Pathol** 1989 Sep;92(3):357-61

Granulocytic sarcoma presenting as a solitary nodule of skin in a patient with Waldenstrom's macroglobulinemia. An immunohistochemical and electron-microscopic study. Choi HS, et al. **Am J Dermatopathol** 1989 Feb;11(1):51-7

Follicular lymphoid hyperplasia of the skin with high content of Ki-1 positive lymphocytes. Eckert F, et al. **Am J Dermatopathol** 1989 Aug;11(4):345-52

Elevated gastric ulcer grossly resembling primary gastric lymphoma [letter] Adachi Y, et al. **Am J Gastroenterol** 1988 Dec;83(12):1434

High-grade non-Hodgkin lymphoma relapsing as low-grade follicular lymphoma: so-called downgraded lymphoma. Kerrigan DP, et al. **Am J Hematol** 1989 Jan;30(1):36-41

Primary lymph node presentation of angiocentric lymphoma associated with features of a hemophagocytic syndrome. Kueck BD, et al. **Am J Hematol** 1989 Feb;30(2):104-11

Alterations in immunoglobulin genes reveal the origin and evolution of monotypic and bitypic B cell lymphomas. de Jong D, et al. **Am J Pathol** 1989 Jun;134(6):1233-42

Primary and secondary cutaneous Ki-1+ (CD30+) anaplastic large cell lymphomas. Morphologic, immunohistologic, and clinical-characteristics. Kaudewitz P, et al. **Am J Pathol** 1989 Aug;135(2):359-67

Response of neoplasms of B cell lineage to the proliferative effects of B cell growth factor and the phorbol ester TPA. Kinney MC, et al. **Am J Pathol** 1989 Apr;134(4):913-23

The pathology of posttransplant lymphoproliferative disorders occurring in the setting of cyclosporine A-prednisone immunosuppression. Nalesnik MA, et al. **Am J Pathol** 1988 Oct;133(1):173-92

Malignant lymphoma of the gastrointestinal tract and mesentery. A clinico-pathologic study of the significance of histologic classification. NHL Study Group of the Comprehensive Cancer Center West. van Krieken JH, et al. **Am J Pathol** 1989 Aug;135(2):281-9

Clonal rearrangements of immunoglobulin genes and progression to B cell lymphoma in cutaneous lymphoid hyperplasia. Wood GS, et al. **Am J Pathol** 1989 Jul; 135(1):13-9

Angiocentric T-cell lymphoma of the skin. An aggressive lymphoma distinct from mycosis fungoides. Chan JK, et al. **Am J Surg Pathol** 1988 Nov;12(11):861-76

A multilobular variant of hairy cell leukemia with morphologic similarities to T-cell lymphoma. Hanson CA, et al. **Am J Surg Pathol** 1989 Aug;13(8):671-9

Malignant lymphoma. A study of 75 cases presenting in soft tissue. Lanham GR, et al. **Am J Surg Pathol** 1989 Jan; 13(1):1-10

Lymphoid infiltrates of the orbit and conjunctiva. A morphologic and immunophenotypic study of 99 cases. Medeiros LJ, et al. **Am J Surg Pathol** 1989 Jun;13(6):459-71

Hypocellular paratrabecular foci of treated small cleaved cell lymphoma in bone marrow biopsies. Osborne BM, et al. **Am J Surg Pathol** 1989 May;13(5):382-8

Angioimmunoblastic lymphadenopathy--type of T-cell lymphoma with a high content of epithelioid cells. Histopathology and comparison with lymphoepithelioid cell lymphoma. Patsouris E, et al. **Am J Surg Pathol** 1989

Apr;13(4):262–75
T-cell-rich B-cell lymphoma. Scarpa A, et al. **Am J Surg Pathol** 1989 Apr;13(4):335–7
Monocytoid B-cell lymphoma [letter] Sheibani K, et al. **Am J Surg Pathol** 1989 Oct;13(10):902–4
Effects of Pasteurella haemolytica leukotoxin on cultured bovine lymphoma cells [published erratum appears in Am J Vet Res 1989 Apr;50(4):607] Clinkenbeard KD, et al. **Am J Vet Res** 1989 Feb;50(2):271–5
A boy with an anterior mediastinal mass [see comments] John RE, et al. **Anaesthesia** 1988 Oct;43(10):864–6. **Comment in: Anaesthesia** 1989 May;44(5):450–1
Cytologic and flow cytometric DNA analysis of multinucleated tumor cells and derived microcells. Rampoldi E, et al. **Anal Quant Cytol Histol** 1989 Feb; 11(1):59–66
Primary multilobated B cell lymphoma of the kidney: report of two cases. Leoncini L, et al. **Appl Pathol** 1988; 6(4):276–80
Pathologic quiz case 2. Malignant lymphoma, diffuse large-cell type. Toriumi DM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1330–1, 3
Solitary spindle cell tumor with myoid differentiation of the lymph node. Lee JY, et al. **Arch Pathol Lab Med** 1989 May;113(5):547–50
Central nervous system lymphomas. Immunohistochemical and clinicopathologic study of 26 autopsy cases. Nakhleh RE, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1050–6
The effect of cyclosporin A on the growth and prolactin binding to Nb-2 rat lymphoma cells. Varma S, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):233–9
Angiocentric immunoproliferative lesions: a clinicopathologic spectrum of post-thymic T-cell proliferations. Lipford EH Jr, et al. **Blood** 1988 Nov; 72(5):1674–81
Interleukin-6 (B-cell stimulatory factor 2)-dependent growth of a Lennert's lymphoma-derived T-cell line (KT-3). Shimizu S, et al. **Blood** 1988 Nov;72(5):1826–8
Monocytoid B-cell lymphoma: its evolution and relationship to other low-grade B-cell neoplasms. Traweek ST, et al. **Blood** 1989 Feb;73(2):573–8
Terminal transformation in B-cell chronic lymphocytic leukaemia. Galton DA. **Bone Marrow Transplant** 1989 Jan; 4 Suppl 1:156–7 (15 ref.)
Growth-promoting effect of oestriol in a lymphoma lacking oestrogen receptors. Kawatsu R, et al. **Br J Cancer** 1989 Apr;59(4):563–8
In vitro malignant progression of cells derived from Abelson murine leukaemia virus-induced thymic lymphomas. Saggioro D, et al. **Br J Cancer** 1988 Aug;58(2):152–7
Phenotypic and genotypic heterogeneity of peripheral T-cell lymphoma. Smith JL, et al. **Br J Cancer** 1988 Dec; 58(6):723–9
Malignant lymphoma presenting as initial symptom in the uterus [letter] Divers MJ. **Br J Obstet Gynaecol** 1989 May; 96(5):623–5
Peripheral T-cell lymphoma. Armitage JO, et al. **Cancer** 1989 Jan 1;63(1):158–63
Primary cardiac lymphoma. Curtsinger CR, et al. **Cancer** 1989 Jul 15;64(2):521–5
Monocytoid B-cell lymphoma. Clinicopathologic study of 21 cases of a unique type of low-grade lymphoma. Sheibani K, et al. **Cancer** 1988 Oct 15;62(8):1531–8
Correlation between tumor proliferation and serum levels of beta 2-microglobulin and thymidine kinase in malignant lymphomas. Lehtinen T. **Cancer Detect Prev** 1988; 12(1–6):125–31
Antitumor activity of quinocarmycin (KW2152) against various cultured leukemia and lymphoma cell lines in vitro. Inaba S, et al. **Cancer Res** 1988 Nov 1;48(21):6029–32
Progression of transplanted SJL/J lymphomas attributed to a single aggressive H-2Ds-negative lymphoma. Sopchak L, et al. **Cancer Res** 1989 Feb 1;49(3):665–71
A 29-year-old renal transplant patient with multiple brain lesions [clinical conference] Estes ML, et al. **Cleve Clin J Med** 1989 May;56(3):304–10
Evolution of cutaneous lymphoid hyperplasia to cutaneous T-cell lymphoma. Wantzin GL, et al. **Clin Exp Dermatol** 1988 Sep;13(5):309–13
Dual effects of pertussis toxin on in vitro invasive behavior of metastatic lymphoma variants. Verschueren H, et al. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):541–55
Primary chiasmatic lymphoma. Cantore GP, et al. **Clin Neurol Neurosurg** 1989;91(1):71–4
Non lymphoblastic T cell lymphomas with prevalent skin involvement different from mycosis fungoides or Sézary's syndrome. A retrospective study of 6 cases in Europe. Grob JJ, et al. **Dermatologica** 1988;177(2):82–97
Deoxyadenosine toxicity and cell cycle arrest in hydroxyurea-resistant S49 T-lymphoma cells. Albert DA, et al. **Exp Cell Res** 1988 Dec;179(2):417–28
Effects of silica pretreatment on allogeneic tumour growth in mice treated with lentil lectin, spleen extract or alloantisera. Hilgert I, et al. **Folia Biol (Praha)** 1988; 34(4):266–76
Vascular system of lymph nodes: vascular density of AILD and malignant lymphomas with special reference to HEV. Muramatsu T. **Fukushima J Med Sci** 1987 Jun;33(1):17–28
Gastric small lymphocytic proliferation with immunoglobulin gene rearrangement in pseudolymphoma versus lymphoma. Sigal SH, et al. **Gastroenterology** 1989 Jul;97(1):195–201 (39 ref.)
Peripheral T-cell lymphoma presenting as hemophagocytic syndrome. Chan EY, et al. **Hematol Oncol** 1989 Jul–Aug; 7(4):275–85
Richter's transformation of lymphoma complicating Gaucher's disease. Paulson JA, et al. **Hematol Pathol** 1989; 3(2):91–6
Anaplastic large cell Ki-1 lymphoma. Delineation of two morphological types. Chan JK, et al. **Histopathology** 1989 Jul;15(1):11–34
Mammary carcinoma arising in benign axillary epithelial lymph node inclusions [letter] Fechner RE. **Histopathology** 1989 Mar;14(3):328–9
T-cell lymphoma: morphology, immunophenotype and clinical features. Krajewski AS, et al. **Histopathology** 1988 Jul;13(1):19–41 (30 ref.)
Morphological and immunohistological study of testicular lymphomas. Wilkins BS, et al. **Histopathology** 1989 Aug; 15(2):147–56
A case of large intestinal malignant lymphoma. Tsuchimoto S, et al. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):545–51 (14 ref.)
Low-grade intestinal lymphoma of intraepithelial T lymphocytes with concomitant enteropathy-associated T cell lymphoma: case report suggesting a possible histogenetic relationship. Alfsen GC, et al. **Hum Pathol** 1989 Sep;20(9):909–13
Primary B cell lymphoma of the thyroid and its relationship to Hashimoto's thyroiditis. Hyjek E, et al. **Hum Pathol** 1988 Nov;19(11):1315–26
The dendritic reticulum cell pattern in B cell lymphomas of the small cleaved, mixed, and large cell types: an immunohistochemical study of 48 cases. Scoazec JY, et al. **Hum Pathol** 1989 Feb;20(2):124–31
Mantle zone lymphoma: a morphometric comparison with centrocytic and immunocytic lymphomas and reactive secondary follicles. Tosi P, et al. **Hum Pathol** 1988 Nov; 19(11):1293–300
Primary large B-cell malignant lymphoma. Kolbusz RV, et al. **IMJ** 1988 Dec;174(6):345–7
Signet ring cell lymphoma simulating liposarcoma—a case report with brief review of literature. Mathur DR, et al. **Indian J Cancer** 1988 Mar;25(1):52–5 (6 ref.)
Variations in serum alkaline DNase activity in rats during growth and treatment of tumors sensitive or resistant to therapy. Economidou-Karaoglou A, et al. **Int J Cancer** 1989 May 15;43(5):956–9
Levels of myc protein, as analyzed by flow cytometry, correlate with cell growth potential in malignant B-cell lymphomas. Holte H, et al. **Int J Cancer** 1989 Jan 15; 43(1):164–70
Malignant angioendotheliomatosis. Reclassification as an angiotropic lymphoma. Drobacheff C, et al. **Int J Dermatol** 1989 Sep;28(7):454–6
Adult T-cell leukemia/lymphoma and cutaneous T-cell lymphoma. Are they related? Yamada M, et al. **Int J Dermatol** 1989 Mar;28(2):107–13
T-cell lymphoma of palatal midline. Report of 2 cases. Nadimi H, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):377–81
Adhesive, invasive, and growth properties of selected metastatic variants of a murine large-cell lymphoma. Nicolson GL, et al. **Invasion Metastasis** 1989;9(2):102–16
Primary striated muscle lymphoma presenting in an amputation stump. Shpilberg O, et al. **Isr J Med Sci** 1989 Feb;25(2):116–7
Ofuji papuloerythroderma. Report of a case with T cell skin lymphoma and discussion of the nature of this disease. Grob JJ, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):927–31
Kaposi's varicelliform eruption in cutaneous T cell lymphoma. Masessa JM, et al. **J Am Acad Dermatol** 1989 Jul;21(1):133–5
Basal cell carcinomas and lymphoma: biologic behavior and associated factors in sixty-three patients. Parnes R, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1017–23
Involvement of LFA-1 in lymphoma invasion and metastasis demonstrated with LFA-1-deficient mutants. Roossien FF, et al. **J Cell Biol** 1989 May;108(5):1979–85
Direct comparisons of peripheral T-cell lymphoma with diffuse B-cell lymphoma of comparable histological grades—should peripheral T-cell lymphoma be considered separately? Cheng AL, et al. **J Clin Oncol** 1989 Jun; 7(6):725–31
Primary lymphoma of bone in children. Furman WL, et al. **J Clin Oncol** 1989 Sep;7(9):1275–80
Lymphomas presenting as histologically unclassified neoplasms: characteristics and response to treatment. Horning SJ, et al. **J Clin Oncol** 1989 Sep;7(9):1281–7
A new serologic staging system for large-cell lymphomas based on initial beta 2-microglobulin and lactate dehydrogenase levels. Swan F Jr, et al. **J Clin Oncol** 1989 Oct;7(10):1518–27
B-cell lymphoma. McNutt NS, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):716–20
Unexplained lymphadenopathy in family practice. An evaluation of the probability of malignant causes and the effectiveness of physicians' workup. Fijten GH, et al. **J Fam Pract** 1988 Oct;27(4):373–6
Prediction of doxorubicin resistance in vitro in myeloma, lymphoma, and breast cancer by P-glycoprotein staining. Salmon SE, et al. **J Natl Cancer Inst** 1989 May 3; 81(9):696–701
Early commitment to neoplasia in murine B- and T-cell lymphomas arising late in life. Van Houten N, et al. **J Natl Cancer Inst** 1989 Jan 4;81(1):47–54
Malignant lymphoma presenting as a midline lethal granuloma. Platt JC, et al. **J Oral Maxillofac Surg** 1989 May;47(5):511–3
Age-related changes in the morphology and immunophenotype of spontaneous lymphomas of SJL/N mice. Chow EY, et al. **J Pathol** 1988 Dec;156(4):331–9
Proliferative activity in lymphomas [editorial] Macartney JC. **J Pathol** 1988 Sep;156(1):7–8
Diagnostic fine needle core biopsy of deep lymph nodes for the diagnosis of lymphoma in patients unfit for surgery. Wotherspoon AC, et al. **J Pathol** 1989 Jun;158(2):115–21
Achalasia and lymphoma. de Caestecker JS, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):334–6
Expression of intracisternal A-type particles is increased when a B-cell lymphoma differentiates into an immunoglobulin-secreting cell. Wiest DL, et al. **J Virol** 1989 Feb;63(2):659–68
Effects of the in vivo administration of recombinant human granulocyte colony-stimulating factor following cytotoxic chemotherapy on granulocytic precursors in patients with malignant lymphoma. Ema H, et al. **Jpn J Cancer Res** 1989 Jun;80(6):577–82
A novel B cell line established from Ki-1-positive diffuse large cell lymphoma. Kamesaki H, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1193–200
Murine liver metastasis model using L5178Y-ML lymphoma and the effect of antitumor agents on the metastasis. Watanabe Y, et al. **Jpn J Cancer Res** 1988 Nov; 79(11):1208–16
B-cell lymphoma of probable thymic origin: case report. Kataoka T, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):371–8
Detection of a systemic effect of malignancy in vivo by magnetic resonance imaging. Richards MA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):557–65
Mucosal thickening adjacent to gastric malignancy: association with epidermal growth factor. Lee EY, et al. **Mod Pathol** 1989 Jul;2(4):397–402
Differentiation in vitro of a leukemia virus-induced B-cell lymphoma into macrophages. Hanecak R, et al. **Mol Cell Biol** 1989 May;9(5):2264–8
Coexistence of two malignant lymphomas in the same patient. A morphological analysis of four cases. Leahu S. **Morphol Embryol (Bucur)** 1988 Oct–Dec;34(4):249–54
T-cell lymphoma in the CNS: clinical and pathologic features. Morgello S, et al. **Neurology** 1989 Sep; 39(9):1190–6
Left precentral gyrus and Broca's aphasia: a clinicopathologic study. Mori E, et al. **Neurology** 1989 Jan;39(1):51–4
Lesions of the brain stem: assessment by magnetic resonance imaging. Byrne JV, et al. **Neuroradiology** 1989;31(2):129–33
Detection of drug resistance in human hematologic malignancy by monoclonal antibodies. Ohtsu T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1630–40
Malignant lymphoma presenting in the retroperitoneum. Ampil FL. **Oncology** 1989;46(3):198–200
Simultaneous bilateral conjunctival and orbital lymphoma presenting as a conjunctival lesion. Mamalis N, et al. **Ophthalmic Surg** 1988 Sep;19(9):662–3
Atypical lymphohistiocytic infiltrate (pseudolymphoma) of the oral cavity. Kabani S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):587–92
Evaluation of bone marrow involvement of malignant lymphoma by bone marrow aspiration and biopsy: necessity to evaluate both samples together. Im T, et al. **Osaka City Med J** 1988 Oct;34(2):147–58
Clinical study of malignant lymphoma of head and neck in the nasal cavity and Waldyer's ring. Sasaki A, et al. **Osaka City Med J** 1989 Jun;35(1):13–9
Pseudoneoplastic lesions of the lower female genital tract. Young RH, et al. **Pathol Annu** 1989;24 Pt 2:189–226 (150 ref.)
Angio-immunoblastic lymphadenopathy (AIL) or T-cell malignant lymphoma of AIL-type. A histopathological, immunohistochemical and ultrastructural study of 8 cases. Caulet S, et al. **Pathol Res Pract** 1988 Nov;183(6):724–34
What's new in the application of Southern blot analysis of malignant lymphomas? Handt S, et al. **Pathol Res Pract** 1989 Apr;184(4):455–63 (98 ref.)
Activated killer cell lymphoma: an erythrophagocytic syndrome simulating histiocytic medullary histiocytosis. Boyd AW, et al. **Pathology** 1988 Jul;20(3):265–70
Growth inhibition of human breast carcinoma and leukemia/lymphoma cell lines by recombinant interferon-beta 2. Chen L, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8037–41
Characterization of a presecretory phase in B-cell differentiation. King LB, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2814–8
Chronic cholecystitis with lymphoid hyperplasia. Albores-Saavedra J, et al. **Rev Invest Clin** 1989 Apr–Jun; 41(2):159–64
Establishment and characterization of an Epstein-Barr virus negative B-cell lymphoma cell line and successful heterotransplantation. Nozawa Y, et al. **Tohoku J Exp Med** 1988 Dec;156(4):319–30
Morphologic classification and incidence of hematopoietic neoplasms in the Sprague-Dawley rat. Frith CH. **Toxicol Pathol** 1988;16(4):451–7
Bilateral primary malignant lymphoma of the breast. A case

report. Bucciarelli E, et al. **Tumori** 1988 Oct 31; 74(5):587–91

Malignant lymphomas of the nasal cavity and paranasal sinuses. Fellbaum C, et al. **Virchows Arch [A]** 1989; 414(5):399–405

[Midline malignant reticulosis (MMR) and peripheral T-cell lymphoma—a clinicopathologic study of 78 cases] Li JX. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):373–5 (Eng. Abstr.) **(Chi)**

[Clinical and pathologic study of lymphoid lesion in orbits] Huang QA. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec; 17(4):257–9 (Eng. Abstr.) **(Chi)**

[Lymphomatoid papulosis: a report of two cases] Wang NL. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):254–6 (Eng. Abstr.) **(Chi)**

[Giant cell anaplastic ki-1-positive malignant lymphoma. A recently characterized type of lymphoma] May O, et al. **Ugeskr Laeger** 1988 Sep 26;150(39):2322–4 (Eng. Abstr.) **(Dan)**

[Intravascular malignant lymphoma (proliferative systemic angioendotheliomatosis)] Haneke E, et al. **Ann Dermatol Venereol** 1988;115(11):1221–3 **(Fre)**

[Malignant lymphoma of mucosa-associated lymphoid tissue (letter)] Diebold J. **Ann Pathol** 1988;8(4–5):340 **(Fre)**

[Primary lymphoma of the heart. Report of a case with immunohistochemical study] Molinie V, et al. **Ann Pathol** 1989;9(3):219–21 (Eng. Abstr.) **(Fre)**

[Malignant lymphoma and lymphoid leukemia induced in sheep by a bovine leukemia virus: a model of B-lymphocyte malignant hemopathy] Parodi AL. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):895–905 (Eng. Abstr.) **(Fre)**

[T lymphoma of the nasopharynx, a rare entity. Apropos of a case] Canioni D, et al. **Pathol Biol (Paris)** 1989 Apr; 37(4):254–8 (33 ref.) (Eng. Abstr.) **(Fre)**

[Malignant midline granuloma and T-cell lymphoma. Apropos of a case] Delmas M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):223–7 (Eng. Abstr.) **(Fre)**

[Is Stewart's malignant midline granuloma a peripheral T-cell lymphoma? Apropos of 5 cases] Dubois A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):151–5 (Eng. Abstr.) **(Fre)**

[Primary malignant lymphoma of bone. Apropos of a case] Ben Rejeb A, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):561–4 (16 ref.) (Eng. Abstr.) **(Fre)**

[Second tumors in hemoblastosis and malignant lymphoma] Raderecht C, et al. **Folia Haematol (Leipz)** 1989;116(1):81–5 **(Ger)**

[Carcinoma spinocellulare and cutaneous T-cell lymphomas] Brünngger A, et al. **Hautarzt** 1989 Apr;40(4):203–7 (Eng. Abstr.) **(Ger)**

[Cutaneous B cell lymphoma in chronic Borrelia burgdorferi infection. Report of 2 cases and a review of the literature] Garbe C, et al. **Hautarzt** 1988 Nov;39(11):717–26 (61 ref.) (Eng. Abstr.) **(Ger)**

[IgM kappa immunocytoma in IgM-kappa monoclonal gammopathy] Gloor M, et al. **Hautarzt** 1988 Jul; 39(7):467–70 (Eng. Abstr.) **(Ger)**

[Morphological equivalents of differentiation status in epithelial tumors and lymphomas] Mattfeldt T, et al. **Verh Dtsch Ges Pathol** 1988;72:343–8 (Eng. Abstr.) **(Ger)**

[Malignant and benign lymphomas: histologic classification and immunomorphologic studies. Results of 838 cases] Radaszkiewicz T. **Wien Klin Wochenschr** 1980 Dec 5; 92(23):819–33 (Eng. Abstr.) **(Ger)**

[Gastrointestinal lymphomas] Möller P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:115–9 (34 ref.) **(Ger)**

[Lymphoproliferative lung lesions (pseudolymphoma—malignant lymphoma] Brittig F, et al. **Orv Hetil** 1989 Feb 12;130(7):341–2, 345–7 (Eng. Abstr.) **(Hun)**

[Diffuse intestinal malignant lymphoma] Kónya L, et al. **Orv Hetil** 1989 Jan 29;130(5):235–8 (Eng. Abstr.) **(Hun)**

[Cytodiagnosis of the lymph nodes] Fontana S. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:19–26 (8 ref.) **(Ita)**

[A possible visceralization in a case of cutaneous T cell lymphoma under treatment with recombinant interferon alfa 2 (letter)] Tulli A, et al. **G Ital Dermatol Venereol** 1988 May;123(5):262 **(Ita)**

[Primary lymphoma of the thyroid gland] Nicolosi A, et al. **Minerva Chir** 1989 Mar 31;44(6):1051–5 (7 ref.) (Eng. Abstr.) **(Ita)**

[A carcinoma of the right breast arising after a mastectomy in primary malignant lymphoma of the left breast] Kobayashi R, et al. **Gan No Rinsho** 1989 Aug;35(9):1077–80 (Eng. Abstr.) **(Jpn)**

[A case of coexistent adenocarcinoma and primary malignant lymphoma of the stomach] Kojima H, et al. **Gan No Rinsho** 1989 Feb;35(3):411–6 (Eng. Abstr.) **(Jpn)**

[Malignant lymphoma of the thyroid gland] Maniwa N, et al. **Gan No Rinsho** 1988 Oct;34(12):1654–8 (Eng. Abstr.) **(Jpn)**

[A clinicopathologic study of primary malignant lymphoma of the thyroid with a report of six cases] Mitsunaga M, et al. **Gan No Rinsho** 1988 Oct;34(12):1699–704 (Eng. Abstr.) **(Jpn)**

[An autopsy study of immunoblastic lymphadenopathy (IBL)-like T-cell lymphoma in a patient previously treated with chemotherapy in colon cancer] Tsuji M, et al. **Gan No Rinsho** 1989 Jan;35(2):323–7 (Eng. Abstr.) **(Jpn)**

[Detection of multidrug resistant phenotype in leukemia and lymphoma by monoclonal antibodies] Shimoyama M, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2863–70 (Eng. Abstr.) **(Jpn)**

[The immunohistological study of the lymphoid malignancy using cell surface or differentiating markers and cell proliferating nuclear marker] Kajiwara M. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):938–45 (Eng. Abstr.) **(Jpn)**

[Ultrasonically guided splenic biopsy in patients with malignant lymphoma] Suzuki T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):982–7 (Eng. Abstr.) **(Jpn)**

[Pulmonary psuedolymphoma combined with malignant lymphoma of the parotid gland] Hashimoto A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr;26(4):421–5 (Eng. Abstr.) **(Jpn)**

[A case of pseudolymphoma of the lung and submandibular gland] Oshita F, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):48–53 **(Jpn)**

[Aggressive natural killer cell leukemia/lymphoma—possible existence of a new clinical entity originating from the third lineage of lymphoid cells] Imamura N, et al. **Rinsho Ketsueki** 1989 Feb;30(2):193–201 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Flow cytometric analysis of malignant cells in lymphocytic leukemias and lymphomas by monoclonal antibodies] Imamura N, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1227–36 (Eng. Abstr.) **(Jpn)**

[Development of extra nodal lymphoma] Mikata A, et al. **Rinsho Ketsueki** 1988 Nov;29(11):1973–9 **(Jpn)**

[IBL-like T cell lymphoma associated with early gastric cancer: a case report] Seki Y, et al. **Rinsho Ketsueki** 1989 Jan;30(1):111–5 (Eng. Abstr.) **(Jpn)**

[Clinical analyses on 10 patients with follicular lymphoma] Shimizu K, et al. **Rinsho Ketsueki** 1989 Apr;30(4):448–51 (Eng. Abstr.) **(Jpn)**

[A case of neoplastic angioendotheliosis with B cell lymphoma] Nakamura M, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1290–7 (Eng. Abstr.) **(Jpn)**

[Malignant lymphoma of the testis] Jarczok K, et al. **Pol Tyg Lek** 1988 May 30;43(22):723–4 (Eng. Abstr.) **(Pol)**

[Poorly differentiated and undifferentiated neoplasms of the thyroid gland. Clinico-pathologic, immunocytochemical and ultrastructural study] Sambade C, et al. **Acta Med Port** 1988 Jul–Dec;1(4–6):251–9 (Eng. Abstr.) **(Por)**

[Tumor of the penis: primary clinical manifestation of a lymphoma] Moreno Avilés J, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):488–90 (Eng. Abstr.) **(Spa)**

[Adult T-cell lymphoblastic lymphoma associated with quiescent multiple myeloma] Obeso Fernández G, et al. **Rev Clin Esp** 1989 Apr;184(7):367–70 (Eng. Abstr.) **(Spa)**

[Lymphoma of the cecum] Esquius Soriguera J, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):289–92 (16 ref.) (Eng. Abstr.) **(Spa)**

[Gastric lymphoma-pseudolymphoma] Ruiz-Cabello JM, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):623–4 (Eng. Abstr.) **(Spa)**

[Study and characterization of lipid factors that inhibit cellular proliferation in MCG3 rat T lymphoma] Rueda R, et al. **Rev Esp Oncol** 1985;32(4):617–25 (Eng. Abstr.) **(Spa)**

[Studies on lymphomas. 1. Consistency of the histopathologic picture] Báez Villaseñor J. **Rev Invest Clin** 1967 Apr–Jun; 19(2):137–47 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Experimental metastasis. Dissemination and growth of lymphoma cells in mice. Gjedde SB. **Dan Med Bull** 1988 Aug;35(4):365–79 (256 ref.)

Host endocrine responses during tumor growth. Besedovsky H, et al. **Prog Clin Biol Res** 1989;288:203–13

PREVENTION & CONTROL

Inhibition of Moloney murine lymphoma and sarcoma growth in vivo by dietary retinoids. Dillehay DL, et al. **Cancer Res** 1989 Jan 1;49(1):44–50

Tumor necrosis factor and interferon gamma inhibit the development of radiation-induced thymic lymphomas in C57BL/Ka mice. Boniver J, et al. **Leukemia** 1989 Aug; 3(8):611–3

Prevention of T-cell lymphoma in AKR/J mice. Peled A, et al. **Leukemia** 1988 Dec;2(12 Suppl):125S–131S

PSYCHOLOGY

Psychological issues in patients with hematological malignancies. Lesko LM, et al. **Recent Results Cancer Res** 1988;108:243–70 (53 ref.)

[Psychopathologic aspects of hematologic neoplasms] Blanco González AL, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Nov–Dec;16(6):375–84 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Computed tomographic features of primary brain lymphoma. Barsky MF, et al. **Can Assoc Radiol J** 1989 Apr;40(2):80–3

Computed tomography of gastric lymphoma. Tiu CM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):463–8

CT findings in visceral leishmaniasis mimicking lymphoma. Cohen D, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):325–7

'Disappearing foot disease': an unusual presentation of primary lymphoma of bone. Dunn NA, et al. **J R Soc Med** 1989 May;82(5):302–3

Primary malignant lymphoma of the brain—clinical and pathological investigations. Kitagawa Y, et al. **Jpn J Med** 1989 Jan–Feb;28(1):2–7

Sites of origin of primary intracerebral malignant lymphoma. Shibata S. **Neurosurgery** 1989 Jul;25(1):14–9

Primary B-cell lymphoma of the CNS in an infant. Egelhoff JC, et al. **Pediatr Radiol** 1989;19(3):204–5

Case 2. Primary malignant lymphoma of the heart. **Radiographics** 1989 Jan;9(1):90–2

Varied appearance of AIDS-related lymphoma in the chest. Sider L, et al. **Radiology** 1989 Jun;171(3):629–32

Angiotropic large cell lymphoma presenting as interstitial lung disease. Tan TB, et al. **Thorax** 1988 Jul;43(7):578–9

[Rare manifestation and unusual course of lymphoplasmocytic immunocytoma] Frahm R, et al. **ROFO** 1989 Jan;150(1):100–1 **(Ger)**

[Spontaneous regression of intracranial malignant lymphoma. Case report] Kojo N, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):498–503 (34 ref.) (Eng. Abstr.) **(Jpn)**

[CT findings of primary and secondary malignant lymphoma of the brain] Ohno K, et al. **Rinsho Hoshasen** 1989 Mar; 34(3):317–22 (Eng. Abstr.) **(Jpn)**

[Computerized tomography in diseases of the retroperitoneal lymph nodes] Bem Z, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan–Feb;52(1):11–4 **(Pol)**

RADIONUCLIDE IMAGING

Mechanism of 201Tl uptake in tumours. Schweil AM, et al. **Eur J Nucl Med** 1989;15(7):376–9

Bone marrow investigation with technetium-99m microcolloid and magnetic resonance imaging in patients with malignant myelolympho-proliferative diseases. Widding A, et al. **Eur J Nucl Med** 1989;15(5):230–8

Tumor imaging of Dalton's lymphoma using antibody-desferal-Ga-67 complex. Udayachander M, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):731–6

Residual mass and gallium scanning [letter; comment] Joshua DE, et al. **J Clin Oncol** 1989 Jan;7(1):144–5. **Comment on:** J Clin Oncol 1988 Jun;6(6):940–6

Intracardiac malignant lymphoma detected by gallium-67 citrate and thallium-201 chloride. Hamada S, et al. **J Nucl Med** 1988 Nov;29(11):1868–70

In vivo tracing of indium-111 oxine-labeled human peripheral blood mononuclear cells in patients with lymphatic malignancies. Müller C, et al. **J Nucl Med** 1989 Jun;30(6):1005–11

Radioimmunoimaging for diagnosis of bone marrow involvement in breast cancer and malignant lymphoma. Reske SN, et al. **Lancet** 1989 Feb 11;1(8633):299–301

A case of primary malignant lymphoma of the brain with high uptake of 123I-IMP. Ohkawa S, et al. **Neuroradiology** 1989;31(3):270–2

Uptake of gallium in the mediastinum. Chandramouly BS, et al. **Semin Nucl Med** 1989 Jul;19(3):247–9

[Bone marrow and bone scintigraphy in the examination of patients with malignant lymphoma] Jánoskúti L, et al. **Orv Hetil** 1988 Oct 16;129(42):2247–50 (Eng. Abstr.) **(Hun)**

RADIOTHERAPY

Primary central nervous system lymphoma in AIDS. Results of radiation therapy. Formenti SC, et al. **Cancer** 1989 Mar 15;63(6):1101–7

Lymphoma of uterine cervix. Khoury GG, et al. **Eur J Surg Oncol** 1989 Feb;15(1):65–7 (17 ref.)

Orbital and conjunctival lymphoma treatment and prognosis. Bessell EM, et al. **Radiother Oncol** 1988 Dec;13(4):237–44

Primary malignant lymphomas of the central nervous system: radiotherapy results in 12 cases. Suh CO, et al. **Yonsei Med J** 1989;30(1):54–64

[Digital subtraction angiography (i.v. DSA) in the planning of infradiaphragmatic irradiation of malignant lymphoma] Sciuk J, et al. **Radiologe** 1989 Feb;29(2):85–8 (Eng. Abstr.) **(Ger)**

[Thyroid disorders after radiation of lymphoma] Angel M. **Med Clin (Barc)** 1989 Apr 1;92(12):457–9 (26 ref.) **(Spa)**

SECONDARY

Fine needle aspiration cytodiagnosis of nasopharyngeal carcinoma in cervical lymph nodes. A study of 40 cases. Chan MK, et al. **Acta Cytol** 1989 May–Jun;33(3):344–50

Purification of two glycoproteins expressing beta 1–6 branched Asn-linked oligosaccharides from metastatic tumour cells. Laferte S, et al. **Biochem J** 1989 Apr 15; 259(2):569–76

Treatment of extraneural metastatic medulloblastoma with a combination of cyclophosphamide, adriamycin, and vincristine. Chamberlain MC, et al. **Neurosurgery** 1988 Oct; 23(4):476–9

Pleomorphic adenoma with lymph-node metastases report of two cases. Collina G, et al. **Pathol Res Pract** 1989 Feb;

184(2):188–93 (12 ref.)
[Scintigraphic search for metastases in patients with neoplasms of the head and neck] Braunels J, et al. HNO 1988 Nov;36(11):445–51 (Eng. Abstr.) (Ger)
[A case of secondary malignant lymphoma of the urinary bladder] Miyake O, et al. Hinyokika Kiyo 1988 May; 34(5):879–82 (Eng. Abstr.) (Jpn)

SURGERY

Surgical aspects of lymphoma. Edwards MJ, et al. Adv Surg 1989;22:225–50 (44 ref.)
Away with leniency toward gastric pseudolymphoma [letter] Sternberg A, et al. Arch Surg 1989 Jun;124(6):751–2
Bone marrow transplantation in the treatment of patients with lymphoma. Armitage JO. Blood 1989 May 15;73(7):1749–58 (103 ref.)
Engraftment in 86 with patients lymphoid malignancy after autologous marrow transplantation. Hill RS, et al. Bone Marrow Transplant 1989 Jan;4(1):69–74
Effect of HLA compatibility on engraftment of bone marrow transplants in patients with leukemia or lymphoma. Anasetti C, et al. N Engl J Med 1989 Jan 26;320(4):197–204
Emergency surgery for primary lymphoma of the thyroid. Albu E, et al. Otolaryngol Head Neck Surg 1989 Apr; 100(4):324–6 (14 ref.)
Acute illnesses necessitating urgent abdominal surgery in neutropenic cancer patients: description of 14 cases and review of the literature. Glenn J, et al. Surgery 1989 Jun; 105(6):778–89 (34 ref.)
The role of surgery in the management of thyroid lymphoma. Rosen IB, et al. Surgery 1988 Dec;104(6):1095–9
[Diagnosis and surgical therapy of primary and secondary lymphomas of the stomach] Strohmeyer T, et al. Med Klin 1988 Jun 17;83(13–14):429–33 (Eng. Abstr.) (Ger)
[Granular cell tumor of the orbit] Kocks W, et al. Neurochirurgia (Stuttg) 1988 Nov;31(6):213–5 (Eng. Abstr.) (Ger)
[Surgery of lymphoma] Bolognese A, et al. Medicina (Firenze) 1988 Jul–Sep;8(3):269–76 (58 ref.) (Eng. Abstr.) (Ita)
[A case of pseudolymphoma of the lung with cough and fever] Kimura S, et al. Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jan;27(1):92–7 (Eng. Abstr.) (Jpn)
[A case of primary lymphoma of the brain] Baniukiewicz E, et al. Neurol Neurochir Pol 1988 Jul–Aug;22(4):348–51 (Eng. Abstr.) (Pol)
[Malignant gastric lymphomas] Beláček J, et al. Rozhl Chir 1988 Jul;67(7):461–3 (Eng. Abstr.) (Slo)
[Gastric lymphomas. Our cases] Martínez Martínez J, et al. Rev Esp Enferm Apar Dig 1989 Feb;75(2):212–3 (Spa)

THERAPY

Postoperative activation of tumor specific T cells by immunization with virus-modified tumor cells and effects on metastasis. Schirrmacher V, et al. Adv Exp Med Biol 1988;233:91–6
Autologous bone marrow transplantation. Santos GW, et al. Annu Rev Med 1989;40:99–112 (49 ref.)
The role of autologous bone marrow transplantstion in the treatment of malignant disease. Goldstone AH, et al. Blood Rev 1987 Sep;1(3):193–200 (60 ref.)
Marrow transplantation for malignant lymphoma. Appelbaum FR. Bone Marrow Transplant 1987 Oct; 2(3):227–31 (25 ref.)
Intensive chemoradiotherapy and autologous bone marrow transplantation for resistant lymphoma [letter] Da WM. Bone Marrow Transplant 1987 Jun;2(1):112–3
Mediastinal large cell lymphoma. An uncommon subset of adult lymphoma curable with combined modality therapy. Jacobson JO, et al. Cancer 1988 Nov 1;62(9):1893–8
Long-term endocrine toxicity of myeloablative treatment followed by autologous bone marrow/blood derived stem cell transplantation in patients with malignant lymphohematopoietic disorders. Keilholz U, et al. Cancer 1989 Aug 1;64(3):641–5
Leukaemia and lymphoma treatment with autologous bone marrow transplantation: preclinical studies. Janossy G, et al. Cancer Detect Prev 1988;12(1–6):597–604
Autologous bone marrow transplantation for patients with advanced lymphomas: improvement of a promising investigational technique [editorial] Mauch P. Cancer Invest 1988;6(4):461–3
The role of high-dose therapy and autologous bone marrow reinfusion in the treatment of malignant lymphomas. Williams SF, et al. Cancer Invest 1988;6(4):427–37 (65 ref.)
Enhanced in vivo therapeutic response to interferon in mice with an in vitro interferon-resistant B-cell lymphoma. Reid TR, et al. Cancer Res 1989 Aug 1;49(15):4163–9
Leukemia and lymphoma. Freireich EJ. Chemioterapia 1987 Jun;6(2 Suppl):677–9 (3 ref.)
Peripheral blood stem cells collected before and after leukapheresis in the very early remission phase of hematopoietic malignancies. Vannier JP, et al. Eur J Haematol 1989 May;42(5):481–6
A phase Ia clinical trial of LYM-1 monoclonal antibody serotherapy in patients with refractory B cell malignancies. Hu E, et al. Hematol Oncol 1989 Mar–Apr;7(2):155–66
Potentiation of adoptive immunotherapy by cis-diamminedichloroplatinum(II), but not by doxorubicin, on a disseminated mouse lymphoma and its association with reduction of tumor burden. Formelli F, et al. Int J Cancer 1988 Dec 15;42(6):952–7
Evaluation of four CD22 antibodies as ricin A chain–containing immunotoxins for the in vivo therapy of human B-cell leukemias and lymphomas. Shen GL, et al. Int J Cancer 1988 Nov 15;42(5):792–7
Treatment of B cell malignancies with 131I Lym-1 monoclonal antibodies. DeNardo SJ, et al. Int J Cancer Suppl 1988;3:96–101
Problems and prospects in the use of lymphoma idiotypes as therapeutic targets. Stevenson GT, et al. Int J Cancer Suppl 1988;3:9–12
Therapeutic strategies for B cell malignancies involving idiotype–anti-idiotype interactions. Stevenson FK, et al. Int Rev Immunol 1986 Jul;1(3–4):303–33 (70 ref.)
Interferon alfa-2a in the treatment of cutaneous T cell lymphoma. Olsen EA, et al. J Am Acad Dermatol 1989 Mar;20(3):395–407
Alpha-2 interferon therapy for cutaneous T cell lymphoma. Tulli A. J Am Acad Dermatol 1989 Apr;20(4):686–7
Phase II trial of outpatient interleukin-2 in malignant lymphoma, chronic lymphocytic leukemia, and selected solid tumors. Allison MA, et al. J Clin Oncol 1989 Jan; 7(1):75–80
Photopheresis therapy of cutaneous T cell lymphoma. Heald PW, et al. Keio J Med 1988 Jun;37(2):155–67
Randomized controlled trials in hematologic malignancies [editorial] Razis DV. Leuk Res 1989;13(6):429–31 (23 ref.)
Graft-versus-host disease as adoptive immunotherapy in patients with advanced hematologic neoplasms. Sullivan KM, et al. N Engl J Med 1989 Mar 30;320(13):828–34
Immunological response in the mouse brain: II. Experimental immunotherapy model against transplanted mouse lymphoma in the brain. Keyaki A, et al. Nippon Geka Hokan 1988 May 1;57(3):202–14
Clinical and biological activity of the interferons in hematologic malignancies. Gutterman JU. Prog Clin Biol Res 1989;288:337–48 (15 ref.)
Light-activated drugs. Edelson RL. Sci Am 1988 Aug; 259(2):68–75 (3 ref.)
Can bone marrow transplantation be offered to more patients in south east Scotland? Craig JI, et al. Scott Med J 1988 Oct;33(5):326–8
Recent advances in the management of hematologic malignancies. Semin Hematol 1988 Jul;25(3 Suppl 3):1–42
Marrow transplantation for hematologic malignancies: a brief review of current status and future prospects. Appelbaum FR. Semin Hematol 1988 Jul;25(3 Suppl 3):16–22 (36 ref.)
Monoclonal antibodies in the treatment of hematopoietic malignancies. Houghton A, et al. Semin Hematol 1988 Jul; 25(3 Suppl 3):23–9 (20 ref.)
Antiidiotype antibody therapy of B-cell lymphoma. Brown SL, et al. Semin Oncol 1989 Jun;16(3):199–210 (48 ref.)
[I-131-LYM-1 MoAb radioimmunotherapy and LYM-1 MoAb immunotherapy in implanted nude mice model] Chen KY. Chung Hua Chung Liu Tsa Chih 1988 Nov; 10(6):424–6 (Eng. Abstr.) (Chi)
[Current perspectives on malignant blood diseases] Elonen E. Duodecim 1989;105(11):963–7 (12 ref.) (Fin)
[The management of malignant blood diseases] Ruutu T. Duodecim 1989;105(11):971–2 (Fin)
[What other treatments resemble cytostatics and radiation for malignant blood diseases?] Soppi E. Duodecim 1989; 105(11):1148–57 (49 ref.) (Fin)
[Allogeneic and autologous bone marrow transplantation in managing malignant blood diseases] Volin L, et al. Duodecim 1989;105(11):1123–9 (13 ref.) (Fin)
[Treatment of hematologic diseases with alpha interferon] Castaigne S. Bull Cancer (Paris) 1988;75(9):859–62 (Eng. Abstr.) (Fre)
[Collection and transplantation of hematopoietic stem cells of circulating blood] Körbling M, et al. Beitr Infusionther 1988;21:322–34 (Ger)
[Bone marrow transplantation—indications and results] Holler E. Fortschr Med 1988 Nov 30;106(34):684–8 (10 ref.) (Eng. Abstr.) (Ger)
[The treatment of solid tumors with monoclonal antibodies] Dippold WG, et al. Immun Infekt 1989 Feb;17(1):26–7 (Eng. Abstr.) (Ger)
[Autologous peripheral stem cell transplantation in children] Emminger W, et al. Klin Padiatr 1989 Jul–Aug; 201(4):299–303 (Eng. Abstr.) (Ger)
[Autologous bone marrow transplantation] Martin H. Versicherungsmedizin 1988 Sep 1;40(5):131–4 (8 ref.) (Eng. Abstr.) (Ger)
[Therapeutic strategy in thyroid carcinoma] Baschieri L, et al. Clin Ter 1987 Jun 30;121(6):457–65 (Eng. Abstr.) (Ita)
[Massive therapy and transplant of autologous bone marrow in childhood lymphomas and solid tumors. State of the art and perspectives] de Terlizzi M, et al. Pediatr Med Chir 1988 Jul–Aug;10(4):359–64 (53 ref.) (Eng. Abstr.) (Ita)
[Treatment of primary gastric lymphoma and factors that influence the prognosis] Kanda H, et al. Gan No Rinsho 1988 Sep;34(11):1568–71 (Eng. Abstr.) (Jpn)
[Present status of cancer therapy in the field of dermatology] Ikeda S. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–1):978–86 (Eng. Abstr.) (Jpn)
[Sorption methods of detoxication in the combined therapy of patients with skin lymphomas] Iastrebov VV, et al. Vestn Dermatol Venerol 1988;(6):51–4 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Comparative morphometric analysis of nuclear area and shape in peripheral T-zone lymphomas and in paracortical areas of normal and reactive lymph nodes. Tosi P, et al. Anal Quant Cytol Histol 1988 Aug;10(4):285–93
Round cell neoplasms of children: value of electron microscopy in their diagnosis. Aboul Ela F, et al. Chemioterapia 1987 Jun;6(2 Suppl):738–40
The extracellular matrix in large-cell lymphomas: a histopathologic, immunohistochemical, and ultrastructural study. McCurley TL, et al. Hum Pathol 1989 Feb; 20(2):164–73
Evidence from neuron/lymphoma heterokaryons for a common trans-acting factor suppressing Thy-1 expression. Saleh M, et al. J Neuroimmunol 1989 Aug;23(3):203–14
The human androgen receptor is a 110 kDa protein. van Laar JH, et al. Mol Cell Endocrinol 1989 May;63(1–2):39–44

URINE

Multiple marker validity of urinary hexosaminidase and polyamines in haematopoietic malignancy. Venkatanarayanan S, et al. Biochem Int 1989 Feb; 18(2):301–9
Urinary excretion of glycosaminoglycans in neoplastic diseases of children [letter] Strisciuglio P, et al. Eur J Pediatr 1989 Apr;148(6):584

VETERINARY

Avian lymphoid leukosis: mechanisms of lymphomagenesis. Ewert DL, et al. Adv Vet Sci Comp Med 1988;32:37–55 (58 ref.)
Canine epidermotropic cutaneous lymphoma. Doe R, et al. Am J Dermatopathol 1988 Feb;10(1):80–6
In vitro immune monitoring of antibody response in dogs given chemoimmunotherapy for lymphoma. Jeglum KA, et al. Am J Vet Res 1989 Apr;50(4):488–92
Natural killer cell activity in untreated and treated dogs with lymphoma. Raskin RE, et al. Am J Vet Res 1989 Apr; 50(4):483–7
Feline lymphomas: immunological and cytochemical characterization. Rojko JL, et al. Cancer Res 1989 Jan 15; 49(2):345–51
Genetics of primate lymphomas in a baboon (Papio hamadryas) colony of Sukhumi, USSR. Crawford MH, et al. Genetica 1987 Aug 31;73(1–2):145–57
Malignant lymphoma in three horses with ulcerative pharyngitis. Adams R, et al. J Am Vet Med Assoc 1988 Sep 15;193(6):674–6
Orthovoltage radiotherapy of primary lymphoma of bone in a dog. Giger U, et al. J Am Vet Med Assoc 1989 Sep 1;195(5):627–30
Treatment and prognostic factors in lymphoma in cats: 103 cases (1977–1981). Mooney SC, et al. J Am Vet Med Assoc 1989 Mar 1;194(5):696–702
Malignant lymphoma with cardiac and bone involvement in a dog. Ogilvie GK, et al. J Am Vet Med Assoc 1989 Mar 15;194(6):793–6
Prevalence of leukemic blood and bone marrow in dogs with multicentric lymphoma. Raskin RE, et al. J Am Vet Med Assoc 1989 May 15;194(10):1427–9
Feline leukemia virus and feline immunodeficiency virus infections in a cat with lymphoma. Shelton GH, et al. J Am Vet Med Assoc 1989 Jan 15;194(2):249–52
Bizarre lymphoid cells in serous effusion of a dog with mediastinal lymphoma. Madewell BR, et al. J Comp Pathol 1988 Aug;99(2):229–33
Gastrointestinal lymphoma in 20 dogs. A ret ospective study. Couto CG, et al. J Vet Intern Med 1989 Apr–Jun;3(2):73–8
Half-body radiotherapy in the treatment of canine lymphoma. Laing EJ, et al. J Vet Intern Med 1989 Apr–Jun;3(2):102–8
Cutaneous lymphoma resembling mycosis fungoides in the Syrian hamster (Mesocricetus auratus). Saunders GK, et al. Lab Anim Sci 1988 Oct;38(5):616–7
Canine and feline lymphoid and myeloid tumors encountered in Tokyo. Haga T, et al. Nippon Juigaku Zasshi 1988 Jun; 50(3):809–13
Ultrastructural observation on cultured cells from swine immunoblastic sarcoma. Kadota K, et al. Nippon Juigaku Zasshi 1988 Oct;50(5):1127–30
Canine lymphoma: clinical considerations. Leifer CE, et al. Semin Vet Med Surg (Small Anim) 1986 Feb;1(1):43–50 (65 ref.)
Lymphoma in the cat: an approach to diagnosis and management. Mooney SC, et al. Semin Vet Med Surg (Small Anim) 1986 Feb;1(1):51–7
Lymph node cytology. Mills JN. Vet Clin North Am Small Anim Pract 1989 Jul; 19(4):697–717 (32 ref.)
Intestinal lymphomas in golden hamsters (Mesocricetus auratus). Jelínek F. Z Versuchstierkd 1989;32(3):123–8
Immunohistochemical localization of S-100 protein and lysozyme in canine lymph nodes and lymphomas. Fondevila D, et al. Zentralbl Veterinarmed [A] 1989 Jan; 36(1):71–7
[Malignant lymphomas of various histological types in pike from the eastern portion of the Baltic Sea] Bogovskii SP.

Eksp Onkol 1988;10(4):31-3 (Eng. Abstr.) (Rus)

LYMPHOMA, BURKITT'S see BURKITT'S LYMPHOMA

LYMPHOMA, GIANT FOLLICULAR

Premature article—follicular lymphoma [letter] Martin JM. Am J Clin Pathol 1988 Oct;90(4):519-20

[Lymphosarcoma of the shoulder] Kravtsova VN, et al. Klin Khir 1989;(5):66 (Rus)

COMPLICATIONS

Erythema nodosum as the presenting symptom of gastric centrofollicular lymphoma. Parodi A, et al. Int J Dermatol 1989 Jun;28(5):336-7

[Anatomo-clinical conference. Hôpital de la Pitié-Salpêtrière. Case n. 1—1988. Lymph nodes, spleen and hypoglycemia] Guillevin L, et al. Ann Med Interne (Paris) 1988;139(3):219-26 (Fre)

DIAGNOSIS

Detection of occult follicular lymphoma by specific DNA amplification. Stetler-Stevenson M, et al. Blood 1988 Nov; 72(5):1822-5

Polymerase chain reaction to confirm extranodal progression of follicular lymphoma [letter] Price CG, et al. Lancet 1989 May 20;1(8647):1132

GENETICS

The bcl-2 gene in primary B cell lymphoma of mucosa-associated lymphoid tissue (MALT). Pan L, et al. Am J Pathol 1989 Jul;135(1):7-11

Involvement of bcl-2 gene in Japanese follicular lymphoma. Amakawa R, et al. Blood 1989 Feb 15;73(3):787-91

Recent progress on the human bcl-2 gene involved in follicular lymphoma: characterization of the protein products. Tsujimoto Y, et al. Curr Top Microbiol Immunol 1988;141:337-40

Oncogenic potential of bcl-2 demonstrated by gene transfer. Reed JC, et al. Nature 1988 Nov 17;336(6196):259-61

Gene involvement in Japanese 14q+ marker-positive cancer. Ohno H, et al. Nippon Ketsueki Gakkai Zasshi 1988 Dec; 51(8):1522-7

PATHOLOGY

Follicular lymphoma mimicking progressive transformation of germinal centers: immunologic analysis of a case [letter] Sandhaus LM, et al. Am J Clin Pathol 1988 Oct;90(4):518-9

Hodgkins and large-cell lymphoma: a response to Dr. Whittaker [letter] Jaffe ES, et al. Am J Surg Pathol 1989 Sep;13(9):811

Progression of follicular large cell lymphoma to Burkitt's lymphoma. Sham RL, et al. Cancer 1989 Feb 15;63(4):700-2

T cells in follicular centroblastic/centrocytic (cleaved follicular centre cell) lymphomas at diagnosis, relapse and transformation. Swerdlow SH, et al. Hematol Oncol 1989 Sep-Oct;7(5):355-63

The dendritic reticulum cell pattern in B cell lymphomas of the small cleaved, mixed, and large cell types: an immunohistochemical study of 48 cases. Scoazec JY, et al. Hum Pathol 1989 Feb;20(2):124-31

The utility of Ki67 immunostaining, nuclear organizer region counting, and morphology in the assessment of follicular lymphomas. Cibull ML, et al. J Pathol 1989 Jul; 158(3):189-93

Nuclear morphology of follicular center cell-associated T-cells: an immunoultrastructural study of follicular hyperplasia and follicular center cell lymphomas. Swerdlow SH, et al. Mod Pathol 1988 Jul;1(4):268-73

[A follicular, medium-sized cell lymphoma showing minimal progress in the last 13 years—case report] Yoshikai T, et al. Gan No Rinsho 1988 Aug;34(9):1159-62 (Eng. Abstr.) (Jpn)

[Leukemic conversion of an initially untreated patient with follicular lymphoma six years after diagnosis] Kajiyama K, et al. Rinsho Ketsueki 1988 Sep;29(9):1447-53 (Eng. Abstr.) (Jpn)

[Follicular lymphoma in leukemic phase associated with chylothorax and chylous ascites] Sekine T, et al. Rinsho Ketsueki 1988 Dec;29(12):2364-8 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

Non Hodgkins lymphoma of the breast, unusual presentation: detection by 67Ga scintigraphy. Kan JW, et al. Eur J Nucl Med 1988;14(4):214-6

RADIOTHERAPY

Localized follicular lymphomas: prognosis and survival of stages I and II in a retrospective series of 103 patients. Soubeyran P, et al. Radiother Oncol 1988 Oct;13(2):91-8

SECONDARY

Paraepididymal relapse of follicular small cleaved cell lymphoma. Wishnow KI, et al. Urol Int 1989;44(1):50-2

THERAPY

Management of patients with low-grade follicular lymphoma. Cabanillas FF. Am J Clin Oncol 1989 Feb; 12(i):81-7

ULTRASTRUCTURE

Morphology and immunology of circulating cells in leukaemic phase of follicular lymphoma. Melo JV, et al. J Clin Pathol 1988 Sep;41(9):951-9

VETERINARY

Histological progression of follicular centre cell lymphomas to immunoglobulin-producing tumours in two pigs. Kadota K, et al. J Comp Pathol 1988 Aug;99(2):145-58

LYMPHOMA, HISTIOCYTIC

[Outline of proliferative disorders in the mononuclear phagocytic system—true histiocytic lymphoma] Mohri N, et al. Nippon Rinsho 1989 Mar;47(3):588-92 (Jpn)

ANALYSIS

Expression of histamine H1 receptors on cultured histiocytic lymphoma cells. Driver AG, et al. Biochem Pharmacol 1989 Sep 15;38(18):3083-91

COMPLICATIONS

Collagenous colitis and histiocytic lymphoma [letter] Edwards DB. Ann Intern Med 1989 Aug 1;111(3):260-1

Electrocardiographic pseudo-myocardial infarct pattern in malignant cardiac disease. O'Dea D, et al. Cancer 1989 Mar 1;63(5):958-62

[Two cases of Richter's syndrome] Werling K, et al. Orv Hetil 1989 Feb 12;130(7):353-5 (30 ref.) (Eng. Abstr.) (Hun)

[Acute cholecystitis in cancer patients in the postoperative period] Lebedev AM, et al. Vopr Onkol 1989;35(6):734-5 (Rus)

DIAGNOSIS

Diagnostic significance of histiocyte-related markers in malignant histiocytosis and true histiocytic lymphoma. Nemes Z, et al. Cancer 1988 Nov 1;62(9):1970-80

Primary intracerebral malignant lymphoma presenting with ophthalmological symptoms: bioptical and autoptical case study. Schober R, et al. Neurosurg Rev 1989;12(1):63-6

Primary intraocular lymphoma (ocular reticulum cell sarcoma) diagnosis and management. Char DH, et al. Ophthalmology 1988 May;95(5):625-30

Case report 487: Primary lymphoma of radius. Genez BM, et al. Skeletal Radiol 1988;17(4):306-9

[Malignant histiocytosis, true histiocytic lymphoma, acute monoblastic leukemia; forms of degeneration in the monocytoid series] Bins M, et al. Ned Tijdschr Geneeskd 1988 Aug 27;132(35):1619-22 (Eng. Abstr.) (Dut)

[Fever in peaks and painful tumor in a 24-year-old woman (clinical conference)] Castrillo JM, et al. Rev Clin Esp 1988 Sep;183(4):204-11 (Spa)

DRUG THERAPY

Evaluation of combinations of CuDIPS, Tween 80 and cyclophosphamide as therapy for reticulum cell sarcoma in SJL/J mice. Crispens CG Jr, et al. Anticancer Res 1989 Mar-Apr;9(2):357-9

Treatment of reticulum cell sarcoma in SJL/J mice with Tween 80. Crispens CG Jr, et al. Anticancer Res 1988 Nov-Dec;8(6):1341-3

Diffuse histiocytic lymphoma: the 20-year experience of an Australian teaching hospital. Burrow JN, et al. Aust N Z J Med 1988 Oct;18(6):758-63

Histiocytic lymphoma of breast responds to tamoxifen. Millis RR, et al. Br J Cancer 1988 Dec;58(6):808-9

Characterization of a novel mouse reticular cell sarcoma M5076 subline resistant to cisplatin. Ferrari A, et al. Int J Cancer 1989 Jun 15;43(6):1091-7

Dose-intensity analysis for CHOP chemotherapy in diffuse aggressive large cell lymphoma. Epelbaum R, et al. Isr J Med Sci 1988 Sep-Oct;24(9-10):533-8

Diffuse large cell non-Hodgkin's lymphoma: results of M-BACOD combination chemotherapy. Polliack A, et al. Isr J Med Sci 1988 Sep-Oct;24(9-10):619-22

Gall bladder perforation in response to chemotherapy in a patient with a histiocytic lymphoma. Schaafsma MR, et al. Neth J Med 1988 Aug;33(1-2):78-82

ENZYMOLOGY

Effect of retinoic acid on phorbol ester-stimulated differentiation and protein kinase C-dependent phosphorylation in the U937 human monoblastoid cell. Ways DK, et al. Cancer Res 1988 Oct 15;48(20):5779-87

Enhancement of interferon-induced 2-5 oligoadenylate synthetase activity by retinoic acid in human histiocytic lymphoma U937 cells and WISH cells. Ho CK, et al. Differentiation 1989 Mar;40(1):70-5

Patterns of glycosidases in the histiocytic cell line U-937. Effects of agents inducing cell differentiation. Bjare U, et al. Int J Biochem 1988;20(11):1291-8

Biochemical characterization of U937 cells resistant to L-asparaginase: the role of asparagine synthetase. Kiriyama Y, et al. Leukemia 1989 Apr;3(4):294-7

ETIOLOGY

Acute non-dilating obstructive renal failure in a patient with AIDS. Spector DA, et al. Am J Nephrol 1989;9(2):129-32

GENETICS

Immunophenotypic and gene probe analysis of a case of Richter's syndrome. Ostrowski M, et al. Am J Clin Pathol 1989 Feb;91(2):215-21

Reticulum cell sarcomas of SJL mice have rearranged immunoglobulin heavy and light chain genes. Stavnezer J, et al. Eur J Immunol 1989 Jun;19(6):1063-9

Deletion of c-ets1 and T3 gamma loci from the 11q- chromosome in the human monoblastic cell line U937. Shipley J, et al. Leuk Res 1989;13(6):445-50

IMMUNOLOGY

Growth requirements of SJL lymphomas in vitro: effect of BCGF II. Lasky JL, et al. Adv Exp Med Biol 1988; 237:145-53

Characterization and growth factor requirements of SJL lymphomas. II. Interleukin 5 dependence of the in vitro cell line, cRCS-X, and influence of other cytokines. Lasky JL, et al. Eur J Immunol 1989 Feb;19(2):365-71

Host-tumor interactions in the SJL lymphoma model. Ponzio NM, et al. Int Rev Immunol 1986 Jul;1(3-4):273-301 (113 ref.)

The SJL/J T cell response to both spontaneous and transplantable syngeneic reticulum cell sarcoma is mediated predominantly by the V beta 17a+ T cell clonotype. Katz JD, et al. J Exp Med 1988 Nov 1;168(5):1553-62

METABOLISM

Alteration of fibronectin receptors (integrins) in phorbol ester-treated human promonocytic leukemia cells. Van de Water L, et al. Cancer Res 1988 Oct 15;48(20):5730-7

Characterization and affinity cross-linking of receptors for human recombinant lymphotoxin (tumor necrosis factor-beta) on a human histiocytic lymphoma cell line, U-937. Stauber GB, et al. J Biol Chem 1989 Feb 25; 264(6):3573-6

The intracellular precursor of IL-1 beta is associated with microtubules in activated U937 cells. Baldari CT, et al. J Immunol 1989 Feb 1;142(3):785-91

Metabolism of tumor regression from angiogenesis inhibition: 31P magnetic resonance spectroscopy. Hoffer FA, et al. Magn Reson Med 1989 Aug;11(2):202-8

PATHOLOGY

Interactions of invasive cells with native and modified extracellular matrix in vitro. Bracke M, et al. Adv Exp Med Biol 1988;233:171-8

Solitary cutaneous reticulum cell tumor. Enzyme-immunohistochemical and electron-microscopic analogies with IDRC sarcoma. Miracco C, et al. Am J Dermatopathol 1988 Feb;10(1):47-53

T-cell signet-ring cell proliferation in the skin simulating true histiocytic lymphoma. van der Putte SC, et al. Am J Dermatopathol 1987 Apr;9(2):120-8

Intraocular lymphoma: immunological and cytological analysis. Char DH, et al. Br J Ophthalmol 1988 Dec; 72(12):905-11

Characterization of hamster tumors induced by simian virus 40 small t deletion mutants as true histiocytic lymphomas. Carbone M, et al. Cancer Res 1989 Mar 15;49(6):1565-71

Histiocytic malignant lymphoma arising in the midfacial soft tissues. Fletcher SM, et al. Ear Nose Throat J 1989 Mar; 68(3):245-6, 248, 250 (16 ref.)

Richter's syndrome presenting as a solitary cutaneous nodule. Novice FM, et al. Int J Dermatol 1989 Jan-Feb;28(1):36-7

The patterns of failure in patients with pathological stage I and II diffuse histiocytic lymphoma treated with radiation therapy alone. Hallahan DE, et al. Int J Radiat Oncol Biol Phys 1989 Oct;17(4):767-71

Biphasic regulation of macrophage attachment by activators of cyclic adenosine monophosphate-dependent kinase and protein kinase C. Issaad C, et al. J Cell Physiol 1989 Aug; 140(2):317-22

Combination iron depletion therapy. Taetle R, et al. J Natl Cancer Inst 1989 Aug 16;81(16):1229-35

Establishment and characterization of a human lymphoma cell line (WSU-NHL) with 14;18 translocation. Mohamed AN, et al. Leuk Res 1988;12(10):833-43

[Non-Hodgkin's lymphoma of the testis] Fornasiero E, et al. Minerva Urol Nefrol 1988 Oct-Dec;40(4):277-9 (Eng. Abstr.) (Ita)

[Richter's syndrome presenting with an abdominal mass] Yamane T, et al. Rinsho Ketsueki 1988 Aug;29(8):1263-6 (Eng. Abstr.) (Jpn)

[Dendritic cell reticulosarcoma—a case report] Frasik W, et al. Patol Pol 1988 Oct-Dec;39(4):303-6 (Eng. Abstr.) (Pol)

RADIOGRAPHY

CT of primary lymphoma of the liver. Sanders LM, et al. AJR Am J Roentgenol 1989 May;152(5):973-6

CT features of primary cerebral lymphoma in AIDS and non-AIDS patients. Poon T, et al. J Comput Assist Tomogr 1989 Jan-Feb;13(1):6-9

[Primary reticulum cell sarcoma of bone (report of 9 cases)] Lu XM. Chung Hua Fang She Hsueh Tsa Chih 1988 Oct;

22(5):294–6 (Eng. Abstr.) (Chi)

RADIONUCLIDE IMAGING

The use of radioisotope scans in the evaluation of primary lymphoma of bone. Leeson MC, et al. **Orthop Rev** 1989 Apr;18(4):410–6 (25 ref.)

RADIOTHERAPY

Primary central nervous system lymphoma: long-term survival following treatment with radiation and methotrexate. Petursson SR. **Eur J Surg Oncol** 1989 Feb; 15(1):69–72

SECONDARY

Computed tomography of posterior pararenal and properitoneal metastases. Posniak HV, et al. **Urol Radiol** 1988;10(2):75–9

THERAPY

Ten-year experience with primary ocular 'reticulum cell sarcoma' (large cell non-Hodgkin's lymphoma). Siegel MJ, et al. **Br J Ophthalmol** 1989 May;73(5):342–6

The in vivo depletion of V beta 17a+ T cells results in the inhibition of reticulum cell sarcoma growth in GJL/J mice. Evidence for the use of anticlonotypic antibody therapy in the control of malignancy. Katz JD, et al. **J Immunol** 1989 Aug 15;143(4):1387–95

Spontaneous gastroduodenal perforation in cancer patients receiving cytotoxic therapy. Ricci JL, et al. **J Surg Oncol** 1989 Aug;41(4):219–21

[Treatment results in localized forms of reticulosarcoma and Ewing's sarcoma in children] Punanov IuA, et al. **Vopr Onkol** 1989;35(5):569–73 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Unusual non-Hodgkin's lymphomas and true histiocytic lymphomas. Erlandson RA, et al. **Ultrastruct Pathol** 1989 Mar-Jun;13(2–3):249–73

LYMPHOMA, LYMPHOCYTIC

Clinicopathologic features of cutaneous squamous cell carcinomas of the head and neck in patients with chronic lymphocytic leukemia/small lymphocytic lymphoma. Frierson HF Jr, et al. **Hum Pathol** 1988 Dec; 19(12):1397–402

Lymphomas—current progress and future directions. Samuels BL, et al. **Perspect Biol Med** 1989 Summer; 32(4):513–25 (49 ref.)

ANALYSIS

Differential expression of LFA-1 molecules in non-Hodgkin's lymphoma and lymphoid leukemia. Inghirami G, et al. **Blood** 1988 Oct;72(4):1431–4

CHEMICALLY INDUCED

Increased frequency of posttransplant lymphomas in patients treated with cyclosporine, azathioprine, and prednisone. Wilkinson AH, et al. **Transplantation** 1989 Feb;47(2):293–6

CLASSIFICATION

Lymphocyte immunophenotyping of B-cell lymphomas: a flow cytometric analysis of neoplastic and nonneoplastic cells in 271 cases. de Martini RM, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):365–79

COMPLICATIONS

Resolution of pure red cell aplasia and lymphoma: response to intravenous gammaglobulin and combination chemotherapy. Vukelja SJ, et al. **Am J Hematol** 1989 Oct; 32(2):129–33 (29 ref.)

Lymphoma pancreatitis: a real entity. Kotwall CA, et al. **Can J Surg** 1989 Sep;32(5):375–7

A particular case of large granular lymphocytes lymphoma. Berceanu S, et al. **Haematologia (Budap)** 1989;22(1):43–53

Malignancy presenting as peripheral venous gangrene. Adamson AS, et al. **J R Soc Med** 1988 Oct;81(10):609–10

Malignant duodenocolic fistulas. Katras T, et al. **J Tenn Med Assoc** 1989 Mar;82(3):123–6

B-cell malignant lymphoma associated with monoclonal macroglobulinemia and cryoglobulinemia. Nozaki H, et al. **Tokai J Exp Clin Med** 1988 Dec;13(4–5):245–51

[A patient with an immunodeficiency and consecutively 3 primary malignancies] Groot-Loonen JJ, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):67–70 (Eng. Abstr.) (Dut)

[Spinal subdural hematoma as a neurologic complication of cryoglobulinemia] Teruel JL, et al. **Arch Neurobiol (Madr)** 1988 Jul-Aug;51(4):204–6 (Eng. Abstr.) (Spa)

[Lymphomatous meningitis as the beginning of diffuse well-differentiated lymphocytic lymphoma (letter)] Solá C, et al. **Rev Clin Esp** 1988 Jun;183(1):53–4 (Spa)

DIAGNOSIS

Macroglobulinaemic lymphoma presenting with perirenal masses. Lorigan JG, et al. **Br J Radiol** 1988 Nov; 61(731):1077–8

Pyoderma gangrenosum or cutaneous lymphoma: a difficult clinical diagnosis. Vose JM, et al. **Cutis** 1988 Oct; 42(4):335–7

Meningopolyradiculitis (Bannwarth syndrome) as primary manifestation of a centrocytic-centroblastic lymphoma. Wilder-Smith E, et al. **J Neurol** 1989 Mar;236(3):168–9

A different sonographic "pseudokidney" appearance detected with intestinal lymphoma: "hydronephrotic-pseudokidney". Sener RN, et al. **JCU** 1989 Mar-Apr;17(3):209–12

[Bladder lymphoma associated with papillary carcinoma] Sánchez García A, et al. **Arch Esp Urol** 1988 May; 41(4):317–8 (Eng. Abstr.) (Spa)

DRUG THERAPY

Complete remission of an AIDS-related B-cell lymphoma with one course of chemotherapy followed by zidovudine treatment [letter] van den Berg-Wolf MG, et al. **Aids** 1988 Aug;2(4):319–20

Synergistic antitumor activity with IFN and monoclonal anti-idiotype for murine B cell lymphoma. Mechanism of action. Basham TY, et al. **J Immunol** 1988 Oct 15; 141(8):2855–60

Diffuse well-differentiated lymphocytic lymphoma: chemotherapy with BCNU, cyclophosphamide, vincristine, melphalan and prednisone. Case DC Jr, et al. **Oncology** 1988;45(6):417–20

ENZYMOLOGY

Alkaline phosphatase-positive B cell lymphomas. Abe M, et al. **Eur J Haematol** 1988 Sep;41(3):223–9

ETIOLOGY

Development of donor-derived thymic lymphomas after allogeneic bone marrow transplantation in AKR/J mice. Yasumizu R, et al. **J Immunol** 1988 Sep 15;141(6):2181–6

Connubial lymphoma in a middle-aged couple. Franklin W, et al. **Practitioner** 1987 Oct 8;231(1436):1257–8

[Angioimmunologic lymphadenopathy evolving into malignant lymphoma and associated with Kaposi's sarcoma] Mader R, et al. **Minerva Med** 1988 Nov; 79(11):991–3 (Eng. Abstr.) (Ita)

GENETICS

The establishment of Epstein-Barr virus nuclear antigen-positive (SP-50B) and Epstein-Barr virus nuclear antigen-negative (SP-53) cell lines with t(11;14)(q13;q32) chromosome abnormality from an intermediate lymphocytic lymphoma. Daibata M, et al. **Cancer** 1989 Sep 15;64(6):1248–53

Philadelphia chromosome without breakpoint cluster region rearrangement in a case of Lennert's lymphoma of suppressor phenotype. Terjanian T, et al. **Hematol Oncol** 1989 May-Jun;7(3):189–94

Characterization of lymphoid tumors induced by a recombinant murine retrovirus carrying the avian v-myc oncogene. Identification of novel (B-lymphoid) tumors in the thymus. Brightman BK, et al. **J Immunol** 1988 Oct 15;141(8):2844–54

Restricted Ig variable region gene expression among Ly-1+ B cell lymphomas. Pennell CA, et al. **J Immunol** 1988 Oct 15;141(8):2788–96

Ig V region gene expression in small lymphocytic lymphoma with little or no somatic hypermutation. Pratt LF, et al. **J Immunol** 1989 Jul 15;143(2):699–705

Epstein-Barr virus gene expression in malignant lymphomas induced by experimental virus infection of cottontop tamarins. Young LS, et al. **J Virol** 1989 May;63(5):1967–74

Cytogenetic studies on rat thymic lymphomas induced by N-propyl-N-nitrosourea. Ogiu T, et al. **Leuk Res** 1988; 12(7):607–10

A novel translocation, t(9;17)(q34;q23), in aggressive childhood lymphoblastic lymphoma. Kaneko Y, et al. **Leukemia** 1988 Nov;2(11):745–8

Multiple proto-oncogene activations in avian leukosis virus-induced lymphomas: evidence for stage-specific events. Clurman BE, et al. **Mol Cell Biol** 1989 Jun; 9(6):2657–64

N-myc activation by proviral insertion in MCF 247-induced murine T-cell lymphomas. Dolcetti R, et al. **Oncogene** 1989 Aug;4(8):1009–14

IMMUNOLOGY

The BCL1 B lymphoma responds to IL-4, IL-5, and GM-CSF. O'Garra A, et al. **Cell Immunol** 1989 Oct 1; 123(1):189–200

Plasticity of T cell function. Cloned EL-4 lymphoma cells may help or suppress a primary antibody response depending on their own concentration and the assay system. Melchers I, et al. **J Immunol** 1988 Nov 1; 141(9):2873–81

[Autoimmune hemolytic anemia, complement-mediated by warm reactive antibodies, associated with lymphoma (letter)] Gallurt P, et al. **Rev Clin Esp** 1988 Nov;183(7):383 (Spa)

MICROBIOLOGY

RAV-1 insertional mutagenesis: disruption of the c-myb locus and development of avian B-cell lymphomas. Pizer E, et al. **J Virol** 1989 Apr;63(4):1630–40

Distinct helper virus requirements for Abelson murine leukemia virus-induced pre-B- and T-cell lymphomas. Poirier Y, et al. **J Virol** 1989 May;63(5):2088–98

PATHOLOGY

Primary meningeal small lymphocytic lymphoma. Nguyen D, et al. **Am J Surg Pathol** 1989 Jan;13(1):67–70

Paraimmunoblastic variant of small lymphocytic lymphoma/leukemia. Pugh WC, et al. **Am J Surg Pathol** 1988 Dec;12(12):907–17

Small lymphocytic lymphoma: a clinicopathologic analysis of 268 cases. Ben-Ezra J, et al. **Blood** 1989 Feb;73(2):579–87

Establishment of two Epstein-Barr virus negative Burkitt cell lines from a patient with AIDS and B-cell lymphoma. Ganser A, et al. **Blood** 1988 Oct;72(4):1255–60

Intermediate lymphocytic lymphoma encompassing diffuse and mantle zone pattern variants. A distinct entity among low-grade lymphomas? Carbone A, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):113–21

E-series prostaglandins are potent growth inhibitors for some B lymphomas. Phipps RP, et al. **Eur J Immunol** 1989 Jun; 19(6):995–1001

Malignant lymphomas of follicular centre cell origin in man. VII. Prognostic features in small cleaved cell lymphoma. Stein RS, et al. **Hematol Oncol** 1989 Sep-Oct;7(5):381–91

Do pathologic features predict prognosis in diffuse large B-cell lymphoma? Vago JF, et al. **Hematol Pathol** 1987; 1(4):217–25

Small lymphocytic lymphoma. Morrison WH, et al. **J Clin Oncol** 1989 May;7(5):598–606

Intravascular lymphomatosis (malignant angioendotheliomatosis). A B-cell neoplasm expressing surface homing receptors. Ferry JA, et al. **Mod Pathol** 1988 Nov;1(6):444–52

Angiocentric B-cell lymphoma of the lung in an immunocompromised boy. Drut R. **Pediatr Pathol** 1988; 8(4):395–400

[Histopathologic observation on 24 cases of T-cell lymphoma] Cao M, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):225–7 (Chi)

[Natural killer lymphocyte cutaneous lymphoma] Girardin C, et al. **Ann Dermatol Venereol** 1988;115(11):1215–7 (Fre)

[Differences in electrophoretic mobility and cytochemistry of leukemic T-cells with identical immunologic phenotype (CD1 positive)] Rychly J, et al. **Folia Haematol (Leipz)** 1988;115(6):837–45 (Eng. Abstr.) (Ger)

[Lymphocytic lymphoma, arterial hypertension and abdominal pain (clinical conference)] **Medicina (B Aires)** 1988;48(5):518–24 (Spa)

PHYSIOPATHOLOGY

Differences in activities of murine retroviral long terminal repeats in cytotoxic T lymphocytes and T-lymphoma cells. LoSardo JE, et al. **J Virol** 1989 Mar;63(3):1087–94

RADIOGRAPHY

Lymphomatous polyposis of the colon. Davis M, et al. **Gastrointest Radiol** 1989 Winter;14(1):70–2

Non-Hodgkin's lymphoma with unusual pulmonary involvement [letter] Ajmani A, et al. **J Assoc Physicians India** 1988 Jul;36(7):461–3

Post-treatment calcification of mesenteric non-Hodgkin lymphoma: CT findings. Cheng J, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):64–6

THERAPY

Treatment of B-cell lymphomas with anti-idiotype antibodies alone and in combination with alpha interferon. Brown SL, et al. **Blood** 1989 Feb 15;73(3):651–61

A case of fatal pemphigus vulgaris in association with beta interferon and interleukin-2 therapy. Ramseur WL, et al. **Cancer** 1989 May 15;63(10):2005–7

Methoxsalen and extracorporeal photoactivation in the treatment of cutaneous T-cell lymphoma [letter] Miwa LJ, et al. **DICP** 1989 Jul-Aug;23(7–8):615

Immunotherapy of established murine B cell lymphoma. Combination of idiotype immunization and cyclophosphamide. Campbell MJ, et al. **J Immunol** 1988 Nov 1;141(9):3227–33

Idiotypic vaccination as a treatment for a B cell lymphoma. George AJ, et al. **J Immunol** 1988 Sep 15;141(6):2168–74

VETERINARY

Lymphoplasmacytic lymphoma with cytoplasmic immunoglobulin-G in a pig. Nakajima H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):835–7

Spontaneous nonthymic T cell lymphomas in young Wistar rats. Hayashi S, et al. **Vet Pathol** 1989 Jul;26(4):326–32

LYMPHOMA, MEDITERRANEAN see **IMMUNOPROLIFERATIVE SMALL INTESTINAL DISEASE**

LYMPHOMA, MIXED

COMPLICATIONS

[A case of malignant lymphoma presenting with

pleuropericardial effusion] Taniguchi H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):575–6 **(Jpn)**

DIAGNOSIS

Pleural effusions and eosinophilia in a 63–year–old woman [clinical conference] Herzig G, et al. **Am J Med** 1989 Sep; 87(3):316–24

DRUG THERAPY

Dose–intensity analysis for CHOP chemotherapy in diffuse aggressive large cell lymphoma. Epelbaum R, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):533–8

GENETICS

Simultaneous presentation of T– and B–cell malignant lymphoma with bcl–2 gene involvement. Cotter FE, et al. **Blood** 1989 Apr;73(5):1387–8

Association of DNA content and proliferative activity with clinical outcome in patients with diffuse mixed cell and large cell non–Hodgkin's lymphoma. Wooldridge TN, et al. **Cancer Res** 1988 Nov 15;48(22):6608–13

Aberrant expression of the K–ras proto–oncogene in B–cell malignancies. Lee J, et al. **Hematol Pathol** 1988;2(4):229–37

PATHOLOGY

Fine–needle aspiration cytology of peripheral T–cell lymphoma. A cytologic, immunologic, and cytometric study. Katz RL, et al. **Am J Clin Pathol** 1989 Feb; 91(2):120–31

An enlarging neck mass in a 71–year–old woman [clinical conference] **Am J Med** 1989 Apr;86(4):459–64

The dendritic reticulum cell pattern in B cell lymphomas of the small cleaved, mixed, and large cell types: an immunohistochemical study of 48 cases. Scoazec JY, et al. **Hum Pathol** 1989 Feb;20(2):124–31

Polymerase chain reaction for detection of dissemination in gastric lymphoma. Cunningham D, et al. **Lancet** 1989 Apr 1;1(8640):695–7

LYMPHOMA, NON–HODGKIN'S

Non–Hodgkin's lymphoma. Skarin AT. **Adv Intern Med** 1989; 34:209–42 (114 ref.)

Primary lymphoma of the central nervous system. A report of 20 cases and a review of the literature. Grote TH, et al. **Am J Clin Oncol** 1989 Apr;12(2):93–100 (40 ref.)

Bilateral testicular and adrenal malignant lymphoma of pre B–cell type. Coventry BJ, et al. **Aust N Z J Surg** 1989 Jan;59(1):79–83

Primary non–Hodgkins lymphoma of bone (case report). Burmeister BH, et al. **Australas Radiol** 1989 May; 33(2):165–7

Childhood non–Hodgkin's lymphomas: clinical and therapeutic aspects. Vannier JP. **Biomed Pharmacother** 1988;42(4):263–9

Steroid–induced complete remission in a case of primary cerebral non–Hodgkin's lymphoma. Pohl P, et al. **Clin Neurol Neurosurg** 1989;91(3):247–50

Hodgkin's disease and non–Hodgkin's lymphomas. Fuller LM, et al. **Compr Ther** 1989 Aug;15(8):3–11 (18 ref.)

Conditions required for activation of the mouse albumin or alpha–fetoprotein gene in hybrids between mouse lymphoblastoma and rat hepatoma cells. Sellem CH, et al. **Differentiation** 1988 Nov;39(1):66–77

Lymphoma predominantly involving the pancreas. Cappell MS, et al. **Dig Dis Sci** 1989 Jun;34(6):942–7 (45 ref.)

Clinical and pathological features of non–Hodgkin's lymphoma of the tonsil. Review of the literature and report of 10 cases. Lugassy G, et al. **Isr J Med Sci** 1989 May; 25(5):251–5 (13 ref.)

Primary reticulosarcoma of bone (non–Hodgkin's lymphoma). A study of 12 cases. De Santis E, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):477–84

Clinical profile of primary gastrointestinal lymphomas. Kasthuri AS, et al. **J Assoc Physicians India** 1988 Jul; 36(7):435–7

Non–Hodgkins lymphoma of the temporal bone. Nicolaides A, et al. **J Laryngol Otol** 1988 Oct;102(10):928–31

[Clinical diagnosis and treatment of non–Hodgkin's lymphoma] Teerenhovi L. **Duodecim** 1989;105(11):1066–76 (37 ref.) **(Fin)**

[Primary lymphoma of the thyroid gland. Diagnostic and therapeutic discussion. Apropos of 4 cases] Ifrah N, et al. **Ann Med Interne (Paris)** 1988;139(5):344–8 (23 ref.) (Eng. Abstr.) **(Fre)**

[Malignant non–Hodgkin's lymphoma of the bony cavity of the face. Apropos of 17 cases] Demard F, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):191–5 (Eng. Abstr.) **(Fre)**

[Malignant non–Hodgkin's lymphoma of tracheo–bronchial sites] Roden S, et al. **Rev Pneumol Clin** 1988;44(3):132–5 (9 ref.) (Eng. Abstr.) **(Fre)**

[Malignant non–Hodgkin's lymphoma of the abdomen in children] Chaouachi B, et al. **Tunis Med** 1989 Apr; 67(4):271–7 (Eng. Abstr.) **(Fre)**

[Prognosis and therapy of malignant non–Hodgkin's lymphoma] Brockmann B, et al. **Radiobiol Radiother (Berl)** 1989;30(2):101–6 (19 ref.) (Eng. Abstr.) **(Ger)**

[Central nervous system manifestations of systemic non–Hodgkin lymphoma] Cohen O, et al. **Harefuah** 1988 Aug;115(3–4):76–9 (38 ref.) **(Heb)**

[Primary duodenal lymphoma. Communication of a case] Morozzo G, et al. **Minerva Chir** 1989 Jun 30;44(12):1701–4 (Eng. Abstr.) **(Ita)**

[Recent progress in non–Hodgkin's lymphoma study in Japan] Shimoyama M. **Gan To Kagaku Ryoho** 1988 Dec; 15(12):3169–88 (100 ref.) (Eng. Abstr.) **(Jpn)**

[Malignant tumors of the gastrointestinal tract in children] Novokreshchenov LB, et al. **Khirurgiia (Mosk)** 1988 Jul; (7):68–71 (Eng. Abstr.) **(Rus)**

[Primary tumors of the small intestine] Telia AV, et al. **Khirurgiia (Mosk)** 1989 May;(5):34–9 (Eng. Abstr.) **(Rus)**

[Sarcomas of the thyroid gland] Murav'ev GN. **Klin Med (Mosk)** 1988 Jul;66(7):28–33 (25 ref.) **(Rus)**

[Non–Hodgkin's lymphoma: review of 45 cases] Guerrero C, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:139–41 **(Spa)**

[Primary vaginal non–Hodgkin's lymphoma (letter)] García–Girón C, et al. **Med Clin (Barc)** 1989 Feb 25; 92(7):276–7 **(Spa)**

ANALYSIS

Diffuse lymphoma eventuating in nodular lymphoma: sequential immunoperoxidase study [letter] Marazuela M, et al. **Am J Clin Pathol** 1989 Apr;91(4):499–500

Surface immunoglobulin light chain restriction in B–cell non–Hodgkin's malignant lymphomas. Ratech H, et al. **Am J Clin Pathol** 1989 May;91(5):583–6

Lectin–binding pattern in human non–Hodgkin lymphoma xenografts. Kopper L, et al. **Anticancer Res** 1988 Nov–Dec; 8(6):1429–33

Flow cytometric measurements of proliferation–associated nuclear antigen p105 and DNA content in non–Hodgkin's lymphomas. Turner RR, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):907–11

Differential expression of LFA–1 molecules in non–Hodgkin's lymphoma and lymphoid leukemia. Inghirami G, et al. **Blood** 1988 Oct;72(4):1431–4

Isolation and characterization of growth factor(s) from a human B–cell lymphoma. Sahasrabuddhe CG, et al. **Blood** 1989 Apr;73(5):1149–56

Measurement of S–phase fractions in lymphoid tissue comparing fresh versus paraffin–embedded tissue and 4',6'–diamidino–2 phenylindole dihydrochloride versus propidium iodide staining. Camplejohn RS, et al. **Cytometry** 1989 Jul;10(4):410–6

IgE–producing low–grade non–Hodgkin lymphoma. Sundström C, et al. **Eur J Haematol** 1988 Oct;41(4):388–95

Flow cytometric DNA analysis of 199 histologically favourable or unfavourable non–Hodgkin lymphomas. Lehtinen T, et al. **J Pathol** 1989 Jan;157(1):27–36

Identification of EBV–DNA in tumour cells of AIDS–related lymphomas by in–situ hybridisation [letter] Hamilton–Dutoit SJ, et al. **Lancet** 1989 Mar 11; 1(8637):554–2

Functional and molecular characterization of B cell line derived interleukin–1 alpha. Vyth–Dreese FA, et al. **Leukemia** 1989 Aug;3(8):585–92

BLOOD

Nucleoli of blood monocytes in malignant lymphoma. A morphometric study. Sokol RJ. **Am J Clin Pathol** 1989 Jan;91(1):60–3

T–cell subsets in peripheral blood of patients with newly diagnosed and posttreatment Hodgkin's and non–Hodgkin's lymphomas. Analysis by monoclonal antibody staining and flow cytometry. De Angelis P, et al. **Anal Quant Cytol Histol** 1988 Aug;10(4):235–42

Granulomonopoiesis and production of granulomonopoietic regulating factors in Hodgkin's disease and non–Hodgkin's lymphomas. López–Karpovitch X, et al. **Ann N Y Acad Sci** 1989;554:241–7

Effect of phytohemagglutinin and interleukin–2 on malignant and nonmalignant B and T lymphocytes. Porwit A, et al. **Cancer Detect Prev** 1988;12(1–6):91–6

Soluble interleukin–2 receptor levels in patients with non–Hodgkin's lymphoma or with acute leukemia. Chang CS, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):79–84

Autoantibody against platelet glycoprotein IIb/IIIa in a patient with non–Hodgkin's lymphoma. Kubota T, et al. **Thromb Res** 1989 Feb 15;53(4):379–86

[Clinical study on serum copper and zinc levels and copper/zinc ratio in malignant lymphoma] Wu HY. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):335–8 (Eng. Abstr.) **(Chi)**

[Examination of platelet aggregation and ultrastructure in patients with non–Hodgkin's lymphoma] Ignatova E, et al. **Folia Haematol (Leipz)** 1988;115(4):603–8 (Eng. Abstr.) **(Ger)**

[Lipid–bound sialic acids and DNA–binding proteins of the blood serum in diseases of the blood system] Egorova VA, et al. **Lab Delo** 1988;(6):38–40 (Eng. Abstr.) **(Rus)**

[Erythroid antigens in children with hemoblastoses] Tupitsyn NN, et al. **Sov Med** 1988;(7):29–32 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Normal cerebrospinal fluid dynamics. A study with intraventricular injection of 111In–DTPA in leukemia and lymphoma without meningeal involvement. Haaxma–Reiche H, et al. **Arch Neurol** 1989 Sep;46(9):997–9

CHEMICALLY INDUCED

Malignant lymphoma in a renal transplant patient on cyclosporin A therapy. Walker RJ, et al. **Aust N Z J Med** 1989 Apr;19(2):154–5

Razoxane and T–cell lymphoma [letter] Zuiable AG, et al. **Br J Dermatol** 1989 Jul;121(1):149

Phenoxy herbicides and non–Hodgkin's lymphoma in New Zealand: frequency and duration of herbicide use [letter] Pearce N. **Br J Ind Med** 1989 Feb;46(2):143–4

Non–Hodgkin's lymphoma associated with long–term azathioprine therapy. Phillips T, et al. **Clin Exp Dermatol** 1987 Nov;12(6):444–5

Risk of non–Hodgkin's lymphoma among men occupationally exposed to organic solvents. Olsson H, et al. **Scand J Work Environ Health** 1988 Aug;14(4):246–51

CLASSIFICATION

Subclassification of follicular lymphomas by computerized image processing. Link NG, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):119–30

The Non–Hodgkin Lymphoma Pathologic Classification Project. Long–term follow–up of 1153 patients with non–Hodgkin lymphomas. Simon R, et al. **Ann Intern Med** 1988 Dec 15;109(12):939–45

Non–Hodgkin's lymphomas: recent concepts in classification and treatment. Ersbøll J, et al. **Eur J Haematol Suppl** 1988; 48:15–29 (126 ref.)

Ultrastructural morphometric study of follicular center lymphocytes: I. Nuclear characteristics and the Lukes–Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):373–91

Ultrastructural morphometric study of follicular center lymphocytes: II. Analyses of cleaved–cell populations do not support the Lukes–Collins' concept. Dardick I, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):393–404

[Updating of the Kiel classification of malignant non–Hodgkin lymphomas (editorial)] Diebold J, et al. **Ann Pathol** 1989;9(1):7–9 **(Fre)**

[Modern morphologic diagnosis of lymphoma (editorial)] Reinholt FP. **Tidsskr Nor Laegeforen** 1989 Aug 20; 109(23):2283 **(Nor)**

COMPLICATIONS

Non–Hodgkin's lymphoma in a neonate with Down's syndrome. Case report and literature review. Lorenzana AN, et al. **Am J Pediatr Hematol Oncol** 1989 Summer; 11(2):186–90 (46 ref.)

Hodgkin's disease and malignant lymphoma in acquired immunodeficiency syndrome [letter] de Mascarel A, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):328

Human immunodeficiency virus–associated large–cell immunoblastic lymphoma presenting as a perianal abscess. Mehta K, et al. **Arch Pathol Lab Med** 1989 May; 113(5):531–3

Early leukemic recurrence of non–Hodgkin lymphoma after high–dose anti–neoplastic therapy with autologous marrow rescue. Vaughan WP, et al. **Bone Marrow Transplant** 1987 Apr;1(4):373–8

Brawny cutaneous induration and granulomatous panniculitis in large cell non–Hodgkin's (T suppressor/cytotoxic cell) lymphoma. Ashworth J, et al. **Br J Dermatol** 1989 Apr; 120(4):563–9

A T–cell lymphoma of suppressor phenotype arising in a patient with severe aplastic anaemia. Mehta AB, et al. **Br J Haematol** 1989 Jun;72(2):287–9

An unusual cause of joint swelling in rheumatoid arthritis. Findeisen JM, et al. **Br J Rheumatol** 1989 Feb;28(1):62–4

Extranodal renal non–Hodgkin's lymphoma and severe hypercalcaemia. Chan AW, et al. **Clin Lab Haematol** 1988; 10(4):475–9

Spontaneous (pathological) rupture of the spleen in non–Hodgkin's lymphoma. Morgan MS, et al. **Clin Lab Haematol** 1989;11(2):153–6

Central nervous system involvement in non–Hodgkin's lymphoma (excluding Burkitt's lymphoma) in Ugandan Africans. Katongole–Mbidde E, et al. **East Afr Med J** 1988 Dec;65(12):838–46

Unilateral exophthalmos through non–Hodgkinian malignant lymphoma. Marinescu I, et al. **Endocrinologie** 1989 Jan–Mar;27(1):49–52

Lymphoma of the breast with cryoglobulinemia [letter] Testa D, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):114–5

Serial study of C–reactive protein for the diagnosis of bacterial and fungal infections in neutropenic patients with hematologic malignancies. Venditti M, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):285–91

Primary lymphomatous stricture of ileum. Khope S, et al. **Indian Pediatr** 1988 Mar;25(3):294–6

Simultaneous occurrence of a chronic myeloid leukemia and a malignant T–cell lymphoma. Ramji S, et al. **Indian Pediatr** 1988 Jun;25(6):566–8

Opportunistic malignancies and the acquired immunodeficiency syndrome. Mueller N, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:159–71

Pain referred to teeth as the sole discomfort in undiagnosed mediastinal lymphoma: report of case. Kant KS. **J Am Dent Assoc** 1989 May;118(5):587–8

Non–Hodgkin's lymphoma in AIDS. A case report.

Subramanian S, et al. **J Assoc Physicians India** 1989 Mar; 37(3):230–1

Abdominal lymphoma and intestinal perforation [letter] Rivera–Luna R, et al. **J Clin Oncol** 1989 Feb;7(2):285–6

Non–Hodgkin's lymphoma and Hodgkin's lymphoma in the same patient. Flanagan NG, et al. **J Clin Pathol** 1989 Apr; 42(4):440–1

Peripheral T–cell lymphoma with bilateral submandibular lymphadenopathy. Ozaki M. **J Oral Maxillofac Surg** 1989 Apr;47(4):417–21

AIDS–associated non–Hodgkin's lymphoma in San Francisco. Kaplan LD, et al. **JAMA** 1989 Feb 3; 261(5):719–24

Disseminated cryptococcosis in a patient with malignant lymphoma. Finke R, et al. **Mycoses** 1988;Suppl 1:102–8

Trichosporon beigelii infection in an immunocompromised host. Payne AL, et al. **Mycoses** 1989 Apr;32(4):183–6

Arteriotracheal fistula in patients treated for lymphoma. Dickman PS, et al. **Pediatr Pathol** 1989;9(3):329–36

AIDS–associated lymphoma of the brain in a child [letter] Cocchi P, et al. **Pediatrics** 1988 Oct;82(4):678–9

Non–Hodgkin's lymphoma presenting as 'chronic active toxoplasmosis'. Dudley NJ, et al. **Postgrad Med J** 1988 Nov;64(757):883–5

Bacteremia and candidemia in hematological malignancies: clinical findings. Hovgaard D, et al. **Scand J Infect Dis** 1988;20(5):495–501

Relationship of fibrinogen–bound sialic acid and liver disease in patients with lymphoma. Farias C, et al. **Thromb Res** 1988 Aug 1;51(3):325–9

Central nervous system involvement in non–Hodgkin's lymphoma. Kutluk MT, et al. **Turk J Pediatr** 1988 Jan–Mar; 30(1):25–33

Heterogeneous malignant non Hodgkin's lymphomas as a causative disorder in lethal midline granuloma. Laeng RH, et al. **Virchows Arch [A]** 1989;415(3):265–73

[Neurologic complications in malignant lymphoma] Nedelcheva E, et al. **Vutr Boles** 1988;27(4):58–61 (Eng. Abstr.) **(Bul)**

[AIDS and non–Hodgkin lymphoma, an insidious association] Haeck J, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3; 132(36):1669–71 (Eng. Abstr.) **(Dut)**

[Acute pulmonary edema following airway obstruction and cardiac tamponade related to mediastinal tumor] Rubio Pascual P, et al. **Ann Fr Anesth Reanim** 1988;7(6):506–8 (Eng. Abstr.) **(Fre)**

[A rare etiology of anasarca in Africa: gastric lymphoma] Klotz F, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):241–2 (Eng. Abstr.) **(Fre)**

[Hemorrhagic iritis. Apropos of a case of malignant non–Hodgkin's lymphoma] Kunnert C, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):399–403 (25 ref.) (Eng. Abstr.) **(Fre)**

[Malignant intraocular non–Hodgkin's lymphoma] Castier Ph, et al. **J Fr Ophtalmol** 1988;11(8–9):551–9 (43 ref.) (Eng. Abstr.) **(Fre)**

[Diabetes insipidus secondary to non–Hodgkin lymphoma (letter)] Fernández–Rodríguez R, et al. **Presse Med** 1989 Mar 18;18(11):584 **(Fre)**

[Chronic interstitial pneumonia and Gougerot–Sjögren syndrome in a 53–year–old woman (clinical conference)] Lacronique J, et al. **Rev Pneumol Clin** 1988;44(4):208–13 **(Fre)**

[Necrotic oophoritis due to cytomegalovirus] Ribaux C, et al. **Schweiz Med Wochenschr** 1988 Feb 4;118(5):160–3 (Eng. Abstr.) **(Fre)**

[Prevention of cytomegalic inclusion disease in leukemia patients with a cytomegalovirus hyperimmune globulin preparation] Gerein V, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):322–9 (Eng. Abstr.) **(Ger)**

[Gas gangrene and Salmonella abscess as a rare infectious complication in leukemia] Daus H, et al. **Med Klin** 1989 Jan 15;84(1):60–3 **(Ger)**

[Malignant lymphomas in HIV–infected patients] Adam H, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1651–6 (Eng. Abstr.) **(Ger)**

[Pemphigus and neoplasia. 2 new clinical cases and a review of the literature] Calzavara PG, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):25–9 (24 ref.) (Eng. Abstr.) **(Ita)**

[Clinical experience of chemotherapy with cefmetazole for severe infections accompanying malignant hematological disorders] Fujii S, et al. **Jpn J Antibiot** 1989 Mar; 42(3):573–8 (Eng. Abstr.) **(Jpn)**

[A case of Raeder's syndrome caused by metastatic malignant lymphoma] Nogaki H, et al. **No To Shinkei** 1989 Mar; 41(3):259–62 (14 ref.) (Eng. Abstr.) **(Jpn)**

[von Recklinghausen's disease associated with malignant lymphoma] Matsuzaki M, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):382–6 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Malignant lymphoma of the central nervous system in a boy with immotile cilia syndrome] Nukina S, et al. **Rinsho Ketsueki** 1989 Apr;30(4):568–72 (Eng. Abstr.) **(Jpn)**

[Double neoplasms of non–Hodgkin's lymphoma and thyroid cancer associated with sicca syndrome: a case report] Saito M, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1460–4 (Eng. Abstr.) **(Jpn)**

[Hemorrhagic syndrome associated with a factor VIII:C inhibitor in a patient with lymphoma] Casas E, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):23–5 (Eng. Abstr.) **(Spa)**

[Neutropenia and immunoblastic lymphoma (letter)] Franco R, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):476–7 **(Spa)**

[Systemic lupus erythematosus and non–Hodgkin's lymphoma] García Díaz JD, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):37–8 **(Spa)**

[Coexistence of more than one disease in HIV positive patients with lymphoma (letter)] Lozano M, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):319 **(Spa)**

[A 39–year–old woman, with bilateral ovarian neoplasms, admitted for treatment of hyperglycemia (clinical conference)] Santabárbara P, et al. **Med Clin (Barc)** 1988 Jun 25;91(5):184–94 **(Spa)**

[Cardiac disease caused by non–Hodgkin's lymphoma in a heroin addict with AIDS (letter)] Galofré J, et al. **Rev Clin Esp** 1989 May;184(9):498–9 **(Spa)**

[5 cases of Hodgkin's lymphoma associated with infection by the human immunodeficiency virus] Jara Sánchez C, et al. **Rev Clin Esp** 1988 Jun;183(2):78–81 (Eng. Abstr.) **(Spa)**

[Intrahepatic portal hypertension in a patient with lymphoma of long course (letter)] Pontes Navarro JC, et al. **Rev Clin Esp** 1988 Sep;183(4):220–1 **(Spa)**

[Colon–splenic fistula. Complicated by large cell non–Hodgkin's lymphoma] Barreiro F, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):271–3 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Paraffin section light–chain immunostaining of large–cell lymphocytoma. Winkelmann RK, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):356–8

Hepatic lymphoma in cyclosporine–treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501–3

Primary lymphoma of bone: the use of MRI in pretreatment evaluation. Salter M, et al. **Am J Clin Oncol** 1989 Apr; 12(2):101–5

Subcutaneous masses and adenopathy in a 77–year–old man with Sjögren's syndrome and amyloidosis [clinical conference] **Am J Med** 1989 May;86(5):585–90

Testicular involvement in young patients with non–Hodgkin's lymphoma. Haddy TB, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):224–9

Leukocyte–common antigen and vimentin are reliable adjuncts in the diagnosis of non–Hodgkin's lymphoma in fine needle aspirates. Domagala W, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):15–21

Primary non–Hodgkin's lymphoma of the esophagus. Nagrani M, et al. **Arch Intern Med** 1989 Jan;149(1):193–5 (17 ref.)

Diagnostic differentiation of chronic B–cell malignancies using monoclonal antibody L161 (CD1c). Jones RA, et al. **Br J Haematol** 1989 Jan;71(1):43–6

The value of immunocytochemical staining of lymph node aspirates in diagnostic cytology. Oertel J, et al. **Br J Haematol** 1988 Nov;70(3):307–16

Primary adrenal lymphoma. Harris GJ, et al. **Cancer** 1989 Feb 15;63(4):799–803 (10 ref.)

Utility of combining antigranulocyte with antileukocyte antibodies in differentiating Hodgkin's disease from non–Hodgkin's lymphoma. Medeiros LJ, et al. **Cancer** 1988 Dec 15;62(12):2475–81

An unusual appearance of renal lymphoma. Cadman PJ, et al. **Clin Radiol** 1988 Jul;39(4):452–3

The analysis of malignant tumours of uncertain origin with immunohistological techniques: clinical follow–up. Robinson M, et al. **Clin Radiol** 1988 Jul;39(4):432–4

Laboratory and clinical applications of monoclonal antibodies for leukemias and non–Hodgkin's lymphomas. Foon KA. **Curr Probl Cancer** 1989 Mar–Apr;13(2):57–128 (376 ref.)

Cell surface markers and cell cycle analysis of lymphomas. Braylan RC, et al. **Cytometry Suppl** 1988;3:73–7 (52 ref.)

Interleukin–2 receptor is functionally linked with in vitro activation of B cells isolated from non–Hodgkin's lymphomas. Garraud O, et al. **Diagn Clin Immunol** 1988; 5(6):417–20

Central nervous system involvement in non–Hodgkin's lymphoma. Liang RH, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):703–10

Terminal deoxynucleotidyl transferase in diagnosis of lymphomas. Rudzka E, et al. **Folia Haematol (Leipz)** 1989; 116(2):245–50

Morphological and immunohistochemical investigation of non–Hodgkin's lymphoma combined with Hodgkin's disease. Hansmann ML, et al. **Histopathology** 1989 Jul; 15(1):35–48

Bacterial endocarditis and lymphadenopathy mimicking Kawasaki disease. Cullen S, et al. **Ir Med J** 1989 Feb; 82(1):32–3

MR imaging of lymphomas: impact on therapy. Greco A, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):785–91

MR imaging of primary thyroid lymphoma. Takashima S, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):517–8

Renal sinus malignant lymphoma: a case report. Honda H, et al. **J Comput Tomogr** 1988 Jul;12(3):190–2

Non–Hodgkin's lymphoma of the uterus in a child. Egwuatu VE. **J Pediatr Surg** 1989 Feb;24(2):220–2

MRI of hepatic lymphoma. Weissleder R, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):675–81

Neuroblastoma–like epidural localization in non–Hodgkin's lymphoma. Fest T, et al. **Neuroradiology** 1988;30(6):569–70

Solitary primary lymphoma of the sciatic nerve: case report. Pillay PK, et al. **Neurosurgery** 1988 Sep;23(3):370–1

Transformed malignant lymphoma from Lennert's lesion is a CD4+ T cell lymphoma: an immunohistochemical study. Ohsaka A, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb; 52(1):63–70

Granulocytic sarcoma of the small intestine: a case report. Grange MJ, et al. **Nouv Rev Fr Hematol** 1988;30(4):251–3

Immunohistochemical characterization of a B–cell signet ring cell lymphoma. Report of a case. Uccini S, et al. **Pathol Res Pract** 1988 Aug;183(4):497–504

Human neoplasm pH and response to radiation therapy: P–31 MR spectroscopy studies in situ. Ng TC, et al. **Radiology** 1989 Mar;170(3 Pt 1):875–8

Abdominal lymphoma in AIDS: evaluation with US. Townsend RR, et al. **Radiology** 1989 Jun;171(3):719–24

Flow cytometric analysis of lymphoma and lymphoma–like disorders. Little JV, et al. **Semin Diagn Pathol** 1989 Feb; 6(1):37–54 (52 ref.)

Primary non–Hodgkin lymphoma of prostate. Kerbl K, et al. **Urology** 1988 Oct;32(4):347–9

[Primary malignant non–Hodgkin's lymphoma of the stomach] Kolarski V, et al. **Vutr Boles** 1988;27(3):107–12 (Eng. Abstr.) **(Bul)**

[Ileus symptoms due to 3 distinctively differentiated small intestine carcinomas in nontropical sprue] Grün M, et al. **Dtsch Med Wochenschr** 1989 May 5;114(18):709–11 (Eng. Abstr.) **(Ger)**

[NMR tomographic imaging of bone marrow infiltrates in malignant lymphoma] Gückel F, et al. **ROFO** 1989 Jan; 150(1):26–31 (Eng. Abstr.) **(Ger)**

[Clinical significance of the determination of lactate dehydrogenase in acute leukemia and non–Hodgkin's lymphoma] D'Angelo G, et al. **Minerva Med** 1989 Jun; 80(6):549–52 (Eng. Abstr.) **(Ita)**

[Usefulness of immunohistochemical tests in the diagnosis of lymphomas. Review of 134 cases of lymph node biopsies] Fruttero A, et al. **Pathologica** 1988 May–Jun; 80(1067):253–77 (41 ref.) (Eng. Abstr.) **(Ita)**

[Gastric lymphomas. The role of echotomography] Potente G, et al. **Radiol Med (Torino)** 1989 May;77(5):478–81 (Eng. Abstr.) **(Ita)**

[An immunohistochemical study of primary malignant lymphomas of orbital and adnexal regions] Suenaga M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1057–62 (Eng. Abstr.) **(Jpn)**

[Problem of lymphoma in children] Krzystolik Z, et al. **Klin Oczna** 1988 Jul;90(7):254–6 (Eng. Abstr.) **(Pol)**

[Serofibrinous pleurisy—malignant non–Hodgkin's lymphoma with leukemic transformation] Murgoci G. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):275–82 **(Rum)**

[Monoclonal antibodies of the ICO series] Baryshnikov AIu. **Gematol Transfuziol** 1988 Dec;33(12):15–20 (Eng. Abstr.) **(Rus)**

[Reactive lymphadenopathies and the criteria for their differential diagnosis from non–Hodgkin's lymphomas] Bychkova EN, et al. **Gematol Transfuziol** 1988 Aug; 33(8):30–4 (Eng. Abstr.) **(Rus)**

[Leukemization of hematosarcomas with primary involvement of the skin] Sigidina MIa, et al. **Ter Arkh** 1988; 60(5):53–6 (Eng. Abstr.) **(Rus)**

[Clinico–anatomic parallels in malignant non–Hodgkin's lymphomas with skin involvement] Zhuravlev AP, et al. **Vestn Dermatol Venerol** 1988;(12):20–4 (Eng. Abstr.) **(Rus)**

[Fever of unknown origin and adrenal insufficiency as presenting features of retroperitoneal lymphoma (letter)] García Díaz JD, et al. **Med Clin (Barc)** 1988 Oct 29; 91(14):559 **(Spa)**

[High–degree malignancy non–Hodgkin's lymphoma simulating a disseminated carcinoma. Presentation of 2 cases] Plaza V, et al. **Med Clin (Barc)** 1989 Mar 11; 92(9):344–6 (Eng. Abstr.) **(Spa)**

[Diagnostic usefulness of a monoclonal antibody against the common leukocyte antigen (letter)] Paterno E, et al. **Medicina (B Aires)** 1985;45(1):90–1 **(Spa)**

[A young man with pneumonia with a torpid course (clinical conference)] **Rev Clin Esp** 1989 Jun;185(2):91–6 **(Spa)**

[Abdominal non–Hodgkin's lymphoma diagnosed by laparoscopy] Martín Herrera L, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):735–6 **(Spa)**

DRUG THERAPY

Treatment of diffuse histiocytic and diffuse mixed non–Hodgkin lymphomas with cyclophosphamide, doxorubicin, vincristine and prednisone (CHOP). Cohen Y, et al. **Acta Oncol** 1988;27(5):531–5

The Murphy–Bowman protocol in the treatment of childhood non–Hodgkin's lymphoma. Armata J, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):204–8

Weekly CHOP for the treatment of advanced intermediate and high–grade non–Hodgkin's lymphoma. Shimizu K, et al. **Am J Clin Oncol** 1989 Jun;12(3):195–200

Acute tumor lysis syndrome in non–Hodgkin lymphoma induced by dexamethasone. Dhingra K, et al. **Am J Hematol** 1988 Oct;29(2):115–6

Non–Hodgkin's lymphoma in a population with or at risk for acquired immunodeficiency syndrome: indications for intensive chemotherapy. Bermudez MA, et al. **Am J Med** 1989 Jan;86(1):71–6

Age as the main prognostic factor in adult aggressive non–Hodgkin's lymphoma. Solal–Celigny P, et al.

Am J Med 1987 Dec;83(6):1075–9

Nephropathy after combination chemotherapy of lymphoma. Venkataseshan VS, et al. **APMIS Suppl** 1988;4:113–9

Hematological response to the new synthetic muramyl dipeptide derivative muroctasin after chemotherapy in patients with malignant lymphoma. A randomized crossover trial. Hiraoka A, et al. **Arzneimittelforschung** 1988 Oct;38(10):1499–501

Improved treatment results for lymphoblastic lymphoma in adolescents and adults using a doxorubicin-based (APO) protocol. Bradstock KF, et al. **Aust N Z J Med** 1988 Jun; 18(4):563–8

Recombinant human granulocyte macrophage colony stimulating factor (rhGM-CSF) following autologous marrow transplantation in man. Appelbaum FR, et al. **Behring Inst Mitt** 1988 Aug;(83):145–8

Bone involvement in young patients with non-Hodgkin's lymphoma: efficacy of chemotherapy without local radiotherapy. Haddy TB, et al. **Blood** 1988 Oct; 72(4):1141–7

Central nervous system (CNS) leukemia: the role of high dose cytarabine (HDAra-C). Morra E, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:101–3

Mitoxantrone and high-dose cytarabine as salvage therapy for refractory non-Hodgkin's lymphoma. Ho AD, et al. **Cancer** 1989 Oct 1;64(7):1388–92

Poor prognosis of mediastinal non-Hodgkin's lymphoma with an immature phenotype of CD2+, CD7 (or CD5)+, CD3-, CD4-, and CD8-. Yumura-Yagi K, et al. **Cancer** 1989 Feb 15;63(4):671–4

Childhood non-Hodgkin's lymphoma in Egypt: preliminary results of treatment with a new ifosfamide-containing regimen. Gad-el-Mawla N, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S20–3

Alternating six-drug combination chemotherapy induction for intermediate and high-grade non-Hodgkin's lymphoma. Green JA, et al. **Cancer Chemother Pharmacol** 1989;24(5):326–8

VP-16, ifosfamide, and methotrexate combination chemotherapy for aggressive non-Hodgkin's lymphomas after failure of the LNH 84 regimen. Herbrecht R, et al. **Cancer Chemother Pharmacol** 1989;24(5):338–9

Treatment of refractory and relapsed non-Hodgkin's lymphoma with ifosfamide, methotrexate and etoposide. Sangster G, et al. **Cancer Chemother Pharmacol** 1989; 23(4):263–5

Phase II study of a new alkylating agent (PTT-119) in resistant-relapsed non-Hodgkin's lymphomas. Tura S, et al. **Cancer Chemother Pharmacol** 1989;23(2):123–5

The effects of four drug regimens on sister chromatid exchange frequency in patients with lymphomas. Brown T, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):89–102

In vitro modulation of natural killer cell activity in non-Hodgkin's lymphoma patients after therapy. Mehta BA, et al. **Cancer Immunol Immunother** 1989;28(2):148–52

Preliminary results with an alternating combination in non-Hodgkin's malignant lymphomas. Greek Lymphoma Research Group. **Chemioterapia** 1987 Jun;6(2 Suppl):719–21

Treatment of resistant non-Hodgkin's lymphomas with cisplatin, etoposide, vindesine, methotrexate with leucovorin rescue. Greek Lymphoma Research Group. **Chemioterapia** 1987 Jun;6(2 Suppl):721–3

CBVPM/AVBP versus HCOMLA chemotherapy in non-Hodgkin lymphoma patients. Pawelski S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):716–9

EMOP/CA chemotherapy for the treatment of aggressive non-Hodgkin's lymphomas. Smith DB, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):991–4

Short-term intensive treatment (V.A.A.P.) of adult acute lymphoblastic leukemia and lymphoblastic lymphoma. Willemze R, et al. **Eur J Haematol** 1988 Nov;41(5):489–95

The effect of biopreparation cACPL on the proliferative activity of haemopoietic and tumour cells. Jurášková V. **Folia Biol (Praha)** 1988;34(3):192–201

Intraocular non-Hodgkin's lymphoma treated with systemic and intrathecal chemotherapy and radiotherapy. A case report and review of the literature. Rouwen AJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):355–9

CHOP versus CNOP (N = mitoxantrone) in non-Hodgkin's lymphoma: an interim report comparing efficacy and toxicity. Brusamolino E, et al. **Haematologica (Pavia)** 1988 May-Jun;73(3):217–22

Cyclophosphamide, epirubicin, vincristine and prednisone (CEOP) in the treatment of advanced stage non-Hodgkin's lymphomas with poor histology. Comella P, et al. **Haematologica (Pavia)** 1988 Nov-Dec;73(6):509–12

Accelerated increase in aortic diameter in patients treated for lymphoma. Dawer SP, et al. **Heart Vessels** 1988; 4(4):237–40

The management of early-stage aggressive non-Hodgkin's lymphoma. Horwich A, et al. **Hematol Oncol** 1988 Oct-Dec;6(4):291–8

Multicentre randomized therapeutic trial for advanced centrocytic lymphoma: anthracycline does not improve the prognosis. Meusers P, et al. **Hematol Oncol** 1989 Sep-Oct; 7(5):365–80

Severe lung toxicity with a weekly low dose chemotherapy regimen in patients with non-Hodgkin's lymphoma. Quigley M, et al. **Hematol Oncol** 1988 Oct-Dec;6(4):319–24

Vincristine infusion in advanced non Hodgkin's lymphoma. Kumar L, et al. **Indian J Cancer** 1989 Mar;26(1):14–6

Deep dermatophytosis to Trichophyton rubrum and T. verrucosum in an immunosuppressed patient. Lestringant GG, et al. **Int J Dermatol** 1988 Dec;27(10):707–9

Cisplatin, VP-16-213 and MGBG (methylglyoxal bis guanylhydrazone) combination chemotherapy in refractory lymphoma, a phase II study. Dabich L, et al. **Invest New Drugs** 1988 Sep;6(3):231–7

Mitoxantrone in combination with prednimustine in treatment of unfavorable non-Hodgkin lymphoma. Landys KE. **Invest New Drugs** 1988 Jun;6(2):105–13

Drug-resistance in multiple myeloma and non-Hodgkin's lymphoma: detection of P-glycoprotein and potential circumvention by addition of verapamil to chemotherapy. Dalton WS, et al. **J Clin Oncol** 1989 Apr;7(4):415–24

Similar efficacy of 6 and 18 months of therapy with four drugs (COMP) for localized non-Hodgkin's lymphoma of children: a report from the Childrens Cancer Study Group. Meadows AT, et al. **J Clin Oncol** 1989 Jan;7(1):92–9

The importance of age in survival of patients treated with chemotherapy for aggressive non-Hodgkin's lymphoma. Vose JM, et al. **J Clin Oncol** 1988 Dec;6(12):1838–44

Use of phosphorus-31 MR spectroscopy to monitor response to chemotherapy in non-Hodgkin lymphoma. Bryant DJ, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):770–4

Advances in the treatment of non-Hodgkin's lymphoma. Jones JM 2d. **J Med Assoc Ga** 1989 Feb;78(2):105–8

Stage IE nonHodgkin's lymphoma of the testis: a need for a brief aggressive chemotherapy. Roche H, et al. **J Urol** 1989 Mar;141(3):554–6

Intermediate-dose cytosine arabinoside in the treatment of recurrent or refractory non-Hodgkin's lymphoma. Takagi T, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):123–6

Fatal strongyloidiasis latent over 42 years in the antineoplastic chemotherapy of a case with malignant lymphoma. Suzuki T, et al. **Jpn J Med** 1989 Jan-Feb; 28(1):96–9

Recombinant human granulocyte-macrophage colony-stimulating factor plus the beam regimen instead of autologous bone marrow transplantation [letter] Fouillard L, et al. **Lancet** 1989 Jun 24;1(8652):1460

Comparison of CHOP-B vs CEOP-B in 'poor prognosis' non-Hodgkin's lymphomas. A randomized trial. De Lena M, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):163–9

Poor-risk non-lymphoblastic lymphoma of childhood: results of an intensive pilot study. Finlay JL, et al. **Med Pediatr Oncol** 1989;17(1):29–38

Treatment of refractory lymphoma with methotrexate, VM-26 (teniposide), procarbazine, and dexamethasone: Cancer and Leukemia Group B study 7902. Lachant NA, et al. **Med Pediatr Oncol** 1988;16(6):375–7

Isolation and characterization of cortisol-sensitive and -resistant P1798 mouse lymphosarcoma cell lines. Chi CW, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):167–76

Bladder cancer after chemotherapy for non-Hodgkin's lymphoma [letter] Travis LB, et al. **N Engl J Med** 1989 Aug 24;321(8):544–5

The cytotoxic effect of methotrexate as evaluated by colony-forming activity of hemopoietic and tumor cells. Jurášková V. **Neoplasma** 1988;35(5):583–9

Prednimustine treatment in malignant lymphomas. Szántó I, et al. **Oncology** 1989;46(4):205–7

Acute renal failure at onset of therapy for advanced stage Burkitt lymphoma and B cell acute lymphoblastic lymphoma. Stapleton FB, et al. **Pediatrics** 1988 Dec; 82(6):863–9

Methylprednisolone, etoposide, vindesine, and chlorambucil (PEEC) alone or alternating with CHOP as initial or salvage therapy for non-Hodgkin's lymphoma. Leonard RC, et al. **Scott Med J** 1988 Dec;33(6):360–2

European experience with ifosfamide in lymphomas. von Kalle AK, et al. **Semin Oncol** 1989 Feb;16(1 Suppl 3):73–7 (24 ref.)

Non-Hodgkin's lymphoma in the elderly: a retrospective evaluation of toxicity related to aggressive vs. conservative treatments. Tirelli U, et al. **Tumori** 1988 Aug 31;74(4):433–8

[Effect of Salvia miltiorrhiza on hyperfibrinogen in patients with malignant lymphoma] Zhang YW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):607–8, 582 (Eng. Abstr.) **(Chi)**

[A comparative trial of C-novantrone OP(CNOP) vs C-adriamycin OP(CHOP) in the treatment of stage II-IV malignant lymphoma--the preliminary report] Chuang MW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan; 41(1):51–6 (Eng. Abstr.) **(Chi)**

[Gonads and the cytostatic treatment of malignant lymphomas] Fauser BC, et al. **Ned Tijdschr Geneeskd** 1988 Aug 27;132(35):1606–9 **(Dut)**

[Large cell anaplastic lymphoma in children--clinical experiences with a newly defined histologic entity] Heitger A, et al. **Klin Padiatr** 1989 Jul-Aug;201(4):237–41 (Eng. Abstr.) **(Ger)**

[Risk-adapted therapy of highly malignant non-Hodgkin's lymphomas with COP-BLAM/IMVP-16: a prospective multicenter study] Gerhartz HH, et al. **Onkologie** 1989 Feb; 12(1):22–6 (Eng. Abstr.) **(Ger)**

[Sequential alternating chemotherapy of highly malignant non-Hodgkin's lymphomas with VIM-Bleo and CHOP. Initial results] Steinke B, et al. **Onkologie** 1989 Feb; 12(1):19–21 (Eng. Abstr.) **(Ger)**

[You make the diagnosis: methotrexate pneumonitis] Hauer C, et al. **Padiatr Padol** 1988;23(4):337–42 **(Ger)**

[Quantitative-kinetic aspects of granulocytic resistance to infection in hematologic systemic diseases with reference to antineoplastic chemotherapy] Sommer S. **Z Arztl Fortbild (Jena)** 1988;82(11):513–5 **(Ger)**

[Effective evaluation of combination chemotherapy in stage I-II of non-Hodgkin's lymphoma--a comparison of treatment with multivariate analysis] Saito Y, et al. **Gan No Rinsho** 1989 Jun;35(7):804–10 (Eng. Abstr.) **(Jpn)**

[Aclarubicin-combined combination chemotherapy in patients with refractory or relapsed non-Hodgkin's lymphoma] Sampi K, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):79–82 (Eng. Abstr.) **(Jpn)**

[Intermediate dose of Ara-C (IDAra-C) for the treatment of refractory and relapsed lymphoid malignancies] Taniguchi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1453–8 (Eng. Abstr.) **(Jpn)**

[THP-COP, BHAC-VMP alternating chemotherapy in patients with non-Hodgkin's lymphoma] Imura H, et al. **Rinsho Ketsueki** 1988 May;29(5):688–93 (Eng. Abstr.) **(Jpn)**

[Evaluation of the response of advanced diffuse large cell lymphomas (LSG classification) to weekly CHOP therapy] Shimizu K, et al. **Rinsho Ketsueki** 1989 Mar;30(3):309–15 (Eng. Abstr.) **(Jpn)**

[Studies of patients with non-Hodgkin's lymphoma unresponsive to C-MOPP] Shirakawa S, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1025–30 (Eng. Abstr.) **(Jpn)**

[Effect of combination chemotherapy with cis-dichlorodiammineplatinum on relapsed or therapy-resistant non-Hodgkin's lymphoma] Tsukasaki K, et al. **Rinsho Ketsueki** 1988 May;29(5):699–704 (Eng. Abstr.) **(Jpn)**

[A comparative study of ABEP and ACOPE in the treatment of non-Hodgkin's lymphoma CS IV] Yoshida T, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1383–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of the results of treatment of non-Hodgkin's lymphoma in children by the Wollner method] Dłużewska A, et al. **Pol Tyg Lek** 1988 Jul 11;43(28):906–9 (Eng. Abstr.) **(Pol)**

[Non-Hodgkin's lymphoma among the cases of the Institute of Pediatrics, Polish Academy of Medicine] Nowakowska J, et al. **Pol Tyg Lek** 1988 Jul 11;43(28):913–6 (Eng. Abstr.) **(Pol)**

[Screening of antineoplastic antibiotics using a rapid method of evaluating their cytostatic effect on tumor cells] Volkolupova OP, et al. **Antibiot Khimioter** 1989 Mar; 34(3):213–5 (Eng. Abstr.) **(Rus)**

[Effect of cyclophosphane on polyamine excretion in rats with Guérin's carcinoma and Pliss' lymphosarcoma] Berdinskikh NK, et al. **Eksp Onkol** 1989;11(3):69–72 (Eng. Abstr.) **(Rus)**

[A method for choosing preparations that reduce the toxicity of cytostatics in experimental chemotherapy of tumors] Zueva EP, et al. **Farmakol Toksikol** 1989 Jan-Feb; 52(1):74–7 (Eng. Abstr.) **(Rus)**

[Acyclovir in oncology practice] Voznyĭ EK, et al. **Sov Med** 1988;(6):110–2 **(Rus)**

[Treatment and prognosis of recurrences of lymphosarcoma] Abdyldaev RA, et al. **Ter Arkh** 1988;60(9):71–3 (Eng. Abstr.) **(Rus)**

[Cytosar in the treatment of hematosarcomas] Kruglova GV, et al. **Ter Arkh** 1988;60(5):47–50 **(Rus)**

[Indirect endolymphatic chemotherapy of patients with lymphoma] Kindzel'skiĭ LP, et al. **Vrach Delo** 1989 Jun; (6):64–6 (Eng. Abstr.) **(Rus)**

[Non-Hodgkin's lymphoma in children: results of treatment on the LSA2L2 protocol] Vuković I, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):289–97 (Eng. Abstr.) **(Scc)**

[Non-Hodgkin's lymphomas in childhood. Evaluation of therapeutic results according to histopathologic criteria (Catalan Interhospital Group of Pediatric Oncology)] Cubells Riero J, et al. **An Esp Pediatr** 1988 Sep;29(3):203–7 (Eng. Abstr.) **(Spa)**

[Non-Hodgkin non-Burkitt lymphomas. Study of 20 cases] García-Miguel P, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:113–5 **(Spa)**

[Non-Hodgkin's lymphoma. Results of a therapeutic protocol] Verdeguer A, et al. **An Esp Pediatr** 1988 Oct; 29 Suppl 34:130–2 **(Spa)**

[Results of the treatment of 46 non-Hodgkin's lymphomas in children] Zubeldia Sánchez J, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:133–7 **(Spa)**

[Thymostimulin as an adjuvant to antineoplastic chemotherapy. Experience with patients with myeloma and lymphoma] Cánovas Fernández A, et al. **Rev Clin Esp** 1988 Nov;183(7):340–3 (Eng. Abstr.) **(Spa)**

[Vindesine, CCNU, high-dosage ara-C, and prednisolone (VINAP regimen) in the treatment of relapsing or refractory non-Hodgkin's lymphomas] Domingo Albós A, et al. **Sangre (Barc)** 1989 Apr;34(2):107–11 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Terminal deoxynucleotidyl transferase (TdT)-positive cells in cerebrospinal fluid and development of overt CNS leukemia: a 5-year follow-up study in 113 children with a TdT-positive leukemia or non-Hodgkin's lymphoma. Hooijkaas H, et al. **Blood** 1989 Jul;74(1):416–22

Detection and characterization of reverse transcriptase activity in some human diseases. Casoli C, et al.

Bull Soc Ital Biol Sper 1988 Nov;64(11):1061–6
Heterogeneity of O6-alkylguanine-DNA alkyltransferase activity in peripheral blood lymphocytes: relationship between this activity in lymphocytes and in lymphoblastoid lines from normal controls and from patients with Hodgkin's disease or non-Hodgkin's lymphoma. Sagher D, et al. **Cancer Res** 1989 Oct 1;49(19):5339–44
Serum lactate dehydrogenase isoenzyme pattern in non-Hodgkin's lymphomas. Ricerca BM, et al. **Int J Biol Markers** 1988 Oct–Dec;3(4):237–42
Evidence for an osteoblast-activating factor in a patient with peripheral T-cell lymphoma and osteosclerosis. Hüfner M, et al. **Klin Wochenschr** 1989 Apr 3;67(7):402–7

EPIDEMIOLOGY

Gastrointestinal and retroperitoneal sarcoma—local experience and review of the literature. Hoe AL, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):76–80 (26 ref.)
Non-Hodgkin's lymphomas in U.S. Navy personnel. Garland FC, et al. **Arch Environ Health** 1988 Nov–Dec;43(6):425–9
AIDS-related secular trends in cancer in Los Angeles County men: a comparison by marital status. Bernstein L, et al. **Cancer Res** 1989 Jan 15;49(2):466–70
The malignant lymphomas in Benin City, Nigeria. Adedeji MO. **East Afr Med J** 1989 Feb;66(2):134–40
A cluster of non-Hodgkin's lymphoma [letter] Kolandaivelu G. **Indian Pediatr** 1988 Jun;25(6):583
Soft-tissue sarcoma, non-Hodgkin's lymphoma and other cancers in New Zealand forestry workers. Reif J, et al. **Int J Cancer** 1989 Jan 15;43(1):49–54
The epidemiology of non-Hodgkin's lymphoma in the north-east of Italy: a hospital-based case-control study. Franceschi S, et al. **Leuk Res** 1989;13(6):465–72
A cluster of cases of lymphoma in an underground colliery. Corbett S, et al. **Med J Aust** 1988 Aug 15;149(4):178–9, 181–2, 184–5
Increased incidence of malignant lymphoma in AIDS: a comparison of risk groups and possible etiologic factors. Beckhardt RN, et al. **Mt Sinai J Med (NY)** 1988 Oct; 55(5):383–9
[Retrospective clinical analysis of patients with non-Hodgkin's lymphoma (1965–1985)] Pálóczi K, et al. **Orv Hetil** 1988 Oct 23;129(43):2295–8 (49 ref.) (Eng. Abstr.) **(Hun)**

ETHNOLOGY

Non-Hodgkin's lymphoma in northern Israel: a study of 481 patients with emphasis on ethnic-related patterns. Cohen Y, et al. **J Surg Oncol** 1989 Apr;40(4):241–4

ETIOLOGY

Immunohistochemical studies of lymphadenosis benigna cutis occurring in a tattoo. Rijlaarsdam JU, et al. **Am J Dermatopathol** 1988 Dec;10(6):518–23
T-cell non-Hodgkin lymphoma in human immunodeficiency virus-1-infected individuals. Lust JA, et al. **Am J Hematol** 1989 Jul;31(3):181–7
Primary bile duct lymphoma in the acquired immunodeficiency syndrome (AIDS). Kaplan LD, et al. **Ann Intern Med** 1989 Jan 15;110(2):161–2
Diffuse large-cell lymphoma of B-cell origin and deficient T-cell function in a patient with rheumatoid arthritis. Weir AB 3d, et al. **Arch Intern Med** 1989 Jul;149(7):1688–90
Molecular genetic analysis of three AIDS-associated neoplasms of uncertain lineage demonstrates their B-cell derivation and the possible pathogenetic role of the Epstein-Barr virus. Knowles DM, et al. **Blood** 1989 Feb 15;73(3):792–9
Prolonged remission of Epstein-Barr virus associated lymphoma secondary to T cell-depleted bone marrow transplantation. Lyttelton MP, et al. **Bone Marrow Transplant** 1988 Nov;3(6):641–6
Malignant lymphomas and occupational exposures. Persson B, et al. **Br J Ind Med** 1989 Aug;46(8):516–20
Colonic lymphoma in the transplant patient. Phillips DL, et al. **Dig Dis Sci** 1989 Jan;34(1):150–4
Gastrointestinal and hepatobiliary neoplasms in AIDS. Friedman SL. **Gastroenterol Clin North Am** 1988 Sep; 17(3):465–86 (131 ref.)
The oral clinical features of HIV infection. Greenspan D, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):535–43 (40 ref.)
Comparison of clinical findings of 148 HIV-related non-Hodgkin's lymphomas among intravenous drug abusers and homosexual men in Italy and France [letter] Tirelli U, et al. **Haematologica (Pavia)** 1989 Mar–Apr; 74(2):225–6
The non-Hodgkin's lymphomas: old and new thinking. Van der Valk P, et al. **Histopathology** 1988 Oct;13(4):367–84 (112 ref.)
AIDS-associated lymphomas. Kaplan LD. **Infect Dis Clin North Am** 1988 Jun;2(2):525–32 (26 ref.)
Increased risk of lung cancer, non-Hodgkin's lymphoma, and leukemia following Hodgkin's disease. van Leeuwen FE, et al. **J Clin Oncol** 1989 Aug;7(8):1046–58
Infective cause of childhood leukaemia [letter] **Lancet** 1989 Feb 11;1(8633):331
Homme rouge and the acquired immunodeficiency syndrome [letter] Parker SC, et al. **N Engl J Med** 1989 Sep 28; 321(13):906–7
Treatment of AIDS and its attendant malignancies. Volberding PA, et al. **Prog Clin Biol Res** 1989;288:459–70 (27 ref.)
Non-Hodgkin's lymphoma associated with the acquired immune deficiency syndrome: a report of five cases. Sebag-Montefiore D, et al. **Radiother Oncol** 1989 Apr; 14(4):297–302
HIV-related hematological neoplasias in France. Andrieu JM, et al. **Recent Results Cancer Res** 1988;112:46–53
Primary pulmonary lymphoma in a patient with the acquired immune deficiency syndrome. Poelzleitner D, et al. **Thorax** 1989 May;44(5):438–9
Chronic myeloid leukemia with monoclonal gammopathy terminating in myeloid crisis and immunoblastic lymphoma. Larocca LM, et al. **Tumori** 1989 Apr 30;75(2):106–9
[The role of IL-2 and Th in pathogenesis of non-Hodgkin's lymphoma (NHL)] Su ZL. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):273–6 (Eng. Abstr.) **(Chi)**
[Lymphangiosarcoma following mastectomy: review of the literature apropos of 2 recent cases of Stewart-Treves syndrome] Defraigne JO, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):29–33 (22 ref.) (Eng. Abstr.) **(Fre)**
[Primary Sjögren's syndrome complicated by gastric lymphoma. Study of Epstein-Barr viral DNA in the tumor (letter)] Mariette X, et al. **Ann Med Interne (Paris)** 1989; 140(1):62–4 **(Fre)**
[Human B lymphotropic virus (HBLV) or human herpesvirus (HHV-6)] Prou O, et al. **Rev Fr Transfus Hemobiol** 1989 Jun;32(3):203–13 (45 ref.) (Eng. Abstr.) **(Fre)**
[Malignant lymphoma in a patient with chronic empyema] Yamazaki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2662–6 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Malignant lymphomas (non-Hodgkin's lymphomas and Hodgkin's disease) associated with infection by the human immunodeficiency virus. Study of 9 cases] Lozano-Molero M, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):302–5 (Eng. Abstr.) **(Spa)**
[Non-Hodgkin's lymphomas and acquired immunodeficiency syndrome] Rivas C. **Med Clin (Barc)** 1989 Mar 4; 92(8):295–8 (42 ref.) **(Spa)**
[Non-Hodgkin's lymphoma and Kaposi's sarcoma as initial manifestations of acquired immunodeficiency syndrome with rapid fatal outcome (letter)] Torné J, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):675 **(Spa)**
[Weber Christian disease with immunoblastic lymphoma. Apropos of a case] Martínez Albaladejo M, et al. **Rev Clin Esp** 1989 Jun;185(2):74–6 (Eng. Abstr.) **(Spa)**
[B-type lymphoma with a mixed kappa-lambda component as a diagnostic entity for AIDS in a heroin-addicted patient] Romero MS, et al. **Sangre (Barc)** 1988 Oct; 33(5):387–90 (Eng. Abstr.) **(Spa)**

GENETICS

Multiphenotypic lymphoma with rearrangements of the T cell receptor beta chain and gamma chain genes. Yasukawa M, et al. **Acta Haematol (Basel)** 1989;81(3):143–7
Plasma cell malignancy in the acquired immune deficiency syndrome. Association with Epstein-Barr virus. Voelkerding KV, et al. **Am J Clin Pathol** 1989 Aug; 92(2):222–8
Implications of flow cytometry in malignant conditions of the stomach. Bronzo R, et al. **Am J Gastroenterol** 1989 Sep;84(9):1065–8
The bcl-2 gene in primary B cell lymphoma of mucosa-associated lymphoid tissue (MALT). Pan L, et al. **Am J Pathol** 1989 Jul;135(1):7–11
Demonstration of monoclonal EBV genomes in Hodgkin's disease and Ki-1-positive anaplastic large cell lymphoma by combined Southern blot and in situ hybridization. Anagnostopoulos I, et al. **Blood** 1989 Aug 1;74(2):810–6
Histologic typing of non-Hodgkin's lymphomas by in situ hybridization with DNA probes of oncogenes. Hamatani K, et al. **Blood** 1989 Jul;74(1):423–9
A novel translocation, t(2;5)(p23;q35), in childhood phagocytic large T-cell lymphoma mimicking malignant histiocytosis. Kaneko Y, et al. **Blood** 1989 Feb 15; 73(3):806–13
Extranodal noncutaneous lymphoid hyperplasias represent a continuous spectrum of B-cell neoplasia: demonstration by molecular genetic analysis. Knowles DM, et al. **Blood** 1989 May 1;73(6):1635–45
Detection of chromosomal translocation t(14;18) within the minor cluster region of bcl-2 by polymerase chain reaction and direct genomic sequencing of the enzymatically amplified DNA in follicular lymphomas. Ngan BY, et al. **Blood** 1989 May 15;73(7):1759–62
Somatic changes in B-lymphoproliferative disorders (B-LPD) detected by DNA-fingerprinting. de Jong D, et al. **Br J Cancer** 1988 Dec;58(6):773–5
Genetic and immunopathological findings in a lymphoma family. Lynch HT, et al. **Br J Cancer** 1989 Apr;59(4):622–6
18q21 rearrangement in diffuse large cell lymphoma: incidence and clinical significance. Offit K, et al. **Br J Haematol** 1989 Jun;72(2):178–83
A translocation involving a specific breakpoint (q35) on chromosome 5 is characteristic of anaplastic large cell lymphoma ('Ki-1 lymphoma'). Rimokh R, et al. **Br J Haematol** 1989 Jan;71(1):31–6
Expression of c-myc oncogene product and ras family oncogene products in various human malignant lymphomas defined by immunohistochemical techniques. Mitani S, et al. **Cancer** 1988 Nov 15;62(10):2085–93
Correlation of chromosome abnormalities with clinical characteristics in thyroid lymphoma. Taniwaki M, et al. **Cancer** 1989 Mar 1;63(5):873–6
Chromosomal translocations and gene rearrangements in non-Hodgkin lymphomas. Yunis JJ. **Cancer Detect Prev** 1988;12(1–6):291–6
A case of inv(5) in non-Hodgkin's lymphoma [letter] Huret JL, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):279–80
Trisomy 5 and t(5;14)(q11;q32) as the sole abnormalities in two different clones from a centroblastic non-Hodgkin's lymphoma. Kristoffersson U, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):173–6
Translocation (4;11) in a case of malignant lymphoma. Leroux D, et al. **Cancer Genet Cytogenet** 1988 Dec; 36(2):159–63
Nonrandom chromosomal aberrations are associated with sites of tissue involvement in non-Hodgkin's lymphoma. Offit K, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):85–93
Nonrandom rearrangement of chromosome 14 at band q32.33 in human lymphoid malignancies with mature B-cell phenotype. Nishida K, et al. **Cancer Res** 1989 Mar 1; 49(5):1275–81
Association of DNA content and proliferative activity with clinical outcome in patients with diffuse mixed cell and large cell non-Hodgkin's lymphoma. Wooldridge TN, et al. **Cancer Res** 1988 Nov 15;48(22):6608–13
Predisposition to lymphomagenesis in pim-1 transgenic mice: cooperation with c-myc and N-myc in murine leukemia virus-induced tumors. van Lohuizen M, et al. **Cell** 1989 Feb 24;56(4):673–82
Frequency and distribution of mitomycin C-induced structural chromosome aberrations in lymphocytes from non-Hodgkin lymphoma patients. Johansson B, et al. **Cytogenet Cell Genet** 1988;48(2):79–83
Relation between occupational exposure to organic solvents and chromosome aberrations in non-Hodgkin's lymphoma. Brandt L, et al. **Eur J Haematol** 1989 Mar;42(3):298–302
Immunoglobulin heavy-chain gene rearrangement in peripheral blood mononuclear cells in non-Hodgkin's lymphomas—correlation with kappa:lambda analysis and clinical features. Lindh J, et al. **Eur J Haematol** 1989 Feb; 42(2):134–42
Chromosome abnormalities in PHA-stimulated and non stimulated bone marrow cultures from patients with non Hodgkin lymphoma. Palka G, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):489–94
Flow cytometric analysis of DNA ploidy in lymphomas of the thyroid. Zirker TA, et al. **Head Neck Surg** 1988 May–Jun;10(5):324–9
Normal frequency of structural chromosome aberrations in fibroblasts from patients with non-Hodgkin's lymphoma. Johansson B, et al. **Hereditas** 1988;109(2):277–80
Breakprone chromosome bands in fibroblasts from patients with non-Hodgkin's lymphoma do not coincide with bands involved in primary rearrangements in non-Hodgkin's lymphomas. Johansson B, et al. **Hereditas** 1988;109(1):131–7
Ploidy, proliferative activity, cluster differentiation antigen expression and clinical remission in high-grade non-Hodgkin's lymphoma. Williamson JM, et al. **Histopathology** 1987 Oct;11(10):1043–54
The EcoRI RFLP of c-mos in patients with non-Hodgkin's lymphoma and acute lymphoblastic leukemia, compared to geriatric and non-geriatric controls. Chenevix-Trench G, et al. **Int J Cancer** 1989 Jun 15;43(6):1034–6
abl oncogene expression in non-Hodgkin lymphomas: correlation to histological differentiation and clinical status. Greil K, et al. **Int J Cancer** 1988 Oct 15;42(4):529–38
Interleukin 6 gene expression in normal and neoplastic B cells. Freeman GJ, et al. **J Clin Invest** 1989 May;83(5):1512–8
Translocation t(14;18) in B cell lymphomas as a cause for defective immunoglobulin production. de Jong D, et al. **J Exp Med** 1989 Mar 1;169(3):613–24
The relationship between number of interphase nors and nor-bearing chromosomes in non-Hodgkin's lymphoma. Jan-Mohamed RM, et al. **J Pathol** 1989 May;158(1):3–7
Detecting t(14;18) in paraffin-embedded lymphoma tissue [letter] Hickish T, et al. **Lancet** 1989 May 20;1(8647):1131–2
Immunoglobulin and T-cell receptor gene rearrangements in Hodgkin's disease and Ki-1-positive anaplastic large cell lymphoma: dissociation between phenotype and genotype. Herbst H, et al. **Leuk Res** 1989;13(2):103–16
T-cell receptor gene rearrangement in B-cell non-Hodgkin's lymphoma: correlation with methylation and expression. Leber BF, et al. **Leuk Res** 1989;13(6):473–81
Clonal immunoglobulin gene rearrangements in primary mediastinal clear cell lymphomas. Brandter LB, et al. **Leukemia** 1989 Feb;3(2):122–9
Translational initiation factor expression and ribosomal protein gene expression are repressed coordinately but by different mechanisms in murine lymphosarcoma cells treated with glucocorticoids. Huang S, et al. **Mol Cell Biol** 1989 Sep;9(9):3679–84
Chronic gamma-radiation sensitivity of skin fibroblasts from patients with non-Hodgkin's lymphoma (NHL). Hannan MA, et al. **Mutat Res** 1989 May;226(1):49–53
Frequency and distribution of N-methyl-N'-nitro-N-nitrosoguanidine (MNNG)-induced structural chromosome aberrations in fibroblasts from sarcoma and non-Hodgkin's lymphoma patients. Mertens F, et al. **Mutat Res** 1989 Jan;210(1):63–70
Cytogenetics acquisitions in malignant lymphomas. Bernheim A, et al. **Nouv Rev Fr Hematol** 1989;31(2):140–1

Immunoglobulin V gene utilization in chronic lymphocytic leukemia and non-Hodgkin's B cell lymphomas. Kipps TJ. **Nouv Rev Fr Hematol** 1988;30(5-6):293-8 (34 ref.)
Molecular analysis of breaks in BCL-1 proto-oncogene in B-cell lymphomas with abnormalities of 11q13. Koduru PR, et al. **Oncogene** 1989 Jul;4(7):929-34
Analysis of RAS oncogene mutations in human lymphoid malignancies. Neri A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9268-72
[Two cases of B-cell lymphoma occurring in a mother and her daughter at the same time] Kato J, et al. **Rinsho Ketsueki** 1989 Feb;30(2):185-92 (Eng. Abstr.) **(Jpn)**
[Cytogenetic results in 9 cases of non-Hodgkin's lymphoma with a high grade of malignancy] López Ginés C, et al. **Sangre (Barc)** 1989 Aug;34(4):278-84 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Direct immunogold staining technique based on monoclonal antibodies: an immediate approach to the immunostaining of lymphocytes. Küster U, et al. **Acta Histochem (Jena)** 1988;84(1):23-9
Heterogeneity in the expression of B-cell antigen in non-Hodgkin's lymphoma. Jones DB, et al. **Adv Exp Med Biol** 1988;237:139-44
Paraffin section immunophenotyping of non-Hodgkin's lymphoma, using a panel of monoclonal antibodies. Myskow MW, et al. **Am J Clin Pathol** 1988 Nov; 90(5):564-74
Nuclear antigens in neoplastic lymphocytes of B cell and T cell non-Hodgkin's lymphomas. Dardick I, et al. **Am J Pathol** 1989 Jan;134(1):213-22
Lymphokine-activated killer cells from normal and lymphoma subjects are cytotoxic for cells coated with antibody derivatives displaying human Fc gamma. Dearman RJ, et al. **Blood** 1988 Dec;72(6):1985-91
Expression of lymphocyte homing receptor as a mechanism of dissemination in non-Hodgkin's lymphoma. Pals ST, et al. **Blood** 1989 Mar;73(4):885-8
Assessment of bone marrow infiltration in B-cell non-Hodgkin's lymphoma (NHL). Dorey EL, et al. **Br J Cancer** 1989 May;59(5):772-4
Stress-induced decline in immune responsiveness in C3H/HeJ mice: relation to endocrine alterations and tumor growth. Kandil O, et al. **Brain Behav Immun** 1988 Mar; 2(1):32-49
Expression of LFA-1 in non-Hodgkin's lymphoma. Medeiros LJ, et al. **Cancer** 1989 Jan 15;63(2):255-9
Demonstration of clonal selection in a child with non-Hodgkin's lymphoma. Yumura-Yagi K, et al. **Cancer** 1989 Jun 1;63(11):2130-3
Clonal analysis of untreated non-Hodgkin's lymphoma utilizing immunoglobulin gene rearrangement and immunophenotype. Rudders RA, et al. **Cancer Res** 1988 Nov 15;48(22):6272-7
Evidence for an involvement of T4+ cytotoxic T cells in tumor immunity. Woods G, et al. **Cell Immunol** 1989 Jan; 118(1):126-35
Immune deficiency in malignant lymphomas. Konopka L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):745-8
Expression of leucocyte function-associated antigen-1 and 7F7-antigen, an adhesion molecule related to intercellular adhesion molecule-1 (ICAM-1) in non-Hodgkin lymphomas and leukaemias: possible influence on growth pattern and leukaemic behaviour. Stauder R, et al. **Clin Exp Immunol** 1989 Aug;77(2):234-8
Induction of plasmacytoid and hairy cell features by phorbol esters (TPA) in B-lymphoma cells: attempted correlation with disease activity. Gazitt Y, et al. **Hematol Oncol** 1988 Oct-Dec;6(4):307-18
The prognostic significance of immunophenotype in high-grade non-Hodgkin's lymphoma. Brown DC, et al. **Histopathology** 1989 Jun;14(6):621-7
Paraffin section immunohistochemistry. I. Non-Hodgkin's lymphoma. Hall PA, et al. **Histopathology** 1988 Aug; 13(2):149-60
Paraffin section immunohistochemistry. II. Hodgkin's disease and large cell anaplastic (Ki1) lymphoma. Hall PA, et al. **Histopathology** 1988 Aug;13(2):161-9
Lymphoma phenotyping in formalin-fixed and paraffin wax-embedded tissues: II. Profiles of reactivity in the various tumour types. Norton AJ, et al. **Histopathology** 1989 Jun;14(6):557-79 (200 ref.)
Triggering of neoplastic B cells via surface IgM and the cell surface antigens CD20 and CDw40. Responses differ from normal blood B cells and are restricted to certain morphologic subsets. Beiske K, et al. **Int J Cancer** 1988 Oct 15;42(4):521-8
Immunophenotypic characterization of follicle-center-cell-derived non-Hodgkin's lymphomas. Sakthivel R, et al. **Int J Cancer** 1989 Apr 15;43(4):624-30
Deficiency in interferon production of peripheral blood leukocytes from patients with non-Hodgkin lymphoma. Ho AD, et al. **J Interferon Res** 1988 Aug;8(4):405-13
Immunohistochemical analysis of non-Hodgkin's lymphomas with the monoclonal antibody to follicular center lymphocytes reactive in paraffin sections. Bhoopat L, et al. **J Med Assoc Thai** 1989 Apr;72(4):207-11
CD1c antigens are present in normal and neoplastic B-cells. Smith ME, et al. **J Pathol** 1988 Oct;156(2):169-77
Limiting dilution analysis of the frequency of IL2 responsive T cells in lymph nodes involved by B-cell non-Hodgkin's lymphomas. Bonnefoix T, et al. **Leuk Res** 1989;13(4):323-9
Residual T lymphocytes, and not malignant B cells, proliferate upon mitogenic stimulation. Kluin-Nelemans HC, et al. **Leukemia** 1989 Oct;3(10):715-7
Prognostic significance of immunoglobulin isotype expression in B-cell non-Hodgkin's lymphoma. Lindemalm C, et al. **Med Oncol Tumor Pharmacother** 1988;5(4):243-8
Monoclonal antibodies marking B-cell non-Hodgkin's lymphoma in paraffin-embedded tissue. Linder J, et al. **Mod Pathol** 1988 Jan;1(1):29-34
Immunophenotyping of leukaemias and non-Hodgkin's lymphomas. Immunological markers and their CD codes. van Dongen JJ, et al. **Neth J Med** 1988 Dec; 33(5-6):298-314
Non-Hodgkin's lymphoma: natural cell-mediated cytotoxicity correlated with histological classification and prognosis. Mehta B, et al. **Oncology** 1989;46(5):323-5
[Malignant lymphoma—from the view of the clinician] Rák K. **Orv Hetil** 1988 Dec 18;129(51):2723-7 (26 ref.) (Eng. Abstr.) **(Hun)**
[Reactivity of monoclonal antibodies LN-1 and LN-2 in non-Hodgkin's lymphoma] Ashiya M. **Rinsho Ketsueki** 1988 Dec;29(12):2256-63 (Eng. Abstr.) **(Jpn)**
[IgM paraproteinemia in laboratory diagnosis. Lymphoma demonstrating IgM paraproteinemia] Jarczok K, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):971-3 (Eng. Abstr.) **(Pol)**
[Clinical trial of immunoregulation using the TFX Polfa preparation in non-Hodgkin's lymphoma] Górski J, et al. **Przegl Lek** 1988;45(7):555-8 (Eng. Abstr.) **(Pol)**
[Effect of irradiation on the cellular sensitivity of separate NKLy tumor subpopulations to the membrane-toxic action of natural killers] Slivinskiĭ GG, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):564-6 (Eng. Abstr.) **(Rus)**
[The immunology of CD4-negative skin hematosarcomas] Sholokhova EN, et al. **Vestn Dermatol Venerol** 1989; (1):20-6 (Eng. Abstr.) **(Rus)**
[Study of immunoglobulin synthesis using the hemolytic plaque technic in lymphoproliferative syndromes of B-cell lineage] González Echeverría FJ, et al. **Sangre (Barc)** 1988 Aug;33(4):269-76 (Eng. Abstr.) **(Spa)**

METABOLISM

Increased levels of soluble interleukin-2 receptor in non-Hodgkin's lymphomas. Relationship with clinical, histologic, and phenotypic features. Chilosi M, et al. **Am J Clin Pathol** 1989 Aug;92(2):186-91
Immunophenotypic diagnosis of non-Hodgkin's lymphoma in paraffin sections. Co-expression of L60 (Leu-22) and L26 antigens correlates with malignant histologic findings. Ngan BY, et al. **Am J Clin Pathol** 1989 May;91(5):579-83
MT2 immunoreactivity, cellular proliferation and prognosis in B-cell non-Hodgkin's lymphoma. Hall PA, et al. **Histopathology** 1989 May;14(5):523-5
Phenazone pharmacokinetics as an index of hepatic metabolic efficiency. Wiela A, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):562-5
Decreased production of IL-6 by peripheral blood mononuclear cells of patients with chronic lymphocytic leukemia and related disorders. Stryckmans P, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):321-3
Changes in metabolism, food and water intake of C3H mice following transplantation of Gardner lymphosarcoma (LSG). Boštík J, et al. **Physiol Bohemoslov** 1988; 37(4):325-32
[The correlation of the in vitro 14C-glycine absorption by murine and human leukemic cells with the antitumor effect of vincristine] Sidorova TA, et al. **Eksp Onkol** 1989; 11(2):52-4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Epstein-Barr virus (EBV) antibodies in children with non-Hodgkin's lymphomas. Roubalová K, et al. **Acta Virol (Praha)** 1988 Jul;32(4):339-48
Fatal Hodgkin and non-Hodgkin lymphoma associated with persistent Epstein-Barr virus in four brothers. Donhuijsen-Ant R, et al. **Ann Intern Med** 1988 Dec 15; 109(12):946-52

MORTALITY

Importance of cell surface marker to the prognosis of non-Hodgkin's lymphoma. Toki H, et al. **Acta Med Okayama** 1988 Oct;42(5):287-92
A clinico-pathological and prognostic analysis of non-Hodgkin lymphoma. A study of 203 patients. Nabholtz JM, et al. **Acta Oncol** 1988;27(5):489-95
Prognostic factors in high and intermediate grade non-Hodgkin's lymphoma. Cowan RA, et al. **Br J Cancer** 1989 Feb;59(2):276-82
Prognostic factors in primary gastrointestinal non-Hodgkin's lymphoma. A multivariate analysis, report of 106 cases, and review of the literature. Azab MB, et al. **Cancer** 1989 Sep 15;64(6):1208-17 (98 ref.)
bcl-2 and other genomic alterations in the prognosis of large-cell lymphoma. Yunis JJ, et al. **N Engl J Med** 1989 Apr 20;320(16):1047-54
[Long-term results in highly malignant stage I and II non-Hodgkin's lymphomas during management with polychemo- and radiotherapy] Kuse R, et al. **Folia Haematol (Leipz)** 1988;115(6):847-57 (Eng. Abstr.) **(Ger)**
[Relapse of the stage I & II non-Hodgkin's lymphoma of the head and neck—factors relating to the chance of long-term survival] Arimoto T, et al. **Gan No Rinsho** 1989 Jul;35(8):875-9 (Eng. Abstr.) **(Jpn)**
[Causes of death in patients with non-Hodgkin's lymphoma] Walewski J, et al. **Nowotwory** 1988 Oct-Dec;38(4):274-80 (Eng. Abstr.) **(Pol)**
[Non-Hodgkin's lymphomas. II. Prognostic factors] San Miguel JF, et al. **Sangre (Barc)** 1988 Oct;33(5):367-71 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Cytomorphology and immunocytochemistry of fine needle aspirates from blastic non-Hodgkin's lymphomas. Tani E, et al. **Acta Cytol** 1989 May-Jun;33(3):363-71
The development of a Ki-1-positive large cell non-Hodgkin's lymphoma in pagetoid reticulosis. Ralfkiaer E, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):206-11
Adult Ki-1-positive large cell anaplastic lymphoma presenting with skin lesions. Morra E, et al. **Acta Haematol (Basel)** 1989;81(1):51-5
Central nervous system lymphoma: primary lumbar nerve root infiltration. Toner GC, et al. **Acta Haematol (Basel)** 1989;81(1):44-7
Primary spinal epidural lymphomas. Maiuri F, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):213-9 (27 ref.)
Non-Hodgkin's lymphoma of the central nervous system after treatment of Hodgkin's disease. Miller DC, et al. **Am J Clin Pathol** 1989 Apr;91(4):481-5
Central nervous system involvement in a patient with chronic lymphocytic leukemia and non-Hodgkin's lymphoma (Richter's syndrome), with concordant cell surface immunoglobulin and immunophenotypic markers [letter] Narang S, et al. **Am J Clin Pathol** 1988 Dec;90(6):750
Pseudo-Gaucher cells preceding the appearance of immunoblastic lymphoma. Papadimitriou JC, et al. **Am J Clin Pathol** 1988 Oct;90(4):454-8
Extranodal non-T-cell lymphoblastic lymphoma in adults. A report of two cases. Schwob VS, et al. **Am J Clin Pathol** 1988 Nov;90(5):602-5
Rapid S-phase determination of non-Hodgkin's lymphomas with the use of an immunofluorescence bromodeoxyuridine labeling index procedure. Witzig TE, et al. **Am J Clin Pathol** 1989 Mar;91(3):298-301
Pleomorphic T-cell lymphoma and large-cell anaplastic lymphoma of the skin. A morphological, immunophenotypical, and ultrastructural study of two typical cases. Sterry W, et al. **Am J Dermatopathol** 1989 Apr;11(2):112-23
High-grade non-Hodgkin lymphoma relapsing as low-grade follicular lymphoma: so-called downgraded lymphoma. Kerrigan DP, et al. **Am J Hematol** 1989 Jan;30(1):36-41
Cell proliferation in non-Hodgkin's lymphomas. Digital image analysis of Ki-67 antibody staining. Schwartz BR, et al. **Am J Pathol** 1989 Feb;134(2):327-36
Malignant lymphoma presenting as pseudoepitheliomatous hyperplasia. A report of two cases. Krasne DL, et al. **Am J Surg Pathol** 1988 Nov;12(11):835-42
Primary large cell lymphoma of the mediastinum. A histologic and immunophenotypic study of 29 cases. Lamarre L, et al. **Am J Surg Pathol** 1989 Sep;13(9):730-9
Multiple lymphomatous polyposis of the gastrointestinal tract. A clinicopathologically distinctive form of non-Hodgkin's lymphoma of B-cell centrocytic type. O'Briain DS, et al. **Am J Surg Pathol** 1989 Aug;13(8):691-9 (52 ref.)
The distribution of non-Hodgkin's lymphoma in the lymphoid compartments of the human spleen. van Krieken JH, et al. **Am J Surg Pathol** 1989 Sep;13(9):757-65
Simultaneous nodular lymphocyte predominance Hodgkin's disease (N-LPHD) and large-cell lymphoma (LCL) [letter] Whittaker M, et al. **Am J Surg Pathol** 1989 Aug;13(8):715-6
Biology and staging of childhood non-Hodgkin lymphoma. Crist WM, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:104-9 (24 ref.)
Non-Hodgkin's lymphoma in children; diffuse lymphoblastic histology; diffuse non-lymphoblastic histology; LSA2-L2 experience. Wollner N. **An Esp Pediatr** 1988 Oct;29 Suppl 34:122-6
Infectious mononucleosis in the nasopharynx with a histological picture of malignant lymphoma. Takimoto T, et al. **Arch Otorhinolaryngol** 1988;245(6):348-50
Primary multilobulated B-cell lymphoma of the breast. Elavathil LJ, et al. **Arch Pathol Lab Med** 1989 Sep; 113(9):1081-4
Salivary gland lymph nodes. The site of lymphadenopathies and lymphomas associated with human immunodeficiency virus infection. Ioachim HL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1224-8
Collision of malignant lymphoma and multiple early adenocarcinomas of the stomach. Noda T, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):419-22
Childhood Ki-1 lymphoma. A report of two cases. Oka K, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):998-1002
Clinical features and outcome in childhood T-cell leukemia-lymphoma according to stage of thymocyte differentiation: a Pediatric Oncology Group Study. Crist WM, et al. **Blood** 1988 Dec;72(6):1891-7
Characterization of a new non-Hodgkin's lymphoma cell line (NCEB-1) with a chromosomal (11:14) translocation [t(11:14)(q13;q32)] Saltman DL, et al. **Blood** 1988 Dec; 72(6):2026-30

Risk classification as the basis for clinical staging of diffuse large-cell lymphoma derived from 10-year survival data. Velasquez WS, et al. **Blood** 1989 Aug 1;74(2):551–7

Detection of minimal malignant cell infiltration in the bone marrow of patients with solid tumours, non-Hodgkin lymphomas and leukaemias. Favrot MC, et al. **Bone Marrow Transplant** 1987 Aug;2(2):117–22

Lymphoblastic lymphoma (LBL) and acute lymphoblastic leukaemia (ALL) in adults: relationships and therapeutic perspectives. Santini G, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:106–7

Cervical intraepithelial neoplasia in lymphoma patients: a cytological and colposcopic study. Hughes RG, et al. **Br J Cancer** 1989 Apr;59(4):594–9

Human non-Hodgkin's malignant lymphomas serially transplanted in nude mice conditioned with whole-body irradiation. Igarashi T, et al. **Br J Cancer** 1989 Mar; 59(3):356–60

Malignant lymphoma presenting as initial symptom in the uterus. Case report. Maeda T, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1195–7

Primary orbital lymphoma: staging by computed tomographic scanning. Mills P, et al. **Br J Radiol** 1989 Mar; 62(735):287–9

Percutaneous histopathologic evaluation of liver in treatment of non-Hodgkin's lymphoma. Yoshimatsu S. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):25–31

Hodgkin's disease complicating non-Hodgkin's lymphoma [letter; comment] Trimble GX. **Can Med Assoc J** 1989 Jun 1;140(11):1262, 1265. **Comment on:** Can Med Assoc J 1988 Dec 15;139(12):1157–9

Clinicopathologic spectrum of cutaneous manifestations in systemic follicular lymphoma. A study of 11 patients. Dabski K, et al. **Cancer** 1989 Oct 1;64(7):1480–5

Non-Hodgkin's lymphoma of the larynx (stage IE). Morgan K, et al. **Cancer** 1989 Sep 1;64(5):1123–7

UCHL1-positive extranodal lymphoma resembling multiple lymphomatous polyposis of the gastrointestinal tract. Nakamine H, et al. **Cancer** 1989 Oct 1;64(7):1500–3

Primary central nervous system lymphoma as a variant of Richter's syndrome in two patients with chronic lymphocytic leukemia. O'Neill BP, et al. **Cancer** 1989 Sep 15;64(6):1296–300

Acute promyelocytic leukemia following treatment of non-Hodgkin's lymphoma. Raiker A, et al. **Cancer** 1989 Apr 1;63(7):1402–6 (17 ref.)

Paraffin section markers for Reed-Sternberg cells. A comparative study of peanut agglutinin, Leu-M1, LN-2, and Ber-H2. Ree HJ, et al. **Cancer** 1989 May 15; 63(10):2030–6

Non-Hodgkin's lymphomas in Turkey. Sarpel SC, et al. **Cancer** 1988 Oct 15;62(8):1653–7

CD8 suppressor cell activity and its effect on CD4 helper cell–dependent growth of SJL/J B-cell lymphomas. Thrush GR, et al. **Cell Immunol** 1989 Sep;122(2):555–62

Comparative analysis of different approaches to investigate cell kinetics. Silvestrini R, et al. **Cell Tissue Kinet** 1988 Mar;21(2):123–31

Open lung biopsy in patients with non-Hodgkin's lymphoma and pulmonary infiltrates. McCabe RE, et al. **Chest** 1989 Aug;96(2):319–24

Clinicopathologic conference. Jaundice, weight loss, fever and abdominal mass. **Chin Med J [Engl]** 1988 Nov; 101(11):867–70

Phenotypic characteristics of three human non-Hodgkin lymphoma lines: flow cytometric analysis after long-term maintenance. Kopper L, et al. **Clin Exp Immunol** 1988 Nov; 74(2):295–9

Late nervous system disorders in cured malignant lymphoma: a clinical and neuropathological study. Vesterby A, et al. **Clin Neuropathol** 1988 May-Jun;7(3):134–8

Residual masses on follow-up computed tomography in patients with mediastinal non-Hodgkin's lymphoma. Uematsu M, et al. **Clin Radiol** 1989 May;40(3):244–7

Primary anaplastic large cell lymphoma of the skin. Berti E, et al. **Dermatologica** 1989;178(4):225–7

Prognostic factors in stage I and II high and intermediate grade non-Hodgkin's lymphoma. Mackintosh JF, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1617–22

Primary extranodal and nodal non-Hodgkin's lymphoma. A survey of a population-based registry. Otter R, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1203–10

Follicular low-grade non-Hodgkin's lymphoma: long-term outcome with or without tumor progression. Ersbøll J, et al. **Eur J Haematol** 1989 Feb;42(2):155–63

Fraction of S-phase cells in blood mononuclear cells in non-Hodgkin's lymphomas—correlation with clinical features and prognosis. Lindh J, et al. **Eur J Haematol** 1989 Apr;42(4):331–8

Bone marrow and blood involvement by non-Hodgkin's lymphoma: a study of clinicopathologic correlations and prognostic significance in relationship to the Working Formulation. Morra E, et al. **Eur J Haematol** 1989 May; 42(5):445–53

Angiotropic large cell lymphoma (ALCL): morphological, immunohistochemical and genotypic studies with analysis of previous reports. Domizio P, et al. **Hematol Oncol** 1989 May-Jun;7(3):195–206 (32 ref.)

Determination of proliferative fractions detected by immunohistochemistry with the monoclonal antibodies to bromodeoxyuridine and Ki-67 in malignant lymphomas. Kawauchi K, et al. **Hematol Oncol** 1989 Jul-Aug; 7(4):257–65

Lymphoplasmacytoid and small cell centrocytic non-Hodgkin's lymphoma—a retrospective analysis from St Bartholomew's Hospital 1972–1986. Richards MA, et al. **Hematol Oncol** 1989 Jan-Feb;7(1):19–35

Correlation between histology and immunophenotype in a series of 322 cases of non-Hodgkin's lymphoma. Smith JL, et al. **Hematol Oncol** 1989 Jan-Feb;7(1):37–48

Bone marrow in malignant lymphoma. McKenna RW, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):617–35 (73 ref.)

Bilateral trephine bone marrow biopsy for staging non-Hodgkin's lymphoma—a second look. Ebie N, et al. **Hematol Pathol** 1989;3(1):29–33

Peripheral T-cell lymphoma in childhood. A clinicopathological study of six cases. Leake J, et al. **Histopathology** 1989 Mar;14(3):255–68

Immunophenotypic analysis of sinonasal non-Hodgkin's lymphomas. Frierson HF Jr, et al. **Hum Pathol** 1989 Jul; 20(7):636–42

Monoclonal antibody Leu-22 (L60) permits the demonstration of some neoplastic T cells in routinely fixed and paraffin-embedded tissue sections. Wieczorek R, et al. **Hum Pathol** 1988 Dec;19(12):1434–43

Non-Hodgkin's lymphomas in children, clinical histological and treatment analysis. Gopal R, et al. **Indian J Cancer** 1987 Dec;24(4):202–9

Bone marrow biopsy in non-Hodgkin's lymphoma. Soman CS, et al. **Indian J Cancer** 1988 Dec;25(4):218–29

Primary gastrointestinal lymphoma: clinicopathological study of 32 cases. Sangiri VP, et al. **Indian J Gastroenterol** 1988 Oct;7(4):219–21

Lymphocytoma cutis—a case report. Mutum SS, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):251–3

Mediastinal non-Hodgkin's lymphoma involving right heart and dorsal vertebra. Ratnakar KS, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):227–9

Methods of simultaneous visualization of cytoplasmic enzyme reactivity and cell surface antigens (by cytochemistry combined with immunocytochemistry) in individual hematopoietic and lymphoid cells. Gloghini A, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):221–32 (29 ref.)

Relationship between clinical stage, histopathology and antibody titers against the second Epstein-Barr virus nuclear antigen (EBNA-2) in non-Hodgkin's lymphoma patients. Masucci G, et al. **Int J Cancer** 1989 Jun 15; 43(6):1017–21

POEMS syndrome associated with cryoglobulinemia, lymphoma, multiple seborrheic keratosis, and ichthyosis. Fishel B, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):979–82

Non Hodgkin's lymphoma of stomach in a case of Hodgkin's disease. Mohandas KM, et al. **J Assoc Physicians India** 1988 Jul;36(7):456–7

Direct comparisons of peripheral T-cell lymphoma with diffuse B-cell lymphoma of comparable histological grades—should peripheral T-cell lymphoma be considered separately? Cheng AL, et al. **J Clin Oncol** 1989 Jun; 7(6):725–31

Picking winners and losers in diffuse small-cell lymphomas [editorial] Fisher RI. **J Clin Oncol** 1989 Aug;7(8):991–2

Childhood non-Hodgkin's lymphoma involving the testis: clinical features and treatment outcome. Kellie SJ, et al. **J Clin Oncol** 1989 Aug;7(8):1066–70 (35 ref.)

Numbers of host "helper" T cells and proliferating cells predict survival in diffuse small-cell lymphomas. Medeiros LJ, et al. **J Clin Oncol** 1989 Aug;7(8):1009–17

Non-Hodgkin's lymphomas of childhood: an analysis of the histology, staging, and response to treatment of 338 cases at a single institution. Murphy SB, et al. **J Clin Oncol** 1989 Feb;7(2):186–93

Prognostic subgroups in childhood non-Hodgkin's lymphoma [letter] Pinkerton CR. **J Clin Oncol** 1989 Aug; 7(8):1174–6

Prognostic indicators in centroblastic-centrocytic lymphoma. Griffin NR, et al. **J Clin Pathol** 1988 Aug;41(8):866–70

Non-Hodgkin lymphoma of the skin excluding mycosis fungoides and cutaneous involvement of adult T-cell leukemia/lymphoma. Mukai K, et al. **J Cutan Pathol** 1988 Aug;15(4):193–200

Non-Hodgkin's extranodal lymphoma: a clinico-pathological study of 24 cases involving head and neck sites. Wallace C, et al. **J Laryngol Otol** 1988 Oct;102(10):914–22

Signet-ring cell lymphoma of the central nervous system. Case report. Pappas CT, et al. **J Neurosurg** 1988 Nov; 69(5):789–92

Primary extranodal non-Hodgkin's lymphoma of the oral region. Takahashi H, et al. **J Oral Pathol Med** 1989 Feb; 18(2):84–91

The utility of Ki67 immunostaining, nuclear organizer region counting, and morphology in the assessment of follicular lymphomas. Cibull ML, et al. **J Pathol** 1989 Jul; 158(3):189–93

Correlation of morphology, immunophenotype, and flow cytometry with remission induction and survival in high grade non-Hodgkin's lymphoma. O'Brien CJ, et al. **J Pathol** 1989 May;158(1):31–9

Malignant lymphoma of the testis: histological and immunohistological study of 28 cases. Nonomura N, et al. **J Urol** 1989 Jun;141(6):1368–71

Ovarian involvement as an initial manifestation of malignant lymphoma. Yamane T, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):163–6

Activity of serum thymidine kinase in non-Hodgkin lymphoma: relationship to other prognostic factors. Hallek M, et al. **Klin Wochenschr** 1988 Aug 15;66(16):718–23

HIV-related malignant lymphomas. A clinical and pathological study of 13 cases. Serke M, et al. **Klin Wochenschr** 1988 Aug 1;66(15):682–5

Centroblastic lymphoma of the thyroid supervening long-lasting chronic lymphocytic leukemia (B-CLL) demonstration of biclonality by immunohistochemical and gene rearrangement analysis. Trümper L, et al. **Klin Wochenschr** 1988 Aug 15;66(16):736–42

Identification of a T cell lymphoma category derived from intestinal-mucosa-associated T cells. Stein H, et al. **Lancet** 1988 Nov 5;2(8619):1053–4

Polymorphic reticulosis: a malignant lymphoma of B-cell lineage. Lin CZ, et al. **Laryngoscope** 1989 Mar;99(3):307–10

Flow cytometric DNA analysis: a prognostic tool in non-Hodgkin's lymphoma. Christensson B, et al. **Leuk Res** 1989;13(4):307–14

Lack of interleukin-2 (IL-2) dependent growth of TAC positive T-ALL/NHL cells is due to the expression of only low affinity receptors for IL-2. Debatin KM, et al. **Leukemia** 1989 Aug;3(8):566–71

Mixed-lineage leukemias and phenotypic shifts occurring in relapsed cases of acute T lymphoblastic lymphomas. Delia D, et al. **Leukemia** 1988 Dec;2(12 Suppl):192S–197S

Circulating buttock cells in non-Hodgkin's lymphoma. Verbunt RJ, et al. **Leukemia** 1989 Aug;3(8):578–84

Malignant non-Hodgkin's lymphomas of the nose and paranasal sinuses. Tan J, et al. **Med J Malaysia** 1988 Mar; 43(1):49–54

Large cell lymphoma presenting as a coronal penile lesion. Scott GC, et al. **Mo Med** 1989 May;86(5):278–9

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 28–1989. A 65-year-old man with pulmonary infiltrates and an axillary mass. **N Engl J Med** 1989 Jul 13;321(2):102–10

Primary non-Hodgkin's lymphoma of the testis. Krol-van Straaten MJ, et al. **Neth J Med** 1988 Aug;33(1–2):83–5

Extranodal non-Hodgkin's lymphoma [editorial] Otter R, et al. **Neth J Med** 1988 Aug;33(1–2):49–51

Non-Hodgkin's lymphoma of the corpus vitreum. Sizoo W, et al. **Neth J Med** 1988 Aug;33(1–2):26–9

Primary endobronchial non-Hodgkin's lymphoma: report of two cases and review of the literature. Spapen H, et al. **Neth J Med** 1988 Aug;33(1–2):86–90 (14 ref.)

Relationship between immunophenotype and the development of second primary neoplasms in patients with non-Hodgkin's lymphoma. Shimizu K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):71–9

Malignant lymphoma presenting in the retroperitoneum. Ampil FL. **Oncology** 1989;46(3):198–200

Oral lymphomas in HIV-infected patients: association with Epstein-Barr virus DNA. Green TL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):437–42

Non-Hodgkin's lymphoma of the oral cavity associated with AIDS. Kaugars GE, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):433–6

Clinicopathologic, immunophenotypic, and molecular genetic analysis of AIDS-associated lymphoid neoplasia. Clinical and biologic implications. Knowles DM, et al. **Pathol Annu** 1988;23 Pt 2:33–67 (87 ref.)

Tumoural associations in chronic granulocytic leukemia. Popa G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):369–72

Bone scanning and radiography in the evaluation of patients with malignant lymphoma. Jánoskuti L, et al. **ROFO** 1988 Oct;149(4):427–8

In vivo induction of malignant transformation of nude mouse B lymphocytes by a human multiple myeloma. Gao TX, et al. **Sci Sin [B]** 1988 Aug;31(8):953–61

Adult non-Hodgkin's lymphoma in Taiwan area: a clinicopathologic study of 123 cases based on working formulation classification. Cheng AL, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):108–13

Bone marrow involvement in non-Hodgkin's lymphoma. Lai HS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb; 88(2):114–21

Synchronous pulmonary carcinoid tumour and non-Hodgkin's lymphoma: report of two cases. Juettner FM, et al. **Thorax** 1989 Jun;44(6):516–8

Persistent generalized lymphadenopathy syndrome vs "AIDS"—unrelated malignant lymphoma: comparison of presenting clinical and laboratory findings in 88 patients. AIDS and Related Syndromes Study Group. Tirelli U, et al. **Tumori** 1989 Jun 30;75(3):222–5

Primary high-grade malignant lymphomas of bone. Radaszkiewicz T, et al. **Virchows Arch [A]** 1988; 413(4):269–74

Disordered development of macrophages in non-Hodgkin's lymphoma. Sokol RJ, et al. **Virchows Arch [B]** 1988; 56(3):205–9

[Primary non-Hodgkin's lymphoma of the breast—report of 8 cases] Qian H, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):137–9 (Eng. Abstr.) **(Chi)**

[Non-Hodgkin's lymphoma of the primary ocular adnexa—clinical and histopathologic analysis of 44 cases] Feng GG, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):225–9 (Eng. Abstr.) **(Chi)**

[Non-Hodgkin's malignant lymphoma with a low level of malignancy] Benešová E, et al. **Sb Lek** 1987 Jun;89(6):180–6

(Eng. Abstr.) (Cze)
[Non-Hodgkin's large B cell malignant lymphoma localized in the anterior mediastinum. Apropos of 2 cases] Sainte-Rose G, et al. **Ann Chir** 1989;43(2):161–4 (Eng. Abstr.) (Fre)
[Immunochemical diagnosis of hepatic localizations in malignant lymphoid hematologic diseases. Study of 80 cases] Voigt JJ, et al. **Gastroenterol Clin Biol** 1989 Apr; 13(4):343–52 (Eng. Abstr.) (Fre)
[Primary malignant non-Hodgkin lymphoma of the uterus] Kühn W, et al. **Geburtshilfe Frauenheilkd** 1989 May; 49(5):506–8 (Eng. Abstr.) (Ger)
[Fine needle aspiration of the skin: diagnosis of malignant lymphoma and of cutaneous manifestations of myeloid hemoblastosis] Binder T, et al. **Hautarzt** 1988 Sep; 39(9):576–80 (Eng. Abstr.) (Ger)
[Local recurrent centroblastic lymphoma of the skin] Eckert F, et al. **Hautarzt** 1988 Dec;39(12):791–4 (Eng. Abstr.) (Ger)
[Definition of malignant histiocytosis and large cell anaplastic (Ki-1) lymphoma in children] Bucsky P, et al. **Klin Padiatr** 1989 Jul–Aug;201(4):233–6 (Eng. Abstr.) (Ger)
[Malignant centroblastic-centrocytic lymphoma: a differential diagnostic alternative in syphilis II] Leicht E, et al. **Med Klin** 1989 May 15;84(5):271–2 (Ger)
[Primary mediastinal, clear cell B-cell lymphoma is an epithelium-associated thymus lymphoma] Möller P, et al. **Pathologe** 1989 Jul;10(4):234–9 (Ger)
[Changes in the breast in Hodgkin's and non-Hodgkin's lymphoma] Hérics I, et al. **Radiol Diagn (Berl)** 1989; 30(1):33–9 (Eng. Abstr.) (Ger)
[Image analysis of the differentiation status of lymphatic cells in malignant non-Hodgkin lymphomas and tonsils] Bergmann M, et al. **Verh Dtsch Ges Pathol** 1988;72:354–9 (Eng. Abstr.) (Ger)
[Associated glomerulonephritis in immunocytoma] Klette H. **Z Gesamte Inn Med** 1988 Sep 1;43(17):488–91 (Eng. Abstr.) (Ger)
[Staging in non-Hodgkin's lymphomas] Wilke C, et al. **Z Lymphol** 1988 Jul;12(1):5–14 (Eng. Abstr.) (Ger)
[Gastric non-Hodgkin's lymphoma: cytogenetic correlations] Cosimi MF, et al. **G Ital Oncol** 1987 Oct–Dec;7(4):186–9 (Eng. Abstr.) (Ita)
[Primary lymphoma of the stomach. Endoscopic study] Manildo M, et al. **Minerva Dietol Gastroenterol** 1989 Apr–Jun;35(2):127–30 (Eng. Abstr.) (Ita)
[The onset of double metachronous neoplasms 29 years after the diagnosis of Hodgkin's disease] Bisi D, et al. **Minerva Med** 1989 May;80(5):511–4 (Eng. Abstr.) (Ita)
[Primary lymph node infarct and malignant non Hodgkin's lymphoma. Description of a case] Angelucci D, et al. **Pathologica** 1989 Jan–Feb;81(1071):83–9 (Eng. Abstr.) (Ita)
[Laparoscopy in the staging of lymphoma. Personal experience] Reguzzoni G, et al. **Recenti Prog Med** 1988 May;79(5):206–9 (Eng. Abstr.) (Ita)
[Two fatal cases of hepatic failure due to a malignant lymphoma presenting a liver injury] Tokuyama K, et al. **Gan No Rinsho** 1989 Jan;35(1):74–80 (Eng. Abstr.) (Jpn)
[Clinicopathological study on 8 cases with non-Hodgkin's lymphomas of the salivary glands] Maeda H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1400–5 (Eng. Abstr.) (Jpn)
[Primary non-Hodgkin's lymphoma, small lymphocytic type, in the spleen complicating myelodysplastic syndrome] Kawashima Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1051–5 (Jpn)
[Primary hepatocellular carcinoma growing in the complete remission of malignant lymphoma treated with curative segmentectomy] Maekawa T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):808–13 (Jpn)
[An autopsy case of progressive multifocal leukoencephalopathy associated with non-Hodgkin's malignant lymphoma] Yamane T, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):64–9 (Jpn)
[Clinical diagnosis of malignant lymphoma with pericardial infiltration] Hiyoshi M, et al. **Rinsho Ketsueki** 1988 May; 29(5):728–32 (Eng. Abstr.) (Jpn)
[Evaluation of 28 cases of localized non-Hodgkin's lymphoma—clinicopathologic features and the response to treatment] Shimizu K, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2272–5 (Eng. Abstr.) (Jpn)
[Clinical studies on eleven patients with nasal and paranasal lymphoma, with special reference to staging evaluation] Shimizu K, et al. **Rinsho Ketsueki** 1989 Feb;30(2):181–4 (Eng. Abstr.) (Jpn)
[Non-Hodgkin's lymphoma subsequent to pure red cell aplasia] Suga K, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2096–100 (15 ref.) (Eng. Abstr.) (Jpn)
[Primary malignant lymphoma of the left brachial plexus] Usuki K, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1125–8 (Eng. Abstr.) (Jpn)
[A case of infiltrating type of lymphosarcoma with remission of 3 and a half years' duration] Ishino H, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):124–9 (Eng. Abstr.) (Jpn)
[Giant cell anaplastic anemia] Gravdahl HK, et al. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2289–94 (Eng. Abstr.) (Nor)
[Conjunctival lymphosarcoma] Nicu C. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):211–6 (Eng. Abstr.) (Rum)
[Tumors of the small intestine. Anatomico-clinical considerations in 4 cases] Curteanu G, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jan–Mar; 38(1):53–60 (Eng. Abstr.) (Rum)
[Pathologic anatomy of subtypes of immunoblastic lymphosarcoma] Mamedov RD, et al. **Arkh Patol** 1989; 51(1):45–52 (Eng. Abstr.) (Rus)
[Non-Hodgkin's lymphoma of extranodal origin. Analysis of prognostic factors] García-Girón C, et al. **Med Clin (Barc)** 1988 Jun 25;91(5):161–5 (Eng. Abstr.) (Spa)
[Warthin's tumor a prelymphomatous lesion? (letter)] Morente M. **Med Clin (Barc)** 1989 Jan 28;92(3):118 (Spa)
[Non-Hodgkin's lymphoma with splenic granulomatous reaction] Urbano-Ispizua A, et al. **Med Clin (Barc)** 1989 May 6;92(17):661–4 (Eng. Abstr.) (Spa)
[Ki-1 non-Hodgkin's lymphoma. A multihospital study of 21 cases] Rivas C, et al. **Rev Clin Esp** 1989 Mar; 184(5):238–44 (Eng. Abstr.) (Spa)
[Bone marrow biopsy in non-Hodgkin's lymphoma: experience with 259 samples] Hernández Nieto L, et al. **Sangre (Barc)** 1989 Aug;34(4):271–7 (Eng. Abstr.) (Spa)
[Advanced abdominal non-Hodgkin's lymphoma in the child. Features and response to treatment] Lobo-Sanahuja F, et al. **Sangre (Barc)** 1988 Jun;33(3):196–201 (Eng. Abstr.) (Spa)
[Immunoblastic lymphoma as the terminal phase of an IgG myeloma (letter) (published erratum appears in Sangre (Barc) 1989 Feb;34(1):79)] Romero MS, et al. **Sangre (Barc)** 1988 Jun;33(3):240–1 (Spa)
[Non-Hodgkin's lymphomas. I. Clinico-biological features in a series of 98 patients] Tomás JF, et al. **Sangre (Barc)** 1988 Oct;33(5):361–6 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Spontaneous regression in non-Hodgkin's lymphoma: clinical and pathogenetic considerations. Drobyski WR, et al. **Am J Hematol** 1989 Jun;31(2):138–41 (32 ref.)
Neuroendocrine function in survivors of childhood acute lymphocytic leukemia and non-Hodgkins lymphoma: a study of pulsatile growth hormone and gonadotropin secretions. Mauras N, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):9–17
Can pregnancy aggravate the course of non-Hodgkin's lymphoma? Giovannini M, et al. **Eur J Gynaecol Oncol** 1989;10(4):287–9
Simultaneous presentation of relapsing non-Hodgkin's lymphoma and Hodgkin's disease [letter] Lenner P, et al. **Eur J Haematol** 1989 Mar;42(3):315–6
Reactive hemophagocytosis in Ki-1 positive large cell lymphoma: a case study. Invernizzi R, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):155–9
Prolonged spontaneous remission of case of malignant lymphoma. Wolf JW. **Mo Med** 1989 May;86(5):275–7
[The Aulhorn flicker test. I: Concomitant neuritis in malignant non-Hodgkin's lymphoma and leukodystrophy] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Aug; 193(2):157–64 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Infant feeding and childhood cancer [letter] Magnani C, et al. **Lancet** 1988 Nov 12;2(8620):1136

PSYCHOLOGY

Psychological response to cancer diagnosis—II. Evidence for coping styles (coping styles and cancer diagnosis). Burgess C, et al. **J Psychosom Res** 1988;32(3):263–72
Psychological response to cancer diagnosis—I. Correlations with prognostic variables. Pettingale KW, et al. **J Psychosom Res** 1988;32(3):255–61

RADIOGRAPHY

Primary extranodal lymphoma in muscle. Scally J, et al. **Br J Radiol** 1989 Jan;62(733):81
Skeletal lymphoma. Franczyk J, et al. **Can Assoc Radiol J** 1989 Apr;40(2):75–9
Unusual presentation of non-Hodgkin lymphoma of the spleen. Martí-Bonmatí L, et al. **Can Assoc Radiol J** 1989 Feb;40(1):49–50
Osseous regeneration after therapy in patients with head and neck tumors. Estrin E, et al. **Cancer** 1989 Sep 15; 64(6):1222–5
Lymphoma of the small intestine: radiological appearances. Gourtsoyiannis NC, et al. **Clin Radiol** 1988 Nov; 39(6):639–45
CT appearance of primary pleural lymphoma. Malatskey A, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):165–7
Primary cerebral lymphoma in acquired immunodeficiency syndrome (AIDS)—CT manifestations. Orron DE, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):207–14
Comparison of CT and chest radiographs in the evaluation of post-therapy lymphoma patients. Khan A, et al. **Eur J Radiol** 1989 May;9(2):96–100
Gastrointestinal imaging in AIDS—luminal gastrointestinal tract. Wall SD. **Gastroenterol Clin North Am** 1988 Sep; 17(3):523–33 (20 ref.)
Non-Hodgkin's lymphoma in Rotter's nodes: a case report. Ampil FL. **J Arkansas Med Soc** 1989 Jan;85(8):332–3
Residual abdominal masses in aggressive non-Hodgkin's lymphoma after combination chemotherapy: significance and management. Surbone A, et al. **J Clin Oncol** 1988 Dec; 6(12):1832–7
Renal lymphoma in ataxia-telangiectasia: CT contribution. Levine C, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):537–9
Computed tomography in the evaluation of lymphoma of the uterine cervix. Miketic LM, et al. **J Comput Tomogr** 1988 Apr;12(2):154–8
Non-Hodgkin's lymphoma of bone. Gabel GT, et al. **Orthopedics** 1989 Aug;12(8):1139–42
Non-Hodgkin lymphoma: influence of lymphography, CT, and bone marrow biopsy on staging and management. Pond GD, et al. **Radiology** 1989 Jan;170(1 Pt 1):159–64
[Lymphoma of the nasal sinus] Daele J, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):502–12 (Eng. Abstr.) (Fre)
[Manifestation of a highly malignant non-Hodgkin's lymphoma of a spinal ganglion] Oelke R, et al. **ROFO** 1989 Aug;151(2):239–40 (Ger)
[Calcified untreated non-Hodgkin's lymphoma of the mediastinum] Stark P. **ROFO** 1989 Jul;151(1):110–1 (Ger)
[Two cases of primary pulmonary non-Hodgkin lymphoma] Nakayama T, et al. **Rinsho Hoshasen** 1989 Jan;34(1):177–80 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

Visualization of non-Hodgkin's lymphoma by I-123 IMP. Kosuda S, et al. **Clin Nucl Med** 1988 Dec;13(12):926–7
In vivo measurement of carbon-11 thymidine uptake in non-Hodgkin's lymphoma using positron emission tomography. Martiat P, et al. **J Nucl Med** 1988 Oct; 29(10):1633–7
[Bone marrow and bone scintigraphy in the examination of patients with malignant lymphoma] Jánoskúti L, et al. **Orv Hetil** 1988 Oct 16;129(42):2247–50 (Eng. Abstr.) (Hun)
[Ga-67 scintigraphy for the localization and staging of malignant lymphoma] Monzawa S, et al. **Gan No Rinsho** 1988 Aug;34(9):1059–64 (Eng. Abstr.) (Jpn)
[A case of cardiac metastasis from non-Hodgkin's lymphoma demonstrating interesting findings through radionuclide studies] Kawahara S, et al. **Kaku Igaku** 1989 Apr; 26(4):529–34 (Eng. Abstr.) (Jpn)
[Gallium-67 citrate accumulation in cardiac involvement of non-Hodgkin's malignant lymphoma] Kawamura M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1226–35 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

Prognostic factors in non-Hodgkin lymphoma stage I treated with radiotherapy. Hagberg H, et al. **Acta Oncol** 1989; 28(1):45–50
Growth hormone response to growth hormone-releasing hormone (hp GHRH1–44) as an index of growth hormone secretory dysfunction after prophylactic cranial irradiation for acute lymphoblastic leukemia (24 grays). Crosnier H, et al. **Acta Paediatr Scand** 1988 Sep;77(5):681–7
Treatment of CNS involvement of non-Hodgkin's lymphoma with short-term cerebrospinal irradiation, high-dose chemotherapy, and autologous bone marrow transplantation. A case report of a 12-year-old patient. Ishii E, et al. **Am J Clin Oncol** 1989 Apr;12(2):132–6
Comprehensive lymphatic irradiation for stage II-III non-Hodgkin's lymphoma. Mendenhall NP, et al. **Am J Clin Oncol** 1989 Jun;12(3):190–4
Emergency radiotherapy in a patient with a mediastinal lymphoblastoma [letter; comment] Sold MJ, et al. **Anaesthesia** 1989 May;44(5):450–1. **Comment on:** Anaesthesia 1988 Oct;43(10):864–6
Elimination of clonogenic tumor cells from HL-60, Daudi, and U-937 cell lines by laser photoradiation therapy: implications for autologous bone marrow purging. Gulliya KS, et al. **Blood** 1989 Mar;73(4):1059–65
Morphologic changes in the thyroid after irradiation for Hodgkin's and non-Hodgkin's lymphoma. Carr RF, et al. **Cancer** 1989 Aug 15;64(4):825–9
Non-Hodgkin's lymphoma of the nasopharynx, paranasal sinus and palate. Makepeace AR, et al. **Clin Radiol** 1989 Mar;40(2):144–6
Management of localized non-Hodgkin's lymphoma: the experience at St. Bartholomew's Hospital 1972–1985. Richards MA, et al. **Hematol Oncol** 1989 Jan–Feb;7(1):1–18
Definitive irradiation for localized non-Hodgkin's lymphoma of breast. DeBlasio D, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):843–6
Severe chemotherapy-induced recall of radiation mucositis in a patient with non-Hodgkin's lymphoma of Waldeyer's ring [letter] Eifel PJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):907–8
Occasional case reports/communications from the international radiation oncology community [letter] Furong Z. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1655–6
Primary orbital lymphomas. Reddy EK, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1239–41
Stage I and II non-Hodgkin's lymphomas: long-term results

of radiation therapy. Reddy S, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):687–92

Prognostic factors of stage I and II non–Hodgkin's lymphomas of the head and neck: the value of the working formulation and need for chemotherapy. Shigematsu N, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1111–8

Total body irradiation for stage II–IV non–Hodgkin's lymphoma: ten–year follow–up. Mendenhall NP, et al. **J Clin Oncol** 1989 Jan;7(1):67–74

Primary non–Hodgkin's lymphoma of the orbit. Makepeace AR, et al. **J R Soc Med** 1988 Nov;81(11):640–2

114Inm oxine–labelled lymphocytes—therapeutic applications. Hamilton D, et al. **Nucl Med Commun** 1988 Oct;9(10):797–802

Primary intracerebral lymphoma: a clinicopathological analysis of 14 patients presenting over a 10–year period in Sheffield. Dorreen MS, et al. **Q J Med** 1988 May; 67(253):387–404

Results of radiotherapy in stage I to II extranodal non–Hodgkin's lymphoma of the head and neck. Kuten A, et al. **Strahlenther Onkol** 1989 Aug;165(8):578–83

[Short–term results of radiotherapy in early stage non–Hodgkin's lymphoma] Huang YR. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):470–2 (Eng. Abstr.) **(Chi)**

[Radiotherapy in (localized) non–Hodgkin's lymphoma of the orbit] Pötter R, et al. **Klin Monatsbl Augenheilkd** 1989 Jun; 194(6):413–23 (Eng. Abstr.) **(Ger)**

[Radiotherapy of malignant lymphomas] Wannenmacher M. **Rontgenblatter** 1989 Jan;42(1):31–3 (Eng. Abstr.) **(Ger)**

[Proposal for a therapeutic protocol in Crosti lymphoma] Manganoni AM, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):21–3 (Eng. Abstr.) **(Ita)**

[Analysis of therapeutic efficacy of combined radio–chemotherapy, pre–radio–therapy in 61 cases of non–Hodgkin's lymphoma] Saito Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):42–50 (Eng. Abstr.) **(Jpn)**

[Effects of intravascular laser irradiation of blood on growth and metastasis of lymphosarcoma in rats] Tsukerman IIa, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):472–3 (Eng. Abstr.) **(Rus)**

[Effects of the use of cranial radiotherapy. Findings obtained by computerized axial tomography and intellectual function tests] Moro Bayón C, et al. **An Esp Pediatr** 1988 May; 28(5):441–4 (Eng. Abstr.) **(Spa)**

SECONDARY

Temporal bone pathology of metastatic T–cell lymphoma. Kobayashi K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 447:113–9 (12 ref.)

SECRETION

[Immuno–secreting nasal lymphoma in childhood] Alemany Monraval P, et al. **An Esp Pediatr** 1989 Apr;30(4):320–2 **(Spa)**

SURGERY

Primary non–Hodgkin lymphoma treated with liver resection. Case report. Søndenaa K, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):681–2

Autologous bone marrow transplantation in non–Hodgkin's lymphoma: monoclonal antibodies plus complement for ex vivo marrow treatment. Hurd DD, et al. **Am J Med** 1988 Dec;85(6):829–34

Pancreatic lymphoma. Is surgery mandatory for diagnosis or treatment? Webb TH, et al. **Ann Surg** 1989 Jan; 209(1):25–30

Autologous bone–marrow transplantation in non–Hodgkin's lymphomas. Pedrazzini A, et al. **Biochim Biophys Acta** 1989 Jul 28;989(1):11–24 (105 ref.)

Autologous transplantation of bone marrow purged in vitro with anti–CD7–(WT1–) ricin A immunotoxin in T–cell lymphoblastic leukemia and lymphoma. Preijers FW, et al. **Blood** 1989 Aug 15;74(3):1152–8

Allogeneic bone marrow transplantation in patients with lymphoma relapsing after autologous marrow transplantation. Schouten HC, et al. **Bone Marrow Transplant** 1989 Jan;4(1):119–21

Autologous bone marrow transplantation in patients with non–Hodgkin's lymphoma: comparison of different parameters in predicting the kinetics of haematological recovery. Visani G, et al. **Bone Marrow Transplant** 1988 Nov;3(6):599–605

[Primary extranodal non–Hodgkin lymphoma of the stomach. Value of surgery within the scope of a multimodality treatment concept] Roder JD, et al. **Chirurg** 1989 Mar; 60(3):157–62 (Eng. Abstr.) **(Ger)**

[Accomplishments of tumor surgery in tumors of the lymphatic system] Funovics J, et al. **Langenbecks Arch Chir** 1988;Suppl 2:315–9 (Eng. Abstr.) **(Ger)**

[Involvement of the urogenital system in non–Hodgkin lymphoma (primary and secondary involvement)] Lehmann HD. **Urologe [A]** 1988 Jul;27(4):234–9 (Eng. Abstr.) **(Ger)**

[Primary malignant non–Hodgkin's lymphoma of the stomach. Case series contribution] Bordone N, et al. **Minerva Chir** 1989 Apr 30;44(8):1217–24 (Eng. Abstr.) **(Ita)**

[Non–Hodgkin's lymphoma and emergency surgery. Apropos of 12 cases] Idígoras G, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:126–8 (Eng. Abstr.) **(Spa)**

THERAPY

Management of non–Hodgkin lymphoma in adults in Scandinavia, United Kingdom, and The Netherlands. Report from the European School of Oncology intercity meeting at Huddinge Hospital, 3rd June, 1988. Juliusson G, et al. **Acta Oncol** 1989;28(1):135–40 (32 ref.)

Management of malignant lymphoma in the elderly. An EORTC retrospective evaluation. Tirelli U. **Acta Oncol** 1989;28(2):199–201

A phase II trial of intermittent leukocyte interferon and high dose chlorambucil in the treatment of non–Hodgkin's lymphoma resistant to conventional therapy. Clark RH, et al. **Am J Clin Oncol** 1989 Feb;12(1):75–7

Salvage therapy for relapsed or refractory non–Hodgkin's lymphoma utilizing autologous bone marrow transplantation. Vose JM, et al. **Am J Med** 1989 Sep; 87(3):285–8

Treatment of non–Hodgkin's lymphoma in childhood. Moe PJ. **An Esp Pediatr** 1988 Oct;29 Suppl 34:118–22 (13 ref.)

Recombinant human granulocyte–macrophage colony stimulating factor (rh GM–CSF) after bone marrow transplantation. Link H, et al. **Behring Inst Mitt** 1988 Aug; (83):313–9

Crossover study of immunoglobulin replacement therapy in patients with low–grade B–cell tumors. Griffiths H, et al. **Blood** 1989 Feb;73(2):366–8

High–dose therapy and autologous peripheral blood stem cell transplantation for patients with lymphoma. Kessinger A, et al. **Blood** 1989 Sep;74(4):1260–5

Treatment of poor prognosis non–Hodgkin's lymphoma using cyclophosphamide and total body irradiation regimens with autologous bone marrow rescue. Braine HG, et al. **Bone Marrow Transplant** 1987 Jun;2(1):7–14

Marrow transplantation for non–Hodgkin's lymphoma: a multi–centre study from the European Co–operative Bone Marrow Transplant Group. Ernst P, et al. **Bone Marrow Transplant** 1986 May;1(1):81–6

Autologous bone marrow transplantation for advanced stage adult lymphoblastic lymphoma in first complete remission. A pilot study of the non–Hodgkin's Lymphoma Co–operative Study Group (NHLCSG). Santini G, et al. **Bone Marrow Transplant** 1989 Jul;4(4):399–404

Combined surgery and chemotherapy for the treatment of primary gastrointestinal intermediate– or high–grade non–Hodgkin's lymphomas. Bellesi G, et al. **Br J Cancer** 1989 Aug;60(2):244–8

Alpha–interferon in the treatment of malignant lymphoma. Cavalli F. **Br J Clin Pract Symp Suppl** 1988 Mar;62:16–21 (26 ref.)

Adjuvant therapy by BCG of non–Hodgkin's malignant lymphomas in a controlled trial: an update [letter] Hoerni B, et al. **Br J Haematol** 1989 Jan;71(1):161–2

Intractible cutaneous non–Hodgkin's lymphoma of the lower limb. Complete remission after sequential regional isolated hyperthermic perfusion and perfusion with 1–phenylalanine–mustard (melphalan, L–Pam). Jansen RF, et al. **Cancer** 1989 Jul 15;64(2):392–5

Autologous bone marrow transplantation in children. Pick TE. **CRC Crit Rev Oncol Hematol** 1988;8(4):311–37 (165 ref.)

Lymphoblastic lymphoma in adults: a clinicopathological study of 34 cases treated at the Institut Gustave–Roussy. Salloum E, et al. **Eur J Cancer Clin Oncol** 1988 Oct; 24(10):1609–16

Primary non–Hodgkin's lymphoma of the stomach: changing aspects and therapeutic choices. Taal BG, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):439–50

Influence of therapy on local control and survival in stage I and II intermediate and high grade non–Hodgkin's lymphoma. Taylor RE, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1771–7

Early hematopoietic reconstitution after autologous transplantation with blood–derived stem cells in a patient with advanced lymphoma. Iacone A, et al. **Int J Artif Organs** 1989 Jun;12(6):395–9

Whole body hyperthermia in dogs using a radiant heating device: effect of surface cooling on temperature uniformity. Thrall DE, et al. **Int J Hyperthermia** 1989 Mar–Apr; 5(2):137–43

Regimen–related toxicity and early posttransplant survival in patients undergoing marrow transplantation for lymphoma. Bearman SI, et al. **J Clin Oncol** 1989 Sep; 7(9):1288–94

Treatment of refractory non–Hodgkin's lymphoma with radiolabeled MB–1 (anti–CD37) antibody. Press OW, et al. **J Clin Oncol** 1989 Aug;7(8):1027–38

Therapy for lymphoma in the elderly [letter] Radford JE Jr, et al. **J Clin Oncol** 1989 Jul;7(7):981–3

Non–Hodgkin's lymphomas in 137 patients aged 70 years or older: a retrospective European Organization for Research and Treatment of Cancer Lymphoma Group Study. Tirelli U, et al. **J Clin Oncol** 1988 Nov;6(11):1708–13

Cardiac damage in autologous bone marrow transplant patients: an autopsy study. Cardiotoxic pretreatment as a major risk factor. von Herbay A, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1175–81

Remission induction in non–Hodgkin lymphoma with reshaped human monoclonal antibody CAMPATH–1H. Hale G, et al. **Lancet** 1988 Dec 17;2(8625):1394–9

Induction of graft–versus–host disease after autologous bone marrow transplantation. Jones RJ, et al. **Lancet** 1989 Apr 8;1(8641):754–7

High dose alpha–2–recombinant interferon in the treatment of malignant lymphoproliferative diseases. A pilot study. Opat P, et al. **Neoplasma** 1989;36(4):489–94

Current therapy for diffuse large–cell lymphoma. Longo DL, et al. **Prog Hematol** 1987;15:115–36 (74 ref.)

Three–dimensional volumetric assessment of response to treatment: stage I and II diffuse large cell lymphoma of the mediastinum. Willett CG, et al. **Radiother Oncol** 1988 Jul;12(3):193–8

Remission of FeLV–associated lymphosarcoma and persistent viral infection after extracorporeal immunoadsorption of plasma using staphylococcal protein A columns: details of immune response. Snyder HW Jr, et al. **Semin Hematol** 1989 Apr;26(2 Suppl 1):25–30

Modulation of immunity in patients with autoimmune disease and cancer treated by extracorporeal immunoadsorption with PROSORBA columns. Snyder HW Jr, et al. **Semin Hematol** 1989 Apr;26(2 Suppl 1):31–41 (104 ref.)

[Cervicofacial non–Hodgkin's malignant lymphoma. Classification, prognosis and treatment apropos of 65 cases] Pignat JC, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(1):37–9 (Eng. Abstr.) **(Fre)**

[Current results of intensive chemotherapy as salvage with bone marrow graft in highly malignant T lymphomas. Apropos of 10 cases] Mezianе F, et al. **Pediatrie** 1988; 43(7):637–44 (Eng. Abstr.) **(Fre)**

[High–dosage chemo–radiotherapy with autologous bone marrow transfusion in malignant lymphoma: indications and personal experience] Stahel RA, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):911–7 (Eng. Abstr.) **(Ger)**

[Interferon in the treatment of non–Hodgkin's lymphoma] Mantovani L, et al. **Clin Ter** 1988 Oct 31;127(2):123–30 (32 ref.) (Eng. Abstr.) **(Ita)**

[Non–Hodgkin's lymphomas: staging and therapy] Rossini F, et al. **Clin Ter** 1989 Mar 31;128(6):387–400 (109 ref.) (Eng. Abstr.) **(Ita)**

[Bone marrow transplant in acute leukemia in children. Experience of the Pesaro group] Giardini C, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):563–7 (Eng. Abstr.) **(Ita)**

[A primary malignant lymphoma of the vulva—a case report] Shinohara M, et al. **Gan No Rinsho** 1988 Dec; 34(15):2125–30 (Eng. Abstr.) **(Jpn)**

[Combined immuno–radio–chemotherapy of head and neck non–Hodgkin's lymphoma] Suzuki K, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3261–5 (Eng. Abstr.) **(Jpn)**

[A clinical study of non–Hodgkin's lymphoma of the nasal cavity and paranasal sinus] Takenaka T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2779–84 (Eng. Abstr.) **(Jpn)**

[A case of lymphoma of a higher stage of malignancy treated with cytostatics and interferon] Cieślińska A. **Pol Tyg Lek** 1988 Jul 11;43(28):917–8 **(Pol)**

[Combined (poly–chemo–radio) therapy of non–Hodgkin's lymphomas] Balsogolov GD, et al. **Med Radiol (Mosk)** 1989 Aug;34(8):31–6 **(Rus)**

[The treatment of relapses of non–Hodgkin's lymphomas] Kindzel'skiĭ LP, et al. **Vrach Delo** 1989 Jan;(1):56–8 (Eng. Abstr.) **(Rus)**

[Intensive chemotherapy followed by autotransplant of bone marrow without cryopreservation as a form of treatment in 17 patients with lymphomas with a bad prognosis] Bello C, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):573–8 (Eng. Abstr.) **(Spa)**

[Non–Hodgkin's lymphomas: importance of prognostic factors in therapeutic decisions] Pereira A, et al. **Med Clin (Barc)** 1988 Jun 25;91(5):172–4 (40 ref.) **(Spa)**

ULTRASTRUCTURE

Two statistical approaches to nuclei shape and size in a morphometric description of lymph node sections in non–Hodgkin's lymphoma. Lesty C, et al. **Cytometry** 1989 Jan;10(1):28–36

Signet ring cell lymphoma of T cell type. Cross PA, et al. **J Clin Pathol** 1989 Mar;42(3):239–45

Correlation between NOR sizes and numbers in non–Hodgkin's lymphomas. Crocker J, et al. **J Pathol** 1988 Nov;156(3):233–9

Characterization of extracellular matrix in non–Hodgkin's lymphomas. Karttunen T, et al. **Pathol Res Pract** 1988 Nov; 183(6):735–46

Unusual non–Hodgkin's lymphomas and true histiocytic lymphomas. Erlandson RA, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):249–73

An immunohistochemically defined non–Hodgkin's lymphoma showing intercellular junctions. A case report. Eyden BP, et al. **Virchows Arch [A]** 1989;415(3):297–300

[Transmission electron microscopy in the differential diagnosis of non–Hodgkin's lymphoma using fine–needle aspirates] Lubiński J, et al. **Patol Pol** 1988 Jul–Sep; 39(3):177–88 (Eng. Abstr.) **(Pol)**

URINE

Prognostic relevance of urinary neopterin in non–Hodgkin's lymphomas. Abate G, et al. **Cancer** 1989 Feb 1;63(3):484–9

[Urinary cytodiagnostic abnormality in a patient with

malignant lymphoma] Sueoka E, et al. **Rinsho Ketsueki** 1989 Feb;30(2):207–10 (Eng. Abstr.) **(Jpn)**

VETERINARY

Clinical, ultrasonographic and pathological findings in a horse with splenic lymphosarcoma and pseudohyperparathyroidism. Marr CM, et al. **Equine Vet J** 1989 May;21(3):221–6

Disseminated sarcocystosis in a cat with lymphosarcoma. Edwards JF, et al. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):831–2

What is your diagnosis? Multifocal lytic bone disease. Frazier AG, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):703–4

Bilateral eyelid swelling attributable to lymphosarcoma in a horse. Murphy CJ, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):939–42

L-asparaginase for treatment of lymphoid neoplasia in dogs. Rogers KS. **J Am Vet Med Assoc** 1989 Jun 1; 194(11):1626–30 (20 ref.)

Generalized skeletal involvement of a hematopoietic tumor in a dog. Shell L, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1077–8

Ultrasonographic features of splenic lymphosarcoma in dogs: 12 cases (1980–1986). Wrigley RH, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1565–8

The use of gamma linolenic acid, linoleic acid and natural vitamin E for the treatment of multicentric lymphoma in two dogs. Williams JH. **J S Afr Vet Assoc** 1988 Sep; 59(3):141–4

Tumorigenic potential of a myc-containing strain of feline leukemia virus in vivo in domestic cats. Levy LS, et al. **J Virol** 1988 Dec;62(12):4770–3

Doxorubicin-induced cardiotoxicity in five dogs. Loar AS, et al. **Semin Vet Med Surg (Small Anim)** 1986 Feb; 1(1):68–71

Spontaneous regression of bovine cutaneous leukosis. Okada K, et al. **Vet Pathol** 1989 Mar;26(2):136–43

Emperipolesis of lymphoid neoplastic cells in feline hepatocytes. Ossent P, et al. **Vet Pathol** 1989 May; 26(3):279–80

Histopathological observations on regression of skin lymphosarcoma in five cows. Ishino S, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):578–85

[The activity of growth-regulating substances isolated from the spleen and thymus of healthy cows and of those with hemoblastoses] Ronichevskaia GM, et al. **Eksp Onkol** 1989; 11(4):63–6 (Eng. Abstr.) **(Rus)**

LYMPHOMA, UNDIFFERENTIATED

PATHOLOGY

Diffuse small noncleaved cell lymphoma in children, Burkitt's versus non-Burkitt's types. Results from the Pediatric Oncology Group and St. Jude Children's Research Hospital. Hutchison RE, et al. **Cancer** 1989 Jul 1;64(1):23–8

Patterns of relapse in large-cell lymphoma patients with bulk disease: implications for the use of adjuvant radiation therapy. Shipp MA, et al. **J Clin Oncol** 1989 May;7(5):613–8

ULTRASTRUCTURE

Electron microscopy of large cell undifferentiated and giant cell tumors. Damjanov I, et al. **Pathol Res Pract** 1989 Feb; 184(2):137–60 (108 ref.)

LYMPHOMATOID GRANULOMATOSIS

Necrotizing vasculitis with granulomatosis. Yevich I. **Int J Dermatol** 1988 Oct;27(8):540–6 (36 ref.)

[Lymphomatoid granulomatosis. Recent bibliographic data] Foldès C. **Ann Dermatol Venereol** 1988;115(10):1067–71 **(Fre)**

COMPLICATIONS

Endocrine dysfunction in lymphomatoid granulomatosis. Leedman PJ, et al. **Aust N Z J Med** 1989 Apr;19(2):97–102

Successive legionellosis in the course of lymphomatoid granulomatosis. Humbert PG, et al. **Dermatologica** 1989; 179(1):47–50

Lymphomatoid granulomatosis and malignant lymphoma of the central nervous system in the acquired immunodeficiency syndrome. Anders KH, et al. **Hum Pathol** 1989 Apr;20(4):326–34

Central nervous system lymphomatoid granulomatosis in AIDS? [editorial] Colby TV. **Hum Pathol** 1989 Apr; 20(4):301–2

Lymphomatoid granulomatosis—evidence of a clonal T-cell origin and an association with lethal midline granuloma. Whittaker S, et al. **Q J Med** 1988 Aug;68(256):645–55

Lymphomatoid granulomatosis presenting with polyarthritis. Ralston SH, et al. **Scott Med J** 1988 Dec;33(6):373–4

Tracheoesophageal fistula in the patient with lymphoma: case report and review of the literature. Perry RR, et al. **Surgery** 1989 Jun;105(6):770–7 (49 ref.)

DIAGNOSIS

CT and MR of lymphomatoid granulomatosis of the CNS: report of four cases and review of the literature. Kapila A, et al. **AJNR** 1988 Nov-Dec;9(6):1139–43 (20 ref.)

Lymphomatoid granulomatosis presenting as a progressive cervical cord lesion. Collins S, et al. **Aust N Z J Med** 1989 Apr;19(2):144–6

Extra-pulmonary lymphomatoid granulomatosis [letter] Carmichael AJ, et al. **Br J Rheumatol** 1989 Aug;28(4):358–9

A 48-year-old woman with large mass shadow in the right lower lung with cough, chest pain and fever [clinical conference] Lou FD, et al. **Chin Med J [Engl]** 1988 Sep; 101(9):695–9

Bronchocentric granulomatosis and allergic bronchopulmonary aspergillosis. Sulavik SB. **Clin Chest Med** 1988 Dec;9(4):609–21 (116 ref.)

Magnetic resonance imaging and computed tomography findings in a patient with lymphomatoid granulomatosis. Mendelson DS, et al. **Clin Imaging** 1989 Jun;13(2):130–3

Lymphomatoid granulomatosis: two cases with skin involvement. Camisa C. **J Am Acad Dermatol** 1989 Apr; 20(4):571–8 (39 ref.)

[Lymphomatoid granulomatosis. Lymphoma of a particular type which is very difficult to diagnose] Storti E. **Recenti Prog Med** 1989 Mar;80(3):153–9 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Lymphomatoid granulomatosis. A case for aggressive therapy. Jenkins TR, et al. **Cancer** 1989 Sep 15;64(6):1362–5

PATHOLOGY

Angiocentric immunoproliferative lesions: a clinicopathologic spectrum of post-thymic T-cell proliferations. Lipford EH Jr, et al. **Blood** 1988 Nov; 72(5):1674–81

A case of lymphomatoid granulomatosis with a protracted course and prominent CNS involvement [letter] Amin SN, et al. **Br J Rheumatol** 1989 Feb;28(1):77–8

Cavitary lung disease with skin lesions. Leff JA, et al. **Chest** 1989 Feb;95(2):457–8

Lymphomatoid granulomatosis: clinical and histopathological report of a patient presenting with spinal cord involvement. Herderscheê D, et al. **J Neurol** 1988 Sep;235(7):432–4

Parkinsonism as first manifestation of lymphomatoid granulomatosis [letter] Oliveras C, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):999–1001

Lymphomatoid granulomatosis in a 13-month-old infant. Lehman TJ, et al. **J Rheumatol** 1989 Feb;16(2):235–8

Benign lymphocytic angiitis and granulomatosis. Tukiainen H, et al. **Thorax** 1988 Aug;43(8):649–50

[Lymphomatoid papulosis resembling ecthyma. A case report] Harder D, et al. **Z Hautkr** 1989 Jul 15;64(7):593–5 (Eng. Abstr.) **(Ger)**

[Lymphomatoid granulomatosis with necrotic vasculitis (letter)] Strukov AI. **Arkh Patol** 1988;50(12):80 **(Rus)**

[Acute malignant histiocytosis in a patient with Liebow's lymphomatoid granulomatosis (a case report)] Krylov AA, et al. **Vopr Onkol** 1988;34(9):1119–22 **(Rus)**

RADIOGRAPHY

Lymphomatoid granulomatosis: a review of 12 cases. Prenovault JM, et al. **Can Assoc Radiol J** 1988 Dec; 39(4):263–6

Lymphomatoid granulomatosis: a case report. Ferrell KD, et al. **Indiana Med** 1988 Dec;81(12):1029–31

RADIONUCLIDE IMAGING

Thoracic gallium uptake in patients with lymphomatoid granulomatosis. Tien R, et al. **Clin Nucl Med** 1988 Dec; 13(12):886–8

RADIOTHERAPY

Sequential half-body irradiation in lymphomatoid granulomatosis. Report of a case and an immunohistologic study. Atkinson CH, et al. **Cancer** 1989 Feb 15;63(4):652–6

Radiation therapy in lymphomatoid granulomatosis. Nair BD, et al. **Cancer** 1989 Aug 15;64(4):821–4

VETERINARY

A syndrome resembling lymphomatoid granulomatosis in the dog. Postorino NC, et al. **J Vet Intern Med** 1989 Jan-Mar; 3(1):15–9

LYMPHOMATOSIS VIRUS, AVIAN see **AVIAN LEUKOSIS VIRUSES**

LYMPHOPENIA

see related
LYMPHOCYTE DEPLETION

BLOOD

The effects of anesthesia and surgery on lymphocyte populations and function in infants and children. Platt MP, et al. **J Pediatr Surg** 1989 Sep;24(9):884–7

CHEMICALLY INDUCED

Lymphopenic effects on mice of a component of ammonia caramel, 2-acetyl-4(5)-tetrahydroxybutylimidazole (THI). Iscaro A, et al. **Immunol Cell Biol** 1988 Oct-Dec;66 (Pt 5-6):395–402

[Exposure to mercury and the immune system] Moszczyński P, et al. **Pol Tyg Lek** 1988 May 16;43(20):640–4 (52 ref.) **(Pol)**

[Changes in the immune system in long-term carbon tetrachloride poisoning] Kolpashchikova IF. **Gig Sanit** 1988 Dec;(12):81–3 **(Rus)**

COMPLICATIONS

Chronic abdominal pain, lymphopenia, and hypogammaglobulinemia in a 9-year-old female [clinical conference] Perrick D, et al. **Ann Allergy** 1989 Apr; 62(4):287–8, 326–8

A model for disease heterogeneity in systemic lupus erythematosus. Relationships between histocompatibility antigens, autoantibodies, and lymphopenia or renal disease. Harley JB, et al. **Arthritis Rheum** 1989 Jul;32(7):826–36

Pseudoachondroplasia with immune deficiency. Kulturs ay N, et al. **Pediatr Radiol** 1988;18(6):505–8

[Immunologic disorder in children with hemophilia] Bogusławska-Jaworska J, et al. **Pediatr Pol** 1988 May; 63(5):319–25 (Eng. Abstr.) **(Pol)**

[Immunologic disorders in patients with recurrent herpes simplex] Majewski S, et al. **Przegl Dermatol** 1988 Mar-Apr; 75(2):107–12 (Eng. Abstr.) **(Pol)**

[Factors affecting the incidence of exacerbation and recurrence of intrathoracic sarcoidosis] Solodkovskil ML. **Sov Med** 1989;(5):79–81 **(Rus)**

DRUG THERAPY

[Experience using immunocorrecting agents in workers engaged in the manufacture of graphite and asbestos products] Bezzub SL, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):27–9 (Eng. Abstr.) **(Rus)**

[Differentiated immunocorrective therapy of dust-induced bronchitis in machine builders] Kleíner AI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):19–21 (Eng. Abstr.) **(Rus)**

[Difficulties in the immunologic and clinical control of nonspecific immunotherapy of bronchial asthma] Bobkova LP, et al. **Ter Arkh** 1988;60(8):109–14 **(Rus)**

ETIOLOGY

Lymphopenia and deranged lymphocyte subsets in nasopharyngeal carcinoma. Cheng PN, et al. **Clin Otolaryngol** 1989 Feb;14(1):53–9

Mechanisms of tumor necrosis factor alpha-induced lymphopenia, neutropenia, and biphasic neutrophilia: a study of lymphocyte recirculation and hematologic interactions of TNF alpha with endogenous mediators of leukocyte trafficking. Ulich TR, et al. **J Leukoc Biol** 1989 Feb;45(2):155–67

Lymphopenia in rheumatoid arthritis. Symmons DP, et al. **J R Soc Med** 1989 Aug;82(8):462–3

Kinetics of lymphocyte subpopulations in dengue hemorrhagic fever/dengue shock syndrome. Sarasombath S, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec;19(4):649–56

Lymphopaenia in the inflammatory response caused by notechis II-5 [letter] Emslie-Smith AM, et al. **Toxicon** 1989;27(5):499–500

[Somatic effects of radiation] Jaśkowski J, et al. **Wiad Lek** 1988 Sep 15;41(18):1252–9 **(Pol)**

[Pathogenesis of immunologic deficiency in the initial stage of lymphogranulomatosis in children] Torubarova NA, et al. **Pediatriia** 1989;(2):38–42 (Eng. Abstr.) **(Rus)**

[Immunologic status in post-burn esophageal strictures] Chernousov AF, et al. **Sov Med** 1988;(10):20–4 (Eng. Abstr.) **(Rus)**

[Characteristics of secondary immunologic deficiency in children with chronic hepatitis B and the methods of its correction] Gol'zand IV, et al. **Ter Arkh** 1989;61(2):72–6 (Eng. Abstr.) **(Rus)**

[Clinico-immunological changes in patients with chronic pancreatitis and their correction during the treatment] Gubergrits NB. **Ter Arkh** 1989;61(2):18–21 (Eng. Abstr.) **(Rus)**

[Prognostic value of studying the cellular immunity in ulcerative lesions of the stomach] Uspenskiĭ VM, et al. **Ter Arkh** 1989;61(2):21–3 (Eng. Abstr.) **(Rus)**

GENETICS

Genetic studies in inbred BB/Wor rats. Analysis of progeny produced by crossing lymphopenic diabetes-prone rats with nonlymphopenic diabetic rats. Guberski DL, et al. **Diabetes** 1989 Jul;38(7):887–93

IMMUNOLOGY

Efficient natural defense mechanisms against Listeria monocytogenes in T and B cell-deficient allogeneic bone marrow radiation chimeras. Preactivated macrophages are the main effector cells in an early phase after bone marrow transfer. Roesler J, et al. **J Immunol** 1989 Sep 1; 143(5):1710–5

Neutrophilia and lymphopenia in major mood disorders. Darko DF, et al. **Psychiatry Res** 1988 Sep;25(3):243–51

NOD mice with high incidence of type 1 diabetes are not T lymphocytopenic. Satoh J, et al. **Tohoku J Exp Med** 1988 Jun;155(2):151–8

Thymus allografts fail to improve lymphopenia or prevent autoimmune diabetes in the BB rat. Brayman KL, et al.

Transplant Proc 1989 Feb;21(1 Pt 1):218–9

PATHOLOGY

Nodular sclerosing, mixed cellularity and lymphocyte-depleted variants of Hodgkin's disease are probable dendritic cell malignancies. Kennedy IC, et al. Clin Exp Immunol 1989 Jun;76(3):324–31

PREVENTION & CONTROL

Hematologic effects of short-term oral diethylcarbamazine treatment given to chronically feline leukemia virus-infected cats. Kitchen LW, et al. Cancer Lett 1989 Jun;45(3):183–7

Effect of thymic extract 'thymostimulin' on the incidence of infections and myelotoxicity during adjuvant chemotherapy for breast cancer. Iaffaioli RV, et al. Thymus 1988–89;12(2):69–75

RADIOTHERAPY

[Immunocorrection using low-intensity laser radiation in the surgical treatment of patients with obstructive jaundice] Zemskoĭ VS, et al. Klin Khir 1988;(9):32–5 (Eng. Abstr.) (Rus)

VETERINARY

Destruction of lymphocytes by a virulent avian influenza A virus. Van Campen H, et al. J Gen Virol 1989 Feb;70 (Pt 2):467–72

LYMPHOPROLIFERATIVE DISORDERS

The chronic proliferative disease of large granular lymphocytes. Bassan R, et al. Haematologica (Pavia) 1989 Jan–Feb;74(1):85–94 (134 ref.)

Pulmonary lymphangiomyomatosis. Eisera NB, et al. J R Soc Med 1988 Oct;81(10):607–9

BLOOD

Serum cholesterol and triglycerides in hematological malignancies. Marini A, et al. Acta Haematol (Basel) 1989; 81(2):75–9

The heme biosynthetic pathway in lymphocytes of patients with malignant lymphoproliferative disorders. Schoenfeld N, et al. Cancer Lett 1988 Dec 1;43(1–2):43–8

[Use of the Hemalog D automatic blood analyzer in the differential diagnosis of lymphoproliferative disorders] Zubrikhina GN, et al. Lab Delo 1988;(11):17–22 (Eng. Abstr.) (Rus)

[Large granule-containing lymphocytes in the peripheral blood of patients with lymphoproliferative diseases] Kindzel'skiĭ LP, et al. Vrach Delo 1988 Sep;(9):62–4 (Eng. Abstr.) (Rus)

[The count of large granule-containing lymphocytes in patients with lymphoproliferative diseases] Zlochevskaia LL, et al. Vrach Delo 1988 Dec;(12):35–7 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Structural requirements for hydantoins and 2-thiohydantoins to induce lymphoproliferative popliteal lymph node reactions in the mouse. Kammüller ME, et al. Int J Immunopharmacol 1988;10(8):997–1010

CLASSIFICATION

Pagetoid reticulosis: a T-cell lymphoproliferative disorder of the skin. Fine RM. Int J Dermatol 1988 Nov;27(9):617–8

[Spectrum of lymphoproliferative diseases] Franssila K. Duodecim 1989;105(11):1016–39 (53 ref.) (Fin)

COMPLICATIONS

Sjogren's syndrome and pulmonary lymphangiomyomatosis [letter] Desche P, et al. Chest 1988 Oct;94(4):898

Common variable immunodeficiency syndrome and nodular lymphoid hyperplasia in the small intestine. Bästlein C, et al. Endoscopy 1988 Sep;20(5):272–5

Antibody prevalence to HBLV (human herpesvirus-6, HHV-6) and suggestive pathogenicity in the general population and in patients with immune deficiency syndromes. Krueger GR, et al. J Virol Methods 1988 Sep; 21(1–4):125–31

Lymphoedema of the legs as a result of lymphangiomyomatosis. A case report and review of the literature. van Lith JM, et al. Neth J Med 1989 Jun; 34(5–6):310–6 (29 ref.)

Coexistence of sarcoidosis and malignant disease: causality or coincidence? Brincker H. Sarcoidosis 1989 Mar; 6(1):31–43 (111 ref.)

[The course of acquired C 1 esterase inhibitor deficiency in lymphoproliferative syndrome] Benitah E, et al. Ann Med Interne (Paris) 1988;139(7):488–90 (19 ref.) (Eng. Abstr.) (Fre)

[Tumors of the nasal cavity in human immunodeficiency virus infection. A case of polyclonal lymphoid hyperplasia] Pulik M, et al. Ann Otolaryngol Chir Cervicofac 1988;105(7):543–7 (34 ref.) (Eng. Abstr.) (Fre)

[A case of pulmonary lymphangiomyomatosis with left chylothorax] Namba Y, et al. Nippon Naika Gakkai Zasshi 1989 Mar;78(3):412–3 (Jpn)

[Chronic T-cell lymphoproliferative disorder associated with pure red cell aplasia] Chubachi A, et al. Rinsho Ketsueki 1989 Jan;30(1):105–10 (14 ref.) (Eng. Abstr.) (Jpn)

[Lymphangioleiomyomatosis of the lungs as a cause of spontaneous bilateral pneumothorax (case report)] Tatlić B, et al. Acta Chir Iugosl 1988;35(2):215–23 (Eng. Abstr.) (Scr)

DIAGNOSIS

Renal lymphangiomyoma—a rare cause of a multiloculated renal mass. Jacobs JE, et al. AJR 1989 Feb;152(2):307–8

The routine diagnostic utility of immunoglobulin and T-cell receptor gene rearrangements in lymphoproliferative disorders. Papadopoulos KP, et al. Am J Clin Pathol 1989 Jun;91(6):633–8

Molecular genetic analysis in the diagnosis of lymphoma in fine needle aspiration biopsies. I. Lymphomas versus benign lymphoproliferative disorders. Lubiński J, et al. Anal Quant Cytol Histol 1988 Dec;10(6):391–8

Comparison of genetic probe with immunophenotype analysis in lymphoproliferative disorders: a study of 87 cases. Henni T, et al. Blood 1988 Dec;72(6):1937–43

Molecular genetic markers in lymphoproliferative disorders. Burns BF. Clin Biochem 1989 Feb;22(1):33–9

Role of imprint cytology in the diagnosis of lymphoproliferative disorders. Lakshminarayanan K, et al. Indian J Med Res 1988 Nov;88:434–42

Evaluation of lymphoproliferative disorders. The ophthalmologist's role [editorial] Grossniklaus HE. J Clin Neuro Ophthalmol 1988 Mar;8(1):47–8

Pulmonary lymphangioleiomyomatosis: CT and pathologic findings. Templeton PA, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):54–7

Immunoperoxidase study of lymphoreticular lesions. Sonakul D, et al. J Med Assoc Thai 1988 Nov;71(11):605–11

Diagnosis and differential diagnosis of progressive lymphoproliferation and malignant lymphoma in persistent active herpesvirus infection. Krueger GR, et al. J Virol Methods 1988 Sep;21(1–4):255–64 (20 ref.)

Clinching the diagnosis: applications of recombinant DNA techniques. Trent RJ. Pathology 1988 Jul;20(3):247–51

[Chronic granulocytopenia as a main symptom of T gamma-lymphocytosis] Krieger G, et al. Dtsch Med Wochenschr 1989 Jul 7;114(27):1064–8 (Eng. Abstr.) (Ger)

[Gene rearrangement of immunoglobulins and of the T-cell receptor for antigens and its significance in the diagnosis of lymphoproliferative diseases] Iavorkovskiĭ LI. Eksp Onkol 1988;10(4):3–10 (46 ref.) (Eng. Abstr.) (Rus)

[Reactive lymphadenopathies and the criteria for their differential diagnosis from non-Hodgkin's lymphomas] Bychkova EN, et al. Gematol Transfuziol 1988 Aug; 33(8):30–4 (Eng. Abstr.) (Rus)

[Study of the characteristics of various hematologic diseases using monoclonal antibodies LT1, LT2 and LT7] Filatov AV, et al. Ter Arkh 1989;61(2):104–8 (Eng. Abstr.) (Rus)

[Terminal deoxynucleotidyl transferase—a marker for lymphatic neoplasms] Drobnjak M. Lijec Vjesn 1989 Mar; 111(3):63–6 (Eng. Abstr.) (Scr)

DIET THERAPY

[Dietary treatment of patients with lymphangiomyoma] Petersen I, et al. Ugeskr Laeger 1989 May 15;151(20):1248–9 (Eng. Abstr.) (Dan)

DRUG THERAPY

Treatment of severe Epstein-Barr virus-induced lymphoproliferative syndrome with ganciclovir: two cases after solid organ transplantation. Pirsch JD, et al. Am J Med 1989 Feb;86(2):241–4

The role of pentostatin (2'-deoxycoformycin, dCF) in the management of lymphoproliferative malignancies. Spiers AS. Blood Rev 1987 Jun;1(2):106–10 (21 ref.)

Phase II study with a new alkylating agent (PTT-119) in lymphoid malignancies. Tura S, et al. Haematologica (Pavia) 1988 Nov–Dec;73(6):503–8

Lymphangiomyomatosis: a respiratory illness with an endocrinologic therapy. Sieker HO, et al. Trans Am Clin Climatol Assoc 1987;99:57–67

[Relation of beta 2 microglobulin and favorable therapeutic responses in malignant lymphoproliferative diseases] Opat P, et al. Vnitr Lek 1988 Oct;34(10):1010–2 (Eng. Abstr.) (Cze)

ETIOLOGY

Lymphoproliferative diseases and idiopathic myelofibrosis [letter] Krsnik I, et al. Am J Hematol 1989 Oct;32(2):156

Epstein-Barr virus-associated lymphoproliferative disorder. Applications of immunoperoxidase and molecular biologic techniques. Kornstein MJ, et al. Arch Pathol Lab Med 1989 May;113(5):481–4

The diagnosis and treatment of posttransplant lymphoproliferative disorders. Nalesnik MA, et al. Curr Probl Surg 1988 Jun;25(6):367–472 (274 ref.)

Posttransplant lymphoproliferative disorders in heart-lung transplant recipients: primary presentation in the allograft. Yousem SA, et al. Hum Pathol 1989 Apr;20(4):361–9

Lymphoproliferative disorders [letter] Alper MG. J Clin Neuro Ophthalmol 1988 Sep;8(3):209–10

Epstein-Barr virus-related lymphoproliferative disorders following bone marrow transplantation: an immunologic and genotypic analysis. Davey DD, et al. Mod Pathol 1989 Jan;2(1):27–34

Epstein-Barr-virus-associated lymphoproliferation arising in a renal allograft. Maher ER, et al. Nephron 1989; 51(4):581–2

Severe lymphoproliferative disease and Kaposi sarcoma in transplant patients. Touraine JL, et al. Transplant Proc 1989 Feb;21(1 Pt 3):3197–8 (8 ref.)

[Waldenström's macroglobulinemia with cerebral lymphoproliferative involvement of tumor appearance (Bing and Neel syndrome). An anatomo-clinical case] Quilichini R, et al. Ann Med Interne (Paris) 1989; 140(1):25–9 (25 ref.) (Eng. Abstr.) (Fre)

GENETICS

T cell receptor and immunoglobulin gene rearrangements in lymphoproliferative disorders. Reis MD, et al. Adv Cancer Res 1989;52:45–80 (131 ref.)

Analysis of granulomatous arteritis in MRL/Mp autoimmune disease mice bearing lymphoproliferative genes. The use of mouse genetics to dissociate the development of arteritis and glomerulonephritis. Nose M, et al. Am J Pathol 1989 Aug;135(2):271–80

Gene rearrangements and translocations in lymphoproliferative diseases. Griesser H, et al. Blood 1989 May 1;73(6):1402–15 (169 ref.)

Extranodal noncutaneous lymphoid hyperplasias represent a continuous spectrum of B-cell neoplasia: demonstration by molecular genetic analysis. Knowles DM, et al. Blood 1989 May 1;73(6):1635–45

Rearrangement of T-cell receptor delta chain gene as a marker of lineage and clonality in T-cell lymphoproliferative disorders. Kimura N, et al. Cancer Res 1989 Aug 15;49(16):4488–92

Lymphoid neoplasia and the control of haemopoietic differentiation. Adams JM, et al. Ciba Found Symp 1989; 142:54–64; discussion 65–70

Clonal rearrangement of the T-cell receptor gamma gene associated with a bizarre lymphoproliferative syndrome. Coupe M, et al. Eur J Haematol 1988 Sep;41(3):289–94

Molecular genetic approaches in the diagnosis and classification of lymphoid malignancies. Krolewski JJ, et al. Hematol Pathol 1989;3(2):45–61 (85 ref.)

Mapping the mutation causing the X-linked lymphoproliferative syndrome in relation to restriction fragment length polymorphisms on Xq. Skare JC, et al. Hum Genet 1989 Jul;82(4):349–53

Linkage analysis of seven kindreds with the X-linked lymphoproliferative syndrome (XLP) confirms that the XLP locus is near DXS42 and DXS37. Skare JC, et al. Hum Genet 1989 Jul;82(4):354–8

X-linked lymphoproliferative syndrome provides clues to the pathogenesis of Epstein-Barr virus-induced lymphomagenesis. Purtilo DT, et al. Int Symp Princess Takamatsu Cancer Res Fund 1987; 18:149–58

Interferon-gamma in a family with X-linked lymphoproliferative syndrome with acute Epstein-Barr virus infection. Okano M, et al. J Clin Immunol 1989 Jan; 9(1):48–54

T cell receptor delta gene organization and expression in normal and leukemic natural killer cells. Biondi A, et al. J Immunol 1989 Aug 1;143(3):1009–14

Oncogene expression in autoimmune mice. Mountz JD, et al. J Mol Cell Immunol 1985;2(3):121–31

Lymphoproliferative syndrome associated with c-myc expression driven by a class I gene promoter in transgenic mice. Morello D, et al. Oncogene Res 1989;4(2):111–25

[Cytogenetic study of exudates secondary to hematologic processes] Bello MJ, et al. Sangre (Barc) 1988 Jun; 33(3):165–70 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Induction of proliferation and blast transformation by interferon in human malignant and non-malignant lymph node B cells. Ostlund L, et al. Blood 1989 Jun;73(8):2171–81

Monoclonality in human T-cell disorders. Reis MD, et al. Blood Rev 1987 Jun;1(2):89–96 (66 ref.)

Proliferative activity of autoimmune MRL mouse serum IgG to interleukin 3-dependent cell line through autocrine mechanism. Tasaka K, et al. Cell Immunol 1989 Jul; 121(2):317–27

The role of autoreactive T-cell lines in the restoration of the immune response to sheep red blood cells in C57Bl/6-lpr/lpr mice. Latta SL, et al. J Autoimmun 1989 Feb;2(1):15–24

CD3-negative lymphoproliferative disease of granular lymphocytes containing Epstein-Barr viral DNA. Kawa-Ha K, et al. J Clin Invest 1989 Jul;84(1):51–5

Age and lpr dependent induction of increased sensitivity to the toxic effects of lipopolysaccharide and indomethacin in MRL mice: evidence for RES activation during disease progression. Hart DA. J Clin Lab Immunol 1988 Jul; 26(3):129–34

Autoantibody in MRL/Mp-lpr/lpr mice. A monoclonal antibody specific for the abnormal T cells from mice bearing the lpr/lpr gene. Yamada K, et al. J Immunol 1989

Apr 15;142(8):2702–7
Splanchnic transplantation. An approach to the infant dependent on parenteral nutrition who develops irreversible liver disease [published erratum appears in JAMA 1989 Jul 14;262(2):210] Williams JW, et al. **JAMA** 1989 Mar 10;261(10):1458–62
Release of natural killer cytotoxic factor in patients with lymphoproliferative disease of granular lymphocytes. Zambello R, et al. **Leuk Res** 1989;13(4):315–22
Immunoglobulin and T cell receptor gene rearrangements and in situ immunophenotyping in lymphoproliferative disorders. Carbone A, et al. **Virchows Arch [A]** 1989; 414(3):223–30
Epstein–Barr virus (EBV). VI. Incidence of EBV antibodies in patients with malignant lymphoproliferative diseases. Pătraşcu IV, et al. **Virologie** 1989 Jan–Mar;40(1):31–4
[The secretion of monoclonal immunoglobulins in chronic lymphoproliferative diseases] Sinitsina TV, et al. **Ter Arkh** 1988;60(5):50–3 (Eng. Abstr.) **(Rus)**

METABOLISM

The abnormal T lymphocytes in lpr mice transcribe interferon–gamma and tumor necrosis factor–alpha genes spontaneously in vivo. Murray L, et al. **Eur J Immunol** 1989 Mar;19(3):563–5

MICROBIOLOGY

In situ demonstration of Epstein–Barr viral genomes in viral–associated B cell lymphoproliferations. Weiss LM, et al. **Am J Pathol** 1989 Mar;134(3):651–9
Human T–cell leukemia virus–I and hematologic malignancies in Panama. Levine PH, et al. **Cancer** 1989 Jun 1;63(11):2186–91
Human B–lymphotropic virus (human herpesvirus–6). Ablashi DV, et al. **J Virol Methods** 1988 Sep;21(1–4):29–48 (24 ref.)
Clonal T–cell lymphoproliferation containing Epstein–Barr (EB) virus DNA in a patient with chronic active EB virus infection. Ishihara S, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):99–101
Potentially pathogenic microorganisms in the oral cavity during febrile episodes in immunocompromised patients with haematologic malignancies. Bergmann OJ, et al. **Scand J Infect Dis** 1989;21(1):43–51
[A new herpes virus] Linnavuori K, et al. **Duodecim** 1989; 105(12):1161–4 (30 ref.) **(Fin)**

PATHOLOGY

The clinical spectrum, pathology, and clonal analysis of Epstein–Barr virus–associated lymphoproliferative disorders in heart–lung transplant recipients. Randhawa PS, et al. **Am J Clin Pathol** 1989 Aug;92(2):177–85
Suppression by bone marrow but not by blood T lymphocytes of autologous and allogeneic granulocytic stem cells in a case of lymphoproliferative T–cell syndrome. Marinof C, et al. **Am J Hematol** 1989 May;31(1):65–6
Lymphadenopathy in renal transplant patients treated with immunosuppressive antibodies (OKT3 and anti–thymocyte globulin). A report of nine cases. Canioni D, et al. **Am J Surg Pathol** 1989 Feb;13(2):87–96
Localized and disseminated pagetoid reticulosis. Diagnostic immunophenotypical findings. Mielke V, et al. **Arch Dermatol** 1989 Mar;125(3):402–6
Flow cytometric surface light chain analysis of lymphocyte–rich effusions. A useful adjunct to cytologic diagnosis [published erratum appears in Cancer 1989 Oct 1;64(7):1436] Ibrahim RE, et al. **Cancer** 1989 May 15; 63(10):2024–9
T–cell–rich lymphoproliferative disorders. Morphologic and immunologic differential diagnoses. Winberg CD, et al. **Cancer** 1988 Oct 15;62(8):1539–55
The splenomegaly of myeloproliferative and lymphoproliferative disorders: splenic cellularity and vascularity. Zhang B, et al. **Eur J Haematol** 1989 Jul; 43(1):63–6
Lethal midline granuloma and lymphoproliferative disorders. Atichartakarn V, et al. **J Med Assoc Thai** 1989 May; 72(5):243–9
Granular lymphocyte proliferative disorders: report of 12 cases and review of the literature. Oshimi K. **Leukemia** 1988 Oct;2(10):617–27 (124 ref.)
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 5–1089. A 27–year–old Greek woman with portal–vein thrombosis and an epigastric mass. N **Engl J Med** 1989 Feb 2;320(5):301–10
Reactive immunoblastic proliferations. Nathwani BN, et al. **Semin Diagn Pathol** 1988 Nov;5(4):317–28 (45 ref.)
Pulmonary lymphangiomyomatosis: report of a case. Jih KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):490–4
[Retroperitoneal lymphangioleiomyoma. Apropos of a new case] el Ouakdi M, et al. **J Urol (Paris)** 1989;95(2):103–6 (6 ref.) (Eng. Abstr.) **(Fre)**
[Lymphoproliferative lung lesions (pseudolymphoma—malignant lymphoma] Brittig F, et al. **Orv Hetil** 1989 Feb 12;130(7):341–2, 345–7 (Eng. Abstr.) **(Hun)**
[Lymphoproliferative infiltration of bladder and prostate. Apropos of a case of Waldenstrom's disease] Idoipe Tomás JI, et al. **Arch Esp Urol** 1988 Sep;41(7):547–9 (Eng. Abstr.) **(Spa)**
[Incidence of mononuclear bone–marrow megakaryocytes in various hemopathies (letter)] Simón R, et al. **Sangre (Barc)** 1988 Jun;33(3):238–9 **(Spa)**

RADIOGRAPHY

Pulmonary lymphangioleiomyomatosis: high–resolution CT findings in four cases. Rappaport DC, et al. **AJR Am J Roentgenol** 1989 May;152(5):961–4
[The contribution of computerized tomography to the diagnosis of diffuse pulmonary lymphangiomyomatosis. Apropos of a case] Blanchon F, et al. **Rev Mal Respir** 1989; 6(1):75–8 (Eng. Abstr.) **(Fre)**
[Pulmonary involvement in lymphangioleiomyomatosis: studies using high–resolution computed tomography] Guhl L. **ROFO** 1988 Dec;149(6):576–9 (Eng. Abstr.) **(Ger)**
[High–resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kullnig P, et al. **ROFO** 1989 Jul;151(1):32–5 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

[Effects of cranial radiotherapy on growth and hypothalamo–hypophyseal function] Morón Bayón C, et al. **An Esp Pediatr** 1988 Jun;28(6):517–20 (Eng. Abstr.) **(Spa)**

SURGERY

Anesthetic management for oophorectomy in a patient with lymphangiomyomatosis. Smith MB, et al. **Anesthesiology** 1989 Mar;70(3):548–50
[Surgery in oncohematology: state of the art] Marmont AM, et al. **Minerva Chir** 1989 Feb 28;44(4):643–6 (11 ref.) **(Ita)**
[A case of pulmonary lymphangiomyomatosis associated with renal angiomyolipoma] Suzuki T, et al. **Kyobu Geka** 1988 May;41(6):525–8 (Eng. Abstr.) **(Jpn)**

THERAPY

Lymphokine activated killer (LAK) activity in lymphoproliferative disorders. Foa R, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:153–5 (15 ref.)
[Interferon–alpha therapy for hairy cell leukemia and lymphoproliferative disorders simulating hairy cell leukemia (hairy cell leukemia variant): a cooperative group study in Japan] Machii T, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2029–36 (Eng. Abstr.) **(Jpn)**

TRANSMISSION

Circulating cytomegalovirus and Epstein–Barr virus–infected cells and transfusions. Ho M. **Transplant Proc** 1988 Dec; 20(6):1118–20 (18 ref.)

LYMPHOSARCOMA see **LYMPHOMA, NON–HODGKIN'S**

LYMPHOTOXINS

ADMINISTRATION & DOSAGE

Tumor necrosis factor–alpha and tumor necrosis factor–beta (lymphotoxin) stimulate the production of granulocyte–macrophage colony–stimulating factor, macrophage colony–stimulating factor, and IL–1 in vivo. Kaushansky K, et al. **J Immunol** 1988 Nov 15; 141(10):3410–5

ANALYSIS

Bispecific antibody–producing hybrid hybridoma and its use in one–step immunoassays for human lymphotoxin. Tada H, et al. **Hybridoma** 1989 Feb;8(1):73–83
An enzyme immunoassay for human lymphotoxin. Tada H, et al. **J Immunoassay** 1989;10(1):93–105
An autocrine growth factor constitutively produced by a human lymphoblastoid B–cell line is serologically related to lymphotoxin (TNF–beta). Seregina TM, et al. **Mol Immunol** 1989 Mar;26(3):339–42

BIOSYNTHESIS

Induction of tumor necrosis factor synthesis in human monocytes treated by transcriptional inhibitors. Voitenok NN, et al. **Immunol Lett** 1989 Jan 15;20(1):77–82
Increased capacity of lymphocytes to lyse tumor cells in vitro and production of lymphotoxins after cisplatin treatment. Sodhi A, et al. **Int J Immunopharmacol** 1988;10(6):753–61
Production of lymphotoxin by isolated human tonsillar B lymphocytes and B lymphocyte cell lines. Sung SS, et al. **J Clin Invest** 1989 Jul;84(1):236–43
Tumor necrosis factor and lymphotoxin secretion by human natural killer cells leads to antiviral cytotoxicity. Paya CV, et al. **J Immunol** 1988 Sep 15;141(6):1989–95
Identification of components of differentiation–inducing activity of human T–cell lymphoma cells by induction of differentiation in human myeloid leukemia cells. Hemmi H, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):952–6

GENETICS

Low degree of DNA polymorphism in the HLA–linked lymphotoxin (tumour necrosis factor beta) gene. Partanen J, et al. **Scand J Immunol** 1988 Sep;28(3):313–6

IMMUNOLOGY

Warner–Lambert/Parke–Davis award lecture. Cytokine–mediated activation of vascular endothelium. Physiology and pathology. Pober JS. **Am J Pathol** 1988 Dec;133(3):426–33 (36 ref.)
The presence of antibodies to lymphotoxin and tumor necrosis factor in normal serum. Jeffes EW 3d, et al. **Arthritis Rheum** 1989 Sep;32(9):1148–52
Lymphocytotoxic cross–matching performed on spleen cells: immunomagnetic technique versus current KN (Kissmeyer–Nielsen) technique. Povlsen JV, et al. **Tissue Antigens** 1989 Mar;33(3):382–8

ISOLATION & PURIFICATION

Human T–lymphotropic virus I–infected T cells constitutively express lymphotoxin in vitro. Tschachler E, et al. **Blood** 1989 Jan;73(1):194–201

METABOLISM

Characterization of the receptor for lymphotoxin; a spontaneous internalization without recycling and ligand–induced downregulation in HL–60 cells. Gullberg U, et al. **Eur J Cell Biol** 1989 Aug;49(2):334–40
Two conserved tryptophan residues of tumor necrosis factor and lymphotoxin are not involved in the biological activity. Van Ostade X, et al. **FEBS Lett** 1988 Oct 10;238(2):347–52
Characterization of specific high–affinity receptor for human lymphotoxin. Hirano K, et al. **J Biochem (Tokyo)** 1989 Jan; 105(1):120–6
Purification and characterization of a T lymphocyte–derived differentiation–inducing factor for human promyelocytic cell line (HL–60) and its relationship to lymphotoxin. Shimizu Y, et al. **Microbiol Immunol** 1989;33(6):489–501
Cytotoxic factor produced from lymphokine–activated killer (LAK) cells. Mizoguchi Y, et al. **Osaka City Med J** 1988 Oct;34(2):223–35
Production of lymphotoxin and tumor necrosis factor by human neonatal mononuclear cells. English BK, et al. **Pediatr Res** 1988 Dec;24(6):717–22

PHARMACOKINETICS

Pharmacokinetics and tissue distribution of parenterally administered human alpha–lymphotoxin in normal and meth–A tumor–bearing BALB/c mice. Averbook BJ, et al. **J Biol Response Mod** 1989 Aug;8(4):344–50

PHARMACOLOGY

Endothelial cell activation induced by tumor necrosis factor and lymphotoxin. Cavender DE, et al. **Am J Pathol** 1989 Mar;134(3):551–60
Increase in permeability of human endothelial cell monolayer by recombinant human lymphotoxin. Shinjo K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1431–7
Recombinant human lymphotoxin effects on osteoblastic cells. Tatakis DN, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):435–40
Modulation of human neutrophilic granulocyte functions by recombinant human tumor necrosis factor and recombinant human lymphotoxin. Promotion of adherence, inhibition of chemotactic migration and superoxide anion release from adherent cells. Kownatzki E, et al. **Clin Exp Immunol** 1988 Oct;74(1):143–8
Effect of lymphotoxin and tumor necrosis factor on endothelial and connective tissue cell growth and function. Kahaleh MB, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):261–72
Comparative study on the antiviral activity of tumor necrosis factor (TNF)–alpha, lymphotoxin/TNF–beta, and IL–1 in WISH cells. Ruggiero V, et al. **Immunol Lett** 1989 May; 21(2):165–9
Interaction of tumor necrosis factor and lymphotoxin with model lipid membranes. Young JD. **Immunol Lett** 1988 Dec;19(4):287–91
Differences in the bioactivity of recombinant human TNF, LT, and T–cell–derived LT–3 on transformed cells in vitro and the Meth A tumor growing in BALB/c mice. Granger GA, et al. **J Biol Response Mod** 1988 Oct;7(5):488–97
Tumoricidal activity of lymphotoxin (tumor necrosis factor beta) in vivo: its effects on macrophages. Higuchi M, et al. **J Biol Response Mod** 1988 Dec;7(6):619–30
Studies on the differing effects of tumor necrosis factor and lymphotoxin on the growth of several human tumor lines. Browning J, et al. **J Immunol** 1989 Sep 15;143(6):1859–67
Inhibition by IL–1 of endothelial cell activation induced by tumor necrosis factor or lymphotoxin. Cavender DE, et al. **J Immunol** 1988 Nov 1;141(9):3111–6
Human vascular smooth muscle cells. Target for and source of tumor necrosis factor. Warner SJ, et al. **J Immunol** 1989 Jan 1;142(1):100–9
Human tumor necrosis factor is a potent activator of the oxidative metabolism in human polymorphonuclear neutrophilic granulocytes: comparison with human lymphotoxin. Kapp A, et al. **J Invest Dermatol** 1989 Mar; 92(3):348–54
Lymphotoxin, tumor necrosis factor, and gamma interferon are cytostatic for normal human keratinocytes. Symington FW. **J Invest Dermatol** 1989 Jun;92(6):798–805

PHYSIOLOGY

Interleukin–1 beta rather than lymphotoxin as the major bone

resorbing activity in human multiple myeloma. Kawano M, et al. **Blood** 1989 May 1;73(6):1646–9
Cytolytic activity of Ia–restricted T cell clones and hybridomas: evidence for a cytolytic mechanism independent of interferon–gamma, lymphotoxin, and tumor necrosis factor–alpha. Ju ST, et al. **Cell Immunol** 1988 Dec; 117(2):399–413

T–LYMPHOTROPIC VIRUS TYPE III ANTIBODIES, HUMAN see **HIV ANTIBODIES**

T–LYMPHOTROPIC VIRUS TYPE III ANTIGENS, HUMAN see **HIV ANTIGENS**

T–LYMPHOTROPIC VIRUS TYPE III INFECTION, HUMAN see **ACQUIRED IMMUNODEFICIENCY SYNDROME**

T–LYMPHOTROPIC VIRUS, TYPE III, SIMIAN see **SIV**

LYNESTRENOL

ADMINISTRATION & DOSAGE

[Succesful treatment of females with psoriasis with lynestrenol] Riffelmacher F. **Z Hautkr** 1988 Dec 15; 63(12):1053 **(Ger)**

ADVERSE EFFECTS

Peroral lynestrenol and arterial disease in mentally retarded women. A case–control study based on autopsy findings. Huovinen K, et al. **Acta Obstet Gynecol Scand** 1988; 67(3):211–4

METABOLISM

Monoamineoxidase activity in certain brain regions associated with xanthurenic acid excretion in rats on oral contraceptive steroids. Bandyopadhyay M, et al. **Indian J Med Res** 1989 Jun;90:191–6

PHARMACOLOGY

Progestogen addition during oestrogen replacement therapy—effects on vasomotor symptoms and mood. Holst J, et al. **Maturitas** 1989 Mar;11(1):13–20

THERAPEUTIC USE

[Estrogen therapy in digestive hemorrhage caused by diffuse vascular ectasia of the gastric antrum (letter)] Martínez Costa X, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):559 **(Spa)**

LYNGBYA TOXINS

The conformations and electrostatic potential maps of phorbol esters, teleocidins and ingenols. Thomson C, et al. **Carcinogenesis** 1989 Mar;10(3):531–40

ANTAGONISTS & INHIBITORS

Sarcophytols A and B inhibit tumor promotion by teleocidin in two–stage carcinogenesis in mouse skin. Fujiki H, et al. **J Cancer Res Clin Oncol** 1989;115(1):25–8

PHARMACOKINETICS

Biological activities and cellular uptake studies of fluorescent derivatives of indole alkaloid tumor promoter teleocidin. Irie K, et al. **Int J Cancer** 1989 Mar 15;43(3):513–9

LYOMIS see **PERCIFORMES**

LYOPHILIZATION see **FREEZE DRYING**

LYPRESSIN

ADMINISTRATION & DOSAGE

Comparison between lysine vasopressin and a long–acting analogue (N alpha–triglycyl–lysine vasopressin) used as local hemostatic agents for conization. Rundqvist E, et al. **Acta Obstet Gynecol Scand** 1988;67(4):301–5
Tissue response to biodegradable injectable microcapsules. Visscher GE, et al. **J Biomater Appl** 1987 Jul;2(1):118–31

ANALOGS & DERIVATIVES

Comparison between lysine vasopressin and a long–acting analogue (N alpha–triglycyl–lysine vasopressin) used as local hemostatic agents for conization. Rundqvist E, et al. **Acta Obstet Gynecol Scand** 1988;67(4):301–5
Binding and internalization of a fluorescent vasopressin analogue by collecting duct cells. Kirk KL. **Am J Physiol** 1988 Nov;255(5 Pt 1):C622–32
Endobronchial versus intravenous application of the vasopressin derivative glypressin during diagnostic bronchoscopy. Breuer HW, et al. **Eur Respir J** 1989 Mar; 2(3):225–8
Placebo–controlled trial of terlipressin (glypressin) in the management of acute variceal bleeding. Freeman JG, et al. **J Clin Gastroenterol** 1989 Feb;11(1):58–60
Tryglycylvasopressin–reduced portal and systemic concentrations of serum bile acids after exogenous chenodeoxycholic acid load in rats as a reflection of reduced splanchnic blood flow. Testa R, et al. **Liver** 1989 Feb;9(1):27–9
[Epileptic crisis in hemoptysis treated with terlipressin (letter)] Boseeray A, et al. **Rev Mal Respir** 1989;6(1):85 **(Fre)**

ANALYSIS

The distribution of lysine vasopressin (lysipressin) in placental mammals: a reinvestigation of the Hippopotamidae (Hippopotamus amphibius) and Tayassuidae (Tayassu angulatus) families. Rouille Y, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):475–83

BLOOD

The influence of central hypersomotic solutions on drinking and vasopressin release following peripheral hyperosmotic NaCl in the minipig. Thornton SN, et al. **Brain Res** 1989 May 29;488(1–2):297–303

PHARMACOLOGY

Intraventricular administration of neurohypophyseal hormones interferes with the development of tolerance to ethanol. Szabó G, et al. **Acta Physiol Hung** 1989; 73(1):97–103
Atrial natriuretic factors (ANF) and antidiuretic agents. Croxatto HR, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):1–9
Vasopressin stimulates phosphoinositide hydrolysis in LLC–PK1 cells. Garg LC, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 1):C502–7
Facilitation of inhibitory avoidance by hypertonic saline is reversed by a vasopressin and a nicotinic antagonist. Baratti CM, et al. **Behav Neural Biol** 1989 May;51(3):424–35
Memory facilitation by posttraining and pretest ACTH, epinephrine, and vasopressin administration: two separate effects. Izquierdo I, et al. **Behav Neurosci** 1988 Oct; 102(5):803–6
Effect of lysine–8–vasopressin on retention and retrieval of a discrimination reward task in the rat. Mulvey DJ, et al. **Behav Neurosci** 1988 Aug;102(4):580–5
Local anaesthetics in pregnancy [letter] Watson AK. **Br Dent J** 1988 Oct 22;165(8):278–9
Uterine blood flow and myometrial activity at menstruation, and the action of vasopressin and a synthetic antagonist. Hauksson A, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):898–904
Vascular responses to vasopressin are tone–dependent in the cerebral circulation of the newborn pig. Armstead WM, et al. **Circ Res** 1989 Jan;64(1):136–44
Effect of lysine vasopressin on basal and TRH stimulated TSH and PRL release in normal men. Chiodera P, et al. **J Endocrinol Invest** 1988 Jul–Aug;11(7):497–500
Loperamide, an opiate analog, differently modifies the adrenocorticotropin responses to corticotropin–releasing hormone and lysine vasopressin in patients with Addison's disease. Bochicchio D, et al. **Neuroendocrinology** 1988 Dec; 48(6):611–4
Change in K+ activity of the scala media produced by vasopressin. Shugyo A, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):156–60
[The elimination of disorders in the acquisition of a conditioned active avoidance reaction by using the C–termination fragment of lysyl vasopressin] Titov SA, et al. **Biol Nauki** 1988;(6):45–8 (Eng. Abstr.) **(Rus)**
[The effect of neurohypophyseal peptides on the formation of conditioned active avoidance behavior] Ibragimov RSh. **Fiziol Zh SSSR** 1989 Jan;75(1):8–12 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Vasopressin for ECT–induced memory impairment: a placebo–controlled comparison. Mattes JA, et al. **Psychopharmacol Bull** 1989;25(1):80–4

LYSERGIC ACID see under **ERGOLINES**

LYSERGIC ACID DIETHYLAMIDE

Ecstasy and the oxygen of publicity. Farrell M. **Br J Addict** 1989 Aug;84(8):943
Intrauterine stroke and maternal polydrug abuse. Case report. Tenorio GM, et al. **Clin Pediatr (Phila)** 1988 Nov; 27(11):565–7

ADVERSE EFFECTS

Stimulants, panic, and BEAM EEG abnormalities [letter] Abraham HD. **Am J Psychiatry** 1989 Jul;146(7):947–8
Visual function in past users of LSD: psychophysical findings. Abraham HD, et al. **J Abnorm Psychol** 1988 Nov; 97(4):443–7

ANALOGS & DERIVATIVES

Quantification of LSD and N–demethyl–LSD in urine by gas chromatography/resonance electron capture ionization mass spectrometry. Lim HK, et al. **Anal Chem** 1988 Jul 15;60(14):1420–5
Comparison of [125I]iodolysergic acid diethylamide binding in human frontal cortex and platelet tissue. Elliott JM, et al. **J Neurochem** 1989 Jul;53(1):191–6
Evidence for allosteric blockade of serotonergic receptors in rabbit thoracic aorta. Xu Z, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1091–5
Is 2–bromo–D–lysergic acid diethylamide (BOL) an allosteric antagonist of serotonergic receptors in rabbit atria? Xu Z, et al. **Proc West Pharmacol Soc** 1988;31:181–3

ANTAGONISTS & INHIBITORS

Evidence for antiserotonergic properties of yohimbine. Dwoskin LP, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):321–6
Risperidone (R 64 766), a potent and complete LSD antagonist in drug discrimination by rats. Meert TF, et al. **Psychopharmacology (Berlin)** 1989;97(2):206–12

BLOOD

Increased serotonin2 (5–HT2) receptor binding as measured by 3H–lysergic acid diethylamide (3H–LSD) in the blood platelets of depressed patients. Arora RC, et al. **Life Sci** 1989;44(11):725–34

METABOLISM

Common receptors for hallucinogens in rat brain: a comparative autoradiographic study using [125I]LSD and [125I]DOI, a new psychotomimetic radioligand. McKenna DJ, et al. **Brain Res** 1989 Jan 2;476(1):45–56

PHARMACOLOGY

Antagonism of 5–hydroxytryptamine2 receptor–mediated phosphatidylinositol turnover by d–lysergic acid diethylamide. Pierce PA, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):918–25
LSD and creativity. Janiger O, et al. **J Psychoactive Drugs** 1989 Jan–Mar;21(1):129–34
Effects of lysergic acid diethylamide (LSD) and adjuvant–induced inflammation on desensitization to and metabolism of substance P in the mouse spinal cord. Larson AA, et al. **Pain** 1989 Jun;37(3):365–73
Effects of intraocular mescaline and LSD on visual–evoked responses in the rat. Eells JT, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):191–6
Effects of LSD on classical conditioning as a function of CS–UCS interval: relationship to reflex facilitation. Harvey JA, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):433–41
Long–lasting alterations in behavior and brain neurochemistry following continuous low–level LSD administration. King W Jr, et al. **Pharmacol Biochem Behav** 1989 May;33(1):69–73
Effects of LSD–25 on classical trace conditioning. Siegel S, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):427–31
Interactions between serotonergic agonists and antagonists in rats trained with LSD as a discriminative stimulus. Winter JC, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):617–24
LSD and other related hallucinogens elicit myoclonic jumping behavior in the guinea pig. Carvey P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):199–210
Hallucinogenic drug interactions at human brain 5–HT2 receptors: implications for treating LSD–induced hallucinogenesis. Sadzot B, et al. **Psychopharmacology (Berlin)** 1989;98(4):495–9

POISONING

LSD intoxication [letter] Schwartz JG, et al. **J Fam Pract** 1988 Nov;27(5):550–1

URINE

Quantification of LSD and N–demethyl–LSD in urine by gas chromatography/resonance electron capture ionization mass spectrometry. Lim HK, et al. **Anal Chem** 1988 Jul 15;60(14):1420–5

LYSERGIDE see **LYSERGIC ACID DIETHYLAMIDE**

LYSINE

The reaction of pyridinecarboxylic acids with dicyclohexylcarbodiimide and p–nitrophenol. Ljungqvist A, et al. **Acta Chem Scand [B]** 1988 Jul;42(6):408–10
Inhibition of the Na+/glucose cotransporter functional lysyl residues by 4–(4–methoxy–3–sulfophenyl)–2,6–bis(4–sulfophenyl)pyryl ium. Fernandez A, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1356–63
Glucose–6–phosphate dehydrogenase. Characterization of a reactive lysine residue in the Pichia jadinii enzyme reveals a limited structural variation in a functionally significant segment. Jeffery J, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1290–5
Site–directed mutagenesis of lysine 58 in a putative ATP–binding domain of the calmodulin–sensitive adenylate cyclase from Bordetella pertussis abolishes catalytic activity. Au DC, et al. **Biochemistry** 1989 Apr 4; 28(7):2772–6
Accessibility and mobility of lysine residues in beta–lactoglobulin. Brown EM, et al. **Biochemistry** 1988 Jul 26;27(15):5601–10
Dicyclohexylcarbodiimide cross–links two conserved residues, Asp–184 and Lys–72, at the active site of the catalytic subunit of cAMP–dependent protein kinase. Buechler JA, et al. **Biochemistry** 1989 Mar 7;28(5):2065–70

Solution structure of recombinant hirudin and the Lys-47——Glu mutant: a nuclear magnetic resonance and hybrid distance geometry-dynamical simulated annealing study. Folkers PJ, et al. **Biochemistry** 1989 Mar 21; 28(6):2601-17

Genetic engineering of EcoRI mutants with altered amino acid residues in the DNA binding site: physicochemical investigations give evidence for an altered monomer/dimer equilibrium for the Gln144Lys145 and Gln144Lys145Lys200 mutants. Geiger R, et al. **Biochemistry** 1989 Mar 21;28(6):2667-77

Role of lysines in human angiogenin: chemical modification and site-directed mutagenesis. Shapiro R, et al. **Biochemistry** 1989 Feb 21;28(4):1726-32

Nucleophilic behavior of lysine-501 of the alpha-polypeptide of sodium and potassium ion activated adenosinetriphosphatase consistent with a role in binding adenosine triphosphate. Xu KY, et al. **Biochemistry** 1989 Apr 4;28(7):3009-17

Binding manner of actin to the lysine-rich sequence of myosin subfragment 1 in the presence and absence of ATP. Yamamoto K. **Biochemistry** 1989 Jun 27;28(13):5573-7

Fluorescence resonance energy transfer studies on the proximity between lysine-107 and cysteine-239 in rabbit muscle aldolase [published erratum appears in Biochim Biophys Acta 1988 Dec 2;957(3):461] Dobryszycki P, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):217-23

Application of the reaction of dithioesters with epsilon-amino groups in lysine to the chemical modification of proteins. Souppe J, et al. **Biochim Biophys Acta** 1988 Nov 23; 957(2):254-7

Structure and mechanism of hydroxyl radical-induced formation of a DNA-protein cross-link involving thymine and lysine in nucleohistone. Dizdaroglu M, et al. **Cancer Res** 1989 Jul 1;49(13):3463-7

Reaction of 2-amino-2-deoxy-D-glucose and lysine: isolation and characterization of 2,5-bis(tetrahydroxybutyl)pyrazine. Candiano G, et al. **Carbohydr Res** 1988 Dec 31;184:67-75

Structural and functional characterization of mutants of recombinant single-chain urokinase-type plasminogen activator obtained by site-specific mutagenesis of Lys158, Ile159 and Ile160. Lijnen HR, et al. **Eur J Biochem** 1988 Nov 15;177(3):575-82

Identification of a Glu greater than Lys substitution in the activation segment of human pepsinogen A-3 and -5 isozymogens by peptide mapping using endoproteinase Lys-C. Bank RA, et al. **FEBS Lett** 1988 Sep 26; 238(1):105-8

Selective cleavage at lysine of the 50 kDa-20 kDa connector loop segment of skeletal myosin S-1 by endoproteinase Arg-C. Bertrand R, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):171-6

Substitution of arginine for lysine 134 alters electrostatic parameters of the active site in shark Cu,Zn superoxide dismutase. Calabrese L, et al. **FEBS Lett** 1989 Jun 19; 250(1):49-52

Identification of lysine residue 199 of human serum albumin as a binding site for benzylpenicilloyl groups. Yvon M, et al. **FEBS Lett** 1988 Nov 7;239(2):237-40

Yeast pyruvate kinase: essential lysine residues in the active site. Imarai M, et al. **Int J Biochem** 1988;20(9):1001-8

X-ray studies on crystalline complexes involving amino acids and peptides. XV. Crystal structures of L-lysine D-glutamate and L-lysine D-aspartate monohydrate and the effect of chirality on molecular aggregation. Soman J, et al. **Int J Pept Protein Res** 1988 Nov;32(5):352-60

Substrate binding in human immunodeficiency virus reverse transcriptase. An analysis of pyridoxal 5'-phosphate sensitivity and identification of lysine 263 in the substrate-binding domain. Basu A, et al. **J Biol Chem** 1989 May 25;264(15):8746-52

One single lysine residue is responsible for the special interaction between polyphosphate and the outer membrane porin PhoE of Escherichia coli. Bauer K, et al. **J Biol Chem** 1989 Oct 5;264(28):16393-8

Binding of heparin to human antithrombin III activates selective chemical modification at lysine 236. Lys-107, Lys-125, and Lys-136 are situated within the heparin-binding site of antithrombin III. Chang JY. **J Biol Chem** 1989 Feb 25;264(6):3111-5

Replacements of lysine 32 in yeast cytochrome c. Effects on the binding and reactivity with physiological partners. Das G, et al. **J Biol Chem** 1988 Dec 5;263(34):18290-7

Reductive methylation and 13C NMR studies of the lysyl residues of fd gene 5 protein. Lysines 24, 46, and 69 may be involved in nucleic acid binding. Dick LR, et al. **J Biol Chem** 1988 Dec 15;263(35):18864-72

Thermodynamic stabilities of yeast iso-1-cytochromes c having amino acid substitutions for lysine 32. Hickey DR, et al. **J Biol Chem** 1988 Dec 5;263(34):18298-305

Mutagenesis of bacterial elongation factor Tu at lysine 136. A conserved amino acid in GTP regulatory proteins. Hwang YW, et al. **J Biol Chem** 1989 May 15;264(14):8304-9

Structure-function relationships in hemoglobin Kariya, Lys-40(C5) alpha——Glu, with high oxygen affinity. Functional role of the salt bridge between Lys-40 alpha and the beta chain COOH terminus. Imai K, et al. **J Biol Chem** 1989 Jul 5;264(19):11174-80

Substitution of a lysyl residue for arginine 386 of Escherichia coli aspartate aminotransferase. Inoue Y, et al. **J Biol Chem** 1989 Jun 5;264(16):9673-81

Directed mutagenesis of the strongly conserved lysine 175 in the proposed nucleotide-binding domain of alpha-subunit from Escherichia coli F1-ATPase. Rao R, et al. **J Biol Chem** 1988 Nov 5;263(31):15957-63

Pig gastric (H+ + K+)-ATPase. Lys-497 conserved in cation transporting ATPases is modified with pyridoxal 5'-phosphate. Tamura S, et al. **J Biol Chem** 1989 May 25; 264(15):8580-4

Dimerization and activation of porcine pancreatic phospholipase A2 via substrate level acylation of lysine 56. Tomasselli AG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10041-7

Fluorescein isothiocyanate specifically modifies lysine 338 of cytochrome P-450scc and inhibits adrenodoxin binding. Tuls J, et al. **J Biol Chem** 1989 Oct 5;264(28):16421-5

Effects of interaction with calcineurin on the reactivities of calmodulin lysines. Wei Q, et al. **J Biol Chem** 1988 Dec 25;263(36):19541-4

NH2-terminal substitutions of basic amino acids induce translocation across the microsomal membrane and glycosylation of rabbit cytochrome P450IIC2. Szczesna-Skorupa E, et al. **J Cell Biol** 1989 Apr; 108(4):1237-43

Characterization of the intrinsic fibrinolytic properties of pro-urokinase through a study of plasmin-resistant mutant forms produced by site-specific mutagenesis of lysine(158). Gurewich V, et al. **J Clin Invest** 1988 Dec;82(6):1956-62

The lysine residue in the membrane-spanning domain of the beta chain is necessary for cell surface expression of the T cell antigen receptor. Morley BJ, et al. **J Exp Med** 1988 Dec 1;168(6):1971-8

The effects of dietary amino acid levels upon lysine and methionine requirements for growing rats. Hosoi A, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):245-59

Photoexchange products of cytosine and 5-methylcytosine with N alpha-acetyl-L-lysine and L-lysine. Dorwin EL, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):265-78

Formation of cyanomethyl derivatives of basic amino acids and proteins with components in cigarette smoke. Yu PH. **Life Sci** 1988;43(20):1633-41

Chemical radiolabeling of lysines that interact strongly with DNA in chromatin. Thomas JO. **Methods Enzymol** 1989; 170:369-85

Reductive methylation of lysine residues of botulinum neurotoxin types A and B. Sathyamoorthy V, et al. **Mol Cell Biochem** 1988 Sep;83(1):65-72

Modification of epsilon-amino group of lysines, cholesterol oxidation and oxidized lipid-apoprotein cross-link formation by porphyrin-photosensitized oxidation of human low density lipoproteins. Candide C, et al. **Photochem Photobiol** 1988 Aug;48(2):137-46

ADMINISTRATION & DOSAGE

Rumen-protected methionine and lysine: effects on animal performance, milk protein yield, and physiological measures. Donkin SS, et al. **J Dairy Sci** 1989 Jun; 72(6):1484-91

Production responses of dairy cows fed various amounts of rumen-protected methionine and lysine. Rogers JA, et al. **J Dairy Sci** 1989 Jul;72(7):1800-17

[The efficacy of enriching wheat bread with lysine and its effect on gastric secretory activity] Vitollo AS, et al. **Vopr Pitan** 1988 Nov-Dec;(6):50-4 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Hypusine biosynthesis in protein and its biological consequences. Murphey RJ, et al. **Adv Exp Med Biol** 1988; 250:449-58 (35 ref.)

Biosynthesis of hypusine in eIF-4D precursors. Park MH, et al. **Adv Exp Med Biol** 1988;250:435-47 (27 ref.)

Age- and diabetes-accelerated glycation in the human aorta. Oimomi M, et al. **Arch Gerontol Geriatr** 1989 Mar; 8(2):123-7

Degradation of thialysine- or selenalysine-containing abnormal proteins in E. coli. Di Girolamo M, et al. **Biochem Int** 1988 Jun;16(6):1033-40

Studies on lysine:N6-hydroxylation by cell-free systems of Aerobacter aerogenes 62-1. Goh CJ, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):240-5

Electrostatic interactions of 4-carboxy-2,6-dinitrophenyllysine-modified cytochromes c with physiological and non-physiological redox partners. Rush JD, et al. **Biochim Biophys Acta** 1988 Nov 16; 936(2):187-98

Acetylsalicylate-induced cholestasis, unrelated to biliary bile acid excretion, in the rabbit. Monte MJ, et al. **Biomed Biochim Acta** 1988;47(8):767-73

The effects of thionapthene-2-carboxylic acid-lysine on the hypercalcemia of malignancy in the rat. Decker JE, et al. **Calcif Tissue Int** 1989 Jan;44(1):61-4

Interaction of lysinoalanine with the protein synthesizing apparatus. Lifsey BJ Jr, et al. **Chem Biol Interact** 1988; 68(3-4):241-57

Quantitative determination of biocytin in urine of patients with biotinidase deficiency using high-performance liquid chromatography (HPLC). Suormala TM, et al. **Clin Chim Acta** 1988 Oct 31;177(3):253-69

Attenuation of rat conjunctival response by repeated hapten applications. Barney NP, et al. **Curr Eye Res** 1988 Sep; 7(9):843-8

Studies on the mechanism of salicylate-induced increase of insulin secretion in man. Giugliano D, et al. **Diabete Metab** 1988 Jul-Aug;14(4):431-6

Aspirin and salicylate do not modify impaired endothelial cell replication at high glucose concentrations. La Selva M, et al. **Diabetes Res** 1988 May;8(1):49-50

Comparison of the biological activity of sodium valproate and L-lysine valproate on brain GABA levels by (3H) muscimol radioreceptor assay. Brunet C, et al. **Farmaco [Prat]** 1988 Sep;43(9):291-6

cDNA and derived amino acid sequence of the hypusine containing protein from Dictyostelium discoideum. Sandholzer U, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):94-100

Increased fructose-lysine of hair protein and blood glucose control in diabetic patients. Oimomi M, et al. **Horm Metab Res** 1988 Oct;20(10):654-5

Inhaled lysine-aspirin as a bronchoprovocation procedure in aspirin-sensitive asthma: its repeatability, absence of a late-phase reaction, and the role of histamine. Phillips GD, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):232-41

Myxochelin A, a new iron-chelating compound from Angiococcus disciformis (Myxobacterales). Production, isolation, physico-chemical and biological properties. Kunze B, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):14-7

Chemical modification of the antitumor antibiotic glidobactin. Oka M, et al. **J Antibiot (Tokyo)** 1988 Dec; 41(12):1812-22

Cell-free synthesis of deoxyhypusine. Separation of protein substrate and enzyme and identification of 1,3-diaminopropane as a product of spermidine cleavage. Park MH, et al. **J Biol Chem** 1988 Oct 25;263(30):15264-9

Sequence determination and cDNA cloning of eukaryotic initiation factor 4D, the hypusine-containing protein. Smit-McBride Z, et al. **J Biol Chem** 1989 Jan 25; 264(3):1578-83

Glycosylated proteins of skin, nail and hair: application as an index for long-term control of diabetes mellitus. Sueki H, et al. **J Dermatol** 1989 Apr;16(2):103-10

A versatile means of intracellular labeling: injection of biocytin and its detection with avidin conjugates. Horikawa K, et al. **J Neurosci Methods** 1988 Aug;25(1):1-11

Photoexchange products of cytosine and 5-methylcytosine with N alpha-acetyl-L-lysine and L-lysine. Dorwin EL, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):265-78

Glycation of hair protein in the assessment of long-term control of blood glucose. Oimomi M, et al. **Jpn J Med** 1988 Aug;27(3):277-80

The incidence of analgesics intolerance in asthmatic children detected by history and inhalation challenge with lysine acetylsalicylate. Hussein A. **Klin Padiatr** 1989 Jan-Feb; 201(1):1-5

Determination of glycated hair protein and its clinical utility. Oimomi M, et al. **Kobe J Med Sci** 1988 Jun;34(3):113-20

Identification of N-epsilon-(2-propenal)lysine as a major urinary metabolite of malondialdehyde. Draper HH, et al. **Lipids** 1988 Jun;23(6):626-8

Cocrystallization of an immunoglobulin light chain dimer with bis(dinitrophenyl) lysine: tandem binding of two ligands, one with and one without accompanying conformational changes in the protein. Edmundson AB, et al. **Mol Immunol** 1989 Mar;26(3):207-20

Thialysine- and selenalysine-resistance in a E. coli mutant. Busiello V, et al. **Physiol Chem Phys Med NMR** 1988; 20(3):193-7

Utilization of lysine analogs by a lysine-requiring E. coli mutant. Busiello V, et al. **Physiol Chem Phys Med NMR** 1988;20(2):109-13

[Effects of 2 doses of lysine acetylsalicylate on platelet aggregation, beta-thromboglobulin and platelet factor 4 in aged atherosclerotic patients] Roussel B, et al. **Therapie** 1988 Jun-Jul;43(4):267-71 (Eng. Abstr.) **(Fre)**

[The dynamics of the analgesic effect of non-steroidal antirheumatic drugs. Ibuprofenlysinate versus diclofenac] Pavelka K Jr, et al. **Fortschr Med** 1989 Apr 20; 107(12):276-80 (Eng. Abstr.) **(Ger)**

[Ketoprofen lysine treatment of painful manifestations of spinal osteoarthrosis] Memeo A, et al. **Clin Ter** 1988 Jul 31;126(2):119-22 (Eng. Abstr.) **(Ita)**

[A new method of diagnosis of aspirin-induced asthma by inhalation test with water-soluble aspirin (aspirin DL-lysine, Venopirin] Sakakibara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Mar; 26(3):275-83 (Eng. Abstr.) **(Jpn)**

[Analgesic action and pharmacokinetics of lysine acetylsalicylate administered intramuscularly] Libina VV, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):78-82 (Eng. Abstr.) **(Rus)**

ANALYSIS

Distance between lysine 384 and heme of cytochrome P-450 LM2 (P-450 IIB4) studied by fluorescence energy transfer measurements. Bernhardt R, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1282-9

Domain-specific bias in arginine/lysine usage by protein toxins. London E, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):333-9

Resonance Raman spectroscopy indicates a lysine as the sixth iron ligand in cytochrome f. Davis DJ, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):61-6

Reverse-phase liquid chromatographic determination of lysine in complete feeds and premixes, using manual precolumn derivatization. Cottingham LS, et al.

J Assoc Off Anal Chem 1988 Sep-Oct;71(5):1012-6
Determination of lipoyllysine derived from enzymes by liquid chromatography. Hayakawa K, et al. J Chromatogr 1989 May 5;490(1):33-41
The estimation of 'available lysine' in human foods by three chemical procedures. Carpenter KJ, et al. Plant Foods Hum Nutr 1989;39(1):129-35
[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. Z Ernahrungswiss 1988 Jun;27(2):109-18 (Eng. Abstr.) (Ger)
[Localization of a lysine residue near the site of initiating substrate binding of T7 bacteriophage RNA polymerase] Maksimova TG, et al. Bioorg Khim 1989 Jan;15(1):18-23 (Eng. Abstr.) (Rus)
[Effects of processing by granular heated beds on the chemical and functional properties of legume grains] Loayza Jibaja C, et al. Arch Latinoam Nutr 1988 Mar; 38(1):162-72 (Eng. Abstr.) (Spa)
[Quantification of the total and available lysine and tryptophan in corn endosperm] Pereyra Alférez B, et al. Rev Latinoam Microbiol 1987 Oct-Dec;29(4):305-9 (Eng. Abstr.) (Spa)

ANTAGONISTS & INHIBITORS

New method of blocking lysyl residues of proteins using 4-(4-methoxy-3-sulphophenyl)-2,6-bis-(4-sulphophenyl)py rylium perchlorate. Dill K, et al. J Biochem Biophys Methods 1988 Sep;17(1):75-8

BIOSYNTHESIS

Influence of increased aspartate availability on lysine formation by a recombinant strain of Corynebacterium glutamicum and utilization of fumarate. Menkel E, et al. Appl Environ Microbiol 1989 Mar;55(3):684-8
Lysine biosynthesis in Penicillium chrysogenum is regulated by feedback inhibition of alpha-aminoadipate reductase. Affenzeller K, et al. FEMS Microbiol Lett 1989 Apr; 49(2-3):293-7
Lysine biosynthesis pathway and biochemical blocks of lysine auxotrophs of Schizosaccharomyces pombe. Ye ZH, et al. J Bacteriol 1988 Dec;170(12):5968-70
Amino acid compositions of different protein fractions in developing grains of NP 113 barley and its high lysine Notch-2 mutant. Joshi S, et al. Plant Foods Hum Nutr 1988;38(4):277-86

BLOOD

Noninvolvement of surface lysine residues of bovine serum albumin in bilirubin binding. Tayyab S, et al. Biochem Int 1989 Feb;18(2):343-9

DEFICIENCY

Transplantation of skin grafts in rats fed plant protein wheat gluten. Lotan RM. Isr J Med Sci 1989 Aug;25(8):433-7
Humoral and cellular immune response in growing rats fed a 10% gluten diet. Lotan RM. Isr J Med Sci 1989 Aug; 25(8):437-41
Combined effect of dimethylnitrosamine and a lysine-restricted diet on O6-methylguanine-DNA methyltransferase levels in mouse tissues. Klaude M, et al. Mutat Res 1989 Sep;218(2):135-42
Sparrows discriminate between diets differing in valine or lysine concentrations. Murphy ME, et al. Physiol Behav 1989 Feb;45(2):423-30

GENETICS

Properties of revertants of lys2 and lys5 mutants as well as alpha-aminoadipate-semialdehyde dehydrogenase from Saccharomyces cerevisiae. Storts DR, et al. Biochem Biophys Res Commun 1989 May 30;161(1):182-6
[Analysis of mutants of Bacillus subtilis, auxotrophic for lysine] Shevchenko TN, et al. Mol Gen Mikrobiol Virusol 1988 Jun;(6):33-7 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Determination of the number of e-amino groups available for conjugation of effector molecules to monoclonal antibodies. Mueller BM, et al. Hybridoma 1988 Oct; 7(5):453-6

METABOLISM

Amino acid transport across the hen colon: interactions between leucine and lysine. Munck BG. Am J Physiol 1989 Mar;256(3 Pt 1):G532-9
Inactivation of human arginine-143, lysine-143, and isoleucine-143 Cu,Zn superoxide dismutases by hydrogen peroxide: multiple mechanisms for inactivation. Horton PJ, et al. Arch Biochem Biophys 1989 Feb 15;269(1):114-24
Dietary treatment of hyperlysinaemia. Gregory JW, et al. Arch Dis Child 1989 May;64(5):716-20
Dicyclohexylcarbodiimide cross-links two conserved residues, Asp-184 and Lys-72, at the active site of the catalytic subunit of cAMP-dependent protein kinase. Buechler JA, et al. Biochemistry 1989 Mar 7;28(5):2065-70
Lysine degradation in Candida. Characterization and probable role of L-norleucine-leucine, 4-aminobutyrate and delta-aminovalerate:2-oxoglutarate aminotransferases. Der Garabedian PA, et al. Biochimie 1989 Apr; 71(4):497-503
Lysinuric protein intolerance mutation is not expressed in the plasma membrane of erythrocytes. Smith DW, et al. Hum Genet 1988 Dec;80(4):395-6
Evidence for oligolysine binding to the minor groove of poly(dA-dT).poly(dA-dT). Atreyi M, et al. Indian J Biochem Biophys 1988 Oct;25(5):385-8
Sodium-dependent lysine flux across bullfrog alveolar epithelium. Kim KJ, et al. J Appl Physiol 1988 Oct; 65(4):1655-61
Lysine catabolism in Streptomyces spp. is primarily through cadaverine: beta-lactam producers also make alpha-aminoadipate. Madduri K, et al. J Bacteriol 1989 Jan;171(1):299-302
The ATP binding site on rho protein. Affinity labeling of Lys181 by pyridoxal 5'-diphospho-5'-adenosine. Dombroski AJ, et al. J Biol Chem 1988 Dec 15; 263(35):18810-5
Examination of the function of active site lysine 329 of ribulose-bisphosphate carboxylase/oxygenase as revealed by the proton exchange reaction. Hartman FC, et al. J Biol Chem 1989 Jul 15;264(20):11784-9
Decreased thermal denaturation temperature of osteogenesis imperfecta mutant collagen is independent of post-translational overmodifications of lysine and hydroxylysine. Rao VH, et al. J Biol Chem 1989 Jan 25; 264(3):1793-8
Role of catalytic and lysine-binding sites in plasmin-induced neutrophil adherence to endothelium. Lo SK, et al. J Clin Invest 1989 Sep;84(3):793-801
Incorporation of 3H-lysine into a rapidly labelling neuronal protein fraction in visual cortex is suppressed in dark reared rats. Rose SP, et al. Life Sci 1974 Jul 15;15(2):223-30
Utilization of lysine analogs by a lysine-requiring E. coli mutant. Busiello V, et al. Physiol Chem Phys Med NMR 1988;20(2):109-13
Bioavailability of lysine in selected foods by rat growth assay. McDonough FE, et al. Plant Foods Hum Nutr 1989; 39(1):67-75
Lysine requirements of growing turkeys in various temperature environments. Noll SL, et al. Poult Sci 1989 Jun;68(6):781-94
Multiple interactions of lysine-128 of Escherichia coli glutamate dehydrogenase revealed by site-directed mutagenesis studies. McPherson MJ, et al. Protein Eng 1988 Jul;2(2):147-52
Inhibition by tranexamic acid of the conversion of single-chain tissue plasminogen activator to its two chain form by plasmin: the presence on tissue plasminogen activator of a site to bind with lysine binding sites of plasmin. Takada A, et al. Thromb Res 1989 Sep 15; 55(6):717-25
[Mechanism of action of lysine in relation to its form of supply in swine] Liebert F, et al. Arch Tierernahr 1989 Apr-May;39(4-5):405-13 (Eng. Abstr.) (Ger)
[L-3H-lysine binding sites on the rat retinal membrane: influence of the GABAergic system] Scondotto S, et al. Medicina (Firenze) 1988 Apr-Jun;8(2):198-200 (Eng. Abstr.) (Ita)
[Features of the chromatin structure of erythrocytes depending on the properties of lysine-rich histones] Kostyleva EI, et al. Mol Biol (Mosk) 1989 Jan-Feb; 23(1):73-9 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Cystine and lysine reabsorption in the isolated perfused rat kidney. Roby KA, et al. Am J Physiol 1989 May;256(5 Pt 2):F901-8
Transport of L-lysine in the fission yeast Schizosaccharomyces pombe. Sychrová H, et al. Biochim Biophys Acta 1989 Jan 30;978(2):203-8
Lysine and alanine transport in the perfused guinea-pig placenta. Wheeler CP, et al. Biochim Biophys Acta 1989 Jan 30;978(2):257-66
Interaction between electron transfer chain and lysine transport in yeast. Opekarova M. Cell Mol Biol 1988; 34(6):629-37
Increased lysine transport capacity in erythrocytes from patients with chronic renal failure. Fervenza FC, et al. Clin Sci 1989 Apr;76(4):419-22
Effect of ethanol on the specific transport system for L-lysine in Saccharomyces cerevisiae. García JC, et al. Folia Microbiol (Praha) 1988;33(4):281-4
Uptake of L-lysine by a double mutant of Saccharomyces cerevisiae. García JC, et al. Folia Microbiol (Praha) 1988; 33(4):285-91
Bioavailability of lysine in L-lysine.HCl. Izquierdo OA, et al. J Anim Sci 1988 Oct;66(10):2590-7
Uptake of lysine and proline via separate alpha-neutral amino acid transport pathways in Mytilus gill brush border membranes. Pajor AM, et al. J Membr Biol 1989 Mar; 107(3):237-47

PHARMACOLOGY

Effect of L-lysine on cytosolic calcium homeostasis in cultured human normal fibroblasts. Civitelli R, et al. Calcif Tissue Int 1989 Sep;45(3):193-7
Effect of L- and D-lysine on the growth of Ehrlich ascites tumour. Choy YM, et al. Chemotherapy 1989;35(2):119-22
D-lysine effectively decreases the non-enzymic glycation of proteins in vitro. Sensi M, et al. Clin Chem 1989 Mar; 35(3):384-7
Stimulus-secretion coupling of arginine-induced insulin release: comparison with lysine-induced insulin secretion. Sener A, et al. Endocrinology 1989 May;124(5):2558-67
Urinary excretion of inactive renin during blockade of the renal tubular protein reabsorption with lysine. Nielsen AH, et al. J Hypertens 1989 Feb;7(2):77-82
Effect of L-lysine monohydrochloride on cutaneous herpes simplex virus in the guinea pig. Ayala E, et al. J Med Virol 1989 May;28(1):16-20
Modulation of benzodiazepine by lysine and pipecolic acid on pentylenetetrazol-induced seizures. Chang YF, et al. Life Sci 1988;43(15):1177-88
Cytoprotective value of lysine, penicillamine, and pyridoxal phosphate against the neurotoxicity of acetaldehyde. Phillips SC. Toxicol Appl Pharmacol 1989 May; 98(3):553-60

PHYSIOLOGY

Selective chemical modification of cytochrome P-450SCC lysine residues. Identification of lysines involved in the interaction with adrenodoxin. Adamovich TB, et al. Biochim Biophys Acta 1989 Jul 6;996(3):247-53
Comparison of enzymatic and pharmacological activities of lysine-49 and aspartate-49 phospholipases A2 from Agkistrodon piscivorus piscivorus snake venom. A reconsideration [letter] Condrea E. Toxicon 1989; 27(7):705-6

RADIATION EFFECTS

Evidence for light-induced lysine conformational changes during the primary event of the bacteriorhodopsin photocycle. McMaster E, et al. Biochem Biophys Res Commun 1988 Oct 14;156(1):86-91

TOXICITY

Lysine-orotate potentiates the toxicity of an extract of the mushroom Amanita phalloides. Halacheva K, et al. Toxicon 1988;26(6):571-6

URINE

Pseudo-cystinuria-lysinuria in neonatal propionic acidemia. Parvy P, et al. Clin Chem 1988 Oct;34(10):2158
Homocitrullinuria and homoargininuria in lysinuric protein intolerance. Kato T, et al. J Inherited Metab Dis 1989; 12(2):157-61
[Protein intolerance with lysinuria. Value of orotic aciduria in adjusting treatment with citrulline] de Parscau L, et al. Arch Fr Pediatr 1988 Dec;45(10):809-12 (Eng. Abstr.) (Fre)
[A case of combined lysinuric protein intolerance and hypoactivity of argininosuccinate synthetase (citrullinemia)] Shioya K, et al. Nippon Naika Gakkai Zasshi 1988 May;77(5):667-73 (Jpn)

LYSINE HYDROXYLASE see under **HYDROXYLASES**

LYSINE VASOPRESSIN see **LYPRESSIN**

LYSINOALANINE see under **LYSINE**

LYSOGENY

Insertion and amplification of foreign genes in the Lactococcus lactis subsp. lactis chromosome. Chopin MC, et al. Appl Environ Microbiol 1989 Jul;55(7):1769-74
Rapid method for the isolation of bacteriophages from lysogens. Parisi JT, et al. Diagn Microbiol Infect Dis 1988 Nov;11(3):121-3
Evidence for the involvement of pim-2, a new common proviral insertion site, in progression of lymphomas. Breuer ML, et al. EMBO J 1989 Mar;8(3):743-8
Mutations of the phage lambda attachment site alter the directionality of resolution of Holliday structures. de Massy B, et al. EMBO J 1989 May;8(5):1591-9
Biochemical characterization of phi X174-protein-E-mediated lysis of Escherichia coli. Witte A, et al. Eur J Biochem 1989 Mar 15;180(2):393-8
The effect of attachment site mutations on strand exchange in bacteriophage lambda site-specific recombination. Bauer CE, et al. Genetics 1989 Aug;122(4):727-36
Biophysical properties of the lysogenic vibrio phage 'Kappa'. Samad SA, et al. Indian J Biochem Biophys 1988 Oct; 25(5):450-4
Characterization of a spontaneously segregating Cf16-v1 lysogen of Xanthomonas campestris pv. citri. Dai H, et al. Intervirology 1988;29(4):207-16
Use of the isocitrate dehydrogenase structural gene for attachment of e14 in Escherichia coli K-12. Hill CW, et al. J Bacteriol 1989 Jul;171(7):4083-4
The canyon hypothesis. Hiding the host cell receptor attachment site on a viral surface from immune surveillance. Rossmann MG. J Biol Chem 1989 Sep 5; 264(25):14587-90 (47 ref.)
Biochemical characterization of a glycoprotein required for rhinovirus attachment. Tomassini JE, et al. J Biol Chem 1989 Jan 25;264(3):1656-62
Products of defective lysogeny in Serratia marcescens SMG 38 and their activity against Escherichia coli and other

Enterobacteria. Gratia JP. J Gen Microbiol 1989 Jan;135 (Pt 1):25-35

Five unique temperate phages from a polylysogenic strain of Bacillus thuringiensis subsp. aizawai. Reynolds RB, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1577-85

Bacteriophage lambda site-specific recombination proceeds with a defined order of strand exchanges. Kitts PA, et al. J Mol Biol 1988 Nov 5;204(1):95-107

Genetic analysis of attTn7, the transposon Tn7 attachment site in Escherichia coli, using a novel M13-based transduction assay. Qadri MI, et al. J Mol Biol 1989 May 5;207(1):85-98

Determinants of site-specific recombination in the lambdoid coliphage HK022. An evolutionary change in specificity. Yagil E, et al. J Mol Biol 1989 Jun 20;207(4):695-717

Integration host factor (IHF) stimulates binding of the gpNu1 subunit of lambda terminase to cos DNA. Shinder G, et al. Nucleic Acids Res 1989 Mar 11;17(5):2005-22

Cleavage of the cII protein of phage lambda by purified HflA protease: control of the switch between lysis and lysogeny. Cheng HH, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(21):7882-6

Nucleotide sequences involved in the neolysogenic insertion of filamentous phage Cf16-v1 into the Xanthomonas campestris pv. citri chromosome. Dai H, et al. Virology 1988 Dec;167(2):613-20

Bacteriophages of Bordetella sp.: features of lysogeny and conversion. Holzmayer TA, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):147-55

[Lysogeny of strains of Xanthomonas campestris and their variants] Gvozdiak RI, et al. Mikrobiol Zh 1987 Jan-Feb; 49(1):9-12 (Eng. Abstr.) (Rus)

[Lysogeny in strains of Proteus mirabilis and Morganella morganii] Majtánová L, et al.
Cesk Epidemiol Mikrobiol Imunol 1988 Nov;37(6):323-8 (Eng. Abstr.) (Slo)

DRUG EFFECTS

Prophage induction by 4 antimalaria drugs (daraprim, fansidar, nivaquine and camoquine) and in combination with aflatoxin B1. Fasunon OD, et al. Mutat Res 1989 Apr; 222(4):311-6

Effect of antiserum against aflatoxin B1-bovine serum albumin complex on aflatoxin B1-induced lysogenesis. Odugbesan EA, et al. Mutat Res 1988 Sep-Oct; 209(1-2):7-11

LYSOLECITHIN ACYLTRANSFERASE see under **ACYLTRANSFERASES**

LYSOLECITHINS see **LYSOPHOSPHATIDYLCHOLINES**

LYSOPHOSPHATIDIC ACIDS see **LYSOPHOSPHOLIPIDS**

LYSOPHOSPHATIDYLCHOLINES

Polymorphic phase behavior of lysopalmitoylphosphatidylcholine in poly(ethylene glycol)-water mixtures. King MD, et al. Biochemistry 1989 Jun 27;28(13):5643-7

Dielectric spectroscopy of L-alpha-lysolecithin-packaged gramicidin A. Buchet R, et al. Biophys Chem 1988 Dec; 32(2-3):199-209

Continuous fluorescence microphotolysis of anthracene-labeled phospholipids in membranes. Theoretical approach of the simultaneous determination of their photodimerization and lateral diffusion rates. Ferrières X, et al. Biophys J 1989 Jun;55(6):1081-91

Thermodynamic parameters for the binding of divalent cations to gramicidin A incorporated into a lipid environment by Tl-205 nuclear magnetic resonance. Hinton JF, et al. Biophys J 1989 Feb;55(2):327-30

Lysophosphatidylcholine stabilizes small unilamellar phosphatidylcholine vesicles. Phosphorus-31 NMR evidence for the "wedge" effect. Kumar VV, et al. Biophys J 1989 Apr;55(4):789-92

Conformation of bombesin in buffer and in the presence of lysolecithin micelles: NMR, CD, and fluorescence studies. Cavatorta P, et al. Biopolymers 1989 Jan;28(1):441-63

ADMINISTRATION & DOSAGE

Surfactant metabolism in surfactant-treated preterm ventilated lambs. Ikegami M, et al. J Appl Physiol 1989 Jul;67(1):429-37

ANALYSIS

Fluorescence spectral resolution of myelin basic protein conformers in complexes with lysophosphatidylcholine. Cavatorta P, et al. Cell Biophys 1988 Dec;13(3):201-15

BIOSYNTHESIS

Modulation of resynthesis of 1-alkyl-2-arachidonyl-glycero-3-phosphocholine and phosphatidylinositols for interception in vivo of free arachidonic acid, lyso-PAF, diacyl-glycerols, and phosphoinositides. Bauer JA, et al. Prog Clin Biol Res 1989; 308:455-62

DIAGNOSTIC USE

Parinaroyl and pyrenyl phospholipids as probes for the lipid surface layer of human low density lipoproteins. Vauhkonen M, et al. Biochim Biophys Acta 1989 Aug 21; 984(1):81-7

Susceptibility of erythrocyte membranes to treatment with L-alpha-lysophosphatidylcholine in Duchenne muscular dystrophy. Tangorra A, et al. Boll Soc Ital Biol Sper 1988 May;64(5):477-84

METABOLISM

Effect of PAF acether on oriented egg phosphatidylcholine multibilayers; interaction with cholesterol; comparison to lyso-PC and lyso-PAF. Oliver JL, et al.
Agents Actions 1989 Jan;26(1-2):121-2

Acylation of lysophosphatidylcholine in liver microsomes of thermally acclimated trout. Livermore RC, et al.
Am J Physiol 1988 Dec;255(6 Pt 2):R923-8

Albumin stimulates the release of lysophosphatidylcholine from cultured rat hepatocytes. Baisted DJ, et al.
Biochem J 1988 Aug 1;253(3):693-701

Factors regulating the secretion of lysophosphatidylcholine by rat hepatocytes compared with the synthesis and secretion of phosphatidylcholine and triacylglycerol. Effects of albumin, cycloheximide, verapamil, EGTA and chlorpromazine. Graham A, et al. Biochem J 1988 Aug 1;253(3):687-92

Lysophosphatidylcholine metabolism and lipoprotein secretion by cultured rat hepatocytes deficient in choline. Robinson BS, et al. Biochem J 1989 May 15;260(1):207-14

Lysolipids and membrane damage: lysolecithin and its interaction with myelin. Gregson NA.
Biochem Soc Trans 1989 Apr;17(2):280-3

Conformation of gramicidin in relation to its ability to form bilayers with lysophosphatidylcholine. Killian JA, et al. Biochemistry 1988 Sep 20;27(19):7295-301

Lysophosphatidylcholine metabolism to 1,2-diacylglycerol in lymphoblasts: involvement of a phosphatidylcholine-hydrolyzing phospholipase C. Nishijima J, et al. Biochemistry 1989 Apr 4;28(7):2902-9

Lysophosphatidylcholine as an intermediate in phosphatidylcholine metabolism and glycerophosphocholine synthesis in cultured cells: an evaluation of the roles of 1-acyl- and 2-acyl-lysophosphatidylcholine. Morash SC, et al.
Biochim Biophys Acta 1989 Aug 8;1004(2):221-9

Lysophospholipase and the metabolism of lysophosphatidylcholine in isolated bovine rod outer segments. Zimmerman WF, et al. Exp Eye Res 1989 Jan; 48(1):69-76

Effects of lysophosphatidylcholine on cultured heart cells: correlation of rate of uptake and extent of accumulation with cell injury. Sedlis SP, et al. J Lab Clin Med 1988 Dec;112(6):745-54

Lysolecithin concentration in pancreatic tissue during therapy with phospholipase A2-inhibitors in acute necrotizing pancreatitis. Kahle M, et al.
Klin Wochenschr 1989 Feb 1;67(3):177-9

Lysophosphatidylcholine and the inflammatory action of neutrophils. Lindahl M, et al. Scand J Clin Lab Invest 1988 Jun;48(4):303-11

PHARMACOKINETICS

Reutilization of surfactant phosphatidylglycerol and lysophosphatidylcholine by adult rabbits. Jacobs HC, et al. Biochim Biophys Acta 1988 Sep 23;962(2):227-33

[Influence of pH in the adsorption capacity of bile salts and lysolecithins in vitro by antacids containing clay and/or aluminum] Vatier J, et al. Gastroenterol Clin Biol 1989 May; 13(5):445-51 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Echinogenic action of L-alpha-lysophosphatidylcholine in Duchenne muscular dystrophy: a study on carrier detection. Tangorra A, et al. Am J Med Genet 1989 Apr; 32(4):540-4

Influence of shape stabilizing agents on the deformability and morphology of lysolecithin-treated erythrocytes. Rogausch H. Arzneimittelforschung 1988 Oct; 38(10):1478-81

DNA repair synthesis in isolated rainbow trout liver cells. Miller MR, et al. Carcinogenesis 1989 Jun;10(6):995-1001

Quantitative analysis of hemolytic action of lysophosphatidylcholines in vitro: effect of acyl chain structure. Matsuzaki K, et al. Chem Pharm Bull (Tokyo) 1988 Nov;26(11):4253-60

Phasic effects of glucose, p-hydroxymercuribenzoate, and lysophosphatidylcholine on insulin secretion from HIT cells. Fujimoto WY, et al. Diabetes 1989 May;38(5):625-8

Cholesterol efflux from bovine sperm. I. Induction of the acrosome reaction with lysophosphatidylcholine after reducing sperm cholesterol. Ehrenwald E, et al.
Gamete Res 1988 Jun;20(2):145-57

In vitro capacitation and fertilizing ability of ejaculated rabbit sperm treated with lysophosphatidylcholine. Kim CK, et al. Gamete Res 1989 Feb;22(2):131-41

The tyrosine-dependent oxidation of tetrahydropterins by lysolecithin-activated rat liver phenylalanine hydroxylase. Davis MD, et al. J Biol Chem 1988 Nov 25;263(33):17312-6

Correlation of lysophosphatidylcholine-induced vs spontaneous relaxation to cyclic GMP levels in rabbit thoracic aorta. Menon NK, et al. Life Sci 1989;44(9):611-8

Effects of lysophosphatidylcholine and arachidonic acid on the regulation of intracellular Ca2+ transport. Rustenbeck I, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Jan-Feb;339(1-2):37-41

Lysolecithins as endothelium-dependent vascular smooth muscle relaxants that differ from endothelium-derived relaxing factor (nitric oxide) [published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4725] Saito T, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8246-50

An improved chemiluminescence assay suggests non nitric oxide-mediated action of lysophosphatidylcholine and acetylcholine. Menon NK, et al.
Proc Soc Exp Biol Med 1989 Jul;191(3):316-9

[Effect of macroergic nucleotides and lysolecithin on the cholinergic reception of the heart muscle in the frog Rana temporaria] Suslova IV. Zh Evol Biokhim Fiziol 1988 Sep-Oct;24(5):650-6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Lysolecithin mediated transmembrane diffusion of plasma lipoproteins and albumin. Wells IC, et al.
Prog Clin Biol Res 1989;292:379-88

LYSOPHOSPHOLIPASE see under **PHOSPHOLIPASES**

LYSOPHOSPHOLIPIDS

Water adsorption isotherms and hydration forces for lysolipids and diacyl phospholipids. Marsh D.
Biophys J 1989 Jun;55(6):1093-100

Polymorphic phase behavior of lysophosphatidylethanolamine dispersions. A thermodynamic and spectroscopic characterization. Slater JL, et al. Biophys J 1989 Aug;56(2):243-52

Molecular dynamics simulation of a phospholipid micelle. Wendoloski JJ, et al. Science 1989 Feb 3;243(4891):636-8

ANALYSIS

Interfacial properties and critical micelle concentration of lysophospholipids. Stafford RE, et al. Biochemistry 1989 Jun 13;28(12):5113-20

Quantification, characterization and fatty acid composition of lysophosphatidic acid in different rat tissues. Das AK, et al. Lipids 1989 Apr;24(4):329-33

BIOSYNTHESIS

Prevention of liver cell damage following lipid peroxidation by depression of lysophosphatide formation. Ungemach FR. Arch Toxicol Suppl 1989;13:275-81

BLOOD

Identification of the molecular species of lysophosphatidic acid produced when platelets are stimulated by thrombin. Gerrard JM, et al. Biochim Biophys Acta 1989 Feb 20; 1001(3):282-5

METABOLISM

Formation of bis(monoacylglycero)phosphate by a macrophage transacylase. Huterer SJ, et al.
Biochim Biophys Acta 1989 Jan 23;1001(1):68-75

Schistosoma mansoni: synthesis and release of phospholipids, lysophospholipids, and neutral lipids by schistosomula. Furlong ST, et al. Exp Parasitol 1989 Jul;69(1):65-77

Uptake and acylation of 2-acyl-lysophospholipids by Escherichia coli. Hsu L, et al. J Bacteriol 1989 Feb; 171(2):1203-5

PHARMACOLOGY

Capacitation of bovine spermatozoa by lysophospholipids and trypsin. Wheeler MB, et al. Gamete Res 1989 Feb; 22(2):193-204

Lysophosphatides enhance superoxide responses of stimulated human neutrophils. Ginsburg I, et al.
Inflammation 1989 Apr;13(2):163-74

Inhibition of Na+,K+-ATPase activity by phospholipase A2 and several lysophospholipids: possible role of phospholipase A2 in noradrenaline release from cerebral cortical synaptosomes. Nishikawa T, et al.
J Pharm Pharmacol 1989 Jul;41(7):450-8

Modulation of calcium-dependent neutral protease activity by fatty acids and lysophospholipids. Zalewska T, et al. Neurochem Pathol 1988 Apr;8(2):79-89

PHYSIOLOGY

Protein kinase C regulation by sphingosine/lysosphingolipids. Bell RM, et al. Cold Spring Harb Symp Quant Biol 1988; 53 Pt 1:103-10 (67 ref.)

Inhibition of synaptosomal (Na+ + K+)-ATPase activity by lysophosphatidic acid: its possible role in membrane depolarization. Nishikawa T, et al. Jpn J Pharmacol 1988 Jun;47(2):143-50

Autacoid properties of lysophosphatidylserine. Bruni A, et al. Prog Clin Biol Res 1988;282:165-79 (46 ref.)

LYSOSOMAL ALPHA-GLUCOSIDASE see **EXO-1,4-ALPHA-GLUCOSIDASE**

LYSOSOMES

[Mechanism of photodynamic cytotoxicity of mammalian cells] Utsumi H. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3109–15 **(Jpn)**

ANALYSIS

Purification and characterization of human lysosomal membrane glycoproteins. Mane SM, et al. **Arch Biochem Biophys** 1989 Jan;268(1):360–78

An immunoreactive 8-azido ATP-labeled protein common to the lysosomal and chromaffin granule membrane. Cappoletti J, et al. **Biochim Biophys Acta** 1988 Dec 8; 946(1):33–9

Isolation and characterization of crinosomes—a subclass of secondary lysosomes. Glaumann H, et al. **Exp Mol Pathol** 1989 Apr;50(2):167–82

Lectin–gold cytochemistry of the Golgi apparatus in rabbit luteal cells, with special emphasis on the formation of a lysosomal–type membrane. Quatacker JR. **Histochemistry** 1989;90(5):399–404

Rat skeletal muscle lysosomes contain glycogen. Calder PC, et al. **Int J Biochem** 1989;21(5):561–7

Amino acid sequence of a lysozyme (B–enzyme) from Bacillus subtilis YT–25. Kamei K, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):832–6

Isolation and characterization of human lysosomal membrane glycoproteins, h–lamp–1 and h–lamp–2. Major sialoglycoproteins carrying polylactosaminoglycan. Carlsson SR, et al. **J Biol Chem** 1988 Dec 15; 263(35):18911–9

Cloning of cDNAs encoding human lysosomal membrane glycoproteins, h–lamp–1 and h–lamp–2. Comparison of their deduced amino acid sequences. Fukuda M, et al. **J Biol Chem** 1988 Dec 15;263(35):18920–8

Evaluation of lysosomal stability in living cultured macrophages by cytofluorometry. Effect of silver lactate and hypotonic conditions. Olsson GM, et al. **Virchows Arch [B]** 1989;56(4):263–9

[Spectrophotometric method for determining the stability of lysosomes from animal tissues depending on the hydrogen ion concentration] Siatkin SP, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):184–6 (Eng. Abstr.) **(Rus)**

[Content of lysosomes and lipids in the cytoplasm of the blood monocytes in patients with ischemic heart disease] Freidlin IS, et al. **Kardiologiia** 1988 Aug;28(8):75–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the cationic–lysosomal test in patients with pneumonia against a background of therapy] Domashenko ON, et al. **Lab Delo** 1989;(5):15–7 (Eng. Abstr.) **(Rus)**

[Lysosomal secretion of peripheral blood leukocytes in children with meningitis of mumps etiology] Babachenko IV, et al. **Pediatriia** 1988;(10):107 **(Rus)**

CLASSIFICATION

Identification of two subpopulations of thyroid lysosomes: relation to the thyroglobulin proteolytic pathway. Selmi S, et al. **Biochem J** 1988 Jul 15;253(2):523–32

DRUG EFFECTS

Comparative studies on the effects of erythromycin A and azithromycin upon extracellular release of lysosomal enzymes in inflammatory processes. Carević O, et al. **Agents Actions** 1988 Aug;25(1–2):124–31

Studies on the effect of lysosomotropic agents on the release of Gal beta 1–4GlcNAc alpha–2,6–sialytransferase from rat liver slices during the acute–phase response. Lammers G, et al. **Biochem J** 1989 Jul 15;261(2):389–93

Effect of gentamicin on the lysosomal system of cultured human proximal tubular cells. Endocytotic activity, lysosomal pH and membrane fragility. Regec AL, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2527–34

Stearylamine permeabilizes the lysosomal membrane to cystine and sialic acid. Jonas AJ, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):257–61

Gonadotropin regulation of rat ovarian lysosomes: existence of a hormone specific dual control mechanism. Dhanasekaran N, et al. **Biosci Rep** 1988 Jun;8(3):279–85

Recombinant ricin A chain conjugated to monoclonal antibodies: improved tumor cell inhibition in the presence of lysosomotropic compounds. Ramakrishnan S, et al. **Cancer Res** 1989 Feb 1;49(3):613–7

Prostaglandin I2 analogue and propranolol prevent ischaemia induced mitochondrial dysfunction through the stabilisation of lysosomal membranes. Hieda N, et al. **Cardiovasc Res** 1988 Mar;22(3):219–25

Heavy metals in the terrestrial isopod Porcellio scaber Latreille. II. Subcellular fractionation of metal–accumulating lysosomes from hepatopancreas. Dallinger R, et al. **Cell Biol Toxicol** 1988 Mar;4(1):97–109

Heavy metals in the terrestrial isopod Porcellio scaber Latreille. I. Histochemical and ultrastructural characterization of metal–containing lysosomes. Prosi F, et al. **Cell Biol Toxicol** 1988 Mar;4(1):81–96

Effect of protoporphyrin on peroxidative damage of rat liver lysosomes. Imai K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4608–11

Perhexilene: effects on hepatic lysosomal function in rats. Sewell RB, et al. **Clin Exp Pharmacol Physiol** 1989 Jan; 16(1):25–32

Monensin and chloroquine inhibit transfer to lysosomes of endocytosed macromolecules in cultured mouse peritoneal macrophages. Stenseth K, et al. **Eur J Cell Biol** 1989 Aug; 49(2):326–33

Antiinflammatory drugs—lysosomal membrane stabilization in normal and activated phagocytic cells. Rao AB, et al. **Indian J Exp Biol** 1988 May;26(5):365–7

Insulin secretion and islet lysosomal enzyme activities in the mouse. Effects of suramin. Skoglund G, et al. **Int J Pancreatol** 1989 Feb;4(1):29–40

Lysosomes: a possible target for psoralen photodamage. Frederiksen S, et al. **J Photochem Photobiol [B]** 1989 Jun; 3(3):437–47

Utilization of mercaptoethylgluconamide for depleting human cystinotic fibroblasts of their accumulated lysosomal cystine. Pisoni RL, et al. **Pediatr Res** 1989 Jul;26(1):73–6

A review of the biology and toxicologic implications of the induction of lysosomal lamellar bodies by drugs. Reasor MJ. **Toxicol Appl Pharmacol** 1989 Jan;97(1):47–56 (53 ref.)

Evidence that cyclosporine pretreatment protects lysosomal membrane in liver ischemia in dogs. Hayashi T, et al. **Transplantation** 1989 May;47(5):924–6

Acridine orange–mediated photodamage of microsomal– and lysosomal fractions. Olsson GM, et al. **Virchows Arch [B]** 1989;56(4):247–57

The effect of allopurinol on lysosomal enzyme release. Mikulíková D, et al. **Z Rheumatol** 1989 Jan–Feb;48(1):26–9

[The lysosomal stabilizing effects of some antishock agents] Miyawaki T, et al. **Masui** 1988 Jul;37(7):815–22 (Eng. Abstr.) **(Jpn)**

[Effect of the antitumor preparations prospidin and spirobromin on the function of the liver lysosomal apparatus in mice] Kliment'eva TK, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):71–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Lysosomal enzyme release from macrophages: a model of food yeast toxicity evaluation. Hernández Rosales F, et al. **Acta Biol Hung** 1988;39(4):335–44

Enzymes of lysosomal origin in the serum of infants of diabetic mothers behavior in the first days after birth. Goi G, et al. **Acta Diabetol Lat** 1988 Oct–Dec;25(4):351–60

Cytochemical localization of arylsulfatase in guinea–pig Kurloff cells. Buat ML, et al. **Acta Histochem (Jena)** 1988; 84(2):211–5

Influence of long–term treatment with hydrazinophthalazines on the activity of lysosomal exoglycosidases in rat tissues. Olczyk K, et al. **Acta Med Hung** 1988;45(2):161–9

Lysosomal enzymes and granulocyte elastase in synovial fluid after multiple traumatic injuries. Hörl M, et al. **Adv Exp Med Biol** 1988;240:519–22

Potential role of lysosomal proteases in gentamicin nephrotoxicity. Olbricht CJ, et al. **Adv Exp Med Biol** 1988; 240:305–8

Effect of glomerular proteinuria on the activities of lysosomal proteases in isolated segments of rat proximal tubule. Olbricht CJ. **Adv Exp Med Biol** 1988;240:283–91

Normal alpha–L–fucosidase and other lysosomal enzyme activities in progressive cone dystrophy [letter] Hayasaka S, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):639–40

Purification of lysosomal membrane–bound glucocerebrosidase from human cultured fibroblasts using high–performance liquid chromatography. Choy FY. **Anal Biochem** 1989 Jun;179(2):312–8

Biogenesis of lysosomal enzymes in the alpha–glucosidase II–deficient modA mutant of Dictyostelium discoideum: retention of alpha–1,3–linked glucose on N–linked oligosaccharides delays intracellular transport but does not alter sorting of alpha–mannosidase or beta–glucosidase. Ebert DL, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):479–90

Adsorptive endocytosis of lysosomal enzymes by human fibroblasts: presence of two different functional systems that deliver an acid hydrolase to lysosomes. González–Noriega A, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):649–58

Characteristics of the sulfation of N–linked oligosaccharides in vesicles from Dictyostelium discoideum: in vitro sulfation of lysosomal enzymes. Lacoste CH, et al. **Arch Biochem Biophys** 1989 Sep;273(2):505–15

Interaction of lysosomal cysteine proteinases with alpha 2–macroglobulin: conclusive evidence for the endopeptidase activities of cathepsins B and H. Mason RW. **Arch Biochem Biophys** 1989 Sep;273(2):367–74

Evidence that aspartic proteinase is involved in the proteolytic processing event of procathepsin L in lysosomes. Nishimura Y, et al. **Arch Biochem Biophys** 1989 Jun;271(2):400–6

Selective effect of nerve growth factor on some Golgi and lysosomal enzyme activities of rat pheochromocytoma (PC12) cells. Rhodes CH, et al. **Arch Biochem Biophys** 1989 Jul;272(1):175–84

Evidence for the presence of a very high concentration of arylsulfatase A in the pig thyroid: identification of arylsulfatase A subunits as the two major glycoproteins in purified thyroid lysosomes. Selmi S, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):170–9

A rat liver lysosomal membrane flavin–adenine dinucleotide phosphohydrolase: purification and characterization. Shin HJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):95–103

In vitro activation of neuraminidase in the beta–galactosidase–neuraminidase–protective protein complex by cathepsin C. D'Agrosa RM, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):770–5

Brefeldin A inhibits the targeting of cathepsin D and cathepsin H to lysosomes in rat hepatocytes. Oda K, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):220–5

Human prostatic acid phosphatase: cDNA cloning, gene mapping and protein sequence homology with lysosomal acid phosphatase. Sharief FS, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):79–86

The effects of SUN 1165, a novel sodium channel blocker, on ischemia–induced mitochondrial dysfunction and leakage of lysosomal enzymes in canine hearts. Sugiyama S, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):433–9

Inhibition of liver lysosomal acid phospholipase A1 by blood serum proteins. Löffler BM, et al. **Biochem Int** 1988 Nov; 17(5):965–71

An improved purification procedure for rat liver lysosomal phospholipase A1. Löffler BM, et al. **Biochem Int** 1989 Jan;18(1):129–39

Isolation and characterization of chicken liver lysosomes. Nakabayashi T, et al. **Biochem Int** 1988 Jun;16(6):1119–25

The comparison of lysosomal enzymes activities in alveolar and peritoneal macrophages of rat. Turyna B, et al. **Biochem Int** 1988 Sep;17(3):433–40

Suppression of macrophage lysosomal enzymes after Leishmania donovani infection. Chakraborty P, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):46–55

Deoxyribonuclease II purified from the isolated lysosomes of porcine spleen and from porcine liver homogenates. Comparison with deoxyribonuclease II purified from porcine spleen homogenates. Liao TH, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):15–22

Lysosomal hydrolases of human vascular cells: response to agonists of endothelial function. Morgan DM, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):184–90

Lysosomal H+–translocating ATPase has a similar subunit structure to chromaffin granule H+–ATPase complex. Moriyama Y, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):241–7

Lysosomal proteinase–sensitive regions in fast and slow skeletal muscle myosins. Dufour E, et al. **Biochimie** 1989 May;71(5):625–32

Possible lysosomal activation of pancreatic zymogens. Activation of both human trypsinogens by cathepsin B and spontaneous acid. Activation of human trypsinogen 1. Figarella C, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:293–8

Targeting of lysosomal acid phosphatase with altered carbohydrate. Gottschalk S, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):75–80

High degree of homology between primary structure of human lysosomal acid phosphatase and human prostatic acid phosphatase. Peters C, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):177–81

Processing enzymes acting on carbohydrate moiety of lysosomal hydrolases in leukemic cells: elevated activity of N–acetylglucosamine–1–phosphotransferase. Uehara Y, et al. **Blood** 1989 May 15;73(7):1957–62

Platelet–dependent induction and amplification of polymorphonuclear leucocyte lysosomal enzyme release. Del Maschio A, et al. **Br J Haematol** 1989 Jul;72(3):329–35

Pineal lysosomal enzymes in the Syrian hamster: circadian rhythm and effects of castration or short photoperiod treatment. Vaughan MK, et al. **Brain Res** 1989 Jun 12; 489(2):318–24

Enhanced acid protease activity of lysosomes from papillary thyroid carcinoma. Sinadinović J, et al. **Cancer** 1989 Mar 15;63(6):1179–82

Acarbose is a competitive inhibitor of mammalian lysosomal acid alpha–D–glucosidases. Calder PC, et al. **Carbohydr Res** 1989 Aug 1;191(1):71–8

Mutations in the cytoplasmic domain of the 275 kd mannose 6–phosphate receptor differentially alter lysosomal enzyme sorting and endocytosis. Lobel P, et al. **Cell** 1989 Jun 2; 57(5):787–96

Studies into hormonal imprinting in a Tetrahymena thermophila mutant incapable of lysosomal enzyme secretion. Kovacs P, et al. **Cell Mol Biol** 1989;35(3):293–6

A macrophage receptor for liver lysosomal beta–glucosidase. Imai K. **Cell Struct Funct** 1988 Aug;13(4):325–32

Characterization of mouse liver sialidase and partial purification of the lysosomal sialidase. Nagai T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4008–18

Chronobiological study of several enzymes of lysosomal origin in human plasma. Goi G, et al. **Chronobiologia** 1989 Apr–Jun;16(2):93–103

Circadian and circannual rhythms of several enzymes of lysosomal origin in human plasma. Goi G, et al. **Clin Chim Acta** 1988 Aug 15;176(1):1–8

Serum lysosomal hydrolases in cystic fibrosis. Krall EA, et al. **Clin Chim Acta** 1988 Jun 30;175(1):1–9

I–cell disease: evidence for a mannose 6–phosphate independent pathway for translocation of lysosomal enzymes in lymphoblastoid cells. Tsuji A, et al. **Clin Chim Acta** 1988 Aug 15;176(1):115–21

Neutrophil lysosomal degradation of human CRP: CRP–derived peptides modulate neutrophil function. Shephard EG, et al. **Clin Exp Immunol** 1988 Jul; 73(1):139–45

An isoelectric focusing study of acid phosphohydrolases in liver lysosomes of higher vertebrates. Nakabayashi T, et al. **Comp Biochem Physiol [B]** 1979;63(2):221–31

A microsystem to assay lysosomal enzyme activities in cultured retinal pigment epithelial cells. Cabral L, et al. **Curr Eye Res** 1988 Nov;7(11):1097–104

Islet hormone secretion and islet lysosomal enzyme activities in the mouse: effects of chloroquine. Skoglund G, et al. **Diabetes Res** 1988 Nov;9(3):145–9

Primary structure and processing of lysosomal alpha-glucosidase; homology with the intestinal sucrase-isomaltase complex. Hoefsloot LH, et al. **EMBO J** 1988 Jun;7(6):1697–704

Biogenesis of the yeast lysosome (vacuole): biosynthesis and maturation of proteinase yscB. Mechler B, et al. **EMBO J** 1988 Jun;7(6):1705–10

Human lysosomal acid phosphatase: cloning, expression and chromosomal assignment. Pohlmann R, et al. **EMBO J** 1988 Aug;7(8):2343–50

Human lysosomal acid phosphatase is transported as a transmembrane protein to lysosomes in transfected baby hamster kidney cells. Waheed A, et al. **EMBO J** 1988 Aug; 7(8):2351–8

Structure of the human lysosomal acid phosphatase gene. Geier C, et al. **Eur J Biochem** 1989 Aug 15;183(3):611–6

Inhibitors of liver lysosomal acid phospholipase A1. Kunze H, et al. **Eur J Biochem** 1988 Nov 15;177(3):591–5

The identification of lysosomal ganglioside sialidase in human cells. Zeigler M, et al. **Eur J Biochem** 1989 Aug 1; 183(2):455–8

Immunocytochemical demonstration of the lysosomal enzyme alpha-glucosidase in the brush border of human intestinal epithelial cells. Fransen JA, et al. **Eur J Cell Biol** 1988 Oct;47(1):72–80

Presence of a lysosomal enzyme, arylsulfatase-A, in the prelysosome-endosome compartments of human cultured fibroblasts. Kelly BM, et al. **Eur J Cell Biol** 1989 Feb; 48(1):71–8

Reduced acid protease activity in vitro of lysosomes from thyroid gland of rats chronically treated with propylthiouracil and perchlorate. Sinadinović J, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):97–105

The amino-terminal sequences in the pro-alpha and -beta polypeptides of human lysosomal beta-hexosaminidase A and B are retained in the mature isozymes. Hubbes M, et al. **FEBS Lett** 1989 Jun 5;249(2):316–20

Chromosomal mapping of lysosomal enzyme structural genes in the domestic cat. Gilbert DA, et al. **Genomics** 1988 May; 2(4):329–36

Characterization of the human HEXB gene encoding lysosomal beta-hexosaminidase. Neote K, et al. **Genomics** 1988 Nov;3(4):279–86

Localization of acid phosphatase in lysosomes of pituitary folliculo-stellate cells following estrogen withdrawal from primed male rats. Reifel CW, et al. **Histochemistry** 1989; 91(6):483–5

The heterogeneity of rat kidney lysosomes revealed by immunoelectron microscopic staining for cathepsins B and H. Yokota S, et al. **Histochemistry** 1988;89(5):499–504

The role of complement in the stimulation of lysosomal enzyme release by polymorphonuclear leucocytes induced by immune complexes of IgG and of IgM. Lucisano YM, et al. **Immunology** 1988 Oct;65(2):171–5

The lysosomal enzyme binding receptor protein isolated from brain and its characteristics. Alvares K, et al. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1-2):150–1

Receptor-dependent transport of lysosomal enzymes. Braulke T, et al. **Indian J Biochem Biophys** 1988 Feb-Apr; 25(1-2):95–101

Lysosomes in denervation atrophy of frog Rana cyanophlictis (Schn.) muscle. Somasekhar T, et al. **Indian J Exp Biol** 1988 Dec;26(12):979–83

Tumor necrosis factor alpha potentiates neutrophil antimicrobial activity: increased fungicidal activity against Torulopsis glabrata and Candida albicans and associated increases in oxygen radical production and lysosomal enzyme release. Ferrante A. **Infect Immun** 1989 Jul; 57(7):2115–22

Monoclonal antibody toward lysosomal cathepsin B cross-reacts preferentially with distinct histone classes. Seeler BJ, et al. **Int J Biochem** 1988;20(10):1089–106

Role of lysosomes in pancreatic diseases. Figarella C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S9–18 (17 ref.)

Purification and characterization of acid phosphatase in rat liver lysosomal contents. Himeno M, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):773–6

Acid phosphatase in rat liver lysosomal membranes: purification and characterization. Himeno M, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):449–56

Processing, transport, and secretion of the lysosomal enzyme acid phosphatase in Dictyostelium discoideum. Bush JM, et al. **J Biol Chem** 1989 May 5;264(13):7630–6

Role of acidic intracellular compartments in the biosynthesis of Dictyostelium lysosomal enzymes. The weak bases ammonium chloride and chloroquine differentially affect proteolytic processing and sorting. Cardelli JA, et al. **J Biol Chem** 1989 Feb 25;264(6):3454–63

Mannose 6-phosphate receptors and lysosomal enzyme targeting. Dahms NM, et al. **J Biol Chem** 1989 Jul 25; 264(21):12115–8 (78 ref.)

Mechanism for selective secretion of a lysosomal protease by transformed mouse fibroblasts. Dong JM, et al. **J Biol Chem** 1989 May 5;264(13):7377–83

Proteolytic processing of the beta-subunit of the lysosomal enzyme, beta-hexosaminidase, in normal human fibroblasts. Quon DV, et al. **J Biol Chem** 1989 Feb 25;264(6):3380–4

Lysosomal (vacuolar) proteinases of yeast are essential catalysts for protein degradation, differentiation, and cell survival. Teichert U, et al. **J Biol Chem** 1989 Sep 25; 264(27):16037–45

Identification and in vitro reconstitution of lysosomal neuraminidase from human placenta. van der Horst GT, et al. **J Biol Chem** 1989 Jan 15;264(2):1317–22

Stimulated secretion of lysosomal enzymes by cells in culture. Warren L. **J Biol Chem** 1989 May 25;264(15):8835–42

Biosynthesis of lysosomal endopeptidases. Erickson AH. **J Cell Biochem** 1989 May;40(1):31–41 (76 ref.)

Alphavirus RNA replicase is located on the cytoplasmic surface of endosomes and lysosomes. Froshauer S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2075–86

Inhibition of early but not late proteolytic processing events leads to the misoorting and oversecretion of precursor forms of lysosomal enzymes in Dictyostelium discoideum. Richardson JM, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2097–107

Lysosomal enzymes in extracellular digestion in the unicellular eukaryote Tetrahymena. Tiedtke A, et al. **J Cell Physiol** 1988 Sep;136(3):554–6

Distribution of lysosomal enzymes within the non-secretory epithelium of the bovine mammary gland. Mattila T, et al. **J Dairy Res** 1988 Aug;55(3):339–44

Cathepsin B immunoreactive neurons in rat brain. A combined light and electron microscopic study. Bernstein HG, et al. **J Hirnforsch** 1989;30(3):313–7

A phospholipase A2-activating protein (PLAP) stimulates human neutrophil aggregation and release of lysosomal enzymes, superoxide, and eicosanoids. Bomalaski JS, et al. **J Immunol** 1989 Jun 1;142(11):3957–62

Differential effects of liposome-incorporation on liver macrophage activating potencies of rough lipopolysaccharide, lipid A, and muramyl dipeptide. Differences in susceptibility to lysosomal enzymes. Daemen T, et al. **J Immunol** 1989 Apr 1;142(7):2469–74

Evaluation of lysosomal enzymes in uncultured and cultured chorionic villi and amniocytes. Bartalini G, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:263–6

alpha-N-acetylgalactosaminidase deficiency, a new lysosomal storage disorder. van Diggelen OP, et al. **J Inherited Metab Dis** 1988;11(4):349–57

Occurrence in brain lysosomes of a sialidase active on ganglioside. Fiorilli A, et al. **J Neurochem** 1989 Sep; 53(3):672–80

Calmodulin antagonist W-7 inhibits lysosomal sphingomyelinase activity in C6 glioma cells. Masson M, et al. **J Neurochem** 1989 May;52(5):1645–7

Effect of drugs in vitro on lysosomal enzyme activities in bovine retinal pigment epithelial cells. Hayasaka S, et al. **Jpn J Ophthalmol** 1988;32(3):316–21

Effect of fasting on lysosomes in kidney cortex of glomerulonephritic rats. Haga HJ, et al. **Kidney Int** 1988 Dec;34(6):766–73

Decline in protease activities with age in the nematode Caenorhabditis elegans. Sarkis GJ, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):191–201

Measurement of secretion of lysosomal acid glycosidases. Holmsen H, et al. **Methods Enzymol** 1989;169:336–42

Preparation and acidification activity of lysosomes and lysosomal membranes. Schneider DL, et al. **Methods Enzymol** 1988;157:591–601

Plasmodium falciparum: inhibitors of lysosomal cysteine proteinases inhibit a trophozoite proteinase and block parasite development. Rosenthal PJ, et al. **Mol Biochem Parasitol** 1989 Jun 15;35(2):177–83

Lysosomal lipolytic enzymes, lipid peroxidation, and injury. Dickens BF, et al. **Mol Cell Biochem** 1988 Jul-Aug; 82(1-2):119–23

Oxygen free radicals induced release of lysosomal enzymes in vitro. Kalra J, et al. **Mol Cell Biochem** 1988 Dec; 84(2):233–8

Heterogeneity of lysosomes in human fibroblasts. Kelly BM, et al. **Mol Cell Biochem** 1989 Jun 1;87(2):171–83

Adriamycin-induced leakage of lysosomal enzymes in vitro. Singal PK, et al. **Mol Cell Biochem** 1988 May;81(1):89–94

Acute in vitro thyrotropin regulation of lysosomal enzyme activity in the thyroid follicular cell. Perrild H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1-2):75–80

Activation of astrocytic lysosomal proteinases by factors released by mononuclear leukocytes. Bever CT Jr, et al. **Neurochem Res** 1989 Jan;14(1):37–41

Lysosome instability in aged rat brain. Nakamura Y, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):215–20

Changes in lysosomal enzyme activities recognized in granulocytes from patients with carcinomas of the gastrointestinal tract. Okada T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2559–67

Lysosomal enzyme activities in ocular tissues and adnexa of rabbits. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):187–90

Improvement of tear lysosomal enzyme levels after treatment with bone marrow transplantation in a patient with I-cell disease. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):226–9

Lysosomal enzyme levels in corneal storage media. K-Sol versus McCarey-Kaufman. Morgan KM, et al. **Ophthalmology** 1988 Nov;95(11):1498–503

Underfeeding and exposure to short photoperiod alters rat pineal and Harderian gland lysosomal enzyme activities. Vaughan MK, et al. **Proc Soc Exp Biol Med** 1988 Nov; 189(2):211–6

Lysosomal and cytosolic enzyme release as a measure of organelle specific toxicity in cultured rat liver slices. Connors MS, et al. **Proc West Pharmacol Soc** 1988;31:143–7

Lysosomal glycogen storage disease without deficiency of acid alpha-glucosidase. Ullrich K, et al. **Prog Clin Biol Res** 1989;306:163–71

Homology of lysosomal enzymes and related proteins: prediction of posttranslational modification sites including phosphorylation of mannose and potential epitopic and substrate binding sites in the alpha- and beta-subunits of hexosaminidases, alpha-glucosidase, and rabbit and human isomaltase. Barnes AK, et al. **Proteins** 1988;4(3):182–9

Radiation-induced association of beta-glucuronidase with purified nuclei from irradiated MOLT-4 and HeLa cells. McClain DE, et al. **Radiat Res** 1989 Feb;117(2):221–33

Lysosomal heterogeneity of dipeptidyl peptidase II active on collagen-related peptides. Andersen KJ, et al. **Renal Physiol Biochem** 1989 Jan-Feb;12(1):32–40

Lysosomal enzyme activity influenced by various types of respiration during extracorporeal circulation. Müller H, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):65–71

Role of beta-glucuronidase, a lysosomal enzyme, in the pathogenesis of intestinal amoebiasis: an experimental study. Virk KJ, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):422–5

Lysosomal enzyme leakage during the hypoxanthine/xanthine oxidase reaction. Olsson GM, et al. **Virchows Arch [B]** 1989;56(6):385–91

[From glycoproteinosis to the understanding of normal and pathological catabolism of N-glycosylproteins in the lysosomes]. Montreuil J, et al. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):979–85 (9 ref.) (Eng. Abstr.) (Fre)

[Lysosomal enzymes and N-procollagen peptide in varicose veins] Haustein UF, et al. **Dermatol Monatsschr** 1988; 174(8):476–9 (Eng. Abstr.) (Ger)

[The effect of chronic aluminum loading on lysosomal enzymes in serum and organ homogenates. Methodologic aspects] Laske V, et al. **Pharmazie** 1989 Mar;44(3):218–21 (Eng. Abstr.) (Ger)

[The effect of hydrocortisone and dopamine on the activity of some lysosomal liver enzymes in experimental endotoxic shock] Trochimowicz L, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):9–17 (Eng. Abstr.) (Ger)

[The effect of leupeptin on lysosomal hydrolases in the visceral vitelline sack of the rat. Histo- and biochemical studies] Greiner A, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):817–28 (Eng. Abstr.) (Ger)

[The effect of collagen and fibrin on the lysosomal protease activities of cultured fibrosarcoma (HT-1080)] Kurita Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):643–6 (Jpn)

[Intracellular processing and activation of lysosomal cathepsins] Nishimura Y. **Seikagaku** 1988 Nov; 60(11):1271–8 (Jpn)

[Biochemistry of the pH maintenance mechanism and the proton pump of lysosomes] Ohkuma S. **Yakugaku Zasshi** 1988 Sep;108(9):842–55 (39 ref.) (Eng. Abstr.) (Jpn)

[Cysteine proteinases and their endogenous inhibitors] Korzus G, et al. **Postepy Biochem** 1988;34(1-2):23–46 (168 ref.) (Pol)

[The role and mechanism of lysosomal acid lipase activity] Piskorska D, et al. **Przegl Lek** 1988;45(8):637–40 (37 ref.) (Pol)

[Effect of ethanol and acetaldehyde on the activity and release of cathepsins from lysosomes of the canine liver (studies in vitro)] Skrzydlewska E, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:59–76 (Eng. Abstr.) (Pol)

[Study of the specificity of human lysosomal glycolipid hydrolases using synthetic fluorogenic substrates] Vidershain GIa, et al. **Bioorg Khim** 1988 Aug;14(8):1014–26 (Eng. Abstr.) (Rus)

[Lysosomal enzyme activity in the nerve tissue of various species of animals after administration of a neurotoxic pesticide aphos] Kuz'minskaia UA, et al. **Gig Sanit** 1988 Nov;(11):86–8 (Rus)

[Comparative cytobiochemical study of the functional state of alveolar macrophages of rats exposed to an alumocobalt molybdenum catalyst] Merkur'eva RV, et al. **Gig Sanit** 1988 Nov;(11):88–9 (Rus)

[Cestode lysosomes] Smirnov LP, et al. **Parazitologiia** 1989 May-Jun;23(3):260–3 (Eng. Abstr.) (Rus)

[Enzymatic spectrum of the lysosomal system of granulocytes and mononuclear phagocytes in the blood of young children with acute pneumonia] Falziev KhN. **Pediatriia** 1989;(2):110–1 (Rus)

[Effect of the segregation and accumulation of chloroquine and daunorubicin by L cells (LSM subline) on the activity of lysosomal hydrolases] Bulychev AG, et al. **Tsitologiia** 1988 May;30(5):560–7 (Eng. Abstr.) (Rus)

[Effective extraction of lysosomal enzymes with digitonin] Pupyshev AB, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):49–54 (Eng. Abstr.) (Rus)

[Correlations between lysosomal enzymes and cyclic

nucleotides during allergies in children] Gerasimov AA, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):104–7 (Eng. Abstr.) (Rus)

[Prenatal diagnosis of hereditary lysosomal diseases] Mirenburg TV, et al. **Vopr Med Khim** 1988 Jul–Aug; 34(4):41–6 (Eng. Abstr.) (Rus)

[Effect of silimarine on activity of lysosomal proteinases in the liver and kidneys during tetramethylthiuram disulfide administration] Tabagari SI, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):110–3 (Eng. Abstr.) (Rus)

[Activity of lysosomal hydrolases and renewal of proteins in the rat liver, spleen, and thymus during antigenic stimulation and protein deficiency] Vasil'ev AV, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):92–5 (Eng. Abstr.) (Rus)

[Activity of lysosomal proteinases in the liver, spleen, thymus and peritoneal macrophages after immunization of mice with thymus–dependent and thymus–independent antigens] Vasil'ev AV, et al. **Vopr Med Khim** 1989 Mar–Apr; 35(2):121–3 (Eng. Abstr.) (Rus)

[Neuroepidemiology of metabolism inborn errors: diseases of lysosomal origin] **Chabás A. An Esp Pediatr** 1988 Sep; 29 Suppl 33:48–51 (8 ref.) (Spa)

METABOLISM

Effect of thyroid hormone on gentamicin accumulation in rat proximal tubule lysosomes. Cronin R, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F86–91

Involvement of cathepsins B and H in lysosomal degradation of horseradish peroxidase endocytosed by the proximal tubule cells of the rat kidney: I. Histochemical and immunohistochemical studies. Yokota S, et al. **Anat Rec** 1988 Aug;221(4):783–90

Involvement of cathepsins B and H in lysosomal degradation of horseradish peroxidase endocytosed by the proximal tubule cells of the rat kidney: II. Immunocytochemical studies using protein A–gold technique applied to conventional and serial sections. Yokota S, et al. **Anat Rec** 1988 Aug;221(4):791–801

Lysosomal membrane transport in cellular nutrition. Gahl WA. **Annu Rev Nutr** 1989;9:39–61 (122 ref.)

Genetic defects of lysosomal function in animals. Patel SC, et al. **Annu Rev Nutr** 1989;9:395–416 (129 ref.)

Lysosomal integral membrane glycoproteins are expressed at high levels in the inclusion bodies of I–cell disease fibroblasts. Sandoval IV, et al. **Arch Biochem Biophys** 1989 May 15;271(1):157–67

Inhibition by lysosomal enzymes and mannose–6–phosphate of the phosphorylation of the lysosomal enzyme binding receptor protein from monkey brain. Panneerselvam K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1244–52

Degradation of aspartate aminotransferase in rat liver lysosomes. Sato A, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):440–2

Passive diffusion of non–electrolytes across the lysosome membrane. Iveson GP, et al. **Biochem J** 1989 Jul 15; 261(2):451–6

Effect of acidotropic amines on the accumulation of newly synthesized membrane and luminal proteins in Chinese–hamster ovary (CHO) cell lysosomes. Madden EA, et al. **Biochem J** 1989 Mar 15;258(3):843–51

Translocation of sugars across the lysosome membrane. Forster S, et al. **Biochem Soc Trans** 1989 Jun;17(3):441

Solute translocation across the mammalian lysosome membrane. Forster S, et al. **Biochim Biophys Acta** 1988 Oct 11;947(3):465–91 (114 ref.)

In vitro studies of the thyroglobulin degradation pathway: endocytosis and delivery of thyroglobulin to lysosomes, release of thyroglobulin cleavage products—iodotyrosines and iodothyronines. Rousset B, et al. **Biochimie** 1989 Feb; 71(2):247–62

Lysosomal catabolic pathway of N–glycosylprotein glycans. Strecker G, et al. **Biochimie** 1988 Nov;70(11):1505–10

Degradation of yolk in the brine shrimp Artemia. Biochemical and morphological studies on the involvement of the lysosomal system. Perona R, et al. **Biol Cell** 1988; 63(3):361–6

The potential role of lysosomes in tissue distribution of weak bases. MacIntyre AC, et al. **Biopharm Drug Dispos** 1988 Nov–Dec;9(6):513–26 (68 ref.)

Receptor–mediated uptake of beta–glucuronidase into primary astrocytes and C6 glioma cells from rat brain. Jenkins HG, et al. **Brain Res** 1988 Oct 18;462(2):265–74

Intracellular transport of cholesteryl esters from lysosomes to cytoplasm in macrophages. Mineo C, et al. **Cell Struct Funct** 1988 Oct;13(5):435–43

Variations in immunocytochemical localization of cathepsin B and thyroxine in follicular cells of the rat thyroid gland and plasma TSH concentrations over 24 hours. Uchiyama Y, et al. **Cell Tissue Res** 1989;256(2):355–60

Inhibitory effects of quaternary ammonium compounds on lysosomal degradation of endogenous proteins. Matsumoto Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):516–8

Lysosomal accumulation of phospholipids in mucolipidosis IV cultured fibroblasts. Bach G, et al. **Enzyme** 1988; 40(1):40–4

Reduced temperature does not prevent transport of lysosomal integral membrane proteins from endoplasmic reticulum and through the Golgi system to lysosomes. Morales PG, et al. **Eur J Biochem** 1989 Aug 1;183(2):407–12

A growth hormone–vesicular stomatitis virus G hybrid protein is rapidly degraded in lysosomes following transport to the cell surface. Rizzolo LJ. **Eur J Cell Biol** 1989 Jun;49(1):92–8

Overall proteolysis in perfused and subfractionated chemically induced malignant hepatoma of rat: effects of amino acids. Yucel T, et al. **Exp Mol Pathol** 1989 Feb; 50(1):38–49

Isolation and sequencing of a cDNA clone encoding 107 kDa sialoglycoprotein in rat liver lysosomal membranes. Himeno M, et al. **FEBS Lett** 1989 Feb 27;244(2):351–6

Hepatic metabolism of colloidal gold–low–density lipoprotein complexes in the rat: evidence for bulk excretion of lysosomal contents into bile. Renaud G, et al. **Hepatology** 1989 Mar;9(3):380–92

Regulation of lysosomal glycogen metabolism: studies of the actions of mammalian acid alpha–glucosidases. Calder PC, et al. **Int J Biochem** 1989;21(5):569–76

Kidney lysosomes. Haga HJ. **Int J Biochem** 1989;21(4):343–5 (40 ref.)

Degradation of intracellular protein in muscle. Lysosomal response to modified proteins and chloroquine. Gerard KW, et al. **J Biol Chem** 1988 Dec 15;263(35):18886–90

Transport of N–acetyl–D–glucosamine and N–acetyl–D–galactosamine by rat liver lysosomes. Jonas AJ, et al. **J Biol Chem** 1989 Mar 25;264(9):4953–6

Characterization of a proton–driven carrier for sialic acid in the lysosomal membrane. Evidence for a group–specific transport system for acidic monosaccharides. Mancini GM, et al. **J Biol Chem** 1989 Sep 15;264(26):15247–54

Identification of a lysosome membrane protein which could mediate ATP–dependent stable association of lysosomes to microtubules. Mithieux G, et al. **J Biol Chem** 1989 Mar 15;264(8):4664–8

Detection and characterization of a nucleoside transport system in human fibroblast lysosomes. Pisoni RL, et al. **J Biol Chem** 1989 Mar 25;264(9):4850–6

Degradation of structurally characterized proteins injected into HeLa cells. Effects of intracellular location and the involvement of lysosomes. Rogers SW, et al. **J Biol Chem** 1988 Dec 25;263(36):19843–9

Thyroid hormone residues are released from thyroglobulin with only limited alteration of the thyroglobulin structure. Rousset B, et al. **J Biol Chem** 1989 Jul 25;264(21):12620–6

Carrier–mediated transport of monoiodotyrosine out of thyroid cell lysosomes. Tietze F, et al. **J Biol Chem** 1989 Mar 25;264(9):4762–5

Defective lysosomal egress of free sialic acid (N–acetylneuraminic acid) in fibroblasts of patients with infantile free sialic acid storage disease. Tietze F, et al. **J Biol Chem** 1989 Sep 15;264(26):15316–22

Hydrolysis of dolichyl esters by rat liver lysosomes. Tollbom O, et al. **J Biol Chem** 1989 Jun 15;264(17):9836–41

Endolyn–78, a membrane glycoprotein present in morphologically diverse components of the endosomal and lysosomal compartments: implications for lysosome biogenesis. Croze E, et al. **J Cell Biol** 1989 May; 108(5):1597–613

Sorting of mannose 6–phosphate receptors and lysosomal membrane proteins in endocytic vesicles. Geuze HJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2491–501

Acidification of the lysosome–like vacuole and the vacuolar H+–ATPase are deficient in two yeast mutants that fail to sort vacuolar proteins. Rothman JH, et al. **J Cell Biol** 1989 Jul;109(1):93–100

Properties of binding sites for chloroquine in liver lysosomal membranes. Colombo MI, et al. **J Cell Physiol** 1988 Dec; 137(3):598–602

Biliary copper excretion by hepatocyte lysosomes in the rat. Major excretory pathway in experimental copper overload. Gross JB Jr, et al. **J Clin Invest** 1989 Jan;83(1):30–9

Degradation of a monoclonal anti–mu chain antibody in a human surface IgM–positive B cell line starts in prelysosomal vesicle. Ruud E, et al. **J Immunol** 1988 Nov 1;141(9):2951–8

Regulation of phagolysosome pH in bovine and human neutrophils: the role of NADPH oxidase activity and an Na+/H+ antiporter. Mayer SJ, et al. **J Leukoc Biol** 1989 Mar;45(3):239–48

Characterization of argentosomes, a type of secondary lysosomes, and the sub–organellar distribution of a lysosomotropic basic compound. Matsumoto Y, et al. **J Pharmacobiodyn** 1988 Oct;11(10):679–84

Effects of quaternary ammonium compounds on the degradation of lipids in lysosomes. Matsumoto Y, et al. **J Pharmacobiodyn** 1989 Feb;12(2):113–7

Microinjected ribonuclease A as a probe for lysosomal pathways of intracellular protein degradation. Dice JF. **J Protein Chem** 1988 Apr;7(2):115–27 (52 ref.)

Aging changes in lipofuscin, lysosomes and melanin in the macular area of human retina and choroid. Hayasaka S. **Jpn J Ophthalmol** 1989;33(1):36–42

Analysis of endosome and lysosome acidification in vitro. Galloway CJ, et al. **Methods Enzymol** 1988;157:601–11

Type–C Niemann–Pick disease: low density lipoprotein uptake is associated with premature cholesterol accumulation in the Golgi complex and excessive cholesterol storage in lysosomes. Blanchette–Mackie EJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8022–6

Derived protein sequence, oligosaccharides, and membrane insertion of the 120–kDa lysosomal membrane glycoprotein (lgp120): identification of a highly conserved family of lysosomal membrane glycoproteins. Howe CL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7577–81

Inhaled soluble aerosols insolubilised by lysosomes of alveolar cells. Application to some toxic compounds; electron microprobe and ion microprobe studies. Berry JP, et al. **Toxicology** 1988 Nov 14;52(1–2):127–39

[Biochemistry of schistosomiasis mansoni. VII. Lipid changes of lysosomal membranes during the initial phase of liver injury] Rodrigues LE. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):47–52 (Eng. Abstr.) (Por)

[Biochemistry of schistosomiasis mansoni. IV. Changes in the hepatic lysosome compartment in relation to the time of infection] Rodrigues LE, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):169–74 (Eng. Abstr.) (Por)

[The lysosomal pathway of prolactin degradation in the mammary gland: kinetics of prolactin hydrolysis by cathepsin D and the peptides formed thereby] Marinchenko GV, et al. **Biokhimiia** 1989 Apr;54(4):629–39 (Eng. Abstr.) (Rus)

[Lysosomal cation proteins of neutrophils in acute pneumonia and chronic bronchitis] Iakushin SS. **Klin Med (Mosk)** 1989 Feb;67(2):102–4 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Fusion of lysosomes with phagosomes containing Histoplasma capsulatum: use of fluoresceinated dextran. Eissenberg LG, et al. **Adv Exp Med Biol** 1988;239:53–61 (31 ref.)

PHYSIOLOGY

Potassium ion dependent proton efflux and depolarization from spleen lysosomes. Moriyama Y. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):211–6

Association of lysosomal activity with sensitivity and resistance to tumor necrosis factor in murine L929 cells. Liddil JD, et al. **Cancer Res** 1989 May 15;49(10):2722–8

Is lysosomal fusion required for the granulocyte chemiluminescence reaction? Dahlgren C. **Free Radic Biol Med** 1989;6(4):399–403 (32 ref.)

Evidence for phagosome–lysosome fusion in Mycobacterium leprae–infected murine Schwann cells. Steinhoff U, et al. **Infect Immun** 1989 Mar;57(3):1008–10

Lack of lysosomal fusion with phagosomes containing Ehrlichia risticii in P388D1 cells: abrogation of inhibition with oxytetracycline. Wells MY, et al. **Infect Immun** 1988 Dec;56(12):3209–15

Assembly of lysosomes: perspectives from comparative molecular cell biology. Storrie B. **Int Rev Cytol** 1988; 111:53–105 (274 ref.)

Energy dependence of different steps in the autophagic–lysosomal pathway. Plomp PJ, et al. **J Biol Chem** 1989 Apr 25;264(12):6699–704

Impaired lysosomes in a temperature–sensitive mutant of Chinese hamster ovary cells. Colbaugh PA, et al. **J Cell Biol** 1989 Jun;108(6):2211–9

A quantitative model of traffic between plasma membrane and secondary lysosomes: evaluation of inflow, lateral diffusion, and degradation. Draye JP, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2109–15

Reconstitution of an endosome–lysosome interaction in a cell–free system. Mullock BM, et al. **J Cell Biol** 1989 Jun; 108(6):2093–9

Lysosomal movements during heterophagy and autophagy: with special reference to nematolysosome and wrapping lysosome. Sakai M, et al. **J Electron Microsc Tech** 1989 Jun;12(2):101–31 (127 ref.)

[A method for assessing the lysosomal secretory activity of neutrophilic granulocytes using a diagnostic focus of inflammation] Pigarevskii VE, et al. **Arkh Patol** 1988; 50(7):83–7 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Intra– and extracellular lysosomes in tendon tissue of the mouse after treatment with an anabolic steroid hormone. Ultrastructural and cytochemical study. Michna H. **Acta Anat (Basel)** 1989;134(1):57–61

Intracytoplasmic eosinophilic inclusion bodies in breast cyst fluids are giant lysosomes. Nagy GK, et al. **Acta Cytol** 1989 Jan–Feb;33(1):99–103

Ultrastructural pathology of dermal axons and Schwann cells in lysosomal diseases. Walter S, et al. **Acta Neuropathol (Berl)** 1988;76(5):489–95

Biochemical characterization of mitochondrial and lysosomal particles in old rat liver. Mertens–Strijthagen J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):37–46

Ultrastructural cytochemistry of hepatic lysosomes and their protein components is selectively revealed by the ninhydrin–dimethyl sulfoxide–thiocarbohydrazide–silver proteinate reaction. Malinin GI, et al. **Histochemistry** 1989; 90(5):339–45

Response of human hepatocyte lysosomes to postmortem anoxia. Yu QC, et al. **Hum Pathol** 1988 Oct;19(10):1174–80

Culture conditions found to minimize false positive diagnosis of lysosomal storage disorders. Arnon J, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1159–64

Changes in lysosome populations in the rat kidney cortex induced by experimental proteinuria. Haga HJ, et al. **Int J Biochem** 1988;20(8):793–800

Lysosomal–mitochondrial interrelationships in damage to the liver in acute experimental pancreatitis in dogs. Treatment with prostacyclin (PGI2). Długosz J, et al. **Int J Pancreatol** 1988 Jul;3(5):343–56

On the character of the secretory granules in juxtaglomerular epithelioid cells. Taugner R, et al. **Int Rev Cytol** 1988; 110:93–131 (150 ref.)
Changes in lysosome shape and distribution correlated with changes in cytoplasmic pH. Heuser J. **J Cell Biol** 1989 Mar; 108(3):855–64
Lysosomes in the pathogenesis of liver injury in chronic copper poisoned sheep: an ultrastructural and morphometric study. Kumaratilake JS, et al. **J Comp Pathol** 1989 May;100(4):381–90
Cellular and subcellular distribution of injected lipopolysaccharide in rat liver and its inactivation by bile salts. Van Bossuyt H, et al. **J Hepatol** 1988 Dec;7(3):325–37
Tubular lysosomes in ruffle-ended ameloblasts associated with enamel maturation in rat incisor. Salama AH, et al. **J Histochem Cytochem** 1989 Jun;37(6):801–11
Mannose 6-phosphate receptors and their role in targeting proteins to lysosomes. Pfeffer SR. **J Membr Biol** 1988 Jul; 103(1):7–16 (83 ref.)
Rapid preparation of a distinct lysosomal population from myelinating mouse brain using Percoll gradients. Caimi L, et al. **J Neurochem** 1989 Jun;52(6):1722–8
Neurons containing retrogradely transported Fluoro-Gold exhibit a variety of lysosomal profiles: a combined brightfield, fluorescence, and electron microscopic study. Schmued LC, et al. **J Neurocytol** 1989 Jun;18(3):333–43
Cytochemical demonstration of lysosomes in the chicken pineal gland: changes induced by light-dark cycle. Ohshima K, et al. **J Pineal Res** 1989;6(2):103–10
The use of albumin-gold to follow lysosome-phagosome fusion. De Carvalho TU, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):773–6
Subpopulations of microtubules with differential sensitivity to nocodazole: role in the structural organization of the Golgi complex and the lysosomal system. Thyberg J, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):259–74
Reversible phenotypic modulation induced by deprivation of exogenous essential fatty acids. Laposata M, et al. **Lab Invest** 1988 Dec;59(6):838–47
The pattern of changes of nucleoli and lysosomes in the lymphocytes of children with acute lymphoblastic leukaemia during maintenance treatment and after its withdrawal. Kopeć-Szlęzak J, et al. **Mater Med Pol** 1988 Apr-Jun;20(2):124–7
Endosome and lysosome purification by free-flow electrophoresis. Marsh M. **Methods Cell Biol** 1989; 31:319–34
Regarding Berman and Iseri [letter] Dingemans KP. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):577
Cytotoxic action of the lysosomotropic agent L-leucine methyl ester on mammalian skeletal muscle. The role of the sarcoplasmic reticulum in producing myofilament damage. Shamsadeen N, et al. **Virchows Arch [B]** 1989; 57(5):315–21

LYSOSTAPHIN

GENETICS

Plasmid-encoded lysostaphin endopeptidase resistance of Staphylococcus simulans biovar staphylolyticus. Heath HE, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1106–9

PHARMACOLOGY

Susceptibility of methicillin-resistant Staphylococcus aureus to lysostaphin. Huber MM, et al. **J Clin Microbiol** 1989 May;27(5):1122–4

LYSOZYME see **MURAMIDASE**

LYSYL OXIDASE see under **AMINO ACID OXIDOREDUCTASES**

LYSYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

LYT 1 ANTIGEN see **ANTIGENS, LY**

M PERIOD see **MITOSIS**

MACACA

Imipramine and alprazolam treatment of lactate-induced acute endogenous distress in nonhuman primates. Sunderland G, et al. **Am J Psychiatry** 1989 Aug; 146(8):1044–7
The effects of isosexual rearing on adult sexual behavior in captive male rhesus macaques. Bercovitch FB, et al. **Arch Sex Behav** 1988 Oct;17(5):381–8
Extended contact lens wear in the developing cynomolgus monkey eye. Recovery from adverse responses. Carney LG, et al. **Cornea** 1989 Sep;8(3):182–7
Behavioral and autonomic responses to peer separation in pigtail macaque monkey infants. Boccia ML, et al. **Dev Psychobiol** 1989 Jul;22(5):447–61
Experimental drug-induced immune thrombocytopenia in monkeys. Petersen BH, et al. **Diagn Clin Immunol** 1988; 5(6):349–54
Macular disease in related rhesus monkeys. Dawson WW, et al. **Doc Ophthalmol** 1989 Mar;71(3):253–63
Primate micronucleus study of L-selenomethionine. Choy WN, et al. **Environ Mol Mutagen** 1989;14(2):123–5
Atherosclerosis research in cynomolgus monkeys (Macaca fascicularis). Weingand KW. **Exp Mol Pathol** 1989 Feb; 50(1):1–15 (82 ref.)
Rank relations of juvenile and subadult natal males of Barbary macaques (Macaca sylvanus) at Affenberg Salem. Kuester J, et al. **Folia Primatol (Basel)** 1988;51(1):33–44
Curvature of the lumbar spine as a consequence of mechanical necessities in Japanese macaques trained for bipedalism. Preuschoft H, et al. **Folia Primatol (Basel)** 1988; 50(1-2):42–58
HIV-2 in rhesus monkeys: serological, virological and clinical results. Dormont D, et al. **Intervirology** 1989;30 Suppl 1:59–65
Experimental infection of rhesus monkeys with SIV isolated from African green monkeys. Herchenröder O, et al. **Intervirology** 1989;30 Suppl 1:66–72
Colonic stenosis in a rhesus monkey. Cantrell C, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1223–4
Endometritis and valvular endocarditis in a rhesus monkey. Cantrell C, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1221–2
Pemphigus vulgaris in a pigtail macaque. Wolff PL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1220–1
Campylobacter pylori isolated from the stomach of the monkey, Macaca nemestrina. Bronsdon MA, et al. **J Clin Microbiol** 1988 Sep;26(9):1725–8
Spontaneous rhabdomyosarcoma in a rhesus monkey. Blanchard JL, et al. **J Comp Pathol** 1988 Jul;99(1):109–13
Comparison of the physical characteristics of grooming in two species of macaques (Macaca nemestrina and M. radiata). Boccia ML. **J Comp Psychol** 1989 Jun; 103(2):177–83
Note on hand use in the manipulation of joysticks by rhesus monkeys (Macaca mulatta) and chimpanzees (Pan troglodytes). Hopkins WD, et al. **J Comp Psychol** 1989 Mar;103(1):91–4
Rhesus monkeys (Macaca mulatta), video tasks, and implications for stimulus-response spatial contiguity. Rumbaugh DM, et al. **J Comp Psychol** 1989 Mar; 103(1):32–8
Intraday feeding patterns in infant rhesus monkeys and the effects of missing a meal. Riopelle AJ, et al. **J Gen Psychol** 1989 Jan;116(1):63–72
Virus-induced immunosuppression: infection of peripheral blood mononuclear cells and suppression of immunoglobulin synthesis during natural measles virus infection of rhesus monkeys. McChesney MB, et al. **J Infect Dis** 1989 Apr;159(4):757–60
Genetically determined hypercholesterolemia in a rhesus monkey family due to a deficiency of the LDL receptor. Scanu AM, et al. **J Lipid Res** 1988 Dec;29(12):1671–81
Isolation of a gastric campylobacter-like organism from the stomach of four rhesus monkeys, and identification as Campylobacter pylori. Newell DG, et al. **J Med Microbiol** 1988 Sep;27(1):41–4
Bilateral posterior parietal atrophy in an infant rhesus monkey (Macaca mulatta). Brack M, et al. **J Med Primatol** 1989; 18(1):43–54
Comparative teratogenicity of triamcinolone acetonide and dexamethasone in the rhesus monkey (Macaca mulatta). Jerome CP, et al. **J Med Primatol** 1988;17(4):195–203
Spontaneous and experimental hepatitis A in Old World monkeys. Shevtsova ZV, et al. **J Med Primatol** 1988; 17(4):177–94
Occurrence of spontaneous diabetes mellitus in a cynomolgus monkey (Macaca fascicularis) and impaired glucose tolerance in its descendants. Yasuda M, et al. **J Med Primatol** 1988;17(6):319–32
Underlying mechanisms of the response specificity of expansion/contraction and rotation cells in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep; 62(3):642–56
Spontaneous periodontitis in a sample group of the monkey Macaca fascicularis. Friskopp J, et al. **J Periodont Res** 1988 Jul;23(4):265–7
Occurrence of Yersinia enterocolitica in the Tokyo Tama Zoo. Sasaki Y, et al. **J Wildl Dis** 1989 Apr;25(2):287–90
An outbreak of salmonellosis in newly imported cynomolgus monkeys. Takasaka M, et al. **Jpn J Med Sci Biol** 1988 Feb; 41(1):1–13
Scleral spur and ciliary muscle in man and monkey. Hamanaka T. **Jpn J Ophthalmol** 1989;33(2):221–36
Guidelines for prevention of herpesvirus simiae (B-virus) infection in monkey handlers [letter] DiGiacomo RF. **Lab Anim Sci** 1988 Oct;38(5):558
Maxillo-orbital lymphoma (Burkitt's-type) in an infant Macaca fascicularis. Jayo MJ, et al. **Lab Anim Sci** 1988 Dec;38(6):722–6
The serodiagnosis of Campylobacter infection in infant cynomolgus monkeys (Macaca fascicularis) 2 to 18 weeks old by enzyme-linked immunosorbent assay. Kohno A, et al. **Lab Anim Sci** 1988 Dec;38(6):715–21
Pyometra in a rhesus monkey secondary to prolonged therapy with medroxyprogesterone acetate. McCarthy TJ, et al. **Lab Anim Sci** 1989 Jan;39(1):71–2
Pairing previously singly caged rhesus monkeys does not interfere with common research protocols. Reinhardt V, et al. **Lab Anim Sci** 1989 Jan;39(1):73–4
A nylon ball device for primate environmental enrichment. Ross PW, et al. **Lab Anim Sci** 1988 Aug;38(4):481–3
Prevalence of Campylobacter in infant, juvenile and adult laboratory primates. Russell RG, et al. **Lab Anim Sci** 1988 Dec;38(6):711–4
Simian AIDS ELISA: sensitivity, specificity and predictive values based on a comparison with Western blot technique. Spinner A, et al. **Lab Anim Sci** 1988 Oct;38(5):568–72
Gluten-sensitive enteropathy in a cynomolgus monkey. Wagner JD, et al. **Lab Anim Sci** 1988 Oct;38(5):592–4
Experimental arthropathy induced in rhesus monkeys and DBA/1 mice by a novel method: intraperitoneal implantation of type II collagen adsorbed onto nitrocellulose filters. Healy CT, et al. **Lab Invest** 1989 Mar; 60(3):462–70
Monkey feeding test for staphylococcal enterotoxin. Bergdoll MS. **Methods Enzymol** 1988;165:324–33
Spontaneous diabetes mellitus in a rhesus monkey: neurophysiological studies. Cornblath DR, et al. **Muscle Nerve** 1989 Mar;12(3):233–5
Proceedings of the meeting to celebrate the 50th anniversary of the Cayo Santiago rhesus monkey colony. 4–7 December 1988, Old San Juan, Puerto Rico. **P R Health Sci J** 1989 Apr;8(1):1–209
Opening remarks of President Fernando E. Agrait on the occasion of the 50th anniversary of the Cayo Santiago macaque colony. Agrait FE. **P R Health Sci J** 1989 Apr; 8(1):13–4
Cayo Santiago: the formative years. Benitez J. **P R Health Sci J** 1989 Apr;8(1):19–20
Life histories of male Cayo Santiago macaques. Berard JD. **P R Health Sci J** 1989 Apr;8(1):61–4
Trapping activities and mother-infant relationships on Cayo Santiago: a cautionary tale. Berman CM. **P R Health Sci J** 1989 Apr;8(1):73–8
Locomotor behavior of rhesus macaques (Macaca mulatta) on Cayo Santiago. Dunbar DC. **P R Health Sci J** 1989 Apr;8(1):79–85
Ecology and removal of introduced rhesus monkeys: Desecheo Island National Wildlife Refuge, Puerto Rico. Evans MA. **P R Health Sci J** 1989 Apr;8(1):139–56
Cayo Santiago and the laboratory of perinatal physiology: recollections. Frontera JG. **P R Health Sci J** 1989 Apr; 8(1):21–7
Establishment of the Cayo Santiago colony. Kessler MJ. **P R Health Sci J** 1989 Apr;8(1):15–7
A brief description of the Cayo Santiago rhesus monkey colony. Kessler MJ, et al. **P R Health Sci J** 1989 Apr; 8(1):55–9
An overview of the food intake patterns of the Cayo Santiago rhesus monkeys (Macaca mulatta): report of a pilot study. Marriott BM, et al. **P R Health Sci J** 1989 Apr;8(1):87–94
The FDA rhesus breeding colony at La Parguera, Puerto Rico. Phoebus EC, et al. **P R Health Sci J** 1989 Apr; 8(1):157–8
Perspectives on the history of colony management and the study of population biology at Cayo Santiago. Rawlins RG. **P R Health Sci J** 1989 Apr;8(1):33–41
Future plans for the Caribbean Primate Research Center. Saldaña JM. **P R Health Sci J** 1989 Apr;8(1):53–4
The role of Cayo Santiago in primate field studies. Southwick CH. **P R Health Sci J** 1989 Apr;8(1):47–51
Development of the Morgan Island rhesus monkey colony. Taub DM, et al. **P R Health Sci J** 1989 Apr;8(1):159–69
Cayo Santiago as a part of the laboratory of perinatal physiology (NINDB). Vandenbergh JG, et al. **P R Health Sci J** 1989 Apr;8(1):29–30
The La Parguera, Puerto Rico colony: establishment and early studies. Vandenbergh JG. **P R Health Sci J** 1989 Apr;8(1):117–9
Demographic and descriptive studies at La Parguera, Puerto Rico. Vessey SH, et al. **P R Health Sci J** 1989 Apr; 8(1):121–7
NIH support for the Caribbean Primate Research Center (1975 to present). Whitehair LA. **P R Health Sci J** 1989 Apr;8(1):43–4
Hemostatic derangement produced by Rift Valley fever virus in rhesus monkeys. Cosgriff TM, et al. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S807–14
Spectrum of disease in macaque monkeys chronically infected with SIV/SMM. McClure HM, et al. **Vet Immunol Immunopathol** 1989 May;21(1):13–24
Necropsy findings in rhesus monkeys experimentally infected with cultured simian immunodeficiency virus (SIV)/delta. Baskin GB, et al. **Vet Pathol** 1988 Nov;25(6):456–67
Diverticulosis and colonic leiomyosarcoma in an aged rhesus macaque. Bunton TE, et al. **Vet Pathol** 1989 Jul;26(4):351–2
Familial infantile cortical hyperostosis (Caffey's disease) in rhesus monkeys (Macaca mulatta). Snook SS, et al. **Vet Pathol** 1989 May;26(3):274–7
Measles in the cynomolgus monkey (Macaca fascicularis). Welshman MD. **Vet Rec** 1989 Feb 25;124(8):184–6
Enteric coronaviruses in primates. Eichhorn W, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):709–12
[Exotics, Macaca and non-responders] Leu HJ. **Vasa** 1988; 17(4):245–6 **(Ger)**
[Microbiological development studies in a clinically healthy, closed primate colony (Macaca mulatta, Macaca arctoides) after the establishment of a Salmonella infection] Hamann HP, et al. **Z Versuchstierkd** 1989;32(3):105–9 (Eng. Abstr.) **(Ger)**
[A survey of the prevalence of Anatrichosoma sp. in nasal cavities of cynomolgus monkeys] Takenaka T, et al. **Jikken Dobutsu** 1989 Jan;38(1):93–6 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Sacrococcygeal dysgenesis in a crab-eating macaque. Leach MW, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1219

ANATOMY & HISTOLOGY

Scanning electron microscopic study of the capillary loops in the dermal papillae. Skin of the hand of the Japanese monkey (Macaca fuscata). Umeda N, et al. **Acta Anat (Basel)** 1988;132(4):270–5

Homology of the adductor pollicis and contrahentes muscles: a study of monkey hands. Yamamoto C, et al. **Acta Med Okayama** 1988 Aug;42(4):215–26

Mitochondria covered with a net of parallel and latticed filaments in nigral neurons of monkeys with experimental parkinsonism. Nakamura H, et al. **Acta Neuropathol (Berl)** 1989;77(5):489–93

Ultrastructural epithelial zonation of the primate endometrium (rhesus monkey). Kaiserman-Abramof IR, et al. **Am J Anat** 1989 Jan;184(1):13–30

Quantitative morphology of the central fovea in the primate retina. Krebs W, et al. **Am J Anat** 1989 Mar;184(3):225–36

Tracheobronchial epithelium in the adult rhesus monkey: a quantitative histochemical and ultrastructural study. Plopper CG, et al. **Am J Anat** 1989 Jan;184(1):31–40

Structural adaptations of the femur and humerus to arboreal and terrestrial environments in three species of macaque. Burr DB, et al. **Am J Phys Anthropol** 1989 Jul;79(3):357–67

Directional asymmetry in the forelimb of Macaca mulatta. Falk D, et al. **Am J Phys Anthropol** 1988 Sep;77(1):1–6

Androgenic influences on body size and composition of adult rhesus monkeys. Kemnitz JW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E857–64

Origin of lingual proprioceptive afferents in Japanese monkey, M. fuscata fuscata. Studied by HRP-labeling technique. Kubota K, et al. **Anat Anz** 1988;166(1–5):141–8

Density of toruli tactiles in the Japanese monkey. Wakuri H. **Anat Histol Embryol** 1988 Dec;17(4):312–8

Muscle receptors: content of some of the extrinsic and intrinsic muscles of the larynx in the bonnet monkey (Macaca radiata). Raman R, et al. **Anat Rec** 1989 Apr; 223(4):433–6

A search for lymphatic drainage of the monkey orbit. McGetrick JJ, et al. **Arch Ophthalmol** 1989 Feb; 107(2):255–60

Interphotoreceptor contacts at the inner segment level in primate retinas. Cohen AI. **Brain Res** 1989 Jun 19; 490(1):200–3

A topographic study of the course of nigral axons and of the distribution of pallidal axonal endings in the centre médian–parafascicular complex of macaques. François C, et al. **Brain Res** 1988 Nov 8;473(1):181–6

Topographic, non-collateralized basal forebrain projections to amygdala, hippocampus, and anterior cingulate cortex in the rhesus monkey [published errata appear in **Brain Res** 1989 Jan 23;478(1):204 and 1989 May 15;487(1):204] Koliatsos VE, et al. **Brain Res** 1988 Oct 25;463(1):133–9

Identification of the substantia nigra pars lateralis in the macaque using cytochrome oxidase and fiber stains. Ma TP. **Brain Res** 1989 Feb 20;480(1–2):305–11

Developmental study of neuropeptide Y-like immunoreactivity in the neurohypophysis and intermediate lobe of the rhesus monkey (Macaca mulatta). McDonald JK, et al. **Cell Tissue Res** 1988;254(3):499–509

Projection patterns of surviving neurons in the dorsal lateral geniculate nucleus following discrete lesions of striate cortex: implications for residual vision. Cowey A, et al. **Exp Brain Res** 1989;75(3):631–8

Distribution of corticospinal neurons with collaterals to the lower brain stem reticular formation in monkey (Macaca fascicularis). Keizer K, et al. **Exp Brain Res** 1989; 74(2):311–8

Projections of the temporo-parietal cortex on vestibular complex in the macaque monkey (Macaca fascicularis). Ventre J, et al. **Exp Brain Res** 1988;72(3):653–8

Structure of the vitread face of the monkey optic disc (Macaca mulatta). SEM on frozen resin-cracked optic nerveheads supplemented by TEM and immunohistochemistry. Heegaard S, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):377–83

The tentorial nerve in monkeys is a branch of the cavernous plexus. Ruskell GL. **J Anat** 1988 Apr;157:67–77

Selective vagal postganglionic innervation of the sinoatrial and atrioventricular nodes in the non-human primate. Billman GE, et al. **J Auton Nerv Syst** 1989 Feb;26(1):27–36

Origins of the renal innervation in the primate, Macaca fascicularis. Marfurt CF, et al. **J Auton Nerv Syst** 1989 Jul;27(2):113–26

Cholinergic innervation of the monkey amygdala: an immunohistochemical analysis with antisera to choline acetyltransferase. Amaral DG, et al. **J Comp Neurol** 1989 Mar 15;281(3):337–61

Connections of area 8 with area 6 in the brain of the macaque monkey. Arikuni T, et al. **J Comp Neurol** 1988 Nov 1; 277(1):21–40

Distribution of glutamate-decarboxylase-immunoreactive neurons and synapses in the rat and monkey hippocampus: light and electron microscopy. Babb TL, et al. **J Comp Neurol** 1988 Dec 1;278(1):121–38

Anatomic organization of basoventral and mediodorsal visual recipient prefrontal regions in the rhesus monkey. Barbas H. **J Comp Neurol** 1988 Oct 15;276(3):313–42

Architecture and intrinsic connections of the prefrontal cortex in the rhesus monkey. Barbas H, et al. **J Comp Neurol** 1989 Aug 15;286(3):353–75

Regional and laminar distribution of the dopamine and serotonin innervation in the macaque cerebral cortex: a radioautographic study. Berger B, et al. **J Comp Neurol** 1988 Jul 1;273(1):99–119

GABA-immunoreactive neurons and terminals in the lateral cervical nucleus of the cynomolgus monkey. Broman J, et al. **J Comp Neurol** 1989 May 15;283(3):415–24

Vasopressin and oxytocin systems in the brain and upper spinal cord of Macaca fascicularis. Caffé AR, et al. **J Comp Neurol** 1989 Sep 15;287(3):302–25

Distribution of phenylethanolamine N-methyltransferase cell bodies, axons, and terminals in monkey brainstem: an immunohistochemical mapping study. Carlton SM, et al. **J Comp Neurol** 1989 Sep 15;287(3):273–85

Connectional analysis of the ipsilateral and contralateral afferent neurons of the superior temporal region in the rhesus monkey. Cipolloni PB, et al. **J Comp Neurol** 1989 Mar 22;281(4):567–85

Axon-bearing amacrine cells of the macaque monkey retina. Dacey DM. **J Comp Neurol** 1989 Jun 8;284(2):275–93

Ultrastructural analysis of somatostatin-immunoreactive neurons and synapses in the temporal and occipital cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1989 May 8;283(2):212–27

Synaptic organization of serotonin-immunoreactive fibers in primary visual cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1988 Aug 8;274(2):280–94

Anatomic connections of inferior parietal cortex (area 7) with subcortical structures related to vestibulo-ocular function in a monkey (Macaca fascicularis). Faugier-Grimaud S, et al. **J Comp Neurol** 1989 Feb 1;280(1):1–14

Somatotopic organization of inputs from the hand to the spinal gray and cuneate nucleus of monkeys with observations on the cuneate nucleus of humans. Florence SL, et al. **J Comp Neurol** 1989 Aug 1;286(1):48–70

Mediodorsal nucleus: areal, laminar, and tangential distribution of afferents and efferents in the frontal lobe of rhesus monkeys. Giguere M, et al. **J Comp Neurol** 1988 Nov 8;277(2):195–213

Localization of glycine-containing neurons in the Macaca monkey retina. Hendrickson AE, et al. **J Comp Neurol** 1988 Jul 22;273(4):473–87

Basal forebrain efferents to the medial dorsal thalamic nucleus in the rhesus monkey. Hreib KK, et al. **J Comp Neurol** 1988 Nov 15;277(3):365–90

Olivocerebellar and cerebelloolivary connections of the oculomotor region of the fastigial nucleus in the macaque monkey. Ikeda Y, et al. **J Comp Neurol** 1989 Jun 15; 284(3):463–88

Local circuit neurons of macaque monkey striate cortex: II. Neurons of laminae 5B and 6. Lund JS, et al. **J Comp Neurol** 1988 Oct 1;276(1):1–29

Distribution of muscarinic receptor subtypes within architectonic subregions of the primate cerebral cortex. Mash DC, et al. **J Comp Neurol** 1988 Dec 8;278(2):265–74

Retinogeniculate projection fibers in the monkey optic nerve: a demonstration of the fiber pathways by retrograde axonal transport of WGA-HRP. Naito J. **J Comp Neurol** 1989 Jun 8;284(2):174–86

Ultrastructural analysis of GABA-immunoreactive elements in the monkey thalamic ventrobasal complex. Ohara PT, et al. **J Comp Neurol** 1989 May 22;283(4):541–58

Basal forebrain cholinergic and noncholinergic projections to the thalamus and brainstem in cats and monkeys. Parent A, et al. **J Comp Neurol** 1988 Nov 8;277(2):281–301

Association fiber pathways to the frontal cortex from the superior temporal region in the rhesus monkey. Petrides M, et al. **J Comp Neurol** 1988 Jul 1;273(1):52–66

Connections of the ventral granular frontal cortex of macaques with perisylvian premotor and somatosensory areas: anatomical evidence for somatic representation in primate frontal association cortex. Preuss TM, et al. **J Comp Neurol** 1989 Apr 8;282(2):293–316

Red nucleus of Macaca fascicularis: an electron microscopic study of its synaptic organization. Ralston DD, et al. **J Comp Neurol** 1989 Jun 22;284(4):602–20

Terminal arbors of individual "feedback" axons projecting from area V2 to V1 in the macaque monkey: a study using immunohistochemistry of anterogradely transported Phaseolus vulgaris-leucoagglutinin. Rockland KS, et al. **J Comp Neurol** 1989 Jul 1;285(1):54–72

Frontal lobe connections of the superior temporal sulcus in the rhesus monkey. Seltzer B, et al. **J Comp Neurol** 1989 Mar 1;281(1):97–113

Thalamic connections of the cortex of the superior temporal sulcus in the rhesus monkey. Yeterian EH, et al. **J Comp Neurol** 1989 Apr 1;282(1):80–97

Topographical organization of the entorhinal projection to the dentate gyrus of the monkey. Witter MP, et al. **J Neurosci** 1989 Jan;9(1):216–28

The fine surface architecture of the primate ciliary body with special regard to the pars plana. Sano Y. **Jpn J Ophthalmol** 1989;33(2):251–9

A technique for catheterization and cystoscopic evaluation of cynomolgus monkey urinary bladders. Bahnson RR, et al. **Lab Anim Sci** 1988 Dec;38(6):731–3

Anatomical evidence for red nucleus projections to motoneuronal cell groups in the spinal cord of the monkey. Holstege G, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):97–101

Ultrastructural evidence for direct monosynaptic rubrospinal connections to motoneurons in Macaca mulatta. Ralston DD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):102–6

Horizontal cells of mammalian retinae. Boycott BB. **Neurosci Res Suppl** 1988;8:S97–111 (53 ref.)

Axon diameter distributions across the monkey's optic nerve. Reese BE, et al. **Neuroscience** 1988 Oct;27(1):205–14

Does the polystomatic gland exist? Imai M, et al. **Okajimas Folia Anat Jpn** 1989 Mar;65(6):405–11

Microvascular patterns of the hard palatine mucosa in the Japanese monkey (Macaca fuscata). Kajiwara K. **Okajimas Folia Anat Jpn** 1989 May;66(1):39–51

Fine structure of the vascular system of crab-eating monkey molar pulps. Nakamura TK, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2–3):89–103

National Science Foundation support of the Cayo Santiago primate skeletal collection. Yellen JE. **P R Health Sci J** 1989 Apr;8(1):185

A dorsolateral spinothalamic tract in macaque monkey. Apkarian AV, et al. **Pain** 1989 Jun;37(3):323–33

Large area sectioning for morphologic studies of nonhuman primate nasal cavities. Randall HW, et al. **Stain Technol** 1988 Nov;63(6):355–62

Bronchoalveolar lavage cytology in cynomolgus monkeys and identification of cytologic alterations following sequential saline lavage. Haley PJ, et al. **Vet Pathol** 1989 May;26(3):265–73

BLOOD

Circulating inhibin alpha concentrations in infant, prepubertal, and adult male rhesus monkeys (Macaca mulatta) and in juvenile males during premature initiation of puberty with pulsatile gonadotropin-releasing hormone treatment. Abeyawardene SA, et al. **Endocrinology** 1989 Jul;125(1):250–6

Antiandrogens do not reverse androgen-induced inhibition of sex hormone-binding globulin levels in adult female rhesus monkeys. Winneker RC, et al. **Endocrinology** 1989 Aug;125(2):715–20

Blood mercury concentrations following methyl mercury exposure in adult and infant monkeys. Rice DC. **Environ Res** 1989 Jun;49(1):115–26

Studies on chorionic gonadotrophin hormone in rhesus monkeys—disappearance rates. Garcia M, et al. **Hum Reprod** 1989 Jan;4(1):39–43

Immunoreactive inhibin concentrations in serum throughout the menstrual cycle of the macaque: suppression of inhibin during the luteal phase after treatment with an LHRH antagonist. Fraser HM, et al. **J Endocrinol** 1989 Apr; 121(1):R9–12

Serum hormone levels in pregnant cynomolgus monkeys. Hein PR, et al. **J Med Primatol** 1989;18(2):133–42

Abnormalities in insulin secretion and glucose clearance among Macaca mulatta examined on Cayo Santiago. Howard CF Jr, et al. **P R Health Sci J** 1989 Apr; 8(1):107–10

EMBRYOLOGY

Development of dermal ridges in the volar skin of fetal pigtailed macaques (Macaca nemestrina). Okajima M, et al. **Am J Anat** 1988 Dec;183(4):323–37

Morphogenesis of the respiratory bronchiole in rhesus monkey lungs. Tyler NK, et al. **Am J Anat** 1988 Jul; 182(3):215–23

Characterization of prenatal growth and development in the crab-eating macaque (Macaca fascicularis) by ultrasound. Tarantal AF, et al. **Anat Rec** 1988 Oct;222(2):177–84

5 alpha-reductase, aromatase, and androgen receptor levels in the monkey brain during fetal development. Sholl SA, et al. **Endocrinology** 1989 Feb;124(2):627–34

Process elimination underlies ontogenetic change in the distribution of callosal projection neurons in the postcentral gyrus of the fetal rhesus monkey. Chalupa LM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1076–9

GENETICS

A population-genetic study of crab-eating macaques (Macaca fascicularis) on the island of Angaur, Palau, Micronesia. Kawamoto Y, et al. **Folia Primatol (Basel)** 1988;51(4):169–81

The major histocompatibility complex, MnLA, of pigtailed macaques: definition of fifteen specificities. Gaur LK, et al. **Hum Immunol** 1989 Apr;24(4):277–94

Rhesus monkey apolipoprotein(a). Sequence, evolution, and sites of synthesis. Tomlinson JE, et al. **J Biol Chem** 1989 Apr 5;264(10):5957–65

Novel hemoglobin components and their amino acid sequences from the crab-eating macaque (Macaca fascicularis). Takenaka A, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):136–44

Nucleotide sequence of the cynomolgus monkey apolipoprotein E cDNA. Marotti KR, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1778

Nucleotide sequence of the triosephosphate isomerase gene from Macaca mulatta. Old SE, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9055

DNA fingerprinting for paternity and maternity in group O Cayo Santiago-derived rhesus monkeys at the German Primate Center: results of a pilot study. Arnemann J, et al. **P R Health Sci J** 1989 Apr;8(1):181–4

[The protease inhibitor system of macaques. The identification of alleles using isoelectric focusing and family analysis] Samil'chuk EI. **Zh Obshch Biol** 1989 May-Jun; 50(3):417-22 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Comparison of human infants and rhesus monkeys on Piaget's AB task: evidence for dependence on dorsolateral prefrontal cortex. Diamond A, et al. **Exp Brain Res** 1989; 74(1):24-40

Age gradations in vocalization and body weight in Japanese monkeys (Macaca fuscata). Inoue M. **Folia Primatol (Basel)** 1988;51(2-3):76-86

Early postnatal development of the monkey globus pallidus: a Golgi and electron microscopic study. Cano J, et al. **J Comp Neurol** 1989 Jan 15;279(3):353-67

Operant measurements of contrast sensitivity in infant macaque monkeys during normal development. Boothe RG, et al. **Vision Res** 1988;28(3):387-96

[Patterns in the ontogenetic development of certain forms of higher nervous activity in rhesus macaques] Maliukova IV. **Zh Evol Biokhim Fiziol** 1988 May-Jun;24(3):357-64 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Long-term observation of baboons, rhesus monkeys, and chimpanzees inoculated with HIV and given periodic immunosuppressive treatment. Morrow WJ, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):233-45

Sex-linked differences in susceptibility of cynomolgus monkeys to type II collagen-induced arthritis. Evidence that epitope-specific immune suppression is involved in the regulation of type II collagen autoantibody formation. Terato K, et al. **Arthritis Rheum** 1989 Jun;32(6):748-58

Serological response of non-human primates to human melanoma disialoganglioside GD3. Stuhlmiller GM, et al. **Cancer Immunol Immunother** 1989;29(3):205-10

Natural killer cells in rhesus monkeys: properties of effector cells which lyse Raji targets. Carver FM, et al. **Cell Immunol** 1988 Nov;117(1):56-69

Phenotypic characterization of cynomolgus monkey natural killer cells. Yamada YK, et al. **Cell Immunol** 1989 Sep; 122(2):524-33

Major histocompatibility complex class I molecules of nonhuman primates. Watkins DI, et al. **Eur J Immunol** 1988 Sep;18(9):1425-32

Immunogenetic studies of maternal-fetal relationships: a review: why newborn rhesus monkeys don't get hemolytic disease. Treichel RS. **Genetica** 1987 Aug 31;73(1-2):69-79 (37 ref.)

On the feasibility of inducing tolerance in man: a study in the cynomolgus monkey. Brent L, et al. **Immunol Lett** 1989 Apr;21(1):55-61

Postexposure immunotherapy of simian immunodeficiency virus (SIV) infected rhesus with an SIV immunogen. Gardner MB, et al. **J Med Primatol** 1989;18(3-4):321-8

Development of a series of monoclonal antibodies recognizing leukocyte differentiation antigens of Japanese monkeys (Macaca fuscata). Murayama Y, et al. **J Med Primatol** 1989;18(2):99-109

UH series of monoclonal antibodies recognizing major histocompatibility complex class II antigen(s) of Japanese monkeys (Macaca fuscata). Murayama Y, et al. **J Med Primatol** 1989;18(2):111-23

Delayed cutaneous hypersensitivity response in tetanus toxoid sensitized rhesus monkeys: predictor of anergy and value in tuberculin skin testing. Davis JA, et al. **Lab Anim Sci** 1988 Aug;38(4):413-6

Serological survey for viral diseases in the Cayo Santiago rhesus macaque population. Kessler MJ, et al. **P R Health Sci J** 1989 Apr;8(1):95-7

Reaction patterns of islet-cell autoantibodies in Macaca nigra [published erratum appears in Pancreas 1989;4(3):394] Fang TY, et al. **Pancreas** 1988;3(6):714-9

Enumeration of lymphocyte subsets in peripheral blood of rhesus monkeys prior to and following monocyte removal using a modified indirect avidin-biotin immunoperoxidase technique. Tryphonas H, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):119-26

ELISA for detection of antibodies to a type D retrovirus, SRV-W. Schultz KT, et al. **Viral Immunol** 1989;2(1):47-55

METABOLISM

Pharmacokinetics of coumarin and 7-hydroxycoumarin in the rhesus monkey after intravenous and peroral administration. Ritschel WA, et al. **Arzneimittelforschung** 1988 Nov;38(11):1619-23

Studies on the mechanism of high intestinal absorption of cholesterol and campesterol in high-responding rhesus monkeys. Bhattacharyya AK, et al. **Atherosclerosis** 1988 Aug;72(2-3):109-14

Purification and some properties of NADPH-cytochrome P-450 reductase from crab-eating monkey liver microsomes. Ohmori S, et al. **Biochem Int** 1988 Aug; 17(2):249-56

Distribution and size of GABAergic neurons in area 7b and the retroinsular cortex of the monkey. Chudler EH, et al. **Brain Res** 1989 Mar 6;481(2):383-7

Immunocytochemical evidence for glutamatergic cortico-cortical connections in monkeys. Conti F, et al. **Brain Res** 1988 Oct 11;462(1):148-53

Peptidylglycine alpha-amidating monooxygenase activity in spinal cord, dorsal roots, and dorsal root ganglia of Macaca fascicularis. Graham L, et al. **Brain Res** 1989 Jul 10; 491(2):371-3

Localization of vasopressin mRNA-containing neurones in the hypothalamus of the monkey. Ichimiya Y, et al. **Brain Res** 1988 Aug;464(1):81-5

Evidence that both intragastric and subcutaneous administration of methylenedioxymethylamphetamine (MDMA) produce serotonin neurotoxicity in rhesus monkeys. Kleven MS, et al. **Brain Res** 1989 May 29; 488(1-2):121-5

GABAA/benzodiazepine receptor-like immunoreactivity in rat and monkey cerebellum. Meinecke DL, et al. **Brain Res** 1989 Jul 31;493(2):303-19

Effects of estrogen on hypothalamic gonadotropin-releasing hormone release in castrated male rhesus macaques. Pau KY, et al. **Brain Res** 1988 Aug 30;459(1):70-5

Distinct localization of prostaglandin D2, E2 and F2 alpha binding sites in monkey brain. Watanabe Y, et al. **Brain Res** 1989 Jan 23;478(1):143-8

The distribution of substance P in the cerebral cortex and hippocampal formation: an immunohistochemical study in the monkey and rat. Iritani S, et al. **Brain Res Bull** 1989 Feb;22(2):295-303

Mode of [14C] 2-deoxy-D-glucose uptake into retrosplenial cortex and other memory-related structures of the monkey during a delayed response. Matsunami K, et al. **Brain Res Bull** 1989 May;22(5):829-38

Ontogeny of somatostatin in cerebral cortex of macaque monkey: an immunohistochemical study. Yamashita A, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):103-11

Cellular localisation of enkephalin gene expression in MPTP-treated cynomolgus monkeys. Augood SJ, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):85-92

Identification of plasma proteins contained in bronchoalveolar fluid from Macacus cynomolgus. Hannothiaux MH, et al. **Comp Biochem Physiol [B]** 1989; 92(4):645-50

Glutamine synthetase in kidneys of monkey and man. Horsburgh T, et al. **Comp Biochem Physiol [B]** 1978; 60(4):501-3

Biochemical and immunological comparison of monkey (Macaca arctoides) and human salivary secretions. Levine MJ, et al. **Comp Biochem Physiol [B]** 1978;60(4):423-31

Bilateral orchidectomy and concomitant testosterone replacement in the juvenile male rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin-releasing hormone (GnRH) infusion results, as in the hypothalamus lesioned GnRH-driven adult male, in a selective hypersecretion of follicle-stimulating hormone. Abeyawardene SA, et al. **Endocrinology** 1989 Jul; 125(1):257-9

Immunofluorescent analysis of estrogen induction of progesterone receptor in the rhesus uterus. Okulicz WC, et al. **Endocrinology** 1989 Aug;125(2):930-4

Ontogeny of cholecystokinin-8 and glutamic acid decarboxylase in cerebral neocortex of macaque monkey. Hayashi M, et al. **Exp Brain Res** 1989;74(2):249-55

Distribution of somatostatin-like immunoreactivity in the monkey amygdala. Amaral DG, et al. **J Comp Neurol** 1989 Jun 8;284(2):294-313

Monoclonal antibody to neurofilament protein (SMI-32) labels a subpopulation of pyramidal neurons in the human and monkey neocortex. Campbell MJ, et al. **J Comp Neurol** 1989 Apr 8;282(2):191-205

Organization of calcitonin gene-related peptide-immunoreactive terminals in the primate dorsal horn. Carlton SM, et al. **J Comp Neurol** 1988 Oct 22; 276(4):527-36

Ultrastructural localization of immunoreactive calbindin-D28k in the rat and monkey basal ganglia, including subcellular distribution with colloidal gold labeling. DiFiglia M, et al. **J Comp Neurol** 1989 Jan 22; 279(4):653-65

Distribution of corticotropin-releasing-factor-like immunoreactivity in brainstem of two monkey species (Saimiri sciureus and Macaca fascicularis): an immunohistochemical study. Foote SL, et al. **J Comp Neurol** 1988 Oct 8;276(2):239-64

Comparative distribution of three opioid systems in the lower brainstem of the monkey (Macaca fuscata). Ibuki T, et al. **J Comp Neurol** 1989 Jan 15;279(3):445-56

Regional distribution of cholecystokinin receptors in macaque medial temporal lobe determined by in vitro receptor autoradiography. Kritzer MF, et al. **J Comp Neurol** 1988 Oct 8;276(2):219-30

Distribution of neuropeptide Y-containing perikarya and axons in various neocortical areas in the macaque monkey. Kuljis RO, et al. **J Comp Neurol** 1989 Feb 15;280(3):383-92

Multiple types of neuropeptide Y-containing neurons in primate neocortex. Kuljis RO, et al. **J Comp Neurol** 1989 Feb 15;280(3):393-409

Quantitative autoradiographic mapping of serotonin 5-HT1 and 5-HT2 receptors and uptake sites in the neocortex of the rhesus monkey. Lidow MS, et al. **J Comp Neurol** 1989 Feb 1;280(1):27-42

Two types of tyrosine hydroxylase-immunoreactive amacrine cell in the rhesus monkey retina. Mariani AP, et al. **J Comp Neurol** 1988 Oct 1;276(1):81-91

Peptidergic neurons in the basal forebrain magnocellular complex of the rhesus monkey. Walker LC, et al. **J Comp Neurol** 1989 Feb 8;280(2):272-82

Uptake and regional distribution of (+)-(R)- and (-)-(S)-N-[methyl-11C]-nicotine in the brains of rhesus monkey. An attempt to study nicotinic receptors in vivo. Nordberg A, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):195-205

Eicosapentaenoic acid metabolism in cynomolgus and rhesus conjunctiva and eyelid. Kulkarni PS, et al. **J Ocul Pharmacol** 1987 Winter;3(4):349-56

Meperidine and normeperidine distribution in the rhesus monkey. Morrison JC, et al. **J Perinatol** 1988 Winter; 8(1):24-6

Characterization of skin-surface lipids from the monkey (Macaca fascicularis). Nishimaki-Mogami T, et al. **Lipids** 1988 Sep;23(9):869-77

Disposition of homovanillic acid in the primate. Miller AL, et al. **Metab Brain Dis** 1987 Sep;2(3):207-12

Substance P-like immunoreactive retinal terminals found in two retinorecipient areas of the Japanese monkey. Nakagawa S, et al. **Neurosci Lett** 1988 Oct 31;93(1):32-7

Immunohistochemical localization of carbonic anhydrase III in the pancreas of the monkey. Nishita T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):642-5

Metabolism and pharmacokinetics of progesterone in the cynomolgus monkey (Macaca fascicularis). Braasch HV, et al. **Steroids** 1988 Sep;52(3):279-94

Valproic acid developmental toxicity and pharmacokinetics in the rhesus monkey: an interspecies comparison. Hendrickx AG, et al. **Teratology** 1988 Oct;38(4):329-45

MICROBIOLOGY

Animal models for HIV infection and AIDS. **Bull Pan Am Health Organ** 1989;23(1-2):215-34

Experimental Campylobacter jejuni infection in Macaca nemestrina. Russell RG, et al. **Infect Immun** 1989 May; 57(5):1438-44

Cellular fatty acid composition of Campylobacter pylori from primates and ferrets compared with those of other campylobacters. Goodwin CS, et al. **J Clin Microbiol** 1989 May;27(5):938-43

Infection of macaque monkeys with simian immunodeficiency virus from African green monkeys: virulence and activation of latent infection. Gravell M, et al. **J Med Primatol** 1989; 18(3-4):247-54

Rhesus macaques inoculated with molecularly cloned simian immunodeficiency virus. Marthas ML, et al. **J Med Primatol** 1989;18(3-4):311-9

Transmission of the simian immunodeficiency virus SIVmne in macaques and baboons. Morton WR, et al. **J Med Primatol** 1989;18(3-4):237-45

Serologic and virologic analysis of type D simian retrovirus infection in a colony of Celebes black macaques (Macaca nigra). Shiigi S, et al. **J Med Primatol** 1989;18(3-4):185-93

Immunodeficiency viruses: the simian-human connection [news] Doolittle RF. **Nature** 1989 Jun 1;339(6223):338-9

An African primate lentivirus (SIVsm) closely related to HIV-2. Hirsch VM, et al. **Nature** 1989 Jun 1; 339(6223):389-92

PARASITOLOGY

Ontogeny of Rhyncoptes grabberi, n. sp. (Acari: Astigmata: Rhyncoptidae) associated with Macaca mulatta. Klompen JS. **J Med Entomol** 1989 Jan;26(1):81-7

Helminth parasites of the Japanese monkey, Macaca fuscata fuscata in Ehime Prefecture, Japan. Itoh K, et al. **Jpn J Vet Res** 1988 Oct;36(3-4):235-47

Management of an infestation of sucking lice in a colony of rhesus macaques. Mader DR, et al. **Lab Anim Sci** 1989 May;39(3):252-5

PHYSIOLOGY

Spontaneous diabetes in Macaca nigra: relevance to human beings with NIDDM. Howard CF Jr. **Adv Exp Med Biol** 1988;246:33-9

Sociometrics of Macaca mulatta: II. Decoupling centrality and dominance in rhesus monkey social networks. Sade DS, et al. **Am J Phys Anthropol** 1988 Dec;77(4):409-25

Magnitude of thromboxane receptor antagonism necessary for antithrombotic activity in monkeys. Schumacher WA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H726-34

Effects of long-term testosterone exposure on ovarian function and morphology in the rhesus monkey. Faiman C, et al. **Anat Rec** 1988 Nov;222(3):245-51

Angiogenesis in the postovulatory primate endometrium: the coiled arteriolar system. Kaiserman-Abramof IR, et al. **Anat Rec** 1989 Aug;224(4):479-89

Effects of aging on the neurons within area 17 of rhesus monkey cerebral cortex. Vincent SL, et al. **Anat Rec** 1989 Mar;223(3):329-41

Visualization of neuronal activity in monkey striate cortex. Blasdel GG. **Annu Rev Physiol** 1989;51:561-81 (25 ref.)

Effect of restricted cortical lesions on absolute thresholds and aphasia-like deficits in Japanese macaques. Heffner HE, et al. **Behav Neurosci** 1989 Feb;103(1):158-69

P3-like brain waves in normal monkeys and in monkeys with medial temporal lesions. Paller KA, et al. **Behav Neurosci** 1988 Oct;102(5):714-25

Purification of cytochrome P-450 from polychlorinated biphenyl-treated crab-eating monkeys: high homology to a form of human cytochrome P-450. Ohta K, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):142-5

Differences between monkey visual cortex cells in triplet and ghost doublet informational symbols relationships. Lestienne R, et al. **Biol Cybern** 1988;59(4–5):337–52

Latencies of visually responsive neurons in various regions of the rhesus monkey brain and their relation to human visual responses. Robinson DL, et al. **Biol Psychol** 1988 Jun;26(1–3):111–6 (23 ref.)

Regulation of plasma sex-steroid-binding protein in adult cynomolgus monkeys (Macaca fascicularis) during different reproductive states. Kottler ML, et al. **Biol Reprod** 1988 Aug;39(1):97–103

Postcordotomy spontaneous dysesthesias in macaques: recurrence after spinal cord transection. Levitt M. **Brain Res** 1989 Feb 27;481(1):47–56

A primate model for the study of tonic pain, pain tolerance and diffuse noxious inhibitory controls. Marchand S, et al. **Brain Res** 1989 May 22;487(2):388–91

Changes in premovement activity in primary somatosensory cortex differ when monkeys make hand movements in response to visual vs vibratory cues. Nelson RJ, et al. **Brain Res** 1989 Apr 10;484(1–2):43–56

Suppression of visually initiated hand movement by stimulation of the prefrontal cortex in the monkey. Sasaki K, et al. **Brain Res** 1989 Aug 21;495(1):100–7

Timing and distribution of flash-evoked activity in the lateral geniculate nucleus of the alert monkey. Schroeder CE, et al. **Brain Res** 1989 Jan 16;477(1–2):183–95

Luteinizing hormone releasing hormone (LHRH) neuroterminals mapped using the push-pull perfusion method in the rhesus monkey. Gearing M, et al. **Brain Res Bull** 1988 Jul;21(1):117–21

Set related and premovement related activity of primate primary somatosensory cortical neurons depends upon stimulus modality and subsequent movement. Nelson RJ. **Brain Res Bull** 1988 Sep;21(3):411–24

On the antipyrine test in laboratory animals. Studies in the dog and monkey. Vickers FF, et al. **Drug Metab Dispos** 1989 Mar–Apr;17(2):160–5

Acute inhibition of gonadotropin secretion by corticotropin-releasing hormone in the primate: are the adrenal glands involved? Xiao E, et al. **Endocrinology** 1989 Apr;124(4):1632–7

Modulation of lemniscal input during conditioned arm movements in the monkey. Chapman CE, et al. **Exp Brain Res** 1988;72(2):316–34

Neuronal activity in primate parietal cortex area 5 varies with intended movement direction during an instructed-delay period. Crammond DJ, et al. **Exp Brain Res** 1989;76(2):458–62

The effects of reverse monocular deprivation in monkeys. II. Electrophysiological and anatomical studies. Crawford ML, et al. **Exp Brain Res** 1989;74(2):338–47

Interhemispheric transfer of visual learning in monkeys with intact optic chiasm. Eacott MJ, et al. **Exp Brain Res** 1989; 74(2):348–52

Significance of attentive fixation for the selection of saccade targets in different parts of the visual field of the rhesus monkey. Fischer B, et al. **Exp Brain Res** 1988;73(3):577–82

Place memory and scene memory: effects of fornix transection in the monkey. Gaffan D, et al. **Exp Brain Res** 1989;74(1):202–12

The effects of reverse monocular deprivation in monkeys. I. Psychophysical experiments. Harwerth RS, et al. **Exp Brain Res** 1989;74(2):327–47

Object-centered encoding by face-selective neurons in the cortex in the superior temporal sulcus of the monkey. Hasselmo ME, et al. **Exp Brain Res** 1989;75(2):417–29

Unit activity in monkey parietal cortex related to haptic perception and temporary memory. Koch KW, et al. **Exp Brain Res** 1989;76(2):292–306

Premotor and supplementary motor cortex in rhesus monkeys: neuronal activity during externally- and internally-instructed motor tasks. Kurata K, et al. **Exp Brain Res** 1988;72(2):237–48

Dark adaptation and increment threshold in rhesus monkey and man. Oehler R, et al. **Exp Brain Res** 1989;75(3):664–8

The effect of learning on the face selective responses of neurons in the cortex in the superior temporal sulcus of the monkey. Rolls ET, et al. **Exp Brain Res** 1989; 76(1):153–64

Directionally selective response of cells in the middle temporal area (MT) of the macaque monkey to the movement of equiluminous opponent color stimuli. Saito H, et al. **Exp Brain Res** 1989;75(1):1–14

Delayed response deficits produced by local injection of bicuculline into the dorsolateral prefrontal cortex in Japanese macaque monkeys. Sawaguchi T, et al. **Exp Brain Res** 1989;75(3):457–69

Neuronal activity in the monkey striatum during the initiation of movements. Schultz W, et al. **Exp Brain Res** 1988; 71(2):431–6

Operant conditioning of primate triceps surae H-reflex produces reflex asymmetry. Wolpaw JR, et al. **Exp Brain Res** 1989;75(1):35–9

What facial features activate face neurons in the inferotemporal cortex of the monkey? Yamane S, et al. **Exp Brain Res** 1988;73(1):209–14

Activity patterns in a captive group of Celebes black apes (Macaca nigra). Bernstein IS, et al. **Folia Primatol (Basel)** 1988;51(2–3):61–75

Generational bias in mating in captive groups of rhesus monkeys (Macaca mulatta). Smith DG. **Folia Primatol (Basel)** 1987;49(3–4):212–5

Rhesus monkey sperm penetration into zona-free hamster ova: comparison of preparation and culture conditions. Binor Z, et al. **Gamete Res** 1988 Jan;19(1):91–9

Incidence of spontaneous otoacoustic emissions in macaque monkeys: a replication. Lonsbury-Martin BL, et al. **Hear Res** 1988 Aug;34(3):313–7

Flow pattern and structural changes at carotid bifurcation in hypertensive cynomolgus monkeys. Hennerici M, et al. **Hypertension** 1989 Apr;13(4):315–21

Dark-rearing interference with emmetropization in the rhesus monkey. Guyton DL, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):761–4

Perception of the missing fundamental in nonhuman primates. Tomlinson RW, et al. **J Acoust Soc Am** 1988 Aug; 84(2):560–5

Effects of growth hormone on the tempo of sexual maturation in female rhesus monkeys. Wilson ME, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):29–38

Efferent projections from limbic cortex of the temporal pole to the magnocellular medial dorsal nucleus in the rhesus monkey. Gower EC. **J Comp Neurol** 1989 Feb 15; 280(3):343–58

Thalamic input to inferior area 6 and area 4 in the macaque monkey. Matelli M, et al. **J Comp Neurol** 1989 Feb 15; 280(3):468–88

Endometrial responses to a deciduogenic stimulus in ovariectomized rhesus monkeys treated with oestrogen and progesterone. Ghosh D, et al. **J Endocrinol** 1989 Jan; 120(1):51–8

Nocturnal changes in serum melatonin during female puberty in rhesus monkeys: a longitudinal study. Wilson ME, et al. **J Endocrinol** 1989 Jun;121(3):553–62

Diagnosis of early pregnancy by ultrasound in Macaca fascicularis. Conrad SH, et al. **J Med Primatol** 1989; 18(2):143–54

Characterization of inheritance patterns of blood pressure in Macaca fascicularis. Hartley LH, et al. **J Med Primatol** 1989;18(2):125–32

Movement characteristics of ejaculated sperm from cynomolgus monkeys (Macaca fascicularis) analyzed by manual and automated computerized image analysis. Yeung CH, et al. **J Med Primatol** 1989;18(1):53–68

Cerebellar neuronal activity related to whole-arm reaching movements in the monkey. Fortier PA, et al. **J Neurophysiol** 1989 Jul;62(1):198–211

Discharge patterns and recruitment order of identified motoneurons and internuclear neurons in the monkey abducens nucleus. Fuchs AF, et al. **J Neurophysiol** 1988 Dec;60(6):1874–95

Topographical distribution and functional properties of cortically induced rhythmical jaw movements in the monkey (Macaca fascicularis). Huang CS, et al. **J Neurophysiol** 1989 Mar;61(3):635–50

Activity of hippocampal formation neurons in the monkey related to a conditional spatial response task. Miyashita Y, et al. **J Neurophysiol** 1989 Mar;61(3):669–78

Monkey primary motor and premotor cortex: single-cell activity related to prior information about direction and extent of an intended movement. Riehle A, et al. **J Neurophysiol** 1989 Mar;61(3):534–49

Deficits in reaction times and movement times as correlates of hypokinesia in monkeys with MPTP-induced striatal dopamine depletion. Schultz W, et al. **J Neurophysiol** 1989 Mar;61(3):651–68

Memory traces in primate spinal cord produced by operant conditioning of H-reflex. Wolpaw JR, et al. **J Neurophysiol** 1989 Mar;61(3):563–72

Functional role of corticoperipheral loop circuits during voluntary movements in the monkey: a preferential bias theory. Favorov O, et al. **J Neurosci** 1988 Sep;8(9):3266–77

Nasotemporal overlap of crossed and uncrossed retinal ganglion cell projections in the Japanese monkey (Macaca fuscata). Fukuda Y, et al. **J Neurosci** 1989 Jul;9(7):2353–73

Disconnection of the amygdala from visual association cortex impairs visual reward-association learning in monkeys. Gaffan EA, et al. **J Neurosci** 1988 Sep;8(9):3144–50

Chromatic and achromatic vision of macaques: role of the P pathway. Merigan WH. **J Neurosci** 1989 Mar;9(3):776–83

A selective mnemonic role for the hippocampus in monkeys: memory for the location of objects. Parkinson JK, et al. **J Neurosci** 1988 Nov;8(11):4159–67

Functional anatomy of the second visual area (V2) in the macaque. Tootell RB, et al. **J Neurosci** 1989 Aug; 9(8):2620–44

A new method for relating behavior to neuronal activity in performing monkeys. Montgomery EB Jr. **J Neurosci Methods** 1989 Jun;28(3):197–204

Current source density analysis of linear and non-linear components of the primate electroretinogram. Baker CL Jr, et al. **J Physiol (Lond)** 1988 Dec;407:155–76

Season determines timing of first ovulation in rhesus monkeys (Macaca mulatta) housed outdoors. Wilson ME, et al. **J Reprod Fertil** 1989 Mar;85(2):583–91

Regulation of gonadotropin-stimulable adenylyl cyclase of the primate corpus luteum. Rojas FJ, et al. **J Steroid Biochem** 1989 Jan;32(1B):175–82

Rearing cynomolgus monkeys (Macaca fascicularis) on surrogate mothers with bottle feeding. Timmermans PJ, et al. **Lab Anim** 1988 Jul;22(3):229–34

Methods to evaluate the wellbeing of laboratory primates: comparisons of macaques and tamarins. Evans HL, et al. **Lab Anim Sci** 1989 Jul;39(4):318–23

Maternal factors affecting reproduction in a breeding colony of cynomolgus macaques (Macaca fascicularis). Gardin JF, et al. **Lab Anim Sci** 1989 May;39(3):205–12

Effects of fenfluramine, m-chlorophenylpiperazine, and other serotonin-related agonists and antagonists on penile erections in nonhuman primates. Szele FG, et al. **Life Sci** 1988;43(16):1297–303

Neuronal correlates of a perceptual decision. Newsome WT, et al. **Nature** 1989 Sep 7;341(6237):52–4

Effects of aging on visual recognition memory in the rhesus monkey. Moss MB, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):495–502 (56 ref.)

Effects of synchrony between primate corticomotoneuronal cells on post-spike facilitation of muscles and motor units. Smith WS, et al. **Neurosci Lett** 1989 Jan 2;96(1):76–81

Responses of motor cortex neurons to visual stimulation in the alert monkey. Wannier TM, et al. **Neurosci Lett** 1989 Mar 13;98(1):63–8

Intraretinal axons of ganglion cells in the Japanese monkey (Macaca fuscata): conduction velocity and diameter distribution. Fukuda Y, et al. **Neurosci Res** 1988 Oct; 6(1):53–71

Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. **Neurosci Res** 1989 Apr; 6(4):283–98

Transneuronal retrograde degeneration of retinal ganglion cells after damage to striate cortex in macaque monkeys: selective loss of P beta cells. Cowey A, et al. **Neuroscience** 1989;29(1):65–80

Validation of single photon absorptiometry in estimating bone mineral mass in rhesus monkey skeletons. Aguiló F Jr, et al. **P R Health Sci J** 1989 Apr;8(1):205–9

Future research on Cayo Santiago-derived group M rhesus monkeys at Sabana Seca: the socioendocrinology of male reproductive development. Bercovitch FB. **P R Health Sci J** 1989 Apr;8(1):177–9

Bone growth and remodeling in Cayo Santiago—derived Macaca mulatta. Burr DB, et al. **P R Health Sci J** 1989 Apr;8(1):191–6

Adult-onset macular degeneration in the Cayo Santiago macaques. Dawson WW, et al. **P R Health Sci J** 1989 Apr; 8(1):111–5

Bone mineral and osteoporosis in aging rhesus monkeys. Grynpas MD, et al. **P R Health Sci J** 1989 Apr;8(1):197–204

Conducting behavioral and biomedical research on Cayo Santiago. Marler P. **P R Health Sci J** 1989 Apr;8(1):45–6

Rhesus macaques as an experimental model for degenerative arthritis. Pritzker KP, et al. **P R Health Sci J** 1989 Apr; 8(1):99–102

Heart rate and endocrine responses to stress in adolescent male rhesus monkeys on Cayo Santiago. Rasmussen KL, et al. **P R Health Sci J** 1989 Apr;8(1):65–71

Characteristics of spontaneous obesity in the Cayo Santiago rhesus macaque: preliminary report. Schwartz SM. **P R Health Sci J** 1989 Apr;8(1):103–6

Pituitary—adrenal response to capture in Cayo Santiago—derived group M rhesus monkeys. Suomi SJ, et al. **P R Health Sci J** 1989 Apr;8(1):171–6

Japanese monkeys' cardiac responses to visual depth. Hayashibe K, et al. **Percept Mot Skills** 1988 Aug; 67(1):303–10

On the physiology of grooming in a pigtail macaque. Boccia ML, et al. **Physiol Behav** 1989 Mar;45(3):667–70

The transfer of visual information across the corpus callosum in cats, monkeys and humans: spatial and temporal properties. Berardi N, et al. **Prog Brain Res** 1988;75:181–5

The role of the primate lateral terminal nucleus in visuomotor behavior. Mustari MJ, et al. **Prog Brain Res** 1988;75:121–8

Some extra-striate corticothalamic connections in macaque monkeys. Squatrito S, et al. **Prog Brain Res** 1988;75:279–92

Complementary hemispheric specialization in monkeys. Hamilton CR, et al. **Science** 1988 Dec 23;242(4886):1691–4

Defensive behaviors in infant rhesus monkeys: environmental cues and neurochemical regulation. Kalin NH, et al. **Science** 1989 Mar 31;243(4899):1718–21

Comparison of saccadic eye movements in humans and macaques to single-step and double-step target movements. Baizer JS, et al. **Vision Res** 1989;29(4):485–95

[Food- and water- intake, urinary and fecal output, and urinalysis in the wild-originated cynomolgus monkeys (Macaca fascicularis) under the indoor individually-caged conditions] Suzuki MT, et al. **Jikken Dobutsu** 1989 Jan; 38(1):71–4 (Eng. Abstr.) **(Jpn)**

[Effect of beta-endorphin on the acquired forms of nervous activity in monkeys] Karamian AI, et al. **Dokl Akad Nauk SSSR** 1989;306(3):743–7 **(Rus)**

MACACA FASCICULARIS see under **MACACA**

MACACA MULATTA see under **MACACA**

MACACA NEMESTRINA see under **MACACA**

MACACA RADIATA see under **MACACA**

MACAQUE see **MACACA**

MACE see **CHLOROACETOPHENONE**

MACHADO-JOSEPH DISEASE see **SPINOCEREBELLAR DEGENERATION**

MACHIAVELLIANISM see under PERSONALITY

MACROGLOBULINEMIA

COMPLICATIONS

Granulocytic sarcoma presenting as a solitary nodule of skin in a patient with Waldenstrom's macroglobulinemia. An immunohistochemical and electron-microscopic study. Choi HS, et al. **Am J Dermatopathol** 1989 Feb;11(1):51-7

Waldenström's macroglobulinaemia associated with alpha 1-antitrypsin deficiency [letter] Sebastián Domingo JJ, et al. **Am J Hematol** 1988 Oct;29(2):122

Lupus anticoagulant and Waldenstrom's macroglobulinemia. Maldonado N, et al. **Bol Asoc Med P R** 1988 Nov; 80(11):408-12

Bilateral pleural effusions due to amyloidosis in a case of Waldenström's macroglobulinemia. Lindemalm C, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):407-9

Urticarial dermatosis associated with Waldenström's macroglobulinemia [letter] Pujol RM, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):855-7

Macroglobulinemia and small intestinal disease. A case report with review of the literature. Veloso FT, et al. **J Clin Gastroenterol** 1988 Oct;10(5):546-50 (20 ref.)

Combined cold- and warm-antibody autoimmune hemolytic anemia--review of the literature and a case report. Hsu HC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun;5(6):350-6 (20 ref.)

Renal transplantation in Waldenström's macroglobulinaemia. Bradley JR, et al. **Nephrol Dial Transplant** 1988;3(2):214-6

Waldenström's macroglobulinemia associated with amyloidosis and crescentic glomerulonephritis. Ogami Y, et al. **Nephron** 1989;51(1):95-8

Mental nerve neuropathy: a symptom of Waldenström's macroglobulinemia. Klokkevold PR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):689-93

B-cell malignant lymphoma associated with monoclonal macroglobulinemia and cryoglobulinemia. Nozaki H, et al. **Tokai J Exp Clin Med** 1988 Dec;13(4-5):245-51

[Waldenström's disease with diffuse large immunoblastic cell lymphoma and chronic urticaria (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1989;140(1):51-2 (5 ref.) (Fre)

[IgM kappa Waldenström's disease with cryoglobulinemia disclosed by visceral leishmaniasis (letter)] Legendre C, et al. **Ann Med Interne (Paris)** 1988;139(6):442-4 (Fre)

[Waldenström's macroglobulinemia with cerebral lymphoproliferative involvement of tumor appearance (Bing and Neel syndrome). An anatomo-clinical case] Quilichini R, et al. **Ann Med Interne (Paris)** 1989; 140(1):25-9 (25 ref.) (Eng. Abstr.) (Fre)

[Amyloid nephropathy disclosing Waldenström macroglobulinemia (letter)] Schillinger F, et al. **Presse Med** 1989 May 27;18(21):1081 (Fre)

[Waldentrom's disease associated with papulous amyloidosis (letter)] Schmutz JL, et al. **Presse Med** 1989 Apr 22; 18(16):844 (Fre)

[Primary macroglobulinemia with severe neutropenia, leading to a rapid development of septic shock] Umeki S, et al. **Rinsho Ketsueki** 1989 Jan;30(1):89-93 (Eng. Abstr.) (Jpn)

[Lymphoproliferative infiltration of bladder and prostate. Apropos of a case of Waldenstrom's disease] Idoipe Tomás JI, et al. **Arch Esp Urol** 1988 Sep;41(7):547-9 (Eng. Abstr.) (Spa)

[Waldenström's macroglobulinemia and cutaneous amyloidosis (letter)] Fernández Collogudo E, et al. **Rev Clin Esp** 1988 Jul;183(3):153-4 (Spa)

DIAGNOSIS

[A case of pulmonary Waldenstrom's macroglobulinemia] Nii Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):670-3 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Recombinant interferon gamma in hairy cell leukemia, multiple myeloma, and Waldenstrom's macroglobulinemia. Quesada JR, et al. **Am J Hematol** 1988 Sep;29(1):1-4

EPIDEMIOLOGY

Waldenström's macroglobulinaemia: three cases in shoe repairers [published erratum appears in BMJ 1989 Mar 18;298(6675):710] Williamson LM, et al. **BMJ** 1989 Feb 25;298(6672):498-9

GENETICS

Four brothers with Waldenstrom's macroglobulinemia. Renier G, et al. **Cancer** 1989 Oct 1;64(7):1554-9 (25 ref.)

Nonrandom rearrangement of chromosome 14 at band q32.33 in human lymphoid malignancies with mature B-cell phenotype. Nishida K, et al. **Cancer Res** 1989 Mar 1; 49(5):1275-81

IMMUNOLOGY

Structural studies of the asparagine-linked sugar chains of two immunoglobulin M's purified from a patient with Waldenström's macroglobulinemia. Ohbayashi H, et al. **Arch Biochem Biophys** 1989 Mar;269(2):463-75

Waldenström's macroglobulinemia with peripheral neuropathy--the role of IgM M-protein in autoimmune mechanism. Wang CR, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):9-15

MICROBIOLOGY

Potentially pathogenic microorganisms in the oral cavity during febrile episodes in immunocompromised patients with haematologic malignancies. Bergmann OJ, et al. **Scand J Infect Dis** 1989;21(1):43-51

PATHOLOGY

Abnormalities in lymphocyte profile and specificity repertoire of patients with Waldenstrom's macroglobulinemia, multiple myeloma, and IgM monoclonal gammopathy of undetermined significance. Pilarski LM, et al. **Am J Hematol** 1989 Feb;30(2):53-60

Violaceous plaques on the lower extremities. Cutaneous macroglobulinosis. Brookins-Reddix N, et al. **Arch Dermatol** 1988 Dec;124(12):1853, 1856

Endoscopic appearance of intestinal involvement in Waldenström's macroglobulinemia. Koivisto PV, et al. **Endoscopy** 1989 May;21(3):155-6

Chronic urticaria and macroglobulinemia (Schnitzler's syndrome): report of two cases. Janier M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):206-11 (21 ref.)

Waldenström's macroglobulinemia. Report of an autopsy case presenting with a pulmonary manifestation. Tsuji M, et al. **Virchows Arch [A]** 1989;415(2):169-73

[Primary Waldenström's macroglobulinemia. Report of a case with pulmonary involvement] Jensen JB, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1059-60 (Eng. Abstr.) (Dan)

[Pulmonary Waldenström's macroglobulinemia--a case report] Masu M, et al. **Rinsho Ketsueki** 1989 Apr; 30(4):485-90 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Abdominal computed tomography in macroglobulinemia (Waldenström's disease). Report of a case. Aspelin P, et al. **Acta Radiol** 1989 Mar-Apr;30(2):197-200

THERAPY

[Myeloma and Waldenström's macroglobulinemia] Palva I. **Duodecim** 1989;105(11):1088-94 (41 ref.) (Fin)

MACROGLOBULINS

METABOLISM

High molecular weight forms of placental lactogen: evidence for lactogen-macroglobulin complexes in rodents and humans. Southard JN, et al. **Endocrinology** 1989 Aug; 125(2):791-800

PHARMACOLOGY

Inhibition of inflammatory proteinase, medullasin, by alpha 2-macroglobulin and ovomacroglobulin. Ikai A, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):831-6

MACROGLOSSIA

COMPLICATIONS

Obstructive sleep apnea in amyloidosis treated with nasal continuous positive airway pressure. Lesser BA, et al. **Arch Intern Med** 1988 Oct;148(10):2285-7

DIAGNOSIS

[Mediastinal neuroblastoma in Wiedemann-Beckwith syndrome] Huber A, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):243-4 (Eng. Abstr.) (Ger)

ETIOLOGY

Low set ears and small oral cavity with relative macroglossia in Down's syndrome: an explanation of the phenomenon. Krmpotic-Nemanic J, et al. **Chic Med Sch Q** 1970; 30(1):41-5

Massive macroglossia, amyloidosis and myeloma. Jacobs P, et al. **Postgrad Med J** 1988 Sep;64(755):696-8

GENETICS

Growth, bone maturation and pubertal development in children with the EMG-syndrome. Sippell WG, et al. **Clin Genet** 1989 Jan;35(1):20-8

SURGERY

A tongue resection in macroglossia due to primary amyloidosis. Dendy RA, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):329-33

MACROGOLS see POLYETHYLENE GLYCOLS

MACROMOLECULAR SYSTEMS

see related

POLYMERS

Discectomies of the lower cervical spine using interbody biopolymer (B.O.P.) implants. Advantages in the treatment of complicated cervical arthrosis. A review of 150 cases. Lozes G, et al. **Acta Neurochir (Wien)** 1989;96(3-4):88-93

Small zone gel chromatography of interacting systems: theoretical and experimental evaluation of elution profiles for kinetically controlled macromolecule-ligand reactions. Cann JR, et al. **Anal Biochem** 1988 Dec;175(2):462-73

Size exclusion chromatography and universal calibration of gel columns. le Maire M, et al. **Anal Biochem** 1989 Feb 15;177(1):50-6

An osmometer for aqueous biopolymer solutions. Schönert H, et al. **Anal Biochem** 1989 Feb 1;176(2):217-20

Time-resolved macromolecular crystallography. Moffat K. **Annu Rev Biophys Biophys Chem** 1989;18:309-32 (56 ref.)

Expanding roles of computers and robotics in biological macromolecular research. Wada A, et al. **Annu Rev Biophys Biophys Chem** 1989;18:1-24 (162 ref.)

Distance estimation from NOE data in macromolecular systems: a quadratic approach. Majumdar A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):886-92

Quantitative analysis of linkage in macromolecules when one ligand is present in limited total quantity. Robert CH, et al. **Biochemistry** 1988 Sep 6;27(18):6829-35

The effect of a distribution of separations upon intramolecular distances in biopolymers, as determined by radiationless energy transfer. Albaugh S, et al. **Biophys Chem** 1989 Mar; 33(1):71-6

The determination of equilibrium constants for heterogeneous macromolecular interactions. Systems forming 2:1 complexes. Crowl-Powers ML, et al. **Biophys Chem** 1988 Oct;32(1):131-46

Dispersion of tertiary structures for an ensemble of primary sequences at an externally induced transition of correlation regimes. Fernández A. **Biophys Chem** 1988 Dec; 32(2-3):167-71

Dielectric behavior of polyelectrolytes. VI. Dynamic response of cylindrical biopolymers to electric fields. Sonnen WE, et al. **Biophys Chem** 1988 Dec;32(2-3):283-95

Evaluation of nonideality from gel chromatographic partition coefficients. A technique with greater versatility than equilibrium dialysis. Van Damme MP, et al. **Biophys Chem** 1989 May;33(2):115-25

Simultaneous determination of intramolecular distance distributions and conformational dynamics by global analysis of energy transfer measurements. Beechem JM, et al. **Biophys J** 1989 Jun;55(6):1225-36

Solvation thermodynamics of biopolymers. II. Correlations between functional groups. Ben-Naim A, et al. **Biopolymers** 1989 Jul;28(7):1327-37

The osmotic coefficients of the sodium form of some biopolymers. Jang LK, et al. **Biopolymers** 1989 Aug; 28(8):1485-9

Macromolecular affinity labeling. Ji TH, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):676-8 (26 ref.)

On the evaluation of data from flow-dialysis experiments. Westerhoff HV, et al. **J Biochem Biophys Methods** 1989 Feb;18(1):53-64

Plasma protein adsorbed biomedical polymers: activation of human monocytes and induction of interleukin 1. Bonfield TL, et al. **J Biomed Mater Res** 1989 Jun;23(6):535-48

Oligomers with pendant isocyanate groups as tissue adhesives: II. Adhesion to bone and other tissues. Brauer GM, et al. **J Biomed Mater Res** 1989 Jul;23(7):753-63

Tissue reaction to intraperitoneal polymer implants: species difference and effects of corticoid and doxorubicin. Christenson L, et al. **J Biomed Mater Res** 1989 Jul; 23(7):705-18

IR spectral changes of bovine serum albumin upon surface adsorption. Lenk TJ, et al. **J Biomed Mater Res** 1989 Jun; 23(6):549-69

Creep studies of multiphase acrylic systems. Oysaed H, et al. **J Biomed Mater Res** 1989 Jul;23(7):719-33

Collagen organization in mandrel-grown vascular grafts. Ramshaw JA, et al. **J Biomed Mater Res** 1989 Jun; 23(6):649-60

Human erythrocyte adhesion and spreading on protein-coated polymer surfaces. Steinberg J, et al. **J Biomed Mater Res** 1989 Jun;23(6):591-610

Glass beads load macromolecules into living cells. McNeil PL, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):669-78

Evaluation of advanced silica packings for the separation of biopolymers by high-performance liquid chromatography. VI. Design, chromatographic performance and application of non-porous silica-based anion exchangers. Jilge G, et al. **J Chromatogr** 1989 Aug 4;476:37-48

Brownian dynamics simulation of protein association. Northrup SH, et al. **J Comput Aided Mol Des** 1988 Jan; 1(4):291-311

Computer simulation of biological interactions and reactivity. Wendoloski JJ, et al. **J Comput Aided Mol Des** 1988 Jan; 1(4):313-22

First and second moments and the mean Hamming distance in a stochastic replication-mutation model for biological macromolecules. Swetina J. **J Math Biol** 1989;27(4):463-83

Introduction of macromolecules into bovine adrenal medullary chromaffin cells and rat pheochromocytoma cells (PC12) by permeabilization with streptolysin O: inhibitory effect of tetanus toxin on catecholamine secretion. Ahnert-Hilger G, et al. **J Neurochem** 1989 Jun; 52(6):1751-8

Adsorption of inorganic and organic ions to polycarbophil as a means of sustained-release dosage formulation. See NA, et al. **Pharm Res** 1987 Jun;4(3):244-7

Molecular interactions and aggregation involving amino

acids and peptides and their role in chemical evolution. Vijayan M. **Prog Biophys Mol Biol** 1988;52(2):71–99 (90 ref.)

Quantum mechanical SCF/CI studies as probes of macromolecular structure: methodological aspects of spectral comparisons. Petke JD, et al. **Prog Clin Biol Res** 1989;289:373–83

The design of a biochip: a self-assembling molecular-scale memory device. Robinson BH, et al. **Protein Eng** 1987 Aug–Sep;1(4):295–300

[Periodic electric field as a possible switch of biopolymer conformation] Vidybida AK. **Biofizika** 1989 Mar–Apr; 34(2):205–9 (Eng. Abstr.) (Rus)

ANALYSIS

An immunological assessment of lysosomal enzymes and other macromolecules sulfated during vegetative growth of Dictyostelium discoideum. Davis SJ, et al. **J Cell Biochem** 1988 Oct;38(2):113–6

Application of correlation chromatography to the investigation of biopolymers in wines. Shatirishvili IS. **J Chromatogr** 1989 May 19;469:420–3

IMMUNOLOGY

Monoclonal autoantibodies reacting with multiple structurally related and unrelated macromolecules. Rubin RL, et al. **Int Rev Immunol** 1988 Mar;3(1–2):71–95 (25 ref.)

The immunogenicity of soluble haptenated polymers is determined by molecular mass and hapten valence. Dintzis RZ, et al. **J Immunol** 1989 Aug 15;143(4):1239–44

METABOLISM

Energetics of cell–cell and cell–biopolymer interactions. van Oss CJ. **Cell Biophys** 1989 Feb;14(1):1–16

[Interaction of immunoglobulins with charged biopolymers: significance in the regulation of humoral immunity] Poverennyĭ AM, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):153–64 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

On the time-dependent diffusion of macromolecules through transient open junctions and their subendothelial spread. I. Short-time model for cleft exit region. Weinbaum S, et al. **J Theor Biol** 1988 Nov 8;135(1):1–30

PHYSIOLOGY

Temperature and macromolecular structure and function. Pain RH. **Symp Soc Exp Biol** 1987;41:21–33 (39 ref.)

MACROPHAGE ACTIVATION

Activation of macrophages by lymphokines from specifically sensitized lymphocytes with Yersinia pseudotuberculosis. Neychev H, et al. **Acta Microbiol Bulg** 1988;22:22–7

Lymph node macrophage heterogeneity: a subpopulation fails to express activation phenotype. Chao D, et al. **Adv Exp Med Biol** 1988;237:771–6

Regulation of macrophage effector function by B cell stimulatory factor-1 (BSF-1). Crawford RM, et al. **Adv Exp Med Biol** 1988;239:223–9

Induction of the expression of an FcR for monomeric rat IgG2b on rat peritoneal macrophages. Denham S, et al. **Adv Exp Med Biol** 1988;237:777–81

Fusion of lysosomes with phagosomes containing Histoplasma capsulatum: use of fluoresceinated dextran. Eissenberg LG, et al. **Adv Exp Med Biol** 1988;239:53–61 (31 ref.)

Activation of mononuclear phagocyte functions by structurally different bacterial endotoxins. Johne B, et al. **Adv Exp Med Biol** 1988;237:783–7

The respiratory burst in activated macrophages: studies of its molecular basis and evidence for downregulation in chronic infection. Johnston RB Jr, et al. **Adv Exp Med Biol** 1988;239:63–72 (22 ref.)

Human non-interferon macrophage activating factor: biological and biochemical characterization. Lee JC, et al. **Adv Exp Med Biol** 1988;239:217–21

Macrophage activation in the acquired immunodeficiency syndrome. Murray HW. **Adv Exp Med Biol** 1988; 239:297–307 (28 ref.)

Lymphokine regulation of macrophage effector activities. Nacy CA, et al. **Adv Exp Med Biol** 1988;239:1–11 (12 ref.)

Identification and characterization of a non-interferon antileishmanial macrophage activating factor (antileishmanial MAF). Van Niel A, et al. **Adv Exp Med Biol** 1988;239:231–7

Interaction of Legionella pneumophila with peritoneal macrophages from various mouse strains. Yamamoto Y, et al. **Adv Exp Med Biol** 1988;239:89–98

Leukotrienes and macrophage activation: augmented cytotoxic activity and enhanced interleukin 1, tumor necrosis factor and hydrogen peroxide production. Gagnon L, et al. **Agents Actions** 1989 Jan;26(1–2):141–7

Activation of murine peritoneal macrophages by Salmonella typhimurium. Langermans JA, et al. **Agents Actions** 1989 Jan;26(1–2):208–10

Defective intracellular killing of micro-organisms by murine alveolar macrophages. Nibbering PH, et al. **Agents Actions** 1989 Jan;26(1–2):206–7

Molecular events in the activation of murine macrophages. Uhing RJ, et al. **Agents Actions** 1989 Jan;26(1–2):9–14 (32 ref.)

Endotoxin-induced neutrophilic alveolitis and macrophage chemotaxin production in sheep. Duke SS, et al. **Am J Med Sci** 1988 Dec;296(6):381–6

Fibrovascular proliferation and retinal detachment after intravitreal injection of activated macrophages in the rabbit eye. Hui YN, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):176–84

Macrophages activated by fibrin increase albumin permeability across pulmonary artery endothelial monolayers. Ferro TJ, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):940–5

Cellular influx and activation increase macrophage cytotoxicity and interleukin-1 elaboration during pulmonary inflammation in rats. Fuchs HJ, et al. **Am Rev Respir Dis** 1988 Sep;138(3):572–7

RES-macrophage stimulation and liver tumour growth in rats; evaluation with dynamic liver RES scintigraphy. Holmberg SB, et al. **Anticancer Res** 1988 Nov–Dec; 8(6):1291–5

Some remarks on application of macrophages in tumor therapy. **Kos FJ. Arch Geschwulstforsch** 1988;58(6):387–93 (46 ref.)

Nucleoside transport in activated macrophages. Busolo F, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):354–61

Selective inhibition of free arachidonic acid production in activated alveolar macrophages by calmodulin antagonists. Nakagawa Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):947–53

Modifications of glycosylation patterns in macrophages upon activation. Afroun S, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):137–47

Recognition and destruction of neoplastic cells by activated macrophages: discrimination of altered self. Fidler IJ, et al. **Biochim Biophys Acta** 1988 Nov 15;948(2):151–73 (190 ref.)

The effect of macrophage stimulation on the uptake of acetylated low-density lipoproteins. Leake DS, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):196–200

Role of activated macrophages in the immunopathology of tuberculosis. Rook GA. **Br Med Bull** 1988 Jul;44(3):611–23 (51 ref.)

Visceral leishmaniasis: a disease associated with inability of lymphocytes to activate macrophages to kill leishmania. Carvalho EM, et al. **Braz J Med Biol Res** 1988;21(1):85–92

Role of culture supernatant of cytotoxic/cytostatic macrophages in activation of murine resident peritoneal macrophages. Hashimoto S, et al. **Cancer Immunol Immunother** 1989;28(4):253–9

Induction of tumoricidal macrophages from bone marrow cells of normal mice or mice bearing a colony-stimulating-factor-producing tumor. Hosoe S, et al. **Cancer Immunol Immunother** 1989;28(2):116–22

Implication of activation of intraperitoneal macrophages with bio-degradable microspheres. Okawa T, et al. **Cell Biol Int Rep** 1989 Jun;13(6):547–53

Cytokine activation of antibacterial activity in human pulmonary macrophages: comparison of recombinant interferon-gamma and granulocyte-macrophage colony-stimulating factor. Jensen WA, et al. **Cell Immunol** 1988 Dec;117(2):369–77

Carborundum pneumoconiosis. Fibers in the mineral activate macrophages to produce fibroblast growth factors and sustain the chronic inflammatory disease. Bégin R, et al. **Chest** 1989 Apr;95(4):842–9

Unconjugated pteridines in bronchoalveolar lavage as indicators of alveolar macrophage activation. Dhondt JL, et al. **Chest** 1989 Feb;95(2):348–51

Pleiotropic effects of the Bcg gene: III. Respiratory burst in Bcg-congenic macrophages. Denis M, et al. **Clin Exp Immunol** 1988 Sep;73(3):370–5

The activated macrophage and granulomatous inflammation. Adams DO, et al. **Curr Top Pathol** 1989;79:151–67 (88 ref.)

Respective rôle of lymphokines and monokines in macrophage activation. Virelizier JL, et al. **Dev Biol Stand** 1988;69:115–9

Activation of trout macrophages and production of CRP after immunization with Vibrio anguillarum. Kodama H, et al. **Dev Comp Immunol** 1989 Spring;13(2):123–32

Suppression of concanavalin A-induced responses in splenic lymphocytes by activated macrophages in the non-obese diabetic mouse. Yokono K, et al. **Diabetologia** 1989 Jan; 32(1):67–73

Macrophage activation by interferon-gamma from host-protective T cells is inhibited by interleukin (IL)3 and IL4 produced by disease-promoting T cells in leishmaniasis. Liew FY, et al. **Eur J Immunol** 1989 Jul; 19(7):1227–32

Secretion of fibronectin by mineral dust-derived alveolar macrophages and activated peritoneal macrophages. Davies R, et al. **Exp Lung Res** 1989 Mar;15(2):285–97

The effect of activation of macrophages on the advancement of experimental lung emphysema. Chyczewski LS, et al. **Exp Pathol** 1988;34(1):41–50

Phosphoinositide breakdown and superoxide anion release in formyl-peptide-stimulated human alveolar macrophages. Comparison between quiescent and activated cells. Damon M, et al. **FEBS Lett** 1988 Nov 7;239(2):169–73

Effect of endotoxin on release of reactive oxygen intermediates by rat hepatic macrophages. Arthur MJ, et al. **Gastroenterology** 1988 Dec;95(6):1588–94

Activation of macrophages to express cytocidal activity correlates with inhibition of their responsiveness to macrophage colony-stimulating factor (CSF-1): involvement of a pertussis toxin-sensitive reaction. Hume DA, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):243–9

Comparisons between helper and suppressor T-cell induction. Ishikura H, et al. **Immunol Rev** 1988 Dec; 106:93–114 (79 ref.)

Molecular interactions in macrophage activation. Adams DO. **Immunol Today** 1989 Feb;10(2):33–5 (1 ref.)

Tumour necrosis factor production by IL-2-activated macrophages in vitro and in vivo. Economou JS, et al. **Immunology** 1989 Aug;67(4):514–9

The production of a macrophage-activating factor from rainbow trout Salmo gairdneri leucocytes. Graham S, et al. **Immunology** 1988 Oct;65(2):293–7

The expression of functional IL-2 receptor on activated macrophages depends on the stimulus applied. Valitutti S, et al. **Immunology** 1989 May;67(1):44–50

Intracellular multiplication of Paracoccidioides brasiliensis in macrophages: killing and restriction of multiplication by activated macrophages. Brummer E, et al. **Infect Immun** 1989 Aug;57(8):2289–94

Cytokine activation of murine macrophages for in vitro killing of Entamoeba histolytica trophozoites. Denis M, et al. **Infect Immun** 1989 Jun;57(6):1750–6

Correlation between macrophage activation and bactericidal function and Mycobacterium leprae antigen presentation in macrophages of leprosy patients and normal individuals. Desai SD, et al. **Infect Immun** 1989 Apr;57(4):1311–7

Inhibition of endotoxin-induced activation of human monocytes by human lipoproteins. Flegel WA, et al. **Infect Immun** 1989 Jul;57(7):2237–45

Activation of macrophages in an experimental rat model of arthritis induced by Erysipelothrix rhusiopathiae infection. Renz H, et al. **Infect Immun** 1989 Oct;57(10):3172–80

Effects of Histoplasma capsulatum on murine macrophage functions: inhibition of macrophage priming, oxidative burst, and antifungal activities. Wolf JE, et al. **Infect Immun** 1989 Feb;57(2):513–9

Macrophage cell lines P388D1 and IC-21 stimulated with gamma interferon fail to inhibit the intracellular growth of Histoplasma capsulatum. Wu-Hsieh B, et al. **Infect Immun** 1989 Sep;57(9):2903–5

Exposure to microorganisms, airway inflammatory changes and immune reactions in asymptomatic dairy farmers. Bronchoalveolar lavage evidence of macrophage activation and permeability changes in the airways. Larsson K, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):127–33

Granulocyte/macrophage colony stimulating factor. A potent activation signal for mature macrophages and monocytes. Morrissey PJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):40–5

Gamma-interferon activation of macrophages for killing of Paracoccidioides brasiliensis and evidence for nonoxidative mechanisms. Brummer E, et al. **Int J Immunopharmacol** 1988;10(8):945–52

Melanophages in inflammatory skin disease demonstrate the surface phenotype of OKM5+ antigen-presenting cells and activated macrophages. Weiss JS, et al. **J Am Acad Dermatol** 1988 Oct;19(4):633–41

Reaction of macrophages activated by agents in vivo to quartz dust in vitro. Kaw JL, et al. **J Appl Toxicol** 1988 Jun;8(3):211–6

Characterization and partial purification of a non-interferon macrophage activating factor produced by human leukemic T cell line. Kutsukake H, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):661–6

Modulation of the expression of chondroitin sulfate proteoglycan in stimulated human monocytes. Uhlin-Hansen L, et al. **J Biol Chem** 1989 Sep 5; 264(25):14916–22

Plasma protein adsorbed biomedical polymers: activation of human monocytes and induction of interleukin 1. Bonfield TL, et al. **J Biomed Mater Res** 1989 Jun;23(6):535–48

Macrophage spreading disparity: alveolar vs peritoneal. Bechard DE, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):67–71

Macrophage activation enhances the human chorionic gonadotrophin-induced disruption of spermatogenesis in the rat. Kerr JB, et al. **J Endocrinol** 1989 May;121(2):285–92

Low density lipoprotein metabolism by human macrophages activated with low density lipoprotein immune complexes. A possible mechanism of foam cell formation. Griffith RL, et al. **J Exp Med** 1988 Sep 1;168(3):1041–59

Molecular cloning of a murine fibronectin receptor and its expression during inflammation. Expression of VLA-5 is increased in activated peritoneal macrophages in a manner discordant from major histocompatibility complex class II. Holers VM, et al. **J Exp Med** 1989 May 1;169(5):1589–605

Activated murine macrophages secrete a metabolite of arginine with the bioactivity of endothelium-derived relaxing factor and the chemical reactivity of nitric oxide. Stuehr DJ, et al. **J Exp Med** 1989 Mar 1;169(3):1011–20

Augmented expression of a myeloid-specific protein tyrosine kinase gene (hck) after macrophage activation. Ziegler SF, et al. **J Exp Med** 1988 Nov 1;168(5):1801–10

Tumor necrosis factor is involved in the T cell-independent pathway of macrophage activation in scid mice. Bancroft GJ, et al. **J Immunol** 1989 Jul 1;143(1):127–30

Role of tumor necrosis factor-alpha in E1A

oncogene-induced susceptibility of neoplastic cells to lysis by natural killer cells and activated macrophages. Cook JL, et al. **J Immunol** 1989 Jun 15;142(12):4527-34

Fungicidal activity of IFN-gamma-activated macrophages. Extracellular killing of Cryptococcus neoformans. Flesch IE, et al. **J Immunol** 1989 May 1;142(9):3219-24

Evidence against expression of an endogenous murine leukemia virus causing cellular resistance to lysis by activated macrophages. Gooding LR, et al. **J Immunol** 1989 Jan 1;142(1):257-62

Macrophage activation by granulocyte/macrophage colony-stimulating factor. Priming for enhanced release of tumor necrosis factor-alpha and prostaglandin E2. Heidenreich S, et al. **J Immunol** 1989 Aug 15; 143(4):1198-205

Production of tumor necrosis factor by rIFN-gamma-primed C3H/HeJ (Lpsd) macrophages requires the presence of lipid A-associated proteins. Hogan MM, et al. **J Immunol** 1988 Dec 15;141(12):4196-202

Products of lipopolysaccharide-activated macrophages (tumor necrosis factor-alpha, transforming growth factor-beta) but not lipopolysaccharide modify DNA synthesis by rat trophoblast cells exhibiting the 80-kDa lipopolysaccharide-binding protein. Hunt JS, et al. **J Immunol** 1989 Sep 1;143(5):1606-13

Mechanism of human monocyte activation via the 40-kDa Fc receptor for IgG. MacIntyre EA, et al. **J Immunol** 1988 Dec 15;141(12):4333-43

Activation of human monocytes occurs on cross-linking monocytic antigens to an Fc receptor. MacIntyre EA, et al. **J Immunol** 1989 Apr 1;142(7):2377-83

Macrophage activation-associated proteins. Characterization of stimuli and conditions needed for expression of proteins 47b, 71/73, and 120. MacKay RJ, et al. **J Immunol** 1989 Mar 1;142(5):1639-45

Lung-phase immunity to Schistosoma mansoni. Flow cytometric analysis of macrophage activation states in vaccinated mice. Menson EN, et al. **J Immunol** 1989 Oct 1;143(7):2342-8

Efficient natural defense mechanisms against Listeria monocytogenes in T and B cell-deficient allogeneic bone marrow radiation chimeras. Preactivated macrophages are the main effector cells in an early phase after bone marrow transfer. Roesler J, et al. **J Immunol** 1989 Sep 1; 143(5):1710-5

Antigen-specific activation of effector macrophages by IFN-gamma producing (TH1) T cell clones. Failure of IL-4-producing (TH2) T cell clones to activate effector function in macrophages. Stout RD, et al. **J Immunol** 1989 Feb 1;142(3):760-5

Identification and characterization of a hamster monoclonal antibody anti-2.28 directed against a 70-kilodalton activation antigen on human monocytes. Sung SS, et al. **J Immunol** 1989 Mar 15;142(6):1903-8

Macrophage activation for cytolysis of virally infected target cells. LeBlanc PA. **J Leukoc Biol** 1989 Apr;45(4):345-52

Candidacidal mechanisms of peritoneal macrophages activated with lymphokines or gamma-interferon. Brummer E, et al. **J Med Microbiol** 1989 Mar;28(3):173-81

Antibody-independent protection against Pseudomonas aeruginosa infection in mice after treatment with a homologous strain vaccine. Fujimura T, et al. **J Med Microbiol** 1989 Feb;28(2):101-8

Immunomodulation by a low-virulence, agerminative variant of Candida albicans. Further evidence for macrophage activation as one of the effector mechanisms of nonspecific anti-infectious protection. Bistoni F, et al. **J Med Vet Mycol** 1988;26(5):285-99

Macrophage activation decreases macrophage prostaglandin E2 release in experimental trauma. Pretus HA, et al. **J Trauma** 1989 Aug;29(8):1152-6; discussion 1156-7

Regulation of insulin and interleukin-1 release after Propionibacterium acnes-induced macrophage activation in mice. Bautista AP, et al. **Lab Invest** 1989 Mar; 60(3):447-54

Role of pulmonary alveolar macrophage activation in acute lung injury after burns and smoke inhalation. Clark CJ, et al. **Lancet** 1988 Oct 15;2(8616):872-4

Activation of mouse peritoneal macrophages by mannophosphoinositides of mycobacteria. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1989;178(1):21-7

Independence of macrophage activation and expression of the alleles of the Ity (immunity to typhimurium) locus. Briles DE, et al. **Microb Pathog** 1986 Feb;1(1):33-41

Activation of macrophages by Entamoeba histolytica extracts in mice. Ghadirian E, et al. **Microb Pathog** 1988 Jul; 5(1):63-70

Enhancement of host resistance against Listeria infection by Lactobacillus casei: activation of liver macrophages and peritoneal macrophages by Lactobacillus casei. Sato K, et al. **Microbiol Immunol** 1988;32(7):689-98

Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251-60

Effect of Lactobacillus casei: formation of interferon and macrophage activating factor in mice in vivo. Kuwabara M, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):665-72

Chemiluminescence of rainbow trout (Salmo gairdneri) phagocytes and factors affecting their response. Yamada F, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1092-8

Macrophage activation in vitro by lymphocytes from Leishmania major infected healer and non-healer mice. Pham TV, et al. **Parasite Immunol** 1988 Jul;10(4):353-68

Susceptible mice present higher macrophage activation than resistant mice during infections with myotropic strains of Trypanosoma cruzi. Russo M, et al. **Parasite Immunol** 1989 Jul;11(4):385-95

Activation of alveolar macrophages from children with the acquired immunodeficiency syndrome-related complex. Clement A, et al. **Pediatr Pulmonol** 1988;5(4):192-7

Membrane activation in immunologically relevant cells. **Prog Allergy** 1988;42:1-312

Receptor-mediated signal transduction in mononuclear phagocytes. Riches DW, et al. **Prog Allergy** 1988;42:65-122 (257 ref.)

Induction of non-specific immunosuppression in mice by mycobacterial infections and its relationship to macrophage activation. Appelberg R, et al. **Scand J Immunol** 1989 Aug; 30(2):165-74

Bystander demyelination through antibody induced macrophage activation in canine distemper virus infection. Griot C, et al. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):39-41

Involvement of Mac-1 antigen in tumor cell killing by macrophages. Okuda T, et al. **Tohoku J Exp Med** 1988 Jun;155(2):211-2

Gene regulation in macrophage development and activation. Adams DO, et al. **Year Immunol** 1989;4:159-80 (96 ref.)

[The effects of cigarette smoking on the activity of pulmonary macrophage] Du BY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):235-6, 256 (Eng. Abstr.) **(Chi)**

[Observation on ultrastructural enzyme cytochemistry of activated macrophages] Guo SY. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):210-2 (Eng. Abstr.) **(Chi)**

[How are macrophages activated? Current viewpoints on an old problem] van Furth R. **Verh K Acad Geneeskd Belg** 1988;50(5):429-43 (Eng. Abstr.) **(Dut)**

[Some recent facts on the function of macrophages and their modification] Kolb E. **Z Gesamte Inn Med** 1989 Feb 15; 44(4):101-5 (33 ref.) (Eng. Abstr.) **(Ger)**

[A study on the mechanism of activation of peritoneal exudate macrophages from MRL/MpJ-lpr/lpr mice] Hashimoto Y. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):781-90 (Eng. Abstr.) **(Jpn)**

[The characteristics and origin of resident macrophages] Imai Y, et al. **Nippon Rinsho** 1989 Mar;47(3):506-12 **(Jpn)**

[Immunopotentiating substances in Lentinus edodes mycelial extract (LEM)—activation of macrophage and proliferation of bone marrow cell] Suzuki H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1430 **(Jpn)**

[Macrophage transformation of mononuclear cells following primary and secondary experimental immunization with measles vaccine] Zakharova TR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):72-4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of interferons on the activation of murine peritoneal macrophages to inhibit the growth of Listeria monocytogenes. Badger AM, et al. **Adv Exp Med Biol** 1988; 239:201-15

Indomethacin stimulation of macrophage cytostasis against MOPC-315 tumor cells is enhanced by endogenous metabolites of lipoxygenase and counteracted by prostaglandin E2. Bonta IL, et al. **Agents Actions** 1989 Jan; 26(1-2):167-9

Interferon-gamma does not enhance the bactericidal activity of murine macrophages. van Furth R, et al. **Agents Actions** 1989 Jan;26(1-2):158-9

Endogenous lipoxygenase metabolites mediate A23187 induced macrophage cytostasis towards P815 tumor cells in vitro. van Hilten JA, et al. **Agents Actions** 1989 Jan; 26(1-2):170-2

Enhanced phagocytosis, killing, and serum sensitivity of Escherichia coli and Staphylococcus aureus treated with sub-MICs of imipenem. Adinolfi LE, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1012-8

Modulation of growth-stimulating and antitumor activity of macrophages by BCG and cyclophosphamide. Okulov VB, et al. **APMIS Suppl** 1988;2:130-5

In vivo activation of murine peritoneal macrophages by intraperitoneal administration of cisplatin. Sodhi A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):303-14

Study on pinocytosis and antigen presentation by murine peritoneal macrophages to T cells in vitro after cisplatin treatment. Sodhi A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):315-23

Synergistic generation of tumoricidal macrophages by muroctasin and interferon-gamma. Nagao S, et al. **Arzneimittelforschung** 1988 Jul;38(7A):999-1002 (68 ref.)

Conditions controlling tumor cytotoxicity of rat liver macrophages mediated by liposomal muramyl dipeptide. Daemen T, et al. **Biochim Biophys Acta** 1989 Apr 25; 991(1):145-51

Induction of tumor cytotoxicity in murine bone marrow-derived macrophages by two synthetic lipopeptide analogues. Hoffmann P, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):575-82

Activation of macrophages by neuropeptides. Hartung HP. **Brain Behav Immun** 1988 Dec;2(4):275-81 (38 ref.)

Effect of anticancer drugs on macrophage-mediated antibody-dependent cytotoxicity and secretion of reactive oxygen intermediates. Gudewicz PW. **Cancer Lett** 1988 Sep-Oct;42(1-2):67-72

Role of tumor necrosis factor and interleukin 1 in gamma-interferon-promoted activation of mouse tumoricidal macrophages. Hori K, et al. **Cancer Res** 1989 May 15;49(10):2606-14

Activation of mouse macrophages by alkylglycerols, inflammation products of cancerous tissues. Yamamoto N, et al. **Cancer Res** 1988 Nov 1;48(21):6044-9

Differential induction of activation markers in macrophage cell lines by interferon-gamma. Lambert LE, et al. **Cell Immunol** 1989 May;120(2):401-18

Alteration of in vitro murine peritoneal macrophage function by dietary enrichment with eicosapentaenoic and docosahexaenoic acids in menhaden fish oil. Somers SD, et al. **Cell Immunol** 1989 Oct 1;123(1):201-11

Regulation of murine macrophage function by IL-4. I. Activation of macrophages by a T-T cell hybridoma is due to IL-4. Somers SD, et al. **Cell Immunol** 1989 Aug; 122(1):178-87

In vivo effects of interferon-gamma and indomethacin on murine alveolar macrophage activity. Stevens MG, et al. **Cell Immunol** 1989 Oct 1;123(1):83-95

Cardiac dysfunction caused by factors released from endotoxin-activated macrophages. Salari H, et al. **Circ Shock** 1989 Mar;27(3):263-72

Cloricromene improves survival rate and peritoneal macrophage function in splanchnic artery occlusion shock in rats. Sturniolo R, et al. **Circ Shock** 1989 Jul;28(3):267-77

Nedocromil sodium inhibition of IgE-mediated activation of human mononuclear phagocytes and platelets from asthmatics. Joseph M, et al. **Drugs** 1989;37 Suppl 1:32-6; discussion 69-77

Toxic effects of methyl methanesulfonate (MMS) on activated macrophages from chickens. Qureshi MA, et al. **Environ Mol Mutagen** 1989;13(3):253-62

Murine macrophage activation with resorcyclic acid lactones (RALs): comparison with diethylstilbestrol and 17 beta-estradiol. Edwards CK 3d, et al. **Immunopharmacology** 1989 Mar-Apr;17(2):107-18

Effect of cisplatin on release of lysozyme, plasminogen activator, leucine aminopeptidase and beta-hexosaminidase by murine peritoneal macrophages in vitro. Gupta P, et al. **Indian J Exp Biol** 1988 Sep;26(9):679-84

Capacity of recombinant gamma interferon to activate macrophages for Salmonella-killing activity. Kagaya K, et al. **Infect Immun** 1989 Feb;57(2):609-15

Macrophage activation by an ornithine-containing lipid or a serine-containing lipid. Kawai Y, et al. **Infect Immun** 1989 Jul;57(7):2086-91

Macrophage activation and host augmentation against Sendai or herpes simplex virus (HSV) infections with synthetic polypeptides in mice. Iida J, et al. **Int J Immunopharmacol** 1989;11(3):249-58

Activation of murine peritoneal macrophages by intraperitoneal administration of a traditional Chinese herbal medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to). Kumazawa Y, et al. **Int J Immunopharmacol** 1988;10(4):395-403

Activation of murine peritoneal macrophages by saikosaponin a, saikosaponin d and saikogenin d. Kumazawa Y, et al. **Int J Immunopharmacol** 1989;11(1):21-8

Comparative study of various immunomodulators for macrophage and natural killer cell activation and antiviral efficacy against exotic RNA viruses. Pinto AJ, et al. **Int J Immunopharmacol** 1988;10(3):197-209

Potent in situ activation of murine lung macrophages and therapy of melanoma metastases by systemic administration of liposomes containing muramyltripeptide phosphatidylethanolamine and interferon gamma. Fidler IJ, et al. **Invasion Metastasis** 1989;9(2):75-88

Human monocyte/macrophage activation and interleukin 1 generation by biomedical polymers. Miller KM, et al. **J Biomed Mater Res** 1988 Aug;22(8):713-31

Effects of retinoic acid on the activation and fusion of mouse alveolar macrophages induced by 1 alpha,25-dihydroxyvitamin D3. Miyaura C, et al. **J Bone Miner Res** 1986 Aug;1(4):359-68

Inhibition of macrophage activation by isoquinolinesulfonamides, phenothiazines, and a napthalenesulfonamide. Holian A, et al. **J Cell Physiol** 1988 Oct;137(1):45-54

Interferon gamma-activated human monocytes downregulate transferrin receptors and inhibit the intracellular multiplication of Legionella pneumophila by limiting the availability of iron. Byrd TF, et al. **J Clin Invest** 1989 May; 83(5):1457-65

Regulation of macrophage functions by L-arginine. Albina JE, et al. **J Exp Med** 1989 Mar 1;169(3):1021-9

Differential effects of liposome-incorporation on liver macrophage activating potencies of rough lipopolysaccharide, lipid A, and muramyl dipeptide. Differences in susceptibility to lysosomal enzymes. Daemen T, et al. **J Immunol** 1989 Apr 1;142(7):2469-74

Release of reactive nitrogen intermediates and reactive oxygen intermediates from mouse peritoneal macrophages. Comparison of activating cytokines and evidence for independent production. Ding AH, et al. **J Immunol** 1988 Oct 1;141(7):2407-12

Granulocyte-macrophage colony-stimulating factor activates macrophages derived from bone marrow cultures

to synthesis of MHC class II molecules and to augmented antigen presentation function. Fischer HG, et al. **J Immunol** 1988 Dec 1;141(11):3882–8

Peptides encoded by the calcitonin gene inhibit macrophage function. Nong YH, et al. **J Immunol** 1989 Jul 1;143(1):45–9

Endotoxin suppresses the generation of O2– and H2O2 by "resting" and lymphokine–activated human blood–derived macrophages. Rellstab P, et al. **J Immunol** 1989 Apr 15; 142(8):2813–20

Comparison of transforming growth factor–beta and a macrophage– deactivating polypeptide from tumor cells. Differences in antigenicity and mechanism of action. Tsunawaki S, et al. **J Immunol** 1989 May 15;142(10):3462–8

Lead inhibits intracellular killing of Leishmania parasites and extracellular cytolysis of target cells by macrophages exposed to macrophage activating factor. Mauël J, et al. **J Leukoc Biol** 1989 May;45(5):401–9

Correlation between the synergistic effect of liposomes and endotoxins on the activation of macrophage tumoricidal activity and the effect of liposomes on the rough endoplasmic reticulum of macrophages. Jeannin JF, et al. **J Membr Biol** 1988 Sep;104(2):107–18

Macrophage activation by the polysaccharide arabinogalactan isolated from plant cell cultures of Echinacea purpurea. Luettig B, et al. **J Natl Cancer Inst** 1989 May 3;81(9):669–75

Delta–9–tetrahydrocannabinol inhibits macrophage protein expression in response to bacterial immunomodulators. Cabral GA, et al. **J Toxicol Environ Health** 1989; 26(2):175–82

Lysis of human leukemic cells by monocyte–derived macrophages activated with interferon–gamma and interleukin–2. Kakita T, et al. **Jpn J Cancer Res** 1989 Jan; 80(1):59–64

Effect of C–reactive protein on peritoneal macrophages. II. Human C–reactive protein activates peritoneal macrophages of guinea pigs to release superoxide anion in vitro. Miyagawa N, et al. **Microbiol Immunol** 1988; 32(7):721–31

Protein precoating of polylactide microspheres containing a lipophilic immunopotentiator for enhancement of macrophage phagocytosis and activation. Tabata Y, et al. **Pharm Res** 1989 Apr;6(4):296–301

Peroxidases enhance macrophage–mediated cytotoxicity via induction of tumor necrosis factor. Lefkowitz DL, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):144–9

The effect of cyclosporine on macrophage oxidative burst potential during graft–versus–host reactions in mice. Goldin H, et al. **Transplantation** 1989 Mar;47(3):548–52

Prophylactic activity against Sendai virus infection and macrophage activation with lipophilic derivatives of N–acetylglucosaminylmuramyl tri– or tetrapeptides. Iida J, et al. **Vaccine** 1989 Jun;7(3):225–8

[Macrophage activation via the polysaccharides of Rhodotorula glutinis] Neichev Kh, et al. **Acta Microbiol Bulg** 1988;23:78–83 (Eng. Abstr.) **(Bul)**

[Anti–inflammatory and immunologic actions of buyang huanwu tang] Duan JY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):164–6, 134 (Eng. Abstr.) **(Chi)**

[Immunopharmacologic study in mice of 2 beta–1, 3, beta–1, 6 polysaccharides (scleroglucan and PSAT) on the activation of macrophages and T lymphocytes] Bousquet M, et al. **Ann Rech Vet** 1989;20(2):165–73 (Eng. Abstr.) **(Fre)**

[Activation of macrophages with Hochu–ekkito] Kataoka T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1490–3 (Eng. Abstr.) **(Jpn)**

[Effect of astasilid on the stimulation of peritoneal macrophages] Makarenko IG, et al. **Antibiot Khimioter** 1988 Nov;33(11):833–5 (Eng. Abstr.) **(Rus)**

[Differences in the receptor apparatus of resident and meat–peptone broth–stimulated macrophage populations detectable under the action of salmozan] Zaltseva LG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):214–7 (Eng. Abstr.) **(Rus)**

[Use of fluorescein diacetate for research on macrophage activation] Gamaleĭ IA, et al. **Tsitologiia** 1988 Dec; 30(12):1426–31 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effects of bone marrow ablation on compartmental prostaglandin synthesis by mononuclear phagocytes. Volkman A, et al. **Adv Exp Med Biol** 1988;239:39–44 (19 ref.)

MACROPHAGE MIGRATION INHIBITORY FACTORS

ANALYSIS

Immuno–competent cells in the murine epididymis. Nashan D, et al. **Int J Androl** 1989 Feb;12(1):85–94

BLOOD

Circulating monocyte migration inhibitory factor in serum of Graves' ophthalmopathy patients: a parameter for disease activity? van der Gaag R, et al. **Clin Exp Immunol** 1989 Feb;75(2):275–9

IMMUNOLOGY

Sequential study of macrophage migration inhibition factor in renal cell carcinoma patients. Gillon G, et al. **Eur Urol** 1988;14(5):391–4

ISOLATION & PURIFICATION

[Identification of Candida albicans products inhibiting macrophage activity] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1988;40(2):98–102 (Eng. Abstr.) **(Pol)**

METABOLISM

Immunohistochemical demonstration of migration inhibitory factor in different types of urticaria. Czarnetzki BM, et al. **J Invest Dermatol** 1989 Oct;93(4):471–4

PHARMACOLOGY

Nonimmune–mediated phagocytosis by "premedullary" lung macrophages: effects of concanavalin A, tuftsin, and macrophage–inhibitory peptide. Sorokin SP, et al. **Anat Rec** 1989 Jan;223(1):55–61

L–fucose blocks MIF/MAF priming of rabbit alveolar macrophages for a PMA–induced oxidative response. Umehara K, et al. **Cell Immunol** 1989 Mar;119(1):67–72

Oxidative responses of rabbit alveolar macrophages: comparative priming activities of MIF/MAF, sera, and serum components. Hayakawa H, et al. **J Leukoc Biol** 1989 Mar;45(3):231–8

Differential inhibitory effects of MIF–1, Tyr–MIF–1, naloxone and beta–funaltrexamine on body rotation–induced analgesia in the meadow vole, Microtus pennsylvanicus. Lipa SM, et al. **Peptides** 1989 May–Jun; 10(3):493–7

MIF–1 and Tyr–MIF–1 fail to alter benzodiazepine–induced hypothermia. Kastin AJ, et al. **Pharmacol Biochem Behav** 1989 May;33(1):261–3

PHYSIOLOGY

Inhibition of macrophage chemotaxis by supernatant fluid from malignant cell lines. Otu AA. **Afr J Med Med Sci** 1988 Dec;17(4):215–20

MACROPHAGE MIGRATION TEST see CELL MIGRATION INHIBITION

MACROPHAGES

see related

RETICULOENDOTHELIAL SYSTEM

Differential cell counting in fraction–collected milk from dairy cows. Ostensson K, et al. **Acta Vet Scand** 1988; 29(3–4):493–500

Interleukin–1–beta gene expression in human monocytes and alveolar macrophages from normal subjects and patients with sarcoidosis. Kern JA, et al. **Am Rev Respir Dis** 1988 May;137(5):1180–4

Interleukin–4 induces secretion of CSF for granulocytes and CSF for macrophages by peripheral blood monocytes. Wieser M, et al. **Blood** 1989 Apr;73(5):1105–8

Circulating colony–forming units of granulocytes and monocytes/macrophages in systemic lupus erythematosus. López–Karpovitch X, et al. **Clin Exp Immunol** 1989 Jul; 77(1):43–6

Characteristics of inflammatory cells in urethral smears from men with non–gonococcal urethritis. Shahmanesh M. **Genitourin Med** 1989 Jan;65(1):18–21

Macrophage subpopulations in lamina propria of normal and inflamed colon and terminal ileum. Mahida YR, et al. **Gut** 1989 Jun;30(6):826–34

Dendritic cells and scavenger macrophages in chronic inflammatory bowel disease. Seldenrijk CA, et al. **Gut** 1989 Apr;30(4):486–91

Behaviour of spherical and irregular (U,Pu)O2 particles after inhalation or intratracheal instillation in rat lung and during in vitro culture with bovine alveolar macrophages. Müller HL, et al. **Int J Radiat Biol** 1989 May;55(5):829–42

Human non–transformed monocyte–derived macrophage cell lines. Sechler JM, et al. **J Immunol Methods** 1989 May 12;119(2):277–85

A new method for concentrating viable alveolar macrophages from bronchoalveolar lavage specimens [letter] Watson DA, et al. **J Immunol Methods** 1988 Nov 25;115(1):149–50

Amelioration of chemotherapy–induced thrombocytopenia by GM–CSF: apparent dose and schedule dependency [letter] Edmonson JH, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1510–2

Relation between immunocytological features of bronchoalveolar lavage fluid and clinical indices in sarcoidosis. Ainslie GM, et al. **Thorax** 1989 Jun;44(6):501–9

Lung macrophages [editorial] Hammar SP. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):iii–v

Macrophages: current views on their differentiation, structure, and function. Papadimitriou JM, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):343–72 (191 ref.)

[Peripheral blood monocyte/macrophages among mononuclear cells and serum tumor necrosis factor in patients with Kawasaki disease] Matsubara T. **Arerugi** 1988 Jul;37(7):454–60 (Eng. Abstr.) **(Jpn)**

[Cytochemical and immunohistological markers of macrophages] Kamesaki H. **Nippon Rinsho** 1989 Mar; 47(3):560–3 **(Jpn)**

[An outline of proliferative disorders in the mononuclear phagocytic system—classification and diagnosis] Kawashima K. **Nippon Rinsho** 1989 Mar;47(3):571–6 **(Jpn)**

[Inherited storage disease associated mononuclear phagocytic system] Takami T, et al. **Nippon Rinsho** 1989 Mar; 47(3):664–8 **(Jpn)**

ANALYSIS

Soybean agglutinin for detection of macrophages in Whipple's disease: a possible aid in diagnosis. Borisch B, et al. **Acta Histochem Suppl (Jena)** 1988;36:235–40

A lectin–like receptor on rat macrophage membranes: colloidal gold probes for detection, localization and description of biological function. Kolb–Bachofen V, et al. **Acta Histochem Suppl (Jena)** 1988;36:153–7 (21 ref.)

Biochemical characterization of a tumor–associated vertebrate lectin, recognized by activated macrophages. Takacs BJ, et al. **Acta Histochem Suppl (Jena)** 1988; 36:217–25

Guinea pig alveolar macrophages possess beta–adrenergic receptors. van Esch B, et al. **Agents Actions** 1989 Jan; 26(1–2):123–4

Glucocorticoid receptors in alveolar macrophages: methodological aspects of the determination of the number of glucocorticoid receptors per cell. van Hal PT, et al. **Agents Actions** 1989 Jan;26(1–2):128–31

Immunohistochemical demonstration of cytoplasmic and membrane–associated tumor necrosis factor in murine macrophages. Chensue SW, et al. **Am J Pathol** 1988 Dec; 133(3):564–72

Identification and characterization of a homogeneous population of beta 2–adrenergic receptors on human alveolar macrophages. Liggett SB. **Am Rev Respir Dis** 1989 Feb;139(2):552–5

Expression of HLA class II genes in alveolar macrophages of patients with sarcoidosis. Spurzem JR, et al. **Am Rev Respir Dis** 1989 Jul;140(1):89–94

The measurement of cytochrome b559 in polymorphonuclear leukocytes and macrophages in the presence of hemoglobin or mitochondrial cytochromes. Ding AH, et al. **Anal Biochem** 1988 Nov 15;175(1):22–9

Multiple sclerosis: involvement of interferons in lesion pathogenesis. Traugott U, et al. **Ann Neurol** 1988 Aug; 24(2):243–51

Bronchoalveolar lavage in the cat: cytological findings. McCarthy GM, et al. **Can J Vet Res** 1989 Jul;53(3):259–63

Partial characterization of a low–molecular–weight, macrophage–derived inhibitor of DNA synthesis: a possible immunoregulatory molecule. Evans R, et al. **Cell Immunol** 1989 Mar;119(1):53–66

Quantification of macrophage cell surface molecules in rheumatoid arthritis. Hessian PA, et al. **Clin Exp Immunol** 1989 Jul;77(1):47–51

Distinct phenotypic composition of diffuse interstitial and perivascular focal infiltrates in renal allografts: a morphometric analysis of cellular infiltration under conventional immunosuppressive therapy and under cyclosporine A. Guettier C, et al. **Clin Nephrol** 1988 Aug; 30(2):97–105

Estimation of pH in individual alveolar macrophage phagolysosomes. Nyberg K, et al. **Exp Lung Res** 1989 Jul; 15(4):499–510

The glycosaminoglycans of the macrophage–like cell line PeMa in suspension and monolayer culture. Kittlick PD, et al. **Exp Pathol** 1988;34(4):245–52

Cell surface fibronectin of mouse peritoneal macrophages. Beppu M, et al. **FEBS Lett** 1989 Jan 2;242(2):378–82

Tumor–induced variations in a high molecular weight inhibitory monokine. Malick AP, et al. **Immunobiology** 1989 Feb;178(4–5):361–79

Expression of 67,000 MW calcimedin and its binding protein in resident and thioglycolate–elicited macrophages. Morse SS, et al. **Immunology** 1988 Dec;65(4):537–41

The expression of functional IL–2 receptor on activated macrophages depends on the stimulus applied. Valitutti S, et al. **Immunology** 1989 May;67(1):44–50

Immuno–competent cells in the murine epididymis. Nashan D, et al. **Int J Androl** 1989 Feb;12(1):85–94

Leydig cells do not have Fc receptors. Hutson JC. **J Androl** 1989 Mar–Apr;10(2):159–65

Determination of pyridine nucleotide contents of cell monolayers by bioluminescence. Lane DA, et al. **J Biochem Biophys Methods** 1988 Oct;17(2):107–17

Identification of renin in resident alveolar macrophages and monocytes: HPLC and immunohistochemical study. Dezsö B, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):155–9

Four monoclonal antibodies, AMH–1, –2, –3, and –4, give varied reactivities with monocytes, alveolar macrophages, and epithelioid–cell granulomas. Akiyama J, et al. **J Clin Immunol** 1988 Sep;8(5):372–80

Elastase inhibitor. Characterization of the human elastase inhibitor molecule associated with monocytes, macrophages, and neutrophils. Remold–O'Donnell E, et al. **J Exp Med** 1989 Mar 1;169(3):1071–86

Evidence for the presence of angiotensins in normal, unstimulated alveolar macrophages and monocytes. Dezsö B, et al. **J Hypertens** 1989 Jan;7(1):5–11

The structure of the rabbit macrophage defensin genes and their organ–specific expression. Ganz T, et al.

J Immunol 1989 Aug 15;143(4):1358–65
Evidence against the existence of a membrane form of murine IL–1 alpha. Minnich–Carruth LL, et al. J Immunol 1989 Jan 15;142(2):526–30
Macrophages and T cells do not express Mlsa determinants. Molina IJ, et al. J Immunol 1989 Jul 1;143(1):39–44
Alveolar macrophages differ from blood monocytes in human IL–1 beta release. Quantitation by enzyme–linked immunoassay. Wewers MD, et al. J Immunol 1989 Sep 1;143(5):1635–41
A rapid and quantitative method for the determination of interleukin–1 alpha and –beta mRNA expression in human monocytes and macrophages. Smith MF Jr, et al. J Immunol Methods 1989 Mar 31;118(2):265–72
Production and characterization of monoclonal antibodies to Fc gamma 2a–binding protein isolated from the detergent lysate of a murine macrophagelike cell line, P388D1. Kagami M, et al. J Leukoc Biol 1989 Apr; 45(4):311–21
Macrophages in bronchoalveolar lavage fluid are not representative of macrophages in granulomas of the lungs of BCG–infected mice. Nibbering PH, et al. J Pathol 1989 Mar;157(3):253–61
Tissue–specific expression and developmental regulation of the human fgr proto–oncogene. Ley TJ, et al. Mol Cell Biol 1989 Jan;9(1):92–9
Characterization of two highly phosphorylated cytoskeleton–associated proteins, pp58 and pp60, in tumoricidal murine peritoneal macrophages and their comparison with vimentin. Didier ES, et al. Mol Immunol 1988 Aug;25(8):785–94
The role of interstitial infiltrates in IgA nephropathy: a study with monoclonal antibodies. Alexopoulos E, et al. Nephrol Dial Transplant 1989;4(3):187–95
Nucleotide and amino acid sequences of the mouse CD14 gene. Matsuura K, et al. Nucleic Acids Res 1989 Mar 11; 17(5):2132
Total coding sequence of profilin cDNA from Mus musculus macrophage. Widada JS, et al. Nucleic Acids Res 1989 Apr 11;17(7):2855
Maternal and fetal cellular relationships in the human placental basal plate. Bulmer JN, et al. Placenta 1988 May–Jun;9(3):237–46
Identification and characterization of macrophage inflammatory protein 2. Wolpe SD, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):612–6
Identification of mRNA coding for factor VII protein in human alveolar macrophages—coagulant expression may be limited due to deficient postribosomal processing. McGee MP, et al. Thromb Haemost 1989 Apr 25; 61(2):170–4
[Immunohistochemical analysis of coronary arteriosclerotic lesions in man] Toda T, et al. Rinsho Byori 1988 Aug; 36(8):943–6 (Jpn)

CLASSIFICATION

Simultaneous enumeration of T–cell subsets and macrophages in bronchoalveolar lavage fluids by immunoenzyme double staining. Comparison with conventional immunofluorescence. van Maarsseveen TC, et al. Acta Cytol 1989 Jul–Aug;33(4):550–6
Anatomic distribution and localization of immunocompetent cells in normal mouse endolymphatic sac. Takahashi M, et al. Acta Otolaryngol (Stockh) 1988 Nov–Dec; 106(5–6):409–16
Plasmacytoid T cells. Immunohistochemical evidence for their monocyte/macrophage origin. Facchetti F, et al. Am J Pathol 1988 Oct;133(1):15–21
Macrophage and lymphocyte subpopulations in magnifying endoscopic lesions of Crohn's disease. Gionchetti P, et al. Clin Exp Immunol 1988 Jun;72(3):373–6
The distribution of phenotypically distinct macrophage subsets in the lungs of patients with cryptogenic fibrosing alveolitis. Noble B, et al. Clin Exp Immunol 1989 Apr; 76(1):41–6
Immunophenotypic characterization of mononuclear phagocytes and dendritic cells in lymphoid organs of the rhesus monkey. Ringler DJ, et al. Clin Immunol Immunopathol 1988 Dec;49(3):349–64
Lymph node macrophage heterogeneity: the phenotypic and functional characterization of two distinct populations of macrophages from rat lymph node. Chao D, et al. Eur J Immunol 1989 Jul;19(7):1273–81
Macrophage heterogeneity in normal colonic mucosa and in inflammatory bowel disease. Allison MC, et al. Gut 1988 Nov;29(11):1531–8
Immunohistochemical heterogeneity of macrophage subpopulations in human lymphoid tissues. Baroni CD, et al. Histopathology 1987 Oct;11(10):1029–42
Changes in macrophage populations: phenotypic differences between normal and tumor–bearing host macrophages. Yurochko AD, et al. Immunobiology 1989 Feb; 178(4–5):416–35
Phenotypic characterization of macrophages in human term placenta. Mues B, et al. Immunology 1989 Jul;67(3):303–7
Phenotypic dynamics of macrophage subpopulations during human experimental gingivitis. Topoll HH, et al. J Periodont Res 1989 Mar;24(2):106–12
Subpopulations of human lung alveolar macrophages: ultrastructural features. Nakstad B, et al. Ultrastruct Pathol 1989 Jan–Feb;13(1):1–13
[Heterogeneity of macrophages] Oghiso Y. Nippon Rinsho 1989 Mar;47(3):499–505 (Jpn)
[Characterization of macrophages present in skin lesions of Hansen's disease: study by monoclonal antibodies] Sarno EN, et al. Rev Inst Med Trop Sao Paulo 1988 Jan–Feb; 30(1):45–50 (Eng. Abstr.) (Por)

CYTOLOGY

Cultivation of mouse macrophages in vitro on different protein substrates. Kolset SO, et al. Acta Histochem (Jena) 1988;84(2):141–51
Formation of microglia–derived brain macrophages is blocked by adriamycin. Graeber MB, et al. Acta Neuropathol (Berl) 1989;78(4):348–58
Immunobiological methods in the prenatal diagnosis and evaluation of foetal neural tube defects. Polgár K, et al. Acta Physiol Hung 1988;71(4):551–5
Tumor–associated macrophages in metastasizing tumors. Chen ZG, et al. Adv Exp Med Biol 1988;233:61–71 (61 ref.)
Tissue localization and migration of murine spleen macrophages carrying the Forssman glycosphingolipid antigen. Conradt P, et al. Adv Exp Med Biol 1988; 237:577–82
Ontogeny of macrophages and dendritic cells of the rat. Dijkstra CD, et al. Adv Exp Med Biol 1988;237:731–6
Direct transdiaphragmatic traffic of peritoneal macrophages to the lung. Pitt ML, et al. Adv Exp Med Biol 1988; 237:627–32
Localization, isolation and histochemical characterization of macrophages in the gut and mesenteric lymph nodes of the rat. Sminia T, et al. Adv Exp Med Biol 1988;237:621–6
Postnatal development of non–lymphoid and lymphoid cell populations in situ in diabetes–prone BB rats. van Rees EP, et al. Adv Exp Med Biol 1988;237:737–43
Reproducible cloning assays for in vitro growth of canine hematopoietic progenitor cells and their potential applications in investigative hematotoxicity. Deldar A, et al. Am J Vet Res 1988 Aug;49(8):1393–401
Time of appearance of esterase–positive alveolar macrophages in bovine fetal lung. Hambolu JO, et al. Am J Vet Res 1989 May;50(5):717–9
The motile response of alveolar macrophages. An experimental study using single–cell and cell population approaches. Glasgow JE, et al. Am Rev Respir Dis 1989 Feb;139(2):320–9
Isolation and antigenic identification of hamster lung interstitial macrophages. Kobzik L, et al. Am Rev Respir Dis 1988 Oct;138(4):908–14
Alveolar macrophage proliferation in situ after thoracic irradiation of rats. Wesselius LJ, et al. Am Rev Respir Dis 1989 Jan;139(1):221–5
Thy–1 positive tingible body macrophages (TBM) in mouse lymph nodes. Smith JP, et al. Anat Rec 1988 Dec; 222(4):380–90
The effects of oxidizing species derived from molecular oxygen on the proliferation in vitro of human granulocyte–macrophage progenitor cells. Broxmeyer HE, et al. Ann N Y Acad Sci 1989;554:177–84
Granulomonopoiesis and production of granulomonopoietic regulating factors in Hodgkin's disease and non–Hodgkin's lymphomas. Lòpez–Karpovitch X, et al. Ann N Y Acad Sci 1989;554:241–7
The molecular regulators of macrophage and granulocyte development. Role of MGI–2/IL–6. Sachs L, et al. Ann N Y Acad Sci 1989;557:417–35, discussion 435–7 (107 ref.)
Immunohistochemical identification of macrophages and various dendritic cells in paraffin–embedded biopsy material. Brandtzaeg P. APMIS Suppl 1988;2:136–59
The role of Ca2+ and protein kinase C in the differentiation of HL–60 cells induced by 1 alpha,25(OH)2D3 and diltiazem. Taoka T, et al. Biochem Int 1989 Jun; 18(6):1193–201
Defined, serum–free culture conditions for the GM–micro–clonogenic assay using agar–capillaries. Echarti C, et al. Blut 1989 Aug;59(2):171–6
Differential activity of recombinant colony–stimulating factors in supporting proliferation of human peripheral blood and bone marrow myeloid progenitors in culture. Caracciolo D, et al. Br J Haematol 1989 Jul;72(3):306–11
Participation of radioresistant Forssman antigen–bearing macrophages in the formation of stromal elements of erythroid spleen colonies. Sadahira Y, et al. Br J Haematol 1989 Apr;71(4):469–74
Microglia and microglia–derived brain macrophages in culture: generation from axotomized rat facial nuclei, identification and characterization in vitro. Rieske E, et al. Brain Res 1989 Jul 17;492(1–2):1–14
Induced locomotion of human and murine macrophages: a comparative analysis by means of the modified Boyden–chamber system and the agarose migration assay. Michna H. Cell Tissue Res 1989 Feb;255(2):423–9
Cellular and eicosanoid composition of bronchoalveolar lavage fluid in endotoxin protection against pulmonary oxygen toxicity. Klein J, et al. Crit Care Med 1989 Mar; 17(3):247–50
The cytogenesis of macrophages and osteoclast–like giant cells in bone tumors with special emphasis on the so–called fibrohistiocytic tumors. Roessner A, et al. Curr Top Pathol 1989;80:205–27
Origin and turnover of monocytes and macrophages. van Furth R. Curr Top Pathol 1989;79:125–50 (111 ref.)
Dose–dependent regulation of macrophage differentiation by mos mRNA in a human monocytic cell line. Kurata N, et al. EMBO J 1989 Feb;8(2):457–63
Differentiation of mononuclear blood cells into macrophages, fibroblasts and endothelial cells in thrombus organization. Leu HJ, et al. Exp Cell Biol 1988;56(4):201–10 (17 ref.)
Mouse peritoneal macrophages produce CFU–gm and CFU–meg growth–promoting factors. Sugimoto M, et al. Exp Cell Biol 1988;56(1–2):29–38
Aggregation of macrophages and fibroblasts is inhibited by a monoclonal antibody to the hyaluronate receptor. Green SJ, et al. Exp Cell Res 1988 Oct;178(2):224–32
Spermidine–dependent proteins are involved in the fusion of mouse alveolar macrophages induced by 1 alpha,25–dihydroxyvitamin D3 and interleukin 4. Tanaka H, et al. Exp Cell Res 1989 Jan;180(1):72–83
Bone marrow response to single small doses of irradiation: implications for stem cell functional organization. Nečas E, et al. Exp Hematol 1988 Nov;16(10):871–5
Characterization of scavenger receptor activity in resident human lung macrophages. McCusker K, et al. Exp Lung Res 1989 Jul;15(4):651–61
Of endothelial cells and macrophages [letter] Waisbren BA Sr. Hosp Pract [Off] 1989 Mar 15;24(3):16
A continuous alveolar macrophage cell line: comparisons with freshly derived alveolar macrophages. Helmke RJ, et al. In Vitro Cell Dev Biol 1989 Jan;25(1):44–8
Application of macrophage and peripheral lung cultures. Plaake M, et al. J Appl Toxicol 1988 Dec;8(6):399–402
Platelet–activating factor acetylhydrolase increases during macrophage differentiation. A novel mechanism that regulates accumulation of platelet–activating factor. Elstad MR, et al. J Biol Chem 1989 May 25;264(15):8467–70
Evidence for coordinate, selective regulation of eicosanoid synthesis in platelet–derived growth factor–stimulated 3T3 fibroblasts and in HL–60 cells induced to differentiate into macrophages or neutrophils. Goerig M, et al. J Biol Chem 1988 Dec 25;263(36):19384–91
Regulation of macrophage growth and antiviral activity by interferon–gamma. Goldberg M, et al. J Cell Biol 1989 Sep;109(3):1331–40
Plasma membrane lipid organization and the adherence of differentiating lymphocytes to macrophages. Del Buono BJ, et al. J Cell Physiol 1989 Jan;138(1):61–9
Regulatory volume decrease in alveolar macrophages: cation loss is not correlated with changes in membrane recycling. Novak JM, et al. J Cell Physiol 1988 Nov;137(2):243–50
Differentiation of HL–60 cells is associated with an increase in the 35–kDa protein lipocortin I. William F, et al. J Cell Physiol 1988 Dec;137(3):402–10
Isolation and immunocytochemical characterization of human bone marrow stromal macrophages in hemopoietic clusters. Lee SH, et al. J Exp Med 1988 Sep 1;168(3):1193–8
Properties of isolated red pulp macrophages from mouse spleen. Nusrat AR, et al. J Exp Med 1988 Oct 1; 168(4):1505–10
Heterogeneity of rat macrophages recognized by monoclonal antibodies: an immunohistochemical and immunoelectron microscopic study. Takeya M, et al. J Histochem Cytochem 1989 May;37(5):635–41
Effects of granulocyte–macrophage colony–stimulating factor and colony–stimulating factor–1 on the proliferation and differentiation of murine alveolar macrophages. Akagawa KS, et al. J Immunol 1988 Nov 15; 141(10):3383–90
Monocyte–to–macrophage transition in vitro. A systematic study using human cells isolated by fractionation on Percoll. Davies DE, et al. J Immunol Methods 1989 Mar 10;118(1):9–16
Lipopolysaccharide (LPS)–free conditions allow growth and purification of postnatal brain macrophages (microglia) [letter] Northoff H, et al. J Immunol Methods 1989 Jan 6;116(1):147
Establishment and characterization of long–term cultured cell lines of murine resident macrophages. Lombard Y, et al. J Leukoc Biol 1988 Nov;44(5):391–401
MH–S, a murine alveolar macrophage cell line: morphological, cytochemical, and functional characteristics. Mbawuike IN, et al. J Leukoc Biol 1989 Aug;46(2):119–27
Maintenance of peritoneal macrophages in the steady state. Melnicoff MJ, et al. J Leukoc Biol 1988 Nov;44(5):367–75
Increased production of cytotoxic macrophage progenitors by Lactobacillus casei in mice. Nanno M, et al. J Leukoc Biol 1989 Aug;46(2):89–95
Establishment and characterization of factor–dependent macrophage cell lines. Ohki K, et al. J Leukoc Biol 1988 Dec;44(6):465–73
Chemiluminescence in a macrophage cell line modulated by biological response modifiers. Tosk J, et al. J Leukoc Biol 1989 Aug;46(2):103–8
Proliferation of macrophage subpopulations in the adult rat: comparison of various lymphoid organs. Westermann J, et al. J Leukoc Biol 1989 Sep;46(3):263–9
Heterogeneity of hematopoietic cells immortalized by v–myc/v–raf recombinant retrovirus infection of bone marrow or fetal liver. Cox GW, et al. J Natl Cancer Inst 1989 Oct 4;81(19):1492–6
Macrophages, lymphocytes and major histocompatibility complex (HLA) class II antigens in adult human sensory and sympathetic ganglia. Esiri MM, et al. J Neuroimmunol 1989 Aug;23(3):187–93

Identity of ED2-positive perivascular cells in rat brain. Graeber MB, et al. **J Neurosci Res** 1989 Jan;22(1):103–6

Are glycoconjugates and their endogenous receptors involved in the fusion of mononuclear macrophages resulting in multinucleate giant cells? Histochemical and electron microscopic determination of endogenous sugar-binding proteins (lectins) in mononuclear macrophages and multinucleate giant cells appearing in granulomatous foreign body reaction. Bardosi A, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):229–38

A semiautomatic image analyzer for cell counts in monolayers. II. Application to toxicity estimation and comparisons between two cell-viability markers, fluorescein diacetate and lactate dehydrogenase. Thorén SA. **J Toxicol Environ Health** 1989;27(4):523–32

A semiautomatic image analyzer for cell counts in monolayers. I. Construction, experimental procedure, and precision obtained. Thorén SA, et al. **J Toxicol Environ Health** 1989;27(4):509–22

Regulation of the visna virus long terminal repeat in macrophages involves cellular factors that bind sequences containing AP-1 sites. Gabuzda DH, et al. **Mol Cell Biol** 1989 Jun;9(6):2728–33

Lineage relationship between oligodendrocytes and brain macrophages? Mallat M, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):12–7

Adenine uptake by rat connective tissue cells with special reference to macrophage precursors. Osogoe B, et al. **Okajimas Folia Anat Jpn** 1989 Mar;65(6):369–79

The uterine lumen of the pregnant guinea-pig contains a large macrophage population. Sype W, et al. **Placenta** 1989 Mar–Apr;10(2):125–35

In vitro effect of lithium on carbamazepine-induced inhibition of murine and human bone marrow-derived granulocyte-macrophage, erythroid, and megakaryocyte progenitor stem cells. Gallicchio VS, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):109–16

Granulocyte-macrophage colony formation in vitro using human non-phagocytic bone marrow cells. Ohhara N, et al. **Res Exp Med (Berl)** 1988;188(6):405–9

On the nature of the content in the PAS-positive macrophages of the rodent thymus. Milićević NM, et al. **Thymus** 1988;11(4):257–9

Gene regulation in macrophage development and activation. Adams DO, et al. **Year Immunol** 1989;4:159–80 (96 ref.)

[Differentiation pathways in the monocyte/macrophage system] Radzun HJ. **Verh Dtsch Ges Pathol** 1988;72:50–6 (49 ref.) (Eng. Abstr.) **(Ger)**

[Presence of immunocompetent cells in human fetal brain] Ennas MG, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep–Oct;109(5):279–83 (Eng. Abstr.) **(Ita)**

[Effect of testosterone on in vitro proliferation of bone marrow granulocyte-macrophage progenitor cells (CFU-GM). I. Observations in normal subjects] De Caro L, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):195–202 (Eng. Abstr.) **(Ita)**

[Effect of testosterone on the in vitro proliferation of bone marrow granulocyte-macrophage cells (CFU-GM). II. Observations in hypogonadal subjects] De Caro L, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):203–10 (Eng. Abstr.) **(Ita)**

[Methods for the study of growth in vitro of granulocyte-macrophage progenitors (CFU-GM)] Ghizzi A, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):433–9 (Eng. Abstr.) **(Ita)**

[Experimental study of cellular response on the intraocular lens surface (5). Light microscopic observation using enzyme-labeled antibody method] Kanagawa R, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1520–2 (Eng. Abstr.) **(Jpn)**

[The characteristics and origin of resident macrophages] Imai Y, et al. **Nippon Rinsho** 1989 Mar;47(3):506–12 **(Jpn)**

[Ellipsoids of the spleen (ellipsoid macrophagal-lymphoid sheaths)] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):5–13 (32 ref.) (Eng. Abstr.) **(Rus)**

[The interaction of macrophages and hematopoietic stem cells of mice in vitro and in vivo] Kravtsov VD, et al. **Tsitologiia** 1989 Mar;31(3):359–63 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Specific effect of leucine-O-methyl ester on macrophages. Csuka I, et al. **Acta Paediatr Hung** 1988–89;29(1–2):43

Carrageenan induced changes in the immunomodulatory capacity of macrophages: an in vitro study. Nicklin S, et al. **Adv Exp Med Biol** 1988;237:821–32

PAF-acether modifies human peritoneal macrophage cAMP levels in a biphasic fashion. Adolfs MJ, et al. **Agents Actions** 1989 Jan;26(1–2):119–20

Prostaglandin E2 and salbutamol are less effective in raising cAMP levels of alveolar macrophages from ovalbumin-sensitized guinea-pigs as compared to controls. Bachelet M, et al. **Agents Actions** 1989 Jan;26(1–2):103–4

Interactions between cyclic AMP stimulating drugs and PAF-acether in guinea-pig alveolar macrophages. Bachelet M, et al. **Agents Actions** 1989 Jan;26(1–2):113–4

Regulation of cyclic AMP levels in alveolar macrophages of guinea pigs and man by prostanoids and beta-adrenergic agents. Beusenberg FD, et al. **Agents Actions** 1989 Jan; 26(1–2):105–7

Eicosanoids as modulators of macrophage eicosanoid release. Elliott GR, et al. **Agents Actions** 1989 Jan;26(1–2):163–4

The generation of chemiluminescence by alveolar macrophages is affected by 9-hydroxy-linoleic acid. Henricks PA, et al. **Agents Actions** 1989 Jan;26(1–2):178–9

Enhancement of the phospholipase A2 activity in fMLP-treated guinea-pig alveolar macrophages. Masliah J, et al. **Agents Actions** 1989 Jan;26(1–2):256–7

Inhibition of the accumulation of macrophages and the generation of macrophage chemotactic activity by dexamethasone in concanavalin A-induced peritonitis of mice. Nagaoka I, et al. **Agents Actions** 1988 Aug; 25(1–2):156–63

Differential effects of malotilate on 5-, 12- and 15-lipoxygenase in human ascites cells. Vermeer MA, et al. **Agents Actions** 1989 Jan;26(1–2):252–3

Effects of qing-fei-tang (seihai-to) and baicalein, its main component flavonoid, on lucigenin-dependent chemiluminescence and leukotriene B4 synthesis of human alveolar macrophages. Tanno Y, et al. **Am J Chin Med** 1988;16(3–4):145–54

Asbestos fibers and silica particles stimulate rat alveolar macrophages to release tumor necrosis factor. Autoregulatory role of leukotriene B4. Dubois CM, et al. **Am Rev Respir Dis** 1989 May;139(5):1257–64

Evaluation of the causal relationship between crocidolite asbestos-induced lipid peroxidation and toxicity to macrophages. Goodglick LA, et al. **Am Rev Respir Dis** 1989 May;139(5):1265–73

Endotoxin-induced suppression of pulmonary antibacterial defenses against Staphylococcus aureus. Harris SE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1439–43

Somatotropin and prolactin enhance respiratory burst activity of macrophages. Edwards CK 3d, et al. **Ann N Y Acad Sci** 1988;540:698–9

Hydroxyapatite and urate crystal induced cytokine release by macrophages. Alwan WH, et al. **Ann Rheum Dis** 1989 Jun;48(6):476–82

Systemic effects of vitamin D. Reichel H, et al. **Annu Rev Med** 1989;40:71–8 (30 ref.)

Pharmacological activities of spirogermanium and other structurally related azaspiranes: effects on tumor cell and macrophage functions. Mirabelli CK, et al. **Anticancer Drug Des** 1989 Mar;3(4):231–42

In vitro effects of antimicrobial agents on Mycobacterium leprae in mouse peritoneal macrophages. Ramasesh N, et al. **Antimicrob Agents Chemother** 1989 May;33(5):657–62

Possible involvement of a 95-kDa protein phosphorylation in phorbol 12-myristate 13-acetate-induced suppression of zymosan phagocytosis in guinea pig macrophages. Hazeki K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):551–9

Probucol does not affect lipoprotein metabolism in macrophages of Watanabe heritable hyperlipidemic rabbits. Nagano Y, et al. **Arterioscler Thromb** 1989 Jul–Aug;9(4):453–61

Arterial blood derived low density lipoprotein increases platelet aggregation and macrophage cholesterol content in comparison to lipoprotein derived from veinous blood. Keidar S, et al. **Artery** 1989;16(2):62–71

In vitro and in vivo augmentation by muroctasin of the production of the third component of complement by murine macrophages. Endo N. **Arzneimittelforschung** 1988 Jul;38(7A):993–6

Synergistic generation of tumoricidal macrophages by muroctasin and interferon-gamma. Nagao S, et al. **Arzneimittelforschung** 1988 Jul;38(7A):999–1002 (68 ref.)

Penetrability of ofloxacin into cultured epithelial cells and macrophages. Une T, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1265–7

Production of colony-stimulating factor from macrophages by muroctasin. Yamaguchi F, et al. **Arzneimittelforschung** 1988 Jul;38(7A):983–6

Prostaglandin E2, thromboxane B2, and leukotriene B4 release from peritoneal macrophages by different osmotic agents in nonuremic guinea pigs. Hain H, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):429–32

Growth hormone, lymphocytes and macrophages. Kelley KW. **Biochem Pharmacol** 1989 Mar 1;38(5):705–13 (103 ref.)

Conditions controlling tumor cytotoxicity of rat liver macrophages mediated by liposomal muramyl dipeptide. Daemen T, et al. **Biochim Biophys Acta** 1989 Apr 25; 991(1):145–51

Membrane proteins are critical targets in free radical mediated cytolysis. Richards DM, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):281–8

Enucleation of phagocytic cells with adenine, guanine, and their nucleosides in combination with centrifugation. Saito T, et al. **Biol Cell** 1988;63(3):287–96

Interleukin-6 synergizes with M-CSF in the formation of macrophage colonies from purified human marrow progenitor cells. Bot FJ, et al. **Blood** 1989 Feb;73(2):435–7

Synergistic stimulation of macrophage proliferation by the monokines tumor necrosis factor-alpha and colony-stimulating factor 1. Branch DR, et al. **Blood** 1989 Jan;73(1):307–11

The effect of cyclosporine A on infection of susceptible cells by human immunodeficiency virus type 1. Wainberg MA, et al. **Blood** 1988 Dec;72(6):1904–10

Effects of chronic injection of sphingomyelin-containing liposomes on lymphoid and non-lymphoid cells in the spleen. Transient suppression of marginal zone macrophages. Claassen E, et al. **Br J Exp Pathol** 1988 Dec; 69(6):865–75

Effect of retinoic acid on asbestos induced plasminogen activator activity of peritoneal macrophages. Lison D, et al. **Br J Ind Med** 1989 Jul;46(7):496–7

Prostaglandin E2 inhibits and indomethacin and aspirin enhance, A23187-stimulated leukotriene B4 synthesis by rat peritoneal macrophages. Elliott GR, et al. **Br J Pharmacol** 1989 Feb;96(2):265–70

Analysis of the stimulative effect of thapsigargin, a non-TPA-type tumour promoter, on arachidonic acid metabolism in rat peritoneal macrophages. Ohuchi K, et al. **Br J Pharmacol** 1988 Jul;94(3):917–23

Effects of intracellular diphosphonates on cells of the mononuclear phagocyte system: in vivo effects of liposome-encapsulated diphosphonates on different macrophage subpopulations in the spleen. van Rooijen N, et al. **Calcif Tissue Int** 1989 Sep;45(3):153–6

Effect of anticancer drugs on macrophage-mediated antibody-dependent cytotoxicity and secretion of reactive oxygen intermediates. Gudewicz PW. **Cancer Lett** 1988 Sep–Oct;42(1–2):67–72

Enhanced activity of peritoneal cells after aclacinomycin injection: effect of pretreatment with superoxide dismutase on aclacinomycin-induced cytological alterations and antitumoral activity. Bravo-Cuellar A, et al. **Cancer Res** 1989 Mar 15;49(6):1578–86

Differential effect of recombinant granulocyte macrophage colony-stimulating factor on human monocytes and alveolar macrophages. Thomassen MJ, et al. **Cancer Res** 1989 Aug 1;49(15):4086–9

Enhancement of macrophage spreading and phagocytosis by peroxidative enzymes. Lefkowitz D, et al. **Cell Biol Int Rep** 1988 Nov;12(11):969–78

In vivo interaction of bilirubin with the cells of the immune system in mice: an ultrastructural electronmicroscopic study. Větvička V, et al. **Cell Biol Int Rep** 1989 Mar; 13(3):301–8

Effect of platelet-derived transforming growth factor (TGF) type beta 1 on murine inflammatory mononuclear phagocytes: increased fibronectin production. Strassmann G, et al. **Cell Immunol** 1989 Jul;121(2):306–16

L-fucose blocks MIF/MAF priming of rabbit alveolar macrophages for a PMA-induced oxidative response. Umehara K, et al. **Cell Immunol** 1989 Mar;119(1):67–72

Modification of macrophage functions by Shosaikoto (Kampo medicine) leads to enhancement of immune response. Nagatsu Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1540–2

Effects of bisulfite and sulfite on Fc and Con A receptors of rat pulmonary macrophages. Lai MD, et al. **Chin Med J [Engl]** 1988 May;101(5):357–60

Inhibitory effect of retinoic acid on the respiratory burst of adult and cord blood neutrophils and macrophages: potential implication to bronchopulmonary dysplasia. Wolfson M, et al. **Clin Exp Immunol** 1988 Jun;72(3):505–9

Induction of macrophage membrane interleukin 1 expression by T-cell dependent and T-cell independent pathways is inhibited by cyclosporin A. Wasik MA, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):331–40

Effect of vitamin K3 on macrophage functions and intracellular calcium. Koyano H, et al. **Comp Biochem Physiol [A]** 1988;91(1):115–21

Cytogenetic effects of cigarette smoke on pulmonary alveolar macrophages of the rat. Rithidech K, et al. **Environ Mol Mutagen** 1989;14(1):27–33

Nitrogen dioxide exposure in vivo and human alveolar macrophage inactivation of influenza virus in vitro. Frampton MW, et al. **Environ Res** 1989 Apr;48(2):179–92

Biological effects of chrysotile after SO2 sorption. II. Effects on alveolar macrophages and red blood cells. Jaurand MC, et al. **Environ Res** 1978 Oct;17(2):216–27

Toxicity of metallic ions and oxides to rabbit alveolar macrophages. Labedzka M, et al. **Environ Res** 1989 Apr; 48(2):255–74

Metabolic enhancement and increase of alveolar macrophages induced by ozone. Mochitate K, et al. **Environ Res** 1989 Jun;49(1):79–92

Effects of in vitro exposure to nitrogen dioxide on human alveolar macrophage release of neutrophil chemotactic factor and interleukin-1. Pinkston P, et al. **Environ Res** 1988 Oct;47(1):48–58

The lipopolysaccharide-induced stimulation of peritoneal macrophages involves at least two signal pathways. Partial stimulation by lipid A precursors. Benninghoff B, et al. **Eur J Biochem** 1989 Feb 15;179(3):589–94

The effects of acetylated low-density lipoproteins on fluid-phase pinocytosis by macrophages. Knowles ME, et al. **Eur J Biochem** 1989 Jun 15;182(2):407–12

Structural and physicochemical requirements of endotoxins for the activation of arachidonic acid metabolism in mouse peritoneal macrophages in vitro. Lüderitz T, et al. **Eur J Biochem** 1989 Jan 15;179(1):11–6

Monensin and chloroquine inhibit transfer to lysosomes of endocytosed macromolecules in cultured mouse peritoneal macrophages. Stenseth K, et al. **Eur J Cell Biol** 1989 Aug; 49(2):326–33

Studies on the release of cell-associated interleukin 1 by paraformaldehyde-treated murine macrophages. Streck H, et al. **Eur J Immunol** 1988 Oct;18(10):1609–13

Beta-adrenoceptor-effector system of the human macrophage U937 cell line. Liggett SB. **Eur J Pharmacol** 1989 Apr 12;163(1):171–4

Differential effects of malotilate on 5-, 12- and 15-lipoxygenase in human ascites cells. Zijlstra FJ, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):291–5

Effects of oral N-acetylcysteine on cell content and

macrophage function in bronchoalveolar lavage from healthy smokers. Linden M, et al. **Eur Respir J** 1988 Jul; 1(7):645–50

Response of rat alveolar macrophages to ozone: quantitative assessment of population size, morphology, and proliferation following acute exposure. Hotchkiss JA, et al. **Exp Lung Res** 1989;15(1):1–16

The effect of paraquat lung on mononuclear cells. Barabás K, et al. **Exp Pathol** 1988;34(2):115–8

Cephalosporin–induced alterations in erythroid (CFU–E) and granulocyte–macrophage (CFU–GM) colony–forming capacity in canine bone marrow. Deldar A, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):450–63

Interferon gamma–treated human macrophages display enhanced cytolysis and generation of reactive oxygen metabolites but reduced ingestion upon Fc receptor triggering. Jungi TW, et al. **Hum Immunol** 1989 Feb; 24(2):77–93

Characterization of murine macrophage Fc receptor–dependent phagocytosis and antibody–dependent cellular cytotoxicity during in vitro culture with interferons–gamma, alpha/beta and/or fetal bovine serum. Leu RW, et al. **Immunobiology** 1989 Feb;178(4–5):340–50

Effects of IL–4 on macrophage functions: increased uptake and killing of a protozoan parasite (Trypanosoma cruzi). Wirth JJ, et al. **Immunology** 1989 Feb;66(2):296–301

Morphological and biochemical alterations of macrophages produced by a glycan, PSK. Kamisato JK, et al. **Immunopharmacology** 1988 Sep–Oct;16(2):89–96

Antiinflammatory drugs—lysosomal membrane stabilization in normal and activated phagocytic cells. Rao AB, et al. **Indian J Exp Biol** 1988 May;26(5):365–7

Pseudomonas aeruginosa cytotoxin: periplasmic localization and inhibition of macrophages. Kluftinger JL, et al. **Infect Immun** 1989 Mar;57(3):882–6

CCA [N–(2–carboxyphenyl)–4–chloroanthranilic acid disodium salt], a newly developed immunomodulating drug, suppresses T–cell activation by acting on macrophages. Takeuchi T, et al. **Inflammation** 1989 Apr; 13(2):125–35

Abrogation of spleen macrophage suppressive activity by 15–deoxyspergualin. Yamamura T, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):211–6

Polyoma T–antigen–derived synthetic peptides induce polyoma–virus–specific macrophage migration inhibition. Reinholdsson G, et al. **Int J Cancer** 1989 Jun 15; 43(6):1165–8

Decreased resistance to Listeria monocytogenes in mice following vanadate exposure: effects upon the function of macrophages. Cohen MD, et al. **Int J Immunopharmacol** 1989;11(3):285–92

Inhibition of interferon gamma–induced macrophage microbicidal activity against Leishmania major by liposomes: inhibition is dependent upon composition of phospholipid headgroups and fatty acids. Gilbreath MJ, et al. **Int J Immunopharmacol** 1989;11(2):103–10

Cyclophosphamide modulates arachidonic acid metabolism by peritoneal macrophages. Giordano M, et al. **Int J Immunopharmacol** 1988;10(8):939–44

Induction of interleukin 1 activity from macrophages by direct interaction with C8–substituted guanine ribonucleosides. Goodman MG. **Int J Immunopharmacol** 1988;10(5):579–86

Effect of estradiol on interleukin 1 synthesis by macrophages. Hu SK, et al. **Int J Immunopharmacol** 1988;10(3):247–52

Levamisole–induced attenuation of alveolar macrophage dysfunction in respiratory virus–infected calves. Ogunbiyi PO, et al. **Int J Immunopharmacol** 1988;10(4):377–85

Increase in the number and the phagocytic function of guinea pig pulmonary and peritoneal macrophages following oral administration of RU 41740, a glycoprotein extract from Klebsiella pneumoniae. Radermecker M, et al. **Int J Immunopharmacol** 1988;10(8):913–7

In vitro and in vivo immunomodulation by LF 1695 of human and rat macrophages and platelets in schistosomiasis. Thorel T, et al. **Int J Immunopharmacol** 1988;10(6):739–46

Ca2+–channel blockers modulate the oxidative burst induced with arachidonic acid in macrophage–like P 388D1 cells. Interaction with peripheral benzodiazepines. Zavala F, et al. **Int J Immunopharmacol** 1988;10(5):531–6

In vivo effects of vitamin E on peritoneal macrophages and T–kininogen level in rats. Sakamoto W, et al. **Int J Vitam Nutr Res** 1989;59(2):131–9

Stimulatory effect of cefodizime on macrophage–mediated phagocytosis. Oishi K, et al. **J Antibiot (Tokyo)** 1989 Jun; 42(6):989–92

Activity of ciprofloxacin against Escherichia coli phagocytosed by monocytes and macrophages [letter] Burgaleta C, et al. **J Antimicrob Chemother** 1989 Mar; 23(3):460–2

Cellular uptake, and intracellular bactericidal activity of teicoplanin in human macrophages. Carlone NA, et al. **J Antimicrob Chemother** 1989 Jun;23(6):849–59

Reaction of macrophages activated by agents in vivo to quartz dust in vitro. Kaw JL, et al. **J Appl Toxicol** 1988 Jun;8(3):211–6

Downregulation of tumor necrosis factor receptors of macrophages by interferons and interleukin–1. Role of protein kinase C activation. Gessani S, et al. **J Biol Regul Homeost Agents** 1988 Oct–Dec;2(4):166–72

Tumoricidal activity of lymphotoxin (tumor necrosis factor beta) in vivo: its effects on macrophages. Higuchi M, et al. **J Biol Response Mod** 1988 Dec;7(6):619–30

Polyamines are involved in the 1–alpha,25–dihydroxyvitamin D3–induced fusion of mouse alveolar macrophages. Hayashi T, et al. **J Bone Miner Res** 1986 Apr;1(2):235–42

Transforming growth factor–beta does not alter interleukin–1 expression in cultured human macrophages. Hurme M, et al. **J Cell Biochem** 1989 Apr;39(4):467–75

Phorbol diester enhances calcium ionophore A23187–induced [3H]acetate incorporation into platelet–activating factor in murine macrophages: predominant incorporation into 1–O–acyl–2–acetyl–sn–glycero–3–phosphocholine. Wey HE. **J Cell Biochem** 1989 Mar;39(3):305–13

Inductive effect of recombinant human interleukin–1 alpha and beta on differentiation of macrophage–like tumor cell line P388D1. Hanazawa S, et al. **J Cell Physiol** 1988 Sep; 136(3):543–6

Inhibition of macrophage activation by isoquinolinesulfonamides, phenothiazines, and a napthalenesulfonamide. Holian A, et al. **J Cell Physiol** 1988 Oct;137(1):45–54

Calcium is essential in the fusion of mouse alveolar macrophages induced by 1 alpha,25–dihydroxyvitamin D3. Jin CH, et al. **J Cell Physiol** 1988 Oct;137(1):110–6

Combinative ligand–receptor interactions: effects of cAMP, epinephrine, and met–enkephalin on RAW264 macrophage morphology, spreading, adherence, and microfilaments. Petty HR, et al. **J Cell Physiol** 1989 Feb;138(2):247–56

Platelet–modified low density lipoprotein induces macrophage cholesterol accumulation and platelet activation. Aviram M, et al. **J Clin Chem Clin Biochem** 1989 Jan;27(1):3–12

Lipolytic surface remnants of triglyceride–rich lipoproteins are cytotoxic to macrophages but not in the presence of high density lipoprotein. A possible mechanism of atherogenesis? Chung BH, et al. **J Clin Invest** 1989 Apr; 83(4):1363–74

Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al. **J Clin Microbiol** 1989 Aug;27(8):1748–53

Effect of cepharanthin on superoxide anion (O2–) production by macrophages. Sawamura D, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):304–7

PSK, a polysaccharide from Coriolus vesicolor, enhances oxygen metabolism of murine peritoneal macrophages and the host resistance to listerial infection. Saito H, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1029–35

Alginate inhibition of the uptake of Pseudomonas aeruginosa by macrophages. Simpson JA, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):29–36

Bradykinin sensitization of CSF–1–responsive murine mononuclear phagocyte precursors to prostaglandin E. Duma EM, et al. **J Immunol** 1988 Nov 1;141(9):3186–9

The effect of human recombinant macrophage colony–stimulating factor (CSF–1) on the murine mononuclear phagocyte system in vivo. Hume DA, et al. **J Immunol** 1988 Nov 15;141(10):3405–9

Differential inhibition of IL–1 and TNF–alpha mRNA expression by agents which block second messenger pathways in murine macrophages. Kovacs EJ, et al. **J Immunol** 1988 Nov 1;141(9):3101–5

Endotoxin suppresses the generation of O2– and H2O2 by "resting" and lymphokine–activated human blood–derived macrophages. Rellstab P, et al. **J Immunol** 1989 Apr 15; 142(8):2813–20

Amphotericin B induces tumor necrosis factor production by murine macrophages. Chia JK, et al. **J Infect Dis** 1989 Jan;159(1):113–6

Polymyxin B prevents lipopolysaccharide–induced release of tumor necrosis factor–alpha from alveolar macrophages. Stokes DC, et al. **J Infect Dis** 1989 Jul;160(1):52–7

Recombinant mouse interferon–gamma is not chemotactic for macrophages or neutrophils. Canono BP, et al. **J Interferon Res** 1989 Feb;9(1):79–86

Effects of interferon–gamma and tumor necrosis factor–alpha on macrophage enzyme levels. Pierangeli SS, et al. **J Interferon Res** 1989 Feb;9(1):1–9

Factors mediating lipopolysaccharide–induced ganglioside expression in murine peritoneal macrophages. Berenson CS, et al. **J Leukoc Biol** 1989 Mar;45(3):221–30

Effects of retinoids on macrophage function and IL–1 activity. Dillehay DL, et al. **J Leukoc Biol** 1988 Nov; 44(5):353–60

Lead–induced alterations of in vitro bone marrow cell responses to colony stimulating factor–1. Kowolenko M, et al. **J Leukoc Biol** 1989 Mar;45(3):198–206

Lead inhibits intracellular killing of Leishmania parasites and extracellular cytolysis of target cells by macrophages exposed to macrophage activating factor. Mauël J, et al. **J Leukoc Biol** 1989 May;45(5):401–9

Synergistic interactions between IFN–gamma and IFN–beta in priming murine macrophages for tumor cell killing. Pace JL. **J Leukoc Biol** 1988 Dec;44(6):514–20

Regulation of monokine gene expression: prostaglandin E2 suppresses tumor necrosis factor but not interleukin–1 alpha or beta–mRNA and cell–associated bioactivity. Scales WE, et al. **J Leukoc Biol** 1989 May;45(5):416–21

Influence of platelet activating factor and a nonmetabolizable analogue on superoxide production by bone marrow derived macrophages. Storch J, et al. **J Leukoc Biol** 1988 Nov;44(5):385–90

Neutral lipid accumulation in macrophages during lipid–induced macrophage growth. Yui S, et al. **J Leukoc Biol** 1989 Mar;45(3):189–97

High density lipoprotein stimulates sterol translocation between intracellular and plasma membrane pools in human monocyte–derived macrophages. Aviram M, et al. **J Lipid Res** 1989 Jan;30(1):65–76

Effects of polymethylmethacrylate exposure upon macrophages. Horowitz SM, et al. **J Orthop Res** 1988; 6(6):827–32

Stimulation of phagocytic activity of leukocytes and macrophages by traxanox sodium in mice and rats. Hisadome M, et al. **Jpn J Pharmacol** 1989 Feb;49(2):275–84

The effect of dialysate on peritoneal phagocyte oxidative metabolism. Topley N, et al. **Kidney Int** 1988 Sep; 34(3):404–11

Effect of black–pigmented Bacteroides gingivalis on cytotoxic activity of linolenic acid against mouse macrophages. Hashimoto Y, et al. **Kitasato Arch Exp Med** 1989 Apr;62(1):21–8

Induction of hypoferremia and modulation of macrophage iron metabolism by tumor necrosis factor. Alvarez–Hernández X, et al. **Lab Invest** 1989 Sep; 61(3):319–22

4'–O–tetrahydropyranyl adriamycin (THP–ADM)–induced modifications of murine peritoneal macrophages. Bravo–Cuellar A, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):71–5

Butyric acid: inhibition of non–leukemic and chronic myeloid leukemia granulocyte macrophage clonal growth. Januszewicz E, et al. **Med Oncol Tumor Pharmacother** 1988; 5(4):259–63

Effect of the immunomodulator LF 1695 on T–lymphocytes and macrophages. Activity in HIV infection. Touraine JL. **Med Oncol Tumor Pharmacother** 1989;6(1):59–61 (6 ref.)

Effect of C–reactive protein on peritoneal macrophages. I. Human C–reactive protein inhibits migration of guinea pig peritoneal macrophages. Miyagawa N, et al. **Microbiol Immunol** 1988;32(7):709–19

Comparative effects of roxithromycin and erythromycin on cellular immune functions in vitro. 2. Chemotaxis and phagocytosis of 3H–Staphylococcus aureus by human macrophages. Carlone NA, et al. **Microbios** 1989; 58(234):17–25

Comparative effects of roxithromycin and erythromycin on cellular immune functions in vitro. 3. Killing of intracellular Staphylococcus aureus by human macrophages. Cuffini AM, et al. **Microbios** 1989;58(234):27–33

Tannin mediated alveolar macrophage protein phosphorylation. Hempel SL, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):163–70

Influence of epirubicin and epurox treatment on mouse peritoneal macrophages. Daicoviciu D, et al. **Morphol Embryol (Bucur)** 1988 Oct–Dec;34(4):281–9

Effect of cisplatin, lipopolysaccharide, muramyl dipeptide and recombinant interferon–gamma on murine macrophages in vitro. I. Macrophage–mediated tumor cell lysis. Geetha B, et al. **Nat Immun Cell Growth Regul** 1989; 8(2):100–7

Effect of cisplatin, lipopolysaccharide, muramyl dipeptide and recombinant interferon–gamma on murine macrophages in vitro. II. Production of H2O2, O2– and interleukin–1. Sodhi A, et al. **Nat Immun Cell Growth Regul** 1989;8(2):108–16

Cefodizime: a new cephalosporin with apparent immune–stimulating properties in chronic renal failure. Vanholder R, et al. **Nephrol Dial Transplant** 1988;3(2):221–4

Thrombin inhibits the synthesis of prostanoids by isolated glomeruli and peritoneal macrophages in rats. Podjarny E, et al. **Nephron** 1989;53(1):50–3

Naloxone–reversible inhibition by opiates of phagocytosis in Tetrahymena thermophila and mouse macrophages. Casellas AM, et al. **P R Health Sci J** 1988 Aug;7(2):103–5

Protein precoating of polylactide microspheres containing a lipophilic immunopotentiator for enhancement of macrophage phagocytosis and activation. Tabata Y, et al. **Pharm Res** 1989 Apr;6(4):296–301

Extracellular ATP induces a large nonselective conductance in macrophage plasma membranes. Buisman HP, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7988–92

Interference of the flavonoid compound cianidanol with macrophage function and lymphocyte activating mechanisms. Daniel PT, et al. **Prog Clin Biol Res** 1988; 280:205–9

Gamma interferon induces the appearance of a CD4–, major histocompatibility complex class II+ macrophage subpopulation in the rat peritoneal cavity. Ericsson PO, et al. **Scand J Immunol** 1989 Jun;29(6):679–87

Suppressive effect of 1–methyladenosine on the generation of chemiluminescence by mouse peritoneal macrophages stimulated with opsonized zymosan. Itoh K, et al. **Tohoku J Exp Med** 1989 Mar;157(3):205–14

On the cytotoxicity of chrysotile asbestos fibers toward pulmonary alveolar macrophages. II. Effects of nicotinamide on the cell metabolism. Nadeau D, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):144–58

Alterations of guinea pig alveolar macrophage oxidative metabolism by nicotine. Ogunbiyi PO, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):25–30

Possible mechanism of chrysotile asbestos–stimulated superoxide anion production in guinea pig alveolar macrophages. Roney PL, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):132–44

Toxicity to alveolar macrophages in rats following parenteral injection of nickel chloride. Sunderman FW Jr, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):107–18

Effects of selenium on toxicity and ultrastructural localization of mercury in cultured murine macrophages. Christensen M, et al. **Toxicol Lett** 1989 Jun;47(3):259–70

Macrophages as targets for inhibition by cyclosporine. Benson A, et al. **Transplantation** 1989 Apr;47(4):696–703

Interference with the humoral immune response in diverse genetic lines of chickens. I. The effect of carrageenan. Van der Zijpp AJ, et al. **Vet Immunol Immunopathol** 1988 Dec; 20(1):53–60

Macrophages of the rat thymus after cyclosporin treatment. Histochemical, enzymehistochemical and immunohistochemical study. Milićević NM, et al. **Virchows Arch [B]** 1989;57(4):237–44

[Advances in experimental research on the effects of anticarcinogenic, tonic herbal medicines on immune function] Zhao J. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):754–6 (32 ref.) (Chi)

[An experimental immunologic study on an oral decoction of "ziyinggingre" herbs] Xu ZH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):371–3 (Chi)

[Resistance of staphylococci to intracellular killing by macrophages—a new pathophysiologic concept of acute hematogenous osteomyelitis in childhood and its therapeutic consequences] Guggenbichler JP, et al. **Padiatr Padol** 1989;24(1):21–32 (Eng. Abstr.) (Ger)

[In vivo effect of etoposide on the function of bone marrow-derived macrophages] Nakanishi M, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3237–41 (Eng. Abstr.) (Jpn)

[Effect of yeast polysaccharides on the functional activity of macrophages in white mice] Gurina SV, et al. **Antibiot Khimioter** 1988 Nov;33(11):842–5 (Eng. Abstr.) (Rus)

[Astasian: A new stimulator of peritoneal macrophages] Khorokhorina VA, et al. **Antibiot Khimioter** 1988 Sep; 33(9):681–4 (Eng. Abstr.) (Rus)

[Effect of mytilan, a polysaccharide from Crenomytilus grayanus, on the functional activity of peritoneal macrophages] Krylova NV, et al. **Antibiot Khimioter** 1989 Feb;34(2):133–8 (Eng. Abstr.) (Rus)

[Effect of astasilid on the stimulation of peritoneal macrophages] Makarenko IG, et al. **Antibiot Khimioter** 1988 Nov;33(11):833–5 (Eng. Abstr.) (Rus)

[The action of tuftsin on the reaction of macrophage-suppressor formation in vitro and in vivo] Voevodin DA. **Biull Eksp Biol Med** 1988 Nov; 106(11):559–61 (Eng. Abstr.) (Rus)

[Differences in the receptor apparatus of resident and meat-peptone broth-stimulated macrophage populations detectable under the action of salmozan] Zaltseva LG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):214–7 (Eng. Abstr.) (Rus)

[Effect of BCG and cyclophosphamide on the antitumor activity of mouse peritoneal macrophages] Gromov SA, et al. **Eksp Onkol** 1989;11(3):63–6 (Eng. Abstr.) (Rus)

[Macrophage receptors and their modulators] Osniach VS. **Farmakol Toksikol** 1988 Sep–Oct;51(5):111–5 (88 ref.) (Rus)

[Thymostimulin induction of the synthesis of a factor intensifying the bactericidal activity of macrophages] Nikol'skiĭ IS, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):23–6 (Eng. Abstr.) (Rus)

[The effect of alpha/beta and gamma interferon preparations on the functional activity of macrophages in experimental staphylococcal infections] Vikhot' NE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):57–60 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Lysosomal enzyme release from macrophages: a model of food yeast toxicity evaluation. Hernández Rosales F, et al. **Acta Biol Hung** 1988;39(4):335–44

Various sensitivity of macrophage enzymes for endogenous proteases. Antoni F, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):41–2

Elastin degradation by human alveolar macrophages. A prominent role of metalloproteinase activity. Senior RM, et al. **Am Rev Respir Dis** 1989 May;139(5):1251–6

A prothrombinase complex of mouse peritoneal macrophages. Lindahl U, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):180–8

Degradation of arachidonyl phospholipids catalyzed by two phospholipases A2 and phospholipase C in a lipopolysaccharide-treated macrophage cell line RAW264.7. Tanaka Y, et al. **Arch Biochem Biophys** 1989 Jul;272(1):210–8

Enhanced lipoprotein lipase secretion from human monocyte-derived macrophages caused by hypertriglyceridemic very low density lipoproteins. Ishibashi S, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):650–5

Biosynthesis of paf-acether. XIV. Paf-acether output in murine peritoneal macrophages is regulated by the level of acetylhydrolase. Palmantier R, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):475–82

The comparison of lysosomal enzymes activities in alveolar and peritoneal macrophages of rat. Turyna B, et al. **Biochem Int** 1988 Sep;17(3):433–40

Regulation of 3-hydroxy-3-methylglutaryl-coenzyme A reductase activity in mouse peritoneal macrophages. Angelin B. **Biochem J** 1988 Oct 15;255(2):529–34

Intracellular localization of beta-glucuronidase in fibroblasts after direct transfer from macrophages. Dean MF, et al. **Biochem J** 1988 Dec 1;256(2):335–41

Suppression of macrophage lysosomal enzymes after Leishmania donovani infection. Chakraborty P, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):46–55

Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells. Lison D, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2107–12

Control of exogenous proteinases and their inhibitors at the macrophage cell surface. Dean RT, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):174–80

Modulation of lipoprotein lipase activity in mouse peritoneal macrophages by recombinant human tumor necrosis factor. Friedman G, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):201–7

Control of lipoprotein lipase secretion in mouse macrophages. Goldman R, et al. **Biochim Biophys Acta** 1989 Feb 6; 1001(2):120–6

Formation of bis(monoacylglycero)phosphate by a macrophage transacylase. Huterer SJ, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):68–75

Increase of histidine decarboxylase activity in murine myelomonocytic leukemia cells (WEHI-3B) in parallel to their differentiation into macrophages. Kawaguchi-Nagata K, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):249–56

Properties and purification of an arachidonoyl-hydrolyzing phospholipase A2 from a macrophage cell line, RAW 264.7. Leslie CC, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):476–92

Regulation of macrophage lipoprotein lipase secretion by the scavenger receptor. Murata Y, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):17–24

Phospholipase A2 in macrophage plasma membrane releases arachidonic acid from phosphatidylinositol. Shibata Y, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):121–6

Pyruvate kinase during in vitro differentiation of GM-CFC haemopoietic precursor in mice: modulation by L-alanine and L-phenylalanine. Cuenllas E, et al. **Biochimie** 1989 Jun; 71(6):763–6

Hyaluronic acid-degrading enzymes in rat alveolar macrophages and in alveolar fluid: stimulation of enzyme activity after oral treatment with the immunomodulator RU 41740. Fiszer-Szafarz B, et al. **Biol Cell** 1988; 63(3):355–60

Solubilization of the NADPH-oxidase from bone marrow derived macrophages by dialkylphospholipid and purification by HPLC-anion exchange chromatography. Storch J, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):403–6

2'-5' oligo-A-synthetase activity in bovine peripheral blood leukocytes and alveolar macrophages exposed to recombinant interferons and tumor necrosis factor-alpha. Ohmann HB, et al. **Can J Vet Res** 1989 Apr;53(2):161–6

The cytotoxicity of chrysotile asbestos fibers to pulmonary alveolar macrophages. I. Effects of inhibitors of ADP-ribosyl transferase. Nadeau D, et al. **Cell Biol Toxicol** 1988 Mar;4(1):13–30

The level of antioxidant enzymes in alveolar and peritoneal macrophages. Duran HA, et al. **Cell Mol Biol** 1988; 34(5):507–15

Hormone-sensitive lipase is responsible for the neutral cholesterol ester hydrolase activity in macrophages. Small CA, et al. **FEBS Lett** 1989 Apr 24;247(2):205–8

Phosphorylation of NADPH-cytochrome c reductase in guinea pig peritoneal macrophages stimulated with phorbol myristate acetate. Tamoto K, et al. **FEBS Lett** 1989 Feb 13;244(1):159–62

A phospholipase A2 hydrolyzing arachidonoyl-phospholipids in mouse peritoneal macrophages. Wijkander J, et al. **FEBS Lett** 1989 Feb 13; 244(1):51–6

Ultrastructural cytochemistry of non-specific esterase in murine peritoneal macrophages. Rademakers LH, et al. **Histochem J** 1989 May;21(5):301–8

Histochemical and immunological demonstration of purple acid phosphatase in human and bovine alveolar macrophages. Schindelmeiser J, et al. **Histochemistry** 1989; 92(1):81–5

Ultrastructural electron probe X-ray microanalytical reaction product identification of three different enzymes in the same mouse resident peritoneal macrophage. van Dort JB, et al. **Histochemistry** 1989;92(3):243–53

Effect of cisplatin on release of lysozyme, plasminogen activator, leucine aminopeptidase and beta-hexosaminidase by murine peritoneal macrophages in vitro. Gupta P, et al. **Indian J Exp Biol** 1988 Sep;26(9):679–84

Selective inhibition of cytokine-induced lysozyme activity by tetanus toxin in the GG2EE macrophage cell line. Pitzurra L, et al. **Infect Immun** 1989 Aug;57(8):2452–6

Stimulus-specific production of cyclooxygenase and lipoxygenase metabolites of arachidonic acid by bovine alveolar macrophages. Laegreid WW, et al. **Inflammation** 1989 Apr;13(2):233–44

Human mononuclear cells and neutral proteinases. III. Neutral proteinases and rheumatoid arthritis: monocytes as a source of cathepsin G and proteinase potentiation of IgM rheumatoid factor elaboration. Panush RS. **Inflammation** 1989 Jun;13(3):359–66

Increased superoxide anion production and glutathione peroxidase activity in peritoneal macrophages from autoimmune-prone MRL/Mp-lpr/lpr mice. Rokutan K, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):113–9

Bacterial lipopolysaccharide regulates the phosphorylation of the 68K protein kinase C substrate in macrophages. Rosen A, et al. **J Biol Chem** 1989 Jun 5;264(16):9118–21

Activation of the superoxide forming NADPH oxidase in a cell-free system by sodium dodecyl sulfate. Absolute lipid dependence of the solubilized enzyme. Shpungin S, et al. **J Biol Chem** 1989 Jun 5;264(16):9195–203

Hydrogen peroxide inhibits alveolar macrophage 5-lipoxygenase metabolism in association with depletion of ATP. Sporn PH, et al. **J Biol Chem** 1988 Oct 15; 263(29):14776–83

Involvement of protein kinase C in platelet-activating factor-stimulated diacylglycerol accumulation in murine peritoneal macrophages. Uhing RJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9224–30

Pulmonary alveolar macrophages from patients with active sarcoidosis express type IV collagenolytic proteinase. An enzymatic mechanism for influx of mononuclear phagocytes at sites of disease activity. Agostini C, et al. **J Clin Invest** 1989 Aug;84(2):605–12

Acid cholesterol esterase activity in the foam cells isolated from rabbit experimental xanthoma tissues. Kodama H, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):294–8

Enzyme histochemistry of monocytes/macrophages: a study in a murine model of immune complex-mediated glomerulonephritis. Iskandar SS, et al. **J Histochem Cytochem** 1989 Jan;37(1):25–9

Polarized distribution of Na+,K+-ATPase in giant cells elicited in vivo and in vitro. Vignery A, et al. **J Histochem Cytochem** 1989 Aug;37(8):1265–71

Selective up-regulation of human alveolar macrophage collagenase production by lipopolysaccharide and comparison to collagenase production by fibroblasts. Cury JD, et al. **J Immunol** 1988 Dec 15;141(12):4306–12

Interferon-induced indoleamine 2,3-dioxygenase activity in human mononuclear phagocytes. Carlin JM, et al. **J Leukoc Biol** 1989 Jan;45(1):29–34

Bacterial lipopolysaccharide reduces macrophage lipoprotein lipase levels: an effect that is independent of tumor necrosis factor. White JR, et al. **J Lipid Res** 1988 Oct;29(10):1379–85

Regulation of monocyte/macrophage collagenase. Wahl LM, et al. **J Oral Pathol** 1988 Nov;17(9–10):452–5 (43 ref.)

Inhibition of histamine N-methyltransferase activity in guinea-pig pulmonary alveolar macrophages by nicotine. Gairola C, et al. **J Pharm Pharmacol** 1988 Oct;40(10):724–6

Phospholipases and acyltransferases in macrophages. Flesch I, et al. **Klin Wochenschr** 1989 Feb 1;67(3):119–22 (16 ref.)

Leishmania mexicana amazonensis: heterogeneity in 5'-nucleotidase and peroxidase activities of mononuclear phagocytes during in vivo and in vitro infection. Côrte-Real S, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):113–21

Influence of transglutaminase on the functions of mouse peritoneal macrophages. Ishitani K, et al. **Microbiol Immunol** 1989;33(1):59–68

PGE2-induced desensitization of adenylate cyclase of a murine macrophage-like cell line (P388D1). Shamma MS, et al. **Prostaglandins** 1988 Sep;36(3):329–41

The adenylate cyclase of rheumatoid synovial fluid macrophages is more sensitive for dl-5E, 19,14-di dehydro-carbo-prostacyclin, a stable prostacyclin analogue, than for prostaglandin E2. Elliott GR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):105–10

Specific lipoxygenase inhibition reverses macrophage cytotasis towards P815 tumor cells in vitro induced by the calcium ionophore A23187. Van Hilten JA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):187–92

Diminished activity of tartrate resistant acid phosphatase in alveolar macrophages from patients with active sarcoidosis. Barth J, et al. **Thorax** 1988 Nov;43(11):901–4

[Observation on ultrastructural enzyme cytochemistry of activated macrophages] Guo SY. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):210–2 (Eng. Abstr.) (Chi)

[Influence of enzyme activity of peritoneal macrophages and Kupffer cells in animal experiments] Fleischer J, et al. **Folia Haematol (Leipz)** 1989;116(1):9–15 (Ger)

[Effect of peritoneal dialysis on cytochemical characteristics of peritoneal macrophages] Sułowicz W, et al. **Przegl Lek** 1988;45(6):500–3 (Eng. Abstr.) (Pol)

[Activity of adenosine metabolism enzymes and spontaneous chemiluminescence in macrophages in the tumor growth process] Umanskiĭ VIu, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):109–11 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Resistance of Mycobacterium avium to microbicidal activities in bone-marrow macrophages from naturally-susceptible (C57B1/6) and naturally-resistant (DBA-2) mice. Rastogi N, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:177–8

Mononuclear cell infiltrate and HLA-DR expression in low grade astrocytomas. An immunohistological study of 23 cases. Rossi ML, et al. **Acta Neuropathol (Berl)** 1988; 76(3):281–6

Studies of phagocytic and killing activity of BAL macrophages in sarcoidosis. Orosi P, et al.

Acta Paediatr Hung 1988–89;29(1–2):49–50
Wall degradation of antibiotic-pretreated staphylococci within macrophages. Wecke J, et al.
Acta Paediatr Hung 1988–89;29(1–2):159–61
Dysfunction of the monocyte–macrophage system in the idiopathic minimal change nephrotic syndrome. Estevez ME, et al. **Acta Paediatr Scand** 1989 Jan;78(1):87–93
Comparative functional study of colostral macrophages from mothers delivering preterm and at term. Rodriguez C, et al. **Acta Paediatr Scand** 1989 May;78(3):337–41
Immune-complexes–mediated evasion of Plasmodium knowlesi from destruction by macrophages. Singh PP, et al. **Acta Trop (Basel)** 1989 Jul;46(4):239–47
Effects on in vitro growth of Babesia microti by cells and serum from B. microti and Schistosoma mansoni infected mice. Kurtzhals J, et al. **Acta Vet Scand** 1988; 29(3–4):357–62
In vivo Junin virus–mouse macrophages interaction. Campetella OE, et al. **Acta Virol (Praha)** 1988 May; 32(3):198–206
Immunological characteristics of milky spots in the omentum of rats. Beelen RH, et al. **Adv Exp Med Biol** 1988; 237:745–50
Lymphokine–induced macrophage resistance to infection with Leishmania major. Belosevic M, et al.
Adv Exp Med Biol 1988;239:239–44
Human peritoneal macrophages enhance HLA–DR expression in culture and are very potent stimulators of an allogeneic mixed leucocyte reaction. Bos HJ, et al.
Adv Exp Med Biol 1988;237:801–6
Subpopulations of non–lymphoid cells in bronchus associated lymphoid tissue and lung of the mouse. Breel M, et al. **Adv Exp Med Biol** 1988;237:607–13
Recognition and binding of pathogenic yeasts by adhesion molecules of human macrophages. Bullock WE, et al.
Adv Exp Med Biol 1988;239:45–52 (22 ref.)
What T cells tell macrophages to do during resistance to listeriosis. Campbell PA. **Adv Exp Med Biol** 1988;239:13–22 (41 ref.)
Lymph node macrophage heterogeneity: a subpopulation fails to express activation phenotype. Chao D, et al.
Adv Exp Med Biol 1988;237:771–6
Induction of the expression of an FcR for monomeric rat IgG2b on rat peritoneal macrophages. Denham S, et al.
Adv Exp Med Biol 1988;237:777–81
Eradication of cancer metastasis by tumoricidal macrophages. Fidler IJ. **Adv Exp Med Biol** 1988;233:415–23
Activation of mononuclear phagocyte functions by structurally different bacterial endotoxins. Johne B, et al.
Adv Exp Med Biol 1988;237:783–7
Expression and function of MHC class II antigens on macrophages and dendritic cells. Kamperdijk EW, et al.
Adv Exp Med Biol 1988;237:789–93
Mycobacterium tuberculosis antigen specific human T–cell lines are cytolytic to autologous antigen pulsed macrophages. Kumararatne DS, et al.
Adv Exp Med Biol 1988;237:401–6
Immunological aspects of tumor–macrophage interactions. Remels L, et al. **Adv Exp Med Biol** 1988;233:49–59
Inhibition of splenic T lymphocytes and accessory cell interaction by anti–mac–1 (monoclonal antibody to complement receptor type 3). el Rouby S, et al.
Adv Exp Med Biol 1988;237:397–400
Joint inflammation induced by a mature macrophage cell line and cloned MT4+, Lyt–2– T cells in allogeneic mice. Klasen IS, et al. **Agents Actions** 1989 Jan;26(1–2):202–5
Expression of macrophage–associated antigens in tissues involved by Langerhans' cell histiocytosis (histiocytosis X). Ruco LP, et al. **Am J Clin Pathol** 1989 Sep;92(3):273–9
Human macrophages can express the Hodgkin's cell–associated antigen Ki–1 (CD30). Andreesen R, et al.
Am J Pathol 1989 Jan;134(1):187–92
The phenotype of human placental macrophages and its variation with gestational age. Goldstein J, et al.
Am J Pathol 1988 Dec;133(3):648–59
Macrophage function in mammary glands of Brucella abortus–infected cows and cows that resisted infection after inoculation of Brucella abortus. Harmon BG, et al.
Am J Vet Res 1989 Apr;50(4):459–65
Evaluation of the opsonic capacity of core lipopolysaccharide antiserum of equine origin against smooth Escherichia coli 0111:B4, using macrophage chemiluminescence. Morris DD, et al. **Am J Vet Res** 1989 Aug;50(8):1272–8
Effects of T–2 mycotoxin ingestion on phagocytosis of Aspergillus fumigatus conidia by rabbit alveolar macrophages and on hematologic, serum biochemical, and pathologic changes in rabbits. Niyo KA, et al.
Am J Vet Res 1988 Oct;49(10):1766–73
Functional and metabolic activity of bovine pulmonary lavage cells phagocytically stimulated with pathogenic isolates of Pasteurella haemolytica. Richards AB, et al.
Am J Vet Res 1989 Mar;50(3):329–34
Use of allophycocyanin allows quantitative description by flow cytometry of alveolar macrophage surface antigens present in low numbers of cells. Fuchs HJ, et al.
Am Rev Respir Dis 1988 Nov;138(5):1124–8
Cellular influx and activation increase macrophage cytotoxicity and interleukin–1 elaboration during pulmonary inflammation in rats. Fuchs HJ, et al.
Am Rev Respir Dis 1988 Sep;138(3):572–7
Improvement in alveolar macrophage migration after therapeutic whole lung lavage in pulmonary alveolar proteinosis. Hoffman RM, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1030–2
Expression of Ia by murine alveolar macrophages is upregulated during the evolution of a specific immune response in pulmonary parenchyma. Kaltreider HB, et al.
Am Rev Respir Dis 1988 Jun;137(6):1411–6
Antigen–independent binding of T–cells by dendritic cells and alveolar macrophages in the rat. Kradin RL, et al.
Am Rev Respir Dis 1989 Jan;139(1):207–11
Bronchoalveolar macrophages from patients with idiopathic pulmonary fibrosis are unable to kill facultative intracellular bacteria. Savici D, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):22–7
Macrophages lysing seminoma cells in patients with carcinoma–in–situ (CIS) of the testis. Schütte B, et al.
Andrologia 1988 Jul–Aug;20(4):295–303
Immune recognition of cytochrome c. II. The role of macrophages as modulators and not as antigen–presenting cells in immune response in vitro. Skok MV, et al.
Ann Inst Pasteur Immunol 1988 Sep–Oct;139(5):531–44
Immunobiology of microglial cells. Frei K, et al.
Ann N Y Acad Sci 1988;540:218–27 (39 ref.)
Microglia express MHC class II in normal and demyelinating human white matter. Hayes GM, et al.
Ann N Y Acad Sci 1988;540:501–3
Occurrence of HLA–DR reactive microglia in Alzheimer's disease. McGeer PL, et al. **Ann N Y Acad Sci** 1988; 540:319–23
IL–6/BSF2 in normal and abnormal regulation of immune responses. Matsuda T, et al. **Ann N Y Acad Sci** 1989; 557:466–76; discussion 476–7
Dual–label immunocytochemistry of the active multiple sclerosis lesion: major histocompatibility complex and activation antigens. Hayashi T, et al. **Ann Neurol** 1988 Oct; 24(4):523–31
Production of interleukin 1 by activated blood monocytes and alveolar macrophages from melanoma patients. Arnould R, et al. **Anticancer Res** 1988 Jul–Aug;8(4):775–9
Antiherpes activity of chemically synthesized lipid A–subunit analogue GLA–60 in immunosuppressed mice. Ikeda S, et al. **Antiviral Res** 1989 May–Jun;11(4):173–80
Characterization of a monoclonal antibody to guinea pig peritoneal macrophages that inhibits phagocytosis of unopsonized zymosan: structural and functional similarities of the antigen to human and mouse CR3. Tamoto K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):541–50
Role of macrophages in cytotoxic reaction against cells of lymphatic leukaemia L1210 in mice in the light of cytoenzymatic and ultracytoenzymatic studies. Madej JA, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):924–32
Phagocytic and bactericidal properties of macrophages of mice immunized with outer membrane proteins (OMP) of Shigella. Czarny A, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(6):701–9
A simple colorimetric method for the measurement of phagocytosis of crystals of low molecular weight compound by macrophages. Piasecki E, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(4):487–95
Phagocytosis and killing of Listeria by guinea pig macrophages and neutrophils. Rudnicka W, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(2):161–6
Study on pinocytosis and antigen presentation by murine peritoneal macrophages to T cells in vitro after cisplatin treatment. Sodhi A, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(3):315–23
In vivo activation of murine peritoneal macrophages by intraperitoneal administration of cisplatin. Sodhi A, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(3):303–14
Antigen presentation to T cell lines and clones by peritoneal macrophages, peritoneal B cells and antigen–specific B cell hybridomas. Zimecki M, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(4):409–22
The inflammatory macrophage response to murine cytomegalovirus in genetically susceptible mice. Price P, et al. **Arch Virol** 1989;106(1–2):35–50
Flow cytometric study of immunocompetent cell phenotypes and phagocytosis in CAPD effluent. Brando B, et al.
ASAIO Trans 1988 Jul–Sep;34(3):441–4
In vitro microbicidal activity of avian peritoneal macrophages. Harmon BG, et al. **Avian Dis** 1989 Jan–Mar; 33(1):177–81
Reduction of macrophage–mediated tumor cytotoxicity by pretreatment with GM–CSF. Heidenreich S, et al.
Behring Inst Mitt 1988 Aug;(83):274–7
Induction of antigen presentation capacity and MHC class II gene expression in bone marrow macrophages derived from GM–CSF–supplemented in vitro cultures.
Reske–Kunz AB, et al. **Behring Inst Mitt** 1988 Aug; (83):258–64
Recognition and destruction of neoplastic cells by activated macrophages: discrimination of altered self. Fidler IJ, et al. **Biochim Biophys Acta** 1988 Nov 15;948(2):151–73 (190 ref.)
Macrophages express glial markers. Alliot F, et al.
Biol Cell 1988;63(1):109–11
Sensitivity of locally recurrent rat mammary tumour cell lines to syngeneic polymorphonuclear cell, macrophage and natural killer cell cytolysis. Aeed PA, et al.
Br J Cancer 1988 Dec;58(6):746–52
Antitumour potential of pleural cavity macrophages in lung cancer patients without malignant effusion. Kimura S, et al. **Br J Cancer** 1989 Apr;59(4):535–9
Effects of inhaled titanium dioxide dust on the lung and on the course of experimental Legionnaires' disease. Baskerville A, et al. **Br J Exp Pathol** 1988 Dec;69(6):781–92
Serial study of phagocytic function in rat bovine serum albumin (BSA) nephritis. Kawasaki K, et al.
Br J Exp Pathol 1988 Aug;69(4):505–13
Macrophage antimycobacterial mechanisms. Lowrie DB, et al. **Br Med Bull** 1988 Jul;44(3):624–34 (47 ref.)
Role of activated macrophages in the immunopathology of tuberculosis. Rook GA. **Br Med Bull** 1988 Jul;44(3):611–23 (51 ref.)
Immunotherapy of cancer: experimental approach with activated macrophages proliferating in culture. Bartholeyns J, et al. **Cancer Detect Prev** 1988;12(1–6):413–20
A morphological analysis of an in vitro model of cytotoxic antitumor activity. Bielat KL, et al. **Cancer Detect Prev** 1988;12(1–6):1–7
Influence of sera from patients affected by neoplasia on some human macrophage functions. Merendino RA, et al.
Cancer Detect Prev 1988;12(1–6):73–80
Role of culture supernatant of cytotoxic/cytostatic macrophages in activation of murine resident peritoneal macrophages. Hashimoto S, et al.
Cancer Immunol Immunother 1989;28(4):253–9
Comparative effect of rat and fetal calf serum on measurement of the natural tumoricidal activity of rat lymphocytes, macrophages and polymorphonuclear cells. Reisser D, et al. **Cancer Immunol Immunother** 1989; 28(1):34–6
Epithelial dendritic cells and connective tissue macrophages in oral carcinogenesis and the effects of systemic Corynebacterium parvum. Pitigala–Arachchi A, et al.
Carcinogenesis 1989 Mar;10(3):501–7
Cell interactions in alveolar macrophage–mediated suppression of the immune response: an unusual suppressor pathway involving a population of T–cells that express Lyt–1, L3T4, and I–J. Ferrick DA, et al. **Cell Immunol** 1988 Oct 1;116(1):183–94
Surface phenotype of rat bone marrow–derived mononuclear phagocytes. Keller R, et al. **Cell Immunol** 1989 Apr 15; 120(1):277–85
Reconstitution of murine resident peritoneal macrophages for antibody–dependent cellular cytotoxicity by homologous serum C1q. Leu RW, et al. **Cell Immunol** 1989 Aug; 122(1):48–61
Macrophage colony–stimulating factor enhances monocyte and macrophage antibody–dependent cell–mediated cytotoxicity. Mufson RA, et al. **Cell Immunol** 1989 Mar; 119(1):182–92
Regulation of MHC gene expression during the differentiation of bone marrow–derived macrophages. Pullen JK, et al. **Cell Immunol** 1989 Jul;121(2):398–413
Nature of the thymocytes associated with dendritic cells and macrophages in thymic rosettes. Shortman K, et al.
Cell Immunol 1989 Mar;119(1):85–100
Alteration of in vitro murine peritoneal macrophage function by dietary enrichment with eicosapentaenoic and docosahexaenoic acids in menhaden fish oil. Somers SD, et al. **Cell Immunol** 1989 Oct 1;123(1):201–11
In vivo effects of interferon–gamma and indomethacin on murine alveolar macrophage activity. Stevens MG, et al.
Cell Immunol 1989 Oct 1;123(1):83–95
Tumor necrosis factor–mediated cytotoxicity by tumor–associated macrophages. Wilson KM, et al.
Cell Immunol 1989 Oct 1;123(1):158–65
Phenotype of blood monocytes and alveolar macrophages in interstitial lung disease. Hoogsteden HC, et al. **Chest** 1989 Mar;95(3):574–7
Macrophage therapy of cancer metastasis. Fidler IJ.
Ciba Found Symp 1988;141:211–22 (25 ref.)
Cyclosporin A enhances elimination of intracellular L. major parasites by murine macrophages. Bogdan C, et al.
Clin Exp Immunol 1989 Jan;75(1):141–6
Demonstration of increased anti–mycobacterial activity in peripheral blood monocytes after BCG vaccination in British school children. Cheng SH, et al.
Clin Exp Immunol 1988 Oct;74(1):20–5
The effect of products from bronchoalveolar–derived neutrophils on oxidant production and phagocytic activity of alveolar macrophages. Donaldson K, et al.
Clin Exp Immunol 1988 Dec;74(3):477–82
The role of human alveolar macrophages in the allogeneic and autologous mixed leucocyte reactions. Ettensohn DB, et al. **Clin Exp Immunol** 1989 Mar;75(3):432–7
Suppressor cell activity of human alveolar macrophages in interstitial lung diseases. Fireman EM, et al.
Clin Exp Immunol 1988 Jul;73(1):111–6
Expression of Fc receptors is suppressed in alveolar macrophages from patients with sarcoidosis. Hayashi S, et al. **Clin Exp Immunol** 1988 Sep;73(3):495–9
The IgM receptor in mouse peritoneal macrophages. Isaac L, et al. **Clin Exp Immunol** 1988 Jun;72(3):516–20
Modulation of Fc and C3b receptor expression on guinea–pig macrophages by lymphokines. Limb GA, et al.
Clin Exp Immunol 1988 Nov;74(2):171–6
Mononuclear phagocyte system of human Peyer's patches: an immunohistochemical study using monoclonal antibodies. Mahida YR, et al. **Clin Exp Immunol** 1989 Jan; 75(1):82–6
Interleukin 2 receptor expression by macrophages in inflammatory bowel disease. Mahida YR, et al.
Clin Exp Immunol 1988 Dec;74(3):382–6

Phenotypic and functional changes in alveolar macrophages contribute to the pathogenesis of pulmonary sarcoidosis. Spiteri MA, et al. **Clin Exp Immunol** 1988 Dec;74(3):359–64

Increased expression of class II antigens of the major histocompatibility complex on alveolar macrophages and alveolar type II cells and interleukin-1 (IL-1) secretion from alveolar macrophages in an animal model of silicosis. Struhar DJ, et al. **Clin Exp Immunol** 1989 Aug;77(2):281–4

TNF-alpha mediated selection of macrophage-resistant gene-regulatory tumor variants. Remels L, et al. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):493–506

Up-regulation of natural killer activity of human immunodeficiency virus-infected patients by in vitro-differentiated macrophages. Chang ZL, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):133–9

Immunologic patterns in CAPD patients with peritonitis. Lamperi S, et al. **Clin Nephrol** 1988;30 Suppl 1:S41–4 (23 ref.)

The effect of immunity to core lipopolysaccharides (LPS) on the production of thromboxane and prostacyclin by equine peritoneal macrophages. Morris DD, et al. **Cornell Vet** 1989 Jul;79(3):231–47

The monoclonal antibody CVI-ChNL-68.1 recognizes cells of the monocyte-macrophage lineage in chickens. Jeurissen SH, et al. **Dev Comp Immunol** 1988 Fall;12(4):855–64

Ontogeny of 'macrophage' function. VI. Down-regulation for Ia-expression of newborn mouse macrophages by endogenous beta-interferon. Kitaura M, et al. **Dev Comp Immunol** 1988 Summer;12(3):645–55

Macrophage infiltration precedes and is a prerequisite for lymphocytic insulitis in pancreatic islets of pre-diabetic BB rats. Hanenberg H, et al. **Diabetologia** 1989 Feb; 32(2):126–34

Prevention of lymphocytic thyroiditis and insulitis in diabetes-prone BB rats by the depletion of macrophages [letter] Wilkin TJ. **Diabetologia** 1988 Oct;31(10):779–80

Toxic effects of methyl methanesulfonate (MMS) on activated macrophages from chickens. Qureshi MA, et al. **Environ Mol Mutagen** 1989;13(3):253–62

Macrophage clearance of 125I-labelled polyvinyl pyrrolidone in the horse: effect of ovarian steroids and persistent endometritis. Watson ED, et al. **Equine Vet J** 1988 Nov;20(6):421–3

Human macrophage function and physical exercise: phagocytic and histochemical studies. Fehr HG, et al. **Eur J Appl Physiol** 1989;58(6):613–7

Control of the antitumoral activity of human macrophages produced in large amounts in view of adoptive transfer. Dumont S, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1691–8

Adoptive immunotherapy of cancer with macrophages: current approaches and further prospects. Keller R. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):599–601 (11 ref.)

Effect of free or liposome-encapsulated muramyl dipeptide on uptake and intracellular survival of Listeria monocytogenes in mouse peritoneal macrophages in vitro. Bakker-Woudenberg IA, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):603–9

Interferon-gamma and tumor necrosis factor induce the L-arginine-dependent cytotoxic effector mechanism in murine macrophages. Drapier JC, et al. **Eur J Immunol** 1988 Oct;18(10):1587–92

Ly-6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon-gamma. Jutila MA, et al. **Eur J Immunol** 1988 Nov;18(11):1819–26

Marginal zone macrophages and their role in the immune response against T-independent type 2 antigens: modulation of the cells with specific antibody. Kraal G, et al. **Eur J Immunol** 1989 Apr;19(4):675–80

Alloreactive cytotoxic T cells induce DNA fragmentation in peritoneal macrophages: evidence for target cell killing by cytotoxic T cells in vivo. Liu Y, et al. **Eur J Immunol** 1989 Jun;19(6):1153–5

Immunogenic capacity of macrophage hybridomas. Tzehoval E, et al. **Eur J Immunol** 1989 Jan;19(1):89–96

Cell-mediated immunity in pigeon breeders' lung: the effect of removal from antigen exposure. Johnson MA, et al. **Eur Respir J** 1989 May;2(5):445–50

Inhaled corticosteroids can modulate the immunopathogenesis of pulmonary sarcoidosis. Spiteri MA, et al. **Eur Respir J** 1989 Mar;2(3):218–24

Flow cytometric demonstration of shared antigens between human bladder cancer cells and normal host macrophages. Devonec M, et al. **Eur Urol** 1989;16(1):57–62

Macrophage antigens associated with adhesion: identification by a monoclonal antibody specific for Lewis lung carcinoma cells. Midoux P, et al. **Exp Cell Res** 1989 Jul; 183(1):168–78

Evaluation of Fc-dependent monocyte-macrophage function in bone marrow transplant recipients. Brochu S, et al. **Exp Hematol** 1989 Oct;17(9):948–51

Echinococcus multilocularis: inhibition of murine neutrophil and macrophage chemotaxis. Alkarmi T, et al. **Exp Parasitol** 1989 Jul;69(1):16–22

Different handling of antigen by macrophages of low-responder C57BL/10ScSn strain and high-responder A/J strain of mice. II. Antigen uptake. Říhová B, et al. **Folia Biol (Praha)** 1989;35(2):90–101

Effect of cyclophosphamide on the candidacidal activity of rabbit peritoneal macrophages. Kotulová D, et al. **Folia Microbiol (Praha)** 1988;33(5):401–6

Characterization of a new monoclonal antibody to rat macrophages and Kupffer cells. Bodenheimer HC Jr, et al. **Hepatology** 1988 Nov–Dec;8(6):1667–72

Macrophages and interdigitating reticulum cells in normal thymus and in thymoma: an immunohistochemical study. Ruco LP, et al. **Histopathology** 1989 Jan;14(1):37–45

Expression of the VEP13 antigen (CD16) on native human alveolar macrophages and cultured blood monocytes. Baumgartner I, et al. **Immunobiology** 1988 Jul;177(3):317–26

Lack of correlation between in vivo peroxidatic activity patterns and tumoricidal activity in vitro of peritoneal macrophages after intraperitoneal immunization with tumor cells. Dullens HF, et al. **Immunobiology** 1988 Jul; 177(3):293–304

Interleukin 1 as a tumor cytostatic mediator released from tumor ascites-treated macrophages. Gong JH, et al. **Immunobiology** 1988 Sep;177(4–5):339–51

Murine macrophage cell line AP284 presents antigen to cloned MT4+, Lyt-2- T cells in vitro and in vivo. Klasen IS, et al. **Immunobiology** 1988 Dec;178(3):261–74

Lewis lung carcinoma cells enhance the synthesis of C3 and are opsonized by C3 secreted from murine macrophages. Lipari M, et al. **Immunobiology** 1988 Jul;177(3):233–44

Activation of macrophages to express cytocidal activity correlates with inhibition of their responsiveness to macrophage colony-stimulating factor (CSF-1): involvement of a pertussis toxin-sensitive reaction. Hume DA, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):243–9

Phagocytic activity of peritoneal and omental macrophages of athymic nude mice. Větvička V, et al. **Immunol Invest** 1988 Aug–Oct;17(6–7):531–41

Human peritoneal macrophage activity is increased by tuftsin. Kain Z, et al. **Immunol Lett** 1989 Jun 1;21(3):257–61

Co-localization of terminal C5b-9 complement complexes and macrophages in human atherosclerotic arterial walls. Rus HG, et al. **Immunol Lett** 1988 Sep;19(1):27–32

Localization of the cell activator lipopeptide in bone marrow-derived macrophages by electron energy loss spectroscopy (EELS). Wolf B, et al. **Immunol Lett** 1989 Jan 31;20(2):121–6

The adenylate cyclase-cAMP-protein kinase A pathway and regulation of the immune response. Kammer GM. **Immunol Today** 1988 Jul–Aug;9(7–8):222–9 (97 ref.)

Measurement of the rates of basal pinocytosis of horseradish peroxidase and internalization of heat-aggregated IgG by macrophages from normal and streptozotocin-induced diabetic rats. Abrass CK. **Immunology** 1988 Nov; 65(3):411–5

Macrophage function in chronic experimental alcoholism. I. Modulation of surface receptors and phagocytosis. Bagasra O, et al. **Immunology** 1988 Nov;65(3):405–9

Functional studies on macrophage populations in the airways and the lung wall of SPF mice in the steady-state and during respiratory virus infection. Bilyk N, et al. **Immunology** 1988 Nov;65(3):417–25

Monoclonal antibodies that recognize distinct epitopes of the macrophage type three complement receptor differ in their ability to inhibit binding of Leishmania promastigotes harvested at different phases of their growth cycle. Cooper A, et al. **Immunology** 1988 Dec;65(4):511–4

Regulation of a murine macrophage haemagglutinin (sheep erythrocyte receptor) by a species-restricted serum factor. Crocker PR, et al. **Immunology** 1988 Dec;65(4):515–22

HLA-DR-positive leucocyte subpopulations in human skin include dendritic cells, macrophages, and CD7-negative T cells. Davis AL, et al. **Immunology** 1988 Dec; 65(4):573–81

Induction of EL4 cell resistance to syngeneic macrophage-mediated lysis by protein kinase C ligands; effects of cultured TPA-treated target cell and protein phosphorylation. Essani N, et al. **Immunology** 1988 Oct; 65(2):165–70

Histochemical identification of guinea-pig macrophages by monoclonal antibody MR-1. Kraal G, et al. **Immunology** 1988 Dec;65(4):523–8

Obligatory role of macrophages in dengue virus antigen presentation to B lymphocytes. Rizvi N, et al. **Immunology** 1989 May;67(1):38–43

The role of macrophages in the immunoadjuvant action of liposomes: effects of elimination of splenic macrophages on the immune response against intravenously injected liposome-associated albumin antigen. Su D, et al. **Immunology** 1989 Mar;66(3):466–70

Effect of ketorolac on phagocytosis of Candida albicans by peritoneal macrophages. Fraser-Smith EB, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):151–5

Effect of ionizing radiation on macrophage stimulating property of Vibrio parahaemolyticus lipopolysaccharide. Bandekar JR, et al. **Indian J Exp Biol** 1988 Sep;26(9):661–4

Phagocytic function of monocytes in murine model of Echinococcus granulosus of human origin. Wangoo A, et al. **Indian J Med Res** 1989 Jan;89:40–2

Calcium is required for the expression of anthrax lethal toxin activity in the macrophagelike cell line J774A.1. Bhatnagar R, et al. **Infect Immun** 1989 Jul;57(7):2107–14

Characterization of a suppressor factor that regulates phagocytosis by macrophages in murine cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Jun;57(6):1773–9

Characterization of the macrophage subset affected and its response to a T suppressor factor (TsFmp) found in cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Oct; 57(10):2931–7

Macrophage production during murine listeriosis: colony-stimulating factor 1 (CSF-1) and CSF-1-binding cells in genetically resistant and susceptible mice. Cheers C, et al. **Infect Immun** 1988 Nov;56(11):2972–8

Defects in sera from acquired immunodeficiency syndrome (AIDS) patients and from non-AIDS patients with Mycobacterium avium infection which decrease macrophage resistance to M. avium. Crowle AJ, et al. **Infect Immun** 1989 May;57(5):1445–51

Inhibition of Chlamydia trachomatis replication in HEp-2 cells by human monocyte-derived macrophages. Manor E, et al. **Infect Immun** 1988 Dec;56(12):3280–4

Incorporation of recombinant gamma interferon into liposomes enhances its ability to induce peritoneal macrophage antitoxoplasma activity. Mellors JW, et al. **Infect Immun** 1989 Jan;57(1):132–7

Antibodies raised against synthetic peptides from the Arg-Gly-Asp-containing region of the Leishmania surface protein gp63 cross-react with human C3 and interfere with gp63-mediated binding to macrophages. Russell DG, et al. **Infect Immun** 1989 Feb;57(2):630–2

Brucella abortus regulates bovine macrophage-T-cell interaction by major histocompatibility complex class II and interleukin-1 expression. Splitter GA, et al. **Infect Immun** 1989 Apr;57(4):1151–7

Expression of tumor necrosis factor in vitro by human mononuclear phagocytes stimulated with whole Mycobacterium bovis BCG and mycobacterial antigens. Valone SE, et al. **Infect Immun** 1988 Dec;56(12):3313–5

In vitro and in vivo toxicity of T-2 toxin, a Fusarium mycotoxin, to mouse peritoneal macrophages. Vidal D, et al. **Infect Immun** 1989 Jul;57(7):2260–4

Modulation of macrophage Ia expression by lipopolysaccharide: stem cell requirements, accessory lymphocyte involvement, and IA-inducing factor production. Wentworth PA, et al. **Infect Immun** 1989 Jul; 57(7):2028–36

Macrophage cell lines P388D1 and IC-21 stimulated with gamma interferon fail to inhibit the intracellular growth of Histoplasma capsulatum. Wu-Hsieh B, et al. **Infect Immun** 1989 Sep;57(9):2903–5

Activation of mouse peritoneal macrophages in vitro or in vivo by recombinant murine gamma interferon inhibits the growth of Chlamydia trachomatis serovar L1. Zhong GM, et al. **Infect Immun** 1988 Dec;56(12):3322–5

Discrepancy in the abilities of lymphokines and bacteria to mediate tumor protection in vivo and/or tumoricidal activity by macrophages in vitro. Keller R, et al. **Int J Cancer** 1989 Sep 15;44(3):512–7

Delayed-type hypersensitivity to tumor antigens co-expressed with immunogenic determinants induced by xenogenization. Puccetti P, et al. **Int J Cancer** 1989 Feb 15;43(2):279–84

Monocyte/macrophage-directed antibodies Ki-M3 and Ki-M7 detect renal-cell carcinomas. Kaiser U, et al. **Int J Cancer Suppl** 1988;3:45–9

Suppression of yeast ingestion by dexamethasone in macrophage cultures: evidence for a steroid-induced phagocytosis inhibitory protein. Becker J, et al. **Int J Immunopharmacol** 1988;10(4):325–38

Effect of Nocardia rubra cell wall skeleton on interleukin 1 production from mouse peritoneal macrophages. Inamura N, et al. **Int J Immunopharmacol** 1988;10(5):547–54

Kinetics of interleukin-1 production by macrophages during infection with Listeria monocytogenes. Petit JC, et al. **Int J Immunopharmacol** 1988;10(7):875–8

The macrophage in leprosy: a review on the current status. Birdi TJ, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):511–25 (136 ref.)

Killing of Leishmania donovani by activated liver macrophages from resistant and susceptible strains of mice. Olivier M, et al. **Int J Parasitol** 1989 Jul;19(4):377–83

Role of alveolar macrophages in tumor-bearing rats: tumoricidal properties of carrageenan-activated macrophages. Bijma AM, et al. **Invasion Metastasis** 1988; 8(6):364–73

Class II antigens on retinal vascular endothelium, pericytes, macrophages, and lymphocytes of the rat. Fujikawa LS, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):66–73

Killing of virus-induced thymic lymphoma cells obtained from primary and early transfers by activated macrophages. Boteach D, et al. **Isr J Med Sci** 1988 Sep–Oct; 24(9–10):518–21

The contribution of alveolar macrophages to hyperreactive airway disease. Rankin JA. **J Allergy Clin Immunol** 1989 Apr;83(4):722–9 (75 ref.)

Responses of rat alveolar macrophages to inhaled brass powder. Anderson RS, et al. **J Appl Toxicol** 1988 Dec; 8(6):389–93

Effects of inhalation of red phosphorus/butyl rubber combustion products on aveolar macrophage responses in rats. Aranyi C, et al. **J Appl Toxicol** 1988 Dec;8(6):393–8

Effect of in vivo injection of recombinant human interleukin-2 on peritoneal macrophages from MRL-lpr/lpr mice. Dugas B, et al. **J Autoimmun** 1988 Apr; 1(2):195–206

Structure of the rat interleukin 6 gene and its expression in macrophage-derived cells. Northemann W, et al. **J Biol Chem** 1989 Sep 25;264(27):16072–82

Human monocyte/macrophage activation and interleukin 1 generation by biomedical polymers. Miller KM, et al. **J Biomed Mater Res** 1988 Aug;22(8):713–31

Release of interleukin 1 inhibitory activity (contra-IL-1) by

human monocyte-derived macrophages infected with human immunodeficiency virus in vitro and in vivo. Locksley RM, et al. **J Clin Invest** 1988 Dec;82(6):2097–105

Effect of antimacrophage serum on the proliferation of glomerular cells in nephrotoxic serum nephritis in the rat. Matsumoto K, et al. **J Clin Lab Immunol** 1989 Jan; 28(1):39–44

KP1: a new monoclonal antibody that detects a monocyte/macrophage associated antigen in routinely processed tissue sections. Pulford KA, et al. **J Clin Pathol** 1989 Apr;42(4):414–21

Dendritic cells and macrophages expressing class II antigens in the normal rat incisor pulp. Jontell M, et al. **J Dent Res** 1988 Oct;67(10):1263–6

Mouse macrophage hemagglutinin (sheep erythrocyte receptor) with specificity for sialylated glycoconjugates characterized by a monoclonal antibody. Crocker PR, et al. **J Exp Med** 1989 Apr 1;169(4):1333–46

Prevention of experimental cerebral malaria by anticytokine antibodies. Interleukin 3 and granulocyte macrophage colony-stimulating factor are intermediates in increased tumor necrosis factor production and macrophage accumulation. Grau GE, et al. **J Exp Med** 1988 Oct 1; 168(4):1499–504

Neuraminidase-treated macrophages stimulate allogenic CD8+ T cells in the presence of exogenous interleukin 2. Hirayama Y, et al. **J Exp Med** 1988 Oct 1;168(4):1443–56

Macrophages phagocytose thymic lymphocytes with productively rearranged T cell receptor alpha and beta genes. Inaba K, et al. **J Exp Med** 1988 Dec 1;168(6):2279–94

Cooperative effects of colony-stimulating factor 1 and recombinant interleukin 2 on proliferation and induction of cytotoxicity of macrophage precursors generated from mouse bone marrow cell cultures. Li H, et al. **J Exp Med** 1989 Mar 1;169(3):973–86

Acquired resistance to Listeria monocytogenes is mediated by Lyt-2+ T cells independently of the influx of monocytes into granulomatous lesions. Mielke ME, et al. **J Exp Med** 1989 Aug 1;170(2):589–94

Bacterial cell wall-induced immunosuppression. Role of transforming growth factor beta. Wahl SM, et al. **J Exp Med** 1988 Oct 1;168(4):1403–17

Restricted tissue distribution of Mlsa determinants. Stimulation of Mlsa-reactive T cells by B cells but not by dendritic cells or macrophages. Webb SR, et al. **J Exp Med** 1989 Jan 1;169(1):1–12

Differential expression of interferon alpha and beta induced with Newcastle disease virus in mouse macrophage cultures. Hoss A, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):575–89

Spontaneous cytotoxicity of macrophages against pancreatic islet cells. Appels B, et al. **J Immunol** 1989 Jun 1; 142(11):3803–8

Effect of liposome encapsulation on antigen presentation in vitro. Comparison of presentation by peritoneal macrophages and B cell tumors. Dal Monte P, et al. **J Immunol** 1989 Mar 1;142(5):1437–43

CR1, the C3b receptor, mediates binding of infective Leishmania major metacyclic promastigotes to human macrophages. Da Silva RP, et al. **J Immunol** 1989 Jul 15; 143(2):617–22

Clonal analysis of mechanisms of murine T helper cell collaboration with effector cells of macrophage lineage. Fan ST, et al. **J Immunol** 1988 Sep 15;141(6):1819–27

Granulocyte-macrophage colony-stimulating factor activates macrophages derived from bone marrow cultures to synthesis of MHC class II molecules and to augmented antigen presentation function. Fischer HG, et al. **J Immunol** 1988 Dec 1;141(11):3882–8

Fungicidal activity of IFN-gamma-activated macrophages. Extracellular killing of Cryptococcus neoformans. Flesch IE, et al. **J Immunol** 1989 May 1;142(9):3219–24

Lectin-induced phosphatidylinositol metabolism in lymphocytes is potentiated by macrophages. Grier CE 3d, et al. **J Immunol** 1988 Oct 15;141(8):2585–92

Functional heterogeneity of macrophage precursor cells from spleen of Leishmania donovani-infected and untreated mice. Hockertz S, et al. **J Immunol** 1989 Apr 1; 142(7):2489–94

Functional analysis of cloned macrophage hybridomas. VII. Modulation of suppressor T cell-inducing activity. Ishikura H, et al. **J Immunol** 1989 Jul 15;143(2):414–9

Paradoxical role of capsule in murine bronchoalveolar macrophage-mediated killing of Cryptococcus neoformans. Levitz SM, et al. **J Immunol** 1989 Jan 15;142(2):659–65

Macrophage activation-associated proteins. Characterization of stimuli and conditions needed for expression of proteins 47b, 71/73, and 120. MacKay RJ, et al. **J Immunol** 1989 Mar 1;142(5):1639–45

Lung-phase immunity to Schistosoma mansoni. Flow cytometric analysis of macrophage activation states in vaccinated mice. Menson EN, et al. **J Immunol** 1989 Oct 1;143(7):2342–8

Macrophage factors which enhance the mixed leukocyte reaction initiated by dendritic cells. Naito K, et al. **J Immunol** 1989 Mar 15;142(6):1834–9

Intrinsic resistance to viral infection. Mouse macrophage restriction of herpes simplex virus replication. Sarmiento M. **J Immunol** 1988 Oct 15;141(8):2740–8

Antigen-specific activation of effector macrophages by IFN-gamma producing (TH1) T cell clones. Failure of IL-4-producing (TH2) T cell clones to activate effector function in macrophages. Stout RD, et al. **J Immunol** 1989 Feb 1;142(3):760–5

Induction of class II MHC antigen expression in macrophages by Mycoplasma species. Stuart PM, et al. **J Immunol** 1989 May 15;142(10):3392–9

Macrophage-mediated suppression of con A-induced IL-2 production in spleen cells from syphilitic rabbits. Tomai MA, et al. **J Immunol** 1989 Jul 1;143(1):309–14

HLA-restricted lysis of herpes simplex virus-infected monocytes and macrophages mediated by CD4+ and CD8+ T lymphocytes. Torpey DJ 3d, et al. **J Immunol** 1989 Feb 15;142(4):1325–32

Comparison of transforming growth factor-beta and a macrophage- deactivating polypeptide from tumor cells. Differences in antigenicity and mechanism of action. Tsunawaki S, et al. **J Immunol** 1989 May 15;142(10):3462–8

Differential antigen presentation by cloned populations of mouse splenic macrophages. Walker WS. **J Immunol** 1989 Oct 1;143(7):2142–5

Endotoxin-macrophage interaction: post-translational regulation of tumor necrosis factor expression. Zuckerman SH, et al. **J Immunol** 1989 Aug 15;143(4):1223–7

Effects of assay medium composition on macrophage-mediated tumor cell binding and lysis. Hasday JD, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):243–52

Photometric assays for FcRI-dependent binding, phagocytosis, and antibody-dependent cellular cytotoxicity mediated by monomeric IgG gamma 2a in murine peritoneal macrophages. Leu RW, et al. **J Immunol Methods** 1988 Oct 26;113(2):269–78

Phagocytosis of Treponema pallidum pertenue by hamster macrophages on membrane filters. Alder JD, et al. **J Infect Dis** 1989 Aug;160(2):289–97

Lipopolysaccharide (LPS)-reactive monoclonal antibodies fail to inhibit LPS-induced tumor necrosis factor secretion by mouse-derived macrophages. Chia JK, et al. **J Infect Dis** 1989 May;159(5):872–80

Phagocytosis and killing of Listeria monocytogenes by alveolar macrophages: smokers versus nonsmokers. King TE Jr, et al. **J Infect Dis** 1988 Dec;158(6):1309–16

Interleukin-2 protects neonatal mice from lethal herpes simplex virus infection: a macrophage-mediated, gamma interferon-induced mechanism. Kohl S, et al. **J Infect Dis** 1989 Feb;159(2):239–47

Reactivation of Toxoplasma gondii by cytomegalovirus disease in mice: antimicrobial activities of macrophages. Pomeroy C, et al. **J Infect Dis** 1989 Aug;160(2):305–11

Suppresion of macrophage Ia antigen expression by endogenous interferon-alpha/beta. Kato T, et al. **J Interferon Res** 1989 Aug;9(4):393–405

Perivascular dendritic macrophages as immunobiological constituents of the human dermal microvascular unit. Sontheimer RD. **J Invest Dermatol** 1989 Aug;93(2 Suppl):96S–101S (43 ref.)

Formalin-fixed macrophages bind tumor targets similarly to viable macrophages. Chapes SK. **J Leukoc Biol** 1989 Apr; 45(4):322–8

Two distinct cytolytic mechanisms of macrophages and monocytes activated by phorbol myristate acetate. Chung T, et al. **J Leukoc Biol** 1988 Nov;44(5):329–36

Rat bone marrow and monocyte cultures: influence of culture time and lymphokines on the expression of macrophage differentiation antigens. Damoiseaux JG, et al. **J Leukoc Biol** 1989 Sep;46(3):246–53

Comparative study of cytotoxicity, tumor necrosis factor, and prostaglandin release after stimulation of rat Kupffer cells, murine Kupffer cells, and murine inflammatory liver macrophages. Decker T, et al. **J Leukoc Biol** 1989 Feb; 45(2):139–46

Inhibition by monoclonal anticomplement receptor type 1 on interactions between senescent human red blood cells and monocytic-macrophagic cells. Gattegno L, et al. **J Leukoc Biol** 1989 May;45(5):422–8

Binding of metastatic colon carcinoma cells to liver macrophages. Gjøen T, et al. **J Leukoc Biol** 1989 Apr; 45(4):362–9

Transglutaminase levels and immunologic functions of BCG-elicited mouse peritoneal macrophages isolated by centrifugal elutriation. Khera V, et al. **J Leukoc Biol** 1989 May;45(5):434–43

Macrophage activation for cytolysis of virally infected target cells. LeBlanc PA. **J Leukoc Biol** 1989 Apr;45(4):345–52

Polyclonal anti-idiotypes influence macrophage chemotaxis in coxsackievirus-induced murine myocarditis. Paque RE, et al. **J Leukoc Biol** 1989 Jan;45(1):79–86

Prostaglandin E2-mediated inactivation of various killer lineage cells by tumor-bearing host macrophages. Parhar RS, et al. **J Leukoc Biol** 1988 Dec;44(6):474–84

Candidacidal mechanisms of peritoneal macrophages activated with lymphokines or gamma-interferon. Brummer E, et al. **J Med Microbiol** 1989 Mar;28(3):173–81

Induction of macrophage motility by a T-cell line from Balb/c mice specific for Plasmodium berghei malaria. Gross A, et al. **J Parasitol** 1988 Dec;74(6):979–84

Antigenic specificity of human alveolar macrophages and blood monocytes studied by an immunofluorescence technique. Nakstad B, et al. **J Pathol** 1989 Feb; 157(2):99–107

Participation of different cellular types in the enhancement of autoimmune response of old animals to sex accessory glands in male rats: importance of macrophages. Pistoresi-Palencia MC, et al. **J Reprod Immunol** 1988 Dec; 14(3):257–65

Rheumatoid adherent synovial cells produce B cell differentiation factor activity neutralizable by antibody to B cell stimulatory factor-2/interleukin 6. Harigai M, et al. **J Rheumatol** 1988 Nov;15(11):1616–22

Mechanism of immunosuppression following hemorrhage: defective antigen presentation by macrophages. Stephan RN, et al. **J Surg Res** 1989 Jun;46(6):553–6

Production and release of C3 by cultured monocytes/macrophages isolated from burned, trauma, and septic patients. Ogle CK, et al. **J Trauma** 1989 Feb; 29(2):189–94

Antiviral antibodies stimulate production of reactive oxygen species in cultured canine brain cells infected with canine distemper virus. Bürge T, et al. **J Virol** 1989 Jun; 63(6):2790–7

Bacterial lipopolysaccharide and gamma interferon induce transcription of beta interferon mRNA and interferon secretion in murine macrophages. Gessani S, et al. **J Virol** 1989 Jun;63(6):2785–9

Modulation of lentivirus replication by antibodies: Fc portion of immunoglobulin molecule is essential for enhancement of binding, internalization, and neutralization of visna virus in macrophages. Jolly PE, et al. **J Virol** 1989 Apr; 63(4):1811–3

Altered macrophage function in dietary immunoregulation. Perez RV, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):1–4

Lysis of human leukemic cells by monocyte-derived macrophages activated with interferon-gamma and interleukin-2. Kakita T, et al. **Jpn J Cancer Res** 1989 Jan; 80(1):59–64

Effect of cysteine ethylester hydrochloride (Cystanin) on host defense mechanism (IV): Potentiating effects on the function of peritoneal or spleen macrophages. Hisadome M, et al. **Jpn J Pharmacol** 1988 Aug;47(4):379–85

In situ hybridization analysis of macrophage-derived tumor necrosis factor and interleukin-1 mRNA. Remick DG, et al. **Lab Invest** 1988 Dec;59(6):809–16

Analysis of immunocompetent cells following inner ear immunostimulation. Takahashi M, et al. **Laryngoscope** 1988 Oct;98(10):1133–8

Serum colony stimulating activity and colony forming cells in murine brucellosis: relationship to immunopathology. Cheers C, et al. **Microb Pathog** 1987 Sep;3(3):185–94

Development of inflammation and augmented chemotactic responsiveness of murine peritoneal macrophages following treatment with Entamoeba histolytica trophozoites. Ghadirian E, et al. **Microb Pathog** 1987 Sep;3(3):207–14

Role of the alveolar macrophage in host defense and immunity to Legionella micdadei pneumonia in the guinea pig. Levi MH, et al. **Microb Pathog** 1987 Apr;2(4):269–82

Inhibition of CMV replication in human fibroblasts by human monocyte-derived macrophages: implication for CMV persistent infection. Manor E, et al. **Microb Pathog** 1988 Aug;5(2):97–107

Neutrophil-macrophage cooperation in the host defence against mycobacterial infections. Silva MT, et al. **Microb Pathog** 1989 May;6(5):369–80

Route-related variation in the immunogenicity of killed Salmonella enteritidis vaccine: role of antigen presenting cells. George A, et al. **Microbiol Immunol** 1989; 33(6):479–88

Suppressive effect of macrophages on interferon-gamma production by human peripheral lymphocytes stimulated with Mycoplasma pneumoniae. Nakayama T, et al. **Microbiol Immunol** 1988;32(9):985–90

Influence of cefotaxime on Staphylococcus aureus with respect to their interaction with macrophages. Cuffini AM, et al. **Microbios** 1989;58(236–237):147–54

Molecular cloning of a gene selectively induced by gamma interferon from human macrophage cell line U937. Fan XD, et al. **Mol Cell Biol** 1989 May;9(5):1922–8

Structure and function of membrane IL-1. Beuscher HU, et al. **Mol Immunol** 1988 Nov;25(11):1189–99

Human macrophage-colony stimulating factor: alternative RNA and protein processing from a single gene. Cerretti DP, et al. **Mol Immunol** 1988 Aug;25(8):761–70

Effect of histamine on the gene expression and secretion of complement components C2, factor B and C3 in murine macrophages—an opposite signal processing via H1 and H2 receptors. Falus A, et al. **Mol Immunol** 1988 Nov; 25(11):1093–7

Monomeric and dimeric IgG1 as probes for assessing high-affinity and low-affinity receptors for IgG on human monocyte-derived macrophages and on activated macrophages. Jungi TW, et al. **Mol Immunol** 1988 Aug; 25(8):719–29

Characterization of gp39, a B-lymphocyte associated differentiation antigen which is also present on granulocytes and macrophages. Lauzon GJ, et al. **Mol Immunol** 1988 Sep;25(9):829–41

Guinea pig macrophages synthesize a low molecular weight form of C1q with affinity for the C1r2C1s2-complex but which does not bind to Fc in immunoglobulin aggregates. Martin H, et al. **Mol Immunol** 1988 Dec;25(12):1231–7

Relative abilities of two Fc gamma receptors on guinea-pig macrophages to operate in the phagocytosis of soluble immune complexes. Sato H, et al. **Mol Immunol** 1989 Mar; 26(3):309–17

Macrophage precursors as natural killer cells against tumor cells and microorganisms. Baccarini M, et al.

Nat Immun Cell Growth Regul 1988;7(5–6):316–27
Treatment of mice with anti-asialo-GM1 antibody or poly-I:C: effects on metastasis dissociable from modulation of macrophage antitumor activity. Riser BL, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):305–15
Enhanced take of spontaneous murine tumors in mice treated with inhibitors of macrophage and/or NK cell function. Minarovits J, et al. **Neoplasma** 1989;36(1):3–9
Immunocytochemical characterization of the macrophage and lymphocyte infiltrate in the brain in six cases of human encephalitis of varied aetiology. Esiri MM, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug;15(4):289–305
Purification of M. leprae with special reference to the effects of purified M. leprae vaccines on host macrophage cell functions. Saito H, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep;56(3):101–9
Receptor-mediated phagocytosis by macrophages induces a calcium-dependent transient increase in c-fos transcription. Collart MA, et al. **Oncogene** 1989 Feb;4(2):237–41
Reactive membrane on a foldable silicone lens implant in the posterior chamber of a human eye. Wolter JR, et al. **Ophthalmic Surg** 1989 Jan;20(1):17–20
Cytotoxic effects in vitro of human monocytes and macrophages on schistosomula of Schistosoma mansoni. Cottrell B, et al. **Parasite Immunol** 1989 Jan;11(1):91–104
Macrophage-mediated cytostasis and lymphocyte cytotoxicity in cattle immunized with Theileria annulata sporozoites or macroschizont-infected cell lines. Preston PM, et al. **Parasite Immunol** 1988 Nov;10(6):631–47
Role of hypochlorous acid in Trypanosoma musculi killing by phagocytes. Vincendeau P, et al. **Parasitology** 1989 Apr; 98 Pt 2:253–7
Phagocytosis-associated functions in neonatal monocyte-derived macrophages. Speer CP, et al. **Pediatr Res** 1988 Aug;24(2):213–6
Systemic immunosuppression induced by photodynamic therapy (PDT) is adoptively transferred by macrophages. Lynch DH, et al. **Photochem Photobiol** 1989 Apr; 49(4):453–8
Insect immunity: isolation from immune blood of the dipteran Phormia terranovae of two insect antibacterial peptides with sequence homology to rabbit lung macrophage bactericidal peptides [published erratum appears in Proc Natl Acad Sci U S A 1989 May;86(9):3321] Lambert J, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):262–6
Peroxidases enhance macrophage-mediated cytotoxicity via induction of tumor necrosis factor. Lefkowitz DL, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):144–9
Evaluation of an anti-inflammatory factor derived from hyperimmunized cows. Owens WE, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):79–86
Antibody-dependent cellular cytotoxicity mediated by lung macrophages: a comparison of two target cells. Barbers RG, et al. **Respiration** 1989;55(2):94–104
Correlation of immune complexes with serum cytotoxic activity induced by antisperm cytophilic antibodies. Segal-Eiras A, et al. **Rev Argent Microbiol** 1984; 16(3):145–52
Endotoxin enhancement of toxic shock syndrome toxin 1-induced secretion of interleukin 1 by murine macrophages. Beezhold DH, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S289–93
Role of the mononuclear phagocyte system in the immunopathogenesis of human immunodeficiency virus infection and the acquired immunodeficiency syndrome. Bender BS, et al. **Rev Infect Dis** 1988 Nov–Dec; 10(6):1142–54
Sarcoidosis: an alveolar macrophage disease? Todisco T, et al. **Sarcoidosis** 1989 Mar;6(1):44–6
Synthesis of soluble C3 and C9 neoepitopes by human alveolar macrophages in vitro. Pettersen HB, et al. **Scand J Immunol** 1988 Oct;28(4):431–4
Characterization of synovial macrophages by monoclonal antibodies in rheumatoid arthritis and osteoarthritis. Helbig B, et al. **Scand J Rheumatol Suppl** 1988;76:61–6
T cells against a bacterial heat shock protein recognize stressed macrophages. Koga T, et al. **Science** 1989 Sep 8; 245(4922):1112–5
The role of T cell--macrophage interactions in tuberculosis. Kaufmann SH, et al. **Springer Semin Immunopathol** 1988; 10(4):337–58 (82 ref.)
Mixed lymphocyte reaction in interferon-gamma treated (NZB x NZW)F1 mice. Funauchi M, et al. **Tohoku J Exp Med** 1989 Jun;158(2):155–61
Involvement of Mac-1 antigen in tumor cell killing by macrophages. Okuda T, et al. **Tohoku J Exp Med** 1988 Jun;155(2):211–2
A new monoclonal antibody to study mouse macrophage antigen during BHT-induced lung injury and repair. Kennel SJ, et al. **Toxicology** 1989 Apr;55(1–2):103–16
Low susceptibility of trophozoites of virulent Entamoeba histolytica to cellular and antibody-dependent cellular cytotoxicity by guinea-pig effector cells. Saxena A, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):933–7
Immunoregulatory activities of macrophages. Geppert TD, et al. **Transplant Proc** 1988 Dec;20(6):1154–5 (23 ref.)
Differential modulation of macrophage function by allosensitized helper and cytotoxic T-lymphocyte clones. Jordan ML, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):160–1
Correlation of macrophage and NK cell numbers with "activation markers" in rat cardiac allografts. Lord RH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):449–50
Studies of the human and rat macrophage receptor for interleukin-2 (IL-2R): induction and demonstration that IL-2 boosts interleukin-1 production by IL-2R+ macrophages. Pleau ME, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):140–1
Patterns of macrophage immigration and differentiation in human liver grafts. Steinhoff G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):398–400
Expression of class I and class II MHC antigens in normal and transplanted human lung. Taylor PM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):451–2
The relevance of induced class II HLA antigens and macrophage infiltration in early renal allograft biopsies. Raftery MJ, et al. **Transplantation** 1989 Aug;48(2):238–43
Evidence that class I-restricted response to Thy-1 antigen requires L3T4+ cells and macrophages but not Lyt-2+ cells. Zhou P, et al. **Transplantation** 1989 Jun;47(6):1089–92
The role of macrophages in experimental Campylobacter-infections of mice in Lagos, Nigeria. Obi CL, et al. **Trop Geogr Med** 1989 Apr;41(2):154–9
Effect of macrophage blockade on the resistance to a primary Brugia pahangi infection of female BALB/c mice. Nakanishi H, et al. **Trop Med Parasitol** 1989 Mar;40(1):75–6
The role of the reticuloendothelial system in the immunopathology of Marek's disease. Gupta MK, et al. **Vet Microbiol** 1989 Jul;20(3):223–34
In vitro and in vivo interaction between sporocysts of Sarcocystis muris and mouse peritoneal macrophages. Gill HS, et al. **Vet Parasitol** 1989 Aug 1;32(4):341–7
Modulation of porcine peripheral blood-derived macrophage functions by in vitro infection with African swine fever virus (ASFV) isolates of different virulence. Martins CL, et al. **Viral Immunol** 1987–88;1(3):177–90
Increased expression of HLA-DR antigen on alveolar macrophages in pulmonary diseases. Popp W, et al. **Virchows Arch [A]** 1989;414(5):393–7
Macrophage killing of human papillomavirus type 16-transformed cells. Denis M, et al. **Virology** 1989 May; 170(1):342–5
Immunomodulatory effects of staphylococcal lipoteichoic acid in early Listeria monocytogenes infection in Balb/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):251–6
Intestinal microflora of BALB/c-mice and function of local immune cells. Roszkowski K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):270–9
Effect of ketone bodies on the phagocytic activity of bovine milk macrophages and polymorphonuclear leukocytes. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep; 35(8):632–9
[Phagocytic activity in various lung tumors] Mikhova Ts, et al. **Eksp Med Morfol** 1988;27(3):39–43 (Eng. Abstr.) **(Bul)**
[The effects of cigarette smoking on the activity of pulmonary macrophage] Du BY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):235–6, 256 (Eng. Abstr.) **(Chi)**
[Effect of tonsillar macrophages on several immune functions] Cai FF. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):125–8 (Eng. Abstr.) **(Chi)**
[Lymphoreticular cells in the human endometrial stroma] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):845–9 (Eng. Abstr.) **(Ger)**
[Immunophenotyping of lymphoreticular cells in the human decidua] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):553–6 (Eng. Abstr.) **(Ger)**
[The characterization of phagocytotic processes using morphometry] Schlöffel G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):141–3 (Eng. Abstr.) **(Ger)**
[Spontaneous interleukin 1 secretion by alveolar macrophages from the bronchoalveolar lavage of patients with active sarcoidosis] Barth J, et al. **Immun Infekt** 1989 Aug; 17(4):141–4 (Eng. Abstr.) **(Ger)**
[Phagocytosis of Staphylococcus aureus and Pseudomonas aeruginosa by pulmonary macrophages and granulocytes] Hürter T. **Pneumologie** 1989 Mar;43(3):147–58 (Eng. Abstr.) **(Ger)**
[Oxygen radical production of alveolar inflammatory cells in sarcoidosis and idiopathic lung fibrosis] Strausz J, et al. **Pneumologie** 1989 Aug;43(8):440–5 (Eng. Abstr.) **(Ger)**
[A study on the mechanism of activation of peritoneal exudate macrophages from MRL/MpJ-lpr/lpr mice] Hashimoto Y. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):781–90 (Eng. Abstr.) **(Jpn)**
[Enhancement of antitumor immune responses by bleomycin] Morikawa K. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):772–80 (Eng. Abstr.) **(Jpn)**
[Immunomodulating capacity of monocyte-macrophage system in cancer patients] Umesaki N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1638–44 (Eng. Abstr.) **(Jpn)**
[Two monoclonal antibodies, AMH-2 and AMH-3, reactive with alveolar macrophages and epithelioid cell granulomas] Akiyama J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun;26(6):637–44 (Eng. Abstr.) **(Jpn)**
[The effect of angiotensin II on the accessory function of BALF macrophages in the cases of sarcoidosis of long duration] Nagai S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):957–64 (Eng. Abstr.) **(Jpn)**
[The accessory cell function of human alveolar macrophages in antigen-induced T-lymphocyte proliferative responses] Ohtsuka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):745–50 (Eng. Abstr.) **(Jpn)**
[Infection of Mycobacterium leprae and Mycobacterium lepraemurium into a cloned macrophage like cell line] Tanaka M, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep; 56(3):110–5 (Eng. Abstr.) **(Jpn)**
[Granuloma formation and macrophage] Hotchi M. **Nippon Rinsho** 1989 Mar;47(3):658–63 **(Jpn)**
[Dysfunction of mononuclear phagocyte system] Kanoh T. **Nippon Rinsho** 1989 Mar;47(3):653–7 **(Jpn)**
[Membrane antigens and receptors on macrophage] Katayama N, et al. **Nippon Rinsho** 1989 Mar;47(3):540–4 **(Jpn)**
[Roles of macrophages and dendritic cells in the initiation of immune responses] Muramatsu S. **Nippon Rinsho** 1989 Mar;47(3):519–25 **(Jpn)**
[Biologically active substances produced by macrophages] Nakano M. **Nippon Rinsho** 1989 Mar;47(3):526–33 **(Jpn)**
[Fibroblasts and mononuclear phagocytes system in the host defense and wound healing of the cornea] Nishida T. **Nippon Rinsho** 1989 Mar;47(3):675–80 **(Jpn)**
[Function of mononuclear phagocyte system as the antigen-presenting cell] Nomoto K. **Nippon Rinsho** 1989 Mar;47(3):513–8 **(Jpn)**
[Technical advance in method of a routine examination of mononuclear phagocytes system] Saito H, et al. **Nippon Rinsho** 1989 Mar;47(3):681–5 **(Jpn)**
[Monoclonal antibodies against macrophages] Takeya M, et al. **Nippon Rinsho** 1989 Mar;47(3):564–70 **(Jpn)**
[Synergism between defence mechanisms and chemotherapy] Machida T, et al. **Nippon Saikingaku Zasshi** 1988 Nov; 43(6):971–80 (43 ref.) **(Jpn)**
[Role of phagocytosis by PMN and macrophages in bio-defense] Nomoto K. **Nippon Saikingaku Zasshi** 1988 Sep;43(5):899–910 (101 ref.) **(Jpn)**
[Isolation of macrophage-activating phospholipid from Listeria monocytogenes] Jakoniuk P, et al. **Med Dosw Mikrobiol** 1989;41(1):15–21 (Eng. Abstr.) **(Pol)**
[Identification of Candida albicans products inhibiting macrophage activity] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1988;40(2):98–102 (Eng. Abstr.) **(Pol)**
[The role of phagocytes in diseases of the digestive system] Hermanowicz A, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):288–93 **(Pol)**
[Physiological interferons and their role in the body. I. Biological activities of interferons] Błach-Olszewska Z. **Postepy Hig Med Dosw** 1988 May–Jun;42(3):260–95 (165 ref.) (Eng. Abstr.) **(Pol)**
[Effect of the methods of levamisole administration on selected elements of cellular immunity in guinea pigs] Górska M. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:175–87 (Eng. Abstr.) **(Pol)**
[Nonspecific immunologic response of the host to parasitic infections] Golińska Z. **Wiad Parazytol** 1988;34(4–6):485–95 (42 ref.) (Eng. Abstr.) **(Pol)**
[Prognosis of suppurative-septic puerperal complications based on indicators of nonspecific body resistance in pregnant women] Dobrovol'skaia IA. **Akush Ginekol (Mosk)** 1988 Sep;(9):18–20 **(Rus)**
[Cytostatic action of the peritoneal cells of Syrian hamsters on transformed cells] Lavnikova NA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):333–5 (Eng. Abstr.) **(Rus)**
[Intercellular contact interactions stimulate production of superoxide radical in granulocytes and macrophages] Subbotin SM, et al. **Dokl Akad Nauk SSSR** 1988; 301(5):1265–8 **(Rus)**
[Secretion of type-E prostaglandin by tumor cells of different degrees of malignancy when in contact with effectors of natural resistance] Kliuchareva TE, et al. **Eksp Onkol** 1989; 11(1):53–6 (Eng. Abstr.) **(Rus)**
[The expression of antigens, detectable with ICO-series monoclonal antibodies, on the surfaces of cells forming granulocyte and macrophage colonies in semiliquid agar] Savel'eva EV, et al. **Eksp Onkol** 1989;11(1):46–8 (Eng. Abstr.) **(Rus)**
[Basic principles of protective reactions of phagocytic cells of the respiratory tract to deposition of cytotoxic dust particles and its regulation] Privalova LI. **Gig Sanit** 1989 Mar;(3):28–31 (Eng. Abstr.) **(Rus)**
[Changes in the expression of the surface antigens of thymocytes during their cultivation with macrophages] Anfalova TV, et al. **Ontogenez** 1989 May–Jun;20(3):294–9 (Eng. Abstr.) **(Rus)**
[Evaluation of the activity of liver and spleen macrophages in children with hepatitis A and B] Relzis AR, et al. **Pediatriia** 1989;(7):20–3 (Eng. Abstr.) **(Rus)**
[Immunology and immunogenetics of tuberculosis: current status and prospects of research development] Averbakh MM, et al. **Probl Tuberk** 1989;(2):65–8 (56 ref.) **(Rus)**
[Autologous macrophages in combined therapy of patients with tuberculosis complicated by nonspecific bronchitis] Shesterina MV, et al. **Probl Tuberk** 1989;(3):22–5 (Eng. Abstr.) **(Rus)**
[Functional characteristics of alveolar macrophages in

chronic bronchitis] Kokosov AN, et al. **Sov Med** 1989; (1):66–8 (Rus)

[Activity of dermal macrophages in acute cholecystitis] Gusmanov SZ, et al. **Vestn Khir** 1988 May;140(5):64 (Rus)

[Functional activity of the natural killers and macrophages in patients with breast tumors] Andrianov IG, et al. **Vopr Onkol** 1988;34(12):1455–60 (Eng. Abstr.) (Rus)

[Effect of a limitation of the food ration on macrophage functional activity and angiogenesis in mice with metastasizing tumors] Sopotsinskaia EB, et al. **Vopr Pitan** 1988 Nov–Dec;(6):48–50 (Eng. Abstr.) (Rus)

[Characteristics of functional disorders of the dermal T-lymphocytes and macrophages in the basic clinical forms of erysipelas] Tsol IG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):101–6 (Eng. Abstr.) (Rus)

METABOLISM

Acceleration of the internalization of ligand–bound membrane DNA by thyroxine treatment in macrophages. Sudár F, et al. **Acta Histochem (Jena)** 1988;84(2):205–10

Antibody–induced generation of reactive oxygen radicals by brain macrophages in canine distemper encephalitis: a mechanism for bystander demyelination. Griot C, et al. **Acta Neuropathol (Berl)** 1989;78(4):396–403

Role of factors derived from activated macrophages in regulation of muscle protein turnover. Baracos VE. **Adv Exp Med Biol** 1988;240:225–34

Endotoxin abolishes the induction of alpha 2–macroglobulin synthesis in cultured human monocytes indicating inhibition of the terminal monocyte maturation into macrophages. Bauer J, et al. **Adv Exp Med Biol** 1988; 240:425–32

Colony stimulating factor–1 stimulated macrophage membrane protein phosphorylation. Jubinsky PT, et al. **Adv Exp Med Biol** 1988;234:75–90

Pharmacologic modulation of TNF production by endotoxin stimulated macrophages: in vitro and in vivo effects of auranofin and other chrysotherapeutic compounds. Evans GF, et al. **Agents Actions** 1989 Mar;26(3–4):329–34

Release of PGE2 and IL–1 as related to suppressive activity of alveolar macrophages from interstitial lung diseases. Fireman E, et al. **Agents Actions** 1989 Jan;26(1–2):173–4

The effects of beta–adrenergic receptor agonists on the H2O2 formation in alveolar macrophage suspensions are not mediated by beta–receptors. Goeptar AR, et al. **Agents Actions** 1988 Dec;25(3–4):375–7

Alpha 2 macroglobulin–proteinase complexes stimulate prostaglandin E2 synthesis by peritoneal macrophages. Hoffman M, et al. **Agents Actions** 1988 Dec;25(3–4):360–7

Regulation of eicosanoid synthesis in mouse peritoneal macrophages by protein kinase C. Kaever V, et al. **Agents Actions** 1989 Jan;26(1–2):175–7

The effects of PAF–acether and FMLP on eicosanoid production in guinea pig alveolar macrophages. Zijlstra FJ, et al. **Agents Actions** 1989 Jan;26(1–2):115–6

Regulation of cholesterol efflux from macrophages. Schmitz G, et al. **Agents Actions Suppl** 1988;26:147–57 (9 ref.)

Iron metabolism in normal and hemochromatotic macrophages. Baynes RD, et al. **Am J Hematol** 1989 May; 31(1):21–5

Effect of ferrous and ferric chelators on transferrin–iron–macrophage interactions. Baynes RD, et al. **Am J Hematol** 1988 Sep;29(1):27–32

Macrophage multinucleation is accompanied by the expression of new soluble and membrane antigens in mice. Vignery A. **Am J Pathol** 1989 Sep;135(3):565–70

Cytoplasmic pH in pulmonary macrophages: recovery from acid load is Na+ independent and NEM sensitive. Bidani A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C65–76

A kinetic model of superoxide production from single pulmonary alveolar macrophages. DiGregorio KA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C405–12

Interleukin 1 release by human alveolar macrophages and blood monocytes. Iwamoto GK, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1012–5

1,25–Dihydroxyvitamin D3–induced alterations of lipid metabolism in human monocyte–macrophages. Roullet JB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E290–5

Oxidative metabolism of the bovine alveolar macrophage. Dyer RM, et al. **Am J Vet Res** 1989 Apr;50(4):448–54

Proadifen–induced production of prostacyclin by equine peritoneal macrophages. Morris DD, et al. **Am J Vet Res** 1989 May;50(5):747–50

Arachidonic acid metabolites produced by bovine alveolar macrophages. O'Sullivan MG, et al. **Am J Vet Res** 1988 Aug;49(8):1214–7

Arachidonic acid metabolism in cultured alveolar macrophages from normal, atopic, and asthmatic subjects. Balter MS, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1134–42

Pulmonary intravascular macrophages metabolize arachidonic acid in vitro. Comparison with alveolar macrophages. Bertram TA, et al. **Am Rev Respir Dis** 1988 Oct;138(4):936–44

The effect of acute inflammatory lung injury on the respiratory burst and protein kinase C activity of rat pulmonary alveolar macrophages. Brieland JK, et al. **Am Rev Respir Dis** 1989 Feb;139(2):378–81

Prostaglandin synthesis and release by subpopulations of rat interstitial macrophages. Chandler DB, et al. **Am Rev Respir Dis** 1988 Oct;138(4):901–7

Rat alveolar macrophages synthesize leukotriene B4 and 12–hydroxyeicosatetraenoic acid from alveolar epithelial cell–derived arachidonic acid. Chauncey JB, et al. **Am Rev Respir Dis** 1988 Oct;138(4):928–35

Alveolar macrophages from patients with asbestos exposure release increased levels of leukotriene B4. Garcia JG, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1494–501

Production of an interleukin–1 inhibitory factor by human alveolar macrophages from normals and allergic asthmatic patients. Gosset P, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):40–6

Spontaneous in vitro release of alveolar–macrophage cytokines after the intratracheal instillation of bleomycin in rats. Characterization and kinetic studies. Jordana M, et al. **Am Rev Respir Dis** 1988 May;137(5):1135–40

Association between alveolar macrophage plasminogen activator activity and indices of lung function in young cigarette smokers. Reilly JJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1422–8

Dyscoordinate expression of tumor necrosis factor–alpha by human blood monocytes and alveolar macrophages. Rich EA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1010–6

Surface IgA and Fc–alpha receptors on human alveolar macrophages from normal subjects and from patients with sarcoidosis. Sibille Y, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):740–7

Interleukin 1 production by alveolar macrophages is decreased in smokers. Yamaguchi E, et al. **Am Rev Respir Dis** 1989 Aug;140(2):397–402

Use of enzyme label for quantitative evaluation of liposome adhesion on cell surface: studies with J774 macrophage monolayers. Trubetskoy VS, et al. **Anal Biochem** 1988 Jul; 172(1):185–9

Identification by in situ hybridization of IFN–beta–producing murine macrophages obtained from high and low interferon producers. De Maeyer–Guignard J, et al. **Ann Inst Pasteur Virol** 1988 Jan–Mar;139(1):51–7

IFN beta 2/IL–6 is one of several cytokines that modulate acute phase gene expression in human hepatocytes and human macrophages. Perlmutter DH. **Ann N Y Acad Sci** 1989;557:332–41; discussion 341–2

Evidences that fibroblasts and epithelial cells produce a specific type of macrophage and granulocyte inducer, also known as colony–stimulating factor, and that monocyte–macrophages can produce another factor with proliferative inducing activity on myeloid cells and differentiative activity on macrophages. Zambrano IR, et al. **Ann N Y Acad Sci** 1989;554:141–55

Nitroblue tetrazolium reduction in monocytes and monocyte–derived macrophages. Effect of oxidative burst stimulants and interferons. Müller F, et al. **APMIS** 1989 Jun;97(6):490–6

Superoxide production of peritoneal macrophages in experimental gram–negative sepsis; influence of in vitro and in vivo supplements of zinc. Srinivas U, et al. **APMIS** 1989 Aug;97(8):682–8

The de novo synthesis of molecular species of phosphatidylinositol from endogenously labeled CDP diacylglycerol in alveolar macrophage microsomes. Nakagawa Y, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):559–66

Studies on the effect of superoxide dismutase (peroxinorm) on interleukin–1 activity. Gieldanowski J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):245–8

Toxicity and ultrastructural localization of mercuric chloride in cultured murine macrophages. Christensen M, et al. **Arch Toxicol** 1988;62(6):440–6

Beta–VLDL metabolism by pigeon macrophages. Evidence for two binding sites with different potentials promoting cholesterol accumulation. Adelman SJ, et al. **Arterioscler Thromb** 1989 Sep–Oct;9(5):673–83

Intralipid infusion abolishes ability of human serum to cholesterol–load cultured macrophages. Aviram M, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):67–75

Biosynthesis of chondroitin sulfate proteoglycan by P388D1 macrophage–like cell line. Christner JE. **Arteriosclerosis** 1988 Sep–Oct;8(5):535–43

Modification of low density lipoprotein with 4–hydroxynonenal induces uptake by macrophages. Hoff HF, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):538–49

Metabolism of acetylated low density lipoproteins by monocyte–derived macrophages from patients with Werner's syndrome. Mori S, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):644–9

Role of platelet secretory products in modified lipoprotein metabolism in macrophages. Hayashi T, et al. **Artery** 1989; 16(5):248–62

Spontaneous production of fibronectin by alveolar macrophages in patients with scleroderma. Kinsella MB, et al. **Arthritis Rheum** 1989 May;32(5):577–83

Study of the excretion mechanism of a perfluorochemical emulsion. Tsuda Y, et al. **Artif Organs** 1989 Jun; 13(3):197–203

Specific binding sites of muroctasin on murine macrophages. Akasaki M, et al. **Arzneimittelforschung** 1988 Jul; 38(7A):978–80

The effect of platelets on macrophage lipoprotein metabolism. Aviram M. **Atherosclerosis** 1988 Oct; 73(2–3):269–71

Macrophages modify beta–VLDL by proteolysis and enhance subsequent lipid accumulation in arterial smooth muscle cells. Davis JB, et al. **Atherosclerosis** 1989 Jun; 77(2–3):203–8

beta–VLDL and acetylated–LDL binding to pigeon monocyte macrophages. Henson DA, et al. **Atherosclerosis** 1989 Jul;78(1):47–60

Accumulation of cholesteryl esters in macrophages incubated with human lipoprotein–antibody autoimmune complex. Klimov AN, et al. **Atherosclerosis** 1988 Nov;74(1–2):41–6

Cholesterol crystal uptake and metabolism by P388D1 macrophages. McConathy WJ, et al. **Atherosclerosis** 1989 Jun;77(2–3):221–5

Influence of probucol on early experimental atherogenesis in hypercholesterolemic rats. Shankar R, et al. **Atherosclerosis** 1989 Aug;78(2–3):91–7

Membrane permeability and oxidant induced injury. Forman HJ, et al. **Basic Life Sci** 1988;49:523–30

Erythropoietin gene expression in macrophages detected by in situ hybridization. Rich IN, et al. **Behring Inst Mitt** 1988 Aug;(83):202–6

Multiple receptors for modified low density lipoproteins in mouse peritoneal macrophages: different uptake mechanisms for acetylated and oxidized low density lipoproteins. Arai H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1375–82

Nucleoside transport in activated macrophages. Busolo F, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):354–61

The beta form is the dominant interleukin 1 released by murine peritoneal macrophages. Chensue SW, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):404–8

Acetylated low density lipoproteins promote the release and metabolism of arachidonic acid by murine macrophages. Diez E, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):461–7

Lucigenin chemiluminescence and its relationship to mitochondrial respiration in phagocytic cells. Esterline RL, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):584–91

Intracellular accumulation of cholesteryl esters suppresses production of lipopolysaccharide–induced interleukin 1 by rat peritoneal macrophages. Haga Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):874–80

Possible binding sites for inositol 1,4,5–trisphosphate in macrophages. Ishimatsu T, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1173–80

Selective inhibition of free arachidonic acid production in activated alveolar macrophages by calmodulin antagonists. Nakagawa Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):947–53

Platelet activating factor is a potent stimulant of the production of active oxygen species by human monocyte–derived macrophages. Rouis M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1293–301

Lipoxygenase inhibitors suppress formation of tumor necrosis factor in vitro and in vivo. Schade UF, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):748–54

Synthesis of nitrogen oxides from L–arginine by macrophage cytosol: requirement for inducible and constitutive components. Stuehr DJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):420–6

Defect of calmodulin–binding protein in expression of interleukin–1 beta gene by LPS–nonresponder C3H/HeJ mouse macrophages. Terada Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):723–9

Deletion of 3' untranslated region of human BSF–2 mRNA causes stabilization of the mRNA and high–level expression in mouse NIH3T3 cells. Tonouchi N, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1056–62

Effect of microenvironment and cell–line type on carbohydrate–binding proteins of macrophage–like cells. Gabius HJ, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1169–76

Inhibition of superoxide anion radical production by ebselen (PZ51) and its sulfur analogue (PZ25) in guinea pig alveolar macrophages. Leurs R, et al. **Biochem Int** 1989 Feb; 18(2):295–9

Lead inhibits oxidative metabolism of macrophages exposed to macrophage–activating factor. Buchmüller–Rouiller Y, et al. **Biochem J** 1989 Jun 1;260(2):325–32

Biosynthesis of normal and low–molecular–mass complement component C1q by cultured human monocytes and macrophages. Hoekzema R, et al. **Biochem J** 1989 Jan 15; 257(2):477–86

Incorporation of lipoxygenase products into cholesteryl esters by acyl–CoA:cholesterol acyltransferase in cholesterol–rich macrophages. Mathur SN, et al. **Biochem J** 1988 Dec 15;256(3):807–14

Rates of utilization of glucose, glutamine and oleate and formation of end–products by mouse peritoneal macrophages in culture. Newsholme P, et al. **Biochem J** 1989 Jul 1;261(1):211–8

Regulation of prostaglandin synthesis by protein kinase C in mouse peritoneal macrophages. Pfannkuche HJ, et al. **Biochem J** 1989 Jun 1;260(2):471–8

Synthesis and processing of cathepsin L, an elastase, by human alveolar macrophages. Reilly JJ Jr, et al. **Biochem J** 1989 Jan 15;257(2):493–8

Inositol 1,4,5–trisphosphate concentrations increase after adherence in the macrophage–like cell line J774.1. Zabrenetzky V, et al. **Biochem J** 1988 Nov 1;255(3):1037–43

Modification of LDL by platelet secretory products induces

enhanced uptake and cholesterol accumulation in macrophages. Fuhrman B, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):9–20

Low-density lipoprotein derived from atherosclerotic patients enhances macrophage cholesterol accumulation and in vitro platelet aggregation. Keidar S, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):117–24

Selective delivery of drugs to macrophages through a highly specific receptor. An efficient chemotherapeutic approach against leishmaniasis. Chaudhuri G, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):2995–3002

Independent regulation of thromboxane and prostaglandin synthesis in liver macrophages. Dieter P, et al. **Biochem Pharmacol** 1989 May 15;38(10):1577–81

Dependence of mixed disulfide formation in alveolar macrophages upon production of oxidized glutathione: effect of selenium depletion. Loeb GA, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3119–21

Inhibition of alveolar macrophage 5-lipoxygenase metabolism by auranofin. Peters-Golden M, et al. **Biochem Pharmacol** 1989 May 15;38(10):1589–95

3-Deazaadenosine 5'-triphosphate: a novel metabolite of 3-deazaadenosine in mouse leukocytes. Prus KL, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):509–17

Dual effects of cyclosporine A on arachidonate metabolism by peritoneal macrophages. Phospholipase activation and partial thromboxane-synthase blockage. Sraer J, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1947–54

The biological significance of nitric oxide formation from L-arginine. Moncada S, et al. **Biochem Soc Trans** 1989 Aug; 17(4):642–4 (37 ref.)

Macrophage oxidation of L-arginine to nitrite and nitrate: nitric oxide is an intermediate. Marletta MA, et al. **Biochemistry** 1988 Nov 29;27(24):8706–11

Modifications of glycosylation patterns in macrophages upon activation. Afroun S, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):137–47

Receptor-mediated uptake and 'retroendocytosis' of high-density lipoproteins by cholesterol-loaded human monocyte-derived macrophages: possible role in enhancing reverse cholesterol transport. Alam R, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):292–9

Preparation of neo-galactosylated liposomes and their interaction with mouse peritoneal macrophages. Haensler J, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):95–105

Uptake of acetylated LDL by peritoneal macrophages obtained from normal and Watanabe heritable hyperlipidemic rabbits, an animal model for familial hypercholesterolemia. Ishii K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):387–9

The effect of macrophage stimulation on the uptake of acetylated low-density lipoproteins. Leake DS, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):196–200

Effect of fatty acid supplementation on cholesterol and retinol esterification in J774 macrophages. McCloskey HM, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):456–67

Regulation of 12-hydroxyeicosatetraenoic acid synthesis by acetyl-LDL in mouse peritoneal macrophages. Mathur SN, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):50–9

Effect of pyridoxal isonicotinoyl hydrazone and other hydrazones on iron release from macrophages, reticulocytes and hepatocytes. Ponka P, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):122–9

Arachidonic acid turnover in peritoneal macrophages is altered in endotoxin-tolerant rats. Rogers TS, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):169–75

A role for protein kinase C-mediated phosphorylation in the mobilization of arachidonic acid in mouse macrophages. Wijkander J, et al. **Biochim Biophys Acta** 1989 Jan 17; 1010(1):78–87

Influence of the extracellular glutamate concentration on the intracellular cyst(e)ine concentration in macrophages and on the capacity to release cysteine. Eck HP, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):109–13

The heparin-dependent accumulation of plasma fibronectin on macrophages. Hörmann H, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):691–8

The galactose-recognizing system of rat peritoneal macrophages; identification and characterization of the receptor molecule. Kelm S, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):693–704

Carbohydrate specificity of the galactose-recognizing receptor of rat peritoneal macrophages. Lee H, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):705–14

Regulation of interleukin-6 expression in cultured human blood monocytes and monocyte-derived macrophages. Bauer J, et al. **Blood** 1988 Oct;72(4):1134–40

Down regulation of myelopoiesis by mediators inhibiting the production of macrophage-derived granulomonopoietic enhancing activity (GM-EA). Wang SY, et al. **Blood** 1988 Dec;72(6):2001–6

Erythropoietin gene expression in vitro and in vivo detected by in situ hybridization. Rich IN, et al. **Blood Cells** 1988; 14(2-3):505–20

Red cell aging results in a change of cell surface carbohydrate epitopes allowing for recognition by galactose-specific receptors of rat liver macrophages. Schlepper-Schäfer J, et al. **Blood Cells** 1988;14(1):259–74

Characterization of receptors for platelet-activating factor on platelets, polymorphonuclear leukocytes and macrophages. Stewart AG, et al. **Br J Pharmacol** 1988 Aug; 94(4):1225–33

Prolonged effect of psychological disturbance on macrophage chemiluminescence in the squirrel monkey. Coe CL, et al. **Brain Behav Immun** 1988 Jun;2(2):151–60

A new mechanism of action of dipyrone: blockade of the release of a nociceptive factor from macrophages. de Campos DI, et al. **Braz J Med Biol Res** 1988;21(3):565–8

Augmentation of release of cytotoxin from murine bone marrow and peritoneal macrophages by tumor transplantation. Yamazaki M, et al. **Cancer Res** 1989 Jan 15;49(2):352–6

Nitrosation by stimulated macrophages. Inhibitors, enhancers and substrates. Kosaka H, et al. **Carcinogenesis** 1989 Mar; 10(3):563–6

Immortalized phenotype and the presence of active oncogenes correlate with the capacity of culture cells to induce reactivation of DNA synthesis in macrophage nuclei in heterokaryons. Prudovsky IA, et al. **Cell Differ Dev** 1989 May;26(3):221–8

Receptor-mediated binding of the acute-phase reactant mouse serum amyloid P-component (SAP) to macrophages. Siripont J, et al. **Cell Immunol** 1988 Dec; 117(2):239–52

Regulation of tumor necrosis factor expression in a macrophage-like cell line by lipopolysaccharide and cyclic AMP. Taffet SM, et al. **Cell Immunol** 1989 May; 120(2):291–300

A macrophage receptor for liver lysosomal beta-glucosidase. Imai K. **Cell Struct Funct** 1988 Aug;13(4):325–32

Intracellular transport of cholesteryl esters from lysosomes to cytoplasm in macrophages. Mineo C, et al. **Cell Struct Funct** 1988 Oct;13(5):435–43

An experimental study on the pathway of iron transfer from macrophages to erythrocytes in rat liver. Ono T, et al. **Cell Struct Funct** 1989 Feb;14(1):61–74

Interaction of malondialdehyde-modified bovine serum albumin and mouse peritoneal macrophages. Beppu M, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4519–26

Aztreonam uptake by professional phagocytic cells. Mastroeni P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):232–3

Smoking and interleukin-1 activity released from human alveolar macrophages in healthy subjects. Nagai S, et al. **Chest** 1988 Oct;94(4):694–700

Lung compartmentalization of increased TNF releasing ability by mononuclear phagocytes in pulmonary sarcoidosis. Spatafora M, et al. **Chest** 1989 Sep;96(3):542–9

Reduced release of TNF and PCA from macrophages of tolerant mice. Haslberger A, et al. **Circ Shock** 1988 Oct; 26(2):185–92

Macrophage-conditioned medium and interleukin 1 suppress vascular contractility. McKenna TM, et al. **Circ Shock** 1988 Jul;25(3):187–96

Equine peritoneal macrophage production of thromboxane and prostacyclin in response to platelet activating factor and its receptor antagonist SRI 63-441. Morris DD, et al. **Circ Shock** 1989 Jun;28(2):149–58

Cardiac dysfunction caused by factors released from endotoxin-activated macrophages. Salari H, et al. **Circ Shock** 1989 Mar;27(3):263–72

Pleiotropic effects of the Bcg gene: III. Respiratory burst in Bcg-congenic macrophages. Denis M, et al. **Clin Exp Immunol** 1988 Sep;73(3):370–5

Lipoarabinomannan from Mycobacterium tuberculosis induces the production of tumour necrosis factor from human and murine macrophages. Moreno C, et al. **Clin Exp Immunol** 1989 May;76(2):240–5

Spontaneous and LPS-stimulated production of intracellular IL-1 beta by synovial macrophages in rheumatoid arthritis is inhibited by IFN-gamma. Ruschen S, et al. **Clin Exp Immunol** 1989 May;76(2):246–51

Lipopolysaccharide-stimulated rat brain macrophages release NGF in vitro. Mallat M, et al. **Dev Biol** 1989 May; 133(1):309–11

The expression of I-A correlates with the uptake of interferon-gamma by macrophages. Celada A, et al. **Eur J Immunol** 1989 Jan;19(1):205–8

Specific and non-specific effects of beta-adrenoceptor agonists on guinea pig alveolar macrophage function. Henricks PA, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):321–30

Increased generation of the arachidonic metabolites LTB4 and 5-HETE by human alveolar macrophages in patients with asthma: effect in vitro of nedocromil sodium. Damon M, et al. **Eur Respir J** 1989 Mar;2(3):202–9

Mouse peritoneal macrophages produce CFU-gm and CFU-meg growth-promoting factors. Sugimoto M, et al. **Exp Cell Biol** 1988;56(1-2):29–38

Stimulation of arachidonic acid metabolism in silica-exposed alveolar macrophages. Englen MD, et al. **Exp Lung Res** 1989 Jul;15(4):511–26

Interferon production in rat type II pneumocytes and alveolar macrophages. Hahon N, et al. **Exp Lung Res** 1989 May; 15(3):429–45

Intraphagosomal pH in alveolar macrophages studied with fluorescein-labeled amorphous silica particles. Nyberg K, et al. **Exp Lung Res** 1989;15(1):49–62

Iodine in rat alveolar macrophages following amiodarone treatment: quantitative X-ray microanalysis. Kirk RG, et al. **Exp Mol Pathol** 1988 Dec;49(3):339–47

Control of fructose 2,6-bisphosphate levels in rat macrophages by glucose and phorbol ester. Bustos R, et al. **FEBS Lett** 1989 Jul 17;251(1-2):143–6

Phosphoinositide breakdown and superoxide anion release in formyl-peptide-stimulated human alveolar macrophages. Comparison between quiescent and activated cells. Damon M, et al. **FEBS Lett** 1988 Nov 7;239(2):169–73

Phosphatidylinositol turnover in human monocyte-derived macrophages by native and acetyl LDL. Ishikawa Y, et al. **FEBS Lett** 1989 Mar 27;246(1-2):35–8

Biphasic increase in intracellular calcium induced by platelet-activating factor in macrophages. Randriamampita C, et al. **FEBS Lett** 1989 Jun 5;249(2):199–206

Bradykinin stimulates tumor necrosis factor and interleukin-1 release from macrophages. Tiffany CW, et al. **FEBS Lett** 1989 Apr 24;247(2):189–92

Adhering lung macrophages produce superoxide demonstrated with desferal-Mn(IV). Ryer-Powder JE, et al. **Free Radic Biol Med** 1989;6(5):513–8

Effect of endotoxin on release of reactive oxygen intermediates by rat hepatic macrophages. Arthur MJ, et al. **Gastroenterology** 1988 Dec;95(6):1588–94

Localization of thyroid hormone in subpopulations of rat alveolar macrophages. Liu WK, et al. **Histochem J** 1989 Feb;21(2):115–21

Glycoconjugate with terminal galactose. A selective property of macrophages in developing rat lung. Honda T, et al. **Histochemistry** 1989;91(1):61–7

Lung dissolution of uranium tetrafluoride in rats and baboons. Comparison with dissolution by alveolar macrophages in culture and chemical dissolution. André S, et al. **Hum Toxicol** 1989 Mar;8(2):111–9

Comparative study of the effect of chrysotile, quartz and rutile on the release of lymphocyte-activating factor (interleukin 1) by murine peritoneal macrophages in vitro. Godelaine D, et al. **IARC Sci Publ** 1989;(90):149–55

Mechanisms of fibre-induced superoxide release from alveolar macrophages and induction of superoxide dismutase in the lungs of rats inhaling crocidolite. Mossman BT, et al. **IARC Sci Publ** 1989;(90):81–92

Polyanions inhibit murine macrophage Fc receptor mediated ADCC and binding. Mocharla R, et al. **Immunol Invest** 1989 Jun;18(5):689–96

Factors involved in macrophage: immune complex binding. Rezai H, et al. **Immunol Invest** 1989 Jun;18(5):671–88

The effect of immunomodulators on PHA or gamma-IFN induced release of neopterin from purified macrophages and peripheral blood mononuclear cells. Barak M, et al. **Immunol Lett** 1989 Jun 15;21(4):317–22

Modulation of human macrophage functions by gangliosides. Hoon DS, et al. **Immunol Lett** 1989 Mar;20(4):269–75

Human influenza virus neuraminidase, but not hemagglutinin, induces murine macrophage interleukin 1 in vivo and in vitro. Houde M, et al. **Immunol Lett** 1989 Jul;22(1):41–6

Salmonella, complement and mouse macrophages. Mäkelä PH, et al. **Immunol Lett** 1988 Nov;19(3):217–22

Culture medium oxygen tension affects fibronectin production in human adult and cord blood macrophages. Yoder MC, et al. **Immunol Lett** 1988 Sep;19(1):1–6

Generation of superoxide anion by alveolar macrophages in sarcoidosis: evidence for the activation of the oxygen metabolism in patients with high-intensity alveolitis. Cassatella MA, et al. **Immunology** 1989 Mar;66(3):451–8

Tumour necrosis factor production by IL-2-activated macrophages in vitro and in vivo. Economou JS, et al. **Immunology** 1989 Aug;67(4):514–9

Regulation of tumour necrosis factor production by mouse peritoneal macrophages: the role of cellular cyclic AMP. Katakami Y, et al. **Immunology** 1988 Aug;64(4):719–24

Histamine synthesis by non-mast cells through mitogen-dependent induction of histidine decarboxylase. Oh C, et al. **Immunology** 1988 Sep;65(1):143–8

Leukotriene generation and metabolism in isolated human lung macrophages. Schönfeld W, et al. **Immunology** 1988 Dec;65(4):529–36

Different effects of bacterial lipopolysaccharide on superoxide anion production by macrophages from normal and tumor-bearing rats. Altavilla D, et al. **Immunopharmacology** 1989 Mar-Apr;17(2):99–106

Hydrogen peroxide producing potential of alveolar macrophages & blood monocytes in pulmonary tuberculosis. Selvaraj P, et al. **Indian J Med Res** 1988 Aug; 88:124–9

Dissociation of cell-associated interleukin-1 (IL-1) and IL-1 release induced by lipopolysaccharide and lipid A. Cavaillon JM, et al. **Infect Immun** 1989 Mar;57(3):791–7

Diphosphoryl lipid A from Rhodopseudomonas sphaeroides ATCC 17023 blocks induction of cachectin in macrophages by lipopolysaccharide. Takayama K, et al. **Infect Immun** 1989 Apr;57(4):1336–8

Production of lipoxygenase metabolites of eicosapentaenoic acid by bovine alveolar macrophages in vitro. Laegreid WW, et al. **Inflammation** 1988 Oct;12(5):503–14

Macrophage-produced oxygen radical generating activities for polymorphonuclear leukocytes. Tsukamoto Y, et al. **Inflammation** 1989 Jun;13(3):259–66

Production of interleukin-1 in macrophage cultures from rats with nephrotoxic serum nephritis. Matsumoto K. **Int Arch Allergy Appl Immunol** 1988;87(4):435–8

Effect of magnesium deficiency on interleukin production by Fisher rats: effect of interleukins on reduced in vitro lymphocyte responses to concanavalin A and lipopolysaccharide. Yiangou M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):217–21

Temporal dependence of hyperthermic augmentation of macrophage-TNF production and tumor cell-TNF

sensitization. Tomasovic SP, et al. Int J Hyperthermia 1989 Sep-Oct;5(5):625-39
Inverse relationship between superoxide anion production of guinea pig alveolar macrophages and tracheal beta-adrenergic receptor function; influence of dietary polyunsaturated fatty acids. Loesberg C, et al. Int J Immunopharmacol 1989;11(2):165-71
Spiramycin uptake by alveolar macrophages. Harf R, et al. J Antimicrob Chemother 1988 Jul;22 Suppl B:135-40
Taurine uptake by isolated alveolar macrophages and type II cells. Banks MA, et al. J Appl Physiol 1989 Mar; 66(3):1079-86
Extracellular matrix proteoglycan degradation by human alveolar macrophages and neutrophils. McGowan SE, et al. J Appl Physiol 1989 Jan;66(1):400-9
Uptake of inert particles by dog alveolar macrophages in vitro--a comparison of monolayer and suspension techniques. Mueller HL, et al. J Appl Toxicol 1989 Jun; 9(3):135-43
Influence of arachidonate metabolism on enhancement of intracellular transglutaminase activity in mouse peritoneal macrophages. Ishitani K, et al. J Biochem (Tokyo) 1988 Sep;104(3):397-402
Binding of activated macrophages to tumor cells through a macrophage lectin and its role in macrophage tumoricidal activity. Oda S, et al. J Biochem (Tokyo) 1989 Jun; 105(6):1040-3
Cleavage of parathyroid hormone in macrophage endosomes illustrates a novel pathway for intracellular processing of proteins. Diment S, et al. J Biol Chem 1989 Aug 15; 264(23):13403-6
Lipid A binding sites in membranes of macrophage tumor cells. Hampton RY, et al. J Biol Chem 1988 Oct 15; 263(29):14802-7
Biosynthesis and processing of the mannose receptor in human macrophages. Lennartz MR, et al. J Biol Chem 1989 Feb 5;264(4):2385-90
Inhibition studies on the membrane-associated phospholipase A2 in vitro and prostaglandin E2 production in vivo of the macrophage-like P388D1 cell. Effects of manoalide, 7,7-dimethyl-5,8-eicosadienoic acid, and p-bromophenacyl bromide. Lister MD, et al. J Biol Chem 1989 May 25;264(15):8520-8
A macrophage receptor that recognizes oxidized low density lipoprotein but not acetylated low density lipoprotein. Sparrow CP, et al. J Biol Chem 1989 Feb 15; 264(5):2599-604
Recognition of oxidized low density lipoprotein by the scavenger receptor of macrophages results from derivatization of apolipoprotein B by products of fatty acid peroxidation. Steinbrecher UP, et al. J Biol Chem 1989 Sep 15;264(26):15216-23
Cytoplasmic pH regulation in macrophages by an ATP-dependent and N,N'-dicyclohexylcarbodiimide-sensitive mechanism. Possible involvement of a plasma membrane proton pump. Swallow CJ, et al. J Biol Chem 1988 Dec 25; 263(36):19558-63
Endocytic uptake of nonenzymatically glycosylated proteins is mediated by a scavenger receptor for aldehyde-modified proteins. Takata K, et al. J Biol Chem 1988 Oct 15; 263(29):14819-25
Iron up-modulates the expression of transferrin receptors during monocyte-macrophage maturation. Testa U, et al. J Biol Chem 1989 Aug 5;264(22):13181-7
Cohort movement of different ligands and receptors in the intracellular endocytic pathway of alveolar macrophages. Ward DM, et al. J Biol Chem 1989 May 15;264(14):8164-70
The effect of TP-5 on the production of C3, PGE2, and TXB2 by macrophages obtained from burned guinea pigs. Ogle CK, et al. J Burn Care Rehabil 1989 Mar-Apr; 10(2):146-50
Phospholipase A2-mediated release of arachidonic acid in stimulated guinea pig alveolar macrophages: interaction with lipid mediators and cyclic AMP. Kadiri C, et al. J Cell Biochem 1989 Jun;40(2):157-64
Human macrophage colony-stimulating factor heterogeneity results from alternative mRNA splicing, differential glycosylation, and proteolytic processing. Shadle PJ, et al. J Cell Biochem 1989 May;40(1):91-107
Macrophage interactions with laminin: PMA selectively induces the adherence and spreading of mouse macrophages on a laminin substratum. Mercurio AM, et al. J Cell Biol 1988 Nov;107(5):1873-80
Pulmonary alveolar macrophages express a polyamine transport system. Saunders NA, et al. J Cell Physiol 1989 Jun;139(3):624-31
Potentiation of the macrophage 25-hydroxyvitamin D-1-hydroxylation reaction by human tuberculous pleural effusion fluid. Adams JS, et al. J Clin Endocrinol Metab 1989 Aug;69(2):457-60
In vitro study of mediators of inflammation in multiple sclerosis. Merrill JE, et al. J Clin Immunol 1989 Mar; 9(2):84-96
Distinct murine macrophage receptor pathway for human triglyceride-rich lipoproteins. Gianturco SH, et al. J Clin Invest 1988 Nov;82(5):1633-43
Inhibition of O2- generation by dexamethasone is mimicked by lipocortin I in alveolar macrophages. Maridonneau-Parini I, et al. J Clin Invest 1989 Jun; 83(6):1936-40
Recombinant interferon-gamma primes alveolar macrophages cultured in vitro for the release of leukotriene B4 in response to IgG stimulation. Rankin JA, et al. J Clin Invest 1989 May;83(5):1691-700
Alveolar macrophages release an insulin-like growth factor I-type molecule. Rom WN, et al. J Clin Invest 1988 Nov; 82(5):1685-93
Binding of Lys-plasminogen to monocytes/macrophages. Silverstein RL, et al. J Clin Invest 1988 Dec;82(6):1948-55
Carbohydrates as recognition molecules in macrophage activities. Stewart J, et al. J Clin Lab Immunol 1989 Mar; 28(3):103-8 (72 ref.)
Opioid receptors on cells of the immune system: evidence for delta- and kappa-classes. Carr DJ, et al. J Endocrinol 1989 Jul;122(1):161-8
Low density lipoprotein metabolism by human macrophages activated with low density lipoprotein immune complexes. A possible mechanism of foam cell formation. Griffith RL, et al. J Exp Med 1988 Sep 1;168(3):1041-59
Macrophage production of transforming growth factor beta and fibroblast collagen synthesis in chronic pulmonary inflammation. Khalil N, et al. J Exp Med 1989 Sep 1; 170(3):727-37
Activated murine macrophages secrete a metabolite of arginine with the bioactivity of endothelium-derived relaxing factor and the chemical reactivity of nitric oxide. Stuehr DJ, et al. J Exp Med 1989 Mar 1;169(3):1011-20
Nitric oxide. A macrophage product responsible for cytostasis and respiratory inhibition in tumor target cells. Stuehr DJ, et al. J Exp Med 1989 May 1;169(5):1543-55
Role of superoxide anion radicals in ethanol metabolism by blood monocyte-derived human macrophages. Wickramasinghe SN. J Exp Med 1989 Mar 1;169(3):755-63
Herpes simplex virus type 2 primes mouse macrophages for an early and genetically determined respiratory burst mediated by interferon-alpha/beta. Mogensen SC, et al. J Gen Virol 1989 Jun;70 (Pt 6):1371-9
Relationship between the production of murine cytomegalovirus and interferon in macrophages. Yamaguchi T, et al. J Gen Virol 1988 Dec;69 (Pt 12):2961-71
The release of neutrophil chemoattractant activity by bronchoalveolar macrophages from adult and senescent mice. Esposito AL, et al. J Gerontol 1989 Jul;44(4):B93-9
Changes in the activity of oxygen-dependent metabolism in polymorphonuclear leukocytes and macrophages from a primary focus during experimental Y. pestis infection in the mouse. Isin ZM. J Hyg Epidemiol Microbiol Immunol 1989;33(2):229-32
Effect of human recombinant IL-2 on murine macrophage precursors. Involvement of a receptor distinct from the p55 (Tac) protein. Baccarini M, et al. J Immunol 1989 Jan 1;142(1):118-25
Different patterns of arachidonate metabolism in autologous human blood monocytes and alveolar macrophages. Balter MS, et al. J Immunol 1989 Jan 15;142(2):602-8
Inhibition of retroviral mRNA expression in the murine macrophage cell line GG2EE by biologic response modifiers. Blasi E, et al. J Immunol 1988 Sep 15; 141(6):2153-7
Monokine production by hypersensitivity (Schistosoma mansoni egg) and foreign body (Sephadex bead)-type granuloma macrophages. Evidence for sequential production of IL-1 and tumor necrosis factor. Chensue SW, et al. J Immunol 1989 Feb 15;142(4):1281-6
Enhancement of macrophage IL-1 production by Leishmania major infection in vitro and its inhibition by IFN-gamma. Cillari E, et al. J Immunol 1989 Sep 15;143(6):2001-5
IFN-beta production by macrophages obtained from mice undergoing graft vs host disease. Cleveland MG, et al. J Immunol 1988 Dec 1;141(11):3823-7
Release of reactive nitrogen intermediates and reactive oxygen intermediates from mouse peritoneal macrophages. Comparison of activating cytokines and evidence for independent production. Ding AH, et al. J Immunol 1988 Oct 1;141(7):2407-12
Platelet-activating factor (PAF) enhances tumor necrosis factor production by alveolar macrophages. Prevention by PAF receptor antagonists and lipoxygenase inhibitors. Dubois C, et al. J Immunol 1989 Aug 1;143(3):964-70
Expression of a binding structure for sialic acid-containing glycoconjugates on rat bone marrow-derived macrophages and its modulation by IFN, TNF-alpha, and dexamethasone. Gessl A, et al. J Immunol 1989 Jun 15; 142(12):4372-7
Role of the maleyl-albumin receptor in activation of murine peritoneal macrophages in vitro. Haberland ME, et al. J Immunol 1989 Feb 1;142(3):855-62
IFN-gamma and IFN-beta independently stimulate the expression of lipopolysaccharide-inducible genes in murine peritoneal macrophages. Hamilton TA, et al. J Immunol 1989 Apr 1;142(7):2325-31
Macrophage activation by granulocyte/macrophage colony-stimulating factor. Priming for enhanced release of tumor necrosis factor-alpha and prostaglandin E2. Heidenreich S, et al. J Immunol 1989 Aug 15; 143(4):1198-205
Production of tumor necrosis factor by rIFN-gamma-primed C3H/HeJ (Lpsd) macrophages requires the presence of lipid A-associated proteins. Hogan MM, et al. J Immunol 1988 Dec 15;141(12):4196-202
Expression of macrophage p120 depends on early protein synthesis. Johnston PA, et al. J Immunol 1989 Apr 15; 142(8):2728-35
Substance P, neurokinin A, and neurokinin B induce generation of IL-1-like activity in P388D1 cells. Possible relevance to arthritic disease. Kimball ES, et al. J Immunol 1988 Nov 15;141(10):3564-9
Metabolism of arachidonic acid through the 5-lipoxygenase pathway in normal human peritoneal macrophages. Laviolette M, et al. J Immunol 1988 Sep 15;141(6):2104-9
Regulation of monocyte/macrophage C2 production and HLA-DR expression by IL-4 (BSF-1) and IFN-gamma. Littman BH, et al. J Immunol 1989 Jan 15;142(2):520-5
Phorbol ester-stimulated superoxide production by murine bone marrow-derived macrophages requires preexposure to cytokines. Phillips WA, et al. J Immunol 1989 Apr 1; 142(7):2445-9
Release of tumor necrosis factor-alpha from macrophages. Enhancement and suppression are dose-dependently regulated by prostaglandin E2 and cyclic nucleotides. Renz H, et al. J Immunol 1988 Oct 1;141(7):2388-93
Mast cell mediators stimulate synthesis of arachidonic acid metabolites in macrophages. Salari H, et al. J Immunol 1989 Apr 15;142(8):2821-7
Demonstration of a novel tumor-killing factor secreted from human macrophage-monocyte hybridomas. Taniyama T, et al. J Immunol 1988 Dec 1;141(11):4061-6
Lipopolysaccharide-induced gene expression in murine peritoneal macrophages is selectively suppressed by agents that elevate intracellular cAMP. Tannenbaum CS, et al. J Immunol 1989 Feb 15;142(4):1274-80
Expression of I-A by macrophages from Bcgr and Bcgs mice. Transient expression of I-A is due to degradation of MHC class II glycoproteins. Vespa L, et al. J Immunol 1989 Jul 1;143(1):214-20
Lymphokine-independent induction of macrophage membrane IL-1 by autoreactive T cells recognizing either class I or class II MHC determinants. Wasik MA, et al. J Immunol 1988 Nov 15;141(10):3456-62
T cell induction of macrophage IL-1 during antigen presentation. Characterization of a lymphokine mediator and comparison of TH1 and TH2 subsets. Weaver CT, et al. J Immunol 1989 May 15;142(10):3469-76
MHC class II transcription in different mouse cell types. Differential requirement for protein synthesis between B cells and macrophages. Woodward JG, et al. J Immunol 1989 Jun 1;142(11):4062-9
Binding of human C-reactive protein to mouse macrophages is mediated by distinct receptors. Zahedi K, et al. J Immunol 1989 Apr 1;142(7):2384-92
Modulation of macrophage superoxide-induced cytochrome c reduction by mast cells. Dileepan KN, et al. J Lab Clin Med 1989 May;113(5):577-85
Fibronectin augments binding of fibrin to macrophages. Kaplan JE, et al. J Lab Clin Med 1989 Feb;113(2):168-76
Contribution of monocyte-macrophage system to serum alpha 1-antitrypsin. Krivit W, et al. J Lab Clin Med 1988 Oct;112(4):437-42
Differential production of tumor necrosis factor, macrophage colony stimulating factor, and interleukin 1 by human alveolar macrophages. Becker S, et al. J Leukoc Biol 1989 Apr;45(4):353-61
Influence of a cytomegalovirus infection on functions and arachidonic acid metabolism of rat peritoneal macrophages. Engels W, et al. J Leukoc Biol 1989 May;45(5):466-73
Oxidative responses of rabbit alveolar macrophages: comparative priming activities of MIF/MAF, sera, and serum components. Hayakawa H, et al. J Leukoc Biol 1989 Mar;45(3):231-8
Virus-induced enhancement of arachidonate metabolism by bovine alveolar macrophages in vitro. Laegreid WW, et al. J Leukoc Biol 1989 Apr;45(4):283-92
Inflammatory cells degrade inter-alpha inhibitor to liberate urinary proteinase inhibitors. Pratt CW, et al. J Leukoc Biol 1989 Jan;45(1):1-9
Characterization of murine bronchoalveolar macrophage respiratory burst: comparison of soluble and particulate stimuli. Sugar AM, et al. J Leukoc Biol 1988 Dec; 44(6):500-7
Differential induction of macrophage GSIB4-binding activity. Tabor DR, et al. J Leukoc Biol 1989 May; 45(5):452-7
Characterization of very low density lipoprotein from Watanabe heritable hyperlipidemic rabbits. Ishii K, et al. J Lipid Res 1989 Jan;30(1):1-7
Interaction of plasma-derived lipid transfer protein with macrophages in culture. Morton RE. J Lipid Res 1988 Oct; 29(10):1367-77
Modification of low density lipoproteins by polymorphonuclear cell elastase leads to enhanced uptake by human monocyte-derived macrophages via the low density lipoprotein receptor pathway. Polacek D, et al. J Lipid Res 1988 Jun;29(6):797-808
Enhanced oxygen metabolism of peritoneal macrophages in the presence of murine neuroblastoma cells is partly caused by enkephalins. Willems J, et al. J Neuroimmunol 1988 Oct; 19(4):269-78
Macrophage-like cells from explant cultures of rat sciatic nerve produce apolipoprotein E. Goodrum JF, et al. J Neurosci Res 1988 Aug;20(4):457-62
Brain macrophages synthesize interleukin-1 and interleukin-1 mRNAs in vitro. Hetier E, et al. J Neurosci Res 1988 Oct-Dec;21(2-4):391-7
In situ evaluation of the stimulatory state of hepatic

macrophages based on their ability to produce superoxide anions in rats. Mochida S, et al. **J Pathol** 1989 May; 158(1):67–71

Cachectin/tumor necrosis factor production by fetal and newborn rat hepatic macrophages. Silen ML, et al. **J Pediatr Surg** 1989 Jan;24(1):34–8; Discussion 38

Production of leukotrienes from mouse peritoneal macrophages by treatment with a neutral subfraction of bakers' yeast mannan. Ishitani K, et al. **J Pharmacobiodyn** 1988 May;11(5):363–8

Characterization of leukotriene B4 binding sites on guinea pig lung macrophages. Cristol JP, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1199–203

Effect of metal containing compounds on superoxide release from phorbol myristate acetate stimulated murine peritoneal macrophages: inhibition by auranofin and spirogermanium. Mirabelli CK, et al. **J Rheumatol** 1988 Jul;15(7):1064–9

Kinetics of interleukin-1 secretion by murine macrophages recovered from the peritoneal cavity after surgery. Abe H, et al. **J Surg Res** 1989 Aug;47(2):178–82

Production of protease inhibitors by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1989 Mar; 46(3):256–61

Modulation of proline and glucosamine incorporation into tissue repair cells by peritoneal macrophages. Fukasawa M, et al. **J Surg Res** 1989 Feb;46(2):166–71

Altered macrophage activity and tumor necrosis factor: tumor necrosis and host cachexia. Stovroff MC, et al. **J Surg Res** 1989 May;46(5):462–9

Mechanisms of cytoplasmic pH recovery in acid-loaded macrophages. Swallow CJ, et al. **J Surg Res** 1989 Jun; 46(6):588–92

Metabolism of n-VLDL and beta-VLDL in peritoneal macrophages from diabetic mice. Gheng G, et al. **J Tongji Med Univ** 1989;9(1):53–7

The role of lipoprotein lipase in metabolism of normolipidemic very low density lipoprotein by macrophages. Wang SP, et al. **J Tongji Med Univ** 1989; 9(1):48–53

The effect of high cholesterol, high fat diet on rabbit plasma beta-VLDL and its interaction with macrophage. Wang SP, et al. **J Tongji Med Univ** 1989;9(1):44–7

Delta-9-tetrahydrocannabinol inhibits macrophage protein expression in response to bacterial immunomodulators. Cabral GA, et al. **J Toxicol Environ Health** 1989; 26(2):175–82

Rokitamycin uptake by alveolar macrophages. Tasaka Y, et al. **Jpn J Antibiot** 1988 Jul;41(7):836–40

Glomerular macrophages produce reactive oxygen species in experimental glomerulonephritis. Boyce NW, et al. **Kidney Int** 1989 Mar;35(3):778–82

Regulation of insulin and interleukin-1 release after Propionibacterium acnes-induced macrophage activation in mice. Bautista AP, et al. **Lab Invest** 1989 Mar; 60(3):447–54

Dietary manipulation of macrophage phospholipid classes: selective increase of dihomogammalinolenic acid. Chapkin RS, et al. **Lipids** 1988 Aug;23(8):766–70

The suppression of eicosanoid synthesis by peritoneal macrophages is influenced by the ratio of dietary docosahexaenoic acid to linoleic acid. Lokesh BR, et al. **Lipids** 1989 Jul;24(7):589–93

Docosahexaenoic acid and other dietary polyunsaturated fatty acids suppress leukotriene synthesis by mouse peritoneal macrophages. Lokesh BR, et al. **Lipids** 1988 Oct; 23(10):968–72

Interleukin 1 stimulates production of LTC4 and other eicosanoids by macrophages. Censini S, et al. **Lymphokine Res** 1989 Summer;8(2):107–14

Oxygen free radical production by mouse peritoneal macrophages as a function of age. Lavie L, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):177–89

ATP permeabilization of the plasma membrane. Steinberg TH, et al. **Methods Cell Biol** 1989;31:45–61

Hepatocyte-stimulating factor. Woloski BM, et al. **Methods Enzymol** 1988;163:594–602

Production of interleukin 1 inhibitors by the murine macrophage cell line P388D1 which produces interleukin 1. Isono N, et al. **Microbiol Immunol** 1989;33(1):43–57

Enhancement of antigen-presenting function of dendritic cells with culture supernatants of mouse peritoneal macrophages stimulated with certain particulate substances. Miyazaki H, et al. **Microbiol Immunol** 1988;32(10):1033–42

Comparative effects of roxithromycin and erythromycin on cellular immune functions in vitro. I. Uptake of 3H-macrolides by human macrophages. Cuffini AM, et al. **Microbios** 1989;57(232–233):167–78

Cholesteryl ester handling by RAW264 macrophages: response to native and acetylated low density lipoprotein. Berg KA, et al. **Mol Cell Biochem** 1988 Nov;84(1):29–40

Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251–60

NPGB-induced inhibition of superoxide anion production by normal Lewis rat macrophages. Arduini A, et al. **Neurochem Res** 1989 Jan;14(1):55–61

Production of interleukin-6 by folliculo-stellate cells of the anterior pituitary gland in a histiotypic cell aggregate culture system. Vankelecom H, et al. **Neuroendocrinology** 1989 Jan;49(1):102–6

Effect of dihydroheptaprenol on nitroblue tetrazolium reduction by swine alveolar macrophages. Watari T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):630–1

Nucleotide sequence of cDNA encoding the heavy subunit of mouse macrophage ferritin. Miyazaki Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10373

Stimulation of prostaglandin production by endotoxin in macrophages and endothelial cells. Xiao DM, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):1–6

Early reversible induction of leukotriene synthesis in chicken myelomonocytic cells transformed by a temperature-sensitive mutant of avian leukemia virus E26. Habenicht AJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):921–4

Phagocytosis of aggregated lipoprotein by macrophages: low density lipoprotein receptor-dependent foam-cell formation. Suits AG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2713–7

Induction of interleukin 1 by Legionella pneumophila in murine peritoneal macrophage cultures. Widen RH, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):304–8

Receptor-mediated signal transduction in mononuclear phagocytes. Riches DW, et al. **Prog Allergy** 1988;42:65–122 (257 ref.)

Glycan variants of human alpha 1-acid glycoprotein modulate the biology of macrophages. Evidence that a concanavalin A-unreactive variant is involved in the production of an interleukin 1 inhibitor. Durand G. **Prog Clin Biol Res** 1989;300:247–65

Macrophage receptor-mediated processing and regulation of advanced glycosylation endproduct (AGE)-modified proteins: role in diabetes and aging. Vlassara H, et al. **Prog Clin Biol Res** 1989;304:205–18 (30 ref.)

Macrophage heterogeneity in prostaglandins and thromboxane synthesis: differential activation by Fc- and C3b-dependent bacterial phagocytosis. Coquette A, et al. **Prostaglandins** 1988 Oct;36(4):491–505

Effects of inadequate vitamin E and/or selenium nutrition on the release of arachidonic acid metabolites in rat alveolar macrophages. Eskew ML, et al. **Prostaglandins** 1989 Jul; 38(1):79–89

Enhancement of eicosanoid synthesis in mouse peritoneal macrophages by the organic mercury compound thimerosal. Kaever V, et al. **Prostaglandins** 1988 Jun; 35(6):885–902

Biosynthesis of peptidyl leukotrienes and other lipoxygenase products by rat pancreatic islets. Comparison with macrophages and neutrophils. Morgan RO, et al. **Prostaglandins** 1988 Apr;35(4):609–23

The production of C3, PGE2 and TxB2 by splenic, alveolar, and peritoneal guinea pig macrophages. Ogle CK, et al. **Prostaglandins** 1988 Sep;36(3):279–89

The oral gold compound auranofin triggers arachidonate release and cyclooxygenase metabolism in the alveolar macrophage. Peters-Golden M, et al. **Prostaglandins** 1988 Dec;36(6):773–86

Kinetics of uptake and distribution of arachidonic acid by rat alveolar macrophages. Robison TW, et al. **Prostaglandins** 1988 Oct;36(4):443–61

The effect of dietary fish oils on eicosanoid biosynthesis in peritoneal macrophages is influenced by both dietary N-6 polyunsaturated fats and total dietary fat. German JB, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):37–45

Eicosanoid synthesis by alveolar macrophages in rats with malignant mammary tumors: differences in rats treated with and without carrageenan implants. Kort WJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):113–20

Tumor necrosis factor release by pulmonary alveolar macrophages. Spatafora M, et al. **Respiration** 1988;54 Suppl 1:73–7

Effect of gold salt treatment on the receptor binding activity of monocytes and macrophages isolated from rats with adjuvant arthritis. Haynes DR, et al. **Rheumatol Int** 1988; 8(4):159–64

In vitro studies on the significance of arachidonate metabolism and other oxidative processes in the inflammatory response of human neutrophils and macrophages. With special reference to chronic inflammatory bowel disease. Nielsen OH. **Scand J Gastroenterol Suppl** 1988;150:1–21

S-protein is synthesized by human monocytes and macrophages in vitro. Hetland G, et al. **Scand J Immunol** 1989 Jan;29(1):15–21

The modulatory effect of lipoproteins on the release of interleukin 1 by human peritoneal macrophages stimulated with beta-1,3-D-polyglucose derivatives. Rasmussen LT, et al. **Scand J Immunol** 1989 Apr;29(4):477–84

Androgen metabolism by human peritoneal macrophages. Coddington CC, et al. **Steroids** 1988 Jan-Feb; 51(1-2):143–61

Production of plasminogen activator by alveolar macrophages in normal subjects and patients with interstitial lung disease. Robinson BW. **Thorax** 1988 Jul; 43(7):508–15

Concurrent expression of procoagulant and plasminogen activator activities by rabbit alveolar macrophages in vitro: opposite modulating effects of prostaglandin E2. Hasday JD, et al. **Thromb Res** 1988 Sep 1;51(5):521–31

In vitro tests on macrophage prostaglandin E2 and thromboxane B2 production after blood transfusion. Ogle CK, et al. **Transplant Proc** 1988 Dec;20(6):1179–83

[The effect of ethanol on the metabolism of arachidonic acid (AA) of peritoneal macrophages of mice] Schüller Pérez A. **Bull Acad Natl Med** 1989 Mar;173(3):299–307 (Fre)

[Indirect detection of lymphokines with the help of SDS-conditioned macrophages] Wagner H. **Z Med Lab Diagn** 1988;29(8):431–6 (Eng. Abstr.) (Ger)

[Mechanisms of lipoprotein metabolism in macrophages] Takahashi K, et al. **Nippon Rinsho** 1989 Mar;47(3):554–9 (Jpn)

[Mononuclear phagocytes and reactive oxygen species] Yamazaki M. **Nippon Rinsho** 1989 Mar;47(3):550–3 (Jpn)

[Mechanism of foam cell transformation of macrophages] Kita T. **Seikagaku** 1988 Oct;60(10):1163–8 (Jpn)

[Anti-tumor effect by leukocyte-derived active oxygens] Yamazaki M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3031–6 (Jpn)

[The role of lipoproteins and macrophages in the development of atherosclerosis] Bjørneboe GE. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):216–9 (Eng. Abstr.) (Nor)

[Effect of macrophage decay products on the incorporation of H3-thymidine into pulmonary cells in rats] Privalova LI, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):66–9 (Eng. Abstr.) (Rus)

[Participation of alveolar macrophages in the catabolism of fibrinogen and fibrin] Zubairov DM, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):335–7 (Eng. Abstr.) (Rus)

[Use of neutralizing antibodies against tumor necrosis factor for determining the activity of colony-stimulating hematopoietic factors in cultures containing macrophages] Paniutich AV, et al. **Gematol Transfuziol** 1988 Dec; 33(12):21–5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Bacterial antigen processing in macrophages infected with the obligate intracellular bacterium, Mycobacterium avium. de Chastellier C, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:175–6

Phagosome-lysosome fusions in macrophages infected by Mycobacterium avium: role of mycosides-C and other cells surface components. Fréhel C, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:173–4

Interaction of Legionella pneumophila with peritoneal macrophages from various mouse strains. Yamamoto Y, et al. **Adv Exp Med Biol** 1988;239:89–98

Role of macrophages in lentivirus infections. Narayan O, et al. **Adv Vet Sci Comp Med** 1988;32:129–48 (64 ref.)

Macrophage biology, latency, and HIV infection [editorial] Laurence J. **AIDS Res Hum Retroviruses** 1988 Oct; 4(5):v–vi

In vitro Sendai viral replication in pulmonary macrophages from mice treated with 4-ipomeanol. Durham SK, et al. **Am J Vet Res** 1988 Oct;49(10):1677–80

1,25(OH)2-vitamin D3 synergizes with pyrazinamide to kill tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1989 Feb;139(2):549–52

Effectiveness of ofloxacin against Mycobacterium tuberculosis and Mycobacterium avium, and rifampin against M. tuberculosis in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1988 May; 137(5):1141–6

Respiratory syncytial virus infection of human cord and adult blood monocytes and alveolar macrophages. Midulla F, et al. **Am Rev Respir Dis** 1989 Sep;140(3):771–7

Interactions of Pseudorabies virus with swine alveolar macrophages I: virus replication. Iglesias G, et al. **Arch Virol** 1989;104(1-2):107–115

The use of liposomally-entrapped gentamicin in the treatment of bovine Staphylococcus aureus mastitis. MacLeod DL, et al. **Can J Vet Res** 1988 Oct;52(4):445–50

The effect of intracellular parasitism on cell phenotype. Poulter LW, et al. **Clin Exp Immunol** 1988 Dec;74(3):344–8

Intracellular survival of wild-type Salmonella typhimurium and macrophage-sensitive mutants in diverse populations of macrophages. Buchmeier NA, et al. **Infect Immun** 1989 Jan;57(1):1–7

A Legionella pneumophila gene encoding a species-specific surface protein potentiates initiation of intracellular infection. Cianciotto NP, et al. **Infect Immun** 1989 Apr; 57(4):1255–62

Inhibition by retinoic acid of multiplication of virulent tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Infect Immun** 1989 Mar;57(3):840–4

Inhibition by normal human serum of Mycobacterium avium multiplication in cultured human macrophages. Crowle AJ, et al. **Infect Immun** 1989 Apr;57(4):1332–5

DNA sequence of mip, a Legionella pneumophila gene associated with macrophage infectivity. Engleberg NC, et al. **Infect Immun** 1989 Apr;57(4):1263–70

Fibronectin as an enhancer of nonopsonic phagocytosis of Pseudomonas aeruginosa by macrophages. Kluftinger JL, et al. **Infect Immun** 1989 Sep;57(9):2782–5

Enhancement of growth of Mycobacterium lepraemurium in macrophages by gamma interferon. Mor N, et al. **Infect Immun** 1989 Aug;57(8):2586–7

Induction of macrophage procoagulant activity by Bacteroides fragilis. Rosenthal GA, et al. **Infect Immun** 1989 Feb;57(2):338–43

Lack of lysosomal fusion with phagosomes containing Ehrlichia risticii in P388D1 cells: abrogation of inhibition

with oxytetracycline. Wells MY, et al. **Infect Immun** 1988 Dec;56(12):3209–15

Effects of Histoplasma capsulatum on murine macrophage functions: inhibition of macrophage priming, oxidative burst, and antifungal activities. Wolf JE, et al. **Infect Immun** 1989 Feb;57(2):513–9

Inhibition of Legionella pneumophila multiplication within human macrophages by fleroxacin. Pohlod DJ, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:49–54

Interferons and bacterial lipopolysaccharide protect macrophages from productive infection by human immunodeficiency virus in vitro. Kornbluth RS, et al. **J Exp Med** 1989 Mar 1;169(3):1137–51

Studies on the mechanism of the interferon-mediated antiviral state to vesicular stomatitis virus in resting mouse peritoneal macrophages. Di Francesco P, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1899–905

Differential sensitivity of macrophages from herpes simplex virus–resistant and –susceptible mice to respiratory burst priming by interferon–alpha/beta. Ellermann–Eriksen S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2139–47

In vitro enhancement of respiratory syncytial virus infection of U937 cells by human sera. Gimenez HB, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):89–96

Modulation of lentivirus replication by antibodies. Non–neutralizing antibodies to caprine arthritis–encephalitis virus enhance early stages of infection in macrophages, but do not cause increased production of virions. Jolly PE, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2221–6

Epstein–Barr virus DNA sequences in precursor monocyte–macrophage cell lines established from the bone marrow of children with maturation defects of haematopoiesis. Revoltella RP, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1203–15

Reversal of virus–induced alveolar macrophage bactericidal dysfunction by cyclooxygenase inhibition in vitro. Laegreid WW, et al. **J Leukoc Biol** 1989 Apr;45(4):293–300

Isolation and identification of feline peritoneal macrophages for in vitro studies of coronavirus–macrophage interactions. Stoddart CA, et al. **J Leukoc Biol** 1988 Nov;44(5):319–28

Intracellular destruction of salmonellae in genetically resistant mice. Lin FR, et al. **J Med Microbiol** 1989 Sep; 30(1):79–87

The productive infection of alveolar macrophages by simian immunodeficiency virus. Ringler DJ, et al. **J Med Primatol** 1989;18(3–4):217–26

Change in host cell tropism associated with in vitro replication of equine infectious anemia virus. Carpenter S, et al. **J Virol** 1989 Jun;63(6):2492–6

Molecular localization of abortive infection of resident peritoneal macrophages by herpes simplex virus type 1. Morahan PS, et al. **J Virol** 1989 May;63(5):2300–7

Intrinsic resistance of feline peritoneal macrophages to coronavirus infection correlates with in vivo virulence. Stoddart CA, et al. **J Virol** 1989 Jan;63(1):436–40

Profiles of antibody–dependent enhancement of dengue virus type 2 infection. Morens DM, et al. **Microb Pathog** 1987 Oct;3(4):231–7

Growth of Legionella pneumophila in a human macrophage–like (U937) cell line. Pearlman E, et al. **Microb Pathog** 1988 Aug;5(2):87–95

The role of the traT gene of the Salmonella typhimurium virulence plasmid for serum resistance and growth within liver macrophages. Rhen M, et al. **Microb Pathog** 1988 Oct;5(4):275–85

Replication of herpes simplex virus in blood monocytes and placental macrophages from human neonates. Plaeger–Marshall S, et al. **Pediatr Res** 1989 Aug; 26(2):135–9

Human immunodeficiency virus type 1 in spinal cords of acquired immunodeficiency syndrome patients with myelopathy: expression and replication in macrophages. Eilbott DJ, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3337–41

Molecular cloning of two west African human immunodeficiency virus type 2 isolates that replicate well in macrophages: a Gambian isolate, from a patient with neurologic acquired immunodeficiency syndrome, and a highly divergent Ghanian isolate. Kühnel H, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2383–7

Macrophage toxicity and complement sensitivity of virulent and avirulent strains of Legionella pneumophila. Caparon M, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S377–81

Effects of isoniazid and of ceforanide against virulent tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Tubercle** 1988 Mar;69(1):15–25

Ultrastructural behavior of human immunodeficiency virus (HIV) in multinucleated giant cells in the brain of a Japanese hemophiliac presenting AIDS encephalopathy. Naito M, et al. **Ultrastruct Pathol** 1989 Jul–Aug; 13(4):433–41

Toxicity of Haemophilus pleuropneumoniae to porcine lung macrophages. Van Leengoed LA, et al. **Vet Microbiol** 1989 Apr;19(4):337–49

Host cell resistance to mouse hepatitis virus type 3 is expressed in vitro in macrophages and lymphocytes. Lamontagne L, et al. **Viral Immunol** 1989;2(1):37–45

African swine fever virus–induced proteins on the plasma membranes of infected cells. Alcaraz C, et al. **Virology** 1989 Feb;168(2):406–8

Ability of smooth and rough variants of Mycobacterium avium and M. intracellulare to multiply and survive intracellularly: role of C–mycosides. Rastogi N, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):345–60

[Lobomycosis] Arrese Estrada J, et al. **Ann Pathol** 1988; 8(4–5):325–7 (Eng. Abstr.) (Fre)

[Changes in the biological properties of Yersinia pestis during long–term intracellular multiplication] Vasil'eva GI, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):30–3 (Eng. Abstr.) (Rus)

[Intracellular activity and phagocyte formation of pathogenic and non–pathogenic strains of Mycobacterium fortuitum] Sosnovskaia AV. **Probl Tuberk** 1988;(6):59–62 (Eng. Abstr.) (Rus)

[Electron microscopic study of the interaction of virulent and avirulent Shigella flexneri strains with the macrophages of murine peritoneal exudate] Kirillova FM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):8–11 (Eng. Abstr.) (Rus)

[Changes in the "latent" virulence of a vaccinal strain of Yersinia pestis multiplying within macrophages] Vasil'eva GI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep; (9):63–6 (Eng. Abstr.) (Rus)

PARASITOLOGY

Intracellular multiplication of Paracoccidioides brasiliensis in macrophages: killing and restriction of multiplication by activated macrophages. Brummer E, et al. **Infect Immun** 1989 Aug;57(8):2289–94

Fibronectin increases Trypanosoma cruzi amastigote binding to and uptake by murine macrophages and human monocytes. Noisin EL, et al. **Infect Immun** 1989 Apr; 57(4):1030–4

Inhibition of Leishmania donovani promastigote internalization into murine macrophages by chemically defined parasite glycoconjugate ligands. Palatnik CB, et al. **Infect Immun** 1989 Mar;57(3):754–63

Beta interferon inhibits Toxoplasma gondii growth in human monocyte–derived macrophages. Schmitz JL, et al. **Infect Immun** 1989 Oct;57(10):3254–6

Cytochemical localization of plasma membrane enzyme markers during interiorization of tachyzoites of Toxoplasma gondii by macrophages. de Carvalho L, et al. **J Protozool** 1989 Mar–Apr;36(2):164–70

Effects of steroid–induced Pneumocystis carinii on alveolar macrophages in the rat. Shear HL, et al. **J Protozool** 1989 Jan–Feb;36(1):49S–50S

CR1 mediates binding of L. major metacyclic promastigotes to human macrophages. da Silva RP, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:459–63

Enhanced invasion of mononuclear phagocytes by serum–treated Trypanosoma cruzi is due to Clq. Rimoldi MT, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:456–8

Monitoring of interactions between macrophage hybridoma and Trypanosoma cruzi by chemiluminescence. Vray B, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:503–5

Influence of the endosymbiont on the interaction of Crithidia deanei with macrophages. Rozental S, et al. **Microsc Electron Biol Celular** 1987 Dec;11(2):167–77

Perturbation of sterol biosynthesis by itraconazole and ketoconazole in Leishmania mexicana mexicana infected macrophages. Hart DT, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):123–34

Trypanosoma cruzi: the effect of variations in experimental conditions on the levels of macrophage infection in vitro. Araújo–Jorge TC, et al. **Parasitol Res** 1989;75(4):257–63

Receptor–mediated drug delivery to macrophages in chemotherapy of leishmaniasis. Mukhopadhyay A, et al. **Science** 1989 May 12;244(4905):705–7

Ultrastructural analysis of the interaction between host cells and Trypanosoma cruzi in experimental chagomas. Bijovsky AT, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):704–8

PATHOLOGY

The mononuclear cell infiltrate compared with survival in high–grade astrocytomas. Rosai ML, et al. **Acta Neuropathol (Berl)** 1989;78(2):189–93

Distribution and morphology of macrophages in palatine tonsils. Yamamoto Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:83–95

Macrophages in bronchoalveolar lavage fluid do not represent macrophages in granulomas of the lungs of BCG–infected mice. Nibbering PH, et al. **Agents Actions** 1989 Jan;26(1–2):132–3

The myofibroblast. Possible derivation from macrophages in xanthogranuloma. Bhawan J, et al. **Am J Dermatopathol** 1989 Jun;11(3):255–8

Glomerular cells and macrophages in the progression of experimental focal and segmental glomerulosclerosis. Matsumoto K, et al. **Am J Pathol** 1989 Apr;134(4):933–45

A rapid method for the detection of early stages of atherosclerotic lesion formation. Rogers KA, et al. **Am J Pathol** 1988 Dec;133(3):451–5

Macrophage size determinations in the diagnosis of tuberculous effusions. Guzman J, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):371–4

Proliferation of alveolar macrophages in hyperoxia. Nerurkar LS, et al. **Ann Allergy** 1988 Nov;61(5):344–7

Histopathology of nude mice induced by granulocyte–macrophage colony–stimulating factor. Takanari H, et al. **Ann Clin Lab Sci** 1988 Nov–Dec; 18(6):468–75

Peripheral nerve vasculitis: immune characterization of the vascular lesions. Kissel JT, et al. **Ann Neurol** 1989 Mar; 25(3):291–7

Lymphocytes and macrophages of the epidermis and dermis in lesional psoriatic skin, but not epidermal Langerhans cells, are depleted by treatment with cyclosporin A. Gupta AK, et al. **Arch Dermatol Res** 1989;281(4):219–26

Identification of macrophages in intimal thickening of rat carotid arteries by cytochemical localization of purine nucleoside phosphorylase. Verheyen AK, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):759–67

Immunohistochemical analysis of lymphoid and macrophage cell subsets and their immunologic activation markers in temporal arteritis. Influence of corticosteroid treatment. Cid MC, et al. **Arthritis Rheum** 1989 Jul;32(7):884–93

Localization of T lymphocytes and macrophages in fibrous and complicated human atherosclerotic plaques. Hansson GK, et al. **Atherosclerosis** 1988 Aug;72(2–3):135–41

Production of interleukin 6 and its relation to the macrophage differentiation of mouse myeloid leukemia cells (M1) treated with differentiation–inducing factor and 1 alpha,25–dihydroxyvitamin D3. Miyaura C, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):660–6

Myeloid progenitor cells (CFU–GM) predict engraftment kinetics in autologous transplantation in children. Emminger W, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):415–20

Normal myeloid progenitors (CFU–GM) in multiple myeloma: a preliminary study in view of autologous BMT. Lemoli RM, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):373–7

Improved CFU–GM recoveries from marrows of neuroblastoma patients using a slightly modified immunomagnetic depletion technique [letter] Lopez M, et al. **Bone Marrow Transplant** 1989 Jul;4(4):453–4

Interstitial foam cells in renal biopsies: an aid in differentiating idiopathic membranoproliferative glomerulonephritis (type I) and membranoproliferative glomerulonephritis associated with systemic lupus erythematosus. Poucell S, et al. **Child Nephrol Urol** 1988–89;9(1–2):106–11

Two calcium–binding proteins associated with specific stages of myeloid cell differentiation are expressed by subsets of macrophages in inflammatory tissues. Zwadlo G, et al. **Clin Exp Immunol** 1988 Jun;72(3):510–5

Proliferation of pulmonary macrophages during the early phase of an acute graft–versus–host reaction in mice. Gartner JG, et al. **Exp Lung Res** 1988;14(6):781–96

The effects of malnutrition on murine peritoneal macrophages. Papadimitriou JM, et al. **Exp Mol Pathol** 1988 Oct;49(2):161–70

The spleen in Hodgkin's disease. An immunohistochemical study of lymphocyte subpopulations and macrophages. Falk S, et al. **Histopathology** 1988 Aug;13(2):139–48

Portal tract macrophages are increased in alcoholic liver disease. Karakucuk I, et al. **Histopathology** 1989 Mar; 14(3):245–53

Isolation and characterization of glomerular macrophages in experimental glomerulonephritis. Tipping PG, et al. **Immunol Cell Biol** 1988 Apr;66 (Pt 2):147–51

Acute inflammatory lung injury retards pulmonary particle clearance. Slauson DO, et al. **Inflammation** 1989 Apr; 13(2):185–99

Biphasic regulation of macrophage attachment by activators of cyclic adenosine monophosphate–dependent kinase and protein kinase C. Issaad C, et al. **J Cell Physiol** 1989 Aug; 140(2):317–22

Abnormal macrophage development in Hodgkin's disease: a morphometric study. Sokol RJ, et al. **J Leukoc Biol** 1988 Dec;44(6):493–9

Silica–induced pulmonary fibrosis involves the reaction of particles with interstitial rather than alveolar macrophages. Bowden DH, et al. **J Pathol** 1989 May;158(1):73–80

Effect of 89 Sr–induced monocytopenia on splenic and pulmonary alveolar macrophage populations in a normal steady state. Oghiso Y, et al. **J Radiat Res (Tokyo)** 1988 Sep;29(3):189–202

Combined effects of differentiation–inducing factor and other cytokines on induction of differentiation of mouse myeloid leukemic cells. Yamamoto–Yamaguchi Y, et al. **Jpn J Cancer Res** 1989 Feb;80(2):115–21

Immunological aspects of acute ureteral obstruction: immune cell infiltrate in the kidney. Schreiner GF, et al. **Kidney Int** 1988 Oct;34(4):487–93

Diagnosis of renal allograft rejection by macrophage immunostaining with a CD14 monoclonal antibody, WT14. Bogman MJ, et al. **Lancet** 1989 Jul 29;2(8657):235–8

Heterogeneous colony forming ability in vitro of the abnormal clone–derived granulocyte–macrophage precursors in myelodysplastic syndromes. Okuda T, et al. **Leuk Res** 1988;12(8):687–92

Undetectable peripheral blood CFU–GM as a prognostic indicator in myelodysplastic syndrome. Tennant GB, et al. **Leuk Res** 1988;12(11–12):961–2

Extra–tissular Schistosoma mansoni egg granulomata in the peritoneal cavity of mice. Melro MC, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:245–52

Reduced capacity of peritoneal exudate cells for oxidative killing of Schistosoma mansoni schistosomula. Smith JM, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:277–82

Differentiation in vitro of a leukemia virus-induced B-cell lymphoma into macrophages. Hanecak R, et al. **Mol Cell Biol** 1989 May;9(5):2264–8

Induction of macrophage-like differentiation of HL-60 leukemia cells by tumor necrosis factor-alpha: potential role of fos expression. Squinto SP, et al. **Mol Endocrinol** 1989 Feb;3(2):409–19

Chronic vitritis with macrophagic inclusions. A sequela of treated endophthalmitis due to a coryneform bacterium. Margo CE, et al. **Ophthalmology** 1988 Feb;95(2):156–61

Macrophages and dendritic cells during the early stages of antigen-induced arthritis in rats: immunohistochemical analysis of cryostat sections of the whole knee joint. Verschure PJ, et al. **Scand J Immunol** 1989 Mar; 29(3):371–81

Number and activity of inflammatory cells in bronchoalveolar lavage fluid in asthma and their relation to airway responsiveness. Kelly C, et al. **Thorax** 1988 Sep; 43(9):684–92

Monocytes and macrophages in the rejection of human cardiac allografts. Gassel AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2514–6

Phenotypic characterization of alveolar capillary endothelial cells, alveolar epithelial cells and alveolar macrophages in patients with pulmonary fibrosis, with special reference to MHC class II antigens. Komatsu T, et al. **Virchows Arch [A]** 1989;415(1):79–90

Evaluation of lysosomal stability in living cultured macrophages by cytofluorometry. Effect of silver lactate and hypotonic conditions. Olsson GM, et al. **Virchows Arch [B]** 1989;56(4):263–9

Disordered development of macrophages in non-Hodgkin's lymphoma. Sokol RJ, et al. **Virchows Arch [B]** 1988; 56(3):205–9

[Macrophage-lymphocyte alveolitis in pulmonary sarcoidosis. The role of T-lymphocytes and alveolar macrophages in the pathogenesis and monitoring of this disease] Rossi GA, et al. **Rev Mal Respir** 1988;5(5):511–8 (68 ref.) (Eng. Abstr.) (Fre)

[Immunohistochemical findings in proliferative retinal diseases—on the significance of fibronectin, macrophages and transferrin] Weller M, et al. **Fortschr Ophthalmol** 1989; 86(2):121–3 (Eng. Abstr.) (Ger)

[Cytophagic histiocytic panniculitis—a T cell disorder with proliferation of macrophages?] Iwasaki M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1235–47 (34 ref.) (Eng. Abstr.) (Jpn)

[A case of acute emphysematous cholecystitis with infiltration of giant cells and eosinophils in the gallbladder wall] Hino K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):265–9 (9 ref.) (Jpn)

[Activity of serum growth regulators of granulocyte-macrophage colonies (GM) in surgically treated breast cancer] Kondracka EE, et al. **Nowotwory** 1988 May-Jun;38(3):152–60 (Eng. Abstr.) (Pol)

[Activity of serum regulators of the growth of granulocyte-macrophage (GM) colonies in acute lymphoblastic leukemia (ALL) in children] Swiderska J, et al. **Nowotwory** 1988 Oct-Dec;38(4):232–40 (Eng. Abstr.) (Pol)

[Cellular infiltrates in lung cancer as a prognostic indicator] Lipińska R, et al. **Pneumonol Pol** 1988 Jul;56(7):297–301 (Eng. Abstr.) (Pol)

[Cytomorphologic characteristics of the uterine contents in women with various courses of postpartum endometritis] Chikin VG, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):66–7 (Rus)

[Morphofunctional characteristics of the alveolar epithelium and alveolar macrophages in chronic bronchitis] Valeev RI, et al. **Arkh Patol** 1988;50(10):49–53 (Eng. Abstr.) (Rus)

[Diagnostic aids in bronchial asthma using macrophage and neutrophil indices and serum IgE levels] Aguilar Angeles D, et al. **Rev Alerg Mex** 1989 Mar-Apr;36(2):45–8 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Regulation of complement gene expression of murine macrophages: effects of histamine. Falus A, et al. **Acta Paediatr Hung** 1988–89;29(1–2):33–5

Answered and unanswered questions about macrophages. van Furh R. **Acta Paediatr Hung** 1988–89;29(1–2):11–21 (62 ref.)

The role of suppressive macrophages in influenza virus-induced immunosuppression. Ichikawa K, et al. **Acta Virol (Praha)** 1989 May;33(3):262–9

Preferential growth of blood-borne cancer cells at sites of trauma—a growth promoting role of macrophages. Alexander P, et al. **Adv Exp Med Biol** 1988;233:245–51

Role of immunocompetent cells in the regulation of human megakaryocytopoiesis in vitro. Detrick RA, et al. **Adv Exp Med Biol** 1988;241:199–215

Haemopoietic regulation and the role of the macrophage in erythropoietic gene expression. Rich IN. **Adv Exp Med Biol** 1988;241:55–66 (54 ref.)

Characterization of cell populations, reappearing in the mouse spleen after elimination by liposome encapsulated dichloromethylene diphosphonate: reappearance of marginal zone lymphocytes is independent of marginal zone macrophages. van Rooijen N, et al. **Adv Exp Med Biol** 1988;237:889–93

Depletion of resident glomerular macrophages by essential fatty acid deficiency protects against glomerulonephritis. Lefkowith JB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:560–3

Regulated generation of leukotrienes in mononuclear cells. Lewis RA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:495–8

Lipopolysaccharide stimulates alveolar macrophage adherence in vivo and in vitro. Edelman J, et al. **Agents Actions** 1989 Mar;26(3–4):287–91

Neutrophil migration induced by inflammatory stimuli is reduced by macrophage depletion. Souza GE, et al. **Agents Actions** 1988 Jul;24(3–4):377–80

The modification of low density lipoproteins by macrophages by oxidation or proteolysis. Rankin SM, et al. **Agents Actions Suppl** 1988;26:233–9

The role of alveolar macrophages in asthma. Godard P, et al. **Allergol Immunopathol (Madr)** 1988 May-Jun; 16(3):185–6

Unique promotion of erythrophagocytosis by malondialdehyde. Hebbel RP, et al. **Am J Hematol** 1988 Dec;29(4):222–5

Fibrovascular proliferation and retinal detachment after intravitreal injection of activated macrophages in the rabbit eye. Hui YN, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):176–84

Evaluation of fibronectin gene expression by in situ hybridization. Differential expression of the fibronectin gene among populations of human alveolar macrophages. Adachi K, et al. **Am J Pathol** 1988 Nov;133(2):193–203

Enhanced macrophage-fibroblast interactions in the pulmonary interstitium increases fibrosis after silica injection to monocyte-depleted mice. Adamson IY, et al. **Am J Pathol** 1989 Feb;134(2):411–8

Rapid fragmentation and reorganization of Golgi membranes during frustrated phagocytosis of immobile immune complexes by macrophages. Bainton DF, et al. **Am J Pathol** 1989 Jan;134(1):15–26

Functional characteristics of macrophages in glomerulonephritis in the rat. O2- generation, MHC class II expression, and eicosanoid synthesis. Cook HT, et al. **Am J Pathol** 1989 Feb;134(2):431–7

Granuloma formation by artificial microparticles in vitro. Macrophages and monokines play a critical role in granuloma formation. Shikama Y, et al. **Am J Pathol** 1989 Jun;134(6):1189–99

Directed exocytosis of secretory granules containing apolipoprotein E to the adherent surface and basal vacuoles of macrophages spreading on immobile immune complexes. Werb Z, et al. **Am J Pathol** 1989 Mar;134(3):661–70

Evidence for a Ca-activated inwardly rectifying K channel in human macrophages. Gallin EK. **Am J Physiol** 1989 Jul;257(1 Pt 1):C77–85

Depression of hydrogen peroxide dependent killing of schistosomula in vitro by peritoneal exudate cells from Schistosoma mansoni infected mice. Smith JM, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):186–94

Effect of respiratory infections caused by bovine herpesvirus-1 or parainfluenza-3 virus on bovine alveolar macrophage functions. Brown TT Jr, et al. **Am J Vet Res** 1988 Sep;49(9):1447–51

Fibroblast proliferation induced by silica-exposed human alveolar macrophages. Brown GP, et al. **Am Rev Respir Dis** 1988 Jul;138(1):85–9

Human alveolar macrophage and blood monocyte inhibition of fibroblast proliferation. Evidence for synergy between interleukin-1 and tumor necrosis factor. Elias JA, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1595–603

Macrophages activated by fibrin increase albumin permeability across pulmonary artery endothelial monolayers. Ferro TJ, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):940–5

The effect of alveolar macrophage chemotaxis on bacterial clearance from the lung surface. Fisher ES, et al. **Am Rev Respir Dis** 1988 May;137(5):1129–34

Comparative oxidative microbicidal activity of human blood monocytes and alveolar macrophages and activation by recombinant gamma interferon [letter] Todisco T, et al. **Am Rev Respir Dis** 1988 May;137(5):1246

Nonimmune-mediated phagocytosis by "premedullary" lung macrophages: effects of concanavalin A, tuftsin, and macrophage-inhibitory peptide. Sorokin SP, et al. **Anat Rec** 1989 Jan;223(1):55–61

Regulation of the acute phase and immune responses: interleukin-6. **Ann N Y Acad Sci** 1989;557:1–583

Interleukin-6. The major regulator of acute-phase protein synthesis in man and rat. Castell JV, et al. **Ann N Y Acad Sci** 1989;557:87–99; discussion 100–1

Interleukin-6. Multiple activities in regulation of the hematopoietic and immune systems. Clark SC. **Ann N Y Acad Sci** 1989;557:438–43 (14 ref.)

The structure and function of the mouse hepatocyte stimulating factor. Fuller GM, et al. **Ann N Y Acad Sci** 1989;557:31–44; discussion 45 (54 ref.)

IFN beta 2/BSF2/IL-6 is the monocyte-derived HSF that regulates receptor-specific acute phase gene regulation in hepatocytes. Gauldie J, et al. **Ann N Y Acad Sci** 1989; 557:46–58; discussion 58–9 (54 ref.)

The role of interleukin-6 as the hepatocyte stimulating factor in the network of inflammatory cytokines. Koj A. **Ann N Y Acad Sci** 1989;557:1–8 (48 ref.)

Production of IL-6 by keratinocytes. Implications for epidermal inflammation and immunity. Kupper TS, et al. **Ann N Y Acad Sci** 1989;557:454–64; discussion 464–5

Activation of thymocytes and T cells by interleukin-6. Le JM, et al. **Ann N Y Acad Sci** 1989;557:444–52; discussion 452–3

Development of cytolytic T lymphocytes in thymus culture requires a cytokine sharing homology with IL-6 alpha. Ming JE, et al. **Ann N Y Acad Sci** 1989;557:396–403; discussion 403–4

Human endothelial cells produce IL-6. Lack of responses to exogenous IL-6. Podor TJ, et al. **Ann N Y Acad Sci** 1989;557:374–85; discussion 386–7

Biochemical and biological properties of human HPGF/IL-6. Van Damme J. **Ann N Y Acad Sci** 1989; 557:104–12; discussion 112–3

The macrophage as a production site for hematopoietic regulator molecules: sensing and responding to normal and pathophysiological signals. Rich IN. **Anticancer Res** 1988 Sep-Oct;8(5A):1015–40 (226 ref.)

Dysfunction of the mononuclear phagocytic system in sepsis. Gutiérrez-Fernández J, et al. **APMIS** 1989 May; 97(5):441–6

Modulation of growth-stimulating and antitumor activity of macrophages by BCG and cyclophosphamide. Okulov VB, et al. **APMIS Suppl** 1988;2:130–5

The rediscovery of the macrophage. Seljelid R. **APMIS Suppl** 1988;2:215–23 (30 ref.)

An immuno-electron microscopic study on interactions among dendritic cells, macrophages and lymphocytes in the human palatine tonsil. Okato S, et al. **Arch Histol Cytol** 1989 Jul;52(3):231–40

The role of renal macrophages in the aglomerular kidney of the sea-horse (teleost) in the removal of exogenous macromolecules from circulating blood. Tsujii T. **Arch Histol Cytol** 1988 Oct;51(4):327–39

Oxidative modification of beta-very low density lipoprotein. Potential role in monocyte recruitment and foam cell formation. Parthasarathy S, et al. **Arteriosclerosis** 1989 May-Jun;9(3):398–404

Macrophage-biomaterial interactions with bioresorbable vascular prostheses. Greisler H. **ASAIO Trans** 1988 Oct-Dec;34(4):1051–9 (37 ref.)

Activity of peritoneal macrophages in endometriosis. Samejima T, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):175–81

Enhanced procoagulatory activity (PCA) of human monocytes/macrophages after in vitro stimulation with chemically modified LDL. Schuff-Werner P, et al. **Atherosclerosis** 1989 Aug;78(2–3):109–12

Is oxidized low density lipoprotein involved in the recruitment and retention of monocyte/macrophages in the artery wall during the initiation of atherosclerosis? Parthasarathy S, et al. **Basic Life Sci** 1988;49:375–80

Effects of alpha, beta-unsaturated aldehydes on macrophage and neutrophil membrane function, fluidity and sulfhydryl status. Witz G, et al. **Basic Life Sci** 1988;49:849–51

Nitric oxide: a cytotoxic activated macrophage effector molecule [published erratum appears in Biochem Biophys Res Commun 1989 Jan 31;158(2):624] Hibbs JB Jr, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):87–94

Macrophage-mediated N-nitrosation of thioproline and proline. Miwa M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):373–8

Cyclosporine A inhibits TNF production without decreasing TNF mRNA levels. Remick DG, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):551–5

Macrophage recognition of periodate-treated erythrocytes: involvement of disulfide formation of the erythrocyte membrane proteins. Beppu M, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):35–45

Differential properties of organ-specific serum opsonins for liver and spleen macrophages. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):379–83

Depolarization of macrophage polykaryons in the absence of external sodium induces a cyclic stimulation of a calcium-activated potassium conductance. Soldati L, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):283–92

Impairment of superoxide release by alveolar macrophage in rats exposed to oxygen and vitamin E. Nakamura H, et al. **Biol Neonate** 1988;54(1):29–34

Absence of a direct effect of recombinant interleukins and cultured peritoneal macrophages on early embryonic development in the mouse. Schneider EG, et al. **Biol Reprod** 1989 Apr;40(4):825–33

Synovial macrophage response to aluminium oxide ceramic and cobalt-chrome alloy wear particles in rats. Howie DW, et al. **Biomaterials** 1988 Sep;9(5):442–8

Bone resorption in vitro: macrophages and giant cells from failed total hip replacement versus osteoclasts. Pazzaglia UE, et al. **Biomaterials** 1989 May;10(4):286–8

Effect of the size and surface charge of polymer microspheres on their phagocytosis by macrophage. Tabata Y, et al. **Biomaterials** 1988 Jul;9(4):356–62

Macrophage colony-stimulating factor (CSF-1) is expressed by spontaneously outgrown EBV-B cell lines and activated normal B lymphocytes. Reisbach G, et al. **Blood** 1989 Aug 15;74(3):959–64

Impaired macrophage migration in incisors absent (ia) osteopetrotic rats. Seifert MF, et al. **Bone Miner** 1988 Jun; 4(2):167–76

In-vivo blockage of neutrophil migration by LPS is mimicked by a factor released from LPS-stimulated

macrophages. Cunha FQ, et al. **Br J Exp Pathol** 1989 Feb; 70(1):1–8

The role of macrophages and eicosanoids in the pathogenesis of experimental allergic neuritis. Serial clinical, electrophysiological, biochemical and morphological observations. Hartung HP, et al. **Brain** 1988 Oct;111 (Pt 5):1039–59

Interleukin–1 mimics the hyperalgesia induced by a factor obtained by macrophage lysis. Francischi JN, et al. **Braz J Med Biol Res** 1988;21(2):321–31

Effect of vitamin D deficiency on macrophage and lymphocyte function in the rat. Wientroub S, et al. **Calcif Tissue Int** 1989 Feb;44(2):125–30

Beta–adrenergic receptor function and oxygen radical production in bovine pulmonary alveolar macrophages. Conlon PD, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1538–41

Macrophage and lymphocyte potentiation of syngeneic tumor cell and host fibroblast collagenolytic activity in rats. Dabbous MK, et al. **Cancer Res** 1988 Dec 1;48(23):6832–6

Inhibition of lymphokine–activated killer cell function by human alveolar macrophages. Roth MD, et al. **Cancer Res** 1989 Sep 1;49(17):4690–5

Tumor necrosis factor as a mediator of Mycoplasma orale–induced tumor cell lysis by macrophages. Gallily R, et al. **Cell Immunol** 1989 Jun;121(1):146–53

Kinetics of changes in peritoneal cell populations following acute inflammation. Melnicoff MJ, et al. **Cell Immunol** 1989 Jan;118(1):178–91

Stimulation of macrophage antibody–dependent killing of tumor targets by recombinant lymphokine factors and M–CSF. Nakoinz I, et al. **Cell Immunol** 1988 Oct 15; 116(2):331–40

Regulation of class II MHC gene expression by macrophages from Bcgr and Bcgs mice. Nath J, et al. **Cell Immunol** 1988 Nov;117(1):127–35

The effect of phorbol esters on tumor cell sensitivity to macrophage–mediated cytostasis. Nycum LM, et al. **Cell Immunol** 1989 Jan;118(1):147–56

Modulation of Fc gamma receptors on the human macrophage cell line U–937. Rossman MD, et al. **Cell Immunol** 1989 Apr 15;120(1):174–87

Regulation of lymphocyte motility by macrophages: characterization of a lymphocyte migration inhibitory factor derived from a macrophage–like cell line. Ye S, et al. **Cell Immunol** 1989 Aug;122(1):231–43

Interaction between thymocytes and thymus–derived macrophages. I. Surface components participating in mutual recognition. Zeira M, et al. **Cell Immunol** 1988 Dec; 117(2):264–76

Interaction between thymocytes and thymus–derived macrophages. II. Engulfment of thymocytes by macrophages. Zeira M, et al. **Cell Immunol** 1988 Dec; 117(2):277–88

Effects of neonatal monosodium–L–glutamate treatment on rat alveolar macrophages. Liu WK, et al. **Chem Biol Interact** 1989;69(2–3):193–201

Rapid measurement of phagocytosis by macrophages. Suzuki I, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4871–5

The mechanism of inhibition of alveolar macrophages on autologous blood natural killer cell activity. Takeuchi M, et al. **Chest** 1989 Feb;95(2):383–7

Enhanced bactericidal activity of macrophages by exogenous leukotriene B4. Demitsu T, et al. **Dermatologica** 1989;179 Suppl 1:129–30

Developmental ocular disease in GM–CSF transgenic mice is mediated by autostimulated macrophages. Cuthbertson RA, et al. **Dev Biol** 1989 Jul;134(1):119–29

The effects of peritoneal macrophages on monolayered luteal cell progestin secretion in the rat. Naito K, et al. **Endocrinol Jpn** 1988 Jun;35(3):439–46

Modulatory activity of 9–hydroxy– and 9–hydroperoxy–octadecadienoic acid towards reactive oxygen species from guinea–pig pulmonary macrophages. Engels F, et al. **Eur J Biochem** 1989 Sep 1;184(1):197–203

Pulmonary macrophages in nosocomial pneumonia: defense function and dysfunction, and prospects for activation. Rose RM. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):25–8 (26 ref.)

C1q acts synergistically with phorbol dibutyrate to activate CR1–mediated phagocytosis by human mononuclear phagocytes. Bobak DA, et al. **Eur J Immunol** 1988 Dec; 18(12):2001–7

Interferon–gamma activates multiple pathways to regulate the expression of the genes for major histocompatibility class II I–A beta, tumor necrosis factor and complement component C3 in mouse macrophages. Celada A, et al. **Eur J Immunol** 1989 Jun;19(6):1103–9

Dual role of macrophages in the suppression of interleukin 2 production and interleukin 2 receptor expression in trypanosome–infected mice. Sileghem M, et al. **Eur J Immunol** 1989 May;19(5):829–35

Subclinical alveolar inflammation in rheumatoid arthritis: superoxide anion, neutrophil chemotactic activity and fibronectin generation by alveolar macrophages. Perez T, et al. **Eur Respir J** 1989 Jan;2(1):7–13

Interaction between cisplatin–treated macrophages and Dalton's lymphoma cells in vitro. Singh SM, et al. **Exp Cell Biol** 1988;56(1–2):1–11

Induction of murine macrophage fungal killing by interleukin 3. Bleiberg I, et al. **Exp Hematol** 1989 Sep;17(8):895–7

Selective culture of primate marrow–derived macrophages in medium devoid of protein additives. Patel JM, et al. **Exp Hematol** 1989 Feb;17(2):96–101

Induction of macrophage–like differentiation of HL60 human myeloid leukemia cells by phorbol myristate acetate triggers an early decline in inositol lipid breakdown. Porfiri E, et al. **Exp Hematol** 1989 May;17(4):344–50

Analysis of peripheral blood granulocyte–macrophage colony growth by limiting dilution assay. Ventura GJ, et al. **Exp Hematol** 1989 Feb;17(2):125–9

A role for the macrophage in normal hemopoiesis: III. In vitro and in vivo erythropoietin gene expression in macrophages detected by in situ hybridization. Vogt C, et al. **Exp Hematol** 1989 Jun;17(5):391–7

Evidence that the macrophage–granulocyte inducer (MGI) is produced during cell proliferation, stored in G0, released in G1, cell specific, and induces the secretion of other colony–stimulating activities (CSA). Zambrano IR, et al. **Exp Hematol** 1989 Mar;17(3):267–72

Role of selenium–dependent glutathione peroxidase in antioxidant defenses in rat alveolar macrophages. Loeb GA, et al. **Exp Lung Res** 1988;14 Suppl:921–36

Effects of chlorphentermine and nitrogen dioxide on murine alveolar macrophages. White SM, et al. **Exp Lung Res** 1988; 14(5):619–36

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

The stimulatory effect of bilirubin on phagocytic activity. Bilej M, et al. **Folia Microbiol (Praha)** 1989;34(2):136–40

Scavenging by alginate of free radicals released by macrophages. Simpson JA, et al. **Free Radic Biol Med** 1989; 6(4):347–53

Macrophage modulation of retinal pigment epithelial cell migration and proliferation. Kirchhof B, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):60–6

In–vivo macrophage–erythrocyte–rosettes within haemolymph nodes as evidence of loss of self–tolerance. Kazeem AA. **Haematologia (Budap)** 1988;21(3):175–80

Molecular interactions in macrophage activation. Adams DO. **Immunol Today** 1989 Feb;10(2):33–5 (1 ref.)

Binding, internalization and degradation of soluble aggregates of human secretory IgA by resident rat peritoneal macrophages. Gorter A, et al. **Immunology** 1988 Aug; 64(4):703–8

Stimulation of macrophage phagocytic but not bactericidal activity by colony–stimulating factor 1. Cheers C, et al. **Infect Immun** 1989 May;57(5):1512–6

Rat alveolar macrophage production of chemoattractants for neutrophils: response to Escherichia coli endotoxin. Christman JW, et al. **Infect Immun** 1989 Mar;57(3):810–6

In vitro and in vivo studies of macrophage functions in amebiasis. Denis M, et al. **Infect Immun** 1988 Dec; 56(12):3126–31

Alginase treatment of mucoid Pseudomonas aeruginosa enhances phagocytosis by human monocyte–derived macrophages. Eftekhar F, et al. **Infect Immun** 1988 Nov; 56(11):2788–93

Roles of the Fc receptor and respiratory burst in killing of Rickettsia prowazekii by macrophagelike cell lines. Keysary A, et al. **Infect Immun** 1989 Aug;57(8):2390–6

Stimulation by fibronectin of macrophage–mediated phagocytosis of Pseudomonas aeruginosa. Kluftinger JL, et al. **Infect Immun** 1989 Mar;57(3):817–22

Resistance of mucoid Pseudomonas aeruginosa to nonopsonic phagocytosis by alveolar macrophages in vitro. Krieg DP, et al. **Infect Immun** 1988 Dec;56(12):3173–9

Role of tryptophan degradation in respiratory burst–independent antimicrobial activity of gamma interferon–stimulated human macrophages. Murray HW, et al. **Infect Immun** 1989 Mar;57(3):845–9

Production of an interleukin–1 inhibitor by cell line P388D1 murine macrophages stimulated with Haemophilus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **Infect Immun** 1988 Nov;56(11):2801–7

Effects of products from inflammatory pulmonary neutrophils on alveolar macrophage chemotaxis, spreading, and thymidine incorporation. Donaldson K, et al. **Inflammation** 1989 Aug;13(4):443–53

Modulation of functional activity of human polymorphonuclear and mononuclear phagocytes by intravenous gamma globulin. Pruzanski W, et al. **Inflammation** 1989 Jun;13(3):341–57

Influence of acute pulmonary interstitial inflammation on kinetics of phagocytosis by alveolar macrophages. Slauson DO, et al. **Inflammation** 1989 Aug;13(4):429–41

Effect of platelet–activating factor on monocyte activation and production of tumor necrosis factor. Bonavida B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):157–60

Granulocyte/macrophage colony stimulating factor. A potent activation signal for mature macrophages and monocytes. Morrissey PJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):40–5

Effect of histamine on chemotaxis and phagocytosis of human alveolar macrophages and blood monocytes. Radermecker M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):197–9

Response of intraventricular macrophages after a penetrant cerebral lesion. Maxwell WL, et al. **J Anat** 1988 Oct; 160:145–55

Comparison of particle clearance and macrophage phagosomal motion in liver and lungs of rats. Weinstock SB, et al. **J Appl Physiol** 1988 Oct;65(4):1811–20

Acute effect of cigarette smoke on cytoplasmic motility of alveolar macrophages in dogs. Yamaya M, et al. **J Appl Physiol** 1989 Mar;66(3):1172–8

Isolation and characterization of lectins specific for mannose/fucose/N–acetylglucosamine from rat peritoneal macrophages. Ii M, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):587–90

The different roles of two distinct Fc gamma receptors on guinea pig macrophages in the phagocytosis of sensitized sheep erythrocytes. Nakamura T, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):383–7

Purification and characterization of a lectin–like molecule specific for galactose/N–acetyl–galactosamine from tumoricidal macrophages. Oda S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):600–5

Macrophage differentiation inducing factor from human monocytic cells is equivalent to murine leukemia inhibitory factor. Abe T, et al. **J Biol Chem** 1989 May 25; 264(15):8941–5

Surface acid proteinase (gp63) of Leishmania mexicana. A metalloenzyme capable of protecting liposome–encapsulated proteins from phagolysosomal degradation by macrophages. Chaudhuri G, et al. **J Biol Chem** 1989 May 5;264(13):7483–9

Bone marrow–derived mononuclear phagocytes autoregulate mannose receptor expression. Clohisy DR, et al. **J Biol Chem** 1989 Apr 5;264(10):5370–7

In vitro clustering and multiple fusion among macrophage endosomes. Diaz R, et al. **J Biol Chem** 1989 Aug 5; 264(22):13171–80

Macrophages rapidly internalize their tumor necrosis factor receptors in response to bacterial lipopolysaccharide. Ding AH, et al. **J Biol Chem** 1989 Mar 5;264(7):3924–9

Lipopolysaccharide–inducible macrophage early genes are induced in Balb/c 3T3 cells by platelet–derived growth factor. Tannenbaum CS, et al. **J Biol Chem** 1989 Mar 5; 264(7):4052–7

Human pulmonary surfactant protein (SP–A), a protein structurally homologous to C1q, can enhance FcR– and CR1–mediated phagocytosis. Tenner AJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13923–8

Temperature effect on endocytosis and exocytosis by rabbit alveolar macrophages. Tomoda H, et al. **J Biol Chem** 1989 Sep 15;264(26):15445–50

Gliotoxin induces apoptosis in macrophages unrelated to its antiphagocytic properties. Waring P, et al. **J Biol Chem** 1988 Dec 5;263(34):18493–9

Modulation of human alveolar macrophage tumoricidal activity by C–reactive protein. Barna BP, et al. **J Biol Response Mod** 1988 Oct;7(5):483–7

Macrophage phagocytosis of biodegradable microspheres composed of L–lactic acid/glycolic acid homo– and copolymers. Tabata Y, et al. **J Biomed Mater Res** 1988 Oct;22(10):837–58

Platelet–derived growth factor and transforming growth factor–beta enhance tissue repair activities by unique mechanisms. Pierce GF, et al. **J Cell Biol** 1989 Jul; 109(1):429–40

Effect of macrophages on the translocation of protein kinase C in concanavalin A–stimulated lymphocytes. Grove DS, et al. **J Cell Physiol** 1989 Mar;138(3):561–7

Macromolecular dynamics of the cell surface during the formation of coated pits is revealed by fracture–flip. Fujimoto K, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):161–73

Macrophage phagocytosis of aging neutrophils in inflammation. Programmed cell death in the neutrophil leads to its recognition by macrophages. Savill JS, et al. **J Clin Invest** 1989 Mar;83(3):865–75

Macrophage spreading disparity: alveolar vs peritoneal. Bechard DE, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):67–71

Regulation of macrophage functions by L–arginine. Albina JE, et al. **J Exp Med** 1989 Mar 1;169(3):1021–9

Inhibition of human macrophage colony formation by interleukin 4. Jansen JH, et al. **J Exp Med** 1989 Aug 1; 170(2):577–82

Interferon gamma and lipopolysaccharide promote macrophage adherence to basement membrane glycoproteins. Shaw LM, et al. **J Exp Med** 1989 Jan 1; 169(1):303–8

Alveolar macrophage elimination in vivo is associated with an increase in pulmonary immune response in mice. Thepen T, et al. **J Exp Med** 1989 Aug 1;170(2):499–509

Augmented expression of a myeloid–specific protein tyrosine kinase gene (hck) after macrophage activation. Ziegler SF, et al. **J Exp Med** 1988 Nov 1;168(5):1801–10

Increased natural resistance to Listeria monocytogenes in senescent mice correlates with enhanced macrophage bactericidal activity. Gervais F, et al. **J Gerontol** 1988 Nov; 43(6):B152–6

Guinea pig Kupffer cells can be activated in vitro to an enhanced superoxide response. I. Comparison with peritoneal macrophages. Rieder H, et al. **J Hepatol** 1988 Dec;7(3):338–44

Effects of recombinant human colony stimulating factors (CSF) (granulocyte–macrophage CSF, granulocyte CSF, and CSF–1) on human monocyte/macrophage differentiation. Geissler K, et al. **J Immunol** 1989 Jul 1; 143(1):140–6

Bone marrow stromal cell regulation of B–lymphopoiesis. I. The role of macrophages, IL–1, and IL–4 in pre–B cell maturation. King AG, et al. **J Immunol** 1988 Sep 15;

141(6):2016–26
Both granulocyte–macrophage CSF and macrophage CSF control the proliferation and survival of the same subset of alveolar macrophages. Lin HS, et al. **J Immunol** 1989 Jan 15;142(2):515–9
Regulation of IL-1 and TNF-alpha expression during the differentiation of bone marrow derived macrophage. Myers MJ, et al. **J Immunol** 1989 Jan 1;142(1):153–60
Macrophage procoagulant-inducing factor. In vivo properties and chemotactic activity for phagocytic cells. Ryan J, et al. **J Immunol** 1988 Sep 15;141(6):2110–7
Fc gamma 2b receptor–mediated phagocytosis by a murine macrophage–like cell line (P388D1) and peritoneal resident macrophages. Up–regulation by the inhibitors of phospholipase A2 and cyclooxygenase. Yamada A, et al. **J Immunol** 1989 Apr 1;142(7):2457–63
The use of mouse serum and the presence of non–adherent cells for the culture of mouse macrophages. Grace S, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):21–6
A commercially available serum–free medium appropriate for studies of macrophage functions in vitro. Majde JA. **J Immunol Methods** 1988 Nov 25;115(1):89–93
A macrophage phenotype for a constitutive, class II antigen–expressing, human dermal perivascular dendritic cell. Sontheimer RD, et al. **J Invest Dermatol** 1989 Jul; 93(1):154–9
Lectin–mediated, nonopsonic phagocytosis of type 1 Escherichia coli by human peritoneal macrophages of uremic patients treated by peritoneal dialysis. Boner G, et al. **J Leukoc Biol** 1989 Sep;46(3):239–45
Confocal scanning fluorescence microscopy: a new method for phagocytosis research. Hook GR, et al. **J Leukoc Biol** 1989 Apr;45(4):277–82
Interactions of pseudorabies virus with swine alveolar macrophages: effects of virus infection on cell functions. Iglesias G, et al. **J Leukoc Biol** 1989 May;45(5):410–5
Endocytic and secretory repertoire of the lipid–loaded macrophage. Montgomery RR, et al. **J Leukoc Biol** 1989 Feb;45(2):129–38
Development, differentiation, and maturation of fetal mouse yolk sac macrophages in cultures. Naito M, et al. **J Leukoc Biol** 1989 Jul;46(1):1–10
Macrophage function in murine allogeneic bone marrow radiation chimeras in the early phase after transplantation. Roesler J, et al. **J Leukoc Biol** 1989 Aug;46(2):134–43
Functional analysis of monocyte–macrophages derived from nonadherent cord blood progenitor cells: correlation with the ontogeny of cell surface proteins. Santiago–Schwarz F, et al. **J Leukoc Biol** 1989 Sep;46(3):230–8
Differentiation, maturation, and proliferation of macrophages in the mouse yolk sac: a light–microscopic, enzyme–cytochemical, immunohistochemical, and ultrastructural study. Takahashi K, et al. **J Leukoc Biol** 1989 Feb;45(2):87–96
Human alveolar macrophage function: differences between smokers and nonsmokers. Thomassen MJ, et al. **J Leukoc Biol** 1988 Nov;44(5):313–8
Receptor–mediated endocytosis of carcinoembryonic antigen by rat alveolar macrophages in vitro. Toth CA, et al. **J Leukoc Biol** 1989 Apr;45(4):370–6
Macrophage subset repopulation in the spleen: differential kinetics after liposome–mediated elimination. van Rooijen N, et al. **J Leukoc Biol** 1989 Feb;45(2):97–104
Patch–clamp studies in human macrophages: single–channel and whole–cell characterization of two K+ conductances. Gallin EK, et al. **J Membr Biol** 1988 Jul;103(1):55–66
Inwardly rectifying whole–cell and single–channel K currents in the murine macrophage cell line J774.1. McKinney LC, et al. **J Membr Biol** 1988 Jul;103(1):41–53
Acquisition of repertoires of suppressor T cells under the influence of macrophages. Soejima T, et al. **J Mol Cell Immunol** 1988;4(2):87–95
Role of the macrophage in the pathogenesis of experimental autoimmune myasthenia gravis. Kinoshita I, et al. **J Neurol Sci** 1988 Oct;87(1):49–59
Myelin phagocytosis by peritoneal macrophages in organ cultures of mouse peripheral nerve. A new model for studying myelin phagocytosis in vitro. Bonnekoh PG, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):140–53
Macrophage function during Wallerian degeneration of rat optic nerve: clearance of degenerating myelin and Ia expression. Stoll G, et al. **J Neurosci** 1989 Jul;9(7):2327–35
Methotrexate inhibits macrophage activation as well as vascular and cellular inflammatory events in rat adjuvant induced arthritis. Johnson WJ, et al. **J Rheumatol** 1988; 15(5):745–9
Functional heterogeneity of human rheumatoid synovial tissue macrophages. Koch AE, et al. **J Rheumatol** 1988 Jul;15(7):1058–63
Incorporation of thymidine by fibroblasts: evidence for complex regulation by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1988 Nov;45(5):460–6
Hypoxia and endotoxin induce macrophage–mediated suppression of fibroblast proliferation. Bankey P, et al. **J Trauma** 1989 Jul;29(7):972–9; discussion 979–80
The immunosuppressive effects of the in vivo administration of endotoxin as influenced by macrophages. Ogle CK, et al. **J Trauma** 1989 Jul;29(7):1015–20
Macrophage/biomaterial interactions: the stimulation of endothelialization. Greisler HP, et al. **J Vasc Surg** 1989 Apr;9(4):588–93
The visna virus long terminal repeat directs expression of a reporter gene in activated macrophages, lymphocytes, and the central nervous systems of transgenic mice. Small JA, et al. **J Virol** 1989 May;63(5):1891–6
Macrophages selectively stimulate ecto–5'–nucleotidase activity of cultured mesangial cells. Stefanovic V, et al. **Kidney Int** 1989 Aug;36(2):249–56
Endocytic pathway of high density lipoprotein via trans–Golgi system in rat resident peritoneal macrophages. Takahashi K, et al. **Lab Invest** 1989 Sep;61(3):270–7
Latrunculin A is a potent inhibitor of phagocytosis by macrophages. de Oliveira CA, et al. **Life Sci** 1988; 43(22):1825–30
The role of hematopoietic growth factors in the fate of an infection with Leishmania mexicana amazonensis: an attempt at a unifying hypothesis. Barcinski MA, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:411–3
In vivo leishmanicidal mechanisms in tegumentary leishmaniasis. Ultra–structural observations. Freitas LA, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:372–5
Depletion of L3T4+ T lymphocytes during acute Trypanosoma cruzi infection abolish macrophage and B lymphocyte activation but not tissue inflammatory reaction. Russo M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:527–38
Platelet secretory products enhance LDL receptor activity and inhibit scavenger receptor activity in human monocyte derived macrophages. Aviram M. **Metabolism** 1989 May; 38(5):425–30
Natural mediators of leukocyte chemotaxis. Hayashi H, et al. **Methods Enzymol** 1988;162:140–70
Lymphocyte– and macrophage–derived growth factors. Wahl SM. **Methods Enzymol** 1988;163:715–31
Arachidonic acid release is closely related to the Fc gamma receptor–mediated superoxide generation in macrophages. Ida E, et al. **Microbiol Immunol** 1988;32(11):1127–43
Hepatic macrophage function in schistosomal glomerulopathy. Barsoum RS, et al. **Nephrol Dial Transplant** 1988;3(5):612–6
Dual regulatory effects of monocytes–macrophages on the proliferation of myeloma cells. Shimizu S, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1550–7
Transformation of murine myelomonocytic cells by myc: point mutations in v–myc contribute synergistically to transforming potential. Symonds G, et al. **Oncogene** 1989 Mar;4(3):285–94
Human and rabbit newborn lung macrophages have reduced anti–Candida activity. D'Ambola JB, et al. **Pediatr Res** 1988 Sep;24(3):285–90
Chemokinetic agents for monocytes in human milk: possible role of tumor necrosis factor–alpha. Mushtaha AA, et al. **Pediatr Res** 1989 Jun;25(6):629–33
Promotion of wound repair in old mice by local injection of macrophages. Danon D, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2018–20
Human interleukin 6 is a direct promoter of maturation of megakaryocytes in vitro. Ishibashi T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5953–7
Transforming growth factor beta reverses the glucocorticoid–induced wound–healing deficit in rats: possible regulation in macrophages by platelet–derived growth factor. Pierce GF, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2229–33
Phagocytosis of aggregated lipoprotein by macrophages: low density lipoprotein receptor–dependent foam–cell formation. Suits AG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2713–7
Production of a factor (CIF) from normal fibroblast cells inhibiting tumor necrosis factor/cachectin production. Gifford GE, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):391–5
Vitamin A supplementation improves macrophage function and bacterial clearance during experimental salmonella infection. Hatchigian EA, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):47–54
Effects of increased major histocompatibility complex dosage on chicken monocyte–macrophage function. Qureshi MA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):195–202
Mechanisms of macrophage–mediated tumor cell lysis: role for the monokines tumor necrosis factor and interleukin 1. Fidler IJ, et al. **Prog Clin Biol Res** 1989;288:169–81
The macrophages: effector cell wound repair. Knighton DR, et al. **Prog Clin Biol Res** 1989;299:217–26 (28 ref.)
Effect of macrophage inhibition in carrageenan– and D–galactosamine–induced sensitivity to low–dose endotoxin. Kujawa KI, et al. **Prog Clin Biol Res** 1989; 286:237–42
Macrophages, monokines, and the metabolic pathophysiology of septic shock. Sacco–Gibson NA, et al. **Prog Clin Biol Res** 1989;286:203–18 (44 ref.)
Macrophages regulate the host response to bacterial lipopolysaccharides. Ulevitch RJ, et al. **Prog Clin Biol Res** 1989;299:193–202
The biological activities and uses of recombinant granulocyte–macrophage and multi–colony stimulating factors. Nathan DG, et al. **Prog Hematol** 1987;15:1–18 (130 ref.)
Postnatal changes in lung phospholipids and alveolar macrophages in term newborn monkeys. Jackson JC, et al. **Respir Physiol** 1988 Sep;73(3):289–300
Role of macrophages in the pathogenesis of sarcoidosis. Ando M. **Sarcoidosis** 1989 Mar;6(1):76–8
Dear epithelioid cell, tell us what you do [editorial] Epstein WL, et al. **Sarcoidosis** 1989 Mar;6(1):5–6
Phenotypic changes in macrophages in skin window exudates. Comparison of patients with rheumatoid arthritis and normals. Wong ML, et al. **Scand J Rheumatol** 1988; 17(4):287–9
Macrophage activation. Seljelid R. **Scand J Rheumatol Suppl** 1988;76:67–72 (30 ref.)
Assessment of pulmonary macrophage and neutrophil function in sequential bronchoalveolar lavage aspirates in sarcoidosis. Kelly CA, et al. **Thorax** 1988 Oct;43(10):787–91
Macrophages and microglia in the nervous system. Perry VH, et al. **Trends Neurosci** 1988 Jun;11(6):273–7 (45 ref.)
[Experimental study of biological effects of wood dust] Liao YL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan; 22(1):3–6 (Eng. Abstr.) (Chi)
[Neuroendocrine regulation of macrophages] Ding XZ. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):32–3 (21 ref.) (Chi)
[Macrophages in central nervous canine distemper: friends or foes?] Griot C, et al. **Schweiz Arch Tierheilkd** 1989; 131(6):351–9 (32 ref.) (Eng. Abstr.) (Ger)
[Some recent facts on the function of macrophages and their modification] Kolb E. **Z Gesamte Inn Med** 1989 Feb 15; 44(4):101–5 (33 ref.) (Eng. Abstr.) (Ger)
[Experimental study of the cellular response on the intraocular lens surface] Tamura M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1349–53 (Eng. Abstr.) (Jpn)
[The regulation of lung fibroblast proliferation by alveolar macrophages—studies on the difference in the fibroblast culture conditions] Suwabe A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):629–36 (Eng. Abstr.) (Jpn)
[The effect of foamy alveolar macrophages presented in bleomycin–injured rat lungs in pulmonary fibrosis] Suwabe A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):3–13 (Eng. Abstr.) (Jpn)
[Coagulation and fibrinolytic system of macrophages] Ogura M, et al. **Nippon Rinsho** 1989 Mar;47(3):545–9 (Jpn)
[Atherosclerosis and macrophages] Shimada K. **Nippon Rinsho** 1989 Mar;47(3):669–74 (Jpn)
[Evaluation of the functional state of the leprous macrophages] Maslov AK, et al. **Arkh Patol** 1988; 50(11):51–4 (Eng. Abstr.) (Rus)
[Characteristics of the membranes and functional activity of phagocytic alveolar macrophages] Kolosova NG, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):71–4 (Eng. Abstr.) (Rus)
[Ca–activated potassium conductance in the membrane of peptone–induced peritoneal macrophages in the mouse] Maliaev AA, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):79–84 (Eng. Abstr.) (Rus)
[Effects of immunization on quartz resistance and phagocytic activity of macrophages] Privalova LI. **Gig Tr Prof Zabol** 1989;(1):11–4 (Eng. Abstr.) (Rus)
[The role of macrophages in the development of the phenomenon of the stimulation of bone marrow hematopoiesis in stress] Gol'dberg ED, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):32–4 (Eng. Abstr.) (Rus)
["Spontaneous" oscillations of the cell surface in the frequency interval of 0.2–30 Hz] Krol' AIu, et al. **Tsitologiia** 1989 May;31(5):556–62 (Eng. Abstr.) (Rus)
[Effect of intratumor macrophages on the growth of a rat sarcoma] Bay ML, et al. **Rev Argent Microbiol** 1987 Apr–Jun;19(2):55–63 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Immortalization of cloned mouse splenic macrophages with a retrovirus containing the v–raf/mil and v–myc oncogenes. Roberson SM, et al. **Cell Immunol** 1988 Oct 15;116(2):341–51
Delayed maturation of skin window macrophages in myelodysplastic syndromes. Zwierzina H, et al. **Leuk Res** 1989;13(6):433–5

RADIATION EFFECTS

Biochemical mechanisms underlying the development of radioresistance by cultured peritoneal exudate macrophages. Lin HS, et al. **Radiat Res** 1989 Jan; 117(1):70–8
Effect of inhaled alpha–emitting nuclides on mouse alveolar macrophages. Talbot RJ, et al. **Radiat Res** 1989 Aug; 119(2):271–85
[Functional changes in the bronchoalveolar macrophages during the development of long–term radiation–induced pulmonary complications] Zherbin EA, et al. **Med Radiol (Mosk)** 1988 Nov;33(11):46–51 (Eng. Abstr.) (Rus)

SECRETION

Cigarette smoking decreases interleukin 1 release by human alveolar macrophages. Brown GP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C260–4
A peptide from alveolar macrophages that releases neutrophil enzymes into the lungs in patients with the adult respiratory distress syndrome. Cohen AB, et al. **Am Rev Respir Dis** 1988 May;137(5):1151–8
Tannin–mediated secretion of a neutrophil chemotactic factor from alveolar macrophages. Potential contribution to the acute pulmonary inflammatory reaction associated with

byssinosis. Rohrbach MS, et al. **Am Rev Respir Dis** 1989 Jan;139(1):39–45

Secretion of interleukin 1 (IL–1) by peritoneal macrophages upon contact with syngeneic T cells is Ia–restricted and antigen–independent process. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):661–71

Low–dose gold compounds inhibit fibroblast proliferation and do not affect interleukin–1 secretion by macrophages. Matsubara T, et al. **Arthritis Rheum** 1988 Oct; 31(10):1272–80

Secretion of fibronectin by mineral dust–derived alveolar macrophages and activated peritoneal macrophages. Davies R, et al. **Exp Lung Res** 1989 Mar;15(2):285–97

Heparin stimulation of plasminogen activator secretion by macrophage–like cell line RAW264.7: role of the scavenger receptor. Falcone DJ. **J Cell Physiol** 1989 Aug; 140(2):219–26

Modulation of macrophage fibronectin secretion by LPS. Trotter KM, et al. **J Leukoc Biol** 1989 Jun;45(6):515–22

Interaction of Pneumocystis carinii with secretions of alveolar macrophages and type II epithelial cells. Pesanti EL. **J Protozool** 1989 Jan–Feb;36(1):47S–49S

A platelet–derived growth factor homolog secreted by alveolar macrophages is complexed to an alpha–macroglobulin. Bonner JC, et al. **Transplant Proc** 1989 Aug;21(4):3704–5

[Pathogenesis of protracted pneumonia] Maianskiĭ DN, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):42–50 **(Rus)**

TRANSPLANTATION

The effects of transplantation of granulocyte–macrophage progenitors on bone resorption in osteopetrotic rats. Schneider GB, et al. **J Bone Miner Res** 1988 Apr; 3(2):225–32

ULTRASTRUCTURE

Changes in nucleolar morphology during human macrophage development: a morphometric study. Sokol RJ. **Acta Anat (Basel)** 1988;133(2):140–2

Local activation of the monocyte–macrophage system in experimental contact dermatitis of the guinea pig. Vermes E, et al. **Acta Vet Hung** 1988;36(3–4):205–8

Macrophages in the circuloventricular organs of the rat. Srebro Z, et al. **Agressologie** 1988 Mar;29(3):159–61

Intravascular macrophages in pulmonary capillaries of humans. Dehring DJ, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):1027–9

Stimulation of a calcium–dependent actin nucleation activity by phorbol 12–myristate 13–acetate in rabbit macrophage cytoskeletons. Hartwig JH, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):64–71

Regulation of RAW264 macrophage morphology and spreading: studies with protein kinase C activators, inhibitors and a cyclic AMP analog. Petty HR. **Biochim Biophys Acta** 1989 Aug 15;1012(3):284–90

Characterization of biomedical polymer–adherent macrophages: interleukin 1 generation and scanning electron microscopy studies. Miller KM, et al. **Biomaterials** 1989 Apr;10(3):187–96

Macrophages and mast cells in dystrophic masseter muscle: a light and electron microscopic study. Kirkeby S, et al. **Br J Exp Pathol** 1988 Aug;69(4):597–603

The organization and regulation of the macrophage actin skeleton. Hartwig JH, et al. **Cell Motil Cytoskeleton** 1988; 10(1–2):117–25 (38 ref.)

Evaluation of phagolysosome fusion in acridine orange stained macrophages infected with Histoplasma capsulatum. Taylor ML, et al. **Clin Exp Immunol** 1989 Mar; 75(3):466–70

Preservation of structure and cytochemical reactivity at the ultrastructural level, using microwave irradiation. Van Dort JB, et al. **Histochem J** 1988 Jun–Jul;20(6–7):365–72

Crystalloid material in cells of the murine mononuclear phagocyte system. Marshall GE, et al. **J Anat** 1988 Apr; 157:217–28

An electron microscopic study of macrophages in the meninges of the human embryonic optic nerve. Sturrock RR. **J Anat** 1988 Apr;157:145–51

Association of gelsolin with actin filaments and cell membranes of macrophages and platelets. Hartwig JH, et al. **J Cell Biol** 1989 Feb;108(2):467–79

Effect of volume and pH on surface receptor number in macrophages. Buys SS, et al. **J Cell Physiol** 1989 Aug; 140(2):371–8

A minibead method for detection of membrane lectins. Matsuoka T, et al. **J Histochem Cytochem** 1989 Jan; 37(1):91–6

Development of surface membrane characteristics of "premedullary" macrophages in organ cultures of embryonic rat and hamster lungs. Sorokin SP, et al. **J Histochem Cytochem** 1989 Mar;37(3):365–76

Changes in nucleolar morphology during macrophage development in Hodgkin's disease: a morphometric study. Sokol RJ. **J Lab Clin Med** 1988 Dec;112(6):755–9

Study of mitochondrial organization in living resident and activated macrophages using the laser dye rhodamine 123. de Carvalho TU, et al. **J Leukoc Biol** 1989 Jun; 45(6):498–502

Interaction between macrophage and parasite cells in lobomycosis. The thickened cell wall of Paracoccidioides loboi exhibits apertures to the extracellular milieu. Sesso A, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):537–48

Electron microscopic observation of the cells floating in the anterior chamber in a case of phacolytic glaucoma. Ueno H, et al. **Jpn J Ophthalmol** 1989;33(1):103–13

Digitonin permeabilization procedures for the study of endosome acidification and function. Diaz R, et al. **Methods Cell Biol** 1989;31:25–43

Fine structure of macrophages in the testicular interstitial tissue of the white–belly opossum Didelphis albiventris. Nogueira JC, et al. **Microsc Electron Biol Celular** 1988 Jun; 12(1):23–33

Macrophages in human chorionic villi. Katabuchi H, et al. **Prog Clin Biol Res** 1989;296:453–8

Ultrastructural characterisation of macrophages (type A cells) in the synovial lining. Mapp PI, et al. **Rheumatol Int** 1988;8(4):171–6

Macrophages and epithelial cells of the thymus gland. An ultrastructural study in the natterjack, Bufo calamita. Barrutia MG, et al. **Tissue Cell** 1989;21(1):69–81

[Scanning electron microscopy of type 2 pneumocytes and alveolar macrophages in experimental silicosis] Situ R. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):179–81 (Eng. Abstr.) **(Chi)**

[A transmission electron microscopic study of cellular responses to intraocular lenses (1). Early responses] Ishibashi T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2089–93 (Eng. Abstr.) **(Jpn)**

[Cellular responses on the intraocular lenses: a transmission electron microscopic study] Ishibashi T, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):762–6 (Eng. Abstr.) **(Jpn)**

[Difference of the cellular response between PMMA and silicone intraocular lens material] Matoba M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2150–5 (Eng. Abstr.) **(Jpn)**

[Ultrastructural aspects of the skeletal striated muscle, macrophages and fibroblasts during the regression of tadpole tails] Mora OA, et al. **Rev Bras Biol** 1989 Feb; 49(1):285–90 (Eng. Abstr.) **(Por)**

[Ultrastructure of macrophages in the developing dermis + + and in the focus of aseptic inflammation in rats] Radostina AI. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):61–7 (Eng. Abstr.) **(Rus)**

[Ultrastructural analysis of interactions of neutrophil leukocytes and macrophages in the center of inflammation] Vtiurin BV, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):68–71 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in alveolar macrophages in rats under the effect of Escherichia coli endotoxin] Kharlanova NG, et al. **Tsitol Genet** 1989 May–Jun;23(3):16–20 (Eng. Abstr.) **(Rus)**

MACROSOMIA, FETAL see **FETAL MACROSOMIA**

MACROSTOMIA

COMPLICATIONS

Lid agenesis–macrostomia–psychomotor retardation–forehead hypertrichosis—a new syndrome? Cesarino EJ, et al. **Am J Med Genet** 1988 Oct;31(2):299–304 (6 ref.)

MACULA LUTEA

A review of 324 cases of idiopathic premacular gliosis. Appiah AP, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):533–5

Methenamine–silver staining in macular corneal dystrophy. Johannsson JH, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):630–1

Surgical management of retinal traction caused by toxocariasis. Small KW, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):10–4

Ultrastructural studies of vitreomacular traction syndrome. Smiddy WE, et al. **Am J Ophthalmol** 1989 Feb 15; 107(2):177–85

The changing trend in the surgical treatment of macular holes. Chia SC. **Ann Acad Med Singapore** 1989 Mar; 18(2):232–3

Argon green and krypton red laser treatment of diabetic macular edema. Cruess AF, et al. **Can J Ophthalmol** 1988 Oct;23(6):262–6

Focal cone electroretinograms: aging and macular disease. Birch DG, et al. **Doc Ophthalmol** 1988 Jul;69(3):211–20

Retinal/macular pigmentation in conjunction with ring 14 chromosome. Howard PJ, et al. **Hum Genet** 1988 Oct; 80(2):140–2

Assessment of contrast sensitivity of patients with macular disease using reduced contrast near visual acuity charts. Greeves AL, et al. **Ophthalmic Physiol Opt** 1988;8(4):371–7

Prognosis of foveal splitting rhegmatogenous retinal detachments. Brenton RS, et al. **Ophthalmic Surg** 1989 Feb; 20(2):112–4

Evolving techniques in the treatment of macular detachment caused by optic nerve pits. Cox MS, et al. **Ophthalmology** 1988 Jul;95(7):889–96

The focal electroretinogram in the clinical assessment of macular disease. Fish GE, et al. **Ophthalmology** 1989 Jan; 96(1):109–14

Macular abnormalities in papilledema from pseudotumor cerebri. Gittinger JW Jr, et al. **Ophthalmology** 1989 Feb; 96(2):192–4

Niacin maculopathy. Millay RH, et al. **Ophthalmology** 1988 Jul;95(7):930–6

Subretinal neovascularization after focal argon laser for diabetic macular edema. Varley MP, et al. **Ophthalmology** 1988 May;95(5):567–73

Visual acuity after the repair of pseudophakic retinal detachments involving the macula. Isernhagen RD, et al. **Retina** 1989;9(1):15–21

Focal photocoagulation of diabetic macular edema. A clinicopathologic case report. Wallow IH, et al. **Retina** 1988;8(4):261–9

Acute exudative polymorphous vitelliform maculopathy. Gass JD, et al. **Trans Am Ophthalmol Soc** 1989;86:354–63; discussion 363–6

[Relationship of corrected visual acuity and macular lesion in high myopia] Guan ZS, et al. **Yen Ko Hsueh Pao** 1986 Sep 2(3):181–7 (Eng. Abstr.) **(Chi)**

[Diabetic maculopathy in pregnancy] Smečka Z, et al. **Cesk Oftalmol** 1988 Sep;44(5):344–9 (Eng. Abstr.) **(Cze)**

[Macular pucker syndrome after laser photocoagulation of peripheral retinal tears] Turut P, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):625–8, 630 (9 ref.) (Eng. Abstr.) **(Fre)**

[Radiation–induced maculopathies] Lautier M, et al. **J Fr Ophtalmol** 1989;12(1):25–30 (10 ref.) (Eng. Abstr.) **(Fre)**

[Diabetic maculopathy and its treatment] Verougstraete C. **J Fr Ophtalmol** 1988;11(2):203–16 (93 ref.) **(Fre)**

[Treatment of edematous diabetic retinopathy (apropos of 51 cases)] el Matri L, et al. **Tunis Med** 1988 Dec; 66(12):833–6 (Eng. Abstr.) **(Fre)**

[A biochemical approach to macular diseases: lipofuscin, lysosomes, and melanin in the human retina and choroid] Hayasaka S. **Nippon Ganka Gakkai Zasshi** 1988 Jul; 92(7):1104–11 (Eng. Abstr.) **(Jpn)**

[Photocoagulation for preproliferative diabetic retinopathy and changes in macular lesions] Kojima K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1781–6 (Eng. Abstr.) **(Jpn)**

[Results of vitrectomy for diabetic traction retinal detachment involving the macula; a comparison of six–month and three–year postoperative findings] Nakae R, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):271–5 (Eng. Abstr.) **(Jpn)**

[Psychophysical studies on the pathophysiology of macular diseases] Ohba N. **Nippon Ganka Gakkai Zasshi** 1988 Jul; 92(7):1081–103 (Eng. Abstr.) **(Jpn)**

[Macular perforations] Kożuchowska I, et al. **Klin Oczna** 1988 Sep;90(9):307–10 (Eng. Abstr.) **(Pol)**

[Diabetic maculopathy: expediency and tactics of preventive laser intervention. Follow–up studies] Ivanishko IuA, et al. **Oftalmol Zh** 1988;(4):210–3 (Eng. Abstr.) **(Rus)**

[Pathogenesis of myopic maculopathy] Ivanishko IuA. **Oftalmol Zh** 1988;(3):161–4 (Eng. Abstr.) **(Rus)**

[Argon laser coagulation in diabetic macular changes] Semenov AD, et al. **Oftalmol Zh** 1988;(4):207–9 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Aland Island eye disease (Forsius–Eriksson syndrome) associated with contiguous deletion syndrome at Xp21. Similarity to incomplete congenital stationary night blindness. Weleber RG, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1170–9 (75 ref.)

Atypical macular coloboma (dysplasia) associated with familial juvenile nephronophthisis and skeletal abnormality. Alsing A, et al. **Ophthalmic Paediatr Genet** 1988 Nov; 9(3):149–55

ANATOMY & HISTOLOGY

Foveal regions of bird retinas correlate with the aster of the inner nuclear layer. Inzunza O, et al. **Anat Rec** 1989 Mar; 223(3):342–6

Topography of the foveal cone mosaic in the living human eye. Williams DR. **Vision Res** 1988;28(3):433–54

[Distribution of cone pedicle and superficial capillary. A morphological study on the macular region of normal human retina] Sekine M, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):196–205 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Partial ablation of neovascular membranes involving the fovea [letter; comment] Tornambe PE, et al. **Arch Ophthalmol** 1989 Jul;107(7):955–6. **Comment on:** Arch Ophthalmol 1989 Mar;107(3):344–52

Dye laser photocoagulation of macular subretinal neovascularization in pathological myopia. A randomized study of three different wavelengths. Brancato R, et al. **Int Ophthalmol** 1988 Feb;11(4):235–8

Quantification of macular reperfusion in a patient with ischemic diabetic maculopathy [letter] Goldberg RE, et al. **Ophthalmic Surg** 1989 Jun;20(6):447–8

Vortex veins in the macula. Sekimoto M, et al. **Ophthalmologica** 1988;197(1):34–5

[Morphological appearance and measurement of retinal microvasculature in the macula] Wu LZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):167–70 (Eng. Abstr.) **(Chi)**

[Comparison between polar coordinates computational

method and computerized image analysis in measuring foveal avascular zone (FAZ)] Wu LZ, et al. **Yen Ko Hsueh Pao** 1986 Mar;2(1):47–9 (Eng. Abstr.) **(Chi)**

CYTOLOGY

Quantitative morphology of the central fovea in the primate retina. Krebs W, et al. **Am J Anat** 1989 Mar;184(3):225–36

Cellular debris—a key to the aging macula [editorial] Marshall J. **Br J Ophthalmol** 1989 Mar;73(3):161

The relative numbers of long-wavelength-sensitive to middle-wavelength-sensitive cones in the human fovea centralis. Cicerone CM, et al. **Vision Res** 1989;29(1):115–28

DRUG EFFECTS

Aminoglycoside macular toxicity after subconjunctival injection. Case report. Judson PH. **Arch Ophthalmol** 1989 Sep;107(9):1282–3

Reversibility of diabetic maculopathy with sulindac—a case report. Sharma YR, et al. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):216–7

Niacin maculopathy [letter] Jampol LM. **Ophthalmology** 1988 Dec;95(12):1704–5

INJURIES

Acute macular neuroretinopathy. Miller MH, et al. **Ophthalmology** 1989 Feb;96(2):265–9

Microscope light-induced maculopathy in combined penetrating keratoplasty, extracapsular cataract extraction, and intraocular lens implantation. Stamler JF, et al. **Ophthalmology** 1988 Aug;95(8):1142–6

METABOLISM

Aging changes in lipofuscin, lysosomes and melanin in the macular area of human retina and choroid. Hayasaka S. **Jpn J Ophthalmol** 1989;33(1):36–42

PATHOLOGY

Confocal laser tomographic analysis of the retina in eyes with macular hole formation and other focal macular diseases. Bartsch DU, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):277–87

Macular changes after retinal detachment surgery. Sabates NR, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):22–9

Microholes of the fovea centralis. Cairns JD, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):75–9

Presumed ocular histoplasmosis syndrome and linear streak lesions. Bottoni FG, et al. **Br J Ophthalmol** 1989 Jul; 73(7):528–35

Hemianopia respecting the vertical meridian and with foveal sparing from retinal degeneration. Johnson LN, et al. **Neurology** 1989 Jun;39(6):872–3

Secondary causes of premacular fibrosis. Appiah AP, et al. **Ophthalmology** 1989 Mar;96(3):389–92

The role of the vitreous in diabetic macular edema. Nasrallah FP, et al. **Ophthalmology** 1988 Oct;95(10):1335–9

[Role of vitreous changes in uveitis with respect to posterior vitreous detachment, macular changes and visual acuity] Hirokawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2020–8 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Psychophysical and electrophysiological testing of retinal function. Macular recovery time and oscillatory potentials in normal subjects. Brinchmann-Hansen O, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):119–26

Evaluation of macular function by Lotmar's visometer test and blue-field entoptic test in patients with cataract. Grignolo FM, et al. **Ann Ophthalmol** 1988 Jul;20(7):247–50, 255

Evaluation of macular function by laser interferometry. Van Verre H, et al. **Bull Soc Belge Ophtalmol** 1987;224:147–53

Macular electroretinogram as a function of age of subjects. Bagolini B, et al. **Doc Ophthalmol** 1988 Sep;70(1):37–43

Oscillatory potentials in electroretinograms of the human macular region. Miyake Y, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1631–5

Asymmetry of focal ERG in human macular region. Miyake Y, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1743–9

Short-wavelength-sensitive-cone sensitivity loss with aging: a protective role for macular pigment? Haegerstrom-Portnoy G. **J Opt Soc Am [A]** 1988 Dec; 5(12):2140–4

How are spatial filters used in fovea and parafovea? Hess RF, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):329–39

Discrimination of time: comparison of foveal and peripheral sensitivity. McKee SP, et al. **J Opt Soc Am [A]** 1984 Jun; 1(6):620–7

Foveal flicker sensitivity in healthy aging eyes. I. Compensating for pupil variation. Mayer MJ, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2201–9

Sensitivity of human foveal color mechanisms throughout the life span. Werner JS, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2122–30

Line-separation discrimination curve in the human fovea: smooth or segmented? Westheimer G. **J Opt Soc Am [A]** 1984 Jun;1(6):683–4

Rod-cone dependence of saccadic eye-movement latency in a foveating task. Doma H, et al. **Vision Res** 1988; 28(8):899–913

Cone interaction occurs in the parafovea under pi 4 stimulus conditions. Haegerstrom-Portnoy G, et al. **Vision Res** 1988; 28(3):397–406

[The studies of macula and macular diseases] Wu LZ, et al. **Yen Ko Hsueh Pao** 1987 Mar;3(1):32–5 (Eng. Abstr.) **(Chi)**

[Studies of local macular ERG] Miyake Y. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1419–49 (104 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Local macular electroretinographic responses in idiopathic central serous chorioretinopathy. Miyake Y, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):546–50

Role of the vitreous in macular disease. Jalkh AE. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:5–7

Evidence of foveal splitting in a commissurotomy patient. Fendrich R, et al. **Neuropsychologia** 1989;27(3):273–81

The effect of a foveal scotoma on the visual lobe. Foley-Fisher JA, et al. **Ophthalmic Physiol Opt** 1988; 8(2):211–4

Oscillatory potentials, macular recovery time, and diabetic retinopathy through 3 years of intensified insulin treatment. Brinchmann-Hansen O, et al. **Ophthalmology** 1988 Oct; 95(10):1358–66

Diminished foveal sensitivity may predict the development of advanced age-related macular degeneration. Sunness JS, et al. **Ophthalmology** 1989 Mar;96(3):375–81

[A new early symptom of maculopathy in juvenile diabetes?] Gerkowicz K, et al. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):75–7 (Eng. Abstr.) **(Ger)**

[Studies on macular changes in diabetic retinopathy—studies on macular function and macular capillary bed] Suzuki R, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1063–70 (Eng. Abstr.) **(Jpn)**

[Electrophysiologic studies before and after laser panphotocoagulation in diabetic retinopathy. I. Early results] Palacz O, et al. **Klin Oczna** 1988 Sep;90(9):320–2 (Eng. Abstr.) **(Pol)**

SURGERY

Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis. Macular Photocoagulation Study Group [see comments] **Arch Ophthalmol** 1989 Mar;107(3):344–52 . **Comment in:** Arch Ophthalmol 1989 Jul;107(7):955–6

Macular grid photocoagulation for macular edema in central retinal vein occlusion. Klein ML, et al. **Arch Ophthalmol** 1989 Sep;107(9):1297–302

Vitrectomy for idiopathic epiretinal membranes causing macular pucker. de Bustros S, et al. **Br J Ophthalmol** 1988 Sep;72(9):692–5

Surgical treatment for macular hole retinal detachment—comparison of simple drainage, macular buckling and vitrectomy techniques. Liu JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):275–82

Subretinal neovascularization complicating laser photocoagulation of diabetic maculopathy. Lewen RM. **Ophthalmic Surg** 1988 Oct;19(10):734–7

Grid laser photocoagulation for atypical central serous chorioretinopathy. Roseman RL, et al. **Ophthalmic Surg** 1988 Nov;19(11):786–91

Foveal ablation for subfoveal choroidal neovascularization. Boldrey EE. **Ophthalmology** 1989 Sep;96(9):1430–5; discussion 1435–6

Surgical management of vitreomacular traction syndromes. Margherio RR, et al. **Ophthalmology** 1989 Sep; 96(9):1437–45

Atrophic creep of the retinal pigment epithelium after focal macular photocoagulation. Morgan CM, et al. **Ophthalmology** 1989 Jan;96(1):96–103

[Transudative myopic maculopathy: pathogenetic validity and comparative effectiveness of laser interventions] Ivanishko IuA. **Oftalmol Zh** 1989;(2):99–104 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Discontinuities of the external limiting membrane in the fovea centralis of the primate retina. Krebs IP, et al. **Exp Eye Res** 1989 Feb;48(2):295–301

MACULAE, ACOUSTIC see under **SACCULE AND UTRICLE**

MACULAR DEGENERATION

Age-related macular degeneration: what can a family physician do? Latowsky ML. **Can Med Assoc J** 1988 Dec 1;139(11):1053–8 (35 ref.)

[Senile macular degeneration: a clinical study of 7 cases] Deng YP. **Yen Ko Hsueh Pao** 1987 Sep;3(3):201–3, 200 (Eng. Abstr.) **(Chi)**

[Ocular posterior aging degeneration syndrome] Wu LZ, et al. **Yen Ko Hsueh Pao** 1988 Jun;4(2):125–7 (Eng. Abstr.) **(Chi)**

BLOOD

A metabolic analysis of high myopia and senile macular degeneration. Silverstone BZ, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(3):122–5

CLASSIFICATION

Atypical foveomacular vitelliform degeneration, adult type. Seibert DA, et al. **J Am Optom Assoc** 1988 Oct; 59(10):798–801

COMPLICATIONS

Low-vision aids in Stargardt's disease. Schwartzenberg T, et al. **Ann Ophthalmol** 1988 Nov;20(11):428–30

Current management of choroidal neovascularization. Singerman LJ. **Ann Ophthalmol** 1988 Nov;20(11):415–20, 423 (6 ref.)

Laser treatment of subfoveal new vessels in senile macular degeneration. Jalkh AE. **Bull Soc Belge Ophtalmol** 1987; 223 Pt 2:59–62

Evolution of geographic atrophy of the retinal pigment epithelium. Sarks JP, et al. **Eye** 1988;2 (Pt 5):552–77

Pattern dystrophy of the retinal pigment epithelium with vitelliform macular lesion: evolution in ten years. Cardillo Piccolino F, et al. **Int Ophthalmol** 1988 Feb;11(4):207–17

Contrast sensitivity function and mobility in elderly patients with macular degeneration. Wilcox DT, et al. **J Am Optom Assoc** 1989 Jul;60(7):504–7

Macular degeneration: the major cause of severe vision loss in persons fifty-five years or older. Haik GM Jr, et al. **J Miss State Med Assoc** 1989 Jul;30(7):207–10

From the National Institutes of Health. Raub W. **JAMA** 1989 Sep 1;262(9):1158

Health maintenance issues of the elderly. Vision: age-related macular degeneration. Bressler SB. **Md Med J** 1989 Feb; 38(2):135–7

Photocoagulation of chorioretinal anastomoses in far-advanced age-related macular degeneration. Cialdini AP, et al. **Ophthalmic Surg** 1989 May;20(5):316–20

Macular degeneration in angioid streaks. Mansour AM, et al. **Ophthalmologica** 1988;197(1):36–41

Growth features of choroidal neovascular membranes in age-related macular degeneration. Klein ML, et al. **Ophthalmology** 1989 Sep;96(9):1416–9; discussion 1420–1

Growth rate of subretinal neovascularization in age-related macular degeneration. Vander JF, et al. **Ophthalmology** 1989 Sep;96(9):1422–6; discussion 1426–9

Diagnosis and laser treatment of choroidal neovascularization in age-related macular degeneration (senile macular degeneration). Murphy RP. **Yen Ko Hsueh Pao** 1986 Mar; 2(1):58–62 (8 ref.)

[Macular degeneration related to age and cystoid macular edema. Apropos of 95 cases (100 eyes)] Soubrane G, et al. **J Fr Ophtalmol** 1988;11(11):711–20 (34 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Drusen and drusenoid macular lesions. Morse PH, et al. **Ann Ophthalmol** 1988 Sep;20(9):327–31, 334

[Clinical observation and fluorescein angiography in senile macular degeneration] Wu DZ, et al. **Yen Ko Hsueh Pao** 1987 Mar;3(1):16–20 (Eng. Abstr.) **(Chi)**

[On the establishment of a "masking" effect in angiography—could one think of the diagnosis of pseudo-vitelliform degeneration?—So-called "liquid disorder"? (apropos of a case)] Bonn G, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):149–53 (Eng. Abstr.) **(Fre)**

[Localization of occult choroid neovascularizations] Hasegawa Y. **Fortschr Ophthalmol** 1989;86(3):224–6 (Eng. Abstr.) **(Ger)**

[Early lesion of choroidal neovascularization. 1. Senile disciform macular degeneration] Miyabe Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1037–43 (Eng. Abstr.) **(Jpn)**

[Differential diagnosis of the early stages of macular dystrophy and optic nerve pathology using modern electroretinographic and perimetric tests] Shamshinova AM, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):50–2 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[PGE1 in senile macular degeneration. A pilot study] Heidrich H, et al. **Klin Monatsbl Augenheilkd** 1989 Apr; 194(4):282–4 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

The association of age-related macular degeneration and lens opacities in the aged. Liu IY, et al. **Am J Public Health** 1989 Jun;79(6):765–9

The grading and prevalence of macular degeneration in Chesapeake Bay watermen. Bressler NM, et al. **Arch Ophthalmol** 1989 Jun;107(6):847–52

[Aging macular degeneration in Uighur] Wu LZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):175–8 (Eng. Abstr.) **(Chi)**

[Solar radiation and choroidal neovascularization. An epidemiologic study] Gastro-Correia J, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):177–9 (Eng. Abstr.) **(Fre)**

ETHNOLOGY

[Aging macular degeneration in Tibetan and Han] Wu LZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):179–81 (Eng. Abstr.) **(Chi)**

ETIOLOGY

Exposure to sunlight and other risk factors for age-related macular degeneration. West SK, et al. **Arch Ophthalmol** 1989 Jun;107(6):875–9

Age-related macular degeneration. Mooney D. **Ir J Med Sci** 1988 Jul;157(7 Suppl):34–9 (41 ref.)

The relationship between retina surgery and preretinal macular fibrosis. Kraushar MF, et al. **Ophthalmic Surg** 1988 Dec;19(12):843–8

Secondary causes of premacular fibrosis. Appiah AP, et al. **Ophthalmology** 1989 Mar;96(3):389–92

[Macular edema in diabetic retinopathy] De Laey JJ. **Journ Annu Diabetol Hotel Dieu** 1988;:141–50 (46 ref.) (Fre)

[Light in the pathogenesis of senile macular degeneration (editorial)] Orpaz D, et al. **Harefuah** 1989 Feb 15; 116(4):238–40 (Heb)

GENETICS

Autosomal dominantly inherited macular dystrophy with preferential short-wavelength sensitive cone involvement. Bresnick GH, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):265–76

Hereditary macular dystrophy without visible fundus abnormality. Miyake Y, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):292–9

Central pigmentary sheen dystrophy. Noble KG, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):255–9

A progressive cone-rod dystrophy and amelogenesis imperfecta: a new syndrome. Jalili IK, et al. **J Med Genet** 1988 Nov;25(11):738–40

[Haplotype A 28, B 35, CW 4 in macular dystrophy] Sosna T, et al. **Cesk Oftalmol** 1988 Nov;44(6):439–42 (Eng. Abstr.) (Cze)

METABOLISM

Cell loss in the aging retina. Relationship to lipofuscin accumulation and macular degeneration. Dorey CK, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1691–9

PATHOLOGY

Subretinal hemorrhage in atrophic age-related macular degeneration. Nasrallah F, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):38–41

Quantification of progressive diabetic macular nonperfusion [published erratum appears in Ophthalmic Surg 1989 Mar;20(3):224] Goldberg RE, et al. **Ophthalmic Surg** 1989 Jan;20(1):42–5

[Stargardt's disease and choroidal silence sign] Huang ZS, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):194–7 (Eng. Abstr.) (Chi)

[Secondary pigmented macular pucker] Bopp S, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):289–94 (Eng. Abstr.) (Ger)

[Morphological studies on senile macular degeneration] Okisaka S. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1261–86 (130 ref.) (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Contrast sensitivity in macular degeneration and the relation to subjective visual impairment. Lennerstrand G, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):225–33

Visual results with low-vision aids in age-related macular degeneration [letter; comment] Archambault P, et al. **Am J Ophthalmol** 1989 May 15;107(5):564–6. **Comment on:** Am J Ophthalmol 1988 Dec 15;106(6):730–4

Assessment of visual function in patients with age-related macular degeneration and low visual acuity. Alexander MF, et al. **Arch Ophthalmol** 1988 Nov;106(11):1543–7

Natural course of poorly defined choroidal neovascularization associated with macular degeneration. Bressler NM, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1537–42

Fast and slow oscillations of the electro-oculogram in Best's macular dystrophy and retinitis pigmentosa. Weleber RG. **Arch Ophthalmol** 1989 Apr;107(4):530–7

Abnormal dark-adapted electroretinogram in Best's vitelliform macular degeneration. Lachapelle P, et al. **Can J Ophthalmol** 1988 Oct;23(6):279–84

Color matching and the Stiles-Crawford effect in observers with early age-related macular changes. Smith VC, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2113–21

Increased scleral rigidity and age-related macular degeneration. Friedman E, et al. **Ophthalmology** 1989 Jan; 96(1):104–8

Diminished foveal sensitivity may predict the development of advanced age-related macular degeneration. Sunness JS, et al. **Ophthalmology** 1989 Mar;96(3):375–81

Temporal summation in age-related maculopathy. Brown B, et al. **Optom Vis Sci** 1989 Jul;66(7):426–9

[The color vision in aging macular degeneration] Huang SZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):198–200 (Eng. Abstr.) (Chi)

[Simultaneous recording of pattern electroretinogram and visual evoked potential in aging macular degeneration] Shen AP, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):220–4 (Eng. Abstr.) (Chi)

[Contrast sensitivity versus visual acuity in aging macular degeneration] Tian N, et al. **Yen Ko Hsueh Pao** 1987 Sep; 3(3):193–7 (Eng. Abstr.) (Chi)

[The visual function in aging macular degeneration] Wu DZ. **Yen Ko Hsueh Pao** 1988 Jun;4(2):67–72 (Eng. Abstr.) (Chi)

[Comparison of tests between visual electrophysiology and psychophysiology for the evaluation of visual function in aging macular degeneration] Wu DZ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):182–5 (Eng. Abstr.) (Chi)

[The observation of VEP in aging macular degeneration] Xin DY, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):190–2 (Eng. Abstr.) (Chi)

[Ganzfeld electroretinogram in aging macular degeneration] Xu XJ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):186–9 (Eng. Abstr.) (Chi)

[Pattern electroretinography and pattern visual evoked potentials in maculopathy: a comparison with sensory tests] Niermann F, et al. **Fortschr Ophthalmol** 1989;86(1):54–8 (Eng. Abstr.) (Ger)

[Indocyanine green video fluorescence angiography: statistical image analysis for quantifying choroidal blood circulation] Prünte C. **Fortschr Ophthalmol** 1988; 85(4):407–9 (Eng. Abstr.) (Ger)

PSYCHOLOGY

Senile macular degeneration and psychosis. Casey DA, et al. **J Geriatr Psychiatry Neurol** 1988 Apr-Jun;1(2):108–9

RADIOTHERAPY

[An initial trial of the clinical use of continuous second-harmonic radiation (with a 0.532-mcm wavelength) from a yttrium-aluminum-garnet laser in treating certain forms of macular pathology] Apostolov ChE, et al. **Vestn Oftalmol** 1988 Nov-Dec;104(6):61–5 (Eng. Abstr.) (Rus)

SURGERY

Treatment of age-related macular degeneration by laser photocoagulation. Visual results 2–8 weeks and 2–4 years after initial laser treatment. Nielsen NV, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):522–7

Spontaneous disappearance of white retinal changes after dissection of epiretinal macular membranes. Stallman JB, et al. **Retina** 1988;8(3):165–8

Treatment of drusen-related aging macular degeneration by photocoagulation. Wetzig PC. **Trans Am Ophthalmol Soc** 1989;86:276–88; discussion 288–90

[Coagulation therapy of senile macular degenerations. I. Avascular pigment epithelium detachments] Pauleikhoff D, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):152–6 (Eng. Abstr.) (Ger)

[Coagulation therapy of senile macular degeneration. II. Extrafoveal choroid neovascularization] Pauleikhoff D, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):266–70 (Eng. Abstr.) (Ger)

THERAPY

Visual results with low-vision aids in age-related macular degeneration [see comments] Nasrallah FP, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):730–4. **Comment in:** Am J Ophthalmol 1989 May 15;107(5):564–6

[The effect of combined iodine treatment in Bad Hall on the color perception of patients] Rieger G. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):416–9 (Eng. Abstr.) (Ger)

[Experience in the ambulatory observation of patients with retinochoroidal dystrophies] Todor Glu, et al. **Oftalmol Zh** 1989;(1):17–9 (Eng. Abstr.) (Rus)

VETERINARY

Adult-onset macular degeneration in the Cayo Santiago macaques. Dawson WW, et al. **P R Health Sci J** 1989 Apr; 8(1):111–5

MACULAR EDEMA, CYSTOID

CHEMICALLY INDUCED

Irreversible ocular toxicity from single "challenge" dose of deferoxamine. Bene C, et al. **Clin Nephrol** 1989 Jan; 31(1):45–8

Aphakic cystoid macular edema secondary to betaxolol therapy. Hesse RJ, et al. **Ophthalmic Surg** 1988 Aug; 19(8):562–4

CLASSIFICATION

[Classification and importance of cystoid macular edema in pseudophakia] Behrens-Baumann W, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):16–21 (Eng. Abstr.) (Ger)

COMPLICATIONS

Macular edema and vitreous detachment. Roldan M, et al. **Ann Ophthalmol** 1989 Apr;21(4):141–8

Posterior sub-Tenon's injections of corticosteroids in uveitis patients with cystoid macular edema. Jennings T, et al. **Jpn J Ophthalmol** 1988;32(4):385–91

Epiretinal membranes and cystoid macular edema in gyrate atrophy of the choroid and retina. Feldman RB, et al. **Retina** 1989;9(2):139–42

Pseudotumor cerebri and macular disease. Mitchell DJ, et al. **Retina** 1989;9(2):115–7

DIAGNOSIS

Cystoid macular edema in pediatric aphakia. Pischoff BS, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep-Oct; 25(5):240–3

Detection of diabetic macular edema. Ophthalmoscopy versus photography—Early Treatment Diabetic Retinopathy Study Report Number 5. The ETDRS Research Group. Kinyoun J, et al. **Ophthalmology** 1989 Jun;96(6):746–50; discussion 750–1

[Fluorescein angiography and pathological study of cystoid macular edema] Zhang HR, et al. **Yen Ko Hsueh Pao** 1985 Dec;1(2):151–6 (Eng. Abstr.) (Chi)

[Video fluorescence angiography follow-up of patients with retinal stasis syndrome] Wolf S, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):39–43 (Eng. Abstr.) (Ger)

[Idiopathic microcystic macular edema] Munteanu G, et al. **Rev Chir [Oftalmol]** 1988 Apr-Jun;32(2):131–5 (Eng. Abstr.) (Rum)

[Studies on cerebral visual evoked potentials in the differential diagnosis of macular edema and obscration amblyopia in children with artiphakia] Shpak AA, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(2):44–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Pseudophakic cystoid macular oedema and its treatment with local steroids. Suckling RD, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):353–9

A comparative study of the effect of antiprostagiandins and steroids on aphakic cystoid macular oedema. Ahluwalia BK, et al. **Indian J Ophthalmol** 1988 Oct-Dec;36(4):176–8

ETIOLOGY

Cystoid macular edema following cataract surgery [letter] Flach AJ. **Arch Ophthalmol** 1989 Feb;107(2):166–7

Prevalence of cystoid macular oedema in aphakia. Bihari V, et al. **Indian J Ophthalmol** 1987;35(5–6):355–7

Uncomplicated extracapsular cataract extraction. **J Cataract Refract Surg** 1988 Nov;14(6):679–84

Intraocular lens removal for chronic cystoid macular edema. Smith SG. **J Cataract Refract Surg** 1989 Jul;15(4):442–5

CME associated with ECCE and ICCE [letter] Galin MA, et al. **Ophthalmic Surg** 1988 Sep;19(9):676, 678

Macular edema in branch retinal vein occlusion: types and treatment. Jalkh AE, et al. **Ophthalmic Surg** 1989 Jan; 20(1):26–32

'Very late onset' cystoid macular edema. Mao LK, et al. **Ophthalmic Surg** 1988 Sep;19(9):633–5

Macular lesions in malignant arterial hypertension. Hayreh SS, et al. **Ophthalmologica** 1989;198(4):230–46

Cystoid macular degeneration in experimental branch retinal vein occlusion. Wallow IH, et al. **Ophthalmology** 1988 Oct; 95(10):1371–9

Cystoid macular edema following extracapsular cataract extraction and posterior chamber intraocular lens implantation. Bradford JD, et al. **Retina** 1988;8(3):161–4

Distant effect of peripheral branch vein occlusion on the macula. Finkelstein D, et al. **Trans Am Ophthalmol Soc** 1989;86:380–7; discussion 387–8

[The macular edema of aphakia and pseudo-aphakia] Grange JD. **Annee Ther Clin Ophtalmol** 1987;38:331–9 (20 ref.) (Fre)

[Recurrent cystoid macular edema during photocoagulation in an aphakic female patient] Pyckewaert M, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):641–2 (Fre)

[Cystoid macular edema directly related to laser photocoagulation] Turut P, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):637–9 (Fre)

[Rupture of the blood-retinal barrier after microsurgery of retinal detachment] Bonnet M, et al. **Ophtalmologie** 1988 Jan-Mar;2(1):29–31 (Eng. Abstr.) (Fre)

[Incidence of cystoid macular edema following cataract extraction] Behrens-Baumann W, et al. **Fortschr Ophthalmol** 1989;86(3):195–6 (Eng. Abstr.) (Ger)

[Long-term observation of the optic disk pit] Adamczewska I, et al. **Klin Oczna** 1988 Aug;90(8):287–8 (Eng. Abstr.) (Pol)

PATHOLOGY

[Pitted optic papilla with fluorescein angiography-detected macular edema] Köhler U. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):506–9 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Concerning haloperidol preoperatively [letter] Schachar RA. **J Cataract Refract Surg** 1988 Nov;14(6):692

Prospective, randomized trial of oral piroxicam in the prophylaxis of postoperative cystoid macular edema. Abelson MB, et al. **J Ocul Pharmacol** 1989 Summer; 5(2):147–53

[Fluorophotometry in aphakic microcystic edema] Schauwvlieghe P, et al. **Ophtalmologie** 1988 Jan-Mar; 2(1):41–3 (Eng. Abstr.) (Fre)

SURGERY

Macular grid photocoagulation for macular edema in central retinal vein occlusion. Klein ML, et al. **Arch Ophthalmol** 1989 Sep;107(9):1297–302

Neodymium: YAG laser vitreolysis for treatment and prophylaxis of cystoid macular oedema. Tchah H, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):179–83

Neodymium:YAG laser anterior vitreolysis for Irvine–Gass cystoid macular edema. Steinert RF, et al. **J Cataract Refract Surg** 1989 May;15(3):304–7

Modified grid laser photocoagulation for diabetic macular edema. The effect on the central visual field. Striph GG, et al. **Ophthalmology** 1988 Dec;95(12):1673–9

[Photocoagulation with the argon laser in cystoid macular edema in retinal venous occlusions. Apropos of 68 cases] Gaudric A, et al. **J Fr Ophtalmol** 1988;11(4):319–26 (Eng. Abstr.) (Fre)

[Prognostic factors in the treatment of edematous diabetic retinopathy with focal photocoagulation] Fernández-Vigo J, et al. **Ophtalmologie** 1988 Oct;2(4):311–4 (Eng. Abstr.) (Fre)

[Treatment of diffuse diabetic macular edema] Kieselbach GF. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):666–7 (Eng. Abstr.) (Ger)

THERAPY

Research in Ohio. Edwards KS. **Ohio Med** 1989 Mar; 85(3):182

Improvement of macular edema after panretinal photocoagulation for proliferative diabetic retinopathy. Gardner TW, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1988;40:691–6

[Treatment of edematous diabetic retinopathy (apropos of 51 cases)] el Matri L, et al. **Tunis Med** 1988 Dec; 66(12):833–6 (Eng. Abstr.) (Fre)

[Visual improvement in diabetic macular edema by hyperbaric oxygen treatment] Ogura Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1456–60 (Eng. Abstr.) (Jpn)

MACULAR HOLES see RETINAL PERFORATIONS

MADURELLA see HYPHOMYCETES

MADUROMYCOSIS

Mycetoma. Magaña M, et al. **Dermatol Clin** 1989 Apr; 7(2):203–17 (43 ref.)

Mycetoma: a contemporary concept. McGinnis MR, et al. **Infect Dis Clin North Am** 1988 Dec;2(4):939–54 (40 ref.)

Madura foot. A case presentation. Dennis KJ, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):36–8

Mycetoma of the forearm due to Actinomadura madurae. Alteras I, et al. **Mycopathologia** 1988 Jul;103(1):55–7

COMPLICATIONS

[Mycetoma of the thorax associated with diabetes mellitus. Report of a clinical case] Bolio Cicero A, et al. **Rev Invest Clin** 1967 Jan–Mar;19(1):95–9 (Eng. Abstr.) (Spa)

DIAGNOSIS

Madura foot or plantar fibromatosis. Turner PG. **J Bone Joint Surg [Br]** 1989 May;71(3):531

Ultrasonographic and microbiological diagnosis of mycetic liver abscesses in patients with AIDS. Filice C, et al. **Microbiologica** 1989 Jan;12(1):101–4

Superior sagittal sinus infection with Petriellidium boydii: case report. Fessler RG, et al. **Neurosurgery** 1989 Apr; 24(4):604–7

Serodiagnosis of mycetoma. Joshi KR, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):334

DRUG THERAPY

Pseudallescheria boydii mycetoma in northern New England. Stierstorfer MB, et al. **Int J Dermatol** 1988 Jul–Aug; 27(6):383–7

EPIDEMIOLOGY

[Diagnostic methods and follow up studies of 54 cases of pulmonary aspergilloma] Vizcaya Sánchez M, et al. **Rev Clin Esp** 1988 Nov;183(8):393–6 (28 ref.) (Eng. Abstr.) (Spa)

ETIOLOGY

Pseudallescheria boydii brain abscess: association with near-drowning and efficacy of high-dose, prolonged miconazole therapy in patients with multiple abscesses. Dworzack DL, et al. **Medicine (Baltimore)** 1989 Jul; 68(4):218–24

[A case of prosthetic valve endocarditis due to Scedosporium apiospermum] Ogihara A, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):432–3 (Jpn)

MICROBIOLOGY

Physiological and pathogenic characteristics of Nocardia brasiliensis isolated from human mycetomas. van Gelderen de Komaid A. **Mycopathologia** 1989 Feb;105(2):111–6

PATHOLOGY

Organ-specific variation in the morphology of the fungomas (fungus balls) of Pseudallescheria boydii. Development within necrotic host tissue. Schwartz DA. **Arch Pathol Lab Med** 1989 May;113(5):476–80

Cerebral Pseudallescheria boydii infection: unique occurrence of fungus ball formation in the brain. Schwartz DA, et al. **Clin Neurol Neurosurg** 1989;91(1):79–84 (27 ref.)

Mycetoma due to Acremonium falciforme. Milburn PB, et al. **Int J Dermatol** 1988 Jul–Aug;27(6):408–10

RADIOGRAPHY

[Mycetoma-like manifestations in invasive pulmonary aspergillosis] Roos N, et al. **Radiologe** 1989 May; 29(5):232–6 (Eng. Abstr.) (Ger)

SURGERY

Surgical treatment of fungal mycetoma. Visvanathan R. **Can J Surg** 1989 Jan;32(1):74–6

[Mycetoma of the fingers. Apropos of 5 case reports] Seye SI, et al. **Ann Chir Main** 1988;7(4):322–6 (Eng. Abstr.) (Fre)

[Maduromycosis of the extremities] Bolko NT. **Vestn Khir** 1988 May;140(5):72–4 (Rus)

VETERINARY

Eumycotic mycetoma caused by Pseudallescheria boydii in a dog. Allison N, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):797–9

MAEDI see PNEUMONIA, PROGRESSIVE INTERSTITIAL, OF SHEEP

MAEDI VIRUS see VISNA-MAEDI VIRUSES

MAFENIDE see under SULFONAMIDES

MAGENTAS see ROSANILINE DYES

MAGIC

'Bhanamati' sorcery and psychopathology in south India. A clinical study. Keshavan MS, et al. **Br J Psychiatry** 1989 Feb;154:218–20

"Magical thinking," suicide, and malpractice litigation. Bursztajn H, et al. **Bull Am Acad Psychiatry Law** 1988; 16(4):369–77 (22 ref.)

History of baldness. From magic to medicine. Kligman AM, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):83–8

Mental illness complicated by the santeria belief in spirit possession. Alonso L, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1188–91

Word magic and the rhetoric of common sense: Erickson's metaphors for mind. Kirmayer LJ. **Int J Clin Exp Hypn** 1988 Jul;36(3):157–72

The current situation in regard to the delusion of possession in Japan. Iida J. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):19–27

Religion and epilepsy. Roberts JK, et al. **Psychiatr J Univ Ottawa** 1989 Mar;14(1):282–6

Supernaturalist curers and sorcery accusations in Thailand. Golomb L. **Soc Sci Med** 1988;27(5):437–43 (17 ref.)

Healing thyself: a Korean shaman's afflictions. Kendall L. **Soc Sci Med** 1988;27(5):445–50

Healing texts and healing techniques in indigenous Balinese medicine. McCauley AP. **Soc Sci Med** 1988;27(8):779–87

From Mantra to Matarâa: opacity and transparency in the language of Tobelo magic and medicine (Halmahera Island, Indonesia). Taylor PM. **Soc Sci Med** 1988;27(5):425–36 (24 ref.)

Ancient magic in modern medicine. Christy NP. **Trans Am Clin Climatol Assoc** 1987;99:170–6 (12 ref.)

[Madness and witchcraft in the Inquisition of the Río de la Plata] Pagés Larraya F. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):211–22 (Eng. Abstr.) (Spa)

MAGNESIUM

Effect of formulation on antacid value of magnesium trisilicate tablets. Jovanovic M, et al. **Acta Pharm Hung** 1988 Sep;58(5):215–20

Infection-induced struvite urolithiasis in rats. Olson ME, et al. **Am J Pathol** 1989 Sep;135(3):581–3

Myocardial preservation: the role of magnesium [letter] Lonchyna VA, et al. **Ann Thorac Surg** 1989 Jul;48(1):145

Myocardial preservation related to magnesium content of hyperkalemic cardioplegic solutions at 8 degrees C. Reynolds TR, et al. **Ann Thorac Surg** 1989 Jun;47(6):907–13

Monolayer coupling in phosphatidylserine bilayers: distinct phase transitions induced by magnesium interacting with one or both monolayers. Düzgüneş N, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):391–8

Preparation and polymerization properties of monomeric ADP-actin. Gershman LC, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):109–15

Reversal of the Mg++-induced B-to-Z transition of poly[d(G-C)] with hydrostatic pressure. Macgregor RB Jr. **Biopolymers** 1988 Oct;27(10):1687–90

Effect of glycosaminoglycans and divalent cations on the thermal properties of dipalmitoylphosphatidylcholine. Voszka I, et al. **Chem Phys Lipids** 1989 Jul;51(1):67–71

The effect of incubation temperature and magnesium chloride concentration on growth of salmonella in home-made and in commercially available dehydrated Rappaport-Vassiliadis broths. Peterz M, et al. **J Appl Bacteriol** 1989 Jun;66(6):523–8

Determination of HDL2 cholesterol by precipitation with dextran sulfate and magnesium chloride: establishing optimal conditions for rat plasma. Sjoblom L, et al. **Lipids** 1989 Jun;24(6):532–4

Magnesium action on the stability of fluorapatite. Okazaki M. **Magnesium** 1988;7(3):148–53

Improved control of partial DNA restriction enzyme digest in agarose using limiting concentrations of Mg++. Albertsen HM, et al. **Nucleic Acids Res** 1989 Jan 25; 17(2):808

Increased potency of antagonists of substance P having asparagine in position 6. Ljungqvist A, et al. **Regul Pept** 1989 Mar;24(3):283–91

[Comparative study, with photoelectron spectroscopy of the adsorption of phospholipids by 3 fibrous silicate minerals (chrysotile, crocidolite, attapulgite)] Baillif P, et al. **C R Acad Sci [III]** 1988;307(3):83–7 (Eng. Abstr.) (Fre)

[Replacement of aluminum-containing phosphate binders by calcium and magnesium carbonates in long-term hemodialysis] Zellweger U, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):659–64 (Eng. Abstr.) (Ger)

[Magnesium and heart disease] Schechter M, et al. **Harefuah** 1989 Jan 1;116(1):60–3 (48 ref.) (Heb)

[Magnesium and hypomagnesemia in childhood] Calvani M. **Recenti Prog Med** 1989 Jun;80(6):338–43 (46 ref.) (Eng. Abstr.) (Ita)

[A study of the conformational state of the ATP gamma-p-azidoanilide-Mn2+ complex by NMR and atom-atomic potential methods] Abramova TV, et al. **Bioorg Khim** 1989 Apr;15(4):514–26 (Eng. Abstr.) (Rus)

[Serum levels and urinary excretion of magnesium in pregnancy. Effect of milk intake] Salinas M, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):444–53 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

Dietary magnesium supplements improve B-cell response to glucose and arginine in elderly non-insulin dependent diabetic subjects. Paolisso G, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):16–20

Treatment of torsade de pointes with intravenous magnesium [letter] Banai S, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1539–40

Management of magnesium depletion. Oster JR, et al. **Am J Nephrol** 1988;8(5):349–54 (36 ref.)

Magnesium supplementation during pregnancy: a double-blind randomized controlled clinical trial. Sibai BM, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):115–9

Intravesical instillation of maalox for the treatment of hemorrhagic cystitis [letter] Kawagoe K, et al. **Acta Oceania J Obstet Gynaecol** 1989 Mar;15(1):107–8

Hemodynamic effects of intravenously administered magnesium on patients with ischemic heart disease. Rasmussen HS, et al. **Clin Cardiol** 1988 Dec;11(12):824–8

Relationship of dietary sodium, potassium, calcium, and magnesium with blood pressure. Belgian Interuniversity Research on Nutrition and Health. Kesteloot H, et al. **Hypertension** 1988 Dec;12(6):594–9

Oral metoclopramide, glycopyrrolate and magnesium trisilicate on gastric volume and pH in paediatric patients. Bhanja DC, et al. **J Indian Med Assoc** 1988 Jul;86(7):175–6

Comparison of potassium alone and potassium-magnesium supplementation in patients with heart failure using hydrochlorothiazide. Kohvakka A, et al. **Magnesium** 1989; 8(2):71–6

Advertisement claims [letter] Davies M, et al. **Vet Rec** 1989 Apr 15;124(15):412

[Magnesium substitution in pregnancy. A prospective, randomized double-blind study] Kovács L, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):595–600 (Eng. Abstr.) (Ger)

[Evaluation of the neutralizing activity on gastric acidity of a carbenoxolone-antacid formulation using computerized gastric pH-metry in healthy volunteers] Passaretti S, et al. **Clin Ter** 1988 Mar 15;124(5):357–61 (Eng. Abstr.) (Ita)

[Results of the compensatory treatment of disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kłoś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1330–3 (Eng. Abstr.) (Pol)

[Use of a method of mathematical planning of an experiment for creating optimal nutrient media] Vakarash NA, et al. **Gig Sanit** 1988 Aug;(8):43–5 (Rus)

[Electrophoresis of obzidan and magnesium in the combined sanatorium-health resort treatment of patients with hypertension] Moshkin AP, et al. **Vrach Delo** 1988 Nov; (11):48–9 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Osteomalacia from Al and Mg antacids. Report of a case of bilateral hip fracture. Neumann L, et al. **Acta Orthop Scand** 1989 Jun;60(3):361–2

Hypermagnesemia: a cause of abnormal metaphyses in the neonate. Cumming WA, et al. **AJR Am J Roentgenol** 1989 May;152(5):1071–2

Serum aluminium levels of intensive care patients treated with two different antacids for prevention of stress ulceration. Rauch H, et al. **Intensive Care Med** 1989; 15(2):84–6

Magnesium hydroxide as a complementary aluminium–free phosphate binder to moderate doses of oral calcium in uraemic patients on chronic haemodialysis: lack of deleterious effect on bone mineralisation. Morinière P, et al. **Nephrol Dial Transplant** 1988;3(5):651–6

[Aluminum and magnesium burden of dialysis patients using antacids. A comparative study] Eichhorn M. **Fortschr Med** 1989 Aug 10;107(23):502–6 (Eng. Abstr.) (Ger)

[The role of various pesticides in nitrosamine–induced carcinogenesis] Ponomareva LA, et al. **Gig Sanit** 1989 May; (5):7–9 (Rus)

ANALYSIS

Magnesium, potassium and zinc deficiency in subjects with type II diabetes mellitus. Sjögren A, et al. **Acta Med Scand** 1988;224(5):461–6

Aluminium, calcium and magnesium content of Hungarian foods and dietary intakes by children aged 3.9 and 14 years. Schamschula RG, et al. **Acta Physiol Hung** 1988; 72(2):237–51

Magnesium, zinc, and copper status of US Navy SEAL trainees. Singh A, et al. **Am J Clin Nutr** 1989 Apr; 49(4):695–700

A fluorescent indicator for measuring cytosolic free magnesium. Raju B, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C540–8

Atomization characteristics and direct determination of manganese and magnesium in biological samples using a magnetically altered thin–film plasma. Brewer SW Jr, et al. **Anal Chem** 1988 Sep 1;60(17):1769–75

Intracellular magnesium ion selective microelectrode based on a neutral carrier. Hu ZM, et al. **Anal Chem** 1989 Mar 15;61(6):574–6

Estimation of rate constants using statistical moments of spatially resolved signal profiles for the elucidation of analyte transformation mechanisms in an inductively coupled plasma. Li KP, et al. **Anal Chem** 1988 Aug 1; 60(15):1599–605

Accurate measurement of stable isotopes of magnesium in biological materials with inductively coupled plasma mass spectrometry. Schuette S, et al. **Analyst** 1988 Dec; 113(12):1837–42

Magnesium ion activity in the mammalian endolymph measured with ion–selective microelectrodes. Ikeda K, et al. **Arch Otorhinolaryngol** 1988;245(3):142–4

Analysis of magnesium and trace elements in urinary calculi by atomic absorption spectrophotometry. Durak I, et al. **Br J Urol** 1988 Sep;62(3):203–5

Calcium: a program in BASIC for calculating the composition of solutions with specified free concentrations of calcium, magnesium and other divalent cations. Chang D, et al. **Comput Biol Med** 1988;18(5):351–66

Muscle magnesium and capillary basement membrane thickness in diabetes mellitus. Dyckner T, et al. **Diabete Metab** 1988 Sep–Oct;14(5):619–22

Evaluation of three strip tests for measuring electrolytes in mares' pre–partum mammary secretions and for predicting parturition. Ousey JC, et al. **Equine Vet J** 1989 May; 21(3):196–200

Experiments on the heat–induced salt balance changes in cow's milk. Pouliot Y, et al. **J Dairy Res** 1989;56(3):513–9

Is lymphocyte magnesium concentration a reflection of intracellular magnesium concentration? Wong NL, et al. **J Lab Clin Med** 1988 Dec;112(6):721–6

An X–ray diffraction study of alpha–tropomyosin magnesium tactoid. Yagi N. **J Muscle Res Cell Motil** 1988 Oct; 9(5):393–402

Bile salt binding properties of commonly used gastrointestinal drugs: maalox, carafate, and questran. Shiau YF, et al. **J Pharm Sci** 1988 Jun;77(6):527–30

Diuretic–induced CNS magnesium alteration and digoxin intoxication. Alexander BS. **Magnesium** 1988;7(4):210–8

Estimation of the upper limit of the free magnesium concentration measured with Mg–sensitive microelectrodes in ferret ventricular muscle: (1) use of the Nicolsky–Eisenman equation and (2) in calibrating solutions of the appropriate concentration. Blatter LA, et al. **Magnesium** 1988;7(3):154–65

Status of the determination of magnesium in mononuclear blood cells in humans. Elin RJ. **Magnesium** 1988; 7(5–6):300–5 (27 ref.)

Determinations of serum and muscle magnesium in Cebus monkeys infected with different T. cruzi strains. Falasca CA, et al. **Medicina (B Aires)** 1988;48(2):156–60

Electron probe X–ray microanalysis of Ca2+, Mg2+, and other ions in rapidly frozen cells. Somlyo AV, et al. **Methods Enzymol** 1989;172:203–29

An attempt to fortify drinking juices with magnesium salts. Miedzobrodzka A, et al. **Nahrung** 1988;32(5):511–2

Monitoring cytosolic free magnesium in cultured chicken heart cells by use of the fluorescent indicator Furaptra. Murphy E, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2981–4

Determination of calcium and magnesium in postmortem human vitreous humor as a test to ascertain the cause and time of death. Nowak R, et al. **Z Rechtsmed** 1989; 102(2–3):179–83

[Determination of the magnesium concentration in body fluids] Falck M, et al. **Internist (Berlin)** 1989 Jan;30(1):51–6 (Ger)

[Cutaneous divalent ions and uremic pruritus] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):143–5 (Eng. Abstr.) (Ita)

[A therapeutic plan for optimal control of divalent ions in patients on chronic hemodialysis] Gonella M, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):301–7 (Eng. Abstr.) (Ita)

BLOOD

Calcium, magnesium and phosphate during and after hypothermic cardiopulmonary bypass without temperature correction of acid base status. Kancir CB, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):676–80

Zinc, copper and magnesium concentration in serum and CSF of patients with neurological disorders. Kapaki E, et al. **Acta Neurol Scand** 1989 May;79(5):373–8

Plasma ionized calcium, phosphate and magnesium in preterm and small for gestational age infants. Nelson N, et al. **Acta Paediatr Scand** 1989 May;78(3):351–7

Acute antidepressant effect of lithium is associated with fluctuation of calcium and magnesium in plasma. A double–blind study on the antidepressant effect of lithium and clomipramine. Linder J, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):27–36

The seasonal dependence of magnesium and zinc in blood in young sportsmen. Kubíček R, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:267–70

Thiazide treatment of systemic hypertension: effects on serum magnesium and ventricular ectopic activity. Hollifield JW. **Am J Cardiol** 1989 Apr 18;63(14):22G–25G

Hypomagnesemia masking the appearance of elevated parathyroid hormone concentrations in familial pseudohypoparathyroidism. Allen DB, et al. **Am J Med Genet** 1988 Sep;31(1):153–8

Cytoplasmic Mg2+ concentration in platelets: implications for determination of Ca2+ with aequorin. Ware JA, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H855–9

Erythrocyte and plasma magnesium status in Nigerians with diabetes mellitus. Olukoga AO, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):74–7

Hypermagnesemia associated with catharsis in a salicylate–intoxicated patient with anorexia nervosa. Gren J, et al. **Ann Emerg Med** 1989 Feb;18(2):200–3

Magnesium levels [letter] Jara FA, et al. **Ann Emerg Med** 1989 May;18(5):605

Limitations of magnesium levels study [letter] Kellermann AL. **Ann Emerg Med** 1989 Feb;18(2):227

Serum parathormone, 25 hydroxycholecalciferol and magnesium concentrations in infants with seizures associated with spontaneous hypocalcemia. Villalpando S, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):165–71

NMR studies of intracellular free calcium, free magnesium and sodium in the guinea pig reticulocyte and mature red cell. Jelicks LA, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):261–6

Pyrimidine nucleotides impair phosphoribosylpyrophosphate (PRPP) synthetase subunit aggregation by sequestering magnesium. A mechanism for the decreased PRPP synthetase activity in hereditary erythrocyte pyrimidine 5'–nucleotidase deficiency. Lachant NA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):81–8

Intracellular free magnesium and phosphorylated metabolites in hexokinase– and pyruvate kinase–deficient red cells measured using 31P–NMR spectroscopy. Ouwerkerk R, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):294–303

Distribution of phosphorylated metabolites and magnesium in the red cells of a patient with hyperactive pyruvate kinase. Ouwerkerk R, et al. **Blood** 1988 Oct;72(4):1224–9

Magnesium free dialysis for uraemic pruritus. Carmichael AJ, et al. **BMJ** 1988 Dec 17;297(6663):1584–5

Hypomagnesaemia and hypocalcaemia after treatment with mitoxantrone. Griffiths KD, et al. **BMJ** 1988 Aug 13; 297(6646):488

Lymphocyte potassium and magnesium concentrations as prognostic factors after acute myocardial infarction [letter] Elin RJ, et al. **Cardiology** 1989;76(3):243–7

Hypomagnesemia in intensive care. Correction of units [letter] Chernow B. **Chest** 1989 Jun;95(6):1362

Hypermagnesemia. A potential complication during treatment of theophylline intoxication with oral activated charcoal and magnesium–containing cathartics. Weber CA, et al. **Chest** 1989 Jan;95(1):56–9

Interpretation of the serum magnesium level [editorial] Zaloga GP. **Chest** 1989 Feb;95(2):257–8

The electrophysiological effects of intravenous magnesium on human sinus node, atrioventricular node, atrium, and ventricle. Rasmussen HS, et al. **Clin Cardiol** 1989 Feb; 12(2):85–90

Studies on measurement of plasma magnesium: application of the Magon dye method to the "Monarch" centrifugal analyzer. Barbour HM, et al. **Clin Chem** 1988 Oct; 34(10):2103–5

Intra–erythrocytic Mg assay in the Kodak Ektachem 700 analyzer. Bonnay MM, et al. **Clin Chem** 1988 Oct; 34(10):2154–5

Serum magnesium as affected by drugs [letter] Cameron JD. **Clin Chem** 1989 Mar;35(3):506

Fast, stable method for harvesting leukocytes for measuring intracellular magnesium. Frandsen NJ, et al. **Clin Chem** 1989 Sep;35(9):1986–9

Short–term and long–term variability of indices related to nutritional status. I: Ca, Cu, Fe, Mg, and Zn. Gallagher SK, et al. **Clin Chem** 1989 Mar;35(3):369–73

Determination of magnesium in granulocytes. Hosseini JM, et al. **Clin Chem** 1989 Jul;35(7):1404–7

Fluorometric determination of magnesium in serum with 2–hydroxy–1–naphthaldehyde salicyloylhydrazone. Ioannou PC, et al. **Clin Chem** 1989 Jul;35(7):1492–6

Modified magnesium method in the aca III: elimination of interference by bilirubin. Rehak NN, et al. **Clin Chem** 1989 Jun;35(6):1031–3

Statistical interpretation of concentrations of magnesium, zinc, calcium, potassium, cholesterols, and creatine kinase isoenzymes in men at different stages of ischemic heart disease. Speich M, et al. **Clin Chem** 1989 May;35(5):833–5

Changes in magnesium, zinc, calcium, potassium, cholesterol, and creatine kinase concentrations in patients from pre–infarction syndrome to fatal myocardial infarction. Speich M, et al. **Clin Chem** 1988 Oct;34(10):2083–6

Measurement of magnesium in mononuclear blood cells [letter] Urdal P, et al. **Clin Chem** 1989 Jul;35(7):1559–60

Correlation between concentrations of magnesium, zinc, and potassium in plasma, erythrocytes and muscles. Ladefoged K, et al. **Clin Chim Acta** 1988 Oct 14;177(2):157–66

Aldosterone and magnesium in essential arterial hypertension. Garcia Zozaya JL, et al. **Clin Physiol Biochem** 1988; 6(6):293–300

Possible effects of diet and other factors on 31P–nuclear–magnetic–resonance measurement of intracellular magnesium in hypertension [letter; comment] Resnick LM, et al. **Clin Sci** 1989 May;76(5):565–6, **Comment on:** Clin Sci 1988 May;74(5):513–7

Calcium and magnesium in essential hypertension. Tillman DM, et al. **Clin Sci** 1988 Oct;75(4):395–402

Cyclosporin–induced hypomagnesaemia and renal magnesium wasting in rats. Wong NL, et al. **Clin Sci** 1988 Nov;75(5):509–14

Impaired insulin–induced erythrocyte magnesium accumulation is correlated to impaired insulin–mediated glucose disposal in type 2 (non–insulin–dependent) diabetic patients. Paolisso G, et al. **Diabetologia** 1988 Dec; 31(12):910–5

Influence of magnesium gluconate on stress reactions in rats. Kietzmann M. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):292–3

Erythrocyte, plasma and urinary magnesium in men before and after a marathon. Lijnen P, et al. **Eur J Appl Physiol** 1988;58(3):252–6

Primary infantile hypomagnesaemia; report of two cases and review of literature. Abdulrazzaq YM, et al. **Eur J Pediatr** 1989 Feb;148(5):459–61

Characterization of Mg2+ efflux from human, rat and chicken erythrocytes. Günther T, et al. **FEBS Lett** 1989 Jul 3;250(2):633–7

Na+–independent Mg2+ efflux from Mg2+–loaded human erythrocytes. Günther T, et al. **FEBS Lett** 1989 Apr 24; 247(2):181–4

Competition between Li+ and Mg2+ for ATP in human erythrocytes. A 31P NMR and optical spectroscopy study. Ramasamy R, et al. **FEBS Lett** 1989 Feb 13;244(1):223–6

Circannual changes in the serum levels of calcium and magnesium in laboratory mice. Fialkowska M. **Folia Biol (Krakow)** 1988;36(1–2):81–7

Changes in the magnesium content in the blood serum of mice treated with sodium glutamate and kainic acid. Srebro Z, et al. **Folia Biol (Krakow)** 1988;36(1–2):59–64

Premenstrual increase of intracellular magnesium levels in women with ovulatory, asymptomatic menstrual cycles. Facchinetti F, et al. **Gynecol Endocrinol** 1988 Sep; 2(3):249–56

31P NMR studies on rejuvenation of outdated red blood cells: complete regeneration of ATP is accompanied by partial Mg–ATP recomplexation. van Waarde A, et al. **Haematologia (Budap)** 1989;22(2):79–87

Study of serum calcium and magnesium in leprosy. Saxena N, et al. **Indian J Dermatol** 1988 Oct;33(4):48–51

The effects of muscle–building exercise on vitamin D and mineral metabolism. Bell NH, et al. **J Bone Miner Res** 1988 Aug;3(4):369–73

A candidate reference method for the determination of magnesium in serum. Külpmann WR, et al. **J Clin Chem Clin Biochem** 1989 Jan;27(1):33–9

Effects of improved glycaemic control on calcium and magnesium homeostasis in type II diabetes. McBain AM, et al. **J Clin Pathol** 1988 Sep;41(9):933–5

Serum electrolytes and parathyroid hormone in patients in a coronary care unit. Joborn H, et al. **J Intern Med** 1989 Jan;225(1):9–14

Na+–K+ pump activities of high– and low–potassium sheep red cells with internal magnesium and calcium altered by A23187. Fujise H, et al. **J Physiol (Lond)** 1988 Nov; 405:605–14

Breed differences in plasma calcium, phosphorus and magnesium concentrations of Merino, Dohne Merino and S.A. Mutton Merino sheep with relation to the bent–leg syndrome. Van Niekerk FE, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):36–41

Trace element studies on Karachi populations, Part 1: Normal ranges for blood copper, zinc and magnesium for adults [published erratum appears in JPMA 1989 Mar;39(3):90] Manser WW, et al. **JPMA** 1989 Feb;39(2):43–9

Sheehan's syndrome with hypomagnesemia and polymorphous ventricular tachycardia. Nunoda S, et al. **Jpn Heart J** 1989 Mar;30(2):251–6

Total thyroparathyroidectomy in patients with thyroid cancers and changes in erythrocytic Mg levels following parathyrosautotransplantation. Sagiura H, et al. **Jpn J Surg** 1988 Nov;18(6):653–9

Plasma and erythrocyte magnesium concentrations in essential arterial hypertension. Buemi M, et al. **Kidney Int Suppl** 1988 Sep;25:S14–5

Unreliability of plasma magnesium values in asphyxiated neonates. Caddell JL, et al. **Magnesium** 1989;8(1):11–6

Magnesium alterations and pharmacokinetic data in gallium-treated lung cancer patients. Collery P, et al. **Magnesium** 1989;8(1):56–64

Genetic regulation of blood and tissue magnesium content in mammals. Henrotte JG. **Magnesium** 1988;7(5–6):306–14 (31 ref.)

Magnesium content and concentration of mononuclear and T lymphocyte blood cells. Huang CM, et al. **Magnesium** 1988;7(4):219–24

Serum magnesium levels in patients with head and neck cancer. Kohli GS, et al. **Magnesium** 1989;8(2):77–86

Serum and erythrocyte magnesium levels in junior high school students: relation to blood pressure and a family history of hypertension. Shibutani Y, et al. **Magnesium** 1988;7(4):188–94

Comparison of magnesium in human lymphocytes and mononuclear blood cells. Yang XY, et al. **Magnesium** 1989; 8(2):100–5

Serum zinc, copper and magnesium in Behçet's disease. Cengiz K, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):190–3

Effect of hypomagnesemia and exercise on slowly exchanging pools of magnesium. Brilla LR, et al. **Metabolism** 1989 Aug;38(8):797–800

Improved bone morphology by normalizing serum magnesium in chronically hemodialyzed patients. Gonella M, et al. **Miner Electrolyte Metab** 1988;14(4):240–5

Laxative abuse causing hypermagnesemia, quadriparesis, and neuromuscular junction defect. Castelbaum AR, et al. **Neurology** 1989 May;39(5):746–7

Intraerythrocytic Ca2+ and Mg2+ concentrations of Theileria sergenti infected calves. Yagi Y, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):460–2

Erythrocyte and plasma magnesium during teenage pregnancy: relationship with blood pressure and pregnancy-induced hypertension. Boston JL, et al. **Obstet Gynecol** 1989 Feb;73(2):169–74

Erythrocyte and plasma magnesium during teenage pregnancy: relationship with blood pressure and pregnancy-induced hypertension [letter] Weaver K. **Obstet Gynecol** 1989 Jul;74(1):135–7

Serum electrolyte disturbances in the post-resuscitation period. The Cerebral Resuscitation Study Group. Buylaert WA, et al. **Resuscitation** 1989;17 Suppl:S189–96; discussion S199–206

Normal serum magnesium values and the diagnosis of magnesium deficiency [letter] Touyz RM, et al. **S Afr Med J** 1989 Jun 3;75(11):554

Comparison of an inductively coupled plasma-atomic emission spectrometry method for the determination of calcium, magnesium, sodium, potassium, copper and zinc with atomic absorption spectroscopy and flame photometry methods. Dipietro ES, et al. **Sci Total Environ** 1988 Aug 1;74:249–62

Normotension with decreased plasma renin activity and low serum ionic calcium levels: a prehypertensive state? Garcia Zozaya JL, et al. **South Med J** 1989 Jun;82(6):686–91

Effects of elevated plasma magnesium versus calcium on cerebral ischemic injury in rats. Blair JL, et al. **Stroke** 1989 Apr;20(4):507–12

The effect of induced hypomagnesaemia and hypermagnesaemia on the erythrocyte magnesium concentration in cattle. Mulei CM, et al. **Vet Res Commun** 1988;12(4–5):289–93

The effect of age on erythrocyte magnesium concentrations of dairy cows during late pregnancy and early lactation. Mulei CM, et al. **Vet Res Commun** 1988;12(6):457–61

Digoxin, magnesium, and potassium levels in a forensic autopsy material of sudden death from ischemic heart disease. Ottoson A, et al. **Z Rechtsmed** 1988;101(1):27–36

The association of plasma magnesium concentration and thyroid gland activity in young calves. Mulei CM, et al. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):516–21

[A study of magnesium in the plasma, red blood cells and urine in patients with acute myocardial infarction] Yang LX, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct;16(5):286–8, 318 (Eng. Abstr.) (Chi)

[Hypokalemia, hypomagnesemia and ventricular arrhythmia during diuretic treatment of arterial hypertension] Hannedouche T, et al. **Arch Mal Coeur** 1988 Jun; 81(6):819–24 (30 ref.) (Eng. Abstr.) (Fre)

[Aluminum and magnesium burden of dialysis patients using antacids. A comparative study] Eichhorn M. **Fortschr Med** 1989 Aug 10;107(23):502–6 (Eng. Abstr.) (Ger)

[Serum magnesium and heart arrhythmias in patients with pelvic-leg arteriosclerosis] Voigt H, et al. **Z Gesamte Inn Med** 1988 Jul 1;43(13):363–4 (Eng. Abstr.) (Ger)

[Variations in serum calcium and magnesium levels in hyperthyroid and euthyroid patients undergoing total thyroidectomy: preliminary observations] Mancini A, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):183–5 (Eng. Abstr.) (Ita)

[Magnesium, parathyroid hormone and osteocalcin in the sera of hospitalized patients with chronic alcoholism] Torizumi K, et al. **Radioisotopes** 1988 Jul;37(7):406–9 (Eng. Abstr.) (Jpn)

[Relationship between activity of erythrocyte pyrimidine 5'-nucleotidase (P5N) and concentration of magnesium or zinc in blood in workers exposed to lead] Ichiba M, et al. **Sangyo Igaku** 1988 Sep;30(5):408–9 (Jpn)

[Plasma magnesium (Mg) level during the menstrual cycle] Paprotny P, et al. **Ginekol Pol** 1988 Aug;59(8):487–92 (Eng. Abstr.) (Pol)

[Zinc, copper and magnesium in patients with rheumatoid arthritis and so-called seronegative arthritis] Tlustochowicz W, et al. **Pol Tyg Lek** 1988 May 16; 43(20):635–7 (Pol)

[Behavior of lymphocyte magnesium in heart diseases. Report of 3 cases] Faintuch JJ, et al. **Arq Bras Cardiol** 1988 Feb; 50(2):125–7 (Eng. Abstr.) (Por)

[Magnesium levels in the blood of patients during surgery using cardiopulmonary bypass] Smimeliovich IL, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):3–6 (Eng. Abstr.) (Rus)

[Normal serum concentrations of magnesium and calcium in mothers and their newborn infants] Gleisner A, et al. **Rev Chil Pediatr** 1987 Sep–Oct;58(5):365–8 (Eng. Abstr.) (Spa)

[Metabolic studies in 2 cases of chondrocalcinosis with hypomagnesemia] Zarco P, et al. **Rev Clin Esp** 1989 Jun; 185(2):77–81 (33 ref.) (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

[Changes in Mg++ concentration of CSF after subarachnoid hemorrhage and Mg++—effects on the contractions of bovine cerebral artery] Miura K. **No Shinkei Geka** 1988 Oct;16(11):1251–9 (Eng. Abstr.) (Jpn)

DIAGNOSTIC USE

Validity of the parenteral magnesium load test for mature mammals. Caddell JL, et al. **Magnesium** 1989;8(2):65–70

[Comparative study of magnesium culture media] Guma VI, et al. **Gig Sanit** 1988 Aug;(8):68–9 (Rus)

METABOLISM

In vitro reversal of insulin resistance in diabetic skeletal muscle is independent of extracellular Ca2+ and Mg2+. Wallberg-Henriksson H, et al. **Acta Physiol Scand** 1988 May;133(1):125–6

Metabolism of magnesium and zinc in skeletal system. Steidl L, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:151–7 (21 ref.)

Disorders of metabolism of magnesium and its clinical and laboratory features. Steidl L, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:215–22

Magnesium after renal transplantation—comparison between cyclosporine A and conventional immunosuppression. Kaiser W, et al. **Adv Exp Med Biol** 1989;252:297–302

Calcium and magnesium movements through sarcoplasmic reticulum, endoplasmic reticulum, and mitochondria. Somlyo AV, et al. **Adv Exp Med Biol** 1988;232:221–9 (52 ref.)

Importance of magnesium in congestive heart failure. Gottlieb SS. **Am J Cardiol** 1989 Apr 18;63(14):39G–42G (36 ref.)

Magnesium—coming of age. Lauler DP. **Am J Cardiol** 1989 Apr 18;63(14):1g–3g

Physiology of magnesium metabolism and the important role of magnesium in potassium deficiency. Rude RK. **Am J Cardiol** 1989 Apr 18;63(14):31G–34G (18 ref.)

Cardiovascular consequences of magnesium deficiency and loss: pathogenesis, prevalence and manifestations—magnesium and chloride loss in refractory potassium repletion. Seelig M. **Am J Cardiol** 1989 Apr 18; 63(14):4G–21G (237 ref.)

Importance of magnesium chloride repletion after myocardial infarction. Sheehan J. **Am J Cardiol** 1989 Apr 18; 63(14):35G–38G (22 ref.)

Calcium, magnesium, and phosphorus metabolism in dogs given intravenous triacetin. Bailey JW, et al. **Am J Clin Nutr** 1989 Feb;49(2):385–8

Zinc, calcium, and magnesium metabolism: effects on plasmacytomas in Balb/c mice. Song MK, et al. **Am J Clin Nutr** 1989 Apr;49(4):701–7

Calcium oxalate in sarcoid granulomas. With particular reference to the small ovoid body and a note on the finding of dolomite. Reid JD, et al. **Am J Clin Pathol** 1988 Nov; 90(5):545–58

Control of magnesium transport in the thick ascending limb. Quamme GA. **Am J Physiol** 1989 Feb;256(2 Pt 2):F197–210 (73 ref.)

Cytosolic free magnesium concentration in cultured chick heart cells. Rotevatn S, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C141–6

Effect of varying levels of magnesium during gestation and lactation on humoral immune response and tissue minerals in rats. Kubena KS, et al. **Ann Nutr Metab** 1989;33(1):7–14

Magnesium in health and disease. Shils ME. **Annu Rev Nutr** 1988;8:429–60 (203 ref.)

Influence of the guanine nucleotide phosphorylation state and of Mg2+ ions on the interaction of vinzolidine/tubulin 6 S: a fluorescence quenching study. Codaccioni F, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):236–44

Magnesium metabolism. A review with special reference to the relationship between intracellular content and serum levels. Reinhart RA. **Arch Intern Med** 1988 Nov; 148(11):2415–20 (60 ref.)

Transfer-RNA, magnesium and the formation of ternary complexes by eukaryotic initiation factor eIF-2. Manchester KL. **Biochem Int** 1989 Jun;18(6):1279–85

Essential role of magnesium in oxytocin-receptor affinity and ligand specificity. Antoni FA, et al. **Biochem J** 1989 Jan 15;257(2):611–4

The effects of Triton X-100 and chlorpromazine on the Mg2+-dependent and Mg2+-independent phosphatidate phosphohydrolase activities of rat lung. Walton PA, et al. **Biochem J** 1989 Jul 15;261(2):673–8

Local anesthetic-divalent cation binding center interaction. Gutiérrez-Merino C, et al. **Biochem Pharmacol** 1989 May 1;38(9):1407–14

The dimer of the beta subunit of Escherichia coli DNA polymerase III holoenzyme is dissociated into monomers upon binding magnesium(II). Griep MA, et al. **Biochemistry** 1988 Jul 12;27(14):5210–5

Stereochemical control over Mn(II)-thio versus Mn(II)-oxy coordination in adenosine 5'-O-(1-thiodiphosphate) complexes at the active site of creatine kinase. Smithers GW, et al. **Biochemistry** 1989 Feb 21;28(4):1597–604

Calmodulin and troponin C structures studied by Fourier transform infrared spectroscopy: effects of Ca2+ and Mg2+ binding. Trewhella J, et al. **Biochemistry** 1989 Feb 7;28(3):1294–301

An ATP-dependent Na+/Mg2+ countertransport is the only mechanism for Mg extrusion in squid axons. DiPolo R, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):424–8

Mitochondrial transport of K+ and Mg2+. Diwan JJ. **Biochim Biophys Acta** 1987;895(3):155–65 (134 ref.)

The pnd gene in E. coli plasmid R16: nucleotide sequence and gene expression leading to cell Mg2+ release and stable RNA degradation. Sakikawa T, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):158–66

Mg2+-paracrystal formation of tropomyosin as a condensation phenomenon. Effects of pH, salt, temperature, and troponin binding. Ishii Y, et al. **Biophys J** 1989 Jul;56(1):107–14

Effects of pH and anion substitution on magnesium accumulation in rabbit aortic smooth muscle. Shetty SS, et al. **Blood Vessels** 1989;26(2):65–76

The changes in plasma diffusible levels and renal tubular handling of magnesium during pregnancy: a longitudinal study. Colussi G, et al. **Bone Miner** 1987 Jul;2(4):311–9

The effect of ruminal phosphate concentration on the absorption of calcium, phosphorus and magnesium from the reticulo-rumen of the sheep. Beardsworth LJ, et al. **Br J Nutr** 1989 May;61(3):715–23

Effect of change of diet on the mineral composition of rumen fluid, on magnesium metabolism and on water balance in sheep. Johnson CL, et al. **Br J Nutr** 1989 May;61(3):583–94

Treatment with the thyrotropin-releasing hormone analog CG3703 restores magnesium homeostasis following traumatic brain injury in rats. Vink R, et al. **Brain Res** 1988 Sep 13;460(1):184–8

Traumatic spinal cord injury in rabbits decreases intracellular free magnesium concentration as measured by 31P MRS. Vink R, et al. **Brain Res** 1989 Jun 19;490(1):144–7

Metabolic effects of glucagon on plasma and urine zinc, copper, calcium and magnesium levels. Brandão-Neto J, et al. **Braz J Med Biol Res** 1988;21(1):49–52

Acute effects of human growth hormone on zinc, copper, calcium and magnesium metabolism in normal subjects. Brandão-Neto J, et al. **Braz J Med Biol Res** 1988;21(1):43–7

Magnesium and manganese regulation during moult-cycle in Porcellio spinicornis Say (Porcellionidae, Isopoda). Alikhan MA. **Bull Environ Contam Toxicol** 1989 May; 42(5):699–706

Effect of forced fasting on magnesium and manganese regulation in a terrestrial isopod, Porcellio spinicornis Say (Porcellionidae, Isopoda, Crustacea). Bercovitz K, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):151–8

Magnesium and the anaesthetist. Gambling DR, et al. **Can J Anaesth** 1988 Nov;35(6):644–54 (68 ref.)

Interaction of D-glucose with alkaline-earth metal ions. Synthesis, spectroscopic, and structural characterization of Mg(II)- and Ca(II)-D-glucose adducts and the effect of metal-ion binding on anomeric configuration of the sugar. Tajmir-Riahi HA. **Carbohydr Res** 1988 Nov 15; 183(1):35–46

Fluctuation in the intracellular concentration of Na+ and Cl- but not of K+ or Mg2+ at mitosis of the first cell cycle in fertilized sea urchin eggs. Cameron IL, et al. **Cell Biol Int Rep** 1988 Nov;12(11):951–8

Magnesium content of serum, circulating mononuclear cells, skeletal muscle, and myocardium in congestive heart failure. Ralston MA, et al. **Circulation** 1989 Sep; 80(3):573–80

Perch muscle parvalbumin: general characterization and magnesium-binding properties. Lehky P, et al. **Comp Biochem Physiol [B]** 1979;63(2):253–9

Intracellular storage of sodium and magnesium in Drosophila Malpighian tubules. X-ray microanalysis of native cryosections. Wessing A, et al. **Eur J Cell Biol** 1988 Oct;

47(1):1–6
Renal handling of magnesium in transplanted children under cyclosporin A treatment. Krull F, et al. **Eur J Pediatr** 1988 Nov;148(2):148–51
Conformational changes occurring in N-ras p21 in response to binding of guanine nucleotide and metal ions probed by proteolysis performed under controlled conditions. Grand RJ, et al. **FEBS Lett** 1989 Aug 14;253(1–2):281–6
Alpha 1-adrenergic stimulation causes Mg2+ release from perfused rat liver. Jakob A, et al. **FEBS Lett** 1989 Mar 27;246(1–2):127–30
Hysteretic interaction of NADH and Mg2+ with mammalian NADH:CoQ reductase from beef heart. Tushurashvili PR, et al. **FEBS Lett** 1989 Feb 27;244(2):268–70
Effect of calcium, magnesium and sodium ions on in vitro nucleation of human gall bladder bile. Neithercut WD. **Gut** 1989 May;30(5):665–70
Low brain magnesium in migraine. Ramadan NM, et al. **Headache** 1989 Jul;29(7):416–9
Site and extent of apparent magnesium and calcium absorption in steers fed monensin. Greene LW, et al. **J Anim Sci** 1988 Nov;66(11):2987–91
Magnesium transport in Salmonella typhimurium: genetic characterization and cloning of three magnesium transport loci. Hmiel SP, et al. **J Bacteriol** 1989 Sep;171(9):4742–51
Magnesium transport in Salmonella typhimurium: expression of cloned genes for three distinct Mg2+ transport systems. Snavely MD, et al. **J Bacteriol** 1989 Sep;171(9):4752–60
Magnesium transport in Salmonella typhimurium: 28Mg2+ transport by the CorA, MgtA, and MgtB systems. Snavely MD, et al. **J Bacteriol** 1989 Sep;171(9):4761–6
Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the hepatic distribution of iron, copper, zinc, and magnesium in rats. Wahba ZZ, et al. **J Biochem Toxicol** 1988 Summer;3:121–9
Cytosolic free magnesium levels in ischemic rat heart. Murphy E, et al. **J Biol Chem** 1989 Apr 5;264(10):5622–7
Nonenzymatic phosphorylation of tyrosine and serine by ATP is catalyzed by manganese but not magnesium. Schieven G, et al. **J Biol Chem** 1988 Oct 25;263(30):15590–3
Simultaneous monitoring of changes in magnesium and calcium concentrations in frog cut twitch fibers containing antipyrylazo III. Irving M, et al. **J Gen Physiol** 1989 Apr; 93(4):585–608
Intracellular free magnesium in hypertension: relation to peripheral insulin resistance. Resnick LM, et al. **J Hypertens Suppl** 1988 Dec;6(4):S199–201
Effects of cyclosporine on magnesium metabolism in rats. Barton CH, et al. **J Lab Clin Med** 1989 Sep;114(3):232–6
Cyclosporine and magnesium metabolism [editorial] Rahman MA, et al. **J Lab Clin Med** 1989 Sep;114(3):213–4 (13 ref.)
Different sensitivity of ATP + Mg + Na (I) and Pi + Mg (II) dependent types of ouabain binding to phospholipase A2. Svoboda P, et al. **J Membr Biol** 1988 Sep;104(3):211–21
Changes in intracellular free magnesium during hypoglycaemia and hypoxia in cerebral tissue as calculated from 31P-nuclear magnetic resonance spectra. Brooks KJ, et al. **J Neurochem** 1989 Aug;53(2):331–4
Traumatic brain injury in the rat: effects on lipid metabolism, tissue magnesium, and water content. Demediuk P, et al. **J Neurotrauma** 1988;5(2):105–19
Changes in cellular bioenergetic state following graded traumatic brain injury in rats: determination by phosphorus 31 magnetic resonance spectroscopy. Vink R, et al. **J Neurotrauma** 1988;5(4):315–30
Effect of protein intake on mineral (calcium, magnesium, and phosphorus) balance in Japanese males. Kitano T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug;34(4):387–98
[3H]MK801 binding to the N-methyl-D-aspartate receptor reveals drug interactions with the zinc and magnesium binding sites. Reynolds IJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1025–31
The cell wall structure of a magnesium-dependent halobacterium, Halobacterium volcanii CD-2, from the Dead Sea. Kessel M, et al. **J Ultrastruct Mol Struct Res** 1988 Jul;100(1):94–106
Effect of sulfate on calcium and magnesium homeostasis following urinary diversion. McDougal WS, et al. **Kidney Int** 1989 Jan;35(1):105–15
Vanadate sensitivity of Na+, K+-ATPase from Schistosoma mansoni and its modulation by Na+, K+ and Mg2+. Noel F, et al. **Life Sci** 1989;44(22):1677–83
Problems in the assessment of magnesium depletion in the rat by in vivo 31P NMR. Adam WR, et al. **Magn Reson Med** 1988 Jul;7(3):300–10
Dietary intake levels and food sources of magnesium and calcium for selected segments of the US population. Morgan KJ, et al. **Magnesium** 1988;7(5–6):225–33
Preliminary report of decreased serum magnesium in postmenopausal osteoporosis. Reginster JY, et al. **Magnesium** 1989;8(2):106–9
Oral administration of magnesium hydroxide to subjects with insulin-dependent diabetes mellitus: effects on magnesium and potassium levels and on insulin requirements. Sjögren A, et al. **Magnesium** 1988;7(3):117–22
Studies of magnesium metabolism in man. Original data and a review. Spencer H, et al. **Magnesium** 1988;7(5–6):271–80 (58 ref.)
Availability of body magnesium during magnesium deficiency. Wallach S. **Magnesium** 1988;7(5–6):262–70 (43 ref.)
Magnesium transport in eukaryotic and prokaryotic cells using magnesium-28 ion. Grubbs RD, et al. **Methods Enzymol** 1989;173:546–63
Identification and partial characterization of a latent ATP, Mg-dependent protein phosphatase in rabbit skeletal muscle cytosol. Vandenheede JR, et al. **Mol Cell Biochem** 1989 May 4;87(1):31–9
Serum CK, calcium, magnesium, and oxidative phosphorylation in mdx mouse muscular dystrophy. Glesby MJ, et al. **Muscle Nerve** 1988 Aug;11(8):852–6
Demonstration of a Na+: Mg2+ exchange in human red cells by its sensitivity to tricyclic antidepressant drugs. Féray JC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep;338(3):332–7
Primary hypomagnesemia with a probable double magnesium transport defect. Matzkin H, et al. **Nephron** 1989;52(1):83–6
Effects of substrate structure on the kinetics of circle opening reactions of the self-splicing intervening sequence from Tetrahymena thermophila: evidence for substrate and Mg2+ binding interactions. Sugimoto N, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):355–71
Role of dietary magnesium and/or manganese variables on Ehrlich ascites tumor-bearing mice. Fahim FA, et al. **Nutr Cancer** 1989;12(3):279–86
Magnesium deficiency and ischemic heart disease. **Nutr Rev** 1988 Sep;46(9):311–2 (18 ref.)
Ca2+ transient, Mg2+, and pH measurements in the cardiac cycle by 19F NMR. Kirschenlohr HL, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9017–21
Activation of a Ca2+-Mg2+-dependent endonuclease as an early event in castration-induced prostatic cell death. Kyprianou N, et al. **Prostate** 1988;13(2):103–17
The effect of an intravenous infusion of aldosterone upon magnesium metabolism in the sheep. Charlton JA, et al. **Q J Exp Physiol** 1989 May;74(3):329–37
Effect of magnesium infusion on calcium handling in the rat kidney. Shafik I, et al. **Q J Exp Physiol** 1989 Jan; 74(1):19–26
Magnesium and the pathogenesis of toxic shock syndrome. Kass EH. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S167–73; discussion S173–5
Calcium and magnesium movements in cells and the role of inositol trisphosphate in muscle. Somlyo AP, et al. **Soc Gen Physiol Ser** 1987;42:77–92 (62 ref.)
Intracellular Mg2+ may act as a co-factor in ion channel function [news] Stanfield PR. **Trends Neurosci** 1988 Nov; 11(11):475–7 (23 ref.)
Calcium, phosphorus, and magnesium homeostasis in ruminants. Reinhardt TA, et al. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):331–50 (78 ref.)
Effect of magnesium content of the diet on the susceptibility of ewes to hypocalcaemia in pregnancy. Pickard DW, et al. **Vet Rec** 1988 Oct 15;123(16):422
[The effect of oral calcium loading on the serum magnesium concentration and its urinary excretion in patients with recurrent calcium nephrolithiasis and hypercalciuria—differential diagnostic potentials] Ivanov I, et al. **Vutr Boles** 1989;28(1):65–70 (Eng. Abstr.) **(Bul)**
[The significance of magnesium in orthopedics. V. Magnesium in osteoporosis] Ditmar R, et al. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):143–59 (Eng. Abstr.) **(Cze)**
[Changes in blood levels and urinary excretion of magnesium in diseases of the thyroid gland] Zamrazil V, et al. **Vnitr Lek** 1988 Oct;34(10):989–93 (Eng. Abstr.) **(Cze)**
[Methods for evaluation magnesium status of the organism] Frost L, et al. **Ugeskr Laeger** 1988 Sep 12;150(37):2160–3 (Eng. Abstr.) **(Dan)**
[The factors affecting transperitoneal flux of magnesium and other divalent ions in patients undergoing continuous ambulatory peritoneal dialysis] Shigematsu T, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1365–73 (Eng. Abstr.) **(Jpn)**
[Magnesium metabolism] Yoshida M. **Nippon Rinsho** 1987 Aug;Suppl:1335–44 (63 ref.) **(Jpn)**
[Evaluation of exposure of forest animals to industrial emissions based on changes in mineral composition of the masticatory system of deer from the regions of Western Pomerania] Dąbkowska E. **Ann Acad Med Stetin** 1988; 34:37–47 (Eng. Abstr.) **(Pol)**
[Parathyroid diseases and disorders of calcium-phosphorus-magnesium metabolism in pregnancy] Sawicki A. **Ginekol Pol** 1988 Sep;59(9):562–6 (20 ref.) (Eng. Abstr.) **(Pol)**
[Calcium-phosphorus-magnesium homeostasis in pregnancy] Sawicki A. **Ginekol Pol** 1988 Sep;59(9):557–61 (20 ref.) (Eng. Abstr.) **(Pol)**
[Status of mineral nutrition in children with phenylketonuria treated by low phenylalanine diet. III. Magnesium] Cabalska B, et al. **Pediatr Pol** 1988 Jun;63(6):337–42 (Eng. Abstr.) **(Pol)**
[Magnesium metabolism in the familial form of osteogenesis imperfecta] Milewicz A, et al. **Pol Tyg Lek** 1988 Nov 14; 43(46):1479–81 (Eng. Abstr.) **(Pol)**
[Magnesium and digestive system pathology] Russu G. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):441–8 (23 ref.) **(Rum)**
[Kinetics of dissociation of alpha-lactalbumin complexes with Ca2+ and Mg2+ ions] Permiakov EA, et al. **Biofizika** 1988 May–Jun;33(3):413–6 (Eng. Abstr.) **(Rus)**
[Mg2+ release from heart mitochondria in ischemia: is it the defense mechanism or damage?] Lemeshko VV, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):64–71 (Eng. Abstr.) **(Rus)**
[Serum levels and renal excretion of magnesium in patients with cardiovascular diseases during oral supplementation with magnesium] Revúsová V, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):909–11 (Eng. Abstr.) **(Slo)**

PHARMACOKINETICS

Cellular-mediated and diffusive magnesium transport across the descending colon of the rat. Karbach U. **Gastroenterology** 1989 May;96(5 Pt 1):1282–9
Elevated calcium, phosphorus, and magnesium retention in pregnant rats prior to the onset of fetal skeletal mineralization. Brommage R, et al. **J Bone Miner Res** 1988 Dec;3(6):667–72
Effect of reactivity rate and particle size of magnesium oxide on magnesium availability, acid-base balance, mineral metabolism, and milking performance of dairy cows. Xin Z, et al. **J Dairy Sci** 1989 Feb;72(2):462–70
Effect of dilution rate and Mg2+ limitation on toxic shock syndrome toxin-1 production by Staphylococcus aureus grown in defined continuous culture. Taylor D, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):719–23
Nutritional availability of magnesium and calcium in magnesium-supplemented diets. Aranda P, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):81–90
Absorption of calcium and magnesium from fortified human milk by very low birth weight infants. Liu YM, et al. **Pediatr Res** 1989 May;25(5):496–502

PHARMACOLOGY

Depressant effect of magnesium on early afterdepolarizations and triggered activity induced by cesium, quinidine, and 4-aminopyridine in canine cardiac Purkinje fibers. Kaseda S, et al. **Am Heart J** 1989 Sep;118(3):458–66
Magnesium and reperfusion of ischemic rat heart as assessed by 31P-NMR. Borchgrevink PC, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H195–204
Ca2+-stimulated ATPase activities in the gill of the eel: interactions of Mg2+ ions. Naon R, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R313–22
Role of magnesium in activation of smooth muscle. Paul RJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C465–72
The effect of magnesium on glucose utilization in ascites tumor cells. Bossi D, et al. **Ann N Y Acad Sci** 1988; 551:261–3
Magnesium salts exert direct vasodilator effects on rat cremaster muscle microcirculation. Nagai I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:194–214
Comparative vasodilator effects of magnesium salts on rat mesenteric arterioles and venules. Nishio A, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:139–63
The effect of magnesium and manganese uptake and accumulation on oxygen consumption and ammonia excretion in Porcellio spinicornis Say (Porcellionidae, Isopoda). Alikhan MA, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):147–54
Effects of nucleotides and divalent cations on phospholipase activity in Saccharomyces cerevisiae. Witt W, et al. **Arch Microbiol** 1989;151(2):154–8
Cytoprotective and antiulcer activities of the antacid magaldrate in the rat. Borella LE, et al. **Arzneimittelforschung** 1989 Jul;39(7):786–9
Fast disassembly of microtubules induced by Mg2+ or Ca2+. Gal V, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1464–70
Magnesium-dependent non-specific binding of [125I]prolactin to myelinated tracts in the rat central nervous system. Mangurian LP, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):986–90
Inhibition of protein kinase C phosphorylation by mono- and divalent cations. Trudell JR, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):45–50
Insulin induces activation of kinase FA in membranes and thereby promotes activation of ATP.Mg-dependent phosphatase in adipocytes. Yang SD, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):762–8
The concentration of uncoupling protein correlates with Mg2+ activated mitochondrial binding of GDP. Henningfield MF, et al. **Biochem Cell Biol** 1989 Feb–Mar; 67(2–3):108–12
Roles for Ca2+, Mg2+ and NaCl in modulating the self-association reaction of hyalin, a major protein component of the sea-urchin extraembryonic hyaline layer. Robinson JJ. **Biochem J** 1988 Nov 15;256(1):225–8
Assembly of pure tubulin in the absence of free GTP: effect of magnesium, glycerol, ATP, and the nonhydrolyzable GTP analogues. O'Brien ET, et al. **Biochemistry** 1989 Feb 7;28(3):1413–22
Comparison of rate constants for (PO3-) transfer by the Mg(II), Cd(II), and Li(I) forms of phosphoglucomutase. Ray WJ Jr, et al. **Biochemistry** 1989 Jan 24;28(2):559–69
Kinetics for reaction of a circularized intervening sequence with CU, UCU, CUCU, and CUCUCU: mechanistic implications from the dependence on temperature and on oligomer and Mg2+ concentrations. Sugimoto N, et al. **Biochemistry** 1988 Aug 23;27(17):6384–92
The role of carboxyl groups of Na+/K+-ATPase in the interaction with divalent cations. Amler E, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):367–70
Infrared and 31P-NMR studies of the interaction of Mg2+ with phosphatidylserines: effect of hydrocarbon chain

unsaturation. Casal HL, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):228–36

A hydrophobic region on myosin light chains modulated by divalent cations. Hardwicke PM, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):352–8

Purification and properties of a magnesium-dependent endodeoxyribonuclease endogenous to rat-liver nuclei. Hibino Y, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):313–20

Ca2+- and Mg2+-dependent association of phosphorylase kinase with human erythrocyte membranes. Kyriakidis SM, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):347–52

Further study on the role of Mg2+ in lipid–protein interaction in reconstituted porcine heart mitochondrial H+-ATPase. Zhang XF, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):53–62

Effects of spermine and magnesium ions on the aminoacylation of yeast tRNA(Tyr). Plohl M, et al. **Biochimie** 1988 May;70(5):637–44

Effects of external calcium, magnesium, and temperature on spontaneous contractions of pregnant human myometrium. Kawarabayashi T, et al. **Biol Reprod** 1989 May;40(5):942–8

Effect of Mg2+ concentration on Ca2+ uptake kinetics and structure of the sarcoplasmic reticulum membrane. Asturias FJ, et al. **Biophys J** 1989 Apr;55(4):739–53

Effects of cobalt, magnesium, and cadmium on contraction of rat soleus muscle. Dulhunty AF, et al. **Biophys J** 1989 Jul;56(1):1–14

Calcium, magnesium and the control of PTH secretion. Brown EM, et al. **Bone Miner** 1989 Mar;5(3):249–57 (32 ref.)

Effects of magnesium, ouabain and bumetanide on 86rubidium uptake in a human atrial cell line. Borchgrevink PC, et al. **Br J Pharmacol** 1988 Oct;95(2):614–8

Augmentation by external Mg ions of beta-adrenoceptor-mediated actions in the longitudinal muscle of rat uterus. Maruta K, et al. **Br J Pharmacol** 1989 Mar;96(3):707–17

Effect of changing extracellular levels of magnesium on spontaneous activity and glutamate release in the mouse neocortical slice. Smith DA, et al. **Br J Pharmacol** 1989 Jun;97(2):475–82

Differential sensitivity of dorsal and ventral root activity to magnesium and 2-amino-5-phosphonovalerate (APV) in an isolated mammalian spinal cord preparation. Bagust J, et al. **Brain Res** 1989 Feb 6;479(1):138–44

Interactions of adenosine and magnesium on rat hippocampal slices. Bartrup JT, et al. **Brain Res** 1988 Nov 1;463(2):374–9

Inhibitory effect of magnesium hydroxide on methylazoxymethanol acetate-induced large bowel carcinogenesis in male F344 rats. Tanaka T, et al. **Carcinogenesis** 1989 Mar;10(3):613–6

Quinidine-induced action potential prolongation, early afterdepolarizations, and triggered activity in canine Purkinje fibers. Effects of stimulation rate, potassium, and magnesium. Davidenko JM, et al. **Circulation** 1989 Mar; 79(3):674–86

Effects of magnesium on the tone of isolated human coronary arteries. Comparison with diltiazem and nitroglycerin. Kimura T, et al. **Circulation** 1989 May;79(5):1118–24

Myocardial contractility and performance capacity after magnesium infusions in young healthy persons: a double-blind, placebo-controlled, cross-over study. Rasmussen HS, et al. **Clin Cardiol** 1988 Aug;11(8):541–5

Thrombin-stimulated calcium uptake is altered in platelets from spontaneously hypertensive rats. Effect of external magnesium. Dard B, et al. **Clin Exp Hypertens [A]** 1989; 11(2):295–315

Decreased cytosolic free calcium concentration in lymphocytes of magnesium-supplemented DOCA-salt hypertensive rats. Suzuki H, et al. **Clin Exp Hypertens [A]** 1989;11(3):487–500

The effects of magnesium on state 3 respiration of liver mitochondria from control and cold-acclimated rats and hamsters. Rochelle RH, et al. **Comp Biochem Physiol [B]** 1978;60(3):267–9

Improved insulin response and action by chronic magnesium administration in aged NIDDM subjects. Paolisso G, et al. **Diabetes Care** 1989 Apr;12(4):265–9

Magnesium administration reduces platelet hyperaggregability in NIDDM [letter] Paolisso G, et al. **Diabetes Care** 1989 Feb;12(2):167–8

Divalent cations suppress 3',5'-adenosine monophosphate accumulation by stimulating a pertussis toxin-sensitive guanine nucleotide-binding protein in cultured bovine parathyroid cells. Chen CJ, et al. **Endocrinology** 1989 Jan; 124(1):233–9

The effects of high extracellular Ca2+ and Mg2+ concentrations on the levels of inositol 1,3,4,5-tetrakisphosphate in bovine parathyroid cells. Hawkins D, et al. **Endocrinology** 1989 Feb;124(2):838–44

Effect of extracellular Ca2+ and Mg2+ on enzyme release from quiescent fibroblasts during various exposures. Kristensen SR, et al. **Enzyme** 1989;41(4):209–16

Effect of sport-drink with and without fluoride and magnesium supplements on rat performance. Sorvari R, et al. **Eur J Appl Physiol** 1989;58(7):738–43

The effect of myosin light chain phosphorylation and Mg2+ on the conformation of myosin in thick filaments of glycerinated fibers of rabbit skeletal muscle. Borovikov YS, et al. **Eur J Biochem** 1989 Jul 15;183(1):83–8

Dual Mg2+ control of formyl-peptide-receptor--G-protein interaction in HL 60 cells. Evidence that the low-agonist-affinity receptor interacts with and activates the G-protein. Gierschik P, et al. **Eur J Biochem** 1989 Jul 15;183(1):97–105

Spectral and kinetic studies of phosphate and magnesium ion binding to yeast inorganic pyrophosphatase. Smirnova IN, et al. **Eur J Biochem** 1989 Jun 15;182(2):451–6

Effect of magnesium hydroxide on the absorption of tolfenamic and mefenamic acids. Neuvonen PJ, et al. **Eur J Clin Pharmacol** 1988;35(5):495–501

Activation of cardiac G-proteins by muscarinic acetylcholine receptors: regulation by Mg2+ and Na+ ions. Hilf G, et al. **Eur J Pharmacol** 1989 May 11;172(2):155–63

Equilibrium analysis of [3H]TCP binding: effects of glycine, magnesium and N-methyl-D-aspartate agonists. Johnson KM, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):141–6

Effects of buffer magnesium on positive inotropic agents in guinea pig cardiac muscle. Kafiluddi R, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):181–9

Release of [3H]norepinephrine from rat hippocampal slices by N-methyl-D-aspartate: comparison of the inhibitory effects of Mg2+ and MK-801. Schmidt CJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):111–20

Differences in magnesium and calcium effects on N-methyl-D-aspartate- and quisqualate-induced decreases in extracellular sodium concentration in rat hippocampal slices. Köhr G, et al. **Exp Brain Res** 1988;71(2):425–30

S-100a0 protein stimulates the basal (Mg2+-activated) adenylate cyclase activity associated with skeletal muscle membranes. Fanò G, et al. **FEBS Lett** 1989 May 8; 248(1–2):9–12

The cytosolic G-protein alpha-subunit in human neutrophils responds to treatment with guanine nucleotides and magnesium. Rudolph U, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):137–42

45Ca2+ uptake and peptide hormones secretion in the presence of excess Mg2+ content. Gyévai A, et al. **Folia Histochem Cytobiol** 1988;26(2):61–70

Activated aluminum complex derived from solubilized antacids exhibits enhanced cytoprotective activity in the rat. DiJoseph JF, et al. **Gastroenterology** 1989 Mar; 96(3):730–5

Effect of activation by Mg2+ on the conformation of ribulose-1,5-bisphosphate carboxylase/oxygenase: a fluorescence study. Bhagwat AS, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):244–8

Protein phosphorylation in monkey brain basal ganglia: Ca2+/Mg2+-independent phosphorylation of a 45 kilodalton protein. Ramamoorthy S, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):321–6

Physiological effects of feeding high levels of magnesium to sheep. Chester-Jones H, et al. **J Anim Sci** 1989 Apr; 67(4):1070–81

Regulatory properties of magnesium-dependent guanylate cyclase in Dictyostelium discoideum membranes. Janssens PM, et al. **J Biol Chem** 1989 Mar 15;264(8):4329–35

A synaptosomal protein kinase is regulated by phosphatidylinositol 4-phosphate and Mg2+. Sahyoun NE, et al. **J Biol Chem** 1989 Jan 15;264(2):1062–7

The effect of potassium phosphate, magnesium chloride and T6 as blocking reagents on tissue valve calcification. Neethling WM, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):317–21

The membrane glycoprotein Ia-IIa (VLA-2) complex mediates the Mg++-dependent adhesion of platelets to collagen. Staatz WD, et al. **J Cell Biol** 1989 May; 108(5):1917–24

Localization and cation dependence of a Ca2+- or Mg2+-ATPase from electrocytes of Electrophorus electricus, L. Taffarel M, et al. **J Histochem Cytochem** 1989 Jul;37(7):953–9

Oral bioavailability of nizatidine and ranitidine concurrently administered with antacid. Desager JP, et al. **J Int Med Res** 1989 Jan-Feb;17(1):62–7

Ion permeation and rectification in ATP-sensitive channels from insulin-secreting cells (RINm5F): effects of K+, Na+ and Mg2+. Ciani S, et al. **J Membr Biol** 1988 Jul; 103(2):171–80

The effect of adenosine triphosphate on the functional status of the ductus arteriosus. Paidas CN, et al. **J Pediatr Surg** 1989 Jul;24(7):649–53

The effects of calcium and magnesium in hyperkalemic cardioplegic solutions on myocardial preservation. Geffin GA, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):239–50

Intracellular magnesium deficiency and effect of oral magnesium on blood pressure and red cell sodium transport in diuretic-treated hypertensive patients. Hattori K, et al. **Jpn Circ J** 1988 Nov;52(11):1249–56

Ruthenium red and magnesium ion partially inhibit silver ion-induced release of calcium from sarcoplasmic reticulum of frog skeletal muscles. Oba T, et al. **Jpn J Physiol** 1989;39(2):241–54

Magnesium and plasma renin concentration. Dechaux M, et al. **Kidney Int Suppl** 1988 Sep;25:S12–3

Magnesium ion: a possible physiological regulator of aldosterone production. Atarashi K, et al. **Life Sci** 1989; 44(20):1483–9

Magnesium potentiation of iron-transferrin binding. Parent ME, et al. **Life Sci** 1989;44(15):1007–12

Effects of magnesium on calcium phosphate formation. Cheng PT, et al. **Magnesium** 1988;7(3):123–32

Suppression of catecholamine-induced abnormal pacemaker activities by magnesium ion in guinea pig cardiac muscle cells. Hasegawa J, et al. **Magnesium** 1989;8(2):94–9

Magnesium counteracts nickel-induced suppression of T lymphocyte response to concanavalin A. Kasprzak KS, et al. **Magnesium** 1988;7(3):166–72

Dietary magnesium, manganese and boron affect the response of rats to high dietary aluminum. Nielsen FH, et al. **Magnesium** 1988;7(3):133–47

Mg2+/NH4+/polyamine system for polyuridine-dependent polyphenylalanine synthesis with near in vivo characteristics. Bartetzko A, et al. **Methods Enzymol** 1988; 164:650–8

Calcium-agonistic action of Mn2+ in the parathyroid cell. Johansson H, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):77–82

Beta-adrenergic desensitization reduces the sensitivity of adenylate cyclase for magnesium in permeabilized lymphocytes. Feldman RD. **Mol Pharmacol** 1989 Mar; 35(3):304–10

Tricyclic antidepressants and dextromethorphan bind with higher affinity to the phencyclidine receptor in the absence of magnesium and L-glutamate. Sills MA, et al. **Mol Pharmacol** 1989 Jul;36(1):160–5

Effect of magnesium diet in gentamicin-induced acute renal failure in rats. Wong NL, et al. **Nephron** 1989;51(1):84–8

Effects of sodium, lithium, and magnesium on in vitro binding of [3H]SCH23390 in rat neostriatum and cerebral cortex. Gottberg E, et al. **Neurochem Res** 1989 May;14(5):419–26

Effect of magnesium on depression of the monosynaptic reflex induced by 2-chloroadenosine or hypoxia in the isolated spinal cord of neonatal rats. Lloyd HG, et al. **Neurosci Lett** 1989 Jun 19;101(2):175–81

Endogenous and network bursts induced by N-methyl-D-aspartate and magnesium free medium in the CA3 region of the hippocampal slice. Neuman RS, et al. **Neuroscience** 1989;28(2):393–9

Cyanide-induced chronic partial asphyxia in vitro: neurochemical abnormalities and reversal by magnesium. Sher PK. **Pediatr Neurol** 1987 Jul-Aug;3(4):197–202

ATP4- and ATP.Mg inhibit the ATP-sensitive K+ channel of rat ventricular myocytes. Findlay I. **Pflugers Arch** 1988 Jul;412(1–2):37–41

Ca2+-activated K+ channels contribute to the resting potential of vascular myocytes. Ca2+-sensitivity is increased by intracellular Mg2+-ions. Trieschmann U, et al. **Pflugers Arch** 1989;414 Suppl 1:S183–4

Lithium and magnesium-dependent processes in glucose metabolism. Birch NJ, et al. **Physiologie** 1989 Jan-Mar; 26(1):25–9

Increased Ca++ or mg++ concentration reduces relative tight-junction permeability to Na+ in the cortical thick ascending limb of Henle's loop of rabbit kidney. Di Stefano A, et al. **Renal Physiol Biochem** 1988 Jan-Feb;11(1–2):70–9

Effect of calcium and magnesium ions on the intestinal absorption of oleic acid in vitro. Bernard A, et al. **Reprod Nutr Dev** 1989;29(1):63–73

Effect of inorganic phosphate and Ca2+ and Mg2+ on the in vitro lysis of bovine erythrocytes. Sellei J. **Res Vet Sci** 1989 May;46(3):297–300

Effect of magnesium on in vitro production of toxic shock syndrome toxin 1. James JF, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S157–66

Production of toxic shock syndrome toxin 1 by Staphylococcus aureus under aerobic and anaerobic conditions and the effect of magnesium ion limitation. Taylor D, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S151–6

Studies of mutagenesis and neoplastic transformation by bivalent metal ions and ionizing radiation. Little JB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):287–92

[Magnesium in cardiology. Fundamentals and potential indications] Weiss M, et al. **Schweiz Med Wochenschr** 1988 Nov 5;118(44):1597–602 (72 ref.) (Eng. Abstr.) **(Ger)**

[Change in impulse formation and impulse transmission of the heart in relation to high magnesium concentration] Stark G, et al. **Wien Med Wochenschr** 1988 Aug 31; 138(15–16):379–81 (Eng. Abstr.) **(Ger)**

[Distribution of manganese and its modification by magnesium and cobalt in the guinea pig] Koch L, et al. **Z Gesamte Hyg** 1989 May;35(5):261–2 (Eng. Abstr.) **(Ger)**

[Action of magnesium salts on the toxic effects of calcium overload in the isolated and perfused rat heart] Ferrara N, et al. **G Ital Cardiol** 1988 Jul;18(7):605–14 (Eng. Abstr.) **(Ita)**

[The effect of magnesium containing cardioplegia by kinetic analysis of calcium and magnesium in myocardial tissue] Abe H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2248–54 (Eng. Abstr.) **(Jpn)**

[Functional and metabolic effects of carbohydrate substrate, magnesium and calcium channel blockers on the ischemic rat hearts with multidose potassium cardioplegia] Tamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1065–74 (Eng. Abstr.) **(Jpn)**

[Physicochemical and biopharmaceutical characteristics of trimag tablets] Dumitrache M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):355–8 (Eng. Abstr.) **(Rum)**

[The effect of pyrophosphate on the rigor fibers of rabbit m. psoas fibers] Kreslavskaia NB, et al. **Biofizika** 1988 Sep-Oct;33(5):883–4 (Eng. Abstr.) **(Rus)**

[The effect of calcium and magnesium ions on the interaction

of calcium-binding proteins parvalbumin and alpha-lactalbumin with dipalmitoylphosphatidylcholine vesicles] Permiakov EA, et al. **Biofizika** 1988 May-Jun; 33(3):465-70 (Eng. Abstr.) (Rus)

[Regulation by cations of adenylate cyclase activity in chicken tissues] Goffenberg SI, et al. **Biokhimiia** 1988 Jul; 53(7):1214-9 (Eng. Abstr.) (Rus)

[Effect of Mg2+ on fast Ka+-channels in molluskan neurons] Kazachenko VN, et al. **Dokl Akad Nauk SSSR** 1988;301(4):997-1002 (Rus)

[Mg2+-dependent interaction of DNA with eukaryotic cells] Beliaev ND, et al. **Mol Biol (Mosk)** 1988 Nov-Dec; 22(6):1667-72 (Eng. Abstr.) (Rus)

[Depression of penicillin-evoked seizure discharges of cerebrospinal neurons by magnesium ions] Kornilov OV, et al. **Patol Fiziol Eksp Ter** 1989 Mar-Apr;(2):43-5 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Magnesium and blood pressure: review of the epidemiologic and clinical trial experience. Whelton PK, et al. **Am J Cardiol** 1989 Apr 18;63(14):26G-30G (45 ref.)

Cytosolic magnesium modulates calcium channel activity in mammalian ventricular cells. Agus ZS, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C452-5

Magnesium and cell proliferation. Maguire ME. **Ann N Y Acad Sci** 1988;551:201-15; discussion 215-7

Identification of Zn2+-dependent and Mg2+/Triton X-100-dependent tyrosine protein kinases in ethylenediaminetetraacetate-treated P2 membrane fraction of monkey brain basal ganglia. Ramamoorthy S, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):148-55

Magnesium ions in cardiac function. Regulator of ion channels and second messengers. White RE, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):859-67 (109 ref.)

Intracellular magnesium blocks sodium outward currents in a voltage- and dose-dependent manner. Pusch M, et al. **Biophys J** 1989 Jun;55(6):1267-71

Electrical stability of erythrocytes in the presence of divalent cations. Tomov TC, et al. **Biosci Rep** 1988 Oct;8(5):421-6

Selective vulnerability of synaptic transmission in hippocampus to ex-vivo ischemia: effects of extracellular ionic substitution in the postischemic period. Ashton D, et al. **Brain Res** 1989 May 22;487(2):402-6

Spontaneous activity induced in isolated mouse spinal cord by high extracellular calcium and by low extracellular magnesium. Czéh G, et al. **Brain Res** 1989 Aug 21; 495(1):89-99

Changes in extracellular calcium and magnesium and synaptic transmission in isolated mouse spinal cord. Czéh G, et al. **Brain Res** 1989 May 8;486(2):274-85

Magnesium, myocardial ischaemia and arrhythmias. The role of magnesium in myocardial infarction. Dubey A, et al. **Drugs** 1989 Jan;37(1):1-7 (76 ref.)

A1 adenosine receptor-mediated block of epileptiform activity induced in zero magnesium in rat neocortex in vitro. O'Shaughnessy CT, et al. **Epilepsy Res** 1988 Sep-Oct; 2(5):294-301

Mechanism of electrographic seizure generation in the hippocampal slice in Mg2+-free medium: the role of GABAa inhibition. Swartzwelder HS, et al. **Epilepsy Res** 1988 Jul-Aug;2(4):239-45

Involvement of GABA and ACh in retinal spreading depression: effects of "low calcium-high magnesium" solutions. Rodrigues PS, et al. **Exp Brain Res** 1988; 73(3):659-64

Outer membrane proteins of polymyxin resistant Pseudomonas aeruginosa: effect of magnesium depletion. Shand GH, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):811-21

Effects of elevated intracellular magnesium on cytoskeletal integrity. Prescott AR, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):321-9

The role of Ca2+ and Mg2+ in the cytotoxic T lymphocyte reaction and in the secretion of N alpha-benzyloxycarbonyl-L-lysine thiobenzyl ester-serine esterase by human T cell clones. Blanchard D, et al. **J Immunol** 1989 Apr 1;142(7):2173-80

Dual effects of intracellular magnesium on muscarinic potassium channel current in single guinea-pig atrial cells. Horie M, et al. **J Physiol (Lond)** 1989;408:313-32

Role of Ca2+ and Mg2+ for endothelial permeability of water and albumin in vitro. Suttorp N, et al. **Lab Invest** 1989 Aug;61(2):183-91

Cellular concentration of magnesium and other ions in relation to protein synthesis, cell proliferation and cancer. Cameron IL, et al. **Magnesium** 1989;8(1):31-44 (47 ref.)

Magnesium and immune function: an overview. Galland L. **Magnesium** 1988;7(5-6):290-9 (94 ref.)

Magnesium and regulation of carbohydrate metabolism at the molecular level. Garfinkel D, et al. **Magnesium** 1988; 7(5-6):249-61 (97 ref.)

Complement activation, phagocytosis, tumor growth and parasitic infection after magnesium supplementation in diet of mice. Stankiewicz M, et al. **Magnesium** 1989;8(2):87-93

The role of magnesium in nucleic-acid and protein metabolism. Vernon WB. **Magnesium** 1988;7(5-6):234-48 (57 ref.)

Action of anticonvulsants on hippocampal slices in Mg-free medium. Psarropoulou C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):613-6

Modification of potassium-induced interictal bursts and electrographic seizures by divalent cations. Traynelis SF, et al. **Neurosci Lett** 1989 Mar 27;98(2):194-9

[Magnesium and the threat of premature labor] Le Bouëdec G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(1):53-60 (44 ref.) (Eng. Abstr.) (Fre)

[Magnesium in cardiology. A challenge for new studies] Späth G. **Wien Med Wochenschr** 1988 Aug 31; 138(15-16):382-415 (0 ref.) (Eng. Abstr.) (Ger)

[The role of magnesium in the body] Kittel M, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):822-4 (58 ref.) (Pol)

[The role of magnesium in the body] Wisłowska M, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):984-8 (Eng. Abstr.) (Pol)

[Importance of Ca2+-Mg2+ ion equilibrium in cardiovascular diseases] Segal B, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun; 92(2):399-402 (0 ref.) (Rum)

THERAPEUTIC USE

Human tolerability and pharmacodynamic study of Tisacid tablet in duodenal ulcer patients. A prospective, randomized, self-controlled clinicopharmacological study. Nagy L, et al. **Acta Med Hung** 1988;45(2):231-47

Inability of flunarizine, lidoflazine or magnesium to counteract delayed hypoperfusion after forebrain ischaemia in the rat. Grøgaard B, et al. **Acta Neurochir (Wien)** 1988; 95(3-4):136-42

Magnesium treatment of ventricular arrhythmias. Roden DM. **Am J Cardiol** 1989 Apr 18;63(14):43G-46G (38 ref.)

Antiarrhythmic efficacy of magnesium in the setting of life-threatening digoxin toxicity [letter] Green SM, et al. **Am J Emerg Med** 1989 May;7(3):347-8

Magnesium and cobalt, not nimodipine, protect neurons against anoxic damage in the rat hippocampal slice. Kass IS, et al. **Anesthesiology** 1988 Nov;69(5):710-5

Influence of magnesium substitution therapy on blood lipid composition in patients with ischemic heart disease. A double-blind, placebo controlled study. Rasmussen HS, et al. **Arch Intern Med** 1989 May;149(5):1050-3

Magnesium in pregnancy [editorial] Hibbard BM. **BMJ** 1989 Feb 11;298(6670):342

Variations in the activity of urinary inhibitors in calcium oxalate urolithiasis. Grases F, et al. **Br J Urol** 1988 Dec; 62(6):515-20

Magnesium supplementation in mild hypertensive patients on a moderately low sodium diet. Nowson CA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):299-302

Magnesium aspartate hydrochloride attenuates monocrotaline-induced pulmonary artery hypertension in rats. Mathew R, et al. **Clin Sci** 1988 Dec;75(6):661-7

Zinc chloride spray--magnesium hydroxide ointment dual topical regimen in the treatment of obstetric and gynecologic incisional wounds. Pastorfide GB, et al. **Clin Ther** 1989 Mar-Apr;11(2):258-63

Calcium carbonate and magnesium hydroxide in the prevention of renal osteodystrophy or the demise of aluminum toxicity in uremia. Analysis of 5 years experience. Morinière P, et al. **Contrib Nephrol** 1988; 64:58-73 (39 ref.)

Antacid maintenance therapy in the prevention of duodenal ulcer relapse. Bardhan KD, et al. **Gut** 1988 Dec; 29(12):1748-54

Maalox versus cimetidine [letter] Hangmann M. **Gut** 1989 Jul;30(7):1025-7

Effect of magnesium and pyridoxine supplementation on glycolate induced hyperoxaluria in male albino rats. Gulati S, et al. **Indian J Exp Biol** 1988 Jul;26(7):525-7

Magnesium therapy in premature neonates with apnea neonatorum [letter] **J Am Coll Nutr** 1988 Dec;7(6):520-1

Brief report: an open middle-term study of combined vitamin B6-magnesium in a subgroup of autistic children selected on their sensitivity to this treatment. Martineau J, et al. **J Autism Dev Disord** 1988 Sep;18(3):435-47

Magnesium and the lungs. Mathew R, et al. **Magnesium** 1988; 7(4):173-87 (128 ref.)

Strain differences in pulmonary hypertensive response to monocrotaline alkaloid and the beneficiai effect of oral magnesium treatment. Mathew R, et al. **Magnesium** 1989; 8(2):110-6

Oral administration of magnesium hydroxide to subjects with insulin-dependent diabetes mellitus: effects on magnesium and potassium levels and on insulin requirements. Sjögren A, et al. **Magnesium** 1988;7(3):117-22

ATP-MgCl2 and liver blood flow following shock and ischemia. Chaudry IH. **Prog Clin Biol Res** 1989;299:19-31 (40 ref.)

Nilacid tablet a new type antacid. Rácz I, et al. **Ther Hung** 1988;36(3):115-8 (17 ref.)

[Effect of magnesium on arrhythmia after valvular replacement] Jia CX, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):200-1, 252 (Eng. Abstr.) (Chi)

[Therapeutic efficacy of a calcium and magnesium preparation in 41 cases of endemic fluorosis] Qu GY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):665-7, 715 (Eng. Abstr.) (Chi)

[The importance of magnesium in orthopedics. VI. The importance of magnesium in the treatment of ectopic calcification and ossification] Ditmar R, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun;56(3):190-200 (Eng. Abstr.) (Cze)

[Magnesium--a new therapeutic alternative in primary dysmenorrhea] Seifert B, et al. **Zentralbl Gynakol** 1989; 111(11):755-60 (Eng. Abstr.) (Ger)

[Accelerated myocardial metabolic and functional recovery with terminal nicorandil-mg cardioplegia in experimental heart transplantation] Orita H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2188-93 (Eng. Abstr.) (Jpn)

TOXICITY

Effects of metal ions on cyprinid fish immune response: in vitro effects of Zn2+ and Mn2+ on the mitogenic response of carp pronephros lymphocytes. Ghanmi Z, et al. **Ecotoxicol Environ Safety** 1989 Apr;17(2):183-9

Toxicity of an attapulgite sample studied in vivo and in vitro. Renier A, et al. **IARC Sci Publ** 1989;(90):180-4

Influence of magnesium, water, and sodium chloride on urolithiasis in veal calves. Petersson KH, et al. **J Dairy Sci** 1988 Dec;71(12):3369-77

Interactions of attapulgite (fibrous clay) with human red blood cells. Perderiset M, et al. **Toxicol Lett** 1989 Jun; 47(3):303-9

URINE

Idiopathic hypercalciuria: effects of calcium load test on magnesiuria. Hernandez R, et al. **Child Nephrol Urol** 1988-89;9(1-2):72-6

Blood pressure and excretion of sodium, potassium, calcium and magnesium in 8- and 9-year old boys from 19 European centres. Knuiman JT, et al. **Eur J Clin Nutr** 1988 Oct;42(10):847-55

Increased kidney glucose utilization induced by cyclosporine: lack of relation to magnesium excretion. Borowitz JL, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):158-62

Fractional excretion of magnesium and renal concentrating capacity in refluxing renal units. Kekomäki M, et al. **J Urol** 1988 Nov;140(5 Pt 2):1095-6

Circadian rhythm with acrophase at night for urinary excretion of calcium and magnesium in childhood: population-based data of the cimitile study in southern Italy. DeSanto NG, et al. **Miner Electrolyte Metab** 1988; 14(4):235-9

Effects of systemic alkalosis on urinary magnesium excretion in the rat. Levin M, et al. **Miner Electrolyte Metab** 1989; 15(4):214-20

[Urinary magnesium excretion in nephrolithiasis] Simeonov S, et al. **Vutr Boles** 1988;27(6):39-43 (Eng. Abstr.) (Bul)

[Urinary electrolytes and arterial pressure: results of a crossed study] Palombi L, et al. **Nuovi Ann Ig Microbiol** 1988 Nov-Dec;39(6):637-50 (Eng. Abstr.) (Ita)

[Urinary levels of ammonium-magnesium phosphate and calcium phosphate in patients with infected urinary calculi] Pupek-Musialik D, et al. **Pol Tyg Lek** 1988 Aug 1-8; 43(31-32):1001-4 (Eng. Abstr.) (Pol)

[Urinary excretion of calcium, magnesium, uric acid and oxalic acid in normal children] Hernández Marco R, et al. **An Esp Pediatr** 1988 Aug;29(2):99-104 (Eng. Abstr.) (Spa)

MAGNESIUM ADENOSINE TRIPHOSPHATASE see **ADENOSINE TRIPHOSPHATASE, MAGNESIUM**

MAGNESIUM ATPASE see **ADENOSINE TRIPHOSPHATASE, MAGNESIUM**

MAGNESIUM DEFICIENCY

[Magnesium and hypomagnesemia in childhood] Calvani M. **Recenti Prog Med** 1989 Jun;80(6):338-43 (46 ref.) (Eng. Abstr.) (Ita)

[Magnesium deficiency--clinical findings, diagnosis and treatment] Sjögren A, et al. **Lakartidningen** 1988 Nov 2; 85(44):3670-2 (Swe)

BLOOD

Hypomagnesemia masking the appearance of elevated parathyroid hormone concentrations in familial pseudohypoparathyroidism. Allen DB, et al. **Am J Med Genet** 1988 Sep;31(1):153-8

Mechanism of increased erythrocyte membrane fluidity during magnesium deficiency in weanling rats. Tongyai S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C270-6

Bone demineralization and impaired mineral metabolism in insulin-dependent diabetes mellitus. A possible role of magnesium deficiency. Saggese G, et al. **Helv Paediatr Acta** 1989 Jun;43(5-6):405-14

Unreliability of plasma magnesium values in asphyxiated neonates. Caddell JL, et al. **Magnesium** 1989;8(1):11-6

Primary hypomagnesemia with a probable double magnesium transport defect. Matzkin H, et al. **Nephron** 1989;52(1):83-6

Normal serum magnesium values and the diagnosis of magnesium deficiency [letter] Touyz RM, et al. **S Afr Med J** 1989 Jun 3;75(11):554

[Serum magnesium and heart arrhythmias in patients with pelvic-leg arteriosclerosis] Voigt H, et al. **Z Gesamte Inn Med** 1988 Jul 1;43(13):363-4 (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Hypomagnesaemia on antibiotic therapy [letter] Campo S, et al. **Postgrad Med J** 1988 Apr;64(750):336-7

Hypomagnesaemia in elderly digitalised patients [published erratum appears in Scott Med J 1988 Oct;33(5):324] Martin BJ, et al. **Scott Med J** 1988 Jun;33(3):273–4
Tetany in association with gentamicin therapy. Beatty OL, et al. **Ulster Med J** 1989 Apr;58(1):108–10
[Magnesium and long-term diuretic therapy] Dørup I, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):759–63 (Eng. Abstr.) (Dan)

COMPLICATIONS

Cardiovascular consequences of magnesium deficiency and loss: pathogenesis, prevalence and manifestations—magnesium and chloride loss in refractory potassium repletion. Seelig M. **Am J Cardiol** 1989 Apr 18; 63(14):4G–21G (237 ref.)
Magnesium deficiency cardiomyopathy. Bloom S. **Am J Cardiovasc Pathol** 1988 Apr;2(1):7–17 (66 ref.)
Depression and magnesium deficiency. Rasmussen HH, et al. **Int J Psychiatry Med** 1989;19(1):57–63
Induction of a rat T cell lymphoma-leukemia by magnesium deficiency—a study of fetal defense against maternal neoplasia. Hass GM, et al. **Magnesium** 1989;8(1):45–55
Magnesium, Staphylococcus aureus and toxic shock syndrome. Kass EH. **Magnesium** 1988;7(5–6):315–9 (9 ref.)
Ventricular fibrillation during antiarrhythmic drug therapy [letter] Rude RK, et al. **N Engl J Med** 1989 Feb 23; 320(8):537–8
Magnesium and other nutrient deficiencies as possible causes of hypertension and low birthweight. Wynn A, et al. **Nutr Health** 1988;6(2):69–88 (92 ref.)
Erythrocyte and plasma magnesium during teenage pregnancy: relationship with blood pressure and pregnancy-induced hypertension. Boston JL, et al. **Obstet Gynecol** 1989 Feb;73(2):169–74
Migraine and magnesium: eleven neglected connections. Swanson DR. **Perspect Biol Med** 1988 Summer; 31(4):526–57 (158 ref.)
Refractory hypokalemia secondary to hypomagnesemia in eating-disorder patients. Hall RC, et al. **Psychosomatics** 1988 Fall;29(4):435–8
Hypomagnesemia and hypertension in primary hyperparathyroidism. Sangal AK, et al. **South Med J** 1989 Sep;82(9):1116–8
[Bartter's syndrome, diffuse articular chondrocalcinosis and nephrogenic hypomagnesemia in an adult] Dupond JL, et al. **Rev Med Interne** 1989 May–Jun;10(3):261–4 (21 ref.) (Eng. Abstr.) (Fre)
[Variant angina due to deficiency of intracellular magnesium by anorexia nervosa] Tanabe K, et al. **Kokyu To Junkan** 1989 Apr;37(4):467–71 (Eng. Abstr.) (Jpn)
[Histological study of magnesium deficiency dermatitis in hairless rats] Hanada K, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):797–802 (Eng. Abstr.) (Jpn)
[The role of magnesium in the body] Kittel M, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):822–4 (58 ref.) (Pol)
[Magnesium metabolism in the familial form of osteogenesis imperfecta] Milewicz A, et al. **Pol Tyg Lek** 1988 Nov 14; 43(46):1479–81 (Eng. Abstr.) (Pol)
[Hyponatremia—a common finding in magnesium deficiency?] Fäldt R, et al. **Lakartidningen** 1989 May 17; 86(20):1908–9 (Swe)

DIAGNOSIS

Lactational hypomagnesaemia [letter] Kamble TK, et al. **Lancet** 1989 Jul 15;2(8655):155–6
Computerized electroencephalographic mapping in hypomagnesian spasmophilic syndromes. Popoviciu L, et al. **Neurol Psychiatr (Bucur)** 1989 Apr–Jun;27(2):91–7

DRUG THERAPY

Magnesium in pregnancy [editorial] Hibbard BM. **BMJ** 1989 Feb 11;298(6670):342
[Results of the compensatory treatment of disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kłoś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1330–3 (Eng. Abstr.) (Pol)

EPIDEMIOLOGY

[Frequency of hypomagnesemia in patients with acute medical conditions] Nielsen LH, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2656–9 (Eng. Abstr.) (Dan)

ETIOLOGY

Hypomagnesemia in patients in postoperative intensive care [published erratum appears in Chest 1989 Jun;95(6):1362] Chernow B, et al. **Chest** 1989 Feb;95(2):391–7
Hypomagnesemia and low alkaline phosphatase activity in patients' serum after cardiac surgery. Lum G, et al. **Clin Chem** 1989 Apr;35(4):664–7
[Calcium, phosphate and magnesium metabolism disorders associated with alcoholism] Yoshimoto Y. **Nippon Rinsho** 1988 Aug;46(8):1755–8 (Jpn)
[Disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kłoś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1325–9 (Eng. Abstr.) (Pol)
[Hypomagnesemia in non-oliguric acute renal failure treated by parenteral nutrition. Study of its mechanism of action] López Martínez J, et al. **Rev Clin Esp** 1988 Oct; 183(6):289–95 (28 ref.) (Eng. Abstr.) (Spa)

IMMUNOLOGY

Effect of varying levels of magnesium during gestation and lactation on humoral immune response and tissue minerals in rats. Kubena KS, et al. **Ann Nutr Metab** 1989;33(1):7–14
Effect of magnesium deficiency on interleukin production by Fisher rats: effect of interleukins on reduced in vitro lymphocyte responses to concanavalin A and lipopolysaccharide. Yiangou M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):217–21

METABOLISM

Magnesium in health and disease. Shils ME. **Annu Rev Nutr** 1988;8:429–60 (203 ref.)
Effect of magnesium depletion and potassium depletion and chlorothiazide on intracellular pH in the rat, studied by 31P NMR. Adam WR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):33–40
Enhancement of gentamicin-induced nephrotoxicity by Mg deficiency in non-pregnant rats. Morphological, enzyme histochemical and immunohistochemical studies. Gossrau R, et al. **Histochemistry** 1989;90(6):489–96
Magnesium deficiency exacerbates and pretreatment improves outcome following traumatic brain injury in rats: 31P magnetic resonance spectroscopy and behavioral studies. McIntosh TK, et al. **J Neurotrauma** 1988;5(1):17–31
Dietary fructose as compared to glucose and starch increases the calcium content of kidney of magnesium-deficient rats. Koh ET, et al. **J Nutr** 1989 Aug;119(8):1173–8
Intracellular magnesium deficiency and effect of oral magnesium on blood pressure and red cell sodium transport in diuretic-treated hypertensive patients. Hattori K, et al. **Jpn Circ J** 1988 Nov;52(11):1249–56
Problems in the assessment of magnesium depletion in the rat by in vivo 31P NMR. Adam WR, et al. **Magn Reson Med** 1988 Jul;7(3):300–10
Validity of the parenteral magnesium load test for mature mammals. Caddell JL, et al. **Magnesium** 1989;8(2):65–70
Availability of body magnesium during magnesium deficiency. Wallach S. **Magnesium** 1988;7(5–6):262–70 (43 ref.)
Effect of hypomagnesemia and exercise on slowly exchanging pools of magnesium. Brilla LR, et al. **Metabolism** 1989 Aug;38(8):797–800
Magnesium deficiency and ischemic heart disease. **Nutr Rev** 1988 Sep;46(9):311–2 (18 ref.)
Effects of low magnesium diet on the vascular prostaglandin and fatty acid metabolism in rats. Soma M, et al. **Prostaglandins** 1988 Oct;36(4):431–41

PATHOLOGY

Structural changes in lungs of magnesium-deficient weanling rats dying spontaneously or after spontaneous recovery from the seizure-shock episode. Possible methods for sudden infant death syndromes. Caddell JL, et al. **Magnesium** 1988;7(4):195–209
[The modifiability of periodontal tissue in Wistar rats by a variation in the magnesium content of the diet] Kleber BM, et al. **Zahn Mund Kieferheilkd** 1988;76(8):799–804 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Ictal epileptiform events induced by removal of extracellular magnesium in slices of entorhinal cortex are blocked by baclofen. Jones RS. **Exp Neurol** 1989 May;104(2):155–61
Growth and development in rats and deficiency of magnesium and pyridoxine. Kubena KS, et al. **J Am Coll Nutr** 1988 Aug;7(4):317–24
Enhanced vasoconstrictor responses to potassium, 5-hydroxytryptamine, and prostaglandin F2 alpha of isolated coronary arteries from magnesium-deficient rats. Comparison with vasomotor activity of aorta. Sjögren A, et al. **J Am Coll Nutr** 1988 Dec;7(6):461–9
2-amino-5-phosphonovaleric acid blocks induction of an epileptiform discharge following a brief hypoxic episode in the hippocampal slices prepared from dietary Mg-deficient mouse. Nakanishi H, et al. **Jpn J Pharmacol** 1989 May;50(1):31–6
Canine renal and systemic hemodynamic measurements after 4 weeks of a magnesium deficient diet. Zawada ET Jr, et al. **Nephron** 1988;50(3):253–7
[Digoxin (letter)] de Valk HW, et al. **Ned Tijdschr Geneeskd** 1988 Sep 24;132(39):1811–2 (Dut)
[A study on the effects of a Mg-deficient diet on blood pressure and various hormonal systems in Wistar rats and spontaneously hypertensive rats] Honda M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):623–35 (Eng. Abstr.) (Jpn)
[The role of magnesium in the body] Wisłowska M, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):984–8 (Eng. Abstr.) (Pol)

PREVENTION & CONTROL

Comparison of potassium alone and potassium–magnesium supplementation in patients with heart failure using hydrochlorothiazide. Kohvakka A, et al. **Magnesium** 1989; 8(2):71–6
Sodium thiosulfate prevents cisplatin-induced hypomagnesemia. Wong NL, et al. **Nephron** 1988; 50(4):308–14
[Magnesium substitution in pregnancy. A prospective, randomized double-blind study] Kovács L, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):595–600 (Eng. Abstr.) (Ger)

THERAPY

Management of magnesium depletion. Oster JR, et al. **Am J Nephrol** 1988;8(5):349–54 (36 ref.)

VETERINARY

Hypomagnesemic tetany of ruminants. Smith RA, et al. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):365–77 (41 ref.)

MAGNESIUM HYDROXIDE see under MAGNESIUM

MAGNESIUM OXIDE

ADMINISTRATION & DOSAGE

Oral magnesium supplementation in patients with essential hypertension. Motoyama T, et al. **Hypertension** 1989 Mar; 13(3):227–32
[An essential hypertensive patient with a significant reduction in blood pressure during oral magnesium supplementation] Motoyama T, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):732–3 (Jpn)

PHARMACOLOGY

Effects of magnesium oxide on the lipid profile of healthy volunteers. Marken PA, et al. **Atherosclerosis** 1989 May; 77(1):37–42
Effect of reactivity rate and particle size of magnesium oxide on magnesium availability, acid–base balance, mineral metabolism, and milking performance of dairy cows. Xin Z, et al. **J Dairy Sci** 1989 Feb;72(2):462–70
Effect of dietary sodium bicarbonate and magnesium oxide on cows with milk fat depression in several dairy herds. Shimada Y, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):373–9

MAGNESIUM SULFATE

Lamicel is more effective in preparing the cervix for midtrimester termination of pregnancy than Laminaria japonicum. Tan SL, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):49–52
Licensing synthetic intracervical tents [letter] Johnson N. **Lancet** 1988 Dec 17;2(8625):1418–9
The adsorption of metronidazole and tinidazole to activated charcoal and the effect of magnesium sulfate. Akintonwa A, et al. **Vet Hum Toxicol** 1988 Dec;30(6):556–8
[Cervical dilatation with Lamicel in gravida I women applying for termination of pregnancy] Jensen NM, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1672–4 (Eng. Abstr.) (Dan)
[Authorization request for the use of L-carnitine, calcium chloride and magnesium sulfate as nutritional additives in the formulation of food designed for specialized diets] Bour H. **Bull Acad Natl Med (Paris)** 1988 Mar;172(3):481–5 (Fre)
[Termination of pregnancy in the first and second trimester using natural and synthetic laminaria tents] Gorgidzhanian RS, et al. **Sov Med** 1989;(1):44–7 (17 ref.) (Rus)

ADMINISTRATION & DOSAGE

Effect of the infusion of magnesium sulfate during atrial pacing on ECG intervals, serum electrolytes, and blood pressure. Rogiers P, et al. **Am Heart J** 1989 Jun; 117(6):1278–83
Acute effect of intravenous magnesium sulfate on airway obstruction of asthmatic patients. Rolla G, et al. **Ann Allergy** 1988 Nov;61(5):388–91
Intravenous magnesium sulfate in the management of acute respiratory failure complicating asthma. McNamara RM, et al. **Ann Emerg Med** 1989 Feb;18(2):197–9
A comparison of gemeprost (Cervagem) pessaries and Lamicel tents for cervical preparation for abortion by dilatation and suction. Helm CW, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):911–5
Failure of high-dose intravenous magnesium sulfate to control myoclonic status epilepticus. Fisher RS, et al. **Clin Neuropharmacol** 1988 Dec;11(6):537–44
Lamicel does not promote induction of labour. A randomized controlled study. Lyndrup J, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Mar;30(3):205–8
An 'amp' by any other name: the hazards of intravenous magnesium dosing [letter] Hoffman RS, et al. **JAMA** 1989 Jan 27;261(4):557
Long-term tocolysis with intravenous magnesium sulfate. Dudley D, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):373–8
Parenteral magnesium sulphate [letter] van Wyk HJ, et al. **S Afr Med J** 1989 Jul 15;76(2):78
Alterations of cardiac conduction and refractoriness in humans following intravenous administration of magnesium sulfate. Chen H, et al. **Tokushima J Exp Med** 1988 Jun; 35(1–2):13–20

ADVERSE EFFECTS

Neuromuscular blockade with magnesium sulfate and nifedipine. Snyder SW, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):35–6

Congenital rickets associated with magnesium sulfate infusion for tocolysis. Lamm CI, et al. **J Pediatr** 1988 Dec; 113(6):1078–82

PHARMACOLOGY

Does the intravenous infusion of ritodrine or magnesium sulfate alter the hemodynamic response to hemorrhage in gravid ewes? Chestnut DH, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1467–73

The effect of pretreatment with magnesium sulfate on the initiation of seizure foci in anesthetized cats. Koontz WL, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):508–9

The effect of magnesium sulfate tocolysis on the fetal biophysical profile. Peaceman AM, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):771–4

Is magnesium sulfate an anesthetic? [letter] Aldrete JA, et al. **Anesth Analg** 1989 Feb;68(2):186–7

Intravenous magnesium sulfate inhibits catecholamine release associated with tracheal intubation. James MF, et al. **Anesth Analg** 1989 Jun;68(6):772–6

Magnesium sulphate and cervical ripening (a biomechanical double-blind, randomized comparison between a synthetic polyvinyl sponge with and without magnesium sulphate). Rådestad A, et al. **Contraception** 1989 Mar;39(3):253–63

Prevention of ventricular fibrillation with magnesium sulfate. Billman GE, et al. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):167–71

Effect of magnesium sulfate on bronchoconstriction in the lung periphery. Lindeman KS, et al. **J Appl Physiol** 1989 Jun;66(6):2527–32

Automated measurements of isolated heart muscle contractions: effects of halothane, calcium, and magnesium on guinea pig left atrial muscle. Kobata RS, et al. **J Clin Monit** 1989 Jan;5(1):26–33

Effects of salts in promoting the adhesion of amphibian gastrula cells. Komazaki S. **J Exp Zool** 1989 Apr; 250(1):40–8

[Influence of magnesium sulfate on the sizes of myocardial infarction in rabbits] Wang SR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):30–3 (Eng. Abstr.) **(Chi)**

[Electrophysiologic effect of magnesium sulphate on arrhythmias] Zang WJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):419–21 (Eng. Abstr.) **(Chi)**

[Effect of water containing calcium and magnesium sulfates on the elimination of cholesterol in the rat] Toussaint C, et al. **Arch Int Physiol Biochim** 1988 Jun;96(2):89–100 (Eng. Abstr.) **(Fre)**

[Hemodynamic effects of intravenous magnesium sulfate in man] Boschat J, et al. **Arch Mal Coeur** 1989 Mar; 82(3):361–4 (Eng. Abstr.) **(Fre)**

[Action of magnesium salts on the toxic effects of calcium overload in the isolated and perfused rat heart] Ferrara N, et al. **G Ital Cardiol** 1988 Jul;18(7):605–14 (Eng. Abstr.) **(Ita)**

[Electrophysiological effects of magnesium sulfate on human conduction system] Yamamoto H, et al. **Kokyu To Junkan** 1989 Jan;37(1):77–81 (Eng. Abstr.) **(Jpn)**

[Effect of magnesium sulfate on the reproduction of the measles virus in cell culture] Shteinberg LSh, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):465–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effect of intravenous magnesium sulfate on supraventricular tachycardia. Wesley RC Jr, et al. **Am J Cardiol** 1989 May 1;63(15):1129–31

Magnesium sulfate termination of torsades de pointes following failure of cardioversion [letter] Warden T, et al. **Am J Emerg Med** 1989 Jan;7(1):126–7

The effects of administration of lithium salts and magnesium sulfate on the serum anion gap. Silverstein FJ, et al. **Am J Kidney Dis** 1989 May;13(5):377–81

The effects of magnesium sulfate therapy on Apgar scores. Pruett KM, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1047–8

Expectant management of abruptio placentae before 35 weeks gestation. Bond AL, et al. **Am J Perinatol** 1989 Apr; 6(2):121–3

Does magnesium sulfate treat eclamptic seizures? Yes. Dinsdale HB. **Arch Neurol** 1988 Dec;45(12):1360–1 (16 ref.)

Magnesium sulfate and eclampsia [letter] Donaldson JO. **Arch Neurol** 1989 Sep;46(9):945–6

No, magnesium sulfate should not be used in treating eclamptic seizures. Kaplan PW, et al. **Arch Neurol** 1988 Dec;45(12):1361–4 (50 ref.)

Magnesium sulfate in the treatment of eclampsia [letter] Pritchard JA. **Arch Neurol** 1989 Sep;46(9):947–8

Use of magnesium sulphate in the anaesthetic management of phaeochromocytoma: a review of 17 anaesthetics. James MF. **Br J Anaesth** 1989 Jun;62(6):616–23

Ventricular fibrillation in acute experimental myocardial ischemia: protection by magnesium sulfate. Barros LF, et al. **Braz J Med Biol Res** 1988;21(4):791–9

Does parenteral magnesium sulfate have an antiemetic effect during chemotherapy with cis-platinum? Ballmer PE, et al. **Cancer Chemother Pharmacol** 1989;24(2):109–12

Effect of magnesium on anginal attack induced by hyperventilation in patients with variant angina. Miyagi H, et al. **Circulation** 1989 Mar;79(3):597–602

Dose-related effect of inhaled magnesium sulfate on histamine bronchial challenge in asthmatics. Rolla G, et al. **Drugs Exp Clin Res** 1988;14(9):609–12

Magnesium sulfate therapy in torsades de pointes. Kothari SS, et al. **Indian Heart J** 1988 May–Jun;40(3):210–1

Suppression of exercise-induced angina by magnesium sulfate in patients with variant angina [letter] Knight H. **J Am Coll Cardiol** 1989 Mar 15;13(4):956

Suppression of exercise-induced angina by magnesium sulfate in patients with variant angina. Kugiyama K, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1177–83

Magnesium deficiency exacerbates and pretreatment improves outcome following traumatic brain injury in rats: 31P magnetic resonance spectroscopy and behavioral studies. McIntosh TK, et al. **J Neurotrauma** 1988;5(1):17–31

Resolution of oliguria in a pre-eclamptic after treatment with magnesium sulfate. Rose BI, et al. **J Perinatol** 1987 Summer;7(3):215–6

Intravenous magnesium sulfate for the treatment of acute asthma in the emergency department. Skobeloff EM, et al. **JAMA** 1989 Sep 1;262(9):1210–3

Effects of vasoactive agents on isolated human umbilical arteries in preeclamptic women treated with magnesium sulfate: a preliminary report. Handwerker SM, et al. **Magnesium** 1989;8(1):1–10

Therapeutic use of magnesium sulfate in selected cases of cerebral ischemia and seizure [letter] Goldman RS, et al. **N Engl J Med** 1988 Nov 3;319(18):1224–5

The plasma renin-angiotensin system in preeclampsia: effects of magnesium sulfate. Sipes SL, et al. **Obstet Gynecol** 1989 Jun;73(6):934–7

Action of magnesium sulfate in the treatment of preeclampsia–eclampsia. Sadeh M. **Stroke** 1989 Sep; 20(9):1273–5 (42 ref.)

[Anti-arrhythmic effects of intravenous magnesium sulfate in paroxysmal supraventricular tachycardia] Etienne Y, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):535–8 (Eng. Abstr.) **(Fre)**

[The problem of ventricular tachycardia with torsade de pointes and its rational therapy] Fragola PV, et al. **Clin Ter** 1988 May 31;125(4):251–69 (210 ref.) (Eng. Abstr.) **(Ita)**

TOXICITY

Gastrointestinal toxicity of melos conquer mixture in rats. Nwankwoala RP, et al. **Scand J Gastroenterol Suppl** 1986; 124:95–9

MAGNETIC RESONANCE see NUCLEAR MAGNETIC RESONANCE

MAGNETIC RESONANCE IMAGING

see related
NUCLEAR MAGNETIC RESONANCE

Echocardiography and magnetic resonance imaging in cardiac amyloidosis. von Kemp K, et al. **Acta Cardiol** 1989; 44(1):29–36

The role of magnetic resonance imaging in the examination of the cardiovascular system. Lambrecht LJ, et al. **Acta Clin Belg** 1988;43(4):282–90

Intracranial arachnoid cysts in adults. Garcia-Bach M, et al. **Acta Neurochir Suppl (Wien)** 1988;42:205–9

Pathophysiological investigation of experimental cerebral ischaemia using in vivo 31P-NMR spectroscopy and 1H-MRI. Higuchi T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:172–6

The investigation of experimental brain tumours using 31P-MRS and 1H-MRI. Hirakawa K, et al. **Acta Neurochir Suppl (Wien)** 1988;43:140–4

Syringomyelia: how MRI aids diagnosis and management. Powell M. **Acta Neurochir Suppl (Wien)** 1988;43:17–21

Magnetic resonance (MR) imaging in the management of primary and secondary syringomyelic cavities, and of other cystic lesions of the spinal cord. Roosen N, et al. **Acta Neurochir Suppl (Wien)** 1988;43:13–6

Intracranial CSF volumes: natural variations and physiological changes measured by MRI. Teasdale GM, et al. **Acta Neurochir Suppl (Wien)** 1988;42:230–5

Proton magnetic resonance imaging in experimental cerebral ischaemia. van Rijen PC, et al. **Acta Neurochir Suppl (Wien)** 1988;43:162–7

Experimental transplantation gliomas in the adult cat brain. 2. Pathophysiology and magnetic resonance imaging. Hossmann KA, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):189–200

Magnetic resonance imaging of jugular foramen neurinomas. Matsushima T, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):83–7

Lhermitte–Duclos disease (dysplastic gangliocytoma): a case report with CT and MRI. Sabin HI, et al. **Acta Neurochir (Wien)** 1988;93(3–4):149–53

Multicystic syringomyelia treated with a single, non-valved syringoperitoneal shunt: fast and near-complete MRI normalization. Wester K, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):148–52

Diagnosis of quadrigeminal plate arachnoid cyst with CT and NMR. A case report. Mancuso P, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):367–72

Capsular ataxic hemiparesis. Early diagnosis with MRI. Milandre L, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):32–7 (16 ref.)

Brain and intracranial cavity volumes: in vivo determination by MRI. Condon B, et al. **Acta Neurol Scand** 1988 Nov; 78(5):387–93

The value of CT and very low field MRI in the etiological diagnosis of dizziness. Ojala M, et al. **Acta Neurol Scand** 1988 Jul;78(1):26–9

Migraine-related stroke: brain infarction in superior cerebellar artery territory demonstrated by nuclear magnetic resonance. Titus F, et al. **Acta Neurol Scand** 1989 May;79(5):357–60

High resolution nuclear magnetic resonance imaging of the spinal cord in experimental demyelinating disease. Feersman GV, et al. **Acta Neuropathol (Berl)** 1988; 76(6):628–32

Cerebral nuclear magnetic resonance (MRI) in Kearns syndrome. Elsås T, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):469–73

Magnetic resonance imaging and spectroscopy of thigh muscles in cruciate ligament insufficiency. Kariya Y, et al. **Acta Orthop Scand** 1989 Jun;60(3):322–5

Patellar motion analyzed by magnetic resonance imaging. Kujala UM, et al. **Acta Orthop Scand** 1989 Feb;60(1):13–6

Otoneurological and ultra low field MRI findings in multiple sclerosis patients. Grenman R, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:77–83

Differential diagnosis of vertigo—combined galvanic test and MRI. Sekitani T. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:113–9

Multicystic acoustic neuroma. Case report and differential diagnosis. Drapkin AJ, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):7–9

In vivo evaluation of femoral blood flow measured with magnetic resonance. Henriksen O, et al. **Acta Radiol** 1989 Mar–Apr;30(2):153–7

Evaluation of biexponential relaxation behaviour in the human brain by magnetic resonance imaging. Kjaer L, et al. **Acta Radiol** 1989 Jul–Aug;30(4):433–7

Method dependence of proton spin–lattice relaxation analysis in biologic tissues. Komu M, et al. **Acta Radiol** 1989 Jan–Feb;30(1):97–100

Comparison of myelography, CT myelography and magnetic resonance imaging in cervical spondylosis and disk herniation. Pre- and postoperative findings. Larsson EM, et al. **Acta Radiol** 1989 May–Jun;30(3):233–9

Effect of superparamagnetic particles as oral contrast medium at magnetic resonance imaging. A phase I clinical study. Lönnemark M, et al. **Acta Radiol** 1989 Mar–Apr; 30(2):193–6

Positron emission tomography compared with magnetic resonance imaging and computed tomography in supratentorial gliomas using multiple stereotactic biopsies as reference. Mosskin M, et al. **Acta Radiol** 1989 May–Jun; 30(3):225–32

Low field magnetic resonance imaging of femoral neck fractures. Ragnarsson JI, et al. **Acta Radiol** 1989 May–Jun; 30(3):247–52

Angiomyolipoma of the kidney. Comparison between magnetic resonance imaging, computed tomography, and ultrasonography for diagnosis. Uhlenbrock D, et al. **Acta Radiol** 1988 Sep–Oct;29(5):523–6

Lesions of skull base observed on high resolution computed tomography. A comparison with magnetic resonance imaging. Volle E, et al. **Acta Radiol** 1989 Mar–Apr; 30(2):129–34

Atlantoaxial subluxation. Radiography and magnetic resonance imaging correlated to myelopathy. Yamashita Y, et al. **Acta Radiol** 1989 Mar–Apr;30(2):135–40

Magnetic resonance imaging in the diagnosis of lesions of the central vestibular structures. Pirodda A, et al. **Adv Otorhinolaryngol** 1988;41:216–23

Posterior fossa: correlations between anatomical slices and magnetic resonance imaging. Vitte E, et al. **Adv Otorhinolaryngol** 1988;41:224–8

CT and MR of MELAS syndrome. Allard JC, et al. **AJNR** 1988 Nov–Dec;9(6):1234–8

MR and CT characteristics of gangliocytoma: a rare cause of epilepsy in children. Altman NR. **AJNR** 1988 Sep; 9(5):917–21

MR of aqueductal stenosis: evidence of a broad spectrum of tectal distortion. Barkovich AJ, et al. **AJNR** 1989 May–Jun;10(3):471–6

Revised classification of posterior fossa cysts and cystlike malformations based on the results of multiplanar MR imaging. Barkovich AJ, et al. **AJNR** 1989 Sep–Oct; 10(5):977–88

MR imaging in patients with intracranial aneurysm clips. Becker RL, et al. **AJNR** 1988 Sep;9(5):885–9

MR Imaging of the cervical cord in juvenile amyotrophy of distal upper extremity. Biondi A, et al. **AJNR** 1989 Mar–Apr;10(2):263–8

MR assessment of myelination in infants and children: usefulness of marker sites. Bird CR, et al. **AJNR** 1989 Jul–Aug;10(4):731–40

Truncation artifact in MR images of the intervertebral disk. Breger RK, et al. **AJNR** 1988 Sep;9(5):825–8

Frequency and variation of the posterior pituitary bright signal on MR images. Brooks BS, et al. **AJNR** 1989

Sep–Oct;10(5):943–8
Hamartoma of the tuber cinereum: a comparison of MR and CT findings in four cases. Burton EM, et al. AJNR 1989 May–Jun;10(3):497–501
The CT and MR evaluation of lissencephaly. Byrd SE, et al. AJNR 1988 Sep;9(5):923–7
High–resolution MR of the spinal cord in humans and rats. Carvlin MJ, et al. AJNR 1989 Jan–Feb;10(1):13–7
MR imaging and CT in three cases of Sturge–Weber syndrome: prospective comparison. Chamberlain MC, et al. AJNR 1989 May–Jun;10(3):491–6
MR imaging of hindbrain deformity in Chiari II patients with and without symptoms of brainstem compression. Curnes JT, et al. AJNR 1989 Mar–Apr;10(2):293–302
MR imaging of compact white matter pathways. Curnes JT, et al. AJNR 1988 Nov–Dec;9(6):1061–8
MR imaging of mucoceles of the sphenoid sinus. Dawson RC 3d, et al. AJNR 1989 May–Jun;10(3):613–4
MR imaging of pericallosal lipoma. Dean B, et al. AJNR 1988 Sep;9(5):929–31
Physiologic intracranial calcification with hyperintensity on MR imaging: case report and experimental model. Dell LA, et al. AJNR 1988 Nov–Dec;9(6):1145–8
Differentiation between meningeal fibrosis and chronic subdural hematoma after ventricular shunting: value of enhanced CT and MR scans. Destian S, et al. AJNR 1989 Sep–Oct;10(5):1021–6
MR findings in eclampsia. Dierckx I, et al. AJNR 1989 Mar–Apr;10(2):445
Significance of CT and MR findings in sphenoid sinus disease. Digre KB, et al. AJNR 1989 May–Jun;10(3):603–6
MR imaging of spinal cord arteriovenous malformations at 0.5 T: study of 34 cases. Dormont D, et al. AJNR 1988 Sep;9(5):833–8
Topography and identification of the inferior precentral sulcus in MR imaging. Ebeling U, et al. AJNR 1989 Sep–Oct;10(5):937–42
MR findings in methotrexate–induced CNS abnormalities. Ebner F, et al. AJNR 1989 Sep–Oct;10(5):959–64
Gd–DTPA–enhanced cranial MR imaging in children: initial clinical experience and recommendations for its use. Elster AD, et al. AJNR 1989 Sep–Oct;10(5):1027–30
Cerebral MR of Menkes kinky–hair disease. Faerber EN, et al. AJNR 1989 Jan–Feb;10(1):190–2
MR imaging of the ectopic bright signal of posterior pituitary regeneration. el Gammal T, et al. AJNR 1989 Mar–Apr; 10(2):323–8
Trauma to the corpus callosum: MR features. Gentry LR, et al. AJNR 1988 Nov–Dec;9(6):1129–38
MR imaging characteristics of a neurenteric cyst. Geremia GK, et al. AJNR 1988 Sep;9(5):978–80
Cholesterol granuloma of the petrous apex: MR and CT evaluation. Greenberg JJ, et al. AJNR 1988 Nov–Dec; 9(6):1205–14
Sellar abscess associated with tuberculous osteomyelitis of the skull: MR findings. Gupta RK, et al. AJNR 1989 Mar–Apr;10(2):448
MR imaging of corpus callosotomy. Harris RD, et al. AJNR 1989 Jul–Aug;10(4):677–80
MR imaging of hyperacute intracranial hemorrhage in the cat. Hayman LA, et al. AJNR 1989 Jul–Aug;10(4):681–6
Large Virchow–Robin spaces: MR–clinical correlation. Heier LA, et al. AJNR 1989 Sep–Oct;10(5):929–36
Foci of increased T2 signal intensity on brain MR scans of healthy elderly subjects. Hendrie HC, et al. AJNR 1989 Jul–Aug;10(4):703–7
Anatomy of the brainstem: correlation of in vitro MR images with histologic sections. Hirsch WL, et al. AJNR 1989 Sep–Oct;10(5):923–8
MR and cryomicrotomy of C1 and C2 roots. Ho PS, et al. AJNR 1988 Sep;9(5):829–31
MR appearance of gray and white matter at the cervicomedullary region. Ho PS, et al. AJNR 1989 Sep–Oct;10(5):1051–5
Comparison of MR imaging and CT in patients with intracranial aneurysm clips. Holtås S, et al. AJNR 1988 Sep;9(5):891–7
The ovoid lesion: a new MR observation in patients with multiple sclerosis. Horowitz AL, et al. AJNR 1989 Mar–Apr;10(2):303–5
Stereotactic third ventriculostomy: assessment of patency with MR imaging. Jack CR Jr, et al. AJNR 1989 May–Jun; 10(3):515–22
MR imaging of callosal and corticocallosal dysgenesis. Jinkins JR, et al. AJNR 1989 Mar–Apr;10(2):339–44
CT and MR of lymphomatoid granulomatosis of the CNS: report of four cases and review of the literature. Kapila A, et al. AJNR 1988 Nov–Dec;9(6):1139–43 (20 ref.)
Cerebral blood volume in a rat model of ischemia by MR imaging at 4.7 T. Kent TA, et al. AJNR 1989 Mar–Apr; 10(2):335–8
Small cauda equina neurinoma detected by MR imaging. Komatsu Y, et al. AJNR 1988 Nov–Dec;9(6):1243
Gd–DTPA–enhanced MR of suspected spinal multiple sclerosis. Larsson EM, et al. AJNR 1989 Sep–Oct; 10(5):1071–6
Craniofacial chondrosarcomas: imaging findings in 15 untreated cases. Lee YY, et al. AJNR 1989 Jan–Feb; 10(1):165–70
MR imaging with topographic EEG electrodes in place. Lufkin R, et al. AJNR 1988 Sep;9(5):953–4
Hypertrophic cranial pachymeningitis: assessment with CT and MR imaging. Martin N, et al. AJNR 1989 May–Jun; 10(3):477–84
MR imaging in neurocysticercosis: a study of 56 cases. Martinez HR, et al. AJNR 1989 Sep–Oct;10(5):1011–9
MR imaging of spinal cord avulsion. Mathis JM, et al. AJNR 1988 Nov–Dec;9(6):1232–3
Inflammatory myelinoclastic diffuse sclerosis (Schilder's disease): neuroradiologic findings. Mehler MF, et al. AJNR 1989 Jan–Feb;10(1):176–80
Use of titanium wire in cervical spine fixation as a means to reduce MR artifacts. Mirvis SE, et al. AJNR 1988 Nov–Dec;9(6):1229–31
Gd–DTPA–enhanced MR imaging of pituitary adenomas. Newton DR, et al. AJNR 1989 Sep–Oct;10(5):949–54
An experimental model to study contrast enhancement in MR imaging of the intervertebral disk. Nguyen CM, et al. AJNR 1989 Jul–Aug;10(4):811–4
MR imaging of neuronal migrational disorders. Osborn RE, et al. AJNR 1988 Nov–Dec;9(6):1101–6
Abnormalities of the brain in nonketotic hyperglycinemia: MR manifestations. Press GA, et al. AJNR 1989 Mar–Apr; 10(2):315–21
Importance of absence of CSF pulsation artifacts in the MR detection of significant myelographic block at 1.5 T. Quint DJ, et al. AJNR 1989 Sep–Oct;10(5):1089–95
MR imaging of middle cranial fossa arachnoid cysts: temporal lobe agenesis syndrome revisited. Robertson SJ, et al. AJNR 1989 Sep–Oct;10(5):1007–10
The septum pellucidum: normal and abnormal. Sarwar M. AJNR 1989 Sep–Oct;10(5):989–1005 (60 ref.)
Primary intracranial CNS lymphoma: MR manifestations. Schwaighofer BW, et al. AJNR 1989 Jul–Aug;10(4):725–9
Myth of the mesoderm [letter; comment] Smith AS. AJNR 1989 Mar–Apr;10(2):449. **Comment on:** AJNR 1988 Mar–Apr;9(2):385–7
MR imaging of Lhermitte–Duclos disease: a case report. Smith RR, et al. AJNR 1989 Jan–Feb;10(1):187–9
Differentiation between postoperative scar and recurrent disk herniation: prospective comparison of MR, CT, and contrast–enhanced CT. Sotiropoulos S, et al. AJNR 1989 May–Jun;10(3):639–43
Thrombus formation and structure and the evolution of mass effect in intracranial aneurysms treated by balloon embolization: emphasis on MR findings. Strother CM, et al. AJNR 1989 Jul–Aug;10(4):787–96
MR imaging of olfactory bulbs and tracts. Suzuki M, et al. AJNR 1989 Sep–Oct;10(5):955–7
MR imaging of the cranial meninges with emphasis on contrast enhancement and meningeal carcinomatosis. Sze G, et al. AJNR 1989 Sep–Oct;10(5):965–75
Tongue cancer: correlation of MR imaging and sonography with pathology. Takashima S, et al. AJNR 1989 Mar–Apr; 10(2):419–24
MR imaging of epidermoid cysts. Tampieri D, et al. AJNR 1989 Mar–Apr;10(2):351–6
Wallerian degeneration and inflammation in rat peripheral nerve detected by in vivo MR imaging. Titelbaum DS, et al. AJNR 1989 Jul–Aug;10(4):741–6
MR imaging vs CT in subacute sclerosing panencephalitis. Tsuchiya K, et al. AJNR 1988 Sep;9(5):943–6
The reflection of histology in MR imaging of Pelizaeus–Merzbacher disease. van der Knaap MS, et al. AJNR 1989 Jan–Feb;10(1):99–103
T1 and T2 measurements of meningiomas and neuromas before and after Gd–DTPA. Watabe T, et al. AJNR 1989 May–Jun;10(3):463–70
The clinical significance of hindbrain herniation and deformity as shown on MR images of patients with Chiari II malformation. Wolpert SM, et al. AJNR 1988 Nov–Dec; 9(6):1075–8
Comparison of MR and diskography in detecting radial tears of the anulus: a postmortem study. Yu SW, et al. AJNR 1989 Sep–Oct;10(5):1077–81
MR imaging of double–outlet right ventricle. Akins EW, et al. AJR 1989 Jan;152(1):128–30
Age–related changes of the prostate: evaluation by MR imaging. Allen KS, et al. AJR 1989 Jan;152(1):77–81
Simpler music/audio system for patients having MR imaging [letter] Axel L. AJR 1989 Mar;152(3):653
Absence of the septum pellucidum: a useful sign in the diagnosis of congenital brain malformations. Barkovich AJ, et al. AJR 1989 Feb;152(2):353–60
MR imaging of coronary artery aneurysms in a child with Kawasaki disease. Bisset GS 3d, et al. AJR 1989 Apr; 152(4):805–7
Preoperative evaluation of cervical radiculopathy and myelopathy by surface–coil MR imaging. Brown BM, et al. AJR 1988 Dec;151(6):1205–12
Myocardial paramagnetic contrast agents for MR imaging. Brown JJ, et al. AJR 1988 Nov;151(5):865–71 (53 ref.)
MR imaging artifacts of the axial internal anatomy of the cervical spinal cord. Curtin AJ, et al. AJR 1989 Apr; 152(4):835–42
Characteristic features of MR truncation artifacts. Czervionke LF, et al. AJR 1988 Dec;151(6):1219–28
MR imaging of the cavernous sinus: value of spin echo and gradient recalled echo images. Daniels DL, et al. AJR 1988 Nov;151(5):1009–14
MR imaging of hemorrhagic intracranial neoplasms. Destian S, et al. AJR 1989 Jan;152(1):137–44
Incidental detection of hematopoietic hyperplasia on routine knee MR imaging. Deutsch AL, et al. AJR 1989 Feb; 152(2):333–6
MR imaging of periventricular leukomalacia in childhood. Flodmark O, et al. AJR 1989 Mar;152(3):583–90
The early evaluations of MR imaging. Friedman PJ. AJR 1988 Nov;151(5):860–1
MR imaging of the knee [letter] Hall FM. AJR 1988 Dec; 151(6):1255–6
Efficacy of MR vs CT in epilepsy. Heinz ER, et al. AJR 1989 Feb;152(2):347–52
MR imaging of thyroid and parathyroid glands: a review of current status. Higgins CB, et al. AJR 1988 Dec; 151(6):1095–106 (78 ref.)
The assessment of MR imaging. Hillman BJ. AJR 1988 Nov; 151(5):858–60
Comparison of MR imaging, CT, and angiography in the evaluation of the enlarged cavernous sinus. Hirsch WL Jr, et al. AJR 1988 Nov;151(5):1015–23
Imaging of pigmented villonodular synovitis with emphasis on MR imaging. Jelinek JS, et al. AJR 1989 Feb; 152(2):337–42
MR imaging of the pars interarticularis. Johnson DW, et al. AJR 1989 Feb;152(2):327–32
Histochemical characterization and functional significance of the hyperintense signal on MR images of the posterior pituitary. Kucharczyk J, et al. AJR 1989 Jan;152(1):153–7
Pre– and postoperative MR imaging of the craniocervical junction in rheumatoid arthritis. Larsson EM, et al. AJR 1989 Mar;152(3):561–6
Progressive periventricular hyperintensity on MR imaging [letter] Lee S, et al. AJR 1989 Mar;152(3):654–5
Intracranial oligodendrogliomas: imaging findings in 35 untreated cases. Lee YY, et al. AJR 1989 Feb;152(2):361–9
MR imaging of the criss–cross heart. Link KM, et al. AJR 1989 Apr;152(4):809–12
Fat–shift artifact simulating aortic dissection on MR images. Lotan CS, et al. AJR 1989 Feb;152(2):385–6
Cardiac masses: assessment by MR imaging. Lund JT, et al. AJR 1989 Mar;152(3):469–73
Detection of liver metastases with superparamagnetic iron oxide in 15 patients: results of MR imaging at 1.5 T. Marchal G, et al. AJR 1989 Apr;152(4):771–5
Dyke award. Gd–DTPA–enhanced MR imaging of experimental bacterial meningitis: evaluation and comparison with CT. Mathews VP, et al. AJR 1989 Jan; 152(1):131–6
Perfluorooctylbromide: a new contrast agent for CT, sonography, and MR imaging. Mattrey RF. AJR 1989 Feb; 152(2):247–52 (36 ref.)
Cerebellar atrophy caused by high–dose cytosine arabinoside: CT and MR findings. Miller L, et al. AJR 1989 Feb; 152(2):343–4
Simple music/audio system for patients having MR imaging [letter] Miyamoto AT, et al. AJR 1988 Nov;151(5):1060
Immature bone infarcts: findings on plain radiographs and MR scans. Munk PL, et al. AJR 1989 Mar;152(3):547–9
MR differentiation of hepatocellular carcinoma from cavernous hemangioma: complementary roles of FLASH and T2 values. Ohtomo K, et al. AJR 1989 Mar; 152(3):505–7
Comparison of cine MR imaging with Doppler echocardiography for the evaluation of aortic regurgitation. Pflugfelder PW, et al. AJR 1989 Apr; 152(4):729–35
Cine–gradient–refocused MR imaging of central pulmonary emboli. Posteraro RH, et al. AJR 1989 Mar;152(3):465–8
MR imaging in the tethered spinal cord syndrome. Raghavan N, et al. AJR 1989 Apr;152(4):843–52
MR imaging of myocardial sarcoidosis. Riedy K, et al. AJR 1988 Nov;151(5):915–6
Constraints and limitations of clinical investigations in radiology. Rosenquist CJ. AJR 1988 Nov;151(5):862–3
Gadolinium–DTPA–enhanced MR imaging of the postoperative lumbar spine: time course and mechanism of enhancement. Ross JS, et al. AJR 1989 Apr; 152(4):825–34
Diagnosis of pulmonary hemosiderosis by MR imaging. Rubin GD, et al. AJR 1989 Mar;152(3):573–4
Primary liver tumors: diagnosis by MR imaging. Rummeny E, et al. AJR 1989 Jan;152(1):63–72
MR imaging of liver neoplasms. Rummeny E, et al. AJR 1989 Mar;152(3):493–9
Multicenter double–blind placebo–controlled study of gadopentetate dimeglumine as an MR contrast agent: evaluation in patients with cerebral lesions. Russell EJ, et al. AJR 1989 Apr;152(4):813–23
MR of osteochondritis dissecans and avascular necrosis of the mandibular condyle. Schellhas KP, et al. AJR 1989 Mar;152(3):551–60
Cutaneous blood flow changes during MR imaging [letter] Shellock FG. AJR 1988 Nov;151(5):1059–60
Comparison of STIR and spin–echo MR imaging at 1.5 T in 90 lesions of the chest, liver, and pelvis. Shuman WP, et al. AJR 1989 Apr;152(4):853–9
The poor quality of early evaluations of MR imaging: a reply. Shuman WP. AJR 1988 Nov;151(5):857–8
Standards of quality in medical research: who decides? Stark DD. AJR 1988 Nov;151(5):863–4
Imaging of pancreatic neoplasms: comparison of MR and CT. Steiner E, et al. AJR 1989 Mar;152(3):487–91
Intramedullary disease of the spine: diagnosis using gadolinium–DTPA–enhanced MR imaging. Sze G, et al. AJR 1988 Dec;151(6):1193–204

MR and CT of masses of the anterosuperior third ventricle. Waggenspack GA, et al. AJR 1989 Mar;152(3):609–14
Subdural and epidural empyemas: MR imaging. Weingarten K, et al. AJR 1989 Mar;152(3):615–21
Superparamagnetic iron oxide: pharmacokinetics and toxicity. Weissleder R, et al. AJR 1989 Jan;152(1):167–73
The diagnosis of splenic lymphoma by MR imaging: value of superparamagnetic iron oxide. Weissleder R, et al. AJR 1989 Jan;152(1):175–80
Giant fibrovascular polyp of the esophagus: CT and MR findings. Whitman GJ, et al. AJR 1989 Mar;152(3):518–20
Visual fuzzy cluster analysis of MR images. Young SW, et al. AJR 1989 Jan;152(1):19–25 (3 ref.)
Osteomyelitis of the foot in diabetic patients: evaluation with plain film, 99mTc-MDP bone scintigraphy, and MR imaging. Yuh WT, et al. AJR 1989 Apr;152(4):795–800
MR imaging of intracranial fluid levels. Abrahams JJ, et al. AJR Am J Roentgenol 1989 Sep;153(3):597–604
MR appearance of the liver after partial hepatectomy. Arrivé L, et al. AJR Am J Roentgenol 1989 Jun;152(6):1215–20
MR signal intensity of parathyroid adenomas: correlation with histopathology. Auffermann W, et al. AJR Am J Roentgenol 1989 Oct;153(4):873–6
MR evaluation of adrenal masses at 1.5 T. Baker ME, et al. AJR Am J Roentgenol 1989 Aug;153(2):307–12
MR imaging of secondary cardiac and paracardiac lesions. Barakos JA, et al. AJR Am J Roentgenol 1989 Jul; 153(1):47–50
MR appearance of gallstones in vitro at 1.5 T: correlation with chemical composition. Baron RL, et al. AJR Am J Roentgenol 1989 Sep;153(3):497–502
Osseous invasion by soft-tissue sarcoma seen better on MR than on CT [letter] Berthoty D, et al. AJR Am J Roentgenol 1989 May;152(5):1131
Contrast enhancement in spinal MR imaging. Breger RK, et al. AJR Am J Roentgenol 1989 Aug;153(2):387–91
Testicular epidermoid cyst: sonographic and MR findings [letter] Brenner JS, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1344
Giant cavernous hemangioma of the liver: CT and MR imaging in 10 cases. Choi BI, et al. AJR Am J Roentgenol 1989 Jun;152(6):1221–6
Gd-DTPA-enhanced MR detection of diffuse leptomeningeal metastases [letter] Cooley PA, et al. AJR Am J Roentgenol 1989 Oct;153(4):888
MR imaging findings in renal medullary fibroma. Cormier P, et al. AJR Am J Roentgenol 1989 Jul;153(1):83–4
The cerebellum in sagittal plane—anatomic-MR correlation: 1. The vermis. Courchesne E, et al. AJR Am J Roentgenol 1989 Oct;153(4):829–35
Recurrent occult medullary thyroid carcinoma detected by MR imaging. Crow JP, et al. AJR Am J Roentgenol 1989 Jun;152(6):1255–6
MR angiography and dynamic flow evaluation of the portal venous system. Edelman RR, et al. AJR Am J Roentgenol 1989 Oct;153(4):755–60
MR imaging of the finger: correlation with normal anatomic sections. Erickson SJ, et al. AJR Am J Roentgenol 1989 May;152(5):1013–9
MR characteristics of subdural hematomas and hygromas at 1.5 T. Fobben ES, et al. AJR Am J Roentgenol 1989 Sep; 153(3):589–95
MR imaging of the posterior hypophysis in children. Gudinchet F, et al. AJR Am J Roentgenol 1989 Aug; 153(2):351–4
MR imaging of brain abscesses. Haimes AB, et al. AJR Am J Roentgenol 1989 May;152(5):1073–85
Pathophysiology of acute intracerebral and subarachnoid hemorrhage: applications to MR imaging. Hayman LA, et al. AJR Am J Roentgenol 1989 Jul;153(1):135–9 (19 ref.)
The anatomic basis of vertebrogenic pain and the autonomic syndrome associated with lumbar disk extrusion. Jinkins JR, et al. AJR Am J Roentgenol 1989 Jun;152(6):1277–89
MR imaging anatomy of the infant hip. Johnson ND, et al. AJR Am J Roentgenol 1989 Jul;153(1):127–33
MR imaging of the craniovertebral junction, cranium, and brain in children with achondroplasia. Kao SC, et al. AJR Am J Roentgenol 1989 Sep;153(3):565–9
MR diagnosis of lipomatous infiltration of the interatrial septum. Kaplan KR, et al. AJR Am J Roentgenol 1989 Sep;153(3):495–6
MR imaging of intracranial carotid occlusion. Katz BH, et al. AJR Am J Roentgenol 1989 Jun;152(6):1271–6
Diagnosis of fistulae and sinus tracts in patients with Crohn disease: value of MR imaging. Koelbel G, et al. AJR Am J Roentgenol 1989 May;152(5):999–1003
Soft-tissue masses: diagnosis using MR imaging. Kransdorf MJ, et al. AJR Am J Roentgenol 1989 Sep;153(3):541–7
Juvenile pilocytic astrocytomas: CT and MR characteristics. Lee YY, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1263–70
Sampling bandwidth and fat suppression: effects on long TR/TE MR imaging of the abdomen and pelvis at 1.5 T. Mitchell DG, et al. AJR Am J Roentgenol 1989 Aug; 153(2):419–25
MR imaging of aneurysmal bone cysts. Munk PL, et al. AJR Am J Roentgenol 1989 Jul;153(1):99–101
Serial assessment of myocardial infarction by using gated MR imaging and Gd-DTPA. Nishimura T, et al. AJR Am J Roentgenol 1989 Oct;153(4):715–20
Cine MR imaging in mitral regurgitation: comparison with color Doppler flow imaging. Nishimura T, et al. AJR Am J Roentgenol 1989 Oct;153(4):721–4
Gd-DTPA-enhanced MR imaging of spinal tumors. Parizel PM, et al. AJR Am J Roentgenol 1989 May;152(5):1087–96
MR imaging of congenitally corrected transposition of the great vessels in adults. Park JH, et al. AJR Am J Roentgenol 1989 Sep;153(3):491–4
The cerebellum in sagittal plane—anatomic-MR correlation: 2. The cerebellar hemispheres. Press GA, et al. AJR Am J Roentgenol 1989 Oct;153(4):837–46
MR imaging of muscles of mastication. Schellhas KP. AJR Am J Roentgenol 1989 Oct;153(4):847–55
Willard Gibbs and the Gibbs phenomenon [letter] Schenck JF. AJR Am J Roentgenol 1989 May;152(5):1127–8
MR detection of probable hematopoietic hyperplasia involving the knees, proximal femurs, and pelvis [letter] Schuck JE, et al. AJR Am J Roentgenol 1989 Sep; 153(3):655–6
Mixed müllerian sarcoma of the uterus: MR imaging findings. Shapeero LG, et al. AJR Am J Roentgenol 1989 Aug; 153(2):317–9
Neuroradiology case of the day. Chordoma of the clivus. Shoemaker EI, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1333
High-signal periventricular lesions in patients with sarcoidosis: neurosarcoidosis or multiple sclerosis? Smith AS, et al. AJR Am J Roentgenol 1989 Jul;153(1):147–52
MR imaging characteristics of tuberculous spondylitis vs vertebral osteomyelitis. Smith AS, et al. AJR Am J Roentgenol 1989 Aug;153(2):399–405
MR imaging of neurocysticercosis. Teitelbaum GP, et al. AJR Am J Roentgenol 1989 Oct;153(4):857–66
MR imaging of experimental demyelination. Teresi LM, et al. AJR Am J Roentgenol 1989 Jun;152(6):1291–8
Focal nodular hyperplasia of the liver: features on Gd-DTPA-enhanced MR [letter] Tham RT, et al. AJR Am J Roentgenol 1989 Oct;153(4):884–5
Gradient-echo MR imaging of the cervical spine: evaluation of extradural disease. VanDyke C, et al. AJR Am J Roentgenol 1989 Aug;153(2):393–8
Mucoceles of the paranasal sinuses: MR imaging with CT correlation. Van Tassel P, et al. AJR Am J Roentgenol 1989 Aug;153(2):407–12
Rounded atelectasis of the lung: MR appearance. Verschakelen JA, et al. AJR Am J Roentgenol 1989 May; 152(5):965–6
Normal variations in MR imaging of the knee: appearance and frequency. Watanabe AT, et al. AJR Am J Roentgenol 1989 Aug;153(2):341–4
MR imaging of ossification of the posterior longitudinal ligament [letter] Widder DJ. AJR Am J Roentgenol 1989 Jul;153(1):194–5
John Caffey award. MR imaging determination of the location of the normal conus medullaris throughout childhood. Wilson DA, et al. AJR Am J Roentgenol 1989 May;152(5):1029–32
Anatomic relations between the median nerve and flexor tendons in the carpal tunnel: MR evaluation in normal volunteers. Zeiss J, et al. AJR Am J Roentgenol 1989 Sep; 153(3):533–6
Quantitation of antegrade and retrograde blood flow in the human aorta by magnetic resonance velocity mapping. Bogren HG, et al. Am Heart J 1989 Jun;117(6):1214–22
The function of the aorta in ischemic heart disease: a magnetic resonance and angiographic study of aortic compliance and blood flow patterns. Bogren HG, et al. Am Heart J 1989 Aug;118(2):234–47
Evaluation of pulmonary arterial morphology in cyanotic congenital heart disease by magnetic resonance imaging. Canter CE, et al. Am Heart J 1989 Aug;118(2):347–54
Detection of apical hypertrophic cardiomyopathy by magnetic resonance imaging. Casolo GC, et al. Am Heart J 1989 Feb;117(2):468–72
Unusual cardiac metastasis in hypernephroma: the complementary role of echocardiography and magnetic resonance imaging. Gindea AJ, et al. Am Heart J 1988 Nov;116(5 Pt 1):1359–61
Magnetic resonance imaging of congenital heart disease: sensitivity and specificity using receiver operating characteristic curve analysis. Kersting-Sommerhoff BA, et al. Am Heart J 1989 Jul;118(1):155–61
Myocardial tissue characterization by magnetic resonance imaging in Fabry's disease. Matsui S, et al. Am Heart J 1989 Feb;117(2):472–4
Contrast-enhanced magnetic resonance imaging of cardiac tumors in children. Niwa K, et al. Am Heart J 1989 Aug; 118(2):424–5
Quantification of left ventricular myocardial mass in humans by nuclear magnetic resonance imaging. Ostrzega E, et al. Am Heart J 1989 Feb;117(2):444–52
Noninvasive evaluation of mitral regurgitation by analysis of left atrial signal loss in cine magnetic resonance. Pflugfelder PW, et al. Am Heart J 1989 May;117(5):1113–9
Magnetic resonance imaging of vascular conduits in coarctation of the aorta. Pucillo AL, et al. Am Heart J 1989 Feb;117(2):482–5
Lipomatous encasement and compression of the heart: antemortem diagnosis by cardiac nuclear magnetic resonance imaging and catheterization. Rokey R, et al. Am Heart J 1989 Apr;117(4):952–3
Value of magnetic resonance imaging for diagnosis of cervical epidural hematoma associated with anticoagulation after cardiac valve replacement. Hurst PG, et al. Am J Cardiol 1989 Apr 15;63(13):1016–7
Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset. Johnston DL, et al. Am J Cardiol 1989 Jul 15;64(3):172–9
Magnetic resonance imaging of prosthetic cardiac valves in vitro and in vivo. Randall PA, et al. Am J Cardiol 1988 Nov 1;62(13):973–6
Correlation of morphology of the left ventricular outflow tract with two-dimensional Doppler echocardiography and magnetic resonance imaging in atrioventricular septal defect. Wenink AC, et al. Am J Cardiol 1989 May 1; 63(15):1137–40
Nuclear magnetic resonance and radionuclide angiographic assessment of acute myocardial infarction in a randomized trial of intravenous streptokinase. Wisenberg G, et al. Am J Cardiol 1988 Nov 15;62(16):1011–6
Primary lymphoma of bone: the use of MRI in pretreatment evaluation. Salter M, et al. Am J Clin Oncol 1989 Apr; 12(2):101–5
Radiological cases of the month. Osteonecrosis of the femoral head diagnosed by magnetic resonance imaging. Barzel E, et al. Am J Dis Child 1989 May;143(5):623–4
Detection of acute myocarditis using nuclear magnetic resonance imaging. Chandraratna PA, et al. Am J Med 1987 Dec;83(6):1144–6
Assessment of tissue iron overload by nuclear magnetic resonance imaging. Johnston DL, et al. Am J Med 1989 Jul;87(1):40–7
Magnetic resonance imaging versus computed tomographic scanning in neuropsychiatric systemic lupus erythematosus. Sewell KL, et al. Am J Med 1989 May;86(5):625–6
Superiority of magnetic resonance imaging over computer tomography for diagnosing isodense bilateral subdural hematomas. Slowikowski JS, et al. Am J Med 1989 Mar; 86(3):345–6
Diagnosis of a small ovarian tumor (androgen secreting) by magnetic resonance: a new noninvasive procedure. Ayalon D, et al. Am J Obstet Gynecol 1988 Oct;159(4):903–5
Magnetic resonance imaging of retrobulbar changes in optic nerve position with eye movement. Smiddy WE, et al. Am J Ophthalmol 1989 Jan 15;107(1):82–3
CT and MRI of the ear and temporal bone: current state of the art and future prospects. Jackler RK. Am J Otol 1988 May;9(3):232–9 (111 ref.)
Magnetic resonance imaging in the diagnosis of temporal bone and skull base lesions. Meyerhoff WL, et al. Am J Otol 1989 Mar;10(2):131–7
Magnetic resonance imaging of bone marrow in sickle cell patients. Mankad VN, et al. Am J Pediatr Hematol Oncol 1988 Winter;10(4):344–7
MRI in multifocal eosinophilic granuloma: staging disease and monitoring response to therapy. Moore JB, et al. Am J Pediatr Hematol Oncol 1989 Summer;11(2):174–7
Use of imaging techniques for schizophrenic patients [letter] Conlon P, et al. Am J Psychiatry 1989 Jul;146(7):941
A magnetic resonance imaging study of autism: normal fourth ventricle size and absence of pathology. Garber HJ, et al. Am J Psychiatry 1989 Apr;146(4):532–4
Quantification of corpus callosum and ventricles in schizophrenia with nuclear magnetic resonance imaging: a pilot study. Rossi A, et al. Am J Psychiatry 1989 Jan; 146(1):99–101
Magnetic resonance imaging of Achilles tendon ruptures. Keene JS, et al. Am J Sports Med 1989 May–Jun; 17(3):333–7
Measurement of pharyngeal volume by digitized magnetic resonance imaging. Effect of nasal continuous positive airway pressure. Abbey NC, et al. Am Rev Respir Dis 1989 Sep;140(3):717–23
Evaluation of intrathoracic extent of lung cancer by plain chest radiography, computed tomography, and magnetic resonance imaging. Batra P, et al. Am Rev Respir Dis 1988 Jun;137(6):1456–62
Magnetic resonance imaging of the thorax. Gamsu G, et al. Am Rev Respir Dis 1989 Jan;139(1):254–74 (169 ref.)
Mapping the cerebral blood vessels with high-field MRI: technical and anatomic review. Gomez CR. Angiology 1989 May;40(5):436–42
Magnetic resonance scanning in the Sjögren syndrome [letter] Parenti DM, et al. Ann Intern Med 1989 Mar 1;110(5):408–9
Transverse sinus thrombosis in newborns: clinical and magnetic resonance imaging findings. Baram TZ, et al. Ann Neurol 1988 Dec;24(6):792–4
Amyotrophic lateral sclerosis: abnormalities of the tongue on magnetic resonance imaging. Cha CH, et al. Ann Neurol 1989 May;25(5):468–72
Benign versus chronic progressive multiple sclerosis: magnetic resonance imaging features. Koopmans RA, et al. Ann Neurol 1989 Jan;25(1):74–81
Chronic progressive multiple sclerosis: serial magnetic resonance brain imaging over six months. Koopmans RA, et al. Ann Neurol 1989 Aug;26(2):248–56
Magnetic resonance imaging findings in stroke patients with convulsive onset [letter] Kramer R. Ann Neurol 1988 Oct; 24(4):585–6
Magnetic resonance imaging morphology of the corpus callosum in monozygotic twins. Oppenheim JS, et al. Ann Neurol 1989 Jul;26(1):100–4
Hallervorden-Spatz syndrome: clinical and magnetic resonance imaging correlations. Sethi KD, et al. Ann Neurol 1988 Nov;24(5):692–4
The open opercular sign: diagnosis and significance. Tatum

WO, et al. **Ann Neurol** 1989 Feb;25(2):196–9
Serial magnetic resonance scanning in multiple sclerosis: a second prospective study in relapsing patients. Willoughby EW, et al. **Ann Neurol** 1989 Jan;25(1):43–9
Mascara and eyelining tattoos: MRI artifacts. Weiss RA, et al. **Ann Ophthalmol** 1989 Apr;21(4):129–31
Gadolinium-enhanced facial nerves: accompanying bilateral acoustic tumors in patient with neurofibromatosis. Dolan KD, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):747–8
Magnetic resonance imaging of Thornwaldt's cyst. Norfray JF, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):569–70
Magnetic resonance imaging of the posterior cranial fossa. Valvassori GE, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):594–8
MR imaging in congenital heart disease: where is the leading edge? Link KM, et al. **Ann Radiol (Paris)** 1989;32(1):15–21
Magnetic resonance imaging of aneurysms and chronic dissections of the thoracic aorta. Grenier P, et al. **Ann Vasc Surg** 1987 Dec;1(5):534–41
Particles from drill bit and metal suction tip friction distort magnetic resonance imaging. Groah L, et al. **AORN J** 1989 Mar;49(3):882–3
Magnetic resonance imaging of the brain in bacterial endocarditis. Bertorini TE, et al. **Arch Intern Med** 1989 Apr;149(4):815–7
Magnetic resonance imaging in a family with hereditary cerebral arteriovenous malformations. Allard JC, et al. **Arch Neurol** 1989 Feb;46(2):184–7
Completeness of callosotomy shown by magnetic resonance imaging in the long term. Bogen JE, et al. **Arch Neurol** 1988 Nov;45(11):1203–5
Hypertensive encephalopathy. Magnetic resonance imaging demonstration of reversible cortical and white matter lesions. Hauser RA, et al. **Arch Neurol** 1988 Oct; 45(10):1078–83
Magnetic resonance imaging and clinical correlates of intellectual impairment in myotonic dystrophy. Huber SJ, et al. **Arch Neurol** 1989 May;46(5):536–40
Magnetic resonance imaging in amateur boxers. Jordan BD, et al. **Arch Neurol** 1988 Nov;45(11):1207–8
A new family with Joseph disease in Japan. Homovanillic acid, magnetic resonance, and sleep apnea studies. Kitamura J, et al. **Arch Neurol** 1989 Apr;46(4):425–8
Cerebrospinal fluid immunoglobulins and multiple sclerosis. Correspondence with magnetic resonance imaging and visually evoked potential changes. Müller FA, et al. **Arch Neurol** 1989 Apr;46(4):367–71
High-resolution magnetic resonance imaging findings in juvenile-onset myotonic dystrophy [letter] Peterson AC, et al. **Arch Neurol** 1989 May;46(5):481–2
Neuropsychological test findings in subjects with leukoaraiosis. Rao SM, et al. **Arch Neurol** 1989 Jan; 46(1):40–4
Cerebral magnetic resonance imaging findings in multiple sclerosis. Relation to disturbance of affect, drive, and cognition. Reischies FM, et al. **Arch Neurol** 1988 Oct; 45(10):1114–6
Interhemispheric transfer in patients with incomplete section of the corpus callosum. Anatomic verification with magnetic resonance imaging. Risse GL, et al. **Arch Neurol** 1989 Apr;46(4):437–43
Magnetic resonance imaging in moyamoya disease [letter] Rolak LA. **Arch Neurol** 1989 Jan;46(1):14
Advantages of diagnosing bacterial spondylitis with magnetic resonance imaging. Bruns J, et al. **Arch Orthop Trauma Surg** 1989;108(1):30–5
Magnetic resonance imaging of tibial shaft fracture repair. Laasonen EM, et al. **Arch Orthop Trauma Surg** 1989; 108(1):40–3
Magnetic resonance imaging of the knee: correlation with arthroscopy. Barronian AD, et al. **Arthroscopy** 1989; 5(3):187–91
Magnetic resonance imaging in posterior circulation infarction: impact on diagnosis and management. Davis SM, et al. **Aust N Z J Med** 1989 Jun;19(3):219–25
Magnetic resonance imaging and intracranial aneurysm clips. Condon PM, et al. **Australas Radiol** 1988 Nov;32(4):493–6
Paediatric MR imaging—current clinical applications. Davies RP, et al. **Australas Radiol** 1988 May;32(2):184–9
Medulloepithelioma: MRI appearances. Davies RP, et al. **Australas Radiol** 1988 Nov;32(4):503–5
Magnetic resonance imaging (MRI) appearances of syringohydromyelia. Houang MT, et al. **Australas Radiol** 1988 May;32(2):172–7
Magnetic resonance imaging (MRI) of pseudosyrinxes. Houang MT, et al. **Australas Radiol** 1988 May;32(2):178–83
Magnetic resonance imaging evaluation of cerebellopontine angle tumours. Loneragan R, et al. **Australas Radiol** 1989 Feb;33(1):47–55
Magnetic resonance imaging. Physics and technical aspects. Vaughan B. **Australas Radiol** 1989 Feb;33(1):34–9
Magnetic resonance imaging in clinical cervical cancer: pretherapeutic tumour volumetry. Hofmann HM, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):789–802
A study of the corpus callosum in epileptic psychosis using magnetic resonance imaging. Conlon P, et al. **Biol Psychiatry** 1988 Nov;24(7):857–60
Morphological evidence for brainstem involvement in infantile autism. Gaffney GR, et al. **Biol Psychiatry** 1988 Sep;24(5):578–86
MRI scans in patients with tardive dyskinesia. Heinz R, et al. **Biol Psychiatry** 1988 Nov;24(7):852–7
Cerebral atrophy in bulimia. Hoffman GW, et al. **Biol Psychiatry** 1989 Apr 1;25(7):894–902
Hemispheric asymmetries and schizophrenia: a preliminary magnetic resonance imaging study. Stratta P, et al. **Biol Psychiatry** 1989 Feb 1;25(3):275–84
Magnetic resonance imaging of coarctation of the aorta in infants: use of a high field strength. Baker EJ, et al. **Br Heart J** 1989 Aug;62(2):97–101
Chemical shift magnetic resonance imaging of human atheroma. Mohiaddin RH, et al. **Br Heart J** 1989 Aug; 62(2):81–9
NMR T1 relaxation time of the brain during alcohol withdrawal and its lack of relationship with symptom severity. Mander AJ, et al. **Br J Addict** 1989 Jun; 84(6):669–72
In vivo magnetic resonance imaging of the effects of photodynamic therapy. Dodd NJ, et al. **Br J Cancer** 1989 Aug;60(2):164–7
Magnetic resonance imaging of the abdomen—1988. Curati WL, et al. **Br J Hosp Med** 1988 Aug;40(2):121–3 (2 ref.)
Interferons in therapeutics [letter] Wardle EN. **Br J Hosp Med** 1989 Jan;41(1):99
Magnetic resonance imaging of intraocular foreign bodies. Williamson TH, et al. **Br J Ophthalmol** 1989 Jul;73(7):555–8
Relative proton density and relaxation times in liver metastases during interferon treatment. Andersson T, et al. **Br J Radiol** 1989 May;62(737):433–7
Magnetic resonance imaging of hypothalamic hamartomas. Beningfield SJ, et al. **Br J Radiol** 1988 Dec;61(732):1177–80
Magnetic resonance imaging: present status and future perspectives. Bydder GM. **Br J Radiol** 1988 Oct; 61(730):889–97 (79 ref.)
Fetal fat measurement by magnetic resonance imaging. Deans HE, et al. **Br J Radiol** 1989 Jul;62(739):603–7
Acute rhabdomyolysis: evaluation with magnetic resonance imaging compared with computed tomography and ultrasonography. Lamminen AE, et al. **Br J Radiol** 1989 Apr;62(736):326–30
Demonstration of vertebral body end plate veins by magnetic resonance imaging. Saywell WR, et al. **Br J Radiol** 1989 Mar;62(735):290–2
Magnetic resonance imaging of ruptured aneurysm of the ascending aorta. Spielmann RP, et al. **Br J Radiol** 1989 Apr;62(736):373–5
Magnetic resonance imaging in recurrent carcinoma of the cervix. Williams MP, et al. **Br J Radiol** 1989 Jun; 62(738):544–50
The value of intravesical echography combined with double-surface coil magnetic resonance imaging in staging bladder cancer. Hendrikx AJ, et al. **Br J Urol** 1989 May; 63(5):469–75
The appearance of adrenal myelolipoma as seen on nuclear magnetic resonance imaging. Moriyama N, et al. **Br J Urol** 1988 Oct;62(4):384–5
New non-invasive methods for assessing brain oxygenation and haemodynamics. Reynolds EO, et al. **Br Med Bull** 1988 Oct;44(4):1052–75 (50 ref.)
Sound lateralization, brainstem auditory evoked potentials and magnetic resonance imaging in multiple sclerosis. van der Poel JC, et al. **Brain** 1988 Dec;111 (Pt 6):1453–74
Pelizaeus-Merzbacher disease manifesting developmental disorder [letter] Aiba K. **Brain Dev** 1988;10(5):342
Magnetic resonance technology in human brain science: blueprint for a program based upon morphometry. Caviness VS Jr, et al. **Brain Dev** 1989;11(1):1–13 (63 ref.)
Polymicrogyria: a case detected by MRI. Curatolo P, et al. **Brain Dev** 1989;11(4):257–9
The Rett syndrome: magnetic resonance imaging and clinical findings in four girls. Krägeloh-Mann I, et al. **Brain Dev** 1989;11(3):175–8
Magnetic resonance imaging of rat brain following kainic acid-induced lesions and fetal striatal tissue transplants. Norman AB, et al. **Brain Res** 1989 Mar 27;483(1):188–91
Magnetic resonance imaging. **Bristol Med Chir J** 1988 May; 103(2):1–36
Magnetic resonance imaging of the orbit. Berger A, et al. **Bristol Med Chir J** 1988 May;103(2):19–21
Magnetic resonance imaging of the CNS. Bradshaw JR, et al. **Bristol Med Chir J** 1988 May;103(2):13–8
The physics of magnetic resonance imaging: a simplified approach. Goddard P, et al. **Bristol Med Chir J** 1988 May; 103(2):7
MRI in thoracic malignancy. Goddard P. **Bristol Med Chir J** 1988 May;103(2):27–8
The detection of metastatic disease of the spine in oncology patients using MRI. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):29–31
The detection of recurrent and metastatic malignant disease in the pelvis using MRI. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):32–3
Cardiovascular MRI. Hartnell G. **Bristol Med Chir J** 1988 May;103(2):23–4
MRI and the District General Hospital. Johnson C, et al. **Bristol Med Chir J** 1988 May;103(2):9–12
Magnetic resonance imaging of the pancreas. Kabala J, et al. **Bristol Med Chir J** 1988 May;103(2):25
Magnetic resonance imaging in the investigation of temporo-mandibular joint disorders. Morse MH. **Bristol Med Chir J** 1988 May;103(2):21–2
MRI in pregnancy: the diagnosis of vasa previa by magnetic resonance imaging. Nimmo MJ, et al. **Bristol Med Chir J** 1988 May;103(2):12
The Bristol MRI Centre. Thomson G. **Bristol Med Chir J** 1988 May;103(2):5–6
Lissencephaly and pachygyria. Banna M, et al. **Can Assoc Radiol J** 1989 Jun;40(3):156–8
Cardiac output by MR imaging: an experimental study comparing right ventricle and left ventricle with thermodilution. Culham JA, et al. **Can Assoc Radiol J** 1988 Dec;39(4):247–9
Falx ossification—MR visualization. Lee DH, et al. **Can Assoc Radiol J** 1988 Dec;39(4):260–2
Magnetic resonance imaging of ruptured Baker's cyst. Lieberman JM, et al. **Can Assoc Radiol J** 1988 Dec; 39(4):295–7
Role of MRI bone marrow imaging in recurrent lymphoma. Marcuzzi DW, et al. **Can Assoc Radiol J** 1989 Aug; 40(4):216–8
Mesenchymal hamartoma in a 10-month-old infant: appearance by magnetic resonance imaging. Roberts EA, et al. **Can Assoc Radiol J** 1989 Aug;40(4):219–21
Intraparenchymal epithelial (enterogenous) cyst of the medulla oblongata. Lach B, et al. **Can J Neurol Sci** 1989 May;16(2):206–10
Computed tomography, magnetic resonance imaging and pathological correlations in a case of Binswanger's disease. Mascalchi M, et al. **Can J Neurol Sci** 1989 May;16(2):214–8
Importance of magnetic resonance imaging in osteoid osteoma: a case report. Bell RS, et al. **Can J Surg** 1989 Jul;32(4):276–8
State-of-the-art assessment. Diagnostic oncologic imaging. Bragg DG. **Cancer** 1989 Jul 1;64(1 Suppl):261–5; discussion 269–71
Magnetic resonance spectroscopy of tumors and potential in vivo clinical applications: a review. Daly PF, et al. **Cancer Res** 1989 Feb 15;49(4):770–9 (116 ref.)
Overview of cardiovascular nuclear magnetic resonance imaging. Bittner V, et al. **Cardiol Clin** 1989 Aug;7(3):631–49 (139 ref.)
Nuclear magnetic resonance of the cardiovascular system: our experience in 112 subjects. Gaudio C, et al. **Cardiologia** 1988 Oct;33(10):907–16
Preoperative evaluation of abdominal aortic aneurysm by MR imaging with aortography correlation. Koslin DB, et al. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):329–35
MR appearance of an arteriovenous hemangioma of the interventricular septum. Newell JD 2d, et al. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):319–21
Clinical implications of nuclear magnetic resonance lung research. Cutillo AG, et al. **Chest** 1989 Sep;96(3):643–52 (115 ref.)
Calcified right atrial myxoma demonstrated by magnetic resonance imaging. de Roos A, et al. **Chest** 1989 Feb; 95(2):478–9
Magnetic resonance for evaluation of the thorax. Fisher MR. **Chest** 1989 Jan;95(1):166–73 (28 ref.)
Radiologic staging of lung cancer using CT and MRI. Glazer GM. **Chest** 1989 Jul;96(1 Suppl):44S–47S (46 ref.)
Magnetic resonance evaluation of patency of stented polytetrafluoroethylene graft connecting right atrium to pulmonary artery. Nawa S, et al. **Chest** 1988 Nov; 94(5):1105–7
Pulmonary artery thrombus detection by magnetic resonance imaging. Szucs RA, et al. **Chest** 1989 Jan;95(1):232–4
A comparative study of CT and MRI in midline tumors of childhood and adolescence. Sprung C, et al. **Childs Nerv Syst** 1989 Apr;5(2):102–6
Magnetic resonance imaging with gadolinium-DTPA for detecting cardiac transplant rejection in rats. Konstam MA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III87–94
Determination of left ventricular mass by magnetic resonance imaging in hearts deformed by acute infarction. Shapiro EP, et al. **Circulation** 1989 Mar;79(3):706–11
Magnetic resonance spectroscopy in biology and medicine. Smith IC. **Clin Biochem** 1989 Feb;22(1):69–76
Computed tomography and magnetic resonance imaging of the skull and brain. Deck MD. **Clin Imaging** 1989 Jun; 13(2):95–113 (94 ref.)
Computed tomography versus magnetic resonance imaging of the brain. A collaborative interinstitutional study. Deck MD, et al. **Clin Imaging** 1989 Mar;13(1):2–15
Staging of cervical carcinoma: accuracy of magnetic resonance imaging and computed tomography. Janus CL, et al. **Clin Imaging** 1989 Jun;13(2):114–6
Magnetic resonance imaging and computed tomography findings in a patient with lymphomatoid granulomatosis. Mendelson DS, et al. **Clin Imaging** 1989 Jun;13(2):130–3
Health policy analysis and magnetic resonance imaging. The case of the New York State Demonstration Project. Milliren JW. **Clin Imaging** 1989 Mar;13(1):16–28
Interaction of metallic neurosurgical implants with magnetic resonance imaging at 1.5 Tesla as a cause of image distortion and of hazardous movement of the implant. Go KG, et al. **Clin Neurol Neurosurg** 1989;91(2):109–15
Spontaneous spinal epidural hematoma in a 7-year-old girl. Diagnostic value of magnetic resonance imaging. Nagel MA, et al. **Clin Neurol Neurosurg** 1989;91(2):157–60
Parkinsonian syndrome after cardiac arrest: radiological and neurochemical changes. Verslegers W, et al. **Clin Neurol Neurosurg** 1988;90(2):177–9
Chronic berylliosis. Demonstration by gallium-67 imaging and magnetic resonance imaging. Deseran MW, et al. **Clin Nucl Med** 1988 Jul;13(7):509–11

Spontaneous femoral osteonecrosis: correlation with MRI. Dey HM, et al. **Clin Nucl Med** 1988 Oct;13(10):756–8
Parathyroid adenoma associated with neurofibromatosis: correlative scintigraphic and magnetic resonance imaging. Vogelzang PJ, et al. **Clin Nucl Med** 1989 Mar;14(3):168–70
Scintigraphic and magnetic resonance studies in a patient with Gaucher's disease. Zanzi I, et al. **Clin Nucl Med** 1988 Jul;13(7):491–5
Magnetic resonance imaging of the musculoskeletal system. **Clin Orthop** 1989 Jul;(244):1–130
Magnetic resonance imaging of the musculoskeletal system. An overview. Bassett LW, et al. **Clin Orthop** 1989 Jul;(244):17–28 (75 ref.)
Magnetic resonance imaging of the spine. Berns DH, et al. **Clin Orthop** 1989 Jul;(244):78–100 (80 ref.)
Magnetic resonance imaging of musculoskeletal neoplasms. Berquist TH. **Clin Orthop** 1989 Jul;(244):101–18 (49 ref.)
Magnetic resonance imaging of the musculoskeletal system in children. Hall TR, et al. **Clin Orthop** 1989 Jul;(244):119–30 (29 ref.)
Skeletal metastases in liposarcoma detectable only by magnetic resonance imaging. Khurana JS, et al. **Clin Orthop** 1989 Jun;(243):204–7
Magnetic resonance imaging of the ischemic femoral head in pigs. Dependency of signal intensities and relaxation times on elapsed time. Lang P, et al. **Clin Orthop** 1989 Jul;(244):272–80
Magnetic resonance imaging of the knee. Mink JH, et al. **Clin Orthop** 1989 Jul;(244):29–47 (56 ref.)
Magnetic resonance imaging of the ischemic hip. Alterations within the osteonecrotic, viable, and reactive zones. Mitchell DG, et al. **Clin Orthop** 1989 Jul;(244):60–77
Physical principles of magnetic resonance imaging. Seeger LL. **Clin Orthop** 1989 Jul;(244):7–16 (14 ref.)
Magnetic resonance imaging of the shoulder. Seeger LL. **Clin Orthop** 1989 Jul;(244):48–59 (29 ref.)
Magnetic resonance imaging in the diagnosis of aggressive villonodular synovitis. Weisz GM, et al. **Clin Orthop** 1988 Nov;(236):303–6
Magnetic resonance imaging in the diagnosis of anterior tibialis muscle herniation. Zeiss J, et al. **Clin Orthop** 1989 Jul;(244):249–53
Magnetic resonance imaging in head and neck cancer. O'Reilly BJ, et al. **Clin Otolaryngol** 1989 Feb;14(1):67–78
Magnetic resonance with gadolinium DTPA for the investigation of temporal bone tumours. Phelps PD, et al. **Clin Otolaryngol** 1989 Jun;14(3):251–62
Olfactory neuroblastoma: imaging by magnetic resonance, CT and conventional techniques. Woodhead P, et al. **Clin Otolaryngol** 1988 Oct;13(5):387–94
Magnetic resonance in clinical physiology. Henriksen O, et al. **Clin Physiol** 1988 Dec;8(6):541–59 (96 ref.)
Magnetic resonance imaging in the foot and ankle. Solomon MA, et al. **Clin Podiatr Med Surg** 1988 Oct;5(4):945–65 (25 ref.)
Extensive cystic leucomalacia: correlation of cranial ultrasound, magnetic resonance imaging and clinical findings in sequential studies. de Vries LS, et al. **Clin Radiol** 1989 Mar;40(2):158–66
Staging of carcinoma of the uterine cervix: MRI–surgical correlation. Greco A, et al. **Clin Radiol** 1989 Jul;40(4):401–5
Cysticercosis of the brain shown by magnetic resonance imaging. Jena A, et al. **Clin Radiol** 1988 Sep;39(5):542–6
Magnetic resonance imaging of intracranial epidermoid tumours. Savader SJ, et al. **Clin Radiol** 1989 May;40(3):282–5
Magnetic resonance imaging of meniscal lesions of the knee. van Heuzen EP, et al. **Clin Radiol** 1988 Nov;39(6):658–60
Magnetic resonance imaging in suspected metastatic spinal cord compression. Williams MP, et al. **Clin Radiol** 1989 May;40(3):286–90
Computed tomography and magnetic resonance imaging of dilated lumbar lymphatic trunks. Williams MP, et al. **Clin Radiol** 1989 May;40(3):321–2
Magnetic resonance imaging: applications in the brain. Geremia GK, et al. **Compr Ther** 1989 May;15(5):34–46 (14 ref.)
A pleuropericardial cyst in an unusual location: the value of magnetic resonance. Boisserie–Lacroix M, et al. **Comput Med Imaging Graph** 1988 Sep–Oct;12(5):277–80
Phantoms for specifications and quality assurance of MR imaging scanners. Goodenough DJ, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):193–209
Magnetic resonance imaging of the craniocervical junction. Lufkin R, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):281–92
Magnetic resonance imaging of post–surgical pseudomeningocele. Murayama S, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):335–9
Aliasing artifacts in MR imaging. Pusey E, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):219–24
MR diagnosis of dural venous sinus thrombosis complicating L–asparaginase therapy. Schick RM, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):319–27
Approaches to MR angiography. Spickler E, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):211–7
Comparison of MR imaging and CT in the evaluation of renal masses. Amendola MA. **CRC Crit Rev Diagn Imaging** 1989;29(2):117–50 (45 ref.)
Bladder diseases and imaging methods. Lamki N, et al. **CRC Crit Rev Diagn Imaging** 1989;29(1):13–101 (61 ref.)
Meniscal tears—comparison of arthrography, CT, and MRI. Manco LG, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):151–79 (69 ref.)
Application of magnetic resonance imaging in pancreas transplant. Yuh WT, et al. **Diabetes** 1989 Jan;38 Suppl 1:27–9
The relationship of cerebral atrophy and T1 in alcoholics: an MRI study. Mander AJ, et al. **Drug Alcohol Depend** 1989 Aug;24(1):57–9
Magnetic resonance imaging of the delivery of a paramagnetic contrast agent by an osmotic pump. Carpenter TA, et al. **Drug Des Deliv** 1988 Nov;3(3):263–6
Magnetic resonance imaging of sphenoethmoid mucoceles. Eisele DW, et al. **Ear Nose Throat J** 1988 Oct;67(10):713, 716–8, 720 passim
Craniocerebral topography within the international 10–20 system. Steinmetz H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):499–506
Magnetic resonance imaging as a sensitive and specific predictor of neoplasms removed for intractable epilepsy. Bergen D, et al. **Epilepsia** 1989 May–Jun;30(3):318–21
Magnetic resonance imaging in epilepsy: a controlled study. Conlon P, et al. **Epilepsy Res** 1988 Jan–Feb;2(1):37–43
A study of the corpus callosum in epilepsy using magnetic resonance imaging. Conlon P, et al. **Epilepsy Res** 1988 Mar–Apr;2(2):122–6
Pure homonymous hemiachromatopsia. Findings with neuro–ophthalmologic examination and imaging procedures. Kölmel HW. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):237–43
Significance of MRI–confirmed atrophy of the cranial spinal cord in Friedreich's ataxia. Wessel K, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):225–30
Myocardial involvement in systemic lupus erythematosus detected by magnetic resonance imaging. Been M, et al. **Eur Heart J** 1988 Nov;9(11):1250–6
Magnetic resonance imaging of an anomalous origin of the left coronary artery from the pulmonary artery. Douard H, et al. **Eur Heart J** 1988 Dec;9(12):1356–60
Correlation between oxygen tension and spin–lattice relaxation rate in tumors. Akber SF. **Eur J Radiol** 1989 Feb;9(1):56–9
Magnetic resonance imaging of pseudomyxoma peritonei. Buy JN, et al. **Eur J Radiol** 1989 May;9(2):115–8
MRI as an adjunct to echocardiography for the diagnostic imaging of cardiac masses. Casolo F, et al. **Eur J Radiol** 1988 Nov;8(4):226–30
MR imaging of the spine in children. Duthoy MJ, et al. **Eur J Radiol** 1988 Aug;8(3):188–95
Diagnostic imaging of the occipito–cervical junction in patients with rheumatoid arthritis. Plain films, computed tomography, magnetic resonance imaging. Fezoulidis I, et al. **Eur J Radiol** 1989 Feb;9(1):5–11
Cine–MR in dissection of the thoracic aorta. Fruehwald FX, et al. **Eur J Radiol** 1989 Feb;9(1):37–41
Morphological identification of brown adipose tissue by magnetic resonance imaging in the rat. Osculati F, et al. **Eur J Radiol** 1989 May;9(2):112–4
Bone grafting in total hip replacement. Preliminary results with MRI. Pedrosa P, et al. **Eur J Radiol** 1989 Feb; 9(1):12–6
Magnetic resonance imaging and extrapyramidal movement disorders. Drayer BP. **Eur Neurol** 1989;29 Suppl 1:9–12
Magnetic resonance signal abnormalities in asymptomatic individuals: their incidence and functional correlates. Fazekas F. **Eur Neurol** 1989;29(3):164–8
Sensory (VEP, BAEP, SEP) and motor–evoked potentials, liquoral and magnetic resonance findings in multiple sclerosis. Rossini PM, et al. **Eur Neurol** 1989;29(1):41–7
Incidental finding of renal cell carcinoma with histological regressive aspects in a pregnant woman. Selli C, et al. **Eur Urol** 1988;15(3–4):287–9
Corticosteroid therapy in avian muscular dystrophy: evaluation by magnetic resonance relaxation times. Misra LK, et al. **Exp Neurol** 1988 Nov;102(2):217–20
Description of brain injury in the amnesic patient N.A. based on magnetic resonance imaging. Squire LR, et al. **Exp Neurol** 1989 Jul;105(1):23–35
Magnetic resonance imaging in hemochromatosis: extrahepatic iron deposition. Housman JF, et al. **Gastrointest Radiol** 1989 Winter;14(1):59–60
Lipoma of the liver: US, CT, and MRI appearance. Martí–Bonmatí L, et al. **Gastrointest Radiol** 1989 Spring; 14(2):155–7
Clinical use of a nonferromagnetic needle for magnetic resonance–guided biopsy. Mueller PR, et al. **Gastrointest Radiol** 1989 Winter;14(1):61–4
Echinococcal hepatic disease: magnetic resonance appearance. Wojtasek DA, et al. **Gastrointest Radiol** 1989 Spring;14(2):158–60
Noninvasive metabolic analysis of eye bank corneas: a magnetic resonance spectroscopic study. Greiner JV, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):295–9
Magnetic resonance imaging in cervical cancer: a basis for objective classification. Burghardt E, et al. **Gynecol Oncol** 1989 Apr;33(1):61–7
Uterine leiomyosarcoma—magnetic resonance imaging. Janus C, et al. **Gynecol Oncol** 1989 Jan;32(1):79–81
Assessment of lung water by magnetic resonance in three types of pulmonary edema. Vinitski S, et al. **Heart Vessels** 1988;4(2):88–93
Pelizaeus–Merzbacher disease: identification of heterozygotes with magnetic resonance imaging? Boltshauser E, et al. **Hum Genet** 1988 Dec;80(4):393–4
Assessment of ovaries by magnetic resonance imaging in patients presenting with polycystic ovarian syndrome. Faure N, et al. **Hum Reprod** 1989 May;4(4):468–72
Congenital diverticulum of the left ventricle presenting as heart failure and diagnosed by magnetic resonance imaging. Handler CE, et al. **Int J Cardiol** 1989 Jan;22(1):115–9
A case of Tourette's syndrome with midbrain involvement. Sandyk R. **Int J Neurosci** 1988 Dec;43(3–4):171–5
Myelin basic protein and magnetic resonance imaging for diagnosing radiation myelopathy. Rubin P, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1371–81
High field resolution magnetic resonance imaging of malignant choroidal melanoma. Lambrecht L, et al. **Int Ophthalmol** 1988 Feb;11(4):199–205
Magnetic resonance imaging in spinal disorders. Weisz GM, et al. **Int Orthop** 1988;12(4):331–4
Magnetic imaging in the assessment of the lumbar disk. Fontanetta AP, et al. **Int Surg** 1988 Jul–Sep;73(3):173–6
A new class of contrast agents for magnetic resonance imaging based on selective reduction of water–T2 by chemical exchange. Aime S, et al. **Invest Radiol** 1988 Sep; 23 Suppl 1:S267–70
Factors determining the proton T1 relaxivity in solutions containing Gd–DTPA. Aime S, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S264–6
Indications for the use of Gd–DTPA in MRI of the central nervous system. Experiences in patients with cerebral and spinal diseases. Bauer WM, et al. **Invest Radiol** 1988 Sep; 23 Suppl 1:S286–8
MRI of the athletic knee. Findings in asymptomatic professional basketball and collegiate football players. Brunner MC, et al. **Invest Radiol** 1989 Jan;24(1):72–5
In vitro interactions of gadolinium DOTA meglumine and gadolinium DTPA meglumine on hemostasis. Corot C, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S261–3
Comparative pharmacokinetics of gadolinium DTPA and gadolinium chloride. Dean PB, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S258–60
Entrapment of gadolinium–DTPA in liposomes. Characterization of vesicles by P–31 NMR spectroscopy. Devoisselle JM, et al. **Invest Radiol** 1988 Oct;23(10):719–24
Effects of turbulence on signal intensity in gradient echo images. Evans AJ, et al. **Invest Radiol** 1988 Jul;23(7):512–8
In vivo measurements of vascular oxygen tension in tumors using MRI of a fluorinated blood substitute. Fishman JE, et al. **Invest Radiol** 1989 Jan;24(1):65–71
Cross–linked DTPA polysaccharides for magnetic resonance imaging. Synthesis and relaxation properties. Gibby WA, et al. **Invest Radiol** 1989 Apr;24(4):302–9
A magnetic resonance imaging contrast medium for the liver and bile. Golman K, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S243–5
Oxygen–17 contrast agents. Fast imaging techniques. Hopkins AL, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S240–2
Transverse relaxation (1/T2) of solvent protons induced by magnetized spheres and its relevance to contrast enhancement in MRI. Koenig SH, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S224–8
The utility of contrast media in MRI at 0.02 T. A preliminary report. Kormano M, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S289–91
Contrast and accuracy of relaxation time measurements in acquired and synthesized multislice magnetic resonance images. Majumdar S, et al. **Invest Radiol** 1989 Feb; 24(2):119–27
Gd–DOTA, a potential MRI contrast agent. Current status of physicochemical knowledge. Meyer D, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S232–5
The importance of nuclear magnetic relaxation dispersion (NMRD) profiles in MRI contrast media development. Muller RN, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S229–31
A model for studying intervertebral disc degeneration with magnetic resonance and a nucleotome. Nguyen CM, et al. **Invest Radiol** 1989 May;24(5):407–9
Effects of the magnetic resonance contrast medium ferrioxamine methanesulfonate on systemic and renal hemodynamics in the anesthetized dog. Niedrach WL, et al. **Invest Radiol** 1988 Sep;23(9):687–91
Serum iron and serum bilirubin after administration of Gd–DTPA–dimeglumine. A pharmacologic study in healthy volunteers. Niendorf HP, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S275–80
Albumin labeled with Gd–DTPA: an intravascular contrast–enhancing agent for magnetic resonance blood pool imaging: preparation and characterization [letter] Ogan MD. **Invest Radiol** 1988 Dec;23(12):961
Evaluation of flow through simulated vascular stenoses with gradient echo magnetic resonance imaging. Podolak MJ, et al. **Invest Radiol** 1989 Mar;24(3):184–9
Magnetic resonance imaging of acute myocardial ischemia using a manganese chelate, Mn–DPDP. Pomeroy OH, et al. **Invest Radiol** 1989 Jul;24(7):531–6
19F relaxation rate enhancement and frequency shift with Gd–DTPA. Ratner AV, et al. **Invest Radiol** 1989 Mar; 24(3):224–7
Magnetic resonance imaging studies on nude mice grafted with colorectal adenocarcinoma using gadolinium–labeled monoclonal antibody. Saccavini JC, et al. **Invest Radiol**

1988 Sep;23 Suppl 1:S292–3
9.4 T imaging studies of human tumor xenografts in nude mice. Sarkar SK, et al. **Invest Radiol** 1988 Sep;23(9):677–9
Canine acute myocardial infarction. In vivo detection by MRI with gradient echo technique and contribution of Gd–DOTA. Schouman–Claeys E, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S254–7
MRI evaluation of pigmented skin tumors. Preliminary study. Schwaighofer BW, et al. **Invest Radiol** 1989 Apr; 24(4):289–93
Measurement of fat distribution by magnetic resonance imaging. Staten MA, et al. **Invest Radiol** 1989 May; 24(5):345–9
Noncontrast and contrast enhanced MR imaging in the evaluation of partial ureteral obstruction: an experimental study in the micropig. Thurnher S, et al. **Invest Radiol** 1989 Jul;24(7):544–54
Comparative chemical structure and pharmacokinetics of MRI contrast agents. Tweedle MF, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S236–9
Gadolinium–DTPA liposomes as a potential MRI contrast agent. Work in progress. Unger E, et al. **Invest Radiol** 1988 Dec;23(12):928–32
Experimental study of the pharmacokinetics and dose response of ferrite particles used as a contrast agent in MRI of the normal liver of the rabbit. Van Hecke P, et al. **Invest Radiol** 1989 May;24(5):397–9
B–19036, a potential new hepatobiliary contrast agent for MR proton imaging. Vittadini G, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S246–8
Biologic and instrumentation issues in MR contrast agent research. Wolf GL. **Invest Radiol** 1988 Sep;23 Suppl 1:S249–53
Ferrioxamine as a magnetic resonance contrast agent. Preclinical studies and phase I and II human clinical trials. Worah D, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S281–5
Paramedian thalamic and midbrain infarct: evidence using magnetic resonance imaging [letter] De Carolis P, et al. **Ital J Neurol Sci** 1989 Apr;10(2):223–4
Neurological complications of Schoenlein–Henoch syndrome: contribution of MR to the diagnosis. Case report. Palesse N, et al. **Ital J Neurol Sci** 1989 Jun; 10(3):351–5
Reversible multifocal encephalopathy following tuberculous infection. Provinciali L, et al. **Ital J Neurol Sci** 1989 Apr; 10(2):163–70
Nuclear magnetic resonance in the diagnosis of lumbar herniated disc. Santori FS, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):243–55
Nuclear magnetic resonance as a contribution to the choice of technique in lengthening of the Achilles tendon in a spastic equinus foot. Villani C, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):103–8
Forebrain structure in infantile autism. Gaffney GR, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):534–7
Assessment of myocardial systolic wall thickening using nuclear magnetic resonance imaging. Peshock RM, et al. **J Am Coll Cardiol** 1989 Sep;14(3):653–9
In vivo nuclear magnetic resonance imaging of myocardial perfusion using the paramagnetic contrast agent manganese gluconate. Schaefer S, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):472–80
Magnetic resonance imaging of pelvic masses complicating pregnancy. Lubbers PR, et al. **J Am Osteopath Assoc** 1988 Aug;88(8):1010–4
Magnetic resonance imaging in the CNS. Moore JB, et al. **J Am Osteopath Assoc** 1989 May;89(5):636–44
Current indications for magnetic resonance imaging. Pera A, et al. **J Am Osteopath Assoc** 1989 Apr;89(4):470–6 (27 ref.)
Magnetic resonance imaging of dural sinus thrombosis with resolution. Shaenboen MJ, et al. **J Am Osteopath Assoc** 1989 Jun;89(6):794–8, 803–4
In vitro tracheal mechanics by nuclear magnetic resonance imaging. Lambert RK, et al. **J Appl Physiol** 1988 Oct; 65(4):1872–9
Correlation of MRI images with histology in avascular necrosis in the hip. A preliminary study. Simmons DJ, et al. **J Arthroplasty** 1989;4(1):7–14
Lack of similar findings may be due to underutilization of MRI technology [letter] Plante E. **J Autism Dev Disord** 1988 Sep;18(3):462–5
Head and neck tumours studied by MRI spin–echo technique. Campostrini F, et al. **J Belge Radiol** 1988;71(5):563–9
Magnetic resonance imaging of focal hepatic lesions: a review. Degryse H, et al. **J Belge Radiol** 1988;71(2):167–75 (27 ref.)
Magnetic resonance imaging of uterine cervix carcinoma. Degryse HR, et al. **J Belge Radiol** 1988;71(3):405–10
Magnetic resonance imaging of bones and soft tissues. A review of the current literature. De Schepper A, et al. **J Belge Radiol** 1988;71(2):231–9 (26 ref.)
MR appearance of a prolactinoma. Parizel PM, et al. **J Belge Radiol** 1988;71(6):736–7
Blood flow in magnetic resonance imaging. Vanclooster R, et al. **J Belge Radiol** 1988;71(2):195–202
Magnetic resonance imaging of the knee joint. Van Roy P, et al. **J Belge Radiol** 1988;71(2):241–53
MR imaging of the brain: preliminary results with a gradient echo sequence after paramagnetic contrast enhancement. Wilms G, et al. **J Belge Radiol** 1989 Apr;72(2):89–94
The use of magnetic resonance imaging for measuring segment inertial properties. Martin PE, et al. **J Biomech** 1989;22(4):367–76
Velocity profiles in stenosed tube models using magnetic resonance imaging. Rittgers SE, et al. **J Biomech Eng** 1988 Aug;110(3):180–4
Double-blind assessment of the value of magnetic resonance imaging in the diagnosis of anterior cruciate and meniscal lesions. Glashow JL, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):113–9
The diagnostic value of magnetic resonance imaging in non–traumatic osteonecrosis of the femoral head. Hauzeur JP, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):641–9
Evaluation of magnetic resonance imaging in the diagnosis of osteonecrosis of the femoral head. Accuracy compared with radiographs, core biopsy, and intraosseous pressure measurements. Robinson HJ Jr, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):650–63
Correlation of the findings of magnetic resonance imaging with those of bone biopsy in patients who have stage–I or II ischemic necrosis of the femoral head. Seiler JG 3d, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):28–32
Common pitfalls in magnetic resonance imaging of the knee. Watanabe AT, et al. **J Bone Joint Surg [Am]** 1989 Jul; 71(6):857–62
Diagnosis of lumbar disc protrusion. A comparison between magnetic resonance imaging and radiculography. Szypryt EP, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):717–22
Diagnosis of acute and chronic cardiac rejection by magnetic resonance imaging: a non–invasive in–vivo study. Aherne T, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct; 29(5):587–90
Parainflammatory leukoencephalomyelitis: clinical and magnetic resonance imaging findings. Marks WA, et al. **J Child Neurol** 1988 Jul;3(3):205–13
The "phantom" optic nerve. Demonstration in CT and MR scans 19 years after resection of optic glioma. Brodsky MC, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):67–8
Early MR demonstration of spinal metastases in patients with normal radiographs and CT and radionuclide bone scans. Avrahami E, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):598–602
MR image of localized giant cell tumor of the tendon sheath involving the knee. Balsara ZN, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):159–62
MR imaging in acute cervical spine trauma. Beers GJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):755–61
Craniopharyngioma presenting as a nasopharyngeal mass: CT and MR findings. Benitez WI, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1068–72
Serial MR studies in Menkes disease. Blaser SI, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):113–5
Intraventricular central neurocytoma: CT and MR findings. Bolen JW Jr, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):495–7
Moyamoya disease: MR findings. Brown WD, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):720–1
Orbital sinus histiocytosis: MR appearance. Burton EM, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):696–9
MR diagnosis of lipoid pneumonia. Carrillon Y, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):876–7
Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):679–81
Spontaneous dissection of the vertebral artery: MR findings. Chen JL, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):326–9
Aggressive fibromatosis of the tongue: MR demonstration. Chen PC, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):343–5
Quantification of cord deformation and dynamics during flexion and extension of the cervical spine using MR imaging. Condon BR, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):947–55
Subacute and chronic cerebral infarctions: SPECT and gadolinium–DTPA enhanced MR imaging. Cordes M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):567–71
MR imaging of postpartum cortical blindness. Coughlin WF, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):572–6
CT and MR imaging in cystic abdominal lymphangiomatosis. Cutillo DP, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):534–6
Evaluation of elastic matching system for anatomic (CT, MR) and functional (PET) cerebral images. Dann R, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):603–11
Quantitative assessment of average velocity in inferior vena cava by phase–display MR imaging: pulsed Doppler correlation. Didier D, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):94–100
Intracranial hemangioblastomas: CT and MR findings. Elster AD, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):736–9
Radiologic screening for von Hippel–Lindau disease: the role of Gd–DTPA enhanced MR imaging of the CNS. Filling–Katz MR, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):743–55
Persistent primitive trigeminal artery aneurysm evaluated by MR imaging and angiography. Fortner AA, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):847–50 (15 ref.)
A study of coronary artery bypass graft patency using MR imaging. Frija G, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):226–32
Hyperintense signal of the posterior pituitary on T1–weighted MR images: an experimental study. Fujisawa I, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):371–7
MR imaging of white matter lesions in uncomplicated chronic alcoholism. Gallucci M, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):395–8
MR appearance of bilateral periscapular elastofibromas. Gould ES, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):701–3
MR imaging of lymphomas: impact on therapy. Greco A, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):785–91
Acquired hepatocerebral degeneration: MR similarity with Wilson disease. Hanner JS, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1076–7
MR imaging of the brain in myelopathy associated with human T–cell lymphotropic virus type I. Hara Y, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):750–4
Gadolinium–DTPA enhanced MR imaging of septic dural sinus thrombosis. Harris TM, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):682–4
Combined 1H–MR imaging and localized 31P–spectroscopy of intracranial tumors in 43 patients. Heindel W, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):907–16
Surface coil MR evaluation of a lacrimal gland carcinoma. Hendrix LE, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):866–8
Neonatal dural venous sinus thrombosis associated with central venous catheterization: CT and MR studies. Hurst RW, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):504–7
CT and MR imaging of postnecrotic liver scars. Itai Y, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):971–5
MR imaging of bilateral adrenal hemorrhage. Itoh K, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1054–6
Hemispherical spondylosclerosis: MR appearance. Jensen ME, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):540–2
Gadolinium–phthalein complexone as a contrast agent for hepatobiliary MR imaging. Kawamura Y, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):67–70
MR imaging of lytic changes in Paget disease of the calvarium. Kelly JK, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):27–9
Malignant cardiac fibrous histiocytomas and angiosarcomas: MR features. Kim EE, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):627–32
Perirenal hemangioendothelioma in a newborn: sonograph and MR findings. Koci TM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):145–7
Maxillary sinus hemangioma: MR and CT studies. Kulkarni MV, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):340–2
MR appearance of the normal chest after pneumonectomy. Laissy JP, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):248–52
MR imaging of cardiac metastases from malignant fibrous histiocytoma. Lee R, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):126–8
Herpes encephalitis: MR monitoring of response to acyclovir therapy. Lester JW Jr, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):941–3
MR imaging of uterine inversion. Lewin JS, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):357–9
Intrinsic third ventricle craniopharyngioma: CT and MR findings. Linden CN, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):362–3
MR imaging of malignant pleural mesothelioma. Lorigan JG, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):617–20
MR body stereotaxis: an aid for MR–guided biopsies. Lufkin R, et al. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):1088–9
MR imaging of superior sulcus carcinoma. McLoud TC, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):233–9
Achilles tendon injuries: the role of MR imaging. Marcus DS, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):480–6
Developmental stages of human brain: an MR study. Martin E, et al. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):917–22
Sarcoidosis of the pineal region: CT and MR studies. Martin N, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):110–2
Cardiac–gated phase MR imaging of aqueductal CSF flow. Mascalchi M, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):923–6
False–negative bone scan in extensive metastatic disease: CT and MR findings. Mehta RC, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):717–9
MR imaging of intrasellar meningiomas simulating pituitary adenomas. Michael AS, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):944–6
Myxoma of the heart presenting with recurrent episodes of hemorrhagic cerebral infarction: MR findings. Michael AS, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):123–5
Metastatic adnexal trophoblastic neoplasm: contribution of MR imaging. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1061–7
MR imaging of traumatic spinal arachnoid cyst. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):862–5
MR imaging of anterior cruciate ligament repair. Moeser P, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):105–9
CT and MR imaging in the evaluation of retroperitoneal fibrosis. Mulligan SA, et al. **J Comput Assist Tomogr** 1989

Mar-Apr;13(2):277-81
MR imaging of a group I case of Hallervorden-Spatz disease. Mutoh K, et al. J Comput Assist Tomogr 1988 Sep-Oct; 12(5):851-3
Effects of lithotripsy on rat kidney: evaluation with MR imaging, histology, and electron microscopy. Neuerburg J, et al. J Comput Assist Tomogr 1989 Jan-Feb;13(1):82-9
Hepatic adenoma: MR appearance mimicking focal nodular hyperplasia. Nokes SR, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):885-7
Sinus histiocytosis with massive lymphadenopathy and tracheobronchial lesions: CT and MR findings. Okada K, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):1039-40
Pituitary adenoma in McCune-Albright syndrome: MR demonstration. O'Laughlin RL, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):685-8
MR imaging of perineural metastasis along the vidian nerve. Pandolfo I, et al. J Comput Assist Tomogr 1989 May-Jun; 13(3):498-500
Reversibility of CT and MR findings in neuro-Behçet disease. Patel DV, et al. J Comput Assist Tomogr 1989 Jul-Aug; 13(4):669-73
Rhinocerebral mucormycosis: MR manifestations. Press GA, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):744-9
Central pontine myelinolysis with clinical recovery: MR documentation. Ragland RL, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):316-8
MR imaging of compressive myelomalacia. Ramanauskas WL, et al. J Comput Assist Tomogr 1989 May-Jun; 13(3):399-404
MR imaging of pediatric cardiac tumors previously diagnosed by echocardiography. Rienmüller R, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):621-6
Reversible cerebral lesions associated with tiazofurin usage: MR demonstration. Rippe DJ, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):1078-81
Fatty replacement of spinal bone marrow due to radiation: demonstration by dual energy quantitative CT and MR imaging. Rosenthal DI, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):463-5
Cauda equina syndrome complicating ankylosing spondylitis: MR features. Rubenstein DJ, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):511-3
CT diagnosis of type A aortic dissections not demonstrated by aortography. St. Amour TE, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):963-7
MR evaluation of flow in a ventricular shunt phantom with in vivo correlation. Savader SJ, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):765-9
Sirenomelia without Potter syndrome: MR characteristics. Savader SJ, et al. J Comput Assist Tomogr 1989 Jul-Aug; 13(4):689-91
MR imaging of intrathoracic extramedullary hematopoiesis. Savader SJ, et al. J Comput Assist Tomogr 1988 Sep-Oct; 12(5):878-80
MR imaging in progressive supranuclear palsy and Shy-Drager syndrome. Savoiardo M, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):555-60
Mucocele of the anterior clinoid process: CT and MR findings. Schwaighofer BW, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):501-3
MR demonstration of reversible brain abnormalities in eclampsia. Schwaighofer BW, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):310-2
MR imaging of pseudoaneurysms in aortocoronary bypass graft. Sherry CS, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):426-9
MR imaging in seminal vesiculitis. Sue DE, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):662-4
MR imaging of primary thyroid lymphoma. Takashima S, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):517-8
Giant cell tumor of the proximal tibia: MR and CT appearance. Tehranzadeh J, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):282-6
Comparison of CT and MR imaging in musculoskeletal neoplasms. Tehranzadeh J, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):466-72
Gadolinium-DTPA enhanced MR imaging of spinal dural arteriovenous fistulas. Terwey B, et al. J Comput Assist Tomogr 1989 Jan-Feb;13(1):30-7
MR features of fleeting CNS lesions associated with Epstein-Barr virus infection. Tolly TL, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):665-8
Cerebral venous angiomas: MR findings. Toro VE, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):935-40 (37 ref.)
Synovial osteochondromatosis of the shoulder: MR findings. Tuckman G, et al. J Comput Assist Tomogr 1989 Mar-Apr; 13(2):360-1
Hereditary multiple exostoses and cervical cord compression: CT and MR studies. Tully RJ, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):330-3
MR imaging of vaginal agenesis with hematocolpos. Vainright JR Jr, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):891-3
Osler-Weber-Rendu disease: MR findings in the liver. Varma DG, et al. J Comput Assist Tomogr 1989 Jan-Feb; 13(1):134-5
Mesothelioma of the pericardium: CT and MR findings. Vogel HJ, et al. J Comput Assist Tomogr 1989 May-Jun; 13(3):543-4
Bladder pheochromocytoma with MR correlation. Warshawsky R, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):714-6
Sequelae of temporal lobe herniation: MR imaging. Wernick S, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):323-5
Sternocleidomastoid fibrosis in congenital muscular torticollis: MR appearance. Whyte AM, et al. J Comput Assist Tomogr 1989 Jan-Feb;13(1):163-4
Significance of thoracic disc herniation demonstrated by MR imaging. Williams MP, et al. J Comput Assist Tomogr 1989 Mar-Apr;13(2):211-4
Regional T2 and sodium concentration estimates in the normal human brain by sodium-23 MR imaging at 1.5 T. Winkler SS, et al. J Comput Assist Tomogr 1989 Jul-Aug; 13(4):561-6
MR imaging of endometriosis arising in cesarean section scar. Wolf GC, et al. J Comput Assist Tomogr 1989 Jan-Feb; 13(1):150-2
Assessment of brain perfusion with MR imaging. Young IR, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):721-7
Lumbar epidural chordoma: MR findings. Yuh WT, et al. J Comput Assist Tomogr 1989 May-Jun;13(3):508-10
MR imaging of neurocysticercosis. Zee CS, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):927-34
MR imaging of normal nasal cycle: comparison with sinus pathology. Zinreich SJ, et al. J Comput Assist Tomogr 1988 Nov-Dec;12(6):1014-9
The painful shoulder: MR imaging of the glenohumeral joint. Zlatkin MB, et al. J Comput Assist Tomogr 1988 Nov-Dec; 12(6):995-1001
Neurosarcoidosis: evaluation using computed tomography and magnetic resonance imaging. Cooper SD, et al. J Comput Tomogr 1988 Apr;12(2):96-9
Lipomatous hypertrophy of the interatrial septum. Diagnosis by magnetic resonance imaging. Fisher MS, et al. J Comput Tomogr 1988 Oct;12(4):267-9
Magnetic resonance imaging of renal vein and inferior vena cava thrombosis in a patient with glomerulonephritis: a case report. Honda H, et al. J Comput Tomogr 1988 Apr; 12(2):147-9
Magnetic resonance imaging of calvarial eosinophilic granuloma. Murayama S, et al. J Comput Tomogr 1988 Oct; 12(4):251-2
Gliomatosis cerebri with formation of a glioblastoma multiform. Study and follow-up by magnetic resonance and computed tomography. Romero FJ, et al. J Comput Tomogr 1988 Oct;12(4):253-7
Partial lipodystrophy. Magnetic resonance findings in one case. Yuh WT, et al. J Comput Tomogr 1988 Oct; 12(4):287-91
Multiple glomus tumors: a role for magnetic resonance imaging in patient evaluation? Benedict LM, et al. J Dermatol Surg Oncol 1989 Jul;15(7):731-3
Magnetic resonance imaging of cutaneous melanocytic lesions. Zemtsov A, et al. J Dermatol Surg Oncol 1989 Aug;15(8):854-8
Brainstem cryptic arteriovenous malformations. Farese M, et al. J Fla Med Assoc 1988 Sep;75(9):590-8
Magnetic resonance images. Interdigital or Morton's neuroma. Sartoris DJ, et al. J Foot Surg 1989 Jan-Feb; 28(1):78-82
Magnetic resonance imaging of the collateral ligaments of the thumb. Louis DS, et al. J Hand Surg [Am] 1989 Jul; 14(4):739-41
Diagnosis of ganglion in Guyon's canal by magnetic resonance imaging. Subin GD, et al. J Hand Surg [Am] 1989 Jul;14(4):640-3
Serial myocardial T2 relaxation time measurements in normal subjects and heart transplant recipients. Lund G, et al. J Heart Transplant 1988 Jul-Aug;7(4):274-9
Magnetic resonance imaging of human orthotopic heart transplantation: correlation with endomyocardial biopsy. Revel D, et al. J Heart Transplant 1989 Mar-Apr; 8(2):139-46
Evaluation of knee injuries using magnetic resonance imaging. Vaughan J, et al. J Ky Med Assoc 1988 Nov; 86(11):605-8
MRI of soft tissue vascular malformations. Kalmar JA, et al. J La State Med Soc 1989 Feb;141(2):27-32
Glomus jugulare or tympanicum? The role of CT and MR imaging with gadolinium DTPA. Phelps PD, et al. J Laryngol Otol 1988 Sep;102(9):766-76
Radiological and magnetic resonance imaging of cervical spine instability [letter] J Manipulative Physiol Ther 1988 Oct;11(5):446-52
A hypothesis introducing a new calculation for discal reduction: emphasis on stenotic factors and manipulative treatment [letter] Gadomski AJ. J Manipulative Physiol Ther 1988 Oct;11(5):442-3
Development of phosphonate derivatives of gadolinium chelates for NMR imaging of calcified soft tissues. Adzamli IK, et al. J Med Chem 1989 Jan;32(1):139-44
Magnetic resonance imaging of rectal carcinoma. Butler H, et al. J Natl Med Assoc 1989 Jan;81(1):87-90
Magnetic resonance imaging of infratentorial congenital brain malformations. Byrd SE. J Natl Med Assoc 1989 Sep; 81(9):961-6
Magnetic resonance imaging of supratentorial congenital brain malformations. Byrd SE. J Natl Med Assoc 1989 Aug; 81(8):873-81 (11 ref.)
Anatomy of the abdomen, back, and pelvis as displayed by magnetic resonance imaging: Part One. Collins JD, et al. J Natl Med Assoc 1989 Jun;81(6):680-4
Anatomy of the abdomen, back, and pelvis as displayed by magnetic resonance imaging: Part Two. Collins JD, et al. J Natl Med Assoc 1989 Jul;81(7):809-13
Anatomy of the abdomen, back, and pelvis as displayed by magnetic resonance imaging: part three. Collins JD, et al. J Natl Med Assoc 1989 Aug;81(8):857-61
Nerves on magnetic resonance imaging. Collins JD, et al. J Natl Med Assoc 1989 Feb;81(2):129-34
Pelvic fused kidneys: magnetic resonance imaging and intravenous pyelogram correlation. Masih S, et al. J Natl Med Assoc 1988 Aug;80(8):925-7
CT, MRI and SPECT neuroimaging in status epilepticus with simple partial and complex partial seizures: case report. Bauer J, et al. J Neurol 1989 Jul;236(5):296-9
Correlation between multimodal evoked potentials and magnetic resonance imaging in multiple sclerosis. Comi G, et al. J Neurol 1989 Jan;236(1):4-8
Influence of magnetic resonance imaging on somatosensory and brain-stem auditory evoked potentials in man. Niemann G, et al. J Neurol 1988 Nov;235(8):462-5
Japanese encephalitis in the Kurume region of Japan: CT and MRI findings. Shoji H, et al. J Neurol 1989 Jul; 236(5):255-9
MRI findings of inferior olives in palatal myoclonus. Yokota T, et al. J Neurol 1989 Feb;236(2):115-6
Cavernous angioma of the optic tract. Zentner J, et al. J Neurol 1989 Feb;236(2):117-9
Magnetic resonance imaging in patients with progressive myelopathy following spinal surgery. Avrahami E, et al. J Neurol Neurosurg Psychiatry 1989 Feb;52(2):176-81
Electrophysiological and MRI evaluation of neurological involvement in Behçet's disease. Besana C, et al. J Neurol Neurosurg Psychiatry 1989 Jun;52(6):749-54
Does signal-attenuation on high-field T2-weighted MRI of the brain reflect regional cerebral iron deposition? Observations on the relationship between regional cerebral water proton T2 values and iron levels. Brooks DJ, et al. J Neurol Neurosurg Psychiatry 1989 Jan;52(1):108-11
Dystonic-Parkinsonian syndrome after cyanide poisoning: clinical and MRI findings. Carella F, et al. J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1345-8
Blindness in eclampsia: CT and MR imaging. Duncan R, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):899-902
CT ring sign imitating tumour, disclosed as multiple sclerosis by MRI: a case report. Gütling E, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):903-6
Pontine lesion in opsoclonus-myoclonus syndrome shown by MRI. Hattori T, et al. J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1572-5
Magnetic resonance imaging of spinal cord lesions in multiple sclerosis. Honig LS, et al. J Neurol Neurosurg Psychiatry 1989 Apr;52(4):459-66
Temporal lobe structure as determined by nuclear magnetic resonance in schizophrenia and bipolar affective disorder. Johnstone EC, et al. J Neurol Neurosurg Psychiatry 1989 Jun;52(6):736-41
Magnetic resonance imaging in Leber's optic neuropathy. Kermode AG, et al. J Neurol Neurosurg Psychiatry 1989 May;52(5):671-4
Quantitative magnetic resonance imaging in multiple sclerosis: the effect of high dose intravenous methylprednisolone. Kesselring J, et al. J Neurol Neurosurg Psychiatry 1989 Jan;52(1):14-7
CNS changes in Usher's syndrome with mental disorder: CT, MRI and PET findings. Koizumi J, et al. J Neurol Neurosurg Psychiatry 1988 Jul;51(7):987-90
Magnetic resonance imaging in an HTLV-I antibody positive patient with tropical spastic paraparesis [letter] Kreeger L, et al. J Neurol Neurosurg Psychiatry 1988 Jul;51(7):999
Cheiro-oral syndrome with bilateral oral involvement: a study of pontine lesions by high-resolution magnetic resonance imaging. Matsumoto S, et al. J Neurol Neurosurg Psychiatry 1989 Jun;52(6):792-4
Magnetic resonance imaging in Fabry's disease [letter] Menzies DG, et al. J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1240-1
The early risk of multiple sclerosis after optic neuritis. Miller DH, et al. J Neurol Neurosurg Psychiatry 1988 Dec; 51(12):1569-71
Magnetic resonance imaging in central pontine myelinolysis. Thompson PD, et al. J Neurol Neurosurg Psychiatry 1989 May;52(5):675-7
Magnetic resonance imaging and clinical correlations in multiple sclerosis. Huber SJ, et al. J Neurol Sci 1988 Aug; 86(1):1-12
Leukoencephalopathy in HTLV-I-associated myelopathy: MRI and EEG data. Kira J, et al. J Neurol Sci 1988 Nov; 87(2-3):221-32
Magnetic resonance imaging in the exploration of dissection of the internal carotid artery. Brugières P, et al. J Neuroradiol 1989;16(1):1-10 (Eng, Fre)
Magnetic resonance imaging in ischaemic accidents of the brain stem. Durif F, et al. J Neuroradiol 1989;16(1):25-37 (Eng, Fre)
MR imaging of subarachnoid hemorrhage [letter] Byrne JV. J Neurosurg 1989 Jan;70(1):155-6
Preoperative diagnosis of Lhermitte-Duclos disease by magnetic resonance imaging. Case report. Carter JE, et al. J Neurosurg 1989 Jan;70(1):135-7
Subtorcular occipital encephaloceles. Anatomical considerations relevant to operative management. Chapman PH, et al. J Neurosurg 1989 Sep;71(3):375-81

Unenhanced and gadolinium-DTPA-enhanced MR imaging in postoperative evaluation in pediatric brain tumors. Dickman CA, et al. **J Neurosurg** 1989 Jul;71(1):49–53

A pneumatized anterior clinoid mimicking an aneurysm on MR imaging. Report of two cases. Gean AD, et al. **J Neurosurg** 1989 Jul;71(1):128–32

Magnetic resonance imaging and 31P magnetic resonance spectroscopy for evaluating focal cerebral ischemia. Germano IM, et al. **J Neurosurg** 1989 Apr;70(4):612–8

Proton magnetic resonance studies of triethyltin-induced edema during perinatal brain development in rabbits. Lorenzo AV, et al. **J Neurosurg** 1989 Mar;70(3):432–40

MR imaging of CSF pulsatory flow and its relation to intracranial pressure. Ohara S, et al. **J Neurosurg** 1988 Nov; 69(5):675–82

Magnetic resonance imaging in myelocystoceles. Report of two cases. Peacock WJ, et al. **J Neurosurg** 1989 May; 70(5):804–7

Magnetic resonance imaging and aneurysm clips. Magnetic properties and image artifacts. Romner B, et al. **J Neurosurg** 1989 Mar;70(3):426–31

Magnetic resonance imaging of acute SAH [letter; comment] Volpin L. **J Neurosurg** 1989 Apr;70(4):657. **Comment on:** J Neurosurg 1988 May;68(5):731–6

Magnetic resonance imaging of vascular compression in trigeminal neuralgia. Case report. Wong BY, et al. **J Neurosurg** 1989 Jan;70(1):132–4

Spontaneous spinal epidural hematoma diagnosed by MRI. Case report. Bollar Zabala A, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):153–5

Intracranial lipomas. Diagnostic and therapeutic considerations. Maiuri F, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):161–7

Localization of pheochromocytoma: MIGB, CT, and MRI correlation. Velchik MG, et al. **J Nucl Med** 1989 Mar; 30(3):328–36

Gd-DISIDA—a potential contrast agent for magnetic resonance imaging of the hepatobiliary system. Saha GB, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):1–6

A comparative study of magnetic resonance imaging versus computed tomography for the evaluation of maxillary and mandibular tumors. Belkin BA, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1039–47

Synovial chondromatosis of the temporomandibular joint diagnosed by magnetic resonance imaging: report of a case. Dolan EA, et al. **J Oral Maxillofac Surg** 1989 Apr; 47(4):411–3

Magnetic resonance imaging of partial temporomandibular joint disc displacement. Kerstens HC, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):25–9

Magnetic resonance imaging of acute spinal cord trauma: preliminary report. Cotler HB, et al. **J Orthop Trauma** 1988; 2(1):1–4

Magnetic resonance imaging in the evaluation of a gunshot wound to the cervical spine. Ebraheim NA, et al. **J Orthop Trauma** 1989;3(1):19–22

Magnetic resonance imaging in children of very low birth weight with suspected brain abnormalities. Lipper EG, et al. **J Pediatr** 1988 Dec;113(6):1046–9

Identification of acute posttraumatic spinal cord cyst by magnetic resonance imaging: a case report and review of the literature. Gabriel KR, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):710–4

Magnetic resonance imaging in early diagnosis of Legg-Calvé-Perthes disease. Pinto MR, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):19–22

Accuracy of diagnostic imaging as determined by delayed operative intervention for advanced neuroblastoma. Foglia RP, et al. **J Pediatr Surg** 1989 Jul;24(7):708–11

Use of magnetic resonance imaging in planning the separation of omphalopagus conjoined twins. Richardson RJ, et al. **J Pediatr Surg** 1989 Jul;24(7):683–4; discussion 684–5

'Benign thoracic pain' syndrome: role of magnetic resonance imaging in the detection and localization of thoracic disc disease. Bruckner FE, et al. **J R Soc Med** 1989 Feb; 82(2):81–3

Magnetic resonance imaging of the nose and paranasal sinuses. Lloyd GA. **J R Soc Med** 1989 Feb;82(2):84–7

Magnetic resonance for tumours of the skull base and parapharyngeal region: discussion paper. Phelps PD. **J R Soc Med** 1988 Nov;81(11):649–52

Use of pancuronium bromide to inhibit fetal movement during magnetic resonance imaging. A case report. Lenke RR, et al. **J Reprod Med** 1989 Apr;34(4):315–7

Diagnosis of adrenal ganglioneuroma in pregnancy with magnetic resonance imaging and ultrasonography. A case report. Marks F, et al. **J Reprod Med** 1989 Jan;34(1):59–61

Early detection of carpal erosions in patients with rheumatoid arthritis: a pilot study of magnetic resonance imaging. Gilkeson G, et al. **J Rheumatol** 1988 Sep;15(9):1361–6

Magnetic resonance imaging identifies early femoral head ischemic necrosis in patients receiving systemic glucocorticoid therapy. Kalunian KC, et al. **J Rheumatol** 1989 Jul;16(7):959–63

Magnetic resonance imaging of the craniovertebral junction in rheumatoid arthritis. Semble EL, et al. **J Rheumatol** 1988 Sep;15(9):1367–75

Indications and applications of MRI Vs. CT scan in diagnosing lesions of the central nervous system. Sherman DD, et al. **J Tenn Med Assoc** 1989 Jul;82(7):359–62

Magnetic resonance imaging in heterotopic heart transplantation [letter] de Roos A, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):457–9

MRI of the thorax. State of the art. **J Thorac Imaging** 1989 Apr;4(2):1–92

Pediatric thoracic applications of magnetic resonance imaging. Bisset GS 3d. **J Thorac Imaging** 1989 Apr; 4(2):51–7

Magnetic resonance imaging of cardiac and paracardiac masses. Brown JJ, et al. **J Thorac Imaging** 1989 Apr; 4(2):58–64

Magnetic resonance imaging of the thorax: techniques, current applications, and future directions. Spritzer C, et al. **J Thorac Imaging** 1989 Apr;4(2):1–18 (177 ref.)

Magnetic resonance imaging of the thorax. Swensen SJ, et al. **J Thorac Imaging** 1989 Apr;4(2):19–33 (86 ref.)

Magnetic resonance imaging of cardiac sarcomas. Watanabe AT, et al. **J Thorac Imaging** 1989 Apr;4(2):90–2

The role of magnetic resonance imaging in the assessment of patients with lung cancer: a comparison with computed tomography. Webb WR. **J Thorac Imaging** 1989 Apr; 4(2):65–75 (47 ref.)

Cross-sectional imaging of the chest wall. Wechsler RJ, et al. **J Thorac Imaging** 1989 Jan;4(1):29–40 (61 ref.)

Magnetic resonance imaging of thoracic vascular disease. White RD, et al. **J Thorac Imaging** 1989 Apr;4(2):34–50 (75 ref.)

Magnetic resonance imaging as an adjunct to ultrasound in oligohydramnios. Detection of sirenomelia. Fitzmorris-Glass R, et al. **J Ultrasound Med** 1989 Mar; 8(3):159–62

The ultrasound appearance of radiation-induced hepatic injury. Correlation with computed tomography and magnetic resonance imaging. Garra BS, et al. **J Ultrasound Med** 1988 Nov;7(11):605–9

Bladder pheochromocytoma: evaluation with magnetic resonance imaging. Heyman J, et al. **J Urol** 1989 Jun; 141(6):1424–6

Detection of testicular torsion by magnetic resonance imaging in a rat model. Landa HM, et al. **J Urol** 1988 Nov;140(5 Pt 2):1178–80

Chronic hemospermia due to müllerian duct cyst: diagnosis by magnetic resonance imaging. Neustein P, et al. **J Urol** 1989 Sep;142(3):828

Magnetic resonance imaging in the diagnosis and followup of idiopathic retroperitoneal fibrosis. Yuh WT, et al. **J Urol** 1989 Mar;141(3):602–5

Identification of aortic thrombus by magnetic resonance imaging. Pan X, et al. **J Vasc Surg** 1989 Jun;9(6):801–5

Magnetic resonance imaging of the abdomen and pelvis. Council on Scientific Affairs. **JAMA** 1989 Jan 20; 261(3):420–33 (114 ref.)

The poor quality of early evaluations of MRI [letter] **JAMA** 1988 Nov 11;260(18):2661–4

Cochlear implants are a contraindication to MRI [letter] Abrams HL. **JAMA** 1989 Jan 6;261(1):46

Use of ultrasound and magnetic resonance imaging in the diagnosis of cervical pregnancy. Bader-Armstrong B, et al. **JCU** 1989 May;17(4):283–6

MRI findings in early infantile epileptic encephalopathy with suppression-burst. Konishi H, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):609–10

Ophthalmic NMR. Cheng HM. **Keio J Med** 1988 Dec; 37(4):434–40

Course of cerebral lesions in a patient with periarteritis nodosa studied by magnetic resonance imaging. Koppensteiner R, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):398–401

Imaging patients with suspected acoustic neuroma [editorial] **Lancet** 1988 Dec 3;2(8623):1294

Magnetic resonance imaging in diabetes insipidus [letter] Chiumello G, et al. **Lancet** 1989 Apr 22;1(8643):901

In-vivo 31P magnetic resonance spectroscopy for monitoring treatment response in breast cancer [letter] Glaholm J, et al. **Lancet** 1989 Jun 10;1(8650):1326–7

Magnetic resonance imaging and early diagnosis of multiple sclerosis [letter] Heun R, et al. **Lancet** 1988 Nov 19; 2(8621):1202–3

Early lesion of multiple sclerosis [letter] Kermode AG, et al. **Lancet** 1988 Nov 19;2(8621):1203–4

New imaging techniques in diagnosis of cerebrospinal fluid fistula. Nicklaus P, et al. **Laryngoscope** 1988 Oct; 98(10):1065–8

A new needle and technique for MRI-guided aspiration cytology of the head and neck. Trapp T, et al. **Laryngoscope** 1989 Jan;99(1):105–8

Magnetic resonance imaging for monitoring relapse of acute myeloid leukemia. Henkelman RM, et al. **Leuk Res** 1988; 12(10):811–6

31P-MR spectroscopy of skeletal muscle in a lymphedematous arm. Kiricuta IC, et al. **Lymphology** 1989 Jun;22(2):93–6

Society for Magnetic Resonance Imaging, seventh annual meeting. 25 February-1 March, 1989, Los Angeles, California. Abstracts. **Magn Reson Imaging** 1989;7 Suppl 1:1–210

Thermoregulatory consequences of cardiovascular impairment during NMR imaging in warm/humid environments. Adair ER, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):25–37

Intrauterine diagnosis of hydranencephaly by magnetic resonance. Aguirre Vila-Coro A, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):105–7

Magnetic resonance imaging in patients with unstable angina: comparison with acute myocardial infarction and normals. Ahmad M, et al. **Magn Reson Imaging** 1988 Sep–Oct; 6(5):527–34

Biological effects of weak electromagnetic fields from 0 Hz to 200 MHz: a survey of the literature with special emphasis on possible magnetic resonance effects. Beers GJ. **Magn Reson Imaging** 1989 May–Jun;7(3):309–31 (214 ref.)

1H-NMR relaxation times and water content of red blood cells from chronic alcoholic patients during withdrawal. Besson JA, et al. **Magn Reson Imaging** 1989 May–Jun; 7(3):289–91

Degenerative cartilage lesions of the hip—magnetic resonance evaluation. Bongartz G, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):179–86

MRI of pulsatile CSF motion within arachnoid cysts. Brooks ML, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):575–84

Hepatic metastases: rat models for imaging research. Chen MC, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):1–8

MRI findings in pulmonary sarcoidosis. Craig DA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):567–73

A possible role for MRI in polyarteritis nodosa: the "creeping fat" sign. Eckel CG, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):713–5

Ultra low field brain MRI in HIV transfusion infected patients. Freund-Levi Y, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):225–30

Iophendylate or spillage from epidermoid—a diagnostic dilemma on cranial MR imaging. Gupta RK, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):293–5

Magnetic resonance imaging of the menstrual cycle. Janus CL, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):669–74

Quantitative magnetic resonance imaging of vertebral bodies: a T1 and T2 study. Jenkins JP, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):17–23

The effects of iron oxides on proton relaxivity. Josephson L, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):647–53

In vivo detection of applied electric currents by magnetic resonance imaging. Joy M, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):89–94

Information processing in nuclear magnetic resonance imaging. Jungke M, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):683–93

Effect of magnetic resonance imaging on Xenopus laevis embryogenesis. Kay HH, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):501–6

MRI of thorotrastoma. Keidan RD, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):717–20

Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):55–60

Sensitivity and specificity of MRI in detecting malignant spinal cord compression and in distinguishing malignant from benign compression fractures of vertebrae. Li KC, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):547–56

Mechanical ventilation of the neonate during magnetic resonance imaging. McGowan JE, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):145–8

Magnetic resonance imaging of malignant fibrous histiocytoma. Mahajan H, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):283–8

Synovial sarcoma: MR imaging. Mahajan H, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):211–6

Effect of hyperosmotic mannitol on magnetic resonance relaxation parameters in reperfused canine myocardial infarction. Miller DD, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):79–88

In vivo T1 characterization of genetically induced muscle atrophy. Misra LK, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):277–82

In vivo 1H spectroscopic studies of human gastrocnemius muscle at 1.5 T. Narayana PA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):481–5

A rotating phantom for the study of flow effects in MR imaging. Nordell B, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):695–705

Diagnosis of peripheral pulmonary emboli by MR imaging: an experimental study in dogs. Ovenfors CO, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):487–91

Femoral head avascular necrosis in sickle cell anemia: MR characteristics. Rao VM, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):661–7

Marrow infarction in sickle cell anemia: correlation with marrow type and distribution by MRI. Rao VM, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):39–44

Detection of a systemic effect of malignancy in vivo by magnetic resonance imaging. Richards MA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):557–65

Magnetic resonance imaging of pediatric spinal dysraphism. Rindahl MA, et al. **Magn Reson Imaging** 1989 Mar–Apr; 7(2):217–24

Magnetic resonance imaging of the penis: normal anatomy. Satragno L, et al. **Magn Reson Imaging** 1989 Jan–Feb; 7(1):95–100

MR imaging of acute cortical venous infarction: preliminary experience with an animal model. Secrist RD, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):149–53

MR evaluation of giant cell tumors of the tendon sheath. Sherry CS, et al. **Magn Reson Imaging** 1989 Mar–Apr; 7(2):195–201

Improved sensitivity of MRI in multiple sclerosis by use of extensive standardized procedures. Van de Vyver FL, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):241–9

Reduced blood flow in the transverse sinus visualized by ultra low field magnetic resonance imaging. Wahlund LO, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):101–4

MRI of hepatic lymphoma. Weissleder R, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):675–81

Assessment of T1 time course changes and tissue–blood ratios after Gd–DTPA administration in brain tumors. Yoshida K, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):9–15

A model of the temperature rise in the head due to magnetic resonance imaging procedures. Athey TW. **Magn Reson Med** 1989 Feb;9(2):177–84

Heating effects of metallic implants by MRI examinations. Buchli R, et al. **Magn Reson Med** 1988 Jul;7(3):255–61

High-resolution NMR imaging of an antigen-induced arthritis in the rabbit knee. Checkley D, et al. **Magn Reson Med** 1989 Aug;11(2):221–35

Vascular occlusions detected by magnetic resonance imaging. Choyke PL, et al. **Magn Reson Med** 1985 Dec;2(6):540–54

Relaxation measurements at 300 MHz using MR microscopy. Dockery SE, et al. **Magn Reson Med** 1989 Aug; 11(2):182–92

Magnetic resonance imaging the velocity vector components of fluid flow. Feinberg DA, et al. **Magn Reson Med** 1985 Dec;2(6):555–66

Number of inner-sphere water molecules in Gd3+ and Eu3+ complexes of DTPA–amide and –ester conjugates. Geraldes CF, et al. **Magn Reson Med** 1988 Oct;8(2):191–9

Evaluation of polyaza macrocyclic methylene phosphonate chelates of Gd3+ ions as MRI contrast agents. Geraldes CF, et al. **Magn Reson Med** 1989 Jan;9(1):94–104

SLIM: spectral localization by imaging. Hu X, et al. **Magn Reson Med** 1988 Nov;8(3):314–22

Low-frequency restoration. Jackson J, et al. **Magn Reson Med** 1989 Aug;11(2):248–57

Gadolinium-labeled liposomes containing paramagnetic amphipathic agents: targeted MRI contrast agents for the liver. Kabalka GW, et al. **Magn Reson Med** 1988 Sep; 8(1):89–95

Assessment of demyelination, edema, and gliosis by in vivo determination of T1 and T2 in the brain of patients with acute attack of multiple sclerosis. Larsson HB, et al. **Magn Reson Med** 1989 Sep;11(3):337–48

Gastrointestinal contrast agents: a diamagnetic approach. Listinsky JJ, et al. **Magn Reson Med** 1988 Nov;8(3):285–92

The influence of pulse sequence on the relaxation effects of superparamagnetic iron oxide contrast agents. Majumdar S, et al. **Magn Reson Med** 1989 Jun;10(3):289–301

Quantitative flow measurements on phantoms and on blood vessels with MR. Meier D, et al. **Magn Reson Med** 1988 Sep;8(1):25–34

MRI detection of myocardial perfusion changes by gadolinium–DTPA infusion during dipyridamole hyperemia. Miller DD, et al. **Magn Reson Med** 1989 May; 10(2):246–55

Precise relaxation time measurements of normal-appearing white matter in inflammatory central nervous system disease. Miller DH, et al. **Magn Reson Med** 1989 Sep; 11(3):331–6

Multiple short-echo (2.5-ms) quantitation of in vivo sodium T2 relaxation. Perman WH, et al. **Magn Reson Med** 1989 Feb;9(2):153–60

Quantitative magnetic resonance imaging of estradiol-induced pituitary hyperplasia in rats. Rudin M, et al. **Magn Reson Med** 1988 Jul;7(3):285–91

Quantitative NMR measurements of hippocampal atrophy in Alzheimer's disease. Seab JP, et al. **Magn Reson Med** 1988 Oct;8(2):200–8

Exposure to a 1.5-T static magnetic field does not alter body and skin temperatures in man. Shellock FG, et al. **Magn Reson Med** 1989 Sep;11(3):371–5

Stability constants for Gd3+ binding to model DTPA–conjugates and DTPA–proteins: implications for their use as magnetic resonance contrast agents. Sherry AD, et al. **Magn Reson Med** 1988 Oct;8(2):180–90

Suppression of radiofrequency interference in cardiac gated MRI: a simple design. Shetty AN. **Magn Reson Med** 1988 Sep;8(1):84–8

Acute and repair stage characteristics of magnetic resonance relaxation times in oxygen-induced pulmonary edema. Shioya S, et al. **Magn Reson Med** 1988 Dec;8(4):450–9

Longitudinal proton relaxation rates in rabbit tissues after intravenous injection of free and chelated Mn2+. Spiller M, et al. **Magn Reson Med** 1988 Nov;8(3):293–313

Dextran–magnetite: a contrast agent for sodium-23 MRI. Summers RM, et al. **Magn Reson Med** 1988 Dec; 8(4):427–39

Magnetic resonance imaging of estrogen-induced pituitary hypertrophy in rats. van Nesselrooij JH, et al. **Magn Reson Med** 1989 Aug;11(2):161–71

Androgen sensitivity of rat prostate carcinoma studied by 31P NMR spectroscopy, 1H MR imaging, and 23Na MR imaging. Vigneron DB, et al. **Magn Reson Med** 1989 Aug; 11(2):152–60

Motional phase artifacts in Fourier transform MRI. Wedeen VJ, et al. **Magn Reson Med** 1989 Jul;11(1):114–20

Computing material-selective projection images in MR. Wright GA, et al. **Magn Reson Med** 1989 Aug;11(2):135–51

Dependence of the solvent proton 1/T1 on the iron content in normal human serum. Yilmaz A, et al. **Magn Reson Med** 1988 Jul;7(3):337–9

MRI measurement of hepatocyte toxicity using the new MRI contrast agent manganese dipyridoxal diphosphate, a manganese/pyridoxal 5-phosphate chelate. Young SW, et al. **Magn Reson Med** 1989 Apr;10(1):1–13

Tuberous sclerosis—another success for magnetic resonance imaging [editorial] Richardson EP Jr. **Mayo Clin Proc** 1989 Mar;64(3):371–3

Magnetic resonance imaging in pediatric diagnosis. Brasch RC. **Mead Johnson Symp Perinat Dev Med** 1987;(25):10–4

Improved radiotherapy treatment planning for spinal cord tumors using gadolinium enhanced MR imaging. Griffin BR, et al. **Med Dosim** 1989;14(1):5–8

New technology for old? [editorial] McDonald IG. **Med J Aust** 1989 Jul 3;151(1):3–5

An evaluation of magnetic resonance imaging at The Royal North Shore Hospital of Sydney, 1986–1987. Sorby WA. **Med J Aust** 1989 Jul 3;151(1):8–11, 14–8

A generalized formulation of diffusion effects in micron resolution nuclear magnetic resonance imaging. Ahn CB, et al. **Med Phys** 1989 Jan–Feb;16(1):22–8

Tissue-mimicking gelatin–agar gels for use in magnetic resonance imaging phantoms. Blechinger JC, et al. **Med Phys** 1988 Jul–Aug;15(4):629–36

Influence of magnetic resonance imaging on human body core and intravascular temperature. Vogl T, et al. **Med Phys** 1988 Jul–Aug;15(4):562–6

Magnetic resonance imaging: failure to demonstrate spinal arteriovenous malformations in four patients. Shah DC, et al. **Mo Med** 1989 Sep;86(9):637–40

Computerized tomography and magnetic resonance imaging in a case of spinal dysraphism. Lusins JO, et al. **Mt Sinai J Med** 1989 Mar;56(2):133–5

31P-NMR spectroscopy: the metabolic profile of malignant hyperpyrexic porcine skeletal muscle. Foster PS, et al. **Muscle Nerve** 1989 May;12(5):390–6

Hippocampal abnormalities in amnesic patients revealed by high-resolution magnetic resonance imaging. Press GA, et al. **Nature** 1989 Sep 7;341(6237):54–7

Clinical diagnostic imaging. Cerebral venous thrombosis. Steg RE, et al. **Nebr Med J** 1989 Feb;74(2):37–41

Magnetic resonance imaging in renal infarction and ischemia. Ishikawa I, et al. **Nephron** 1989;51(1):99–102

Chemical shift misregistration effect in spinal magnetic resonance imaging. Komiyama M, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):642–4

Gadolinium–DTPA–enhanced magnetic resonance imaging in intractable partial epilepsy. Cascino GD, et al. **Neurology** 1989 Aug;39(8):1115–8

Gadolinium–DTPA–enhanced magnetic resonance imaging in childhood brain tumors. Cohen BH, et al. **Neurology** 1989 Sep;39(9):1178–83

The significance of MRI abnormalities in children with neurofibromatosis. Duffner PK, et al. **Neurology** 1989 Mar; 39(3):373–8

Criteria for an increased specificity of MRI interpretation in elderly subjects with suspected multiple sclerosis. Fazekas F, et al. **Neurology** 1988 Dec;38(12):1822–5

Correlation of neuropsychological and MRI findings in chronic/progressive multiple sclerosis. Franklin GM, et al. **Neurology** 1988 Dec;38(12):1826–9

Gadolinium-enhanced MRI: a superior technique for the diagnosis of intraspinal metastases. Fredericks RK, et al. **Neurology** 1989 May;39(5):734–6

Behçet's disease with slowly enlarging midbrain mass on MRI: resolution following steroid therapy. Kermode AG, et al. **Neurology** 1989 Sep;39(9):1251–2

Correlation of magnetic resonance imaging with neuropsychological testing in multiple sclerosis. Rao SM, et al. **Neurology** 1989 Feb;39(2 Pt 1):161–6

A preliminary MRI study of the geometry of brain displacement and level of consciousness with acute intracranial masses. Ropper AH. **Neurology** 1989 May; 39(5):622–7

Serial magnetic resonance and carotid duplex examinations in the management of carotid dissection. Rothrock JF, et al. **Neurology** 1989 May;39(5):686–92

Magnetic resonance imaging in pathologically proven Hallervorden–Spatz disease. Schaffert DA, et al. **Neurology** 1989 Mar;39(3):440–2

Postinfectious encephalitis with multifocal white matter lesions. Boulloche J, et al. **Neuropediatrics** 1989 Aug; 20(3):173–5

Magnetic resonance imaging in autism: preliminary report. Hashimoto T, et al. **Neuropediatrics** 1989 Aug;20(3):142–6

MR imaging of syringobulbia with giant syrinx. Abe K, et al. **Neuroradiology** 1988;30(5):442–3

Garcin syndrome with hypopituitarythm. MR imaging. Abe K, et al. **Neuroradiology** 1988;30(5):447–8

MR demonstration of spontaneous acute epidural hematoma of the thoracic spine. Avrahami E, et al. **Neuroradiology** 1989;31(1):89–92

"Top of the basilar" syndrome: a comparison of clinical and MR findings. Barkhof F, et al. **Neuroradiology** 1988; 30(4):293–8

MRI in Cockayne syndrome type I. Boltshauser E, et al. **Neuroradiology** 1989;31(3):276–7

Primary progressive cerebellar ataxia. Bradac GB, et al. **Neuroradiology** 1989;31(1):16–8

MRI and hydrocephalus in childhood. Britton J, et al. **Neuroradiology** 1988;30(4):310–4

Neuroradiology [editorial] Calabro A. **Neuroradiology** 1989; 31(1):1–2

The effect of patient positioning on MR imaging of the internal auditory canal. Daniels DL, et al. **Neuroradiology** 1988;30(5):395–8

Multiple sclerosis and corpus callosum atrophy: relationship of MRI findings to clinical data. Dietemann JL, et al. **Neuroradiology** 1988;30(6):478–80

Ossification of the ligamentum flavum. A case report and its MRI finding. Enomoto H, et al. **Neuroradiology** 1988; 30(6):571–3

Vertebrobasilar dolichoectasia: assessment using MR. Giang DW, et al. **Neuroradiology** 1988;30(6):518–23

Further aspects of MR–signal enhancements in stenosis of the cervical spinal canal. MRI–investigations in correlation to clinical and cerebrospinal fluid (CSF) findings. Haupts M, et al. **Neuroradiology** 1988;30(6):545–6

MR imaging of dural arteriovenous malformations with ocular signs. Hirabuki N, et al. **Neuroradiology** 1988; 30(5):390–4

MRI assessment of unsuspected dural sinus thrombosis. Hulcelle PJ, et al. **Neuroradiology** 1989;31(3):217–21

Magnetic resonance images of tuberous sclerosis. Further observations and clinical correlations. Inoue Y, et al. **Neuroradiology** 1988;30(5):379–84

Magnetic resonance imaging in primary cerebral neuroblastoma. Just M, et al. **Neuroradiology** 1989;31(1):108

Magnetic resonance imaging in the evaluation of treatment in multiple sclerosis. Kappos L, et al. **Neuroradiology** 1988; 30(4):299–302

MR visualization of CSF flow through a ventriculo–cisternostomy. Missir O, et al. **Neuroradiology** 1989;31(1):93–4

Medullary lesion revealed by MRI in a case of MS with respiratory arrest. Mochizuki A, et al. **Neuroradiology** 1988; 30(6):574–6

Gd–DTPA–enhanced MR in thoracic disc herniations. Parizel PM, et al. **Neuroradiology** 1989;31(1):75–9

Magnetic resonance imaging of subarachnoid hemorrhage. Satoh S, et al. **Neuroradiology** 1988;30(5):361–6

MR of childhood tuberculous meningitis. Schoeman J, et al. **Neuroradiology** 1988;30(6):473–7

Reversible brain shrinkage in abstinent alcoholics, measured by MRI. Schroth G, et al. **Neuroradiology** 1988;30(5):385–9

MR imaging of intraspinal tumors—capability in histological differentiation and compartmentalization of extramedullary tumors. Takemoto K, et al. **Neuroradiology** 1988; 30(4):303–9

Bilateral anterior opercular syndrome: localizing value of SPECT and MRI. Tohgi H, et al. **Neuroradiology** 1988; 30(6):579–81

The value of T1-weighted images in the differentiation between MS, white matter lesions, and subcortical arteriosclerotic encephalopathy (SAE). Uhlenbrock D, et al. **Neuroradiology** 1989;31(3):203–12 (35 ref.)

One-year MR imaging follow-up of patients with multiple sclerosis under cortisone therapy. Uhlenbrock D, et al. **Neuroradiology** 1989;31(1):3–7

Neuromagnetic imaging studies discriminate proprioceptive and cutaneous cortical inputs during median nerve stimulation in man. Narici L, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):169–74

Cranial magnetic resonance imaging in multiple sclerosis—indicated only in exceptional cases? Haupts M, et al. **Neurosurg Rev** 1987;10(4):287–9

MR imaging of cerebral tumors: state of the art and work in progress. Higer HP, et al. **Neurosurg Rev** 1989; 12(2):91–106 (60 ref.)

The influence of magnetic resonance tomography on diagnosis and therapy in patients with intracranial manifestation of neurofibromatosis (Recklinghausen disease). Kiwit JC, et al. **Neurosurg Rev** 1987;10(4):283–6

Intraspinal extension of an air cyst of the lung: case report. Andrews DW, et al. **Neurosurgery** 1989 Mar;24(3):414–7

Thoracic intervertebral disc herniations: diagnostic value of magnetic resonance imaging. Blumenkopf B. **Neurosurgery** 1988 Jul;23(1):36–40

Magnetic resonance imaging of lipomyelomeningocele and tethered cord. Brophy JD, et al. **Neurosurgery** 1989 Sep; 25(3):336–40

Presentation and management of pediatric Chiari malformations without myelodysplasia. Dyste GN, et al. **Neurosurgery** 1988 Nov;23(5):589–97

Thrombosed arteriovenous malformations: a type of occult vascular malformation. Magnetic resonance imaging and histopathological correlations. Ebeling JD, et al. **Neurosurgery** 1988 Nov;23(5):605–10

Confirmation by magnetic resonance imaging of Bell's cruciate paralysis in a young child with Chiari type I malformation and minor head trauma. Erlich V, et al. **Neurosurgery** 1989 Jul;25(1):102–5

Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62

Intramedullary dermoid tumor diagnosed with the assistance of magnetic resonance imaging. Graham DV, et al. **Neurosurgery** 1988 Dec;23(6):765–7

MRI assessment of ventricular CSF dynamics in the presence of lesions of the foramen of Monro [letter] Guthrie BL, et al. **Neurosurgery** 1989 Aug;25(2):319

Magnetic resonance imaging in cases of spinal dural arteriovenous malformation. Isu T, et al. **Neurosurgery** 1989 Jun;24(6):919–23

Magnetic resonance imaging in acute spinal cord trauma. Kalfas I, et al. **Neurosurgery** 1988 Sep;23(3):295–9

Magnetic resonance imaging after closed head injury in children. Levin HS, et al. **Neurosurgery** 1989 Feb; 24(2):223–7

Sleep apnea and the Chiari I malformation: case report. Levitt P, et al. **Neurosurgery** 1988 Oct;23(4):508–10

Transient late magnetic resonance imaging changes suggesting progression of brain stem glioma: implications for entry criteria for phase II trials. Longee DC, et al. **Neurosurgery** 1988 Aug;23(2):248–53

Magnetic resonance imaging stereotactic thalamotomy: report of a case with comparison to computed tomography. Lunsford LD. **Neurosurgery** 1988 Sep;23(3):363–7

Acute aortic thrombosis causing sudden paraplegia in a patient with known thoraco–lumbar spinal metastasis: the diagnostic usefulness of magnetic resonance imaging. Moore MR, et al. **Neurosurgery** 1989 Jul;25(1):105–9

Aspergillus disc space infection: case report and review of the literature. Morgenlander JC, et al. **Neurosurgery** 1989 Jul;25(1):126–9 (14 ref.)

Correlation between magnetic resonance imaging and surgical findings in the tethered spinal cord. Moufarrij NA, et al. **Neurosurgery** 1989 Sep;25(3):341–6

Primary intrasellar microgerminoma detected by magnetic resonance imaging: case report. Oishi M, et al. **Neurosurgery** 1989 Sep;25(3):458–62

Surgical excision of a cavernous hemangioma of the rostral brain stem: case report. Ondra SL, et al. **Neurosurgery** 1988 Oct;23(4):490–3

Anatomical evaluation of the caudal regression syndrome (lumbosacral agenesis) with magnetic resonance imaging. Pappas CT, et al. **Neurosurgery** 1989 Sep;25(3):462–5

Solitary primary lymphoma of the sciatic nerve: case report. Pillay PK, et al. **Neurosurgery** 1988 Sep;23(3):370–1

Magnetic resonance imaging in the diagnosis and treatment of Lhermitte–Duclos disease (dysplastic gangliocytoma of the cerebellum). Reeder RF, et al. **Neurosurgery** 1988 Aug; 23(2):240–5

Late magnetic resonance imaging related to neurobehavioral functioning after aneurysmal subarachnoid hemorrhage. Romner B, et al. **Neurosurgery** 1989 Sep;25(3):390–6; discussion 396–7

Multiple intracranial aneurysms: magnetic resonance imaging for determination of the site of rupture. Report of a case. Stone JL, et al. **Neurosurgery** 1988 Jul;23(1):97–100

Intrasellar intercarotid communicating artery associated with agenesis of the right internal carotid artery: case report. Udzura M, et al. **Neurosurgery** 1988 Dec;23(6):770–3

Arnold–Chiari malformation in an infant with Kleeblattschadel: an acquired malformation? Venes JL. **Neurosurgery** 1988 Sep;23(3):360–2

Magnetic resonance imaging of symptomatic Rathke's cleft cyst: report of a case. Wagle VG, et al. **Neurosurgery** 1989 Feb;24(2):276–8

Computed tomography versus magnetic resonance imaging for the evaluation of suspected pituitary adenomas. Stein AL, et al. **Obstet Gynecol** 1989 Jun;73(6):996–9

Magnetic resonance imaging of anomalous fetuses. Williamson RA, et al. **Obstet Gynecol** 1989 Jun;73(6):952–6

Chronic hematic cyst of the orbit. Role of magnetic resonance imaging in diagnosis. Kersten RC, et al. **Ophthalmology** 1988 Nov;95(11):1549–53

Magnetic resonance imaging versus computed tomography of leukocoric eyes and use of in vitro proton magnetic resonance spectroscopy of retinoblastoma. Mafee MF, et al. **Ophthalmology** 1989 Jul;96(7):965–75; discussion 975–6

Imaging orofacial tissues by magnetic resonance. Lam EW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):2–8

Radiographic evaluation of osteomyelitis using magnetic resonance imaging. Totty WG. **Orthop Rev** 1989 May; 18(5):587–92

Radiologic case study. Diffuse pigmented villonodular synovitis. Kerr R. **Orthopedics** 1989 Jul;12(7):1008, 1010–2

ENG–MRI correlates in cerebellar oculomotor dysfunction. Hamid MA, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):302–8

Computed tomography and magnetic resonance imaging of the inner ear. Jackler RK, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):494–504 (40 ref.)

Nuclear magnetic resonance imaging in a patient with a DDD Pacemaker [letter] Alagona P Jr, et al. **PACE** 1989 Apr;12(4 Pt 1):619

Noninvasive diagnosis of congenital left coronary artery to right ventricle fistula by nuclear magnetic resonance imaging. Boxer RA, et al. **Pediatr Cardiol** 1989 Winter; 10(1):45–7

Magnetic resonance imaging of cor triatriatum. Rumancik WM, et al. **Pediatr Cardiol** 1988;9(3):149–51

Electroencephalographic and neuroradiologic evaluation of children with epilepsy. Holmes GL. **Pediatr Clin North Am** 1989 Apr;36(2):395–420 (75 ref.)

Demonstration of acute post–viral myelitis with magnetic resonance imaging. Awerbuch G, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):367–9

Congenital fourth nerve palsy and occult cranium bifidum. Bale JF Jr, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):320–1

Granulocytic sarcoma in childhood acute myelogenous leukemia. Brown LM, et al. **Pediatr Neurol** 1989 May–Jun; 5(3):173–8 (35 ref.)

Computed tomography and magnetic resonance imaging in late–onset globoid cell leukodystrophy (Krabbe disease). Brownsworth RD, et al. **Pediatr Neurol** 1985 Jul–Aug; 1(4):242–4

Cockayne syndrome: MRI correlates of hypomyelination. Dabbagh O, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):113–6

Focal MRI findings in early SSPE. Geller TJ, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):310–2

Brain tumors in children with neurofibromatosis: computed tomography and magnetic resonance imaging. Gray J, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):335–41

MRI and evoked potentials in a child with hydranencephaly. Hanigan WC, et al. **Pediatr Neurol** 1988 May–Jun; 4(3):185–7

Acute cerebellar swelling in varicella encephalitis. Hurst DL, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):122–3

Magnetic resonance and CT imaging correlated with clinical status in SSPE [published erratum appears in Pediatr Neurol 1986 May–Jun;2(3):147] Lum GB, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):75–9

Magnetic resonance imaging in childhood disseminated encephalomyelitis. Perdue Z, et al. **Pediatr Neurol** 1985 Nov–Dec;1(6):370–4

Magnetic resonance imaging in Pelizaeus–Merzbacher disease. Shimomura C, et al. **Pediatr Neurol** 1988 Mar–Apr; 4(2):124–5

Role of MRI scanning in the diagnosis of cerebral visual disturbance. Van Nieuwenhuizen O, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):363–6

Comparison of CT and MRI brain tumor imaging using a canine glioma model. Whelan HT, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):279–83

Magnetic resonance imaging in leukodystrophies of childhood. Young RS, et al. **Pediatr Neurol** 1985 Jan–Feb; 1(1):15–9

Parietal cephaloceles: radiographic and magnetic resonance imaging evaluation. Curnes JT, et al. **Pediatr Neurosci** 1988; 14(2):71–6

Recurrent brain tumors in children. Friedman HS, et al. **Pediatr Neurosci** 1987;13(5):233–41 (63 ref.)

Role of magnetic resonance imaging and three–dimensional computerized tomography in craniovertebral junction anomalies. Pappas CT, et al. **Pediatr Neurosci** 1988; 14(1):18–22

MRI of hypothalamic hamartomas in children. Barral V, et al. **Pediatr Radiol** 1988;18(6):449–52

Metastatic Wilms' tumor to the liver with MR findings simulating cysts: case report emphasizing need for integrated imaging. Brody AS, et al. **Pediatr Radiol** 1989; 19(5):337–8

The CT and MR evaluation of migrational disorders of the brain. Part II. Schizencephaly, heterotopia and polymicrogyria. Byrd SE, et al. **Pediatr Radiol** 1989; 19(4):219–22

The CT and MR evaluation of migrational disorders of the brain. Part I. Lissencephaly and pachygyria. Byrd SE, et al. **Pediatr Radiol** 1989;19(3):151–6

Lipoma of the corpus callosum: diagnosis by ultrasound and magnetic resonance. Fisher RM, et al. **Pediatr Radiol** 1988; 18(5):409–10

Primary mediastinal tuberculous abscess: demonstration with MR. Gupta RK, et al. **Pediatr Radiol** 1989;19(5):330–2

Magnetic resonance imaging of a lingual thyroid gland. Johnson JC, et al. **Pediatr Radiol** 1989;19(6–7):461–2

Metabolic and anatomic development of the chick embryo as studied by phosphorus–31 magnetic resonance spectroscopy and proton MRI. Moseley ME, et al. **Pediatr Radiol** 1989;19(6–7):400–5

Magnetic resonance imaging of normal and pathological white matter maturation [letter] Ranade SS, et al. **Pediatr Radiol** 1989;19(5):346

MRI study of lumbosacral lipoma in children. Taviere V, et al. **Pediatr Radiol** 1989;19(5):316–20

The anorectal sphincter after rectal pull–through surgery for anorectal anomalies: MRI evaluation. Vade A, et al. **Pediatr Radiol** 1989;19(3):179–83

Magnetic resonance appearance of adrenal hemorrhage in a neonate. Willemse AP, et al. **Pediatr Radiol** 1989; 19(3):210–1

Magnetic resonance imaging. Brody AS, et al. **Pediatr Rev** 1986 Sep;8(3):87–92 (14 ref.)

Early detection of delayed myelination in preterm infants. van de Bor M, et al. **Pediatrics** 1989 Sep;84(3):407–11

Localization of injected silicone with MRI prior to removal by suction cannula [letter] Bailey MH, et al. **Plast Reconstr Surg** 1989 Aug;84(2):364–6

Magnetic resonance imaging versus computed tomography—which one? Anderson RE. **Postgrad Med** 1989 Feb 15;85(3):79–83, 86–7

Clinical applications of magnetic resonance imaging. Johnson RJ. **Practitioner** 1988 Nov 8;232(1458):1241–3

Magnetic resonance imaging of intracerebral neural grafts. Peschanski M, et al. **Prog Brain Res** 1988;78:619–24

19F magnetic resonance imaging and spectroscopy of a fluorinated neuroleptic ligand: in vivo and in vitro studies. Arndt DC, et al. **Psychiatry Res** 1988 Jul;25(1):73–9

Comparison between air CT and MRI in the detection of small acoustic neurinomas. Kamei T, et al. **Radiat Med** 1989 Jan–Feb;7(1):16–22

Computed tomographic and magnetic resonance imaging of vanishing cerebral infarct. Mizushima A, et al. **Radiat Med** 1988 Mar–Apr;6(2):54–7

MRI of pulmonary sequestration with hemorrhage. Ohtomo K, et al. **Radiat Med** 1988 Mar–Apr;6(2):58–60

Measurements of magnetic relaxation times of normal tissue and renal cell carcinoma. Suzuki M, et al. **Radiat Med** 1988 Nov–Dec;6(6):263–6

Improved detection of healed myocardial infarction by Fourier amplitude and phase imaging in two projections: validation with MRI. Akins EW, et al. **Radiographics** 1989 Mar;9(2):323–39

MR imaging: vascular anatomy of the abdomen. Barbaric ZL, et al. **Radiographics** 1989 Jan;9(1):69–84

MRI demonstration of radiographically occult fractures: what have we been missing? Berger PE, et al. **Radiographics** 1989 May;9(3):407–36

Magnetic resonance imaging of the wrist: normal cross sectional imaging and selected abnormal cases. Binkovitz LA, et al. **Radiographics** 1988 Nov;8(6):1171–202

Magnetic resonance imaging of primary malignant bone tumors. Bloem JL, et al. **Radiographics** 1985 Nov; 5(6):853–86

Stereoscopic computed three–dimensional surface displays. Herman GT, et al. **Radiographics** 1985 Nov;5(6):825–52

Anatomic correlations of magnetic resonance images with cadaver cryosections. Holliday J, et al. **Radiographics** 1985 Nov;5(6):887–921

Seminal vesicle imaging. King BF, et al. **Radiographics** 1989 Jul;9(4):653–76

1.5 tesla magnetic resonance imaging of acute spinal trauma. Kulkarni MV, et al. **Radiographics** 1988 Nov;8(6):1059–82

Magnetic resonance imaging of discrete and conglomerate retroperitoneal lymph node masses. Lawson TL, et al. **Radiographics** 1985 Nov;5(6):971–84

Reconstruction of the four basic cardiac projections from magnetic resonance images: a new aspect [published erratum appears in Radiographics 1989 Mar;9(2):353] Link KM, et al. **Radiographics** 1988 Nov;8(6):1109–36

Magnetic resonance imaging of the knee and correlation with normal anatomy. Mesgarzadeh M, et al. **Radiographics** 1988 Jul;8(4):707–33

Computed tomography and magnetic resonance imaging of the pericardium. Olson MC, et al. **Radiographics** 1989 Jul; 9(4):633–49

Magnetic resonance imaging of disturbances in neuronal migration: illustration of an embryologic process. Smith AS, et al. **Radiographics** 1989 May;9(3):509–22

Gd–DTPA enhanced high resolution MR imaging of pituitary adenomas. Steiner E, et al. **Radiographics** 1989 Jul;9(4):587–98

Three–dimensional magnetic resonance imaging of congenital heart disease. Vannier MW, et al. **Radiographics** 1988 Sep; 8(5):857–71

Application of image enhancement techniques to magnetic resonance imaging. Wood ML, et al. **Radiographics** 1988 Jul;8(4):771–84

MRI of the head and neck. **Radiol Clin North Am** 1989 Mar; 27(2):195–479

MRI of the nasopharynx. Braun IF. **Radiol Clin North Am** 1989 Mar;27(2):315–30 (18 ref.)

MRI of the parapharyngeal space. Cross RR, et al. **Radiol Clin North Am** 1989 Mar;27(2):353–78 (36 ref.)

Magnetic resonance imaging of musculoskeletal injuries. Deutsch AL, et al. **Radiol Clin North Am** 1989 Sep; 27(5):983–1002 (79 ref.)

MRI of the gastrointestinal tract. Goldberg HI, et al. **Radiol Clin North Am** 1989 Jul;27(4):805–12 (24 ref.)

MRI of mastoid and middle ear disease. Holliday RA, et al. **Radiol Clin North Am** 1989 Mar;27(2):283–99 (34 ref.)

MRI of the floor of the mouth, tongue and orohypopharynx. Kassel EE, et al. **Radiol Clin North Am** 1989 Mar; 27(2):331–51 (46 ref.)

Magnetic resonance imaging: a brief review of image contrast. Makow LS. **Radiol Clin North Am** 1989 Mar; 27(2):195–218

MRI of the paranasal sinuses and nasal cavity. Shapiro MD, et al. **Radiol Clin North Am** 1989 Mar;27(2):447–75 (39 ref.)

MR of the salivary glands. Tabor EK, et al. **Radiol Clin North Am** 1989 Mar;27(2):379–92 (25 ref.)

Magnetic resonance imaging of the larynx. Teresi LM, et al. **Radiol Clin North Am** 1989 Mar;27(2):393–406 (57 ref.)

Neurofibromatosis types 1 and 2: cranial MR findings. Aoki S, et al. **Radiology** 1989 Aug;172(2):527–34

Marrow conversion before pneumatization of the sphenoid sinus: assessment with MR imaging. Aoki S, et al. **Radiology** 1989 Aug;172(2):373–5

Normal deposition of brain iron in childhood and adolescence: MR imaging at 1.5 T. Aoki S, et al. **Radiology** 1989 Aug;172(2):381–5

Pelvic endometriosis: MR imaging. Arrivé L, et al. **Radiology** 1989 Jun;171(3):687–92

Malignant versus nonmalignant retroperitoneal fibrosis: differentiation with MR imaging. Arrivé L, et al. **Radiology** 1989 Jul;172(1):139–43

Radiation–induced uterine changes: MR imaging. Arrivé L, et al. **Radiology** 1989 Jan;170(1 Pt 1):55–8

Aqueductal stenosis: evaluation with gradient–echo rapid MR imaging. Atlas SW, et al. **Radiology** 1988 Nov; 169(2):449–53

Incorporation versus infection of retroperitoneal aortic grafts: MR imaging features. Auffermann W, et al. **Radiology** 1989 Aug;172(2):359–62

Septo–optic dysplasia: MR imaging. Barkovich AJ, et al. **Radiology** 1989 Apr;171(1):189–92

Abnormal signal in deep white–matter infarction [letter] Barnes D. **Radiology** 1989 Jan;170(1 Pt 1):279–80

In vitro dissolution of gallstones with MTBE: correlation

with characteristics at CT and MR imaging. Baron RL, et al. **Radiology** 1989 Oct;173(1):117–21
Prostatic carcinoma: staging with MR imaging at 1.5 T. Bezzi M, et al. **Radiology** 1988 Nov;169(2):339–46
Radiologic staging of primary bone sarcoma: MR imaging, scintigraphy, angiography, and CT correlated with pathologic examination. Bloem JL, et al. **Radiology** 1988 Dec;169(3):805–10
Adrenal hemorrhage and renal vein thrombosis in the newborn: MR imaging. Brill PW, et al. **Radiology** 1989 Jan;170(1 Pt 1):95–8
MR staging of bladder carcinoma: correlation with pathologic findings. Buy JN, et al. **Radiology** 1988 Dec; 169(3):695–700
Spinal cord compression due to metastatic disease: diagnosis with MR imaging versus myelography. Carmody RF, et al. **Radiology** 1989 Oct;173(1):225–9
MR imaging in renal cell carcinoma. Choyke PL. **Radiology** 1988 Nov;169(2):572–3
Imaging of the larynx: current concepts. Curtin HD. **Radiology** 1989 Oct;173(1):1–11 (27 ref.)
Cervical neural foramina: correlative anatomic and MR imaging study. Czervionke LF, et al. **Radiology** 1988 Dec; 169(3):753–9
MR imaging of facial nerve enhancement in Bell palsy or after temporal bone surgery. Daniels DL, et al. **Radiology** 1989 Jun;171(3):807–9
Suspected recurrent rectosigmoid carcinoma after abdominoperineal resection: MR imaging and histopathologic findings. de Lange EE, et al. **Radiology** 1989 Feb;170(2):323–8
Occult fractures of the proximal femur: MR imaging. Deutsch AL, et al. **Radiology** 1989 Jan;170(1 Pt 1):113–6
Meningioma subtypes: MR and PET features [letter; comment] Di Chiro G. **Radiology** 1989 Aug;172(2):578–9 . **Comment on:** Radiology 1989 Mar;170(3 Pt 1):857–62
Intradural spinal cord lesions: Gd-DTPA-enhanced MR imaging. Dillon WP, et al. **Radiology** 1989 Jan;170(1 Pt 1):229–37
Cushing syndrome due to primary pigmented nodular adrenocortical disease: findings at CT and MR imaging. Doppman JL, et al. **Radiology** 1989 Aug;172(2):415–20
Ectopic adrenocorticotropic hormone syndrome: localization studies in 28 patients. Doppman JL, et al. **Radiology** 1989 Jul;172(1):115–24
Head and neck lesions: MR-guided aspiration biopsy. Duckwiler G, et al. **Radiology** 1989 Feb;170(2):519–22
Nonacute subdural hematoma: fundamental interpretation of MR images based on biochemical and in vitro MR analysis. Ebisu T, et al. **Radiology** 1989 May;171(2):449–53
Is Gd-DTPA required for routine cranial MR imaging? Elster AD, et al. **Radiology** 1989 Oct;173(1):231–8
Meningiomas: MR and histopathologic features [see comments] Elster AD, et al. **Radiology** 1989 Mar;170(3 Pt 1):857–62. **Comment in:** Radiology 1989 Aug;172(2):578–9
Musculoskeletal neoplasms: static and dynamic Gd-DTPA—enhanced MR imaging. Erlemann R, et al. **Radiology** 1989 Jun;171(3):767–73
Sports-related muscle injuries: evaluation with MR imaging. Fleckenstein JL, et al. **Radiology** 1989 Sep;172(3):793–8
Tracheal compression and the innominate artery: MR evaluation in infants. Fletcher BD, et al. **Radiology** 1989 Jan;170(1 Pt 1):103–7
Recurrent postoperative sciatica: evaluation with MR imaging and enhanced CT. Frocrain L, et al. **Radiology** 1989 Feb;170(2):531–3
Gastrinomas: comparison of MR imaging with CT, angiography, and US. Frucht H, et al. **Radiology** 1989 Jun; 171(3):713–7
Traumatic brain stem injury: MR imaging. Gentry LR, et al. **Radiology** 1989 Apr;171(1):177–87
Idiopathic intracranial hypertension: pathogenesis and the role of MR imaging. George AE. **Radiology** 1989 Jan;170(1 Pt 1):21–2
Superparamagnetic Iron Oxide Particles. Gore JC, et al. **Radiology** 1988 Dec;169(3):657–8
Normal and disrupted lumbar longitudinal ligaments: correlative MR and anatomic study. Grenier N, et al. **Radiology** 1989 Apr;171(1):197–205
Gated cardiac MR imaging and P-31 MR spectroscopy in humans at 1.5 T. Work in progress. Grist TM, et al. **Radiology** 1989 Feb;170(2):357–61
Sanguinary efforts [editorial] Grossman RI. **Radiology** 1989 Jul;172(1):13–4
Experimental radiation injury: combined MR imaging and spectroscopy. Grossman RI, et al. **Radiology** 1988 Nov; 169(2):305–9
Reduction of T2* dephasing in gradient field–echo imaging. Haacke EM, et al. **Radiology** 1989 Feb;170(2):457–62
Development and aging of brain midline structures: assessment with MR imaging. Hayakawa K, et al. **Radiology** 1989 Jul;172(1):171–7
Superior sulcus tumors: CT and MR imaging. Heelan RT, et al. **Radiology** 1989 Mar;170(3 Pt 1):637–41
Detection of focal hepatic masses: prospective evaluation with CT, delayed CT, CT during arterial portography, and MR imaging. Heiken JP, et al. **Radiology** 1989 Apr; 171(1):47–51
Significant extracranial carotid stenosis: detection on routine cerebral MR images. Heinz ER, et al. **Radiology** 1989 Mar; 170(3 Pt 1):843–8
Temporomandibular joint: morphology and signal intensity characteristics of the disk at MR imaging. Helms CA, et al. **Radiology** 1989 Sep;172(3):817–20
MR imaging of the breast with Gd-DTPA: use and limitations. Heywang SH, et al. **Radiology** 1989 Apr; 171(1):95–103
Success of acute thrombolytic therapy in acute myocardial infarction: what does it demand from cardiac imaging in the 1990s? [editorial] Higgins CB. **Radiology** 1989 Jul; 172(1):17–9
Graves ophthalmopathy: MR imaging of the orbits. Hosten N, et al. **Radiology** 1989 Sep;172(3):759–62
Imaging prostate carcinoma. Hricak H. **Radiology** 1988 Nov; 169(2):569–71 (36 ref.)
Normal penile anatomy and abnormal penile conditions: evaluation with MR imaging. Hricak H, et al. **Radiology** 1988 Dec;169(3):683–90
Anterior temporal lobes and hippocampal formations: normative volumetric measurements from MR images in young adults. Jack CR Jr, et al. **Radiology** 1989 Aug; 172(2):549–54
Use of MR imaging for quantitative evaluation of resection for temporal lobe epilepsy. Jack CR Jr, et al. **Radiology** 1988 Nov;169(2):463–8
Intraspinal synovial cysts: MR imaging. Jackson DE Jr, et al. **Radiology** 1989 Feb;170(2):527–30
Human cerebral gliomas: correlation of postmortem MR imaging and neuropathologic findings. Johnson PC, et al. **Radiology** 1989 Jan;170(1 Pt 1):211–7
Tissue characterization with T1, T2, and proton density values: results in 160 patients with brain tumors. Just M, et al. **Radiology** 1988 Dec;169(3):779–85
Estimation of human myocardial mass with MR imaging. Katz J, et al. **Radiology** 1988 Nov;169(2):495–8
Temporomandibular joint: MR assessment of rotational and sideways disk displacements. Katzberg RW, et al. **Radiology** 1988 Dec;169(3):741–8
Primary tumors of the foot: MR imaging. Keigley BA, et al. **Radiology** 1989 Jun;171(3):755–9
Nonpalpable testes in young boys: evaluation with MR imaging. Kier R, et al. **Radiology** 1988 Nov;169(2):429–33
MR characterization of adrenal masses: field strength and pulse sequence considerations. Kier R, et al. **Radiology** 1989 Jun;171(3):671–4
High-resolution MR imaging with local coils. Kneeland JB, et al. **Radiology** 1989 Apr;171(1):1–7 (41 ref.)
Adrenal masses: evaluation with fast gradient-echo MR imaging and Gd-DTPA-enhanced dynamic studies. Krestin GP, et al. **Radiology** 1989 Jun;171(3):675–80
Wallerian degeneration after cerebral infarction: evaluation with sequential MR imaging. Kuhn MJ, et al. **Radiology** 1989 Jul;172(1):179–82
Relationship between MR relaxation time and muscle fiber composition. Kuno S, et al. **Radiology** 1988 Nov; 169(2):567–8
Avascular necrosis of the femoral head: high-field-strength MR imaging with histologic correlation. Lang P, et al. **Radiology** 1988 Nov;169(2):517–24
Posterior fossa hemangioblastomas: MR imaging. Lee SR, et al. **Radiology** 1989 May;171(2):463–8
Structure, function, and degeneration of bovine hyaline cartilage: assessment with MR imaging in vitro. Lehner KB, et al. **Radiology** 1989 Feb;170(2):495–9
MR imaging of transient osteoporosis [letter] Leonidas JC. **Radiology** 1989 Jan;170(1 Pt 1):281
Retrospective geometric correlation of MR, CT, and PET images. Levin DN, et al. **Radiology** 1988 Dec;169(3):817–23
Fixed spinal cord: diagnosis with MR imaging. Levy LM, et al. **Radiology** 1988 Dec;169(3):773–8
Distinction of hepatic cavernous hemangioma from hepatic metastases with MR imaging. Li KC, et al. **Radiology** 1988 Nov;169(2):409–15
Intratemporal vascular tumors: detection with CT and MR imaging. Lo WW, et al. **Radiology** 1989 May;171(2):445–8
Bone abnormalities of the knee: prevalence and significance at MR imaging. Lynch TC, et al. **Radiology** 1989 Jun; 171(3):761–6
Uterine junctional zone: MR study of water content and relaxation properties. McCarthy S, et al. **Radiology** 1989 Apr;171(1):241–3
MR imaging of the uterus. McCarthy S. **Radiology** 1989 May; 171(2):321–2
Liver volume measurements and three-dimensional display from MR images. McNeal GR, et al. **Radiology** 1988 Dec; 169(3):851–4
Human abdominal aorta: comparative measurements of blood flow with MR imaging and multigated Doppler US. Maier SE, et al. **Radiology** 1989 May;171(2):487–92
About articles of judgment. Margulis AR. **Radiology** 1988 Nov;169(2):576–7
Cerebrospinal fluid shunts: flow measurements with MR imaging. Martin AJ, et al. **Radiology** 1989 Oct;173(1):243–7
Cholesterol granulomas of the middle ear cavities: MR imaging. Martin N, et al. **Radiology** 1989 Aug;172(2):521–5
Adenomatous hyperplastic nodules in the cirrhotic liver: differentiation from hepatocellular carcinoma with MR imaging. Matsui O, et al. **Radiology** 1989 Oct;173(1):123–6
Intrahepatic periportal abnormal intensity on MR images: an indication of various hepatobiliary diseases. Matsui O, et al. **Radiology** 1989 May;171(2):335–8
Tantalum vascular stents: in vivo evaluation with MR imaging. Matsumoto AH, et al. **Radiology** 1989 Mar;170(3 Pt 1):753–5
Carpal tunnel: MR imaging. Part I. Normal anatomy. Mesgarzadeh M, et al. **Radiology** 1989 Jun;171(3):743–8
Carpal tunnel: MR imaging. Part II. Carpal tunnel syndrome. Mesgarzadeh M, et al. **Radiology** 1989 Jun;171(3):749–54
Siderotic nodules in the spleen: MR imaging of portal hypertension. Minami M, et al. **Radiology** 1989 Sep; 172(3):681–4
Cystic neoplasms of the pancreas: comparison of MR imaging with CT. Minami M, et al. **Radiology** 1989 Apr;171(1):53–6
Occult cartilage and bone injuries of the knee: detection, classification, and assessment with MR imaging. Mink JH, et al. **Radiology** 1989 Mar;170(3 Pt 1):823–9
Focal signal-intensity variations in the posterior internal capsule: normal MR findings and distinction from pathologic findings. Mirowitz S, et al. **Radiology** 1989 Aug; 172(2):535–9
Tetralogy of Fallot: MR findings. Mirowitz SA, et al. **Radiology** 1989 Apr;171(1):207–12
Using MR imaging to probe the pathophysiology of osteonecrosis. Mitchell DG. **Radiology** 1989 Apr; 171(1):25–6
Avascular necrosis of the vertebral body: MR imaging. Naul LG, et al. **Radiology** 1989 Jul;172(1):219–22
Bone and soft-tissue lesions: diagnosis with combined H-1 MR imaging and P-31 MR spectroscopy. Negendank WG, et al. **Radiology** 1989 Oct;173(1):181–8
Hepatic tumors: comparison of CT during arterial portography, delayed CT, and MR imaging for preoperative evaluation. Nelson RC, et al. **Radiology** 1989 Jul;172(1):27–34
Cerebral tuberous sclerosis: MR imaging. Nixon JR, et al. **Radiology** 1989 Mar;170(3 Pt 1):869–73
Herniation pits of the femoral neck: appearance at MR imaging. Nokes SR, et al. **Radiology** 1989 Jul;172(1):231–4
MR imaging of the ankle: normal variants. Noto AM, et al. **Radiology** 1989 Jan;170(1 Pt 1):121–4
Residual mediastinal masses in Hodgkin disease: prediction of size with MR imaging. Nyman RS, et al. **Radiology** 1989 Feb;170(2):435–40
Cranial bone marrow in children: assessment of normal development with MR imaging. Okada Y, et al. **Radiology** 1989 Apr;171(1):161–4
White matter disease in AIDS: findings at MR imaging. Olsen WL, et al. **Radiology** 1988 Nov;169(2):445–8
Whole-body MR imaging and spectroscopy at 4 T: where do we go from here? [editorial] Ortendahl DA. **Radiology** 1988 Dec;169(3):864–5
Hip pain in three children accompanied by transient abnormal findings on MR images. Pay NT, et al. **Radiology** 1989 Apr;171(1):147–9
Bone marrow imaging [letter; comment] Pennes DR, et al. **Radiology** 1989 Mar;170(3 Pt 1):894–5. **Comment on:** Radiology 1988 Sep;168(3):679–93
Spinal infection: evaluation with MR imaging and intraoperative US. Post MJ, et al. **Radiology** 1988 Dec; 169(3):765–71
Central nervous system lesions in pediatric patients: Gd-DTPA-enhanced MR imaging. Powers TA, et al. **Radiology** 1988 Dec;169(3):723–6
Anxiety in patients undergoing MR imaging. Quirk ME, et al. **Radiology** 1989 Feb;170(2):463–6
Osteosarcoma: use of MR imaging and MR spectroscopy in clinical decision making. Redmond OM, et al. **Radiology** 1989 Sep;172(3):811–5
Liver metastases: detection with MR imaging at 0.5 and 1.5 T. Reinig JW, et al. **Radiology** 1989 Jan;170(1 Pt 1):149–53
Hyperfunctioning and nonhyperfunctioning benign adrenal cortical lesions: characterization and comparison with MR imaging. Remer EM, et al. **Radiology** 1989 Jun;171(3):681–5
Extracranial lesions of the head and neck: preliminary experience with Gd-DTPA-enhanced MR imaging. Robinson JD, et al. **Radiology** 1989 Jul;172(1):165–70
Hematologic bone marrow disorders: quantitative chemical shift MR imaging. Rosen BR, et al. **Radiology** 1988 Dec; 169(3):799–804
Central scars in primary liver tumors: MR features, specificity, and pathologic correlation. Rummeny E, et al. **Radiology** 1989 May;171(2):323–6
Detection of significant extracranial carotid stenosis with routine cerebral MR imaging [editorial] Russell EJ. **Radiology** 1989 Mar;170(3 Pt 1):623–4
Occlusive and reperfused myocardial infarcts: differentiation with Mn-DPDP—enhanced MR imaging. Saeed M, et al. **Radiology** 1989 Jul;172(1):59–64
Gamna-Gandy bodies of the spleen: evaluation with MR imaging. Sagoh T, et al. **Radiology** 1989 Sep;172(3):685–7
Forty-millisecond MR imaging of the abdomen at 2.0 T. Saini S, et al. **Radiology** 1989 Oct;173(1):111–6
Ferrite particles as an MR contrast agent. Saini S, et al. **Radiology** 1988 Dec;169(3):656
Prostatic carcinoma and benign prostatic hyperplasia: correlation of high-resolution MR and histopathologic findings. Schiebler ML, et al. **Radiology** 1989 Jul; 172(1):131–7
Acute myocardial ischemia and reperfusion: MR imaging with albumin-Gd-DTPA. Schmiedl U, et al. **Radiology** 1989 Feb;170(2):351–6
Intracranial hemorrhagic lesions: evaluation with spin-echo and gradient-refocused MR imaging at 0.5 and 1.5 T. Seidenwurm D, et al. **Radiology** 1989 Jul;172(1):189–94
Detection and quantification of chronic cerebrovascular disease: comparison of MR imaging, SPECT, and CT.

Seiderer M, et al. **Radiology** 1989 Feb;170(2):545–8
Normal and abnormal thymus in childhood: MR imaging. Siegel MJ, et al. **Radiology** 1989 Aug;172(2):367–71
Lymphangiomas in children: MR imaging. Siegel MJ, et al. **Radiology** 1989 Feb;170(2):467–70
Idiopathic intracranial hypertension (pseudotumor cerebri): MR imaging. Silbergleit R, et al. **Radiology** 1989 Jan;170(1 Pt 1):207–9
Bone marrow disorders: characterization with quantitative MR imaging. Smith SR, et al. **Radiology** 1989 Sep; 172(3):805–10
Chronically obstructed sinonasal secretions: observations on T1 and T2 shortening. Som PM, et al. **Radiology** 1989 Aug; 172(2):515–20
Benign and malignant sinonasal lesions with intracranial extension: differentiation with MR imaging. Som PM, et al. **Radiology** 1989 Sep;172(3):763–6
Current imaging approach to the temporal bone. Swartz JD. **Radiology** 1989 May;171(2):309–17
Spinal lesions: quantitative and qualitative temporal evolution of gadopentetate dimeglumine enhancement in MR imaging. Sze G, et al. **Radiology** 1989 Mar;170(3 Pt 1):849–56
Chronic cervical cord compression: clinical significance of increased signal intensity on MR images. Takahashi M, et al. **Radiology** 1989 Oct;173(1):219–24
Trigeminal neuralgia: MR imaging features. Tash RR, et al. **Radiology** 1989 Sep;172(3):767–70
Cerebral Erdheim–Chester disease: persistent enhancement with Gd–DTPA on MR images. Tien RD, et al. **Radiology** 1989 Sep;172(3):791–2
Liposomal Gd–DTPA: preparation and characterization of relaxivity. Tilcock C, et al. **Radiology** 1989 Apr; 171(1):77–80
Enlarged uterus: differentiation between adenomyosis and leiomyoma with MR imaging. Togashi K, et al. **Radiology** 1989 May;171(2):531–4
Carcinoma of the cervix: staging with MR imaging. Togashi K, et al. **Radiology** 1989 Apr;171(1):245–51
Femoral capital osteonecrosis: MR finding of diffuse marrow abnormalities without focal lesions. Turner DA, et al. **Radiology** 1989 Apr;171(1):135–40
Hepatic metastases: liposomal Gd–DTPA–enhanced MR imaging. Unger EC, et al. **Radiology** 1989 Apr;171(1):81–5
Automated registration of multimodality images [editorial] Vannier MW, et al. **Radiology** 1988 Dec;169(3):860–1
MR imaging of treated mediastinal Hodgkin disease [editorial] Webb WR. **Radiology** 1989 Feb;170(2):315–6
Prevalence of lumbosacral intervertebral disk abnormalities on MR images in pregnant and asymptomatic nonpregnant women. Weinreb JC, et al. **Radiology** 1989 Jan;170(1 Pt 1):125–8
Superparamagnetic iron oxide: enhanced detection of focal splenic tumors with MR imaging. Weissleder R, et al. **Radiology** 1988 Nov;169(2):399–403
Experimental lymph node metastases: enhanced detection with MR lymphography. Weissleder R, et al. **Radiology** 1989 Jun;171(3):835–9
True water and fat MR imaging with use of multiple-echo acquisition. Williams SC, et al. **Radiology** 1989 Oct; 173(1):249–53
Current status of MR imaging contrast agents: special report. Wolf GL. **Radiology** 1989 Sep;172(3):709–10 (2 ref.)
Avulsion of the posteromedial tibial plateau by the semimembranosus tendon: diagnosis with MR imaging. Yao L, et al. **Radiology** 1989 Aug;172(2):513–4
Pituitary adenomas: possible role of bromocriptine in intratumoral hemorrhage. Yousem DM, et al. **Radiology** 1989 Jan;170(1 Pt 1):239–43
Criteria for classifying normal and degenerated lumbar intervertebral disks. Yu S, et al. **Radiology** 1989 Feb; 170(2):523–6
Vertebral compression fractures: distinction between benign and malignant causes with MR imaging. Yuh WT, et al. **Radiology** 1989 Jul;172(1):215–8
Pancreatic transplants: evaluation with MR imaging. Yuh WT, et al. **Radiology** 1989 Jan;170(1 Pt 1):171–7
Endometriosis: appearance and detection at MR imaging. Zawin M, et al. **Radiology** 1989 Jun;171(3):693–6
Fungal sinusitis: diagnosis with CT and MR imaging. Zinreich SJ, et al. **Radiology** 1988 Nov;169(2):439–44
Rotator cuff tears: diagnostic performance of MR imaging. Zlatkin MB, et al. **Radiology** 1989 Jul;172(1):223–9
Magnetic resonance imaging (MRI) studies of brain atrophy in hypothyroidism. Tomei E, et al. **Rays** 1988 Jan–Apr; 13(1):43–7
Scoliosis in myelomeningocele. Significance of syringohydromyelia and Chiari malformations studied with magnetic resonance imaging. Samuelsson L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:310–1
MRI in the prenatal diagnosis of bilateral renal agenesis. De Cleyn K, et al. **ROFO** 1989 Jan;150(1):104–5
Surface coil magnetic resonance imaging of the orbit at 1.5T. Wilms G, et al. **ROFO** 1988 Nov;149(5):496–501
Comparative morphological study of the pituitary gland by computed tomography and magnetic resonance imaging. Loxton AJ. **S Afr Med J** 1988 Oct 15;74(8):406–7
Auditory evoked potentials test battery related to magnetic resonance imaging for multiple sclerosis patients. Antonelli AR, et al. **Scand Audiol Suppl** 1988;30:191–6
Magnetic resonance imaging (MRI) and high resolution computertomography (HRCT) in cochlear implant candidates. Laszig R, et al. **Scand Audiol Suppl** 1988; 30:197–200
Central vestibulocochlear pathology: role of MRI and CT. Mafee MF. **Scand Audiol Suppl** 1988;30:153–9
Computed tomography and magnetic resonance imaging of the liver. Bernardino ME, et al. **Semin Liver Dis** 1989 Feb; 9(1):32–49 (87 ref.)
Nuclear magnetic resonance imaging of the nervous system. **Semin Neurol** 1986 Mar;6(1):1–110
Magnetic resonance imaging of the posterior fossa and brainstem. Bradley WG Jr. **Semin Neurol** 1986 Mar; 6(1):8–16 (32 ref.)
Magnetic resonance imaging of the brain in childhood. Bydder GM, et al. **Semin Neurol** 1986 Mar;6(1):72–8 (14 ref.)
Magnetic resonance imaging in adult white matter disorders and hydrocephalus. Gerard G, et al. **Semin Neurol** 1986 Mar;6(1):17–23 (61 ref.)
MR + ESME = MESMER. Goldblatt D. **Semin Neurol** 1986 Mar;6(1):100–6
Impact of nuclear magnetic resonance imaging on the assessment of multiple sclerosis patients. Jacobs L, et al. **Semin Neurol** 1986 Mar;6(1):24–32
Nuclear magnetic resonance imaging in patients with stroke. Kinkel PR, et al. **Semin Neurol** 1986 Mar;6(1):43–52
Magnetic resonance imaging of the central nervous system: interpretation and normal anatomy. Lufkin RB. **Semin Neurol** 1986 Mar;6(1):1–7 (28 ref.)
Magnetic resonance imaging of brain tumors. Maravilla KR, et al. **Semin Neurol** 1986 Mar;6(1):33–42 (20 ref.)
Brain edema studied by magnetic resonance. Naruse S, et al. **Semin Neurol** 1986 Mar;6(1):53–64 (30 ref.)
Magnetic resonance imaging of the spine. Rossi DR, et al. **Semin Neurol** 1986 Mar;6(1):84–93 (23 ref.)
Magnetic resonance in neuromuscular disorders. Shabas D, et al. **Semin Neurol** 1986 Mar;6(1):94–9 (41 ref.)
Magnetic resonance imaging for evaluation of tumors involving the optic pathways and orbit. Svitra PP, et al. **Semin Neurol** 1986 Mar;6(1):79–83
Magnetic resonance imaging of blood flow. Waluch V. **Semin Neurol** 1986 Mar;6(1):65–71
MRI of the adrenal glands. Egglin TK, et al. **Semin Roentgenol** 1988 Oct;23(4):280–7 (24 ref.)
Cross-sectional imaging in the evaluation of osteogenic sarcoma: MRI and CT. Seeger LL, et al. **Semin Roentgenol** 1989 Jul;24(3):174–84
Imaging of atypical lipomas of the extremities: report of three cases. Bush CH, et al. **Skeletal Radiol** 1988;17(7):472–5
Magnetic resonance imaging of para-articular and ectopic ganglia. Feldman F, et al. **Skeletal Radiol** 1989;18(5):353–8
The role of magnetic resonance imaging in the evaluation of Ewing sarcoma. A report of 27 cases. Frouge C, et al. **Skeletal Radiol** 1988;17(6):387–92
Hyperextension injuries of the cervical spine. Magnetic resonance findings. Goldberg AL, et al. **Skeletal Radiol** 1989;18(4):283–8
Thoracic disc herniation versus spinal metastases: optimizing diagnosis with magnetic resonance imaging. Goldberg AL, et al. **Skeletal Radiol** 1988;17(6):423–6
Gadolinium–DTPA enhancement of soft tissue tumors in magnetic resonance imaging—preliminary clinical experience in five patients. Pettersson H, et al. **Skeletal Radiol** 1988;17(5):319–23
Fibrous metaphyseal defects. Magnetic resonance imaging appearances. Ritschl P, et al. **Skeletal Radiol** 1989; 18(4):253–9
Computed tomography or magnetic resonance for evaluating the solitary tumor or tumor-like lesion of bone? Sundaram M, et al. **Skeletal Radiol** 1988;17(6):393–401
Differential diagnosis of severe back pain using MRI. Abram SR, et al. **South Med J** 1988 Dec;81(12):1487–92
Trigeminal neurilemoma: appearance on magnetic resonance imaging. Embry BM, et al. **South Med J** 1989 May; 82(5):653–6
Creutzfeldt–Jakob disease: high caudate signal on magnetic resonance imaging. Pearl GS, et al. **South Med J** 1989 Sep; 82(9):1177–80
Failure to diagnose conus ependymomas by magnetic resonance imaging. Epstein NE, et al. **Spine** 1989 Jan; 14(1):134–7
"Dynamic" MRI scanning of the cervical spine. Epstein NE, et al. **Spine** 1988 Aug;13(8):937–8
Magnetic resonance imaging and contrast CT of the lumbar spine. Comparison of diagnostic methods and correlation with surgical findings. Forristall RM, et al. **Spine** 1988 Sep; 13(9):1049–54
MRI diagnosis of traumatic Schmorl's node. A case report. Kornberg M. **Spine** 1988 Aug;13(8):934–5
The effect of magnetic resonance imaging on metal spine implants. Lyons CJ, et al. **Spine** 1989 Jul;14(7):670–2
Magnetic resonance study of disc degeneration in young low-back pain patients. Paajanen H, et al. **Spine** 1989 Sep; 14(9):982–5
Comparison of MRI to contrast CT in the diagnosis of spinal stenosis. Schnebel B, et al. **Spine** 1989 Mar;14(3):332–7
A comparison between magnetic resonance imaging and scintigraphic bone imaging in the diagnosis of disc space infection in an animal model. Szypryt EP, et al. **Spine** 1988 Sep;13(9):1042–8
The prevalence of disc degeneration associated with neural arch defects of the lumbar spine assessed by magnetic resonance imaging. Szypryt EP, et al. **Spine** 1989 Sep; 14(9):977–81
The geometry of the muscles of the lumbar spine determined by magnetic resonance imaging. Tracy MF, et al. **Spine** 1989 Feb;14(2):186–93
Magnetic resonance imaging of spinal injury. Tracy PT, et al. **Spine** 1989 Mar;14(3):292–301
Evaluation of cervical disc degeneration with ultralow field MRI and discography. An experimental study on cadavers. Viikari-Juntura E, et al. **Spine** 1989 Jun;14(6):616–9
Normal magnetic resonance imaging with abnormal discography. Zucherman J, et al. **Spine** 1988 Dec; 13(12):1355–9
Computerized axial tomographic and magnetic resonance imaging scan follow-up of two patients after boron neutron capture therapy for glioblastoma multiforme. Marano SR, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):240–2
Imaging with 11B of intact tissues using magnetic resonance gradient echoes. Richards TL, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):179–81
Middle cerebral artery occlusion in rats studied by magnetic resonance imaging. Bradley RH, et al. **Stroke** 1989 Aug; 20(8):1032–6
Periventricular lesions on MRI. Facts and theories. Chimowitz MI, et al. **Stroke** 1989 Jul;20(7):963–7
Repeated cranial computed tomographic and magnetic resonance imaging scans in two cases of eclampsia. Fredriksson K, et al. **Stroke** 1989 Apr;20(4):547–53
Nicardipine reduces ischemic brain injury. Magnetic resonance imaging/spectroscopy study in cats. Kucharczyk J, et al. **Stroke** 1989 Feb;20(2):268–74
Magnetic resonance and clinical cerebrovascular disease. An update. Ramadan NM, et al. **Stroke** 1989 Sep;20(9):1279–83 (40 ref.)
Gadolinium-enhanced magnetic resonance imaging in multiple infarction [letter; comment] Yu YL. **Stroke** 1989 Feb;20(2):299. **Comment on:** Stroke 1988 Jul;19(7):834–9
Gadolinium–DTPA enhancement of a recurrent intramedullary ependymoma: a case report. Baldwin H, et al. **Surg Neurol** 1989 Mar;31(3):220–3
Magnetic resonance imaging of silastic-induced canine hydrocephalus. Drake JM, et al. **Surg Neurol** 1989 Jan; 31(1):28–40
Magnetic resonance imaging of brain contusion. Ebisu T, et al. **Surg Neurol** 1989 Apr;31(4):261–7
Magnetic resonance imaging of embolism from intracranial aneurysms. Kobayashi H, et al. **Surg Neurol** 1989 Sep; 32(3):225–30
Intracranial glossopharyngeal neurinomas. Report of two cases with special emphasis on computed tomography and magnetic resonance imaging findings. Suzuki F, et al. **Surg Neurol** 1989 May;31(5):390–4
MRI of the mandible. Christianson R, et al. **Surg Radiol Anat** 1989;11(2):163–9
Magnetic resonance imaging of the brain stem. Anatomico-radiological correlations. de Chambenoit G, et al. **Surg Radiol Anat** 1989;11(2):155–61
MRI anatomy of the nerves of the upper limb. Frocrain L, et al. **Surg Radiol Anat** 1989;11(2):141–7
Magnetic resonance imaging and spectroscopy of intraocular tumors. Kolodny NH, et al. **Surv Ophthalmol** 1989 May–Jun;33(6):502–14 (54 ref.)
Magnetic resonance imaging (MRI): a new tool in experimental toxicologic pathology. Dixon D, et al. **Toxicol Pathol** 1988;16(3):386–91
Imaging of head and neck tumors. DiNardo LJ, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1988;40:766–9
Magnetic resonance imaging to detect heart transplant rejection: sensitivity and specificity. Kurland RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2537–43
Pretransplant assessment of renal viability by phosphorus-31 magnetic resonance spectroscopy. Clinical experience in 40 recipient patients. Bretan PN JR, et al. **Transplantation** 1989 Jul;48(1):48–53
The role of magnetic resonance imaging in the evaluation of neoplastic lesions of the breast. Petrillo R, et al. **Tumori** 1989 Feb 28;75(1):14–7
Velocity profiles in the normal human abdominal aorta: a comparison between ultrasound and magnetic resonance data. Vieli A, et al. **Ultrasound Med Biol** 1989;15(2):113–9
Implantable drug delivery systems in computed tomography and magnetic resonance imaging—a comparison between titanium and stainless steel. Krog M, et al. **Ups J Med Sci** 1989;94(2):153–60
Adrenal imaging. Computed tomographic scanning and magnetic resonance imaging. Bretan PN Jr, et al. **Urol Clin North Am** 1989 Aug;16(3):505–13 (28 ref.)
Segmental infarction of the renal allograft: ultrasound/MRI observations. Becker JA, et al. **Urol Radiol** 1989; 11(2):109–12
MRI of multilocular cystic nephroma. Dikengil A, et al. **Urol Radiol** 1988;10(2):95–9
Xanthogranulomatous pyelonephritis: comparison of extent using computed tomography and magnetic resonance imaging in one case. Feldberg MA, et al. **Urol Radiol** 1988; 10(2):92–4
CT and MR imaging of malignant germ cell tumor of the undescended testis. Lorigan JG, et al. **Urol Radiol** 1989; 11(2):113–7
MR and CT imaging of perirenal amyloidosis. Sueoka BL, et al. **Urol Radiol** 1989;11(2):97–9
Magnetic resonance imaging of hepatic neoplasms in the rat. Johnson GA, et al. **Vet Pathol** 1989 Jul;26(4):303–8

Nuclear magnetic resonance computerised tomography (NMR–CT) in early diagnosis of dumbbell neuroblastoma. Ogita S, et al. **Z Kinderchir** 1989 Apr;44(2):122–3

Identification by MRI. Amberg R, et al. **Z Rechtsmed** 1989; 102(2–3):185–9

Calcified chronic subdural hematoma. Case report. Kobayashi H, et al. **Zentralbl Neurochir** 1988;49(2):119–23

[Clinical application of magnetic resonance imaging in gynecology] Zou SS. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):19–21, 58 (Eng. Abstr.) (Chi)

[Magnetic resonance in cardiology—status and perspectives] Møgelvang J, et al. **Nord Med** 1988;103(11):323–6, 328 (Eng. Abstr.) (Dan)

[MRI—where do we stand] Henriksen O. **Ugeskr Laeger** 1989 Mar 6;151(10):609 (Dan)

[Overview of nuclear magnetic resonance terminology] Van de Vyver FL, et al. **J Belge Radiol** 1988;71(2):273–93 (Dut)

[Diagnosis of laryngeal carcinoma using proton spin resonance tomography] Castelijns JA, et al. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1268–73 (Eng. Abstr.) (Dut)

[Proton spin tomography in the treatment of congenital hip dislocation] Bos CF, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):228–30 (Eng. Abstr.) (Dut)

[Carcinoid cardiopathy: value of ultrasonography and MRI. Apropos of a case related to bronchial tumor. Review of the literature] Ebagosti A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):91–5 (27 ref.) (Eng. Abstr.) (Fre)

[Comparison of the left ventricular stroke volume and fraction measured with MRI and contrast ventriculography] Germain P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):319–25 (27 ref.) (Eng. Abstr.) (Fre)

[Magnetic resonance imaging in the diagnosis of agenesis of the pericardium] Kastler B, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):151–3 (Eng. Abstr.) (Fre)

[Pre- and postoperative study of neonatal transposition of the great vessels by magnetic resonance imaging] Livolsi A, et al. **Ann Cardiol Angeiol (Paris)** 1989 May;38(5):261–4 (Eng. Abstr.) (Fre)

[Value of nuclear magnetic resonance in the detection of false aneurysm of the abdominal aorta] Marzelle J, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):111–3 (Eng. Abstr.) (Fre)

[Surveillance elements of pneumonectomy spaces. Comparison of MRI and x-ray CT] Laissy JP, et al. **Ann Chir** 1988;42(8):602–5 (Eng. Abstr.) (Fre)

[Haemophilus aphrophilus epidural abscess studied by nuclear magnetic resonance (letter)] Gaudin P, et al. **Ann Med Interne (Paris)** 1989;140(1):68–9 (13 ref.) (Fre)

[Value of MRI in the pre-therapeutic evaluation of laryngeal neoplasms. Comparison with CT X-ray. Apropos of 21 cases] Boisserie-Lacroix M, et al. **Ann Radiol (Paris)** 1988; 31(7–8):403–9 (Eng. Abstr.) (Fre)

[Value and limitations of MRI in hemangioblastoma. Apropos of 2 cases] de Kersaint-Gilly A, et al. **Ann Radiol (Paris)** 1988;31(5):265–9 (Eng. Abstr.) (Fre)

[Diagnostic role of MRI in localized cancer of the prostate] Gevenois PA, et al. **Ann Radiol (Paris)** 1989;32(3):163–7 (19 ref.) (Eng. Abstr.) (Fre)

[MRI and post-partum thrombosis of the utero-ovarian vein. Apropos of a case] Martin B, et al. **Ann Radiol (Paris)** 1988; 31(4):251–4 (Eng. Abstr.) (Fre)

[Role of imaging in the study of painful Paget's bone (excluding axial sites)] Martin B, et al. **Ann Radiol (Paris)** 1988;31(5):315–21 (31 ref.) (Eng. Abstr.) (Fre)

[MRI features of expansive processes of soft tissues. Contribution to etiologic diagnosis. Apropos of 32 cases] Rose-Pittet L, et al. **Ann Radiol (Paris)** 1989;32(3):169–77 (Eng. Abstr.) (Fre)

[Aseptic osteonecrosis of the femoral head. Contribution of magnetic resonance imaging] Sarrat P, et al. **Ann Radiol (Paris)** 1988;31(3):133–9 (Eng. Abstr.) (Fre)

[Xanthogranulomatous pyelonephritis. Value of magnetic resonance imaging] Joërg A, et al. **Ann Urol (Paris)** 1989; 23(3):232–5 (Eng. Abstr.) (Fre)

[Respective indications for echography, scanning and MRI in diseases of the intra-cranial optic pathways] Cabanis EA, et al. **Annee Ther Clin Ophtalmol** 1987;38:299–318 (Fre)

[Respective indications for echography, scanning and MRI in diseases of the eye and orbit] Catros A, et al. **Annee Ther Clin Ophtalmol** 1987;38:283–98 (Fre)

[Neonatal spinal cord injuries and magnetic resonance imaging] Bloom MC, et al. **Arch Fr Pediatr** 1988 Dec; 45(10):823–5 (Eng. Abstr.) (Fre)

[Contribution of magnetic resonance imaging in the neonatal diagnosis of congenital cardiopathies. Apropos of 10 cases] Livolsi A, et al. **Arch Fr Pediatr** 1989 Feb;46(2):89–94 (Eng. Abstr.) (Fre)

[Contribution of nuclear magnetic resonance in right atrial angiosarcoma. Apropos of a case] Aouate P, et al. **Arch Mal Coeur** 1988 Dec;81(12):1543–6 (Eng. Abstr.) (Fre)

[Contribution of MRI to the diagnosis of double aortic arch] Bernard C, et al. **Arch Mal Coeur** 1988 Oct;81(10):1277–80 (Eng. Abstr.) (Fre)

[Magnetic resonance imagery in cardiac pathology] Mc Namara M, et al. **Bull Acad Natl Med (Paris)** 1988 Jun; 172(6):829–39 (Eng. Abstr.) (Fre)

[Contribution and limits of x-ray computed tomography and magnetic resonance imaging in evaluating the extent of primary cancers of the bronchi] Laurent F, et al. **Bull Cancer (Paris)** 1988;75(9):903–16 (Eng. Abstr.) (Fre)

[Respective contributions of x-ray computed tomography and MRI in the diagnosis of meningioma of the optic nerve] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1321–2 (Fre)

[Magnetic resonance imaging: early detection of involvement of the central nervous system in acquired immunodeficiency syndrome] Trotot PM, et al. **C R Acad Sci [III]** 1988;307(1):1–4 (Eng. Abstr.) (Fre)

[Value of magnetic resonance imaging in the follow-up of children operated for portal hypertension] Baunin C, et al. **Chir Pediatr** 1988;29(4):161–4 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging of high anorectal malformations. A preliminary study apropos of 15 cases] Panuel M, et al. **Chir Pediatr** 1988;29(5):243–6 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging in senology] Dagnelie J, et al. **J Belge Radiol** 1988;71(2):161–5 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging of normal and pathological bone marrow. Axial skeleton and pelvis] Dooms G, et al. **J Belge Radiol** 1988;71(2):203–9 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging in gynecology and obstetrics] Dooms G, et al. **J Belge Radiol** 1988;71(2):189–94 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging (MRI) of the spleen and bone marrow in hematology] Kurdziel JC, et al. **J Belge Radiol** 1988;71(2):211–29 (Eng. Abstr.) (Fre)

[Abridged lexicon of terms in nuclear magnetic resonance] Muller RN. **J Belge Radiol** 1988;71(2):259–71 (Fre)

[Magnetic resonance imaging in the study of renal transplants: value and limits] Van Gansbeke D, et al. **J Belge Radiol** 1988;71(2):177–81 (Eng. Abstr.) (Fre)

[MRI in the diagnosis of lissencephaly. Apropos of a case] Bernard C, et al. **J Radiol** 1988 Nov;69(11):691–5 (Eng. Abstr.) (Fre)

[Contribution of MRI in the staging of cancer of the bladder. Apropos of 40 cases] Buy JN, et al. **J Radiol** 1989 Feb; 70(2):85–94 (20 ref.) (Eng. Abstr.) (Fre)

[MRI in the diagnosis of recurrent cholesteatoma of the petrous bone] Doyon D, et al. **J Radiol** 1989 Mar; 70(3):151–7 (Eng. Abstr.) (Fre)

[Role of MRI in the study of the Achilles tendon and patellar tendon] Frocrain L, et al. **J Radiol** 1988 Dec;69(12):731–4 (Eng. Abstr.) (Fre)

[Neoplastic invasion of the pulmonary arteries. Evaluation by MRI. Preliminary experience] Gevenois PA, et al. **J Radiol** 1989 Mar;70(3):175–81 (Eng. Abstr.) (Fre)

[Diagnosis of double aortic arch in the neonatal period. Contribution of magnetic resonance imaging. Apropos of a case] Kastler B, et al. **J Radiol** 1988 Oct;69(10):625–8 (Eng. Abstr.) (Fre)

[The MRI sites functioning in 1987 in France. Results of a survey] Le Bas JF, et al. **J Radiol** 1988 Oct;69(10):561–6 (Eng. Abstr.) (Fre)

[MRI of aortic arch anomalies in children. Initial results] Mamou Mani T, et al. **J Radiol** 1988 Dec;69(12):751–7 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging of bone infarction. Apropos of 2 cases] Péré P, et al. **J Radiol** 1988 Oct;69(10):597–601 (24 ref.) (Eng. Abstr.) (Fre)

[Specific and non-specific contrast media for MRI of tumors. Experimental study of human breast carcinoma] Revel D, et al. **J Radiol** 1989 Feb;70(2):115–21 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging in paralysis of the upper limb of traumatic origin] Roger B, et al. **J Radiol** 1989 Mar; 70(3):197–208 (Eng. Abstr.) (Fre)

[Aseptic osteonecrosis of the femur head and pregnancy. Apropos of 2 cases with MRI study] Rose-Pittet L, et al. **J Radiol** 1988 Oct;69(10):611–5 (15 ref.) (Eng. Abstr.) (Fre)

[Algodystrophy of the femoral head. Contribution of new imaging methods] Sarrat P, et al. **J Radiol** 1988 Aug-Sep; 69(8–9):495–500 (Eng. Abstr.) (Fre)

[The value of magnetic resonance imaging in the surveillance of fibromatosis. A study of 10 cases] Vanel D, et al. **J Radiol** 1989 Jan;70(1):33–6 (Eng. Abstr.) (Fre)

[Contribution of gadolinium DOTA in primary tumors of bone and soft tissue] Vanel D, et al. **J Radiol** 1988 Dec; 69(12):735–9 (Eng. Abstr.) (Fre)

[Spontaneous dissection of the cervical internal carotid artery. Diagnosis by MRI] Wilms G, et al. **J Radiol** 1989 Mar;70(3):225–7 (Eng. Abstr.) (Fre)

[Computed tomography and magnetic resonance imaging in anomalies of neuronal migration] Wilms G, et al. **J Radiol** 1989 Jan;70(1):1–6 (Eng. Abstr.) (Fre)

[MRI and surgery of epilepsy] Rougier A, et al. **Neurochirurgie** 1988;34(3):188–93 (Eng. Abstr.) (Fre)

[Magnetic resonance imaging in Bourneville's disease: relation to the EEG] Curatolo P, et al. **Neurophysiol Clin** 1988 Sep;18(5):459–67 (Eng. Abstr.) (Fre)

[Hypothalamic dysfunction. 2 cases: the contribution of nuclear magnetic resonance, therapeutic trial of naltrexone] Loeuille GA, et al. **Pediatrie** 1989;44(3):203–12 (25 ref.) (Eng. Abstr.) (Fre)

[Idiopathic calcifications of the central gray nuclei (Fahr's disease). Detection by magnetic resonance imaging (letter)] d'Anglejan Chatillon J, et al. **Presse Med** 1988 Oct 8; 17(34):1760 (Fre)

[X-ray computed tomography and magnetic resonance imaging in the diagnosis of trapped popliteal arteries (letter)] Fermand M, et al. **Presse Med** 1989 May 13; 18(19):983 (Fre)

[Introduction to nuclear magnetic resonance imaging] Piette E. **Rev Belge Med Dent** 1987;42(6):196–200 (Fre)

[Validity and diagnostic value of magnetic resonance imaging in traumatic menisco-ligamentous pathology of the knee. Prospective study of 22 knees] Christel P, et al. **Rev Chir Orthop** 1988;74(5):402–12 (Eng. Abstr.) (Fre)

[Role of magnetic resonance imaging in studies of the spine] Frocrain L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:312–6 (Fre)

[Preoperative evaluation of the extent of femoral head necrosis. Comparison of computerized tomography and magnetic resonance imaging. Apropos of 10 case reports] Pittet LR, et al. **Rev Chir Orthop** 1988;74 Suppl 2:206–8 (Fre)

[Radiologic imaging in acoustic neurinoma] Darrouzet V, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):421–7 (16 ref.) (Eng. Abstr.) (Fre)

[Spontaneous dissecting aneurysm of the internal carotid artery. Magnetic resonance imaging] Hommel M, et al. **Rev Neurol (Paris)** 1988;144(8–9):512–4 (Eng. Abstr.) (Fre)

[Retrochiasmatic lesions in multiple sclerosis. Demonstration by visual evoked potentials. Correlation with magnetic resonance imaging] Rigolet MH, et al. **Rev Neurol (Paris)** 1989;145(5):378–83 (20 ref.) (Eng. Abstr.) (Fre)

[Medical imaging in the diagnosis and treatment of trochanteric bursitis] Wybier M, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):789–90 (Fre)

[Magnetic resonance imaging and the diagnosis of musculo-tendinous disorders] Sayegh C, et al. **Schweiz Z Sportmed** 1988 Dec;36(4):169–74 (Eng. Abstr.) (Fre)

[Remote artificial respiration and anesthesia in nuclear magnetic resonance imaging] Neumark J, et al. **Anaesthesist** 1989 Jun;38(6):273–7 (Eng. Abstr.) (Ger)

[Computerized tomography and nuclear magnetic tomography of the facial skull and neck] Mees K, et al. **Arch Otorhinolaryngol Suppl** 1989;1:1–40 (Ger)

[Computerized tomography and nuclear magnetic resonance tomography and digital subtraction angiography of the petrous bone and the surrounding area] Valavanis A. **Arch Otorhinolaryngol Suppl** 1989;1:41–70 (Ger)

[Abnormalities of the brain in childhood in nuclear magnetic tomography] Baierl P, et al. **Bildgebung** 1987–89; 56(1):35–40 (Eng. Abstr.) (Ger)

[An experimental model for the evaluation of pathologic changes in the spinal canal] Wehling P, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):136–40 (Eng. Abstr.) (Ger)

[The value of magnetic resonance tomography using gadolinium-DTPA in the diagnosis of the post-lumbar disk surgery syndrome] Beyer HK, et al. **Digitale Bilddiagn** 1989 Mar;9(1):22–30 (Eng. Abstr.) (Ger)

[Diseases of the lymphatic system of the head and neck region. A comparative study of MRI and CT] Schedel H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):158–67 (Eng. Abstr.) (Ger)

[Technics of secondary reconstruction of planar images from magnetic resonance tomographic 3D data sets] Skalej M, et al. **Digitale Bilddiagn** 1988 Dec;8(4):168–72 (Eng. Abstr.) (Ger)

[Poststenotic flow in MRT: phantom measurements using spin-echo and gradient-echo sequences] Spielmann RP, et al. **Digitale Bilddiagn** 1989 Jun;9(2):55–8 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography of the parotid gland: plain diagnosis and Gd-DTPA] Vogl T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):59–68 (Eng. Abstr.) (Ger)

[Magnetic resonance tomographic studies of stress fractures] Yousry T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):69–71 (Eng. Abstr.) (Ger)

[Rare causes of the Brown-Séquard syndrome. NMR tomographic findings] Berlit P. **Dtsch Med Wochenschr** 1988 Nov 25;113(47):1844–6 (Eng. Abstr.) (Ger)

[Para-aortic pseudoaneurysm following aortic valve replacement. Its diagnosis by magnetic resonance tomography] Deider S, et al. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):54–7 (Eng. Abstr.) (Ger)

[Magnetic resonance imaging in myasthenia gravis. An alternative to mediastinal computerized tomography?] Emskötter T, et al. **Dtsch Med Wochenschr** 1988 Sep 30; 113(39):1508–10 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography in the differential diagnosis of ovarian tumor and mucocele of the appendix] Jaluvka V, et al. **Dtsch Med Wochenschr** 1989 Aug 18; 114(33):1245–7 (Eng. Abstr.) (Ger)

[Diagnosis of kidney transplant rejection. The value of scintigraphy, sonography and NMR tomography] Kaiser WA, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1830–6 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography of the breast. The results of 253 examinations] Kaiser WA. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1351–7 (Eng.

Abstr.) (Ger)
[Diagnosis of intervertebral disk prolapse: myelography, computed tomography or MR tomography?] Russegger L, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1300–2 (Ger)
[Computerized tomography of the petrous bone. With magnetic resonance tomography] Köster O. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1988; 129:1–92 (Ger)
[Diagnosis of orbital space-occupying lesions—a comparison of magnetic resonance imaging and computerized tomography] Grannemann D, et al. **Fortschr Ophthalmol** 1988;85(3):327–9 (Eng. Abstr.) (Ger)
[Indications for magnetic resonance tomography of the orbit] Wiegand W. **Fortschr Ophthalmol** 1988;85(6):777–81 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of choroid melanoma] Wollensak J, et al. **Fortschr Ophthalmol** 1988;85(6):719–22 (Eng. Abstr.) (Ger)
[Modern radiologic imaging in the diagnosis of abdominal diseases. Magnetic resonance imaging and spectroscopy] Fuchs WA. **Helv Chir Acta** 1989 Apr;55(6):799–805 (19 ref.) (Eng. Abstr.) (Ger)
[Proton spin tomography in testicular tumors] Knönagel H, et al. **Helv Chir Acta** 1988 Jul;55(3):325–8 (Eng. Abstr.) (Ger)
[Magnetic resonance in pediatric research and clinical practice. I. What can we expect from this new method?] Martin E, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):53–74 (49 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance in pediatric research and clinical practice. II. Studies on the development and pathology of the brain in neonates, infants and young children] Martin E, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):75–86 (Eng. Abstr.) (Ger)
[Intratemporal course of the facial nerve in magnetic resonance imaging] Traxler M, et al. **HNO** 1989 Jan; 37(1):19–22 (Eng. Abstr.) (Ger)
[Results of nuclear magnetic resonance tomography studies in endocrine orbitopathy] Pedrosa P, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):169–73 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography in tumors of the salivary glands—a diagnostic advantage?] Mees K, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):355–61 (Eng. Abstr.) (Ger)
[Involvement of apparently normal white brain substance in the disease process of multiple sclerosis] Brainin M, et al. **Nervenarzt** 1989 Mar;60(3):159–62 (Eng. Abstr.) (Ger)
[The nuclear magnetic resonance tomography course of intra- and extraspinal lumbar abscess formation] Krupp W, et al. **Nervenarzt** 1989 May;60(5):302–4 (Ger)
[Diffuse cerebral gliomatosis. Clinical, nuclear magnetic resonance tomography and pathologic findings] Neuhold A, et al. **Nervenarzt** 1989 Jul;60(7):437–40 (Ger)
[What are the advantages of magnetic resonance tomography compared with computerized tomography in imaging spontaneous cerebral hemorrhage?] Schütz HJ, et al. **Nervenarzt** 1988 Nov;59(11):654–60 (Ger)
[Neutron spin tomography of the optic nerve in retrobulbar neuritis and optic nerve atrophy: demonstration of inflammation and demyelination.] Wiegand W. **Ophthalmologica** 1988;197(4):193–201 (Eng. Abstr.) (Ger)
[The value of nuclear magnetic resonance tomography in staging of bone and soft tissue sarcomas] Hirle A, et al. **Orthopade** 1989 Feb;18(1):34–40 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography studies with contrast media in post-discotomy syndrome] Oppel U, et al. **Orthopade** 1989 Feb;18(1):41–52 (Eng. Abstr.) (Ger)
[Malignant bone marrow infiltration in nuclear magnetic resonance tomography] Gamillscheg A, et al. **Padiatr Padol** 1989;24(2):103–11 (Eng. Abstr.) (Ger)
[Juvenile nonspecific spondylodiscitis] Gutenberger KH, et al. **Padiatr Padol** 1988;23(4):321–9 (Eng. Abstr.) (Ger)
[Indications for magnetic resonance tomography in diseases of the central nervous system in children] Reither M. **Padiatr Padol** 1989;24(2):123–35 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography confirms the diagnosis of Hallervorden-Spatz disease] Scheer PJ, et al. **Padiatr Padol** 1988;23(3):245–52 (Eng. Abstr.) (Ger)
[Indications for proton spin tomography and computerized tomography in chest diagnoees] Dinkel E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:327–34 (47 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance tomography—a diagnostic gain in bronchial cancer?] Mayer KH, et al. **Prax Klin Pneumol** 1988 Jul;42(7):567–9 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of the knee joint] Dewey C, et al. **Radiol Diagn (Berl)** 1988;29(6):809–15 (Eng. Abstr.) (Ger)
[CT arthrography and MR tomography—a study of the normal anatomy of the cruciate ligaments of the knee joint] Garz G, et al. **Radiol Diagn (Berl)** 1988;29(4):563–70 (Eng. Abstr.) (Ger)
[NMR, CT and PET in brain tumors] Schober O, et al. **Radiol Diagn (Berl)** 1988;29(3):457–62 (Eng. Abstr.) (Ger)
[The MELAS syndrome. Computed tomographic documentation of its course and magnetic resonance tomography] Brühl K, et al. **Radiologe** 1988 Nov; 28(11):514–6 (Eng. Abstr.) (Ger)
[Use of contrast media in MR tomography of soft tissue sarcomas. Follow-up studies after multimodal therapy] Fürst G, et al. **Radiologe** 1989 Jul;29(7):336–42 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of pituitary tumors] Gückel F, et al. **Radiologe** 1989 Jan;29(1):14–7 (15 ref.) (Eng. Abstr.) (Ger)
[Predictive value of magnetic resonance tomography in comparison with sonography and computed tomography in the diagnosis of focal liver lesions] Hauenstein KH, et al. **Radiologe** 1988 Aug;28(8):362–9 (Eng. Abstr.) (Ger)
[Possibilities of MR tomography of diseases of the hand and wrist] Heuck A, et al. **Radiologe** 1989 Feb;29(2):53–60 (Eng. Abstr.) (Ger)
[Imaging of osteoid osteoma by MR tomography] Heuck A, et al. **Radiologe** 1988 Nov;28(11):522–7 (Eng. Abstr.) (Ger)
[Intracranial hemorrhage in MRT] Higer HP, et al. **Radiologe** 1989 Jun;29(6):297–302 (18 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of prostatic cancer. A histopathologic correlation] Kahn T, et al. **Radiologe** 1989 Mar;29(3):144–9 (Eng. Abstr.) (Ger)
[CT and MRT following liver transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):544–8 (17 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of focal liver and spleen lesions. Experiences using ferrite, a new RES-specific MR contrast medium] Rummeny E, et al. **Radiologe** 1988 Aug; 28(8):380–6 (Eng. Abstr.) (Ger)
[The value of magnetic resonance tomography during radiotherapy of childhood tumors in the posterior fossa and the pineal region] Baierl P, et al. **ROFO** 1989 Jun; 150(6):663–9 (Eng. Abstr.) (Ger)
[MR tomography following craniocerebral trauma: comparison with computed tomography, electroencephalography and neurologic status] Dewes W, et al. **ROFO** 1989 Mar;150(3):316–22 (Eng. Abstr.) (Ger)
[Imaging diagnosis of aggressive fibromatosis and the MRT-pathological correlation] Duda S, et al. **ROFO** 1989 Jul;151(1):57–62 (Eng. Abstr.) (Ger)
[The use of contrast media in magnetic resonance tomography of head and neck tumors] Fürst G, et al. **ROFO** 1988 Nov;149(5):489–95 (Eng. Abstr.) (Ger)
[Computed tomography and magnetic resonance tomography of the lower leg in chronic venous insufficiency] Gmelin E, et al. **ROFO** 1989 Jul;151(1):50–6 (Eng. Abstr.) (Ger)
[NMR tomographic imaging of bone marrow infiltrates in malignant lymphoma] Gückel F, et al. **ROFO** 1989 Jan; 150(1):26–31 (Eng. Abstr.) (Ger)
[Bone marrow changes in Hodgkin's disease: MR tomography and chemical shift imaging] Gückel F, et al. **ROFO** 1989 Jun;150(6):670–3 (Eng. Abstr.) (Ger)
[MR tomography, CT and angiography of vascular malformations of the central nervous system] Harder T, et al. **ROFO** 1989 Feb;150(2):119–24 (Eng. Abstr.) (Ger)
[Differentiation of focal liver lesions using contrast-enhanced MRT] Heintz P, et al. **ROFO** 1989 Mar;150(3):297–306 (Eng. Abstr.) (Ger)
[Ectopic gray matter: imaging by MRT] Higer HP, et al. **ROFO** 1988 Nov;149(5):548–9 (Ger)
[Magnetic resonance tomographic results in bone changes associated with sclerosis] Holland BR, et al. **ROFO** 1988 Nov;149(5):513–21 (Eng. Abstr.) (Ger)
[Space-occupying lesions in the pineal region—MRT using Gd-DTPA] Kahn T, et al. **ROFO** 1989 Jun;150(6):657–62 (Eng. Abstr.) (Ger)
[Contrast medium enhanced MRT of tumors of the posterior fossa in children and adolescents] Kahn T, et al. **ROFO** 1989 Aug;151(2):216–24 (Eng. Abstr.) (Ger)
[Magnetic resonance tomographic studies of pancreatic transplants] Königsrainer A, et al. **ROFO** 1989 Aug; 151(2):154–7 (Eng. Abstr.) (Ger)
[NMR tomography of the brain in patients on long-term dialysis] Köster VO, et al. **ROFO** 1989 May;150(5):598–601 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of the oral cavity, the oropharynx and the mouth floor: comparison with computed tomography] Lenz M, et al. **ROFO** 1989 Apr; 150(4):425–33 (Eng. Abstr.) (Ger)
[Pre- and postoperative magnetic resonance tomography of osteochondrosis dissecans] Lütten C, et al. **ROFO** 1989 Mar;150(3):290–3 (Eng. Abstr.) (Ger)
[Cerebral MRT in neurofibromatosis: gliosis versus neoplasia?] Mautner VF, et al. **ROFO** 1989 Aug; 151(2):225–8 (Eng. Abstr.) (Ger)
[Paget's disease of bone: MR characteristics at 1.5 T] Neuerburg J, et al. **ROFO** 1988 Dec;149(6):609–14 (Eng. Abstr.) (Ger)
[Space-occupying lesions of the pineal region in magnetic resonance tomography] Neuhold A, et al. **ROFO** 1989 Aug; 151(2):210–5 (Eng. Abstr.) (Ger)
[MR tomography of astrocytic tumors (I–III)] Pedrosa P, et al. **ROFO** 1989 Jan;150(1):52–7 (Eng. Abstr.) (Ger)
[MRT and CT of diaphragmatic lipomas] Reuther G, et al. **ROFO** 1989 Jun;150(6):691–3 (Eng. Abstr.) (Ger)
[MR imaging of the meninges: normal and pathological findings] Schörner W, et al. **ROFO** 1988 Oct;149(4):361–8 (Eng. Abstr.) (Ger)
[Psychomotor epilepsy—a comparison of CT and MR in 100 patients] Schörner W, et al. **ROFO** 1989 Aug;151(2):202–9 (Eng. Abstr.) (Ger)
[Syringomyelia: correlation of magnetic resonance tomographic and clinical findings before and after surgery] Schroth G, et al. **ROFO** 1988 Dec;149(6):587–93 (Eng. Abstr.) (Ger)
[MRT diagnosis of hemorrhagic lung infarct] Spielmann RP, et al. **ROFO** 1989 Jan;150(1):102–3 (Ger)
[Magnetic resonance tomography of a thoracic aortic aneurysm] Spielmann RP, et al. **ROFO** 1988 Dec; 149(6):571–5 (Eng. Abstr.) (Ger)
[Gd-DTPA in the MR diagnosis of pituitary adenomas] Steiner E, et al. **ROFO** 1989 Mar;150(3):323–7 (Eng. Abstr.) (Ger)
[MR tomography following lumbar disk surgery: differential diagnostic potentials using Gd-DTPA] Steiner H. **ROFO** 1989 Aug;151(2):179–85 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of the perineural cyst] Vahldiek G, et al. **ROFO** 1988 Nov;149(5):508–12 (Eng. Abstr.) (Ger)
[MRI of the nasopharynx with Gd-DTPA: its value and differential diagnostic criteria] Vogl T, et al. **ROFO** 1989 May;150(5):516–22 (Eng. Abstr.) (Ger)
[In vivo 31P magnetic resonance spectroscopy and MRI in patients with superficial tumors] Vogl T, et al. **ROFO** 1989 Jan;150(1):58–65 (Eng. Abstr.) (Ger)
[Diagnosis of postpartum complications using CT and MRT] Woerner H, et al. **ROFO** 1989 Aug;151(2):158–62 (Eng. Abstr.) (Ger)
[Pelvimetry using magnetic resonance tomography] Woerner H, et al. **ROFO** 1988 Oct;149(4):378–82 (Eng. Abstr.) (Ger)
[Specific detection of various stages of Osler's disease of the brain using high field magnetic resonance tomography (1.5 Tesla)] Billet F, et al. **Rontgenblatter** 1988 Aug;41(8):320–3 (Eng. Abstr.) (Ger)
[Late intramedullary metastases of a medulloblastoma with primary extramedullary seeded metastases—magnetic resonance tomographic detection using gadolinium-DTPA] Glathe S, et al. **Rontgenblatter** 1988 Dec;41(12):484–7 (Eng. Abstr.) (Ger)
[Heterotopia of the cerebral cortex: a comparison of CT and MRT] Hosten N, et al. **Rontgenblatter** 1989 Aug; 42(8):336–8 (Eng. Abstr.) (Ger)
[Visualization of multiple neurofibromas using gadolinium-DTPA assisted MRT: a case report] Kaminsky S, et al. **Rontgenblatter** 1988 Dec;41(12):492–4 (Eng. Abstr.) (Ger)
[The effect of x-ray contrast media on magnetic resonance tomography of the spinal canal] Sander B, et al. **Rontgenblatter** 1989 Aug;42(8):343–5 (Eng. Abstr.) (Ger)
[Differentiation between dissection and a true aneurysm of the descending thoracic aorta using magnetic resonance tomography] Theissen P, et al. **Rontgenblatter** 1989 Jun; 42(6):246–50 (Eng. Abstr.) (Ger)
[Diseases of the aerodigestive tract and of the soft tissues of the neck. Comparison of MRI and CT] Vogl T. **Rontgenblatter** 1989 May;42(5):199–209 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography—a possibility for non-invasive meniscus diagnosis. 1. Experimentally produced lesions] Wacker F, et al. **Rontgenblatter** 1989 Jun; 42(6):233–8 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography—a possibility for non-invasive meniscus diagnosis. 2. Results of clinical application] Wacker F, et al. **Rontgenblatter** 1989 Jun; 42(6):239–45 (Eng. Abstr.) (Ger)
[Comparison of sonography of the soft tissues of the neck with computerized tomography and magnetic resonance] Westhofen M. **Rontgenblatter** 1989 May;42(5):210–5 (Eng. Abstr.) (Ger)
[Status of research in the field of diagnostic imaging of the breast with particular reference to magnetic resonance tomography] Heywang SH. **Rontgenpraxis** 1988 Nov; 41(11):384–94 (80 ref.) (Ger)
[Magnetic resonance tomography of the orbit in endocrine orbitopathy] Hosten N, et al. **Rontgenpraxis** 1988 Nov; 41(11):400–5 (Ger)
[Magnetic resonance tomography of the musculoskeletal system] Nägele M, et al. **Rontgenpraxis** 1988 Nov; 41(11):377–83 (14 ref.) (Ger)
[MRT anatomy of the retroperitoneal space] Zilch HG, et al. **Rontgenpraxis** 1989 Jul;42(7):236–44 (Ger)
[The diagnosis of cardiomyopathies using magnetic resonance] Buser PT, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):896–901 (30 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance in the assessment of cardiovascular diseases] Buser PT. **Schweiz Rundsch Med Prax** 1989 Feb 28;78(9):211–3 (Ger)
[Refixation in osteochondrosis dissecans with resorbable material using magnetic resonance tomography in follow-up monitoring] Lütten C, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):61–8 (Eng. Abstr.) (Ger)
[The value of MR tomography in tumorous diseases of the inner nose and paranasal sinuses] Held P, et al. **Strahlenther Onkol** 1989 Jun;165(6):447–51 (Eng. Abstr.) (Ger)
[Comparison of the value of magnetic resonance tomography and computerized tomography in the follow-up of augmentation-plasties with carbon fiber ligaments of the anterior cruciate ligament] Sim E, et al. **Unfallchirurgie**

1989 Jun;15(3):152–61 (Eng. Abstr.) (Ger)
[The clinical value of preoperative staging of bladder and prostatic cancers with nuclear magnetic resonance and computerized tomography] Beer M, et al. **Urologe [A]** 1989 Mar;28(2):65–9 (Eng. Abstr.) (Ger)
[Magnetic resonance angiography of the supra-aortic arteries supplying the brain] Felber S, et al. **Vasa Suppl** 1988; 26:18–21 (Ger)
[Clinical and nuclear magnetic resonance tomography findings in adults following surgical correction of aortic isthmus stenoses (CoA)] Kaemmerer H, et al. **Vasa Suppl** 1988;26:197–200 (Ger)
[The elderly patient with cerebrovascular insufficiency, a challenge for the internist. Diagnostic possibilities in the clinic] Heiss WD. **Verh Dtsch Ges Inn Med** 1988;94:246–54 (79 ref.) (Ger)
[Imaging procedures in gastroenterology. Magnetic resonance tomography] Loeffler W. **Verh Dtsch Ges Inn Med** 1988;94:154–8 (Ger)
[Osteopoikilosis in magnetic resonance tomography (case report)] Wicke K, et al. **Wien Med Wochenschr** 1989 Mar 15;139(5):95–7 (Eng. Abstr.) (Ger)
[Clinical use of magnetic resonance spectroscopy in tumor patients] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:158–61 (Ger)
[Magnetic resonance tomography in pediatric cardiology] Gillor A, et al. **Z Kardiol** 1989 Feb;78(2):116–24 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography in the assessment of questionable aneurysm of the thoracic aorta with or without dissection of the intima] Globits S, et al. **Z Kardiol** 1989 Feb;78(2):109–15 (Eng. Abstr.) (Ger)
[Transitory hip osteoporosis in magnetic resonance tomography] Glas K, et al. **Z Orthop** 1989 May–Jun; 127(3):302–7 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography in spondylolysis and spondylolisthesis] Lang P, et al. **Z Orthop** 1988 Dec; 126(6):651–7 (Eng. Abstr.) (Ger)
[Significance of nuclear magnetic resonance tomography for the diagnosis of degenerative diseases of the lumbar spine] Schulitz KP, et al. **Z Orthop** 1988 May–Jun;126(3):334–44 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of kidney transplants—status of diagnostic possibilities] Dewey C, et al. **Z Urol Nephrol** 1988 Nov;81(11):665–70 (Eng. Abstr.) (Ger)
[Soft tissue diagnosis of the shoulder joint using sonography, computerized tomography and magnetic resonance tomography (MRT)] Mellerowicz H, et al. **Zentralbl Chir** 1989;114(4):209–21 (15 ref.) (Eng. Abstr.) (Ger)
[Magnetic resonance imaging of the brain in AIDS patients with normal CT scans] Avrahami E. **Harefuah** 1988 Nov 1;115(9):213–4 (Eng. Abstr.) (Heb)
[New horizons in diagnostic imaging: magnetic resonance] Itzhak Y. **Harefuah** 1989 Feb 15;116(4):240 (Heb)
[Nuclear magnetic resonance diagnosis of the retro-esophageal aorta and left superior vena cava] Di Renzi P, et al. **Cardiologia** 1988 Aug;33(8):809–11 (Eng. Abstr.) (Ita)
[The role of NMR in the diagnosis of lumbar disc pathology] Randelli M, et al. **Chir Organi Mov** 1988 Jan–Mar; 73(1):45–52 (Eng. Abstr.) (Ita)
[Magnetic resonance in the evaluation of pathology of the uterus and ovary] Gualdi GF, et al. **Clin Ter** 1989 Apr 15;129(1):55–61 (Ita)
[Magnetic resonance in the evaluation of breast pathology] Gualdi GF, et al. **Clin Ter** 1988 Sep 15;126(5):363–7 (Ita)
[Magnetic resonance in the evaluation of tumors of the liver] Gualdi GF, et al. **Clin Ter** 1988 Oct 31;127(2):147–50 (Ita)
[Magnetic resonance of the adrenal glands] Gualdi GF, et al. **Clin Ter** 1988 Dec 15;127(5):385–7 (Ita)
[Renal and adrenal masses in childhood: the role of magnetic resonance] Gualdi GF, et al. **Clin Ter** 1988 Nov 15; 127(3):225–6 (Ita)
[Magnetic resonance of the head and neck in pediatrics] Gualdi GF, et al. **Clin Ter** 1988 Dec 15;127(5):389–90 (Ita)
[Magnetic resonance in the evaluation of patients with lymphoma] Gualdi GF, et al. **Clin Ter** 1988 Nov 15; 127(3):227–9 (Ita)
[Use of magnetic resonance imaging (MRI) in diagnosis of diseases of the abdominal aorta] Barile C, et al. **Minerva Cardioangiol** 1988 Dec;36(12):605–9 (Eng. Abstr.) (Ita)
[Pseudoaneurysm of the superficial femoral artery diagnosed preoperatively by magnetic resonance] Pavone P, et al. **Minerva Cardioangiol** 1989 Mar;37(3):125–7 (Eng. Abstr.) (Ita)
[Validity of nuclear magnetic resonance in gynecologic and obstetric diagnosis] Cappa F, et al. **Minerva Ginecol** 1988 Jul;40(7):395–401 (Eng. Abstr.) (Ita)
[Diagnostic potentials and limits of nuclear magnetic resonance (NMR) in cerebral neoplastic pathology] Fazio B. **Minerva Med** 1989 Feb;80(2):111–5 (10 ref.) (Eng. Abstr.) (Ita)
[Use of nuclear magnetic resonance in cranio-facial pathology. Preliminary study] Cirillo G, et al. **Minerva Stomatol** 1989 Mar;38(3):307–16 (Eng. Abstr.) (Ita)
[Finding of focal heterotopy with magnetic resonance. Description of a case associated with late onset epilepsy] Casara G, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):89–91 (Eng. Abstr.) (Ita)
[Magnetic resonance in neoplasms of the adipose, fibrous and muscular tissues] Balzarini L, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):87–93 (Eng. Abstr.) (Ita)
[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):152–7 (Eng. Abstr.) (Ita)
[Magnetic resonance of the breast. Clinical experience with a dedicated coil] Beomonte Zobel B, et al. **Radiol Med (Torino)** 1988 Sep;76(3):146–51 (Eng. Abstr.) (Ita)
[Theoretical-experimental comparison of contrast in magnetic resonance] Cesana P, et al. **Radiol Med (Torino)** 1989 Jun;77(6):684–8 (Eng. Abstr.) (Ita)
[MR vs CT: which is the diagnostic advantage in neuroradiology] Cirillo S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):390–8 (Eng. Abstr.) (Ita)
[Magnetic resonance study of lesions of the cervical spinal cord in multiple sclerosis] Dal Pozzo G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):23–9 (Eng. Abstr.) (Ita)
[Hemorrhagic lymph node metastasis from testicular carcinoma. The echo-CT-MR correlations] Ferrozzi F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):283–5 (Ita)
[Evaluation of parietal infiltration in carcinoma of the bladder: comparison of MR imaging, CT and histology] Gualdi GF, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):604–9 (Eng. Abstr.) (Ita)
[CT and MR compared in the study of hypophysis] Juliani G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):51–64 (Eng. Abstr.) (Ita)
[Soft-tissue sarcomas of the extremities. Their assessment with magnetic resonance] Masciocchi C, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):80–6 (Eng. Abstr.) (Ita)
[Abdominal aortic aneurysms. Comparison of magnetic resonance, ultrasound, CT x-ray and angiography] Pavone P, et al. **Radiol Med (Torino)** 1988 Sep;76(3):168–73 (Eng. Abstr.) (Ita)
[Demonstration of the value of iron as an organ-specific contrast medium in magnetic resonance of the liver. A case] Pavone P, et al. **Radiol Med (Torino)** 1988 Dec;76(6):634–5 (Ita)
[Induction of liver metastases in the rat. An experimental model for research on magnetic resonance] Pavone P, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):94–8 (Eng. Abstr.) (Ita)
[Role of magnetic resonance in acute capsular-ligamentous pathology of the knee] Pinto R, et al. **Radiol Med (Torino)** 1988 Dec;76(6):559–62 (Eng. Abstr.) (Ita)
[Assessment of the myometrial infiltration of endometrial carcinoma (FIGO stage I–II). The accuracy of magnetic resonance (1.5 T)] Sironi S, et al. **Radiol Med (Torino)** 1989 Apr;77(4):386–90 (Eng. Abstr.) (Ita)
[Magnetic resonance imaging in the study of brain changes due to carbon monoxide poisoning] Taverni N, et al. **Radiol Med (Torino)** 1988 Oct;76(4):289–92 (Eng. Abstr.) (Ita)
[Diagnosis of cancer with magnetic resonance imaging (MRI)] Takahashi M, et al. **Gan No Rinsho** 1988 Aug; 34(10):1237–46 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of a case of bladder leiomyoma] Nishimura K, et al. **Hinyokika Kiyo** 1989 Mar;35(3):497–500 (Eng. Abstr.) (Jpn)
[Clinical application of MRI for urological malignancy. 1: Usefulness of various imaging modalities for local staging of prostatic cancer; a comparison between MRI, CT and transrectal ultrasonography] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2083–9 (Eng. Abstr.) (Jpn)
[Clinical application of MRI for urological malignancy. 2: Usefulness of various imaging modalities for local staging of bladder cancer; a comparison between MRI, CT and transurethral ultrasonography] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2091–6 (Eng. Abstr.) (Jpn)
[Clinical application of MRI for urological malignancy. 3: A new trial of MRI for bladder cancer and prostatic cancer; surface coil and GD-DTPA] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2097–100 (Eng. Abstr.) (Jpn)
[The retroperitoneal liposarcoma: a case report] Ohyabu Y, et al. **Hinyokika Kiyo** 1989 Feb;35(2):307–13 (Eng. Abstr.) (Jpn)
[Flow imaging of the cardiovascular system using magnetic resonance imaging] Imai H, et al. **J Cardiol** 1988 Jun; 18(2):493–505 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging in staging prostatic cancer; correlation with pathological stage] Fujino A, et al. **Kaku Igaku** 1988 Dec;25(12):1417–23 (Eng. Abstr.) (Jpn)
[Comparison of X-ray CT and MRI in the diagnosis of cardiovascular disease] Masuda Y. **Kokyu To Junkan** 1989 Feb;37(2):173–8 (Jpn)
[Renal damage after extracorporeal shock-wave lithotripsy detected by magnetic resonance imaging] Torii S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1323–7 (Eng. Abstr.) (Jpn)
[Clinical significance of the intranuclear cleft of the lumbar intervertebral disk on MRI] Kakitsubata Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):42–7 (Eng. Abstr.) (Jpn)
[Synthesized images with intensified relaxation time effect—clinical application to brain tumor] Matsumoto K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1113–22 (Eng. Abstr.) (Jpn)
[Reference lines on diagnostic imagings of the head. Part 2: Reference lines on MRI] Okamoto K. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):264–9 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of spinal cord injury—observation of cyst formation] Shakudo M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1475–7 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging in lateral medullary (Wallenberg's) syndrome] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):172–6 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of post massive hepatic necrosis—a comparison of CT and histologic findings] Ueno E. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25;48(11):1406–17 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging] Igarashi Y. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):196–200 (Jpn)
[Symposium on diagnosis and treatment of cancer. Recent progress. I. Diagnosis 2. Imaging diagnosis (2) Nuclear magnetic resonance (NMR)] Arimizu N. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1651–4 (7 ref.) (Jpn)
[A case of Cruveilhier-Baumgarten syndrome. The elucidation of collateral vessels of the portal system by magnetic resonance image] Hashimoto A, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1410–6 (Jpn)
[Recent progress of magnetic resonance imaging (MRI)] Torizuka K. **Nippon Naika Gakkai Zasshi** 1988 Oct; 77(10):1529–33 (Jpn)
[Detectability of the small cancers by using MR imaging] Yoshikawa K, et al. **Nippon Rinsho** 1989 May;47(5):1044–50 (Jpn)
[Basic study on MRI guided stereotaxic surgery] Kyuma Y, et al. **No Shinkei Geka** 1989 May;17(5):449–55 (Eng. Abstr.) (Jpn)
[Intraspinal lipoma in an infant: a case report of MRI study] Nagane M, et al. **No Shinkei Geka** 1988 Nov;16(12):1411–5 (Eng. Abstr.) (Jpn)
[Perifocal abnormal signal intensity area in MRI in meningiomas] Tsuyumu M, et al. **No Shinkei Geka** 1989 Apr;17(4):319–25 (Eng. Abstr.) (Jpn)
[A comparison of serial MRI with X-ray CT in a patient with Reye-like syndrome] Fujii Y, et al. **No To Hattatsu** 1988;20(5):379–84 (Eng. Abstr.) (Jpn)
[A typical case of type I schizencephaly—MRI and clinical findings] Horita H, et al. **No To Hattatsu** 1989 Jan; 21(1):74–5 (Jpn)
[Role of MRI in the pediatric central nervous system disorders] Yoshikawa K, et al. **No To Hattatsu** 1989 Mar; 21(2):104–12 (Eng. Abstr.) (Jpn)
[Changes in tissue T1 of brain tumor following GD-DTPA administration—differences in T1 time course and tissue-blood ratio by histological types] Yoshida K, et al. **No To Shinkei** 1988 Jun;40(6):531–7 (Eng. Abstr.) (Jpn)
[MRI of bronchogenic carcinoma] Bittner RC, et al. **Rinsho Hoshasen** 1989 Jan;34(1):37–43 (Eng. Abstr.) (Jpn)
[A case report of hepatocellular carcinoma with tumor thrombus in the pulmonary artery demonstrated by MRI] Harada M, et al. **Rinsho Hoshasen** 1988 Aug;33(8):907–10 (Eng. Abstr.) (Jpn)
[MRI of craniopharyngioma] Hashimoto H, et al. **Rinsho Hoshasen** 1988 Sep;33(9):953–9 (Eng. Abstr.) (Jpn)
[MRI of OPLL (ossification of the posterior longitudinal ligament)] Otake S, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):989–93 (Eng. Abstr.) (Jpn)
[A case report of intrahepatic portal vein aneurysm; diagnostic usefulness of MRI] Sato T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):277–80 (18 ref.) (Eng. Abstr.) (Jpn)
[Studies of diagnosis of rectal cancer using MRI, CT and intrarectal ultrasonography] Satoh N, et al. **Rinsho Hoshasen** 1989 May;34(5):573–81 (Eng. Abstr.) (Jpn)
[Usefulness of MR imaging and I-131 MIBG scintigraphy for the localization of extra-adrenal pheochromocytoma; a case report] Takada I, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):1051–4 (Eng. Abstr.) (Jpn)
[Localization of spinal tumors by MRI] Takahashi M, et al. **Rinsho Hoshasen** 1989 Feb;34(2):191–8 (Eng. Abstr.) (Jpn)
[Usefulness of magnetic resonance imaging in gynecologic abnormalities] Yamashita Y, et al. **Rinsho Hoshasen** 1988 Jun;33(6):685–90 (Eng. Abstr.) (Jpn)
[Adrenomyeloneuropathy associated with congenital cataract—report of a family with MRI study] Komori T, et al. **Rinsho Shinkeigaku** 1988 May;28(5):532–5 (Eng. Abstr.) (Jpn)

[A case of central alveolar hypoventilation syndrome with a localized brain stem lesion identified by magnetic resonance imaging (MRI)] Miyazaki A, et al. **Rinsho Shinkeigaku** 1988 May;28(5):512–6 (Eng. Abstr.) (Jpn)

[Skeletal muscle MRI findings in autosomal recessive distal muscular dystrophy (Miyoshi)] Ohsuga H, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1304–11 (Eng. Abstr.) (Jpn)

[Acute spinal epidural hematoma in MRI–CT, following continuous epidural anesthesia with spontaneous recovery] Yoshida T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):226–9 (Eng. Abstr.) (Jpn)

[Magnetic tomography of intracranial hemorrhage. A study of paramagnetic effects] Smith HJ. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1303–6 (Eng. Abstr.) (Nor)

[Safety of patients and personnel at a department of MR tomography, a new method of imaging in medicine] Gomet B. **Med Pr** 1988;39(3):193–9 (Eng. Abstr.) (Pol)

[Clinical use of magnetic resonance tomography for assessing adrenal function in patients with arterial hypertension] Pustovitova TS. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):80–8 (Eng. Abstr.) (Rus)

[Magnetic resonance tomography of the heart in primary pulmonary hypertension] Sinitayn VE, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):102–5 (Eng. Abstr.) (Rus)

[Magnetic resonance tomography in kidney tumors concomitant with symptomatic hypertension] Luk'ianenok PI. **Med Radiol (Mosk)** 1989 Jul;34(7):41–4 (Eng. Abstr.) (Rus)

[A study of aneurysmal lesions of the aorta using magnetic resonance tomography] Belenkov IuN, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):24–7 (Eng. Abstr.) (Rus)

[Use of nuclear magnetic resonance tomography in the diagnosis of diseases of the central nervous system in children of various ages] Skvortsov IA, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):8–12 (Eng. Abstr.) (Rus)

[Comparison of CT and MRI findings in the diagnosis of cerebral complications in AIDS] Kulić S, et al. **Neurologija** 1987;36(1–4):29–40 (Eng. Abstr.) (Scr)

[Diagnosis of discitis using MRI in children] Simón Riazuelo JL, et al. **An Esp Pediatr** 1989 Apr;30(4):306–8 (Eng. Abstr.) (Spa)

[Current indications for magnetic resonance in non-neurological pathology (II)] Gómez González J, et al. **Med Clin (Barc)** 1989 May 6;92(17):665–75 (88 ref.) (Spa)

[Introduction to basic principles of nuclear magnetic resonance. I.] Gómez González J, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):623–9 (Spa)

[Current neurologic indications of magnetic resonance (II)] Muñoz González A, et al. **Med Clin (Barc)** 1989 Apr 1; 92(12):465–9 (32 ref.) (Spa)

[Current neurological indications for magnetic resonance (I)] Muñoz González A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):421–8 (77 ref.) (Spa)

[Magnetic resonance in neurology: analysis of 240 cases] Pujol-Nuez J, et al. **Med Clin (Barc)** 1988 Oct 29; 91(14):530–4 (Eng. Abstr.) (Spa)

[A magnetic tomography study: 3 out of 4 HIV-I infected men suffer subcortical pathologic changes] Alexius B, et al. **Lakartidningen** 1989 May 31;86(22):2108–11 (Eng. Abstr.) (Swe)

[Magnetic resonance for better possibilities in studying the connection between alcohol and brain damage] Bergmen H, et al. **Lakartidningen** 1989 Mar 15;86(11):967–70 (Swe)

ADVERSE EFFECTS

Surface-coil heat concentration in MR as a possible exacerbating factor in retrobulbar neuritis: is this a local "hot bath test"? [letter] Weintraub MI. **AJNR** 1989 Jan–Feb;10(1):207–8

MR imaging as a trigger for persistent claustrophobia [letter] Fishbain D, et al. **AJR** 1989 Mar;152(3):653

The sand-trap hazard in magnetic resonance imaging [letter] Kim T, et al. **Ann Intern Med** 1989 Feb 1;110(3):243–4

Enthusiasm for MRI 'P Chem' reservations [letter] Honour LC. **Hosp Pract [Off]** 1989 Jan 15;24(1):17

Increased rf power absorption in MR imaging due to rf coupling between body coil and surface coil. Buchli R, et al. **Magn Reson Med** 1989 Jan;9(1):105–12

Emotional distress during magnetic resonance imaging [letter] Flaherty JA, et al. **N Engl J Med** 1989 Feb 16; 320(7):467–8

Potential hearing loss resulting from MR imaging. Brummett RE, et al. **Radiology** 1988 Nov;169(2):539–40

[Cerebral vascular clips in MRI. Absolute or relative contraindications] Doyon D, et al. **J Radiol** 1989 Feb; 70(2):123–6 (Eng. Abstr.) (Fre)

ECONOMICS

Experiences at the new magnetic resonance imaging centre at Bristol. Thomson JL. **Br J Radiol** 1989 Feb; 62(734):134–7

GdMRI—good value at 150 DM a vial? [editorial] Phelps PD. **Clin Otolaryngol** 1989 Feb;14(1):1–2

Stark seeks MRI cost study, referral reform. Robinson ML. **Hospitals** 1989 Apr 20;63(8):18

EDUCATION

Image reading. Koska MT. **Hospitals** 1988 Nov 5;62(21):58, 60–1

HISTORY

Image formation by induced local interactions. Examples employing nuclear magnetic resonance. 1973 [classical article] Lauterbur PC. **Clin Orthop** 1989 Jul;(244):3–6

INSTRUMENTATION

The stereotactic operating microscope: accuracy refinement and clinical experience. Roberts DW, et al. **Acta Neurochir Suppl (Wien)** 1989;46:112–4

Technique for RF isolation of a pulse oximeter in a 1.5-T MR unit [letter] Wagle WA. **AJNR** 1989 Jan–Feb;10(1):208

Defibrillator failure in a magnetic resonance unit [letter] Snowdon SL. **Anaesthesia** 1989 Apr;44(4):359

Pulse, a PC-based graphics pulse sequence editor for NMR and MRI. Wang H, et al. **Australas Phys Eng Sci Med** 1989 Jun;12(2):69–72

Magnetic resonance imaging: project planning and management of a superconductive M.R.I. installation. Condon PM, et al. **Australas Radiol** 1989 Feb;33(1):40–6

Magnetic resonance imaging systems equipment hardware today and tomorrow. Beatty DC. **Bristol Med Chir J** 1988 May;103(2):35–6

Effects on media materials of storage in proximity to a magnetic resonance imaging scanner. Kittle PW. **Bull Med Libr Assoc** 1989 Jan;77(1):67–9

Hemangioma of the liver: characteristics exhibited on a 0.15 Tesla scanner. Flak B, et al. **Can Assoc Radiol J** 1989 Jun; 40(3):135–8

Further technical development in magnetic resonance imaging of the brain in children. Young IR, et al. **Clin Radiol** 1988 Nov;39(6):651–7

An incremental phase shifter and frequency modulator for magnetic resonance imaging and spectroscopy. Jensen DJ, et al. **IEEE Trans Biomed Eng** 1987 Apr;34(4):310–3

Multispectral and color-aided displays. Vannier MW, et al. **Invest Radiol** 1989 Jan;24(1):88–91 (13 ref.)

Introduction to magnetic resonance imaging [published erratum appears in J Am Osteopath Assoc 1989 Jun;89(6):716] Gift DA, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):315–20, 321 (12 ref.)

MR imaging using a rampable system. Dixon AK, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):903–4

The safety of MRI [letter] Shellock FG, et al. **JAMA** 1989 Jun 16;261(23):3412

Doubly tuned solenoidal resonators for small animal imaging and spectroscopy at 1.5 Tesla. Ballon D, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):155–62

Magnetic shielding of magnetic resonance systems. Andrew ER, et al. **Magn Reson Med** 1989 Jun;10(3):373–87

A comparison of double-tuned surface coils. Fitzsimmons JR, et al. **Magn Reson Med** 1989 Jun;10(3):302–9

A fuse for magnetic resonance imaging probes. Hedges LK. **Magn Reson Med** 1989 Feb;9(2):278–81

Magnetic resonance imaging using a ribbonator: hand and wrist. Marshall EA, et al. **Magn Reson Med** 1989 Mar; 9(3):369–78

The center-tapped slotted tube autotransformer resonator: a coil for use with a high-resolution small animal imaging system. Martin M, et al. **Magn Reson Med** 1988 Oct; 8(2):171–9

A slice geometry phantom for cross sectional tomographic imagers. Coffey CW, et al. **Med Phys** 1989 Mar–Apr; 16(2):273–8

Analysis of capacitive coupling and associated loss for a solenoidal magnetic resonance imaging radio-frequency coil. Harpen MD. **Med Phys** 1989 Mar–Apr;16(2):234–8

Accuracy and reproducibility of image derived relaxation times on a clinical 1.5 T magnetic resonance scanner. Masterson ME, et al. **Med Phys** 1989 Mar–Apr; 16(2):225–33

Skin surface markers for use in magnetic resonance imaging [letter] Douglas SL, et al. **Phys Med Biol** 1988 Nov; 33(11):1335–7

A test material for tissue characterisation and system calibration in MRI. Walker PM, et al. **Phys Med Biol** 1989 Jan;34(1):5–22

Coil holder and marker system for MR imaging of the total spine. Abrahams JJ, et al. **Radiology** 1989 Sep;172(3):869–71

T1 and T2 measurements on a 1.5-T commercial MR imager. Breger RK, et al. **Radiology** 1989 Apr;171(1):273–6

Clinical MR imaging with a Helmholtz-type surface coil. Reiman TH, et al. **Radiology** 1988 Nov;169(2):564–6

Prostate: MR imaging with an endorectal surface coil. Schnall MD, et al. **Radiology** 1989 Aug;172(2):570–4

Bilateral MR imaging with switched mutually coupled receiver coils. Wright SM, et al. **Radiology** 1989 Jan;170(1 Pt 1):249–55

[Intrarenal kinetics of Gd-DOTA in sequential MRI in rabbits. Reproducibility study] Grenier N, et al. **Ann Radiol (Paris)** 1989;32(3):186–95 (Eng. Abstr.) (Fre)

[An antenna support table for studying the spinal cord and spine by magnetic resonance] Doyon D, et al. **J Radiol** 1989 Jan;70(1):65–6 (Fre)

[CAS (computer assisted surgery). A new procedure in head and neck surgery] Schlöndorff G, et al. **HNO** 1989 May; 37(5):187–90 (Eng. Abstr.) (Ger)

[A prototype double coil for MR breast measurement] Kaiser WA, et al. **ROFO** 1989 Jul;151(1):103–5 (Eng. Abstr.) (Ger)

[Intracranial hemorrhage studied with a high-field (1.5T) NMR apparatus] Campodonico F, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):65–9 (Eng. Abstr.) (Ita)

[Effect of tissue temperature changes in canine brain T1S measured with a 0.1 Tesla magnetic resonance imager] Tsuji T, et al. **Iyodenshi To Seitai Kogaku** 1988 Sep; 26(3):158–63 (Eng. Abstr.) (Jpn)

METHODS

Field-echo pulse sequences used under suspended respiration for detection of liver metastases. Andersson T, et al. **Acta Radiol** 1989 May–Jun;30(3):285–9

MR-cholangiography with a double contrast technique. Hemmingsson A, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):29–33

Low flip angle gradient echo magnetic resonance imaging of the cervical spine at 0.3 tesla. Holtås S, et al. **Acta Radiol** 1989 Jul–Aug;30(4):343–8

Coil selection for magnetic resonance imaging of the cervical and thoracic spine using a vertical magnetic field. Larsson EM, et al. **Acta Radiol** 1989 Mar–Apr;30(2):141–6

Chemical shift selective magnetic resonance imaging of the optic nerve in patients with acute optic neuritis. Larsson HB, et al. **Acta Radiol** 1988 Nov–Dec;29(6):629–32

Superparamagnetic particles as an MRI contrast agent for the gastrointestinal tract. Lönnemark M, et al. **Acta Radiol** 1988 Sep–Oct;29(5):599–602

Preliminary clinical results with low flip angle spin-echo MR imaging of the head and neck. Chisin R, et al. **AJNR** 1989 Jul–Aug;10(4):719–24

A protocol for the isolation of carotid and vertebral arteries in MR angiography. Cousins JP, et al. **AJNR** 1989 Sep–Oct; 10(5):921–2

Magnetic susceptibility artifacts in gradient-recalled echo MR imaging. Czervionke LF, et al. **AJNR** 1988 Nov–Dec; 9(6):1149–55

Transfer index of MR relaxation enhancer: a quantitative evaluation of MR contrast enhancement. Kaneoke Y, et al. **AJNR** 1989 Mar–Apr;10(2):329–33

Comparison of gradient-recalled-echo and T2-weighted spin-echo pulse sequences in intramedullary spinal lesions. Katz BH, et al. **AJNR** 1989 Jul–Aug;10(4):815–22

Gated gradient-motion-refocused (GMR) images with spin-echo sequences. Metes JJ, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S54–5

Phase-contrast imaging of the parotid region. Mikulis DJ, et al. **AJNR** 1989 Jan–Feb;10(1):157–64

MR-gated intracranial CSF dynamics: evaluation of CSF pulsatile flow. Njemanze PC, et al. **AJNR** 1989 Jan–Feb; 10(1):77–80

Gradient echoes: simplified [editorial] [published erratum appears in AJNR 1989 Mar–Apr;10(2):406] Norfray JF, et al. **AJNR** 1989 Jan–Feb;10(1):209–10

Dual-surface-coil MR imaging of bilateral temporomandibular joints: improvements in the imaging protocol. Shellock FG, et al. **AJNR** 1989 May–Jun; 10(3):595–8

Fat-suppression MR imaging of the orbit. Simon J, et al. **AJNR** 1988 Sep;9(5):961–8

Optimization of sequence parameters in fast MR imaging of the brain with FLASH. Stadnik TW, et al. **AJNR** 1989 Mar–Apr;10(2):357–62

Correction of CSF motion artifact on MR images of the brain and spine by pulse sequence modification: clinical evaluation. Szeverenyi NM, et al. **AJNR** 1988 Nov–Dec; 9(6):1069–74

3DFT MR angiography of carotid and basilar arteries. Wagle WA, et al. **AJNR** 1989 Sep–Oct;10(5):911–9

STIR MR imaging of the orbit. Atlas SW, et al. **AJR** 1988 Nov;151(5):1025–30

MR imaging of Parkinson disease with spin-echo and gradient-echo sequences. Braffman BH, et al. **AJR** 1989 Jan;152(1):159–65

High-resolution MR imaging of pituitary microadenomas at 1.5 T: experience with Cushing disease. Peck WW, et al. **AJR** 1989 Jan;152(1):145–51

High-resolution MR of the hip [letter] Singer AM, et al. **AJR** 1988 Nov;151(5):1058–9

Gadolinium-DTPA-enhanced MR imaging of spinal neoplasms: preliminary investigation and comparison with unenhanced spin-echo and STIR sequences. Stimac GK, et al. **AJR** 1988 Dec;151(6):1185–92

Blood flow in the carotid arteries: quantification by using phase-sensitive MR imaging. Bendel P, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1307–10

MR imaging of the abdomen in children. Boechat MI, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1245–50 (32 ref.)

MR imaging of the shoulder: optimizing surface-coil positioning [letter] Glickstein MF. **AJR Am J Roentgenol** 1989 Aug;153(2):431–2

MR imaging of the temporomandibular joint: comparison of images of autopsy specimens made at 0.3 T and 1.5 T with anatomic cryosections. Hansson LG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1241–4

Partial flip-angle spin-echo imaging: clinical applications

[letter] Laissy JP, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):883–4
MR imaging of the knee in the sagittal projection: comparison of three-dimensional gradient-echo and spin-echo sequences. Reeder JD, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):537–40
Temporomandibular joint inflammation: comparison of MR fast scanning with T1- and T2-weighted imaging techniques. Schellhas KP, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):93–8
Diagnostic significance of interslice gap and imaging volume in body MR imaging. Schwaighofer BW, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):629–32
Detection of thrombus by using phase-image MR scans: ROC curve analysis. Tavares NJ, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):173–8
Paragangliomas of the jugular bulb and carotid body: MR imaging with short sequences and Gd-DTPA enhancement. Vogl T, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):583–7
Magnetic resonance imaging and the future of cardiac imaging. Wolf GL. **Am J Cardiol** 1989 Sep 5;64(9):60E–63E
Magnetic resonance imaging-based brain morphometry: development and application to normal subjects. Filipek PA, et al. **Ann Neurol** 1989 Jan;25(1):61–7
Boron-11 magnetic resonance imaging and spectroscopy; tools for investigating pharmacokinetics for boron neutron capture therapy. Kabalka GW, et al. **Basic Life Sci** 1989; 50:243–9
Contrast testing for magnetic resonance imaging. Anderson DW, et al. **Biomed Instrum Technol** 1989 Mar-Apr; 23(2):129–35
Left ventricular volume measured rapidly by oblique magnetic resonance imaging. Underwood SR, et al. **Br Heart J** 1988 Sep;60(3):188–95
Improvements in snap-shot nuclear magnetic resonance imaging. Howseman AM, et al. **Br J Radiol** 1988 Sep; 61(729):822–8
Magnetic resonance imaging of the infant heart at 1.5 T. Smith MA, et al. **Br J Radiol** 1989 Apr;62(736):367–70
MRI pulse sequences. Goddard P. **Bristol Med Chir J** 1988 May;103(2):8
The stir sequence in MRI of neoplastic lesions. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):26
Clinical applications of magnetic resonance imaging of the spine. Firooznia H, et al. **Bull N Y Acad Med** 1988 Nov; 64(8):941–52
Current applications of magnetic resonance vascular imaging. Lim TH, et al. **Cardiol Clin** 1989 Aug;7(3):661–83 (73 ref.)
Cine magnetic resonance imaging: tomographic analysis of left ventricular function. Wagner S, et al. **Cardiol Clin** 1989 Aug;7(3):651–9 (19 ref.)
Assessment of myocardial ischemia and infarction by contrast enhanced magnetic resonance imaging. Wolfe CL. **Cardiol Clin** 1989 Aug;7(3):685–96 (44 ref.)
Magnetic resonance in clinical physiology. Henriksen O, et al. **Clin Physiol** 1988 Dec;8(6):541–59 (96 ref.)
Magnetic resonance imaging of the knee [letter] Hughes D, et al. **Clin Radiol** 1989 Jul;40(4):436
Musculo-skeletal magnetic resonance imaging using inversion recovery pulse sequences at 0.08 T. Smith FW. **Clin Radiol** 1988 Jul;39(4):412–7
MR imaging of myopathy. Kuriyama M, et al. **Comput Med Imaging Graph** 1989 Jul-Aug;13(4):329–33
Approaches to fast MR imaging. Lufkin R. **Comput Med Imaging Graph** 1989 Mar-Apr;13(2):145–51
Comparison of T1 and T2 weighted images of the lumbar spine. Moffit B, et al. **Comput Med Imaging Graph** 1988 Sep-Oct;12(5):271–6
Magnetic resonance imaging of musculoskeletal tumors. Nurenberg P, et al. **CRC Crit Rev Diagn Imaging** 1988; 28(4):331–66 (71 ref.)
Magnetic resonance imaging of the hindfoot. Crim JR, et al. **Foot Ankle** 1989 Aug;10(1):1–7
Magnetic resonance imaging of paranasal sinus tumors for craniofacial resection. Lund VJ, et al. **Head Neck** 1989 May-Jun;11(3):279–83
The use of adaptive algorithms for obtaining optimal electrical shimming in magnetic resonance imaging (MRI). Wilkins J, et al. **IEEE Trans Biomed Eng** 1989 Feb; 36(2):202–10
Nuclear magnetic resonance microscopic ocular imaging for the detection of early-stage cataract. Ahn CB, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1612–7
Indicator dilution time-activity curves demonstrated by rapid magnetic resonance imaging techniques and paramagnetic contrast agent. Davis PL, et al. **Invest Radiol** 1989 May; 24(5):400–6
The raw and the cooked, or the importance of the motion of water for MRI revisited. Koenig SH, et al. **Invest Radiol** 1988 Jul;23(7):495–7
Delayed magnetic resonance hepatic imaging with gadolinium-DTPA. Nelson RC, et al. **Invest Radiol** 1988 Jul;23(7):509–11
Rapid, contrast-enhanced, diuretic magnetic resonance imaging of unilateral partial ureteral obstruction. An experimental study in micropigs. Tzika AA, et al. **Invest Radiol** 1989 Jan;24(1):37–46
Contrast-enhanced MRI of tumors. Comparison of Gd-DTPA and a macromolecular agent. Wikström MG, et al. **Invest Radiol** 1989 Aug;24(8):609–15
Noninvasive evaluation of global left ventricular function with use of cine nuclear magnetic resonance. Buser PT, et al. **J Am Coll Cardiol** 1989 May;13(6):1294–300
Magnetic resonance imaging approaching microscopic scale: maturation stages of Acetabularia mediterranea reproductive caps. Harrison LG, et al. **J Cell Sci** 1988 Nov; 91 (Pt 3):379–88
Gadolinium-DTPA enhancement of an optic nerve and chiasmal meningioma. Haik BG, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):122–5
Tuberous sclerosis: increased MR detection using gradient echo techniques. Berns DH, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):896–8
MR imaging of cerebral hematomas at different field strengths: theory and applications. Brooks RA, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):194–206 (59 ref.)
Deconvolution of chemical shift spectra in two- or three-dimensional [19F] MR imaging. Busse LJ, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):824–35
High quality zoomed MR images. Constable RT, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):179–81
Cine MR imaging in aortic stenosis. de Roos A, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):421–5
Gadolinium DTPA enhanced MR imaging of ACTH-secreting microadenomas of the pituitary gland. Doppman JL, et al. **J Comput Assist Tomogr** 1988 Sep-Oct; 12(5):728–35
Gadolinium-DTPA enhanced dynamic MR imaging in the evaluation of cisplatinum nephrotoxicity. Frank JA, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):448–59
Filtered backprojection and spectral width of MR signal. Gounot D, et al. **J Comput Assist Tomogr** 1988 Nov-Dec; 12(6):1020–5
MR characteristics of prostatic carcinoma and benign prostatic hyperplasia at 1.5 T. Griebel J, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):988–94
Quantification of knee joint fluid volume by MR imaging and CT using three-dimensional data processing. Heuck AF, et al. **J Comput Assist Tomogr** 1989 Mar-Apr; 13(2):287–93
Selective chemical imaging with a three-dimensional gradient echo sequence. Klose U, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):724–9
Signal suppression of normal liver tissue by phase corrected inversion recovery: a screening technique. Lehmann B, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):650–5
Segmentation of MR brain images into cerebrospinal fluid spaces, white and gray matter. Lim KO, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):588–93
Proton MR chemical shift imaging using double and triple phase contrast acquisition methods. Lodes CC, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):855–61
Low field (0.02 T) MR imaging of the whole body. Lotz H, et al. **J Comput Assist Tomogr** 1988 Nov-Dec; 12(6):1006–13
Vascular mapping using albumin-(Gd-DTPA), an intravascular MR contrast agent, and projection MR imaging. Moseley ME, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):215–21
Stereoscopic MR imaging. Moseley ME, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):167–73
Gadolinium-DOTA enhanced MR imaging of intracranial lesions. Parizel PM, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):378–85
Gadolinium-DTPA enhanced MR imaging of intradural neurenteric cysts. Pierot L, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):762–4
An algorithm for MR imaging of the short T2 fraction of sodium using the FID signal. Ra JB, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):302–9
Carotid body tumor: flow sensitive pulse sequences and MR angiography. Rippe DJ, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):874–7
Three-dimensional FLASH imaging: applications with gadolinium-DTPA. Ross JS, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):547–52
Multiexponential proton spin-spin relaxation in MR imaging of human brain tumors. Schad LR, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):577–87
Validation of three-dimensional reconstructions of knee anatomy: CT vs MR imaging. Smith DK, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):294–301
SIMA: simultaneous multislice acquisition of MR images by Hadamard-encoded excitation. Souza SP, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1026–30
Cerebral cortical localization: application and validation of the proportional grid system in MR imaging. Steinmetz H, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):10–9
Subtracted synthetic images in Gd-DTPA enhanced MR. Suto Y, et al. **J Comput Assist Tomogr** 1989 Sep-Oct; 13(5):925–8
MR fat suppression technique in the evaluation of normal structures of the knee. Totterman S, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):473–9
Assessment of phase and amplitude effects due to susceptibility variations in MR imaging of the brain. Young IR, et al. **J Comput Assist Tomogr** 1989 May-Jun; 13(3):490–4
Dynamic CT vs 0.5 T MR imaging in the detection of surgically proven hepatic metastases. Zeman RK, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):637–44
Fast scan magnetic resonance of Achilles tendonitis. Berthoty D, et al. **J Foot Surg** 1989 Mar-Apr;28(2):171–3
Nonspecific inflammation in the foot demonstrated by magnetic resonance imaging. Santoro JP, et al. **J Foot Surg** 1988 Sep-Oct;27(5):478–83 (8 ref.)
A hypothesis introducing a new calculation for discal reduction emphasis on stentotic factors and manipulative treatment [letter] Church CP, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):151–2
Liposomes for paramagnetic contrast enhancement in n.m.r. imaging. Gore JC, et al. **J Microencapsul** 1986 Oct-Dec; 3(4):251–64 (25 ref.)
Dynamic magnetic resonance imaging of the temporomandibular joint using FLASH sequences. Conway WF, et al. **J Oral Maxillofac Surg** 1988 Nov; 46(11):930–8
Cine magnetic resonance imaging for evaluation of congenital heart disease: role in pediatric cardiology compared with echocardiography and angiography. Chung KJ, et al. **J Pediatr** 1988 Dec;113(6):1028–35
Magnetic resonance imaging of the head and neck region. Present status and future potential. Council on Scientific Affairs. Report of the Panel on Magnetic Resonance Imaging. **JAMA** 1988 Dec 9;260(22):3313–26 (82 ref.)
Radiology. Leeds NE, et al. **JAMA** 1989 May 19; 261(19):2885–7
Echo-planar magnetic resonance imaging in abnormal pregnancies [letter] Stehling MK, et al. **Lancet** 1989 Jul 15;2(8655):157
Diagnosis of superior sagittal sinus thrombosis by three-dimensional magnetic resonance flow imaging [letter] Villringer A, et al. **Lancet** 1989 May 13;1(8646):1086–7
Gadolinium-enhanced magnetic resonance imaging in temporal bone lesions. Millen SJ, et al. **Laryngoscope** 1989 Mar;99(3):257–60
Papers presented at the 1987 Topical Conference on Fast Magnetic Resonance Imaging Techniques. May 15–17, 1987, Cleveland, Ohio. **Magn Reson Imaging** 1988 Jul-Aug; 6(4):353–477
Simple formulae for the calculation of RHO, T1 and T2 from a properly designed diagnostic NMR experiment. Bakker CJ, et al. **Magn Reson Imaging** 1989 May-Jun;7(3):305–7
1H-spectroscopic imaging using a modified Dixon method. Brix G, et al. **Magn Reson Imaging** 1988 Nov-Dec; 6(6):617–22
Vascular morphology by three-dimensional magnetic resonance imaging. Cline HE, et al. **Magn Reson Imaging** 1989 Jan-Feb;7(1):45–54
RF interference suppression in a cardiac synchronization system operating in a high magnetic field NMR imaging system. Damji AA, et al. **Magn Reson Imaging** 1988 Nov-Dec;6(6):637–40
Analysis of imaging axes significance in motion artifact suppression technique (MAST): MRI of turbulent flow and motion. Duerk JL, et al. **Magn Reson Imaging** 1989 May-Jun;7(3):251–63
A mathematical model for signal from spins flowing during the application of spin echo pulse sequences. Gullberg GT, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):437–61
The application of steady-state free precession in rapid 2DFT NMR imaging: FAST and CE-FAST sequences. Gyngell ML. **Magn Reson Imaging** 1988 Jul-Aug;6(4):415–9
Imaging sequences in NMR [editorial] Hascke EM. **Magn Reson Imaging** 1988 Jul-Aug;6(4):353–4
Proton decoupled 13C NMR imaging. Hammer BE. **Magn Reson Imaging** 1989 Mar-Apr;7(2):235–40
Transverse relaxation rate enhancement caused by magnetic particulates. Hardy PA, et al. **Magn Reson Imaging** 1989 May-Jun;7(3):265–75
Fast and exact flow measurements with the fast Fourier flow technique. Hennig J, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):369–72
Clinical applications and methodological developments of the RARE technique. Hennig J, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):391–5
Implementation and evaluation of data compression of MR images. Howe FA. **Magn Reson Imaging** 1989 Mar-Apr; 7(2):127–32
Clinical experience with rapid 2DFT SSFP imaging at low field strength. Jolesz FA, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):397–403
A comparison of selective saturation and selective echo chemical shift imaging techniques. Joseph PM, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):421–30
Tissue characterization of benign brain tumors: use of NMR-tissue parameters. Just M, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):463–72
MR imaging of model fluid velocity profiles. Kraft KA, et al. **Magn Reson Imaging** 1989 Jan-Feb;7(1):69–77
Cervical spine MR imaging using multislice gradient echo imaging: comparison with cardiac gated spin echo. Kulkarni MV, et al. **Magn Reson Imaging** 1988 Sep-Oct; 6(5):517–25
Regional differences in rat brain displayed by fast MRI with superparamagnetic contrast agents. Majumdar S, et al. **Magn Reson Imaging** 1988 Nov-Dec;6(6):611–5
Multiple spin-echo MR imaging of the body: image contrast and motion-induced artifact. Mitchell DG, et al. **Magn Reson Imaging** 1988 Sep-Oct;6(5):535–46
Diffusion imaging with paired CPMG sequences. Mulkern RV, et al. **Magn Reson Imaging** 1988 Nov-Dec;6(6):623–31
19F 2-FDG NMR imaging of the brain in rat. Nakada T, et al. **Magn Reson Imaging** 1988 Nov-Dec;6(6):633–5

Some factors that influence the steady state in steady-state free precession. Patz S. **Magn Reson Imaging** 1988 Jul-Aug; 6(4):405–13
A simple approach to T2 imaging in MRI. Pope JM, et al. **Magn Reson Imaging** 1988 Nov-Dec;6(6):641–6
Feasibility of fast MR imaging of the liver at 1.5 T. Raval B, et al. **Magn Reson Imaging** 1989 Mar-Apr;7(2):203–10
Fast magnetic resonance in vascular diseases of the abdomen. Raval B, et al. **Magn Reson Imaging** 1988 Jul-Aug; 6(4):473–7
High resolution nuclear magnetic resonance imaging of pig knees at 4.7 T. Robinson EM, et al. **Magn Reson Imaging** 1988 Sep-Oct;6(5):591–4
Fast imaging and other motion artifact reduction schemes: a pictorial overview. Runge VM, et al. **Magn Reson Imaging** 1988 Sep-Oct;6(5):595–607 (16 ref.)
Intensity dependence of flow signal in slice selective velocity measurements. Saloner D. **Magn Reson Imaging** 1989 Jan-Feb;7(1):61–7
Abdominal applications of fast MR imaging: a comparison of fast field echo (FFE) and spin echo (SE) pulse sequences. te Strake L, et al. **Magn Reson Imaging** 1989 May-Jun; 7(3):297–303
In vivo measurements of relaxation process in the human liver by MRI. The role of respiratory gating/triggering. Thomsen C, et al. **Magn Reson Imaging** 1988 Jul-Aug; 6(4):431–6
A comparison of fast spin echo and gradient field echo sequences. Tkach JA, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):373–89
Pulse sequence optimization for T2-weighted MR imaging of the brain. Unger EC, et al. **Magn Reson Imaging** 1989 Mar-Apr;7(2):119–25
Gradient-echo imaging of hemorrhage at 1.5 Tesla. Unger EC, et al. **Magn Reson Imaging** 1989 Mar-Apr;7(2):163–72
Fast Field Echo imaging: an overview and contrast calculations. van der Meulen P, et al. **Magn Reson Imaging** 1988 Jul-Aug;6(4):355–68 (15 ref.)
Lactate observation in vivo by spectral editing in real time. Vinitaki S, et al. **Magn Reson Imaging** 1988 Nov-Dec; 6(6):707–11
The benefits of increasing spatial resolution as a means of reducing artifacts due to field inhomogeneities. Young IR, et al. **Magn Reson Imaging** 1988 Sep-Oct;6(5):585–90
Imaging tumors with respect to a grid coordinate system by proton magnetic resonance using lipid suppression and T2 weighting. Block RE, et al. **Magn Reson Med** 1989 Aug;11(2):244–7
Noise reduction in magnetic resonance imaging. Brosnan T, et al. **Magn Reson Med** 1988 Dec;8(4):394–409
Improvements in MR angiography using phase-corrected data sets. Chenevert TL, et al. **Magn Reson Med** 1989 Apr; 10(1):38–49
Addendum to "rapid local rectangular views and magnifications: reduced phase encoding of orthogonally excited spin echoes". Conturo TE, et al. **Magn Reson Med** 1989 Mar;9(3):389–90
Elimination of transverse coherences in FLASH MRI. Crawley AP, et al. **Magn Reson Med** 1988 Nov;8(3):248–60
Maximum entropy and 2DFT NMR images. De Simone BC, et al. **Magn Reson Med** 1988 Nov;8(3):332–9
Three-dimensional phase contrast angiography. Dumoulin CL, et al. **Magn Reson Med** 1989 Jan;9(1):139–49
Three-dimensional time-of-flight magnetic resonance angiography using spin saturation. Dumoulin CL, et al. **Magn Reson Med** 1989 Jul;11(1):35–46
Self-refocusing 270 degrees Gaussian pulses for slice selection without gradient reversal in magnetic resonance imaging. Emsley L, et al. **Magn Reson Med** 1989 May; 10(2):273–81
Implanted coil MR microscopy of renal pathology. Farmer TH, et al. **Magn Reson Med** 1989 Jun;10(3):310–23
Use of magnetic resonance imaging to identify changes in cerebral blood flow in epilepsia partialis continua. Fish DR, et al. **Magn Reson Med** 1988 Oct;8(2):238–40
Projection flow imaging by bolus tracking using stimulated echoes. Foo TK, et al. **Magn Reson Med** 1989 Feb; 9(2):203–18
Magnetic resonance imaging with adiabatic pulses using a single surface coil for RF transmission and signal detection. Garwood M, et al. **Magn Reson Med** 1989 Jan;9(1):25–34
PEEP—a rapid chemical-shift imaging method. Guilfoyle DN, et al. **Magn Reson Med** 1989 May;10(2):282–7
31P FLASH NMR imaging. Haase A, et al. **Magn Reson Med** 1988 Jul;7(3):358–63
Eigenimage filtering in MR imaging: an application in the abnormal chest wall. Haggar AM, et al. **Magn Reson Med** 1989 Jul;11(1):85–97
Use of solvent suppression technique to enhance changes due to susceptibility variations in magnetic resonance imaging. Hall AS, et al. **Magn Reson Med** 1989 Mar;9(3):411–8
MRI of extremities using perforated single-turn solenoids. Hornak JP, et al. **Magn Reson Med** 1988 Aug;7(4):442–8
Characterization of normal brain tissue using seven calculated MRI parameters and a statistical analysis system. Hyman TJ, et al. **Magn Reson Med** 1989 Jul;11(1):22–34
Boron-11 MRI and MRS of intact animals infused with a boron neutron capture agent. Kabalka GW, et al. **Magn Reson Med** 1988 Oct;8(2):231–7
Unified multiple-feature color display for MR images. Kamman RL, et al. **Magn Reson Med** 1989 Feb;9(2):240–53
Fluid shear and spin-echo images. Kuethe DO, et al. **Magn Reson Med** 1989 Apr;10(1):57–70
Effects of intravoxel incoherent motions (IVIM) in steady-state free precession (SSFP) imaging: application to molecular diffusion imaging. Le Bihan D, et al. **Magn Reson Med** 1989 Jun;10(3):324–37
Intravoxel incoherent motion imaging using steady-state free precession. Le Bihan D. **Magn Reson Med** 1988 Jul; 7(3):346–51
Fast SSFP gradient echo sequence for simultaneous acquisitions of FID and echo signals. Lee SY, et al. **Magn Reson Med** 1988 Oct;8(2):142–50
A quantitative study of relaxation rate enhancement produced by iron oxide particles in polyacrylamide gels and tissue. Majumdar S, et al. **Magn Reson Med** 1989 Feb; 9(2):185–202
MRI of "diffusion" in the human brain: new results using a modified CE-FAST sequence. Merboldt KD, et al. **Magn Reson Med** 1989 Mar;9(3):423–9
The use of band-selectable digital filtering in magnetic resonance image enhancement. Mitchell DK, et al. **Magn Reson Med** 1989 Mar;9(3):353–68
Simultaneous multislice imaging (SIMUSIM) for improved cardiac imaging. Müller S. **Magn Reson Med** 1989 Apr; 10(1):145–55
Transrectal probe for 1H MRI and 31P MR spectroscopy of the prostate gland. Narayan P, et al. **Magn Reson Med** 1989 Aug;11(2):209–20 (35 ref.)
Paramagnetic contrast enhancement at 0.02 T: an experimental study using Gd-DOTA in normal and hydronephrotic kidneys. Niemi P, et al. **Magn Reson Med** 1988 Jul;7(3):311–8
Considerations of magnetic resonance angiography by selective inversion recovery. Nishimura DG, et al. **Magn Reson Med** 1988 Aug;7(4):472–84
Magnetic resonance angiography by selective inversion recovery using a compact gradient echo sequence. Nishimura DG, et al. **Magn Reson Med** 1988 Sep; 8(1):96–103
Snapshot imaging at 0.5 T using echo-planar techniques. Ordidge RJ, et al. **Magn Reson Med** 1989 May;10(2):227–40
A computer simulation of T2 decay effects in echo planar imaging. Oshio K, et al. **Magn Reson Med** 1989 Sep; 11(3):389–97
Fast gradient-echo chemical-shift imaging. Park HW, et al. **Magn Reson Med** 1988 Jul;7(3):340–5
Efficient biphasic spin-echo magnetic resonance imaging. Parker DL, et al. **Magn Reson Med** 1989 Jul;11(1):98–113
Missing pulse steady-state free precession. Patz S, et al. **Magn Reson Med** 1989 May;10(2):194–209
MR fluoroscopy: technical feasibility. Riederer SJ, et al. **Magn Reson Med** 1988 Sep;8(1):1–15
Averaging error in NMR slice profile measurements. Selikson M, et al. **Magn Reson Med** 1988 Jul;7(3):280–4
A fast method for T1 fitting. Sperber GO, et al. **Magn Reson Med** 1989 Jan;9(1):113–7
Fat suppression in the time domain in fast MR imaging. Szumowski J, et al. **Magn Reson Med** 1988 Nov;8(3):345–54
Hybrid methods of chemical-shift imaging. Szumowski J, et al. **Magn Reson Med** 1989 Mar;9(3):379–88
Fast limited flip angle MR subtraction angiography. Tasciyan TA, et al. **Magn Reson Med** 1988 Nov;8(3):261–74
Simultaneous multislice acquisition of MR images. Weaver JB. **Magn Reson Med** 1988 Nov;8(3):275–84
Characterization of fluid flow using low-spatial-resolution velocity spectra from NMR images. Wendt RE 3d, et al. **Magn Reson Med** 1989 Apr;10(1):71–88
Magnetization transfer contrast (MTC) and tissue water proton relaxation in vivo. Wolff SD, et al. **Magn Reson Med** 1989 Apr;10(1):135–44
Truncation artifacts in magnetic resonance imaging. Wood ML, et al. **Magn Reson Med** 1985 Dec;2(6):517–26
Computing material-selective projection images in MR. Wright GA, et al. **Magn Reson Med** 1989 Aug;11(2):135–51
Use of ultralong echo time imaging to assist in measuring the velocity of perfused flow in vivo. Young IR, et al. **Magn Reson Med** 1989 Jun;10(3):349–61
Problems with achieving saturation using methods based on bursts of rf pulses with spoilers in magnetic resonance imaging. Young IR, et al. **Magn Reson Med** 1989 Jul; 11(1):127–31
Flow-induced phase effects and compensation technique for slice-selective pulses. Yuan C, et al. **Magn Reson Med** 1989 Feb;9(2):161–76
Cerebral tuberous sclerosis: postmortem magnetic resonance imaging and pathologic anatomy. Nixon JR, et al. **Mayo Clin Proc** 1989 Mar;64(3):305–11
Alternative reconstruction algorithm for NMR imaging. Leszczynski KW, et al. **Med Biol Eng Comput** 1988 Mar; 26(2):186–92
Nuclear magnetic resonance imaging using a microcomputer. Pittard S, et al. **Med Biol Eng Comput** 1988 Mar;26(2):221–4
Pseudo-shading technique in the two-dimensional domain: a post-processing algorithm for enhancing the Z-buffer of a three-dimensional binary image. Tan AC, et al. **Med Inf (Lond)** 1989 Apr-Jun;14(2):149–56
Correction of phase wrapping in magnetic resonance imaging. Axel L, et al. **Med Phys** 1989 Mar-Apr; 16(2):284–7
Nuclear magnetic resonance signal from flowing nuclei in rapid imaging using gradient echoes. Gao JH, et al. **Med Phys** 1988 Nov-Dec;15(6):809–14
Constrained reconstruction: a superresolution, optimal signal-to-noise alternative to the Fourier transform in magnetic resonance imaging. Haacke EM, et al. **Med Phys** 1989 May-Jun;16(3):388–97
A new method of computing spin-lattice relaxation maps in magnetic resonance imaging using fast scanning protocols. Hinson WH, et al. **Med Phys** 1988 Jul-Aug; 15(4):551–61
Artifacts due to residual magnetization in three-dimensional magnetic resonance imaging. Wood ML, et al. **Med Phys** 1988 Nov-Dec;15(6):825–31
MRI of intracerebral haematoma at low field (0.15T) using T2 dependent partial saturation sequences. Bydder GM, et al. **Neuroradiology** 1988;30(5):367–71
Gradient recalled echo MR imaging of superior sagittal sinus occlusion. Daniels DL, et al. **Neuroradiology** 1989; 31(2):134–6
Short TR, variable flip angle, gradient echo scans of the cervical spine: comparison of 2DFT and 3DFT techniques. Enzmann D, et al. **Neuroradiology** 1989;31(3):213–6
Sodium-MR-imaging of the brain: initial clinical results. Grodd W, et al. **Neuroradiology** 1988;30(5):399–407
Magnetic resonance imaging of cerebral infarction: time course of Gd-DTPA enhancement and CT comparison. Imakita S, et al. **Neuroradiology** 1988;30(5):372–8
Magnetic resonance imaging and angiography of the brain in embolic left atrial myxoma. Marazuela M, et al. **Neuroradiology** 1989;31(2):137–9
Comparison of multi echo and contrast-enhanced MR scans: image contrast and delineation of intracranial tumors. Schörner W, et al. **Neuroradiology** 1989;31(2):140–7
Computer-assisted stereotactic biopsy of intracranial lesions in pediatric patients. Davis DH, et al. **Pediatr Neurosci** 1988;14(1):31–6
Three-dimensional magnetic resonance image representation using reflection holography. Benatar M, et al. **Phys Med Biol** 1988 Dec;33(12):1469–72
Resolution of biexponential transverse relaxation in magnetic resonance imaging. Fransson A, et al. **Phys Med Biol** 1989 Mar;34(3):305–14
Self-referencing subtractive angiography by modified stimulated echo in magnetic resonance imaging. Lahrech H, et al. **Phys Med Biol** 1989 Jan;34(1):1–4
Ferrous sulphate gels for determination of absorbed dose distributions using MRI technique: basic studies. Olsson LE, et al. **Phys Med Biol** 1989 Jan;34(1):43–52
Standardized magnetic resonance image intensity study in schizophrenia. Rossi A, et al. **Psychiatry Res** 1988 Aug; 25(2):223–31
MR imaging of blood flows in the cavernous sinus. Komiyama M, et al. **Radiat Med** 1988 May-Jun;6(3):124–9
Spectroscopic imaging by dephasing amplitude changing (SIDAC). Miyazaki T, et al. **Radiat Med** 1989 Jan-Feb; 7(1):1–5
Magnetic resonance imaging phase encoding: a pictorial essay. Felmlee JP, et al. **Radiographics** 1989 Jul;9(4):717–22
FLASH: clinical three-dimensional magnetic resonance imaging. Runge VM, et al. **Radiographics** 1988 Sep; 8(5):947–65
Magnetic resonance imaging of pituitary and parasellar abnormalities. Chakeres DW, et al. **Radiol Clin North Am** 1989 Mar;27(2):265–81 (29 ref.)
MR-directed needle biopsies. Duckwiler G, et al. **Radiol Clin North Am** 1989 Mar;27(2):255–63
Three-dimensional magnetic resonance imaging of the heart. Yoffie RL, et al. **Radiol Technol** 1989 Mar-Apr;60(4):305–9
Vascular intracranial lesions: applications of gradient-echo MR imaging. Atlas SW, et al. **Radiology** 1988 Nov; 169(2):455–61
MR imaging of motion with spatial modulation of magnetization. Axel L, et al. **Radiology** 1989 Jun; 171(3):841–5
Heart wall motion: improved method of spatial modulation of magnetization for MR imaging. Axel L, et al. **Radiology** 1989 Aug;172(2):349–50
Whole-body MR imaging and spectroscopy with a 4-T system. Barfuss H, et al. **Radiology** 1988 Dec;169(3):811–6
When should GRASS be used? Bradley WG. **Radiology** 1988 Nov;169(2):574–5
Use of Gd-DTPA and fast gradient-echo and spin-echo MR imaging to demonstrate renal function in the rabbit. Carvlin MJ, et al. **Radiology** 1989 Mar;170(3 Pt 1):705–11
Full-frame transform compression of CT and MR images. Chan KK, et al. **Radiology** 1989 Jun;171(3):847–51
Dynamic Gd-DTPA-enhanced MR imaging of the kidney: experimental results. Choyke PL, et al. **Radiology** 1989 Mar; 170(3 Pt 1):713–20
Temporomandibular joint motion: efficacy of fast low-angle shot MR imaging. Conway WF, et al. **Radiology** 1989 Sep; 172(3):821–6
Reperfused and nonreperfused myocardial infarction: diagnostic potential of Gd-DTPA—enhanced MR imaging. de Roos A, et al. **Radiology** 1989 Sep; 172(3):717–20
Short TI inversion-recovery imaging of the liver: pulse-sequence optimization and comparison with spin-echo imaging. Dousset M, et al. **Radiology** 1989 May; 171(2):327–33
Projection arteriography and venography: initial clinical results with MR. Edelman RR, et al. **Radiology** 1989 Aug; 172(2):351–7
Quantification of blood flow with dynamic MR imaging and presaturation bolus tracking. Edelman RR, et al.

Radiology 1989 May;171(2):551–6
Adaptive technique for high-definition MR imaging of moving structures. Ehman RL, et al. Radiology 1989 Oct; 173(1):255–63
Improved MR images of the brain with use of a gated, flow-compensated, variable-bandwidth pulse sequence. Enzmann D, et al. Radiology 1989 Sep;172(3):771–81
MR fluoroscopy: initial clinical studies. Farzaneh F, et al. Radiology 1989 May;171(2):545–9
Superparamagnetic iron oxide-enhanced MR imaging: pulse sequence optimization for detection of liver cancer. Fretz CJ, et al. Radiology 1989 Aug;172(2):393–7
White matter lesions: role of spin density in MR imaging. Geis JR, et al. Radiology 1989 Mar;170(3 Pt 1):863–8
Pulmonary vasculature: high-resolution MR imaging. Work in progress. Hatabu H, et al. Radiology 1989 May; 171(2):391–5
Cerebrospinal fluid-iophendylate contrast on gradient-echo MR images. Jack CR Jr, et al. Radiology 1988 Nov; 169(2):561–3
MR imaging of the breast: fast imaging sequences with and without Gd-DTPA. Preliminary observations. Kaiser WA, et al. Radiology 1989 Mar;170(3 Pt 1):681–6
Use of radio-frequency field gradients to image blood flow and perfusion in vivo. Karczmar GS, et al. Radiology 1989 Aug;172(2):363–6
Measuring signal-to-noise ratios in MR imaging. Kaufman L, et al. Radiology 1989 Oct;173(1):265–7
Larynx: MR imaging at 2.35 T. Kikinis R, et al. Radiology 1989 Apr;171(1):165–9
Temperature mapping with MR imaging of molecular diffusion: application to hyperthermia. Le Bihan D, et al. Radiology 1989 Jun;171(3):853–7
Surface of the brain: three-dimensional MR images created with volume rendering. Levin DN, et al. Radiology 1989 Apr;171(1):277–80
The brain: integrated three-dimensional display of MR and PET images. Levin DN, et al. Radiology 1989 Sep; 172(3):783–9
Quantitation of MR relaxation effects of iron oxide particles in liver and spleen. Majumdar S, et al. Radiology 1988 Dec; 169(3):653–8
Intracranial circulation: preliminary clinical results with three-dimensional (volume) MR angiography. Masaryk TJ, et al. Radiology 1989 Jun;171(3):793–9
Three-dimensional (volume) gradient-echo imaging of the carotid bifurcation: preliminary clinical experience. Masaryk TJ, et al. Radiology 1989 Jun;171(3):801–6
Blood MR signal suppression by preexcitation with inverting pulses. Mayo JR, et al. Radiology 1989 Oct;173(1):269–71
Variable-flip-angle spin-echo MR imaging of the pelvis: more versatile T2-weighted images. Mitchell DG, et al. Radiology 1989 May;171(2):525–9
Urinary bladder neoplasms: evaluation with contrast-enhanced MR imaging. Neuerburg JM, et al. Radiology 1989 Sep;172(3):739–43
In vivo and in vitro MR imaging of renal tumors: histopathologic correlation and pulse sequence optimization. Quint LE, et al. Radiology 1988 Nov; 169(2):359–62
Intracranial circulation: pulse-sequence considerations in three-dimensional (volume) MR angiography. Ruggieri PM, et al. Radiology 1989 Jun;171(3):785–91
Volumetric rendering of MR images. Rusinek H, et al. Radiology 1989 Apr;171(1):269–72
Patellar tracking abnormalities: clinical experience with kinematic MR imaging in 130 patients. Shellock FG, et al. Radiology 1989 Sep;172(3):799–804
Chemical shift imaging with paramagnetic contrast material enhancement for improved lesion depiction. Simon JH, et al. Radiology 1989 May;171(2):539–43
Reduced-bandwidth MR imaging of the head at 1.5 T1. Simon JH, et al. Radiology 1989 Sep;172(3):771–5
Noise-reduced prostatic MR imaging. Work in progress. Sommer G, et al. Radiology 1988 Nov;169(2):347–50
Whole-body echo-planar MR imaging at 0.5 T. Stehling MJ, et al. Radiology 1989 Jan;170(1 Pt 1):257–63
Gastrointestinal tract: dynamic MR studies with echo-planar imaging. Stehling MK, et al. Radiology 1989 Apr; 171(1):41–6
Carbon-fiber electrodes and leads for electrocardiography during MR imaging. van Genderingen HR, et al. Radiology 1989 Jun;171(3):872
Comparison of cocurrent and countercurrent flow-related enhancement in MR imaging. Whittemore AR, et al. Radiology 1989 Jan;170(1 Pt 1):265–71
Hepatic neoplasia: breath-hold MR imaging. Winkler ML, et al. Radiology 1989 Mar;170(3 Pt 1):801–6
Small hepatocellular carcinoma and cavernous hemangioma: differentiation with dynamic FLASH MR imaging with Gd-DTPA. Yoshida H, et al. Radiology 1989 May; 171(2):339–42
Clinical evaluation of a motion compensated double echo sequence in MRI of the brain. Marchal G, et al. ROFO 1989 Apr;150(4):442–8
Magnetic resonance in cartilaginous lesions of the knee joint with three-dimensional gradient-echo imaging. Reiser MF, et al. Skeletal Radiol 1988;17(7):465–71
"Angiography" by magnetic resonance imaging: detailed vascular anatomy without ionizing radiation or contrast media. Rapp JH, et al. Surgery 1989 May;105(5):662–7
Magnetic resonance microscopy of chick embryos in ovo. Effmann EL, et al. Teratology 1988 Jul;38(1):59–65
Expression forms and characteristics of Carr-Purcell-Meiboom-Gill sequence magnetic resonance images. Yamada S, et al. Tohoku J Exp Med 1989 Mar; 157(3):185–92
[Magnetic resonance imaging in the diagnosis of adrenal pathology] Leroy-Willig A, et al. Ann Endocrinol (Paris) 1988;49(4–5):337–9 (3 ref.) (Eng. Abstr.) (Fre)
[The STIR sequence. Comparison with other MRI sequences and scintigraphy in detecting spinal metastases] Laissy JP, et al. Ann Radiol (Paris) 1989;32(3):178–85 (Eng. Abstr.) (Fre)
[Detection of recent myocardial infarction by spin-echo MRI. Value of the third echo (published erratum appears in Arch Mal Coeur 1988 Sep;81(9):following 1140)] Kastler B, et al. Arch Mal Coeur 1988 Aug;81(8):963–71 (27 ref.) (Eng. Abstr.) (Fre)
[Magnetic resonance imaging of the prostate. The value of imaging calculated in T1 and T2. Preliminary experience: 28 case reports] Gevenois PA, et al. J Belge Radiol 1988; 71(2):183–8 (Eng. Abstr.) (Fre)
[Segmentation of MR tomograms for quantitative volume estimation] Imme M, et al. Digitale Bilddiagn 1988 Sep; 8(3):103–9 (Eng. Abstr.) (Ger)
[A new multislice gradient echo sequence for magnetic resonance tomography of the liver] Sander B, et al. Digitale Bilddiagn 1989 Mar;9(1):5–11 (Eng. Abstr.) (Ger)
[ECG-triggered magnetic resonance tomographic measurement of blood flow velocity in the carotid arteries: comparison with duplex sonography] Seiderer M, et al. Digitale Bilddiagn 1988 Sep;8(3):110–4 (Eng. Abstr.) (Ger)
[Indications for magnetic resonance tomography] Schörner W, et al. Dtsch Med Wochenschr 1989 Aug 18; 114(33):1248–52 (10 ref.) (Ger)
[Nuclear magnetic resonance tomography: better images with contrast media. Contrast caused by paramagnetic properties—also imaging of the abdomen] Schwing C. Fortschr Med 1988 Sep 20;106(27):74–5 (Ger)
[Pelvimetry with magnetic resonance tomography] Dudenhausen JW, et al. Geburtshilfe Frauenheilkd 1989 May;49(5):477–80 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of the locomotor system with rapid image sequences] Glückert K, et al. Orthopade 1989 Feb;18(1):53–65 (Eng. Abstr.) (Ger)
[Acute hip pain in the adult—assessment by magnetic resonance tomography] Grimm J, et al. Orthopade 1989 Feb;18(1):24–33 (45 ref.) (Eng. Abstr.) (Ger)
[NMR tomography of the cartilage structures of the knee joint with 3D-volume imaging combined with a rapid optical-imaging computer] Adam G, et al. ROFO 1989 Jan;150(1):44–8 (Eng. Abstr.) (Ger)
[A simplified technic in high-resolution MR tomography of the shoulder: ZEPRA (Zoom of Eccentric Positioned Regions by active Aliasing)] Bongartz G, et al. ROFO 1989 Apr;150(4):421–4 (Eng. Abstr.) (Ger)
[Improvement of MR tomography of the liver using a multislice gradient echo sequence] Hamm B, et al. ROFO 1989 Mar;150(3):307–15 (Eng. Abstr.) (Ger)
[Dynamic MR tomography of intrahepatic tumors] Hamm B, et al. ROFO 1989 Apr;150(4):434–41 (Eng. Abstr.) (Ger)
[NMR tomography with gadolinium-DTPA of the trunk in pediatric oncology] Kahn T, et al. ROFO 1989 May; 150(5):592–7 (Eng. Abstr.) (Ger)
[NMR tomography of the shoulder joint: clinical experiences with the saturation pulse technic] König H, et al. ROFO 1989 Feb;150(2):205–10 (Eng. Abstr.) (Ger)
[High-resolution MR tomography of the hand: normal anatomy] Krahe T, et al. ROFO 1989 Apr;150(4):417–20 (Eng. Abstr.) (Ger)
[Quantitative volumetric determinations on MR tomograms in communicating hydrocephalus] Langkowski JH, et al. ROFO 1989 Feb;150(2):125–9 (Eng. Abstr.) (Ger)
[Gd-DTPA-supported magnetic resonance tomographic perfusion follow-up of shockwave-treated tumors] Naegele M, et al. ROFO 1989 May;150(5):602–5 (Eng. Abstr.) (Ger)
[Experimental determination of weighting functions in magnetic resonance tomography] Schmidt D, et al. ROFO 1989 Jul;151(1):97–102 (Eng. Abstr.) (Ger)
[MRT of extracranial hematomas at 1.5 T using spin echo and gradient echo sequences] Spielmann RP, et al. ROFO 1989 Apr;150(4):449–53 (Eng. Abstr.) (Ger)
[Results of magnetic resonance tomography of the temporomandibular joint using optimized surface coils] Vogl T, et al. ROFO 1988 Nov;149(5):502–7 (Eng. Abstr.) (Ger)
[Technic and clinical benefit of respiratory gating in magnetic resonance tomography] Heintz P, et al. Roentgenpraxis 1988 Sep;41(9):305–10 (Ger)
[Magnetic resonance tomography of meniscopathies using 3DFT (3-Dimensional Fourier Transform) and a secondary reconstruction technic] Skalej M, et al. Roentgenpraxis 1988 Nov;41(11):395–9 (Ger)
[1.5-T MR of the knee: the correlations with arthroscopy] Cerofolini E, et al. Radiol Med (Torino) 1989 May; 77(5):451–60 (Eng. Abstr.) (Ita)
[Optimization of the technic in the study of the upper abdomen using magnetic resonance. I. Artifact reduction] Pavone P, et al. Radiol Med (Torino) 1989 Jun;77(6):613–20 (Eng. Abstr.) (Ita)
[MRI and MRS in the diagnosis of cancer] Itai Y. Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 2):639–45 (15 ref.) (Eng. Abstr.) (Jpn)
[3-Dimensional reconstruction of whole heart from MRI data] Eiho S, et al. Iyodenshi To Seitai Kogaku 1988 Jun; 26(2):98–105 (Eng. Abstr.) (Jpn)
[Quantitative analysis of multiple spin echo MRI of normal human orbit] Nose H, et al. Nippon Ganka Gakkai Zasshi 1988 Nov;92(11):1859–63 (Eng. Abstr.) (Jpn)
[MR imaging of the bone marrow using short TI IR. Part 1—Normal and pathological intensity distribution of the bone marrow] Ishizaka H, et al. Nippon Igaku Hoshasen Gakkai Zasshi 1989 Feb 25; 49(2):128–33 (Eng. Abstr.) (Jpn)
[MR imaging of the bone marrow using short TI IR. Part 2—Normal and pathological intensity distribution of the bone marrow] Ishizaka H, et al. Nippon Igaku Hoshasen Gakkai Zasshi 1989 Feb 25; 49(2):134–8 (Eng. Abstr.) (Jpn)
[The usefulness of motion artifact suppression technic (MAST) in the MRI diagnosis of liver tumors] Hirohashi S, et al. Rinsho Hoshasen 1989 May;34(5):591–7 (Eng. Abstr.) (Jpn)
[The clinical application of ultra-low field (0.02 T) MRI for the diagnosis of lung tumors] Nakayama Y, et al. Rinsho Hoshasen 1989 Jan;34(1):19–25 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of the anterior neck (normal study)—using a surface coil] Noma S, et al. Rinsho Hoshasen 1988 Jul;33(7):751–5 (Eng. Abstr.) (Jpn)
[Multislice fast imaging technique for postcontrast MR brain examination] Schörner W, et al. Rinsho Hoshasen 1988 Dec; 33(13):1659–66 (Eng. Abstr.) (Jpn)
[Imaging technics for MRI] Yoshikawa K. Rinsho Hoshasen 1988 Oct;33(11):1211–7 (Jpn)

STANDARDS

Human error limits MRI's quality potential. Souhrada L. Hospitals 1989 May 20;63(10):38
The quality of magnetic resonance imaging, as affected by the composition of the halo orthosis. A brief note. Ballock RT, et al. J Bone Joint Surg [Am] 1989 Mar;71(3):431–4

SUPPLY & DISTRIBUTION

Misleading statistics [letter] Rao TN. Minn Med 1989 Aug; 72(8):449

MAGNETIC RESONANCE SPECTROSCOPY see NUCLEAR MAGNETIC RESONANCE

MAGNETICS

Comparison between electric evoked potentials, source dipole components and magnetic evoked fields elicited by noise/square-wave stimuli. Joutsiniemi SL. Acta Neurol Scand 1988 Oct;78(4):337–45
Superparamagnetic particles as an MRI contrast agent for the gastrointestinal tract. Lönnemark M, et al. Acta Radiol 1988 Sep-Oct;29(5):599–602
Effect of superparamagnetic particles as oral contrast medium at magnetic resonance imaging. A phase I clinical study. Lönnemark M, et al. Acta Radiol 1989 Mar-Apr; 30(2):193–6
Magnetite and magnetotaxis in microorganisms. Frankel RB, et al. Adv Exp Med Biol 1988;238:321–30
Magnetic susceptibility artifacts in gradient-recalled echo MR imaging. Czervionke LF, et al. AJNR 1988 Nov-Dec; 9(6):1149–55
Units and formulas in magnetism [letter] Jehenson P. AJR 1988 Dec;151(6):1249–50
Re: "Acute Nonlymphocytic Leukemia and Residential Exposure to Power-Frequency Magnetic Fields". Wertheimer N, et al. Am J Epidemiol 1989 Aug; 130(2):423–7
Pacemaker endless loop tachycardia: termination by simple techniques other than magnet application. Barold SS, et al. Am J Med 1988 Dec;85(6):817–22
The use of magnets to move molars distally. Gianelly AA, et al. Am J Orthod Dentofacial Orthop 1989 Aug; 96(2):161–7
Effects of a fixed magnetic appliance on the dentofacial complex. Kalra V, et al. Am J Orthod Dentofacial Orthop 1989 Jun;95(6):467–78
Functional orthopedic magnetic appliance (FOMA) II—modus operandi. Vardimon AD, et al. Am J Orthod Dentofacial Orthop 1989 May;95(5):371–87
Magnetic stimulation of the facial nerve. Kaneush JM, et al. Am J Otol 1989 Jan;10(1):14–9
Effect of a 1.5 Tesla magnetic field on Greenfield filters in vitro and in dogs. Williamson MR, et al. Angiology 1988 Dec;39(12):1022–4
Magnetized forceps for metallic corneal foreign bodies [letter] Arnold RW, et al. Arch Ophthalmol 1988 Nov; 106(11):1502
Low-frequency magnetic field technology: quantifying spinal range of motion. Cohn ML, et al. Arch Phys Med Rehabil 1989 Jun;70(6):455–7

The magnetic properties of the nickel cofactor F430 in the enzyme methyl-coenzyme M reductase of Methanobacterium thermoautotrophicum. Cheesman MR, et al. **Biochem J** 1989 Jun 1;260(2):613–6
Analysis of electric and magnetic fields leaking from induction heaters. Andreuccetti D, et al. **Bioelectromagnetics** 1988;9(4):373–9
Lack of effects from 2000-Hz magnetic fields on mammary adenocarcinoma and reproductive hormones in rats. Baumann S, et al. **Bioelectromagnetics** 1989;10(3):329–33
Resonant ac–dc magnetic fields: calculated response. Durney CH, et al. **Bioelectromagnetics** 1988;9(4):315–36
Magnetite and magnetotaxis in microorganisms. Frankel RB, et al. **Bioelectromagnetics** 1989;10(3):223–37 (40 ref.)
On the cyclotron resonance mechanism for magnetic field effects on transmembrane ion conductivity. Halle B. **Bioelectromagnetics** 1988;9(4):381–5
Magnetite biomineralization and geomagnetic sensitivity in higher animals: an update and recommendations for future study. Kirschvink JL. **Bioelectromagnetics** 1989; 10(3):239–59 (118 ref.)
Magnetic fields and time dependent effects on development. Martin AH. **Bioelectromagnetics** 1988;9(4):393–6
Exposure of mammalian cells to 60-Hz magnetic or electric fields: analysis for DNA single-strand breaks. Reese JA, et al. **Bioelectromagnetics** 1988;9(3):237–47
Lithium as a normal metabolite: some implications for cyclotron resonance of ions in magnetic fields. Smith RF. **Bioelectromagnetics** 1988;9(4):387–91 (17 ref.)
Conditioning analysis of magnetoreception in honeybees. Walker MM, et al. **Bioelectromagnetics** 1989;10(3):261–75 (45 ref.)
Biomagnetic functional localization of a peripheral nerve in man. Trahms L, et al. **Biophys J** 1989 Jun;55(6):1145–53
Single fibre motor evoked potentials to brain, spinal roots and nerve stimulation. Comparisons of the 'central' and 'peripheral' response jitter to magnetic and electric stimuli. Zarola F, et al. **Brain Res** 1989 Aug 28;495(2):217–24
Effects on media materials of storage in proximity to a magnetic resonance imaging scanner. Kittle PW. **Bull Med Libr Assoc** 1989 Jan;77(1):67–9
Effect of a pulsed magnetic field on tumoral C3H/Bi female mice. Bellossi A, et al. **Cancer Biochem Biophys** 1988 Jul; 10(1):59–66
Removal of broken fragment of biopsy forceps with magnetic extractor. Saito H, et al. **Chest** 1989 Mar;95(3):700–1
Runaway pacemaker: a still existing complication and therapeutic guidelines. Mickley H, et al. **Clin Cardiol** 1989 Jul;12(7):412–4
Effect of pH on the nuclear magnetic resonance relaxivity of encapsulated solid paramagnetic substances. Braybrook JH, et al. **Drug Des Deliv** 1989 Mar;4(2):93–5
An analysis of peripheral motor nerve stimulation in humans using the magnetic coil. Maccabee PJ, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):524–33
Dependence of the MEG on dipole orientation in the rabbit head. Melcher JR, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov; 70(5):460–72
Early deflections of cerebral magnetic responses to median nerve stimulation. Tiihonen J, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul–Aug; 74(4):290–6
Effect of static magnetic field on cellular metabolism in the living mouse. Feinendegen LE, et al. **Endeavour** 1988; 12(3):119–23
Magnetocardiographic studies of ventricular repolarization in old inferior myocardial infarction. Nomura M, et al. **Eur Heart J** 1989 Jan;10(1):8–15
Stability of magnetic versus mechanical palatal expansion. Vardimon AD, et al. **Eur J Orthod** 1989 May;11(2):107–15
Magnetopneumography: a general review. Le Gros V, et al. **Eur Respir J** 1989 Feb;2(2):149–59 (46 ref.)
Focal stimulation of human peripheral nerve with the magnetic coil: a comparison with electrical stimulation. Amassian VE, et al. **Exp Neurol** 1989 Mar;103(3):282–9
Sorting of chromosomes by magnetic separation. Dudin G, et al. **Hum Genet** 1988 Oct;80(2):111–6
MCG inverse solution: influence of coil size, grid size, number of coils, and SNR. Abraham-Fuchs K, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):573–6
Method for locating a small magnetic object in the human body. Ilmoniemi RJ, et al. **IEEE Trans Biomed Eng** 1988 Jul;35(7):561–4
Magnetic measurements of cardiac mechanical activity. Maniewski R, et al. **IEEE Trans Biomed Eng** 1988 Sep; 35(9):662–70
Estimation of the energy of cytoplasmic movements by magnetometry: effects of temperature and intracellular concentration of ATP. Nemoto I, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):598–607
Effect of torso boundaries on electric potential and magnetic field of a dipole. Purcell CJ, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):671–8
A magneto-acoustic method for the noninvasive measurement of bioelectric currents. Towe BC, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):892–4
A study of magnetic field in the lung of workers in an asbestos factory. Weng XT, et al. **Ind Health** 1989;27(1):9–15
Magnetic intra ocular foreign bodies in the posterior segment. Ittyerah TP. **Indian J Ophthalmol** 1987 May–Jun; 35(3):129–31
The intraocular magnet in clinical use. Rajendran B, et al. **Indian J Ophthalmol** 1987;35(5–6):416–7
Biomagnetic measurements in uterine leiomyomas using a superconducting quantum interference device (SQUID). Anastasiadis PG, et al. **Int J Gynaecol Obstet** 1989 May; 29(1):47–9
Short-term effect of exposure to intense magnetic fields on hematologic indices of bone metabolism. Papatheofanis FJ, et al. **Invest Radiol** 1989 Mar;24(3):221–3
Magnetization and electron paramagnetic resonance studies of reduced uteroferrin and its "EPR-silent" phosphate complex. Day EP, et al. **J Biol Chem** 1988 Oct 25; 263(30):15561–7
Magnetically controlled release systems: effect of polymer composition. Kost J, et al. **J Biomed Mater Res** 1985 Oct; 19(8):935–40
Effect of static magnetic field on some enzymes activities in rats. Gorczyńska E, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):149–55
Isolation of pure villous cytotrophoblast from term human placenta using immunomagnetic microspheres. Douglas GC, et al. **J Immunol Methods** 1989 May 12;119(2):259–68
Immunometric assay for lutropin (hLH) based on the use of universal reagents for enzymatic labelling and magnetic separation and monitored by enhanced chemiluminescence. Pazzagli M, et al. **J Immunol Methods** 1988 Nov 10; 114(1–2):61–8
Paramagnetic microspheres as immunological markers for light and electron microscopy. Rana MT, et al. **J Immunol Methods** 1988 Dec 9;115(2):209–17
External magnetic guidance of endovascular catheters with a superconducting magnet: preliminary trials. Experimental studies in dogs and prospects of application. Gaston A, et al. **J Neuroradiol** 1988;15(2):137–47 **(Eng, Fre)**
System for detecting central ray in dental radiography using a magnetic sensor. Arai Y, et al. **J Nihon Univ Sch Dent** 1988 Jun;30(2):134–40
The interaction of a magnetically retained denture with osseointegrated implants. Highton R, et al. **J Prosthet Dent** 1988 Oct;60(4):486–90
An investigation of two rare earth magnetic systems by measuring grip force and rescating force. Lewandowski JA, et al. **J Prosthet Dent** 1988 Dec;60(6):705–11
Retention magnets in guiding plates of distal-extension removable partial dentures. Pezzoli M, et al. **J Prosthet Dent** 1988 Nov;60(5):577–82
Conversion of a conventional attachment to magnets. Tautin FS. **J Prosthet Dent** 1988 Aug;60(2):257
Thermal dose-response of magnetic-induction thermoradiotherapy. Storm FK, et al. **J Surg Oncol** 1988 Oct;39(2):79–83
Clinical applications of adjustable magnetic blunt-tip needle. Hou SK. **J Tradit Chin Med** 1988 Dec;8(4):239–42
Further observations on the therapeutic effect of magnets and magnetized water against ascariasis in children—analysis of 114 cases. Wu J. **J Tradit Chin Med** 1989 Jun;9(2):111–2
Magnetically controlled targeted micro-carrier systems. Gupta PK, et al. **Life Sci** 1989;44(3):175–86 (110 ref.)
Transverse relaxation rate enhancement caused by magnetic particulates. Hardy PA, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):265–75
Biological effects of magnetic fields: chronic exposure of the nematode Panagrellus redivivus. Peeling J, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):655–60
Phase alterations of spin echoes by motion along magnetic field gradients. Wendt RE 3d, et al. **Magn Reson Med** 1985 Dec;2(6):527–33
High-resolution magnetic mapping of PR-interval phenomena of normal subjects. ten Voorde BJ, et al. **Med Biol Eng Comput** 1988 Mar;26(2):130–5
Nucleic acid sandwich hybridization: enhanced reaction rate with magnetic microparticles as carriers. Jungell-Nortamo A, et al. **Mol Cell Probes** 1988 Dec;2(4):281–8
Abstracts of free communications: the AAEE/AEEGS Joint Symposium on Somatosensory Evoked Potentials and Magnetic Stimulation. San Diego, California, October 5, 1988. **Muscle Nerve** 1988 Sep;11(9):985–97
The utility of magnetic stimulation for routine peripheral nerve conduction studies. Evans BA, et al. **Muscle Nerve** 1988 Oct;11(10):1074–8
Preferential activation of muscle fibers with peripheral magnetic stimulation of the limb. Lotz BP, et al. **Muscle Nerve** 1989 Aug;12(8):636–9
Magnetic separation of DNA. Uhlen M. **Nature** 1989 Aug 31;340(6236):733–4
Cellulose biogenesis in bacteria and higher plants is disrupted by magnetic fields. Gretz MR, et al. **Naturwissenschaften** 1989 Aug;76(8):380–3
Magnetic-field-induced changes in the human auditory evoked potentials [published erratum appears in Naturwissenschaften 1989 Feb;76(2):85] Stojan L, et al. **Naturwissenschaften** 1988 Dec;75(12):622–3
Transcranial magnetic stimulation: an assessment of cognitive and other cerebral effects. Bridgers SL, et al. **Neurology** 1989 Mar;39(3):417–9
Magnetic DNA affinity purification of yeast transcription factor tau—a new purification principle for the ultrarapid isolation of near homogeneous factor. Gabrielsen OS, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6253–67
Removal of corneal foreign bodies with ocular magnet [letter] Weiss JS, et al. **Ophthalmic Surg** 1989 May;20(5):378–9
Magnetically evoked facial nerve potential. Windmill IM, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):345–7
The mathematical framework essential for magneto-therapy in the treatment of genomic and associated disorders, including cancer, AIDS, and CNS regeneration. Jacobson JI. **Panminerva Med** 1989 Jan–Mar;31(1):1–7
Geophysical variables and behavior: XXXIII. Onsets of historical and contemporary poltergeist episodes occurred with sudden increases in geomagnetic activity. Gearhart L, et al. **Percept Mot Skills** 1986 Apr;62(2):463–6
Receptor-mediated magnetic carriers: basis for targeting. Gallo JM, et al. **Pharm Res** 1988 May;5(5):300–4
Two magnetic methods for articulatory measurements. Panagos G, et al. **Phonetica** 1987;44(4):197–209
Isolation of human extravillous trophoblast cells by attachment to laminin-coated magnetic beads. Loke YW, et al. **Placenta** 1989 Jul–Aug;10(4):407–15
Magnetic localization of neuronal activity in the human brain. Yamamoto T, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8732–6
Hepatic iron stores in thalassemia: non-invasive magnetic measurements. Brittenham GM, et al. **Prog Clin Biol Res** 1989;309:101–6
Power frequency magnetic field; depressive illness and myocardial infarction. Perry S, et al. **Public Health** 1989 May;103(3):177–80
A review of the epidemiologic literature on magnetic fields and cancer. Ahlbom A. **Scand J Work Environ Health** 1988 Dec;14(6):337–43 (36 ref.)
Changes in the activity of erythrocyte glutathione peroxidase associated with magnetic fields. Braven J, et al. **Sci Total Environ** 1988 Jul 15;73(3):267–8
Teratological assessment of exposure to time-varying magnetic field. Stuchly MA, et al. **Teratology** 1988 Nov; 38(5):461–6
MHC fully allogeneic bone transplantation after physical T-cell depletion with magnetic microspheres (MAMIS). Leyhausen G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2943–6
Magnetic microspheres (MMS) coupled to selective lectins: a new tool for large-scale extraction and purification of human pancreatic islets. Winoto-Morbach S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2628–30
Magnetic extraction of intravesical foreign body. Wise KL, et al. **Urology** 1989 Jan;33(1):62–3
[Extraction magnets in ophthalmology] Kavan P, et al. **Cesk Oftalmol** 1989 Feb;45(1):39–44 (Eng. Abstr.) **(Cze)**
[Permanent manual magnets in microsurgery of the eye] Novák J, et al. **Cesk Oftalmol** 1989 Feb;45(1):50–5 (Eng. Abstr.) **(Cze)**
[Permanent Ormex magnets in clinical practice] Vlková E, et al. **Cesk Oftalmol** 1989 Feb;45(1):45–9 (Eng. Abstr.) **(Cze)**
[On the contribution of magnets in sequelae of facial paralysis. Preliminary clinical study] Fombeur JP, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):397–402 (Eng. Abstr.) **(Fre)**
[Estimation of pulmonary dust load using magnetic pneumography] Le Gros V, et al. **Rev Mal Respir** 1988; 5(6):601–8 (Eng. Abstr.) **(Fre)**
[Cervical magnetic stimulation. A new method of bilateral phrenic nerve stimulation for use in clinical practice] Similowski T, et al. **Rev Mal Respir** 1988;5(6):609–14 (Eng. Abstr.) **(Fre)**
[Effect of static magnetic fields on the acoustic action potential of the cochlea in guinea pigs] Tausch-Treml R, et al. **Naturwissenschaften** 1989 Mar;76(3):114–7 (Eng. Abstr.) **(Ger)**
[Development of the direct current-superconducting quantum interference device and its application to the diagnosis of brain functions] Kado H, et al. **Nippon Rinsho** 1988 Jul;46(7):1630–6 (9 ref.) **(Jpn)**
[Targeting of magnetically responsive drug carriers to cancer] Morimoto Y, et al. **Nippon Rinsho** 1989 Jun; 47(6):1432–6 **(Jpn)**
[Motor and cortical sensory evoked potentials by magnetic stimulation] Tsuji S, et al. **No To Hattatsu** 1989 Mar; 21(2):145–51 (Eng. Abstr.) **(Jpn)**
[Biokinetics of magnetic carriers for directed transport of drugs] Papisov MI, et al. **Antibiot Khimioter** 1988 Oct; 33(10):744–51 (Eng. Abstr.) **(Rus)**
[Prediction of the biological effect of magnetically regulated drugs] Papisov MI, et al. **Antibiot Khimioter** 1988 Oct; 33(10):751–7 (Eng. Abstr.) **(Rus)**
[Effect of temperature and pH on magnetic properties of human erythrocytes] Shalygin AN, et al. **Biofizika** 1988 May–Jun;33(3):529–30 (Eng. Abstr.) **(Rus)**
[Hysteresis behavior of complex I in delta mu H+-dependent reduction of NAD+ succinate] Kotliar AB, et al. **Biokhimiia** 1989 Jan;54(1):9–16 (Eng. Abstr.) **(Rus)**
[Dynamics of the excitability of the cardiovascular centers in changes in disturbances of the geomagnetic field] Kuz'menko VA. **Fiziol Cheloveka** 1988 Jan–Feb; 14(1):160–2 **(Rus)**
[Working conditions in manufacturing stable magnets using the powder metallurgy method] Dubeikovskaia LS, et al. **Gig Tr Prof Zabol** 1989;(6):17–9 (Eng. Abstr.) **(Rus)**
[Determination of the nucleic acids in pig embryonic kidney cells by magnetic cytaphoresis] Chikov VM, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):294–7 (Eng. Abstr.) **(Rus)**

[Possibilities of using implanted elastic magnetic elements in reconstructive operations on the abdominal aorta and its branches] Volkolakov IaV, et al. **Kardiologiia** 1988 Jun; 28(6):85–9 (Eng. Abstr.) **(Rus)**

[The effect on the liver of a semiconductor IR laser with a constant magnetic field] Mikaelian NP, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):85–8 (Eng. Abstr.) **(Rus)**

[Effect of permanent magnetic fields on the regeneration of the tail in amphibian larvae] Kudokotsev VP, et al. **Ontogenez** 1988 Sep–Oct;19(5):508–12 (Eng. Abstr.) **(Rus)**

[Changes in the neuronal activity of the nodose ganglion under the action of a traveling pulsed magnetic field in animals with various arterial pressure levels] Mikhallova SD, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):65–7 (Eng. Abstr.) **(Rus)**

[Effect of an infra–low frequency magnetic field on nerve cell resistance to hypoxia] Vlasova IG, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun;(3):17–21 (Eng. Abstr.) **(Rus)**

[Combined effect of a constant magnetic field and ionizing radiation] Shein VI. **Radiobiologiia** 1988 Sep–Oct; 28(5):703–6 (Eng. Abstr.) **(Rus)**

[Use of magnets for improving the fixation of removable plate dentures] Dolnikov AI, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):61–2 (Eng. Abstr.) **(Rus)**

[Magnetopuncture therapy of patients with chronic alcoholism] Tabeeva DM. **Ter Arkh** 1989;61(1):104–7 **(Rus)**

[Treatment of short urethral strictures in children using magnets] Stepanov EA, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):8–11 (Eng. Abstr.) **(Rus)**

[The geomagnetic field and the human body] Raevskaia OS. **Usp Fiziol Nauk** 1988 Oct–Dec;19(4):91–108 (114 ref.) **(Rus)**

[The effect of magnetoregulated microfields on Treponema pallidum. 2] Milich MV, et al. **Vestn Dermatol Venerol** 1989; (2):23–7 (Eng. Abstr.) **(Rus)**

[The effect of micro–fields of magnetically ordered media on Treponema pallidum] Milich MV, et al. **Vestn Dermatol Venerol** 1989;(3):20–6 (Eng. Abstr.) **(Rus)**

[Effect of microfields of magnetically aligned media on Treponema pallidum. 1] Milich MV, et al. **Vestn Dermatol Venerol** 1989;(1):29–34 (Eng. Abstr.) **(Rus)**

[The potentials of early magnetotherapy following gynecologic surgery using cyanoacrylate glue] Arslanian KN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):53–4 **(Rus)**

[Experience with the use of an ultrahigh–frequency alternating magnetic field in periodontitis] Efanov OI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):47–9 **(Rus)**

[Low–frequency magnetotherapy in the rehabilitative treatment of patients with nonspecific lung diseases] Krupennikov AI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):26–31 **(Rus)**

[Use of a low–frequency magnetic field in the combined treatment of middle–aged and elderly patients with ischemic heart disease and osteochondrosis of the cervico–thoracic spine] Sorokina EI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):18–22 (Eng. Abstr.) **(Rus)**

[Possible acquisition of positive and inhibitory conditioned reflexes to an alternating magnetic field in rats] Partskhaladze NN. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct; 38(5):969–70 **(Rus)**

ADVERSE EFFECTS

Stereo speaker silences automatic implantable cardioverter–defibrillator [letter] Karson TH, et al. **N Engl J Med** 1989 Jun 15;320(24):1628–9

INSTRUMENTATION

Magnetic movement of a brain thermoceptor. Howard MA, et al. **Neurosurgery** 1989 Mar;24(3):444–8

[Videomagnetic recording during phleboscopy of the lower extremities (videophlebography) and its diagnostic value in varicose disease] Khachkuruzov SG, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):27–9 (Eng. Abstr.) **(Rus)**

MAGNETOENCEPHALOGRAPHY

Neocortical propagation in temporal lobe spike foci on magnetoencephalography and electroencephalography. Sutherling WW, et al. **Ann Neurol** 1989 Apr;25(4):373–81

Magnetoencephalography. Applications in psychiatry. Reeve A, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):573–6 (41 ref.)

Late auditory magnetic sources may differ in the left hemisphere of schizophrenic patients. A preliminary report. Reite M, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):565–72

Magnetic fields from the auditory cortex of a deaf human individual occurring spontaneously or evoked by stimulation through a cochlear prosthesis. Hoke M, et al. **Audiology** 1989;28(3):152–70 (22 ref.)

Dependence of the MEG on dipole orientation in the rabbit head. Melcher JR, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov; 70(5):460–72

Subdural electrode as a dipole source for magnetoencephalography. Rose DF, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):86–90

Objective evidence of tinnitus in auditory evoked magnetic fields. Hoke M, et al. **Hear Res** 1989 Feb;37(3):281–6

The influence of model parameters on EEG/MEG single dipole source estimation. Stok CJ. **IEEE Trans Biomed Eng** 1987 Apr;34(4):289–96

Localization and cure of epileptic foci with the use of MEG measurements. Anninos PA, et al. **Int J Neurosci** 1989 Jun; 46(3–4):235–42

The magnetic and electric fields agree with intracranial localizations of somatosensory cortex. Sutherling WW, et al. **Neurology** 1988 Nov;38(11):1705–14

On the effects on source localisation of volume currents in neuroelectric and neuromagnetic signals. Mondt JP. **Phys Med Biol** 1989 Aug;34(8):1073–88

Recording and interpretation of cerebral magnetic fields. Hari R, et al. **Science** 1989 Apr 28;244(4903):432–6 (21 ref.)

[Pre– and postoperative quantitative flow measurements (electromagnetic and sonographic) in the assessment of surgical results in carotid stenoses] Walter P, et al. **Vasa Suppl** 1988;23:238–40 **(Ger)**

INSTRUMENTATION

Magnetoencephalography. Sato S, et al. **J Clin Neurophysiol** 1985 Apr;2(2):173–92 (100 ref.)

METHODS

Spatial filtering in multichannel magnetoencephalography. Nicolas P, et al. **J Biomed Eng** 1989 Jan;11(1):79–86

Magnetism. A new method for stimulation of nerve and brain [clinical conference] Hallett M, et al. **JAMA** 1989 Jul 28; 262(4):538–41

Relative influence of model assumptions and measurement procedures in the analysis of the MEG. Meijs JW, et al. **Med Biol Eng Comput** 1988 Mar;26(2):136–42

MAGNETOMETRY see **MAGNETICS**

MAIC see **MYCOBACTERIUM AVIUM COMPLEX**

MAILLARD REACTION

Chemistry of Maillard reactions: recent studies on the browning reaction mechanism and the development of antioxidants and mutagens. Namiki M. **Adv Food Res** 1988; 32:115–84 (295 ref.)

Nutritional and toxicological aspects of the Maillard browning reaction in foods. O'Brien J, et al. **Crit Rev Food Sci Nutr** 1989;28(3):211–48 (312 ref.)

Re: Aminoguanidine inhibits 3–deoxyglucosone during the advanced Maillard reaction [letter] Oimomi M, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):311–3

Relationship between levels of advanced–stage products of the Maillard reaction and the development of diabetic retinopathy. Oimomi M, et al. **Exp Eye Res** 1989 Aug; 49(2):317–20

Effect of storage on mutagenicity, absorbance and content of furfural in the ribose–lysine maillard system. Cuzzoni MT, et al. **Food Chem Toxicol** 1989 Apr;27(4):209–13

Influence of water activity and reaction temperature of ribose–lysine and glucose–lysine Maillard systems on mutagenicity, absorbance and content of furfurals. Cuzzoni MT, et al. **Food Chem Toxicol** 1988 Oct;26(10):815–22

Toxicological effects of dietary Maillard reaction products in the rat. O'Brien J, et al. **Food Chem Toxicol** 1988 Sep; 26(9):775–83

Aging of proteins: immunological detection of a glucose–derived pyrrole formed during maillard reaction in vivo. Hayase F, et al. **J Biol Chem** 1989 Mar 5; 264(7):3758–64

Thermospray high–performance liquid chromatographic–mass spectrometric characterization of biological macromolecules. I. Analysis of acid hydrolysate of peptides. Chen TM, et al. **J Chromatogr** 1989 Jan 20; 463(1):95–106

Relationship between diabetic complications and advanced–stage products of the Maillard reaction. Oimomi M, et al. **Kobe J Med Sci** 1988 Aug;34(4):171–7

Quantification of glycation–induced browning in lens crystallins. A simple method for studying the advanced products of the Maillard reaction. Vidal P, et al. **Ophthalmic Res** 1989;21(3):261–7

The Maillard reaction in aging, diabetes, and nutrition. Proceedings of an NIH conference. Bethesda, Maryland, September 22–23, 1988. Dedicated to John E. Hodge on the occasion of his 75th birthday. **Prog Clin Biol Res** 1989; 304:1–410

The Amadori product on protein: structure and reactions. Baynes JW, et al. **Prog Clin Biol Res** 1989;304:43–67 (74 ref.)

Pharmacological modulation of the advanced glycosylation reaction. Brownlee M. **Prog Clin Biol Res** 1989;304:235–48 (38 ref.)

Metabolic transit and toxicity of Maillard reaction products. Finot PA, et al. **Prog Clin Biol Res** 1989;304:343–58 (35 ref.)

The Maillard reaction in foods. Kaanane A, et al. **Prog Clin Biol Res** 1989;304:301–27 (57 ref.)

3–Deoxyglucosone, an intermediate product of the Maillard reaction. Kato H, et al. **Prog Clin Biol Res** 1989;304:69–84

Chemical pathways of the Maillard reaction. Ledl F, et al. **Prog Clin Biol Res** 1989;304:23–42 (55 ref.)

Nonenzymatic glycosylation of DNA by reducing sugars. Lee AT, et al. **Prog Clin Biol Res** 1989;304:291–9

Toward a Maillard reaction theory of aging. Monnier VM. **Prog Clin Biol Res** 1989;304:1–22 (99 ref.)

The chemistry of the Maillard reaction under physiological conditions: a review. Njoroge FG, et al. **Prog Clin Biol Res** 1989;304:85–107 (84 ref.)

Effect of Maillard reaction products on protein digestion. Oste R. **Prog Clin Biol Res** 1989;304:329–42

Genotoxicity testing of Maillard reaction products. Shibamoto T. **Prog Clin Biol Res** 1989;304:359–76 (46 ref.)

Nonenzymatic browning of proteins and the sorbitol pathway. Suarez G. **Prog Clin Biol Res** 1989;304:141–62 (45 ref.)

[Maillard reaction of bovine serum albumin with glucose. Determination of 2–formyl–5–(hydroxymethyl)pyrrole–1–norleucine by high–performance liquid chromatography after alkaline hydrolysis] Sengl M, et al. **J Chromatogr** 1989 Jan 20; 463(1):119–25 (Eng. Abstr.) **(Ger)**

[The Maillard reaction. 18. Radical inhibition of browning by sulfur compounds] Kroh L, et al. **Z Lebensm Unters Forsch** 1989 Feb;188(2):115–7 (Eng. Abstr.) **(Ger)**

[Mutagenic activity of browning in model systems with three components] Gazzani G, et al. **Farmaco [Prat]** 1988 Apr; 43(4):149–56 (Eng. Abstr.) **(Ita)**

[Nonenzymatic glycosylation (the Maillard reaction) in the body] Virovets OA. **Vopr Pitan** 1988 Sep–Oct;(5):4–9 (45 ref.) **(Rus)**

MAINSTREAMING (EDUCATION)

see related
CHILD, EXCEPTIONAL HANDICAPPED

Mainstreaming and the deaf community [editorial] **Am Ann Deaf** 1988 Dec;133(5):313

Integration of Down's syndrome children in the primary school: a longitudinal study of cognitive development and academic attainments. Casey W, et al. **Br J Educ Psychol** 1988 Nov;58 (Pt 3):279–86

Thoughts from Canada: starting school—emotional considerations. Freeman RD, et al. **Child Care Health Dev** 1989 Jan–Feb;15(1):65–7

Observations on a child with cerebral palsy and her twin sister made in an integrated nursery and at home. Martlew M. **Child Care Health Dev** 1989 May–Jun;15(3):175–94

Thoughts from Sweden: the blind child at nursery school with sighted children. Preisler G, et al. **Child Care Health Dev** 1989 Jan–Feb;15(1):45–52

Thoughts from Scotland: starting school—emotional considerations. Tropp B. **Child Care Health Dev** 1989 Jan–Feb;15(1):53–8

The regular education initiative: patent medicine for behavioral disorders. Braaten S, et al. **Except Child** 1988 Sep;55(1):21–7

Play behavior of hearing impaired children: integrated and segregated settings. Esposito BG, et al. **Except Child** 1989 Feb;55(5):412–9

Evaluation of the adaptive learning environments model. Fuchs D, et al. **Except Child** 1988 Oct;55(2):115–27 (45 ref.)

Parent perceptions of the integration transition process; overcoming artificial barriers. Hanline MF, et al. **Except Child** 1989 Apr;55(6):487–92

Effects of social integration on preschool children with handicaps. Jenkins JR, et al. **Except Child** 1989 Feb; 55(5):420–8

Mathematics achievement of hearing impaired adolescents in different placements. Kluwin TN, et al. **Except Child** 1989 Jan;55(4):327–35

Four fallacies of segregationism. Wang MC, et al. **Except Child** 1988 Oct;55(2):128–46

The chief scientist reports ... the meaning of independent living for people with a mental handicap. Markova I, et al. **Health Bull (Edinb)** 1988 Jul;46(4):246–53

Gaining access to school for the child with a tracheostomy. Grundfast KM, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):101–12

Study of integration strategies. Bauer M. **Int J Rehabil Res** 1987;10(4 Suppl 5):186–90

Attitudes of elementary, middle and high school teachers toward mainstreaming: implications for job satisfaction. Lombardo E, et al. **Int J Rehabil Res** 1987;10(4):405–10

Teacher ratings of behavior in hearing–impaired, orally taught, mainstreamed children. MacLean G. **J Am Acad Child Psychiatry** 1983 May;22(3):217–20

Generalization of student question asking from special class to regular class settings. Knapczyk DR. **J Appl Behav Anal** 1989 Spring;22(1):77–83

Increasing implementation of special education instruction in mainstream preschools: direct and generalized effects of nondirective consultation. Peck CA, et al. **J Appl Behav Anal** 1989 Summer;22(2):197–210

Psychiatric disorders in mainstreamed developmentally disabled adolescents. Myers BA. **J Dev Behav Pediatr** 1988 Aug;9(4):227–8

Mainstreaming children with handicaps: implications for

pediatricians. Walker DK, et al. J Dev Behav Pediatr 1989 Jun;10(3):151–6 (63 ref.)
The social reception of mainstreamed children in the regular classroom. Gillmore JL, et al. J Ment Defic Res 1989 Aug; 33 (Pt 4):301–11
School and the child with acquired immunodeficiency syndrome: the role of the pediatrician. Chadwick EG. Pediatr Infect Dis J 1988 Aug;7(8):531–4
Attitudes toward handicapped peers of mainstreamed and nonmainstreamed children in physical education. Archie VW, et al. Percept Mot Skills 1989 Aug;69(1):319–22
Social acceptance of mentally retarded children in regular schools in relation to years mainstreamed. Brewer N, et al. Psychol Rep 1989 Apr;64(2):375–80
Spina bifida children in ordinary schools: handicap, attainment and behaviour. Tew BJ. Z Kinderchir 1988 Dec; 43 Suppl 2:46–8
[Normal school and medicosocial integration of young handicapped subjects] Guyot JC.
Cah Sociol Demogr Med 1988 Apr–Jun;28(2):111–34 (Fre)
[Handicapped children and children at risk for handicaps in Bavarian integrated kindergartens—initial results of a survey] Hüffner U, et al.
Prax Kinderpsychol Kinderpsychiatr 1989 Feb;38(2):34–41 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

The physician under Public Law 99–457. Bloom AS, et al. J Ky Med Assoc 1989 Jun;87(6):275–9
[Rehabilitation overseas. Integration of handicapped students at American community colleges] Buttlar A.
Rehabilitation (Stuttg) 1988 Nov;27(4):221–7 (Ger)

TRENDS

Recent changes in the educational placement of deaf students. Schildroth A. Am Ann Deaf 1988 Apr;133(2):61–7

MAINTENANCE

Equipment management: the Cinderella of bio–engineering. Whelpton D. J Biomed Eng 1988 Nov;10(6):499–505
Infection control when servicing medical and laboratory equipment. Corner GA, et al. J Med Eng Technol 1989 May–Jun;13(3):177–80

MAINTENANCE AND ENGINEERING, HOSPITAL

The clinical engineer: a full member of the health care team? Frize M. Med Biol Eng Comput 1988 Sep;26(5):461–5 (25 ref.)
[Flow rates, pressures and simultaneous use of various gases. Description of the type of central gas supply]
Rev Esp Anestesiol Reanim 1988;35 Suppl 1:14–27 (Spa)
[Electricity] Rev Esp Anestesiol Reanim 1988;35 Suppl 1:28–30 (Spa)
[Tests] Rev Esp Anestesiol Reanim 1988;35 Suppl 1:39–50 (Spa)
[Gas lines according to the areas which they serve]
Rev Esp Anestesiol Reanim 1988;35 Suppl 1:8–13 (Spa)

ECONOMICS

Evaluating medical equipment service options. Anderson JT. Biomed Instrum Technol 1989 May–Jun;23(3):195–8
Structuring of service centres for economic and equipment efficiency. Irnich W. Med Biol Eng Comput 1989 Jan; 27(1):69–74

LEGISLATION & JURISPRUDENCE

Infectious medical wastes. Council on Scientific Affairs. JAMA 1989 Sep 22–29;262(12):1669–71

METHODS

Facilities management. Tossing the trash. Eubanks P. Hospitals 1989 May 20;63(10):76–7, 79
Facilities management. Automated maintenance. Sedor P. Hospitals 1989 May 20;63(10):72, 74
Facilities management. Energizing efficiency. Souhrada L. Hospitals 1989 May 20;63(10):66, 68, 70
Legionella spp. in a hospital hot water system: effect of control measures. Ezzeddine H, et al. J Hosp Infect 1989 Feb;13(2):121–31
Monitoring the bacteriological quality of potable waters in hospital. Hunter PR, et al. J Hosp Infect 1988 Nov; 12(4):289–94
Management of infectious waste by US hospitals. Rutala WA, et al. JAMA 1989 Sep 22–29;262(12):1635–40
Chlorine, pH, and control of Legionella in hospital plumbing systems [letter] States SJ, et al. JAMA 1989 Apr 7; 261(13):1882–3

ORGANIZATION & ADMINISTRATION

More on clinical engineering in clinical departments [letter] Biomed Instrum Technol 1989 May–Jun;23(3):247–9
Using productivity measures in clinical engineering departments. Betts WF. Biomed Instrum Technol 1989 Mar–Apr;23(2):120–7
Clinical engineering in clinical departments [letter] Staewen WS. Biomed Instrum Technol 1989 Mar–Apr;23(2):98

STANDARDS

Evaluation of activities in the health services. Bracale M, et al. Med Biol Eng Comput 1987 Nov;25(6):605–12
[Required documentation for a project or renovation. Simplified calculations of dimensions]
Rev Esp Anestesiol Reanim 1988;35 Suppl 1:31–8 (Spa)

MAIZE see CORN

MAJOR CORE PROTEIN see VIRAL CORE PROTEINS

MAJOR CORE PROTEINS, VIRAL see VIRAL CORE PROTEINS

MAJOR HISTOCOMPATIBILITY COMPLEX

Adenovirus proteins and MHC expression. Pääbo S, et al. Adv Cancer Res 1989;52:151–63 (68 ref.)
Control of MHC genes that regulate the metastatic phenotype of tumor cells. Feldman M, et al. Adv Exp Med Biol 1988; 233:109–17
Interferon–mediated modulation of metastasis and MHC antigens. Lollini PL, et al. Adv Exp Med Biol 1988; 233:129–39
Genetic and humoral markers in IDDM patients and their families. Ruiz M, et al. Adv Exp Med Biol 1988;246:241–7
MHC class I and II gene expression on human tumors. Ruiz–Cabello F, et al. Adv Exp Med Biol 1988;233:119–28 (23 ref.)
MHC antigens expressed on 3LL metastatic variants: correlation with the expression of a TSP–180 protein. Sacchi A, et al. Adv Exp Med Biol 1988;233:141–50
Prevention of diabetes in the BB rat by injection of major histocompatibility complex– (MHC–) compatible bone marrow cells. Scott J, et al. Adv Exp Med Biol 1988; 246:387–95
The molecular basis of HLA–disease association. Bell JI, et al. Adv Hum Genet 1989;18:1–41 (108 ref.)
Physical maps of the mouse and human immunoglobulin–like loci. Lai E, et al. Adv Immunol 1989;46:1–59 (357 ref.)
Genetic analysis of HLA in the U.S. Schmiedenleut Hutterites. Kostyu DD, et al. Am J Hum Genet 1989 Aug; 45(2):261–9
Major histocompatibility complex genes in systemic lupus erythematosus, Sjögren's syndrome, and polymyositis. Arnett FC, et al. Am J Med 1988 Dec 23;85(6A):38–41 (15 ref.)
Major histocompatibility complex associations with systemic lupus erythematosus. Fronek Z, et al. Am J Med 1988 Dec 23;85(6A):42–4
Genetic contributions to lupus–like disease in NZB/NZW mice. Kotzin BL, et al. Am J Med 1988 Dec 23; 85(6A):29–31
Enhanced MHC class II expression in renal proximal tubules precedes loss of renal function in MRL/lpr mice with lupus nephritis. Wuthrich RP, et al. Am J Pathol 1989 Jan; 134(1):45–51
Influence of major histocompatibility genes on serum hemolytic complement activity in miniature swine. Mallard BA, et al. Am J Vet Res 1989 Mar;50(3):359–63
Joint report of the Third International Bovine Lymphocyte Antigen (BoLA) Workshop, Helsinki, Finland, 27 July 1986. Bull RW, et al. Anim Genet 1989;20(1):109–32
At least two loci encode polymorphic class I MHC antigens in the horse. Donaldson WL, et al. Anim Genet 1988; 19(4):379–90
Antibody responses to sheep erythrocytes for White Leghorn chickens differing in haplotypes of the major histocompatibility complex (B). Dunnington EA, et al. Anim Genet 1989;20(2):213–6
Serological and genetic study of the ELA W21 specificity. Hirni H, et al. Anim Genet 1988;19(4):391–4
ELA and fertility in American Standardbred horses. MacCluer JW, et al. Anim Genet 1988;19(4):359–72
Identification of genetic variation in the bovine major histocompatibility complex DR beta–like genes using sequenced bovine genomic probes. Muggli–Cockett NE, et al. Anim Genet 1988;19(3):213–25
The analyses of antigen and DNA polymorphism within the bovine major histocompatibility complex: 1. The class I antigens. Oliver RA, et al. Anim Genet 1989;20(1):31–41
Equine lymphocyte antigens and reproduction in the Standardbred mare. Park CA, et al. Anim Genet 1989; 20(1):99–104
Anti–Rous sarcoma response of major histocompatibility (B) complex haplotypes B23, B24 and B30. Taylor RL Jr, et al. Anim Genet 1988;19(3):277–84
Are cognitive receptors involved in "non–specific" mhc–unrestricted lytic activity? Bolhuis RL, et al.
Ann Inst Pasteur Immunol 1988 Jul–Aug;139(4):460–5
Effectors, repertoire and receptors involved in lymphocyte–mediated mhc–unrestricted cytotoxicity. Lanier LL, et al. Ann Inst Pasteur Immunol 1988 Jul–Aug; 139(4):450–6
Understanding the biology of non–mhc–restricted cytotoxicity: toward new approaches in the treatment of cancer? Michon JM, et al. Ann Inst Pasteur Immunol 1988 Jul–Aug;139(4):433–5
Different types of effector cells involved in non–mhc–restricted cytolytic activity. Moretta A, et al. Ann Inst Pasteur Immunol 1988 Jul–Aug;139(4):456–60
MHC association between antistriational antibody–negative myasthenia gravis in the Chinese. Gin W, et al. Ann N Y Acad Sci 1988;540:513–5
Expression and cellular localization of major histocompatibility complex antigens in active multiple sclerosis lesions. Hayashi T, et al. Ann N Y Acad Sci 1988; 540:301–5
Alterations in the pattern of MHC restriction of T cells in relapsing murine experimental allergic encephalomyelitis. McCarron RM, et al. Ann N Y Acad Sci 1988;540:349–51
MHC–dependent neural allograft rejection. Rao K, et al. Ann N Y Acad Sci 1988;540:493–4
The influence of MHC gene products on the generation of an antigen–specific T–cell repertoire. Sorger SB, et al. Ann N Y Acad Sci 1988;532:18–32
Complement allotyping explains MHC associations in multiple sclerosis. Zhang WJ, et al. Ann N Y Acad Sci 1988;540:372–3
Dual–label immunocytochemistry of the active multiple sclerosis lesion: major histocompatibility complex and activation antigens. Hayashi T, et al. Ann Neurol 1988 Oct; 24(4):523–31
Neurological autoimmune disease and the trimolecular complex of T–lymphocytes. Hohlfeld R. Ann Neurol 1989 Jun;25(6):531–8 (89 ref.)
Human class II major histocompatibility complex genes and proteins. Kappes D, et al. Annu Rev Biochem 1988; 57:991–1028 (195 ref.)
HLA disease associations: models for insulin dependent diabetes mellitus and the study of complex human genetic disorders. Thomson G. Annu Rev Genet 1988;22:31–50 (83 ref.)
Secretion of interleukin 1 (IL–1) by peritoneal macrophages upon contact with syngeneic T cells is Ia–restricted and antigen–independent process. Zimecki M, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(6):661–71
Establishment of antigen–specific and MHC–restricted B cell hybridoma clones: a model for studying antigen presentation to T cell lines and clones. Zimecki M, et al. Arch Immunol Ther Exp (Warsz) 1988;36(4):395–408
Regulation of major histocompatibility gene expression in human vascular smooth muscle cells. Warner SJ, et al. Arteriosclerosis 1989 May–Jun;9(3):279–88
The relationship of "shared epitopes" of major histocompatibility complex molecules to autoimmune disease [letter] Mackay IR, et al. Arthritis Rheum 1989 Apr; 32(4):509
Models for MHC–restricted T–cell antigen recognition. Norcross MA. Bioessays 1986 Oct;5(4):153–7 (31 ref.)
Hematopoietic cellular interactions: role of the major histocompatibility complex (MHC). Torok–Storb B. Blood Cells 1988;14(2–3):497–504 (19 ref.)
Maternally induced graft–vs–host disease to minor antigens as a possible etiology of an acquired immunodeficiency syndrome in mice. Hamilton MS, et al. Cancer Detect Prev 1988;12(1–6):205–10
Differential induction by interferons of major histocompatibility complex–encoded and non–major histocompatibility complex–encoded antigens in human breast and ovarian carcinoma cell lines. Boyer CM, et al. Cancer Res 1989 Jun 1;49(11):2928–34
Antigen/MHC–specific T cells are preferentially exported from the thymus in the presence of their MHC ligand. Berg LJ, et al. Cell 1989 Sep 22;58(6):1035–46
MHC restriction, alloreactivity, and thymic education: a common link? Kourilsky P, et al. Cell 1989 Feb 10; 56(3):327–9 (23 ref.)
A T cell clone expresses two T cell receptor alpha genes but uses one alpha beta heterodimer for allorecognition and self MHC–restricted antigen recognition. Malissen M, et al. Cell 1988 Oct 7;55(1):49–59
Inhibition of an allospecific T cell hybridoma by soluble class I proteins and peptides: estimation of the affinity of a T cell receptor for MHC. Schneck J, et al. Cell 1989 Jan 13;56(1):47–55
The gamma delta T cell receptor and class Ib MHC–related proteins: enigmatic molecules of immune recognition. Strominger JL. Cell 1989 Jun 16;57(6):895–8 (25 ref.)
The role of T cell receptors in non–MHC–restricted cytotoxicity. Lauzon RJ, et al. Cell Immunol 1989 Feb; 118(2):265–84
Negative trans–acting factors extinguish Ia expression in B cell–L 929 somatic cell hybrids. Stuart PM, et al. Cell Immunol 1989 Sep;122(2):391–404
Class I gene regulation of haplotype preference may influence antiviral immunity in vivo. Thomsen AR, et al. Cell Immunol 1989 Sep;122(2):365–76
Neonatal tolerance induction to Mlsa. I. Tolerance to Mlsa is restricted by shared MHC determinants. Waite DJ, et al. Cell Immunol 1988 Nov;117(1):70–7
Thyroglobulin antibodies in Graves' disease are associated with T–cell receptor beta chain and major histocompatibility complex loci. Demaine AG, et al. Clin Exp Immunol 1989 Jul;77(1):21–4
Complotypes and extended haplotypes in laboratory medicine. Alper CA, et al. Complement Inflamm 1989; 6(1):8–18 (57 ref.)
Influence of the major histocompatibility complex (MHC) on the response to and expression of H–Y in rats.

Desquenne-Clark L, et al. **Dev Genet** 1987;8(4):189-94
MHC molecules and beta-cell destruction. Immune and nonimmune mechanisms. Harrison LC, et al. **Diabetes** 1989 Jul;38(7):815-8 (26 ref.)
Elevated mRNA levels of major histocompatibility complex class II genes in lymphocytes of autoimmune BB rats. Holowachuk EW, et al. **Diabetes** 1988 Dec;37(12):1637-40
Immunoelectron microscopic localization of MHC structures in isolated pancreatic rat islets. Von Gaudecker B, et al. **Diabetes** 1989 Jan;38 Suppl 1:150-3
Effects of islet grafts of MHC-compatible donors on glucose metabolism in the spontaneously diabetic BB/Wor rat. Selawry H, et al. **Diabetes Res Clin Pract** 1988 Oct 14; 5(4):295-303
Regulation of the immune response. Cooke A. **Diabetic Med** 1989 Jan-Feb;6(1):71-7 (31 ref.)
Restriction fragment length polymorphism analysis of major histocompatibility complex genes in the non-obese diabetic mouse strain and its non-diabetic sister strains. Fujishima Y, et al. **Diabetologia** 1989 Feb;32(2):118-25
Oligonucleotide probes for HLA-DQA and DQB genes define susceptibility to type 1 (insulin-dependent) diabetes mellitus. Owerbach D, et al. **Diabetologia** 1988 Oct; 31(10):751-7
Major histocompatibility genes and type 1 (insulin-dependent) diabetes mellitus [letter] Tait BD, et al. **Diabetologia** 1989 Mar;32(3):218
Distribution and co-occurrence of MHC class I, II, and III markers in southern Chinese: implications for autoimmune disease. Hawkins BR, et al. **Dis Markers** 1988 Oct-Dec; 6(4):237-45
Major histocompatibility complex extended haplotypes in systemic lupus erythematosus. Welch TR, et al. **Dis Markers** 1988 Oct-Dec;6(4):247-55
Searching for coding sequences in the mammalian genome: the H-2K region of the mouse MHC is replete with genes expressed in embryos. Abe K, et al. **EMBO J** 1988 Nov; 7(11):3441-9
A molecular map of the chicken major histocompatibility complex: the class II beta genes are closely linked to the class I genes and the nucleolar organizer. Guillemot F, et al. **EMBO J** 1988 Sep;7(9):2775-85
A monoclonal antibody to LFA-3, the CD2 ligand, specifically immobilizes major histocompatibility complex proteins. Bierer BE, et al. **Eur J Immunol** 1989 Apr; 19(4):661-5
Inhibition of T cell response with peptides is influenced by both peptide-binding specificity of major histocompatibility complex molecules and susceptibility of T cells to blocking. Lehmann PV, et al. **Eur J Immunol** 1989 Jun;19(6):1071-7
Antigen presentation by liposomes as model system for T-B cell interaction. Walden P. **Eur J Immunol** 1988 Nov; 18(11):1851-4
Major histocompatibility complex class I molecules of nonhuman primates. Watkins DI, et al. **Eur J Immunol** 1988 Sep;18(9):1425-32
Is the cyclosporin A toxicity on rat pancreatic B-cells modulated by the MHC? Hahn HJ, et al. **Exp Clin Endocrinol** 1989 May;93(2-3):203-7
Eimeria acervulina: evaluation of the cellular and antibody responses to the recombinant coccidial antigens in B-congenic chickens. Lillehoj HS, et al. **Exp Parasitol** 1988 Dec;67(2):148-58
B (MHC) antigen dependent modulation of GvH reactivity by neonatal thymectomy and alloimmunization. Plachý J, et al. **Folia Biol (Praha)** 1989;35(3):121-36
An analysis of the response of recombinant congenic lines of chickens to RSV challenge provides evidence for further complexity of the genetic structure of the chicken MHC (B). Plachý J. **Folia Biol (Praha)** 1988;34(3):170-81
A general method for the construction of recombinant vaccinia viruses expressing multiple foreign genes. Coupar BE, et al. **Gene** 1988 Aug 15;68(1):1-10
The major histocompatibility complex of primates. Heise ER, et al. **Genetics** 1987 Aug 31;73(1-2):53-68 (60 ref.)
Coevolution of the major histocompatibility complex and the t-complex in the mouse. I. Generation and maintenance of high complementarity associations. Uyenoyama MK. **Genetics** 1989 Jan;121(1):139-51
Coevolution of the major histocompatibility complex and the t-complex in the mouse. II. Modification of response to sharing of histocompatibility antigens. Uyenoyama MK. **Genetics** 1989 Jan;121(1):153-61
A physical map including a new class I gene (cda12) of the human major histocompatibility complex (A2/B13 haplotype) derived from a monosomy 6 mutant cell line. Ragoussis J, et al. **Genomics** 1989 Apr;4(3):301-8
Localization of the equine major histocompatibility complex (ELA) to chromosome 20 by in situ hybridization. Mäkinen A, et al. **Hereditas** 1989;110(1):93-6
Human immune responsiveness to Lolium perenne pollen allergen Lol p III (rye III) is associated with HLA-DR3 and DR5. Ansari AA, et al. **Hum Immunol** 1989 May; 25(1):59-71
The major histocompatibility complex, MnLA, of pigtailed macaques: definition of fifteen specificities. Gaur LK, et al. **Hum Immunol** 1989 Apr;24(4):277-94
The DR3(w18),DQw4 haplotype differs from DR3(w17),DQw2 haplotypes at multiple class II loci. Hurley CK, et al. **Hum Immunol** 1989 May;25(1):37-50
Discrimination of antibodies against antigens of different MHC loci in human sera by monoclonal antibody-specific immobilization of leukocyte antigens. Mueller-Eckhardt G, et al. **Hum Immunol** 1989 Jun;25(2):125-34
DNA sequence analysis of the HLA-DRw12 allele. Navarrete C, et al. **Hum Immunol** 1989 May;25(1):51-8
Chromosomal localization of the major histocompatibility complex of the horse (ELA) by in situ hybridization. Ansari HA, et al. **Immunogenetics** 1988;28(5):362-4
Molecular genotyping of four chicken B-complex haplotypes with B-L beta, B-F, and B-G probes. Chaussé AM, et al. **Immunogenetics** 1989;29(2):127-30
Polymorphism in the major histocompatibility complex class II genes of Peromyscus leucopus. Crew MD, et al. **Immunogenetics** 1989;30(3):214-7
Immunization with syngeneic Sendai virus-infected cells induce no MHC-restricted antibodies but antibodies specific for H-2 class I determinants. Kievits F, et al. **Immunogenetics** 1989;29(2):108-11
Genetic control of rat heart allograft rejection: effect of different MHC and non-MHC incompatibilities. Klempnauer J, et al. **Immunogenetics** 1989;30(2):81-8
The RT1.G locus in the rat encodes a Qa/TL-like antigen. Kunz HW, et al. **Immunogenetics** 1989;30(3):181-7
A rabbit class II MHC gene with strong similarities to HLA-DRA. Laverriere A, et al. **Immunogenetics** 1989; 30(2):137-40
Definition of rabbit class I and class II MHC gene haplotypes using molecular typing procedures. Marche PN, et al. **Immunogenetics** 1989;29(4):273-6
Number of major histocompatibility loci in inbred strains of the fish Oryzias latipes. Matsuzaki T, et al. **Immunogenetics** 1989;30(3):226-8
Genotyping chickens for the B-G subregion of the major histocompatibility complex using restriction fragment length polymorphisms. Miller MM, et al. **Immunogenetics** 1988;28(5):374-9
Genetic and serological heterogeneity of the supertypic HLA-B locus specificities Bw4 and Bw6. Müller CA, et al. **Immunogenetics** 1989;30(3):200-7
Southern blot analysis of HLA-DP gene polymorphisms in Caucasoid rheumatoid arthritis (RA) patients and controls. Stephens HA, et al. **Immunogenetics** 1989;30(3):149-55
Limited MHC polymorphism in whales. Trowsdale J, et al. **Immunogenetics** 1989;29(1):19-24
Localization of heat shock protein 70 genes inside the rat major histocompatibility complex close to class III genes. Wurst W, et al. **Immunogenetics** 1989;30(1):46-9
The antigen-major histocompatibility complex-T cell receptor interaction. A structural analysis. Williams WV, et al. **Immunol Res** 1988;7(4):339-50 (51 ref.)
Antigen processing. **Immunol Rev** 1988 Dec;106:1-222
Antigen processing for presentation to T lymphocytes: function, mechanisms, and implications for the T-cell repertoire. Berzofsky JA, et al. **Immunol Rev** 1988 Dec; 106:5-31 (88 ref.)
The biochemistry and cell biology of antigen processing. Chain BM, et al. **Immunol Rev** 1988 Dec;106:33-58 (87 ref.)
Tolerance to self antigens shapes the T-cell repertoire. Pullen AM, et al. **Immunol Rev** 1989 Feb;107:125-39 (50 ref.)
The major histocompatibility complex and diseases in farm animals. van der Zijpp AJ, et al. **Immunol Today** 1989 Apr; 10(4):109-11
Immuno-competent cells in the murine epididymis. Nashan D, et al. **Int J Androl** 1989 Feb;12(1):85-94
Failure to find an association between class I antigens of the bovine major histocompatibility system and faecal worm egg counts. Stear MJ, et al. **Int J Parasitol** 1988 Sep;18(6):859-61
H-2, a serendipitously encountered obstacle. Bailey DW. **Int Rev Immunol** 1988 Aug;3(4):305-12
The impact of Jack Stimpfling's recombinants on immunogenetics. Beito TG, et al. **Int Rev Immunol** 1988 Aug;3(4):323-31 (23 ref.)
MHC recombinant mice: genetic tools for study of resistance to viral disease. Chesebro B. **Int Rev Immunol** 1988 Aug; 3(4):393-6 (9 ref.)
The molecular basis of MHC-restricted antigen recognition by T cells. Saito T, et al. **Int Rev Immunol** 1988 Apr; 3(3):147-74 (101 ref.)
What are those complement genes doing in the MHC? Shreffler DC. **Int Rev Immunol** 1988 Aug;3(4):345-56
Was the MHC made for the immune system, or did immunity take advantage of an ancient polymorphic gene family encoding cell surface interaction molecules? A speculative essay. Weissman IL. **Int Rev Immunol** 1988 Aug; 3(4):397-416
The relationships of birth weight, preweaning gain and postweaning gain with the bovine major histocompatibility system. Stear MJ, et al. **J Anim Sci** 1989 Mar;67(3):641-9
Viruses and cytokines: evidence for multiple roles in pancreatic beta cell destruction in type 1 insulin-dependent diabetes mellitus. Campbell IL, et al. **J Cell Biochem** 1989 May;40(1):57-66
The chicken major histocompatibility complex in disease resistance and poultry breeding. Lamont SJ. **J Dairy Sci** 1989 May;72(5):1328-33 (48 ref.)
Disease resistance and immune response genes in cattle: strategies for their detection and evidence of their existence. Lewin HA. **J Dairy Sci** 1989 May;72(5):1334-48 (93 ref.)
Function and regulation of lymphocyte-mediated immune responses: relevance to bovine mastitis. Nonnecke BJ, et al. **J Dairy Sci** 1989 May;72(5):1313-27 (118 ref.)
The MHC molecule I-E is necessary but not sufficient for the clonal deletion of V beta 11-bearing T cells. Bill J, et al. **J Exp Med** 1989 Apr 1;169(4):1405-19
Structure and specificity of T cell receptor gamma/delta on major histocompatibility complex antigen-specific CD3+, CD4-, CD8- T lymphocytes. Bluestone JA, et al. **J Exp Med** 1988 Nov 1;168(5):1899-916
Regulation of murine MHC class II molecule expression. Identification of A beta residues responsible for allele-specific cell surface expression. Buerstedde JM, et al. **J Exp Med** 1988 Sep 1;168(3):823-37
Self recognition by T cells. I. Bystander killing of target cells bearing syngeneic MHC antigens. Duke RC. **J Exp Med** 1989 Jul 1;170(1):59-71
The generation of antigen-specific, major histocompatibility complex-restricted cytotoxic T lymphocytes of the CD4+ phenotype. Enhancement by the cutaneous administration of interleukin 2. Hancock GE, et al. **J Exp Med** 1989 Mar 1;169(3):909-19
Chromosomal organization of the human major histocompatibility complex class I gene family [published erratum appears in J Exp Med 1989 Apr 1;169(4):1517] Koller BH, et al. **J Exp Med** 1989 Feb 1;169(2):469-80
The murine MHC class I genes, H-2Dq and H-2Lq, are strikingly homologous to each other, H-2Ld, and two genes reported to encode tumor-specific antigens. Lee DR, et al. **J Exp Med** 1988 Nov 1;168(5):1719-39
Major histocompatibility complex-linked susceptibility or resistance to disease caused by a noncytopathic virus varies with the disease parameter evaluated. Leist T, et al. **J Exp Med** 1989 Jul 1;170(1):269-77
A trans-acting major histocompatibility complex-linked gene whose alleles determine gain and loss changes in the antigenic structure of a classical class I molecule. Livingstone AM, et al. **J Exp Med** 1989 Sep 1; 170(3):777-95
Lack of expression of HLA-B27 gene in transgenic mouse trophoblast. Conserved genetic pressures underlying extra-embryonic development. Oudejans CB, et al. **J Exp Med** 1989 Feb 1;169(2):447-56
H-2-linked genes influence the severity of herpes simplex virus infection of the peripheral nervous system. Simmons A. **J Exp Med** 1989 Apr 1;169(4):1503-7
Extensive deletions and insertions in different MHC supratypes detected by pusled field gel electrophoresis. Tokunaga K, et al. **J Exp Med** 1988 Sep 1;168(3):933-40
The effect of cyclosporin on major histocompatibility complex-linked resistance to murine cytomegalovirus. Lawson CM, et al. **J Gen Virol** 1989 May;70 (Pt 5):1253-9
Induction of donor major histocompatibility complex antigens in coronary arterial vessels: mechanism of arterial vasculitis in rat allografts treated with cyclosporine. Herskowitz A, et al. **J Heart Transplant** 1989 Jan-Feb; 8(1):11-9
Evidence for a histocompatibility locus probably linked to but distinct from Mls and H-25. Berumen L, et al. **J Immunogenet** 1988 Feb-Jun;15(1-3):49-58
Further serological and RFLP analysis of the MRL-+/+ and MRL-lpr/lpr mice. Delarbre C, et al. **J Immunogenet** 1988 Oct-Dec;15(5-6):307-19
Genetic control of C3 production by the S region of the mouse MHC. Dieli F, et al. **J Immunogenet** 1988 Oct-Dec; 15(5-6):339-43
Specificity of anti-H-2 class I antibodies induced by syngeneic immunization with Sendai virus-treated cells is regulated by the mouse MHC and viral antigens. No evidence for MHC-restricted virus-specific antibodies. Kievits F, et al. **J Immunogenet** 1989 Feb;16(1):3-17
Association between restriction fragment length variants of the complement C4 genes and MHC haplotypes. Partanen J. **J Immunogenet** 1987 Dec;14(6):285-93
The influence of the BoLA-A locus on reproductive traits in cattle. Stear MJ, et al. **J Immunogenet** 1989 Feb; 16(1):77-88
Seventy-five years of immunology: the view from the MHC. Shreffler DC. **J Immunol** 1988 Sep 15;141(6):1791-8
Ontogeny of MHC-linked, T cell-mediated suppression is regulated by the T cell genotype. Araneo BA. **J Mol Cell Immunol** 1986;2(4):219-31
Molecular characterization of the recombination region of six murine major histocompatibility complex (MHC) I-region recombinants. Kobori JA, et al. **J Mol Cell Immunol** 1984;1(2):125-35
Autoreactive T cells with atypical MHC restriction from MRL-lpr/lpr mice: forbidden clones revisited. Naparstek Y, et al. **J Mol Cell Immunol** 1988;4(1):35-43
T lymphocytes from irradiation chimeras repopulated with 13-day fetal liver cells recognize antigens only in association with self-MHC products. Nisbet-Brown E, et al. **J Mol Cell Immunol** 1986;2(4):235-42
Selection of thymocyte MHC restriction specificity in vitro. Rock KL, et al. **J Mol Cell Immunol** 1984;1(5):311-20
The origin of MHC-restriction of suppressor T cells--a commentary. Tada T, et al. **J Mol Cell Immunol** 1986; 2(4):232-3
Immunohistochemical studies of adult human glial cells. Grenier Y, et al. **J Neuroimmunol** 1989 Feb;21(2-3):103-15
Major histocompatibility complex antigen expression on rat microglia following epidural kainic acid lesions. Akiyama H, et al. **J Neurosci Res** 1988;20(2):147-57
Pemphigoid gestationis: a unique mechanism of initiation of

an autoimmune response by MHC class II molecules? Kelly SE, et al. **J Pathol** 1989 May;158(1):81–2
Generation of self–macrophage–toxic non–T cells in the MHC–homozygous F1 spleen cells co–cultured with parental cells: possible involvements of host cells in impaired immunity in GVH disease. Hosono M, et al. **Jpn J Exp Med** 1988 Dec;58(6):261–7
Microrecombinations generate sequence diversity in the murine major histocompatibility complex: analysis of the Kbm3, Kbm4, Kbm10, and Kbm11 mutants. Geliebter J, et al. **Mol Cell Biol** 1988 Oct;8(10):4342–52
Self–tolerance alters T–cell receptor expression in an antigen–specific MHC restricted immune response. Fry AM, et al. **Nature** 1988 Oct 27;335(6193):830–2
Analysis of specificity for antigen, Mls, and allogenic MHC by transfer of T–cell receptor alpha– and beta–chain genes. Kaye J, et al. **Nature** 1988 Dec 8;336(6199):580–3
MHC molecules. A profitable lesson in heresy [news] Parham P. **Nature** 1989 Aug 10;340(6233):426–8
Immunology. MHC meets mother's milk [news] Parham P. **Nature** 1989 Jan 12;337(6203):118–9
The T–cell repertoire is heavily influenced by tolerance to polymorphic self–antigens. Pullen AM, et al. **Nature** 1988 Oct 27;335(6193):796–801
Extended major histocompatibility complex haplotypes in patients with multiple sclerosis. Hauser SL, et al. **Neurology** 1989 Feb;39(2 Pt 1):275–7
MHC related genetic susceptibility to Hodgkin's disease. Kalidi I, et al. **Nouv Rev Fr Hematol** 1989;31(2):149–52
A possible basis for major histocompatibility complex–restricted T–cell recognition. Davis MM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12;323(1217):521–4
Structural requirements and biological significance of interactions between peptides and the major histocompatibility complex. Grey HM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):545–52
Characterization of resistance and immunity to Eimeria tenella among major histocompatibility complex B–F/B–G recombinant hosts. Clare RA, et al. **Poult Sci** 1989 May; 68(5):639–45
Associations of major histocompatibility complex haplotypes with body weight and egg production traits in S1 White Leghorn chickens. Kim CD, et al. **Poult Sci** 1989 Apr; 68(4):464–9
Response of major histocompatibility (B) complex haplotypes B22, B26, and B30 to Rous sarcomas. Lukacs NW, et al. **Poult Sci** 1989 Feb;68(2):233–7
Analysis of B–G and immune response genes in the Iowa State University S1 chicken line by hybridization of sperm deoxyribonucleic acid with a major histocompatibility complex class II probe. Pitcovski J, et al. **Poult Sci** 1989 Jan;68(1):94–9
Eimeria acervulina and Eimeria tenella in 15.B–congenic White Leghorns. Ruff MD, et al. **Poult Sci** 1989 Mar; 68(3):380–5
Virus dilution affects the anti–Rous sarcoma response of progressor but not regressor major histocompatibility (B) complex genotypes. Vincent SC, et al. **Poult Sci** 1988 Nov; 67(11):1491–6
Isolation and characterization of a cDNA and gene coding for a fourth CD1 molecule. Balk SP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):252–6
Specific, major histocompatibility complex–unrestricted recognition of tumor–associated mucins by human cytotoxic T cells. Barnd DL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7159–63
An analysis of T–cell receptor variable region gene expression in major histocompatibility complex disparate mice. Bill J, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9184–8
Recognition of a self major histocompatibility complex TL region product by gamma delta T–cell receptors. Bonneville M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5928–32
Physical linkage of a guanine nucleotide–binding protein–related gene to the chicken major histocompatibility complex. Guillemot F, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4594–8
Oligodendrocyte–specific autoreactive T cells using an alpha/beta T–cell receptor kill their target without self restriction. Jewtoukoff V, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2824–8
Recognition of xeno–(HLA, SLA) major histocompatibility complex antigens by mouse cytotoxic T cells is not H–2 restricted: a study with transgenic mice. Kievits F, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):617–20
Mutational analysis of the HLA–DQ3.2 insulin–dependent diabetes mellitus susceptibility gene. Kwok WW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1027–30
Human major histocompatibility complex contains genes for the major heat shock protein HSP70. Sargent CA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1968–72
B–lymphoma cells process and present their endogenous immunoglobulin to major histocompatibility complex–restricted T cells. Weiss S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):282–6
Genetic characterization of FLA, the cat major histocompatibility complex. Winkler C, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):943–7
Effects of increased major histocompatibility complex dosage on chicken monocyte–macrophage function. Qureshi MA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):195–202
Tolerance, and Mhc–controlled nonresponsiveness: are they related to each other? Klein J. **Prog Clin Biol Res** 1989; 288:119–25
Association of class I, II, and III MHC gene products with systemic lupus erythematosus. Results of a Central European multicenter study. Hartung K, et al. **Rheumatol Int** 1989;9(1):13–8
Absence of major histocompatibility complex restriction in the interaction between processed basic protein and Ia of two rat strains. Friedman A, et al. **Scand J Immunol** 1989 Jun;29(6):747–50
Influence of the major histocompatibility complex on positive thymic selection of V beta 17a+ T cells. Blackman MA, et al. **Science** 1989 Apr 14;244(4901):214–7
Murine MHC polymorphism and T cell specificities. Roy S, et al. **Science** 1989 May 5;244(4904):572–5
A new cluster of genes within the human major histocompatibility complex. Spies T, et al. **Science** 1989 Jan 13;243(4888):214–7
Lack of an association between carcinoma of the stomach and the major histocompatibility complex (HLA) in Cape Coloureds. Martell RW, et al. **Tissue Antigens** 1988 Sep; 32(3):150–4
Alloantigenic systems in the rat. Seventh international workshop. Yanuca Island, Fiji, August 6–13, 1988. Proceedings. **Transplant Proc** 1989 Apr;21(2):3239–310
Effect of the MHC on the immunogenicity of vascular allografts in miniature swine. Bray J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):683–4
Mapping and sequencing analysis of the rat MHC. Cortese Hassett AL, et al. **Transplant Proc** 1989 Apr;21(2):3244–6 (27 ref.)
Molecular analysis of MHC–linked genes affecting growth and development. Cortese Hassett AL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):563–4
The influence of MHC subregions on the induction of suppressor cells after orthotopic rat liver transplantation. Engemann R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):427–8
Expression of major histocompatibility complex (MHC) antigens on vascular endothelium of spontaneously tolerated liver allografts. Fabiani B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):407–8
T–cell clones recognizing MHC products. Flomenberg N. **Transplant Proc** 1989 Feb;21(1 Pt 1):35–7
Patterns of donor major histocompatibility complex antigen expression in rat heart grafts and a model of chronic vascular rejection. Forbes RD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):447–8
Analysis of the major histocompatibility genes that control susceptibility to diabetes mellitus in the BB rat. Günther E, et al. **Transplant Proc** 1989 Apr;21(2):3247–8
Major histocompatibility antigen expression in rejection: cause or consequence? Koene RA. **Transplant Proc** 1989 Feb;21(1 Pt 1):602–4 (21 ref.)
A unique placental antigen controlled by an MHC–linked locus, RT11. Kunz HW, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):559–60
Tolerance and the thymus. Miller JF. **Transplant Proc** 1989 Feb;21(1 Pt 1):59–60
Effects of gamma interferon and interleukin–2, and of gamma–interferon antibodies, on the rat immune response against allografts. Paineau J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):999–1001
The reasons for MHC polymorphism in man. Serjeantson SW. **Transplant Proc** 1989 Feb;21(1 Pt 1):598–601 (35 ref.)
T–lymphocyte subsets: major histocompatibility antigens rejection of H–2K or H–2I region disparate skin allografts by either Lyt–2+ or L3T4+ T–lymphocyte subset. Smith DM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):162–4
Appearance of ART–18–positive (IL–2R) cells in peripheral blood and spleen after donor–specific blood transfusion (DST) in rats differing across the major histocompatibility complex. Wasowska B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1177–8
Immune privilege to MHC–disparate tumor grafts in the anterior chamber of the eye. I. Quantitative analysis of intraocular tumor growth and the corresponding delayed hypersensitivity response. Ksander BR, et al. **Transplantation** 1989 Apr;47(4):661–7
Modulation of the major histocompatibility complex antigen and the immunogenicity of islet allografts. Markmann JF, et al. **Transplantation** 1989 Sep;48(3):478–86
Correlation of fetal kidney and testis congenic graft survival with reduced major histocompatibility complex burden. Statter MB, et al. **Transplantation** 1989 Apr;47(4):651–60
Genetic control of immunity to Eimeria tenella. Interaction of MHC genes and non–MHC linked genes influences levels of disease susceptibility in chickens. Lillehoj HS, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):135–48
The influence of the swine major histocompatibility genes (SLA) on variation in serum immunoglobulin (Ig) concentration. Mallard BA, et al. **Vet Immunol Immunopathol** 1989 Jun;21(2):139–51
Immunogenetic analysis of Trichinella spiralis infections in swine. Lunney JK, et al. **Vet Parasitol** 1988 Sep; 29(2–3):179–93
[The major histocompatibility system in bronchogenic carcinoma] Měřička O, et al. **Sb Lek** 1988 Oct;90(10):314–7 (Eng. Abstr.) **(Cze)**
[Current news on cell membrane molecules. The significance for immune response] Austgulen R. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2735–8 (Eng. Abstr.) **(Nor)**
[Current status of the pathogenesis of rheumatic disease] Couto AA, et al. **Arq Bras Cardiol** 1988 Feb;50(2):75–8 **(Por)**
[Histocompatibility antigen expression in tumor growth] Govallo VI. **Vestn Akad Med Nauk SSSR** 1988;(7):52–7 (44 ref.) (Eng. Abstr.) **(Rus)**
[Expression of the class II antigens of the major histocompatibility complex on the blood cells of psoriasis patients and its alteration under the influence of interferon preparations] Medunitsyn NV, et al. **Vestn Dermatol Venerol** 1989;(4):10–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Modulation of murine tumor major histocompatibility antigens by cytokines in vivo and in vitro. Weber JS, et al. **Cancer Res** 1988 Oct 15;48(20):5818–24
Cyclosporine (CyA) blocks the release of tau–interferon from non T–cells. Halloran PF, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):856

IMMUNOLOGY

Histological signs of immune reactions against allogeneic solid fetal neural grafts in the mouse cerebellum depend on the MHC locus. Date I, et al. **Exp Brain Res** 1988; 73(1):15–22

MALABSORPTION SYNDROMES

see related
INTESTINAL ABSORPTION

Acrodermatitis enteropathica. Walling A, et al. **Am Fam Physician** 1989 Feb;39(2):151–4
[Chronic idiopathic intestinal pseudo–obstruction] Koskinen S, et al. **Duodecim** 1989;105(4):363–7 **(Fin)**
[Short bowel syndrome. Considerations on factors influencing the prognosis after massive intestinal resections] Ferraris R, et al. **Minerva Chir** 1988 Oct 31;43(20):1707–18 (Eng. Abstr.) **(Ita)**

BLOOD

[Characteristics of the fatty acid composition of the blood serum in children with a malabsorption syndrome] Lazareva TS, et al. **Pediatriia** 1988;(11):19–21 (Eng. Abstr.) **(Rus)**
[Phosphorus–calcium metabolism in patients with malabsorption syndrome on diets with various ratios of calcium and phosphorus] Shvedova EB, et al. **Vopr Pitan** 1988 Nov–Dec;(6):12–4 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

[Classification of malabsorption syndrome] Slobodian LM. **Pediatriia** 1989;(6):86–7 **(Rus)**

COMPLICATIONS

Digestive involvement in dystrophic recessive epidermolysis bullosa [letter] Fortier–Beaulieu M, et al. **Arch Dermatol** 1988 Dec;124(12):1870
Effect of a long acting somatostatin analogue SMS 201–995 on jejunostomy effluents in patients with severe short bowel syndrome. Ladefoged K, et al. **Gut** 1989 Jul; 30(7):943–9
Neuropathy secondary to vitamin E deficiency in acquired intestinal malabsorption. Palmucci L, et al. **Ital J Neurol Sci** 1988 Dec;9(6):599–602
D–lactate–associated encephalopathy after massive small–bowel resection. Scully TB, et al. **J Clin Gastroenterol** 1989 Aug;11(4):448–51
Incidence of catheter–associated gram–negative bacteremia in children with short bowel syndrome. Piedra PA, et al. **J Clin Microbiol** 1989 Jun;27(6):1317–9
Fat malabsorption, vitamin E deficiency, scoliosis and cataracts. Griffiths RD, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:153–4
Severe acquired hypocholesterolemia: two case reports. **Nutr Rev** 1989 Jul;47(7):202–7 (25 ref.)
Hepatobiliary complications of malabsorption and malnutrition. Quigley EM, et al. **Semin Liver Dis** 1988 Aug; 8(3):218–28 (155 ref.)
[Carbohydrate malabsorption (fructose, sorbitol) and functional intestinal disorders] Lembcke B. **Z Gastroenterol** 1989 Mar;27(3):148–50 **(Ger)**
[Chronic diarrhea caused by bile acid malabsorption] Mikó P, et al. **Orv Hetil** 1988 Dec 25;129(52):2801–3 (Eng. Abstr.) **(Hun)**
[Prevention of rickets in premature infants and in children with various chronic disease] Otto–Buczkowska E, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1565–8 (50 ref.) **(Pol)**
[Primary lymphoma of the small bowel and malabsorption] Sambuelli A, et al. **Acta Gastroenterol Latinoam** 1988; 18(1):43–52 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

A carbon–13 breath test to characterize glucose absorption and utilization in children. Lifschitz CH, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):842–7
Nutritional consequences of bowel segments in the lower

urinary tract. Canning DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):509–11; discussion 520–1

[Current diagnostic method for saccharose–isomaltose malabsorption] Micskey E, et al. **Orv Hetil** 1989 Sep 3; 130(36):1921–3 (Eng. Abstr.) **(Hun)**

[Diagnosis of malabsorption: new perspectives bound with possible dissociation between enteropathy and malabsorption] Corazza GR, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):146–50 (37 ref.) (Eng. Abstr.) **(Ita)**

[RI studies of the gastrointestinal tract—the malabsorption test] Hosoda S, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):643–50 (Eng. Abstr.) **(Jpn)**

[Food allergies in children] Socha J, et al. **Wiad Lek** 1988 Aug 1;41(15):1024–7 (29 ref.) (Eng. Abstr.) **(Pol)**

[Use of a modification of Lowry's method for determining the protein content of feces in children] Filippskil GK, et al. **Lab Delo** 1988;(9):72–3 **(Rus)**

[Symptoms and treatment of disorders of intestinal digestion and absorption] Parfenov AI. **Voen Med Zh** 1988 Oct; (10):41–4 (9 ref.) **(Rus)**

DIET THERAPY

Complex carbohydrate intolerance [letter] Clark JH. **J Pediatr** 1988 Dec;113(6):1115–6

[Diet therapy of children with chronic nonspecific diseases of the small intestine under outpatient care] Makarova IB. **Pediatriia** 1989;(7):105–6 **(Rus)**

DRUG THERAPY

Failure of taurine to improve fat absorption in cystic fibrosis. Thompson GN. **J Inherited Metab Dis** 1988;11 Suppl 2:158–60

Adequate enzyme replacement after total pancreatectomy [letter] Robert A. **JAMA** 1989 May 12;261(18):2638–9

Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92

EPIDEMIOLOGY

[Epidemiology of food intolerance in preschool children from urban and rural areas] Bugrova OV, et al. **Pediatriia** 1988; (7):39–42 **(Rus)**

ETIOLOGY

Metastatic hypernephroma to the ampulla of Vater: an unusual cause of malabsorption diagnosed at endoscopic sphincterotomy. McKenna JI, et al. **Am J Gastroenterol** 1989 Jan;84(1):81–3

Relationship between bile acid malabsorption using the 75Se homocholic acid taurine scanning method and diarrhoea following right hemicolectomy. Jewkes AJ, et al. **Br J Surg** 1989 Jul;76(7):707–8

Transient vitamin B12 malabsorption in a patient with mixed nutritional anemia. Pagnotta I. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):130–3

Carbohydrate malabsorption in alcoholic pancreatic insufficiency. The effect of pancreatic enzyme therapy on intestinal transit time. Keshavarzian A, et al. **J Clin Gastroenterol** 1988 Oct;10(5):528–32

Malabsorption in children with persistent diarrhea: a rapidly reversible phenomenon [letter] Bhan MK, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):134

Enzyme therapy for malabsorption in exocrine pancreatic insufficiency. Roberts IM. **Pancreas** 1989;4(4):496–503 (58 ref.)

Fat malabsorption in patients before and after total gastrectomy, studied by the triolein breath test. Walther B, et al. **Scand J Gastroenterol** 1989 Apr;24(3):309–14

Bowel resection in the neonatal phase of life: short–term and long–term consequences. Affourtit MJ, et al. **Z Kinderchir** 1989 Jun;44(3):144–7

[Lambliasis: a cause of malabsorption and diarrhea?] Reul W, et al. **Dtsch Med Wochenschr** 1989 May 26; 114(21):825–30 (Eng. Abstr.) **(Ger)**

[Postoperative disorders of gastrointestinal motility. 2: Status following total gastrectomy and ileum resection] Stockbrügger R. **Fortschr Med** 1988 Nov 20;106(33):660, 661–662 (5 ref.) (Eng. Abstr.) **(Ger)**

[Malabsorption causing secondary gastrointestinal amyloidosis associated with rheumatoid arthritis] Jármay K, et al. **Orv Hetil** 1989 Jan 15;130(3):137–40 (24 ref.) (Eng. Abstr.) **(Hun)**

[The short bowel syndrome after extensive resection of the small intestine] Miani S, et al. **Minerva Med** 1989 Jul; 80(7):801–8 **(Ita)**

[Surgical treatment and problem of massive small intestinal resection in children—assessment of background diseases and actual management] Ohsawa Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1378–81 (Eng. Abstr.) **(Jpn)**

[Soybean protein intolerance in children] Kaczmarski M, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):818–21 (16 ref.) **(Pol)**

[Clinico–pathogenetic approaches to the problem of digestive disorders in young children] Smiian IS. **Pediatriia** 1989; (3):73–6 **(Rus)**

[Post–infection intestinal malabsorption syndrome in infants] Vorotyntseva NV, et al. **Pediatriia** 1988;(7):42–4 **(Rus)**

[Digestive intolerance in newborn infants with extensive intestinal resections. Nutritional problems and long–term sequelae] González Landa G, et al. **An Esp Pediatr** 1988 Jun;28(6):548–52 (Eng. Abstr.) **(Spa)**

METABOLISM

Vitamin B12 malabsorption in patients with acquired immunodeficiency syndrome. Harriman GR, et al. **Arch Intern Med** 1989 Sep;149(9):2039–41

Cholesterol synthesis in the small intestine of patients with malabsorption syndrome. Sviridov DD, et al. **Digestion** 1988;40(3):152–6

Effect of starch malabsorption on colonic function and metabolism in humans. Scheppach W, et al. **Gastroenterology** 1988 Dec;95(6):1549–55

Energy absorption as a measure of intestinal failure in the short bowel syndrome. Rodrigues CA, et al. **Gut** 1989 Feb; 30(2):176–83

Use of kinetic methods to evaluate D–xylose malabsorption in patients. Breiter HC, et al. **J Lab Clin Med** 1988 Nov; 112(5):533–43

Regulation of plasma plant sterol levels in patients with gut resections. Färkkilä MA, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):715–22

The effect of starch malabsorption on fecal short–chain fatty acid excretion in man. Scheppach W, et al. **Scand J Gastroenterol** 1988 Aug;23(6):755–9

Measurement of the 10,000–molecular weight calcium–binding protein in small–intestinal biopsy specimens from patients with malabsorption syndromes. Staun M, et al. **Scand J Gastroenterol** 1988 Sep;23(7):827–32

[Determination of protein nitrogen utilization with (15N) yeast protein in short bowel syndrome] Heine W, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):210–2 (Eng. Abstr.) **(Ger)**

[Nutritional condition and absorptive capacity of 14 infants with short bowel syndrome] Ohkohchi N, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1395–8 (Eng. Abstr.) **(Jpn)**

[The fat absorption test in children] Moreira FL, et al. **Arq Gastroenterol** 1987 Apr–Jun;24(2):113–8 (Eng. Abstr.) **(Por)**

PATHOLOGY

Glucose–galactose malabsorption: demonstration of specific jejunal brush border membrane defect. Booth IW, et al. **Gut** 1988 Dec;29(12):1661–5

Is the assay of disaccharidase activity in small bowel mucosal biopsy relevant for clinical gastroenterologists? Lembcke B, et al. **Klin Wochenschr** 1989 Jun 1;67(11):568–75

[Small intestine biopsies in children with malabsorption syndrome. Autoradiographic studies with 3H–thymidine] Trimper B, et al. **Zentralbl Allg Pathol** 1988;134(3):265–74 (Eng. Abstr.) **(Ger)**

[The value of disaccharide determination, associated with histological studies of the small intestine, in various stages if celiac disease and other malabsorption disorders] Sólyom E, et al. **Orv Hetil** 1988 Oct 2;129(40):2127–31 (54 ref.) (Eng. Abstr.) **(Hun)**

PHYSIOPATHOLOGY

Intestinal adaptation in patients with short bowel syndrome. Measurement by calcium absorption. Gouttebel MC, et al. **Dig Dis Sci** 1989 May;34(5):709–15

Intestinal adaptation in short–bowel syndrome. Lentze MJ. **Eur J Pediatr** 1989 Jan;148(4):294–9 (73 ref.)

Acquired monosaccharide intolerance in infants. Nichols VN, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):51–7

Studies on malabsorption in malnourished Pakistani children. Mazahir I, et al. **Z Naturforsch [C]** 1988 Sep–Oct; 43(9–10):782–6

[Malabsorption] Cluysenaer OJ, et al. **Ned Tijdschr Geneeskd** 1988 Dec 10;132(50):2273–8 (12 ref.) **(Dut)**

[Physiopathology of the short bowel syndrome] Ferraris R, et al. **Minerva Chir** 1988 Oct 15;43(19):1533–44 (17 ref.) (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

[Enteroclysis in malabsorption syndrome in adults. Apropos of 73 cases] Schmutz G, et al. **J Radiol** 1989 Mar; 70(3):183–9 (Eng. Abstr.) **(Fre)**

SURGERY

A technique for preservation of the ileocecal valve in the neonatal short intestine. Kosloske AM, et al. **J Pediatr Surg** 1989 Apr;24(4):369–70

[Small intestine transplantation, an overview] Saat RE, et al. **Ned Tijdschr Geneeskd** 1988 Oct 8;132(41):1878–81 (37 ref.) **(Dut)**

[Surgical managements of massive involvement of small bowel and of short gut syndrome] Muraji T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1382–6 (Eng. Abstr.) **(Jpn)**

[Management of short bowel syndrome in infants—experience of adjunctive surgical therapy in three cases] Tsuda M, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1387–90 (Eng. Abstr.) **(Jpn)**

[Current possibilities of transplantation of the small intestine] Bielicki D. **Wiad Lek** 1988 Jul 1;41(13):874–9 (26 ref.) (Eng. Abstr.) **(Pol)**

THERAPY

Beneficial effects of glucose polymer and an H2–receptor blocker in a patient with a proximal ileostomy. Saunders DR, et al. **Am J Gastroenterol** 1989 Feb;84(2):192–4

Extensive short–bowel syndrome in neonates: outcome in the 1980s. Caniano DA, et al. **Surgery** 1989 Feb;105(2 Pt 1):119–24

[Small intestine transplantation, a review (letter)] Piegza MA. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):179–80 **(Dut)**

[Continuous enteral nutrition and short bowel syndrome] Cosnes J. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov; 24(6):323–8 (Eng. Abstr.) **(Fre)**

[Parenteral nutrition at home: 2 years' experience] Van Gossum A, et al. **Rev Med Brux** 1989 Jun;10(6):225–32 (Eng. Abstr.) **(Fre)**

[Problems and difficulties in adapting period in infants and children after massive intestinal resection] Hasegawa S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1391–4 (Eng. Abstr.) **(Jpn)**

[Long–term TPN for short bowel syndrome] Yokoyama S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1403–5 (Eng. Abstr.) **(Jpn)**

VETERINARY

Rapid decrease of the peripheral deiodination of thyroxine in malabsorption syndrome in artificially inoculated broilers. Rudas P, et al. **Avian Dis** 1989 Apr–Jun; 33(2):279–84

Pulmonary excretion of H2 in calves with Cryptosporidium–induced malabsorption. Holland RE, et al. **Dig Dis Sci** 1989 Sep;34(9):1399–404

Probable vitamin K—deficient bleeding in two cats with malabsorption syndrome secondary to lymphocytic–plasmacytic enteritis. Edwards DF, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):97–101

MALACOPLAKIA

Malacoplakia: a 25–year experience with a review of the literature. Long JP Jr, et al. **J Urol** 1989 Jun;141(6):1328–31 (26 ref.)

[Malacoplakia of the urinary bladder] Goj P, et al. **Rozhl Chir** 1988 Oct;67(10):694–9 (Eng. Abstr.) **(Cze)**

[Ureteral and vesical malacoplakia. Description of 2 cases] Losinno F, et al. **Radiol Med (Torino)** 1988 Sep;76(3):223–5 **(Ita)**

COMPLICATIONS

Acute renal failure due to bilateral renal parenchymal malacoplakia. Ling BN, et al. **Am J Kidney Dis** 1989 May; 13(5):430–3 (23 ref.)

Renal cell carcinoma with malakoplakia. Lew S, et al. **Eur Urol** 1988;14(5):426–8

Prostatic malakoplakia associated with prostatic adenocarcinoma and multiple prostatic abscesses. Sujka SK, et al. **Urology** 1989 Sep;34(3):159–61

DIAGNOSIS

An unusual case of malacoplakia cytologically diagnosed [letter] Coscia–Porrazzi L. **Acta Cytol** 1989 May–Jun; 33(3):411–3

Unusual site for an unusual disease. Malacoplakia of the prostate. Rach JF, et al. **W V Med J** 1989 Mar;85(3):90–1 (16 ref.)

[Genitourinary malacoplakia. Apropos of 5 cases. A review of the literature] el Ouakdi M, et al. **Ann Urol (Paris)** 1989; 23(3):197–200 (11 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

Malakoplakia in renal transplantation: an expression of altered tissue reactivity under immunosuppression. Shabtai M, et al. **Transplant Proc** 1989 Aug;21(4):3725–7

MICROBIOLOGY

Intracellular bacilli in vaginal smears in a case of malacoplakia of the uterine cervix [letter] Kapila K, et al. **Acta Cytol** 1989 May–Jun;33(3):410–1

PATHOLOGY

Renal parenchymal malakoplakia. Histologic spectrum and its relationship to megalocytic interstitial nephritis and xanthogranulomatous pyelonephritis. Esparza AR, et al. **Am J Surg Pathol** 1989 Mar;13(3):225–36

Morphogenesis of Michaelis–Gutmann bodies in cerebral malacoplakia. An ultrastructural study. Ho KL. **Arch Pathol Lab Med** 1989 Aug;113(8):874–9

Renal parenchymal malakoplakia. Singh PB, et al. **Br J Urol** 1989 Jan;63(1):99–100

Bilateral renal malakoplakia in infancy. Wiggelinkhuizen J, et al. **Child Nephrol Urol** 1988–89;9(1–2):101–5

Bilateral renal malacoplakia in systemic lupus erythematosus and adrenogenital syndrome. Mohácsi G, et al. **Int Urol Nephrol** 1989;21(1):31–8

[Renal malacoplakia with pseudotumoral form] Ferry N. **J Urol (Paris)** 1989;95(1):70–1 **(Fre)**

[Malacoplakia of the urethra] Hausmann H, et al. **Z Urol Nephrol** 1989 Mar;82(3):155–8 (Eng. Abstr.) **(Ger)**

[A case of ureteral and vesical malacoplakia] Mizunaga M,

et al. Hinyokika Kiyo 1989 Mar;35(3):501–4 (Eng. Abstr.) (Jpn)
[A case of malakoplakia of the testis and epididymis] Moriyama N, et al. Nippon Hinyokika Gakkai Zasshi 1989 May;80(5):740–3 (24 ref.) (Eng. Abstr.) (Jpn)
[Vesical malacoplakia] Laguna Urraca G, et al. Actas Urol Esp 1989 May–Jun;13(3):207–9 (Eng. Abstr.) (Spa)
[Malacoplakia: aggressive course of a large pelvic mass] Pamplona M, et al. Actas Urol Esp 1988 Nov–Dec; 12(6):581–6 (Eng. Abstr.) (Spa)
[Renal malacoplakia in childhood. Report of a case] Ramos–Contreras P, et al. Bol Med Hosp Infant Mex 1989 Mar;46(3):191–4 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Urinary tract malakoplakia with extension into the retroperitoneum with secondary gastrointestinal involvement. Westra SJ, et al. Urol Radiol 1988;10(4):181–5

RADIONUCLIDE IMAGING

Scintigraphic evaluation of parenchymal malakoplakia in a transplanted kidney. Melloul MM, et al. Clin Nucl Med 1988 Jul;13(7):525–6

MALAR BONE see ZYGOMA

MALARIA

Association of a Plasmodium–refractory phenotype with an esterase locus in Anopheles gambiae. Vernick KD, et al. Am J Trop Med Hyg 1989 Jun;40(6):593–7
A general system of resistance to malaria infection in Anopheles gambiae controlled by two main genetic loci. Vernick KD, et al. Am J Trop Med Hyg 1989 Jun; 40(6):585–92
If I had an attack of malaria. Jopling WH. Br J Clin Pract 1988 Feb;42(2):49–50
The great malaria problem: where is the light at the end of the tunnel? Cook GC. J Infect 1989 Jan;18(1):1–10 (98 ref.)
Malaria—an overview. Gilles HM. J Infect 1989 Jan; 18(1):11–23 (109 ref.)
Black water fever in Multan. Zafar MH, et al. JPMA 1988 Jul;38(7):194–6
Thoughts on malaria in pregnancy with consideration of some factors which influence remedial strategies. McGregor IA. Parasitologia 1987 May–Dec; 29(2–3):153–63 (7 ref.)
Malaria and the red cell:2. Proceedings of the second workshop. Ann Arbor, Michigan, October 24, 1988. Prog Clin Biol Res 1989;313:1–169
Clinical course of malaria in pregnancy—a prospective controlled study from India. Sholapurkar SL, et al. Trans R Soc Trop Med Hyg 1988;82(3):376–9
XIIth International Congress for Tropical Medicine and Malaria. Amsterdam, September 18–23, 1988. Abstracts. Trop Geogr Med 1988 Jul;40(3):S1–60
[Malaria in the islands of the Comoro archipelago. Historical and geophysical aspects. Epidemiologic considerations] Julvez J, et al. Bull Soc Pathol Exot Filiales 1988; 81(5):847–53 (Eng. Abstr.) (Fre)
[Iterative placental infection by P. falciparum during 2 successive pregnancies in Bobo–Dioulasso (Burkina–Faso)] Molez JF, et al. Bull Soc Pathol Exot Filiales 1989; 82(3):373–80 (Eng. Abstr.) (Fre)
[Malaria in the Mediterranean world. The historical and present-day distribution] Nozais JP. Bull Soc Pathol Exot Filiales 1988;81(5):854–60 (30 ref.) (Eng. Abstr.) (Fre)
[Therapy and prevention of malaria] Bianchini C. Medicina (Firenze) 1989 Jan–Mar;9(1):27–40 (6 ref.) (Eng. Abstr.) (Ita)
[Biology of Amazonian Anopheles. XII. Occurrence of Anopheles species, transmission dynamics and malaria control in the urban area of Ariquemes (Rondônia)] Tadei WP, et al. Rev Inst Med Trop Sao Paulo 1988 May–Jun; 30(3):221–51 (Eng. Abstr.) (Por)
[Malaria as a public health problem] Carrada–Bravo T, et al. Bol Med Hosp Infant Mex 1988 Oct;45(10):700–11 (19 ref.) (Eng. Abstr.) (Spa)
[Malaria for gastroenterologists] Römer MA. GEN 1987 Jan–Mar;41(1):22–40 (29 ref.) (Eng. Abstr.) (Spa)

BLOOD

Comparison of the partitioning in vitro of chloroquine and its desethyl metabolites between the erythrocytes and plasma of healthy subjects and those with falciparum malaria. Ajayi FO, et al. Afr J Med Med Sci 1989 Jun; 18(2):95–100
Elevated tumor necrosis factor alpha and interleukin–6 serum levels as markers for complicated Plasmodium falciparum malaria. Kern P, et al. Am J Med 1989 Aug;87(2):139–43
Transcapillary escape rate and capillary permeability to albumin in patients with Plasmodium falciparum. Areekul S. Ann Trop Med Parasitol 1988 Apr;82(2):135–40
Removal of leucocytes from malaria–infected blood using commercially available filters. Mons B, et al. Ann Trop Med Parasitol 1988 Dec;82(6):621–3
Peripheral blood and bone marrow leucocytes in Gambian children with malaria: numerical changes and evaluation of phagocytosis. Abdalla SH. Ann Trop Paediatr 1988 Dec; 8(4):250–8
Abnormal features of peripheral blood films from Gambian children with malaria. Facer CA, et al. Ann Trop Paediatr 1989 Jun;9(2):107–10
Diferric transferrin reductase in Plasmodium falciparum–infected erythrocytes. Fry M. Biochem Biophys Res Commun 1989 Jan 31;158(2):469–73
Compartment analysis of ATP in malaria–infected erythrocytes. Kanaani J, et al. Biochem Int 1988 Sep; 17(3):451–9
Regulation of phosphatidylcholine biosynthesis in Plasmodium–infected erythrocytes. Ancelin ML, et al. Biochim Biophys Acta 1989 Jan 23;1001(1):82–9
Abnormalities in the mechanical properties of red blood cells caused by Plasmodium falciparum. Nash GB, et al. Blood 1989 Aug 1;74(2):855–61
The circulating platelet in acute malaria infection. Easien EM. Br J Haematol 1989 Aug;72(4):589–90 (20 ref.)
Dyserythropoiesis and ineffective erythropoiesis in Plasmodium vivax malaria. Wickramasinghe SN, et al. Br J Haematol 1989 May;72(1):91–9
Rapid clearance of Plasmodium yoelii–infected erythrocytes after exposure to the ionophore A23187. Tanabe K, et al. Comp Biochem Physiol [A] 1989;92(1):85–9
Alterations in membrane proteins of mouse erythrocytes infected with different species and strains of malaria parasites. Yuthavong Y, et al. Comp Biochem Physiol [B] 1979;63(1):83–5
Inhibition of erythropoiesis by a soluble factor in murine malaria. Miller KL, et al. Exp Hematol 1989 May; 17(4):379–85
Some roles of free radicals in malaria. Clark IA, et al. Free Radic Biol Med 1989;6(3):315–21 (87 ref.)
Red cell membrane alterations in malaria. Gupta CM. Indian J Biochem Biophys 1988 Feb–Apr;25(1–2):20–4 (34 ref.)
Some components of kinin system in human malaria. Roy S, et al. Indian J Malariol 1988 Jun;25(1):51–5
Effector cells involved in nonspecific and antibody–dependent mechanisms directed against Plasmodium falciparum blood stages in vitro. Lunel F, et al. Infect Immun 1989 Jul;57(7):2043–9
Malaria invasion of human erythrocytes. Synthesis of peptides relevant to glycophorin A and evaluation of their inhibitory properties. Lacombe JM, et al. Int J Pept Protein Res 1988 Aug;32(2):104–16
IgM antibody responses to the circumsporozoite protein in naturally acquired falciparum malaria. Brown AE, et al. J Clin Immunol 1988 Sep;8(5):342–8
Activation of monocytes and platelets by monoclonal antibodies or malaria–infected erythrocytes binding to the CD36 surface receptor in vitro. Ockenhouse CF, et al. J Clin Invest 1989 Aug;84(2):468–75
Increased ovalocytic red cells and their low parasitemia in malaria infected subjects. Apibal S, et al. J Med Assoc Thai 1989 Mar;72(3):129–31
Tumor necrosis factor and disease severity in children with falciparum malaria. Grau GE, et al. N Engl J Med 1989 Jun 15;320(24):1586–91
Blood glucose levels in Malawian children before and during the administration of intravenous quinine for severe falciparum malaria [published erratum appears in N Engl J Med 1989 Mar 9;320(10):676] Taylor TE, et al. N Engl J Med 1988 Oct 20;319(16):1040–7
Erythrocyte knobs and malaria [letter] Trager W. Nature 1989 Aug 3;340(6232):352
A selective advantage for the Gerbich–negative phenotype in malarious areas of Papua New Guinea. Serjeantson SW. P N G Med J 1989 Mar;32(1):5–9
Localisation of Plasmodium chabaudi antigens by cryomicrotomy using monoclonal antibodies and the immunogold–silver staining method for light microscopy. Chadwick CJ, et al. Parasitol Res 1989;75(3):247–9
Stage–specific proteins of Plasmodium berghei–infected red blood cells detected by antibodies of immune mouse serum. Schetters TP, et al. Parasitol Res 1988;75(1):69–72
Phospholipid metabolism in Plasmodium–infected erythrocytes: guidelines for further studies using radioactive precursor incorporation. Vial HJ, et al. Parasitology 1989 Jun;98 Pt 3:351–7
1H–NMR spectroscopic study of serums from patients with malaria. Nishina M, et al. Physiol Chem Phys Med NMR 1988;20(4):269–71
Ferriprotoporphyrin IX: role in chloroquine susceptibility and resistance in malaria. Fitch CD. Prog Clin Biol Res 1989;313:45–52 (33 ref.)
Infrequency of asymptomatic malaria in an endemic area in Amazonas, Brazil. Prata A, et al. Rev Soc Bras Med Trop 1988 Apr–Jun;21(2):51–4
Platelet dysfunction in malaria. Srichaikul T, et al. Southeast Asian J Trop Med Public Health 1988 Jun; 19(2):225–33
Endotoxaemia in complicated falciparum malaria. Aung–Kyaw–Zaw, et al. Trans R Soc Trop Med Hyg 1988; 82(4):513–4
Elevation of beta 2–microglobulin in malaria. Chiewsilp D, et al. Trans R Soc Trop Med Hyg 1988;82(5):688–9
Quinine pharmacokinetics in cerebral malaria: predicted plasma concentrations after rapid intravenous loading using a two–compartment model. Davis TM, et al. Trans R Soc Trop Med Hyg 1988;82(4):542–7
ELISA—a possible alternative to establish a therapeutic drug monitoring system in severe and complicated falciparum malaria. Ealava A, et al. Trans R Soc Trop Med Hyg 1988; 82(5):683–5
Duffy phenotypes in Malaysian populations: correction of previous unusual findings. Lewis GE Jr, et al. Trans R Soc Trop Med Hyg 1988;82(3):509–10
Functional and ultrastructural changes of platelets in malarial infection. Mohanty D, et al. Trans R Soc Trop Med Hyg 1988;82(3):369–75
Reduced efficacy of chemotherapy of Plasmodium chabaudi in T cell–deprived mice. Myint Lwin, et al. Trans R Soc Trop Med Hyg 1987;81(6):899–902
Characterization of a specific inhibitor of IL2–mediated proliferation from serum of Plasmodium berghei infected mice. Natarajan K, et al. Trop Med Parasitol 1988 Sep; 39(3):203–7
[Stimulation of the chemiluminescence of human polymorphonuclear leukocytes in various stages of the intraerythrocyte development of Plasmodium falciparum] Malhotra K, et al. C R Soc Biol (Paris) 1988;182(3):270–8 (Eng. Abstr.) (Fre)
[The state of hemostasis in patients with imported malaria] Loban KM, et al. Klin Med (Mosk) 1988 Nov;66(11):110–4 (Eng. Abstr.) (Rus)

COMPLICATIONS

Is malaria involved in the pathogenesis of tropical endomyocardial fibrosis? Eling WM, et al. Acta Leiden 1988;57(1):47–52
In–vivo susceptibility of Plasmodium falciparum to cholorquine in pregnant and non–pregnant women and in–vitro response of P. falciparum to chloroquine and mefloquine in Madang Province, Papua New Guinea. Klever HJ, et al. Acta Leiden 1988;57(1):29–38
Tumor necrosis factor in malaria–induced abortion. Clark IA, et al. Am J Trop Med Hyg 1988 Sep;39(3):246–9
Interactions between Plasmodium yoelii and Leishmania mexicana amazonensis in Leishmania resistant C57Bl/6 mice. Coleman RE, et al. Am J Trop Med Hyg 1988 Dec; 39(6):540–4
Metastasis of Leishmania mexicana in a Leishmania–resistant mouse strain (C/57) following concomitant malarial infection. Coleman RE, et al. Ann Trop Med Parasitol 1988 Aug;82(4):399–401
Symptoms and responses to chemotherapy in adult Malawians admitted to hospital with Plasmodium falciparum malaria. Harries AD, et al. Ann Trop Med Parasitol 1988 Oct;82(5):511–2
Plasmodium berghei: pulmonary oedema and changes in clotting and fibrinolysis during infection in mice. Peçanha LM, et al. Ann Trop Med Parasitol 1988 Oct;82(5):429–36
Review article: immune nephritides due to malaria. Otieno LS, et al. East Afr Med J 1988 Jun;65(6):402–6 (36 ref.)
Immunopathology of thrombocytopenia in experimental malaria. Grau GE, et al. Immunology 1988 Dec;65(4):501–6
Coronary arterial aneurysm: possible relation with malaria? van der Wall EE, et al. Int J Cardiol 1988 Dec;21(3):351–3
Malarial hepatitis [letter] Arya TV, et al. J Assoc Physicians India 1988 Apr;36(4):294–5
Occurrence of urticaria as a manifestation of Falciparum malaria. Singh RP, et al. J Assoc Physicians India 1988 Apr;36(4):261–2
Falciparum malaria presenting as testicular pain and swelling—a rejoinder [letter] Virmani SK. J Assoc Physicians India 1988 Apr;36(4):295
Prevention of experimental cerebral malaria by anticytokine antibodies. Interleukin 3 and granulocyte macrophage colony–stimulating factor are intermediates in increased tumor necrosis factor production and macrophage accumulation. Grau GE, et al. J Exp Med 1988 Oct 1; 168(4):1499–504
Glomerulonephritis in common marmosets infected with Plasmodium brasilianum and Epstein–Barr virus. Wedderburn N, et al. J Infect Dis 1988 Oct;158(4):789–94
Interactions between malaria (Plasmodium yoelii) and leishmaniasis (Leishmania mexicana amazonensis): effect of concomitant infection on host activity, host body temperature, and vector engorgement success. Coleman RE, et al. J Med Entomol 1988 Nov;25(6):467–71
Cytoadherence in human falciparum malaria as a cause of respiratory distress. Corbett CE, et al. J Trop Med Hyg 1989 Apr;92(2):112–20
Focal neurological signs in cerebral malaria accounted for by preceding neurological damage. Currie BJ, et al. J Trop Med Hyg 1989 Aug;92(4):276–8
Nephropathy in falciparum malaria [clinical conference] Sitprija V. Kidney Int 1988 Dec;34(6):867–77 (109 ref.)
Ovalocytosis and malaria [letter] Fleming AF. Lancet 1988 Oct 8;2(8615):857
Eosinophils in falciparum malaria [letter] Davis TM. Med J Aust 1989 Mar 20;150(6):348–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 35–1989. A 25–year–old Haitian man with chills, fever, abdominal pain, and renal failure. N Engl J Med 1989 Aug 31;321(9):597–605
NZ death from malaria [letter] Ewing RL. N Z Med J 1988 Sep 28;101(854):614
Furosemide and dopamine in malarial acute renal failure. Lumlertgul D, et al. Nephron 1989;52(1):40–4
Antenatal malarial infections. Naeye RL. Prog Clin Biol Res 1988;281:165–73 (18 ref.)

Hypoglycaemia in severe falciparum malaria. Das BS, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):197–201

Cerebellar syndrome in mild Plasmodium falciparum malaria. Girard PM, et al. **Trans R Soc Trop Med Hyg** 1988; 82(2):204

Treatment of severe malarial anaemia in East Africa's underfives–an unsolvable problem since the advent of AIDS? Schmutzhard E, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):220

Tropical infections after renal transplantation. Gueco I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2105–7

Spontaneous and quinine induced hypoglycaemia in severe falciparum malaria. Arya TV, et al. **Trop Geogr Med** 1989 Jan;41(1):73–5

[An uncommon complication of chloroquine resistant Plasmodium falciparum malaria: spontaneous splenic rupture (letter)] Touze JE, et al. **Ann Med Interne (Paris)** 1989;140(3):228–9 (Fre)

[Hyper–reactive malarial splenomegaly in an European returning from Central Africa (letter)] Chagnon A, et al. **Presse Med** 1989 May 6;18(18):938 (Fre)

[Thrombocytopenia of malaria. Role of immune phenomena (letter)] Touze JE, et al. **Presse Med** 1989 Jul 1;18(26):1297 (Fre)

CONGENITAL

Chloroquine–resistant Plasmodium falciparum in Mali revealed by congenital malaria. Chabasse D, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):547

Congenital malaria in Papua New Guinea. Lehner PJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):822–6

[Malaria, pregnancy and prophylaxis] Niyongabo T, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):69–71 (Eng. Abstr.) (Fre)

[Congenital malaria in a twin] Salazar–Hernández AC. **Bol Med Hosp Infant Mex** 1989 Mar;46(3):195–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Comparison of thick films, in vitro culture and DNA hybridization probes for detecting Plasmodium falciparum malaria. Lanar DE, et al. **Am J Trop Med Hyg** 1989 Jan; 40(1):3–6

A comparative field study of radiolabeled and enzyme–conjugated synthetic DNA probes for the diagnosis of falciparum malaria. Sethabutr O, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):227–31

Malaria diagnosis by direct observation of centrifuged samples of blood. Spielman A, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):337–42

It's not a viral syndrome, it's malaria. Klingelberger CE. **Ann Emerg Med** 1989 Feb;18(2):207–10

Hypnozoites in Bradford. McGlone R, et al. **Arch Emerg Med** 1988 Dec;5(4):239–41

Malaria diagnosis: memorandum from a WHO meeting. **Bull WHO** 1988;66(5):575–94 (75 ref.)

Use and limitations of light microscopy for diagnosing malaria at the primary health care level. Payne D. **Bull WHO** 1988;66(5):621–6

Development of a DNA diagnostic probe for the detection of the human malarial parasite Plasmodium falciparum. Francis VS, et al. **Indian J Biochem Biophys** 1988 Dec; 25(6):537–41

Stabilization of Plasmodium knowlesi antigen for seroepidemiology of malaria. Saxena SK, et al. **Indian J Malariol** 1988 Jun;25(1):27–32

Fractionation of Plasmodium knowlesi antigen for seroepidemiology of human malaria by IHA test. Saxena SK, et al. **Indian J Malariol** 1988 Jun;25(1):33–9

Cerebral malaria caused by Plasmodium vivax. Arora RC, et al. **J Assoc Physicians India** 1988 Sep;36(9):564

Sero–epidemiological tools vis–a–vis conventional malariometric–indices—a study in Orissa State, India. Ray K, et al. **J Commun Dis** 1988 Sep;20(3):232–46

A new tool for the serodiagnosis of acute Plasmodium falciparum malaria in individuals with primary infection. Früh K, et al. **J Immunol Methods** 1989 Aug 15; 122(1):25–32

Comparative study of various serological criteria in malaria survey. Ittiravivongs A, et al. **J Trop Med Hyg** 1988 Dec; 91(6):288–91

A patient of vivax malaria and enteric fever presenting as a case of jaundice with leukaemoid reaction. Gandapur AS, et al. **JPMA** 1988 May;38(5):148–9

Interpretation of blood films in diagnosis of malaria [letter] Brook MG, et al. **Lancet** 1989 Sep 9;2(8663):619

Cerebral malaria, missed again [letter] Haile Z, et al. **Lancet** 1989 Mar 18;1(8638):620

Rapid diagnosis of malaria by acridine orange staining of centrifuged parasites. Rickman LS, et al. **Lancet** 1989 Jan 14;1(8629):68–71

Rapid diagnosis of malaria [letter] Rickman LS, et al. **Lancet** 1989 Jun 3;1(8649):1271

Rapid diagnosis of malaria [letter] Spielman A, et al. **Lancet** 1989 Apr 1;1(8640):727

Rapid, sensitive diagnosis of malaria based on ribosomal RNA. Waters AP, et al. **Lancet** 1989 Jun 17;1(8651):1343–6

Rapid diagnosis of malaria [letter] White NJ, et al. **Lancet** 1989 Feb 25;1(8635):435

Rapid diagnosis of malaria by acridine orange staining of centrifuged parasites [letter] Wongsrichanalai C, et al. **Lancet** 1989 Apr 29;1(8644):967

Rapid test for malaria [letter] Zimmerman R, et al. **Lancet** 1989 May 6;1(8645):1013–4

Long–standing fevers in a young pregnant woman [clinical conference] Lloyd A, et al. **Med J Aust** 1988 Oct 3; 149(7):382–6

Malaria—diagnostic criteria [letter] Gevers T. **S Afr Med J** 1988 Oct 15;74(8):427

Diagnosis of falciparum malaria delayed by long incubation period and misleading presenting symptoms: life–saving role of manual leucocyte differential count. Kyrönseppä H, et al. **Scand J Infect Dis** 1989;21(1):117–8

A case of autochthonous malaria in Italy [letter] Sartori M, et al. **Scand J Infect Dis** 1989;21(3):357–8

Diagnosis of tertian malaria by enzyme–linked immunosorbent assay. Wang M, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):888–90

[Application of dot–immunobinding assay in immuno–diagnosis of falciparum malaria] Wang J, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(4):282–4 (Eng. Abstr.) (Chi)

[Antigenic diversity of Plasmodium falciparum and serodiagnosis of tropical malaria] Giboda M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):18–26 (Eng. Abstr.) (Cze)

[Current clinical aspects and role of parasitic density in the manifestations of falciparum malaria] Touze JE, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):110–7 (Eng. Abstr.) (Fre)

[Diagnostic difficulties and current clinical aspects of Plasmodium falciparum malaria upon returning from a chemoresistance area] Touze JE, et al. **Presse Med** 1988 Sep 17;17(31):1573–5 (Eng. Abstr.) (Fre)

[Evolving visceral malaria: an unusual occurrence in Europeans. Apropos of a case] Raeber PA, et al. **Rev Med Suisse Romande** 1988 Sep;108(9):791–4 (Fre)

[A case from practice (142). Patient: Mr. R. W., born 1960, cook] Suter F. **Schweiz Rundsch Med Prax** 1989 Jun 27; 78(26):754–6 (Ger)

[Plasmodium falciparum malaria: a difficult diagnostic and therapeutic problem] Kocięcka W, et al. **Wiad Parazytol** 1988;34(4–6):649–53 (Eng. Abstr.) (Pol)

[Human malaria: standardization and optimization of serologic tests for individual diagnosis and seroepidemiologic surveys] Ferreira AW, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):137–46 (Eng. Abstr.) (Por)

[The results of a study on imported drug–resistant tropical malaria in the USSR] Filippov AM, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):3–6 (Eng. Abstr.) (Rus)

[Clinical and treatment characteristics of tertian malaria in viral hepatitis A] Koshil' OI, et al. **Voen Med Zh** 1988 Jul;(7):44–6 (Rus)

[Errors in the diagnosis of malaria] Ovcharenko PA, et al. **Vrach Delo** 1988 Aug;(8):109–10 (Eng. Abstr.) (Rus)

DRUG THERAPY

Chloroquine–resistant Plasmodium falciparum in eastern Sudan. Bayoumi RA, et al. **Acta Trop (Basel)** 1989 May; 46(3):157–65

Delay in emergence of mefloquine resistance in Plasmodium berghei by use of drug combinations. Puri SK, et al. **Acta Trop (Basel)** 1989 Jul;46(4):209–12

Comparison of the susceptibility of falciparum malaria to mefloquine–sulphadoxine–pyrimethamine and chloroquine in Nigeria. Fadeke Aderounmu A, et al. **Afr J Med Med Sci** 1988 Dec;17(4):195–200

Mechanisms of enhanced pruritogenicity of chloroquine among patients with malaria: a review. Osifo NG. **Afr J Med Med Sci** 1989 Jun;18(2):121–9 (52 ref.)

Intravenous quinine therapy of hospitalized children with Plasmodium falciparum malaria in Kinshasa, Zaire. Greenberg AE, et al. **Am J Trop Med Hyg** 1989 Apr; 40(4):360–4

Norfloxacin: a new drug in the treatment of falciparum malaria. Sarma PS. **Ann Intern Med** 1989 Aug 15; 111(4):336–7

Fluoroquinolones for malaria: the newest kid on the block? Wyler DJ. **Ann Intern Med** 1989 Aug 15;111(4):269–71

Mepacrine accumulation during treatment of chloroquine–resistant falciparum malaria. Looareesuwan S, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):107–12

Sensitivity of Plasmodium falciparum to mefloquine–sulphadoxine–pyrimethamine (Fansimef) in vivo and to mefloquine alone in vitro in Nigeria. Salako LA, et al. **Ann Trop Med Parasitol** 1988 Aug;82(4):325–30

In vitro and in vivo activities of atalaphillinine and related acridone alkaloids against rodent malaria. Fujioka H, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):6–9

Antimalarial agents: specific treatment regimens. Krogstad DJ, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):957–61 (51 ref.)

Pharmacokinetics of intramuscular amopyroquin in healthy subjects and determination of a therapeutic regimen for Plasmodium falciparum malaria. Verdier F, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):316–21

Malaria. Ellis ME. **Arch Emerg Med** 1988 Dec;5(4):195–9

Antimalarial prophylaxis. **Aust Fam Physician** 1976 Sep; 5(8):1164, 1166

Fansimef [Fansidar plus mefloquine] is effective treatment for imported malaria in New Zealand. Ellis–Pegler RB, et al. **Aust N Z J Med** 1988 Aug;18(5):733–4

Fansimef in the treatment of malaria [letter] Prociv P. **Aust N Z J Med** 1989 Aug;19(4):411

Therapeutic effect of chloroquine(CQ)–containing immunoliposomes in rats infected with Plasmodium berghei parasitized mouse red blood cells: comparison with combinations of antibodies and CQ or liposomal CQ. Peeters PA, et al. **Biochim Biophys Acta** 1989 Jun 6; 981(2):269–76

Effectiveness of amodinquine, sulfadoxine–pyrimethamine, and combinations of these drugs for treating chloroquine–resistant falciparum malaria in Hainan Island, China. Huang OL, et al. **Bull WHO** 1988;66(3):353–8

Effect of oral contraceptive steroids on the clinical course of malaria infection and on the pharmacokinetics of mefloquine in Thai women. Karbwang J, et al. **Bull WHO** 1988;66(6):763–7

In vivo and in vitro responses to quinine and quinidine of Plasmodium falciparum. Sabchareon A, et al. **Bull WHO** 1988;66(3):347–52

Response of Plasmodium falciparum to chloroquine treatment: relation to whole blood concentrations of chloroquine and desethylchloroquine. Hellgren U, et al. **Bull WORLD Health Organ** 1989;67(2):197–202

In vitro drug sensitivity of Plasmodium falciparum in Acre, Brazil. Kremsner PG, et al. **Bull WORLD Health Organ** 1989;67(3):289–93

Chloroquine–resistant Plasmodium falciparum malaria acquired in central Africa—Quebec. Pichette G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):65–6 (Eng, Fre)

Mixed falciparum and vivax malaria in Canadian travellers [letter] Nguyen CD, et al. **Can Med Assoc J** 1989 Jul 15; 141(2):100, 104

Prostaglandin derivatives inhibit the growth of malarial parasites in mice. Ohnishi ST, et al. **Cell Biochem Funct** 1989 Apr;7(2):105–9

A comparison of the sensitivity of Plasmodium falciparum malaria to chloroquine in two areas of Isoka District—Zambia. Maboshe MN, et al. **Cent Afr J Med** 1988 Oct;34(10):244–6

Artemisinin (qinghaosu)—a new gametocytocidal drug for malaria. Dutta GP, et al. **Chemotherapy** 1989;35(3):200–7

Spectrum of the antimalarial activity of a new macrolide antibiotic midecamycin in mice and monkeys. Puri SK, et al. **Chemotherapy** 1989;35(3):187–92

Ineffectiveness of continuous quinidine gluconate infusion in the treatment of severe chloroquine–resistant Plasmodium falciparum malaria. Matsuura GK, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):883–5

Malaria: its therapy and drug resistance [editorial] **East Afr Med J** 1987 Aug;64(8):509–10

In–vivo falciparum malaria response to chloroquine in Kisumu–Kenya. Kabiru EW, et al. **East Afr Med J** 1987 Sep;64(9):606–10

Chloroquine administration in the treatment of malaria with reference to brands, specification and dosage: a survey in north–eastern Tanzania. Lyimo EO. **East Afr Med J** 1987 Aug;64(8):551–7

Response of Plasmodium falciparum to chloroquine in hospital patients at Muheza, Tanzania. Mutabingwa TK, et al. **East Afr Med J** 1986 Dec;63(12):771–85

Quinine dosage in severe malaria with renal failure necessitating haemodialysis. Sharma AM, et al. **Eur J Clin Pharmacol** 1989;36(5):535–6

Curative and preventive treatment of uncomplicated malaria in public health institutions in Cameroon. Ndumbe PM. **Eur J Epidemiol** 1989 Jun;5(2):183–8

Oxidative stress as a defense mechanism against parasitic infections [published erratum appears in Free Radic Res Commun 1987;4(1):following 67] Schirmer RH, et al. **Free Radic Res Commun** 1987;3(1–5):3–12

Drug therapy falciparum malaria [letter] Gopinathan VP, et al. **Indian Pediatr** 1988 Mar;25(3):309–10

Cerebral malaria in children: therapeutic considerations. Thapa BR, et al. **Indian Pediatr** 1988 Jan;25(1):61–5

Clindamycin treatment of falciparum malaria in Brazil. Kremsner PG, et al. **J Antimicrob Chemother** 1989 Feb; 23(2):275–81

Drug combinations in the treatment of malaria. Donno L. **J Chemother** 1989 Feb;1(1):52–8

DNA hybridization for assessment of response of Plasmodium falciparum to chloroquine therapy. McLaughlin GL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1704–7

Studies on efficacy of treatment with sulfamethoxazole + trimethoprim and sulfalene + pyrimethamine combinations in Plasmodium falciparum malaria of known and unknown resistant status. Barkakaty BN, et al. **J Commun Dis** 1988 Sep;20(3):165–74

Chloroquine in the treatment of malaria [letter] Ellis CJ. **J Infect** 1989 Jul;19(1):87

High–dose dexamethasone in malaria [letter] Cooper B. **J Infect Dis** 1989 Apr;159(4):803–4

A comparative trial of three regimens for treating uncomplicated falciparum malaria in Acre, Brazil. Kremsner PG, et al. **J Infect Dis** 1988 Dec;158(6):1368–71

Follow–up observation on the therapeutic effects and remote reactions of artemisinin (Qinghaosu) and artemether in treating malaria in pregnant woman. Wang TY. **J Tradit Chin Med** 1989 Mar;9(1):28–30

Experimental studies on the antimalarial activity estimation

by artesunate and artemether preparations per skin absorption. Xuan WY, et al. **J Tradit Chin Med** 1988 Dec; 8(4):282–4

Serial studies on the evolution of drug resistance in malaria in an area of east Africa: findings from 1979 up to 1986. Draper CC, et al. **J Trop Med Hyg** 1988 Oct;91(5):265–73

From the Food and Drug Administration. Nightingale SL. **JAMA** 1989 Jul 14;262(2):184

Halofantrine in the treatment of malaria. **Lancet** 1989 Sep 2;2(8662):537–8 (16 ref.)

Successful treatment of falciparum malaria in pregnancy with mefloquine [letter] Collignon P, et al. **Lancet** 1989 Apr 29; 1(8644):967

Resistant malaria and the Sudan floods [letter] Homeida M, et al. **Lancet** 1988 Oct 15;2(8616):912

Stevens–Johnson syndrome due to pyrimethamine/sulfadoxine during presumptive self–therapy of malaria [letter] Phillips–Howard PA, et al. **Lancet** 1989 Sep 30;2(8666):803–4

Malaria in travelers returning from Kenya: failure of self–treatment with pyrimethamine/sulfadoxine. **MMWR** 1989 May 26;38(20):363–4

Mitochondria as the site of action of tetracycline on Plasmodium falciparum. Kiatfuengfoo R, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):109–15

Chemoprophylaxis and treatment of malaria [letter; comment] **N Engl J Med** 1989 Jun 8;320(23):1561. **Comment on:** N Engl J Med 1988 Dec 8;319(23):1538–40

Chemoprophylaxis and treatment of malaria [editorial] [see comments] Krogstad DJ, et al. **N Engl J Med** 1988 Dec 8;319(23):1538–40. **Comment in:** N Engl J Med 1989 Jun 8;320(23):1561

Chloroquine treatment of severe malaria in children. Pharmacokinetics, toxicity, and new dosage recommendations. White NJ, et al. **N Engl J Med** 1988 Dec 8;319(23):1493–500

Transport proteins. Export–import family expands [news] Higgins C. **Nature** 1989 Aug 3;340(6232):342

Resistance of Plasmodium falciparum to chemotherapy with 4–aminoquinolines in the Ok Tedi area of Papua New Guinea. Schuurkamp GJ, et al. **P N G Med J** 1989 Mar; 32(1):33–44

Antimalarial activity of new floxacrine–related acridinedione derivatives: studies on blood schizontocidal action of potential candidates against P. berghei in mice and P. falciparum in vivo and in vitro. Raether W, et al. **Parasitol Res** 1989;75(8):619–26

Chloroquine containing liposomes in the chemotherapy of murine malaria. Peeters PA, et al. **Parasitology** 1989 Jun; 98 Pt 3:381–6

Cerebellar ataxia in patients with malaria treated with chloroquine [letter] James RF. **Postgrad Med J** 1988 Feb; 64(748):167

Bis(benzyl)polyamine analogs inhibit the growth of chloroquine–resistant human malaria parasites (Plasmodium falciparum) in vitro and in combination with alpha–difluoromethylornithine cure murine malaria. Bitonti AJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):651–5

Multiresistant malaria in Brazil cured with low dose clindamycin (letter). Kremsner PG, et al. **Rev Inst Med Trop Sao Paulo** 1988 Mar–Apr;30(2):118–9

Malaria in Humaita County, State of Amazonas, Brazil. XIX—Evaluation of clindamycin for the treatment of patients with Plasmodium falciparum infection. Meira DA, et al. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):123–9

Malaria in north–eastern Botswana [letter] Robinson MJ. **S Afr Med J** 1988 Oct 15;74(8):427

Falciparum malaria and pregnancy: relationship and treatment response. Thet Naing, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):253–8

Failure of erythromycin to improve chloroquine treatment of Plasmodium falciparum malaria in Kenya. Brandling–Bennett AD, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):363–5

Chloroquine treatment of falciparum malaria in an area of Kenya of intermediate chloroquine resistance. Brandling–Bennett AD, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):833–7

Chloroquine treatment of malaria does not increase antibody response to measles vaccination. A controlled study of 580 rural children living in an endemic malaria area. Cénac A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):405

Chloroquine–resistant Plasmodium falciparum malaria from Ivory Coast. Charmot G, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):392–3

In vitro drug sensitivity of Plasmodium falciparum malaria from Nigeria. de Francisco Serpa LA, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):403–4

Double–blind dose finding study of mefloquine–sulfadoxine–pyrimethamine in children with acute falciparum malaria. Guo XB, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):538–40

Parenteral Fansidar in falciparum malaria. Harinasuta T, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):694

Observations on early and late post–sporozoite tissue stages in primate malaria. V. The effect of pyrimethamine and proguanil upon tissue hypnozoites and schizonts of Plasmodium cynomolgi bastianellii [published erratum appears in Trans R Soc Trop Med Hyg 1988;82(2):236] Jiang JB, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):56–8

Response of children with Plasmodium falciparum to chloroquine and development of a national malaria treatment policy in Zaire. Paluku KM, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):353–7

Amodiaquine in malaria treatment [letter] Rieckmann KH. **Trans R Soc Trop Med Hyg** 1987;81(6):1040

Multiple drug resistant Plasmodium falciparum malaria in a pregnant indigenous Zambian woman. Rolfe M. **Trans R Soc Trop Med Hyg** 1988;82(4):554–7

Evaluation of the sensitivity in vivo and in vitro of Plasmodium falciparum malaria to quinine in an area of full sensitivity to chloroquine. Salako LA, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):366–8

Chloroquine–resistant falciparum malaria from Guinea. Sanguigni S, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):359

The Plasmodium falciparum chloroquine in vivo test: extended follow–up is more important than parasite counting. Schapira A, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):39–43

Double–blind trial to find dose range using a fixed combination of mefloquine, sulfadoxine and pyrimethamine in falciparum malaria: a field study on adults in Burma. Tin F, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):910–2

The effect of mefloquine–artemether compared with quinine on patients with complicated falciparum malaria. Tin Shwe, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):665–6

The combined use of artemether, sulfadoxine and pyrimethamine in the treatment of uncomplicated falciparum malaria. U Thet Naing, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):530–1

Chlorproguanil/dapsone for the treatment of non–severe Plasmodium falciparum malaria in Kenya: a pilot study. Watkins WM, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):398–403

The changing response of Plasmodium falciparum to antimalarial drugs in east Africa. Watkins WM, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):21–6 (51 ref.)

Chloroquine and quinine: a randomized, double–blind comparison of efficacy and side effects in the treatment of Plasmodium falciparum malaria in the Philippines. Watt G, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):205–8

Mechanisms of chloroquine resistance in malarial chemotherapy. Ward SA. **Trends Pharmacol Sci** 1988 Jul; 9(7):241–6 (35 ref.)

Low response of Colombian strains of Plasmodium vivax to classical antimalarial therapy. Arias AE, et al. **Trop Med Parasitol** 1989 Mar;40(1):21–3

[Efficacy of amodiaquine, Fansidar and their combination in the treatment of chloroquine–resistant falciparum malaria] Huang QL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(4):292–5 (Eng. Abstr.) **(Chi)**

[Therapeutic effect of pyronaridine in plain tablets and enteric–coated tablets in falciparum malaria patients] Huang ZS, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):19–21 (Eng. Abstr.) **(Chi)**

[Effects of combined dose of pyronaridine/sulfadoxine/pyrimethamine on falciparum malaria] Huang ZS, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(4):285–8 (Eng. Abstr.) **(Chi)**

[Efficacy of combined use of pyronaridine, sulfadoxine and pyrimethamine in the treatment of falciparum malaria on Hainan Island] Pang XJ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(4):289–91 (Eng. Abstr.) **(Chi)**

[Comparative efficacy of alternative treatments in Plasmodium falciparum infections in Zaire] Mbudi PK, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):25–33 (Eng. Abstr.) **(Fre)**

[Methods of preselecting febrifugal plants from the Madascan flora in view of research on their antimalarial activity] Rakotoamboa JL, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):185–93 **(Fre)**

[Surveillance of Plasmodium falciparum drug sensitivity in Yaounde and its surroundings (Cameroon). In vivo and in vitro study] Hengy C, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):217–23 (Eng. Abstr.) **(Fre)**

[The treatment of multiresistant falciparum malaria in Southeast Asia] Lasserre R. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):94–100 (28 ref.) (Eng. Abstr.) **(Fre)**

[In vivo sensitivity of Plasmodium falciparum to amodiaquine in the town of Edea (Cameroon)] Macaigne F, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):208–16 (Eng. Abstr.) **(Fre)**

[Halofantrine in the treatment of malaria. Clinical trial in a semi–rural zone of Cameroon] Raccurt CP, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):368–72 (Eng. Abstr.) **(Fre)**

[Plasmodium falciparum drug resistance and sulfadoxine–pyrimethamine in Africa] Randriamanjaka JR, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):381–4 (Eng. Abstr.) **(Fre)**

[A new antimalarial on the market: halofantrine. Various observations] Picq JJ. **Med Trop (Mars)** 1989 Jan–Mar; 49(1):87–9 (Eng. Abstr.) **(Fre)**

[Severe chloroquine–resistant Plasmodium falciparum malaria acquired in Senegal (letter)] Beytout J, et al. **Presse Med** 1989 Jun 17;18(24):1210 **(Fre)**

[Transient disorders of memory after a malaria attack. Caused by mefloquine? (letter)] Lapras J, et al. **Presse Med** 1989 Apr 15;18(15):776 **(Fre)**

[Fatal pernicious attack due to chloroquinoresistant Plasmodium falciparum on return from Burkina Faso. 1 case (letter)] Mosset F, et al. **Presse Med** 1988 Nov 5; 17(39):2087–8 **(Fre)**

[Chloroquine and fansidar resistance of Plasmodium falciparum now also in Ghana] Kupferschmidt HG, et al. **Angew Parasitol** 1988 Nov;29(4):211–3 (Eng. Abstr.) **(Ger)**

[Antimetabolites of nucleic acid synthesis in the treatment of malignant tumors, autoimmune diseases and infections. The 1988 Nobel Prize for Medicine] Wilmanns W. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):73–5 **(Ger)**

[Effect of pasta ulmi on malaria parasites] Zhao CX. **J Tongji Med Univ** 1989;9(1):22–4 (Eng. Abstr.) **(Ger)**

[Therapy of severe malaria] Stuby U, et al. **Wien Med Wochenschr** 1989 May 15;139(9):222–7 (24 ref.) (Eng. Abstr.) **(Ger)**

[An imported case of malaria resistant to chloroquine] Golinski M, et al. **Harefuah** 1988 Sep;115(5–6):119–20 (Eng. Abstr.) **(Heb)**

[Urgent problems of the treatment and pharmacologic prevention of malaria] Kotłowski A. **Wiad Parazytol** 1988; 34(4–6):503–7 **(Pol)**

[In vivo resistance of Plasmodium falciparum to 4–aminoquinolines and to a sulfadoxine–pyrimethamine combination. II—The Emperatriz study, Maranhão, 1983–1984] Passos AD, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):109–13 (Eng. Abstr.) **(Por)**

[Determination of the optimal method of treating experimental malaria using artemisinine] Fedorova OV, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):8–13 (Eng. Abstr.) **(Rus)**

[The antimalarial action of Soviet artemisinine in Plasmodium berghei schizont infection in mice] Fedorova OV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):11–5 (Eng. Abstr.) **(Rus)**

[Experience in treating tropical malaria in Europeans temporarily living in tropical Africa] Reutskil IA, et al. **Ter Arkh** 1988;60(11):127–8 **(Rus)**

ENZYMOLOGY

The enzymes of the glycolytic pathway in erythrocytes infected with Plasmodium falciparum malaria parasites. Roth EF Jr, et al. **Blood** 1988 Dec;72(6):1922–5

A malarial cysteine proteinase is necessary for hemoglobin degradation by Plasmodium falciparum. Rosenthal PJ, et al. **J Clin Invest** 1988 Nov;82(5):1560–6

Glutathione reductase activity and its relation with riboflavin levels measured by methemoglobin reduction by cystamine in patients with malaria (preliminary report). Barraviera B, et al. **Rev Inst Med Trop Sao Paulo** 1988 Mar–Apr; 30(2):107–8

Histochemistry of cerebral lesions in mice infected with Plasmodium berghei. Polder TW, et al. **Trop Med Parasitol** 1988 Dec;39(4):277–83

EPIDEMIOLOGY

Antibody responses to malarial antigens in the Wopkaimin population of the Star Mountains, Papua New Guinea. Collins WE, et al. **Am J Trop Med Hyg** 1988 Sep; 39(3):241–5

Small area variation in prevalence of an S–antigen serotype of Plasmodium falciparum in villages of Madang, Papua New Guinea. Forsyth KP, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):344–50

Interaction of Malaysian sera with Plasmodium vivax sporozoite antigen. Lee M, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):535–9

Evaluation of serology as a tool for malaria surveillance in East Champaran District of Bihar, India. Ray K, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):225–8

Malaria infection in pregnant women in Zaire: the effects and the potential for intervention. Steketee RW, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):113–20

The effects on malaria of treatment of iron–deficiency anaemia with oral iron in Gambian children. Smith AW, et al. **Ann Trop Paediatr** 1989 Mar;9(1):17–23

Newborn splenic volumes vary under different malaria endemic conditions. Corkill JA, et al. **Arch Dis Child** 1989 Apr;64(4):541–5

The prevalence of malaria in Garki, Nigeria: double sampling with a fallible expert. Nedelman J. **Biometrics** 1988 Sep; 44(3):635–55

Hospital–based surveillance of malaria–related paediatric morbidity and mortality in Kinshasa, Zaire. Greenberg AE, et al. **Bull WORLD Health Organ** 1989;67(2):189–96

Severe malaria in France, 1986–1987. **Can Dis Wkly Rep** 1988 Sep 10;14(36):162 **(Eng, Fre)**

The changing pattern of imported malaria. Yechouron A, et al. **Can Dis Wkly Rep** 1988 Jul 30;14(30):133–6 **(Eng, Fre)**

Geographical–historical remarks on malaria in Czechoslovakia. Jedlicka J, et al. **Geogr Med** 1989;19:71–4

Malaria outbreak in Kundam block, district Jabalpur (M.P.). Singh N, et al. **Indian J Malariol** 1988 Jun;25(1):41–9

First record of malaria and associated Anopheles in El Gara Oasis, Egypt. Kenawy MA, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):101–3

Vector introduction and malaria infection on Guam. Nowell WR. **J Am Mosq Control Assoc** 1987 Jun;3(2):259–65

Malaria in Egypt in view of a recent publication [letter] Soliman MA, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):365–7

Early acquisition of antibody to Plasmodium falciparum sporozoites in nonimmune temporary residents of Africa. Miller KD, et al. **J Infect Dis** 1988 Oct;158(4):868–71

Preliminary application of circular distribution in analysis of certain seasonal epidemic diseases. Huang WM, et al. **J Tongji Med Univ** 1988;8(3):186–92

Critique of article: "Prevalence and Distribution of Intestinal and Blood Parasites Among Ibans in the Nanga Atoi in the Second Division of Sarawak" (sic). By Neo CB, Cheah YK, Chin PW, et al. Hardin S, et al. **Med J Malaysia** 1988 Sep;43(3):269–71

Human malaria: evaluation of serological tests in seroepidemiological surveys, individual diagnosis and for blood banks screening. Ferreira AW, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:476–7

Nutrition and morbidity: acute lower respiratory tract infections, diarrhoea and malaria. Lehmann D, et al. **P N G Med J** 1988 Jun;31(2):109–16 (35 ref.)

New approaches to the serotypic analysis of the epidemiology of Plasmodium falciparum. Forsyth KP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):485–93 (24 ref.)

The malaria situation in Malaysia. Ayyamni UD, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):349–53

Epidemiology of malaria in displaced Khmers on the Thai–Kampuchean border. Meek SR. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):243–52

The malaria situation in the Philippines with special reference to mosquito vectors. Salazar NP, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):709–12

A longitudinal study of splenomegaly in pregnancy in a malaria endemic area in Papua New Guinea. Brabin BJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):677–81

High and low spleen rates distinguish two populations of women living under the same malaria endemic conditions in Madang, Papua, New Guinea. Brabin L, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):671–6

Epidemiology of malaria in Nyarutovu (Rwanda): a clinical, parasitological and serological study. Gascon J, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):222

Plasmodium falciparum incidence and patency in a high seasonal transmission area of Burkina Faso. Gazin P, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):50–5

Malaria and splenomegaly in the Punjab. Strickland GT, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):667–70

Haemoparasites of blood donors in Calabar. Emeribe AO, et al. **Trop Geogr Med** 1989 Jan;41(1):61–5

Reappearance of unprecedented falciparum malaria: 28 years after the last case in the Cuyuni–Mazaruni–Potaro, Guyana, South America. Rambajan I. **Trop Geogr Med** 1988 Jul; 40(3):269–71

[An epidemiological study of the residual vivax malaria cases in Huanghuai plain] Zhang XB, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):22–7 (Eng. Abstr.) **(Chi)**

[Malaria in employees of an African industrial enterprise (Bobo Dioulasso, Burkina Faso)] Gazin P, et al. **Ann Soc Belg Med Trop** 1988 Dec;68(4):285–92 (Eng. Abstr.) **(Fre)**

[Perception of malaria in Africa south of the Sahara] Gazin P, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):1–3 **(Fre)**

[Malaria found in patients attending a Sahelian outpatient center] Gazin P, et al. **Ann Soc Belg Med Trop** 1988 Mar; 68(1):15–24 (Eng. Abstr.) **(Fre)**

[Malaria in the forest region of Mayombe, People's Republic of the Congo. III. The role of malaria in general morbidity] Richard A, et al. **Ann Soc Belg Med Trop** 1988 Dec; 68(4):317–29 (Eng. Abstr.) **(Fre)**

[Malaria, impasses and hopes] Lagardère B. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):451–3 **(Fre)**

[Malaria in a village of the high plateau area of Madagascar in 1987. Present status of Plasmodium falciparum sensitivity to chloroquine. In vitro study. Some epidemiologic findings] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):133–41 **(Fre)**

[Recent findings on the epidemiology of malaria and on the distribution of plasmodial species in Madagascar in 1987] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):151–67 **(Fre)**

[Epidemiologic study of malaria in the foothill area of the Taez region of the Arabic Republic of Yemen] Daoud W. **Bull Soc Pathol Exot Filiales** 1988;81(3):351–9 (Eng. Abstr.) **(Fre)**

[Malaria in Guiana. I. General status of the endemic] Lepelletier L, et al. **Bull Soc Pathol Exot Filiales** 1989; 82(3):385–92 (Eng. Abstr.) **(Fre)**

[Malaria in Guiana. II. The characteristics of different foci and antimalarial control] Mouchet J, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):393–405 (Eng. Abstr.) **(Fre)**

[Malaria in Gabon. Bioclinical survey of non immune Europeans during short stay and prophylactic attitude] Richard–Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):359–67 (Eng. Abstr.) **(Fre)**

[Malaria morbidity in rural and urban areas in Senegal] Gaye O, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):59–62 (Eng. Abstr.) **(Fre)**

[Comparative study of the malaria indices in Nanga–Eboko, Yaounde and Edea (Cameroon)] Josse R, et al. **Med Trop (Mars)** 1988 Jul–Sep;48(3):201–8 (Eng. Abstr.) **(Fre)**

[Malaria in Switzerland] Fernex M. **Schweiz Med Wochenschr** 1988 Dec 10;118(49):1838–43 (42 ref.) (Eng. Abstr.) **(Fre)**

[Malaria in Switzerland: 1982–1986] Raeber PA, et al. **Schweiz Med Wochenschr** 1988 Sep 10;118(36):1261–6 (Eng. Abstr.) **(Fre)**

[Imported protozoan infections in Japan: the current status and countermeasure] Nakabayashi T. **Nippon Rinsho** 1989 Jan;47(1):112–7 **(Jpn)**

[Epidemiologic information on malaria in the state of São Paulo, Brazil] Wanderley DM, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):143–6 (Eng. Abstr.) **(Por)**

[Results of malariometric study of the population of the Yemen Arab Republic in 1986] Ali Mohammed Assabri. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):72–4 **(Rus)**

[The malariologic situation in the Yemen Arab Republic] Assabri AM. **Med Parazitol (Mosk)** 1989 May–Jun;(3):33–5 (Eng. Abstr.) **(Rus)**

[Tropical malaria in European children temporarily living in Nigeria] Reutskiĭ IA, et al. **Pediatriia** 1988;(7):88–90 **(Rus)**

[Epidemiology and prevention of malaria in a mountain desert locale with a hot climate] Perepelkin VS, et al. **Voen Med Zh** 1988 Jun;(6):39–41 **(Rus)**

[Report of 72 cases of imported malaria (letter)] Corachán M, et al. **Rev Clin Esp** 1989 May;184(8):448–9 **(Spa)**

[Imported malaria in Cuba. Some considerations on its epidemiology, surveillance and control] Peña Molina E, et al. **Rev Cubana Med Trop** 1988 May–Aug;40(2):82–96 (Eng. Abstr.) **(Spa)**

[Clinical characteristics of 9 cases of non-indigenous malaria] Ramírez G, et al. **Rev Med Chil** 1988 Feb;116(2):143–7 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Malaria in Afghan refugees in Pakistan. Suleman M. **Trans R Soc Trop Med Hyg** 1988;82(1):44–7

[Imported malaria: 72 cases] Jáuregui Ibabe C, et al. **Rev Clin Esp** 1988 Jul;183(3):129–31 (Eng. Abstr.) **(Spa)**

ETIOLOGY

The effect of iron therapy on malarial infection in Papua New Guinean schoolchildren. Harvey PW, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):12–8

Antioxidants can prevent cerebral malaria in Plasmodium berghei–infected mice. Thumwood CM, et al. **Br J Exp Pathol** 1989 Jun;70(3):293–303

Congenital malaria: mixed infection at birth. Jhamb U, et al. **Indian Pediatr** 1988 Nov;25(11):1110–1

Malaria, hereditary elliptocytosis, and pyropoikilocytosis [letter] Facer CA. **Lancet** 1989 Apr 22;1(8643):897

Plasmodium falciparum malaria after three years in a non–endemic area. Revel MP, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):832

[Post–transfusion malaria: a cause of postoperative fever not to ignore (letter)] Gaillard L, et al. **J Chir (Paris)** 1988 Aug–Sep;125(8–9):535–6 **(Fre)**

[Emergence of multiresistant Plasmodium falciparum malaria in Central African Republic (letter)] Belec L, et al. **Presse Med** 1988 Nov 5;17(39):2090–1 **(Fre)**

[Malaria among the participants on an expedition to the Congo] Hauk–Szklarek E, et al. **Wiad Lek** 1988 Jun 15; 41(12):813–7 (Eng. Abstr.) **(Pol)**

[Our experiences regarding imported malaria] Nahorski W, et al. **Wiad Parazytol** 1988;34(4–6):655–62 **(Pol)**

[Modern concepts of the pathogenesis of tropical malaria and trends in the development of a rational therapeutic procedure] Ozeretskovskaia NN. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):3–9 (58 ref.) (Eng. Abstr.) **(Rus)**

GENETICS

Malaria and red cell genetic defects. Nagel RL, et al. **Blood** 1989 Sep;74(4):1213–21 (90 ref.)

Elliptocytosis, malaria, and fertility in Malaysia. Baer A. **Hum Biol** 1988 Dec;60(6):909–15

HLA and malaria in four Colombian ethnic groups. Restrepo M, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct; 30(5):323–31

Clinical, genetic and fertility studies of Indians with beta S–globin gene and the influence of Hb S on Plasmodium falciparum malaria infection. Joishy SK, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):515–9

HISTORY

Dr. William Gorgas and his war with the mosquito. Patterson R. **Can Med Assoc J** 1989 Sep 15;141(6):596–7, 599

Historical references to malaria in Sri Lanka and some notable episodes up to present times. Edirisinghe JS. **Ceylon Med J** 1988 Sep;33(3):110–7

Malaria, the scourge of the tropics. Historical references to malaria in Sri Lanka and some notable episodes up to present times. Edirisinghe JS. **Ceylon Med J** 1988 Dec; 33(4):143–50

European malaria policy in the 1920s and 1930s. The epidemiology of minutiae. Evans H. **Isis** 1989 Mar; 80(301):40–59

In the Roman Campagna from G. M. Lancisi to G. B. Grassi: two centuries of ideas, hypotheses and misunderstandings about malaria fevers. Corradetti A. **Parassitologia** 1987 May–Dec;29(2–3):123–6

Changes in the geographical distribution of malaria throughout history. de Zulueta J. **Parassitologia** 1987 May–Dec;29(2–3):193–205

Correspondence with Corradetti. Garnham PC. **Parassitologia** 1987 May–Dec;29(2–3):127–51

The Dutch school of malaria research. Verhave JP. **Parassitologia** 1987 May–Dec;29(2–3):263–74

Spanish agriculture and malaria in the 18th century. Riera Palmero J, et al. **Pubbl Stn Zool Napoli [II]** 1988; 10(2):343–62

[Malaria in Czechoslovakia. A quarter century since Czechoslovakia was proclaimed a malaria–free country] Jedlička J, et al. **Cas Lek Cesk** 1988 Dec 2;127(49):1528–9 **(Cze)**

[The rise and decline of malaria in The Netherlands] van der Heide RM. **Ned Tijdschr Geneeskd** 1988 Dec 24; 132(52):2372–4 **(Dut)**

[Of what did Alexander Csoma de Körös die?] Le Calloc'h B. **Geogr Med** 1989;19:9–33 **(Fre)**

[Malaria prevention and racial segregation. The medical preparation and justification of the Duala expropriation 1912–14] Eckart WU. **Pubbl Stn Zool Napoli [II]** 1988; 10(2):363–78 (Eng. Abstr.) **(Ger)**

[Memoir of the Memorias. Development of malaria hematozoa resistant to quinine. By Arthur Neiva, 1910 (classical article)] Rodrigues Coura J. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):303–9 **(Por)**

IMMUNOLOGY

Changes in size and cell populations in lymphoid organs during Plasmodium chabaudi infection in resistant and susceptible mice. Rae D, et al. **Adv Exp Med Biol** 1988; 239:113–20

The protective role of T cells in immunity to malaria. Weidanz WP, et al. **Adv Exp Med Biol** 1988;239:99–111 (34 ref.)

Immunity in malaria: II. Heterophile and malarial antibodies in acute Plasmodium falciparum infection. Akinwolere OA, et al. **Afr J Med Med Sci** 1989 Sep;18(3):235–40

C3b inactivator in normal mice and mice infected with Plasmodium berghei berghei. Okerengwo AA. **Afr J Med Med Sci** 1988 Sep;17(3):171–4

The role of mitogenic factors in the pathogenesis of certain features of malarial infection. Oyeyinka GO. **Afr J Med Med Sci** 1988 Dec;17(4):201–7 (68 ref.)

Immune response of humans to the circumsporozoite protein of Plasmodium falciparum: limited T cell response to the immunodominant central repeat region. Campbell JR, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):232–5

Suppression of cell–mediated immune responses to malaria antigens in pregnant Gambian women. Riley EM, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):141–4

Cross–reacting antigens to Pc96, a protective antigen of Plasmodium chabaudi, in P. falciparum, P. vivax, and P. cynomolgi. Wanidworanun C, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):579–84

The balance of useful and harmful effects of TNF, with special reference to malaria. Clark IA, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):305–6

Line immunoassay: a new serologic test for malaria. Van der Groen G, et al. **Ann Soc Belg Med Trop** 1988 Mar; 68(1):37–41

Prenatal immune priming in malaria: antigen–specific blastogenesis of cord blood lymphocytes from neonates born in a setting of holoendemic malaria. Desowitz RS. **Ann Trop Med Parasitol** 1988 Apr;82(2):121–5

Immunofluorescent and immunoelectron microscopic localization of protein antigens in red cells infected with the human malaria Plasmodium falciparum. Sherman IW, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):531–45

Lymphocyte subpopulations during acute and convalescence phases of malaria. Tongtawe P, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):11–8

Expression and function of erythrocyte–associated surface antigens in malaria. Hommel M, et al. **Biol Cell** 1988; 64(2):183–203 (108 ref.)

Role of non–human primates in malaria vaccine development: memorandum from a WHO meeting. **Bull WHO** 1988; 66(6):719–28

Suppression of malaria–induced autoimmunity by immunization with cryoglobulins. Fawcett PT, et al. **Cell Immunol** 1989 Jan;118(1):192–8

Immunological aspects of cerebral lesions in murine malaria. Curfs JH, et al. **Clin Exp Immunol** 1989 Jan;75(1):136–40

Cellular immune responses to Plasmodium falciparum antigens in Gambian children during and after an acute attack of falciparum malaria. Riley EM, et al. **Clin Exp Immunol** 1988 Jul;73(1):17–22

Detection of anti–RESA/Pf 155 antibodies in Kenyan malaria immune individuals. Chemtai AK, et al. **East Afr Med J** 1988 Dec;65(12):852–5

HTLV–I antibodies in blood donors, patients with leukaemia, acute malaria and multiple blood transfusion recipients in

the Cross River State of Nigeria. Okpara RA, et al. **East Afr Med J** 1988 Jul;65(7):495–502

Plasmodium yoelii: characterization of a protective idiotype during malarial infection in mice. Majarian WR, et al. **Exp Parasitol** 1988 Dec;67(2):227–37

T cell immunity to malaria sporozoites. Schofield L. **Exp Parasitol** 1989 Apr;68(3):357–64 (45 ref.)

Naturally–occurring anti–alpha–galactosyl antibodies in human Plasmodium falciparum infections—a possible role for autoantibodies in malaria. Ravindran B, et al. **Immunol Lett** 1988 Oct;19(2):137–41

Status of natural killer activity in the peripheral blood of P. vivax and P. falciparum malaria patients. Saxena QB, et al. **Indian J Malariol** 1988 Jun;25(1):11–5

Plasmodium falciparum schizont sonic extracts suppress lymphoproliferative responses to mitogens and antigens in malaria–immune adults. Riley EM, et al. **Infect Immun** 1989 Oct;57(10):3181–8

CD8+ T cells inhibit Plasmodium falciparum–induced lymphoproliferation and gamma interferon production in cell preparations from some malaria–immune individuals. Riley EM, et al. **Infect Immun** 1989 Apr;57(4):1281–4

Variation in expression of antibody–dependent cell–mediated cytotoxicity in rodents with malaria. Shear HL. **Infect Immun** 1988 Nov;56(11):3007–10

Roles of CD4– and CD8–bearing T lymphocytes in the immune response to the erythrocytic stages of Plasmodium chabaudi. Süss G, et al. **Infect Immun** 1988 Dec; 56(12):3081–8

Differential antibody responses to Plasmodium falciparum and P. vivax circumsporozoite proteins in a human population. Burkot TR, et al. **J Clin Microbiol** 1989 Jun; 27(6):1346–51

Evolution of the levels of soluble interleukin–2 receptors during Plasmodium falciparum and P. vivax malaria. Deloron P, et al. **J Clin Microbiol** 1989 Aug;27(8):1887–9

Target antigens of malaria transmission blocking immunity. Kaushal DC, et al. **J Commun Dis** 1987 Dec;19(4):417–21

Restricted or absent immune responses in human populations to Plasmodium falciparum gamete antigens that are targets of malaria transmission–blocking antibodies. Carter R, et al. **J Exp Med** 1989 Jan 1;169(1):135–47

Human T cell recognition of polymorphic epitopes from malaria circumsporozoite protein. de Groot AS, et al. **J Immunol** 1989 Jun 1;142(11):4000–5

Defective production of and response to IL–2 in acute human falciparum malaria. Ho M, et al. **J Immunol** 1988 Oct 15; 141(8):2755–9

Human lymphocyte proliferative response to a sporozoite T cell epitope correlates with resistance to falciparum malaria. Hoffman SL, et al. **J Immunol** 1989 Feb 15; 142(4):1299–303

Immune response gene regulation of immunity to Plasmodium berghei sporozoites and circumsporozoite protein vaccines. Overcoming genetic restriction with whole organism and subunit vaccines. Hoffman SL, et al. **J Immunol** 1989 May 15;142(10):3581–4

Interdependence of CD4+ T cells and malarial spleen in immunity to Plasmodium vinckei vinckei. Relevance to vaccine development. Kumar S, et al. **J Immunol** 1989 Sep 15;143(6):2017–23

Class II restriction in mice to the malaria candidate vaccine ring infected erythrocyte surface antigen (RESA) as synthetic peptides or as expressed in recombinant vaccinia. Lew AM, et al. **J Immunol** 1989 Jun 1;142(11):4012–6

Role of IFN–gamma in lethal and nonlethal malaria in susceptible and resistant murine hosts. Shear HL, et al. **J Immunol** 1989 Sep 15;143(6):2038–44

Igh–C allotype–linked control of anti–DNA production and clonotype expression in mice infected with Plasmodium yoelii. Yoshida H, et al. **J Immunol** 1988 Sep 15; 141(6):2125–31

Soluble CD8 antigen in Plasmodium falciparum malaria [letter] Kremsner PG, et al. **J Infect Dis** 1989 Aug; 160(2):357–8

Increased levels of released interleukin–2 receptors in Plasmodium falciparum malaria [letter] Nguyen–Dinh P, et al. **J Infect Dis** 1988 Dec;158(6):1403–4

Induction of macrophage motility by a T–cell line from Balb/c mice specific for Plasmodium berghei malaria. Gross A, et al. **J Parasitol** 1988 Dec;74(6):979–84

Effects of pyran copolymer on host resistance of mice to Plasmodium yoelii. Krishna VR, et al. **J Parasitol** 1989 Jun;75(3):405–10

Impairment of T–helper function by a Plasmodium berghei–derived immunosuppressive factor. Srour EF, et al. **J Protozool** 1988 Nov;35(4):441–6

Modulation of the host's immune response to Plasmodium berghei by a parasite–derived immunosuppressive factor. Srour EF, et al. **J Protozool** 1989 Jul–Aug;36(4):341–4

Detection of parasite antigens in different biological fluids. Katzin AM. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:478–81

Polyclonal B–cell activation (PBA). What have we learned from the study of malaria? Ribeiro CD. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:633–48 (73 ref.)

Developing a human malaria sporozoite vaccine. Young JF, et al. **Microb Pathog** 1987 Apr;2(4):237–40 (16 ref.)

Passive modulation of antigenic expression in the surface of normal and malaria–infected erythrocytes. Baruch D, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):127–37

A malaria T–cell epitope recognized in association with most mouse and human MHC class II molecules. Sinigaglia F, et al. **Nature** 1988 Dec 22–29;336(6201):778–80

Immunology of human malaria. A cellular perspective. Ho M, et al. **Parasite Immunol** 1989 Mar;11(2):105–16 (66 ref.)

Protective immunity to malaria: studies with cloned lines of rodent malaria in CBA/Ca mice. IV. The specificity of mechanisms resulting in crisis and resolution of the primary acute phase parasitaemia of Plasmodium chabaudi chabaudi and P. yoelii yoelii. Jarra W, et al. **Parasite Immunol** 1989 Jan;11(1):1–13

Protective and pathological activity in serum of mice developing resistance to Plasmodium berghei infection. Schetters TP, et al. **Parasite Immunol** 1989 Jul;11(4):413–23

Effects of testosterone on blood leukocytes in plasmodium berghei–infected mice. Kamis AB, et al. **Parasitol Res** 1989; 75(8):611–3

Long–term protection of squirrel monkeys (Saimiri sciureus) against Plasmodium falciparum challenge inoculations after various time intervals. Roussilhon C, et al. **Parasitol Res** 1988;75(2):118–22

Plasmodium antigens external to the parasite but with the infected erythrocyte. Wiser MF. **Parasitol Res** 1989; 75(3):206–11

Mechanisms of immunity to malaria and the possibilities of a blood–stage vaccine: a critical appraisal. Butcher GA. **Parasitology** 1989 Apr;98 Pt 2:315–27 (134 ref.)

Application in clinical epidemiology of new advances in immunology and molecular biology of malaria. Björkman A, et al. **Parasitologia** 1986 Aug–Dec;28(2–3):95–9

Role of immune complexes in cerebral malaria. Gupta N, et al. **Pathology** 1988 Oct;20(4):373–6

Development of asexual erythrocytic malaria vaccines. Chulay JD. **Prog Clin Biol Res** 1989;313:13–21 (34 ref.)

Polyclonal B–cell activation in human malaria: relevance to the development of anti–sporozoite specific immune response and of immunopathology in individuals from endemic areas (Rondonia State—Brazil). Daniel–Ribeiro C, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):415–8

Some studies on acquired immunity to Plasmodium chabaudi and Plasmodium yoelii in mice. Favila–Castillo L, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun;30(2):117–23

Frequency of human leukocyte antigen (HLA) in patients with malaria and in the general population of Humaitá County, Amazonas State, Brazil. Meira DA, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):153–8

Effects of levamisole on experimental infections by Plasmodium berghei in mice. Melendez E, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec;20(4):193–7

Immunodeficiency associated with malaria. Tosta CE. **Rev Soc Bras Med Trop** 1987 Jan–Mar;20(1):1–5 (35 ref.) **(Eng, Por)**

Sporozoite vaccine induces genetically restricted T cell elimination of malaria from hepatocytes. Hoffman SL, et al. **Science** 1989 Jun 2;244(4908):1078–81

Lymphocyte subsets in two cases of acute malaria of pregnancy and in cases of uncomplicated falciparum malaria in western Thailand. Desowitz RS, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):165–7

Development of asexual blood stage malaria vaccines. Kidson C. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):391–6

Malaria vaccines: experience with sporozoite vaccines against falciparum malaria. Levine MM, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):369–74

Asymptomatic malaria parasitaemia and the antibody response to tetanus toxoid vaccination. Corrigall RJ. **Trans R Soc Trop Med Hyg** 1988;82(4):540–1

Modulation of human malaria transmission by anti–gamete transmission blocking immunity. de Zoysa AP, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):548–53

Prevalence and levels of antibodies to the circumsporozoite protein of Plasmodium falciparum in an endemic area and their relationship to resistance against malaria infection. Esposito F, et al. **Trans R Soc Trop Med Hyg** 1988; 82(6):827–32

Anti–sporozoite antibodies and immunity to malaria in a rural Gambian population. Marsh K, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):532–7

Sera from Cameroon recognize proteins of Plasmodium falciparum isolates from geographically diverse areas of the world. Nkuo TK, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):891–5

Sera from Cameroon induce crisis forms during Plasmodium falciparum growth inhibition studies in vitro. Nkuo TK, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):380–3

Immunity to malaria in young Gambian children after a two–year period of chemoprophylaxis. Otoo LN, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):59–65

Antibody against a ring–infected erythrocyte surface antigen in cerebral and non–cerebral malaria patients. Tharavanij S, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):385–8

Involvement of T cells in malaria immunity: implications for vaccine development. Good MF, et al. **Vaccine** 1989 Feb; 7(1):3–9 (93 ref.)

Epidemiological and immunological aspects of human crisis form factor in falciparum malaria: cell–mediated responses? Jensen JB, et al. **Vet Parasitol** 1988 Sep;29(2–3):171–7 (24 ref.)

[Studies on the effective components in protective sera against Plasmodium yoelii infections in mice] Cheng Q, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):81–6 (Eng. Abstr.) **(Chi)**

[Plasmodium falciparum: correlation between immunofluorescent properties of monoclonal antibodies and their protective activities] Li JL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):115–7 (Eng. Abstr.) **(Chi)**

[Acquisition of immunity in a zone of endemic malaria (the Sudan–Sahelian savannah)] Cot M, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):25–35 (Eng. Abstr.) **(Fre)**

[Study of malaria serology using indirect immunofluorescence in children of the Tananarive area. 1987] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):143–9 **(Fre)**

[Malaria in Gabon. Transplacental passage and dynamics of development of fluorescent antimalarial antibodies with age] Richard–Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):732–7 (Eng. Abstr.) **(Fre)**

METABOLISM

Plasma concentrations of sulfadoxine in healthy and malaria infected Thai subjects. Sarikabhuti B, et al. **Acta Trop (Basel)** 1988 Sep;45(3):217–24

Expression of the precursor of the major merozoite surface antigens during the hepatic stage of malaria. Suhrbier A, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):351–5

A comparison of the pharmacokinetics of mefloquine in healthy Thai volunteers and in Thai patients with falciparum malaria. Karbwang J, et al. **Eur J Clin Pharmacol** 1988;35(6):677–80

Mefloquine disposition in normals and in patients with severe Plasmodium falciparum malaria. Juma FD, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan–Mar;14(1):15–7

Histamine & kinin system in experimental malaria. Bhattacharya U, et al. **Indian J Med Res** 1988 Dec; 88:558–63

Possible roles for oxidants, through tumor necrosis factor, in malarial anemia. Clark IA, et al. **Prog Clin Biol Res** 1989;313:73–82

Plasma and urine electrolyte concentrations and vasopressin levels in patients admitted to hospital for falciparum malaria. Fryatt RJ, et al. **Trop Geogr Med** 1989 Jan; 41(1):57–60

[Changes in the ability to produce reactive oxygen by phagocytes from mice infected or immunized with Plasmodium berghei] Li M, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):208–11 (Eng. Abstr.) **(Chi)**

MORTALITY

A retrospective study of the mortality from malaria during 1984–1985 at the Kenyatta National Hospital. Okelo GB, et al. **East Afr Med J** 1987 Dec;64(12):821–4

Falciparum malaria in children. Rashid A, et al. **JPMA** 1988 Oct;38(10):268–71

[Study of general mortality and of mortality related to malaria in the mountains of Kivu, Zaire] Delacollette C, et al. **Rev Epidemiol Sante Publique** 1989;37(2):161–6 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Application of anti–TNF to Plasmodium vinckei–infected mice is followed by an increase of parasitaemia. Neifer S, et al. **Acta Trop (Basel)** 1989 Jul;46(4):273–5

Uninfected erythrocytes form "rosettes" around Plasmodium falciparum infected erythrocytes. Handunnetti SM, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):115–8

Growth and immunity conferred by a Plasmodium falciparum temperature sensitive mutant in Panamanian owl monkeys. Inselburg J, et al. **Am J Trop Med Hyg** 1989 May;40(5):465–9

Sex determination and sex differentiation in malaria parasites. Cornelissen AW. **Biol Rev Cambridge Philosophic Soc** 1988 Aug;63(3):379–94 (120 ref.)

Development of an asexual blood stage malaria vaccine. Moreno A, et al. **Blood** 1989 Aug 1;74(2):537–46 (73 ref.)

Circumsporozoite antibodies and falciparum malaria incidence in children living in a malaria endemic area. Pang LW, et al. **Bull WHO** 1988;66(3):359–63

Malaria parasite invasion: interactions with the red cell membrane. Mitchell GH, et al. **CRC Crit Rev Oncol Hematol** 1988;8(4):225–310 (213 ref.)

Detection of Plasmodium ovale in Koraput district, Orissa state. Jambulingam P, et al. **Indian J Med Res** 1989 Mar; 89:115–6

Malarial parasite density in infected pregnant women from northern India. Sholapurkar SL, et al. **Indian J Med Res** 1988 Sep;88:228–30

C–reactive protein protects against preerythrocytic stages of malaria. Pied S, et al. **Infect Immun** 1989 Jan;57(1):278–82

Evidence for a 6.5–day minimum exoerythrocytic cycle for Plasmodium falciparum in humans and confirmation that immunization with a synthetic peptide representative of a region of the circumsporozoite protein retards infection. Murphy JR, et al. **J Clin Microbiol** 1989 Jul;27(7):1434–7

Malaria as anthropo–ecosystem. Part I: General concept.

Kondrashin AV, et al. **J Commun Dis** 1988 Mar;20(1):79–88

Cerebral malaria from West Africa: chloroquine-resistant Plasmodium falciparum? [letter] Nathwani DN, et al. **J Infect** 1988 Sep;17(2):183–4

The Uganda I/CDC strain of Plasmodium malariae in Saimiri sciureus boliviensis. Collins WE, et al. **J Parasitol** 1989 Apr;75(2):310–3

The response of Plasmodium falciparum to chloroquine and mefloquine in Bandar-Abbas and Minab areas, Hormozgan Province, southern Iran. Edrissian GH, et al. **J Trop Med Hyg** 1989 Apr;92(2):75–9

Selection of blood donors in malaria-endemic countries [letter] Choudhury N, et al. **Lancet** 1988 Oct 22; 2(8617):972–3

Malaria. Binding of infected red cells [news] Miller LH. **Nature** 1989 Sep 7;341(6237):18

Comparative morphology of human and animal malaria parasites. I. Host-parasite interface. Mackenstedt U, et al. **Parasitol Res** 1989;75(7):528–35

Human host selection by anophelines: no evidence for preferential selection of malaria or microfilariae-infected individuals in a hyperendemic area. Burkot TR, et al. **Parasitology** 1989 Jun;98 Pt 3:337–42

Detection of antibodies to Plasmodium falciparum sporozoites by employing synthetic peptides. Del Giudice G, et al. **Parassitologia** 1986 Aug-Dec;28(2–3):107–11

Immunity to Plasmodium sporozoites: recent advances and applications to field research. Esposito F, et al. **Parassitologia** 1986 Aug-Dec;28(2–3):101–5

Plasmodium vivax: merozoite antigens, the Duffy blood group, and erythrocyte invasion. Barnwell JW, et al. **Prog Clin Biol Res** 1989;313:1–11 (29 ref.)

Formation and role of malaria pigment. Jamjoom GA. **Rev Infect Dis** 1988 Sep-Oct;10(5):1029–34 (20 ref.)

In vitro confirmation of chloroquine-resistant Plasmodium falciparum malaria in KwaZulu. Freese JA, et al. **S Afr Med J** 1988 Dec 3;74(11):576–8

Ovale malaria: a case report from Kuwait. Sher A, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):670

Submicroscopic double infection of Plasmodium falciparum in P. vivax malaria. Takagi T, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):384

Influence of aflatoxin on malarial infection in mice. Young RH, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):559–60

Swellengrebel lecture. Hypnozoites and 'relapses' in Plasmodium vivax and in vivax-like malaria. Garnham PC. **Trop Geogr Med** 1988 Jul;40(3):187–95

Low prevalence of P. falciparum in-vivo resistance to chloroquine in northern Cameroon in 1986. Lavoue V, et al. **Trop Med Parasitol** 1988 Sep;39(3):249–50

[Comparative experimental studies on Plasmodium vivax isolated from south Yunnan and northwest Hunan] Yang BL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):107–10 (Eng. Abstr.) (Chi)

[Experimental observation on the incubation period and relapse pattern of Plasmodium vivax in Guangxi] Ye YY, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):166–8 (Eng. Abstr.) (Chi)

[Malaria in the forest region of Mayombe, People's Republic of the Congo. II. Parasitologic observations] Richard A, et al. **Ann Soc Belg Med Trop** 1988 Dec;68(4):305–16 (Eng. Abstr.) (Fre)

[Resistant falciparum malaria at the F. Houphouet-Boigny hospital in Marseilles in 1985–1986–1987] Faugère B, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):118–23 (Eng. Abstr.) (Fre)

[In vivo study of chloroquine resistance of Plasmodium falciparum malaria in Mayotte] Julvez J, et al. **Med Trop (Mars)** 1989 Jan-Mar;49(1):63–5 (Eng. Abstr.) (Fre)

[Emergence of chloroquine-resistant malaria in West Africa: the case of Sokode (Togo)] Gbary AR, et al. **Trop Med Parasitol** 1988 Jun;39(2):142–4 (Eng. Abstr.) (Fre)

[Chloroquine-resistant Plasmodium falciparum malaria confirmed by semi-micro sensitivity test for chloroquine seen in a person returned from Nigeria to Japan] Obana M, et al. **Kansenshogaku Zasshi** 1989 Jan;63(1):83–8 (Eng. Abstr.) (Jpn)

[Quantitative evaluation of parasitemia in tropical malaria] Glazunova ZI, et al. **Lab Delo** 1988;(8):58–61 (Eng. Abstr.) (Rus)

[Detection of malarial parasite isoenzymes by cellulose acetate electrophoresis combined with blood concentration in capillaries] Allakhverdiev AM. **Med Parazitol (Mosk)** 1988 Nov-Dec;(6):6–8 (Eng. Abstr.) (Rus)

[Development of Plasmodium berghei and the immunosuppression phenomenon in the early phase of experimental malaria in mice] Gilpin-Jackson E, et al. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):9–11 (Eng. Abstr.) (Rus)

PATHOLOGY

Mechanisms of splenic control of murine malaria: tissue culture studies of the erythropoietic interplay of spleen, bone marrow, and blood in lethal (strain 17XL) Plasmodium yoelii malaria in BALB/c mice. Weiss L, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):135–43

Mechanisms of splenic control of murine malaria: cellular reactions of the spleen in lethal (strain 17XL) Plasmodium yoelii malaria in BALB/c mice, and the consequences of pre-infective splenectomy. Weiss L. **Am J Trop Med Hyg** 1989 Aug;41(2):144–60

Plasmodium falciparum associated placental pathology: a light and electron microscopic and immunohistologic study. Yamada M, et al. **Am J Trop Med Hyg** 1989 Aug; 41(2):161–8

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

Scanning electron microscopic studies on rhesus monkey placenta during early gestational malarial infection. Saxena N, et al. **Indian J Exp Biol** 1988 Sep;26(9):712–4

A histopathologic study of cerebral malaria in a rhesus monkey model [letter] Mahdi AA, et al. **J Infect Dis** 1989 Jan;159(1):154–5

Biochemical evidence of muscle injury in African children with severe malaria. Miller KD, et al. **J Infect Dis** 1989 Jan;159(1):139–42

Electron microscopic study of phagocytosis in human spleen in falciparum malaria. Pongponratn E, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):31–9

[Histopathology of the liver and kidney during malaria: relation to malaria-induced dyslipoproteinemia] Dumont ME, et al. **Ann Parasitol Hum Comp** 1988;63(3):171–83 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Reduced hepatic blood flow and intestinal malabsorption in severe falciparum malaria. Molyneux ME, et al. **Am J Trop Med Hyg** 1989 May;40(5):470–6

Blood monocyte oxidative burst activity in acute P. falciparum malaria. Nielsen H, et al. **APMIS** 1989 May; 97(5):469–71

Tumour necrosis factor may contribute to the anaemia of malaria by causing dyserythropoiesis and erythrophagocytosis. Clark IA, et al. **Br J Haematol** 1988 Sep;70(1):99–103

Plasmodium berghei: malaria infection causes increased cardiac output in rats, Rattus rattus. Shida KK, et al. **Exp Parasitol** 1989 Apr;68(3):253–9

Tumor necrosis factor alpha and the anemia associated with murine malaria. Miller KL, et al. **Infect Immun** 1989 May; 57(5):1542–6

Involvement of tumour necrosis factor and other cytokines in immune-mediated vascular pathology. Grau GE, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):34–9 (44 ref.)

Febrile temperatures can synchronize the growth of Plasmodium falciparum in vitro. Kwiatkowski D. **J Exp Med** 1989 Jan 1;169(1):357–61

Malaria infection in rats with stimulated splenic red pulp: the blood flow and protective effect in normal and transplanted splenic tissue. Westermann J, et al. **Res Exp Med (Berl)** 1988;188(4):267–76

PREVENTION & CONTROL

Pyrethroid-impregnated bed nets in the malaria control strategy at community level. Robert V, et al. **Acta Trop (Basel)** 1989 Jul;46(4):267–8

Rationale for the development of an engineered sporozoite malaria vaccine. Nussenzweig V, et al. **Adv Immunol** 1989; 45:283–334 (178 ref.)

Effect of a malaria suppression program on the incidence of African Burkitt's lymphoma. Geser A, et al. **Am J Epidemiol** 1989 Apr;129(4):740–52

Immunization of Saimiri sciureus boliviensis with recombinant vaccines based on the circumsporozoite protein of Plasmodium vivax. Collins WE, et al. **Am J Trop Med Hyg** 1989 May;40(5):455–64

Trial of deltamethrin impregnated bed nets for the control of malaria transmitted by Anopheles sinensis and Anopheles anthropophagus. Li ZZ, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):356–9

Comparative evaluation of the protective effect of immune spleen cells and immune RNA against Plasmodium berghei. Khullar N, et al. **Ann Trop Med Parasitol** 1988 Dec; 82(6):519–26

Antimalarial agents: specific chemoprophylaxis regimens. Herwaldt BL, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):953–6 (40 ref.)

Review of malaria prophylactic drugs for performance effects in naval aviators. Reams GG. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A77–9 (22 ref.)

Liposomes as carriers for a human malaria sporozoite vaccine. Richards RL, et al. **Biochem Soc Trans** 1988 Dec; 16(6):921–2

Plasmodium vivax malaria: parasite biology defines potential targets for vaccine development. David PH, et al. **Biol Cell** 1988;64(2):251–60 (76 ref.)

The prophylaxis and treatment of malaria. Winstanley PA. **Blood Rev** 1987 Mar;1(1):44–9 (17 ref.)

Prevention of malaria [letter] **BMJ** 1988 Sep 3; 297(6648):623–4

Malaria prophylaxis and epilepsy [letter] Hellgren U, et al. **BMJ** 1988 Nov 12;297(6658):1267

Combating severe malaria in African children. Breman JG, et al. **Bull WHO** 1988;66(5):611–20

A quantitative approach to recommendations on malaria prophylaxis. Pappaioanou M, et al. **Bull WHO** 1988; 66(4):477–84

Use of insecticide-impregnated bed nets in Gambian primary health care: economic aspects. MacCormack CP, et al. **Bull WORLD Health Organ** 1989;67(2):209–14

Malaria and the work of WHO. Najera JA. **Bull WORLD Health Organ** 1989;67(3):229–43 (56 ref.)

Malaria prophylaxis with proguanil and sulfisoxazole in children living in a malaria endemic area. Pang LW, et al. **Bull WORLD Health Organ** 1989;67(1):51–8

Studies on malaria prophylaxis with chlorproguanil or chloroquine in Mozambique. Schapira A, et al. **Cent Afr J Med** 1988 Mar;34(3):44–9

An unusual combination of phototoxicity and Stevens-Johnson syndrome due to antimalarial therapy. Ortel B, et al. **Dermatologica** 1989;178(1):39–42

Malaria vaccine [editorial] **East Afr Med J** 1988 Apr; 65(4):217–8

Prospects and problems for malaria vaccination: an African perspective. Mulla AF. **East Afr Med J** 1988 Apr; 65(4):219–23 (17 ref.)

Malaria vaccines: results of human trials and directions of current research. Cattani JA. **Exp Parasitol** 1989 Feb; 68(2):242–7 (23 ref.)

The real difficulties for malaria sporozoite vaccine development: nonresponsiveness and antigenic variation. Good MF, et al. **Immunol Today** 1988 Nov;9(11):351–5 (53 ref.)

The value of spraying cattlesheds in a control programme. Ansari MA, et al. **Indian J Malariol** 1988 Jun;25(1):17–22

Effect of permethrin impregnated bednets in reducing population of malaria vector Anopheles culicifacies in a tribal village of Orissa state (India). Jambulingam P, et al. **Indian J Med Res** 1989 Jan;89:48–51

Plasmodium chabaudi malaria: protective immunization with surface membranes of infected erythrocytes. Wunderlich F, et al. **Infect Immun** 1988 Dec;56(12):3326–8

Malaria in Nicaragua: community-based control efforts and the impact of war. Garfield RM, et al. **Int J Epidemiol** 1989 Jun;18(2):434–9

Future role of the Agency for International Development in world-wide malaria control programs. Cowper LT. **J Am Mosq Control Assoc** 1987 Sep;3(3):489–93

Bio-environmental control of malaria in an industrial complex at Hardwar (U.P.), India. Dua VK, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):426–30

Mosquitofish Gambusia affinis holbrooki as a malaria vector control agent in Gezira irrigation canals of the Sudan. Mahmoud AA. **J Am Mosq Control Assoc** 1985 Dec; 1(4):524–6

An evaluation of the residual lifespan of DDT in malaria control. Mpofu SM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):529–35

Irritability to DDT of natural populations of the primary malaria vectors in Colombia. Quinones ML, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):56–9

The status of deet (N,N-diethyl-m-toluamide) as a repellent for Anopheles albimanus. Schreck CE. **J Am Mosq Control Assoc** 1985 Mar;1(1):98–100

The control of malaria vectors in the context of the Health for All by the Year 2000 Global Strategy. Slooff R. **J Am Mosq Control Assoc** 1987 Dec;3(4):551–5

Field application of Romanomermis culicivorax (Mermithidae: Nematoda) to control anopheline larvae in southern Iran. Zaim M, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):351–5

Malaria control in Iran—present and future. Zaim M. **J Am Mosq Control Assoc** 1987 Sep;3(3):392–6

Malaria prophylaxis—a persisting dilemma. Zumla A, et al. **J Antimicrob Chemother** 1989 May;23(5):809–10

A critical review of the impact of insecticidal spray under NMEP on malaria situation in India. Sharma GK. **J Commun Dis** 1987 Sep;19(3):187–290 (0 ref.)

Strategy of malaria control at cross roads with particular reference to India. Sharma MI. **J Commun Dis** 1988 Jun; 20(2):93–103

Single dose curative and prophylactic efficacy of antimalarial drugs against multi-resistant Plasmodium yoelii nigeriensis. Shukla B, et al. **J Commun Dis** 1988 Sep;20(3):175–84

Malaria in spite of chemoprophylaxis [letter] Brightman CA. **J Infect** 1989 Mar;18(2):189–90

Malaria prophylaxis in travellers from Britain. Coole L, et al. **J Infect** 1989 May;18(3):209–12

Prophylactic treatment of vivax and falciparum malaria with low-dose doxycycline. Pang L, et al. **J Infect Dis** 1988 Nov;158(5):1124–7

Malaria chemoprophylaxis with a proguanil-chloroquine-maloprim combination in Papua New Guinea. Heap BJ. **J R Army Med Corps** 1988 Oct; 134(3):128–9

Malaria and its prevention in British residents visiting west Africa [letter] [published erratum appears in J R Coll Gen Pract 1988 Jul;38(312):302] Phillips-Howard PA, et al. **J R Coll Gen Pract** 1988 May;38(310):226

The availability of proguanil for overseas travelers [letter] Dardick KR, et al. **JAMA** 1989 Jan 13;261(2):247

Malarial prophylaxis for Australians who are travelling or are temporarily resident overseas [editorial] Cook IF. **Med J Aust** 1988 Nov 7;149(9):454–5

Malarial prophylaxis [letter] Currie B, et al. **Med J Aust** 1989 Feb 6;150(3):166

Malaria prophylaxis [letter] Ellis-Pegler RB. **N Z Med J** 1988 Nov 9;101(857):774

Malaria prophylaxis [letter] Holt P. N Z Med J 1988 Nov 23;101(858):801–2
Malaria prophylaxis [letter] Richardson JE. N Z Med J 1988 Sep 28;101(854):613
Trial of human malaria vaccine [letter] Nature 1988 Dec 15; 336(6200):626
Riboflavin status and resistance to Plasmodium. Nutr Rev 1989 Jun;47(6):181–3 (4 ref.)
Vaccination trials in rhesus monkeys with a minor, invariant, Plasmodium knowlesi 66 kD merozoite antigen. Deans JA, et al. Parasite Immunol 1988 Sep;10(5):535–52
Immunization against Plasmodium falciparum with recombinant polypeptides produced in Escherichia coli. Holder AA, et al. Parasite Immunol 1988 Nov;10(6):607–17
Acquirement of protective immunity in mice through infection with an attenuated isolate and its failure in parent virulent Plasmodium berghei. Waki S, et al. Parasitol Res 1989;75(8):614–8
An update on candidate malaria vaccines. Mitchell GH. Parasitology 1989;98 Suppl:S29–47 (146 ref.)
Monoclonal antibody against interferon gamma can prevent experimental cerebral malaria and its associated overproduction of tumor necrosis factor. Grau GE, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5572–4
Suppression of transmission of malaria through source reduction: antianopheline measures applied in Israel, the United States, and Italy. Kitron U, et al. Rev Infect Dis 1989 May–Jun;11(3):391–406 (120 ref.)
Antisporozoite vaccine for malaria: experimental basis and current status. Nussenzweig RS, et al. Rev Infect Dis 1989 May–Jun;11 Suppl 3:S579–85 (40 ref.)
Malaria vaccines. Kinoshita J. Sci Am 1988 May;258(5):34, 36
Contamination of stored food and feed commodities from indoor use of HCH and DDT in malaria control programmes. Battu RS, et al. Sci Total Environ 1989 Jan; 78:173–8
Limited immunological recognition of critical malaria vaccine candidate antigens. Good MF, et al. Science 1988 Oct 28;242(4878):574–7
Anopheles malaria vector and control measures applied in Indonesia. Kirnowardoyo S. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):713–6
The current situation of the anti-malaria programme in Thailand. Malikul S. Southeast Asian J Trop Med Public Health 1988 Sep; 19(3):355–9
Animal influence on man–biting rates at a malarious site in Palawan, Philippines. Schultz GW. Southeast Asian J Trop Med Public Health 1989 Mar; 20(1):49–53
Malaria prophylaxis with doxycycline in soldiers deployed to the Thai–Kampuchean border. Watanasook C, et al. Southeast Asian J Trop Med Public Health 1989 Mar; 20(1):61–4
Vaccines for human malaria: epidemiological and immunological perspectives. Webster HK, et al. Southeast Asian J Trop Med Public Health 1988 Sep; 19(3):375–89 (59 ref.)
Malaria prophylaxis amongst British residents of Lilongwe and Kasungu districts, Malawi. Harries AD, et al. Trans R Soc Trop Med Hyg 1988;82(5):690–2
Tolerability of long–term malaria prophylaxis with the combination mefloquine + sulfadoxine + pyrimethamine (Fansimef): results of a double blind field trial versus chloroquine in Nigeria. Kollaritsch H, et al. Trans R Soc Trop Med Hyg 1988;82(4):524–9
Efficacy of chemoprophylaxis in preventing Plasmodium falciparum parasitaemia and placental infection in pregnant women in Malawi. McDermott JM, et al. Trans R Soc Trop Med Hyg 1988;82(4):520–3
The use of immunofluorescence to evaluate the efficacy of malarial chemoprophylaxis. Myint Lwin, et al. Trans R Soc Trop Med Hyg 1987;81(6):896–8
Malaria breakthrough despite chlorproguanil chemoprophylaxis in an area without antifol resistance. Petersen E, et al. Trans R Soc Trop Med Hyg 1988;82(5):693
A trial of bed nets (mosquito nets) as a malaria control strategy in a rural area of The Gambia, West Africa. Snow RW, et al. Trans R Soc Trop Med Hyg 1988;82(2):212–5
Permethrin–treated bed nets (mosquito nets) prevent malaria in Gambian children. Snow RW, et al. Trans R Soc Trop Med Hyg 1988;82(6):838–42
How best to treat bed nets with insecticide in the field. Snow RW, et al. Trans R Soc Trop Med Hyg 1988;82(4):647–8
Malaria in Saudi Arabia. Sebai ZA. Trop Doct 1988 Oct; 18(4):183–8
Development of malaria vaccines. Perrin LH, et al. Trop Geogr Med 1988 Jul;40(3):S6–21 (81 ref.)
Self–medication with chloroquine for malaria prophylaxis in urban and rural Zimbabweans. Stein CM, et al. Trop Geogr Med 1988 Jul;40(3):264–8
Traditional practitioners as voluntary health workers [letter] Okanurak K, et al. World Health Forum 1989;10(1):103–4
[Malaria situation in China, 1987. Advisory Committee on Parasitic Disease] Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(4):241–4 (Eng. Abstr.) (Chi)
[Role of microscopy stations for malaria in malaria control in Jiangsu Province] Huang BP, et al. Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(3):178–81 (Eng. Abstr.) (Chi)
[Control of malaria using mosquito nets impregnated with pyrethroids in Burkina Faso] Carnevale P, et al. Bull Soc Pathol Exot Filiales 1988;81(5):832–46 (Eng. Abstr.) (Fre)
[A study of the efficacy of the chemoprevention of malaria using chlorproguanil alone or in combination with chloroquine in French expatriates in Dar–es–Salaam, Tanzania] Ringwald P, et al. Bull Soc Pathol Exot Filiales 1989 Jan;82(1):124–9 (Eng. Abstr.) (Fre)
[The effect of 2 chloroquine–based drug strategies (prevention and therapy of febrile cases] on malaria transmission] Robert V, et al. Bull Soc Pathol Exot Filiales 1989;82(2):243–7 (Eng. Abstr.) (Fre)
[Failure of antimalarial prophylaxis by chloroquine in Niger (letter)] Couzigou PY, et al. Presse Med 1989 Apr 29; 18(17):895 (Fre)
[Antimalarial activities: the last 40 years. Antimalarial action program] World Health Stat Q 1988;41(2):64–73 (Eng. Abstr.) (Fre)
[Prophylaxis in travel (malaria)] Piekarski G. Immun Infekt 1989 Jun;17(3):91 (Ger)
[Malaria: vaccines and clinical trials] Fernex M, et al. Schweiz Rundsch Med Prax 1988 Dec 6;77(49):1341–2 (32 ref.) (Ger)
[Malaria: revised recommendations for prophylaxis] Seidman DS, et al. Harefuah 1988 Aug;115(3–4):90–3 (Heb)
[Migratory flow of cases of malaria in Cuiabá/MT, 1986] Botelho C, et al. Rev Inst Med Trop Sao Paulo 1988 May–Jun;30(3):212–20 (Eng. Abstr.) (Por)

RADIONUCLIDE IMAGING

Diffuse lung uptake of technetium–99m sulfur colloid in malaria. Leclerc Y, et al. J Nucl Med 1989 Jan;30(1):117–9 (16 ref.)

SURGERY

Splenectomy in massive tropical splenomegaly: two–to six–year follow–up in 14 patients. Vriend WH, et al. Trop Geogr Med 1988 Oct;40(4):298–303

THERAPY

Inhibition of Plasmodium vinckei–malaria in mice by recombinant murine interferon–gamma. Bienzle U, et al. Acta Trop (Basel) 1988 Sep;45(3):289–90
Malaria: the search for vaccine antigens and new chemotherapeutic strategies. Howard RJ. Blood 1989 Aug 1;74(2):533–6 (9 ref.)
Successful treatment of malaria tropica with acute renal failure and cerebral involvement by plasmapheresis and hemodialysis. Stuby U, et al. Infection 1988;16(6):362–4
Treatment of severe malaria in the United States with a continuous infusion of quinidine gluconate and exchange transfusion. Miller KD, et al. N Engl J Med 1989 Jul 13; 321(2):65–70
Clinical and laboratory studies of malaria and melioidosis. White NJ, et al. Trans R Soc Trop Med Hyg 1988; 82(1):15–20 (29 ref.)
[Complicated malaria] Rønn AM, et al. Ugeskr Laeger 1989 Aug 28;151(35):2187–9 (Eng. Abstr.) (Dan)
[A severe and atypical form of Plasmodium falciparum malaria treated with intravenous quinine and exsanguinotransfusion (letter)] Lelarge P, et al. Presse Med 1989 Mar 11;18(10):540 (Fre)
[Exchange transfusion and (or) plasmapheresis in more severe falciparum malaria?] Bambauer R. Dtsch Med Wochenschr 1988 Oct 7;113(40):1576–7 (Ger)

TRANSMISSION

Seasonal population changes and malaria transmission potential of Anopheles pharoensis and the minor anophelines in Mwea Irrigation Scheme, Kenya. Mukiama TK, et al. Acta Trop (Basel) 1989 May;46(3):181–9
An analysis of some factors determining the sporozoite rates, human blood indexes, and biting rates of members of the Anopheles punctulatus complex in Papua New Guinea. Burkot TR, et al. Am J Trop Med Hyg 1989 Mar; 40(3):229–34
Anopheles sergenti (Theobald) a potential malaria vector in Egypt. Shehata MG, et al. Ann Parasitol Hum Comp 1989; 64(1):72–6
Concurrent malaria and bacteraemia in a multiply transfused patient. MacIntyre EA, et al. Clin Lab Haematol 1988; 10(3):355–6
Risk of transfusion malaria in Nairobi. Kabiru EW, et al. East Afr Med J 1987 Dec;64(12):825–7
Malaria transmission–enhancing activity in mosquitoes by mammalian host anti–sporozoite antibodies. Hollingdale MR, et al. Exp Parasitol 1989 Apr;68(3):365–8 (19 ref.)
Cytogenetic evidence for two species within the current concept of the malaria vector Anopheles leucosphyrus in Southeast Asia. Baimai V, et al. J Am Mosq Control Assoc 1988 Mar;4(1):44–50
Colonization of the oasis malaria vector, Anopheles sergentii, in Egypt. Beier JC, et al. J Am Mosq Control Assoc 1986 Mar;2(1):104–5
Some entomological observations on malaria transmission in a remote village in northwestern Thailand. Harbach RE, et al. J Am Mosq Control Assoc 1987 Jun;3(2):296–301
Newly incriminated anopheline vectors of human malaria parasites in Junin Department, Peru. Hayes J, et al. J Am Mosq Control Assoc 1987 Sep;3(3):418–22
Anopheles culicifacies: siblings species composition and its relationship to malaria incidence. Subbarao SK, et al. J Am Mosq Control Assoc 1988 Mar;4(1):29–33
The use of CDC light traps and other procedures for sampling malaria vectors in southern Iran. Zaim M, et al. J Am Mosq Control Assoc 1986 Dec;2(4):511–5
The spread of chloroquine–resistant malaria in Africa. Implications for travelers. Moran JS, et al. JAMA 1989 Jul 14;262(2):245–8 (20 ref.)
Floods and resistant malaria [letter] Lancet 1988 Dec 10; 2(8624):1367
Unusual transmission of falciparum malaria in Italy [letter] Rizzo F, et al. Lancet 1989 Mar 11;1(8637):555–6
Simulations of enhanced malaria transmission and host bias induced by modified vector blood location behaviour. Rossignol PA, et al. Parasitology 1988 Dec;97 (Pt 3):363–72
Experimental infections of simians with human malaria: attempts to infect Callithrix penicillata with Plasmodium falciparum. da Rocha EM, et al. Parassitologia 1987 May–Dec;29(2–3):251–61
Study on the natural history of malaria in areas of the Rondonia State–Brazil and problems related to its control. Deane LM, et al. Rev Inst Med Trop Sao Paulo 1988 May–Jun;30(3):153–6
Distribution and chromosomal polymorphism of the malaria vector Anopheles dirus species D. Baimai V, et al. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):661–5
Population cytogenetics of the malaria vector Anopheles leucosphyrus group. Baimai V. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):667–80
Enzyme polymorphism of the malaria vector, An. balabacensis (Diptera: Culicidae) revisited—why sample natural populations? Hii JL, et al. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):689–701
Field studies of the bionomics of Anopheles maculatus and its role in malaria transmission in Malaysia. Loong KP, et al. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):724
Bionomics of Anopheles minimus and its role in malaria transmission in Thailand. Ratanatham S, et al. Southeast Asian J Trop Med Public Health 1988 Jun; 19(2):283–9
Population genetic studies on the Anopheles minimus complex in Thailand. Sucharit S, et al. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):717–23
Bionomics of Anopheles maculatus complex and their role in malaria transmission in Thailand. Upatham ES, et al. Southeast Asian J Trop Med Public Health 1988 Jun; 19(2):259–69
Genetic variation in the malaria mosquito vector Anopheles maculatus from Peninsular Malaysia. Yong HS, et al. Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):681–7
Reappearance of Anopheles funestus as a malaria vector in the Antananarivo region, Madagascar. Fontenille D, et al. Trans R Soc Trop Med Hyg 1988;82(4):644–5
The trouble with eaves; house entry by vectors of malaria. Lindsay SW, et al. Trans R Soc Trop Med Hyg 1988; 82(4):645–6
Susceptibility of Anopheles culicifacies species A and B to Plasmodium vivax and Plasmodium falciparum as determined by immunoradiometric assay. Subbarao SK, et al. Trans R Soc Trop Med Hyg 1988;82(3):394–7
A newly discovered habitat of Anopheles stephensi in present–day Calcutta with evidence of natural malarial infection. Hati AK, et al. Trop Geogr Med 1988 Oct; 40(4):376–7
[A longitudinal observation on the vectorial capacity of Anopheles sinensis in vivax malaria endemic area] Fan TB. Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1988 Dec; 9(6):325–8 (Eng. Abstr.) (Chi)
[To explore the principal vector of malaria by using vectorial capacity] Zheng KS. Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1989 Jun; 10(3):161–3 (Eng. Abstr.) (Chi)
[Studies on the variability of incubation period of vivax malaria following mosquito biting] Li QJ, et al. Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1989;7(1):28–31 (Eng. Abstr.) (Chi)
[Malaria in Oudalan, a Sahelian region of Burkina Faso] Gazin P, et al. Ann Soc Belg Med Trop 1988 Sep; 68(3):255–64 (Eng. Abstr.) (Fre)
[Malaria in the forest region of Mayombe, People's Republic of the Congo. I. Presentation of the region and entomologic data] Richard A, et al. Ann Soc Belg Med Trop 1988 Dec; 68(4):293–303 (Eng. Abstr.) (Fre)
[Transmission of human malaria in a savanna village of South–West Burkina Faso] Robert V, et al. Ann Soc Belg Med Trop 1988 Jun;68(2):107–21 (Eng. Abstr.) (Fre)
[Study of Culicidae in Firaisam–Pokontany of Ambohimanjaka in the environs of Tananarive: results of a longitudinal study, in particular on the vectorial

transmission of malaria] Fontenille D, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):231–42 (Fre)

[Imported falciparum malaria in Marseilles hospitals in 1987. Apropos of 104 cases] Bourgeade A, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):101–9 (Eng. Abstr.) (Fre)

[The severity of airport malaria] Giacomini T, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):345–50 (25 ref.) (Eng. Abstr.) (Fre)

[Post-transfusion malaria. Apropos of a case in a child] Ben Ammar B, et al. **Tunis Med** 1989 Feb;67(2):101–5 (Eng. Abstr.) (Fre)

[Transfusion malaria in promyelocytic leukemia] Shunkert H, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1841–3 (Eng. Abstr.) (Ger)

[Suspected airport malaria in Israel] Shpilberg O, et al. **Harefuah** 1988 Sep;115(5–6):117–9 (Eng. Abstr.) (Heb)

[Comments on the Second Session on Prevention of Travelers' Malaria. Ecole du Val de Grace (Paris), 9–10 October 1987] Carosi G. **Boll Ist Sieroter Milan** 1988; 67(1):79–82 (Ita)

[Air transport and dynamics of the reintroduction of malaria] Năstoiu I. **Rev Ig [Bacteriol]** 1988 Jan–Mar;33(1):73–85 (38 ref.) (Rum)

[Vectors of malaria in rice paddies] Erlikh VD. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):16–9 (Eng. Abstr.) (Rus)

[Susceptibility of Aedes Aegypti L. mosquitoes infected with an entomopathogenic virus to malarial plasmodia] Zakharova NF, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec; (6):18–22 (Eng. Abstr.) (Rus)

[The effect of economic activities on the fauna and population count of malarial mosquitoes in an industrial city] Zarechnaia SN, et al. **Med Parazitol (Mosk)** 1989 May–Jun; (3):71–2 (Eng. Abstr.) (Rus)

VETERINARY

Experimental infections of Plasmodium yoelii nigeriensis in mice and rats, and hosts' reactions. Fagbenro-Beyioku AF, et al. **Afr J Med Med Sci** 1989 Mar;18(1):25–32

Host diet in experimental rodent malaria: a variable which can compromise experimental design and interpretation. Gilks CF, et al. **Parasitology** 1989 Apr;98 Pt 2:175–7

The sex ratio of Plasmodium gametocytes. Schall JJ. **Parasitology** 1989 Jun;98 Pt 3:343–50

[Attempted immunodepression of a Lemur macaco macaco carrying Plasmodium sp. Utilization of corticoids] Rabetafika L, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):179–83 (Fre)

MALARIA, AVIAN

MICROBIOLOGY

Plasmodium relictum as a cause of avian malaria in wild-caught magellanic penguins (Spheniscus magellanicus). Fix AS, et al. **J Wildl Dis** 1988 Oct; 24(4):610–9

MALASSEZIA

Malassezia furfur. Klotz SA. **Infect Dis Clin North Am** 1989 Mar;3(1):53–64 (26 ref.)

CLASSIFICATION

A reevaluation of the genus Malassezia by means of genome comparison. Guého E, et al. **Antonie Van Leeuwenhoek** 1989;55(3):245–51

DRUG EFFECTS

Activity of triazole derivatives against Pityrosporum orbiculare in vitro and in vivo. Faergemann J. **Ann N Y Acad Sci** 1988;544:348–53

GROWTH & DEVELOPMENT

The 'tape-method': a new and simple method for quantitative culture of Pityrosporum yeasts. Wikler JR, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):445–9

The distribution and ecology of Malassezia furfur and cutaneous bacteria on human skin. Leeming JP, et al. **J Appl Bacteriol** 1989 Jul;67(1):47–52

A new model for growth and filament production of Pityrosporum ovale (orbiculare) on human stratum corneum in vitro. Faergemann J. **J Invest Dermatol** 1989 Jan;92(1):117–9

Preliminary studies on the mechanism of infection and characterization of Malassezia pachydermatis in association with canine otitis externa. Gabal MA. **Mycopathologia** 1988 Nov;104(2):93–8

Malassezia intertrigo, a new clinical entity. Katoh T, et al. **Mycoses** 1988 Nov;31(11):558–62

[Histologic fungal infection in skin tumors] Schönborn C, et al. **Mycoses** 1988 Aug;31(8):411–7 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Seborrhoeic dermatitis and Pityrosporum ovale: a cultural and immunological study. Bergbrant IM, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):332–5

[Specific IgE antibodies to Pityrosporum orbiculare in patients with atopic dermatitis] Schrenker T, et al. **Z Hautkr** 1989 Jun 15;64(6):478–9 (Eng. Abstr.) (Ger)

ISOLATION & PURIFICATION

Variations of Pityrosporum orbiculare in middle-aged and elderly individuals. Bergbrant IM, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):537–40

Studies on the lipophilic yeast Pityrosporum ovale in HIV-seropositive and HIV-seronegative homosexual men. Håkansson C, et al. **Acta Derm Venereol (Stockh)** 1988; 68(5):422–6

The microbial content and complement C3 cleaving capacity of comedones in acne vulgaris. Leeming JP, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):468–73

Infantile seborrhoeic dermatitis and Pityrosporum ovale. Broberg A, et al. **Br J Dermatol** 1989 Mar;120(3):359–62

Pityrosporum ovale in infantile seborrheic dermatitis. Ruiz-Maldonado R, et al. **Pediatr Dermatol** 1989 Mar; 6(1):16–20

[Pityrosporum ovale in seborrheic dermatitis in children and in other dermatoses in children] Pérez Chavarría EL, et al. **Med Cutan Ibero Lat Am** 1989;17(2):98–102 (Eng. Abstr.) (Spa)

MALATE DEHYDROGENASE

An evaluation of allozyme amino acid substitutions for the study of molecular relationships in Providencia strains. Goullet P, et al. **Ann Inst Pasteur Microbiol** 1988 Nov–Dec; 139(6):689–702

Reversible dissociation of the catalytically active subunits of pigeon liver malic enzyme. Chang GG, et al. **Biochem J** 1988 Aug 15;254(1):123–30

Refined crystal structure of cytoplasmic malate dehydrogenase at 2.5-A resolution. Birktoft JJ, et al. **Biochemistry** 1989 Jul 11;28(14):6065–81

Archaebacterial malate dehydrogenase: the amino-terminal sequence of the enzyme from Sulfolobus acidocaldarius is homologous to the eubacterial and eukaryotic malate dehydrogenases. Görisch H, et al. **FEBS Lett** 1989 Apr 24;247(2):259–62

ANALYSIS

Fasciola hepatica and Dicrocoelium dendriticum: isoenzyme patterns of malate dehydrogenase and malic enzyme. Leon-Ortega P, et al. **Angew Parasitol** 1988 Sep;29(3):173–7

Purification and N-terminal amino-acid sequences of bacterial malate dehydrogenases from six actinomycetales strains and from Phenylobacterium immobile, strain E. Rommel TO, et al. **Biol Chem Hoppe Seyler** 1989 Jul; 370(7):763–8

A comparison of the malate dehydrogenase of the propionic acid bacteria with the mammalian soluble and mitochondrial isoenzymes. Allen SH, et al. **Comp Biochem Physiol [B]** 1978;60(3):287–93

Stability and activity of a thermostable malic enzyme in denaturants and water-miscible organic solvents. Guagliardi A, et al. **Eur J Biochem** 1989 Jul 15;183(1):25–30

Effect of triiodothyronine and thyroxine on malic enzyme activity and protein and nucleic acid contents of liver and muscle of toad, Bufo melanostictus. Dey SS, et al. **Horm Metab Res** 1989 Jan;21(1):49–50

Characterization of Yersinia enterocolitica, Y. intermedia, Y. aldovae, Y. frederiksenii, Y. kristensenii and Y. pseudotuberculosis by electrophoretic polymorphism of acid phosphatase, esterases, and glutamate and malate dehydrogenases. Goullet P, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):317–25

Enzyme variation and pathogenicity of recent field isolates of Eimeria tenella. Shirley MW, et al. **Res Vet Sci** 1989 Jan;46(1):79–83

[Analysis of parasitic zymodemes] Myjak P. **Wiad Parazytol** 1988;34(4–6):672–8 (Pol)

ANTAGONISTS & INHIBITORS

Cyclic AMP, fructose-2,6-bisphosphate and catabolite inactivation of enzymes in the hydrocarbon-assimilating yeast Candida maltosa. Polnisch E, et al. **Arch Microbiol** 1989;152(3):269–72

Cyanide—an uncompetitive inhibitor of NAD(P)-dependent malic enzyme from human term placental mitochondria. Zołnierowicz S, et al. **Biochem Int** 1988 Aug;17(2):303–9

Periodate-oxidized 3-aminopyridine adenine dinucleotide phosphate as a fluoreacent affinity label for pigeon liver malic enzyme. Chang GG, et al. **J Biol Chem** 1989 Jan 5;264(1):280–7

Synthetic transit peptides inhibit import and processing of mitochondrial precursor proteins. Chu TW, et al. **J Biol Chem** 1989 Jun 5;264(16):9552–8

BIOSYNTHESIS

Precocious induction of malic enzyme by nutritional and hormonal factors in rat foetal hepatocyte primary cultures. Fabregat I, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1028–34

Effects of insulin and fructose on transcriptional and post-transcriptional regulation of malic enzyme synthesis in diabetic rat liver. Katsurada A, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):103–7

BLOOD

Biochemical and genetic identity of alpha-keto acid reductase and cytoplasmic malate dehydrogenase from human erythrocytes. Friedrich CA, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):25–37

[Malate dehydrogenase isoenzymes in myocardial infarction] Wagenknecht K, et al. **Kardiologia** 1988 Nov;28(11):55–7 (Eng. Abstr.) (Rus)

[Clinical and isoenzymatic characteristics of hepatitis B in pulmonary tuberculosis] Andriutsa KA. **Probl Tuberk** 1988; (6):22–7 (Eng. Abstr.) (Rus)

GENETICS

Population and biochemical genetics of the human mitochondrial malic enzyme. Papiha SS, et al. **Ann Hum Biol** 1989 Jul–Aug;16(4):369–74

Gene sequence and primary structure of mitochondrial malate dehydrogenase from Saccharomyces cerevisiae. Thompson LM, et al. **Biochemistry** 1988 Nov 1; 27(22):8393–400

Cytogenetic localization of a putative regulatory gene affecting an NADP+-dependent enzyme in Drosophila melanogaster. Bentley MM, et al. **Can J Genet Cytol** 1985 Jun;27(3):322–7

Esterase and malate dehydrogenase isozyme polymorphisms in 15 Artemia populations. Bowen ST, et al. **Comp Biochem Physiol [B]** 1978;61(4):593–5

Allelic frequency variations at the MDH-1 locus within Schistosoma mansoni strains from Guadeloupe (French West Indies): ecological interpretation. Théron A, et al. **Comp Biochem Physiol [B]** 1989;93(1):33–7

Sex linkage of malic enzyme in Xenopus laevis. Graf JD. **Experientia** 1989 Feb 15;45(2):194–6

Human malic enzyme-2 polymorphism in the GDR. Stöhlmacher P, et al. **Hum Hered** 1989;39(1):58–60

Thyroid hormone regulation of transcription factors involved in malic enzyme gene expression. Petty KJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11483–90

Transcriptional activation and stabilization of malic enzyme mRNA precursor by thyroid hormone. Song MK, et al. **J Biol Chem** 1988 Dec 5;263(34):17970–4

Structural organization of the mouse cytosolic malate dehydrogenase gene: comparison with that of the mouse mitochondrial malate dehydrogenase gene. Setoyama C, et al. **J Mol Biol** 1988 Aug 5;202(3):355–64

Nutritional and hormonal regulation of the gene for avian malic enzyme. Goodridge AG, et al. **J Nutr** 1989 Feb; 119(2):299–308 (47 ref.)

Structural and functional analysis of the rat malic enzyme gene promoter. Morioka H, et al. **Mol Cell Biol** 1988 Aug; 8(8):3542–5

Thyrotropin increases malic enzyme messenger ribonucleic acid levels in rat FRTL-5 thyroid cells. Kohn AD, et al. **Mol Endocrinol** 1989 Mar;3(3):532–8

Structural characterization of the rat malic enzyme gene. Morioka H, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4912–6

Evolutionary relationships among the malate dehydrogenases. McAlister-Henn L. **Trends Biochem Sci** 1988 May;13(5):178–81

IMMUNOLOGY

Antibodies against alcohol dehydrogenase and lactate dehydrogenase inhibit the activities of other unrelated NADH-requiring dehydrogenases. Srivastava A, et al. **Biochem Int** 1988 Oct;17(4):611–5

ISOLATION & PURIFICATION

NADP-linked malic enzyme. Purification from maize leaves, Mr and subunit composition. Thorniley MS, et al. **Biochem J** 1988 Aug 15;254(1):229–33

Purification and properties of cytoplasmic malate dehydrogenase from Taenia crassiceps (Zeder, 1800) cysticerci. Zenka J, et al. **Folia Parasitol (Praha)** 1989; 36(1):59–65

Purification of malate dehydrogenase from chicken liver mitochondria. Existence of a small quantity of cytosolic isoenzyme. Gelpí JL, et al. **Int J Biochem** 1988;20(9):989–96

Purification and properties of cytosolic malic enzyme from human skeletal muscle. Taroni F, et al. **Int J Biochem** 1988; 20(8):857–66

Isolation and purification of malate dehydrogenase in helminth parasites. Sanchez-Moreno M, et al. **Wiad Parazytol** 1988;34(2):113–24

[Purification and properties of NADP-specific malate dehydrogenase from bovine adrenal cortex mitochondria] Senkevich SB. **Biokhimiia** 1988 Nov;53(11):1783–90 (Eng. Abstr.) (Rus)

METABOLISM

Purification and molecular properties of malate dehydrogenase from the marine diatom Nitzschia alba. Yueh AY, et al. **Biochem J** 1989 Feb 15;258(1):221–8

Comparison of the molecular structures of cytoplasmic and mitochondrial malate dehydrogenase. Birktoft JJ, et al. **Biochem Soc Trans** 1989 Apr;17(2):301–4

Oxalacetate decarboxylase and pyruvate carboxylase activities, and effect of sulfhydryl reagents in malic enzyme from Sulfolobus solfataricus. Guagliardi A, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):301–11

Time-resolved fluorescence studies on NADH bound to mitochondrial malate dehydrogenase. Jameson DM, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):187–90

Variation in apparent enzyme activity in two-enzyme assay systems: phosphoenolpyruvate carboxylase and malate dehydrogenase. Hatley RH, et al. **Biotechnol Appl Biochem** 1989 Aug;11(4):367–70

Clofibrate feeding increases cytoplasmic but not mitochondrial malic enzyme activity in rat kidney cortex. Zelewski M, et al. **Cell Biochem Funct** 1989 Apr;7(2):97–103

Are spontaneous conformational interconversions a molecular basis for long-period oscillations in enzyme activity? Queiroz-Claret C, et al. **Chronobiol Int** 1988; 5(4):301–9

Zinc effects on LDH, MDH and alkaline phosphatase from cultures of fathead minnow cells. Adragna PJ, et al. **Comp Biochem Physiol [B]** 1979;64(2):219–24

Biochemical studies of supernatant malate dehydrogenase allozymes in Drosophila melanogaster. Alahiotis S. **Comp Biochem Physiol [B]** 1979;62(4):375–80

High activity of NADP-dependent malic enzyme in mitochondria from abdomen muscle of the crayfish Orconectes limosus. Skorkowski EF, et al. **Comp Biochem Physiol [B]** 1977;58(3):297–301

Immunocytochemical localization of transferrin and mitochondrial malate dehydrogenase in the developing nervous system of the rat. Dion TL, et al. **Dev Neurosci** 1988;10(3):152–64

The visualization by affinity electrophoresis of a specific association between the consecutive citric acid cycle enzymes fumarase and malate dehydrogenase. Beeckmans S, et al. **Eur J Biochem** 1989 Aug 1;183(2):449–54

Catalytic properties of thermophilic lactate dehydrogenase and halophilic malate dehydrogenase at high temperature and low water activity. Hecht K, et al. **Eur J Biochem** 1989 Jul 15;183(1):69–74

The effect of high glucose and high insulin concentrations on pentose phosphate shunt enzymes and malic enzyme in cultured human endothelial cells. Hawthorne GC, et al. **Horm Metab Res** 1988 Oct;20(10):645–7

Malic enzyme activity in the developing rat brain in relation to thyroid status. Thakare UR, et al. **Int J Dev Neurosci** 1989;7(2):203–8

Kinetic advantages of hetero-enzyme complexes with glutamate dehydrogenase and the alpha-ketoglutarate dehydrogenase complex. Fahien LA, et al. **J Biol Chem** 1989 Jul 25;264(21):12303–12

Substrate channeling of NADH and binding of dehydrogenases to complex I. Fukushima T, et al. **J Biol Chem** 1989 Oct 5;264(28):16483–8

Structure and properties of malic enzyme from Bacillus stearothermophilus. Kobayashi K, et al. **J Biol Chem** 1989 Feb 25;264(6):3200–5

Dispensable presequence for cellular localization and function of mitochondrial malate dehydrogenase from Saccharomyces cerevisiae. Thompson LM, et al. **J Biol Chem** 1989 Jul 15;264(20):12091–6

Differentiation in culture of cells from an avian holocrine secretory gland: preparation of isolated cells and conditions which induce accumulation of malic enzyme. Carpenter WR, et al. **J Cell Physiol** 1988 Nov;137(2):205–13

Light and electron microscope immunolocalization of cytosolic malic enzyme-like activity in the rat's cerebellar cortex. Martínez-Rodríguez R, et al. **J Hirnforsch** 1989; 30(3):291–6

Insulin-mediated regulation of epididymal fat pad malic enzyme. McHugh KM, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):227–33

A specific, highly active malate dehydrogenase by redesign of a lactate dehydrogenase framework. Wilks HM, et al. **Science** 1988 Dec 16;242(4885):1541–4

Isoenzyme patterns of isolates of Trichomonas vaginalis from Vancouver. Proctor EM, et al. **Sex Transm Dis** 1988 Oct-Dec;15(4):181–5

[Dehydrogenase activity of the liver in rats following 30 days' exposure to hypergravity] Vetrova EG, et al. **Kosm Biol Aviakosm Med** 1988 Nov-Dec;22(6):64–6 (Eng. Abstr.) **(Rus)**

[Effect of human milk enzymes on carbohydrate metabolism during adaptation of newborn infants in the early neonatal period] Nabukhotnyi TK, et al. **Vopr Pitan** 1988 May-Jun; (3):34–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Regulation of aerobic fermentation in Leishmania donovani promastigotes by NADP+-dependent malic enzyme. Saadalla V, et al. **Ann Trop Med Parasitol** 1987 Dec; 81(6):687–92

Hormonal regulation of malic enzyme expression in primary cultures of foetal brown adipocytes. Lorenzo M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):341–7

MALATE SYNTHASE see under **KETOACID-LYASES**

MALATES

ADMINISTRATION & DOSAGE

Topical treatment of burns using aserbine. Lloyd DA, et al. **Burns** 1989 Apr;15(2):125–8

ANALYSIS

An unusual polyanion from Physarum polycephalum that inhibits homologous DNA polymerase alpha in vitro. Fischer H, et al. **Biochemistry** 1989 Jun 13;28(12):5219–26

BIOSYNTHESIS

Studies on the biosynthesis of bialaphos (SF-1293). 8. Purification and characterization of 2-phosphinomethylmalic acid synthase from Streptomyces hygroscopicus SF-1293. Shimotohno KW, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1057–65

CHEMICAL SYNTHESIS

Synthesis of alpha-isopropylmalate, beta-isopropylmalate, and dimethylcitraconate. Schloss JV, et al. **Methods Enzymol** 1988;166:92–6

METABOLISM

Purification, oligomerization state and malate sensitivity of maize leaf phosphoenolpyruvate carboxylase. McNaughton GA, et al. **Biochem J** 1989 Jul 15;261(2):349–55

Oxidation of malate by the mitochondrial succinate-ubiquinone reductase. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):1–9

Subcellular distribution of malate-aspartate cycle intermediates during normoxia and anoxia in the heart. Wiesner RJ, et al. **Biochim Biophys Acta** 1988 Oct 26; 936(1):114–23

Role of malolactic fermentation in lactic acid bacteria. Renault P, et al. **Biochimie** 1988 Mar;70(3):375–9

Malolactic enzyme in Lactobacillus murinus. Strasser de Saad AM, et al. **Biochimie** 1988 Mar;70(3):357–65 (52 ref.)

Binding of calcium by organic anions, determined by perturbation of the equilibrium solubility of [14C]calcium oxalate. Geller DA, et al. **Clin Chim Acta** 1989 Jul 14; 182(3):255–70

Sources of intramitochondrial malate. Bobyleva-Guarriero V, et al. **FASEB J** 1989 Aug;3(10):2208–11

Product of the Lactococcus lactis gene required for malolactic fermentation is homologous to a family of positive regulators. Renault P, et al. **J Bacteriol** 1989 Jun; 171(6):3108–14

[5-Alkyl(C19-C25) resorcinols as regulators of succinate and NAD-dependent substrate oxidation by mitochondria] Nenashev VA, et al. **Biokhimiia** 1989 May;54(5):784–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The response time of transcription and translation of the leu-2 gene of Neurospora to its inducer, alpha-isopropylmalate, approaches the permissible minimum. Mary A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1286–90

Absence of mutagenic activity of acidity regulators in the Ames Salmonella/microsome test. Al-Ani FY, et al. **Mutat Res** 1988 Dec;206(4):467–70

MALATHION

Genes controlling malathion resistance in a laboratory-selected population of Drosophila melanogaster. Houpt DR, et al. **Genome** 1988 Dec; 30(6):844–53

Increased toxicity of malathion diluted with heavy aromatic naphtha on adult Aedes taeniorhynchus. Bunner BL, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):87–9

Evaluating ultra-low volume ground applications of malathion against Aedes aegypti using landing counts in Puerto Rico, 1980–84. Fox I, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):163–7

Susceptibility status of Aedes albopictus to three topically applied adulticides. Khoo BK, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):310–3

Effects of dengue-1 infection in Aedes albopictus on its susceptibility to malathion. Rawlins SC, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):372–3

A simple method of identifying organophosphate insecticide resistance in adults of the yellow fever mosquito, Aedes aegypti. Rees AT, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):23–7

[The occurrence of addiction to karbofos in the progeny of rats administered it during pregnancy] Ivashin VM, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):87–90 (Eng. Abstr.) **(Rus)**

[The sensitivity of a natural population of Anopheles martinius to malathion and DDT in the Kirghiz SSR] Gracheva GV, et al. **Med Parazitol (Mosk)** 1989 May-Jun; (3):88–9 (Eng. Abstr.) **(Rus)**

[Sensitivity of Anopheles mosquitoes to DDT and malathion depending on sex, age and female blood feeding] Sergieva VP, et al. **Med Parazitol (Mosk)** 1988 Jul-Aug;(4):27–31 (Eng. Abstr.) **(Rus)**

[Resistance of Musca domestica Linnaeus 1758 (Diptera: Muscidae) to organophosphorous insecticides in a poultry farm, province La Habana] Tang Chiong R, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):34–9 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Microencapsulated organophosphorous insecticides. III. Some aspects on the volatilization of malathion and disulfoton from aqueous suspensions of microcapsules. Drágan D, et al. **J Microencapsul** 1987 Apr-Jun;4(2):97–105

ANALOGS & DERIVATIVES

Time-course of malaoxon-induced alterations in brain regional inositol-1-phosphate levels in convulsing and nonconvulsing rats. Hirvonen MR, et al. **Neurochem Res** 1989 Feb;14(2):143–7

ANALYSIS

Degradation of malathion by microorganisms isolated from industrial effluents. Singh AK, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):28–35

ANTAGONISTS & INHIBITORS

[The level and nature of insecticide resistance (DDT and malathion) in laboratory-strain mosquitoes] Sergieva VP, et al. **Med Parazitol (Mosk)** 1989 May-Jun;(3):64–8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Studies on removal of malathion from water by means of activated charcoal [letter] Gessner PK. **Ecotoxicol Environ Safety** 1988 Oct;16(2):187–8

METABOLISM

Correlation of fluorescent tracer measurements of dermal exposure and urinary metabolite excretion during occupational exposure to malathion. Fenske RA. **Am Ind Hyg Assoc J** 1988 Sep;49(9):438–44

Partial purification and properties of a soil enzyme that degrades the insecticide malathion. Getzin LW, et al. **Biochim Biophys Acta** 1971 Jun 16;235(3):442–53

PHARMACOLOGY

delta-Aminolaevulinate synthase: mechanism of its response to malathion. del Carmen Vila M, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4783–6

Effect of insecticides on humoral immune response in cockerels. Varshneya C, et al. **Br Vet J** 1988 Nov-Dec; 144(6):610–2

Effect of malathion and endosulfan on brain acetylcholinesterase and ovarian steroidogenesis of Channa punctatus (Bloch). Inbaraj RM, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):123–8

Malathion-specific resistance in Anopheles stephensi from Pakistan. Scott JG, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):29–32

POISONING

Toxicological evaluation of a poisoning attributed to ingestion of malathion insect spray and correlation with in vitro inhibition of cholinesterases. Chaturvedi AK, et al. **Hum Toxicol** 1989 Jan;8(1):11–8

Detection of organophosphate poisoning in a putrefying body by analyzing arthropod larvae. Gunatilake K, et al. **J Forensic Sci** 1989 May;34(3):714–6

[Clinico-morphologic and histochemical changes in the neuromuscular apparatus in acute carbophos poisoning] Kolesnichenko IP, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):76–80 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Further studies on head lice and their control in Tasmania. Goldsmid JM, et al. **Aust Fam Physician** 1989 Mar; 18(3):253–5

Pediculosis capitis: why prefer a solution to shampoo or spray? Armoni M, et al. **Pediatr Dermatol** 1988 Nov; 5(4):273–5

TOXICITY

Early biochemical changes produced by malathion on toad embryos. Rosenbaum EA, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):831–5

Acute toxicity of malathion, tetrabromobisphenol-A, and tributyltin chloride to mysids (Mysidopsis bahia) of three ages. Goodman LR, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):746–53

Histopathological changes induced by malathion in the gills of bluegill Lepomis macrochirus. Richmonds C, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):123–30

Characterization of carboxylesterase from malathion degrading bacterium: Pseudomonas sp. M-3. Singh AK, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):860–7

Cythion-induced histophysiological changes in thyroid and thyrotrophs of the teleost fish, Channa punctatus (Bloch). Ram RN, et al. **Ecotoxicol Environ Safety** 1989 Jun; 17(3):272–8

Teratological study of malathion in the rabbit. Machin MG, et al. **J Toxicol Environ Health** 1989;26(3):249–53

Effects of a commercial malathion dip preparation on the cellular and humoral immune response of BALB/c mice. Relford RL, et al. **Lab Anim Sci** 1989 Jan;39(1):56–9

Comments on "Amyoplasia Congenita-Like Condition and Maternal Malathion Exposure": Is all Amyoplasia Amyoplasia? [letter] Hall JG. **Teratology** 1988 Nov; 38(5):493–5

Detection of kidney damage by malathion impurities using

a microdissection technique. Keadtisuke S, et al. **Toxicol Lett** 1989 Apr;47(1):53–9

[Studies on the safety assessment of pesticides by means of immunological criteria] Zhou YZ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):74–6 (Eng. Abstr.) **(Chi)**

[Hygienic evaluation of embryotoxic effects of carbofos and formaldehyde mixture isolated and combined with elevated temperature and air humidity] Korshunova EP. **Gig Sanit** 1988 Oct;(10):13–5 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of methods of mathematical evaluation of the combined effects of 2 or more harmful chemical factors in their single and successive administration in acute experiments] Manenko AK, et al. **Gig Sanit** 1988 Nov;(11):55–8 **(Rus)**

MALEATES

ADVERSE EFFECTS

Acetoacetate does not prevent maleate-induced proteinuria in rats. Neuhaus OW. **Nephron** 1989;53(1):83–4

PHARMACOLOGY

Safety evaluation of a male injectable antifertility agent, styrene maleic anhydride, in rats. Sethi N, et al. **Contraception** 1989 Feb;39(2):217–26

Lack of genotoxicity with acrylate polymers in five short-term mutagenicity assays. Thompson ED, et al. **Environ Mol Mutagen** 1989;14(2):98–106

Glutathione and cysteine enhance and diethylmaleate reduces thiabendazole teratogenicity in mice. Ogata A, et al. **Food Chem Toxicol** 1989 Feb;27(2):117–23

Distribution of nickel in diethylmaleate (DEM) pre-treated rats: protective role of glutathione and histidine. Srivastava RC, et al. **Ind Health** 1988;26(3):183–5

Radiosensitization by misonidazole during recovery of cellular thiols following depletion by BSO or DEM. McNally NJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1331–4

Vulnerability of the thick ascending limb to glutathione depletion in rat kidney: effects of diuretics and indomethacin. Torres AM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):247–53

Chloroform-induced multiple forms of ornithine decarboxylase: differential sensitivity of forms to enhancement by diethyl maleate and inhibition by ODC-antizyme. Savage RE Jr, et al. **J Toxicol Environ Health** 1989;27(1):57–64

Effect of maleate on tubular protein reabsorption in dog kidneys. Hysing J, et al. **Renal Physiol** 1988;10(6):338–51

Enhancement of murine phenytoin teratogenicity by the gamma-glutamylcysteine synthetase inhibitor L-buthionine-(S,R)-sulfoximine and by the glutathione depletor diethyl maleate. Wong M, et al. **Teratology** 1989 Aug;40(2):127–41

Unilateral depletion of testicular glutathione levels in the rat following intratesticular injections of diethylmaleate and buthionine sulfoximine. Slott VL, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):369–73

Role of GSSG-reductase and a thiol oxidant diethylmaleate (DEM) in skin tumorigenesis induced by jute batching oil. Antony M, et al. **Toxicol Lett** 1989 Sep;48(3):259–64

Role of free radicals in entero-hepatic dysfunction caused by portal circulatory disturbance: effect of SOD derivative. Kawamoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1287–9

TOXICITY

Quantitative morphologic changes in nephron structures and urinary enzyme activity pattern in sodium-maleate-induced renal injury. Pfaller W, et al. **Renal Physiol Biochem** 1989 Jan-Feb;12(1):56–64

Alterations in the renal function of male and female rats exposed to maleic acid, dichloromaleic acid, and both compounds. Christenson WR, et al. **Toxicology** 1989 Jun 16;56(3):229–38

MALEIC ANHYDRIDES see under **FURANS**

MALEIC HYDRAZIDE see under **PYRIDAZINES**

MALEIMIDES

Ca2+-induced conformational changes in cardiac troponin C as measured by N-(1-pyrene)maleimide fluorescence. Verin AD, et al. **Biochim Biophys Acta** 1988 Sep 21; 956(2):197–208

BLOOD

Inhibition of hexose transport and labelling of the hexose carrier in human erythrocytes by an impermeant maleimide derivative of maltose. May JM. **Biochem J** 1988 Sep 1; 254(2):329–36

METABOLISM

Excimer fluorescence in lens proteins labelled with N-(1-pyrene)maleimide. Putilina T, et al. **Curr Eye Res** 1989 May;8(5):533–5

Chemical derivatization of Ca2+-pump protein from skeletal muscle with N-substituted maleimides and 5-(2-iodoacetamidoethyl)aminonaphthalene 1-sulfonate. Kawakita M, et al. **Methods Enzymol** 1988;157:251–61

PHARMACOLOGY

Inhibition of glucocorticoid receptor transformation, subunit dissociation, and temperature-dependent inactivation by various N-substituted maleimides. Blicq S, et al. **Biochemistry** 1988 Nov 1;27(22):8436–42

Nonpolar interactions in the modification of an essential sulfhydryl of sorbitol dehydrogenase by N-alkylmaleimides. Beier KH, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):236–41

Steroid binding to hepatoma tissue culture cell glucocorticoid receptors involves at least two sulfhydryl groups. Miller NR, et al. **J Biol Chem** 1988 Oct 15;263(29):15217–25

The effects of aromatic and aliphatic maleimide crosslinkers on anti-CD5 ricin immunotoxins. Myers DE, et al. **J Immunol Methods** 1989 Jul 6;121(1):129–42

[The effect of troponin I on Ca2+-induced conformation transitions of troponin C modified by N-1-pyrene maleimide] Verin AD, et al. **Dokl Akad Nauk SSSR** 1988; 300(2):476–9 **(Rus)**

MALFUNCTION, EQUIPMENT see **EQUIPMENT FAILURE**

MALIC ENZYME see **MALATE DEHYDROGENASE**

MALIGNANT CARCINOID SYNDROME

Gastrointestinal carcinoid tumours. Histogenetic, histochemical, immunohistochemical, clinical and therapeutic aspects. Wilander E, et al. **Prog Histochem Cytochem** 1989;19(2):1–88 (276 ref.)

[Clinical considerations on 2 cases of carcinoid tumor of the ileum with hepatic metastases] Vietri F, et al. **Minerva Chir** 1988 Oct 31;43(20):1745–51 (Eng. Abstr.) **(Ita)**

BLOOD

Histamine in carcinoid syndrome. Gustafsen J, et al. **Agents Actions** 1988 Aug;25(1–2):1–3

Plasma atrial natriuretic peptide in carcinoid heart disease. Lundin L, et al. **Am J Cardiol** 1989 Apr 15;63(13):969–72

Circulating bradykinin-like immunoreactivity and the pentagastrin-induced carcinoid flush. Balks HJ, et al. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):141–51

Circulation of a fragment of haemoglobin alpha-chain during a pentagastrin-induced flush in patients with metastatic carcinoid tumours. Balks HJ, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):261–9

The effects of octreotide on basal and stimulated hormone levels in patients with carcinoid syndrome. Oberg K, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):796–800

COMPLICATIONS

Successful treatment of unstable angina in malignant carcinoid syndrome using the long-acting somatostatin analogue SMS 201-995 (Sandostatin). Bluming AZ, et al. **Am J Med** 1988 Dec;85(6):872–4

Hypertrophic gastritis associated with increased gastric mucosal prostaglandin E2 concentrations in a patient with the carcinoid syndrome. Boyd EJ, et al. **Gut** 1988 Sep; 29(9):1270–6

Tricuspid and pulmonary valve involvement in carcinoid syndrome. Rajan A, et al. **Indian Heart J** 1988 Jan-Feb; 40(1):67–71

Spinal cord compression due to carcinoid metastasis. Gray JA, et al. **Postgrad Med J** 1988 Sep;64(755):703–5

DIAGNOSIS

[Carcinoid syndrome misinterpreted as an allergic reaction] Jensen JG. **Ugeskr Laeger** 1989 Feb 27;151(9):573–4 (Eng. Abstr.) **(Dan)**

[Carcinoid cardiopathy: value of ultrasonography and MRI. Apropos of a case related to bronchial tumor. Review of the literature] Ebagosti A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):91–5 (27 ref.) (Eng. Abstr.) **(Fre)**

[Demonstration by Doppler echocardiography of multiple valvular involvement in carcinoid cardiopathy] Tribouilloy C, et al. **Arch Mal Coeur** 1989 Jan;82(1):109–14 (Eng. Abstr.) **(Fre)**

[Carcinoid tumor with cystic liver metastases] Klemm G, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):342–4 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Clinical features of carcinoid syndrome and the use of somatostatin analogue in its management. Vinik AI, et al. **Acta Oncol** 1989;28(3):389–402 (78 ref.)

SMS 201-995 and provocation tests in preparation of patients with carcinoids for surgery or hepatic arterial embolization. Ahlman H, et al. **Anesth Analg** 1988 Dec;67(12):1142–8

Treatment of malignant carcinoid syndrome with a long-acting somatostatin analogue. Altman AR, et al. **Arch Dermatol** 1989 Mar;125(3):394–6

Use of somatostatin analog in management of carcinoid syndrome. Vinik A, et al. **Dig Dis Sci** 1989 Mar;34(3 Suppl):14S–27S

Successful treatment with a long-acting somatostatin analogue (SMS201-995) in a patient with malignant carcinoid syndrome. Tsuda M, et al. **Jpn J Med** 1988 Aug; 27(3):311–6

Octreotide—a synthetic somatostatin. **Med Lett Drugs Ther** 1989 Jul 14;31(796):66–8

[Symptomatic treatment of the malignant carcinoid syndrome with octreotide] Alberts AS, et al. **S Afr Med J** 1989 Jan 7;75(1):30–1 (Eng. Abstr.) **(Afr)**

[Effect of somatostatin and salmon calcitonin on carcinoid syndrome. A clinical case] Festa V, et al. **Minerva Chir** 1989 May 15;44(9):1429–33 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Primary ovarian carcinoid tumor in combination with carcinoid heart disease; a case report. Oei SG, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):185–8

PATHOLOGY

Diarrhea, respiratory distress, and death in a 60-year-old man [clinical conference] **Am J Med** 1988 Oct;85(4):544–8

PHYSIOPATHOLOGY

Clinical and echocardiographic comparison of patients with the carcinoid syndrome with and without carcinoid heart disease. Himelman RB, et al. **Am J Cardiol** 1989 Feb 1; 63(5):347–52

Distinguishing features of idiopathic flushing and carcinoid syndrome. Aldrich LB, et al. **Arch Intern Med** 1988 Dec; 148(12):2614–8

SURGERY

Surgical treatment of patients with the carcinoid syndrome. Ahlman H, et al. **Acta Oncol** 1989;28(3):403–7

THERAPY

Therapeutic considerations for the malignant carcinoid syndrome. Kvols LK. **Acta Oncol** 1989;28(3):433–8 (49 ref.)

Controlling the carcinoid syndrome. Hodgson HJ. **BMJ** 1988 Nov 12;297(6658):1213–4 (17 ref.)

Therapy of the malignant carcinoid syndrome. Kvols LK. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):557–68 (48 ref.)

Therapy of metastatic carcinoid tumor and the malignant carcinoid syndrome with recombinant leukocyte A interferon. Moertel CG, et al. **J Clin Oncol** 1989 Jul; 7(7):865–8

[Therapy of metastatic carcinoid with the somatostatin analog octreotide and with recombinant interferon alfa 2b] Linkesch M, et al. **Wien Klin Wochenschr** 1989 Jun 23; 101(13):455–7 (Eng. Abstr.) **(Ger)**

MALIGNANT CATARRH

EPIDEMIOLOGY

Epidemiologic and pathologic aspects of an epizootic of malignant catarrhal fever in exotic hoofstock. Meteyer CU, et al. **J Wildl Dis** 1989 Apr;25(2):280–6

IMMUNOLOGY

Isolation and characterisation of lymphoblastoid cells from cattle and deer affected with 'sheep-associated' malignant catarrhal fever. Reid HW, et al. **Res Vet Sci** 1989 Jul; 47(1):90–6

Lytic function of bovine lymphokine-activated killer cells from a normal and a malignant catarrhal fever virus-infected animal. Cook CG, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):105–18

Immunoblotting analysis of the reaction of wildebeest, sheep and cattle sera with the structural antigens of alcelaphine herpesvirus-1 (malignant catarrhal fever virus). Herring A, et al. **Vet Microbiol** 1989 Mar;19(3):205–15

MICROBIOLOGY

Cloning and characterization of a genomic probe for malignant catarrhal fever virus. Shih LM, et al. **Am J Vet Res** 1988 Oct;49(10):1665–8

PATHOLOGY

An unusual clinical and pathological variant of malignant catarrhal fever in a white-tailed deer. Shulaw WP, et al. **J Wildl Dis** 1989 Jan;25(1):112–7

Malignant catarrhal fever in a roan antelope (Hippotragus equinus) at Regent's Park. Gulland FM, et al. **Vet Rec** 1989 Jan 14;124(2):42–3

TRANSMISSION

Epizootology of wildebeest-derived malignant catarrhal fever in an outbreak in the north-western Transvaal: indications of an intermediate host. Barnard BJ, et al. **Onderstepoort J Vet Res** 1989 Jun;56(2):135–9

MALIGNANT HYPERPYREXIA see **MALIGNANT HYPERTHERMIA**

MALIGNANT HYPERTHERMIA

Propofol in patients susceptible to malignant hyperpyrexia [letter] Cartwright DP. **Anaesthesia** 1989 Feb;44(2):173

A circle system is best when anesthetizing malignant hyperthermia susceptible patients [letter] Allen G. **Anesthesiology** 1989 Jun;70(6):1025–6

Midazolam in a malignant hyperthermia–susceptible patient [letter] Brooks JH. **Anesthesiology** 1989 Jan;70(1):167–8

The relationship between malignant hyperthermia and neuroleptic malignant syndrome [letter] Hermesh H, et al. **Anesthesiology** 1989 Jan;70(1):171–3

Atracurium or vecuronium for MHS patients? [letter] Allen G. **Br J Anaesth** 1988 Oct;61(4):513

Malignant hyperpyrexia. Longstaff F, et al. **Br J Hosp Med** 1989 Feb;41(2):181

Malignant hyperthermia. Glisson SN. **Compr Ther** 1988 Oct; 14(10):33–41 (12 ref.)

Malignant hyperthermia crisis. Cirillo DP, et al. **Plast Reconstr Surg** 1989 Feb;83(2):332–6

Malignant hyperthermia. Quick recognition and treatment to avoid death. Larew RE. **Postgrad Med** 1989 Jun; 85(8):117–8, 128–9

[Malignant hyperthermia—an unusual complication of eye surgery] Rozsival P, et al. **Cesk Oftalmol** 1988 Nov; 44(6):435–8 (Eng. Abstr.) (Cze)

[Peranesthetic malignant hyperthermia (editorial)] Stieglitz P. **Ann Fr Anesth Reanim** 1988;7(4):275 (Fre)

[Postoperative malignant hyperthermia in a 7-day-old infant?] Püschel K, et al. **Anaesthesist** 1989 Feb;38(2):81–4 (Eng. Abstr.) (Ger)

BLOOD

Pulse oximetry in malignant hyperthermia. Bacon AK. **Anaesth Intensive Care** 1989 May;17(2):208–10

Plasma levels of dantrolene following oral administration in malignant hyperthermia–susceptible patients. Allen GC, et al. **Anesthesiology** 1988 Dec;69(6):900–4 (14 ref.)

Sensitivity of the adenine nucleotide metabolism of platelets from malignant hyperthermia patients to halothane. Hofmann JG, et al. **Biomed Biochim Acta** 1989;48(4):343–50

Halothane induced disorder of red cell membranes of subjects susceptible to malignant hyperthermia. Ohnishi ST, et al. **Cell Biochem Funct** 1988 Oct;6(4):257–61

[Enzyme-linked immunoglobulins in the serum in malignant hyperthermia] Shimonaka H, et al. **Masui** 1988 Sep; 37(9):1034–43 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Tricyclic antidepressants and malignant hyperthermia [letter] Levenson JL. **Am J Psychiatry** 1989 Oct;146(10):1359–60

Ketamine does not trigger malignant hyperthermia in susceptible swine. Dershwitz M, et al. **Anesth Analg** 1989 Oct;69(4):501–3

Neuroleptic malignans [letter] Hermesh H, et al. **Neurology** 1989 Sep;39(9):1273

[Malignant hyperpyrexia caused by neuroleptics] Escolano Villén F, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug; 35(4):214–7 (50 ref.) (Eng. Abstr.) (Spa)

COMPLICATIONS

Multiple anaesthetics for a malignant hyperthermia susceptible patient [letter] Lloyd EL. **Anaesthesia** 1989 Jan; 44(1):76–7

Is there a relationship between masseteric muscle spasm and malignant hyperpyrexia? Christian AS, et al. **Br J Anaesth** 1989 May;62(5):540–4

Malignant hyperthermia in a child with sleep apnea. Schwartz N, et al. **Mt Sinai J Med** 1989 Mar;56(2):123–5

[Central core disease associated with malignant hyperthermia sensitivity] Krivosic-Horber R, et al. **Presse Med** 1989 Apr 22;18(16):828–31 (Eng. Abstr.) (Fre)

[Malignant hyperthermia in paramyotonia congenita] Thomas A, et al. **Anaesthesiol Reanim** 1988;13(5):295–300 (Eng. Abstr.) (Ger)

DIAGNOSIS

Ambulatory laboratory investigations for malignant hyperthermia susceptible patients. Ellis FR. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):253–4

Diagnosis and management of susceptibility to malignant hyperthermia in pregnancy. Sorosky JI, et al. **Am J Perinatol** 1989 Jan;6(1):46–8

Phaeochromocytoma—a presentation mimicking malignant hyperthermia. Crowley KJ, et al. **Anaesthesia** 1988 Dec; 43(12):1031–2

Standardization of the caffeine halothane muscle contracture test. North American Malignant Hyperthermia Group. Larach MG. **Anesth Analg** 1989 Oct;69(4):511–5 (4 ref.)

Malignant hyperthermia in humans—standardization of contracture testing protocol. Melton AT, et al. **Anesth Analg** 1989 Oct;69(4):437–43

Standards for halothane/caffeine contracture test [editorial] Rosenberg H. **Anesth Analg** 1989 Oct;69(4):429–30

Detection of malignant hyperthermia susceptibility using a spin label technique on red blood cells. Ohnishi ST, et al. **Br J Anaesth** 1988 Nov;61(5):565–8

Association of post-anaesthetic hyperthermia with abnormal muscle characteristics: a case report. Kripke BJ, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):290–4

The in vitro determination of susceptibility to malignant hyperthermia. Isaizzo PA, et al. **Muscle Nerve** 1989 Mar; 12(3):184–90

Myophosphorylase B deficiency and malignant hyperthermia. Isaacs H, et al. **Muscle Nerve** 1989 Mar;12(3):203–5

Ankle dorsiflexor twitch properties in malignant hyperthermia. Quinlan JG, et al. **Muscle Nerve** 1989 Feb; 12(2):119–25

King–Denborough syndrome: contracture testing and literature review. Heiman–Patterson TD, et al. **Pediatr Neurol** 1986 May–Jun;2(3):175–7 (15 ref.)

Muscle biopsy testing for malignant hyperthermia [letter] Allen G, et al. **Plast Reconstr Surg** 1989 Aug;84(2):373–4

Diagnosing malignant hyperthermia [letter] Nelson TE. **Plast Reconstr Surg** 1989 Oct;84(4):699–700

[Comparative study of in vitro diagnosis by the skinned fiber test and clinical diagnosis of malignant hyperthermia] Matsui K, et al. **Masui** 1989 Feb;38(2):195–201 (Eng. Abstr.) (Jpn)

[Clinical implications of enhanced caffeine contracture in malignant hyperthermia (MH) and Duchenne muscular dystrophy (DMD)] Takagi A, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):301–5 (Eng. Abstr.) (Jpn)

[Malignant hyperthermia or myotonia congenita (letter)] Amores Lloret A, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):346 (Spa)

DRUG THERAPY

Malignant hyperthermia and the conscious patient. Kemp DR, et al. **Aust N Z J Surg** 1988 May;58(5):423–7

Effect of diltiazem on porcine malignant hyperpyrexia induced by suxamethonium and halothane. Foster PS, et al. **Br J Anaesth** 1989 May;62(5):560–5

Fatal thermal injury [letter] Denborough M. **Med J Aust** 1989 May 15;150(10):608

[Non-rigid type malignant hyperthermia and dantrolene sodium] Hayakawa A, et al. **Masui** 1988 Oct;37(10):1243–8 (29 ref.) (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Inositol 1,4,5-trisphosphate phosphatase deficiency and malignant hyperpyrexia in swine. Foster PS, et al. **Lancet** 1989 Jul 15;2(8655):124–7

[Changes in phospholipid metabolism in the skeletal muscle cell in induced malignant hyperthermia in the domestic pig] Adam H, et al. **Anaesthesiol Reanim** 1988;13(3):149–55 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

[Registration of peranesthetic cases of malignant hyperthermia in France. An update] Jacquot C, et al. **Ann Fr Anesth Reanim** 1988;7(6):524–34 (Eng. Abstr.) (Fre)

ETIOLOGY

Risk of malignant hyperthermia among patients with neuroleptic malignant syndrome and their families. Hermesh H, et al. **Am J Psychiatry** 1988 Nov; 145(11):1431–4

Malignant hyperthermia in the Wolf–Hirschhorn syndrome [letter] Ellis FR, et al. **Anaesthesia** 1989 Jun;44(6):519

Malignant hyperthermia and myotonia congenita (Thomsen's disease) [letter] Haberer JP, et al. **Anaesthesia** 1989 Feb; 44(2):166

Malignant hyperthermia in a hemodialysis patient. Harioka T, et al. **Anesth Analg** 1989 Jul;69(1):119–21

Malignant hyperthermia–like syndrome associated with metrizamide myelography. Ong RO, et al. **Anesth Analg** 1989 Jun;68(6):795–7

Possible malignant hyperthermia in a 7-week-old infant. Wilhoit RD, et al. **Anesth Analg** 1989 May;68(5):688–91

Suxamethonium and malignant hyperthermia [letter] Fletcher JE, et al. **Br J Anaesth** 1989 Apr;62(4):468–9

Effect of propofol on the malignant hyperthermia susceptible pig model. Krivosic-Horber R, et al. **Br J Anaesth** 1989 Jun;62(6):691–3

Postoperative malignant hyperthermia episodes in patients who received "safe" anaesthetics. Grinberg R, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):273–6

Heat–exercise hyperpyrexia. Dickinson JG. **J R Army Med Corps** 1989 Feb;135(1):27–9

The use of amide local anesthetics in patients susceptible to malignant hyperthermia. Minasian A, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):405–15 (75 ref.)

Congenital myopathy with cleft palate and increased susceptibility to malignant hyperthermia: King syndrome? Stewart CR, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):371–4

[Penta-chlorophenol (Xylophene) poisoning] Bouges M, et al. **Agressologie** 1988 Mar;29(3):199–201 (Fre)

[Malignant hyperthermia in ophthalmologic surgery] Negre F, et al. **J Fr Ophtalmol** 1988;11(11):753–7 (14 ref.) (Eng. Abstr.) (Fre)

[Malignant hyperthermia during alcohol withdrawal] Bercault N, et al. **Rev Med Interne** 1989 May–Jun; 10(3):203–5 (Eng. Abstr.) (Fre)

[The malignant neuroleptic syndrome and malignant hyperthermia] Mitterschiffthaler G, et al. **Anaesthesist** 1989 Apr;38(4):210–3 (Eng. Abstr.) (Ger)

[Hyperthermic reaction in the perioperative phase in 2 children with acute lymphoblastic leukemia of B-cell type] Schnorr C, et al. **Anaesthesist** 1989 Feb;38(2):85–8 (Eng. Abstr.) (Ger)

[Malignant hyperthermia; two cases of MH in the presence of general anesthesia and performing caffeine contracture test] Tateishi M, et al. **Masui** 1989 Apr;38(4):546–51 (Eng. Abstr.) (Jpn)

[Fulminant form of intra-anesthetic malignant hyperthermia] Angheluță F, et al. **Rev Chir [Chir]** 1988 Jul–Aug; 37(4):311–5 (Eng. Abstr.) (Rum)

GENETICS

[Malignant hyperthermia: 2 cases in a family] Radeschi G, et al. **Minerva Anestesiol** 1988 Jul–Aug;54(7–8):333–6 (Eng. Abstr.) (Ita)

METABOLISM

Lipid analysis of skeletal muscle from pigs susceptible to malignant hyperthermia. Fletcher JE, et al. **Biochem Cell Biol** 1988 Aug;66(8):917–21

31P-NMR spectroscopy: the metabolic profile of malignant hyperpyrexic porcine skeletal muscle. Foster PS, et al. **Muscle Nerve** 1989 May;12(5):390–6

Porcine malignant hyperthermia: halothane effects on force generation in skeletal muscles. Gallant EM, et al. **Muscle Nerve** 1989 Jan;12(1):56–63

Disordered catecholamine release in pigs susceptible to malignant hyperthermia. Häggendal J, et al. **Pharmacol Toxicol** 1988 Oct;63(4):257–61

NURSING

Malignant hyperthermia. Potential crisis in patient care. Wlody GS. **AORN J** 1989 Aug;50(2):286–7, 289–93, 295 passim (31 ref.)

PATHOLOGY

Membrane abnormality in malignant hyperthermia. Shah A, et al. **Acta Neuropathol (Berl)** 1989;78(1):86–9

Hyperpyrexia, seizures, and hypotension in a 31-year-old man [clinical conference] Merlin SI, et al. **Ala J Med Sci** 1988 Jul;25(3):274–9

Adrenal cortical reserve in patients undergoing muscle biopsy for malignant hyperthermia screening. Fairbrass MJ, et al. **Br J Anaesth** 1989 Jan;62(1):66–9

PHYSIOPATHOLOGY

Effects of droperidol, haloperidol and ketamine on halothane, succinylcholine and caffeine contractures: implications for malignant hyperthermia. Fletcher JE, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):187–92

Involvement of the 60 kDa phosphoprotein in the regulation of Ca2+ release from sarcoplasmic reticulum of normal and malignant hyperthermia susceptible pig muscles. Kim DH, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):246–52

Effect of diltiazem and dantrolene on the contractility of isolated malignant hyperpyrexia–susceptible porcine skeletal muscle. Foster PS, et al. **Br J Anaesth** 1989 May; 62(5):566–72

SR function in malignant hyperthermia. Nelson TE. **Cell Calcium** 1988 Dec;9(5–6):257–65 (40 ref.)

Safety of amide local anesthetics in patients susceptible to malignant hyperthermia. Dershwitz M, et al. **J Am Dent Assoc** 1989 Mar;118(3):276, 278, 280 (28 ref.)

Malignant hyperthermia: effects of halothane on the surface membrane. Iaizzo PA, et al. **Muscle Nerve** 1989 Mar; 12(3):178–83

Calcium currents and asymmetric charge movement in malignant hyperpyrexia. Lamb GD, et al. **Muscle Nerve** 1989 Feb;12(2):135–40

Caffeine sensitivity of sarcoplasmic reticulum of fast and slow fibers from normal and malignant hyperthermia human muscle. Salviati G, et al. **Muscle Nerve** 1989 May; 12(5):365–70

Skeletal muscle excitation–contraction coupling. I. Transverse tubule control of peeled fiber Ca2+-induced Ca2+ release in normal and malignant hyperthermic muscles. Donaldson SK, et al. **Pflugers Arch** 1989 May; 414(1):15–23

Skeletal muscle excitation–contraction coupling. II. Plasmalemma voltage control of intact bundle contractile properties in normal and malignant hyperthermic muscles. Gallant EM, et al. **Pflugers Arch** 1989 May;414(1):24–30

[Malignant hyperthermia electrocardiographic and hemodynamic study] Marsepoil T, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):417–9 (Fre)

PREVENTION & CONTROL

Malignant hyperthermia in an office surgery suite: a case report. Turpin IM, et al. **Aesthetic Plast Surg** 1989 Spring; 13(2):121–3

Dantrolene in pregnancy: lack of adverse effects on the fetus and newborn infant. Shime J, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):831–4

Fluoxetine treatment of a depressed patient susceptible to malignant hyperthermia [letter] Burket RC, et al. **Am J Psychiatry** 1989 May;146(5):680

Propofol during cardiopulmonary bypass in a patient susceptible to malignant hyperpyrexia. Marks LF, et al. **Anaesth Intensive Care** 1988 Nov;16(4):482–5

The screening of propofol in MHS swine. Raff M, et al.

Anesth Analg 1989 Jun;68(6):750–1

More on anesthesia machines and malignant hyperpyrexia [letter] Cooper JB, et al. **Anesthesiology** 1989 Mar; 70(3):561–2

Pharmacokinetics of intravenous dantrolene in children. Lerman J, et al. **Anesthesiology** 1989 Apr;70(4):625–9

Malignant hyperthermia: experience in the prospective management of eight children. Dubrow TJ, et al. **J Pediatr Surg** 1989 Feb;24(2):163–6

Malignant hyperthermia revisited [editorial] Eichhorn JH. **Plast Reconstr Surg** 1988 Nov;82(5):883–5

Malignant hyperthermia in plastic surgery. Wackym PA, et al. **Plast Reconstr Surg** 1988 Nov;82(5):878–82

[Oral dantrolene in a parturient with myotonic dystrophy and susceptibility to malignant hyperthermia] Houvenaeghel M, et al. **Ann Fr Anesth Reanim** 1988; 7(5):408–11 (Eng. Abstr.) **(Fre)**

[Is the prevention of peranesthetic malignant hyperthermia with dantrolene justified? (letter)] Welfringer P, et al. **Ann Fr Anesth Reanim** 1988;7(5):437–8 **(Fre)**

[Malignant hyperthermia in Austria. III. Anesthesia in susceptible patients] Mauritz W, et al. **Anaesthesist** 1988 Aug;37(8):522–8 (Eng. Abstr.) **(Ger)**

[Prophylactic use of oral dantrolene for spinal anesthesia in a patient with susceptible malignant hyperthermia] Shindoh M, et al. **Masui** 1988 Jul;37(7):861–7 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Counselling on malignant hyperpyrexia [editorial] Mulrooney L. **Anaesthesia** 1988 Sep;43(9):727–8

RADIONUCLIDE IMAGING

Technetium-99m pyrophosphate scintigraphy in a patient with malignant hyperthermia [letter] Murakawa M, et al. **J Nucl Med** 1989 May;30(5):718–9

SURGERY

Rewarming following hypothermic cardiopulmonary bypass in the malignant hyperthermia-susceptible patient: implications for diagnosis and perioperative management. Allen GC, et al. **Can J Anaesth** 1989 Jan;36(1):81–5

THERAPY

Optimal treatment for malignant hyperthermia today. Krivosic-Horber R. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):255–9

An unusual anesthetic course in a patient susceptible to malignant hyperthermia. Westlund UJ, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):860–4 (31 ref.)

VETERINARY

Ca-induced Ca release in malignant hyperthermia-susceptible pig skeletal muscle. Ohta T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C358–67

Increased peroxidation of erythrocytes of stress-susceptible pigs: an improved diagnostic test for porcine stress syndrome. Duthie GG, et al. **Am J Vet Res** 1989 Jan; 50(1):84–7

Porcine malignant hyperthermia susceptibility: halothane-induced increase in cytoplasmic free calcium in lymphocytes. O'Brien PJ, et al. **Am J Vet Res** 1989 Jan; 50(1):131–5

Porcine malignant hyperthermia carrier detection and chromosomal assignment using a linked probe. Davies W, et al. **Anim Genet** 1988;19(3):203–12

Transverse tubule calcium regulation in malignant hyperthermia. Ervasti JM, et al. **Arch Biochem Biophys** 1989 Mar;269(2):497–506

Porcine stress syndrome, free radicals and vitamin E. Duthie G, et al. **Basic Life Sci** 1988;49:605–9

Open canalicular system of platelets in porcine stress syndrome. Basrur PK, et al. **Can J Vet Res** 1988 Jul; 52(3):380–5

Halothane induced vasomotion of coronary, renal and iliac arterial rings in malignant hyperthermia susceptible swine. DeRoth L, et al. **Can J Vet Res** 1988 Oct;52(4):407–10

Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711–7

Effects of halothane on the mechanical responses in vitro of coronary arterial rings of malignant hyperthermia susceptible swine. DeRoth L, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):402–4

Erythrocyte osmotic fragility in porcine malignant hyperthermia and effects of halothane. Reiner G, et al. **Zentralbl Veterinarmed** [A] 1989 Apr;36(4):269–75

MALINGERING

Malingering. Lande RG. **J Am Osteopath Assoc** 1989 Apr; 89(4):483–8 (25 ref.)

DIAGNOSIS

Assessment of malingerers' visual acuity by Lotmar's visometer test. Grignolo FM, et al. **Ann Ophthalmol** 1988 Sep;20(9):335–9

Assessment of visual function in suspected ocular malingering. Fahle M, et al. **Br J Ophthalmol** 1989 Aug; 73(8):651–4

Human intestinal myiasis [letter] Tripathi AK, et al. **J Assoc Physicians India** 1988 Aug;36(8):523–4

MMPI profiles of malingerers diagnosed in pretrial forensic evaluations. Hawk GL, et al. **J Clin Psychol** 1989 Jul; 45(4):673–8

Psychometric detection of fabricated symptoms of combat-related post-traumatic stress disorder: a systematic replication. McCaffrey RJ, et al. **J Clin Psychol** 1989 Jan; 45(1):76–9

Pediatric malingering: the capacity of children to fake believable deficits on neuropsychological testing. Faust D, et al. **J Consult Clin Psychol** 1988 Aug;56(4):578–82

Malingering vs. the factitious personality in chiropractic practice. Kreger-Wexhler LM, et al. **J Manipulative Physiol Ther** 1988 Oct;11(5):416–21

Lasegue's sign [letter] Pearce JM. **Lancet** 1989 Feb 25; 1(8635):436

Malingering doubt about factitious AIDS [letter; comment] Chiarello RJ. **N Engl J Med** 1989 May 25;320(21):1423. **Comment on:** N Engl J Med 1988 Dec 15;319(24):1605–6

[A test of symptom validity in assessing functional symptoms] Pankratz L, et al. **Z Klin Psychol Psychopathol Psychother** 1988;36(2):130–7 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

A psychometric study of stereotypes: assessment of malingering in a criminal forensic group. Grossman LS, et al. **J Pers Assess** 1988 Fall;52(3):549–63

Detecting faking on the Rorschach: computer versus expert clinical judgment. Kahn MW, et al. **J Pers Assess** 1988 Fall;52(3):516–23

Susceptibility of Rorschach distress correlates to malingering. Meisner S. **J Pers Assess** 1988 Fall;52(3):564–71

The concept of nomogenic disorders. Tyndel M, et al. **Med Law** 1988;7(2):167–76

MALLEUS see under **EAR OSSICLES**

MALLOPHAGA

ANATOMY & HISTOLOGY

Colpocephalum holzenthali n. sp. (Mallophaga: Menoponidae) from the barred forest-falcon Micrastur ruficollis (Falconidae) in Peru. Clayton DH, et al. **J Parasitol** 1989 Aug;75(4):505–7

CLASSIFICATION

[A review of the mammalian Mallophaga of Europe] Mey E. **Angew Parasitol** 1988 Jun;29(2):113–26 (52 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Distribution of Mallophaga on the body of Acridotheres tristis (Aves). Chandra S, et al. **Angew Parasitol** 1989 Feb; 30(1):39–42

Feeding of the chewing louse Damalinia ovis (Schrank) (Phthiraptera:Trichodectidae) on sheep. Sinclair AN, et al. **Vet Parasitol** 1989 Jan;30(3):233–51

[Phoresy and hyperparasitism in Ornithomya (Diptera, Hippoboscidae) in the Federal Republic of Germany] Walter G. **Angew Parasitol** 1989 Feb;30(1):43–6 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Formation and function of accessory nuclei in the oocytes of the bird louse, Eomenacanthus stramineus (Insecta, Mallophaga). I. Ultrastructural and histochemical studies. Biliński SM. **Chromosoma** 1989 Jan;97(4):321–6

MALLORY-WEISS SYNDROME

[Mallory-Weiss syndrome. Personal experience and review of the literature] Caroli A, et al. **Minerva Dietol Gastroenterol** 1989 Jan-Mar;35(1):7–12 (42 ref.) (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Lithium-associated Mallory-Weiss syndrome [letter] Ananth J, et al. **J Clin Psychiatry** 1988 Oct;49(10):412

COMPLICATIONS

The association of esophageal hiatus hernia with Mallory-Weiss syndrome. Sato H, et al. **Gastroenterol Jpn** 1989 Jun;24(3):233–8

Mallory-Weiss syndrome associated with raised intracranial pressure. Ng SK, et al. **Neurosurgery** 1988 Sep;23(3):389–92

[Upper digestive hemorrhage: the Mallory-Weiss syndrome] Cicia S. **Minerva Dietol Gastroenterol** 1988 Oct-Dec; 34(4):281–4 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

[Diagnostic problems in the Mallory-Weiss syndrome] Lapin MD, et al. **Klin Med (Mosk)** 1988 Aug;66(8):105–8 (Eng. Abstr.) **(Rus)**

MALNUTRITION see **NUTRITION DISORDERS**

MALOCCLUSION

see related
ORTHODONTICS, CORRECTIVE
PROGNATHISM
RETROGNATHISM

Additional criteria for sample division suggested [letter] Cangialosi TJ. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):24A

Occlusal considerations for partially or completely edentulous skeletal Class II patients. Part II: Treatment concepts. Curtis TA, et al. **J Prosthet Dent** 1988 Sep; 60(3):334–42

[Bolton indices in Cl II/1, Cl II/2 and Cl I anomalies with frontal crowding] Legovic M, et al. **Minerva Stomatol** 1989 Jun;38(6):679–82 (Eng. Abstr.) **(Ita)**

CLASSIFICATION

Freeway space measurement using mandibular kinesiograph and EMG before and after TENS. Konchak PA, et al. **Angle Orthod** 1988 Oct;58(4):343–50

COMPLICATIONS

Causal relation between malocclusion and caries. Helm S, et al. **Acta Odontol Scand** 1989 Aug;47(4):217–21

Causal relation between malocclusion and periodontal health. Helm S, et al. **Acta Odontol Scand** 1989 Aug;47(4):223–8

Legal aspects of orthodontic practice: risk management concepts. Periodontal disease in orthodontic practice. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):445–7

External resorption of a maxillary lateral incisor by a labially placed canine: pathology and management. Regan D, et al. **Br J Orthod** 1988 Nov;15(4):261–7

Alveolar bone loss and crowding in adult periodontal patients. Jensen BL, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):47–51

Do occlusal factors play a part in temporomandibular dysfunction? Wassell RW. **J Dent** 1989 Jun;17(3):101–10 (94 ref.)

The prevalence of dental attrition and its association with factors of age, gender, occlusion, and TMJ symptomatology. Seligman DA, et al. **J Dent Res** 1988 Oct;67(10):1323–33 (71 ref.)

Obstructive sleep apnea syndrome in patients with class II malocclusion. Triplett WW, et al. **Mayo Clin Proc** 1989 Jun;64(6):644–52 (30 ref.)

Malocclusion and its association with clinical signs of craniomandibular disorder in 5-, 10- and 15-year old children in Finland. Jämsä T, et al. **Proc Finn Dent Soc** 1988;84(4):235–40

[Does rehabilitation of misarticulation in patients with jaw anomalies and defects in tooth position meet modern demands?] Muška K, et al. **Cesk Otolaryngol** 1988 Sep; 37(5):288–97 (Eng. Abstr.) **(Cze)**

[Orthodontic anomalies and otorhinolaryngology] Coyas A. **Orthod Fr** 1987;58 Pt 2:411–4 **(Fre)**

DIAGNOSIS

Cephalometric and clinical diagnoses of open bite tendency. Dung DJ, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):484–90

Cephalometric findings [letter] Singer J. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):443–4

An assessment of the fit of a parabolic curve to pre- and post-treatment dental arches. Jones ML, et al. **Br J Orthod** 1989 May;16(2):85–93 (37 ref.)

Utility of the dental aesthetic index in industrialized and developing countries. Cons NC, et al. **J Public Health Dent** 1989 Summer;49(3):163–6

[Diagnosis and treatment in orthodontics: principles and decision diagrams] Petrovic A, et al. **Orthod Fr** 1987;58 Pt 2:517–42 (41 ref.) (Eng. Abstr.) **(Fre)**

[Diagnostic efficacy of cephalometry for Class II/1] Matthey F, et al. **Schweiz Monatsschr Zahnmed** 1989;99(6):658–69 (Eng. Abstr.) **(Fre)**

[3-Dimensional model analysis of normal and dysgnathic bites using a coordinate measurement technic] Schenk HJ. **Fortschr Kieferorthop** 1989 Apr;50(2):81–98 (Eng. Abstr.) **(Ger)**

[Development of intermaxillary comparison values in the dysgnathic bite] Schenk HJ, et al. **Zahn Mund Kieferheilkd** 1988;76(5):444–9 (Eng. Abstr.) **(Ger)**

[Evaluation of the Schmuth index in orthodontic diagnosis] Balaton P, et al. **Fogorv Sz** 1989 Jan;82(1):23–5 (Eng. Abstr.) **(Hun)**

[Clinical forms of deep incisor overlap, their diagnosis and treatment] Demner LM, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):48–9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Individual changes in malocclusion from adolescence to 35 years of age. Helm S, et al. **Acta Odontol Scand** 1989 Aug; 47(4):211–6

Class III malocclusion: a cephalometric study of Saudi Arabians. Toms AP. **Br J Orthod** 1989 Aug;16(3):201–6

Occlusion among a group of Tanzanian urban schoolchildren. Kerosuo H, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):306–9

[Malocclusion among the people of the Lague and Han nationalities in Simao District of Yunnan Province] Xu RF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):365–7 (Chi)

[Malocclusion prevalence among 3055 Tibetans in Lhasa] Yang ZL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul;23(4):239–41 (Chi)

[An epidemiologic survey of treated and non-treated occlusion] Amoric M. **Orthod Fr** 1987;58 Pt 2:823–31 (Eng. Abstr.) (Fre)

[Stomatologic studies of Mozambique children. Dental status, caries, dysgnathias] Ulbrich M, et al. **Z Gesamte Hyg** 1988 Dec;34(12):725–8 (Eng. Abstr.) (Ger)

[Study on health status and oral hygiene of children at a primary school. Health status and oral hygiene in schoolchildren] Pizzi S, et al. **Acta Biomed Ateneo Parmense** 1988;59(3–4):93–102 (Eng. Abstr.) (Ita)

[Clinico-statistical considerations on a sample of school-age population in the Province of Trieste. 3. Incidence of dental and orthognatodontic pathology] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):699–704 (Eng. Abstr.) (Ita)

[Incidence of abnormalities of the stomatognathic system among Polish children 13–14 years of age and its comparison with the data from other countries] Starniewska-Głowacka M, et al. **Przegl Epidemiol** 1988; 42(3):292–8 (Eng. Abstr.) (Pol)

ETHNOLOGY

A cephalometric study of 32 North American black patients with anterior open bite. Jones OG. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):289–96

ETIOLOGY

The role of the third molar in the cause of late lower arch crowding: a review. Richardson ME. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):79–83 (16 ref.)

Role of the mandibular third molar relative to lower arch crowding [letter] Riedel RA. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):25A–26A

Developmental effects of impaired breathing in the face of the growing child. Cheng MC, et al. **Angle Orthod** 1988 Oct;58(4):309–20

Jaw deformity caused by juvenile rheumatoid arthritis and its correction. Myall RW, et al. **Arthritis Rheum** 1988 Oct; 31(10):1305–10

Oral function in the physically handicapped with or without severe mental retardation. Oreland A, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):17–25

Relation between sucking habits and dental characteristics in preschoolchildren with unilateral cross-bite. Lindner A, et al. **Scand J Dent Res** 1989 Jun;97(3):278–83

[The exposure of ignorance] Chateau M. **Orthod Fr** 1987;58 Pt 2:415–20 (Fre)

[The level of skeletal maturity—a factor in the etiology of bite anomalies?] Bredy E, et al. **Fortschr Kieferorthop** 1988 Oct;49(5):426–31 (Eng. Abstr.) (Ger)

[Tertiary mandibular crowding depending on the start of treatment and the methods (letter)] Rohowsky HJ. **Fortschr Kieferorthop** 1988 Aug;49(4):400–1 (Ger)

[The significance and meaning of genetic and environmental factors for the etiology and pathogenesis of dysgnathias] Harzer W. **Zahn Mund Kieferheilkd** 1988;76(5):439–43 (Eng. Abstr.) (Ger)

[Thumb or finger sucking in the development of dento-maxillo-facial malformations] Cordasco G, et al. **Minerva Stomatol** 1988 Dec;37(12):1021–3 (Eng. Abstr.) (Ita)

GENETICS

Bimaxillary proclination in patients of Afro-Caribbean origin. Carter NE, et al. **Br J Orthod** 1988 Aug;15(3):175–84 (37 ref.)

The psychological and behavioral considerations of orthognathic surgery on identical (monozygotic) twins. Hudson JW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):259–63

HISTORY

"Orthodontistry" and dental occlusion in Etruscans. Corruccini RS, et al. **Angle Orthod** 1989 Spring;59(1):61–4

PATHOLOGY

Cephalometric analysis of reverse overjet in patients with total unilateral cleft lip and palate. Procházková I, et al. **Acta Chir Plast** 1989;31(1):48–55

Head posture and dentofacial asymmetries in surgically treated muscular torticollis patients. Pirttiniemi P, et al. **Acta Odontol Scand** 1989 Aug;47(4):193–7

The occurrence of tooth size discrepancies among different malocclusion groups. Crosby DR, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):457–61

A multivariate approach to analyzing the relation between occlusion and craniofacial morphology. Keeling SD, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):297–305

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):453–7

Correlations among craniofacial angles and dimensions in Class I and Class II malocclusions. Anderson D, et al. **Angle Orthod** 1989 Spring;59(1):37–42

A longitudinal study of anterior vertical overbite from eight to twenty years of age. Bergersen EO. **Angle Orthod** 1988 Jul;58(3):237–56

An evaluation of the relationship between rest position of the mandible and malocclusion. Sperry TP. **Angle Orthod** 1989 Fall;59(3):217–25

Mandibular condyle morphology in relation to malocclusions in children. Tadej G, et al. **Angle Orthod** 1989 Fall; 59(3):187–94

Mandibular position in class III malocclusion. Kerr WJ, et al. **Br J Orthod** 1988 Nov;15(4):241–5

Incisor edge-centroid relationships and overbite depth. Houston WJ. **Eur J Orthod** 1989 May;11(2):139–43

Occlusal considerations for partially or completely edentulous skeletal class II patients. Part I: Background information. Curtis TA, et al. **J Prosthet Dent** 1988 Aug; 60(2):202–11 (25 ref.)

[The shape of the arch: an individualized record] Horn A, et al. **Orthod Fr** 1987;58 Pt 2:467–77 (Fre)

[Class II, division 1 malocclusion in a skeletal pattern of a Class II, division 2] Maj G, et al. **Orthod Fr** 1987;58 Pt 2:649–57 (Eng. Abstr.) (Fre)

[Effect of an experimentally-induced lateral occlusal disorder on cell proliferation in the condylar cartilage of the rat temporomandibular joint] Dannhauer KH, et al. **Zahn Mund Kieferheilkd** 1989;77(4):299–304 (Eng. Abstr.) (Ger)

[Mode and site of bone remodelling in the glenoid cavity of the temporomandibular joint] Pastremoli A, et al. **Minerva Stomatol** 1988 Jun;37(6):435–9 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

Mandibular displacement and dentitional changes during orthodontic treatment and growth. Ghafari J, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):12–9

Electromyography of masticatory muscles in three jaw registration positions. Jiménez ID. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):282–8

The relationship between temporomandibular joint sounds and malocclusion. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):36–42

Circumpubertal growth spurt related to vertical dysplasia. Nanda SK, et al. **Angle Orthod** 1989 Summer;59(2):113–22

Adaptive functional changes in the swallowing pattern of the tongue following expansion of the maxillary dental arch in subjects with and without cleft palate. Ohkiba T, et al. **Cleft Palate J** 1989 Jan;26(1):21–30

Mathematical models of longitudinal mandibular growth for children with normal and untreated Class II, division 1 malocclusion. Buschang PH, et al. **Eur J Orthod** 1988 Aug; 10(3):227–34

[Mandibular kinesiology and orthodontics] Li JX, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):118–20 (16 ref.) (Chi)

[Compensatory alveolar inclinations in sagittal dysharmonies of the skeletal base] Fleury JE, et al. **Rev Stomatol Chir Maxillofac** 1988;89(6):361–4 (Eng. Abstr.) (Fre)

[Functional study of the temporomandibular joint in new orthodontic cases using the hinge axis recorder] Jähnig A, et al. **Fortschr Kieferorthop** 1989 Apr;50(2):136–43 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

[Functional orthodontics. Prevention. Social dentistry] Simões WA. **Orthod Fr** 1987;58 Pt 2:693–708 (Eng. Abstr.) (Fre)

[Cauhépé-Fieux syndrome. Interception in the deciduous dentition of mid-face hypoplasia] Brethaux J, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):236–40 (Eng. Abstr.) (Fre)

PSYCHOLOGY

An evaluation of the psychological and social effects of malocclusion: some implications for dental policy making. Kenealy P, et al. **Soc Sci Med** 1989;28(6):583–91

RADIOGRAPHY

Relation of the Wits appraisal to the ANB angle: a statistical appraisal. Järvinen S. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):432–5

[Value of conventional and newer measurements (modified tensor analysis) in the teleradiograph exemplified by Class-II therapy] Sielaff R. **Zahn Mund Kieferheilkd** 1988; 76(6):576–82 (Eng. Abstr.) (Ger)

[Malposition of the second mandibular molars. Problems with their preservation and corrective orthodontic therapy] Bertelè GP, et al. **Minerva Stomatol** 1988 Aug;37(8):583–90 (Eng. Abstr.) (Ita)

SURGERY

An American Board of Orthodontics case report. Surgical treatment of adult Class II, division 2 malocclusion. Hinkle FG. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):185–91

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):91–5

Stability of maxillary surgery in openbite versus nonopenbite malocclusions. Denison TF, et al. **Angle Orthod** 1989 Spring;59(1):5–10

Kirschner wire migration through the jugular foramen. Sanders AD, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct; 97(5 Pt 1):559–60

Surgical treatment of mandibular retrusion by a post-condylar cartilage graft. Banks P, et al. **Br Dent J** 1989 Jun 24;166(12):443–50

Lymphangioma and cystic hygroma. Correction of facial growth disharmony and obstructive sleep apnea. Jasper RD, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):152–4

Orthognathic surgery: a significant contribution to facial and dental esthetics. Turvey TA. **J Am Dent Assoc** 1988 Sep; 117(4):49E–55E

Temporomandibular joint symptoms in orthognathic surgery. Kerstens HC, et al. **J Craniomaxillofac Surg** 1989 Jul; 17(5):215–8

Impairment of the inferior alveolar nerve after sagittal split osteotomy. Yoshida T, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):271–7 (23 ref.)

Correction of facial-skeletal deformities in two patients with facio-scapulo-humeral muscular dystrophy. Goldberg MH, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):996–9

An alternative for the correction of the Class II low mandibular plane angle. McCollum AG, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):231–41

Le Fort II osteotomy in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al. **S Afr J Surg** 1988 Sep;26(3):88–9

[Surgical method of sagittal splitting of the mandibular ramus. The Obweger-Dal Pont method] Bögi I. **Fogorv Sz** 1988 Nov;81(11):327–31 (Eng. Abstr.) (Hun)

[Response of facial soft tissues following interventions of mandibular regression. Frontal examination] Cassarino G. **Minerva Stomatol** 1989 Feb;38(2):269–71 (Eng. Abstr.) (Ita)

[Diagnosis and therapeutic programming of mandibular symphysis dysmorphisms in patients with dento-osseous malformations] Iannetti G, et al. **Minerva Stomatol** 1989 Jan;38(1):57–70 (Eng. Abstr.) (Ita)

THERAPY

Differences in functional variables, fillings, and tooth wear in two groups of 19-year-old individuals. Dahl BL, et al. **Acta Odontol Scand** 1989 Feb;47(1):35–40

Functional appliances: a review. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):250–8 (54 ref.)

Treatment of a dental deep bite in a patient with vertical excess and excessive gingival display. Casko JS, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):1–7

Cephalometric changes in Class II, Division 1 cases after orthopedic treatment with the bioactivator. Dahan J, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):127–37

A comparison of the Ricketts and Tweed-type arch leveling techniques. Dake ML, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):72–8

Orthopedic and orthodontic effects resulting from the use of a functional appliance with different amounts of protrusive activation. DeVincenzo JP, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):181–90

An American Board of Orthodontics case report. Correction of Class I crowding in an achondroplastic patient. Dunbar JP, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):255–63

An American Board of Orthodontics case report. Fisher JC. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):363–70

Effects of a fixed magnetic appliance on the dentofacial complex. Kalra V, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):467–78

Postretention evaluation of stability and relapse—mandibular arches with generalized spacing. Little RM, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):37–41

The effect of the amount of protrusion built into the bionator on condylar growth and displacement: a clinical study. Op Heij DG, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):401–9

An American Board of Orthodontics case report. A combined face mask-orthognathic surgical approach in the treatment of skeletal open bite and maxillary deficiency. Paz ME, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan; 95(1):1–11

Maxillary impaction and advancement reduction genioplasty. Pearson LE, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):363–6

Re: Changes in mandibular anterior alignment [letter] Perlow J. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):445–6

An American Board of Orthodontics case report. Correction of a severe Class II malocclusion. Regan PD, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):192–9

Class II, Division 1 vertical pattern. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):271–7

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):451–6

An American Board of Orthodontics case report. Orthodontic treatment of a patient born with a severe right unilateral cleft lip and palate. Snyder EP, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):273–81

Treatment effects of the Herbst appliance. Valant JR, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):138–47

Case report. Presence of fibrous dysplasia affects the

treatment approach for a 28-year old female patient. Joondeph DR. **Angle Orthod** 1989 Spring;59(1):65-8
Space closure in adult patients using the segmented arch technique. Manhartsberger C, et al. **Angle Orthod** 1989 Fall; 59(3):205-10
Frontal facial changes with the Fränkel appliance. Owen AH 3d. **Angle Orthod** 1988 Jul;58(3):257-87
Occlusal contacts following orthodontic treatment: a follow-up study. Razdolsky Y, et al. **Angle Orthod** 1989 Fall;59(3):181-5; discussion 186
Case report: VT. An adult patient with a bilateral posterior crossbite characterized by maxillary deficiency. Turpin DL. **Angle Orthod** 1989 Summer;59(2):155-9
Juvenile rheumatoid arthritis: a 14-year posttreatment evaluation. Turpin DL. **Angle Orthod** 1989 Fall;59(3):233-8
Conservative treatment for malaligned permanent mandibular incisors in the early mixed dentition. Gellin ME. **ASDC J Dent Child** 1989 Jul-Aug;56(4):288-92 (19 ref.)
Teeth in cross-bite: the role of removable appliances. Jacobs SG. **Aust Dent J** 1989 Feb;34(1):20-8
Postgraduate orthodontic training [letter] Mew J. **Aust Dent J** 1989 Aug;34(4):382
Benefits of orthodontic treatment [letter] Mew JR. **Br Dent J** 1989 Apr 22;166(8):283
An approach to the treatment of malocclusion caused by bone expanding lesions. Pilley JR, et al. **Br Dent J** 1989 Apr 8;166(7):258-60
A Class III case—but how severe? Battagel JM. **Br J Orthod** 1988 Aug;15(3):163-73
Maxillary expansion: a retrospective study of three methods of expansion and their long-term sequelae. Herold JS. **Br J Orthod** 1989 Aug;16(3):195-200
A retrospective cephalometric study of Class I patients. Lavelle C. **Br J Orthod** 1989 Feb;16(1):17-23
A cephalometric investigation of overjet changes in fifty severe Class II division I malocclusions. Nashed RR, et al. **Br J Orthod** 1989 Feb;16(1):31-7
A functional appliance system for the correction of class II relationships. Trenouth MJ. **Br J Orthod** 1989 Aug; 16(3):169-76
Long-term results of orthodontic treatment. A clinical view 4. Brouwer H, et al. **Eur J Orthod** 1988 Nov;10(4):329-45
An evaluation of the morphogenic and anatomic effects of the functional regulator utilizing the counterpart analysis. Enlow DH, et al. **Eur J Orthod** 1988 Aug;10(3):192-202
Dentofacial orthopaedics in relation to chronological age, growth period and skeletal development. An analysis of 72 male patients with Class II division 1 malocclusion treated with the Herbst appliance. Hägg U, et al. **Eur J Orthod** 1988 Aug;10(3):169-76
Overbite and overjet correction in a Class II, division 1 sample treated with Edgewise therapy. Hellekant M, et al. **Eur J Orthod** 1989 May;11(2):91-106
A comparison of three appliance systems in the treatment of Class III malocclusion. Kerr WJ, et al. **Eur J Orthod** 1988 Aug;10(3):203-14
Five-year treatment results with a headgear-activator combination. Lehman R, et al. **Eur J Orthod** 1988 Nov; 10(4):309-18
Class II correction in Herbst and Bass therapy. Pancherz H, et al. **Eur J Orthod** 1989 Feb;11(1):17-30
Protraction of the cleft maxilla. Ranta R. **Eur J Orthod** 1988 Aug;10(3):215-22
Can 'articulare' be used in the cephalometric analysis of mandibular length? A methodologic study. Stickel A, et al. **Eur J Orthod** 1988 Nov;10(4):362-8
Correction of deep overbite. A modified splint permitting rapid extrusion of posterior teeth. Tuinzing DB, et al. **J Craniomaxillofac Surg** 1989 May;17(4):172-4
Use of an incisal guide plate to achieve anterior guidance for a skeletal Class II patient: a clinical report. Foerth D, et al. **J Prosthet Dent** 1989 Mar;61(3):263-5
Gnathologic assessment of centric slides in postretention orthodontic patients. Johnston LE Jr. **J Prosthet Dent** 1988 Dec;60(6):712-5
The role of orthodontics in oral rehabilitation. A case report. Platzer KM. **N Y State Dent J** 1989 May;55(5):34-5
Protruding premaxilla in the bilateral cleft lip patient [letter] Georgiade NG, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):372-3
[Clinical studies on the corrective orthodontics in periodontal diseases] Tao LM. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):37-9 (Chi)
[The ideal arch] **Orthod Fr** 1987;58 Pt 2:429-55 (Fre)
[Therapeutic requirements as a function of the position of the incisors and of relative macrodontia] Aboulker S, et al. **Orthod Fr** 1987;58 Pt 2:861-8 (Eng. Abstr.) (Fre)
[Mesial movement of the arc of the mandibular molars using the Edgewise technic] Aknin JJ, et al. **Orthod Fr** 1987;58 Pt 2:723-36 (Eng. Abstr.) (Fre)
[The ideal arch as defined by the patient] Bimler AB. **Orthod Fr** 1987;58 Pt 2:567-71 (Eng. Abstr.) (Fre)
[The hypoplastic condyle treated with an activator appliance (apropos of 2 cases)] Deplagne H, et al. **Orthod Fr** 1987; 58 Pt 2:641-8 (Eng. Abstr.) (Fre)
[1st order curves. Their development in the functional phases of treatment] Jegou I, et al. **Orthod Fr** 1987;58 Pt 2:479-87 (Fre)
[An esthetic appreciation test of the faces of patients treated with a combination of orthodontics and maxillofacial surgery] Jung-Nafziger Y, et al. **Orthod Fr** 1987;58 Pt 2:615-27 (Eng. Abstr.) (Fre)
[The condylar test in orthodontics and gnathology] Petit HP. **Orthod Fr** 1987;58 Pt 2:659-87 (Eng. Abstr.) (Fre)
[Expansion and relapse] Ulgen M, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):324-30 (Eng. Abstr.) (Ger)

MALOCCLUSION, ANGLE CLASS I see under **MALOCCLUSION**

MALOCCLUSION, ANGLE CLASS II see under **MALOCCLUSION**

MALOCCLUSION, ANGLE CLASS III see under **MALOCCLUSION**

MALONATES

Spectroscopic studies of quinonoid species from pyridoxal 5'-phosphate. Metzler CM, et al. **Biochemistry** 1988 Jun 28;27(13):4923-33
The effect of oxalate and malonate on red cell metabolism [letter] Tomson CR, et al. **Blood** 1988 Oct;72(4):1435
Production of malonaldehyde from squalene, a major skin surface lipid, during UV-irradiation. Dennis KJ, et al. **Photochem Photobiol** 1989 May;49(5):711-6

ADVERSE EFFECTS

Is malondialdehyde a putative uremic toxin? [letter] Kishore BK. **Nephron** 1989;52(3):286
[The ebb and flow of LDH-IgG complexes influenced by the administered drugs] Mizutani H, et al. **Rinsho Byori** 1989 Apr;37(4):436-40 (Jpn)

ANALOGS & DERIVATIVES

Malondialdehyde derivatives in urine. Draper HH, et al. **Basic Life Sci** 1988;49:199-202

ANALYSIS

Subpicogram determination of malondialdehyde by gas-liquid chromatography with nitrogen phosphorus detector. I. Standardization. Beljean-Leymarie M, et al. **Anal Biochem** 1988 Aug 15;173(1):174-84
Determination of malonaldehyde in oxidized lipids by the Hantzsch fluorometric method. Kikugawa K, et al. **Anal Biochem** 1988 Nov 1;174(2):512-21
Interaction of malondialdehyde-modified bovine serum albumin and mouse peritoneal macrophages. Beppu M, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4519-26
Solid-phase sample extraction for rapid determination of methylmalonic acid in serum and urine by a stable-isotope-dilution method. Rasmussen K. **Clin Chem** 1989 Feb;35(2):260-4
A modification of the thiobarbituric acid reaction. Bidder TG, et al. **Lipids** 1989 Jul;24(7):656-8
Cardiac membrane vitamin E and malondialdehyde levels in heart muscle of normotensive and spontaneously-hypertensive rats. Janero DR, et al. **Lipids** 1989 Jan;24(1):33-8
Analysis of free malondialdehyde in photoirradiated corn oil and beef fat via a pyrazole derivative. Umano K, et al. **Lipids** 1988 Aug;23(8):811-4
Determination of methylmalonic acid in biological fluids by mass spectrometry. Montgomery JA, et al. **Methods Enzymol** 1988;166:47-55
Penetration of malonic dialdehyde on filtration of tobacco smoke. Witas T, et al. **Nahrung** 1988;32(10):961-4
Low density lipoprotein undergoes oxidative modification in vivo. Palinski W, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1372-6
[The effect of oxygen free radicals in the pathologic course following experimental brain injury] Gao GD. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):629-31, 44 (Eng. Abstr.) (Chi)
[Glutathione status and malondialdehyde content in the liver and blood of the rat in the course of reversible and irreversible endotoxic shock] Kopprasch S, et al. **Z Med Lab Diagn** 1988;29(6):309-13 (Eng. Abstr.) (Ger)

BIOSYNTHESIS

Effects of dietary fish oil on malondialdehyde production and glutathione peroxidase activity in hyperlipidaemic patients. Olivieri O, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):659-65

BLOOD

Plasma lipid peroxidation and atherosclerosis in restricted ovulator chickens. Smith TL, et al. **Basic Life Sci** 1988; 49:941-4
Platelet regeneration time: a statistical approach. Lopes AA, et al. **Braz J Med Biol Res** 1988;21(3):471-3
Tissue damage markers in experimental Chagas' disease. Palhares PE, et al. **Braz J Med Biol Res** 1988;21(5):957-9
Plasma malondialdehyde, lipid peroxides, and the thiobarbituric acid reaction [letter] Wade CR, et al. **Clin Chem** 1989 Feb;35(2):336
Chronic renal failure in methylmalonic acidaemia. Walter JH, et al. **Eur J Pediatr** 1989 Jan;148(4):344-8
Plasma lipid peroxidation in pre-eclampsia. Sieroń G, et al. **Ginekol Pol** 1988 Nov;59(11):668-71
Aqueous humour, a possible material for postmortem methylmalonic acidaemia diagnosis. Coude M, et al. **J Inherited Metab Dis** 1989;12(1):95-6
Persistent hyperkalaemia in vitamin B12 unresponsive methylmalonic acidaemia. Morita J, et al. **J Inherited Metab Dis** 1989;12(1):89-93
Acute extrapyramidal syndrome in methylmalonic acidemia: "metabolic stroke" involving the globus pallidus. Heidenreich R, et al. **J Pediatr** 1988 Dec;113(6):1022-7
Parenteral nutrition in propionic and methylmaloaic acidemia. Kahler SG, et al. **J Pediatr** 1989 Aug; 115(2):235-41
Contribution of aminoacid catabolism to propionate production in methylmalonic acidaemia. Walter JH, et al. **Lancet** 1989 Jun 10;1(8650):1298-9
Response of thromboxane B2, malondialdehyde and platelet sensitivity to 3 weeks low-dose aspirin (ASA) in healthy volunteers. Sinzinger H, et al. **Thromb Res** 1989 Feb 1; 53(3):261-9
[The diagnostic value of platelet malondialdehyde/malondialdehyde-a in blood in hypercoagulable states and thrombotic diseases] Zheng RL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):683-5, 716-7 (Eng. Abstr.) (Chi)
[Laboratory diagnostic monitoring of individually dosed antithrombotic therapy with acetylsalicylic acid in patients with atherosclerosis] Misselwitz F, et al. **Z Med Lab Diagn** 1989;30(1):43-4 (Ger)
[Plasma malondialdehyde levels: marker for lipid peroxidation in man] Vendemiale G, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):699-706 (Eng. Abstr.) (Ita)
[Studies on the beneficial effect of levocarnitine chloride (LC-80) on organic acidemias, especially propionic acidemia and methylmalonic acidemia] Fujisawa S, et al. **Nippon Yakurigaku Zasshi** 1989 May;93(5):305-14 (Eng. Abstr.) (Jpn)
[Assessment of laboratory findings in megaloblastic anemia—measurement of serum vitamin B12 and methylmalonic acid] Kondo H, et al. **Rinsho Ketsueki** 1989 Jan;30(1):36-44 (Eng. Abstr.) (Jpn)
[Blood lipids and the indicators of lipid peroxidation in patients with hemorrhagic fever with nephrotic syndrome] Koval'skiĭ IuG. **Ter Arkh** 1988;60(6):82-5 (Eng. Abstr.) (Rus)
[Effectiveness of the elimination of lipid peroxidation products in various methods of detoxication therapy of patients with traumatic shock] Grinev MV, et al. **Vestn Khir** 1988 Jun;140(6):53-8 (Eng. Abstr.) (Rus)
[Degradation of malonic dialdehyde in erythrocytes and its age-, seasonal- and circadian-dependent changes] Bankova VV, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):27-30 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

Thiobarbituric acid-reactive malondialdehyde formation during superoxide-dependent, iron-catalyzed lipid peroxidation: influence of peroxidation conditions. Janero DR, et al. **Lipids** 1989 Feb;24(2):125-31
[Antitubercular agents. 43. A new group of potential antitubercular agents—oxalanilides and malonanilides] Waisser K, et al. **Pharmazie** 1989 Feb;44(2):162-3 (Ger)

ISOLATION & PURIFICATION

The optimum condition for malonic dialdehyde liberation from smoked fish and curing smoke condensates. Witas T, et al. **Nahrung** 1988;32(5):497-502

METABOLISM

Calmodulin antagonist reduces release of malondialdehyde from isolated ischemic/reperfused rat heart. Beręsewicz A, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5-6):442-9
Interaction of acetyl-LDL and Mal-BSA with scavenger receptor sites of rat liver. Dresel HA, et al. **Agents Actions Suppl** 1988;26:159-63 (12 ref.)
MDA content increases in fast- and slow-twitch skeletal muscle with intensity of exercise in a rat. Alessio HM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C874-7
Mechanism of horseradish peroxidase-catalyzed oxidation of malonaldehyde. MacDonald ID, et al. **Arch Biochem Biophys** 1989 Jul;272(1):185-93
Long-term effects of commercial and congeneric polychlorinated biphenyls on ethane production and malondialdehyde levels, indicators of in vivo lipid peroxidation. Dogra S, et al. **Arch Toxicol** 1988; 62(5):369-74
Comparison of nerve regeneration in vascularized and conventional grafts: nerve electrophysiology, norepinephrine, prostacyclin, malondialdehyde, and the blood-nerve barrier. Shupeck M, et al. **Brain Res** 1989 Jul 31;493(2):225-30
Reduction of lipid peroxidation in reperfused isolated rabbit hearts by diltiazem. Koller PT, et al. **Circ Res** 1989 Sep; 65(3):838-46
Effect of fish oil supplementation on erythrocyte lipid pattern, malondialdehyde production and glutathione-peroxidase activity in psoriasis. Corrocher R, et al. **Clin Chim Acta** 1989 Feb 15;179(2):121-31
Binding of calcium by organic anions, determined by perturbation of the equilibrium solubility of [14C]calcium oxalate. Geller DA, et al. **Clin Chim Acta** 1989 Jul 14;

182(3):255–70
Butylmalonate is a transition state analogue for aminocylase I. Röhm KH. **FEBS Lett** 1989 Jul 3;250(2):191–4
Inhibition of liver Golgi glycosylation activities by carbonyl products of lipid peroxidation. Marinari UM, et al. **Free Radic Res Commun** 1987;3(1–5):319–24
Comparison of fluorescence characteristics of products of peroxidation of membrane phospholipids with those of products derived from reaction of malonaldehyde with glycine as a model of lipofuscin fluorescent substances. Shimasaki H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):761–6
Effect of hypothyroidism on methylmalonate excretion and hepatic vitamin B–12 levels in rats. Stokstad EL, et al. **J Nutr** 1988 Dec;118(12):1495–501
Metabolic stroke in methylmalonic acidemia [letter] Thompson GN, et al. **J Pediatr** 1989 Sep;115(3):499–500
Biological and methodological implications of prostaglandin involvement in mouse brain lipid peroxidation measurements. Bose R, et al. **Neurochem Res** 1989 Mar; 14(3):217–20
The role for reactive oxygen species in cyclosporin A induced nephrotoxicity in rats. Kumano K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):941–2
Isolation and characterization of a new thio–glucuronide, a biliary metabolite of malotilate in rats. Nakaoka M, et al. **Xenobiotica** 1989 Feb;19(2):209–16
[Mechanism of formation of malonic dialdehyde during liposome interaction with cells] Konev VV, et al. **Biokhimiia** 1988 Sep;53(9):1439–42 (Eng. Abstr.) **(Rus)**
[The role of aldehyde dehydrogenases in the malonic dialdehyde metabolism in the rat liver] Pirozhkov SV, et al. **Biokhimiia** 1988 Sep;53(9):1443–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Distribution and excretion of thallium after oral and intraperitoneal administration of thallous malonate and thallous sulfate in hamsters. Aoyama H. **Bull Environ Contam Toxicol** 1989 Mar;42(3):456–63
Distribution and fate of diethyl malonate and diisopropyl fluorophosphate on pig skin in vitro. Chellquist EM, et al. **J Pharm Sci** 1988 Oct;77(10):850–4

PHARMACOLOGY

Effects of leukocyte–derived oxidants on sarcolemmal Na,K,ATP–ase and calcium transport. Matsuoka T, et al. **Adv Exp Med Biol** 1989;248:621–8
Differential effects of malotilate on 5–, 12– and 15–lipoxygenase in human ascites cells. Vermeer MA, et al. **Agents Actions** 1989 Jan;26(1–2):252–3
Effects of malotilate on alcoholic liver injury in rats. Matsuda Y, et al. **Alcoholism (NY)** 1988 Oct;12(5):665–70
Unique promotion of erythrophagocytosis by malondialdehyde. Hebbel RP, et al. **Am J Hematol** 1988 Dec;29(4):222–5
The accumulation of malonyldialdehyde, an end product of membrane lipid peroxidation, can cause potassium leak in normal and sickle red blood cells. Jain SK, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):60–5
The effect of di–isopropyl 1,3 dithiol–2–ylidenemalonate (malotilate) on the hepatic changes induced by ethanol administration in the rat. Ryle PR, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4341–51
The effects of malotilate on hepatic drug metabolizing systems in different strains of rats. Kai K, et al. **Comp Biochem Physiol [C]** 1988;90(1):13–9
Differential effects of malotilate on 5–, 12– and 15–lipoxygenase in human ascites cells. Zijlstra FJ, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):291–5
Preventive effect of malotilate on dimethylnitrosamine–induced liver fibrosis in the rat. Ala–Kokko L, et al. **J Lab Clin Med** 1989 Feb; 113(2):177–83
Effects of isoprothiolane and phytosterol on serum lipids and adipose tissue of rats given saturated fat diet. Katamoto H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):119–27
[Cytotoxicity of the pesticide romucide] Malysheva MV. **Gig Sanit** 1989 Jan;(1):73–4 **(Rus)**

THERAPEUTIC USE

Effects of malotilate treatment on alcoholic liver disease. Takase S, et al. **Alcohol** 1989 May–Jun;6(3):219–22
Malotilate prevents accumulation of type III pN–collagen, type IV collagen, and laminin in carbon tetrachloride–induced pulmonary fibrosis in rats. Pääkkö P, et al. **Am Rev Respir Dis** 1989 May;139(5):1105–11
Effects of malotilate treatment on the serum markers of hepatic fibrogenesis in liver cirrhosis. Takase S, et al. **Gastroenterol Jpn** 1988 Dec;23(6):639–45

TOXICITY

Induction of lipid peroxidation in tissues of thallous malonate–treated hamster. Aoyama H, et al. **Toxicology** 1988 Dec 16;53(1):11–8

URINE

Malondialdehyde derivatives in urine. Draper HH, et al. **Basic Life Sci** 1988;49:199–202
Organic aciduria and butyryl CoA dehydrogenase deficiency in BALB/cByJ mice. Schiffer SP, et al. **Biochem Genet** 1989 Feb;27(1–2):47–58
Recovery of malondialdehyde in urine as a 2,4–dinitrophenylhydrazine derivative after exposure to chloroform or hydroquinone. Ekström T, et al. **Chem Biol Interact** 1988;67(1–2):25–31
Identification of N–(2–propenal)ethanolamine as a urinary metabolite of malondialdehyde. Hadley M, et al. **Free Radic Biol Med** 1989;6(1):49–52
Current research in the organic acidurias. Chalmers RA. **J Inherited Metab Dis** 1989;12(2):225–39 (24 ref.)
Transient diabetes mellitus in neonatal methylmalonic aciduria. Mathew PM, et al. **J Inherited Metab Dis** 1988; 11(2):218–9
Odd–numbered long–chain fatty acid contents in erythrocyte membrane phospholipids in patients with an impaired propionate utilization. Wendel U, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:225–8
Fermentable dietary fibers elevate urinary methylmalonate and decrease propionate oxidation in rats deprived of vitamin B–12. Cullen RW, et al. **J Nutr** 1989 Aug; 119(8):1115–20
Vitamin B12–responsive megaloblastic anemia, homocystinuria, and transient methylmalonic aciduria in cb1E disease. Tuchman M, et al. **J Pediatr** 1988 Dec; 113(6):1052–6
Dietary restriction and methylmalonicaciduria [letter] Bain MD, et al. **Lancet** 1989 Aug 5;2(8658):337
Identification of N–epsilon–(2–propenal)lysine as a major urinary metabolite of malondialdehyde. Draper HH, et al. **Lipids** 1988 Jun;23(6):626–8
Abnormality of odd–numbered long–chain fatty acids in erythrocyte membrane lipids from patients with disorders of propionate metabolism. Wendel U. **Pediatr Res** 1989 Feb; 25(2):147–50

MALONDIALDEHYDE see under **MALONATES**

MALONYL COENZYME A see under **ACYL COENZYME A**

MALPIGHIAN TUBULES see under **CLOACA**

MALPRACTICE

see related
INSURANCE, LIABILITY

VBAC delivery [letter] Flaster DJ. **Am Fam Physician** 1988 Dec;38(6):45–6
Legal aspects of orthodontic practice: risk management concepts. Treatment records and the defensible case. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):173–5
Legal aspects of orthodontic practice: risk management concepts. Diagnosis, root resorption, and progress monitoring [see comments] Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):267–8. **Comment in:** Am J Orthod Dentofacial Orthop 1989 Jul;96(1):15A–16A
Michigan jury awards +850,000 in ortho case: a tempest in a teapot. Pollack B. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):358–60
In re: Diagnosis/Root Resorption/Progress Monitoring (AJO/DO 1989;95:267–8) [letter; comment] Rubin RM. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):15A–16A . **Comment on:** Am J Orthod Dentofacial Orthop 1989 Mar;95(3):267–8
Ways of dealing with a malpractice hazard [letter] Gutheil TG, et al. **Am J Psychiatry** 1988 Nov;145(11):1492–3
Efficacy of psychoanalysis and psychoanalytically oriented psychotherapy [letter] Klerman GL. **Am J Psychiatry** 1989 Apr;146(4):571
'Talking in their sleep'—a defensive practice [letter] Stanley GD. **Anaesthesia** 1989 Aug;44(8):706
Serious sequelae and malpractice in endodontics. Morse DR. **Ann Dent** 1988 Summer;47(1):33–7
Whistle–blowing: is it worth the consequences? Rothrock JC. **AORN J** 1988 Oct;48(4):757–8, 760–2
Computers in clinical medicine raise questions of liability. Foreman J. **Arch Ophthalmol** 1989 Jan;107(1):25
How exposed are we? Is there a better way? [editorial] Olson RJ. **Arch Ophthalmol** 1989 Aug;107(8):1131
Are audiologists guilty of malpractice if they do not recommend binaural amplification? Lowe RG. **ASHA** 1988 Nov;30(11):39–40
The legal aspects of medical defence. Bourke DJ. **Aust N Z J Ophthalmol** 1988 May;16(2):143–6
Professional negligence. Moore MC. **Aust N Z J Ophthalmol** 1988 May;16(2):137–42
The effect of the New Zealand Accident Compensation legislation on medical malpractice. Powell GG. **Aust N Z J Ophthalmol** 1988 May;16(2):147–53
Appraisal of the event as a factor in coping with malpractice litigation. Charles SC, et al. **Behav Med** 1988 Winter; 14(4):148–55
Defence societies' price war [editorial] Dyer C. **BMJ** 1988 Nov 26;297(6660):1356
Upsurge in malpractice claims, costs may be levelling off. Goldman B. **Can Med Assoc J** 1989 Sep 1;141(5):434–7
Effect of medicolegal liability on patterns of general and family practice in Canada. Woodward CA, et al. **Can Med Assoc J** 1989 Aug 15;141(4):291–9
What's your malpractice exposure? Parker W. **Colo Med** 1988 Jul 15;85(14):261–6
Second thoughts [editorial] Todd JS. **Colo Med** 1988 Jul 15; 85(14):260
Doctor's countersuit gets to the heart of it. Barnes PG. **Conn Med** 1988 Oct;52(10):607–8
Medical charts and malpractice: how to avoid costly errors and omissions. NaPier PM, et al. **Hawaii Med J** 1989 Jan; 48(1):596–7, 599, 607
Infection control information and malpractice cases [letter] Levy CS. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):295
Malpractice liability of allied health professionals: developments in an area of critical concern. Peterson RG. **J Allied Health** 1985 Nov;14(4):363–72
Perspectives incite responses [letter] **J Am Dent Assoc** 1989 Feb;118(2):144, 146
Understanding your malpractice insurance. Council on Insurance. **J Am Dent Assoc** 1988 Nov;117(6):779–84 (3 ref.)
Continuing "cause for concern" [letter] Douglas BL. **J Am Dent Assoc** 1989 Feb;118(2):146, 148
The eye–opening case of Keir v. United States. Classé JG. **J Am Optom Assoc** 1989 Jun;60(6):471–6
Good records help in the defense of malpractice suits. DiFrancesca E. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):806–7
Reducing the risk of malpractice. Hannah HW. **J Am Vet Med Assoc** 1986 Nov 1;189(9):986
Malpractice actions—what recovery? Hannah HW. **J Am Vet Med Assoc** 1988 Sep 1;193(5):538–9
Stress and medical malpractice: organizational risk assessment and intervention. Jones JW, et al. **J Appl Psychol** 1988 Nov;73(4):727–35
Present status of obstetrics in family practice and the effects of malpractice issues. Bredfeldt R, et al. **J Fam Pract** 1989 Mar;28(3):294–7
Is teaching worth the risk? [letter] Pearl AJ. **J Fla Med Assoc** 1989 Feb;76(2):241–2
Change the tort system: expose it to patients. Freedman M. **J Med Assoc Ga** 1989 Apr;78(4):201–4
Medical–legal implications of Clinical Alert [letter] Prosnitz LR. **J Natl Cancer Inst** 1988 Dec 7;80(19):1574
Impaired nurses: a cost analysis. LaGodna GE, et al. **J Nurs Adm** 1989 Sep;19(9):13–8
Casting the first stone [letter] Gold L. **J Oral Maxillofac Surg** 1989 Jul;47(7):772
Medico–legal consultation: an expanded role of the tertiary neonatologist. Donn SM, et al. **J Perinatol** 1987 Summer; 7(3):238–41
Hospital risk management for perinatal care: theory and practice. Raines E. **J Perinatol** 1988 Spring;8(2):96–100
Polemics in perinatology: the tango of the sharks. Schifrin BS. **J Perinatol** 1987 Spring;7(2):133–4
Polemics in perinatology: malpractice—we have met the enemy. Schifrin BS. **J Perinatol** 1987 Fall;7(4):350–3
Perinatal medical negligence closed claims from the St. Paul Company, 1980–1982. Ogburn PL Jr, et al. **J Reprod Med** 1988 Jul;33(7):608–11
Risk management [editorial] Colvin EM. **J S C Med Assoc** 1989 Jan;85(1):47
Malpractice prophylaxis. Hunt JR. **J S C Med Assoc** 1989 Jan;85(1):36–8
Loss prevention case of the month. Where is that prenatal record? Avery JK. **J Tenn Med Assoc** 1988 Oct;81(10):640
Malpractice claims for urogenital injuries. Morey AF, et al. **J Urol** 1988 Dec;140(6):1475–8
Professional liability. Hatlie MJ. **JAMA** 1989 May 19; 261(19):2881–2
Brain damage due to blocked tracheostomy tube: a 12–year saga. Brahams D. **Lancet** 1989 Jan 7;1(8628):55
A patient voice at the General Medical Council [letter] Pratten B. **Lancet** 1989 Jan 21;1(8630):163
Practice changes in response to the malpractice litigation climate. Results of a Maryland physician survey. Weisman CS, et al. **Med Care** 1989 Jan;27(1):16–24
Comments on a commentary [letter] Dawson NV. **Med Decis Making** 1989 Jan–Mar;9(1):68–9
Consumer Help against MalPractice [letter] McKay B. **Med J Aust** 1989 Feb 6;150(3):166–7
Risk management — an important choice for physicians. Berglund TR. **Mich Med** 1989 May;88(5):22
Physician contact with legislators important. Farhat DR. **Mich Med** 1989 May;88(5):20
Understanding the power of effective communications. Marabell P, et al. **Mich Med** 1989 Jun;88(6):38–9
The voice of organized medicine is being heard, thanks to MSMS. Paxton RE. **Mich Med** 1989 May;88(5):17–8
What the Missouri State Medical Association is doing about medical malpractice. **Mo Med** 1986 Jan;83(1):20–1
Effects of the liability climate on the academic health center. Challoner DR, et al. **N Engl J Med** 1988 Dec 15; 319(24):1603–5
Using restraints in the elderly because of fear of litigation [letter] Francis J. **N Engl J Med** 1989 Mar 30;320(13):870–1
The effects of liability fears [letter] Smeltzer JS. **N Engl J Med** 1989 May 4;320(18):1221
Ten–year experience in otolaryngology medical malpractice claims in New Jersey. Yeager HP, et al. **N J Med** 1988 Oct;85(10):819–23
Professional medical conduct [letter] Pearlman RL. **N Y State J Med** 1988 Nov;88(11):603–4
Disciplinary matters [letter] Langridge CJ. **N Z Med J** 1988 Dec 14;101(859):829–30

Vaginal breech delivery—inaccurate reporting [letter] Lowe B. **N Z Med J** 1989 Apr 26;102(866):202
Fraud on the agenda [news] **Nature** 1989 Feb 16; 337(6208):586
A modest proposal [editorial] Gelber BR. **Nebr Med J** 1988 Sep;73(9):283
Management of genital herpes infection in pregnancy [letter; comment] Frame LE. **Obstet Gynecol** 1989 Jan;73(1):140–1 . **Comment on:** Obstet Gynecol 1988 May;71(5):779–80
Links exist between communication and claims prevention. **Ohio Med** 1989 Mar;85(3):218
Practice patterns often emerge as factors in malpractice lawsuits. **Ohio Med** 1988 Sep;84(9):759
Referrals and consultations: avoiding the risk of liability. **Ohio Med** 1988 Dec;84(12):971–2
Wounded healers—malpractice on trial. MacDougall MK. **Ohio Med** 1989 May;85(5):333–5
Malpractice crisis: a personal perspective. Reiling WA Jr. **Ohio Med** 1989 Feb;85(2):116–9, 121
The pediatrician and the under toad. Nazarian LF. **Pediatr Rev** 1988 Oct;10(4):99–100
Fallacies of the R/O (rule out) philosophy [letter] Klinefelter HF. **Pharos** 1989 Winter;52(1):37
Have we really come this far?[editorial] Curtin JW. **Plast Reconstr Surg** 1989 Aug;84(2):340–1
Charity, plastic surgery, and malpractice [letter; comment] Goodman RC. **Plast Reconstr Surg** 1989 Feb;83(2):387. **Comment on:** Plast Reconstr Surg 1988 Jul;82(1):147–50
Professional courtesy [letter] Silversmith PE. **Plast Reconstr Surg** 1989 Oct;84(4):705
The malpractice mess [letter] **Postgrad Med** 1989 Apr; 85(5):45–6
New information resource, the National Practitioner Data Bank. Wilson MA. **Public Health Rep** 1989 May–Jun; 104(3):311–2
Status of the Rhode Island Board of Medical Licensure and Discipline. Hamolsky MW. **R I Med J** 1989 Feb; 72(2):57–60
Medical malpractice claims in diagnostic radiology: update [letter] Dahlen RT, et al. **Radiology** 1989 Jan;170(1 Pt 1):277
Clinical history, radiographic reporting, and defensive radiologic practice [letter] Hall FM. **Radiology** 1989 Feb; 170(2):575–6
Legal aspects of urologic prosthetic devices. Irwin JR. **Urol Clin North Am** 1989 Feb;16(1):165–74
Fairness [editorial] Morgan DZ. **W V Med J** 1989 Mar; 85(3):103
Physician communication skills and malpractice claims. A complex relationship. Adamson TE, et al. **West J Med** 1989 Mar;150(3):356–60
Depositions: preparing for battle [interview by Don Harper Mills] Ehrhardt ME. **Wis Med J** 1989 Feb;88(2):25–6
Update on the medical mediation panels. Sproule R. **Wis Med J** 1989 Jan;88(1):25–6
[Acute obstruction of a nasotracheal tube in a newborn infant] Larsen J. **Ugeskr Laeger** 1988 Oct 24;150(43):2587 (Eng. Abstr.) **(Dan)**
[Is a rebuke for surgical treatment errors foreseeable?] Ekkernkamp A, et al. **Chirurg** 1989 May;60(5):suppl 73–6 **(Ger)**
[An autopsy case of the lethal anesthetic accident caused by nitrous oxide mis–inhalation] Naruse T, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):397–402 (Eng. Abstr.) **(Jpn)**
[Iatrogenic diseases in pediatrics and their prevention] Erenkova NV. **Pediatriia** 1989;(7):81–6 **(Rus)**

ECONOMICS

The price of pleasure [editorial] Brown CL. **Ala Med** 1989 Jun;58(12):15–6
How much is an injury worth? Murphy EK. **AORN J** 1989 Aug;50(2):222–3, 226
Differential defence rates [letter] Ford PG. **BMJ** 1989 Feb 4;298(6669):323–4
Cost–containment and medical malpractice. Landwirth J. **Conn Med** 1989 Jan;53(1):47–9
Effect of perceived malpractice insurance costs on the family practice career goals of medical students. Rodney WM, et al. **Fam Med** 1988 Nov–Dec;20(6):418–21
South Carolina medical malpractice patients' compensation fund. Kilgore DG Jr, et al. **J S C Med Assoc** 1989 Jan; 85(1):10–1
Standard of care and anesthesia liability. Cheney FW, et al. **JAMA** 1989 Mar 17;261(11):1599–603
Compensation: a draft bill. Brahams D. **Lancet** 1988 Nov 5;2(8619):1088–9
Barristers debate medicolegal issues. Brahams D. **Lancet** 1988 Oct 8;2(8615):858
Michigan physicians' insurance rates highest in Great Lakes area. **Mich Med** 1988 Jul;87(7):414
Michigan malpractice premiums worse than they appear [letter] Hoski AJ. **Mich Med** 1988 Jul;87(7):401
MSMS to participate in seminar on Sweden's medical malpractice system. Kelly K. **Mich Med** 1989 May; 88(5):18–9
Escalating malpractice insurance fees [letter] Rennie T. **N Y State Dent J** 1988 Oct;54(8):13
C section rates and increased malpractice premiums—an alternate explanation [letter] Johnson WP. **Public Health Rep** 1989 Mar–Apr;104(2):200–1
Malpractice premiums and primary cesarean section rates in New York and Illinois. Rock SM. **Public Health Rep** 1988 Sep–Oct;103(5):459–63
Patient expectations and the medical malpractice crisis [letter] Uzych L. **Tex Med** 1989 Feb;85(2):15–6
Insuring a healthy medical liability insurance system. Terry MS. **Va Med** 1989 Feb;116(2):53–4

HISTORY

Death on the Argus: American medical malpractice versus British chauvinism in the War of 1812. Estes JW, et al. **J Hist Med Allied Sci** 1989 Apr;44(2):179–95
Dante and medicine: the circle of malpractice. Accardo P. **South Med J** 1989 May;82(5):624–8
[Reflections on the aftereffects of the Nürnberg trial of physicians] Mausbach H. **Z Gesamte Hyg** 1988 Dec; 34(12):717–21 **(Ger)**

LEGISLATION & JURISPRUDENCE

Psychosurgery and personality—some legal considerations. Nys H. **Acta Neurochir Suppl (Wien)** 1988;44:170–2
Medicolegal aspects of screening mammography. Brenner RJ. **AJR Am J Roentgenol** 1989 Jul;153(1):53–6
AIDS—products liability—Jones v. Miles Laboratories, Inc. **Am J Law Med** 1989;15(1):133–4
Patient dumping in the hospital emergency department: renewed interest in an old problem. Enfield LM, et al. **Am J Law Med** 1988;13(4):561–95 (153 ref.)
Finding fault when patients fall. Cushing M. **Am J Nurs** 1989 Jun;89(6):808–9
Legal aspects of orthodontic practice: risk management concepts. Professional liability insurance. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):357–9
Medical malpractice tort reform: balancing the interests of providers, patients and public. Wiet MJ. **Am J Otol** 1989 May;10(3):208–14 (0 ref.)
Tort, contract, and the patient–physician relationship [letter] Rubin H. **Ann Intern Med** 1988 Dec 1;109(11):929–30
First assistant article clarification [letter] Briggs P. **AORN J** 1989 Aug;50(2):218, 220
The effect of shortened statutes of limitations on nurses. Murphy EK. **AORN J** 1988 Sep;48(3):547–50
Does determining serum alcohol concentrations in emergency department patients influence physicians' civil suit liability? Simel DL, et al. **Arch Intern Med** 1989 May; 149(5):1016–8
Writing a wrong. Mullan K. **BMJ** 1988 Aug 13; 297(6646):470–1
Glass in the foot: negligence or a criminal act? Richmond PW, et al. **BMJ** 1989 Jun 3;298(6686):1491
Medical defence peace [editorial] Smith T. **BMJ** 1989 Apr 29;298(6681):1130
"Magical thinking," suicide, and malpractice litigation. Bursztajn H, et al. **Bull Am Acad Psychiatry Law** 1988; 16(4):369–77 (22 ref.)
The health sciences librarian's exposure to malpractice liability because of negligent provision of information. Gray JA. **Bull Med Libr Assoc** 1989 Jan;77(1):33–7
The impact of litigation and court decisions on clinical practice. Menninger WW. **Bull Menninger Clin** 1989 May; 53(3):203–14 (27 ref.)
Removing the mandibular third molar: neurosensory deficits and consequent litigation. Swanson AE. **Can Dent Assoc J** 1989 May;55(5):383–6
The Knox lecture: radiology and the law. Craig JO. **Clin Radiol** 1989 Jul;40(4):343–6
Pretreatment arbitration agreement: if you haven't done it right, you haven't done it at all! [news] Meyer CM. **Colo Med** 1989 Feb 15;86(4):68–9
Generic drugs: therapeutic effectiveness and interchangeability. Netz HE. **Colo Med** 1988 Sep 1; 85(16):347–8
Administrative approach to the malpractice problem [letter] Bingham DB. **Conn Med** 1988 Sep;52(9):567–8
Taking the malpractice crisis into physician hands [letter] Permut S. **Del Med J** 1988 Oct;60(10):605
Diabetes and hypoglycaemia: medico–legal aspects of criminal responsibility. Frier BM, et al. **Diabetic Med** 1988 Sep;5(6):521–6 (33 ref.)
Professional liability for pharmacists: a focus on pharmacy practice acts. Munger MA, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):886–8
Legal aspects of tardive dyskinesia. Davis JM, et al. **Encephale** 1988 Sep;14 Spec No:257–61 (49 ref.)
Cost constraints and emergency treatment [letter] Jones GE. **Hastings Cent Rep** 1988 Oct–Nov;18(5):50–1
Professional liability: let's try something new. Nelson AR. **Hawaii Med J** 1989 Feb;48(2):16, 33–4, 37
Management and rehabilitation of sexually exploitive therapists. Gartrell N, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1070–4
Nally II: further clarification of clergy malpractice. Griffith EE, et al. **Hosp Community Psychiatry** 1988 Oct; 39(10):1041–3
Psych care and malpractice: analyze the risks. Eubanks P. **Hospitals** 1989 Jun 20;63(12):84
Changing times create new liability hot spots. Holthaus D. **Hospitals** 1988 Nov 20;62(22):58, 61
Jury research strengthens lawsuit defense. Holthaus D. **Hospitals** 1989 Aug 20;63(16):40–1
Peer review materials protected by statute. **Indiana Med** 1989 Jul;82(7):562
Malpractice cap increase moves to Senate [editorial] **Indiana Med** 1989 Apr;82(4):239
Cause for concern. Ball CL. **J Am Dent Assoc** 1988 Nov; 117(6):768
Where does malpractice prevention end and harassment protection begin? Greene CS. **J Am Dent Assoc** 1988 Nov; 117(6):767–8
Legal requirement of private practice medical records. Cross AT. **J Am Diet Assoc** 1988 Oct;88(10):1272–4
The malpractice crisis. Relevance for geriatrics. Kapp MB. **J Am Geriatr Soc** 1989 Apr;37(4):364–8 (20 ref.)
Videotaping as a potential safeguard against veterinary malpractice lawsuits. Buckley WR. **J Am Vet Med Assoc** 1989 Mar 1;194(5):652–3
Malpractice suits and malicious prosecution—veterinarian countersuits. Hannah HW. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1392–3
Remedy for frivolous malpractice actions. Mitchell MW. **J Arkansas Med Soc** 1988 Sep;85(4):177–8
View from the Nation's Courts. Freishtat HW. **J Clin Psychopharmacol** 1989 Jun;9(3):215–6
View from the Nation's Courts. Freishtat HW. **J Clin Psychopharmacol** 1988 Dec;8(6):434–6
Malpractice and tardive dyskinesia: a conceptual dilemma. Tancredi LR. **J Clin Psychopharmacol** 1988 Aug;8(4 Suppl):71S–76S (30 ref.)
Amendment 10: some afterthoughts [editorial] Lacsamana RG. **J Fla Med Assoc** 1988 Nov;75(11):721
The message is loud and clear [editorial] Lacsamana RG. **J Fla Med Assoc** 1988 Sep;75(9):579
Post–amendment 10 questions [letter] Pegues HU 2d. **J Fla Med Assoc** 1989 Feb;76(2):238
Misleading information [letter] Smith DC. **J Fla Med Assoc** 1989 Feb;76(2):238–9
Medical malpractice and the standard of care. Restaino JM Jr. **J Foot Surg** 1988 Nov–Dec;27(6):576–80 (34 ref.)
When doctors divulge: is there a "threat from within" to psychiatric confidentiality? Goldstein RL. **J Forensic Sci** 1989 Mar;34(2):433–8
The sinking of the "captain of the ship". Reexamining the vicarious liability of an operating surgeon for the negligence of assisting hospital personnel. Price SH. **J Leg Med** 1989 Jun;10(2):327–56
1987 Letourneau award. Enforcing hospital responsibility through self–evaluation and review committee confidentiality. Rowland JM. **J Leg Med** 1988 Sep; 9(3):377–419 (284 ref.)
1987 Schwartz award. Countersuits by medical malpractice defendants against attorneys. Witlin LT. **J Leg Med** 1988 Sep;9(3):421–47 (119 ref.)
Revisiting Georgia's medical malpractice arbitration statute. Berg RN. **J Med Assoc Ga** 1989 Mar;78(3):160–1
Statutory protection for peer review committees—can it be waived? Berg RN. **J Med Assoc Ga** 1988 Jul;77(7):586–7
Pediatrician liable for failure to diagnose infant's hip problem. **J Miss State Med Assoc** 1989 Jun;30(6):186
Outrageous and beyond the bounds of decency. Epps CH Jr. **J Natl Med Assoc** 1989 Sep;81(9):975–7, 981, 985–6
Perinatal lawsuits in Oklahoma. McIntyre RV. **J Okla State Med Assoc** 1988 Nov;81(11):683–4
Expert witness testimony. Quinn NK, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1086–9
Malpractice litigation: the deposition. Winer HJ, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):57–9
Legal vulnerabilities in the treatment of chemically dependent dual diagnosis patients. Clark HW, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):251–7
South Carolina Medical Malpractice Joint Underwriting Association. Barone BM. **J S C Med Assoc** 1989 Jan; 85(1):7–8
Peer review where it counts [editorial] Bryan CS. **J S C Med Assoc** 1989 Apr;85(4):209–11
"I've been there" [editorial] Bryan CS. **J S C Med Assoc** 1988 Oct;84(10):511–2
The South Carolina Medical Association/Joint Underwriting Association risk management program. Colvin EM. **J S C Med Assoc** 1989 Jan;85(1):16–8
The deposition—the doctor, the lawyer. Fairey WF. **J S C Med Assoc** 1989 Jan;85(1):43–5
The South Carolina Dental Association and the S.C. Medical Malpractice JUA. Gaines JH. **J S C Med Assoc** 1989 Jan; 85(1):33–4
The SCHA Loss Control Program: reduction in liability exposures for hospitals and physicians. Koob C, et al. **J S C Med Assoc** 1989 Jan;85(1):25–6
JUA claims functions. Lawton BM Jr. **J S C Med Assoc** 1989 Jan;85(1):11
So you are a defendant in a malpractice action. Richardson DV. **J S C Med Assoc** 1989 Jan;85(1):39–41
Documented self–destruction. Avery JK. **J Tenn Med Assoc** 1989 Jan;82(1):20, 22
Loss prevention case of the month. Any old hired gun will do! Avery JK. **J Tenn Med Assoc** 1989 May;82(5):264
Medical liability reform [letter] Yarington CT Jr. **JAMA** 1988 Nov 25;260(20):3007
Physician countersuits. Stratton WT. **Kans Med** 1989 Jan; 90(1):6–7
Liability of a referring physician. Stratton WT. **Kans Med** 1988 Nov;89(11):292–3
Complaints and litigation [letter] Banks BE. **Lancet** 1989 Apr 15;1(8642):848–9
Sterilisation and mental handicap. Brahams D. **Lancet** 1988

Dec 10;2(8624):1377–8
Aspiration of boiling tea leading to respiratory failure. Brahams D. **Lancet** 1989 May 13;1(8646):1089
Uninsured pharmacists and illegible prescriptions. Brahams D. **Lancet** 1989 Mar 4;1(8636):510
Delayed birth injuries claim. Brahams D. **Lancet** 1989 Apr 1;1(8640):738–9
Duty to disclose medical records. Brahams D. **Lancet** 1989 Aug 19;2(8660):460
Informed consent and 25% risk of paralysis. Brahams D. **Lancet** 1989 Jul 1;2(8653):57–8
Decision aids and the law [letter] Brahams D, et al. **Lancet** 1989 Sep 9;2(8663):632–4
Medical defence and crown indemnity. Brahams D. **Lancet** 1989 Apr 8;1(8641):795
The use of videotechnology by the medical trial defense bar—a case study. Couch JB. **Leg Med** 1987;:148–64
The expert witness. Rhodes AM. **MCN** 1989 Jan–Feb; 14(1):49
A primer on tort law. Haas TF. **Md Med J** 1989 Jan; 38(1):55–74 (107 ref.)
The obstetrician's dilemma [editorial] Sweet R. **Med J Aust** 1989 May 15;150(10):545–6
Legal discussions in medical literature: is there adequate peer review? Kapp MB. **Med Law** 1988;7(4):317–21
Evaluation of the physicians' obligation to provide information in Denmark. Segest E, et al. **Med Law** 1988; 7(2):141–9
Civil damages—the need for radical reform. **Med Leg J** 1988; 56 (Pt 4):186–8
A conference on no fault compensation [editorial] Brahams D. **Med Leg J** 1989;57 (Pt 1):3–4
Anaesthesia—the report on peri-operative deaths. Lunn JN. **Med Leg J** 1988;56 (Pt 4):204–18
Hospitalization and surgery [editorial] Goode AW, et al. **Med Sci Law** 1988 Jul;28(3):185–6
As it happens: conversations overheard in a medical school. **Med Teach** 1988;10(2):237–40
Berrien County Medical Society — a leader in medical malpractice mediation. Munger CD. **Mich Med** 1989 May; 88(5):19–20
Professional liability — a top priority for MSMS. Paxton RE. **Mich Med** 1989 May;88(5):14–6
Pension protection — legislation enacted. Weber RD. **Mich Med** 1989 May;88(5):16–7
Consultations: clear communication prevents patient injuries and malpractice suits. **Minn Med** 1988 Oct;71(10):638–9
MMIE malpractice claim review. Internal medicine. MMIE Risk Management Committee. **Minn Med** 1986 Mar; 69(3):153–4
BME clarification [letter] **Minn Med** 1989 May;72(5):271
Risk management—good patient care. Craig ME. **Minn Med** 1986 Mar;69(3):113–4
Minnesota's physician reporting law: when am I my brother's or sister's keeper? Part II. Eelkema R, et al. **Minn Med** 1988 Oct;71(10):625–30
Medical malpractice and the potential for alternative dispute resolution. Metzloff TB, et al. **N C Med J** 1988 Dec; 49(12):627–8
The effects of a medical malpractice judgment in North Carolina. Stevens TJ. **N C Med J** 1989 May;50(5):246–7
The Model Health Care Provider Liability Reform Act. A summary and commentary. Weaver JP, et al. **N C Med J** 1988 Dec;49(12):621–4
Reducing the risks of malpractice liability: the Illinois court takes an important step. Curran WJ. **N Engl J Med** 1988 Dec 29;319(26):1715–7
AIDS malpractice verdict. **N J Med** 1988 Jul;85(7):575–6
Differing opinions re law suits [letter] Shpuntoff H. **N Y State Dent J** 1988 Oct;54(8):10
Poor legal representation in medical malpractice cases [letter] Ger R. **N Y State J Med** 1988 Nov;88(11):604–5
The prima facie tort rule: a possible medical–legal answer to the medical malpractice crisis. Schussler T. **N Y State J Med** 1989 Jul;89(7):399–402
Failed vasectomy [letter] Walton JK. **N Z Med J** 1989 Aug 23;102(874):448
AIDS-contaminated blood: haemophiliacs to sue [news] Swinbanks D. **Nature** 1989 Aug 10;340(6233):416
Medical ethics: Japanese doctors keep quiet [news] Swinbanks D. **Nature** 1989 Jun 8;339(6224):409
The Health Care Quality Improvement Act of 1986 [editorial] Gelber BR. **Nebr Med J** 1988 Aug;73(8):261
The physician as an expert witness. Kerr JR. **Nebr Med J** 1989 Jun;74(6):132–5
Tort claims against health care providers for breach of confidentiality. Lawson CM. **Nebr Med J** 1989 Jun; 74(6):150–7
Ex parte discussions between treating physicians and defense counsel in malpractice and personal injury suits. Sapp SK. **Nebr Med J** 1989 Jun;74(6):145–9
Tort reform: where does nursing stand? Northrop CE. **Nurs Outlook** 1988 Nov–Dec;36(6):304
Malpractice—the syndrome of the 80s [letter; comment] Sandmire HF. **Obstet Gynecol** 1989 Jan;73(1):145–6. **Comment on:** Obstet Gynecol 1988 Jul;72(1):130–5
Industrial physicians take note [news] **Occup Health Saf** 1989 Mar;58(3):10
Dealing with the bad medical result. **Ohio Med** 1988 Oct; 84(10):840
Professional liability and double standards. Baumgartner DA Jr. **Ohio Med** 1988 Nov;84(11):857–8
The suicidal patient: what are your liabilities? Edwards KS. **Ohio Med** 1989 Mar;85(3):179, 181–2
Who dropped the ball on tort reform? Behrendt RP. **Pa Med** 1989 Jul;92(7):48–9
American Academy of Pediatrics Committee of Medical Liability: Guidelines for expert witness testimony. **Pediatrics** 1989 Feb;83(2):312–3
Malpractice: living with the threat. Connelly JE. **Pharos** 1988 Summer;51(3):26–9
Informed consent [letter] Altchek ED. **Plast Reconstr Surg** 1988 Nov;82(5):920
The malpractice mess. Bodies don't come with a guarantee [editorial] Griffen GC. **Postgrad Med** 1989 Feb 1;85(2):15–6
More on malpractice [letter] Spence JO. **Postgrad Med** 1989 May 15;85(7):16, 26
The malpractice mess [letter] White AG. **Postgrad Med** 1989 May 15;85(7):16
Risk management for physicians. Supreme Court invalidates minors' statute of limitations. Gerdes DA. **S D J Med** 1989 Jul;42(7):21–2
Unresolved complaints can lead to malpractice litigation. Karp D. **S D J Med** 1989 Jan;42(1):27
"Perjury is not a crime". Mayfield FH. **Surg Neurol** 1989 Jan;31(1):71–5
Super-legislature in session: recent opinions of the Texas Supreme Court. Francisco CJ. **Tex Med** 1988 Oct; 84(10):69–71
The devil or the sea? Transfer regs create a dilemma. Jones DB. **Tex Med** 1989 May;85(5):70–5
Right to day in court imperils citizens' access to medical care [letter] McKinney M. **Tex Med** 1989 May;85(5):8
OIG v. Burditt, MD (it could happen to you). Wilcox DP, et al. **Tex Med** 1989 May;85(5):79–80
Whither malpractice litigation? Mills DH. **West J Med** 1988 Nov;149(5):611–5 (23 ref.)
Board targets tort reform in 1989–90. **Wis Med J** 1988 Dec; 87(12):39–40
Limits on medical malpractice claims in Wisconsin. **Wis Med J** 1989 Apr;88(4):32–4
California's cap on noneconomic damages. **Wis Med J** 1989 Apr;88(4):34
Medical malpractice limits across the nation. **Wis Med J** 1989 Apr;88(4):36
The reform movement. Kabler JD. **Wis Med J** 1989 Apr; 88(4):3
Loss prevention. The physician's role in fueling liability fires. Reineck MC. **Wis Med J** 1988 Dec;87(12):32, 34
Observations of the liability crisis [letter] Samadani AM. **Wis Med J** 1989 Jul;88(7):6
Is this what our forefathers had in mind? Treacy WL. **Wis Med J** 1989 Jun;88(6):3
Medical malpractice: a case study in medical and legal decision making [clinical conference] Piccirillo M, et al. **Yale J Biol Med** 1989 Jan–Feb;62(1):23–42
Sudden death from left atrial pressure line wedging into cardiac valve prosthesis: pathologic findings and forensic significance. Bordignon D, et al. **Z Rechtsmed** 1988; 101(2):131–5
[Risk as a circumstance which excludes unlawfulness] Mitlöhner M. **Cesk Zdrav** 1989 May;37(5):234–40 (Eng. Abstr.) (Cze)
[Fear of sanctions?] Landheer T. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):457–61 (Dut)
[Several principles of jurisprudence on the medicosurgical error] Sarver-Couteau MC, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):325–37 (Eng. Abstr.) (Fre)
[Medical fault and penal responsibility] Hadengue A. **Bull Acad Natl Med (Paris)** 1988 May;172(5):635–40 (Eng. Abstr.) (Fre)
[Anesthesia and medical responsibility. Principles] Labadie L, et al. **Phlebologie** 1989 Jan–Mar;42(1):113–8 (Eng. Abstr.) (Fre)
[Medical guarantor responsibility and suicide of the psychiatric patient] Oehmichen M, et al. **Beitr Gerichtl Med** 1988;46:43–7 (Eng. Abstr.) (Ger)
[The physician and the malpractice accusation] Pribilla O. **Beitr Gerichtl Med** 1988;46:27–36 (Eng. Abstr.) (Ger)
[Burns in medical and nursing treatment measures] Wiese J, et al. **Beitr Gerichtl Med** 1988;46:37–41 (Eng. Abstr.) (Ger)
[The compartment syndrome from the forensic medicine viewpoint] Carstensen G, et al. **Chirurg** 1988 Nov; 59(11):728–33 (18 ref.) (Ger)
[Extent of postoperative care and protection from spurious accusations] Müller-Osten W. **Chirurg** 1989 Jun;60(6):suppl 98–101 (Ger)
[Liability after death for treatment mistakes] Rieger HJ. **Dtsch Med Wochenschr** 1989 Feb 17;114(7):276 (Ger)
[Civil rights responsibility for health accidents. Legal aspects in intensive care medicine] Ankermann E. **Fortschr Med** 1989 Mar 15;107(8):185–7 (Ger)
[Current health and legal problems in general practice and the hospital] Paquet KJ. **Fortschr Med** 1989 Mar 15; 107(8):179 (Ger)
[When the admitting physician is accused of a false decision in the hospital...Guiding decision for amniocentesis—some flaws] Waibl K, et al. **Fortschr Med** 1989 Jul 10; 107(20):64–5 (Ger)
[In vitro fertilization from the legal viewpoint] Eder-Rieder MA. **Gynakol Rundsch** 1988;28(4):198–209 (Eng. Abstr.) (Ger)
[Truth at bedside in relation to poor prognosis. Legal aspects] Schreiber HL. **Langenbecks Arch Chir** 1988;Suppl 2:557–62 (Eng. Abstr.) (Ger)
[Expert assessment and evaluation practice of homeopathic practitioners] Eberhardt J, et al. **Off Gesundheitswes** 1988 Oct;50(10):579–83 (Eng. Abstr.) (Ger)
[Diagnostic and expert assessment aspects of iatrogenic nerve damage] Müller D, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:82–3 (Ger)
[Fatal hemorrhage in total endoprosthesis reimplantation. A case report and legal viewpoints] Bullrich A, et al. **Unfallchirurg** 1989 Apr;92(4):187–90 (Eng. Abstr.) (Ger)
[Experiences with medical expert committees—procedures in physician malpractice claims] Carstensen G. **Versicherungsmedizin** 1989 Mar 1;41(2):64–8 (Eng. Abstr.) (Ger)
[The health and will of the patient—applied to extended surgical procedures] Bauer G, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):725–9 (12 ref.) (Eng. Abstr.) (Ger)
[Responsibility of the physician for carrying out injections] Heusinger H. **Z Arztl Fortbild (Jena)** 1988;82(23):1207–10 (Ger)
[Medical management of the alcohol intoxicated patient—stepchild of emergency medicine?] Mattig W, et al. **Z Arztl Fortbild (Jena)** 1989;83(13):677–8 (Ger)
[Legal and ethical questions of emergency medicine with reference to exceptions] Röding H. **Z Arztl Fortbild (Jena)** 1989;83(13):662–4 (Ger)
[Forensic medicine and morphologic aspects of fatal amniotic fluid aspiration] Althoff H, et al. **Z Rechtsmed** 1989; 102(1):11–23 (Eng. Abstr.) (Ger)
[Current legal and deontologic dilemmas of physicians] Raszeja S. **Pol Tyg Lek** 1989 Jan 2;44(1):3–6, 14 (Pol)
[A method of estimating errors in medical treatment during medico-legal expert evaluation] Protsenkov MG, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):44–5 (Eng. Abstr.) (Rus)
[Forensic medical evaluation in cases of foreign bodies left in the abdominal cavity] Sidorov IuS, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):27–30 (Eng. Abstr.) (Rus)
[Legal aspects of patient services in urological practice] Sergeev IuD, et al. **Urol Nefrol (Mosk)** 1988 May–Jun; (3):57–60 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

A study of medical injury and medical malpractice. Hiatt HH, et al. **N Engl J Med** 1989 Aug 17;321(7):480–4

TRENDS

Cost, correlates and effects of malpractice litigation in family practice residency programmes in the United States. Bowman MA, et al. **Fam Pract** 1989 Jun;6(2):146–50
Of course there is a malpractice crisis, but is the St. Petersburg Times for real? Campbell EB. **J Fla Med Assoc** 1988 Oct;75(10):689–90
Polemics in perinatology: malpractice obituary. Schifrin BS. **J Perinatol** 1988 Fall;8(4):347–52
Medical negligence and no-fault liability. Clothier C. **Lancet** 1989 Mar 18;1(8638):603–5
Practice changes in response to the malpractice litigation climate. Results of a Maryland physician survey. Weisman CS, et al. **Med Care** 1989 Jan;27(1):16–24
Medical professional liability and the delivery of obstetrical care. Rostow VP, et al. **N Engl J Med** 1989 Oct 12; 321(15):1057–60
Diary of my practice—1999. Basavaraj D. **Ohio Med** 1989 Feb;85(2):91–3

MALT see **CEREALS**

MALTA FEVER see **BRUCELLOSIS**

MALTASES see **ALPHA-GLUCOSIDASES**

MALTOSE

Conformational analysis and molecular dynamics simulations of maltose. Ha SN, et al. **Biopolymers** 1988 Dec; 27(12):1927–52
Taste preferences of squirrel monkeys and bonnet macaques for Polycose, maltose and sucrose. Sunderland G, et al. **Physiol Behav** 1988;43(6):685–90

ANALOGS & DERIVATIVES

Inhibition of hexose transport and labelling of the hexose carrier in human erythrocytes by an impermeant maleimide derivative of maltose. May JM. **Biochem J** 1988 Sep 1; 254(2):329–36
Mitogenic, immunoadjuvancy, and genetic studies on fatty acyl maltose. Bissonnette E, et al. **Cancer Immunol Immunother** 1988;27(3):272–7

ANALYSIS

Chromatographic evaluation of sorption and diffusion characteristics of glucose, maltose and maltotriose in silica gels. Ching CB, et al. **J Chromatogr** 1989 Feb 3; 463(2):261–70

GENETICS

The MAL63 gene of Saccharomyces encodes a cysteine–zinc finger protein. Kim J, et al. **Curr Genet** 1988 Oct; 14(4):319–23

Isolation and characterization of lactose permease mutants with an enhanced recognition of maltose and diminished recognition of cellobiose. Collins JC, et al. **J Biol Chem** 1989 Sep 5;264(25):14698–703

METABOLISM

Plasmid–linked maltose utilization in Lactobacillus ssp. Liu ML, et al. **Biochimie** 1988 Mar;70(3):351–5

Malto–oligosaccharide homologues of 3,7–anhydro–2–azi–1,2–dideoxy–D–glycero–D–gulo–octitol + + +: improved photoaffinity reagents for labelling the malto–oligosaccharide–binding protein of Escherichia coli. Lehmann J, et al. **Carbohydr Res** 1988 Dec 31;184:113–20

MAL63 codes for a positive regulator of maltose fermentation in Saccharomyces cerevisiae. Chang YS, et al. **Curr Genet** 1988 Sep;14(3):201–9

MalT, the regulatory protein of the Escherichia coli maltose system, is an ATP–dependent transcriptional activator. Richet E, et al. **EMBO J** 1989 Mar;8(3):981–7

Active transport of maltose in membrane vesicles obtained from Escherichia coli cells producing tethered maltose–binding protein. Dean DA, et al. **J Bacteriol** 1989 Jan;171(1):503–10

Novel secA alleles improve export of maltose–binding protein synthesized with a defective signal peptide. Fikes JD, et al. **J Bacteriol** 1989 Jan;171(1):402–9

The mature portion of Escherichia coli maltose–binding protein (MBP) determines the dependence of MBP on SecB for export. Gannon PM, et al. **J Bacteriol** 1989 Feb; 171(2):813–8

MalI, a novel protein involved in regulation of the maltose system of Escherichia coli, is highly homologous to the repressor proteins GalR, CytR, and LacI. Reidl J, et al. **J Bacteriol** 1989 Sep;171(9):4888–99

Overproduction of MalK protein prevents expression of the Escherichia coli mal regulon. Reyes M, et al. **J Bacteriol** 1988 Oct;170(10):4598–602

Role of the leader peptide of maltose–binding protein in two steps of the export process. Thom JR, et al. **J Bacteriol** 1988 Dec;170(12):5654–61

Isolation and characterization of thiodigalactoside–resistant mutants of the lactose permease which possess an enhanced recognition for maltose. Franco PJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15988–92

Thermodynamics of hydrolysis of disaccharides. Cellobiose, gentiobiose, isomaltose, and maltose. Tewari YB, et al. **J Biol Chem** 1989 Mar 5;264(7):3966–71

Nucleotide sequence of the Saccharomyces cerevisiae positive regulatory mutant gene MAL2–8cp. Kopetzki E, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5390

Structure and regulation of the multigene family controlling maltose fermentation in budding yeast. Vanoni M, et al. **Prog Nucleic Acid Res Mol Biol** 1989;37:281–322 (214 ref.)

PHARMACOLOGY

Outer membrane proteins of Yersinia: major protein induced by maltose. Bielecki J, et al. **Acta Microbiol Pol** 1988; 37(2):133–9

Comparisons of maltase activities in kidney brush border membranes from normal, diabetic, glucose–infused and maltose–infused rabbits. Itoh K, et al. **Biochem Int** 1989 Jun;18(6):1137–47

Inhibition by maltose, isomaltose, and nigerose of the synthesis of high–molecular–weight D–glucans by the D–glucosyltransferases of Streptococcus sobrinus. McAlister D, et al. **Carbohydr Res** 1989 Apr 1;187(1):131–8

Identification of a maltose–inducible major outer membrane protein in Actinobacillus (Haemophilus) pleuropneumoniae. Deneer HG, et al. **Microb Pathog** 1989 Jun;6(6):425–32

The maltose–inducible 43 kDa major outer membrane protein in Vibrio cholerae is immunogenic and common to different isolates. Lång HA, et al. **Microb Pathog** 1988 Sep; 5(3):169–75

A major outer membrane protein in Vibrio cholerae is maltose–inducible. Lång HA, et al. **Microb Pathog** 1987 Aug;3(2):143–7

The caries inhibitory effects of GOS–sugar in vitro and in rat experiments. Ooshima T, et al. **Microbiol Immunol** 1988; 32(11):1093–105

THERAPEUTIC USE

Changes in the respiratory quotient during surgery with or without carbohydrate loading [published erratum appears in Hiroshima J Med Sci 1988 Sep;37(3):149] Kawachi S, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):83–7

MAMMAE

Risk factors for the disorders of the mammary gland in dairy cattle. Gröhn YT, et al. **Acta Vet Scand Suppl** 1988;84:170–2

Udder edema in cattle: effects of diuretics (furosemide, hydrochlorothiazide, acetazolamide, and 50% dextrose) on serum and urine electrolytes. Vestweber JG, et al. **Am J Vet Res** 1989 Aug;50(8):1323–8

Anterior pituitary function in female dogs with spontaneous mammary tumors: I. Growth hormone. Rutteman GR, et al. **Anticancer Res** 1989 Jan–Feb;9(1):235–9

Anterior pituitary function in female dogs with mammary tumors: II. Prolactin. Rutteman GR, et al. **Anticancer Res** 1989 Jan–Feb;9(1):241–5

Excretion of penicillins and cephalexin in bovine milk following intramammary administration. Moretain JP, et al. **Food Addit Contam** 1989 Jan–Mar;6(1):79–89

Use of radionuclide imaging to identify malignant mammary tumor bone metastases in dogs. Ogilvie GK, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):220–2

Prognostic factors in canine mammary tumors. Kurzman ID, et al. **Semin Vet Med Surg (Small Anim)** 1986 Feb; 1(1):25–32

Canine mammary tumour disease: role of hormones in pathogenesis and treatment. Rutteman GR, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:34S–35S

Staphylococcal dermatitis in sheep [letter] Doherty ML, et al. **Vet Rec** 1989 Apr 29;124(17):470

[Variation of glycosaminoglycan in the growth of transplantable tumors derived from a spontaneous ddY mouse mammary tumor] Yamamoto H, et al. **Jikken Dobutsu** 1989 Jan;38(1):75–9 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Asymmetrical udder syndrome in dairy cows [letter] Jones TO. **Vet Rec** 1988 Aug 20;123(8):211–2

ANALYSIS

Vasopressin and oxytocin receptors on plasma membranes from rat mammary gland. Demonstration of vasopressin receptors by stimulation of inositol phosphate formation, and oxytocin receptors by binding of a specific 125I–labeled oxytocin antagonist, d(CH2)5(1)[Tyr(Me)2, Thr4,Tyr–NH2(9)]OVT. Soloff MS, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):152–62

Monoclonal antibody detection of prolactin–binding subunits in the rabbit mammary gland. Murakami H, et al. **Biochem J** 1988 Dec 15;256(3):917–22

Identification of glucose transporters in plasma membrane and Golgi vesicle fractions prepared from lactating rat mammary gland. Madon RJ, et al. **Biochem Soc Trans** 1989 Jun;17(3):450–1

Oestrogen (ER) and progestin receptors (PR) in mammary tissue of the female dog: different receptor profile in non–malignant and malignant states. Rutteman GR, et al. **Br J Cancer** 1988 Nov;58(5):594–9

Quantitation of calmodulin in the mammary gland of the lactating sow. Alston–Mills B, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):79–83

Cell–surface heparan sulfate and heparan–sulfate/chondroitin–sulfate hybrid proteoglycans of mouse mammary epithelial cells. David G, et al. **Eur J Biochem** 1989 Jan 2;178(3):609–17

Effect of a mammary–derived growth inhibitor on the expression of the oncogenes c–fos, c–myc and c–ras. Lehmann W, et al. **FEBS Lett** 1989 Feb 13;244(1):185–7

A polypeptide growth inhibitor isolated from lactating bovine mammary gland (MDGI) is a lipid–carrying protein. Böhmer FD, et al. **J Cell Biochem** 1988 Nov;38(3):199–204

A mammary–derived growth inhibitor (MDGI) related 70 kDa antigen identified in nuclei of mammary epithelial cells. Müller T, et al. **J Cell Physiol** 1989 Feb;138(2):415–23

Localization of alpha–casein gene transcription in sections of epoxy resin–embedded mouse mammary tissues by in situ hybridization. Liscia DS, et al. **J Histochem Cytochem** 1988 Dec;36(12):1503–10

Isolation of a mycotoxin (gliotoxin) from a bovine udder infected with Aspergillus fumigatus. Bauer J, et al. **J Med Vet Mycol** 1989;27(1):45–50

Glucocorticoid receptor from lactating goat mammary tissue comparison of native and activated forms in a cell free system. Hutchens TW, et al. **J Steroid Biochem** 1989 May; 32(5):651–68

Mammary gland 1,25–dihydroxyvitamin D3 receptor content during pregnancy and lactation. Colston KW, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):15–22

Identification and sequence analysis of a second form of prolactin receptor by molecular cloning of complementary DNA from rabbit mammary gland. Edery M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2112–6

[Immunofluorescence location using monoclonal antibodies of prolactin receptors in mammary epithelial cells of lactating rabbits] Seddiki T, et al. **C R Acad Sci [III]** 1988; 307(7):427–32 (Eng. Abstr.) **(Fre)**

[Comparative evaluation of chemical methods for determining diethylstilbestrol in tissues of animal origin] Perevoshchikova KA, et al. **Vopr Med Khim** 1971 Jul–Aug; 17(4):439–43 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Histological properties and biological significance of pouch in red kangaroo, Macropus rufus. Kubota K, et al. **Anat Anz** 1989;168(2):169–79

Studies on quantitative morphology. XIII. Heterogeneity in the mammary gland of rats. Löw O, et al. **Exp Pathol** 1988; 34(2):105–13

BLOOD SUPPLY

Changes in density and architecture of microvessels of the rat mammary gland during pregnancy and lactation. Yasugi T, et al. **Arch Histol Cytol** 1989 May;52(2):115–22

Polymyxin B diminishes blood flow to brown adipose tissue and lactating mammary gland in the rat. Possible mechanism of its action to decrease the stimulation of lipogenesis on refeeding. Tedstone AE, et al. **Biochem J** 1989 Jul 15;261(2):445–50

Evaluation of mammary blood flow measurements in lactating goats using the ultrasound Doppler principle. Christensen K, et al. **Comp Biochem Physiol [A]** 1989; 92(3):385–92

Mammary blood flow and cardiac output during initiated involution of the mammary gland in the rabbit. Jones CS, et al. **Comp Biochem Physiol [A]** 1988;91(1):21–5

Measuring bovine mammary gland blood flow using a transit time ultrasonic flow probe. Gorewit RC, et al. **J Dairy Sci** 1989 Jul;72(7):1918–28

Changes in venous size in mouse mammary glands from virgin through pregnancy, lactation, and post–weaning. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1262–3

CYTOLOGY

Modulation in the expression of murine mammary tumor virus, ras proto–oncogene, and of alveolar hyperplasia by fatty acids in mouse mammary explant cultures. Telang NT, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):971–6

TGF–beta 1–induced inhibition of mouse mammary ductal growth: developmental specificity and characterization. Daniel CW, et al. **Dev Biol** 1989 Sep;135(1):20–30

Growth factor control of myoepithelial–cell differentiation in cultures of human mammary gland. Petersen OW, et al. **Differentiation** 1988 Dec;39(3):197–215

Differentiation of mammary stem cells in vivo and in vitro. Barraclough R, et al. **Environ Health Perspect** 1989 Mar; 80:39–48 (90 ref.)

Regulation of functional cytodifferentiation and histogenesis in mammary epithelial cells: role of the extracellular matrix. Bissell MJ, et al. **Environ Health Perspect** 1989 Mar; 80:61–70 (72 ref.)

Regulation of mammary differentiation by the extracellular matrix. Blum JL, et al. **Environ Health Perspect** 1989 Mar; 80:71–83 (122 ref.)

Growth control and differentiation in mammary epithelial cells. Borellini F, et al. **Environ Health Perspect** 1989 Mar; 80:85–99 (185 ref.)

cAMP levels in proliferating rat mammary epithelial cells in vitro and in vivo. Ethier SP, et al. **Exp Cell Res** 1989 Jun;182(2):653–8

Growth of epithelium from a preneoplastic mammary outgrowth in response to mammary adipose tissue. Beck JC, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):409–18

Clonal populations of the mouse mammary cell line, COMMA–D, which retain capability of morphogenesis in vivo. Danielson KG, et al. **In Vitro Cell Dev Biol** 1989 Jun;25(6):535–43

New mammary epithelial and fibroblastic cell clones in coculture form structures competent to differentiate functionally. Reichmann E, et al. **J Cell Biol** 1989 Mar; 108(3):1127–38

Morphology of goat milk–derived mammary epithelial cells cultured in collagen gel. Kawano A, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1252–8

Culture conditions and cell morphology of goat milk–derived mammary epithelial cells in plate culture. Tateyama S, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1192–9

Phospholipids containing polyunsaturated fatty acyl groups are mitogenic for normal mouse mammary epithelial cells in serum–free primary cell culture. Imagawa W, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4122–6

Constraints on frequent or continuous lactation. Knight CH. **Proc Nutr Soc** 1989 Jan;48(1):45–51 (30 ref.)

Recent data on the structure of rabbit milk protein genes and on the mechanism of the hormonal control of their expression. Devinoy E, et al. **Reprod Nutr Dev** 1988; 28(4B):1145–64

Primary culture of bovine mammary acini on a collagen matrix. Baumrucker CR, et al. **Tissue Cell** 1988; 20(4):541–54

Lymphocyte recirculation in cattle: patterns of localization by mammary and mesenteric lymph node lymphocytes. Harp JA, et al. **Vet Immunol Immunopathol** 1988 Dec; 20(1):31–9

DRUG EFFECTS

17–beta–estradiol treatment maintains differentiative potential of virgin mouse mammary gland in culture and its responsiveness to insulin. Komura H, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):543–8

A morphometric study of the effects of ethanol consumption on lactating mammary glands of rats. Steven WM, et al. **Alcoholism (NY)** 1989 Apr;13(2):209–12

Altered ultrastructure of lactating rat mammary epithelial cells induced by chronic ethanol ingestion. Vilaró S, et al. **Alcoholism (NY)** 1989 Feb;13(1):128–36

Insulin action on the lactating–rat mammary gland: intracellular glucose and its phosphorylation [letter] Kuhn NJ. **Biochem J** 1989 Feb 1;257(3):933–4

The effects of concanavalin A on milk secretion and mammary metabolism in the goat. Faulkner A, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):284–8

32P-postlabeling analysis of 1-nitropyrene-DNA adducts in female Sprague-Dawley rats. Roy AK, et al. **Carcinogenesis** 1989 Jan;10(1):195-8

Altered structure of the hybrid cell surface proteoglycan of mammary epithelial cells in response to transforming growth factor-beta. Rasmussen S, et al. **J Cell Biol** 1988 Nov;107(5):1959-67

Effect of calcium on oxytocin-induced contraction of mammary gland myoepithelium as visualized by NBD-phallacidin. Moore DM, et al. **J Cell Sci** 1987 Dec; 88 (Pt 5):563-9

Cardiovascular responses and mammary substrate uptake in Jersey cows treated with pituitary-derived growth hormone during late lactation. Fullerton FM, et al. **J Dairy Res** 1989 Feb;56(1):27-35

Basic fibroblast growth factor stimulates the growth and inhibits casein accumulation in mouse mammary epithelial cells in vitro. Levay-Young BK, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):327-36

The actions of forskolin, cholera toxin and iloprost on casein secretion by lactating doe mammary glands. Ollivier-Bousquet M. **Mol Cell Endocrinol** 1989 Aug; 65(1-2):27-33

Effects of enkephalin on lactating rat mammary gland: in vitro studies. Conde E, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):353-63

Distinguishing features of cytotoxic and pharmacological effects of selenite in murine mammary epithelial cells in vitro. Morrison DG, et al. **Toxicol Lett** 1988 Dec; 44(3):307-14

[Boiled maltum water decreased milk secretion of the parturient rat mammary gland] Wang TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):485-92 (Eng. Abstr.) (Chi)

ENZYMOLOGY

Plasminogen activation in the bovine udder. Hedkvist L, et al. **Acta Vet Scand** 1989;30(1):103-5

Membrane-associated phosphatidylinositol kinase of R3230AC mammary tumors and normal mammary glands and effects of insulin on tumor enzyme activity. Narayanan U, et al. **Cancer Res** 1988 Dec 1;48(23):6727-32

Type I, 5'-monodeiodinase activity in the lactating mammary gland. Aceves C, et al. **Endocrinology** 1989 Jun; 124(6):2818-20

Substrate-specificity determinants for a membrane-bound casein kinase of lactating mammary gland. A study with synthetic peptides. Meggio F, et al. **Eur J Biochem** 1988 Nov 1;177(2):281-4

Two physiological substrate-specific casein kinases are present in the bovine mammary gland. Brooks CL. **FEBS Lett** 1989 Jan 30;243(2):385-8

Studies on the regulation of enzymes related to fatty acid synthesis in goat mammary gland using explant culture system. Jindal HK, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):428-33

The difference between cytosol and membrane growth-related protein kinase activities in lactating mouse mammary gland. Mitev VI, et al. **Int J Biochem** 1989; 21(3):337-40

Plasminogen activators in the mouse mammary gland. Decreased expression during lactation. Busso N, et al. **J Biol Chem** 1989 May 5;264(13):7455-7

Purification and characterization of UDP-N-acetyl-D-glucosamine:dolichol phosphate N-acetyl-D-glucosamine-1-phosphate transferase involved in the biosynthesis of asparagine-linked glycoproteins in the mammary gland. Shailubhai K, et al. **J Biol Chem** 1988 Nov 5;263(31):15964-72

Phorbol diesters regulate expression of the membrane neutral metalloendopeptidase (EC 3.4.24.11) in rabbit synovial fibroblasts and mammary epithelial cells. Werb Z, et al. **J Biol Chem** 1989 Jun 5;264(16):9111-3

Distribution of lysosomal enzymes within the non-secretory epithelium of the bovine mammary gland. Mattila T, et al. **J Dairy Res** 1988 Aug;55(3):339-44

Paracellular leakage of lipoprotein lipase across the mammary epithelium of the goat. Azzara CD, et al. **J Dairy Sci** 1989 May;72(5):1159-68

Somatotrophin increases thyroxine-5'-monodeiodinase activity in lactating mammary tissue of the cow. Capuco AV, et al. **J Endocrinol** 1989 May;121(2):205-11

Dietary protein enhanced mammary ornithine decarboxylase activity and tumorigenesis in rats. Hawrylewicz EJ, et al. **J Nutr** 1989 Apr;119(4):547-52

Rat mammary gland fatty acid synthase: localization of the constituent domains and two functional polyadenylation/termination signals in the cDNA. Schweizer M, et al. **Nucleic Acids Res** 1989 Jan 25; 17(2):567-86

Hormonal modulation of the rat mammary gland gamma-glutamyltranspeptidase. Ríos M, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):651-4

GROWTH & DEVELOPMENT

Developmental regulation of murine mammary-gland 90 kDa heat-shock proteins. Catelli MG, et al. **Biochem J** 1989 Mar 15;258(3):895-901

Transferrin receptor and ferritin levels during murine mammary gland development. Schulman HM, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):1-6

Mammary gland development and alpha-lactalbumin production in hypophysectomized, pregnant mice. Thordarson G, et al. **Biol Reprod** 1989 Mar;40(3):517-24

Progesterone alone is responsible for stimulation of the growth of ducts and of mammary alveolar structures in mice. Skarda J, et al. **Endocrinol Exp** 1989 Mar;23(1):17-28

Lactotransferrin gene expression in the mouse uterus and mammary gland. Teng CT, et al. **Endocrinology** 1989 Feb; 124(2):992-9

A partial characterization of uterine and mammary growth stimulatory activity from placenta. Grissom FE, et al. **Growth Dev Aging** 1988 Spring;52(1):23-35

Association of prolactin and insulin receptors with mammogenesis and lobulo-alveolar formation in pregnant ewes. Smith JJ, et al. **Int J Biochem** 1989;21(1):73-81

Effects of creep feeding, zeranol implants and breed type on beef production: II. Reproductive development and fat deposition in heifers. Prichard DL, et al. **J Anim Sci** 1989 Mar;67(3):617-23

Regulation of milk protein and basement membrane gene expression: the influence of the extracellular matrix. Aggeler J, et al. **J Dairy Sci** 1988 Oct;71(10):2830-42 (49 ref.)

Estrogen and progesterone augment growth responsiveness of mammary tissue to cholera toxin. Sheffield LG. **J Dairy Sci** 1989 Apr;72(4):892-9

Organization and growth of mammary epithelia in the mammary gland fat pad. Sheffield LG. **J Dairy Sci** 1988 Oct;71(10):2855-74 (200 ref.)

Mammary gland growth and response to hormones in mastomys compared with mice. Nagasawa H, et al. **Lab Anim Sci** 1989 Jul;39(4):313-7

The effect of dietary fat on the mammary gland in immature mice. Nishinakagawa H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):447-9

Mammary development. Forsyth IA. **Proc Nutr Soc** 1989 Jan;48(1):17-22 (61 ref.)

IMMUNOLOGY

Studies of defence mechanisms and inflammatory reactions in the bovine teat using a new experimental method. Persson K, et al. **Acta Vet Scand** 1988;29(3-4):519-20

Macrophage function in mammary glands of Brucella abortus-infected cows and cows that resisted infection after inoculation of Brucella abortus. Harmon BG, et al. **Am J Vet Res** 1989 Apr;50(4):459-65

Expression of epithelial-like markers and class I major histocompatibility antigens by a murine carcinoma growing in the mammary gland and in metastases: orthotopic site effects. Elliott BE, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7237-45

Inhibition of bovine peripheral blood mononuclear cell blastogenesis by fractionated mammary secretion. Torre PM, et al. **Comp Biochem Physiol [B]** 1989;92(1):157-65

Subpopulations of lymphocytes in the mammary gland of sheep. Lee CS, et al. **Immunology** 1989 Mar;66(3):388-93

Local immunostimulation of the bovine mammary gland with interleukin-2. Nickerson SC, et al. **J Dairy Sci** 1989 Jul; 72(7):1764-73

Immunohistochemical analysis of the stage-specific expression of Ia antigens in the rat mammary gland during pregnancy and lactation. Kumar SN, et al. **J Reprod Immunol** 1988 Jul;13(2):159-73

Origin of antibody-containing cells in the ovine mammary gland following intraperitoneal and intramammary immunisation. Sheldrake RF, et al. **Res Vet Sci** 1988 Sep; 45(2):156-9

[Tissue-specific mammary gland antigen identified by monoclonal antibodies] Egorova SG, et al. **Ontogenez** 1989 Mar-Apr;20(2):209-15 (Eng. Abstr.) (Rus)

INJURIES

[A randomized field study of therapy of non-perforating injury of the udder] Kremer WD, et al. **Tijdschr Diergeneeskd** 1989 May 15;114(10):566-9 (Eng. Abstr.) (Dut)

METABOLISM

Calcitonin-like immunoreactivity and calcitonin gene expression in the placenta and in the mammary gland of the rat. Jousset V, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):443-51

Cyclic nucleotides and polyamines in prolactin stimulation of lactose biosynthesis. Oppat CA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E318-22

Effect of prolactin on enzymes of lipid biosynthesis in mammary gland explants. Waters SB, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E567-71

Docosahexaenoic acid is neither synthesized nor retroconverted by the normal and tumor mouse mammary epithelial cells in primary culture. Bandyopadhyay GK, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):730-6

The lipid composition of plasma membrane from goat mammary gland. Sharma A, et al. **Biochem Cell Biol** 1988 Dec;66(12):1355-9

Regulation by insulin of glucose metabolism in mammary gland of anaesthetized lactating rats. Stimulation of phosphofructokinase-1 by fructose 2,6-bisphosphate and activation of acetyl-CoA carboxylase. Burnol AF, et al. **Biochem J** 1988 Aug 15;254(1):11-4

Uptake of choline by rat mammary-gland epithelial cells. Chao CK, et al. **Biochem J** 1988 Aug 15;254(1):33-8

Metabolism of the chemopreventive retinoid N-(4-hydroxyphenyl)retinamide by mammary gland in organ culture. Mehta RG, et al. **Biochem J** 1988 Dec 1; 256(2):579-84

Re-examination of the putative roles of insulin and prolactin in the regulation of lipid deposition and lipogenesis in vivo in mammary gland and white and brown adipose tissue of lactating rats and litter-removed rats. Oller do Nascimento CM, et al. **Biochem J** 1989 Feb 15;258(1):273-8

Evidence for the involvement of a gastrointestinal peptide in the regulation of glucose uptake in the mammary gland of the lactating rat. Page T. **Biochem J** 1989 Mar 15; 258(3):639-43

Rat and human mammary tissue can synthesize choline moiety via the methylation of phosphatidylethanolamine. Yang EK, et al. **Biochem J** 1988 Dec 15;256(3):821-8

Regulation of intracellular casein degradation by secreted milk proteins. Wilde CJ, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):315-9

Fate of 7,12-dimethylbenz(a)anthracene in the mouse mammary gland during initiation and promotion stages of carcinogenesis in vitro. Das SK, et al. **Cancer Res** 1989 Feb 15;49(4):920-4

In vitro and in vivo effects of sodium selenite on 7,12-dimethylbenz[a]anthracene--DNA adduct formation in isolated rat mammary epithelial cells. Ejadi S, et al. **Carcinogenesis** 1989 May;10(5):823-6

Comparison of 7,12-dimethylbenz[a]anthracene metabolism and DNA binding in mammary epithelial cells from three rat strains with differing susceptibilities to mammary carcinogenesis. Moore CJ, et al. **Carcinogenesis** 1988 Nov; 9(11):2099-102

Synthesis of calelectrins and calpactin I during cytochalasin mediated cell spreading inhibition. Hom YK, et al. **Cell Calcium** 1989 Apr;10(3):135-44

A study of sulphate transport by lactating rat mammary tissue slices: evidence for anion exchange. Shennan DB. **Comp Biochem Physiol [A]** 1989;92(1):145-50

Alterations in estrogen receptor isoforms in the mammary gland and uterus of the rat during differentiation. Hyder SM, et al. **Comp Biochem Physiol [B]** 1988;91(3):517-23

Effect of bovine growth hormone on incorporation of [14C]acetate into lipids by co-cultures of bovine mammary, liver, and adipose tissue explants. Fekry AE, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):87-94

Spermidine is necessary for, but not the only mediator of, linoleic acid-stimulated alpha-casein accumulation in mouse mammary epithelial cells. Levay-Young BK, et al. **Endocrinology** 1989 Sep;125(3):1513-8

Relaxin detected by immunocytochemistry and northern analysis in the mammary gland of the guinea pig. Peaker M, et al. **Endocrinology** 1989 Aug;125(2):693-8

Thyroid hormone regulation of alpha-lactalbumin: differential glycosylation and messenger ribonucleic acid synthesis in mouse mammary glands. Ziska SE, et al. **Endocrinology** 1988 Nov;123(5):2242-8

Transformation of mouse mammary epithelial cells with the Ha-ras but not with the neu oncogene results in a gene dosage-dependent increase in transforming growth factor-alpha production. Ciardiello F, et al. **FEBS Lett** 1989 Jul 3;250(2):474-8

Photoaffinity labelling of the oxytocin receptor in plasma membranes from rat mammary gland. Müller M, et al. **FEBS Lett** 1989 Jan 2;242(2):333-6

p-nitrophenyl-beta-D-xyloside modulates proteoglycan synthesis and secretory differentiation in mouse mammary epithelial cell cultures. Parry G, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1217-22

Studies on the biosynthesis and regulation of asparagine-linked glycoproteins in the lactating mammary gland. Vijay IK, et al. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1-2):127-32

Quantitation of prolactin-dependent responses in porcine mammary explants. Jerry DJ, et al. **J Anim Sci** 1989 Apr; 67(4):1013-9

Relationships among prolactin binding, prolactin concentrations in plasma and metabolic activity of the porcine mammary gland. Plaut KI, et al. **J Anim Sci** 1989 Jun;67(6):1509-19

Mechanism of phosphorylation in the lumen of the Golgi apparatus. Translocation of adenosine 5'-triphosphate into Golgi vesicles from rat liver and mammary gland. Capasso JM, et al. **J Biol Chem** 1989 Mar 25;264(9):5233-40

Casein accumulation in distended rough endoplasmic reticulum of collagen gel-cultivated mouse mammary epithelia. Hurley D, et al. **J Cell Physiol** 1989 Oct; 141(1):135-41

Effect of different oxygen concentrations in the gas phase on biochemical activities of goat mammary tissue in organ culture. Skarda J, et al. **J Dairy Res** 1989 Feb;56(1):1-5

Metabolic adaptations in goat mammary tissue during long-term incomplete milking. Wilde CJ, et al. **J Dairy Res** 1989 Feb;56(1):7-15

Casein gene expression in bovine mammary gland. Choi YJ, et al. **J Dairy Sci** 1988 Nov;71(11):2898-903

Effect of bovine somatotropin on the distribution of immunoreactive insulin-like growth factor-I in lactating bovine mammary tissue. Glimm DR, et al. **J Dairy Sci** 1988 Nov;71(11):2923-35

Assessment of lipoprotein activators of skim milk lipoprotein lipase and the relationship between lipoprotein lipase activity and milk fat synthesis. Grummer RR, et al. **J Dairy Sci** 1989 Jun;72(6):1451–8

Characteristics of mammary mitochondria in lines of mice genetically divergent for milk production. Lindberg GL, et al. **J Dairy Sci** 1989 May;72(5):1175–81

Effect of exogenous bovine somatotropin on mammary lipid metabolism and milk yield in lactating dairy cows. Lough DS, et al. **J Dairy Sci** 1989 Jun;72(6):1469–76

Influence of breed and hormones on production of milk proteins by mammary explants from prepubertal heifers. McFadden TB, et al. **J Dairy Sci** 1989 Jul;72(7):1754–63

Milk protein secretion by explants of prepubertal bull mammary tissue: breed differences. McFadden TB, et al. **J Dairy Sci** 1988 Nov;71(11):2904–14

Effect of prolactin on casein and fat synthesis and casein secretion in explants of bovine mammary tissue pretreated in athymic nude mice. Shamay A, et al. **J Dairy Sci** 1989 May;72(5):1169–74

Influence of cholera toxin (an adenylate cyclase activator) on deoxyribonucleic acid synthesis of bovine mammary tissue in vitro and in athymic nude mice. Sheffield LG. **J Dairy Sci** 1989 Jan;72(1):41–8

Metabolic adaptations in mammary gland during the declining phase of lactation. Wilde CJ, et al. **J Dairy Sci** 1989 Jun;72(6):1679–92 (44 ref.)

Comparison of some biological effects of epidermal growth factor and commercial serum albumin on the induction of alpha-lactalbumin in rat and rabbit mammary explants. Nicholas KR, et al. **J Endocrinol** 1988 Oct;119(1):133–9

Determination of diphenhydramine in rat milk and plasma and its effects on milk composition and mammary gland nucleic acids. Dostal LA, et al. **J Pharm Sci** 1989 May; 78(5):423–6

Inhibition of casein synthesis by progestagens in vitro: modulation in relation to concentration of hormones that synergize with prolactin. Jahn GA, et al. **J Steroid Biochem** 1989 Mar;32(3):373–9

Comparison of insulin-like growth factor 1 and insulin effects on prolactin-induced lactogenesis in the rabbit mammary gland in vitro. Duclos M, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):129–34

Alpha-lactalbumin production by rat mammary gland: prepartum emergence of resistance to glucocorticoids and progestins. Quirk SJ, et al. **Mol Cell Endocrinol** 1988 Aug; 58(2–3):183–9

Transforming growth factor alpha production and epidermal growth factor receptor expression in normal and oncogene transformed human mammary epithelial cells. Valverius EM, et al. **Mol Endocrinol** 1989 Jan;3(1):203–14

Single calcium-activated potassium channel in cultured mammary epithelial cells. Furuya K, et al. **Pflugers Arch** 1989 Jun;414(2):118–24

The role of thyroid hormones in the control of beta-adrenergic receptors in rat mammary gland. Depix M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):79–86

Expression of a calcium-mobilizing parathyroid hormone-like peptide in lactating mammary tissue. Thiede MA, et al. **Science** 1988 Oct 14;242(4876):278–80

[Change in the level of casein mRNA in the mammary gland of rats and goats during lactation] Klenova EM, et al. **Biokhimiia** 1988 Nov;53(11):1925–31 (Eng. Abstr.) **(Rus)**

[The lysosomal pathway of prolactin degradation in the mammary gland: kinetics of prolactin hydrolysis by cathepsin D and the peptides formed thereby] Marinchenko GV, et al. **Biokhimiia** 1989 Apr;54(4):629–39 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Duration of experimentally induced Corynebacterium bovis colonization of bovine mammary glands during the lactating, nonlactating, and peripartum periods. Sordillo LM, et al. **Am J Vet Res** 1989 Feb;50(2):267–70

The role of sex steroids in the expression of MMTV in the normal mouse mammary gland. Bradham BM, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1020–5

Non-clinical intramammary infection in lactating ewes and its association with clinical mastitis. Bor A, et al. **Br Vet J** 1989 Mar-Apr;145(2):178–84

Intervention of T-cells in transportation of mouse mammary tumor virus (milk factor) to mammary gland cells in vivo. Tsubura A, et al. **Cancer Res** 1988 Nov 15;48(22):6555–9

Roles of alpha-toxin and beta-toxin in virulence of Staphylococcus aureus for the mouse mammary gland. Bramley AJ, et al. **Infect Immun** 1989 Aug;57(8):2489–94

Evaluation of the Minitek Gram-Positive Set for identification of streptococci isolated from bovine mammary glands. Watts JL. **J Clin Microbiol** 1989 May; 27(5):1008–10

Efficacy of .18% iodine teat dip against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1989 Apr;72(4):1063–6

Prolonged in vitro exposure of Staphylococcus aureus to germicidal teat dips. Hogan JS, et al. **J Dairy Sci** 1989 Apr;72(4):1052–6

Premilking udder hygiene. Pankey JW. **J Dairy Sci** 1989 May;72(5):1308–12

Leukocytic infiltration of bovine mammary parenchymal tissue in response to Corynebacterium bovis colonization. Sordillo LM, et al. **J Dairy Sci** 1989 Apr;72(4):1045–51

The effect of post-milking teat dipping on teat canal infections. Du Preez JH. **J S Afr Vet Assoc** 1987 Sep; 58(3):119–23

Prolactin regulation of mouse mammary tumor virus (MMTV) expression in normal mouse mammary epithelium. Muñoz B, et al. **Mol Cell Endocrinol** 1989 Mar; 62(1):23–9

Prevalence of staphylococcal species in four dairy herds. Watts JL, et al. **Res Vet Sci** 1989 Jan;46(1):1–4

Teat skin normal flora and colonization with mastitis pathogen inhibitors. Woodward WD, et al. **Vet Microbiol** 1988 Aug;17(4):357–65

[Sensitivity pattern of Staphylococcus aureus isolated from quarter milk from cattle] Vecht U, et al. **Tijdschr Diergeneeskd** 1989 Mar 1;114(5):260–9 (Eng. Abstr.) **(Dut)**

PARASITOLOGY

Transmammary transmission of Strongyloides ratti. Kawanabe M, et al. **Parasitol Res** 1988;75(1):50–6

PATHOLOGY

Variations in measures of udder health within a short period of time. I. The dynamic characteristics in diagnostics of subclinical mastitis based on cytological and bacteriological parameters. Jensen NE, et al. **Acta Vet Scand** 1988; 29(3–4):421–30

Cell death by apoptosis during involution of the lactating breast in mice and rats. Walker NI, et al. **Am J Anat** 1989 May;185(1):19–32

Effect of megestrol acetate or melengestrol acetate on preneoplastic and neoplastic mammary growth in mice. Nagasawa H, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1399–403

Pathological changes in the mammary gland and biochemical changes in milk of the goat following oral dosing with leaf of the avocado (Persea americana). Craigmill AL, et al. **Aust Vet J** 1989 Jul;66(7):206–11

Effect of medroxyprogesterone acetate on the response of the rat mammary gland to carcinogenesis. Russo IH, et al. **Br J Cancer** 1989 Feb;59(2):210–6

Expression of the int-1 gene in transgenic mice is associated with mammary gland hyperplasia and adenocarcinomas in male and female mice. Tsukamoto AS, et al. **Cell** 1988 Nov 18;55(4):619–25

Ha-ras and c-myc oncogene expression interferes with morphological and functional differentiation of mammary epithelial cells in single and double transgenic mice. Andres AC, et al. **Genes Dev** 1988 Nov;2(11):1486–95

Changes in in vitro growth behaviour of the mammary epithelial cell line NMuMG caused by the v-fos oncogene. Bradbury JM, et al. **Int J Cancer** 1988 Dec 15;42(6):923–9

Primary teat neoplasia in two yearling heifers. Ford TS, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):238–9

Participation of myofibroblasts in feline mammary carcinoma. Tateyama S, et al. **Nippon Juigaku Zasshi** 1988 Oct; 50(5):1048–54

Harvey-ras mediated neoplastic development in the mouse mammary gland. Strange R, et al. **Oncogene** 1989 Mar; 4(3):309–15

Pathological changes following implantation of intramammary devices (IMD) and immunological mediator release by cells on recovered IMDs. Collins RA, et al. **Res Vet Sci** 1989 Mar;46(2):253–7

Induction by endotoxin of the inflammatory response in the lactating and dry bovine mammary gland. Mattila T, et al. **Res Vet Sci** 1989 Mar;46(2):238–40

Effects of Staphylococcus aureus mastitis on bovine mammary gland plasma cell populations and immunoglobin concentrations in milk. Doymaz MZ, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):87–93

Morphologic changes in the mammary gland of megestrol acetate-treated and untreated cats: a retrospective study. Hayden DW, et al. **Vet Pathol** 1989 Mar;26(2):104–13

Staphylococcal dermatitis involving the teats of lactating ewes. Gunning RF, et al. **Vet Rec** 1989 Feb 11;124(6):146–7

[Frequency and diagnosis of chronic changes in the mammary glands of sows (abattoir findings)] Bollwahn W, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1; 102(7):223–7 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Quantitative estimation of residual milk in bovine udders--a methodological study. Isaksson A, et al. **Acta Vet Scand** 1988;29(2):259–62

Response of different mammary epithelial cell lines to a mammary derived growth inhibitor (MDGI). Lehmann W, et al. **Biomed Biochim Acta** 1989;48(1):143–51

Teat stimulation-induced release of prolactin and basal concentrations of prolactin and growth hormone in pregnant dairy and beef heifers. Wickramatilake GN, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):133–9

Developmental regulation of calcium-binding proteins (calelectrins and calpactin I) in mammary glands. Lozano JJ, et al. **J Cell Physiol** 1989 Mar;138(3):503–10

Effect of hydraulic milking on milking performance, teat condition and lipolysis. Grindal RJ, et al. **J Dairy Res** 1989 Feb;56(1):45–53

Short-term effects of frequent milking of dairy cows. van der Iest R, et al. **J Dairy Res** 1989 Aug;56(4):587–92

Survey of milking management practices on large dairies and their relationship to udder health and production variables. Goodger WJ, et al. **J Dairy Sci** 1988 Sep;71(9):2535–42

Cell to cell interactions and normal mammary gland function. Haslam SZ. **J Dairy Sci** 1988 Oct;71(10):2843–54

Mammary gland function during involution. Hurley WL. **J Dairy Sci** 1989 Jun;72(6):1637–46 (85 ref.)

Immunological aspects of mammary involution. Nickerson SC. **J Dairy Sci** 1989 Jun;72(6):1665–78 (63 ref.)

Udder health in the periparturient period. Oliver SP, et al. **J Dairy Sci** 1988 Sep;71(9):2584–606 (166 ref.)

Approaches to the manipulation of mammary involution. Oliver SP, et al. **J Dairy Sci** 1989 Jun;72(6):1647–64 (157 ref.)

Characteristics of milk ejection, associated intramammary pressure changes and oxytocin release in the mare. Ellendorff F, et al. **J Endocrinol** 1988 Nov;119(2):219–27

Effect of ionic composition of milk on transepithelial potential in the goat mammary gland. Blatchford DR, et al. **J Physiol (Lond)** 1988 Aug;402:533–41

Growth factors in mammary gland function. Forsyth IA. **J Reprod Fertil** 1989 Mar;85(2):759–70 (110 ref.)

Role of protein kinase C in the prolactin-induced responses in mouse mammary gland explants. Waters SB, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):159–66

[The effect of udder nerve blocke on the temperature of the udder skin] Eichel H, et al. **Arch Exp Veterinarmed** 1988 May;42(3):378–82 (Eng. Abstr.) **(Ger)**

[New aspects of the physiology of milking with special reference to the teat smooth musculature in teat rubber-free extraction] Mayntz M, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):39–50 (Eng. Abstr.) **(Ger)**

SECRETION

Phagocytosis by somatic cells from dry cow secretion. Bassalik-Chabielska L, et al. **Acta Microbiol Pol** 1988; 37(1):73–82

Effects of intracisternal bead devices on lacteal secretion components, plaque formation, and bacterial infection during the nonlactating period. Nickerson SC, et al. **Am J Vet Res** 1988 Aug;49(8):1205–9

Evaluation of three strip tests for measuring electrolytes in mares' pre-partum mammary secretions and for predicting parturition. Ousey JC, et al. **Equine Vet J** 1989 May; 21(3):196–200

Release of cholesteryl esters by the mammary gland of the pre-partum cow. Thompson GE. **J Dairy Res** 1989 May; 56(2):161–5

Enzyme-linked immunosorbent assays of bovine lactoferrin and a 39-kilodalton protein found in mammary secretions during involution. Rejman JJ, et al. **J Dairy Sci** 1989 Feb; 72(2):555–60

Suppression of mitogenic response of peripheral blood mononuclear cells by bovine mammary secretions. Torre PM, et al. **J Dairy Sci** 1989 Jan;72(1):219–27

[Ionic dependence of hyperpolarized changes of the membrane potential of breast secretory cells] Tolkunov IuA. **Fiziol Zh SSSR** 1989 Apr;75(4):567–74 (Eng. Abstr.) **(Rus)**

SURGERY

Treatment of teat obstruction in a cow by transfer of oral mucosa and temporary implantation of an intraluminal tube. Bristol DG. **J Am Vet Med Assoc** 1989 Aug 15;195(4):492–4

Surgical treatment of accessory teat and gland cistern complexes in three cows. Shappell KK, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):623–6

Effectiveness of prophylactic mastectomy in the prevention of breast tumors in C3H mice. Nelson H, et al. **Plast Reconstr Surg** 1989 Apr;83(4):662–9

TRANSPLANTATION

Influence of epidermal growth factor on growth of bovine mammary tissue in athymic nude mice. Sheffield LG, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):141–7

ULTRASTRUCTURE

Isolation of plasma membranes from mammary gland by two-phase polymer partitioning. Keenan TW, et al. **Anal Biochem** 1989 Feb 15;177(1):194–8

Cilia on bovine mammary epithelium: ultrastructural observations. Nickerson SC. **Cell Tissue Res** 1989 Mar; 255(3):675–7

A morphologically distinct candidate for an epithelial stem cell in mouse mammary gland. Smith GH, et al. **J Cell Sci** 1988 May;90 (Pt 1):173–83

MAMMALS

Subclinical lumbar polyradiculopathy in aged domestic, laboratory, and exotic mammalian species--a light and selected electron microscopic study. Anderson WI, et al. **Cornell Vet** 1989 Oct;79(4):339–44

Pet-bird and exotic-pet owners and their use of veterinary services. Troutman CM. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1490–1

Structural studies on phosphorylated oligosaccharides derived from yeast mannan by 1H(31P) relayed spin-echo difference spectroscopy (RESED). de Waard P, et al. **J Biol Chem** 1989 Jul 25;264(21):12141–4

Mammalian bites. Galloway RE. **J Emerg Med** 1988 Jul-Aug; 6(4):325–31 (41 ref.)

Lagomorphs as sentinels for surveillance of borreliosis in the far western United States. Lane RS, et al. **J Wildl Dis** 1989 Apr;25(2):189–93

Biochemical and toxigenic characteristics of Aeromonas spp. isolated from diseased mammals, moribund and healthy fish. Lallier R, et al. **Vet Microbiol** 1988 Sep;18(1):63–71

Generalized AA–amyloidosis in two hares (Lepus europaeus) immunohistochemically identified using poly– and monoclonal antibodies. Geisel O, et al. **Vet Pathol** 1988 Sep;25(5):391–3

Pulmonary alveolar microlithiasis in Afghan pika (Ochotona rufescens rufescens). Madarame H, et al. **Vet Pathol** 1989 Jul;26(4):333–7

[Legal regulations and practical implementation of inspection of slaughter animals and their meat, concerning fur–bearing game] Bert F, et al. **Tierarztl Prax** 1988;16(3):219–26 (Eng. Abstr.) (Ger)

[Legal fundamentals and practical accomplishments of abattoir and meat research in mammalian game animals] Hadlok RM, et al. **Tierarztl Prax** 1988;16(4):343–50 (Eng. Abstr.) (Ger)

[A systemic model of reproductive death of mammalian cells. Postulates of the model and mathematical equations of survival] Obaturov GM. **Radiobiologiia** 1988 Sep–Oct; 28(5):640–3 (Eng. Abstr.) (Rus)

ABNORMALITIES

Myocardial bridges in animals. van Nie CJ, et al. **Anat Histol Embryol** 1989 Mar;18(1):45–51

ANATOMY & HISTOLOGY

Distribution of elastic system fibers in the peripheral nerves of mammals. Ferreira JM Jr, et al. **Acta Anat (Basel)** 1987; 130(2):168–73

Gross and microscopic anatomy of the kidney of the West Indian manatee, Trichechus manatus (Mammalia: Sirenia). Hill DA, et al. **Acta Anat (Basel)** 1989;135(1):53–6

Renal anatomy of the manatee, Trichechus manatus, Linnaeus. Maluf NS. **Am J Anat** 1989 Apr;184(4):269–86

A functional consequence of an ossified mandibular symphysis. Greaves WS. **Am J Phys Anthropol** 1988 Sep; 77(1):53–6

Size and shape of the cerebral cortex in mammals. II. The cortical volume. Hofman MA. **Brain Behav Evol** 1988; 32(1):17–26 (35 ref.)

Retinal projection to mammalian telencephalon. Cooper HM, et al. **Brain Res** 1989 Jan 16;477(1–2):350–7

Retinohypothalamic pathway: a breach in the law of Newton–Müller–Gudden? Magnin M, et al. **Brain Res** 1989 May 29;488(1–2):390–7

Muscle metabolic profiles and fiber–type composition in some marine mammals. Ponganis PJ, et al. **Comp Biochem Physiol [B]** 1978;59(2):99–102

Ultrastructural studies on the boundary tissue of the seminiferous tubules of different mammals. Cieciura L, et al. **Folia Histochem Cytobiol** 1988;26(3):171–6

The ventral metacarpo– and metatarso–phalangeal sesamoid bones: comparative anatomy and evolutionary aspects. Le Minor JM. **Gegenbaurs Morphol Jahrb** 1988;134(5):693–731

Astrocytes in the guinea pig, horse, and monkey retina: their occurrence coincides with the presence of blood vessels. Schnitzer J. **GLIA** 1988;1(1):74–89

Tension fibroblasts and the connective tissue matrix of the spiral ligament. Henson MM, et al. **Hear Res** 1988 Sep 15;35(2–3):237–58

Sensory and sympathetic innervation of the mammalian cornea. A retrograde tracing study. Marfurt CF, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):461–72

Muscle–spindle distribution in relation to the fibre–type composition of masseter in mammals. Rowlerson A, et al. **J Anat** 1988 Dec;161:37–60

Aggregations of granule cells in the basal forebrain (islands of Calleja): Golgi and cytoarchitectonic study in different mammals, including man. Meyer G, et al. **J Comp Neurol** 1989 Jun 15;284(3):405–28

Descending pathways to the spinal cord: a comparative study of 22 mammals. Nudo RJ, et al. **J Comp Neurol** 1988 Nov 1;277(1):53–79

Descending pathways to the spinal cord: II. Quantitative study of the tectospinal tract in 23 mammals. Nudo RJ, et al. **J Comp Neurol** 1989 Aug 1;286(1):96–119

Comparative neuroanatomical aspects of the salt and water balance in birds and mammals. Ramieri G, et al. **J Endocrinol Invest** 1989 Jan;12(1):59–74 (154 ref.)

Ribbon synapses of the mammalian retina contain two types of synaptic bodies—ribbons and spheres. Vollrath L, et al. **J Neurocytol** 1989 Feb;18(1):115–20

Presence of filaments in the nonciliated bronchiolar epithelial (Clara) cell of mammalian lung. Sasaki J, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2–3):155–69

Modern mammal origins: evolutionary grades in the Early Cretaceous of North America. Jacobs LL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4992–5

Structure and functional anatomy of visceroreceptors in the mammalian respiratory system. von Düring M, et al. **Prog Brain Res** 1988;74:139–54 (44 ref.)

On the evolution and geometry of the brain in mammals. Hofman MA. **Prog Neurobiol** 1989;32(2):137–58 (125 ref.)

Basis of the structure and development of mammalian enamel as seen by scanning electron microscopy. Boyde A, et al. **Scanning Microsc** 1988 Sep;2(3):1479–90 (44 ref.)

Taxonomic differences in the scaling of brain on body weight among mammals. Pagel MD, et al. **Science** 1989 Jun 30; 244(4912):1589–93

Radiographic examination of eyes fixed in Zenker's solution. Davidson HJ, et al. **Vet Pathol** 1989 Jan;26(1):83–5

Mammalian renal modifications in dry environments. Mbassa GK. **Vet Res Commun** 1988;12(1):1–18 (69 ref.)

The argentophil reticular cells of the mammalian spleen. III. Histophysiology of the perifollicular region of mammalian spleen. Hadler WA, et al. **Z Mikrosk Anat Forsch** 1988; 102(6):913–34

[Comparative anatomy of the velopharyngeal complex in mammals—excluding primates (1)] Vergote T, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):19–24 (Eng. Abstr.) (Fre)

[Transformation of mitochondria in sebaceous gland cells of the hare Lepus timidus L.] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1469–71 (Rus)

[Theoretical and practical aspects of the classification of mammalian sweat glands] Sokolov VE, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):814–23 (47 ref.) (Rus)

BLOOD

The primary structure of the hemoglobin of the Brazilian manatee (Trichechus inunguis, Sirenia). Kleinschmidt T, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):507–12

Comparative studies on six blood serum glycosidases from several mammalian species. Garcia MV, et al. **Comp Biochem Physiol [B]** 1979;63(1):151–5

Comparative biochemistry of mammalian epididymal plasma. Jones R. **Comp Biochem Physiol [B]** 1978;61(3):365–70

Comparative studies on the glycoprotein composition of mammalian platelets. Nurden AT, et al. **Comp Biochem Physiol [B]** 1977;56(4):407–13

Evidence for the presence of alpha 1B–glycoprotein in mammalian sera: immunoblotting studies. Stratil A, et al. **Comp Biochem Physiol [B]** 1988;91(4):783–8

Phosphoribosylpyrophosphate in erythrocytes of ten mammalian species: concentration, synthesis and degradation. Tax WJ, et al. **Comp Biochem Physiol [B]** 1978;59(3):219–22

Use of various animal erythrocytes for in vitro cultivation of Plasmodium berghei. Ramaiya ML, et al. **Int J Parasitol** 1988 Jul;18(5):639–41

A blood capillaries–bridging cell type in adult mammalian brains. Leibnitz L, et al. **J Hirnforsch** 1988;29(4):367–75

Species variation in neutrophil biochemistry and function. Styrt B. **J Leukoc Biol** 1989 Jul;46(1):63–74 (143 ref.)

Genetic regulation of blood and tissue magnesium content in mammals. Henrotte JG. **Magnesium** 1988;7(5–6):306–14 (31 ref.)

Haemolytic effect of Pasteurella haemolytica on blood from young mammals. Smith GR, et al. **Res Vet Sci** 1988 Sep; 45(2):255

Species–specific hemolysis of erythrocytes by T–2 toxin. DeLoach JR, et al. **Toxicol Appl Pharmacol** 1989 Jan; 97(1):107–12

[Phylogenetic characteristics of the structure and function of polypeptide growth factors localized in the blood platelets of mammals] Stolka RS. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):373–9 (27 ref.) (Rus)

EMBRYOLOGY

Palate development. Ferguson MW. **Development** 1988;103 Suppl:41–60 (101 ref.)

Spatial organization of the epithelium and the role of neural crest cells in the initiation of the mammalian tooth germ. Lumsden AG. **Development** 1988;103 Suppl:155–69

Growth factor superfamilies and mammalian embryogenesis. Mercola M, et al. **Development** 1988 Mar;102(3):451–60 (101 ref.)

Cell surface glycoproteins in embryonic development. Bourrillon R, et al. **Int Rev Cytol** 1989;116:257–338 (529 ref.)

Sexual differentiation in litter–bearing mammals: influence of sex of adjacent fetuses in utero. vom Saal FS. **J Anim Sci** 1989 Jul;67(7):1824–40 (101 ref.)

Pathogens associated with mammalian embryo (a review). Apelo CL, et al. **Jpn J Vet Res** 1989 Apr;37(2):49–69 (55 ref.)

GENETICS

Mechanisms of the effects of aneuploidy in mammals. Epstein CJ. **Annu Rev Genet** 1988;22:51–75 (125 ref.)

Mammalian genome organization: an evolutionary view. O'Brien SJ, et al. **Annu Rev Genet** 1988;22:323–51 (101 ref.)

A model for regulation of mammalian ribosomal DNA transcription. Co–ordination of initiation and termination. Nashimoto M, et al. **Biochem J** 1988 Dec 1;256(2):329–33

Mammalian expression vectors. Ridgway AA. **Biotechnology** 1988;10:467–92 (170 ref.)

Structures of the genes coding for G–protein alpha subunits from mammalian and yeast cells. Kaziro Y, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:209–20 (60 ref.)

The frequency of oligonucleotides in mammalian genic regions. Volinia S, et al. **Comput Appl Biosci** 1989 Feb; 5(1):33–40

Adopt a zoo or a species! [editorial] Benirschke K, et al. **Cytogenet Cell Genet** 1988;48(1):1

On the highest chromosome number in mammals. Schmid M, et al. **Cytogenet Cell Genet** 1988;49(4):305–8

Mammalian developmental genetics. **Dev Genet** 1987; 8(4):189–304

The mammalian Y chromosome: molecular search for the sex–determining factor. **Development** 1987;101 Suppl:1–203

Transverse alternating field electrophoresis and applications to mammalian genome mapping. Gardiner K, et al. **Electrophoresis** 1989 May–Jun;10(5–6):296–302

The role of the mammalian branchpoint sequence in pre–mRNA splicing. Reed R, et al. **Genes Dev** 1988 Oct; 2(10):1268–76

Kinetochore size variation in mammalian chromosomes: an image analysis study with evolutionary implications. Cherry LM, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):281–9

Co–localization of rare oligonucleotides and regulatory elements in mammalian upstream gene regions. Volinia S, et al. **J Mol Biol** 1988 Sep 20;203(2):385–90

The structure and regulation of the alpha–fetoprotein and albumin genes. Tilghman SM. **Oxf Surv Eukaryot Genes** 1985;2:160–206 (151 ref.)

Rate constancy of globin gene evolution in placental mammals. Easteal S. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7622–6

Mammalian beta–glucuronidase: genetics, molecular biology, and cell biology. Paigen K. **Prog Nucleic Acid Res Mol Biol** 1989;37:155–205 (162 ref.)

Mammalian chromosome banding—an expression of genome organization. Bickmore WA, et al. **Trends Genet** 1989 May; 5(5):144–8 (36 ref.)

[Genetic program and environmental imprinting: the critical perinatal period] Csaba G. **Orv Hetil** 1988 Aug 28; 129(35):1847–52, 1855–6 (47 ref.) (Eng. Abstr.) (Hun)

[Quantitative analysis of the evolution of mammalian genome by comparing genetic maps] Zakharov IA, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1213–8 (Rus)

[Genetic variability of antigenic structure of the Lpm–protein and alpha2–macroglobulin among non–mustelid mammals] Shumnyĭ TV, et al. **Genetika** 1989 Mar;25(3):513–20 (Eng. Abstr.) (Rus)

[Macromutation and evolution: the fixation of Goldschmidt's macromutations as species and genus traits. Hairlessness mutations in mammals] Vorontsov NN. **Genetika** 1988 Jun; 24(6):1081–8 (26 ref.) (Eng. Abstr.) (Rus)

[Various aspects of evolution of Alu repeats in mammals] Kolchanov NA, et al. **Mol Biol (Mosk)** 1988 Sep–Oct; 22(5):1335–44 (Eng. Abstr.) (Rus)

[Quantitative estimation of the modification of mutagenic effect in experiments on mammals using a regression modification index] Sycheva LP, et al. **Tsitol Genet** 1989 Mar–Apr;23(2):45–9 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Might gene conversion be the mechanism of somatic hypermutation of mammalian immunoglobulin genes? Maizels N. **Trends Genet** 1989 Jan;5(1):4–8 (32 ref.)

[Incidence of the spirochete Borrelia burgdorferi in arthropods (Arthropoda) and antibodies in vertebrates (Vertebrata)] Pokorný P. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):52–60 (74 ref.) (Eng. Abstr.) (Cze)

METABOLISM

Identification of filaggrin in Hassall's corpuscle by histochemical and immunohistochemical methods. Favre A. **Acta Anat (Basel)** 1989;135(1):71–6

Ornithine decarboxylase antizyme in mammalian tissues. Brosnan ME, et al. **Adv Exp Med Biol** 1988;250:37–43 (28 ref.)

Regulation of phosphatidylcholine metabolism in mammalian hearts. Hatch GM, et al. **Biochem Cell Biol** 1989 Feb–Mar; 67(2–3):67–77 (104 ref.)

Characterization of the enolase isozymes of rabbit brain: kinetic differences between mammalian and yeast enolases. Kornblatt MJ, et al. **Biochem Cell Biol** 1989 Feb–Mar; 67(2–3):103–7

Structures and functions of mammalian nucleoside transporters. Young JD. **Biochem Soc Trans** 1989 Jun; 17(3):444–7 (44 ref.)

Quantitative distribution of GABA–immunoreactive neurons in cetacean visual cortex is similar to that in land mammals. Garey LJ, et al. **Brain Res** 1989 Apr 24;485(2):278–84

The iodine–staining properties and fine structure of some mammalian and invertebrate glycogens. Craig SA, et al. **Carbohydr Res** 1988 Aug 15;179:327–40

Biochemical correlates of the structural allometry and site–specific properties of mammalian adipose tissue. Pond CM, et al. **Comp Biochem Physiol [A]** 1989;92(3):455–63

Comparative studies on the major features of insulin receptors in mammalian and non–mammalian liver membranes. al–Attas OS. **Comp Biochem Physiol [B]** 1989;93(1):125–33

Comparative levels of muscle glycolytic enzymes in mammals, fish, echinoderm and molluscs. Avelar PM, et al. **Comp Biochem Physiol [B]** 1978;60(2):143–8

Ascorbic acid and L–gulonolactone oxidase in lagomorphs. Jenness R, et al. **Comp Biochem Physiol [B]** 1978; 61(3):395–9

Gluconeogenesis in vertebrate livers. Phillips JW, et al. **Comp Biochem Physiol [B]** 1977;57(2):127–31

Ketogenesis in vertebrate livers. Phillips JW, et al.

Comp Biochem Physiol [B] 1977;57(2):133–8
The effect of bile acids on liver alcohol dehydrogenase in different mammalian species. Simonetta M, et al. **Comp Biochem Physiol [B]** 1979;64(4):363–7
Comparative biochemistry of mammalian arylsulfatases A and B. Thompson DB, et al. **Comp Biochem Physiol [B]** 1988;90(4):823–31
A comparison of selected physical properties of hepatic sorbitol dehydrogenases [L-iditol: NAD oxidoreductases] from four mammalian species. Walsall EP, et al. **Comp Biochem Physiol [B]** 1978;59(3):213–8
Widespread occurrence of calicin, a basic cytoskeletal protein of sperm cells, in diverse mammalian species. Paranko J, et al. **Differentiation** 1988 Jun;38(1):21–7
N-terminal region of Proteus mirabilis glutathione transferase is not homologous to mammalian and plant glutathione transferases. Di Ilio C, et al. **FEBS Lett** 1989 Jun 19; 250(1):57–9
Some mammalian retinae lack FMRF-amide-like immunoreactive efferents. Rusoff AC, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):791–4
Comparative study of glutamate decarboxylase immunoreactive boutons in the mammalian inferior olive. Nelson BJ, et al. **J Comp Neurol** 1989 Aug 22;286(4):514–39
Comparative oxygen affinity of fish and mammalian myoglobins. Nichols JW, et al. **J Comp Physiol [B]** 1989; 159(2):205–9
Biochemical characteristics of mammalian myocardia. Blank S, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):367–73
Growth factor activity in luminal fluids from the male reproductive tract of the ram, rat, tammar wallaby (Macropus eugenii) and Japanese quail (Coturnix coturnix japonica). Jones RC, et al. **J Reprod Fertil** 1989 Jul; 86(2):513–6
Characterization and quantitative autoradiographic distribution of [3H]acetylcholine muscarinic receptors in mammalian brain. Apparent labelling of an M2-like receptor sub-type. Quirion R, et al. **Neuroscience** 1989; 29(2):271–89
The proteins immunochemically related to P-450 HFLa, a major form of cytochrome P-450 in human fetal livers, are present in liver microsomes from various animal species. Kitada M, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct;62(1):31–40

MICROBIOLOGY

Mammalian and avian reservoirs for Borrelia burgdorferi. Anderson JF. **Ann N Y Acad Sci** 1988;539:180–91 (90 ref.)
Serotypes of Erysipelothrix rhusiopathiae in Australian pigs, small ruminants, poultry, and captive wild birds and animals. Eamens GJ, et al. **Aust Vet J** 1988 Aug; 65(8):249–52
Yersinia enterocolitica among small wild mammals in France. Servan J, et al. **Comp Immunol Microbiol Infect Dis** 1979; 1(4):321–33

PARASITOLOGY

The host preferences of Culiseta inornata in southwestern Manitoba. Anderson RA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):219–21
Attraction to mammals of male mosquitoes with special reference to Aedes diantaeus in Sweden. Jaenson TG. **J Am Mosq Control Assoc** 1985 Jun;1(2):195–8
Giardiasis—zoonosis or not? [news] Connaughton D. **J Am Vet Med Assoc** 1989 Feb 15;194(4):447–9, 451
Helminthiasis and toxoplasmosis among exotic mammals at the Santiago National Zoo. Gorman TR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1068–70
Host associations of ticks (Acari: Ixodidae) parasitizing medium-sized mammals in a Lyme disease endemic area of southern New York. Fish D, et al. **J Med Entomol** 1989 May;26(3):200–9
Population dynamics of the American dog tick (Acari: Ixodidae) in relation to small mammal hosts. Smart DL, et al. **J Med Entomol** 1988 Nov;25(6):515–22
Medium-sized mammal hosts of Amblyomma americanum and Dermacentor variabilis (Acari: Ixodidae) at Land Between the Lakes, Tennessee, and effects of integrated tick management on host infestations. Zimmerman RH, et al. **J Med Entomol** 1988 Nov;25(6):461–6
Susceptibility of laboratory-reared Afghan pika, Ochotona rufescens rufescens (Lagomorpha: Ochotonidae), to gastro-intestinal nematodes of ruminants. Okamoto M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):913–7
Detection of Toxoplasma gondii in liver tissue sections from brown hares (Lepus europaeus P.) and mountain hares (Lepus timidus L.) using the peroxidase anti-peroxidase (PAP) technique as a complement to conventional histopathology. Gustafsson K, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):402–7
[A review of the mammalian Mallophaga of Europe] Mey E. **Angew Parasitol** 1988 Jun;29(2):113–26 (52 ref.) (Eng. Abstr.) (Ger)
[The occurrence of Trichinella in indigenous wildlife] Wagner JA, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1;101(12):413–6 (Eng. Abstr.) (Ger)
[An attempt to search for the correlations between the indices of plague infectivity in small mammals and fleas] Burdelov LA, et al. **Parazitologiia** 1989 Mar-Apr;23(2):98–103 (Eng. Abstr.) (Rus)
[Faunistic analysis of the fleas on small mammals in the trans-Aral Sea area] Burdelov LA, et al. **Parazitologiia** 1988 Nov-Dec;22(6):496–505 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Predator vigilance and group size in mammals and birds: a critical review of the empirical evidence. Elgar MA. **Biol Rev Camb Philos Soc** 1989 Feb;64(1):13–33 (109 ref.)
Mammalian calcitonin cells: retrospect and prospect. Srivastav AK, et al. **Biol Struct Morphog** 1988;1(3):117–23 (156 ref.)
Characterization of a monoclonal antibody which detects luteinizing hormone from diverse mammalian species. Matteri RL, et al. **Domest Anim Endocrinol** 1987 Jul; 4(3):157–65
Biotechnology in mammalian reproduction [letter] Dukelow WR. **Fertil Steril** 1989 May;51(5):908–9
Apparent densities of spermatozoa of various mammalian species. Oshio S. **Gamete Res** 1988 Jun;20(2):159–64
Coordination of social signals and ovarian function during sexual development. Vandenbergh JG. **J Anim Sci** 1989 Jul;67(7):1841–7 (52 ref.)
Ongoing electrical activity of superior cervical ganglion cells in mammals of different size. Ivanov A, et al. **J Comp Neurol** 1989 Jun 15;284(3):398–404
Speed, stride frequency and energy cost per stride: how do they change with body size and gait? Heglund NC, et al. **J Exp Biol** 1988 Sep;138:301–18
Seasonal variation in the daily pattern of plasma melatonin in a wild mammal: the mountain hare (Lepus timidus). Iason GR, et al. **J Pineal Res** 1989;6(2):157–67
Mistakes allow evolutionary stability in the repeated prisoner's dilemma game. Boyd R. **J Theor Biol** 1989 Jan 9;136(1):47–56
Pathways of water through erythrocyte membranes. Routes along defect structures. Lawaczeck R, et al. **J Theor Biol** 1988 Dec 7;135(3):401–7
Laminar and turbulent flow in the mammalian aorta: Reynolds number. Li JK. **J Theor Biol** 1988 Dec 7; 135(3):409–14
The distribution of wearout over evolved reliability structures. Miller AR. **J Theor Biol** 1989 Jan 9;136(1):27–46
Predicting body-weight distribution of mammalian genera in families and orders. Peczkis J. **J Theor Biol** 1988 Jun 22;132(4):509–10
Autosomal genes involved in mammalian primary sex determination. Eicher EM. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):109–18 (28 ref.)
Aberrant chromosomal sex-determining mechanisms in mammals, with special reference to species with XY females. Fredga K. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):83–95 (101 ref.)
Tuning in the mammalian cochlea. Patuzzi R, et al. **Physiol Rev** 1988 Oct;68(4):1009–82 (476 ref.)
Mammalian mating systems. Clutton-Brock TH. **Proc R Soc Lond [Biol]** 1989 May 22;236(1285):339–72 (239 ref.)
Mechanisms of chemotransmission in the mammalian carotid body. Fidone SJ, et al. **Prog Brain Res** 1988;74:169–79 (31 ref.)
Mechanism of mammalian ovulation. Morioka N, et al. **Prog Clin Biol Res** 1989;294:65–85 (76 ref.)
Taurine in the central nervous system and the mammalian actions of taurine. Huxtable RJ. **Prog Neurobiol** 1989; 32(6):471–533 (763 ref.)
Embryo-uterine interactions during early stages of pregnancy in domestic mammals. Guillomot M, et al. **Reprod Nutr Dev** 1988;28(6B):1629–48 (75 ref.)
Biochemical characteristics of mammalian diaphragms. Blank S, et al. **Respir Physiol** 1988 Oct;74(1):115–25
A comparison of the surfactant associated lipids derived from reptilian and mammalian lungs. Daniels CB, et al. **Respir Physiol** 1989 Mar;75(3):335–47
Fertilization in mammals. Wassarman PM. **Sci Am** 1988 Dec; 259(6):78–84 (5 ref.)
Scaling body support in mammals: limb posture and muscle mechanics. Biewener AA. **Science** 1989 Jul 7; 245(4913):45–8
Biochemical and functional aspects of recovery of mammalian systems from deep sub-zero temperatures. De Loecker R, et al. **Symp Soc Exp Biol** 1987;41:407–27 (113 ref.)
Cold tolerance in mammalian cells. Willis JS. **Symp Soc Exp Biol** 1987;41:285–309 (109 ref.)
Using the nemstode Caenorhabditis elegans to predict mammalian acute lethality to metallic salts. Williams PL, et al. **Toxicol Ind Health** 1988 Dec;4(4):469–78
[The visual limbic area in the cerebral cortex of mammals (the limbic cortex and the problems of the evolution of the visual system)] Karamian AI, et al. **Usp Fiziol Nauk** 1988 Jul-Sep;19(3):3–23 (147 ref.) (Rus)
[The electrolyte content of the body of insects, ascidians, fishes, amphibians and mammals and its dynamics in ontogeny] Natochin IuV, et al. **Zh Evol Biokhim Fiziol** 1988 Nov-Dec;24(6):822–8 (Eng. Abstr.) (Rus)
[Evolution of the neocortex. The principle of a double afferent supply in mammalian evolution] Sollertinskaia TN. **Zh Evol Biokhim Fiziol** 1988 May-Jun;24(3):295–310 (Eng. Abstr.) (Rus)

MAMMARY ARTERIES see under THORACIC ARTERIES

MAMMARY CANCER VIRUS

ANALYSIS

Analysis of gag proteins from mouse mammary tumor virus. Hizi A, et al. **J Virol** 1989 Jun;63(6):2543–9

DRUG EFFECTS

Elevation of mouse mammary tumor virus envelope glycoprotein (Gp52) by growth factors. Ritzi EM, et al. **Intervirology** 1988;29(3):144–53
Glucocorticoids stimulate the release of a viral tumor marker (MMTV gp52) while inhibiting tumor cell growth. Ritzi EM, et al. **J Steroid Biochem** 1989 Apr;32(4):499–505

GENETICS

Modulation in the expression of murine mammary tumor virus, ras proto-oncogene, and of alveolar hyperplasia by fatty acids in mouse mammary explant cultures. Telang NT, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):971–6
Construction and characterization of a packaging cell line for MMTV-based conditional retroviral vectors. Salmons B, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1191–8
Characterization of sequences related to the mouse mammary tumor virus that are specific to MCF-7 breast cancer cells. May FE, et al. **Cancer Res** 1989 Jul 15;49(14):3879–83
Molecular events during B lymphocyte differentiation. Induction of endogenous mouse mammary tumor proviral envelope transcripts after B cell stimulation. Sharma S, et al. **J Immunol** 1988 Oct 1;141(7):2510–8
Multihormone regulation of MMTV-LTR in transfected T-47-D human breast cancer cells. Glover JF, et al. **J Steroid Biochem** 1989 Mar;32(3):357–63
Mouse mammary tumor virus proviruses in T-cell lymphomas lack a negative regulatory element in the long terminal repeat. Hsu CL, et al. **J Virol** 1988 Dec; 62(12):4644–52
A putative int domain for mouse mammary tumor virus on mouse chromosome 7 is a 5' extension of int-2. Peters G, et al. **J Virol** 1989 Mar;63(3):1448–50
Amplification of mouse mammary tumor virus genomes in non-mammary tumor cells. Racevskis J, et al. **J Virol** 1989 Jan;63(1):456–9
Phorbol ester-inducible T-cell-specific expression of variant mouse mammary tumor virus long terminal repeats. Theunissen HJ, et al. **J Virol** 1989 Aug;63(8):3466–71
Transactivating potential of the 3' open reading frame of murine mammary tumor virus. van Klaveren P, et al. **J Virol** 1988 Nov;62(11):4410–3
Independent glucocorticoid induction and repression of two contiguous responsive genes. Charron J, et al. **Mol Cell Biol** 1989 Jul;9(7):3127–31
Mutations in the hormone regulatory element of mouse mammary tumor virus differentially affect the response to progestins, androgens, and glucocorticoids. Gowland PL, et al. **Mol Cell Biol** 1989 Sep;9(9):3999–4008
Negative regulation of transcription in vitro by a glucocorticoid response element is mediated by a trans-acting factor. Langer SJ, et al. **Mol Cell Biol** 1988 Sep;8(9):3872–81
Transgenic mice carrying the mouse mammary tumor virus ras fusion gene: distinct effects in various tissues. Tremblay PJ, et al. **Mol Cell Biol** 1989 Feb;9(2):854–9
Dual function of a nuclear factor I binding site in MMTV transcription regulation. Buetti E, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3065–78
A model for hormone receptor binding to the mouse mammary tumour virus regulatory element based on hydroxyl radical footprinting. Chalepakis G, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10237–47
Expression of proviral DNA of mouse mammary tumour virus and its transcriptional control sequences. Groner B, et al. **Oxf Surv Eukaryot Genes** 1984;1:87–110 (76 ref.)
The mouse homolog of the hst/k-FGF gene is adjacent to int-2 and is activated by proviral insertion in some virally induced mammary tumors. Peters G, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5678–82
Construction of a clonable, infectious, and tumorigenic mouse mammary tumor virus provirus and a derivative genetic vector. Shackleford GM, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9655–9
Chromatin structure of hormone-responsive Moloney murine leukemia virus proviruses that contain sequences from mouse mammary tumor virus. Thompson T, et al. **Virus Genes** 1988 Oct;2(1):83–98
Molecular cloning and sequencing of the MTV-1 LTR: evidence for a LTR sequence alteration. Crouse CA, et al. **Virus Res** 1989 Feb;12(2):123–37

GROWTH & DEVELOPMENT

The role of sex steroids in the expression of MMTV in the normal mouse mammary gland. Bradham BM, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1020–5
Estrogen influence on maturational pathway of murine mammary tumor virus: an immunoelectron microscopy study. Peralta Soler A, et al. **Exp Mol Pathol** 1989 Feb; 50(1):16–25

IMMUNOLOGY

Expression of proteins immunologically related to murine mammary tumour virus (MMTV) core proteins in the cells of breast cancer continuous lines MCF-7, T47D, MDA-231 and cells from human milk. Litvinov SV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):137–42

Towards an idiotype vaccine against mammary tumors. Induction of an immune response to breast cancer-associated antigens by anti-idiotypic antibodies. Smorodinsky NI, et al. **Eur J Immunol** 1988 Nov; 18(11):1713–8

Shedding of virus-free MMTV gp52 by nonproducer mammary tumor cells: a source of tumor marker in the presence and absence of dexamethasone. Ritzi EM, et al. **Intervirology** 1989;30(2):102–10

Positive and negative modification of dexamethasone-mediated MMTV gp52 release by progesterone pretreatment of tumor cells. Ritzi EM, et al. **Intervirology** 1989;30(2):111–6

Binding and transepithelial transport of immunoglobulins by intestinal M cells: demonstration using monoclonal IgA antibodies against enteric viral proteins. Weltzin R, et al. **J Cell Biol** 1989 May;108(5):1673–85

ISOLATION & PURIFICATION

Absence of mouse mammary tumor virus proviral amplification in chemically induced lymphomas of RF/J mice. Kraft R, et al. **J Virol** 1989 Jul;63(7):3200–4

Concentration of retroviruses by low-speed centrifugation. Prachař J, et al. **Neoplasma** 1988;35(6):651–5

METABOLISM

Levels of viral glycoprotein provide a dose-dependent measure of tumor cell inhibition. Ritzi EM, et al. **Life Sci** 1989;44(26):2041–50

PATHOGENICITY

Isolation of a pathogenic clone of mouse mammary tumor virus. Morris DW, et al. **J Virol** 1989 Jan;63(1):148–58

PHYSIOLOGY

Intervention of T-cells in transportation of mouse mammary tumor virus (milk factor) to mammary gland cells in vivo. Tsubura A, et al. **Cancer Res** 1988 Nov 15;48(22):6555–9

Lymphomas with acquired mouse mammary tumor virus proviruses resemble distinct prethymic and intrathymic phenotypes defined in vivo. Meyers S, et al. **J Immunol** 1989 May 1;142(9):3342–50

Prolactin regulation of mouse mammary tumor virus (MMTV) expression in normal mouse mammary epithelium. Muñoz B, et al. **Mol Cell Endocrinol** 1989 Mar; 62(1):23–9

ULTRASTRUCTURE

Ultrastructural features of the intestinal absorption of mouse mammary tumor virus in newborn BALB/cfRIII mice. Bevilacqua G, et al. **Gastroenterology** 1989 Jan;96(1):139–45

Differential detection of murine mammary tumor virus constituents by immuno-electron microscopy. Peralta Soler A, et al. **Microsc Electron Biol Celular** 1988 Jun;12(1):89–99

MAMMARY DYSPLASIA see FIBROCYSTIC DISEASE OF BREAST

MAMMARY GLANDS see BREAST

MAMMARY GLANDS, ANIMAL see MAMMAE

MAMMARY NEOPLASMS, EXPERIMENTAL

Characterization of a new spontaneously developed murine mammary adenocarcinoma in syngeneic BALB/c hosts. Chao TY, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):621–6

Site-directed metastasis: a model to study site variations in treatment response. Casey ME, et al. **J Surg Res** 1988 Nov; 45(5):443–51

[Effect of combined transfer of irradiated allo-lymphocytes and LAK cells on pulmonary metastasis of mammary carcinoma (SST-2) in SHR rats] Li SZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):85–8 (Eng. Abstr.) (Chi)

ANALYSIS

Biological and clinical implications of tumor lectins: present status and future prospects. Gabius HJ. **Acta Histochem Suppl (Jena)** 1988;36:209–16 (37 ref.)

Correlation of estrogen, progesterone, and androgen receptors in breast cancer. Ellis LM, et al. **Am J Surg** 1989 Jun;157(6):577–80; discussion 581

Composition of phospholipid molecular species from mammary tumors. Ishinaga M, et al. **Biochem Cell Biol** 1988 Nov;66(11):1163–8

Characterization of cytokeratins expressed in metastatic rat mammary adenocarcinoma cells. Lichtner RB, et al. **Cancer Res** 1989 Jan 1;49(1):104–11

Effects of ischemia on breast tumor steroid hormone-receptor levels. Ellis LM, et al. **Curr Surg** 1988 Jul-Aug;45(4):312–4

Detection by in situ hybridization of messenger RNAs of collagen types I and IV in murine mammary cancer. Clavel C, et al. **Int J Cancer** 1989 Sep 15;44(3):548–53

Isolated soluble fractions from spleen cell culture supernatants induce tumor enhancement. Eiján AM, et al. **J Surg Oncol** 1989 Jun;41(2):134–8

Localization of tissue copper in mouse mammary tumors. Fuchs AG, et al. **Oncology** 1989;46(3):183–7

BLOOD

Correlation between mammary tumor and blood glucose, serum insulin, and free fatty acids in mice. Iguchi T, et al. **Cancer Res** 1989 Feb 15;49(4):821–5

Tumor-elicited polymorphonuclear cells, in contrast to "normal" circulating polymorphonuclear cells, stimulate invasive and metastatic potentials of rat mammary adenocarcinoma cells. Welch DR, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5859–63

BLOOD SUPPLY

Blood flow, tissue oxygenation, pH distribution, and energy metabolism of murine mammary adenocarcinomas during growth. Vaupel P, et al. **Adv Exp Med Biol** 1989;248:835–45

Lability of steroid hormone receptors following devascularization of breast tumors. Ellis LM, et al. **Arch Surg** 1989 Jan;124(1):39–42

Reduction of tumour blood flow by vasoactive drugs: a role in cancer therapy. Chaplin DJ, et al. **Biosci Biochim Acta** 1989;48(2-3):S264–8

Angiogenic activity of rat mammary carcinomas induced by 7,12-dimethylbenz[a]anthracene and its inhibition by medroxyprogesterone acetate: possible involvement of antiangiogenic action of medroxyprogesterone acetate in its tumor growth inhibition. Oikawa T, et al. **Cancer Lett** 1988 Dec 1;43(1-2):85–92

Relationship between heat-induced vascular damage and thermosensitivity in four mouse tumors. Nishimura Y, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7226–30

Geometric resistance to blood flow in solid tumors perfused ex vivo: effects of tumor size and perfusion pressure. Sevick EM, et al. **Cancer Res** 1989 Jul 1;49(13):3506–12

Viscous resistance to blood flow in solid tumors: effect of hematocrit on intratumor blood viscosity. Sevick EM, et al. **Cancer Res** 1989 Jul 1;49(13):3513–9

Tumor blood flow: the principal modulator of oxidative and glycolytic metabolism, and of the metabolic micromilieu of human tumor xenografts in vivo. Kallinowski F, et al. **Int J Cancer** 1989 Aug 15;44(2):266–72

Morphologic and hemodynamic comparison of tumor and healing normal tissue microvasculature. Dewhirst MW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):91–9

Inhibition of tumor angiogenesis activity in C3H mouse mammary tumor by medroxyprogesterone acetate. Fujimoto J, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):77–82

CHEMICALLY INDUCED

Effect of medroxyprogesterone acetate on the response of the rat mammary gland to carcinogenesis. Russo IH, et al. **Br J Cancer** 1989 Feb;59(2):210–6

Glucocorticoid-induced alterations of morphology and growth of fibrosarcoma cells derived from 7,12-dimethylbenz(a)anthracene rat mammary tumor. Steffen M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7212–8

Effect of dietary palm oils on mammary carcinogenesis in female rats induced by 7,12-dimethylbenz(a)anthracene. Sundram K, et al. **Cancer Res** 1989 Mar 15;49(6):1447–51

Induction of tumors in the Zymbal gland, oral cavity, colon, skin and mammary gland of F344 rats by a mutagenic compound, 2-amino-3,4-dimethylimidazo[4,5-f]quinoline. Kato T, et al. **Carcinogenesis** 1989 Mar;10(3):601–3

The prevention of nitrosomethylurea-induced mammary tumors by d-limonene and orange oil. Maltzman TH, et al. **Carcinogenesis** 1989 Apr;10(4):781–3

Induction of malignant transformation in vitro and mammary tumors in rats by two new potent anthracycline antitumor antibiotics, morpholinodaunomycin and cyanomorpholinoadriamycin. Westendorf J, et al. **Cell Biol Toxicol** 1987 Mar;3(1):17–21

Different effects of cyclophosphamide in vivo and phosphamide mustard in vitro on two cell clones of chemically induced mammary carcinoma of the rat. Angres G, et al. **J Cancer Res Clin Oncol** 1989;115(2):203–6

Tumor-initiating activity in mouse skin and carcinogenicity in rat mammary gland of dibenzo[a]pyrenes: the very potent environmental carcinogen dibenzo[a, l]pyrene. Cavalieri EL, et al. **J Cancer Res Clin Oncol** 1989; 115(1):67–72

The combined effects of dietary protein and fat intake during the promotion phase of 7,12-dimethylbenz(a)anthracene-induced breast cancer in rats. Clinton SK, et al. **J Nutr** 1988 Dec;118(12):1577–85

The changes of glycosaminoglycan in the growth of urethane-induced mouse mammary tumors. Yamamoto H, et al. **Kitasato Arch Exp Med** 1989 Apr;62(1):29–37

Hounding the pill [editorial] **Med J Aust** 1979 Oct 20; 2(8):406–7

Effects of perinatal exposure to a synthetic estrogen and progestin on mammary tumorigenesis in mice. Lopez J, et al. **Teratology** 1988 Aug;38(2):129–34

[Combined long-term toxicity and carcinogenicity test of p-chloro-m-xylenol (PCMX) applied to female mouse skin] Momma J, et al. **Eisei Shikenjo Hokoku** 1988; (106):39–47 (Eng. Abstr.) (Jpn)

[Blastomogenic and nephrotoxic effects of a petroleum product obtained from high-vanadium oil at a temperature of 300-350 degrees C] Karimov MA, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):53–5 (Rus)

DIAGNOSIS

Levels of viral glycoprotein provide a dose-dependent measure of tumor cell inhibition. Ritzi EM, et al. **Life Sci** 1989;44(26):2041–50

DIET THERAPY

Anti-cancer therapy with valine-depleted amino acid imbalance solution. Nishihira T, et al. **Tohoku J Exp Med** 1988 Nov;156(3):259–70

DRUG THERAPY

Nucleoside analogues: 7. Effect on colon, breast and lung tumours in mice of 5-fluorouracil/nitrosourea molecular combinations incorporating alkoxy and oxidized sulphur functions. McElhinney RS, et al. **Anticancer Drug Des** 1989 Mar;3(4):255–69

Nucleoside analogues: 8. Some isomers of B.3839, the original 5-fluorouracil/nitrosourea molecular combination, and their effect on colon, breast and lung tumours in mice. McElhinney RS, et al. **Anticancer Drug Des** 1989 Jun; 4(1):1–20

Antitumor effect of some rhodium(I) derivatives on MCa mammary carcinoma. Sava G, et al. **Anticancer Res** 1989 May-Jun;9(3):787–90

In vivo magnetic resonance imaging of the effects of photodynamic therapy. Dodd NJ, et al. **Br J Cancer** 1989 Aug;60(2):164–7

Anticancer efficacy of 2-chloroethylnitrosocarbamoyl derivatives of L-alanine, glycine, their di- and tripeptide homologues and the respective amides in methylnitrosourea-induced rat mammary carcinoma. Klenner T, et al. **Br J Cancer** 1989 Mar;59(3):335–40

Warfarin inhibits metastasis of Mtln3 rat mammary carcinoma without affecting primary tumour growth. McCulloch P, et al. **Br J Cancer** 1989 Feb;59(2):179–83

Can neo-adjuvant chemotherapy prevent residual tumors? Bourut C, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):59–63

Inhibition of radiogenic mammary carcinoma in rats by estriol or tamoxifen. Lemon HM, et al. **Cancer** 1989 May 1;63(9):1685–92

Use of oral uridine as a substitute for parenteral uridine rescue of 5-fluorouracil therapy, with and without the uridine phosphorylase inhibitor 5-benzylacyclouridine. Martin DS, et al. **Cancer Chemother Pharmacol** 1989;24(1):9–14

Effects of two pyridinalalkyliminerhodium(I) complexes in mice bearing MCa mammary carcinoma. Sava G, et al. **Cancer Chemother Pharmacol** 1989;24(5):302–6

A new irreversible aromatase inhibitor, 6-methylenandrosta-1,4-diene-3,17-dione (FCE 24304): antitumor activity and endocrine effects in rats with DMBA-induced mammary tumors. Zaccheo T, et al. **Cancer Chemother Pharmacol** 1989;23(1):47–50

Chemosuppression of breast cancer with tamoxifen: laboratory evidence and future clinical investigations. Jordan VC. **Cancer Invest** 1988;6(5):589–95 (42 ref.)

Effects of the aromatase inhibitor 7 alpha-(4'-amino)phenylthio-4-androstene-3,17-dione on 7,12-dimethylbenz(a)anthracene-induced mammary carcinoma in rats. Brueggemeier RW, et al. **Cancer Res** 1988 Dec 1;48(23):6808–10

Combination of N-methylformamide with cis-diamminedichloroplatinum (II) in murine mammary carcinoma: importance of timing. Iwakawa M, et al. **Cancer Res** 1989 Apr 1;49(7):1640–3

Hydrogen ion-mediated enhancement of cytotoxicity of bis-chloroethylating drugs in rat mammary carcinoma cells in vitro. Jähde E, et al. **Cancer Res** 1989 Jun 1; 49(11):2965–72

Reduction of intracellular pH as a possible mechanism for killing cells in acidic regions of solid tumors: effects of carbonylcyanide-3-chlorophenylhydrazone. Newell KJ, et al. **Cancer Res** 1989 Aug 15;49(16):4477–82

Preclinical antitumor activity of an alpha-picoline derivative, penclomedine (NSC 338720), on human and murine tumors. Plowman J, et al. **Cancer Res** 1989 Apr 15;49(8):1909–15

Endocrine and antitumor effects of combined treatment with an antiprogestin and antiestrogen or luteinizing hormone-releasing hormone agonist in female rats bearing mammary tumors. Bakker GH, et al. **Endocrinology** 1989 Sep;125(3):1593–8

Additive inhibitory effects of bromocryptine (CB-154) and medroxyprogesterone acetate (MPA) on dimethylbenz[a]anthracene (DMBA)-induced mammary tumors in the rat. Dauvois S, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):891–7

Characterization of the antitumor activity of hexadecylphosphocholine (D 18506). Hilgard P, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1457–61

Carrier mediated action of platinum complexes on estrogen receptor positive tumors. Knebel N, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):293–9

Antitumor activity of the progesterone antagonists ZK 98.299 and RU 38.486 in the hormone-dependent MXT mammary tumor model of the mouse and the DMBA- and the MNU-induced mammary tumor models of the rat. Schneider MR, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):691-701

Preclinical studies of a perfluorochemical emulsion as an adjunct to radiotherapy. Rockwell S, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):913-20

Anticancer activity of bisphosphonic acids in methylnitrosourea-induced mammary carcinoma of the rat--benefit of combining bisphosphonates with cytostatic agents. Wingen F, et al. **Invest New Drugs** 1988 Sep; 6(3):155-67

Chlorocarbamate-mustard-linked 1,1,2-triphenylbut-1-enes with a selective antitumor activity on mammary tumors containing estrogen receptors. Schneider MR, et al. **J Cancer Res Clin Oncol** 1988;114(6):583-7

Effects of the protein-bound polysaccharide preparation, PSK on spontaneous breast cancer in mice. Fujii T, et al. **J Int Med Res** 1988 Jul-Aug;16(4):286-93

The antitumour effect of lipophilic derivatives of 5-fluoro-2'-deoxyuridine incorporated into liposomes. Supersaxo A, et al. **J Microencapsul** 1988 Jan-Mar; 5(1):1-11

Cytotoxic effect of 8-amino adenosine 3',5'-cyclic monophosphate on FM3A mouse mammary tumor cells. Saito M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):357-62

Effect of oral administration of n-méthylformamide on dimethylenzanthracène-induced mammary tumour in female rat. Scailteur V, et al. **J Toxicol Clin Exp** 1985 Sep-Oct;5(5):315-9

Mode of action of estra-1,3,5(10)-triene-3,17 beta-diol 3-benzoate 17-[4-(4-bis(2-chloroethyl)amino)phenyl)-1-oxobutoxy)acet ate) on human breast carcinoma xenografts in nude mice. Kubota T, et al. **Jpn J Cancer Res** 1988 Nov; 79(11):1224-9

Sequential hormone therapy with medroxyprogesterone acetate for 7, 12-dimethylbenz [alpha] anthracene-induced rat mammary tumors. Iino Y, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):45-50

Interaction of nicotine with anticancer treatment. Berger MR, et al. **Klin Wochenschr** 1988;66 Suppl 11:127-33

Adverse effect of tamoxifen with LHRH agonist on oestrogen-receptor-negative mammary carcinoma [letter] Szende B, et al. **Lancet** 1989 Jul 22;2(8656):222-3

Effects of trilostane on 7,12-dimethylbenz[a]anthracene-induced rat mammary cancers and body weight of rats in relation to estrogen receptors. Iino Y, et al. **Oncology** 1989;46(5):301-5

Influence of 1 alpha,25-dihydroxyvitamin D3 on the development and steroid hormone receptor contents of DMBA-induced rat mammary tumors. Noguchi S, et al. **Oncology** 1989;46(4):273-6

Chemiluminescence and hematoporphyrin derivative: a novel therapy for mammary adenocarcinomas in mice. Phillip MJ, et al. **Oncology** 1989;46(4):266-72 (38 ref.)

Effect of cancer chemotherapy on the hypoxic fraction of a solid tumor measured using a local tumor control assay. Grau C, et al. **Radiother Oncol** 1988 Dec;13(4):301-9

Rats with mammary cancer treated with tcremifene and interferon: morphometry and needle aspiration biopsy for determination of ATP and 14C-fluorodeoxyglucose content. Kangas L, et al. **Res Exp Med (Berl)** 1989; 189(2):113-9

Inhibition of aromatase activity and of endocrine-responsive tumor growth by 10-propargylestr-4-ene-3, 17-dione and its 17-propionate derivative. Zimniski SJ, et al. **Steroids** 1987 Jul-Sep;50(1-3):135-46

Can neo-adjuvant chemotherapy prevent residual tumors? Bourut C, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:59-63

[Animal experimental models of breast cancer for therapeutic testing of hormones and antihormones] Naundorf H. **Arch Geschwulstforsch** 1988;58(5):345-56 (112 ref.) (Eng. Abstr.) (Ger)

[In vitro study of estradiol-linked nitrosourea in breast cancers in the mouse, rat and human: interspecies comparison] Petru E, et al. **Wien Klin Wochenschr** 1989 Feb 17;101(4):130-4 (Eng. Abstr.) (Ger)

ENZYMOLOGY

In vitro photosensitization of tumour cell enzymes by photofrin II administered in vivo. Gibson SL, et al. **Br J Cancer** 1989 Jan;59(1):47-53

Membrane-associated phosphatidylinositol kinase of R3230AC mammary tumors and normal mammary glands and effects of insulin on tumor enzyme activity. Narayanan U, et al. **Cancer Res** 1988 Dec 1;48(23):6727-32

Induction of mixed function oxidase activities of protein A in rat mammary tumors. Bansal MR, et al. **Carcinogenesis** 1989 Sep;10(9):1749-51

Stability and reactivation of tyrosine radicals from ribonucleotide reductase in tumor cells studied by ESR. Lassmann G, et al. **Free Radic Biol Med** 1989;6(1):9-14

Cellular interactions determining the production of collagenase by a rat mammary carcinoma cell line. Lyons JG, et al. **Int J Cancer** 1989 Jan 15;43(1):119-25

Enhancement of urokinase-type plasminogen activator activity during the growth of a murine mammary adenocarcinoma [letter] Pereyra-Alfonso S, et al. **Int J Cancer** 1989 Feb 15;43(2):356-7

Gamma-glutamyltranspeptidase activity in intact leukocytes: flow cytometric analysis and sorting. Russo SA, et al. **J Histochem Cytochem** 1989 Mar;37(3):323-30

Effects of dietary fish oil on human mammary carcinoma and on lipid-metabolizing enzymes. Borgeson CE, et al. **Lipids** 1989 Apr;24(4):290-5

The collagenase produced by neoplastic rat epithelial cells: modulation of secretion, molecular weight characteristics, and purification. Lyons JG, et al. **Matrix** 1989 Jan;9(1):7-16

Effects of medroxyprogesterone acetate (MPA) on phosphodiesterase (PDE) activity in DMBA-induced rat mammary tumours. Racca S, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):101-2

Inhibition of GSH-dependent PGH2 isomerase in mammary adenocarcinoma cells by allicin. Shalinsky DR, et al. **Prostaglandins** 1989 Jan;37(1):135-48

ETIOLOGY

Effect of type and amount of dietary fat on the enhancement of rat mammary tumorigenesis by exercise. Thompson HJ, et al. **Cancer Res** 1989 Apr 15;49(8):1904-8

Comparison of 7,12-dimethylbenz[a]anthracene metabolism and DNA binding in mammary epithelial cells from three rat strains with differing susceptibilities to mammary carcinogenesis. Moore CJ, et al. **Carcinogenesis** 1988 Nov; 9(11):2099-102

Dietary protein enhanced mammary ornithine decarboxylase activity and tumorigenesis in rats. Hawrylewicz EJ, et al. **J Nutr** 1989 Apr;119(4):547-52

Dose-rate effects of mammary tumor development in female Sprague-Dawley rats exposed to X and gamma radiation. Johnson JR, et al. **Radiat Res** 1989 Jun;118(3):545-58

GENETICS

Unique male mammary tumors developing in the inbred soft-furred field rats Millardia meltada. Lu J, et al. **Am J Pathol** 1989 Sep;135(3):477-88

Proto-neoplasia revisited: the molecular biology of mouse mammary hyperplasia. Cardiff RD, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):925-33 (122 ref.)

Gene expression of PCNA/cyclin in adult tissues and the R3230AC mammary tumor of rat. Liu YC, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):873-82

Transcriptional down-regulation of a rat gene, WDNM2, in metastatic DMBA-8 cells. Dear TN, et al. **Cancer Res** 1989 Oct 1;49(19):5323-8

Gene expression during the early phases of regression of the androgen-dependent Shionogi mouse mammary carcinoma. Rennie PS, et al. **Cancer Res** 1988 Nov 15; 48(22):6309-12

Stochastic appearance of mammary tumors in transgenic mice carrying the MMTV/c-neu oncogene. Bouchard L, et al. **Cell** 1989 Jun 16;57(6):931-6

Expression of the int-1 gene in transgenic mice is associated with mammary gland hyperplasia and adenocarcinomas in male and female mice. Tsukamoto AS, et al. **Cell** 1988 Nov 18;55(4):619-25

Activation of ras oncogenes by chemical carcinogens. Barbacid M, et al. **Gene Amplif Anal** 1986;4:21-38

Expression of the c-Ha-ras and neu oncogenes in DMBA-induced, anti-estrogen-treated rat mammary tumors. Vuorio T, et al. **Int J Cancer** 1988 Nov 15; 42(5):774-9

A new transfection method of mouse FM3A mammary carcinoma cells with plasmid DNA. Ogawa T, et al. **Nucleic Acids Symp Ser** 1988;(19):153-5

The int genes in mammary tumorigenesis and in normal development. Nusse R. **Trends Genet** 1988 Oct;4(10):291-5 (37 ref.)

IMMUNOLOGY

Interferon-mediated modulation of metastasis and MHC antigens. Lollini PL, et al. **Adv Exp Med Biol** 1988; 233:129-39

Sensitivity of locally recurrent rat mammary tumour cell lines to syngeneic polymorphonuclear cell, macrophage and natural killer cell cytolysis. Aeed PA, et al. **Br J Cancer** 1988 Dec;58(6):746-52

MTP-PE: induction of tumoricidal leukocytes in the lungs of rats. Brownbill AF, et al. **Cancer Detect Prev** 1988; 12(1-6):161-8

Implantation of a gelatin-sponge as a model for effector recruitment. Tumor growth inhibition by T-lymphocytes recovered from a site of tumor rejection. Akporiaye ET, et al. **Cancer Immunol Immunother** 1989;29(3):199-204

Expression of epithelial-like markers and class I major histocompatibility antigens by a murine carcinoma growing in the mammary gland and in metastases: orthotopic site effects. Elliott BE, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7237-45

Modulation of murine natural killer cells by a granulocytosis-inducing tumor. Pollack SB, et al. **Cancer Res** 1989 Jan 1;49(1):174-8

Evidence for host-mediated antitumor effects of lysozyme in mice bearing the MCa mammary carcinoma. Sava G, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1737-43

Nuclear disintegration of target cells by killer B lymphocytes from tumor-bearing mice. Lopez DM, et al. **FASEB J** 1989 Jan;3(1):37-43

Conserved antigen expression in epithelial tumors recognized by monoclonal antibody 4A9 generated against canine mammary carcinoma cells. Gangopadhyay A, et al. **Hybridoma** 1989 Apr;8(2):175-86

Ovarian hormones, antiestrogen and pregnancy effects on the expression of class II histocompatibility antigens by N-nitroso-N-methylurea-induced rat mammary carcinomas. Bernard DJ, et al. **Immunopharmacology** 1989 May-Jun;17(3):147-55

Development and characterization of a syngeneic monoclonal antibody to a rat mammary tumor metastasis-associated mucin-like cell-surface antigen (gp580). North SM, et al. **Int J Cancer** 1988 Oct 15;42(4):607-14

Identification and characterization of a novel antigen complex on mouse mammary tumor cells using a monoclonal antibody against platelet glycoprotein Ic. Sonnenberg A, et al. **J Biol Chem** 1988 Oct 5; 263(28):14030-8

Failure of expression of class I major histocompatibility antigens to alter tumor immunogenicity of a spontaneous murine carcinoma. Carlow DA, et al. **J Natl Cancer Inst** 1989 May 10;81(10):759-67

[The role of an immunologic mechanism in the occurrence of postoperative metastases in mice] Iunker VM, et al. **Vopr Onkol** 1988;34(12):1471-7 (Eng. Abstr.) (Rus)

METABOLISM

Endogenous as well as exogenous hormonal modulation of lectin binding sites in normal and neoplastic tissue of rat mammary gland. Vierbuchen M, et al. **Acta Histochem Suppl (Jena)** 1988;36:179-90

Neutrophil maturation and hypersegmentation promoted in normal bone marrow by a carcinoma-elaborated protein factor. Bailey SC, et al. **Am J Hematol** 1989 Jul; 31(3):159-65

Distribution of a boronated porphyrin in murine tumors. Kahl SB, et al. **Basic Life Sci** 1989;50:205-12

Docosahexaenoic acid is neither synthesized nor retroconverted by the normal and tumor mouse mammary epithelial cells in primary culture. Bandyopadhyay GK, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):730-6

The effect of tumour-bearing on 2-deoxy[U-14C]glucose uptake in normal and neoplastic tissues in the rat. Rofe AM, et al. **Biochem J** 1988 Jul 15;253(2):603-6

pH distributions in spontaneous and isotransplanted rat tumours. Kallinowski F, et al. **Br J Cancer** 1988 Sep; 58(3):314-21

The effect of hypobaric hypoxia on misonidazole binding in normal and tumour-bearing mice. MacManus MP, et al. **Br J Cancer** 1989 Mar;59(3):349-52

Effects of the aromatase inhibitor 4-hydroxyandrostenedione and the antiandrogen flutamide on growth and steroid levels in DMBA-induced rat mammary tumors. Spinola PG, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):287-96

In vitro biotransformation of estradiol by explant cultures of murine mammary tissues. Telang NT, et al. **Breast Cancer Res Treat** 1989 Mar;13(2):173-81

Induction of tumoricidal macrophages from bone marrow cells of normal mice or mice bearing a colony-stimulating-factor-producing tumor. Hosoe S, et al. **Cancer Immunol Immunother** 1989;28(2):116-22

Effect of all-trans-retinoic acid on nuclear RNA polymerase activity in chemically-induced rat mammary tumors. Mehta RG, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):1-5

Metabolism of retinol and retinoic acid in N-methyl-N-nitrosourea-induced mammary carcinomas in rats. Bhat PV, et al. **Cancer Res** 1989 Jan 1;49(1):139-44

Linoleic acid metabolism in metastatic and nonmetastatic murine mammary tumor cells. Chapkin RS, et al. **Cancer Res** 1989 Sep 1;49(17):4724-8

Fate of 7,12-dimethylbenz(a)anthracene in the mouse mammary gland during initiation and promotion stages of carcinogenesis in vitro. Das SK, et al. **Cancer Res** 1989 Feb 15;49(4):920-4

Modification of the metabolism and cytotoxicity of bioreductive alkylating agents by dicoumarol in aerobic and hypoxic murine tumor cells. Keyes SR, et al. **Cancer Res** 1989 Jun 15;49(12):3310-3

Effects of host hormonal status on binding of activated estrogen receptor to nuclei from R3230AC and 7,12-dimethylbenz[a]anthracene-induced mammary tumors. Klinge CM, et al. **Cancer Res** 1989 Mar 1; 49(5):1165-70

Inhibition by retinoic acid of type IV collagenolysis and invasion through reconstituted basement membrane by metastatic rat mammary adenocarcinoma cells. Nakajima M, et al. **Cancer Res** 1989 Apr 1;49(7):1698-706

Growth factor binding to 7,12-dimethylbenz(a)anthracene-induced mammary tumors from rats subject to chronic caloric restriction. Ruggeri BA, et al. **Cancer Res** 1989 Aug 1;49(15):4135-41

Modulation of prostaglandin biosynthesis in hypoxic murine mammary adenocarcinoma cells by misonidazole. Shalinsky DR, et al. **Cancer Res** 1989 Jul 15;49(14):3853-6

Evidence for enzymatic activation and oxygen involvement in cytotoxicity and antitumor activity of N,N',N''-triethylenethiophosphoramide. Teicher BA, et al. **Cancer Res** 1989 Sep 15;49(18):4996-5001

Increase in collagen production with loss of androgen responsiveness in cultured androgen-responsive Shionogi carcinoma 115 cells. Terada N, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):895-901

Immunocytochemical detection of estrogen receptors in a

hormone-unresponsive mammary tumor. Peralta Soler A, et al. **Histochemistry** 1989;91(4):351-6
Comparative double-tracer whole-body autoradiography: uptake of 11C-, 18F- and 3H-labeled compounds in rat tumors. d'Argy R, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):577-85
Incorporation of [3H]acetate into the membrane lipids of a murine tumour during the development of thermotolerance. Harms-Ringdahl M, et al. **Int J Radiat Biol** 1989 Feb; 55(2):297-305
Elevation of mouse mammary tumor virus envelope glycoprotein (Gp52) by growth factors. Ritzi EM, et al. **Intervirology** 1988;29(3):144-53
In vivo measurements of vascular oxygen tension in tumors using MRI of a fluorinated blood substitute. Fishman JE, et al. **Invest Radiol** 1989 Jan;24(1):65-71
Sulfation of the tumor cell surface sialomucin of the 13762 rat mammary adenocarcinoma. Hull SR, et al. **J Cell Biochem** 1989 May;40(1):67-81
Prostaglandin E2 receptor heterogeneity and dysfunction in mammary tumor cells. Fulton AM, et al. **J Cell Physiol** 1989 Apr;139(1):93-9
Pyrimido-pyrimidine modulation of EGF growth-promoting activity and p21ras expression in rat mammary adenocarcinoma cells. Lichtner RB, et al. **J Cell Physiol** 1988 Nov;137(2):285-92
Characterization by chromatofocusing of estrogen receptors from rat mammary tumor MTW9. Platica M, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1093-6
Changes in selenium and antioxidant status during DMBA-induced mammary carcinogenesis in rats. L'Abbé MR, et al. **J Nutr** 1989 May;119(5):766-71
Antiestrogen(4-hydroxytamoxifen)-charged estrogen receptor binding to nuclei from normal and neoplastic rat mammary tissues is not affected by host hormonal status. Klinge CM, et al. **J Steroid Biochem** 1989 Sep;33(3):335-40
Androgenic activity of synthetic progestins and spironolactone in androgen-sensitive mouse mammary carcinoma (Shionogi) cells in culture. Luthy IA, et al. **J Steroid Biochem** 1988 Nov;31(5):845-52
Eicosanoid synthesis in 7,12-dimethylbenz(a)anthracene-induced mammary carcinomas in Sprague-Dawley rats fed primrose oil, menhaden oil or corn oil diet. Abou-el-Ela SH, et al. **Lipids** 1988 Oct;23(10):948-54
Proton NMR characteristics of a biological system useful for developing in vivo spectroscopy and imaging techniques for tumors. Block RE, et al. **Magn Reson Med** 1985 Dec;2(6):576-82
Decrease in prolactin receptor affinity in the rat mammary tumor model after treatment with analogs of somatostatin and LH-RH. Kadar T, et al. **Mater Med Pol** 1988 Oct-Dec; 20(4):219-23
Disordered metabolism of microfilament proteins, tropomyosin and actin, in mouse mammary epithelial cells expressing the Ha-ras oncogene. Bhattacharya B, et al. **Oncogene Res** 1988;3(1):51-65
Biodistribution and scintigraphy of 11C-toremifene in rats bearing DMBA-induced mammary carcinoma. Kangas L, et al. **Pharmacol Toxicol** 1989 Apr;64(4):373-7
Picosecond fluorescence of R3230AC mammary carcinoma mitochondria after treatment with hematoporphyrin derivative and Photofrin II in vivo. Hanzlik CA, et al. **Photochem Photobiol** 1989 Jul;50(1):45-53
Eicosanoid synthesis by alveolar macrophages in rats with malignant mammary tumors: differences in rats treated with and without carrageenan implants. Kort WJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):113-20

MICROBIOLOGY

Characterization of sequences related to the mouse mammary tumor virus that are specific to MCF-7 breast cancer cells. May FE, et al. **Cancer Res** 1989 Jul 15;49(14):3879-83
Shedding of virus-free MMTV gp52 by nonproducer mammary tumor cells: a source of tumor marker in the presence and absence of dexamethasone. Ritzi EM, et al. **Intervirology** 1989;30(2):102-10
Positive and negative modification of dexamethasone-mediated MMTV gp52 release by progesterone pretreatment of tumor cells. Ritzi EM, et al. **Intervirology** 1989;30(2):111-6
Adenovirus type 9-induced tumorigenesis in the rat mammary gland related to sex hormonal state. Ankerst J, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):294-8
Glucocorticoids stimulate the release of a viral tumor marker (MMTV gp52) while inhibiting tumor cell growth. Ritzi EM, et al. **J Steroid Biochem** 1989 Apr;32(4):499-505
Isolation of a pathogenic clone of mouse mammary tumor virus. Morris DW, et al. **J Virol** 1989 Jan;63(1):148-58
The mouse homolog of the hst/k-FGF gene is adjacent to int-2 and is activated by proviral insertion in some virally induced mammary tumors. Peters G, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5678-82

PARASITOLOGY

[Mammary protistoma in a bitch and microcebus. Contribution to the study of the pathogenesis of tumors (published erratum appears in C R Acad Sci [III] 1988;307(11):677)] Chauvier G, et al. **C R Acad Sci [III]** 1988;307(5):245-8 (Eng. Abstr.) (Fre)

PATHOLOGY

Development of spindle-shaped cells and chondroid cells from androgen-dependent Shionogi carcinoma 115. A light and electron microscopic study. Terada N, et al. **Acta Pathol Jpn** 1988 Nov;38(11):1405-16
Heterogeneity and clonal interactions in the TS/A murine mammary adenocarcinoma. De Giovanni C, et al. **Adv Exp Med Biol** 1988;233:5-14
Influence of gangliosides on the metastatic process. Gullino PM. **Adv Exp Med Biol** 1988;233:211-4
Maturational agents alone or in combination with cytotoxic agents in therapy of tumor metastases. Milas L, et al. **Adv Exp Med Biol** 1988;233:377-83
Cytoskeletal and junctional heterogeneity in mammary tumor cells and their possible significance in tumor progression. Nicolson GL, et al. **Adv Exp Med Biol** 1988;233:21-6
Analysis of growth, selection, and metastasis of tumor cell populations in vivo using random insertions of foreign DNA as genetic tags. Waghorne C, et al. **Adv Exp Med Biol** 1988;233:27-37
Effects of N-nitroso-N-methylurea on mammary and pituitary glands of young female Sprague-Dawley rats. Bernard DJ, et al. **Anticancer Res** 1988 Jul-Aug;8(4):717-24
Antimetastatic effect of amiloride in an animal tumour model. Kellen JA, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1373-6
Effect of megestrol acetate or melengestrol acetate on preneoplastic and neoplastic mammary growth in mice. Nagasawa H, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1399-403
Cytotoxic estrogens: anilin mustard linked 1,1,2-triphenylbut-1-enes with mammary tumor inhibiting activity. Schneider MR, et al. **Arch Pharm (Weinheim)** 1989 Jan;322(1):59-62
Lack of effects from 2000-Hz magnetic fields on mammary adenocarcinoma and reproductive hormones in rats. Baumann S, et al. **Bioelectromagnetics** 1989;10(3):329-33
Isolation and properties of cell lines from the metastasising rat mammary tumour SMT-2A. Rudland PS, et al. **Br J Cancer** 1989 Jun;59(6):854-64
Androstenedione and androst-5-ene-3 beta,17 beta-diol stimulate DMBA-induced rat mammary tumors--role of aromatase. Dauvois S, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):61-9
Role of polyamines in the growth of hormone-responsive experimental breast cancer in vivo. Manni A, et al. **Breast Cancer Res Treat** 1988 Jul;11(3):231-40
Medroxyprogesterone acetate enhances spontaneous mammary tumorigenesis and uterine adenomyosis in mice. Nagasawa H, et al. **Breast Cancer Res Treat** 1988 Sep; 12(1):59-66
Differential organ tissue adhesion, invasion, and growth properties of metastatic rat mammary adenocarcinoma cells. Nicolson GL. **Breast Cancer Res Treat** 1988 Oct; 12(2):167-76
Secreted growth factors from estrogen receptor-negative human breast cancer do not support growth of estrogen receptor-positive breast cancer in the nude mouse model. Osborne CK, et al. **Breast Cancer Res Treat** 1988 Jul; 11(3):211-9
Experimental model for locally recurring mammary tumors. Development, morphology, karyotype, growth kinetics, and experimental metastatic potential. Estrada J, et al. **Cancer** 1989 Apr 1;63(7):1353-62
Effect of a pulsed magnetic field on tumoral C3H/Bi female mice. Bellossi A, et al. **Cancer Biochem Biophys** 1988 Jul; 10(1):59-66
Activity of the pyrazoloacridines against multidrug-resistant tumor cells. Sebolt J, et al. **Cancer Chemother Pharmacol** 1989;24(4):219-24
Preferential homing of tumor-infiltrating lymphocytes in tumor-bearing mice. Ames IH, et al. **Cancer Immunol Immunother** 1989;29(2):93-100
Radiosensitizing effect of camphor on transplantable mammary adenocarcinoma in mice. Goel HC, et al. **Cancer Lett** 1988 Dec 1;43(1-2):21-7
Effect of dietary linoleic acid level on lodgement, proliferation and survival of mammary tumor metastases. Hubbard NE, et al. **Cancer Lett** 1989 Feb;44(2):117-25
Inhibition of growth and linoleate-enhanced metastasis of a transplantable mouse mammary tumor by indomethacin. Hubbard NE, et al. **Cancer Lett** 1988 Dec 1;43(1-2):111-20
Selenite distribution in log and confluent growth phase murine mammary epithelial cells. Morrison DG, et al. **Cancer Lett** 1988 Dec 15;43(3):227-36
Effect of dietary brussels sprouts with increased selenium content on mammary carcinogenesis in the rat. Stoewsand GS, et al. **Cancer Lett** 1989 Apr;45(1):43-8
Purification and some properties of a lung-derived growth factor that differentially stimulates the growth of tumor cells metastatic to the lung. Cavanaugh PG, et al. **Cancer Res** 1989 Jul 15;49(14):3928-33
Effects of extracellular matrix on the growth and casein gene expression of primary mouse mammary tumor cells in vitro. Chou JL, et al. **Cancer Res** 1989 Oct 1;49(19):5371-6
Differential ability of antiestrogens to stimulate breast cancer cell (MCF-7) growth in vivo and in vitro. Gottardis MM, et al. **Cancer Res** 1989 Sep 1;49(17):4765-9
Tumor cell dissemination patterns and metastasis of murine mammary carcinoma. Juacaba SF, et al. **Cancer Res** 1989 Feb 1;49(3):570-5
Effects of reciprocal changes of diets differing in fat content on pulmonary metastasis from the 13762 rat mammary tumor. Katz EB, et al. **Cancer Res** 1989 May 1; 49(9):2477-84
Possible involvement of Ca2+ mobilization and protein kinase C activation in the induction of spontaneous metastasis by mouse mammary adenocarcinoma cells. Korczak B, et al. **Cancer Res** 1989 May 15;49(10):2597-602
Antiproliferative activity of gamma-interferon combined with lipopolysaccharide on murine adenocarcinoma: dependence on an L-arginine metabolism with production of nitrite and citrulline. Lepoivre M, et al. **Cancer Res** 1989 Apr 15;49(8):1970-6
Inhibitory effect of antibody against basic fibroblast growth factor on androgen- or glucocorticoid-induced growth of Shionogi carcinoma 115 cells in serum-free culture. Lu J, et al. **Cancer Res** 1989 Sep 15;49(18):4963-7
Differential effects of tranylcypromine and imidazole on mammary carcinogenesis in rats fed low and high fat diets. McCormick DL, et al. **Cancer Res** 1989 Jun 15; 49(12):3168-72
Dominance of a tumor subpopulation line in mixed heterogeneous mouse mammary tumors. Miller BE, et al. **Cancer Res** 1988 Oct 15;48(20):5747-53
Therapeutic perturbation of the tumor ecosystem in reconstructed heterogeneous mouse mammary tumors. Miller BE, et al. **Cancer Res** 1989 Jul 15;49(14):3747-53
Antiestrogenic action of toremifene on hormone-dependent, -independent, and heterogeneous breast tumor growth in the athymic mouse. Robinson SP, et al. **Cancer Res** 1989 Apr 1;49(7):1758-62
Effects on C3H mouse mammary cancer of changing from a high fat to a low fat diet before, at, or after puberty. Silverman J, et al. **Cancer Res** 1989 Jul 15;49(14):3857-60
Androgen dependency of a tumor produced by a cell line derived from androgen-responsive Shionogi carcinoma 115. Terada N, et al. **Cancer Res** 1989 Feb 1;49(3):693-8
Genetic evidence for progressive selection and overgrowth of primary tumors by metastatic cell subpopulations. Waghorne C, et al. **Cancer Res** 1988 Nov 1;48(21):6109-14
Correlation of natural killer activity with tumorigenesis of a preneoplastic mouse mammary lesion. Wei WZ, et al. **Cancer Res** 1989 May 15;49(10):2709-15
Suppression by cathepsin L inhibitors of the invasion of amnion membranes by murine cancer cells. Yagel S, et al. **Cancer Res** 1989 Jul 1;49(13):3553-7
A comparison of the effects of the prostaglandin synthesis inhibitors indomethacin and carprofen on 7,12-dimethylbenz[a]anthracene-induced mammary tumorigenesis in rats fed different amounts of essential fatty acid. Carter CA, et al. **Carcinogenesis** 1989 Aug; 10(8):1369-74
Effects of RA 233 treatment on the adhesive, invasive and metastatic properties of 13762NF rat mammary tumor cells. Lichtner RB, et al. **Clin Exp Metastasis** 1989 Mar-Apr; 7(2):175-86
Loss of spontaneous metastasizing potential in mouse mammary tumors. Vaage J. **Clin Exp Metastasis** 1989 May-Jun;7(3):373-8
The relationship between lymphogenous and hematogenous metastasis in rats bearing the MT-100-TC mammary carcinoma. Ward PM, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):253-64
Inhibitory action of androstenedione on the proliferation and cell cycle kinetics of aromatase-free MXT and MCF-7 mammary tumour cell lines. Kiss R, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):837-43
Differential adhesion of metastatic rat mammary carcinoma cells to organ-derived microvessel endothelial cells and subendothelial matrix. Lichtner RB, et al. **Exp Cell Biol** 1989;57(3):146-52
Carcinogenesis and aging. VIII. Effect of host age on tumour growth, metastatic potential, and chemotherapeutic sensitivity to 1.4-benzoquinone-guanylhydrazonethiosemicarbazone (ambazone) and 5-fluorouracil in mice and rats. Baumgart J, et al. **Exp Pathol** 1988;33(4):239-48
Influence of L-thyroxine, L-triiodothyronine, thyroid stimulating hormone, or estradiol on the cell kinetics of cultured mammary cancer cells. de Launoit Y, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):585-91
Variations in serum alkaline DNase activity in rats during growth and treatment of tumors sensitive or resistant to therapy. Economidou-Karaoglou A, et al. **Int J Cancer** 1989 May 15;43(5):956-9
Mammary adenocarcinomas induced by medroxyprogesterone acetate: hormone dependence and EGF receptors of BALB/c in vivo sublines. Lanari C, et al. **Int J Cancer** 1989 May 15;43(5):845-50
A survey of in vivo growth characteristics and spontaneous metastasizing potentials of C3H mouse mammary tumors. Vaage J. **Int J Cancer** 1989 May 15;43(5):910-4
Hydralazine-induced enhancement of hyperthermic damage in a C3H mammary carcinoma in vivo. Horsman MR, et al. **Int J Hyperthermia** 1989 Mar-Apr;5(2):123-36
In vivo influence of androgens on the cell kinetics and chromatin pattern of the MXT mouse mammary tumor treated or not by aminoglutethimide. de Launoit Y, et al. **J Cancer Res Clin Oncol** 1989;115(2):129-38
Cytotoxicity of receptor-mediated 16 alpha-[125I]iodoestradiol in cultured MCF-7 human breast cancer cells. McLaughlin WH, et al. **J Natl Cancer Inst** 1989 Mar 15;81(6):437-40
Histopathologic features of DMBA-induced mammary

tumors in blind-underfed, blind-anosmic, and blind cold-exposed rats: influence of the pineal gland. Cos S, et al. **J Pineal Res** 1989;6(3):221-31

Growth control of androgen-dependent Shionogi carcinoma cells by growth factor(s) produced from androgen-independent Shionogi carcinoma cells in a paracrine mechanism. Noguchi S, et al. **J Steroid Biochem** 1989 Apr;32(4):479-83

Partial nephrectomy in mice with milliwatt carbon dioxide laser and its influence on experimental metastasis. Ammirati M, et al. **J Surg Oncol** 1989 Jul;41(3):153-9

The effect of bovine growth hormone on growth of mammary tumors in hypophysectomized rats. Li CH, et al. **Life Sci** 1974 Aug 15;15(4):761-4

Imaging tumors with respect to a grid coordinate system by proton magnetic resonance using lipid suppression and T2 weighting. Block RE, et al. **Magn Reson Med** 1989 Aug;11(2):244-7

Genetic tagging of tumor cells with retrovirus vectors: clonal analysis of tumor growth and metastasis in vivo. Korczak B, et al. **Mol Cell Biol** 1988 Aug;8(8):3143-9

Phenotypic variability of chemically induced primary rat mammary tumors. Doležalová V, et al. **Neoplasma** 1989; 36(1):103-12

The effect of dietary fat on metastasis of the Lewis lung carcinoma and the BALB/c mammary carcinoma. Scholar EM, et al. **Nutr Cancer** 1989;12(2):109-19

Harvey-ras mediated neoplastic development in the mouse mammary gland. Strange R, et al. **Oncogene** 1989 Mar; 4(3):309-15

Replicative behaviour of ascites tumour cells transplanted in BALB C mice of different sex. Liotti FS, et al. **Oncology** 1988;45(6):453-7

Reversion toward an earlier stage of differentiation and loss of polarity during progression of N-methyl-N-nitrosourea-induced rat mammary tumours. Dulbecco R, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9292-6

Stochastic development of invasive potential in rat mammary tumors induced by N-methyl-N-nitrosourea. Dulbecco R, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8659-63

Inhibition of growth of human breast carcinomas in vivo by somatostatin analog SMS 201-995: treatment of nude mouse xenografts. Weber C, et al. **Surgery** 1989 Aug; 106(2):416-22

Factors in transfusion-related enhanced tumor growth. Ames SA, et al. **Transplant Proc** 1988 Dec;20(6):1121-4

Copper histochemistry of 5 murine tumors and their respective metastases. Fuchs AG, et al. **Tumour Biol** 1989; 10(1):38-45

Morphological and biological characteristics of mammary tumours induced by the direct application of DMBA powder to rat mammary glands. Tsubura A, et al. **Virchows Arch [A]** 1988;414(1):1-7

[Establishment of a mammary cancer cell line Ca 761-86 and its biologic characteristics in inbred 615 mice] Cheng YD. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):402-5 (Eng. Abstr.) **(Chi)**

[Modeling of differentiation and physiological involution in the tissues of induced cancer of the mammary gland] Khaetskil IK, et al. **Vopr Onkol** 1988;34(10):1224-31 (Eng. Abstr.) **(Rus)**

[Special report: studies to determine the possible antitumoral properties of Cobra venom and crotoxin complex A and B] Baldi A, et al. **Medicina (B Aires)** 1988;48(4):337-44 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Transplantable mouse 16/C mammary adenocarcinoma as a model in experimental cancer therapy. I. Kinetics of growth and spread. Rak J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):325-34

Mechanisms of tumor-induced neutrophilia: constitutive production of colony-stimulating factors and their synergistic actions. Lee MY, et al. **Blood** 1989 Jul; 74(1):115-22

Growth of epithelium from a preneoplastic mammary outgrowth in response to mammary adipose tissue. Beck JC, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):409-18

Effect of 1,25-dihydroxyvitamin D3 on mouse mammary tumor (GR) cells: evidence for receptors, cellular uptake, inhibition of growth and alteration in morphology at physiologic concentrations of hormone. Gross M, et al. **J Bone Miner Res** 1986 Oct;1(5):457-67

Establishment and characterization of resistant cells to etoposide (VP16) from a mouse breast cancer cell line, FM3A. Takagi E, et al. **Jpn J Cancer Res** 1988 Aug; 79(8):938-44

Response of mammary tumors to caloric restriction for different time periods during the promotion phase. Kritchevsky D, et al. **Nutr Cancer** 1989;12(3):259-69

Characterization of monoclonal antibody R256, specific for activated ras p21 with arginine at 12, and analysis of breast carcinoma of v-Harvey-ras transgenic mouse. Pullano TG, et al. **Oncogene** 1989 Aug;4(8):1003-8

PREVENTION & CONTROL

Anti-growth action on mouse mammary and prostate glands of a monoclonal antibody to prolactin receptor. Sissom JF, et al. **Am J Pathol** 1988 Dec;133(3):589-95

Inhibition by beta-carotene-rich algae Dunaliella of spontaneous mammary tumourigenesis in mice. Nagasawa H, et al. **Anticancer Res** 1989 Jan-Feb;9(1):71-5

Hormone prevention of mammary carcinogenesis: a new approach in anticancer research. Russo IH, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1247-64 (105 ref.)

Synergistic interaction between 13-cis-retinoic acid and glucarate: activity against rat mammary tumor induction and MCF-7 cells. Abou-Issa H, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1364-9

Project of experimental bioassays on chemoprevention agents performed at the Bologna Institute of Oncology: report on tamoxifen control of spontaneous mammary tumors on Sprague-Dawley rats. Maltoni C, et al. **Cancer Invest** 1988; 6(5):643-58

Effects of D,L-2-difluoromethylornithine and indomethacin on mammary tumor promotion in rats fed high n-3 and/or n-6 fat diets [published erratum appears in Cancer Res 1989 Sep 1;49(17):4946] Abou-el-Ela SH, et al. **Cancer Res** 1989 Mar 15;49(6):1434-40

Chemopreventive efficacy of combined retinoid and tamoxifen treatment following surgical excision of a primary mammary cancer in female rats. Ratko TA, et al. **Cancer Res** 1989 Aug 15;49(16):4472-6

Caloric restriction and 7,12-dimethylbenz(a)anthracene-induced mammary tumor growth in rats: alterations in circulating insulin, insulin-like growth factors I and II, and epidermal growth factor. Ruggeri BA, et al. **Cancer Res** 1989 Aug 1;49(15):4130-4

Inhibition of 7,12-dimethylbenz(a)anthracene- and N-nitrosomethylurea-induced rat mammary cancer by dietary flavonol quercetin [published erratum appears in Cancer Res 1989 Feb 15;49(4):1073] Verma AK, et al. **Cancer Res** 1988 Oct 15;48(20):5754-8

Tissue selenium levels in selenium-supplemented rats and their relevance in mammary cancer protection. Ip C, et al. **Carcinogenesis** 1989 May;10(5):921-5

Suppression of rat mammary cancer development by N-(4-hydroxyphenyl)retinamide (4-HPR) following surgical removal of first palpable tumor. Moon RC, et al. **Carcinogenesis** 1989 Sep;10(9):1645-9

Chemoprevention of experimental mammary carcinogenesis by the synthetic organoselenium compound, benzylselenocyanate, in rats. Nayini J, et al. **Carcinogenesis** 1989 Mar;10(3):509-12

Antitumor actions of toremifene in the 7,12-dimethylbenzanthracene (DMBA)-induced rat mammary tumor model. Robinson SP, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1817-21

Inhibition of DMBA-induced mammary tumorigenesis by caloric restriction in rats fed high-fat diets. Klurfeld DM, et al. **Int J Cancer** 1989 May 15;43(5):922-5

Ester derivatives of the mammary-tumor-inhibiting antiestrogen 2,3-bis(2-fluoro-4-hydroxyphenyl)-2,3-dimethylbutane. Schwarz W, et al. **J Cancer Res Clin Oncol** 1989; 115(2):161-5

New approaches to cancer chemoprevention with difluoromethylornithine and selenite. Ip C, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):839-43

Determination of degree of energy restriction necessary to reduce DMBA-induced mammary tumorigenesis in rats during the promotion phase. Klurfeld DM, et al. **J Nutr** 1989 Feb;119(2):286-91

Effects of dietary selenium on DMBA-induced carcinogenesis in rats fed a diet high in mixed fats. L'Abbé MR, et al. **J Nutr** 1989 May;119(5):757-65

Possible role for vitamin D in controlling breast cancer cell proliferation. Colston KW, et al. **Lancet** 1989 Jan 28; 1(8631):188-91

Effects of dietary fat on long-term growth and mammary tumorigenesis in female Sprague-Dawley rats given a low dose of DMBA. Jacobson EA, et al. **Nutr Cancer** 1988; 11(4):221-7

d-limonene, an anticarcinogenic terpene. **Nutr Rev** 1988 Oct; 46(10):363-5 (12 ref.)

Effectiveness of prophylactic mastectomy in the prevention of breast tumors in C3H mice. Nelson H, et al. **Plast Reconstr Surg** 1989 Apr;83(4):662-9

RADIONUCLIDE IMAGING

Chelator-induced enhancement of 67Ga tumour imaging: comparison of desferrioxamine with N,N'-ethylene-bis[2-hydroxy-5-carboxyphenylglycine] Hunt FC. **Int J Rad Appl Instrum [B]** 1988;15(6):651-7

In vivo assessment of 111In-labeled hematoporphyrin derivative in breast tumor-bearing animals. Wong DW, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):269-81

RADIOTHERAPY

Evaluation of the therapeutic use of radioactive monoclonal antibodies C242 and C215 in transplanted murine tumours. Habib NA, et al. **Eur J Surg Oncol** 1989 Aug;15(4):367-70

Tumor radiation responses and tumor oxygenation in aging mice. Rockwell S. **Exp Gerontol** 1989;24(1):37-48

Normobaric oxygen as a sensitizer of hypoxic tumor cells. Hong A, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1097-9

Radiosensitization by nicotinamide in tumors and normal tissues: the importance of tissue oxygenation status. Horsman MR, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1273-6

Tumor radiosensitization by nicotinamide: a result of improved perfusion and oxygenation. Horsman MR, et al. **Radiat Res** 1989 Apr;118(1):139-50

Response of a brachytherapy model using 125I in a murine tumor system. Jones EL, et al. **Radiat Res** 1989 Apr; 118(1):112-30

Preclinical studies of porfiromycin as an adjunct to radiotherapy. Rockwell S, et al. **Radiat Res** 1988 Oct; 116(1):100-13

Therapeutic gain factors for fractionated radiation treatment of spontaneous murine tumors using fast neutrons, photons plus O2(1) or 3 ATA, or photons plus misonidazole. Suit HD, et al. **Radiat Res** 1988 Dec;116(3):482-502

An experimental study of tumour size and radiosensitivity: analysis by regrowth delay. Hill SA, et al. **Radiother Oncol** 1989 May;15(1):39-48

Comparison of low dose nicotinamide versus benzamide, administered per os, as radiosensitizers in a C3H mammary carcinoma. Kjellen E, et al. **Radiother Oncol** 1988 Aug; 12(4):327-31

[Experimental study on the effectiveness of BRM in radiation therapy—OK-432 and cyclophosphamide] Norimura T, et al. **Gan No Rinsho** 1988 Oct;34(13):1811-5 (Eng. Abstr.) **(Jpn)**

[Experimental studies of multiple fractions per day (MFD) at smaller doses than 2 Gy] Yamakawa M, et al. **Gan No Rinsho** 1988 Oct;34(13):1764-7 (Eng. Abstr.) **(Jpn)**

[Radiosensitizing effect of the nitroimidazole derivatives RK28 and DNIE on murine tumors] Tanaka M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1249-60 (Eng. Abstr.) **(Jpn)**

SECONDARY

The role of polymorphonuclear leukocytes (PMN) on the growth and metastatic potential of 13762NF mammary adenocarcinoma cells. Aeed PA, et al. **Int J Cancer** 1988 Nov 15;42(5):748-59

SURGERY

Mechanisms of reduction of tumor recurrence with carbon dioxide laser in experimental mammary tumors. Lanzafame RJ, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):493-6

[Timing of UFT administration combined with surgical operation in pulmonary metastasis of rat mammary carcinoma] Li XB, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2381-5 (Eng. Abstr.) **(Jpn)**

THERAPY

The interaction between RSU-1069, hydralazine and hyperthermia in a C3H mammary carcinoma as assessed by tumour growth delay [letter] Horsman MR, et al. **Acta Oncol** 1988;27(6b):861-2

Growth delay effect of combined interstitial hyperthermia and brachytherapy in a rat solid tumor model. Papadopoulos D, et al. **Anticancer Res** 1989 Jan-Feb; 9(1):45-7

Effect of human recombinant tumour necrosis factor and rat gamma interferon on nitrosomethylurea-induced mammary tumours. Shah P, et al. **Br J Cancer** 1989 Feb;59(2):206-9

Influence of pituitary grafts or prolactin administrations on the hormone sensitivity of ovarian hormone-independent mouse mammary MXT tumors. Kiss R, et al. **Cancer Res** 1989 Jun 1;49(11):2945-51

Individual and combined effects of alpha-difluoromethylornithine and ovariectomy on the growth and polyamine milieu of experimental breast cancer in rats. Manni A, et al. **Cancer Res** 1989 Jul 1; 49(13):3529-34

Thermochemotherapy in vivo of a C3H mouse mammary carcinoma: single fraction heat and drug treatment. Monge OR, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1661-9

Reduced thermal sensitivity of the vasculature in a slowly growing tumour. Hill SA, et al. **Int J Hyperthermia** 1989 May-Jun;5(3):359-70

Thermal enhancement of low dose rate irradiation in a murine tumour system. Jones EL, et al. **Int J Hyperthermia** 1989 Jul-Aug;5(4):509-23

Thermochemotherapy in vivo of a C3H mouse mammary carcinoma: thermotolerant tumours. Monge OR, et al. **Int J Hyperthermia** 1989 Sep-Oct;5(5):579-87

Phosphorus NMR study of the response of a murine tumour to hyperthermia as a function of treatment time and temperature. Sijens PE, et al. **Int J Hyperthermia** 1989 May-Jun;5(3):351-7

Combined effects of X rays, Ro 03-8799, and hyperthermia on growth, necrosis, and cell proliferation in a mouse tumor. George KC, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1119-22

Hyperthermic "dose" dependent changes in intralesional pH. Hetzel FW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):183-6

Modulating the oxygen tension in tumours by hypothermia and hyperbaric oxygen. Nias AH, et al. **J R Soc Med** 1988 Nov;81(11):633-6

Comparison of local tumor recurrence following excision with the CO2 laser, Nd:YAG laser, and Argon Beam Coagulator. Lanzafame RJ, et al. **Lasers Surg Med** 1988; 8(5):515-20

Nd:YAG laser-induced hyperthermia in a mouse tumor model. Waldow SM, et al. **Lasers Surg Med** 1988;8(5):510-4

Modulation of lymphocytic infiltrates in C4 mouse mammary tumors. Wei WZ, et al. **Prog Clin Biol Res** 1989;288:195–9
[Experimental study of the antitumor effect of Z–100 in the treatment of MM 46 tumor transplanted in C3H/He mice. 1. Effect of long–term administration of Z–100] Ogawa Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2551–8 (Eng. Abstr.) **(Jpn)**
[Effect of immunomodifier on radiation–induced antitumor immunity following local irradiation to tumor—2. Mouse interferon–alpha/beta] Mukae S, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Oct 25; 48(10):1243–8 (Eng. Abstr.) **(Jpn)**
[Multifactor analysis of the immunomodulating properties of sclarubicin] Vladro MM, et al. **Antibiot Khimioter** 1989 Jan;34(1):56–60 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Reinfection of virus free mice with mouse mammary tumour virus. Lee AE, et al. **Lab Anim** 1989 Apr;23(2):133–7

ULTRASTRUCTURE

Beta–adrenergic receptors in DMBA–induced rat mammary tumors: correlation with progesterone receptor and tumor growth. Marchetti B, et al. **Breast Cancer Res Treat** 1989 Jul;13(3):251–63
Mechanism of tumor destruction following photodynamic therapy with hematoporphyrin derivative, chlorin, and phthalocyanine. Nelson JS, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1599–605
A comparative fine structure study on myofibroblasts from a cultured human and an in–situ rat tumor source. Reger JF, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):501–8

MAMMILLARY BODIES

Lesions of the hippocampal formation but not lesions of the fornix or the mammillary nuclei produce long–lasting memory impairment in monkeys. Zola–Morgan S, et al. **J Neurosci** 1989 Mar;9(3):898–913

ANALYSIS

Neurons containing cholecystokinin mRNA in the mammillary region: ontogeny and adult distribution in the rat. Burgunder JM, et al. **Cell Mol Neurobiol** 1989 Jun; 9(2):281–94

ANATOMY & HISTOLOGY

Mamillary body in the rat: topography and synaptology of projections from the subicular complex, prefrontal cortex, and midbrain tegmentum. Allen GV, et al.
J Comp Neurol 1989 Aug 15;286(3):311–36

CYTOLOGY

Retrograde double–labeling study of the mammillothalamic and the mammillotegmental projections in the rat. Hayakawa T, et al. **J Comp Neurol** 1989 Jun 1;284(1):1–11
A quantitative histological study of the anterodorsal thalamic nucleus and the lateral mammillary nucleus of ageing mice. Sturrock RR. **J Hirnforsch** 1989;30(2):191–5

DRUG EFFECTS

THA increases action potential duration of central histamine neurons in vitro. Reiner PB, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):265–70

GROWTH & DEVELOPMENT

Neurons in the rat subiculum with transient postmamillary collaterals during development maintain projections to the mamillary complex. Stanfield BB, et al. **Exp Brain Res** 1988; 72(1):185–90

METABOLISM

Effect of neurotoxic lesions in the mammillary bodies on the distribution of brain histamine. Niigawa H, et al.
Brain Res 1988 Aug 30;459(1):183–6

PATHOLOGY

Mamillary bodies in Alzheimer's disease. Grossi D, et al.
Acta Neurol Scand 1989 Jul;80(1):41–5
Atrophy and sponginess of the mammillary bodies with neuronal sparing: not only inactive Wernicke's encephalopathy. Lindboe CF, et al. **APMIS** 1989 Jul; 97(7):667–70

PHYSIOLOGY

Impairment of memory in a delayed non–matching to place task following mamillary body lesions in mice. Beracochea DJ, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):147–54
A comparison of supramammillary and medial septal influences on hippocampal field potentials and single–unit activity. Mizumori SJ, et al. **J Neurophysiol** 1989 Jan; 61(1):15–31
Mammillary polydipsia and diabetes insipidus: a study of the rhythmicity of water intake. Morales A, et al.
Physiol Behav 1989 May;45(5):911–5
[Effects of stimulation of the hypothalamic supramammillary and medial preoptic area on plasma renin activity (PRA) in rabbits] Chen PP, et al. **Sheng Li Hsueh Pao** 1988 Apr; 40(2):197–201 (Eng. Abstr.) **(Chi)**
[Effect of electric stimulation of the supraoptic nucleus on mammillary polydipsia] Morales A, et al.
Arch Neurobiol (Madr) 1988 May–Jun;51(3):154–8 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

A study of the response to several dipsogenic treatments in rats with mammillary polydipsia and with centrally induced diabetes insipidus. Morales A, et al. **Behav Brain Res** 1988 Nov 1;31(1):69–74
[Primary/secondary characteristics of polydipsia induced by electrolytic lesion of the mammillary bodies] Morales A, et al. **Rev Esp Fisiol** 1989 Mar;45(1):27–32 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Mamillary body in the rat: a cytoarchitectonic, Golgi, and ultrastructural study. Allen GV, et al. **J Comp Neurol** 1988 Sep 1;275(1):39–64

MAMMOGRAPHY

Optical spectroscopy. Pre–mammography marker. Egan RL, et al. **Acta Radiol** 1988 Sep–Oct;29(5):497–503
Preoperative needle–marking of non–palpable breast lesions. Søholm S, et al. **Acta Radiol** 1989 Mar–Apr;30(2):223–4
A personal–computer reporting system for mammography. Bates BF. **AJR** 1988 Dec;151(6):1237–9
Breast cancer screening: all's well that ends well, or much ado about nothing? [letter] Beijerinck D, et al. **AJR** 1989 Apr;152(4):891
Evaluation of a dual–screen, dual–emulsion mammography system. Jackson VP, et al. **AJR** 1989 Mar;152(3):483–6
A report–coding system for integration into a digital radiology department. Bramble JM, et al.
AJR Am J Roentgenol 1989 May;152(5):1109–12
Medicolegal aspects of screening mammography. Brenner RJ. **AJR Am J Roentgenol** 1989 Jul;153(1):53–6
Sedimented calcium in benign breast cysts: the full spectrum of mammographic presentations. Linden SS, et al.
AJR Am J Roentgenol 1989 May;152(5):967–71
Infiltrating lobular carcinoma: mammographic patterns with pathologic correlation. Mendelson EB, et al.
AJR Am J Roentgenol 1989 Aug;153(2):265–71
Radiopaque markers on mammary implants [letter] Sullivan DC, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):428–9
Galactography in the investigation of nipple discharge. Rubin E. **Ala J Med Sci** 1988 Jul;25(3):280–2
Mobile mammography screening. Stanley RJ, et al.
Ala Med 1989 Mar;58(9):13
Selecting a screening mammography facility. Kaplan AS, et al. **Am Fam Physician** 1988 Oct;38(4):143–7 (27 ref.)
Mammographic parenchymal patterns in women receiving noncontraceptive estrogen treatment. Bergkvist L, et al. **Am J Epidemiol** 1989 Sep;130(3):503–10
Application of expert systems to mammographic image analysis. Cook HM, et al. **Am J Physiol Imaging** 1989; 4(1):16–22
The potential value of mammographically guided fine–needle aspiration biopsy of nonpalpable breast lesions. Masood S, et al. **Am Surg** 1989 Apr;55(4):226–31
Cancer surveillance after augmentation mammoplasty [letter] Miller SH. **Arch Surg** 1989 Jan;124(1):134
Screening in breast cancer: a view from the front line. Lundgren B. **Biomed Pharmacother** 1988;42(7):443–6
Malmö mammographic screening trial [letter] Tabár L, et al. **BMJ** 1989 Jan 7;298(6665):48–9
Film processing for mammography. Law J, et al.
Br J Radiol 1988 Oct;61(730):939–42
X–ray protection considerations for mammography screening centres. Walker A, et al. **Br J Radiol** 1989 Jun; 62(738):554–7
Additional value of fine–needle aspiration biopsy in a mammographic screening trial. Frisell J, et al.
Br J Surg 1989 Aug;76(8):840–3
Mammography [letter] Baines CJ. **CA** 1989 Jul–Aug; 39(4):252–4
Sensitivity and specificity of first screen mammography in 15 NBSS centres. Baines CJ, et al. **Can Assoc Radiol J** 1988 Dec;39(4):273–6
Sexual ornaments [letter] Munk PL, et al.
Can Assoc Radiol J 1989 Jun;40(3):182
Primary squamous cell carcinoma of the breast: mammographic findings. Tashjian J, et al.
Can Assoc Radiol J 1989 Aug;40(4):228–9
Histologic and mammographic specificity of risk factors for benign breast disease. Bright RA, et al. **Cancer** 1989 Aug 1;64(3):653–7
Determining the efficacy of breast cancer screening. Shapiro S. **Cancer** 1989 May 15;63(10):1873–80
A comparison of radiation doses to the breast in computed tomographic chest examinations for two scanning protocols. Evans SH, et al. **Clin Radiol** 1989 Jan;40(1):45–6
Computer–assisted analysis of mammographic clustered calcifications. Freundlich IM, et al. **Clin Radiol** 1989 May; 40(3):295–8
Mobile mammography: the first six–months experience at Mount Sinai Hospital. Kron ES, et al. **Conn Med** 1989 Feb; 53(2):71–2
Mammographic wire–guided biopsies in non–palpable breast lesions. Adler OB, et al. **Eur J Radiol** 1989 May;9(2):108–11
Breast cancer: evaluating mammography in early diagnosis. Adler DD. **Geriatrics** 1988 Dec;43(12):51–5, 58 (22 ref.)
Mammographic localization and biopsy: the experience of a gynecologic oncology group. Stock RJ, et al.
Gynecol Oncol 1989 May;33(2):172–6
DNA flow cytometric analysis indicates that many breast cancers detected in the first round of mammographic screening have a low malignant potential. Kallioniemi OP, et al. **Int J Cancer** 1988 Nov 15;42(5):697–702
Evaluation of overdiagnosis of breast cancer in screening with mammography: results of the Nijmegen programme. Peeters PH, et al. **Int J Epidemiol** 1989 Jun;18(2):295–9
Computer–aided detection of microcalcifications in mammograms. Methodology and preliminary clinical study. Chan HP, et al. **Invest Radiol** 1988 Sep;23(9):664–71
Correlation between breast parenchymal patterns and mammographers' certainty of diagnosis. Fajardo LL, et al.
Invest Radiol 1988 Jul;23(7):505–8
A comparison of digitized storage phosphors and conventional mammography in the detection of malignant microcalcifications. Oestmann JW, et al. **Invest Radiol** 1988 Oct;23(10):725–8
The value of mammography screening in women under age 50 years. Tabár L, et al. **Invest Radiol** 1989 May;24(5):420–4
Screening for breast cancer in elderly women. Developed by the Clinical Practice Committee and approved by the American Geriatrics Society Board of Directors.
J Am Geriatr Soc 1989 Sep;37(9):883–4
Risk disclosure for mammography in the elderly [letter] Sickbert SF. **J Am Geriatr Soc** 1989 Apr;37(4):389–90
Have you had your mammogram, doctor? Guinan ME.
J Am Med Wom Assoc 1988 Nov–Dec;43(6):183–4
Sensitivity, specificity, predictive value and accuracy of film/screen mammography. A three–year experience. Warren DL, et al. **J Ky Med Assoc** 1989 Apr;87(4):169–73
Mammographic parenchymal features and breast cancer in the breast cancer detection demonstration project [see comments] Brisson J, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1534–40. **Comment in:** J Natl Cancer Inst 1989 Jun 21;81(12):962–3
Mammographic parenchymal features and breast cancer [letter; comment] Sonnenschein E, et al.
J Natl Cancer Inst 1989 Jun 21;81(12):962–3. **Comment on:** J Natl Cancer Inst 1988 Dec 7;80(19):1534–40
Medical groups' message to women: if 40 or older, get regular mammograms [news] Vanchieri C. **J Natl Cancer Inst** 1989 Aug 2;81(15):1126–8
Film–screen mammography: comparison of views. Bassett LW, et al. **J Natl Med Assoc** 1989 Apr;81(4):391–4
Breast cancer screening. Acheson ED. **J R Soc Med** 1989 Aug;82(8):455–7
Enhanced detection of preinvasive breast cancer: combined role of mammography and needle localization biopsy. Molloy M, et al. **J Surg Oncol** 1989 Mar;40(3):152–4
Real–time ultrasound, axillary mammography, and clinical examination in the detection of axillary lymph node metastases in breast cancer patients. Pamilo M, et al.
J Ultrasound Med 1989 Mar;8(3):115–20
Mammographic screening in asymptomatic women aged 40 years and older. Council on Scientific Affairs. **JAMA** 1989 May 5;261(17):2535–42 (42 ref.)
Not everyone agrees with new mammographic screening guidelines designed to end confusion [news] King AS.
JAMA 1989 Sep 1;262(9):1154–5
Making mammography a habit [letter] Snowdon DA, et al.
JAMA 1989 Jul 14;262(2):207
Recommendations for mammography in the presence of advanced age and coexisting disease [letter] Temianka D.
JAMA 1989 Oct 13;262(14):1950
Stereotactic fine–needle biopsy in 2594 mammographically detected non–palpable lesions. Azavedo E, et al. **Lancet** 1989 May 13;1(8646):1033–6
Fine–needle biopsy in mammographically detected non–palpable lesions [letter] Graham IH. **Lancet** 1989 Aug 12;2(8659):384
Mammography in symptomatic breast disease. Locker AP, et al. **Lancet** 1989 Apr 22;1(8643):887–9
Accuracy of mammography in an Australian community setting [letter] **Med J Aust** 1989 Jan 2;150(1):53–4
The price of a false–negative result of mammography and an overenthusiastic lay press [letter] Cooper SG, et al.
Med J Aust 1989 Jun 5;150(11):664
Accuracy of mammography in an Australian community setting. Cregan PC, et al. **Med J Aust** 1988 Oct 17; 149(8):408, 410
Comparison of mammary serum antigen assay with mammography in patients with breast cancer. Hare WS, et al. **Med J Aust** 1988 Oct 17;149(8):402–6
The risks of suboptimal mammography. McDermott FT, et al. **Med J Aust** 1988 Oct 17;149(8):439–42
Comments on "Image Feature Analysis and Computer–Aided Diagnosis in Digital Radiography. I. Automated Detection of Microcalcifications in Mammography" [letter] Belikova TP, et al. **Med Phys** 1989 Jan–Feb;16(1):142
The effect of breast composition on absorbed dose and image contrast. Skubic SE, et al. **Med Phys** 1989 Jul–Aug; 16(4):544–52
Mammography in the early detection of breast cancer. Marcus VL. **Nebr Med J** 1988 Dec;73(12):355–7
A survey of physician beliefs and practices concerning routine mammography. Slenker SE, et al. **Ohio Med** 1988

Jun;84(6):476–81
A generalised algorithm for spectral reconstruction in Compton spectroscopy with corrections for coherent scattering. Matscheko G, et al. **Phys Med Biol** 1989 Jul; 34(7):835–41
Mammography of the augmented breast [letter] Miller SH, et al. **Plast Reconstr Surg** 1988 Nov;82(5):922
Radiological investigations of the chest, breast, head & neck. Bury R. **Practitioner** 1987 Nov 9;231(1438):1503–6, 1509 (3 ref.)
Exploration of factors affecting mammography behaviors. Rutledge DN, et al. **Prev Med** 1988 Jul;17(4):412–22
The technical quality of mammography in centers participating in a regional breast cancer awareness program [letter] Gray JE. **Radiographics** 1988 Jul;8(4):823
The mammographic features of the postlumpectomy, postirradiation breast. Harris KM, et al. **Radiographics** 1989 Mar;9(2):253–68
Well defined masses in the breast. Marsteller LP, et al. **Radiographics** 1989 Jan;9(1):13–37
Mammographic evaluation of the postsurgical and irradiated breast. Peters ME, et al. **Radiographics** 1988 Sep; 8(5):873–99
Mammography as a radiographic examination: an overview. Vyborny CJ, et al. **Radiographics** 1989 Jul;9(4):723–64 (38 ref.)
Males in mammography—a silly suggestion [letter] Durand D. **Radiol Technol** 1989 Mar–Apr;60(4):342–3
No males in mammography [letter] Volk B. **Radiol Technol** 1989 Mar–Apr;60(4):342
Association of estrogen receptors with parenchymal pattern at mammography. Ciatto S, et al. **Radiology** 1989 Mar;170(3 Pt 1):695–7
Mammography registry: considerations and options. Clark RA, et al. **Radiology** 1989 Apr;171(1):91–3
Mammography after prosthesis placement for augmentation or reconstructive mammoplasty. Dershaw DD, et al. **Radiology** 1989 Jan;170(1 Pt 1):69–74
Ductal carcinoma in situ: mammographic findings and clinical implications. Dershaw DD, et al. **Radiology** 1989 Feb;170(2):411–5
Decreased breast cancer mortality through mammographic screening [letter] Evens RG. **Radiology** 1989 Feb;170(2):575
Nipple simulating a breast mass on a mammogram. Gilula LA, et al. **Radiology** 1989 Jan;170(1 Pt 1):272
Radiologists' roles in mammography [letter] Gulino LA, et al. **Radiology** 1988 Dec;169(3):873–4
Circumscribed intraductal carcinoma of the breast [letter; comment] Hall FM. **Radiology** 1989 Aug;172(2):579–80. **Comment on:** Radiology 1989 Feb;170(2):423–5
Follow-up as an alternative to biopsy for mammographically detected lesions interpreted as probably benign [letter] Hall FM. **Radiology** 1989 Oct;173(1):284–5
Breast microcalcifications after lumpectomy and radiation therapy [letter] Hall FM. **Radiology** 1989 Aug;172(2):577–8
Mammographic reports and surgical referrals [letter] Hall FM. **Radiology** 1989 Jun;171(3):876
Breast hamartomas: variable mammographic appearance. Helvie MA, et al. **Radiology** 1989 Feb;170(2):417–21
Residual breast carcinoma after biopsy: role of mammography in evaluation. Homer MJ, et al. **Radiology** 1989 Jan;170(1 Pt 1):75–7
A further simulator of a breast mass on a mammogram [letter] Jackson FI. **Radiology** 1989 Oct;173(1):284
Asymmetric breast tissue. Kopans DB, et al. **Radiology** 1989 Jun;171(3):639–43
Medullary carcinoma of the breast: mammographic and US appearance. Meyer JE, et al. **Radiology** 1989 Jan;170(1 Pt 1):79–82
Combination gel-inflatable mammary prosthesis: appearance at CT. O'Mara EM, et al. **Radiology** 1989 Jan;170(1 Pt 1):78
Why women resist screening mammography: patient-related barriers. Rimer BK, et al. **Radiology** 1989 Jul;172(1):243–6
Communication problems after mammographic screening. Robertson CL, et al. **Radiology** 1989 Aug;172(2):443–4
Invasive papillary breast carcinoma: mammographic and sonographic appearance. Schneider JA. **Radiology** 1989 May;171(2):377–9
Clinically occult ductal carcinoma in situ detected with mammography: analysis of 100 cases with radiologic-pathologic correlation. Stomper PC, et al. **Radiology** 1989 Jul;172(1):235–41
Needle localization of nonpalpable breast lesions with current dedicated mammographic systems [letter] Yagan R, et al. **Radiology** 1989 Aug;172(2):580–1
Radiological and ultrasonographical diagnosis of inflammatory breast cancer. Bock E, et al. **Rays** 1988 May–Aug;13(2):53–7
The present state of screening for breast cancer. Tabár L, et al. **Semin Surg Oncol** 1989;5(2):94–101 (28 ref.)
Mammography screening in women under age 50 (a clinician's viewpoint) [letter] Elliott RL. **South Med J** 1989 Jul;82(7):931–2
Mammographic microcalcifications associated with schistosomiasis. Varin CR, et al. **South Med J** 1989 Aug; 82(8):1060–1
Mammographic detection of carcinoma of the breast in patients with augmentation prostheses. Mitnick JS, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):30–2
Ultrasonography: an alternative to x-ray-guided needle localization of nonpalpable breast masses. Schwartz GF, et al. **Surgery** 1988 Nov;104(5):870–3
Direct-contact B-scan sonomammography—an aid to X-ray mammography. Guyer PB. **Ultrasound Med Biol** 1988;14 Suppl 1:49–52
Ultrasound breast examination of asymptomatic patients with normal but radiodense mammograms. Rothschild P, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:113–9
Why every woman over 40 isn't in a breast cancer detection program [letter] Scott J. **West J Med** 1988 Oct;149(4):465
[Mammography in the diagnosis of diseases of the breast] Duchač A, et al. **Sb Lek** 1987 May;89(5):148–51 (Eng. Abstr.) (Cze)
[Localization of pathologically secreting lactiferous ducts] Vyhnánek L, et al. **Sb Lek** 1989 Mar;91(2–3):83–6 (Eng. Abstr.) (Cze)
[Non-palpable tumors of the breast demonstrated by mammography] Friis M, et al. **Ugeskr Laeger** 1989 Apr 17;151(16):988–9 (Eng. Abstr.) (Dan)
[False negative mammographies] Krasnik M, et al. **Ugeskr Laeger** 1988 Nov 14;150(46):2833 (Dan)
[Mammography of breast tumors in males] Mantoni M, et al. **Ugeskr Laeger** 1988 Sep 12;150(37):2182–3 (Eng. Abstr.) (Dan)
[False positive mammographic findings in breast edema] Herrstedt J, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):168–9 (Eng. Abstr.) (Dut)
[The organization of breast cancer screening in 1987] Elovainio L, et al. **Duodecim** 1989;105(12):1184–90 (Fin)
[Cancer of the breast and breast prostheses] Tristant H. **Ann Chir Plast Esthet** 1989;34(3):285–8 (Eng. Abstr.) (Fre)
[Breast echography in addition to mammography] Anderegg A, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S24–9 (Fre)
[Comparison of the radiological image with ultrasonography of the normal breast] Dagnelie J, et al. **J Belge Radiol** 1988; 71(5):571–6 (Eng. Abstr.) (Fre)
[Mammography in screening in breast studies. Retrospective analysis of a personal series] Tetti C, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):647–50 (Eng. Abstr.) (Fre)
[Technical aspects of guided biopsy following placement of a "harpoon" for infra-clinical, radiologically suspect breast lesions] Nogaret JM, et al. **Rev Med Brux** 1989 Jun; 10(6):219–24 (Eng. Abstr.) (Fre)
[Nonpuerperal mastitis. 3 possible causes including mammography correlates] Umbach G, et al. **Fortschr Med** 1989 Jan 20;107(2):65–6 (Eng. Abstr.) (Ger)
[The role of mammography in the diagnosis of simultaneous second cancers in the contralateral breast] Ronay G, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):579–83 (Eng. Abstr.) (Ger)
[Mammography and ultrasound in the diagnosis of clinically occult breast cancer] Gyr T, et al. **Gynakol Rundsch** 1989; 29(2):65–8 (Eng. Abstr.) (Ger)
[Computer-assisted medical decision making in x-ray diagnosis. 1. Comparative studies on the application of Bayes theorem and discrimination analysis in mammography] Schüler W, et al. **Radiol Diagn (Berl)** 1989; 30(2):197–205 (Ger)
[X-ray diagnosis of small breast cancers] Steffin C, et al. **Radiol Diagn (Berl)** 1989;30(1):41–6 (Eng. Abstr.) (Ger)
[Preoperative localization of pathologic findings in mammography] Klusemann H, et al. **ROFO** 1988 Dec; 149(6):636–41 (Eng. Abstr.) (Ger)
[Comparison of raster mammography and real time sonography with histology in carcinoma of the breast] Stauch G, et al. **ROFO** 1988 Oct;149(4):402–7 (Eng. Abstr.) (Ger)
[Mammographic findings following reduction mammaplasty] Buhtz C, et al. **Zentralbl Chir** 1989;114(1):36–9 (Eng. Abstr.) (Ger)
[Results of mammographic screening and organizational aspects] Rosselli del Turco M. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:101–13 (Ita)
[Mammography] Gozzi G. **G Clin Med** 1988 Aug–Sep; 69(8–9):550 (Ita)
[Imaging in senology] Tetti C. **Minerva Chir** 1988 Sep 30; 43(18 Suppl):9–11 (Ita)
[Results of the first round of mammographic screening at local health unit No. 43, Leno, Lombardy (Brescia)] Cirelli L, et al. **Radiol Med (Torino)** 1989 Apr;77(4):382–5 (Eng. Abstr.) (Ita)
[The factor of magnification in mammography] Maggi S, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):101–6 (Eng. Abstr.) (Ita)
[Galactographic features of the secreting breast] Pignatelli V, et al. **Radiol Med (Torino)** 1989 Jun;77(6):643–9 (Eng. Abstr.) (Ita)
[Mammographic detection of early breast cancer] Watanabe S. **Gan No Rinsho** 1988 Aug;34(10):1378–87 (Eng. Abstr.) (Jpn)
[Mammography screening. A statement from the consensus conference on mammography screening, Soria Moria, Oslo, February 8–10, 1989] **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1079–82 (Nor)
[Mammography screening in Tromsö. Realization and results of the first mammography screening in Norway] Gram IT, et al. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1040–2 (Eng. Abstr.) (Nor)
[Mammography and breast cancer] Piene H. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1087 (Nor)
[Mammography] Skjennald A. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1086 (Nor)
[Resources for mammography screening] Westin S. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1038–9 (Nor)
[X-ray imaging of the male nipple] Khomiakov IuS, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):78–81 (Eng. Abstr.) (Rus)
[Consensus conference in Norway: clinical mammography is a valuable diagnostic method, but for early recognition mass screening is recommended] **Lakartidningen** 1989 Mar 29;86(13):1186 (Swe)
[Mammography screening is not a question of women's rights] **Lakartidningen** 1988 Nov 30;85(48):4200–1 (Swe)
[Screening with mammography—a critical attitude is supported by new findings] Andersson I, et al. **Lakartidningen** 1988 Nov 2;85(44):3666–9 (Swe)
[Mammography is the supreme method for early diagnosis of breast cancer] Cederblom S. **Lakartidningen** 1988 Nov 16;85(46):3928 (Swe)
[Mammography can lower breast cancer mortality] Holmberg L. **Lakartidningen** 1988 Dec 28;85(52):4599–600 (Swe)
[Shocking view on the worth of middle-aged women] Westerholm B. **Lakartidningen** 1988 Nov 23;85(47):4056–7 (Swe)

ADVERSE EFFECTS

Rupture of a cyst during compression at mammography. Report of a case. Novak R. **Acta Radiol** 1989 May–Jun; 30(3):257–8
Hereditary breast cancer and possible risk of mammography [letter] Sluijter FJ, et al. **Breast Cancer Res Treat** 1989 Jul;13(3):277
Screening mammography. A risk versus risk decision. Ritenour ER, et al. **Invest Radiol** 1989 Jan;24(1):17–9 (19 ref.)
Mammography as a cause of firmness after augmentation mammaplasty [letter] James NJ. **Plast Reconstr Surg** 1989 Mar;83(3):577
[Radiation exposure and radiation risk of the patient in mammography] Hasert V. **Radiol Diagn (Berl)** 1988; 29(4):605–9 (Eng. Abstr.) (Ger)

CLASSIFICATION

Radiological nomenclature in benign breast change. Breast Group of the Royal College of Radiologists. **Clin Radiol** 1989 Jul;40(4):376–9

ECONOMICS

Marketing mammography: education key. Droste T. **Hospitals** 1989 Feb 20;63(4):44
Mammographic screening in southern California: 2 1/2-year longitudinal survey of fees. Bassett LW, et al. **Radiology** 1989 Oct;173(1):61–3
Low-cost screening mammography: report on finances and review of 21,716 consecutive cases. Bird RE. **Radiology** 1989 Apr;171(1):87–90
[Where is free preventive mammography? (editorial)] Gericke D. **Fortschr Med** 1989 Mar 10;107(7):16–7 (Ger)
[Mammography from the male viewpoint: " a nuisance, waste of personnel, inconclusive"?] Elmér W. **Lakartidningen** 1988 Nov 23;85(47):4057 (Swe)

EDUCATION

Breast disease programs in obstetrics and gynecology: a plea for training in mammography. Gleicher N. **Am J Obstet Gynecol** 1989 Aug;161(2):267–70
What do we tell patients about mammography? [letter] Plumley PF. **Br J Hosp Med** 1989 Apr;41(4):397

HISTORY

[75th anniversary of the first mammography] Semiglazov VF, et al. **Vopr Onkol** 1989;35(2):233–7 (Rus)

INSTRUMENTATION

Localization of nonpalpable breast lesions with the curved-end, retractable wire: leaving the needle in vivo. Homer MJ. **AJR** 1988 Nov;151(5):919–20
Mammographic hook wire localization—a step by step guide. Albertyn LE, et al. **Australas Radiol** 1989 Feb;33(1):97–100
Quality control of mammographic equipment: a 5-year follow-up. Karila KT. **Br J Radiol** 1988 Dec; 61(732):1155–67
Films, screens and cassettes for mammography. Law J, et al. **Br J Radiol** 1989 Feb;62(734):163–7
Films, screens and cassettes for mammography [letter] Law J, et al. **Br J Radiol** 1989 Jun;62(738):565
Variation of image quality with X-ray tube potential in mammography [letter] Law J, et al. **Br J Radiol** 1989 Feb; 62(734):192
An alignment test jig for measuring the effective focal-spot size of mammographic X-ray tubes. Ramsdale ML, et al. **Br J Radiol** 1989 May;62(737):484–6
An instrument for monitoring the force applied by breast compression devices on mammography x-ray sets. Faulkner K, et al. **Clin Phys Physiol Meas** 1989 May; 10(2):177–80

Needle localization of occult breast cancer for surgical biopsy. Puyau FA. **J La State Med Soc** 1988 Aug; 140(8):33–6

Diagnostic evaluation of a PACS subsystem using mammographs. An ROC analysis. Klessens PL, et al. **Med Inf (Lond)** 1988 Oct–Dec;13(4):323–6

An energy sensitive cassette for dual-energy mammography. Chakraborty DP, et al. **Med Phys** 1989 Jan–Feb;16(1):7–13

Radiation probe for indirect evaluation of the high-voltage waveform of a Mo anode mammography unit. Gambaccini M, et al. **Med Phys** 1989 Jan–Feb;16(1):94–7

Film-screen mammography x-ray tube anodes: molybdenum versus tungsten. Kimme-Smith C, et al. **Med Phys** 1989 Mar–Apr;16(2):279–83

Measurement of x-ray tube potential in the mammographic region. Law J, et al. **Phys Med Biol** 1989 Jun;34(6):717–25

Needle localization of nonpalpable breast lesions with a portable dual-grid compression system. Work in progress. Chen HH, et al. **Radiology** 1989 Mar;170(3 Pt 1):687–90

Stationary grids in senology: assessment of the diagnostic improvement by a group of radiologists. Majorana M, et al. **Rays** 1988 Sep–Dec;13(3):27–31

[A prototype double coil for MR breast measurement] Kaiser WA, et al. **ROFO** 1989 Jul;151(1):103–5 (Eng. Abstr.) (Ger)

[The stereotaxic marking of conspicuous changes in the breast] Flesch U, et al. **Rontgenpraxis** 1989 Mar;42(3):89–92 (Ger)

[A computerized manual for assessing the dosage absorbed by breast tissue in mammography] Bagni B, et al. **Radiol Med (Torino)** 1988 Nov;76(5):479–85 (Eng. Abstr.) (Ita)

[The use of the Daylight System in mammography] Giuseppetti G, et al. **Radiol Med (Torino)** 1989 Jul–Aug; 78(1–2):107–11 (Eng. Abstr.) (Ita)

METHODS

Mammographic film-processor temperature, development time, and chemistry: effect on dose, contrast, and noise. Kimme-Smith C, et al. **AJR** 1989 Jan;152(1):35–40

A coaxial technique for performing galactography. Bernà JD, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):273–4

Preoperative localization of inferior breast lesions. Pisano ED, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):272

Mammographic parenchymal patterns as indicators of breast cancer risk. Saftlas AF, et al. **Am J Epidemiol** 1989 Mar; 129(3):518–26

Nonpalpable breast lesion at biopsy: a detailed analysis of radiographic features [letter] Sakorafas GH. **Ann Surg** 1989 Aug;210(2):250

Stereotaxic localisation and aspiration cytology of impalpable breast lesions. Dent DM, et al. **Clin Radiol** 1989 Jul; 40(4):380–2

Nonpalpable breast lesions: diagnosis and therapy. Cataliotti L. **Contrib Gynecol Obstet** 1989;17:74–85

Mass screening for breast cancer with sonomammography: a prospective study. Rotten D, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul;28(3):257–67

A perspex grid for localization of non-palpable mammographic lesions in breast biopsies. Champ CS, et al. **Histopathology** 1989 Mar;14(3):311–5

Exposure equalization technique in mammography. Lam KL, et al. **Invest Radiol** 1989 Feb;24(2):154–7

Factitious microcalcifications in breast biopsy material: laboratory-induced error by use of tattoo powder for specimen mammography. Lager DJ, et al. **J Surg Oncol** 1989 Apr;40(4):281–2

Hand-held and automated sonomammography. Clinical role relative to X-ray mammography. Vilaro MM, et al. **J Ultrasound Med** 1989 Feb;8(2):95–100

Equivocal mammographic findings: evaluation with spot compression. Berkowitz JE, et al. **Radiology** 1989 May; 171(2):369–71

Algorithm for the detection of fine clustered calcifications on film mammograms. Fam BW, et al. **Radiology** 1988 Nov; 169(2):333–7

Magnification spot compression of the breast [letter] Hall FM. **Radiology** 1989 Oct;173(1):284

Breast skin calcifications: localization with a stereotactic device. Linden SS, et al. **Radiology** 1989 May;171(2):570–1

Breast calcifications: analysis of imaging properties. Olson SL, et al. **Radiology** 1988 Nov;169(2):329–32

Processing of mammographic films: technical and clinical considerations. Tabar L, et al. **Radiology** 1989 Oct; 173(1):65–9

Retractable-barb needle for breast lesion localization: use in 60 cases. Urrutia EJ, et al. **Radiology** 1988 Dec;169(3):845–7

Mammographic wire localization in diagnosis and treatment of occult carcinoma of breast. Petrovich JA, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):239–43

Mammography versus physical exam at a community hospital. Zelenik ME, et al. **Va Med** 1988 Nov; 115(11):543–4

[Dual-energy subtraction radiography of the breast] Asaga T, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):931–7 (Eng. Abstr.) (Jpn)

[Comparison of 2 methods of galactography] Iwaszkiewicz K. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct;51(5):263–6 (Eng. Abstr.) (Pol)

[Galactography in the early detection of breast cancer] Semiglazov VF, et al. **Vopr Onkol** 1988;34(9):1098–102 (Eng. Abstr.) (Rus)

PSYCHOLOGY

The acceptance and completion of mammography by older black women. Burack RC, et al. **Am J Public Health** 1989 Jun;79(6):721–6

STANDARDS

Quality assurance in breast cancer screening. Grey JA. **Aust Clin Rev** 1988 Dec;8(31):177–80

Evaluation of a proposed breast cancer screening regimen. Knox EG. **BMJ** 1988 Sep 10;297(6649):650–4

The false negative mammogram [letter] Williams JG, et al. **Br J Hosp Med** 1989 Apr;41(4):397–8

Quality assurance procedures in mammography. Dodd GD. **Cancer** 1989 Jul 1;64(1 Suppl):258–60; discussion 269–71

ACR program accredits nearly 800 mammography units [news] Kumar S. **J Natl Cancer Inst** 1989 Aug 16; 81(16):1211–2

Routine quality control tests for film-screen mammographic systems with automatic exposure control. Geise RA, et al. **Med Phys** 1988 Nov–Dec;15(6):904–8

The need for quality assurance in mammography [letter] Sienko DF, et al. **N Engl J Med** 1989 Apr 6;320(14):941

Preliminary report of an intervention to improve mammography skills of radiologists. D'Orsi CJ, et al. **Prog Clin Biol Res** 1989;293:151–7

A demonstration comparing film mammography with the new high sensitivity xeromammography. Martin JE. **Radiographics** 1989 Jan;9(1):153–68

STATISTICS & NUMERICAL DATA

Mammography in the symptomatic woman. Edeiken S. **Cancer** 1989 Apr 1;63(7):1412–4

SUPPLY & DISTRIBUTION

Use of mammography for breast cancer screening—Rhode Island, 1987. Centers for Disease Control. **Conn Med** 1988 Jul;52(7):429–30

TRENDS

Leads from the MMWR. Trends in screening mammograms for women 50 years of age and older—Behavioral Risk Factor Surveillance System, 1987. **JAMA** 1989 Apr 14; 261(14):2031–2

Trends in screening mammograms for women 50 years of age and older—Behavioral Risk Factor Surveillance System, 1987. **MMWR** 1989 Mar 10;38(9):137–40

Vicissitudes [editorial] Slobodien HD. **N J Med** 1988 Aug; 85(8):651

UTILIZATION

Improving the utilization of screening mammography in primary care practices. Nattinger AB, et al. **Arch Intern Med** 1989 Sep;149(9):2087–92

Mammographic screening and mortality from breast cancer: the Malmö mammographic screening trial. Andersson I, et al. **BMJ** 1988 Oct 15;297(6654):943–8

Controversy over mammography screening [editorial] Reidy J, et al. **BMJ** 1988 Oct 15;297(6654):932–3

The debate over mass mammography in Britain. The case against. Skrabanek P. **BMJ** 1988 Oct 15;297(6654):971–2

The debate over mass mammography in Britain. The case for. Warren R. **BMJ** 1988 Oct 15;297(6654):969–70

Mammography: effective but underused screening tool. Chilcote WA Jr. **Cleve Clin J Med** 1989 May;56(3):229

The under-use of mammography. Petrocelli RD. **Del Med J** 1989 Jul;61(7):343–5

Physician compliance with mammography guidelines: a retrospective chart review. Selinger HA, et al. **Fam Med** 1989 Jan–Feb;21(1):56–8

Microcomputer-generated reminders. Improving the compliance of primary care physicians with mammography screening guidelines. Chambers CV, et al. **J Fam Pract** 1989 Sep;29(3):273–80

Breast cancer screening. A curious problem in primary care. Taplin SH. **J Fam Pract** 1989 Sep;29(3):247–8

State-to-state variation in screening mammograms for women 50 years of age and older—Behavioral Risk Factor Surveillance System, 1987. **MMWR** 1989 Mar 17; 38(10):157–60

Breast cancer screening for primary care physicians. Costanza ME, et al. **Prog Clin Biol Res** 1989;293:65–74

Barriers and facilitators to compliance with routine mammographic screening. Rimer B, et al. **Prog Clin Biol Res** 1989;293:125–33

[Mammography even at a younger age has a good effect] Lithman T. **Lakartidningen** 1988 Dec 14;85(50):4408–9 (Swe)

MAMMOTROPIC HORMONE, PITUITARY see **PROLACTIN**

MAMMOTROPIC HORMONE, PLACENTAL see **PLACENTAL LACTOGEN**

MAMMOTROPIN see **PROLACTIN**

MAN-MACHINE SYSTEMS

Sensory feedback control of upper- and lower-extremity motor prostheses. Phillips CA. **Crit Rev Biomed Eng** 1988; 16(2):105–40 (100 ref.)

Muscle response to pneumatic hand tool torque reaction forces. Radwin RG, et al. **Ergonomics** 1989 Jun; 32(6):655–74

Some considerations on control of continuous processes by speech. Cremers GB, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):158–61

[Human reliability and safety of medical equipment. Basic principles] Skolbekken JA. **Tidsskr Nor Laegeforen** 1988 Oct 20;108(29):2507–10 (Eng. Abstr.) (Nor)

[The probability of disorders in the control system as a criterion of stress in an operator's activities] Gritsevskiĭ MA, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):424–7 (Rus)

[Local heat removal as a means of maintaining the level of wakefulness of a human operator during monotonous activity] Shenderova IS. **Fiziol Cheloveka** 1988 May–Jun; 14(3):428–33 (Rus)

[Information interaction of the man-aircraft system as a problem in aviation medicine] Lapa VV. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):28–32 (Eng. Abstr.) (Rus)

MANAGED CARE PROGRAMS see under **DELIVERY OF HEALTH CARE**

MANAGEMENT AUDIT see under **ORGANIZATION AND ADMINISTRATION**

MANAGEMENT INFORMATION SYSTEMS

Implementation of a computerized management information system in an urban fire department. Valenzuela TD, et al. **Ann Emerg Med** 1989 May;18(5):573–8

The MIS guidelines offer opportunity to the researcher. MacKenzie TA. **Dimens Health Serv** 1988 Oct;65(7):31

Financial systems still lag behind users' needs. Cerne F. **Hospitals** 1989 Jan 20;63(2):34, 38

Executive systems give CEOs management tools. Cerne F. **Hospitals** 1988 Nov 20;62(22):80–1

New system helps prevent Medi-Cal claim delays. Larkin H. **Hospitals** 1989 Apr 20;63(8):28

Hospitals combat DRGs with case-mix systems. Packer C. **Hospitals** 1989 Jun 20;63(12):86

Facilities management. Automated maintenance. Sedor P. **Hospitals** 1989 May 20;63(10):72, 74

Computer-assisted radiology resident rotation scheduling. Oppenheim BE. **Invest Radiol** 1989 Feb;24(2):163–6

Operating room scheduling data base analysis for scheduling. Hancock WM, et al. **J Med Syst** 1988 Dec;12(6):397–409

A case mix simulation decision support system model for negotiating hospital rates. Hatcher ME, et al. **J Med Syst** 1988 Dec;12(6):341–63

Evolution of a computerized support system for health care capacity planning. Kilpatrick KE, et al. **J Med Syst** 1988 Oct;12(5):305–17

A computerized system for staffing, billing and productivity measurement. Budd MC, et al. **J Nurs Adm** 1989 Jul–Aug; 19(7):17–22

Improving perinatal outcome through data management: the design of the small area analysis system. Gould JB, et al. **J Perinat Med** 1988;16(4):305–14

Programming medical rosters in Prolog. Rosenberg S. **Med Inf (Lond)** 1988 Jul–Sep;13(3):187–98

Information management needs of the obstetrician-gynecologist—a survey. Jelovsek FR, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):395–9

Information management in clinical prevention. Campbell JR, et al. **Prim Care** 1989 Mar;16(1):251–64 (41 ref.)

Standardisation of statistics for health service management. Kane-Berman J. **S Afr Med J** 1989 Jan 21;75(2):57–61

ASSIST: an alternative management information system for social services in health care. Nurius PS, et al. **Soc Work Health Care** 1988;13(4):99–115

Productivity systems and diagnosis related group reporting. D'Erasmo M. **Top Health Care Financ** 1989 Spring; 15(3):69–79

[The use of large morbidity data bases in the evaluation of health services] Pineault R, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):267–72 (Eng. Abstr.) (Fre)

[Management and administrative control of outside consultants] Guthmann F. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):299–300 (Fre)

[Information management] Jouannin J. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):304–5 (Fre)

[Management information systems: applications in hospitals] Kohler F, et al. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):295–9 (Fre)

ECONOMICS

Purchasing an office management computer system—the questions to ask. Miller L. **J Med Assoc Ga** 1988 Aug; 77(8):625–8

INSTRUMENTATION

TRAKIT—a computer-assisted personal to-do list. Rashba HW. **Pediatrics** 1989 Jun;83(6):1007–10

ORGANIZATION & ADMINISTRATION

The integrated inpatient management model. A new approach to clinical practice. McMahon LF Jr, et al. **Ann Intern Med** 1989 Aug 15;111(4):318–26

A multiuser MUMPS language patient/physician scheduling system for microcomputers. Quattlebaum TG. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):287–93

Guidelines implementation: commitment yields success. Hersey FM. **Dimens Health Serv** 1989 Feb;66(1):8–9

Management information systems: their role in the marketing activities of HMOs. Aronow DB. **Health Care Manage Rev** 1988 Fall;13(4):59–64 (74 ref.)

Institutional strategies, a key to successful curriculum change. Sellers EM, et al. **J Palliat Care** 1988 May;4(1–2):34–7

Management decisions in hospitals: recommendations for information needs. Seelos HJ. **Methods Inf Med** 1988 Jul; 27(3):142–3

[An information system for the management support of a radiology institute. Critical analysis and experience] Ukovich W, et al. **Radiol Med (Torino)** 1989 Jul–Aug; 78(1–2):94–100 (Eng. Abstr.) **(Ita)**

[The operative management of the anesthesiology–resuscitation service of a hospital based on a systems approach and computerization] Nedashkovskiĭ EV. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):54–6 (Eng. Abstr.) **(Rus)**

[The outlook for the use of automatic management systems at blood banks] Danilova TN, et al. **Gematol Transfuziol** 1988 Nov;33(11):55–7 **(Rus)**

[Teaching the course on the management information system "Public health" at a medical institute] Chernetskiĭ OE, et al. **Sov Zdravookhr** 1989;(6):41–3 **(Rus)**

[A system of complex evaluation of physicians' activities] Gabrielin ES, et al. **Sov Zdravookhr** 1988;(12):3–9 **(Rus)**

[Optimal control of the activities of a district hospital due to the use of an automated hospital management system] P'ianov IuV, et al. **Sov Zdravookhr** 1989;(4):44–5 **(Rus)**

[Operational management of emergency hospitalization using automated systems] Shmatov AV, et al. **Sov Zdravookhr** 1989;(6):23–5 **(Rus)**

[Problems of the training of medical personnel in computer technology] Sozon–Iaroshevich EA. **Sov Zdravookhr** 1989; (6):14–6 (Eng. Abstr.) **(Rus)**

[Characteristics of the dynamic outpatient observation of workers at an industrial enterprise] Kamysheva EP, et al. **Ter Arkh** 1988;60(11):128–31 (Eng. Abstr.) **(Rus)**

[Use of computers in the management of ambulatory care] Poliakov LE, et al. **Voen Med Zh** 1989 Jan;(1):21–3 **(Rus)**

STANDARDS

Decision–support systems' downfall: management. Packer CL. **Hospitals** 1989 Mar 20;63(6):100

TRENDS

Data to go. Cerne F. **Hospitals** 1989 Jan 5;63(1):43–4

Computers in hospital management and improvements in patients care—new trends in the United States. Pierskalla WP, et al. **J Med Syst** 1988 Dec;12(6):411–28

Future trends in general practice computing [editorial] Difford F. **J R Coll Gen Pract** 1987 Oct;37(303):434–6

[The development of resources in informatics, computer technology and management automation in the medical service of the armed forces of the main NATO–block countries] Litvinov AM, et al. **Voen Med Zh** 1989 Mar; (3):68–72 (19 ref.) **(Rus)**

MANAGEMENT QUALITY CIRCLES see under PERSONNEL MANAGEMENT

MANDELIC ACIDS

ADMINISTRATION & DOSAGE

[Effects of long–term administration of oxybutynin hydrochloride (KL007) for the treatment of neurogenic bladder and unstable bladder] Sonoda T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):167–78 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Oxybutynin: is it safe? Baigrie RJ, et al. **Br J Urol** 1988 Oct; 62(4):319–22

ANALYSIS

Determination of oxybutinin chloride in pharmaceuticals by reversed–phase ion–pair liquid chromatography with two counter–ions in the eluent. De Schutter JA, et al. **J Chromatogr** 1988 Oct 26;450(3):337–42

BLOOD

Gas chromatographic–mass spectrometric analysis of plasma oxybutynin using a deuterated internal standard. Patrick KS, et al. **J Chromatogr** 1989 Jan 27;487(1):91–8

METABOLISM

Chemical and enzymic oxidation by tyrosinase of 3,4–dihydroxymandelate. Cabanes J, et al. **Biochem J** 1988 Dec 1;256(2):681–4

Selection and characterization of a mutant of the cloned gene for mandelate racemase that confers resistance to an affinity label by greatly enhanced production of enzyme. Tsou AY, et al. **Biochemistry** 1989 Feb 7;28(3):969–75

Oxidation of 3,4–dihydroxymandelic acid catalyzed by tyrosinase. Martínez Ortiz F, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):158–63

PHARMACOKINETICS

The pharmacokinetics of oxybutynin in man. Douchamps J, et al. **Eur J Clin Pharmacol** 1988;35(5):515–20

PHARMACOLOGY

R and S enantiomers of oxybutynin: pharmacological effects in guinea pig bladder and intestine. Kachur JF, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):867–72

Analysis of the in vitro pharmacologic response of renal pelvis and detrusor smooth muscle to thiphenamil, oxybutynin and verapamil. Levounis P, et al. **Urol Int** 1988; 43(4):211–8

[Effect of oxybutynin on lower urinary tract function] Nishizawa O, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1383–7 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Oxybutynin chloride for geriatric urinary dysfunction: a double–blind placebo–controlled study. Zorzitto ML, et al. **Age Ageing** 1989 May;18(3):195–200 (28 ref.)

Oxybutinin versus propantheline in the management of detrusor instability. A patient–regulated variable dose trial. Holmes DM, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):607–12

Lack of effect of cholinergic blocking and alpha–adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379–83

Recurrent bacteriuria: 1. Prior therapy [letter] **Hosp Pract [Off]** 1989 Jan 30;24(1A):18

Topical oxybutynin chloride for relaxation of dysfunctional bladders. Brendler CB, et al. **J Urol** 1989 Jun;141(6):1350–2

URINE

Kinetic interpretation of the exposure test for styrene. Wieczorek H, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):107–13

The metabolism of ethylbenzene and styrene to mandelic acid: stereochemical considerations. Drummond L, et al. **Xenobiotica** 1989 Feb;19(2):199–207

[Correction of MPEL of styrene in the air of the work area and the substantiation of safe levels of its metabolites in the urine of workers] Ulanova IP, et al. **Gig Sanit** 1988 Oct;(10):17–9 (Eng. Abstr.) **(Rus)**

MANDELONITRILE BETA GENTIOBIOSIDE see AMYGDALIN

MANDIBLE

see related CHIN

The diagnosis and treatment of the dislocated mandible. Luyk NH, et al. **Am J Emerg Med** 1989 May;7(3):329–35 (49 ref.)

A simple technique for localizing a broken dental needle in the pterygomandibular region. Ho KH. **Aust Dent J** 1988 Aug;33(4):308–9

Production of methyl farnesoate by the mandibular organs of the mud crab, Scylla serrata: validation of a radiochemical assay. Tobe SS, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):342–53

Endomethasone root canal filling material in the mandibular canal. A case report. Erisen R, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):343–5

Ghost foreign body. Murphy JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):228

[Evaluation of occlusal plane, ala–tragion line, palatal plane and mandibular plane in Chinese] Shen YF, et al. **Chang Keng I Hsueh** 1988 Sep 20;11(3):218–23 (Eng. Abstr.) **(Chi)**

[Results of horizontal and vertical transposition of teeth in children as affected by the action of ultrasonics on the bony tissue of the lower jaw] Chumakov AN, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):69–70 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Dysmorphogenesis of the mandible, zygoma, and middle ear ossicles in hemifacial microsomia and mandibulofacial dysostosis. Kay ED, et al. **Am J Med Genet** 1989 Jan; 32(1):27–31

Aglossia with congenital absence of the mandibular rami and other craniofacial abnormalities. Neidich JA, et al. **Am J Med Genet Suppl** 1988;4:161–6

A composite flap for early treatment of hemifacial microsomia. Poole MD. **Br J Plast Surg** 1989 Mar; 42(2):163–72

Mandibular and dental abnormalities of two Pleistocene American lions (Panthera leo atrox) from Yukon Territory. Beebe BF, et al. **Can J Vet Res** 1988 Oct;52(4):468–72

Simultaneous correction of maxillary and mandibular dentofacial deformities without the use of postoperative intermaxillary fixation. A clinical and cephalometric study. Krekmanov L, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):363–70

Sleep apnea syndrome in an adult patient with mandibular hypoplasia. Navarro Vila C, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):32–4

Another family with the 'Habsburg jaw'. Thompson EM, et al. **J Med Genet** 1988 Dec;25(12):838–42

Bilateral coronoid hyperplasia. Report of a case. Shultz RE, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):23–6

Chondrodystrophic mice with coincidental agnathia: evidence for the tongue obstruction hypothesis in cleft palate. Clarke L, et al. **Teratology** 1988 Dec;38(6):565–70

[Surgical treatment of the anterior mandibie] Li CS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):345–7 **(Chi)**

[Diagnosis and therapeutic programming of mandibular symphysis dysmorphisms in patients with dento–osseous malformations] Iannetti G, et al. **Minerva Stomatol** 1989 Jan;38(1):57–70 (Eng. Abstr.) **(Ita)**

[Cerebro–costo–mandibular syndrome] Fidalgo Alvarez I, et al. **An Esp Pediatr** 1988 Jun;28(6):591–3 **(Spa)**

ANALYSIS

Bone mineral content of mandibles: normal reference values—rate of age–related bone loss. von Wowern N. **Calcif Tissue Int** 1988 Oct;43(4):193–8

A histochemical localization on Maclura pomifera lectin during osteogenesis. Nakamura M, et al. **Histochemistry** 1989;92(3):225–30

Miokamycin penetration into oral cavity tissues and crevicular fluid. Fraschini F, et al. **Int J Clin Pharmacol Res** 1989;9(4):293–6

ANATOMY & HISTOLOGY

Ontogeny of architectural complexity in embryonic quail visceral arch muscles. McClearn D, et al. **Am J Anat** 1988 Dec;183(4):277–93

Postretention evaluation of stability and relapse—mandibular arches with generalized spacing. Little RM, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):37–41

Re: Changes in mandibular anterior alignment [letter] Perlow J. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):445–6

Expansion of the lower arch concurrent with rapid maxillary expansion. Sandstrom RA, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):296–302

Treatment effects of the Herbst appliance. Valant JR, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):138–47

The anterior buccal mandibular depressions: ontogeny and phylogeny. Arensburg B, et al. **Am J Phys Anthropol** 1989 Mar;78(3):431–7

A functional consequence of an ossified mandibular symphysis. Greaves WS. **Am J Phys Anthropol** 1988 Sep; 77(1):53–6

Tooth wear and the position of the mental foramen. Green RM, et al. **Am J Phys Anthropol** 1988 Sep;77(1):69–75

Cranial base and jaw relationship. Kerr WJ, et al. **Am J Phys Anthropol** 1988 Oct;77(2):213–20

Allometric relations of teeth and jaws in man. Kieser JA, et al. **Am J Phys Anthropol** 1988 Sep;77(1):57–67

Deciduous teeth of the Neandertal mandible from Molare Shelter, near Scario (Salerno, Italy). Mallegni F, et al. **Am J Phys Anthropol** 1989 Aug;79(4):475–82

Clinical prosection for dental gross anatomy: a medial approach to the pterygomandibular space. Shaw MD, et al. **Anat Rec** 1988 Nov;222(3):305–8

Morphology of the mandibulo–stylohyoid ligament in human adults. Shimada K, et al. **Anat Rec** 1988 Oct;222(2):207–10

Correlations among craniofacial angles and dimensions in Class I and Class II malocclusions. Anderson D, et al. **Angle Orthod** 1989 Spring;59(1):37–42

Identification of the cephalometric reference point condylion on lateral head films. Forsberg CM, et al. **Angle Orthod** 1989 Summer;59(2):123–30

Mandibular rotation and lower face height indicators. Ghafari J, et al. **Angle Orthod** 1989 Spring;59(1):31–6

Mandibular form and position related to changed mode of breathing—a five–year longitudinal study. Kerr WJ, et al. **Angle Orthod** 1989 Summer;59(2):91–6

Freeway space measurement using mandibular kinesiograph and EMG before and after TENS. Konchak PA, et al. **Angle Orthod** 1988 Oct;58(4):343–50

The relationship between mandibular morphology and apical root curvature in man. Marklund M, et al. **Arch Oral Biol** 1988;33(6):391–4

The position of the inferior dental canal and its relation to the mandibular second molar. Fox NA. **Br Dent J** 1989 Jul 8;167(1):19–21

The relation between mandibular configuration and the shape of the glenoid fossa in the human. Kantomaa T. **Eur J Orthod** 1989 Feb;11(1):77–81

Can 'articulare' be used in the cephalometric analysis of mandibular length? A methodologic study. Stickel A, et al. **Eur J Orthod** 1988 Nov;10(4):362–8

Genetic divergence in mandible form in relation to molecular divergence in inbred mouse strains. Atchley WR, et al. **Genetics** 1988 Sep;120(1):239–53

Canine mandibular response to surfaced–textured hydroxylapatite blocks. Block MS, et al.

Int J Oral Maxillofac Surg 1988 Dec;17(6):358–9

Histomorphometric evaluation of stress shielding in mandibular continuity defects treated with rigid fixation plates and bone grafts. Kennady MC, et al.
Int J Oral Maxillofac Surg 1989 Jun;18(3):170–4

Finite element method comparison of murine mandibular form differences. Moss ML.
J Craniofac Genet Dev Biol 1988;8(1):3–20

Evaluating anatomical factors affecting endotracheal intubation. Rhee KJ, et al. **J Emerg Med** 1988 May–Jun; 6(3):209–11

Modified sagittal split technique for patients with a high lingula. Nishioka GJ, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):426–7

The effects of cusp and jaw morphology on the forces on teeth and the temporomandibular joint. Katona TR.
J Oral Rehabil 1989 Mar;16(2):211–9

The immediate effect of splint-induced changes in jaw positioning on the asymmetry of submaximal masticatory muscle activity. McCarroll RS, et al. **J Oral Rehabil** 1989 Mar;16(2):163–70

Tooth support in the human mandible. Ralph WJ, et al.
J Oral Rehabil 1988 Sep;15(5):499–503

Application of a geometric principle for locating the mandibular hinge axis through the use of a double recording stylus. Getz EH, et al. **J Prosthet Dent** 1988 Nov; 60(5):553–9

Osseointegration of two types of implants in nonhuman primates. Lum LB, et al. **J Prosthet Dent** 1988 Dec; 60(6):700–5

A study of the height of intact alveolar bone on panoramic radiographs of adult patients. Packota GV, et al.
J Prosthet Dent 1988 Oct;60(4):504–9

Discomalleolar and anterior malleolar ligaments: possible causes of middle ear damage during temporomandibular joint surgery. Loughner BA, et al.
Oral Surg Oral Med Oral Pathol 1989 Jul;68(1):14–22

Mandibular third molar eruption in relation to available space as assessed on lateral cephalograms. Forsberg CM, et al.
Swed Dent J 1989;13(1–2):23–31

[Measurement of the surface area and thickness of 30 adult mandibular bones] Bu RF.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Mar; 23(2):112–4, 127 (Eng. Abstr.) (Chi)

[Mandibular biometry in the norma axialis. A proposed architectural analysis and diagram] Harb K, et al.
Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec; 31(3–4):141–50 (Eng. Abstr.) (Fre)

[The mandibular symphysis. Its transverse variations during growth] Laude M, et al.
Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec; 31(3–4):155–60 (Eng. Abstr.) (Fre)

[Symphyseal morphology and mandibular growth] Darqué J, et al. **Orthod Fr** 1987;58 Pt 2:489–500 (Eng. Abstr.) (Fre)

[The course of the mandibular canal in fossils and forensic material] Vajdovich I, et al.
Morphol Igazsagugyi Orv Sz 1989 Jan;29(1):39–47 (Eng. Abstr.) (Hun)

[Strain identification using mandible measurements in Japanese white rabbits] Tsuji G. **Jikken Dobutsu** 1988 Oct; 37(4):493–500 (Jpn)

[Anatomic characteristics of the mandibular canal from the viewpoint of age] Kristesinshvili TI, et al.
Stomatologiia (Mosk) 1988 Sep–Oct;67(5):46–7 (Eng. Abstr.) (Rus)

[Effect of removable sectional dentures on mandibular position] Kurochkin IuK. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):64–6 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Normal blood supply to the canine mandible and mandibular teeth. Roush JK, et al. **Am J Vet Res** 1989 Jun;50(6):904–7

Varix of the facial vein. Manstein ME, et al.
Ann Plast Surg 1988 Aug;21(2):155–7

Age changes of the inferior alveolar artery [letter] Bradley JC. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):517–9

Therapeutic embolization for vascular lesions of the head and neck. Report of 2 cases. Hashimoto Y, et al.
Int J Oral Maxillofac Surg 1989 Feb;18(1):47–9

Vascular changes after experimentally-induced inflammation in the mandible. Wannfors K.
Int J Oral Maxillofac Surg 1989 Apr;18(2):79–82

Diagnostic radiographs [letter] Cregar WR.
J Am Dent Assoc 1989 Feb;118(2):148, 150

Arteriovenous malformation of the mandible: report of case. McCarley DL, et al. **J Am Dent Assoc** 1988 Sep; 117(3):449–51

Management of a mandibular high-flow vascular malformation. Hiatt SW, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):295–9

Delayed management of a mandibular vascular malformation. McKenna SJ, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):517–22

Arteriovenous malformation of the mandible and its treatment: a case report. Svane TJ, et al.
Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):379–83

The management of intraosseous arteriovenous malformations in the head and neck area. Jackson IT, et al. **Plast Reconstr Surg** 1989 Jul;84(1):47–54

Healing of mandibular body osteotomies after plate and intramedullary pin fixation. Roush JK, et al. **Vet Surg** 1989 May–Jun;18(3):190–6

[Changes in the inferior dental artery in relation to age] Obradovic O, et al.
Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec; 31(3–4):165–76 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Glucocorticoid hormone adversely affects the growth and regeneration of cartilage in vitro. Weiss A, et al.
Growth Dev Aging 1988 Summer;52(2):67–75

Local infusion of prostaglandin E1 stimulates mandibular bone formation in vivo. Marks SC Jr, et al.
J Oral Pathol 1988 Nov;17(9–10):500–5

[Evaluation of exposure of forest animals to industrial emissions based on changes in mineral composition of the masticatory system of deer from the regions of Western Pomerania] Dąbkowska E. **Ann Acad Med Stetin** 1988; 34:37–47 (Eng. Abstr.) (Pol)

EMBRYOLOGY

Development of osteogenic and chondrogenic potentials along the mediolateral axis of the embryonic chick mandible. Tyler MS. **Arch Oral Biol** 1988;33(6):443–9

Prenatal protein-energy malnutrition alters various biochemical components of the membranous bones in fetal rats. Miwa T, et al. **Biol Neonate** 1988;54(6):347–55

Enzyme histochemical analysis of Meckel's cartilage. Granström G, et al. **J Anat** 1988 Oct;160:101–8

Formation and early prenatal location of the human mental foramen. Kjaer I. **Scand J Dent Res** 1989 Feb;97(1):1–7

[The ascending mandibular ramus and other bone sectors. A prenatal study] Fuentes A.
Rev Stomatol Chir Maxillofac 1988;89(3):169–75 (Eng. Abstr.) (Fre)

[Comparison of the stability of morphometric and nonmetric skeletal characteristics of inbred mice with regard to environmental exposure in prenatal development] Vasil'eva IA, et al. **Genetika** 1988 Jul;24(7):1209–14 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Growth allometry of craniomandibular muscles, tendons, and bones in the laboratory rat (Rattus norvegicus): relationships to oromotor maturation and biomechanics of feeding. Hurov J, et al. **Am J Anat** 1988 Aug;182(4):381–94

Modeling longitudinal mandibular growth: percentiles for gnathion from 6 to 15 years of age in girls. Buschang PH, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):60–6

Maxillomandibular growth 2 years after mandibular advancement surgery with and without suprahyoid myotomy in juvenile Macaca mulatta. Carlson DS, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):491–502

Cephalometric changes in Class II, Division 1 cases after orthopedic treatment with the bioactivator. Dahan J, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):127–37

Mandibular displacement and dentitional changes during orthodontic treatment and growth. Ghafari J, et al.
Am J Orthod Dentofacial Orthop 1989 Jan;95(1):12–9

Pubertal growth of the cephalometric point gnathion: multilevel models for boys and girls. Buschang PH, et al.
Am J Phys Anthropol 1988 Nov;77(3):347–54 (35 ref.)

Mathematical models of longitudinal mandibular growth for children with normal and untreated Class II, division 1 malocclusion. Buschang PH, et al. **Eur J Orthod** 1988 Aug; 10(3):227–34

Mandibular growth rotations—their mechanisms and importance. Houston WJ. **Eur J Orthod** 1988 Nov; 10(4):369–73 (17 ref.)

The first cervical vertebra as an indicator of mandibular growth. Huggare J. **Eur J Orthod** 1989 Feb;11(1):10–6

The shape of the glenoid fossa affects the growth of the mandible. Kantomaa T. **Eur J Orthod** 1988 Aug; 10(3):249–54

Mandibular rotations: concepts and terminology. Solow B, et al. **Eur J Orthod** 1988 Aug;10(3):177–9 (12 ref.)

The influence of periosteal elevation on mandibular growth in young rats. Sa'do B, et al.
Int J Oral Maxillofac Surg 1989 Jun;18(3):175–8

Picrotoxin, a gamma-aminobutyric acid-receptor antagonist, retards craniofacial development in the weaning rat: I. Effect on mandibular bone growth. Ben-Shachar D, et al.
J Craniofac Genet Dev Biol 1988;8(4):351–61

Picrotoxin, a gamma-aminobutyric acid-receptor antagonist, retards craniofacial development in the weaning rat: II. Effect on mandibular condylar cartilage. Ben-Shachar D, et al. **J Craniofac Genet Dev Biol** 1988;8(4):363–72

Facial growth after treatment of unilateral temporomandibular joint ankylosis in childhood without growth centre transplantation. A serial cephalomorphometric study. Farmand M, et al.
J Craniomaxillofac Surg 1989 Aug;17(6):260–70

The concentration of dietary casein required for normal mandibular growth in the rat. Bozzini C, et al.
J Dent Res 1989 May;68(5):840–2

Effect of Le Fort III osteotomy on mandibular growth in patients with Crouzon and Apert syndromes. Bu BH, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):666–71

An experimental orthopedic treatment of the rat mandible using a functional appliance alters the fibre and myosin types in masticatory muscles. Oudet C, et al.
Reprod Nutr Dev 1988;28(3B):795–803

[A lecture on the craniofacial architecture as an element of prediction] Delachapelle C, et al. **Orthod Fr** 1987;58 Pt 2:771–4 (Eng. Abstr.) (Fre)

[The tongue as a factor in craniofacial growth. 2. The influence of the width dimension of the lower jaw] Becker R, et al. **Anat Anz** 1988;167(2):81–6 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 3. The influence of the height and angle of the lower jaw] Hübner A, et al. **Anat Anz** 1988;167(3):191–7 (Eng. Abstr.) (Ger)

[The functional morphology of the maxillomandibular apparatus of the miniature swine MINI-LEWE. 9. Metric studies of the skull and mandible] Schumacher B, et al. **Anat Anz** 1989;168(1):27–36 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 1. Modification of the linear dimensions of the lower jaw] Schumacher GH, et al. **Anat Anz** 1988;166(1–5):309–15 (Eng. Abstr.) (Ger)

[Mandibular development of rat pups nursed by mothers on a low-calcium diet] Lozupone E, et al.
Boll Soc Ital Biol Sper 1988 Aug;64(8):683–9 (Eng. Abstr.) (Ita)

INNERVATION

Distribution and central projections of primary afferent neurons that innervate the masseter muscle and mandibular periodontium: a double-label study. Capra NF, et al.
J Comp Neurol 1989 Jan 15;279(3):341–52

Sensory pathways and motoneurons of the proboscis reflex in the suboesophageal ganglion of the honey bee. Rehder V. **J Comp Neurol** 1989 Jan 15;279(3):499–513

METABOLISM

Cephradine penetration of mandibular bone. Middlehurst RJ, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):672–3

[Benzylpenicillin levels in the serum and bone tissue of the lower jaw in patients with chronic traumatic osteomyelitis after intraosseous and intramuscular administration] Borodin IuN. **Antibiot Khimioter** 1988 Sep;33(9):694–6 (Eng. Abstr.) (Rus)

PATHOLOGY

A cephalometric assessment of children with fetal alcohol syndrome. Gir AV, et al.
Am J Orthod Dentofacial Orthop 1989 Apr;95(4):319–26

Mandibular position in class III malocclusion. Kerr WJ, et al. **Br J Orthod** 1988 Nov;15(4):241–5

The hydroxylapatite-bone interface. Studies on a human biopsy. Blijdorp PA, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):354–7

Cherubism. Histo-enzymological and ultrastructural study. Chomette G, et al. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):219–23

Mandibular atrophy and metabolic bone loss.
Histomorphometry of iliac crest biopsies in 74 patients. Habets LL, et al. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):325–9

Cranial suture eccentricities: a case in which precocious closure complicated determination of sex and commingling. Reichs KJ. **J Forensic Sci** 1989 Jan;34(1):263–73

Treatment of the mandibular compromised ridge: a literature review. Jennings DE. **J Prosthet Dent** 1989 May; 61(5):575–9 (61 ref.)

Bilateral hyperplasia of the mandibular coronoid processes: a report of two cases. Hall RE, et al.
Oral Surg Oral Med Oral Pathol 1989 Feb;67(2):141–5

An alternative for the correction of the Class II low mandibular plane angle. McCollum AG, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):231–41

MRI of the mandible. Christianson R, et al.
Surg Radiol Anat 1989;11(2):163–9

[The importance of clinical characteristics in familial adenomatous polyposis] Offerhaus GJ.
Ned Tijdschr Geneeskd 1988 Sep 17;132(38):1735–7 (Dut)

[Class II, division 1 malocclusion in a skeletal pattern of a Class II, division 2] Maj G, et al. **Orthod Fr** 1987;58 Pt 2:649–57 (Eng. Abstr.) (Fre)

[Facial asymmetry due to hemi-mandibular hypertrophy] Freidel M, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(1):39–42 (Eng. Abstr.) (Fre)

[Anatomic-roentgenologic study of the mandibular canal in atrophic mandible] Ulm C. **Wien Klin Wochenschr** 1989 May 26;101(11):390–3 (Eng. Abstr.) (Ger)

[3-dimensional recording of changes in the infant jaw with unilateral cheilognathopalatoschisis with special reference to the results of preoperative orthodontic therapy] Schenk HJ, et al. **Zahn Mund Kieferheilkd** 1989;77(4):291–8 (Eng. Abstr.) (Ger)

[The influence of functional stress on the mandibular tissue around the apatite implant] Aikawa S.
Kokubyo Gakkai Zasshi 1988 Jun;55(2):381–436 (Eng. Abstr.) (Jpn)

[Changes in the jaws of rats after a 7-day flight on "Kosmos-1667"] Volozhin AI, et al.
Kosm Biol Aviakosm Med 1989 Jan–Feb;23(1):83–6 (Rus)

PHYSIOLOGY

Differences in functional variables, fillings, and tooth wear

in two groups of 19-year-old individuals. Dahl BL, et al. **Acta Odontol Scand** 1989 Feb;47(1):35-40

Right-left asymmetry of maximum jaw opening. Kirveskari P, et al. **Acta Odontol Scand** 1989 Apr;47(2):101-3 (10 ref.)

Head posture and hyo-mandibular function in man. A synchronized electromyographic and videofluorographic study of the open-close-clench cycle. Winnberg A, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):393-404 (49 ref.)

Opto-electronic analyses of masticatory mandibular movements and velocities in the rat. Byrd KE. **Arch Oral Biol** 1988;33(3):209-15

Observations on the effects of two ceramics on the strength of bone subjected to cryosurgery. McCord JF, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):217-23

An analysis of mandibular movement trajectories and masticatory muscle EMG activity during drinking in the guinea pig. Gerstner GE, et al. **Brain Res** 1989 Feb 6; 479(1):6-15

The effect of food texture on the replication of jaw movements in mastication. Chew CL, et al. **J Dent** 1988 Oct;16(5):210-4

Loci and characteristics of EMG silent periods during masticatory mandibular movements in rats. Byrd KE. **J Dent Res** 1988 Oct;67(10):1284-8

Radiographic and microscopic evaluation of subperiosteally implanted blocks of hydrated and hardened alpha-tricalcium phosphate in rabbits. Nagase M, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):582-6

Finite element analysis of a mandibular model. Farah JW, et al. **J Oral Rehabil** 1988 Nov;15(6):615-24

A comparison of lateral interocclusal records to pantographic tracings. Curtis DA. **J Prosthet Dent** 1989 Jul;62(1):23-7

Centric relation and the treatment position in rehabilitating occlusions: a physiologic approach. Part I: Developing an optimum mandibular posture [letter] Goldstein LB. **J Prosthet Dent** 1989 Feb;61(2):256-7

A graphic comparison of mandibular border movements generated by various articulators. Part II: Results. Hatano Y, et al. **J Prosthet Dent** 1989 Apr;61(4):425-9

Pantograph clutch retention and stability. Jennings DE, et al. **J Prosthet Dent** 1989 Jun;61(6):652-4

Potential errors when using a computerized pantograph. Price RB, et al. **J Prosthet Dent** 1989 Feb;61(2):155-60

A comparison of articulator settings obtained by using an electronic pantograph and lateral interocclusal recordings. Price RB, et al. **J Prosthet Dent** 1988 Aug;60(2):159-64

A graphic comparison of mandibular border movements generated by various articulators. Part I: Methodology. Stern N, et al. **J Prosthet Dent** 1988 Aug;60(2):194-8

Analysis of rotation centers of various mandibular closures. Torii K. **J Prosthet Dent** 1989 Mar;61(3):285-91

Mandible and hyoid bone movements during speech. Westbury JR. **J Speech Hear Res** 1988 Sep;31(3):405-16

A study of the utility of measuring mandibular mobility by means of the interincisal dimension. Ellis E 3d, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):132-6

[Computer processing corrected the geometric divergence of the mandibular kinesiograph (MKG)] Feng HL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):18-21, 62 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Early soft tissue ingrowth into porous block hydroxyapatite. Butts TE, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):475-9

The effect of orthognathic surgery on occlusal force. Proffit WR, et al. **J Oral Maxillofac Surg** 1989 May;47(5):457-63

Preliminary studies of some masticatory characteristics of bruxism. Faulkner KD. **J Oral Rehabil** 1989 May; 16(3):221-7

Postural and maximum activity in elevators during mandible pre- and post-occlusal splint treatment of temporomandibular joint disturbance syndrome. Shi CS, et al. **J Oral Rehabil** 1989 Mar;16(2):155-61

An evaluation of the criteria used to diagnose mandibular dysfunction with the mandibular kinesiograph. Feine JS, et al. **J Prosthet Dent** 1988 Sep;60(3):374-80

Habitual mastication in dysfunction: a computer-based analysis. Mongini F, et al. **J Prosthet Dent** 1989 Apr; 61(4):484-94

Consequences of inadequate bone healing before implant surgery. Scott RF, et al. **J Prosthet Dent** 1989 Apr; 61(4):399-401

RADIATION EFFECTS

Effects of radiotherapy on mandibular reconstruction plates. Castillo MH, et al. **Am J Surg** 1988 Oct;156(4):261-3

Proper reporting of radiation data [letter] Jacob RF, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1032

Titanium implants in irradiated dog mandibles. Schweiger JW. **J Prosthet Dent** 1989 Aug;62(2):201-5

[Radiation injury to the mandible following radiotherapy of carcinoma of the tongue—with special reference to radiographic findings] Kubo K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):873-80 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Suitability of the panoramic radiograph for assessment of mesiodistal angulation of teeth in the buccal segments of the mandible. Lucchesi MV, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):303-10

The reliability of mandibular radiographic superimposition. Cook PA, et al. **Br J Orthod** 1989 Feb;16(1):25-30

Occult radiologic changes in the skull and jaw in familial adenomatous polyposis coli. Woods RJ, et al. **Dis Colon Rectum** 1989 Apr;32(4):304-6

A radiographic investigation into bone resorption of mandibular alveolar bone in elderly edentulous adults. Humphries S, et al. **J Dent** 1989 Apr;17(2):94-6

Mandibular pathology presenting as a parotid tumour. Ling J, et al. **J Laryngol Otol** 1988 Oct;102(10):896-900

Standardized panoramic radiography in assessment of mandibular augmentation with hydroxylapatite material: preliminary report. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):724-9

The Orthopantomogram, an aid in diagnosis of temporomandibular joint problems. II. The vertical symmetry. Habets LL, et al. **J Oral Rehabil** 1988 Sep; 15(5):465-71

The effects of beam hardening on digital subtraction radiography. Webber RL, et al. **J Periodont Res** 1989 Jan; 24(1):53-8

Prediction of difficult intubation—the measurement of five parameters of the X-ray mandible in Jordanian population. Takrouri MS, et al. **Middle East J Anesthesiol** 1988 Oct; 9(6):479-89

The appearance of mental foramina on panoramic radiographs. I. Evaluation of patients. Yosue T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):360-4

[Roentgenographic study of Bennett movement] Feng HL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):271-3, 318 (Eng. Abstr.) **(Chi)**

[Fracture of the mandibular condyle in childhood] D'Ascanio G, et al. **Minerva Stomatol** 1989 Feb;38(2):239-42 (Eng. Abstr.) **(Ita)**

SURGERY

Osteotomy length and postoperative stability in vertical subcondylar ramus osteotomy. Tornes K. **Acta Odontol Scand** 1989 Apr;47(2):81-8

An American Board of Orthodontics case report. Surgical treatment of adult Class II, division 2 malocclusion. Hinkle FG. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):185-91

Cause of early skeletal relapse after mandibular setback. Komori E, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):29-36

Integumental profile changes after surgical orthodontic correction of bimaxillary dentoalveolar protrusion in black patients. O'Reilly MT. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):242-8

Simultaneous superior repositioning of the maxilla and mandibular advancement. A report on stability. Turvey TA, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):372-83

Relationships of changes in craniofacial morphology, head posture, and nasopharyngeal airway size following mandibular osteotomy. Wenzel A, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):138-43

Re: A retrospective study of relapse in rigidly fixated sagittal split/osteotomies: contributing factors [letter] Woods MG. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):446-7

Enhancement of rehabilitation by use of implantable adjuncts with vascularized bone grafts for mandible reconstruction. Sanger JR, et al. **Am J Surg** 1988 Oct;156(4):243-7

Isoflurane-induced hypotension in orthognathic surgery. Lessard MR, et al. **Anesth Analg** 1989 Sep;69(3):379-83

An approach to mandibular reconstruction. Pearl RM, et al. **Ann Plast Surg** 1988 Nov;21(5):401-17

The surgical correction of mandibular prognathism using rigid internal fixation—a report of a new technique together with its long-term stability. Reitzik M. **Ann R Coll Surg Engl** 1988 Nov;70(6):380-5

Mandibular reconstruction. An example of microvascular bone grafting. Goodman T, et al. **AORN J** 1988 Oct; 48(4):678-81, 684-7, 690

Mandibulotomy in the irradiated patient. Davidson J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):497-9

A critical analysis of immediate and delayed mandibular reconstruction using A-O plates. Komisar A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):830-3

Approach to the pterygomaxillary space and posterior part of the tongue by lateral stair-step mandibulotomy. Pinsolle J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):313-5

The internal oblique-iliac crest osseomyocutaneous free flap in oromandibular reconstruction. Report of 20 cases. Urken ML, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):339-49

Interface between bone tissue and implants of solid hydroxyapatite or hydroxyapatite-coated titanium implants. de Lange GL, et al. **Biomaterials** 1989 Mar; 10(2):121-5

Preoperative angiography in reconstructive microsurgery of the maxillofacial region. Kärcher H, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):317-21

The marginal mandibulectomy for the treatment of mandibular tumours. Pogrel MA. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):132-8

Primary reconstruction of a major loss of lower jaw by an animal bite using a "rib sandwich" pectoralis major island flap. Govila A, et al. **Br J Plast Surg** 1989 Jan;42(1):101-3

Reconstruction of the resected mandible using titanium implants in a free vascularized graft. Fenton AH, et al. **Can Dent Assoc J** 1989 Jun;55(6):465-8

Rigid internal fixation and vascularized bone grafting in mandibular reconstruction. Wenig BL, et al. **Clin Plast Surg** 1989 Jan;16(1):125-31 (71 ref.)

Maxillo-mandibular surgery for obstructive sleep apnoea. Guilleminault C, et al. **Eur Respir J** 1989 Jul;2(7):604-12

Healing following coronoidotomy in rats. Allan PG, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):109-13

Traumatic neuroma following sagittal mandibular osteotomy. Chau MN, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):95-8 (19 ref.)

The accuracy of computer generated prediction tracings. Hing NR. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):148-51 (16 ref.)

Radiographic changes of the temporomandibular joint after oblique sliding osteotomy of the mandibular rami. Petersson A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):27-31

Skeletal stability following sagittal split osteotomy using monocortical miniplate internal fixation. Rubens BC, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):371-6

The anti-inflammatory effect of organo-heparinoid cream after bilateral mandibular osteotomies. Sindet-Pedersen S, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):35-8

Stability after vertical subcondylar ramus osteotomy for correction of mandibular prognathism. Tornes K, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):242-8

Evaluation of satisfaction of denture wearers with the transmandibular implant. van Waas MA, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):145-7

A modification of the sagittal splitting technique ensuring that the osteotomy split lies immediately medial to the lateral cortex. Kitajima T, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):53-7

Condylar displacement after oblique sliding osteotomy of the mandibular rami. A stereometric and plain radiographic study. Rosenquist B, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):301-7

Correction of deep overbite. A modified splint permitting rapid extrusion of posterior teeth. Tuinzing DB, et al. **J Craniomaxillofac Surg** 1989 May;17(4):172-4

Mandibular reconstruction with the THORP condylar prosthesis after hemimandibulectomy. Vuillemin T, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):78-87

The in vivo behavior of gentamicin-PMMA beads in the maxillofacial region. Alpert B, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):46-9

The transmandibular implant: a 12-year follow-up study. Bosker H, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):442-50

Use of bone plates to manage chronic mandibular dislocation: report of cases. Buckley MJ, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):998-1003

Zygomatic and mandibular augmentation with proplast and porous hydroxyapatite in rhesus monkeys. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 May;47(5):480-8

Polyurethane-coated Dacron mesh tray for temporary mandibular reconstruction following resection of oral cancer: clinical results of 27 cases. Eckardt A, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):21-4

Transoral submental lipectomy: an adjunct to orthognathic surgery. Epker BN, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):795-803

Factors contributing to relapse in rigidly fixed mandibular setbacks. Franco JE, et al. **J Oral Maxillofac Surg** 1989 May;47(5):451-6

Feasibility of mandibular inferior border grafts [letter] Galey RK. **J Oral Maxillofac Surg** 1989 Jan;47(1):2, 105

Condylar displacement and temporomandibular joint dysfunction following bilateral sagittal split osteotomy and rigid fixation. Hackney FL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):223-7

Condylar positioning in orthognathic surgery. Hiatt WR, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1110-2

Stabilization of the intraoral vertical osteotomy using small bone plates. Kraut RA. **J Oral Maxillofac Surg** 1988 Oct; 46(10):908-10

Migration of Kirschner wires used for rigid noncompressive fixation of the mandibular sagittal split osteotomy: report of four cases. Lansley CV, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):194-7

Stability following combined maxillary and mandibular osteotomies treated with rigid internal fixation. Law JH, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):128-36

Multicenter follow-up study of the transmandibular implant. Maxson B, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):785-9

A simplified technique for percutaneous rigid fixation of sagittal ramus osteotomies. Muller JT, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):93-5

Radiographic and microscopic evaluation of subperiosteally implanted blocks of hydroxylapatite-gelatin mixture in rabbits. Nagase M, et al. **J Oral Maxillofac Surg** 1989 Jan; 47(1):40-5

The transmandibular implant: a 2-year prospective study. Powers MP, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):679-83

Adaptation of the suprahyoid muscle complex to large mandibular advancements. Reynolds ST, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1077-85

Inferior mandibular osteotomy and hyoid myotomy suspension for obstructive sleep apnea: a review of 55 patients. Riley RW, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):159–64

Stability of simultaneous maxillary intrusion and mandibular advancement: a comparison of rigid and nonrigid fixation techniques. Skoczylas LJ, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1056–64

Transoral placement of rigid fixation following sagittal ramus split osteotomy. Tulasne JF, et al.
J Oral Maxillofac Surg 1989 Jun;47(6):651–2

Factors influencing the stability of the sagittal split osteotomy for mandibular advancement. Will LA, et al.
J Oral Maxillofac Surg 1989 Aug;47(8):813–8

Surgical management of a large, complex mandibular odontoma by unilateral sagittal split osteotomy. Wong GB.
J Oral Maxillofac Surg 1989 Feb;47(2):179–84

AO/ASIF plate for mandibular reconstruction in tumor surgery: results in 20 cases. Birt D, et al. **J Otolaryngol** 1988 Oct;17(6):274–8

Mandibulotomy and radical radiotherapy: compatible or not? Davidson J, et al. **J Otolaryngol** 1988 Oct;17(6):279–81

The mandibular subperiosteal implant denture: a fourteen-year study. Bailey JH, et al. **J Prosthet Dent** 1988 Sep;60(3):358–61

Prosthodontic rehabilitation following total mandibular reconstruction. A clinical report. Newton AD, et al.
J Prosthet Dent 1988 Aug;60(2):139–42

Mandibular guidance following partial resection. Walter JD.
J R Coll Surg Edinb 1988 Jun;33(3):146–7

The mandibular swing stabilization of the midline mandibular osteotomy. Cohen JI, et al. **Laryngoscope** 1988 Oct; 98(10):1139–42

Mandibular reconstruction in the young adult using free vascularized iliac crest. Boyd JB. **Microsurgery** 1988; 9(2):141–9

Comparative evaluation of screw configuration on the stability of the sagittal split osteotomy. Ardary WC, et al.
Oral Surg Oral Med Oral Pathol 1989 Aug;68(2):125–9

Short-term stability and muscle adaptation after mandibular advancement surgery with and without suprahyoid myotomy in juvenile Macaca mulatta. Carlson DS, et al.
Oral Surg Oral Med Oral Pathol 1989 Aug;68(2):135–49

Use of a two-piece Gunning splint as a mandibular guide appliance for a patient treated for ameloblastoma. Fattore L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec; 66(6):662–5

Postoperative changes after bilateral mandibular osteotomies: a computed tomography study. Lund E, et al.
Oral Surg Oral Med Oral Pathol 1989 May;67(5):588–93

Technical improvements in the sagittal split ramus osteotomy. Niederdellmann H, et al.
Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):25–30

Host response to infection of a subperiosteal hydroxylapatite implant. Reznick JB, et al.
Oral Surg Oral Med Oral Pathol 1989 Jun;67(6):665–72

Passive rigid fixation of sagittal split osteotomy. Shufford EL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):150–3

Restoration of the mandible and condylar head. Cheng EY, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):513–9

Primary placement of osseointegrated implants in microvascular mandibular reconstruction. Urken ML, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):56–73

The prominent mandibular angle: preoperative management, operative technique, and results in 42 patients. Baek SM, et al. **Plast Reconstr Surg** 1989 Feb;83(2):272–80

Mandibular reconstruction with vascularized iliac crest: a 10-year experience. David DJ, et al.
Plast Reconstr Surg 1988 Nov;82(5):792–803

Orofacial and mandibular reconstruction with the iliac crest free flap: a review of 60 cases and a new method of classification. Jewer DD, et al. **Plast Reconstr Surg** 1989 Sep;84(3):391–403; discussion 404–5

Functional mandibular reconstruction: prevention of the oral invalid. Lukash FN, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):227–33; discussion 234–5

Fixation effects on membranous and endochondral onlay bone-graft resorption. Phillips JH, et al.
Plast Reconstr Surg 1988 Nov;82(5):872–7

Mandibular reconstruction with the titanium hollow screw reconstruction plate (THORP) system: evaluation of 62 cases. Vuillemin T, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):804–14

Orthognathic surgery without the use of postoperative intermaxillary fixation. A clinical and cephalometric evaluation of surgical correction of mandibular and maxillary deformities. Krekmanov L.
Swed Dent J Suppl 1989;61:8–62

The effect of partial rostral hemimandibulectomy on mandibular mobility and temporomandibular joint morphology in the dog. Umphlet RC, et al. **Vet Surg** 1988 Jul–Aug;17(4):186–93

[Reconstruction of the mandible] Holt GR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):13–5 **(Chi)**

[Complications of mandible surgery] Holt GR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):15–7 **(Chi)**

[Reconstruction of mandibular defects by free rib graft with small arterial anastomosis] Zhou ML.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 May;1(2):69–70, 64 **(Chi)**

[Autogenous bone grafts in the restoration of mandibular defects] Bu RF.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 May; 23(3):186–7 (20 ref.) **(Chi)**

[Histologic changes in the donor area of the mandible] Bu RF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):303–4 **(Chi)**

[Methods to measure blood supply and detect the viability of the osteomyocutaneous flap] Song BZ.
Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan; 24(1):43–5, 63 (Eng. Abstr.) **(Chi)**

[A clinical report of 74 mandibles reconstructed with osteomyocutaneous flaps] Song BZ.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 May; 23(3):129–32, 190 (Eng. Abstr.) **(Chi)**

[Surgical treatment of hypoplasia of the ascending ramus of the mandible in children using an autologous osteochondral costal graft] Champy M, et al. **Ann Chir Plast Esthet** 1989; 34(1):25–9 (Eng. Abstr.) **(Fre)**

[Creation of a curved bony part using cleavage and synthesis of rigid ribs] Pellerin P. **Ann Chir Plast Esthet** 1989; 34(1):48–9 **(Fre)**

[Secondary reconstruction of the mouth floor using a complete and prepared skin graft after non-interrupted pelvi-mandibulectomy] Gdoura A, et al.
Rev Stomatol Chir Maxillofac 1989;90(2):95–9 (Eng. Abstr.) **(Fre)**

[The osteocutaneous outer arm flap. A new concept in microsurgical mandibular reconstructions] Martin D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):281–7 (Eng. Abstr.) **(Fre)**

[Reconstruction of the interruptive loss of substance of the mandible] Péri G, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(3):143–229 (484 ref.) **(Fre)**

[The healing of osteotomies of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. I. Radiologic and histological evaluation of the lower jaw] Härtel J, et al. **Anat Anz** 1988; 167(1):29–34 (Eng. Abstr.) **(Ger)**

[Osteotomy healing of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. II. Response pattern of the masticatory muscles (M. masseter)] Herrmann V, et al. **Anat Anz** 1988; 167(2):87–104 (Eng. Abstr.) **(Ger)**

[Esthetic aspects of the chin area in causal therapy of skeletal dysgnathias] Brachvogel P, et al.
Fortschr Kiefer Gesichtschir 1989;34:31–4 **(Ger)**

[Face lifting, submental lipectomy and simultaneous mandibular reduction] Steinhäuser EW.
Fortschr Kiefer Gesichtschir 1989;34:9–12 **(Ger)**

[Implants—preprosthetic surgery. Endosseous implants and simultaneous preprosthetic operations on the mandible: the technic and results] Hardt N, et al.
Schweiz Monatsschr Zahnmed 1989;99(5):574–85 **(Ger, Fre)**

[Surgical method of sagittal splitting of the mandibular ramus. The Obweger-Dal Pont method] Bögi I. **Fogorv Sz** 1988 Nov;81(11):327–31 (Eng. Abstr.) **(Hun)**

[Experimental use of a pulsed CO2 laser in bone and osteoplastic operations on the maxillofacial area] Bagramov RI. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):17–9 (Eng. Abstr.) **(Rus)**

[Combined osteochrondroalloplasty of mandible defects] Plotnikov NA, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec; 67(6):20–2 (Eng. Abstr.) **(Rus)**

[Plastic surgery in post-osteomyelitic defect of the mandible] Sysoliatin PG. **Vestn Khir** 1988 Sep;141(9):92–4 (Eng. Abstr.) **(Rus)**

[Extrafocal transosseous osteosynthesis of the mandible with a new repositioning-compression-distraction apparatus and headpiece for inserting pins into the bone fragments] Gynga GN, et al. **Voen Med Zh** 1988 Jun;(6):60–1 **(Rus)**

ULTRASTRUCTURE

[Healing of bone and the shape of the periosteal vessels after mandible fracture in the rabbit] Sheng LX.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 May; 23(3):147–9, 190–1 (Eng. Abstr.) **(Chi)**

MANDIBULAR CONDYLE

An experimental study on the healing of fracture of the condylar process of the mandible—the course after malunion. Shimahara M, et al. **Bull Osaka Med Sch** 1987 Oct;33(2):164–78

A condylar tumor from pre-Columbian Chile: a case report. Sawyer DR, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):400–3

[Remodeling of the temporomandibular joint and long-term results after conservative treatment of condylar fractures] Zou ZJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):193–6, 254 (Eng. Abstr.) **(Chi)**

[Temporomandibular joint dysfunction and neurofibromatosis. Apropos of a case] Pasturel A, et al.
Rev Stomatol Chir Maxillofac 1989;90(1):17–9 (Eng. Abstr.) **(Fre)**

ABNORMALITIES

[The hypoplastic condyle treated with an activator appliance (apropos of 2 cases)] Deplagne H, et al. **Orthod Fr** 1987; 58 Pt 2:641–8 (Eng. Abstr.) **(Fre)**

ANALYSIS

Cellular stages in cartilage formation as revealed by morphometry, radioautography and type II collagen immunostaining of the mandibular condyle from weanling rats. Luder HU, et al. **Am J Anat** 1988 Jul;182(3):197–214

ANATOMY & HISTOLOGY

Porion and condyle as cephalometric landmarks—an error study. Adenwalla ST, et al.
Am J Orthod Dentofacial Orthop 1988 Nov;94(5):411–5

The accuracy of measuring condylion location. Moore RN, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):344–7

Identification of the cephalometric reference point condylion on lateral head films. Forsberg CM, et al.
Angle Orthod 1989 Summer;59(2):123–30

Can 'articulare' be used in the cephalometric analysis of mandibular length? A methodologic study. Stickel A, et al. **Eur J Orthod** 1988 Nov;10(4):362–8

Condylar positioning in orthognathic surgery. Hiatt WR, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1110–2

The relationship between condylar guidance and temporomandibular joint clicking. Alsawaf M, et al.
J Prosthet Dent 1989 Mar;61(3):349–54

Graphic tracings of condylar paths and measurements of condylar angles. el-Gheriani AS, et al. **J Prosthet Dent** 1989 Jan;61(1):77–87

Discomalleolar and anterior malleolar ligaments: possible causes of middle ear damage during temporomandibular joint surgery. Loughner BA, et al.
Oral Surg Oral Med Oral Pathol 1989 Jul;68(1):14–22

[Discussion on the reference plane of inclination of condylar guidance] Guo TW.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Sep; 23(5):274–5, 318–9 (Eng. Abstr.) **(Chi)**

[The head of the human mandibular condyle (caput mandibulae): a skeletal unit or skeletal units?] Delachapelle C, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec;31(3–4):123–9 (Eng. Abstr.) **(Fre)**

[The condylar-meniscal complex] Pajoni D. **Orthod Fr** 1987; 58 Pt 2:501–5 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Histological, histometrical and fluoride electrode studies of the effects of fluoride on the mandibular condyles in growing newborn rats. Mizohata M, et al.
Acta Anat (Basel) 1988;133(2):134–9

Effects of polypeptide growth factors on mandibular condylar cartilage of the rat in vitro. Copray JC, et al.
J Biol Buccale 1988 Jun;16(2):109–17

EMBRYOLOGY

[The ascending mandibular ramus and other bone sectors. A prenatal study] Fuentes A.
Rev Stomatol Chir Maxillofac 1988;89(3):169–75 (Eng. Abstr.) **(Fre)**

[The mandibular condyle. The prenatal evolutionary process] Fuentes A. **Rev Stomatol Chir Maxillofac** 1988; 89(5):299–305 (Eng. Abstr.) **(Fre)**

GROWTH & DEVELOPMENT

The effect of the amount of protrusion built into the bionator on condylar growth and displacement: a clinical study. Op Heij DG, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):401–9

Induced condylar growth in a patient with hemifacial microsomia. Kaplan RG. **Angle Orthod** 1989 Summer; 59(2):85–90

Organ culture providing an articulating function for the temporomandibular joint. Kantomaa T, et al. **J Anat** 1988 Dec;161:195–201

A theoretical model of loading and eminence development of the postnatal human temporomandibular joint. Nickel JC, et al. **J Dent Res** 1988 Jun;67(6):903–10

INJURIES

Posttraumatic condylar hyperplasia. Lineaweaver W, et al.
Ann Plast Surg 1989 Feb;22(2):163–72

Supero-lateral dislocation of sagittally split bifid mandibular condyle. To EW. **Br J Oral Maxillofac Surg** 1989 Apr; 27(2):107–13 (27 ref.)

Subcondylar fracture of the mandible: an analysis of 23 cases of mandibular subcondyle fractures. Chidzonga MM.
Cent Afr J Med 1988 Jan;34(1):9–11

Fracture of the mandibular condyle as a complication of tonsillectomy [letter] Gupta SC, et al.
Ear Nose Throat J 1989 Jun;68(6):477–9

Long-term results after childhood condylar fractures. A computer-tomographic study. Sahm G, et al.
Eur J Orthod 1989 May;11(2):154–60

15 years follow-up on condylar fractures. Dahlström L, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):18–23

Conservative management of fractures of the mandibular condyloid process in three cats and one dog. Salisbury SK, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):85–7

Lateral displacement of the intact mandibular condyle. Review of literature and report of case with associated facial nerve palsy. Ferguson JW, et al.

J Craniomaxillofac Surg 1989 Apr;17(3):125–7 (14 ref.)
A new method of intra-oral open reduction using a screw applied through the mandibular crest of condylar fractures. Kitayama S. J Craniomaxillofac Surg 1989 Jan;17(1):16–23
Surgical treatment of fractures of the mandibular condylar neck. Takenoshita Y, et al. J Craniomaxillofac Surg 1989 Apr;17(3):119–24
Closed mind to an open technique [letter] Raveh J. J Oral Maxillofac Surg 1989 Jul;47(7):773
An interesting condylar fracture revealed by use of computed tomography. A case report. Davis WM Jr. Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):31–2
[Treatment of facial bone fractures in children] Huang MX. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Jul; 23(4):202–3, 254 (Eng. Abstr.) (Chi)
[Success and failure in orthodontic treatment following temporomandibular condylar fractures] Sahm G. Fortschr Kieferorthop 1988 Dec;49(6):557–67 (Eng. Abstr.) (Ger)
[Indications for surgical management of condylar fractures] Vuillemin T, et al. HNO 1988 Nov;36(11):467–71 (Eng. Abstr.) (Ger)
[Fracture of the mandibular condyle in childhood] D'Ascanio G, et al. Minerva Stomatol 1989 Feb;38(2):239–42 (Eng. Abstr.) (Ita)
[Traumatic pathology of the temporo-mandibular articulation. Clinical study of 55 cases] Mazzocchi A, et al. Minerva Stomatol 1989 Jan;38(1):89–96 (Eng. Abstr.) (Ita)
[Bone remodelling after condylar fractures in children] Mazzocchi A, et al. Minerva Stomatol 1989 Jan;38(1):47–55 (Eng. Abstr.) (Ita)
[Osteosynthesis of high fractures of the condyloid process of the lower jaw, accompanied by displacement of the fragments and dislocation of the capitulum] Arifdzhanov AK. Stomatologiia (Mosk) 1988 Jul–Aug;67(4):78–9 (Rus)
[Treatment of fractures of the mandibular condyle] Kadyrov KS, et al. Stomatologiia (Mosk) 1988 Nov–Dec;67(6):67–8 (Rus)

METABOLISM

The ultrastructural distribution of proteoglycans in normal and rachitic growth cartilage from the mandibular condyle of the rat. Appleton J. Arch Oral Biol 1988;33(5):379–81

PATHOLOGY

MR of osteochondritis dissecans and avascular necrosis of the mandibular condyle. Schellhas KP, et al. AJR 1989 Mar;152(3):551–60
Condylar cartilage in the muscular dystrophic mouse. Ghafari J, et al. Am J Orthod Dentofacial Orthop 1989 Feb;95(2):107–14
Mandibular condyle morphology in relation to malocclusions in children. Tadej G, et al. Angle Orthod 1989 Fall; 59(3):187–94
Morphologic alterations of the temporomandibular joint in a patient with Sotos' syndrome: report of a case. Harris AM, et al. Ann Dent 1988 Summer;47(1):20–2 (18 ref.)
Eosinophilic granuloma of the mandibular condyle. Peckitt NS, et al. Br J Oral Maxillofac Surg 1988 Aug;26(4):306–10 (4 ref.)
Condylar displacement and temporomandibular joint dysfunction following bilateral sagittal split osteotomy and rigid fixation. Hackney FL, et al. J Oral Maxillofac Surg 1989 Mar;47(3):223–7
Osteoarthrosis of the temporomandibular joint following experimental disc perforation in Macaca fascicularis. Helmy E, et al. J Oral Maxillofac Surg 1988 Nov;46(11):979–90
Metastatic carcinoma of the mandibular condyle presenting as temporomandibular joint syndrome. Rubin MM, et al. J Oral Maxillofac Surg 1989 May;47(5):507–10
The recognition of craniomandibular disorders; condylar symmetry in relation to myogenous and arthrogenous origin of pain. Bezuur JN, et al. J Oral Rehabil 1989 May; 16(3):257–60
[Mandibular condylar hyperplasia. Its various clinical aspects and its treatment] Gordeeff A, et al. Acta Stomatol Belg 1988 Dec;85(4):259–76 (Fre)
[Effect of an experimentally-induced lateral occlusal disorder on cell proliferation in the condylar cartilage of the rat temporomandibular joint] Dannhauer KH, et al. Zahn Mund Kieferheilkd 1989;77(4):299–304 (Eng. Abstr.) (Ger)
[Morphologic changes in the mandibular condyle under the action of extraoral traction] Latil AA. Stomatologiia (Mosk) 1989 Jan–Feb;68(1):16–9 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The role of condylar cartilage in the development of the temporomandibular joint. Copray JC, et al. Angle Orthod 1988 Oct;58(4):369–80 (42 ref.)
Functional and morphologic considerations of the articular eminence. Widman DJ. Angle Orthod 1988 Jul;58(3):221–36
A preliminary study of the effects of tooth guidance on working-side condylar movement. Coffey JP, et al. J Prosthet Dent 1989 Aug;62(2):157–62
A computer analysis of condylar movement as determined by cuspal guidances. Mack PJ. J Prosthet Dent 1989 May; 61(5):628–33
The relationship between condylar rotation and anterior translation in healthy and clicking temporomandibular joints. Merlini L, et al. Schweiz Monatsschr Zahnmed 1988; 98(11):1191–9
[The condylar test in orthodontics and gnathology] Petit HP. Orthod Fr 1987;58 Pt 2:659–87 (Eng. Abstr.) (Fre)
[Reactive capacity of animal and human condylar cartilage at the cellular and molecular levels in the light of a cybernetic concept of facial growth] Petrovic AG, et al. Fortschr Kieferorthop 1988 Oct;49(5):405–25 (51 ref.) (Eng. Abstr.) (Ger)
[Observation of the changes in the cartilage matrix in endochondral ossification of the rat mandibular condyle] Sugano H. Kokubyo Gakkai Zasshi 1988 Jun;55(2):283–330 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Three-dimensional radiographic evaluation of condyle poles in "closed-lock" syndrome. Nadler GL. Angle Orthod 1988 Oct;58(4):357–68
Condylar displacement after oblique sliding osteotomy of the mandibular rami. A stereometric and plain radiographic study. Rosenquist B, et al. J Craniomaxillofac Surg 1988 Oct;16(7):301–7
Accuracy of the oblique lateral transcranial projection, lateral tomography, and x-ray stereometry in evaluation of mandibular condyle displacement. Rosenquist B, et al. J Oral Maxillofac Surg 1988 Oct;46(10):862–7
The Orthopantomogram, an aid in diagnosis of temporomandibular joint problems. II. The vertical symmetry. Habets LL, et al. J Oral Rehabil 1988 Sep; 15(5):465–71
The effect of increasing occlusal vertical dimension on transcranial radiographic projections of the temporomandibular joints. Gross MD. J Prosthet Dent 1988 Oct;60(4):491–9
Condylar position as a predictor of temporomandibular joint internal derangement. Brand JW, et al. Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):469–76
[Roentgenographic study of Bennett movement] Feng HL. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Sep; 23(5):271–3, 318 (Eng. Abstr.) (Chi)

SURGERY

Effect of condylotomy on DNA synthesis in cells of the mandibular condylar cartilage in the rat. Hinton RJ. Arch Oral Biol 1987;32(12):865–72
Open mandibular condylotomy (osteotomy) with precision scaphoid staple osteosynthesis and meniscopexy. A description of the operation. Norman JE, et al. Aust Dent J 1988 Jun;33(3):212–7
Surgical treatment of mandibular retrusion by a post-condylar cartilage graft. Banks P, et al. Br Dent J 1989 Jun 24;166(12):443–50
The significance of condylar position using rigid fixation in orthognathic surgery. Luhr HG. Clin Plast Surg 1989 Jan; 16(1):147–56
Rigid skeletal fixation in maxillary osteotomies. Intraoperative control of condylar position. Luhr HG, et al. Clin Plast Surg 1989 Jan;16(1):157–63
Open reduction of mandibular condyle fractures. Indications and technique. Zide MF. Clin Plast Surg 1989 Jan; 16(1):69–76
Mandibular condylectomy in a horse. Patterson LJ, et al. J Am Vet Med Assoc 1989 Jul 1;195(1):101–2
Avascular necrosis of the mandibular condyle: fact or fantasy [letter] Abubaker O. J Oral Maxillofac Surg 1989 Sep; 47(9):1007–8
Free grafting of traumatically displaced or resected mandibular condyles. Boyne PJ. J Oral Maxillofac Surg 1989 Mar;47(3):228–32
Healing following condylar shave in the monkey temporomandibular joint. Marciani RD, et al. J Oral Maxillofac Surg 1988 Dec;46(12):1071–6
Reconstruction of the mandibular condyle using ramus osteotomies: a preliminary report. Markowitz NR, et al. J Oral Maxillofac Surg 1989 Apr;47(4):367–77 (82 ref.)
Open reduction of the dislocated, fractured condylar process: indications and surgical procedures. Raveh J, et al. J Oral Maxillofac Surg 1989 Feb;47(2):120–7
Histochemical characteristics of masseter and temporalis muscles after 5 weeks of maxillomandibular fixation—an investigation in Macaca mulatta. Mayo KH, et al. Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):421–6
Restoration of the mandible and condylar head. Cheng EY, et al. Otolaryngol Head Neck Surg 1988 Nov;99(5):513–9
[Excision of condylar osteochondroma by vertical ramisection with immediate TMJ reconstruction] Hong M. Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan; 24(1):8–10, 62 (Eng. Abstr.) (Chi)
[An experimental study on repairing articular cartilage of the mandibular condyle with an autograft of the costal perichondrium] Zhang T. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Nov; 23(6):356–8 (Chi)
[Repositioning of the mandibular condyle after intervention for surgical remodeling] Cascone P, et al. Minerva Stomatol 1988 Oct;37(10):779–88 (Eng. Abstr.) (Ita)

TRANSPLANTATION

Transplantation of cryogenically preserved mandibular condyles in the adult and juvenile goat. Bifano CA, et al. Aviat Space Environ Med 1988 Nov;59(11 Pt 2):A76–80

ULTRASTRUCTURE

Ultrastructural changes associated with weaning in the mandibular condyle of the rat. Copray JC, et al. Acta Anat (Basel) 1989;134(1):35–47
Effects of leukemogenic retroviruses on condylar cartilage in vitro: an ultrastructural study. Livne E, et al. Calcif Tissue Int 1989 Jan;44(1):25–35
Electron microscopic observations on the fate of hypertrophic chondrocytes in condylar cartilage of rat mandible. Yoshioka C, et al. J Craniofac Genet Dev Biol 1988;8(3):253–64

MANDIBULAR DISEASES

Aneurysmal bone cyst of the mandible. Giddings NA, et al. Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):865–70 (54 ref.)
Bilateral mandibular dentigerous cysts in a five-year-old child: report of a case. O'Neil DW, et al. ASDC J Dent Child 1989 Sep–Oct;56(5):382–4
A large mandibular primordial cyst. Case report. Sofat JR, et al. Indian J Med Sci 1988 Dec;42(12):298–300
[Isolated epidermoid cysts of the jaw. Apropos of 3 cases with a familial aspect] Klersy F, et al. Rev Stomatol Chir Maxillofac 1988;89(6):339–41 (Eng. Abstr.) (Fre)

CLASSIFICATION

Type C lesions [letter] Mintz AL. N Y State Dent J 1989 Feb;55(2):9

COMPLICATIONS

Recurrent keratocysts in basal cell nevus syndrome: review of the literature and report of a case. Mustaciuolo VW, et al. J Oral Maxillofac Surg 1989 Aug;47(8):870–3 (9 ref.)
[Facial asymmetry due to polycystic-like mandibular fibrous dysplasia. Apropos of a case] Netter JC, et al. Rev Stomatol Chir Maxillofac 1988;89(6):370–4 (Eng. Abstr.) (Fre)
[Diseases in the field of otorhinopharyngolaryngology as the cause of ventilatory disturbance during sleep] Togawa K, et al. Kokyu To Junkan 1989 Jan;37(1):17–20 (Jpn)

DIAGNOSIS

Developmental bone defects [letter] Ogden GR. Br J Oral Maxillofac Surg 1988 Dec;26(6):517
Granular cell odontogenic cyst: a unicystic ameloblastoma with late recurrence as follicular ameloblastoma. Abaza NA, et al. J Oral Maxillofac Surg 1989 Feb;47(2):168–75

DRUG THERAPY

Treatment for solitary eosinophilic granuloma of the mandible by steroid injection: report of a case. Jones LR, et al. J Oral Maxillofac Surg 1989 Mar;47(3):306–9
[Experience with Tarivid (Ofloxacin) in maxillofacial surgery] Szabó G, et al. Orv Hetil 1988 Aug 21; 129(34):1811–3 (Eng. Abstr.) (Hun)

EPIDEMIOLOGY

Craniomandibular disorders in adult populations of West Bothnia, Sweden. Agerberg G, et al. Acta Odontol Scand 1989 Jun;47(3):129–40

ETIOLOGY

Odontogenic sinus tracts. Hodges TP, et al. Am Fam Physician 1989 Jul;40(1):113–6 (8 ref.)
Posttraumatic condylar hyperplasia. Lineaweaver W, et al. Ann Plast Surg 1989 Feb;22(2):163–72
Osteomyelitis of the mandible associated with osteopetrosis: report of a case. Lawoyin DO, et al. Br J Oral Maxillofac Surg 1988 Aug;26(4):330–5
Actinomycotic osteomyelitis. Ruprecht A, et al. Can Dent Assoc J 1988 Nov;54(11):837–9
A proliferative inflammation in the mandible caused by implantation of an infected dental root. A possible experimental model for chronic osteomyelitis. Wannfors K, et al. Int J Oral Maxillofac Surg 1989 Jun;18(3):179–83

PATHOLOGY

Chronic pyogenic osteomyelitis. Case report. Shalhoub SY. Aust Dent J 1988 Dec;33(6):478–80 (11 ref.)
Invasive histoplasmosis of the mandible. Dobleman TJ, et al. Head Neck 1989 Jan–Feb;11(1):81–4 (6 ref.)
Squamous cell carcinoma arising in an odontogenic cyst. Bradley N, et al. Int J Oral Maxillofac Surg 1988 Aug; 17(4):260–3 (27 ref.)
Mandibular atrophy and metabolic bone loss. Histomorphometry of iliac crest biopsies in 74 patients. Habets LL, et al. Int J Oral Maxillofac Surg 1988 Oct; 17(5):325–9
A botryoid odontogenic cyst with multiple recurrences. Heikinheimo K, et al. Int J Oral Maxillofac Surg 1989 Feb; 18(1):10–3

Cholesterol granuloma of the jaws. Report of a case. Hirshberg A, et al. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):230–1 (20 ref.)

Vascular changes after experimentally-induced inflammation in the mandible. Wannfors K. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):79–82

Facial deformity and rash [clinical conference] Zerin JM, et al. **Invest Radiol** 1989 Feb;24(2):159–61

Bilateral giant cell granulomata of the mandible: report of case. Cassatly MG, et al. **J Am Dent Assoc** 1988 Nov; 117(6):731–3

Extra-articular ankylosis of the coronoid processes to the base of the skull. A case report. Karakasis D, et al. **J Craniomaxillofac Surg** 1989 Jan;17(1):46–9

Mandibular infected buccal cyst: report of two cases. Camarda AJ, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):528–34

Hydatid cyst of the mandible: a case report. Nandakumar H, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):759–61

Diffuse sclerosing osteomyelitis of the mandible: clinical radiographic and histologic findings in twenty-seven patients. Van Merkesteyn JP, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):825–9

The glandular odontogenic cyst: an apparent entity. Gardner DG, et al. **J Oral Pathol** 1988 Sep;17(8):359–66

Paget's disease of bone with involvement of the dental pulp. Aldred MJ, et al. **J Oral Pathol Med** 1989 Mar;18(3):184–5

Respiratory epithelium in an apical periodontal cyst of the mandible. Redman RS. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):77–80

The inflammatory paradental cyst. Vedtofte P, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):182–8

Primary intraosseous carcinoma of the mandible with probable origin in an odontogenic cyst. Waldron CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):716–24 (20 ref.)

PHYSIOPATHOLOGY

The effects of pain from the mandibular joint and muscles on masticatory motor behaviour in man. Stohler CS, et al. **Arch Oral Biol** 1988;33(3):175–82

RADIOGRAPHY

The untreated, shrinking simple bone cavity: case report. Parker ME, et al. **Ann Dent** 1988 Winter;47(2):43–5 (18 ref.)

A maxillary fourth molar? Howe GS. **Br J Orthod** 1988 Aug; 15(3):205–6

Mandibular pathology presenting as a parotid tumour. Ling J, et al. **J Laryngol Otol** 1988 Oct;102(10):896–900

Signs without symptoms. Hatton MN, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):365–6

Severe notching of inferior border of mandible. Lee HY, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):268–9

Coronoid process hyperplasia: CT studies. Munk PL, et al. **Radiology** 1989 Jun;171(3):783–4

[Radiological semeiology of the lacunar injuries of the mandible] Ciccarelli R, et al. **Minerva Stomatol** 1989 Jan; 38(1):97–106 (37 ref.) (Eng. Abstr.) **(Ita)**

[A rare case of primary osteomyelitis of the coronoid process] Gotte P, et al. **Minerva Stomatol** 1988 Oct; 37(10):763–70 (Eng. Abstr.) **(Ita)**

[Computed tomography in the diagnosis of cystic formations of the mandible] Rud'ko VF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):18–20 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

The use of nuclear medicine in the diagnosis of Paget's disease of the mandible. Report of a case. Camarda AJ, et al. **Can Dent Assoc J** 1989 Jan;55(1):49–53 (18 ref.)

RE: The use of nuclear medicine in the diagnosis of Paget's disease of the mandible [letter] Lee L. **Can Dent Assoc J** 1989 Jun;55(6):451–2

SURGERY

Histomorphometric evaluation of stress shielding in mandibular continuity defects treated with rigid fixation plates and bone grafts. Kennady MC, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):170–4

Hyperostosis corticalis generalisata: surgical management and long-term follow-up of one patient. Marmary Y, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):155–7

Titanium-coated hollow screw and reconstruction plate system for bridging of lower jaw defects: biomechanical aspects. Sutter F, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):267–74

Giant fibrous dysplasia of the mandible: surgical management. Kreutziger KL. **Laryngoscope** 1989 Jun;99(6 Pt 1):618–31

[Reconstruction of the interruptive loss of substance of the mandible] Péri G, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(3):143–229 (484 ref.) **(Fre)**

[Radical cystectomy with secondary epithelialization. Considerations and personal experience] Berrone S, et al. **Minerva Stomatol** 1988 Jun;37(6):469–72 (Eng. Abstr.) **(Ita)**

[Immediate replacement bone grafts in benign pathology of the facial bones. An analysis of 37 cases] Cortelazzi R, et al. **Minerva Stomatol** 1988 Oct;37(10):801–4 (Eng. Abstr.) **(Ita)**

[Replacement of bone cavities in the lower jaw by a pedicled muscle flap] Luk'ianenko VT, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):75–7 **(Rus)**

[Use of brepho-osteoplasty for filling bone cavities in oral medical and surgical practice] Panikarovskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):22–4 (Eng. Abstr.) **(Rus)**

THERAPY

Treatment of osteoradionecrosis combined with pathologic fracture and osteomyelitis of the mandible with electromagnetic stimulation. Barak S, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):253–6

Osteoradionecrosis of the mandible: a review. Balogh JM, et al. **J Otolaryngol** 1989 Aug;18(5):245–50 (19 ref.)

Hyperbaric oxygen in osteoradionecrosis of the mandible. Daum RE, et al. **J R Nav Med Serv** 1988 Spring;74(1):51–4

VETERINARY

Congenital aneurysmal bone cyst in the mandible of a foal. Lamb CR, et al. **Equine Vet J** 1989 Mar;21(2):130–2

Fusobacterium necrophorum and Actinomyces pyogenes associated facial and mandibular abscesses in blue duiker. Roeder BL, et al. **J Wildl Dis** 1989 Jul;25(3):370–7

[Abscess forming mandibular osteomyelitis following actinomycosis] Nuss K, et al. **Tierarztl Prax** 1989;17(1):15, 109–11 **(Ger)**

MANDIBULAR FRACTURES

An experimental study on the healing of fracture of the condylar process of the mandible—the course after malunion. Shimahara M, et al. **Bull Osaka Med Sch** 1987 Oct;33(2):164–78

Subcondylar fracture of the mandible: an analysis of 23 cases of mandibular subcondyle fractures. Chidzonga MM. **Cent Afr J Med** 1988 Jan;34(1):9–11

COMPLICATIONS

Supero-lateral dislocation of sagittally split bifid mandibular condyle. To EW. **Br J Oral Maxillofac Surg** 1989 Apr; 27(2):107–13 (27 ref.)

Lateral displacement of the intact mandibular condyle. Review of literature and report of case with associated facial nerve palsy. Ferguson JW, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):125–7 (14 ref.)

Gas-producing necrotizing fasciitis following mandibular fracture. Falender LG, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):856–9

Pneumomediastinum and cervical emphysema subsequent to mandibular injury associated with a flare pistol shot. Shuker S, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):741–4

Pneumomediastinum secondary to a mandible fracture. Haberkamp TJ, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):104–7

[The prognosis of infectious-inflammatory complications in patients with mandibular fractures] Solov'ev MM, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):14–8 (Eng. Abstr.) **(Rus)**

[Mandibular fracture with an atypical complication] Ushin AG, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):74–5 **(Rus)**

[Plastic surgery in post-osteomyelitic defect of the mandible] Sysoliatin PG. **Vestn Khir** 1988 Sep;141(9):92–4 (Eng. Abstr.) **(Rus)**

CONGENITAL

Treatment of a mandibular fracture in a neonate. Priest JH. **J Oral Maxillofac Surg** 1989 Jan;47(1):77–81

DIAGNOSIS

[Fractures of the mandibular coronoid process and their treatment] Sysoliatin PG, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):31–3 (Eng. Abstr.) **(Rus)**

DIET THERAPY

[Comparative biological value of the proteins comprising the products for the tube and regular feeding of patients with mandibular fractures] Kholodov SV, et al. **Vopr Pitan** 1988 Sep–Oct;(5):21–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Experimental fractures of the mandibular body of sheep and dogs. A new technique. Rozema FR, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):163–8

Fracture of the mandibular condyle as a complication of tonsillectomy [letter] Gupta SC, et al. **Ear Nose Throat J** 1989 Jun;68(6):477–9

Aetiological factors of mandibular fractures at Harare Central Hospital, Harare, Zimbabwe. Chidzonga MM. **East Afr Med J** 1988 Jul;65(7):465–9

Causes and types of mandibular fractures in northern Finland in 1980–1986. Oikarinen K, et al. **Proc Finn Dent Soc** 1988; 84(4):227–33

IMMUNOLOGY

[Evaluation of immunologic status in mandibular fractures] Robustova TG, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):58–60 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Long-term results after childhood condylar fractures. A computer-tomographic study. Sahm G, et al. **Eur J Orthod** 1989 May;11(2):154–60

PHYSIOPATHOLOGY

[Healing of bone and the shape of the periosteal vessels after mandible fracture in the rabbit] Sheng LX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):147–9, 190–1 (Eng. Abstr.) **(Chi)**

[Function of the respiratory and circulatory systems in patients with mandibular fractures] Gritsuk SF, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):35–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Accurate radiographic evaluation of mandibular fractures. Reiner SA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1083–5

An interesting condylar fracture revealed by use of computed tomography. A case report. Davis WM Jr. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):31–2

Ghost foreign body. Murphy JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):228

[Bone remodelling after condylar fractures in children] Mazzocchi A, et al. **Minerva Stomatol** 1989 Jan;38(1):47–55 (Eng. Abstr.) **(Ita)**

REHABILITATION

[Treatment of patients with mandibular fractures and a nonfixed height of the lower face] Zotov VM, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):82–3 **(Rus)**

SURGERY

Augmented fixation of mandibular fractures with a threaded Kirschner wire. Coniglio JU, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):699–704

The intramandibular sliding myo-osseous graft for delayed reconstruction of selected mandibular defects. A preliminary report. Browne GA, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):472–8

Perioperative antibiotic prophylaxis in mandibular fracture treatment. Gerlach K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):568

Plate and screw fixation in the management of mandible fractures. Ardary WC. **Clin Plast Surg** 1989 Jan;16(1):61–7

The effects of mandibular immobilization on the masticatory system. A review. Ellis E 3d, et al. **Clin Plast Surg** 1989 Jan;16(1):133–46 (77 ref.)

Open reduction of mandibular condyle fractures. Indications and technique. Zide MF. **Clin Plast Surg** 1989 Jan; 16(1):69–76

A new method of intra-oral open reduction using a screw applied through the mandibular crest of condylar fractures. Kitayama S. **J Craniomaxillofac Surg** 1989 Jan;17(1):16–23

Treatment of mandibular fractures. Need for rigid internal fixation. Oikarinen K, et al. **J Craniomaxillofac Surg** 1989 Jan;17(1):24–30

Surgical treatment of fractures of the mandibular condylar neck. Takenoshita Y, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):119–24

Free grafting of traumatically displaced or resected mandibular condyles. Boyne PJ. **J Oral Maxillofac Surg** 1989 Mar;47(3):228–32

Intraoral open reduction with rigid internal fixation of mandibular subcondylar fractures. Jeter TS, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1113–6

A simplified method for fixation of mandibular fractures in children. Minkow B. **J Oral Maxillofac Surg** 1989 Jul; 47(7):764–5

Open reduction of the dislocated, fractured condylar process: indications and surgical procedures. Raveh J, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):120–7

Closed mind to an open technique [letter] Raveh J. **J Oral Maxillofac Surg** 1989 Jul;47(7):773

Intraoral approach to rigid internal fixation of anterior mandibular fractures. Klotch DW, et al. **Laryngoscope** 1989 Mar;99(3):344–5

Facial fracture management at WBAMC Trauma Unit [letter] Samit A, et al. **Milit Med** 1989 Jul;154(7):378

Transoral plating of mandibular angle fractures: a technique. Nishioka GJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):531–5

Mandibular reconstruction with the titanium hollow screw reconstruction plate (THORP) system: evaluation of 62 cases. Vuillemin T, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):804–14

[Rigid fixation of mandibular fractures with titanium miniplate] Sung DY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):129–34 (Eng. Abstr.) **(Chi)**

[Treatment of facial bone fractures in children] Huang MX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):202–3, 254 (Eng. Abstr.) **(Chi)**

[Fracture injuries of the mandibular arch. A repair technic] Ferri J, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(4):247–52 (Eng. Abstr.) **(Fre)**

[Fracture of the mandible in osteogenesis imperfecta]

Ehrenfeld M, et al. **Aktuel Traumatol** 1989 Jun;19(3):107–9 (Eng. Abstr.) (Ger)

[Indications for surgical management of condylar fractures] Vuillemin T, et al. **HNO** 1988 Nov;36(11):467–71 (Eng. Abstr.) (Ger)

[Maxillofacial injuries in polytrauma. Results of a follow-up study] Fischer-Brandies E, et al. **Unfallchirurg** 1989 May; 92(5):209–15 (Eng. Abstr.) (Ger)

[The problems of treating mandibular fractures in the case of partial dentition or an edentulous jaw] Jakubik E. **Zahn Mund Kieferheilkd** 1988;76(8):831–4 (Eng. Abstr.) (Ger)

[Treatment of fractures of the mandible: a new type of external fixator] Caldani P, et al. **Minerva Chir** 1989 Jun 30;44(12):1681–3 (Eng. Abstr.) (Ita)

[Treatment of fractures of the mandibular condyle] Kadyrov KS, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):67–8 (Rus)

THERAPY

A locking bar modification for splint localisation. Roveda SI, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):318–20

Treatment of osteoradionecrosis combined with pathologic fracture and osteomyelitis of the mandible with electromagnetic stimulation. Barak S, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):253–6

A technique for the treatment of mandibular body fractures in young children. Calderon S, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):83–4

15 years follow-up on condylar fractures. Dahlström L, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):18–23

Treatment of mandibular fractures by means of compression osteosynthesis. Peled M, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):566–9

A method for repositioning a mandibular fracture with delayed union and/or nonunion. Waikakul A. **J Oral Maxillofac Surg** 1989 Feb;47(2):206–8

[Remodeling of the temporomandibular joint and long-term results after conservative treatment of condylar fractures] Zou ZJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):193–6, 254 (Eng. Abstr.) (Chi)

[Success and failure in orthodontic treatment following temporomandibular condylar fractures] Sahm G. **Fortschr Kieferorthop** 1988 Dec;49(6):557–67 (Eng. Abstr.) (Ger)

[Fracture of the mandibular condyle in childhood] D'Ascanio G, et al. **Minerva Stomatol** 1989 Feb;38(2):239–42 (Eng. Abstr.) (Ita)

[The use of minifixers-compressors in the treatment of fractures of the mandible. Indications and methods] Losapio PL, et al. **Minerva Stomatol** 1988 Apr;37(4):287–90 (Eng. Abstr.) (Ita)

[Traumatic pathology of the temporo-mandibular articulation. Clinical study of 55 cases] Mazzocchi A, et al. **Minerva Stomatol** 1989 Jan;38(1):89–96 (Eng. Abstr.) (Ita)

[Use of splint prostheses for the treatment and rehabilitation of patients with fractures of the lower jaw] Stepanov PE. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):42–3 (Eng. Abstr.) (Rus)

[Characteristics of the regional muscular blood flow and the activity of mineralization processes in the callus as affected by different methods of fixation of fractures of the lower jaw] Zuev VP, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug; 67(4):37–9 (Eng. Abstr.) (Rus)

[Active irrigation of the oral cavity in the combined treatment and rehabilitation of maxillofacial patients] Slepchenko MA, et al. **Voen Med Zh** 1988 Oct;(10):58–9 (Rus)

VETERINARY

Conservative management of fractures of the mandibular condyloid process in three cats and one dog. Salisbury SK, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):85–7

Healing of mandibular body osteotomies after plate and intramedullary pin fixation. Roush JK, et al. **Vet Surg** 1989 May-Jun;18(3):190–6

Mandibular fractures in the cat. A retrospective study. Umphlet RC, et al. **Vet Surg** 1988 Nov-Dec;17(6):333–7

[A retrospective clinical study of the fractures and luxations of the mandible in the cat] Battier B, et al. **Schweiz Arch Tierheilkd** 1989;131(2):77–80, 87–94 (Eng. Abstr.) (Fre)

MANDIBULAR INJURIES

REHABILITATION

Prosthodontic rehabilitation of the partially edentulous trauma patient by using osseointegrated implants. Diaz-Arnold AM, et al. **J Prosthet Dent** 1988 Sep; 60(3):354–7

SURGERY

Microvascular free flap reconstruction for head and neck defects. Wenig BL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1118–20

Primary reconstruction of a major loss of lower jaw by an animal bite using a "rib sandwich" pectoralis major island flap. Govila A, et al. **Br J Plast Surg** 1989 Jan;42(1):101–3

The use of tissue expanders in the correction of avulsive injuries of the mandible: report of two cases. Lew D, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):892–9

Tubed free flap combined with split-rib-graft for reconstruction of multiple oral cavity defects. A case report. Larson O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):187–91

THERAPY

Treating acute mandibular dislocations. Lieberman J. **Postgrad Med** 1989 May 15;85(7):136–7

MANDIBULAR NEOPLASMS

An unusual late recurrence of unicystic ameloblastoma. Punnia-Moorthy A. **Br J Oral Maxillofac Surg** 1989 Jun; 27(3):254–9

Dentinoma of the mandible. Anker AH, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):731–3

Ganglioneuroma of the mandible. Chou LS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):201–5 (19 ref.)

[Cystic hamartoma of the mandibular angle. Apropos of a case] Guilbert F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(4):290–2 (Eng. Abstr.) (Fre)

[Apparently solitary plasmacytoma with mandibular localization] Baiotti G, et al. **Minerva Stomatol** 1989 Jun; 38(6):629–32 (Eng. Abstr.) (Ita)

[Odontomas. Description of a clinical case] Giannoni M, et al. **Minerva Stomatol** 1989 Jun;38(6):617–22 (Eng. Abstr.) (Ita)

[Central mucoepidermoid tumor of the mandible. Presentation of a case] Panzoni E, et al. **Minerva Stomatol** 1989 Apr;38(4):417–9 (Eng. Abstr.) (Ita)

ANALYSIS

Immunohistochemical staining for vimentin filaments and S-100 protein in myxoma of the jaws. Lombardi T, et al. **J Oral Pathol** 1988 Apr;17(4):175–7

Adenomatoid odontogenic tumour: co-expression of keratin and vimentin. Tatemoto Y, et al. **Virchows Arch [A]** 1988; 413(4):341–7

CEREBROSPINAL FLUID

CSF fibronectin in Burkitt's lymphoma: an early marker for CNS involvement [letter] Rajantie J, et al. **Eur J Haematol** 1989 Mar;42(3):313–4

CHEMICALLY INDUCED

Evaluation of the carcinogenic risk of the phenoxyherbicide MCPA to an urodele amphibian. Zavanella T, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):114–22

COMPLICATIONS

Concomitant osteitis fibrosa cystica and ameloblastoma of the mandible. Zamurovic D, et al. **J Rheumatol** 1989 Mar; 16(3):397–401

[Facial asymmetry caused by tumors of the mandibular condyle] Kalusokoma K, et al. **Acta Stomatol Belg** 1988 Dec;85(4):277–87 (25 ref.) (Eng. Abstr.) (Fre)

[Temporomandibular joint dysfunction and neurofibromatosis. Apropos of a case] Pasturel A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):17–9 (Eng. Abstr.) (Fre)

[Membranous glomerulonephritis in a patient with squamous cell carcinoma of the mandible] Hruby Z, et al. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):1021–2 (Eng. Abstr.) (Pol)

DIAGNOSIS

Intra-oral tumours presenting after dental extraction. Saxby PJ, et al. **Br Dent J** 1989 May 6;166(9):337–8

Granular cell odontogenic cyst: a unicystic ameloblastoma with late recurrence as follicular ameloblastoma. Abaza NA, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):168–75

A comparative study of magnetic resonance imaging versus computed tomography for the evaluation of maxillary and mandibular tumors. Belkin BA, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1039–47

Undiagnosed benign cementoblastoma in a patient with a 6-year pain condition. Report of a case. Forsslund HG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):243–8

[Desmoplastic fibroma of the jaws] Li RW. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):301–2 (Chi)

[A case of intravascular angiomatosis in the right molar region] Takinami S, et al. **Rinsho Hoshasen** 1988 Dec; 33(13):1707–10 (Eng. Abstr.) (Jpn)

ETIOLOGY

Odontogenic sarcoma following radiation treatment of tongue cancer—a case report [letter] Monzen Y, et al. **Acta Oncol** 1988;27(6b):858–9

GENETICS

Multicentric familial squamous odontogenic tumor. Leider AS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):175–81 (25 ref.)

PATHOLOGY

Dedifferentiation of recurrent chondrosarcoma of the mandible. Robinson ML, et al. **Ann Dent** 1988 Summer; 47(1):27–30

Chondromyxoid fibroma. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):571–2

Ameloblastic fibro-odontoma. Case report. Günhan O, et al. **Aust Dent J** 1989 Feb;34(1):29–31

A case of ameloblastic carcinoma with pulmonary metastases. Dorner L, et al. **Br J Oral Maxillofac Surg** 1988 Dec; 26(6):503–10

Florid cemento-osseous dysplasia (gigantiform cementoma) in a Caucasian woman. Wolf J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):46–52

Malignant fibrous histiocytoma of the mandible. Moisa II, et al. **Ear Nose Throat J** 1988 Oct;67(10):773–4, 776, 778–9

Mixed odontogenic tumors: an analysis of 23 new cases. Hansen LS, et al. **Head Neck Surg** 1988 May-Jun; 10(5):330–43

Routes of entry of squamous cell carcinoma to the mandible. McGregor AD, et al. **Head Neck Surg** 1988 May-Jun; 10(5):294–301

Reactive changes in the mandible in the presence of squamous cell carcinoma. McGregor AD, et al. **Head Neck Surg** 1988 Jul-Aug;10(6):378–86

Squamous cell carcinoma arising in an odontogenic cyst. Bradley N, et al. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):260–3 (27 ref.)

Multiple myeloma presenting as localized expansile jaw tumour. Raubenheimer EJ, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):382–5

Granular cell ameloblastoma. A rare variant. Yamamoto G, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):140–1

Recurrences of ameloblastoma in bone grafts. Report of 4 cases. Zachariades N. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):316–8

Chondrosarcoma of the mandible. Report of case and a survey of 23 cases in the Japanese literature. Murayama S, et al. **J Craniomaxillofac Surg** 1988 Aug;16(6):287–92 (32 ref.)

Central carcinoma of the jaw. A survey of 28 cases in the Japanese literature. Ohtake K, et al. **J Craniomaxillofac Surg** 1989 May;17(4):155–61 (34 ref.)

Mandibular invasion by oral squamous cell carcinoma. Slootweg PJ, et al. **J Craniomaxillofac Surg** 1989 Feb; 17(2):69–74

Odontogenic carcinoma with sarcomatous proliferation. A case report. Yoshida T, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):139–42

Microcystic adnexal carcinoma with mandibular invasion and bone marrow replacement. Birkby CS, et al. **J Dermatol Surg Oncol** 1989 Mar;15(3):308–12

Recurrent osteoblastoma of the mandible: report of a case. Colm SJ, et al. **J Oral Maxillofac Surg** 1988 Oct; 46(10):881–5

Epithelial odontogenic ghost cell tumor: report of a case. Günhan O, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):864–7

Primary central adenoid cystic carcinoma of the mandible. Hirota J, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):176–9 (18 ref.)

Intraoral Hodgkin's disease. Mathews FR, et al. **J Oral Maxillofac Surg** 1989 May;47(5):502–4

Solitary neurofibroma of the mandible: case report and review of the literature. Polak M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):65–8 (39 ref.)

Mandibular ameloblastoma with metastasis to the lungs and lymph nodes: a case report and review of the literature. Ueda M, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):623–8 (44 ref.)

Prognostic evaluation of ameloblastoma based on histologic and radiographic typing. Ueno S, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):11–5

Morphobiochemical analysis of calcified chondroblastic osteosarcoma of the mandible. Tokuoka T, et al. **J Oral Pathol** 1988 Apr;17(4):153–7

Clear cell odontogenic carcinoma: report of three cases with pulmonary and lymph node metastases. Bang G, et al. **J Oral Pathol Med** 1989 Feb;18(2):113–8

Rhabdomyosarcoma of the alveolar ridge in an adult. Moore GK, et al. **J Otolaryngol** 1989 Apr;18(3):116–8

A case of benign cementoblastoma. Fujita S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):64–8

Ameloblastoma in young persons: a clinicopathologic analysis and etiologic investigation. Kahn MA. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):706–15 (76 ref.)

A condylar tumor from pre-Columbian Chile: a case report. Sawyer DR, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):400–3

Central odontogenic fibroma, granular cell variant. A case report with S-100 immunohistochemistry and a review of the literature. Shiro BC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):725–30 (24 ref.)

Primary intraosseous carcinoma of the mandible with probable origin in an odontogenic cyst. Waldron CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):716–24 (20 ref.)

Benign solitary schwannoma. Diagnostic value of fine-needle aspiration biopsy. Cristallini EG. **Pathologica** 1988 Jul-Aug;80(1068):501–4

MRI of the mandible. Christianson R, et al. **Surg Radiol Anat** 1989;11(2):163–9

[Ameloblastic fibroma: clinico-pathologic analysis] Wu QG. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):328–30, 384 (Eng. Abstr.) **(Chi)**

[A case of aggressive juvenile fibromatosis of the mandible. Review of the literature] Bancel B, et al. **Ann Pathol** 1989; 9(2):126–31 (31 ref.) (Eng. Abstr.) **(Fre)**

[The maxillo-mandibular desmoid fibroma. Synthesis of knowledge about a rare entity. Apropos of 3 cases] Mascrès C, et al. **Ann Pathol** 1989;9(3):182–8 (36 ref.) (Eng. Abstr.) **(Fre)**

[Histogenetic relations in ameloblastic fibroma and odontoma. Apropos of 2 cases] Auriol M, et al. **Arch Anat Cytol Pathol** 1988;36(5–6):235–7 (6 ref.) (Eng. Abstr.) **(Fre)**

[Trichogenic trichoblastoma] Siemund J. **Dermatol Monatsschr** 1988;174(9):551–3 (Eng. Abstr.) **(Ger)**

[Recurrence of an ameloblastoma in the context of the parotid. Report of a case] Belladonna M, et al. **Minerva Stomatol** 1988 Apr;37(4):265–8 (Eng. Abstr.) **(Ita)**

[Difficulties in the cytologic diagnosis of the cystic form of adamantinoma] Ronin VS. **Lab Delo** 1989;(2):76 **(Rus)**

[Burkitt's lymphoma] Taichenachev AIa, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):70–1 **(Rus)**

RADIOGRAPHY

Central hemangioma of the mandible: report of case. Nortje CJ, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):62–4

Asymptomatic expansion of the mandible. Ward TO, et al. **J Am Dent Assoc** 1989 Jul;119(1):169–70

Well-circumscribed mixed-density lesion coronal to an unerupted permanent tooth. Warnock GR, et al. **J Am Dent Assoc** 1989 Aug;119(2):311–2

Signs without symptoms. Hatton MN, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):365–6

[Radiological semeiology of the lacunar injuries of the mandible] Ciccarelli R, et al. **Minerva Stomatol** 1989 Jan; 38(1):97–106 (37 ref.) (Eng. Abstr.) **(Ita)**

[Giant keratocyst localized in the mandible. Clinical case] Pomatto E, et al. **Minerva Stomatol** 1988 Jul;37(7):543–6 (Eng. Abstr.) **(Ita)**

[Computed tomography in the diagnosis of cystic formations of the mandible] Rud'ko VF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):18–20 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Adenocarcinoma of the prostate presenting as a single focus of radionuclide accumulation in the mandible on bone and gallium images. Ackerman l, et al. **Clin Nucl Med** 1989 Jul;14(7):542–3

SECONDARY

Metastatic uterine tumor to the oral cavity: case report and 20-year review of the English literature. Tsounias B. **Ann Dent** 1988 Winter;47(2):26–7 (12 ref.)

Secondary chordoma of the mandible. Slee RW, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):346–9

Metastatic transitional-cell carcinoma to the mandible: a case report. Weithman AM, et al. **Diagn Cytopathol** 1988; 4(2):156–8

Mandibular metastasis of angiosarcoma. A case report. Nardi P, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):386–7

Adenocarcinoma of the esophagus presenting as a mandibular metastasis. Jones DC. **J Oral Maxillofac Surg** 1989 May; 47(5):504–7

Small round cell neoplasm of jaw in a patient with medulloblastoma. Richardson J, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):408–10

Metastatic carcinoma of the mandibular condyle presenting as temporomandibular joint syndrome. Rubin MM, et al. **J Oral Maxillofac Surg** 1989 May;47(5):507–10

Metastatic tumors to the jaws: a report of seven cases. Zachariades N, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):991–6

Cystosarcoma phyllodes metastatic to the mandible. Abemayor E, et al. **J Surg Oncol** 1988 Dec;39(4):235–40

Hepatocellular carcinoma presenting as an oral cavity lesion. Mucitelli DR, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):701–5 (27 ref.)

Metastatic adenocarcinoma of the colon presenting as periradicular periodontal disease: a case report. Naylor GD, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):162–6

[Facial localization of a retinoblastoma metastasis] Caroli A, et al. **Acta Stomatol Belg** 1988 Sep;85(3):185–95 **(Fre)**

[Dissemination of an epidermoid carcinoma of the lip through the mental nerve (letter)] Peñarrocha M, et al. **Med Clin (Barc)** 1988 May 28;91(1):37–8 **(Spa)**

SURGERY

The marginal mandibulectomy for the treatment of mandibular tumours. Pogrel MA. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):132–8

A cheek splitting approach to the posterior oral cavity: a case report. Wood GA. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):326–9

Mandibular reconstruction with subsequent denture implantation. Tahara S, et al. **Br J Plast Surg** 1989 May; 42(3):344–6

Reconstruction of the resected mandible using titanium implants in a free vascularized graft. Fenton AH, et al. **Can Dent Assoc J** 1989 Jun;55(6):465–8

Late loco-regional recurrences after radical resection for mandibular ameloblastoma. Demeulemeester LJ, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):310–5

Polyurethane-coated Dacron mesh tray for temporary mandibular reconstruction following resection of oral cancer: clinical results of 27 cases. Eckardt A, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):21–4

Surgical management of a large, complex mandibular odontoma by unilateral sagittal split osteotomy. Wong GB. **J Oral Maxillofac Surg** 1989 Feb;47(2):179–84

The internal oblique-iliac crest osseomyocutaneous microvascular free flap in head and neck reconstruction. Urken ML, et al. **J Reconstr Microsurg** 1989 Jul; 5(3):203–14; discussion 215–6

The pleural osteomuscular flap in oropharyngeal reconstruction. Stromberg BV. **Laryngoscope** 1989 Mar; 99(3):339–41

Use of a two-piece Gunning splint as a mandibular guide appliance for a patient treated for ameloblastoma. Fattore L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec; 66(6):662–5

Ewing's sarcoma of the mandible. Langman AW, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):74–7

Primary placement of osseointegrated implants in microvascular mandibular reconstruction. Urken ML, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):56–73

Mandibular reconstruction with vascularized iliac crest: a 10-year experience. David DJ, et al. **Plast Reconstr Surg** 1988 Nov;82(5):792–803

Fibula free flap: a new method of mandible reconstruction. Hidalgo DA. **Plast Reconstr Surg** 1989 Jul;84(1):71–9

Mandibular reconstruction with the titanium hollow screw reconstruction plate (THORP) system: evaluation of 62 cases. Vuillemin T, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):804–14

[Microsurgical reconstruction of inferior alveolar nerve defects during resection of the mandible and evaluation of sensory function after surgery] Dong YJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):231–3, 255 (Eng. Abstr.) **(Chi)**

[Excision of condylar osteochondroma by vertical ramisection with immediate TMJ reconstruction] Hong M. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):8–10, 62 (Eng. Abstr.) **(Chi)**

[Reconstruction of the face after mandibular resection for sarcoma] Andrle J, et al. **Rozhl Chir** 1989 Mar;68(3):145–52 (Eng. Abstr.) **(Cze)**

[Retinal fat embolism after excision of an ameloblastoma of the mandible] Furia M, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):207–10 (Eng. Abstr.) **(Fre)**

[A case of mandibular chondrosarcoma] Amato R, et al. **Minerva Stomatol** 1989 Feb;38(2):181–5 (Eng. Abstr.) **(Ita)**

[Compound odontoma. Presentation of a clinical case] Benech A, et al. **Minerva Stomatol** 1989 Feb;38(2):187–90 (Eng. Abstr.) **(Ita)**

[CO2 laser in surgical procedures in patients with hemorrhagic diathesis] Martula M, et al. **Wiad Lek** 1988 Apr 1;41(7):464–5 (Eng. Abstr.) **(Pol)**

THERAPY

[Management by transcutaneous intravascular treatment of angioma of the mandible and adjacent soft tissues] Bien S, et al. **Rev Stomatol Chir Maxillofac** 1988;89(3):148–50 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Melanotic neuroectodermal tumour of infancy (MNTI). Immunohistochemical and ultrastructural study of a case. Melissari M, et al. **J Craniomaxillofac Surg** 1988 Oct; 16(7):330–6

Giant cell reaction to ameloblastoma: an immunohistochemical and ultrastructural study of a case. Kawakami T, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):737–41

VETERINARY

Parosteal osteosarcoma of the mandible in a dog. Brogdon JD, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1079–81

Fracture-associated osteogenic sarcoma and a mandibular osteoma in two goats. Steinberg H, et al. **J Comp Pathol** 1989 May;100(4):453–57

Multilobular osteosarcoma of the mandible and orbit in a dog. McCalla TL, et al. **Vet Pathol** 1989 Jan;26(1):92–4

Equine juvenile mandibular ossifying fibroma. Morse CC, et al. **Vet Pathol** 1988 Nov;25(6):415–21

Wide local excision of acanthomatous epulides in the dog. White RA, et al. **Vet Surg** 1989 Jan–Feb;18(1):12–4

[Ameloblastic odontoma in a Sprague-Dawley rat] Ernst H, et al. **DTW** 1989 Apr;96(4):207–9 (Eng. Abstr.) **(Ger)**

[Short original report. Osteochondromatosis in the cat] Lott-Stolz G. **Schweiz Arch Tierheilkd** 1988 Nov; 130(11):635–8 (Eng. Abstr.) **(Ger)**

MANDIBULAR NERVE

Lingual and buccal nerve neuropathy in a patient in the prone position: a case report. Winter R, et al. **Anesthesiology** 1989 Sep;71(3):452–4

Herpes zoster and facial palsy. Feldman SR, et al. **Cutis** 1988 Dec;42(6):523–4

Traumatic neuroma following sagittal mandibular osteotomy. Chau MN, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):95–8 (19 ref.)

[Clinical manifestations and treatment of odontogenic neuropathy (neuritis) of the alveolar nerves] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):133–5 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The fascicular structure of the lingual nerve and the chorda tympani: an anatomic study. Girod SC, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):607–9

Presence of nerve cell bodies in the lingual nerve in the third molar area. Smith EE, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):931–5

INJURIES

Excision of the submandibular gland: minimizing the risk of nerve damage. Kennedy PJ, et al. **Aust N Z J Surg** 1989 May;59(5):411–4

Lingual nerve damage associated with the removal of lower third molars. Blackburn CW, et al. **Br Dent J** 1989 Aug 5;167(3):103–7

Removing the mandibular third molar: neurosensory deficits and consequent litigation. Swanson AE. **Can Dent Assoc J** 1989 May;55(5):383–6

Lingual nerve damage following lower third molar surgery. Mason DA. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):290–4

Impairment of the inferior alveolar nerve after sagittal split osteotomy. Yoshida T, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):271–7 (23 ref.)

[Microsurgical reconstruction of inferior alveolar nerve defects during resection of the mandible and evaluation of sensory function after surgery] Dong YJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):231–3, 255 (Eng. Abstr.) **(Chi)**

[Injuries to the sublingual nerve during surgical treatment of neck wounds] Bezrukov VM, et al. **Vestn Khir** 1989 Jan;142(1):124–5 **(Rus)**

PATHOLOGY

Diabetic polyradiculopathy with trigeminal nerve involvement. A case report. Casamassimo PS, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):315–7 (9 ref.)

PHYSIOLOGY

Degenerative changes of primary neurons following tooth extraction. Kubota K, et al. **Anat Anz** 1988;166(1–5):133–9

Localisation of the first-order neurone of the jaw opening reflex elicited by periodontal stimulation. Aigouy L, et al. **Brain Res** 1988 Nov 15;473(2):380–4

The reinnervation of the tongue and salivary glands after lingual nerve injuries in cats. Robinson PP. **Brain Res** 1989 Apr 3;483(2):259–71

Cutaneous sensory afferents recorded from the nervus intramandibularis of Gallus gallus var domesticus. Gentle MJ. **J Comp Physiol [A]** 1989 Feb;164(6):763–74

Organization of early forms of kitten behavior after partial oral deprivation. Lushchekin VS, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):498–504

A comparative study of normal sensibility of the inferior alveolar nerve and the infraorbital nerve. Van Sickels JE, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):255–7

"Paralytic' secretion after parasympathectomy of rabbit submandibular glands includes a cholinergic component. Garrett JR, et al. **Q J Exp Physiol** 1988 Sep;73(5):737–46

[Effect of vasoactive substances and electrical stimulation of the inferior alveolar nerve on blood flow in the dental pulp in dogs] Todoki K. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):61–7 (Eng. Abstr.) **(Jpn)**

[The effect of taste deafferentation on the phenomenon of pre-exposure taste solutions in rats] Serova ON, et al. **Vopr Pitan** 1989 Mar–Apr;(2):42–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Mental nerve neuropathy: a symptom of Waldenström's macroglobulinemia. Klokkevold PR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):689–93

SURGERY

Autonomic nervous system regulation of murine immune responses as assessed by local surgical sympathetic and parasympathetic denervation. Alito AE, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):305–19

Effect of different surgical repair modalities on regeneration of the rabbit mandibular nerve. Eppley BL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):257–76

MANDIBULAR PROSTHESIS

A critical analysis of immediate and delayed mandibular

reconstruction using A–O plates. Komisar A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):830–3
Mandibular reconstruction with the THORP condylar prosthesis after hemimandibulectomy. Vuillemin T, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):78–87
Computer-fabricated custom mandibular replacement prostheses. Price JC, et al. **Laryngoscope** 1989 Feb; 99(2):222–4
Prefabricated methyl methacrylate implant for reconstruction of the hemimandible and temporomandibular joint complex [letter] Govila A. **Plast Reconstr Surg** 1989 Aug;84(2):370–2
[Implants of fired ceramics in the dog. Preliminary study. Morphology of bone coaptation after 3 and 7 months] Chomette G, et al. **Pathol Biol (Paris)** 1989 Jan;37(1):9–15 (Eng. Abstr.) **(Fre)**

MANDIBULAR REST POSITION see **VERTICAL DIMENSION**

MANDIBULOFACIAL DYSOSTOSIS

Mandibulofacial dysostosis and cornea guttata. Nucci P, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):204–5
Failed intubation in a case of oculoauriculovertebral dysplasia (Goldenhar's syndrome). Mohandas K, et al. **Med J Malaysia** 1988 Sep;43(3):255–8

COMPLICATIONS

Treacher-Collins syndrome: an association with polyhydramnios. Kopelman JN, et al. **Milit Med** 1988 Sep; 153(9):485–6

DIAGNOSIS

A patient with median cleft face anomaly and bilateral Goldenhar anomaly. Musarella MA, et al. **Am J Med Genet Suppl** 1986;2:135–41 (16 ref.)

EMBRYOLOGY

Pathogenesis of cleft palate in Treacher Collins, Nager, and Miller syndromes. Sulik KK, et al. **Cleft Palate J** 1989 Jul; 26(3):209–16; discussion 216

GENETICS

A new autosomal dominant acrofacial dysostosis syndrome. Reynolds JF, et al. **Am J Med Genet Suppl** 1986;2:143–50 (20 ref.)
Oculoauriculovertebral anomaly: variability and causal heterogeneity. Rollnick BR. **Am J Med Genet Suppl** 1988; 4:41–53 (70 ref.)

PATHOLOGY

Dysmorphogenesis of the mandible, zygoma, and middle ear ossicles in hemifacial microsomia and mandibulofacial dysostosis. Kay ED, et al. **Am J Med Genet** 1989 Jan; 32(1):27–31
Detailed morphometry of the nose in patients with Treacher Collins syndrome. Farkas LG, et al. **Ann Plast Surg** 1989 Mar;22(3):211–9
Longitudinal changes in cranial base angulation in mandibulofacial dysostosis. Peterson-Falzone SJ, et al. **Cleft Palate J** 1989 Jan;26(1):31–5

SURGERY

Stability in correction of hypertelorbitism and Treacher Collins syndromes. Tessier P, et al. **Clin Plast Surg** 1989 Jan;16(1):195–204 (12 ref.)
Complications encountered during LeFort I osteotomy in a patient with mandibulofacial dysostosis. Reaume CE, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1003–4
Orthopaedic manifestations of Goldenhar syndrome. Avon SW, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):683–6 (19 ref.)
Treacher Collins syndrome: present concepts of the disorder and their surgical correction. Argenta LC, et al. **World J Surg** 1989 Jul–Aug;13(4):401–9

MANDRAGORA see under **PLANTS, TOXIC**

MANDRILL see **PAPIO**

MANEB see under **THIOCARBAMATES**

MANGANESE

Characterization of a superoxide dismutase mimic prepared from desferrioxamine and MnO2. Beyer WF Jr, et al. **Arch Biochem Biophys** 1989 May 15;271(1):149–56
Induction of manganese superoxide dismutase by tumor necrosis factor in human breast cancer MCF-7 cell line and its TNF-resistant variant. Asoh K, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):794–801
Isolation and characterization of a cDNA for mitochondrial manganese superoxide dismutase (SOD-3) of maize and its relation to other manganese superoxide dismutases. White JA, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):61–70
Synthesis and processing of the precursor for human mangano-superoxide dismutase. Wispé JR, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):30–6
Resonance Raman enhancement of the Mn-N-O bending mode in nitrosyl manganese "strapped" and "open" heme complexes. Yu NT, et al. **Biophys J** 1989 Jun;55(6):1137–44
Manganese catalyzed auto-oxidation of dopamine to 6-hydroxydopamine in vitro. Garner CD, et al. **Chem Biol Interact** 1989;69(4):345–51
The interactions between MnO2+/Mn3+ complexes and ascorbates. A pulse radiolysis study. Cabelli DE. **Free Radic Biol Med** 1989;6(2):171–7
Adhering lung macrophages produce superoxide demonstrated with desferal-Mn(IV). Ryer-Powder JE, et al. **Free Radic Biol Med** 1989;6(5):513–8
Cloning and determination of the nucleotide sequence of the Mn-containing superoxide dismutase gene from Halobacterium halobium. Salin ML, et al. **Gene** 1988 Oct 15;70(1):153–9
Indicator dilution time-activity curves demonstrated by rapid magnetic resonance imaging techniques and paramagnetic contrast agent. Davis PL, et al. **Invest Radiol** 1989 May; 24(5):400–6
NMR studies of L-dopa melanin-manganese(II) complex in water solution. Aime S, et al. **J Inorg Biochem** 1989 May; 36(1):1–9
A plant manganese superoxide dismutase is efficiently imported and correctly processed by yeast mitochondria. Bowler C, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3237–41
Manganese catalysis of dopamine oxidation. Florence TM, et al. **Sci Total Environ** 1989 Jan;78:233–40
The manganese site of the photosynthetic water-splitting enzyme. George GN, et al. **Science** 1989 Feb 10; 243(4892):789–91
[Scavenging of active oxygen by manganese catalase] Kono Y. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2940–8 **(Jpn)**

ADMINISTRATION & DOSAGE

"Effect of manganese on regression of atherosclerosis in cholesterol fed rabbits". Bomb BS, et al. **J Assoc Physicians India** 1988 Feb;36(2):149–50

ANALYSIS

Atomization characteristics and direct determination of manganese and magnesium in biological samples using a magnetically altered thin-film plasma. Brewer SW Jr, et al. **Anal Chem** 1988 Sep 1;60(17):1769–75
Coordination of manganous ion at the active site of pyruvate, phosphate dikinase: the complex of oxalate with the phosphorylated enzyme. Kofron JL, et al. **Biochemistry** 1988 Jun 28;27(13):4781–7
Calcineurin immunoprecipitated from bovine brain extract contains no detectable Ni2+ or Mn2+. Rao J, et al. **J Biol Chem** 1989 Jan 15;264(2):1058–61
Origins of manganese in air particulates in California. Davis DW, et al. **JAPCA** 1988 Sep;38(9):1152–7
Alteration of manganese distribution in organs of rats treated with streptozotocin. Nishida M, et al. **Naturwissenschaften** 1989 May;76(5):220–2
Manganese in scalp hair: problems of exogenous manganese and implications for manganese monitoring in Groote Eylandt Aborigines. Stauber JL, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):85–98
[Levels of manganese in biological media: value, samplings, physiopathological variations. Bibliographic review] Baruthio F, et al. **Ann Biol Clin (Paris)** 1988;46(8):657–64 (99 ref.) (Eng. Abstr.) **(Fre)**
[Quantitation of manganese and vanadium levels in the lung of "normal" and occupationally exposed persons] Kraus T, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):108–26 (Eng. Abstr.) **(Ger)**
[Relation of bacitracin synthesis and manganese content in Bacillus licheniformis: antibiotic production in colonies forming on media with high levels of Mn2+] Kuzovnikova TA, et al. **Antibiot Khimioter** 1989 Jan;34(1):10–3 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Effect of inhibition of protein synthesis on cholestasis induced by taurolithocholate, lithocholate, and a manganese-bilirubin combination in the rat. Dahlström-King L, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2543–9

BLOOD

Quantifying manganese in lymphocytes to assess manganese nutritional status. Matsuda A, et al. **Clin Chem** 1989 Sep; 35(9):1939–41
Changes of manganese levels during haemodialysis. Hosokawa S, et al. **Int Urol Nephrol** 1988;20(5):551–8
Use of manganese to discriminate between calcium influx and mobilization from internal stores in stimulated human neutrophils. Merritt JE, et al. **J Biol Chem** 1989 Jan 25; 264(3):1522–7
Plasma manganese concentrations in infants and children receiving parenteral nutrition. Hambidge KM, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):168–71
What is the clinical significance of reduced manganese and zinc levels in treated epileptic patients? [letter] Akram M, et al. **Med J Aust** 1989 Jul 17;151(2):113
Low blood manganese levels in Liverpool children with Perthes' disease. Hall AJ, et al. **Paediatr Perinat Epidemiol** 1989 Apr;3(2):131–5

DEFICIENCY

Mechanism of decreased insulinogenesis in manganese-deficient rats. Decreased insulin mRNA levels. Baly DL, et al. **FEBS Lett** 1988 Oct 24;239(1):55–8
Manganese deficiency in humans: fact or fiction? **Nutr Rev** 1988 Oct;46(10):348–52 (20 ref.)

DIAGNOSTIC USE

Manganese-heparin precipitation of very low-density lipoprotein: screening for type III hyperlipoproteinaemia. Muirhead RA, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):289–91
Measurement of Ca channel activity of isolated adult rat heart cells using 54Mn. Haworth RA, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):594–604
In vivo nuclear magnetic resonance imaging of myocardial perfusion using the paramagnetic contrast agent manganese gluconate. Schaefer S, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):472–80
In vivo distribution of 54Mn-hematoporphyrin derivative in tumor bearing mice. Crone-Escanye MC, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):237–41
Longitudinal proton relaxation rates in rabbit tissues after intravenous injection of free and chelated Mn2+. Spiller M, et al. **Magn Reson Med** 1988 Nov;8(3):293–313
MRI measurement of hepatocyte toxicity using the new MRI contrast agent manganese dipyridoxal diphosphate, a manganese/pyridoxal 5-phosphate chelate. Young SW, et al. **Magn Reson Med** 1989 Apr;10(1):1–13

METABOLISM

Determination of endogenous manganese excretion in broiler chicks by an isotope-dilution method. Weigand E, et al. **Arch Tierernahr** 1988 Oct;38(10):879–92
Influx of bivalent cations can be independent of receptor stimulation in human endothelial cells. Hallam TJ, et al. **Biochem J** 1989 Apr 1;259(1):125–9
Manganese-binding proteins of the oxygen-evolving complex. Mei R, et al. **Biochemistry** 1989 Jun 27; 28(13):5560–7
31P NMR studies of the structure of cation–nucleotide complexes bound to porcine muscle adenylate kinase. Ray BD, et al. **Biochemistry** 1988 Nov 15;27(23):8669–76
Stereochemical control over Mn(II)-thio versus Mn(II)-oxy coordination in adenosine 5'-O-(1-thiodiphosphate) complexes at the active site of creatine kinase. Smithers GW, et al. **Biochemistry** 1989 Feb 21;28(4):1597–604
Binding of manganese ions to the Na+/K+-ATPase during phosphorylation by ATP. Campos M, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):242–8
Calorimetric experiments of Mn2+ -binding to alpha-lactalbumin. Desmet J, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):411–9
Longitudinal manganese and copper balances in young infants and preterm infants fed on breast-milk and adapted cow's milk formulas. Dörner K, et al. **Br J Nutr** 1989 May; 61(3):559–72
Magnesium and manganese regulation during moult-cycle in Porcellio spinicornis Say (Porcellionidae, Isopoda). Alikhan MA. **Bull Environ Contam Toxicol** 1989 May; 42(5):699–706
Effect of forced fasting on magnesium and manganese regulation in a terrestrial isopod, Porcellio spinicornis Say (Porcellionidae, Isopoda, Crustacea). Bercovitz K, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):151–8
Reduction of cadmium toxicity to green microalga Stichococcus bacillaris by manganese. Skowroński T, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):915–20
Preliminary ESR study of Mn(II) retention by the yeast Saccharomyces. Kihn JC, et al. **Can J Microbiol** 1988 Nov; 34(11):1230–4
Interaction of monoclonal antiparathyroid antibody with Ca2+ agonistic actions of Mn2+ in normal human parathyroid cells. Johansson H, et al. **Cell Calcium** 1989 Jan;10(1):11–5
Location of divalent ion sites in acyl carrier protein using relaxation perturbed 2D NMR. Frederick AF, et al. **FEBS Lett** 1988 Sep 26;238(1):43–8
Intracellular Mn (II)-associated superoxide scavenging activity protects Cu,Zn superoxide dismutase-deficient Saccharomyces cerevisiae against dioxygen stress. Chang EC, et al. **J Biol Chem** 1989 Jul 25;264(21):12172–8
Nonenzymatic phosphorylation of tyrosine and serine by ATP is catalyzed by manganese but not magnesium. Schieven G, et al. **J Biol Chem** 1988 Oct 25;263(30):15590–3
Chromosome aberrations in peripheral blood lymphocytes of welders and characterization of their exposure by biological samples analysis. Elias Z, et al. **J Occup Med** 1989 May;31(5):477–83
Role of dietary magnesium and/or manganese variables on Ehrlich ascites tumor-bearing mice. Fahim FA, et al. **Nutr Cancer** 1989;12(3):279–86
[Microbiologic studies of in situ removal of iron and manganese] Schweisfurth R. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:167–86 (12 ref.) (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Manganese retention in man: a method for estimating manganese absorption in man. Davidsson L, et al. **Am J Clin Nutr** 1989 Jan;49(1):170–9

Manganese absorption from human milk, cow's milk, and infant formulas in humans. Davidsson L, et al. **Am J Dis Child** 1989 Jul;143(7):823–7

Evidence that agonists stimulate bivalent-cation influx into human endothelial cells. Hallam TJ, et al. **Biochem J** 1988 Oct 1;255(1):179–84

Intrinsic and extrinsic labeling for studies of manganese absorption in humans. Davidsson L, et al. **J Nutr** 1988 Dec; 118(12):1517–21

Factors affecting absorption and excretion of 54Mn in rats. Lee DY, et al. **J Nutr** 1988 Dec;118(12):1509–16

Higher retention of manganese in suckling than in adult rats is not due to maturational differences in manganese uptake by rat small intestine. Bell JG, et al. **J Toxicol Environ Health** 1989;26(4):387–98

Brain regional manganese levels and monoamine metabolism in manganese-treated neonatal rats. Kontur PJ, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):295–303

Relative bioavailability of manganese in a manganese-methionine complex for broiler chicks. Henry PR, et al. **Poult Sci** 1989 Jan;68(1):107–12

54Mn absorption and excretion in rats fed soy protein and casein diets. Lee DY, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):211–6

Retention and distribution of manganese in the mouse brain following acute exposure on postnatal day 0, 7, 14 or 42: an autoradiographic and gamma counting study. Valois AA, et al. **Toxicology** 1989 Aug;57(3):315–28

[Distribution of manganese and its modification by magnesium and cobalt in the guinea pig] Koch L, et al. **Z Gesamte Hyg** 1989 May;35(5):261–2 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Effects of zinc, iron, cobalt, and manganese on Fusarium moniliforme NRRL 13616 growth and fusarin C biosynthesis in submerged cultures. Jackson MA, et al. **Appl Environ Microbiol** 1989 Mar;55(3):649–55

The effect of magnesium and manganese uptake and accumulation on oxygen consumption and ammonia excretion in Porcellio spinicornis Say (Porcellionidae, Isopoda). Alikhan MA, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):147–54

Manganese, Mn-dependent peroxidases, and the biodegradation of lignin. Forrester IT, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):992–9

Insulin receptor dephosphorylation in permeabilized adipocytes is inhibitable by manganese and independent of receptor kinase activity. Mooney RA, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1200–6

Salt stimulation of the activation of latent protein phosphatase, Fc.M, by Mn++ and by Mn/trypsin. Schuchard MD, et al. **Biochem Int** 1989 Apr;18(4):845–9

Effects of manganese chloride, verapamil, and hypoxia on the rate-dependent increase in internal longitudinal resistance of rabbit myocardium. Alvarez J, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):263–8

Manganese can inhibit or potentiate contractile responses in mesenteric portal vein. Sutter MC, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):737–44

Measurement of cytoplasmic calcium concentration in cell suspensions: correction for extracellular Fura-2 through use of Mn2+ and probenecid. McDonough PM, et al. **Cell Calcium** 1989 Apr;10(3):171–80

Caffeine- and potassium-induced contractures of mouse isolated soleus muscle: effects of verapamil, manganese, EGTA and calcium withdrawal. Savage AO, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):901–11

Manganous chloride stimulation of adenylate cyclase responsiveness in ocular ciliary process membranes. Mittag TW, et al. **Exp Eye Res** 1988 Jun;46(6):841–51

Manganese complexes and the generation and scavenging of hydroxyl free radicals. Cheton PL, et al. **Free Radic Biol Med** 1988;5(5–6):325–33

Copper-manganese interactions concerning red-cell and plasma lipid peroxidation. Fernandes AC, et al. **Free Radic Res Commun** 1988;5(3):177–84

Ligand interactions of the cation-dependent mannose 6-phosphate receptor. Comparison with the cation-independent mannose 6-phosphate receptor. Tong PY, et al. **J Biol Chem** 1989 May 15;264(14):7970–5

Induction of fibroblast spreading by Mn2+: a possible role for unusual binding sites for divalent cations in receptors for proteins containing Arg-Gly-Asp. Edwards JG, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):507–13

Manganese-mediated increase in the rat brain mitochondrial cytochrome P-450 and drug metabolism activity: susceptibility of the striatum. Liccione JJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):222–8

Dietary magnesium, manganese and boron affect the response of rats to high dietary aluminum. Nielsen FH, et al. **Magnesium** 1988;7(3):133–47

Effects of organic and inorganic Ca antagonists on rat platelet arachidonic acid metabolism in the presence of Ca2+, Sr2+ and Ba2+. Blache D, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):191–6

Mn2+ activates skinned smooth muscle cells in the absence of myosin light chain phosphorylation. Hoar PE, et al. **Pflugers Arch** 1988 Aug;412(3):225–30

Effect of manganese ions on the incorporation of dideoxynucleotides by bacteriophage T7 DNA polymerase and Escherichia coli DNA polymerase I. Tabor S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4076–80

Interactions of manganese with human brain glutathione-S-transferase. Vescovi A, et al. **Toxicology** 1989 Jul 17;57(2):183–91

[Characteristics of the combined mutagenic effects of chromium and manganese on a model of microbial mutation] Balezin SL, et al. **Gig Sanit** 1988 Dec;(12):22–4 (Eng. Abstr.) **(Rus)**

[Effect of copper, manganese and zinc on some causative agents of pyelonephritis in children] Lagutina LE, et al. **Pediatriia** 1988;(10):22–4 (Eng. Abstr.) **(Rus)**

POISONING

Possible health effects of high manganese concentration in drinking water. Kondakis XG, et al. **Arch Environ Health** 1989 May–Jun;44(3):175–8

Morvan's fibrillary chorea. A case with possible manganese poisoning. Haug BA, et al. **Clin Neurol Neurosurg** 1989; 91(1):53–9

[Effect of manganese dichloride on the graft vs host activity of splenic lymphocytes in mice] Divanian Kh, et al. **Eksp Med Morfol** 1988;27(4):17–9 (Eng. Abstr.) **(Bul)**

SECRETION

Studies in human lactation: secretion of zinc, copper, and manganese in human milk. Casey CE, et al. **Am J Clin Nutr** 1989 May;49(5):773–85

TOXICITY

Effect of manganese on some bioantioxidants in various organs of protein-deficient rats. Srivastava RS, et al. **Biochem Int** 1989 May;18(5):903–12

Role of dopamine in manganese neurotoxicity. Parenti M, et al. **Brain Res** 1988 Nov 15;473(2):236–40

Some factors influencing cadmium-manganese interaction in adult rats. Gruden N, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):101–6

Effect of manganese ions on the immune response of carp (Cyprinus carpio) against Yersinia ruckeri. Cossarini-Dunier M, et al. **Dev Comp Immunol** 1988 Summer;12(3):573–9

Selective vulnerability of glutathione metabolism and cellular defense mechanisms in rat striatum to manganese. Liccione JJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):156–61

Neurobehavioral and biochemical response to manganese and selenium exposure in rats. Derevenco P, et al. **Physiologie** 1988 Jul–Sep;25(3):111–8

[Experimental studies on biologic and toxicologic effect of excessive dose of manganese] Ito A, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):388–96 (Eng. Abstr.) **(Jpn)**

URINE

Levels of manganese in the urine of female farmers in non-polluted regions in Japan. Watanabe T, et al. **Sci Total Environ** 1989 Feb;79(1):85–93

MANGE see MITE INFESTATIONS

MANGE, SARCOPTIC see SCABIES

MANIA see MANIC DISORDER

MANIC-DEPRESSIVE PSYCHOSIS see BIPOLAR DISORDER

MANIC DISORDER

BLOOD

Melatonin and cortisol "switches" during mania, depression, and euthymia in a drug-free bipolar patient. Kennedy SH, et al. **J Nerv Ment Dis** 1989 May;177(5):300–3

CHEMICALLY INDUCED

Mania precipitated by benzodiazepine withdrawal. Rigby J, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):406–7

Mania associated with high percentage of inhibition of monoamine oxidase [letter] Bowden CL, et al. **Am J Psychiatry** 1989 Jan;146(1):121

Mania triggered by a steroid nasal spray in a patient with stable bipolar disorder [letter] Goldstein ET, et al. **Am J Psychiatry** 1989 Aug;146(8):1076–7

Manic syndrome after discontinuation of methyldopa [letter] Labbate LA, et al. **Am J Psychiatry** 1989 Aug; 146(8):1075–6

Induction of mania by antidepressants [letter] Lewis J, et al. **Am J Psychiatry** 1989 Jan;146(1):126–8

Carbamazepine-induced mania with hypersexuality in a 9-year-old boy [letter] Myers WC, et al. **Am J Psychiatry** 1989 Mar;146(3):400

Idiosyncratic dapsone induced manic depression. Carmichael AJ, et al. **BMJ** 1989 Jun 3;298(6686):1524

Idiosyncratic dapsone induced manic depression [letter] Daneshmend T. **BMJ** 1989 Jul 29;299(6694):324

Mianserin and mania [letter] Sturdy JL, et al. **Br J Psychiatry** 1988 Aug;153:269–70

Mania induced by lithium augmentation. A case report. Yuvarajan R, et al. **Br J Psychiatry** 1988 Dec;153:828–30

Secondary mania in a patient receiving isonicotinic acid hydrazide and pyridoxine: case report [letter] Chaturvedi SK, et al. **Can J Psychiatry** 1988 Oct;33(7):675–6

Secondary mania with steroid withdrawal. Venkatarangam SH, et al. **Can J Psychiatry** 1988 Oct;33(7):631–2

Bulimia, tricyclic antidepressants, and mania. Siegel DM. **Clin Pediatr (Phila)** 1989 Mar;28(3):123–6

Behavioral disinhibition with clonazepam [letter] Marchevsky S, et al. **Gen Hosp Psychiatry** 1988 Nov; 10(6):447

Mania induced by lorazepam withdrawal: a report of two cases. Turkington D, et al. **J Affective Disord** 1989 Jul–Aug; 17(1):93–5

Mania and neuropsychiatric excitation following carbamazepine. Pleak RR, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):500–3

Mania secondary to amantadine treatment of neuroleptic-induced hyperprolactinemia. Rego MD, et al. **J Clin Psychiatry** 1989 Apr;50(4):143–4

Manic psychosis associated with appetite suppressant medication, phenylpropanolamine [letter] Boffi BV, et al. **J Clin Psychopharmacol** 1989 Aug;9(4):308–9

Buspirone-induced mania [letter] Price WA, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):150–1

Manic syndrome associated with zidovudine [letter] **JAMA** 1988 Dec 23–30;260(24):3587–8

Severe anorexia and possible psychosis or hypomania after trazodone-tryptophan treatment of aggression [letter] Patterson BD, et al. **Lancet** 1989 May 6;1(8645):1017

Quinacrine-associated mania [letter] Moreno TJ, et al. **Mayo Clin Proc** 1989 Jan;64(1):129–30

Zidovudine-related mania. Wright JM, et al. **Med J Aust** 1989 Mar 20;150(6):339–41

Drug-induced mania—causative agents, clinical characteristics and management. A retrospective analysis of the literature. Sultzer DL, et al. **Med Toxicol Adverse Drug Exp** 1989 Mar–Apr;4(2):127–43 (127 ref.)

COMPLICATIONS

Drug abuse in schizophrenia and bipolar disorder. Miller FT, et al. **Am J Drug Alcohol Abuse** 1989;15(3):291–5

The diagnostic implications of formal thought disorder in mania and schizophrenia: a reassessment. Jampala VC, et al. **Am J Psychiatry** 1989 Apr;146(4):459–63

Hypomania following increased epileptic activity [letter] Byrne A. **Br J Psychiatry** 1988 Oct;153:573–4

Mania in the early stages of AIDS [letter] Dauncey K. **Br J Psychiatry** 1988 May;152:716–7

Mania in a case of Eale's disease [letter] Pandey RS, et al. **Br J Psychiatry** 1988 Jul;153:129–30

Patients at risk for HIV [letter] Gewirtz G, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1311–2

DIAGNOSIS

Nursing diagnosis of patients with manic and thought disorders. Thomas MD, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):339–44

Pseudodementia in schizophrenia and mania [letter] Sachdev PS. **Aust N Z J Psychiatry** 1988 Sep;22(3):228–30

Postpartum mania [letter] Winokur G. **Br J Psychiatry** 1988 Dec;153:843–4

[Dexamethasone test in the diagnosis and treatment of affective psychoses] Evsegneev RA. **Zh Nevropatol Psikhiatr** 1989;89(4):98–101 (Eng. Abstr.) **(Rus)**

[Clinical characteristics of endogenous affective psychoses with predominantly manic conditions] Morozova MA. **Zh Nevropatol Psikhiatr** 1989;89(4):82–7 (Eng. Abstr.) **(Rus)**

[Significance of the clinical characteristics of manic, manic-paranoid and manic-hebephrenic conditions for differentiated psychopharmacotherapy] Mosolov SN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):87–93 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Adding lithium carbonate to carbamazepine: antimanic efficacy in treatment-resistant mania. Kramlinger KG, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):378–85

Higher frequency of neuroleptic-induced dystonia in mania than in schizophrenia. Nasrallah HA, et al. **Am J Psychiatry** 1988 Nov;145(11):1455–6

Lithium treatment of manic episodes with psychotic features in prepubertal children. Varanka TM, et al. **Am J Psychiatry** 1988 Dec;145(12):1557–9

Effects of lithium on sleep in mania. Hudson JI, et al. **Biol Psychiatry** 1989 Mar 1;25(5):665–8

Methylene blue in mania [letter] Naylor GJ, et al. **Biol Psychiatry** 1988 Dec;24(8):941–2

Clonidine and neuroleptic-resistant mania [letter] Jouvent R, et al. **Br J Psychiatry** 1988 Feb;152:293–4

Lithium in pregnancy and still birth: a case report. Khandelwal SK, et al. **Br J Psychiatry** 1989 Jan;154:114–6

Carbamazepine vs lithium in the treatment and prophylaxis of mania. Lusznat RM, et al. **Br J Psychiatry** 1988 Aug; 153:198–204

Sulpiride treatment of acute mania with a comparison of the effects on plasma hormone concentrations of lithium and sulpiride treatment. Christie JE, et al.
J Affective Disord 1989 Mar–Jun;16(2–3):115–20

Refractory rapid cycling unipolar depression responds to lithium and carbamazepine treatment [letter] Arana GW, et al. **J Clin Psychiatry** 1989 Sep;50(9):356–7

Valproate use in acute mania and bipolar disorder: an international perspective. Fawcett J. **J Clin Psychiatry** 1989 Mar;50 Suppl:10–2 (25 ref.)

Pharmacologic management of acute mania in pregnancy. Sitland–Marken PA, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):78–87 (106 ref.)

Neuroleptic malignant syndrome with hypomania and mental retardation. Ward MR, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):339–42

Clonazepam in the treatment of steroid–induced mania in a patient after renal transplantation [letter] Viswanathan R, et al. **N Engl J Med** 1989 Feb 2;320(5):319–20

Lithium therapy and prophylaxis in unipolar manic–depressive illness. Tudorache B, et al.
Neurol Psychiatr (Bucur) 1988 Oct–Dec;26(4):271–9

Doubleblind evaluation of the antimanic properties of carbamazepine as a comedication to haloperidol. Möller HJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):127–36

Psychobiologic aspects of the treatment of primary mania. Clower CG. **Psychiatr Med** 1988;6(3):83–91

Approaches to the treatment of lithium–resistant mania. Menza MA, et al. **Psychiatr Med** 1988;6(4):73–87 (73 ref.)

Luteinizing hormone responses to luteinizing hormone releasing hormone (LHRH) in acute mania and the effects of lithium on LHRH and thyrotrophin releasing hormone tests in volunteers. Hunter R, et al. **Psychol Med** 1989 Feb; 19(1):69–77

[A comparison of EEG changes with reaction time and serum lithium levels during treatment of manic patients with lithium carbonate] Shen JH.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Apr; 21(2):83–6, 126–7 (Eng. Abstr.) **(Chi)**

EPIDEMIOLOGY

Decline in the diagnosis of schizophrenia among first contacts with psychiatric services in north–east Scotland, 1969–1984. Eagles JM, et al. **Br J Psychiatry** 1988 Jun; 152:793–8

ETIOLOGY

Hypomania following complex partial seizures [letter]
Br J Psychiatry 1988 Apr;152:571–2

Hypomania following complex partial seizures. A report of three cases. Barczak P, et al. **Br J Psychiatry** 1988 Jan; 152:137–9

Influence of climate on the prevalence of mania. Carney PA, et al. **Br J Psychiatry** 1988 Jun;152:820–3

Secondary affective disorder in survivor of cardiac arrest. A case report. Kumar A, et al. **Br J Psychiatry** 1988 Dec; 153:836–9

Mania following head injury [letter] McKeown SP, et al. **Br J Psychiatry** 1987 Dec;151:867–8

Two cases of hypomania in AIDS. Schmidt U, et al.
Br J Psychiatry 1988 Jun;152:839–42

Two cases of erotomania (de Clérambault's syndrome) in bipolar affective disorder. Signer SF, et al.
Br J Psychiatry 1987 Dec;151:853–5

Mania following bereavement in a mentally handicapped man [letter] Singh I, et al. **Br J Psychiatry** 1988 Jun;152:866–7

Prasad's syndrome [letter] Weiner MJ, et al.
Br J Psychiatry 1988 Mar;152:438–9

Mania in a girl with Cushing's disease. Frank R, et al.
J Am Acad Child Adolesc Psychiatry 1989 Jul;28(4):610–1

Manic–like state after bilateral orbitofrontal and right temporoparietal injury: efficacy of clonidine. Bakchine S, et al. **Neurology** 1989 Jun;39(6):777–81

Aging and mania. Rubin EH. **Psychiatr Dev** 1988 Winter; 6(4):329–37 (24 ref.)

Secondary mania from cerebral embolization with nonfocal neurologic findings. Goldschmidt TJ, et al.
South Med J 1988 Oct;81(10):1309–11

Thyrotoxicosis manifested as mania. Regan WM.
South Med J 1988 Nov;81(11):1460–1

[Manic disorders of old age] Andrusenko MP.
Zh Nevropatol Psikhiatr 1988;88(9):131–7 (88 ref.) **(Rus)**

GENETICS

Hypomanic behaviour associated with familial spastic paraplegia. Jansen PH, et al.
Eur Arch Psychiatry Neurol Sci 1988;238(1):28–30

PATHOLOGY

Down's syndrome with mania [letter] Singh I.
Br J Psychiatry 1988 Mar;152:436–7

PHYSIOPATHOLOGY

Regional cerebral blood flow in depression and mania. Silfverskiöld P, et al. **Arch Gen Psychiatry** 1989 Mar; 46(3):253–9

PSYCHOLOGY

The incidence of negative symptoms in early schizophrenia, mania and other psychoses. Montague LR, et al.
Acta Psychiatr Scand 1989 Jun;79(6):613–8

Dysphoric mania. Clinical and biological correlates. Post RM, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):353–8

Retrieval from semantic memory using meaningful and meaningless constructs by depressed, stable bipolar and manic patients. Calev A, et al. **Br J Clin Psychol** 1989 Feb; 28 (Pt 1):67–73

Reference performance and positive and negative thought disorder: a follow–up study of manics and schizophrenics. Docherty N, et al. **J Abnorm Psychol** 1988 Nov; 97(4):437–42

Manic symptoms in a non–referred adolescent population. Carlson GA, et al. **J Affective Disord** 1988 Nov–Dec; 15(3):219–26

A manic episode in the course of anorexia nervosa with bulimia. Ghadirian AM, et al. **Psychosomatics** 1989 Winter; 30(1):101–3

The impact of education about schizophrenia on relatives varying in expressed emotion. Cozolino LJ, et al.
Schizophr Bull 1988;14(4):675–87

Dichotic listening and recall in schizophrenia and mania. Wielgus MS, et al. **Schizophr Bull** 1988;14(4):689–700

[Markers of schizophrenic language. A comparative patholinguistic study of dialogues with schizophrenic, manic, depressive and brain–damaged patients] Frommer J, et al. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):85–93 (Eng. Abstr.) **(Ger)**

[Symptomatic mania in HIV infection. 3 cases of classified euphoric psychoses as a sequela of the AIDS disease] Peters UH, et al. **Psychiatr Prax** 1989 May;16(3):91–6 (Eng. Abstr.) **(Ger)**

THERAPY

Electroconvulsive therapy in parkinsonism with affective disorder. Atre–Vaidya N, et al. **Br J Psychiatry** 1988 Jan; 152:55–8

Inappropriate placement of a patient with childhood hypomania in a mental handicap hospital for 51 years [letter] Fernando SN, et al. **Br J Psychiatry** 1988 Oct; 153:572–3

The effect of somatic treatment and comorbidity on immediate outcome in manic patients. Black DW, et al.
Compr Psychiatry 1989 Jan–Feb;30(1):74–9

Psychotic and nonpsychotic depression: comparison of response to ECT [letter] Black DW, et al.
J Clin Psychiatry 1989 May;50(5):186

MANIC STATE see **MANIC DISORDER**

MANIFEST ANXIETY SCALE see under **PERSONALITY INVENTORY**

MANIKINS see under **MODELS, ANATOMIC**

MANIPULATION, ORTHOPEDIC

Manual medicine. A description of some strategies. Stevens A. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):151–63

Local versus general anaesthetic in the management of the fractured nose. Watson DJ, et al. **Clin Otolaryngol** 1988 Dec;13(6):491–4

The external rotation method for reduction of acute anterior shoulder dislocation. Plummer D, et al.
Emerg Med Clin North Am 1989 Feb;7(1):165–75

Manipulation for postop pain [letter] Heath DM.
Hosp Pract [Off] 1989 Sep 15;24(9):13

A "closet DO" comes out for manipulation [letter] Norris SH. **Hosp Pract [Off]** 1989 Sep 30;24(9A):12–4

Spinal manipulation for back pain. Raftis KL, et al.
Hosp Pract [Off] 1989 Mar 15;24(3):89–90, 95–6, 102 passim (9 ref.)

Reduction of Colles' fractures without anaesthesia using a new dynamic bone alignment system. Kongsholm J, et al.
Injury 1987 Mar;18(2):133–6

Local anaesthetic toxicity of haematoma blocks in manipulation of Colles' fractures. Quinton DN. **Injury** 1988 Jul;19(4):239–40

Should comminuted trochanteric fractures of the hip in the elderly be reduced before fixation? Verghese GB, et al.
Injury 1987 Jul;18(4):270–3

Chronic cervical dysfunction: correlation of myoelectric findings with clinical progress. Beal MC, et al.
J Am Osteopath Assoc 1989 Jul;89(7):891–900

An osteopathic approach to conservative management of thoracic outlet syndromes. Dobrusin R.
J Am Osteopath Assoc 1989 Aug;89(8):1046–50, 1053–7 (20 ref.)

Electromyographic and skin resistance responses to osteopathic manipulative treatment for low–back pain. Ellestad SM, et al. **J Am Osteopath Assoc** 1988 Aug; 88(8):991–7

Shoulder pain and repetition strain injury to the supraspinatus muscle: etiology and manipulative treatment. Jacobson EC, et al. **J Am Osteopath Assoc** 1989 Aug;89(8):1037–40, 1043–5

Manipulation of the fractured nose using topical local anaesthesia. el–Kholy A. **J Laryngol Otol** 1989 Jun; 103(6):580–1

Failure of clinical tests to predict cerebral ischemia before neck manipulation. Bolton PS, et al.
J Manipulative Physiol Ther 1989 Aug;12(4):304–7

Changes in electrical activity in muscles resulting from chiropractic adjustment: a pilot study [letter] Brewer G.
J Manipulative Physiol Ther 1988 Oct;11(5):445–6

Chiropractic distractive decompression in treating pelvic pain and multiple system pelvic organic dysfunction. Browning JE. **J Manipulative Physiol Ther** 1989 Aug;12(4):265–74

Understanding manipulative medicine in general practice. Mennell JM. **J Manipulative Physiol Ther** 1989 Jun; 12(3):231–5

Lumbar intervertebral disc herniation: treatment by rotational manipulation. Quon JA, et al.
J Manipulative Physiol Ther 1989 Jun;12(3):220–7

Distal tibial physeal injuries in children: a different treatment concept. Dugan G, et al. **J Orthop Trauma** 1987;1(1):63–7

Neurological complications of dynamic reduction of Colles' fractures without anesthesia compared with traditional manipulation after local infiltration anesthesia. Kongsholm J, et al. **J Orthop Trauma** 1987;1(1):43–7

Manipulative physiotherapy [letter] Neame A.
N Z Med J 1989 Mar 8;102(863):112

Manipulative therapy [letter] Powell TH. **Orthop Rev** 1987 Dec;16(12):963–4

Manipulative therapy. Powell TH. **Orthop Rev** 1988 May; 17(5):441–2

Manipulation in the treatment of frozen shoulder [letter] Bierner SM. **Orthopedics** 1989 Mar;12(3):356, 380–1

Manipulation in the treatment of frozen shoulder. Hill JJ Jr, et al. **Orthopedics** 1988 Sep;11(9):1255–60

Frozen shoulder. Part II: Treatment by manipulation under anesthesia. Parker RD, et al. **Orthopedics** 1989 Jul; 12(7):989–90

Completely displaced distal radius fractures with intact ulnas in children. Roy DR. **Orthopedics** 1989 Aug;12(8):1089–92

Spinal manipulation: science or black art? [editorial] Paterson JK. **Practitioner** 1988 Mar 22;232(1445):289, 291

[Orthomanual medicine (letter)] **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1331–2 **(Dut)**

[Orthomanual medicine] Sickesz M, et al.
Ned Tijdschr Geneeskd 1989 May 6;133(18):928–30 **(Dut)**

[East Bothnian treatment modalities of spinal manipulation and limb correction] Hernesniemi A. **Duodecim** 1989; 105(8):758–63 **(Fin)**

[Diagnosis and treatment by orthopedic manipulation] Rekola K. **Duodecim** 1989;105(2):100–4 **(Fin)**

[Percutaneous arthrolysis under arthroscopic control and manipulation under anesthesia in the treatment of postoperative stiffness of the knee] Christel P, et al.
Rev Chir Orthop 1988;74(6):517–25 (Eng. Abstr.) **(Fre)**

[Headache caused by functional discordance of the pelvis?] Keil G, et al. **Z Arztl Fortbild (Jena)** 1988;82(24):1261–2 **(Ger)**

[An algorithm for the selection for manual therapy of patients with clinical manifestations of osteochondrosis] Kovalʹ DE, et al. **Ortop Travmatol Protez** 1989 May;(5):65–9 **(Rus)**

[Our experience with organizing a department of manual therapy in an urban hospital] Lomakin PV.
Ortop Travmatol Protez 1989 May;(5):55–8 **(Rus)**

[Manual therapy and acupuncture in the treatment of neuro–dystrophic syndromes in cervical osteochondrosis] Goĭdenko VS, et al. **Zh Nevropatol Psikhiatr** 1989; 89(4):45–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Are physicians' opinions about chiropractors changing? [letter] Potter GE. **Can Med Assoc J** 1988 Oct 15; 139(8):705–6

Intra–articular fracture of the metacarpal head of the locked index finger due to forced passive extension. Inoue G, et al. **J Hand Surg [Br]** 1988 Aug;13(3):320–2

Aneurysm of the cervical internal carotid artery following chiropractic manipulation [letter] Murthy JM, et al.
J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1237–8

Dissecting aneurysm of the vertebral artery and cervical manipulation: a case report with autopsy. Mas JL, et al.
Neurology 1989 Apr;39(4):512–5

[Vertebro–basilar vascular accident after manipulation of the cervical spine] Ponge T, et al.
Rev Rhum Mal Osteoartic 1989 Jun;56(7):545–8 **(Fre)**

INSTRUMENTATION

A 'wee stirrup' to ease a little problem [letter] James MR.
J R Coll Surg Edinb 1988 Jun;33(3):170

METHODS

Spinal mobilisation and manipulation. Kenna C, et al.
Aust Fam Physician 1989 Jun;18(6):630–1, 633, 637–8 passim

Office management of frozen shoulder syndrome. Treatment with hydraulic distension under local anesthesia. Fareed DO, et al. **Clin Orthop** 1989 May;(242):177–83

Osteopathic manipulation: purposes and protocols [letter] Kuchera WA. **Hosp Pract [Off]** 1989 Jul 15;24(7):17, 20

Unilateral intermittent claudication of the left lower extremity. Downs SE. **J Manipulative Physiol Ther** 1988 Aug;11(4):322–4

Hass' disease [letter] Mick TJ.
J Manipulative Physiol Ther 1988 Aug;11(4):335–6

Static and dynamic components of the chiropractic subluxation complex: a literature review [letter] Smallie DD. **J Manipulative Physiol Ther** 1989 Apr;12(2):152

Interexaminer reliability of an isolation test for the

identification of cervical subluxation. Youngquist MW, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):93–7
Experience in the conservative treatment of congenital clubfoot in newborns and infants. Karski T, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):134–6
Preoperative intermittent manual traction in congenital dislocation of the hip. Sun DZ, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):205–7
Startle disease: an avoidable cause of sudden infant death [letter] Vigevano F, et al. **Lancet** 1989 Jan 28;1(8631):216
[Prerequisites of manual therapy in spinal diseases] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1988 Jun;(6):68–71 **(Rus)**

MANNANS

Effects of guar–pasta on serum lipid levels in obese diabetic and non–diabetic women with normal lipids. Tognarelli M, et al. **Acta Diabetol Lat** 1988 Jul–Sep;25(3):243–6
Structural studies of an acidic galactomannan from the reference strain for Serratia marcescens serogroup O4. Oxley D, et al. **Carbohydr Res** 1988 Aug 15;179:341–8
Treatment of chronic constipation with lactitol sweetened yoghurt supplemented with guar gum and wheat bran in elderly hospital in–patients. Rajala SA, et al. **Compr Gerontol [A]** 1988 Jun;2(2):83–6

ADMINISTRATION & DOSAGE

Effects of guar gum on plasma urea, insulin and glucose in the growing pig. Malmlöf K, et al. **Br J Nutr** 1989 Jan; 61(1):67–73
Effect of guar on amino acid absorption and the blood glucose, insulin, C–peptide and glucagon responses to jejunal amino acid and glucose perfusion in man. Gulliford MC, et al. **Eur J Clin Nutr** 1988 Oct;42(10):871–6
Antitumor effect of a baker's yeast mannan–mitomycin C conjugate against mouse hepatoma, MH134, in vivo and in vitro. Aizawa K, et al. **Int J Immunopharmacol** 1989; 11(2):191–5
Effect of guar incorporated diet on plasma lipoprotein fractions in non insulin dependent diabetes mellitus. (NIDDM). Gahlot RS, et al. **J Assoc Physicians India** 1988 Dec;36(12):719–20
Study of effect of guar gum on long term glycaemic control in patients of diabetes mellitus. Gupta A, et al. **J Assoc Physicians India** 1988 Mar;36(3):204–6
Guar gum and hypoglycemia in the rat. **Nutr Rev** 1989 Jan; 47(1):28–31

ANALYSIS

Structural study of phosphomannan of yeast–form cells of Candida albicans J–1012 strain with special reference to application of mild acetolysis. Kobayashi H, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):364–75
Structural studies of an acidic galactoglucomannan from the O3 reference strain (C.D.C. 863–57) of Serratia marcescens. Oxley D, et al. **Carbohydr Res** 1989 Apr 15;187(2):295–301
Interactions of cadmium with yeast mannans. Oda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2695–8
Quantitative precipitin reaction and enzyme–linked immunosorbent assay of mannans of Candida albicans NIH A–207 and NIH B–792 strains compared. Tojo M, et al. **Clin Chem** 1988 Dec;34(12):2423–5
Candida cell wall mannan: a polysaccharide with diverse immunologic properties. Domer JE. **Crit Rev Microbiol** 1989;17(1):33–51 (154 ref.)
Analysis of mannans of two relatively avirulent mutant strains of Candida albicans. Saxena A, et al. **Infect Immun** 1989 Feb;57(2):413–9

BLOOD

Mannan and D–arabinitol concentrations in serum from a patient with Candida albicans endocarditis. Fujita S, et al. **Mycopathologia** 1989 Feb;105(2):87–92

DIAGNOSTIC USE

Visualization of the mucosal villi on double–contrast barium studies of the small intestine by using a high molecular fraction of guaran. Desaga JF. **Gastrointest Radiol** 1989 Winter;14(1):25–30
Generation and characterization of cytotoxic activity against tumor cell lines in human peripheral blood mononuclear cells stimulated "in vitro" by a glucomannan–protein preparation of Candida albicans. Ausiello CM, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):59–68

IMMUNOLOGY

Polyclonal IgG synthesis of mononuclear cells induced by the homopolymer of 4,6–dideoxy–4–formamido–alpha–D–mannopyranosyl units isolated from Brucella melitensis. Montag T, et al. **Biomed Biochim Acta** 1988;47(6):537–42
Direct activation of human B lymphocytes by Candida albicans–derived mannan antigen. Mangeney M, et al. **Cell Immunol** 1989 Sep;122(2):329–37
Affinity chromatography of anti–mannan antibodies on mannan–acrylamide copolymers. Pavliak V, et al. **J Chromatogr** 1989 May 30;490(2):418–23
Detection of Candida sp. mannan antigen by indirect ELISA–inhibition. In vitro crossed reactivity among mannans obtained from C. albicans A, C. albicans B, and C. tropicalis. Garcia–de–Lomas J, et al. **Mycopathologia** 1988 Jun;102(3):175–8
Determination of antibodies to Candida albicans cell wall components by immunodiffusion, ELISA and its rapid modification. Pavliak V, et al. **Mycoses** 1988 Aug; 31(8):426–32

ISOLATION & PURIFICATION

Novel structure of the cellular mannan of the pathogenic yeast Candida krusei. Kogan G, et al. **Carbohydr Res** 1988 Dec 31;184:171–82
Structural studies of an acidic galactoglucomannan from the O15 reference strain (C.D.C. 4523–60) of Serratia marcescens. Oxley D, et al. **Carbohydr Res** 1989 Mar 15; 186(2):295–300

METABOLISM

Increase in surface expression of transferrin receptors on cultured hepatocytes of adult rats in response to iron deficiency. Muller–Eberhard U, et al. **J Biol Chem** 1988 Oct 15;263(29):14753–6

PHARMACOLOGY

Effect of guar gum on mineral balances in NIDDM adults. Behall KM, et al. **Diabetes Care** 1989 May;12(5):357–64
In vitro activity of mannan sulfate, a novel sulfated polysaccharide, against human immunodeficiency virus type 1 and other enveloped viruses. Ito M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):171–3
The influence of Guar gum on absorption of metformin from the gut in healthy volunteers. Gin H, et al. **Horm Metab Res** 1989 Feb;21(2):81–3
Hypolipidemic effect of guar gum in rats & rabbits. Singh L, et al. **Indian J Med Res** 1988 Dec;88:550–7
Enhancement of allo–responsiveness of human lymphocytes by acemannan (Carrisyn). Womble D, et al. **Int J Immunopharmacol** 1988;10(8):967–74
Hypoglycaemic effect of guar gum [letter] Upadhyaya AC, et al. **J Assoc Physicians India** 1988 Nov;36(11):679–80
The effects of guar gum or wheat bran on the disappearance of 14C–labeled starch from the rat gastrointestinal tract. Tinker LF, et al. **J Nutr** 1989 Mar;119(3):403–8
Production of leukotrienes from mouse peritoneal macrophages by treatment with a neutral subfraction of bakers' yeast mannan. Ishitani K, et al. **J Pharmacobiodyn** 1988 May;11(5):363–8

PHYSIOLOGY

Mannan as an antigen in cell–mediated immunity (CMI) assays and as a modulator of mannan–specific CMI. Domer JE, et al. **Infect Immun** 1989 Mar;57(3):693–700

THERAPEUTIC USE

Metabolic and nutritional effects of long–term use of guar gum in the treatment of noninsulin–dependent diabetes of poor metabolic control. Uusitupa M, et al. **Am J Clin Nutr** 1989 Feb;49(2):345–51
Mouth–to–cecum transit time in patients affected by chronic constipation: effect of glucomannan. Marzio L, et al. **Am J Gastroenterol** 1989 Aug;84(8):888–91
Guar gum and gemfibrozil—an effective combination in the treatment of hypercholesterolaemia. Tuomilehto J, et al. **Atherosclerosis** 1989 Mar;76(1):71–7
Long term treatment of severe hypercholesterolaemia with guar gum. Tuomilehto J, et al. **Atherosclerosis** 1988 Aug; 72(2–3):157–62
A comparison of metformin versus guar in combination with sulphonylureas in the treatment of non insulin dependent diabetes. Wilson JA, et al. **Horm Metab Res** 1989 Jun; 21(6):317–9
[Mannan sulfates—inducers of plant resistance to viral infection] Kovalenko AG, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):732–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Safety evaluation studies of SGF gum—a potential food additive from the seed of Sesbania cannabina. Li XL, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):935–46

MANNICH BASES see under **AMINES**

MANNITOL

Compatibility of ADSOL–stored red cells with intravenous solutions. Strautz RL, et al. **Am J Emerg Med** 1989 Mar; 7(2):162–4
In vivo regeneration of red cell 2,3–diphosphoglycerate following transfusion of DPG–depleted AS–1, AS–3 and CPDA–1 red cells. Heaton A, et al. **Br J Haematol** 1989 Jan;71(1):131–6
Design and evaluation of a low threshold, porous tip lead with a mannitol coated screw–in tip ("Sweet Tip"). Ormerod D, et al. **PACE** 1988 Nov;11(11 Pt 2):1784–90
Phosphoenolpyruvate in the rejuvenation of stored red cells in SAGM medium: optimal conditions and the indirect effect of methemoglobin formation. Matsuyama H, et al. **Transfusion** 1989 Sep;29(7):614–9
Effectiveness of two synthetic fiber filters for removing white cells from AS–1 red cells. Pikul FJ, et al. **Transfusion** 1989 Sep;29(7):590–5
Additive solution for the suspension and storage of deglycerolized red blood cells. Ross DG, et al. **Vox Sang** 1989;56(2):75–9

ADMINISTRATION & DOSAGE

Effects of an oral water load and intravenous administration of isotonic glucose, hypertonic saline, mannitol and furosemide on the release of atrial natriuretic peptide in men. Yamasaki Y, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):269–76
Comparison of urograms using ionic contrast, non–ionic contrast and non–ionic contrast with mannitol. Lovett I, et al. **Australas Radiol** 1988 Nov;32(4):434–6
Effect of ultrasound on transdermal drug delivery to rats and guinea pigs. Levy D, et al. **J Clin Invest** 1989 Jun; 83(6):2074–8
Evidence that atrial natriuretic factor is the humoral factor by which volume loading or mannitol infusion produces an improved renal function after acute ischemia. An experimental study in dogs. Gianello P, et al. **Transplantation** 1989 Jul;48(1):9–14
[The therapeutic value of forced diuresis] Kelbel C, et al. **Med Klin** 1989 Feb 15;84(2):98–102 (32 ref.) **(Ger)**
[Orthograde intestinal irrigation with a mannitol solution in reducing hepatic encephalopathy in patients with liver cirrhosis and gastrointestinal hemorrhage] Micklefield GH, et al. **Z Gastroenterol** 1989 Jul;27(7):374–7 (Eng. Abstr.) **(Ger)**
[Therapeutic efficacy of intracarotid infusion of 20% mannitol with ACNU in Fischer rats with intracerebrally implanted 9L gliosarcoma] Miyagami M, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2059–65 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Acute renal failure due to mannitol intoxication. Horgan KJ, et al. **Am J Nephrol** 1989;9(2):106–9 (16 ref.)

ANALOGS & DERIVATIVES

99mTc(Cu)–mannitol complex: a new agent for dynamic renal function studies. Chauhan UP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):283–9
[Effect of dibromomannitol in the treatment of chronic myelogenous leukemia: report of 22 cases] Zhu XQ, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Mar;27(3):157–8, 197 (Eng. Abstr.) **(Chi)**

ANALYSIS

Rapid analysis of sorbitol, galactitol, mannitol and myoinositol mixtures from biological sources. Eades DM, et al. **J Chromatogr** 1989 May 5;490(1):1–8
Increased amounts of the Aspergillus metabolite D–mannitol in tissue and serum of rats with experimental aspergillosis. Wong B, et al. **J Infect Dis** 1989 Jul;160(1):95–103

BLOOD

[Determination of mannitol concentrations in plasma by colorimetry] Zeng JZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):285–8 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

Cellobiose: mannitol differential permeability in small bowel disease. Hodges S, et al. **Arch Dis Child** 1989 Jun; 64(6):853–5
Lactulose/mannitol test: an ideal screen for celiac disease. Juby LD, et al. **Gastroenterology** 1989 Jan;96(1):79–85
Cellobiose/mannitol sugar test—a sensitive tubeless test for coeliac disease: results on 1010 unselected patients. Juby LD, et al. **Gut** 1989 Apr;30(4):476–80
[Diagnosis of contaminated small bowel syndrome following subtotal gastrectomy: a comparative study of mannitol–BHT and jejunal bacteriology] Mu JZ, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):32–4, 62 (Eng. Abstr.) **(Chi)**
[Use of mannitol breath hydrogen test in diagnosis of small bowel transit time] Mu JZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):400–3 (Eng. Abstr.) **(Chi)**

METABOLISM

Detection of fecal coliforms in water by using [14C]mannitol. Reasoner DJ, et al. **Appl Environ Microbiol** 1989 Apr; 55(4):907–11
Bacterial phosphoenolpyruvate–dependent phosphotransferase system: mannitol–specific EII contains two phosphoryl binding sites per monomer and one high–affinity mannitol binding site per dimer. Pas HH, et al. **Biochemistry** 1988 Jul 26;27(15):5520–5
S–phosphocysteine and phosphohistidine are intermediates in the phosphoenolpyruvate–dependent mannitol transport catalyzed by Escherichia coli EIIMtl. Pas HH, et al. **Biochemistry** 1988 Aug 9;27(16):5835–9
NADPH generation in Aspergillus nidulans: is the mannitol cycle involved? Singh M, et al. **J Gen Microbiol** 1988 Mar; 134 (Pt 3):643–54
Evidence for and characterization of a mannitol cycle in Eimeria tenella. Schmatz DM, et al.

Mol Biochem Parasitol 1989 Jan 15;32(2–3):263–70
The redox state and the phosphorylation state of the mannitol–specific carrier of the E. coli phosphoenolpyruvate–dependent phosphotransferase system. Robillard GT, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):113–8 (19 ref.)

PHARMACOKINETICS

Hepatic clearance of polyethylene glycol 900 and mannitol in the pig. Friman S, et al. **Digestion** 1988;39(3):172–80
Use of mannitol during neurosurgery: interpatient variability in the plasma and CSF levels. Anderson P, et al. **Eur J Clin Pharmacol** 1988;35(6):643–9

PHARMACOLOGY

Cytoprotective effect of isotonic mannitol at low oxygen tension. Gronow G, et al. **Adv Exp Med Biol** 1989; 248:755–62
Blood–brain barrier disruption using mannitol: time course and electron microscopy studies. Cosolo WC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R443–7
Sugar–stimulated ion absorption is not different in seahare and vertebrate intestine. Moran WM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R583–90
Opening of blood–brain barrier in Triturus cristatus carnifex by hyperosmolar mannitol solutions. Franceschini V, et al. **Basic Appl Histochem** 1988;32(3):327–32
Polyamines mediate the reversible opening of the blood–brain barrier by the intracarotid infusion of hyperosmolal mannitol. Koenig H, et al. **Brain Res** 1989 Mar 27; 483(1):110–6
Mannitol and reperfusion–induced arrhythmias: possible mechanisms of action in the isolated rat heart. Yeatman M, et al. **Can J Cardiol** 1988 Sep;4(6):287–94
Role of hypovolemic hemoconcentration in dose–dependent flow decline observed in murine tumors after intraperitoneal administration of glucose or mannitol. Vaupel PW, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7102–6
The effect of intravenous mannitol or oral glycerol on intraocular pressure in dogs. Lorimer DW, et al. **Cornell Vet** 1989 Jul;79(3):249–58
Effect of free radical scavengers and metal ion chelators on hydrogen peroxide and phenylhydrazine induced red blood cell lipid peroxidation. Einsele H, et al. **Free Radic Res Commun** 1987;3(1–5):257–63
Free radicals in hypothermic rat heart preservation—prevention of damage by mannitol and desferrioxamine. Wickens DG, et al. **Free Radic Res Commun** 1987;4(3):189–95
Subcellular changes in the endolymphatic sac after administration of hyperosmolar substances. Erwall C, et al. **Hear Res** 1988 Sep 1;35(1):109–18
Effect of hypertonic mannitol solution on histomorphology of rat jejunum. Mehta V, et al. **Indian J Med Sci** 1988 Jun;42(6):135–8
Evaluation of tumor energy metabolism and microvascular blood flow after glucose or mannitol administration using 31P nuclear magnetic resonance spectroscopy and laser Doppler flowmetry. Okunieff P, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1493–500
Electrophysiological effects of anti–free radical interventions in canine Purkinje fibers. Rosenthal JE, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1053–67
Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure [published erratum appears in J Neurosurg 1989 Apr;70(4):662] Ravussin P, et al. **J Neurosurg** 1988 Dec;69(6):869–76
Selective effect of mannitol–induced hyperosmolality on brain interstitial fluid and water content in white matter. Rosenberg GA, et al. **Metab Brain Dis** 1988 Sep;3(3):217–27
Cell kinetics of intracerebrally implanted RG–C6 tumors in rats—effects of intracarotid hyperosmolar mannitol measured by 3H–thymidine autoradiography and bromodeoxyuridine uptake. Inoue T, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):533–7
Structural changes in the rat brain after carotid infusions of hyperosmolar solutions: a light microscopic and immunohistochemical study. Salahuddin TS, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):467–82
Luminal hypertonic solutions stimulate concentration–dependent duodenal serotonin release. Martin DC, et al. **Surgery** 1989 Aug;106(2):325–31
[Effect of mannitol, furosemide and mannitol with furosemide on intracranial pressure] Xu BN. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):230–2, 255–6 (Eng. Abstr.) **(Chi)**
[Restoration of neuronal activity after severe global ischemia. Effects of mannitol and glycerol] Mabuchi S, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):460–6 (Eng. Abstr.) **(Jpn)**
[Protective effect of various agents against ischemic neuronal damage in guinea pig hippocampal neurons studied in vitro] Amagasa M, et al. **No Shinkei Geka** 1988 Nov; 16(12):1363–71 (Eng. Abstr.) **(Jpn)**

POISONING

[Disorder of the blood–brain barrier caused by mannitol poisoning in an infant with encephalotoxicosis] Bökenkamp A, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):344–9 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Oxygen–derived free radical scavengers and skeletal muscle ischemic/reperfusion injury. Faust KB, et al. **Am Surg** 1988 Dec;54(12):709–19
Reduction of reperfusion injury with mannitol cardioplegia. Ferreira R, et al. **Ann Thorac Surg** 1989 Jul;48(1):77–83; discussion 83–4
Are free radical scavengers beneficial in the treatment of compartment syndrome after acute arterial ischemia? Ricci MA, et al. **J Vasc Surg** 1989 Feb;9(2):244–50
Effect of hyperosmotic mannitol on magnetic resonance relaxation parameters in reperfused canine myocardial infarction. Miller DD, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):79–88
Ciguatera and mannitol: experience with a new treatment regimen. Pearn JH, et al. **Med J Aust** 1989 Jul 17; 151(2):77–80
The protective effect of mannitol, vitamin E and glucocorticoid on ischaemic brain injury: evaluation by chemiluminescence, energy metabolism and water content. Uenohara H, et al. **Neurol Res** 1988 Jun;10(2):73–80
Effect of hetastarch, mannitol, and phenylephrine on spinal cord blood flow following experimental spinal injury. Dyste GN, et al. **Neurosurgery** 1989 Feb;24(2):228–35
Effect of treatment with fluosol and mannitol during temporary middle cerebral artery occlusion in cats. Pereira BM, et al. **Neurosurgery** 1988 Aug;23(2):139–42
Mannitol diuresis alone is insufficient to protect postoperative renal function in patients with obstructive jaundice [letter] Cahill J. **Surgery** 1989 Feb;105(2 Pt 1):239–40
Therapeutic effect of corticosteroid, mannitol and silicon sponge on retraction induced brain edema. Lin SM. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):602–10
Mannitol reduces ATN in cadaveric allografts. Richards KF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1228–9
[Response of intracranial pressure after rapid perfusion of mannitol in neurotraumatology] Ligier B, et al. **Agressologie** 1988 May;29(6):409–11 (Eng. Abstr.) **(Fre)**
[Intra–arterial chemotherapy of malignant glioma after osmotic blood–brain barrier disruption] Yamada K, et al. **Gan To Kagaku Ryobo** 1989 Aug;16(8 Pt 2):2692–6 (Eng. Abstr.) **(Jpn)**
[EEG changes in response to dehydration depending on the extent of intracranial hypertension] Mosilchuk NM, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):30–3 (Eng. Abstr.) **(Rus)**

TOXICITY

General effects of hyperosmolar agents on the endolymphatic sac. Erwall C. **Hear Res** 1988 Nov;36(2–3):277–86
Osmolality–related effects of injections into the central nervous system. Speck U, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S114–7

URINE

Urinary mannitol: lactulose excretion ratios and jejunal mucosal structure. Nathavitharana KA, et al. **Arch Dis Child** 1988 Sep;63(9):1054–9
Comparison between the cellobiose/mannitol and 51Cr–labelled ethylenediaminetetra–acetate absorption tests in the detection of coeliac disease. Martines D, et al. **Clin Sci** 1988 Oct;75(4):375–8

MANNITOL PHOSPHATES see under **SUGAR PHOSPHATES**

MANNOHEPTULOSE see under **HEPTOSES**

MANNOSE

Covalent coupling of sugars to liposomes. Weissig V, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):54–7
Type 3 fimbriae among enterobacteria and the ability of spermidine to inhibit MR/K hemagglutination. Gerlach GF, et al. **Infect Immun** 1989 Jan;57(1):219–24

ANALOGS & DERIVATIVES

Blood–group active proteoglycan containing 3–O–methylrhamnose (acofriose) from young plants of Osmunda japonica. Akiyama T, et al. **Carbohydr Res** 1988 Jul 15;178:320–6
Modulation of prostaglandin metabolism by K–MAP and prevention of toxic effect of cyclosporin on pancreatic islet cells. Teraoka S, et al. **Diabetes** 1989 Jan;38 Suppl 1:120–5
Improvement in renal blood flow and kidney function by modulation of prostaglandin metabolism in cyclosporine–treated animals. Teraoka S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):937–40
Cyclosporine–associated toxicity in pancreatic islet cells and its prevention by K–MAP in cyclosporine–treated animals. Teraoka S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2774–9

ANALYSIS

Blood–group active proteoglycan containing 3–O–methylrhamnose (acofriose) from young plants of Osmunda japonica. Akiyama T, et al. **Carbohydr Res** 1988 Jul 15;178:320–6
On the utility of 13C–n.m.r. spectroscopy in the identification of the primary structures of manno–oligosaccharides and glycopeptides. Cumming DA, et al. **Carbohydr Res** 1988 Aug 15;179:369–80 (34 ref.)
Structural analysis of the preponderant high–mannose oligosaccharide of human Tamm–Horsfall glycoprotein. Dall'Olio F, et al. **Carbohydr Res** 1988 Jul 15;178:327–32
O–mannosylation of recombinant human insulin–like growth factor I (IGF–I) produced in Saccharomyces cerevisiae. Hård K, et al. **FEBS Lett** 1989 May 8;248(1–2):111–4
Carbohydrate moieties of small placental hCG: requirement of mannose structure for biological activity. Wang HY, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):13–22

IMMUNOLOGY

Mannose–mediated targeted immunoadjuvant action of liposomes. Garcon N, et al. **Immunology** 1988 Aug; 64(4):743–5

ISOLATION & PURIFICATION

Fibronectin: source of mannose in a highly purified respiratory mucin. Bhattacharyya SN, et al. **Inflammation** 1988 Oct;12(5):433–46

METABOLISM

Radioautographic study of [3H]mannose utilization during cementoblast differentiation, formation of acellular cementum, and development of periodontal ligament principal fibers. Cho MI, et al. **Anat Rec** 1989 Feb; 223(2):209–22
Kinetics of the glycation of bovine serum albumin by mannose and fucose in vitro. Davis LJ, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):362–6
Immunochemistry of highly branched N–glycans. Terminal N–acetyl–D–glucosamine (GlcNAc) cluster antigens contain epitopes composed of terminal GlcNAc residues linked to mannose. Chechik BE, et al. **Biochem Cell Biol** 1988 Dec;66(12):1333–41
Bovine serum conglutinin is a lectin which binds non–reducing terminal N–acetylglucosamine, mannose and fucose residues. Loveless RW, et al. **Biochem J** 1989 Feb 15;258(1):109–13
Extremely rapid endocytosis mediated by the mannose receptor of sinusoidal endothelial rat liver cells. Magnusson S, et al. **Biochem J** 1989 Feb 1;257(3):651–6
Composition and toxicity of lipids from Rhodococcus rhodochrous grown on medium containing galactose, glucose or mannose. de Almeida ET, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):45–50
Influence of vitamin A status and DDT on vitamin A–dependent protein mannosylation in rat liver. Azais–Braesco V, et al. **Chem Biol Interact** 1989; 69(2–3):259–67
Bone marrow–derived mononuclear phagocytes autoregulate mannose receptor expression. Clohisy DR, et al. **J Biol Chem** 1989 Apr 5;264(10):5370–7
Mannose processing is an important determinant in the assembly of phosphorylated high mannose–type oligosaccharides. Lazzarino DA, et al. **J Biol Chem** 1989 Mar 25;264(9):5015–23
Biosynthesis and processing of the mannose receptor in human macrophages. Lennartz MR, et al. **J Biol Chem** 1989 Feb 5;264(4):2385–90
A library of oligosaccharide probes (neoglycolipids) from N–glycosylated proteins reveals that conglutinin binds to certain complex–type as well as high mannose–type oligosaccharide chains. Mizuochi T, et al. **J Biol Chem** 1989 Aug 15;264(23):13834–9
Identification of an N–acetylglucosaminyltransferase in Dictyostelium discoideum that transfers an "intersecting" N–acetylglucosamine residue to high mannose oligosaccharides. Sharkey DJ, et al. **J Biol Chem** 1989 Jun 25;264(18):10411–9
IL–2, a lectin with specificity for high mannose glycopeptides. Sherblom AP, et al. **J Immunol** 1989 Aug 1;143(3):939–44
Addition of high–mannose sugars must precede disulfide bond formation for proper folding of Sendai virus glycoproteins. Vidal S, et al. **J Virol** 1989 Feb; 63(2):892–900
Evidence that serum amyloid P component binds to mannose–terminated sequences of polysaccharides and glycoproteins. Kubak BM, et al. **Mol Immunol** 1988 Sep; 25(9):851–8
Conservation of the D–mannose–adhesion protein among type 1 fimbriated members of the family Enterobacteriaceae. Abraham SN, et al. **Nature** 1988 Dec 15;336(6200):682–4
Homology of lysosomal enzymes and related proteins: prediction of posttranslational modification sites including phosphorylation of mannose and potential epitopic and substrate binding sites in the alpha– and beta–subunits of hexosaminidases, alpha–glucosidase, and rabbit and human isomaltase. Barnes AK, et al. **Proteins** 1988;4(3):182–9

PHARMACOKINETICS

[Distribution of labeled mannose in mice studied by whole–body autoradiography and biochemical analysis] Kuno N. **Kaibogaku Zasshi** 1988 Oct;63(5):449–67 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Significance of D-mannose as a sperm receptor site on the zona pellucida in human fertilization. Mori K, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):207-11

Effects of mannose and fructose on the synthesis and secretion of insulin. Curry DL. **Pancreas** 1989;4(1):2-9

TOXICITY

Mannose toxicity in Ehrlich ascites tumor cells. Hernández D, et al. **Biochem Cell Biol** 1989 Jun;67(6):311-4

MANNOSEPHOSPHATE ISOMERASE see under **CARBOHYDRATE ISOMERASES**

MANNOSEPHOSPHATES see under **HEXOSEPHOSPHATES**

MANNOSIDASES

ANTAGONISTS & INHIBITORS

Antibody-independent, complement-mediated enhancement of HIV-1 infection by mannosidase I and II inhibitors. Montefiori DC, et al. **Antiviral Res** 1989 Apr;11(3):137-46

Structure-activity relationship of swainsonine. Inhibition of human alpha-mannosidases by swainsonine analogues. Cenci di Bello I, et al. **Biochem J** 1989 May 1;259(3):855-61

Inhibition of glycoprotein oligosaccharide processing in vitro and in influenza-virus-infected cells by alpha-D-mannopyranosylmethyl-p-nitrophenyltriazene. McDowell W, et al. **Biochem J** 1988 Nov 1;255(3):991-8

Potentiation of human lymphokine-activated killer cell activity by swainsonine, an inhibitor of glycoprotein processing. Bowlin TL, et al. **Cancer Res** 1989 Aug 1; 49(15):4109-13

Mannostatins A and B: new inhibitors of alpha-D-mannosidase, produced by Streptoverticillium verticillus var. quintum ME3-AG3: taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. **J Antibiot (Tokyo)** 1989 Jun; 42(6):883-9

Non-carrier-mediated uptake of the mannosidase I inhibitor 1-deoxymannojirimycin by K562 erythroleukemic cells. Neefjes JJ, et al. **J Biol Chem** 1989 Jun 15;264(17):10271-5

The structures of oligosaccharides excreted by sheep with swainsonine toxicosis. Warren CD, et al. **J Biol Chem** 1988 Oct 15;263(29):15041-9

Design of potential anti-HIV agents. 1. Mannosidase inhibitors. Winkler DA, et al. **J Med Chem** 1989 Sep; 32(9):2084-9

DEFICIENCY

Beta-mannosidosis in two brothers with hearing loss. Dorland L, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:255-8

GENETICS

Nucleotide sequence of AMS1, the structure gene of vacuolar alpha-mannosidase of Saccharomyces cerevisiae. Yoshihisa T, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):908-15

Isolation of a rat liver Golgi mannosidase II clone by mixed oligonucleotide-primed amplification of cDNA. Moremen KW. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5276-80

ISOLATION & PURIFICATION

Rat epididymal alpha-D-mannosidase: purification, carbohydrate composition, substrate specificity, and antibody production. Tulsiani DR, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):60-8

Purification and characterization of an alpha-1,2-mannosidase involved in processing asparagine-linked oligosaccharides. Forsee WT, et al. **J Biol Chem** 1989 Mar 5;264(7):3869-76

Glycoprotein biosynthesis in Saccharomyces cerevisiae. Purification of the alpha-mannosidase which removes one specific mannose residue from Man9GlcNAc. Jelinek-Kelly S, et al. **J Biol Chem** 1988 Oct 15; 263(29):14757-63

METABOLISM

Co2+-mediated time- and temperature-dependent activation of neutral alpha-D-mannosidase from monkey brain. Mathur R, et al. **Biochem J** 1988 Aug 1;253(3):677-85

Protein matrix effects on glycan processing by mannosidase II and sialyl transferase from rat liver. Shao MC, et al. **Biochemistry** 1989 May 2;28(9):4077-83

Characterization of lysosomal alpha-mannosidase from human placenta. Basu D, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):695-8

Role of acidic intracellular compartments in the biosynthesis of Dictyostelium lysosomal enzymes. The weak bases ammonium chloride and chloroquine differentially affect proteolytic processing and sorting. Cardelli JA, et al. **J Biol Chem** 1989 Feb 25;264(6):3454-63

Novel alpha-D-mannosidase of rat sperm plasma membranes: characterization and potential role in sperm-egg interactions. Tulsiani DR, et al. **J Cell Biol** 1989 Sep; 109(3):1257-67

[Kinetic characteristics of the alpha-mannanase of Rhodococcus erythropolis 19] Pavlova IN, et al. **Mikrobiol Zh** 1987 Mar-Apr;49(2):11-5 (Eng. Abstr.) (Rus)

URINE

Human urinary beta-mannosidase: behaviour towards two chromatographic supports. Ricard B, et al. **J Chromatogr** 1988 Jun 24;428(1):203-5

MANNOSIDES see under **GLYCOSIDES**

MANNOSIDOSIS

GENETICS

Beta-mannosidosis in two brothers with hearing loss. Dorland L, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:255-8

METABOLISM

Long-term follow-up of biochemical and cognitive functioning in patients with mannosidosis. Noll RB, et al. **Arch Neurol** 1989 May;46(5):507-9

VETERINARY

The accumulation of oligosaccharides in tissues and body fluids of cats with alpha-mannosidosis. Warren CD, et al. **Carbohydr Res** 1988 Sep 15;180(2):325-38

Dysmyelinogenesis in caprine beta-mannosidosis: ultrastructural and morphometric studies in fetal optic nerve. Lovell KL, et al. **Int J Dev Neurosci** 1987; 5(3):243-53

The clinical and pathologic heterogeneity of feline alpha-mannosidosis. Cummings JF, et al. **J Vet Intern Med** 1988 Oct-Dec;2(4):163-70

Morphology of leukocytes from cats affected with alpha-mannosidosis and mucopolysaccharidosis VI (MPS VI). Alroy J, et al. **Vet Pathol** 1989 Jul;26(4):294-302

Otic pathology of caprine beta-mannosidosis. Render JA, et al. **Vet Pathol** 1988 Nov;25(6):437-42

MANNOSYLTRANSFERASES see under **HEXOSYLTRANSFERASES**

MANOMETRY

Deflation opening pressure of the eustachian tube. Cohen D. **Am J Otol** 1989 Mar;10(2):138-41

Anal manometry improves the outcome of surgery for fistula-in-ano. Pescatori M, et al. **Dis Colon Rectum** 1989 Jul;32(7):588-92

The effect of a manometer on the mean airway pressure during hand ventilation, an in vitro study. Karsdon J, et al. **Eur J Pediatr** 1989 Apr;148(6):574-6

Mind over manometry [editorial] Ende J. **Hosp Pract [Off]** 1988 Nov 30;23(11A):4, 7-8, 11

Evaluating rhinitis: clinical, rhinomanometric, and cytologic assessments. Meltzer EO. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):900-8 (5 ref.)

Rhinomanometry. Schumacher MJ. **J Allergy Clin Immunol** 1989 Apr;83(4):711-8 (50 ref.)

Toronto rhinomanometry: laboratory, field and clinical studies. Cole P. **J Otolaryngol** 1988 Oct;17(6):331-5

Intraoperative esophageal manometry and early postoperative esophageal pH monitoring in children. Jolley SG, et al. **J Pediatr Surg** 1989 Apr;24(4):336-40

Report of the First International Symposium of Anorectal Manometry. Mishalany H, et al. **J Pediatr Surg** 1989 Apr; 24(4):356-9

Objective assessment of nasal obstruction. Lund VJ. **Otolaryngol Clin North Am** 1989 Apr;22(2):279-90 (54 ref.)

Rhinomanometry for preoperative and postoperative assessment of nasal obstruction. Gordon AS, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):20-6

Unilateral and bilateral nasal resistances. Cole P, et al. **Rhinology** 1988 Sep;26(3):209-16

[Anal manometric studies following 3d degree perineal tear] Voigt R, et al. **Geburtshilfe Frauenheilkd** 1989 Jun; 49(6):561-3 (27 ref.) (Eng. Abstr.) (Ger)

[Should esophageal varices by assessed by manometry before sclerosing?] Kleber G. **Z Gastroenterol** 1988 Dec; 26(12):772-3 (Ger)

[Comparison of a radioisotope method and esophageal electromanometry in the study of motor disorders of the esophagus] Usai P, et al. **Minerva Dietol Gastroenterol** 1988 Jul-Sep;34(3):155-8 (Eng. Abstr.) (Ita)

[Esophageal manometry for the study of gastroesophageal reflux] Felix VN. **Arq Gastroenterol** 1988 Jan-Mar; 25(1):33-6 (18 ref.) (Eng. Abstr.) (Por)

ADVERSE EFFECTS

Systemic anaphylaxis during rectal manometry with a latex balloon. Sondheimer JM, et al. **Am J Gastroenterol** 1989 Aug;84(8):975-7

INSTRUMENTATION

Chronic exercise-induced compartment pressure elevation measured with a miniaturized fluid pressure monitor. A laboratory and clinical study. Awbrey BJ, et al. **Am J Sports Med** 1988 Nov-Dec;16(6):610-5

Failure of low pressure alarm associated with the use of a humidifier. Slee TA, et al. **Anesthesiology** 1988 Nov; 69(5):791-3

Rhinomanometry in the selection for adenoidectomy and its relation to preoperative radiology. Parker AJ, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):155-61

Rhinomanometry in children. Parker LP, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):127-37

Frequency response evaluation of radial artery catheter-manometer systems: sinusoidal frequency analysis versus flush method. Schwid HA. **J Clin Monit** 1988 Jul; 4(3):181-5

Rhinomanometric method error in the assessment of nasal respiratory resistance. Sandham A. **Rhinology** 1988 Sep; 26(3):191-202

[Computer-assisted rhinomanometry (CAR)] Bachert C, et al. **HNO** 1988 Jul;36(7):277-81 (Eng. Abstr.) (Ger)

[The technic of intranasal hyposensitization and provocation with rhinomanometric control] Enzmann H, et al. **HNO** 1989 May;37(5):203-6 (Eng. Abstr.) (Ger)

[Clinical comparison of 2 modern rhinomanometers] Gammert C, et al. **HNO** 1988 Oct;36(10):406-8 (Eng. Abstr.) (Ger)

[A holding device for otic manometers] Lygun AN. **Voen Med Zh** 1988 Sep;(9):62-3 (Rus)

METHODS

Determination of intra-abdominal pressure using a transurethral bladder catheter: clinical validation of the technique. Iberti TJ, et al. **Anesthesiology** 1989 Jan; 70(1):47-50

Air-filled microballoon manometry for use in anorectal physiology. Miller R, et al. **Br J Surg** 1989 Jan;76(1):72-5

A simple technique to accurately determine intra-abdominal pressure [letter] Kron IL. **Crit Care Med** 1989 Jul; 17(7):714-5

Accuracy of abbreviated manometry in detecting esophageal motility abnormalities. Clouse RE, et al. **Dig Dis Sci** 1989 Jan;34(1):66-70

Sphincter of Oddi manometry: comparison of microtransducer and perfusion methods. Tanaka M, et al. **Endoscopy** 1988 Aug;20 Suppl 1:184-8 (62 ref.)

New intraoperative biliary manometric technique using a balloon catheter—selective evaluation of papillary function. Kubota K, et al. **Eur Surg Res** 1989;21(2):92-7

Consistency in manual scoring analysis of gastrointestinal pressure recordings. Andersen MB, et al. **Scand J Gastroenterol** 1989 Apr;24(3):321-8

Reliability of anorectal manometry in the diagnosis of Hirschsprung's disease. Iwai N, et al. **Z Kinderchir** 1988 Dec;43(6):405-7

[Power curves in rhinomanometry] Eichler J. **Biomed Tech (Berlin)** 1989 Mar;34(3):42-5 (Eng. Abstr.) (Ger)

[Normal values in rhinomanometry] Gammert C, et al. **HNO** 1988 Oct;36(10):399-405 (Eng. Abstr.) (Ger)

[Recent advances in rhinomanometry] Unno T. **Hokkaido Igaku Zasshi** 1989 May;64(3):219-22 (Jpn)

[Stimulation tonometry of the functional portion of the large intestine in children] Salov PP, et al. **Klin Khir** 1988; (6):77-8 (Rus)

[Anorectosigmoid electromanometry in the differential diagnosis of constipation in children] Krebs C, et al. **Rev Chil Pediatr** 1988 Jan-Feb;59(1):11-6 (Eng. Abstr.) (Spa)

STANDARDS

Inaccuracies in manometric central venous pressure measurement. Clayton DG. **Resuscitation** 1988 Jul; 16(3):221-30

TRENDS

Rhinomanometry 1988: practice and trends. Cole P. **Laryngoscope** 1989 Mar;99(3):311-5 (57 ref.)

MANSONELLA

ISOLATION & PURIFICATION

Mansonella streptocerca in the Central African Republic. Okelo GB, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):464

MANSONELLA OZZARDI see under **MANSONELLA**

MANSONELLIASIS see under **FILARIASIS**

MANTIDS see **ORTHOPTERA**

MANUAL COMMUNICATION

Cued speech, manual complement to lipreading, for visual reception of spoken language. Principles, practice and prospects for automation. Cornett RO. **Acta Otorhinolaryngol Belg** 1988;42(3):375-84

Rights of deaf hospital patients [editorial] **Am Ann Deaf** 1988 Oct;133(4):253

Summarizing stories: the role of instruction in text structure in learning to write. Akamatsu CT. **Am Ann Deaf** 1988 Oct;133(4):294-302

Isolated sign vocabulary acquisition by hearing adults: CAI vs. videotaped presentation. Beykirch HL, et al.

Am Ann Deaf 1989 Mar;134(1):31–4
Metalinguistic abilities of young hearing–impaired children: performance on a judgment of synonymy task. Borman DL, et al. **Am Ann Deaf** 1988 Dec;133(5):325–9
The American Sign Language/English Studies Project: a progress report. Brodesky RL, et al. **Am Ann Deaf** 1988 Dec;133(5):330–5
Self assessment of a sign language program. Kemp M. **Am Ann Deaf** 1988 Dec;133(5):349–55
Interpreting for deaf–blind students: factors to consider. Petronio K. **Am Ann Deaf** 1988 Jul;133(3):226–9
New tests for identifying hearing–impaired students with visual perceptual deficits: relationship between deficits and ability to comprehend sign language. Ratner V. **Am Ann Deaf** 1988 Dec;133(5):336–43
A model for teaching parents of young hearing–impaired children total communication in the home—Project RITCH. Watkins S, et al. **Am Ann Deaf** 1988 Oct; 133(4):289–93
Cues–pause–point training and simultaneous communication to teach the use of signed labeling repertoires. Foxx RM, et al. **Am J Ment Retard** 1988 Nov;93(3):305–11
Two decades of language research with great apes. Romski MA. **ASHA** 1989 May;31(5):81–2
Hand preference in gestures and signs in the deaf and hearing: some notes on early evidence and theory. Harris LJ. **Brain Cogn** 1989 Jul;10(2):189–219
Visual field asymmetries in numerical size comparisons of digits, words, and signs. Vaid J, et al. **Brain Lang** 1989 Jan;36(1):117–26
The role of referential speech in sign learning by mentally retarded children: a comparison of total communication and sign–alone training. Clarke S, et al. **J Appl Behav Anal** 1988 Winter;21(4):419–26
Language training with autistic children using four different modes of presentation. Layton TL. **J Commun Disord** 1988 Aug;21(4):333–50
Linguistic flexibility in signed and written language productions of deaf children. Everhart VS, et al. **J Exp Child Psychol** 1988 Oct;46(2):174–93
Functional demands and consequences of manual communication. Meals RA, et al. **J Hand Surg [Am]** 1988 Sep;13(5):686–91
The use of sign language as an aggravating factor in shoulder tendinitis, a case history of a deaf–mute cleaner. Hagberg M, et al. **J Hum Ergol (Tokyo)** 1987 Dec;16(2):173–8
Key word signing: listeners' classification of signed and spoken narratives. Windsor J, et al. **J Speech Hear Disord** 1989 Aug;54(3):374–82
The effects of linguistic stress on ASL signs. Wilbur RB, et al. **Lang Speech** 1987 Oct–Dec;30 (Pt 4):301–23
Carolina Picture Vocabulary Test: validation with hearing–impaired students. Kline M, et al. **Percept Mot Skills** 1989 Aug;69(1):64–6
Mothers' estimates of hearing family members' competence in sign language and the deaf child's loneliness. Loyer–Carlson VL, et al. **Percept Mot Skills** 1988 Oct; 67(2):633–4
Teaching severely retarded persons to sign interactively through the use of a behavioral script. Sommer KS, et al. **Res Dev Disabil** 1988;9(3):291–304

PHYSIOLOGY

Hand dominance for signing: clues to brain lateralization of language. Vaid J, et al. **Neuropsychologia** 1989;27(7):949–60

MANUALS

Anxiety disorders: a comparison of the ICD–9 and DSM–III–R classification systems. Hiller W, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):338–47
American College of Physicians Ethics Manual. Part 1: History; the patient; other physicians. American College of Physicians. **Ann Intern Med** 1989 Aug 1;111(3):245–52
American College of Physicians Ethics Manual. Part 2: The physician and society; research; life–sustaining treatment; other issues. American College of Physicians. **Ann Intern Med** 1989 Aug 15;111(4):327–35
Disquiet on the research front [letter] McConaghy N. **Aust N Z J Psychiatry** 1988 Sep;22(3):226–8
An appraisal of the DSM–III system. Adamson J. **Can J Psychiatry** 1989 May;34(4):303–10 (90 ref.)
Paranoid schizophrenia: prognosis under DSM–II and DSM–III–R. Goodman AB. **Compr Psychiatry** 1989 May–Jun;30(3):259–66
DSM–III–R personality diagnoses in anxiety disorder patients. Klass ET, et al. **Compr Psychiatry** 1989 May–Jun; 30(3):251–8
Conversion disorder (DSM–III 300.11): symptomatology and course in childhood and adolescence. Lehmkuhl G, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):155–60
Stressful events [letter] Segal SA, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):998
Double–blind, placebo–controlled food challenge (DBPCFC) as an office procedure: a manual. Bock SA, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):986–97 (29 ref.)
The development of a format for a policy and procedure manual for allied health administration. Gross RC. **J Allied Health** 1985 Nov;14(4):395–402
Issues in the classification of child and adolescent psychopathology. Cantwell DP, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):521–33 (122 ref.)
The phenomenology of schizophrenia occurring in childhood. Russell AT, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):399–407
Contingency contracting with delinquents: effects of a brief training manual on staff contract negotiation and writing skills. Welch SJ, et al. **J Appl Behav Anal** 1988 Winter; 21(4):357–68
The use of treatment manuals in cognitive therapy: experience and issues. Dobson KS, et al. **J Consult Clin Psychol** 1988 Oct;56(5):673–80 (64 ref.)
Role of manual–guided training in the conduct and efficacy of interpersonal psychotherapy for depression. Rounsaville BJ, et al. **J Consult Clin Psychol** 1988 Oct;56(5):681–8 (42 ref.)
Dangerous information: product tampering and poisoning advice in revenge and murder manuals. Dietz PE. **J Forensic Sci** 1988 Sep;33(5):1206–17 (46 ref.)
Developing a nursing research manual. Yeager BJ, et al. **J Nurs Adm** 1988 Oct;18(10):8–9, 23, 28
Crosstalk. Assimilation of conflicting information among mental health professionals. Earl WL, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jan;27(1):20–5
Urology and the TNM classification [letter] Hermanek P, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1495
Do's and don'ts of writing a personnel manual. Conomides GS. **Mo Med** 1987 Dec;84(12):745–7
Simple phobia: evidence for heterogeneity. Himle JA, et al. **Psychiatry Res** 1989 Apr;28(1):25–30
Diagnostic grammar and assessment: translating criteria into questions. Robins LN. **Psychol Med** 1989 Feb;19(1):57–68
Integration of DSM–III and ICD–8 to be used in a consultation–liaison psychiatric service. Preliminary experiences. Poulsen DL, et al. **Psychother Psychosom** 1987;48(1–4):78–82
How to make manuals for health workers. Dowling MA. **World Health Forum** 1988;9(3):414–9
[Nosologic differentiation of idiopathic psychosyndromes—a psychiatric Sisyphus myth] Janzarik W. **Nervenarzt** 1989 Feb;60(2):86–9 (12 ref.) (Ger)
[A computerized manual for assessing the dosage absorbed by breast tissue in mammography] Bagni B, et al. **Radiol Med (Torino)** 1988 Nov;76(5):479–85 (Eng. Abstr.) (Ita)
[The 140th anniversary of Pediiatrika—the first Russian manual on pediatrics] Reshetkina LP, et al. **Pediatriia** 1988; (6):103–5 (Rus)

HISTORY

The development of DSM–IV. Frances AJ, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):373–5
[150 years of the "Handbook of Plastic Surgery"—in memory of Eduard Zeis (1807–1868)] Sebastian G. **Hautarzt** 1989 Jan;40(1):45–52 (Eng. Abstr.) (Ger)

STANDARDS

Why are we rushing to publish DSM–IV? Zimmerman M. **Arch Gen Psychiatry** 1988 Dec;45(12):1135–8
Critical issues in the review of diagnostic criteria for "adjustment disorders" and "psychological factors affecting physical condition" [editorial] Strain JJ, et al. **Gen Hosp Psychiatry** 1989 May;11(3):153–5

MANUBRIUM see under **STERNUM**

MANURE

Effects of treatment of cattle with some anthelmintics on the subsequent degradation of their dung. Madsen M, et al. **Acta Vet Scand** 1988;29(3–4):515–7
Digestion of animal slurries: technological, chemical, microbiological, and managerial aspects. Sorlini C, et al. **Adv Biotechnol Processes** 1989;12:203–34 (63 ref.)
Epidemiology of infection by nontuberculous mycobacteria. VIII. Absence of mycobacteria in chicken litter. Falkinham JO 3d, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1347–9
Costs of existing and recommended manure management practices for house fly and stable fly (Diptera: Muscidae) control on dairy farms. Lazarus WF, et al. **J Econ Entomol** 1989 Aug;82(4):1145–51
The ecology of infective larvae of bovine gastrointestinal trichostrongylids in dry season contaminated pastures in the Nigerian derived savanna. Chiejina SN, et al. **J Helminthol** 1989 Jun;63(2):127–39
Attempts to control infection with Ostertagia ostertagi (Trichostrongylidae) in grazing calves by adding mycelium of the nematode–trapping fungus Arthrobotrys oligospora (Hyphomycetales) to cow pats. Grønvold J, et al. **J Helminthol** 1989 Jun;63(2):115–26
Colonization and response of Culicoides variipennis (Diptera: Ceratopogonidae) to pollution levels in experimental dairy wastewater ponds. Mullens BA, et al. **J Med Entomol** 1988 Nov;25(6):441–51
Fatalities attributed to methane asphyxia in manure waste pits—Ohio, Michigan, 1989. **MMWR** 1989 Aug 25; 38(33):583–6
[Hygienic aspects of the use of sludge and liquid manure in agriculture] Köck M. **Geogr Med** 1989;Suppl 2:33–8 (Ger)
[Viruses in fluid and solid manure and in waste water from abattoirs] Wekerle J. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:39–56 (16 ref.) (Ger)
[Experience with an experimental device "Biogas–301 C" in recycling waste from swine–breeding farms using a method of anaerobic fermentation] Butenko VN, et al. **Gig Sanit** 1989 Apr;(4):64–5 (Rus)
[Species composition of methane bacteria in fermented cattle manure] Nozhevnikova AN, et al. **Prikl Biokhim Mikrobiol** 1988 Jul–Aug;24(4):555–60 (Eng. Abstr.) (Rus)

MANUSCRIPTS

An author's guide to the Guidelines for Authors. Whalen E. **AJR** 1989 Jan;152(1):195–8
A Victorian mother's vigil over her sick son: Emma Gilpin's journal of 1888. Davis K. **J Fla Med Assoc** 1988 Aug; 75(8):501–7
Illustrations from the Wellcome Institute Library. A Polish rabbi's circumcision manual. Allan N. **Med Hist** 1989 Apr; 33(2):247–54
A medieval Hebrew treatise on obstetrics. Barkai R. **Med Hist** 1989 Jan;33(1):96–119
Did Leonardo describe Parkinson's disease? [letter] Calne DB, et al. **N Engl J Med** 1989 Mar 2;320(9):594
[A rare manuscript on the therapy of horse diseases] Palivec V. **Cas Lek Cesk** 1989 Jan 20;128(4):127 (Cze)
[The Basel manuscript of Meister Albrant's Horse Medicine] Hils HP, et al. **DTW** 1988 Nov–Dec;95(10):426–9 (Eng. Abstr.) (Ger)
[A manuscript of home medicine prescriptions from the 18th century. V.] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):597–600 (Rum)
[Uniform requirements for submitting manuscripts to biomedical journals. International Committee of Medical Journal Editors] **Rev Clin Esp** 1989 Feb;184(2):89–96 (Spa)
[Uniform requirements for manuscripts: the new 3d edition] **Rev Clin Esp** 1989 Feb;184(2):88 (Spa)

MANUSCRIPTS, MEDICAL

Biomedical manuscripts: what editors want from authors and peer reviewers [editorial] Squires BP. **Can Med Assoc J** 1989 Jul 1;141(1):17–9
Writing about writing, Part II: Copyediting. Stephens GG. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):291–4
Healing texts and healing techniques in indigenous Balinese medicine. McCauley AP. **Soc Sci Med** 1988;27(8):779–87
Paravicius immortal? Weisser U. **Sudhoffs Arch** 1988; 72(2):239–40
[Hematoscopy in German diagnosics of the late middle ages. Supplements to Friedrich Lenhardt, from the manuscript of Ortlof von Baierland's "Arzneibuch"] Mayer J. **Sudhoffs Arch** 1988;72(2):225–33 (Ger)
[Urine analysis in the diagnosis of Isaak Judaeus, Gilles de Corbeil and Ortolf von Baierland. Observations on the processing technic] Riha O, et al. **Sudhoffs Arch** 1988; 72(2):212–24 (Eng. Abstr.) (Ger)
[To make the difference between cockle and wheat. Critical scrutinizing of medical manuscripts] Nylenna M. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):1968–9 (Nor)
[A manuscript of home remedy prescriptions from the 18th century. 6. (conclusion)] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):779–81 (Rum)
[Unknown medical manuscripts] Anikin IL. **Klin Med (Mosk)** 1988 Nov;66(11):151–3 (Rus)
[Bibliographic references in medical manuscripts] Gómez–Dantés O, et al. **Salud Publica Mex** 1988 Sep–Oct; 30(5):760–5 (Eng. Abstr.) (Spa)

HISTORY

Reflections on Italian medical writings of the fourteenth and fifteenth centuries. Siraisi NG. **Ann N Y Acad Sci** 1983; 412:155–68
[Henry E. Sigerist: creation of medical historical study. An unpublished manuscript in the Zurich medical history institute] Mörgeli C, et al. **Gesnerus** 1989;46(1–2):45–53 (Eng. Abstr.) (Ger)

MAPLE SYRUP URINE DISEASE

Oral clinicopathologic manifestations in maple syrup urine disease. Gazit D, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):694–7

DIAGNOSIS

[Maple syrup urine disease and cystathioninemia] Simma B, et al. **Padiatr Padol** 1989;24(1):69–75 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Molecular phenotypes in cultured maple syrup urine disease cells. Complete E1 alpha cDNA sequence and mRNA and subunit contents of the human branched chain alpha–keto acid dehydrogenase complex. Fisher CW, et al. **J Biol Chem** 1989 Feb 25;264(6):3448–53

Enzyme assays with mutant cell lines of maple syrup urine disease. Chuang DT, et al. **Methods Enzymol** 1988; 166:135–46

GENETICS

Mitochondrial import and processing of an in vitro synthesized human prebranched chain acyltransferase fragment. Litwer S, et al. **Am J Hum Genet** 1988 Nov; 43(5):764–9

Reversion of the maple syrup urine disease phenotype of impaired branched chain alpha-ketoacid dehydrogenase complex activity in fibroblasts from an affected child. Litwer S, et al. **J Biol Chem** 1989 Sep 5;264(25):14597–600

Evidence for both a regulatory mutation and a structural mutation in a family with maple syrup urine disease. Zhang B, et al. **J Clin Invest** 1989 Apr;83(4):1425–9

Maple syrup urine disease: case report of 2 Thai infants. Chiemchanya S, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:116–20

METABOLISM

Functional differences in the catabolism of branched-chain L-amino acids in cultured normal and maple syrup urine disease fibroblasts. Schadewaldt P, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):105–16

Interrelation between the metabolism of L-isoleucine and L-allo-isoleucine in patients with maple syrup urine disease. Wendel U, et al. **Pediatr Res** 1989 Jan;25(1):11–4

THERAPY

Treatment outcome of maple syrup urine disease. Snyderman SE. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):417–24

URINE

Simple method for rapid quantification of branched-chain 2-oxo acids in physiological fluids as quinoxalinol derivatives by high-performance liquid chromatography. Radeck W, et al. **J Chromatogr** 1988 Nov 18;432:297–301

VETERINARY

Maple syrup urine disease in calves: a clinical, pathological and biochemical study. Harper PA, et al. **Aust Vet J** 1989 Feb;66(2):46–9

MAPROTILINE see under ANTHRACENES

MARASMUS see PROTEIN-CALORIE MALNUTRITION

MARBLE BONE DISEASE see OSTEOPETROSIS

MARBURG VIRUS see under RHABDOVIRIDAE

MARBURG VIRUS DISEASE

Clinical aspects of African viral hemorrhagic fevers. Gear JH. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S777–82 (8 ref.)

MARCHIAFAVA-MICHELI SYNDROME see HEMOGLOBINURIA, PAROXYSMAL

MAREK'S DISEASE

COMPLICATIONS

Marek's disease virus-induced transient paralysis in chickens: alterations in brain density. Swayne DE, et al. **Acta Neuropathol (Berl)** 1988;76(3):287–91

Discovery of noninfectious viral genes complementary to Marek's disease herpes virus in quail susceptible to cholesterol-induced atherosclerosis. Shih JC, et al. **J Nutr** 1989 Feb;119(2):294–8 (23 ref.)

Immune complex-mediated glomerulopathy in Marek's disease. Pradhan HK, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):165–71

EPIDEMIOLOGY

Marek's disease (MD). XX. Incidence and epizootology of MD in broiler flocks. Pătraşcu IV. **Virologie** 1989 Apr-Jun; 40(2):125–8

ETIOLOGY

Pathogenesis of Marek's disease virus-induced local lesions. 1. Lesion characterization and cell line establishment. Calnek BW, et al. **Avian Dis** 1989 Apr-Jun;33(2):291–302

GENETICS

C-myc activation in an unusual retrovirus-induced avian T-lymphoma resembling Marek's disease: proviral insertion 5' of exon one enhances the expression of an intron promoter. Isfort R, et al. **Oncogene Res** 1987;2(1):81–94

Immune response versus susceptibility to Marek's disease. Calnek BW, et al. **Poult Sci** 1989 Jan;68(1):17–26

Antigen A gene of Marek's disease virus (MDV) detects two mRNA species (3.7 and 2.1 kb) in MDV- and HVT-infected cells. Maray T, et al. **Virus Genes** 1988 Jun; 1(3):287–90

IMMUNOLOGY

In situ production of interferon in tissues of chickens exposed as embryos to turkey herpesvirus and Marek's disease virus. Sharma JM. **Am J Vet Res** 1989 Jun;50(6):882–6

Development of anti-tumoral cell-mediated cytotoxicity during the course of Marek's disease in chickens. Queré P, et al. **Ann Rech Vet** 1988;19(3):193–201

Transplantable Marek's disease lymphomas. III. Induction of MHC-restricted tumor immunity by lymphoblastoid cells in F1 hosts. DiFronzo NL, et al. **Int J Cancer** 1989 Sep 15;44(3):474–6

Immune response versus susceptibility to Marek's disease. Calnek BW, et al. **Poult Sci** 1989 Jan;68(1):17–26

The role of the reticuloendothelial system in the immunopathology of Marek's disease. Gupta MK, et al. **Vet Microbiol** 1989 Jul;20(3):223–34

Influence of thymic hormone on cell-mediated and humoral immune responses in Marek's disease. Quere P, et al. **Vet Microbiol** 1989 Jan;19(1):53–64

MICROBIOLOGY

Properties of producer and non-producer clones of a Marek's disease turkey lymphoblastoid cell line. Nazerian K, et al. **Avian Dis** 1988 Jul-Sep;32(3):486–93

PATHOLOGY

Some aspects of lymphomagenesis of Marek's disease of chickens. Nazerian K. **Leukemia** 1988 Dec;2(12 Suppl):198S–203S (49 ref.)

PREVENTION & CONTROL

[Isolation of the pathogenic virus of Marek's disease from a flock of chickens vaccinated with the turkey herpes vaccine] Jurajda V, et al. **Vet Med (Praha)** 1988 Dec; 33(12):741–6 (Eng. Abstr.) (Cze)

MAREK'S DISEASE VIRUS

ENZYMOLOGY

Partial relaxation of enzyme-product binding by refolding of the growing chain in autocatalytic RNA replication. Fernández A. **Naturwissenschaften** 1989 Feb;76(2):69–71

GENETICS

Partial transcription map of Marek's disease herpesvirus in lytically infected cells and lymphoblastoid cell lines. Schat KA, et al. **Int J Cancer** 1989 Jul 15;44(1):101–9

Nucleotide sequence and characterization of the Marek's disease virus homologue of glycoprotein B of herpes simplex virus. Ross LJ, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1789–804

Discovery of noninfectious viral genes complementary to Marek's disease herpes virus in quail susceptible to cholesterol-induced atherosclerosis. Shih JC, et al. **J Nutr** 1989 Feb;119(2):294–8 (23 ref.)

Loss of Marek's disease virus tumorigenicity is associated with truncation of RNAs transcribed within BamHI-H. Bradley G, et al. **J Virol** 1989 Oct;63(10):4129–35

Structure of the Marek's disease virus BamHI-H gene family: genes of putative importance for tumor induction. Bradley G, et al. **J Virol** 1989 Jun;63(6):2534–42

A repeat sequence, GGGTTA, is shared by DNA of human herpesvirus 6 and Marek's disease virus. Kishi M, et al. **J Virol** 1988 Dec;62(12):4824–7

RNA transcripts of Marek's disease virus (MDV) serotype-1 in infected and transformed cells. Maray T, et al. **Virus Genes** 1988 Oct;2(1):49–68

Nucleotide sequence of the Marek's disease virus (MDV) RB-1B A antigen gene and the identification of the MDV A antigen as the herpes simplex virus-1 glycoprotein C homologue. Binns MM, et al. **Virus Res** 1989 Apr; 12(4):371–81

GROWTH & DEVELOPMENT

Maintenance of Marek's disease herpesvirus latency in vitro by a factor found in conditioned medium. Buscaglia C, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2809–18

IMMUNOLOGY

Immunohistological identification of both infectious bursal and Marek virus antigens in the bursa of Fabricius. Fernández A, et al. **DTW** 1989 Apr;96(4):192–4

Transplantable Marek's disease lymphomas. III. Induction of MHC-restricted tumor immunity by lymphoblastoid cells in F1 hosts. DiFronzo NL, et al. **Int J Cancer** 1989 Sep 15;44(3):474–6

Marek's disease virus serotype-1 antigens A and B and their unglycosylated precursors detected by Western blot analysis of infected cells. Davidson I, et al. **Virus Genes** 1988 Oct;2(1):5–18

ISOLATION & PURIFICATION

[Isolation of the pathogenic virus of Marek's disease from a flock of chickens vaccinated with the turkey herpes vaccine] Jurajda V, et al. **Vet Med (Praha)** 1988 Dec; 33(12):741–6 (Eng. Abstr.) (Cze)

METABOLISM

Synthesis and processing of the Marek's disease herpesvirus B antigen glycoprotein complex. Sithole I, et al. **J Virol** 1988 Nov;62(11):4270–9

PATHOGENICITY

Augmentation of retrovirus-induced lymphoid leukosis by Marek's disease herpesviruses in White Leghorn chickens. Bacon LD, et al. **J Virol** 1989 Feb;63(2):504–12

Some aspects of lymphomagenesis of Marek's disease of chickens. Nazerian K. **Leukemia** 1988 Dec;2(12 Suppl):198S–203S (49 ref.)

PHYSIOLOGY

Pathogenesis of Marek's disease virus-induced local lesions. 1. Lesion characterization and cell line establishment. Calnek BW, et al. **Avian Dis** 1989 Apr-Jun;33(2):291–302

Properties of producer and non-producer clones of a Marek's disease turkey lymphoblastoid cell line. Nazerian K, et al. **Avian Dis** 1988 Jul-Sep;32(3):486–93

MARFAN SYNDROME

First International Symposium on the Marfan syndrome. July 8–10, 1988, Baltimore, Maryland. Abstracts. **Am J Med Genet** 1989 Feb;32(2):239–51

Marfan's syndrome: MDs must take great care diagnosing, treating. Lee RE. **Can Med Assoc J** 1989 May 1; 140(9):1077–8

Multifocal Langerhans cell granulomatosis and cranial diabetes insipidus in a patient with marfanoid habitus—a case report. Sivasankaran S, et al. **J Assoc Physicians India** 1988 Nov;36(11):665–7

Marfan syndrome in the parturient. Bailey MK, et al. **J S C Med Assoc** 1989 Jul;85(7):327–30

Dissecting aortic aneurysm in pregnant women without Marfan disease. Snir E, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):463–5 (19 ref.)

[Marfan's syndrome in the pediatric practice] Deliagin VM, et al. **Pediatriia** 1989;(6):65–70 (Rus)

COMPLICATIONS

A unique association of Marfan syndrome with craniofacial hypoplasia, oligophrenia and severe microphthalmia. Capocchi G, et al. **Ital J Neurol Sci** 1988 Aug;9(4):397–400

Marfanoid hypermobility syndrome. Adlakha A, et al. **J Indian Med Assoc** 1988 Apr;86(4):103–5

Marfan's syndrome associated with Wolff-Parkinson-White syndrome type B. Banerjee AK. **Jpn Heart J** 1988 May; 29(3):377–80

Early berry aneurysm formation in Marfan's syndrome. Stehbens WE, et al. **Surg Neurol** 1989 Mar;31(3):200–2

[Aortic media necrosis in Marfan's disease in young adults. Apropos of 5 surgically treated cases, with 3 survivals] Defraigne JO, et al. **Arch Mal Coeur** 1988 Aug;81(8):991–5 (Eng. Abstr.) (Fre)

[Malignant quadrivalvular dysplasia of Marfan syndrome in a neonate] Pernot C, et al. **Arch Mal Coeur** 1989 May; 82(5):797–801 (Eng. Abstr.) (Fre)

[Aneurysm of the internal carotid artery and cervical mega-dolicho-arteries in Marfan syndrome] Croisile B, et al. **Neurochirurgie** 1988;34(5):342–7 (Eng. Abstr.) (Fre)

[Hepato-renal polycystosis, Marfan's syndrome and spina bifida occulta: a complex association. Description of a clinical case] Ortino O, et al. **Minerva Med** 1988 Dec; 79(12):1105–7 (Eng. Abstr.) (Ita)

[Congenital absence of pericardium in a case of a variant of Marfan syndrome] Corti P, et al. **Recenti Prog Med** 1989 Feb;80(2):63–6 (Eng. Abstr.) (Ita)

[A case of three-channeled dissection in Marfan's syndrome after Bentall's operation] Watanabe M, et al. **Kyobu Geka** 1988 Sep;41(10):825–9 (Eng. Abstr.) (Jpn)

[Surgical treatment of the thoracoabdominal aortic aneurysms with Marfan's syndrome] Yasuda K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):355–61 (19 ref.) (Eng. Abstr.) (Jpn)

[Marfan's syndrome associated with a frontal arachnoid cyst] Ikeda M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1076–8 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Arachnodactyly and unusual dermatoglyphics: study of a case. Krush AJ, et al. **Am J Med Genet** 1988 Sep; 31(1):57–62

Clinical manifestations of the Marfan syndrome. Cohen PR, et al. **Int J Dermatol** 1989 Jun;28(5):291–9 (45 ref.)

Cardiovascular, skeletal and ophthalmologic manifestations in patients with Marfan's syndrome. Algom M, et al. **Isr J Med Sci** 1989 May;25(5):261–3

Marfan's syndrome starting to yield secrets [news] Kirn TF. **JAMA** 1988 Dec 2;260(21):3108

Severe perinatal Marfan syndrome. Gross DM, et al. **Pediatrics** 1989 Jul;84(1):83–9

[A forme fruste of Marfan's syndrome in congenital aortic stenosis?] Sochman J, et al. **Vnitr Lek** 1988 Sep;34(9):911–3 (Eng. Abstr.) (Cze)

[Mitral insufficiency and Marfan syndrome in children] Krag-Olsen B, et al. **Ugeskr Laeger** 1988 Nov 14; 150(46):2825–7 (Eng. Abstr.) (Dan)

[The Beals-Hecht syndrome (congenital contractural

arachnodactyly) revealed in a neonate] Philip N, et al. **Pediatrie** 1988;43(7):609–12 (Eng. Abstr.) **(Fre)**
[Marfan's syndrome] Melamud MIa, et al. **Klin Med (Mosk)** 1988 Jun;66(6):20–6 (40 ref.) **(Rus)**
[Differential diagnosis of Marfan's syndrome] Narycheva IA, et al. **Sov Med** 1988;(12):32–5 (31 ref.) **(Rus)**
[Marfan syndrome and dilated aortic root—clinical findings, diagnosis and case reports] Brodin LA, et al. **Lakartidningen** 1989 Jun 7;86(23):2207–9 **(Swe)**

GENETICS

Dural ectasia is a common feature of the Marfan syndrome. Pyeritz RE, et al. **Am J Hum Genet** 1988 Nov;43(5):726–32
Aortic root dilatation associated with partial trisomy 7(q31.2——qter). Roche KB, et al. **Pediatr Cardiol** 1989 Winter;10(1):53–5
[Natural and recombinant interferons provide different protection of human cells with impaired repair system (Marfan syndrome) against mutagens] Iakubovskaia EL, et al. **Genetika** 1988 Nov;24(11):2050–5 (Eng. Abstr.) **(Rus)**
[A case of familial Marfan syndrome] Vasil'ev IuM, et al. **Ter Arkh** 1989;61(5):135–6 **(Rus)**
[A case of familial Marfan syndrome without manifested ocular anomalies] Kavtaradze NP, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):124–8 (Eng. Abstr.) **(Rus)**

HISTORY

[The Marfan hands of Niccolò Paganini] Mantero R. **Ann Chir Main** 1988;7(4):335–40 **(Fre)**
[The man behind the syndrome: Antonin Marfan. He introduced the discovery of congenital connective tissue diseases] Zettergvist P, et al. **Lakartidningen** 1989 Jun 7; 86(23):2205–6 **(Swe)**

METABOLISM

Aortic 125I–albumin transport in patients with Marfan's syndrome and annuloaortic ectasia. Kennedy JH, et al. **Atherosclerosis** 1988 Sep;73(1):33–7

MORTALITY

Marfan's syndrome: natural history and long–term follow–up of cardiovascular involvement. Marsalese DL, et al. **J Am Coll Cardiol** 1989 Aug;14(2):422–8; discussion 429–31

PATHOLOGY

Congenital fiber type disproportion in an adult: a morphometric and microchemical study. Haltia M, et al. **Acta Neurol Scand** 1988 Jul;78(1):65–71
"Osmiophilic elastolysis" of peripheral organ arteries in patients with Marfan's syndrome. Takebayashi S, et al. **Acta Pathol Jpn** 1988 Nov;38(11):1433–43
Asymmetric Marfan syndrome. Burgio RG, et al. **Am J Med Genet** 1988 Aug;30(4):905–9
Unilateral lens dislocation and axial elongation in Marfan syndrome [letter] Rasooly R, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):135–6
[Cardiovascular pathology in Marfan syndrome. Study of 11 children using two–dimensional echocardiography] Modesto C, et al. **Rev Esp Cardiol** 1989 May;42(5):318–21 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Comparison of cardiovascular and skeletal features of primary mitral valve prolapse and Marfan syndrome. Roman MJ, et al. **Am J Cardiol** 1989 Feb 1;63(5):317–21
Marfan syndrome: neuropsychological aspects. Hofman KJ, et al. **Am J Med Genet** 1988 Oct;31(2):331–8
Arterial hemodynamic indexes in Marfan's syndrome. Yin FC, et al. **Circulation** 1989 Apr;79(4):854–62

RADIOGRAPHY

Pulmonary arterial aneurysms in Marfan's syndrome. Disler LJ, et al. **Int J Cardiol** 1988 Oct;21(1):79–82

SURGERY

Impact of cardiovascular operation on survival in the Marfan patient. Svensson LG, et al. **Circulation** 1989 Sep;80(3 Pt 1):I233–42
Surgical management of children and young adults with Marfan syndrome and pectus excavatum. Scherer LR, et al. **J Pediatr Surg** 1988 Dec;23(12):1169–72
Diagnosis of coronary artery dehiscence and pseudoaneurysm formation in postoperative Marfan patient by color flow Doppler echocardiography. Rice MJ, et al. **JCU** 1989 Jun;17(5):359–65
Marfan's syndrome, pregnancy, and the cardiac surgeon. Smith VC, et al. **Milit Med** 1989 Aug;154(8):404–6 (23 ref.)
[One stage operation for annulo–aortic ectasia and pectus excavatum caused by Marfan's syndrome] Hiekata T, et al. **Kyobu Geka** 1988 May;41(6):513–6 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of aneurysm of the ascending aorta in Marfan syndrome] Tsukerman GI, et al. **Vestn Khir** 1988 Jul;141(7):11–5 (Eng. Abstr.) **(Rus)**
[Surgical treatment of aortic root dilatation] Ivert T, et al. **Lakartidningen** 1989 Jun 7;86(23):2210–3 **(Swe)**

MARGARINE

Geographic and temporal variations of sugar and margarine consumption in relation to Crohn's disease. Sonnenberg A. **Digestion** 1988;41(3):161–71
Choice of spread by a random sample of the British population. Association with socio–economic status and risk factors for cardiovascular disease. Whichelow MJ. **Eur J Clin Nutr** 1989 Jan;43(1):1–10

MARGINAL ULCER see under **PEPTIC ULCER**

MARIDOMYCINS see **LEUCOMYCINS**

MARIE–BAMBERGER DISEASE see **OSTEOARTHROPATHY, SECONDARY HYPERTROPHIC**

MARIE–STRUEMPELL DISEASE see **SPONDYLITIS, ANKYLOSING**

MARIJUANA see **CANNABIS**

MARIJUANA ABUSE see **CANNABIS ABUSE**

MARIJUANA SMOKING

Ovine placental perfusion balance: effect of marijuana smoke. Clapp JF 3d, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1430–4
Maternal drug use and risk of childhood nonlymphoblastic leukemia among offspring. An epidemiologic investigation implicating marijuana (a report from the Childrens Cancer Study Group). Robison LL, et al. **Cancer** 1989 May 15; 63(10):1904–11
Marijuana and Tourette's syndrome [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):444–5
Prevalence and patterns of combined alcohol and marijuana use. Norton R, et al. **J Stud Alcohol** 1988 Jul;49(4):378–80
Inhalation marijuana as an antiemetic for cancer chemotherapy. Vinciguerra V, et al. **N Y State J Med** 1988 Oct;88(10):525–7

ADVERSE EFFECTS

Passive inhalation of marijuana, phencyclidine, and freebase cocaine ("crack") by infants. Schwartz RH. **Am J Dis Child** 1989 Jun;143(6):644
Chronic marijuana use by adults: a rebuttal [letter] Schwartz RH. **Am J Psychiatry** 1989 Sep;146(9):1233–4
Postnatal consequences of maternal marijuana use in humans. Fried PA. **Ann N Y Acad Sci** 1989;562:123–32
Effects of marijuana use during pregnancy on newborn cry. Lester BM, et al. **Child Dev** 1989 Aug;60(4):765–71
Metastatic lung cancer in a young marijuana smoker [letter] Ferguson RP, et al. **JAMA** 1989 Jan 6;261(1):41–2
Occasional use of marijuana [letter] Schwartz RH. **JAMA** 1988 Dec 23–30;260(24):3591–2
Isolated uvulitis secondary to marijuana use. Guarisco JL, et al. **Laryngoscope** 1988 Dec;98(12):1309–12 (18 ref.)
12– and 24–month neurobehavioural follow–up of children prenatally exposed to marihuana, cigarettes and alcohol. Fried PA, et al. **Neurotoxicol Teratol** 1988 Jul–Aug; 10(4):305–13
Effects of smoked marijuana on human social behavior in small groups. Foltin RW, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):539–41
Marijuana as a potential carcinogen [letter] Donepudi SK. **South Med J** 1989 May;82(5):671–2
Marijuana as a potential respiratory tract carcinogen: a retrospective analysis of a community hospital population. Taylor FM 3d. **South Med J** 1988 Oct;81(10):1213–6

BLOOD

Carboxy– and oxyhemoglobin in pregnant ewe and fetus after inhalation of marijuana, marijuana placebo and tobacco cigarette smoke. McTiernan MJ, et al. **Life Sci** 1988; 43(24):2043–7
Decreased serum cotinine levels in smokers of both tobacco and marijuana as compared with smokers of tobacco only. Van Vunakis H, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):895–8

EPIDEMIOLOGY

Sinsemilla and its cultivation in climatic conditions of Czechoslovakia—a potential danger of abuse of marihuana of high quality. Hanuš L, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:11–22
Methodological issues in the measurement of substance use. Day NL, et al. **Ann N Y Acad Sci** 1989;562:8–13
Patterns of marihuana smoking among Brazilian students. Silva MT, et al. **Drug Alcohol Depend** 1989 Apr; 23(2):159–64
Three positive shifts away from marijuana use, 1979–1988. Okrie TR. **J Sch Health** 1989 Jan;59(1):34–6 (10 ref.)

LEGISLATION & JURISPRUDENCE

Physicians' attitudes toward the legalization of marijuana use. Linn LS, et al. **West J Med** 1989 Jun;150(6):714–7

METABOLISM

Relative sensitivity and specificity of salivary and serum cotinine in identifying tobacco–smoking status of self–reported nonsmokers and smokers of tobacco and/or marijuana. van Vunakis H, et al. **Arch Environ Health** 1989 Jan–Feb;44(1):53–8
Determination of delta 1–tetrahydrocannabinol in human fat biopsies from marihuana users by gas chromatography–mass spectrometry. Johansson E, et al. **Biomed Chromatogr** 1989 Jan;3(1):35–8

PHYSIOPATHOLOGY

Acute changes in cerebral blood flow associated with marijuana smoking. Mathew RJ, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):118–28
Effects of smoked marijuana on food intake and body weight of humans living in a residential laboratory. Foltin RW, et al. **Appetite** 1988 Aug;11(1):1–14
Alcohol and marijuana: comparative dose effect profiles in humans. Heishman SJ, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):649–55

PREVENTION & CONTROL

Increased exposure to alcohol and cannabis education and changes in use patterns. Smart RG. **J Drug Educ** 1989; 19(2):183–94

PSYCHOLOGY

Adolescent alcohol and marijuana use: a longitudinal assessment of a social learning perspective. Johnson V. **Am J Drug Alcohol Abuse** 1988;14(3):419–39
Marijuana sensitivity and panic anxiety. Szuster RR, et al. **J Clin Psychiatry** 1988 Nov;49(11):427–9
The marihuana perception inventory: stage 2—confirmatory evidence. Gabany S, et al. **J Drug Educ** 1988;18(4):359–66
Adolescents' perceptions of cannabis use by their peers: does it have anything to do with behavior? Sheppard MA. **J Drug Educ** 1989;19(2):157–64
Undergraduate marijuana use and anger. Stoner SB. **J Psychol** 1988 Jul;122(4):343–7
Acute effects of marijuana smoke on complex operant behavior in rhesus monkeys. Schulze GE, et al. **Life Sci** 1989;45(6):465–75
The regularity of smoked marijuana self–administration. Foltin RW, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):483–6
Delta–9–tetrahydrocannabinol content and human marijuana self–administration. Chait LD. **Psychopharmacology (Berlin)** 1989;98(1):51–5

URINE

Urinary excretion half–life of delta 1–tetrahydrocannabinol–7–oic acid in heavy marijuana users after smoking. Johansson E, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):218–23
Bonded phase adsorption/thin–layer chromatography testing for marihuana metabolites [letter] Martinez JA. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):273–5
Chronic marijuana (MJ) smoking and urinary cortisol (UC) excretion in the monkey. Paule MG, et al. **Proc West Pharmacol Soc** 1989;32:189

MARINE BIOLOGY

see related
OCEANOGRAPHY
PLANKTON

Integumental nutrient uptake by aquatic organisms. Wright SH, et al. **Annu Rev Physiol** 1989;51:585–600 (73 ref.)
Dehalogenation in marine sediments containing natural sources of halophenols. King GM. **Appl Environ Microbiol** 1988 Dec;54(12):3079–85
Marine biology of antarctic organisms. Proceedings of the International Conference on the Marine Biology of Antarctica. Ravello, Italy. Proceedings. **Comp Biochem Physiol [B]** 1988;90(3):459–637
Cytometry in aquatic sciences. Dedicated to Reuben Lasker (1930–1988). **Cytometry** 1989 Sep;10(5):497–669
Cytometry in the aquatic sciences. Yentsch CM, et al. **Cytometry** 1989 Sep;10(5):497–9
Microparticulate feeds for marine suspension–feeders. Langdon CJ, et al. **J Microencapsul** 1985 Jan–Mar;2(1):1–11 (61 ref.)
Drugs from the sea. Imbesi A. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:1–21
[Biometrico–statistical evaluation of a biological sample] Carli A, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):413–20 (Eng. Abstr.) **(Ita)**

METHODS

Alternative diets for maintaining and rearing cephalopods in captivity. DeRusha RH, et al. **Lab Anim Sci** 1989 Jul; 39(4):306–12

MARINE TOXINS

Peptide toxins from venomous Conus snails. Gray WR, et al. **Annu Rev Biochem** 1988;57:665–700 (158 ref.)
Brevetoxins: unique polyether dinoflagellate toxins. Baden DG. **FASEB J** 1989 May;3(7):1807–17 (56 ref.)

Naming of cyclic heptapeptide toxins of cyanobacteria (blue-green algae). Carmichael WW, et al. **Toxicon** 1988; 26(11):971-3

ANALYSIS

Laboratory procedures for detoxification of equipment and waste contaminated with brevetoxins PbTx-2 and PbTx-3. Poli MA. **J Assoc Off Anal Chem** 1988 Sep-Oct; 71(5):1000-2

Comparison evaluation of liquid chromatographic and bioassay methods of analysis for determination of paralytic shellfish poisons in shellfish tissues. Salter JE, et al. **J Assoc Off Anal Chem** 1989 Jul-Aug;72(4):670-3

Some chemical properties of maitotoxin, a putative calcium channel agonist isolated from a marine dinoflagellate. Yokoyama A, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):184-7

Tetramine: occurrence in marine organisms and pharmacology. Anthoni U, et al. **Toxicon** 1989;27(7):707-16 (81 ref.)

The toxin tetramine from the "edible" whelk Neptunea antiqua. Anthoni U, et al. **Toxicon** 1989;27(7):717-23

Variations in major toxin composition for six clones of Ptychodiscus brevis. Baden DG, et al. **Toxicon** 1988; 26(10):961-3

Distribution and chemical composition of the toxic skin secretions from trunkfish (family Ostraciidae). Goldberg AS, et al. **Toxicon** 1988;26(7):651-63

Tetrodotoxin in two species of ribbon worm (Nemertini), Lineus fuscoviridis and Tubulanus punctatus. Miyazawa K, et al. **Toxicon** 1988;26(9):867-74

Seasonal frequency of ciguatoxic barracuda in southwest Puerto Rico. Tosteson TR, et al. **Toxicon** 1988; 26(9):795-801

[Occurrence and determination of okadaic acids in mussels from the German North Sea coast] Luckas B, et al. **Z Lebensm Unters Forsch** 1988 Nov;187(5):421-4 (Eng. Abstr.) (Ger)

GENETICS

Cloning and expression of a synthetic gene for Cerebratulus lacteus neurotoxin B-IV. Howell ML, et al. **J Biol Chem** 1989 Sep 15;264(26):15268-73

IMMUNOLOGY

Production and characterization of antibodies against microcystins. Chu FS, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1928-33

ISOLATION & PURIFICATION

Isolation and structure of a cytotoxic epoxy sterol from the marine mollusc Planaxis sulcatus. Alam M, et al. **Steroids** 1988 Jul-Aug;52(1-2):45-50

Protogonyaulax cohorticula, a toxic dinoflagellate found in the Gulf of Thailand. Kodama M, et al. **Toxicon** 1988; 26(8):707-12

Toxins extracted from Australian specimens of the crab, Eriphia sebana (Xanthidae). Llewellyn LE, et al. **Toxicon** 1989;27(5):579-86

Shark repellent lipophilic constituents in the defense secretion of the Moses sole (Pardachirus marmoratus). Tachibana K, et al. **Toxicon** 1988;26(9):839-53

[Echinoderms and their toxins] Becker H. **Pharm Unserer Zeit** 1988 Sep;17(5):145-53 (0 ref.) (Ger)

PHARMACOLOGY

Inhibitory effect of a marine-sponge toxin, okadaic acid, on protein phosphatases. Specificity and kinetics. Bialojan C, et al. **Biochem J** 1988 Nov 15;256(1):283-90

The mode of inotropic action of ciguatoxin on guinea-pig cardiac muscle. Seino A, et al. **Br J Pharmacol** 1988 Nov; 95(3):876-82

Antitumor activity and mechanism of action of the novel marine natural products mycalamide-A and -B and onnamide. Burres NS, et al. **Cancer Res** 1989 Jun 1; 49(11):2935-40

Inhibition of parathyroid hormone release by maitotoxin, a calcium channel activator. Fitzpatrick LA, et al. **Endocrinology** 1989 Jan;124(1):97-103

Maitotoxin, a potent, general activator of phosphoinositide breakdown. Gusovsky F, et al. **FEBS Lett** 1989 Jan 30; 243(2):307-12

The actions of a red tide toxin from Ptychodiscus brevis on single sodium channels in mammalian neuroblastoma cells. Sheridan RE, et al. **FEBS Lett** 1989 Apr 24; 247(2):448-52

Calcium-dependent effects of maitotoxin on phosphoinositide breakdown and on cyclic AMP accumulation in PC12 and NCB-20 cells. Gusovsky F, et al. **Mol Pharmacol** 1989 Jul; 36(1):44-53

N-methylanatoxinol isomers: derivatives of the agonist (+)-anatoxin-a block the nicotinic acetylcholine receptor ion channel. Swanson KL, et al. **Mol Pharmacol** 1989 Feb; 35(2):223-31

Comparison of effects of anatoxin-a(s) and paraoxon, physostigmine and pyridostigmine on mouse brain cholinesterase activity. Cook WO, et al. **Toxicon** 1988; 26(8):750-3

POISONING

Ciguatera poisoning presenting as psychiatric disorder [letter] Lipkin KM. **Arch Gen Psychiatry** 1989 Apr;46(4):384-5

Ciguatera poisoning in the Pacific [editorial] Reppun JI. **Hawaii Med J** 1988 Oct;47(10):462

Ciguatera fish poisoning. A jet age peril. Schatz IJ. **Hosp Pract [Off]** 1989 Sep 15;24(9):79-86, 89, 93-6 (8 ref.)

Ciguatera fish poisoning. Glantz RH, et al. **IMJ** 1988 Aug; 174(2):101-2

Intoxications from the seas: ciguatera, scombroid, and paralytic shellfish poisoning. Sanders WE Jr. **Infect Dis Clin North Am** 1987 Sep;1(3):665-76 (34 ref.)

Polyneuropathy secondary to ciguatoxin poisoning. Sozzi G, et al. **Ital J Neurol Sci** 1988 Oct;9(5):491-5

Ciguatera fish poisoning. Hampton MT, et al. **J Am Acad Dermatol** 1989 Mar;20(3):510-1

A large common-source outbreak of ciguatera fish poisoning. Frenette C, et al. **J Infect Dis** 1988 Nov;158(5):1128-31

Ciguatera and military activity [letter] Conway GW, et al. **Lancet** 1989 Apr 15;1(8642):848

Ciguatera in the Pacific: a link with military activities. Ruff TA. **Lancet** 1989 Jan 28;1(8631):201-5

Ciguatera and mannitol: experience with a new treatment regimen. Pearn JH, et al. **Med J Aust** 1989 Jul 17; 151(2):77-80

Ciguatera fish poisoning. Hashmi MA, et al. **N J Med** 1989 Jun;86(6):469-71

Ciguatera intoxication from Texas gulf coast fish [letter] Bogart JN, et al. **Tex Med** 1989 Feb;85(2):15

Variations in symptomatology of ciguatera poisoning. Kodama AM, et al. **Toxicon** 1989;27(5):593-5

Histopathological studies on experimental marine toxin poisoning--III. Morphological changes in the liver and thymus of male ICR mice induced by goniodomin A, isolated from the dinoflagellate Goniodoma pseudogoniaulax. Terao K, et al. **Toxicon** 1989;27(2):269-71

Ciguatera in a young baby [letter] **Vet Hum Toxicol** 1989 Feb;31(1):71

Ciguatera-like poisoning in the Mediterranean. Raikhlin-Eisenkraft B, et al. **Vet Hum Toxicol** 1988 Dec; 30(6):582-3

[Fish poisoning in the Caribbean: ciguatera (letter)] Mebs D, et al. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):1009 (Ger)

[Biotoxins of hydrobionts and prevention of food poisoning] Gabovich RD, et al. **Vopr Pitan** 1989 Mar-Apr;(2):4-11 (79 ref.) (Rus)

TOXICITY

Toxic mussels and okadaic acid induce rapid hypersecretion in the rat small intestine. Edebo L, et al. **APMIS** 1988 Nov; 96(11):1029-35

Effect of biological toxins on gap-junctional intercellular communication in Chinese hamster V79 cells. Jone C, et al. **Cell Biol Toxicol** 1987 Mar;3(1):1-15

Effect of a marine toxin on human peripheral blood monocytes. Hokama Y, et al. **J Clin Lab Anal** 1989; 3(4):215-21

Diarrhetic shellfish toxin, dinophysistoxin-1, is a potent tumor promoter on mouse skin. Fujiki H, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1089-93

Histopathological observations on organs from rabbits injected with the skin toxin of the Arabian Gulf catfish (Arius bilineatus, Valenciennes). Alnaqeeb MA, et al. **Toxicon** 1989;27(7):789-95

Isolated rat liver perfusion studies with cyclic heptapeptide toxins of Microcystis and Oscillatoria (freshwater cyanobacteria). Berg K, et al. **Toxicon** 1988;26(9):827-37

Partial structural determination of hepatotoxic peptides from Microcystis aeruginosa (cyanobacterium) collected in ponds of central China. Carmichael WW, et al. **Toxicon** 1988;26(12):1213-7

Respiratory effects of brevetoxin and saxitoxin in awake guinea pigs. Franz DR, et al. **Toxicon** 1989;27(6):647-54

Hemolytic and toxic properties of Hydra attenuata nematocysts. Klug M, et al. **Toxicon** 1989;27(3):325-39

Negative inotropic and arrhythmic effects of high doses of ciguatoxin on guinea-pig atria and papillary muscles. Lewis RJ. **Toxicon** 1988;26(7):639-49

Toxicity and paralytic shellfish toxin profiles of the xanthid crabs, Lophozozymus pictor and Zosimus aeneus, collected from some Australian coral reefs. Llewellyn LE, et al. **Toxicon** 1989;27(5):596-600

Toxicity to mice and sheep of a bloom of the cyanobacterium (blue-green alga) Anabaena circinalis. Runnegar MT, et al. **Toxicon** 1988;26(6):599-602

Serological cross-reactions between crab saxitoxin-induced protein and paralytic shellfish poison-contaminated shellfish. Smith DS, et al. **Toxicon** 1989;27(5):601-6

Human poisoning by ingestion of a sea hare (Dolabella auricularia). Sorokin M. **Toxicon** 1988;26(11):1095-7

The effects of single L-amino acid substitutions on the lethal potencies of the microcystins. Stoner RD, et al. **Toxicon** 1989;27(7):825-8

Blood pressure and hepatocellular effects of the cyclic heptapeptide toxin produced by the freshwater cyanobacterium (blue-green alga) Microcystis aeruginosa strain PCC-7820. Theiss WC, et al. **Toxicon** 1988; 26(7):603-13

Toxins contained in Microcystis species of cyanobacteria (blue-green algae). Watanabe MF, et al. **Toxicon** 1988; 26(11):1017-25

MARINESCO-SJOGREN SYNDROME see **SPINOCEREBELLAR DEGENERATION**

MARITAL RELATIONSHIP see **MARRIAGE**

MARITAL THERAPY

Differences between alcoholic couples accepting and rejecting an offer of outpatient marital therapy. O'Farrell TJ, et al. **Am J Drug Alcohol Abuse** 1986;12(3):285-94

You don't have to be sick to get better [editorial] Jones SL. **Arch Psychiatr Nurs** 1989 Feb;3(1):1-2

The comparability of solicited versus clinic subjects in alcohol treatment research. Pearlman S, et al. **Br J Addict** 1989 May;84(5):523-32

Successful treatment of a Chinese with primary ejaculatory failure [letter] Chiu LP. **Br J Psychiatry** 1988 Apr; 152:580-1

Assessing perceived patterns of behavior exchange in relationships. Forman BD. **J Clin Psychol** 1988 Nov; 44(6):972-81

[Marital and sex counseling--a report of results (catamnestic pilot study)] Drunkenmölle C. **Z Arztl Fortbild (Jena)** 1989; 83(9):473-6 (Ger)

METHODS

Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. Craske MG, et al. **Behav Res Ther** 1989; 27(2):131-40

Research-structured vs clinically flexible versions of social learning-based marital therapy. Jacobson NS, et al. **Behav Res Ther** 1989;27(2):173-80

A comparison of brief advice and conjoint therapy in the treatment of alcohol abuse: the results of the Marital Systems Study. Zweben A, et al. **Br J Addict** 1988 Aug; 83(8):899-916

Action methods in systemic therapy: dramatizing ideal futures and reformed pasts with couples. Chasin R, et al. **Fam Process** 1989 Jun;28(2):121-36 (41 ref.)

Psychoanalysis, marital therapy, and object-relations theory. Finkelstein L. **J Am Psychoanal Assoc** 1988;36(4):905-31

The role of cognitions in marital relationships: definitional, methodological, and conceptual issues. Baucom DH, et al. **J Consult Clin Psychol** 1989 Feb;57(1):31-8 (54 ref.)

On the use of symbolic labels in psychotherapy outcome research: comment on Wills, Faitler, and Snyder. Collins FL Jr, et al. **J Consult Clin Psychol** 1988 Dec;56(6):932-3

Marital therapy and spouse involvement in the treatment of depression, agoraphobia, and alcoholism. Jacobson NS, et al. **J Consult Clin Psychol** 1989 Feb;57(1):5-10 (36 ref.)

Distinguishing specific from nonspecific interventions in comparative outcome studies: reply to Collins and Thompson. Snyder DK, et al. **J Consult Clin Psychol** 1988 Dec;56(6):934-5

Behavioral versus insight-oriented marital therapy: effects on individual and interspousal functioning. Snyder DK, et al. **J Consult Clin Psychol** 1989 Feb;57(1):39-46

Treatment of relationship dysfunction: an empirical evaluation of group and conjoint behavioral marital therapy. Wilson GL, et al. **J Consult Clin Psychol** 1988 Dec;56(6):929-31

Identifying and treating the sexual repercussions of incest: a couples therapy approach. Maltz W. **J Sex Marital Ther** 1988 Summer;14(2):142-70

Marital and family therapy in alcoholism treatment. O'Farrell TJ. **J Subst Abuse Treat** 1989;6(1):23-9 (42 ref.)

General management issues in depressive illness--family interventions. Keegan DL. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):420-5 (24 ref.)

A conjugal curriculum vitae method: behavioral assessment and treatment of marital problems. Pléchaty M. **Psychol Rep** 1988 Aug;63(1):151-9

[Correlations between psychotherapy and partnership--reflections on including the partner in inpatient psychotherapy] Riehl-Emde A. **Psychother Psychosom Med Psychol** 1988 Sep-Oct; 38(9-10):359-64 (36 ref.) (Eng. Abstr.) (Ger)

[Marital, family and sexual therapy with special reference to cognitive behavioral orientation] Scholz OB. **Z Klin Psychol Psychopathol Psychother** 1988;36(3):230-44 (95 ref.) (Eng. Abstr.) (Ger)

MARKER ANTIGENS see **ANTIGENS, DIFFERENTIATION**

MARKERS, BIOLOGICAL see **BIOLOGICAL MARKERS**

MARKERS, DNA see **GENETIC MARKERS**

MARKERS, GENETIC see **GENETIC MARKERS**

MARKERS, TUMOR see **TUMOR MARKERS, BIOLOGICAL**

MARKETING OF HEALTH SERVICES

Marketing radiology and radiologic services. Marasco JA Jr, et al. **AJR** 1989 Jan;152(1):191-4

Funding and marketing of an investigational drug service

[letter] Rockwell MM, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1339–40
Establishing a market niche: meeting the competitive challenge. **Am Pharm** 1989 Mar;NS29(3):61–9
Marketing your services. Speak with sense. Foxman CA. **ASHA** 1988 Sep;30(9):46–7
Marketing your services. Quality sells. Griffin KM. **ASHA** 1988 Sep;30(9):48–51
Marketing your services. President's page. Holley SC. **ASHA** 1988 Sep;30(9):37–8
Marketing your services. Strategies that work. Matthews CB. **ASHA** 1988 Sep;30(9):22–5
Marketing your services. Case study 5. State association makes May a year-round event. Shanoff CS. **ASHA** 1988 Sep;30(9):33–5
Marketing your services. Case study 4. A clinic profits from board members' help. Signer MB. **ASHA** 1988 Sep; 30(9):31–3
Marketing your services. Case study 2. A school system wins with team players. Signer MB. **ASHA** 1988 Sep;30(9):27–9
Marketing your services. Case study 3. A hospital capitalizes on opportunities. Signer MB. **ASHA** 1988 Sep;30(9):29–31
Marketing your services. Case study 1. A private practitioner prepares for PL 99-457. Straub SA. **ASHA** 1988 Sep; 30(9):26–7
Marketing in medical practice. Part Four—The marketing tools. Beaton G. **Aust Fam Physician** 1988 Oct;17(10):887–8
Should we recommend contact lenses? [editorial] Farris RL. **CLAO J** 1989 Jan–Mar;15(1):5
Evaluation of an advertising method for a university family practice center. Ricer RE, et al. **Fam Med** 1989 Mar–Apr; 21(2):144–6
The Chief Scientist reports ... marketing health. Baker MJ. **Health Bull (Edinb)** 1988 Sep;46(5):296–303
Management information systems: their role in the marketing activities of HMOs. Aronow DB. **Health Care Manage Rev** 1988 Fall;13(4):59–64 (74 ref.)
Hospital wellness centers: strategic implementation, marketing, and management. Boscarino JA. **Health Care Manage Rev** 1989 Spring;14(2):25–9
HCMR interview: Jack Cashill [interview by Montague Brown and Sherry Larson] Cashill J. **Health Care Manage Rev** 1988 Summer;13(3):85–90
Evaluating health care advertising. MacStravic RS. **Health Care Manage Rev** 1988 Summer;13(3):45–57
Market and market segment portfolio assessment for hospitals. MacStravic S. **Health Care Manage Rev** 1989 Summer;14(3):25–32 (21 ref.)
Health care quality: the new marketing challenge. Nelson CW, et al. **Health Care Manage Rev** 1989 Spring; 14(2):87–95
Public relations marketing: applying public relations techniques to the marketing mix. Ristino RJ. **Health Care Manage Rev** 1989 Spring;14(2):79–85
Social marketing and public health intervention. Lefebvre RC, et al. **Health Educ Q** 1988 Fall;15(3):299–315 (26 ref.)
The role of linking agents in the diffusion of health promotion programs. Monahan JL, et al. **Health Educ Q** 1988 Winter; 15(4):417–33
The effects of method of presenting health plan information on HMO enrollment by Medicaid beneficiaries. Andrews RM, et al. **Health Serv Res** 1989 Aug;24(3):311–27
Smart consumers present a marketing challenge. Christenson M, et al. **Hospitals** 1989 Aug 20;63(16):42–4, 46, 48
One hospital's experience with the Fortune 100. Cochran DB. **Hospitals** 1989 Sep 5;63(17):88
Medical centers and marketing: making it work. Cottillion JG. **Hospitals** 1989 Jul 5;63(13):88
Employers want more substance-abuse services. Droste T. **Hospitals** 1989 May 5;63(9):24, 26–8, 30
Mercy: marketing training goes systemwide. Droste T. **Hospitals** 1988 Nov 20;62(22):49
Marketers and CFOs: bridging relationship gaps. Droste T. **Hospitals** 1989 Apr 20;63(8):76
Marketing mammography: education key. Droste T. **Hospitals** 1989 Feb 20;63(4):44
Physician marketing: ingredients for success. Droste T. **Hospitals** 1988 Dec 5;62(23):31
Marketing to seniors: time, attention, and TLC. Droste T. **Hospitals** 1989 Feb 5;63(3):50
Age counts in rural physician marketing plans. Koska MT. **Hospitals** 1989 Jun 20;63(12):68
Market-based financial plan is vital for survival. Larkin H. **Hospitals** 1989 Jun 5;63(11):38
Health care entrepreneur's key to success: break the mold. Robinson ML. **Hospitals** 1989 Mar 20;63(6):80
Effective communication tools for marketing your practice. Borshoff M. **Indiana Med** 1989 Jun;82(6):466–9
Computerized target marketing in dentistry: a personal view. Reed OK. **Int Dent J** 1989 Mar;39(1):48–51
The profitization of health promotion. Milio N. **Int J Health Serv** 1988;18(4):573–85
Marketing. Good medicine or good business? Adcock DF. **Invest Radiol** 1989 May;24(5):416
Successful marketing focuses on service. Perkins AH. **Iowa Med** 1988 Sep;78(9):421–2
Marketing the allied health professions. **J Allied Health** 1989 Summer;18(4):415–8
Emphasis. Dental marketing: strategies for success. **J Am Dent Assoc** 1988 Oct;117(5):563–7
Social marketing of nutrition education to cardiac patients in acute care. Huebner VD, et al. **J Am Diet Assoc** 1989 Apr;89(4):540–2
The marketing and distribution of health films and videos. Broadhurst JJ. **J Audiov Media Med** 1988 Apr;11(2):65–7
The ethics of general practice and advertising. Colman RD. **J Med Ethics** 1989 Jun;15(2):86–9, 93
Advertising and medical ethics [editorial] Gillon R. **J Med Ethics** 1989 Jun;15(2):59–60, 85
An administrative marketing strategy: a different perspective on the nursing process. Beaupre BA. **J Nurs Adm** 1988 Nov;18(11):37–41
Intrapreneurship: tapping employee creativity. Marszalek-Gaucher E, et al. **J Nurs Adm** 1988 Dec; 18(12):20–2
Small fee for shareware [letter] Santucci RA. **MD Comput** 1988 Nov–Dec;5(6):4
Marketing of human organs and tissues is justified and necessary. Kevorkian J. **Med Law** 1989;7(6):557–65
Understanding the power of effective communications. Marabell P, et al. **Mich Med** 1989 Jun;88(6):38–9
Morality for the medical-industrial complex [letter] **N Engl J Med** 1989 Apr 20;320(16):1082–4
Superstar ophthalmology. A modern parable [see comments] Beauchamp GR. **N Engl J Med** 1988 Oct 27; 319(17):1159–61. **Comment in:** N Engl J Med 1989 Apr 27;320(17):1150–1
Morality for the medical-industrial complex: a code of ethics for the mass marketing of health care. Engelhardt HT Jr, et al. **N Engl J Med** 1988 Oct 20;319(16):1086–9
Marketing medicine [letter] Taylor DB. **N Z Med J** 1989 Apr 26;102(866):200
Antitrust alert [editorial] Warde NE. **R I Med J** 1989 Jan; 72(1):5
Health care utilization and attitudes to health care before and after development work in a health centre. Results from two independent postal surveys. Westman G, et al. **Scand J Soc Med** 1989;17(2):217–22
Consumers of oral contraceptives in a social marketing program in Honduras. Bailey PE, et al. **Stud Fam Plann** 1989 Jan–Feb;20(1):53–61
[Industrial aspects of the production and consumption of medical oxygen at home] Grasset JM. **Agressologie** 1988 Sep;29(8):569–72 (Eng. Abstr.) **(Fre)**
[An active marketing of research results makes research more useful for society] Westrin CG. **Lakartidningen** 1989 Mar 15;86(11):983–4 **(Swe)**

ECONOMICS

A market analysis comparing the practices of psychiatrists and psychologists. Knesper DJ, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):305–14 (57 ref.)
NHS review. Internal markets for surgical services: opportunity for trade in orthopaedics. Fordham RJ, et al. **BMJ** 1989 Apr 1;298(6677):882–4
NHS review. A GP's perspective. Harris A. **BMJ** 1989 Apr 1;298(6677):884–5
As competition increases, so should MD's marketing efforts. Houlihan P. **Can Med Assoc J** 1989 Mar 1;140(5):547
Deep marketing cuts are unfair, unwise. Droste T. **Hospitals** 1989 Jun 5;63(11):52
The economics and ethics of markets for human organs. Hansmann H. **J Health Polit Policy Law** 1989 Spring; 14(1):57–85 (42 ref.)
A better way to market maternal-child care. Sonstegard L. **MCN** 1988 Nov–Dec;13(6):395–402
Physician supply and Medicaid participation. The causes of market failure. Fossett JW, et al. **Med Care** 1989 Apr; 27(4):386–96
Occupational medicine. Marketing. Small RJ, et al. **State Art Rev Occup Med** 1989 Jan–Mar;4(1):83–92 (9 ref.)
Contraceptive social marketing and community-based distribution systems in Colombia. Vernon R, et al. **Stud Fam Plann** 1988 Nov–Dec;19(6 Pt 1):354–60

LEGISLATION & JURISPRUDENCE

Fraud and abuse. Setting the limits on physicians' entrepreneurship. Hyman DA, et al. **N Engl J Med** 1989 May 11;320(19):1275–8

METHODS

Ethical use of Yellow Pages listings by physicians. Degenberg SM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1392–4
Market administration in health care delivery. MacStravic S. **Health Care Manage Rev** 1989 Winter;14(1):41–8 (20 ref.)
Marketing your practice: how to get started. Borshoff MJ. **Indiana Med** 1989 May;82(5):376–8
Coping with competitors coast to coast. Ebbin A. **J Am Coll Health** 1989 Sep;38(2):99–100
Use of a consultant to assist a dietetic association in its media and public relations efforts. Visocan BJ, et al. **J Am Diet Assoc** 1989 Apr;89(4):513–6

ORGANIZATION & ADMINISTRATION

Customer obsession drives Mercy marketer. Droste T. **Hospitals** 1989 Jun 20;63(12):58–9

STANDARDS

Promoting public awareness of signs of heart attack [letter] Paiva KB. **Am Pharm** 1989 Feb;NS29(2):5
Market research: 'Let the buyer beware'. Inguanzo JM. **Hospitals** 1989 Mar 5;63(5):80

STATISTICS & NUMERICAL DATA

Advertising cuts represent marketing shakeout. Steiber SR. **Hospitals** 1988 Nov 20;62(22):46–7, 49
Marketing strategies of nurse practitioners in New York State. Nolan CM, et al. **Nurse Pract** 1988 Aug;13(8):37, 41–2

TRENDS

The secularization of health affairs. Kissick WL. **Conn Med** 1988 Nov;52(11):675–9
The "competition revolution" in health care. Fuchs VR. **Health Aff (Millwood)** 1988 Summer;7(3):5–24
Home health care: new challenges, new solutions. Church L. **Hospitals** 1989 Jan 5;63(1):80
Ad budgets slow in the new age of accountability. Droste T. **Hospitals** 1988 Dec 20;62(24):32
Hospitals turn to low-risk MD marketing. Droste T. **Hospitals** 1989 Aug 20;63(16):53
Marketers' survey: advertising decline continues. Droste T. **Hospitals** 1989 Mar 5;63(5):52
'Center of excellence' name tag carries clout. Droste T. **Hospitals** 1989 Jan 20;63(2):54
Research and customer satisfaction top agenda. Droste T. **Hospitals** 1989 Jan 5;63(1):38
Market power key to upgraded hospitals' success. Larkin H. **Hospitals** 1989 Sep 5;63(17):24, 28, 30–2
Advertising: is the honeymoon over for budgets? Steiber SR. **Hospitals** 1988 Nov 5;62(21):42
Marketing in Indiana's medical community. Borshoff MJ. **Indiana Med** 1989 Jul;82(7):544–7
The evolution of medicine [editorial] Prasad P. **J Indian Med Assoc** 1989 Jan;87(1):1–3
Killing the golden goose [letter] Silk AD. **West J Med** 1988 Jun;148(6):707–8

MARKOV CHAINS see under **PROBABILITY**

MARMOSET VIRUS see under **HERPESVIRIDAE**

MARMOSETS see **CALLITHRICIDAE**

MARMOTA see under **SCIURIDAE**

MARRIAGE

Intimacy and mental disorder in late middle age. Report of the TURVA project. Salokangas RK, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):555–60
Partner weight status and subject weight loss: implications for cost-effective programs and public health. Black DR, et al. **Addict Behav** 1989;14(3):279–89
Marital status and mortality in middle-aged Swedish men. Rosengren A, et al. **Am J Epidemiol** 1989 Jan;129(1):54–64
Marital correlates of blood pressure. Speers MA, et al. **Am J Epidemiol** 1989 May;129(5):956–72
Human immunodeficiency virus infection in sexually active wives of infected hemophilic men. Kim HC, et al. **Am J Med** 1988 Oct;85(4):472–6
Gynecologic screening examinations: does the obstetrician-gynecologist's spouse comply? Petrikovsky B, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):82–5
Marital quality, depression, and inconsistent parenting: relationship with observed mother-child conflict. Stoneman Z, et al. **Am J Orthopsychiatry** 1989 Jan; 59(1):105–17
Evolution of human serial pairbonding. Fisher HE. **Am J Phys Anthropol** 1989 Mar;78(3):331–54
The effect of occupational, marital and parental roles on mortality: the Alameda County Study. Kotler P, et al. **Am J Public Health** 1989 May;79(5):607–12
Husbands' layoff and wives' mental health. A prospective analysis. Penkower L, et al. **Arch Gen Psychiatry** 1988 Nov; 45(11):994–1000
Predictors of divorce in long-term marriages. Jones SL, et al. **Arch Psychiatr Nurs** 1988 Oct;2(5):267–73
Transvestites' women revisited: a nonpatient sample. Brown GR, et al. **Arch Sex Behav** 1989 Feb;18(1):73–83
Sexual satisfaction in marriage as a function of life meaning. McCann JT, et al. **Arch Sex Behav** 1989 Feb;18(1):59–72
Spouse similarity for IQ and personality and convergence. Mascie-Taylor CG. **Behav Genet** 1989 Mar;19(2):223–7
Direct marital assortment for cognitive and personality variables. Phillips K, et al. **Behav Genet** 1988 May; 18(3):347–56
Research-structured vs clinically flexible versions of social learning-based marital therapy. Jacobson NS, et al. **Behav Res Ther** 1989;27(2):173–80
The relationship between marital intimacy, perceived strain and depression in spouse caregivers of dementia sufferers. Morris LW, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):231–6
Cognitive style and perceived control in spouse caregivers of dementia sufferers. Morris LW, et al. **Br J Med Psychol** 1989 Jun;62 (Pt 2):173–9
Genital cancer among wives of men with penile cancer. A study between 1958 and 1982. Hellberg D, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):221–5
Marital violence in the community. A biographical approach.

Andrews B, et al. **Br J Psychiatry** 1988 Sep;153:305–12
Marital problems and sexual dysfunction: how are they related? Rust J, et al. **Br J Psychiatry** 1988 May;152:629–31
Behavioural and cognitive changes in traumatic brain injury: a spouse's perspective. Bigler ED. **Brain Inj** 1989 Jan–Mar; 3(1):73–8
The role of marital intimacy in psychiatric help-seeking. Chamberlaine C, et al. **Can J Psychiatry** 1989 Feb;34(1):3–7
Marital intimacy in parents of exceptional children. Fisman SN, et al. **Can J Psychiatry** 1989 Aug;34(6):519–25
AIDS-related secular trends in cancer in Los Angeles County men: a comparison by marital status. Bernstein L, et al. **Cancer Res** 1989 Jan 15;49(2):466–70
Married-couple families with step, adopted, and biological children. Moorman JE, et al. **Demography** 1989 May; 26(2):267–77
Marital state, psoriasis, urticaria, and asthma [letter] Lindegård B. **Dermatologica** 1989;179(1):55–6
The relationship between alcohol intoxication and power in real-life non-alcoholic couples. Gustafson R. **Drug Alcohol Depend** 1988 Oct;22(1–2):55–62
Locus of control in couples with different patterns of alcohol consumption. Natera G, et al. **Drug Alcohol Depend** 1988 Dec;22(3):179–86
Sex differences in the marital functioning of treated alcoholics. Pérodeau GM, et al. **Drug Alcohol Depend** 1989 Jan;23(1):1–11
Perinatal mortality and mother's marital status at birth in subsequent siblings. Skjaerven R, et al. **Early Hum Dev** 1988 Dec;18(2–3):199–212
The weakening link between marriage and the care of children. Cherlin AJ. **Fam Plann Perspect** 1988 Nov–Dec; 20(6):302–6
The transition to parenthood: II. Stability and change in marital structure. Lewis JM. **Fam Process** 1988 Sep; 27(3):273–83
Graduate student marriages: an organizational/interactional view. Scheinkman M. **Fam Process** 1988 Sep;27(3):351–68
Gender differences in marital communication patterns. White BB. **Fam Process** 1989 Mar;28(1):89–106
Path analysis under generalized marital resemblance: evaluation of the assumptions underlying the mixed homogamy model by the Monte Carlo method. McGue M, et al. **Genet Epidemiol** 1989;6(2):373–88
Problems and coping strategies of elderly spouse caregivers. Barusch AS. **Gerontologist** 1988 Oct;28(5):677–85
The frustrations, gratifications, and well-being of dementia caregivers. Motenko AK. **Gerontologist** 1989 Apr; 29(2):166–72
Husbands and wives as caregivers: antecedents of depression and burden. Pruchno RA, et al. **Gerontologist** 1989 Apr; 29(2):159–65
Couple therapy and chronic headache: a preliminary outcome study. Roy R. **Headache** 1989 Jul;29(7):455–7
Adjustment problems of spouses of patients undergoing coronary artery bypass graft surgery during early convalescence. Stanley MJ, et al. **Heart Lung** 1988 Nov; 17(6 Pt 1):677–82
Older widows and married women: their intimates and confidants. Babchuk N, et al. **Int J Aging Hum Dev** 1989; 28(1):21–35
Social problems of infertile women in India. Jindal UN, et al. **Int J Fertil** 1989 Jan–Feb;34(1):30–3
Adjustment to cancer: who is the patient—the husband or the wife? Baider L, et al. **Isr J Med Sci** 1988 Sep–Oct; 24(9–10):631–6
The nature of interparental conflict of married and divorced parents: implications for young adolescents. Forehand R, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):235–49
The relationship of early adolescent functioning to parent-reported and adolescent-perceived interparental conflict. Wierson M, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):707–18
Impact of distressed and aggressive behavior. Biglan A, et al. **J Abnorm Psychol** 1989 Aug;98(3):218–28
Depression and marital functioning: an examination of specificity and gender differences. Gotlib IH, et al. **J Abnorm Psychol** 1989 Feb;98(1):23–30
Predictors of relapse in unipolar depressives: expressed emotion, marital distress, and perceived criticism. Hooley JM, et al. **J Abnorm Psychol** 1989 Aug;98(3):229–35
Physical and psychological symptoms experienced by Canadian women and their husbands during pregnancy and the postpartum. Drake ML, et al. **J Adv Nurs** 1988 Jul; 13(4):436–40
Gender, marital status and treated affective disorders in South Verona: a case register study. Bebbington P, et al. **J Affective Disord** 1989 Jul–Aug;17(1):83–91
Coping with parental quarrels. Jenkins JM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):182–9
The two-woman phenomenon revisited. Chessick RD. **J Am Acad Psychoanal** 1989 Summer;17(2):293–304
Money as a mirror of marriage. Turkel AR. **J Am Acad Psychoanal** 1988 Oct;16(4):525–35
Education to assist spouses in coping with Alzheimer's disease. A controlled trial. Chiverton P, et al. **J Am Geriatr Soc** 1989 Jul;37(7):593–8
Caregiving spouses. Physical and mental health in perspective. Pruchno RA, et al. **J Am Geriatr Soc** 1989 Aug;37(8):697–705
Archetypal factors revealed in the study of marital breakdown: a Jungian perspective. Saayman GS, et al. **J Anal Psychol** 1988 Jul;33(3):253–76
Weight changes in a couples program: negative association of marital adjustment. Black DR. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):103–11
Marital fertility in polygynous unions in Nigeria. Adewuyi AA. **J Biosoc Sci** 1988 Oct;20(4):393–400
Nuptiality and fertility in the Dominican Republic. Ebanks GE, et al. **J Biosoc Sci** 1989 Jan;21(1):71–82
Polygamy and fertility in Somalia. Johnson NE, et al. **J Biosoc Sci** 1989 Apr;21(2):127–34
Inbreeding levels in Khartoum. Saha N, et al. **J Biosoc Sci** 1988 Jul;20(3):333–6
The consequences of heterogamy and homogamy on the similarity between spouses. Tomlinson I. **J Biosoc Sci** 1989 Apr;21(2):193–206
The time lag between menarche and marriage as a risk factor for cervical dysplasia [letter] Indira C, et al. **J Clin Epidemiol** 1989;42(9):925–8
Comparison of surrogate and subject reports of dietary practices, smoking habits and weight among married couples in the Tecumseh Diet Methodology Study. Metzner HL, et al. **J Clin Epidemiol** 1989;42(4):367–75
Sensation-seeking congruence in couples as a determinant of marital adjustment: a partial replication and extension. Ficher IV, et al. **J Clin Psychol** 1988 Sep;44(5):803–9
Assessing perceived patterns of behavior exchange in relationships. Forman BD. **J Clin Psychol** 1988 Nov; 44(6):972–81
The role of cognitions in marital relationships: definitional, methodological, and conceptual issues. Baucom DH, et al. **J Consult Clin Psychol** 1989 Feb;57(1):31–8 (54 ref.)
Early adolescent adjustment to recent parental divorce: the role of interparental conflict and adolescent sex as mediating variables. Forehand R, et al. **J Consult Clin Psychol** 1988 Aug;56(4):624–7
Marital interaction and satisfaction: a longitudinal view. Gottman JM, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):47–52
Marital therapy and spouse involvement in the treatment of depression, agoraphobia, and alcoholism. Jacobson NS, et al. **J Consult Clin Psychol** 1989 Feb;57(1):5–10 (36 ref.)
Interspousal aggression, marital discord, and child problems. Jouriles EN, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):453–5
Behavioral versus insight-oriented marital therapy: effects on individual and interspousal functioning. Snyder DK, et al. **J Consult Clin Psychol** 1989 Feb;57(1):39–46
The health impact of living with a cognitively impaired elderly spouse: depressive symptoms and social functioning. Moritz DJ, et al. **J Gerontol** 1989 Jan;44(1):S17–27
Models for pair formation in bisexual populations. Hadeler KP, et al. **J Math Biol** 1988;26(6):635–49
She comes from a nice family [editorial] Messer AA. **J Med Assoc Ga** 1988 Jul;77(7):548–9
The effect of infertility on marriage and self-concept. Hirsch AM, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Jan–Feb; 18(1):13–20
The experience of AIDS: case narratives and questions. Who's who. Beaulieu R. **J Palliat Care** 1988 Dec;4(4):8
Spouse criticism and support: their association with coping and psychological adjustment among women with rheumatoid arthritis. Manne SL, et al. **J Pers Soc Psychol** 1989 Apr;56(4):608–17
Cross-spouse correlates of blood pressure in hypertension-prone families in Utah. Carmelli D, et al. **J Psychosom Res** 1989;33(1):75–84
Intimacy and terminal care. Gilley J. **J R Coll Gen Pract** 1988 Mar;38(308):121–2
Divorce potential and marital stability of adult women sexually abused as children compared to adult women not sexually abused as children. Gelster KL, et al. **J Sex Marital Ther** 1988 Winter;14(4):269–77
Sensation seeking and marital adjustment. Gibson KJ, et al. **J Sex Marital Ther** 1989 Spring;15(1):57–61
Mutually gratifying heterosexual relationship with micropenis of husband. van Seters AP, et al. **J Sex Marital Ther** 1988 Summer;14(2):98–107
The relationship between characteristics of the victim, persuasive techniques of the batterer, and returning to a battering relationship. Schutte NS, et al. **J Soc Psychol** 1988 Oct;128(5):605–10
Impact of social desirability response sets on the self-report of marital adjustment in alcoholics. Rychtarik RG, et al. **J Stud Alcohol** 1989 Jan;50(1):24–9
Alcoholic and spouse concordance on attributions about relapse to drinking. Maisto SA, et al. **J Subst Abuse Treat** 1988;5(3):179–81
Marriage: if it lasts, does that mean it's good? [editorial] Eisenberg L. **JAMA** 1989 Apr 28;261(16):2401
The psychology of postponement in the medical marriage. Gabbard GO, et al. **JAMA** 1989 Apr 28;261(16):2378–81
Denial of the AMA-endorsed disability insurance program owing to marriage counseling [letter] Komrad MS. **JAMA** 1989 Mar 17;261(11):1583
A piece of my mind. Prairie wedding. Ohmart RV. **JAMA** 1989 Jan 27;261(4):616
An epidemiological study on marital status and cancer incidence. Kato I, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):306–11
Premarital sex in rural India [letter] Bang A, et al. **Lancet** 1989 Jul 8;2(8654):109
Marital status and cervical cancer in young women [letter] Murphy M, et al. **Lancet** 1989 Jun 17;1(8651):1385–6
Do caring wives protect against cardiac disease? [editorial] Goble AJ. **Med J Aust** 1989 Aug 21;151(4):183–4
Marriage is associated with a lower risk of ischaemic heart disease in men. Malcolm JA, et al. **Med J Aust** 1989 Aug 21;151(4):185–8
Impact of military life stress on the quality of life of military wives. Rosen LN, et al. **Milit Med** 1989 Mar;154(3):116–20
Conjoint therapy with a deaf and mute couple by a hearing therapist. Bansil RK, et al. **N J Med** 1988 Jul;85(7):599–600
Tribute to the doctor's wife and the doctor. It takes a lot of prayers [letter] Grace A. **Nebr Med J** 1989 Jul; 74(7):172–3
Analysis of the Jalowiec Scale with cardiac patients' spouses. Wikoff RL, et al. **Nurs Res** 1989 Jul–Aug;38(4):221–2
Relationship of pain impact and significant other reinforcement of pain behaviors: the mediating role of gender, marital status and marital satisfaction. Flor H, et al. **Pain** 1989 Jul;38(1):45–50
Marital quality in the parents of schizophrenic offspring. Klinck AM, et al. **Psychiatr J Univ Ottawa** 1988 Nov; 13(4):186–93
Parental communication deviance: its relationship to parent, child, and family system variables. Velligan D, et al. **Psychiatry Res** 1988 Dec;26(3):313–25
The decision to leave an abusive relationship: empirical evidence and theoretical issues. Strube MJ. **Psychol Bull** 1988 Sep;104(2):236–50 (132 ref.)
The assessment of type A behaviour pattern: results from a spouse-report approach [published erratum appears in Psychol Med 1989 May;19(2):following 547] Condon JT. **Psychol Med** 1988 Aug;18(3):747–55
Academic achievement of children of divorced parents. Cherian VI. **Psychol Rep** 1989 Apr;64(2):355–8
Preferences and perceived social norms for division of work and family responsibilities among Japanese college students. Morinaga-Okada Y, et al. **Psychol Rep** 1988 Oct; 63(2):403–6
Women and their husbands: mood and arousal fluctuations across the menstrual cycle and days of the week. Mansfield PK, et al. **Psychosom Med** 1989 Jan–Feb;51(1):66–80
Effect of artificial insemination with donor semen on the psyche of the husband. Blaser A, et al. **Psychother Psychosom** 1988;49(1):17–21
Role supplementation as a nursing intervention for Alzheimer's disease: a case study. Kelley LS, et al. **Public Health Nurs** 1988 Sep;5(3):146–52
Antecedents and consequences of remarriage in later life. Bulcroft K, et al. **Res Aging** 1989 Mar;11(1):82–106
Alcohol-related parasuicide among married people. Pillay AL, et al. **S Afr Med J** 1989 Feb 4;75(3):120–1
Social class, marriage, and fertility in schizophrenia. Saugstad LF. **Schizophr Bull** 1989;15(1):9–43 (160 ref.)
Effect of marital dissolution on fertility in Cameroon. Lee BS, et al. **Soc Biol** 1988 Fall–Winter;35(3–4):293–306
Duration between marriage and first birth and marital instability. Wineberg H. **Soc Biol** 1988 Spring–Summer; 35(1–2):91–102
Depression and life circumstances. A study of young, married women on a London housing estate. Birtchnell J. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):240–6
End stage renal disease and the marital dyad: an empirical investigation. Chowanec GD, et al. **Soc Sci Med** 1989; 28(9):971–83
Marriage and the psychological consequences of a heart attack: a longitudinal study of adaptation to chronic illness after 3 years. Waltz M, et al. **Soc Sci Med** 1988;27(2):149–58
Development of the Grief Experience Questionnaire. Barrett TW, et al. **Suicide Life Threat Behav** 1989 Summer; 19(2):201–15
The participation of females in the labor force and rates of personal violence (suicide and homicide). Yang BJ, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):270–8
Processes of pair formation leading to assortative mating in biological populations: dynamic interaction model. Gimelfarb A. **Theor Popul Biol** 1988 Aug;34(1):1–23
Marital interaction and the health and well-being of spouses. Schmoldt RA, et al. **Women Health** 1989;15(1):35–56
[The wife of the impotent person. Key element in the prognosis] Buvat-Herbaut M, et al. **Acta Urol Belg** 1989; 57(1):183–9 (Eng. Abstr.) (Fre)
[Retirement and the married couple. Apropos of 23 cases] Veyrat JG. **Ann Med Psychol (Paris)** 1988 Jun;146(6):572–6 (Fre)
[Relationships following legal abortion—a longitudinal comparative study] Freudenberg N, et al. **Fortschr Neurol Psychiatr** 1988 Sep;56(9):300–18 (Eng. Abstr.) (Ger)
[Eve and Adam—is a partnership between the male and female actually possible?] Günzel S. **Psyche (Stuttg)** 1989 Mar;43(3):219–37 (Eng. Abstr.) (Ger)
[Psychological effect of ultrasound examination on patients, relatives and the technician] Wittmann BK, et al. **Ultraschall Med** 1989 Feb;10(1):2–6 (Eng. Abstr.) (Ger)
[Partnership status in preparation for therapeutic donor insemination] Seikowski K, et al. **Zentralbl Gynakol** 1989; 111(1):43–6 (Eng. Abstr.) (Ger)
[Absence of sexual dysfunction does not mean that the couple does not need sexual counseling] Pepe F, et al. **Minerva Ginecol** 1989 Feb;41(2):117–21 (Eng. Abstr.) (Ita)
[Relationship between violent behavior and quality of

communication in couples with an alcoholic member] Casacchia M, et al. **Minerva Psichiatr** 1988 Jul–Sep; 29(3):153–6 (Eng. Abstr.) **(Ita)**

[A study of blood pressure aggregation among husband–wife pairs] Wakisaka I, et al. **Nippon Eiseigaku Zasshi** 1988 Dec; 43(5):1019–27 (Eng. Abstr.) **(Jpn)**

[Marital interaction and the transmission across generations in alcoholic families] Saito S. **Seishin Shinkeigaku Zasshi** 1988;90(9):717–48 (Eng. Abstr.) **(Jpn)**

[Marital status and the first consultation at a psychiatric outpatient clinic. A 5–year follow–up study] Vatten LJ, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1395–8 (Eng. Abstr.) **(Nor)**

[The role of the WHO Special Human Reproduction Program in solving urgent problems of infertility in marriage] Vikhliaeva EM, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):3–4 **(Rus)**

[Characteristics of tooth eruption in children with various degrees of exogamy] Savranskii FZ, et al. **Pediatriia** 1988; (10):106 **(Rus)**

[Anti–alcoholism education of future married couples] Zangieva TD, et al. **Sov Zdravookhr** 1989;(3):36–9 **(Rus)**

ETHNOLOGY

Consanguineous marriages in Beirut: time trends, spatial distribution. Khlat M. **Soc Biol** 1988 Fall–Winter; 35(3–4):324–30

[Demographic genetic characteristics of the population of a large multiethnic city (the example of Alma–Ata). An analysis of assortative mating and migrations] Sviatova GS, et al. **Genetika** 1988 Jul;24(7):1269–75 (Eng. Abstr.) **(Rus)**

HISTORY

Mating structure, isonymy and social class in late nineteenth century Tasmania. Lafranchi M, et al. **Ann Hum Biol** 1988 Sep–Oct;15(5):325–36

STATISTICS & NUMERICAL DATA

Consanguineous marriages in the Turkish population. Başaran N, et al. **Clin Genet** 1988 Nov;34(5):339–41

Variations in marriage patterns in central Thailand. Cherlin A, et al. **Demography** 1988 Aug;25(3):337–53

Agricultural opportunity and marriage: the United States at the turn of the century. Landale NS. **Demography** 1989 May;26(2):203–18

Marital break–up among couples raising families by artificial insemination by donor. Bendvold E, et al. **Fertil Steril** 1989 Jun;51(6):980–3

Consanguinity in the Archbishopric of Toledo, Spain, 1900–79. I. Types of consanguineous mating in relation to premarital migration and its effects on inbreeding levels. Calderon R. **J Biosoc Sci** 1989 Jul;21(3):253–66

Inbreeding among endogamous groups in three multicaste villages of Srikakulam District, Andhra Pradesh, India. Rao BD, et al. **Soc Biol** 1988 Fall–Winter;35(3–4):331–6

Remarriages and subsequent divorces. Wilson BF. **Vital Health Stat [21]** 1989 Jan;(45):1–34

Remarriages and subsequent divorces. Wilson BF. **Vital Health Stat [21]** 1989 Jan;(45):1–34

[Myotonic dystrophy: II. Marital status, fertility and gene transmission] Veillette S, et al. **Can J Neurol Sci** 1989 Feb; 16(1):114–8 (Eng. Abstr.) **(Fre)**

[Consanguinity in the population of northern Tunisia] Riou S, et al. **Tunis Med** 1989 Mar;67(3):167–72 (Eng. Abstr.) **(Fre)**

[The role of migration processes in the formation of the marriage structure of Moscow population. III. Assortative mating as a factor counteracting the outbreeding] Kurbatova OL, et al. **Genetika** 1988 Sep;24(9):1689–95 (Eng. Abstr.) **(Rus)**

[The role of migration processes in the formation of marriage structure of Moscow population. II. Assortative mating for the age, birthplace and nationality] Kurbatova OL, et al. **Genetika** 1988 Sep;24(9):1679–88 (Eng. Abstr.) **(Rus)**

MARROW see BONE MARROW

MARSUPIALIA

A survey of urinary tract disease in New South Wales koalas. Canfield PJ. **Aust Vet J** 1989 Apr;66(4):103–6

Purification of a marsupial insulin: amino–acid sequence of insulin from the eastern grey kangaroo Macropus giganteus. Treacy GB, et al. **Biochim Biophys Acta** 1989 Mar 24; 990(3):263–8

Observations on the treatment of necrobacillosis in wallabies. Lewis JC, et al. **Br Vet J** 1989 Jul–Aug;145(4):394–6

The health of Australia's koalas: more research is needed urgently. Brown AS. **Med J Aust** 1988 Dec 5–19; 149(11–12):662–4

ANATOMY & HISTOLOGY

Histological properties and biological significance of pouch in red kangaroo, Macropus rufus. Kubota K, et al. **Anat Anz** 1989;168(2):169–79

Development of cell density gradients in the retinal ganglion cell layer of marsupials. Beazley LD, et al. **Aust Paediatr J** 1988;24 Suppl 1:43–7 (14 ref.)

Peripheral and central auditory specialization in a gliding marsupial, the feathertail glider, Acrobates pygmaeus. Aitkin LM, et al. **Brain Behav Evol** 1989;33(6):325–33

A nomenclature for the cortical sulcal features of the tammar wallaby, Macropus eugenii. Mayner L. **Brain Behav Evol** 1989;33(5):293–302

A cyto–architectonic description of the thalamus of the tammar wallaby, Macropus eugenii. Mayner L. **Brain Behav Evol** 1989;33(6):342–55

A cyto–architectonic study of the cortex of the tammar wallaby, Macropus eugenii. Mayner L. **Brain Behav Evol** 1989;33(5):303–16

An investigation of the topography of the lymphatic system of the grey kangaroo (Macropus giganteus). 1. The superficial lymphatic system. Hopwood PR. **J Anat** 1988 Apr;157:181–95

The accessory optic system of the wallaby, Setonix brachyurus: anatomy in normal animals and after early unilateral eye removal. Coleman LA, et al. **J Comp Neurol** 1988 Jul 15;273(3):359–76

Auditory forebrain organization of an Australian marsupial, the northern native cat (Dasyurus hallucatus). Kudo M, et al. **J Comp Neurol** 1989 Jan 1;279(1):28–42

Functional organization of cerebral microvasculature in a marsupial, the northern quoll (Dasyurus hallucatus). Snyder GK, et al. **J Exp Zool** 1989 Sep;251(3):349–54

The brain of Thylacosmilus atrox. Extinct South American saber–tooth carnivore marsupial. Quiroga JC, et al. **J Hirnforsch** 1988;29(5):573–86

Gas exchange in the lung of a dasyurid marsupial: morphometric estimation of diffusion capacity and blood oxygen uptake kinetics. Hallam JF, et al. **Respir Physiol** 1989 Sep;77(3):309–22

Ultrastructural variation in enamel of Australian marsupials. Gilkeson CF, et al. **Scanning Microsc** 1989 Mar;3(1):177–91

Enamel of Yalkaparidon coheni: representative of a distinctive order of tertiary zalambdodont marsupials. Lester KS, et al. **Scanning Microsc** 1988 Sep;2(3):1491–501

BLOOD

Plasma progesterone through pregnancy and the estrous cycle in the eastern quoll, Dasyurus viverrinus. Hinds LA. **Gen Comp Endocrinol** 1989 Jul;75(1):110–7

Effects of photoperiod on the 24–hour melatonin profiles of the Bennett's wallaby (Macropus rufogriseus rufogriseus). Curlewis JD, et al. **J Pineal Res** 1988;5(4):373–83

Plasma progesterone and body weight in the pregnant and non–pregnant kowari, Dasyuroides byrnei (Marsupialia:Dasyuridae). Fletcher TP. **Reprod Fertil Dev** 1989;1(1):65–74

Oxygen carriage and carbonic anhydrase activity in the blood of a marsupial, the Tammar wallaby (Macropus eugenii), during early development. Holland RA, et al. **Respir Physiol** 1988 Jul;73(1):69–86

EMBRYOLOGY

DNA methylation in the developing marsupial embryo. Stevens ME, et al. **Development** 1988 Aug;103(4):719–24

Embryonic development in culture of two dasyurid marsupials, Sminthopsis crassicaudata (Gould) and Sminthopsis macroura (Spencer), during cleavage and blastocyst formation. Selwood L. **Gamete Res** 1987 Apr; 16(4):355–71

GENETICS

Limited allozymic variation in a marsupial, the Tammar wallaby (Macropus eugenii). van Oorschot RA, et al. **Biochem Genet** 1988 Aug;26(7–8):481–8

Ag–NOR staining in the Bennett wallaby, Macropus rufogriseus: evidence for dosage compensation. Dhaliwal MK, et al. **Cytobios** 1988;56(224):29–38

Studies on early replication patterns in the marsupial Sminthopsis crassicaudata: no evidence for XY replication homologies. Müller G, et al. **Cytogenet Cell Genet** 1988; 48(3):164–6

Differential distribution of the P1 and P2 protamine gene sequences in eutherian and marsupial mammals and a monotreme. Johnson PA, et al. **Gamete Res** 1988 Feb; 19(2):169–75

Dominance of South American marsupials [letter] Patterson BD. **Nature** 1989 Jan 19;337(6204):215

Sequences homologous to ZFY, a candidate human sex–determining gene, are autosomal in marsupials. Sinclair AH, et al. **Nature** 1988 Dec 22–29;336(6201):780–3

DNA phylogeny of the extinct marsupial wolf. Thomas RH, et al. **Nature** 1989 Aug 10;340(6233):465–7

GROWTH & DEVELOPMENT

Histological and electron microscopic milestones in the development of the retina of a marsupial wallaby, Macropus eugenii. Spira AW, et al. **Anat Embryol (Berl)** 1989;179(6):571–85

Expanded retinofugal projections to the dorsal lateral geniculate nucleus and superior colliculus after unilateral enucleation in the wallaby Setonix brachyurus, quokka. Coleman LA, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):273–91

Retinal ganglion cell number is unchanged in the remaining eye following early unilateral eye removal in the wallaby Setonix brachyurus, quokka. Coleman LA, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):293–307

Osteogenesis in two marsupial species, the bandicoot Isoodon macrourus and the possum Trichosurus vulpecula. Gemmell RT, et al. **J Anat** 1988 Aug;159:155–64

Generation of retinal cells in the wallaby, Setonix brachyurus (quokka). Harman AM, et al. **Neuroscience** 1989; 28(1):219–32

IMMUNOLOGY

Lack of evidence for complement–dependent cytotoxic antibodies to fetal paternally derived antigens in the marsupial Macropus eugenii (tammar wallaby). Van Oorshot RA, et al. **Am J Reprod Immunol Microbiol** 1988 Aug;17(4):145–8

Immune response of a marsupial (Monodelphis domestica) to sheep red blood cells. Croix DA, et al. **Dev Comp Immunol** 1989 Winter;13(1):73–8

METABOLISM

Changes in alpha–lactalbumin, total lactose, UDP–galactose hydrolase and other factors in tammar wallaby (Macropus eugenii) milk during lactation. Messer M, et al. **Aust J Biol Sci** 1987;40(1):37–46

Laminar and non–laminar patterns of acetylcholinesterase activity in the marsupial lateral geniculate nucleus. Wilson PM, et al. **Brain Res** 1989 May 8;486(2):236–60

Rate of water turnover and electrolyte balance of an arid–zone marsupial, the spectacled hare wallaby (Lagorchestes conspicillatus) on Barrow Island. Bakker HR, et al. **Comp Biochem Physiol [A]** 1989;92(4):521–9

The localization of oxytocin and mesotocin in the reproductive tract of the male marsupial bandicoot Isoodon macrourus. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):103–9

Immunocytochemical location of oxytocin and mesotocin within the hypothalamus of two Australian marsupials, the bandicoot Isoodon macrourus and the brushtail possum Trichosurus vulpecula. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):96–102

Energy expenditure and protein turnover in three species of wallabies (Marsupialia: Macropodidae). White RG, et al. **J Comp Physiol [B]** 1988;158(2):237–46

Luteinizing hormone in the Kowari, Dasyuroides byrnei (Marsupialia:Dasyuridae), during the oestrous cycle and pregnancy, and the effects of gonadectomy in male and female. Fletcher TP. **Reprod Fertil Dev** 1989;1(1):55–64

MICROBIOLOGY

Virus particles associated with leukaemia in a koala. Canfield PJ, et al. **Aust Vet J** 1988 Oct;65(10):327–8

Death due to a probable herpesvirus infection in a common wombat (Vombatus ursinus). Rothwell JT, et al. **Aust Vet J** 1988 Nov;65(11):360–1

PARASITOLOGY

Eimeria spp. (Apicomplexa:Eimeriidae) parasitic in the rat–kangaroos Hypsiprymnodon moschatus, Potorous tridactylus, Aepyprymnus rufescens and Bettongia gaimardi (Marsupialia:Potoroidae). Barker IK, et al. **Int J Parasitol** 1988 Nov;18(7):947–53

Host–parasite associations of Eimeria spp. (Apicomplexa:Eimeriidae) in kangaroos and wallabies of the genus Macropus (Marsupialia:Macropodidae). Barker IK, et al. **Int J Parasitol** 1989 May;19(3):241–63

Eimeria spp. (Apicomplexa:Eimeriidae) parasitic in wallabies and kangaroos of the genera Setonix, Thylogale, Wallabia, Lagorchestes and Dendrolagus (Marsupialia:Macropodidae). Barker IK, et al. **Int J Parasitol** 1988 Nov;18(7):955–62

Epizootic of toxoplasmosis in kangaroos, wallabies, and potaroos: possible transmission via domestic cats. Patton S, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1166–9

Australiformis semoni (Linstow, 1898) n. gen., n. comb. (Acanthocephala: Moniliformidae) from marsupials of Australia and New Guinea. Schmidt GD, et al. **J Parasitol** 1989 Apr;75(2):215–7

Plagiorhynchus (Prosthorhynchus) cylindraceus (Goeze, 1782) Schmidt and Kuntz, 1966, from the Australian bandicoots, Perameles gunnii Gray 1838, and Isoodon obesulus (Shaw, 1797). Smales LR. **J Parasitol** 1988 Dec; 74(6):1062–4

Toxoplasmosis in black–faced kangaroos (Macropus fuliginosus melanops). Dubey JP, et al. **Vet Parasitol** 1988 Dec;30(2):97–105

PHYSIOLOGY

Salivation in the red kangaroo (Macropus rufus) during sympathetic nerve stimulation. Beal AM. **Comp Biochem Physiol [A]** 1989;92(4):495–7

Sperm morphology and storage in the female reproductive tract of the fat–tailed dunnart, Sminthopsis crassicaudata (Marsupialia: Dasyuridae). Breed WG, et al. **Gamete Res** 1989 May;23(1):61–75

Morphological observations on sperm–egg interactions during in vivo fertilization in the dasyurid marsupial Sminthopsis crassicaudata. Breed WG, et al. **Gamete Res** 1988 Feb;19(2):131–49

Effects of very early monocular and binocular enucleation on primary visual centers in the tammar wallaby (Macropus eugenii). Marotte LR, et al. **J Comp Neurol** 1989 Apr 22; 282(4):535–54

Characteristics of cardiac action potentials in marsupials. Campbell TJ. **J Comp Physiol [B]** 1989;158(6):759–62
Effect of exogenous prolactin and bromocriptine on seasonal reproductive quiescence in the Bennett's wallaby (Macropus rufogriseus rufogriseus). Brinklow BR, et al. **J Endocrinol** 1989 Feb;120(2):189–93
Experimental manipulations of prolactin following removal of pouch young or bromocriptine treatment during lactational quiescence in the Bennett's wallaby. Curlewis JD, et al. **J Endocrinol** 1988 Dec;119(3):405–11
Blood–brain, blood–cerebrospinal fluid and cerebrospinal fluid–brain barriers in a marsupial (Macropus eugenii) during development. Dziegielewska KM, et al. **J Physiol (Lond)** 1988 Sep;403:367–88
Sex determination in marsupials: evidence for a marsupial–eutherian dichotomy. Renfree MB, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):41–53 (29 ref.)
Nutrition of marsupial herbivores. Hume ID. **Proc Nutr Soc** 1989 Jan;48(1):69–79 (38 ref.)
Marsupial pre-implantation embryos in vivo and in vitro. Selwood L. **Prog Clin Biol Res** 1989;294:225–36
The hormonal milieu during early development in marsupials. Tyndale-Biscoe CH, et al. **Prog Clin Biol Res** 1989; 294:237–46
The development of pulmonary surfactant lipids in a neonatal marsupial and the rat. Ribbons KA, et al. **Respir Physiol** 1989 Jan;75(1):1–10

MASKING, PERCEPTUAL see **PERCEPTUAL MASKING**

MASKS

How to use a bag–valve–mask device for artificial ventilation. Cuzzell JZ, et al. **Am J Nurs** 1989 Jul;89(7):932–3
Inspired oxygen and nitrous oxide concentrations in volunteers during nitrous oxide sedation with a Hudson mask [published erratum appears in Anaesth Intensive Care 1989 Feb;17(1):8] Anderson BJ, et al. **Anaesth Intensive Care** 1988 Nov;16(4):423–6
The oxygen delivery characteristics of the Hudson Oxy-one face mask. Milross J, et al. **Anaesth Intensive Care** 1989 May;17(2):180–4
Laryngeal mask anaesthesia for repair of cleft palate. Beveridge ME. **Anaesthesia** 1989 Aug;44(8):656–7
Further developments of the laryngeal mask [letter] Brain AI. **Anaesthesia** 1989 Jun;44(6):530
The pressor response and laryngeal mask insertion. A comparison with tracheal intubation. Braude N, et al. **Anaesthesia** 1989 Jul;44(7):551–4
Laryngeal mask and patients with chronic respiratory disease [letter] Gunawardene RD. **Anaesthesia** 1989 Jun;44(6):531
Controlled ventilation and the laryngeal mask [letter] Hammond JE. **Anaesthesia** 1989 Jul;44(7):616–7
'Fruit-flavoured' mask for isoflurane induction in children. Lewis RP, et al. **Anaesthesia** 1988 Dec;43(12):1052–4
Potential hazard of Hudson facemask [letter] Onsiong MK. **Anaesthesia** 1988 Oct;43(10):907
Large tonsils and the laryngeal mask airway [letter] van Heerden PV, et al. **Anaesthesia** 1989 Aug;44(8):703
The case against use of paper masks. Kennon J. **Aust Fam Physician** 1988 Dec;17(12):1068
Death masks and life masks at Edinburgh University. Kaufman MH, et al. **BMJ** 1989 Feb 25;298(6672):506–7
Spacer device with face mask attachment for giving bronchodilators to infants with asthma. O'Callaghan C, et al. **BMJ** 1989 Jan 21;298(6667):160–1
Use of the Brain laryngeal mask airway in anticipation of difficult tracheal intubation. Thomson KD, et al. **Br J Plast Surg** 1989 Jul;42(4):478–80
Design hazard of Laerdal masks [letter] Maxwell DM. **Can Med Assoc J** 1989 Jul 1;141(1):11
Wearing of caps and masks not necessary during cardiac catheterization. Laslett LJ, et al. **Cathet Cardiovasc Diagn** 1989 Jul;17(3):158–60
Noninvasive face mask ventilation in patients with acute respiratory failure. Meduri GU, et al. **Chest** 1989 Apr; 95(4):865–70
Infection control barrier techniques. Used by physicians during routine examinations. Parental attitudes. Siegel LJ, et al. **Clin Pediatr (Phila)** 1989 May;28(5):231–4
Airway pressure release ventilation by mask. Jousela IT, et al. **Crit Care Med** 1988 Dec;16(12):1250–1
Myths, masks and mechanisms of facial deformity. Friel Memorial Lecture 1987. Poswillo DE. **Eur J Orthod** 1989 Feb;11(1):1–9
Gowns, caps and masks in neonatal units: are they necessary? Raju TN. **Indian J Pediatr** 1988 Sep–Oct;55(5):669–74 (14 ref.)
Continuous positive airway pressure with a face-mask in infants with hyaline membrane disease. Murali MV, et al. **Indian Pediatr** 1988 Jul;25(7):627–31
Acoustic-phonetic characteristics of speech produced in noise and while wearing an oxygen mask. Bond ZS, et al. **J Acoust Soc Am** 1989 Feb;85(2):907–12
Comparison of ipratropium solution, fenoterol solution, and their combination administered by nebulizer and face mask to children with acute asthma. Watson WT, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1012–8
'Who was that masked man?' Elicits a different response now. Densmore G. **Occup Health Saf** 1988 Nov;57(12):20, 22
Cross-infection control: attitudes of patients toward the wearing of gloves and masks by dentists in the United Kingdom in 1987. Bowden JR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):45–8
Reliable salbutamol administration in 6- to 36-month-old children by means of a metered dose inhaler and Aerochamber with mask. Conner WT, et al. **Pediatr Pulmonol** 1989;6(4):263–7
[Changes in oxygen saturation of arterial blood during controlled oxygen therapy using oxygen masks produced in Poland] Sliwiński P, et al. **Pneumonol Pol** 1988 Dec; 56(12):564–8 (Eng. Abstr.) **(Pol)**

STANDARDS

Facemask hazard [letter] Gordon HL, et al. **Anaesthesia** 1989 Jan;44(1):84
Face masks as protection from laser plume [letter] Dickes J. **AORN J** 1989 Sep;50(3):520–2
Acute lead poisoning in construction workers: the failure of current protective standards. Marino PE, et al. **Arch Environ Health** 1989 May–Jun;44(3):140–5
Thermal comparison of aircrew clothing aboard OV-10 aircraft. Constable R, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1190–2

MASOCHISM

Ligature strangulation of a woman during sadomasochistic sexual activity. Baik SO, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):249–51
Self-defeating personality disorder and DSM-III-R: development of the diagnostic criteria. Kass F, et al. **Am J Psychiatry** 1989 Aug;146(8):1022–6 (49 ref.)
Issues in personality disorder diagnoses [letter] Sheeley WF. **Am J Psychiatry** 1989 Mar;146(3):415–6
Paradoxical punishment as it relates to the battered woman syndrome. Long GM, et al. **Behav Modif** 1989 Apr; 13(2):192–205
The provocative masochistic patient. An intersubjective approach to treatment. Shapiro S. **Bull Menninger Clin** 1989 Jul;53(4):319–30
Masochism and its treatment. Stolorow RD, et al. **Bull Menninger Clin** 1988 Nov;52(6):504–9
Clinical dimensions of masochism. Kernberg OF. **J Am Psychoanal Assoc** 1988;36(4):1005–29
Masochistic personality disorder. A prototype analysis of diagnosis and sex bias. Fuller AK, et al. **J Nerv Ment Dis** 1989 Mar;177(3):168–72
Masochistic patients. How to help the person who finds 'joy in pain'. Fisch RZ. **Postgrad Med** 1989 May 1;85(6):157–60 (14 ref.)
The compulsion to repeat the trauma. Re-enactment, revictimization, and masochism. van der Kolk BA. **Psychiatr Clin North Am** 1989 Jun;12(2):389–411 (147 ref.)
"Say you're sorry": a sadomasochistic transference. Pekowsky J. **Psychoanal Rev** 1988 Fall;75(3):459–68
Deprivation/enhancement fantasy patterns in children. Stearns ME, et al. **Psychol Rep** 1989 Aug;65(1):127–30

MASON-PFIZER MONKEY VIRUS see **SIV**

MASS BEHAVIOR

see related
CIVIL DISORDERS
RIOTS

Adolescent gangs in the hospital. Berland DI, et al. **Bull Menninger Clin** 1989 Jan;53(1):31–43
[Confusio congenialis epidemica (letter)] Wiingaard P. **Ugeskr Laeger** 1989 Jan 16;151(3):183–4 **(Dan)**

MASS CHEST X-RAY

A 10 year follow-up of semi-annual screening for early detection of lung cancer in the Erfurt County, GDR. Wilde J. **Eur Respir J** 1989 Jul;2(7):656–62
The value of routine chest radiography in offshore workers. Gann M. **J Soc Occup Med** 1988 Autumn;38(3):58–60
[The development in smoking habits in Canton Bern 1977 to 1987. Survey of smoking habits through regular x-ray screening in industry] Lemola M, et al. **Schweiz Rundsch Med Prax** 1989 Jun 13;78(24):683–7 (Eng. Abstr.) **(Ger)**
[Occupational medicine otorhinolaryngologic analysis of employees of a district socialist agricultural facility within the scope of expanded public mass roentgen screening] Krellig B, et al. **Z Gesamte Hyg** 1989 Mar;35(3):149–51 (Eng. Abstr.) **(Ger)**
[Organization of phthisiological and pulmonological services at industrial plants] Smirnova LA, et al. **Probl Tuberk** 1989; (4):6–9 (Eng. Abstr.) **(Rus)**

LEGISLATION & JURISPRUDENCE

[More on mass roentgen examination] Neumann G. **Prax Klin Pneumol** 1988 Jun;42(6):434 **(Ger)**

ORGANIZATION & ADMINISTRATION

[Status and prospects of the development of anti-tuberculosis services in the RSFSR] Kucherov AL. **Probl Tuberk** 1988; (7):3–5 (Eng. Abstr.) **(Rus)**
[Determining the optimal frequency of preventive fluorographic examination of the population] Shefer LB, et al. **Probl Tuberk** 1989;(2):6–9 (Eng. Abstr.) **(Rus)**
[Model of an automated system for selection and differential fluorographic examination] Portnoĭ LM, et al. **Sov Zdravookhr** 1988;(7):11–5 (Eng. Abstr.) **(Rus)**

TRENDS

[The development of mass chest x-ray units in West Germany—report of their status and future perspectives] Arens FJ, et al. **Off Gesundheitswes** 1988 Aug–Sep; 50(8–9):510–5 (Eng. Abstr.) **(Ger)**
[Tuberculosis in West Germany—prevention, control and monitoring by the public health service] Jantzen G. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):494–502 (Eng. Abstr.) **(Ger)**

UTILIZATION

Still screening for pulmonary tuberculosis? [editorial] Tala E, et al. **Eur Respir J** 1989 May;2(5):397–8

MASS FRAGMENTOGRAPHY

Detection of bacterial lipoic acid. A modified gas–chromatographic–mass–spectrometric procedure. Pratt KJ, et al. **Biochem J** 1989 Mar 15;258(3):749–54
Development of a selective clean-up method using immobilized antibody and its application to HPLC and GC/MS determination of a carbacyclin derivative, CS-570, in plasma. Nakagawa A, et al. **Biomed Chromatogr** 1987; 2(5):203–8
Determination of the N-acetyl metabolites of 4,4'-methylene dianiline and 4,4'-methylene-bis(2-chloroaniline) in urine. Cocker J, et al. **Biomed Environ Mass Spectrom** 1988 Sep; 17(3):161–7
Dimethylisopropylsilyl ether derivative in gas chromatography/mass spectrometry of 11-dehydrothromboxane B2. Ishibashi M, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):133–5
Estradiol-17 beta determined in plasma by gas chromatography–mass spectrometry with selected ion monitoring of mixed silyl ether-perfluoroacyl ester derivatives and use of various stable-isotope-labeled internal standards. Dehennin L. **Clin Chem** 1989 Apr; 35(4):532–6
Quantitative analysis for organic acids in biological samples: batch isolation followed by gas chromatographic–mass spectrometric analysis. Hoffmann G, et al. **Clin Chem** 1989 Apr;35(4):587–95
Determination of benzene, toluene and xylene in breath samples by gas chromatography/mass spectrometry. Pellizzari ED, et al. **IARC Sci Publ** 1988;(85):267–79
GC/MS analysis of phencyclidine acid metabolite in human urine. elSohly MA, et al. **J Anal Toxicol** 1988 Jul–Aug; 12(4):180–2
Chromatography for diagnosis of metabolic diseases. Jellum E. **J Chromatogr** 1988 Oct 28;452:435–41
Advances in the use of computerized gas chromatography–mass spectrometry and high-performance liquid chromatography with rapid scanning detection for clinical diagnosis. Jellum E, et al. **J Chromatogr** 1989 May 12;468:43–53
Biochemical applications of liquid chromatography–mass spectrometry. Tomer KB, et al. **J Chromatogr** 1989 Aug 11;492:189–221 (142 ref.)
Validity testing of commercial urine cocaine metabolite assays: II. Sensitivity, specificity, accuracy, and confirmation by gas chromatography/mass spectrometry. Cone EJ, et al. **J Forensic Sci** 1989 Jan;34(1):32–45
Analysis of alkyl nitrites by capillary gas chromatography–mass spectrometry. Bal TS, et al. **J Forensic Sci Soc** 1988 May–Jun;28(3):185–90
Simultaneous quantitative analysis of methamphetamine and 4-hydroxymethamphetamine in body fluids by gas chromatography/mass spectrometry. Hara K, et al. **Z Rechtsmed** 1988;100(4):231–6
[Gas chromatography–mass spectroscopy detection of tuberculostearic acid in the cerebrospinal fluid as a diagnostic aid in the differential diagnosis of tuberculoid meningitis] Roelcke U, et al. **Nervenarzt** 1989 May; 60(5):288–90 **(Ger)**

INSTRUMENTATION

Characterization of the direct-probe open-tubular liquid chromatography–mass spectrometry interface parameters. De Wit JS, et al. **J Chromatogr** 1989 Jan 13;462:365–75

METHODS

A new technique for lipid analysis using liquid chromatography/mass spectrometry. Kim HY, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):241–7
Interference of 3-hydroxyisobutyrate with measurements of ketone body concentration and isotopic enrichment by gas chromatography–mass spectrometry. Des Rosiers C, et al. **Anal Biochem** 1988 Aug 15;173(1):96–105
Determination of the carbohydrate composition of mammalian glycoproteins by capillary gas chromatography/mass spectrometry. Elwood PC, et al. **Anal Biochem** 1988 Nov 15;175(1):202–11
Quantification of quinolinic acid in rat brain, whole blood, and plasma by gas chromatography and negative chemical ionization mass spectrometry: effects of systemic L-tryptophan administration on brain and blood quinolinic

acid concentrations. Heyes MP, et al. **Anal Biochem** 1988 Oct;174(1):349–59

Low nanogram detection of nucleotides using fast atom bombardment–mass spectrometry. Weng QM, et al. **Anal Biochem** 1989 Apr;178(1):102–6

Quantification of leukotriene B4 in synovial fluid by gas chromatography/tandem mass spectrometry. Dawson M, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):205–11

Measurement of phenylacetic acid in cerebrospinal fluid and plasma using combined gas chromatography/electron capture chemical ionization mass spectrometry. Faull KF, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):213–9

Determination of the synthetic steroid norgestomet in bovine plasma by capillary column gas chromatography/negative chemical ionization mass spectrometry. KayKaty M, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):121–6

Femtomole analysis of diclofenac in human plasma by gas chromatography/negative ion chemical ionization/mass spectrometry using (18O2)diclofenac as internal standard. Leis HJ, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 17(4):307–10

Analysis of N tau–methyl imidazole acetic acid by electron impact gas chromatography/mass spectrometry. Mallet AI, et al. **Biomed Environ Mass Spectrom** 1988 Oct;17(4):275–9

A sensitive gas chromatographic mass spectrometric assay for a novel dopamine agonist (+)-trans-3,4,4A,5,6,10B-hexahydro-4-propyl-2H-naphth(1,2-B)(1,4) oxazin-9-ol in human plasma. Musson DG, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 17(4):293–8

GC/MS confirmatory method for etorphine in horse urine. Bonnaire Y, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):193–6

Distribution of zeranol in bovine tissues determined by selected ion monitoring capillary gas chromatography/mass spectrometry. Chichila TM, et al. **J Anal Toxicol** 1988 Nov–Dec;12(6):310–8

Determination of 1,2,4–trimethylbenzene (pseudocumene) in serum of a person exposed to liquid scintillation counting solutions by GC/MS. Kenndler E, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):211–3

Characterization of the antihistamines tripelennamine, methapyrilene, and thenyldiamine and their N–oxides by thermospray mass spectrometry. Korfmacher WA, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):94–6

The use of gas chromatography/negative ion chemical ionization mass spectrometry for the determination of lorazepam in whole blood. Koves EM, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):69–72

Confirmation and quantitation of barbiturates in human urine by gas chromatography/mass spectrometry. Mulé SJ, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):13–6

Gas chromatography/electron impact mass fragmentometric determination of urinary 6–acetylmorphine, a metabolite of heroin. Paul BD, et al. **J Anal Toxicol** 1989 Jan–Feb; 13(1):2–7

Simultaneous determination of methamphetamine and its metabolites in monkey urine by gas chromatography/mass spectrometry with selected ion monitoring. Yamamoto T, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):117–9

Liquid chromatography/mass spectrometry of fatty acids as their anilides. Kusaka T, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):495–7

MASS MEDIA

Youth and alcohol in television stories, with suggestions to the industry for alternative portrayals. De Foe JR, et al. **Adolescence** 1988 Fall;23(91):533–50

Clustering of teenage suicides after television news stories about suicides: a reconsideration. Kessler RC, et al. **Am J Psychiatry** 1988 Nov;145(11):1379–83

Media power and public mental health policy. Marcos LR. **Am J Psychiatry** 1989 Sep;146(9):1185–9

The role of media across four levels of health promotion intervention. Flora JA, et al. **Annu Rev Public Health** 1989; 10:181–201 (90 ref.)

Effects of media violence on children. A review of the literature. Heath L, et al. **Arch Gen Psychiatry** 1989 Apr; 46(4):376–9

Suicide: the role of the media. Goldney RD. **Aust N Z J Psychiatry** 1989 Mar;23(1):30–4 (23 ref.)

The responsibility of the media. Cowen Z. **BMJ** 1989 Jun 3;298(6686):1508–11

Addictions and the media [editorial] Farrell M. **Br J Addict** 1989 Aug;84(8):841

The press and AIDS. Altman LK. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):520–8

Medical dramas and the press: who benefits from the coverage? [letter] Thompson P. **Can Med Assoc J** 1989 Jan 1;140(1):10–1

A community action project on alcohol: community organization and its evaluation. Casswell S, et al. **Community Health Stud** 1989;13(1):39–48

Alcohol and the mass media. Partanen J, et al. **EURO Rep Stud** 1988;(108):1–73 (223 ref.)

Audience responses to appearance codes: old–age imagery in the media. Kaiser SB, et al. **Gerontologist** 1988 Oct; 28(5):692–9

Depression, etc [letter] Kuhn AJ. **Indiana Med** 1989 Apr; 82(4):306

Targeting messages to supplement users. Raab CA, et al. **J Am Diet Assoc** 1989 Apr;89(4):545–6

Medicine and the media. Crawshaw R. **J Clin Epidemiol** 1989; 42(8):815–6

Salt intake and blood pressure in the general population: a controlled intervention trial in two towns. Staessen J, et al. **J Hypertens** 1988 Dec;6(12):965–73

Somethin' gon' gitcha [editorial] Thomison JB. **J Tenn Med Assoc** 1989 May;82(5):270–1

The reporting of AIDS [letter] Pope HG Jr, et al. **JAMA** 1989 Oct 13;262(14):1949–50

Medical quackbusters [news] **Lancet** 1989 May 13; 1(8646):1090

The medical examiner and the press. Cornwell PD. **Med Leg Bull** 1989 Jan–Feb;38(1):1–8

The voice of organized medicine is being heard, thanks to MSMS. Paxton RE. **Mich Med** 1989 May;88(5):17–8

Where medicine and media clash. Heussner RC Jr, et al. **Minn Med** 1989 Mar;72(3):141, 143–5

The media and medicine [editorial] Burkey JW. **Mo Med** 1987 Jan;84(1):13, 50

Adolescent sexuality and the media. Strasburger VC. **Pediatr Clin North Am** 1989 Jun;36(3):747–73 (109 ref.)

Three mass media campaigns to prevent adolescent cigarette smoking. Bauman KE, et al. **Prev Med** 1988 Sep; 17(5):510–30

A mass media campaign. Using the mass media in smoking prevention and cessation programs: an introduction to five studies. Bettinghaus EP. **Prev Med** 1988 Sep;17(5):503–9

Mass media campaign—A Su Salud. Ramirez AG, et al. **Prev Med** 1988 Sep;17(5):608–21

Development of a smoking prevention mass media program using diagnostic and formative research. Worden JK, et al. **Prev Med** 1988 Sep;17(5):531–58

Is media information that smoking causes illness a self–fulfilling prophecy? Grossarth–Maticek R, et al. **Psychol Rep** 1989 Aug;65(1):177–8

Somatotypes revisited: have the media changed our perception of the female body image? Spillman DM, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):887–90

The CF gene hits the news [news] Marx JL. **Science** 1989 Sep 1;245(4921):924

The effect of publicized mass murders and murder–suicides on lethal violence, 1968–1980. A research note. Stack S. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul;24(4):202–8

Medicine and the media: social and legislative issues symposium of the Society of University Surgeons. King M, et al. **Surgery** 1989 Apr;105(4):549–52

How gullible are the media? Dineen B. **Vet Rec** 1989 Jun 3;124(22):579

Mobilizing media support for health. Abeyagunawardene LN, et al. **World Health Forum** 1989;10(1):30–1

[Respiratory diseases and the media] Molina C. **Rev Mal Respir** 1989;6(2):181–4 **(Fre)**

[The elderly and new media] Straka GA. **Z Gerontol** 1988 Jul–Aug;21(4):217–21 (40 ref.) (Eng. Abstr.) **(Ger)**

[The mass media and our children] Remschmidt H. **Z Kinder Jugendpsychiatr** 1989 Jun;17(2):53–4 **(Ger)**

[Professional secret and the press (editorial)] Batista Miranda JE, et al. **Med Clin (Barc)** 1988 Dec 10;91(20):783–5 **(Spa)**

STANDARDS

[Medical teachers' opinion on various sources of information related to smoking control (data from a questionnaire survey)] Kiselev VIa. **Sov Zdravookhr** 1988;(12):25–8 (Eng. Abstr.) **(Rus)**

TRENDS

[The limited viewpoint, the media—a medical aggravation] Imdahl H. **Langenbecks Arch Chir** 1988;Suppl 2:321–3 (Eng. Abstr.) **(Ger)**

[Conflicts from the viewpoint of the surgeon] Imdahl H. **Langenbecks Arch Chir** 1988;Suppl 2:347–53 (Eng. Abstr.) **(Ger)**

[The informed society—illusion or reality?] Noelle–Neumann E. **Langenbecks Arch Chir** 1988;Suppl 2:325–9 (Eng. Abstr.) **(Ger)**

MASS SCREENING

Gastric stump carcinoma—is prophylactic screening indicated? Fischer A, et al. **Acta Chir Scand Suppl** 1988; 547:86–7

School screening for scoliosis [letter] **Acta Orthop Scand** 1989 Feb;60(1):123–5

High risk screening of adenosine deaminase and purine nucleoside phosphorylase deficiency in Japan. Kishi T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):152–4

Early detection of harmful alcohol consumption: comparison of clinical, laboratory, and self–report screening procedures. Babor TF, et al. **Addict Behav** 1989; 14(2):139–57

Screening for hearing impairment [letter] Lund WS. **Age Ageing** 1988 Nov;17(6):425

Breast cancer screening in mobile. Lorino CO, et al. **Ala Med** 1988 Nov;58(5):23–5

Mobile mammography screening. Stanley RJ, et al. **Ala Med** 1989 Mar;58(9):13

Screening for hepatitis B. U.S. Preventive Services Task Force. **Am Fam Physician** 1989 Jul;40(1):131–3

Screening for breast cancer. U.S. Preventive Services Task Force, Washington, D.C. **Am Fam Physician** 1989 Jun; 39(6):89–96 (50 ref.)

Screening for silent myocardial ischemia. Assey ME. **Am Fam Physician** 1988 Dec;38(6):143–6 (24 ref.)

Population screening for plasma cholesterol: community–based results from Connecticut. Wynder EL, et al. **Am Heart J** 1989 Mar;117(3):649–56

Avoiding sources of error in PKU screening [letter] Kremensky I, et al. **Am J Clin Pathol** 1989 Sep;92(3):396–7

Eliminating some possible errors in phenylketonuria screening [letter] Wilcken B, et al. **Am J Clin Pathol** 1989 Sep;92(3):396

French screening programs for congenital hypothyroidism [letter] Farriaux JP, et al. **Am J Dis Child** 1988 Nov; 142(11):1137–8

Reactions of asbestos–exposed workers to notification and screening. Meyerowitz BE, et al. **Am J Ind Med** 1989; 15(4):463–75

Screening for hereditary non–polyposis colorectal cancer: a study of 22 kindreds in The Netherlands. Vasen HF, et al. **Am J Med** 1989 Mar;86(3):278–81

Macrosomia in the postdate pregnancy: is routine ultrasonographic screening indicated? Chervenak JL, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):753–6

Adequacy of the ELISA test for screening corneal transplant donors. Goode SM, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):463–6

Population screening and referral for hypercholesterolemia. Råstam L, et al. **Am J Prev Med** 1988 Sep–Oct;4(5):249–54

HIV testing in prisoners: is mandatory testing mandatory? Andrus JK, et al. **Am J Public Health** 1989 Jul;79(7):840–2

Community screening for HIV infection in Finland [letter] Pönkä A, et al. **Am J Public Health** 1989 Apr;79(4):522

Prevalence of diabetes in a Navajo Indian community [published erratum appears in Am J Public Health 1989 Jun;79(6):690] Sugarman J, et al. **Am J Public Health** 1989 Apr;79(4):511–3

Hemoccult screening for colorectal cancer. Chang FC, et al. **Am J Surg** 1988 Dec;156(6):457–9

AIDS antibody testing. Will it stop the AIDS epidemic? Will it help people infected with HIV? Coates TJ, et al. **Am Psychol** 1988 Nov;43(11):859–64 (45 ref.)

Annual tuberculosis screening of hospital employees: an idea lacking supporting data [editorial] Aitken ML, et al. **Am Rev Respir Dis** 1988 Jul;138(1):3–4

Tuberculosis screening in alcoholics and drug addicts [letter] Friedman L. **Am Rev Respir Dis** 1988 Jul;138(1):239

Screening for NPC. Chan SH. **Ann Acad Med Singapore** 1989 Jan;18(1):80–2

A case for colorectal cancer screening in Singapore. Goh HS. **Ann Acad Med Singapore** 1989 Jan;18(1):90–2

Gynaecological cancer screening. Sivanesaratnam V. **Ann Acad Med Singapore** 1989 Jan;18(1):75–9

Bone mineral densitometry. Health and Public Policy Committee, American College of Physicians [letter] **Ann Intern Med** 1988 Nov 15;109(10):846

Screening for diabetes mellitus [letter] Clement S, et al. **Ann Intern Med** 1989 Apr 1;110(7):572–3

Screening for diabetes mellitus [letter] Davidson MB. **Ann Intern Med** 1989 Jan 15;110(2):168

Screening for breast cancer. Eddy DM. **Ann Intern Med** 1989 Sep 1;111(5):389–99 (30 ref.)

Screening for lung cancer. Eddy DM. **Ann Intern Med** 1989 Aug 1;111(3):232–7 (27 ref.)

Screening asymptomatic adults for cardiac risk factors: the serum cholesterol level. Garber AM, et al. **Ann Intern Med** 1989 Apr 15;110(8):622–39 (107 ref.)

Voluntary screening for human immunodeficiency virus (HIV) infection. Weighing the benefits and harms. Lo B, et al. **Ann Intern Med** 1989 May 1;110(9):727–33 (67 ref.)

Screening for lung cancer [letter] Petty TL. **Ann Intern Med** 1989 Oct 1;111(7):620–1

The resting electrocardiogram as a screening test. A clinical analysis. Sox HC Jr, et al. **Ann Intern Med** 1989 Sep 15; 111(6):489–502 (56 ref.)

Increased recall rate at screening for congenital hypothyroidism in breast fed infants born to iodine overloaded mothers. Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1207–10

Withdrawal of iodinated disinfectants at delivery decreases the recall rate at neonatal screening for congenital hypothyroidism [letter] Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1297–8

Have school entry medicals had their day? Kennedy FD. **Arch Dis Child** 1988 Oct;63(10):1261–3

Results of a television–advertised public screening program for colorectal cancer. McGarrity TJ, et al. **Arch Intern Med** 1989 Jan;149(1):140–4

Promoting cancer screening. A randomized, controlled trial of three interventions. McPhee SJ, et al. **Arch Intern Med** 1989 Aug;149(8):1866–72

Screening for hepatocellular carcinoma in high–risk individuals. A clinical review. Regan LS. **Arch Intern Med** 1989 Aug;149(8):1741–4 (39 ref.)

Preoperative screening for HIV infection. A balanced view for the practicing surgeon. Fournier AM, et al. **Arch Surg** 1989 Sep;124(9):1038–40

A serological mass examination for syphilis in Greenland in 1987. Misfeldt J, et al. **Arctic Med Res** 1988 Oct;47(4):173–8

Prevalence of HIV virus among patients undergoing continuous ambulatory peritoneal dialysis. Rubin J. **ASAIO Trans** 1989 Apr–Jun;35(2):144–5

Audiologic screening of newborn infants who are at risk for

hearing impairment. **ASHA** 1989 Mar;31(3):89–92
Quality assurance in breast cancer screening. Grey JA. **Aust Clin Rev** 1988 Dec;8(31):177–80
Annual Pap smears queried [letter] Roberts RW. **Aust Fam Physician** 1988 Oct;17(10):839
Microbiological profile of the cervix in 1,000 sexually active women. Kovacs GT, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):216–20
Pap smear results of Victorian teenagers, 1980–1987. Mitchell H, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):213–5
The development of action lines in an Australian maternal serum alphafetoprotein screening service for neural tube defects. Nicolas T, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):12–6
Obstetric high risk screening and prediction of neonatal morbidity. Webster MA, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(i):6–11
Experience with neonatal screening for cystic fibrosis in New Zealand using measurement of immunoreactive trypsinogen. Wesley AW, et al. **Aust Paediatr J** 1989 Jun; 25(3):151–5
Biochemical screening of airmen. Hardarson T, et al. **Aviat Space Environ Med** 1988 Oct;59(10):965–7
Screening for abdominal aortic aneurysm. Allen PI. **Biomed Pharmacother** 1988;42(7):451–4 (31 ref.)
Screening in breast cancer: a view from the front line. Lundgren B. **Biomed Pharmacother** 1988;42(7):443–6
The ethics, the risks and the benefits of screening. Miller AB. **Biomed Pharmacother** 1988;42(7):439–42
Screening: potential for cancer prevention. Newell GR. **Biomed Pharmacother** 1988;42(7):435–7
The debate over mass mammography in Great Britain [letter] Day NE. **BMJ** 1988 Dec 10;297(6662):1541–2
Controversy over mammographic screening [letter] Fallowfield L. **BMJ** 1988 Nov 12;297(6658):1226–7
Breast screening programme [letter] Gray JA. **BMJ** 1989 Jan 7;298(6665):48
Screening for HIV in medicolegal necropsies in Helsinki. Karhunen PJ, et al. **BMJ** 1989 Apr 29;298(6681):1160
Evaluation of a proposed breast cancer screening regimen. Knox EG. **BMJ** 1988 Sep 10;297(6649):650–4
Antenatal ultrasonography to detect fetal renal abnormalities: a prospective screening programme. Livera LN, et al. **BMJ** 1989 May 27;298(6685):1421–3
Breast screening in Britain and Sweden [letter] Lundgren B. **BMJ** 1988 Nov 12;297(6658):1266
The debate over mass mammography in Britain. The case against. Skrabanek P. **BMJ** 1988 Oct 15;297(6654):971–2
Malmö mammographic screening trial [letter] Tabár L, et al. **BMJ** 1989 Jan 7;298(6665):48–9
The debate over mass mammography in Britain. The case for. Warren R. **BMJ** 1988 Oct 15;297(6654):969–70
The occurrence of interval cancers in the Nijmegen screening programme. Peeters PH, et al. **Br J Cancer** 1989 Jun; 59(6):929–32
Breast cancer screening: counter editorial [letter] Blamey RW. **Br J Hosp Med** 1989 Jun;41(6):591
Screening for HIV [editorial] Johnson MA, et al. **Br J Hosp Med** 1989 Feb;41(2):119
Breast cancer screening: a UK showdown [editorial] Skrabanek P. **Br J Hosp Med** 1988 Dec;40(6):419
Reporting the assessment of screening and diagnostic tests. Wald N, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):389–96
Screening for breast cancer: the UK scene. The 69th Mackenzie Davidson memorial lecture. Forrest AP. **Br J Radiol** 1989 Aug;62(740):695–704
Additional value of fine-needle aspiration biopsy in a mammographic screening trial. Frisell J, et al. **Br J Surg** 1989 Aug;76(8):840–3
General practice-based population screening for abdominal aortic aneurysms: a pilot study. O'Kelly TJ, et al. **Br J Surg** 1989 May;76(5):479–80
The Stockholm breast cancer screening trial—5-year results and stage at discovery. Frisell J, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):79–87
Screening of deep-sea fishermen for cardiovascular disease. Gockowski K, et al. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):31–8
Many-year observation of the circulatory system in the selected groups of harbour workers with the Minnesota Code 1982 employed. Waśkiewicz J. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):5–16
Tuberculosis among refugees: study of a population screening at the Tuberculosis Clinic in Lausanne (Switzerland) between 1983 and 1988. Zellweger JP, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):29–31
Mammography [letter] Baines CJ. **CA** 1989 Jul–Aug; 39(4):252–4
Canadian Immunization Guide. National Advisory Committee on Immunization. **Can Dis Wkly Rep** 1989 Apr 22;15(16):85–8 (Eng, Fre)
Screening for parasites in a selected group of foreign students—Alberta. Clarkson G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):67–8 (Eng, Fre)
Testing pregnant women for HBsAg: a pilot study in Manitoba. Sekla LH, et al. **Can Dis Wkly Rep** 1988 Aug 6;14(31):137–40 (Eng, Fre)
Universal prenatal screening for hepatitis B, Alberta, 1985–1988. Waters JR. **Can Dis Wkly Rep** 1989 Feb 11; 15(6):29–32 (Eng, Fre)
Travel restrictions and HIV antibody screening. William C, et al. **Can Dis Wkly Rep** 1988 Jul 2;14(26):116 (Eng, Fre)
Development of a suicide screening instrument for use in a remand centre setting. Arboleda-Florez J, et al. **Can J Psychiatry** 1988 Oct;33(7):595–8
Validity of the GHQ-30 in a Nigerian medical outpatient clinic. Oduwole OO, et al. **Can J Psychiatry** 1989 Feb; 34(1):20–3
The National Breast Screening Study: pre-recruitment source of awareness in participants. Baines CJ, et al. **Can J Public Health** 1989 May–Jun;80(3):221–5
Mass testing for HIV infection [letter] Danby FW. **Can Med Assoc J** 1988 Nov 1;139(9):824–5
Cervical intraepithelial neoplasia in female prisoners in British Columbia. Karsai H, et al. **Can Med Assoc J** 1988 Oct 15;139(8):733–6
Informed consent to HIV testing [letter] Parker JE. **Can Med Assoc J** 1989 Feb 1;140(3):262
Mass screening for cervical cancer in Taiwan from 1974 to 1984. Chou P, et al. **Cancer** 1989 Aug 15;64(4):962–8
Cytometric characterization and clinical course of breast cancer diagnosed in a population-based screening program. Hatschek T, et al. **Cancer** 1989 Sep 1;64(5):1074–81
Determining the efficacy of breast cancer screening. Shapiro S. **Cancer** 1989 May 15;63(10):1873–80
Control of breast cancer through mass screening: from research to action. Strax P. **Cancer** 1989 May 15; 63(10):1881–7
Rocket research and Pony Express delivery. Wizenberg MJ. **Cancer** 1989 Jun 15;63(12):2387–92
A long-term follow-up study of patients with gastric cancer detected by mass screening. Yamazaki H, et al. **Cancer** 1989 Feb 15;63(4):613–7
Screening for sleep apnea? Williams A, et al. **Chest** 1989 Sep; 96(3):451–3
Early language screening in City and Hackney: work in progress. Dixon J, et al. **Child Care Health Dev** 1988 May-Jun;14(3):213–29
The application of radionuclide ventriculography to cardiac screening. Lindsay J Jr, et al. **Clin Cardiol** 1989 May; 12(5):259–65
Screening for high blood cholesterol. Schucker B, et al. **Clin Lab Med** 1989 Mar;9(1):29–36 (30 ref.)
An insurance policy to reduce the risk of dying from breast cancer. Chamberlain J. **Clin Radiol** 1989 Jan;40(1):1–3
New methods for identifying "at risk" patients for osteoporosis. Christiansen C, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:52–5
Computer-managed call and recall for cervical screening: a typology of reasons for non-attendance. Elkind A, et al. **Community Med** 1989 May;11(2):157–62
Screening for thyroid disease in the elderly. Serum concentrations of thyrotropin and 3,5,3'-triiodothyronine in a representative population of 79-year-old women and men. Edén S, et al. **Compr Gerontol [A]** 1988 Feb;2(1):40–5
Variants of the course of ischaemic heart disease, its incidence and the level of main risk factors. Results of a two-stage screening trial in a male population. Lipovetsky BM, et al. **Cor Vasa** 1989;31(2):90–7
Lead poisoning in Wilmington, Delaware, 1974–1984. Craven EM, et al. **Del Med J** 1989 Mar;61(3):135–6
The infant motor screen. Nickel RE, et al. **Dev Med Child Neurol** 1989 Feb;31(1):35–42
Screening or examining? Whitmore K, et al. **Dev Med Child Neurol** 1988 Oct;30(5):673–6
Screening for gastrointestinal cancers in high-risk groups. Järvinen HJ, et al. **Dig Dis** 1989;7(3):243–54 (71 ref.)
Mass screening for colorectal cancer. Khubchandani IT, et al. **Dis Colon Rectum** 1989 Sep;32(9):754–8
Fiberoptic sigmoidoscopy as the first screening procedure for colorectal neoplasms in an asymptomatic population. Shida H, et al. **Dis Colon Rectum** 1989 May;32(5):404–8
Cervical cytology in an urban Nigeria population. Ayangade O, et al. **East Afr Med J** 1989 Jan;66(1):50–6
Studies on congenital hypothyroidism and results of three and half years of compulsory screening program in Slovak Socialist Republic. Dluholucký S, et al. **Endocrinol Exp** 1989 Jun;23(2):125–35
Screening of congenital hypothyroidism in newborns in Bohemia and Moravia. Hníková O, et al. **Endocrinol Exp** 1989 Jun;23(2):117–23
Experience with neonatal screening for congenital hypothyroidism in Hungary. Péter F, et al. **Endocrinol Exp** 1989 Jun;23(2):143–51
An up-dating on oncologic colpocytology. Gentile G. **Eur J Gynaecol Oncol** 1988;9(5):399–403
A community screening programme for abdominal aortic aneurysms. Collin J, et al. **Eur J Vasc Surg** 1988 Apr; 2(2):83–6
Screening for hypercholesterolemia in a family practice residency. Keller KG, et al. **Fam Pract Res J** 1989 Spring-Summer;8(2):85–91
Colonoscopic screening of persons with suspected risk factors for colon cancer: II. Past history of colorectal neoplasms. Grossman S, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):299–306
Cervical cytology screening in a sexually transmitted diseases clinic for the first time in Sri Lanka. Abeyewickreme I. **Genitourin Med** 1989 Apr;65(2):98–102
Screening for cervical dysplasia in department of genitourinary medicine. Tait IA, et al. **Genitourin Med** 1988 Aug;64(4):255–8
Sensitivity of the screening program for cervical cancer in the Florence District. Cecchini S, et al. **Gynecol Oncol** 1989 May;33(2):182–4
Acquired immunodeficiency syndrome: realistic concerns and appropriate precautions. Gurevich I. **Heart Lung** 1989 Mar;18(2):107–12 (25 ref.)
Screening for renal disease in school children: experience in Japan. Kitagawa T. **Indian J Pediatr** 1988 Jul–Aug; 55(4):481–94
AIDS: serologic testing for the human immunodeficiency virus—to screen or not to screen. Maki DG. **Infect Control Hosp Epidemiol** 1989 Jun;10(6):243–7
The frequency of IgA-deficiency in the Austrian population. A protocol for large-scale screening by ELISA and a study on 3056 blood donors. Winter PM, et al. **Infusionstherapie** 1988 Oct;15(5):221–4
Screening models in occupational health practice to detect and to assess individuals and groups at risk because of exposure and/or with decreased capacities to cope with workplace chemicals. Lahaye D. **Int Arch Occup Environ Health** 1988;Suppl:96–101
Screening for breast cancer in Nijmegen. Report of 6 screening rounds, 1975–1986. Peeters PH, et al. **Int J Cancer** 1989 Feb 15;43(2):226–30
Screening for toxoplasmosis in pregnancy. al-Meshari AA, et al. **Int J Gynaecol Obstet** 1989 May;29(1):39–45
Screening for middle-ear disease in schools for hearing-impaired children. Meyer S, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):163–70
The value of mammography screening in women under age 50 years. Tabár L, et al. **Invest Radiol** 1989 May;24(5):420–4
Reducing mortality from breast cancer [editorial] Ennis J. **Ir Med J** 1988 Nov;81(1):2
Screening for depression among the elderly in Israel: an assessment of the Short Geriatric Depression Scale (S-GDS). Cwikel J, et al. **Isr J Med Sci** 1989 Mar; 25(3):131–7
The natural history of human immunodeficiency virus infection in screened HIV positive U.S. Air Force personnel: a preliminary report. Reid MJ, et al. **J Acquir Immune Defic Syndr** 1988;1(5):508–15
Screening for melanoma/skin cancer: theoretic and practical considerations. Koh HK, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):159–72 (81 ref.)
Feasibility of sigmoidoscopic screening for bowel cancer in a primary care setting. Hahn DL. **J Am Board Fam Pract** 1989 Jan–Mar;2(1):25–9
Screening for chlamydia by university health centers: is it necessary and feasible? Spear SF, et al. **J Am Coll Health** 1989 May;37(6):293–5
Screening for cervical carcinoma in elderly women. Developed by the Clinical Practice Committee and approved by the American Geriatrics Society Board of Directors. **J Am Geriatr Soc** 1989 Sep;37(9):85–7
Screening for breast cancer in elderly women. Developed by the Clinical Practice Committee and approved by the American Geriatrics Society Board of Directors. **J Am Geriatr Soc** 1989 Sep;37(9):883–4
On cancer screening in the elderly [editorial] Barry P, et al. **J Am Geriatr Soc** 1989 Sep;37(9):913–4
Cancer screening in the elderly. Robie PW. **J Am Geriatr Soc** 1989 Sep;37(9):888–93
Screening for Alzheimer's disease by clock drawing. Wolf-Klein GP, et al. **J Am Geriatr Soc** 1989 Aug; 37(8):730–4
Why mandatory HIV antibody screening cannot work. Wilson RJ. **J Am Optom Assoc** 1989 Jun;60(6):447–52
Redesigning the workplace prevents low-back injuries [letter] Moloff AL. **J Am Osteopath Assoc** 1988 Jul; 88(7):834
AIDS in Arkansas. AIDS 1988. Boswell RN. **J Arkansas Med Soc** 1988 Jul;85(2):73–85 (0 ref.)
Neonatal screening for congenital dislocation of the hip. A prospective 21-year survey. Hadlow V. **J Bone Joint Surg [Br]** 1988 Nov;70(5):740–3
Screening for learning disabilities: a neuropsychological approach. Davis RD, et al. **J Clin Psychol** 1989 May; 45(3):423–9
The development and preliminary evaluation of a screening test to detect school learning problems. Gottesman RL, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):68–74
Screening for hemochromatosis? Lederle FA. **J Gen Intern Med** 1989 Jan–Feb;4(1):61–3
Does screening proctosigmoidoscopy result in reduced mortality from colorectal cancer? A critical review of the literature. Ow CL, et al. **J Gen Intern Med** 1989 May–Jun; 4(3):209–15 (35 ref.)
Hypertension screening in a Hungarian town. Sonkodi S, et al. **J Hum Hypertens** 1989 Apr;3(2):105–10
Exercise testing in children as a diagnostic tool of future hypertension: the Odense Schoolchild Study. Hansen HS, et al. **J Hypertens Suppl** 1989 Feb;7(1):S41–2
Quantitative analysis of systolic blood pressure tracking during childhood and adolescence using a tracking index: the Shimane Heart Study. Nishio T, et al. **J Hypertens Suppl** 1989 Feb;7(1):S35–6
Comparison of high-risk and mass strategies for the prevention of high blood pressure. Watt G. **J Hypertens Suppl** 1989 Feb;7(1):S29–32 (32 ref.)
What about mandatory AIDS testing? Frierson RL, et al. **J Ky Med Assoc** 1989 Feb;87(2):66–71
Speech and language screening of children from birth to 6 years of age. Steckol KF. **J Ky Med Assoc** 1988 Sep; 86(9):503–6

Public cholesterol screening: motivation for participation, follow-up outcome, self-knowledge, and coronary heart disease risk factor intervention. Stockbridge H, et al. **J Lab Clin Med** 1989 Aug;114(2):142–51

Phenylketonuria in Greece: 12 years' experience. Missiou-Tsagaraki S, et al. **J Ment Defic Res** 1988 Aug; 32 (Pt 4):271–87

Medical groups' message to women: if 40 or older, get regular mammograms [news] Vanchieri C. **J Natl Cancer Inst** 1989 Aug 2;81(15):1126–8

Screening blood test identifies subclinical beryllium disease. Kreiss K, et al. **J Occup Med** 1989 Jul;31(7):603–8

Chlamydia—screening needs in Oklahoma [news] **J Okla State Med Assoc** 1989 Jan;82(1):27

Parental history of cardiovascular disease as an indication for screening for lipoprotein abnormalities in children. Dennison BA, et al. **J Pediatr** 1989 Aug;115(2):186–94

Common pitfalls in the evaluation of developmental screening tests. Frankenburg WK, et al. **J Pediatr** 1988 Dec;113(6):1110–3

Early identification of developmental problems [editorial] Garfunkel JM. **J Pediatr** 1988 Dec;113(6):1113–4

Failure of neonatal screening for hypothyroidism [letter] Moore P, et al. **J Pediatr** 1989 Jul;115(1):169–70

Screening of school-aged hearing impaired children. Rogers GL, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):230–2

Prevention of congenital dislocation of the hip in the newborn. Miranda L, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):671–5

A new urinary mass screening system for neuroblastoma in infancy by use of monoclonal antibodies against VMA and HVA. Yokomori K, et al. **J Pediatr Surg** 1989 Apr; 24(4):391–4

Cholesterol screening in general practice. Jacobs L. **J R Coll Gen Pract** 1988 Jul;38(312):321

Iron deficiency in inner city pre-school children: development of a general practice screening programme. James J, et al. **J R Coll Gen Pract** 1988 Jun;38(311):250–2

Study of the women overdue for a smear test in a general practice cervical screening programme. Meadows P. **J R Coll Gen Pract** 1987 Nov;37(304):500–3

Prophylactic cytological investigation for cervical cancer in relation to stage at diagnosis: a study of 420 women in Denmark. Olesen F. **J R Coll Gen Pract** 1988 Aug; 38(313):356–9

Cervical screening in general practice [letter] Pollock EE, et al. **J R Coll Gen Pract** 1987 Nov;37(304):512

Problems of cervical cancer screening programmes. Rang EH, et al. **J R Coll Gen Pract** 1988 Jun;38(311):267–9

Psychiatric screening in general practice: comparison of the general health questionnaire and the hospital anxiety depression scale. Wilkinson MJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):311–3

Newborn screening for HIV antibody [editorial] DiSalvo AF, et al. **J S C Med Assoc** 1989 Apr;85(4):208–9

HIV prevalence in a medically indigent population. Gabel HD, et al. **J S C Med Assoc** 1988 Sep;84(9):445

The High Blood Pressure and You Education Program. Hale CD, et al. **J Sch Health** 1988 Aug;58(6):251–2

Results of screening for cardiac diseases among school children in Singapore. Chan KY, et al. **J Singapore Paediatr Soc** 1988;30(3–4):125–8

Pre-employment screening: use or ornament? Houghton AM, et al. **J Soc Occup Med** 1989 Summer;39(2):51–5

Athlete drug testing receiving more attention than ever before in history of competition [news] Cowart VS. **JAMA** 1989 Jun 23–30;261(24):3510–1, 3516

New studies fuel controversy over universal cholesterol screening during childhood [news] Merz B. **JAMA** 1989 Feb 10;261(6):814

Screening for cervical cancer by Pap smear [see comments] Rizvi JH, et al. **JPMA** 1988 Sep;38(9):229–31. **Comment in:** JPMA 1989 Apr;39(4):116–8

Evaluation of mass screening for thyroid cancer. Ishida T, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):289–95

A new screening test for dementia. Otsuka T, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):223–9

Population screening for serum cholesterol [letter] **Lancet** 1989 Mar 11;1(8637):547–8

Screening for gestational glucose intolerance [letter; comment] **Lancet** 1989 Jul 15;2(8655):153–4. **Comment on:** Lancet 1989 May 27;1(8648):1187–91

Screening for congenital CMV [editorial] **Lancet** 1989 Sep 9;2(8663):599–600

Screening for hepatitis C virus antibody [letter] **Lancet** 1989 Aug 26;2(8661):505

Should all pregnant women be screened for gestational glucose intolerance? [see comments] Ales KL, et al. **Lancet** 1989 May 27;1(8648):1187–91 (58 ref.). **Comment in:** Lancet 1989 Jul 15;2(8655):153–4

HIV testing in 25% of Swedish population aged 16–44 [letter] HerLitz C, et al. **Lancet** 1989 Aug 12;2(8659):386–7

Screening for congenital cytomegalovirus and toxoplasmosis [letter] Ho-Yen DO. **Lancet** 1989 Sep 30;2(8666):803

Ultrasound screening for fetal malformations [letter] Levi S, et al. **Lancet** 1989 Mar 25;1(8639):678

Evaluation of screening tests for urinary infection in hospital patients [letter] Levy M, et al. **Lancet** 1989 Aug 12; 2(8659):384–5

Cervical smears: a questionable practice? McCormick JS. **Lancet** 1989 Jul 22;2(8656):207–9

Close-contact surveys and mass-screening studies for leprosy in Turkey. Aytekin AH, et al. **Lepr Rev** 1988 Sep; 59(3):225–9

Strategies for screening for colorectal carcinoma. England WL, et al. **Med Decis Making** 1989 Jan–Mar;9(1):3–13

Screening for congenital dislocation of the hip by child-health nurses in Western Australia. Bower C, et al. **Med J Aust** 1989 Jan 16;150(2):61–5

Should all pregnant women be screened for hepatitis B surface antigen? [letter] Christopher PJ. **Med J Aust** 1989 Jun 5;150(11):668

Screening for congenital dislocation of the hip in Western Australia [letter] Dunn PM, et al. **Med J Aust** 1989 Apr 17;150(8):467

Gynaecological cytology screening in South Australia: a 23-year experience. MacCormac L, et al. **Med J Aust** 1988 Nov 21;149(10):530–6

A biological false-positive result for human immunodeficiency virus type-1 in an army recruit. Nasveld P, et al. **Med J Aust** 1988 Oct 17;149(8):444

Screening for congenital dislocation of the hip [editorial] Nolan T, et al. **Med J Aust** 1989 Jan 16;150(2):59–60

Should all pregnant women be screened for hepatitis B surface antigen? [see comments] Pesce AF, et al. **Med J Aust** 1989 Jan 2;150(1):19–21. **Comment in:** Med J Aust 1989 Mar 20;150(6):346, 348

Galactosemia: progress in neonatal screening in Missouri. Haibach H, et al. **Mo Med** 1986 May;83(5):271–4

Screening and detection of colon cancer. Schubert TT. **Mo Med** 1986 Mar;83(3):145–50 (51 ref.)

NJ skin cancer screening program. Papa CM. **N J Med** 1989 May;86(5):353–5, 358

Screening for cervical cancer [letter] Chambers H. **N Z Med J** 1989 Feb 8;102(861):52

Encouraging and reminding women to have cervical smears [letter] Chang AR. **N Z Med J** 1989 Sep 13;102(875):482

Chlamydia screening [letter] Edwards D, et al. **N Z Med J** 1988 Sep 28;101(854):613

Screening for cervical cancer [letter] Edwards D. **N Z Med J** 1988 Sep 28;101(854):616–7

Screening for hyperlipidaemias [letter] French J. **N Z Med J** 1989 Feb 8;102(861):53

Mass vaccination against hepatitis B in preschool children: immunogenicity after three reduced doses. Milne A, et al. **N Z Med J** 1989 Aug 23;102(874):429–30

Mass screening for colo-rectal cancer. **Natl Inst Health Consensus Dev Conf Summ** 1977–78;1:20–2 (0 ref.)

Mass screening for lung cancer. **Natl Inst Health Consensus Dev Conf Summ** 1977–78;1:32–4 (0 ref.)

The case for routine bone mass measurements [editorial] Fogelman I. **Nucl Med Commun** 1988 Aug;9(8):541–3

Early prediction of antepartum hypertension. Ales KL, et al. **Obstet Gynecol** 1989 Jun;73(6):928–33

Maternal age and screening for gestational diabetes: a population-based study. Coustan DR, et al. **Obstet Gynecol** 1989 Apr;73(4):557–61

Routine antepartum human immunodeficiency virus infection screening in an inner-city population. Lindsay MK, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):289–94

Effective hearing programs require assessment, testing, enforcement. Caple GE. **Occup Health Saf** 1989 Jan; 58(1):48–9, 52

Audiometric monitoring may reduce hearing loss, compensation awards. Sawyer C. **Occup Health Saf** 1989 Jan;58(1):50–2

Skin cancer awareness programs: success of a statewide program of education and screening in Ohio. Hazen PG. **Ohio Med** 1989 Jun;85(6):449–51

A survey of physician beliefs and practices concerning routine mammography. Slenker SE, et al. **Ohio Med** 1988 Jun;84(6):476–81

New technology in infant hearing screening. Northern JL, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):75–87 (19 ref.)

Could oedema and proteinuria in pregnancy be used to screen for high risk? The WHO International Collaborative Study of Hypertensive Disorders of Pregnancy. **Paediatr Perinat Epidemiol** 1988 Jan;2(1):25–42

Newborn screening for sickle cell disease and other hemoglobinopathies. **Pediatrics** 1989 May;83(5 Pt 2):813–914

Family history evaluation as a predictive screen for childhood hypercholesterolemia. Pediatric Practice Research Group. Griffin TC, et al. **Pediatrics** 1989 Aug; 84(2):365–73

Newborn screening for sickle cell disease [letter] Gross T. **Pediatrics** 1989 Apr;83(4 Pt 2):629–31

Neonatal testing for sickle cell diseases—a historical and personal review. Pearson HA. **Pediatrics** 1989 May;83(5 Pt 2):815–8

Prevention of hepatitis B infection in newborns through mass screening and delayed vaccination of all infants of mothers with hepatitis B surface antigen. Schalm SW, et al. **Pediatrics** 1989 Jun;83(6):1041–8

Public health perspective on newborn screening for hemoglobinopathies. Walker B Jr. **Pediatrics** 1989 May;83(5 Pt 2):912

Screening for AIDS virus: what should we do? A panel discussion [clinical conference] Childress JF, et al. **Pharos** 1988 Summer;51(3):33–7

Scoliosis screening of 3,000 college-aged women. The Utah Study—phase 2. Francis RS. **Phys Ther** 1988 Oct; 68(10):1513–6

Health surveillance of pre-school children. Colver A. **Practitioner** 1988 May 9;232(1448):519–20, 523

The ethics of paternalism and preventive screening. Doyal L, et al. **Practitioner** 1988 Jul;232(1452):820–3

Cervical cancer screening in primary care: issues and recommendations. Mandelblatt J. **Prim Care** 1989 Mar; 16(1):133–55 (141 ref.)

Cervical cytology and the evaluation of the abnormal Papanicolaou smear. Noller KL. **Prim Care** 1988 Sep; 15(3):461–71 (20 ref.)

Preventive health screening in adolescent patients. Schubiner HH. **Prim Care** 1989 Mar;16(1):211–30 (70 ref.)

Validity of health screening programs. Marr WL. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988;:87–95

Evaluating the efficacy of skin self-exam and other surveillance measures in persons at various levels of risk for cutaneous malignant melanoma: an ongoing case-control study. Berwick M, et al. **Prog Clin Biol Res** 1989;293:297–305

Breast cancer screening and education in high risk women. Dworsky R, et al. **Prog Clin Biol Res** 1989;293:115–24

Pap smear screening intervals among patients with cervical cancer in West Virginia. Jubelirer S, et al. **Prog Clin Biol Res** 1989;293:323–30

Results of a community-based breast cancer screening program. McClatchey MW, et al. **Prog Clin Biol Res** 1989; 293:89–101

An examination of compliance and noncompliance in an HMO cancer screening program. Rimer B, et al. **Prog Clin Biol Res** 1988;278:21–30

Barriers and facilitators to compliance with routine mammographic screening. Rimer B, et al. **Prog Clin Biol Res** 1989;293:125–33

Validation of 30- and 12-item versions of the Chinese Health Questionnaire (CHQ) in patients admitted for general health screening. Chong MY, et al. **Psychol Med** 1989 May; 19(2):495–505

Validity of the Japanese version of the GHQ among antenatal clinic attendants. Kitamura T, et al. **Psychol Med** 1989 May; 19(2):507–11

Cervical screening: what are the communication problems? Haran D, et al. **Public Health** 1989 Mar;103(2):99–104

An international survey of attitudes of medical geneticists toward mass screening and access to results. Wertz DC, et al. **Public Health Rep** 1989 Jan–Feb;104(1):35–44

Health screening of a RI Cambodian refugee population. Chow RT, et al. **R I Med J** 1989 Aug;72(8):273–7

Diabetes and pregnancy: the public health perspective [editorial] Feldman J. **R I Med J** 1989 Apr;72(4):121–2

The risk of lead poisoning among southeast Asian refugee children in Rhode Island 1984–1988. Simon P, et al. **R I Med J** 1989 Aug;72(8):283–7

The technical quality of mammography in centers participating in a regional breast cancer awareness program [letter] Gray JE. **Radiographics** 1988 Jul;8(4):823

Why women resist screening mammography: patient-related barriers. Rimer BK, et al. **Radiology** 1989 Jul;172(1):243–6

Perceived fairness in risk management: Bayesian implications for AIDS testing [letter] Gleason JM. **Risk Anal** 1989 Mar; 9(1):15–6

Screening antenatal blood samples for anti-human immunodeficiency virus antibodies by a large-pool enzyme-linked immunosorbent assay system. Results of an 18-month investigation. Shapiro M, et al. **S Afr Med J** 1989 Sep 16;76(6):245–7

Hearing loss at age 7, 10 and 13—an audiometric follow-up study. Costa OA, et al. **Scand Audiol Suppl** 1988;30:25–32

Diagnosis of colorectal cancer screening—risk groups. Ekelund GR. **Scand J Gastroenterol Suppl** 1988;149:39–42

The Copenhagen City Heart Study. Osterbroundersøgelsen. A book of tables with data from the first examination (1976–78) and a five year follow-up (1981–83). The Copenhagen City Heart Study Group. **Scand J Soc Med Suppl** 1989;41:1–160

Strategies for control of prostatic cancer mortality with some methodologic comments. Adami HO. **Scand J Urol Nephrol Suppl** 1988;110:15–22

Routine breast screening for cancer. Letton AH, et al. **Semin Surg Oncol** 1989;5(3):163–7

Screening for colorectal carcinoma. Lytle GH. **Semin Surg Oncol** 1989;5(3):194–200 (56 ref.)

Screening for lung cancer. McGee JM. **Semin Surg Oncol** 1989;5(3):179–85 (46 ref.)

Mass screening to reduce mortality from breast cancer. Strax P. **Semin Surg Oncol** 1988;4(4):218–20 (5 ref.)

The present state of screening for breast cancer. Tabár L, et al. **Semin Surg Oncol** 1989;5(2):94–101 (28 ref.)

Reasons for non-attendance for computer-managed cervical screening: pilot interviews. Elkind AK, et al. **Soc Sci Med** 1988;27(6):651–60

Significance of a positive Papanicolaou smear in a well screened population. Lyon DS, et al. **South Med J** 1989 Feb;82(2):190–2

A pilot study of community cholesterol screening. Scheidt-Nave C, et al. **Sox Preventivmed** 1988; 33(4–5):217–22

The current status of scoliosis screening in North America, 1986. Results of a survey by mailed questionnaire. Asher M, et al. **Spine** 1989 Jul;14(7):652–62

The British decision and subsequent events. Burwell G. **Spine** 1988 Oct;13(10):1192–4
The North American decision in historical perspective. Kane WJ. **Spine** 1988 Oct;13(10):1191
Why school screening for scoliosis should be continued. Lonstein JE. **Spine** 1988 Oct;13(10):1198–200
School screening for scoliosis. A statement of the problem. Morrissy RT. **Spine** 1988 Oct;13(10):1195–7
Criteria for screening: are the effects predictable? Williams JI. **Spine** 1988 Oct;13(10):1178–86
Estimation of sojourn time distributions and false negative rates in screening programmes which use two modalities. Alexander FE. **Stat Med** 1989 Jun;8(6):743–55
Disease prevention models of voluntary confidential screening for human immunodeficiency virus (HIV). Gail MH, et al. **Stat Med** 1989 Jan;8(1):59–81
Screening of congenital hypothyroidism, phenylketonuria, galactosemia, homocystinuria, and maple syrup urine disease in moderate to severe mentally retarded Chinese children. Hsiao KJ, et al.
Taiwan I Hsueh Hui Tsa Chih 1989 Jan;88(1):18–22
Ultrasonographic screening of gallbladder diseases in pregnancy. Hsieh FJ, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Dec;87(12):1182–6
Urban–rural difference in the acceptance of mass health examination in north–eastern Japan. Ikeda M, et al.
Tohoku J Exp Med 1989 May;158(1):57–72
Haemoparasites of blood donors in Calabar. Emeribe AO, et al. **Trop Geogr Med** 1989 Jan;41(1):61–5
Selection criteria in colorectal cancer screening. Castiglione G, et al. **Tumori** 1988 Aug 31;74(4):451–6
Coronary risk factor prevalence in a high incidence area: results from the Belfast MONICA Project. Evans AE, et al. **Ulster Med J** 1989 Apr;58(1):60–8
Transrectal ultrasonography. Early experience with use as prostate cancer detection tool. Nesbitt JA, et al.
Urology 1989 Sep;34(3):120–2
Screening for hepatocellular carcinoma. Review and perspective. Ellis JC. **West J Med** 1988 Aug;149(2):183–7 (52 ref.)
Why every woman over 40 isn't in a breast cancer detection program [letter] Scott J. **West J Med** 1988 Oct;149(4):465
Intensifying the fight against high blood pressure. Oganov RG, et al. **World Health Forum** 1988;9(1):88–91
Progress and problems in screening for carcinoma of the prostate. Chodak GW, et al. **World J Surg** 1989 Jan–Feb; 13(1):60–4 (27 ref.)
Quantitative approaches to the evaluation of screening programs. Day NE. **World J Surg** 1989 Jan–Feb;13(1):3–8 (16 ref.)
The surgeon's role in breast screening. Forrest AP.
World J Surg 1989 Jan–Feb;13(1):19–24 (19 ref.)
Screening for colorectal cancer: a critical review. Hardcastle JD, et al. **World J Surg** 1989 Jan–Feb;13(1):38–44 (65 ref.)
Screening for gastric cancer. Hisamichi S. **World J Surg** 1989 Jan–Feb;13(1):31–7 (17 ref.)
Screening for cancer of the cervix uteri. Lynge E.
World J Surg 1989 Jan–Feb;13(1):71–8 (61 ref.)
The status of breast cancer screening: a quarter of a century of research. Shapiro S. **World J Surg** 1989 Jan–Feb; 13(1):9–18 (21 ref.)
Screening for carcinoma of the prostate: efficacy of available screening tests. Thompson IM, et al. **World J Surg** 1989 Jan–Feb;13(1):65–70 (38 ref.)
[Community–based screening for colorectal cancer in Luh–Guu Township] Chou P, et al.
Chung Hua I Hsueh Tsa Chih 1988 Apr;41(4):281–6 (Eng. Abstr.) **(Chi)**
[Community–based screening for cervical cancer in Luh–Gun Township] Liu SF, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):43–6 (Eng. Abstr.) **(Chi)**
[Screening for liver cancer in Luh–Guu township] Chou PS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):1021–4 (Eng. Abstr.) **(Chi)**
[Repeat screening for colorectal carcinoma in a population of asymptomatic individuals after 2 years] Zoubek V, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):463–4 (Eng. Abstr.) **(Cze)**
[Results of screening for colorectal carcinoma in the Bruntál District using the Haemoccult Test 1985–1986] Zoubek V, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):460–2 (Eng. Abstr.) **(Cze)**
[Results of screening for hearing disorders using the Ewing test] Dhont G, et al. **Acta Otorhinolaryngol Belg** 1988; 42(3):319–26 (Eng. Abstr.) **(Dut)**
[Breast cancer screening in women younger than 50 years of age: luxury or necessity?] Ruijs JH.
Ned Tijdschr Geneeskd 1989 Jan 14;133(2):57–9 **(Dut)**
[Attitudes of pregnant women concerning testing for HIV infection] van Lith JM, et al. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1273–7 (Eng. Abstr.) **(Dut)**
[The value of screening and the national registration of hereditary tumors] Vasen HF, et al.
Ned Tijdschr Geneeskd 1988 Aug 27;132(35):1609–12 **(Dut)**
[Medical protocol concerning the outcome of cytologic screening study of the cervix uteri] Wijnen JA, et al.
Ned Tijdschr Geneeskd 1988 Nov 19;132(47):2146–50 **(Dut)**
[Neonatal screening for phenylketonuria and hypothyroidism in France. A 12–year experience] Briard ML.
Ann Biol Clin (Paris) 1988;46(6):387–92 (Eng. Abstr.) **(Fre)**
[Screening for hereditary diseases. What other screening?] Farriaux JP, et al. **Ann Biol Clin (Paris)** 1988;46(6):393–401 (Eng. Abstr.) **(Fre)**
[Integration of African human trypanosomiasis control in a network of multipurpose health centers] Pepin J, et al.
Bull WORLD Health Organ 1989;67(3):301–8 (Eng. Abstr.) **(Fre)**
[Social acceptability of screening for HIV seropositivity in pregnant women. An inquiry in the Paris region] Moatti JP, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(4):437–43 (Eng. Abstr.) **(Fre)**
[Prevention, females and physicians: the example of self–examination of the breast] Huguenin M.
Soz Praventivmed 1988;33(3):181–5 (Eng. Abstr.) **(Fre)**
[The degree of morbidity of pathologic conditions of the musculoskeletal system detected by child and adolescent preventive health services and requiring follow–up monitoring] Nitzschmann L, et al. **Arztl Jugendkd** 1988; 79(4):195–8 (Eng. Abstr.) **(Ger)**
[HIV testing in general practice] Stockbrügger R, et al.
Dtsch Med Wochenschr 1988 Oct 7;113(40):1577 **(Ger)**
[AIDS. The sense and purpose of mass screening is still a problem (news)] Marcus U. **Fortschr Med** 1988 Dec 20; 106(36):8–9 **(Ger)**
[AIDS. HIV test: accuracy alone is not enough (news)] Marcus U. **Fortschr Med** 1989 Jan 20;107(2):8 **(Ger)**
[Early detection of breast cancer in relation to patient and physician characteristics] Biefang S.
Geburtshilfe Frauenheilkd 1988 Oct;48(10):694–700 (Eng. Abstr.) **(Ger)**
[Severe fetopathy—toxoplasma despite serologic screening. A case report] Mayer HO, et al.
Geburtshilfe Frauenheilkd 1989 May;49(5):504–5 (Eng. Abstr.) **(Ger)**
[To what extent have early cancer detection and preventive examination for cancer of the uterine cervix fulfilled established expectations?] Soost HJ, et al.
Geburtshilfe Frauenheilkd 1989 Jun;49(6):579–86 (Eng. Abstr.) **(Ger)**
[Gestational diabetes: screening and therapy at the University Gynecologic Clinic, Innsbruck] Drexel H, et al.
Gynakol Rundsch 1989;29(2):114–7 **(Ger)**
[Peripheral rheography as a screening study for chronic placental insufficiency] Feiks A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:146–8 **(Ger)**
[Postpartum screening following gestational diabetes] Hofmann HM, et al. **Gynakol Rundsch** 1989;29(2):118–9 **(Ger)**
[Cystinuria screening in children—analytical and diagnostic applicability of the Ni2+/S2O4(2–) rapid test] Berg W, et al. **Kinderarztl Prax** 1988 Aug;56(8):401–8 (Eng. Abstr.) **(Ger)**
[Ophthalmologic study in diabetic retinopathy] Bischoff P. **Klin Monatsbl Augenheilkd** 1989 May;194(5):393–5 (Eng. Abstr.) **(Ger)**
[Hearing screening using acoustically evoked brain stem potentials in newborn infants and infants] Schauseil–Zipf U, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):324–9 (Eng. Abstr.) **(Ger)**
[Differential diagnosis of increased phenylalanine blood level in infancy. Results of the German collaborative study on phenylketonuria (PKU)/hyperphenylalaninemia (HPA)] Schmidt H, et al. **Monatsschr Kinderheilkd** 1989 Feb; 137(2):86–92 (Eng. Abstr.) **(Ger)**
[Hearing handicap in childhood—responsibilities of public health, early diagnosis] Aust G, et al.
Off Gesundheitswes 1989 Jan;51(1):2–6 (Eng. Abstr.) **(Ger)**
[HIV tests as preventive responsibility of public health offices] Gostomzyk JG, et al. **Off Gesundheitswes** 1989 Jul; 51(7):335–9 (Eng. Abstr.) **(Ger)**
[The value of the tuberculin tine test] Hofmann F, et al.
Off Gesundheitswes 1989 Jul;51(7):359–61 (Eng. Abstr.) **(Ger)**
[The current examination protocol for prostitutes at a venereal disease counseling clinic, Vienna Public Health Service] Kopp W. **Off Gesundheitswes** 1989 Jan;51(1):30–3 (Eng. Abstr.) **(Ger)**
[Determination of rubella antibodies in 16–year–old girls within the scope of the final school and youth occupational preventive examinations 1986/88 conducted by the youth health service of the Tempelhof district in Berlin] Krause C. **Off Gesundheitswes** 1989 Apr;51(4):192–4 (Eng. Abstr.) **(Ger)**
[Risk of sudden infant death: recommendation for an early detection and prevention program] Scholle S, et al.
Padiatr Grenzgeb 1989;28(3):139–47 (Eng. Abstr.) **(Ger)**
[The early detection of hearing disorders in infancy as a result of interdisciplinary cooperation] Zehmisch H, et al.
Padiatr Grenzgeb 1989;28(2):113–4 (Eng. Abstr.) **(Ger)**
[In vitro study as a screening test for inhalation allergy (Phadiatop)] Köhl C, et al. **Pneumologie** 1989 Apr; 43(4):200–3 (Eng. Abstr.) **(Ger)**
[The tuberculin test in the clinic—dosage and evaluation] Simon K, et al. **Prax Klin Pneumol** 1988 Jun;42(6):423–6 (Eng. Abstr.) **(Ger)**
[The effects of sonography on breast diagnosis—a 10–year retrospective (1977–1987)] Duda V. **Rontgenblatter** 1989 Mar;42(3):130–3 (Eng. Abstr.) **(Ger)**
[Cholesterol screening in a bank for the detection of a risk population] Flores J, et al. **Wien Klin Wochenschr** 1989 Jun 9;101(12):419–23 (Eng. Abstr.) **(Ger)**
[The cholesterol risk factor—initial results of a screening study in industries] Flores J, et al.
Wien Klin Wochenschr 1989 Jun 9;101(12):412–7 (Eng. Abstr.) **(Ger)**
[Cholesterol screening in schools—initial results] Haidinger G, et al. **Wien Klin Wochenschr** 1989 Jun 9;101(12):418–9 (Eng. Abstr.) **(Ger)**
[Ultrasound screening in pregnancy—a critical analysis of the literature] Köck C. **Wien Klin Wochenschr** 1989 May 12;101(10):341–5 (20 ref.) (Eng. Abstr.) **(Ger)**
[Cholesterol 87—status of knowledge of the Vienna public] Rasinger E, et al. **Wien Klin Wochenschr** 1989 Jun 9; 101(12):408–12 (Eng. Abstr.) **(Ger)**
[21 years "Austrian Program for Early Detection of Congenital Metabolic Abnormalities." Did the screening programs also contribute scientific knowledge?]
Thalhammer O. **Wien Klin Wochenschr** 1988 Oct 7; 100(19):641–5 (10 ref.) (Eng. Abstr.) **(Ger)**
[Screening for cancer of the large intestine] Gnauck R.
Wien Med Wochenschr 1988 Jun 30;138(11–12):257–60 (0 ref.) (Eng. Abstr.) **(Ger)**
[Control of arterial hypertension at population level] Eisenblätter D, et al. **Z Arztl Fortbild (Jena)** 1989; 83(4):167–8 **(Ger)**
[The trend of coronary risk factors in Schwedt (Oder)] Gräfner L, et al. **Z Arztl Fortbild (Jena)** 1989;83(10):523–7 **(Ger)**
[Mass screening for the evaluation of individual and community health] Hornei R, et al.
Z Arztl Fortbild (Jena) 1988;82(19):948–50 **(Ger)**
[Health indicators and screening of military recruits] Jäschke G. **Z Arztl Fortbild (Jena)** 1988;82(19):952–4 **(Ger)**
[Indicators of population–related health status of children and adolescents] Müller D, et al.
Z Arztl Fortbild (Jena) 1988;82(19):951–2 **(Ger)**
[Phenylketonuria from the current viewpoint] Seidlitz G, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1123–6 **(Ger)**
[When in pregnancy should screening for Chlamydia be carried out?] Schlögl H, et al. **Z Geburtshilfe Perinatol** 1988 Nov–Dec;192(6):263–5 (Eng. Abstr.) **(Ger)**
[Occupational medicine monitoring of workers exposed to benzene] Bittersohl G. **Z Gesamte Hyg** 1989 Jan;35(1):28–30 (0 ref.) (Eng. Abstr.) **(Ger)**
[Lead pollution and its effect on students] Manuwald O.
Z Gesamte Hyg 1988 Nov;34(11):661–3 (Eng. Abstr.) **(Ger)**
[The value of determining delta–aminolevulinic acid in urine (method II, East German occupational monitoring) as a screening procedure for the assessment of internal residues in occupational exposure to lead] Pannier R, et al.
Z Gesamte Hyg 1989 Jan;35(1):22–3 (Eng. Abstr.) **(Ger)**
[Relations between age, health status and occupational health measures in exposed workers] Ruppe K, et al.
Z Gesamte Hyg 1988 Jul;34(7):431–4 (Eng. Abstr.) **(Ger)**
[Rubella screening in school girls using the radial hemolysis test and their vaccination with attenuated live vaccine of the RA23/3 strain] Strauss J, et al. **Z Gesamte Hyg** 1988 Oct;34(10):589–91 (Eng. Abstr.) **(Ger)**
[Social health contribution to the assessment of health status of workers within the scope of industrial mass screening] Werner K, et al. **Z Gesamte Hyg** 1988 Jul;34(7):419–21 (Eng. Abstr.) **(Ger)**
[Prevalence, degree of recognition and detection of hypertension and the quality of blood pressure control at the Wismut industrial branch] Zwingenberger W, et al.
Z Gesamte Inn Med 1989 Apr 1;44(7):211–4 (Eng. Abstr.) **(Ger)**
[Comment on the contribution: "Hip screening in newborn infants" by M. Pauer et al. Z. Orthop. 126 (1988) 260–265] Melzer C. **Z Orthop** 1989 Mar–Apr;127(2):265–7 **(Ger)**
[Hip screening of newborn infants. Type classification, therapy and follow–up] Pauer M, et al. **Z Orthop** 1988 May–Jun;126(3):260–5 (Eng. Abstr.) **(Ger)**
[Clinical and sonographic study of the infant hip. A prospective study] Pfeil J, et al. **Z Orthop** 1988 Dec; 126(6):629–36 (Eng. Abstr.) **(Ger)**
[Maternal serum AFP screening in type I diabetic patients] Briese V. **Zentralbl Gynakol** 1989;111(10):664–8 (Eng. Abstr.) **(Ger)**
[Results of a survey of experts regarding early diagnosis of breast cancer] Gredler B, et al. **Zentralbl Gynakol** 1989; 111(4):217–22 (Eng. Abstr.) **(Ger)**
[Hepatitis B screening in pregnant patients and their children. A Greifswald perinatology–pediatric study. II. Pediatric findings] Jährig VD, et al. **Zentralbl Gynakol** 1989; 111(10):651–7 (Eng. Abstr.) **(Ger)**
[Evaluation of ophthalmologic pediatric screening at 3, 12, and 24 months of age] Capitelli E, et al.
Epidemiol Prev 1988 Mar;10(34):44–9 (Eng. Abstr.) **(Ita)**
[Prevalent and incident carcinomas diagnosed in a screening program for carcinoma of the breast] Leuzzi R, et al.
Minerva Chir 1988 Sep 15;43(17):1355–8 (Eng. Abstr.) **(Ita)**
[Minimal carcinoma of the breast: incidence on mass screening] Virno F. **Minerva Chir** 1989 Feb 15; 44(3):399–400 **(Ita)**
[Presentation of a computerized clinical record for the study of risk factors and early diagnosis of breast neoplasia] Senni GA, et al. **Minerva Med** 1988 Dec;79(12):1057–73 (Eng. Abstr.) **(Ita)**
[Neonatal screening for congenital hypothyroidism. Reflections on the methodology based on a statistical

analysis of TSH and T4] Principi R, et al. **Minerva Pediatr** 1988 Nov;40(11):633–8 (Eng. Abstr.) **(Ita)**

[Results of the first round of mammographic screening at local health unit No. 43, Leno, Lombardy (Brescia)] Cirelli L, et al. **Radiol Med (Torino)** 1989 Apr;77(4):382–5 (Eng. Abstr.) **(Ita)**

[Methodological consideration on evaluation of lung cancer screening program: one-step process and two-step process] Hamajima N, et al. **Gan No Rinsho** 1989 Jan;35(2):183–7 (Eng. Abstr.) **(Jpn)**

[An epidemiological approach to increase mass screening efficiency, by finding high-risk group of esophageal cancer] Imai K, et al. **Gan No Rinsho** 1989 Jan;35(2):215–20 (Eng. Abstr.) **(Jpn)**

[Characteristics of colorectal carcinomas detected by mass screening] Kikkawa N, et al. **Gan No Rinsho** 1989 Jul; 35(8):923–6 (Eng. Abstr.) **(Jpn)**

[How can we make mass-screening of stomach cancer more efficient using epidemiological results?] Kikuchi S, et al. **Gan No Rinsho** 1989 Jan;35(2):202–6 (Eng. Abstr.) **(Jpn)**

[The role of epidemiologic research of the natural history of cancer for evaluating cancer screening programs—a prospective study of colorectal polyps on the occurrence of colorectal cancer] Murakami R, et al. **Gan No Rinsho** 1989 Jan;35(2):188–94 (Eng. Abstr.) **(Jpn)**

[Effectiveness, accuracy, and acceptability of breast self-examination as a breast cancer screening method] Ogawa H, et al. **Gan No Rinsho** 1989 Jan;35(2):195–201 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Evaluation of cancer screening from the epidemiologic point of view] Oshima A. **Gan No Rinsho** 1989 Jan;35(2):253–7 (Eng. Abstr.) **(Jpn)**

[A retrospective study on the findings of indirect fluorography in gastric cancer with special reference to the course and interval of gastric mass surveys] Kusano K. **Igaku Kenkyu** 1988 Jun;58(3):125–37 (Eng. Abstr.) **(Jpn)**

[A study on the gastric carcinoma in mass survey—with special reference to the position and the visualizing ability of indirect fluororadiography] Shinmaki K. **Igaku Kenkyu** 1988 Jun;58(3):138–50 (Eng. Abstr.) **(Jpn)**

[Mitral valve prolapse: two-dimensional echocardiographic screening in apparently healthy students] Fujii K, et al. **J Cardiol** 1988;18 Suppl 18:9–17, discussion 18–9 (Eng. Abstr.) **(Jpn)**

[A study of a mass screening for both lung tuberculosis and cancer in Yaizu city--mass screening system and its results] Hida K. **Kekkaku** 1988 Jun;63(6):461–8 **(Jpn)**

[Extraordinary examinations in tuberculous prevalence areas and family contact examinations] Yamagishi F, et al. **Kekkaku** 1989 Feb;64(2):99–104 (Eng. Abstr.) **(Jpn)**

[Analysis of the poor visualization of the pancreas on ultrasonography] Kanazawa S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):680–6 (Eng. Abstr.) **(Jpn)**

[Radioimmunoassay of vasopressin in unextracted random urine; clinical application for screening of central diabetes insipidus] Kondo K, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 May 20;65(5):537–48 (Eng. Abstr.) **(Jpn)**

[Quality control of the mass examination of pulmonary cancer] Matsuura S. **Rinsho Byori** 1988 Jul;36(7):775–80 **(Jpn)**

[Role of laboratory tests and imagings on the screening of pancreatic cancer] Yamamoto M, et al. **Rinsho Byori** 1988 Jul;36(7):767–74 **(Jpn)**

[Mass screening programs for cancer in Japan] Hisamichi S. **Rinsho Hoshasen** 1988 Nov;33(12):1513–21 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Mammography screening. A statement from the consensus conference on mammography screening, Soria Moria, Oslo, February 8–10, 1989] **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1079–82 **(Nor)**

[Cytological mass screenings for the cancer of the cervix uteri. Resources, organization and costs] Kolstad P. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2057–60 (Eng. Abstr.) **(Nor)**

[An automated system for the preventive mass screening of the pediatric population (ASPON-D)] Akhutin VM, et al. **Med Tekh** 1988 Nov-Dec;(6):45–50 (Eng. Abstr.) **(Rus)**

[An automated screening system for the electrocardiographic examination of children] Chernyshov VN, et al. **Med Tekh** 1988 Nov-Dec;(6):50–4 **(Rus)**

[Detection of hypodynamia and psychoemotional stress during the mass prophylactic examination of students] Nikolaeva AA, et al. **Sov Med** 1988;(8):45–8 **(Rus)**

[Detection of arterial hypertension in workers in the rubber manufacturing industry] Vinogradova LA, et al. **Sov Med** 1988;(9):60–3 **(Rus)**

[Evaluation of the effectiveness of screening programs as a method of detection of malignant neoformations] Tseshkovskiĭ MS. **Vopr Onkol** 1988;34(10):1160–5 **(Rus)**

[Serologic screening of immunodeficiency virus infection in 1987] Pokrovskiĭ VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):56–9 (Eng. Abstr.) **(Rus)**

[Results of systematic screening of women in the village of Stepanovićevo] Jovićević V. **Med Pregl** 1989;42(1–2):61–3 (Eng. Abstr.) **(Scr)**

[Results of screening for the early detection of cancer of the uterine cervix in Subotica] Mazak-Bešlić S, et al. **Med Pregl** 1988;41(11–12):457 (Eng. Abstr.) **(Scr)**

[Experience with rescreening for congenital hypothyroidism in Eastern Slovakia] Sedlák J, et al. **Cesk Pediatr** 1986 Oct; 41(10):618–9 **(Slo)**

[Hypothyroidism as a risk factor in ischemic heart disease. Is hospital screening for thyropathies in adults effective as a part of a cardiovascular program?] Hrnčiar J, et al. **Vnitr Lek** 1988 Aug;34(8):793–801 (Eng. Abstr.) **(Slo)**

[Developmental quotient/intelligence quotient (DQ/IQ) in children with congenital hypothyroidism] Illig R, et al. **An Esp Pediatr** 1988 May;28(5):389–94 (Eng. Abstr.) **(Spa)**

[Prevalence of hypertension in 18-year-old males in the city of Buenos Aires. Evaluation of a detection method following previous screening by nurses] Boffi-Boggero HJ, et al. **Medicina (B Aires)** 1988;48(4):365–70 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Screening mammography. A risk versus risk decision. Ritenour ER, et al. **Invest Radiol** 1989 Jan;24(1):17–9 (19 ref.)

ECONOMICS

Should women be tested for gonococcal infection of the cervix during routine gynecologic visits? An economic appraisal. Phillips RS, et al. **Am J Med** 1989 Mar; 86(3):297–302

Maternal serum alpha-fetoprotein screening for Down syndrome: economic considerations. Swint JM, et al. **Am J Med Genet** 1988 Sep;31(1):231–45

Oral cancer [letter] **Br Dent J** 1988 Nov 19;165(10):357

Remuneration for oral mucosa screening [letter] Pinkerton DN. **Br Dent J** 1989 Jan 7;166(1):6

The cost-effectiveness of breast cancer screening. van der Maas PJ, et al. **Int J Cancer** 1989 Jun 15;43(6):1055–60

Response to Drs. Chu and Smart concerning breast cancer screening in women under 50 years [letter] Eddy DM. **J Natl Cancer Inst** 1989 May 10;81(10):813–5

Captopril test in screening hypertensive patients [letter] Daly MJ. **J Nucl Med** 1989 Aug;30(8):1422–3

Cost-effective pre-vaccine screening of hepatitis B infection in hospital workers: a seroepidemiological study. Little RF, et al. **J S C Med Assoc** 1988 Aug;84(8):409–13

Mass screening for colorectal cancer: are we ready? [editorial] Clayman CB. **JAMA** 1989 Jan 27;261(4):609

Screening for aortic aneurysm [letter] Collin J. **Lancet** 1988 Dec 17;2(8625):1431–2

Cost effectiveness of testing for chlamydial infections in asymptomatic women. Buhaug H, et al. **Med Care** 1989 Aug;27(8):833–41

Should all pregnant women be screened for hepatitis B surface antigen? [letter; comment] **Med J Aust** 1989 Mar 20;150(6):346, 348. **Comment on:** Med J Aust 1989 Jan 2;150(1):19–21

Low-cost screening mammography: report on finances and review of 21,716 consecutive cases. Bird RE. **Radiology** 1989 Apr;171(1):87–90

Early prostate cancer: diagnostic costs of screening transrectal US and digital rectal examination. Torp-Pedersen ST, et al. **Radiology** 1988 Nov;169(2):351–4

Cost-benefit impact on cancer screening. Humphrey LJ. **Semin Surg Oncol** 1989;5(3):205–10 (21 ref.)

Proportional payment for pelvic inflammatory disease: who should pay for chlamydial screening? Nettleman MD, et al. **Sex Transm Dis** 1989 Jan-Mar;16(1):36–40

Scoliosis screening. An approach to cost/benefit analysis. Ashworth MA, et al. **Spine** 1988 Oct;13(10):1187–8

Economics of breast examination in the United States. Holden RW. **Ultrasound Med Biol** 1988;14 Suppl 1:1–3

[Where is free preventive mammography? (editorial)] Gericke D. **Fortschr Med** 1989 Mar 10;107(7):16–7 **(Ger)**

[Cost-effectiveness analysis of the mass screening of lung cancer] Iinuma T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1342–8 (Eng. Abstr.) **(Jpn)**

[Work losses of medical personnel of mobile health units while conducting preventive examinations in rural populations] Bratkov OI. **Sov Zdravookhr** 1989;(1):42–6 (Eng. Abstr.) **(Rus)**

[Evaluation of economic effectiveness of the complex measures related to mass screening of the population in a rural region] Kalzhekov TK, et al. **Sov Zdravookhr** 1989; (1):39–42 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Transcutaneous bilirubinometry in preterm very low birthweight infants. Tan KL, et al. **Acta Paediatr Scand** 1988 Nov;77(6):796–801

Transcutaneous bilirubinometry. Evaluation of accuracy and reliability in a large population. Yamauchi Y, et al. **Acta Paediatr Scand** 1988 Nov;77(6):791–5

Improving the utilization of screening mammography in primary care practices. Nattinger AB, et al. **Arch Intern Med** 1989 Sep;149(9):2087–92

Accuracy of the Michigan Alcoholism Screening Test for screening of alcoholism in patients of a medical department. Yersin B, et al. **Arch Intern Med** 1989 Sep;149(9):2071–4

The inadequacies of instruments used for cervical screening. Spurrett B, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb; 29(1):44–6

The 'Reflotron' for cholesterol and triglyceride measurements in the surgery. Chambers JP, et al. **Ir Med J** 1988 Nov;81(1):38–9

Colorectal cancer detection with the 60 cm flexible sigmoidoscope in a solo general internist's office. Yao Y. **J Am Geriatr Soc** 1988 Oct;36(10):914–8

Precision of reflectance meters in screening for gestational diabetes. Carr S, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):727–31

Performance characteristics of a blood cholesterol measuring instrument used in screening programs. Lefebvre RC, et al. **Public Health Rep** 1989 May-Jun;104(3):266–70

Effectiveness of scoliometer in school screening for scoliosis. Huang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct; 87(10):955–9

[Rectoscopy or rectosigmoidoscopy with a flexible fiber optic endoscope?] Tomecki R, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):236–41 (Eng. Abstr.) **(Pol)**

LEGISLATION & JURISPRUDENCE

Medicolegal aspects of screening mammography. Brenner RJ. **AJR Am J Roentgenol** 1989 Jul;153(1):53–6

HIV screening[letter] Connelly JB. **Br J Psychiatry** 1989 Feb; 154:266–7

At law. Crack, symbolism, and the constitution. Annas GJ. **Hastings Cent Rep** 1989 May-Jun;19(3):35–7

AIDS and the insurance industry. The debate within the debate. Hollowell EE, et al. **J Leg Med** 1989 Mar; 10(1):77–87

HIV screening. Scientific, ethical, and legal issues. Howard J. **J Leg Med** 1988 Dec;9(4):601–10

Premarital AIDS testing: public policy abandoned at the altar [editorial] Joseph SC. **JAMA** 1989 Jun 16;261(23):3456

Mandatory premarital testing for human immunodeficiency virus. The Illinois experience. Turnock BJ, et al. **JAMA** 1989 Jun 16;261(23):3415–8

Testing for drugs of abuse in urine. Turk J. **Mo Med** 1989 Jun;86(6):337–40

Court will not order AIDS tests. **N J Med** 1989 May; 86(5):337

Private lives of employees: how much should employers know? Evans DG. **Occup Health Saf** 1988 Oct;57(11):36–41

Legal and ethical issues in newborn screening. Bowman JE. **Pediatrics** 1989 May;83(5 Pt 2):894–6

[Mass screening for endometrial cancer according to the Law of Health for the Elderly] Kashimura M, et al. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):155–61 (Eng. Abstr.) **(Jpn)**

METHODS

Neonatal hypothyroid screening using enzymeimmunoassay of thyrotropin—comparison with radioimmunoassay. Kusuda S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec; 30(6):686–91

HIV testing [letter] Boss DJ. **Am Fam Physician** 1989 Jan; 39(1):53, 55

Screening for colorectal cancer [see comments] Ross CC. **Am Fam Physician** 1988 Dec;38(6):105–14 (25 ref.). **Comment in:** Am Fam Physician 1989 Jul;40(1):40, 42, 45 passim

Heart rate adjustment of ST-segment depression for reduction of false positive electrocardiographic responses to exercise in asymptomatic men screened for coronary artery disease. Okin PM, et al. **Am J Cardiol** 1988 Nov 15;62(16):1043–7

Effect of screening and treatment on imported intestinal parasite infections: results from a randomized, controlled trial. Gyorkos TW, et al. **Am J Epidemiol** 1989 Apr; 129(4):753–61

Screening for the fragile X: how many cells should we analyse? [published erratum appears in Am J Med Genet 1989 Mar;32(3):436–7] Tommerup N, et al. **Am J Med Genet** 1988 May-Jun;30(1–2):417–22

Screening for varicella-zoster immunity and the use of varicella zoster immune globulin in pregnancy [letter] Greenspoon JS, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):1020–2

Management of women with one abnormal oral glucose tolerance test value reduces adverse outcome in pregnancy. Langer O, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):593–9

Predictive values, relative risks, and overall benefits of high and low maternal serum alpha-fetoprotein screening in singleton pregnancies: new epidemiologic data. Milunsky A, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):291–7

The efficacy of fetal sonographic biometry in Down syndrome screening. Peters MT, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):297–300

How reliable is the fifty-gram, one-hour glucose screening test? Sacks DA, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):642–5

Evaluation of a risk-scoring system for prediction of preterm labor. Holbrook RH Jr, et al. **Am J Perinatol** 1989 Jan; 6(1):62–8

Screening adolescent male detainees [letter; comment] Braslow CA, et al. **Am J Public Health** 1989 Jul;79(7):902–3. **Comment on:** Am J Public Health 1988 Dec;78(12):1583–4

Tuberculosis surveillance in a state prison system. Spencer

SS, et al. **Am J Public Health** 1989 Apr;79(4):507–9
Real-time ultrasound for diagnosis of symptomatic venous thrombosis and for screening of patients at risk: correlation with ascending conventional venography. Monreal M, et al. **Angiology** 1989 Jun;40(6):527–33
Regional individual allergen based miniscreen to predict IgE-mediated airborne allergy. Mansfield LE, et al. **Ann Allergy** 1988 Oct;61(4):259–61
Prediction and diagnosis of sickling disorders in neonates. Adjaye N, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):39–43
Screening for cystic fibrosis: a four year regional experience. Roberts G, et al. **Arch Dis Child** 1988 Dec;63(12):1438–43
Click evoked otoacoustic emissions compared with brain stem electric response. Stevens JC, et al. **Arch Dis Child** 1989 Aug;64(8):1105–11
Selective screening for abdominal aortic aneurysms with physical examination and ultrasound [letter] Ballard DJ. **Arch Intern Med** 1989 Jun;149(6):1463, 1466
Rescreening of a group at high risk for colorectal neoplasia using immunochemical tests for faecal occult blood. Hunter R, et al. **Aust N Z J Surg** 1988 Oct;58(10):791–4
Potassium ion ionization of desorbed species (K+IDS): a rapid method for the screening of urine for organic acidemias. Kassel DB, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):221–8
Making cervical screening work [letter] **BMJ** 1989 Jul 22; 299(6693):260–1
Screening for thyroid disease in a primary care unit with a thyroid stimulating hormone assay with a low detection limit. Eggertsen R, et al. **BMJ** 1988 Dec 17; 297(6663):1586–92
Cytological screening for cervical cancer and human papillomavirus in general practice. Hiscock E, et al. **BMJ** 1988 Sep 17;297(6650):724–6
Prospective randomised controlled trial of methods of call and recall for cervical cytology screening. Pierce M, et al. **BMJ** 1989 Jul 15;299(6692):160–2
Evaluation of a call programme for cervical cytology screening in women aged 50–60. Robertson AJ, et al. **BMJ** 1989 Jul 15;299(6692):163–6
Screening: the inadequacy of population registers [letter] Roe L, et al. **BMJ** 1989 Apr 22;298(6680):1100
Breast screening in Britain and Sweden [letter] Sanders G, et al. **BMJ** 1988 Dec 3;297(6661):1471–2
Cervical screening in an inner city area: response to a call system in general practice. Shroff KJ, et al. **BMJ** 1988 Nov 19;297(6659):1317–8
Making cervical screening work. Smith A, et al. **BMJ** 1989 Jun 24;298(6689):1662–4 (19 ref.)
Value of a risk questionnaire in screening for colorectal neoplasm. Kewenter J, et al. **Br J Surg** 1989 Mar; 76(3):280–3
AIDS testing: mathematical models [letter] Parker JE. **Can Med Assoc J** 1989 Apr 1;140(7):792
Patterns of occult bleeding in asymptomatic colorectal cancer. Ahlquist DA, et al. **Cancer** 1989 May 1; 63(9):1826–30
Physical examination. Its role as a single screening modality in the Canadian National Breast Screening Study. Baines CJ, et al. **Cancer** 1989 May 1;63(9):1816–22
The use of oncofetal ferritin-bearing lymphocytes as a marker for the screening, diagnosis, and follow-up of patients with early breast malignancy screening of 3400 women. Moroz C, et al. **Cancer** 1989 Aug 1;64(3):691–7
Identification and screening of women at high risk of breast cancer. Krischer JP, et al. **Cancer Detect Prev** 1988; 13(1):65–74
Limited value of leukocyte adherence inhibition in screening for colorectal neoplasia in high-risk groups. Shani A, et al. **Cancer Detect Prev** 1989;13(5–6):311–6
Pilot study of a screening test for peripheral arterial disease in middle aged men: fibrinogen as a possible risk factor. Baxter K, et al. **Cardiovasc Res** 1988 Apr;22(4):300–2
Microassay for screening newborns for galactosemia with use of a fluorometric microplate reader. Yamaguchi A, et al. **Clin Chem** 1989 Sep;35(9):1962–4
Comparison of screening methods in a diabetes prevalence survey among northern Indians. Young TK, et al. **Clin Invest Med** 1988 Oct;11(5):380–5
Recommendations for neonatal screening for haemoglobinopathies. International Committee for Standardization in Haematology. ICSH Expert Panel on Abnormal Haemoglobins. **Clin Lab Haematol** 1988; 10(3):335–45
Shadows over screening mammography. Skrabanek P. **Clin Radiol** 1989 Jan;40(1):4–5
Screening for diabetes. **Diabetes Care** 1989 Sep;12(8):588–90 (7 ref.)
Screening for major depression among alcoholics: an application of receiver operating characteristic analysis. Grant BF, et al. **Drug Alcohol Depend** 1989 Apr; 23(2):123–31
Cancer prevention by mass screening for gynaecologic cancers in the European community. **Eur J Gynaecol Oncol** 1989;10(2):63–8
Tumoral markers (CA 125—CEA) in the screening of ovarian cancer. Alberico S, et al. **Eur J Gynaecol Oncol** 1988; 9(6):485–9
Evaluation of routine ultrasound examination for the prenatal diagnosis of malformation. Lys F, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):101–9
Mass screening for breast cancer with sonomammography: a prospective study. Rotten D, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul;28(3):257–67
Positive S100 protein staining of neuroblastoma discovered by VMA mass screening [letter] Nakagawara A, et al. **Eur J Pediatr** 1988 Nov;148(2):171–2
Investigations on the early diagnosis of cystinuria in children. Berg W, et al. **Eur Urol** 1988;14(6):458–63
Digital rectal examination to screen for prostatic cancer. Waaler G, et al. **Eur Urol** 1988;15(1–2):34–6
Importance of being anonymous [news] **Fam Plann Perspect** 1989 Jan–Feb;21(1):5
Screening and surveillance for colorectal cancer. Kinzie JL, et al. **Gastroenterol Clin North Am** 1988 Dec;17(4):793–809 (99 ref.)
Video endoscopy by nurse practitioners: a model for colorectal cancer screening. Schroy PC, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):390–4
Screening of colorectal tumours using an improved faecal occult blood test. Quantitative aspects. Häkkinen I, et al. **Gut** 1988 Sep;29(9):1194–7
Transvaginal sonography as a screening method for ovarian cancer. Higgins RV, et al. **Gynecol Oncol** 1989 Sep; 34(3):402–6
Indianapolis cholesterol screening 1987: does mass screening accomplish its goal? Miller JZ, et al. **Indiana Med** 1989 Jul;82(7):526–31
Report of the Fourth Consensus Conference on HIV Testing sponsored by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD). Hausler WJ Jr, et al. **Infect Control Hosp Epidemiol** 1989 Aug; 10(8):354–67 (0 ref.)
Intra- and interindividual variability of biochemical and haematological parameters in periodical health surveillance. van Geen F. **Int Arch Occup Environ Health** 1988;Suppl:65–75
Have you had your mammogram, doctor? Guinan ME. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):183–4
Mass screening for hyperprolactinemia and prolactinoma in men. Miyake A, et al. **J Endocrinol Invest** 1988 May; 11(5):383–4
Use of risk factors to allocate schedules for breast cancer screening. Alexander FE, et al. **J Epidemiol Community Health** 1988 Jun;42(2):193–9
A simple concept for the screening of amino- and organic aciduias. Stöckler S, et al. **J Inherited Metab Dis** 1988; 11(4):432–3
Considerations and potential pitfalls in AIDS lab testing. Wecht CH. **J Leg Med** 1988 Dec;9(4):623–35
Considerations in the development of lung cancer screening tools. Mulshine JL, et al. **J Natl Cancer Inst** 1989 Jun 21; 81(12):900–6 (66 ref.)
Factors associated with participation in an occupational program for colorectal cancer screening. Vernon SW, et al. **J Occup Med** 1989 May;31(5):458–63
Drug screening of meconium in infants of drug-dependent mothers: an alternative to urine testing. Ostrea EM Jr, et al. **J Pediatr** 1989 Sep;115(3):474–7
The value of Quetelet's Index in the assessment of obesity in 7 and 12 year old obese Chinese children. Ho TF, et al. **J Singapore Paediatr Soc** 1988;30(1–2):67–71
Assessment of screening for prostate cancer using the digital rectal examination. Chodak GW, et al. **J Urol** 1989 May; 141(5):1136–8
From the Congressional Office of Technology Assessment. **JAMA** 1989 Aug 18;262(7):883
Accord on drug testing, sanctions sought before 1992 Olympics in Europe [news] Cowart VS. **JAMA** 1988 Dec 16;260(23):3397–8
Breast cancer screening guidelines agreed on by AMA, other medically related organizations [news] Gordillo C. **JAMA** 1989 Sep 1;262(9):1155
Seropositivity for HIV at alternate sites [letter] Grabau JC, et al. **JAMA** 1988 Dec 2;260(21):3128
Not everyone agrees with new mammographic screening guidelines designed to end confusion [news] King AS. **JAMA** 1989 Sep 1;262(9):1154–5
Screening for impaired hearing in the elderly [letter] Macphee GJ, et al. **JAMA** 1988 Dec 23–30;260(24):3589–90
Like other segments of culture, military has had to come to grips with drug abuse problems [news] Marwick C, et al. **JAMA** 1989 May 19;261(19):2784–5, 2788
Prenatal screening for hepatitis B antigen [letter; comment] Ross JW. **JAMA** 1989 Mar 24–31;261(12):1727–8. **Comment on:** JAMA 1988 Jul 8;260(2):165, 169–70
Cervical screening [letter] **Lancet** 1989 Sep 9;2(8663):627–9
Duchenne muscular dystrophy: neonatal screening and prenatal diagnosis [letter] Plauchu H, et al. **Lancet** 1989 Mar 25;1(8639):669
Imaging patients with suspected acoustic neuroma [letter] Swan IR, et al. **Lancet** 1989 Jan 28;1(8631):219
Screening for otitis media with effusion in preschool children. Zielhuis GA, et al. **Lancet** 1989 Feb 11;1(8633):311–4
Screening for cervical cancer [letter] **Med J Aust** 1989 Aug 7;151(3):174–6
Breast cancer again: diagnostic alternatives. Furnival CM, et al. **Med J Aust** 1988 Oct 17;149(8):397–8 (15 ref.)
Is there a role for screening by cervicography in Australia? Mitchell H. **Med J Aust** 1989 Apr 17;150(8):441–4
Alcohol screening and early intervention: an achievable advance in management [editorial] Price J. **Med J Aust** 1988 Oct 3;149(7):345–6
Screening for cervical cancer—where are we going wrong? [editorial] Quinn MA. **Med J Aust** 1989 Apr 17; 150(8):414–5
Alcohol-related problems in a general hospital and a general practice: screening and the preventive paradox. Ryder D, et al. **Med J Aust** 1988 Oct 3;149(7):355–60
Feasibility study for neonatal neuroblastoma screening in the United States. Tuchman M, et al. **Med Pediatr Oncol** 1989; 17(4):258–64
Breast cancer screening. **Natl Inst Health Consensus Dev Conf Summ** 1977–78;1:5–8 (0 ref.)
The relationship of one abnormal glucose tolerance test value and pregnancy complications [letter] Scialli AR. **Obstet Gynecol** 1989 Jul;74(1):134–5
A new and sensitive method of screening for human papillomavirus infection. Tidy JA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):410–4
Serial changes in the 50-g oral glucose test in pregnancy: implications for screening. Watson WJ. **Obstet Gynecol** 1989 Jul;74(1):40–3
Imaging evaluation of infants with neuroblastoma detected by VMA screening spot test. Fujioka M, et al. **Pediatr Radiol** 1988;18(6):479–83
Newborn screening for galactosemia: a new method used in Manitoba. Greenberg CR, et al. **Pediatrics** 1989 Aug; 84(2):331–5
Scoliosis screening [letter] McCroan ML. **Phys Ther** 1989 May;69(5):357–8
Prenatal ascertainment of triploidy by maternal serum alpha-fetoprotein screening. Freeman SB, et al. **Prenat Diagn** 1989 May;9(5):339–47
Screening, diagnosis, and treatment of hypercholesterolemia. Wones RG. **Prim Care** 1989 Mar;16(1):63–82
Recruitment procedures for a high risk breast cancer detection clinic. Halper M, et al. **Prog Clin Biol Res** 1989; 293:183–9
Breast cancer screening and primary care providers. Zapka JG, et al. **Prog Clin Biol Res** 1989;293:57–63
District based cervical cancer screening: are there alternative approaches? [editorial] Schnieden H. **Public Health** 1988 Sep;102(5):405–6
Impact of a priori medical decisions on screening for breast cancer. Moskowitz M. **Radiology** 1989 Jun;171(3):605–8
Adolescent hypertension: a follow-up study in the community. Michaud PA. **Rev Epidemiol Sante Publique** 1989;37(1):23–8
New insights on infant ABR hearing screening. Kileny PR. **Scand Audiol Suppl** 1988;30:81–8
Worksite-screenings for hypertension with follow-up: experiences from the Munich Blood Pressure Program. Hense HW, et al. **Soz Praventivmed** 1989;34(1):15–8
School screening for scoliosis by the Chiba University Medical School screening program. Results of 1.24 million students over an 8-year period. Ohtsuka Y, et al. **Spine** 1988 Nov;13(11):1251–7
Ultrasonic screening for the detection of abdominal aortic aneurysms. Quill DS, et al. **Surg Clin North Am** 1989 Aug; 69(4):713–20 (51 ref.)
[An echographic study of the prevalence of gallstone disease in Maastricht and the surrounding area] Thijs CT, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):110–4 (Eng. Abstr.) **(Dut)**
[Trypanosomiasis caused by T. b. gambiense: methods of control] Stanghellini A. **Bull Soc Pathol Exot Filiales** 1988; 81(3 Pt 2):637–44 (Eng. Abstr.) **(Fre)**
[Evaluation of a screening test for urinary infection] Audurier A, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):921–4 (Eng. Abstr.) **(Fre)**
[NMR research on blood plasma for tumor detection—a method for mass screening?] Fritzsche H, et al. **Arch Geschwulstforsch** 1989;59(2):129–33 (Eng. Abstr.) **(Ger)**
[A monitoring program and intervention regimen based on biological exposure tests for ensuring individual health protection of workers exposed to lead] Pannier R, et al. **Z Gesamte Hyg** 1989 May;35(5):264–6 (Eng. Abstr.) **(Ger)**
[Public education in recognizing melanoma] Illig L, et al. **Z Hautkr** 1989 Jul 15;64(7):537–8, 543–6, 551–63 (67 ref.) (Eng. Abstr.) **(Ger)**
[Results of mammographic screening and organizational aspects] Rosselli del Turco M. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:101–13 **(Ita)**
[Screening for colorectal neoplasms at a regional corporation] Giacchero A, et al. **Epidemiol Prev** 1988 Mar;10(34):33–5 (Eng. Abstr.) **(Ita)**
[Recommendations for screening in oncology] Maltoni G, et al. **Epidemiol Prev** 1988 Sep;10(36):29–36 (18 ref.) **(Ita)**
[Centers for sexually transmitted diseases and HIV infection. Operative methods and results of a screening] Alessi E, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):431–4 (Eng. Abstr.) **(Ita)**
[Screening visual field test considering priori probability] Yuda K. **Nippon Ganka Gakkai Zasshi** 1988 Sep; 92(9):1497–502 (Eng. Abstr.) **(Jpn)**
[Comparison of digital examination and transrectal sonography in the assessment of prostatic diseases] Itakura Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug; 79(8):1328–36 (Eng. Abstr.) **(Jpn)**

[Studies on screening for hard-of-hearing children by questionnaire. 1. Screening of 1-year-6-month-old children in conjunction with the physical examination of the Ministry of Health and Welfare] Nishioka K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):856–64 (Eng. Abstr.) (Jpn)

[Recent progress in diagnosis and treatment of digestive diseases. IV Colonic cancer. 8. Early detection and mass screening of colonic cancer] Shirakabe H, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1671–4 (Jpn)

[The detection rate of early gastric cancer according to the methods of mass survey examination] Asaki S, et al. **Nippon Rinsho** 1989 May;47(5):990–5 (Jpn)

[Detection of early cancer of colorectum by mass survey system] Hojo K. **Nippon Rinsho** 1989 May;47(5):996–9 (Jpn)

[Mass screening for early breast cancer] Morimoto T, et al. **Nippon Rinsho** 1989 May;47(5):1006–11 (Jpn)

[Method of mass screening and detection rate of early uterine cancer] Ohta M, et al. **Nippon Rinsho** 1989 May; 47(5):1012–6 (Jpn)

[Method of mass screening and detection rate of early lung cancer] Saito Y, et al. **Nippon Rinsho** 1989 May; 47(5):1000–5 (Jpn)

[Evaluation of biochemical examination and image procedures in mass screening survey for liver cancer] Kojima J, et al. **Rinsho Byori** 1988 Jul;36(7):759–66 (Jpn)

[Evaluation of immunological fecal occult blood test] Yamaguchi N, et al. **Rinsho Byori** 1988 Jul;36(7):751–8 (Jpn)

[Experience in using cytological screening studies of working women for the early detection of tumorous and pretumorous diseases of the cervix uteri] Lapenkova NB, et al. **Akush Ginekol (Mosk)** 1988 May;(5):57–8 (Rus)

[The viroimmunotest for mass determinations of nanogram amounts of antigens] Skvortsov VT, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):704–6 (Eng. Abstr.) (Rus)

[Possibilities of the use of echocardiography in epidemiologic examinations] Shamarin VM, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):77–82 (Eng. Abstr.) (Rus)

[Determining the level of ascorbic acid in the urine in hygienic studies] Petrova GA. **Gig Sanit** 1989 May; (5):49–50 (Rus)

[Organizational and methodologic aspects of preventing ischemic heart disease in coal miners] Kobets GP, et al. **Gig Tr Prof Zabol** 1989;(4):1–4 (Eng. Abstr.) (Rus)

[Early diagnosis of cardiovascular diseases using expert personal computer systems] Balliuzek FV, et al. **Kardiologiia** 1988 Jun;28(6):104–6 (Rus)

[Possibilities of echocardiography in epidemiologic studies] Golyzhnikov VA, et al. **Kardiologiia** 1989 May;29(5):94–6 (Rus)

[Early diagnosis and mass screening of patients with initial signs of pathology of the brachiocephalic arteries using an automated screening system at industrial plants] Vilianskiĭ MP, et al. **Kardiologiia** 1988 Sep;28(9):96–7 (Rus)

[A program of ambulatory instrumental screening of patients with a high risk of developing neoplasms of the gastrointestinal organs] Denisov LE, et al. **Klin Med (Mosk)** 1988 Jul;66(7):127–9 (Rus)

[Use of an allergologic screening examination to study the incidence and early detection of pollinosis and latent dust allergy in children] Ostroumov AI, et al. **Pediatriia** 1988; (10):82–5 (Rus)

[Experience in the work of detecting tuberculosis in Northern nationalities] Rozenfel'd NIa, et al. **Probl Tuberk** 1988; (10):60–1 (Rus)

[The role of tests for polyenuria in mass screening of the population] Gritsman Iula, et al. **Sov Med** 1988;(5):49–51 (Rus)

[Ultrasonic examination of the thyroid gland in mass screening of the population] Tsyb AF, et al. **Sov Med** 1988; (5):77–9 (Rus)

[Elaboration of approaches to quantitative evaluation of the health status of the population in mass screening practices] Gichev IuP. **Sov Zdravookhr** 1989;(1):47–51 (Eng. Abstr.) (Rus)

[CASMSP (Complex Automated system of Mass Screening of the Population) as an information basis for the evaluation of health of the population] Mintser OP, et al. **Sov Zdravookhr** 1989;(2):36–41 (Eng. Abstr.) (Rus)

[A method of analyzing the effectiveness of mass screening of children based on health status indicators] Osin AIa. **Sov Zdravookhr** 1988;(10):30–3 (Eng. Abstr.) (Rus)

[Opinion of the population with regard to mass screening by the CASMSP (Complex Automated System of Mass Screening of the Population) system] Popov GS, et al. **Sov Zdravookhr** 1988;(9):36–40 (Rus)

[A questionnaire method of epidemiological testing] Shavdiia MD, et al. **Sov Zdravookhr** 1989;(2):45–7 (Eng. Abstr.) (Rus)

[Correlation adaptometry as a method of screening of the population] Sedov KR, et al. **Vestn Akad Med Nauk SSSR** 1988;(10):69–75 (Eng. Abstr.) (Rus)

[The effectiveness of rapid iridodiagnosis in mass examinations in a polyclinic] Vel'khover ES, et al. **Voen Med Zh** 1988 Jun;(6):36–8 (Rus)

[The experience of the Armenian Republic Endoscopic Center in the active detection of tumors of the urinary system] Mkrtchian LN, et al. **Vopr Onkol** 1989;35(6):709–11 (Eng. Abstr.) (Rus)

[The low frequency of false positive results in the serological detection of infectivity with the human immunodeficiency virus in collectives of healthy young people] Zaldes VM, et al. **Vopr Virusol** 1988 May–Jun;33(3):298–302 (Eng. Abstr.) (Rus)

[Immunoenzyme method for demonstrating the antigen and antibodies to the human immunodeficiency virus and its use for the serological examination of different population groups] Zhdanov VM, et al. **Vopr Virusol** 1988 May–Jun; 33(3):294–8 (Eng. Abstr.) (Rus)

[Standardized methods for detecting arterial hypertension and ischemic heart disease among the workers of industrial enterprises] Kovalenko VN, et al. **Vrach Delo** 1989 Jan; (1):104–5 (Eng. Abstr.) (Rus)

[Concentration aimed at the screening of high-risk HPV carriers] von Krogh G. **Lakartidningen** 1989 Mar 15; 86(11):948–9 (Swe)

ORGANIZATION & ADMINISTRATION

Effective prenatal care decreases the incidence of low birthweight. Hakala TH, et al. **Am J Perinatol** 1989 Apr; 6(2):222–5

The Hawaii Chlamydia Network Project: a successful program incorporating close intra-agency cooperation. Katz AR. **Am J Public Health** 1989 Apr;79(4):505–7

Evaluation of the cervical cytology screening programme in an inner city health district. Beardow R, et al. **BMJ** 1989 Jul 8;299(6691):98–100

Preliminary results of a district call scheme for cervical screening organised in general practice. Havelock CM, et al. **BMJ** 1988 Nov 26;297(6660):1384–6

Screening for cervical cancer [letter] Lewis LS. **BMJ** 1988 Oct 29;297(6656):1129

Controversy over mammography screening [editorial] Reidy J, et al. **BMJ** 1988 Oct 15;297(6654):932–3

Cervical cytology screening [letter] Sherwood A. **BMJ** 1988 Sep 3;297(6648):625

Breast cancer screening programmes: the development of a monitoring and evaluation system. Day NE, et al. **Br J Cancer** 1989 Jun;59(6):954–8

Report of the WHO meeting on criteria for HIV screening programmes. Geneva, 20–21 May 1987. **Br Med Bull** 1988 Jan;44(1):220–9

Criteria for HIV screening programs. **Bull Pan Am Health Organ** 1989;23(1–2):176–82

A colorectal cancer prevention, screening, and evaluation program in community black churches. Mitchell-Beren ME, et al. **CA** 1989 Mar–Apr;39(2):115–8

Implementing a public cholesterol screening campaign: the North Coast experience. James R, et al. **Community Health Stud** 1989;13(2):130–9

Use of mammography for breast cancer screening—Rhode Island, 1987. Centers for Disease Control. **Conn Med** 1988 Jul;52(7):429–30

Computerisation of screening for cervical cancer. The OCCURS Group. **Health Bull (Edinb)** 1988 May; 46(3):146–52

Cervical screening: the potential contribution of workplace examinations. Morris GJ. **Health Bull (Edinb)** 1988 May; 46(3):156–9

Adolescent idiopathic scoliosis: screening and diagnosis. Lonstein JE. **Instr Course Lect** 1989;38:105–13 (26 ref.)

Screening newborn infants for sickle hemoglobin. Pegelow CH, et al. **J Fla Med Assoc** 1988 Oct;75(10):670–5

The Adolescent Urine Drug Screening Program [editorial] Huttenbach DE. **J Med Assoc Ga** 1988 Nov;77(11):817

Work site blood pressure control: the evolution of a program. Brown HR Jr, et al. **J Occup Med** 1989 Apr;31(4):354–7

Breast cancer screening. Acheson ED. **J R Soc Med** 1989 Aug;82(8):455–7

Screening for infections in pregnancy [letter] Ho-Yen DO, et al. **Lancet** 1988 Oct 29;2(8618):1031

Cervical screening management [letter] Muir Gray JA, et al. **Lancet** 1989 Jul 29;2(8657):280

Prenatal screening for human immunodeficiency virus infection: purpose, priorities, protocol, and pitfalls [editorial] Duff P. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):403–4

Colorectal cancer screening in a defined population. Engstrom PF, et al. **Prog Clin Biol Res** 1988;278:7–19

Mammography registry: considerations and options. Clark RA, et al. **Radiology** 1989 Apr;171(1):91–3

School screening for hearing loss in developing countries. McPherson BD, et al. **Scand Audiol Suppl** 1988;28:103–10

Cancer prevention and detection centers: an overview and critique. Humphrey LJ, et al. **Semin Surg Oncol** 1989; 5(3):211–8

Neonatal screening for cystic fibrosis in Wisconsin. Mischler E, et al. **Wis Med J** 1989 Mar;88(3):14–8

[Results of periodic cytologic screening of women at one work place] Grys E. **Ginekol Pol** 1988 Aug;59(8):493–8 (Eng. Abstr.) (Pol)

[Opinions of occupational health physicians with regard to preventive examinations of persons exposed to substances harmful to the respiratory system] Hanke W. **Pneumonol Pol** 1988 Dec;56(12):556–63 (Eng. Abstr.) (Pol)

[Arterial hypertension in a population of working men—6 years' observation] Sznajd J, et al. **Przegl Lek** 1989; 46(2):275–6 (Pol)

[The main trends in the activities to improve mass screening of women] Serov VN. **Akush Ginekol (Mosk)** 1988 Oct; (10):3–7 (Rus)

[Experience of the preventive services department in conducting mass screening of workers at a railroad junction] Naldenov SP. **Gig Sanit** 1988 Sep;(9):28–31 (Rus)

[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. **Gig Sanit** 1989 May; (5):90–2 (Rus)

[Experience with differentiated mass screening and treatment of workers in petrochemical plants with diseases of the liver and biliary tract] Bulatova FD, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):18–20 (Eng. Abstr.) (Rus)

[Methodologic approaches to the elaboration of quantitative evaluation of health status in the practice of ambulatory care] Gichev IuP. **Gig Tr Prof Zabol** 1988 Dec;(12):6–9 (38 ref.) (Eng. Abstr.) (Rus)

[Basic principles of mass screening of patients with asbestosis] Gladkova EV. **Gig Tr Prof Zabol** 1989;(4):4–7 (Eng. Abstr.) (Rus)

[Practical objectives of mass immunologic screening of the population] Lebedev KA, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):137–40 (Eng. Abstr.) (Rus)

[Problems of the prevention of non-infectious diseases] Oganov RT. **Klin Med (Mosk)** 1989 Mar;67(3):4–10 (Rus)

[A model of municipal automated screening centers] Bogdanov EV, et al. **Med Tekh** 1988 Nov–Dec;(6):7–16 (Rus)

[The role of medical examinations in the mass screening and treatment of miners] Grabovoĭ AF, et al. **Ortop Travmatol Protez** 1988 Jun;(6):64–8 (Rus)

[Mass screening of patients with traumatological and orthopedic problems and the objectives of its development] Shumada IV. **Ortop Travmatol Protez** 1988 Jun;(6):60–4 (Rus)

[Experience with mass screening of patients with tuberculosis and various risk groups] Goncharova EN, et al. **Probl Tuberk** 1988;(7):66–6 (Eng. Abstr.) (Rus)

[Results of expeditious screening of children for tuberculosis in regions with low population density] Kochkin AV. **Probl Tuberk** 1988;(6):3–5 (Eng. Abstr.) (Rus)

[Organization of fluorographic examinations of the population in large cities] Loviagin EV, et al. **Probl Tuberk** 1989;(1):7–12 (Eng. Abstr.) (Rus)

[A program of primary prevention of arterial hypertension in an organized rural population] Gabinskiĭ VL, et al. **Sov Med** 1989;(5):59–61 (Rus)

[Evaluation of the medical effectiveness of the CASMSP (Complex Ambulatory System of Mass Screening of the Population) based on data of a urban polyclinic] Popov GS, et al. **Sov Med** 1989;(2):37–9 (Rus)

[Scientific and technologic aspects of equipping the preventive services department during general mass screening of the population] Ananin VF, et al. **Sov Zdravookhr** 1989;(1):33–8 (Eng. Abstr.) (Rus)

[Detection of cardiovascular pathology in adolescents and students during mass preventive examinations] Antonova LT, et al. **Sov Zdravookhr** 1989;(5):29–32 (Eng. Abstr.) (Rus)

[The role of the regional society of social hygienists and public health administrators in solving problems of mass screening] Baranovskaia LM, et al. **Sov Zdravookhr** 1988; (10):48–50 (Eng. Abstr.) (Rus)

[Ways of improving general mass screening of the population] Baranovskaia LM. **Sov Zdravookhr** 1988;(6):50–3 (Eng. Abstr.) (Rus)

[Introduction of a program of secondary prevention of arterial hypertension into practical public health] Britov AN, et al. **Sov Zdravookhr** 1989;(1):23–9 (Rus)

[Integral approach to the prevention of major chronic non-infectious diseases] Chazova LV, et al. **Sov Zdravookhr** 1989;(1):3–7 (Eng. Abstr.) (Rus)

[Mass screening of railway workers] Erpelev FA. **Sov Zdravookhr** 1989;(2):42–4 (Eng. Abstr.) (Rus)

[Status and prospects of mass screening of the population in the Democratic Republic of Germany] Fridemann Kh. **Sov Zdravookhr** 1988;(11):49–52 (Rus)

[Mass screening of families of frequently ill children] Gavalov SM, et al. **Sov Zdravookhr** 1988;(9):40–4 (Eng. Abstr.) (Rus)

[Use of computers in the organization of mass screening] Golovchenko VP, et al. **Sov Zdravookhr** 1988;(9):33–6 (Rus)

[Urgent problems of medical services for vocational school students] Kirillov VV, et al. **Sov Zdravookhr** 1988;(6):22–7 (Eng. Abstr.) (Rus)

[Mass screening of schoolchildren with various non-infectious diseases of the digestive organs in the Kirghiz SSR] Kozhonazarov KK. **Sov Zdravookhr** 1988; (8):37–9 (Rus)

[Implementation of an integrated program of prevention of chronic nonspecific diseases in the Kaishiador region of the Lithuanian SSR] Misiavichene IS, et al. **Sov Zdravookhr** 1989;(4):31–4 (Eng. Abstr.) (Rus)

[Ways of improving mass screening of the population] Petrovskiĭ AM, et al. **Sov Zdravookhr** 1988;(8):32–7 (Eng. Abstr.) (Rus)

[Health education of the population during mass screening at a polyclinic] Purina EA, et al. **Sov Zdravookhr** 1989; (4):37–41 (Eng. Abstr.) **(Rus)**

[Moving toward general mass screening of the population of the Brest-Litovsk region] Shidlovskiĭ PR. **Sov Zdravookhr** 1989;(1):54–8 **(Rus)**

[Problems of preventing ischemic heart disease among naval personnel] Vinnikova VN, et al. **Sov Zdravookhr** 1989; (4):34–7 (Eng. Abstr.) **(Rus)**

[Experience with scientific and practical work in regard to studying the health status of the population of the Karelian ASSR during the transition to mass screening] Zhuravleva KI, et al. **Sov Zdravookhr** 1988;(10):33–8 (Eng. Abstr.) **(Rus)**

[Integrated approach to the organization of the mass prevention of dental caries and periodontal diseases] Leus PA. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):82–4 **(Rus)**

[Detection of pathology of the urinary system in students during preventive mass screening] Seisembekov TZ, et al. **Ter Arkh** 1988;60(6):16–8 (Eng. Abstr.) **(Rus)**

[Medico-social aspects of mass screening of children with cryptorchism] Pavlova LP, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):22–6 (Eng. Abstr.) **(Rus)**

[Experience with the ophthalmological examination of workers in refrigerator-manufacturing plants] Iakovlev IuG, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):71–4 **(Rus)**

[On the article by V.E. Smirnov et al. "The effectiveness of a program of stroke prevention in high-risk groups"] Misiuk NS. **Zh Nevropatol Psikhiatr** 1989;89(3):153–4 **(Rus)**

[Mass screening and prognosis of sequelae of closed cranio-cerebral trauma in children] Pishel' IaV, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):77–82 (Eng. Abstr.) **(Rus)**

STANDARDS

Experience in managing a large-scale rescreening of Papanicolaou smears and the pros and cons of measuring proficiency with visual and written examinations. Rube IF. **Acta Cytol** 1989 Jul–Aug;33(4):479–83

Cervical cancer screening from the public health perspective. Steiner C. **Acta Cytol** 1989 Jul–Aug;33(4):471–4

The politics of inadequate registers [editorial] Armstrong EM. **BMJ** 1989 Jul 8;299(6691):73

Screening: the inadequacy of population registers [editorial] [see comments] Bowling A, et al. **BMJ** 1989 Mar 4; 298(6673):545–6. **Comment in:** BMJ 1989 Apr 8;298(6678):963

Who should have their cholesterol concentration measured? What experts in the United Kingdom suggest. Leitch D. **BMJ** 1989 Jun 17;298(6688):1615–6 (16 ref.)

Screening of vision in school: could we do better by doing less? Stewart-Brown SL, et al. **BMJ** 1988 Oct 29; 297(6656):1111–3

Who is for cholesterol testing? Test selectively those who will benefit most. Tunstall-Pedoe H. **BMJ** 1989 Jun 17; 298(6688):1593–4 (19 ref.)

Cervical screening attendance and its effectiveness in a rural population in China. Zhang ZF, et al. **Cancer Detect Prev** 1989;13(5–6):337–42

A screening programme for cervical cancer that worked. Hakama M, et al. **Cancer Surv** 1988;7(3):403–16

Effectiveness of a cancer control programme. Knox EG, et al. **Cancer Surv** 1988;7(3):379–401

Quality assurance guidelines for effective cholesterol screening programs. Dusenbury L. **Colo Med** 1988 Sep 15; 85(17):375

Sensitivity, specificity, and positive predictivity of the Hemoccult test in screening for colorectal cancers. The University of Minnesota's Colon Cancer Control Study. Mandel JS, et al. **Gastroenterology** 1989 Sep;97(3):597–600

Managing abnormal Pap smears: comments on two articles. Buck HW. **J Am Coll Health** 1989 Sep;38(2):101–2

Survey of population coverage in cervical cancer screening in the Oxford region. Coulter A, et al. **J R Coll Gen Pract** 1987 Oct;37(303):441–3

Screening for aortic aneurysm [letter] Dev VJ, et al. **Lancet** 1988 Oct 29;2(8618):1028

Blood cholesterol: is population screening warranted in the UK? Smith WC, et al. **Lancet** 1989 Feb 18;1(8634):372–3

Immunoreactive trypsinogen screening for cystic fibrosis: characterization of infants with a false-positive screening test. Rock MJ, et al. **Pediatr Pulmonol** 1989;6(1):42–8

Predictive models for frequency and proficiency of BSE performance. Chrvala CA, et al. **Prog Clin Biol Res** 1989; 293:159–73

Breast cancer screening–individualized risk assessment and application of new research technology: non-protein bound estradiol and chromosome analysis. Jackson GL, et al. **Prog Clin Biol Res** 1989;293:271–8

[Quality assurance in a mass screening project of breast cancer] den Otter G. **Ned Tijdschr Geneeskd** 1989 Mar 11; 133(10):502–3 **(Dut)**

[Value of follow-up of neonatal screening by the delivery number. VEDETT system of control of the efficacy of the screening and treatment of the coverage rate (letter)] Reviron D, et al. **Presse Med** 1989 Mar 25;18(12):638 **(Fre)**

[A model for evaluating screening tests. The case of colorectal tumors] Junod B, et al. **Rev Epidemiol Sante Publique** 1989;37(1):49–59 (Eng. Abstr.) **(Fre)**

[Diagnostic sensitivity and specificity and positive predictive value in the mass screening for cancer] Ohkawa J. **Rinsho Byori** 1988 Jul;36(7):781–6 **(Jpn)**

[Problem of improving regular medical examinations] Penknovich AA, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):33–5 (Eng. Abstr.) **(Rus)**

[Expert evaluation of preliminary and periodic occupational examinations of miners in the Don Basin coal mines] Kobets GP, et al. **Vrach Delo** 1988 Jul;(7):97–9 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Mammographic screening and mortality from breast cancer: the Malmö mammographic screening trial. Andersson I, et al. **BMJ** 1988 Oct 15;297(6654):943–8

Cancer screening services for the elderly. Weisman CS, et al. **Public Health Rep** 1989 May–Jun;104(3):209–14

TRENDS

Cervical cancer screening and demonstration projects to identify barriers to preventing cervical cancer mortality. Taylor WR, et al. **Acta Cytol** 1989 Jul–Aug;33(4):460–2

Health screening in schools. The U.S. experience. Cross A. **Arztl Jugendkd** 1988;79(3):149–57

Status of human retrovirus testing in state and territorial public health laboratories: summary of survey no. 6. Hausler WJ Jr. **Infect Control Hosp Epidemiol** 1989 Aug; 10(8):345–9

Trends in breast cancer screening—Rhode Island, 1987–1989. **MMWR** 1989 Aug 25;38(33):569–71

Exploration of factors affecting mammography behaviors. Rutledge DN, et al. **Prev Med** 1988 Jul;17(4):412–22

Innovations in screening: evaluating periodic screening without using data from a control group. Baker SG. **Prog Clin Biol Res** 1989;293:15–21

Physician induced and patient induced utilization of early cancer detection practices among black Americans. Bloom JR, et al. **Prog Clin Biol Res** 1989;293:279–96

Breast cancer screening for primary care physicians. Costanza ME, et al. **Prog Clin Biol Res** 1989;293:65–74

Measuring the impact of varied interventions of community-wide breast cancer screening. Lane DS, et al. **Prog Clin Biol Res** 1989;293:103–13

Selective screening for late stage breast cancer using a logistic model. McGregor SE, et al. **Prog Clin Biol Res** 1989; 293:175–82

The current and potential status of screening for prostatic cancer in asymptomatic populations. Murphy GP. **Prog Clin Biol Res** 1989;303:19–25 (16 ref.)

Two interventions to improve use of screening for breast cancer. Schymura MJ, et al. **Prog Clin Biol Res** 1989; 293:135–49

The Oregon Breast Cancer Detection Awareness Project: follow-up of a community-based breast cancer screening campaign. Sobel J, et al. **Prog Clin Biol Res** 1989;293:75–87

Screening for cancer: state of the art and prospects for the future. Miller AB. **World J Surg** 1989 Jan–Feb;13(1):79–83 (22 ref.)

[A program of preventive and health monitoring examinations for children and adolescents in East Germany] Müller D, et al. **Arztl Jugendkd** 1988; 79(2):97–100 (Eng. Abstr.) **(Ger)**

[Regional differences in the utilization of early cancer screening 1985] Berghof B, et al. **Off Gesundheitswes** 1989 Feb;51(2):75–7 (Eng. Abstr.) **(Ger)**

[Supplementary data for cholesterol and blood glucose screening in public services of the Health Department] Musolff W. **Off Gesundheitswes** 1988 Jul;50(7):392 **(Ger)**

UTILIZATION

Attendance and non-attendance for breast screening at the south east London breast screening service. McEwen J, et al. **BMJ** 1989 Jul 8;299(6691):104–6

Cervical cytology screening and government policy. Ross SK. **BMJ** 1989 Jul 8;299(6691):101–4

Randomised trial of two strategies offering women mobile screening for breast cancer. Williams EM, et al. **BMJ** 1989 Jul 15;299(6692):158–9

Is there a need for a place-of-work cervical smear service? Reid G, et al. **Health Bull (Edinb)** 1988 May;46(3):153–5

Community screening for cervical cancer in New Hampshire. Dietrich AJ, et al. **J Fam Pract** 1989 Sep;29(3):319, 321, 323

The organization of cervical screening in general practice. Havelock C, et al. **J R Coll Gen Pract** 1988 May; 38(310):207–11

[No apparent correlation between the level of participation in the German early cancer detection program and the development of cancer mortality in females. An ecologic analysis] Robra BP, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):587–91 (Eng. Abstr.) **(Ger)**

VETERINARY

[Epizootic situation of brucellosis in Poland in the aspect of the risk for humans] Królak M. **Przegl Epidemiol** 1988; 42(4):360–3 **(Pol)**

MASS SPECTROMETRY see **SPECTRUM ANALYSIS, MASS**

MASSAGE

Digital rectal message for PSVT [letter] Weiss LD. **Ann Emerg Med** 1989 Mar;18(3):330–1

Increase of plasma beta-endorphins in connective tissue massage. Kaada B, et al. **Gen Pharmacol** 1989;20(4):487–9

Termination of ventricular tachycardia by carotid sinus stimulation. Grubb BP. **Int J Cardiol** 1989 Jun;23(3):397–9

Nipple tenderness and breast massage [letter] Axline SE. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):336, 355

Treatment of 11 cases of chronic enuresis by acupuncture and massage. Huo JS. **J Tradit Chin Med** 1988 Sep; 8(3):195–6

[Study on "massage to activate the meridian" apparatus in the treatment of cholecystolithiasis] Wu JQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):141–3, 131 (Eng. Abstr.) **(Chi)**

[Effect of massage of the breasts in prolonged pregnancy on cervical maturation] Krasnodębski J, et al. **Ginekol Pol** 1988 Sep;59(9):534–8 (Eng. Abstr.) **(Pol)**

[Use of vital point massage in various types of obstetrical pathology] Zharkin NA. **Akush Ginekol (Mosk)** 1988 Oct; (10):62–5 **(Rus)**

[Non-pharmacological methods of treatment of neurocirculatory asthenia] Petrov MN, et al. **Sov Med** 1988; (5):54–7 **(Rus)**

[Complex treatment of lumbosacral radiculoischemia using manual therapy] Drobinskiĭ AD, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):24–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Keratoconus and ocular massage. Gritz DC, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):757–8

Visual loss caused by subretinal hemorrhage and rupture of Bruch's membrane after digital ocular massage. Ruderman JM, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):493–4

Prenatal cranial haemorrhages in 47 Pacific Islander infants: is traditional massage the cause? Becroft DM, et al. **N Z Med J** 1989 May 10;102(867):207–10

[Cataract and retinal detachment due to ocular compression for paroxysmal supraventricular tachycardia: a case report] Horio S. **Nippon Geka Hokan** 1988 May 1;57(3):240–3 (Eng. Abstr.) **(Jpn)**

METHODS

Treatment of hydrarthrosis of the knee with manual manipulation and herbs. Wu ZM, et al. **J Tradit Chin Med** 1988 Dec;8(4):251–3

[Clinico-physiologic evaluation of the oscillatory modulation of breathing and vacuum massage as methods of respiratory physiotherapy in chronic obstructive diseases of the lungs] Zil'ber EA. **Vestn Akad Med Nauk SSSR** 1988;(9):35–9 (Eng. Abstr.) **(Rus)**

MASSETER MUSCLE see under **MASTICATORY MUSCLES**

MAST CELL COLONY-STIMULATING FACTOR see **INTERLEUKIN 3**

MAST CELL DISEASE see **MASTOCYTOSIS**

MAST CELL LEUKEMIA see **LEUKEMIA, MAST CELL**

MAST CELL SARCOMA see **SARCOMA, MAST CELL**

MAST CELLS

Human mast cells. Dvorak AM. **Adv Anat Embryol Cell Biol** 1989;114:1–107 (168 ref.)

Pathogenesis of naturally acquired bovine respiratory syncytial virus infection in calves: evidence for the involvement of complement and mast cell mediators. Kimman TG, et al. **Am J Vet Res** 1989 May;50(5):694–700

Prognostic significance of mast cells in soft tissue sarcoma. Ueda T, et al. **Cancer** 1988 Dec 1;62(11):2416–9

The human skin mast cell. Benyon RC. **Clin Exp Allergy** 1989 Jul;19(4):375–87 (149 ref.)

A survey of the number and distribution of mast cells in the skin of patients with mast cell disorders. Garriga MM, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):425–32

Mast cells in bronchoalveolar lavage in sarcoidosis: correlation with alveolar lymphocytes. Rottoli P, et al. **Respiration** 1988;54 Suppl 1:42–8

[Role of mast cells in the etiopathogenesis of nasal polyps] Bellioni P, et al. **Acta Otorhinolaryngol Ital** 1988 Jul–Aug; 8(4):371–83 (Eng. Abstr.) **(Ita)**

ANALYSIS

Permanent metachromatic effect of 1,9-dimethyl-methylene blue on acidic mucopolysaccharides of mastocytes. Pokorny E, et al. **Acta Morphol Hung** 1988;36(3–4):143–6

Calcium specificity of the antigen-induced channels in rat basophilic leukemia cells. Corcia A, et al. **Biochemistry** 1988 Sep 20;27(19):7499–506

Isolation and purification of an Fc epsilon receptor activated ion channel from the rat mast cell line RBL-2H3. Hemmerich S, et al. **Biochemistry** 1988 Sep 20; 27(19):7488–98

Substance P-like immunoreactivity in sympathetic ganglion from toad. Montoya GA, et al. **Cell Mol Biol** 1989; 35(3):325–31

Phenotypic expression of proteoglycan in mast cells of the human nasal mucosa. Pipkorn U, et al. **Histochem J** 1988 Sep;20(9):519–25

Cytochemical evidence of lack of basic protein in mucosal mast cells of the small intestine in the rat. Lunardi LO, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):367–8

Histamine receptor on mast cells. Antohe F, et al. **Microcire Endothelium Lymphatics** 1988 Dec;4(6):469–88

[Histamine content and function of the mastocytes of the skin in patients with Schoenlein-Henoch disease] Mishkova R, et al. **Klin Med (Mosk)** 1988 Aug;66(8):126–8 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

The mast cells of the human uterus. Crow J, et al. **APMIS** 1988 Oct;96(10):921–6

Mast cell typing: demonstration of a distinct hematopoietic cell type and evidence for immunophenotypic relationship to mononuclear phagocytes. Valent P, et al. **Blood** 1989 May 15;73(7):1778–85

Mast cell heterogeneity. Irani AM, et al. **Clin Exp Allergy** 1989 Mar;19(2):143–55 (110 ref.)

Numbers and heterogeneity of mast cells in the male genital tract of the rat. Fritz FJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):360–2

Mast cell heterogeneity in the small intestine of normal, gnotobiotic and parasitized pigs. Pabst R, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):363–6

[Histochemical heterogeneity of mast cells in the human upper respiratory mucosa] Ohkubo K. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1920–7 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Population of the diaphragm by mast cells in growing rats. Abood EA, et al. **Acta Anat (Basel)** 1989;134(4):269–75

Relationships between neural crest cells and mast cells in newborn mice. Nozue AT. **Anat Anz** 1988;166(1–5):219–25

Heterogeneity of mast cells and phenotypic change between subpopulations. Kitamura Y. **Annu Rev Immunol** 1989; 7:59–76 (95 ref.)

Purification of rat cutaneous mast cells with Percoll density centrifugation. Hachisuka H, et al. **Arch Dermatol Res** 1988; 280(6):358–62

Mast cell density in psoriatic skin. The effect of PUVA and corticosteroid therapy. Töyry S, et al. **Arch Dermatol Res** 1988;280(5):282–5

Occurrence of large groups of mast cells in subcutaneous connective tissue in the mouse. Moskalewski S, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):141–50

Whole body X-irradiation and repopulation with syngeneic bone marrow have no significant effect on basophils and mast cell compartment of murine lymph nodes. Włodarski KH. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):433–7

The development of mast cells in facial skin, palate and tongue of the mouse. Luke DA. **Arch Oral Biol** 1988; 33(11):827–31

Cyclic-AMP-induced c-fos expression and its relevance to differentiation of a transformed mast cell line. Goulding MD, et al. **Biochim Biophys Acta** 1989 Jan 23; 1007(1):99–108

Clonal assay of mast cell progenitors in semi-solid culture with a high seeding efficiency. Sakoda H, et al. **Biomed Pharmacother** 1988;42(5):335–41

Human cutaneous mast cells—a study of fixative and staining reactions in normal skin. Markey AC, et al. **Br J Dermatol** 1989 May;120(5):625–31

The development of neurogenic plasma extravasation in the rat dura mater does not depend upon the degranulation of mast cells. Markowitz S, et al. **Brain Res** 1989 Jan 16; 477(1–2):157–65

Rat peritoneal mast cell regranulation and acid phosphatase and trimetaphosphatase activity induced after stimulation by 48/80. A fluorescence, ultrastructural, and cytochemical study. Jamur MC, et al. **Cell Mol Biol** 1988;34(3):231–7

The mast cells. Enerbäck L, et al. **Curr Top Pathol** 1989; 79:169–204 (278 ref.)

Distribution and differentiation of murine mast cell progenitors determined with soft agar culture. Sakoda H, et al. **Exp Hematol** 1989 Aug;17(7):791–4

Identification and characterization of human hemopoietic mast cell colonies. Yuen E, et al. **Exp Hematol** 1988 Dec; 16(11):896–902

Unique features in differentiation of mast cells. Kitamura Y, et al. **IARC Sci Publ** 1988;(92):11–9 (60 ref.)

The generation of ovine bone marrow-derived mast cells in culture. Haig DM, et al. **Immunology** 1988 Oct; 65(2):199–203

Rat IL-3 stimulates the growth of rat mucosal mast cells in culture. Haig DM, et al. **Immunology** 1988 Oct; 65(2):205–11

Distribution and characteristics of mast cells in immature rat ovary. Parshad RK, et al. **Indian J Exp Biol** 1988 Dec; 26(12):937–40

Distribution and histochemical characterization of pulmonary mast cells in the rat and guinea pig. Bachelet CM, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):225–9

Functional and morphologic characterization of mast cells recovered by bronchoalveolar lavage from Basenji greyhound and mongrel dogs. Sommerhoff CP, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):441–9

Mast cells, elastic fibres and the lamina propria in the hard palate of the rat. Thomas CJ. **J Biol Buccale** 1988 Jun; 16(2):101–7

Stochastic model for mast cell proliferation in culture of murine peritoneal cells. Kobayashi T, et al. **J Cell Physiol** 1989 Jan;138(1):24–8

Stimulation of connective tissue-type mast cell proliferation by crosslinking of cell-bound IgE. Takagi M, et al. **J Exp Med** 1989 Jul 1;170(1):233–44

Structural alterations in fibroblast monolayers caused by mast cell degranulation. Ginsburg H, et al. **J Leukoc Biol** 1989 Jun;45(6):491–7

Mast cells and mast cell products. Graziano FM. **Methods Enzymol** 1988;162:501–22

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1–3):77–82

Age-related change in the number of mast cells in human bone marrow and spleen. Suzuki K, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):739–45

Mast cells in conjunctiva affected by cicatricial pemphigoid. Hoang-Xuan T, et al. **Ophthalmology** 1989 Jul;96(7):1110–4

The effects of urine on mast cells and smooth muscle of the human ureter. Ugaily-Thulesius L, et al. **Urol Res** 1988; 16(6):441–7

[Effect of retinoic acid on the differentiation and growth of murine mastocyte precursors] Arock M, et al. **C R Soc Biol (Paris)** 1988;182(4):361–71 (Eng. Abstr.) **(Fre)**

[Mast cell changes in the organs of the immune system under physical loading] Tkachuk MG, et al. **Arkh Anat Gistol Embriol** 1988 Nov;95(11):56–60 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Modulation of histamine secretion from rat and human mast cell subpopulations. Swieter M, et al. **Adv Exp Med Biol** 1988;237:699–704

Radiographic contrast media-induced histamine release: a comparative study with mast cells from different species. Amon EU, et al. **Agents Actions** 1989 Apr;27(1–2):104–6

Interaction of adriamycin with rat and mouse mast cells: histamine release and cellular uptake. Decorti G, et al. **Agents Actions** 1989 Apr;27(1–2):49–51

Beta-adrenoceptor blocking drugs and calcium transport in isolated rat mast cells. Drábiková K, et al. **Agents Actions** 1989 Apr;27(1–2):33–5

Histamine release from canine lung and liver mast cells induced by radiographic contrast media. Ennis M, et al. **Agents Actions** 1989 Apr;27(1–2):101–3

Comparative studies on the effect of non-steroidal anti-inflammatory drugs (NSAID) on histamine release from mast cells of the rat and guinea pig. Gomes JC, et al. **Agents Actions** 1988 Jul;24(3–4):266–71

Synergistic effect of palmitoylcarnitine and the ionophore A23187 on isolated rat mast cells. Grosman N. **Agents Actions** 1988 Dec;25(3–4):276–83

Inhibitory effect of phloretin on histamine release from isolated rat mast cells. Grosman N. **Agents Actions** 1988 Dec;25(3–4):284–90

A polyfunctional molecule produced by the conjugation of a synthetic polyion-immunostimulant with specific antigen and an inhibitor of mast cell activation: effects on histamine release. Gushchin IS, et al. **Agents Actions** 1989 Apr; 27(1–2):75–8

The protective effect of a new antiallergic agent, KP-136 on mast cell activation: a comparison with disodium cromoglycate. Kuriyama K, et al. **Agents Actions** 1988 Dec; 25(3–4):321–5

Some further characteristics of histamine secretion from rat mast cells stimulated with sodium orthovanadate. al-Laith M, et al. **Agents Actions** 1989 Apr;27(1–2):65–7

Effect of amiloride on arachidonic acid and histamine release from rat mast cells. Linnebjerg H, et al. **Agents Actions** 1989 Apr;27(1–2):39–42

Study of the effect of some neuropeptides and endogenous opioid peptides on in vitro histamine release from human lung mast cells and peripheral blood basophils. Miadonna A, et al. **Agents Actions** 1988 Aug;25(1–2):11–6

Broncho-Vaxom inhibits histamine release from rat mast cells induced by compound 48/80 and ionophore A23187. Németh A, et al. **Agents Actions** 1989 Apr;27(1–2):43–5

Membrane perturbing activity of beta-adrenoceptor blocking drugs in isolated rat mast cells. Nosál R, et al. **Agents Actions** 1989 Apr;27(1–2):36–8

Effect of beta-adrenoceptor blocking drugs on 32P incorporation into and arachidonic acid liberation from phospholipids in stimulated rat mast cells. Pečivová J, et al. **Agents Actions** 1989 Apr;27(1–2):29–32

Atropine and hexamethonium-sensitive, Ca/K-modulated, reversible swelling of mast cells in rat mesentery, due to feeding or exposure to carbachol. Rothschild AM, et al. **Agents Actions** 1988 Aug;25(1–2):4–10

Increased levels of histamine observed in the skin of adrenaline-treated rats or mice are not the result of histamine synthesis by mast cells. Rothschild AM, et al. **Agents Actions** 1989 Apr;27(1–2):86–8

The effects of metoclopramide and cloxacepride on human mast cells from adenoidal tissues. Schmutzler W, et al. **Agents Actions** 1989 Apr;27(1–2):110–2

Reassessment of mast cell stabilizers in the treatment of respiratory disease. Church MK. **Ann Allergy** 1989 Mar; 62(3):215–21 (81 ref.)

The sensitivity of guinea pig mesenteric and pulmonary mast cells to some histamine releasers. Brezezińska-Błaszczyk E, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):871–6

Inhibitory effect of tranilast on prostaglandin D synthetase. Ikai K, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2673–6

Effects of glycyrrhizin and glycyrrhetinic acid on dexamethasone-induced changes in histamine synthesis of mouse mastocytoma P-815 cells and in histamine release from rat peritoneal mast cells. Imanishi N, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2521–6

Alteration of mast cell responsiveness to adenosine by pertussis toxin. Marquardt DL, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):4019–25

ATP inhibits onset of exocytosis in permeabilised mast cells. Tatham PE, et al. **Biosci Rep** 1989 Feb;9(1):99–109

Effect of an inhaled mast cell stabiliser, N-acetyl-aspartyl-glutamate (Zy15109) on allergen-induced immediate bronchoconstriction. Lai CK, et al. **Br J Clin Pharmacol** 1989 May;27(5):626–8

Prolonged treatment with topical glucocorticoids results in an inhibition of the allergen-induced weal-and-flare response and a reduction in skin mast cell numbers and histamine content. Pipkorn U, et al. **Clin Exp Allergy** 1989 Jan;19(1):19–25

Effect of nedocromil sodium on the compound exocytosis of mast cells. Enerbäck L, et al. **Drugs** 1989;37 Suppl 1:44–50; discussion 69–77

Inhibition by amiloride and by Na+-depletion of A23187-stimulated arachidonic acid and histamine release from rat mast cells. Linnebjerg H, et al. **FEBS Lett** 1988 Nov 21;240(1–2):167–70

Modulation of chymase-mediated rat serosal mast cell degranulation by trypsin or diisopropyl fluorophosphate. Schick B, et al. **Immunology** 1989 Mar;66(3):434–8

Histamine-releasing activity of endogenous peptides on mast cells derived from different sites and species. Arock M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):229–35

In vitro sensitivity of immature human mast cells to chemotherapeutic agents. Butterfield JH, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):297–300

Study of the antiallergic component of inosine pranobex (Inosiplex, Isoprinosine). Schmutzler W, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):244–6

Inhibition of cAMP increase by an anti-allergic agent, NCO-650, during histamine release. Takei M, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):377–80

Inhibition of histamine and prostaglandin D2 release from human lung mast cells by ciclosporin A. Triggiani M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):253–5

Effect of the mast cell activator compound 48/80 and heparin on angiogenesis in the chick chorioallantoic membrane. Clinton M, et al. **Int J Microcirc Clin Exp** 1988 Nov; 7(4):315–26

Nerve growth factor enhances antigen and other secretagogue-induced histamine release from rat peritoneal mast cells in the absence of phosphatidylserine. Tomioka M, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):599–607

Dual effect of dihydropyridines on 45Ca uptake induced by the K+ -channel blocker, 4-aminopyridin on mast cells. Eleno N, et al. **J Cell Physiol** 1988 Nov;137(2):378–83

Effects of the Chinese herbal medicine "saiboku-to" on histamine release from and the degranulation of mouse peritoneal mast cells induced by compound 48/80. Toda S, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):303–9

Pretreatment with phorbol esters abrogates mast cell adenosine responsiveness. Marquardt DL, et al. **J Immunol** 1989 Feb 15;142(4):1268–73

Substance P induces granulocyte infiltration through degranulation of mast cells. Matsuda H, et al. **J Immunol** 1989 Feb 1;142(3):927–31

Isoproterenol-induced inhibition of immunoglobulin E-mediated release of histamine and arachidonic acid metabolites from the human lung mast cell. Undem BJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):209–17

Effects of a specific inhibitor of the 5-lipoxygenase pathway on mediator release from human basophils and mast cells. Warner JA, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):218–22

Parainfluenza-3 virus-induced enhancement of histamine release from calf lung mast cells—effect of levamisole. Ogunbiyi PO, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):338–44

Fluoroaluminates stimulate histamine secretion in the digitonin-permeabilized rat mast cells. Sorimachi M, et al. **Jpn J Physiol** 1988;38(2):227–32

Characteristics of beta-endorphin-induced histamine release from rat serosal mast cells. Comparison with neurotensin, dynorphin and compound 48/80. Sydbom A. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):567–72

Edema formation and degranulation of mast cells by a basic phospholipase A2 purified from Trimeresurus mucrosquamatus snake venom. Chiu HF, et al. **Toxicon** 1989;27(1):115–25

[Alpha-thrombin stimulation of heparin secretion by the

peritoneal mast cells in rats] Umarova BA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):131–3 (Eng. Abstr.) **(Rus)**

[Effect of NaF and calcium in rats mastocytes in response to norepinephrine] Botana LM, et al. **Rev Esp Fisiol** 1988 Mar;44(1):105–6 **(Spa)**

ENZYMOLOGY

The role of chymase in ionophore–induced histamine release from human pulmonary mast cells. Hultsch T, et al. **Adv Exp Med Biol** 1988;240:133–6

Changes in protein kinase C activity during histamine release from activated rat mast cells. Kurosawa M, et al. **Allergy** 1989 Apr;44(3):226–32

Roles of mast cell tryptase and chymase in airway function. Caughey GH. **Am J Physiol** 1989 Aug;257(2 Pt 1):L39–46 (86 ref.)

Immunoperoxidase and enzyme–histochemical demonstration of human skin tryptase in cutaneous mast cells in normal and mastocytoma skin. Harvima IT, et al. **Arch Dermatol Res** 1988;280(6):363–70

The structure of rat mast cell protease II at 1.9–A resolution. Remington SJ, et al. **Biochemistry** 1988 Oct 18; 27(21):8097–105

Amino acid sequence of a mouse mucosal mast cell protease. Trong HL, et al. **Biochemistry** 1989 Jan 10;28(1):391–5

Molecular cloning of dog mast cell tryptase and a related protease: structural evidence of a unique mode of serine protease activation. Vanderslice P, et al. **Biochemistry** 1989 May 16;28(10):4148–55

Effect of histamine and divalent cations on the activity and stability of tryptase from human mast cells. Alter SC, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):426–30

The allosteric effect of salt on human mast cell tryptase. Harvima IT, et al. **Biochim Biophys Acta** 1988 Sep 21; 956(2):133–9

Tryptase in rat mast cells: properties and inhibition by various inhibitors in comparison with chymase. Muramatu M, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):617–25

Roles of mast cell proteases in airways. Nadel JA, et al. **Chest** 1989 Jun;95(6):1328–30 (27 ref.)

Peroxidase activity in mast cell granules in urticaria pigmentosa. Akiyama M, et al. **Dermatologica** 1989; 178(3):145–50

Roles of mast cell proteases in airways. Nadel JA. **Drugs** 1989;37 Suppl 1:51–5; discussion 69–77 (29 ref.)

Novel structures CTLA–2 alpha and CTLA–2 beta expressed in mouse activated T cells and mast cells and homologous to cysteine proteinase proregions. Denizot F, et al. **Eur J Immunol** 1989 Apr;19(4):631–5

Tryptase and chymase, markers of distinct types of human mast cells. Craig SS, et al. **Immunol Res** 1989;8(2):130–48 (113 ref.)

Granule proteinases define mast cell heterogeneity in the serosa and the gastrointestinal mucosa of the mouse. Miller HR, et al. **Immunology** 1988 Dec;65(4):559–66

Release of elastase from purified human lung mast cells and basophils. Identification as a Hageman factor cleaving enzyme. Meier HL, et al. **Inflammation** 1989 Jun; 13(3):295–308

A diphosphoinositide kinase in rat mast cell granules. Kurosawa M, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):118–28

Peptide boronic acids, substrate analogs, inhibit chymase, and histamine release from rat mast cells. Kato Y, et al. **J Biochem (Tokyo)** 1988 May;103(5):820–2

The mast cell–specific expression of a protease gene, RMCP II, is regulated by an enhancer element that binds specifically to mast cell trans–acting factors. Sarid J, et al. **J Biol Chem** 1989 Jan 15;264(2):1022–6

Biological functions of serine proteases in mast cells in allergic inflammation. Katunuma N, et al. **J Cell Biochem** 1988 Dec;38(4):291–301 (91 ref.)

Human mast cell carboxypeptidase. Purification and characterization. Goldstein SM, et al. **J Clin Invest** 1989 May;83(5):1630–6

Time course of appearance and disappearance of human mast cell tryptase in the circulation after anaphylaxis. Schwartz LB, et al. **J Clin Invest** 1989 May;83(5):1551–5

Mast cell tryptase causes airway smooth muscle hyperresponsiveness in dogs. Sekizawa K, et al. **J Clin Invest** 1989 Jan;83(1):175–9

Detection of MCT and MCTC types of human mast cells by immunohistochemistry using new monoclonal anti–tryptase and anti–chymase antibodies. Irani AM, et al. **J Histochem Cytochem** 1989 Oct;37(10):1509–15

Enzyme histochemical discrimination between tryptase and chymase in mast cells of human gut. Osman IA, et al. **J Histochem Cytochem** 1989 Apr;37(4):415–21

Effect of nonhydrolyzable guanosine phosphate on IgE–mediated activation of phospholipase C and histamine release from rodent mast cells. Saito H, et al. **J Immunol** 1989 Jul 1;143(1):250–8

Mast cell chymase. A potent secretagogue for airway gland serous cells. Sommerhoff CP, et al. **J Immunol** 1989 Apr 1;142(7):2450–6

Mast cell tryptase and chymase reverse airway smooth muscle relaxation induced by vasoactive intestinal peptide in the ferret. Franconi GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):947–51

Human neutrophil and mast cell proteases implicated in inflammation. Rest RF. **Methods Enzymol** 1988;163:309–27

The action of a mast cell protease on the cuticular collagens of Necator americanus. McKean PG, et al. **Parasite Immunol** 1989 May;11(3):293–7

Pavlovian conditioning of rat mucosal mast cells to secrete rat mast cell protease II. MacQueen G, et al. **Science** 1989 Jan 6;243(4887):83–5

[Omega–exonuclease: an enzymatic marker for basophilic leukocytes and mast cells] Woessner S, et al. **Sangre (Barc)** 1989 Apr;34(2):151–2 (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

[Ontogeny and differentiation of mastocytes (editorial)] Escribano Mora L. **Med Clin (Barc)** 1988 Dec 3; 91(19):739–40 **(Spa)**

IMMUNOLOGY

An intravital microscopic model for mast cell–dependent inflammation in the hamster cheek pouch. Raud J, et al. **Acta Physiol Scand** 1989 Feb;135(2):95–105

Intracellular ion exchange between cytoplasmic potassium and granule histamine, an integrated link in the histamine release machinery of mast cells. Uvnäs B, et al. **Acta Physiol Scand** 1989 Jul;136(3):309–20

Mast cell response to tumor graft. Courtoy R, et al. **Adv Exp Med Biol** 1988;237:427–32

Passive sensitization of human intestinal mast cells. Nolte H, et al. **Agents Actions** 1989 Apr;27(1–2):93–6

Active sensitization does not increase the responsivity of rat peritoneal mast cells to diverse chemical stimuli. Peachell PT, et al. **Agents Actions** 1989 Apr;27(1–2):62–4

Sensitivity of human pulmonary mast cells obtained by bronchoalveolar lavage to immunological and nonimmunological histamine releasers. Brezińska–Blaszcyk E, et al. **Allerg Immunol (Leipz)** 1988;34(3):169–75

Basophil–mast cell response syndromes: a unified clinical approach. Patterson R, et al. **Allergy Proc** 1988 Nov–Dec; 9(6):611–20 (62 ref.)

Protein malnutrition: effect on rat peritoneal mast cell number, histamine content, and IgE receptors. Rickard AL, et al. **Am J Clin Nutr** 1989 Apr;49(4):641–5

Effect of staurosporine on histamine release from rat serosal mast cells. Kurosawa M, et al. **Ann Allergy** 1989 Sep; 63(3):231–4

Mast cells and arthritis. Malone DG, et al. **Ann Allergy** 1988 Dec;61(6 Pt 2):27–30 (42 ref.)

Presence and distribution of nervous system–associated mast cells that may modulate experimental autoimmune encephalomyelitis. Orr EL. **Ann N Y Acad Sci** 1988; 540:723–6

Proliferative potential of degranulated murine peritoneal mast cells. Kuriu A, et al. **Blood** 1989 Aug 15;74(3):925–9

Basophil mast cell and eosinophil growth and differentiation factors in human allergic disease. Denburg JA, et al. **Clin Exp Allergy** 1989 May;19(3):249–54 (67 ref.)

Inflammatory and immunological cell profiles in a rat model of conjunctival immediate hypersensitivity. Doherty MJ, et al. **Clin Exp Allergy** 1989 Jul;19(4):449–55

Role of GTP–binding protein in histamine release from mast cells. Ishizaka T. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):20–9 (24 ref.)

Characterization of isolated human skin mast cells: the effect of human anaphylatoxin and neutrophils on histamine release from human skin mast cells. Kubota Y, et al. **Dermatologica** 1989;179 Suppl 1:125

Trypanosoma cruzi: antibody–dependent killing of bloodstream trypomastigotes by mouse bone marrow–derived mast cells and by mastocytoma cells. Tambourgi DV, et al. **Exp Parasitol** 1989 Feb;68(2):192–201

Association of maturation of the small intestine at weaning with mucosal mast cell activation in the rat. Cummins AG, et al. **Immunol Cell Biol** 1988 Oct–Dec;66 (Pt 5–6):417–22

Immunopharmacological studies on Picrorhiza kurroa Royle ex Benth. Part VI: Effect on anaphylactic activation events in rat peritoneal mast cells. Pandey BL, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):47–52

Induction of inflammatory mediators (histamine and leukotrienes) from rat peritoneal mast cells and human granulocytes by Pseudomonas aeruginosa strains from burn patients. Bergmann U, et al. **Infect Immun** 1989 Jul; 57(7):2187–95

Demonstration of IgE–sensitized mast cells in human heart and kidney. Assem ES, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):101–4

Mast cell histamine–releasing activity from stimulated rat neutrophils. Cochrane DE, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):269–74

Nasal mast cell response to natural allergen exposure. Enerbäck L, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):209–11

Microfilament–associated, local degranulation of rat peritoneal mast cells. Mio M, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):369–71

IgE–positive cells in human intestinal mucosa are mainly mast cells. Rognum TO, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):256–60

Do mast cells and their products play a role in AIDS–related angiogenesis and immune dysfunction? [letter] Manconi R. **Int J Biol Markers** 1989 Apr–Jun;4(2):121–2

Ocular allergy. Mast cells and eosinophils. Rothenberg ME, et al. **Int Ophthalmol Clin** 1988 Winter;28(4):267–74 (94 ref.)

Asthma and mast cell activation. Kaliner M. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 2):510–20 (12 ref.)

Use of plasma histamine levels to monitor cutaneous mast cell degranulation. McBride P, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):374–80

Rabbit F(ab')2 antihuman IgE is a universal skin test reagent in the evaluation of skin mast cell degranulation in vivo. Weiss ME, et al. **J Allergy Clin Immunol** 1989 Jun; 83(6):1040–8

The gene for the rat mast cell high affinity IgE receptor alpha chain. Structure and alternative mRNA splicing patterns. Tepler I, et al. **J Biol Chem** 1989 Apr 5; 264(10):5912–5

Interleukin 3–dependent and –independent mast cells stimulated with IgE and antigen express multiple cytokines. Burd PR, et al. **J Exp Med** 1989 Jul 1;170(1):245–57

The role of mast cells in the elicitation of experimental allergic encephalomyelitis. Dietsch GN, et al. **J Immunol** 1989 Mar 1;142(5):1476–81

The antigen–binding T cell factor PCI–F sensitizes mast cells for in vitro release of serotonin. Comparison with monoclonal IgE antibody. Meade R, et al. **J Immunol** 1988 Oct 15;141(8):2704–13

Mast cells are important in the development of hypersensitivity pneumonitis. A study with mast–cell–deficient mice. Takizawa H, et al. **J Immunol** 1989 Sep 15;143(6):1982–8

Two specific T cell factors that initiate immune responses in murine allograft systems. A comparison of biologic functions. Vandebriel RJ, et al. **J Immunol** 1989 Jul 1; 143(1):66–73

The immunocytochemical preservation of IgE and mast cells of the rat. Hickling KC, et al. **J Immunol Methods** 1989 Jan 6;116(1):19–26

Inflammatory properties of human C5a and C5a des Arg/ in mast cell–depleted human skin. Swerlick RA, et al. **J Invest Dermatol** 1989 Sep;93(3):417–22

Studies of connective tissue mast cell–mediated cytotoxicity. Tharp MD, et al. **J Invest Dermatol** 1989 Sep;93(3):423–8

Inter–receptor relationships in effector cell triggering, with particular reference to the mast cell. Stanworth DR. **Mol Immunol** 1988 Nov;25(11):1213–5 (19 ref.)

Activation of rheumatoid synovial mast cells. Role of IgE–associated antiglobulins. Gruber B. **Monogr Allergy** 1989;26:120–34 (59 ref.)

Mast cell associated–immune resistance against ticks. Matsuda H, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):817–20

Morphologic evidence that compound 48/80–challenged rat eyelid mast cells differ in their states of maximal degranulation. Allansmith MR, et al. **Ophthalmic Res** 1989; 21(3):206–15

Kinetics of mast cells, eosinophils and phospholipase B activity in the spontaneous–cure response of two strains of mice (rapid and slow responder) to the cestode Hymenolepis nana. Bortoletti G, et al. **Parasitol Res** 1989; 75(6):465–9

Expression of high–affinity binding of human immunoglobulin E by transfected cells. Miller L, et al. **Science** 1989 Apr 21;244(4902):334–7

Characterization of isolated porcine intestinal mucosal mast cells following infection with Ascaris suum. Ashraf M, et al. **Vet Parasitol** 1988 Sep;29(2–3):143–58

Regulation of human basophils and mast cells. Activation by cytokines. Lett–Brown MA, et al. **Year Immunol** 1989; 5:195–204 (43 ref.)

[Mast cells and basophils in asthma] Leynadier F. **Ann Biol Clin (Paris)** 1989;47(6):351–6 (64 ref.) (Eng. Abstr.) **(Fre)**

[Possible immunopathogenetic role of mastocytes in alopecia areata] D'Ovidio R, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):569–70 **(Ita)**

[Cytostatic action of the peritoneal cells of Syrian hamsters on transformed cells] Lavnikova NA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):333–5 (Eng. Abstr.) **(Rus)**

[Mast cells and antitumor resistance] Nikol'skiĭ IS, et al. **Eksp Onkol** 1988;10(5):15–9,75 (27 ref.) (Eng. Abstr.) **(Rus)**

[Effect of virus–induced interferon on mast cell resistance to the degranulating action of immune complexes] Aspetov RD, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):585–8 (Eng. Abstr.) **(Rus)**

METABOLISM

The role of membrane bound sialic acid of rat mast cells in histamine release induced by compound 48/80 and derivatives as well as calcium. Adamczyk–Engelmann P, et al. **Agents Actions** 1989 Aug;28(1–2):34–8

Replenishment of the cellular calcium required for non–immunologic stimulation of mast cell histamine secretion: temperature sensitivity and inhibition by manganese and sodium–free conditions. Bibb PC, et al. **Agents Actions** 1988 Aug;25(1–2):27–36

Histamine and mucosal mast cells in interstitial cystitis. Enerbäck L, et al. **Agents Actions** 1989 Apr;27(1–2):113–6

Histamine release from nasal mucosal mast cells in patients with chronic hypertrophic non–allergic rhinitis, after parasympathetic nerve stimulation. Rucci L, et al. **Agents Actions** 1988 Dec;25(3–4):314–20

Antagonists of luteinizing hormone releasing hormone bind

to rat mast cells and induce histamine release. Sundaram K, et al. **Agents Actions** 1988 Dec;25(3–4):307–13

Histamine release from mast cells by terpenoid aldehydes isolated from glanded varieties of cotton. Elissalde MH, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):396–401

Mapping gold-labeled receptors on cell surfaces by backscattered electron imaging and digital image analysis: studies of the IgE receptor on mast cells. Stump RF, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):128–41

Generation of leukotriene B4 by human lung fragments and purified human lung mast cells. Freeland HS, et al. **Am Rev Respir Dis** 1988 Aug;138(2):389–94

The effect of parainfluenza 3 infection on guinea pig basophil and lung mast cell histamine release. Graziano FM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):715–20

Histochemical comparison of mast cells obtained from the airways of mongrel dogs and Basenji–Greyhound dogs by bronchoalveolar lavage. Osborne ML, et al. **Am Rev Respir Dis** 1989 Sep;140(3):749–55

Adenosine potentiates mediator release from human lung mast cells. Peachell PT, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1143–51

Influence of the fibroblast environment on the structure of mast cell proteoglycans. Rothenberg ME, et al. **Ann N Y Acad Sci** 1989;556:233–44 (79 ref.)

Inhibition of mast cell histamine release by copper. Sharma SC, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun; 299:254–68

Participation of synovial mast cells in intermittent hydrarthrosis [letter] Malone DG, et al. **Arthritis Rheum** 1989 Mar;32(3):357–8

Synthesis of prostaglandins and eicosanoids by the mast cell secretory granule. Chock SP, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1308–15

Changes in polyphosphoinositide metabolism during mediator release from stimulated rat mast cells. Kurosawa M, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):431–7

Synergistic enhancement of histamine release from rat peritoneal mast cells by the phorbol ester 12-O-tetradecanoylphorbol 13-acetate is not reflected by corresponding changes in phospholipid turnover. Boam DS, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):215–22

Stimulation of histamine release and arachidonic acid metabolism in rat peritoneal mast cells by thapsigargin, a non-TPA-type tumor promoter. Ohuchi K, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):9–14

Antibodies and inhibitor of chymase are incorporated into mast cell granules and inhibit histamine release. Kido H, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:95–100

Differential release of histamine and eicosanoids from human skin mast cells activated by IgE-dependent and non-immunological stimuli. Benyon RC, et al. **Br J Pharmacol** 1989 Jul;97(3):898–904

Na+ -K+ pump activity in rat peritoneal mast cells: inhibition by extracellular calcium. Knudsen T, et al. **Br J Pharmacol** 1989 Apr;96(4):773–8

Characterization of neuropeptide-induced histamine release from human dispersed skin mast cells. Lowman MA, et al. **Br J Pharmacol** 1988 Sep;95(1):121–30

Divalent cation dependence of the inhibition by phenothiazines of mediator release from mast cells. Peachell PT, et al. **Br J Pharmacol** 1989 Jun;97(2):547–55

Uptake of adriamycin by rat and mouse mast cells and correlation with histamine release. Decorti G, et al. **Cancer Res** 1989 Apr 15;49(8):1921–6

Effects of sodium cromoglycate and nedocromil sodium on histamine secretion from mast cells from various locations. Pearce FL, et al. **Drugs** 1989;37 Suppl 1:37–43; discussion 69–77

The actions of retinal and retinoic acid on histamine release from rat peritoneal mast cells. Cantwell ME, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):43–51

Effects of benzodiazepines on serotonin release from rat mast cells. Suzuki-Nishimura T, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):75–85

Activation of multiple hemopoietic growth factor genes in Abelson virus-transformed myeloid cells. Humphries RK, et al. **Exp Hematol** 1988 Oct;16(9):774–81

Mouse bone marrow-derived IL-3-dependent mast cells and autonomous sublines produce IL-6. Hültner L, et al. **Immunology** 1989 Jul;67(3):408–13

Role of cloned virulence factors (mannose-resistant haemagglutination, mannose-resistant adhesions) from uropathogenic Escherichia coli strains in the release of inflammatory mediators from neutrophils and mast cells. König W, et al. **Immunology** 1989 Jul;67(3):401–7

IgE-mediated release of rat mast cell protease II, beta-hexosaminidase and leukotriene C4 from cultured bone marrow-derived rat mast cells. MacDonald AJ, et al. **Immunology** 1989 Jul;67(3):414–8

The secretory characteristics of mast cells isolated from the human large intestinal mucosa and muscle. Rees PH, et al. **Immunology** 1988 Nov;65(3):437–42

Presence of tumour necrosis factor or a related factor in human basophil/mast cells. Steffen M, et al. **Immunology** 1989 Mar;66(3):445–50

Interferon-alpha/beta inhibits IgE-dependent histamine release from rat mast cells. Swieter M, et al. **Immunology** 1989 Apr;66(4):606–10

Ca uptake and Ca releasing properties of the endoplasmic reticulum in rat peritoneal mast cells. Yoshii N, et al. **Immunopharmacology** 1988 Sep–Oct;16(2):107–13

Bioflavonoids and vasoactive mediator release from mast cells. Das Gupta G, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar;32(1):29–36

IgE receptors from rat intestinal mucosal and peritoneal mast cells show mast cell subtype-specific differences. Swieter M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):200–2

Binding of dexamethasone and its effect on histamine release from rat mast cells. Walajtys-Rode E, et al. **Int J Immunopharmacol** 1988;10(8):925–30

Dermal mast cell releasability and end organ responsiveness in atopic and nonatopic dogs. Turner CR, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):643–8

Inhibitory effects of GMCHA-OPhBut on phospholipid methylation and histamine release in mast cells activated by concanavalin A, anti-IgE, and antigen. Takei M, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):219–25

Kunitz-type protease inhibitor found in rat mast cells. Purification, properties, and amino acid sequence. Kido H, et al. **J Biol Chem** 1988 Dec 5;263(34):18104–7

Proteolytic enzymes of mast cell granules degrade low density lipoproteins and promote their granule-mediated uptake by macrophages in vitro. Kokkonen JO, et al. **J Biol Chem** 1989 Jun 25;264(18):10749–55

Complete structure of the mouse mast cell receptor for IgE (Fc epsilon RI) and surface expression of chimeric receptors (rat-mouse-human) on transfected cells. Ra C, et al. **J Biol Chem** 1989 Sep 15;264(26):15323–7

Induction of histamine release from rat mast cells and human basophilic granulocytes by clinical Escherichia coli isolates and relation to hemolysin production and adhesin expression. Gross-Weege W, et al. **J Clin Microbiol** 1988 Sep;26(9):1831–7

Activation- and phorbol ester-stimulated phosphorylation of a plasma membrane glycoprotein antigen expressed on mouse IL-3-dependent mast cells and serosal mast cells. Katz HR, et al. **J Immunol** 1989 Feb 1;142(3):919–26

Transformation of prostaglandin D2 to isomeric prostaglandin F2 compounds by human eosinophils. A potential mast cell–eosinophil interaction. Parsons WG 3d, et al. **J Immunol** 1988 Oct 1;141(7):2413–9

Biochemical and morphological modifications in dexamethasone-treated mouse bone marrow-derived mast cells. Pitton C, et al. **J Immunol** 1988 Oct 1;141(7):2437–44

Natural cytotoxic cell-specific cytotoxic factor produced by IL-3-dependent basophilic/mast cells. Relationship to TNF. Richards AL, et al. **J Immunol** 1988 Nov 1; 141(9):3061–6

Mast cell mediators stimulate synthesis of arachidonic acid metabolites in macrophages. Salari H, et al. **J Immunol** 1989 Apr 15;142(8):2821–7

Isolation and in vitro translation of mRNA from rat peritoneal mast cells and rat basophilic leukemia cells. Fujimaki H, et al. **J Immunol Methods** 1988 Nov 10; 114(1–2):219–25

IgG anti-IgE from atopic dermatitis induces mediator release from basophils and mast cells. Marone G, et al. **J Invest Dermatol** 1989 Aug;93(2):246–52

The IgE- and calcium-dependent release of eicosanoids and histamine from human purified cutaneous mast cells. Robinson C, et al. **J Invest Dermatol** 1989 Sep; 93(3):397–404

Inflammatory cells degrade inter-alpha inhibitor to liberate urinary proteinase inhibitors. Pratt CW, et al. **J Leukoc Biol** 1989 Jan;45(1):1–9

On scleroderma. Mast cells, endothelial cells, and fibroblasts. Claman HN. **JAMA** 1989 Sep 1;262(9):1206–9 (79 ref.)

Histamine release induced by proteolytic digests of human serum albumin: isolation and structure of an active peptide from pepsin treatment. Sugiyama K, et al. **Jpn J Pharmacol** 1989 Feb;49(2):165–71

Prostaglandin D2 generation in mouse bone marrow-derived mast cells exposed to dexamethasone is associated with endogenous peroxidase activity. Michel L, et al. **Lab Invest** 1988 Nov;59(5):613–24

Bronchoconstriction, nebulised pentamidine, and mast cells [letter] Ong EL, et al. **Lancet** 1989 Apr 29;1(8644):956

The molecular basis for the storage and release of histamine in rat mast cell granules. Uvnäs B. **Life Sci** 1974 Jun 16; 14(12):2355–66 (28 ref.)

ATP permeabilization of the plasma membrane. Steinberg TH, et al. **Methods Cell Biol** 1989;31:45–61

Mast cell lines produce lymphokines in response to cross-linkage of Fc epsilon RI or to calcium ionophores. Plaut M, et al. **Nature** 1989 May 4;339(6219):64–7

Production of the haemopoietic growth factors GM-CSF and interleukin-3 by mast cells in response to IgE receptor-mediated activation. Wodnar-Filipowicz A, et al. **Nature** 1989 May 11;339(6220):150–2

Membrane phosphoinositide-activated signals in mast cells and basophils. Beaven MA, et al. **Prog Allergy** 1988; 42:123–84 (274 ref.)

Signal transduction and cellular response in RBL-2H3 mast cells. Oliver JM, et al. **Prog Allergy** 1988;42:185–245 (81 ref.)

Metabolism of leukotriene D4 by rat peritoneal mast cells. Koyano H, et al. **Prostaglandins** 1989 Aug;38(2):215–26

[Effect of phorbol myristate acetate (PMA) on diphosphoinositide (DPI) synthesis in rat mast cell granules] Okayama Y, et al. **Arerugi** 1989 Feb;38(2):80–5 (Eng. Abstr.) **(Jpa)**

[Effect of colchicine on histamine secretion and calcium uptake in mast cells] Eleno N, et al. **Rev Esp Fisiol** 1988 Mar;44(1):35–40 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Avian erythroblastosis virus transforms a novel mast cell–basophil precursor target in the Japanese quail. Moscovici MG, et al. **J Virol** 1989 May;63(5):2335–9

PATHOLOGY

Mast cells in experimental and human cancerogenesis. Pastrňák A, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:107–12

Patients with chronic bronchitis differ in their mast cell subtypes as compared with normal subjects. Van Overveld FJ, et al. **Agents Actions** 1989 Jan;26(1–2):60–2

Quantitation of mast cells in 100 normal and 92 diseased human hearts. Implications for interpretation of endomyocardial biopsy specimens. Turlington BS, et al. **Am J Cardiovasc Pathol** 1988;2(2):151–7

Human nasal polyp epithelial basophil/mast cell and eosinophil colony-stimulating activity. The effect is T-cell-dependent. Ohnishi M, et al. **Am Rev Respir Dis** 1988 Sep;138(3):560–4

Mast cells in interstitial cystitis. Aldenborg F, et al. **Ann Urol (Paris)** 1989;23(2):165–6

Kinetics and staining properties of mast cells proliferating in rat small intestine tunica muscularis and subserosa following infection with Nippostrongylus brasiliensis. Arizono N, et al. **APMIS** 1988 Nov;96(11):964–70

Increased number of mast cells accompany enhanced collagen synthesis in linear localized scleroderma. Takeda K, et al. **Arch Dermatol Res** 1989;281(4):288–90

Mast cells in the initial stages of psoriasis. Toruniowa B, et al. **Arch Dermatol Res** 1988;280(4):189–93

Perineural and intraneural inflammatory infiltrates in the intestines of patients with systemic connective-tissue disease. DeSchryver-Kecskemeti K, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):394–8

Intestinal mucosal mast cells: enumeration in urticaria pigmentosa and systemic mastocytosis. Ferguson J, et al. **Br J Dermatol** 1988 Nov;119(5):573–8

Mast cells and IgE in intestinal mucosa in adult atopic dermatitis patients. Kalimo K, et al. **Br J Dermatol** 1988 Nov;119(5):579–85

Genetic control of mast cell development in bone marrow cultures. Strain-dependent variation in cultures from inbred mice. Reed ND, et al. **Clin Exp Immunol** 1988 Sep; 73(3):510–5

Increased mast cell numbers in the sclerotic skin of porphyria cutanea tarda. Torinuki W, et al. **Dermatologica** 1989; 178(2):75–8

Increased colonic mucosal mast cells associated with severe watery diarrhea and microscopic colitis. Baum CA, et al. **Dig Dis Sci** 1989 Sep;34(9):1462–5

Intestinal mucosal injury is associated with mast cell activation and leukotriene generation during Nippostrongylus-induced inflammation in the rat. Perdue MH, et al. **Dig Dis Sci** 1989 May;34(5):724–31

Mast cells in histoid lepromatous lesions. Kumar R. **Hansenol Int** 1985;10(1–2):1–4

Prognostic significance of eosinophils and mast cells in rectal cancer: findings from the National Surgical Adjuvant Breast and Bowel Project (protocol R-01). Fisher ER, et al. **Hum Pathol** 1989 Feb;20(2):159–63

Cutaneous mast cell quantity in pruritic and nonpruritic hemodialysis patients. Klein LR, et al. **Int J Dermatol** 1988 Oct;27(8):557–9

The mast cell–committed progenitor. II. W/Wv mice do not make mast cell–committed progenitors and S1/S1d fibroblasts do not support development of normal mast cell–committed progenitors. Jarboe DL, et al. **J Immunol** 1989 Apr 1;142(7):2418–23

The effects of different fixations on the distribution and numbers of mast cells in patients with nasal polyps. Drake-Lee AB, et al. **J Laryngol Otol** 1988 Dec; 102(12):1099–101

Mast cells in human odontogenic cysts. Smith G, et al. **J Oral Pathol Med** 1989 May;18(5):274–8

Mast cells in human lungs. Heard BE, et al. **J Pathol** 1989 Jan;157(1):59–63

"In vivo" kinetics of eosinophils and mast cells in experimental murine schistosomiasis. Lenzi HL, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:67–76

Proteinase phenotypes and fixation properties of rat mast cells in parasitic lesions caused by Mesocestoides corti: selective and site-specific recruitment of mast cell subsets. Chernin J, et al. **Parasite Immunol** 1988 Jul;10(4):433–42

Mast cells in ureters from rejected allografts. Greenstein SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):286–8

Increased mast cells in the limiting membrane of seminiferous tubules in testes of patients with idiopathic infertility. Hashimoto J, et al. **Urol Int** 1988;43(3):129–32

PHYSIOLOGY

Mast cell–tumour cell interactions: matrix degradation and the demonstration of histamine H2 receptors on human melanoma. Woolley DE, et al. **Adv Exp Med Biol** 1988; 233:81–90 (38 ref.)

Transformation of prostaglandin D2 to isomeric prostaglandin F2 compounds by human eosinophils: a potential mast cell–eosinophil interaction. Parsons WG 3d, et al. **Adv Prostaglandin Thromboxane Leukotriene Res**

1989;19:499–502
Mast cells, neuropeptides and inflammation. Church MK, et al. **Agents Actions** 1989 Apr;27(1–2):8–16 (76 ref.)
Prostaglandin modulation of mast cell–dependent inflammation. Raud J, et al. **Agents Actions** 1989 Jan; 26(1–2):42–4
Microfilament–associated degranulation of sensitized guinea–pig lung mast cells. Tasaka K, et al. **Agents Actions** 1989 Apr;27(1–2):79–82
Mast cells: a new approach for analyzing their maturation and function in vivo. Galli SJ. **Allergy Proc** 1988 Nov–Dec; 9(6):621–7 (74 ref.)
The interdependence of the follicular, parafollicular, and mast cells in the mammalian thyroid gland: a review and a synthesis [published erratum appears in Am J Anat 1989 May;185(1):101] Kaliińik M, et al. **Am J Anat** 1988 Oct; 183(2):148–57 (53 ref.)
Periarteriolar localization of mast cells promotes oriented interstitial migration of leukocytes in the hamster cheek pouch. Raud J, et al. **Am J Pathol** 1989 Jan;134(1):161–9
A patch–clamp study: secretagogue–induced currents in rat peritoneal mast cells. Kuno M, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C560–8
Beta–adrenergic and prostanoid inhibition of canine fundic mucosal mast cells. Soll AH, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):G727–32
Inflammatory cells and the epithelium. Mast cell/nerve interactions in the lung in vitro and in vivo. Bienenstock J, et al. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S31–4
Activation of pulmonary mast cells by bronchoalveolar allergen challenge. In vivo release of histamine and tryptase in atopic subjects with and without asthma. Wenzel SE, et al. **Am Rev Respir Dis** 1988 May;137(5):1002–8
Age–dependent mast–cell–mediated angiogenesis. Norrby K, et al. **APMIS Suppl** 1988;2:251–61
Mast cell degranulating peptide forms voltage gated and cation–selective channels in lipid bilayers. Ide T, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):155–60
Regulation of mast cell differentiation. Kitamura Y, et al. **Bioessays** 1989 Jun;10(6):193–6 (22 ref.)
Role of cyclic AMP during histamine release. Histamine release is not directly related to increase in cyclic AMP levels in rat mast cells activated by concanavalin A, anti–IgE, antigen, prostaglandin D2 and isoproterenol. Takei M, et al. **Biol Chem Hoppe Seyler** 1988 Aug; 369(8):765–73
Post bone marrow transplant sera and persisting mast cell colonies. Yuen E, et al. **Bone Marrow Transplant** 1988 Jan; 3(1):59–62
Reduction of ethanol–induced gastric damage by sodium cromoglycate and FPL–52694. Role of leukotrienes, prostaglandins, and mast cells in the protective mechanism. Beck PL, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):287–93
In vitro regeneration of activated rat peritoneal mast cells cocultured with 3T3 fibroblasts. Levi–Schaffer F, et al. **Cell Immunol** 1989 Mar;119(1):30–40
Acute reoxygenation injury in the isolated rat heart: role of resident cardiac mast cells. Keller AM, et al. **Circ Res** 1988 Dec;63(6):1044–52
Pathophysiology of human basophils and mast cells in allergic disorders. Marone G, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S24–40 (189 ref.)
GTP–binding proteins in the control of exocytosis. Gomperts BD, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:983–92
Beige granules as a cell marker for clonal analysis in kidney and liver of mouse aggregation chimaeras, and three–dimensional reconstruction from serial paraffin sections. Nakatsuji N. **Development** 1988 Nov;104(3):383–90
Possible orientational constraints determine secretory signals induced by aggregation of IgE receptors on mast cells. Ortega E, et al. **EMBO J** 1988 Dec 20;7(13):4101–9
Roles of mast cells and PMN leukocytes in cardiotoxin–induced rat paw edema. Wang JP, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):9–18
Isolation and characterization of lung mast cells from rats with bleomycin–induced pulmonary fibrosis. Tomioka M, et al. **Immunology** 1989 Mar;66(3):439–44
Interaction of IgE with its high–affinity receptor. Structural basis and requirements for effective cross–linking. Baird B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):23–8 (39 ref.)
Interaction of neuropeptides with human mast cells. Church MK, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):70–8 (67 ref.)
Interactions between neurotransmitters and inflammatory cells in the airways. Pauwels R, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):68–9 (6 ref.)
Characteristics of histamine secretion induced by neuropeptides: implications for the relevance of peptide–mast cell interactions in allergy and inflammation. Pearce FL, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):129–31
Secretory activity of nasal mucosal mast cells and histamine release in hay fever. Pipkorn U, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):349–60
Role of microfilaments in the exocytosis of rat peritoneal mast cells. Tasaka K, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):213–21
The role of mast cells in wound healing. Trabucchi E, et al. **Int J Tissue React** 1988;10(6):367–72 (32 ref.)
Single–cell analysis of Ca++ changes in human lung mast cells: graded vs. all–or–nothing elevations after IgE–mediated stimulation. MacGlashan D Jr. **J Cell Biol** 1989 Jul;109(1):123–34
Two populations of mast cells on fibrobiast monolayers: correlation of quantitative microscopy and functional activity. Hammel I, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):13–9
Role of mast cells in anaphylaxis. Evidence for the importance of mast cells in the cardiopulmonary alterations and death induced by anti–IgE in mice. Martin TR, et al. **J Clin Invest** 1989 Apr;83(4):1375–83
Cromolyn sodium does not prevent hypoxia–induced pulmonary hypertension in newborn and young lambs. Frantz EG, et al. **J Dev Physiol** 1988 Dec;10(6):555–65
Adrenal mast cells modulate vascular and secretory responses in the intact adrenal gland of the rat. Hinson JP, et al. **J Endocrinol** 1989 May;121(2):253–60
Histamine, mast cells and ovarian function. Krishna A, et al. **J Endocrinol** 1989 Mar;120(3):363–71 (48 ref.)
Inhibition of the growth of IL–3–dependent mast cells from murine bone marrow by recombinant granulocyte macrophage–colony–stimulating factor. Bressler RB, et al. **J Immunol** 1989 Jul 1;143(1):135–9
Functional and biochemical characterization of rat bone marrow derived mast cells. Broide DH, et al. **J Immunol** 1988 Dec 15;141(12):4298–305
Transforming growth factor–beta 1 selectively inhibits IL–3–dependent mast cell proliferation without affecting mast cell function or differentiation. Broide DH, et al. **J Immunol** 1989 Sep 1;143(5):1591–7
Regulation of the growth rate of mouse fibroblasts by IL–3–activated mouse bone marrow–derived mast cells. Dayton ET, et al. **J Immunol** 1989 Jun 15;142(12):4307–13
Thiol–sensitive mast cell lines derived from mouse bone marrow respond to a mast cell growth–enhancing activity different from both IL–3 and IL–4. Hültner L, et al. **J Immunol** 1989 May 15;142(10):3440–6
The mast cell–committed progenitor. I. Description of a cell capable of IL–3–independent proliferation and differentiation without contact with fibroblasts. Jarboe DL, et al. **J Immunol** 1989 Apr 1;142(7):2405–17
IL–3–dependent growth of basophil–like cells and mastlike cells from human bone marrow. Kirshenbaum AS, et al. **J Immunol** 1989 Apr 1;142(7):2424–9
Partial purification of a mast cell growth–enhancing activity and its separation from IL–3 and IL–4. Moeller J, et al. **J Immunol** 1989 May 15;142(10):3447–51
The role of mast cells in thioglycollate–induced inflammation. Qureshi R, et al. **J Immunol** 1988 Sep 15; 141(6):2090–6
Laminin promotes mast cell attachment. Thompson HL, et al. **J Immunol** 1989 Oct 1;143(7):2323–7
The interaction between mast cells and endothelial cells. Tharp MD. **J Invest Dermatol** 1989 Aug;93(2 Suppl):107S–112S (57 ref.)
Modulation of macrophage superoxide–induced cytochrome c reduction by mast cells. Dileepan KN, et al. **J Lab Clin Med** 1989 May;113(5):577–85
Activation of rat peritoneal mast cells by substance P and mastoparan. Mousli M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):329–35
Do mast cells intervene in the vasoproliferative process of the rheumatoid synovitis? Ribatti D, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):635–7
Resistance to peritonitis following disruption of peritoneal mast cells. Shin R, et al. **J Surg Res** 1988 Dec;45(6):565–7
Ionic signalling in mast cells; antigen and ionophore induced changes in cytosolic pH. Gertler R, et al. **Mol Immunol** 1988 Nov;25(11):1087–92
Role of mast cell mediators in radiation injury and protection. Donlon MA. **Pharmacol Ther** 1988;39(1–3):373–7 (35 ref.)
Influence of aging on the histamine release and membrane fluidity of rat peritoneal mast cells. Mio M, et al. **Pharmacology** 1989;38(3):191–200
Mast cells and their mediators. Tuominen S, et al. **Proc Finn Dent Soc** 1989;85(2):125–36 (32 ref.)
Molecular cloning of a cDNA that encodes the peptide core of a mouse mast cell secretory granule proteoglycan and comparison with the analogous rat and human cDNA. Avraham S, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3763–7
In vitro duplication and in vivo cure of mast–cell deficiency of Sl/Sld mutant mice by cloned 3T3 fibroblasts. Fujita J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2888–91
Adenosine regulates the Ca2+ sensitivity of mast cell mediator release. Lohse MJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8875–9
Multiple signaling pathways control stimulus–secretion coupling in rat peritoneal mast cells. Penner R. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9856–60
[Lipoxygenase inhibitors and mast cell degranulation] Grupe R, et al. **Biomed Biochim Acta** 1988;47(12):955–63 (Eng. Abstr.) **(Ger)**
[The mast cell] Carmagnola AL. **G Ital Dermatol Venereol** 1988 Dec;123(12):627–33 (38 ref.) (Eng. Abstr.) **(Ita)**
[Effect of ovarian hormones on mast cells in the denervated uterus of rats] Popova LA. **Fiziol Zh** 1989 Mar–Apr; 35(2):75–80 (Eng. Abstr.) **(Rus)**
[Mast–cell mechanism of the pathogenesis of bronchial asthma and peroxidation of membrane lipids] Amatuni VG, et al. **Ter Arkh** 1989;61(3):34–7 (Eng. Abstr.) **(Rus)**
[Morphometric studies of the epididymal duct in the F–zone after apical mesotestis cutting] Blázquez C, et al. **Rev Esp Fisiol** 1988 Dec;44(4):423–7 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Role of mast cells in peripheral nervous system demyelination. Johnson D, et al. **Ann N Y Acad Sci** 1988; 540:727–8

RADIATION EFFECTS

Separate effects of irradiation and of graft–versus–host reaction on rat mucosal mast cells. Cummins AG, et al. **Gut** 1989 Mar;30(3):355–60
Effect of ultraviolet radiation and PUVA on mediator release from purified mast cells. Mandel MJ, et al. **Photodermatol** 1988 Oct;5(5):211–7

SECRETION

Mediator release from human lung mast cell subtypes in chronic bronchitis and emphysema. van Overveld FJ. **Agents Actions** 1989 Apr;27(1–2):97–100
Histamine release from human pulmonary mast cells induced by bacterial antigens. Brzezińska–Blaszczyk E, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):375–8
Human basophil/mast cell releasability. V. Functional comparisons of cells obtained from peripheral blood, lung parenchyma, and bronchoalveolar lavage in asthmatics. Casolaro V, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1375–82
Effect of beta–adrenergic blockade and sympathetic stimulation on canine bronchial mast cell response to immune degranulation in vivo. White SR, et al. **Am Rev Respir Dis** 1989 Jan;139(1):73–9
Role of calcium in histamine release from rat mast cells activated by various secretagogues; intracellular calcium mobilization correlates with histamine release. Takei M, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):1–10
Control mechanisms of mediator release in human basophils and mast cells. Marone G. **Immunol Invest** 1988 Nov–Dec; 17(8–9):707–45 (235 ref.)
Substance P and Arg–Pro–Lys–Pro–NH–C12–H25–induced mediator release from different mast cell subtypes of rat and guinea–pig. Assem ES, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):119–28
Dispersal of rat uterine mast cells and their functional response to an embryo–derived histamine releasing factor: a possible model for embryo implantation. Cocchiara R, et al. **J Reprod Immunol** 1988 Nov;14(2):191–201
Strain differences in histamine release from mouse peritoneal mast cells induced by compound 48/80 or A23187. Toda S, et al. **Jikken Dobutsu** 1989 Apr;38(2):135–7
The mechanism of exocytosis during secretion in mast cells. Almers W, et al. **Soc Gen Physiol Ser** 1989;44:269–82
Stimulus–secretion coupling in mast cells. Penner R, et al. **Soc Gen Physiol Ser** 1989;44:295–310
Effects of sodium cromoglycate and nedocromil sodium on histamine secretion from human lung mast cells. Leung KB, et al. **Thorax** 1988 Oct;43(10):756–61
The patch–clamp technique in the study of secretion. Penner R, et al. **Trends Neurosci** 1989 Apr;12(4):159–63 (46 ref.)
Mast–cell secretion and angiogenesis, a quantitative study in rats and mice. Norrby K, et al. **Virchows Arch [B]** 1989; 57(4):251–6
[Effect of glucocorticoids on histamine liberation from human basophils and rat mast cells in vitro] Walajtys–Rode E, et al. **Pol Tyg Lek** 1988 May 23;43(21):665–8 (Eng. Abstr.) **(Pol)**
[Mast cells and basophils in the reproductive functions in women] Ionov ID. **Akush Ginekol (Mosk)** 1988 Nov; (11):9–12 (46 ref.) **(Rus)**
[Mast cells of the lungs in experimental hyperergic pleurisy] Lipshits RU, et al. **Fiziol Zh** 1989 May–Jun;35(3):102–6 (Eng. Abstr.) **(Rus)**
[Pathogenesis of protracted pneumonia] Maianskiĭ DN, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):42–50 **(Rus)**

TRANSPLANTATION

Hybrid resistance to parental bone marrow–derived cultured mast cells in the skin but not in the peritoneal cavity of (WB X C57BL/6)F1–W/Wv mice. Nakano T, et al. **Exp Hematol** 1988 Dec;16(11):908–11

ULTRASTRUCTURE

Intravital microscopic studies on acute mast cell–dependent inflammation. Raud J. **Acta Physiol Scand Suppl** 1989; 578:1–58
Prolonged exposure to a K–rich medium makes the rat mast cell membrane permeable to external calcium ions. Sorimachi M, et al. **Agents Actions** 1989 Aug;28(1–2):22–33
Human bone marrow mast cells in systemic mast cell disease. Ultrastructure and evaluation of fixation and staining techniques. Gabriel LC, et al. **Allergy** 1988 Aug;43(6):430–4
Effect of alveolar hypoxia on pulmonary mast cells in vivo. Nadziejko CE, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):743–8
Ultrastructural changes in the size of mast cell granules and in the granular matrix during an experimental anaphylactic shock. Popov AA. **Anat Anz** 1988;166(1–5):267–73
Macrophages and mast cells in dystrophic masseter muscle: a light and electron microscopic study. Kirkeby S, et al.

Br J Exp Pathol 1988 Aug;69(4):597–603
Characterization of mast cells residing in cutaneous neurofibromas. Kamide R, et al. Dermatologica 1989;179 Suppl 1:124
Cultured human basophils with ultrastructural and ultracytochemical features of mast cells. Eguchi M, et al. Eur J Haematol 1989 Jan;42(1):81–9
Edematous response caused by [Thi5,8,D-Phe7]bradykinin, a B2 receptor antagonist, is due to mast cell degranulation. Wang JP, et al. Eur J Pharmacol 1989 Feb 28; 161(2–3):143–9
Mast cells are closely apposed to nerves in the human gastrointestinal mucosa. Stead RH, et al. Gastroenterology 1989 Sep;97(3):575–85
An ultrastructural study of the morphology and lectin-binding properties of human mast cell granules. Jones CJ, et al. Histochem J 1988 Aug;20(8):433–42
Ultrastructural changes in human skin mast cells during antigen-induced degranulation in vivo. Friedman MM, et al. J Allergy Clin Immunol 1988 Dec;82(6):998–1005
Phospholipid storage in the secretory granule of the mast cell. Chock SP, et al. J Biol Chem 1989 Feb 15; 264(5):2862–8
Localization of cyclo-oxygenase and prostaglandin E2 in the secretory granule of the mast cell. Schmauder-Chock EA, et al. J Histochem Cytochem 1989 Sep;37(9):1319–28
Mast cell changes in a case of rapidly progressive scleroderma-ultrastructural analysis. Claman HN. J Invest Dermatol 1989 Feb;92(2):290–5
Conditions required for detection of specimen-specific SE-I secondary electrons in an analytical SEM. Apkarian RP. J Microsc 1989 May;154 (Pt 2):177–88
Characterization of human synovial mast cells. Kopicky-Burd JA, et al. J Rheumatol 1988 Sep; 15(9):1326–33
Ultrastructural analysis of maturing human T and TC mast cells in situ. Craig SS, et al. Lab Invest 1989 Jan; 60(1):147–57
Studies on the growth of mast cells in rats. Changes in granule size between 1 and 6 months. Hammel I, et al. Lab Invest 1988 Oct;59(4):549–54
Interaction between mast cells and perineurial fibroblasts in neurofibroma. New insights into mast cell function. Kirkpatrick CJ, et al. Pathol Res Pract 1988 Aug; 183(4):453–61
Mast cells and histamine responses of the ureter, ultrastructural features of cell-to-cell associations and functional implications. Ugaily-Thulesius L, et al. Urol Res 1988;16(4):287–93
[Observation of mast cells in adenoid liver tumors] Ruan YB, et al. J Tongji Med Univ 1988;8(3):129–34 (Eng. Abstr.) (Ger)
[Ultrastructural findings in tissue mast cells in urticaria pigmentosa] Schmidt U, et al. Z Hautkr 1988 Aug 15; 63(8):651–7 (Eng. Abstr.) (Ger)
[Ultrastructural characteristics of disorders of various non-respiratory functions of the lungs in endotoxic shock] Kharlanova NG, et al. Anesteziol Reanimatol 1988 Jul-Aug;(4):37–41 (Eng. Abstr.) (Rus)

MASTECTOMY

Removal of both breasts for paraffinoma and subsequent replacement. Czeti I, et al. Acta Chir Plast 1988;30(2):122–4
A Danish randomized trial comparing breast-preserving therapy with mastectomy in mammary carcinoma. Preliminary results. Blichert-Toft M, et al. Acta Oncol 1988;27(6A):671–7
The case in developing countries for routine postoperative radiotherapy after mastectomy in patients with histologically positive axillary nodes. Sankaranarayanan R, et al. Am J Clin Oncol 1989 Feb;12(1):78–80
Experience with the ipsilateral upper TRAM flap for postmastectomy breast reconstruction. Mukherjee RP, et al. Ann Plast Surg 1989 Sep;23(3):187–96
Oncological aspects of immediate breast reconstruction following mastectomy for malignancy. Johnson CH, et al. Arch Surg 1989 Jul;124(7):819–23; discussion 823–4
Mastectomy or conservation: the patient's choice [letter] BMJ 1989 Jan 7;298(6665):49
Comparison of mastectomy with tamoxifen for treating elderly patients with operable breast cancer. Robertson JF, et al. BMJ 1988 Aug 20–27;297(6647):511–4
Results of salvage hormonal therapy and salvage chemotherapy in women failing adjuvant chemotherapy after mastectomy for breast cancer. Buckner JC, et al. Breast Cancer Res Treat 1989 Mar;13(2):135–42
The transverse abdominal island flap for breast reconstruction. A 7-year experience. Hartrampf CR Jr. Clin Plast Surg 1988 Oct;15(4):703–16
The value of yearly chest X-ray in patients with stage I breast cancer. Vestergaard A, et al. Eur J Cancer Clin Oncol 1989 Apr;25(4):687–9
The predictors of distant relapse following conservative surgery and radiotherapy for early breast cancer are similar to those following mastectomy. Epstein AH, et al. Int J Radiat Oncol Biol Phys 1989 Oct;17(4):755–60
The reverse hockey stick technique: postmastectomy radiation therapy for breast cancer patients with locally advanced tumor presentation or extensive loco-regional recurrence. Pezner RD, et al. Int J Radiat Oncol Biol Phys 1989 Jul;17(1):191–7
The effect of method of biopsy and timing of mastectomy on the development of postmastectomy nosocomial wound infection. Morris DM, et al. J La State Med Soc 1988 Aug; 140(8):37–41
Multiple nodular foci in the liver associated with chronic hepatic porphyria after previous treatment of breast cancer. Leibach WK, et al. Klin Wochenschr 1989 Jun 1; 67(11):592–7
Tamoxifen instead of mastectomy in elderly women with breast cancer [editorial] Dent DM, et al. S Afr Med J 1989 Mar 18;75(6):257
Breast reconstruction after mastectomy. Bostwick J 3d. Semin Surg Oncol 1988;4(4):274–9 (26 ref.)
[Breast surgery (editorial)] Blichert-Toft M. Ugeskr Laeger 1989 Jul 24;151(30):1913–4 (Dan)
[Phantom-related phenomena following mastectomy] Krøner K, et al. Ugeskr Laeger 1988 Sep 19;150(38):2233–5 (Eng. Abstr.) (Dan)
[Refusal of reconstruction after mastectomy for cancer of the breast] Pasqualin F, et al. Ann Chir Plast Esthet 1988; 33(2):177–9 (Eng. Abstr.) (Fre)
[Rate of local recurrence and survival in patients with breast reconstruction following mastectomy] Kaufmann M, et al. Geburtshilfe Frauenheilkd 1988 Jul;48(7):524–7 (Eng. Abstr.) (Ger)
[Recurrence after surgery of breast cancer or a secondary disease?] Wöhlke G, et al. Pathologe 1989 Mar;10(2):93–6 (Ger)
[Stewart-Treves syndrome of the edematous arm following breast cancer operation] Gregl A, et al. Z Lymphol 1988 Dec;12(2):66–83 (186 ref.) (Eng. Abstr.) (Ger)
[Unilateral secondary postmastectomy arm lymphedema. Study of inpatient physical therapy] Pfaff A. Z Lymphol 1988 Jul;12(1):19–23 (Ger)
[Unilateral secondary postmastectomy lymphedema of the arm. Study of inpatient physical therapy (II)] Pfaff A. Z Lymphol 1988 Dec;12(2):54–65 (Ger)
[Technic, limits and complications of breast reconstruction with island flaps of the rectus abdominis muscle] Babayan R. Zentralbl Chir 1988;113(12):758–64 (Eng. Abstr.) (Ger)
[Surgical management of breast cancer—update] Sternberg A, et al. Harefuah 1988 Sep;115(5–6):122–6 (65 ref.) (Heb)
[Timing and method of breast reconstruction after mastectomy] Errichi BM, et al. Ann Ital Chir 1987; 59(1–6):103–7 (Eng. Abstr.) (Ita)
[Current approaches on the subject of breast reconstruction after mastectomy because of tumor] Donati L, et al. Minerva Chir 1989 Feb 15;44(3):437–9 (11 ref.) (Ita)
[Role of the general surgeon in the preparation for breast reconstruction] Gucciardo G. Minerva Chir 1989 Feb 15; 44(3):441–4 (0 ref.) (Ita)
[Reconstruction of the breast] Piotti F. Minerva Chir 1989 Feb 15;44(3):445–51 (0 ref.) (Ita)
[Problems of minor surgery for the early breast cancer—from the clinicopathological study] Morimoto T. Rinsho Hoshasen 1989 Apr;34(4):429–34 (Eng. Abstr.) (Jpn)
[Post-mastectomy lymphangiosarcoma (Stewart-Treves syndrome). Report of a case and review of the literature] Quadros LG, et al. Rev Paul Med 1988 Jul-Aug; 106(4):238–40 (7 ref.) (Eng. Abstr.) (Por)
[The free TRAM (transverse rectus abdominis myocutaneous) flap—a new possibility in breast reconstruction] Arnež Z, et al. Acta Chir Iugosl 1989; 36(1):143–57 (Eng. Abstr.) (Scr)
[Surgico-oncologic considerations in breast reconstruction after mastectomy] Unušić J, et al. Lijec Vjesn 1988 Nov; 110(11):368–72 (Eng. Abstr.) (Scr)
[Adjuvant chemotherapy and mastectomy] Veselý F, et al. Rozhl Chir 1988 Jul;67(7):455–60 (Eng. Abstr.) (Slo)

ADVERSE EFFECTS

Striving for excellence in breast reconstruction: the salvage of poor results. Kroll SS, et al. Ann Plast Surg 1989 Jan; 22(1):58–64
Second- and third-degree burns as a complication in breast reconstruction. Maxwell GP, et al. Ann Plast Surg 1989 May;22(5):386–90
Late onset of pectoralis major wasting after Patey mastectomy [letter] Wedgwood KR, et al. Eur J Surg Oncol 1989 Feb;15(1):90–1
Immediate and long-term phantom breast syndrome after mastectomy: incidence, clinical characteristics and relationship to pre-mastectomy breast pain. Krøner K, et al. Pain 1989 Mar;36(3):327–34
Post-axillary dissection pain in breast cancer due to a lesion of the intercostobrachial nerve. Vecht CJ, et al. Pain 1989 Aug;38(2):171–6
The post-mastectomy pain syndrome and the effect of topical capsaicin. Watson CP, et al. Pain 1989 Aug;38(2):177–86
Fluid translocation measurement. A method to study pneumatic compression treatment of postmastectomy lymphoedema. Mridha M, et al. Scand J Rehabil Med 1989; 21(2):63–9

HISTORY

More on Halsted's "deathbed statement" [letter] Rutkow IM. Surgery 1988 Nov;104(5):936

METHODS

Eliminating the dog-ear in modified radical mastectomy. Farrar WB, et al. Am J Surg 1988 Nov;156(5):401–2
Significance of incisional biopsy in breast carcinoma: results from a clinical trial with intended excisional biopsy. Watt-Boolsen S, et al. Eur J Surg Oncol 1989 Feb; 15(1):33–7
The evolving treatment of breast cancer [letter] Ruffin WK. JAMA 1989 Feb 3;261(5):696
Treatment decisions in breast cancer. Gore SM, et al. Recent Results Cancer Res 1988;111:149–70
Alternative treatments for small cancers of the breast: motives and preferences of patients having to choose. von Wrese D. Recent Results Cancer Res 1988;111:174–8
[Current status and evaluation of surgery of breast cancer] Leng XS, et al. Chung Hua Wai Ko Tsa Chih 1988 Nov; 26(11):656–9 (23 ref.) (Chi)
[Juvenile mammary hypertrophy. Early surgical treatment] Staub S, et al. Ann Chir Plast Esthet 1989;34(3):269–72 (Eng. Abstr.) (Fre)
[Breast cancer. Principles of prevention, early detection, treatment and after care] Ebeling K, et al. Zentralbl Chir 1989;114(1):60–72 (Ger)
[Which surgical methods are justified in breast cancer?] Wolff H, et al. Zentralbl Chir 1989;114(1):1–10; discussion 18–9 (42 ref.) (Eng. Abstr.) (Ger)
[Changing view on the surgery of breast cancer] Kisida E. Orv Hetil 1988 Dec 25;129(52):2787–91 (46 ref.) (Eng. Abstr.) (Hun)
[Surgical procedure and adjuvant therapy in breast cancer] Ishida T, et al. Rinsho Hoshasen 1989 Apr;34(4):435–42 (Eng. Abstr.) (Jpn)
[Combined treatment of breast cancer] Firsova PP, et al. Vestn Akad Med Nauk SSSR 1988;(6):8–12 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Long-term psychological sequelae of mastectomy and breast conserving treatment for breast cancer. Meyer L, et al. Acta Oncol 1989;28(1):13–8
Psychoemotional aspects of mastectomy: a review of recent literature. Asken MJ. Am J Psychiatry 1975 Jan;132(1):56–9 (22 ref.)
Growing pains: the psychological experience of breast reconstruction with tissue expansion. Goin MK, et al. Ann Plast Surg 1988 Sep;21(3):217–22
Mastectomy or conservation: the patient's choice [letter] BMJ 1988 Dec 3;297(6661):1471
Mastectomy or conservation: the patient's choice [letter] Baum M, et al. BMJ 1988 Dec 10;297(6662):1542–3
Mastectomy or conservation: the patient's choice [letter] Locker AP, et al. BMJ 1988 Nov 26;297(6660):1406–7
Mood disturbance after mastectomy [letter] Hughson AV. Br J Hosp Med 1988 Jul;40(1):81
Psychosexual adaptation to breast cancer surgery. Wolberg WH, et al. Cancer 1989 Apr 15;63(8):1645–55
Physical and psychologic support for women following mastectomy [letter] Feltoe Y. Cent Afr J Med 1989 Jun; 35(6):425–6
Effects of preparation for mastectomy/hysterectomy on women's post-operative self-care behaviors. Williams PD, et al. Int J Nurs Stud 1988;25(3):191–206
Breast conservation versus mastectomy: distress sequelae as a function of choice. Levy SM, et al. J Clin Oncol 1989 Mar;7(3):367–75
Psychological effects of breast conservation versus mastectomy [letter] Margolis GJ, et al. J Clin Oncol 1989 Sep;7(9):1365–6
Sexual counseling of couples after a mastectomy or myocardial infarction. Whipple B. Nurs Forum 1987–88; 23(3):85–91
Evaluation of psychosocial aspects in a breast preservation trial. Olschewski M, et al. Recent Results Cancer Res 1988; 111:258–69
Breast conservation versus mastectomy: psychological considerations. Maguire P. Semin Surg Oncol 1989; 5(2):137–44 (18 ref.)
Effects of breast cancer and mastectomy on emotional support and adjustment. Zemore R, et al. Soc Sci Med 1989; 28(1):19–27
The mastectomy experience: patients' perspectives. Hailey BJ, et al. Women Health 1988;14(1):75–88

REHABILITATION

Breast reconstruction after mastectomy. Krag C. Acta Oncol 1988;27(6A):687–90
Breast reconstruction following mastectomy. Bostwick J 3d. CA 1989 Jan–Feb;39(1):40–9
STRETCH: a rehabilitative program for patients with breast cancer. Gaskin TA, et al. South Med J 1989 Apr; 82(4):467–9
[Breast reconstruction following breast cancer] Calteux N, et al. Bull Soc Sci Med Grand Duche Luxemb 1988; 125(1):15–26 (Fre)
[Current principles of rehabilitation in breast cancer] Demidov VP, et al. Sov Med 1988;(10):67–70 (64 ref.) (Rus)

TRENDS

[Therapeutic modulation of cancer of the breast] Oliva V,

et al. **Minerva Chir** 1989 Feb 28;44(4):579–87 (25 ref.) **(Ita)**

[Breast conserving method] Kasumi F. **Rinsho Hoshasen** 1989 Apr;34(4):419–27 (Eng. Abstr.) **(Jpn)**

[Changing trends in the surgical management of breast carcinoma in Japan] Yamamoto H, et al. **Rinsho Hoshasen** 1989 Apr;34(4):405–18 (Eng. Abstr.) **(Jpn)**

[Reduction of functional inoperability in patients with breast cancer] Spirina TP, et al. **Ter Arkh** 1989;61(2):79–81 (Eng. Abstr.) **(Rus)**

MASTECTOMY, EXTENDED RADICAL

A controlled trial of extended radical versus radical mastectomy. Ten-year results. Meier P, et al. **Cancer** 1989 Jan 1;63(1):188–95

METHODS

[Mastectomy incisions and biopsy technics in view of subsequent reconstructive surgery in breast cancer] Kiil J, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1914–7 (Eng. Abstr.) **(Dan)**

MASTECTOMY, MODIFIED RADICAL

Effect of perioperative blood transfusion on recurrence and death after mastectomy for breast cancer. Eickhoff JH, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):425–8

Influence of adjuvant irradiation on the development of late arm lymphedema and impaired shoulder mobility after mastectomy for carcinoma of the breast. Ryttov N, et al. **Acta Oncol** 1988;27(6A):667–70

Preoperative TRAM flap planning for postmastectomy breast reconstruction. Berrino P, et al. **Ann Plast Surg** 1988 Sep; 21(3):264–72

Effect of shoulder immobilization on wound seroma and shoulder dysfunction following modified radical mastectomy: a raadomized prospective clinical trial. Dawson I, et al. **Br J Surg** 1989 Mar;76(3):311–2

Fractionation sensitivity of a functional endpoint: impaired shoulder movement after post-mastectomy radiotherapy. Bentzen SM, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep; 17(3):531–7

Infiltrating lobular carcinoma of the breast treated with segmental and modified radical mastectomy. Martin MA, et al. **J Surg Oncol** 1989 Jun;41(2):117–20

Evaluation of a short-stay program for patients undergoing mastectomy. Wagman LD, et al. **J Surg Oncol** 1989 Jun; 41(2):98–102

Chest wall deformity following expansion of irradiated soft tissue for breast reconstruction. Fodor PB, et al. **N Y State J Med** 1989 Jul;89(7):419–20

Ten-year results of a randomized trial comparing a conservative treatment to mastectomy in early breast cancer. Sarrazin D, et al. **Radiother Oncol** 1989 Mar; 14(3):177–84

[Dosage and modulation of cutaneous steroid receptors during antihormonal therapy in a case of Stewart-Treves syndrome] Fabre JF, et al. **Ann Dermatol Venereol** 1988; 115(10):1035–9 (Eng. Abstr.) **(Fre)**

[Breast reconstruction using a skin expander prostheses following modified radical mastectomy] Schmidt R, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):701–4 (Eng. Abstr.) **(Ger)**

[Follow-up of node-negative patients with breast cancer] Meinen K, et al. **Zentralbl Gynakol** 1989;111(1):19–28 (Eng. Abstr.) **(Ger)**

[Late and deferred reconstruction after mastectomy] Ambroggio GP, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):41–5 **(Ita)**

[Importance of pectoral nerves in conservative surgery in cancer of the breast] De Toma G, et al. **Minerva Chir** 1988 Sep 15;43(17):1349–53 (Eng. Abstr.) **(Ita)**

[A carcinoma of the right breast arising after a mastectomy in primary malignant lymphoma of the left breast] Kobayashi R, et al. **Gan No Rinsho** 1989 Aug;35(9):1077–80 (Eng. Abstr.) **(Jpn)**

[Autotransplantation of nipple–areolar complex in a modified radical mastectomy—indications and three-stage breast reconstruction] Ishikawa H, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1879–85 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

The importance of volumetry, lymphscintigraphy and computer tomography in the diagnosis of brachial edema after mastectomy. Göltner E, et al. **Lymphology** 1988 Sep; 21(3):134–43

[Electrophysiological study on the atrophied pectoralis major muscle after modified radical mastectomy] Tashiro K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):429–33 (Eng. Abstr.) **(Jpn)**

METHODS

Influence of mastectomy technique on sex steroid receptor analysis. Day T, et al. **Am J Surg** 1988 Dec;156(6):446–9

Carcinoma of the breast occurring in routine reduction mammaplasty. Dinner MI, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1042–4

[Long-term results following breast reconstruction] Petit JY, et al. **Helv Chir Acta** 1989 Apr;55(6):869–77 (Eng. Abstr.) **(Fre)**

[Immediate reconstruction of the breast following mastectomy] Bohmert H. **Langenbecks Arch Chir** 1988; Suppl 2:459–64 (19 ref.) (Eng. Abstr.) **(Ger)**

[Breast saving therapy in the small breast cancer] Stierer M, et al. **Langenbecks Arch Chir** 1989;374(2):67–71 (Eng. Abstr.) **(Ger)**

MORTALITY

[The extent of the surgical intervention and the prognosis of patients with stage III breast cancer] Adamian AT, et al. **Vopr Onkol** 1989;35(6):699–703 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Psychosocial adjustment after mastectomy and breast-conserving treatment. Holmberg L, et al. **Cancer** 1989 Aug 15;64(4):969–74

Psychological distress after initial treatment for breast cancer: a comparison of partial and total mastectomy. Maunsell E, et al. **J Clin Epidemiol** 1989;42(8):765–71

Psychological factors in the choice of treatment for breast cancer. Margolis GJ, et al. **Psychosomatics** 1989 Spring; 30(2):192–7

REHABILITATION

Rehabilitation of the mastectomy patient: a randomized, blind, prospective study. Wingate L, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):21–4

MASTECTOMY, RADICAL

Postmastectomy low-grade angiosarcoma. An unusual case clinically resembling a lymphangioma circumscriptum. Drachman D, et al. **Am J Dermatopathol** 1988 Jun; 10(3):247–51

Preoperative TRAM flap planning for postmastectomy breast reconstruction. Berrino P, et al. **Ann Plast Surg** 1988 Sep; 21(3):264–72

A controlled trial of extended radical versus radical mastectomy. Ten-year results. Meier P, et al. **Cancer** 1989 Jan 1;63(1):188–95

Postmastectomy angiosarcoma—a case report. Wu CC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):305–8

Analysis of long-term results of 326 breast reconstructions. Lejour M, et al. **Clin Plast Surg** 1988 Oct;15(4):689–701

Early and late capsular "deformation" as a cause of unsatisfactory results in the latissimus dorsi breast reconstruction. McCraw JB, et al. **Clin Plast Surg** 1988 Oct;15(4):717–26

Long-range results for breast cancer patients treated by radical mastectomy and postoperative radiation without adjuvant chemotherapy: an update. Fletcher GH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):11–4

The gold standard and Pogo [editorial] Levitt SH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):235–6

The extended vertical rectus abdominis myocutaneous flap for breast reconstruction. Sakai S, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1061–7; discussion 1068–9

Extended transverse rectus abdominis musculocutaneous flap. Takayanagi S, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):1057–60

Surgical treatment of primary breast cancer. Wickerham DL, et al. **Semin Surg Oncol** 1988;4(4):226–33 (19 ref.)

[Use of a pedicled latissimus dorsi flap in plastic reconstruction after radical mastectomy] Li JZ. **Chung Hua Wai Ko Tsa Chih** 1988 Nov;26(11):651–2, 700–1 (Eng. Abstr.) **(Chi)**

[Breast reconstruction after mastectomy. I. Prosthesis implantation after tissue expansion] Andersen M, et al. **Ugeskr Laeger** 1988 Oct 24;150(43):2568–71 (Eng. Abstr.) **(Dan)**

[Breast reconstruction after mastectomy. II. Use of a musculo-cutaneous flap without prosthetic implants] Kramhøft M, et al. **Ugeskr Laeger** 1988 Oct 24; 150(43):2571–5 (Eng. Abstr.) **(Dan)**

[Transposition and myocutaneous island flaps in primary or secondary locoregional surgical therapy of breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):584–7 (Eng. Abstr.) **(Ger)**

[Late and deferred reconstruction after mastectomy] Ambroggio GP, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):41–5 **(Ita)**

[Reconstruction of the breast after radical mastectomy in cancer. Reconstruction of the areola–nipple complex and the symmetry of the 2 breasts] Elia L, et al. **Minerva Chir** 1989 Jun 30;44(12):1665–8 (Eng. Abstr.) **(Ita)**

[Radical surgery in carcinoma of the breast] Mossetti C, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):21–5 **(Ita)**

[Bilateral reconstruction of the breast simultaneous with bilateral mastectomy for cancer] Musiani R, et al. **Minerva Chir** 1988 Apr 30;43(8):695–700 (Eng. Abstr.) **(Ita)**

[Internal mammary lymph node metastases and parasternal recurrences in breast cancer] Kikuchi A. **Rinsho Hoshasen** 1989 Apr;34(4):471–9 (Eng. Abstr.) **(Jpn)**

[A retrospective study of recurrent breast cancer following radical mastectomy] Nishimura Y, et al. **Rinsho Hoshasen** 1989 Apr;34(4):449–53 (Eng. Abstr.) **(Jpn)**

[Reasons for a decrease in the work capacity of patients after the radical treatment of breast cancer] Gerasimenko VN, et al. **Sov Med** 1988;(6):61–3 **(Rus)**

[Non-adjuvant chemotherapy in the complex treatment of breast cancer] Voznyi EK, et al. **Sov Med** 1988;(10):96–9 **(Rus)**

[Evaluation of the analgesic effect of an improved method of local electroanesthesia using electrodes implanted in the wound] Reshetniak VK, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):65–7 (Eng. Abstr.) **(Rus)**

[Choice of the optimal regimen for pneumatic compression in treating patients with postmastectomy edema of the upper extremity] Gerasimenko VN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):54–5 **(Rus)**

ADVERSE EFFECTS

[Lymphangiosarcoma following mastectomy: review of the literature apropos of 2 recent cases of Stewart–Treves syndrome] Defraigne JO, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):29–33 (22 ref.) (Eng. Abstr.) **(Fre)**

[Microcirculatory disorders of the arm in post–mastectomy edema] Mogilevskii IL, et al. **Sov Med** 1989;(4):15–20 (Eng. Abstr.) **(Rus)**

[Lymphovenous anastomoses in the prevention of post–mastectomy edema of the arm] Pronin VI, et al. **Sov Med** 1989;(4):32–5 (Eng. Abstr.) **(Rus)**

METHODS

[Pathologic–anatomic parameters for the prognosis of invasive breast cancer following amputation or saving the breast] Torhorst J. **Helv Chir Acta** 1989 Apr;55(6):823–9 (21 ref.) (Eng. Abstr.) **(Ger)**

[Actual problems of the treatment of lactation mastitis] Gushcha AL, et al. **Vestn Khir** 1989 Jan;142(1):45–7 (Eng. Abstr.) **(Rus)**

MORTALITY

Resection of haematogenous metastases [letter] Landau RL. **Lancet** 1988 Dec 3;2(8623):1311

[The extent of the surgical intervention and the prognosis of patients with stage III breast cancer] Adamian AT, et al. **Vopr Onkol** 1989;35(6):699–703 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Reconstruction of the breast after mastectomy using an island flap from the latissimus dorsi muscle without endoprosthesis] Towpik E. **Pol Tyg Lek** 1988 Aug 15; 43(33):1060–2 (Eng. Abstr.) **(Pol)**

[Bioelectric activity of the muscles of the shoulder girdle after radical mastectomy] Pronin VI, et al. **Sov Med** 1989; (2):114 **(Rus)**

MASTECTOMY, SEGMENTAL

Scrape cytology assessment of margins of lumpectomy specimens in breast cancer. Gal R. **Acta Cytol** 1988 Nov–Dec;32(6):838–9

Segmental mastectomy and irradiation in the treatment of breast cancer. Singletary SE, et al. **Am J Clin Oncol** 1988 Dec;11(6):679–83

Mastectomy or conservation: the patient's choice. Wilson RG, et al. **BMJ** 1988 Nov 5;297(6657):1167–9

Mammographically detected duct carcinoma in situ. Frequency of local recurrence following tylectomy and prognostic effect of nuclear grade on local recurrence. Lagios MD, et al. **Cancer** 1989 Feb 15;63(4):618–24

Tumorectomy and radiotherapy in early breast cancer: a report on 392 patients. Dubois JB, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1275–82

The predictors of distant relapse following conservative surgery and radiotherapy for early breast cancer are similar to those following mastectomy. Epstein AH, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):755–60

Results of conservative surgery and radiation therapy for multiple synchronous cancers of one breast. Leopold KA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):11–6

Late cosmetic outcome after conservative surgery and radiotherapy: analysis of causes of cosmetic failure. Olivotto IA, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):747–53

Prognosis following local or regional recurrence after conservative surgery and radiotherapy for early stage breast carcinoma. Recht A, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):3–9

Age as a prognostic factor for patients treated with definitive irradiation for early stage breast cancer. Solin LJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):373–81

Early breast cancer: significance and effectiveness of local control by conservative surgery and primary radiation therapy. Yahalom J, et al. **Isr J Med Sci** 1988 Sep–Oct; 24(9–10):545–51 (44 ref.)

Infiltrating lobular carcinoma of the breast treated with segmental and modified radical mastectomy. Martin MA, et al. **J Surg Oncol** 1989 Jun;41(2):117–20

Evaluation of a short-stay program for patients undergoing mastectomy. Wagman LD, et al. **J Surg Oncol** 1989 Jun; 41(2):98–102

Lumpectomy or total mastectomy for breast cancer [letter] Ferguson DJ, et al. **N Engl J Med** 1989 Sep 7; 321(10):689–90

Eight-year results of a randomized clinical trial comparing total mastectomy and lumpectomy with or without irradiation in the treatment of breast cancer. Fisher B, et al. **N Engl J Med** 1989 Mar 30;320(13):822–8

The mammographic features of the postlumpectomy, postirradiation breast. Harris KM, et al. **Radiographics** 1989 Mar;9(2):253–68

Breast microcalcifications after lumpectomy and radiation therapy [letter] Hall FM. **Radiology** 1989 Aug;172(2):577–8

Breast microcalcifications after lumpectomy and radiation therapy. Rebner M, et al. **Radiology** 1989 Mar;170(3 Pt 1):691–3

Fat necrosis of the breast following lumpectomy and radiation therapy for early breast cancer. Boyages J, et al. **Radiother Oncol** 1988 Sep;13(1):69–74

Cosmetic results following lumpectomy, axillary dissection and radiotherapy for small breast cancers. Dewar JA, et al. **Radiother Oncol** 1988 Aug;12(4):273–80

Treatment of breast cancer with segmental mastectomy alone or segmental mastectomy plus radiation. Kantorowitz DA, et al. **Radiother Oncol** 1989 Jun;15(2):141–50

Ten-year results of a randomized trial comparing a conservative treatment to mastectomy in early breast cancer. Sarrazin D, et al. **Radiother Oncol** 1989 Mar; 14(3):177–84

[Partial mastectomy in juvenile hypertrophy of the breast] Pintér L, et al. **Rozhl Chir** 1988 Nov;67(11):775–8 (Eng. Abstr.) **(Cze)**

[Breast-preserving therapy of breast carcinoma] Bender HG, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1601–3 **(Ger)**

[Side effects and complications in breast-saving therapy of breast cancer] Engel K, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):367–74 (Eng. Abstr.) **(Ger)**

[Design, goals and preliminary results of the first national breast cancer study—the Federal Ministry of Research and Technology study of "small breast cancer"] Rauschecker H, et al. **Rontgenblatter** 1988 Aug;41(8):336–9 (Eng. Abstr.) **(Ger)**

[Breast-preserving treatment of breast carcinoma] Staffen A, et al. **Wien Klin Wochenschr** 1989 Jan 20;101(2):92–5 (Eng. Abstr.) **(Ger)**

[Lumpectomy with axillary lymph node excision and subsequent irradiation of the small breast cancer] Winzer KJ, et al. **Zentralbl Chir** 1989;114(1):20–31 (Eng. Abstr.) **(Ger)**

[Conservative treatment of carcinoma of the breast] Bocci A, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):17–20 **(Ita)**

[Treatment of early breast cancer by lumpectomy plus radiotherapy] Tazaki E. **Rinsho Hoshasen** 1989 Apr; 34(4):499–500 **(Jpn)**

[Macro-fractionated irradiation of cancer of the breast with subsequent sparing resection] Panshin GA, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):19–23 (Eng. Abstr.) **(Rus)**

[Large-fractional preoperative irradiation combined with organ-sparing operations in stage I and II cancer of the breast] Kharchenko VP, et al. **Sov Med** 1989;(1):15–7 (Eng. Abstr.) **(Rus)**

[Cancer of the breast at a remote time after segmental resection] Batalina LD, et al. **Vopr Onkol** 1989;35(7):864–6 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Standardization of the surgical technique in breast-conserving treatment of mammary cancer. Aspegren K, et al. **Br J Surg** 1988 Aug;75(8):807–10

METHODS

Conservative surgery and radiation in the treatment of early (stages I and II) breast cancer. Long-term results. Fowble B. **Helv Chir Acta** 1989 Apr;55(6):831–6 (22 ref.)

Local recurrence after breast-conserving surgery and radiotherapy. Kurtz JM, et al. **Helv Chir Acta** 1989 Apr; 55(6):837–42

Improved exposure for dissection of axillary lymph nodes performed in conjunction with lumpectomy for carcinoma of the breast. Wolberg WH. **Surg Gynecol Obstet** 1989 Apr; 168(4):361–2

[Poor esthetic results after conservative treatment of breast cancer. Technics of partial breast reconstruction] Petit JY, et al. **Ann Chir Plast Esthet** 1989;34(2):103–8 (Eng. Abstr.) **(Fre)**

[Indications-related and technical errors and their consequences in breast saving treatment] Laffer U, et al. **Helv Chir Acta** 1989 Apr;55(6):849–60 (Eng. Abstr.) **(Ger)**

[Local late sequelae following breast saving therapy of breast cancer: problem cases and possibilities for their correction] Lüscher NJ, et al. **Helv Chir Acta** 1989 Apr;55(6):861–8 (Eng. Abstr.) **(Ger)**

[Pathologic-anatomic parameters for the prognosis of invasive breast cancer following amputation or saving the breast] Torhorst J. **Helv Chir Acta** 1989 Apr;55(6):823–9 (21 ref.) (Eng. Abstr.) **(Ger)**

[Breast saving therapy: diagnostic problems in after care] Walther E, et al. **Helv Chir Acta** 1989 Apr;55(6):909–15 (Eng. Abstr.) **(Ger)**

[Breast saving treatment in the primary therapy of breast cancer] Rauschecker H. **Langenbecks Arch Chir** 1989; 374(2):65–6 **(Ger)**

[Breast saving therapy in the small breast cancer] Stierer M, et al. **Langenbecks Arch Chir** 1989;374(2):67–71 (Eng. Abstr.) **(Ger)**

MORTALITY

Resection of haematogenous metastases [letter] Landau RL. **Lancet** 1988 Dec 3;2(8623):1311

PSYCHOLOGY

Psychosocial adjustment after mastectomy and breast-conserving treatment. Holmberg L, et al. **Cancer** 1989 Aug 15;64(4):969–74

Assessing psychosexual needs of women experiencing lumpectomy. A challenge for research. Rutherford DE. **Cancer Nurs** 1988 Aug;11(4):244–9 (33 ref.)

Life after.... Kendrick PR. **Conn Med** 1988 Dec;52(12):711–3

Psychological distress after initial treatment for breast cancer: a comparison of partial and total mastectomy. Maunsell E, et al. **J Clin Epidemiol** 1989;42(8):765–71

Psychological effects of breast conservation versus mastectomy [letter] Margolis GJ, et al. **J Clin Oncol** 1989 Sep;7(9):1365–6

Psychological factors in the choice of treatment for breast cancer. Margolis GJ, et al. **Psychosomatics** 1989 Spring; 30(2):192–7

MASTECTOMY, SIMPLE

Low-risk breast cancer patients treated by mastectomy and lower axillary dissection. The present status of the Danish Breast Cancer Cooperative Group Trial 77-A. Axelsson CK, et al. **Acta Oncol** 1988;27(6A):605–9

Postmastectomy irradiation in high-risk breast cancer patients. Present status of the Danish Breast Cancer Cooperative Group trials. Overgaard M, et al. **Acta Oncol** 1988;27(6A):707–14

The result of breast reconstruction after mastectomy for breast cancer in 109 patients. Houpt P, et al. **Ann Plast Surg** 1988 Dec;21(6):516–25

Immediate breast reconstruction using the skin expander: a modification in technique. Hyland WT. **Ann Plast Surg** 1988 Aug;21(2):101–7

Mastectomy or conservation: the patient's choice. Wilson RG, et al. **BMJ** 1988 Nov 5;297(6657):1167–9

Evaluation of a short-stay program for patients undergoing mastectomy. Wagman LD, et al. **J Surg Oncol** 1989 Jun; 41(2):98–102

Lumpectomy or total mastectomy for breast cancer [letter] Ferguson DJ, et al. **N Engl J Med** 1989 Sep 7; 321(10):689–90

Eight-year results of a randomized clinical trial comparing total mastectomy and lumpectomy with or without irradiation in the treatment of breast cancer. Fisher B, et al. **N Engl J Med** 1989 Mar 30;320(13):822–8

[Transposition and myocutaneous island flaps in primary or secondary locoregional surgical therapy of breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):584–7 (Eng. Abstr.) **(Ger)**

[Breast carcinoma: breast-preserving therapy and cosmetic results] George CA. **Schweiz Rundsch Med Prax** 1989 May 30;78(22):638–42 (Eng. Abstr.) **(Ger)**

METHODS

Total mastectomy with special reference to surgical technique, extent of axillary dissection and complications. Watt-Boolsen S, et al. **Acta Oncol** 1988;27(6A):663–5

Total mastectomy: indications and techniques. Horton CE, et al. **Clin Plast Surg** 1988 Oct;15(4):677–87

[Breast-preserving treatment in patients with stage I and II breast carcinoma (letter)] Dijkstra R. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2034–5 **(Dut)**

[Breast-preserving treatment of patients with stage I and II breast carcinoma (letter)] Wobbes T, et al. **Ned Tijdschr Geneeskd** 1988 Oct 15;132(42):1947–8 **(Dut)**

PSYCHOLOGY

Psychological distress after initial treatment for breast cancer: a comparison of partial and total mastectomy. Maunsell E, et al. **J Clin Epidemiol** 1989;42(8):765–71

Psychosocial consequences of mastectomy: levels of morbidity and associated factors. Hughson AV, et al. **J Psychosom Res** 1988;32(4–5):383–91

MASTECTOMY, SUBCUTANEOUS

The result of breast reconstruction after mastectomy for breast cancer in 109 patients. Houpt P, et al. **Ann Plast Surg** 1988 Dec;21(6):516–25

Nine-year experience with subpectoral breast reconstruction after subcutaneous mastectomy in 98 patients utilizing saline-inflatable prostheses. Schuster DI, et al. **Ann Plast Surg** 1988 Nov;21(5):444–51

Surgical alternatives in subcutaneous mastectomy reconstruction. Fisher J, et al. **Clin Plast Surg** 1988 Oct; 15(4):667–76

[The familial carcinoma burden and indications for subcutaneous mastectomy] Müller A, et al. **Dtsch Med Wochenschr** 1989 Apr 14;114(15):575–9 (Eng. Abstr.) **(Ger)**

[Subcutaneous mastectomy: surgical indications and pathologico-anatomic findings in the mastectomy specimen] Müller A, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):687–93 (Eng. Abstr.) **(Ger)**

[Hemolytic anemia in a 32-year-old patient with metastatic breast cancer] Zurborn KH, et al. **Internist (Berlin)** 1989 May;30(5):341–3 **(Ger)**

[A 12-year report of follow-up after surgical treatment of bilateral hypernephroid kidney cancer and subsequent diffuse metastatic breast cancer] Weber T. **Z Urol Nephrol** 1988 Nov;81(11):681–4 (Eng. Abstr.) **(Ger)**

[Indications and limitations of subcutaneous mastectomy in the treatment of breast carcinoma] Melita P, et al. **Minerva Chir** 1989 Apr 30;44(8):1279–83 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Conservative management in full-thickness nipple-areolar necrosis after subcutaneous mastectomy. Woods JE, et al. **Plast Reconstr Surg** 1989 Aug;84(2):258–64; discussion 265–6

METHODS

Immediate reconstruction after subcutaneous mastectomy. Maillard GF, et al. **Aesthetic Plast Surg** 1989 Winter; 13(1):23–6

Immediate breast reconstruction with subpectoral implantation after transaxillary subcutaneous mastectomy for siliconoma. Megumi Y. **Aesthetic Plast Surg** 1989 Winter;13(1):27–32

Surgical treatment of gynecomastia in the body builder. Aiache AE. **Plast Reconstr Surg** 1989 Jan;83(1):61–6

Suction lipectomy and gynecomastia [letter] Yang CC. **Plast Reconstr Surg** 1989 Apr;83(4):753–4

PSYCHOLOGY

[Psychosocial aspects of bilateral subcutaneous reduction mastectomy in breast cancer] De Wilde R, et al. **Zentralbl Gynakol** 1989;111(9):604–8 (Eng. Abstr.) **(Ger)**

REHABILITATION

[Pedunculated flap from the greater omentum in reconstructive operations after the treatment of neoplasms] Kulakowski A, et al. **Nowotwory** 1988 May-Jun;38(3):180–6 (Eng. Abstr.) **(Pol)**

STATISTICS & NUMERICAL DATA

Subcutaneous mastectomy data: a final statistical analysis of 1500 patients. Pennisi VR, et al. **Aesthetic Plast Surg** 1989 Winter;13(1):15–21

MASTICATION

Blood mercury content after chewing. Forsten L. **Acta Odontol Scand** 1989 Apr;47(2):127–8

Oral digestion of a complex-carbohydrate cereal: effects of stress and relaxation on physiological and salivary measures. Morse DR, et al. **Am J Clin Nutr** 1989 Jan; 49(1):97–105

A functional consequence of an ossified mandibular symphysis. Greaves WS. **Am J Phys Anthropol** 1988 Sep; 77(1):53–6

Endo's stress analysis of the primate skull and the functional significance of the supraorbital region. Picq PG, et al. **Am J Phys Anthropol** 1989 Jul;79(3):393–8 (38 ref.)

Jaw movements and muscle activity during mastication in growing rabbits. Weijs WA, et al. **Anat Rec** 1989 Jul; 224(3):407–16

Oral reinforced endotracheal tube crushed and perforated from biting [letter] Hoffmann CO, et al. **Anesth Analg** 1989 Oct;69(4):552–3

Three-dimensional movement analysis of lateral pterygoid electromyographic activity during mastication in the rat. Byrd KE, et al. **Arch Oral Biol** 1988;33(9):635–40

Opto-electronic analyses of masticatory mandibular movements and velocities in the rat. Byrd KE. **Arch Oral Biol** 1988;33(3):209–15

The effect of infrahyoid-muscle tenotomy on orofacial motor activity in the rat. Jüch PJ, et al. **Arch Oral Biol** 1988; 33(7):511–7

Isometric muscle tension generated by masseter stimulation after prolonged alteration of the consistency of the diet fed to growing rats. Kiliaridis S, et al. **Arch Oral Biol** 1988; 33(7):467–72

Lissajous figures of differential electromyograms of the paired temporal and paired masseter muscles in human mastication. Kumai T. **Arch Oral Biol** 1988;33(11):851–4

The effects of pain from the mandibular joint and muscles on masticatory motor behaviour in man. Stohler CS, et al. **Arch Oral Biol** 1988;33(3):175–82

A comparison of the effects of tasting and chewing foods on the flow rate of whole saliva in man. Watanabe S, et al. **Arch Oral Biol** 1988;33(10):761–4

Amygdaloid projections to commissural interneurons for masticatory motoneurons. Takeuchi Y, et al.

Brain Res Bull 1988 Jul;21(1):123–7
Feeding behavior in mammals: corticobulbar projection is reorganized during conversion from sucking to chewing. Iriki A, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):189–96
The effects of backward pairings on the conditioning of the albino rabbit's jaw movement and nictitating membrane responses. Tait RW, et al. **Can J Psychol** 1987 Sep; 41(3):271–86
Effects of Parafilm and cheese chewing on human dental plaque pH and metabolism. Higham SM, et al. **Caries Res** 1989;23(1):42–8
Dental state and subjective chewing ability of institutionalized elderly people. Ekelund R. **Community Dent Oral Epidemiol** 1989 Feb;17(1):24–7
Modifications of masticatory behavior after trigeminal deafferentation in the rabbit. Inoue T, et al. **Exp Brain Res** 1989;74(3):579–91
Mechanoreceptive afferent activity in the infraorbital nerve in man during speech and chewing movements. Johansson RS, et al. **Exp Brain Res** 1988;72(1):209–14
Site and extent of neutral detergent fiber digestion, efficiency of ruminal digesta flux and fecal output as related to variations in voluntary intake and chewing behavior in heifers. Deswysen AG, et al. **J Anim Sci** 1988 Oct; 66(10):2678–86
Effects of ingestive mastication on particle dimensions and weight distribution of coastal bermudagrass hay fed to steers at four levels. Luginbuhl JM, et al. **J Anim Sci** 1989 Feb;67(2):538–46
The effect of food texture on the replication of jaw movements in mastication. Chew CL, et al. **J Dent** 1988 Oct;16(5):210–4
Loci and characteristics of EMG silent periods during masticatory mandibular movements in rats. Byrd KE. **J Dent Res** 1988 Oct;67(10):1284–8
The effect of daily gum-chewing on salivary flow rates in man. Jenkins GN, et al. **J Dent Res** 1989 May;68(5):786–90
Single-unit activity in bulbar reticular formation during food ingestion in chronic cats. Hiraba K, et al. **J Neurophysiol** 1988 Oct;60(4):1333–49
Mastication in the rabbit: a description of movement and muscle activity. Schwartz G, et al. **J Neurophysiol** 1989 Jul;62(1):273–87
Relationship between the values of masticatory efficiency and biting pressure in children with cerebral palsy—inter-relationship between the maximum biting pressure, chewing cycle and the value of masticatory efficiency. Nakajima I, et al. **J Nihon Univ Sch Dent** 1988 Sep;30(3):244–60
The subjective experience of mastication in subjects with shortened dental arches. Aukes JN, et al. **J Oral Rehabil** 1988 Jul;15(4):321–4
Preliminary studies of some masticatory characteristics of bruxism. Faulkner KD. **J Oral Rehabil** 1989 May; 16(3):221–7
Effects of texture of food on chewing patterns in the human subject. Horio T, et al. **J Oral Rehabil** 1989 Mar; 16(2):177–83
Habitual mastication in dysfunction: a computer-based analysis. Mongini F, et al. **J Prosthet Dent** 1989 Apr; 61(4):484–94
Functional loading of the dentition during mastication. Neill DJ, et al. **J Prosthet Dent** 1989 Aug;62(2):218–28
An evaluation of chewing function of complete denture wearers. Sato Y, et al. **J Prosthet Dent** 1989 Jul;62(1):50–3
Chewing and spitting associated with a protein sparing modified fast and psychosocial stressors. Smith GR Jr, et al. **Psychosomatics** 1989 Spring;30(2):224–6
[Mandibular kinesiology and orthodontics] Li JX, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):118–20 (16 ref.) **(Chi)**
[Masticatory efficiency of the Chinese adolescent] Zhang J. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):144–6 **(Chi)**
[Sequelae of tooth loss for the potential for chewing in the elderly] Kalk W, et al. **Tijdschr Gerontol Geriatr** 1988 Dec; 19(6):283–7 (Eng. Abstr.) **(Dut)**
[Electromyographic study of mastication as a function of the denture in humans] Verkindere M, et al. **J Biol Buccale** 1988 Sep;16(3):169–78 (Eng. Abstr.) **(Fre)**
[Masticatory cycles of the rumination type in vagotomized lambs] Ruckebusch Y, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:143–4 (Eng. Abstr.) **(Fre)**
[Biomechanics of dental implants: theoretical aspects] Richter EJ. **Rev Belge Med Dent** 1987;42(6):186–90 **(Fre)**
[The influence of functional stress on the mandibular tissue around the apatite implant] Aikawa S. **Kokubyo Gakkai Zasshi** 1988 Jun;55(2):381–436 (Eng. Abstr.) **(Jpn)**
[Peripheral control of the feeding behavior of fresh water mollusks] Iagodin SV, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):374–80 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Elicitation of feeding, drinking, and gnawing following microinjections of muscimol into the median raphe nucleus of rats. Klitenick MA, et al. **Behav Neural Biol** 1989 May; 51(3):436–41
Effects of SCH23390 injection into the dorsal striatum and nucleus accumbens on methamphetamine-induced gnawing and hyperlocomotion in rats. Koshikawa N, et al. **J Nihon Univ Sch Dent** 1989 Jun;31(2):451–7

MASTICATORY MUSCLES

Underdosage with succinylcholine may lead to incorrect diagnosis of masseter spasm in children [letter] Meakin G. **Anesthesiology** 1988 Dec;69(6):1025–7
Masseter muscle spasm, succinylcholine, and strabismus surgery [letter] Schwartz N, et al. **Anesthesiology** 1988 Oct; 69(4):635–6
Botulinum toxin injection for the treatment of oromandibular dystonia. Blitzer A, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):93–7
Is there a relationship between masseteric muscle spasm and malignant hyperpyrexia? Christian AS, et al. **Br J Anaesth** 1989 May;62(5):540–4
The anti-inflammatory effect of organo-heparinoid cream after bilateral mandibular osteotomies. Sindet-Pedersen S, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):35–8
Treatment of muscle spasms with oral dantrolene sodium. Christian JM. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):268–70
Bursitis: a factor in the differential diagnosis of orofacial neuralgias and myofascial pain dysfunction syndrome. Salins PC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):154–7
The effect of pulsed ultrasound on myofacial pain. A placebo controlled study. Taube S, et al. **Proc Finn Dent Soc** 1988; 84(4):241–6
[Ameloblastoma of the pterygomaxillary fossa. Apropos of a case and review of the literature] Bonfils P, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):477–9 (18 ref.) (Eng. Abstr.) **(Fre)**
[Facial circumscribed ossifying myositis. Anatomo-clinical and tomodensitometric study] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):1–6 (Eng. Abstr.) **(Fre)**
[Traumatic myositis ossificans of the medial pterygoid muscle] Gotte P, et al. **Minerva Stomatol** 1988 Oct; 37(10):757–62 (Eng. Abstr.) **(Ita)**
[Myositis ossificans circumscripta of the masseter muscle] Iannetti G, et al. **Minerva Stomatol** 1988 May;37(5):373–80 (Eng. Abstr.) **(Ita)**
[A case of unilateral masticatory spasm without hemifacial atrophy] Yoshii K, et al. **No To Shinkei** 1989 Apr; 41(4):343–6 (5 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Histochemical characteristics of masseter and temporalis muscles after 5 weeks of maxillomandibular fixation—an investigation in Macaca mulatta. Mayo KH, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):421–6
[Native myosins of the masticatory muscles of the cat using non-dissociative gel electrophoresis] Navez M, et al. **Orthod Fr** 1987;58 Pt 2:591–8 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

The adductor mandibulae muscle in teleost fish with protrusible or non protrusible jaws: a histochemical and immunohistochemical study. Scapolo PA, et al. **Anat Anz** 1989;168(3):205–21
Clinical prosection for dental gross anatomy: a medial approach to the pterygomandibular space. Shaw MD, et al. **Anat Rec** 1988 Nov;222(3):305–8
Morphology of the pterygomandibular raphe in human fetuses and adults. Shimada K, et al. **Anat Rec** 1989 May; 224(1):117–22
Gross anatomy of the craniomandibular joint and masticatory muscles of the dog. Ström D, et al. **Arch Oral Biol** 1988; 33(8):597–604
The anatomic relationship of the insertion of the superior lateral pterygoid muscle to the articular disc in the temporomandibular joint of human cadavers. Wilkinson T, et al. **Aust Dent J** 1989 Aug;34(4):315–22
Muscle attachments and TMJ [letter] **J Am Dent Assoc** 1988 Dec;117(7):808, 810, 812
Newly described muscle attachments to the anterior band of the articular disk of the temporomandibular joint. Myers LJ. **J Am Dent Assoc** 1988 Sep;117(3):437–9
Muscle-spindle distribution in relation to the fibre-type composition of masseter in mammals. Rowlerson A, et al. **J Anat** 1988 Dec;161:37–60
Relationship between jaw muscle volume and craniofacial form. Gionhaku N, et al. **J Dent Res** 1989 May;68(5):805–9
Relationships between the size, position, and angulation of human jaw muscles and unilateral first molar bite force. Sasaki K, et al. **J Dent Res** 1989 Mar;68(3):499–503
CT assisted evaluation of variation in length and angulation of the lateral pterygoid muscle and variation in angulation of the medial pterygoid muscle: mandibular mechanics implications. Christiansen EL, et al. **J Prosthet Dent** 1988 Nov;60(5):616–21
The relationship between the disk and the lateral pterygoid muscle in the human temporomandibular joint. Wilkinson TM. **J Prosthet Dent** 1988 Dec;60(6):715–24
The lamination of the masseter muscle in the Japanese serow (Capricornis crispus). Suzuki T. **Okajimas Folia Anat Jpn** 1989 Mar;65(6):381–9
[Functional structure of the human temporal-masseter muscle complex in the fetus and the adult] Gaspard M. **Orthod Fr** 1987;58 Pt 2:549–65 (41 ref.) (Eng. Abstr.) **(Fre)**
[Sex dimorphism of quantitative parameters of the masticatory muscles and skull of the rabbit] Brehmer A, et al. **Anat Anz** 1988;167(4):323–8 (Eng. Abstr.) **(Ger)**
[Osteotomy healing of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. II. Response pattern of the masticatory muscles (M. masseter)] Herrmann V, et al. **Anat Anz** 1988; 167(2):87–104 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Estimation of blood flow by 133Xe clearance in human masseter muscle during rest, endurance of isometric contraction, and recovery. Monteiro AA, et al. **Arch Oral Biol** 1988;33(8):561–5
IUPS satellite symposium. International Union of Physiological Sciences. Autonomic regulation of orofacial function. Kuopio, Finland, July 5–7, 1989. Abstracts. **Proc Finn Dent Soc** 1989;85 Suppl 1:1–44
[The effect of a modified blood supply on the craniofacial growth of rabbits. 2. Masticatory muscles] Beleites B, et al. **Anat Anz** 1989;168(4):307–13 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Effects of succinylcholine at the masseter and adductor pollicis muscles in adults. Smith CE, et al. **Anesth Analg** 1989 Aug;69(2):158–62
Differing effect of agonist and antagonist muscle relaxants on cat jaw muscles. Van der Spek AF, et al. **Anesth Analg** 1989 Jul;69(1):76–80
Differential effects of pancuronium on masseter and adductor pollicis muscles in humans. Smith CE, et al. **Anesthesiology** 1989 Jul;71(1):57–61
Brain hypoxia preferentially stimulates genioglossal EMG responses to CO2. Hutt DA, et al. **J Appl Physiol** 1989 Jan;66(1):51–6

ENZYMOLOGY

Esterase profile of human masseter muscle. Kirkeby S, et al. **J Anat** 1988 Apr;157:79–87
Non-specific esterases and esterproteases in masticatory muscles from the muscular dystrophic mouse. Kirkeby S, et al. **Neurochem Res** 1989 Mar;14(3):211–5

GROWTH & DEVELOPMENT

Growth allometry of craniomandibular muscles, tendons, and bones in the laboratory rat (Rattus norvegicus): relationships to oromotor maturation and biomechanics of feeding. Hurov J, et al. **Am J Anat** 1988 Aug;182(4):381–94
Effects of the infraorbital nerve-transection on the formation of Ia fibers in muscle spindles of the masseter muscle in developing mice. Maeda N, et al. **Anat Anz** 1988; 167(3):177–82
Immunocytochemical analysis of the perinatal development of cat masseter muscle using anti-myosin antibodies. Hoh JF, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):312–25
[The effect of a modified blood supply on the craniofacial growth of rabbits. 1. Vascular casts] Brehmer A, et al. **Anat Anz** 1989;168(3):229–36 (Eng. Abstr.) **(Ger)**

INJURIES

Morphology of jaw-muscle spindle afferents in the rat. Dessem D, et al. **J Comp Neurol** 1989 Apr 15; 282(3):389–403

INNERVATION

Feeding behavior by parasitic phase lampreys, Ichthyomyzon unicuspis. Kawasaki R, et al. **Brain Behav Evol** 1988; 32(6):317–29
Variation in neuromuscular activity during prey capture by trophic specialists and generalists (Pisces: Labridae). Sanderson SL. **Brain Behav Evol** 1988;32(5):257–68
An HRP study of the central projections from primary sensory neurons innervating the rat masseter muscle. Arvidsson J, et al. **Brain Res** 1989 Feb 20;480(1-2):111–8
The morphology of the axons and axon collaterals of rat jaw-elevator motoneurones. Moore JA, et al. **Brain Res** 1989 Jun 12;489(2):383–6
Masseter inhibitory periods and sensations evoked by electrical tooth-pulp stimulation in subjects under hypnotic anesthesia. Sharav Y, et al. **Brain Res** 1989 Feb 13; 479(2):247–54
Physiological and morphological characteristics of cat masticatory motoneurons—intracellular injection of HRP. Shigenaga Y, et al. **Brain Res** 1988 Oct 4;461(2):238–56
Feeding behavior in mammals: corticobulbar projection is reorganized during conversion from sucking to chewing. Iriki A, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):189–96
Sensory components facilitating jaw-closing muscle activities in the rabbit. Morimoto T, et al. **Exp Brain Res** 1989; 76(2):424–40
Sensory and motor responses of trigeminal and reticular neurons during ingestive behavior in rats. Yamamoto T, et al. **Exp Brain Res** 1989;76(2):386–400
Distribution and central projections of primary afferent neurons that innervate the masseter muscle and mandibular periodontium: a double-label study. Capra NF, et al. **J Comp Neurol** 1989 Jan 15;279(3):341–52
Neural organization of the masseter muscle in the pig. Herring SW, et al. **J Comp Neurol** 1989 Feb 22;

280(4):563–76
Dendritic ramifications of trigeminal motor neurons innervating jaw-closing muscles of rats. Mong FS, et al. **J Neurol Sci** 1988 Sep;86(2–3):251–64
Candidate interneurons mediating peripherally evoked disynaptic inhibition of masseter motoneurons of both sides. Kamogawa H, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):149–54
Modulation of an inhibitory reflex in single motor units in human masseter at different joint angles. Türker KS, et al. **Neurosci Lett** 1989 May 22;100(1–3):157–63
Frequency analysis of electromyographically measured covert speech behavior. Dollins AB, et al. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):27–30
Patterns of covert speech behavior and phonetic coding. McGuigan FJ, et al. **Pavlov J Biol Sci** 1989 Jan–Mar; 24(1):19–26
Comparative threshold studies of the acoustic pinna, jaw and startle reflex in the rat. Pilz PK, et al. **Physiol Behav** 1988; 43(4):411–5
The somatotopy of the masticatory neurons in the rat trigeminal motor nucleus as revealed by HRP study. Chen KN, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul; 12(3):146–55
[Functional morphology of the maxillo-mandibular apparatus in the miniature swine MINI-LEWE. 8. The development of the intramuscular nerve ramification pattern in the masticatory muscles] Koppe T, et al. **Anat Anz** 1988; 166(1–5):97–104 (Eng. Abstr.) **(Ger)**
[Temporal muscle proprioceptors involved in evoking jaw-tongue reflex] Ishiwata Y. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):460–70 (Eng. Abstr.) **(Jpn)**

METABOLISM

An experimental orthopedic treatment of the rat mandible using a functional appliance alters the fibre and myosin types in masticatory muscles. Oudet C, et al. **Reprod Nutr Dev** 1988;28(3B):795–803

PATHOLOGY

MR imaging of muscles of mastication. Schellhas KP. **AJR Am J Roentgenol** 1989 Oct;153(4):847–55
Bilateral opercular polymicrogyria. Becker PS, et al. **Ann Neurol** 1989 Jan;25(1):90–2
Carcinoma of the maxillary sinus with pterygoid invasion. Toriumi DM, et al. **Ann Otol Rhinol Laryngol** 1989 Jun; 98(6):485–6
Pathologic quiz case 1. Intramuscular hemangioma, small vessel type, masseter muscle (also known as infiltrating angiolipoma). Rushin JM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):878–81
Angiomyoma of the temporal region. Soames JV, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):229–35
Masseter muscle adaptation following surgical correction of vertical maxillary excess. Boyd SB, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):953–62
[Hypertrophy of the masseter muscle. Clinical aspects—etiology—therapy] Abrams J. **Laryngorhinootologie** 1989 Jul;68(7):383–7 (35 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Reliability of maximum static work efforts by the human masseter muscle. Christensen LV. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):42–5
Electromyography of masticatory muscles in three jaw registration positions. Jiménez ID. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):282–8
Head posture and hyo-mandibular function in man. A synchronized electromyographic and videofluorographic study of the open-close-clench cycle. Winnberg A, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):393–404 (49 ref.)
Jaw movements and muscle activity during mastication in growing rabbits. Weijs WA, et al. **Anat Rec** 1989 Jul; 224(3):407–16
Freeway space measurement using mandibular kinesiograph and EMG before and after TENS. Konchak PA, et al. **Angle Orthod** 1988 Oct;58(4):343–50
Reflex excitation of masticatory muscles induced by algesic chemicals applied to the temporomandibular joint of the cat. Broton JG, et al. **Arch Oral Biol** 1988;33(10):741–7
Three-dimensional movement analysis of lateral pterygoid electromyographic activity during mastication in the rat. Byrd KE, et al. **Arch Oral Biol** 1988;33(9):635–40
A comparison of reflex depressions of activity in jaw-closing muscles evoked by intra- and peri-oral stimuli in man. Cadden SW, et al. **Arch Oral Biol** 1988;33(12):863–9
Analysis of electromyographic signals in human jaw closing muscles at various isometric force levels. Clark GT, et al. **Arch Oral Biol** 1988;33(11):833–7
Isometric muscle tension generated by masseter stimulation after prolonged alteration of the consistency of the diet fed to growing rats. Kiliaridis S, et al. **Arch Oral Biol** 1988; 33(7):467–72
Histochemical analysis of masticatory muscle in the growing rat after prolonged alteration in the consistency of the diet. Kiliaridis S, et al. **Arch Oral Biol** 1988;33(3):187–93
Lissajous figures of differential electromyograms of the paired temporal and paired masseter muscles in human mastication. Kumai T. **Arch Oral Biol** 1988;33(11):851–4
Bilateral post-stimulus electromyographic complexes in human masseter muscles after stimulation of periodontal mechanoreceptors of bi- and unilaterally-innervated teeth. van der Glas HW, et al. **Arch Oral Biol** 1988;33(1):41–9
Mechanical capabilities of the human jaw muscles studied with a mathematical model. Van Eijden TM, et al. **Arch Oral Biol** 1988;33(11):819–26
An analysis of mandibular movement trajectories and masticatory muscle EMG activity during drinking in the guinea pig. Gerstner GE, et al. **Brain Res** 1989 Feb 6; 479(1):6–15
Angiotensin II-induced rhythmic jaw movements in the ketamine-anesthetized guinea pig. Gerstner GE, et al. **Brain Res** 1989 Jan 30;478(2):233–40
Variability in electromyographic surface recordings of the human masseter muscle. Dahlström L, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):105–8
Left–right ratio of the tonic vibration reflex at full occlusion in the human masseter muscles. Hoogmartens MJ, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):45–52
Prehension in the pigeon. I. Descriptive analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):569–76
Prehension in the pigeon. II. Kinematic analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):577–85
Modifications of masticatory behavior after trigeminal deafferentation in the rabbit. Inoue T, et al. **Exp Brain Res** 1989;74(3):579–91
Activation of masseter muscles with inspiratory resistance loading. Hollowell DE, et al. **J Appl Physiol** 1989 Jul; 67(1):270–5
Sensitivity of temporomandibular joint force calculations to errors in muscle force measurements. Throckmorton GS. **J Biomech** 1989;22(5):455–68
Loci and characteristics of EMG silent periods during masticatory mandibular movements in rats. Byrd KE. **J Dent Res** 1988 Oct;67(10):1284–8
EMG power spectrum patterns of anterior temporal and masseter muscles in children and adults. Yuen SW, et al. **J Dent Res** 1989 May;68(5):800–4
Length-tension relationships of masseter and digastric muscles of miniature swine during ontogeny. Anapol F, et al. **J Exp Biol** 1989 May;143:1–16
Topographical distribution and functional properties of cortically induced rhythmical jaw movements in the monkey (Macaca fascicularis). Huang CS, et al. **J Neurophysiol** 1989 Mar;61(3):635–50
Spectral analysis of the masseter and anterior temporalis: an assessment of reliability for use in the clinical situation. Barker GR, et al. **J Oral Rehabil** 1989 May;16(3):309–13
Effects of texture of food on chewing patterns in the human subject. Horio T, et al. **J Oral Rehabil** 1989 Mar; 16(2):177–83
Short-term effect of a stabilization splint on the asymmetry of submaximal masticatory muscle activity. McCarroll RS, et al. **J Oral Rehabil** 1989 Mar;16(2):171–6
The immediate effect of splint-induced changes in jaw positioning on the asymmetry of submaximal masticatory muscle activity. McCarroll RS, et al. **J Oral Rehabil** 1989 Mar;16(2):163–70
Comparative electromyographic study of elevator muscles in patients with complete dentures and natural dentition. Miralles R, et al. **J Oral Rehabil** 1989 May;16(3):249–55
Electromyographic activity of the human masticatory muscles during submaximal clenching in the inter-cuspal position. Naeije M, et al. **J Oral Rehabil** 1989 Jan; 16(1):63–70
A 2-year electromyographic study of patients with an immediate complete upper and a partial lower denture. Tryde G, et al. **J Oral Rehabil** 1989 Mar;16(2):193–201
Electromyographic biofeedback and sustained masseter muscle contraction in man. Watkinson AC. **J Oral Rehabil** 1988 Jul;15(4):353–9
Can electrical stimulation be used to establish a physiologic occlusal position? [letter] Adib F. **J Prosthet Dent** 1989 Mar;61(3):386–8
Can electrical stimulation be used to establish a physiologic occlusal position? Dao TT, et al. **J Prosthet Dent** 1988 Oct;60(4):509–14
An electromyographic study of masticatory muscle activity at increased occlusal vertical dimension in complete denture wearers. Lyons MF. **J Prosthet Dent** 1988 Sep; 60(3):346–8
Influence of variation in anteroposterior occlusal contacts on electromyographic activity. Manns A, et al. **J Prosthet Dent** 1989 May;61(5):617–23
Influence of balanced occlusion and canine guidance on electromyographic activity of elevator muscles in complete denture wearers. Miralles R, et al. **J Prosthet Dent** 1989 Apr;61(4):494–8
Functional loading of the dentition during mastication. Neill DJ, et al. **J Prosthet Dent** 1989 Aug;62(2):218–28
The effect of prior jaw motion on the plot of electromyographic amplitude versus jaw position. Plesh O, et al. **J Prosthet Dent** 1988 Sep;60(3):369–73
The silent period duration of the masticatory muscles. Verkindere MT, et al. **J Prosthet Dent** 1989 Jun;61(6):733–6
Rhythmic digastric activity in the naloxone-treated decerebrate rabbit pup. Thexton AJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):242–6
Surface EMG frequency dependence on force in the masseter and the anterior temporal muscles. Hagberg C, et al. **Scand J Dent Res** 1988 Oct;96(5):451–6
Experimental teeth clenching in man. Christensen LV. **Swed Dent J Suppl** 1989;60:1–66 (152 ref.)
[Electromyography of the masticatory muscles in normal people] Huang CJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):227–30, 255 (Eng. Abstr.) **(Chi)**
[Electromyographic study of mastication as a function of the denture in humans] Verkindere M, et al. **J Biol Buccale** 1988 Sep;16(3):169–78 (Eng. Abstr.) **(Fre)**
[Real-time analysis of orofacial movements using electromagnetic articulography] Schönle PW, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):126–30 (Eng. Abstr.) **(Ger)**
[Physiological properties of motor units in the human anterior digastric muscle] Mimura H. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):75–92 (Eng. Abstr.) **(Jpn)**
[Effect of lingual surface inclination of maxillary canine on jaw muscle activity] Soneda K. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):162–81 (Eng. Abstr.) **(Jpn)**
[Comparative characteristics of masticatory muscle tonus in children with orthognathic and prognathic deep bites before and after orthodontic treatment] Anikienko AA, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):53–6 (Eng. Abstr.) **(Rus)**
[The choice of the functional test in electromyographic study of the masticatory muscles] Malevich OE, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):84–5 **(Rus)**
[A method for recording the human periodontal muscular reflex] Malevich OE, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):10–2 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Differences in functional variables, fillings, and tooth wear in two groups of 19-year-old individuals. Dahl BL, et al. **Acta Odontol Scand** 1989 Feb;47(1):35–40
Quantitative analyses of voluntary orofacial motor control in schizophrenia and tardive dyskinesia. Caligiuri MP, et al. **Biol Psychiatry** 1988 Nov;24(7):787–800
Muscle function and craniofacial morphology: a clinical study in patients with myotonic dystrophy. Kiliaridis S, et al. **Eur J Orthod** 1989 May;11(2):131–8
Tremor: a possible side effect of prolonged therapy with low doses of amiodarone [letter] Della Sala S, et al. **Ital J Neurol Sci** 1989 Apr;10(2):219–20
Jaw pain and stiffness levels after repeated maximum voluntary clenching. Clark GT, et al. **J Dent Res** 1989 Jan;68(1):69–71
Jaw closing spasm—a form of focal dystonia? An electrophysiological study. Lagueny A, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):652–5
Value of EMG analysis of mandibular elevators in open-close-clench cycle to diagnosing TMJ disturbance syndrome. Chong-Shan S, et al. **J Oral Rehabil** 1989 Jan; 16(1):101–7
Quantitative observations on maximum static work efforts and associated pain of the human masseter muscle. Christensen LV. **J Oral Rehabil** 1988 Nov;15(6):561–73
Electromyographic studies of craniomandibular disorders: a review of the literature. Dahlström L. **J Oral Rehabil** 1989 Jan;16(1):1–20 (72 ref.)
Pain in the sternocleidomastoid muscle and occlusal interferences. Kohno S, et al. **J Oral Rehabil** 1988 Jul; 15(4):385–92
Stress in patients with pain in the muscles of mastication and the temporomandibular joints. Lundeen TF, et al. **J Oral Rehabil** 1988 Nov;15(6):631–7
The effects of muscle fatigue on the silent period of the masticatory muscles. Nagasawa T, et al. **J Oral Rehabil** 1988 Nov;15(6):531–5
Postural and maximum activity in elevators during mandible pre- and post-occlusal splint treatment of temporomandibular joint disturbance syndrome. Shi CS, et al. **J Oral Rehabil** 1989 Mar;16(2):155–61
The silent period in the masseter and the anterior temporalis muscles in adult patients with mild or moderate mandibular dysfunction symptoms. Zulqarnain BJ, et al. **J Oral Rehabil** 1989 Mar;16(2):127–37
Short-term effect of two therapeutic methods on myofascial pain and dysfunction of the masticatory system. Burgess JA, et al. **J Prosthet Dent** 1988 Nov;60(5):606–10
Bite force duration: a diagnostic procedure for mandibular dysfunction. Choy E, et al. **J Prosthet Dent** 1988 Sep; 60(3):365–8
A chairside method for treating external pterygoid muscle dysfunction in the edentulous patient. Lieberman J, et al. **J Prosthet Dent** 1989 Jun;61(6):752–3
A comparative electromyographic study of the lateral pterygoid muscle and arthrography in patients with temporomandibular joint disturbance syndrome sounds. Liu ZJ, et al. **J Prosthet Dent** 1989 Aug;62(2):229–33
Habitual mastication in dysfunction: a computer-based analysis. Mongini F, et al. **J Prosthet Dent** 1989 Apr; 61(4):484–94
Neuronal and neurochemical mechanisms of hypothalamic inhibition of the nociceptive reflex. Baklavadzhyan OG, et al. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):42–51
[Nature of masticatory muscle damage in patient with temporomandibular joint dysfunction syndrome] Fang DF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):92–5 **(Chi)**
[Comprehensive studies on occlusion, electromyography and radiography in cases with temporomandibular sounds] Liu

ZJ. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Sep; 23(5):276–8, 319 (Eng. Abstr.) (Chi)
[Studies of masticatory efficiency and of muscle force of the temporal and masseter muscles in full denture wearers by a light absorption method and computer electromyography processing system] Ye XF.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Nov; 23(6):334–6, 384–5 (Eng. Abstr.) (Chi)
[Electromyographic evaluation of silent periods in the elevator muscles of the mandible in dysfunctional pathology of the temporo–mandibular joint] Bonanini M, et al. Minerva Stomatol 1989 Feb;38(2):151–9 (65 ref.) (Eng. Abstr.) (Ita)
[Electromyographic evaluation of muscular tension in dysfunctional subjects in relation to normal subjects] Scotti R, et al. Minerva Stomatol 1989 Feb;38(2):205–10 (Eng. Abstr.) (Ita)

SURGERY

Reconstruction of the palate using bilateral temporalis muscle flaps: a case report. Phillips JG, et al.
Br J Oral Maxillofac Surg 1988 Aug;26(4):322–5
Transmaxillary temporalis transfer for reconstruction of a large palatal defect: report of a case. Demas PN, et al.
J Oral Maxillofac Surg 1989 Feb;4. (2):197–202
The use of a pedicled temporalis muscle–pericranial flap for replacement of the TMJ disc: preliminary report. Feinberg SE, et al. J Oral Maxillofac Surg 1989 Feb;47(2):142–6
Surgical correction of masseter muscle hypertrophy by an intraoral approach. Loh FC, et al.
J Oral Maxillofac Surg 1989 Aug;47(8):883–5
Experimental studies on masseter muscle grafts in rats: comparison of donor muscles. Mong FS.
J Oral Rehabil 1989 May;16(3):315–21
The prominent mandibular angle: preoperative management, operative technique, and results in 42 patients. Back SM, et al. Plast Reconstr Surg 1989 Feb;83(2):272–80
[Critical evaluation of masseter reduction as a method for reducing facial width] Sailer HF, et al.
Fortschr Kiefer Gesichtschir 1989;34:87–90 (Ger)

TRANSPLANTATION

The masseter muscle cross–over flap—a versatile flap for reconstruction in the oral cavity. Langdon JD.
Br J Oral Maxillofac Surg 1989 Apr;27(2):124–31
The fasciaform graft: a technique for the repair of large perforations of the tympanic membrane. Pfleiderer AG, et al. Clin Otolaryngol 1988 Dec;13(6):427–34
Role of masseter crossover flap in oropharyngeal reconstruction. Tiwari RM, et al. J Laryngol Otol 1989 Mar;103(3):298–301
[Reconstruction of the lateral skull contour following temporal muscle flap–plasty] Spitzer WJ, et al.
Fortschr Kiefer Gesichtschir 1989;34:103–5 (Ger)

ULTRASTRUCTURE

Macrophages and mast cells in dystrophic masseter muscle: a light and electron microscopic study. Kirkeby S, et al.
Br J Exp Pathol 1988 Aug;69(4):597–603

MASTICATORY SYSTEM see STOMATOGNATHIC SYSTEM

MASTIGOMYCOTINA

Encapsulation of the mosquito fungal pathogen Lagenidium giganteum (Oomycetes:Lagenidiales) in calcium alginate. Axtell RC, et al. J Am Mosq Control Assoc 1987 Sep; 3(3):450–9
Temperature and water quality effects in simulated woodland pools on the infection of Culex mosquito larvae by Lagenidium giganteum (Oomycetes: Lagenidiales) in North Carolina. Guzman DR, et al.
J Am Mosq Control Assoc 1987 Jun;3(2):211–8
Ground and aerial application of the sexual and asexual stages of Lagenidium giganteum (Oomycetes: Lagenidiales) for mosquito control. Kerwin JL, et al.
J Am Mosq Control Assoc 1986 Jun;2(2):182–9
Ground and aerial application of the asexual stage of Lagenidium giganteum for control of mosquitoes associated with rice culture in the Central Valley of California. Kerwin JL, et al. J Am Mosq Control Assoc 1987 Mar; 3(1):59–64

ANALYSIS

Comparative studies on the DNA of Pythium species and some possibly related taxa. Belkhiri A, et al.
J Gen Microbiol 1988 Oct;134 (Pt 10):2673–83

DRUG EFFECTS

Fungitoxicity of m–fluorophenylalanine–containing peptides towards Pythium ultimum. Young DH, et al.
Experientia 1989 Apr 15;45(4):325–7
Salinity tolerance of Leptolegnia chapmanii (Oomycetes: Saprolgeniales), a fungal pathogen of mosquito larvae. Lord JC, et al. J Am Mosq Control Assoc 1988 Sep;4(3):370–1
Phthoramycin, a new antibiotic active against a plant pathogen, Phytophthora sp. Omura S, et al.
J Antibiot (Tokyo) 1988 Dec;41(12):1910–2

ENZYMOLOGY

Production of xylanase by the ruminal anaerobic fungus Neocallimastix frontalis. Mountfort DO, et al.
Appl Environ Microbiol 1989 Apr;55(4):1016–22
Phosphorylation–dependent regulation of amidotransferase during the development of Blastocladiella emersonii. Etchebehere LC, et al. Arch Biochem Biophys 1989 Aug 1;272(2):301–10

GENETICS

Genetic analysis of the fungus, Bremia lactucae, using restriction fragment length polymorphisms. Hulbert SH, et al. Genetics 1988 Dec;120(4):947–58
DNA–mediated transformation in the aquatic filamentous fungus Achlya ambisexualis. Manavathu EK, et al.
J Gen Microbiol 1988 Jul;134 (Pt 7):2019–28
F1–ATPase alpha subunit in the mitochondrial genome of the Pythiaceae. Forster H, et al. Nucleic Acids Res 1989 Sep 12;17(17):7109

GROWTH & DEVELOPMENT

Growth characteristics on cellobiose of three different anaerobic fungi isolated from the ovine rumen. Phillips MW, et al. Appl Environ Microbiol 1989 Jul;55(7):1695–702
Developmental regulation of expression of the regulatory subunit of the cAMP–dependent protein kinase of Blastocladiella emersonii. Marques M do V, et al.
Eur J Biochem 1989 Jan 2;178(3):803–10
Factors affecting storage of mycelial cultures of the mosquito fungal pathogen Lagenidium giganteum (Oomycetes: Lagenidiales). Su XQ, et al. J Am Mosq Control Assoc 1986 Sep;2(3):350–4
Reassessment of the role of phospholipids in sexual reproduction by sterol–auxotrophic fungi. Kerwin JL, et al. J Bacteriol 1989 Jul;171(7):3831–9
Defense strategies of soybean against the fungus Phytophthora megasperma f.sp. glycinea: a molecular analysis. Ebel J, et al. Trends Biochem Sci 1988 Jan; 13(1):23–7 (27 ref.)

IMMUNOLOGY

Antigenic relationship between Pythium insidiosum de Cock et al. 1987 and its synonym Pythium destruens Shipton 1987. Mendoza L, et al. Mycoses 1989 Feb;32(2):73–7

ISOLATION & PURIFICATION

Use of immunohistochemical methods for diagnosis of equine pythiosis. Brown CC, et al. Am J Vet Res 1988 Nov; 49(11):1866–8
Occurrence and control of Aphanomyces (Saprolegniales: fungi) infections in laboratory colonies of larval Anopheles. Seymour R, et al. J Am Mosq Control Assoc 1985 Mar; 1(1):100–2

METABOLISM

Degradation and utilization of cellulose and straw by three different anaerobic fungi from the ovine rumen. Gordon GL, et al. Appl Environ Microbiol 1989 Jul;55(7):1703–10
Isolation of sealed plasma membrane vesicles from Phytophthora megasperma f. sp. glycinea: II. Partial characterization of Ca2+ transport and glyceollin effects. Giannini JL, et al. Arch Biochem Biophys 1988 Nov 1; 266(2):644–9
Metabolic changes during development of Phytophthora palmivora examined by gas chromatography/mass spectrometry. Grant BR, et al. J Gen Microbiol 1988 Jul; 134 (Pt 7):1901–11

PATHOGENICITY

Structure and activity of proteins from pathogenic fungi Phytophthora eliciting necrosis and acquired resistance in tobacco. Ricci P, et al. Eur J Biochem 1989 Aug 15; 183(3):555–63
Human pythiosis associated with thalassemia hemoglobinopathy syndrome. Sathapatayavongs B, et al.
J Infect Dis 1989 Feb;159(2):274–80 (19 ref.)
Crypticola clavulifera gen. et sp. nov. and Lagenidium giganteum: oomycetes pathogenic for dipterans infesting leaf axils in an Australian rain forest. Frances SP, et al.
J Invertebr Pathol 1989 Jul;54(1):103–11
Infection ability of watermolds in some temperate fishes of Himalaya, India. Khulbe RD. Mycoses 1989 Feb;32(2):84–6

PHYSIOLOGY

Accelerated ion fluxes during differentiation in zoospores of Phytophthora palmivora. Iser JR, et al. Cell Differ Dev 1989 Jan;26(1):29–37
Decreased activity of Blastocladiella emersonii zoospore ribosomes: correlation with developmental changes in ribosome–associated proteins. Jaworski AJ, et al.
Dev Biol 1989 Oct;135(2):340–8
Effect of nutrient concentration in culturing three isolates of the mosquito fungal pathogen, Lagenidium giganteum (Oomycetes: Lagenidiales), on sunflower seed extract. Guzman DR, et al. J Am Mosq Control Assoc 1986 Jun; 2(2):196–200
Population dynamics of Culex quinquefasciatus and the fungal pathogen Lagenidium giganteum (Oomycetes: Lagenidiales) in stagnant water pools. Guzman DR, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):442–9
Field evaluation of Lagenidium giganteum (Oömycetes: Lagenidiales) and description of a natural epizoötic involving a new isolate of the fungus. Kerwin JL, et al.
J Med Entomol 1988 Nov;25(6):452–60
Density reduction in larval mosquito (Diptera: Culicidae) populations by interactions between a parasitic ciliate (Ciliophora: Tetrahymenidae) and an opportunistic fungal (Oömycetes: Pythiaceae) parasite. Washburn JO, et al.
J Med Entomol 1988 Sep;25(5):307–14
An ultrastructural study of the invasion of Culex quinquefasciatus larvae by Leptolegnia chapmanii (Oomycetes: Saprolegniales). Lord JC, et al.
Mycopathologia 1988 Nov;104(2):67–73
A method to obtain rapid zoosporogenesis of Pythium insidiosum. Mendoza L, et al. Mycopathologia 1988 Oct; 104(1):59–62
Symbiotic marine bacteria chemically defend crustacean embryos from a pathogenic fungus. Gil–Turnes MS, et al. Science 1989 Oct 6;246(4926):116–8

ULTRASTRUCTURE

The ultrastructure and possible relationships of four obligate anaerobic chytridiomycete fungi from the rumen of sheep. Munn EA, et al. Biosystems 1988;22(1):67–81
Morphological and metabolic characterization of a new species of strictly anaerobic rumen fungus: Neocallimastix joyonii. Breton A, et al. FEMS Microbiol Lett 1989 Apr; 49(2–3):309–14

MASTIGOPHORA

CYTOLOGY

The ontogeny and phylogeny of cellular differentiation in Volvox. Kirk DL. Trends Genet 1988 Feb;4(2):32–6 (28 ref.)

GROWTH & DEVELOPMENT

Development of Trypanoplasma borreli (Mastigophora: Kinetoplastida) in the leech vector Piscicola geometra and its infectivity for the common carp, Cyprinus carpio. Kruse P, et al. J Parasitol 1989 Aug;75(4):527–30

IMMUNOLOGY

Acquired and innate resistance to the haemoflagellate cryptobia salmositica in sockeye salmon (Oncorhynchus nerka). Bower SM, et al. Dev Comp Immunol 1988 Fall; 12(4):749–60
Immunoglobulin M–dependent classical complement pathway activation in killing of Pentatrichomonas hominis. Shaio MF, et al. Infect Immun 1989 Mar;57(3):902–6

ISOLATION & PURIFICATION

On the flagellate parasite of uncertain identity from the Egyptian brown rats and stray dogs [letter] Morsy TA.
J Egypt Soc Parasitol 1989 Dec;19(2):765–6

PHYSIOLOGY

[Biological cycle of Phytomonas] Jankevicius JV, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:601–10 (Por)

ULTRASTRUCTURE

Demonstration of glycosomes (microbodies) in the Bodonid flagellate Trypanoplasma borelli (Protozoa, Kinetoplastida). Opperdoes FR, et al.
Mol Biochem Parasitol 1988 Aug;30(2):155–63
[Phagocytosis and endocytosis in the colorless flagellate Thaumatomonas lauterborni] Karpov SA, et al.
Tsitologiia 1989 Mar;31(3):347–9 (Eng. Abstr.) (Rus)

MASTITIS

COMPLICATIONS

Hyperprolactinemia and nonpuerperal mastitis (duct ectasia). Peters F, et al. JAMA 1989 Mar 17;261(11):1618–20
[Treatment of inflammatory cancer of the breast. Combined chemotherapy and radiotherapy. Apropos of 270 women treated at the Institut Gustave–Roussy] Rouëssé J, et al.
Bull Cancer (Paris) 1989;76(1):87–92 (Eng. Abstr.) (Fre)

DIAGNOSIS

Granulomatous mastitis caused by histoplasma and mimicking inflammatory breast carcinoma. Osborne BM.
Hum Pathol 1989 Jan;20(1):47–52
Mammary tuberculosis. McMeeking AA, et al.
N Y State J Med 1989 May;89(5):288–9
[Inflammatory processes of the breast] Takov R, et al.
Khirurgiia (Sofiia) 1989;42(1):19–22 (Eng. Abstr.) (Bul)
[Tuberculosis of the breast. Report of a clinical case and review of the literature] Blasi A, et al.
Recenti Prog Med 1989 May;80(5):249–51 (10 ref.) (Eng. Abstr.) (Ita)
[Chronic nonspecific mastitis simulating cancer of the breast] Izmailova GE, et al. Khirurgiia (Mosk) 1988 Nov;(11):38–41 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of suppurative processes caused by

non-clostridial anaerobic microflora] Ofanesian SS. **Khirurgiia (Mosk)** 1989 Jun;(6):68-71 (Eng. Abstr.) (Rus)

[A case of gadfly larva in the retracted nipple] Pushkarev NI, et al. **Klin Khir** 1989;(1):62 (Rus)

[Tuberculosis of the breast] Polushkina EE, et al. **Probl Tuberk** 1989;(6):71-2 (Rus)

[Ultrasonic diagnosis of abscesses of the abdominal cavity and soft tissues] Buianov VM, et al. **Sov Med** 1988;(5):28-34 (Rus)

[Echography in suppurative mastitis] Nauryzbaeva BU, et al. **Sov Med** 1988;(8):83-7 (Rus)

[Errors in the diagnosis of tuberculosis of the breast] Moroz GS, et al. **Vestn Khir** 1989 Mar;142(3):115 (Rus)

DRUG THERAPY

[Selected problems related to the use of bromocriptine (parlodel) in obstetrics and gynecology] Marianowski L, et al. **Ginekol Pol** 1988 Jan;59(1):49-58 (54 ref.) (Eng. Abstr.) (Pol)

[Bromocriptine in the treatment of puerperal mastitis] Wojcieszek A, et al. **Pol Tyg Lek** 1988 Nov 7;43(45):1437, 1448 (Pol)

[Parlodel in the treatment of lactation mastitis] Myshkin KI, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):53-4 (Rus)

[Silver electrophoresis in the treatment of lactation mastitis] Dalgat DM, et al. **Khirurgiia (Mosk)** 1989 May;(5):19-22 (Eng. Abstr.) (Rus)

[Tuberculosis of the breast treated with chemotherapeutic agents] Kunovskii BV, et al. **Probl Tuberk** 1988;(6):70-2 (Rus)

ETIOLOGY

Methicillin-resistant staphylococcal mastitis. Kalstone C. **Am J Obstet Gynecol** 1989 Jul;161(1):120

Kinetics of endotoxin-induced inflammation in ovine mammary gland. Colditz IG, et al. **Inflammation** 1988 Oct; 12(5):491-501

Group B streptococcal breast abscess in a mother and mastitis in her infant. Rench MA, et al. **Obstet Gynecol** 1989 May; 73(5 Pt 2):875-7

Tuberculosis of the breast. Tan KK, et al. **Singapore Med J** 1988 Jun;29(3):271-5

[Breast tuberculosis: apropos of a case] Bonnet P, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):304-6 (Eng. Abstr.) (Fre)

[Nonpuerperal mastitis. 3 possible causes including mammography correlates] Umbach G, et al. **Fortschr Med** 1989 Jan 20;107(2):65-6 (Eng. Abstr.) (Ger)

[Epidemiologic significance of bacterial contamination of the skin of the breasts of puerperants] Sytnik SI. **Akush Ginekol (Mosk)** 1988 Sep;(9):27-30 (Eng. Abstr.) (Rus)

[Treatment of non-lactation suppurative mastitis] Abdulzhavadov IM. **Khirurgiia (Mosk)** 1989 Jun;(6):42-5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Bacteriological findings and clinical symptoms in relation to clinical outcome in puerperal mastitis. Matheson I, et al. **Acta Obstet Gynecol Scand** 1988;67(8):723-6

A lysozyme isolated from rainbow trout acts on mastitis pathogens. Grinde B. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):179-82

PATHOLOGY

Granulomatous lobular mastitis. Galea MH, et al. **Aust N Z J Surg** 1989 Jul;59(7):547-50 (18 ref.)

Granulomatous lobular mastitis: report of a case with previously undescribed histopathological abnormalities. Axelsen RA, et al. **Pathology** 1988 Oct;20(4):383-9 (17 ref.)

[Self-inflicted necroses (mastitis factitia) as an unusual course of non-puerperal mastitis] Peters F, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):816-8 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Nipple tenderness and breast massage [letter] Axline SE. **J Obstet Gynecol Neonatal Nurs** 1988 Sep-Oct;17(5):336, 355

[Evaluation of the effect of preventing mastitis through ante-partum propaganda and education] Zhang HS. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):586-7 (Chi)

[Measures for the prevention of puerperal mastitis] de Boer HH, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):292-4 (Dut)

[Measures for the prevention of puerperal mastitis (letter)] Meijer JB, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8; 133(14):744 (Dut)

RADIOGRAPHY

Microcystic calcifying liponecrosis following carcinomatous mastitis. Van Goethem M, et al. **J Belge Radiol** 1988; 71(6):744-5

SURGERY

[Recurrence of non-puerperal mastitis. Limits of surgical and conservative therapeutic possibilities] Peters F, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:99-103 (Ger)

[Use of CO2 lasers in the surgical treatment of suppurative wounds of soft tissues] Dotsenko AP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):54-8 (Eng. Abstr.) (Rus)

[Economic effect of using CO2 laser in the treatment of suppurative-inflammatory diseases of soft tissues] Skobelkin OK, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):19-21 (Eng. Abstr.) (Rus)

[Organization of surgical services for patients with lactation mastitis] Lavrov AS, et al. **Klin Khir** 1989;(1):43-4 (Rus)

[Treatment of suppurative puerperal mastitis] Mazurik MF, et al. **Klin Khir** 1989;(1):1-3 (Eng. Abstr.) (Rus)

[Errors in the organization of medical services, diagnosis and treatment causing the development of septicemia in patients with suppurative-inflammatory diseases] Dolidze NG, et al. **Vestn Khir** 1989 Jan;142(1):118-20 (Rus)

[Actual problems of the treatment of lactation mastitis] Gushcha AL, et al. **Vestn Khir** 1989 Jan;142(1):45-7 (Eng. Abstr.) (Rus)

[Use of the leukocyte mass in treatment of patients with suppurative lactation mastitis] Kuiushev FKh, et al. **Vestn Khir** 1988 Aug;141(8):95-9 (Eng. Abstr.) (Rus)

[Use of lasers in the treatment of acute suppurative lactation mastitis] Skobelkin OK, et al. **Vestn Khir** 1988 Sep; 141(9):46-9 (Eng. Abstr.) (Rus)

THERAPY

Inflammatory breast cancer: advances in therapy. Ellis LM, et al. **Semin Surg Oncol** 1988;4(4):261-7 (34 ref.)

[Differential correction of disorders of colloid-oncotic blood pressure in pregnant women and puerperants with suppurative-septic diseases] Serov VN, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):54-8 (Eng. Abstr.) (Rus)

[Characteristics of the course of acute lactation mastitis] Bondarenko NM, et al. **Klin Khir** 1989;(1):22-3 (Eng. Abstr.) (Rus)

VETERINARY

Pathogenicity of Mycoplasma mycoides subsp mycoides (large-colony type) for sheep udder. Banga HS, et al. **Aust Vet J** 1988 Nov;65(11):361-2

Experimental chlamydial mastitis in goats. Koul S, et al. **Aust Vet J** 1988 Dec;65(12):399-400

Non-clinical intramammary infection in lactating ewes and its association with clinical mastitis. Bor A, et al. **Br Vet J** 1989 Mar-Apr;145(2):178-84

Equine mastitis--a review of 28 cases. McCue PM, et al. **Equine Vet J** 1989 Sep;21(5):351-3

Intramammary antibiotic treatment at the end of lactation for prophylaxis and treatment of intramammary infections in ewes. Hueston WD, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1041-4

Incidence and control of subclinical mastitis in intensively managed ewes. McCarthy FD, et al. **J Anim Sci** 1988 Nov; 66(11):2715-21

Use of California Mastitis Test, N-acetyl-beta-glucosaminidase, and antitrypsin to diagnose caprine subclinical mastitis. Maisi P, et al. **J Dairy Res** 1988 Aug;55(3):309-14

Hepatic failure in dairy cattle following mastitis or metritis. Sweeney RW, et al. **J Vet Intern Med** 1988 Apr-Jun; 2(2):80-4

Vaccination against experimental staphylococcal mastitis in ewes. Watson DL. **Res Vet Sci** 1988 Jul;45(1):16-21

The role of endotoxin in the pathogenesis of coliform mastitis in sows. de Ruijter K, et al. **Vet Q** 1988 Jul;10(3):186-90

[The mammary gland: target organ for infection with the caprine arthritis and encephalitis virus] Lerondelle C, et al. **Ann Rech Vet** 1989;20(1):57-63 (Eng. Abstr.) (Fre)

[Frequency and diagnosis of chronic changes in the mammary glands of sows (abattoir findings)] Bollwahn W, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1; 102(7):223-7 (Eng. Abstr.) (Ger)

[The problems of mastitis in mares] Bostedt H, et al. **Tierarztl Prax** 1988;16(4):367-71 (Eng. Abstr.) (Ger)

MASTITIS, BOVINE

Summer mastitis [letter] Formston C. **Vet Rec** 1988 Oct 22; 123(17):452

[Nocardia mastitis] Hartmann H. **Schweiz Arch Tierheilkd** 1989;131(1):31-2 (5 ref.) (Ger)

BLOOD

Preliminary studies on the acid soluble glycoproteins in serum and their diagnostic value for acute inflammatory diseases in cattle. Nagahata H, et al. **Vet Res Commun** 1989; 13(4):257-63

CHEMICALLY INDUCED

Growth of Escherichia coli in whole and skim milk from endotoxin-induced mastitic quarters: in vitro effects of deferoxamine, zinc, and iron supplementation. Lohuis JA, et al. **J Dairy Sci** 1988 Oct;71(10):2772-81

COMPLICATIONS

[Disseminated intravascular coagulation in a cow of the breed "Deutsche Rotbunte" with fungal mastitis and abomasal displacement] Heuwieser W, et al. **Tierarztl Prax** 1989; 17(2):133-5 (Eng. Abstr.) (Ger)

DIAGNOSIS

Variations in measures of udder health within a short period of time. I. The dynamic characteristics in diagnostics of subclinical mastitis based on cytological and bacteriological parameters. Jensen NE, et al. **Acta Vet Scand** 1988; 29(3-4):421-30

Using individual somatic cell counts to help diagnose herd mastitis problems. Dohoo IR, et al. **Acta Vet Scand Suppl** 1988;84:145-7

Consequences of diagnostic errors in mastitis therapy trials. Morant SV, et al. **J Dairy Res** 1988 Aug;55(3):315-29

Contribution of leucocytes to the origin of lactate dehydrogenase isozymes in milk of bovine mastitis. Kato K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):530-9

Development and evaluation of an enzyme-linked immunosorbent assay for endotoxin in milk. Mohammed AH, et al. **Vet Microbiol** 1988 Sep;18(1):27-39

Assessment of the visually read N-acetylglucosaminidase test to detect mastitis in herd surveys. Ball HJ, et al. **Vet Rec** 1989 Feb 11;124(6):145-6

Compartmentalization of milk N-acetyl-beta-D-glucosaminidase (NAGase). Release of NAGase from the cellular compartment by storage, freezing and thawing, detergent and using cell stimulants. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1988 Jul; 35(6):408-14

Flotation of mastitis pathogens with cream from subclinically infected quarters. Prospects for developing a cream-rising test for detecting mastitis caused by major mastitis pathogens. Sandholm M, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):27-34

DRUG THERAPY

Phenylbutazone and flunixin meglumine fail to show beneficial effects on bovine subclinical mastitis. Pyörälä S, et al. **Acta Vet Scand** 1988;29(3-4):501-3

Cromoglycate induces a rebound effect on blood/milk permeability in subclinical mastitis. Pyörälä S, et al. **Acta Vet Scand** 1988;29(1):139-41

Update on mastitis. III. Mastitis therapy. Francis PG. **Br Vet J** 1989 Jul-Aug;145(4):302-11 (22 ref.)

The use of liposomally-entrapped gentamicin in the treatment of bovine Staphylococcus aureus mastitis. MacLeod DL, et al. **Can J Vet Res** 1988 Oct;52(4):445-50

Effect of steroidal anti-inflammatory drugs on Escherichia coli endotoxin-induced mastitis in the cow. Lohuis JA, et al. **J Dairy Sci** 1989 Jan;72(1):241-9

Antibiotic treatment of mastitis: comparison of intramammary and intramammary plus intramuscular therapies. Owens WE, et al. **J Dairy Sci** 1988 Nov; 71(11):3143-7

Effectiveness of intramammary antibiotic therapy based on somatic cell count. Seymour EH, et al. **J Dairy Sci** 1989 Apr;72(4):1057-62

Persistence of residues in milk following antibiotic treatment of dairy cattle. Seymour EH, et al. **J Dairy Sci** 1988 Aug; 71(8):2292-6

Treatment of various forms of bovine mastitis with consideration of udder pathology and the pharmacokinetics of appropriate drugs: a review. du Preez JH. **J S Afr Vet Assoc** 1988 Sep;59(3):161-7 (65 ref.)

Probiotic use [letter] David GP. **Vet Rec** 1988 Dec 10; 123(24):632

Clinical trial of three therapeutic regimens for bovine mastitis. Jarp J, et al. **Vet Rec** 1989 Jun 17;124(24):630-4

Flunixin meglumine and flurbiprofen in cows with experimental Escherichia coli mastitis. Lohuis JA, et al. **Vet Rec** 1989 Mar 25;124(12):305-8

Anti-inflammatory therapy in acute endotoxin-induced bovine mastitis. Anderson KL, et al. **Vet Res Commun** 1989; 13(1):17-26

[The administration of homeopathic drugs for the treatment of acute mastitis in cattle] Merck CC, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1; 102(8):266-72 (Eng. Abstr.) (Ger)

ECONOMICS

Cost of mastitis and its prevention in four dairy cattle herds on St Croix, US Virgin Islands. Ahl AS, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1418-21

ENZYMOLOGY

Activation of plasmin in mastitic milk. Kaartinen L, et al. **Acta Vet Scand** 1988;29(3-4):485-91

Use of N-acetyl-beta-glucosaminidase to detect teat canal inflammations. Kaartinen L, et al. **J Dairy Res** 1988 Nov; 55(4):603-7

EPIDEMIOLOGY

Removal risks in Swedish Friesian dairy cows according to parity, stage of lactation, and occurrence of clinical mastitis. Bendixen PH, et al. **Acta Vet Scand** 1989; 30(1):37-42

Risk factors for the disorders of the mammary gland in dairy

cattle. Gröhn YT, et al. **Acta Vet Scand Suppl** 1988;84:170–2
Evaluation of alternatives for calculating clinical mastitis prevalence and incidence from prospective animal health monitoring schemes. Hueston WD.
Acta Vet Scand Suppl 1988;84:442–5
Prevalence of udder infections and mastitis in 50 California dairy herds. González RN, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):323–8
Field survey of clinical mastitis in low somatic cell count herds. Hogan JS, et al. **J Dairy Sci** 1989 Jun;72(6):1547–56
Incidence of clinical mastitis on farms with low somatic cell counts in bulk milk. Schukken YH, et al. **Vet Rec** 1989 Jul 15;125(3):60–3

ETIOLOGY

On the role of sawdust in the development of mastitis in cows. Isaksson A, et al. **Acta Vet Scand** 1988;29(2):151–8
Role of leukotriene B4 in the pathogenesis of Klebsiella pneumoniae–induced bovine mastitis. Rose DM, et al.
Am J Vet Res 1989 Jun;50(6):915–8
Infection following challenge of the lactating and dry udder of dairy cows with Actinomyces pyogenes and Peptostreptococcus indolicus. Hillerton JE, et al.
Br Vet J 1989 Mar–Apr;145(2):148–58
A hospital–based study of the relationship between retained placenta and mastitis in dairy cows. Schukken YH, et al.
Cornell Vet 1989 Oct;79(4):319–26
Retained placenta and mastitis [editorial] Schukken YH.
Cornell Vet 1989 Apr;79(2):129–31
Survey of milking management practices on large dairies and their relationship to udder health and production variables. Goodger WJ, et al. **J Dairy Sci** 1988 Sep;71(9):2535–42
Approaches to the manipulation of mammary involution. Oliver SP, et al. **J Dairy Sci** 1989 Jun;72(6):1647–64 (157 ref.)
Induction by endotoxin of the inflammatory response in the lactating and dry bovine mammary gland. Mattila T, et al. **Res Vet Sci** 1989 Mar;46(2):238–40

IMMUNOLOGY

Studies of defence mechanisms and inflammatory reactions in the bovine teat using a new experimental method. Persson K, et al. **Acta Vet Scand** 1988;29(3–4):519–20
The relationship between phagocytic activity of polymorphonuclear leukocytes and mastitis in cattle. van der Vliet H, et al. **Agents Actions** 1989 Jan;26(1–2):211–2
Relationship between serologic recognition of Escherichia coli 0111:B4 (J5) and clinical coliform mastitis in cattle. Tyler JW, et al. **Am J Vet Res** 1988 Nov;49(11):1950–4
Immune responses to Mycoplasma bovis vaccination and experimental infection in the bovine mammary gland. Boothby JT, et al. **Can J Vet Res** 1988 Jul;52(3):355–9
Identification of inflammatory cells in bovine milk by flow cytometry. Redelman D, et al. **Cytometry** 1988 Sep; 9(5):463–8
Ingestion and killing of Listeria monocytogenes by blood and milk phagocytes from mastitic and normal cattle. Czuprynski CJ, et al. **J Clin Microbiol** 1989 May; 27(5):812–7
Physiological and pathological factors influencing bovine immunoglobulin G2 concentration in milk. Caffin JP, et al. **J Dairy Sci** 1988 Aug;71(8):2035–43
Local immunostimulation of the bovine mammary gland with interleukin–2. Nickerson SC, et al. **J Dairy Sci** 1989 Jul; 72(7):1764–73
Immunological aspects of mammary involution. Nickerson SC. **J Dairy Sci** 1989 Jun;72(6):1665–78 (63 ref.)
Function and regulation of lymphocyte–mediated immune responses: relevance to bovine mastitis. Nonnecke BJ, et al. **J Dairy Sci** 1989 May;72(5):1313–27 (118 ref.)
Effects of Staphylococcus aureus mastitis on bovine mammary gland plasma cell populations and immunoglobin concentrations in milk. Doymaz MZ, et al.
Vet Immunol Immunopathol 1988 Dec;20(1):87–93
In vivo effects of a thymosin alpha 1–containing colostral whey product on neutrophils and lymphocytes from lactating cows without and with experimentally induced Staphylococcus aureus mastitis. Kehrli ME Jr, et al.
Vet Immunol Immunopathol 1989 Jan;20(2):149–63
Humoral immune response of bovine mammary glands colonized with Corynebacterium bovis: enumeration of plasma cell populations in tissue and immunoglobulin concentrations in milk. Sordillo LM, et al.
Zentralbl Veterinarmed [B] 1988 Oct;35(8):617–27

METABOLISM

Pharmacokinetics of sodium cephapirin in lactating dairy cows. Prades M, et al. **Am J Vet Res** 1988 Nov; 49(11):1888–90
Influence of bovine mastitis on lipolysis ond proteolysis in milk. Murphy SC, et al. **J Dairy Sci** 1989 Mar;72(3):620–6
Endotoxin levels in milk and plasma of mastitis–affected cows measured with a chromogenic limulus test. Hakogi E, et al. **Vet Microbiol** 1989 Jul;20(3):267–74
Comparison of fat and cream content in normal and mastitic milk of cows. Vandeputte–Van Messom G, et al.
Vet Q 1989 Jan;11(1):61–4
Free fatty acids and lipid peroxidation in normal and mastitic bovine milk. Atroshi F, et al.
Zentralbl Veterinarmed [A] 1989 May;36(5):321–30
Endotoxin–induced mastitis. Inhibition of casein synthesis and activation of the caseinolytic system. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1988 Jun;35(5):353–60
Sequential changes of mineral and trace elements in milk during the course of endotoxin–induced mastitis as analyzed by particle induced –X–ray (PIXE), –gamma–ray emission (PIGE) and ion selective electrodes. Lappalainen R, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):664–76
[Modification of the potential acidity of cow's milk due to quantitative changes of milk substances in udder diseases and alimentary–conditioned metabolic burdens] Mielke H, et al. **Arch Exp Veterinarmed** 1988 May;42(3):328–46 (Eng. Abstr.) (Ger)

MICROBIOLOGY

Comparative characterization and biotyping of Staphylococcus aureus isolates from human and bovine sources. Farah IO, et al. **Acta Vet Scand** 1988; 29(3–4):303–10
Milk plasmin, antitrypsin, N–acetyl–beta–D–glucosaminidase and bacterial growth in lactoserum during the early post partum period. Pyörälä S, et al. **Acta Vet Scand** 1988; 29(2):145–50
Frequency of isolation of environmental mastitis–causing pathogens and incidence of new intramammary infection during the nonlactating period. Oliver SP.
Am J Vet Res 1988 Nov;49(11):1789–93
Hemagglutination by Staphylococcus aureus. Studies on strains isolated from bovine mastitis. Lindahl M, et al.
APMIS 1989 Feb;97(2):175–80
Phage typing set for differentiating Staphylococcus epidermidis. Gershman M, et al. **Can J Microbiol** 1988 Dec; 34(12):1358–61
DNA fingerprinting of Streptococcus uberis: a useful tool for epidemiology of bovine mastitis. Hill AW, et al.
Epidemiol Infect 1989 Aug;103(1):165–71
Sources of Prototheca spp in a dairy herd environment. Anderson KL, et al. **J Am Vet Med Assoc** 1988 Sep 1; 193(5):553–6
Staphylococcus aureus exopolysaccharide in vivo demonstrated by immunomagnetic separation and electron microscopy. Johne B, et al. **J Clin Microbiol** 1989 Jul; 27(7):1631–5
Effect of milk on fibronectin and collagen type I binding to Staphylococcus aureus and coagulase–negative staphylococci isolated from bovine mastitis [published erratum appears in J Clin Microbiol 1989 Jul;27(7):1705] Miedzobrodzki J, et al. **J Clin Microbiol** 1989 Mar; 27(3):540–4
Evaluation of various antibiotics for induction of L forms from Staphylococcus aureus strains isolated from bovine mastitis. Owens WE. **J Clin Microbiol** 1988 Oct; 26(10):2187–90
Evaluation of the Minitek Gram–Positive Set for identification of streptococci isolated from bovine mammary glands. Watts JL. **J Clin Microbiol** 1989 May; 27(5):1008–10
Serum susceptibility of coliforms isolated from bovine intramammary infections. Hogan JS, et al. **J Dairy Sci** 1989 Jul;72(7):1893–9
Rate of environmental mastitis in quarters infected with Corynebacterium bovis and Staphylococcus species. Hogan JS, et al. **J Dairy Sci** 1988 Sep;71(9):2520–5
Effect of freezing on bacteriologic culturing of mastitis milk samples. Schukken YH, et al. **J Dairy Sci** 1989 Jul; 72(7):1900–6
Isolation of a mycotoxin (gliotoxin) from a bovine udder infected with Aspergillus fumigatus. Bauer J, et al.
J Med Vet Mycol 1989;27(1):45–50
Binding of fibronectin, fibrinogen and type II collagen to streptococci isolated from bovine mastitis. Mamo W, et al. **Microb Pathog** 1987 Jun;2(6):417–24
The growth of compact and diffuse variants of Staphylococcus aureus in bovine mastitic and normal whey. Mattila T, et al. **Microbiol Immunol** 1988;32(7):667–73
Protothecal mastitis in a cow. Furuoka H, et al.
Nippon Juigaku Zasshi 1989 Feb;51(1):197–9
Pathogenicity of two strains of Streptococcus uberis infused into lactating and non–lactating bovine mammary glands. Hill AW. **Res Vet Sci** 1988 Nov;45(3):400–4
Prevalence of staphylococcal species in four dairy herds. Watts JL, et al. **Res Vet Sci** 1989 Jan;46(1):1–4
The virulence characteristics of strains of Escherichia coli isolated from cases of bovine mastitis in England and Wales. Barrow PA, et al. **Vet Microbiol** 1989 May;20(1):35–48
Interaction of sub–epithelial connective tissue components with Staphylococcus aureus and coagulase–negative staphylococci from bovine mastitis. Mamo W, et al.
Vet Microbiol 1988 Oct;18(2):163–76
Teat skin normal flora and colonization with mastitis pathogen inhibitors. Woodward WD, et al.
Vet Microbiol 1988 Aug;17(4):357–65
Antibiotic sensitivity of bovine staphylococcal and coliform mastitis isolates over four years. Mackie DP, et al.
Vet Rec 1988 Nov 12;123(20):515–7
Glucose oxidase (GOD) as a source of hydrogen peroxide for the lactoperoxidase (LPO) system in milk: antibacterial effect of the GOD–LPO system against mastitis pathogens. Sandholm M, et al. **Zentralbl Veterinarmed [B]** 1988 Jun; 35(5):346–52
[Bacteriological findings in samples of milk from cows studied for the causative agent of mastitis] Mazura F.
Vet Med (Praha) 1989 Mar;34(3):149–56 (Eng. Abstr.) (Cze)
[Isolation and characteristics of nutritional variants of streptococci of animal origin] Skardová O.
Vet Med (Praha) 1989 May;34(5):257–66 (Eng. Abstr.) (Cze)
[Bacterial species isolated from cattle mastitis in Senegal] Konte M, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(3):253–5 (19 ref.) (Eng. Abstr.) (Fre)

PATHOLOGY

Heterogeneity of the plasma cell response to bovine staphylococcal mastitis: an ultrastructural study. Nickerson SC. **Cytobios** 1988;55(222–223):155–65
Functional activity of neutrophils from bovine mammary glands infected with Staphylococcus aureus. Fox LK, et al. **J Dairy Sci** 1988 Dec;71(12):3521–4
Pathology of Staphylococcus aureus mastitis during lactogenesis: relationships with bovine mammary structure and function. Sordillo LM, et al. **J Dairy Sci** 1989 Jan; 72(1):228–40
[Clinical and bacteriologic studies of the frequency of mastitis during and after parturition in heifers lactating for the first time] Sobiraj A, et al. **Tierarztl Prax** 1988;16(3):243–9 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Relationship between test–day measures of somatic cell count and milk production in California dairy cows. Tyler JW, et al. **Can J Vet Res** 1989 Apr;53(2):182–7
Oxygen concentration in milk of healthy and mastitic cows and implications of low oxygen tension for the killing of Staphylococcus aureus by bovine neutrophils. Mayer SJ, et al. **J Dairy Res** 1988 Nov;55(4):513–9
Evidence of calmodulin in bovine milk with high somatic cell counts. Alston–Mills B, et al. **J Dairy Sci** 1988 Aug; 71(8):2246–9
Effect of dexamethasone on experimental Escherichia coli mastitis in the cow. Lohuis JA, et al. **J Dairy Sci** 1988 Oct;71(10):2782–9
Indicators of inflammation to evaluate the recovery from acute bovine mastitis. Pyörälä S. **Res Vet Sci** 1988 Sep; 45(2):166–9
[The effect of subclinical and clinical mastitis on milk production in cattle] Geerts AA, et al.
Tijdschr Diergeneeskd 1988 Aug 15;113(15–16):868–72 (Eng. Abstr.) (Dut)

PREVENTION & CONTROL

Impact of the analytical treatment of explanatory variables on the explanatory/response relationship. Farver TB, et al. **Acta Vet Scand Suppl** 1988;84:456–8
Update on mastitis. I. Control measures in England and Wales. How have they influenced incidence and aetiology? Booth JM. **Br Vet J** 1988 Jul–Aug;144(4):316–22
Prevention of clinical coliform mastitis in dairy cows by a mutant Escherichia coli vaccine. González RN, et al.
Can J Vet Res 1989 Jul;53(3):301–5
Effect of a shielded liner on new mastitis infection. Binde M, et al. **J Dairy Res** 1989 Feb;56(1):55–9
Automatic application of teat disinfectant through the milking machine cluster. Grindal RJ, et al. **J Dairy Res** 1989 Aug;56(4):579–85
Efficacy of .18% iodine teat dip against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al.
J Dairy Sci 1989 Apr;72(4):1063–6
Effect of segregation on prevention of intramammary infections by Staphylococcus aureus. Fox LK, et al.
J Dairy Sci 1989 Feb;72(2):540–4
Use of dairy herd improvement somatic cell information by Ohio dairy producers and their perceptions of mastitis. Miller GY, et al. **J Dairy Sci** 1988 Aug;71(8):2284–91
Udder health in the periparturient period. Oliver SP, et al. **J Dairy Sci** 1988 Sep;71(9):2584–606 (166 ref.)
The effect of post–milking teat dipping on teat canal infections. Du Preez JH. **J S Afr Vet Assoc** 1987 Sep; 58(3):119–23
The effect on inflammation of the bovine mammary gland of vaccination with a cell wall extract of Staphylococcus aureus. Frost AJ, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):688–94

THERAPY

Using simulation modeling to assess the benefit of lactational therapy for subclinical Streptococcus agalactiae mastitis. Goodger WJ, et al. **Acta Vet Scand Suppl** 1988;84:377–80

TRANSMISSION

The role of the milking machine in mastitis. Grindal RJ.
Br Vet J 1988 Nov–Dec;144(6):524–33
Summer mastitis: transmission by blood feeding flies [letter] Tarry DW, et al. **Vet Rec** 1988 Sep 10;123(11):304

MASTITIS, CYSTIC see **FIBROCYSTIC DISEASE OF BREAST**

MASTOCYTOMA, BENIGN see **MASTOCYTOSIS**

MASTOCYTOMA, MALIGNANT see **SARCOMA, MAST CELL**

MASTOCYTOSIS

Systemic mast cell disease. Analysis of 58 cases and literature review. Travis WD, et al. **Medicine (Baltimore)** 1988 Nov; 67(6):345–68 (329 ref.)

[The clinical picture and therapy of nodular mastocytosis] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1989; (3):53–7 (19 ref.) (Eng. Abstr.) **(Rus)**

BLOOD

Serum levels of neutrophil and eosinophil chemotactic activities in mastocytosis. Granerus G, et al. **Agents Actions** 1989 Apr;27(1–2):208–11

COMPLICATIONS

Systemic mastocytosis associated with membranous nephropathy and peripheral neuropathy. Lal SM, et al. **Am J Kidney Dis** 1988 Dec;12(6):538–43

Solid and hematologic malignancies in 60 patients with systemic mast cell disease. Travis WD, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):365–8

The osteoporosis of heparinotherapy and systemic mastocytosis. Bardin T, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:119–23 (32 ref.)

Systemic mastocytosis affecting the skeletal system. Cook JV, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):536

Chorea: a new manifestation of mastocytosis [letter] Iriarte LM, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1457–8

CONGENITAL

Congenital systemic mastocytosis. Date UG, et al. **Indian Pediatr** 1989 Mar;26(3):286–90

DRUG THERAPY

The effect of disodium cromoglycate and ketotifen on the excretion of histamine and N tau-methylimidazole acetic acid in urine of patients with mastocytosis. Mallet AI, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):88–91

A double-blind, placebo-controlled, crossover trial of ketotifen versus hydroxyzine in the treatment of pediatric mastocytosis. Kettelhut BV, et al. **J Allergy Clin Immunol** 1989 May;83(5):866–70

ETIOLOGY

[Mastocytosis: a disease of mast cells] Pawłowicz A, et al. **Pol Tyg Lek** 1988 May 23;43(21):693–6 (49 ref.) **(Pol)**

IMMUNOLOGY

Analysis of the wheal-and-flare reactions that follow the intradermal injection of histamine and morphine in adults with recurrent, unexplained anaphylaxis and systemic mastocytosis. Keffer JM, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):595–601

PATHOLOGY

Human bone marrow mast cells in systemic mast cell disease. Ultrastructure and evaluation of fixation and staining techniques. Gabriel LC, et al. **Allergy** 1988 Aug;43(6):430–4

Mastocytosis in infants and children: recognition of patterns of skin disease. Kirshenbaum AS, et al. **Allergy Proc** 1989 Jan–Feb;10(1):17–21

Malignant systemic mastocytosis. Jane SM, et al. **Aust N Z J Med** 1988 Jun;18(4):610–2

Intestinal mucosal mast cells: enumeration in urticaria pigmentosa and systemic mastocytosis. Ferguson J, et al. **Br J Dermatol** 1988 Nov;119(5):573–8

Liver findings in generalized mastocytosis. A clinicopathologic study. Horny HP, et al. **Cancer** 1989 Feb 1;63(3):532–8 (85 ref.)

Lectin-binding studies of a human skin mastocytoma. Schumacher U, et al. **Histochem J** 1989 Jan;21(1):44–6

Cutaneous mast cell quantity in pruritic and nonpruritic hemodialysis patients. Klein LR, et al. **Int J Dermatol** 1988 Oct;27(8):557–9

A survey of the number and distribution of mast cells in the skin of patients with mast cell disorders. Garriga MM, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):425–32

Pathology of the lymph node and spleen in systemic mast cell disease. Travis WD, et al. **Mod Pathol** 1988 Jan; 1(1):4–14

[Significance of the presence of mastocytes in bronchoalveolar lavage in the diagnostic evaluation of diffuse interstitial lung diseases] Moisés JA, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):454–6 (Eng. Abstr.) **(Spa)**

[Systemic mastocytosis] Almagro Sanchez M, et al. **Med Cutan Ibero Lat Am** 1988;16(3):213–8 (Eng. Abstr.) **(Spa)**

[Urticaria pigmentosa and systemic mastocytosis] Roupe G. **Lakartidningen** 1989 Apr 12;86(15):1370–2 **(Swe)**

PHYSIOPATHOLOGY

Gastric acid secretion in systemic mastocytosis [letter; comment] Cherner JA. **N Engl J Med** 1989 Jun 8; 320(23):1562. **Comment on:** N Engl J Med 1988 Dec 29;319(26):1707–15

RADIOGRAPHY

Case report 561: Systemic mastocytosis. Schweitzer ME, et al. **Skeletal Radiol** 1989;18(5):411–3

RADIONUCLIDE IMAGING

Mastocytosis: scintigraphic findings with bony involvement. Malley MJ, et al. **Clin Nucl Med** 1988 Sep;13(9):673–4

VETERINARY

Ocular mastocytosis in a horse. Hum S, et al. **Aust Vet J** 1989 Jan;66(1):32

Systemic mastocytosis in 16 dogs. O'Keefe DA, et al. **J Vet Intern Med** 1987 Apr–Jun;1(2):75–80

MASTOCYTOSIS, BULLOUS see **URTICARIA PIGMENTOSA**

MASTOCYTOSIS, DIFFUSE CUTANEOUS see **URTICARIA PIGMENTOSA**

MASTOID

Chondromyxoid fibroma of the mastoid invading the occipital bone. Kitamura K, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):384–6

A neck mass as an unusual complication of aural cholesteatoma [letter] Aberbach A, et al. **Ear Nose Throat J** 1988 Oct;67(10):780–1

A unilateral mesenchymal disorder of the head. Raman R, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):143–5

Recurrent meningitis associated with meningioma of the mastoid cavity. Kelleher RJ, et al. **J Laryngol Otol** 1989 Jan;103(1):99–100

Pain in the sternocleidomastoid muscle and occlusal interferences. Kohno S, et al. **J Oral Rehabil** 1988 Jul; 15(4):385–92

Extra-mastoid cholesteatoma with upper neck extension. Sinanan EG. **J Otolaryngol** 1988 Oct;17(6):308–10

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 14–1989. An 82-year-old woman with a complete left facial palsy and a left mastoid mass. **N Engl J Med** 1989 Apr 6; 320(14):924–30

ABNORMALITIES

Mastoid abnormalities in Down syndrome. Glass RB, et al. **Pediatr Radiol** 1989;19(5):311–2

ANATOMY & HISTOLOGY

[Anatomic characteristics of the mastoid in children. Pneumatization of the subfacial region] Contencin P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):259–62 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Objective tinnitus associated with abnormal mastoid emissary vein. Forte V, et al. **J Otolaryngol** 1989 Aug;18(5):232–5

INJURIES

[Difficulties in the differential diagnosis of primary and secondary (post-traumatic) subarachnoid hemorrhage] Kawiak W, et al. **Wiad Lek** 1988 Oct 15;41(20):1390–2 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Mastoid pneumatization in otosclerosis. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):451–4

MRI of mastoid and middle ear disease. Holliday RA, et al. **Radiol Clin North Am** 1989 Mar;27(2):283–99 (34 ref.)

[Mastoid pneumatization in cholesteatoma] Sato Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1933–7 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

A comparative study of the pneumatization of the mastoid air cells and the frontal and maxillary sinuses. Thomas A, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S88

RADIOGRAPHY

Spontaneous extracranial pneumatocele associated with mastoid hyperpneumatization. Levenson MJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):107–8

Primary cholesteatoma of the mastoid presenting as cervical abscess. el-Kholy AA, et al. **J Laryngol Otol** 1989 Jan; 103(1):92–3

[Clinical investigation on pneumatization of the temporal bone. 3. Comparison of the size of the mastoid air cell system of patients with Menière's disease and normals] Yachiyama H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov; 91(11):1928–32 (Eng. Abstr.) **(Jpn)**

SURGERY

Modified radical mastoidectomies as gas pockets. Sadé J, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):456–9

Facial nerve palsy following tympanmastoid surgery [letter] Madden G. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):635

Water contamination and swimming with the open mastoid cavity. Bingham BJ, et al. **Clin Otolaryngol** 1988 Oct; 13(5):347–50

Anatomical and functional reconstruction of old radical mastoidectomy cavities by obliteration tympanoplasty. Charachon R, et al. **Clin Otolaryngol** 1989 Apr;14(2):121–6

An avoidable occupational hazard during mastoid surgery. Lannigan FJ, et al. **J Laryngol Otol** 1989 Jun;103(6):566

Tensa retraction cholesteatoma: treatment and long-term results. Lau T, et al. **J Laryngol Otol** 1989 Feb; 103(2):149–57

Unexplained neurological problems after mastoid surgery. Osammor JY, et al. **J Laryngol Otol** 1989 Mar; 103(3):269–71 (7 ref.)

Obliteration of mastoid cavities using bone pâté. Solomons NB, et al. **J Laryngol Otol** 1988 Sep;102(9):783–4

Surgical management of the discharging mastoid cavity. Mills RP. **J Laryngol Otol Suppl** 1988;16:1–6

Sink-trap effect as a cause of failure in mastoidectomy. Goldenberg RA. **Laryngoscope** 1988 Oct;98(10):1143–4

Intact canal wall tympanoplasty with mastoidectomy for cholesteatoma: long-term follow-up. Kinney SE. **Laryngoscope** 1988 Nov;98(11):1190–4

Treatment of the intractable chronically draining mastoid cavity with hydroxylapatite covered with temporalis flap. Lenis A. **Laryngoscope** 1988 Nov;98(11):1271–2

The flexible/intact-bridge tympanomastoidectomy technique [published erratum appears in Otolaryngol Clin North Am 1989 Apr;22(2):ix] Alleva M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):41–9

Techniques of tympanomastoidectomy. Portmann M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):29–40

High-frequency electrostimulation hearing after mastoidectomy. Hegewald M, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):49–56

Transmastoid labyrinthectomy: reliable surgical management of vertigo. Kemink JL, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):5–10

Nocardia asteroides brain abscess following mastoidectomy. Cox F, et al. **Pediatr Neurol** 1986 May–Jun;2(3):183–4

Total ear canal ablation combined with lateral bulla osteotomy for end-stage otitis in dogs. Results in thirty dogs. Mason LK, et al. **Vet Surg** 1988 Sep–Oct;17(5):263–8

[Mastoidectomy and seromucous otitis] Narcy P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):263–7 (19 ref.) (Eng. Abstr.) **(Fre)**

[Neuroendocrine carcinoma in the cavity of radical mastoidectomy] Monteagudo-Castro JC, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):669–79 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

[Repair of the attic wall by a mastoid osteofibrous graft] Desaulty A, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(1):71–2 (Eng. Abstr.) **(Fre)**

MASTOIDITIS

Mastoiditis. Scheibel WR, et al. **Am Fam Physician** 1987 Jun; 35(6):123–7

COMPLICATIONS

Modern presentations of Bezold's abscess. Smouha EE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep; 115(9):1126–9

Complications of ear disease. Yaniv E, et al. **Clin Otolaryngol** 1988 Oct;13(5):357–61

Sinusitis: hidden source of sepsis in postoperative pediatric intensive care patients. Bos AP, et al. **Crit Care Med** 1989 Sep;17(9):886–8

A swollen cheek, an unusual course of acute mastoiditis. Warnaar A, et al. **Int J Pediatr Otorhinolaryngol** 1989 May; 17(2):179–83

[A combination of cerebrovascular pathology and bilateral mastoiditis] Ternovoĭ AV, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):65–6 **(Rus)**

DIAGNOSIS

Aneurysmal bone cyst masquerading as acute mastoiditis. deVries EJ, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):613–6

[Protein analytic studies in children with mastoiditis] Nischwitz AS, et al. **Padiatr Grenzgeb** 1989;28(1):61–70 (Eng. Abstr.) **(Ger)**

[Long-term evolution of chronic suppurative otomastoiditis] Ataman T, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):193–6 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

Ciprofloxacin for the treatment of chronic ear disease. Piccirillo JF, et al. **Laryngoscope** 1989 May;99(5):510–3

Tuberculous mastoiditis and laryngitis [letter] Mukerjee CM. **Med J Aust** 1989 Apr 17;150(8):468

ETIOLOGY

Emergency presentation of coalescent mastoiditis. Rogers SM, et al. **Am J Emerg Med** 1989 Jul;7(4):413–6

[Otitis media, petrositis and Gradenigo's syndrome] van Wieringen PM, et al. **Tijdschr Kindergeneeskd** 1989 Apr; 57(2):63–6 (Eng. Abstr.) **(Dut)**

[Human lagochilascariasis in Venezuela: description of a fatal

case] Orihuela R, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):217-21 (22 ref.) (Eng. Abstr.) (Spa)

RADIOGRAPHY

Tuberculous mastoiditis and laryngitis: a case report. Bryan PA, et al. **Med J Aust** 1989 Jan 2;150(1):41-3

SURGERY

[General anesthesia with kalipsol during operations on the temporal bone in children] Tikhonova GV. **Anesteziol Reanimatol** 1988 Jul-Aug;(4):61-2 (Eng. Abstr.) (Rus)

MASTOMYS see MURIDAE

MASTURBATION

Asphyxiophilia in Scandinavia. Innala SM, et al. **Arch Sex Behav** 1989 Jun;18(3):181-9

Androgynous masturbatory behavior as a schizoid phenomenon. Eber M, et al. **Bull Menninger Clin** 1988 Sep; 52(5):404-9

Clinical improvements of specific seminal deficiencies via intercourse with a seminal collection device versus masturbation. Zavos PM, et al. **Fertil Steril** 1989 Jan; 51(1):190-3

Ethics of mandatory masturbation [letter] Egilman D. **J Occup Med** 1988 Dec;30(12):992-3

Contraction of HIV infection during mutual masturbation [letter] **S Afr Med J** 1988 Nov 5;74(9):469-71 (Eng, Afr)

COMPLICATIONS

[A tumor-like lesion of the parametrium caused by foreign body of the bladder] Sprogis J, et al. **Ginekol Pol** 1988 Dec;59(12):755-7 (Eng. Abstr.) (Pol)

[Complications caused by long-term presence of a foreign body in the bladder] Shpize'l S, et al. **Sov Med** 1989; (4):119-21 (Rus)

DRUG EFFECTS

Use of lithium carbonate in the treatment of autoerotic asphyxia. Cesnik JA, et al. **Am J Psychother** 1989 Apr; 43(2):277-86

PSYCHOLOGY

Self-mutilation [letter] Siomopoulous V. **Hosp Community Psychiatry** 1989 Aug;40(8):856-7

Enuresis following masturbation in a mentally retarded adolescent. Rockney RM, et al. **J Adolesc Health Care** 1989 Mar;10(2):165-7

MATERIA ALBA see DENTAL DEPOSITS

MATERIA MEDICA

see related
MEDICINE, TRADITIONAL

Effects of repeated administration of deer antler extract on biochemical changes related to aging in senescence-accelerated mice. Wang BX, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2587-92

Stimulating effect of deer antler extract on protein synthesis in senescence-accelerated mice in vivo. Wang BX, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2593-8

Traditional Chinese infant supplementary medical foods given by mothers in Hong Kong. Sung RY, et al. **Early Hum Dev** 1988 Aug-Sep;17(2-3):157-63

The anti-aging effect of pearl oyster shell powder (POSP). Tong ZH, et al. **J Tradit Chin Med** 1988 Dec;8(4):247-50

Effect of a Chinese medicine "kyushin" on serum digoxin concentration measurement in dogs. Lin CS, et al. **Jpn Circ J** 1989 Feb;53(2):108-12

[CT changes in patients with cerebrovascular disease treated with kangcu pills] Guo FL. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):609-10, 582 (Eng. Abstr.) (Chi)

[Preliminary study on the therapeutic effect and pharmacological action of an earthworm extract] Guo FT, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):400-1, 387 (Eng. Abstr.) (Chi)

[Longdan jiechuan decoction in the management of bronchial asthma] Liang GH, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):22-3, 5 (Eng. Abstr.) (Chi)

[Clinical and experimental studies on naoxuekang in treating hypertensive cerebral hemorrhage] Xie DZ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):341-3, 324 (Eng. Abstr.) (Chi)

[Comparative study on pharmacological function of back-shell and plastron of tortoise] Yang MX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):279-81, 262 (Eng. Abstr.) (Chi)

[Growth capability of epithelial cell line of human poorly differentiated nasopharyngeal carcinoma and its response to Chinese medicinal herbs and marine drugs] Zhao ML, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar; 10(2):98-101 (Eng. Abstr.) (Chi)

[The tendencies of research on Chinese materia medica in Japan—establishment of morbid models in animals and their application to research on Chinese materia medica] Chen T. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):3-5, 33, 61 (30 ref.) (Eng. Abstr.) (Chi)

[Effects of Ejiao (colla corii asini) on the hemodynamics, hemorheology and microcirculation during endotoxin shock in dogs] Yao DF, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):44-6, 64 (Eng. Abstr.) (Chi)

[An investigation of medicinal concha ostreae of Xinghua City, Jiangsu Province] Zhang HB, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):6-7, 61 (Eng. Abstr.) (Chi)

[Studies on calculus bovis by FTIR-PAS] Zhao DY, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):34-6, 63 (Eng. Abstr.) (Chi)

[Comparative studies on the pharmacological activities of muskrat and musk] Chen YS. **Chung Yao Tung Pao** 1988 May;13(5):46-7, 64 (Eng. Abstr.) (Chi)

[Chemical composition of artificial and natural bear bile compared by thin layer and paper chromatography] Guo YW, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):41-3, 64 (Eng. Abstr.) (Chi)

[Chemical reactions in the preparation of baisheng dan and baijiang dan] Meng NC. **Chung Yao Tung Pao** 1988 Sep; 13(9):25-8, 62 (Eng. Abstr.) (Chi)

[Identification and partial comparison of the chemical components of the tortoise-plastron of Testudo impressa (Guenther) and Chinemys reevesii (Gray)] Wang JY, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):6-7, 61 (Eng. Abstr.) (Chi)

[Identification of jecur Lutra and its adultrants] Wu JL. **Chung Yao Tung Pao** 1988 May;13(5):8-13, 61 (Eng. Abstr.) (Chi)

[An improved method of realgar processing] Yuan ST. **Chung Yao Tung Pao** 1988 Aug;13(8):17-21, 62 (Eng. Abstr.) (Chi)

[TLC-colorimetric assay of cholic acid in bezoars and angong niuhuang pills] Zang FH, et al. **Chung Yao Tung Pao** 1988 Dec;13(12):28-30, 59 (Eng. Abstr.) (Chi)

[Optimum technical condition for heating and quencing calamine] Zhang R. **Chung Yao Tung Pao** 1988 May; 13(5):23-4, 62 (Eng. Abstr.) (Chi)

[Scanning electron-microscopical observation of natural and cultured ox gallstones] He CY, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):956-61 (Eng. Abstr.) (Chi)

[Studies of chemical constituents of Manis pentadactyla] Ma XM, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):588-92 (Eng. Abstr.) (Chi)

[The pharmacological activities of musk. II. The anti-inflammatory activity of the active components of musk] Zhu XY, et al. **Yao Hsueh Hsueh Pao** 1988 Jun; 23(6):406-10 (Eng. Abstr.) (Chi)

HISTORY

Insect-derived crude drugs in the Chinese Song dynasty. Namba T, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):247-85

An early colonial pharmacopoeia: a drug list and its materia medica for an Australian convict settlement. Pearn J, et al. **Med J Aust** 1988 Dec 5-19;149(11-12):630-4

[Ancient Czech gastronomy] Palivec V. **Cas Lek Cesk** 1989 Jan 13;128(3):93 (Cze)

[The history of scopolamine—with special reference to its use in anesthesia] Soban D, et al. **Anaesthesiol Reanim** 1989; 14(1):43-54 (Eng. Abstr.) (Ger)

[A manuscript of home medicine prescriptions from the 18th century. V.] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):597-600 (Rum)

[A manuscript of home remedy prescriptions from the 18th century. 6. (conclusion)] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct-Dec; 92(4):779-81 (Rum)

MATERIALS MANAGEMENT, HOSPITAL

Effects of bar coding on a pharmacy stock replenishment system. Chester MI, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1380-5

The right equipment... in working order. Bloom G. **World Health Forum** 1989;10(1):3-10; discussion 11-27

ECONOMICS

Inventory management. Economic order quantity—economic order period. **Radiol Technol** 1988 Sep-Oct;60(1):54-5

[The role of day hospitals in the rational use of the hospital bed fund] Poliakova KA, et al. **Sov Zdravookhr** 1988; (8):11-2 (Eng. Abstr.) (Rus)

[Hospital activity related to a stage II experiment regarding intensification of the use of hospital beds] Semenov VIu. **Sov Zdravookhr** 1989;(4):22-6 (Eng. Abstr.) (Rus)

METHODS

Stockless inventory: state-of-the-art materials management. Eull J. **Dimens Health Serv** 1988 Nov;65(8):26-8

ORGANIZATION & ADMINISTRATION

Developing an efficient inventory control system. Young CD, et al. **AORN J** 1988 Nov;48(5):970-5

Quality assurance in transition. Ben-Zvi S. **Biomed Instrum Technol** 1989 Jan-Feb;23(1):27-33

Execs speak up about materials management role. Souhrada L. **Hospitals** 1989 Jul 5;63(13):67-8

STANDARDS

Recommended practices. Traffic patterns in the surgical suite. **AORN J** 1989 Mar;49(3):865-6, 870

STATISTICS & NUMERICAL DATA

Materials management in investor-owned, nonprofit government, and other general hospitals. Young ST. **Health Care Manage Rev** 1989 Spring;14(2):57-62

TRENDS

What changes will medical equipment managers face in the next five years? [interview by Michael J. Miller] Gordon GJ, et al. **Biomed Instrum Technol** 1989 Jan-Feb;23(1):11-5

Purchasing, product-line strategy meet in '89. Souhrada L. **Hospitals** 1989 Jan 5;63(1):70

MATERIALS TESTING

Evaluation of glove material resistance to ethylene glycol dimethyl ether permeation. Menke R, et al. **Am Ind Hyg Assoc J** 1988 Aug;49(8):386-9

Factors which influence the accuracy of corrosion rate determination of implant materials. Bundy KJ, et al. **Ann Biomed Eng** 1989;17(2):159-75

Resorbable structured porous materials in the healing process of hard tissue defects. Jamshidi K, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):755-60

In vitro testing of bioprostheses. Reul H, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):1033-9

Challenge of phagocyte metabolism by extracorporeal circulation and membrane contact. A biocompatibility test. Vanholder RC, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):543-5

A year of anniversaries [editorial] Harcourt JK. **Aust Dent J** 1988 Oct;33(5):433-4

Current activities of the Australian Dental Standards Laboratory. Tyas MJ. **Aust Dent J** 1988 Oct;33(5):355-63

Contribution of hydroxyapatite to the tensile strength of the isobutyl-2-cyanoacrylate-bone bond. Papatheofanis FJ. **Biomaterials** 1989 Apr;10(3):185-6

Wear of ion-implanted pure titanium against UHMWPE. Röstlund T, et al. **Biomaterials** 1989 Apr;10(3):176-81

Titanium-hydrogen peroxide interaction: model studies of the influence of the inflammatory response on titanium implants. Tengvall P, et al. **Biomaterials** 1989 Apr; 10(3):166-75

Objective evaluation of insert material for diabetic and athletic footwear. Brodsky JW, et al. **Foot Ankle** 1988 Dec; 9(3):111-6

Relating the surface properties of intraocular lens materials to endothelial cell adhesion damage. Mateo NB, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):853-60

The in vivo biodegradation of nylon 6 utilized in a particular IUD. Hudson JA, et al. **J Biomater Appl** 1987 Apr; 1(4):487-501

Chemical modification of polyurethanes by radiation-induced grafting. Jansen B. **J Biomater Appl** 1987 Apr;1(4):502-32 (52 ref.)

Characterization of Hexsyn, a polyolefin rubber. McMillin CR. **J Biomater Appl** 1987 Jul;2(1):3-100

Autooxidative degradation of implanted polyether polyurethane devices. Stokes K, et al. **J Biomater Appl** 1987 Apr;1(4):411-48

Poly(ether) urethane reactivity with metal-ion in calcification and environmental stress cracking. Thoma RJ. **J Biomater Appl** 1987 Apr;1(4):449-86

An arterial prosthesis from Argentina: the Barone Microvelour arterial graft. Torché D, et al. **J Biomater Appl** 1989 Jan;3(3):427-53

Softening of thermoplastic polyurethanes: a structure/property study. Zdrahala RJ, et al. **J Biomater Appl** 1988 Apr;2(4):544-61

Effect of specimen size on work-of-fracture measurements. Rogers LL, et al. **J Biomech** 1988;21(11):919-26

Selection of transducer material for use with 'optical' foot pressure systems. Franks CI, et al. **J Biomed Eng** 1988 Jul; 10(4):365-7

Flexible device for vertebral body replacement. Main JA, et al. **J Biomed Eng** 1989 Mar;11(2):113-7

Characterization of morphologic and mechanical properties of surgical mesh fabrics. Chu CC, et al. **J Biomed Mater Res** 1985 Oct;19(8):903-16

Properties and biological interactions of polyurethane anionomers: effect of sulfonate incorporation. Grasel TG, et al. **J Biomed Mater Res** 1989 Mar;23(3):311-38

Determination of residual stresses in denture base polymers using the layer removal technique. Murphy KM, et al. **J Biomed Mater Res** 1985 Oct;19(8):971-80

Creep studies of multiphase acrylic systems. Oysaed H, et al. **J Biomed Mater Res** 1989 Jul;23(7):719-33

Effect of palladium on sulfide tarnishing of noble metal alloys. Suoninen E, et al. **J Biomed Mater Res** 1985 Oct; 19(8):917-34

Compressive properties of polymer coated synthetic hydroxyapatite for bone grafting. Tencer AF, et al. **J Biomed Mater Res** 1985 Oct;19(8):957–69

Evaluation of the chemical, optical, and mechanical properties of elastomeric intraocular lens materials and their clinical significance. Christ FR, et al. **J Cataract Refract Surg** 1989 Mar;15(2):176–84

Correlation of dental amalgam crevice corrosion with clinical ratings. Sutow EJ, et al. **J Dent Res** 1989 Feb;68(2):82–8

Bond strength of joined posterior light–cured composites: comparison of surface treatments. Eli I, et al. **J Prosthet Dent** 1988 Aug;60(2):185–9

A comparison of two post systems under applied compressive–shear loads. Greenfeld RS, et al. **J Prosthet Dent** 1989 Jan;61(1):17–24

Tests of two new polyurethane foam wheelchair tires. Gordon J, et al. **J Rehabil Res Dev** 1989 Winter;26(1):33–46

Subjective distress during continuous enteral alimentation: superiority of silicone rubber to polyurethane. Herrmann ME, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):281–5

The influence of Encephalitozoon cuniculi on neural tissue responses to implanted biomaterials in the rabbit. Ansbacher L, et al. **Lab Anim Sci** 1988 Dec;38(6):689–95

Low–technology sealing method for implantable hermetic packages. Donaldson ND. **Med Biol Eng Comput** 1988 Jan; 26(1):111–6

Metallurgical evaluation of retrieved implants and correlation of failures to patient record data. Zardiackas LD, et al. **Orthopedics** 1989 Jan;12(1):85–92

Pedicle screws: axial pull–out strength in the lumbar spine. Sell P, et al. **Spine** 1989 Sep;13(9):1075–6

[Laboratory testing of 28 commercially available total hip prostheses] Langlais F, et al. **Rev Chir Orthop** 1988;74 Suppl 2:353–66 **(Fre)**

[Visco–elastic characteristics of various posterior composite resins] Pettini PL, et al. **Minerva Stomatol** 1988 Oct; 37(10):775–8 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Design and development of a versatile hip joint simulator and a preliminary assessment of wear and creep in Charnley total replacement hip joints. Dowson D, et al. **Eng Med** 1988 Jul;17(3):111–7

Technical note: a mains drop–out simulator. Norwood HM. **J Med Eng Technol** 1988 Sep–Oct;12(5):224–5

Cytotoxicity of dental composites and other materials in a new in vitro device. Hanks CT, et al. **J Oral Pathol** 1988 Sep;17(8):396–403

METHODS

Using immersion test data to screen chemical protective clothing. Stampfer JF, et al. **Am Ind Hyg Assoc J** 1988 Nov;49(11):579–83

A method of testing the union between glass ionomer cement and composite resin. Mount GJ. **Aust Dent J** 1988 Dec; 33(6):462–6

Growth of osteoblasts on porous calcium phosphate ceramic: an in vitro model for biocompatibility study. Cheung HS, et al. **Biomaterials** 1989 Jan;10(1):63–7

Biomembranes as models for polymer surfaces. V. Thrombelastographic studies of polymeric lipids and polyesters. Hall B, et al. **Biomaterials** 1989 May; 10(4):219–24

Characterization of the inner surface of tubular substrates by contact angle measurement. Steinhauser H, et al. **Biomaterials** 1989 Apr;10(3):213–4

Factors and interactions affecting the performance of polyurethane elastomers in medical devices. Coury AJ, et al. **J Biomater Appl** 1988 Oct;3(2):130–79 (85 ref.)

Controlled release of diphosphonates from synthetic polymers to inhibit calcification. Golomb G. **J Biomater Appl** 1987 Oct;2(2):266–89

Antithrombogenic heparin–bound polyurethanes. Ito Y. **J Biomater Appl** 1987 Oct;2(2):235–65 (158 ref.)

Hemocompatibility of hydrogel with polyethyleneoxide chains. Nakao A, et al. **J Biomater Appl** 1987 Oct; 2(2):219–34

Strategies for biological testing of biomaterials. Northup SJ. **J Biomater Appl** 1987 Jul;2(1):132–48 (7 ref.)

Biomedical applications of polyurethanes: implications of failure mechanisms. Phillips RE, et al. **J Biomater Appl** 1988 Oct;3(2):207–27 (25 ref.)

The use of silicone/polyurethane graft polymers as a means of eliminating surface cracking of polyurethane prostheses. Pinchuk L, et al. **J Biomater Appl** 1988 Oct;3(2):260–96

A review of structural and material properties of vascular grafts. Pourdeyhimi B, et al. **J Biomater Appl** 1987 Oct; 2(2):163–204 (166 ref.)

Introduction of surface functional groups onto biomaterials by glow discharges. Sharma CP, et al. **J Biomater Appl** 1987 Oct;2(2):205–18

Polyether polyurethanes: biostable or not? Stokes KB. **J Biomater Appl** 1988 Oct;3(2):228–59

Biostability of polyurethane elastomers: a critical review. Szycher M. **J Biomater Appl** 1988 Oct;3(2):297–402 (48 ref.)

Ionic interactions of polyurethanes. Thoma RJ, et al. **J Biomater Appl** 1988 Oct;3(2):180–206 (33 ref.)

Current concepts for assessing blood compatibility: small diameter vascular prostheses. Vale BH. **J Biomater Appl** 1987 Jul;2(1):149–59 (32 ref.)

Biomechanics of curved surgical needle bending. Abidin MR, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):129–43

Porosity of surgical mesh fabrics: new technology. Pourdeyhimi B. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):145–52

Improved procedure for surface analysis of explanted intraocular lenses by combined light microscopy and scanning electron microscopy. Stacholy J, et al. **J Cataract Refract Surg** 1989 Mar;15(2):215–7

Biocompatibility testing of a posterior composite and dental cements using a new organ culture model. Hetem S, et al. **J Dent** 1989 Aug;17(4):155–61

In vivo wear. Part II: Wear and abrasion of composite restorative materials. Bloem TJ, et al. **J Prosthet Dent** 1988 Aug;60(2):242–9

In vitro two–body wear of three veneering resins. Gallegos LI, et al. **J Prosthet Dent** 1988 Aug;60(2):172–8

Measuring fracture toughness of high–impact poly(methyl methacrylate) with the short rod method. Neihart TR, et al. **J Prosthet Dent** 1988 Aug;60(2):249–53

Effects of bat composition, grip firmness, and impact location on postimpact ball velocity. Weyrich AS, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):199–205

A method for the assessment of area–elastic surfaces. Yeadon MR, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):403–7 (16 ref.)

A simple in vitro test to evaluate biocompatibility of dialysis membranes. Vincent D, et al. **Nephrol Dial Transplant** 1989; 4(4):306–8

The chick chorioallantoic membrane as test system for biocompatible materials. Spanel–Borowski K. **Res Exp Med (Berl)** 1989;189(1):69–75

Segmental spinal instrumentation. A study of the mechanical properties of materials used for subluminar fixation. Crawford RJ, et al. **Spine** 1989 Jun;14(6):632–5

Material thrombelastography: an assessment of phosphorylcholine compounds as models for biomaterials. Bird RR, et al. **Thromb Res** 1988 Sep 1;51(5):471–83

[A method for the standardized in vitro testing of biomaterials with bacterial cultures] Schubert R, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):66–73 (Eng. Abstr.) **(Ger)**

[The production of eluates for testing acute cytotoxicity by a new method] Schubert T, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):74–82 (Eng. Abstr.) **(Ger)**

STANDARDS

An investigation of Bioglass powders: quality assurance test procedure and test criteria. Warren LD, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):201–9

[Biological testing of biomaterials in the framework of permitted procedures. 2.] Jacker HJ, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):302–12 (Eng. Abstr.) **(Ger)**

MATERNAL AGE

Age at first pregnancy and the viral etiology of cervical neoplasia. Burger MP, et al. **Acta Obstet Gynecol Scand** 1988;67(8):689–94

Pregnancy in a 50–year–old. Helm P, et al. **Acta Obstet Gynecol Scand** 1988;67(4):373–4

Maternal serum alpha–fetoprotein prenatal screening for Down syndrome. Boots LR, et al. **Ala Med** 1989 Jul; 59(1):25–7

Combined effect of childbearing, menstrual events, and body size on age–specific breast cancer risk. Kampert JB, et al. **Am J Epidemiol** 1988 Nov;128(5):962–79

Children, age at first birth, and colorectal cancer risk. Data from the Melbourne Colorectal Cancer Study. Kune GA, et al. **Am J Epidemiol** 1989 Mar;129(3):533–42

Maternal age–specific rates of chromosome abnormalities at chorionic villus study: a revision [letter] Hook EB, et al. **Am J Hum Genet** 1989 Sep;45(3):474–7

Prevalence of dominant mutations in Spain: effect of changes in maternal age distribution. Martínez–Frías ML, et al. **Am J Med Genet** 1988 Dec;31(4):845–52

AFP and age screening for Down syndrome. Wald N, et al. **Am J Med Genet** 1988 Sep;31(1):197–209

Combining maternal serum alpha–fetoprotein measurements and age to screen for Down syndrome in pregnant women under age 35. New England Regional Genetics Group Prenatal Collaborative Study of Down Syndrome Screening. **Am J Obstet Gynecol** 1989 Mar;160(3):575–81

Late maternal age and postdate pregnancy. Shapiro H, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):909–12

Maternal age in trisomy. Morton NE, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):227–35

A community–based study of parental age at the birth of patients with dementia of the Alzheimer type. Urakami K, et al. **Arch Neurol** 1989 Jan;46(1):38–9

First pregnancy at 47 years of age after 20 years of amenorrhoea. Lam SY, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):152–3

Maternal age, illegitimacy, and postneonatal mortality. Gordon RR, et al. **BMJ** 1988 Sep 24;297(6651):774

Reproductive factors and the risk of invasive and intraepithelial cervical neoplasia. Parazzini F, et al. **Br J Cancer** 1989 May;59(5):805–9

Schizophrenia, season of birth, and maternal age. Dalén P. **Br J Psychiatry** 1988 Dec;153:727–33 (29 ref.)

Risk effect of maternal age in Pallister i(12p) syndrome. Wenger SL, et al. **Clin Genet** 1988 Sep;34(3):181–4

Sexual immaturity and maternal age: incidence of aneuploidy and polyploidy in first–cleavage mouse embryos. Catala V, et al. **Cytogenet Cell Genet** 1988;48(4):233–7

Dear ol' mom [letter] Barklind A, et al. **Diabetes Care** 1983 Sep–Oct;6(5):526–7

Perinatal mortality and mother's marital status at birth in subsequent siblings. Skjaerven R, et al. **Early Hum Dev** 1988 Dec;18(2–3):199–212

Effect of maternal age and number of in vitro fertilization procedures on pregnancy outcome. Padilla SL, et al. **Fertil Steril** 1989 Aug;52(2):270–3

Motor and mental development in relation to certain maternal characteristics. Katiyar GP, et al. **Indian Pediatr** 1988 Dec; 25(12):1159–64

A prospective study of the independent effects of parity and age at first birth on breast cancer incidence in England and Wales. Leon DA. **Int J Cancer** 1989 Jun 15; 43(6):986–91

Parental age and cancer risk in offspring [letter] Neutel I, et al. **Int J Epidemiol** 1988 Dec;17(4):928–9

The effect of maternal age on primary cesarean section rate. Witter FR, et al. **Int J Gynaecol Obstet** 1988 Aug; 27(1):51–5

Maternal age at last birth in Egypt. Horne AD, et al. **J Biosoc Sci** 1988 Jul;20(3):313–20

Correlates of depression according to maternal age. Reis J. **J Genet Psychol** 1988 Dec;149(4):535–45

The maternal age associated with maximal newborn birthweight: Thailand 1982–1983. Nondasuta A, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:2–5

Parental age and motor neuron disease. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):618–21

Outcomes of mature primiparas in an out–of–hospital birth center. Holz K, et al. **J Nurse Midwifery** 1989 Jul–Aug; 34(4):185–9

A comparison of young teenage, older teenage, and adult mothers on determinants of parenting. Reis J. **J Psychol** 1989 Mar;123(2):141–51

Proceedings of a workshop on 'Oral contraception for women over 35'. Lausanne (Switzerland), 4–5 March 1988. **Maturitas** 1988;Suppl 1:1–175

Maternal mortality, fetal death, congenital anomalies and infant mortality at an advanced maternal age. Czeizel A. **Maturitas** 1988;Suppl 1:73–81

Contraceptive needs of women over 35. Ketting E. **Maturitas** 1988;Suppl 1:23–38

Historical overview of fertility and age. Toulemon L. **Maturitas** 1988;Suppl 1:5–14 (12 ref.)

Obstetrical risks of pregnancy and childbirth after age 35. Utian WH, et al. **Maturitas** 1988;Suppl 1:63–72

Pregnancy risk in women over 35. Erickson D, et al. **Minn Med** 1988 Jul;71(7):433–6

Lack of effect of maternal age on UV–induced DNA repair in mouse oocytes. Guli CL, et al. **Mutat Res** 1989 Feb; 210(2):323–8

Maternal age and screening for gestational diabetes: a population–based study [letter] Barss V, et al. **Obstet Gynecol** 1989 Aug;74(2):286–8

Maternal age and screening for gestational diabetes: a population–based study. Coustan DR, et al. **Obstet Gynecol** 1989 Apr;73(4):557–61

Nongenetic implications of childbearing after age thirty–five. Fonteyn VJ, et al. **Obstet Gynecol Surv** 1988 Dec; 43(12):709–20 (21 ref.)

American Academy of Pediatrics Committee on Adolescence: Care of adolescent parents and their children. **Pediatrics** 1989 Jan;83(1):138–40

Prenatal diagnosis of 45,X/46,XX mosaicism in the fetus. Should the pregnancy be terminated? Kulkarni R, et al. **Prenat Diagn** 1989 Jun;9(6):439–41

Prenatal diagnosis and psychological distress: amniocentesis or chorionic villus biopsy? Sjögren B, et al. **Prenat Diagn** 1989 Jul;9(7):477–87

The spindle of mammalian oocytes: alterations in morphology and progression through meiosis with maternal age. Eichenlaub–Ritter U. **Prog Clin Biol Res** 1989;311:199–220

Non disjunction and maternal age in the mouse. Estop A. **Prog Clin Biol Res** 1989;311:221–44 (60 ref.)

Issues pertaining to the impact and etiology of trisomy 21 and other aneuploidy in humans; a consideration of evolutionary implications, maternal age mechanisms, and other matters. Hook EB. **Prog Clin Biol Res** 1989;311:1–27 (47 ref.)

An investigation of factors influencing the survival of trisomic fetuses in the mouse. Vekemans M. **Prog Clin Biol Res** 1989;311:245–62

The effect of maternal age on the frequency of trisomy: change in meiosis or in utero selection? Warburton D. **Prog Clin Biol Res** 1989;311:165–81 (31 ref.)

Trends and variations in first births to older women, United States, 1970–86. Ventura SJ. **Vital Health Stat [21]** 1989 Jun;(47):1–27

[Effect of age on the prognosis of sterility and the outcome of pregnancy] Popov I, et al. **Akush Ginekol (Sofiia)** 1988; 27(6):66–72 (Eng. Abstr.) **(Bul)**

[Fertility and reproductive risks in older women in Czechoslovakia] Stejskal D, et al. **Cesk Gynekol** 1989 Apr; 54(3):161–7 (Eng. Abstr.) **(Cze)**

[Pregnancy and fertility in older women] van der Schoor L, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2137–9

(Dut)
[Pregnancy and delivery after the age of 40] Denax A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(2):213–21 (Eng. Abstr.) (Fre)
[Clinical experiences with late mothers and their wished for children] Berger M. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jan;38(1):16–24 (Eng. Abstr.) (Ger)
[Use of the new East German percentiles in the classification of newborn infants] Jährig K, et al. **Zentralbl Gynakol** 1989; 111(6):350–5 (Eng. Abstr.) (Ger)
[East German percentile values for newborn infants—1985 relation of age, parity, body weight and height of the mother and the birth weight of newborn infants] Voigt M, et al. **Zentralbl Gynakol** 1989;111(6):337–49 (Eng. Abstr.) (Ger)
[Incidence of cesarean section in elderly pregnant women] Rolfini G, et al. **Clin Ter** 1987 Sep 15;122(5):351–5 (Eng. Abstr.) (Ita)
[Childbirth in the older woman. Clinico-statistical assessment] Rolfini G, et al. **Clin Ter** 1987 Jul 31; 122(2):113–20 (Eng. Abstr.) (Ita)
[Can age influence the course of pregnancy? Experience in the L'Aquila area in the period 1979–1986] Cappa F, et al. **Minerva Ginecol** 1988 Sep;40(9):501–4 (Eng. Abstr.) (Ita)
[Statistical report on the births at the Obstetrical and Gynecologic Clinic of L'Aquila during the period 1979–1986] Cappa F, et al. **Minerva Ginecol** 1988 Sep; 40(9):541–6 (Eng. Abstr.) (Ita)
[The system for identifying groups at risk of delivering large fetuses] Mezinova NN, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):64–5 (Rus)
[Reproductive function of women and risk of the development of breast cancer] Levshin VF. **Vopr Onkol** 1988;34(10):1178–82 (Eng. Abstr.) (Rus)

MATERNAL AGE 35 AND OVER see under **MATERNAL AGE**

MATERNAL BEHAVIOR

Mother–twin interaction during early childhood. Robin M, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(2):151–9
Mother–infant interactive behaviors: impact of maternal deafness. Rea CA, et al. **Am Ann Deaf** 1988 Dec; 133(5):317–24
The effects of a maternal preparation program on mother–infant pairs: a pilot study. Hamilton–Dodd C, et al. **Am J Occup Ther** 1989 Aug;43(8):513–21
Maternal affect and toddlers' social–emotional competence. Denham SA. **Am J Orthopsychiatry** 1989 Jul;59(3):368–76
Maternal support following disclosure of incest. Everson MD, et al. **Am J Orthopsychiatry** 1989 Apr;59(2):197–207
Severity of maternal depression and three types of mother–to–child aggression. Zuravin SJ.
Am J Orthopsychiatry 1989 Jul;59(3):377–89
Perioral anesthesia disrupts maternal behavior during early lactation in Long–Evans rats. Stern JM, et al.
Behav Neural Biol 1989 Jul;52(1):20–38
Plasma prolactin levels in incubating turkey hens during pipping of the eggs and after introduction of poults into the nest. Opel H, et al. **Biol Reprod** 1989 May;40(5):981–7
Who breastfeeds in New Brunswick, when and why? Beaudry M, et al. **Can J Public Health** 1989 May–Jun; 80(3):166–72
Breastfeeding in the Mohawk community of Kahnawake: revisited and redefined. Macaulay AC, et al.
Can J Public Health 1989 May–Jun;80(3):177–81
Patterns of breastfeeding and work: the Canadian experience. Morse JM, et al. **Can J Public Health** 1989 May–Jun; 80(3):182–8
Maternal self–efficacy and infant attachment: integrating physiology, perceptions, and behavior. Donovan WL, et al. **Child Dev** 1989 Apr;60(2):460–72
Proximate regulation by mothers: a demonstration of how differing styles affect young children's behavior. Holden GW, et al. **Child Dev** 1989 Feb;60(1):64–9
Continuity and discontinuity in maternal sensitivity at 6, 24, and 42 months in a high–risk sample. Pianta RC, et al. **Child Dev** 1989 Apr;60(2):481–7
Habituation and maternal encouragement of attention in infancy as predictors of toddler language, play, and representational competence. Tamis–LeMonda CS, et al. **Child Dev** 1989 Jun;60(3):738–51
Maternal expectations of their infants' development: some cultural differences. Hopkins B, et al.
Dev Med Child Neurol 1989 Jun;31(3):384–90
Early experience and maternal behavior in rats. Brunelli SA, et al. **Dev Psychobiol** 1989 Apr;22(3):295–314
Uterine positions and schedules of urination: correlates of differential maternal anogenital stimulation. Clark MM, et al. **Dev Psychobiol** 1989 May;22(4):389–400
Maternal and peer imprinting in mallard ducklings under experimentally simulated natural social conditions. Dyer AB, et al. **Dev Psychobiol** 1989 Jul;22(5):463–75
Long–term effects of early mothering behavior on responsiveness to the environment in vervet monkeys. Fairbanks LA, et al. **Dev Psychobiol** 1988 Nov;21(7):711–24
Evidence for a maternal effect on infant hand–use preferences. Harkins DA, et al. **Dev Psychobiol** 1988 Sep; 21(6):535–41
Nursing interaction of Wistar rats is modified by prior experience of altered nursing bout length. Hofer MA, et al. **Dev Psychobiol** 1989 May;22(4):321–45
Maternal behavior of SHR rats and its relationship to offspring blood pressures. Myers MM, et al.
Dev Psychobiol 1989 Jan;22(1):29–53
Relationships between maternal behavior of SHR and WKY dams and adult blood pressures of cross–fostered F1 pups. Myers MM, et al. **Dev Psychobiol** 1989 Jan;22(1):55–67
Effect of maternal presence on the fear response to an unfamiliar environment as measured by heart rate in rats as a function of age. Richardson R, et al.
Dev Psychobiol 1988 Nov;21(7):613–33
Experience with younger siblings facilitates maternal responsiveness in pubertal Norway rats. Stern JM, et al. **Dev Psychobiol** 1988 Sep;21(6):575–89
Presence–absence cycles of the mother and not light–darkness are the zeitgeber for the circadian rhythm of newborn mice. Viswanathan N. **Experientia** 1989 Apr 15;45(4):383–5
The reliability and validity of the maternal social support index. Pascoe JM, et al. **Fam Med** 1988 Jul–Aug;20(4):271–6
Gestation and birth–related behaviors in Temminck's red colobus. Starin ED. **Folia Primatol (Basel)** 1988; 51(2–3):161–4
Maternal aggression by lactating group–living Japanese macaque females. Troisi A, et al. **Horm Behav** 1988 Dec; 22(4):444–52
Maternal attitude and practices in initiation of newborn feeding. Kumari S, et al. **Indian J Pediatr** 1988 Nov–Dec: 55(6):905–11
Effect of stress on maternal behaviour. Sahakari SD, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):93–6
Accuracy of maternal recall of birthweights of adolescent children [letter] Seidman DS, et al. **Int J Epidemiol** 1988 Sep;17(3):688–9
Teen mothering. Behaviors and interventions. Panzarine S.
J Adolesc Health Care 1988 Sep;9(5):443–8 (40 ref.)
Semantic differentials and the process of developing one to measure maternal role competence. Flagler S.
J Adv Nurs 1989 Mar;14(3):190–7
Going beyond abuse: maladaptive patterns of interaction in abusing mother–infant pairs. Wasserman GA, et al.
J Am Acad Child Psychiatry 1983 May;22(3):245–52
Sexuality, pregnancy, and parenting in anorexia nervosa. Mogul SL. **J Am Acad Psychoanal** 1989 Spring;17(1):65–88
Effect of birth and fraternal litter size and cross–fostering on growth and reproduction in swine. Stewart TS, et al.
J Anim Sci 1989 Mar;67(3):635–40
Aspects of structure and content of maternal talk with infants. Elias G, et al. **J Child Psychol Psychiatry** 1988 Jul; 29(4):523–31
Severity of early separation and later abusive mothering in monkeys: what is the pathogenic threshold? Troisi A, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):277–84
Litter gender composition affects maternal behavior of the primiparous mouse dam (Mus musculus). Alleva E, et al.
J Comp Psychol 1989 Mar;103(1):83–7
Different patterns of biting attack employed by lactating female mice (Mus domesticus) in encounters with male and female conspecific intruders. Parmigiani S, et al.
J Comp Psychol 1988 Sep;102(3):287–93
Correlates of parenting on a neonatal intensive care unit: maternal characteristics and family resources. Giblin PT, et al. **J Genet Psychol** 1988 Dec;149(4):505–14
Early postpartum rooming–in and maternal attachment behaviors in a group of medically indigent primiparas. Norr KF, et al. **J Nurse Midwifery** 1989 Mar–Apr;34(2):85–91
Reva Rubin revisited. Gay JT, et al.
J Obstet Gynecol Neonatal Nurs 1988 Nov–Dec; 17(6):394–9
Maternal question use predicts later language development in specific–language–disordered children. Yoder PJ.
J Speech Hear Disord 1989 Aug;54(3):347–55
A piece of my mind. So much more to say. Leff PT.
JAMA 1989 Jul 21;262(3):402
A fostering/crossfostering analysis of the effects of prenatal ethanol exposure in a liquid diet on offspring development and behavior in rats. Vorhees CV. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):115–20
Maternal responsiveness: characteristics and consequences. **New Dir Child Dev** 1989 Spring;(43):1–112
Maternal responsiveness with preterm infants and later competency. Beckwith L, et al. **New Dir Child Dev** 1989 Spring;(43):75–87
Maternal responsiveness and cognitive development in children. Bornstein MH, et al. **New Dir Child Dev** 1989 Spring;(43):49–61
HOME measurement of maternal responsiveness. Bradley RH. **New Dir Child Dev** 1989 Spring;(43):63–73 (20 ref.)
Maternal responsiveness in human and animal mothers. Fleming AS. **New Dir Child Dev** 1989 Spring;(43):31–47 (64 ref.)
Maternal behavior to infants in five cultures. Richman AL, et al. **New Dir Child Dev** 1988 Summer;(40):81–97
The physiological and evolutionary background of maternal responsiveness. Rosenblatt JS. **New Dir Child Dev** 1989 Spring;(43):15–30 (66 ref.)
The relationship of obstetric ultrasound to parent and infant behavior. Sparling JW, et al. **Obstet Gynecol** 1988 Dec; 72(6):902–7
Trapping activities and mother–infant relationships on Cayo Santiago: a cautionary tale. Berman CM.
P R Health Sci J 1989 Apr;8(1):73–8
Parent and child behavior during immunization. Broome ME, et al. **Pain** 1989 Apr;37(1):85–92
Early feeding practices and subsequent childrearing attitudes of French–Canadian women. de Man A.
Percept Mot Skills 1989 Jun;68(3 Pt 1):879–82
Both prenatal and postnatal factors contribute to the effects of maternal stress on offspring behavior and central 5–hydroxytryptamine receptors in the rat. Peters DA.
Pharmacol Biochem Behav 1988 Jul;30(3):669–73
Activation of aggression in female rats by normal males and by castrated males with testosterone implants. Albert DJ, et al. **Physiol Behav** 1988;44(1):9–13
Suckling stimulation modulates the maintenance of postpartum aggression in mice. Garland M, et al.
Physiol Behav 1988;44(3):301–5
Lesions of the hypothalamic paraventricular nucleus disrupt the initiation of maternal behavior. Insel TR, et al.
Physiol Behav 1989 May;45(5):1033–41
Estradiol and parental experience, but not prolactin are necessary for ultrasound recognition and pup–retrieving in the mouse. Koch M, et al. **Physiol Behav** 1989 Apr; 45(4):771–6
Maternal behavior in normal and androgenized female rats: effect of age and experience. Leboucher G.
Physiol Behav 1989 Feb;45(2):313–9
Mouse pup urine as an infant signal. Londei T, et al.
Physiol Behav 1989 Mar;45(3):579–83
Maternal behavior is related to prepartum urinary estradiol levels in red–bellied tamarin monkeys. Pryce CR, et al.
Physiol Behav 1988;44(6):717–26
Fetal sex identification and prenatal bonding. Wu JH, et al.
Psychol Rep 1988 Aug;63(1):199–202
Maternal confidence during toddlerhood: comparing preterm and fullterm groups. Gross D, et al. **Res Nurs Health** 1989 Feb;12(1):1–9
The effect of social influence on cognitive development and school performance. Hartmann E, et al.
Scand J Psychol 1989;30(1):52–63
Women's choices—the ethics of maternity. Jonsen AR.
West J Med 1988 Dec;149(6):726–8 (8 ref.)
Maternal role competence. Flagler S. **West J Nurs Res** 1988 Jun;10(3):274–90
[Substance abuse among women—maternal care as a new risk group?] Halmesmäki E. **Duodecim** 1989;105(12):1191–6 (Fin)
[Temporal structure of maternal language directed at infants 3 months old] Cossette L, et al. **Can J Psychol** 1986 Dec; 40(4):414–22 (Eng. Abstr.) (Fre)
[Maternal determination of fetal movements. A sure and simple method of monitoring the pregnancy] Boog G.
Rev Fr Gynecol Obstet 1988 Nov;83(11):693–5 (6 ref.) (Eng. Abstr.) (Fre)
[Maternal behavior toward her newborn infant. Potential modification by peridural analgesia or childbirth preparation] Wagner A, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):29–35 (Eng. Abstr.) (Fre)
[Can a mouse be the object of maternal aggression on the part of a rat?] Rylov AL. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1048–53 (Eng. Abstr.) (Rus)
[The feeding of young children with mild diarrhea. Study of the behavior of 20 mothers in a periurban area of Guatemala City] García B, et al.
Bol Med Hosp Infant Mex 1989 Jun;46(6):399–408 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Parity–associated reductions in behavioral sensitivity to opiates. Kinsley CH, et al. **Biol Reprod** 1988 Sep; 39(2):270–8
Morphine effects on maternal aggression, pup care and analgesia in mice. Haney M, et al.
Psychopharmacology (Berlin) 1989;98(1):68–74
Quantitative and comparative analyses of pro–aggressive actions of benzodiazepines in maternal aggression of rats. Mos J, et al. **Psychopharmacology (Berlin)** 1989;97(2):152–3
Acute and chronic effects of psychotropic drugs on maternal aggression in mice. Yoshimura H, et al.
Psychopharmacology (Berlin) 1989;97(3):339–42
[Effect of opiate receptor agonists and antagonists on maternal aggression in rats] Kosenkova NS, et al.
Biull Eksp Biol Med 1989 Feb;107(2):207–9 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Maternal modulation of pituitary–adrenal activity during ontogeny. Levine S, et al. **Adv Exp Med Biol** 1988; 245:295–310
Behavior of mother rats in conflict tests sensitive to antianxiety agents. Ferreira A, et al. **Behav Neurosci** 1989 Feb;103(1):193–201
Alterations in supraoptic nucleus ultrastructure of maternally behaving virgin rats. Salm AK, et al. **Brain Res Bull** 1988 Oct;21(4):685–91
Ovarian hormone–induced short–latency maternal behavior in ovariectomized virgin Long–Evans rats. Stern JM, et al. **Horm Behav** 1989 Jun;23(2):157–72
Perioral somatosensory determinants of nursing behavior in Norway rats (Rattus norvegicus). Stern JM, et al.
J Comp Psychol 1989 Sep;103(3):269–80
Neural transection between preoptic area and septum inhibits

maternal behavior in female and male rats. Korányi L, et al. **Neurosci Res** 1988 Dec;6(2):167–73

Importance of noradrenergic mechanisms in the olfactory bulbs for the maternal behaviour of mice. Dickinson C, et al. **Physiol Behav** 1988;43(3):313–6

MATERNAL-CHILD HEALTH CENTERS see under **HEALTH FACILITIES**

MATERNAL DEPRIVATION

Experience of parental loss and later suicide: data from published biographies. Lester D. **Acta Psychiatr Scand** 1989 May;79(5):450–2

Early parental loss and development of adult psychopathology. Breier A, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):987–93

Parental loss in childhood. Its effect in adult life. Tennant C. **Arch Gen Psychiatry** 1988 Nov;45(11):1045–50 (58 ref.)

Plasma corticosterone fluctuations in an infant-learning paradigm. Hennessy MB, et al. **Behav Neurosci** 1988 Oct; 102(5):701–5

Maternal deprivation potentiates pituitary-adrenal stress responses in infant rats. Stanton ME, et al. **Behav Neurosci** 1988 Oct;102(5):692–700

Effects of rearing and exposure condition upon the acquisition of phobic behaviour in cynomolgus monkeys. Röder EL, et al. **Behav Res Ther** 1989;27(3):221–31

Father kills mother. Issues and problems encountered by a child psychiatric team. Black D, et al. **Br J Psychiatry** 1988 Nov;153:624–30

Premature maternal separation and lymphocyte function. Ackerman SH, et al. **Brain Behav Immun** 1988 Jun; 2(2):161–5

Influence of early rearing on lymphocyte proliferation responses in juvenile rhesus monkeys. Coe CL, et al. **Brain Behav Immun** 1989 Mar;3(1):47–60

Prolonged effect of psychological disturbance on macrophage chemiluminescence in the squirrel monkey. Coe CL, et al. **Brain Behav Immun** 1988 Jun;2(2):151–60

Behavioral analysis of the postnatal development of micturition in kittens. Thor KB, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):137–44

Maternal separation in bonnet monkey infants: altered attachment and social support. Reite M, et al. **Child Dev** 1989 Apr;60(2):473–80

Effects of hand-rearing on the behavioral development of infant and juvenile gorillas (Gorilla g. gorilla). Meder A. **Dev Psychobiol** 1989 May;22(4):357–76

Modification of hypothalamic content of growth hormone regulatory peptides in maternally deprived neonatal rats [published erratum appears in Growth Dev Aging 1988 Winter;52(4):160] Juárez LM, et al. **Growth Dev Aging** 1988 Autumn;52(3):139–43

The effects of deprivation syndrome on the adjustment of orphan, tribal and non-tribal children. Khan MA. **Indian Pediatr** 1988 Jan;25(1):47–50

Lasting effects on mouse brain growth of 24 hr postpartum deprivation. Wahlsten D, et al. **Int J Dev Neurosci** 1987; 5(1):71–5

Rearing cynomolgus monkeys (Macaca fascicularis) on surrogate mothers with bottle feeding. Timmermans PJ, et al. **Lab Anim** 1988 Jul;22(3):229–34

Imprisoned children. Black D. **Med Leg J** 1988;56 (Pt 3):139–49

Behavioral and physiologic effects of CRH administered to infant primates undergoing maternal separation. Kalin NH, et al. **Neuropsychopharmacology** 1989 Jun;2(2):97–104

Both prevention of physical contact and removal of distal cues mediate cortisol and vocalization responses of guinea pig pups to maternal separation in a novel environment. Hennessy MB. **Physiol Behav** 1988;43(6):729–33

A mother dies, a child denies: the reparative psychoanalytic process. A case study. Karme L. **Psychoanal Rev** 1988 Summer;75(2):263–98

[Parent, mother or father loss in childhood and suicidal behavior in adulthood] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr; 41(4):218–23 (Eng. Abstr.) (Ger)

[The psychology of separation: animal experiments in psychosomatic medicine] Meyer AE. **Psychother Psychosom Med Psychol** 1989 Mar–Apr; 39(3–4):106–9 (Ger)

PHYSIOLOGY

Factors influencing cortisol and behavioral responses to maternal separation in guinea pigs. Hennessy MB, et al. **Behav Neurosci** 1989 Apr;103(2):378–85

MATERNAL-FETAL EXCHANGE

see related

ABNORMALITIES, DRUG-INDUCED

Influence of medullar anesthetic techniques on uterine blood flow, placental transfer and foetal outcome. Shnider SM. **Acta Anaesthesiol Belg** 1988;39(3):169–75 (38 ref.)

Maternal and fetal chromosomal aberrations in mice following prenatal exposure to subembryotoxic doses of lead nitrate. Nayak BN, et al. **Acta Anat (Basel)** 1989; 135(2):185–8

Enzymes of lysosomal origin in the serum of infants of diabetic mothers behavior in the first days after birth. Goi G, et al. **Acta Diabetol Lat** 1988 Oct–Dec;25(4):351–60

Comparison of maternal to fetal transfer of 3,5,3'-triiodothyronine versus thyroxine in rats, as assessed from 3,5,3'-triiodothyronine levels in fetal tissues. Morreale de Escobar G, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):20–30

Maternal–fetal thyroid hormone relationships and the fetal brain. Morreale de Escobar G, et al. **Acta Med Austriaca** 1988;15 Suppl 1:66–70

Effects of ethanol infusion on foetal EEG and breathing movements. Vojcek L, et al. **Acta Physiol Hung** 1988; 71(4):511–5

Transient neonatal ventricular tachycardia associated with maternal cocaine use. Geggel RL, et al. **Am J Cardiol** 1989 Feb 1;63(5):383–4

Experimental maternal and neonatal folate status relationships in nonhuman primates. Blocker DE, et al. **Am J Clin Nutr** 1989 Jul;50(1):120–8

Direct demonstration of iron in a term placenta in a case of beta-thalassemia major. Birkenfeld A, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):562–3

Placental transfer of thiamine in the human subject: in vitro perfusion studies and maternal-cord plasma concentrations. Dancis J, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1435–9

Determination of pentamidine transfer in the in vitro perfused human cotyledon with high-performance liquid chromatography. Fortunato SJ, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):759–61

Pharmacokinetics of azidothymidine during late pregnancy in Long–Evans rats. Little BB, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):732–4

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251–9

Sources and disposition of fetal glucose: studies in the fetal lamb. Bloch CA, et al. **Am J Perinatol** 1988 Oct;5(4):344–52 (53 ref.)

Fetal glucose utilization in response to maternal starvation and acute hyperketonemia. Leturque A, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E699–703

Effect of continuous feeding on maternal protein metabolism and fetal growth in the rat. Ling PR, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E852–62

Placental transfer of succinylcholine causing transient respiratory depression in the newborn. Cherala SR, et al. **Anaesth Intensive Care** 1989 May;17(2):202–4

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: III. Placental transfer and elimination in neonates. Bach V, et al. **Anesth Analg** 1989 Mar;68(3):238–42

Maternal–fetal pharmacokinetics and fetal dose–response relationships. Szeto HH. **Ann N Y Acad Sci** 1989;562:42–55 (45 ref.)

Lead concentrations in maternal and cord blood in women users of surma eye cosmetics. Moghraby SA, et al. **Ann Trop Paediatr** 1989 Mar;9(1):49–53

Lack of evidence for transplacental transmission of HBV infection by HBsAg-carrier mothers. Ramia S, et al. **Ann Trop Paediatr** 1988 Sep;8(3):141–4

Fetal nutrition. Battaglia FC, et al. **Annu Rev Nutr** 1988; 8:43–61 (115 ref.)

Effect of prenatal lignocaine on auditory brain stem evoked response. Bozynski ME, et al. **Arch Dis Child** 1989 Jul; 64(7):934–8

Vertical transmission of HIV: a prospective study. Mok JY, et al. **Arch Dis Child** 1989 Aug;64(8):1140–5

Blood flow velocity waveforms at late pregnancy and during labor. Kirkinen P, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S19–23

Iron stores in maternal and cord blood. Agha F, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec;14(4):405–9

Effects of fetal hypoinsulinemia on fetal hepatic insulin binding in the rat. Gruppuso PA. **Biochim Biophys Acta** 1989 Feb 9;1010(2):270–3

Maternal–fetal transfer of fluoride in pregnant women. Caldera R, et al. **Biol Neonate** 1988;54(5):263–9

Maternal treatments with corticosteroids and/or T3 change lung volumes and rupture pressures in preterm rabbits. ElKady T, et al. **Biol Neonate** 1988;54(4):203–10

Maternal transfer of photoperiodic information in Siberian hamsters. II. The nature of the maternal signal, time of signal transfer, and the effect of the maternal signal on peripubertal reproductive development in the absence of photoperiodic input. Stetson MH, et al. **Biol Reprod** 1989 Mar;40(3):458–65

The effect of maternal Naja nigricollis envenomation on the placenta. An experimental study. Nawar NN, et al. **Biol Struct Morphog** 1989;2(1):13–7

Fetal haemodynamic response to acute maternal hyperoxygenation as predictor of fetal distress in intrauterine growth retardation. Arduini D, et al. **BMJ** 1989 Jun 10;298(6687):1561–2

Maternal effects on the phenotypic expression of the skeletal store of calcium (bone mass) and related variables in the rat. Puche RC, et al. **Bone Miner** 1986 Dec;1(6):467–74

Maternal hormone levels in early gestation of cryptorchid males: a case–control study. Bernstein L, et al. **Br J Cancer** 1988 Sep;58(3):379–81

Fetal glucose utilization using maternal plasma glucose and scintillation values. Kostreva DR. **Brain Res** 1989 May 22; 487(2):384–7

Effect of high-intensity sound on local cerebral glucose utilization in fetal sheep. Abrams RM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):1–10

Periodic feeding of SCN-lesioned pregnant rats entrains the fetal biological clock. Weaver DR, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):291–6

Sexually dimorphic behavioral and brain asymmetries in neonatal rats: effects of prenatal alcohol exposure. Zimmerberg B, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):281–90

Placental barrier to atrial natriuretic peptide in rats. Mulay S, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):1–4

Evaluation of the transplacental tumorigenicity of the tobacco-specific carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in mice. Anderson LM, et al. **Cancer Res** 1989 Jul 15;49(14):3770–5

Rapid isolation and detection of drugs in meconium of infants of drug-dependent mothers. Ostrea EM Jr, et al. **Clin Chem** 1988 Nov;34(11):2372–3

The disposition and placental transfer of diazepam in cesarean section. Ridd MJ, et al. **Clin Pharmacol Ther** 1989 May; 45(5):506–12

Thermodynamic network modelling of transfer across the perfused guinea-pig placenta, using SPICE. van Kreel BK, et al. **Comput Methods Programs Biomed** 1989 Feb; 28(2):137–49

Lack of teratogenic effect of brief maternal insulin-induced hypoglycemia in rats during late neurulation. Buchanan TA, et al. **Diabetes** 1989 Aug;38(8):1063–6

Clonidine: placental transfer and neonatal adaption. Boutroy MJ, et al. **Early Hum Dev** 1988 Aug–Sep;17(2–3):275–86

Fetal and maternal plasma levels of gastrin, somatostatin and oxytocin after vaginal delivery and elective cesarean section. Marchini G, et al. **Early Hum Dev** 1988 Nov; 18(1):73–9

The uterine artery blood flow velocity waveform in pathological pregnancy. Mulders LG, et al. **Early Hum Dev** 1988 Nov;18(1):45–57

Umbilical artery blood velocimetry: a prospective longitudinal study in search of the intrauterine growth-retarded fetus. van Vugt JM, et al. **Early Hum Dev** 1988 Nov;18(1):59–71

Brain aromatase activity and behavioral consequences in the male rat treated in utero with 4-hydroxy-androstenedione. Takahashi Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):29–36

Biological half-life and transfer of maternal corticosteroid-binding globulin to amniotic fluid in the rabbit. Seralini GE, et al. **Endocrinology** 1989 Sep; 125(3):1321–5

Fetal prolactin levels respond to a maternal melatonin implant. Serón-Ferré M, et al. **Endocrinology** 1989 Jul; 125(1):400–3

Dose-response analysis of infants prenatally exposed to methyl mercury: an application of a single compartment model to single-strand hair analysis. Cox C, et al. **Environ Res** 1989 Aug;49(2):318–32

Placental transfer of alfentanil at caesarean section. Cartwright DP, et al. **Eur J Anaesthesiol** 1989 Mar; 6(2):103–9

The transfer of ketorolac tromethamine from maternal to foetal blood. Walker JJ, et al. **Eur J Clin Pharmacol** 1988; 34(5):509–11

Placental transfer and distribution of pinazepam and its metabolite N-desmethyldiazepam in the maternal and fetal rabbit: effect of the stage of gestation. Pacifici GM, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan–Mar;14(1):1–6

Postnatal B cell development: influence of trinitrobenzenesulfonic acid treatment during pregnancy. Zöller M. **Eur J Immunol** 1988 Dec;18(12):1931–6

Feto-placental haemodynamics in growth retardation: a pulsed Doppler study. Bogatti P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):213–9

Serum DHAS in the maternal–fetoplacental system during the 28th–40th weeks of pregnancy. Hercz P, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):1–5

Maternal and embryonal/fetal beta-endorphin concentrations during the first trimester of pregnancy. Surico N, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):207–11

Reversible congenital neutropenia associated with maternal sulphasalazine therapy [letter] Levi S, et al. **Eur J Pediatr** 1988 Nov;148(2):174–5

Effect of maternal hormone treatment on lung protein leakage and lung function of preterm newborn rabbits. Ikegami M, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(3):16s–20s

Biochemical characterization of retinal protein and phospholipid synthesis in mice exposed transplacentally to N-methyl-N-nitrosourea. Smith SB, et al. **Exp Eye Res** 1988 Nov;47(5):713–25

Embryotoxicity and in vivo cytogenetic changes following maternal exposure to cadmium chloride in mice. Nayak BN, et al. **Exp Pathol** 1989;36(2):75–80

Intact teratogenic immunoglobulins may reach the rat embryo. Leung CC, et al. **Experientia** 1988 Dec 1; 44(11–12):1017–8

Immunogenetic studies of maternal–fetal relationships: a review: why newborn rhesus monkeys don't get hemolytic disease. Treichel RS. **Genetica** 1987 Aug 31;73(1–2):69–79 (37 ref.)

Chemotherapy in a pregnant rat model. 1. Mitomycin-C: pregnancy-specific kinetics and placental transfer. Boike

GM, et al. **Gynecol Oncol** 1989 Aug;34(2):187–90

Chemotherapy in a pregnant rat model. 2,5–fluorouracil: nonlinear kinetics and placental transfer. Boike GM, et al. **Gynecol Oncol** 1989 Aug;34(2):191–4

Assessment of passive and transplacental exposure to tobacco smoke. Sorsa M, et al. **IARC Sci Publ** 1988;(89):129–32

Maternal autoimmune disease influences self–tolerance in offspring: the role of suppressor cells and materno–foetal cell traffic. Gibson J, et al. **Immunol Cell Biol** 1988 Apr; 66 (Pt 2):85–96

Aminophylline as diazepam antagonist in a preterm infant [letter] Rathi SK. **Indian Pediatr** 1988 Aug;25(8):803–4

Chemical quality of maternal drinking water and congenital heart disease. Zierler S, et al. **Int J Epidemiol** 1988 Sep; 17(3):589–94

The effect of maternal smoking on the relationship between maternal and fetal zinc status and infant birth weight. Kuhnert BR, et al. **J Am Coll Nutr** 1988 Aug;7(4):309–16

Utero–placental transfer of octanoic, palmitic and linoleic acids during late gestation in gilts. Thulin AJ, et al. **J Anim Sci** 1989 Mar;67(3):738–45

Induction of 3–hydroxy–3–methylglutaryl coenzyme A reductase activity in foetal rats by maternal cholestyramine feeding. Haave NC, et al. **J Dev Physiol** 1988 Jun; 10(3):247–55

Interpreting the carboxyhaemoglobin concentration in fetal cord blood. Leonard MB, et al. **J Dev Physiol** 1989 Feb; 11(2):73–6

Addendum on "Cocaine in a Pregnant Woman" [letter] Mittleman RE, et al. **J Forensic Sci** 1989 Jul;34(4):807

Tissue distribution of cocaine in a pregnant woman [published erratum appears in J Forensic Sci 1989 Jul;34(4):807] Mittleman RE, et al. **J Forensic Sci** 1989 Mar;34(2):481–6

Blood and placental concentrations of cadmium, lead, and mercury in mothers and their newborns. Truska P, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):141–7

The management of children born to human immunodeficiency virus seropositive women. Mok JY, et al. **J Infect** 1989 Mar;18(2):119–24

Demonstration of a barrier to transplacental passage of murine enteroviruses in late gestation. Abzug MJ, et al. **J Infect Dis** 1989 Apr;159(4):761–5

Vertical transmission of woodchuck hepatitis virus. Kulonen K, et al. **J Med Virol** 1988 Nov;26(3):233–42

Phenobarbital lacks promoting activity for neurogenic tumors in F344 rats transplacentally exposed to ethylnitrosourea. Walker VE, et al. **J Neuropathol Exp Neurol** 1989 May; 48(3):263–9

Fractional contributions to total carnitine in the neonatal rat. Davis AT. **J Nutr** 1989 Feb;119(2):262–7

Maternal zinc deprivation and interleukin–1 influence metallothionein gene expression and zinc metabolism of rats. Huber KL, et al. **J Nutr** 1988 Dec;118(12):1570–6

Smoking during pregnancy and the perinatal cadmium burden. Sikorski R, et al. **J Perinat Med** 1988;16(3):225–31

Effect of maternal intrapartum glucose therapy on neonatal blood glucose levels and neurobehavioral status of hypoglycemic term newborn infants. Singhi S. **J Perinat Med** 1988;16(3):217–24

The renotrophic factor, a persistent stimulus that crosses the placenta in mice. Averbukh Z, et al. **J Physiol (Lond)** 1988 Oct;404:31–8

Immunosuppressive effects of rabbit blastocoelic fluid and embryo culture medium. Pandian AM, et al. **J Reprod Immunol** 1988 Aug;13(3):221–34

T–cell suppressor factors play an integral role in preventing fetal rejection. Ribbing SL, et al. **J Reprod Immunol** 1988 Oct;14(1):83–95

Immunization with a syngeneic regressor tumor causes resorption in allo–pregnant mice. Tartakovsky B, et al. **J Reprod Immunol** 1988 Jul;13(2):113–22

The effects of placental site on the arcuate artery flow velocity waveform. Chambers SE, et al. **J Ultrasound Med** 1988 Dec;7(12):671–3

Assessment of utero–placental blood flow velocity wave forms in a pregnant patient with systemic lupus erythematosus. Meizner I, et al. **JCU** 1988 Jan;16(1):55–7

Localization of fetal major histocompatibility complex antigens and maternal leukocytes in murine placenta. Implications for maternal–fetal immunological relationship. Redline RW, et al. **Lab Invest** 1989 Jul;61(1):27–36

Fetoplacental passage of zidovudine [letter] Gillet JY, et al. **Lancet** 1989 Jul 29;2(8657):269–70

348 cases of suspected neonatal alloimmune thrombocytopenia. Mueller–Eckhardt C, et al. **Lancet** 1989 Feb 18;1(8634):363–6

Prevention of hepatitis B transmission at birth [letter] Schalm SW, et al. **Lancet** 1989 Jan 7;1(8628):44

Ethanol induced teratogenesis: characterization, mechanisms and diagnostic approaches. Hoyseth KS, et al. **Life Sci** 1989;44(10):643–9 (43 ref.)

Plasma concentrations of delta–9–tetrahydrocannabinol in dams and fetuses following acute or multiple prenatal dosing in rats. Hutchings DE, et al. **Life Sci** 1989; 44(11):697–701

Induction of a rat T cell lymphoma–leukemia by magnesium deficiency—a study of fetal defense against maternal neoplasia. Hass GM, et al. **Magnesium** 1989;8(1):45–55

Maternal transmission and dental caries induction in Sprague–Dawley rats infected with Streptococcus mutans. Ooshima T, et al. **Microbiol Immunol** 1988;32(8):785–94

Maternal thyroxine and congenital hypothyroidism [editorial; comment] Larsen PR. **N Engl J Med** 1989 Jul 6;321(1):44–6 . **Comment on:** N Engl J Med 1989 Jul 6;321(1):13–6

Neurologic tumors in offspring after inoculation of mothers with killed–poliovirus vaccine [letter] Melnick JL, et al. **N Engl J Med** 1988 Nov 3;319(18):1226

Maternal–fetal transfer of thyroxine in congenital hypothyroidism due to a total organification defect or thyroid agenesis [see comments] Vulsma T, et al. **N Engl J Med** 1989 Jul 6;321(1):13–6. **Comment in:** N Engl J Med 1989 Jul 6;321(1):44–6

Modification of retinal ganglion cell axon morphology by prenatal infusion of tetrodotoxin. Sretavan DW, et al. **Nature** 1988 Dec 1;336(6198):468–71

Na+,K+–ATPase in developing fetal guinea pig brain and the effect of maternal hypoxia. Mishra OP, et al. **Neurochem Res** 1988 Aug;13(8):765–70

Effects of prenatal exposure to neuroleptic drugs on children's growth. Platt JE, et al. **Neuropsychopharmacology** 1988 Sep;1(3):205–12

Neurobehavioural consequences of prenatal low level exposures to lead. Cooney GH, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):95–104

Influence of maternal chlorpromazine on discrimination learning in rat offspring. Hironaka N, et al. **Neurotoxicol Teratol** 1988 May–Jun;10(3):199–205

Behavioral consequences of prenatal exposure to the organophosphate insecticide sumithion. Lehotzky K, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):321–4

Effects of 2–methoxyethanol on fetal development, postnatal behavior, and embryonic intracellular pH of rats. Nelson BK, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):273–84

Behavioral teratology investigation of 1–butanol in rats. Nelson BK, et al. **Neurotoxicol Teratol** 1989 May–Jun; 11(3):313–5

Effect of perinatal monosodium glutamate administration on visual evoked potentials of juvenile and adult rats. Rigdon GC, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):121–8

Neurobehavioral deficits after low level lead exposure in neonates: the Mexico City pilot study. Rothenberg SJ, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):85–93

Effects of perinatal PCB exposure on discrimination–reversal learning in monkeys. Schantz SL, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):243–50

Maternal alcohol ingestion inhibits fetal glucose uptake and growth. Singh SP, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):215–9

Plasma levels of dihydroxyphenylalanine, dopamine and norepinephrine in the fetoplacental unit and maternal circulation at delivery. Yamamoto K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1894–8

Control of transfer across the mature placenta. Sibley CP, et al. **Oxf Rev Reprod Biol** 1988;10:382–435 (253 ref.)

Body size and thermic exchanges in the human fetus. Panattoni GL. **Panminerva Med** 1989 Jan–Mar;31(1):46–8

Transmission of genital mycoplasmas from mother to neonate in women with prolonged membrane rupture. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):483–7

Renal tumors induced transplacentally in the rat by n–ethylnitrosourea. Ohaki Y. **Pediatr Pathol** 1989; 9(1):19–33

Regulation of placental glucose transfer and consumption by fetal glucose production. DiGiacomo JE, et al. **Pediatr Res** 1989 May;25(5):429–34

Use of fetal streptozotocin injection to determine the role of normal levels of fetal insulin in regulating uteroplacental and umbilical glucose exchange. Hay WW Jr, et al. **Pediatr Res** 1988 Sep;24(3):312–7

Clearance of calcium across in situ perfused placentas of intrauterine growth–retarded rat fetuses. Mughal MZ, et al. **Pediatr Res** 1989 Apr;25(4):420–2

Placental transfer and fetal effects of maternal sodium beta–hydroxybutyrate infusion in the baboon. Paton JB, et al. **Pediatr Res** 1989 May;25(5):435–9

Fetal control of calcium transport across the rat placenta. Robinson NR, et al. **Pediatr Res** 1989 Aug;26(2):109–15

Fetal atrial natriuretic factor and arginine vasopressin responses to hyperosmolality and hypervolemia. Ross MG, et al. **Pediatr Res** 1988 Sep;24(3):318–21

Uterine and cytoplasmic effects on pup eyelid opening in two inbred strains of mice. Nosten M, et al. **Physiol Behav** 1988;43(2):167–71

Acute and repeated gestational stress affect offspring learning and activity in rats. Weller A, et al. **Physiol Behav** 1988; 43(2):139–43

Placental transfer of methionine during protein restriction in the rhesus monkey studied by position emission tomography. Berglund L, et al. **Placenta** 1989 Jul–Aug; 10(4):387–97

Maternal and fetal cellular relationships in the human placental basal plate. Bulmer JN, et al. **Placenta** 1988 May–Jun;9(3):237–46

Uptake of bicarbonate/CO2 in the isolated guinea pig placenta. Hatano H, et al. **Placenta** 1989 Mar–Apr; 10(2):213–21

Transport of radioactive deoxyglucose by the isolated perfused human placental cotyledon as measured by the paired–tracer dilution method. Inconsistency of the transfer rates across the two trophoblast borders with the simultaneously measured rate of transplacental transfer. Stulc J, et al. **Placenta** 1988 May–Jun;9(3):227–35

Triploid fetus: an important consideration in the evaluation of very high maternal serum alpha–fetoprotein. Kazazian LC, et al. **Prenat Diagn** 1989 Jan;9(1):27–30

Gestational changes in calbindin–D9k in rat uterus, yolk sac, and placenta: implications for maternal–fetal calcium transport and uterine muscle function. Mathieu CL, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3433–7

Maternal transmission of retroviral disease: transgenic mice as a rapid test system for evaluating perinatal and transplacental antiretroviral therapy [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(6):2045] Sharpe AH, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9792–6

Effect of maternal glucose concentration on uteroplacental glucose consumption and transfer in pregnant sheep. Hay WW Jr, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):63–9

Possible foetotoxic effects of mercury vapour: a case report. Gelbier S, et al. **Public Health** 1989 Jan;103(1):35–40

The transfer of zinc across the term dually perfused human placental lobule. Page KR, et al. **Q J Exp Physiol** 1988 Jul;73(4):585–93

Acetaldehyde production and transfer by the perfused human placental cotyledon. Karl PI, et al. **Science** 1988 Oct 14; 242(4876):273–5

Natural history and clinical management of the infant born to a mother infected with human immunodeficiency virus. Katz BZ. **Semin Perinatol** 1989 Feb;13(1):27–34 (49 ref.)

Human immunodeficiency virus infection in women: an overview. Landesman SH. **Semin Perinatol** 1989 Feb; 13(1):2–6 (30 ref.)

Micronucleus induction in mouse and rat fetuses treated transplacentally during histogenesis with mitomycin C and 7,12–dimethylbenz(a)anthracene. Müller L. **Teratogenesis Carcinog Mutagen** 1988;8(5):303–13

Transplacental teratogenesis and mutagenesis in mouse fetuses treated with cyclophosphamide. Porter AJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):191–203

Developmental alternations in offspring of female rats orally intoxicated by aluminum chloride or lactate during gestation. Bernuzzi V, et al. **Teratology** 1989 Jul;40(1):21–7

A scanning electron microscope study of fetal eyelid closure accelerated by cortisone in SWV/Bc mice. Juriloff DM, et al. **Teratology** 1989 Jul;40(1):59–66

Steroid contraceptive use and pregnancy outcome. Pardthaisong T, et al. **Teratology** 1988 Jul;38(1):51–8

Neuron development in the superior colliculus of the fetal mouse following maternal alcohol exposure. Zajac CS, et al. **Teratology** 1988 Jul;38(1):37–43

Control and long–term inhibition of foetal supraventricular tachyarrhythmia with a cardioselective beta–receptor blocker administered to the mother. Resch B, et al. **Ther Hung** 1988;36(4):164–9

Dose–response aggregometry in maternal/neonatal platelets. Gader AM, et al. **Thromb Haemost** 1988 Oct 31;60(2):314–8

Placental transfer of vitamin K1 and its implications in fetal hemostasis. Mandelbrot L, et al. **Thromb Haemost** 1988 Aug 30;60(1):39–43

Low molecular weight heparin Novo (LHN–1) does not cross the placenta during the second trimester of pregnancy. Omri A, et al. **Thromb Haemost** 1989 Feb 28; 61(1):55–6

Teratogenicity and placental transfer of all–trans–, 13–cis–, 4–oxo–all–trans–, and 4–oxo–13–cis–retinoic acid after administration of a low oral dose during organogenesis in mice. Creech Kraft J, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):162–76

Prenatal or postnatal exposure to bis(tri–n–butyltin)oxide in the rat: postnatal evaluation of teratology and behavior. Crofton KM, et al. **Toxicol Appl Pharmacol** 1989 Jan; 97(1):113–23

Placental transfer and fetal distribution of fluoxetine in the rat. Pohland RC, et al. **Toxicol Appl Pharmacol** 1989 Apr; 98(2):198–205

Embryo–maternal distribution of basic compounds in the CD–1 mouse: doxylamine and nicotine. Roberts LG, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):134–40

Transplacental pharmacokinetics and teratogenicity of a single dose of retinol (vitamin A) during organogenesis in the mouse. Eckhoff C, et al. **Toxicol Lett** 1989 Aug; 48(2):171–84

Plasma concentration and placental transfer of bromofenofos in rats. Yoshimura H, et al. **Toxicology** 1989 May 15; 55(3):299–306

Th activation of maternal and cord blood. Wahl CM, et al. **Transfusion** 1989 Sep;29(7):635–7

The role of ultrasound in the early diagnosis of fetal structural defects following maternal anticonvulsant therapy. Wladimiroff JW, et al. **Ultrasound Med Biol** 1988; 14(8):657–60

Porcine cytomegalovirus (PCMV) in early gestation. Edington N, et al. **Vet Microbiol** 1988 Jun;17(2):117–28

Serological and immunological characteristics of maternal anti–Rh(D) antibodies in predicting the severity of haemolytic disease of the newborn. Zupańska B, et al. **Vox Sang** 1989;56(4):247–53

Vitamin A supply and biochemical development of the rat heart: studies on cellular DNA, RNA and protein. Sharma HS, et al. **Z Ernahrungswiss** 1988 Jun;27(2):119–25

[Vaccination with HB vaccine to prevent transmission of hepatitis B between mother and infant] Kang P. **Chung Hua Hu Li Tsa Chih** 1988 Dec;23(12):714–6 (Chi)

[Morbidity caused by Neisseria gonorrhoeae and Chlamydia

trachomatis in mothers and children in Kenya] Piot P, et al. **Verh K Acad Geneeskd Belg** 1988;50(4):367–92 (49 ref.) (Eng. Abstr.) (Dut)

[Transplacental administration of diethylstilbestrol (DES) in the rat: effects on fertility and on hormonal receptors in the endometrium] Rachail M, et al. **Ann Rech Vet** 1988; 19(3):203–8 (Eng. Abstr.) (Fre)

[Doppler and pregnancy. Introduction (the importance of Doppler)] Béguin F. **Arch Gynecol Obstet** 1988;244 Suppl:S1–3 (Fre)

[Doppler study of the cervico-placental circulatory equilibrium in the fetus] Tranquart F, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S4–8 (Fre)

[The pharmacokinetics of propofol used in cesarean section; a preliminary study in the newborn infant] Cortambert F, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):33–7 (Eng. Abstr.) (Fre)

[Measuring fetal ischemia using multichannel pulsed Doppler sonography of the aorta and umbilical vein. Preliminary results in normal pregnancy] Gasser B, et al. **Gynakol Rundsch** 1989;29(1):22–31 (Eng. Abstr.) (Fre)

[Experimental study of nephrotoxicity: effects, on the newborn rat kidney, of aminoglycoside administration during gestation] Mallie JP, et al. **Nephrologie** 1989; 10(1):27–31 (Eng. Abstr.) (Fre)

[Placental passage of cefodizime] Berthelot G, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):699–701 (Eng. Abstr.) (Fre)

[Doppler blood flow measurement in the mother and fetus in normal pregnancy] Baumann H. **Arch Gynecol Obstet** 1988;244 Suppl:S9–11 (Ger)

[The significance of Doppler blood flow measurement in recognizing placental insufficiency] Vetter K. **Arch Gynecol Obstet** 1988;244 Suppl:S12–8 (Ger)

[AIDS in children. Neurologic damage before immunodeficiency (news)] **Fortschr Med** 1989 Mar 10; 107(7):15–6 (Ger)

[The prospective value of Doppler blood flow measurement in uteroplacental and fetal blood vessels—a comparative study of multiple parameters] Arabin B, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):457–62 (Eng. Abstr.) (Ger)

[Comparison of Doppler flow measurements of the arcuate artery and uterine artery in fetal growth retardation (published erratum appears in Geburtshilfe Frauenheilkd 1989 Mar;49(3):312)] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):863–8 (Eng. Abstr.) (Ger)

[Comparison of the clinical value of 2 frequently used indices of fetal blood flow analysis (pulsatility index PI and resistance index RI)] Hecher K, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):809–13 (Eng. Abstr.) (Ger)

[The 10th anniversary of obstetric Doppler sonography—development and perspectives] Schneider KT, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):407–15 (92 ref.) (Eng. Abstr.) (Ger)

[The value of fetal blood flow measurements in intrauterine growth retardation in comparison with E3 and human placental lactogen determinations] Spernol R, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):463–5 (Eng. Abstr.) (Ger)

[Doppler sonography of the umbilical artery: differential diagnosis in intrauterine growth retardation] Weiss E, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):466–71 (Eng. Abstr.) (Ger)

[Impedance cardiography in labor: clinical significance of several hemodynamic parameters] Moggian G, et al. **Gynakol Rundsch** 1989;29(1):32–4 (Eng. Abstr.) (Ger)

[Relation of Doppler ultrasound curves and birth weight] Rammer E, et al. **Gynakol Rundsch** 1988;28 Suppl 2:166–9 (Ger)

[Relation of uteroplacental hemodynamics and fetal respiratory behavior in pregnancy with threatened premature labor or intrauterine retardation] Ruckhäberle KE, et al. **Gynakol Rundsch** 1989;29(1):1–11 (Eng. Abstr.) (Ger)

[Integration of pulsed Doppler ultrasound into prenatal diagnosis] Skodler W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:163–5 (Ger)

[New non-invasive possibilities for assessing the function of the utero- and fetoplacental unit: Doppler sonography flow characteristics of selected arteries in normal pregnancy] Mager R, et al. **Padiatr Grenzgeb** 1989;28(3):131–8 (Eng. Abstr.) (Ger)

[Doppler ultrasound studies before and following short-term maternal stress in late pregnancy] Drack G, et al. **Z Geburtshilfe Perinatol** 1988 Jul–Aug;192(4):173–7 (Eng. Abstr.) (Ger)

[Doppler sonography of the umbilical artery, mode of delivery and perinatal morbidity in prolonged pregnancy] Hitschold T, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct; 192(5):197–202 (Eng. Abstr.) (Ger)

[Morphology of the placenta in relation to glycemia status in pregnancy in diabetes mellitus] Semmler K, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun;193(3):124–8 (Eng. Abstr.) (Ger)

[Examination of the reduction of umbilical circulation in fetuses with variable decelerations of heart rate using Doppler sonography of the umbilical artery] Weiss E, et al. **Z Geburtshilfe Perinatol** 1989 Mar–Apr;193(2):60–7 (Eng. Abstr.) (Ger)

[Recent physiologic and pathophysiologic findings on fetal circulation] Schwartze H. **Zentralbl Gynakol** 1988; 110(20):1257–62 (13 ref.) (Eng. Abstr.) (Ger)

[Correlation of progesterone and apoprotein B in pregnancy] Seiler E, et al. **Zentralbl Gynakol** 1988;110(21):1340–4 (Eng. Abstr.) (Ger)

[Determination of immune complexes in the serum of pregnant patients and puerperal females with EPH gestosis] Wagler P, et al. **Zentralbl Gynakol** 1988;110(21):1329–39 (Eng. Abstr.) (Ger)

[Maternal concentration of serum digoxin and concentration in the amniotic fluid and neonatal serum] Plotti G, et al. **Recenti Prog Med** 1989 Mar;80(3):165–9 (Eng. Abstr.) (Ita)

[Pharmacokinetic and clinical studies of ceftizoxime in obstetrical and gynecological field (2)] Ito K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1155–63 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on ceftizoxime in the perinatal period] Yamamoto T, et al. **Jpn J Antibiot** 1988 Aug;41(8):1164–71 (Eng. Abstr.) (Jpn)

[Effects of maternal hyperventilation and oxygen inhalation during labor on fetal blood-gas status] Haruta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1377–84 (Eng. Abstr.) (Jpn)

[The study on the human placental L-lactate transport mechanism (using placental microvillous membrane vesicles)] Nabuchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):137–42 (Eng. Abstr.) (Jpn)

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. I. Transplacental transmission of phenytoin] Tanaka K, et al. **No To Hattatsu** 1988; 20(5):363–7 (Eng. Abstr.) (Jpn)

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. II. Possible adverse effects on the fetal growth] Tanaka K, et al. **No To Hattatsu** 1988;20(5):368–72 (Eng. Abstr.) (Jpn)

[Toxic environmental pollution as a fetal risk factor] Zdziennicki A. **Wiad Lek** 1988 Apr 15;41(8):514–7 (33 ref.) (Eng. Abstr.) (Pol)

[Changes in the sensomotor cortex of offspring after chronic intoxication with tobacco smoke through the mother–fetus system] Kleshcheva RP. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):10–4 (Eng. Abstr.) (Rus)

[Structure of the mesenteric lymph nodes in fetuses and offspring of white rats under the effect of indomethacin on the mother–fetus system] Morozova EV. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):48–55 (Eng. Abstr.) (Rus)

[Cell composition and ultrastructure of the thymus in offspring during changes in the hormonal background in the mother–fetus functional system] Torbek VE. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):80–4 (Eng. Abstr.) (Rus)

[Role of bacterial lipopolysaccharides in provoking immune conflict in the mother–fetus system] Bandazhevskil IuI. **Arkh Patol** 1989;51(5):77–80 (56 ref.) (Eng. Abstr.) (Rus)

[Pathogenesis of fetal growth retardation and behavioral disorders in the progeny caused by smoking during pregnancy] Konstantinova NN, et al. **Vestn Akad Med Nauk SSSR** 1989;(3):42–50 (46 ref.) (Eng. Abstr.) (Rus)

[Maternal–fetal transmission of HIV in Catalonia and the Balearic Islands] Español Boren T, et al. **An Esp Pediatr** 1989 Apr;30(4):265–8 (37 ref.) (Eng. Abstr.) (Spa)

DRUG EFFECTS

Enzyme cytochemistry for the risk assessment of drug administration during pregnancy with special reference to proteases. Gossrau R, et al. **Acta Histochem Suppl (Jena)** 1988;36:361–76

The effect of toxic doses of lanthanum and cerium on the placental barrier and the blood/organ barrier in mice after intravenous injection of these elements. Marciniak M, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):294–9

Effect of ethanol on human placental transport of model amino acids and glucose. Schenker S, et al. **Alcoholism (NY)** 1989 Feb;13(1):112–9

Transplacental passage and hemodynamic effects of esmolol in the gravid ewe. Ostman PL, et al. **Anesthesiology** 1988 Nov;69(5):738–41

Use of unbound drug concentrations to determine neonatal anticonvulsant exposure. Friel PN, et al. **Epilepsy Res** 1987 Jan;1(1):70–3

Effects of centrophenoxine on cholinephosphotransferase activity in maternal and fetal guinea pig lung. Stith IE, et al. **Exp Lung Res** 1989 Jul;15(4):587–96

Acetylcholine and choline levels in rabbit fetuses exposed to anticholinergics. McBride WG, et al. **Int J Dev Neurosci** 1987;5(2):117–25

Fluid transport across human fetal membranes affected by human amniotic fluid prolactin: an in vitro study. de Bakker-Teunissen OJ, et al. **Placenta** 1988 Sep–Oct; 9(5):533–45

Risks to the fetus of anticoagulant therapy during pregnancy. Ginsberg JS, et al. **Thromb Haemost** 1989 Apr 25; 61(2):197–203 (189 ref.)

[Regulation of the fetoplacental unit. 3. Suppression of the fetoplacental unit by cortisol in relation to the maturity of the fetus] Reck G, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):651–3 (Eng. Abstr.) (Ger)

[What changes in pregnancy? Physiologic principles of anesthesia in labor] Diemer HP. **Gynakologe** 1989 Apr; 22(2):110–4 (49 ref.) (Ger)

[Influence of pindolol on maternal cardiovascular parameters and contractility of the puerperal uterus] Egarter C, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):123–5 (Eng. Abstr.) (Ger)

[Cardiovascular agents in pregnancy] Lopes AC, et al. **Arq Bras Cardiol** 1988 Nov;51(5):419–25 (87 ref.) (Por)

RADIATION EFFECTS

[Exposure of the fetoplacental unit, breast milk and cow's milk to radionuclides 1 year after Chernobyl] Schlotter CM, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):557–60 (Eng. Abstr.) (Ger)

MATERNAL HEALTH SERVICES

Pregnancy in women prisoners [letter] Philipp E. **Br J Hosp Med** 1988 Aug;40(2):150

Teenage pregnancy. Caring for adolescent mothers with their infants in pediatric settings. Stevens-Simon C, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):282–3

Development of a statewide Maternal and Child Health Information Network. Benford MS, et al. **Comput Nurs** 1989 Jan–Feb;7(1):9–14

Psychosocial and clinical variables in pregnant adolescents. A survey of maternity home residents. Koniak-Griffin D. **J Adolesc Health Care** 1989 Jan;10(1):23–9

Rural obstetric care [letter] **J Am Board Fam Pract** 1989 Apr–Jun;2(2):139–41

Anatomy of a training seminar. Teaching and learning in Angola. Raisler J. **J Nurse Midwifery** 1989 Jan–Feb; 34(1):36–40

Wibangbe: the making of a documentary about the training and supervision of traditional birth attendants in Zaire. Vansintejan GA, et al. **J Nurse Midwifery** 1988 Nov–Dec; 33(6):280–2

Early discharge with home follow-up: impacts on low-income mothers and infants. Norr KF, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr; 18(2):133–41

Appropriateness of antenatal referrals to a regional perinatal center. Cordero L, et al. **J Perinatol** 1989 Mar;9(1):38–42

The impact of South African destabilization on maternal and child health in Mozambique. Cliff JL, et al. **J Trop Pediatr** 1988 Dec;34(6):329–30

Obstetric services in a "multicultural" Australia [editorial] Duke JE. **Med J Aust** 1988 Nov 7;149(9):453–4

Survey of maternal transports to the North Carolina Memorial Hospital. Thorp JM Jr, et al. **N C Med J** 1989 Aug;50(8):423–5

Mothers' lives matter: maternal health in the community. **Popul Rep [L]** 1988 Sep;(7):1–3

A shelter that saves mothers' lives [letter] Knowles JK. **World Health Forum** 1988;9(3):387–8

Lessons for the developed—from the Third World. Lenart JC. **World Health Forum** 1988;9(3):454–60

[Perspectives for our profession in 1988] Balák K. **Cesk Gynekol** 1988 May;53(4):241–2 (Cze)

[Survey on the level of functioning of family health services in Milan] Farina A, et al. **Ann Ostet Ginecol Med Perinat** 1988 Mar–Apr; 109(2):99–107 (Eng. Abstr.) (Ita)

[Drugs for the mother and infant in the maternity ward. A study of 5 Norwegian university hospitals] Matheson I. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2118–22 (Eng. Abstr.) (Nor)

[Maternal health services and pediatric health services in developing countries demand more resources] Lundborg M. **Lakartidningen** 1988 Oct 19;85(42):3488 (Swe)

ECONOMICS

Barriers to implementation of a prenatal care program for low income women. Miller CL, et al. **Am J Public Health** 1989 Jan;79(1):62–4

Medicaid and medical services for pregnant women and children. Sadler DK. **J Tenn Med Assoc** 1988 Sep;81(9):580

Incantations in the dark: Medicaid, managed care, and maternity care. Rosenbaum S, et al. **Milbank Q** 1988; 66(4):661–93

HISTORY

From the labour unit and the Anna-Maria paediatric hospital to the Polish Mother Health Centre Memorial Hospital in Lódź. Fijalek J, et al. **Mater Med Pol** 1988 Jan–Mar; 20(1):57–62

[Maternal and child health services in Bashkiria during the years of establishing of Soviet power] Ibragimov NG. **Sov Zdravookhr** 1989;(3):70–4 (Rus)

[Contribution of Russian physicians to the struggle for improving maternal and child health in the Turkmenistan] Iskhakov VI, et al. **Sov Zdravookhr** 1989;(3):74–6 (Rus)

LEGISLATION & JURISPRUDENCE

[Possibilities for deriving health indicators in maternal health counseling] Ewert R. **Z Arztl Fortbild (Jena)** 1989; 83(10):541–3 (Ger)

MANPOWER

Comparison between the outcome of antenatal care led primarily by district physician or by obstetrician. A study on a defined population based on the Medical Birth Registry. Håkansson A. **Acta Obstet Gynecol Scand** 1988; 67(7):639–44

ORGANIZATION & ADMINISTRATION

Planning a maternal–fetal medicine program. The hospital employee model. Barford D. **Am J Perinatol** 1989 Apr;6 Suppl:21–3

Planning a maternal–fetal medicine program. The private practice model. Blanco JD. **Am J Perinatol** 1989 Apr;6 Suppl:17–20

Planning a maternal–fetal medicine program. Contracts. Elliott JP. **Am J Perinatol** 1989 Apr;6 Suppl:28–31

Planning a maternal–fetal medicine program. The subspecialist's perspective. Lorenz RP. **Am J Perinatol** 1989 Apr;6 Suppl:12–4

Planning a maternal–fetal medicine program. Relationship to obstetricians. Lorenz RP. **Am J Perinatol** 1989 Apr;6 Suppl:15–6

Planning a maternal–fetal medicine program. The hospital's perspective. Schwartz DB. **Am J Perinatol** 1989 Apr;6 Suppl:3–11

Planning a maternal–fetal medicine program. Joint university and private hospital models. Sokol RJ. **Am J Perinatol** 1989 Apr;6 Suppl:24–7

Community-based, community-oriented maternity care [news] Sakala C. **Am J Public Health** 1989 Jul;79(7):897–8

Organization of obstetrical care in Belgium. Derom R, et al. **Biol Neonate** 1989;55(1):63–9 (11 ref.)

NHS review. Obstetrics after the white paper. Chamberlain G. **BMJ** 1989 Jun 24;298(6689):1702–3

My grandchild's birth [letter] Cullimore J. **BMJ** 1988 Dec 10;297(6662):1540

Use of a statewide Maternal and Child Health Information Network. Slack CB, et al. **Comput Nurs** 1989 Mar–Apr; 7(2):61–7

Evaluation of the benefit of setting up a decentralised obstetric-surgical structure in order to reduce maternal mortality and transfers in the Ivory Coast. Berardi JC, et al. **Int J Gynaecol Obstet** 1989 May;29(1):13–7

A four-week observation of maternity care in Finland. Carr C. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr; 18(2):100–4 (13 ref.)

The Bamako initiative [editorial] **Lancet** 1988 Nov 19; 2(8621):1177–8

Maternity services in New South Wales—childbirth moves toward the 21st century. Bennett C, et al. **Med J Aust** 1989 Jun 19;150(12):673–6

Helping managers to manage: work schedules of field-workers in rural Bangladesh. Koblinsky MA, et al. **Stud Fam Plann** 1989 Jul–Aug;20(4):225–34

[The main trends in the activities to improve mass screening of women] Serov VN. **Akush Ginekol (Mosk)** 1988 Oct; (10):3–7 **(Rus)**

[Organization of preventive services in a pediatric polyclinic and a consultation center for women in obstetric–therapeutic–pediatric units] Gorodkov VN, et al. **Pediatriia** 1988;(4):66–71 **(Rus)**

[Maternal and child health services at the current stage: their problems and ways of their solution] Baranov AA. **Sov Zdravookhr** 1989;(3):3–6 **(Rus)**

[Health status of pregnant women and infants in their first year of life in the Lithuanian S.S.R.] Ignat'eva RK, et al. **Sov Zdravookhr** 1989;(6):31–8 (Eng. Abstr.) **(Rus)**

[Organization of medico-social services for families in the Hungarian People's Republic] Kamsiuk LG, et al. **Sov Zdravookhr** 1988;(9):58–62 **(Rus)**

[Anti-smoking propaganda among pregnant women] Kosenko EV. **Sov Zdravookhr** 1989;(3):39–41 (Eng. Abstr.) **(Rus)**

[Priority trends in the realization of complex programs aimed at decreasing infant mortality in the regions of high mortality rate] Vaganov NN, et al. **Sov Zdravookhr** 1989; (3):7–11 **(Rus)**

STANDARDS

The measurement of birth outcome. Bonham GH. **Can J Public Health** 1988 Sep–Oct;79(5):385

Assessment of MCH services in the district of Solenzo, Burkina Faso. III. Effectiveness of MCH services in detecting of and caring for mothers and children at risk. Sauerborn R, et al. **J Trop Pediatr** 1989 Jun;35 Suppl 1:14–7

Interviews or postal questionnaires? Comparisons of data about women's experiences with maternity services. Cartwright A. **Milbank Q** 1988;66(1):172–89

Improvement of maternity and child health services in rural Bangladesh: an experimental project. Rahman S, et al. **Public Health** 1988 Jul;102(4):355–8

[The professional ethics of midwives] Matuszewska E. **Ginekol Pol** 1988 Sep;59(9):570–6 (Eng. Abstr.) **(Pol)**

SUPPLY & DISTRIBUTION

Crisis in the maternity services. Hall MH. **BMJ** 1988 Aug 20–27;297(6647):500–1

Private and public sectors form partnership to solve indigent maternity care crisis. Deju J. **J Fla Med Assoc** 1988 Nov; 75(11):725–6

TRENDS

Indicators for monitoring progress in maternal and child health care in Africa. Wallace HM, et al. **J Trop Pediatr** 1988 Aug;34(4):158–64

Reproductive health and reproductive freedom: maternal health care and family planning in the Swedish health system. Sundström-Feigenberg K. **Women Health** 1988; 13(3–4):35–55

[The World Health Organization working for the puerpera and the newborn infant] Vülov V. **Akush Ginekol (Sofiia)** 1988;27(5):1–7 **(Bul)**

[Pronouncement of the Minister of Health and Social Welfare on May 27, 1987: "Current trends in the health care of women in Poland"] Cybulko M. **Ginekol Pol** 1988 Jun; 59(6):325–32 **(Pol)**

[Main trends in restructuring of maternal and child health services] Baranov AA. **Pediatriia** 1988;(9):5–10 **(Rus)**

UTILIZATION

The requirement for intensive care support for the pregnant population. Graham SG, et al. **Anaesthesia** 1989 Jul; 44(7):581–4

Rural maternal, child, and adolescent health. McManus MA, et al. **Health Serv Res** 1989 Feb;23(6):807–48 (28 ref.)

Under utilization of MCH services—the major factor for very high IMR in rural Rajasthan. Bhandari B, et al. **Indian Pediatr** 1989 Mar;26(3):228–33

Who consults and where? Sociocultural differentiation in access to health care in urban Africa. Fassin D, et al. **Int J Epidemiol** 1988 Dec;17(4):858–64

Productivity and selected indicators of care in maternity and infant care and children and youth projects according to sponsorship. Kotch JB, et al. **J Med Syst** 1988 Oct; 12(5):285–94

Assessment of MCH services offered by professional and community health workers in the district of Solenzo, Burkina Faso. I. Utilization of MCH services. Nougtara A, et al. **J Trop Pediatr** 1989 Jun;35 Suppl 1:2–9

Maternal health care and outcome of pregnancies in Kainji Lake Area of Nigeria. Adekolu-John EO. **Public Health** 1989 Jan;103(1):41–9

Use of obstetrical care compared among military and civilian families. Horton JA, et al. **Public Health Rep** 1989 May–Jun;104(3):309–10

Factors influencing early prenatal enrollment in the WIC program. Ku L. **Public Health Rep** 1989 May–Jun; 104(3):301–6

[Utilization of preventive obstetric examinations in Denmark in 1937] Knudsen LB, et al. **Ugeskr Laeger** 1988 Nov 14; 150(46):2828–9 **(Dan)**

[Use of maternal health services in rural Mexico] Potter JE. **Salud Publica Mex** 1988 May–Jun;30(3):387–402 (Eng. Abstr.) **(Spa)**

MATERNAL MORTALITY

Maternal mortality in pre-Columbian Indians of Arica, Chile. Arriaza B, et al. **Am J Phys Anthropol** 1988 Sep;77(1):35–41

Maternal mortality surveillance [letter] Entman SS, et al. **Am J Public Health** 1988 Nov;78(11):1499–500

Grandmultiparity: a continuing problem in developing countries. Aziz-Karim S, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):155–60

Are perinatal and maternal mortality the best measures of quality in obstetrics? Hudson CN. **Aust Clin Rev** 1988 Dec; 8(31):181–4

Maternal mortality in Rangoon Burma [letter] Hartfield VJ. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):328

Maternal mortality at the Women's and Children's Hospital, South Okkalapa (1978–1982). Khin Kyi M. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):36–40

Maternal mortality and morbidity in Belgium. MacGillivray I, et al. **Biol Neonate** 1989;55(1):30–3 (15 ref.)

A prospective study of maternal and fetal outcome in acute Lassa fever infection during pregnancy. Price ME, et al. **BMJ** 1988 Sep 3;297(6648):584–7

Obstetric deaths in Menoufia Governorate, Egypt. el Kady AA, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):9–14

Causes of maternal mortality in rural Bangladesh, 1976–85. Fauveau V, et al. **Bull WHO** 1988;66(5):643–51

Analysis of the causes of maternal death in China. Zhang LM, et al. **Bull WHO** 1988;66(3):387–90

The need for national pregnancy mortality surveillance. Atrash HK, et al. **Fam Plann Perspect** 1989 Jan–Feb; 21(1):25–6

Maternal mortality in Indiana: a report of maternal deaths in 1986. Ragan WD. **Indiana Med** 1988 Sep;81(9):773

Maternal mortality in various Italian regions [letter] Parazzini F, et al. **Int J Epidemiol** 1989 Jun;18(2):466–7

Evaluation of the benefit of setting up a decentralised obstetric-surgical structure in order to reduce maternal mortality and transfers in the Ivory Coast. Berardi JC, et al. **Int J Gynaecol Obstet** 1989 May;29(1):13–7

Maternal mortality in Anambra State of Nigeria. Chukudebelu WO, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):365–70 (10 ref.)

Eclampsia and placental abruption: basic patterns, management and morbidity. López-Llera M, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):335–42

Characteristics of maternal deaths following cesarean section in a developing country. Ojo VA, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):171–6

Safe motherhood: an international priority [editorial] Pinotti JA. **Int J Gynaecol Obstet** 1989 Jun;29(2):105–6

Cesarean sections for maternal indications in Kasongo (Zaire). VandenBroek N, et al. **Int J Gynaecol Obstet** 1989 Apr;28(4):337–42

The confidential enquiry into maternal deaths: its role and importance for pathologists. Dawson I. **J Clin Pathol** 1988 Aug;41(8):820–5

Maternal mortality in developing countries. An ongoing but neglected 'epidemic'. Rosenfield A. **JAMA** 1989 Jul 21; 262(3):376–9 (39 ref.)

Maternal mortality in a Sahelian capital [letter] Huguet D, et al. **Lancet** 1989 Mar 11;1(8637):557

Abortion USA [letter] Reynolds JL. **Lancet** 1989 Jun 10; 1(8650):1331

Safe motherhood: the Niamey conference [letter] [see comments] Tafforeau J. **Lancet** 1989 Mar 25;1(8639):676–7 . **Comment in:** Lancet 1989 Jul 15;2(8655):162

Maternal mortality, fetal death, congenital anomalies and infant mortality at an advanced maternal age. Czeizel A. **Maturitas** 1988;Suppl 1:73–81

Maternal mortality surveillance, United States, 1980–1985. Koonin LM, et al. **MMWR CDC Surveill Summ** 1988 Dec; 37(5):19–29

Maternal deaths in New Jersey. Hansen GF, et al. **N J Med** 1988 Dec;85(12):1020–2

Maternal death in Papua New Guinea, 1984–1986. Mola G. **P N G Med J** 1989 Mar;32(1):27–31

The "guidelines" on reporting reproductive health statistics tend to confuse rather than clarify [letter] Ahmed F. **Public Health Rep** 1989 Mar–Apr;104(2):199–200

The distinction between rate and ratio is important [letter] Fortney JA. **Public Health Rep** 1989 Mar–Ap .;104(2):200

Maternal deaths at Pelonomi Hospital, Bloemfontein, 1980–1985. A survey of 81 consecutive cases. Cooreman BF, et al. **S Afr Med J** 1989 Jul 1;76(1):24–6

Estimating maternal mortality: the sisterhood method. Graham W, et al. **Stud Fam Plann** 1989 May–Jun; 20(3):125–35

[Maternal mortality in France and its uncertainties] Magnin P, et al. **Bull Acad Natl Med (Paris)** 1988 Nov; 172(8):1213–22 (Eng. Abstr.) **(Fre)**

[Maternal mortality caused by hemorrhage in developing countries. What policy is proposed?] Fernandez H, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):687–92 (Eng. Abstr.) **(Fre)**

[Maternal mortality at the Hospital Center of Libreville (1984–1987)] Picaud A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):445–50 (Eng. Abstr.) **(Fre)**

[Risk factors in maternal mortality in Algeria as seen from civil service records and hospital admission records] Desforts J. **Rev Epidemiol Sante Publique** 1988;36(6):498–9 **(Fre)**

[Maternal mortality. Apropos of 212 instances in 7 years (1980–1986) at the Ignace-Deen Maternity Hospital in Conakry (Guinea)] Diallo MS, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):419–22 (Eng. Abstr.) **(Fre)**

[Reproductive mortality in Switzerland between 1952 and 1982] Edye B, et al. **Soz Praventivmed** 1988;33(3):144–7 (Eng. Abstr.) **(Ger)**

[Reference landmarks for studies and research on maternal mortality] Laurenti R. **Rev Saude Publica** 1988 Dec; 22(6):507–12 (Eng. Abstr.) **(Por)**

[Methodologic approach to the study of health indicators in women and children] Tokova ZZ. **Akush Ginekol (Mosk)** 1988 Jul;(7):46–9 (Eng. Abstr.) **(Rus)**

[Thoughts on gynecology and obstetrics in Slovakia] Bárdoš A. **Cesk Gynekol** 1988 Nov;53(9):633–5 **(Slo)**

[Perspectives on maternal and neonatal health in Portugal] Torrado da Silva A. **Salud Publica Mex** 1988 Sep–Oct; 30(5):700–13 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Maternal mortality in North Carolina: a forty-year experience. May WJ, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):555–60; discussion 560–1

TRENDS

Maternal mortality in Hong Kong 1961–1985. Duthie SJ, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):4–8

Maternal mortality in developing countries. Harrison KA. **Br J Obstet Gynaecol** 1989 Jan;96(1):1–3 (13 ref.)

Teenage pregnancy: trend and impact on rates of low birth weight and fetal, maternal, and neonatal mortality in the United States. Lee KS, et al. **Clin Perinatol** 1988 Dec; 15(4):929–42 (33 ref.)

Regional differences in maternal mortality in Greece, 1973–1982. Llongueras S de S, et al. **Int J Epidemiol** 1988 Sep;17(3):574–8

Maternal mortality: levels, causes and promising interventions. Kwast BE. **J Biosoc Sci Suppl** 1989;10:51–67 (57 ref.)

Lessons from history—maternal and infant mortality [editorial] **Lancet** 1989 Jul 15;2(8655):140

Maternal and infant mortality [letter] Walker AR, et al. **Lancet** 1989 Aug 19;2(8660):453

Maternal death as a result of anesthesia—the Michigan

experience. Endler GC, et al. **Mich Med** 1989 Feb; 88(2):28–9
Documentation of maternal mortality. **N Y State J Med** 1989 Apr;89(4):238–9
Maternal mortality in Iowa from 1952 to 1986. Varner MW. **Surg Gynecol Obstet** 1989 Jun;168(6):555–62
The SMS Study Committee on Maternal Mortality Survey. Halverson GM. **Wis Med J** 1989 Jun;88(6):19–21
Maternal mortality in Wisconsin: 1971–1987. Halverson GM. **Wis Med J** 1989 Jun;88(6):21–3
[Problems in decreasing maternal mortality in Bulgaria] Mirkov K, et al. **Akush Ginekol (Sofiia)** 1988;27(3):1–9 (Eng. Abstr.) **(Bul)**
[Maternal mortality, its definition and assessment. Report of maternal mortality at the Bamberg Gynecologic Clinic 1963–1988] Krone HA, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):666–72 (Eng. Abstr.) **(Ger)**
[Peripartal mortality in East Germany with respect to prevention and cause of death] Fritsche U, et al. **Z Gesamte Hyg** 1988 Aug;34(8):458–61 (Eng. Abstr.) **(Ger)**
[Multicenter study of obstetrico-perinatologic quality control in the Rostock district. I. Comparative medical statistics] Heinrich J, et al. **Zentralbl Gynakol** 1989;111(4):193–203 (Eng. Abstr.) **(Ger)**
[Multicenter study of obstetrico-perinatologic quality control in the Rostock district. II. Analysis of results with graphic aids] Heinrich J, et al. **Zentralbl Gynakol** 1989; 111(4):204–10 (Eng. Abstr.) **(Ger)**
[Mortality after cesarean section] Starostina TA, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):22–4 **(Rus)**

MATERNAL WELFARE

see related
MATERNAL HEALTH SERVICES
Improving the life-course development of socially disadvantaged mothers: a randomized trial of nurse home visitation. Olds DL, et al. **Am J Public Health** 1988 Nov; 78(11):1436–45
Obstetrics and Pakistani women [letter] Sami AR. **BMJ** 1989 May 6;298(6682):1248–9
Better system for maternal and child health. Ko KW. **Indian Pediatr** 1988 Aug;25(8):726–33
Mothers' lives matter: maternal health in the community. **Popul Rep [L]** 1988 Sep;(7):1–3
Women's health: an alternative perspective for choosing interventions. Winikoff B. **Stud Fam Plann** 1988 Jul–Aug; 19(4):197–214 (65 ref.)
[Prolapse of the uterus and maternal health care] Jiang YZ, et al. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):203–5 **(Chi)**
[Activities of health personnel trade unions concerning health care of women and children (editorial)] Novak LI. **Pediatriia** 1988;(12):4–7 **(Rus)**
[Maternal nutrition during pregnancy: study of women from a rural area of Costa Rica] Murillo S, et al. **Bol Of Sanit Panam** 1988 Apr;104(4):345–54 (Eng. Abstr.) **(Spa)**

LEGISLATION & JURISPRUDENCE
Fetal therapy and surgery. Fetal rights versus maternal obligations. Rosner F, et al. **N Y State J Med** 1989 Feb; 89(2):80–4
[Protection of the pregnant woman. Administrative, medical and social problems] Nollevaux MA. **Arch Belg** 1988; 46(5–6):284–301 (Eng. Abstr.) **(Fre)**

TRENDS
Parent/child health: challenges for the 1990s [editorial] Stewart PJ. **Can J Public Health** 1989 May–Jun;80(3):163–5 **(Eng, Fre)**
[Sociomedical problems of maternal and infant welfare in regions with various levels of infant mortality] Vaganov NN, et al. **Pediatriia** 1988;(10):5–8 **(Rus)**

MATERNALLY-ACQUIRED IMMUNITY see IMMUNITY, MATERNALLY-ACQUIRED

MATHEMATICAL COMPUTING

see related
EPIDEMIOLOGIC METHODS
A new procedure for correcting background in quantitative autoradiographic studies. Korr H, et al. **Acta Histochem Suppl (Jena)** 1989;37:149–55
Some experiences with StatView 512+: a statistical package for the Macintosh [letter] Vogel HJ, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):188
Microcomputer programs for the evaluation of predictable long-term exposure. Re M. **Am Ind Hyg Assoc J** 1985 Jul; 46(7):369–72
A program to calculate sample size, power, and least detectable relative risk using a programmable calculator. Muhm JM, et al. **Am J Epidemiol** 1989 Jan;129(1):205–11
Hydrocortisone secretion: production rate and pulse characterization by numerical deconvolution. Toutain PL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E688–95
Logarithmic timebase for stopped-flow data acquisition and analysis. Walmsley AR, et al. **Anal Biochem** 1989 Feb 1; 176(2):313–8
Solution of the Hodgkin-Huxley and cable equations on an array processor. Stockbridge N. **Ann Biomed Eng** 1989; 17(3):253–68
Reliability of the Cobb angle index derived by traditional and computer assisted methods. Dutton KE, et al. **Australas Phys Eng Sci Med** 1989 Mar;12(1):16–23
Nonlinear curve fitting improves noise sensitivity of the single-breath method for estimation of cardiac output. Christensen P, et al. **Aviat Space Environ Med** 1989 Aug; 60(8):803–6
ELF electromagnetic environment in power substations. Hayashi N, et al. **Bioelectromagnetics** 1989;10(1):51–64
Score tests for homogeneity of regression effect in the proportional hazards model. O'Quigley J, et al. **Biometrics** 1989 Mar;45(1):135–44
Computerised intraocular lens calculation: clinical results and predictability. Olsen T, et al. **Br J Ophthalmol** 1989 Mar; 73(3):220–4
Computation of derived diagnostic quantities during intermittent coronary sinus occlusion in dogs. Schreiner W, et al. **Cardiovasc Res** 1988 Apr;22(4):265–76
Mathematical analysis of haemopoietic grafted cell renewal and migration through the allogeneic or syngeneic mouse host. Spach C, et al. **Cell Tissue Kinet** 1988 Jul;21(4):285–99
Nonlinear regression on a microcomputer: which program? Atkins GL. **Comput Appl Biosci** 1985;1(2):79–82
A general purpose non-linear curve fitting program for the British Broadcasting Corporation Microcomputer. Beynon RJ. **Comput Appl Biosci** 1985;1(2):111–5
Merging of distance matrices and classification by dynamic clustering. Delorme MO, et al. **Comput Appl Biosci** 1988 Nov;4(4):453–8
A simple add-on algorithm to extend one-dimensional finite difference diffusion calculations to include charge coupling. Dibdin GH. **Comput Appl Biosci** 1989 Feb;5(1):19–26
Analysis of finite mixture of distributions: a statistical tool for biological classification problems. Equihua M. **Comput Appl Biosci** 1988 Nov;4(4):435–40
A rapid computer technique for analysing molecular interactions. Fielding AH, et al. **Comput Appl Biosci** 1986 Sep;2(3):195–9
Using Lotus 1-2-3 to determine correlation of linearly related method comparison data. Gasperini R. **Comput Appl Biosci** 1989 Feb;5(1):56–7
Spreadsheet statistics. Kibby MR. **Comput Appl Biosci** 1986 Sep;2(3):151–7
A test for the statistical significance of DNA sequence similarities for application in databank searches. Mott RF, et al. **Comput Appl Biosci** 1989 Apr;5(2):123–31
Computer program Jamsek combining statistical and stereochemical rules for the prediction of protein secondary structure. Mrázek J, et al. **Comput Appl Biosci** 1988 Apr; 4(2):297–302
Microcomputer tools for steady-state enzyme kinetics. Myers D, et al. **Comput Appl Biosci** 1985;1(2):105–10
POEAMS: program for outliers elimination in 'anomalous' multidimensional space. Orozco M, et al. **Comput Appl Biosci** 1989 Jul;5(3):241–2
A BASIC microcomputer program for data analysis of limiting dilution assays. Sette A, et al. **Comput Appl Biosci** 1989 Apr;5(2):161
Solving algebraic equations on a microcomputer. Tucker EE. **Comput Appl Biosci** 1986 Sep;2(3):159–65
A FORTRAN subroutine to compute inbreeding and kinship coefficients according to the number of ancestral generations. Vu Tien Khang J. **Comput Appl Biosci** 1989 Jul;5(3):199–204
Selecting a processor for computations in molecular biophysics. Bourne PE, et al. **Comput Biol Med** 1988; 18(5):341–9
Calcium: a program in BASIC for calculating the composition of solutions with specified free concentrations of calcium, magnesium and other divalent cations. Chang D, et al. **Comput Biol Med** 1988;18(5):351–66
A computer program in BASIC for estimation of ED50 and LD50. Fung KP. **Comput Biol Med** 1989;19(2):131–5
A SAS procedure for exact probability testing of difference between sample and population proportion. Lee J, et al. **Comput Biol Med** 1989;19(2):137–43
Precise water vapor pressure value calculations. Prusaczyk WK. **Comput Biol Med** 1989;19(2):129–30
A radioimmunoassay program for Lotus 1-2-3. Sundqvist C, et al. **Comput Biol Med** 1989;19(2):145–50
The global extrapolation of numerical methods for computing concentration profiles in percutaneous drug absorption. Twizell EH. **Comput Biol Med** 1989;19(3):163–71
A computer program for summarizing scatter plots with robust ellipses. Baughman AL. **Comput Methods Programs Biomed** 1989 Jan;28(1):57–61
A FORTRAN function for the bivariate normal integral. Baughman AL. **Comput Methods Programs Biomed** 1988 Sep–Oct;27(2):169–74
A new implemented version of program MIR (MIR II): analysis and identification of mathematical models in enzyme and transport kinetic studies. Bianchi R, et al. **Comput Methods Programs Biomed** 1988 Sep–Oct; 27(2):189–96
SEQUAL: an interactive computer program for sequential classification of biomedical data. Bona B, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):213–21
BOOMER, a simulation and modeling program for pharmacokinetic and pharmacodynamic data analysis. Bourne DW. **Comput Methods Programs Biomed** 1989 Jul; 29(3):191–5
A BASIC program for the estimation of Michaelis-Menten parameters by the direct linear plot. Brady JF, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):271–2
Microcomputer-assisted univariate survival data analysis using Kaplan-Meier life table estimators. Campos-Filho N, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):223–8
CONFREG: a BASIC program for calculating and plotting confidence regions based on correlational analyses. Iturriaga R, et al. **Comput Methods Programs Biomed** 1989 May;29(1):37–42
A program for the computation of power and determination of sample size in hierarchical experimental designs. Jeanprêtre N, et al. **Comput Methods Programs Biomed** 1989 Jul;29(3):179–90
A computer program for calculating ratio estimates. Latvis V, et al. **Comput Methods Programs Biomed** 1989 Jan; 28(1):31–6
Correspondence analysis of contingency tables. Moussa MA, et al. **Comput Methods Programs Biomed** 1988 Sep–Oct; 27(2):111–9
A FORTRAN program for multivariate survival analysis on the personal computer. Mulder PG. **Comput Methods Programs Biomed** 1988 Sep–Oct; 27(2):175–88
RIAPC: a microcomputer program for the analysis of radioimmunoassay data. Rieger D. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):249–55
Using permutation tests and bootstrap confidence limits to analyze repeated events data from clinical trials. Freedman L, et al. **Controlled Clin Trials** 1989 Jun;10(2):129–41
The inverse problem in electrocardiography: solutions in terms of equivalent sources. Gulrajani RM, et al. **Crit Rev Biomed Eng** 1988;16(3):171–214 (112 ref.)
The appended curve technique for deconvolutional analysis—method and validation. Juni JE, et al. **Eur J Nucl Med** 1988;14(7–8):403–7
Mathematical and statistical strategies for biomarker research of aging. Mode CJ. **Exp Gerontol** 1988;23(4–5):369–75
Assessment of fetal blood volume for computer-assisted management of in utero transfusion. Mandelbrot L, et al. **Fetal Ther** 1988;3(1–2):60–6
Impulsive noise suppression and background normalization of electrocardiogram signals using morphological operators. Chu CH, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):262–73
Local convolution in ectomography. Dale SM, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):964–8
Segmentation of echocardiographic images using mathematical morphology. Klingler JW Jr, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):925–34
A method for recovering physiological components from dynamic radionuclide images using the maximum entropy principle: a numerical investigation. Nakamura M, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):906–17
Fast Hartley transforms for spectral analysis of ultrasound Doppler signals. Paik CH, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):885–8
The inverse problem in electroneurography—II: Computational aspects and evaluation using simulated data. Stegeman DF, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):778–88
Modelling of plasma-separation through microporous membranes. Gupta BB, et al. **Int J Artif Organs** 1989 Jan; 12(1):51–8
A program for simulation of nerve equations with branching geometries. Hines M. **Int J Biomed Comput** 1989 Mar; 24(1):55–68
A least squares algorithm to determine the mechanical time constant distribution of the lung during forced expiration. Rotger M, et al. **Int J Biomed Comput** 1989 Mar;24(1):29–40
Computer aided design and evaluation of limiting and serial dilution experiments. Strijbosch LW, et al. **Int J Biomed Comput** 1988 Dec;23(3–4):279–90
A versatile computational method for the determination of areas under the curve and moment curve following multidose drug administration. Yamashita TS, et al. **Int J Biomed Comput** 1988 Dec;23(3–4):239–49
Heat loss and blood flow during hyperthermia in normal canine brain. II: Mathematical model. Samulski TV, et al. **Int J Hyperthermia** 1989 Mar–Apr;5(2):249–63
A computational model for heat generation in a radially layered tissue inside a 'coaxial TEM' applicator. Zwamborn AP, et al. **Int J Hyperthermia** 1989 Mar–Apr;5(2):211–23
Calculating the nutrient composition of recipes with computers. Powers PM, et al. **J Am Diet Assoc** 1989 Feb; 89(2):224–32
Two BASIC programs for statistical analysis of periodicity data, based on the sine-wave function. Linley JR. **J Am Mosq Control Assoc** 1985 Jun;1(2):251–3
Algorithm for computing oxygen dissociation curve with pH, PCO2, and CO in sheep blood. Sharan M, et al. **J Biomed Eng** 1989 Jan;11(1):48–52
A numerical taxonomic study of the genus Xenorhabdus (Enterobacteriaceae) and proposed elevation of the subspecies of X. nematophilus to species. Akhurst RJ, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1835–45
A numerical classification of the genus Bacillus. Priest FG,

et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1847–82
X linked or autosomal recessive? A new approach to an old problem. Read AP. **J Med Genet** 1989 May;26(5):305–8
An estimation of a model explaining the mechanism causing neurotic disorders using a theory of fuzzy sets. Fujikake M, et al. **J Med Syst** 1988 Aug;12(4):211–29
BASIC programs to compute source densities from autoradiographic cross-fire matrices. Cau P. **J Microsc** 1988 Jun;150 (Pt 3):199–209
Detecting faking on the Rorschach: computer versus expert clinical judgment. Kahn MW, et al. **J Pers Assess** 1988 Fall;52(3):516–23
Characterization of normal brain tissue using seven calculated MRI parameters and a statistical analysis system. Hyman TJ, et al. **Magn Reson Med** 1989 Jul;11(1):22–34
Numerical analysis of electromagnetic hyperthermia of the human thorax. Zheng L, et al. **Med Biol Eng Comput** 1988 Jan;26(1):50–6
The influence of outliers on discrimination of chronic obturative lung disease. Krusińska E, et al. **Methods Inf Med** 1988 Oct;27(4):167–76
The relationship between the MAXABS and the RMS error. van Oosterom A, et al. **Methods Inf Med** 1988 Oct; 27(4):161–6
Hands-on to handle-turning man [editorial] Gregory RL. **Perception** 1989;18(2):139–42
Bootstrapping: applications to psychophysiology. Wasserman S, et al. **Psychophysiology** 1989 Mar;26(2):208–21
Graphical generalized residuals in fitting distributions: applications to epidemiological follow-up data. Elandt-Johnson RC, et al. **Stat Med** 1989 Jun;8(6):703–23
The application of time series forecasting methods to an estimation problem using provisional mortality statistics. Katzoff M. **Stat Med** 1989 Mar;8(3):335–41; discussion 363
[Computer-assisted measurement of biomechanical values exemplified by the renovascular system] Möller DP. **Biomed Tech (Berlin)** 1989 May;34(5):94–100 (Eng. Abstr.) (Ger)
[A computerized model of cerebrovascular circulation] Pucher RK, et al. **Biomed Tech (Berlin)** 1988 Jun; 33(6):140–7 (Eng. Abstr.) (Ger)
[A new numerical representation of visual field in patients with chiasmal tumor] Sakatani K, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1046–51 (Eng. Abstr.) (Jpn)
[Analysis of clinical data from atopic dermatitis by database system, ADOS] Fujisawa S, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1211–8 (Eng. Abstr.) (Jpn)
[Evaluation of diets by the computerized diet analysis system] Mielniczuk H, et al. **Rocz Panstw Zakł Hig** 1988;39(6):463–8 (Eng. Abstr.) (Pol)
[Use of a method of mathematical planning of an experiment for creating optimal nutrient media] Vakarash NA, et al. **Gig Sanit** 1988 Aug;(8):43–5 (Rus)
[Biomathematical approaches to the problems of radiation biology and medicine] Iakovlev AIu. **Med Radiol (Mosk)** 1988 Nov;33(11):13–6 (Eng. Abstr.) (Rus)
[A system of automated analysis of the efficacy of radiation therapy] Osipova TT. **Med Radiol (Mosk)** 1988 Nov; 33(11):23–6 (Rus)
[Use of a simplified method of calculating mean life expectancy by regions in the Ukraine] Grabovskaia TV, et al. **Sov Zdravookhr** 1989;(6):16–20 (Rus)
[A diagnostic program for estimating the time of death using microcalculators MK-61 and B3-34] Shved EF, et al. **Sud Med Ekspert** 1989 Jan-Mar;32(1):15–7 (Eng. Abstr.) (Rus)
[Prospects for using numerical methods in research in traumatology and orthopedics] Kalnberz VK, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):74–9 (Eng. Abstr.) (Rus)
[Use of fuzzy sets in the quantification of normality of the QRS complex in the orthogonal electrocardiogram] Ruttkay-Nedecký I. **Bratisl Lek Listy** 1988 Sep; 89(9):627–30 (Eng. Abstr.) (Slo)

MATHEMATICS

Mathematics, structuralism and biology. Saunders PT. **Acta Biol Hung** 1988;39(1):3–16
Gender differences in patterns of spatial ability, environmental cognition, and math and English achievement in late adolescence. Pearson JL, et al. **Adolescence** 1989 Summer;24(94):421–31
Algebra of sphero-cylinders and refractive errors, and their means, variance, and standard deviation. Harris WF. **Am J Optom Physiol Opt** 1988 Oct;65(10):794–802
Early interest in the idiot savant [letter] Foerstl J. **Am J Psychiatry** 1989 Apr;146(4):566
Propagation of error and bias in half-life estimates based on two measurements. Phillips DL. **Arch Environ Contam Toxicol** 1989 Jul-Aug;18(4):508–14
How sensory maps could enhance resolution through ordered arrangements of broadly tuned receivers. Baldi P, et al. **Biol Cybern** 1988;59(4–5):313–8
Connection between internal representation of rigid transformation and cortical activity paths. Carlton EH. **Biol Cybern** 1988;59(6):419–29
Maximum likelihood identification of neural point process systems. Chornoboy ES, et al. **Biol Cybern** 1988; 59(4–5):265–75
A note regarding curve fitting with a sum of exponentials. Herman RA, et al. **Biopharm Drug Dispos** 1988 Nov-Dec; 9(6):579–86
Padé-Laplace method for analysis of fluorescence intensity decay. Bajzer Z, et al. **Biophys J** 1989 Jul;56(1):79–93
Regional stress in a noncircular cylinder. Janz RF, et al. **Biophys J** 1989 Jan;55(1):173–82
Graphical aid for determining power of clinical trials involving two groups. Miller DK, et al. **BMJ** 1988 Sep 10;297(6649):672–6
Calendar calculating in 'idiots savants': how do they do it? Howe MJ, et al. **Br J Psychol** 1988 Aug;79 (Pt 3):371–86
Learning of a complex arithmetic skill in amnesia: evidence for a dissociation between compilation and production. Milberg W, et al. **Brain Cogn** 1988 Aug;8(1):91–104
The role of the teacher in learning-based models of parietal area 7a. Zipser D, et al. **Brain Res Bull** 1988 Sep; 21(3):505–12
Mathematical analysis of molecular sequences. **Bull Math Biol** 1989;51(1):1–194
Tutorial on large deviations for the binomial distribution. Arratia R, et al. **Bull Math Biol** 1989;51(1):125–31
Weak hierarchies associated with similarity measures—an additive clustering technique. Bandelt HJ, et al. **Bull Math Biol** 1989;51(1):133–66
Analysis of interaction for mixtures of agents using the linear isobole. Lam GK. **Bull Math Biol** 1989;51(3):293–309
Approximate matching of regular expressions. Myers EW, et al. **Bull Math Biol** 1989;51(1):5–37
How children choose among serial recall strategies. McGilly K, et al. **Child Dev** 1989 Feb;60(1):172–82
Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. Midgley C, et al. **Child Dev** 1989 Aug;60(4):981–92
The development of working memory in normally achieving and subtypes of learning disabled children. Siegel LS, et al. **Child Dev** 1989 Aug;60(4):973–80
The progressive breakdown of number processing and calculation ability: a case study. Grafman J, et al. **Cortex** 1989 Mar;25(1):121–33
Localization of monoclonal B-cell populations through the use of Komogorov-Smirnov D-value and reduced chi-square contours. Bagwell CB, et al. **Cytometry** 1988 Sep;9(5):469–76
Radically simplifying the Henry function. Michov BM. **Electrophoresis** 1988 Apr;9(4):199–200
A quantitative theory of the Stern electric double layer. Michov BM. **Electrophoresis** 1988 Apr;9(4):201–2
Epilepsia arithmetices revisited. Senanayake N. **Epilepsy Res** 1989 Mar-Apr;3(2):167–73
Mathematics achievement of hearing impaired adolescents in different placements. Kluwin TN, et al. **Except Child** 1989 Jan;55(4):327–35
Bacterial strain characterization using mathematical modelling of growth. Rochet MJ, et al. **Int J Med Microbiol** 1989 May;271(1):2–10
Wide-angle one-way wave equations. Halpern L, et al. **J Acoust Soc Am** 1988 Oct;84(4):1397–404
Diffraction effects of planar transducers using a numerical expression for edge waves. Mair HD, et al. **J Acoust Soc Am** 1988 Oct;84(4):1517–25
Comparison of response prompting procedures in teaching numeral identification to autistic subjects. Ault MJ, et al. **J Autism Dev Disord** 1988 Dec;18(4):627–36
Singular value decomposition for identification of parameters in multicompartment analysis. Strackee J, et al. **J Biomed Eng** 1988 Oct;10(5):438–42
The emancipation of Miss Menten. Gjedde A. **J Cereb Blood Flow Metab** 1989 Apr;9(2):243–6
Use of augmented Lagrangians in the calculation of molecular conformations by distance geometry. Crippen GM, et al. **J Chem Inf Comput Sci** 1988 Aug;28(3):125–8
Numerical competence in a chimpanzee (Pan troglodytes). Boysen ST, et al. **J Comp Psychol** 1989 Mar;103(1):23–31
Judgments of quantity and conservation of quantity: the area of a rectangle. Lautrey J, et al. **J Exp Child Psychol** 1989 Apr;47(2):193–209
Strategy choice procedures and the development of multiplication skill. Siegler RS. **J Exp Psychol [Gen]** 1988 Sep;117(3):258–75
In defense of a modular architecture for the number-processing system: reply to Campbell and Clark. Sokol SM, et al. **J Exp Psychol [Gen]** 1989 Mar; 118(1):105–10
A singular dispersion relation arising in a caricature of a model for morphogenesis. Britton NF. **J Math Biol** 1988; 26(4):387–403
Regulation of differentiation in a population of cells interacting through a common pool. Doi S, et al. **J Math Biol** 1988;26(4):435–54
Existence and uniqueness of solutions in general multisolute renal flow problems. Garner JB, et al. **J Math Biol** 1988; 26(4):455–64
Asymptotic stability in a generalized probabilistic/deterministic model of the cell cycle. Tyrcha J. **J Math Biol** 1988;26(4):465–75
Edge detection in images using Marr-Hildreth filtering techniques. Smith TG Jr, et al. **J Neurosci Methods** 1988 Nov;26(1):75–81
A series expression for the surface area of an ellipsoid and its application to the computation of the surface area of avian erythrocytes. Bulliman BT, et al. **J Theor Biol** 1988 Sep 9;134(1):113–23
Chaos: detecting density dependence in imaginary worlds [news] May RM. **Nature** 1989 Mar 2;338(6210):16–7
The relationship between laterality and numerical and spatial ability. French CC, et al. **Neuropsychologia** 1989; 27(7):1019–22
Hemispheric specialization of abacus experts in mental calculation: evidence from the results of time-sharing tasks. Hatta T, et al. **Neuropsychologia** 1988;26(6):877–93
Calculation deficits in patients with right and left hemisphere damage. Rosselli M, et al. **Neuropsychologia** 1989; 27(5):607–17
Mathematics learning in Japanese, Chinese, and American classrooms. Stigler JW, et al. **New Dir Child Dev** 1988 Fall; (41):27–54
Effect of arousal on mathematics scores. Lawless WF. **Percept Mot Skills** 1988 Aug;67(1):318
Elementary counting of cardinal and ordinal numbers by persons with mental retardation. Marx MH. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1176–8
Hands-on to handle-turning man [editorial] Gregory RL. **Perception** 1989;18(2):139–42
Limit-cycle oscillations and chaos in reaction networks subject to conservation of mass. Di Cera E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):142–6
Noise in neural networks: thresholds, hysteresis, and neuromodulation of signal-to-noise. Keeler JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1712–6
A causal model of mathematics performance in early adolescence: the role of sex. Midkiff RM Jr, et al. **Psychol Rep** 1989 Feb;64(1):167–76
Mathematical and statistical analysis of circadian rhythms. Minors DS, et al. **Psychoneuroendocrinology** 1988; 13(6):443–64
Physical versus psychological determinants of heart rate reactivity to mental arithmetic. Brown TG, et al. **Psychophysiology** 1988 Sep;25(5):532–7
[The physician and the computer. 30. Evaluation of time, different aspects of the same problem] Kasal P, et al. **Cesk Pediatr** 1989 Jun;44(6):352–5 (Eng. Abstr.) (Cze)
[Düker's new version of mathematical problem-solving (published erratum appears in Arch Psychol (Frankf) 1988;140(4):following 280)] Heller O. **Arch Psychol (Frankf)** 1988;140(3):191–203 (Eng. Abstr.) (Ger)
[Results and clinical application of up-to-date mathematical procedures and computers: A joint session of the Department of Clinical Medicine and the Scientific Council for Biomedical Cybernetics of the USSR Academy of Medical Sciences and the Kirov Military Medical Academy. Leningrad, September 15–17, 1987. Proceedings] **Vestn Akad Med Nauk SSSR** 1988;(8):4–97 (Rus)

HISTORY

[The first general mathematical description of optical lenses without aberrations] Merté B. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):59–61 (Eng. Abstr.) (Ger)

MATING BEHAVIOR, ANIMAL see **SEX BEHAVIOR, ANIMAL**

MATING TYPE GENES see **GENES, FUNGAL**

MATRIX BANDS see under **DENTAL INSTRUMENTS**

MATRIX, EXTRACELLULAR see **EXTRACELLULAR MATRIX**

MATTRESSES see **BEDS**

MAXILLA

[A method for taking upper jaw impression and transferring it to the articulator in a single sitting] Pera P, et al. **Minerva Stomatol** 1989 Mar;38(3):341–4 (Eng. Abstr.) (Ita)

ABNORMALITIES

Surgical treatment of patients with upper micrognathia or retrognathia. Bezrukov VM, et al. **Acta Chir Plast** 1988; 30(3):138–46
The craniofacial morphology in persons with maxillonasal dysplasia (Binder syndrome). A longitudinal cephalometric study of orthodontically treated children. Olow-Nordenram M, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):148–58
Case report: VT. An adult patient with a bilateral posterior crossbite characterized by maxillary deficiency. Turpin DL. **Angle Orthod** 1989 Summer;59(2):155–9
Management of maxillary hypoplasia by Le Fort I osteotomy of the maxilla. Bromige MR. **Ann Acad Med Singapore** 1988 Jul;17(3):407–14
Simultaneous correction of maxillary and mandibular dentofacial deformities without the use of postoperative intermaxillary fixation. A clinical and cephalometric study. Krekmanov L, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):363–70
Treatment of the facial skeleton in naso-maxillo-acro-dysostosis. Bütow KW, et al.

J Craniomaxillofac Surg 1988 Aug;16(6):266–72

Masseter muscle adaptation following surgical correction of vertical maxillary excess. Boyd SB, et al.
J Oral Maxillofac Surg 1989 Sep;47(9):953–62

Congenital nasal pyriform aperture stenosis. Brown OE, et al. Laryngoscope 1989 Jan;99(1):86–91

Le Fort II osteotomy in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al.
S Afr J Surg 1988 Sep;26(3):88–9

Skull bone grafts in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al. S Afr J Surg 1988 Sep;26(3):90–4

Nasomaxillo–acrodysostosis. Bütow KW, et al.
S Afr Med J 1989 Jan 7;75(1):5–11

[Nasomaxillary dysplasias. Morphology and development, therapy and results] Pfeifer G.
Fortschr Kiefer Gesichtschir 1989;34:90–3 (Ger)

[Care of anterior diastemata in patients with lip–jaw–palate clefts] Hickel R, et al. Fortschr Kieferorthop 1989 Feb; 50(1):75–80 (Eng. Abstr.) (Ger)

[The effect of passive plates on the arrangement of the alveolar arch segments in unilateral total cheilognathopalatoschisis] Sarnäs KV, et al.
Fortschr Kieferorthop 1989 Feb;50(1):21–34 (Eng. Abstr.) (Ger)

[Consultation for patients with cheilognathopalatoschisis and their family members. Cooperation between orthodontists and human geneticists] Schwanitz G, et al.
Fortschr Kieferorthop 1989 Apr;50(2):118–26 (Eng. Abstr.) (Ger)

[Prosthodontics in cheilognathopalatoschisis patients. Prosthetic bridge care of patients with cheilognathopalatoschisis] Schürch E Jr, et al.
Schweiz Monatsschr Zahnmed 1989;99(4):434–43 (Ger, Fre)

[Causes of congenital maxillary anomalies in children] Nisinman EP. Stomatologiia (Mosk) 1988 Nov–Dec; 67(6):59–60 (Eng. Abstr.) (Rus)

[Comparative analysis immediately after treatment and 2 years and 10 months after treatment by posterior–anterior traction of the maxilla in patients with cleft lip and palate using a facial mask] Fernández De Cevallos–Urueta J, et al. Bol Med Hosp Infant Mex 1988 Dec;45(12):837–45 (Eng. Abstr.) (Spa)

ANALYSIS

Miokamycin penetration into oral cavity tissues and crevicular fluid. Fraschini F, et al.
Int J Clin Pharmacol Res 1989;9(4):293–6

ANATOMY & HISTOLOGY

On the clinical deformation of maxillary complete dentures. Influence of denture-base design and shape of denture-bearing tissue. el Ghazali S, et al.
Acta Odontol Scand 1989 Apr;47(2):69–76

Skeletal changes in vertical and anterior displacement of the maxilla with bonded rapid palatal expansion appliances. Sarver DM, et al. Am J Orthod Dentofacial Orthop 1989 Jun;95(6):462–6

Treatment effects of the Herbst appliance. Valant JR, et al. Am J Orthod Dentofacial Orthop 1989 Feb;95(2):138–47

Allometric relations of teeth and jaws in man. Kieser JA, et al. Am J Phys Anthropol 1988 Sep;77(1):57–67

A retrospective study of the stability of midface osteotomies in cleft lip and palate patients. Adlam DM, et al.
Br J Oral Maxillofac Surg 1989 Aug;27(4):265–76

Orientation of maxillary sutural surfaces. Remmelink HJ.
Eur J Orthod 1988 Aug;10(3):223–6

A morphometric study of bone and tooth volumes in the pipid frog Xenopus laevis (Daudin), with comments on the importance of tooth resorption during normal tooth replacement. Shaw JP. J Exp Zool 1989 Jan;249(1):99–104

The relationship of upper facial proportions and the plane of occlusion to anatomic reference planes. Ow RK, et al.
J Prosthet Dent 1989 Jun;61(6):727–33

A study of the height of intact alveolar bone on panoramic radiographs of adult patients. Packota GV, et al.
J Prosthet Dent 1988 Oct;60(4):504–9

On the functional deformation of maxillary complete dentures. A clinical and experimental study. el Ghazali S.
Swed Dent J Suppl 1989;59:1–82

[Correlative ontogenetic study of transverse variations in the premaxillary and symphyseal axes] Danguy–Derot C, et al. Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec;31(3–4):119–22 (Eng. Abstr.) (Fre)

[Symphyseo–premaxillary correlations in the norma lateralis] Laude M, et al.
Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec; 31(3–4):151–4 (Eng. Abstr.) (Fre)

[The premaxilla. Its transverse variations during growth] Laude M, et al.
Bull Group Int Rech Sci Stomatol Odontol 1988 Aug–Dec; 31(3–4):161–4 (Eng. Abstr.) (Fre)

BLOOD SUPPLY

Vascularized bone grafts for maxillofacial reconstruction. Yaremchuk MJ. Clin Plast Surg 1989 Jan;16(1):29–39 (58 ref.)

EMBRYOLOGY

Influence of epithelial–mesenchymal interaction on the viability of facial mesenchyme in vitro. Saber GM, et al. Anat Rec 1989 Sep;225(1):56–66

Relative growth rates of maxillary mesenchyme in the chick embryo. Bailey LJ, et al. J Craniofac Genet Dev Biol 1988; 8(2):167–77

GROWTH & DEVELOPMENT

Maxillomandibular growth 2 years after mandibular advancement surgery with and without suprahyoid myotomy in juvenile Macaca mulatta. Carlson DS, et al. Am J Orthod Dentofacial Orthop 1988 Dec;94(6):491–502

Cephalometric changes in Class II, Division 1 cases after orthopedic treatment with the bioactivator. Dahan J, et al. Am J Orthod Dentofacial Orthop 1989 Feb;95(2):127–37

Labial root torque: effect on the maxilla and incisor root apex. Goldin B. Am J Orthod Dentofacial Orthop 1989 Mar; 95(3):208–19

Maxillary superimposition: a comparison of three methods for cephalometric evaluation of growth and treatment change. Nielsen IL. Am J Orthod Dentofacial Orthop 1989 May;95(5):422–31

Effect of alveolar bone grafting on maxillary growth in unilateral cleft lip and palate patients. Semb G.
Cleft Palate J 1988 Jul;25(3):288–95

PATHOLOGY

Maxillary ameloblastoma. A potentially lethal neoplasm. Bredenkamp JK, et al.
Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):99–104 (28 ref.)

Protraction of the cleft maxilla. Ranta R. Eur J Orthod 1988 Aug;10(3):215–22

Postmortem examination of six maxillary core–vent implants: report of a case. Gores RJ, et al.
J Oral Maxillofac Surg 1989 Mar;47(3):302–6

Osseous repair with Le Fort I osteotomy. Calhoun NR, et al. Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):365–73

Protruding premaxilla in the bilateral cleft lip patient [letter] Georgiade NG, et al. Plast Reconstr Surg 1989 Aug; 84(2):372–3

[Evaluation of the apical base of the upper jaw in anomalies with protrusion of the upper incisors and overbite] Dúbravská E, et al. Sb Lek 1987 May;89(5):152–60 (Eng. Abstr.) (Cze)

[3–dimensional recording of changes in the infant jaw with unilateral cheilognathopalatoschisis with special reference to the results of preoperative orthodontic therapy] Schenk HJ, et al. Zahn Mund Kieferheilkd 1989;77(4):291–8 (Eng. Abstr.) (Ger)

[Changes in the jaws of rats after a 7–day flight on "Kosmos–1667"] Volozhin AI, et al.
Kosm Biol Aviakosm Med 1989 Jan–Feb;23(1):83–6 (Rus)

PHYSIOLOGY

Biomechanical effect of anteriorly directed extraoral forces on the craniofacial complex: a study using the finite element method. Tanne K, et al.
Am J Orthod Dentofacial Orthop 1989 Mar;95(3):200–7

Human tissue response to porous hydroxyapatite implants. A case report. Frame JW, et al.
Int J Oral Maxillofac Surg 1989 Jun;18(3):142–4

A photoelastic study of stress induced by framework design in a maxillary resection. Myers RE, et al.
J Prosthet Dent 1989 May;61(5):590–4

PHYSIOPATHOLOGY

The effect of orthognathic surgery on occlusal force. Proffit WR, et al. J Oral Maxillofac Surg 1989 May;47(5):457–63

RADIOGRAPHY

Vertical parallax radiology to localize an object in the anterior part of the maxilla. Southall PJ, et al.
Br J Orthod 1989 May;16(2):79–83

Radiographic appearance of nutrient canals in the region of the erupting permanent maxillary cuspid. Goodman–Topper ED, et al.
Oral Surg Oral Med Oral Pathol 1989 May;67(5):606–10

RADIONUCLIDE IMAGING

Bone mineral content of the maxilla estimated by dual–photon absorptiometry after augmentation with bone or hydroxyapatite. von Wowern N, et al. J Dent Res 1988 Nov;67(11):1405–8

SURGERY

Postsurgical maxillary movement: a comparison study of bone plate and screw versus wire osseous fixation. Larsen AJ, et al. Am J Orthod Dentofacial Orthop 1989 Apr; 95(4):334–43

Integumental profile changes after surgical orthodontic correction of bimaxillary dentoalveolar protrusion in black patients. O'Reilly MT. Am J Orthod Dentofacial Orthop 1989 Sep;96(3):242–8

An American Board of Orthodontics case report. Snyder DE. Am J Orthod Dentofacial Orthop 1989 Feb;95(2):91–5

Simultaneous superior repositioning of the maxilla and mandibular advancement. A report on stability. Turvey TA, et al. Am J Orthod Dentofacial Orthop 1988 Nov; 94(5):372–83

Isoflurane–induced hypotension in orthognathic surgery. Lessard MR, et al. Anesth Analg 1989 Sep;69(3):379–83

Stability of maxillary surgery in openbite versus nonopenbite malocclusions. Denison TF, et al. Angle Orthod 1989 Spring;59(1):5–10

Commercially pure titanium Steinhäuser plate–screw system for maxillofacial surgery. Breme J, et al. Biomaterials 1988 Jul;9(4):310–3

Reconstruction of the palate using bilateral temporalis muscle flaps: a case report. Phillips JG, et al.
Br J Oral Maxillofac Surg 1988 Aug;26(4):322–5

Osteotomy at the Le Fort I level. A versatile procedure. Wood GD, et al. Br J Oral Maxillofac Surg 1989 Feb; 27(1):33–8

The effects of Le Fort I osteotomy with maxillary movement on articulation, resonance, and velopharyngeal function. Kummer AW, et al. Cleft Palate J 1989 Jul;26(3):193–9; discussion 199–200

The significance of condylar position using rigid fixation in orthognathic surgery. Luhr HG. Clin Plast Surg 1989 Jan; 16(1):147–56

Rigid skeletal fixation in maxillary osteotomies. Intraoperative control of condylar position. Luhr HG, et al. Clin Plast Surg 1989 Jan;16(1):157–63

Maxillo–mandibular surgery for obstructive sleep apnoea. Guilleminault C, et al. Eur Respir J 1989 Jul;2(7):604–12

Simultaneous rhinoplasty procedures in orthognathic surgery. Waite PD, et al. Int J Oral Maxillofac Surg 1988 Oct;17(5):298–302

On the feasibility of intraoral maxillo–malar osteotomy. Brusati R, et al. J Craniomaxillofac Surg 1989 Apr; 17(3):110–5

Incidence of nasolacrimal injury and turbinectomy—associated atrophic rhinitis with Le Fort I osteotomies. Demas PN, et al.
J Craniomaxillofac Surg 1989 Apr;17(3):116–8

Preserving the pterygoid plates in posterior repositioning of the LeFort I osteotomy. Hai HK, et al.
J Craniomaxillofac Surg 1989 Jul;17(5):219–21

Paranasal incision as an access for maxillary osteotomy. Hollmann K, et al. J Craniomaxillofac Surg 1988 Nov; 16(8):359–61

Le Fort I maxillary osteotomies in cleft palate cases. Surgical changes and stability. Houston WJ, et al.
J Craniomaxillofac Surg 1989 Jan;17(1):9–15 (10 ref.)

Pulp sensibility and pulp necrosis after Le Fort I osteotomy. Vedtofte P, et al. J Craniomaxillofac Surg 1989 May; 17(4):167–71

Serious circulatory disturbance after Le Fort I osteotomy. A case report. Yeo JF, et al. J Craniomaxillofac Surg 1989 Jul;17(5):222–5

The in vivo behavior of gentamicin–PMMA beads in the maxillofacial region. Alpert B, et al.
J Oral Maxillofac Surg 1989 Jan;47(1):46–9

Effect of Le Fort III osteotomy on mandibular growth in patients with Crouzon and Apert syndromes. Bu BH, et al. J Oral Maxillofac Surg 1989 Jul;47(7):666–71

The skeletal stability of Le Fort I downfracture osteotomies with rigid fixation. Carpenter CW, et al.
J Oral Maxillofac Surg 1989 Sep;47(9):922–5

Use of collagen tubes containing particulate hydroxylapatite for augmentation of the edentulous atrophic maxilla: a preliminary report. Collins TA. J Oral Maxillofac Surg 1989 Feb;47(2):137–41

Factors contributing to relapse in rigidly fixed mandibular setbacks. Franco JE, et al. J Oral Maxillofac Surg 1989 May;47(5):451–6

A lateral cephalometric analysis of nasal morphology following Le Fort I osteotomy applying photometric analysis techniques. Gassmann CJ, et al.
J Oral Maxillofac Surg 1989 Sep;47(9):926–30

Frontal soft tissue morphology with double V–Y closure following Le Fort I osteotomy. Hackney FL, et al.
J Oral Maxillofac Surg 1988 Oct;46(10):850–6

Modified Y–closure after exposure of osseointegrated implants in the maxilla. Jensen OT.
J Oral Maxillofac Surg 1989 Mar;47(3):310

Simultaneous maxillary sinus floor bone grafting and placement of hydroxylapatite–coated implants. Kent JN, et al. J Oral Maxillofac Surg 1989 Mar;47(3):238–42

Stability following combined maxillary and mandibular osteotomies treated with rigid internal fixation. Law JH, et al. J Oral Maxillofac Surg 1989 Feb;47(2):128–36

Destruction or reconstruction? [letter] Marx RE.
J Oral Maxillofac Surg 1988 Oct;46(10):824

Complications encountered during LeFort I osteotomy in a patient with mandibulofacial dysostosis. Reaume CE, et al. J Oral Maxillofac Surg 1988 Nov;46(11):1003–4

Stability of simultaneous maxillary intrusion and mandibular advancement: a comparison of rigid and nonrigid fixation techniques. Skoczylas LJ, et al. J Oral Maxillofac Surg 1988 Dec;46(12):1056–64

Predictability of upper lip soft tissue changes with maxillary advancement. Stella JP, et al. J Oral Maxillofac Surg 1989 Jul;47(7):697–703

Maxillary stability following downgraft and/or advancement procedures with stabilization using rigid fixation and porous block hydroxyapatite implants. Wardrop RW, et al.
J Oral Maxillofac Surg 1989 Apr;47(4):336–42

Le Fort I down-fracture of the maxilla: application to benign antral neoplasm. Armstrong JE, et al. **J Otolaryngol** 1988 Oct;17(6):288–92

Rhinoplastic implications of maxillary osteotomy. Donald PJ. **J Otolaryngol** 1988 Oct;17(6):265–73

An easy, fast technique for making immediate surgical obturators. Caputo TL, et al. **J Prosthet Dent** 1989 Apr; 61(4):473–5

The maxillary immediate surgical obturator prosthesis. Huryn JM, et al. **J Prosthet Dent** 1989 Mar;61(3):343–7

Prosthodontic principles in the framework design of maxillary obturator prostheses. Parr GR, et al. **J Prosthet Dent** 1989 Aug;62(2):205–12

Reconstruction of the edentulous maxillary arch by using prosthodontic implants. Zobler MN. **J Prosthet Dent** 1988 Oct;60(4):474–8

Orthognathic surgery without the use of postoperative intermaxillary fixation. A clinical and cephalometric evaluation of surgical correction of mandibular and maxillary deformities. Krekmanov L. **Swed Dent J Suppl** 1989;61:8–62

[The versatile midface degloving approach. Re-updating the method, apropos of a case] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):268–70 (Eng. Abstr.) (Fre)

[Soldering without transition (osteoassimilation) between the human maxillary bone and a compact dental implant in natural calcite from marine invertebrate] Lopez E, et al. **C R Acad Sci [III]** 1989;309(6):203–10 (Eng. Abstr.) (Fre)

[Modifications of Lefort I osteotomy. Pterygomaxillary disjunction by an inferior rotation of the maxilla] Precious DS, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):288–92 (Eng. Abstr.) (Fre)

[Indications and technic of microvascular small intestine transplantation in combination with the usual technics of facial soft tissue and craniofacial reconstruction] Hausamen JE, et al. **Handchir Mikrochir Plast Chir** 1988 Sep; 20(5):249–54 (Eng. Abstr.) (Ger)

[Resection prosthetics. Experiences and problems of the prosthodontic treatment of patients with maxillary resection] Mericske E, et al. **Schweiz Monatsschr Zahnmed** 1989;99(6):698–708 (Ger, Fre)

[Osteotomy of the superior maxilla according to Koële. Review of long-term results] Benech A, et al. **Minerva Stomatol** 1988 Dec;37(12):991–6 (Eng. Abstr.) (Ita)

[Study of local capillary circulation using labeled albumin microspheres during osteotomy of the maxilla (experimental study)] Tairov UT, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):65–9 (Eng. Abstr.) (Rus)

MAXILLARY ANTRUM see MAXILLARY SINUS

MAXILLARY ARTERY

Plus ca change [letter] Gage AA. **Headache** 1988 Oct; 28(9):625

[Acute gangrene of the face in a diabetic] Nini G, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):359–61 (Eng. Abstr.) (Ita)

[A method for the temporary arrest of external arterial hemorrhage from the vessels of the neck and head] Tsybyrné GA, et al. **Voen Med Zh** 1988 Jun;(6):62–4 (Rus)

ABNORMALITIES

Steel coils. Hupp JR. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):361–2

The management of intraosseous arteriovenous malformations in the head and neck area. Jackson IT, et al. **Plast Reconstr Surg** 1989 Jul;84(1):47–54

INJURIES

Management of internal maxillary artery hemorrhage from temporomandibular joint surgery via selective embolization. Peoples JR 3d, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1005–7

PATHOLOGY

[Atherosclerotic changes of the inferior dental artery correlated with those of the carotid bifurcation and the abdominal artery] Obradović O, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):105–10 (Eng. Abstr.) (Fre)

SURGERY

Embolization in the treatment of epistaxis after failure of internal maxillary artery ligation. Breda SD, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):809–13

The role of angiography and embolization in the management of recurrent epistaxis. DeFilipp GJ, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):597–600

MAXILLARY DISEASES

COMPLICATIONS

Case report. Presence of fibrous dysplasia affects the treatment approach for a 28-year old female patient. Joondeph DR. **Angle Orthod** 1989 Spring;59(1):65–8

A lateral periodontal cyst in association with a follicular cyst. Buckley FM, et al. **Br Dent J** 1989 Jul 8;167(1):26–8

An approach to the treatment of malocclusion caused by bone expanding lesions. Pilley JR, et al. **Br Dent J** 1989 Apr 8;166(7):258–60

[Ectropion of the eyelid due to maxillary osteitis and its treatment (report on 26 cases)] Kong FG, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):28–30 (Eng. Abstr.) (Chi)

[A case of cancer of the nasal cavity associated with giant cyst of the maxillary sinus] Lipovich MM, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):74–6 (Rus)

CONGENITAL

[Causes of congenital maxillary anomalies in children] Nisinman EP. **Stomatologiia (Mosk)** 1988 Nov–Dec; 67(6):59–60 (Eng. Abstr.) (Rus)

DIAGNOSIS

[MRI findings of postoperative maxillary cyst] Yamashita T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):1996–2002 (Eng. Abstr.) (Jpn)

DRUG THERAPY

[Intraarterial antibiotic therapy in comprehensive therapeutic and preventive measures against inflammatory processes in the maxillofacial area] Shcherbatiuk DI, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):33–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Maxillary osteomyelitis in a neonate. Date UG, et al. **Indian Pediatr** 1988 Mar;25(3):302–5

Complications encountered during LeFort I osteotomy in a patient with mandibulofacial dysostosis. Reaume CE, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1003–4

Osteomyelitis of the maxilla with associated vertical root fracture and Pseudomonas infection. Hoen MM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):494–8

METABOLISM

Histochemical studies on lectin binding patterns in postoperative maxillary cysts. Gunge M. **J Nihon Univ Sch Dent** 1988 Jun;30(2):95–103

PATHOLOGY

Squamous cell carcinoma arising in a dentigerous cyst. Berenholz L, et al. **Ear Nose Throat J** 1988 Oct;67(10):764, 766, 768 passim (18 ref.)

The post-operative maxillary cyst. Experience with 23 cases. Basu MK, et al. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):282–4 (18 ref.)

A clinicoradiological study of maxillary osteomyelitis. Kaneda T, et al. **J Nihon Univ Sch Dent** 1989 Jun; 31(2):464–9

A disappearing dentigerous cyst: report of a case. Freedman GL. **J Oral Maxillofac Surg** 1988 Oct;46(10):885–6

Ossification in the wall of a radicular cyst: report of a case. Karakasis DT, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):853–5

The glandular odontogenic cyst: an apparent entity. Gardner DG, et al. **J Oral Pathol** 1988 Sep;17(8):359–66

Unusually aggressive osteomyelitis of the jaws. A report of two cases. Krutchkoff DJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):499–507

The inflammatory paradental cyst. Vedtofte P, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):182–8

RADIOGRAPHY

Odontogenic keratocyst involving the maxillary antrum. Shenoy P, et al. **J Laryngol Otol** 1988 Dec;102(12):1168–71

Bone resorption in acute traumatic periodontitis. Macgregor ID, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun; 67(6):781–2

[Distribution of the postoperative cyst of the maxilla] Fukuta M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep; 91(9):1395–9 (Eng. Abstr.) (Jpn)

[Facial asymmetry in a 14-year-old girl] García Pérez M, et al. **Rev Clin Esp** 1989 May;184(8):443–5 (Spa)

SURGERY

Cleft palate fistula repair. Improved results by the addition of bone. Schultz RC. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):65–7

Destruction or reconstruction? [letter] Marx RE. **J Oral Maxillofac Surg** 1988 Oct;46(10):824

Stabilization of the midface with a cranium-to-alveolus bone graft. Mixter RC, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):348–55

[Immediate replacement bone grafts in benign pathology of the facial bones. An analysis of 37 cases] Cortelazzi R, et al. **Minerva Stomatol** 1988 Oct;37(10):801–4 (Eng. Abstr.) (Ita)

[Use of brepho-osteoplasty for filling bone cavities in oral medical and surgical practice] Panikarovskii VV, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):22–4 (Eng. Abstr.) (Rus)

THERAPY

[A plugging method for maxillary cysts of large size with powders of deproteinized teeth] Vercellino V, et al. **Minerva Stomatol** 1988 Jun;37(6):465–8 (Eng. Abstr.) (Ita)

MAXILLARY FRACTURES

COMPLICATIONS

[Isolated perforation of the orbital fundus by a fragment of tree branch wedged into the maxillary sinus] Krwawicz L. **Klin Oczna** 1988 Mar;90(3):110–1 (Eng. Abstr.) (Pol)

SURGERY

Zygomatico-maxillary fractures. Late results after traction-hook reduction. Kaastad E, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):210–4

[Maxillofacial injuries in polytrauma. Results of a follow-up study] Fischer-Brandies E, et al. **Unfallchirurg** 1989 May; 92(5):209–15 (Eng. Abstr.) (Ger)

THERAPY

An acrylic head appliance for craniomaxillary fixation. Chu DY, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):649–50

MAXILLARY NEOPLASMS

Diagnosis and treatment of metastatic ameloblastoma. Eliasson AH, et al. **South Med J** 1989 Sep;82(9):1165–8 (18 ref.)

ANALYSIS

Adenomatoid odontogenic tumour: co-expression of keratin and vimentin. Tatemoto Y, et al. **Virchows Arch [A]** 1988; 413(4):341–7

COMPLICATIONS

Ameloblastic fibrodentinoma: report of case. Brandt SK, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):372–5

Delayed eruption of a maxillary central incisor associated with an odontome: report of case. Oliver RG, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):368–71

Oncogenous osteomalacia: a case study. Nitzan DW, et al. **Bone Miner** 1989 May;6(2):191–7

DIAGNOSIS

A comparative study of magnetic resonance imaging versus computed tomography for the evaluation of maxillary and mandibular tumors. Belkin BA, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1039–47

[Desmoplastic fibroma of the jaws] Li RW. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):301–2 (Chi)

[Ameloblastoma of the pterygomaxillary fossa. Apropos of a case and review of the literature] Bonfils P, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):477–9 (18 ref.) (Eng. Abstr.) (Fre)

[A complete form of basocellular nevomatosis manifested by exophthalmia] Berkman N, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):11–2, 15–20 (29 ref.) (Fre)

DRUG THERAPY

Prinzmetal's angina during cyclophosphamide therapy. Stefenelli T, et al. **Eur Heart J** 1988 Oct;9(10):1155–7

GENETICS

Multicentric familial squamous odontogenic tumor. Leider AS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):175–81 (25 ref.)

PATHOLOGY

Malignant ameloblastoma with pulmonary metastasis and hypercalcemia. Report of an autopsy case and review of the literature. Inoue N, et al. **Am J Clin Pathol** 1988 Oct; 90(4):474–81 (35 ref.)

Maxillary ameloblastoma. A potentially lethal neoplasm. Bredenkamp JK, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):99–104 (28 ref.)

Aggressive calcifying odontogenic cyst—a possible variant of ameloblastoma. Scott J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):53–9

Florid cemento-osseous dysplasia (gigantiform cementoma) in a Caucasian woman. Wolf J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):46–52

Squamous cell carcinoma arising in a dentigerous cyst. Berenholz L, et al. **Ear Nose Throat J** 1988 Oct;67(10):764, 766, 768 passim (18 ref.)

Mixed odontogenic tumors: an analysis of 23 new cases. Hansen LS, et al. **Head Neck Surg** 1988 May–Jun; 10(5):330–43

Hodgkin's disease presenting in the maxilla. A case report. Lello GE, et al. **Int J Oral Maxillofac Surg** 1989 Feb; 18(1):7–9 (26 ref.)

Multiple myeloma presenting as localized expansile jaw tumour. Raubenheimer EJ, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):382–5

Melanotic neuroectodermal tumor of infancy: a case report.

Clarós P, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb; 17(1):65–73

Odontogenic epithelial hamartomas in periodontal structures. Moskow BS, et al. **J Clin Periodontol** 1989 Feb;16(2):92–7

An erupted odontoma: case report. Gomel M, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):999–1000

Basal cell nevus syndrome with squamous cell carcinoma of the maxilla: report of a case. Hasegawa K, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):629–33 (28 ref.)

Angiosarcoma of the maxilla and maxillary sinus: report of a case and review of the literature. Lanigan DT, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):747–53 (25 ref.)

Benign osteoblastoma of the maxilla. el-Mofty S, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):60–4 (38 ref.)

Mesenchymal chondrosarcoma of the maxilla: report of a case. Salmo NA, et al. **J Oral Maxillofac Surg** 1988 Oct; 46(10):887–9 (22 ref.)

Clinical evaluation for the mechanism of cisplatin with bromodeoxyuridine by flow cytometry and clinico-histological study. Wada Y, et al. **Life Sci** 1989; 44(4):259–64

"Aggressive" osteoblastoma of the maxilla. Ohkubo T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):69–73

The occurrence of a fibro-osseous lesion and multiple dental anomalies in a patient with the Greig cephalopolysyndactyly syndrome. Pliskin ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):475–9

Melanotic neuroectodermal tumor of infancy: evidence for multicentricity. Steinberg B, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):666–9

Metachronous sarcomas in a patient with bilateral retinoblastomas. A case report. Cohen R. **S Afr Med J** 1989 Aug 5;76(3):117–8

[The maxillo-mandibular desmoid fibroma. Synthesis of knowledge about a rare entity. Apropos of 3 cases] Mascrès C, et al. **Ann Pathol** 1989;9(3):182–8 (36 ref.) (Eng. Abstr.) **(Fre)**

[Histogenetic relations in ameloblastic fibroma and odontoma. Apropos of 2 cases] Auriol M, et al. **Arch Anat Cytol Pathol** 1988;36(5–6):235–7 (6 ref.) (Eng. Abstr.) **(Fre)**

[Melanotic progonoma in an infant. Apropos of a case] Marrakchi R, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(5):316–9 (26 ref.) (Eng. Abstr.) **(Fre)**

[Giant cell tumor of the upper maxilla. Description of a case] Marci F, et al. **Minerva Stomatol** 1989 Apr;38(4):421–5 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Well-circumscribed, radiopaque, and radiolucent lesion of the anterior maxilla. Dunn RH, et al. **J Am Dent Assoc** 1989 Apr;118(4):467–8

[Advances in the diagnosis of early recurrences of maxillary neoplasms and various problems of the CT diagnosis of nasopharyngeal lesions] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):149–55 (Eng. Abstr.) **(Pol)**

SECONDARY

Maxillary metastasis of transitional cell carcinoma: report of a case. Cohen DM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):185–9 (52 ref.)

SURGERY

Immediate microvascular reconstruction of combined palatal and midfacial defects. Shestak KC, et al. **Am J Surg** 1988 Oct;156(4):252–5

A study of the late effects of radiotherapy and operation on patients with maxillary cancer. A survey more than 10 years after initial treatment. Sakai S, et al. **Cancer** 1988 Nov 15;62(10):2114–7

Tumours of the parapharyngeal space [letter] Seward GR. **J R Coll Surg Edinb** 1989 Apr;34(2):111–2

[Ameloblastoma of the upper maxilla treated with conservative surgery] Bucci E, et al. **Minerva Stomatol** 1989 Apr;38(4):433–7 (Eng. Abstr.) **(Ita)**

[Myocutaneous flaps of the greater pectoral muscle in cervico-maxillo-facial oncologic surgery] D'Ascanio G, et al. **Minerva Stomatol** 1989 Apr;38(4):427–31 (Eng. Abstr.) **(Ita)**

THERAPY

Adoptive immunotherapy for head and neck cancer with killer cells induced by stimulation with autologous or allogeneic tumour cells and recombinant interleukin-2. Ishikawa T, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):346–51

Therapeutic embolization for vascular lesions of the head and neck. Report of 2 cases. Hashimoto Y, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):47–9

[Study of head and neck cancer treatment by administration of autologous cytotoxic lymphocyte induced by stimulation with tumor cell—effect of adoptive immunotherapy by intra-arterial infusion of killer cells stimulated by autologous tumor in patients with maxillary carcinoma] Eura M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):2069–78 (Eng. Abstr.) **(Jpn)**

[Study of head and neck cancer treatment by administration of autologous cytotoxic lymphocyte induced by stimulation with tumor cell—effect of adoptive immunotherapy by intra arterial infusion of killer cells stimulated by allogeneic tumor in patients with lingual and maxillary carcinoma] Ishikawa T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2082–8 (Eng. Abstr.) **(Jpn)**

[The combined use of cryosurgery and solcoseryl in treating malignant neoplasms] Mosienko VS, et al. **Eksp Onkol** 1989; 11(2):69–71 (Eng. Abstr.) **(Rus)**

VETERINARY

What is your diagnosis? Expansile destructive lesion, suggestive of neoplasia, localized in the right upper canine perialveolar space. Kirby BM, et al. **J Am Vet Med Assoc** 1989 Jun 1;194(11):1632–3

Maxillo-orbital lymphoma (Burkitt's-type) in an infant Macaca fascicularis. Jayo MJ, et al. **Lab Anim Sci** 1988 Dec;38(6):722–6

Osteosarcoma in the maxilla of a brown bear (Ursus arctos). Momotani E, et al. **Vet Pathol** 1988 Nov;25(6):527–9

Wide local excision of acanthomatous epulides in the dog. White RA, et al. **Vet Surg** 1989 Jan–Feb;18(1):12–4

MAXILLARY NERVE

An alternative to the transpalatal maxillary nerve block. Taylor WE Jr, et al. **Laryngoscope** 1989 Jan;99(1):109–10

EMBRYOLOGY

The post-injury changes that occur in transected foetal nerves; an experimental study in the rat. Rowsell AR. **Br J Plast Surg** 1989 May;42(3):296–300

PHYSIOLOGY

Mechanoreceptive afferent activity in the infraorbital nerve in man during speech and chewing movements. Johansson RS, et al. **Exp Brain Res** 1988;72(1):209–14

Mechanoreceptor activity from the human face and oral mucosa. Johansson RS, et al. **Exp Brain Res** 1988; 72(1):204–8

MAXILLARY SINUS

Ossifying fibroma of the maxillary sinus: a case report. Antonelli JR. **Ann Dent** 1989 Summer;48(1):33–6

Fibrous dysplasia masquerading as chronic maxillary sinusitis. Barat M, et al. **Ear Nose Throat J** 1989 Jan;68(1):42, 44–6 (10 ref.)

Antroscopy: current practice—a survey of UK otolaryngologists. Fisher EW, et al. **J Laryngol Otol** 1989 Aug;103(8):747–9

Maxillary antral lavage—infiltration and surface anaesthesia compared. Paulose KO, et al. **J Laryngol Otol** 1989 Jun; 103(6):582–4

Primary hyperparathyroidism presenting with a maxillary tumour and hydrocephalus. Robinson PJ, et al. **J Laryngol Otol** 1988 Dec;102(12):1164–7

Use of a Braunula for maxillary sinus irrigation. Zohar Y, et al. **J Laryngol Otol** 1989 Mar;103(3):279–80

Spontaneous removal of foreign bodies from the maxillary sinus: report of a case. Westermark AH. **J Oral Maxillofac Surg** 1989 Jan;47(1):75–7

Cytologic diagnosis of the maxillary sinus reevaluated. Nishioka K, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):842–5

Reamer in the maxillary antrum: a complication of periapical surgery. Donlon WC. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):122–3

[Cholesteatoma of the maxillary sinus—a case report] Huang KW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May; 41(5):393–4 (Eng. Abstr.) **(Chi)**

[Malignant schwannoma of the cervico-cephalic region. Clinical case] Pomatto E, et al. **Minerva Stomatol** 1988 Nov; 37(11):831–5 (Eng. Abstr.) **(Ita)**

[A rare case of aspergilloma of the maxillary sinus] Turco GC, et al. **Minerva Stomatol** 1988 Aug;37(8):591–3 (Eng. Abstr.) **(Ita)**

[Maxillary antrum mucocele. Comments on 3 cases] Surlin C, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar; 34(1):71–8 (Eng. Abstr.) **(Rum)**

[Cementoma of the nasal cavity and paranasal sinuses] Akopian RG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):63–5 **(Rus)**

[A case of aberrant thyroid goiter in the nasal cavity and paranasal sinuses] Boenko SK, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):72–3 **(Rus)**

[Melanoma of the nasal cavity and paranasal sinuses] Shtil' AA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):55–60 (Eng. Abstr.) **(Rus)**

[Sinus lithiasis] Dvorski I, et al. **Lijec Vjesn** 1988 Jun–Jul; 110(6–7):211–2 (Eng. Abstr.) **(Scr)**

ANATOMY & HISTOLOGY

Antroscopy: a comparison between the sublabial (canine fossa) and intranasal (inferior meatus) approaches as an out-patient procedure. Whittet HB, et al. **Clin Otolaryngol** 1989 Feb;14(1):33–40

[The hiatus semiluminaris, the infundibulum and the ostium of the sinus maxillaris, the anterior attached zone of the concha nasalis and its distance to the landmarks of the outer and inner nose] Lang J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):637–46 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Blood flow in the rabbit maxillary sinus mucosa during experimentally induced acute sinusitis. Johansson P, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):299–305

CYTOLOGY

[Histochemical heterogeneity of mast cells in the human upper respiratory mucosa] Ohkubo K. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1920–7 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

[In vivo and in vitro suppression of lymphocyte function in paranasal sinus mycoses] Loidolt D, et al. **Laryngorhinootologie** 1989 Jul;68(7):407–10 (Eng. Abstr.) **(Ger)**

INJURIES

[Isolated perforation of the orbital fundus by a fragment of tree branch wedged into the maxillary sinus] Krwawicz L. **Klin Oczna** 1988 Mar;90(3):110–1 (Eng. Abstr.) **(Pol)**

METABOLISM

Penetration of fleroxacin into maxillary sinus mucosa and palatine tonsil. Baba S, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:195–7

MICROBIOLOGY

Macroscopic purulence, leukocyte counts, and bacterial morphotypes in relation to culture findings for sinus secretions in acute maxillary sinusitis. Jousimies-Somer HR, et al. **J Clin Microbiol** 1988 Oct;26(10):1926–33

PATHOLOGY

Destructive cysts of the maxillary sinus affecting the orbit. Kaltreider SA, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1398–402

Pathologic quiz case 1. Invasive aspergillosis of the maxillary sinus and nose. Boutros A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):114–6

Correlation of the sinoscopic appearance of the maxillary antrum with histological and bacteriological findings. Smith MC, et al. **J Laryngol Otol** 1988 Dec;102(12):1086–8

Antroscopic study of the maxillary antrum in lepromatous leprosy. Soni NK. **J Laryngol Otol** 1989 May;103(5):502–3

Cholesteatoma (keratoma) of the maxillary sinus: report of a case. Sadoff RS, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):873–6

A rare case of basosquamous carcinoma of the orbit invading the maxillary sinus. Catalano GB, et al. **Ophthalmologica** 1988;196(4):200–3

[Mucocele of the maxillary sinus. Apropos of 60 cases from the stomatology department of the Cardiology Hospital in Lyon] Garcia-Darennes F, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):287–9 (Eng. Abstr.) **(Fre)**

[Sonographic studies in odontogenic maxillary sinus diseases] Nitzschke M, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):29–33 (Eng. Abstr.) **(Ger)**

[Mucoceles of the maxillary sinus. Report of a case] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1989; 16(2):149–58 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

A comparative study of the pneumatization of the mastoid air cells and the frontal and maxillary sinuses. Thomas A, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S88

VIP potentiates cholinergic effects on the mucociliary system in the maxillary sinus. Lindberg S, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):401–7

Particle deposition efficiency of therapeutic aerosols in the human maxillary sinus. Hyo N, et al. **Rhinology** 1989 Mar; 27(1):17–26

PHYSIOPATHOLOGY

Experimental studies on the relationship between maxillary sinus ventilation and various obstructions of the nose and nasopharynx. Bachert C, et al. **Rhinology** 1989 Mar; 27(1):37–43

RADIOGRAPHY

Odontogenic keratocyst involving the maxillary antrum. Shenoy P, et al. **J Laryngol Otol** 1988 Dec;102(12):1168–71

Significance of opacification of the maxillary and ethmoid sinuses in infants. Glasier CM, et al. **J Pediatr** 1989 Jan; 114(1):45–50

Radiographic evaluation of the effect of initial periodontal therapy on thickness of the maxillary sinus mucosa. Engström H, et al. **J Periodontol** 1988 Sep;59(9):604–8

The diagnosis and follow-up of pediatric sinusitis: Water's view radiography versus ultrasonography. Revonta M, et al. **Laryngoscope** 1989 Mar;99(3):321–4

Ankylosed deciduous maxillary molar mimicking sinus pathosis. Kreutz RW. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):611–2

Diagnostic radiology of maxillary sinus defects. Perez CA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct; 66(4):507–12

[Plain film features of fungus infection of the maxillary sinus (an analysis of 91 cases)] Zhou MS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct; 22(5):279–82 (Eng. Abstr.) **(Chi)**

[Computed tomography of tumors in the infratemporal, parapharyngeal space and pterrgopalatine fossa] Wang DY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):90–1, 127 (Eng. Abstr.) **(Chi)**

[Yaws: a rare case of an "invasively growing" tumor of the maxillary sinus] Draws J, et al. **HNO** 1988 Oct;36(10):426–8 (Eng. Abstr.) **(Ger)**

[The experimental study of sinal wall thickening on CT] Kase Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1213–9 (Eng. Abstr.) **(Jpn)**

[Radiographic anatomy by waters' view on the innominate and Tuber maxillae lines] Mizuno Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):390–4 (Eng. Abstr.) **(Jpn)**

SECRETION

CR1-expression and C3b-mediated phagocytosis of granulocytes in purulent maxillary secretion and peripheral blood from patients with sinusitis. Berg O, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):130–5

SURGERY

Endoscopic transnasal surgery in chronic maxillary sinusitis. Kamel RH. **J Laryngol Otol** 1989 May;103(5):492–501

Simultaneous maxillary sinus floor bone grafting and placement of hydroxylapatite-coated implants. Kent JN, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):238–42

The Caldwell-Luc procedure: institutional review of 670 cases: 1975–1985. DeFreitas J, et al. **Laryngoscope** 1988 Dec;98(12):1297–300

The effect of a temporary nasoantral window on mucociliary clearance. An experimental study. Friedman M, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):819–30

Mucosal regeneration of the maxillary sinus after surgery. Benninger MS, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):33–7

Treatment of antral pathology—which surgical route. Wigand ME, et al. **Rhinology** 1988 Dec;26(4):253–5

[Development of the facial and periodontal approach to the maxillary sinus] Härle F. **HNO** 1988 Dec;36(12):483–8 (38 ref.) (Eng. Abstr.) **(Ger)**

[Clinical and functional aspects of endonasal operation of the maxillary sinuses] Hosemann W, et al. **HNO** 1989 Jun; 37(6):225–30 (Eng. Abstr.) **(Ger)**

[A proposal for endonasal middle meatal antrostomy] Ogasawara H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):542–7 (Eng. Abstr.) **(Jpn)**

MAXILLARY SINUS NEOPLASMS see under **PARANASAL SINUS NEOPLASMS**

MAXILLOFACIAL DEVELOPMENT

see related
CEPHALOMETRY

Functional appliances: a review. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):250–8 (54 ref.)

Developmental changes in the facial soft tissues. Burke PH, et al. **Am J Phys Anthropol** 1989 Jul;79(3):281–8

Body weight gain as related to craniofacial and calvarial volumetric changes in growing rabbits. Alberius P, et al. **Anat Rec** 1989 Mar;223(3):322–8

A longitudinal study of anterior vertical overbite from eight to twenty years of age. Bergersen EO. **Angle Orthod** 1988 Jul;58(3):237–56

Developmental effects of impaired breathing in the face of the growing child. Cheng MC, et al. **Angle Orthod** 1988 Oct;58(4):309–20

Circumpubertal growth spurt related to vertical dysplasia. Nanda SK, et al. **Angle Orthod** 1989 Summer;59(2):113–22

Craniofacial change and non-change after experimental surgery in young and adult animals. Sarnat BG. **Angle Orthod** 1988 Oct;58(4):321–42 (32 ref.)

Research in dentistry: growth and development. Townsend G. **Aust Dent J** 1988 Oct;33(5):375–8

Northcroft revisited. Moss JP. **Br J Orthod** 1989 Aug; 16(3):155–67

Facial growth in the rabbit after autologous grafting in unilateral clefts. Griffioen FM, et al. **Cleft Palate J** 1988 Jul;25(3):226–34

Effects of primary periosteoplasty on facial growth in unilateral cleft lip and palate: 10-year follow-up. Smahel Z, et al. **Cleft Palate J** 1988 Oct;25(4):356–61

Craniofacial growth, evolutionary questions. Gans C. **Development** 1988;103 Suppl:3–15 (86 ref.)

Dentofacial morphology in children playing musical wind instruments: a longitudinal study. Brattström V, et al. **Eur J Orthod** 1989 May;11(2):179–85

Cephalometric comparison between children with and without Down's syndrome. Fischer-Brandies H. **Eur J Orthod** 1988 Aug;10(3):255–63

Dentofacial orthopaedics in relation to chronological age, growth period and skeletal development. An analysis of 72 male patients with Class II division 1 malocclusion treated with the Herbst appliance. Hägg U, et al. **Eur J Orthod** 1988 Aug;10(3):169–76

The role of nasal airway obstruction in sinus disease and facial development. Shapiro GG. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):935–40 (9 ref.)

The growth and development of the soft tissues of the human face. Burke PH, et al. **J Anat** 1988 Jun;158:115–20

Sites of serotonin uptake in epithelia of the developing mouse palate, oral cavity, and face: possible role in morphogenesis. Lauder JM, et al. **J Craniofac Genet Dev Biol** 1988; 8(3):265–76

Electron microscopic observations on the fate of hypertrophic chondrocytes in condylar cartilage of rat mandible. Yoshioka C, et al. **J Craniofac Genet Dev Biol** 1988;8(3):253–64

The effects of nasomaxillary injury on future facial growth. Precious DS, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):525–30

Nasorespiratory function and orofacial development. Cooper BC. **Otolaryngol Clin North Am** 1989 Apr;22(2):413–41 (119 ref.)

Lip repair and facial growth in beagles [letter] Bardach J. **Plast Reconstr Surg** 1989 Jun;83(6):1079–80

The influence of lip repair with and without soft-tissue undermining on facial growth in beagles. Bardach J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):747–59

Soft-tissue undermining with lip repair: influence on facial growth [letter] Kaplan EN. **Plast Reconstr Surg** 1989 Sep; 84(3):539–40

The effects of simultaneous cleft lip and palate repair on craniofacial growth [letter] Lejour M. **Plast Reconstr Surg** 1989 Apr;83(4):751–2

Testing surgical success [letter] Ross RB. **Plast Reconstr Surg** 1988 Nov;82(5):921–2

[A comparative study on the structure and growth of the dentoskeleton and soft-tissue in normal occlusion] Yu XH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):30–3, 62–3 (Eng. Abstr.) **(Chi)**

[Long-term experience with 2-stage surgery of cleft palate in total unilateral and bilateral clefts from the aspect of maxillary development] Fára M, et al. **Rozhl Chir** 1988 Nov;67(11):729–41 (Eng. Abstr.) **(Cze)**

[Growth stimulation and growth treatment in patients with cleft lip, jaw and palate] Weil J. **Tijdschr Kindergeneeskd** 1989 Feb;57(1):1–8 (Eng. Abstr.) **(Dut)**

[Role of the septal cartilage in facial growth. Experimental study in rats] Bui P, et al. **Ann Chir Plast Esthet** 1989; 34(2):167–73 (Eng. Abstr.) **(Fre)**

[Correlative ontogenetic study of transverse variations in the premaxillary and symphyseal axes] Danguy-Derot C, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug-Dec;31(3–4):119–22 (Eng. Abstr.) **(Fre)**

[The tongue as a factor in craniofacial growth. 2. The influence of the width dimension of the lower jaw] Becker R, et al. **Anat Anz** 1988;167(2):81–6 (Eng. Abstr.) **(Ger)**

[The effect of a modified blood supply on the craniofacial growth of rabbits. 2. Masticatory muscles] Beleites B, et al. **Anat Anz** 1989;168(4):307–13 (Eng. Abstr.) **(Ger)**

[The effect of a modified blood supply on the craniofacial growth of rabbits. 1. Vascular casts] Brehmer A, et al. **Anat Anz** 1989;168(3):229–36 (Eng. Abstr.) **(Ger)**

[The tongue as a factor in craniofacial growth. 3. The influence of the height and angle of the lower jaw] Hübner A, et al. **Anat Anz** 1988;167(3):191–7 (Eng. Abstr.) **(Ger)**

[The tongue as a factor in craniofacial growth. 4. Results of animal experiments] Pommerenke F, et al. **Anat Anz** 1988;167(4):281–7 (51 ref.) (Eng. Abstr.) **(Ger)**

[Long-term observations of dental and occlusal development in patients with cleidocranial dysostosis] Fleischer-Peters A, et al. **Fortschr Kieferorthop** 1988 Dec;49(6):535–42 (Eng. Abstr.) **(Ger)**

[Growth type and anthropometric parameters of the dental arch] Masztalerz A. **Fortschr Kieferorthop** 1988 Aug; 49(4):321–3 (Eng. Abstr.) **(Ger)**

[Reactive capacity of animal and human condylar cartilage at the cellular and molecular levels in the light of a cybernetic concept of facial growth] Petrovic AG, et al. **Fortschr Kieferorthop** 1988 Oct;49(5):405–25 (51 ref.) (Eng. Abstr.) **(Ger)**

[The growth pattern in cleft lip and palate patients with reference to familial disposition] Grabowski R. **Zahn Mund Kieferheilkd** 1988;76(6):588–94 (Eng. Abstr.) **(Ger)**

[The growth pattern of patients with cleft lip and palate] Grabowski R. **Zahn Mund Kieferheilkd** 1988;76(5):450–5 (Eng. Abstr.) **(Ger)**

[The sum of the angles as a growth indicator of the facial skull. A geometric study] Odegaard J. **Zahn Mund Kieferheilkd** 1988;76(6):583–7 (Eng. Abstr.) **(Ger)**

[Thumb or finger sucking in the development of dento-maxillo-facial malformations] Cordasco G, et al. **Minerva Stomatol** 1988 Dec;37(12):1021–3 (Eng. Abstr.) **(Ita)**

[Histological and experimental study on the role of F-actin in mouse facial morphogenesis] Osumi N. **Kokubyo Gakkai Zasshi** 1988 Dec;55(4):615–38 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Differential effects of physiological concentrations of retinoic acid in vitro on chondrogenesis and myogenesis in chick craniofacial mesenchyme. Langille RM, et al. **Differentiation** 1989 May;40(2):84–92

The effect of thyroxine on craniofacial morphology in the growing rat. Part I: A longitudinal cephalometric analysis. Persson EC, et al. **Eur J Orthod** 1989 Feb;11(1):59–66

MAXILLOFACIAL INJURIES

Surgical, socio-economic and forensic aspects of assault: a review. Shepherd JP. **Br J Oral Maxillofac Surg** 1989 Apr; 27(2):89–98 (57 ref.)

Severe facial trauma after orthognathic surgery with rigid fixation. Wilson GW, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):640–2

COMPLICATIONS

Carotid-cavernous sinus fistula following maxillofacial trauma and orthognathic surgery. Hes J, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):295–7

Traumatic carotid-cavernous sinus fistula. Zachariades N, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):385–8

Traumatic emphysema of the head, neck, and mediastinum associated with maxillofacial trauma: case report and review. Henry CH, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):876–82 (47 ref.)

Pneumomediastinum and cervical emphysema subsequent to mandibular injury associated with a flare pistol shot. Shuker S, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):741–4

The effects of nasomaxillary injury on future facial growth. Precious DS, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):525–30

[Experience with the treatment of blow-out fractures associated with pinching of the oculomotor nerve] Katona J, et al. **Fogorv Sz** 1989 Aug;82(8):243–6 (Eng. Abstr.) **(Hun)**

[A case of combined gunshot injuries of the maxillofacial and cervical regions] Pugachev AD, et al. **Klin Khir** 1989; (4):69 **(Rus)**

EPIDEMIOLOGY

Comparison of maxillofacial and dental injuries in four contact team sports: American football, bandy, basketball, and handball. Sane J. **Am J Sports Med** 1988 Nov–Dec; 16(6):647–51

Orofacial trauma and mouth-protector wear among high school varsity basketball players. Maestrello-deMoya MG, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):36–9

Faciomaxillary fractures in north India. A statistical analysis and review of management. Sawhney CP, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):430–4

California mandatory seat belt law: the effect of recent legislation on motor vehicle accident related maxillofacial injuries. Dodson TB, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):875–80

Maxillofacial trauma in two rural level II trauma centers. Schroeder WA Jr. **Mo Med** 1989 Jan;86(1):35–9

[Survey of a three-and-a-half-year case load at a traumatology department] Büki A, et al. **Fogorv Sz** 1989 Jun;82(6):173–6 (Eng. Abstr.) **(Hun)**

ETIOLOGY

The aetiology of maxillofacial injuries and the seat belt law. Perkins CS, et al. **Br J Oral Maxillofac Surg** 1988 Oct; 26(5):353–63

PATHOLOGY

Patterns of maxillofacial injuries in restrained and unrestrained motor vehicle crash victims. Reath DB, et al. **J Trauma** 1989 Jun;29(6):806–9; discussion 809–10

PREVENTION & CONTROL

The pattern of use of mouthguards in rugby league (a study of the 1986 Australian Rugby League touring team). Chapman PJ. **Br J Sports Med** 1988 Sep;22(3):98–100

RADIOGRAPHY

The application of panoramic zonography to the diagnosis of maxillofacial fractures. Hartman LC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):214–9

REHABILITATION

Provisional restorations in maxillofacial prosthetics. Finger IM, et al. **Dent Clin North Am** 1989 Jul;33(3):435–55

SURGERY

Complex facial trauma: the evolving role of rigid fixation and immediate bone graft reconstruction. Gruss JS, et al. **Clin Plast Surg** 1989 Jan;16(1):93–104 (11 ref.)

Rigid fixation of complex facial fractures. Sargent LA. **J Tenn Med Assoc** 1989 Mar;82(3):136–7, 142

Lip retractors [letter] Haedicke GJ, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1085–6

[Summary of 14961 cases of maxillo-facial wounds] **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):204–6 **(Chi)**

[Maxillofacial injuries due to firearms. Retrospective study apropos of 60 cases] Goga D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):242–7 (Eng. Abstr.) **(Fre)**

[Possibilities of wire osteosynthesis and experiences in our department] Nagy P. **Fogorv Sz** 1989 Jun;82(6):169–71 (Eng. Abstr.) **(Hun)**

[Clinical observation of cases operated in the Department of Oral and Maxillofacial Surgery, University of Erlangen-Nürnberg, in 1987–1988—especially cases of fractures and maxillofacial deformities] Tanaka N. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):17–23 (Eng. Abstr.) **(Jpn)**

THERAPY

Rigid internal fixation for fractures involving tooth-bearing maxillary segments. Stanley RB Jr, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1295–9

A retrospective study of injuries to the maxillofacial skeleton in Harare, Zimbabwe. Khan AA. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):435–9

Management of maxillofacial and neck soft-tissue injuries. White MJ, et al. **Clin Sports Med** 1989 Jan;8(1):11–23 (3 ref.)

The management of hemorrhage from severe missile injuries using Foley catheter balloon tamponade. Shuker S. **J Oral Maxillofac Surg** 1989 Jun;47(6):646–8

MAXILLOFACIAL PROSTHESIS

Provisional restorations in maxillofacial prosthetics. Finger IM, et al. **Dent Clin North Am** 1989 Jul;33(3):435–55

Chairside color verification for facial prostheses. Ma T, et al. **J Prosthet Dent** 1988 Aug;60(2):219–21

Technique for superimposing a color slide onto a facial cast to sculpt a facial prosthesis. Shimodaira K, et al. **J Prosthet Dent** 1989 Aug;62(2):212–3

[Gore-Tex: value in craniomaxillofacial surgery] Briche D, et al. **Ann Chir Plast Esthet** 1988;33(3):288–94 (42 ref.) (Eng. Abstr.) **(Fre)**

[Use of coral as replacement for bone grafts in facial surgery. 4 years' follow-up] Levet Y, et al. **Ann Chir Plast Esthet** 1988;33(3):278–82 (Eng. Abstr.) **(Fre)**

[Implants of fired ceramics in the dog. Preliminary study. Morphology of bone coaptation after 3 and 7 months] Chomette G, et al. **Pathol Biol (Paris)** 1989 Jan;37(1):9–15 (Eng. Abstr.) **(Fre)**

METHODS

Fabrication of facial prostheses by applying the osseointegration concept for retention. Seals RR Jr, et al. **J Prosthet Dent** 1989 Jun;61(6):712–6

MAXIMAL EXPIRATORY FLOW RATE see under **FORCED EXPIRATORY FLOW RATES**

MAXIMAL EXPIRATORY FLOW-VOLUME CURVES see under **FORCED EXPIRATORY FLOW RATES**

MAXIMAL MIDEXPIRATORY FLOW RATE see under **FORCED EXPIRATORY FLOW RATES**

MAXIMAL VOLUNTARY VENTILATION see under **RESPIRATORY AIRFLOW**

MAXIMUM PERMISSIBLE EXPOSURE LEVEL see under **ENVIRONMENTAL EXPOSURE**

MAYTANSINE see under **OXAZINES**

MAZINDOL see under **INDOLES**

MCARDLE'S DISEASE see **GLYCOGEN STORAGE DISEASE TYPE V**

MCGILL PAIN QUESTIONNAIRE see **PAIN MEASUREMENT**

MCN A 343 see under **AMMONIUM COMPOUNDS**

MCPA see under **GLYCOLATES**

MEA I see **NEOPLASMS, MULTIPLE ENDOCRINE**

MEA II see **NEOPLASMS, MULTIPLE ENDOCRINE**

MEA III see **NEOPLASMS, MULTIPLE ENDOCRINE**

MEALS ON WHEELS see **FOOD SERVICES**

MEALWORM see **TENEBRIO**

MEASLES

Measles. Neihart RE, et al. **Clin Dermatol** 1989 Jan–Mar; 7(1):1–7 (34 ref.)

Measles, mumps, rubella and chickenpox in the adult population. Boodley CA, et al. **Nurse Pract** 1989 Feb; 14(2):12, 14, 16 passim (17 ref.)

Measles: clinical and laboratory observations in young adults during an epidemic. Ackerman Z, et al. **South Med J** 1988 Nov;81(11):1396–400

COMPLICATIONS

Measles in hospitalized African children with human immunodeficiency virus [letter] Sension MG, et al. **Am J Dis Child** 1988 Dec;142(12):1271–2

Autoimmune reactions against myelin basic protein induced by corona and measles viruses. ter Meulen V. **Ann N Y Acad Sci** 1988;540:202–9 (31 ref.)

Endotracheal aspiration for the bacteriological diagnosis of nosocomial- and measles-associated pneumonia. Berkowitz FE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):217–21

Postmeasles blindness [letter] McLaren DS. **Br J Ophthalmol** 1988 Nov;72(11):879–80

Hepatitis during measles in young adults: possible role of antipyretic drugs. Ackerman Z, et al. **Hepatology** 1989 Aug; 10(2):203–6

Bronchiolitis obliterans following measles. Kumar L, et al. **Indian Pediatr** 1988 Dec;25(12):1201–5

Oral ribavirin therapy for subacute sclerosing panencephalitis. Ogle JW, et al. **J Infect Dis** 1989 Apr; 159(4):748–50

Etiology of diarrhea in measles. Varavithya W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:151–4

Keratomalacia in a child with familial hypo-retinol-binding proteinemia. Matsuo T, et al. **Jpn J Ophthalmol** 1988; 32(3):249–54

Measles pneumonia in a newborn. Drut R, et al. **Pediatr Pathol** 1988;8(5):553–7

[Encephalitic complications of measles in 1987] Celers J, et al. **Bull Acad Natl Med** 1989 Feb;173(2):133–8; discussion 139 (Eng. Abstr.) **(Fre)**

[Neurologic complications of measles in Parma in the period 1970–1986] Consigli F, et al. **Acta Biomed Ateneo Parmense** 1988;59(1–2):19–27 (Eng. Abstr.) **(Ita)**

[A case of measles in adolescents with myocarditis and pneumonia] Tokuyama T, et al. **Kansenshogaku Zasshi** 1989 May;63(5):530–3 (Eng. Abstr.) **(Jpn)**

[Subacute sclerosing panencephalitis (SSPE) in Poland 1984–1986. Stage III of epidemiologic studies] Naruszewicz-Lesiuk D, et al. **Przegl Epidemiol** 1988; 42(3):205–10 (Eng. Abstr.) **(Pol)**

[Adenocarcinoma of the lung in a 25-year-old woman] Khallenko VA, et al. **Klin Med (Mosk)** 1988 Dec;66(12):103 **(Rus)**

DIAGNOSIS

[Measles, still a problem today?] Roosen YM, et al. **Ned Tijdschr Geneeskd** 1989 May 20;133(20):1009–11 **(Dut)**

ECONOMICS

[An economic evaluation of measles vaccination in District 3 of the city of Bucharest] Ion-Nedelcu N, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):163–8 (Eng. Abstr.) **(Rum)**

ENZYMOLOGY

Increased cytosol aminopeptidase and lactate dehydrogenase in serum originating from lymphocytes in measles and rubella infection. Sugaya N, et al. **Am J Dis Child** 1988 Dec;142(12):1352–5

EPIDEMIOLOGY

Measles and childhood mortality in semi-urban Nigeria. Fagbule D, et al. **Afr J Med Med Sci** 1988 Sep;17(3):181–5

An explosive point-source measles outbreak in a highly vaccinated population. Modes of transmission and risk factors for disease. Chen RT, et al. **Am J Epidemiol** 1989 Jan;129(1):173–82

The role of secondary vaccine failures in measles outbreaks. Mathias RG, et al. **Am J Public Health** 1989 Apr; 79(4):475–8

Current trends measles—United States, 1987. **Arch Dermatol** 1988 Nov;124(11):1627–8

Measles—United States, 1987. **Can Dis Wkly Rep** 1989 Jan 7;15(1):7–8 **(Eng, Fre)**

Measles in Ontario—overview of 1989 cases. Assaff D, et al. **Can Dis Wkly Rep** 1989 Jul 22;15(29):148–50 **(Eng, Fre)**

Measles in Montreal, Quebec. Girodias JB. **Can Dis Wkly Rep** 1988 Dec 31;14(52):233–5 **(Eng, Fre)**

Update on measles in Quebec. Lavigne PM, et al. **Can Dis Wkly Rep** 1989 Jul 22;15(29):147 **(Eng, Fre)**

Update on measles in Quebec. Lavigne PM, et al. **Can Dis Wkly Rep** 1989 May 6;15(18):99 **(Eng, Fre)**

Measles in Canada. Varughese PV, et al. **Can Dis Wkly Rep** 1989 Jan 7;15(1):1–7 **(Eng, Fre)**

An evaluation of measles serodiagnosis during an outbreak in a vaccinated community. Sekla L, et al. **Clin Invest Med** 1988 Aug;11(4):304–9

The incidence and notification of measles in Australia. McGrath J, et al. **Community Health Stud** 1989; 13(2):156–60

Measles—a fire-fighting exercise. Aspinall B, et al. **Community Med** 1988 Nov;10(4):341–3

The epidemiology of a measles outbreak on a remote offshore island near Taiwan. Gao JP, et al. **Int J Epidemiol** 1988 Dec;17(4):894–8

Vaccine-preventable diseases on college campuses: the emergence of mumps. Williams WW, et al. **J Am Coll Health** 1989 Mar;37(5):197–203

Measles in schools: age at vaccination vs risk of disease. Narian JP, et al. **J Arkansas Med Soc** 1989 Feb;85(9):383–5

Measles in a rural community. Phaneendra Rao RS, et al. **J Commun Dis** 1988 Jun;20(2):131–5

Epidemiology of measles in western Rajasthan. Swami SS, et al. **J Commun Dis** 1987 Dec;19(4):370–2

Serological survey of measles in Yemen in 1985. Strauss J, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):71–4

Seroepidemiology of mumps, measles, and subacute sclerosing panencephalitis in Saudi Arabia. Bakir TM, et al. **J Trop Pediatr** 1988 Oct;34(5):254–6

Leads from the MMWR. Measles—Los Angeles County, California, 1988. **JAMA** 1989 Feb 24;261(8):1111, 1115

From the Centers for Disease Control. Measles—United States, 1988. **JAMA** 1989 Oct 6;262(13):1751, 1754

From the Centers for Disease Control. Measles outbreak—Chicago, 1989. **JAMA** 1989 Sep 22–29; 262(12):1587

Long past date set for its US disappearance, measles remains a threat to many children [news] Goldsmith MF. **JAMA** 1989 Sep 1;262(9):1156

Measles—Los Angeles County, California, 1988. **MMWR** 1989 Feb 3;38(4):49–52, 57

Measles—United States, 1988. **MMWR** 1989 Sep 8; 38(35):601–5

Measles—Hungary. **MMWR** 1989 Oct 6;38(39):665–8

Measles—Quebec. **MMWR** 1989 May 12;38(18):329–30

Measles outbreak—Chicago, 1989. **MMWR** 1989 Sep 1; 38(34):591–2

Measles epidemic in New Jersey: 1985–1986. Porter J. **N J Med** 1988 Jul;85(7):593–7

[The immunization status of patients registered with measles during the 1987–88 epidemic] Bijkerk H, et al. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):29–32 (Eng. Abstr.) **(Dut)**

[An epidemic of measles in Burkina Faso: 714 cases hospitalized in the hospital at Bobo-Dioulasso. A study of risk factors] Sahuguède P, et al. **Ann Pediatr (Paris)** 1989 Apr;36(4):244–51 (Eng. Abstr.) **(Fre)**

[Epidemiological study and cost evaluation of measles in Lyons hospitals over a 5-year period] Loras-Duclaux I, et al. **Pediatrie** 1988;43(5):451–4 (Eng. Abstr.) **(Fre)**

[A measles outbreak among junior high school students] Nagai K, et al. **Kansenshogaku Zasshi** 1988 Aug; 62(8):717–21 (Eng. Abstr.) **(Jpn)**

[Measles—1987] Naruszewicz-Lesiuk D. **Przegl Epidemiol** 1989;43(1):10–5 **(Pol)**

[Measles 1986] Naruszewicz-Lesiuk D. **Przegl Epidemiol** 1988;42(1):9–15 **(Pol)**

[An epidemic of measles in Subotica from January to June 1987] Perović S, et al. **Med Pregl** 1988;41(11–12):494–6 (Eng. Abstr.) **(Scr)**

[Study of a measles epidemic in Gátova (Castellón) and the efficacy of measles vaccination] Colomer Pache M, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):649–52 (Eng. Abstr.) **(Spa)**

[Measles in adults. An unforeseen consequence of vaccination?] Repetto G, et al. **Rev Med Chil** 1987 Nov; 115(11):1102–8 (Eng. Abstr.) **(Spa)**

ETIOLOGY

[Measles in a 2-week-old infant] Zriachkin NI. **Pediatriia** 1989;(7):102 **(Rus)**

IMMUNOLOGY

Virus-induced immunosuppression: infections with measles virus and human immunodeficiency virus. McChesney MB, et al. **Adv Immunol** 1989;45:335–80 (352 ref.)

Measles virus infection causes expression of class I and class II MHC antigens in rat brain. Olsson T, et al. **Ann N Y Acad Sci** 1988;540:486–7

Virus-specific IgA in serum, saliva, and tears of children with measles. Friedman MG, et al. **Clin Exp Immunol** 1989 Jan;75(1):58–63

A sensitive radioimmunoassay for circulating alpha-interferon in the plasma of healthy children and patients with measles virus infection. Shiozawa S, et al. **Clin Exp Immunol** 1988 Sep;73(3):366–9

Maternally derived measles immunity in children of naturally infected and vaccinated mothers. Jenks PJ, et al. **Epidemiol Infect** 1988 Oct;101(2):473–6

Serological investigation of measles (morbilli) in the Melut district, South Sudan. Sixl W, et al. **Geogr Med** 1988;Suppl 1:45–8

Loss of maternal measles antibody during infancy in an African city. Dabis F, et al. **Int J Epidemiol** 1989 Mar; 18(1):264–8

Efficacy and safety of vaccination of marrow transplant recipients with a live attenuated measles, mumps, and rubella vaccine. Ljungman P, et al. **J Infect Dis** 1989 Apr; 159(4):610–5

Measles and measles immunity in children infected with human immunodeficiency virus. Krasinski K, et al. **JAMA** 1989 May 5;261(17):2512–6

Immunology of measles [editorial] **Lancet** 1989 Sep 30; 2(8666):780–1

Trial of high-dose Edmonston-Zagreb measles vaccine in the Gambia: antibody response and side-effects. Whittle H, et al. **Lancet** 1988 Oct 8;2(8615):811–4

Seroconversion after administration of measles vaccine to

central Australian Aboriginal children at nine months of age. Hanna JN, et al. **Med J Aust** 1989 Feb 20;150(4):188, 191–2

Measles and rubella antibody status in previously vaccinated children with cancer. Feldman S, et al. **Med Pediatr Oncol** 1988;16(5):308–11

Pathogenesis of measles immunodeficiency and encephalomyelitis: parallels to AIDS. Johnson RT, et al. **Microb Pathog** 1988 Mar;4(3):169–74 (43 ref.)

Immune activation in measles. Griffin DE, et al. **N Engl J Med** 1989 Jun 22;320(25):1667–72

[A study on measles immune status by ELISA] Li GQ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Apr; 10(2):105–8 (Eng. Abstr.) **(Chi)**

[Transfer of measles immunoglobulins and antibodies from mother to child in Africa and Europe] Gendrel D, et al. **Presse Med** 1988 Sep 24;17(32):1633–6 (Eng. Abstr.) **(Fre)**

[Long-term remission induced by measles infection and followed by immunosuppressive therapy in a case of refractory juvenile rheumatoid arthritis] Lepore L, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):191–3 (Eng. Abstr.) **(Ita)**

[Changes of the immunologic status of the population as a result of preventive vaccination] Gałązka A. **Przegl Epidemiol** 1988;42(3):211–24 (Eng. Abstr.) **(Pol)**

[The significance of the level of immunity in organized collectives in performing epidemiologic surveillance for diphtheria, tetanus and measles] Kolkov VF, et al. **Voen Med Zh** 1988 Jul;(7):46–9 **(Rus)**

MICROBIOLOGY

[Current problems of measles virus infection] Liebert UG. **Ergeb Inn Med Kinderheilkd** 1989;58:153–71 (110 ref.) **(Ger)**

[The measles virus is not teratogenic (letter)] Lökös M, et al. **Orv Hetil** 1989 Jun 11;130(24):1299 **(Hun)**

MORTALITY

Malnourished or overinfected. An analysis of the determinants of acute measles mortality. Aaby P. **Dan Med Bull** 1989 Apr;36(2):93–113 (133 ref.)

Effect of measles immunization on child mortality in rural Gambia. Williams PJ. **J Biosoc Sci Suppl** 1989;10:95–104

Vitamin A levels and mortality among hospitalized measles patients, Kinshasa, Zaire. Markowitz LE, et al. **J Trop Pediatr** 1989 Jun;35(3):109–12

Child mortality related to seroconversion or lack of seroconversion after measles vaccination. Aaby P, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):197–200

[Measles infections at a Mozambique provincial hospital] Kotte W, et al. **Kinderarztl Prax** 1988 Jul;56(7):347–51 (Eng. Abstr.) **(Ger)**

PATHOLOGY

[Comparative clinico-morphological research on measles and mumps infections in an experiment on guinea pigs] Rozina EE, et al. **Vopr Virusol** 1988 May–Jun;33(3):342–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Measles and measles vaccine in Japan. Isomura S. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):154–62

Measles vaccination and childhood mortality in rural Bangladesh. Clemens JD, et al. **Am J Epidemiol** 1988 Dec; 128(6):1330–9

Updated statement on measles prevention issued by Centers for Disease Control [news] **Clin Pharm** 1987 Oct;6(10):754

The cold chain in the measles immunization programme in India. Saha SM, et al. **Indian J Pediatr** 1988 May–Jun; 55(3):356–8

An audit of measles immunisation in a semi-rural practice. O'Brien S, et al. **Ir Med J** 1988 Nov;81(1):36–8

Measles immunization study in rural area of primary health unit Dighal (Haryana). Gaur DR, et al. **J Commun Dis** 1988 Sep;20(3):196–201

Field evaluation of measles vaccine efficacy in Najafgarh zone of delhi. Sharma RS, et al. **J Commun Dis** 1988 Mar; 20(1):33–43

Leads from the MMWR. Measles prevention: supplementary statement. **JAMA** 1989 Feb 10;261(6):827, 831

Measles, mumps, and rubella vaccine coverage [letter] **Lancet** 1989 Feb 4;1(8632):271–2

Measles immunisation before the age of nine months? Position statement by the expanded programme on immunisation of the World Health Organisation. **Lancet** 1988 Dec 10; 2(8624):1356–7

Measles/mumps/rubella vaccine [news] **Lancet** 1988 Oct 8; 2(8615):860

Trial of high-dose Edmonston-Zagreb measles vaccine in Guinea-Bissau: protective efficacy. Aaby P, et al. **Lancet** 1988 Oct 8;2(8615):809–11

Measles, mumps, and rubella vaccine: what coverage to block transmission? [letter] Nokes DJ, et al. **Lancet** 1988 Dec 10;2(8624):1374

Measles, mumps, and rubella immunisation [letter] Walker D. **Lancet** 1989 Jan 21;1(8630):167

Aboriginal health-workers' response to an outbreak of measles [letter] Brooks E, et al. **Med J Aust** 1989 Jun 19; 150(12):728

Measles revaccination. **Med Lett Drugs Ther** 1989 Jul 28; 31(797):69–70

Measles prevention: supplementary statement. **MMWR** 1989 Jan 13;38(1):11–4

Two-dose measles immunization recommendations. **N Y State J Med** 1989 Aug;89(8):492–3

Measles immunization and its effectiveness in the southern Highlands. Alto WA, et al. **P N G Med J** 1989 Mar; 32(1):45–9

Measles outbreak among unvaccinated preschool-aged children: opportunities missed by health care providers to administer measles vaccine. Hutchins SS, et al. **Pediatrics** 1989 Mar;83(3):369–74

Measles immunisation non-acceptance: validation of computer-held records and raising the vaccine uptake at early school age; the Maidstone experience. Brambleby P, et al. **Public Health** 1989 Jul;103(4):289–94

Measles, mumps and rubella: present and future immunisation policy. Miller E. **Public Health** 1988 Jul;102(4):317–21

Evaluation of a mass measles immunisation campaign in a rapidly growing peri-urban area. Kearney M, et al. **S Afr Med J** 1989 Aug 19;76(4):157–9

Two doses of MMR vaccine--sufficient to eradicate measles, mumps and rubella? Fahlgren K. **Scand J Soc Med** 1988; 16(3):129–35 (41 ref.)

Prospects for measles eradication [letter] Davis R. **World Health Forum** 1988;9(3):382–3

[Evaluation of coverage under the national plan for measles and rubella vaccination based on a sample of schools] Goulet V, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):43–8 (Eng. Abstr.) **(Fre)**

[Rubella, measles, mumps--epidemiologic, occupational medicine significance and efficacy of adult vaccination] Hofmann F, et al. **Off Gesundheitswes** 1989 Jun; 51(6):299–302 (Eng. Abstr.) **(Ger)**

[Clinico-immunologic evaluation of a trivalent vaccine against measles, rubella and mumps] Schettini F, et al. **Minerva Pediatr** 1989 Mar;41(3):117–22 (Eng. Abstr.) **(Ita)**

[Measles infection: an operational proposal for vaccine prophylaxis] Simonetti D'Arca A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct;39(4–5):431–8 **(Ita)**

[Possibilities of immunization against measles of children with injuries of the CNS] Sergeeva MV, et al. **Pediatriia** 1989; (6):75–8 **(Rus)**

[Effectiveness of selective anti-measles reimmunization of risk-group children] Sokhin AA, et al. **Pediatriia** 1988; (9):69–72 **(Rus)**

[Conjugated vaccine against measles, rubella and mumps] **Vopr Virusol** 1989 Jan–Feb;34(1):117–9 **(Rus)**

[Epidemiologic effectiveness of mass revaccination against measles] Deshevoĭ SE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):69–72 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Measles in a two-months age baby and his mother in Juba, Sudan. Mukhtar AA, et al. **East Afr Med J** 1989 Jan; 66(1):74–5

The importance of nosocomial transmission of measles in the propagation of a community outbreak. Raad II, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):161–6

Brother-to-sister transmission of measles after MMR immunisation [letter] Campbell AG. **Lancet** 1989 Feb 25; 1(8635):442

Brother-to-sister transmission of measles after measles, mumps, and rubella immunisation [letter] Millson DS. **Lancet** 1989 Feb 4;1(8632):271

Patterns of transmission in measles outbreaks in the United States, 1985–1986. Markowitz LE, et al. **N Engl J Med** 1989 Jan 12;320(2):75–81

URINE

Urinary excretion of 3-methylhistidine, creatinine and total nitrogen by Kenyan children during acute measles and after recovery. Duggan MB, et al. **Eur J Clin Nutr** 1989 Jun; 43(6):391–401

VETERINARY

Infection studies in mink with seal-derived morbillivirus. Blixenkrone-Møller M, et al. **Arch Virol** 1989; 106(1–2):165–70

Virus-induced immunosuppression: infection of peripheral blood mononuclear cells and suppression of immunoglobulin synthesis during natural measles virus infection of rhesus monkeys. McChesney MB, et al. **J Infect Dis** 1989 Apr;159(4):757–60

Seal disease predictions [letter] Harwood J, et al. **Nature** 1989 Jun 29;339(6227):670

Measles in the cynomolgus monkey (Macaca fascicularis). Welshman MD. **Vet Rec** 1989 Feb 25;124(8):184–6

MEASLES, GERMAN see **RUBELLA**

MEASLES VACCINE

Measles and measles vaccine in Japan. Isomura S. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):154–62

Measles mumps rubella (MMR) vaccine in Japan. Kuno-Sakai H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):167–74

Measles vaccination and childhood mortality in rural Bangladesh. Clemens JD, et al. **Am J Epidemiol** 1988 Dec; 128(6):1330–9

Measles immunisation in Thai children aged nine to 14 months. Lumbiganon P, et al. **Asia Pac J Public Health** 1988;2(4):241–4

Measles, mumps, and rubella vaccine. **BMJ** 1988 Sep 24; 297(6651):780–1

Big bang for vaccination [editorial] Badenoch J. **BMJ** 1988 Sep 24;297(6651):750–1

The cold chain in the measles immunization programme in India. Saha SM, et al. **Indian J Pediatr** 1988 May–Jun; 55(3):356–8

Contraindications to live-viral immunization [letter] Legler JD. **J Fam Pract** 1989 Mar;28(3):333–4

Effect of measles, mumps, rubella vaccination on pattern of encephalitis in children. Koskiniemi M, et al. **Lancet** 1989 Jan 7;1(8628):31–4

Measles immunization and its effectiveness in the southern Highlands. Alto WA, et al. **P N G Med J** 1989 Mar; 32(1):45–9

Measles, mumps, rubella and the GP [editorial] Kerrigan P. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1121

Prospects for measles eradication [letter] Davis R. **World Health Forum** 1988;9(3):382–3

[Response to Dr. Gaillet's letter: An open question to those responsible for the MMR vaccination program (letter)] Suter S. **Rev Med Suisse Romande** 1988 Nov;108(11):1001–2 **(Fre)**

[Vaccination coverage in a school population of Guipúzcoa: DTP, polio and measles] Basterretxea Irurzun M, et al. **Gac Sanit** 1988 Jan–Feb;2(4):26–9 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Measles--a fire-fighting exercise. Aspinall B, et al. **Community Med** 1988 Nov;10(4):341–3

Immunizing HIV-positive children [news] **Int Nurs Rev** 1989 May–Jun;36(3):72

An audit of measles immunisation in a semi-rural practice. O'Brien S, et al. **Ir Med J** 1988 Nov;81(1):36–8

Updated guidelines for vaccinations in HIV-infected children [letter] Lindquist CM. **J Am Osteopath Assoc** 1988 Sep; 88(9):1064

Interference between strains in live virus vaccines, I: Combined vaccination with measles, mumps and rubella vaccine. Berger R, et al. **J Biol Stand** 1988 Oct;16(4):269–73

Interference between strains in live virus vaccines. II: Combined vaccination with varicella and measles-mumps-rubella vaccine. Berger R, et al. **J Biol Stand** 1988 Oct;16(4):275–9

Study of combined vaccination against yellow fever and measles in infants from six to nine months. Lhuillier M, et al. **J Biol Stand** 1989 Jan;17(1):9–15

Placebo-controlled trial of varicella vaccine given with or after measles-mumps-rubella vaccine. Englund JA, et al. **J Pediatr** 1989 Jan;114(1):37–44

Measles immunisation before the age of nine months? Position statement by the expanded programme on immunisation of the World Health Organisation. **Lancet** 1988 Dec 10; 2(8624):1356–7

Trial of high-dose Edmonston-Zagreb measles vaccine in Guinea-Bissau: protective efficacy. Aaby P, et al. **Lancet** 1988 Oct 8;2(8615):809–11

Immunization of asymptomatic HIV-infected children with measles vaccine: assessment of risks and benefits. Onorato IM, et al. **Med Decis Making** 1989 Apr–Jun;9(2):76–83

Measles revaccination. **Med Lett Drugs Ther** 1989 Jul 28; 31(797):69–70

Two-dose measles immunization recommendations. **N Y State J Med** 1989 Aug;89(8):492–3

Measles outbreak among unvaccinated preschool-aged children: opportunities missed by health care providers to administer measles vaccine. Hutchins SS, et al. **Pediatrics** 1989 Mar;83(3):369–74

Field evaluation of a simplified unit-dose syringe for administration of measles vaccine. Halsey NA, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S631–8

Two doses of MMR vaccine--sufficient to eradicate measles, mumps and rubella? Fahlgren K. **Scand J Soc Med** 1988; 16(3):129–35 (41 ref.)

[Changes of the immunologic status of the population as a result of preventive vaccination] Gałązka A. **Przegl Epidemiol** 1988;42(3):211–24 (Eng. Abstr.) **(Pol)**

[Subacute sclerosing panencephalitis (SSPE) in Poland 1984–1986. Stage III of epidemiologic studies] Naruszewicz-Lesiuk D, et al. **Przegl Epidemiol** 1988; 42(3):205–10 (Eng. Abstr.) **(Pol)**

[An economic evaluation of measles vaccination in District 3 of the city of Bucharest] Ion-Nedelcu N, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):163–8 (Eng. Abstr.) **(Rum)**

[Possibilities of immunization against measles of children with injuries of the CNS] Sergeeva MV, et al. **Pediatriia** 1989; (6):75–8 **(Rus)**

[Conjugated vaccine against measles, rubella and mumps] **Vopr Virusol** 1989 Jan–Feb;34(1):117–9 **(Rus)**

[Study of a measles epidemic in Gátova (Castellón) and the efficacy of measles vaccination] Colomer Pache M, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):649–52 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Sister chromatid exchanges in peripheral lymphocytes of children vaccinated against rubella and measles-mumps-rubella. Kitsiou S, et al. **Acta Paediatr Scand** 1988 Nov;77(6):879–84

Unilateral deafness as a complication of the mumps, measles, and rubella vaccination. Nabe-Nielsen J, et al. **BMJ** 1988 Aug 13;297(6646):489

New vaccination--measles, mumps, rubella [letter] Libbey MA. **Br Dent J** 1988 Sep 10;165(5):160

Immunogenicity and safety of measles vaccine in ill African children [letter] Goubau P. **Int J Epidemiol** 1989 Jun; 18(2):467

Administration of measles-mumps-rubella vaccine to children allergic to eggs [letter] Peter G. **J Pediatr** 1989 Jun;114(6):1067

Mumps meningitis following measles, mumps, and rubella immunisation [letter] **Lancet** 1989 Aug 12;2(8659):394–5

Mumps meningitis following measles, mumps, and rubella immunisation [letter] Gray JA, et al. **Lancet** 1989 Jul 8; 2(8654):98

Measles and autoimmune chronic active hepatitis [letter] Mieli-Vergani G, et al. **Lancet** 1989 Sep 16;2(8664):688

Mumps meningitis after measles, mumps, and rubella vaccination [letter] Murray MW, et al. **Lancet** 1989 Sep 16;2(8664):677

Measles revaccination--an additional note. **Med Lett Drugs Ther** 1989 Sep 22;31(801):88

Aseptic meningitis after vaccination against measles and mumps. Cižman M, et al. **Pediatr Infect Dis J** 1989 May; 8(5):302–8

Unilateral total deafness as a complication of the measles-mumps-rubella vaccination. Nabe-Nielsen J, et al. **Scand Audiol Suppl** 1988;30:69–70

IMMUNOLOGY

Follow-up of the antibody response to measles vaccine in a rural area of Guinea-Bissau. Smedman L, et al. **Acta Paediatr Scand** 1988 Nov;77(6):885–9

The role of secondary vaccine failures in measles outbreaks. Mathias RG, et al. **Am J Public Health** 1989 Apr; 79(4):475–8

Maternally derived measles immunity in children of naturally infected and vaccinated mothers. Jenks PJ, et al. **Epidemiol Infect** 1988 Oct;101(2):473–6

Evaluation of live attenuated measles vaccines prepared in human diploid cells for reimmunization. Mirchamsy H, et al. **Epidemiol Infect** 1988 Oct;101(2):437–43

Efficacy and safety of vaccination of marrow transplant recipients with a live attenuated measles, mumps, and rubella vaccine. Ljungman P, et al. **J Infect Dis** 1989 Apr; 159(4):610–5

Long-term regulation of interferon production by lymphocytes from children inoculated with live measles virus vaccine. Nakayama T, et al. **J Infect Dis** 1988 Dec; 158(6):1386–90

Trial of high-dose Edmonston-Zagreb measles vaccine in the Gambia: antibody response and side-effects. Whittle H, et al. **Lancet** 1988 Oct 8;2(8615):811–4

Measles and rubella antibody status in previously vaccinated children with cancer. Feldman S, et al. **Med Pediatr Oncol** 1988;16(5):308–11

Evaluation of mumps antibodies after measles-mumps-rubella (MMR) vaccines. Ozaki K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):305–11

Chloroquine treatment of malaria does not increase antibody response to measles vaccination. A controlled study of 580 rural children living in an endemic malaria area. Cénac A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):405

Complement-mediated neutralization test for determination of mumps vaccine-induced antibody. Hishiyama M, et al. **Vaccine** 1988 Oct;6(5):423–7

[Clinico-immunologic evaluation of a trivalent vaccine against measles, rubella and mumps] Schettini F, et al. **Minerva Pediatr** 1989 Mar;41(3):117–22 (Eng. Abstr.) **(Ita)**

[Epidemiologic effectiveness of mass revaccination against measles] Deshevoĭ SE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):69–72 (Eng. Abstr.) **(Rus)**

[Use of the leukocyte adherence inhibition reaction for assessing the effectiveness of vaccination against measles] Mikheeva IV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):33–6 (Eng. Abstr.) **(Rus)**

[Macrophage transformation of mononuclear cells following primary and secondary experimental immunization with measles vaccine] Zakharova TR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):72–4 (Eng. Abstr.) **(Rus)**

[The development and duration of immunity in children vaccinated against measles with the Edmonston-Zagreb vaccine] Borčić B, et al. **Lijec Vjesn** 1989 Apr-May; 111(4–5):131–4 (Eng. Abstr.) **(Scr)**

STANDARDS

Field evaluation of measles vaccine efficacy in Najafgarh zone of delhi. Sharma RS, et al. **J Commun Dis** 1988 Mar; 20(1):38–43

SUPPLY & DISTRIBUTION

Measles, mumps and rubella vaccine [editorial] Miller E. **Br J Hosp Med** 1988 Oct;40(4):247, 249

THERAPEUTIC USE

Updated statement on measles prevention issued by Centers for Disease Control [news] **Clin Pharm** 1987 Oct;6(10):754

Child mortality related to seroconversion or lack of seroconversion after measles vaccination. Aaby P, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):197–200

Measles, mumps and rubella. The new MMR. Golding AM. **Public Health** 1988 Nov;102(6):517–8

Measles vaccination in primary schools--the Colchester project. Rao M, et al. **Public Health** 1988 Sep;102(5):477–83

[The immunization status of patients registered with measles during the 1987–88 epidemic] Bijkerk H, et al. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):29–32 (Eng. Abstr.) **(Dut)**

[Open question to those responsible for the measles-mumps-rubella vaccination program] Gaillet RP. **Rev Med Suisse Romande** 1988 Aug;108(8):711–6 **(Fre)**

[Response to: "Open question to those responsible for the MMR vaccination program" by Dr. R. Ph. Gaillet (letter)] Méan F. **Rev Med Suisse Romande** 1988 Oct;108(10):907–10 **(Fre)**

MEASLES VIRUS

Impaired human leukocyte antigen-restricted measles virus-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. **Ann Neurol** 1989 Mar;25(3):272–80

Characterization of octyl glucoside-solubilized cell membrane receptors for binding measles virus. Krah DL. **Virology** 1989 Sep;172(1):386–90

[Sorbitol-gelatin and glutamic acid-lactose solutions as stabilizers of reference preparations of measles virus (published erratum appears in Bol Of Sanit Panam 1989 Jan;106(1):31)] de Rizzo E, et al. **Bol Of Sanit Panam** 1988 Jul;105(1):45–52 (Eng. Abstr.) **(Por)**

ANALYSIS

Postmortem detection of measles virus in non-neural tissues in subacute sclerosing panencephalitis. Brown HR, et al. **Ann Neurol** 1989 Aug;26(2):263–8

DRUG EFFECTS

Characterization of a halothane-resistant strain of measles virus. Bedows E, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):400–3

Peptides as potential virus inhibitors. Synthesis and bioassay of five respiratory syncytial virus peptide analogs with antimeasles activity. Lobl TJ, et al. **Int J Pept Protein Res** 1988 Nov;32(5):326–30

[The antimicrobial effect of lysozyme on nasal mucosa] Glück U. **HNO** 1989 May;37(5):207–10 (Eng. Abstr.) **(Ger)**

[Effect of magnesium sulfate on the reproduction of the measles virus in cell culture] Shteĭnberg LSh, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):465–9 (Eng. Abstr.) **(Rus)**

GENETICS

Detection of measles virus genome in blood leucocytes of patients with certain autoimmune diseases. Andjaparidze OG, et al. **Arch Virol** 1989;105(3–4):287–91

The molecular biology of the morbillivirus (measles) group. Barrett T. **Biochem Soc Symp** 1987;53:25–37 (59 ref.)

Biased hypermutation and other genetic changes in defective measles viruses in human brain infections. Cattaneo R, et al. **Cell** 1988 Oct 21;55(2):255–65

Measles virus editing provides an additional cysteine-rich protein. Cattaneo R, et al. **Cell** 1989 Mar 10;56(5):759–64

Expression of measles virus nucleoprotein in Escherichia coli: use of deletion mutants to locate the antigenic sites. Buckland R, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):435–41

Expression of bicistronic measles virus P/C mRNA by using hybrid adenoviruses: levels of C protein synthesized in vivo are unaffected by the presence or absence of the upstream P initiator codon. Alkhatib G, et al. **J Virol** 1988 Nov; 62(11):4059–69

Measles virus synthesizes both leaderless and leader-containing polyadenylated RNAs in vivo. Castaneda SJ, et al. **J Virol** 1989 Jul;63(7):2977–86

Detection of measles virus RNA in paraffin-embedded tissue [letter] Jackson DP, et al. **Lancet** 1989 Jun 17;1(8651):1391

Measles-specific nucleotide sequences and autoimmune chronic active hepatitis [letter] Kalland KH, et al. **Lancet** 1989 Jun 17;1(8651):1390–1

Cloning and sequencing of the nucleoprotein gene of measles virus (Hallé strain). Buckland R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11821

A measles virus subgenomic RNA: structure and generation mechanism. Enami M, et al. **Virology** 1989 Aug; 171(2):427–33

Restriction of measles virus gene expression in acute and subacute encephalitis of Lewis rats. Schneider-Schaulies S, et al. **Virology** 1989 Aug;171(2):525–34

Host age and cell type influence measles virus protein expression in the central nervous system. Swoveland PT, et al. **Virology** 1989 May;170(1):131–8

[Persistence of the measles virus genome in some autoimmune diseases] Andzhaparidze OG, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):92–5 **(Rus)**

GROWTH & DEVELOPMENT

Transmission of measles virus encephalitis to ferrets by intracardiac inoculation of a cell-associated SSPE virus strain. Thormar H, et al. **APMIS** 1988 Dec;96(12):1125–8

Replication of measles virus in the human plasma cell leukemia-derived LICR-LON-HMy2 cell line. Ziola B, et al. **J Virol Methods** 1989 Jun;24(3):313–20

IMMUNOLOGY

Effect of corticoid treatment upon the measles virus-induced leukocyte adherence inhibition. Mayer M. **Acta Univ Palacki Olomuc Fac Med** 1987;117:137–40

Impaired measles-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. **Ann N Y Acad Sci** 1988;540:645–8

Recognition of intracellular measles virus antigens by HLA class II restricted measles virus-specific cytotoxic T lymphocytes. Jacobson S, et al. **Ann N Y Acad Sci** 1988; 540:352–3

Virus-specific cytotoxic T cells in multiple sclerosis. McFarland HF, et al. **Ann N Y Acad Sci** 1988;532:273–9

Measles immunisation in Thai children aged nine to 14 months. Lumbiganon P, et al. **Asia Pac J Public Health** 1988;2(4):241–4

Surveillance of antibody to measles, mumps, and rubella by age. Morgan-Capner P, et al. **BMJ** 1988 Sep 24; 297(6651):770–2

Measles virus inhibits lymphocyte proliferation in vitro by two different mechanisms. Salonen R, et al. **Clin Exp Immunol** 1989 Mar;75(3):376–80

Maternally derived measles immunity in children of naturally infected and vaccinated mothers. Jenks PJ, et al. **Epidemiol Infect** 1988 Oct;101(2):473–6

Fluctuation of virus antibody levels in healthy adults. Meurman O, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):656–8

Effects of calcium ionophore and phorbol ester on class-II-restricted virus-specific human cytotoxic T cell clones. Richert JR, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):178–83

Immunoglobulin G subclass antibodies to measles virus in patients with subacute sclerosing panencephalitis or multiple sclerosis. Mehta PD, et al. **J Clin Microbiol** 1989 Jan;27(1):62–5

Antigenicity of the measles virus haemagglutinin studied by using synthetic peptides. Mäkelä MJ, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):603–14

Measles virus-specific murine T cell clones: characterization of fine specificity and function. de Vries P, et al. **J Immunol** 1989 Apr 15;142(8):2841–6

Measles virus-specific human T cell clones. Characterization of specificity and function of CD4+ helper/cytotoxic and CD8+ cytotoxic T cell clones. van Binnendijk RS, et al. **J Immunol** 1989 Apr 15;142(8):2847–54

Virus induced immune interferon contains both interferon-alpha and -gamma [letter] Green JA. **J Infect Dis** 1989 Sep;160(3):543–4

Measles virus-polypeptide specificity of the cytotoxic T-lymphocyte response in multiple sclerosis. Dhib-Jalbut S, et al. **J Neuroimmunol** 1989 Feb;21(2–3):205–12

Comparative analysis of virus-specific antibodies and immunoglobulins in serum and cerebrospinal fluid of subacute measles virus-induced encephalomyelitis (SAME) in rats and subacute sclerosing panencephalitis (SSPE). Dörries R, et al. **J Neuroimmunol** 1988 Oct;19(4):339–52

Virus-specific cytotoxic T lymphocytes in multiple sclerosis: a normal mumps virus response adds support for a distinct impairment in the measles virus response. Goodman AD, et al. **J Neuroimmunol** 1989 May;22(3):201–9

Persistence of measles virus in rat brain neurons is promoted by depletion of CD8+ T cells. Maehlen J, et al. **J Neuroimmunol** 1989 Feb;21(2–3):149–55

Acute encephalitis with intrathecal synthesis of measles antibodies. Schädlich HJ, et al. **J Neuroimmunol** 1988 Dec; 20(2–3):171–2

Antibody response to different antigenic sites on measles virus surface polypeptides in patients with multiple sclerosis. Mäkelä MJ. **J Neurol Sci** 1989 Apr;90(2):239–46

HLA class II-restricted presentation of cytoplasmic measles virus antigens to cytotoxic T cells. Jacobson S, et al. **J Virol** 1989 Apr;63(4):1756–62

Protective role of human antibody to the fusion protein of measles virus. Sato TA, et al. **Microbiol Immunol** 1989; 33(7):601–7

Clue to seal epizootic? [letter] Dietz R, et al. **Nature** 1989 Apr 20;338(6217):627

Patterns of the morbillivirus immunity in some residents from high-risk areas for multiple sclerosis. Mititelu G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct-Dec; 92(4):707–10

T-cell recognition of measles virus haemagglutinin studied in a mouse model. Mäkelä MJ, et al. **Scand J Immunol** 1989 May;29(5):597–607

Monoclonal antibodies against measles virus haemagglutinin react with synthetic peptides. Mäkelä MJ, et al. **Scand J Immunol** 1989 Aug;30(2):225–31

Chloroquine treatment of malaria does not increase antibody

response to measles vaccination. A controlled study of 580 rural children living in an endemic malaria area. Cénac A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):405
Humoral immune response elicited in rats by measles viral membrane antigens presented in liposomes and ISCOMs. Mougin B, et al. **Vaccine** 1988 Oct;6(5):445–9
Induction of measles virus–specific human cytotoxic T cells by purified measles virus nucleocapsid and hemagglutinin polypeptides. Jacobson S, et al. **Viral Immunol** 1987–88; 1(3):153–62
[Studies on the establishment of a measles antibodies detection method using enzyme–linked immunosorbent assay (ELISA)] Shimazaki T. **Kansenshogaku Zasshi** 1988 Dec;62(12):1157–65 (Eng. Abstr.) **(Jpn)**
[Isolation and properties of hybridomas producing monoclonal antibodies to the Leningrad–16 measles virus] Andzhaparidze OG, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):204–8 (Eng. Abstr.) **(Rus)**
[Measles antibodies in exocrine secretions] Redechkina ZP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct; (10):67–70 (Eng. Abstr.) **(Rus)**
[The development and duration of immunity in children vaccinated against measles with the Edmonston–Zagreb vaccine] Borčić B, et al. **Lijec Vjesn** 1989 Apr–May; 111(4–5):131–4 (Eng. Abstr.) **(Scr)**

ISOLATION & PURIFICATION

Morbillivirus in seals: isolation and some growth characteristics in cell cultures. Liess B, et al. **DTW** 1989 Apr;96(4):180–2
Serological survey of measles in Yemen in 1985. Strauss J, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):71–4

PATHOGENICITY

Viral distemper now found in porpoises [letter] Kennedy S, et al. **Nature** 1988 Nov 3;336(6194):21

PHYSIOLOGY

Measles virus–induced suppression of lymphocyte proliferation. Sanchez–Lanier M, et al. **Cell Immunol** 1988 Oct 15;116(2):367–81
Effect of persistent measles virus infection on protein kinase C activity and c–fos protooncogene expression in neuroblastoma cells. Wolfson M, et al. **FEBS Lett** 1989 Jul 3;250(2):367–70
Replication of measles virus in cultured human thymic epithelial cells. Numazaki K, et al. **J Med Virol** 1989 Jan; 27(1):52–8
Morphogenesis of measles virus on C6 rat glioma cells. Röser K, et al. **J Neuroimmunol** 1988 Dec;20(2–3):173–6
Infection of human peripheral blood mononuclear cells with a temperature–sensitive mutant of measles virus. Vydelingum S, et al. **J Virol** 1989 Feb;63(2):689–95
Inhibition of measles virus–induced cell–cell fusion with a monoclonal antibody directed against the haemagglutinin. de Vries P, et al. **Viral Immunol** 1987 Spring;1(1):25–34
[Analysis of the possible mechanisms for the persistence of the vaccinal strain of the measles virus in a human cell culture] Andzhaparidze OG, et al. **Vopr Virusol** 1988 May–Jun;33(3):338–42 (Eng. Abstr.) **(Rus)**

MEASLES VIRUS, GERMAN see **RUBELLA VIRUS**

MEAT

Prevalence of campylobacteria in the Finnish broiler chicken chain from the producer to the consumer. Aho M, et al. **Acta Vet Scand** 1988;29(3–4):451–62
Health hazards and intensified animal productions. Bendixen HJ. **Acta Vet Scand Suppl** 1988;84:29–41 (8 ref.)
The water buffalo of Egypt. Shalaah MR. **Acta Vet Scand Suppl** 1988;83:66–79 (75 ref.)
Beef fat prevents alcoholic liver disease in the rat. Nanji AA, et al. **Alcoholism (NY)** 1989 Feb;13(1):15–9
Disseminated Salmonella arizona infection associated with rattlesnake meat ingestion. Bhatt BD, et al. **Am J Gastroenterol** 1989 Apr;84(4):433–5
The tenderizing trap [news] Scherer P. **Am J Nurs** 1988 Dec; 88(12):1629
Numerical taxonomy of psychrotrophic lactic acid bacteria from prepacked meat and meat products. Borch E, et al. **Antonie Van Leeuwenhoek** 1988;54(4):301–23
An application of the repertory grid method to investigate consumer perceptions of foods. Thomson DM, et al. **Appetite** 1988 Jun;10(3):181–93
Comparison of lithium chloride–phenylethanol–moxalactam and modified Vogel Johnson agars for detection of Listeria spp. in retail–level meats, poultry, and seafood. Buchanan RL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):599–603
Cell surface charge characteristics and their relationship to bacterial attachment to meat surfaces. Dickson JS, et al. **Appl Environ Microbiol** 1989 Apr;55(4):832–6
Fate of Listeria monocytogenes in processed meat products during refrigerated storage. Glass KA, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1565–9
New method to study bacterial adhesion to meat. Piette JP, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1531–6
Antibacterial activity of Lactobacillus sake isolated from meat. Schillinger U, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1901–6
Lipid peroxidation dependent on oxygen and catalytic free iron ions in situ storage muscle foods. Harel S, et al. **Basic Life Sci** 1988;49:301–6
Nutritional effects of pickle fermentation of blood and liver sausages in skyrwhey. Hilmarsdóttir E, et al. **Bibl Nutr Dieta** 1989;(43):47–58 (13 ref.)
Developments and future trends in post–slaughter handling and packaging of meat. Taylor AA. **Bibl Nutr Dieta** 1989; (43):59–70
A moderate fish intake increases plasminogen activator inhibitor type–1 in human volunteers. Emeis JJ, et al. **Blood** 1989 Jul;74(1):233–7
Bioavailability of total iron from meat, spinach (Spinacea oleracea L.) and meat–spinach mixtures by anaemic and non–anaemic rats. Zhang D, et al. **Br J Nutr** 1989 Mar; 61(2):331–43
Survival of Salmonella typhimurium and Staphylococcus aureus in Genoa salami of varying salt concentration. Messier S, et al. **Can J Vet Res** 1989 Jan;53(1):84–6
Destruction of Trichinella spiralis spiralis during the preparation of the "dry cured" pork products proscuitto, proscuittini and Genoa salami. Smith HJ, et al. **Can J Vet Res** 1989 Jan;53(1):80–3
Detection and measurement of MeIQx in human urine after ingestion of a cooked meat meal. Murray S, et al. **Carcinogenesis** 1989 Apr;10(4):763–5
Urinary prostaglandin E and kallikrein activity in glomerular hyperfiltration induced by a meat meal in man. Herrera J, et al. **Clin Nephrol** 1988 Sep;30(3):151–7
Ice recrystallization in a model system and in frozen muscle tissue. Martino MN, et al. **Cryobiology** 1989 Apr; 26(2):138–48
Formation of direct–acting genotoxic substances in nitrosated smoked fish and meat products: identification of simple phenolic precursors and phenyldiazonium ions as reactive products. Ohshima H, et al. **Food Chem Toxicol** 1989 Mar; 27(3):193–203
Comparative histochemical and biochemical study on storage characteristics and culinary values of fish, goat and chicken muscle. Talesara CL, et al. **Indian J Exp Biol** 1988 May; 26(5):387–91
Estimation of product yield and numbers of portions of turkey rolls in a convection oven. Hsieh JH, et al. **J Am Diet Assoc** 1989 Mar;89(3):409–11
Analyses needed to link food with listeriosis [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
Listeria may be present in hot dogs [news] **J Am Vet Med Assoc** 1989 Mar 1;194(5):626–7
CDC identifies listeriosis risks [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
FSIS takes action to combat E coli in ground beef [news] **J Am Vet Med Assoc** 1989 Mar 1;194(5):627
FSIS to expand Listeria testing [news] **J Am Vet Med Assoc** 1989 Jan 1;194(1):34
Committee looks at veal calf welfare [news] Boyce J. **J Am Vet Med Assoc** 1989 May 1;194(9):1160
Hemorrhagic colitis and hemolytic uremic syndrome caused by Escherichia coli in people consuming undercooked beef and unpasteurized milk [letter] Dorn CR. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1360–1
Survival of sylvatic Trichinella spiralis isolates in frozen tissue and processed meat products. Worley DE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1047–9
Effect of fasting and transportation on various physiological parameters and meat quality of slaughter hogs. Becker BA, et al. **J Anim Sci** 1989 Feb;67(2):334–41
Volatile compounds associated with microbial growth on normal and high pH beef stored at chill temperatures. Dainty RH, et al. **J Appl Bacteriol** 1989 Apr;66(4):281–9
The growth of potential food poisoning organisms on chicken and pork muscle surfaces. Mattila T, et al. **J Appl Bacteriol** 1988 Dec;65(6):455–61
A numerical taxonomic study of non–motile non–fermentative gram–negative bacteria from foods. Shaw BG, et al. **J Appl Bacteriol** 1988 Jul;65(1):7–21
A case report of human trichinosis in Tanta [letter] Antonios SN, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):363–4
Effects of dietary beef and soy protein on tissue composition and low density lipoprotein uptake in young pigs. Johnson JA, et al. **J Nutr** 1989 May;119(5):696–705
Residues—drugs and growth promoters. Crawford I. **J R Soc Health** 1988 Aug;108(4):125–6
Immunomodulation in C57Bl/6 mice following consumption of halogenated aromatic hydrocarbon–contaminated coho salmon (Oncorhynchus kisutch) from Lake Ontario. Cleland GB, et al. **J Toxicol Environ Health** 1989; 27(4):477–86
Listeria and food [letter] Breer C, et al. **Lancet** 1988 Oct 29;2(8618):1022
Temperature and time effects on mutagen production in cooked lamb meat. Sflomos C, et al. **Mutagenesis** 1989 May; 4(3):228–9
In vivo cytogenetic effects of cooked food mutagens. Tucker JD, et al. **Mutat Res** 1989 Sep;224(1):105–13
New approaches to raw meat processing as a result of recent studies of food exotrophia. Rogov IA, et al. **Nahrung** 1989; 33(2):119–31 (19 ref.)
Increased tubular secretion of creatinine after a meat meal [letter] Wetzels JF, et al. **Nephrol Dial Transplant** 1988; 3(6):846
Enalapril attenuates glomerular hyperfiltration following a meat meal. Chagnac A, et al. **Nephron** 1989;51(4):466–9
Fish and meat in man's diet: an historical perspective. Williams G. **Nutr Health** 1988;6(2):99–104
Long–term consumption of beef extended with soy protein by men, women and children: II. Effects on iron status. Bodwell CE, et al. **Plant Foods Hum Nutr** 1987; 37(4):361–76
Long–term consumption of beef extended with soy protein by men, women and children: I. Study design, nutrient intakes, and serum zinc levels. Miles CW, et al. **Plant Foods Hum Nutr** 1987;37(4):341–59
Long–term consumption of beef extended with soy protein by children, women and men: III. Iron absorption by adult men. Morris ER, et al. **Plant Foods Hum Nutr** 1987; 37(4):377–89
Effects of dietary protein and added fat on turkeys varying in strain, sex, and age. 2. Carcass characteristics. Blair ME, et al. **Poult Sci** 1989 Feb;68(2):287–96
Meat and meat products: changes in demand and supply. Harrington G. **Proc Nutr Soc** 1988 Sep;47(3):315–21
Cancer risks among New Zealand meat workers. Reif JS, et al. **Scand J Work Environ Health** 1989 Feb;15(1):24–9
Europe bans boeuf à l'estradiol [news] Marshall E. **Science** 1989 Jan 13;243(4888):161–2
The jungle and the aroma of meats: an ecological theme in Hindu medicine. Zimmermann F. **Soc Sci Med** 1988; 27(3):197–215
Epidemic of restaurant–associated illness due to Salmonella newport. Narain JP, et al. **South Med J** 1989 Jul; 82(7):837–40
A rapid method for detecting Trichinella spiralis larvae in pork using a monoclonal antibody–latex conjugate. Choy WF, et al. **Vet Parasitol** 1989 Aug 1;32(4):301–10
A backward look at Chernobyl [news] **Vet Rec** 1988 Oct 22;123(17):432
Relationship between wing flapping at shackling and red wingtips in chicken carcases. Gregory NG, et al. **Vet Rec** 1989 Jan 21;124(3):62
The influence of pleural lesions in the pig at slaughter on the duration of the fattening period: an on–farm study. Hartley PE, et al. **Vet Rec** 1988 Aug 20;123(8):208
Impact of ovine meat inspection systems on processing and production costs. Hathaway SC, et al. **Vet Rec** 1989 Feb 25;124(8):189–93
Survival of influenza virus in pig tissues after slaughter. Romijn PC, et al. **Vet Rec** 1989 Mar 4;124(9):224
Rattlesnake meat ingestion—a common Hispanic folk remedy [letter] Bhatt BD, et al. **West J Med** 1988 Nov;149(5):605
HPLC profiles of mutagens in lean ground pork fried at different temperatures. Nielsen PA, et al. **Z Lebensm Unters Forsch** 1988 Nov;187(5):451–6
Microbiological and physico–chemical aspects in dry–salted Spanish ham. Huerta T, et al. **Zentralbl Mikrobiol** 1988; 143(6):475–82
[Clenbuterol: the 'redistribution' agent (letter)] Frens J. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2033–4 **(Dut)**
[Veterinary Chief Inspection for Public Health. The Panamanian freighter 'Reefer Rio' loaded with 'radioactive' meat] **Tijdschr Diergeneeskd** 1988 Oct 1;113(19):1092–4 **(Dut)**
[A case of food poisoning caused by C. perfringens] Mol H, et al. **Tijdschr Diergeneeskd** 1988 Oct 15;113(20):1135–8 (Eng. Abstr.) **(Dut)**
[Hormones and meat: toxicologic significance of residues and practical aspects of their control] Maghuin–Rogister G. **Bull Mem Acad R Med Belg** 1988;143(3–4):208–18 (Eng. Abstr.) **(Fre)**
[Growth studies of starter cultures] Scharner E, et al. **Arch Exp Veterinarmed** 1988 May;42(3):449–57 (Eng. Abstr.) **(Ger)**
["The meat diet of humans" by Andreas Christian Gerlach (1875)] Hofschulte B. **DTW** 1988 Sep;95(8):334–8 (Eng. Abstr.) **(Ger)**
[The significance of mycotoxin assimilation for meat animals] Fink–Gremmels J. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug;96(7):360–3 (57 ref.) (Eng. Abstr.) **(Ger)**
[Instinct therapy—raw food with meat with exclusion of milk products. Report No. 16] Jallut O. **Schweiz Rundsch Med Prax** 1989 Jun 13;78(24):697–701 (Eng. Abstr.) **(Ger)**
[Type 2 Streptococcus suis (R–Streptococci) as pathogens of occupational diseases. Report of a case and a review of the literature] Köhler W, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):144–8 (54 ref.) (Eng. Abstr.) **(Ger)**
[Residues of active substances after consumption of contaminated food: status report on the evaluation of residues with examples of two drugs] Richter O, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):130–6 (Eng. Abstr.) **(Ger)**
[Parasitic diseases caused by consumption of imported meat of fish and domestic animals] Iseki M. **Nippon Rinsho** 1989 Jan;47(1):123–8 **(Jpn)**
[Effect of components of curing mixtures on the antagonistic properties of enterococci and other bacteria isolated from cured meat] Szteyn J. **Pol Arch Weter** 1987;27(2–3):117–27 (Eng. Abstr.) **(Pol)**
[Characteristics of thermophilic microorganisms of the genus Campylobacter isolated from various sources. IV. Survival of C. jejuni on the surface of pickled meat] Dąbrowski J. **Rocz Panstw Zakl Hig** 1988;39(3):217–22 (Eng. Abstr.) **(Pol)**
[Sanitary–hygienic characteristics and means of improving working conditions at meat–processing plants] Tsapko VG,

et al. **Gig Sanit** 1988 Jun;(6):23–5 (Eng. Abstr.) **(Rus)**

[Experimental evaluation of the effectiveness of vitamin–enriched chopped meat products] Alekseeva IA, et al. **Vopr Pitan** 1988 Jul–Aug;(4):55–9 (Eng. Abstr.) **(Rus)**

[Use of dietetic canned meats in the nutrition of infants with food allergy] Ladodo KS, et al. **Vopr Pitan** 1989 Jan–Feb;(1):34–6 (Eng. Abstr.) **(Rus)**

[Data on the buffer effect of food based on the study of intragastric proteolytic activity in patients metabolic–alimentary obesity] Sintsova NV. **Vopr Pitan** 1988 May–Jun;(3):17–20 (Eng. Abstr.) **(Rus)**

[Enterobacteriaceae as indicators of the presence of Salmonella and the hygienic conditions of meat and bone meals] Michanie S, et al. **Rev Argent Microbiol** 1989 Jan–Mar;21(1):43–6 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

The haggis tolerance test in Scots and Sassenachs. Fraser AG, et al. **BMJ** 1988 Dec 24–31;297(6664):1632–4

Mutagenicity and carcinogenicity of smoked meat from Nagaland, a region of India prone to a high incidence of nasopharyngeal cancer. Sarkar S, et al. **Carcinogenesis** 1989 Apr;10(4):733–6

Listeriosis associated with consumption of turkey franks. **MMWR** 1989 Apr 21;38(15):267–8

L–tryptophan inhibits formation of mutagens during cooking of meat and in laboratory models. Jones RC, et al. **Mutat Res** 1988 Nov;206(3):343–9

Brucellosis in an inuit child, probably related to caribou meat consumption. Chan J, et al. **Scand J Infect Dis** 1989; 21(3):337–8

[The cecum of game eaters] Koskelainen J. **Duodecim** 1988; 104(11):860–1 **(Fin)**

[Meat and risks of its consumption] Noirfalise A. **J Pharm Belg** 1989 Jan–Feb;44(1):84–9 (24 ref.) (Eng. Abstr.) **(Fre)**

[A case of semi–delayed hypersensitivity to dry sausage dust] Dalphin JC, et al. **Rev Mal Respir** 1988;5(6):633–5 (Eng. Abstr.) **(Fre)**

[Is eating estrogen–treated calf's meat dangerous?] Breckwoldt M. **Versicherungsmedizin** 1989 Jul 1;41(4):105 **(Ger)**

[Episodes of food poisoning caused by Salmonella C2 transmitted via prosciutto] Mete R, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug;38(3–4):219–24 (Eng. Abstr.) **(Ita)**

ANALYSIS

The effect of the pH of meat on the boiling test. Korkeala H, et al. **Acta Vet Scand** 1988;29(1):15–22

The effect of processing on the content of polycyclic aromatic hydrocarbons and volatile N–nitrosamines in cured and smoked lamb meat. Thorkelsson G. **Bibl Nutr Dieta** 1989;(43):188–98 (45 ref.)

An assay for 2–amino–3,8–dimethylimidazo[4,5–f]–quinoxaline and 2–amino–3,4,8–trimethylimidazo–[4,5–f]quinoxaline in fried beef using capillary column gas chromatography electron capture negative ion chemical ionization mass spectrometry. Murray S, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):221–4

New Zealand meat as a source of omega 3 polyunsaturated fatty acids [letter] Payne E. **Br J Nutr** 1989 May; 61(3):749–50

Methylmercury concentrations in broiler's meat and hen's meat and eggs. Kambamanoli–Dimou A, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):728–34

Toxic and potentially toxic constituents of gari and beef marketed in Nigerian traditional markets. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):553–7

An efficient and convenient method for the purification of mutagenic heterocyclic amines in heated meat products. Gross GA, et al. **Carcinogenesis** 1989 Jul;10(7):1175–82

Purification of the food–borne carcinogens 2–amino–3–methylimidazo [4,5–f]quinoline and 2–amino–3,8–dimethylimidazo[4,5–f]quinoxaline in heated meat products by immunoaffinity chromatography. Turesky RJ, et al. **Carcinogenesis** 1989 Jan;10(1):151–6

Detection of steroid hormone (estrogen) residues in imported red meat. Ateia MM, et al. **DTW** 1989 Jan;96(1):14–5

Pharmacokinetics of fluoride absorbed from dried seafoods by healthy adults. Hattab FN. **Eur J Clin Pharmacol** 1988; 34(5):489–93

The analysis and significance of bound N–nitrosoproline in nitrite–cured meat products. Sen NP, et al. **Food Addit Contam** 1989 Jan–Mar;6(1):21–8

Formation of N–nitrosamines in microwaved versus skillet–fried bacon containing nitrite. Miller BJ, et al. **Food Chem Toxicol** 1989 May;27(5):295–9

Analysis of mutagenic heterocyclic amines in cooked beef products by high–performance liquid chromatography in combination with mass spectrometry. Turesky RJ, et al. **Food Chem Toxicol** 1988 Jun;26(6):501–9

Fate and residues of trenbolone acetate in edible tissues from sheep amd calves implanted with tritium–labeled trenbolone acetate. Evrard P, et al. **J Anim Sci** 1989 Jun; 67(6):1489–96

Fluid distribution in pork, measured by x–ray diffraction, interference microscopy and centrifugation compared to paleness measured by fiber optics. Swatland HJ, et al. **J Anim Sci** 1989 Jun;67(6):1465–70

Evaluation of a monoclonal antibody–based immunoassay for detecting type B Clostridium botulinum toxin produced in pure culture and an inoculated model cured meat system. Gibson AM, et al. **J Appl Bacteriol** 1988 Apr;64(4):285–91

Liquid chromatographic determination of chloramphenicol residues in meat: interlaboratory study. Aerts RM, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):570–6

Simultaneous determination of dextrose, sucrose, maltose, and lactose in sausage products by liquid chromatography. Ali MS. **J Assoc Off Anal Chem** 1988 Nov–Dec; 71(6):1097–100

Rapid headspace gas chromatographic method for assessment of oxidative stability of cooked chicken meat. Ang CY, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):277–81

Dimetridazole residues in pork tissue. I. Assay by liquid chromatography with electrochemical detector. Carignan G, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec; 71(6):1141–5

Development of serological ovine field test (SOFT) by modified agar–gel immunodiffusion. Cutrufelli ME, et al. **J Assoc Off Anal Chem** 1989 Jan–Feb;72(1):60–1

Changing pesticide technology in meat and poultry products. Ellis RL. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):521–4

Investigations on N–nitrosopyrrolidine in dry–cured bacon. Fiddler W, et al. **J Assoc Off Anal Chem** 1989 Jan–Feb; 72(1):19–22

Sensitive enzyme immunoassay of cephalexin residues in milk, hen tissues, and eggs. Kitagawa T, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):915–20

Determination of nicarbazin in chicken tissues by liquid chromatography and confirmation of identity by thermospray liquid chromatography/mass spectrometry. Lewis JL, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug; 72(4):577–81

Liquid chromatographic–electrochemical detection screening procedure for six nitro–containing drugs in chicken tissues at low ppb level. Parks OW. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):567–9

Simultaneous determination of niacin and niacinamide in meats by high–performance liquid chromatography. Hamano T, et al. **J Chromatogr** 1988 Dec 21;457:403–8

Gas chromatographic determination of nicotinamide in meats and meat products as 3–cyanopyridine. Tanaka A, et al. **J Chromatogr** 1989 Apr 19;466:307–17

Multi–immunoaffinity chromatography: a simple and highly selective clean–up method for multi–anabolic residue analysis of meat. van Ginkel LA, et al. **J Chromatogr** 1989 Apr 7;489(1):111–20

The enhancement of nonheme iron bioavailability by beef protein in the rat. Gordon DT, et al. **J Nutr** 1989 Mar; 119(3):446–52

Blood biochemical parameters and meat pH of feedlot cattle slaughtered on arrival or after overnight rest at an abattoir. Grosskopf JF, et al. **J S Afr Vet Assoc** 1988 Sep; 59(3):149–52

The use of a diffusion test for the detection of antibiotics in the tissues of slaughter stock. Lloyd DN, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):183–6

A comparison of mutagen production in fried ground chicken and beef: effect of supplemental creatine. Knize MG, et al. **Mutagenesis** 1988 Nov;3(6):503–8

Presence of nitrosable mutagen precursors in cooked meat and fish. Yano M, et al. **Mutat Res** 1988 Nov;202(1):119–23

Structural and electronic origin of meat odour of organic hetero–atomic compounds. Dimoglo AS, et al. **Nahrung** 1988;32(5):461–73

Measurement of some antinutritive factors in meat products containing texturated vegetable protein (TVP). Komándi K, et al. **Nahrung** 1988;32(7):643–8

Nutritive value of meat–soy mixture. Mekhael KG, et al. **Nahrung** 1988;32(8):729–35

The optimum condition for malonic dialdehyde liberation from smoked fish and curing smoke condensates. Witas T, et al. **Nahrung** 1988;32(5):497–502

Effect of product form on the microbiological growth support characteristics of turkey meat products. Denton JH, et al. **Poult Sci** 1988 Sep;67(9):1269–73

Mercury content of some marine fish from the southern Caribbean Sea. Shrestha KP, et al. **Sci Total Environ** 1988 Jul 15;73(3):181–7

Withdrawal times in pig meat [letter] Douglas RG, et al. **Vet Rec** 1989 Apr 15;124(15):409–10

Nitroxynil residues in meat [letter] Taylor SM, et al. **Vet Rec** 1989 Apr 1;124(13):354

A rapid fluorimetric screening method for chlortetracycline, oxytetracycline and tetracycline in pig meat and kidney tissues. Haagsma N, et al. **Z Lebensm Unters Forsch** 1989 Mar;188(3):227–31

The levels of zinc, copper, manganese, selenium, chromium, nickel, cobalt, and aluminium in the meat, liver and kidney of swedish pigs and cattle. Jorhem L, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):39–44

Class separation of mutagenic polycyclic organic material in grilled and smoked foods. Larsson BK, et al. **Z Lebensm Unters Forsch** 1988 Dec;187(6):546–51

Arsenic, cadmium, lead and mercury in meat, livers and kidneys of sheep slaughtered in The Netherlands. Vos G, et al. **Z Lebensm Unters Forsch** 1988 Jul;187(1):1–7

A two–dimensional high–performance thin–layer chromatographic screening method for sulphonamides in animal tissues. Wyhowski de Bukanski B, et al. **Z Lebensm Unters Forsch** 1988 Sep;187(3):242–5

[The effect of aflatoxins on growth in pigs and the biological value of the meat] Drábek J, et al. **Vet Med (Praha)** 1989 Apr;34(4):223–9 (Eng. Abstr.) **(Cze)**

[The presence of nortestosterone in edible parts from non–castrated male pigs] van Ginkel LA, et al. **Tijdschr Diergeneeskd** 1989 Mar 15;114(6):311–4 (Eng. Abstr.) **(Dut)**

[The application of additives and compounds to meat products] Peters H, et al. **Nahrung** 1988;32(9):889–910 (23 ref.) (Eng. Abstr.) **(Ger)**

[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. **Z Ernahrungswiss** 1988 Jun;27(2):109–18 (Eng. Abstr.) **(Ger)**

[Determination of biogenic amines by RP–HPLC for monitoring the microbial spoilage of poultry] Schmitt RE, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):121–4 (Eng. Abstr.) **(Ger)**

[Evaluation of the actual level of contamination by organochlorine pesticides in meat produced in Campania] Amodio Cocchieri R, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):211–8 (Eng. Abstr.) **(Ita)**

[Chlorinated hydrocarbon levels in swine adipose tissue, liver and pork] Amarowicz R, et al. **Rocz Panstw Zakl Hig** 1988; 39(3):193–7 (Eng. Abstr.) **(Pol)**

[Mercury levels in the muscles, liver and kidneys of slaughter and game animals from the region of northern Poland 1985–1986] Falandysz J, et al. **Rocz Panstw Zakl Hig** 1988; 39(2):113–7 (Eng. Abstr.) **(Pol)**

[A method of atomic absorption spectrophotometry in determining the levels of cadmium and lead in milk–cereal products, cereals and canned vegetables and meat for children up to 3 years of age] Jedrzejczak R. **Rocz Panstw Zakl Hig** 1988;39(2):118–24 (Eng. Abstr.) **(Pol)**

[Effect of microorganisms of the genus Enterobacter on the amino acid composition of food products] Madzhid AA. **Gig Sanit** 1988 Aug;(8):88–9 **(Rus)**

[Microflora of meat and fish products] Pivovarov IuP, et al. **Gig Sanit** 1988 Aug;(8):18–21 (Eng. Abstr.) **(Rus)**

[A spectrophotometric method of determining the levels of nitrates in animal feed, milk and meat] Saiapin VP, et al. **Gig Sanit** 1988 Jul;(7):43–4 **(Rus)**

[Yersinia enterocolitica: 1st isolation from meat products in Argentina] de Guzmán AM, et al. **Rev Argent Microbiol** 1984;16(2):49–56 (Eng. Abstr.) **(Spa)**

[Sensitivity to 11 antimicrobials in strains of Salmonella isolated from products of animal origin] Mercado E, et al. **Rev Argent Microbiol** 1984;16(2):101–5 (Eng. Abstr.) **(Spa)**

[Salmonella in eviscerated chickens from processing plants of greater Buenos Aires] Mercado EC. **Rev Argent Microbiol** 1983;15(4):187–92 (Eng. Abstr.) **(Spa)**

[Sanitary quality of ham eaten in Mexico City] Sartí–Gutiérrez EJ, et al. **Salud Publica Mex** 1989 May–Jun;31(3):326–33 (Eng. Abstr.) **(Spa)**

ECONOMICS

The economics of sheep production, 1988. Nix J. **Br Vet J** 1988 Sep–Oct;144(5):426–33

The economics of pig production. Ridgeon RF. **Br Vet J** 1988 Sep–Oct;144(5):434–48

The economics of beef production 1988 and beyond? Spedding A. **Br Vet J** 1988 Sep–Oct;144(5):419–25

HISTORY

Public health or protectionism? The German–American pork war, 1880–1891. Hoy S, et al. **Bull Hist Med** 1989 Summer; 63(2):198–224

POISONING

Effects of nisin on growth of bacteria attached to meat. Chung KT, et al. **Appl Environ Microbiol** 1989 Jun; 55(6):1329–33

Hepatotoxicity to dogs of horse meat contaminated with indospicine. Hegarty MP, et al. **Aust Vet J** 1988 Nov; 65(11):337–40

Avoiding injuries caused by pigs [letter] **BMJ** 1989 May 20; 298(6684):1383–4

Turtle flesh poisoning. Ariyananda PL, et al. **Ceylon Med J** 1987 Dec;32(4):213–5

Trichinosis following ingestion of wild pig in Hawaii: a case report. Satta S. **Hawaii Med J** 1988 Aug;47(8):366

[An epidemic of food poisoning by Aeromonas hydrophila] Liu ZS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):333–4 (Eng. Abstr.) **(Chi)**

RADIATION EFFECTS

Prevention of poultry–borne salmonellosis by irradiation: costs and benefits in Scotland. Yule BF, et al. **Bull WHO** 1988;66(6):753–8

Effect of gamma irradiation on the B vitamins of pork chops and chicken breasts. Fox JB Jr, et al. **Int J Radiat Biol** 1989 Apr;55(4):689–703

Bacterial survival and thermal responses of beef loaf after microwave processing. Lin W, et al.

J Microw Power Electromagn Energy 1988;23(3):183–94
The effect of gamma-radiation on smoked fish using short-term mutagenicity assays. Dela Rosa AM, et al. Mutat Res 1989 Jul;223(3):303–7

STANDARDS

The occurrence and variation of organochlorine pesticide residues detected in Australian livestock at slaughter. Neumann GB. Acta Vet Scand Suppl 1988;84:299–302
Abattoir condemnation of pigs and its economic implications in Singapore. Tiong CK, et al. Br Vet J 1989 Jan–Feb; 145(1):77–84
Are imported food animal products safe? [news] J Am Vet Med Assoc 1989 Apr 1;194(7):874
Private enterprise and federal agencies attack sulfamethazine residues [news] Gloyd JS. J Am Vet Med Assoc 1989 Jan 15;194(2):174–5
Compliance with recommended drug withdrawal requirements for dairy cows sent to market in Michigan. Marteniuk JV, et al. J Am Vet Med Assoc 1988 Aug 15; 193(4):404–7
Veterinary education. Erasmus JM. J S Afr Vet Assoc 1987 Sep;58(3):103–4
Effects of electrical stimulation on the post-mortem biochemical changes and texture of broiler pectoralis muscle. Lyon CE, et al. Poult Sci 1989 Feb;68(2):249–57
Influence of sodium pentobarbital on pH, sarcomere length, and muscle tenderness of broiler Pectoralis major muscle. McGinnis JP, et al. Poult Sci 1989 Feb;68(2):244–8
Effect of feed withdrawal on composition and quality of broiler meat. Rasmussen AL, et al. Poult Sci 1989 Aug; 68(8):1109–13
Drug and chemical residues in livestock. Sundlof SF. Vet Clin North Am Food Anim Pract 1989 Jul;5(2):411–49 (79 ref.)
Food hygiene in the 1990s [letter] Vet Rec 1989 Apr 22; 124(16):439–40
Food hygiene in the 1990s. Cooke M. Vet Rec 1989 Apr 1;124(13):352–3
Effect of stunning current on carcase quality in chickens. Gregory NG, et al. Vet Rec 1989 May 20;124(20):530–2
Interpretation [letter] Leslie NW. Vet Rec 1989 Jul 22; 125(4):97–8
Beta-agonists as repartitioning agents: a review. Peters AR. Vet Rec 1989 Apr 22;124(16):417–20 (38 ref.)
[Veterinary Chief Inspection for Public Health. Import meat from Belgium] Tijdschr Diergeneeskd 1988 Dec 1; 113(23):1328–9 (Dut)
[Veterinary Chief Inspector of Public Health. An action program for hygienic slaughtering of cattle and calves, and meat transport] Tijdschr Diergeneeskd 1989 Jun 1; 114(11):640–1 (Dut)
[Beta agonists, the background of the excitement? (letter)] Poll PH. Tijdschr Diergeneeskd 1989 Jan 15;114(2):103 (Dut)
[Dermatitis in slaughtering pigs. A study of the incidence, pathology and its economic significance] Smeets JF, et al. Tijdschr Diergeneeskd 1989 Jun 1;114(11):603–10 (Eng. Abstr.) (Dut)
[On the way to an optimal system of meat inspection for slaughtering pigs] Snijders JM, et al. Tijdschr Diergeneeskd 1989 Apr 15;114(8):431–6 (Eng. Abstr.) (Dut)
[The detection of Clostridium botulinum in fecal samples of cattle and swine and in the raw material and animal meal of different animal body rendering plants] Klarmann D. Berl Munch Tierarztl Wochenschr 1989 Mar 1;102(3):84–6 (Eng. Abstr.) (Ger)
[The influence of thermal load on the immunochemical detection of dried blood plasma supplements in meat mixtures] Otto W, et al. Berl Munch Tierarztl Wochenschr 1989 Jan 1;102(1):14–8 (Eng. Abstr.) (Ger)
[The surveillance of plant hygiene in the slaughtering process] Stolle FA, et al. Berl Munch Tierarztl Wochenschr 1989 Jul 1;102(7):239–41 (Eng. Abstr.) (Ger)
[Lipopigment in the adipose tissue of slaughtered swine] Ellerbroek L, et al. DTW 1989 Apr;96(4):229–32 (Eng. Abstr.) (Ger)
[New methods for poultry meat hygiene: a challenge for veterinary medicine] Siegmann O. DTW 1989 Mar; 96(3):135–6 (Ger)
[Legal regulations and practical implementation of inspection of slaughter animals and their meat, concerning fur-bearing game] Bert F, et al. Tierarztl Prax 1988;16(3):219–26 (Eng. Abstr.) (Ger)
[Legal foundation and practical execution of slaughtering and meat examination of game animals] Bert F, et al. Tierarztl Prax 1989;17(2):127–32 (Eng. Abstr.) (Ger)
[Legal fundamentals and practical accomplishments of abattoir and meat research in mammalian game animals] Hadlok RM, et al. Tierarztl Prax 1988;16(4):343–50 (Eng. Abstr.) (Ger)

TOXICITY

Nitrite-cured meats as a source of endogenously and exogenously formed N-nitrosoproline in the ferret. Perciballi M, et al. Food Chem Toxicol 1989 Feb; 27(2):111–6
[Chlorinated hydrocarbon residues in hare's fat] Zamojski J, et al. Rocz Panstw Zakl Hig 1988;39(5):361–5 (Eng. Abstr.) (Pol)

MEAT-PACKING INDUSTRY

An outbreak of psittacosis in Minnesota turkey industry workers: implications for modes of transmission and control. Hedberg K, et al. Am J Epidemiol 1989 Sep; 130(3):569–77
Lung cancer in the meat industry. Coggon D, et al. Br J Ind Med 1989 Mar;46(3):188–91
Mortality among nonwhite men in the meat industry. Johnson ES. J Occup Med 1989 Mar;31(3):270–2
Recent and future developments in meat processing and retailing. Cullimore CS. J R Soc Health 1988 Aug; 108(4):127–9
Sickness absence in the freezing industry. Turner WE. N Z Med J 1988 Oct 26;101(856 Pt 1):663–6
Brucellosis and thrombocytopenic purpura: case report and review. Todd KH, et al. Tex Med 1989 Mar;85(3):37–8 (14 ref.)
[Viral warts in butchers. A clinico-statistical study] Aloi FG, et al. G Ital Dermatol Venereol 1988 Jul–Aug; 123(7–8):341–4 (Eng. Abstr.) (Ita)

STANDARDS

Outraged. Leary MM. Occup Health Saf 1988 Dec; 57(13):15–6, 19
Impact of ovine meat inspection systems on processing and production costs. Hathaway SC, et al. Vet Rec 1989 Feb 25;124(8):189–93
Slaughterhouses [letter] Mullen PA. Vet Rec 1989 May 6; 124(18):497

MEAT PRODUCTS see under MEAT

MEBALLYMAL see SECOBARBITAL

MEBENDAZOLE

ADMINISTRATION & DOSAGE

A randomized controlled trial of pyrantel and mebendazole in children with enterobiasis and concomitant ascariasis. Sarmah HC. Indian Pediatr 1988 Jun;25(6):544–7
"Low dose mebendazole therapy in pulmonary hydatid cyst" [letter] Gupta V, et al. J Assoc Physicians India 1988 Sep; 36(9):571–2
Mebendazole retention enema for severe Trichuris trichiura (whipworm) infection: a case report. Sebastian VJ, et al. J Trop Med Hyg 1989 Feb;92(1):39–40
[The long-term course of 60 patients with alveolar echinococcosis in continuous therapy with mebendazole (1976–85)] Ammann R, et al. Klin Wochenschr 1988 Nov 1;66(21):1060–73 (Eng. Abstr.) (Ger)
[Chemoprevention of secondary abdominal echinococcosis—experimental study and clinical observation] Stojanow G, et al. Z Exp Chir Transplant Kunstliche Organe 1989;22(3):180–3 (Eng. Abstr.) (Ger)

ANALOGS & DERIVATIVES

Randomized trial of albendazole versus tiabendazole plus flubendazole during an outbreak of human trichinellosis. Fourestié V, et al. Parasitol Res 1988;75(1):36–41
Macrofilaricidal activity of oral flubendazole on Brugia pahangi. Van Kerckhoven I, et al. Trans R Soc Trop Med Hyg 1988;82(6):890–1
Efficacy of flubendazole against gastrointestinal and lung nematodes in pigs. Vanparijs O, et al. Vet Rec 1988 Sep 24;123(13):337–9

PHARMACOKINETICS

[Use of mebendazole in a mixture with sunflower seed oil (pharmacokinetic research)] Lur'e AA, et al. Med Parazitol (Mosk) 1988 Sep–Oct;(5):43–6 (Eng. Abstr.) (Rus)
[Clinical trial of the possibility of increasing the bioavailability of mebendazole using sunflower oil in echinococcosis] Shcherbakov AM, et al. Med Parazitol (Mosk) 1989 May–Jun;(3):46–9 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Use of mebendazole in combination with DEC in bancroftian filariasis. Sarma RV, et al. Indian J Med Res 1988 Jun; 87:579–83
Effect of some anthelmintics on Hymenolepis nana in albino mice. el-Ridi AM, et al. J Egypt Soc Parasitol 1989 Dec; 19(2):477–82
Mebendazole in cutaneous leishmaniasis. Al-Waili NS, et al. JPMA 1989 Jan;39(1):20–1
Mebendazole for worming mice: effectiveness and side effects. Baskerville M, et al. Lab Anim 1988 Jul;22(3):263–8
The effects of thiabendazole, mebendazole and cambendazole in normal and immunosuppressed dogs infected with a human strain of Strongyloides stercoralis. Grove DI, et al. Trans R Soc Trop Med Hyg 1988;82(1):146–9
Mebendazole in the treatment of mice experimentally infected with Schistosoma mansoni. Katz N, et al. Trans R Soc Trop Med Hyg 1988;82(6):873
Effects of mebendazole on patients infected with Schistosoma mansoni and S. haematobium: preliminary study. al-Waili NS. Trans R Soc Trop Med Hyg 1988;82(4):588–9
Therapeutic use of mebendazole in giardial infections. al-Waili NS, et al. Trans R Soc Trop Med Hyg 1988; 82(3):438
In vivo efficacy of mebendazole in containment of larval cyst mass in early stages of hydatid disease due to Echinococcus granulosus. Wangoo A, et al. Trans R Soc Trop Med Hyg 1987;81(6):965–6
Experimental chemotherapy in horses infected with benzimidazole-resistant small strongyles. Britt DP, et al. Vet Rec 1988 Aug 27;123(9):219–21
[Mebendazole-medicated-salt in the control of hookworm infection] Tang CM, et al. Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1989;7(1):43–6 (Eng. Abstr.) (Chi)
[Use of mebendazole in the treatment of pulmonary hydatidosis] Lemma F, et al. Minerva Chir 1989 Mar 15; 44(5):849–54 (Eng. Abstr.) (Ita)
[Medical therapy with mebendazole in hydatid cyst disease. A follow-up of 40 cases] Bartoloni C, et al. Minerva Med 1989 Mar;80(3):205–14 (Eng. Abstr.) (Ita)
[Treatment of taeniasis] Kuźmicki R. Wiad Parazytol 1988; 34(4–6):515–8 (Eng. Abstr.) (Pol)
[Comparative effectiveness of mebendazole, medamine and pyrantel pamoate and their combination with fenasal in nippostrongylosis and hymenolepiasis in white mice] Kulieva NS. Med Parazitol (Mosk) 1988 Sep–Oct;(5):68–72 (Eng. Abstr.) (Rus)
[Comparative study of thiabendazole and mebendazole in strongyloidiasis] Beus A. Ljec Vjesn 1989 Mar; 111(3):98–101 (Eng. Abstr.) (Scr)
[Is mebendazole an immunoregulator?] Valenzuela Solano FJ, et al. Rev Alerg Mex 1989 Jan–Feb;36(1):19–24 (Spa)

MEBUBARBITAL see PENTOBARBITAL

MEBUMAL see PENTOBARBITAL

MECAMYLAMINE

PHARMACOLOGY

Effects of combined muscarinic and nicotinic blockade on choice accuracy in the radial-arm maze. Levin ED, et al. Behav Neural Biol 1989 Mar;51(2):270–7
Nicotinic-dopaminergic relationships and radial-arm maze performance in rats. McGurk SR, et al. Behav Neural Biol 1989 Jul;52(1):78–86
The blockage of ponto-geniculo-occipital waves in the cat lateral geniculate nucleus by nicotinic antagonists. Hu B, et al. Brain Res 1988 Nov 15;473(2):394–7
Soman enhances nicotinic depolarizations, and depresses muscarinic hyperpolarizations in parasympathetic neurons. Kumamoto E, et al. Brain Res 1988 Aug 16;458(1):151–6
Antagonism of the nicotine-induced changes of the striatal dopamine metabolism in mice by mecamylamine and pempidine. Haikala H, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Aug; 338(2):169–73
Nicotine-induced inhibition of cerebellar Purkinje neurons: specific actions of nicotine and selective blockade by mecamylamine. de la Garza R, et al. Neuropharmacology 1989 May;28(5):495–501
Mecamylamine is a selective non-competitive antagonist of N-methyl-D-aspartate- and aspartate-induced currents in horizontal cells dissociated from the catfish retina. O'Dell TJ, et al. Neurosci Lett 1988 Nov 22;94(1–2):93–8
Mecamylamine reduces some EEG effects of nicotine chewing gum in humans. Pickworth WB, et al. Pharmacol Biochem Behav 1988 May;30(1):149–53

MECHANICAL VENTILATOR WEANING see VENTILATOR WEANING

MECHANORECEPTORS

see related PROPRIOCEPTION

ANALYSIS

Localization of proprioceptive neurons innervating the muscle spindles of pig extraocular muscles studied by horseradish peroxidase labelling. Kubota K, et al. Anat Anz 1988;166(1–5):117–31
Membrane heterogeneity in sensory receptors of rat vibrissae: Merkel receptors differ from other nerve endings. Byers MR, et al. Brain Res 1988 Oct 4;461(2):397–402
Different intrafusal fiber composition of spindles in sheep and pig extraocular muscles [published erratum appears in Experientia 1989 Aug 15;45(8):784] Lalatta Costerbosa G, et al. Experientia 1989 Jun 15;45(6):563–7
Localization of mechanoreceptors in the protozoan, Stentor coeruleus. Wood DC. J Comp Physiol [A] 1989; 165(2):229–35

ANATOMY & HISTOLOGY

Mechanoreceptors in the human medial meniscus. Zimny ML, et al. Acta Anat (Basel) 1988;133(1):35–40

Neurohistology of lumbar spine ligaments. Yahia LH, et al. **Acta Orthop Scand** 1988 Oct;59(5):508–12
Medullary and mesencephalic pathways and connections of lateral line neurons of the spiny dogfish Squalus acanthias. Boord RL, et al. **Brain Behav Evol** 1988;32(2):76–88
Gross morphology and evolution of the mechanoreceptive lateral-line system in teleost fishes. Webb JF. **Brain Behav Evol** 1989;33(1):34–53 (146 ref.)
Mechano-receptors in the flexor tendons of the hand. Zimny ML, et al. **J Hand Surg [Br]** 1989 May;14(2):229–31
Location of pulmonary stretch receptors in the guinea-pig. Keller E, et al. **Respir Physiol** 1989 May;76(2):149–57

CYTOLOGY

Membrane relationships in murine Meissner corpuscles: cytology of freeze-substituted tissue. Yoshida Y, et al. **Anat Rec** 1989 Apr;223(4):437–45
Characterization of Merkel cells and mechanosensory axons of the rat by styryl pyridinium dyes. Nurse CA, et al. **Cell Tissue Res** 1989 Jan;255(1):125–8
Somatotopic mapping of sensory neurons innervating mechanosensory hairs on the larval prolegs of Manduca sexta. Peterson BA, et al. **J Comp Neurol** 1988 Sep 1; 275(1):128–44
Sensory nerve endings in the cat cruciate ligaments: a morphological investigation. Sjölander P, et al. **Neurosci Lett** 1989 Jul 17;102(1):33–8
Development of Merkel cell populations with contrasting sensitivities to neonatal deafferentation in the rat whisker pad. Nurse CA, et al. **Somatosens Mot Res** 1988;6(2):141–62

DRUG EFFECTS

Selective modulation of spike duration by serotonin and the neuropeptides, FMRFamide, SCPB, buccalin and myomodulin in different classes of mechanoafferent neurons in the cerebral ganglion of Aplysia. Rosen SC, et al. **J Neurosci** 1989 Feb;9(2):390–402
Calcium channel blockers and Merkel cells. Pacitti EG, et al. **Prog Brain Res** 1988;74:37–42
Effects of ammonia and histamine on lung irritant receptors in the rabbit. Matsumoto S. **Respir Physiol** 1989 Sep; 77(3):301–8

EMBRYOLOGY

The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). I. The mechanoreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):205–22
The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). II. The electroreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):223–36

ENZYMOLOGY

Fine structural localization of non-specific cholinesterase activity in rat tendon organs. Dubový P, et al. **Acta Histochem (Jena)** 1989;85(2):195–202
Electron microscopical study of non-specific cholinesterase activity in simple lamellar corpuscles of glabrous skin from cat rhinarium: a histochemical evidence for the presence of collagenase-sensitive molecular forms and their secretion. Dubový P. **Acta Histochem (Jena)** 1989; 86(1):63–77
Immunohistochemical and cytochemical evidences for a possible localization of leucine aminopeptidase in the Merkel cell granule. Tachibana T, et al. **Acta Histochem (Jena)** 1989;86(1):79–84

METABOLISM

Ion permeation through hyperpolarization-activated membrane channels (Q-channels) in the lobster stretch receptor neurone. Edman A, et al. **Pflugers Arch** 1989 Jan; 413(3):249–55

PATHOLOGY

Tactile corpuscle-like structures in peripheral nerve sheath tumors in plastic embedded material. Jurecka W. **Am J Dermatopathol** 1988 Feb;10(1):74–9

PHYSIOLOGY

Processing of wave patterns in the lateral line system parallels to auditory processing. Elepfandt A. **Acta Biol Hung** 1988; 39(2–3):251–65 (39 ref.)
The amphibian octavo-lateralis system and its regressive and progressive evolution. Fritzsch B. **Acta Biol Hung** 1988; 39(2–3):305–22 (52 ref.)
Presentation of a posturographic test with loading of the proprioceptive system. Enbom H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:58–61
Mechanoreceptive units in the human infra-orbital nerve. Nordin M, et al. **Acta Physiol Scand** 1989 Feb;135(2):149–61
The role of cervical inputs in compensation of unilateral labyrinthectomized patients. Kobayashi Y, et al. **Adv Otorhinolaryngol** 1988;42:185–9
Mechanosensitive and beta-adrenergic control of the ciliary beat frequency of mammalian respiratory tract cells in culture. Sanderson MJ, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):432–40
Nerve endings in palm skin grafts. Wada H, et al. **Ann Plast Surg** 1989 Jun;22(6):461–6
Effects of intraoral mechanoreceptor stimulation on reticular formation neurones, in the rabbit. Ermirio R, et al. **Arch Ital Biol** 1989 Feb;127(1):1–11
The response characteristics of mechanoreceptors related to their position in the cat canine periodontal ligament. Linden RW, et al. **Arch Oral Biol** 1988;33(1):51–6
The effect of rate of force application on the threshold of periodontal ligament mechanoreceptors in the cat canine tooth. Linden RW, et al. **Arch Oral Biol** 1988;33(10):715–9
Bilateral post-stimulus electromyographic complexes in human masseter muscles after stimulation of periodontal mechanoreceptors of bi- and unilaterally-innervated teeth. van der Glas HW, et al. **Arch Oral Biol** 1988;33(1):41–9
Locking, intermittency, and bifurcations in a periodically driven pacemaker neuron: Poincaré maps and biological implications. Diez Martinez O, et al. **Biol Cybern** 1988; 60(1):49–58
Stretch activated ion channels in ventricular myocytes. Craelius W, et al. **Biosci Rep** 1988 Oct;8(5):407–14
Changes in mechanoreceptive field properties of trigeminal somatosensory brainstem neurons induced by stimulation of nucleus raphe magnus in cats. Chiang CY, et al. **Brain Res** 1989 Apr 24;485(2):371–81
Observations on static and dynamic responses of muscle stretch receptors in kittens. Jami L, et al. **Brain Res** 1989 Jan 23;478(1):34–40
Stretch-induced release of proctolin from the dendrites of a lobster sense organ. Pasztor VM, et al. **Brain Res** 1988 Aug 16;458(1):199–203
Responses of cat muscle spindle afferents after short periods of denervation and reinnervation. Scott JJ. **Brain Res** 1988 Oct 4;461(2):381–3
Sensitization of cat dorsal horn neurons to innocuous mechanical stimulation after intradermal injection of capsaicin. Simone DA, et al. **Brain Res** 1989 May 1; 486(1):185–9
Fusimotor neurones can be reflexly influenced by activity in receptor afferents from the posterior cruciate ligament. Sojka P, et al. **Brain Res** 1989 Mar 27;483(1):177–83
Central terminations of periodontal mechanoreceptive and tooth pulp afferents in the trigeminal principal and oral nuclei of the cat. Tsuru K, et al. **Brain Res** 1989 Apr 17; 485(1):29–61
Dual somatosensory representation of the periodontium in nucleus ventralis posteromedialis of the cat thalamus. Yokota T, et al. **Brain Res** 1988 Dec 13;475(1):187–91
The effect of acupuncture manipulation to the discharges of needling sensation receptors. Zhao Y, et al. **Chen Tzu Yen Chiu** 1988;13(3):221–5
Stimulation of renal sympathetic activity by static contraction: evidence for mechanoreceptor-induced reflexes from skeletal muscle. Victor RG, et al. **Circ Res** 1989 Mar;64(3):592–9
Vasodilatation in human skin induced by low-amplitude high-frequency vibration. Skoglund CR. **Clin Physiol** 1989 Aug;9(4):361–72
Mechanical transduction in biological systems. Sachs F. **Crit Rev Biomed Eng** 1988;16(2):141–69 (105 ref.)
Postnatal development of the cutaneous flexor reflex: comparative study of preterm infants and newborn rat pups. Fitzgerald M, et al. **Dev Med Child Neurol** 1988 Aug; 30(4):520–6
Changes in human alpha-motoneurone excitability following mechanical muscle stimuli. Claus D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):140–3
Lung mechanics and activity of slowly adapting airway stretch receptors. Sant'Ambrogio FB, et al. **Eur Respir J** 1988 Aug;1(8):685–90
The responses of muscle spindles in the kitten to stretch and vibration. Gregory JE, et al. **Exp Brain Res** 1988; 73(3):606–14
Mechanoreceptor activity from the human face and oral mucosa. Johansson RS, et al. **Exp Brain Res** 1988; 72(1):204–8
Mechanoreceptive afferent activity in the infraorbital nerve in man during speech and chewing movements. Johansson RS, et al. **Exp Brain Res** 1988;72(1):209–14
Vibratory detection thresholds following a digital nerve lesion. Morley JW, et al. **Exp Brain Res** 1988;72(1):215–8
Function and structure of atypical muscle spindles after neonatal nerve crush in rats. Paleček J, et al. **Exp Brain Res** 1989;74(2):417–20
Mechanical and electromyographic responses to stretch of the human anterior tibial muscle at different levels of contraction. Toft E, et al. **Exp Brain Res** 1989;74(1):213–9
Interdome interactions in cutaneous type I receptors. Looft FJ. **IEEE Trans Biomed Eng** 1988 Nov;35(11):973–80
Four channels mediate the mechanical aspects of touch. Bolanowski SJ Jr, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1680–94
Hot-film anemometry for measuring lateral line stimuli. Coombs S, et al. **J Acoust Soc Am** 1989 May;85(5):2185–93
A model of spatiotemporal tactile sensitivity linking psychophysics to tissue mechanics. Van Doren CL. **J Acoust Soc Am** 1989 May;85(5):2065–80
The effect of visual deprivation and proprioceptive change on postural sway in healthy adults. Ring C, et al. **J Am Geriatr Soc** 1989 Aug;37(8):745–9
Role of cardiopulmonary baroreflexes during dynamic exercise. Mack G, et al. **J Appl Physiol** 1988 Oct; 65(4):1827–32
External mechanical loading in conscious humans: role of upper airway mechanoreceptors. O'Donnell DE, et al. **J Appl Physiol** 1988 Aug;65(2):541–8
Reflex effect of skeletal muscle mechanoreceptor stimulation on the cardiovascular system. Stebbins CL, et al. **J Appl Physiol** 1988 Oct;65(4):1539–47
Responses of pulmonary vagal mechanoreceptors to high-frequency oscillatory ventilation. Wozniak JA, et al. **J Appl Physiol** 1988 Aug;65(2):633–9
Rapidly adapting pulmonary receptor afferents: II. Fine structure and synaptic organization of central terminal processes in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):574–94
Rapidly adapting pulmonary receptor afferents: I. Arborization in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):560–73
A population of ascending intersegmental interneurones in the locust with mechanosensory inputs from a hind leg. Laurent G, et al. **J Comp Neurol** 1988 Sep 1;275(1):1–12
Physiology of lateral line mechanoreceptive regions in the elasmobranch brain. Bleckmann H, et al. **J Comp Physiol [A]** 1989 Jan;164(4):459–74
A lateral line analogue in cephalopods: water waves generate microphonic potentials in the epidermal head lines of Sepia and Lolliguncula. Budelmann BU, et al. **J Comp Physiol [A]** 1988 Nov;164(1):1–5
Response characteristics of vibration-sensitive neurons in the midbrain of the grassfrog, Rana temporaria. Christensen-Dalsgaard J, et al. **J Comp Physiol [A]** 1989 Jan;164(4):495–9
Cutaneous sensory afferents recorded from the nervus intramandibularis of Gallus gallus var domesticus. Gentle MJ. **J Comp Physiol [A]** 1989 Feb;164(6):763–74
Modulation of activity in sensory neurons and wind-sensitive interneurons by cercal displacement in the cockroach. Goldstein RS. et al. **J Comp Physiol [A]** 1988 Aug; 163(4):479–87
Perioral somatosensory determinants of nursing behavior in Norway rats (Rattus norvegicus). Stern JM, et al. **J Comp Psychol** 1989 Sep;103(3):269–80
Primary afferent responses of a crustacean mechanoreceptor are modulated by proctolin, octopamine, and serotonin. Pasztor VM, et al. **J Neurobiol** 1989 Jun;20(4):234–54
The contribution of articular receptors to proprioception with the fingers in humans. Clark FJ, et al. **J Neurophysiol** 1989 Jan;61(1):186–93
Esophageal mechanoreceptors in the feeding system of the pond snail, Lymnaea stagnalis. Elliott CJ, et al. **J Neurophysiol** 1989 Apr;61(4):727–36
Two components of rapid sensory adaptation in a cockroach mechanoreceptor neuron. French AS. **J Neurophysiol** 1989 Sep;62(3):768–77
Properties of somata of spinal dorsal root ganglion cells differ according to peripheral receptor innervated. Koerber HR, et al. **J Neurophysiol** 1988 Nov;60(5):1584–96
Long-term expansion and sensitization of mechanosensory receptive fields in Aplysia support an activity-dependent model of whole-cell sensory plasticity. Billy AJ, et al. **J Neurosci** 1989 Apr;9(4):1254–62
Perceived roughness of a grating: correlation with responses of mechanoreceptive afferents innervating the monkey's fingerpad. Sathian K, et al. **J Neurosci** 1989 Apr; 9(4):1273–9
Habituation in Stentor: produced by mechanoreceptor channel modification. Wood DC. **J Neurosci** 1988 Jul; 8(7):2254–8
The role of periodontal receptors in the jaw-opening reflex in the cat. Dessem D, et al. **J Physiol (Lond)** 1988 Dec; 406:315–30
The effect of stimulation of left atrial receptors on coronary blood flow in anaesthetized dogs. Drinkhill MJ, et al. **J Physiol (Lond)** 1989;408:45–56
Unloading of tendon organ discharges by in-series motor units in cat peroneal muscles. Horcholle-Bossavit G, et al. **J Physiol (Lond)** 1989;408:185–98
Conduction of neural impulses in human mechanoreceptive cutaneous afferents. Mackel R. **J Physiol (Lond)** 1988 Jul; 401:597–615
Ventricular syncope: is the heart a sensory organ? [editorial] Abboud FM. **N Engl J Med** 1989 Feb 9;320(6):390–2
Involvement of different receptors in the regulation of human posture. Dietz V, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):82–7
Activation of Golgi tendon organs by asynchronous contractions of motor units in cat leg muscles. Horcholle-Bossavit G, et al. **Neurosci Lett** 1989 Aug 14; 103(1):44–9
Merkel cells and the mechanosensitivity of normal and regenerating nerves in Xenopus skin. Mearow KM, et al. **Neuroscience** 1988 Aug;26(2):695–708
Mechanical visceral pain model: chronic intermittent intestinal distention in the rat. Colburn RW, et al. **Physiol Behav** 1989 Jan;45(1):191–7
Clip induced analgesia and immobility in the mouse: activation by different sensory modalities. Fleischmann A, et al. **Physiol Behav** 1988;44(1):39–45
Manipulation of stretch-induced atriopeptin prohormone release and processing in the perfused rat heart. Ito T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8365–9
Specialization of sensorimotor organization in the neck muscle system. Abrahams VC, et al. **Prog Brain Res** 1988; 76:125–35 (41 ref.)

Responsiveness of slowly adapting cutaneous mechanoreceptors after close arterial infusion of neomycin in cats. Baumann KI, et al. **Prog Brain Res** 1988;74:43–9
Evidence that the Merkel cell is not the transducer in the mechanosensory Merkel cell–neurite complex. Diamond J, et al. **Prog Brain Res** 1988;74:51–6 (28 ref.)
Efferent modulation of penile mechanoreceptor activity. Johnson RD. **Prog Brain Res** 1988;74:319–24
The ultrastructure and receptor transduction mechanisms of dentine. Matthews B, et al. **Prog Brain Res** 1988;74:69–76
Spread of skin deformation and mechanoreceptor discharge. Pubols BH Jr. **Prog Brain Res** 1988;74:263–70 (12 ref.)
Development of the lateral line system in Xenopus. Winklbauer R. **Prog Neurobiol** 1989;32(3):181–206 (37 ref.)
Reflex responses of vagal efferent fibres influenced by gastrointestinal mechanoreceptors to electrical afferent stimulation in the anaesthetized ferret. Blackshaw LA, et al. **Q J Exp Physiol** 1988 Nov;73(6):1001–4
Intrapulmonary receptors in the garter snake (Thamnophis sirtalis). Furilla RA, et al. **Respir Physiol** 1988 Dec; 74(3):311–22
Responses of pulmonary slowly adapting receptors to airway occlusion in cat. Iscoe S, et al. **Respir Physiol** 1989 Aug; 77(2):215–24
Effects of prolonged inflation on pulmonary stretch receptor discharge in turtles. McLean HA, et al. **Respir Physiol** 1989 Jan;75(1):75–88
Laryngeal paralysis on receptor and reflex responses to negative pressure in the upper airway. Mathew OP, et al. **Respir Physiol** 1988 Oct;74(1):25–34
Afferent vagal activity during hyperthermic polypnea in the pigeon. Mückenhoff K, et al. **Respir Physiol** 1989 Mar; 75(3):267–78
Response of stretch receptors to static inflations and deflations in an isolated tracheal segment. Ogilvie MD, et al. **Respir Physiol** 1989 Mar;75(3):289–307
Effects of intrapulmonary CO2 and airway pressure on pulmonary vagal afferent activity in the alligator. Powell FL, et al. **Respir Physiol** 1988 Dec;74(3):285–98
Activities of pulmonary stretch receptors during ventilatory cycles without lung inflation. Zhou D, et al. **Respir Physiol** 1989 Aug;77(2):187–94
Stretch-inactivated ion channels coexist with stretch-activated ion channels. Morris CE, et al. **Science** 1989 Feb 10;243(4892):807–9
Cnidocyte mechanoreceptors are tuned to the movements of swimming prey by chemoreceptors. Watson GM, et al. **Science** 1989 Mar 24;243(4898):1589–91
Responses of neurons in somatosensory cortical area II of cats to high-frequency vibratory stimuli during iontophoresis of a GABA antagonist and glutamate. Alloway KD, et al. **Somatosens Mot Res** 1988;6(2):109–40
The capacity of human subjects to process directional information provided at two skin sites. Essick GK, et al. **Somatosens Mot Res** 1988;6(1):1–20
Discrimination and scaling of velocity of stimulus motion across the skin. Essick GK, et al. **Somatosens Mot Res** 1988; 6(1):21–40
Temperature and the two-point threshold. Stevens JC. **Somatosens Mot Res** 1989;6(3):275–84
Neural mechanisms of absolute tactile localization in monkeys. Vierck CJ Jr, et al. **Somatosens Mot Res** 1988; 6(1):41–61
[Functional properties of the Golgi tendon organs] Jami L. **Arch Int Physiol Biochim** 1988 Sep;96(4):A363–78 (40 ref.) (Eng. Abstr.) (Fre)
[The regulation of feed intake in ruminants] Langhans W. **Schweiz Arch Tierheilkd** 1989;131(3):117–26 (79 ref.) (Eng. Abstr.) (Ger)
[Evidence of presynaptic inhibitory activity in mechanosensory afferents directed to the solitary nucleus in frogs] Gilberti G, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):353–60 (Eng. Abstr.) (Ita)
[Reflex action of extralingual mechanosensory afferents in the solitary tract nucleus] Villa A, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):369–75 (Eng. Abstr.) (Ita)
[Temporal muscle proprioceptors involved in evoking jaw–tongue reflex] Ishiwata Y. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):460–70 (Eng. Abstr.) (Jpn)
[Physiological study of mechanoreceptors of cat's larynx] Miura T. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1228–36 (Eng. Abstr.) (Jpn)
[Functional restructuring of the bush-like receptor during the suppression of anaerobic glycolysis] Lukashin VG, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):486–8 (Eng. Abstr.) (Rus)
[Interstitial volume receptors of the liver] Tyryshkina EM. **Fiziol Zh SSSR** 1989 Jan;75(1):90–6 (Eng. Abstr.) (Rus)
[Possible role of the potential-dependent potassium channels in the generation of responses of the pacinian corpuscles] Akoev GN, et al. **Neirofiziologiia** 1988;20(5):623–30 (Eng. Abstr.) (Rus)
[Impulse activity of slowly adapting pulmonary receptors during respiration] Preobrazhenskii NN, et al. **Neirofiziologiia** 1988;20(4):518–25 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Does acute intraoral pain alter cutaneous sensibility? Hansson P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1032–6
Evaluation of thermal, pain, and vibration sensation thresholds in newly diagnosed type 1 diabetic patients. Ziegler D, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1420–4
Vibration perception thresholds in 279 diabetic patients. McKillop GM, et al. **Scott Med J** 1988 Oct;33(5):334–5
[Increased vasodilation response to the stimulation of low pressure mechanoreceptors in borderline hypertension] Girerd X, et al. **Arch Mal Coeur** 1989 Feb;82(2):231–5 (Eng. Abstr.) (Fre)
[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) (Ger)

RADIATION EFFECTS

Low power laser irradiation does not affect the generation of signals in a sensory receptor. Lundeberg T, et al. **Am J Chin Med** 1988;16(3–4):87–91

ULTRASTRUCTURE

Comparison of trigeminal receptor location and structure in the periodontal ligament of different types of teeth from the rat, cat, and monkey. Byers MR, et al. **J Comp Neurol** 1989 Jan 1;279(1):117–27
Ultrastructural features of functionally identified primary afferent neurons with C (unmyelinated) fibers of the guinea pig: classification of dorsal root ganglion cell type with reference to sensory modality. Sugiura Y, et al. **J Comp Neurol** 1988 Oct 8;276(2):265–78
Intraperineural localization of lamellated sensory corpuscles in the skin and oral mucosae of the adult cat and miniature pig. Tachibana T, et al. **J Neurocytol** 1989 Feb;18(1):61–9
[Electron microscopic study of the interrelations of the bush-like receptor terminals with the tissue] Lukashin VG, et al. **Tsitologiia** 1989 May;31(5):535–8 (Eng. Abstr.) (Rus)

MECHLORETHAMINE

ADMINISTRATION & DOSAGE

[Use of topical mechlorethamine solution—a new, immunologic approach in the treatment of alopecia areata] Stefanović Z. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):346–9 (Eng. Abstr.) (Ser)

ADVERSE EFFECTS

Axillary vein thrombosis after nitrogen mustard therapy for SLE [letter] Quismorio FP Jr, et al. **J Rheumatol** 1988 Nov; 15(11):1732–3
[Lung cancer and related environmental factors] Tokuoka S, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1013–22 (30 ref.) (Eng. Abstr.) (Jpn)

METABOLISM

Cross-linkage of nucleophosmin in tumor cells by nitrogen mustard. Chan PK. **Cancer Res** 1989 Jun 15;49(12):3271–5
Differential sensitivity of histone acetylation in nitrogen-mustard sensitive and resistant cells. Relation to drug uptake, formation and repair of DNA-interstrand cross-links. Helliger W, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1861–8

PHARMACOLOGY

Lung injury and neutrophil density during air embolization in sheep after leukocyte depletion with nitrogen mustard. Albertine KH. **Am Rev Respir Dis** 1988 Dec;138(6):1444–53
Unique sensitivity of nitrogen mustard-resistant human Burkitt lymphoma cells to novobiocin. Tan KB, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4411–3
Altered expression and transcription of the topoisomerase II gene in nitrogen mustard-resistant human cells [published erratum appears in Biochem Pharmacol 1989 May 1;38(9):1541] Tan KB, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4413–6
Selective inhibition by bis(2-chloroethyl)methylamine (nitrogen mustard) of the Na+/K+/Cl- cotransporter of murine L1210 leukemia cells. Wilcock C, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):368–78
Influence of WR2721 on DNA cross-linking by nitrogen mustard in normal mouse bone marrow and leukemia cells in vivo. DeNeve WJ, et al. **Cancer Res** 1988 Nov 1; 48(21):6002–5
Mutational specificities of 1,3-bis(2-chloroethyl)-1-nitrosourea and nitrogen mustard in the SUP4-o gene of Saccharomyces cerevisiae. Kunz BA, et al. **Cancer Res** 1989 Jan 15;49(2):279–83
Cytostatic activity of commonly used tricyclic antidepressants. Sauter C. **Oncology** 1989;46(3):155–7

THERAPEUTIC USE

No detectable increase in sister chromatid exchanges in lymphocytes from mycosis fungoides patients after topical treatment with nitrogen mustard. Studstrup L, et al. **Br J Dermatol** 1988 Dec;119(6):711–5
Topical mechlorethamine therapy for early stage mycosis fungoides. Ramsay DL, et al. **J Am Acad Dermatol** 1988 Oct;19(4):684–91
Long-term efficacy, curative potential, and carcinogenicity of topical mechlorethamine chemotherapy in cutaneous T cell lymphoma. Vonderheid EC, et al. **J Am Acad Dermatol** 1989 Mar;20(3):416–28

TOXICITY

Efficacy of sodium thiosulfate as a local antidote to mechlorethamine skin toxicity in the mouse. Dorr RT, et al. **Cancer Chemother Pharmacol** 1988;22(4):299–302
Chemical warfare [letter] Weigand DA. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):324–5

MECHLORETHAMINE OXIDE see **MECHLORETHAMINE**

MECILLINAM see **AMDINOCILLIN**

MECKEL'S DIVERTICULUM

Dual carcinoid tumors of Meckel's diverticulum presenting as metastasis in an inguinal hernia sac: case report with literature review. Dixon AY, et al. **Am J Gastroenterol** 1988 Nov;83(11):1283–8 (66 ref.)
Carcinoid tumor in Meckel's diverticulum. Silk YN, et al. **Am Surg** 1988 Nov;54(11):664–7 (30 ref.)
Crohn's disease of a Meckel's diverticulum causing diverticulitis and small bowel obstruction. Parler DW, et al. **South Med J** 1989 Sep;82(9):1190–1 (15 ref.)
[Primary tumors of Meckel's diverticulum. Apropos of 2 cases] Haouet S, et al. **Tunis Med** 1989 Feb;67(2):125–7 (Eng. Abstr.) (Fre)
[Adenocarcinoma of Meckel's diverticulum. Description of a case] Arceci F, et al. **Minerva Chir** 1988 Jul 31; 43(13–14):1191–3 (Eng. Abstr.) (Ita)
[Phlegmon of a cyst of Meckel's diverticulum] Averin MG. **Klin Khir** 1989;(2):61 (Rus)
[A rare case of intestinal perforation by a fish bone] Ushatenko PP, et al. **Klin Khir** 1988;(8):57 (Rus)
[Perforation of Meckel's diverticulum by a fish bone in a child] Zhalelov EZh, et al. **Vestn Khir** 1989 Feb;142(2):78 (Rus)

COMPLICATIONS

Intussusception secondary to Meckel's diverticulum. A challenging diagnosis in adolescence. Hurley LJ, et al. **J Adolesc Health Care** 1989 Jan;10(1):51–3
Hemoperitoneum from perforated Meckel's diverticulum. Fowler CL, et al. **J Pediatr Surg** 1988 Oct;23(10):982–3
Traumatic hemoperitoneum due to a Meckel's mesodiverticular band: case report. McAneny D, et al. **J Trauma** 1989 Feb;29(2):261–2
Bleeding Meckel's diverticulum demonstrated by digital subtraction angiography. Aggarwal S, et al. **Pediatr Radiol** 1989;19(6–7):438
Enterolithiasis in a patient with Meckel's diverticulum and Crohn's disease. van der Bruggen H, et al. **ROFO** 1988 Nov;149(5):552–3
Meckel's diverticulum and related umbilical abnormalities: review of 26 cases. Chen CJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):23–6
[Perforation of the small intestine caused by an enterolith originating from a Meckel's diverticulum] Guenier C, et al. **Acta Chir Belg** 1989 Mar–Apr;89(2):82–4 (Eng. Abstr.) (Fre)
[A rare cause of neonatal occlusion by a palpable abdominal mass: Meckel's diverticulum] Leconte D, et al. **Chir Pediatr** 1988;29(4):216–8 (Eng. Abstr.) (Fre)
[Carcinoid of Meckel's diverticulum (a case associated with adenocarcinoma of the rectum)] Tonello PG, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):333–9 (Eng. Abstr.) (Ita)
[Carcinoid tumor in Meckel's diverticulum] Spissu M, et al. **Minerva Chir** 1989 Mar 15;44(5):915–7 (Eng. Abstr.) (Ita)
[A rare combination of invagination and a complicated Meckel's diverticulum in a child] Khakhalev VP, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):136–7 (Rus)
[Perforation by a fish bone of a Meckel's diverticulum affected by a carcinoid] Utenin VD, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):119–20 (Rus)
[Destructive appendicitis associated with diverticulitis] Durda II. **Klin Khir** 1989;(4):61–2 (Rus)
[Acute surgical diseases of the abdominal organs in patients with Meckel's diverticulum] Osipov AP, et al. **Klin Khir** 1989;(4):61 (Rus)
[Intestinal invagination caused by a Meckel's diverticulum containing heterotopic tissue] Serenko VV, et al. **Klin Khir** 1989;(6):71 (Rus)
[A Meckel's diverticulum in a strangulated inguinal hernia] Siagallo PT, et al. **Klin Khir** 1989;(6):70 (Rus)
[Meckel's diverticulum causing acute intestinal obstruction] Zubachik RM. **Klin Khir** 1988;(6):65–6 (Rus)

DIAGNOSIS

Sonographic findings in torsion of a Meckel diverticulum [letter] Larson J, et al. **AJR Am J Roentgenol** 1989 May; 152(5):1130
Giant Meckel diverticulum containing enteroliths diagnosed by computed tomography and sonography. Torii Y, et al. **Gastrointest Radiol** 1989 Spring;14(2):167–9

ETIOLOGY

[Pathology due to incomplete involution of the vitelline duct] Shish AA, et al. **Klin Khir** 1988;(6):39–40 (Eng. Abstr.) (Rus)

GENETICS

[A case of bleeding Meckel's diverticulum in brothers] Mardenov AB, et al. **Klin Khir** 1989;(6):69–70 (Rus)

MICROBIOLOGY

Campylobacter-like organisms and heterotopic gastric mucosa in Meckel's diverticula. de Cothi GA, et al. **J Clin Pathol** 1989 Feb;42(2):132–4

PATHOLOGY

Carcinoid tumors arising from Meckel's diverticulum. A clinical, morphologic, and immunohistochemical study. Moyana TN. **Am J Clin Pathol** 1989 Jan;91(1):52–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 3–1989. A 23-year-old man with recurrent bouts of abdominal pain and vomiting. **N Engl J Med** 1989 Jan 19;320(3):171–8

RADIOGRAPHY

Meckel's diverticulum in children: a radiological challenge? [letter] Lachaux AG, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):939

[Preoperative roentgenologic diagnosis of Meckel's diverticulum in a child] Sulaĭmanov AS, et al. **Vestn Khir** 1989 Feb;142(2):77–8 (Rus)

[Segmental dilatation of the ileum: presentation of a case] Ruiz Jaureguizuria JC, et al. **An Esp Pediatr** 1988 Oct; 29(4):343–5 (Spa)

RADIONUCLIDE IMAGING

The diagnosis of Meckel's diverticulum. Sostre S, et al. **Bol Asoc Med P R** 1988 Jun;80(6):205–7

Incidental discovery of a large duplication cyst during Meckel's scintigraphy. Vazquez R, et al. **Clin Nucl Med** 1989 Jul;14(7):537

Bleeding Meckel's diverticulum in an adult. Farr CM, et al. **J Clin Gastroenterol** 1989 Apr;11(2):208–10

[Digestive hemorrhage of jejuno-ileal origin. Significance of abdominal scintigraphy in its diagnosis] Speranzini MB, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb; 43(1):9–13 (Eng. Abstr.) (Por)

SURGERY

Meckel's diverticulum in the pediatric surgical population. Brophy C, et al. **Conn Med** 1989 Apr;53(4):203–5

Vesicoileal fistula via Meckel diverticulum. MacKenzie TM, et al. **Urology** 1989 Jun;33(6):475–6

[Selective therapy with ranitidine in a case of bleeding Meckel's diverticulum] Volpato M, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):61–3 (Eng. Abstr.) (Ita)

[Meckel's diverticulum and its complications. Comments on 6 surgical patients] Marino G, et al. **Minerva Med** 1989 Jul;80(7):797–800 (Ita)

[A case of combined intestinal obstruction in a child] Borodina NB, et al. **Klin Khir** 1988;(6):67–8 (Rus)

[Tactics of treating children with Meckel's diverticulum] Tikhonov IuA, et al. **Klin Khir** 1989;(6):42–5 (Eng. Abstr.) (Rus)

[Meckel's diverticulum in surgical practice] Sapozhkov AIu. **Vestn Khir** 1988 Jul;141(7):105–7 (Rus)

VETERINARY

Small intestinal strangulation caused by Meckel's diverticulum in a horse. Hooper RN. **J Am Vet Med Assoc** 1989 Apr 1;194(7):943–4

MECLIZINE

THERAPEUTIC USE

The failure of antimotion sickness medication to improve reading in developmental dyslexia: results of a randomized trial. Fagan JE, et al. **J Dev Behav Pediatr** 1988 Dec; 9(6):359–66

MECLOFENAMIC ACID see under **ANTHRANILIC ACIDS**

MECLOZINE see **MECLIZINE**

MECONIUM

Meconium peritonitis due to meconium ileus presenting as fetal ascites: a case report. Rachagan SP, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):117–20

Genetic heterogeneity between two clinical forms of cystic fibrosis evidenced by familial analysis and linked DNA probes. Mornet E, et al. **Clin Genet** 1989 Feb;35(2):81–7

Meconium peritonitis presenting as a giant pseudocyst in a neonate. Kapoor R, et al. **Indian Pediatr** 1988 Nov; 25(11):1113–5

Clinical and genetic comparisons of patients with cystic fibrosis, with or without meconium ileus. Kerem E, et al. **J Pediatr** 1989 May;114(5):767–73

Tracheal suction in meconium-stained neonates [letter] Paul VK, et al. **J Pediatr** 1989 Mar;114(3):508

Meconium ileus and its equivalent as a risk factor for the development of cirrhosis: an autopsy study in cystic fibrosis. Maurage C, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):17–20

Use of the appendix stump in the treatment of meconium ileus. Fitzgerald R, et al. **J Pediatr Surg** 1989 Sep; 24(9):899–900

Meconium pseudocyst presenting as a buttock mass. West DK, et al. **J Pediatr Surg** 1988 Sep;23(9):864–5

Neonatal surgical casebook. Meconium ileus in premature twins. Chawls WJ, et al. **J Perinatol** 1988 Winter;8(1):62–4

Delivery room management of meconium staining of the amniotic fluid and the development of meconium aspiration syndrome. Hageman JR, et al. **J Perinatol** 1988 Spring; 8(2):127–31

Echogenic fetal bowel in the third trimester associated with meconium ileus secondary to cystic fibrosis. A case report. Benacerraf BR, et al. **J Reprod Med** 1989 Apr;34(4):299–300

Meconium hydrocele: an unusual etiology of a scrotal mass in the newborn. Ring KS, et al. **J Urol** 1989 May; 141(5):1172–3

Sonographic findings of generalized meconium peritonitis presenting as neonatal ascites. Wu CC. **JCU** 1988 Jan; 16(1):48–51

Reliability of intrapartum fetal heart rate monitoring in the postterm fetus with meconium passage. Shaw K, et al. **Obstet Gynecol** 1988 Dec;72(6):886–9

[Meconium peritonitis complicated with Enterobacter aerogenes infection--a case report] Yang CJ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):71–4 (Eng. Abstr.) (Chi)

[Meconium peritonitis. The value of prenatal diagnosis] Wakim A, et al. **Chir Pediatr** 1989;30(1):21–4 (Eng. Abstr.) (Fre)

[Acid-base status of the mother and infant in labor with meconium in the amniotic fluid] Frković A, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):77–81 (Eng. Abstr.) (Scr)

[Meconium peritonitis] Barrera F, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):115–9 (Eng. Abstr.) (Spa)

ANALYSIS

Identification of a novel oligosaccharide backbone structure with a galactose residue monosubstituted at C-6 in human foetal gastrointestinal mucins. Hounsell EF, et al. **Biochem J** 1988 Dec 1;256(2):397–401

Trace elements in meconium from preterm and full-term infants. Friel JK, et al. **Biol Neonate** 1989;55(4–5):214–7

Synthesis of 6-hydroxylated bile acids and identification of 3 alpha,6 alpha,7 alpha,12 alpha-tetrahydroxy-5 beta-cholan-24-oic acid in human meconium and neonatal urine. Kurosawa T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):557–9

Rapid isolation and detection of drugs in meconium of infants of drug-dependent mothers. Ostrea EM Jr, et al. **Clin Chem** 1988 Nov;34(11):2372–3

Structures of O-glycosidically linked oligosaccharides isolated from human meconium glycoproteins. Capon C, et al. **Eur J Biochem** 1989 Jun 1;182(1):139–52

A new ganglioside of the lactotetraose series, GalNAc-3'-isoLM1, detected in human meconium. Fredman P, et al. **J Biol Chem** 1989 Jul 25;264(21):12122–5

Drug screening of meconium in infants of drug-dependent mothers: an alternative to urine testing. Ostrea EM Jr, et al. **J Pediatr** 1989 Sep;115(3):474–7

Meconium in the amniotic fluid and fetal acid-base status. Yeomans ER, et al. **Obstet Gynecol** 1989 Feb;73(2):175–8

ENZYMOLOGY

Pancreatic function testing in meconium disease in cystic fibrosis [letter] Eggermont E. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):935

IMMUNOLOGY

[The meconium antigen exhibiting oncofetal properties] Pugachev KK, et al. **Eksp Onkol** 1989;11(4):47–50 (Eng. Abstr.) (Rus)

PATHOLOGY

Meconium peritonitis in stillbirths. Yavner DL, et al. **Pediatr Pathol** 1988;8(6):617–23

[Meconial disease in a newborn] P'ianov RP. **Arkh Patol** 1989;51(4):68–71 (Eng. Abstr.) (Rus)

PHYSIOLOGY

[Fetal meconium peritonitis. Case report] Piattelli L. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):165–6 (Eng. Abstr.) (Ita)

MECONIUM ASPIRATION

see related

MECONIUM

Prophylactic amnioinfusion during labor complicated by meconium: a preliminary report. Sadovsky Y, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):613–7

BLOOD

Pulse oximetry versus transcutaneous oxygen monitoring in perinatology applications. Wiswell TE. **J Perinatol** 1987 Fall;7(4):331–2

COMPLICATIONS

Pulmonary sequelae of meconium aspiration [letter] Shapiro GG. **J Pediatr** 1989 Aug;115(2):338

Long-term pulmonary sequelae of meconium aspiration syndrome. Swaminathan S, et al. **J Pediatr** 1989 Mar; 114(3):356–61

Absence of long term pulmonary sequelae after mild meconium aspiration syndrome. Stevens JC, et al. **Pediatr Pulmonol** 1988;5(2):74–81

Extracorporeal membrane oxygenation as treatment of severe meconium aspiration syndrome. Graves ED 3d, et al. **South Med J** 1989 Jun;82(6):696–8

[Biochemical diagnosis of neonatal respiratory distress: hyalin membrane disease and meconium aspiration] Magny JF, et al. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):505–10 (57 ref.) (Fre)

DIAGNOSIS

Simultaneous determination of hemoglobin and coproporphyrin by second derivative differential spectrophotometry: application to the diagnosis of meconium aspiration. Ficheux H, et al. **Clin Chim Acta** 1989 Jun 15;182(1):53–61

Meconium aspiration syndrome without evidence of fetal distress in early labor before elective cesarean delivery. Sunoo C, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):707–9

[Prevention of meconium aspiration] Riehn A, et al. **Zentralbl Gynakol** 1988;110(17):1073–80 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

Meconium aspiration syndrome: a 6-year retrospective study. Coltart TM, et al. **Br J Obstet Gynaecol** 1989 Apr; 96(4):411–4

ETIOLOGY

Fetal death from sepsis following a reassuring intrapartum fetal acoustic stimulation test. Strong TH Jr, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):465–8

GENETICS

Cystic fibrosis with and without meconium ileus [letter] Auvinet M, et al. **Lancet** 1989 Jan 21;1(8630):161

Genetic differences between cystic fibrosis with and without meconium ileus [letter] [see comments] Curtis A, et al. **Lancet** 1989 May 13;1(8646):1078–9. **Comment in:** Lancet 1989 Jul 8;2(8654):102

PATHOLOGY

The pulmonary vasculature in meconium aspiration. Perlman EJ, et al. **Hum Pathol** 1989 Jul;20(7):701–6

Experimental meconium aspiration in guinea pigs. Jovanovic R, et al. **Obstet Gynecol** 1989 Apr;73(4):652–6

PHYSIOPATHOLOGY

Meconium-induced vasocontraction: a potential cause of cerebral and other fetal hypoperfusion and of poor pregnancy outcome. Altshuler G, et al. **J Child Neurol** 1989 Apr;4(2):137–42

PREVENTION & CONTROL

Prophylactic amnioinfusion during labor complicated by meconium: a preliminary report. Sadovsky Y, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):613–7

Management of meconium-stained neonates [letter] Casiro O, et al. **J Pediatr** 1989 Jun;114(6):1067–8

Tracheal suction in meconium-stained neonates [letter] Paul VK, et al. **J Pediatr** 1989 Mar;114(3):508

Management of meconium-stained neonate [letter; comment] Wiswell TE. **J Pediatr** 1989 Jul;115(1):165–6. **Comment on:** J Pediatr 1988 Apr;112(4):613–5

Intrapartum suctioning of meconium: comparative efficacy of bulb syringe and De Lee catheter. Cohen-Addad N, et al. **J Perinatol** 1987 Spring;7(2):111–3

Delivery room management of meconium staining of the amniotic fluid and the development of meconium aspiration syndrome. Hageman JR, et al. **J Perinatol** 1988 Spring; 8(2):127–31

The prevention of meconium aspiration in labor using amnioinfusion [letter] Goodlin RC. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):430–1

The prevention of meconium aspiration in labor using amnioinfusion. Wenstrom KD, et al. **Obstet Gynecol** 1989 Apr;73(4):647–51

[Prevention of meconium aspiration syndrome] Chen ZL. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):82–4, 127 (Eng. Abstr.) (Chi)

THERAPY

"Disappearing" endotracheal tube following meconium aspiration: a possible solution to the problem [letter] Finucane BT, et al. **Anesthesiology** 1989 Sep;71(3):469–70

[Intensive therapy of the aspiration syndrome in newborn

infants] Mikhel'son VA, et al. **Pediatriia** 1988;(5):70–3 **(Rus)**

MEDAZEPAM see under BENZODIAZEPINE TRANQUILIZERS

MEDEX see PHYSICIANS' ASSISTANTS

MEDIAN EMINENCE

ANALYSIS

Axons containing a prolactin-like peptide project into the perivascular layer of the median eminence: an immunocytochemical light and electron microscope study in adult and infant rats. Alonso G, et al. **Neuroendocrinology** 1988 Jul;48(1):39–44

Autoradiographic identification of prolactin binding sites in rat median eminence. Barton AC, et al. **Neuroendocrinology** 1989 Jun;49(6):649–53

Influence of the central nucleus of the amygdala on the content of corticotropin-releasing factor in the median eminence. Beaulieu S, et al. **Neuroendocrinology** 1989 Mar; 49(3):255–61

Peptide- and transmitter-containing neurons in the mediobasal hypothalamus and their relation to GABAergic systems: possible roles in control of prolactin and growth hormone secretion. Meister B, et al. **Synapse** 1988; 2(6):585–605

ANATOMY & HISTOLOGY

Subfornical organ connections with septal neurons projecting to the median eminence. Donevan SD, et al. **Neuroendocrinology** 1988 Jul;48(1):67–71

Sites of origin of growth hormone-releasing factor-containing neurons projecting to the stalk-median eminence of the rat. Niimi M, et al. **Peptides** 1989 May-Jun; 10(3):605–8

CYTOLOGY

Substance P-like immunoreactive neurons in the arcuate nucleus project to the median eminence in rat. Palkovits M, et al. **Brain Res** 1989 May 8;486(2):364–8

DRUG EFFECTS

Alteration by thyroid hormones of TRH in the rat median eminence: role of the hypothalamic paraventricular nucleus. Yamada M, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):104–10

ENZYMOLOGY

Tyrosine hydroxylase in the stalk-median eminence and posterior pituitary is inactivated only during the plateau phase of the preovulatory prolactin surge. Arbogast LA, et al. **Endocrinology** 1989 Aug;125(2):667–74

Hormonal control of tyrosine hydroxylase in the median eminence: demonstration of a central role for the pituitary gland. Gonzalez HA, et al. **Endocrinology** 1989 May; 124(5):2122–7

Quantification of the mass of tyrosine monooxygenase in the median eminence and superior cervical ganglion. Porter JC, et al. **Methods Enzymol** 1989;168:371–85

Mass and activity of tyrosine hydroxylase in tuberoinfundibular dopaminergic neurons of the aged brain. Control by prolactin and ovarian hormones. Gonzalez HA, et al. **Neuroendocrinology** 1988 Dec;48(6):663–7

Mass and in situ molar activity of tyrosine hydroxylase in the median eminence. Effect of thyroidectomy and thyroid hormone replacement. Wang PS, et al. **Neuroendocrinology** 1989 Jun;49(6):659–63

GROWTH & DEVELOPMENT

The melatonin receptors in rat ontogenesis. Vaněček J. **Neuroendocrinology** 1988 Aug;48(2):201–3

METABOLISM

Centrally administered galanin reduces dopamine utilization in the median eminence and increases dopamine utilization in the medial neostriatum of the male rat. Jansson A, et al. **Acta Physiol Scand** 1989 Feb;135(2):199–200

Release of luteinizing hormone-releasing hormone: interrelations between eicosanoids and catecholamines. Saadi M, et al. **Brain Res** 1989 May 29;488(1–2):97–104

Short days induce changes in specific melatonin binding in hamster median eminence and anterior pituitary. Vaněček J, et al. **Brain Res** 1989 Jan 16;477(1–2):387–90

Enhanced dopamine synthesis and release in vitro in the median eminence of rat hypothalamus are associated with involution of estradiol-induced pituitary tumors. Arita J, et al. **Endocrinology** 1989 Apr;124(4):1998–2004

The maturational process of gonadotropin-releasing hormone neurons in the male rat: a role for the adrenal gland in the increase in secretory function. Barnea A, et al. **Endocrinology** 1988 Dec;123(6):2730–5

Hypoglycemia enhances turnover of corticotropin-releasing factor and of vasopressin in the zona externa of the rat median eminence. Berkenbosch F, et al. **Endocrinology** 1989 Jul;125(1):28–34

Neurotransmitters, neuropeptides and binding sites in the rat mediobasal hypothalamus: effects of monosodium glutamate (MSG) lesions. Meister B, et al. **Exp Brain Res** 1989;76(2):343–68

Selective effects of hyperprolactinemia on in vitro dopamine release from median eminence synaptosomes. Gregerson KA, et al. **J Neurosci** 1988 Jul;8(7):2477–84

A rapid, Ca2+-independent, onset of prostaglandin E2 stimulation of the release of luteinizing hormone releasing hormone from copper-treated median eminence explants. Barnea A, et al. **Mol Cell Endocrinol** 1989 Aug; 65(1–2):111–8

Differential alterations in dopamine turnover rates in the stalk-median eminence and posterior pituitary during the preovulatory prolactin surge. Arbogast LA, et al. **Neuroendocrinology** 1989 May;49(5):525–30

A sex difference in the stimulatory afferent regulation of tuberoinfundibular dopaminergic neuronal activity. Barton AC, et al. **Neuroendocrinology** 1989 Apr;49(4):361–6

Substance p in the median eminence and pituitary of the rat: demonstration of immunoreactive fibers and specific binding sites. Mikkelsen JD, et al. **Neuroendocrinology** 1989 Jul;50(1):100–8

Physiological evidence for alpha 1-adrenergic facilitatory control of the cold-induced TRH release in the rat, obtained by push-pull cannulation of the median eminence. Arancibia S, et al. **Neurosci Lett** 1989 May 22; 100(1–3):169–74

[Immunohistochemical research on the insulin-sensitive elements of the hypothalamic median eminence] Babichenko II. **Biull Eksp Biol Med** 1989 Feb;107(2):245–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Central catecholaminergic system stimulates secretion of CKH st different sites. Szafarczyk A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E463–8

Correlative scanning-immunoelectromicroscopic analysis of neuropeptide localization and neuronal plasticity in the endocrine hypothalamus. Wu WT, et al. **Brain Res Bull** 1989 Feb;22(2):399–410

The brain histamine system in vitro. Haas HL, et al. **J Neurosci Methods** 1989 May;28(1–2):71–5

Comparison of the effects between the conventional and electrical acupuncture on some cytochemical components of median eminentia and supraoptic nucleus. Ge Z, et al. **J Tradit Chin Med** 1989 Mar;9(1):57–62

Median eminence dopamine and serotonin neuronal activity. Temporal relationship to preovulatory prolactin and luteinizing hormone surges. Kerdelhué B, et al. **Neuroendocrinology** 1989 Feb;49(2):176–80

Correlation between the stress-induced transient increase in corticotropin-releasing hormone content of the median eminence of the hypothalamus and adrenocorticotropic hormone secretion. Murakami K, et al. **Neuroendocrinology** 1989 Mar;49(3):233–41

Multifactorial control of pituitary hormone secretion: the "wheels" of the brain. Jacobowitz DM. **Synapse** 1988; 2(3):186–92 (104 ref.)

PHYSIOPATHOLOGY

Regulation of vasopressin and oxytocin release in vitro. Sladek CD, et al. **Adv Exp Med Biol** 1988;245:157–65 (46 ref.)

SECRETION

Luteinizing hormone releasing hormone (LHRH) neuroterminals mapped using the push-pull perfusion method in the rhesus monkey. Gearing M, et al. **Brain Res Bull** 1988 Jul;21(1):117–21

Endogenous opioid inhibition and facilitation of gonadotropin-releasing hormone release from the median eminence in vitro: potential role of catecholamines. Rasmussen DD, et al. **Endocrinology** 1988 Dec; 123(6):2916–21

Neuropeptide-Y stimulation of luteinizing hormone-releasing hormone secretion from the median eminence in vitro by estrogen-dependent and extracellular Ca2+-independent mechanisms. Sabatino FD, et al. **Endocrinology** 1989 May; 124(5):2089–98

Methods for the study of somatostatin. Aguila MC, et al. **Methods Enzymol** 1989;168:716–29

ULTRASTRUCTURE

Immunocytochemical and physiological evidence of a synapse between dopamine- and luteinizing hormone releasing hormone-containing neurons in the ewe median eminence. Kuljis RO, et al. **Endocrinology** 1989 Mar; 124(3):1579–81

MEDIAN FOREBRAIN BUNDLE see under NEURAL PATHWAYS

MEDIAN NERVE

see related
CARPAL TUNNEL SYNDROME

Two neuropathies of the upper extremities. Stabile MJ, et al. **Hosp Pract [Off]** 1989 Sep 30;24(9A):62, 65–6

Greenstick fracture of the forearm with median nerve entrapment. Genelin F, et al. **J Emerg Med** 1988 Sep-Oct; 6(5):381–5

Persistent median artery as a cause of pronator syndrome. Jones NF, et al. **J Hand Surg [Am]** 1988 Sep;13(5):728–32

Peripheral nerve entrapment at the wrist in pyrophosphate arthropathy. Pattrick MG, et al. **J Rheumatol** 1988 Aug; 15(8):1254–7

ABNORMALITIES

Electrophysiologic study of the Riche-Cannieu anomaly. Dumitru D, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):27–31

Anomalous intrinsic hand muscle innervation in median and ulnar nerve lesions: an electrophysiological study. Uncini A, et al. **Ital J Neurol Sci** 1988 Oct;9(5):497–503

ANATOMY & HISTOLOGY

Anatomic relations between the median nerve and flexor tendons in the carpal tunnel: MR evaluation in normal volunteers. Zeiss J, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):533–6

Anatomic observations in carpal tunnel syndrome as they relate to the tethered median nerve stress test. LaBan MM, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):44–6

Neuromagnetic imaging studies discriminate proprioceptive and cutaneous cortical inputs during median nerve stimulation in man. Narici L, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):169–74

A cadaveric study of the anatomic variations of the recurrent motor branch of the median nerve. Siverhus SW, et al. **Orthop Rev** 1989 Mar;18(3):315–20 (25 ref.)

Somatotopy of digital nerve projections to the dorsal horn in the monkey. Brown PB, et al. **Somatosens Mot Res** 1989; 6(3):309–17

DRUG EFFECTS

[Clinico-electroneuromyographic characteristics of occupational polyneuropathies of toxico-allergic origin] Krasheninnikova ON. **Gig Tr Prof Zabol** 1989;(4):54–5 **(Rus)**

INJURIES

Brachial artery puncture: the need for caution. Berger A. **J Fam Pract** 1989 Jun;28(6):720–1

[Surgical injury of the peripheral nerve: a report of 81 cases] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):543–4, 573–4 (Eng. Abstr.) **(Chi)**

[Analysis of 28 cases of peripheral nerve injury resulted from wooden splint and plaster] Zhu SX. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):344–5, 382 (Eng. Abstr.) **(Chi)**

[Dynamics of restoration of the motor and sensory functions of the upper extremity after suturing] Kankava DM, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):26–8 (Eng. Abstr.) **(Rus)**

[Neurovascular autoregulation of the regeneration of nerves in the upper extremities] Krupatkin AI. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):35–9 (Eng. Abstr.) **(Rus)**

PATHOLOGY

[Fibrous hyperplasia of the flexor tendon sheaths as a main cause of carpal tunnel syndrome] Paschmeyer HD. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):74–8 (Eng. Abstr.) **(Ger)**

[Echotomographic diagnosis of a case of schwannoma of the median nerve] Tabasso MD. **Radiol Med (Torino)** 1989 May;77(5):569–72 **(Ita)**

PHYSIOLOGY

The effect of tracheal intubation and surgical stimulation on median nerve somatosensory evoked potentials during anaesthesia. Sebel PS, et al. **Anaesthesia** 1988 Oct; 43(10):857–60

The premotor potential. Dumitru D, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):537–40

Biomagnetic functional localization of a peripheral nerve in man. Trahms L, et al. **Biophys J** 1989 Jun;55(6):1145–53

Somatosensory evoked potentials by median nerve stimulation in rabbits. I. Source localization by cortical and stereotaxic recordings. Romani A, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):47–54

Somatosensory evoked potentials by median nerve stimulation in rabbits. II. Normative data of surface recordings. Romani A, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):55–60

Median nerve evoked potentials during propofol anaesthesia. Scheepstra GL, et al. **Br J Anaesth** 1989 Jan;62(1):92–4

Effects of thiopentone on median nerve somatosensory evoked potentials. Sloan TB, et al. **Br J Anaesth** 1989 Jul; 63(1):51–5

The effects of sleep on median nerve short latency somatosensory evoked potentials. Addy RO, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar-Apr; 74(2):105–11

Multichannel detection of magnetic compound action fields of median and ulnar nerves. Hari R, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):277–80

An analysis of peripheral motor nerve stimulation in humans using the magnetic coil. Maccabee PJ, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec;

70(6):524–33
Comparison of the distal motor latency of the first dorsal interosseous with abductor pollicis brevis. Report of 200 cases. Seror P. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct;28(6):341–5
Where is the ideal reference site for recording the thenar compound muscle action potential. Wee AS, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):249–52
Interference of vibrations with input transmission in dorsal horn and cuneate nucleus in man: a study of somatosensory evoked potentials (SEPs) to electrical stimulation of median nerve and fingers. Ibañez V, et al. **Exp Brain Res** 1989; 75(3):599–610
Do muscle afferents contribute to the cervical response evoked by electrical stimulation of the median nerve in man? Reni L, et al. **Exp Brain Res** 1988;72(2):305–15
Short latency somatosensory evoked responses to median nerve stimulation in healthy humans: electric and magnetic recordings. Rossini PM, et al. **Int J Neurosci** 1989 May; 46(1–2):67–76
The non–linear relationship between nerve conduction velocity and skin temperature. Todnem K, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):497–501
Neurological complications of dynamic reduction of Colles' fractures without anesthesia compared with traditional manipulation after local infiltration anesthesia. Kongsholm J, et al. **J Orthop Trauma** 1987;1(1):43–7
Evidence for non–monosynaptic Ia excitation of human wrist flexor motoneurones, possibly via propriospinal neurones. Malmgren K, et al. **J Physiol (Lond)** 1988 Nov;405:747–64
Inhibition of neurones transmitting non–monosynaptic Ia excitation to human wrist flexor motoneurones. Malmgren K, et al. **J Physiol (Lond)** 1988 Nov;405:765–83
Topographical displays of somatosensory evoked potentials. Nakashima K, et al. **Jpn J Psychiatry Neurol** 1988 Jun; 42(2):297–306
Effects of different sensory inputs on the median–derived somatosensory evoked potential. Reisin RC, et al. **Muscle Nerve** 1989 Jul;12(7):598–603 (31 ref.)
Longitudinal conduction studies in hereditary motor and sensory neuropathy type 1. Roy EP 3d, et al. **Muscle Nerve** 1989 Jan;12(1):52–5
The anatomic and physiologic bases of median nerve somatosensory evoked potentials. Yamada T. **Neurol Clin** 1988 Nov;6(4):705–33 (93 ref.)
Effects of thiopentone and etomidate on median nerve somatosensory evoked responses. Russ W, et al. **Neurol Res** 1989 Mar;11(1):51–6
Simultaneous motor output and sensory input: cortical interference site resolved in humans via neuromagnetic measurements. Rossini PM, et al. **Neurosci Lett** 1989 Jan 30;96(3):300–5
Roth technique—a new approach for measuring sensory neural conduction in the median and ulnar nerves: suggestion from the field. Greathouse DG, et al. **Phys Ther** 1989 Sep;69(9):777–9
Neuromuscular recovery using calcium protease inhibition after median nerve repair in primates. Badalamente MA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5983–7
[The effects of dorsal median hypothalamus efferent impulses and median nervous afferent impulses on the left ventricular transmural blood flow] Cui LQ, et al. **Chen Tzu Yen Chiu** 1988;13(4):329–33 (Eng. Abstr.) **(Chi)**
[Somatosensory evoked potentials after depletion of monoamines by reserpine] Li WB, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):100–4 (Eng. Abstr.) **(Chi)**
[The cervical somatosensory evoked potential and its relation to F–wave activity] Strenge H. **EEG EMG** 1989 Jun; 20(2):99–105 (Eng. Abstr.) **(Ger)**
[Effect of a static 0.2 T magnetic field on the EEG power spectrum in periodic median nerve stimulation] von Klitzing L, et al. **EEG EMG** 1989 Mar;20(1):50–3 (Eng. Abstr.) **(Ger)**
[Can skin texture serve as a guide in the course and variation of the median nerve?] Schwarz M. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):344–6 (Eng. Abstr.) **(Ger)**
[Anatomo–functional considerations on the pathways generated by cortical somatosensory evoked potentials of the median nerve. Study in 6 hemispherectomized patients] Villanueva J, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec; 51(6):316–23 (Eng. Abstr.) **(Spa)**
[Digital neural conduction] Paradiso G. **Medicina (B Aires)** 1987;47(5):484–8 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Median and radial sensory latencies to digit I as compared with other screening tests in carpal tunnel syndrome. Cassvan A, et al. **Am J Phys Med Rehabil** 1988 Oct; 67(5):221–4
Correlation studies of velocity, amplitude, and duration in median nerves. Joynt RL. **Arch Phys Med Rehabil** 1989 Jun;70(6):477–81
Risk factors for median mononeuropathy of the wrist in postpoliomyelitis patients. Werner R, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):464–7
Short–latency somatosensory evoked potentials following median nerve stimulation in Down's syndrome. Kakigi R. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr; 74(2):88–94
Localized nerve damage recorded intraoperatively in carpal tunnel syndrome. Luchetti R, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):379–83
Anterior interosseous nerve syndrome secondary to forearm thrombo–phlebitis [letter] Pavesi G, et al. **Ital J Neurol Sci** 1989 Apr;10(2):221
Assessment of sensory nerve conduction in carpal tunnel syndrome before, during and after operation. Luchetti R, et al. **J Hand Surg [Br]** 1988 Nov;13(4):386–90
Hand muscle reflexes following electrical stimulation in choreatic movement disorders. Deuschl G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):755–62
Human cortical potentials evoked by stimulation of the median nerve. II. Cytoarchitectonic areas generating long–latency activity. Allison T, et al. **J Neurophysiol** 1989 Sep;62(3):711–22
Human cortical potentials evoked by stimulation of the median nerve. II. Cytoarchitectonic areas generating short–latency activity. Allison T, et al. **J Neurophysiol** 1989 Sep;62(3):694–710
Relationship of age and sex to sensory conduction of the median nerve at the carpal tunnel and association of slowed conduction with symptoms. Nathan PA, et al. **Muscle Nerve** 1988 Nov;11(11):1149–53
[Median nerve SEP and prognosis in neurological intensive medicine—a study of 255 patients] Haupt WF, et al. **EEG EMG** 1988 Sep;19(3):148–51 (Eng. Abstr.) **(Ger)**
[Pronator teres syndrome caused by neurinoma of the median nerve] Berlit P. **Nervenarzt** 1989 Mar;60(3):184–6 **(Ger)**
[Somatosensory evoked potentials following dermatome stimulation in comparison with nerve root stimulation in the diagnosis of root lesions] Simić A. **Nervenarzt** 1988 Nov;59(11):672–4 **(Ger)**
[Velocity of nerve conduction in children and adolescents with type I diabetes mellitus: clinical, metabolic and immunologic correlations] Cardella F, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):33–6 (Eng. Abstr.) **(Ita)**
[Short latency somatosensory evoked potentials following median nerve stimulation in children] Tayama M, et al. **No To Hattatsu** 1989 Mar;21(2):128–37 (Eng. Abstr.) **(Jpn)**
[Effect of low–intensity electromagnetic irradiation of the millimetric range on the bioelectric activity of peripheral and central neural structures and systemic hemodynamics in patients with hypertension] Gaponiuk PIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):14–8 (Eng. Abstr.) **(Rus)**

SURGERY

Fascicular tubulization: a comparison of experimental nerve repair techniques in the cat. Rosen JM, et al. **Ann Plast Surg** 1989 Jun;22(6):467–78
Intraneural lipofibroma of the median nerve. Houpt P, et al. **J Hand Surg [Am]** 1989 Jul;14(4):706–9
Surgical release of the median nerve under local anaesthesia for carpal tunnel syndrome. Altissimi M, et al. **J Hand Surg [Br]** 1988 Nov;13(4):395–6
Treatment of skin and median nerve defects with peroneal neurofasciocutaneous flap. Fukui A, et al. **Microsurgery** 1989;10(2):87–92
Interpretation of cutaneous pressure threshold (Semmes–Weinstein monofilament measurement) following median nerve repair and sensory reeducation in the adult. Imai H, et al. **Microsurgery** 1989;10(2):142–4
Comparison of regeneration across a vascularized versus conventional nerve graft: case report. Mackinnon SE, et al. **Microsurgery** 1988;9(4):226–34
Complications from silicon–polymer intubulation of nerves. Merle M, et al. **Microsurgery** 1989;10(2):130–3
Results of median nerve repair in children. Tajima T, et al. **Microsurgery** 1989;10(2):145–6
Management of synovial sarcoma of the median nerve at the elbow. Rinehart GC, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):528–32
[Compression of the median nerve by chondrosarcoma of the hand] Steffens K, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):220–2 (Eng. Abstr.) **(Ger)**
[Evaluation of the results of secondary reconstruction of the median and ulnar nerves by nerve transplantation] Pisarek W, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1463–6 (Eng. Abstr.) **(Pol)**
[Surgical treatment of tunnel lesions of the nerves of the arm] Dumbere RT, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug; (4):53–6 (51 ref.) **(Rus)**

MEDIASTINAL CYST

[Neurenteric cyst of the mediastinum] Schlolaut KH, et al. **ROFO** 1988 Dec;149(6):660–3 **(Ger)**
[Mediastinal pancreas pseudocyst] Gaa J, et al. **Rontgenblatter** 1988 Oct;41(10):406–10 (36 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

CEA and CA 19–9 in benign pulmonary or mediastinal cystic lesions. Uyama T, et al. **J Surg Oncol** 1989 Jun;41(2):103–8

COMPLICATIONS

Extralobar pulmonary sequestration and mediastinal bronchogenic cyst. **Black TL, et al. J Pediatr Surg** 1988 Nov;23(11):999–1001
Respiratory complications in cervical thymic cysts. Wagner CW, et al. **J Pediatr Surg** 1988 Jul;23(7):657–60
[A case of a lymphoreticular thymoma arising in the wall of a true cyst] Kharitonov VA, et al. **Klin Khir** 1988;(12):55 **(Rus)**
[Rare combination of granulomatous thymoma and multiple dysontogenetic cysts of the thymus gland] Kharitonov VA, et al. **Klin Med (Mosk)** 1989 Apr;67(4):122–3 **(Rus)**
[Pancreato–pleural fistula as a complication of post–traumatic pancreatic mediastinal pseudocyst] Matejiček E, et al. **Rozhl Chir** 1989 Apr;68(4):240–4 (Eng. Abstr.) **(Slo)**

CONGENITAL

Pseudopericardial cyst in a neonate—a case report and review of the literature. Gupta R, et al. **Z Kinderchir** 1989 Jun;44(3):162–3 (11 ref.)
[A coelomic cyst of the pericardium simulating a tuberculoma of the lung] Volkova KI, et al. **Probl Tuberk** 1988;(10):65–7 **(Rus)**

DIAGNOSIS

Mediastinal bronchogenic cyst: prenatal sonographic diagnosis. Young G, et al. **AJR** 1989 Jan;152(1):125–7
Primary anterior mediastinal tumours: "an investigational algorithm". Fradet G, et al. **Can J Surg** 1989 Mar; 32(2):139–42
A pleuropericardial cyst in an unusual location: the value of magnetic resonance. Boisserie–Lacroix M, et al. **Comput Med Imaging Graph** 1988 Sep–Oct;12(5):277–80
Computed tomography and magnetic resonance imaging diagnosis of thymic cyst. Merine DS, et al. **J Comput Tomogr** 1988 Jul;12(3):220–2
Unusual pericardial cyst location. Value of two–dimensional echocardiography in diagnosis. Meloni L, et al. **J Ultrasound Med** 1988 Sep;7(9):519–22
Computed tomography and magnetic resonance imaging of the pericardium. Olson MC, et al. **Radiographics** 1989 Jul; 9(4):633–49
[Cervical mass in children. Apropos of a case of cervical thymic cyst] Ugazzi M, et al. **Ann Pediatr (Paris)** 1988 Dec; 35(10):747–51 (Eng. Abstr.) **(Fre)**
[Thoracoscopic diagnosis of various types of intrathoracic tumors and cysts] Get'man VG, et al. **Grudn Khir** 1988 Nov–Dec;(6):52–7 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Cysts and primary tumors of the mediastinum in childhood] Mineo TC, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1161–7 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Apparent association between thymic cysts and prior thoracotomy. Jaramillo D, et al. **Radiology** 1989 Jul; 172(1):207–9
[A case with polyarteritis nodosa associated with acute renal failure and pericardial cyst] Yoshida A, et al. **Ryumachi** 1989 Apr;29(2):118–25 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Cervical thymic cysts. Lyons TJ, et al. **J Pediatr Surg** 1989 Mar;24(3):241–3
Percutaneous fine needle aspiration in the diagnosis and management of mediastinal cysts in adults. Nath PH, et al. **South Med J** 1988 Oct;81(10):1225–8
Cervical thymic cyst: case report. Haislip CE. **W V Med J** 1988 Oct;84(10):455–6

RADIOGRAPHY

Symptomatic mediastinal thymic cysts. Davis JW, et al. **Ann Thorac Surg** 1988 Dec;46(6):693–4 (18 ref.)
CT diagnosis of primary mediastinal hydatid cyst rupture into the aorta: a case report. Marti–Bonmati L, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):296–9
Air–filled, multilocular, bronchopulmonary foregut duplication cyst of the mediastinum. Unusual computed tomography appearance. Woodring JH, et al. **Clin Imaging** 1989 Mar;13(1):44–7
Mediastinal tumours/cysts—a clinico radiological study. Chauhan MS, et al. **J Assoc Physicians India** 1988 Jul; 36(7):421–3
Benign mediastinal cysts: pointed appearance on CT. Demos TC, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):132–3
Pericardial cyst. A rare mass abutting the aorta. Williamson BR, et al. **J Comput Tomogr** 1988 Oct;12(4):264–6
[CT diagnosis of the postoperative mediastinal lymphocele] Gamroth A, et al. **ROFO** 1989 Mar;150(3):356–7 **(Ger)**
[Evaluation of diagnostic methods for studying mediastinal tumors and cysts] Florikian AK, et al. **Klin Khir** 1988; (10):28–30 (Eng. Abstr.) **(Rus)**

SURGERY

Operative strategies in the management of mediastinal pancreatic pseudocyst. Beauchamp RD, et al. **Surgery** 1989 Sep;106(3):567–70

Mediastinal thymic cyst. Van Schil P, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):159–60

[Cervical thymic cyst in childhood] Rösslein R, et al. **Z Kinderchir** 1988 Oct;43(5):334–5 (Eng. Abstr.) **(Ger)**

[Giant mediastinal pancreatic pseudocyst removed by thoracotomy] Kecskés L, et al. **Orv Hetil** 1988 Sep 18; 129(38):2033–5 (Eng. Abstr.) **(Hun)**

[Endodermal and coelomic mediastinal cysts] Bortolani EM, et al. **Minerva Chir** 1989 Apr 30;44(8):1275–8 (Eng. Abstr.) **(Ita)**

[A surgical case of bronchogenic cyst existing continuously in the intrapulmonary and posterior mediastinal regions] Nishioka E, et al. **Kyobu Geka** 1988 Dec;41(13):1082–4 (Eng. Abstr.) **(Jpn)**

[Thirty one cases of surgery of mediastinal cysts involving three cases of pericardial diverticulum] Komoda T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2465–72 (32 ref.) (Eng. Abstr.) **(Jpn)**

THERAPY

Foregut cyst of the mediastinum: fluid re-accumulation after transbronchial needle aspiration. van Beers B, et al. **Br J Radiol** 1989 Jun;62(738):558–60

MEDIASTINAL DISEASES

[Plasma cell granuloma of the lung and mediastinum in a ten year old girl] Schuster A, et al. **Monatsschr Kinderheilkd** 1988 Nov;136(11):762–5 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Mediastinal haemorrhage: a complication of thrombolytic treatment. Suddes KP, et al. **BMJ** 1988 Aug 20–27; 297(6647):527

COMPLICATIONS

Combined retroperitoneal and mediastinal fibrosis associated with variceal haemorrhage. Bullimore DW, et al. **Br J Clin Pract** 1987 Dec;41(12):1064–5

Filarial mediastinal lymphadenitis. Another cause of superior vena caval syndrome. Seetharaman ML, et al. **Chest** 1988 Oct;94(4):871–2

Fatal pneumonia in a patient with a superior mediastinal mass. Boersma WG, et al. **Eur Respir J** 1989 Jul;2(7):688–9

[A case of mediastinal leiomyoma associated with cystic change and calcification—a review of 7 cases in Japanese literatures] Niwa H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2136–9 (15 ref.) (Eng. Abstr.) **(Jpn)**

[A case of bronchogenic cyst in the superior mediastinum with Horner's syndrome] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1229–32 **(Jpn)**

DIAGNOSIS

Aortic rupture or mediastinal hematoma? [letter] Stark P. **AJR Am J Roentgenol** 1989 Jul;153(1):195

Ultrasound in chest disease: 2. Lung and mediastinum. Fataar S. **Australas Radiol** 1988 Aug;32(3):302–8

Mediastinal exploration by mediastinoscopy and mediastinotomy. Goldstraw P. **Br J Dis Chest** 1988 Apr; 82(2):111–20

Primary mediastinal tuberculous abscess: demonstration with MR. Gupta RK, et al. **Pediatr Radiol** 1989;19(5):330–2

[Diagnosis and surgical treatment of mediastinal caseoma] Dakov I, et al. **Khirurgiia (Sofiia)** 1988;41(6):16–9 (Eng. Abstr.) **(Bul)**

[Value and current role of anterior mediastinotomy in the diagnosis of mediastinal diseases. Apropos of a series of 100 cases] Martigne C, et al. **Ann Chir** 1989;43(2):171–3 (Eng. Abstr.) **(Fre)**

[Aids in the diagnosis of sarcoidosis in 1988] Battesti JP. **Rev Med Interne** 1988 Sep–Oct;9(4):351–3 **(Fre)**

[Mediastinal widening in thoracic lordosis] Fischer U, et al. **ROFO** 1989 May;150(5):617–8 **(Ger)**

[Intrathoracic goiter in the posterior mediastinum] Sciuk J, et al. **Rontgenblatter** 1988 Dec;41(12):512–5 (Eng. Abstr.) **(Ger)**

[Analysis of mediastinal lymphadenopathy in sarcoidosis with transesophageal ultrasonic endoscopy; influences on cardiovascular system] Dambara T, et al. **Rinsho Hoshasen** 1989 Jan;34(1):137–46 (Eng. Abstr.) **(Jpn)**

[Segmental bronchoalveolar lavage with a flexible probe via a rigid bronchoscope in the differential diagnosis of mediastinopulmonary sarcoidosis] Faina AG. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):257–60 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

A retrospective comparison of two drug regimens RHE2/RH10 and RHZ2/RH10 in the treatment of tuberculous mediastinal lymphadenopathy. Ormerod LP. **Br J Dis Chest** 1988 Jul;82(3):274–81

Fluconazole and candidosis [letter] Kirk AJ, et al. **Lancet** 1989 Feb 11;1(8633):339

ETIOLOGY

Radiological case of the month. Intrathoracic stomach with volvulus. Bonadio WA, et al. **Am J Dis Child** 1989 Apr; 143(4):503–4

Spontaneous hematoma of a parathyroid adenoma. Hotes LS, et al. **Am J Med Sci** 1989 May;297(5):331–3 (17 ref.)

Blunt chest trauma. Extrapericardial cardiac tamponade by a mediastinal hematoma. Coleman GM, et al. **Chest** 1989 Apr;95(4):922–4

Horner's syndrome secondary to hydromediastinum. A complication of extravascular migration of a central venous catheter. Milam MG, et al. **Chest** 1988 Nov;94(5):1093–4

Mediastinal hemorrhage after treatment of thyrotoxicosis using radioiodine. Piers DA, et al. **Clin Nucl Med** 1988 Aug;13(8):574–6

Delayed hydromediastinum after multilumen central venous catheterization. Wehmann TW, et al. **J Am Osteopath Assoc** 1988 Sep;88(9):1118–20, 1125

The risk of abscess from sternoclavicular septic arthritis [see comments] Wohlgethan JR, et al. **J Rheumatol** 1988 Aug; 15(8):1302–6 (46 ref.). **Comment in:** J Rheumatol 1989 Mar;16(3):413–4

[The limitations of plain chest radiography and the role of computed tomography in diagnosis of traumatic mediastinal hematoma] Nakajima Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):961–71 (Eng. Abstr.) **(Jpn)**

[Anterior mediastinal hematoma secondary to catheterization of the jugular vein (letter)] Vendrell J, et al. **Rev Clin Esp** 1988 Apr;182(7):391–2 **(Spa)**

PARASITOLOGY

[An unusual case of mediastinal lymphatic filariasis with pulmonary artery stenosis] Tormes MB, et al. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):33–5 (Eng. Abstr.) **(Por)**

PATHOLOGY

Castleman's disease—an unusual cause of mediastinal mass. Narang R, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):154–60

Combined sarcoidosis and disseminated visceral giant cell vasculitis. Marcussen N, et al. **Pathol Res Pract** 1989 Mar; 184(3):325–30

[Needle biopsy of thoracic lesions (a clinical analysis of 410 cases)] Cui ZH. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):338–40, 385 (Eng. Abstr.) **(Chi)**

RADIOGRAPHY

Superior mediastinal widening from spine fractures mimicking aortic rupture on chest radiographs. Dennis LN, et al. **AJR** 1989 Jan;152(1):27–30

Low-attenuation mediastinal masses on CT. Glazer HS, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1173–7

Mediastinal hemorrhage complicating thrombolytic treatment [letter] **BMJ** 1988 Oct 22;297(6655):1042

Adult tuberculous mediastinal lymphadentitis in Saudi Arabia. Maglad SA, et al. **East Afr Med J** 1986 Dec; 63(12):818–21

Aneurysmal bone cyst presenting as a posterior mediastinal mass. Dusaj IS, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):269–71

Hyperlucent lung due to a calcium-containing bronchogenic cyst. Goncette L, et al. **J Belge Radiol** 1988;71(6):728–9

Computed tomography of mediastinal hematoma secondary to unusual esophageal laceration: a Boerhaave variant. Pezzulli FA, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):129–31

Tuberculous mediastinal lymphadenitis in an adult patient. Shiota Y, et al. **Jpn J Med** 1989 May–Jun;28(3):382–4

Mediastinal histoplasmosis granuloma: evaluation with CT. Landay MJ, et al. **Radiology** 1989 Sep;172(3):657–9

[The significance of digital subtraction angiography in diseases of the lungs and mediastinum] Bohutová J, et al. **Cesk Radiol** 1989 Mar;43(2):73–83 (Eng. Abstr.) **(Cze)**

[Aorto-pulmonary window: normal and pathological x-ray computed tomographic aspects] Hubert C, et al. **Ann Radiol (Paris)** 1988;31(3):163–72 (Eng. Abstr.) **(Fre)**

SURGERY

[A case of spontaneous cervico-mediastinal hematoma] Horio H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):2145–51 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Thirty one cases of surgery of mediastinal cysts involving three cases of pericardial diverticulum] Komoda T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2465–72 (32 ref.) (Eng. Abstr.) **(Jpn)**

[Suppurating echinococcosis of the posterosuperior mediastinum in a child] Kul'chinskiĭ PE, et al. **Grudn Khir** 1988 Sep–Oct;(5):93–5 **(Rus)**

[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):68–72 (Eng. Abstr.) **(Rus)**

[Prevention of suppurative complications after a trans-sternal approach to the organs of the anterior mediastinum] Chupryna VV, et al. **Vestn Khir** 1988 Sep;141(9):52–3 **(Rus)**

THERAPY

Percutaneous drainage of chest abscesses in children. Ball WS Jr, et al. **Radiology** 1989 May;171(2):431–4

VETERINARY

Application of ultrasound in the diagnosis and treatment of empyema and mediastinal abscess in a dog [letter] Osler GE, et al. **S Afr Med J** 1989 Aug 19;76(4):174–5

MEDIASTINAL EMPHYSEMA

CHEMICALLY INDUCED

[Complications associated with cocaine consumption (letter)] Rello J, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):435 **(Spa)**

COMPLICATIONS

Pneumomediastinum during diabetic ketoacidosis [letter] Matz R. **Diabetic Med** 1989 Jul;6(5):460–1

Pneumomediastinum in diabetic ketoacidosis. Watson JP, et al. **Diabetic Med** 1989 Mar;6(2):173–4 (20 ref.)

Subcutaneous emphysema and pneumomediastinum complicating labor in a twin pregnancy. Sparacino ML, et al. **J Am Osteopath Assoc** 1989 Feb;89(2):185–7

[An autopsy case of bronchial asthma complicated with severe pneumomediastinum, extensive subcutaneous emphysema pneumothorax and pneumoperitoneum] Aoyama S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May;26(5):554–8 (Eng. Abstr.) **(Jpn)**

[Mediastinal emphysema complicated by subcutaneous emphysema in status asthmaticus] Markiewicz R. **Wiad Lek** 1988 May 1;41(9):572–5 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Primary (spontaneous) pneumomediastinum presenting as abdominal pain after swimming [letter] Grant T. **Ann Emerg Med** 1988 Dec;17(12):1368–9

Mediastinal emphysema simulating aortic rupture. Barrett NK, et al. **J R Soc Med** 1988 Nov;81(11):670–1

Traumatic tension pneumomediastinum mimicking cardiac tamponade. Beg MH, et al. **Thorax** 1988 Jul;43(7):576–7

ETIOLOGY

Pneumomediastinum not associated with lesion of mediastinal organs. Capizzi FD, et al. **Acta Chir Scand** 1989 Mar; 155(3):159–61

Mediastinal and subcutaneous cervical emphysema caused by perforating sigmoid cancer. Case report. Krasheninnikoff M, et al. **Acta Chir Scand** 1988 Sep; 154(9):541–2

Pneumomediastinum due to a sucking wound of the knee [letter] Hamilton S, et al. **AJR Am J Roentgenol** 1989 May; 152(5):1131–2

Pneumomediastinum complicating Pneumocystis carinii pneumonia in a patient with AIDS. Villalona-Calero MA, et al. **Am J Med Sci** 1989 May;297(5):328–30

Postoperative mediastinal emphysema: blame the anaesthetist? [letter] Myles PS. **Anaesthesia** 1989 Jul; 44(7):615

Tension pneumothorax during dental anesthesia. Samuel J, et al. **Anesth Analg** 1988 Dec;67(12):1187–8

Mechanisms of pneumothorax following tracheal intubation. Berg LF, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct; 97(5 Pt 1):500–5

Mediastinal emphysema in marrow transplant recipients. Hill G, et al. **Bone Marrow Transplant** 1987 Oct;2(3):315–20

Pneumomediastinum during general anaesthesia: a case report. Bembridge JL, et al. **Can J Anaesth** 1989 Jan; 36(1):75–7

An unusual cause of subcutaneous emphysema, pneumomediastinum and pneumoperitoneum. Boersma WG, et al. **Eur Respir J** 1988 Dec;1(10):969–71

Traumatic emphysema of the head, neck, and mediastinum associated with maxillofacial trauma: case report and review. Henry CH, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):876–82 (47 ref.)

Pneumomediastinum and cervical emphysema subsequent to mandibular injury associated with a flare pistol shot. Shuker S, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):741–4

Complications of the Heimlich maneuver. Fink JA, et al. **J Pediatr Surg** 1989 May;24(5):486–7

Recurrent pneumomediastinum in adult dermatomyositis. Cicuttini FM, et al. **J Rheumatol** 1989 Mar;16(3):384–6

An unusual cause of massive non-surgical pneumoperitoneum: case report. Andreone P, et al. **J Trauma** 1989 Sep;29(9):1286–8

Pneumomediastinum due to venturi system during microlaryngoscopy. Badran I, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):561–4

Pneumomediastinum induced by inhalation of alkaloidal cocaine. Palat D, et al. **N Y State J Med** 1988 Aug; 88(8):438–9

Buttocks blow barotrauma and pneumomediastinum [letter] Tamarin FM, et al. **N Y State J Med** 1989 Jun;89(6):361

Pneumomediastinum after facial trauma. Carmichael F, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):540–2

Pneumomediastinum secondary to a mandible fracture. Haberkamp TJ, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):104–7

Spontaneous subcutaneous and mediastinal emphysema—a complication of lung function tests in Pneumocystis carinii pneumonia. Ramakrishnan S, et al. **Postgrad Med J** 1988

Dec;64(758):960–2
Pneumomediastinum associated with orbital fracture. Case report. Andersen C, et al.
Scand J Plast Reconstr Surg Hand Surg 1988;22(3):249–50
[Subcutaneous and mediastinal emphysema related to facial injuries] Andersen C. **Ugeskr Laeger** 1989 May 8; 151(19):1168–70 (30 ref.) (Eng. Abstr.) **(Dan)**
[Pneumomediastinum: complications due to the use of a jet of compressed air] Kern C, et al. **Can J Anaesth** 1989 Jan; 36(1):78–80 (Eng. Abstr.) **(Fre)**
[Soft-tissue cervicofacial emphysema and pneumomediastinum caused by self injury] Yattara-Baratti CL, et al. **Schweiz Med Wochenschr** 1988 Aug 9; 118(31–32):1135–7 (Eng. Abstr.) **(Ger)**
[A case of summer-type hypersensitivity pneumonitis with mediastinal and subcutaneous emphysema] Fujiwara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1102–6 (Eng. Abstr.) **(Jpn)**
[Mediastinal and subcutaneous emphysema as complications of bronchial asthma in a 14-year-old girl] Kardas-Sobantka D. **Pediatr Pol** 1988 Jun;63(6):371–3 **(Pol)**

PHYSIOPATHOLOGY

Pneumomediastinum or auto-PEEP? [letter] Tse CY. **Chest** 1989 Feb;95(2):485–6

RADIOGRAPHY

Radiological case of the month. Pneumomediastinum and subcutaneous emphysema caused by diabetic hyperpnea. Bullaboy CA, et al. **Am J Dis Child** 1989 Jan;143(1):93–4
Spontaneous pneumothorax and pneumomediastinum in metastatic lung disease. Sharma S, et al.
Indian J Chest Dis Allied Sci 1988 Apr–Jun;30(2):125–32 (15 ref.)
CT demonstration of spinal epidural emphysema complicating bronchial asthma and violent coughing. Tsuji H, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):38–9
[Pneumomediastinum] Johansen TE, et al.
Tidsskr Nor Laegeforen 1988 Aug 30;108(24):1914–5 (Eng. Abstr.) **(Nor)**

THERAPY

New pigtail catheter for pleural drainage in pediatric patients. Lawless S, et al. **Crit Care Med** 1989 Feb;17(2):173–5

MEDIASTINAL NEOPLASMS

Giant cystic hygroma of the posterior mediastinum. Curley SA, et al. **J Pediatr Surg** 1989 Apr;24(4):398–400
Ectopic thyroid in the retroesophageal superior mediastinum. Arriaga MA, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):338–40
[Tumors of the mediastinum in children] Gruner Ml, et al. **Ann Pediatr (Paris)** 1988 Nov;35(9):637–9 **(Fre)**
[Primary malignant dysembryoma of the mediastinum] Lemarie E, et al. **Rev Mal Respir** 1989;6(2):95–108 (102 ref.) (Eng. Abstr.) **(Fre)**
[Mediastinal thymoma (presentation of 2 cases)] Tirone G, et al. **Chir Ital** 1988 Apr;40(2):159–69 (22 ref.) (Eng. Abstr.) **(Ita)**
[Extragonadal tumors. Considerations on extragonadal germinal tumors and a description of 1 case] Mencoboni M, et al. **G Clin Med** 1989 Mar;70(3):187–93 (29 ref.) (Eng. Abstr.) **(Ita)**
[Mediastinal tumors] Masaoka A. **Gan No Rinsho** 1989 Jan; Spec No:139–50 **(Jpn)**
[Lymphangioma of the mediastinum—a case report] Abe Y, et al. **Kyobu Geka** 1988 Dec;41(13):1085–9 (19 ref.) (Eng. Abstr.) **(Jpn)**
[A case of mediastinal cystic lymphangioma—case reports and review of the literature in Japan] Date H, et al.
Kyobu Geka 1989 Jun;42(6):469–73 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Six cases of intrathoracic Castleman lymphoma] Nakagawa K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1195–200 (Eng. Abstr.) **(Jpn)**
[A case of primary myelolipoma of the posterior mediastinum] Suzuki T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Dec; 26(12):1318–22 (Eng. Abstr.) **(Jpn)**

ANALYSIS

CEA and CA 19-9 in benign pulmonary or mediastinal cystic lesions. Uyama T, et al. **J Surg Oncol** 1989 Jun;41(2):103–8

BLOOD

[The role of large granular lymphocytes of the blood in the differential diagnosis of mediastinal neoplasms] Kindzel'skiĭ LP, et al. **Klin Khir** 1989;(5):46–7 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Mediastinal lipomatosis: a complication of high dose steroid therapy in children. Shukla LW, et al. **Pediatr Radiol** 1988; 19(1):57–8

COMPLICATIONS

Posterior mediastinal lymphangioma presenting with thoracic inlet compression. Scholefield JH, et al.
Br J Hosp Med 1989 Feb;41(2):183–4
Thymoma in a case of linear scleroderma [letter] Duró JC, et al. **Br J Rheumatol** 1989 Apr;28(2):178–9
Congenital central hypoventilation syndrome associated with multiple ganglioneuromas. Swaminathan S, et al. **Chest** 1989 Aug;96(2):423–4
Pain referred to teeth as the sole discomfort in undiagnosed mediastinal lymphoma: report of case. Kant KS.
J Am Dent Assoc 1989 May;118(5):587–8
Horner's syndrome due to superior-mediastinal schwannoma [letter] Mathew BG, et al.
J Neurol Neurosurg Psychiatry 1988 Nov;51(11):1460–1
Massive intraoperative atelectasis secondary to untreated mediastinal Hodgkin's disease: report of the hazard and review of the literature. Merrick HW, et al.
J Surg Oncol 1989 May;41(1):60–4 (12 ref.)
Mediastinal mass and tracheal obstruction during general anesthesia [letter] Curtis JL, et al. **Mayo Clin Proc** 1989 Apr;64(4):475–6
Mediastinal mass and tracheal obstruction during general anesthesia. Prakash UB, et al. **Mayo Clin Proc** 1988 Oct; 63(10):1004–11
The fifth hyperfunctioning parathyroid gland in end-stage renal disease [letter] Nakatsuka K, et al. **Nephron** 1989; 51(1):140–2
Intrauterine mediastinal teratoma associated with non-immune hydrops fetalis. Weinraub Z, et al.
Prenat Diagn 1989 May;9(5):369–72
Neck and thorax venous aneurysm: association with cystic hygroma. Joseph AE, et al. **Radiology** 1989 Jan;170(1 Pt 1):109–12
Malignant lymphoma of the posterior mediastinum with transverse myelopathy. Ando K, et al.
Thorac Cardiovasc Surg 1989 Feb;37(1):58–60
[Acute pulmonary edema following airway obstruction and cardiac tamponade related to mediastinal tumor] Rubio Pascual P, et al. **Ann Fr Anesth Reanim** 1988;7(6):506–8 (Eng. Abstr.) **(Fre)**
[Mediastinal teratoma disclosed by pericarditis] Long P, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):150–1 (6 ref.) **(Fre)**
[Pressure-sensitive skin nodules, skin spots, dyspnea (clinical conference)] Steiner A, et al.
Schweiz Rundsch Med Prax 1988 May 3;77(18):496–8 (Eng. Abstr.) **(Ger)**
[Peripheral pulmonary stenosis: initial manifestation of a malignant teratoma] Busch U, et al. **Z Kardiol** 1988 Sep; 77(9):613–6 (Eng. Abstr.) **(Ger)**

CONGENITAL

[Intrapericardial teratoma] Weber G, et al. **Pathologe** 1988 Sep;9(5):302–4 **(Ger)**

DIAGNOSIS

MR imaging of secondary cardiac and paracardiac lesions. Barakos JA, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):47–50
Presbyesophagus masquerading as an extracardiac mass on echocardiography. Hoit BD, et al. **Am Heart J** 1989 Aug; 118(2):419–21
Ultrasonically guided needle biopsy in the diagnosis of mediastinal masses. Saito T, et al. **Am Rev Respir Dis** 1988 Sep;138(3):679–84
Substernal goiter versus intrathoracic aberrant thyroid: a critical difference. Hall TS, et al. **Ann Thorac Surg** 1988 Dec;46(6):684–5
Right ventricular outflow tract obstruction due to extracardiac tumors. A report of three cases diagnosed and followed up by echocardiographic studies. Israeli A, et al.
Arch Intern Med 1989 Sep;149(9):2105–6
Primary anterior mediastinal tumours: "an investigational algorithm". Fradet G, et al. **Can J Surg** 1989 Mar; 32(2):139–42
High signal intensity lesions of the chest in MR imaging. Barakos JA, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):797–802
MR imaging of intrathoracic extramedullary hematopoiesis. Savader SJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):878–80
The value of mediastinoscopy in preoperative staging of bronchogenic carcinoma. Van Schil PE, et al.
J Thorac Cardiovasc Surg 1989 Feb;97(2):240–4
Lactate dehydrogenase isoenzyme-1 in the mediastinal yolk sac tumor. Ito M, et al. **Jpn J Surg** 1988 Jul;18(4):419–22
Residual mediastinal masses in Hodgkin disease: prediction of size with MR imaging. Nyman RS, et al. **Radiology** 1989 Feb;170(2):435–40
MR imaging of treated mediastinal Hodgkin disease [editorial] Webb WR. **Radiology** 1989 Feb;170(2):315–6
Mediastinal tumors: biopsy under US guidance. Wernecke K, et al. **Radiology** 1989 Aug;172(2):473–6
Azygos continuation of the inferior vena cava masquerading as neoplasm. Pallin J, et al. **South Med J** 1989 Feb; 82(2):259–61
Primary extraosseous osteogenic sarcoma of the mediastinum: clinical, pathologic, and radiologic correlation. Tarr RW, et al. **South Med J** 1988 Oct;81(10):1317–9 (11 ref.)
Paraesophageal varices mimicking a mediastinal mass: report of 2 cases. Yang WY, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Nov;87(11):1103–7
A mediastinal tumor simulated by a sacculated aneurysm of the azygos vein. Seebauer L, et al.
Thorac Cardiovasc Surg 1989 Apr;37(2):112–4
[Iatrogenic Cushing's syndrome with mediastinal lipomatosis simulating cardiomegaly and pleural effusion: report of a case] Tao HY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):500–4 (Eng. Abstr.) **(Chi)**
[Echography and CT in mediastinal teratoma] Roelandt W, et al. **J Belge Radiol** 1988;71(5):611–4 (Eng. Abstr.) **(Dut)**
[Large B cell lymphoma of the mediastinum. 6 cases] Wurtz A, et al. **Ann Chir** 1989;43(2):165–70 (12 ref.) (Eng. Abstr.) **(Fre)**
[Respiratory obstruction during anesthesia in children with malignant mediastinal lymphoma] Montange F, et al.
Ann Fr Anesth Reanim 1988;7(6):520–3 (Eng. Abstr.) **(Fre)**
[Pericardial hemolymphangioma. Apropos of a case] Nataf P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1137–40 (Eng. Abstr.) **(Fre)**
[Middle mediastinal parathyroid adenoma of the aorto-pulmonary window. 2 cases] Proye C, et al.
Chirurgie 1988;114(2):166–73 (Eng. Abstr.) **(Fre)**
[Diagnosis of mediastinal processes] Dienemann H, et al.
Chirurg 1989 Jun;60(6):377–83 (8 ref.) **(Ger)**
[Mediastinal neuroblastoma in Wiedemann-Beckwith syndrome] Huber A, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):243–4 (Eng. Abstr.) **(Ger)**
[Diagnostic thoracoscopy in mediastinal space-occupying lesions] Mai J, et al. **Pneumologie** 1989 Feb;43(2):122–5 (Eng. Abstr.) **(Ger)**
[Transesophageal endoscopic ultrasonography in lung cancer involving mediastinal organs in the assessment of resectability] Sakio H, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Apr;37(4):650–7 (Eng. Abstr.) **(Jpn)**
[A case of primary malignant fibrous histiocytoma in the mediastinum complaining of fever] Tsuchiya C, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Dec; 26(12):1297–301 (Eng. Abstr.) **(Jpn)**
[Isolated mediastinal fibromatosis (clinical study and a brief review of the literature)] Traianova TG, et al.
Ter Arkh 1988;60(6):124–7 (23 ref.) (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Cisplatinum-based chemotherapy in malignant mediastinal teratoma. Mackintosh JF, et al. **Aust N Z J Surg** 1989 May; 59(5):399–404 (19 ref.)
Poor prognosis of mediastinal non-Hodgkin's lymphoma with an immature phenotype of CD2+, CD7 (or CD5)+, CD3-, CD4-, and CD8-. Yumura-Yagi K, et al.
Cancer 1989 Feb 15;63(4):671–4
[You make the diagnosis: methotrexate pneumonitis] Hauer C, et al. **Padiatr Padol** 1988;23(4):337–42 **(Ger)**
[Diffuse B-cell lymphoma of anterior mediastinum cured by short-term administration of CDDP-containing regimen] Inoue H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):3003–5 (Eng. Abstr.) **(Jpn)**
[A case of chemotherapy induced necrosis of primary mediastinal germ cell tumor] Hatanaka N, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Feb;37(2):362–5 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

[Cysts and primary tumors of the mediastinum in childhood] Mineo TC, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1161–7 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Mediastinal osteosarcoma with extension to lungs in a patient treated for Hodgkin's disease. Catanese J, et al. **Cancer** 1988 Nov 15;62(10):2252–7 (28 ref.)

GENETICS

Clonal immunoglobulin gene rearrangements in primary mediastinal clear cell lymphomas. Brandter LB, et al.
Leukemia 1989 Feb;3(2):122–9
[Mediastinal mass, large hepatomegaly and del(11) (q21q24) chromosome abnormality in a patient with acute monocytic leukemia] Ikushima S, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2329–34 (21 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Immunophenotypic similarities of mediastinal clear-cell lymphoma and sinusoidal (monocytoid) B cells. Möller P, et al. **Int J Cancer** 1989 Jan 15;43(1):10–6

PATHOLOGY

Cytologic features of well-differentiated sclerosing liposarcoma in aspirated samples. Shattuck MC, et al.
Acta Cytol 1988 Nov–Dec;32(6):896–901
Primary large cell lymphoma of the mediastinum. A histologic and immunophenotypic study of 29 cases. Lamarre L, et al. **Am J Surg Pathol** 1989 Sep;13(9):730–9
A biphasic tumor of the mediastinum with features of synovial sarcoma. A report of four cases. Witkin GB, et al. **Am J Surg Pathol** 1989 Jun;13(6):490–9
Solitary fibrous tumor of the mediastinum. A report of 14 cases. Witkin GB, et al. **Am J Surg Pathol** 1989 Jul; 13(7):547–57
A boy with an anterior mediastinal mass [see comments] John RE, et al. **Anaesthesia** 1988 Oct;43(10):864–6. **Comment**

in: Anaesthesia 1989 May;44(5):450–1
Mediastinal germ cell tumor and acute megakaryoblastic leukemia [letter] Domingo A, et al. **Ann Intern Med** 1989 Sep 15;111(6):539
Bilateral granular cell tumors of the posterior mediastinum. Aimer SC, et al. **Ann Thorac Surg** 1988 Dec;46(6):688–9
Extraskeletal osteogenic sarcoma of the mediastinum. Greenwood SM, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):430–3 (15 ref.)
Modified "Tores" biopsy needle for use in C.T. guided mediastinal and paraspinal biopsy. Cameron DC. **Australas Radiol** 1989 Feb;33(1):101–4
Residual masses on follow-up computed tomography in patients with mediastinal non-Hodgkin's lymphoma. Uematsu M, et al. **Clin Radiol** 1989 May;40(3):244–7
Hairy cell leukemia—mediastinal involvement. A report of two cases and review of the literature. Malik ST, et al. **Hematol Oncol** 1989 Jul–Aug;7(4):303–6 (8 ref.)
Mediastinal non-Hodgkin's lymphoma involving right heart and dorsal vertebra. Ratnakar KS, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):227–9
Primary malignant mediastinal germ cell tumors: a study of eleven cases and a review of the literature. Kiffer JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):835–41 (63 ref.)
Mediastinal angiofollicular lymph node hyperplasia, hyaline-vascular type with mucocutaneous manifestations. Caporale A, et al. **Ital J Surg Sci** 1988;18(4):389–92
Stage IA–IIB Hodgkin's disease: staging and treatment of patients with large mediastinal adenopathy. Leopold KA, et al. **J Clin Oncol** 1989 Aug;7(8):1059–65
B-cell lymphoma of probable thymic origin: case report. Kataoka T, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):371–8
Mediastinal germ cell tumor in a young woman. Brown K, et al. **Med Pediatr Oncol** 1989;17(2):164–7
Ultrasonically guided 19-gauge Surecut needle biopsy of apical and superior mediastinal tumors. Takeuchi K, et al. **Radiat Med** 1988 Nov–Dec;6(6):272–5
Mediastinal seminoma. A case report and review of the literature. Aggarwal P, et al. **Urol Int** 1988;43(6):344–6 (29 ref.)
Polypoid endobronchial extension from invasive thymoma. Honma K, et al. **Virchows Arch [A]** 1988;413(5):469–74
[A case of parathyroid adenoma localized in the middle mediastinum] Deleplanque G, et al. **Ann Chir** 1989; 43(5):393–6 (11 ref.) (Eng. Abstr.) (Fre)
[Non-Hodgkin's large B cell malignant lymphoma localized in the anterior mediastinum. Apropos of 2 cases] Sainte-Rose G, et al. **Ann Chir** 1989;43(2):161–4 (Eng. Abstr.) (Fre)
[Stage I and II Hodgkin's disease with enlarged mediastinum in adults. Apropos of 24 cases] Touboul E, et al. **Rev Mal Respir** 1988;5(6):619–27 (Eng. Abstr.) (Fre)
[Primary mediastinal, clear cell B-cell lymphoma is an epithelium-associated thymus lymphoma] Möller P, et al. **Pathologe** 1989 Jul;10(4):234–9 (Ger)
[Current technics of biopsy of the mediastinum: 1) mediastinoscopy] Giampaglia F, et al. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):459–76 (11 ref.) (Eng. Abstr.) (Ita)
[Mediastinal neoplasms of mesenchymal origin] Bortolani EM, et al. **Minerva Chir** 1989 Apr 15;44(7):1163–6 (Eng. Abstr.) (Ita)
[Successful CYVADIC combination chemotherapy of metastatic pulmonary lesions involving a mediastinal leiomyosarcoma—a case report] Mishima T, et al. **Gan No Rinsho** 1989 Aug;35(9):1061–6 (Eng. Abstr.) (Jpn)
[A case of invasive thymoma in the left hilus of the lung] Tomichi N, et al. **Gan No Rinsho** 1989 Aug;35(9):1067–72 (Eng. Abstr.) (Jpn)
[A case of mediastinal schwannoma originating from the intrathoracic vagal nerve] Hasegawa N, et al. **Kyobu Geka** 1989 Jun;42(6):474–7 (9 ref.) (Eng. Abstr.) (Jpn)
[A case of mediastinal leiomyoma associated with cystic change and calcification—a review of 7 cases in Japanese literatures] Niwa H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2136–9 (15 ref.) (Eng. Abstr.) (Jpn)
[A case of chondrosarcoma of rib origin with intrathoracic extension] Ozeki Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2315–8 (19 ref.) (Eng. Abstr.) (Jpn)
[A case of mediastinal schwannoma originating from the intrathoracic phrenic nerve] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1187–90 (Eng. Abstr.) (Jpn)
[Chordoma of the posterior mediastinum] Marchuk IK. **Vrach Delo** 1989 Apr;(4):96–7 (Rus)

RADIOGRAPHY

Computed tomography reveals atypical localization of benign mediastinal tumors. Ikezoe J, et al. **Acta Radiol** 1989 Mar–Apr;30(2):175–9
Late-onset cystic hygromas: the role of CT. Woods D, et al. **Can Assoc Radiol J** 1989 Jun;40(3):159–61
Mediastinal pseudotumor due to passage of ascites through the esophageal hiatus. Pandolfo I, et al. **Gastrointest Radiol** 1989 Summer;14(3):209–11
Posterior mediastinal teratoma involving the esophagus. Vade A, et al. **Gastrointest Radiol** 1989 Spring;14(2):106–8
Non-Hodgkin's lymphoma with unusual pulmonary involvement [letter] Ajmani A, et al. **J Assoc Physicians India** 1988 Jul;36(7):461–3
Mediastinal tumours/cysts—a clinico radiological study. Chauhan MS, et al. **J Assoc Physicians India** 1988 Jul; 36(7):421–3
Traumatic false aneurysm of the common carotid artery presenting as a mediastinal mass: a case report. Schwartz LB, et al. **J Vasc Surg** 1989 Sep;10(3):281–4
Intrathoracic granular cell myoblastoma. Robinson JM, et al. **South Med J** 1988 Nov;81(11):1453–7 (31 ref.)
[Vascular pseudotumors in the mediastinum in the CT picture] Salamoun V, et al. **Cesk Radiol** 1988 Nov; 42(6):370–7 (Eng. Abstr.) (Cze)
[Broad mediastinal flutter in a patient] Paul R, et al. **Duodecim** 1988;104(18):1474–7 (Fin)
[Efficacy of x-ray computed tomography in the diagnosis of tumors of the mediastinum. 103 cases] Frija J, et al. **J Radiol** 1988 Aug–Sep;69(8–9):473–83 (47 ref.) (Eng. Abstr.) (Fre)
[Calcified untreated non-Hodgkin's lymphoma of the mediastinum] Stark P. **ROFO** 1989 Jul;151(1):110–1 (Ger)
[Confirmation power of computer tomography for suspected mediastinal tumors] Kriedemann E, et al. **Z Erkr Atmungsorgane** 1988;171(1):5–18 (Eng. Abstr.) (Ger)
[A case of cystic lymphangioma with niveau formation] Soejima Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec;26(12):1313–7 (Eng. Abstr.) (Jpn)
[A case of mediastinal hemangioma] Miyauchi K, et al. **Rinsho Hoshasen** 1988 Jun;33(6):715–8 (Eng. Abstr.) (Jpn)
[Pheochromocytomas with extra-adrenal location] Pacho R, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct; 51(5):241–4 (Eng. Abstr.) (Pol)
[Evaluation of diagnostic methods for studying mediastinal tumors and cysts] Florikian AK, et al. **Klin Khir** 1988; (10):28–30 (Eng. Abstr.) (Rus)
[Asymptomatic course of giant lipoma of the mediastinum] Bruns VA, et al. **Vestn Khir** 1989 Feb;142(2):49–50 (Rus)
[Thrombosed aneurysm of the accessory hemiazygos vein simulating neurinoma of the posterior mediastinum] Vishnevskiĭ AA, et al. **Vestn Khir** 1989 Mar;142(3):49–50 (Rus)
[Relaxation of the diaphragm simulating a tumor of the mediastinum] Golovanova NN, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):83–4 (Rus)
[Differential diagnostic signs of metastases to the mediastinal lymph nodes in rats with a transplanted Walker tumor] Feofilov GL, et al. **Vopr Onkol** 1989;35(6):689–93 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Medullary thyroid carcinoma: localization of a mediastinal metastasis with I-131 MIBG. Laflamme L, et al. **Clin Nucl Med** 1988 Aug;13(8):577–9
Residual mass and gallium scanning [letter; comment] Joshua DE, et al. **J Clin Oncol** 1989 Jan;7(1):144–5. **Comment on:** J Clin Oncol 1988 Jun;6(6):940–6
Uptake of gallium in the mediastinum. Chandramouly BS, et al. **Semin Nucl Med** 1989 Jul;19(3):247–9

RADIOTHERAPY

Emergency radiotherapy in a patient with a mediastinal lymphoblastoma [letter; comment] Sold MJ, et al. **Anaesthesia** 1989 May;44(5):450–1. **Comment on:** Anaesthesia 1988 Oct;43(10):864–6
Primary mediastinal seminoma. Cefaro GA, et al. **Br J Urol** 1988 Nov;62(5):461–4 (23 ref.)
Response of mediastinal Hodgkin's disease to radiotherapy: rate of tumor regression not predictive of outcome. Russell KJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):201–4
Failure of development of the growing breast after radiation therapy. Rosenfield NS, et al. **Pediatr Radiol** 1989; 19(2):124–7
[Atrioventricular block, a complication of radiotherapy of the mediastinum] Ebagosti A, et al. **Arch Mal Coeur** 1989 Jun;82(6):935–9 (10 ref.) (Eng. Abstr.) (Fre)
[Complete heart block after radiotherapy. Case report (letter)] Martínez Sande JL, et al. **Rev Clin Esp** 1988 Jun; 183(2):98–9 (Spa)

SECONDARY

Computed tomography and mediastinoscopy in the assessment of resectability of lung cancer. Lähde S, et al. **Acta Radiol** 1989 Mar–Apr;30(2):169–73
Hepatocellular carcinoma presenting with the superior mediastinal syndrome. Kew MC. **Am J Gastroenterol** 1989 Sep;84(9):1092–4
Mediastinal involvement by myxoid liposarcoma. McLean TR, et al. **Ann Thorac Surg** 1989 Jun;47(6):920–1
Utility of the Wang 18-gauge transbronchial histology needle in the staging of bronchogenic carcinoma. Schenk DA, et al. **Chest** 1989 Aug;96(2):272–4
Radio-hyperthermia for subcutaneous metastasis of hemangiopericytoma of the mediastinum: case report. Puleo S, et al. **Tumori** 1988 Aug 31;74(4):485–8
Unusual solitary soft tissue metastases from renal cell carcinoma. Lipman JC, et al. **Urol Radiol** 1988;10(2):110–2
[Esophageal stenosis caused by carcinomatous mediastinitis secondary to epidermoid carcinoma of the anal canal] De Mestier P, et al. **Ann Chir** 1989;43(3):241–3 (Eng. Abstr.) (Fre)
[Neoplastic invasion of the pulmonary arteries. Evaluation by MRI. Preliminary experience] Gevenois PA, et al. **J Radiol** 1989 Mar;70(3):175–81 (Eng. Abstr.) (Fre)
[Clinical evaluation of Tl-201 single photon emission computed tomography in patients with suspected bronchogenic carcinoma] Tonami N, et al. **Kaku Igaku** 1988 Dec;25(12):1381–94 (Eng. Abstr.) (Jpn)
[Coexistence and risk of secondary neoplasms in Hodgkin's disease] Gabryś K, et al. **Pol Tyg Lek** 1988 Jul 11; 43(28):919–22 (Eng. Abstr.) (Pol)

SECRETION

[A case of antidiuretic hormone-producing malignant teratoma of the anterior mediastinum] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):884–5 (Jpn)

SURGERY

Vascular reconstruction in surgery for tumor resection. Lee PC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 42(4):281–8
Resection of advanced stage neuroblastoma with the cavitron ultrasonic surgical aspirator. Loo R, et al. **J Pediatr Surg** 1988 Dec;23(12):1135–8
Nonfunctioning paraganglioma of the posterior mediastinum. Case report. Évora PR, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):295–7
The challenge of the middle mediastinal parathyroid. Curley IR, et al. **World J Surg** 1988 Dec;12(6):818–24
[Giant tumoral hemangioma of the mediastinum. Apropos of a case] Ceccanti JP, et al. **Ann Chir** 1989;43(2):157–60 (Eng. Abstr.) (Fre)
[Iterative surgery in germ cell tumor] Merlini M, et al. **Helv Chir Acta** 1989 Jan;55(5):549–52 (Eng. Abstr.) (Fre)
[Pancoast's tumor: multi-disciplinary treatment and combined cervico-thoracic approach] Merlini M, et al. **Helv Chir Acta** 1989 Jan;55(5):727–30 (Eng. Abstr.) (Fre)
[Mediastinal tumors] Merkle NM, et al. **Chirurg** 1989 Jun; 60(6):391–7 (14 ref.) (Ger)
[Primary mediastinal seminoma] Heintz A, et al. **Langenbecks Arch Chir** 1989;374(3):185–8 (Eng. Abstr.) (Ger)
[Bronchial carcinoma with mediastinal lymph node metastases—an indication for surgery?] Merkle NM, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:360–2 (8 ref.) (Eng. Abstr.) (Ger)
[Neurogenic tumors of the mediastinum. Considerations apropos of 6 operated cases] Ghilardi G, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2125–9 (Eng. Abstr.) (Ita)
[A case of dumbbell neurogenic tumor in the posterior mediastinum] Fukata T, et al. **Kyobu Geka** 1989 May; 42(5):400–3 (Eng. Abstr.) (Jpn)
[A case of the successful surgical treatment of mediastinal giant neurogenic tumor, and the chest wall reconstruction by the autologous ribs] Ishikawa S, et al. **Kyobu Geka** 1989 Mar;42(3):244–8 (Eng. Abstr.) (Jpn)
[A case of teratoma of the posterior mediastinum] Kashiwaya A, et al. **Kyobu Geka** 1989 Jan;42(1):59–61 (Eng. Abstr.) (Jpn)
[Surgical treatment of the malignant mediastinal tumors—with special reference to prosthetic reconstruction of superior vena cava] Fukushima K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):195–202 (Eng. Abstr.) (Jpn)
[1-stage sequential removal of a mediastinal-intravertebral neurinoma of the sandglass type] Velibekov ASh, et al. **Grudn Khir** 1988 Sep–Oct;(5):92–3 (Rus)
[Mediastinal lymphadenectomy in diffuse forms of lung cancer] Kotliarov EV, et al. **Vestn Khir** 1988 Aug; 141(8):18–21 (Eng. Abstr.) (Rus)
[Combined and extended operations in neglected cancer of the thyroid gland] Romanchishen AF. **Vestn Khir** 1988 May;140(5):39–42 (Eng. Abstr.) (Rus)
[Comparative characteristics of reactions of central hemodynamics to the exfusion of blood and plasma in surgical diseases] Singaevskiĭ SB, et al. **Vestn Khir** 1988 Dec;141(12):71–3 (Eng. Abstr.) (Rus)

THERAPY

Toxicity of a combination of ABVD chemotherapy and mediastinal irradiation for Hodgkin's disease patients with massive initial mediastinal involvement. Lagrange JL, et al. **Bull Cancer (Paris)** 1988;75(8):801–6
Mediastinal large cell lymphoma. An uncommon subset of adult lymphoma curable with combined modality therapy. Jacobson JO, et al. **Cancer** 1988 Nov 1;62(9):1893–8
Experience with the management of primary endodermal sinus tumor of the mediastinum. Sham JS, et al. **Cancer** 1989 Aug 1;64(3):756–61
Primary anterior mediastinal malignant teratoma. A case report with long-term survival. Wirtanen GW, et al. **Cancer** 1989 May 1;63(9):1823–5
Primary mediastinal seminoma. Huang MC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):39–42
The management of bulky mediastinal Hodgkin's disease.

Hoppe RT. **Hematol Oncol Clin North Am** 1989 Jun; 3(2):265–76 (25 ref.)
Percutaneous catheter drainage of necrotic tumors: CT demonstration. Abbitt PL, et al.
J Comput Assist Tomogr 1989 May–Jun;13(3):437–9
Three-dimensional volumetric assessment of response to treatment: stage I and II diffuse large cell lymphoma of the mediastinum. Willett CG, et al. **Radiother Oncol** 1988 Jul;12(3):193–8
[A case of mediastinal undifferentiated carcinoma] Maezato K, et al. **Kyobu Geka** 1989 Jun;42(6):466–8 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Electron microscopy of fine needle aspiration biopsies of mediastinal and paramediastinal lesions. Taccagni G, et al. **Acta Cytol** 1988 Nov–Dec;32(6):868–79
Mediastinal malignant carcinoid with Cushing's syndrome: immunohistochemical and ultrastructural study. Barbareschi M, et al. **Appl Pathol** 1989;7(3):161–70

VETERINARY

Bizarre lymphoid cells in serous effusion of a dog with mediastinal lymphoma. Madewell BR, et al.
J Comp Pathol 1988 Aug;99(2):229–33

MEDIASTINITIS

COMPLICATIONS

Fibrosing mediastinitis. Hoogsteden HC, et al.
Neth J Med 1988 Oct;33(3–4):182–6
Soft tissue involvement, mediastinal pseudotumor, and venous thrombosis in pustulotic arthro-osteitis. A study of eight new cases. van Holsbeeck M, et al.
Skeletal Radiol 1989;18(1):1–8

ETIOLOGY

Perforation of the oesophagus by a swallowed foreign body presenting as a mediastinal and pulmonary mass. Radford PJ, et al. **Thorax** 1988 May;43(5):416–7
[Infections of the retropharyngeal space as a complication in pharyngitis] de Marie S, et al.
Ned Tijdschr Geneeskd 1988 Sep 17;132(38):1748–53 (Eng. Abstr.) **(Dut)**
[Esophageal stenosis caused by carcinomatous mediastinitis secondary to epidermoid carcinoma of the anal canal] De Mestier P, et al. **Ann Chir** 1989;43(3):241–3 (Eng. Abstr.) **(Fre)**
[Mediastinitis caused by odontogenic organisms (dental origin). Apropos of 3 cases] Coche G, et al.
Ann Radiol (Paris) 1988;31(4):223–8 (Eng. Abstr.) **(Fre)**
[Candidal mediastinitis and pleural empyema in bronchial asthma (letter)] Zazgornik J, et al.
Dtsch Med Wochenschr 1988 Dec 9;113(49):1940 **(Ger)**
[Acute mediastinitis due to Ludwig's angina] Kubota H.
Rinsho Hoshasen 1989 Apr;34(4):513–4 **(Jpn)**
[Peritonitis as a complication of mediastinitis secondary to a dental abscess (letter)] Cisneros Alonso C, et al.
Rev Clin Esp 1988 May;182(8):448–9 **(Spa)**

PATHOLOGY

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 6–1989. A 57-year-old man with increasing dyspnea and a mediastinal mass [published erratum appers in N Engl J Med 1989 Mar 2;320(9):607] **N Engl J Med** 1989 Feb 9;320(6):380–9

PREVENTION & CONTROL

Interlocking figure-of-8 closure of the sternum. Di Marco RF Jr, et al. **Ann Thorac Surg** 1989 Jun;47(6):927–9
Gentamicin solution for mediastinal irrigation: systemic absorption, bactericidal activity, and toxicity. Kopel ME, et al. **Ann Thorac Surg** 1989 Aug;48(2):228–31

RADIOGRAPHY

Fibrosing mediastinitis in the posterior thorax. Kountz PD, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):489–90
[Radiologic aspects of fibrous mediastinitis] Hendaoui L, et al. **Ann Radiol (Paris)** 1988;31(7–8):433–7 (23 ref.) (Eng. Abstr.) **(Fre)**
[Fibrosing mediastinitis] Frank W, et al. **Rontgenblatter** 1989 Mar;42(3):105–7 (Eng. Abstr.) **(Ger)**

SURGERY

Omental pedicle grafting in the treatment of poststernotomy mediastinitis. Bédard JP, et al. **Can J Surg** 1989 Sep; 32(5):328–30
Primary treatment of the infected sternotomy wound with muscle flaps: a review of 211 consecutive cases. Nahai F, et al. **Plast Reconstr Surg** 1989 Sep;84(3):434–41
[Power staple fixation of the sternum after refractory mediastinitis following A-C bypass; key points of sternal fixation] Okada M, et al. **Kyobu Geka** 1988 Jul;41(8):641–3 (Eng. Abstr.) **(Jpn)**
[2 cases of mediastinal abscess] Sowiński H, et al.
Otolaryngol Pol 1988;42(5):369–71 (Eng. Abstr.) **(Pol)**
[Surgical treatment and intensive therapy of diffuse purulent mediastinitis complicated by pyothorax and intestinal hemorrhage] Kolos AI, et al. **Grudn Khir** 1988 Nov–Dec; (6):93–5 **(Rus)**
[Early surgical treatment of anterior mediastinitis in heart surgery] Korolev BA, et al. **Grudn Khir** 1988 Nov–Dec; (6):69–72 (Eng. Abstr.) **(Rus)**
[The surgeon's procedures in acute suppurative mediastinitis] Monin MI, et al. **Klin Khir** 1988;(10):9–11 (Eng. Abstr.) **(Rus)**
[Acute suppurative mediastinitis in children] Ermakov IuV, et al. **Vestn Khir** 1988 Oct;141(10):88–90 **(Rus)**

THERAPY

Airway pressure release ventilation by mask. Jousela IT, et al. **Crit Care Med** 1988 Dec;16(12):1250–1
Mediastinal infection after cardiac operation. A simple closed technique. Durandy Y, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):282–5

MEDIASTINOSCOPY

Computed tomography and mediastinoscopy in the assessment of resectability of lung cancer. Lähde S, et al. **Acta Radiol** 1989 Mar–Apr;30(2):169–73
Prolonged neuromuscular blockade following the use of vecuronium for mediastinoscopy. Schindler MB.
Anaesth Intensive Care 1989 Aug;17(3):372–4
Postmediastinoscopy changes in the chest radiograph. Don C, et al. **Can Assoc Radiol J** 1988 Dec;39(4):270–2
Blood pressure monitoring during mediastinoscopy [letter] Garry BP, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):365
The value of mediastinoscopy in preoperative staging of bronchogenic carcinoma. Van Schil PE, et al.
J Thorac Cardiovasc Surg 1989 Feb;97(2):240–4
Mediastinoscopy: not needed preoperatively in CT-negative lung carcinoma? Liippo K, et al.
ORL J Otorhinolaryngol Relat Spec 1989;51(3):192–5
Repeat mediastinoscopy. Puhakka HJ.
ORL J Otorhinolaryngol Relat Spec 1989;51(1):62–6
Mediastinoscopy in the investigation of primary mediastinal lymphadenopathy. Pattison CW, et al.
Scand J Thorac Cardiovasc Surg 1989;23(2):177–9
[Mediastinoscopy in the central hospital of Hame during 1974–84] Revonta M, et al. **Duodecim** 1988;104(4):252–6 **(Fin)**
[Surgical diagnostic methods in the thoracic area] Engelmann C. **Z Erkr Atmungsorgane** 1988;171(1):19–28 (19 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy. Miller RR, et al.
Ann Thorac Surg 1989 Aug;48(2):247–50
Mediastinoscopy incision site metastasis. Implications for radiotherapeutic treatment. Rate WR, et al. **Cancer** 1989 Jan 1;63(1):68–9
Complications of mediastinoscopy. Puhakka HJ.
J Laryngol Otol 1989 Mar;103(3):312–5

ECONOMICS

Cost-effectiveness of CT scanning compared with mediastinoscopy in the preoperative staging of lung cancer. Eddy RJ. **Can Assoc Radiol J** 1989 Aug;40(4):189–93

METHODS

Mediastinal exploration by mediastinoscopy and mediastinotomy. Goldstraw P. **Br J Dis Chest** 1988 Apr; 82(2):111–20
[Value of pericardioscopy in pericardial effusion. Apropos of 20 patients] Millaire A, et al. **Arch Mal Coeur** 1988 Sep; 81(9):1071–6 (Eng. Abstr.) **(Fre)**
[Current technics of biopsy of the mediastinum: 1) mediastinoscopy] Giampaglia F, et al.
Arch Monaldi Mal Torace 1987 Sep–Oct;42(5):459–76 (11 ref.) (Eng. Abstr.) **(Ita)**
[Mediastinoscopy by a pre-scalenic route as an alternative for staging of neoplasms of the upper lobe of the left lung] Bongiovani HL, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):235–7 (Eng. Abstr.) **(Por)**

TRENDS

Mediastinoscopy: its changing role. Sakurai H, et al.
Mt Sinai J Med (NY) 1988 Sep;55(4):292–5

MEDIASTINUM

see related
PNEUMOMEDIASTINUM, DIAGNOSTIC

Some aspects of mediastinal anatomy and radiology. Webster RV, et al. **CRC Crit Rev Diagn Imaging** 1977;10(1):1–16 (13 ref.)
Mediastinoscopy in the investigation of primary mediastinal lymphadenopathy. Pattison CW, et al.
Scand J Thorac Cardiovasc Surg 1989;23(2):177–9
[A complication of central venous catheterization: penetration into the mediastinum] Meoni MS, et al.
Minerva Anestesiol 1988 Mar;54(3):63–6 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

[A case of bilateral pneumothoraces due to intrathoracic communication through a defect in the mediastinal pleura] Nomori H, et al. **Kyobu Geka** 1988 Aug;41(9):761–3 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The mediastinum of the bovine testis. Hees H, et al.
Cell Tissue Res 1989 Jan;255(1):29–39
Direct lymphatic drainage of lung segments to the mediastinal nodes. An anatomic study on 260 adults. Riquet M, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):623–32

BLOOD SUPPLY

[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al.
Khirurgiia (Mosk) 1989 Mar;(3):68–72 (Eng. Abstr.) **(Rus)**
[Thrombosed aneurysm of the accessory hemiazygos vein simulating neurinoma of the posterior mediastinum] Vishnevskiĭ AA, et al. **Vestn Khir** 1989 Mar;142(3):49–50 **(Rus)**

DRUG EFFECTS

Mediastinal fibrin glue: hemostatic effect and tissue response in calves. Baker JW, et al. **Ann Thorac Surg** 1989 Mar; 47(3):450–2

INJURIES

[Medical treatment of mediastinal perforation of Barrett's ulcer (letter)] Nousbaum JB, et al. **Presse Med** 1989 Feb 11;18(5):228–9 **(Fre)**
[The limitations of plain chest radiography and the role of computed tomography in diagnosis of traumatic mediastinal hematoma] Nakajima Y.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Aug 25; 48(8):961–71 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Relations of the soft structures of the posterior mediastinum in the scoliotic spine. Nathan H. **Acta Anat (Basel)** 1988; 133(3):260–4
Ultrasonically guided needle biopsy in the diagnosis of mediastinal masses. Saito T, et al. **Am Rev Respir Dis** 1988 Sep;138(3):679–84
Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy. Miller RR, et al.
Ann Thorac Surg 1989 Aug;48(2):247–50
Residual masses on follow-up computed tomography in patients with mediastinal non-Hodgkin's lymphoma. Uematsu M, et al. **Clin Radiol** 1989 May;40(3):244–7
Gallium scanning in the management of mediastinal Hodgkin's disease. Wylie BR, et al. **Eur J Haematol** 1989 Apr;42(4):344–7
Determination of normal transverse mediastinal width and mediastinal-width to chest-width (M/C) ratio in control subjects: implications for subjects with aortic or brachiocephalic arterial injury. Woodring JH, et al.
J Trauma 1989 Sep;29(9):1268–72
Thymic hemorrhage: a cause of acute symptomatic mediastinal widening in an infant with late haemorrhagic disease. Sonographic findings. Lemaitre L, et al.
Pediatr Radiol 1989;19(2):128–9
CT of bronchogenic carcinoma: indeterminate mediastinal invasion [editorial] McLoud TC. **Radiology** 1989 Oct; 173(1):15–6
Percutaneous fine needle aspiration in the diagnosis and management of mediastinal cysts in adults. Nath PH, et al. **South Med J** 1988 Oct;81(10):1225–8
[Mediastinal sonography in childhood. Results of 310 studies] von Lengerke HJ, et al. **Radiologe** 1988 Oct;28(10):460–5 (Eng. Abstr.) **(Ger)**
[The examination technic and indications for mediastinal sonography] Wernecke K. **ROFO** 1989 May;150(5):501–8 (Eng. Abstr.) **(Ger)**
[CT-guided percutaneous fine-needle biopsy in the histological characterization of mediastinal-pulmonary lesions] Casamassima F, et al. **Radiol Med (Torino)** 1988 Nov;76(5):438–42 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Mediastinal, left, and right atrial pressure variations with different modes of mechanical and spontaneous ventilation. Navarrete-Navarro P, et al. **Crit Care Med** 1989 Jun; 17(6):563–6

PHYSIOPATHOLOGY

[Broad mediastinal flutter in a patient] Paul R, et al.
Duodecim 1988;104(18):1474–7 **(Fin)**

RADIATION EFFECTS

Five-year results of combined chemotherapy and mediastinal radiation therapy in small cell lung cancer. Bonfill X, et al. **Oncology** 1989;46(2):91–5
[A case of coronary artery disease probably elicited by mediastinal radiation] Horimoto M, et al.
Nippon Naika Gakkai Zasshi 1988 Jun;77(6):873–9 **(Jpn)**

RADIOGRAPHY

Superior mediastinal widening from spine fractures

mimicking aortic rupture on chest radiographs [letter] Heiberg E. **AJR Am J Roentgenol** 1989 Jun;152(6):1340
Normal lymph node size in the mediastinum: a retrospective study in two patient groups. Ingram CE, et al. **Clin Radiol** 1989 Jan;40(1):35–9
Computed tomography of mediastinal collaterals in SVC syndrome. Mendelson DS, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):881–4
Computed tomography evaluation of pathologic processes in the potential spaces of the mediastinum. Shin MS, et al. **J Comput Tomogr** 1988 Jul;12(3):230–6
Indeterminate mediastinal invasion in bronchogenic carcinoma: CT evaluation. Glazer HS, et al. **Radiology** 1989 Oct;173(1):37–42
[Aorto-pulmonary window: normal and pathological x-ray computed tomographic aspects] Hubert C, et al. **Ann Radiol (Paris)** 1988;31(3):163–72 (Eng. Abstr.) **(Fre)**
[Magnetic resonance imaging in myasthenia gravis. An alternative to mediastinal computerized tomography?] Emsköttter T, et al. **Dtsch Med Wochenschr** 1988 Sep 30; 113(39):1508–10 (Eng. Abstr.) **(Ger)**
[The radiological picture of the nonvascular surgical mediastinum] Schiavon F, et al. **Radiol Med (Torino)** 1989 May;77(5):470–7 (Eng. Abstr.) **(Ita)**
[Advantages, possibilities and limitations of computer tomography of the mediastinum] Dedić M, et al. **Med Pregl** 1988;41(7–8):313–8 (Eng. Abstr.) **(Scr)**

RADIONUCLIDE IMAGING

Mediastinal uptake of Tc-99m pertechnetate in a thymona. Jimenez-Heffernan A, et al. **Clin Nucl Med** 1989 May; 14(5):375
[Scintigraphy of the mediastinum using 67Ga citrate in lymphogranulomatosis in children] Shiriaev SV, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):43–8 (Eng. Abstr.) **(Rus)**

SURGERY

Mediastinal exploration by mediastinoscopy and mediastinotomy. Goldstraw P. **Br J Dis Chest** 1988 Apr; 82(2):111–20
[Value and current role of anterior mediastinotomy in the diagnosis of mediastinal diseases. Apropos of a series of 100 cases] Martigne C, et al. **Ann Chir** 1989;43(2):171–3 (Eng. Abstr.) **(Fre)**

MEDICAGO see **ALFALFA**

MEDICAID see **MEDICAL ASSISTANCE, TITLE 19**

MEDICAL ASSISTANCE

Barriers to implementation of a prenatal care program for low income women. Miller CL, et al. **Am J Public Health** 1989 Jan;79(1):62–4
Medical and financial implications of discontinuing a statewide free insulin program involving 3,720 people. Nicholas WC, et al. **South Med J** 1989 Jan;82(1):13–7
[Deontology of state interventionism in the health sector] Silveira PF. **Rev Saude Publica** 1988 Jun;22(3):221–32 (Eng. Abstr.) **(Por)**

LEGISLATION & JURISPRUDENCE

New focus on children's health issues [interview by Michele Robinson] Rosenbaum S. **Hospitals** 1989 Jun 20;63(12):71–2

METHODS

Enhancing mental health services for homeless persons: state proposals under the MHSH Block Grant Program. Salem DA, et al. **Public Health Rep** 1989 May–Jun;104(3):241–6

TRENDS

The medically uninsured: who cares? Castellani BC. **J Med Assoc Ga** 1988 Sep;77(9):708–10
Uncompensated medical care: what's being done? Haverty JR. **J Med Assoc Ga** 1988 Sep;77(9):701–3
[The rebellion of medical doctors (editorial)] Fernández-Cruz A. **Rev Clin Esp** 1988 Sep;183(4):161–6 **(Spa)**

MEDICAL ASSISTANCE, TITLE 19

Use of Medicaid data for pharmacoepidemiology. Ray WA, et al. **Am J Epidemiol** 1989 Apr;129(4):837–49
Risk status and pregnancy outcome among medicaid recipients. Schwethelm B, et al. **Am J Prev Med** 1989 May–Jun;5(3):157–63
Health practices of the elderly poor. Lubben JE, et al. **Am J Public Health** 1989 Jun;79(6):731–4
The impact of Medicaid on physician use by low-income children. Rosenbach ML. **Am J Public Health** 1989 Sep; 79(9):1220–6
Fiscal conditions and state government policy choices. Newcomer RJ. **Compr Gerontol [B]** 1987 Dec;1(3):122–8
Medicaid recipients and psychiatric treatment. Chun WK. **Hawaii Med J** 1989 Jun;48(6):221–2, 225–6, 229–30 passim
The effects of method of presenting health plan information on HMO enrollment by Medicaid beneficiaries. Andrews RM, et al. **Health Serv Res** 1989 Aug;24(3):311–27
The dentist's role in access to dental care by Medicaid recipients. Capilouto E. **J Dent Educ** 1988 Nov; 52(11):647–52
Children's disability claims. Lefebvre DM. **J Tenn Med Assoc** 1989 Feb;82(2):90
Lead toxicity screening through the Medicaid EPSDT program. Light RT. **J Tenn Med Assoc** 1988 Nov; 81(11):700
From the Health Care Financing Administration. Roper WL. **JAMA** 1989 Jan 13;261(2):197
Health care for the uninsured. The statistics are staggering. Shearer M. **Mich Med** 1989 Apr;88(4):14–5
Infant mortality and access to care. Schwarz RH. **Obstet Gynecol** 1989 Jan;73(1):123–4
AIDS in Ohio [letter] Offner P. **Ohio Med** 1988 Sep;84(9):707
[Medicaid] Alfonso Sánchez JL. **Med Clin (Barc)** 1989 Feb 11;92(5):178–80 **(Spa)**

ECONOMICS

Emergency room use and primary care case management: evidence from four Medicaid demonstration programs. Hurley RE, et al. **Am J Public Health** 1989 Jul;79(7):843–6
Long-term care initiatives: success in Hennepin County, Minnesota [news] Lindberg G, et al. **Am J Public Health** 1989 Apr;79(4):519
Expanding Medicaid coverage for pregnant women: estimates of the impact and cost. Torres A, et al. **Fam Plann Perspect** 1989 Jan–Feb;21(1):19–24
Medicaid patients' access to new drugs. Grabowski H. **Health Aff (Millwood)** 1988 Winter;7(5):102–14
Controlling Medicaid costs in hospitals. Holahan J, et al. **Health Aff (Millwood)** 1988 Fall;7(4):132–41
Evaluation questions for Philadelphia's capitation plan for mental health services. Schinnar AP, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):681–3
The impact of alternative hospital payment systems on Medicaid costs. Holahan J. **Inquiry** 1988 Winter; 25(4):517–32
Using medical markets to stimulate the rural economy. Prinzinger JM, et al. **J S C Med Assoc** 1988 Sep;84(9):461–3
Presumptive eligibility: early access to prenatal care. Sadler DK. **J Tenn Med Assoc** 1989 Feb;82(2):88–9
A health policy agenda proposal for including the poor [editorial] Tallon JR Jr. **JAMA** 1989 Feb 17;261(7):1044
Including the poor: the fiscal impacts of Medicaid expansion. Thorpe KE, et al. **JAMA** 1989 Feb 17;261(7):1003–7
The impact of Medicaid reimbursement policy on subacute care in hospitals. Coburn AF, et al. **Med Care** 1989 Jan; 27(1):25–33
The effects of an internal analgesic formulary restriction on Medicaid drug expenditures in Wisconsin. Kreling DH, et al. **Med Care** 1989 Jan;27(1):34–44
An evaluation of Utah's primary care case management program for Medicaid recipients. Long SH, et al. **Med Care** 1988 Nov;26(11):1021–32
Medicaid payment to physicians. A national comparison with attention to Minnesota. Foldes SS. **Minn Med** 1988 Jul; 71(7):425–30
Medicaid. Brickett B, et al. **N C Med J** 1989 Aug;50(8):426–8
Some results of the increases in the NY State Medicaid fees. Waldman HB. **N Y State Dent J** 1989 May;55(5):32–3
The state of Nebraska, Medicaid, the Sunderbruch Corporation & you [letter] Sloan JW. **Nebr Med J** 1989 Jun;74(6):162–3

LEGISLATION & JURISPRUDENCE

AIDS—Medicaid coverage of AZT—Weaver v. Reagan. **Am J Law Med** 1989;15(1):132–3
Patient confidentiality statutes in Medicare & Medicaid fraud investigations. Khajezadeh D. **Am J Law Med** 1987; 13(1):105–37 (202 ref.)
Who's responsible for too-early discharge? Cushing M. **Am J Nurs** 1989 Apr;89(4):471–2
Kids and Medicaid: progress but continuing problems [editorial] Waxman HA. **Am J Public Health** 1989 Sep; 79(9):1217–8
Medicaid and Medicaid dentistry in the Reagan years. Waldman HB. **ASDC J Dent Child** 1988 Nov–Dec; 55(6):409–17
Physicians and their elderly patients' legal rights, Part I: Medicare, Medicaid, elder abuse. Panel discussion. Meier D, et al. **Geriatrics** 1989 Sep;44(9):57–8, 61–3, 66
Evaluation of recent changes in Medicaid. Johns L, et al. **Health Aff (Millwood)** 1989 Spring;8(1):171–81
Meaningful Medicaid reform [letter] Miller RL Jr, et al. **Health Aff (Millwood)** 1989 Spring;8(1):227–8
Medicaid: entering the third decade. Oberg CN, et al. **Health Aff (Millwood)** 1988 Fall;7(4):83–96
Larger issues at stake in Medicaid suits. Holthaus D. **Hospitals** 1988 Dec 5;62(23):56
Medicaid budget prompts lawsuit in Michigan. Holthaus D. **Hospitals** 1989 Apr 5;63(7):46
Inadequate funding plagues Medicaid expansions. Larkin H. **Hospitals** 1989 Mar 20;63(6):20–2
Politics kills indigent care 'sin' tax and lottery. Larkin H. **Hospitals** 1989 Sep 5;63(17):70, 72
States may tax hospitals for Medicaid expansion. Robinson ML. **Hospitals** 1989 Sep 5;63(17):20, 22
Reimbursement for services to dependents of Medicaid and Medicare [editorial] Ramsey FB. **Indiana Med** 1989 Apr; 82(4):306
Making sense of referral fee statutes. Hall MA. **J Health Polit Policy Law** 1988 Winter;13(4):623–33
Issues on which reasonable people disagree and minimum acceptable standards. Travis RL. **J Ky Med Assoc** 1989 Aug;87(8):363–4
What to expect—and not expect—in the Medicare/Medicaid anti-kickback "safe harbor" regulations. Berg RN. **J Med Assoc Ga** 1989 Apr;78(4):225–7
A primer on the Medicare/Medicaid anti-kickback provisions. Berg RN. **J Med Assoc Ga** 1989 Jan;78(1):53–5
Medicaid today. **J Miss State Med Assoc** 1989 Apr; 30(4):119–24
Medicaid waiver for AIDS and ARC patients [editorial] Bryan CS. **J S C Med Assoc** 1988 Dec;84(12):596
Medicaid and medical services for pregnant women and children. Sadler DK. **J Tenn Med Assoc** 1988 Sep;81(9):580
Oregon pioneers "more ethical" Medicaid coverage with priority-setting project [news] Goldsmith MF. **JAMA** 1989 Jul 14;262(2):176–7
The Oregon Health Initiative [letter; comment] Kitzhaber J. **Lancet** 1989 Jul 8;2(8654):106. **Comment on:** Lancet 1989 Apr 8;1(8641):772–3
Mandatory HMO enrollment in Medicaid: the issue of freedom of choice. Welch WP, et al. **Milbank Q** 1988; 66(4):618–39
Physician participation in the Missouri Medicaid program. Bushmann CF, et al. **Mo Med** 1988 Oct;85(10):659–65
Medicaid expands to cover more pregnant women & children. Harmon RG. **Mo Med** 1988 Aug;85(8):447–8
Oregon's decision to curtail funding for organ transplantation [letter] **N Engl J Med** 1988 Nov 24;319(21):1419–20
Fraud and abuse. Setting the limits on physicians' entrepreneurship. Hyman DA, et al. **N Engl J Med** 1989 May 11;320(19):1275–8
A coalition to influence public policy. Stone JP, et al. **Soc Work Health Care** 1989;14(1):107–12
Civil monetary penalties—weapon against fraud or instrument of health policy? Barton HM. **Tex Med** 1989 Jun;85(6):65–8
Civil Monetary Penalties Law: mistakes could be (very) costly. Gaynes MJ. **Tex Med** 1989 May;85(5):83–5

ORGANIZATION & ADMINISTRATION

Gatekeeping the emergency department: impact of a Medicaid primary care case management program. Hurley RE, et al. **Health Care Manage Rev** 1989 Spring;14(2):63–71 (32 ref.)
Illinois matches quality with reimbursement. Eubanks P. **Hospitals** 1988 Nov 5;62(21):110
New system helps prevent Medi-Cal claim delays. Larkin H. **Hospitals** 1989 Apr 20;63(8):28
New payment system squeezes NYC hospitals despite high occupancy. Larkin H. **Hospitals** 1988 Nov 5;62(21):32, 34
The effect of Medicaid policy on mental health and poverty. Frank RG, et al. **Inquiry** 1989 Summer;26(2):283–90
Determinants of provider selection or assignment in a mandatory case management program and their implications for utilization. Hurley RE, et al. **Inquiry** 1988 Fall;25(3):402–10
A profile of Medicaid home and community-based care waivers, 1985: findings of a national survey. Laudicina SS, et al. **J Health Polit Policy Law** 1988 Fall;13(3):525–46
How the poor fared in a competitive model: assessing the Illinois selective contracting approach. Christoffel T, et al. **J Public Health Policy** 1988 Winter;9(4):519–36
Case-mix adjusted analyses of service utilization for a Medicaid health insuring organization in Philadelphia. Vertrees JC, et al. **Med Care** 1989 Apr;27(4):397–411
Incantations in the dark: Medicaid, managed care, and maternity care. Rosenbaum S, et al. **Milbank Q** 1988; 66(4):661–93

STATISTICS & NUMERICAL DATA

Medicaid policy and the substitution of hospital outpatient care for physician care. Cohen JW. **Health Serv Res** 1989 Apr;24(1):33–66
Public sector primary care and Medicaid: trading accessibility for mainstreaming. Fossett JW, et al. **J Health Polit Policy Law** 1989 Summer;14(2):309–25 (35 ref.)
PPS waivers: implications for Medicare, Medicaid, and commercial insurers. Zuckerman S, et al. **J Health Polit Policy Law** 1988 Winter;13(4):663–81

SUPPLY & DISTRIBUTION

The role of substitutes in policy analysis: acute care services in state Medicaid programs. Miller M. **J Health Polit Policy Law** 1988 Fall;13(3):499–524

TRENDS

States, hospitals aim to cut costly ED visits. Koska MT. **Hospitals** 1988 Dec 5;62(23):60
The potential impact of private long-term care financing options on Medicaid: the next thirty years. Wiener JM, et al. **J Health Polit Policy Law** 1989 Summer;14(2):327–40
Wanted: drug utilization reviewers [letter] Bruzek R. **Minn Med** 1989 May;72(5):271

UTILIZATION

Influence of age, sex, and race on prescription drug use among Georgia Medicaid recipients. Kotzan L, et al.

Am J Hosp Pharm 1989 Feb;46(2):287–90
The effect of nursing home use on Medicaid eligibility. Liu K, et al. **Gerontologist** 1989 Feb;29(1):59–66
The dynamics of Medicaid enrollment. Short PF, et al. **Inquiry** 1988 Winter;25(4):504–16
Specialty bias in obstetric care for high-risk socioeconomic groups in Maine. Onion DK, et al. **J Fam Pract** 1988 Oct; 27(4):423–7
An expert system for determining Medicaid eligibility. Sear AM. **J Med Syst** 1988 Oct;12(5):275–83
Physician supply and Medicaid participation. The causes of market failure. Fossett JW, et al. **Med Care** 1989 Apr; 27(4):386–96
H2 receptor antagonist usage in Missouri Medicaid recipients. Douglas KC, et al. **Mo Med** 1988 Dec;85(12):779–80
Medicaid patients' use of HMO services. Laufenburg HF. **Wis Med J** 1989 Feb;88(2):19–21
Medicaid: the lower tier of health care for women. Muller C. **Women Health** 1988;14(2):81–103

MEDICAL AUDIT

A two-institution study of transfusion practice in 78 consecutive adult elective open-heart procedures. Goodnough LT, et al. **Am J Clin Pathol** 1989 Apr; 91(4):468–72
The nonvalue of retrospective peer comparison feedback in containing hospital antibiotic costs. Parrino TA. **Am J Med** 1989 Apr;86(4):442–8
Intraoperative pathologic consultation. An audit of 1,000 recent consecutive cases. Oneson RH, et al. **Am J Surg Pathol** 1989 Mar;13(3):237–43
An audit of 2000 endoscopies. Duggan JM, et al. **Aust Clin Rev** 1989;9(1):33–5
Surgical audit—the clinical implications. Gunn AA. **Aust Clin Rev** 1988 Dec;8(31):194–7
Clinical audit as a tool for resource allocation. Kettlewell MG. **Aust Clin Rev** 1988 Dec;8(31):159–62
Audit as a basis for informed consent with cerebral angiography. Mowat PD, et al. **Australas Radiol** 1988 Aug; 32(3):319–21
An inspector calls [letter] **BMJ** 1988 Nov 5;297(6657):1197–8
Three year follow up of patients with raised blood pressure identified at health checks in general practice. Mant D, et al. **BMJ** 1989 May 20;298(6684):1360–2
Audit of 26 years of obstetrics in general practice [see comments] Marsh GN, et al. **BMJ** 1989 Apr 22; 298(6680):1077–80. **Comment in:** BMJ 1989 May 13;298(6683):1313
Audit of 26 years of obstetrics in general practice [letter] Marsh GN. **BMJ** 1989 Jun 10;298(6687):1579
All must audit [letter] Murley R. **BMJ** 1989 Apr 15; 298(6679):1032–3
Audit of 26 years of obstetrics in general practice [letter; comment] Prentice A, et al. **BMJ** 1989 May 13; 298(6683):1313. **Comment on:** BMJ 1989 Apr 22;298(6680):1077–80
Audit—a cause for TMJ dysfunction. Winstanley JH. **Br Dent J** 1989 Apr 22;166(8):278
Costing the quality of life [letter] **Br J Hosp Med** 1988 Aug; 40(2):147
Medical audit. Paton A. **Br J Hosp Med** 1989 Apr;41(4):383
Selection of cases for autopsy [letter] Reid WA. **Br J Hosp Med** 1989 Apr;41(4):397
Audit in internal medicine [editorial] Shaw CD. **Br J Hosp Med** 1989 Jul;42(1):19
The research police [editorial] Short R. **Br J Hosp Med** 1989 Aug;42(2):92
Should the royal colleges be the employers' watchdogs? [letter] Weale F. **Br J Hosp Med** 1989 Mar;41(3):298
Audit of medical response to antenatal booking history. Guthrie KA, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):552–6
Audit and action [editorial] Griffiths RW. **Br J Plast Surg** 1989 Mar;42(2):240–1
Extending surgical audit: the assessment of postoperative outcome. Macintyre IM. **Br J Surg** 1989 Jun;76(6):531–2
Simple audit of trainee/trainer consultation profiles as a method of assessing whether non structured surgeries give adequate training. Skerrett FD, et al. **Bristol Med Chir J** 1988 Aug;103(3):38–9, 53
Computer-assisted audits of blood component transfusion. Hoeltge GA, et al. **Cleve Clin J Med** 1989 May;56(3):267–72
Computerized protocol for preventive medicine: a controlled self-audit in family practice. Weingarten MA, et al. **Fam Pract** 1989 Jun;6(2):120–4
Self audit for rational medical treatment [letter] Rathi SK. **Indian Pediatr** 1988 Feb;25(2):215–6
Analysis of night-time and weekend otolaryngology service. McShane DP. **Ir J Med Sci** 1989 Jun;158(6):150–2
Surgical audit [editorial] Robins R. **J Hand Surg [Br]** 1988 Aug;13(3):235–6
Factors contributing to the perioperative death rate [editorial] **J R Army Med Corps** 1989 Jun;135(2):41–2
Audit of prescribing habits in a sheltered housing development [letter] Eisner C. **J R Coll Gen Pract** 1988 Jul;38(312):323
Audit of diabetic care [letter] Martin E, et al. **J R Coll Gen Pract** 1988 Mar;38(308):123–4
Called to account. Obstetrics. Pediatrics. **Lancet** 1989 Mar 25;1(8639):661–2
Called to account. A radiologist. **Lancet** 1989 Mar 18; 1(8638):605–7
Called to account. Surgery. Orthopedics. **Lancet** 1989 Apr 1;1(8640):714–6
Surgical audit [letter] Kidson IG, et al. **Lancet** 1988 Dec 3;2(8623):1312–3
Apgar score and audit [letter] Samra JS, et al. **Lancet** 1989 Jun 24;1(8652):1444
Audit and necropsy [letter] Underwood JC, et al. **Lancet** 1989 Feb 25;1(8635):442
Prospective audit of aminoglycoside usage in a general hospital with assessments of clinical processes and adverse clinical outcomes. Li SC, et al. **Med J Aust** 1989 Aug 21; 151(4):224–32
Third party audit of dental records. Boerschinger TH. **N Y State Dent J** 1989 Jan;55(1):39
Perinatal mortality audit in a Zimbabwean district. De Muylder X. **Paediatr Perinat Epidemiol** 1989 Jul; 3(3):284–93
Surgical audit—workload, utilisation of manpower and beds, pattern of admission and operations in a community teaching hospital. Schein M, et al. **S Afr J Surg** 1989 Jul; 27(3):93–5
Algorithms for evaluating the appropriateness of blood transfusion. Coffin C, et al. **Transfusion** 1989 May; 29(4):298–303
[Independent controls of quality in therapeutic trials. Apropos of an experience of 11 external audits of clinical investigators performed in 2 European multicenter trials] Bergmann JF, et al. **Therapie** 1988 Aug–Sep;43(5):379–84 (Eng. Abstr.) **(Fre)**
[Surgical infections—study methods] Rubino M. **Ann Ital Chir** 1988;60(1):7–8 **(Ita)**
[Audit of clinical records in primary care: 6 years' experience] Borrell Carrió F, et al. **Gac Sanit** 1988 May–Jun;2(6):144–9 (Eng. Abstr.) **(Spa)**

METHODS

A methodology for targeting hospital cases for quality of care record reviews. Hannan EL, et al. **Am J Public Health** 1989 Apr;79(4):430–6
The CEPOD report and its consequences. Devlin HB. **Aust Clin Rev** 1988 Dec;8(31):174–6
Clinical audit [letter] **BMJ** 1989 May 20;298(6684):1385–6
How to set up an audit. Ellis BW. **BMJ** 1989 Jun 17; 298(6688):1635–7
NHS review. Welcome for medical audit [interview by Dr. Tony Smith] van't Hoff W. **BMJ** 1989 Apr 15; 298(6679):1021–3
Best documented practice [editorial] Whitehouse JM. **BMJ** 1989 Jun 10;298(6687):1536–7
Should physicians perform their own quality assurance audits? Brady WJ, et al. **J Gen Intern Med** 1988 Nov–Dec; 3(6):560–5
Computer-assisted assessment of patient care in the hospital. Gabrieli ER. **J Med Syst** 1988 Jun;12(3):135–46
Medical audit: a review. McKee CM, et al. **J R Soc Med** 1989 Aug;82(8):474–8 (47 ref.)

ORGANIZATION & ADMINISTRATION

[Activity of the hospital commissions with regard to the prevention and control of hospital infections in the Kielce province 1985–1986] Krawiecka H, et al. **Przegl Epidemiol** 1988;42(3):301–8 (Eng. Abstr.) **(Pol)**
[Experience with the organization of sanitary control of cooperative activities] Smirnova OE, et al. **Sov Zdravookhr** 1989;(4):45–7 **(Rus)**

STANDARDS

Surgical audit: do we need it? Dudley HA. **Aust Clin Rev** 1988 Dec;8(31):198–200
Management and medical audit. Shaw CD. **Aust Clin Rev** 1988 Dec;8(31):185–7
Booking scan dates discrepancy and repeat scanning [letter] Banfield G, et al. **Lancet** 1989 Jun 24;1(8652):1445
Working Paper 6 on the National Health Service. Lilleyman JS, et al. **Lancet** 1989 Mar 11;1(8637):545–6
Blood and component wastage report. A quality assurance function of the hospital transfusion committee. Clark JA, et al. **Transfusion** 1989 Feb;29(2):139–42

MEDICAL CARE RESEARCH see **HEALTH SERVICES RESEARCH**

MEDICAL CARE TEAM see **PATIENT CARE TEAM**

MEDICAL CENTERS, ACADEMIC see **ACADEMIC MEDICAL CENTERS**

MEDICAL CENTERS, UNIVERSITY see **ACADEMIC MEDICAL CENTERS**

MEDICAL COMPUTER SCIENCE see **MEDICAL INFORMATICS**

MEDICAL DECISION MAKING, COMPUTER-ASSISTED see **DECISION MAKING, COMPUTER-ASSISTED**

MEDICAL DEVICE DESIGN see **EQUIPMENT DESIGN**

MEDICAL DEVICE FAILURE see **EQUIPMENT FAILURE**

MEDICAL DEVICE SAFETY see **EQUIPMENT SAFETY**

MEDICAL DEVICES see **EQUIPMENT AND SUPPLIES**

MEDICAL DIRECTORS

Medical Director of Respiratory Care. Accepted as an Official Position Paper by the ATS Board of Directors, November 1987. **Am Rev Respir Dis** 1988 Oct; 138(4):1082–3
The regional blood center medical director's role in transfusion safety. Menitove JE. **Arch Pathol Lab Med** 1989 Mar;113(3):292–5
The academic hospital blood bank director. All things to all people. Snyder EL. **Arch Pathol Lab Med** 1989 Mar; 113(3):300–6
Be a manager. Chantler C. **BMJ** 1989 Jun 3;298(6686):1505–8
Doctors becoming managers. A conversation among Richard Smith, Sir Anthony Grabham, and Professor Cyril Chantler [interview by Richard Smith] Grabham A, et al. **BMJ** 1989 Feb 4;298(6669):311–4
Doctors becoming managers [letter] Hunt MA, et al. **BMJ** 1989 Mar 11;298(6674):670
Doctors becoming managers [letter] Murphy E. **BMJ** 1989 Mar 4;298(6673):603–4
The uniqueness of a professionally dominated organization. Fogel DS. **Health Care Manage Rev** 1989 Summer; 14(3):15–24 (16 ref.)
A complex mandate. The radiology chairmanship. James AE Jr. **Invest Radiol** 1988 Nov;23(11):870–4
The nursing home medical director. Fanale JE. **J Am Geriatr Soc** 1989 Apr;37(4):369–75 (25 ref.)
A postgraduate dean's year. Paton A. **Postgrad Med J** 1988 May;64(751):409–10
Role of the department chairman in the future of interventional radiology. Levin DC. **Radiology** 1989 Mar; 170(3 Pt 2):947–9
Pedigrees of southern surgical chairmen. Cohn I Jr. **South Med J** 1989 Jul;82(7):892–6
[Outpatient surgical centers: functions and responsibilities of the medical director] Muzzi A, et al. **Nuovi Ann Ig Microbiol** 1987 Sep–Dec;38(5–6):463–70 (Eng. Abstr.) **(Ita)**

ECONOMICS

Salaries reflect value of physician managers. Koska MT. **Hospitals** 1989 Mar 5;63(5):56

PSYCHOLOGY

Physician managers: personal characteristics versus institutional demands. Tabenkin H, et al. **Health Care Manage Rev** 1989 Spring;14(2):7–12 (27 ref.)
Stress is nothing new to MDs who are CEOs. Koska MT. **Hospitals** 1989 Sep 20;63(18):72–3

MEDICAL EXAMINERS see **CORONERS AND MEDICAL EXAMINERS**

MEDICAL HISTORY TAKING

see related
DATA COLLECTION

Evaluating the interview performance of internal medicine interns. Meuleman JR, et al. **Acad Med** 1989 May; 64(5):277–9
Improving the preparation of preclinical students for taking sexual histories. Vollmer S, et al. **Acad Med** 1989 Aug; 64(8):474–9
The new sexual history: inquiring about sexual practices [editorial] Bowman M. **Am Fam Physician** 1989 Jul; 40(1):82–3
How to assess the risk of HIV exposure. Jewell ME, et al. **Am Fam Physician** 1989 Jul;40(1):153–61
Taking a sexual history: an individualized approach [editorial] Siwek J. **Am Fam Physician** 1989 Jul;40(1):83–4
Records, recall loss, and recall bias in pregnancy: a comparison of interview and medical records data of pregnant and postnatal women. Bryant HE, et al. **Am J Public Health** 1989 Jan;79(1):78–80
Reliability of patient history in determining the possibility of pregnancy. Ramoska EA, et al. **Ann Emerg Med** 1989 Jan;18(1):48–50
The preparedness of freshman medical students for taking sexual histories. Vollmer SA, et al. **Arch Sex Behav** 1989 Apr;18(2):167–77
Concepts, questions and goals in general practice. Are you asking the right questions? Kamien M. **Aust Fam Physician** 1989 Jul;18(7):815–6, 818, 820–1 passim 823
Undescended testis: how history and examination may influence treatment. MacKellar A. **Aust N Z J Surg** 1988 Aug;58(8):643–5
Time to let the patient speak. Blau JN. **BMJ** 1989 Jan 7; 298(6665):39
Form of address: an addition to history taking? [letter] Elizabeth JE. **BMJ** 1989 Jan 28;298(6668):257
Away with the system review: a plea for parsimony. Hoffbrand BI. **BMJ** 1989 Mar 25;298(6676):817–9
Using computers to take patient histories. Pringle M.

BMJ 1988 Sep 17;297(6650):697–8 (52 ref.)
Alcohol histories taken by psychiatric registrars: a comparative study in a non-teaching hospital [letter] Mitchell C. Br J Addict 1989 Apr;84(4):438–9
Urological history-taking and management recommendations by microcomputer. Glen ES, et al. Br J Urol 1989 Feb; 63(2):117–21
Evaluation of a computer interview system for use with neuro-otology patients. O'Connor KP, et al. Clin Otolaryngol 1989 Feb;14(1):3–9
The reliability of surrogate information about oral contraceptive use, smoking, height and weight collected from men about their wives. Thorogood M, et al. Contraception 1989 Apr;39(4):401–8
Evaluation of the elderly patient. Greenberg MS. Dent Clin North Am 1989 Jan;33(1):51–7 (0 ref.)
Evaluation of a patient-completed versus health professional-conducted medication history. Montpetit LM, et al. Drug Intell Clin Pharm 1988 Dec;22(12):964–9
An experimental study of two methods for teaching sexual history taking skills. Liese BS, et al. Fam Med 1989 Jan-Feb;21(1):21–4
A self-scored medical history teaching technique. Urberg MM, et al. Fam Med 1988 Nov-Dec;20(6):458–60
You're supposed to feel abnormal. Anderson EG. Geriatrics 1989 Aug;44(8):93–4
Ethics and the daily language of medical discourse. Poirier S, et al. Hastings Cent Rep 1988 Aug-Sep;18(4):5–9
Work-up of the HIV-infected patient. Practical approach. Hollander H. Infect Dis Clin North Am 1988 Jun;2(2):353–8 (14 ref.)
The development and evaluation of a computerised antenatal questionnaire. Fawdry R. Int J Gynaecol Obstet 1989 Mar; 28(3):229–35
The reliability of the medical history in the identification of patients at risk for infective endocarditis. Lockhart PB, et al. J Am Dent Assoc 1989 Sep;119(3):417–8, 421–2
Documenting safe treatment of the medical-risk patient. McCarthy FM, et al. J Am Dent Assoc 1989 Sep; 119(3):383–9
History-taking in the elderly with and without cognitive impairment. How useful is it? Davis PB, et al. J Am Geriatr Soc 1989 Mar;37(3):249–55
Use of interactive video in teaching history-taking to medical students: a pilot project. Kwan RM, et al. J Audiov Media Med 1988 Oct;11(4):121–4
Recall of childhood illnesses. Krall EA, et al. J Clin Epidemiol 1988;41(11):1059–64
Diagnosis of past history of myocardial infarction in epidemiological studies: an alternative based on the Caerphilly and Speedwell surveys. Yarnell JW, et al. J Epidemiol Community Health 1988 Jun;42(2):116–20
Development and evaluation of a computer genogram. Ebell MH, et al. J Fam Pract 1988 Nov;27(5):536–8
Coping with the sexual health interview. Andrews S. J Nurse Midwifery 1988 Nov-Dec;33(6):269–73
Sexual history. Beal JA, et al. J Okla State Med Assoc 1989 Jan;82(1):25–6
A framework for taking a treatment history. Herxheimer A. J R Coll Physicians Lond 1989 Jan;23(1):22–3
Taking a sexual history and managing common sexual problems. Franger AL. J Reprod Med 1988 Jul; 33(7):639–43
Righting the medical record [letter] Graner JL. JAMA 1988 Dec 2;260(21):3131
Lectures and skills workshops as teaching formats in a history-taking skills course for medical students. Evans BJ, et al. Med Educ 1989 Jul;23(4):364–70
Teaching doctors to take alcohol histories: a limited success story. Rowland N, et al. Med Educ 1988 Nov;22(6):539–42
How comfortable do first-year medical students expect to be when taking sexual histories? Vollmer SA, et al. Med Educ 1988 Sep;22(5):418–25
A model for evaluating the history taking and physical examination skills of medical students. Stone H, et al. Med Teach 1989;11(1):75–80
Self-directed learning of history taking in childhood asthma. Tseng RY. Med Teach 1988;10(3–4):351–3
Taking a sexual history and educating clients about safe sex. Andrist LC. Nurs Clin North Am 1988 Dec;23(4):959–73 (28 ref.)
Brief sexual inquiry in gynecologic practice. Bachmann GA, et al. Obstet Gynecol 1989 Mar;73(3 Pt 1):425–7
The reliability of personal and family medical histories in the identification of hepatitis B carriers. Comfort MB, et al. Oral Surg Oral Med Oral Pathol 1989 May;67(5):531–4
Family history evaluation as a predictive screen for childhood hypercholesterolemia. Pediatric Practice Research Group. Griffin TC, et al. Pediatrics 1989 Aug; 84(2):365–73
Physiologic changes as patients get older. Perlman PE, et al. Postgrad Med 1989 Feb 1;85(2):213–4, 219
Hemiplegic migraine in childhood [letter] Appleton RE. Practitioner 1988 Mar 8;232(1444):219
Evaluation of anamnestic data in patients referred for oral cholecystography. Persson G, et al. Scand J Gastroenterol 1989 Jun;24(5):550–6
Subjective disease experience in Sjögren's syndrome. A computerized discrimination analysis [published erratum appears in Scand J Rheumatol 1989;18(3):188] Konttinen YT, et al. Scand J Rheumatol 1989;18(1):13–20
Cornell Medical Index responses and mortality in a Polynesian population. Crews DE, et al. Soc Sci Med 1988; 27(12):1433–7
Why perform a routine history and physical examination? Sapira JD. South Med J 1989 Mar;82(3):364–5
A computer-based interview system for patients with back pain. A validation study. Thomas AM, et al. Spine 1989 Aug;14(8):844–6
Blood transfusion history in colorectal cancer patients and cancer-free controls. Tartter PI. Transfusion 1988 Nov-Dec;28(6):593–6
[Early recognition and management of anorexia nervosa in adolescence] Weeda-Mannak WL. Ned Tijdschr Geneeskd 1989 Feb 4;133(5):237–40 (Dut)
[Epidemiologic survey of the DMS-III criteria for bulimia] Aimez P, et al. Ann Med Psychol (Paris) 1988 May-Jun; 146(7):677–87 (Fre)
[Use of a preanesthetic questionnaire] Trebuchet C, et al. Cah Anesthesiol 1988 Nov;36(7):559–62 (Fre)
[Biographical anamnesis and social amnesia. A review of medical history taking, exploration, clinical interview, biographical analysis and diagnostic-clinical consultation] Kobbé U. Psychiatr Neurol Med Psychol (Leipz) 1988 Jun; 40(6):321–35 (69 ref.) (Eng. Abstr.) (Ger)
[Anamnesis: a methodologic approach and diagnostic value] Calcagnini G, et al. Minerva Med 1989 Feb;80(2):95–9 (Ita)
[Use of occupational anamnesis at a lung department] Bakke P, et al. Tidsskr Nor Laegeforen 1988 Oct 30; 108(30):2729–30 (Eng. Abstr.) (Nor)

EDUCATION

The contribution of different components of the clinical encounter in generating and eliminating diagnostic hypotheses. Gruppen LD, et al. Proc Annu Conf Res Med Educ 1988;27:242–7
Expertise in the clinical interview: a cognitive analysis. Kaufman DR, et al. Proc Annu Conf Res Med Educ 1988; 27:167–72
A model for evaluating the history taking and physical examination skills of medical students. Stone H, et al. Proc Annu Conf Res Med Educ 1988;27:46–50

METHODS

Patient-proxy response comparability on measures of patient health and functional status. Magaziner J, et al. J Clin Epidemiol 1988;41(11):1065–74

STANDARDS

Factors affecting outcomes of medication-history interviewing by pharmacy students. Ranelli PL, et al. Am J Hosp Pharm 1989 Feb;46(2):267–81
Reliability of drug histories in a specialized geriatric outpatient clinic. Jackson JE, et al. J Gen Intern Med 1989 Jan-Feb;4(1):39–43

VETERINARY

Case histories [letter] Bedford PG. Vet Rec 1989 Aug 5; 125(6):136–7

MEDICAL ILLUSTRATION

Pictorially assisted recall of past hormone use in case-control studies. Beresford SA, et al. Am J Epidemiol 1989 Jul; 130(1):202–5
Aspects of confidentiality, copyright, and accreditation. Cull P. J Audiov Media Med 1988 Jan;11(1):8–10
Porcelain facings in dentistry and the importance of clinical illustrations to the dentist and dental ceramist. Jackson AP. J Audiov Media Med 1988 Apr;11(2):68–70
The challenge of medical illustration today. Ollerenshaw K. J Audiov Media Med 1988 Jan;11(1):5–7
Illustrating the ocular fundus. Stenstrom WJ. J Audiov Media Med 1988 Jul;11(3):100–3
Canonical form as a model for surgical illustration. McConathy D. J Biocommun 1989;16(2):20–7 (22 ref.)
Flexible fiberoptic endoscopy: an introduction for illustrators. Pearl RK, et al. J Biocommun 1989;16(2):11–3
Visual aid for quick assessment of coronary artery stenosis at necropsy [letter] Champ CS, et al. J Clin Pathol 1989 Aug;42(8):887–8
Three dimensional microarchitecture of organs reconstructed on the basis of modern histological observation methods. Krstić RV. Prog Clin Biol Res 1989;295:623–8

HISTORY

Some specimens from William Clift's copy of Matthew Baillie's The Morbid Anatomy of the Human Body (1799–1802). Attwood HD. Aust N Z J Surg 1988 Aug; 58(8):665–70
Renaissance medicine: alchemy and astrology, art and anatomy. Bendiner E. Hosp Pract [Off] 1989 Jun 15; 24(6):247–9, 253–4, 259–61 passim
Lea & Febiger—all in the family. Bussy RK. J Biocommun 1988 Fall;15(4):12–5
The key to the brain. Félix Vicq d'Azyr (1748–1794). Goldblatt D. Semin Neurol 1986 Jun;6(2):231–7
Gilbert Horrax the complete surgeon: postoperative drawings. Rossitch E Jr, et al. Surg Neurol 1989 Jun; 31(6):477–9
Harvey Cushing as medical artist: a case of cirsoid aneurysm of the scalp. Rossitch E Jr, et al. Surg Neurol 1989 Sep; 32(3):237–40
[Paracelsus—the Michelangelo of medicine? Diagnosis by Paracelsus and Ortolf of Bavaria] Riha O. Fortschr Med 1988 Sep 30;106(28):61–2 (Ger)
[Greek anatomy of the eye in Pakistan today] Crone RA. Klin Monatsbl Augenheilkd 1988 Oct;193(4):427–30 (Eng. Abstr.) (Ger)

MEDICAL IMAGING see DIAGNOSTIC IMAGING

MEDICAL INDIGENCY

Evaluating health-care needs of the poor: a community-oriented approach. Hubbell FA, et al. Am J Med 1989 Aug;87(2):127–31
Health care for the indigent [letter] Adams N. Am J Public Health 1989 Oct;79(10):1435–6
Patient dumping. The physician's dilemma [editorial] Rose C. Chest 1989 Mar;95(3):490–1
The Colorado Indigent Care Program: an update. Barton M, et al. Colo Med 1989 Jul 1;86(13):213–4
AIDS, judges, and the right to medical care. Annas GJ. Hastings Cent Rep 1988 Aug-Sep;18(4):20–2
Filling the gaps in health insurance: impact on competition. Wilensky GR. Health Aff (Millwood) 1988 Summer; 7(3):133–49
The hospitalizable patient as commodity: selling in a bear market. Greenberg WM, et al. Hosp Community Psychiatry 1989 Feb;40(2):184–5
Indigent care and overcrowding threaten EDs. Koska MT. Hospitals 1989 Jul 20;63(14):66, 68, 70
M.D.s, hospitals unite to share indigent load. Koska MT. Hospitals 1989 Jul 20;63(14):58
Hospitals support insurance for the working poor. Larkin H. Hospitals 1989 Mar 20;63(6):23–4
HMO conflict: market pressure vs. indigent care. Larkin H. Hospitals 1989 Jul 20;63(14):62, 64
Product-line approach controls cost of providing indigent care. Larkin H. Hospitals 1989 Mar 20;63(6):24
The Care Center cares. IMJ 1988 Jul;174(1):31–6
Health [editorial] Wathan B. J Am Dent Assoc 1989 May; 118(5):672
Evaluation of a primary health care program for the poor. Begley CE, et al. J Community Health 1989 Summer; 14(2):107–20
Dumping or work aversion? [editorial] Rosen P. J Emerg Med 1988 Sep-Oct;6(5):429–31
Perceptions of family practice residents regarding health care and poor patients. Price JH, et al. J Fam Pract 1988 Dec; 27(6):615–21
On poverty [editorial] Underwood CR. J Med Assoc Ga 1988 Sep;77(9):689
Charity hospitals [editorial] Hill JE. J Miss State Med Assoc 1988 Dec;29(12):381
Early discharge with home follow-up: impacts on low-income mothers and infants. Norr KF, et al. J Obstet Gynecol Neonatal Nurs 1989 Mar-Apr; 18(2):133–41
Caring for the poor: the altruism of physicians [letter] JAMA 1989 Jan 20;261(3):378–9
The torturer's horse. Friedman E. JAMA 1989 Mar 10; 261(10):1481–2
Fifty hours for the poor [editorial] Lundberg GD, et al. JAMA 1988 Dec 2;260(21):3178
Care for the Hispanic poor: a growing segment of American society. Muñoz E. JAMA 1988 Nov 11;260(18):2711–2
What should be done about the uninsured poor? [letter; comment] Navarro V. JAMA 1989 Jul 14;262(2):209–10. Comment on: JAMA 1988 Dec 2;260(21):3176–7
New York City's health care crisis: AIDS, the poor, and limited resources [letter] Oryshkevich BA. JAMA 1989 Jan 20;261(3):378
A health policy agenda proposal for including the poor [editorial] Tallon JR Jr. JAMA 1989 Feb 17;261(7):1044
Including the poor: the fiscal impacts of Medicaid expansion. Thorpe KE, et al. JAMA 1989 Feb 17;261(7):1003–7
Risky business [letter] McCoy S. MCN 1989 Mar-Apr; 14(2):130
Health care to the uninsured a national embarrassment. Domzalski HM. Mich Med 1989 Apr;88(4):5
Health care for the uninsured. The statistics are staggering. Shearer M. Mich Med 1989 Apr;88(4):14–5
Missouri's medically indigent. Ekern HP. Mo Med 1987 Mar; 84(3):115–6
Who pays? [editorial; comment] Berwick DM, et al. N Engl J Med 1989 Aug 24;321(8):541–2. Comment on: N Engl J Med 1989 Aug 24;321(8):508–13
Around-the-state aid for the medically needy. Athy D, et al. Ohio Med 1988 Dec;84(12):953–7
The medically needy—and the next generation. Martin RD. Ohio Med 1988 Dec;84(12):960–5
'47 varieties'. A survey of the use of Section 47 of the National Assistance Act 1948 in Bradford. Towler JN. Public Health 1988 Sep;102(5):485–92
Federal antidumping law—hospital and physician responsibility. Schneider KC. Tex Med 1989 Jan; 85(1):58–60
Physician-subsidized health care [editorial] Watts MS. West J Med 1988 Sep;149(3):328
[Late results with hybrid dentures in low-income patients. An investigation at the Cantonal Public Dental Clinic of

Zurich] Brunner T, et al. **Schweiz Monatsschr Zahnmed** 1989;99(2):166–73 (Eng. Abstr.) (Ger)

[Second-level hospitals in the health care model for the population without coverage] Soberón G, et al. **Salud Publica Mex** 1989 May–Jun;31(3):346–69 (Eng. Abstr.) (Spa)

ECONOMICS

Uncompensated care threatening the future of Alaskan health care. Johnson K. **Alaska Med** 1989 Mar–Apr;31(2):65–71

Financial barriers to medical care: a prospective study in a university-affiliated community clinic. Hubbell FA, et al. **Am J Med Sci** 1989 Mar;297(3):158–62

Uncompensated emergency care in hospital markets in Los Angeles County. Melnick GA, et al. **Am J Public Health** 1989 Apr;79(4):514–6

Health Care Cost Management Commission sets agenda for the future. Rusten M. **Del Med J** 1989 Jun;61(6):299–300

State health risk pools: insuring the 'uninsurable'. Laudicina SS. **Health Aff (Millwood)** 1988 Fall;7(4):97–104

The medically indigent mentally ill: approaches to financing. Frank RG. **Hosp Community Psychiatry** 1989 Jan; 40(1):9–12

Decentralized services for public hospital patients: a cost analysis. Santos AB, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):827–9

Are risk pools being oversold as a solution? Friedman E. **Hospitals** 1988 Nov 5;62(21):100–4

Free care hurts hospital price competition. Larkin H. **Hospitals** 1988 Nov 5;62(21):30, 32

Execs: government ignores duty to help the poor. Robinson ML. **Hospitals** 1989 Feb 5;63(3):20, 22–3, 25

Analysis of the effect of disproportionately large share of low-income patients on psychiatric costs in general hospitals. Rupp A, et al. **Inquiry** 1989 Summer;26(2):216–21

Uncompensated care pools and care to the uninsured: lessons from the New York Prospective Hospital Reimbursement Methodology. Thorpe KE. **Inquiry** 1988 Fall;25(3):344–53

Private and public sectors form partnership to solve indigent maternity care crisis. Deju J. **J Fla Med Assoc** 1988 Nov; 75(11):725–6

Access to medical care in a medically indigent population. Akin BV, et al. **J Gen Intern Med** 1989 May–Jun; 4(3):216–20

Access, health, and the general internist [editorial] Brook RH. **J Gen Intern Med** 1989 May–Jun;4(3):265

Who will care for the needy? Provision and funding of health care in Louisiana. Williams DM, et al. **J La State Med Soc** 1989 Jun;141(6):33–7

The cost of compassion. Can Georgia hospitals afford it? Parker JA. **J Med Assoc Ga** 1988 Sep;77(9):705–7

With compassion and respect for human dignity. Steckler DR. **J Miss State Med Assoc** 1989 Feb;30(2):46, 65

'Medical care for all': questions and answers [news] **JAMA** 1988 Dec 2;260(21):3106–7

What should be done about the uninsured poor? [see comments] Blendon RJ. **JAMA** 1988 Dec 2;260(21):3176–7 **Comment in:** JAMA 1989 Jul 14;262(2):209–10

Midland County program provides alternative to mandatory assignment. Lo DH. **Mich Med** 1989 Mar;88(3):17–8

Setting the records straight: are voluntary hospitals caring for the poor? [letter] **N Engl J Med** 1988 Dec 1; 319(22):1485–7

Worse before it gets better? [editorial] Leon DF. **Pa Med** 1988 Oct;91(10):8

Pediatric care for state's poor and near-poor. Young CL, et al. **Pa Med** 1989 May;92(5):32–6

Ability to pay and access to transplantation. Daniels N. **Transplant Proc** 1989 Jun;21(3):3424–5; discussion 3440–4

Money matters: should ability to pay ever be a consideration in gaining access to transplantation? Evans RW. **Transplant Proc** 1989 Jun;21(3):3419–23; discussion 3440–4

Questions views expressed in article on health insurance [letter] Gueriera CJ. **Va Med** 1989 Jun;116(6):254–5

HISTORY

Matronized nursing service at Mobile City Hospital in the mid-19th century: a paradigm of altruism and indigent patient care. Salley RK, et al. **South Med J** 1989 Aug; 82(8):1017–25

LEGISLATION & JURISPRUDENCE

Medicaid: entering the third decade. Oberg CN, et al. **Health Aff (Millwood)** 1988 Fall;7(4):83–96

The Florida Health Care Access Act: a blended regulatory/competitive approach to the indigent health care problem. Jones KR. **J Health Polit Policy Law** 1989 Summer;14(2):261–85 (58 ref.)

Issues on which reasonable people disagree and minimum acceptable standards. Travis RL. **J Ky Med Assoc** 1989 Aug;87(8):363–4

American Medical Association presidential candidate questionnaire. Questionnaire on health and related topics. Ward JC Jr. **J Med Assoc Ga** 1988 Jul;77(7):573–5

Medicaid today. **J Miss State Med Assoc** 1989 Apr; 30(4):119–24

The Uncompensated Care Trust Fund and the Medicare waiver. Coye MJ. **N J Med** 1989 Mar;86(3):189–90

Does medical indigence exist in Ohio? Edwards KS. **Ohio Med** 1988 Dec;84(12):945–51

The devil or the sea? Transfer regs create a dilemma. Jones DB. **Tex Med** 1989 May;85(5):70–5

OIG v. Burditt, MD (it could happen to you). Wilcox DP, et al. **Tex Med** 1989 May;85(5):79–80

Wisconsin's AZT reimbursement program. **Wis Med J** 1989 Jul;88(7):152, 156

STATISTICS & NUMERICAL DATA

Cost estimate of health care coverage for the medically indigent in Hawaii. Mondragón D, et al. **Asia Pac J Public Health** 1989;3(1):82–5

Triple jeopardy: rural, poor, and uninsured. Rowland D, et al. **Health Serv Res** 1989 Feb;23(6):975–1004 (24 ref.)

Hospital and patient characteristics of uncompensated hospital care: policy implications. Saywell RM Jr, et al. **J Health Polit Policy Law** 1989 Summer;14(2):287–307

Adverse outcomes and lack of health insurance among newborns in an eight-county area of California, 1982 to 1986 [see comments] Braveman P, et al. **N Engl J Med** 1989 Aug 24;321(8):508–13. **Comment in:** N Engl J Med 1989 Aug 24;321(8):541–2

Uncompensated and undercompensated care provided by San Francisco Medical Society physicians. Hogeland S. **West J Med** 1988 Sep;149(3):359–61

TRENDS

Why is our population of uninsured and underinsured persons growing? The consequences of the "deindustrialization" of America. Renner C, et al. **Annu Rev Public Health** 1989; 10:85–94

Medical need and the private practice physician [editorial] Platt D. **Del Med J** 1988 Sep;60(9):532–3

A proposal for care for the medically indigent in the New Orleans area. Daniels RS. **J La State Med Soc** 1989 Apr; 141(4):35–8

The future of medical care for the medically indigent in Louisiana and its relationship to medical education. Daniels RS. **J La State Med Soc** 1989 Mar;141(3):27–8, 31–4

The medically uninsured: who cares? Castellani BC. **J Med Assoc Ga** 1988 Sep;77(9):708–10

Uncompensated medical care: what's being done? Haverty JR. **J Med Assoc Ga** 1988 Sep;77(9):701–3

Uncompensated health care in Georgia—an emerging public policy problem. Marchetti A. **J Med Assoc Ga** 1988 Sep; 77(9):695–700

Outreach as case finding. The process of locating low-income pregnant women. Brooks-Gunn J, et al. **Med Care** 1989 Feb;27(2):95–102

Outreach as case finding: its effect on enrollment in prenatal care. McCormick MC, et al. **Med Care** 1989 Feb; 27(2):103–11

Twin cities care teams reach people of the streets. Kizilos PJ. **Minn Med** 1989 Jun;72(6):332–40

One step away from the street. Reflections on caring for the homeless. Rumsey T, et al. **Minn Med** 1989 Jun; 72(6):341–2

A national perspective. The medically indigent. Edwards KS. **Ohio Med** 1988 Dec;84(12):938–43

Labour insecurity and health: an epidemiological study in Zimbabwe. Loewenson R. **Soc Sci Med** 1988;27(7):733–41

Health insurance of women of childbearing age: United States, 1985. Singh S. **Stat Bull Metrop Insur Co** 1988 Oct–Dec;69(4):16–23

Uncompensated care among Wisconsin physicians. Carranza S, et al. **Wis Med J** 1989 Apr;88(4):23–5

MEDICAL INFORMATICS

A review of medical education and medical informatics. Haynes RB, et al. **Acad Med** 1989 Apr;64(4):207–12

Hypermedia in pathology—the Dartmouth Interactive Medical Record project. Shultz EK, et al. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S34–8

Improving medical communication with facsimile (fax) transmission. Yamamoto LG, et al. **Am J Emerg Med** 1989 Mar;7(2):203–8

Automated processing of narrative medical text—a new tool for clinical drug studies. Gabrieli ER. **J Med Syst** 1989 Apr;13(2):95–102 (28 ref.)

The natural language processing of medical databases. Grams RR, et al. **J Med Syst** 1989 Apr;13(2):79–87

Quality controlling interpretive reporting systems in clinical medicine—a changing responsibility. Lezotte DC. **J Med Syst** 1988 Jun;12(3):153–67

Expert systems in laboratory medicine: a practical consultative application. Pribor HC. **J Med Syst** 1989 Apr; 13(2):103–9

Risks versus benefits of tests and treatments [editorial] McDonald CJ. **MD Comput** 1989 Mar–Apr;6(2):63–4

The classification-nomenclature issues in medicine: a return to natural language. Côté RA, et al. **Med Inf (Lond)** 1989 Jan–Mar;14(1):25–41

On medical informatics. Haux R. **Methods Inf Med** 1989 Apr; 28(2):66–8

Indivisibility and variety of medical informatics. Seelos HJ. **Methods Inf Med** 1988 Oct;27(4):191–3

[The physician and the computer. 26. Commercial software] Březovský P, et al. **Cesk Pediatr** 1989 Feb;44(2):111–5 (Eng. Abstr.) (Cze)

[The physician and the computer. 22. Programming in the Prolog language] Feber J, et al. **Cesk Pediatr** 1989 Jan; 44(1):26–8 (Eng. Abstr.) (Cze)

[The physician and the computer. 27. Equipment-computer connection (signal processing)] Hoskovec P, et al. **Cesk Pediatr** 1989 Mar;44(3):167–9 (Eng. Abstr.) (Cze)

[The physician and the computer. 22. Graphics methods. I] Kasal P, et al. **Cesk Pediatr** 1988 Oct;43(10):610–4 (Eng. Abstr.) (Cze)

[The physician and the computer. 21. Logical questions] Kasal P. **Cesk Pediatr** 1988 Sep;43(9):545–7 (Eng. Abstr.) (Cze)

[The physician and the computer. 23. Graphics methods. II] Kasal P, et al. **Cesk Pediatr** 1988 Nov;43(11):674–7 (Eng. Abstr.) (Cze)

[The physician and the computer. 24. Graph theory] Kasal P, et al. **Cesk Pediatr** 1988 Dec;43(12):727–31 (Eng. Abstr.) (Cze)

[Medical and hospital informatics in Europe: development and trends] Roger FH. **Bull Mem Acad R Med Belg** 1988; 143(5–6):288–99 (Eng. Abstr.) (Fre)

[Professionals in health areas: knowledge of the documentation terminology] Población DA, et al. **Rev Saude Publica** 1988 Oct;22(5):422–35 (Eng. Abstr.) (Por)

[The risk of reaching an incorrect decision as a criterion of the value of diagnostic information] Mintser OP, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):74–81 (Eng. Abstr.) (Rus)

[The correct utilization of scientific terminology (letter)] López-Aramburu MA. **Actas Urol Esp** 1989 Mar–Apr; 13(2):154 (Spa)

[Influence of informatics on clinical and epidemiologic investigation] Marrugat J, et al. **Med Clin (Barc)** 1989 May 20;92(19):742–8 (47 ref.) (Spa)

ECONOMICS

Preparing a medical informatics research grant proposal: general principles. Miller RA, et al. **Comput Biomed Res** 1989 Feb;22(1):92–101

EDUCATION

M.D./Ph.D. program in quantitative and computational medicine [letter] Lacy ME. **Am J Med** 1989 Jun;86(6 Pt 1):639–40

A strategy for curriculum integration of information skills instruction. Burrows S, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):245–51

The evolving role of clinical medical librarians. Halsted DD, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):299–301

Graduate specialization in nursing informatics. Heller BR, et al. **Comput Nurs** 1989 Mar–Apr;7(2):68–77

HISTORY

Evolution of medical informatics societies in the United States. Collen MF. **MD Comput** 1989 Jul–Aug;6(4):192–8

ORGANIZATION & ADMINISTRATION

[Prerequisites for the development of medical informatics] Ostapiuk SF, et al. **Vestn Akad Med Nauk SSSR** 1988; (6):77–81 (Eng. Abstr.) (Rus)

STANDARDS

A name is not enough. Bishop CW. **MD Comput** 1989 Jul–Aug;6(4):200–6

TRENDS

Biotechnology computing: information science for the era of molecular medicine. Masys DR. **Acad Med** 1989 Jul; 64(7):379–81

Medical informatics: glimpses of the promised land. Masys DR. **Acad Med** 1989 Jan;64(1):13–4

Electronic information for physicians: a new dimension in solving traditional problems. Part II. Yasnoff WA. **Alaska Med** 1988 Sep–Oct;30(5):167–8

FAX technology, a useful medical tool. Oster HG. **Md Med J** 1989 May;38(5):395–6

Human meaning of medical informatics: reflections on its future and trends. Grémy F. **Med Inf (Lond)** 1989 Jan–Mar; 14(1):1–11

Medical data, information, and knowledge [editorial] van Bemmel JH. **Methods Inf Med** 1988 Jul;27(3):109–10

[The development of resources in informatics, computer technology and management automation in the medical service of the armed forces of the main NATO-block countries] Litvinov AM, et al. **Voen Med Zh** 1989 Mar; (3):68–72 (19 ref.) (Rus)

[Informatics in pediatrics: introduction] Argemí Renom J. **An Esp Pediatr** 1988 Sep;29 Suppl 32:40–2 (Spa)

UTILIZATION

[Informatics in medicine] Hamouda C. **Tunis Med** 1987 Oct; 65(10):613–5 (Eng. Abstr.) (Fre)

MEDICAL INFORMATICS APPLICATIONS

So you are about to buy a computer for your department. What not to do? Van Maele G, et al. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):219–21

Evaluation of a computer interview system for use with neuro-otology patients. O'Connor KP, et al.

Clin Otolaryngol 1989 Feb;14(1):3–9
Fully automated computer analysis of intracolonic pressures. Rogers J, et al. Gut 1989 May;30(5):642–9
Computerized telephone assessment of the "concrete" needs of chemotherapy outpatients: a feasibility study. Siegel K, et al. J Clin Oncol 1988 Nov;6(11):1760–7
[Statistical use of a database (Bull–SOPRA–ADICAP system). Application in the study of cancers in women] Bocquet L. Ann Pathol 1989;9(1):62–7 (Eng. Abstr.) (Fre)
[Informatics in the dental office] Forrer JM. Schweiz Monatsschr Zahnmed 1989;99(2):236–7 (Fre)
[Supporting functions of medical information system] Nose Y. Fukuoka Igaku Zasshi 1988 Dec;79(12):851–3 (8 ref.) (Jpn)
[Informatics applications in pediatrics] Zappulla F. An Esp Pediatr 1988 Sep;29 Suppl 32:54–7 (Spa)

MEDICAL INFORMATICS COMPUTING

The South Dakota Med–Fax network. Hulkonen DA, et al. Bull Med Libr Assoc 1989 Apr;77(2):212–5
PRUFILE: a clinical and laboratory database for the genetics centre. Mutton DE, et al. Clin Genet 1988 Oct;34(4):209–18
Querying medical databases in an environment offering logical data independence. di Felice P. Comput Methods Programs Biomed 1989 Apr;28(4):225–34
The synergism of Health Information Science/Health Informatics. Protti DJ. Crit Rev Med Inform 1986; 1(2):149–63 (55 ref.)
From mainframe to micro: decentralization of perinatal epidemiology. Bottoms SF, et al. J Perinat Med 1988; 16(4):345–8
An application of the Markov process for quantitative prediction of labor progress. Nagamatsu A, et al. J Perinat Med 1988;16(4):333–7
WORM optical disk systems for medicine. Dayhoff RE. MD Comput 1988 Nov–Dec;5(6):12–6
Remembrance, thanks, and welcome [editorial] Slack WV. MD Comput 1989 Jul–Aug;6(4):183–5
Design and implementation of a biomedical image database (BDIM). Aubry F, et al. Med Inf (Lond) 1988 Oct–Dec; 13(4):241–8
The PACS project in the radiology department of the LKH–Graz. Becker M, et al. Med Inf (Lond) 1988 Oct–Dec;13(4):249–53
PACS in practice: the status of the PACS project at the St. Radboud University Hospital. Part B. A digital image archive: information analysis and development. Bouman HD, et al. Med Inf (Lond) 1988 Oct–Dec;13(4):265–78
PACS in practice: the status of the PACS project at the St. Radboud University Hospital. Part A: Introduction and the picture system. van Erning LJ, et al. Med Inf (Lond) 1988 Oct–Dec;13(4):255–64
Efficient storage of urodynamic signals by computer: application of FAN adaptive sampling. van Mastrigt R, et al. Urol Res 1989;17(1):57–62
[Real–time collection of obstetrical and neonatal data. 1 years' experience] Tellez B, et al. Rev Fr Gynecol Obstet 1989 Mar 10;84(3):183–5 (Eng. Abstr.) (Fre)
[Design criteria for a computerized clinical database] De Bernardinis M, et al. Chir Ital 1988 Aug–Oct; 40(4–5):295–305 (Eng. Abstr.) (Ita)
[Informatics in cardiology: proposal for standardized terminology in clinical records and in permanent cardiac electrostimulation] Fiorista F, et al. Arch Inst Cardiol Mex 1988 Jul–Aug;58(4):333–7 (Eng. Abstr.) (Spa)

MEDICAL INFORMATION SCIENCE see MEDICAL INFORMATICS

MEDICAL MISSIONS, OFFICIAL

Dialysis for acute renal failure due to crush injuries after the Armenian earthquake [published erratum appears in BMJ 1989 Mar 11;298(6674):655] Richards NT, et al. BMJ 1989 Feb 18;298(6671):443–5
Visit to Poland. Br Dent J 1989 Aug 5;167(3):109
In the Barakai camp there is little life, little hope. Seufert W. Can Med Assoc J 1989 Jun 1;140(11):1346, 1348, 1350 passim
American critical care team at a foreign disaster site: the Armenian experience. Pesola G, et al. Crit Care Med 1989 Jun;17(6):582–5
Uganda safari (American surgeon visits east Africa). Preston DJ. Del Med J 1989 Apr;61(4):217–8, 222–3
Medical missions. Scurlock WR. J Arkansas Med Soc 1989 May;85(12):533
Medical Readiness Education and Training Exercises by United States Army medical personnel in Kenya. Hand R, et al. Milit Med 1989 Aug;154(8):417–21
Volunteers for Israel [letter] Hornblow JF. N Z Dent J 1989 Apr;85(380):65
Orthopaedics overseas: the other side of the coin [editorial] Fowles JV. Orthop Rev 1989 Jan;18(1):13–4
Orthopaedics Overseas #15. Project Ethiopia. Harsha WN. Orthop Rev 1989 Jan;18(1):125–6, 128
[Vaccinations in Africa, experiences in Burkina Faso] Stuyt LB. Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2375–80 (Dut)
[Difficulties in otolaryngologic practice in Central Africa] Pietruski J. Otolaryngol Pol 1988;42(4):291–5 (Eng. Abstr.) (Pol)

HISTORY

Dugald Christie. Scottish medical pioneer in Manchuria (1883–1923). Tsai HH. Scott Med J 1989 Apr;34(2):443–4
[The first Soviet physicians in Yemen] Gavlin ML. Sov Zdravookhr 1988;(12):52–5 (Rus)

MEDICAL OFFICE BUILDINGS see under HEALTH FACILITIES

MEDICAL ONCOLOGY

see related NEOPLASMS
A curriculum in oncology for medical students in Europe. Peckham M. Acta Oncol 1989;28(1):141–7
Radionuclide studies in surgical oncology. Sundram FX. Ann Acad Med Singapore 1988 Jan;17(1):113–7 (41 ref.)
Scientific and technical staffing of radiation oncology departments. Australasian College of Physical Scientists and Engineers in Medicine Topic Group on Radiotherapy Staffing. Australas Phys Eng Sci Med 1989 Jun;12(2):48–54
Impact of radiation research on clinical trials in radiation oncology. Rubin P, et al. Clin Radiol 1989 Jan;40(1):68–75 (43 ref.)
The pathologist and the clinical oncologist: a new effective partnership in assessing tumor prognosis. Saccani Jotti G, et al. Eur J Cancer Clin Oncol 1989 Apr;25(4):585–98 (93 ref.)
The scientific tour of China and Hong Kong by the British Association of Surgical Oncology. Rosin D, et al. Eur J Surg Oncol 1989 Aug;15(4):390–6
International activities of the National Cancer Institute. Masnyk IJ. J Natl Cancer Inst 1988 Nov 2;80(17):1366–72
Oncology. Roper M, et al. JAMA 1989 May 19; 261(19):2865–7
The Japanese–German cooperation in cancer research: history, presence, future [letter] Munk K. Jpn J Cancer Res 1989 May;80(5):490–1
Patients', parents', and oncologists' perceptions of informed consent for bone marrow transplantation. Lesko LM, et al. Med Pediatr Oncol 1989;17(3):181–7
Oncologist–induced vomiting: the Igvid syndrome? [letter] Divgi AB. N Engl J Med 1989 Jan 19;320(3):189–90
Innovations in diffusion. Ford LG. Prog Clin Biol Res 1989; 293:23–33
[Oncologic surgery; the role of the surgeon in the treatment of the patient with cancer] Hoekstra HJ, et al. Ned Tijdschr Geneeskd 1988 Nov 26;132(48):2211–4 (Dut)
[Temporal logic and expert systems in cancer management] Lardennois B, et al. Rev Fr Gynecol Obstet 1989 Apr; 84(4):331–42 (Fre)
[10 years' experience in ambulatory and hospital consultation in oncology at the Monthey hospital] Wildhaber D. Rev Med Suisse Romande 1988 Nov;108(11):941–7 (Fre)
[Tumor cytogenetics: between molecular genetics and clinical oncology] Rudolph G. Dtsch Med Wochenschr 1989 Aug 18;114(33):1253–9 (56 ref.) (Ger)
[Spontaneous tumors in mongrel breeding–stock mice and rats from the vivarium of the R. E. Kavetskiĭ Institute for Oncology Problems of the Academy of Sciences of the Ukrainian SSR] Tsapenko VF, et al. Eksp Onkol 1988; 10(4):39–43 (Eng. Abstr.) (Rus)
[The participation of Soviet oncologists in WHO activities] Tseshkovskiĭ MS, et al. Vopr Onkol 1989;35(1):58–64 (Eng. Abstr.) (Rus)
[The development and contribution of experimental oncology to clinical practice] Ujházy V. Cas Lek Cesk 1988 Sep 30; 127(39–40):1220–3 (Eng. Abstr.) (Slo)
[Oncologic pediatrics and general pediatrics] Bezanilla Regato JL. An Esp Pediatr 1988 Sep;29 Suppl 33:173–4 (6 ref.) (Spa)
[The role of medical oncology as a subspecialty of internal medicine in the management of cancer (letter)] Gallardo J, et al. Rev Med Chil 1988 Apr;116(4):386–8 (Spa)

ECONOMICS

Ethics, economy and credibility in oncology [(editorial)] Reizenstein P. Biomed Pharmacother 1988;42(10):623–4

EDUCATION

An EC/EORTC effort to achieve common European guidelines for the teaching of oncology [editorial] Acta Oncol 1988;27(4):421
European undergraduate education in oncology. A report of the EORTC Education Branch. Robèrt KH, et al. Acta Oncol 1988;27(4):423–5
Training for surgical oncology. Clunie GJ. Ann Acad Med Singapore 1988 Jan;17(1):118–9
Improve the counselling skills of doctors and nurses in cancer care. Maguire P, et al. BMJ 1988 Oct 1;297(6652):847–9
The teaching of physics and related courses to residents in radiation oncology. Dunscombe P. Can Assoc Radiol J 1989 Aug;40(4):211–2
A statement on behalf of St. Elsewhere [editorial] Boronow RC. Gynecol Oncol 1988 Nov;31(3):474–7
Radiation oncology: postgraduate medical education in the United States, 1988. Cox JD, et al. Int J Radiat Oncol Biol Phys 1989 Jun;16(6):1577–82
Summary results of the ACR (American College of Radiology) experience with an in–training examination for residents in radiation oncology. Wilson JF, et al. Int J Radiat Oncol Biol Phys 1988 Nov;15(5):1219–21
Now we tell—but how well? [editorial] Holland JC. J Clin Oncol 1989 May;7(5):557–9
Cancer pain education: a call for role models [editorial] Weissman DE. J Clin Oncol 1988 Dec;6(12):1793–4
Oncology Pharmacy Residency at Walter Reed Army Medical Center. Martin SC. Milit Med 1988 Aug; 153(8):413–6
Psychosocial support of cancer patients: a training program for oncology staff. Hürny C. Recent Results Cancer Res 1988;108:295–300
Public information and professional education about cancer. van der Linde F. Recent Results Cancer Res 1988; 108:319–26
[Few remarks with regard to the training of medical students in oncology] Woźniak L. Nowotwory 1988 May–Jun; 38(3):202–3 (Pol)
[The teaching of the section on maxillofacial neoplasms at a dentistry department] Neustroev VV, et al. Stomatologiia (Mosk) 1988 Sep–Oct;67(5):86 (Rus)

HISTORY

Gustave Roussy. del Regato JA. Int J Radiat Oncol Biol Phys 1988 Nov;15(5):1223–32
On the 85th birthday of this journal. Grundmann E. J Cancer Res Clin Oncol 1988;114(5):443–6
Antonio Prudente: Brazilian physician. Taufic M, et al. Mayo Clin Proc 1988 Nov;63(11):1122
Cancer research. CRC and MRC to shuffle the pack [news] Webb B. Nature 1989 Sep 21;341(6239):175
[Cancer in the works of l'École de Paris 1800–1850] Ackerknecht EH. Clio Med 1985–86;20(1–4):125–34 (Fre)

MANPOWER

Intestinal surgery in gynaecological oncology' [letter] Harbison RG. Aust N Z J Obstet Gynaecol 1988 Aug; 28(3):242

METHODS

Cancer chemotherapy: ethical dilemmas [letter] Van Scoy–Mosher MB. J Clin Oncol 1989 May;7(5):687
Artificial intelligence techniques for cancer treatment planning. Ardizzone E, et al. Med Inf (Lond) 1988 Jul–Sep; 13(3):199–210
[Collaboration between pathology and surgery in oncology. I. From the viewpoint of the pathologist] Georgii A. Verh Dtsch Ges Pathol 1988;72:374–80 (Ger)
[Collaboration between pathology and surgery in oncology. II. From the viewpoint of the surgeon] Schreiber HW. Verh Dtsch Ges Pathol 1988;72:381–6 (Ger)
[Use of monoclonal antibodies against cytoskeletal proteins and extracellular matrix in basic and applied oncological research] Vasil'ev IuM. Gematol Transfuziol 1988 Dec; 33(12):3–7 (20 ref.) (Eng. Abstr.) (Rus)

ORGANIZATION & ADMINISTRATION

Advances in cancer control: cancer control research and the emergence of the oncology product line. Proceedings of the 5th annual meeting on Advances in Cancer Control—a combined meeting of the Association of Community Cancer Centers/Association of American Cancer Institutes. Washington, D.C., March 11–15, 1987. Prog Clin Biol Res 1988;278:1–253

STANDARDS

Utilisation review of radiation oncology practice. Shepherd J, et al. Aust Clin Rev 1988 Sep;8(30):131–8
Medical ethics, altruism, and the cancer patient [editorial] Holleb AI. CA 1989 May–Jun;39(3):133–4
[Improving the organization of services for patients with malignant neoplasms of the head and neck] O'shanskiĭ VO, et al. Sov Med 1989;(4):62–6 (Rus)
[Ways to improve the cancer service] Vopr Onkol 1988; 34(9):1027–33 (Rus)

STATISTICS & NUMERICAL DATA

Developing a method to analyze the oncology product line. Guy JF, et al. Prog Clin Biol Res 1989;293:379–86

TRENDS

Surgical oncology [editorial] Nambiar R. Ann Acad Med Singapore 1988 Jan;17(1):1–2
Unfinished business. Paul J. Br J Cancer Suppl 1988 Dec; 9:5–8
One score + 11 = 2000. Creasman WT. Gynecol Oncol 1989 Sep;34(3):255–7
Patterns of change in the physics and technical support of radiation therapy in the USA 1975–1986. Chu JC, et al. Int J Radiat Oncol Biol Phys 1989 Aug;17(2):437–42
Do we need a new end point in clinical trials today? [letter] J Natl Cancer Inst 1989 Jul 19;81(14):1105–7
[The radiologic service of the Cheliabinsk Oblast (history,

present status, future development)] Vazhenin AV, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):61–4 (Eng. Abstr.) **(Rus)**

[Evolution of the views on the organization of the treatment of esophageal cancer] Chissov VI, et al. **Sov Med** 1988; (7):66–9 **(Rus)**

[Ways of solving the problems of the control of malignant neoplasms in the RSFSR] Chissov VI, et al. **Sov Med** 1989; (4):58–61 **(Rus)**

MEDICAL PSYCHOLOGY see **PSYCHOLOGY, MEDICAL**

MEDICAL RECEPTIONISTS see under **MEDICAL SECRETARIES**

MEDICAL RECORD LINKAGE see under **MEDICAL RECORDS**

MEDICAL RECORDS

see related
MEDICAL HISTORY TAKING

Assessing the value of student case write-ups and write-up evaluations. McLeod PJ. **Acad Med** 1989 May;64(5):273–4

A report-coding system for integration into a digital radiology department. Bramble JM, et al. **AJR Am J Roentgenol** 1989 May;152(5):1109–12

Hypermedia in pathology—the Dartmouth Interactive Medical Record project. Shultz EK, et al. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S34–8

The single patient report [editorial] Fulginiti VA. **Am J Dis Child** 1988 Oct;142(10):1035

Computers in medicine. Augmenting medical care in pediatric patients with chronic illnesses. Handler EG. **Am J Dis Child** 1989 Sep;143(9):1021–3

Agreement between questionnaire data and medical records. The evidence for accuracy of recall. Harlow SD, et al. **Am J Epidemiol** 1989 Feb;129(2):233–48 (37 ref.)

Medication histories should not be included in measures of comprehensive clinical services [letter] Waller DJ, et al. **Am J Hosp Pharm** 1988 Aug;45(8):1668

CPR in a small hospital. Sander P, et al. **Am J Nurs** 1989 Jun;89(6):812–5

Research in physical medicine and rehabilitation. III. The chart review or how to use clinical data for exploratory retrospective studies. Findley TW, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):150–7

Psychoactive drug use in a general population sample, Sweden: correlates with perceived health, psychiatric diagnoses, and mortality in an automated record-linkage study. Allgulander C. **Am J Public Health** 1989 Aug; 79(8):1006–10

Records, recall loss, and recall bias in pregnancy: a comparison of interview and medical records data of pregnant and postnatal women. Bryant HE, et al. **Am J Public Health** 1989 Jan;79(1):78–80

A methodology for targeting hospital cases for quality of care record reviews. Hannan EL, et al. **Am J Public Health** 1989 Apr;79(4):430–6

Patient reports [letter] Meijer GA. **Anaesth Intensive Care** 1989 May;17(2):235–6

Permanent record of findings at laryngoscopy [letter] Liban JB. **Anaesthesia** 1989 Apr;44(4):357

Fifty-five years ago in Anesthesia & Analgesia. E. A. Rovenstine: A method of combining anesthetic and surgical records for statistical purposes. Anesthesia and Analgesia: 1934;13:122–128. **Anesth Analg** 1989 Feb;68(2):185

A computerized anesthesia database. Strauss PL, et al. **Anesth Analg** 1989 Mar;68(3):340–3

A user-friendly system [letter] Grauer K, et al. **Ann Emerg Med** 1988 Dec;17(12):1369

The misinformation era: the fall of the medical record [see comments] Burnum JF. **Ann Intern Med** 1989 Mar 15; 110(6):482–4. **Comment in:** Ann Intern Med 1989 Jul 1;111(1):92

Coding of acute myocardial infarction. Clinical and policy implications. Iezzoni LI, et al. **Ann Intern Med** 1988 Nov 1;109(9):745–51

ICD, POR, and DRG. Unsolved scientific problems in the nosology of clinical medicine. Feinstein AR. **Arch Intern Med** 1988 Oct;148(10):2269–74

A friendly encounter [letter] Liaw ST. **Aust Fam Physician** 1989 Jul;18(7):869, 871

Use an encounter sheet to solve your problems. North J. **Aust Fam Physician** 1989 Jan;18(1):26–7

DOCLE. A new system of medical notation. Oon YK. **Aust Fam Physician** 1988 Sep;17(9):772–3

New cervical cytology request form is unusable [letter] **BMJ** 1989 Mar 4;298(6673):597–8

Form of address: an addition to history taking? [letter] Elizabeth JE. **BMJ** 1989 Jan 28;298(6668):257

Coping with disaster [letter] Hawkins TJ. **BMJ** 1989 Apr 8;298(6678):962

Which type of hospital discharge report reaches general practitioners most quickly? Kendrick AR, et al. **BMJ** 1989 Feb 11;298(6670):362–3

Computerised updating of clinical summaries: new opportunities for clinical practice and research? Llewelyn DE, et al. **BMJ** 1988 Dec 10;297(6662):1504–6

Computerised updating of clinical summaries [letter] Llewelyn DE, et al. **BMJ** 1989 Feb 18;298(6671):459

Save the general practice record [editorial] Loudon I, et al. **BMJ** 1989 Mar 25;298(6676):772

Is an information booklet for patients leaving hospital helpful and useful? Sandler DA, et al. **BMJ** 1989 Apr 1; 298(6677):870–4

Occupational physicians and the Access to Medical Reports Act [letter] Symington IS, et al. **BMJ** 1989 Apr 1; 298(6677):892–3

A microcomputer-based index filing system for the rapid retrieval of records in a surgical pathology laboratory. Chan KW, et al. **Br J Clin Pract** 1988 Feb;42(2):68–73

Reporting of influenza outbreaks in long-term care facilities. **Can Dis Wkly Rep** 1989 Mar 4;15(9):53–4 **(Eng, Fre)**

Comparison of individual follow-up and computerized record linkage using the Canadian Mortality Data Base. Shannon HS, et al. **Can J Public Health** 1989 Jan–Feb; 80(1):54–7

Ontario MDs worried new law threatens confidentiality of patient records. Cohen L. **Can Med Assoc J** 1988 Oct 15; 139(8):798

That notwithstanding clause again [letter] Herbert CP, et al. **Can Med Assoc J** 1989 Jul 15;141(2):97–8

Registration procedures and exchange of data in the Sjögren's syndrome research team with special reference to the oral component. Axéll T. **Clin Exp Rheumatol** 1989 Mar–Apr; 7(2):137–9

Disease prevention and general health maintenance for women: improved by the use of a computer-integrated database. Staker LV. **Clin Obstet Gynecol** 1988 Dec; 31(4):927–40

Record release. General guidelines. **Colo Med** 1989 Jan 1; 86(1):522

Physiological amino acid data management: quantitation, assessment, reporting and storage. Carter RJ, et al. **Comput Biol Med** 1988;18(6):431–9

Hierarchical time-oriented approaches to missing data inference. Albridge KM, et al. **Comput Biomed Res** 1988 Aug;21(4):349–66

dNA: a simple dBASE program for medical studies. Aickin M. **Comput Methods Programs Biomed** 1989 Mar; 28(3):201–5

Data processing software for electrophysiological visual exploration. Grall Y, et al. **Comput Methods Programs Biomed** 1989 Feb;28(2):101–9

Transferring documents from one system to another. Reed RC. **Comput Nurs** 1989 Mar–Apr;7(2):58–60

The analysis of menstrual bleeding patterns: a review. Belsey EM, et al. **Contraception** 1988 Aug;38(2):129–56 (30 ref.)

A micro-computer software for the analysis of menstrual diaries: the menstrual diary system. Pinol A, et al. **Contraception** 1988 Aug;38(2):157–63

Clinical writing and the documentary construction of schizophrenia. Barrett RJ. **Cult Med Psychiatry** 1988 Sep; 12(3):265–99

A standard form for recording clinical findings in children with a motor deficit of central origin [letter] **Dev Med Child Neurol** 1989 Feb;31(1):119–20

Automated health surveillance. Block B, et al. **Fam Med** 1988 Sep–Oct;20(5):377–80

Improving geriatric preventive care through a patient-held checklist. Dietrich AJ, et al. **Fam Med** 1989 May–Jun; 21(3):195–8

Opportunistic research in general practice using a low cost microcomputer based medical record system as a tool. Chan DH, et al. **Fam Pract** 1989 Jun;6(2):125–9

Toxicology case data reporting system. Joynt BP. **Forensic Sci Int** 1988 Nov;39(2):143–53

The clinical utility of a comprehensive periodic assessment form for the geriatric rehabilitation patient. Yew E, et al. **Gerontologist** 1989 Apr;29(2):263–7

Language, thought, and reality [letter] **Hastings Cent Rep** 1989 Jan–Feb;19(1):44–5

Ethics and the daily language of medical discourse. Poirier S, et al. **Hastings Cent Rep** 1988 Aug–Sep;18(4):5–9

Medical charts and malpractice: how to avoid costly errors and omissions. NaPier PM, et al. **Hawaii Med J** 1989 Jan; 48(1):596–7, 599, 607

Patient access to general practice medical records. Melville AW. **Health Bull (Edinb)** 1989 Jan;47(1):5–8

A strategy for enhancing the clinical utility of the psychiatric record. Van Vort W, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):407–9

The case presentation: narrative or teaching tool? [letter; comment] Cass RM. **Hosp Pract [Off]** 1989 Feb 15;24(2):22 . **Comment on:** Hosp Pract [Off] 1988 Jul 15;23(7):21, 25–6, 29

Endocarditis case report: a critique [letter] Coe AE. **Hosp Pract [Off]** 1989 Mar 30;24(3A):16

Hospitals must tap electronic clinical information. Corley RP. **Hospitals** 1989 Aug 5;63(15):80

Employer and hospital hook up via computer. Droste T. **Hospitals** 1988 Nov 5;62(21):90

'Underautomated' medical records clog system. Koska MT. **Hospitals** 1989 Feb 5;63(3):36–7, 39, 41

Blood contamination of medical records. Wormser GP, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):118–9

Use of surveillance systems for occupational cancer: data from the Danish National system. Lynge E, et al. **Int J Epidemiol** 1988 Sep;17(3):493–500

Usefulness of case report literature in determining drugs responsible for toxic epidermal necrolysis. Stern RS, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):317–22

Legal requirement of private practice medical records. Cross AT. **J Am Diet Assoc** 1988 Oct;88(10):1272–4

Computerized optometric records and the law. Dister RE, et al. **J Am Optom Assoc** 1989 Jan;60(1):56–8

Clinical records on computer for ambulatory patients. Olson CD. **J Am Osteopath Assoc** 1988 Dec;88(12):1509–10, 1513–5 (8 ref.)

Measures of asthma severity recorded by patients. Kotses H, et al. **J Asthma** 1988;25(6):373–6

Sample bias and overinference: two sources of error in interpreting case report data [letter] Coffman JA, et al. **J Clin Psychiatry** 1989 Mar;50(3):105

Identifying suicide potential in primary care. Lin EH, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):1–6

Complaints about fees and costs for medical records and depositions. Marshall TM, et al. **J Ky Med Assoc** 1988 Oct; 86(10):587

Computerized medical records [letter] Shrader JA. **J Med Educ** 1988 Dec;63(12):928–9

Chart reading and anxiety levels of nursing students prior to first interactions with psychiatric clients. Nieswiadomy R, et al. **J Nurs Educ** 1989 Feb;28(2):67–71

Prob. c abbrev. in med. rec [editorial] Laskin DM. **J Oral Maxillofac Surg** 1988 Oct;46(10):823

Implementation of a microcomputer-based opportunistic health maintenance programme in a general practice teaching clinic. Chan DH, et al. **J R Coll Gen Pract** 1988 Aug;38(313):360–2

Computerized family practitioner committee records—a data base for general practitioners. Hargrave L, et al. **J R Coll Gen Pract** 1988 Jan;38(306):22–3

Censoring of patient-held records by doctors. Jones RB, et al. **J R Coll Gen Pract** 1988 Mar;38(308):117–8

Format and content of medical record summaries in 27 training practices. Presley P. **J R Coll Gen Pract** 1988 Jan; 38(306):26–7

Patient access to psychiatric records: the patients' view. Parrott J, et al. **J R Soc Med** 1988 Sep;81(9):520–2

The Sunnybrook Neurotrauma Assessment Record: improving trauma data collection. Kondziolka D, et al. **J Trauma** 1989 Jun;29(6):730–5

Continuous monitoring of child mortality from clinic records. Pickering H, et al. **J Trop Med Hyg** 1989 Apr;92(2):71–4

The computer-stored medical record [letter] **JAMA** 1989 May 12;261(18):2636–7

Danish experience of statutory right of patients to access hospital records [letter] Andersen T, et al. **Lancet** 1988 Dec 17;2(8625):1428

Access to medical reports. Brahams D. **Lancet** 1989 Feb 18; 1(8634):395

Duty to disclose medical records. Brahams D. **Lancet** 1989 Aug 19;2(8660):460

Management information system for leprosy eradication programme—an alternative information system. Revankar CR, et al. **Lepr Rev** 1989 Jun;60(2):129–34

A. R. Luria and the art of clinical biography. Hawkins AH. **Lit Med** 1986;5:1–15

Clinical tales. Sacks O. **Lit Med** 1986;5:16–23

The Regenstrief medical records. McDonald CJ, et al. **MD Comput** 1988 Sep–Oct;5(5):34–47

Computer-stored medical record systems [editorial] McDonald CJ. **MD Comput** 1988 Sep–Oct;5(5):4–5

A convertible perinatal database. Nagey DA, et al. **MD Comput** 1989 Jan–Feb;6(1):28–36

The HELP medical record system. Pryor TA. **MD Comput** 1988 Sep–Oct;5(5):22–33

A quarter-century of computer-based medical records. Stead WW. **MD Comput** 1989 Mar–Apr;6(2):74–81

Computer-based medical records: the centerpiece of TMR. Stead WW, et al. **MD Comput** 1988 Sep–Oct;5(5):48–62

The advantages of a microcomputer-based procedure log. Wheeler RP. **MD Comput** 1989 Jan–Feb;6(1):24–6

A typical patient simulation and dosimetry data sheet. Nair RP. **Med Dosim** 1989;14(2):79–80

A daily radiation therapy record form. Thompson RW, et al. **Med Dosim** 1989;14(2):75–7

Development and evaluation of a radiological reporting system for use with a personal computer. Murata K, et al. **Med Inf (Lond)** 1989 Jan–Mar;14(1):71–83

Computers and clinicians [letter] **Med J Aust** 1988 Nov 7; 149(9):511–2

Discriminating powers of partial agreements of names for linking personal records. Part I: The logical basis. Newcombe HB, et al. **Methods Inf Med** 1989 Apr; 28(2):86–91

Discriminating powers of partial agreements of names for linking personal records. Part II: The empirical test. Newcombe HB, et al. **Methods Inf Med** 1989 Apr; 28(2):92–6

MSMS legal counsel explains physician access to HCFA, MPRO records. Williams TR. **Mich Med** 1989 Apr;88(4):27

A simple, microcomputer-based transcription system for radiology reports. Campbell AF. **Milit Med** 1989 Mar; 154(3):136–9

Barriers between patients and their medical records [letter] Kaufman JL. **N Engl J Med** 1988 Dec 22;319(25):1672

Abbreviated breakthrough [letter] Mizroch SG, et al. **N Engl J Med** 1989 Feb 23;320(8):539

The application of a computer data base system to the generation of hospital discharge summaries. Smith RP, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):803–7

Subpoenas for medical records served upon physicians.

Licata LJ, et al. **Ohio Med** 1989 Jan;85(1):48–51
Topical retinoid treatment for various dry-eye disorders [letter] Maumenee AE, et al. **Ophthalmology** 1989 May; 96(5):730
The SPOCC (Selective Procedures, Operative Cases, and Consults) program as an advance in orthopaedic resident record keeping. Bear JV, et al. **Orthop Rev** 1989 Feb; 18(2):193–8
Computer corner #19. The computer as an aid to the orthopaedic resident for record-keeping. Bear JV, et al. **Orthop Rev** 1988 Mar;17(3):325–8
Computer corner #18. A computer program suitable for routine hip replacement follow up and clinical research. Hamilton HW, et al. **Orthop Rev** 1988 Jan;17(1):116–20
An advanced data base pacemaker follow-up system that's customizable. Batey RL, et al. **PACE** 1988 Dec; 11(12):2180–92
Development of a clinical database for the implant and follow-up of cardioverter systems. Benedek ZM, et al. **PACE** 1988 Nov;11(11 Pt 2):2023–8
The St. Thomas's Hospital maternity case notes study: a randomised controlled trial to assess the effects of giving expectant mothers their own maternity case notes. Lovell A, et al. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):57–66
Medical histories of children with acute pyelonephritis compared with controls. Mårild S, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):511–5
The problem-oriented system, problem-knowledge coupling, and clinical decision making. Weed LL, et al. **Phys Ther** 1989 Jul;69(7):565–8
Weighty records: medicine by bulk [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 Aug;84(2):338–9
Patients' access to their medical records [editorial] Dean A. **Practitioner** 1988 Jul;232(1452):763–4
Paediatric surveillance: linking general practice and health visitor records using computer-produced labels. Salisbury CJ. **Practitioner** 1988 Nov 22;232(1459):1262, 1265
Doctor, nurse and patient knowledge of prescribed medication in primary care. Ross FM. **Public Health** 1989 Mar;103(2):131–7
Voice recognition system [letter] Hansen GC, et al. **Radiology** 1988 Nov;169(2):580
Industrial physician's responsibilities to his patients and to management—confidential records. Beard RR. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):83–9
Experience with a multi crossover model in dyspepsia. Johannessen T, et al. **Scand J Gastroenterol Suppl** 1988; 147:33–7
An N of 1 service: applying the scientific method in clinical practice. Keller JL, et al. **Scand J Gastroenterol Suppl** 1988; 147:22–9
Single case studies in clinical trials. Lindberg G. **Scand J Gastroenterol Suppl** 1988;147:30–2
Single case studies from a statistician's point of view. Sandvik L. **Scand J Gastroenterol Suppl** 1988;147:38–9
Single case studies in psychology and psychiatry. Sjödén PO. **Scand J Gastroenterol Suppl** 1988;147:11–21 (12 ref.)
Statistical issues in studies of individual response. Spiegelhalter DJ. **Scand J Gastroenterol Suppl** 1988; 147:40–5
Single case studies. An introduction. Wulff HR. **Scand J Gastroenterol Suppl** 1988;147:7–10
Computerization of clinic records: the resource utilization system for a sexually transmitted diseases clinic. Hart G. **Sex Transm Dis** 1989 Jan-Mar;16(1):1–6
The Iowa record-linkage experience. Black DW. **Suicide Life Threat Behav** 1989 Spring;19(1):78–89
The utility of emergency room data for record linkage in the study of adolescent suicidal behavior. Deykin EY. **Suicide Life Threat Behav** 1989 Spring;19(1):90–8
Home-based mothers' health records. Kumar V, et al. **World Health Forum** 1988;9(1):107–10
[The legislation concerning insight into medical records. A questionnaire study] Hoffmann E, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):30–1 (Eng. Abstr.) (Dan)
[The first year of access to medical records in a gynecologic and obstetric department] Høgdall CK, et al. **Ugeskr Laeger** 1988 Nov 14;150(46):2808–10 (Eng. Abstr.) (Dan)
[Access to medical records from a psychiatric ward. Experiences from the first year of free access] Noring U, et al. **Ugeskr Laeger** 1988 Nov 14;150(46):2806–8 (Eng. Abstr.) (Dan)
[Access to psychiatric and child psychiatric case records in the Copenhagen County Hospital in Nordvang in 1987] Svendsen AB, et al. **Ugeskr Laeger** 1989 May 29; 151(22):1389–92 (Eng. Abstr.) (Dan)
[Activity indicators for an anesthesiology department] Kobel M. **Ann Fr Anesth Reanim** 1989;8(1):75–6 (Fre)
[The obstetrical record] Lewin D. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):770–5 (Fre)
[Medical records in gynecology and obstetrics. Administrative and medico-legal aspects] Magnin G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):775–84 (Fre)
[Experience of decentralized informatics at a nephrology unit of a general hospital] Marichal JF, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1227–31 (Eng. Abstr.) (Fre)
[Numeration of patients from anonymous data: a method established with the epidemiological data of public health of Paris] Thelot B, et al. **Rev Epidemiol Sante Publique** 1988;36(3):226–34 (Eng. Abstr.) (Fre)
[Direct transfer of obstetrical data by magnetic means in a randomized multicenter trial of the subjective count of fetal movements by the mother-to-be] Alexander S, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):179–82 (Eng. Abstr.) (Fre)
[Computerized obstetrical record of the North Pas-de-Calais region] Delcroix M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):175–7 (Eng. Abstr.) (Fre)
[The pregnancy file on a magnetic card (CAM)] Paradinas P, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):173 (Fre)
[Computerized management of the obstetrical record] Pierre F, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):305–10 (Fre)
[Real-time collection of obstetrical and neonatal data. 1 years' experience] Tellez B, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):183–5 (Eng. Abstr.) (Fre)
[From the management of the medical record to clinical research in obstetrics] Viel JF, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):310–2 (Fre)
[Computerized records of visits. Support in therapy] Werthenschlag J, et al. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):303–4 (Fre)
[Computerized medical records. The experience of the François Baclesse Center] Barrelier P, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):58–61 (Eng. Abstr.) (Fre)
[The blood bank electronic data processing system: program for the "blood recipient" record] Kluge A, et al. **Beitr Infusionther** 1988;21:357–9 (Ger)
[Practical goals of data processing in tumor surgery] Hermanek P, et al. **Chirurg** 1989 Feb;60(2):78–82 (10 ref.) (Ger)
[A computer program for registering all daily accumulated data at a school for vision disorders] Effert R, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):518–22 (Eng. Abstr.) (Ger)
[Bronchoscopy documentation] Schindl R, et al. **Prax Klin Pneumol** 1988 Jul;42(7):573–5 (Eng. Abstr.) (Ger)
[Computer assisted clinical cancer documentation and its use in a multidisciplinary oncologic center] Schott G, et al. **Z Arztl Fortbild (Jena)** 1988;82(11):517–22 (Ger)
[The main features of an electronic data processing polyclinic information system in East Germany] Bohndorf HJ, et al. **Z Gesamte Hyg** 1988 Oct;34(10):556–8 (Eng. Abstr.) (Ger)
[A microcomputer project for medical documentation at polyclinics of the People's Republic of Poland] Melaniuk M. **Z Gesamte Hyg** 1988 Oct;34(10):555 (Eng. Abstr.) (Ger)
[Computer-assisted documentation in dermatohistology] Bahmer FA. **Z Hautkr** 1989 Feb 15;64(2):113–4, 117–8 (Eng. Abstr.) (Ger)
[The significance of dermatologic management in computer-assisted occupational dermatology consultation] Rakoski J, et al. **Z Hautkr** 1989 Jan 15;64(1):31–3 (Eng. Abstr.) (Ger)
[Medical documentation on the accident unit at the Wels Hospital—13 years' experience] Povacz F. **Zentralbl Chir** 1989;114(12):771–6 (Eng. Abstr.) (Ger)
[Assessment of causes of death in follow-up studies: comparison of procedures that can be used in Italy] Lagorio S, et al. **Epidemiol Prev** 1987 Jun;9(31):57–61 (Eng. Abstr.) (Ita)
[Computerization of the operating room service in the department of plastic surgery at the San Camillo Hospital] Caldani P, et al. **Minerva Chir** 1988 Sep 15;43(17):1385–8 (Eng. Abstr.) (Ita)
[Presentation of a computerized clinical record for the study of risk factors and early diagnosis of breast neoplasia] Senni GA, et al. **Minerva Med** 1988 Dec;79(12):1057–73 (Eng. Abstr.) (Ita)
[A simplified computerized file for patients on dialysis] Camerini C, et al. **Minerva Urol Nefrol** 1989 Jan-Mar; 41(1):69–70 (Ita)
[A new dialysis folder: 1987] Ragaiolo M, et al. **Minerva Urol Nefrol** 1989 Jan-Mar;41(1):67 (Ita)
[Software for record reporting and filing with the personal computer] Di Giandomenico E, et al. **Radiol Med (Torino)** 1989 Mar;77(3):246–9 (Eng. Abstr.) (Ita)
[A study of quadriceps contracture-causing factor by the analysis of muscle injection according to medical records] Nakagawa T, et al. **Nippon Eiseigaku Zasshi** 1988 Aug; 43(3):724–35 (Eng. Abstr.) (Jpn)
[The record-keeping of X-ray films] **Rinsho Hoshasen** 1988 Dec;33(13):1627–41 (Jpn)
[Experiences of physicians with ADP-assisted medical records at hospitals] Aasly J, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2022–3 (Nor)
[Health cards for pregnant women. Information from general practitioners and gynecologists to obstetric clinics about social and medical problems during pregnancy] Braut RM. **Tidsskr Nor Laegeforen** 1989 Apr 20;109(11):1180–3 (Eng. Abstr.) (Nor)
[Word processing of medical records and epicrises at a hospital department] Forsgren B. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2019–21 (Eng. Abstr.) (Nor)
[Epicrises which do not come] Rytter EC. **Tidsskr Nor Laegeforen** 1988 Sep 20;108(26):2171–3 (Eng. Abstr.) (Nor)
[The CVA database as an example of the use of a ZX SPECTRUM microcomputer for recording data on neurologic patients for the purpose of scientific research] Lass P, et al. **Wiad Lek** 1988 May 1;41(9):604–8 (Eng. Abstr.) (Pol)
[Various elements of the experimental introduction of the Book of Health for retired and handicapped persons in an urban environment] Wdowiak L, et al. **Wiad Lek** 1988 Jun 1;41(11):754–9 (Pol)
[Choice of antibacterial therapy with the use of a computerized consultation system] Vrublevskiĭ OP, et al. **Anesteziol Reanimatol** 1989 Jan-Feb;(1):17–9 (Eng. Abstr.) (Rus)
[A computerized system in the health care of child population] Vetrov VP, et al. **Pediatriia** 1989;(1):88–92 (Rus)
[A machine analysis of the medical documentation on patients with acute pneumonia treated at pulmonology departments] Tutskaniuk K, et al. **Probl Tuberk** 1988;(8):29–30 (Eng. Abstr.) (Rus)
[A medical passport] Poliakov LE, et al. **Sov Zdravookhr** 1988;(9):22–6 (Eng. Abstr.) (Rus)
[Expert evaluation of medical documentation data in estimating the severity of injuries] Kolysh LB, et al. **Sud Med Ekspert** 1989 Jan-Mar;32(1):42–4 (Eng. Abstr.) (Rus)
[Development and experience in the use of unified records of findings with respect to results of ultrasonic studies of the liver and bile ducts] Nikogosian GA, et al. **Ter Arkh** 1989;61(4):31–3 (Rus)
[The use of microcomputers for processing medical accounts] Kozhev AA, et al. **Voen Med Zh** 1989 May;(5):22–3 (Rus)
[The Soviet information flow of secondary documents on cardiovascular diseases] Uvarenko AR, et al. **Vrach Delo** 1989 Feb;(2):111–4 (Rus)
[The "Arkhiv" information retrieval system] Kazarnovskaia MI, et al. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):61–3 (Rus)
[Informatics in cardiology: proposal for standardized terminology in clinical records and in permanent cardiac electrostimulation] Fiorista F, et al. **Arch Inst Cardiol Mex** 1988 Jul-Aug;58(4):333–7 (Eng. Abstr.) (Spa)
[Secret statistics and health research: a delicate but necessary marriage (editorial)] García Benavides F. **Gac Sanit** 1988 Sep-Oct;2(8):221–3 (Spa)
[Quality of surveys on hospital morbidity (letter)] García Benavides F. **Gac Sanit** 1988 May-Jun;2(6):170–1 (Spa)
[Validity of hospital statistics, a crucial problem (letter)] Sicras Mainar A, et al. **Gac Sanit** 1988 Mar-Apr;2(5):117 (Spa)
[Clinical records written in autonomic languages (letter)] Jiménez Mejías ME, et al. **Med Clin (Barc)** 1989 Feb 4; 92(4):159 (Spa)
[Computerized medical records and a quality study circle. Effective measures for ensuring quality in health care] Linnarsson R. **Lakartidningen** 1989 Feb 1;86(5):301–4 (Swe)

LEGISLATION & JURISPRUDENCE

Preventing legal suicide with medical records. Reinke TS, et al. **J Manipulative Physiol Ther** 1988 Dec;11(6):511–3
May a physician release medical records upon receipt of a subpoena? Stratton WT. **Kans Med** 1989 Apr;90(4):94
[Timeliness of making obligatory to private or public hospital establishments the issuance to patients on their demand of a resume of their medical case including surgical reports and reports on anatomo-pathological examinations and treatment received] Lortat-Jacob JL. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1107–13 (Fre)
[Payment for reports by the assistance service] Rieger HJ. **Dtsch Med Wochenschr** 1988 Dec 9;113(49):1935–7 (Ger)
[The responsibility for confidentiality—private insurance medicine information—data protection] Mohr PG. **Versicherungsmedizin** 1989 Jul 1;41(4):106–10 (Eng. Abstr.) (Ger)
[The importance of documentation in emergency medicine] Schiffner H. **Z Arztl Fortbild (Jena)** 1989;83(13):675–6 (Ger)

STANDARDS

Hypothesis: old people would benefit from a patient-held standardized primary health care record. Thompson MK. **Age Ageing** 1989 Jan;18(1):64–6
Poor medical records [letter] Marks ES. **Ann Intern Med** 1989 Jun 15;110(12):1037
Standardized recording of acute corneal disease. Ormerod LD, et al. **Ann Ophthalmol** 1989 May;21(5):164–8
Quality assurance: standard physiotherapy assessment forms and computerization. Nosworthy JC, et al. **Aust Clin Rev** 1989;9(1):46–8
Failure to record variables of growth and development in children with inflammatory bowel disease [see comments]

Barton JR, et al. **BMJ** 1989 Apr 1;298(6677):865–6. **Comment in:** BMJ 1989 May 13;298(6683):1312–3

New cervical cytology request form is unusable. Clark JV, et al. **BMJ** 1989 Feb 11;298(6670):371–2

Dictate a discharge summary. Penney TM. **BMJ** 1989 Apr 22;298(6680):1084–5

Proposals for standardized reporting of results of bone marrow transplantation for leukaemia. Clift R, et al. **Bone Marrow Transplant** 1989 Jul;4(4):445–8

Frenchay burns chart [letter] Wilson GR, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):255

Prenatal care: a comparative evaluation of nurse–midwives and family physicians [letter] **Can Med Assoc J** 1989 Jan 15;140(2):107, 110–1

A proposal for standardization of psychiatric consultation–liaison data. Hengeveld MW, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):410–22

Is a functionally orientated discharge summary of use to general practitioners? Philp I, et al. **Health Bull (Edinb)** 1988 Sep;46(5):291–4

HCFA ruling speeds MD's role in payment chain. Koska MT. **Hospitals** 1989 Feb 5;63(3):56

Work of IEEE P1157 Medical Data Interchange committee. Rutt TE. **Int J Clin Monit Comput** 1989 Jan;6(1):45–57

Inappropriate readmissions. Bate W. **Iowa Med** 1989 Mar; 79(3):126

Patient telephone call documentation. Quality implications and an attempted intervention. Daugird AJ, et al. **J Fam Pract** 1988 Oct;27(4):420–1

Measuring medical residents' chart–documentation practices. Moran MT, et al. **J Med Educ** 1988 Nov;63(11):859–65

Assessing the quality of data entry in a computerized medical records system. Dambro MR, et al. **J Med Syst** 1988 Jun; 12(3):181–7

A framework for taking a treatment history. Herxheimer A. **J R Coll Physicians Lond** 1989 Jan;23(1):22–3

Textual data versus encoded data [letter] Decker DA Jr. **MD Comput** 1988 Nov–Dec;5(6):4–5

The emergency treatment record: time for a change [letter] Walsh MJ. **Milit Med** 1988 Dec;153(12):651–2

The importance of documentation in peer review. Kingsley DI. **N J Med** 1989 Mar;86(3):185–6

Psychiatric discharge summaries—an assessment of need. Rigby JC, et al. **Practitioner** 1988 Jun 8;232(1450):677–9

Radiology reporting: attitudes of referring physicians. Clinger NJ, et al. **Radiology** 1988 Dec;169(3):825–6

Mammographic reports and surgical referrals [letter] Hall FM. **Radiology** 1989 Jun;171(3):876

Mothers' understanding of the graphic representation of weight gain on 'Road to Health' cards [letter] Donald PR, et al. **S Afr Med J** 1988 Dec 17;74(12):644

[By his letters shall the doctor be known] Meiring JH, et al. **S Afr Med J** 1989 Jan 7;75(1):26–8 (Eng. Abstr.) **(Afr)**

[Froblem–oriented medical documentation] Doroba A. **Pol Tyg Lek** 1988 Sep 12;43(37):1204–6 (Eng. Abstr.) **(Pol)**

[Improving the annual statistical records] Grigor'ev FG. **Sov Zdravookhr** 1989;(2):31–6 **(Rus)**

[Current demands for a medical first aid record and ways for its improvement] Abdrashitov RS, et al. **Voen Med Zh** 1988 Oct;(10):13–20 **(Rus)**

[Standardization of information in primary care: present and future] Gérvas JJ, et al. **Gac Sanit** 1988 Jul–Aug;2(7):203–7 (Eng. Abstr.) **(Spa)**

MEDICAL RECORDS DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

MEDICAL RECORDS, PROBLEM ORIENTED see under **MEDICAL RECORDS**

MEDICAL SECRETARIES

Is your most valuable resource ignored? North J. **Aust Fam Physician** 1989 Aug;18(8):992

Rheumatology patients and hospital secretaries [letter] Briggs S. **Br J Rheumatol** 1989 Aug;28(4):365

Practice receptionists: poorly trained and taken for granted? Copeman JP, et al. **J R Coll Gen Pract** 1988 Jan; 38(306):14–6

Working with...the receptionist. Carroll J. **Practitioner** 1988 Nov 22;232(1459):1276, 1278

Alcohol-related knowledge, beliefs and attitudes among health and clerical personnel. Poikolainen K. **Soc Sci Med** 1988;27(12):1429–32

EDUCATION

Clerical/secretarial education: a joint venture. Dill SA, et al. **Dimens Health Serv** 1988 Sep;65(6):22–3

Office staff can help in risk reduction. **Ohio Med** 1989 Aug; 85(8):637–8

A training course for doctors' receptionists. Sims P, et al. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1162–6

PSYCHOLOGY

Risk factors in the psychosocial work environment for neck and shoulder pain in secretaries. Linton SJ, et al. **J Occup Med** 1989 Jul;31(7):609–13

MEDICAL SOCIOLOGY see **SOCIOLOGY, MEDICAL**

MEDICAL STAFF

Be cautious in the office: lawsuits can originate there too. Milne P. **Can Med Assoc J** 1988 Nov 15;139(10):997–8

Activities of the attending physician in the ambulatory setting: what part is teaching? Zweig SC, et al. **Fam Med** 1989 Jul–Aug;21(4):263–7

Large medical group–practice organizations and employed physicians: a relationship in transition. Madison DL, et al. **Milbank Q** 1988;66(2):240–82

Hired help: a physician's experiences in a for-profit staff-model HMO [letter] **N Engl J Med** 1989 Jan 19; 320(3):185–7

[Human immunodeficiency virus (HIV). 2: HIV infections caused by accidental exposure in medical personnel] Lätzsch I. **Z Ärztl Fortbild (Jena)** 1988;82(12):553–6 (19 ref.) **(Ger)**

[Indexes of human resources performance in the technical area of a health service. I. Medical hours] Dragicevic JG, et al. **Rev Med Chil** 1988 Jan;116(1):82–6 (Eng. Abstr.) **(Spa)**

ECONOMICS

Impact of IPAs on fee–for–service medical groups. Aluise JJ, et al. **Health Care Manage Rev** 1989 Winter;14(1):55–63 (26 ref.)

ORGANIZATION & ADMINISTRATION

Agency costs and complex contracts in health care organizations. McLean RA. **Health Care Manage Rev** 1989 Winter;14(1):65–71 (18 ref.)

[Substantiation of the reorganization of the activities of medical personnel at schools] Usanova EP, et al. **Pediatriia** 1989;(4):70–4 **(Rus)**

[Work losses of medical personnel of mobile health units while conducting preventive examinations in rural populations] Bratkov OI. **Sov Zdravookhr** 1989;(1):42–6 (Eng. Abstr.) **(Rus)**

MEDICAL STAFF, HOSPITAL

A creative method for determining the immunization status of a community hospital medical staff. Scheckler WE. **Am J Infect Control** 1988 Aug;16(4):147–51

The nonvalue of retrospective peer comparison feedback in containing hospital antibiotic costs. Parrino TA. **Am J Med** 1989 Apr;86(4):442–8

Speaking out. Should nurses substitute for house staff? [see comments] Silver HK, et al. **Am J Nurs** 1988 Dec; 88(12):1671–3. **Comment in:** Am J Nurs 1989 Jul;89(7):931

Planning a maternal–fetal medicine program. The hospital employee model. Barford D. **Am J Perinatol** 1989 Apr;6 Suppl:21–3

Attending coverage in academic emergency medicine: a national survey. Henneman PL, et al. **Ann Emerg Med** 1989 Jan;18(1):34–41

Exposure of emergency medicine personnel to ionizing radiation during cervical spine radiography. Singer CM, et al. **Ann Emerg Med** 1989 Aug;18(8):822–5

A study of the knowledge of radiological anatomy of senior house officers in accident and emergency medicine. Gardner GJ. **Arch Emerg Med** 1989 Mar;6(1):51–5

Changing physician test ordering in a university hospital. An intervention of physician participation, explicit criteria, and feedback. Spiegel JS, et al. **Arch Intern Med** 1989 Mar; 149(3):549–53

The impact of in–house surgeons and operating room resuscitation on outcome of traumatic injuries. Hoyt DB, et al. **Arch Surg** 1989 Aug;124(8):906–9; discussion 909–10

A study of diagnostic accuracy in suspected acute appendicitis. Gough IR. **Aust N Z J Surg** 1988 Jul; 58(7):555–9

Lack of sleep in junior doctors [letter] **BMJ** 1989 Feb 11; 298(6670):381–2

Junior doctors and self governing hospitals [letter] Dawes PJ. **BMJ** 1989 Jul 8;299(6691):125

Research posts and overseas visitors in British gastroenterology departments. Lennard–Jones JE, et al. **BMJ** 1989 Mar 25;298(6676):807–8

Inaccuracy and delay in decision making in paediatric resuscitation, and a proposed reference chart to reduce error. Oakley PA. **BMJ** 1988 Oct 1;297(6652):817–9

Hospital training for general practice: views of trainees in the North Western region. Reeve H, et al. **BMJ** 1989 May 27;298(6685):1432–4

Computerised matching for house officer posts [letter] Ward–Booth RP. **Br Dent J** 1989 Jan 21;166(2):37

Doctors' beliefs about diabetes: a comparison of hospital and community doctors. Marteau TM, et al. **Br J Clin Psychol** 1988 Nov;27 (Pt 4):381–3

What sort of letters do GPs want to receive from hospital specialists? Hart JT, et al. **Br J Hosp Med** 1989 Feb; 41(2):175–7, 180–1

A log book for preregistration house officers [editorial] King RC. **Br J Hosp Med** 1989 Feb;41(2):111

The impossibility of achieving a balance [letter] Plumley PF. **Br J Hosp Med** 1989 Jul;42(1):80

A survey of surgical rotations for oral & maxillofacial surgery trainees. Altman K. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):12–5

The shortage of consultant posts [letter] Carter JL. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):172–3

Burns management and junior staff—what do they know? Griffiths GD, et al. **Burns Incl Therm Inj** 1989 Feb; 15(1):47–8

Risk management in the hospital: medical staff must be involved. Messenger O. **Can Med Assoc J** 1988 Nov 15; 139(10):994–6

Medical staff enforcement. Dilemmas and decisions. McAfee RE. **Cancer** 1989 Jul 1;64(1 Suppl):317–8; discussion 320–3

Letters of reference and hospital appointments [letter] Ratzan RM. **Conn Med** 1989 Jan;53(1):54–5

Health for all: a surgical model in Haiti. Dalessandri KM. **Curr Surg** 1989 May–Jun;46(3):181–4

The informed professional: another view of HIV testing: an interview with Dr. Lorraine Day. Day L. **Del Med J** 1988 Aug;60(8):35–7

AIDS as an occupational disease: whose right to know? Gostin L. **Del Med J** 1988 Sep;60(9):479–83

Communication, the letter, and the GP. Hill P, et al. **Diabetic Med** 1988 Oct;5(7):611–2

Do hospital personnel in hyperendemic areas require immunization against hepatitis B virus (HBV) infection? Is vertical transmission of HBV infection common in this group? Tsega E, et al. **Ethiop Med J** 1989 Jul;27(3):101–6

Patrick Trevor–Roper: a born teacher. Elkington AR. **Eye** 1988;2 (Pt 6):593–9

Process and outcome of critical care provided by community and academic primary care physicians. Lawler FH, et al. **Fam Med** 1989 Jul–Aug;21(4):268–72

General practitioner involvement in non–procedural medicine in public hospitals in Melbourne, Australia. Schattner P, et al. **Fam Pract** 1989 Jun;6(2):141–5

Hospital credentialing and privileges: issues of competence or competition? [letter] Effron AM. **Gastrointest Endosc** 1988 Nov–Dec;34(6):486

Prospective payment to medical staffs: a proposal. Welch WP. **Health Aff (Millwood)** 1989 Spring;8(1):34–49

Physician marketing: ingredients for success. Droste T. **Hospitals** 1988 Dec 5;62(23):31

Breaking the medical gridlock. Grayson MA. **Hospitals** 1989 Feb 20;63(4):32–7

Telecommunications. Paging all MDs. Koska MT. **Hospitals** 1989 Aug 5;63(15):52

AIDS precautions: compliance difficult to enforce. Koska MT. **Hospitals** 1989 Sep 5;63(17):58, 60

Medical staff cooperation key to JCAHO plans. Koska MT. **Hospitals** 1989 May 5;63(9):48

Membership has its privileges and expectations. Koska MT. **Hospitals** 1988 Nov 20;62(22):77

Physician bonding is a fact of life for hospitals. Snook ID Jr. **Hospitals** 1989 Jun 20;63(12):96

Hospital–physician integration and hospital costs. Alexander JA, et al. **Inquiry** 1988 Fall;25(3):388–401

Viral hepatitis in females in Delhi. Gupta HL, et al. **J Commun Dis** 1987 Dec;19(4):359–61

Analysis of resident and attending physician interactions in family medicine. Knudson MP, et al. **J Fam Pract** 1989 Jun;28(6):705–9

Obstetric privileges for family physicians: a national study. Schmittling G, et al. **J Fam Pract** 1989 Aug;29(2):179–84

House officer interviewing techniques: impact on data elicitation and patient perceptions. Woolliscroft JO, et al. **J Gen Intern Med** 1989 Mar–Apr;4(2):108–14

AIDS–phobia, contact with AIDS, and AIDS–related job stress in hospital workers. Pleck JH, et al. **J Homosex** 1988; 15(3–4):41–54

Georgia Thoracic Society statement. Suggested guidelines for hospital privileges in ventilator management. **J Med Assoc Ga** 1988 Jul;77(7):577

A new credentialing problem. Smith WB. **J Miss State Med Assoc** 1988 Aug;29(8):255–6

Immunization status of entering housestaff physicians. Lewy R. **J Occup Med** 1988 Oct;30(10):822–3

Staff escorting centralized cardiotocographic surveillance (level 3: cardiotocographic surveillance). Langnickel DW. **J Perinat Med** 1988;16(4):319–26

Neonatal transport: communication—the essential element. Finsterwald W. **J Perinatol** 1988 Fall;8(4):358–60

Notifying general practitioners about deaths in hospital: an audit. Neville RG. **J R Coll Gen Pract** 1987 Nov; 37(304):496–7

HIV exposure in the emergency department [letter] Monafo WW, et al. **Mo Med** 1989 Jan;86(1):11–2

Demographics of a laser program in a tertiary medical center. Sinar DR. **N C Med J** 1989 Jun;50(6):315–8

Preemployment drug testing of housestaff physicians [letter] Lewy R. **N Y State J Med** 1988 Oct;88(10):553–4

Resuscitation skills of first year postgraduate doctors. Lum ME, et al. **N Z Med J** 1989 Aug 9;102(873):406–8

AIDS and the health care worker. Tobias MI. **N Z Med J** 1989 Feb 22;102(862):80–2

Nursery privileges of the private attending pediatrician in the care of critically sick neonates in New York state. Harper RG, et al. **Pediatrics** 1989 Jun;83(6):940–4

Attitudes to a hospital based terminal care scheme. McKee CM, et al. **Postgrad Med J** 1988 Sep;64(755):678–80

Working with ... the hospital doctor. Carroll J. **Practitioner** 1988 Sep 22;232(1454 (Pt 2)):1034–6

Varying antibody response in hospital staff vaccinated against hepatitis B. Ljunggren K, et al. **Scand J Infect Dis** 1988; 20(5):485–8

Tuberculosis in hospital doctors. Goldman KP. **Tubercle** 1988 Dec;69(4):237–40 (24 ref.)

[Staff physician treatment in the general care class. Lawful fees for the participating physicians (staff physician, department head, consultants)] aus der Fünten H. **Chirurg** 1989 May;60(5):suppl 77–9 (Ger)
[AIDS. Medical personnel: HIV infection can be prevented by careful behavior (news)] Marcus U. **Fortschr Med** 1989 Mar 10;107(7):13 (Ger)
[Results of work schedule studies of hospital physicians of the Cottbus district hospital] Hoffmann W, et al. **Z Gesamte Hyg** 1989 Apr;35(4):228–31 (Eng. Abstr.) (Ger)
[Anesthetics vapors and gases and health hazards: results of an environmental survey] Ravagli A, et al. **G Ital Med Lav** 1987 Jan;9(1):39–44 (Eng. Abstr.) (Ita)
[Hepatitis B vaccination with the plasma-derived Hevac-B Pasteur vaccine. A comparison of 2 populations: hospital personnel and hemodialysis patients] Di Giandomenico G, et al. **Minerva Med** 1989 Feb;80(2):149–51 (Eng. Abstr.) (Ita)
[The role of outpatient services in the prevention of smoking] Milievskaia IL, et al. **Gig Sanit** 1988 Nov;(11):40–3 (Rus)
[Survey on the smoking habits of a population of hospital doctors] Martínez de la Iglesia J, et al. **Rev Clin Esp** 1988 May;182(8):429–34 (Eng. Abstr.) (Spa)

ECONOMICS

High-tech specialties generate top dollars. Koska MT. **Hospitals** 1988 Oct 20;62(20):72, 74
Medical staff sets goal: trim costs by $2 million. Koska MT. **Hospitals** 1989 Jul 20;63(14):56, 58

EDUCATION

Overseas Doctors Training Scheme in Surgery. Bevan PG, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):65
Liaison psychiatry in a child development clinic. Evered CJ, et al. **Arch Dis Child** 1989 May;64(5):754–8
Impact of staff education on pressure sore development in elderly hospitalized patients. Moody BL, et al. **Arch Intern Med** 1988 Oct;148(10):2241–3
Children in respiratory distress in the emergency department—a clinical review survey. Rosengarten P, et al. **Aust Clin Rev** 1988 Jun;8(29):91–6
Training of surgical registrars: a regional audit. Diggory RT. **BMJ** 1988 Aug 13;297(6646):455–6
Can log books improve the standard of doctors' training? [letter] **Br J Hosp Med** 1989 May;41(5):497
What you have to do to become an ENT senior registrar. Slack RW, et al. **Clin Otolaryngol** 1988 Dec;13(6):411–3
CEO: physician input vital to quality improvement. Koska MT. **Hospitals** 1989 Jul 20;63(14):22
An informed M.D can help control drug costs. Souhrada L. **Hospitals** 1989 Jun 20;63(12):78
Fate of gross specimens in pathology [letter] Haboubi NY, et al. **J Clin Pathol** 1988 Nov;41(11):1247
Bibliography of clinical teaching. Snell L. **J Gen Intern Med** 1988 Nov–Dec;3(6):611–5
Permanent Working Group of European Junior Hospital Doctors. Policy statement on postgraduate medical education. Subcommittee on Postgraduate Training. **Med Educ** 1989 Jul;23(4):339–47
Staff at Red Lake Hospital designed, implemented, and evaluated a staff training program on AIDS [letter] Kutch JM Jr, et al. **Milit Med** 1988 Dec;153(12):650–1
[Modular principle of the organization of independent work of interns and residents] Merzon AK, et al. **Klin Med (Mosk)** 1988 Dec;66(12):123–4 (Rus)

LEGISLATION & JURISPRUDENCE

Safeguarding the spirit of competition. Cushing M. **Am J Nurs** 1989 Aug;89(8):1035–6, 1038
Do process and due process [editorial] Griffen WO Jr. **Am J Surg** 1989 Jun;157(6):537
Gianetti v Norwalk Hospital: Connecticut Supreme Court rules on hospital and medical staff member contractual relationship and judicial review of medical staff termination decisions. Ronai SE, et al. **Conn Med** 1989 Jul;53(7):425–6
Peer review after Patrick case is alive and well. Holthaus D. **Hospitals** 1988 Oct 20;62(20):34
Psychologists' staff privileges in dispute. Holthaus D. **Hospitals** 1989 Jan 20;63(2):52
The sinking of the "captain of the ship". Reexamining the vicarious liability of an operating surgeon for the negligence of assisting hospital personnel. Price SH. **J Leg Med** 1989 Jun;10(2):323–56
Peer review immunity for bad faith activities. Patrick v. Burget fails to provide an answer. Trankina TJ. **J Med Assoc Ga** 1988 Sep;77(9):724–6
No property right to due process hearing. **J Miss State Med Assoc** 1989 Mar;30(3):85
Contract medicine. In which hospitals contract with health plans but their doctors don't [editorial] Thomison JB. **J Tenn Med Assoc** 1988 Sep;81(9):588–90
Independent status for hospital medical staffs: no cause for antitrust alarm. Rifkin AM, et al. **Md Med J** 1989 Jan; 38(1):41–4
Hospital and medical staff relations in the USA. III. The business of practicing medicine. Hirsh HL. **Med Law** 1988; 7(2):121–32 (111 ref.)
Minnesota's physician reporting law: when am I my brother's or sister's keeper? Part II. Eelkema R, et al. **Minn Med** 1988 Oct;71(10):625–30
Legal immunity for medical peer-review programs. New policies explored [see comments] Curran WJ. **N Engl J Med** 1989 Jan 26;320(4):233–5. **Comment in:** N Engl J Med 1989 Jul 27;321(4):265
Legal immunity for peer-review programs [letter; comment] Pedersen AB. **N Engl J Med** 1989 Jul 27;321(4):265. **Comment on:** N Engl J Med 1989 Jan 26;320(4):233–5
Current legal developments in medical staff credentialing disputes. Callahan MR, et al. **New Dir Ment Health Serv** 1989 Spring;(41):81–93
Addressing the problem of the impaired physician. Krizek CR. **New Dir Ment Health Serv** 1989 Spring;(41):11–9 (9 ref.)
Judge refuses to quash AIDS suit [news] **Occup Health Saf** 1989 Jan;58(1):9
Eight precautions for peer reviewers. Pudlin HP. **Pa Med** 1989 Apr;92(4):34–6
Childbearing and women's choice of nurse-midwives in Washington, D.C. hospitals. Langton PA, et al. **Women Health** 1989;15(2):49–65
[Calculation of salary of affiliated hospital physicians] Jansen C. **Dtsch Med Wochenschr** 1989 Apr 21;114(16):644–5 (Ger)
[Specific legal questions concerning chief physician's contract] Rieger HJ. **Dtsch Med Wochenschr** 1988 Oct 28; 113(43):1693–4 (Ger)
[Physician's right to make decisions in a hospital] Rieger HJ. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1613–4 (Ger)
[When the admitting physician is accused of a false decision in the hospital...Guiding decision for amniocentesis—some flaws] Waibl K, et al. **Fortschr Med** 1989 Jul 10; 107(20):64–5 (Ger)
[Suspension of medical staff privileges at a private or community hospital] Cruz ML. **Bol Asoc Med P R** 1988 Oct;80(10):390–2 (Eng. Abstr.) (Spa)

ORGANIZATION & ADMINISTRATION

Junior hospital doctors: tired and tested [letter] **BMJ** 1988 Nov 19;297(6659):1331–2
NHS review. Doubtful gains from tighter consultant contracts [interview by Dr. Tony Smith] Appleyard WJ. **BMJ** 1989 Mar 18;298(6675):739–41
The secret of medical management. Rohrer JE. **Health Care Manage Rev** 1989 Summer;14(3):7–13 (22 ref.)
A final adjustment for staff allocation under environmental uncertainty. Jeang A. **J Med Syst** 1989 Apr;13(2):67–78
The politics of the sand-pit. Best J. **Med J Aust** 1989 Feb 6;150(3):158, 160–1
Hospital medical staffs—fighting back from the trenches. Edwards KS. **Ohio Med** 1988 Aug;84(8):620–5
[The role of social and professional factors in the activities of physicians] Kaptsov VA, et al. **Gig Sanit** 1988 Dec; (12):36–8 (Rus)
[Rational work and recreation schedules of physicians and therapists during their work shift] Kutsenko GI. **Gig Sanit** 1988 Nov;(11):73–5 (Rus)
[Functions of a district phthisiologist in ambulatory practice] Shefer LB, et al. **Probl Tuberk** 1988;(6):12–7 (Eng. Abstr.) (Rus)
[Complex evaluation of the work of physician-endoscopy specialists] Bokman GB, et al. **Sov Zdravookhr** 1989;(5):25–8 (Eng. Abstr.) (Rus)
[A system of complex evaluation of physicians' activities] Gabrielin ES, et al. **Sov Zdravookhr** 1988;(12):3–9 (Rus)
[Analysis and ways of improving the organization of activities of sector physicians] Kononov AG. **Sov Zdravookhr** 1989; (5):15–7 (Eng. Abstr.) (Rus)
[Organization of the activities of medical personnel on a patient team principle] Litvinenko LIa, et al. **Sov Zdravookhr** 1988;(12):41–2 (Rus)

PSYCHOLOGY

Barriers to influenza vaccine acceptance. A survey of physicians and nurses. Weingarten S, et al. **Am J Infect Control** 1989 Aug;17(4):202–7
The attitudes of junior anaesthetists to research. A survey. Gaylard DG, et al. **Anaesthesia** 1989 Aug;44(8):681–3
Management of stress and prevention of burnout in emergency physicians. Keller KL, et al. **Ann Emerg Med** 1989 Jan;18(1):42–7
Who's stressing whom? [editorial] Koltonow SH. **Ann Emerg Med** 1989 Jan;18(1):103–4
Junior hospital doctors: tired and tested [editorial] Durnford S. **BMJ** 1988 Oct 15;297(6654):931–2
Long hours of work in junior doctors [letter] Gruzelier JH, et al. **BMJ** 1989 Mar 18;298(6675):754–5
Adverse changes in mood and cognitive performance of house officers after night duty. Orton DI, et al. **BMJ** 1989 Jan 7;298(6665):21–3
Are junior doctors disillusioned? [editorial] Allen I. **Br J Hosp Med** 1989 Aug;42(2):95
Stress in medical undergraduates and house officers. Firth-Cozens J. **Br J Hosp Med** 1989 Feb;41(2):161–4 (66 ref.)
Career counselling for junior doctors [editorial] Mulligan RA. **Br J Hosp Med** 1989 Jun;41(6):515
Stress among emergency medical staff [letter] Ho K. **Can Med Assoc J** 1988 Dec 1;139(11):1034–5
Job stress and satisfaction among the staff members at a cancer center. Peteet JR, et al. **Cancer** 1989 Aug 15; 64(4):975–82
Radiologists and endoscopy: a survey of the attitudes and intentions of radiologists in training. Etherington RJ, et al. **Clin Radiol** 1989 Jul;40(4):383–5
Do medical staff problems exist on the new job? Droste T. **Hospitals** 1989 Jun 5;63(11):66
Nurses' and physicians' perceptions of nursing authority. Katzman EM. **J Prof Nurs** 1989 Jul–Aug;5(4):208–14
The dangers of not going to bed [editorial] **Lancet** 1989 Jan 21;1(8630):138–9
Don't treat nurses as if they were invisible. Magee M. **Postgrad Med** 1989 Jan;85(1):67–8
Physicians' stress in the coronary care units. Hasegawa A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:474–9
Improving compliance with preventive medicine procedures in a house staff training program. Schreiner DT, et al. **South Med J** 1988 Dec;81(12):1553–7
[Predicting professional competence of subinterns based on an analysis of personality characteristics] Akunts KB, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):69–72 (Rus)
[Psychological characteristics of various categories of medical personnel and the problems of their professional selection] Korotin LP, et al. **Gig Sanit** 1988 Oct;(10):46–8 (Rus)

STANDARDS

Safe use of lignocaine. Scrimshire JA. **BMJ** 1989 Jun 3; 298(6686):1494
Use of advisers in the diagnosis and management of abdominal pain in accident and emergency departments. Driscoll PA, et al. **Br J Surg** 1988 Dec;75(12):1173–5
Observation: a useful tool or a relic from the past? Pearson JW. **Hawaii Med J** 1988 Aug;47(8):369–71, 389
The first defense: improve MD productivity [interview by Michele Robinson] Jeppson D. **Hospitals** 1989 Feb 20; 63(4):62–4
Outreach surgeon credentials key to quality care. Koska MT. **Hospitals** 1988 Nov 5;62(21):107, 109
Hospitals on hold for data bank protocols. Koska MT. **Hospitals** 1989 Feb 20;63(4):48
Specialty board proliferation causes confusion. Koska MT. **Hospitals** 1989 Aug 5;63(15):58, 60
Substandard care rules would put hospitals at risk. Robinson ML. **Hospitals** 1989 Mar 20;63(6):17
A new instrument for patients' ratings of physician performance in the hospital setting. Matthews DA, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):14–22
Surgical insurrection [editorial][see comments] **Lancet** 1988 Oct 15;2(8616):884–5. **Comment in:** Lancet 1989 Jan 14;1(8629):104
[Evaluation of the contribution of different categories of medical workers to the activities of a hospital] Nenov NI, et al. **Sov Zdravookhr** 1988;(7):55–7 (Rus)

SUPPLY & DISTRIBUTION

Achieving a balance [letter] Henderson AH, et al. **BMJ** 1988 Sep 10;297(6649):688
Cost of achieving a balance in the anaesthetic department of a district general hospital. Hurst J, et al. **BMJ** 1988 Oct 22;297(6655):1033–4
Are referrals by general practitioners influenced by the availability of consultants? Roland M, et al. **BMJ** 1988 Sep 3;297(6648):599–600
Are we achieving a balance? [editorial] Shore E. **Br J Hosp Med** 1989 Mar;41(3):215
The crisis in staffing neonatal intensive care units: a taste of things to come? Chance GW. **Can Med Assoc J** 1989 Jun 1;140(11):1271–4
Medical staffing in Ontario neonatal intensive care units. Paes B, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1321–6
Career prospects in medical gastroenterology in the United Kingdom. Lennard-Jones JE. **Gut** 1989 Apr;30(4):551–7
Physician recruitment takes center stage. Grayson MA. **Hospitals** 1989 Apr 5;63(7):30, 32–4
Many surgeons unwilling to staff trauma centers. Koska MT. **Hospitals** 1989 May 5;63(9):46, 48
Competition stiff for available psychiatrists. Koska MT. **Hospitals** 1989 Jun 5;63(11):26
Stark bill, safe harbors may help small hospitals. Larkin H. **Hospitals** 1989 May 5;63(9):20
Factors affecting the outcome of maternity care. 1. Relationship between staffing and perinatal deaths at the hospital of birth. Stilwell J, et al. **J Epidemiol Community Health** 1988 Jun;42(2):157–69

TRENDS

Popularity, but not profit, marks FP specialty. Koska MT. **Hospitals** 1989 Apr 20;63(8):68, 70
Payment, practice, and GME reform key in 1989. Koska MT. **Hospitals** 1989 Jan 5;63(1):60
High liability premiums cause trouble for MDs. Koska MT. **Hospitals** 1988 Dec 20;62(24):58
Why should optometry become involved in the hospital setting? Blackman GL. **J Am Optom Assoc** 1988 Aug; 59(8):603–4
Optometry in hospitals [editorial] Fisher GW. **J Am Optom Assoc** 1988 Aug;59(8):588–9
Hospitals and optometry: an evolving relationship. Myers KJ. **J Am Optom Assoc** 1988 Aug;59(8):598–602

A perspective on hospital affiliation by optometrists [editorial] Thomas RK. **J Am Optom Assoc** 1988 Aug; 59(8):590–1
Historical perspective of optometrists' and other health professionals' involvement in hospitals. Wong SG. **J Am Optom Assoc** 1988 Aug;59(8):594–7

UTILIZATION

The hours doctors work [editorial] Scotland A. **Br J Hosp Med** 1989 Mar;41(3):211, 215
Should physicians perform their own quality assurance audits? Brady WJ, et al. **J Gen Intern Med** 1988 Nov–Dec; 3(6):560–5

MEDICAL STAFF PRIVILEGES see under **MEDICAL STAFF, HOSPITAL**

MEDICAL WASTE see under **WASTE PRODUCTS**

MEDICALLY UNDERSERVED AREA

see related
HEALTH SERVICES ACCESSIBILITY

Native Americans in medicine: the need for Indian healers. Prieto DO. **Acad Med** 1989 Jul;64(7):388–9
Psychiatric consultation to the bush. Kettl P. **Alaska Med** 1989 Mar–Apr;31(2):62–3
Changes in the distribution of physicians in rural areas of Minnesota, 1965–85. Dennis T. **Am J Public Health** 1988 Dec;78(12):1577–9
Addressing service delivery in remote/rural areas. Chezik KH, et al. **ASHA** 1989 Jan;31(1):52–5
Maternal mortality in Rangoon Burma [letter] Hartfield VJ. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):328
Rationing medical services in Puerto Rico. Vázquez-Quintana E. **Bol Asoc Med P R** 1989 Aug; 81(8):323–4
A perspective on the future of infectious disease reimbursement. Iglehart JK. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):577–90
The "marathon assessment" in child psychiatry: a service to underserviced areas. Krell R, et al. **Can J Psychiatry** 1989 Aug;34(6):606–8
Recruiting family physicians to underserviced areas [letter] **Can Med Assoc J** 1989 Apr 15;140(8):885–9
Family medicine departments not doing their job, rural MD asserts. Chouinard A. **Can Med Assoc J** 1989 Feb 1; 140(3):314–5
Characteristics of medical school applicants: implications for rural health care. Head RE, et al. **Fam Med** 1989 May–Jun; 21(3):187–90
The adequacy of physician supply in small rural counties. Kindig DA, et al. **Health Aff (Millwood)** 1989 Summer; 8(2):63–76
Extradural haemorrhage: strategies for management in remote places. Simpson DA, et al. **Injury** 1988 Sep; 19(5):307–12
Care of the injured in the Third World—what can we learn? Weston PM. **Injury** 1987 Sep;18(5):297–303
Rural areas still need physicians. Dettelbach MS. **JAMA** 1988 Dec 2;260(21):3214–5
Revising RAWP [letter] Milner P, et al. **Lancet** 1988 Nov 19;2(8621):1195
Cooperation is the key to solving rural physician shortage [letter] Johnson TM, et al. **Mich Med** 1988 Dec;87(12):757, 796, 804
Family physicians for underserved areas. The role of residency training. Gessert C, et al. **West J Med** 1989 Feb; 150(2):226–30
[The zone principle in the organization of emergency medical services] Shmatov AV, et al. **Sov Zdravookhr** 1989;(5):11–5 (Eng. Abstr.) **(Rus)**
[Health inequalities in Barcelona] Alonso Caballero J, et al. **Gac Sanit** 1988 Jan–Feb;2(4):4–12 (Eng. Abstr.) **(Spa, Cat)**
[Aisha's eyes. Reflections of a physician in the Sahel] Ollé Goig JE. **Med Clin (Barc)** 1989 Apr 1;92(12):460–1 **(Spa)**

STATISTICS & NUMERICAL DATA

Providing census data for general practice. 2. Usefulness. Foy C, et al. **J R Coll Gen Pract** 1987 Oct;37(303):451–4

MEDICARE see **HEALTH INSURANCE FOR AGED AND DISABLED, TITLE 18**

MEDICARE ASSIGNMENT see under **HEALTH INSURANCE FOR AGED AND DISABLED, TITLE 18**

MEDICATION ERRORS

Drug errors and incidents in a neonatal intensive care unit. A quality assurance activity. Vincer MJ, et al. **Am J Dis Child** 1989 Jun;143(6):737–40
Medication error prevention by pharmacists. Blum KV, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1902–3
Screening discharge prescriptions. Morrill GB, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1904–5
Pharmacist resignation and the risk of dispensing error [letter] Slack MK, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1862–3
Accidental epidural injection of a large dose of morphine [letter] Atanassoff P, et al. **Anaesthesia** 1988 Dec; 43(12):1056
Inadvertent epidural midazolam and fentanyl [letter] Goodchild CS, et al. **Anaesthesia** 1989 Jul;44(7):609–10
Inadvertent epidural midazolam and fentanyl [letter] Stedmon J, et al. **Anaesthesia** 1989 Jan;44(1):75
Acute treatment after accidental intrathecal injection of hypertonic contrast media [letter] Tartiere J, et al. **Anesthesiology** 1989 Jul;71(1):169
Theophylline therapy [letter] Brown JF, et al. **Ann Emerg Med** 1989 Apr;18(4):425–6
Fatal iatrogenic salicylate intoxication in a long-term user of enteric-coated aspirin [see comments] Shkrum MJ, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):89–90. **Comment in:** Arch Pathol Lab Med 1989 Jul;113(7):711
Writing a wrong. Mullan K. **BMJ** 1988 Aug 13; 297(6646):470–1
A case of accidental cyclosporin overdose with pharmacokinetic analysis. Krüger HU, et al. **Bone Marrow Transplant** 1988 Mar;3(2):167–9
A new therapeutic approach to accidental intra-arterial injection of thiopentone. Vangerven M, et al. **Br J Anaesth** 1989 Jan;62(1):98–100
Inadvertent epidural administration of potassium chloride. A case report. Tessler MJ, et al. **Can J Anaesth** 1988 Nov; 35(6):631–3
Tuberculin substituted for terbutaline. No "tine" for error [letter] Barham B, et al. **Chest** 1988 Nov;94(5):1120–1
Computer-simulated effect of errors in infusion duration and blood sampling times on pharmacokinetic calculations for gentamicin. Boyce EG, et al. **Clin Pharm** 1989 Jan; 8(1):48–53
Column response [letter] Giovinazzo N. **Dimens Health Serv** 1989 Feb;66(1):7
Drug errors: dangerous, costly, and avoidable. Koska MT. **Hospitals** 1989 Jun 5;63(11):24
Doctors' dilemma? Practical answer to a pertinent problem [letter] Agarwal BD. **J Assoc Physicians India** 1988 Feb; 36(2):180
Unintentional accidents—who is responsible [letter] Bhatia RS. **J Assoc Physicians India** 1988 Feb;36(2):186
Doctors dilemma? [letter] Rao SD. **J Assoc Physicians India** 1988 Feb;36(2):185
Paediatric drug therapy. II—Drug administration errors. Nahata MC. **J Clin Pharm Ther** 1988 Dec;13(6):399–402
The big brown bag [editorial] Johnston J. **J Miss State Med Assoc** 1989 Jul;30(7):215
Desipramine isn't when it's disopyramide [letter] Garvey CW. **JAMA** 1989 Jul 14;262(2):210
An 'amp' by any other name: the hazards of intravenous magnesium dosing [letter] Hoffman RS, et al. **JAMA** 1989 Jan 27;261(4):557
Medication errors in neonatal and paediatric intensive-care units. Raju TN, et al. **Lancet** 1989 Aug 12;2(8659):374–6
Inadvertent intravitreal injection of bethamethasone. Chen V, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):61–2
Packaging and storage of TAC to avoid medication dispensing errors [letter] Bonadio WA, et al. **Pediatr Emerg Care** 1988 Sep;4(3):229–30
SI unit dangers [letter] Perlman SA. **Pediatrics** 1989 May; 83(5):804
Transcription medication error with transdermal clonidine [letter] Mallet L, et al. **South Med J** 1988 Dec;81(12):1597–8
Poison center utilization in nosocomial toxicologic exposures: a prospective study. Scalise J, et al. **Vet Hum Toxicol** 1989 Apr;31(2):158–61
[Accidental injection of tranexamic acid (Transamin) during spinal anesthesia] Wong JO, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):249–52 (Eng. Abstr.) **(Chi)**
[Chlorhexidine poisoning] Baranov IuI. **Sud Med Ekspert** 1989 Jan–Mar;32(1):52 **(Rus)**
[General principles of elaboration of methods of drug ultraphonophoresis and their violation in clinical practice] Ulashchik VS. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun;(3):1–7 **(Rus)**
[Use of aminopenicillins: first cause of error in the prescription of antimicrobial agents at a hospital] Cartón JA, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):281–4 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Prescription-writing patterns and errors in a family medicine residency program. Shaughnessy AF, et al. **J Fam Pract** 1989 Sep;29(3):290–5

MEDICATION SYSTEMS

Office-based medication dispensing [letter] Bartholome WG. **Pediatrics** 1989 Aug;84(2):399–400
Office-based medication dispensing: another consideration [letter] Erramousepe J, et al. **Pediatrics** 1989 Aug;84(2):400

MEDICATION SYSTEMS, HOSPITAL

see related
MEDICATION ERRORS

Drug safety and medication systems in hospitals. Haslam R. **Adverse Drug React Acute Poisoning Rev** 1988 Autumn; 7(3):135–46 (55 ref.)
Pharmacist-managed drug therapy in California hospitals. Guglielmo BJ, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1366–9
Antibiotic streamlining—scope, format, and benefits. Henderson P, et al. **Conn Med** 1989 Jul;53(7):423–4
Regional variation in the use of antibiotics in four Danish hospitals. Friis H, et al. **Infection** 1989 May–Jun; 17(3):139–41
[Use of benzodiazepines at a general hospital] Figueras A, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):288–90 (Eng. Abstr.) **(Spa)**

ECONOMICS

Examining nursing personnel costs: controlled versus noncontrolled oral analgesic agents. Kitz DS, et al. **J Nurs Adm** 1989 Jan;19(1):10–4

ORGANIZATION & ADMINISTRATION

Restructuring nursing unit inspections as a quality assurance activity. Arrison CJ. **Am J Hosp Pharm** 1989 Feb; 46(2):313–5
Economic consequences of two drug-use control systems in a teaching hospital. Clapham CE, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2329–40
Pharmacist-managed drug therapy in California hospitals. Guglielmo BJ, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1366–9
Funding and marketing of an investigational drug service [letter] Rockwell MM, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1339–40
Quality assurance program for a hospital investigational-drug service. Tankanow RM, et al. **Am J Hosp Pharm** 1989 May; 46(5):962–9

STANDARDS

A decade of experience with a clinical pharmacokinetics service. Ambrose PJ, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1879–86
Drug errors: dangerous, costly, and avoidable. Koska MT. **Hospitals** 1989 Jun 5;63(11):24

STATISTICS & NUMERICAL DATA

Concern about study design and statistical analyses in recent AJHP paper [letter] MacKeigan LD, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1342–3

MEDICINE

Disease and medicine in idiom and proverb. Dirckx JH. **Am J Dermatopathol** 1988 Apr;10(2):160–2
Latin is alive and well. Dirckx JH. **Am J Dermatopathol** 1988 Jun;10(3):270–4
Connotations. Dirckx JH. **Am J Dermatopathol** 1988 Oct; 10(5):451–6
A question of velleity. LaCombe MA. **Am J Med** 1989 Feb; 86(2):207–8
Computers in clinical medicine raise questions of liability. Foreman J. **Arch Ophthalmol** 1989 Jan;107(1):25
National variations in medical practice [editorial] Clare A. **BMJ** 1989 May 20;298(6684):1334
Medical dramas and the press [letter] [published erratum appears in Can Med Assoc J 1989 Feb 15;140(4):365] **Can Med Assoc J** 1988 Dec 15;139(12):1128
A vision of health in the 21st century: medical response to the greenhouse effect. Last JM. **Can Med Assoc J** 1989 Jun 1;140(11):1277–9
Multicultural medicine: fad or forgotten concept? Masi R. **Can Med Assoc J** 1989 May 1;140(9):1086–7
The human factor at the endless frontier. Healy B. **Circulation** 1989 Apr;79(4):959–65
From bench to bedside—the impact of the transfer of the new biology to clinical medicine. Burrow GN. **Clin Invest Med** 1988 Aug;11(4):315–20
The oath, the art, the caring [editorial] Maletz FW. **Conn Med** 1989 Jul;53(7):431–2
Reflections on medicine. Too much science? Massey RU. **Conn Med** 1989 Feb;53(2):119
The madness of hunger: sickness, delirium, and human needs. Scheper-Hughes N. **Cult Med Psychiatry** 1988 Dec; 12(4):429–58
Doing interdisciplinary research in social sciences and medicine. Mayer JD. **Fam Med** 1989 May–Jun;21(3):211–6
Renaissance medicine: alchemy and astrology, art and anatomy. Bendiner E. **Hosp Pract [Off]** 1989 Jun 15; 24(6):247–9, 253–4, 259–61 passim
Medicine and the media. Crawshaw R. **J Clin Epidemiol** 1989; 42(8):815–6
Inference and decision at the bedside. Sackett DL. **J Clin Epidemiol** 1989;42(4):309–16
Ethics and clinical practice. Gillon R. **J Inherited Metab Dis** 1988;11 Suppl 1:120–4
Health science, natural science, and clinical knowledge. Bench RJ. **J Med Philos** 1989 Apr;14(2):147–64
Borborygmia I [editorial] Johnston J. **J Miss State Med Assoc** 1988 Aug;29(8):235
Psychiatry and its poor relations: "less than warmly embraced, more than misunderstood". A response to Paul McHugh. Brady JV. **J Nerv Ment Dis** 1988 Oct; 176(10):581–4
Medical science and the patient. Rippin JW. **J Oral Rehabil** 1988 Jul;15(4):313–20
A proper balance. Newsom B. **J S C Med Assoc** 1989 Jan; 85(1):48

The doctors' dilemmas. Perdue GD. **J Vasc Surg** 1989 Feb; 9(2):190–2
CONTEMPO '89. **JAMA** 1989 May 19;261(19):2823–97
Twenty years of medical advances. Brunett P. **JAMA** 1989 Feb 3;261(5):782–3
Medicine in defense against biological warfare. Huxsoll DL, et al. **JAMA** 1989 Aug 4;262(5):677–9
Humanism and the art of medicine. Our commitment to care. Nelson AR. **JAMA** 1989 Sep 1;262(9):1228–30
The symbol of medicine: one snake, not two [letter] Parrish DO. **JAMA** 1989 Jun 16;261(23):3412
Radicalism, Marxism and medicine. Navarro V. **Med Anthropol** 1989 Jun;11(2):195–219
Joint US–Sweden workshop: the role of university research in the future development of the biomedical industry. Nerem RM, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):547–51
First International Congress on Medicine, Law and Human Rights. 7–14 August 1987, Sun City, Republic of Bophuthatswana, Southern Africa. **Med Law** 1989; 7(5):399–555
Medical progress and the U.S. Constitution: two centuries. Anderson PC. **Mo Med** 1987 Jul;84(7):339–40
Whose data is it anyway? Wagner MG. **Paediatr Perinat Epidemiol** 1988 Jan;2(1):7–10
Responsibility of the learned journal. Dusseau JL. **Perspect Biol Med** 1989 Spring;32(3):344–8
Medicine in the focal spot of the natural sciences, technology, and humanity. Iversen OH. **Perspect Biol Med** 1989 Spring; 32(3):315–21
Medicine is changing. Davis JM. **Postgrad Med** 1989 Apr; 85(5):38–40
The challenge of medicine: the joy of life. A commencement address. Adams LC. **R I Med J** 1988 Sep;71(9):351–4
Patent medicine. Corcoran E. **Sci Am** 1988 Sep;259(3):128–30
New horizons in medicine [editorial] Abelson PH. **Science** 1988 Nov 25;242(4882):1109
Assumptions governing approaches to diagnosis and treatment. Aakster CW. **Soc Sci Med** 1989;29(3):293–300
Accountability of anthropologists, indigenous healers and their governments: a plea for reasonable medicine. Glasser M. **Soc Sci Med** 1988;27(12):1461–4
Humor and the physician. Cushner FD, et al. **South Med J** 1989 Jan;82(1):51–2
Ancient magic in modern medicine. Christy NP. **Trans Am Clin Climatol Assoc** 1987;99:170–6 (12 ref.)
Crossing lines in medicine. Davies NE, et al. **Trans Am Clin Climatol Assoc** 1987;99:91–9
Annual oration on medical politics—the myths and realities. Marks J. **Trans Med Soc Lond** 1986–87;103:82–90
Memoirs of a bookseller. Foster RW. **Trans Stud Coll Physicians Phila** 1989 Jun;11(2):99–104
Serving two masters. Love AH. **Ulster Med J** 1989 Apr; 58(1):13–28 (16 ref.)
To a young man entering medicine. Robertson WA. **Va Med** 1988 Sep;115(9):442–3
[What is the value and utility value of medical practice based on?] Münz J. **Cas Lek Cesk** 1989 Jun 2;128(23):705–7 (Eng. Abstr.) (Cze)
[Medicine and language (letter)] van Everdingen JJ. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):465–6 (Dut)
[Clinical medicine and DDS] Mizushima Y. **Nippon Rinsho** 1989 Jun;47(6):1218–22 (Jpn)
[Medicine and the media] Nylenna M. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):309–310 (Nor)
[Modern theoretico-cognitive problems of medical science] Hecht A. **Arkh Patol** 1989;51(4):3–9 (48 ref.) (Eng. Abstr.) (Rus)
[Problems of the theory of medicine in the works of V. Kh. Vasilenko] Burtsev VI. **Klin Med (Mosk)** 1988 Jun;66(6):3, 5–10 (Rus)
[Apropos of the article by V. I. Burakovskiĭ "A new methodologic approach—the basis of further progress in clinical medicine" (Vestnik AMN SSSR No. 4, 1988)] Sarkisov DS. **Vestn Akad Med Nauk SSSR** 1988;(12):82–8 (Rus)
[The social sciences in the service of medicine] Schpaar H. **Vestn Akad Med Nauk SSSR** 1989;(4):14–7 (Rus)
[Evaluation of trends in the development of the basic directions of present-day medicine from a sample of major scientific achievements] Starosel'skaia LN, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):81–6 (Eng. Abstr.) (Rus)
[Medicine and modern mysticism] Petlenko VP, et al. **Voen Med Zh** 1988 May;(5):18–21 (Rus)
[The role of science in medical practice] Rumboldt Z. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):1–5 (Eng. Abstr.) (Scr)
[Is clinical medicine a scientific activity? (letter)] Segura A. **Med Clin (Barc)** 1988 Nov 19;91(17):679 (Spa)

TRENDS

The challenge of change revisited. Greiss FC Jr. **Am J Obstet Gynecol** 1989 Sep;161(3):505–9
CAS and Association of American Medical Colleges Report. James AE Jr, et al. **Invest Radiol** 1988 Jul;23(7):548–51
20th century demerits: 21st century merits in medicine. Ficarra BJ. **J Med** 1988;19(5–6):257–68
The changing character of the medical profession. **Milbank Q** 1988;66 Suppl 2:1–225
Theories at the crossroads: a discussion of evolving views on medicine as a profession. Hafferty FW. **Milbank Q** 1988; 66 Suppl 2:202–25
The changing character of the medical profession: a theoretical overview. Light D, et al. **Milbank Q** 1988;66 Suppl 2:10–32 (118 ref.)
The American dominative medical system as a reflection of social relations in the larger society. Baer HA. **Soc Sci Med** 1989;28(11):1103–12 (53 ref.)
The reluctant imperialism of the medical profession. de Swaan A. **Soc Sci Med** 1989;28(11):1165–70 (29 ref.)
The coming of age of critical medical anthropology. Singer M. **Soc Sci Med** 1989;28(11):1193–203 (96 ref.)
[To what extent is medicine a science?] Schaefer H. **Med Klin** 1989 May 15;84(5):267–70 (21 ref.) (Ger)
[Uruguay: methods for a simulation model of future medical supply] Meerhoff R, et al. **Educ Med Salud** 1989 Apr–Jun; 23(2):155–67 (Spa)

MEDICINE, ALTERNATIVE see **ALTERNATIVE MEDICINE**

MEDICINE, ARABIC

Gleanings from an Arabist's workshop. Current trends in the study of medieval Islamic science and medicine. Savage-Smith E. **Isis** 1988 Jun;79(297):246–72
Medical ethics and the Islamic tradition. Nanji AA. **J Med Philos** 1988 Aug;13(3):257–75
Paravicius immortal? Weisser U. **Sudhoffs Arch** 1988; 72(2):239–40
Arabic medicine and anatomy. Solassol A. **Surg Radiol Anat** 1989;11(1):1–2
[Value of the principles of conducting scientific research and historical psychology in historical and medical studies (various problems of the theory of history of medicine)] Arkhangel'skiĭ GV. **Sov Zdravookhr** 1988;(6):66–70 (Rus)

HISTORY

["Medicine is not a difficult science". The historical influence of Arabic scholars—a current exhibit in Berlin] Wildhagen H. **Fortschr Med** 1989 Jul 20;107(21):55–6 (Ger)

MEDICINE, AYURVEDIC

Effect of the Indian gooseberry (amla) on serum cholesterol levels in men aged 35–55 years. Jacob A, et al. **Eur J Clin Nutr** 1988 Nov;42(11):939–44
Effect of an Ayurvedic compound preparation on the ability of rat urine to influence mineral phase formation. Mago N, et al. **Indian J Med Res** 1989 Feb;90:77–81
Gum guggul (Commiphora mukul)—the success story of an ancient insight leading to a modern discovery. Satyavati GV. **Indian J Med Res** 1988 Apr;87:327–35 (42 ref.)
Immunopharmacological studies on Picrorhiza kurroa Royle-ex-Benth. Part III: Adrenergic mechanisms of anti-inflammatory action. Pandey BL, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):120–5
The Ayurvedic medicines Haritaki, Amala and Bahira reduce cholesterol-induced atherosclerosis in rabbits. Thakur CP, et al. **Int J Cardiol** 1988 Nov;21(2):167–75
Speech and hearing science in ancient India—a review of Sanskrit literature. Savithri SR. **J Commun Disord** 1988 Aug;21(4):271–317
Unethical [letter] Sarkar PK. **J Indian Med Assoc** 1989 Feb; 87(2):49
Medical ethics in India. Desai PN. **J Med Philos** 1988 Aug; 13(3):231–55
Health and health care—a Hindu perspective. Naidoo T. **Med Law** 1989;7(6):643–7
Ayurvedic treatment for jaundice in Nepal. Durkin M. **Soc Sci Med** 1988;27(5):491–5
Ayurveda: a multilectic interpretation. Nordstrom CR. **Soc Sci Med** 1989;28(9):963–70 (36 ref.)
Exploring pluralism—the many faces of Ayurveda. Nordstrom CR. **Soc Sci Med** 1988;27(5):479–89
Plural medicine in Sri Lanka: do Ayurvedic and Western medical practices differ? Waxler-Morrison NE. **Soc Sci Med** 1988;27(5):531–44
Three bodies of practice in a traditional South Indian martial art. Zarrilli PB. **Soc Sci Med** 1989;28(12):1289–309 (69 ref.)
The jungle and the aroma of meats: an ecological theme in Hindu medicine. Zimmermann F. **Soc Sci Med** 1988; 27(3):197–215
Ganesha: the primeval Hindu xenograft. Kahan BD. **Transplant Proc** 1989 Jun;21(3 Suppl 1):1–8

MEDICINE, CHINESE TRADITIONAL

see related
DRUGS, CHINESE HERBAL

Tibetan medicine. Part III: Pulse diagnosis in Tibetan medicine. Translated from the first chapter of the Fourth Tantra (rGyud-bzi). Steiner RP. **Am J Chin Med** 1988; 16(3–4):173–8
A preliminary report on a new anti-G maneuver. Guo HZ, et al. **Aviat Space Environ Med** 1988 Oct;59(10):968–72
Integration of modern and traditional Chinese medicine. Konig G. **Chen Tzu Yen Chiu** 1988;13(1):30–5 (Eng, Chi)
Applying TCM theories to improve the curative effects of acupuncture and moxibustion. Qiu ML. **Chen Tzu Yen Chiu** 1988;13(1):10–6 (Eng, Chi)
Cataractopiesis and an analysis of 49 treated eyes. Lu LC. **Chin Med J** 1966 Sep;85(9):618–22
EEG findings during special psychical state (Qi Gong state) by means of compressed spectral array and topographic mapping. Zhang JZ, et al. **Comput Biol Med** 1988; 18(6):455–63
The indigenization of neurasthenia in Hong Kong. Cheung FM. **Cult Med Psychiatry** 1989 Jun;13(2):227–41
Neurasthenia in China: modern and traditional criteria for its diagnosis. Liu SX. **Cult Med Psychiatry** 1989 Jun; 13(2):163–86
Blood-building foods in contemporary Chinese populations. Ludman EK, et al. **J Am Diet Assoc** 1989 Aug;89(8):1122–4
What Nei Jing and Mai Jing say about arterial pulse waves and our attempt to illustrate some of their statements. Xue H, et al. **J Biomech Eng** 1989 Feb;111(1):88–91
Traditional Chinese medicine and the search for new antineoplastic drugs. Han J. **J Ethnopharmacol** 1988 Sep; 24(1):1–17 (52 ref.)
The Chinese traditional method for the treatment of forearm fractures. Sung HW. **J Orthop Trauma** 1988;2(1):43–4
Why do patients go to traditional healers? Lau BW. **J R Soc Health** 1989 Jun;109(3):92–5 (16 ref.)
Research on traditional Chinese acupuncture—science or myth: a review. Prance SE, et al. **J R Soc Med** 1988 Oct; 81(10):588–90 (16 ref.)
A study on hemorrheology in patients with spleen Qi deficiency. Kuang YL, et al. **J Tradit Chin Med** 1988 Dec; 8(4):235–8
Heat symptom-complex with cold limbs in traditional Chinese medicine: observations and discussion. Yan YG, et al. **J Tradit Chin Med** 1988 Sep;8(3):213–5
Studies on Yin-deficiency. Zhang JQ. **J Tradit Chin Med** 1989 Mar;9(1):75–8
The role of traditional Chinese medicine in supportive care of cancer patients. Sun Y. **Recent Results Cancer Res** 1988; 108:327–34 (8 ref.)
Pharmacological study of a traditional Chinese medicine: effect of bezoar bovis on the irregular beating pattern of cultured mouse myocardial cells. Takahashi K, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):317–30
Integration of traditional Chinese medicine with Western medicine—right or wrong? Cai JF. **Soc Sci Med** 1988; 27(5):521–9
[Relation of the patterns of syndrome differentiation and features of coronary and left ventricular angiocardiography in coronary heart disease] Bao YX. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):74–5, 67 (Eng. Abstr.) (Chi)
[Standards in the differentiation of the symptom-complex in liver yang exuberance syndrome] Chen GL. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):549–51 (Chi)
[On factors related to abnormalities of the sublingual vein in 530 cancer patients] Chen JM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):590–2, 580 (Eng. Abstr.) (Chi)
[Power spectral analysis of heart rate in qi deficiency and both qi and yin deficiency in patients with coronary heart disease] Chen YQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):76–8, 67 (Eng. Abstr.) (Chi)
[Syndrome differentiation in chronic kidney failure using Chinese traditional medicine based on the laboratory tests] Chen ZW. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul; 8(7):395–7, 387 (Eng. Abstr.) (Chi)
[Analysis of 35 cases of pathology in yin deficiency syndrome] Dai HL, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):7–9, 3 (Eng. Abstr.) (Chi)
[Progress in research on the spleen deficiency syndrome with traditional Chinese medicine and Western medicine] Ding J. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):697–9 (16 ref.) (Chi)
[Study of the relation of the typology of nephrotic syndrome and red cell C3b receptor, T cell function] Ding PZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):218–9, 197 (Eng. Abstr.) (Chi)
[Relations of the "three regions, nine subdivisions" sphygmograms and the differentiation of symptom-complexes in traditional Chinese medicine] Fei ZF, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec; 8(12):728–30, 709 (Eng. Abstr.) (Chi)
[Genetic characteristics in yang deficiency patients] Feng DN, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan; 9(1):24–5, 6 (Eng. Abstr.) (Chi)
[Study on the mechanism of denuded tongue coating due to yin deficiency] Hu QF, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):153–5, 133 (Eng. Abstr.) (Chi)
[Hemodynamic and hemorheologic changes in weak pulse in mitral stenosis patients] Jiang CW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):273–5, 261 (Eng. Abstr.) (Chi)
[Relation of plasma renin activity and angiotensin II level and traditional Chinese medicine differentiation in essential hypertension] Jing WY, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):663–4, 645 (Eng. Abstr.) (Chi)
[The relation of lesions of the testis and acute injury and chronic disease of the kidney] Kuang DY.

Chung Hsi I Chieh Ho Tsa Chih 1989 Jan;9(1):10–3, 3–4 (Eng. Abstr.) (Chi)
[A study of dynamic state on cold and heat syndromes: characteristics between stimulation and reaction in rats with cold and heat functional state] Liang YH, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):349–51, 325 (Eng. Abstr.) (Chi)
[Correlation of syndrome types in traditional Chinese medicine and insulin release curves in pre-aged and aged diabetics—an analysis of 142 cases] Liu C. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jun;9(6):338–40, 324 (Eng. Abstr.) (Chi)
[Presentation of diagnostic criteria for the blood-stasis symptom-complex in dermatology] Nakagima H. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):588–9, 580 (Eng. Abstr.) (Chi)
[The relation of typing of gastric carcinoma according to traditional Chinese medicine theories and clinical pathologic classification] Qu SF, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):14–5, 4 (Eng. Abstr.) (Chi)
[Clinical method of evaluating declined intelligence with aging and its application in traditional Chinese medicine research] Sun FL, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):203–6, 195 (Eng. Abstr.) (Chi)
[Exploration of the relation of pulse, tongue appearance and biochemical, immunologic changes in primary hepatic carcinoma] Tao XC. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):405–6, 388 (Eng. Abstr.) (Chi)
[Traditional Chinese medicine in America] Tsung PK. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jun;9(6):365–7 (Chi)
[Research on the diagnostic criteria of the blood-stasis symptom-complex] Wang J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):585–7, 589, 580 (Eng. Abstr.) (Chi)
[Exploration between shen and ear by auditory determination in patients with renal disease] Wang JX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):91–2, 69 (Eng. Abstr.) (Chi)
[Some easily corrected problems in the research design in traditional Chinese medicine] Wang MH. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):236–7 (Chi)
[Clinical significance of cardionatrin in the diagnosis of deficiency of heart-lung qi] Wang WH, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):521–2, 515 (Eng. Abstr.) (Chi)
[Platelet ultrastructure and function of coronary heart disease in patients with the blood-stasis symptom-complex] Wu J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):593–5, 581 (Eng. Abstr.) (Chi)
[Research on cold and heat properties in deficiency syndromes by assaying catecholamines in the urine] Xie ZF. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):647–9, 643 (Eng. Abstr.) (Chi)
[Relation of a crimson and pale tongue and levels of some serum trace elements and sex hormones] Xu ZF. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):402–4, 388 (Eng. Abstr.) (Chi)
[Relation of hormone levels and the type of diabetes classified by a differentiation of symptoms and signs] Zhang CX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):714–6, 707 (Eng. Abstr.) (Chi)
[Prospect of treating intractable disorders with traditional Chinese remedies for relieving the blood-stasis symptom-complex] Zhang ZN. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):684–5 (Chi)
[Application of the law of synthetical judgment of fuzzy mathematics in clinical curative effect analysis] Zheng RX. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):302–3 (Chi)
[Experimental study of qi deficiency syndrome and Codonopsis pillosulae and Astragalus injection on the immune response in mice] Zhou Y, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):286–8, 262 (Eng. Abstr.) (Chi)
[Nursing perspective on the differentiation of symptoms and signs of exterior syndrome patients treated by relieving the exterior syndrome] Gu QH. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):410–1 (Chi)
[Observation of patient's tongue presentation in clinical nursing] Zhang GM. **Chung Hua Hu Li Tsa Chih** 1988 Sep;23(9):536–7 (Chi)
[Nursing problems in traditional Chinese medicine] Zhang SL. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):340–1 (Chi)
[Discrimination concerning the modern concept of "bencao"] Hao JD. **Chung Yao Tung Pao** 1988 Nov;13(11):3–5, 61 (Eng. Abstr.) (Chi)
[Influence of zuogui and yougui decoctions on the plasma cyclic nucleotides in mice] Li GH. **Chung Yao Tung Pao** 1988 Aug;13(8):41–2, 64 (Eng. Abstr.) (Chi)
[Statistical analysis of the relation of pharmacologic actions and channels of Chinese Materia medica] Li YK, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):48–50, 64 (Eng. Abstr.) (Chi)
[Effect of hongqi jianzhong decoction and sijunzi decoction on a mouse model of deficiency in the spleen caused by dahuang mixture] Wu AG. **Chung Yao Tung Pao** 1988 Aug;13(8):39–41, 63 (Eng. Abstr.) (Chi)
[Chinese and Western medicine—confrontation of 2 medical cultures] Unschuld PU. **Internist (Berlin)** 1988 Jul;29(7):503–9 (17 ref.) (Ger)
[Psychiatry in China. Modern and traditional treatment—hand in hand] Jansson B. **Lakartidningen** 1989 May 24;86(21):2035–6 (Swe)

HISTORY

Medicine—the art of humaneness: on ethics of traditional Chinese medicine. Qiu RZ. **J Med Philos** 1988 Aug;13(3):277–99
Some medical achievements in Chinese history. Cai JF. **J Tradit Chin Med** 1988 Sep;8(3):217–20
The general development of Chinese ophthalmology. Chen YZ. **Yen Ko Hsueh Pao** 1987 Sep;3(3):139–42
[The origin, formation and development of Chinese gerontotherapeutics (I)] Zhou WQ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):751–3 (Chi)
[The origin, formation and development of Chinese gerontotherapeutics (II)] Zhou WQ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):48–51 (Chi)
[The general development of Chinese ophthalmology] Chen YZ. **Yen Ko Hsueh Pao** 1986 Mar;2(1):3–8 (Eng. Abstr.) (Chi)
[Professor Chen YaoZhen (Eugene Chan) and the study of history of ancient Chinese ophthalmology] Deng YP. **Yen Ko Hsueh Pao** 1988 Dec;4(4):195–8, 227 (Eng. Abstr.) (Chi)

MEDICINE, FOLK see **MEDICINE, TRADITIONAL**

MEDICINE, HERBAL

see related
DRUGS, CHINESE HERBAL

Treatment of secretory otitis media with Kampo medicine. Ikeda K, et al. **Arch Otorhinolaryngol** 1988;245(4):234–6
Anglo-Saxon cures. Hart FD. **Br J Clin Pract** 1988 Jun;42(6):250–1
Evidence that 1 per cent Meshushit ointment prevents progressive dermal ischaemia of experimental deep partial skin thickness burns: a preliminary, quantitative controlled study. Kaufman T, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):27–30
Moral medicine: symbolic content in 19th century Shaker therapeutics. Idler EL. **Cult Med Psychiatry** 1989 Mar;13(1):1–24
Inhibitory effect of TJ-960 (SK) on pentylenetetrazol-induced EEG power spectrum changes. Sugaya E, et al. **Epilepsy Res** 1988 Jan–Feb;2(1):27–31
Inhibitory effect of a mixture of herbal drugs (TJ-960, SK) on pentylenetetrazol-induced convulsions in E1 mice. Sugaya E, et al. **Epilepsy Res** 1988 Sep–Oct;2(5):337–9
Ethnopharmacologic analysis of medicinal plants used by Laotian Hmong refugees in Minnesota. Spring MA. **J Ethnopharmacol** 1989 Jun;26(1):65–91 (82 ref.)
Efficacy of one herbal product in prostatorrhoea and spermatorrhoea cases [letter] Mukherjee G, et al. **J Indian Med Assoc** 1989 Jan;87(1):19–20
Unethical [letter] Sarkar PK. **J Indian Med Assoc** 1989 Feb;87(2):49
Studies on antinephritic effect of TJ-8014, a new Japanese herbal medicine, and its mechanisms (1): Effects on original-type anti-GBM nephritis in rats and platelet aggregation. Hattori T, et al. **Jpn J Pharmacol** 1989 Aug;50(4):477–85
Regulation [letter] Dinnen A. **Med J Aust** 1989 Mar 6;150(5):287
Herbal preparations—to regulate or not to regulate? [editorial] Moulds RF, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):572–4
Conservation, ethnobotany, and the search for new jungle medicines: pharmacognosy comes of age ... again. Plotkin MJ. **Pharmacotherapy** 1988;8(5):257–62
Worm bolus and herbal toxins masquerading as abruptio placentae [letter] Moodley IR. **S Afr Med J** 1988 Nov 5;74(9):472
To strengthen and refresh: herbal therapy in Southeast Asia. Van Esterik P. **Soc Sci Med** 1988;27(8):751–9 (32 ref.)
Oriental medicine today. Ishida Y. **South Med J** 1989 Apr;82(4):499–505
Traditional treatment and community control of gastrointestinal helminthiasis in St Lucia, West Indies. Didier JM, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):303–4
A matter of trust. Borgenicht L. **West J Med** 1989 Aug;151(2):229–30
[Phytotherapy in internal medicine] Zimmermann W. **Internist (Berlin)** 1988 Jul;29(7):463–71 (18 ref.) (Ger)
[Amborum Special F and ASFO—2 glucocorticoid-containing herbal remedies] Knoblauch A, et al. **Schweiz Med Wochenschr** 1989 Jun 3;119(22):796–802 (Eng. Abstr.) (Ger)

MEDICINE, HINDU see **MEDICINE, AYURVEDIC**

MEDICINE IN ART

A case of late congenital syphilis at the Metropolitan Museum of Art, New York. Borroni G. **Am J Dermatopathol** 1988 Oct;10(5):448–50
To cast a pox. The iconography of syphilis. Ober WB. **Am J Dermatopathol** 1989 Feb;11(1):74–86
Mona Lisa syndrome: solving the enigma of the Gioconda smile. Adour KK. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):196–9
Babinski's sign in medieval, Renaissance, and baroque art. Massey EW, et al. **Arch Neurol** 1989 Jan;46(1):85–8
Migraine aura as artistic inspiration. Fuller GN, et al. **BMJ** 1988 Dec 24–31;297(6664):1670–2
Dentistry and the art of exaggeration. Marsh J. **Br Dent J** 1988 Oct 22;165(8):298
The pest house at Jaffa: medicine, art and French romantic painting. Merrill JM, et al. **Caduceus** 1988 Fall–Winter;4(3–4):58–73
Hippocrates: the ideal physician then and now. Merrill JM. **Caduceus** 1989 Spring;5(1):68–74
Another family with the 'Habsburg jaw'. Thompson EM, et al. **J Med Genet** 1988 Dec;25(12):838–42
Velázquez' dwarfs: a profusion of diagnoses [letter] **JAMA** 1989 Jul 21;262(3):349–50
Cosmas and Damian, patron saints of doctors. Dewhurst J. **Lancet** 1988 Dec 24–31;2(8626–8627):1479–80
A note on Eric Avery's work. Banks JT. **Lit Med** 1986;5:84–7
A book by its cover: sonnet on an otolaryngological text. Hayes CF. **Lit Med** 1987;6:92–3
Dwarfism in Egypt and classical antiquity: iconography and medical history. Dasen V. **Med Hist** 1988 Jul;32(3):253–76
Alister John Douglas Brass. Egan P. **Med J Aust** 1988 Aug 15;149(4):214, 216
Medicine in music [letter] Graham JR. **N Engl J Med** 1989 Mar 23;320(12):812
Nose and society. Huizing E. **Rhinology** 1988;Suppl 7:9–38
Upon the wracke of this tough world. Traction as treatment or torture. Goldblatt D. **Semin Neurol** 1986 Dec;6(4):431–6
An investigation of endemic goitre during the centuries in sacral figurative arts. Giampalmo A, et al. **Zentralbl Allg Pathol** 1988;134(3):297–307
[Genetics in Greek antiquity] Bartsocas CS. **J Genet Hum** 1988 Aug;36(4):279–93 (Eng. Abstr.) (Fre)
[The history of dermatology. Haemangioma senile, presenting on the cheek of a "Female with Carnations"] Roth W. **Hautarzt** 1988 Nov;39(11):746–7 (Eng. Abstr.) (Ger)
[Ghirlandajo's painting "Grandfather and Grandchild" from the viewpoint of the dermatologist] Tsankov N, et al. **Hautarzt** 1988 Oct;39(10):677–9 (Ger)
[Communication disorders as illness factors. Observations of a pathologist] Seifert G. **Pathologe** 1989 Mar;10(2):76–86 (Ger)
[Representation of labor in ceramics from 16th century Urbino] Szabó A. **Orv Hetil** 1989 Jan 22;130(4):189–91 (Hun)
[Factors influencing the effectiveness of posters used in anti-alcoholism and anti-smoking propaganda] Ananina NL. **Gig Sanit** 1988 Jun;(6):69–72 (Rus)
[Methodological approaches to the evaluation of health education posters] Pozdniakova RZ, et al. **Gig Sanit** 1988 Jun;(6):39–41 (Rus)
[S.P. Botkin in the life of I.N. Kramskii] Shul'tsev GP. **Klin Med (Mosk)** 1988 Dec;66(12):124–7 (Rus)

HISTORY

Freud's lithograph of Charcot: a historical note. Morgan WG. **Bull Hist Med** 1989 Summer;63(2):268–72
[Comment on the contribution by N. Tsankov and S. Tonev: Ghirlandajo's painting "Grandfather and Grandchild" from the viewpoint of the dermatologist] Korting GW. **Hautarzt** 1989 Jul;40(7):465 (Ger)
[Lentigo maligna and naevus pigmentosus et pilosus in oil paintings at the National Gallery in London] Roth W. **Hautarzt** 1989 May;40(5):320–1 (Eng. Abstr.) (Ger)
[Facial abnormalities in figurative art and in historical documents] Neumann HJ. **Z Arztl Fortbild (Jena)** 1989;83(3):159–62 (Ger)

MEDICINE IN LITERATURE

Short stories about doctors and patients: a course [letter] Ness DE. **Acad Med** 1989 Jul;64(7):390–1
Tales of the ampulla of Vater, II [letter] Sobin LH. **Am J Gastroenterol** 1988 Dec;83(12):1437
One Particular Leviathan [letter] Davison S. **Am J Med** 1989 Sep;87(3):365
S. Weir Mitchell's early fictional description of multiple personality [letter] Schneck JM. **Am J Psychiatry** 1989 Feb;146(2):284
Theodore Dreiser's "Laughing Gas". Wright AJ. **Anesth Analg** 1989 Sep;69(3):391–2
Professor Lord Lister, William Ernest Henley, and Oscar Wilde. Baron JH. **BMJ** 1988 Dec 24–31;297(6664):1651–3
Preparkinsonian parkinsonism. Freedman BJ. **BMJ** 1989 Jun 10;298(6687):1573
The death of Porthos, or the first description of vertebrobasilar insufficiency in fiction. Rønnov-Jessen V. **BMJ** 1988 Dec 24–31;297(6664):1658
Sherlock Holmes: a suitable case for treatment? Rollin HR. **Br J Psychiatry** 1988 Aug;153:241–2
Domestic medicines. An irreverent look at health education.

Crosfill M. **Bristol Med Chir J** 1988 Aug;103(3):34–7
Calenture—a psychopathological syndrome of a long-lasting sea voyage. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):45–9
Poetry: the doctor and the tubercle bacilli. Askar AO. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):12
Felix Marti-Ibanez. Gordon RF. **Del Med J** 1989 Feb; 61(2):77–9
Human obsolescence and rejuvenescence: some literary treatments. Donow HS. **Gerontol Geriatr Educ** 1987–88; 8(1–2):113–22
Aging according to biography. Weiland S. **Gerontologist** 1989 Apr;29(2):191–4
A walk in the woods [letter] Kohn SR. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):300–1
"Skin is in" [letter] Norman RA. **J Am Acad Dermatol** 1989 Apr;20(4):701
Changing dental images—from stone tablets to comic strips. Mandel ID. **J Am Dent Assoc** 1989 Jun;118(6):695–9
An Anglo-American consultation: Sir William Osler refers Henry James to Sir James Mackenzie. Janowitz HD, et al. **J Hist Med Allied Sci** 1988 Jul;43(3):297–308
Philoctetes by Sophocles: a case for diagnosis. Stefanato C. **J R Coll Physicians Lond** 1989 Jul;23(3):176
William Somerset Maugham: medical student at St Thomas's Hospital 1892 to 1897—'Liza of Lambeth'. Banerjee AK. **J R Soc Med** 1989 Jan;82(1):44–5
Literature and medical ethics [editorial] Sheriff DS. **J R Soc Med** 1988 Dec;81(12):688–90
'Poe-phyria,' madness, and The Fall of the House of Usher [letter] Rickman LS, et al. **JAMA** 1989 Feb 10;261(6):863–4
Literature and bioethics. **Lit Med** 1988;7:1–209
Use and abuse of literary concepts in medicine. **Lit Med** 1986; 5:1–183
A controversy about clinical form. **Banks JT. Lit Med** 1986; 5:24–6
A case of amyotrophic lateral sclerosis. Barnard D. **Lit Med** 1986;5:27–42
The roots of guilt and responsibility in Shusaku Endo's The Sea and Poison. Breuer HP. **Lit Med** 1988;7:80–106
Darwinism in Victorian letters. Breuer HP. **Lit Med** 1987; 6:128–38
The doctor as patient: bioethical dilemmas reflected in literary narratives. Budge A, et al. **Lit Med** 1988;7:132–7
Esthetics and anesthetics: mimesis, hermeneutics, and treatment in literature and medicine. Carter AH 3d. **Lit Med** 1986;5:141–51
To render the lives of patients. Charon R. **Lit Med** 1986; 5:58–74
The pharmakos figure in modern American stories of physicians and patients. Cowan JC. **Lit Med** 1987;6:94–109
Medical ethics and the problem of role ambiguity in Mikhail Bulgakov's "The Murderer" and Pearl S. Buck's "The Enemy". Dagi TF. **Lit Med** 1988;7:107–22
Literature and medicine: in quest of method. Daniel SL. **Lit Med** 1987;6:1–12
Not choosing not to be: Victorian literary responses to suicide. Gates BT. **Lit Med** 1987;6:77–91
A. R. Luria and the art of clinical biography. Hawkins AH. **Lit Med** 1986;5:1–15
A book by its cover: sonnet on an otolaryngological text. Hayes CF. **Lit Med** 1987;6:92–3
Making a case. Hunter KM. **Lit Med** 1988;7:66–79
Medicine as business and patient welfare: Thomas Mann dissects the conflict of interest. Justin RG. **Lit Med** 1988; 7:138–47
Metaphorical language and terminal illness: reflections upon images of death. Marston J. **Lit Med** 1986;5:109–21
Fitzgerald vs. Fitzgerald: "An Alcoholic Case". Monteiro G. **Lit Med** 1987;6:110–6
How to read The Body in Pain. Morris DB. **Lit Med** 1987; 6:139–55
Williams's force. Morris DB. **Lit Med** 1986;5:122–40
The healthy text. Mosley P. **Lit Med** 1987;6:35–42
The moral vision of The Alchemist: tricks, psychotherapy, and personality traits. Netscher RE. **Lit Med** 1988;7:177–94
Literature and medicine as a critical discourse. Psaty BM. **Lit Med** 1987;6:13–34
A case of self defense. Rabkin E. **Lit Med** 1986;5:43–53
Literature and medicine: towards a simultaneity of theory and practice. Rousseau GS. **Lit Med** 1986;5:152–81
Clinical tales. Sacks O. **Lit Med** 1986;5:16–23
Prospero as a renaissance therapist. Schleiner W. **Lit Med** 1987;6:54–60
Sequel. Schneiderman LJ. **Lit Med** 1986;5:75–83
The limits of narrative. Smith DH. **Lit Med** 1986;5:54–7
Poems and patients: the balance of interpretation. Terry JS, et al. **Lit Med** 1987;6:43–53
Using literature to teach ethical principles in medicine: Of Mice and Men and the concept of duty. Waldron EE. **Lit Med** 1988;7:170–6
Dream doctors as healers in drama and film: a paradigm, an antecedent, and an imitation. Welsh JM. **Lit Med** 1987; 6:117–27
The ethics of impaired physicians: Wolfe's Dr. McGuire and Williams's Dr. Rivers. Willms J, et al. **Lit Med** 1988; 7:123–31
Tennyson, the weird seizures in The Princess, and epilepsy. Wright BH. **Lit Med** 1987;6:61–76
Smallpox in seventeenth-century English literature: reality and the metamorphosis of wit. Anselment RA. **Med Hist** 1989 Jan;33(1):72–95
Immunology and literature in the early twentieth century: "Arrowsmith" and "The Doctor's Dilemma". Löwy I. **Med Hist** 1988 Jul;32(3):314–32
A literary look at contemporary society. Fried R. **Ohio Med** 1989 May;85(5):393–5
Joë Bousquet: paraplegia as a poet's plight and challenge. Ohry A, et al. **Paraplegia** 1988 Aug;26(4):273–7
Application of Piotrowski's dark shading hypothesis to Sylvia Plath's poems written before her suicide. Lester D. **Percept Mot Skills** 1989 Feb;68(1):122
The doctor's dilemma: problems that do not go away. Landau WM. **Perspect Biol Med** 1989 Summer;32(4):505–12
The case of Tertius Lydgate. Streeter RE. **Perspect Biol Med** 1989 Winter;32(2):171–3
Symbols and symptoms. Wilson FC. **Perspect Biol Med** 1989 Spring;32(3):449–54
Spontaneous human combustion: its role in literature and science. Bergman NA. **Pharos** 1988 Fall;51(4):18–21
Molière's medical satire: motives and methods. Dirckx JH. **Pharos** 1989 Winter;52(1):10–4
A.J. Cronin—physician, author. Fisher J. **Pharos** 1988 Fall; 51(4):25–8
The confrontation with death. Vavra JD. **Pharos** 1988 Summer;51(3):16–25
Physician burnout [letter] Vinson DC. **Pharos** 1988 Summer; 51(3):42
Dante and medicine: the circle of malpractice. Accardo P. **South Med J** 1989 May;82(5):624–8
[Hendrick Conscience (1812–1883). Pathographic and medical aspects of his life and work] Dieckhöfer K. **Clio Med** 1985–86;20(1–4):91–103 **(Ger)**
[Remarks on the contribution "Displaced and supernumerary molar of the ethmoid bone" by J. Silberzahn (Giessen) in this periodical, volume 67, issue 10 1988, p. 545–546 (letter)] Becker W. **Laryngorhinootologie** 1989 Feb;68(2):133 **(Ger)**
[The intercepted decline. Tristram Shandy's traumas] Beland H. **Psyche (Stuttg)** 1988 Aug;42(8):709–23 (Eng. Abstr.) **(Ger)**
[Poison—subject and parable. Facts and fables on flora] Giebelmann R. **Z Gesamte Hyg** 1988 Dec;34(12):739–42 (Eng. Abstr.) **(Ger)**
[On the occasion of the reunion of medical writers at Siófok, 21–13 October 1988] Sáry G. **Orv Hetil** 1988 Aug 7; 129(32):1712–3 **(Hun)**
[A.P. Chekhov and M.A. Chlenov (on the 125th anniversary of the writer's birth)] Arkhangel'skiĭ GV. **Klin Med (Mosk)** 1988 Dec;66(12):130–1 **(Rus)**
[Medicine in the life and creativity of M. A. Bulgakov] Likhtenshtein IE. **Klin Med (Mosk)** 1988 Aug;66(8):149–51 **(Rus)**
[A.P. Chekhov's comments on cardiac hypertrophy] Shul'tsev GP. **Klin Med (Mosk)** 1989 Mar;67(3):152–3 **(Rus)**
[A page from the history of social medicine] Idel'chik Khl. **Sov Zdravookhr** 1988;(11):55–9 **(Rus)**
[Social and medical observations in "Istarskim Putima" (Istrian Paths) by Franje Horvat Kiš] Rudelić I. **Ljec Vjesn** 1988 Aug;110(8):291–4 (Eng. Abstr.) **(Scr)**
[The physician with a pen and physicians on the stage] Böttiger LE. **Lakartidningen** 1988 Dec 28;85(52):4638–9 **(Swe)**
[Medicine is my wife and literature is my mistress. Anton Chekhov—the writer-physician] Böttiger LE. **Lakartidningen** 1988 Dec 21;85(51):4546–9 **(Swe)**

HISTORY

Fictional doctors and the evolution of medical ethics in the United States, 1975–1900. **Burns CR. Lit Med** 1988;7:39–55
Humanism and ethics in Roman medicine: translation and commentary on a text of Scribonius Largus. Pellegrino ED, et al. **Lit Med** 1988;7:22–38
[Gerhart Hauptmann and psychiatry at that time reflected in his works] Dieckhöfer K. **Gesnerus** 1989;46(1–2):81–92 (Eng. Abstr.) **(Ger)**
[Dr. Charlot Strasser (1884–1950). A Swiss psychiatrist as author, cultural and social politician] Heinrich D. **Gesnerus** 1988;45 Pt 3–4:483–99 (Eng. Abstr.) **(Ger)**
[Hofmannsthal and the gliding out of this world] Tellenbach H. **Z Klin Psychol Psychopathol Psychother** 1988; 36(3):268–74 (Eng. Abstr.) **(Ger)**

MEDICINE, INDIGENOUS see **MEDICINE, TRADITIONAL**

MEDICINE, ORIENTAL TRADITIONAL

Treatment of secretory otitis media with Kampo medicine. Ikeda K, et al. **Arch Otorhinolaryngol** 1988;245(4):234–6
Illness from fright or soul loss: a North Balinese culture-bound syndrome? Wikan U. **Cult Med Psychiatry** 1989 Mar;13(1):25–50
The integration of Western and Oriental medicine. Ishikawa Y. **Fam Med** 1988 Jul–Aug;20(4):239, 303
Traditional Chinese rehabilitative therapy in the process of modernization. Zhuo DH. **Int Disabil Stud** 1988;10(3):140–2
Inotropic effects of (+/-)-higenamine and its chemically related components, (+)-R-coclaurine and (+)-S-reticuline, contained in the traditional sino-Japanese medicines "bushi" and "shin-i" in isolated guinea pig papillary muscle. Kimura I, et al. **Jpn J Pharmacol** 1989 May;50(1):75–8
Lessons from the East. Dimond EG. **Pharos** 1989 Spring; 52(2):25–8
The existence of aldose reductase inhibitors in some kampo medicines (Oriental herb prescriptions). Aida K, et al. **Planta Med** 1989 Feb;55(1):22–6
Techniques of healing in Southeast Asia. **Soc Sci Med** 1988; 27(8):747–877
The practice of traditional Korean medicine in Washington, D.C. Pang KY. **Soc Sci Med** 1989;28(8):875–84
Oriental medicine today. Ishida Y. **South Med J** 1989 Apr; 82(4):499–505
Folk medicine in the health practice of Hmong refugees. Cheon-Klessig Y, et al. **West J Nurs Res** 1988 Oct; 10(5):647–60

MEDICINE, PRIMITIVE see **MEDICINE, TRADITIONAL**

MEDICINE, TRADITIONAL

see related
HEALTH SERVICES, INDIGENOUS

Evaluation of traditional plant treatments for diabetes: studies in streptozotocin diabetic mice. Swanston-Flatt SK, et al. **Acta Diabetol Lat** 1989 Jan–Mar;26(1):51–5
"Psychic surgery" in the Philippines as a form of group hypnosis. Azuma N, et al. **Am J Clin Hypn** 1988 Jul; 31(1):61–7 (20 ref.)
Copper sulfate. Not a harmless chemical. Lamont DL, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):226–7
Disseminated Salmonella arizona infection associated with rattlesnake meat ingestion. Bhatt BD, et al. **Am J Gastroenterol** 1989 Apr;84(4):433–5
Healing we cannot explain. McNall MC. **Am J Nurs** 1989 Sep;89(9):1162–3
An ethnomedical perspective of Anglo-American psychiatry. Fabrega H Jr. **Am J Psychiatry** 1989 May;146(5):588–96 (97 ref.)
The curandero's apprentice: a therapeutic integration of folk and medical healing. Kreisman JJ. **Am J Psychiatry** 1975 Jan;132(1):81–3
A sociocultural study of koro epidemics in Guangdong, China. Tseng WS, et al. **Am J Psychiatry** 1988 Dec; 145(12):1538–43
Paleodigms and paleodigmatics: a new theoretical construct applicable to Munchausen's syndrome by proxy, child-abuse dwarfism, paraphilias, anorexia nervosa, and other syndromes. Money J. **Am J Psychother** 1989 Jan; 43(1):15–24
Traditional craniotomies of the Kisii tribe of Kenya. Furnas DW, et al. **Ann Plast Surg** 1985 Dec;15(6):538–56
Perceived causes and traditional treatment of diarrhoea by mothers in Eastern Sudan. el Bushra HA, et al. **Ann Trop Paediatr** 1988 Sep;8(3):135–40
Traditional belief and practice among the Pokot people of Kenya with particular reference to mother and child health: 2. Mother and child health. O'Dempsey TJ. **Ann Trop Paediatr** 1988 Sep;8(3):125–34
'Bhanamati' sorcery and psychopathology in south India. A clinical study. Keshavan MS, et al. **Br J Psychiatry** 1989 Feb;154:218–20
Socio-medical aspects of a physician's work in the tropics. Tomaszewski R. **Bull Inst Marit Trop Med Gdynia** 1987; 38(3–4):210–5
Brazilian popular healers as effective promoters of oral rehydration therapy (ORT) and related child survival strategies. Nations MK, et al. **Bull Pan Am Health Organ** 1988;22(4):335–54
Burn hazard from cupping—an ancient universal medication still in practice. Sagi A, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):323–5
Traditional medicine of aboriginal Australia. Byard R. **Can Med Assoc J** 1988 Oct 15;139(8):792–4 (15 ref.)
Treating enteritis in Indonesia [letter] Dormaar NG. **Can Med Assoc J** 1989 May 15;140(10):1132
Coin rolling misdiagnosed as child abuse. Rosenblat H, et al. **Can Med Assoc J** 1989 Feb 15;140(4):417
Glycaemic effects of traditional European plant treatments for diabetes. Studies in normal and streptozotocin diabetic mice. Swanston-Flatt SK, et al. **Diabetes Res** 1989 Feb; 10(2):69–73
The Unani traditional medical system in India: a case study in health behaviour. Izhar N. **Geogr Med** 1989;19:163–85
In Ghana, conflict and complementarity. Hevi J. **Hastings Cent Rep** 1989 Jul–Aug;SPEC Suppl:5–7
Breast-feeding patterns and lactational amenorrhoea among the Warli tribals: a socioanthropological inquiry. Carneiro P. **Int J Fertil** 1988;33 Suppl:35–9
Characteristics of traditional midwives and their beliefs and practices in rural Bangladesh. Amin R, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):119–25
Notes on the utilization of traditional and modern/Western mental health practices among the Yoruba, Nigeria. Jaiyeoba DA. **Int J Nurs Stud** 1988;25(3):179–84
Toward an appreciation of cross-cultural perspectives in modern health care. Appelt GD. **J Clin Pharm Ther** 1988 Jun;13(3):175–8
Toxic Mexican folk remedies for the treatment of empacho: the case of azarcon, greta, and albayalde. Baer RD, et al. **J Ethnopharmacol** 1988 Sep;24(1):31–9
Ethnopharmacologic and phytochemical studies of the

Thymelaeaceae. Borris RP, et al. **J Ethnopharmacol** 1988 Sep;24(1):41–91 (438 ref.)
Screening for cytotoxic activity of plants used in traditional medicine. Chapuis JC, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):273–84
Plants used in traditional medicine in eastern Tanzania. II. Angiosperms (Capparidaceae to Ebenaceae). Chhabra SC, et al. **J Ethnopharmacol** 1989 May;25(3):339–59 (81 ref.)
Ethnopharmacology and Western medicine. Phillipson JD, et al. **J Ethnopharmacol** 1989 Feb;25(1):61–72 (27 ref.)
Chemical studies on Mexican plants used in traditional medicine, V. Cucurbitacin glucosides from Cigarrilla mexicana. Mata R, et al. **J Nat Prod** 1988 Sep–Oct; 51(5):836–9
Chemical studies on mexican plants used in traditional medicine, VI. Additional new 4–phenylcoumarins from Exostema caribaeum. Mata R, et al. **J Nat Prod** 1988 Sep–Oct;51(5):851–6
Sanitation, spirits, and medicine: health care in the African bush. Ferenchick GS. **JAMA** 1989 Feb 24;261(8):1201–2
The current situation in regard to the delusion of possession in Japan. Iida J. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):19–27
Mexico: a special program in international health care. Brown RL. **Kans Med** 1989 Mar;90(3):82, 85
Use of ghee during delivery [letter; comment] Murthy GV, et al. **Lancet** 1989 Jul 8;2(8654):109–10. **Comment on:** Lancet 1989 Mar 4;1(8636):486–8
Indigenised pharmaceuticals [letter] Weerasuriya K. **Lancet** 1988 Dec 10;2(8624):1366
Changing times and changing symptoms: the effects of modernization on mestizo medicine in rural Bolivia (the case of two mestizo sisters). Crandon L. **Med Anthropol** 1989 Apr;10(4):255–64
Fallen fontanelle in the American Southwest: its origin, epidemiology, and possible organic causes. Trotter RT 2d, et al. **Med Anthropol** 1989 Apr;10(4):211–21 (36 ref.)
Ethnobotanical treatments of diabetes in Baja California Norte. Winkelman M. **Med Anthropol** 1989 Jun; 11(3):255–68 (41 ref.)
Ethnomedical science and African medical practice. Matthe DS. **Med Law** 1989;7(5):517–21
Towards the legalization of African folk therapy. Sanders AJ. **Med Law** 1989;7(5):523–31
Discovering how lucky we really are. McIvor AC. **N C Med J** 1988 Nov;49(11):587–9
Prenatal cranial haemorrhages in 47 Pacific Islander infants: is traditional massage the cause? Becroft DM, et al. **N Z Med J** 1989 May 10;102(867):207–10
AIDS and traditional health beliefs and practices of black women. Flaskerud JH, et al. **Nurs Res** 1989 Jul–Aug; 38(4):210–5
Talisman in the orofacial region. Loh FC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):252–5
Lessons from the Navajo. Coulehan JL. **Pa Med** 1989 Mar; 92(3):52–3
Flavonoids and traditional medicine. Anton R. **Prog Clin Biol Res** 1988;280:423–39
Folk psychology of mental activities. Rips LJ, et al. **Psychol Rev** 1989 Apr;96(2):187–207 (69 ref.)
Observations on the use of some known and suspected toxic Liliiflorae in Zulu and Xhosa medicine. Hutchings A, et al. **S Afr Med J** 1989 Jan 21;75(2):62–9
Permanence and change in Asian health care traditions. Selections from a symposium. 1985. **Soc Sci Med** 1988; 27(5):411–567
Modes of production and medicine: an examination of the theory in light of Sherpa medical traditionalism. Adams V. **Soc Sci Med** 1988;27(5):505–13
The household management of childhood diarrhea in rural north India. Bentley ME. **Soc Sci Med** 1988;27(1):75–85
Ambiguity, synecdoche and affect in Semai medicine. Dentan RK. **Soc Sci Med** 1988;27(8):857–77
Traditional medicine and the stakes of legitimation in Senegal. Fassin D, et al. **Soc Sci Med** 1988;27(4):353–7
A new approach to community health. Follér ML. **Soc Sci Med** 1989;28(8):811–8
Accountability of anthropologists, indigenous healers and their governments: a plea for reasonable medicine. Glasser M. **Soc Sci Med** 1988;27(12):1461–4
The interplay of traditional therapies in south Thailand. Golomb L. **Soc Sci Med** 1988;27(8):761–8
Supernaturalist curers and sorcery accusations in Thailand. Golomb L. **Soc Sci Med** 1988;27(5):437–43 (17 ref.)
The drum is the shaman, the spear guides his voice. Hoskins J. **Soc Sci Med** 1988;27(8):819–28
Traditional thought and modern Western surgery. Katz P, et al. **Soc Sci Med** 1988;26(12):1175–81
Healing thyself: a Korean shaman's afflictions. Kendall L. **Soc Sci Med** 1988;27(5):445–50
Sinking heart: a Punjabi communication of distress. Krause IB. **Soc Sci Med** 1989;29(4):563–75
Wayward winds: Malay archetypes, and theory of personality in the context of shamanism. Laderman C. **Soc Sci Med** 1988;27(8):799–810
From vice to madness: the semantics of naturalistic and personalistic understandings in Trinidadian local medicine. Littlewood R. **Soc Sci Med** 1988;27(2):129–48 (88 ref.)
Healing texts and healing techniques in indigenous Balinese medicine. McCauley AP. **Soc Sci Med** 1988;27(8):779–87
Doctoring by go–between: aspects of health care for Malay children. Massard J. **Soc Sci Med** 1988;27(8):789–97 (43 ref.)
Hegemony and healing in rural North Yemen. Myntti C. **Soc Sci Med** 1988;27(5):515–20
Mystification of a simple solution: oral rehydration therapy in northeast Brazil. Nations MK, et al. **Soc Sci Med** 1988; 27(1):25–38
Exploring pluralism—the many faces of Ayurveda. Nordstrom CR. **Soc Sci Med** 1988;27(5):479–89
Food taboos in maternal and child health: the views of traditional healers in Ile–Ife, Nigeria. Odebiyi AI. **Soc Sci Med** 1989;28(9):985–96
Healers in transition. Oppong AC. **Soc Sci Med** 1989; 28(6):605–12
Ritual coordination of medical pluralism in highland Nepal: implications for policy. Parker B. **Soc Sci Med** 1988; 27(9):919–25
The assessment of diviners and their knowledge by civil servants in southwestern Nigeria. Pearce TO. **Soc Sci Med** 1989;28(9):917–24
The semiotics of ritual healing in a North Indian Muslim shrine. Pfleiderer B. **Soc Sci Med** 1988;27(5):417–24
Anthropological involvement in the Central American diarrheal disease control project. Scrimshaw SC, et al. **Soc Sci Med** 1988;27(1):97–105
Childbearing in Korea. Sich D. **Soc Sci Med** 1988; 27(5):497–504
Some preliminary considerations on the sobada: a traditional treatment for gastrointestinal illness in Costa Rica. Simpson SH. **Soc Sci Med** 1988;27(1):69–73
Severing the bonds of love: a case study in soul loss. Steedly MM. **Soc Sci Med** 1988;27(8):841–56
Fijac: fright and illness in highland Yemen. Swagman CF. **Soc Sci Med** 1989;28(4):381–8
Traditional or transitional medical systems? Pharmacotherapy as a case for analysis. Tan ML. **Soc Sci Med** 1989;29(3):301–7 (39 ref.)
The concept of flow in Rwandan popular medicine. Taylor CC. **Soc Sci Med** 1988;27(12):1343–8
From Mantra to Matarâa: opacity and transparency in the language of Tobelo magic and medicine (Halmahera Island, Indonesia). Taylor PM. **Soc Sci Med** 1988;27(5):425–36 (24 ref.)
Healing boundaries in south Kalimantan. Tsing AL. **Soc Sci Med** 1988;27(8):829–39
Medical anthropology in Mexico. Vargas LA, et al. **Soc Sci Med** 1989;28(12):1343–9
Humoral concepts of mental illness in India. Weiss MG, et al. **Soc Sci Med** 1988;27(5):471–7
Folk medicine in Laos: a comparison between two ethnic groups. Westermeyer J. **Soc Sci Med** 1988;27(8):769–78
Illness behaviour in Sri Lanka: results of a survey in two Sinhalese communities. Wolffers I. **Soc Sci Med** 1988; 27(5):545–52
Rattlesnake meat ingestion—a common Hispanic folk remedy [letter] Bhatt BD, et al. **West J Med** 1988 Nov;149(5):605
Physician–healers in Africa [letter] Diallo I. **World Health Forum** 1989;10(1):101
Traditional practitioners as voluntary health workers [letter] Okanurak K, et al. **World Health Forum** 1989;10(1):103–4
[Plants and traditional medicine in southeast Madagascar] Beaujard P. **J Ethnopharmacol** 1988 Jul–Aug; 23(2–3):165–265 (Eng. Abstr.) **(Fre)**
[Between 'sickness' and 'illness': from socialization to individualization of the 'disease'] Zempléni A. **Soc Sci Med** 1988;27(11):1171–82 (33 ref.) (Eng. Abstr.) **(Fre)**
[Four centuries of childhood and adolescence in Benin (South Nigeria)] Roese PM, et al. **Arztl Jugendkd** 1988;79(4):221–8 (Eng. Abstr.) **(Ger)**
[From the history of mountain medicine in the Karkonosze Mountains] Domosławski Z. **Arch Hist Filoz Med** 1988; 51(2):151–62 (Eng. Abstr.) **(Pol)**
[Otolaryngology in ancient India] Kierzek A. **Otolaryngol Pol** 1988;42(4):296–9 (Eng. Abstr.) **(Pol)**
[A manuscript of home medicine prescriptions from the 18th century. V.] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):597–600 **(Rum)**
[A manuscript of home remedy prescriptions from the 18th century. 6. (conclusion)] Cotrău M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):779–81 **(Rum)**
[The use of natural environmental factors in antiquity and in particular in ancient Rome] Zamfir G. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):617–20 **(Rum)**
[Prevention of osteochondritis in folk medicine in the Ukraine] Pridatkevich AV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):46–7 **(Rus)**
[Disease and the physician. Transculturation in the discovery of the New World] Quintero Lumbreras FJ. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan–Feb;17(1):3–14 (Eng. Abstr.) **(Spa)**

HISTORY

Glimpses of Alaskan medical history. Koniag Healers and their methods (1804–5). Fortuine R. **Alaska Med** 1989 May–Jun;31(3):127
Glimpses of Alaskan medical history. A primer of Aleut medicine. Fortuine R. **Alaska Med** 1988 Jul–Aug;30(4):139
Some notes on the treatment of human and animal diseases in the folklore of Turkey and the Balkan countries. Dinçer F. **DTW** 1988 Nov–Dec;95(10):419–20
John Wesley's primitive physic. An easy and natural method of curing most diseases. Tranter J. **Int J Dermatol** 1989 Mar;28(2):92–3
[Between empirical treatment and magic: fracture treatment in the middle ages by lay practitioners] Zimmermann V. **Gesnerus** 1988;45 Pt 3–4:343–52 (Eng. Abstr.) **(Ger)**

MEDIGOXIN see under **DIGOXIN**

MEDITERRANEAN FEVER, FAMILIAL see **PERIODIC DISEASE**

MEDLARS–MEDLINE INFORMATION SYSTEM

Grateful Med [editorial] **Am Fam Physician** 1989 Mar; 39(3):108
Sudden death due to ketoacidosis: medline search [letter] Coe JI. **Am J Forensic Med Pathol** 1989 Sep;10(3):269–70
Online searching by trained health–care professionals versus searching by librarians [letter] **Am J Hosp Pharm** 1989 Jul; 46(7):1343–4
Comparative usefulness of MEDLINE searches performed by a drug information pharmacist and by medical librarians. Wanke LA, et al. **Am J Hosp Pharm** 1988 Dec; 45(12):2507–10
The relevance of China. Pang H. **Aust Fam Physician** 1976 Sep;5(8):1119–20
Clinicians' satisfaction with Grateful Med: an exploratory study. Burroughs CM. **Bull Med Libr Assoc** 1989 Jan; 77(1):56–60
MEDTUTOR: a microcomputer–based training program for MEDLINE. Perkins ML, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):201–4
PDQ—a database of clinical trials and cancer treatment information. Perry DJ, et al. **Cancer Metastasis Rev** 1988 Nov;7(3):209–21 (7 ref.)
Self–service computerized bibliographic retrieval: a comparison of Colleague and PaperChase, programs that search the MEDLINE data base. Porter D, et al. **Comput Biomed Res** 1988 Oct;21(5):488–501
Capturing the semantic relationship between clinical terms with current MeSH bibliographic coding. Miller PL, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):205–11
Using microcomputers in rural preceptorships. Harris DL, et al. **Fam Med** 1989 Jan–Feb;21(1):35–7
Cancer corner. Dugan WM Jr. **Indiana Med** 1988 Dec; 81(12):1046
Online coverage of the literature on thermal physiology. Refinetti R. **Int J Biomed Comput** 1989 Jul;24(2):127–31
A primer for users of medical bibliographic databases. Shearer B, et al. **J Am Board Fam Pract** 1989 Jul–Sep; 2(3):191–5
The comprehensiveness of computer–assisted searches of the medical literature. DeNeef P. **J Fam Pract** 1988 Oct; 27(4):404–8
MEDLINE, cancer–CD, SCI–CD addition on CD–ROM. Brahmi FA. **MD Comput** 1989 Jan–Feb;6(1):12–9
AIDSLINE. **Methods Inf Med** 1989 Jan;28(1):56
Are younger physicians more likely to be computer users than older physicians? [letter] Humphreys BL, et al. **Methods Inf Med** 1988 Oct;27(4):194
The weight of medical knowledge: still gaining [letter] Madlon–Kay DJ. **N Engl J Med** 1989 Sep 28;321(13):908
Looking for the latest AIDS facts? ... AIDSLINE may help. **Ohio Med** 1988 Dec;84(12):936
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1989 Jan; 3(1):4–6
MEDLINE off–line—a better way? [letter] Desch LW, et al. **Pediatrics** 1988 Nov;82(5):809–10
Searching MEDLINE for randomized clinical trials involving care of the newborn. Kirpalani H, et al. **Pediatrics** 1989 Apr;83(4):543–6
Retrieval of scientific and technical data [editorial] Abelson PH. **Science** 1989 Jul 7;245(4913):9
A poisonous plant file in TOXLINE. Wagstaff DJ, et al. **Toxicon** 1989;27(2):259–63
[Medline on CD–ROM (letter)] Raabye P, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2217–8 **(Dan)**
[Literature storage and retrieval for library users using a microcomputer (letter)] Eger AJ. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):789 **(Dut)**
[Computerized bibliographic retrieval research: a tool at the fingertips of every practitioner] Bovet P, et al. **Schweiz Rundsch Med Prax** 1989 Jan 10;78(1–2):14–7 (Eng. Abstr.) **(Fre)**
[Information on medical literature. From reference books to pocket–size databases] Lande RE. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3233–5 (Eng. Abstr.) **(Nor)**
[Incorporation of Gaceta Sanitaria to Index Medicus. What does it mean?] Pulido Mestre M. **Gac Sanit** 1989 Jan–Feb; 3(10):311–2 **(Spa)**

HISTORY

John Shaw Billings (1838–1913). Howell JD. **J Lab Clin Med** 1988 Nov;112(5):661–2

INSTRUMENTATION

The National Library of Medicine. The great equalizer between small hospitals and major medical centers. Stead EA Jr. N C Med J 1988 Jul;49(7):360

UTILIZATION

Analysis of the use of MEDLARS in Mexico. Macias-Chapula CA. Bull Med Libr Assoc 1988 Oct; 76(4):334-8

MEDLINE see MEDLARS-MEDLINE INFORMATION SYSTEM

MEDPHALAN see MELPHALAN

MEDROGESTONE see under PREGNADIENES

MEDROXYPROGESTERONE

ADMINISTRATION & DOSAGE

Premenstrual exacerbations in hepatic porphyria: prevention by intermittent administration of an LH-RH agonist in combination with a gestagen [letter] Bargetzi MJ, et al. JAMA 1989 Feb 10;261(6):864

[Vepesid and medroxyprogesterone in the treatment of disseminated malignant melanoma] Pawlicki M, et al. Nowotwory 1988 Oct-Dec;38(4):267-73 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

Hematometra complicating hormone replacement therapy after radiation for cervical carcinoma. Sauer MV, et al. Arch Gynecol Obstet 1988;243(4):235-6

Medroxyprogesterone acetate therapy in early pregnancy has no apparent fetal effects. Yovich JL, et al. Teratology 1988 Aug;38(2):135-44

ANALOGS & DERIVATIVES

Cytochemical examinations of Ca, cytochrome oxidase and succinate dehydrogenase enzymes in endometrium carcinomatous tissue after high dose progestogen treatment. Szarvas Z, et al. Acta Morphol Hung 1988;36(3-4):177-83

Adjuvant treatment with high dose medroxyprogesterone acetate in node-negative early breast cancer. A 3-year interim report on a randomized trial (I). Focan C, et al. Acta Oncol 1989;28(2):237-40

The effect of medroxyprogesterone acetate (Provera) on ovarian radiosensitivity. Jarrell J, et al. Am J Obstet Gynecol 1989 Apr;160(4):990-4

Steroid hormone receptors and response to high-dose medroxyprogesterone acetate in advanced breast cancer. Nomura Y, et al. Anticancer Res 1988 Jul-Aug;8(4):647-51

Spironolactone with physiological female steroids for presurgical therapy of male-to-female transsexualism. Prior JC, et al. Arch Sex Behav 1989 Feb;18(1):49-57

Depo-Provera—missing the point? [letter] Fennessy S. Aust Fam Physician 1988 Oct;17(10):839-40

Phase II study of high-dose medroxyprogesterone acetate in advanced malignant melanoma. Becher R, et al. Br J Cancer 1989 Jun;59(6):948

The pharmacokinetics of medroxyprogesterone acetate following two different loading dose schedules in advanced carcinoma of the breast. Canney PA, et al. Br J Cancer 1988 Jul;58(1):73-6

Effect of medroxyprogesterone acetate on the response of the rat mammary gland to carcinogenesis. Russo IH, et al. Br J Cancer 1989 Feb;59(2):210-6

Lack of gonadal protection by medroxyprogesterone acetate-induced transient medical castration during chemotherapy for testicular cancer. Fossâ SD, et al. Br J Urol 1988 Nov;62(5):449-53

Testing the chemosensitivity of renal carcinoma in vitro. Lai T, et al. Br J Urol 1989 Jul;64(1):25-9

Medroxyprogesterone acetate enhances spontaneous mammary tumorigenesis and uterine adenomyosis in mice. Nagasawa H, et al. Breast Cancer Res Treat 1988 Sep; 12(1):59-66

Androgen and glucocorticoid receptor-mediated inhibition of cell proliferation by medroxyprogesterone acetate in ZR-75-1 human breast cancer cells. Poulin R, et al. Breast Cancer Res Treat 1989 Mar;13(2):161-72

High-dose medroxyprogesterone acetate in advanced breast cancer. Clinical and pharmacokinetic study with a combined oral and intramuscular regimen. Becher R, et al. Cancer 1989 May 15;63(10):1938-43

Sequential cyclic combined hormonal therapy for metastatic breast cancer. Hortobagyi GN, et al. Cancer 1989 Sep 1; 64(5):1002-6

Angiogenic activity of rat mammary carcinomas induced by 7,12-dimethylbenz[a]anthracene and its inhibition by medroxyprogesterone acetate: possible involvement of antiangiogenic action of medroxyprogesterone acetate in its tumor growth inhibition. Oikawa T, et al. Cancer Lett 1988 Dec 1;43(1-2):85-92

The role of medroxyprogesterone acetate (MPA) in the treatment of renal adenocarcinoma. Kjaer M. Cancer Treat Rev 1988 Sep;15(3):195-209 (63 ref.)

Indices of severity of obstructive sleep apnea syndrome do not change during medroxyprogesterone acetate therapy. Cook WR, et al. Chest 1989 Aug;96(2):262-6

Ischemic papillopathy and contraceptives. Li ZH, et al. Chin Med J [Engl] 1988 Jun;101(6):446-7

Clinical significance of differences in bioavailability of medroxyprogesterone acetate preparations. Stockdale AD, et al. Clin Pharmacokinet 1989 Mar;16(3):129-33 (32 ref.)

Clinical evaluation of two monthly injectable contraceptives and their effects on some metabolic parameters. Haiba NA, et al. Contraception 1989 Jun;39(6):619-32

Aggression, physical activity levels and sex role identity in teenagers exposed in utero to MPA. Jaffe B, et al. Contraception 1989 Sep;40(3):351-63

Assessing changes in vaginal bleeding patterns in contracepting women. Machin D, et al. Contraception 1988 Aug;38(2):165-79

Acceptability of injectable contraceptives in Assiut, Egypt. Salem HT, et al. Contraception 1988 Dec;38(6):697-710

The use of a gonadotropin-releasing hormone analog and transdermal estrogen to preserve fertility in a woman with severe menorrhagia. Fedorkow DM, et al. Fertil Steril 1989 Sep;52(3):512-3

Treatment of leiomyomata uteri with short-term leuprolide followed by leuprolide plus estrogen-progestin hormone replacement therapy for 2 years: a pilot study. Friedman AJ. Fertil Steril 1989 Mar;51(3):526-8

Combination of 19-nortestosterone-hexyloxyphenylpropionate (Anadur) and depot-medroxyprogesterone-acetate (Clinovir) for male contraception. Knuth UA, et al. Fertil Steril 1989 Jun;51(6):1011-8

Danazol and medroxyprogesterone acetate inefficacious in the treatment of infertility in endometriosis. Telimaa S. Fertil Steril 1988 Dec;50(6):872-5

Circulating lipid and lipoprotein concentrations during danazol and high-dose medroxyprogesterone acetate therapy of endometriosis. Telimaa S, et al. Fertil Steril 1989 Jul;52(1):31-5

Suppression of sperm function by depot medroxyprogesterone acetate and testosterone enanthate in steroid male contraception. Wu FC, et al. Fertil Steril 1989 Apr;51(4):691-8

Control of illegal medroxyprogesterone acetate-application in veal calves by residue analysis in adipose tissue using HPLC/RIA methods. Rapp M, et al. Food Addit Contam 1989 Jan-Mar;6(1):59-69

Placebo-controlled comparison of danazol and high-dose medroxyprogesterone acetate in the treatment of endometriosis after conservative surgery. Telimaa S, et al. Gynecol Endocrinol 1987 Dec;1(4):363-71

Placebo-controlled comparison of danazol and high-dose medroxyprogesterone acetate in the treatment of endometriosis. Telimaa S, et al. Gynecol Endocrinol 1987 Mar;1(1):13-23

Efficacy of sequential cyclical hormonal therapy in endometrial cancer and its correlation with steroid hormone receptor status. Ayoub J, et al. Gynecol Oncol 1988 Oct;31(2):327-37

Depo-provera in the First World [letter] McDonough RT. Hastings Cent Rep 1988 Aug-Sep;18(4):44-5

Long-term effects of progestin and RU 486 on prolactin production and synthesis in human endometrial stromal cells. Chen G, et al. Hum Reprod 1989 May;4(4):355-8

Endocrine, seminal and peripheral effects of depot medroxyprogesterone acetate and testosterone enanthate in men. Hedman M, et al. Int J Androl 1988 Aug; 11(4):265-76

Mammary adenocarcinomas induced by medroxyprogesterone acetate: hormone dependence and EGF receptors of BALB/c in vivo sublines. Lanari C, et al. Int J Cancer 1989 May 15;43(5):845-50

Actions of medroxyprogesterone acetate on the efficacy of cytotoxic drugs: studies with human breast cancer cells in culture. Shaikh N, et al. Int J Cancer 1989 Mar 15; 43(3):458-63

Cervical cancer risk and use of depot-medroxyprogesterone acetate in Costa Rica. Oberle MW, et al. Int J Epidemiol 1988 Dec;17(4):718-23

Inhibition of tumor angiogenesis activity by medroxyprogesterone acetate in gynecologic malignant tumors. Fujimoto J, et al. Invasion Metastasis 1989; 9(5):269-77

Effect of medroxyprogesterone acetate on secondary spreading of endometrial cancer. Fujimoto J, et al. Invasion Metastasis 1989;9(4):209-15

Pulmonary tuberous sclerosis responds to progesterone treatment. Murray DP, et al. Ir J Med Sci 1988 Jun; 157(6):196-7

Combined effects of female hormones and metabolic rate on ventilatory drives in women. Regensteiner JG, et al. J Appl Physiol 1989 Feb;66(2):808-13

Medroxyprogesterone acetate: steady-state pharmacokinetics bioequivalence of two oral formulations. Pollow K, et al. J Cancer Res Clin Oncol 1989;115(4):397-9

The inductive effects of progestogens on aromatase activity in stromal cells of human uterine endometrium. Yamamoto T, et al. J Endocrinol Invest 1989 Mar;12(3):201-4

Postmenopausal endometriosis associated with hormone replacement therapy. A case report. Goodman HM, et al. J Reprod Med 1989 Mar;34(3):231-3

Pharmacokinetics and metabolism of medroxyprogesterone acetate in patients with advanced breast cancer. Utaaker E, et al. J Steroid Biochem 1988 Oct;31(4A):437-41

Multivariate analysis of prognostic factors in patients with advanced prostatic cancer: results from 2 European Organization for Research on Treatment of Cancer trials. de Voogt HJ, et al. J Urol 1989 Apr;141(4):883-8

Deoxyribonucleic acid content and medroxyprogesterone acetate treatment in metastatic renal cell carcinoma. Ljungberg B, et al. J Urol 1989 Jun;141(6):1308-10

Influence of tamoxifen-medroxyprogesterone sequential therapy on estrogen and progesterone receptor contents of breast cancer. Noguchi S, et al. Jpn J Cancer Res 1989 Mar;80(3):244-8

Sequential hormone therapy with medroxyprogesterone acetate for 7, 12-dimethylbenz [alpha] anthracene-induced rat mammary tumors. Iino Y, et al. Jpn J Clin Oncol 1989 Mar;19(1):45-50

Pyometra in a rhesus monkey secondary to prolonged therapy with medroxyprogesterone acetate. McCarthy TJ, et al. Lab Anim Sci 1989 Jan;39(1):71-2

Antilibidinal drugs and mental retardation: a review. Clarke DJ. Med Sci Law 1989 Apr;29(2):136-46 (111 ref.)

Experimental local administration of CDDP to in vitro models of gynecological malignant tumors transplanted into nude mice (compared with medroxyprogesterone acetate orally administered). Tateyama I, et al. Nippon Gan Chiryo Gakkai Shi 1989 May 20;24(5):1053-66

Inhibition of tumor angiogenesis activity in C3H mouse mammary tumor by medroxyprogesterone acetate. Fujimoto J, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Jan;41(1):77-82

Medroxyprogesterone acetate and tamoxifen do not decrease aggressive behavior in CF-1 male mice. Simon NG, et al. Pharmacol Biochem Behav 1988 Aug;30(4):829-33

Injectable contraception. Wilson E. Practitioner 1988 Jan; 232(1441):32-6

Ovarian steroid treatment blocks a postmenopausal increase in blood monocyte interleukin 1 release. Pacifici R, et al. Proc Natl Acad Sci U S A 1989 Apr;86(7):2398-402

Requirement for estrogen in implantation and post implantation survival of blastocyst in the bonnet monkey. Moudgal NR, et al. Prog Clin Biol Res 1989;294:277-88

EORTC protocol 30761: a randomized study of non-metastatic and metastatic prostatic cancer treated by cyproterone acetate versus diethylstilbestrol and medroxyprogesterone acetate. European Organization for Research on Treatment of Cancer Urological Group. Pavone-Macaluso M, et al. Prog Clin Biol Res 1989; 303:111-6

Effects of high dose medroxyprogesterone acetate treatment on antithrombin III and other plasma proteins in males with renal cell or prostatic carcinoma. Nilsson TK, et al. Scand J Urol Nephrol 1989;23(1):11-4

Endocrinological effects of treatment with high doses of medroxyprogesterone acetate in patients with renal or prostatic adenocarcinoma. Tomic R, et al. Scand J Urol Nephrol Suppl 1988;110:185-7

Endocrine manipulation of meningiomas with medroxyprogesterone acetate. Effect of MPA on growth of primary meningioma cells in monolayer tissue culture. Waelti ER, et al. Surg Neurol 1989 Feb;31(2):96-100

Steroid contraceptive use and pregnancy outcome. Pardthaisong T, et al. Teratology 1988 Jul;38(1):51-8

[Medroxyprogesterone acetate in the treatment of recurrent vaginal candidiasis] Presl J. Cesk Gynekol 1988 Aug; 53(7):528-9 (Cze)

[Initial experience with centralized care of women with bleeding in the climacteric and postmenopausal period] Rešlová T, et al. Cesk Gynekol 1989 Mar;54(2):101-5 (Eng. Abstr.) (Cze)

[GnRH agonist/hMG stimulation in gamete intrafallopian transfer (GIFT)] Lindner C, et al. Geburtshilfe Frauenheilkd 1989 Feb;49 Suppl 1:91-5 (Eng. Abstr.) (Ger)

[Hormone dependence of malignant ovarian tumors—an in vitro model] Schieder K, et al. Geburtshilfe Frauenheilkd 1989 May;49(5):437-41 (Eng. Abstr.) (Ger)

[The protective effect of medroxyprogesterone acetate in patients with ovarian cancer treated with chemotherapy] Enzelsberger H, et al. Gynakol Rundsch 1988;28 Suppl 2:195-7 (Ger)

[The medroxyprogesterone acetate serum level following various medroxyprogesterone acetate dose schedules in gynecologic oncology] Husslein P, et al. Zentralbl Gynakol 1988;110(20):1277-82 (Eng. Abstr.) (Ger)

[Adjuvant gestagen therapy in stage I endometrial cancer] Lahousen M, et al. Zentralbl Gynakol 1988;110(16):1013-7 (Eng. Abstr.) (Ger)

[Diverse actions of pure crystalline progesterone, 17-alpha-hydroxyprogesterone capronate and medroxyprogesterone acetate (MPA), on the biosynthesis of collagen in the tail of the rat (ovariectomized females)] Gambella GR, et al. Pathologica 1987 Sep-Oct; 79(1063):581-6 (Eng. Abstr.) (Ita)

[Remarkable pain relief in the treatment with high-dose medroxyprogesterone acetate in advanced prostatic carcinoma] Sasagawa I, et al. Gan No Rinsho 1989 May; 35(6):767-71 (Eng. Abstr.) (Jpn)

[Experimental study of the treatment of uterine leiomyosarcoma in the mouse with progestogen] Sato Y, et al. Gan No Rinsho 1988 Nov;34(14):1979-84 (Eng. Abstr.) (Jpn)

[Mammary gland carcinoma treated by large-dose

medroxyprogesterone acetate of which pulmonary metastases disappeared and a selection of hormone, chemoimmunological treatment] Matsumoto S, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2457–9 (Eng. Abstr.) **(Jpn)**

[Combination with medroxyprogesterone acetate and chemotherapy making possible complete removal of uterine corpus carcinoma] Tajima H, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2461–4 (Eng. Abstr.) **(Jpn)**

[Combination therapy with medroxyprogesterone acetate and tegafur in tamoxifen- and adriamycin-resistant advanced breast cancers] Wada T, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2087–92 (Eng. Abstr.) **(Jpn)**

[Effect of medroxyprogesterone acetate on side effects of CAP therapy in gynecological malignant tumors] Yanagawa Y, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2393–8 (Eng. Abstr.) **(Jpn)**

[Pain relief by high-dose medroxyprogesterone acetate in advanced prostatic cancer] Sasagawa I, et al. **Hinyokika Kiyo** 1989 Apr;35(4):603–8 (Eng. Abstr.) **(Jpn)**

[Results of the treatment of patients with advanced breast with large doses of medroxyprogesterone acetate] Zulichowska J, et al. **Pol Tyg Lek** 1988 May 30; 43(22):712–4 (Eng. Abstr.) **(Pol)**

[Effect of progestin therapy on the level of cytoplasmic receptors in patients with cancer of the corpus uteri] Vishnevskii AS, et al. **Vopr Onkol** 1989;35(5):594–8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Use of liquid chromatography in the synthesis of isoluminol-labeled medroxyprogesterone acetate and zeranol. Koehler H, et al. **J Chromatogr** 1989 May 19; 469:305–15

PHARMACOLOGY

Regulation of renal N-nitrosodimethylamine demethylase activity by androgens, progestin, glucocorticoid, and estrogen in BALB/c mice. Ahir S, et al. **Cancer Res** 1989 Jul 15;49(14):3737–41

A prospective 1-year study of estrogen and progestin in postmenopausal women: effects on the endometrium. Gelfand MM, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):398–402

Effects of medroxyprogesterone acetate (MPA) on phosphodiesterase (PDE) activity in DMBA-induced rat mammary tumours. Racca S, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):101–2

Effects of medroxyprogesterone acetate on serum prolactin levels and liver prolactin binding capacity in the rat. Muccioli G, et al. **Pharmacol Res Commun** 1988 Aug; 20(8):719–30

THERAPEUTIC USE

The biologic significance of cytologic atypia in progestogen-treated endometrial hyperplasia. Ferenczy A, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):126–31

Management of patients with advanced breast cancer. Mackintosh JF. **Aust Fam Physician** 1989 Jun;18(6):687–8, 691

Medroxyprogesterone and obstructive sleep apnea [editorial] Millman RP. **Chest** 1989 Aug;96(2):225–6

Progestin and estrogen reduce sleep-disordered breathing in postmenopausal women. Pickett CK, et al. **J Appl Physiol** 1989 Apr;66(4):1656–61

The influence of gonadal function and the effect of gonadal suppression treatment on final height in growth hormone (GH)-treated GH-deficient children. Hibi I, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):221–6

Reversibility of rat liver cirrhosis by medroxyprogesterone acetate. Stenbäck F, et al. **Toxicol Pathol** 1989;17(1 Pt 1):38–45

Lymphangiomyomatosis: a respiratory illness with an endocrinologic therapy. Sieker HO, et al. **Trans Am Clin Climatol Assoc** 1987;99:57–67

[Current status of hormonotherapy of metastatic cancer of the breast] Namer M. **Bull Cancer (Paris)** 1989;76(1):65–73 (Eng. Abstr.) **(Fre)**

[Effect of medroxyprogesterone on the bioelectric activity of the brain in children with precocious puberty syndrome] Koślącz-Folga A, et al. **Pediatr Pol** 1974 Feb;49(2):195–201 (Eng. Abstr.) **(Pol)**

MEDULLA OBLONGATA

Microsurgical treatment of intramedullary spinal cord tumours. Fornari M, et al. **Acta Neurochir Suppl (Wien)** 1988;43:3–8

Microsurgical removal of intramedullary spinal cord tumours: report of 22 cases. Yasui T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:9–12

Microbial infection or trauma at cardiovascular representation area of medulla oblongata as some of the possible causes of hypertension or hypotension. Omura Y. **Acupunct Electrother Res** 1988;13(2–3):131–45

Cardiovascular effects of GABA system activating drugs injected into the caudal ventrolateral medulla of the rat. Kihara M, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct; 295:67–79

Progressive medullary failure associated with neurofibrillary degeneration. Lidov HG, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):643–7

A rare case of haemangioblastoma of the medulla oblongata with atypical clinical course. Kobos J, et al. **Neurol Psychiatr (Bucur)** 1989 Apr–Jun;27(2):163–5

[A case report of quadriparesis due to compression of the medulla oblongata by the elongated left vertebral artery] Maruyama K, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):108–11 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Congenital apnea with medullary and olivary hypoplasia: a pathologic study with computer reconstructions. Kinney HC, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):163–73

ANALYSIS

Central sodium loading modifies norepinephrine content in the ventrolateral medulla and blood pressure in rats. Mikami H, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:275–9

ECF pH dynamics within the ventrolateral medulla: a microelectrode study. Ichikawa K, et al. **J Appl Physiol** 1989 Jul;67(1):193–8

Decreased density of alpha 2-adrenoceptors in medulla oblongata of spontaneously hypertensive rats. Yamada S, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):440–6

Thyrotropin-releasing hormone-like immunoreactive neurons in rabbit medulla oblongata. Iwase M, et al. **Neurosci Lett** 1988 Sep 23;92(1):30–3

Central serotonergic projections to the nucleus tractus solitarii: evidence from a double labeling study in the rat. Schaffar N, et al. **Neuroscience** 1988 Sep;26(3):951–8

ANATOMY & HISTOLOGY

Medullary and mesencephalic pathways and connections of lateral line neurons of the spiny dogfish Squalus acanthias. Boord RL, et al. **Brain Behav Evol** 1988;32(2):76–88

Spinal input to the parabrachial nucleus in the cat. Blomqvist A, et al. **Brain Res** 1989 Feb 20;480(1–2):29–36

Spino-diencephalic relays through the parabrachial nucleus in the cat. Ma W, et al. **Brain Res** 1989 Feb 20; 480(1–2):37–50

Ascending and descending projections of the nucleus reticularis gigantocellularis in the cat demonstrated by the anterograde neural tracer, Phaseolus vulgaris leucoagglutinin (PHA-L). Matsuyama K, et al. **Brain Res** 1988 Sep 13;460(1):124–41

Efferent projections from the anterior nucleus of the solitary tract of the hamster. Travers JB. **Brain Res** 1988 Aug 2; 457(1):1–11

Divergent projections of physiologically characterized rat ventral cochlear nucleus neurons as shown by intra-axonal injection of horseradish peroxidase. Friauf E, et al. **Exp Brain Res** 1988;73(2):263–84

Lamina medullaris pretectothalamica and adjacent nuclei in the rat. Moryś J, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):83–90

Neuronal morphology of the hypoglossal nucleus in aurochs. Szteyn S, et al. **Folia Morphol (Warsz)** 1987;46(3–4):147–51

Types of neurons in the dorsal parasympathetic nucleus of aurochs. Szteyn S, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):153–60

A stereotaxic atlas of the medulla oblongata of the goat's brain. Tindal JS, et al. **J Anat** 1987 Dec;155:195–202

Projections of the nucleus of the tractus solitarius in the pigeon (Columba livia). Arends JJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):405–29

Somatotopic organization of inputs from the hand to the spinal gray and cuneate nucleus of monkeys with observations on the cuneate nucleus of humans. Florence SL, et al. **J Comp Neurol** 1989 Aug 1;286(1):48–70

Evidence for direct projections from the nucleus of the solitary tract onto medullary adrenaline cells. Hancock MB. **J Comp Neurol** 1988 Oct 15;276(3):460–7

Lobule structure and somatotopic organization of the medullary facial lobe in the channel catfish Ictalurus punctatus. Hayama T, et al. **J Comp Neurol** 1989 Jul 1; 285(1):9–17

Anatomical study of the final common pathway for vocalization in the cat. Holstege G. **J Comp Neurol** 1989 Jun 8;284(2):242–52

Rapidly adapting pulmonary receptor afferents: I. Arborization in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):560–73

Somatosensory and auditory relay nucleus in the rostral part of the ventrolateral medulla: a morphological study in the cat. Kamiya H, et al. **J Comp Neurol** 1988 Jul 15; 273(3):421–35

The nuclei of origin of monoaminergic, peptidergic, and cholinergic afferents to the cat nucleus reticularis magnocellularis: a double-labeling study with cholera toxin as a retrograde tracer. Luppi PH, et al. **J Comp Neurol** 1988 Nov 1;277(1):1–20

Anatomy of the adrenergic system in the medulla oblongata of the tree shrew: PNMT immunoreactive structures within the nucleus tractus solitarii. Mittendorf A, et al. **J Comp Neurol** 1988 Aug 8;274(2):178–89

Neuronal architecture of the nucleus of the solitary tract in the hamster. Whitehead MC. **J Comp Neurol** 1988 Oct 22; 276(4):547–72

Central projections of the lateral line nerves of Chelon labrosus (teleosts, order Perciformes). Diaz SM, et al. **J Hirnforsch** 1989;30(3):339–47

The amygdala directly innervates adrenergic (C1) neurons in the ventrolateral medulla in the rat. Cassell MD, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):163–8

Vagal afferents interact with substance P-immunoreactive structures in the nucleus of the tractus solitarius: immunoelectron microscopy combined with an anterograde degeneration study. Kawai Y, et al. **Neurosci Lett** 1989 Jun 5;101(1):6–10

The projection pattern of forepaw nerves to the cuneate nucleus of the raccoon. Rasmusson DD. **Neurosci Lett** 1989 Mar 27;98(2):129–34

Cholecystokinin octapeptide immunoreactivity in the nucleus tractus solitarius of the cat. Howes KA, et al. **Peptides** 1989 Jan–Feb;10(1):73–8

Somatotopy of digital nerve projections to the cuneate nucleus in the monkey. Culberson JL, et al. **Somatosens Mot Res** 1989;6(3):319–30

An analysis of the cyto- and myeloarchitectonic organization of trigeminal nucleus interpolaris in the rat. Phelan KD, et al. **Somatosens Mot Res** 1989;6(4):333–66

The interstitial system of the spinal trigeminal tract in the rat: anatomical evidence for morphological and functional heterogeneity. Phelan KD, et al. **Somatosens Mot Res** 1989; 6(4):367–99

Immunocytochemical evidence for substance P and serotonin input to medullary bulbospinal adrenergic neurons. Nicholas AP, et al. **Synapse** 1988;2(6):569–76

[The ultrastructure of the nucleus of the solitary tract of the sheep and goat] Störmer R, et al. **J Hirnforsch** 1988; 29(6):633–41 (Eng. Abstr.) **(Ger)**

[Vestibulofugal projections to the lateral reticular nucleus of the cat medulla] Voitenko LP, et al. **Neirofiziologiia** 1989;21(2):147–52 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Behçets syndrome presenting with multiple cerebral and brainstem infarcts: a case report. Adam AM, et al. **East Afr Med J** 1987 Aug;64(8):558–60

Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases. Wrobel CJ, et al. **J Neurosurg** 1988 Dec; 69(6):934–9

Infarction of the medulla and cervical cord after fitness exercises. Pryse-Phillips W. **Stroke** 1989 Feb;20(2):292–4

[Partially thrombosed radiculomeningeal arterio-venous fistula in spinomedullary junction] Oda Y, et al. **No Shinkei Geka** 1989 Jan;17(1):63–8 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Reticulospinal vasomotor neurons in the RVL mediate the somatosympathetic reflex. Morrison SF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1084–97

The cerebellar nuclear afferent and efferent connections with the lateral reticular nucleus in the cat as studied with retrograde transport of WGA-HRP. Qvist H. **Anat Embryol (Berl)** 1989;179(5):471–83

Afferents and efferents of the rat cuneiformis nucleus: an anatomical study with reference to pain transmission. Bernard JF, et al. **Brain Res** 1989 Jun 19;490(1):181–5

Segregation of coarse and fine glossopharyngeal axons in the visceral nucleus of the tractus solitarius of the cat. Claps A, et al. **Brain Res** 1989 Jun 5;489(1):80–92

Adrenergic projection from the caudal part of the nucleus of the tractus solitarius to the parabrachial nucleus in the rat: immunocytochemical study combined with a retrograde tracing method. Kawai Y, et al. **Brain Res** 1988 Sep 6;459(2):369–72

Are there bulbospinal catecholaminergic neurones in the guinea pig equivalent to the C1 cell group in the rat and rabbit? McLachlan EM, et al. **Brain Res** 1989 Mar 6; 481(2):274–85

Extent of colocalization of serotonin and GABA in neurons of the ventral medulla oblongata in rat. Millhorn DE, et al. **Brain Res** 1988 Sep 27;461(1):169–74

The connections from botzinger expiratory neurons to upper cervical inspiratory neurons in the cat. Mateika JH, et al. **Exp Neurol** 1989 May;104(2):138–46

Location of bulbospinal neurons and of laryngeal motoneurons within the nucleus ambiguus of the rat and cat by means of retrograde fluorescent labelling. Portillo F, et al. **J Anat** 1988 Aug;159:11–8

A Golgi analysis of the gustatory zone of the nucleus of the solitary tract in the adult hamster. Davis BJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):388–96

Topographic organization of the central projections of the spiral ganglion in cats. Leake PA, et al. **J Comp Neurol** 1989 Mar 22;281(4):612–29

Projections of digit afferents to the cuneate nucleus in the raccoon before and after partial deafferentation. Rasmusson DD. **J Comp Neurol** 1988 Nov 22;277(4):549–56

Brainstem projections to the major respiratory neuron populations in the medulla of the cat. Smith JC, et al. **J Comp Neurol** 1989 Mar 1;281(1):69–96

Brainstem projections to the rat cuneate nucleus. Weinberg RJ, et al. **J Comp Neurol** 1989 Apr 1;282(1):142–56

Direct projections from the medulla oblongata to selective cortical areas in the rat. González-Hernández TH, et al.

J Hirnforsch 1989;30(3):319–23
Cross–correlation analysis of taste neuron pairs in rat solitary tract nucleus. Adachi M, et al. **J Neurophysiol** 1989 Aug; 62(2):501–9
Adrenergic neurons in the nucleus tractus solitarius receive GABAergic synapses. Demonstration by dual immunocytochemistry in the rat. Kachidian P, et al. **Neurosci Lett** 1989 May 22;100(1–3):65–70
Retrotrapezoid nucleus in the rat. Pearce RA, et al. **Neurosci Lett** 1989 Jun 19;101(2):138–42
Differential distribution and non–collateralization of central amygdaloid neurons projecting to different medullary regions. Thompson RL, et al. **Neurosci Lett** 1989 Feb 27; 97(3):245–51
Adrenergic neurons in sheep brain demonstrated by immunohistochemistry with antibodies to phenylethanolamine N–methyltransferase (PNMT) and dopamine–beta–hydroxylase (DBH): absence of the C1 cell group in the sheep brain. Tillet Y. **Neurosci Lett** 1988 Dec 19;95(1–3):107–12
Giant lateral–line afferent terminals in the electroreceptive dorsal nucleus of lampreys. Kishida R, et al. **Neurosci Res** 1988 Oct;6(1):83–7
Immunohistochemical and biochemical analysis of serotonin and substance P colocalization in the nucleus tractus solitarii and associated afferent ganglia of the rat. Thor KB, et al. **Synapse** 1988;2(3):225–31

DRUG EFFECTS

Hypoventilation and apnoea induced by the substance P antagonist [D–Pro2,D–Trp7,9]–SP in the ventrolateral rat medulla. Chen Z, et al. **Acta Physiol Scand** 1988 Sep; 134(1):153–4
Evidence for the interaction of urapidil with 5–HT1A receptors in the brain leading to a decrease in blood pressure. Kolassa N, et al. **Am J Cardiol** 1989 Feb 2; 63(6):36C–39C (30 ref.)
Cardiovascular effects of angiotensin–(1–7) injected into the dorsal medulla of rats. Campagnole–Santos MJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H324–9
Disruption of the rhythmic activity of the medullary inspiratory neurons and phrenic nerve by fentanyl and reversal with nalbuphine. Tabatabai M, et al. **Anesthesiology** 1989 Mar;70(3):489–95
Modulation of the GABAA receptor complex by steroids in slices of rat cuneate nucleus. Turner JP, et al. **Br J Pharmacol** 1989 Feb;96(2):409–17
Pressor responses evoked by microinjections of L–glutamate into the caudal ventrolateral medulla of the rat. Gordon FJ, et al. **Brain Res** 1988 Aug 9;457(2):251–8
TRH stimulation and L–glutamic acid inhibition of proximal gastric motor activity in the rat dorsal vagal complex. Raybould HE, et al. **Brain Res** 1989 Aug 28;495(2):319–28
Responses of medullary vasoactive neurones in cat to iontophoretically applied acetylcholine and noradrenaline. Raghubir R, et al. **Indian J Exp Biol** 1988 Dec;26(12):950–3
Kainic acid on the rostral ventrolateral medulla inhibits phrenic output and CO2 sensitivity. Nattie EE, et al. **J Appl Physiol** 1988 Oct;65(4):1525–34
Involvement of ventral medullary surface in respiratory responses induced by 2,4–dinitrophenol. Prabhakar NR, et al. **J Appl Physiol** 1989 Feb;66(2):598–605
Thyrotropin–releasing hormone: effects on identified neurons of the dorsal vagal complex. McCann MJ, et al. **J Auton Nerv Syst** 1989 Mar;26(2):107–12
Inhibition of baroreflex following microinjection of GABA or morphine into the nucleus tractus solitarii in rabbits. Wang Q, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):165–72
Drug interaction with gamma–aminobutyric acid/benzodiazepine receptors at the ventral surface of the medulla results in pronounced changes in cardiorespiratory activity. Gillis RA, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):863–70
Correlation between the inhibitory effect on catecholaminergic ventrolateral medullary neurons and the hypotension evoked by clonidine: a voltammetric approach. Tibirica E, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):642–7
Vomiting, chemoreceptor trigger zone, and dopamine [letter] Shen WW. **Psychosomatics** 1989 Winter;30(1):118–9
Diazepam potentiates postsynaptic inhibition in bulbar respiratory neurons of cats. Takeda R, et al. **Respir Physiol** 1989 Aug;77(2):173–86
[Effect of capsaicin on the solitary tract nucleus] Gilberti G, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):361–7 (Eng. Abstr.) (Ita)

EMBRYOLOGY

Development of the rat thalamus: III. Time and site of origin and settling pattern of neurons of the reticular nucleus. Altman J, et al. **J Comp Neurol** 1988 Sep 15;275(3):406–28

ENZYMOLOGY

Fluctuations of succinic dehydrogenase during morphine tolerance, dependence and withdrawals in the spinal cord and medulla oblongata of mice. Josephjohn K, et al. **Acta Neurol Belg** 1988 Nov–Dec;88(5):281–9
Elevated NADH–dehydrogenase activity characterizes the rostral gustatory zone of the solitary nucleus in rat. Lasiter PS, et al. **Brain Res Bull** 1989 Apr;22(4):777–81
Distribution of monoamine–synthesizing neurons in the human medulla oblongata. Halliday GM, et al. **J Comp Neurol** 1988 Jul 15;273(3):301–17
Localization of choline acetyltransferase in perikarya and dendrites within the nuclei of the solitary tracts. Armstrong DM, et al. **J Neurosci Res** 1988 Jul;20(3):279–90
Tyrosine hydroxylase–like and dopamine beta–hydroxylase–like immunoreactivity in the gustatory zone of the nucleus of the solitary tract in the hamster: light– and electron–microscopic studies. Davis BJ, et al. **Neuroscience** 1988 Dec;27(3):949–64
Arachidonic acid–induced inhibition of (Na+K+)–stimulated ATPase in the cerebral cortex and medulla oblongata of young and adult rats. Mourek J. **Physiol Bohemoslov** 1988;37(5):427–31

GROWTH & DEVELOPMENT

Postnatal development of the rostral solitary nucleus in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1989 Feb;22(2):313–21
Development of the human hypoglossal nucleus: a morphometric study. Nara T, et al. **Dev Neurosci** 1989; 11(3):212–20
Ontogeny of adrenergic fibers in rat spinal cord in relationship to adrenal preganglionic neurons. Bernstein–Goral H, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):333–51

INJURIES

[Unusual suicide caused by a stab wound in the neck] Klose W, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):157–62 (Eng. Abstr.) (Ger)
[Joint functions of the gastrocnemius muscle's blood vessels in lesions of the ventral structures of the medulla oblongata] Kul'chitskiĭ VA, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):345–52 (Eng. Abstr.) (Rus)

METABOLISM

Angiotensin II reduces the affinity of [3H]para–aminoclonidine binding sites in membrane preparations from the rat dorsomedial medulla oblongata. Fuxe K, et al. **Acta Physiol Scand** 1988 Oct;134(2):317–8
Decrease in gene expression of substance P and thyrotropin releasing hormone (TRH) in rat medulla oblongata following treatment with an antidepressive drug. Schalling M, et al. **Acta Physiol Scand** 1988 Nov;134(3):455–6
Effect of hydralazine–induced hypotension on glutamate, gamma–aminobutyric acid and some other amino acid levels in medullary regions of the rat. Kihara M, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:86–97
Release of [3H]– and endogenous GABA from slices of the rat medulla oblongata: modification by 3–mercaptopropionic acid, nipecotic acid and diaminobutyric acid. Kihara M, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:50–60
Cytoplasmic loop of beta–adrenergic receptors: synaptic and intracellular localization and relation to catecholaminergic neurons in the nuclei of the solitary tracts. Aoki C, et al. **Brain Res** 1989 Jul 31;493(2):331–47
Possible locations of pH–dependent central chemoreceptors: intramedullary regions with acidic shift of extracellular fluid pH during hypercapnia. Arita H, et al. **Brain Res** 1989 Apr 24;485(2):285–93
Quantitative autoradiography of angiotensin II receptors in the rat solitary–vagal area: effects of nodose ganglionectomy or sinoaortic denervation. Healy DP, et al. **Brain Res** 1989 Apr 10;484(1–2):1–12
Age–dependent changes in brain glycine concentration and strychnine–induced seizures in the rat. Hunter C, et al. **Brain Res** 1989 Mar 20;482(2):247–51
Distribution of cholecystokinin receptors in the dorsal vagal complex and other selected nuclei in the human medulla. Hyde TM, et al. **Brain Res** 1989 Aug 21;495(1):198–202
Development of serotonin, substance P and thyrotrophin–releasing hormone in mouse medullary raphe grown in organotypic tissue culture: developmental regulation by serotonin. Jonakait GM, et al. **Brain Res** 1988 Nov 15;473(2):336–43
Parvicellular adrenergic neurons receive substance P–ergic inputs in the nucleus of the tractus solitarius of the rat. Kawai Y, et al. **Brain Res** 1989 Feb 13;479(2):344–8
Reduction of CCK–8 binding in the nucleus of the solitary tract in unilaterally nodosectomized rats. Ladenheim EE, et al. **Brain Res** 1988 Nov 22;474(1):125–9
Immunocytochemical localization of GABA in neurons projecting to the ventrolateral nucleus of the solitary tract. Livingston CA, et al. **Brain Res** 1989 Aug 7;494(1):143–50
Delta–sleep–inducing peptide (DSIP) stimulates the release of immunoreactive Met–enkephalin from rat lower brainstem slices in vitro. Nakamura A, et al. **Brain Res** 1989 Feb 27;481(1):165–8
Neuropeptide Y–like immunoreactivity in neurons of the solitary tract nuclei: vesicular localization and synaptic input from GABAergic terminals. Pickel VM, et al. **Brain Res** 1989 Jan 9;476(2):265–78
A comparison of the effects of morphine on 5–HT metabolism in the periaqueductal gray, ventromedial medulla and medullary dorsal horn: in vivo electrochemical studies in freely moving rats. Rivot JP, et al. **Brain Res** 1989 Aug 21;495(1):140–4
Incorporation of plasma [14C]palmitate into the hypoglossal nucleus following unilateral axotomy of the hypoglossal nerve in adult rat, with and without regeneration. Yamazaki S, et al. **Brain Res** 1989 Jan 16;477(1–2):19–28
Organization of GABA and GABA–transaminase containing neurons in the gustatory zone of the nucleus of the solitary tract. Lasiter PS, et al. **Brain Res Bull** 1988 Oct; 21(4):623–36
Evidence for substance P, serotonin and oxytocin input to medullary catecholamine neurons with diencephalic projections. Nicholas AP, et al. **Brain Res Bull** 1989 Feb; 22(2):213–23
Postnatal development of protein P–38 ('synaptophysin') immunoreactivity in pontine and medullary gustatory zones of rat. Lasiter PS, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):27–33
Respiratory and vasomotor influences of the ventrolateral medulla. Cherniack NS, et al. **Clin Exp Hypertens [A]** 1988; 10 Suppl 1:1–9 (25 ref.)
Differential expression of human HOX–2 genes along the anterior–posterior axis in embryonic central nervous system. Giampaolo A, et al. **Differentiation** 1989 Jun; 40(3):191–7
Evidence for the occurrence of an enkephalin–like peptide in adrenaline and noradrenaline neurons of the rat medulla oblongata. Ceccatelli S, et al. **Exp Brain Res** 1989; 74(3):631–40
Immunocytochemical localization of GABA containing neurons in the ventrolateral medulla oblongata of the rat. Kihara M, et al. **Histochemistry** 1989;91(4):309–14
Coexistence of catecholamine and methionine enkephalin–Arg6–Gly7–Leu8 in neurons of the rat ventrolateral medulla oblongata. Application of combined peptide immunocytochemistry and histofluorescence method in the same vibratome section. Okamura H, et al. **Histochemistry** 1989;91(1):31–4
Infiltration of carbon–labelled monocytes into the dorsal motor nucleus following an intraneural injection of ricinus communis agglutinin–60 into the vagus nerve in rats. Ling EA, et al. **J Anat** 1988 Aug;159:207–18
Distribution of calcitonin gene–related peptide–like immunoreactivity in the nucleus ambiguus of the cat. McWilliam PN, et al. **J Comp Neurol** 1989 Apr 8; 282(2):206–14
Differential colocalization of neuropeptide Y– and methionine–enkephalin–Arg6–Gly7–Leu8–like immunoreactivity in catecholaminergic neurons in the rat brain stem. Murakami S, et al. **J Comp Neurol** 1989 Mar 22;281(4):532–44
Hypotensive action of clonidine analogues correlates with binding affinity at imidazole and not alpha–2–adrenergic receptors in the rostral ventrolateral medulla. Ernsberger P, et al. **J Hypertens Suppl** 1988 Dec;6(4):S554–7
Reciprocal interactions between alpha 2–adrenoceptor agonist and neuropeptide Y binding sites in the nucleus tractus solitarius of the rat. A biochemic and autoradiographic analysis. Härfstrand A, et al. **J Neural Transm** 1989;75(2):83–99
Effects of chronic imipramine treatment on glucocorticoid receptor immunoreactivity in various regions of the rat brain. Evidence for selective increases of glucocorticoid receptor immunoreactivity in the locus coeruleus and in 5–hydroxytryptamine nerve cell groups of the rostral ventromedial medulla. Kitayama I, et al. **J Neural Transm** 1988;73(3):191–203
Reduced inhibitory effects of clonidine and neuropeptide Y on 3H–noradrenaline release from synaptosomes of the medulla oblongata of the spontaneously hypertensive rat. Martire M, et al. **J Neural Transm** 1989;76(3):181–9
Release by electrical stimulation of endogenous glutamate, gamma–aminobutyric acid, and other amino acids from slices of the rat medulla oblongata. Kihara M, et al. **J Neurochem** 1989 Jan;52(1):261–7
Aspartate aminotransferase for synthesis of transmitter glutamate in the medulla oblongata: effect of aminooxyacetic acid and 2–oxoglutarate. Kihara M, et al. **J Neurochem** 1989 Apr;52(4):1127–34
Ultrastructural basis for interactions between central opioids and catecholamines. I. Rostral ventrolateral medulla. Milner TA, et al. **J Neurosci** 1989 Jun;9(6):2114–30
Cardiorespiratory effects produced by activation of cholinergic muscarinic receptors on the ventral surface of the medulla. Gillis RA, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):765–73
Pattern of catecholamine release in the nucleus tractus solitarii of the cat. Lanzinger I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):298–301
Effects of catecholamine–depleting medullary knife cuts on corticotropin–releasing factor and vasopressin immunoreactivity in the hypothalamus of normal and steroid–manipulated rats. Sawchenko PE. **Neuroendocrinology** 1988 Nov;48(5):459–70
Evidence for colocalization of substance P and 5–hydroxytryptamine in spinally projecting neurons from the cat medulla oblongata. Marson L. **Neurosci Lett** 1989 Jan 2;96(1):54–9
Identification of gamma–aminobutyric acid–like immunoreactive neurons in the rat cuneate nucleus. Roettger VR, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):46–50
Morphometrical and microdensitometrical studies on phenylethanolamine–N–methyltransferase– and neuropeptide Y–immunoreactive neurons in the rostral

medulla oblongata of the adult and old male rat. Agnati LF, et al. **Neuroscience** 1988 Aug;26(2):461–78

An enkephalin-containing pathway from nucleus tractus solitarius to the pressor area of the rostral ventrolateral medulla of the rabbit. Morilak DA, et al. **Neuroscience** 1989; 31(1):187–94

MSG effects on beta-endorphin and alpha-MSH in the hypothalamus and caudal medulla. Alessi NE, et al. **Peptides** 1988 Jul–Aug;9(4):689–95

Autoradiographic localization of peptide YY and neuropeptide Y binding sites in the medulla oblongata. Leslie RA, et al. **Peptides** 1988 Sep–Oct;9(5):1071–6

Substance P binding sites in the nucleus tractus solitarius of the cat. Maley BE, et al. **Peptides** 1988 Nov–Dec; 9(6):1301–6

Peptidergic neurons in the nucleus raphe magnus and the nucleus gigantocellularis: their distributions, interrelationships, and projections to the spinal cord. Bowker RM, et al. **Prog Brain Res** 1988;77:95–127 (63 ref.)

Distribution of substance P-like immunoreactive neurons in the human medulla oblongata: co-localization with monoamine-synthesizing neurons. Halliday GM, et al. **Synapse** 1988;2(4):353–70

PATHOLOGY

MR appearance of gray and white matter at the cervicomedullary region. Ho PS, et al. **AJNR** 1989 Sep–Oct;10(5):1051–5

X-linked recessive bulbospinal neuronopathy. A clinicopathological study. Sobue G, et al. **Brain** 1989 Feb; 112 (Pt 1):209–32

Intraparenchymal epithelial (enterogenous) cyst of the medulla oblongata. Lach B, et al. **Can J Neurol Sci** 1989 May;16(2):206–10

Solitary asymptomatic plaque of demyelination in the medulla oblongata. Auer RN, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):225–7

Acute ventilatory failure in multiple sclerosis. Yamamoto T, et al. **J Neurol Sci** 1989 Feb;89(2–3):313–24

MR imaging of syringobulbia with giant syrinx. Abe K, et al. **Neuroradiology** 1988;30(5):442–3

Medullary lesion revealed by MRI in a case of MS with respiratory arrest. Mochizuki A, et al. **Neuroradiology** 1988; 30(6):574–6

[Leigh disease. Morphology and clinical aspects] Tennstedt A, et al. **Zentralbl Allg Pathol** 1989;135(1):15–23 (Eng. Abstr.) **(Ger)**

[Localization of the corticobulbar tract in pons] Kawai M, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):897–901 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Primary position upbeat nystagmus in man and cats. Harada K, et al. **Adv Otorhinolaryngol** 1988;42:190–4

Neurons in rostral VLM are inhibited by chemical stimulation of caudal VLM in rats. Agarwal SK, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R265–70

Angiotensin receptor binding and pressor effects in cat subretrofacial nucleus. Allen AM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1011–7

Cardiorespiratory effects of DL-homocysteic acid in caudal ventrolateral medulla. Bonham AC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H688–96

Pressor responses from electrical or glutamate stimulations of the dorsal or ventrolateral medulla. Chai CY, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R709–17

Characterization of midline medulla role in the trigeminal depressor response. Clement ME, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1111–20

Mechanisms of respiration-induced changes in vasomotor control exerted by rostral ventrolateral medulla. Cox BF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R626–34

Subregions of rostral ventral medulla control arterial pressure and regional hemodynamics. Cox BF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R635–40

Ventrolateral medullary lesions and fastigial cardiovascular response in beagles. Dormer KJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1200–8

Lateral parabrachial lesions attenuate ingestive effects of area postrema lesions. Edwards GL, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R306–12

Neuronal and cardiovascular responses to ANF microinjected into the solitary nucleus. Ermirio R, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R577–82

Sympathetic activity remains synchronized in presence of a glutamate antagonist. Gebber GL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R722–32

Stimulation of parabrachial neurons elicits a sympathetically mediated pressor response in cats. Hade JS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1349–58

Central respiratory modulation of medullary sympathoexcitatory neurons in rat. Haselton JR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R739–50

Tracheal and phrenic responses to neurotensin applied to ventral medulla. Haxhiu MA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R780–6

Body weight of rats following area postrema ablation: effect of early force-feeding. Kenney NJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R939–45

GABA-mediated inhibition of sympathoexcitatory neurons by midline medullary stimulation. McCall RB. **Am J Physiol** 1988 Oct;255(4 Pt 2):R605–15

Baroreceptor activation or glutamate coinjection facilitates depressor responses to ANF microinjection into NTS. McKitrick DJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R405–9

Neurons of rostral ventrolateral medulla mediate somatic pressor reflex. Stornetta RL, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):R448–62

Tonic influences from the rostral medulla affect sympathetic nerves differentially. Yardley CP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R323–31

Torsional nystagmus in the lateral medullary syndrome. Morrow MJ, et al. **Ann Neurol** 1988 Sep;24(3):390–8

Effects of electrolytic lesions of the superior olivary complex and trapezoid body on brainstem auditory-evoked potentials in the guinea pig. II. Three-channel Lissajous' trajectory analysis. Paquereau J, et al. **Audiology** 1988; 27(5):291–304

Effects of electrolytic lesions of the superior olivary complex and trapezoid body on brainstem auditory-evoked potentials in the guinea pig. I. Vertex-tragus recordings. Simha N, et al. **Audiology** 1988;27(5):279–90

Respiratory effects of 5'-ethylcarboxamidoadenosine, an analog of adenosine, following microinjections into the nucleus tractus solitarius of rats. Barraco RA, et al. **Brain Res** 1989 Feb 20;480(1–2):360–4

Maintenance of host medullary nucleus gracilis neurons after C3 homografting of fetal spinal cord into host fasciculus gracilis. Bernstein JJ, et al. **Brain Res** 1989 May 29; 488(1–2):180–5

Viscerotopic control of regional vascular beds by discrete groups of neurons within the midbrain periaqueductal gray. Carrive P, et al. **Brain Res** 1989 Jul 31;493(2):385–90

Anatomical evidence that hypertension associated with the defence reaction in the cat is mediated by a direct projection from a restricted portion of the midbrain periaqueductal grey to the subretrofacial nucleus of the medulla. Carrive P, et al. **Brain Res** 1988 Sep 20; 460(2):339–45

Fast rhythms in the discharges of medullary inspiratory neurons. Christakos CN, et al. **Brain Res** 1988 Nov 1; 463(2):362–7

Changes in frequency content of inspiratory neuron and nerve activities in the course of inspiration. Christakos CN, et al. **Brain Res** 1989 Mar 20;482(2):376–80

Dorsal medullary inspiratory neurons: effects of superior laryngeal afferent stimulation. Donnelly DF, et al. **Brain Res** 1989 Jul 10;491(2):243–52

Alpha 2-adrenergic modulation of synaptic excitability in the rat nucleus tractus solitarius. Feldman PD, et al. **Brain Res** 1989 Feb 20;480(1–2):190–7

Intracellular study of nucleus parabrachialis and nucleus tractus solitarii interconnections. Granata AR, et al. **Brain Res** 1989 Jul 17;492(1–2):281–92

Putative nociceptive modulatory neurons in the dorsolateral pontomesencephalic reticular formation. Haws CM, et al. **Brain Res** 1989 Apr 3;483(2):272–82

Vasopressin and oxytocin express excitatory effects on respiratory and respiration-related neurones in the nuclei of the tractus solitarius in the cat. Henry JL, et al. **Brain Res** 1989 Jul 3;491(1):150–5

Possible modulation of the medullary respiratory rhythm generator by the noradrenergic A5 area: an in vitro study in the newborn rat. Hilaire G, et al. **Brain Res** 1989 Apr 24;485(2):325–32

Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281–96

Tonic and baroreflex effects on arterial pressure and ventilation of pentobarbital and nicotine on the rat ventral medullary surface. Jung R, et al. **Brain Res** 1989 Apr 24; 485(2):399–402

N-methyl-D-aspartate receptors mediate tonic vasodepressor control in the caudal ventrolateral medulla of the rat. Kubo T, et al. **Brain Res** 1988 Jun 7; 451(1–2):366–70

Electrophysiological identification of spinally projecting neurons in the lateral reticular nucleus of the rat. Liu RH, et al. **Brain Res** 1989 Mar 6;481(2):350–5

Excitatory amino acid receptors intrinsic to synaptic transmission in nucleus tractus solitarii. Miller BD, et al. **Brain Res** 1988 Jul 26;456(2):333–43

Hedonic interactions of medial prefrontal cortex and nucleus reticularis gigantocellularis. Miserendino MJ, et al. **Brain Res** 1989 Apr 3;483(2):233–50

Characterization of stimulation-produced analgesia from the nucleus tractus solitarius in the rat. Morgan MM, et al. **Brain Res** 1989 May 1;486(1):175–80

Cardiovascular roles of tachykinin peptides in the nucleus tractus solitarii of rats. Nagashima A, et al. **Brain Res** 1989 May 22;487(2):392–6

Auditory influences via cochlear nucleus on cuneate neurons in decerebrate-decerebellate cats. Saadé NE, et al. **Brain Res** 1989 May 8;486(2):403–6

Inputs from the nucleus of the solitary tract to subfornical organ neurons projecting to the paraventricular nucleus in the rat. Shioya M, et al. **Brain Res** 1989 Mar 27; 483(1):192–5

Respiratory rhythmicity after extensive lesions of the dorsal and ventral respiratory groups in the decerebrate cat. Speck DF, et al. **Brain Res** 1989 Mar 20;482(2):387–92

Rostral ventrolateral medullary neurons with intrinsic pacemaker properties are not catecholaminergic. Sun MK, et al. **Brain Res** 1988 Jun 7;451(1–2):345–9

Effects of vasopressin and other neuropeptides on rostral medullary sympathoexcitatory neurons 'in vitro'. Sun MK, et al. **Brain Res** 1989 Jul 17;492(1–2):261–70

M2 muscarinic receptor agonists produce hypotension and bradycardia when injected into the nucleus tractus solitarii. Sundaram K, et al. **Brain Res** 1989 Jan 16;477(1–2):358–62

Role of pontomedullary reticular formation neurons in horizontal head movements: an ibotenic acid lesion study in the cat. Suzuki SS, et al. **Brain Res** 1989 Apr 10; 484(1–2):78–93

Responses of neurons in the lamb nucleus tractus solitarius to stimulation of the caudal oral cavity and epiglottis with different stimulus modalities. Sweazey RD, et al. **Brain Res** 1989 Feb 20;480(1–2):133–50

Glycine, like glutamate, microinjected into the nucleus tractus solitarii of rat decreases arterial pressure and heart rate. Talman WT, et al. **Brain Res** 1989 Jan 16; 477(1–2):7–13

Cardiovascular effects of substance P receptor stimulation in the ventrolateral medullary pressor and depressor areas. Urbanski RW, et al. **Brain Res** 1989 Jul 10;491(2):383–9

Stimulation of the ventrolateral medulla inhibits the baroreceptor input to the nucleus tractus solitarius. Wang Q, et al. **Brain Res** 1988 Nov 15;473(2):227–35

A GABAergic mechanism in the inhibition of cardiac vagal reflexes. Wang QA, et al. **Brain Res** 1988 Aug 9; 457(2):367–70

Electrophysiological evidence for axonal branching of ambiguous laryngeal motoneurons. Yajima Y, et al. **Brain Res** 1989 Jan 30;478(2):309–14

Methods of single unit recording from medullary neural substrates in awake, behaving guinea pigs. Chang FC, et al. **Brain Res Bull** 1988 Nov;21(5):749–56

Homocysteic acid elicits pressor responses from ventrolateral medulla and dorsomedial medulla. Lin AM, et al. **Brain Res Bull** 1989 Apr;22(4):627–31

Mapping the effects of motor cortex stimulation on single neurons in the dorsal column nuclei in the rat: direct responses and afferent modulation. Shin HC, et al. **Brain Res Bull** 1989 Feb;22(2):245–52

Feeding behavior in mammals: corticobulbar projection is reorganized during conversion from sucking to chewing. Iriki A, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):189–96

Influence of rostral neural structures on the vasomotor functions of the medulla oblongata. Su CK, et al. **Chin J Physiol** 1988;31(2):79–93

Evidence for two functionally distinct vasomotor subregions of rostral ventral medulla. Cox BF, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:11–8

The effect of intrathecal serotonergic antagonists on the pressor response to stimulation of the brainstem in the rat. Mills EH, et al. **Clin Exp Hypertens [A]** 1989;11(2):265–76

Barosensory neurons in the rostral ventrolateral medulla mediate the renal-sympathetic reflex in rabbits. Terui N, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:269–74

Effects of systemic morphine upon A delta- and C-fibre evoked activities of subnucleus reticularis dorsalis neurones in the rat medulla. Bing Z, et al. **Eur J Pharmacol** 1989 May 2;164(1):85–92

Opiate receptor subtypes in the nucleus tractus solitarii of the cat: the effect of vagal section. Dashwood MR, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):85–92

Ventrolateral medullary pressor area: site of hypotensive and sympatho-inhibitory effects of (+/-)8-OH-DPAT in anaesthetized dogs. Laubie M, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):385–94

Monosynaptic excitation of medullary inspiratory neurons by bulbospinal inspiratory neurons of the ventral respiratory group in the cat. Ezure K, et al. **Exp Brain Res** 1989;74(3):501–11

Segregation of lemniscal inputs and motor cortex outputs in cat ventral thalamic nuclei: application of a novel technique. Hirai T, et al. **Exp Brain Res** 1988;71(2):329–44

Interference of vibrations with input transmission in dorsal horn and cuneate nucleus in man: a study of somatosensory evoked potentials (SEPs) to electrical stimulation of median nerve and fingers. Ibañez V, et al. **Exp Brain Res** 1989; 75(3):599–610

Collateral axonal projections from the A1 noradrenergic cell group to the paraventricular nucleus and bed nucleus of the stria terminalis in the rat. Woulfe JM, et al. **Exp Neurol** 1988 Oct;102(1):121–4

Medullary sites of action of the TRH analogue, RX 77368, for stimulation of gastric acid secretion in the rat. Ishikawa T, et al. **Gastroenterology** 1988 Dec;95(6):1470–6

Influence of envelope rise time on neural responses in the auditory system of anurans. Hall JC, et al. **Hear Res** 1988 Nov;36(2–3):261–76

Effect of brain stem transections on the respiratory response to medullary stimulation. Korczyn AD, et al. **Isr J Med Sci** 1967 May–Jun;3(3):440–4

Effects on respiratory pattern of focal cooling in the medulla of the dog. Adams M, et al. **J Appl Physiol** 1988 Nov; 65(5):2004–10

Medullary expiratory activity during opossum development. Farber JP. **J Appl Physiol** 1989 Apr;66(4):1606–12

Intracellular recordings of respiratory neurons in the lateral

medulla of piglets. Lawson EE, et al. **J Appl Physiol** 1989 Feb;66(2):983–8

Rostral ventrolateral medulla muscarinic receptor involvement in central ventilatory chemosensitivity. Nattie EE, et al. **J Appl Physiol** 1989 Mar;66(3):1462–70

Medullary neurons mediating the inhibition of inspiration by intercostal muscle tendon organs? Shannon R, et al. **J Appl Physiol** 1988 Dec;65(6):2498–505

Nasal and tracheal responses to chemical and somatic afferent stimulation in anesthetized cats. Strohl KP, et al. **J Appl Physiol** 1988 Aug;65(2):870–7

Normotension in conscious rats after placement of bilateral electrolytic lesions in the rostral ventrolateral medulla. Cochrane KL, et al. **J Auton Nerv Syst** 1989 Apr; 26(3):199–211

Origin of tonic GABAergic inputs to vasopressor neurons in the subretrofacial nucleus of the rabbit. Dampney RA, et al. **J Auton Nerv Syst** 1988 Oct;24(3):227–39

Cardiovascular responses and changes in neural activity in the rostral ventrolateral medulla elicited by electrical stimulation of the amygdala of the rat. Gelsema AJ, et al. **J Auton Nerv Syst** 1989 Jul;27(2):91–100

Dorsal medullary serotonin and gastric motility: enhancement of effects by thyrotropin-releasing hormone. McCann MJ, et al. **J Auton Nerv Syst** 1988 Nov;25(1):35–40

Putative neurotransmitters involved in medullary cardiovascular regulation. Urbanski RW, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):181–93

Evidence for a sympathoexcitatory pathway from the nucleus tractus solitarii to the ventrolateral medullary pressor area. Urbanski RW, et al. **J Auton Nerv Syst** 1988 Aug; 23(2):161–74

Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. Altschuler SM, et al. **J Comp Neurol** 1989 May 8;283(2):248–68

Morphology of augmenting inspiratory neurons of the ventral respiratory group in the cat. Sasaki H, et al. **J Comp Neurol** 1989 Apr 8;282(2):157–68

An in vitro physiological preparation of a vertebrate communicatory behavior: chirping in the weakly electric fish, Apteronotus. Dye J. **J Comp Physiol [A]** 1988 Aug; 163(4):445–58

GABAergic inhibition shapes temporal and spatial response properties of pyramidal cells in the electrosensory lateral line lobe of gymnotiform fish. Shumway CA, et al. **J Comp Physiol [A]** 1989 Jan;164(3):391–407

Vasopressin micro-injections into the nucleus tractus solitarii decrease heart rate and blood pressure in anaesthetized rats. Bratttström A, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S521–4

Renal and somatic input to spinal neurons antidromically activated from the ventrolateral medulla. Ammons WS. **J Neurophysiol** 1988 Dec;60(6):1967–81

Lateral tegmental field neurons of cat medulla: a source of basal activity of raphespinal sympathoinhibitory neurons. Barman SM, et al. **J Neurophysiol** 1989 May;61(5):1011–24

Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918–26

The correlation of monkey medullary dorsal horn neuronal activity and the perceived intensity of noxious heat stimuli. Dubner R, et al. **J Neurophysiol** 1989 Aug;62(2):450–7

Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437–49

Role of the acoustic striae in hearing: contribution of dorsal and intermediate striae to detection of noises and tones. Masterton RB, et al. **J Neurophysiol** 1988 Dec; 60(6):1841–60

Patterns of resting discharge in neurons of the raccoon main cuneate nucleus. Pubols BH Jr, et al. **J Neurophysiol** 1989 Jun;61(6):1131–41

Encoding of electrical, thermal, and mechanical noxious stimuli by subnucleus reticularis dorsalis neurons in the rat medulla. Villanueva L, et al. **J Neurophysiol** 1989 Feb; 61(2):391–402

Convergence of heterotopic nociceptive information onto subnucleus reticularis dorsalis neurons in the rat medulla. Villanueva L, et al. **J Neurophysiol** 1988 Sep;60(3):980–1009

A circumscribed projection from the nucleus of the solitary tract to the nucleus ambiguus in the rat: anatomical evidence for somatostatin-28-immunoreactive interneurons subserving reflex control of esophageal motility. Cunningham ET Jr, et al. **J Neurosci** 1989 May; 9(5):1668–82

GABA-mediated inhibition of locus coeruleus from the dorsomedial rostral medulla. Ennis M, et al. **J Neurosci** 1989 Aug;9(8):2973–81

Activation of locus coeruleus from nucleus paragigantocellularis: a new excitatory amino acid pathway in brain. Ennis M, et al. **J Neurosci** 1988 Oct;8(10):3644–57

Cholinergic regulation of arterial pressure by the C1 area of the rostral ventrolateral medulla. Giuliano R, et al. **J Neurosci** 1989 Mar;9(3):923–42

Medullary regions mediating atonia. Lai YY, et al. **J Neurosci** 1988 Dec;8(12):4790–6

Ultrastructural basis for interactions between central opioids and catecholamines. II. Nuclei of the solitary tracts. Pickel VM, et al. **J Neurosci** 1989 Jul;9(7):2519–35

Characterization of antinociception produced by glutamate microinjection in the nucleus tractus solitarius and the nucleus reticularis ventralis. Randich A, et al. **J Neurosci** 1988 Dec;8(12):4675–84

Ultrastructural demonstration of a gastric monosynaptic vagal circuit in the nucleus of the solitary tract in rat. Rinaman L, et al. **J Neurosci** 1989 Jun;9(6):1985–96

Evidence for glycine as an inhibitory neurotransmitter of vestibular, reticular, and prepositus hypoglossi neurons that project to the cat abducens nucleus. Spencer RF, et al. **J Neurosci** 1989 Aug;9(8):2718–36

Is L-glutamate a neurotransmitter of baroreceptor information in the nucleus of the tractus solitarius? Leone C, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):953–62

Synaptic rhythm of caudal medullary expiratory neurones during stimulation of the hypothalamic defence area of the cat. Ballantyne D, et al. **J Physiol (Lond)** 1988 Nov; 405:527–46

Electrophysiological properties of rostral medullary respiratory neurones in the cat: an intracellular study. Bianchi AL, et al. **J Physiol (Lond)** 1988 Dec;407:293–310

Localization by kainic acid lesions of neurones transmitting the carotid chemoreceptor stimulus for respiration in rat. Housley GD, et al. **J Physiol (Lond)** 1988 Dec;406:99–114

Taste responses in the nucleus tractus solitarius of sodium-deprived rats. Jacobs KM, et al. **J Physiol (Lond)** 1988 Dec;406:393–410

Ventrolateral medullary neurones: effects on magnitude and rhythm of discharge of mesenteric and renal nerves in cats. Stein RD, et al. **J Physiol (Lond)** 1989;408:571–86

Participation of ventrolateral medullary neurons in the renal-sympathetic reflex in rabbits. Saeki Y, et al. **Jpn J Physiol** 1988;38(3):267–81

In vivo voltammetry in the B3 group of serotonin neurons of the rat medulla oblongata after drug-induced modifications of arterial pressure. Aslanian V, et al. **Life Sci** 1988;43(13):1031–8

gamma-Aminobutyric acid receptors at the ventral surface of the medulla inhibit respiratory motor outflow to the laryngeal musculature. King KA, et al. **Neuropharmacology** 1989 Mar;28(3):255–62

Cardiovascular responses elicited by gamma-aminobutyric acid in the nucleus tractus solitarius: evidence for action at the GABAB receptor. Sved JC, et al. **Neuropharmacology** 1989 May;28(5):515–20

Passive electrical properties of spontaneously active neurons in the nucleus reticularis gigantocellularis of the cat. Chan JY, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):169–74

The rat nucleus paragigantocellularis as a relay station to mediate peripherally induced central effects of nicotine. Chen Z, et al. **Neurosci Lett** 1989 Jun 5;101(1):67–71

Vestibular nucleus inputs to paramedian reticulospinal neurons in the cat. Elisevich K, et al. **Neurosci Lett** 1988 Aug 15;91(1):1–6

Pertussis toxin treatment counteracts the cardiovascular effects of neuropeptide Y and clonidine in the awake unrestrained rat. Fuxe K, et al. **Neurosci Lett** 1989 Jul 3; 101(3):337–41

An electrophysiologically defined trigemino-reticulo-facial pathway related to the blink reflex in the cat. Inagaki M, et al. **Neurosci Lett** 1989 Jan 2;96(1):64–9

Characteristics of glycine-activated conductances in cultured medullary neurons from embryonic rat. Lewis CA, et al. **Neurosci Lett** 1989 Jan 16;96(2):185–90

GABA-mediated inhibition in nucleus paragigantocellularis lateralis in the cat. Lovick TA. **Neurosci Lett** 1988 Oct 5;92(2):182–6

A GABA-mediated inhibition of neurones in the nucleus tractus solitarius of the cat that respond to electrical stimulation of the carotid sinus nerve. McWilliam PN, et al. **Neurosci Lett** 1988 Dec 5;94(3):321–6

REM sleep without atonia after lesions of the medial medulla. Schenkel E, et al. **Neurosci Lett** 1989 Mar 27;98(2):159–65

Central sympathetic stimulation produced by saline application into the nucleus tractus solitarii area of conscious rats. Vlahakos D, et al. **Neurosci Lett** 1988 Oct 17;92(3):335–40

Experimentally induced postinhibitory rebound in rat nucleus ambiguus is dependent on hyperpolarization parameters and membrane potential. Dean JB, et al. **Neurosci Res** 1989 Jun;6(5):487–93

Electrophysiological characterization of putative C1 adrenergic neurons in the rat. Haselton JR, et al. **Neuroscience** 1989;30(1):199–214

Somatic and vagal afferent convergence on solitary tract neurons in cat: electrophysiological characteristics. Person RJ. **Neuroscience** 1989;30(2):283–95

Relationship between cardiovascular neurones and descending antinociceptive pathways in the rostral ventrolateral medulla of the cat. Siddall PJ, et al. **Pain** 1989 Jun;37(3):347–55

Inhibitory effect of the lateral reticular nucleus on neurons of the gigantocellularis nucleus which respond to noxious stimuli. Sotgiu ML. **Pain** 1988 Dec;35(3):355–62

Anorectic effect of calcitonin, neurotensin and bombesin infused in the area of the rostral part of the nucleus of the tractus solitarius in the rat. de Beaurepaire R, et al. **Peptides** 1988 Jul-Aug;9(4):729–33

Peripheral chemoreceptor inputs to medullary inspiratory and postinspiratory neurons of cats. Lawson EE, et al. **Pflugers Arch** 1989 Sep;414(5):523–33

Influence of rubrospinal tract and the adjacent mesencephalic reticular formation on the activity of medullary respiratory neurons and the phrenic nerve discharge in the rabbit. Schmid K, et al. **Pflugers Arch** 1988 Nov;413(1):23–31

Olfactory and visceral projections to the nucleus of the solitary tract. Garcia-Diaz DE, et al. **Physiol Behav** 1988; 44(4–5):619–24

Cannulation of the caudal medulla: behavioral effects of indwelling cerebellar cannulae. Martinez JL, et al. **Proc West Pharmacol Soc** 1988;31:217–9

Convergence of macular vestibular and neck inputs on vestibulospinal and reticulospinal neurons projecting to the lumbosacral cord. Manzoni D. **Prog Brain Res** 1988; 76:145–54 (42 ref.)

Area postrema: chemoreceptor circumventricular organ of the medulla oblongata. Borison HL. **Prog Neurobiol** 1989; 32(5):351–90 (329 ref.)

Studies on the inspiratory generating effect of the dorso-medial area of nucleus facialis. Lei L, et al. **Respir Physiol** 1989 Jan;75(1):65–73

Respiratory and vasomotor responses to focal cooling of the ventral medullary surface (VMS) of the rat. Mitra J, et al. **Respir Physiol** 1988 Oct;74(1):35–47

Functions of the retrofacial nucleus in chemosensitivity and ventilatory neurogenesis. St. John WM, et al. **Respir Physiol** 1989 May;76(2):159–71

Putative nociceptive modulatory neurons in the rostral ventromedial medulla of the rat display highly correlated firing patterns. Barbaro NM, et al. **Somatosens Mot Res** 1989;6(4):413–25

Putative nociceptive modulating neurons in the rostral ventromedial medulla of the rat: firing of on- and off-cells is related to nociceptive responsiveness. Heinricher MM, et al. **Somatosens Mot Res** 1989;6(4):427–39

Failure to block responses of locus coeruleus neurons to somatosensory stimuli by destruction of two major afferent nuclei. Rasmussen K, et al. **Synapse** 1989;4(2):162–4

Increase in ventilation caused by aminophylline in the absence of changes in ventral medullary extracellular fluid pH and carbon dioxide tension. Javaheri S, et al. **Thorax** 1989 Feb;44(2):121–5

[Descending bulbospinal substance-P-containing pathway involved in the pressor response evoked by physostigmine] Zhu GQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):184–90 (Eng. Abstr.) **(Chi)**

[Effect of ohmefentanyl injection to the region of nucleus tractus solitarius on discharge of phrenic nerve in rabbits] Zhou J, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul; 9(4):296–9 (Eng. Abstr.) **(Chi)**

[Excitatory effect of microinjection of coriaria lactone into the rabbit's nucleus tractus solitarius region on respiration] Shen FS, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):124–7 (Eng. Abstr.) **(Chi)**

[Relationship between pressor area of ventral surface of medulla oblongata and baroreflex in rabbits] Jia BJ, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):335–42 (Eng. Abstr.) **(Chi)**

[Effects of electrical and chemical stimulation of the ventral-medial region of nucleus facialis on respiratory phase switching in rabbits] Liu J, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):494–501 (Eng. Abstr.) **(Chi)**

[The role of medial medulla in the depressive responses in pulmonary and carotid arteries to injection of acetylcholine at fourth ventricle] Ni H, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):291–8 (Eng. Abstr.) **(Chi)**

[Effects of blockade of medullary region on respiration in the rabbit] Wu ZH, et al. **Sheng Li Hsueh Pao** 1988 Jun; 40(3):250–7 (Eng. Abstr.) **(Chi)**

[Role of rostral ventrolateral medulla in the pressor response to intracerebroventricular injection of neostigmine] Xia QG, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):19–29 (Eng. Abstr.) **(Chi)**

[The role of the ventral medulla oblongata in the vasopressor reaction induced by habenular nucleus stimulation] Yang SN, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):283–8 (Eng. Abstr.) **(Chi)**

[Electrophysiological study of medullary projection of the abdominal vagal and greater splanchnic afferents in the rabbit] Zhong SN, et al. **Sheng Li Hsueh Pao** 1988 Dec; 40(6):539–46 (Eng. Abstr.) **(Chi)**

[Evidence of presynaptic inhibitory activity in mechanosensory afferents directed to the solitary nucleus in frogs] Gilberti G, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):353–60 (Eng. Abstr.) **(Ita)**

[Reflex action of extralingual mechanosensory afferents in the solitary tract nucleus] Villa A, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):369–75 (Eng. Abstr.) **(Ita)**

[A central respiratory oscillator: phase response analysis--pontine and medullary electrical stimulation] Kitano S, et al. **Kokyu To Junkan** 1988 Sep;36(9):975–80 (Eng. Abstr.) **(Jpn)**

[A comparative study of the depressive effects of halothane and sevoflurane on medullary respiratory neurons in cats] Doi K, et al. **Masui** 1988 Dec;37(12):1466–77 (Eng. Abstr.) **(Jpn)**

[Studies on the respiratory control mechanism of medullary raphe nuclei and their serotonergic system] Kumaido K. **No To Shinkei** 1988 Oct;40(10):929–38 (Eng. Abstr.) **(Jpn)**

[The effects of electrical stimulation of nucleus raphe magnus and nucleus reticularis gigantocellularis on medial thalamic neurons--special reference to noxious neurons] Miyamoto

T. No To Shinkei 1988 Oct;40(10):971–8 (Eng. Abstr.) (Jpn)

[The pressor zone in the caudal part of the ventral surface of the medulla oblongata] Kul'chitskiĭ VA. Biull Eksp Biol Med 1988 Oct;106(10):387–9 (Eng. Abstr.) (Rus)

[Comparative characteristics of the changes in resistance in the vessels of the skeletal muscle and small intestine after the destruction of the structures in the ventral portions of the medulla oblongata] Tkachenko BI, et al. Biull Eksp Biol Med 1989 Feb;107(2):161–4 (Eng. Abstr.) (Rus)

[The participation of the structures of the ventral sections of the medulla oblongata in realizing vasomotor pressor reflexes] Kul'chitskiĭ VA, et al. Fiziol Zh SSSR 1988 Oct; 74(10):1409–17 (Eng. Abstr.) (Rus)

[A method for studying the electrical potential of the cerebrospinal fluid from the subarachnoid space of the ventral surface of the medulla oblongata] Platin VF. Fiziol Zh SSSR 1989 Feb;75(2):279–82 (Rus)

[Participation of the cholinergic system in the development of hemodynamic effects of GABA, administered intrabulbarly] Shapoval LN, et al. Fiziol Zh SSSR 1989 Jan;75(1):58–65 (Eng. Abstr.) (Rus)

[Effect of stimulation of the central gray substance on the low- and high-threshold responses of the reticular neurons in the pons and medulla oblongata] Karpukhina MV, et al. Neirofiziologiia 1988;20(6):749–57 (Eng. Abstr.) (Rus)

[Influence of electric stimulation of the medulla oblongata on the smooth muscle tone of the airway in cats] Talvan IL, et al. Neirofiziologiia 1989;21(3):320–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Effects of alpha 2-adrenoceptors blockade on the inhibition of the nociceptive jaw-opening reflex by the lateral reticular nucleus in rabbits. Sotgiu ML. Arch Ital Biol 1989 Feb;127(1):63–7

Thyrotropin-releasing hormone: medullary site of action to induce gastric ulcers and stimulate acid secretion. Hernandez DE, et al. Brain Res 1988 Aug 30;459(1):148–52

Comparison of the antinociceptive effect of morphine and glutamate at coincidental sites in the periaqueductal gray and medial medulla in rats. Jensen TS, et al. Brain Res 1989 Jan 2;476(1):1–9

Electrophysiological properties of ventromedial medulla neurons in response to noxious and non-noxious stimuli in the awake, freely moving rat: a single-unit study. Oliveras JL, et al. Brain Res 1989 May 1;486(1):1–14

Tremorogenesis by LON-954 [N-carbamoyl-2-(2,6-dichlorophenyl) acetamidine hydrochloride]: evidence for the involvement of 5-hydroxytryptamine. Mohanakumar KP, et al. Brain Res Bull 1989 Feb;22(2):191–5

Inhibition of the responses of cat dorsal horn neurons to noxious skin heating by stimulation in medial or lateral medullary reticular formation. Pretel S, et al. Exp Brain Res 1988;72(1):51–62

Bulbar amyotrophic lateral sclerosis: patterns of progression and clinical management. Hillel AD, et al. Head Neck 1989 Jan-Feb;11(1):51–9

Inhibition of renal sympathetic nerve activity by the nucleus tractus solitarii (NTS) in exaggerated natriuresis of hypertension. Kawamura H, et al. Nippon Jinzo Gakkai Shi 1988 Mar;30(3):285–90

Direct and indirect pathways to lamina I in the medulla oblongata and spinal cord of the cat. Holstege G. Prog Brain Res 1988;77:47–94 (151 ref.)

Stimulation-produced analgesia in animals: behavioural investigations. Oliveras JL, et al. Prog Brain Res 1988; 77:141–57 (124 ref.)

[Discharge changes of various medullary respiratory neurons during reflexive apnea] Zhang FT, et al. Sheng Li Hsueh Pao 1988 Apr;40(2):159–66 (Eng. Abstr.) (Chi)

SECRETION

Release of substance P in the nucleus tractus solitarius measured by in vivo microdialysis: response to stimulation of the aortic depressor nerves in rabbit. Morilak DA, et al. Neurosci Lett 1988 Nov 22;94(1-2):131–7

SURGERY

The transoral approach to the superior cervical spine. A review of 53 cases of extradural cervicomedullary compression. Hadley MN, et al. J Neurosurg 1989 Jul; 71(1):16–23

[Spinal and medullary DREZ lesions for deafferentation pain] Ishijima B. No Shinkei Geka 1988 Nov;16(12):1331–7 (Jpn)

TRANSPLANTATION

[Transplantation of embryonic medulla oblongata into cerebella of adult rats] Nanami T. No To Shinkei 1989 Jan; 41(1):17–26 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Morphology of afferent synapses in the Mauthner cell of larval Xenopus laevis. Cioni C, et al. J Comp Neurol 1989 Jun 8;284(2):205–14

Rapidly adapting pulmonary receptor afferents: II. Fine structure and synaptic organization of central terminal processes in the nucleus of the tractus solitarius. Kalia M, et al. J Comp Neurol 1988 Aug 22;274(4):574–94

HRP labeling and ultrastructural localization of prepacemaker terminals within the medullary pacemaker nucleus of the weakly electric gymnotiform fish Apteronotus leptorhynchus. Szabo T, et al. J Comp Neurol 1989 Jun 8;284(2):169–73

Ultrastructural alterations of primary afferent axons in the nucleus gracilis after peripheral nerve axotomy. Hachisuka K, et al. J Neuropathol Exp Neurol 1989 Jul;48(4):413–24

Monosynaptic nigral inputs to the pedunculopontine tegmental nucleus neurons which send their axons to the medial reticular formation in the medulla oblongata. An electron microscopic study in the cat. Nakamura Y, et al. Neurosci Lett 1989 Aug 28;103(2):145–50

[Ultrastructural organization of the chemosensitive ventrolateral region of the cat medulla oblongata] Shapoval LN, et al. Neirofiziologiia 1989;21(3):300–5 (Eng. Abstr.) (Rus)

MEDULLOBLASTOMA

Morphological and biochemical differentiation of the human medulloblastoma cell line TE671. Siegel HN, et al. Brain Res Dev Brain Res 1988 Dec 1;44(2):269–80

Adult cerebellar medulloblastomas: the pathological, radiographic, and clinical disease spectrum. Hubbard JL, et al. J Neurosurg 1989 Apr;70(4):536–44

Cell identity resolved [letter; comment] Chen TR, et al. Nature 1989 Jul 13;340(6229):106. Comment on: Nature 1989 Jan 26;337(6205):311–2

Characterization of nicotinic acetylcholine receptor channels of the TE671 human medulloblastoma clonal line. Oswald RE, et al. Neurosci Lett 1989 Jan 16;96(2):207–12

Treatment of extraneural metastatic medulloblastoma with a combination of cyclophosphamide, adriamycin, and vincristine. Chamberlain MC, et al. Neurosurgery 1988 Oct; 23(4):476–9

[Medulloblastoma in adults] Kubát A, et al. Cesk Radiol 1988 Oct;42(5):331–4 (Eng. Abstr.) (Cze)

ANALYSIS

Melanotic medulloblastoma. A case report with immunohistochemical and ultrastructural examination. Dolman CL. Acta Neuropathol (Berl) 1988;76(5):528–31

Expression of major histocompatibility complex on human medulloblastoma cells with neuronal differentiation. Tamura K, et al. Cancer Res 1989 Oct 1;49(19):5380–4

Prognostic importance of DNA ploidy in medulloblastoma of childhood. Yasue M, et al. J Neurosurg 1989 Mar; 70(3):385–91

[Glial fibrillary acidic protein and neurofilament protein in medulloblastoma] Tohyama T, et al. No Shinkei Geka 1988 Oct;16(11):1243–50 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Bone marrow necrosis associated with medulloblastoma. Nakayama T, et al. Acta Paediatr Jpn Overseas Ed 1988 Dec;30(6):723–7

Acute comitant esotropia in children with brain tumors. Williams AS, et al. Arch Ophthalmol 1989 Mar;107(3):376–8

Cerebellar tumor causing hypertensive crisis and simulating pheochromocytoma and Cushing's syndrome. Yagil Y, et al. Mt Sinai J Med (NY) 1989 Jan;56(1):56–8

DIAGNOSIS

Displacement of the quadrigeminal plate in tumors of the fourth ventricle: MR appearance. Nemoto Y, et al. J Comput Assist Tomogr 1989 Sep-Oct;13(5):769–72

Primary spinal medulloblastomas? Jaksche H, et al. Neurosurg Rev 1988;11(3-4):259–65

Recurrent brain tumors in children. Friedman HS, et al. Pediatr Neurosci 1987;13(5):233–41 (63 ref.)

DRUG THERAPY

Efficacy of adjuvant chemotherapy for patients with poor-risk medulloblastoma: a preliminary report. Packer RJ, et al. Ann Neurol 1988 Oct;24(4):503–8

Phase II treatment of medulloblastoma and pineoblastoma with melphalan: clinical therapy based on experimental models of human medulloblastoma. Friedman HS, et al. J Clin Oncol 1989 Jul;7(7):904–11

Increased melphalan activity in intracranial human medulloblastoma and glioma xenografts following buthionine sulfoximine-mediated glutathione depletion. Friedman HS, et al. J Natl Cancer Inst 1989 Apr 5; 81(7):524–7

A phase II study of cisplatin therapy in recurrent childhood brain tumors. A report from the Childrens Cancer Study Group. Bertolone SJ, et al. J Neurooncol 1989 May; 7(1):5–11

Successful combination chemotherapy (cisplatinum, vinblastine, and bleomycin) in the treatment of medulloblastoma disseminated by cerebrospinal fluid: case report. Asai A, et al. Neurosurgery 1989 Mar;24(3):439–43

ENZYMOLOGY

O6-alkylguanine-DNA alkyltransferase and sensitivity to procarbazine in human brain-tumor xenografts. Schold SC Jr, et al. J Neurosurg 1989 Apr;70(4):573–7

EPIDEMIOLOGY

[Tumors of the CNS in childhood] Turmo J, et al. An Esp Pediatr 1988 Jun;28(6):508–12 (Eng. Abstr.) (Spa)

GENETICS

N-myc gene expression and oncoprotein characterisation in medulloblastoma. Garson JA, et al. Br J Cancer 1989 Jun; 59(6):889–94

A der(11)t(8;11) in two medulloblastomas. A possible nonrandom cytogenetic abnormality. Callen DF, et al. Cancer Genet Cytogenet 1989 Apr;38(2):255–60

Characterization of the human cell line TE671. Stratton MR, et al. Carcinogenesis 1989 May;10(5):899–905

Turcot's syndrome. A review. Jarvis L, et al. Dis Colon Rectum 1988 Nov;31(11):907–14

Phenotypic analysis of four human medulloblastoma cell lines and transplantable xenografts. He XM, et al. J Neuropathol Exp Neurol 1989 Jan;48(1):48–68

IMMUNOLOGY

Monoclonal antibody T-199 directed against human medulloblastoma: characterization of a new antigenic system expressed on neuroectodermal tumors and natural killer cells. Feickert HJ, et al. Cancer Res 1989 Aug 1; 49(15):4338–43

METABOLISM

Ganglioside mapping of a human medulloblastoma xenograft. Gottfries J, et al. Acta Neuropathol (Berl) 1989;77(3):283–8

A muscle acetylcholine receptor is expressed in the human cerebellar medulloblastoma cell line TE671. Luther MA, et al. J Neurosci 1989 Mar;9(3):1082–96

Relationship of the demonstration of intermediate filament protein to kinetics of three human neuroepithelial tumor cell lines. Lack of neural-related proteins in most cells in S phase: a double-labeled immunohistochemical study on matrix cultures. Ibayashi N, et al. Lab Invest 1989 Sep; 61(3):310–8

PATHOLOGY

Direct spread of medulloblastoma in adjacent extrameningeal tissues. Jamjoom ZB, et al. Acta Neurochir (Wien) 1989; 97(3-4):171–6 (13 ref.)

Medulloblastoma with cartilaginous differentiation. Anwer UE, et al. Arch Pathol Lab Med 1989 Jan;113(1):84–8

Cerebellar desmoplastic medulloblastomas. A further immunohistochemical characterization of the reticulin-free pale islands. Katsetos CD, et al. Arch Pathol Lab Med 1989 Sep;113(9):1019–29

Adult onset medulloblastoma cerebelli with leptomeningeal dissemination and coincidental primary hyperparathyroidism. Hankey GJ, et al. Australas Radiol 1989 Feb;33(1):111–5

Heterotransplantation of malignant human gliomas in neonatal rats. Tamargo RJ, et al. J Neurosurg 1988 Dec; 69(6):928–33

[Basal cell nevus syndrome and medulloblastoma] Chevrant-Breton J, et al. Ann Dermatol Venereol 1988; 115(11):1115–7 (Fre)

[Differentiation of medulloblastoma: immunohistochemistry of 247 cases from the therapy trial SIOP/GPO MED 84] Aguzzi A, et al. Verh Dtsch Ges Pathol 1988;72:284–7 (Eng. Abstr.) (Ger)

[Response to antitumoral agents of a human medulloblastoma implanted into the chorioallantoic membrane of a chick embryo] Nakamura O, et al. Gan No Rinsho 1989 Mar; 35(4):477–80 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

Impairment of neuropsychological functions in children with medulloblastomas and astrocytomas in the posterior fossa. Riva D, et al. Childs Nerv Syst 1989 Apr;5(2):107–10

RADIOGRAPHY

Multifocal cerebellar medulloblastoma: CT findings. Shen WC, et al. J Comput Assist Tomogr 1988 Sep-Oct;12(5):894

RADIOTHERAPY

Results of postoperative irradiation of medulloblastoma in adults. Skołyszewski J, et al. Int J Radiat Oncol Biol Phys 1989 Feb;16(2):479–82

Field matching considerations in craniospinal irradiation. Tatcher M, et al. Int J Radiat Oncol Biol Phys 1989 Oct; 17(4):865–9

Medulloblastoma: results of treatment. Jose B, et al. J Ky Med Assoc 1989 Jun;87(6):269–71

Cerebral aneurysms following radiotherapy for medulloblastoma. Benson PJ, et al. J Neurosurg 1989 Apr; 70(4):545–50

Pediatric medulloblastoma: a new treatment technique. Lees RE, et al. Med Dosim 1988 Sep;13(3):143–7

[Neuroendocrine changes induced by craniospinal radiation in children with acute lymphoblastic leukemia and medulloblastoma] Couce Pico ML, et al. An Esp Pediatr 1989 Feb;30(2):85–90 (Eng. Abstr.) (Spa)

[Effects of the use of cranial radiotherapy. Findings obtained by computerized axial tomography and intellectual function tests] Moro Bayón C, et al. **An Esp Pediatr** 1988 May; 28(5):441–4 (Eng. Abstr.) (Spa)

SECONDARY

The incidence and distribution of spinal metastases in children with posterior fossa medulloblastomas. Stanley P, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):283–7

Large trans-shunt metastatic abdominal mass from cerebellar medulloblastoma. Chhang WH, et al. **Indian Pediatr** 1989 Feb;26(2):185–9

Small round cell neoplasm of jaw in a patient with medulloblastoma. Richardson J, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):408–10

Spinal extradural metastasis from a medulloblastoma. Altinörs N, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):84–6

Isolated metastasis to optic nerve from medulloblastoma. Garrity JA, et al. **Ophthalmology** 1989 Feb;96(2):207–10

Extracranial metastases from medulloblastoma: the radiological appearance of one case. Calderazzi A, et al. **Rays** 1987 Sep–Dec;12(3):31–4

[Late intramedullary metastases of a medulloblastoma with primary extramedullary seeded metastases—magnetic resonance tomographic detection using gadolinium-DTPA] Glathe S, et al. **Rontgenblatter** 1988 Dec;41(12):484–7 (Eng. Abstr.) (Ger)

SURGERY

Perioperative external ventricular drainage in obstructive hydrocephalus secondary to infratentorial brain tumours. Rappaport ZH, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):118–21

Nystagmus after medulloblastoma. Elliott AJ, et al. **Dev Med Child Neurol** 1989 Feb;31(1):43–6

THERAPY

An adoptive immunotherapy of patients with medulloblastoma by lymphokine-activated killer cells (LAK). Okamoto Y, et al. **Acta Neurochir (Wien)** 1988; 94(1–2):47–52

[Diagnostic problems in children treated for brain tumors] Muin N, et al. **Ned Tijdschr Geneeskd** 1988 Sep 24; 132(39):1777–80 (Dut)

[Primary cerebral tumors in children. II: Topography and treatment] Carrie C, et al. **Bull Cancer (Paris)** 1989; 76(3):255–72 (70 ref.) (Eng. Abstr.) (Fre)

ULTRASTRUCTURE

Immunohistochemical and ultrastructural observations on Homer Wright (neuroblastic) rosettes and the "pale islands" of human cerebellar medulloblastomas. Katsetos CD, et al. **Hum Pathol** 1988 Oct;19(10):1219–27

MEFENAMIC ACID

ADMINISTRATION & DOSAGE

Effect of encapsulation of mefenamic acid with cationic Eudragit E on its bioavailability and gastric ulcerogenic activity in rabbits. Ramadan EM, et al. **J Microencapsul** 1987 Apr–Jun;4(2):125–32

ADVERSE EFFECTS

Toxic interaction of lithium carbonate and mefenamic acid. MacDonald J, et al. **BMJ** 1988 Nov 19;297(6659):1339

Iatrogenic oesophageal ulceration with massive haemorrhage and stricture formation. De Caestecker JS, et al. **Br J Clin Pract** 1988 May;42(5):212–4

Lithium toxicity and mefenamic acid. A possible interaction and the role of prostaglandin inhibition. Shelley RK. **Br J Psychiatry** 1987 Dec;151:847–8

Mefenamic acid nephropathy: an interstitial and mesangial lesion. Jenkins DA, et al. **Nephrol Dial Transplant** 1988; 3(2):217–20

Irreversible renal failure following mefenamic acid. Boletis J, et al. **Nephron** 1989;51(4):575–6

ANALYSIS

Simultaneous spectrophotometric determination of mefenamic acid and paracetamol in pharmaceutical preparations. Das S, et al. **Analyst** 1989 Jan;114(1):101–3

Traditional oriental medicines. I. Black pearl: identification and chromatographic determination of some undeclared medicinal ingredients. By A, et al. **J Chromatogr** 1989 May 19;469:406–11

BLOOD

Simple, rapid and sensitive reversed-phase high-performance liquid chromatographic method for the determination of mefenamic acid in plasma. Sato J, et al. **J Chromatogr** 1989 Aug 25;493(1):239–43

PHARMACOKINETICS

Effect of magnesium hydroxide on the absorption of tolfenamic and mefenamic acids. Neuvonen PJ, et al. **Eur J Clin Pharmacol** 1988;35(5):495–501

PHARMACOLOGY

Effects of the nonsteroidal anti-inflammatory drug mefenamic acid on energy metabolism in the perfused rat liver. Kemmelmeier FS, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):823–30

Differential effects of non-steroidal anti-inflammatory drugs on seizures produced by pilocarpine in rats. Ikonomidou-Turski C, et al. **Brain Res** 1988 Oct 18; 462(2):275–85

Drug competition for thyroxine binding to transthyretin (prealbumin): comparison with effects on thyroxine-binding globulin. Munro SL, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1141–7

Inhibition of phospholipase A2 isoenzymes in human endometrium by mefenamic acid and indomethacin: modulation by calcium ions. Bonney RC, et al. **J Endocrinol** 1988 Oct;119(1):141–5

POISONING

Mefenamic acid overdose mimicking brainstem stroke [letter] Hendrickse MT. **Lancet** 1988 Oct 29;2(8618):1019

THERAPEUTIC USE

Mefenamic acid compared with diclofenac sodium in elderly patients with osteoarthritis. Stewart I, et al. **Br J Clin Pract** 1988 Aug;42(8):316–20

Comparison between mefenamic acid and danazol in the treatment of established menorrhagia. Dockeray CJ, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):840–4

[The treatment of psoriatic arthropathy with a combination of mefenamic and aminocaproic acids] Kuliev NA. **Vestn Dermatol Venerol** 1989;(5):43–7 (Eng. Abstr.) (Rus)

[Use of mefenamic acid as a connective tissue stabilizer in treating arthropathic psoriasis] Kuliev NA. **Vestn Dermatol Venerol** 1989;(4):54–9 (Eng. Abstr.) (Rus)

MEFRUSIDE see under DIURETICS, SULFAMYL

MEGACINS see under BACTERIOCINS

MEGACOLON

Chagasic megaesophagus and megacolon. Historical review and present concepts. de Rezende JM, et al. **Arq Gastroenterol** 1988;25 Spec No:32–43 (110 ref.)

CHEMICALLY INDUCED

Lactulose-induced megacolon [letter] Wright RA. **Gastrointest Endosc** 1988 Nov–Dec;34(6):489–90

COMPLICATIONS

Idiopathic megacolon presenting with fatal inferior vena caval obstruction and colonic perforation. Case report. Scott MJ. **Acta Chir Scand** 1988 Oct;154(10):605–7

Megacolon and volvulus complicating progressive systemic sclerosis. Brandwein M, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):343–5

Megaesophagus, megacolon and cancer. Lopes ER. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):91–4 (33 ref.) (Eng, Por)

[Incidence and causes of volvulus of the sigmoid in Ethiopia] Vasil'ev IT, et al. **Vestn Khir** 1988 Jun;140(6):48–50 (Rus)

DIAGNOSIS

The enigma of Hirschsprung's disease: an African experience. Shija JK. **East Afr Med J** 1988 Jul;65(7):438–45

[Clinico-roentgenologic characteristics of megacolon in adults] Sniger NU, et al. **Radiol Diagn (Berl)** 1988; 29(5):681–8 (Eng. Abstr.) (Ger)

[Use of anorectal manometry in studying defecation in children with functional megacolon] Chernienko IuL. **Klin Khir** 1988;(6):34–7 (Eng. Abstr.) (Rus)

ETIOLOGY

[A case of ileal ulcer showing segmental mega-ileum] Tsukahara H, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar; 78(3):363–6 (Jpn)

[Formation of megarectum and megadolichosigmoid in a child with rectoanal dyssynergia] Chernienko IuL, et al. **Klin Khir** 1988;(6):64 (Rus)

PHYSIOPATHOLOGY

Function of the striated anal sphincter during straining in control subjects and constipated patients with a radiologically normal rectum or idiopathic megacolon. Barnes PR, et al. **Int J Color Dis** 1988 Nov;3(4):207–9

SURGERY

[Errors in the choice of the extent of operative intervention in adult megacolon] Miminoshvili OI, et al. **Klin Khir** 1989; (2):53–4 (Rus)

[Variants of the Duhamel operation in Hirschsprung's disease and idiopathic megacolon in children] Pilipenko AP, et al. **Klin Khir** 1989;(6):12–6 (Eng. Abstr.) (Rus)

[A method of dislocation of the ileocecal segment of the intestine and ascending colon] Iaremchuk AIa, et al. **Vestn Khir** 1989 Jan;142(1):126–7 (Rus)

VETERINARY

Subtotal colectomy for treatment of chronic constipation associated with idiopathic megacolon in cats: 38 cases (1979–1985). Rosin E, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):850–3

MEGACOLON, CONGENITAL see HIRSCHSPRUNG DISEASE

MEGACOLON, TOXIC see under COLITIS, ULCERATIVE

MEGAESOPHAGUS see ESOPHAGEAL ACHALASIA

MEGAKARYOBLASTIC LEUKEMIA, ACUTE see LEUKEMIA, MEGAKARYOCYTIC, ACUTE

MEGAKARYOCYTES

ANALYSIS

Localization of fibronectin in megakaryocytes of fetal liver. Bockman DE, et al. **Anat Rec** 1989 Jan;223(1):90–4

Cloning of GMP-140, a granule membrane protein of platelets and endothelium: sequence similarity to proteins involved in cell adhesion and inflammation. Johnston GI, et al. **Cell** 1989 Mar 24;56(6):1033–44

Ultrastructural analysis of megakaryoblasts by simultaneous detection of platelet peroxidase and platelet glycoproteins. Kishimoto Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):102–12

Elevated level of p60c-src in virus-transformed murine megakaryocytic cell lines. Fischer S, et al. **Oncogene** 1989 Jul;4(7):901–5

The bleeding time is inversely related to megakaryocyte nuclear DNA content and size in man. Dalby Kristensen S, et al. **Thromb Haemost** 1988 Jun 16;59(3):357–9

[Megakaryocyte DNA content by microcytofluorometry with DAPI staining after removal of Wright-Giemsa staining—in ITP patients] Kobayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1147–51 (Eng. Abstr.) (Jpn)

[Megakaryocyte DNA content in man by microcytofluorometry with DAPI staining after removal of Wright-Giemsa staining] Kobayashi Y, et al. **Rinsho Byori** 1988 Sep;36(9):1065–9 (Jpn)

CLASSIFICATION

Characterization of guinea pig megakaryocyte subpopulations at different phases of maturation prepared with a Celsep separation system. Schick PK, et al. **Blood** 1989 May 15;73(7):1801–8

CYTOLOGY

Factors regulating megakaryocytopoiesis and platelet formation. Abe T, et al. **Adv Exp Med Biol** 1988;241:183–90

Studies of murine megakaryocyte colony size and ploidization. Segal GM. **Adv Exp Med Biol** 1988;241:175–81

Regulation of human megakaryocytopoiesis. Long MW. **Ann N Y Acad Sci** 1989;554:192–205

Megakaryocytopoiesis in the human fetus. Allen Graeve JL, et al. **Arch Dis Child** 1989 Apr;64(4):481–4

Megakaryocyte and platelet morphology. Hovig T. **Baillieres Clin Haematol** 1989 Jul;2(3):503–41 (222 ref.)

Effects of hematopoietic growth factors on in vitro colony formation by human megakaryocyte progenitor cells. Lu L, et al. **Behring Inst Mitt** 1988 Aug;(83):181–7

Characterization of the human burst-forming unit-megakaryocyte. Briddell RA, et al. **Blood** 1989 Jul; 74(1):145–51

Interacting cytokines regulate in vitro human megakaryocytopoiesis. Bruno E, et al. **Blood** 1989 Feb 15; 73(3):671–7

Identification of a light density murine megakaryocyte progenitor (LD-CFU-M). Chatelain C, et al. **Blood** 1988 Oct;72(4):1187–92

Growth and differentiation of a human megakaryoblastic cell line, CMK. Komatsu N, et al. **Blood** 1989 Jul;74(1):42–8

Megakaryocytopoiesis. **Blood Cells** 1989;15(1):1–313

Erythropoietin and megakaryocytopoiesis. Burstein SA, et al. **Blood Cells** 1989;15(1):193–201

The relationship between megakaryocyte ploidy and platelet volume. Corash L. **Blood Cells** 1989;15(1):81–107 (98 ref.)

Megakaryocyte colony-stimulating factor (Mk-CSF): its physiologic significance. de Alarcon PA. **Blood Cells** 1989; 15(1):173–85

Modulation of megakaryocytopoiesis by erythropoietin via a direct effect of the hormone on progenitor cells. Dukes PP. **Blood Cells** 1989;15(1):202–4

Animal models with inherited hematopoietic abnormalities as tools to study thrombopoiesis. Ebbe S. **Blood Cells** 1989; 15(1):254–7

Regulators of thrombopoiesis: their biochemistry and physiology. Hill RJ, et al. **Blood Cells** 1989;15(1):141–66 (156 ref.)

Animal models with inherited hematopoietic abnormalities as tools to study thrombopoiesis. Jackson CW. **Blood Cells** 1989;15(1):237–53 (87 ref.)

Elutriation for isolation of megakaryocytes. Leven R.

Blood Cells 1989;15(1):306–13
Is interleukin-3 a physiological regulator of megakaryocytopoiesis, in vivo? Levin J. **Blood Cells** 1989; 15(1):134–9
Signal transduction events in in vitro megakaryocytopoiesis. Long MW. **Blood Cells** 1989;15(1):205–29
The relationship between megakaryocyte ploidy and platelet volume. Martin J. **Blood Cells** 1989;15(1):108–21
Megakaryocytopoietic regulation: the forest and the trees. Mazur EM. **Blood Cells** 1989;15(1):167–71
Elutriation for isolation of megakaryocytes. Shoff PK, et al. **Blood Cells** 1989;15(1):285–305
Stimulators and inhibitors of megakaryocytopoiesis in human plasma. Solberg LA Jr. **Blood Cells** 1989;15(1):186–91
Mechanisms of platelet production. Stenberg PE, et al. **Blood Cells** 1989;15(1):23–47 (109 ref.)
Localization of megakaryocytes in the bone marrow. Tavassoli M, et al. **Blood Cells** 1989;15(1):3–14 (52 ref.)
Mechanisms of platelet production. White JG. **Blood Cells** 1989;15(1):48–57
Multiple levels of regulation of megakaryocytopoiesis. Williams N, et al. **Blood Cells** 1989;15(1):123–33
Signal transduction events in in vitro megakaryocytopoiesis. Williams NT. **Blood Cells** 1989;15(1):230–5
Localization of megakaryocytes in the bone marrow. Young KM. **Blood Cells** 1989;15(1):15–21
Effect of gangliosides on murine megakaryocytopoiesis in a liquid culture system. Watanabe Y, et al. **Cell Struct Funct** 1988 Aug;13(4):293–300
Cryopreservation of human megakaryocytic progenitor cells (CFU-MK): influence of culture conditions. Berthier R, et al. **Cryobiology** 1989 Jun;26(3):265–72
Partial purification of human urinary megakaryocyte colony-stimulating factor. Ogata K, et al. **Exp Cell Biol** 1989;57(1):19–26
Mouse peritoneal macrophages produce CFU-gm and CFU-meg growth-promoting factors. Sugimoto M, et al. **Exp Cell Biol** 1988;56(1–2):29–38
The roles of factors from lung in murine megakaryocytopoiesis. Fawcett J, et al. **Exp Hematol** 1989 Jan;17(1):25–9
Granulocyte colony-stimulating factor augments in vitro megakaryocyte colony formation by interleukin-3. McNiece IK, et al. **Exp Hematol** 1988 Oct;16(9):807–10
In vivo proliferative and differential properties of murine bone marrow cells separated on the basis of rhodamine-123 retention. Ploemacher RE, et al. **Exp Hematol** 1988 Dec; 16(11):903–7
Clonal growth of human megakaryocyte progenitors in serum-free cultures: effect of recombinant human interleukin 3. Teramura M, et al. **Exp Hematol** 1988 Nov; 16(10):843–8
Serotonin incorporation as a marker of murine megakaryocyte proliferation in liquid cultures. Vannucchi AM, et al. **Exp Hematol** 1988 Dec;16(11):916–21
Analysis of murine megakaryocyte colony size and ploidy: effects of interleukin-3. Segal GM, et al. **J Cell Physiol** 1988 Dec;137(3):537–44
Synergistic regulation of human megakaryocyte development. Long MW, et al. **J Clin Invest** 1988 Nov; 82(5):1779–86
Stimulation of CFU-Mk colony growth by normal plasma and plasma from myelodysplastic patients. Podolak-Dawidziak M. **Leuk Res** 1989;13(3):213–5
Megakaryocytic inhibitors derived from platelets: effect of transforming growth factor-beta (TGF-beta) on murine megakaryocytopoiesis. Ishibashi T. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1597–605
Human interleukin 6 is a direct promoter of maturation of megakaryocytes in vitro. Ishibashi T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5953–7
Induction of megakaryocytic differentiation and modulation of protein kinase gene expression by site-selective cAMP analogs in K-562 human leukemic cells. Tortora G, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2849–52
In vitro effect of lithium on carbamazepine-induced inhibition of murine and human bone marrow-derived granulocyte-macrophage, erythroid, and megakaryocyte progenitor stem cells. Gallicchio VS, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):109–16
Megakaryocytopoiesis in spontaneously hypertensive rats (SHR). Basara N, et al. **Thromb Res** 1989 Mar 15; 53(6):551–9
Megakaryocytic colony-stimulating activity in patients receiving a marrow transplant during hematopoietic reconstitution. Fauser AA, et al. **Transplantation** 1988 Oct; 46(4):543–8
[Emperipolesis and interrelations of megakaryocytes and neutrophilic granulocytes in the bone marrow of healthy dogs] Vlasov PA. **Arkh Anat Gistol Embriol** 1989 Feb; 96(2):60–3 (Eng. Abstr.) **(Rus)**
[Use of a mathematical model in researching the time of cellular maturation of the megakaryocyte line, its proliferative activity and the megakaryocyte volume] Selivanov VA, et al. **Zh Obshch Biol** 1988 Jul–Aug; 49(4):476–86 (Eng. Abstr.) **(Rus)**
[Megakaryocytopoiesis and its regulating mechanisms] Rolović Z. **Liječ Vjesn** 1988 Dec;110(12):428–36 (91 ref.) (Eng. Abstr.) **(Ser)**

DRUG EFFECTS

In vivo and in vitro inhibitory effect of alpha-interferon on megakaryocyte colony growth in essential thrombocythaemia. Gugliotta L, et al. **Br J Haematol** 1989 Feb;71(2):177–81
Effect of recombinant and purified human haematopoietic growth factors on in vitro colony formation by enriched populations of human megakaryocyte progenitor cells [published erratum appears in Br J Haematol 1988 Dec;70(4):503] Lu L, et al. **Br J Haematol** 1988 Oct; 70(2):149–56
Effects of recombinant human interferon alpha on human megakaryocyte and fibroblast colony formation. Han ZC, et al. **J Biol Regul Homeost Agents** 1987 Oct–Dec; 1(4):195–200
Recombinant gibbon interleukin-3 stimulates megakaryocyte colony growth in vitro from human peripheral blood progenitor cells. Mazur EM, et al. **J Cell Physiol** 1988 Sep; 136(3):439–46
Megakaryocyte response to thrombin [letter] Trowbridge A. **Thromb Haemost** 1988 Aug 30;60(1):125–6
[Cytogenetic effect of the antineoplastic anthracycline antibiotic 4'-epidoxorubicin] Nerseian AK, et al. **Antibiot Khimioter** 1989 Mar;34(3):216–7 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Coamplification of human acetylcholinesterase and butyrylcholinesterase genes in blood cells: correlation with various leukemias and abnormal megakaryocytopoiesis. Lapidot-Lifson Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4715–9
Tissue plasminogen activator in human megakaryocytes and platelets: immunocytochemical localization, immunoblotting and zymographic analysis. Jeanneau C, et al. **Thromb Haemost** 1988 Jun 16;59(3):529–34

IMMUNOLOGY

The immunohistological detection of platelets, megakaryocytes and thrombi in routinely processed specimens. Gatter KC, et al. **Histopathology** 1988 Sep; 13(3):257–67
Megakaryocytes of human immunodeficiency virus-infected individuals express viral RNA. Zucker-Franklin D, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5595–9
[Megakaryocytes and thrombocytopoiesis in idiopathic thrombocytopenic purpura] Arendt T, et al. **Folia Haematol (Leipz)** 1989;116(2):211–7 (Eng. Abstr.) **(Ger)**

METABOLISM

Uncoordinated expression of fibrinogen compared with thrombospondin and von Willebrand factor in maturing human megakaryocytes. Cramer EM, et al. **Blood** 1989 Apr; 73(5):1123–9
Megakaryocyte and hepatocyte origins of human fibrinogen biosynthesis exhibit hepatocyte-specific expression of gamma chain-variant polypeptides. Haidaris PJ, et al. **Blood** 1989 Aug 1;74(2):743–50
Incorporation of a circulating protein into alpha granules of megakaryocytes. Handagama PJ, et al. **Blood Cells** 1989; 15(1):59–72
The relationship of alpha granules to the membrane systems of platelets and megakaryocytes. Zucker-Franklin D. **Blood Cells** 1989;15(1):73–9
Expression of specific high-affinity binding sites for erythropoietin on rat and mouse megakaryocytes. Fraser JK, et al. **Exp Hematol** 1989 Jan;17(1):10–6
Growth factor production by a human megakaryocytic tumor cell line. Witte DP, et al. **J Cell Physiol** 1988 Oct; 137(1):86–94
Incorporation of intravenously injected albumin, immunoglobulin G, and fibrinogen in guinea pig megakaryocyte granules. Handagama PJ, et al. **J Clin Invest** 1989 Jul;84(1):73–82
Arachidonic acid is preferentially incorporated by immature megakaryocytes. Schick PK. **J Lab Clin Med** 1989 Jan; 113(1):79–87
[Siderophilic erythrokaryocytes of the bone marrow at various periods during the course of acute leukemia] Vorob'ev VG. **Gematol Transfuziol** 1989 May;34(5):8–12 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Structural changes in the megakaryocytes of patients infected with the human immune deficiency virus (HIV-1). Zucker-Franklin D, et al. **Am J Pathol** 1989 Jun; 134(6):1295–303
Characterization of a new megakaryocytic cell line: the Dami cell. Greenberg SM, et al. **Blood** 1988 Dec;72(6):1968–77
Flow cytometric analysis of megakaryocytes from patients with abnormal platelet counts. Tomer A, et al. **Blood** 1989 Aug 1;74(2):594–601
Variant (3;21) translocation and megakaryocytic involvement in blastic crisis of Philadelphia positive chronic myeloid leukaemia. Aventin A, et al. **Br J Haematol** 1989 Apr; 71(4):562–4
Near-haploid cell line in megakaryoblastic transformation of Philadelphia-positive chronic myeloid leukemia. Mayne KM, et al. **Cancer Genet Cytogenet** 1989 May;39(1):133–6
Endogenous megakaryocyte colonies from peripheral blood in precursor cell cultures of patients with myeloproliferative disorders. Battegay EJ, et al. **Eur J Haematol** 1989 Apr;42(4):321–6
Colony formation by megakaryocyte progenitors in myelodysplatic syndromes. Juvonen E, et al. **Eur J Haematol** 1989 Apr;42(4):389–95
Application of megakaryocytic morphology in diagnosing 5q- syndrome. Thiede T, et al. **Eur J Haematol** 1988 Nov; 41(5):434–7
Effects of isobaric hypoxia on murine medullary and splenic megakaryocytopoiesis. Cullen WC, et al. **Exp Hematol** 1989 Mar;17(3):246–51
Characteristics of megakaryocyte colony formation in normal individuals and in primary thrombocythemia: studies using an optimal cloning system. Han ZC, et al. **Exp Hematol** 1989 Jan;17(1):46–52
Bone marrow in megakaryocytic disorders. Burkhardt R. **Hematol Oncol Clin North Am** 1988 Dec;2(4):695–733 (147 ref.)
A case of chronic myelogenous leukemia with T lymphoblastic and megakaryoblastic mixed crisis. Iwamasa K, et al. **Jpn J Med** 1989 Jan–Feb;28(1):89–95
Megakaryocyte colony formation in chronic myeloid leukemia and myelofibrosis. Juvonen E. **Leuk Res** 1988; 12(9):751–6
Phenotypic changes in the megakaryocyte-platelet lineage. Stenberg PE. **Scanning Microsc** 1988 Dec;2(4):2117–27
[Megakaryocytic myelosis—clinical aspects, morphology and platelet function] Hochhaus A, et al. **Klin Wochenschr** 1989 Jan 20;67(2):51–9 (Eng. Abstr.) **(Ger)**
[Megakaryocytes in peripheral blood—studies on normal subjects and patients with various blood diseases] Ohashi T. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1122–9 (Eng. Abstr.) **(Jpn)**
[Megakaryocytopoiesis in vitro of the patients with essential thrombocythemia] Komatsu N. **Rinsho Ketsueki** 1988 Jul; 29(7):977–82 (Eng. Abstr.) **(Jpn)**
[Emperipolesis by megakaryocytes in RAEB in T (refractory anemia with excess of blasts in transformation)] Natori H, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1504–10 (Eng. Abstr.) **(Jpn)**
[Clonal megakaryocytopathies] Sánchez Fayos J, et al. **Sangre (Barc)** 1989 Aug;34(4):259–62 (42 ref.) **(Spa)**
[Incidence of mononuclear bone-marrow megakaryocytes in various hemopathies (letter)] Simón R, et al. **Sangre (Barc)** 1988 Jun;33(3):238–9 **(Spa)**

PHYSIOLOGY

The effects of prostaglandin E1 on megakaryocyte proliferation in vitro. Cooper GW, et al. **Adv Exp Med Biol** 1988;241:217–24
Role of immunocompetent cells in the regulation of human megakaryocytopoiesis in vitro. Detrick RA, et al. **Adv Exp Med Biol** 1988;241:199–215
Exogenous and endogenous regulations of human megakaryocytopoiesis. Gewirtz AM. **Adv Exp Med Biol** 1988;241:149–64
Parabiotic demonstration of a substance released from burned tissue affecting marrow megakaryocyte diameter and number in mice. Kalmaz GD, et al. **Adv Exp Med Biol** 1988;241:225–32
Evaluation of c-sis mRNA expression by human megakaryocytic cells in normals and patients with myeloproliferative disorders. Kanz L, et al. **Adv Exp Med Biol** 1988;241:73–80
Current status of thrombopoietin. McDonald TP. **Adv Exp Med Biol** 1988;241:243–53 (69 ref.)
Bone marrow emboli [letter] Slater DN. **Am J Forensic Med Pathol** 1988 Dec;9(4):357–8
Human megakaryocytopoiesis. Sims RB, et al. **Annu Rev Med** 1989;40:213–24 (54 ref.)
Megakaryocyte function and dysfunction. Eldor A, et al. **Baillieres Clin Haematol** 1989 Jul;2(3):543–68 (173 ref.)
Megakaryocytopenia in W/Wv mice is accompanied by an increase in size within ploidy groups and acceleration of maturation. Ebbe S, et al. **Blood** 1989 Jul;74(1):94–8
Regulation of megakaryocytopoiesis. Hoffman R. **Blood** 1989 Sep;74(4):1196–212 (213 ref.)
Interleukin-6 is a potent thrombopoietic factor in vivo in mice. Ishibashi T, et al. **Blood** 1989 Sep;74(4):1241–4
Recombinant human erythropoietin has little influence on megakaryocytopoiesis in mice. Grossi A, et al. **Br J Haematol** 1989 Apr;71(4):463–8
Defective megakaryocytopoiesis in the syndrome of thrombocytopenia with absent radii. Homans AC, et al. **Br J Haematol** 1988 Oct;70(2):205–10
Serum from patients with various thrombopoietic disorders alters terminal cytoplasmic maturation of human megakaryocytes in vitro. Straneva JE, et al. **Eur J Haematol** 1989 Mar;42(3):293–7
Measurement of megakaryocyte frequency and ploidy distribution in unfractionated murine bone marrow. Corash L, et al. **Exp Hematol** 1989 Mar;17(3):278–86 (51 ref.)
The effect of partially purified thrombopoietin on guinea pig megakaryocyte ploidy in vitro. Hill RJ, et al. **Exp Hematol** 1989 Sep;17(8):903–7
The regulation of megakaryocyte and platelet production. McDonald TP. **Int J Cell Cloning** 1989 May;7(3):139–55 (130 ref.)
Inhibition of human megakaryocytopoiesis in vitro by platelet factor 4 (PF4) and a synthetic COOH-terminal PF4 peptide. Gewirtz AM, et al. **J Clin Invest** 1989 May; 83(5):1477–86

Alterations in megakaryocyte and platelet compartments following in vivo IL-1 beta administration to normal mice. Williams DE, et al. **J Immunol** 1989 Jun 15;142(12):4361–5
Effects of rat platelet extracts and human platelet-derived growth factor on megakaryocytopoiesis in vitro. Uyar R, et al. **J Surg Oncol** 1988 Dec;39(4):217–24
A quantitative and dynamic study of endothelial cells and megakaryocytes in human long-term bone marrow cultures. Berneman ZN, et al. **Leukemia** 1989 Jan;3(1):61–7
Measurement of platelet and megakaryocyte interaction with the subendothelial extracellular matrix. Eldor A, et al. **Methods Enzymol** 1989;169:76–91
Acquired cyclic amegakaryocytic thrombocytopenia associated with an immunoglobulin blocking the action of granulocyte-macrophage colony-stimulating factor. Hoffman R, et al. **N Engl J Med** 1989 Jul 13;321(2):97–102
Circulating megakaryocytes and platelet production [letter] Trowbridge A, et al. **S Afr Med J** 1989 Apr 1;75(7):353–4
[Regulation of megakaryocytopoiesis] Tu Q. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):334–7 (41 ref.) **(Chi)**

PHYSIOPATHOLOGY

Megakaryocyte function and dysfunction. Eldor A, et al. **Baillieres Clin Haematol** 1989 Jul;2(3):543–68 (173 ref.)

TRANSPLANTATION

Peripheral blood stem cells collected before and after leukapheresis in the very early remission phase of hematopoietic malignancies. Vannier JP, et al. **Eur J Haematol** 1989 May;42(5):481–6

ULTRASTRUCTURE

The ultrastructure of megakaryopoietic cells of the yolk sac and liver in mouse embryo. Matsumura G, et al. **Anat Rec** 1988 Oct;222(2):164–9
Storage pool deficiency in cattle with the Chédiak-Higashi syndrome results from an absence of dense granule precursors in their megakaryocytes. Ménard M, et al. **Blood** 1988 Nov;72(5):1726–34
Congenital macrothrombocytopenia, leucocyte inclusions, deafness and proteinuria: functional and electron microscopic observations on platelets and megakaryocytes. Heynen MJ, et al. **Br J Haematol** 1988 Dec;70(4):441–8
Ultrastructural localization of platelet factor 4 in rat megakaryocytes and platelets by gold-labeled antibody detection. Hegyi E, et al. **Exp Hematol** 1989 Mar; 17(3):223–8
Ultrastructural analysis of acute immune thrombocytopenia in mice: dissociation between alterations in megakaryocytes and platelets. Stenberg PE, et al. **J Cell Physiol** 1989 Oct; 141(1):160–9
Ultrastructure of megakaryocytes in the human bone marrow of patients with primary (essential) thrombocythemia. Thiele J, et al. **J Submicrosc Cytol Pathol** 1988 Oct; 20(4):671–81
Studies on micromegakaryocytes in myelodysplastic syndromes (MDS). Song YH, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):33–9
Ultrastructural analysis of platelets and megakaryocytes from a dog with probable essential thrombocythemia. Tablin F, et al. **Vet Pathol** 1989 Jul;26(4):289–93
[Analytical study on leukemic megakaryocytic cells using simultaneous demonstration of membrane antigen with monoclonal antibodies and peroxidase cytochemistry at ultrastructural level] Enomoto Y, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1150–62 (Eng. Abstr.) **(Jpn)**

MEGAKARYOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, MEGAKARYOCYTIC, ACUTE**

MEGALOBLASTS see under **ERYTHROCYTES, ABNORMAL**

MEGAVITAMIN THERAPY see **ORTHOMOLECULAR THERAPY**

MEGAVOLT RADIOTHERAPY see **RADIOTHERAPY, HIGH ENERGY**

MEGESTROL

ANALOGS & DERIVATIVES

A prospective, randomized controlled trial of megestrol acetate among high-risk patients with resected malignant melanoma. Creagan ET, et al. **Am J Clin Oncol** 1989 Apr; 12(2):152–5
Megestrol acetate and hyperpnea [letter] Fessel WJ. **Ann Intern Med** 1989 Jun 15;110(12):1034–5
Megestrol acetate and cachexia associated with human immunodeficiency virus (HIV) infection [letter] Furth PA. **Ann Intern Med** 1989 Apr 15;110(8):667–8
Megestrol acetate for treatment of cachexia associated with human immunodeficiency virus (HIV) infection. von Roenn JH, et al. **Ann Intern Med** 1988 Nov 15; 109(10):840–1
Effect of megestrol acetate or melengestrol acetate on preneoplastic and neoplastic mammary growth in mice. Nagasawa H, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1399–403
Comparison of four continuously administered progestogen plus oestradiol combinations for climacteric complaints. Sporrong T, et al. **Br J Obstet Gynaecol** 1988 Oct; 95(10):1042–8
Jaundice and intrahepatic cholestasis following high-dose megestrol acetate for breast cancer. Foitl DR, et al. **Cancer** 1989 Feb 1;63(3):438–9
Megestrol acetate: clinical experience. Schacter L, et al. **Cancer Treat Rev** 1989 Mar;16(1):49–63 (75 ref.)
Factors predicting the response of patients with advanced breast cancer to endocrine (Megace) therapy. Robertson JF, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):469–75
Use of megestrol acetate in cats. Romatowski J. **J Am Vet Med Assoc** 1989 Mar 1;194(5):700–2 (25 ref.)
Regulation of rat uterine steroid receptors by nomegestrol acetate, a new 19-nor-progesterone derivative. Botella J, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):758–61
Comparison of Megace, Stilphostrol, Megace plus DES, or streptozotocin in metastatic prostatic cancer in patients with hormonal failure and prior radiotherapy. McLeod DG, et al. **Urology** 1988 Nov;32(5):431–6
Morphologic changes in the mammary gland of megestrol acetate-treated and untreated cats: a retrospective study. Hayden DW, et al. **Vet Pathol** 1989 Mar;26(2):104–13
[Lutenyl and menstrual disorders. A hospital study] Cohen A, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):741–3 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Management of patients with advanced breast cancer. Mackintosh JF. **Aust Fam Physician** 1989 Jun;18(6):687–8, 691
Glassy cell carcinoma of the endometrium responsive to megestrol acetate. Dawson EC, et al. **Gynecol Oncol** 1989 Apr;33(1):121–4
Hormonal cytoreduction in locally advanced carcinoma of the prostate treated with definitive radiotherapy: preliminary results of RTOG 83-07. Pilepich MV, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):813–7

MEGLUMINE see under **SORBITOL**

MEGLUMINE DIATRIZOATE see **DIATRIZOATE MEGLUMINE**

MEGLUMINE IOTHALAMATE see **IOTHALAMATE MEGLUMINE**

MEIBOMIAN GLANDS see under **EYELIDS**

MEIGE SYNDROME see under **BASAL GANGLIA DISEASES**

MEIGS' SYNDROME

BLOOD

Meigs syndrome and elevated CA 125. Jones OW 3d, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):520–1

COMPLICATIONS

Secondary massive ovarian edema with Meig's syndrome. Lacson AG, et al. **Am J Clin Pathol** 1989 May; 91(5):597–603
Meige's syndrome and bilateral pallidal calcification [letter] Herraiz J, et al. **J Neurol** 1988 Jul;235(6):384
[Bilateral pleural effusion] Krut'ko VS. **Probl Tuberk** 1989; (5):72–4 **(Rus)**

ETIOLOGY

[A case of Meigs' syndrome due to ovarian thecoma with increased CA125] Kawamura T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1302–6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[A rare case of a variation of the Meigs-Cass syndrome] Milchev N, et al. **Akush Ginekol (Sofiia)** 1988;27(6):86–8 **(Bul)**

[Demons-Meigs syndrome (a case report)] Malik SS, et al. **Vopr Onkol** 1989;35(5):615–6 **(Rus)**

MEIOSIS

Segregation analysis of translocations by the study of human sperm chromosome complements. Martin RH. **Am J Hum Genet** 1989 Apr;44(4):461–3
Direct segregation analysis of reciprocal translocations: a study of 283 sperm karyotypes from four carriers. Pellestor F, et al. **Am J Hum Genet** 1989 Apr;44(4):464–73
Meiotic origin of autosomal trisomies [letter] Côté GB. **Am J Med Genet** 1988 Aug;30(4):997–8
Regulation of the meiotic cycle in oocytes of domestic mammals. Moor RM. **Ann N Y Acad Sci** 1988;541:248–58
Polyamine levels during Xenopus laevis oogenesis: a role in oocyte competence to meiotic resumption. Osborne HB, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):520–6
Regulation of meiosis: from DNA binding protein to protein kinase. McLeod M. **Bioessays** 1989 Jul;11(1):9–14 (30 ref.)
Chromatin organization at meiosis. Møens PB, et al. **Bioessays** 1988 Nov;9(5):151–3 (9 ref.)
Post-translational modifications of tubulin and the dynamics of microtubules in mouse oocytes and zygotes. de Pennart H, et al. **Biol Cell** 1988;64(3):375–8
Timing of nuclear progression and protein synthesis necessary for meiotic maturation of bovine oocytes. Sirard MA, et al. **Biol Reprod** 1989 Jun;40(6):1257–63
Spatial reorganization of actin, tubulin and histone mRNAs during meiotic maturation and fertilization in Xenopus oocytes. Perry BA, et al. **Cell Differ Dev** 1988 Nov; 25(2):99–108
Histone electrophoretic pattern in the characterization of synaptonemal complexes. Vilardell J, et al. **Cell Mol Biol** 1989;35(2):207–14
Differential elongation of autosomal pachytene bivalents related to their DNA content in human spermatocytes. Luciani JM, et al. **Chromosoma** 1988;97(1):19–25
Electron microscopic autoradiographic analysis: evidence of RNA transcription along pachytene chromosomes of rad-4, him-4 and wild-type Caenorhabditis elegans. Lerner K, et al. **Cytobios** 1988;55(220):51–61
Hypervariable minisatellite regions are sites for crossing-over at meiosis in man. Chandley AC, et al. **Cytogenet Cell Genet** 1988;48(3):152–5
Synaptonemal complexes in a subfertile man with a pericentric inversion in chromosome 21. Heterosynapsis without previous homosynapsis. Gabriel-Robez O, et al. **Cytogenet Cell Genet** 1988;48(2):84–7
Immunocytogenetics. III. Analysis of trivalent and multivalent configurations in mouse pachytene spermatocytes by human autoantibodies to synaptonemal complexes and kinetochores. Haaf T, et al. **Cytogenet Cell Genet** 1989;50(1):14–22
Immunocytogenetics. II. Human autoantibodies to synaptonemal complexes. Haaf T, et al. **Cytogenet Cell Genet** 1989;50(1):6–13
Synaptonemal complex analysis of B-chromosome behavior in meiotic prophase I in the East-Asiatic mouse Apodemus peninsulae (Muridae, Rodentia). Kolomiets OL, et al. **Cytogenet Cell Genet** 1988;48(3):183–7
Meiotic analysis of two human reciprocal X-autosome translocations. Quack B, et al. **Cytogenet Cell Genet** 1988; 48(1):43–7
Pachytene pairing in relation to sperm and oocyte numbers in a male-fertile reciprocal translocation in the mouse. Setterfield LA, et al. **Cytogenet Cell Genet** 1988;49(4):293–9
Pairing of ZW gonosomes and the localized recombination nodule in two Z-autosome translocations in Gallus domesticus. Solari AJ, et al. **Cytogenet Cell Genet** 1988; 48(3):130–6
Synaptic adjustment in Peromyscus beatae (Rodentia: Cricetidae) heterozygous for interstitial heterochromatin. Sudman PD, et al. **Cytogenet Cell Genet** 1989;50(1):1–5
Intrafollicular factors regulating human ovarian follicular development and oocyte meiosis. Westergaard LG. **Dan Med Bull** 1988 Jun;35(3):270–81 (118 ref.)
Meiotic breakdown of nuclear envelope in oocytes of Spisula solidissima involves phosphorylation and release of nuclear lamin. Dessev G, et al. **Dev Biol** 1988 Dec;130(2):543–50
Quantitative studies of changes in cortical granule number and distribution in the mouse oocyte during meiotic maturation. Ducibella T, et al. **Dev Biol** 1988 Nov; 130(1):184–97
A requirement for protein phosphorylation in regulating the meiotic and mitotic cell cycles in echinoderms. Néant I, et al. **Dev Biol** 1989 Apr;132(2):304–14
In vitro and in vivo studies reveal that hamster oocyte meiotic arrest is maintained only transiently by follicular fluid, but persistently by membrana/cumulus granulosa cell contact. Racowsky C, et al. **Dev Biol** 1989 Aug; 134(2):297–306
Free calcium pulses following fertilization in the ascidian egg. Speksnijder JE, et al. **Dev Biol** 1989 Sep;135(1):182–90
Nuclear envelope disassembly and nuclear lamina depolymerization during germinal vesicle breakdown in starfish. Stricker SA, et al. **Dev Biol** 1989 Sep;135(1):87–98
Suppression of chromosome condensation during meiotic maturation induces parthenogenetic development of mouse oocytes. Clarke HJ, et al. **Development** 1988 Sep; 104(1):97–103
Down-regulation of membrana granulosa cell gap junctions is correlated with irreversible commitment to resume meiosis in golden Syrian hamster oocytes. Racowsky C, et al. **Eur J Cell Biol** 1989 Aug;49(2):244–51
Testis-specific histone H1t is truly a testis-specific variant and not a meiotic-specific variant. Markose ER, et al. **Exp Cell Res** 1989 May;182(1):279–83
Meiotic resumption and gap junction modulation in the cultured rat cumulus-oocyte complex. Wert SE, et al. **Gamete Res** 1989 Feb;22(2):143–62
Effects of follicle-stimulating hormone and ovarian steroids during in vitro meiotic maturation on fertilization of rat oocytes. Zhang X, et al. **Gamete Res** 1989 Jul;23(3):267–77
Nonhomologous synapsis of the XY during early pachynema in In(X)1H male mice. Ashley T. **Genetica** 1987 Jun 15; 72(2):81–4
Influence of age on chiasma number in male Locusta migratoria. Diez M, et al. **Genetica** 1987 Sep 30;74(1):7–11
New data on the synaptic process of Mesocricetus auratus: connecting fibers, telomere association and heterosynapsis. Guitart M, et al. **Genetica** 1987 Oct 15;74(2):105–12

Relationship between frequencies of univalents and meiotic segregation in different mouse strains and their hybrids. Léotard D, et al. **Genetica** 1987 Dec 15;75(3):189–98

Cytogenetic studies on Cervus elaphus. II. Synaptonemal complexes and NOR activity during spermatogenesis. Lunghi R, et al. **Genetica** 1987 Oct 15;74(2):119–24

Sequential study of the synaptonemal complex in rat (Rattus norvegicus) oocytes by light and electron microscopy. Pujol R, et al. **Genetica** 1988 Nov 30;77(3):179–87

Synaptic behaviour and recombination nodules in the human XY pair. Solari AJ. **Genetica** 1988 Sep 30;77(2):149–58

Meiosis in Mesostoma ehrenbergii ehrenbergii. IV. Recombination nodules in spermatocytes and a test of the correspondence of late recombination nodules and chiasmata. Croft JA, et al. **Genetics** 1989 Feb;121(2):255–62

Yeast mer1 mutants display reduced levels of meiotic recombination. Engebrecht J, et al. **Genetics** 1989 Feb; 121(2):237–47

Presence of abnormal synaptonemal complexes in heterothallic species of Neurospora. Bojko M. **Genome** 1988 Oct;30(5):697–709

Two kinds of "recombination nodules" in Neurospora crassa. Bojko M. **Genome** 1989 Apr;32(2):309–17

Visualization of kinetochores in mammalian meiotic preparations and observations of argentophilic differences between mitotic and meiotic kinetochores. Sudman PD, et al. **Genome** 1989 Jun;32(3):380–2

Differential associative behaviour of mitotic and meiotic acrocentric chromosomes. Dumont MC, et al. **Hum Genet** 1989 Apr;82(1):35–9

Nucleolar structures in chromosome and SC preparations from human oocytes at first meiotic prophase. García M, et al. **Hum Genet** 1989 May;82(2):147–53

Meiotic and cytoplasmic maturation of oocytes collected in stimulated cycles is asynchronous. Sundström P, et al. **Hum Reprod** 1988 Jul;3(5):613–9

Presynapsis and synapsis of DNA promoted by the STP alpha and single-stranded DNA-binding proteins from Saccharomyces cerevisiae. Hamatake RK, et al. **J Biol Chem** 1989 Aug 5;264(22):13336–42

The role of cyclin B in meiosis I. Westendorf JM, et al. **J Cell Biol** 1989 Apr;108(4):1431–44

Differential cytolocalization of prosomes in axolotl during oogenesis and meiotic maturation. Gautier J, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):543–53

DNase I nick translation in situ on meiotic chromosomes of the mouse, Mus musculus. Raman R, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):629–34

Remodeling of mouse thymocyte nuclei depends on the time of their transfer into activated, homologous oocytes. Szöllösi D, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):603–13

Influence of postovulatory aging on chromosome segregation during the second meiotic division in mouse oocytes: a parthenogenetic analysis. O'Neill GT, et al. **J Exp Zool** 1988 Oct;248(1):125–31

Chloride current modulation during meiosis in Xenopus oocytes. Vilain JP, et al. **J Exp Zool** 1989 Apr;250(1):100–8

A method for producing synaptonemal complex complements in lily and mouse. Hasenkampf CA. **J Hered** 1989 May–Jun; 80(3):197–202

Meiotic pairing constraints and the activity of sex chromosomes. Jablonka E, et al. **J Theor Biol** 1988 Jul 8;133(1):23–36

Recombination nodules, synaptonemal complexes and heterochromatin in the hemipteran Triatoma infestans. Solari AJ, et al. **Microsc Electron Biol Celular** 1987 Dec; 11(2):179–95

Two DNA repair and recombination genes in Saccharomyces cerevisiae, RAD52 and RAD54, are induced during meiosis. Cole GM, et al. **Mol Cell Biol** 1989 Jul;9(7):3101–4

Related proteins are phosphorylated at tyrosine in response to mitogenic stimuli and at meiosis. Cooper JA. **Mol Cell Biol** 1989 Jul;9(7):3143–7

A transcriptional cascade governs entry into meiosis in Saccharomyces cerevisiae. Smith HE, et al. **Mol Cell Biol** 1989 May;9(5):2142–52

Meiosis: initiation of recombination [news] Fincham JR, et al. **Nature** 1989 Mar 2;338(6210):14–5

Palindromic sequences in heteroduplex DNA inhibit mismatch repair in yeast. Nag DK, et al. **Nature** 1989 Jul 27;340(6231):318–20

An initiation site for meiotic gene conversion in the yeast Saccharomyces cerevisiae. Nicolas A, et al. **Nature** 1989 Mar 2;338(6210):35–9

Universal and essential role of MPF/cdc2+ [letter] Niwa O, et al. **Nature** 1988 Dec 1;336(6198):430

Double-strand breaks at an initiation site for meiotic gene conversion. Sun H, et al. **Nature** 1989 Mar 2; 338(6210):87–90

Genes which regulate the entry of yeast cells into meiosis. Whiteway M. **Oxf Surv Eukaryot Genes** 1987;4:143–67 (78 ref.)

Enhanced meiotic recombination on the smallest chromosome of Saccharomyces cerevisiae. Kaback DB, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3694–8

Meiotic inhibition: molecular control of meiosis. Proceedings from a symposium. Bethesda, Maryland, January 1987. Dedicated to Cornelia Post Channing. **Prog Clin Biol Res** 1988;267:1–401

Gene expression during growth and meiotic maturation of mouse oocytes. Bachvarova R, et al. **Prog Clin Biol Res** 1988;267:67–85 (46 ref.)

Spatial relationship of follicular cells in the control of meiosis. Dekel N. **Prog Clin Biol Res** 1988;267:87–101 (50 ref.)

Mullerian inhibiting substance in the ovary. Donahoe PK, et al. **Prog Clin Biol Res** 1988;267:153–75 (62 ref.)

The role of purines in the maintenance of meiotic arrest in mammalian oocytes. Eppig JJ, et al. **Prog Clin Biol Res** 1988;267:103–13 (25 ref.)

Cytoplasmic control of oocyte maturation and species differences in the development of maturational competence. First NL, et al. **Prog Clin Biol Res** 1988;267:1–46 (193 ref.)

New concepts for old problems in meiosis. Haseltine FP. **Prog Clin Biol Res** 1989;294:3–19 (21 ref.)

Post-meiotic gene expression during spermatogenesis. Hecht NB. **Prog Clin Biol Res** 1988;267:291–313 (47 ref.)

Oocyte maturation in amphibians and the regulation of meiosis and mitosis. Maller J. **Prog Clin Biol Res** 1988; 267:259–74 (44 ref.)

Two switches govern entry into meiosis in yeast. Mitchell AP. **Prog Clin Biol Res** 1988;267:47–66 (58 ref.)

Isolation and characterization of yeast mutants defective in meiotic chromosome segregation. Roeder GS, et al. **Prog Clin Biol Res** 1989;311:303–26 (32 ref.)

Regulatory functions of protein phosphorylation in meiotic maturation of mouse oocytes in vitro. Schultz RM. **Prog Clin Biol Res** 1988;267:137–51 (19 ref.)

Meiotic segregation of normal and deletion chromosomes in Saccharomyces cerevisiae. Surosky RT, et al. **Prog Clin Biol Res** 1989;311:327–48

Morphodynamics of nuclear and cytoplasmic reorganization during the resumption of arrested meiosis in the mouse oocyte. Van Blerkom J. **Prog Clin Biol Res** 1989;294:33–51 (26 ref.)

Specific expression of nuclear proto-oncogenes before entry into meiotic prophase of spermatogenesis. Wolfes H, et al. **Science** 1989 Aug 18;245(4919):740–3

In situ hybridization of biotinylated DNA probes to cotton meiotic chromosomes. Bergey DR, et al. **Stain Technol** 1989 Jan;64(1):25–37

The effect of bovine serum albumin and cytohelicase on surface-spread synaptonemal complexes of rye (Secale cereale). de Jong JH, et al. **Stain Technol** 1988 Jul; 63(4):213–20

Meiosis in man. Chandley AC. **Trends Genet** 1988 Mar; 4(3):79–84 (33 ref.)

Partial restoration of meiosis in an apomictic strain of Saccharomyces cerevisiae: a model system for investigation of nucleomitochondrial interactions during sporulation. Marmiroli N, et al. **Yeast** 1985 Sep;1(1):39–47

[The value of centrifugation for the study of cytoplasmic changes related to the maturation and fertilization of mammalian oocytes] Mulnard J, et al. **Bull Mem Acad R Med Belg** 1987;142(11–12):507–16 (Eng. Abstr.) **(Fre)**

[Quantitative detection of spermatogenesis cells and qualitative assessment of meiosis stages in the ejaculate of normo- and oligozoospermia] Weise W, et al. **Zentralbl Gynakol** 1988;110(14):877–83 (Eng. Abstr.) **(Ger)**

[A molecular approach to the meiosis in female Drosophila] Yamamoto AH. **Tanpakushitsu Kakusan Koso** 1989 Jan; 34(1):12–9 **(Jpn)**

[Effect of heterozygosity for insertions of homogeneously stained regions in chromosome 1 of the house mouse on synapsis in meiotic prophase] Borodin PM, et al. **Genetika** 1989 Feb;25(2):214–9 (Eng. Abstr.) **(Rus)**

[Identification of aberrant chromosomes based on the morphometry of the synaptonemal complexes in a sterile male mouse] Kalikinskaia EI, et al. **Genetika** 1988 Jul; 24(7):1215–25 (Eng. Abstr.) **(Rus)**

[Association between synaptonemal complexes of sex and autosomal bivalents in male tx/ty mice as a possible cause of their sterility] Safronova LD, et al. **Genetika** 1988 Jul; 24(7):1187–98 (Eng. Abstr.) **(Rus)**

[Various properties of DNA from isolated fractions of the mouse synaptonemal complexes] Karpova OI, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):571–9 (Eng. Abstr.) **(Rus)**

[The production of spread synaptonemal complexes of meiocytes from animals and plants by a drying method] Burd SB, et al. **Tsitol Genet** 1988 Nov–Dec;22(6):8–12 (Eng. Abstr.) **(Rus)**

[Possibilities of cytogenetic studies of meiosis in male sterility] Kurilo LF. **Tsitol Genet** 1989 Mar–Apr;23(2):63–70 (59 ref.) (Eng. Abstr.) **(Rus)**

[Elimination of the genome of one of the parents prior to premeiotic DNA synthesis in a hybridogenic species of Rana esculenta] Vinogradov AE, et al. **Tsitologiia** 1988 Jun;30(6):691–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of microtubule reactive drugs on steroid- and centrifugation-induced germinal vesicle migration during goldfish oocyte meiosis. Lessman CA, et al. **Biol Cell** 1988; 64(3):293–9

Homologous pairing and the formation of nascent synaptic intermediates between regions of duplex DNA by RecA protein. Conley EC, et al. **Cell** 1989 Mar 24;56(6):987–95

Synaptonemal complex damage as a measure of genotoxicity at meiosis. Allen JW, et al. **Cell Biol Toxicol** 1988 Dec; 4(4):487–94

Intracellular signals trigger ultrastructural events characteristic of meiotic maturation in oocytes of Xenopus laevis. Bement WM, et al. **Cell Tissue Res** 1989 Jan; 255(1):183–91

Effects of dimethyl sulphoxide on early gametogenesis in Caenorhabditis elegans: ultrastructural aberrations and loss of synaptonemal complexes from pachytene nuclei. Goldstein P, et al. **Cytobios** 1988;56(224):45–57

6-Dimethylaminopurine (6-DMAP), a reversible inhibitor of the transition to metaphase during the first meiotic cell division of the mouse oocyte. Rime H, et al. **Dev Biol** 1989 May;133(1):169–79

The effects of acrylamide on mouse germ-line and somatic cell chromosomes. Backer LC, et al. **Environ Mol Mutagen** 1989;13(3):218–26

The interaction of lithium with forskolin-inhibited meiotic maturation of denuded mouse oocytes. Gavin AC, et al. **Exp Cell Res** 1988 Nov;179(1):298–302

Hypoxanthine and cyclic adenosine 5'-monophosphate maintain meiotic arrest of rhesus monkey oocytes in vitro. Warikoo PK, et al. **Fertil Steril** 1989 May;51(5):886–9

Distribution of microtubules during the first meiotic cell division in the mouse oocyte: effect of taxol. Rime H, et al. **Gamete Res** 1987 May;17(1):1–13

Adenosine potentiates forskolin-induced delay of meiotic resumption by mouse denuded oocytes: evidence for an oocyte surface site of adenosine action. Salustri A, et al. **Gamete Res** 1988 Oct;21(2):157–68

Sexual reproduction as a response to H2O2 damage in Schizosaccharomyces pombe. Bernstein C, et al. **J Bacteriol** 1989 Apr;171(4):1893–7

Inhibin as an oocyte meiotic inhibitor. O WS, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):107–11

Synaptonemal complex damage induced by clastogenic and anti-mitotic chemicals: implications for non-disjunction and aneuploidy. Allen JW, et al. **Mutat Res** 1988 Oct; 201(2):313–24

Meiotic arrest and aneuploidy induced by vinblastine in mouse oocytes. Russo A, et al. **Mutat Res** 1988 Nov; 202(1):215–21

[Studies on toad oocytes maturation induced by microinjection of progesterone-loaded human red blood cell ghosts] Gu QB, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):337–44 (Eng. Abstr.) **(Chi)**

MEISSNER'S PLEXUS see **SUBMUCOUS PLEXUS**

MELANCHOLIA see **DEPRESSIVE DISORDER**

MELANCHOLIA, INVOLUTIONAL see **DEPRESSION, INVOLUTIONAL**

MELANINS

Avoiding the problem of melanin pigment [letter] Bonetti F, et al. **Am J Clin Pathol** 1988 Oct;90(4):521–2

Analysis of the structure of synthetic and natural melanins by solid-phase NMR. Duff GA, et al. **Biochemistry** 1988 Sep 6;27(18):7112–6

Pigmented nasopalatine duct cyst. Report of 2 cases. el-Bardaie A, et al. **Int J Oral Maxillofac Surg** 1989 Jun; 18(3):138–9

NMR studies of L-dopa melanin-manganese(II) complex in water solution. Aime S, et al. **J Inorg Biochem** 1989 May; 36(1):1–9

Visible action spectrum for melanin-specific selective photothermolysis. Margolis RJ, et al. **Lasers Surg Med** 1989;9(4):389–97

Progress in the chemistry of melanins and related metabolites. Prota G. **Med Res Rev** 1988 Oct–Dec;8(4):525–56 (129 ref.)

Choroidal melanoma with pigment dispersion in vitreous and melanomalytic glaucoma. el Baba F, et al. **Ophthalmology** 1988 Mar;95(3):370–7 (26 ref.)

13C solid-state cross polarization/magic-angle-spinning nuclear magnetic resonance spectra of natural and synthetic melanins. Aime S, et al. **Pigment Cell Res** 1988;1(5):355–7

Collisional spectroscopy in structural characterization of melanins: I. A first study on [C8H7ON](+.) ions originating from pyrolysis of biosynthetic and synthetic tryptophan melanins. Allegri G, et al. **Pigment Cell Res** 1987;1(2):87–93

Ability of melanins to protect against the radiolysis of thymine and thymidine. Hill HZ, et al. **Pigment Cell Res** 1987;1(2):81–6

Ultraweak photon emission in model reactions of the in vitro formation of eumelanins and pheomelanins. Sławińska D, et al. **Pigment Cell Res** 1987;1(3):171–5

Further evidence that the pigment in the Dubin-Johnson syndrome is not melanin. Swartz HM, et al. **Pigment Cell Res** 1987;1(2):69–75

The incorporation of boronated substances into melanin in vitro—an experimental model for melanotic melanoma. Roberto A, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):165–7

ANALYSIS

Melanotic medulloblastoma. A case report with immunohistochemical and ultrastructural examination. Dolman CL. **Acta Neuropathol (Berl)** 1988;76(5):528–31

Neuromelanin in the substantia nigra of adult horses. Cozzi B, et al. **Anat Anz** 1988;166(1–5):53–61

Nonmelanized macromelanosomes in a cellular blue nevus. Light and electron microscopic observations. Tschen JA,

et al. **Arch Dermatol** 1989 Jun;125(6):809–12

Melanin chemistry and melanin precursors in melanoma. Ito S, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):261S–265S (24 ref.)

Melanin–concentrating hormone (MCH) immunoreactivity in the brain and pituitary of the dogfish Scyliorhinus canicula. Colocalization with alpha–melanocyte–stimulating hormone (alpha–MSH) in hypothalamic neurons. Vallarino M, et al. **Peptides** 1989 Mar–Apr;10(2):375–82

Analysis and quantification of pheomelanins by radioimmunoassay. Ahene AB, et al. **Pigment Cell Res** 1988; 1(5):326–31

Pigment types of various color genotypes of horses. Sponenberg DP, et al. **Pigment Cell Res** 1988;1(6):410–3

Pigment types in sheep, goats, and llamas. Sponenberg DP, et al. **Pigment Cell Res** 1988;1(6):414–8

Are melanin deposits in the stria vascularis related to cause hearing loss? Crovetto MA, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):453–5 (18 ref.)

One hour bleach for melanin. Frangioni G, et al. **Stain Technol** 1988 Sep;63(5):325–6

[Melanotic adenocarcinoma of the uterus. Neuroendocrine tumor of the uterus] Bertrand G. **Ann Pathol** 1988; 8(4–5):295–304 (Eng. Abstr.) **(Fre)**

[Quantitative approach of melanin in human cultured melanocytes] Boue–Grabot M, et al. **C R Soc Biol (Paris)** 1988;182(6):584–8 (Eng. Abstr.) **(Fre)**

ANTAGONISTS & INHIBITORS

Melanin concentrating hormone analogues: contraction of the cyclic structure. II. Antagonist activity. Lebl M, et al. **Life Sci** 1989;44(7):451–7

Induction of melanogenesis suppression: cellular pharmacology and mode of differential action. Mishima Y, et al. **Pigment Cell Res** 1988;1(6):367–74 (10 ref.)

BIOSYNTHESIS

Melanin–producing medullary thyroid carcinoma with glandular differentiation. Kimura N, et al. **Acta Cytol** 1989 Jan–Feb;33(1):61–6

The role of sulfhydryl compounds in mammalian melanogenesis: the effect of cysteine and glutathione upon tyrosinase and the intermediates of the pathway. Jara JR, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):296–303

Catecholamine melanins. Structural changes induced by copper ions. Stępień KB, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):49–54

Melanin synthesis and the action of L–dopa and 3,4–dihydroxybenzylamine in human melanoma cells. Kable EP, et al. **Cancer Chemother Pharmacol** 1989; 23(1):1–7

Expression of melanocyte stimulating hormone receptors correlates with mammalian pigmentation, and can be modulated by interferons. Kameyama K, et al. **J Cell Physiol** 1988 Oct;137(1):35–44

Positive regulation of melanin pigmentation by two key substrates of the melanogenic pathway, L–tyrosine and L–dopa. Slominski A, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):287–96

Melanogenesis in Cryptococcus neoformans. Polacheck I, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1037–41

UVB–induced melanogenesis may be mediated through the MSH–receptor system. Bolognia J, et al. **J Invest Dermatol** 1989 May;92(5):651–6

Regulation of tyrosinase synthesis and its processing in the hair follicular melanocytes of the mouse during eumelanogenesis and phaeomelanogenesis. Burchill SA, et al. **J Invest Dermatol** 1989 Aug;93(2):236–40

Sunlight, melanogenesis and radicals in the skin. Chedekel MR, et al. **Lipids** 1988 Jun;23(6):587–91 (56 ref.)

An immunological study of the secretory activity of neurons producing melanin–concentrating hormone in a teleost. Bird DJ, et al. **Neuroscience** 1989;28(1):245–51

Melanogenesis in the pigment cells of Rana esculenta L. liver: evidence for tyrosinase–like activity in the melanosome protein fraction. Cicero R, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):100–8

Effects of a ventrally localized inhibitor of melanization on cultured S91 and B16 mouse melanoma. Kreutzfeld KL, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):123–5

L–tyrosine, L–dopa, and tyrosinase as positive regulators of the subcellular apparatus of melanogenesis in Bomirski Ab amelanotic melanoma cells. Slominski A, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):109–16

Occurrence of melanin granules and melanosynthesis in the kidney of Sparus auratus. Zuasti A, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):93–9

BLOOD

The measurement of melanin–concentrating hormone in trout blood. Kishida M, et al. **Gen Comp Endocrinol** 1989 May; 74(2):221–9

CHEMICAL SYNTHESIS

Melanin concentrating hormone (MCH): synthesis and bioactivity studies of MCH fragment analogues. Matsunaga TO, et al. **Peptides** 1989 Mar–Apr;10(2):349–54

Optimization of conditions for preparing synthetic pheomelanin. Ito S. **Pigment Cell Res** 1989 Jan–Feb; 2(1):53–6

GENETICS

Structures of two kinds of mRNA encoding the chum salmon melanin–concentrating hormone. Ono M, et al. **Gene** 1988 Nov 30;71(2):433–8

cDNA sequence of salmon melanin–concentrating hormone exhibits similarities with 7SL RNA. Nahon JL, et al. **Nucleic Acids Res** 1989 May 11;17(9):3598

Two precursors of melanin–concentrating hormone: DNA sequence analysis and in situ immunochemical localization. Minth CD, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4292–6

Melanocyte stimulating hormone and melanin concentration hormone may be structurally and evolutionarily related. Castrucci AM, et al. **Regul Pept** 1989 Jan;24(1):27–35

ISOLATION & PURIFICATION

Characterization of melanin–concentrating hormone from rat hypothalamus. Vaughan JM, et al. **Endocrinology** 1989 Sep; 125(3):1660–5

METABOLISM

Melanin–related metabolites in urine of B16 melanoma–bearing mice. Wakamatsu K, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):385–9

Malignant melanotic neuroectodermal tumor arising from the pineal body. Ogata A, et al. **Acta Neuropathol (Berl)** 1989; 77(6):654–8

The pigmented subpeduncular nucleus: a neuromelanin–containing nucleus in the human pontine tegmentum. Morphology and changes in Alzheimer's disease. Ohm TG, et al. **Acta Neuropathol (Berl)** 1988; 77(1):26–32

Comparative anatomy of melanin pigment in the stria vascularis. Evidence for a distinction between melanocytes and intermediate cells in the cat. Conlee JW, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):48–58

Radicals in melanin biochemistry. Riley PA. **Ann N Y Acad Sci** 1988;551:111–9; discussion 119–20

A quantitative investigation of the substantia nigra in Huntington's disease. Oyanagi K, et al. **Ann Neurol** 1989 Jul;26(1):13–9

The formation of glyoxylate from glycine by melanin. Baich A, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1161–4

Function of dopachrome oxidoreductase and metal ions in dopachrome conversion in the eumelanin pathway. Leonard LJ, et al. **Biochemistry** 1988 Aug 9;27(16):6156–9

Granular phenoloxidase involved in cuticular melanization in the tobacco hornworm: regulation of its synthesis in the epidermis by juvenile hormone. Hiruma K, et al. **Dev Biol** 1988 Nov;130(1):87–97

Binding of the beta–blockers timolol and H 216/44 to ocular melanin. Abrahamsson T, et al. **Exp Eye Res** 1988 Oct; 47(4):565–77

Binding of aflatoxin B1 to melanin. Larsson P, et al. **Food Chem Toxicol** 1988 Jul;26(7):579–86

Pharmacokinetics of Ro 03–8799 in mice bearing melanosarcoma: comparison with tumors without melanin. Laurent F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1101–3

Regulation of human melanocyte growth, dendricity, and melanization by keratinocyte derived factors. Gordon PR, et al. **J Invest Dermatol** 1989 Apr;92(4):565–72

Analysis of initial melanogenesis including tyrosinase transfer and melanosome differentiation through interrupted melanization by glutathione. Imokawa G. **J Invest Dermatol** 1989 Jul;93(1):100–7

Ca2+ regulates hormone secretion and proopiomelanocortin gene expression in melanotrope cells via the calmodulin and the protein kinase C pathways. Loeffler JP, et al. **J Neurochem** 1989 Apr;52(4):1279–83

Timolol binding to bovine ocular melanin in vitro. Aula P, et al. **J Ocul Pharmacol** 1988 Spring;4(1):29–36

Oxidation of 2–hydroxyestradiol and its incorporation into melanin by mushroom tyrosinase. Jacobsohn MK, et al. **J Steroid Biochem** 1988 Oct;31(4A):377–85

Aging changes in lipofuscin, lysosomes and melanin in the macular area of human retina and choroid. Hayasaka S. **Jpn J Ophthalmol** 1989;33(1):36–42

Serotoninergic activity stimulates melanin dispersion within dermal melanophores of newts. Miller LJ. **Life Sci** 1989; 44(5):355–9

Human hypothalamic neuronal system revealed with a salmon melanin–concentrating hormone (MCH) antiserum. Bresson JL, et al. **Neurosci Lett** 1989 Jul 17;102(1):39–43

Effects of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP) on ultrastructure of nigral neuromelanin in Macaca fascicularis. Levi AC, et al. **Neurosci Lett** 1989 Jan 30;96(3):271–6

Autoradiography of [14C]paraquat or [14C]diquat in frogs and mice: accumulation in neuromelanin. Lindquist NG, et al. **Neurosci Lett** 1988 Oct 31;93(1):1–6

Coexistence of acetylcholinesterase–, human growth hormone–releasing factor(1–37)–, alpha–melanotropin– and melanin–concentrating hormone–like immunoreactivities in neurons of the rat hypothalamus: a light and electron microscope study. Risold PY, et al. **Neurosci Lett** 1989 May 22;100(1–3):23–8

Affinity of drugs for dopa–auto–oxidation melanin and tyrosinase–catalyzed dopa–melanin in vitro. Hayasaka S, et al. **Ophthalmic Res** 1988;20(6):376–9

Massive pseudophakic pigment dispersion associated with an iris nevus. Kremer I, et al. **Ophthalmic Surg** 1989 Mar; 20(3):182–5

Phosphorylated mixed isomers of L–dopa increase melanin content in skins of Skh–2 pigmented hairless mice. Agin PP, et al. **Pigment Cell Res** 1987;1(3):137–42

Drug–induced and genetic hypermelanism: effects on pigment cell differentiation. Frost SK, et al. **Pigment Cell Res** 1989 May–Jun;2(3):182–90

Phenolic melanin precursors provide a rational approach to the design of antitumor agents for melanoma. Jimbow K, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):34–9

Differential radiosensitivity in cultured B–16 melanoma cells following interrupted melanogenesis induced by glucosamine. Mileo AM, et al. **Pigment Cell Res** 1989 May–Jun;2(3):167–70

Relationship between melanogenicity and malignancy in malignant melanoma cells. Kim HI, et al. **Yonsei Med J** 1988;29(4):357–66

[Synthesis of precursors of the pigment eumelanin. I. Isomeric indole acids] Bubnová E, et al. **Sb Lek** 1988 Sep; 90(8–9):227–33 (Eng. Abstr.) **(Cze)**

[Spinal melanotic schwannoma: report of a case] Iizuka H, et al. **No Shinkei Geka** 1988 Sep;16(10):1199–205 (29 ref.) (Eng. Abstr.) **(Jpn)**

[A spectrofluorometric method of recording oxidation products of eumelanin destruction] Korzhova LP, et al. **Vopr Med Khim** 1989 May–Jun;35(3):139–43 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The influence of melanins on the photoperoxidation of lipids. Ezzahir A. **J Photochem Photobiol [B]** 1989 Jun;3(3):341–9

Eumelanin causes DNA strand breaks and kills cells. Hill HZ, et al. **Pigment Cell Res** 1987;1(3):163–70

Ultrastructural changes produced in Ehrlich ascites carcinoma cells by ultraviolet–visible radiation in the presence of melanins. Lea PJ, et al. **Pigment Cell Res** 1988; 1(6):402–9

Ionic requirements for melanin concentrating hormone (MCH) actions on teleost Poecilia reticulata melanophores. Visconti MA, et al. **Pigment Cell Res** 1989 May–Jun; 2(3):213–7

[Inhibition of UV–induced accumulation of lipid peroxides by melanins and ommochromes] Pustynnikov MG, et al. **Biokhimiia** 1988 Jul;53(7):1117–20 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The lives of pigment cells. Nordlund JJ. **Clin Geriatr Med** 1989 Feb;5(1):91–108 (48 ref.)

Extra–cutaneous melanin. Breathnach AS. **Pigment Cell Res** 1988;1(4):234–7 (23 ref.)

Neuromelanin and its possible protective and destructive properties. Lindquist NG, et al. **Pigment Cell Res** 1987; 1(3):133–6 (63 ref.)

Physiology and pathophysiology of inner ear melanin. Meyer zum Gottesberge AM. **Pigment Cell Res** 1988;1(4):238–49 (58 ref.)

Biosynthesis and function of melanins in hepatic pigmentary system. Sichel G. **Pigment Cell Res** 1988;1(4):250–8

Selective cytotoxicity of hydroquinone for melanocyte–derived cells is mediated by tyrosinase activity but independent of melanin content. Smith CJ, et al. **Pigment Cell Res** 1988;1(6):386–9

[The influence of melanin on intraocular dynamics] Fukuda M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov; 92(11):1839–43 (Eng. Abstr.) **(Jpn)**

SECRETION

Melanin–producing medullary carcinoma of the thyroid gland. Eng HL, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):377–80

URINE

Melanin and other indole compounds do not cause false–positive cannabinoid assay results [letter] Ricci MJ, et al. **Clin Chem** 1989 Aug;35(8):1809

A case of dark urine, hyperpigmentation and hepatomegaly. McClements BM, et al. **Ir J Med Sci** 1988 May;157(5):157

MELANOCYTE–STIMULATING HORM RELEASE INHIBITING HORMONE see **MSH RELEASE INHIBITING HORMONE**

MELANOCYTE–STIMULATING HORMONES see **MSH**

MELANOCYTES

Common acquired melanocytic nevi, melanocytic dysplasia and malignant melanoma. A morphometric study. Santucci M, et al. **Appl Pathol** 1989;7(2):111–5

ANALYSIS

Nonmelanized macromelanosomes in a cellular blue nevus. Light and electron microscopic observations. Tschen JA, et al. **Arch Dermatol** 1989 Jun;125(6):809–12

RNA and DNA in melanosomes of hamster melanoma.

Vedralová E, et al. **Pigment Cell Res** 1987;1(2):76–80

CYTOLOGY

SV40–transfected human melanocyte sensitivity to growth inhibition by the phorbol ester 12–O–tetradecanoylphorbol–13–acetate. Melber K, et al. **Cancer Res** 1989 Jul 1;49(13):3650–5

Tumor progression in melanoma: the biology of epidermal melanocytes in vitro. Mancianti ML, et al. **Carcinog Compr Surv** 1989;11:369–86 (49 ref.)

Determination and regulation in the pigment cell lineage of the ascidian embryo. Nishida H, et al. **Dev Biol** 1989 Apr; 132(2):355–67

Gene controlling a differentiation step in the quail melanocyte. Yamamoto H, et al. **Dev Genet** 1987; 8(3):179–85

Developmental changes of the proliferative response of mouse epidermal melanocytes to skin wounding. Hirobe T. **Development** 1988 Mar;102(3):567–74

Mechanisms of differentiation in melanoma cells and melanocytes. Bennett DC. **Environ Health Perspect** 1989 Mar;80:49–59 (119 ref.)

Genetic factors controlling the proliferative activity of mouse epidermal melanocytes during the healing of skin wounds. Hirobe T. **Genetics** 1988 Oct;120(2):551–8

Human epithelial cells induce human melanocyte growth in vitro but only skin keratinocytes regulate its proper differentiation in the absence of dermis. De Luca M, et al. **J Cell Biol** 1988 Nov;107(5):1919–26

Basic fibroblast growth factor from human keratinocytes is a natural mitogen for melanocytes. Halaban R, et al. **J Cell Biol** 1988 Oct;107(4):1611–9

Serum–free culture of normal human melanocytes: growth kinetics and growth factor requirements. Pittelkow MR, et al. **J Cell Physiol** 1989 Sep;140(3):565–76

Directional cell movement during early development of the teleost Blennius pholis: II. Transformation of the cells of epithelial clusters into dendritic melanocytes, their dissociation from each other, and their migration to and invasion of the pectoral fin buds. Trinkaus JP. **J Exp Zool** 1988 Oct;248(1):55–72

Regulation of human melanocyte growth, dendricity, and melanization by keratinocyte derived factors. Gordon PR, et al. **J Invest Dermatol** 1989 Apr;92(4):565–72

Analysis of initial melanogenesis including tyrosinase transfer and melanosome differentiation through interrupted melanization by glutathione. Imokawa G. **J Invest Dermatol** 1989 Jul;93(1):100–7

Large–scale cultivation of human melanocytes using collagen–coated Sephadex beads (cytodex 3). Smit NP, et al. **J Invest Dermatol** 1989 Jan;92(1):18–21

Urinary excretion of 5–S–cysteinyldopa in relation to skin type, UVB–induced erythema, and melanocyte proliferation in human skin. Stierner U, et al. **J Invest Dermatol** 1988 Nov;91(5):506–10

UVB irradiation induces melanocyte increase in both exposed and shielded human skin. Stierner U, et al. **J Invest Dermatol** 1989 Apr;92(4):561–4

Observations on iris melanocytes implanted in the cornea. Ko MK, et al. **Korean J Ophthalmol** 1987 Jun;1(1):23–5

Hypothesis and empiricism [editorial] Bolande RP. **Pediatr Pathol** 1988;8(3):iii–iv

The melanocytic differentiation pathway in congenital melanocytic nevi: theoretical considerations. Cramer SF. **Pediatr Pathol** 1988;8(3):253–65

Phosphorylated mixed isomers of L–dopa increase melanin content in skins of Skh–2 pigmented hairless mice. Agin PP, et al. **Pigment Cell Res** 1987;1(3):137–42

Invasive characteristics of neural crest cells in vitro. Gehlsen KR, et al. **Pigment Cell Res** 1987;1(1):16–21

Calcium–dependent irreversible effect of ionophore A23187 on melanophores. Hadley ME. **Pigment Cell Res** 1987; 1(1):57–61

Normal uveal melanocytes in culture. Hu F, et al. **Pigment Cell Res** 1987;1(2):94–103

Gene transfer and expression studies in cultured avian neural crest cells differentiating into melanocytes. Vielkind JR, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):44–52

Deficient melanosome formation in some coat–color mutant mice revealed by a monoclonal antibody against melanosome. Yanai N, et al. **Pigment Cell Res** 1987; 1(2):111–7

Alpha–melanocyte–stimulating hormone structure–activity studies: comparative analysis of melanotropic and CNS bioactivities. Sawyer TK, et al. **Synapse** 1988;2(3):289–92

[Microinjections of antibodies against microtubule proteins: the effect on distribution and movement of melanosomes in melanophores] Leonova EV, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1469–72 (Rus)

[In vitro culture of melanocyte–bearing epidermis and its application in the treatment of vitiligo and the stable leukodermas] Falabella R, et al. **Med Cutan Ibero Lat Am** 1989;17(3):193–8 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effect of verapamil on cell cycle transit and c–myc gene expression in normal and malignant murine cells. Huber KR, et al. **Br J Cancer** 1989 May;59(5):714–8

Induction of tumorigenicity and lack of in vitro growth requirement for 12–O–tetradecanoylphorbol–13–acetate by transfection of murine melanocytes with v–Ha–ras. Wilson RE, et al. **Cancer Res** 1989 Feb 1;49(3):711–6

Regulatory factors that determine growth and phenotype of normal human melanocytes. Herlyn M, et al. **Exp Cell Res** 1988 Dec;179(2):322–31

Effect of alpha–melanocyte–stimulating hormone on tyrosinase activity in hair follicular and epidermal melanocytes of the mouse. Seechurn P, et al. **J Endocrinol** 1988 Dec;119(3):517–22

Human melanocytes as a target tissue for hormones: in vitro studies with 1 alpha–25, dihydroxyvitamin D3, alpha–melanocyte stimulating hormone, and beta–estradiol. Ranson M, et al. **J Invest Dermatol** 1988 Dec;91(6):593–8

Levodopa/dopamine analogs as inhibitors of DNA synthesis in human melanoma cells. Wick MM. **J Invest Dermatol** 1989 May;92(5 Suppl):329S–331S

Leukotrienes and thromboxane B2 stimulate normal human melanocytes in vitro: possible inducers of postinflammatory pigmentation. Tomita Y, et al. **Tohoku J Exp Med** 1988 Nov;156(3):303–4

ENZYMOLOGY

Cupric ions and DOPA oxidase activity in melanocytes. Iyengar B, et al. **Acta Morphol Hung** 1988;36(1–2):95–9

Regulation of tyrosinase synthesis and its processing in the hair follicular melanocytes of the mouse during eumelanogenesis and phaeomelanogenesis. Burchill SA, et al. **J Invest Dermatol** 1989 Aug;93(2):236–40

Melanogenesis in the pigment cells of Rana esculenta L. liver: evidence for tyrosinase–like activity in the melanosome protein fraction. Cicero R, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):100–8

Tyrosinases of murine melanocytes with mutations at the albino locus. Halaban R, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7241–5

IMMUNOLOGY

Beta 2 microglobulin expression in normal melanocytes, nevocellular nevi, and malignant melanomas. Takata M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):243S–247S

METABOLISM

Some indolic compounds as markers of the melanocyte activity. Hansson C. **Acta Derm Venereol Suppl (Stockh)** 1988;138:1–60

Comparative anatomy of melanin pigment in the stria vascularis. Evidence for a distinction between melanocytes and intermediate cells in the cat. Conlee JW, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):48–58

Modulation of fibronectin production in normal human melanocytes and malignant melanoma cells by interferon–gamma and tumor necrosis factor–alpha. Varani J, et al. **Am J Pathol** 1989 Apr;134(4):827–36

Efflux of cytotoxic species within lipo–melanosome membrane. Amicarelli F, et al. **Ann N Y Acad Sci** 1988; 551:141–3

c–AMP–induced c–fos expression in cells of melanocyte origin. Hart IR, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):408–13

Nerve growth factor receptors in chromatin of melanoma cells, proliferating melanocytes, and colorectal carcinoma cells in vitro. Rakowicz–Szulczyńska EM, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7200–6

Further assessment of a pharmacological effect of Tris buffer. Burton D. **Comp Biochem Physiol [C]** 1988;90(1):263–5

Mechanisms for hyperpigmentation in postinflammatory pigmentation, urticaria pigmentosa and sunburn. Tomita Y, et al. **Dermatologica** 1989;179 Suppl 1:49–53

Production and utilization of extracellular matrix components by human melanocytes. McClenic BK, et al. **Exp Cell Res** 1989 Feb;180(2):314–25

Melanotropin structure–activity studies on melanocytes of the teleost fish, Synbranchus marmoratus. Castrucci AM, et al. **Gen Comp Endocrinol** 1989 May;74(2):209–14

Diphenoloxidase of Mycobacterium leprae: discovery, applications and prospects. Prabhakaran K. **Indian J Lepr** 1988 Oct;60(4):616–22

Expression of melanocyte stimulating hormone receptors correlates with mammalian pigmentation, and can be modulated by interferons. Kameyama K, et al. **J Cell Physiol** 1988 Oct;137(1):35–44

HMB–45 recognizes stimulated melanocytes. Smoller BR, et al. **J Cutan Pathol** 1989 Apr;16(2):49–53

Biosynthesis and function of melanins in hepatic pigmentary system. Sichel G. **Pigment Cell Res** 1988;1(4):250–8

[Quantitative approach of melanin in human cultured melanocytes] Boue–Grabot M, et al. **C R Soc Biol (Paris)** 1988;182(6):584–8 (Eng. Abstr.) (Fre)

PATHOLOGY

Neural differentiation of melanocytes in vitiliginous skin. Iyengar B, et al. **Acta Anat (Basel)** 1988;133(1):62–5

Melanocytic proliferation in condylomata acuminata. A report of two cases and investigation by in situ hybridisation. Blessing K, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):238–41

Modulation of melanocytes during experimentally induced endolymphatic hydrops. Meyer zum Gottesberge AM. **Acta Histochem Suppl (Jena)** 1988;36:331–9

HMB–45 staining of dysplastic nevi. Support for a spectrum of progression toward melanoma. Smoller BR, et al. **Am J Surg Pathol** 1989 Aug;13(8):680–4

Growth defects of melanocytes in culture from vitiligo subjects are spontaneously corrected in vivo in repigmenting subjects and can be partially corrected by the addition of fibroblast–derived growth factors in vitro. Puri N, et al. **Arch Dermatol Res** 1989;281(3):178–84

Architectural features in melanocytic lesions with cellular atypia. Balkau D, et al. **Dermatologica** 1988;177(3):129–37

Nucleolar organizer regions in melanocytic dysplasia and melanoma. Fallowfield ME, et al. **Histopathology** 1988 Jul; 13(1):95–9

Pigmented dermatofibrosarcoma protuberans (Bednar tumour): melanocytic colonization or neuroectodermal differentiation? A clinicopathological and immunohistochemical study. Fletcher CD, et al. **Histopathology** 1988 Dec;13(6):631–43

Angiosarcoma with dermal melanocytosis. Akiyama M, et al. **J Cutan Pathol** 1989 Jun;16(3):149–53

Dysplastic melanocytic nevi: a reproducible histologic definition emphasizing cellular morphology. Rhodes AR, et al. **Mod Pathol** 1989 Jul;2(4):306–19

The presence of stage II melanosomes (premelanosomes) in neoplasms other than melanomas. Szpak CA, et al. **Mod Pathol** 1988 Jan;1(1):35–43

Melanocytic proliferations that simulate malignant melanoma histopathologically. Ackerman AB. **Monogr Pathol** 1988; (30):153–73 (12 ref.)

bFGF as an autocrine growth factor for human melanomas. Halaban R, et al. **Oncogene Res** 1988 Sep;3(2):177–86

Ocular pathology in the minimally depigmented subline of the vitiliginous Smyth chicken. Boissy RE, et al. **Pigment Cell Res** 1988;1(5):303–14

Melanocytic carcinogenesis in albino guinea pigs. Gomez S, et al. **Pigment Cell Res** 1988;1(6):390–6

[Case for diagnosis. Longitudinal melanonychia] Baran R. **Ann Dermatol Venereol** 1988;115(5):611–2 (Fre)

PHYSIOLOGY

Paracrine stimulation of melanocytes by keratinocytes through basic fibroblast growth factor. Halaban R, et al. **Ann N Y Acad Sci** 1988;548:180–90

Molecular basis of mouse Himalayan mutation. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):252–60

Growth of melanocytes in a skin equivalent model in vitro. Bertaux B, et al. **Br J Dermatol** 1988 Oct;119(4):503–12

The lives of pigment cells. Nordlund JJ. **Clin Geriatr Med** 1989 Feb;5(1):91–108 (48 ref.)

Genetic control of signal transduction in mouse melanocytes. Takeuchi T, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):239S–242S

Thyrotropin–releasing hormone stimulates porcine melanotrope cells in primary culture. Trouslard J, et al. **Neurosci Lett** 1989 Mar 27;98(2):234–9

Extra–cutaneous melanin. Breathnach AS. **Pigment Cell Res** 1988;1(4):234–7 (23 ref.)

Stimulatory effect of histamine on normal human melanocytes in vitro. Tomita Y, et al. **Tohoku J Exp Med** 1988 Jun;155(2):209–10

RADIATION EFFECTS

Membrane responses of B–16 melanoma cells to single exposure to ultraviolet light. Ogura R, et al. **Arch Dermatol Res** 1989;280(8):481–6

Effects of X–rays on the induction of somatic mutations and growth in the retinal pigmented epithelium during development of the mouse eye. Stephenson DA, et al. **Mutagenesis** 1986 Mar;1(2):135–41

Solar and UVC–induced mutation in human cells and inhibition by deoxynucleosides. Musk P, et al. **Mutat Res** 1989 Sep;227(1):25–30

UVB–induced melanocyte proliferation and 5–S–cysteinyldopa excretion in dysplastic nevus syndrome. Stierner U, et al. **Photodermatol** 1988 Oct;5(5):218–23

Photo–induced events in the human melanocytic system: photoaggression and photoprotection. Cesarini JP. **Pigment Cell Res** 1988;1(4):223–33 (43 ref.)

Ultraviolet radiation acts as an independent mitogen for normal human melanocytes in culture. Libow LF, et al. **Pigment Cell Res** 1988;1(6):397–401

TRANSPLANTATION

Grafting and transplantation of melanocytes for repigmenting vitiligo and other types of leukoderma. Falabella R. **Int J Dermatol** 1989 Jul–Aug;28(6):363–9 (38 ref.)

Transplantation of in vitro–cultured epidermis bearing melanocytes for repigmenting vitiligo. Falabella R, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):257–64

ULTRASTRUCTURE

Melanocytes in vestibular dark cell areas in human fetuses. Igarashi Y, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):9–18

Morphofunctional aspects of lipo–melanosome as a model for the organelle phenotype of normal and tumor pigment cells. Miranda M, et al. **Ann N Y Acad Sci** 1988;551:448–51

Reduced DNA repair in cultured melanocytes and nevus cells from a patient with xeroderma pigmentosum. Kraemer KH,

et al. **Arch Dermatol** 1989 Feb;125(2):263–8
Immunoelectron microscopic approaches [letter] Manara GC. **J Invest Dermatol** 1988 Oct;91(4):373–4
Nuclear size and shape parameters correlate with proliferative activity in cutaneous melanocytic tumors. Smolle J, et al. **J Invest Dermatol** 1989 Jul;93(1):178–82
Transmission and scanning electron microscopy and freeze-fracture replication of normal human melanocytes and human melanoma cells in tissue culture. Breathnach AS, et al. **Pigment Cell Res** 1988;1(5):315–25
Theophylline effects on normal uveal melanocytes in culture: an ultrastructural study. Hu F, et al. **Pigment Cell Res** 1987; 1(2):104–10
Electron microscopic evidence for stimulation of melanosomal maturation by lysosomotropic agents and monensin in cultured B16 mouse melanoma cells. Oikawa A, et al. **Pigment Cell Res** 1987;1(1):44–50
On the formation and degradation of melanosomes in smooth muscle cells: electron microscopic investigation on the m. sphincter pupillae of the rat. Stanka P, et al. **Pigment Cell Res** 1988;1(5):358–60
[Dysplastic melanocytic nevi: quantitative ultrastructural investigation comparing intraepidermal melanocytes of dysplastic melanocytic nevi, superficial spreading melanoma, nevocellular nevi, and normal skin] Seki Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1093–103 (Eng. Abstr.) **(Jpn)**

MELANOMA

Simultaneous bilateral primary choroidal melanoma. Eide N. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):216–20
Orbital metastasis from cutaneous malignant melanoma. Ruusuvaara P, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):325–8
On the terminology of cutaneous melanoma [letter] Bondi R, et al. **Am J Dermatopathol** 1989 Feb;11(1):93–4
Primary malignant melanoma of the lacrimal sac. Glaros D, et al. **Arch Ophthalmol** 1989 Aug;107(8):1244–5
Malignant melanoma: the Australian contribution. Davis NC. **Aust N Z J Surg** 1988 Aug;58(8):605–17 (64 ref.)
Transplantation of B16/C3 melanoma cells into the brains of rats and mice. Freed WJ, et al. **Brain Res** 1989 Apr 24;485(2):349–62
Immunodiagnostic and immunotherapeutic applications of anti human melanoma associated antigen monoclonal antibodies. Natali PG, et al. **Carcinog Compr Surv** 1989; 11:133–63 (92 ref.)
Malignant melanoma of the anorectum. Liang CL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):207–10
Cutaneous malignant melanoma in the older patient. Morris BT, et al. **Clin Geriatr Med** 1989 Feb;5(1):171–81 (25 ref.)
Malignant melanoma of the skin. **Drug Ther Bull** 1988 Sep 19;26(19):73–5 (16 ref.)
Vulvovaginal melanoma: report of seven cases and literature review. Brand E, et al. **Gynecol Oncol** 1989 Apr;33(1):54–60 (28 ref.)
Primary malignant melanoma of the vagina: report of four cases and review of the literature. Levitan Z, et al. **Gynecol Oncol** 1989 Apr;33(1):85–90 (53 ref.)
Malignant melanoma of the uterine cervix: case report and review of the literature. Mordel N, et al. **Gynecol Oncol** 1989 Mar;32(3):375–80 (38 ref.)
Nasal septal melanoma [clinical conference] Suen JY, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):432–5
Primary lung melanoma. Bertola G, et al. **Ital J Surg Sci** 1989;19(2):187–9
Facial malignant melanoma in a 3-year-old child. Tarnopolsky R, et al. **J Am Osteopath Assoc** 1988 Oct; 88(10):1231–3
Malignant melanoma infiltrating the reticular dermis at level IV. Guin JD, et al. **J Arkansas Med Soc** 1989 Apr; 85(11):502–3
Dohi memorial lecture. Melanoma today. Cascinelli N. **J Dermatol (Tokyo)** 1988 Oct;15(5):355–66
Malignant melanoma in Malaysia—a report of 23 cases. Ismail R, et al. **J Dermatol (Tokyo)** 1988 Apr;15(2):168–71
U.S./Japan Cooperative Cancer Research Program. Proceedings of the United States–Japan Melanoma and Skin Cancer Seminar on the Biology and Comparative Features. November 13–15, 1987, Tokyo. **J Invest Dermatol** 1989 May;92(5 Suppl):199S–331S
A case of malignant melanoma of the transverse mesocolon. Yoshida S, et al. **J Pediatr Surg** 1988 Nov;23(11):1036–7
Natural history and treatment of mucosal melanoma. McKinnon JG, et al. **J Surg Oncol** 1989 Aug;41(4):222–5
Malignant melanomas of the vulva: two case reports. Singh P, et al. **Med J Malaysia** 1987 Sep;42(3):209–11
Primary melanoma of the esophagus. A case report. Arrighi DA, et al. **Mo Med** 1987 Jun;84(6):296–8
Neurotropic melanoma of the head and neck. Schroeder WA Jr, et al. **Mo Med** 1987 May;84(5):242–6
Pathobiology and recognition of malignant melanoma: Introduction. Mihm MC Jr. **Monogr Pathol** 1988;(30):1–9 (53 ref.)
Malignant melanoma. A multivariate analysis of prognostic factors. Vollmer RT. **Pathol Annu** 1989;24 Pt 1:383–407 (70 ref.)
The vascular system of xenotransplanted tumors—scanning electron and light microscopic studies. Konerding MA, et al. **Scanning Microsc** 1989 Mar;3(1):327–35; discussion 335–6
Melanoma. **Semin Oncol** 1988 Dec;15(6):493–622
Malignant melanoma and redheads [letter; comment] Clayson DE. **West J Med** 1989 Jan;150(1):91–2. **Comment on:** West J Med 1988 Jul;149(1):43–6
[Multiple cancers. Apropos of a case with triple localization, one of which was in the eye] Karray H, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):239–42 (Eng. Abstr.) **(Fre)**
[Malignant Melanoma Symposium of the German Dermatologic Society. 16–17 June 1989, Berlin. Abstracts] **Hautarzt** 1989 Jun;40(6):377–96 **(Ger)**
[Pigmented lesions of the oral cavity. II. Melanosis and melanoma] Bucci E, et al. **Minerva Stomatol** 1989 May; 38(5):533–45 (162 ref.) (Eng. Abstr.) **(Ita)**
[Malignant melanoma] Ikeda S, et al. **Gan No Rinsho** 1989 Jan;Spec No:517–30 **(Jpn)**
[Melanoma of the nasal cavity and paranasal sinuses] Shtil' AA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):55–60 (Eng. Abstr.) **(Rus)**
[Malignant melanomas of the nasal mucosa and paranasal sinuses] Danić D, et al. **Med Pregl** 1988;41(3–4):135–7 (Eng. Abstr.) **(Scr)**
[Ano-rectal melanoma: apropos of a case] Caro Mancilla A, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):705–7 (Eng. Abstr.) **(Spa)**

ANALYSIS

Nuclear indices and survival in cutaneous melanoma. Heenan PJ, et al. **Am J Dermatopathol** 1989 Aug;11(4):308–12
DNA content analysis of uveal melanoma [letter] McMillan J, et al. **Arch Ophthalmol** 1989 Sep;107(9):1278
Detection and quantification of S-100 protein in ocular tissues and fluids from patients with intraocular melanoma. Cochran AJ, et al. **Br J Ophthalmol** 1988 Nov;72(11):874–9
Gangliosides of human melanoma. Tsuchida T, et al. **Cancer** 1989 Mar 15;63(6):1166–74
Autocrine tumor cell growth-inhibiting activities from human malignant melanoma. Bogdahn U, et al. **Cancer Res** 1989 Oct 1;49(19):5358–63
Two human monoclonal antibodies reacting with the major gangliosides of human melanomas and comparison with corresponding mouse monoclonal antibodies. Furukawa K, et al. **Cancer Res** 1989 Jan 1;49(1):191–6
Biochemical and immunological characterization of K-1735P melanoma galactoside-binding lectins and their modulation by differentiation inducers. Lotan R, et al. **Cancer Res** 1989 Mar 1;49(5):1261–8
Differentiation of mitotic melanoma cells from G2 cells and their isolation by use of 5-bromo-2'-deoxyuridine and propidium iodide. Trinkle LS, et al. **Cytometry** 1988 Sep; 9(5):432–5
Limitations of the quantitative cytochemical assay of catechol oxidase in melanoma cells. Croce AC, et al. **Histochem J** 1988 Nov;20(11):595–602
AgNORs in melanocytic dysplasia [letter] Howat AJ, et al. **Histopathology** 1989 Mar;14(3):327–8
Ganglioside GD3 shedding by human malignant melanoma cells. Bernhard H, et al. **Int J Cancer** 1989 Jul 15; 44(1):155–60
Lectin-resistant variants and revertants of mouse melanoma cells: differential expression of a fucosylated cell-surface antigen and altered metastasizing capacity. Finne J, et al. **Int J Cancer** 1989 Feb 15;43(2):300–4
Identification of integrin collagen receptors on human melanoma cells. Kramer RH, et al. **J Biol Chem** 1989 Mar 15;264(8):4684–8
Melanin chemistry and melanin precursors in melanoma. Ito S, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):261S–265S (24 ref.)
A perfusion system developed for 31P NMR study of melanoma cells at tissue-like density. Minichiello MM, et al. **Magn Reson Med** 1989 Apr;10(1):96–107
One hour bleach for melanin. Frangioni G, et al. **Stain Technol** 1988 Sep;63(5):325–6

BLOOD

Serum selenium levels in patients with malignant melanoma. Reinhold U, et al. **Acta Derm Venereol (Stockh)** 1989; 69(2):132–6
Serum levels of protein HC and its IgA complex in malignant melanoma. Fernandez-Luna JL, et al. **Am J Clin Pathol** 1989 Jan;91(1):88–91
Influence of sera from patients affected by neoplasia on some human macrophage functions. Merendino RA, et al. **Cancer Detect Prev** 1988;12(1–6):73–80
Monocyte-dependent, serum-borne suppressor of induction of lymphokine-activated killer cells in lymphocytes from melanoma patients. Itoh K, et al. **Cancer Immunol Immunother** 1989;29(1):57–62
Sialic acids in human lymphocytes. Qualitative and quantitative alterations in cancer cases. Holzhauser R, et al. **Carbohydr Res** 1988 Nov 15;183(1):89–95
Pharmacokinetics of N-4-hydroxyphenyl-retinamide and the effect of its oral administration on plasma retinol concentrations in cancer patients [published erratum appears in Int J Cancer 1989 Sep 15;44(3):567] Peng YM, et al. **Int J Cancer** 1989 Jan 15;43(1):22–6
Plasma 5-S-cysteinyldopa differentiates patients with primary and metastatic melanoma from patients with dysplastic nevus syndrome and normal subjects. Peterson LL, et al. **J Am Acad Dermatol** 1988 Sep;19(3):509–15
Levels of disialogangliosides in sera of melanoma patients monitored by sensitive thin-layer chromatography and immunostaining. Sela BA, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1489–92

BLOOD SUPPLY

The prognostic significance of tumor vascularity in intermediate-thickness (0.76–4.0 mm thick) skin melanoma. A quantitative histologic study. Srivastava A, et al. **Am J Pathol** 1988 Nov;133(2):419–23
Vascularity in cutaneous melanoma detected by Doppler sonography and histology: correlation with tumour behaviour. Srivastava A, et al. **Br J Cancer** 1989 Jan; 59(1):89–91
Relationship between heat-induced vascular damage and thermosensitivity in four mouse tumors. Nishimura Y, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7226–30
Scanning and transmission electron microscopic studies on the vascular system of xenotransplanted human tumors on nude mice. Konerding MA, et al. **Prog Clin Biol Res** 1989; 295:475–80
Scanning electron microscopic studies on the vascular system of xenotransplanted tumours. Konerding MA, et al. **Strahlenther Onkol** 1989 Jul;165(7):503–4

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251–9

COMPLICATIONS

Borderline spindle cell nevus of the ciliary body as a second primary melanoma—a clinicopathologic case. Kremer I, et al. **Ann Ophthalmol** 1989 Jun;21(6):217–21
Primary eyelid malignant melanoma associated with primary conjunctival malignant melanoma. Giblin ME, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):127–31
Depigmentation: its significance in patients with melanoma. Barnes L, et al. **Clin Dermatol** 1989 Apr–Jun;7(2):66–73 (40 ref.)
Malignant melanoma arising in the scar of lupus vulgaris and response to treatment with topical azelaic acid. Sowden J, et al. **Clin Exp Dermatol** 1988 Sep;13(5):353–6
The sign of Leser-Trélat associated with malignant melanoma. Fanti PA, et al. **Cutis** 1989 Jul;44(1):39–41
Malignant melanoma in a man seropositive for the human immunodeficiency virus. Rivers JK, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1127–8
Malignant melanoma associated with human immunodeficiency virus infection in three homosexual men. Tindall B, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):587–91
Subretinal precipitates of retinal detachments associated with intraocular tumors. Takagi T, et al. **Ophthalmologica** 1988; 197(3):120–6
Choroidal melanoma with pigment dispersion in vitreous and melanomalytic glaucoma. el Baba F, et al. **Ophthalmology** 1988 Mar;95(3):370–7 (26 ref.)
The treatment of serous macular detachment secondary to choroidal melanomas and nevi. Folk JC, et al. **Ophthalmology** 1989 Apr;96(4):547–51
Choroidal melanoma and pigment dispersion [letter] McMenamin PG. **Ophthalmology** 1988 Dec;95(12):1704
Histologic effects of cyclophotocoagulation [letter] March WF, et al. **Ophthalmology** 1989 Jun;96(6):925
Neurofibromatosis and neural crest neoplasms: primary acquired melanosis and malignant melanoma of the conjunctiva. To KW, et al. **Surv Ophthalmol** 1989 Mar–Apr;33(5):373–9 (53 ref.)
[Choroid melanoma-induced secondary glaucoma with special reference to histologic findings] Rohrbach JM, et al. **Fortschr Ophthalmol** 1988;85(6):723–5 (Eng. Abstr.) **(Ger)**
[Primary melanoblastoma as a cause of occlusive hydrocephalus] Vitzthum HE, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):297–303 (Eng. Abstr.) **(Ger)**
[Malignant melanoma and HIV infection] Rasokat H, et al. **Z Hautkr** 1989 Jul 15;64(7):581–2, 587 (Eng. Abstr.) **(Ger)**
[von Recklinghausen disease and cutaneous melanoma. A rare association] Baldini MT, et al. **G Ital Oncol** 1988 Apr–Jun;8(2):93–6 (Eng. Abstr.) **(Ita)**
[Intestinal occlusion caused by ileo-colic invagination in a patient with intestinal metastasis of melanoma] Sisto G, et al. **Minerva Chir** 1989 May 15;44(9):1401–4 (Eng. Abstr.) **(Ita)**

CONGENITAL

[Congenital pseudomelanoma] Kerl H, et al. **Z Hautkr** 1989 Jul 15;64(7):564, 567–8 (Eng. Abstr.) **(Ger)**
[Congenital nevomelanocytic nevus] Steigleder GK. **Z Hautkr** 1988 Oct 15;63(10):787–8 **(Ger)**

DIAGNOSIS

Fine needle aspiration biopsy in uveal melanoma. Char DH, et al. **Acta Cytol** 1989 Sep–Oct;33(5):599–605
Fine needle aspirate smear morphology in metastatic melanoma. Layfield LJ, et al. **Acta Cytol** 1989 Sep–Oct;

33(5):606–12
Primary meningeal melanoma. Helseth A, et al. **Acta Oncol** 1989;28(1):103–4
Differential diagnosis of malignant melanoma. Becker JK, et al. **Am Fam Physician** 1989 May;39(5):203–14 (27 ref.)
Malignant lesions of the eyelid. Mamalis N, et al. **Am Fam Physician** 1989 Jan;39(1):95–102 (18 ref.)
Malignant epithelioid schwannoma of the skin. A low-grade neurotropic malignant melanoma? Suster S, et al. **Am J Dermatopathol** 1989 Aug;11(4):338–44
An expert system for the early detection of melanoma using knowledge-based image analysis. Dhawan AP. **Anal Quant Cytol Histol** 1988 Dec;10(6):405–16 (34 ref.)
Evaluation of staging workup in malignant melanoma. Khansur T, et al. **Arch Surg** 1989 Jul;124(7):847–9
Freckles, moles and melanoma. National Skin Cancer Awareness Week 1988. Marks R. **Aust Fam Physician** 1988 Dec;17(12):1025
Accuracy in clinically evaluating pigmented lesions. Curley RK, et al. **BMJ** 1989 Jul 1;299(6690):16–8
Education campaign on early detection of malignant melanoma [letter] Graham-Brown RA. **BMJ** 1988 Oct 15; 297(6654):979
Education campaign on early detection of malignant melanoma [letter] Whitehead SM, et al. **BMJ** 1988 Sep 3;297(6648):620–1
Malignant melanoma of the right atrium: antemortem diagnosis by transvenous biopsy. Gosalakkal JA, et al. **Br Heart J** 1989 Aug;62(2):159–60
An assessment of the value of Ag NOR staining in the identification of dysplastic and other borderline melanocytic naevi. MacKie RM, et al. **Br J Dermatol** 1989 Apr;120(4):511–6
Can HLA-DR expression help in the routine diagnosis of malignant melanomas? West KP, et al. **Br J Dermatol** 1989 Aug;121(2):175–8
Coincident systemic malignant disease in uveal melanoma patients. Kindy-Degnan N, et al. **Can J Ophthalmol** 1989 Aug;24(5):204–6
Usefulness of frequent skin examination for the early detection of second primary cutaneous melanoma. Titus-Ernstoff L, et al. **Cancer Detect Prev** 1989; 13(5–6):317–21
Delayed reaction to "lead" pencil simulating melanoma. Taylor B, et al. **Cutis** 1988 Sep;42(3):199–201
Immunostaining of tissue sections previously stained with hematoxylin and eosin. Paul E, et al. **Dis Markers** 1988 Oct-Dec;6(4):231–6
Patients' and doctors' delay in the diagnosis and treatment of cutaneous melanoma. Rampen FH, et al. **Eur J Surg Oncol** 1989 Apr;15(2):143–8
Monoclonal antibodies in detection of choroidal melanoma. Ringens PJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):287–90
Dysplastic naevi [letter] **Histopathology** 1989 Jul;15(1):103–8
What naevus is dysplastic, a syndrome and the commonest precursor of malignant melanoma? A riddle and an answer. Ackerman AB. **Histopathology** 1988 Sep;13(3):241–56 (40 ref.)
The value of nucleolar organizer region staining in the differential diagnosis of borderline melanocytic lesions. Fallowfield ME, et al. **Histopathology** 1989 Mar; 14(3):299–304
Malignant melanoma: a new mimic of colloid adenocarcinoma. Nottingham JF, et al. **Histopathology** 1988 Nov;13(5):576–8
Distinction between metastatic melanoma and primary parotid gland carcinoma using monoclonal HMB 45 antimelanoma antibody: report of a case. Podesta A, et al. **Hum Pathol** 1989 Jan;20(1):77–80
A primary amelanotic melanoma of the vagina diagnosed by immunocytochemistry. Scambia G, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):159–64 (21 ref.)
High field resolution magnetic resonance imaging of malignant choroidal melanoma. Lambrecht L, et al. **Int Ophthalmol** 1988 Feb;11(4):199–205
Malignant melanoma. A clinical and surgical review. Part II: Diagnosis and treatment. Zivot ML, et al. **J Am Podiatr Med Assoc** 1989 Sep;79(9):421–31 (28 ref.)
Melanoma update: advances in diagnostic technique. Rogers GS. **J Dermatol Surg Oncol** 1989 Jun;15(6):605–7
Magnetic resonance imaging of cutaneous melanocytic lesions. Zemtsov A, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):854–8
Malignant melanoma of the nasal cavity. Going JJ, et al. **J Laryngol Otol** 1989 Feb;103(2):231–3
New technique to diagnose eye cancer being tested [news] Smigel K. **J Natl Cancer Inst** 1989 Jan 18;81(2):94–5
Sonographic detection and fine-needle aspiration biopsy of nonpalpable recurrent or metastatic melanoma in subcutaneous tissues. Fornage BD, et al. **J Ultrasound Med** 1989 Aug;8(8):421–4
Sniffer dogs in the melanoma clinic? [letter] Williams H, et al. **Lancet** 1989 Apr 1;1(8640):734
Role of the clinical laboratory in the diagnosis and management of malignant melanoma. Scott RE, et al. **Mayo Clin Proc** 1989 Jul;64(7):837–45 (55 ref.)
Management of malignant melanoma of the head and neck. Woods JE. **Mayo Clin Proc** 1989 Jul;64(7):861–3 (14 ref.)
Melanoma markers: biological and diagnostic considerations. Cochran AJ. **Monogr Pathol** 1988;(30):35–49 (52 ref.)
Primary spinal intramedullary malignant melanoma: case report. Yamasaki T, et al. **Neurosurgery** 1989 Jul; 25(1):117–21
Orbital exenteration at the Mayo Clinic. 1967–1986. Bartley GB, et al. **Ophthalmology** 1989 Apr;96(4):468–73
Cryotherapy for conjunctival primary acquired melanosis and malignant melanoma. Experience with 62 cases. Jakobiec FA, et al. **Ophthalmology** 1988 Aug;95(8):1058–70
Preliminary results on phosphorus-31 nuclear magnetic resonance evaluation of human uveal melanoma in enucleated eyes. Kolodny NH, et al. **Ophthalmology** 1988 May;95(5):666–73
Misdiagnosis of choroidal melanoma. Stringa M. **Panminerva Med** 1988 Apr-Jun;30(2):89–92 (31 ref.)
Spontaneous regression of choroidal melanoma over 8 years. Chong CA, et al. **Retina** 1989;9(2):136–8
Resolution of an apparent choroidal melanoma. Williams DF, et al. **Retina** 1989;9(2):131–5
Skin cancer: a primer for the nondermatologist. Ramsdell WM. **Tex Med** 1989 Feb;85(2):52–5
Recent advances in dermatopathology. Patterson JW. **Va Med** 1988 Dec;115(12):572–7
[Primary malignant melanoma of the vagina—report of 8 cases] Li JX. **Chung Hua Chung Liu Tsa Chih** 1989 Jan; 11(1):64–6 (Eng. Abstr.) **(Chi)**
[The ultrasonograph of choroidal melanoma and its histopathological correlation] Hu SM. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):203–5 (Eng. Abstr.) **(Chi)**
[Clinical and fluorescein angiographic findings of malignant melanoma and solitary hemangioma of the choroid] Zhang CF. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):17–20 (Eng. Abstr.) **(Chi)**
[Tapioca melanoma of the iris] Winklerová S, et al. **Cesk Oftalmol** 1988 Jul;44(4):268–71 (Eng. Abstr.) **(Cze)**
[A difficult diagnosis: malignant melanoma of the choroid. Apropos of a case] Vincey L, et al. **Bull Soc Ophtalmol Fr** 1988 Nov;88(11):1337–42 (Eng. Abstr.) **(Fre)**
[Neurocutaneous melanosis] Husstedt IW, et al. **Fortschr Neurol Psychiatr** 1989 Jun;57(6):250–4 (Eng. Abstr.) **(Ger)**
[Doppler sonographic findings in intraocular tumors] Guthoff R, et al. **Fortschr Ophthalmol** 1989;86(3):239–41 (Eng. Abstr.) **(Ger)**
[Natural fluorescence of nuclear cataract lenses and melanomas of the eye] Lohmann W, et al. **Fortschr Ophthalmol** 1989;86(1):23–5 (Eng. Abstr.) **(Ger)**
[Magnetic resonance tomography of choroid melanoma] Wollensak J, et al. **Fortschr Ophthalmol** 1988;85(6):719–22 (Eng. Abstr.) **(Ger)**
[Lymph node sonography in the after care of malignant melanoma] Stutte H, et al. **Hautarzt** 1989 Jun;40(6):344–9 (Eng. Abstr.) **(Ger)**
[Malignant melanoma. A model case of early cancer detection] Paul E. **Z Hautkr** 1989 Feb 15;64(2):85–8 **(Ger)**
[After-care of melanoma. 8 years' experience using the Mainz model] Schramm P. **Z Hautkr** 1988 Oct 15;63(10):816–21 (Eng. Abstr.) **(Ger)**
[Angiokeratoma simulating malignant melanoma] Gąsior-Chrzan B. **Przegl Dermatol** 1988 Jul-Aug; 75(4):301–4 **(Pol)**
[Pigmented melanoma of the common bile duct] Dykhno IuA, et al. **Klin Khir** 1989;(5):57–8 **(Rus)**
[Giant melanoma of the maxillary sinus] Rzaev RM. **Vestn Otorinolaringol** 1989 Mar-Apr;(2):82–4 **(Rus)**
[The diagnosis of malignant skin melanomas on an outpatient basis] Blinov NN, et al. **Vopr Onkol** 1989;35(1):65–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Hyperpigmentary disorders—mechanisms of action. Effect of azelaic acid on melanoma and other tumoral cells in culture. Breathnach AS, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;143:62–6 (23 ref.)
Azelaic acid: mode of action at cellular and subcellular levels. Galhaup I. **Acta Derm Venereol Suppl (Stockh)** 1989; 143:75–82
Evaluation of cis-platinum and DTIC combination chemotherapy in disseminated melanoma. A Southwest Oncology Group Study. Fletcher WS, et al. **Am J Clin Oncol** 1988 Oct;11(5):589–93
A phase II trial of vinblastine, bleomycin, and cisplatin induction followed by dacarbazine and dibromodulcitol maintenance in the treatment of metastatic melanoma. A follow-up study of twenty-two patients. Gentile PS, et al. **Am J Clin Oncol** 1988 Dec;11(6):666–8
Cisplatin in isolated limb perfusion [letter] Roseman JM. **Am J Surg** 1989 Mar;157(3):366
Isolated regional perfusion for treatment of limb melanoma in the American black. Muchmore JH, et al. **Am Surg** 1989 Apr;55(4):232–7
Phase II study of high-dose medroxyprogesterone acetate in advanced malignant melanoma. Becher R, et al. **Br J Cancer** 1989 Jun;59(6):948
Predictive chemosensitivity testing in malignant melanoma: reliable methodology—ineffective drugs. Tveit KM, et al. **Br J Cancer** 1988 Dec;58(6):734–7
The killing effects of 4-S-cysteinylcatechol and analogues on human melanoma cells. Yamada I, et al. **Br J Cancer** 1988 Dec;58(6):776–8
Inhibition of pulmonary metastases and enhancement of natural killer cell activity by methionine-enkephalin. Faith RE, et al. **Brain Behav Immun** 1988 Jun;2(2):114–22
Chemotherapy of disseminated melanoma with bleomycin, vincristine, CCNU, and DTIC (BOLD regimen). The Prudente Foundation Melanoma Study Group. **Cancer** 1989 May 1;63(9):1676–80
Complete responses and long-term survivals after systemic chemotherapy for patients with advanced malignant melanoma. Ahmann DL, et al. **Cancer** 1989 Jan 15; 63(2):224–7
The importance of tamoxifen to a cisplatin-containing regimen in the treatment of metastatic melanoma. McClay EF, et al. **Cancer** 1989 Apr 1;63(7):1292–5
High-dose, double alkylating agent chemotherapy with DTIC, melphalan, or ifosfamide and marrow rescue for metastatic malignant melanoma. Thatcher D, et al. **Cancer** 1989 Apr 1;63(7):1296–302
Treatment of advanced malignant melanoma with coumarin and cimetidine: a pilot study. Marshall ME, et al. **Cancer Chemother Pharmacol** 1989;24(1):65–6
A phase-II study of low-dose cyclophosphamide and recombinant human interleukin-2 in metastatic renal cell carcinoma and malignant melanoma. Lindemann A, et al. **Cancer Immunol Immunother** 1989;28(4):275–81
Modulation of murine melanoma growth by naloxone. Murgo AJ. **Cancer Lett** 1989 Feb;44(2):137–42
Inhibition of experimental liver tumor growth in mice by liposomes containing a lipophilic muramyl dipeptide derivative. Phillips NC, et al. **Cancer Res** 1989 Feb 15; 49(4):936–9
A multicenter trial of interleukin-2 and low-dose cyclophosphamide in highly chemotherapy-resistant malignancies. Lindemann A, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:53–7
Alternating recombinant human interleukin-2 and dacarbazine in advanced melanoma. A multicentric phase II study. Stoter G, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:59–63
Recombinant IL-2 given intra-splenically and intravenously in advanced malignant melanoma: a phase I/II study. Thatcher N, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:49–52
Phase II studies of mitozolomide in melanoma, lung and ovarian cancer. Harding M, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):785–8
Phase II study of tauromustine in disseminated malignant melanoma. Nolte H, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):655–7
Randomized phase II trial of TCNU versus mitozolomide in malignant melanoma. EORTC Early Clinical Trials Group. Smyth JF, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):755–7
Tourniquet infusion chemotherapy of the lower extremities—clinical and pharmacokinetic results. Ingvar C, et al. **Eur J Surg Oncol** 1989 Aug;15(4):375–9
A treatment for metastasis of murine ocular melanoma. Harning R, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1505–10
Phase II study of bleomycin, dacarbazine (DTIC) and vindesine in disseminated malignant melanoma. Mulder NH, et al. **J Cancer Res Clin Oncol** 1989;115(1):93–5
Hyperthermic regional perfusion using membrane- instead of bubble-oxygenators. An experimental and clinical study. van Os J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug; 30(4):523–32
Interim report of phase II study of new nitrosourea S 10036 in disseminated malignant melanoma. Khayat D, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1407–8
Inhibition of murine melanoma growth by sodium ascorbate. Gardiner NS, et al. **J Nutr** 1989 Apr;119(4):586–90
The use of a hand-held gamma detector improves the safety of isolated limb perfusion. Sardi A, et al. **J Surg Oncol** 1989 Jul;41(3):172–6
Regression of cutaneous metastatic malignant melanoma with topical diphencyprone and oral cimetidine [letter] Harland CC, et al. **Lancet** 1989 Aug 19;2(8660):445
Systemic interferon-gamma therapy for cutaneous melanoma: subversive role of keratinocyte prostaglandin E production induced by interferon-gamma. Wigginton JM. **Med Pediatr Oncol** 1988;16(5):349–50
Specificity of growth inhibition of melanoma by 4-hydroxyanisole. Kulkarni GA, et al. **Pigment Cell Res** 1989 Jan-Feb;2(1):40–3
Roferon-A in solid tumor therapy. **Semin Oncol** 1989 Feb; 16(1 Suppl 1):1–50
Approaches for drug development in treatment of advanced melanoma. Pezzuto JM, et al. **Semin Oncol** 1988 Dec; 15(6):578–88 (70 ref.)
Isolated limb perfusion for stage I melanoma of the extremity: a comparison of melphalan and dacarbazine (DTIC). Edwards MJ, et al. **South Med J** 1989 Aug;82(8):985–7, 989
Chemosensitization by chlorpromazine (CPZ) and caffeine (C) in human melanoma xenografts sensitive or resistant to methyl-CCNU (semustine). Osieka R, et al. **Strahlenther Onkol** 1989 Jul;165(7):526–8
An attempt at topical DNCB immunomodulation in advanced malignant melanoma. Budzanowska E, et al. **Tumori** 1988 Oct 31;74(5):519–22
Effectiveness and toxicity of "BELD" polychemotherapy in advanced malignant melanoma. Cartei G, et al. **Tumori** 1989 Jun 30;75(3):229–32

[Chemotherapy of malignant melanoma] Avril MF. **Ann Dermatol Venereol** 1988;115(9):959–68 (52 ref.) (Fre)

[Therapy monitoring of regional chemotherapy by magnetic resonance spectroscopy] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:202–3 (Ger)

[Excretion of the urinary enzymes alanine aminopeptidase and beta-glucuronidase in cystostatic perfusion therapy] Drelier E. **Z Gesamte Inn Med** 1988 Sep 1;43(17):491–3 (Eng. Abstr.) (Ger)

[Vepesid and medroxyprogesterone in the treatment of disseminated malignant melanoma] Pawlicki M, et al. **Nowotwory** 1988 Oct–Dec;38(4):267–73 (Eng. Abstr.) (Pol)

[Testing of individual sensitivity to drugs in human malignant melanoma] Czownicki Z. **Pol Tyg Lek** 1988 Dec 12; 43(50):1627–30 (Eng. Abstr.) (Pol)

[Results of the treatment of advances melanoma of the skin with high daily doses of dacarbazine] Klimek M, et al. **Przegl Lek** 1988;45(6):543–5 (Eng. Abstr.) (Pol)

ECONOMICS

Malignant melanoma: cost and reimbursement issues. Creagan ET. **Semin Oncol** 1989 Feb;16(1 Suppl 1):45–50 (6 ref.)

ENZYMOLOGY

Tyrosinase activity in serum from patients with malignant melanoma. Agrup P, et al. **Acta Derm Venereol (Stockh)** 1989;69(2):120–4

Adenylate cyclase activity in homogenates of human melanoma cells. Effect of alpha-MSH and isoprenaline. Karg E, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):288–91

The stereospecific suicide inhibition of human melanoma thioredoxin reductase by 13-cis-retinoic acid. Schallreuter KU, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):573–9

Retinoic acid blockade of imidazole-induced tyrosinase expression in B16 melanoma cultures: similar effects of the active retinoid and triiodothyronine. Smith TJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):288–93

3,3',5-L-triiodothyronine but not L-thyroxine can block the induction of tyrosinase by imidazole in cultured B16 melanoma cells. Smith TJ, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1293–6

Calcium regulates thioredoxin reductase in human metastatic melanoma. Schallreuter KU, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):242–7

The activity and purification of membrane-associated thioredoxin reductase from human metastatic melanotic melanoma. Schallreuter KU, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):103–9

Cysteine proteinase inhibitors in human melanoma transplanted into nude mice. Tsushima H, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:243–50

Modulation by palmitoyl-carnitine of calcium activated, phospholipid-dependent protein kinase activity and inhibition of melanoma cell growth. Vescovi G, et al. **Br J Dermatol** 1988 Aug;119(2):171–8

Relationships among cell survival, O6-alkylguanine-DNA alkyltransferase activity, and reactivation of methylated adenovirus 5 and herpes simplex virus type 1 in human melanoma cell lines. Maynard K, et al. **Cancer Res** 1989 Sep 1;49(17):4813–7

Marked heterogeneity of aromatase activity in human malignant melanoma tissue. Santen RJ, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1811–6

Cytotoxicity of 4-hydroxyanisole and tyrosinase activity in variant cell lines of B16 melanoma. Thody AJ, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1879–84

Mechanisms of platelet activation by cultured human cancer cells and cells freshly isolated from tumor tissues. Grignani G, et al. **Invasion Metastasis** 1989;9(5):298–309

A new role for epidermal cell-derived thymocyte activating factor/IL-1 as an antagonist for distinct epidermal cell function. Swope VB, et al. **J Immunol** 1989 Mar 15; 142(6):1943–9

Tissue plasminogen activator and inhibitors of fibrinolysis in malignant melanoma. Kwaan HC, et al. **Tumour Biol** 1988;9(6):301–6

EPIDEMIOLOGY

Cutaneous melanoma—season and invasion? A preliminary report. Aksłen LA, et al. **Acta Derm Venereol (Stockh)** 1988; 68(5):390–4

Malignant melanomas in the Eur-African-Malay population of South Africa. Isaacson C, et al. **Am J Dermatopathol** 1987 Apr;9(2):109–10

Other cancers in uveal melanoma patients and their families. Turner BJ, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):601–8

Trends in cutaneous malignant melanoma in Denmark 1943–1982 by anatomic site. Osterlind A, et al. **APMIS** 1988 Nov;96(11):953–63

Incidence of melanoma in surgically removed pigmented lesions. Fernando SS. **Australas J Dermatol** 1987 Dec; 28(3):126–8

Incidence of cutaneous malignant melanoma in Denmark 1978–1982. Anatomic site distribution, histologic types, and comparison with non-melanoma skin cancer. Osterlind A, et al. **Br J Cancer** 1988 Sep;58(3):385–91

Absence of seasonal variation in the diagnosis of melanoma of the eye in the United States. Schwartz SM, et al. **Br J Cancer** 1988 Sep;58(3):402–4

Increased incidence of malignant melanoma of the skin in workers in a telecommunications industry. De Guire L, et al. **Br J Ind Med** 1988 Dec;45(12):824–8

The incidence of late recurrence (greater than 10 years); an analysis of 536 consecutive cases of cutaneous melanoma. Callaway MP, et al. **Br J Plast Surg** 1989 Jan;42(1):46–9

Survival and prognostic factors of patients with skin melanoma. A regression-model analysis based on nationwide cancer registry data. Karjalainen S, et al. **Cancer** 1988 Nov 15;62(10):2274–80

Change of epidemiological characteristics of malignant melanoma during the years 1962–1972 and 1983–1986 in the Federal Republic of Germany. Garbe C, et al. **Dermatologica** 1989;178(3):131–5

An epidemiological study of malignant melanoma in greater Bombay. Jussawalla DJ, et al. **Indian J Cancer** 1988 Jun; 25(2):70–6

Epidemiology and control of melanoma in white populations and in Japan. Elwood JM. **J Invest Dermatol** 1989 May; 92(5 Suppl):214S–221S

Comparative aspects of melanoma and non-melanoma skin cancers in Japan. Ikeda S, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):204S–209S

Report on United States—Japan Cooperative Cancer Research Program: melanoma and skin cancer—biology and comparative features in the United States and Japan. Jimbow K, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):200S–203S

Clinical features and distribution of malignant melanoma and pigmented nevi on the soles of the feet in Japan. Kukita A, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):210S–213S

Moles and site-specific risk of nonfamilial cutaneous malignant melanoma in women. Weinstock MA, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):948–52

Clinical analysis of tumors of the eye and its adnexa. Roh KK, et al. **Korean J Ophthalmol** 1988 Jun;2(1):27–31 (24 ref.)

Skin cancers and ultraviolet radiation [letter] Lee JA, et al. **Med J Aust** 1989 May 1;150(9):540

Changing trends in malignant melanoma in New York State. **N Y State J Med** 1989 Apr;89(4):239–41

Malignant melanoma of the skin in children (0 to 14 years of age) in Denmark, 1943–1982. Partoft S, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):55–8

[Melanoma and its risk factors. Epidemiology and consequences in detection and prevention] Bonerandi JJ, et al. **Ann Dermatol Venereol** 1989;116(5):411–7 (72 ref.) (Fre)

[A case-control study of melanoma of the skin in the province of Torino, Italy] Zanetti R, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):309–17 (Eng. Abstr.) (Fre)

ETHNOLOGY

Incidence and anatomic distribution of cutaneous melanoma among United States Hispanics. Bergfelt L, et al. **J Surg Oncol** 1989 Apr;40(4):222–6

Anorectal melanoma. Jalleh RP, et al. **Postgrad Med J** 1988 Sep;64(755):669–71

ETIOLOGY

Malignant melanoma of the iris in xeroderma pigmentosum. Johnson MW, et al. **Arch Ophthalmol** 1989 Mar; 107(3):402–7

Sunlamps and the risk of melanoma [letter] **BMJ** 1988 Nov 5;297(6657):1193–4

Fluorescent lights, ultraviolet lamps, and cutaneous melanoma [letter] Griffiths AP, et al. **BMJ** 1988 Oct 22; 297(6655):1041

Fluorescent lights, ultraviolet lamps, and risk of cutaneous melanoma [published erratum appears in BMJ 1988 Nov 5;297(6657):1172] Swerdlow AJ, et al. **BMJ** 1988 Sep 10; 297(6649):647–50

Blue nevus and nevus of Ota associated with dural melanoma. Hartmann LC, et al. **Cancer** 1989 Jul 1;64(1):182–6

Dysplastic nevi. Markers for increased risk for melanoma. Rigel DS, et al. **Cancer** 1989 Jan 15;63(2):386–9

Case-control study of female hormones and eye melanoma. Hartge P, et al. **Cancer Res** 1989 Aug 15;49(16):4622–5

Epidemiology of human malignant skin tumors with special reference to natural and artificial ultraviolet radiation exposures. Elwood JM, et al. **Carcinog Compr Surv** 1989; 11:55–84 (94 ref.)

PUVA and the induction of skin cancer. Stern RS. **Carcinog Compr Surv** 1989;11:85–101 (64 ref.)

Sun exposure and malignant melanoma among susceptible individuals. Dubin N, et al. **Environ Health Perspect** 1989 May;81:139–51

Solar ultraviolet radiation and regional peculiarities in skin malignant melanoma incidence. Guslitser LN. **Geogr Med** 1989;19:77–8

The Danish case-control study of cutaneous malignant melanoma. III. Hormonal and reproductive factors in women. Osterlind A, et al. **Int J Cancer** 1988 Dec 15; 42(6):821–4

The Danish case-control study of cutaneous malignant melanoma. IV. No association with nutritional factors, alcohol, smoking or hair dyes. Osterlind A, et al. **Int J Cancer** 1988 Dec 15;42(6):825–8

Rescued human virus (RHV): association with melanoma. Závada J, et al. **Int J Cancer** 1988 Oct 15;42(4):572–5

Malignant melanoma associated with multiple therapies for psoriasis. Barnhill RL, et al. **J Am Acad Dermatol** 1989 Jul;21(1):148–50

Apparent absence of a benign precursor lesion: implications for the pathogenesis of malignant melanoma. Ross PM. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):529–38 (69 ref.)

Human melanocytic neoplasms and their etiologic relationship with sunlight. Elder DE. **J Invest Dermatol** 1989 May;92(5 Suppl):297S–303S (73 ref.)

Enigma of the pathogenesis of primary melanoma: changing incidence and mortality in Japan and the United States. Fitzpatrick TB. **J Invest Dermatol** 1989 May;92(5 Suppl):234S–235S

Actinic DNA damage and the pathogenesis of cutaneous malignant melanoma. Ross PM, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):293S–296S (58 ref.)

Cyclist's melanoma. Williams H, et al. **J R Coll Physicians Lond** 1989 Apr;23(2):114–5

Personal risk-factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

Naevocytic naevi as an atavism; their relationship to melanoma risk. Rampen FH. **Med Hypotheses** 1988 Sep; 27(1):71–5 (38 ref.)

Dietary polyunsaturated fats [letter] Mackie BS, et al. **Med J Aust** 1988 Oct 17;149(8):449–50

Skin cancer and dietary polyunsaturated fats [letter] Mackie BS, et al. **Med J Aust** 1989 Mar 20;150(6):352

Etiology of melanoma. Kleeberg UR. **Onkologie** 1988 Dec; 11(6):254–9 (50 ref.)

Nonfamilial cutaneous melanoma incidence in women associated with sun exposure before 20 years of age. Weinstock MA, et al. **Pediatrics** 1989 Aug;84(2):199–204

Ultraviolet radiation—induced malignant melanoma in Monodelphis domestica. Ley RD, et al. **Photochem Photobiol** 1989 Jul;50(1):1–5

Solar considerations in the development of cutaneous melanoma. Loggie BW, et al. **Semin Oncol** 1988 Dec; 15(6):494–9

[Ionizing radiation—(a) cause of malignant melanoma?] Zschunke E. **Dermatol Monatsschr** 1989;175(2):69–75 (54 ref.) (Eng. Abstr.) (Ger)

[Can the risk of melanoma be calculated?] Jung EG. **Z Hautkr** 1988 Jul 15;63(7):559–62 (10 ref.) (Eng. Abstr.) (Ger)

[Ultraviolet rays and skin melanoma] Cascinelli N. **G Ital Dermatol Venereol** 1988 Oct;123(10):449–55 (37 ref.) (Eng. Abstr.) (Ita)

[Case-control study on malignant skin melanoma in the Turin province] Zanetti R, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):461–8 (Eng. Abstr.) (Ita)

[Dysplastic pigmented nevi as a high risk group for the development of malignant melanoma] Kik A, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):323–6 (17 ref.) (Pol)

GENETICS

DNA cell cycle studies in uveal melanoma. Char DH, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):65–72

Gene amplification correlates with sister chromatid exchange in B16 murine and human melanoma and human astrocytoma cell lines. Lakshmi MS, et al. **Anticancer Res** 1989 Jan–Feb;9(1):113–4

Detection of transforming sequences in human melanomas and leukemias. Noguchi T, et al. **Cancer Detect Prev** 1988; 12(1–6):383–8

Chromosome rearrangements in dysplastic nevus syndrome predisposing to malignant melanoma. Hecht F, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):73–8

Multiple karyotypic abnormalities, including structural rearrangements of 11p, in cell lines from malignant melanomas. Heim S, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):5–20

Spontaneous and 4-nitroquinoline 1-oxide-induced G2 chromosome aberrations in lymphoblasts from familial melanoma patients. Lu GH, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):233–43

Chromosomal evolution in the progression and metastasis of human malignant melanoma. A multiple lesion study. Pedersen MI, et al. **Cancer Genet Cytogenet** 1989 Sep; 41(2):185–201

Chromosome and growth factor abnormalities in melanoma. Priest JH, et al. **Cancer Genet Cytogenet** 1988 Oct 15; 35(2):253–62

Ultraviolet-induced formation of micronuclei and sister chromatid exchange in cultured fibroblasts of patients with cutaneous malignant melanoma. Roser M, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):129–37

Clonal variation in the production of tumor-associated alpha 2-macroglobulin in a malignant human melanoma and association with growth stimulation. Bízik J, et al. **Cancer Res** 1989 Feb 15;49(4):983–90

In situ hybridization analysis of interstitial C-heterochromatin in marker chromosomes of two human melanomas. Doneda L, et al. **Cancer Res** 1989 Jan 15; 49(2):433–8

Increased mdr gene expression and decreased drug accumulation in multidrug-resistant human melanoma cells. Lemontt JF, et al. **Cancer Res** 1988 Nov 15;48(22):6348–53

Reduced DNA damage induced in human melanoma cells

by dacarbazine in the presence of deoxyribonucleosides. Lönn U, et al. **Cancer Res** 1989 Jun 1;49(11):2921–4

Identification of a recurring translocation site involving chromosome 6 in human malignant melanoma. Trent JM, et al. **Cancer Res** 1989 Jan 15;49(2):420–3 (30 ref.)

Induction of tumorigenicity and lack of in vitro growth requirement for 12–O–tetradecanoylphorbol–13–acetate by transfection of murine melanocytes with v–Ha–ras. Wilson RE, et al. **Cancer Res** 1989 Feb 1;49(3):711–6

Chromosome alterations in human malignant melanoma. Trent JM, et al. **Carcinog Compr Surv** 1989;11:165–86 (30 ref.)

Suppression of genetic melanoma in the fish Xiphophorus. Schwab M. **Ciba Found Symp** 1989;142:181–97; discussion 197–8

Transformed NIH 3T3 cells expressing human melanoma N–ras oncogene metastasize to lymph node in nude mice. Jouanneau J, et al. **Clin Exp Metastasis** 1989 Jul–Aug; 7(4):391–403

High incidence of chromosomal lesions involving C–heterochromatin in four human melanoma lines. Larizza L, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):633–44

A Taqi RFLP of the human TGF alpha gene is significantly associated with cutaneous malignant melanoma. Hayward N, et al. **Int J Cancer** 1988 Oct 15;42(4):558–61

Relative tumorigenicities of hybrid cells with and without HSR–bearing chromosomes from a human melanoma cell line. Hough MR, et al. **Int J Cancer** 1989 Aug 15; 44(2):360–6

Where have dysplastic nevi led us? Tucker MA. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:251–9

Increased numbers of spontaneous micronuclei in blood lymphocytes and cultures fibroblasts of individuals with familial cutaneous malignant melanoma. Weichenthal M, et al. **J Cancer Res Clin Oncol** 1989;115(3):264–8

Suppression of class I human histocompatibility leukocyte antigen by c–myc is locus specific. Versteeg R, et al. **J Exp Med** 1989 Sep 1;170(3):621–35

Improved detection of aneuploidy in malignant melanoma using multiparameter flow cytometry for S100 protein and DNA content. Kamino H, et al. **J Invest Dermatol** 1989 Sep;93(3):392–6

Loss of heterozygosity at polymorphic chromosomal loci in patients with malignant melanoma. Orita M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):280S–283S

Genomic DNA with transformation–related activity and melanoma antigen expression. Tagawa M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):284S–288s

Melanoma and other skin cancers in xeroderma pigmentosum patients and mutation in their cells. Takebe H, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):236S–238S

Differential expression of ras oncogene products among the types of human melanomas and melanocytic nevi. Yasuda H, et al. **J Invest Dermatol** 1989 Jul;93(1):54–9

Chromosome 9p and hereditary cutaneous malignant melanoma [letter] Bale SJ, et al. **J Natl Cancer Inst** 1989 Jan 4;81(1):70

N–ras mutations in human cutaneous melanoma from sun–exposed body sites. van 't Veer LJ, et al. **Mol Cell Biol** 1989 Jul;9(7):3114–6

Mapping the gene for hereditary cutaneous malignant melanoma–dysplastic nevus to chromosome 1p. Bale SJ, et al. **N Engl J Med** 1989 May 25;320(21):1367–72

Dysplastic nevi and melanoma. Milgraum SS, et al. **N J Med** 1989 May;86(5):389–92

A distinct octamer–binding protein present in malignant melanoma cells. Cox PM, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11047–56

A rare c–mos RFLP in normal (noncancerous) fibroblasts from two related cancer patients. Dietrich KD, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1273

Loss of alleles from the distal short arm of chromosome 1 occurs late in melanoma tumor progression. Dracopoli NC, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4614–8

Involvement of the TCL5 gene on human chromosome 1 in T–cell leukemia and melanoma. Finger LR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5039–43

Genetic aspects of cutaneous malignant melanoma. Dracopoli NC, et al. **Semin Oncol** 1988 Dec;15(6):541–8 (72 ref.)

Molecular models of tumorigenesis: application to familial and sporadic melanoma. Harnett P, et al. **Semin Oncol** 1988 Dec;15(6):549–57 (76 ref.)

Clinical aspects of familial cutaneous malignant melanoma. Tucker MA, et al. **Semin Oncol** 1988 Dec;15(6):524–8

HLA antigens in familial and sporadic cutaneous melanoma. Rovini D, et al. **Tumori** 1988 Dec 31;74(6):657–64

[Research on the molecular basis of neoplasms: malignant melanoma as an example] Birnbaum D, et al. **Bull Cancer (Paris)** 1989;76(3):227–36 (72 ref.) (Eng. Abstr.) **(Fre)**

[Which malignant melanomas are genetically determined?] Sigg C, et al. **Hautarzt** 1988 Jul;39(7):409–12 (17 ref.) (Eng. Abstr.) **(Ger)**

[Immunohistochemical analysis of ras gene expression in human melanomas and melanocytic nevi] Yasuda H. **Hokkaido Igaku Zasshi** 1989 May;64(3):243–53 (Eng. Abstr.) **(Jpn)**

HISTORY

[A farewell to the Thormählen test for melanoma. New facts on the lif of the prematurely deceased Johannes Thormahlen, M.D., (1860–1892)] Voswinckel P. **J Clin Chem Clin Biochem** 1989 Apr;27(4):253–9 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Cellular reaction to concanavalin A studied by the skin window method in healthy subjects and in patients with malignant tumors. Kolář Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:73–80

Current approaches to the adoptive immunotherapy of cancer. Yang JC, et al. **Adv Exp Med Biol** 1988;233:459–67

Melanoma–specific cytotoxic T cells generated from peripheral blood lymphocytes. Implications of a renewable source of precursors for adoptive cellular immunotherapy. Slingluff CL Jr, et al. **Ann Surg** 1989 Aug;210(2):194–202

Production of interleukin 1 by activated blood monocytes and alveolar macrophages from melanoma patients. Arnould R, et al. **Anticancer Res** 1988 Jul–Aug;8(4):775–9

The Ki–67 antigen in primary human melanomas—its relationship to mitotic rate and tumor thickness and its stability. Ostmeier H, et al. **Arch Dermatol Res** 1989; 281(3):173–7

Inhibition of neuroglandular antigen (NGA) glycosylation by phorbol ester in human melanoma cells. Feyles V, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):837–43

GM–CSF enhances 3F8 monoclonal antibody–dependent cellular cytotoxicity against human melanoma and neuroblastoma. Kushner BH, et al. **Blood** 1989 May 15; 73(7):1936–41

B–lymphocytes from melanoma patients and normal individuals react with melanoma cells but also with irrelevant antigens. Damato BE, et al. **Br J Cancer** 1988 Aug;58(2):182–5

Relationship between changes in antigen expression and protein synthesis in human melanoma cells after hyperthermia and photodynamic treatment. Davies CL, et al. **Br J Cancer** 1988 Sep;58(3):306–13

Immunogenetic heterogeneity of uveal melanoma. Martinetti M, et al. **Cancer Detect Prev** 1988;12(1–6):145–8

Induction of antibodies to a tumor–associated antigen by immunization with a whole melanoma cell vaccine. Euhus DM, et al. **Cancer Immunol Immunother** 1989;29(4):247–54

Combined interferon and vinblastine treatment of advanced melanoma: evaluation of the treatment results and the effects of the treatment on immunological functions. Kellokumpu–Lehtinen P, et al. **Cancer Immunol Immunother** 1989;28(3):213–7

Local distribution and concentration of intravenously injected 131I–9.2.27 monoclonal antibody in human malignant melanoma. Del Vecchio S, et al. **Cancer Res** 1989 May 15;49(10):2783–9

Monoclonal antiidiotypic antibodies related to the p97 human melanoma antigen. Kahn M, et al. **Cancer Res** 1989 Jun 15;49(12):3157–62

Tumor–reactive human immunoglobulin G monoclonal antibody from a melanoma patient. Kan–Mitchell J, et al. **Cancer Res** 1989 Aug 15;49(16):4536–41

Analysis of the antigenic profile of uveal melanoma lesions with anti–cutaneous melanoma–associated antigen and anti–HLA monoclonal antibodies. Natali PG, et al. **Cancer Res** 1989 Mar 1;49(5):1269–74

An epitope common to gangliosides O–acetyl–GD3 and GD3 recognized by antibodies in melanoma patients after active specific immunotherapy. Ravindranath MH, et al. **Cancer Res** 1989 Jul 15;49(14):3891–7

Identification of a human homologue of the murine tumor rejection antigen GP96. Srivastava PK, et al. **Cancer Res** 1989 Mar 15;49(6):1341–3

Accessory cell function of human melanoma cells in mitogen–induced T cell proliferation. Cordiali–Fei P, et al. **Cell Immunol** 1988 Oct 1;116(1):149–62

The tumor progression–associated human melanoma antigen P3.58 mediates monocyte–lymphocyte interactions in vitro. Johnson JP, et al. **Eur J Immunol** 1988 Dec;18(12):2097–100

The GPIIB–IIIa–like complex may function as a human melanoma cell adhesion receptor for thrombospondin. Tuszynski GP, et al. **Exp Cell Res** 1989 Jun;182(2):473–81

Conversion of a melanoma cell line from an HLA class II positive to negative phenotype after treatment with anti–mycoplasma drugs. Carrington MN, et al. **Hum Immunol** 1988 Aug;22(4):275–82

The melanoma progression–associated antigen P3.58 is identical to the intercellular adhesion molecule, ICAM–1. Johnson JP, et al. **Immunobiology** 1988 Dec;178(3):275–84

Short–term effects of i.v. injected murine 99MTc–F(ab')2 fragments of an anti–melanoma antibody (HMW–MAA 225.28 S) on haemato–immunological parameters in patients with melanoma. Castello G, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):140–4

Changes in antigen expression on human FME melanoma cells after exposure to hypoxia and acidic pH, alone or in combination. Davies CL, et al. **Int J Cancer** 1989 Feb 15;43(2):350–5

Differential lysis of melanoma clones by autologous recombinant interleukin 2–activated lymphocytes. Relationship with spontaneous resistance to doxorubicin (Dx). Gambacorti–Passerini C, et al. **Int J Cancer** 1988 Oct 15;42(4):544–8

Lack of correlation between peripheral blood lymphokine–activated killer (LAK) cell function and clinical response in patients with advanced malignant melanoma receiving recombinant interleukin 2. Ghosh AK, et al. **Int J Cancer** 1989 Mar 15;43(3):410–4

Ganglioside GM2 expression on human melanoma cells correlates with sensitivity to lymphokine–activated killer cells. Hoon DS, et al. **Int J Cancer** 1989 May 15; 43(5):857–62

Differential modulation by tumor necrosis factor and immune interferon of HLA class–II antigens expressed by melanoma cells. Maio M, et al. **Int J Cancer** 1989 Sep 15;44(3):554–9

Melanoma antigen expression and metastatic ability of mutant B16 melanoma clones. Nozue M, et al. **Int J Cancer** 1988 Nov 15;42(5):734–8

Generation and partial characterization of melanoma sublines resistant to lymphokine activated killer (LAK) cells. Relevance to doxorubicin resistance. Rivoltini L, et al. **Int J Cancer** 1989 May 15;43(5):880–5

Regulation of the metastasis of murine ocular melanoma by natural killer cells. Harning R, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1909–15

Melanoma patient antibody responses to melanoma tumor–associated antigens defined by murine monoclonal antibodies. Seigler HF, et al. **J Biol Response Mod** 1989 Feb;8(1):37–52

Defective interferon–augmented natural killer cell activity in patients with metastatic malignant melanoma. Müller C, et al. **J Cancer Res Clin Oncol** 1989;115(4):393–6

Detection of a tumor–associated glycoprotein antigen in serum and urine of melanoma patients by murine monoclonal antibody (AD1–40F4) in enzyme immunoassay. Euhus DM, et al. **J Clin Lab Anal** 1989; 3(3):184–90

DNA content and MHC class II antigen expression in malignant melanoma: clinical course. Zaloudik J, et al. **J Clin Pathol** 1988 Oct;41(10):1078–84

A unique antigenic epitope of human melanoma is carried on the common melanoma glycoprotein gp95/p97. Furukawa KS, et al. **J Exp Med** 1989 Feb 1;169(2):585–90

Autologous tumor–specific cytotoxic T lymphocytes in the infiltrate of human metastatic melanomas. Activation by interleukin 2 and autologous tumor cells, and involvement of the T cell receptor. Itoh K, et al. **J Exp Med** 1988 Oct 1;168(4):1419–41

Interleukin 4 promotes the growth of tumor–infiltrating lymphocytes cytotoxic for human autologous melanoma. Kawakami Y, et al. **J Exp Med** 1988 Dec 1;168(6):2183–91

Clonal analysis of cytotoxic and regulatory T cell responses against human melanoma. Mukherji B, et al. **J Exp Med** 1989 Jun 1;169(6):1961–76

Lysis of human melanoma cells by autologous cytolytic T cell clones. Identification of human histocompatibility leukocyte antigen A2 as a restriction element for three different antigens. Wölfel T, et al. **J Exp Med** 1989 Sep 1;170(3):797–810

Defective antigen presentation by human melanoma cell lines cultured from advanced, but not biologically early, disease. Alexander MA, et al. **J Immunol** 1989 Jun 1;142(11):4070–8

Cytotoxic T lymphocyte clones from peripheral blood and from tumor site detect intratumor heterogeneity of melanoma cells. Analysis of specificity and mechanisms of interaction. Anichini A, et al. **J Immunol** 1989 May 15; 142(10):3692–701

The role of HLA class I antigens in recognition of melanoma cells by tumor–specific cytotoxic T lymphocytes. Evidence for shared tumor antigens. Darrow TL, et al. **J Immunol** 1989 May 1;142(9):3329–35

A novel IFN–gamma regulated human melanoma associated antigen gp33–38 defined by monoclonal antibody Me14/D12. I. Identification and immunochemical characterization. Giuffré L, et al. **J Immunol** 1988 Sep 15; 141(6):2072–8

A novel heteromorphic human cell surface alloantigen, gp60, defined by a human monoclonal antibody. Schadendorf D, et al. **J Immunol** 1989 Mar 1;142(5):1621–5

Tumor–specific cytolysis by lymphocytes infiltrating human melanomas. Topalian SL, et al. **J Immunol** 1989 May 15; 142(10):3714–25

Immunosurveillance and melanoma. Bystryn JC. **J Invest Dermatol** 1989 May;92(5 Suppl):318S–320S

Immunohistologic evidence for the malignant potential of congenital melanocytic nevi. Steijlen PM, et al. **J Invest Dermatol** 1989 Mar;92(3):366–70

Beta 2 microglobulin expression in normal melanocytes, nevocellular nevi, and malignant melanomas. Takata M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):243S–247S

Expression and release of interleukin–1 by different human melanoma cell lines. Köck A, et al. **J Natl Cancer Inst** 1989 Jan 4;81(1):36–42

Lack of comparability between binding of monoclonal antibodies to melanoma cells in vitro and localization in vivo. McCready DR, et al. **J Natl Cancer Inst** 1989 May 3;81(9):682–7

In vitro complex formation and biodistribution of mouse antitumor monoclonal antibody in cancer patients. Sakahara H, et al. **J Nucl Med** 1989 Aug;30(8):1311–7

Study of proton spin–lattice relaxation variation induced by paramagnetic antibodies. Macri MA, et al. **Magn Reson Med** 1989 Sep;11(3):283–7

A novel interferon–gamma regulated human melanoma–associated antigen, gp33–38, defined by monoclonal antibody Me14–D12. II. Molecular cloning of a genomic probe. Audette M, et al. **Mol Immunol** 1989 Jun;26(6):515–22

Immunology of melanoma. Rowden G. **Monogr Pathol** 1988; (30):50–78 (195 ref.)
ADCC against hamster transplantable melanoma cells in relation to the diversity of their cell surface. Kozlowska K, et al. **Neoplasma** 1988;35(5):503–10
Biochemical classification of circulating immune complexes in human malignant melanoma and hematologic neoplasms. Queen WD, et al. **Oncology** 1989;46(1):14–25
Demonstration of B700 cross–reactive antigens on human and other animal melanomas. Gersten DM, et al. **Pigment Cell Res** 1988;1(6):434–8
De novo expression of intercellular–adhesion molecule 1 in melanoma correlates with increased risk of metastasis. Johnson JP, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):641–4
Cytolytic T–cell clones against an autologous human melanoma: specificity study and definition of three antigens by immunoselection. Knuth A, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2804–8
Human monoclonal antibodies. Kan–Mitchell J, et al. **Prog Clin Biol Res** 1989;288:85–94
Characterization of a human–mouse chimeric antibody reactive with a human melanoma associated antigen. Marchitto KS, et al. **Prog Clin Biol Res** 1989;288:101–5
Superficial spreading melanoma with a nodular area: antigenic phenotype of the radial and vertical growth areas. Brogelli L, et al. **Tumori** 1989 Feb 28;75(1):8–11
Immunoglobulin allotypes in familial malignant melanoma. Martinetti M, et al. **Tumori** 1989 Apr 30;75(2):97–9
[Effect of recombinant interleukin 2 on peripheral blood lymphocytes in vitro. IV. Cytotoxicity of lymphocytes in patients with malignant tumors] Jira M, et al. **Cas Lek Cesk** 1988 Nov 11;127(46):1422–4 (Eng. Abstr.) (Cze)
[Integrated immunotherapy in two cases of vulvar and vaginal melanoma] Cappello F. **Minerva Ginecol** 1988 Oct; 40(10):613–5 (Eng. Abstr.) (Ita)
[Immunoglobulins M, G and A as prognostic criteria of the treatment outcome in uveal melanoblastoma] Kotelianskiĭ EO. **Oftalmol Zh** 1989;(2):104–7 (Eng. Abstr.) (Rus)
[Disorders of immune system function and their correction in melanomas with regional metastases] Labunets IF, et al. **Vopr Onkol** 1989;35(4):416–23 (Eng. Abstr.) (Rus)
[Detection of surface antigens in uveal melanoma using monoclonal antibodies] Cernák A, et al. **Cesk Oftalmol** 1989 May;45(3):145–52 (Eng. Abstr.) (Slo)
[Expression of HLA–Dr and CD1+ cells in malignant and benign pigmentary tumors] Ramírez–Bosca A, et al. **Med Cutan Ibero Lat Am** 1989;17(1):58–64 (Eng. Abstr.) (Spa)

METABOLISM

Modulation of glutathione level in cultured human melanoma cells. Karg E, et al. **Acta Derm Venereol (Stockh)** 1989; 69(2):137–41
Cell surface molecules of human melanoma. Immunohistochemical analysis of the gp57, GD3, and mel–CSPG antigenic systems. Garin–Chesa P, et al. **Am J Pathol** 1989 Feb;134(2):295–303
Modulation of fibronectin production in normal human melanocytes and malignant melanoma cells by interferon–gamma and tumor necrosis factor–alpha. Varani J, et al. **Am J Pathol** 1989 Apr;134(4):827–36
Studies of the receptors on melanoma cells for Plasmodium falciparum infected erythrocytes. Sherwood JA, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):119–27
Increased iofetamine I 123 brain uptake in metastatic melanoma. Nagel JS, et al. **Arch Neurol** 1988 Oct; 45(10):1126–8
Purification of a lipoprotein lipase–inhibiting protein produced by a melanoma cell line associated with cancer cachexia. Mori M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1085–92
Cellular pharmacology of chloroquinoxaline sulfonamide and a related compound in murine B16 melanoma cells. Branda RF, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4557–64
Melanin synthesis and the action of L–dopa and 3,4–dihydroxybenzylamine in human melanoma cells. Kable EP, et al. **Cancer Chemother Pharmacol** 1989; 23(1):1–7
High uptake of RSU 1069 and its analogues melanotic melanomas. Walling JM, et al. **Cancer Chemother Pharmacol** 1989;24(1):28–32
Altered methionine metabolism in metastatic variants of a human melanoma cell line. Liteplo RG. **Cancer Lett** 1989 Jan;44(1):23–31
Production of interleukin 1 activity by cultured human melanoma cells. Bennicelli JL, et al. **Cancer Res** 1989 Feb 15;49(4):930–5
Melanoma cell adhesion to basement membrane mediated by integrin–related complexes. Kramer RH, et al. **Cancer Res** 1989 Jan 15;49(2):393–402
Nerve growth factor receptors in chromatin of melanoma cells, proliferating melanocytes, and colorectal carcinoma cells in vitro. Rakowicz–Szulczyńska EM, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7200–6
Interactions of thrombospondin with sulfated glycolipids and proteoglycans of human melanoma cells. Roberts DD. **Cancer Res** 1988 Dec 1;48(23):6785–93
Different growth responses to agents which elevate cAMP in human melanoma cell lines of high and low experimental metastatic capacity. Ormerod EJ, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):85–95
A human melanoma–derived cell line (IGR39) with a very high number of vasoactive–intestinal–peptide (VIP) receptors. 1. Molecular characterization of the binding site. Luis J, et al. **Eur J Biochem** 1989 Mar 15;180(2):429–33
Adrenocorticotropin binding activity of B16/C3 melanoma cells. Simić–Krstić J, et al. **Exp Cell Biol** 1988;56(3):138–42
Enhanced levels of cathepsin B mRNA in murine tumors. Moin K, et al. **FEBS Lett** 1989 Feb 13;244(1):61–4
Modulation of human macrophage functions by gangliosides. Hoon DS, et al. **Immunol Lett** 1989 Mar;20(4):269–75
The receptor for alpha–melanotropin of mouse and human melanoma cells. Application of a potent alpha–melanotropin photoaffinity label. Solca F, et al. **J Biol Chem** 1989 Aug 25;264(24):14277–81
Common acute lymphoblastic leukemia antigen expressed on leukemia and melanoma cell lines has neutral endopeptidase activity. Jongeneel CV, et al. **J Clin Invest** 1989 Feb; 83(2):713–7
Interferons modulate the expression of hormone receptors on the surface of murine melanoma cells. Kameyama K, et al. **J Clin Invest** 1989 Jan;83(1):213–21
Tumor growth and metastases in malignant disease. A review. Kwaan HC. **J Med** 1988;19(3–4):179–91 (59 ref.)
Biokinetics of radiolabeled monoclonal antibodies in heterotransplanted nude rats: evaluation of corrected specific tissue uptake. Ingvar C, et al. **J Nucl Med** 1989 Jul;30(7):1224–34
Postembedding immunogold electron microscopy for S100, tubulin, and cytoskeletal proteins in an amelanotic malignant melanoma. Hearn SA, et al. **Mod Pathol** 1989 Jan;2(1):46–54
Expression of the gangliosides GD3 and GD2 on lymphocytes in tissue sections of melanoma. Hersey P, et al. **Pathology** 1989 Jan;21(1):51–8
Human melanoma cell attachment involves an Arg–Gly–Asp–directed adhesion receptor and the disialoganglioside GD2. Cheresh DA. **Prog Clin Biol Res** 1989;288:3–24
Effect of hyperthermia on some metabolites in human melanoma cells and their xenografts on nude mice. Mirtsch S, et al. **Strahlenther Onkol** 1989 Jul;165(7):568–9
Tumor and tissue pharmacokinetics of cytostatic drugs in the nude mouse. Scheulen ME, et al. **Strahlenther Onkol** 1989 Jul;165(7):529–32
[Metabolism of vitamin D in patients with malignant melanoma of the skin] Wilczek H, et al. **Sb Lek** 1988 Sep; 90(8–9):268–73 (Eng. Abstr.) (Cze)

MICROBIOLOGY

A human melanoma cell line highly susceptible to influenza C virus. Nishimura H, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1653–61

MORTALITY

Mucosal melanoma of the head and neck. Hoyt DJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1096–9
A method for determining the optimum transform for covariates of the Cox model with application to 3680 cases of intraocular melanoma. Gamel JW, et al. **Comput Biomed Res** 1988 Oct;21(5):471–7
The association between anatomic site and survival in malignant melanoma. An analysis of 12,353 cases from the Swedish Cancer Registry. Thörn M, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):483–91
Nuclear DNA, serum sialic acid and measured depth in malignant melanoma for predicting disease recurrence and survival. Silver HK, et al. **Int J Cancer** 1989 Jul 15; 44(1):31–4
Trends in survival from malignant melanoma: remarkable improvement in 23 years. Thörn M, et al. **J Natl Cancer Inst** 1989 Apr 19;81(8):611–7
Cutaneous malignant melanoma of the head and neck. Fisher SR. **Laryngoscope** 1989 Aug;99(8 Pt 1):822–36
Survival following recurrent malignant melanoma of the head and neck. Hoyt DJ, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):586–9
Implications of survival curve slopes on the interpretation of adjuvant therapy results. Eriguchi M, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:93–7
Juvenile malignant melanoma. Reintgen DS, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):249–53
[Late metastasis in malignant melanoma of the skin] Landthaler M, et al. **Dtsch Med Wochenschr** 1989 Jul 28; 114(30):1149–52 (Eng. Abstr.) (Ger)
[The sex factor in the prognosis of stage I skin melanoma. A preliminary note] Ciardi C, et al. **G Ital Dermatol Venereol** 1988 May;123(5):215–8 (Eng. Abstr.) (Ita)

PATHOLOGY

Grimelius' silver method for all types of malignant melanomas. Spalević L, et al. **Acta Med Iugosl** 1989; 43(2):121–6
Cis–diamminedichloroplatinum(II) toxicity in human melanoma cells and lymphocytes as related to cellular platinum accumulation, DNA cross–linking and inhibition of DNA synthesis. Hansson J, et al. **Acta Oncol** 1988; 27(4):383–92
Smear and imprint technique in malignant melanoma of the eye. Fuchs U. **Acta Ophthalmol (Copenh)** 1988 Aug; 66(4):445–9
Reactivity of human lymphocyte clones to autologous metastatic melanoma cells. Fossati G, et al. **Adv Exp Med Biol** 1988;233:73–80
Immunological and structural profile of a 96 kD human melanoma associated antigen with preferential distribution in metastases. Graf LH Jr, et al. **Adv Exp Med Biol** 1988; 233:341–9
Immunohistochemical and ultrastructural study of human melanoma colonies grown in soft agar. Persky B, et al. **Am J Anat** 1989 Mar;184(3):212–24
Comparison of HMB–45 monoclonal antibody and S–100 protein in the immunohistochemical diagnosis of melanoma. Ordóñez NG, et al. **Am J Clin Pathol** 1988 Oct;90(4):385–90
Malignant melanoma in light of the multistep theory of neoplasia. Rywlin AM. **Am J Dermatopathol** 1989 Aug; 11(4):387–9
Malignant melanoma in situ on the sole of the foot. Its clinical and histopathologic characteristics. Saida T. **Am J Dermatopathol** 1989 Apr;11(2):124–30
Cutaneous malignant melanoma in a black patient with neurofibromatosis (von Recklinghausen's disease). Silverman JF, et al. **Am J Dermatopathol** 1988 Dec; 10(6):536–40 (16 ref.)
Proliferative activity of cutaneous melanocytic tumors defined by Ki–67 monoclonal antibody. A quantitative immunohistochemical study. Smolle J, et al. **Am J Dermatopathol** 1989 Aug;11(4):301–7
Diffuse uveal melanoma in a 5–year–old child. Rosenbaum PS, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):601–6
Tumor cell growth fractions in human malignant melanomas and the correlation to histopathologic tumor grading. Kaudewitz P, et al. **Am J Pathol** 1989 May;134(5):1063–8
Tumor cell–endothelial interactions. Increased adhesion of human melanoma cells to activated vascular endothelium. Rice GE, et al. **Am J Pathol** 1988 Nov;133(2):204–10
Prognostic significance of melanoma arising in the scalp. Essner R, et al. **Am J Surg** 1988 Oct;156(4):314–7
Signet ring melanoma, S–100 negative [letter] Bonetti F, et al. **Am J Surg Pathol** 1989 Jun;13(6):522–3
Histomorphometry in the assessment of prognosis in stage II malignant melanoma. Cochran AJ, et al. **Am J Surg Pathol** 1989 Jul;13(7):600–4
Vascular invasion in malignant melanomas. An independent prognostic variable? Fallowfield ME, et al. **Am J Surg Pathol** 1989 Mar;13(3):217–20
Desmoplastic malignant melanoma and its variants. A study of 45 cases. Jain S, et al. **Am J Surg Pathol** 1989 May; 13(5):358–73
Occult tumor cells in lymph nodes [letter; comment] Kern WH. **Am J Surg Pathol** 1989 May;13(5):430–2. **Comment on:** Am J Surg Pathol 1988 Aug;12(8):612–8
Primary malignant melanoma of the lung. Bagwell SP, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1543–7
A case of conjunctival Spitz nevus: review of literature and comparison with cutaneous locations. Kantelip B, et al. **Ann Ophthalmol** 1989 May;21(5):176–9 (15 ref.)
Effect of pyridoxine and pyridoxal on the in vitro growth of human malignant melanoma. Shultz TD, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1313–8
Common acquired melanocytic nevi, melanocytic dysplasia and malignant melanoma. A morphometric study. Santucci M, et al. **Appl Pathol** 1989;7(2):111–5
Pigmented breast carcinoma. A clinical and histopathologic simulator of malignant melanoma. Sau P, et al. **Arch Dermatol** 1989 Apr;125(4):536–9
Tumor thickness is not a prognostic factor in thin melanoma [letter] Jones SK, et al. **Arch Dermatol Res** 1989;281(1):81–2
Conjunctival melanoma with balloon cell transformation. Case report. Margo CE. **Arch Ophthalmol** 1988 Dec; 106(12):1653–4
Malignant melanoma of the choroid with vitreal seeding. Pavan PR, et al. **Arch Ophthalmol** 1989 Jan;107(1):130
Desmoplastic melanoma. Histologic correlation with behavior and treatment. Beenken S, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):374–9
Measurement of choroidal melanomas: a comparison of methods. Favilla I, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):59–66
Antagonistic effect of PDGF and NGF on transcription of ribosomal DNA and tumor cell proliferation. Rakowicz–Szulczynska EM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):649–56
Selective cytotoxicity of a phenolic melanin precursor, 4–S–cysteaminylphenol, on in vitro melanoma cells. Yamada K, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2217–21
Platelet–melanoma cell interaction is mediated by the glycoprotein IIb–IIIa complex. Boukerche H, et al. **Blood** 1989 Aug 1;74(2):658–63
A monoclonal antibody (LYP18) directed against the blood platelet glycoprotein IIb/IIIa complex inhibits human melanoma growth in vivo. Boukerche H, et al. **Blood** 1989 Aug 15;74(3):909–12
Prognosis of conjunctival melanomas in relation to histopathological features. Fuchs U, et al. **Br J Cancer** 1989 Feb;59(2):261–7
Effect of BANS location on the prognosis of clinical stage I melanoma: new data and meta–analysis. Weinstock MA, et al. **Br J Dermatol** 1988 Nov;119(5):559–65
Cutaneous malignant melanoma: a potentially curable disease. du Vivier A. **Br J Hosp Med** 1989 Apr;41(4):357–63 (54

ref.)
Primary malignant melanoma of the orbit arising in a cellular blue naevus. Löffler KU, et al. **Br J Ophthalmol** 1989 May; 73(5):388–93
A study of iris melanoma in Northern Ireland. McGalliard JN, et al. **Br J Ophthalmol** 1989 Aug;73(8):591–5
Clinicopathological findings in a growing optic nerve melanocytoma. Mansour AM, et al. **Br J Ophthalmol** 1989 Jun;73(6):410–5
Necrosis of choroidal melanoma: in ciliary artery involvement with temporal arteritis. Wolter JR. **Br J Ophthalmol** 1989 Mar;73(3):216–9
Is the proportion of hypoxic cells in a solid tumour dependent on the host (mouse or rat)? Guichard M, et al. **Bull Cancer (Paris)** 1989;76(4):367–71
Bilateral ciliary body melanomas. Waterhouse WJ, et al. **Can J Ophthalmol** 1989 Apr;24(3):125–8
Cutaneous malignant melanoma. II. The natural history and prognostic factors influencing the development of stage II disease. Berdeaux DH, et al. **Cancer** 1989 Apr 1; 63(7):1430–6
Desmoplastic malignant melanoma. A clinicohistopathologic study of 25 cases. Egbert B, et al. **Cancer** 1988 Nov 1; 62(9):2033–41
Tumor thickness and prognosis in clinical stage I malignant melanoma. Karakousis CP, et al. **Cancer** 1989 Oct 1; 64(7):1432–6
Patterns of the first lymph node metastases in patients with cutaneous malignant melanoma of axial localization. Lock-Andersen J, et al. **Cancer** 1988 Nov 1;62(9):2073–7
Malignant melanoma arising in a giant congenital melanocytic nevus. A case report with cytogenetic and histopathologic analyses. Padilla RS, et al. **Cancer** 1988 Dec 15;62(12):2589–94
Clinical and histopathologic characteristics of early lesions of subungual malignant melanoma. Saida T, et al. **Cancer** 1989 Feb 1;63(3):556–60
Objective histopathologic grading of cutaneous malignant melanomas by stereologic estimation of nuclear volume. Prediction of survival and disease-free period. Sørensen FB. **Cancer** 1989 May 1;63(9):1784–98
Association of early malignant melanoma with nevocytic nevi. Stolz W, et al. **Cancer** 1989 Feb 1;63(3):550–5 (38 ref.)
Effects of hyperoxia on B16–F10 cells in vivo. Margaretten NC, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):119–25
Combination effects of human recombinant interferon (alpha-2-arg, gamma) and cytotoxic agents on colony formation of human melanoma and hypernephroma cell lines. Nachbaur DM, et al. **Cancer Lett** 1989 Jan;44(1):49–53
Cytotoxic effect of RA233 on hypoxic B16 melanoma cells in vitro. Stackpole CW, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):127–31
An IgG3 monoclonal antibody established after immunization with GM3 lactone: immunochemical specificity and inhibition of melanoma cell growth in vitro and in vivo. Dohi T, et al. **Cancer Res** 1988 Oct 15;48(20):5680–5
Antigenic profile of tumor progression stages in human melanocytic nevi and melanomas. Elder DE, et al. **Cancer Res** 1989 Sep 15;49(18):5091–6
Effect of 17 beta-estradiol on the growth of estrogen receptor-positive human melanoma in vitro and in athymic mice. Feucht KA, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7093–101
Sensitivity of human melanoma cells to L-dopa and DL-buthionine (S,R)-sulfoximine. Kable EP, et al. **Cancer Res** 1989 May 1;49(9):2327–31
Establishment and characterization of a melanoma cell line from a xeroderma pigmentosum patient: activation of N-ras at a potential pyrimidine dimer site. Keijzer W, et al. **Cancer Res** 1989 Mar 1;49(5):1229–35
A human tumor lung metastasis model in athymic nude rats. Kjønniksen I, et al. **Cancer Res** 1989 Sep 15;49(18):5148–52
Membrane-associated interleukin 1 alpha as a mediator of tumor cell killing by human blood monocytes fixed with paraformaldehyde. Okubo A, et al. **Cancer Res** 1989 Jan 15;49(2):265–70
Influence of cellular, microenvironmental, and growth parameters on thermotolerance kinetics in vivo in human melanoma xenografts. Rofstad EK. **Cancer Res** 1989 Sep 15;49(18):5027–32
Pathology of human and experimental skin tumors. Klein-Szanto AJ. **Carcinog Compr Surv** 1989;11:19–53 (111 ref.)
Tumor progression in melanoma: the biology of epidermal melanocytes in vitro. Mancianti ML, et al. **Carcinog Compr Surv** 1989;11:369–86 (49 ref.)
Human melanoma xenografts. Pawlowski A, et al. **Carcinog Compr Surv** 1989;11:103–32 (75 ref.)
A novel vitronectin receptor integrin (alpha v beta x) is responsible for distinct adhesive properties of carcinoma cells. Cheresh DA, et al. **Cell** 1989 Apr 7;57(1):59–69
Establishment and characterization of a novel human malignant melanoma cell line AKI. Ishii A, et al. **Cell Mol Biol** 1988;34(3):255–64
Replating efficiency of metastatic melanoma cells from lymph node and subcutaneous sites does not predict patient survival. Meyskens FL Jr, et al. **Clin Exp Metastasis** 1989 Nov-Dec;7(6):627–32
Disseminated melanomatosis of the central nervous system and other organs: a case report. Iglesias-Rozas JR, et al. **Clin Neuropathol** 1989 Jan-Feb;8(1):11–5
Primary malignant melanoma of the meninges. Thornton C, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):244–8
Amelanotic lentigo maligna melanoma: a unique case and review of the literature. Herman KL, et al. **Cutis** 1989 Jul; 44(1):45–8 (8 ref.)
Metastatic malignant melanoma arising from a common blue nevus in a patient with subacute cutaneous lupus erythematosus. Modly C, et al. **Dermatologica** 1989; 178(3):171–5 (19 ref.)
Macular amelanotic melanoma in situ. Pichler E, et al. **Dermatologica** 1988;177(5):313–6 (5 ref.)
Proliferation antigens in cutaneous melanocytic tumors—an immunohistochemical study comparing the transferrin receptor and the Ki 67 antigen. Soyer HP, et al. **Dermatologica** 1989;179(1):3–9
Mechanisms of differentiation in melanoma cells and melanocytes. Bennett DC. **Environ Health Perspect** 1989 Mar;80:49–59 (119 ref.)
Laparoscopy in the abdominal staging of melanoma. Caldironi MW, et al. **Eur J Cancer Clin Oncol** 1989 Feb; 25(2):223–6
Clinical assessment of melanoma thickness. Pritchard GA, et al. **Eur J Surg Oncol** 1989 Jun;15(3):232–5
Differential distribution of B16F10 melanoma cells in the liver lobule. Hilario E, et al. **Exp Cell Biol** 1988; 56(6):303–10
Trigramin, an RGD-containing peptide from snake venom, inhibits cell-substratum adhesion of human melanoma cells. Knudsen KA, et al. **Exp Cell Res** 1988 Nov;179(1):42–9
Malignant transformation of an iris melanocytoma. A case report. Cialdini AP, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):348–54
Transvitreal retinochoroidal biopsy. Scherfig E, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):369–73
Malignant melanoma: a new mimic of colloid adenocarcinoma [letter] Clarke TJ. **Histopathology** 1989 Jul;15(1):108–9
Nucleolar organizer regions in melanocytic dysplasia and melanoma. Fallowfield ME, et al. **Histopathology** 1988 Jul; 13(1):95–9
Basement membrane deposition in benign and malignant naevo-melanocytic lesions: an immunohistochemical study with antibodies to type IV collagen and laminin. Havenith MG, et al. **Histopathology** 1989 Aug;15(2):137–46
Primary mucosal malignant melanoma: an immunohistochemical study of 12 cases with comparison to cutaneous and metastatic melanomas. Fitzgibbons PL, et al. **Hum Pathol** 1989 Mar;20(3):269–72
Silver staining of nucleolar organizer regions in malignant melanoma and melanotic nevi. Leong AS, et al. **Hum Pathol** 1989 Mar;20(3):257–62
Molecular profile, tissue distribution and prognostic evaluation of a human melanoma-carcinoma antigen recognized by the murine monoclonal antibody B1.1. Natali PG, et al. **Int J Biol Markers** 1988 Oct–Dec;3(4):211–20
Characterization of a metastasis-deficient lectin-resistant human melanoma mutant. Ishikawa M, et al. **Int J Cancer** 1989 Jan 15;43(1):134–9
Pathologic prognostic factors for cutaneous malignant melanoma: the Western Canada Melanoma Study. Worth AJ, et al. **Int J Cancer** 1989 Mar 15;43(3):370–5
Selective radiosensitization and cytotoxicity of human melanoma cells using halogenated deoxycytidines and tetrahydrouridine. Lawrence TS, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1243–6
Metastatic patterns in autopsy cases of cutaneous melanoma. Akslen LA, et al. **Invasion Metastasis** 1988;8(4):193–204
Effect of dicarboxylic acids (C6 and C9) on human choroidal melanoma in cell culture. Breathnach AS, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):491–8
Characterization of uveal melanoma cell lines that grow as xenografts in rabbit eyes. Kan-Mitchell J, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):829–34
Mucosal melanotic macule, reactive type: a simulation of melanoma. Horlick HP, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):786–91 (25 ref.)
Photographs for Clark's "dysplastic" nevi? Rapini RP. **J Am Acad Dermatol** 1988 Dec;19(6):1130–4
Semiquantitative analysis of histologic criteria in thin malignant melanomas. Stolz W, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1115–20
Melanocytic nevus counts and melanoma [letter] Swerdlow AJ, et al. **J Am Acad Dermatol** 1989 Mar;20(3):522–3
In situ malignant melanoma arising in a speckled lentiginous nevus. Wagner RF Jr, et al. **J Am Acad Dermatol** 1989 Jan;20(1):125–6
Acral lentiginous melanoma. Pedal lesions in the black population. Bartolomei FJ, et al. **J Am Podiatr Med Assoc** 1988 Nov;78(11):584–9
Human recombinant alpha- and gamma-interferons enhance the cytotoxic properties of tumor necrosis factor on human melanoma. Bregman MD, et al. **J Biol Response Mod** 1988 Aug;7(4):384–9
Role of IIb-IIIa-like glycoproteins in cell-substratum adhesion of human melanoma cells. Knudsen KA, et al. **J Cell Physiol** 1988 Sep;136(3):471–8
Primary malignant melanoma of the gall bladder. Heath DI, et al. **J Clin Pathol** 1988 Oct;41(10):1073–7 (33 ref.)
Balloon cell melanoma: a report of two cases. Aloi FG, et al. **J Cutan Pathol** 1988 Aug;15(4):230–3
Recognition of malignant melanoma by monoclonal antibody HMB-45. An immunohistochemical study of 200 paraffin-embedded cutaneous tumors. Wick MR, et al. **J Cutan Pathol** 1988 Aug;15(4):201–7
Five primary disparate melanomas: a case report (the spectrum of melanoma). Shapiro MA. **J Dermatol Surg Oncol** 1988 Dec;14(12):1378–85
Clinical characteristics of cutaneous melanoma in southeastern Hungary. Szekeres E, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):761–5
Primary malignant melanoma of the penis—a case report and a review of the literature. Nakamura S, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):68–72 (14 ref.)
Synergistic effects of hyperthermia and peplomycin against human malignant melanoma xenografts. Yamada K, et al. **J Dermatol (Tokyo)** 1988 Oct;15(5):405–11
The role of inhibitors in the fluorescent staining of benign naevus and malignant melanoma cells with 9-amino acridine and acridine orange. Steven FS, et al. **J Enzym Inhib** 1987;1(4):275–87
Giant congenital nevus and malignant melanoma. Hori Y, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):310S–314S
Fine structural and immunohistochemical properties of dysplastic melanocytic nevi: comparison with malignant melanoma. Jimbow K, et al. **J Invest Dermatol** 1989 May; 92(5 Suppl):304S–309S
Comparison of acral nevomelanocytic proliferations in Japanese and whites. Margolis RJ, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):222S–226S
Pigment cells and pigment cell tumors in fish. Masahito P, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):266S–270S (28 ref.)
Structure of basement membranes in malignant melanoma and nevocytic nevi. Schmoeckel C, et al. **J Invest Dermatol** 1989 May;92(5):663–8
Cutaneous melanoma in Japan and the United States: comparative prognostic factors. Sober AJ. **J Invest Dermatol** 1989 May;92(5 Suppl):227S–233S
Levodopa/dopamine analogs as inhibitors of DNA synthesis in human melanoma cells. Wick MM. **J Invest Dermatol** 1989 May;92(5 Suppl):329S–331S
Malignant melanoma of the larynx. Hussain SS, et al. **J Laryngol Otol** 1989 May;103(5):533–6 (11 ref.)
Two malignant melanomas in skin and tonsil during consecutive pregnancies. Walsted A, et al. **J Laryngol Otol** 1989 Aug;103(8):780–2
Enhanced tumorigenicity, melanogenesis, and metastases of a human malignant melanoma after subdermal implantation in nude mice. Cornil I, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):938–44
Correlation of growth capacity of human tumor cells in hard agarose with their in vivo proliferative capacity at specific metastatic sites. Li L, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1406–12
Partial purification of (a) low molecular weight ovine pineal compound(s) with an inhibiting effect on the growth of human melanoma cells in vitro. Noteborn HP, et al. **J Neural Transm** 1988;73(2):135–55
Primary malignant melanoma of the oral cavity: a case report. Bucci E, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):621–2
Primary malignant melanoma of the maxillary sinus: case report and literature review. Clark DB, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):754–9 (22 ref.)
Type VII collagen antibody LH 7.2 identifies basement membrane characteristics of thin malignant melanomas. Kirkham N, et al. **J Pathol** 1989 Mar;157(3):243–7
Response of melanoma cells to alpha-MSH and cAMP stimulation. Liu YH. **J Tongji Med Univ** 1988;8(2):89–93
Effects of nitrogen dioxide and ozone on blood-borne cancer cell colonization of the lungs. Richters A. **J Toxicol Environ Health** 1988;25(3):383–90
Malignant conjunctival melanoma. A case report. Kandiah R, et al. **Med J Malaysia** 1988 Jun;43(2):178–80
Melanocytic proliferations that simulate malignant melanoma histopathologically. Ackerman AB. **Monogr Pathol** 1988; (30):153–73 (12 ref.)
Biological and prognostic significance of vertical growth phase characteristics in malignant melanoma. Imber MJ, et al. **Monogr Pathol** 1988;(30):19–34 (67 ref.)
Histologic reporting of malignant melanoma. Murphy GF, et al. **Monogr Pathol** 1988;(30):79–93 (31 ref.)
Minimal deviation melanoma. Reed RJ. **Monogr Pathol** 1988; (30):110–52 (21 ref.)
Problems in microstaging of melanoma vertical growth. Sagebiel RW. **Monogr Pathol** 1988;(30):94–109 (55 ref.)
Dysplastic nevus: a formal histogenetic precursor of malignant melanoma. Tong AK, et al. **Monogr Pathol** 1988; (30):10–8 (20 ref.)
Morphometric studies on melanocytic tumors. Olinici CD, et al. **Morphol Embryol (Bucur)** 1989 Jan-Mar;35(1):49–52
Melanoma-pigmented lesion center. Devereux DF. **N J Med** 1989 May;86(5):401–3
Malignant melanoma of the anal canal. Lin PY, et al. **N Y State J Med** 1989 May;89(5):291–2
Biological and immunological properties of the HMB-2 human melanoma cell line. Svec J, et al. **Neoplasma** 1988; 35(6):665–81
Primary melanoma of the vagina: a clinicopathologic analysis. Reid GC, et al. **Obstet Gynecol** 1989 Aug;74(2):190–9
bFGF as an autocrine growth factor for human melanomas. Halaban R, et al. **Oncogene Res** 1988 Sep;3(2):177–86
Late manifestation of conjunctival malignant melanoma. Daxecker F, et al. **Ophthalmologica** 1988;197(4):176–8
Fluid state of malignant choroidal melanoma growth

presenting as exudative retinal detachment. Wolter JR. **Ophthalmologica** 1989;199(1):34–40

Benign conjunctival melanocytic lesions. Clinicopathologic features. Folberg R, et al. **Ophthalmology** 1989 Apr; 96(4):436–61 (150 ref.)

Clinicopathologic characteristics of premalignant and malignant melanocytic lesions of the conjunctiva. Jakobiec FA, et al. **Ophthalmology** 1989 Feb;96(2):147–66 (58 ref.)

Metastatic melanoma within and to the conjunctiva. Jakobiec FA, et al. **Ophthalmology** 1989 Jul;96(7):999–1005

Conjunctival melanocytic lesions in children. McDonnell JM, et al. **Ophthalmology** 1989 Jul;96(7):986–93

Comparison of transillumination and histologic slide measurements of tumor diameter in uveal melanoma. Polivogianis L, et al. **Ophthalmology** 1988 Nov; 95(11):1576–82

Peripunctal melanocytic nevi. Distinctive clinical findings and differential diagnosis. Scott KR, et al. **Ophthalmology** 1989 Jul;96(7):994–8

Balloon cell melanoma mimicking clear cell carcinoma. Aksen LA, et al. **Pathol Res Pract** 1989 May;184(5):548–50; discussion 551–3

Heterogeneity of primary malignant melanomas in oral mucosa: an analysis of 43 cases in Japan. Umeda M, et al. **Pathology** 1988 Jul;20(3):234–41 (56 ref.)

DNA ploidy in thin melanoma. Zardawi IM, et al. **Pathology** 1988 Jul;20(3):243–6

Melanomas arising in large congenital nevocytic nevi: a prospective study. Gari LM, et al. **Pediatr Dermatol** 1988 Aug;5(3):151–8

Minimal deviation spindle cell melanoma: unusual histologic pattern in an 11-year-old black girl. Donner LR, et al. **Pediatr Pathol** 1988;8(4):401–7

Median effect and long term recovery analysis of biological modifier interactions with difluoromethylornithine on the proliferation of human melanoma cells. Bregman MD, et al. **Pigment Cell Res** 1987;1(2):124–8

Chromatophoromas in a pine snake. Jacobson ER, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):26–33

Biology of melanoma invasion and metastasis. Liotta LA, et al. **Pigment Cell Res** 1987;1(1):5–15 (64 ref.)

Monoclonal antibody against a melanosomal protein in melanotic and amelanotic human melanoma cells. McEwan M, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):1–7

Identification and quantification of subsets of mononuclear inflammatory cells in melanocytic and other human tumors. Nestor MS, et al. **Pigment Cell Res** 1987;1(1):22–7

Head and neck melanoma. How to recognize and treat this increasingly common tumor. Barone JG, et al. **Postgrad Med** 1989 Mar;85(4):389–90, 397–8, 400 (11 ref.)

Malignant melanoma. Why early diagnosis and treatment are crucial. Costanzi JJ. **Postgrad Med** 1988 Nov 1; 84(6):159–60, 163–8 (42 ref.)

Radiosensitivity of human prostate cancer and malignant melanoma cell lines. Wollin M, et al. **Radiother Oncol** 1989 Jul;15(3):285–93

Choroidal malignant melanoma with early vitreous seeding [published erratum appears in Retina 1989;9(1):58] Dunn WJ, et al. **Retina** 1988;8(3):188–92

Histologic prognostic indicators in cutaneous malignant melanoma. Ronan SG, et al. **Semin Oncol** 1988 Dec; 15(6):558–65

RBE of thermal neutron capture therapy using 10B1-para-boronophenylalanine for human and B-16 melanoma cells. Ichihashi M, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):198–201

Fast neutrons from the Essen cyclotron can be used successfully for neutron capture experiments in vitro. Ziegler W, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):210–2

Iris pigmentation and pigmented lesions: an ultrastructural study. Eagle RC Jr. **Trans Am Ophthalmol Soc** 1989; 86:581–687

Carcinoma in plantar ulcers of leprosy patients. Majoroh TO, et al. **Trop Geogr Med** 1988 Oct;40(4):365–8

Primary melanoma of the ovary in a 25 year old primigravida—a case report. Shroff CP, et al. **Tumori** 1989 Feb 28;75(1):72–5

In vivo ultrasound backscattering estimation for tumour diagnosis: an animal study. Romijn RL, et al. **Ultrasound Med Biol** 1989;15(5):471–9

Relationship between melanogenicity and malignancy in malignant melanoma cells. Kim HI, et al. **Yonsei Med J** 1988;29(4):357–66

[Immunohistochemical studies of metastasis of achromatic melanoma to the lymph nodes] Popov A, et al. **Eksp Med Morfol** 1988;27(3):35–9 (Eng. Abstr.) (Bul)

[Primary malignant melanoma of the oral cavity] Wang ZY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):174–6 (Chi)

[Photobiologic aspects of malignant melanoma (clinical studies)] Ettler K. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):419–25 (Eng. Abstr.) (Cze)

[Conjunctival localization of Spitz nevus] Boccard R, et al. **Ann Dermatol Venereol** 1988;115(6–7):733–4 (8 ref.) (Fre)

[Primary malignant melanoma of the esophagus arising in melanosis. Histological, immunohistochemical and ultrastructural study of a case] Kanavaros P, et al. **Ann Pathol** 1989;9(1):57–61 (Eng. Abstr.) (Fre)

[Achromic melanoma of the limbus (apropos of a case)] Ducasse A, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):397–8 (Eng. Abstr.) (Fre)

[Natural history of malignant melanoma of the choroid] Saraux H, et al. **J Fr Ophtalmol** 1988;11(2):169–75 (Eng. Abstr.) (Fre)

[Primary malignant melanoma of ORL mucosa. Apropos of 5 cases] Stoll D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):229–31 (Eng. Abstr.) (Fre)

[Which are the nevomelanocytic nevi which should be excised?] Mérot Y. **Rev Med Suisse Romande** 1989 Jun; 109(6):433–5 (Fre)

[Malignant endobronchial melanoma, apparently primary. Apropos of a case] André N, et al. **Rev Pneumol Clin** 1988; 44(3):143–5 (11 ref.) (Eng. Abstr.) (Fre)

[Use of cell kinetic studies in managing the treatment of malignant melanoma of the skin] Fiedler H, et al. **Dermatol Monatsschr** 1988;174(9):546–50 (Eng. Abstr.) (Ger)

[The growth dynamics of malignant melanomas. Long-term establishment of melanomas] Paul E. **Fortschr Med** 1989 Feb 10;107(4):29–30, 33–4, 37–8 (16 ref.) (Eng. Abstr.) (Ger)

[Demonstration of S 100 protein in malignant melanoma of the skin. Pattern of distribution and significance for determination of tumor thickness] Flügge G, et al. **Hautarzt** 1989 May;40(5):290–5 (Eng. Abstr.) (Ger)

[Local recurrence and metastasis of thin malignant melanomas (less than or equal to 1mm)] Garbe C, et al. **Hautarzt** 1989 Jun;40(6):337–43 (Eng. Abstr.) (Ger)

[Comment on the work by H.P. Soyer, J. Smolle, H. Kresbach, S. Hödl, P. Glavanovitz, H. Pachernegg and H. Kerl: Direct light microscopy of pigment tumors of the skin (letter)] Schwermann M, et al. **Hautarzt** 1988 Dec; 39(12):795 (Ger)

[Multiple primary melanomas of the hair follicles—a special form of malignant melanoma of the skin] Sigg C, et al. **Hautarzt** 1988 Jul;39(7):447–51 (Eng. Abstr.) (Ger)

[Growth inhibition of melanoma cells by interferons in vitro. Similar antiproliferative effects of 100–1000 times lower concentrations of nIFN-beta in comparison with rIFN-alpha-2a] Zouboulis C, et al. **Hautarzt** 1989 Feb; 40(2):65–9 (Eng. Abstr.) (Ger)

[Prognostic significance of lymphocytic infiltration in malignant melanoma of the choroid] Göllnitz R, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):660–5 (Eng. Abstr.) (Ger)

[Pseudoneuritis pigmentosa in malignant melanoma of the choroid] Lommatzsch PK, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):69–74 (Eng. Abstr.) (Ger)

[Malignant melanoma—a challenge for the physician] Seebacher C. **Z Arztl Fortbild (Jena)** 1988;82(9):401–4 (Ger)

[Melanoma malignum en cuirasse] Dimitrowa J, et al. **Z Hautkr** 1988 Oct 15;63(10):828–30 (Eng. Abstr.) (Ger)

[Metastatic malignant melanoma] Groth W. **Z Hautkr** 1989 Jul 15;64(7):535–6 (Ger)

[The prognosis of patients with level V melanomas of the extremities] Krüger I, et al. **Z Hautkr** 1989 Jul 15; 64(7):573–6 (Eng. Abstr.) (Ger)

[Acral lentiginous malignant melanoma] Meschig R, et al. **Z Hautkr** 1989 Feb 15;64(2):137–9 (13 ref.) (Eng. Abstr.) (Ger)

[Malignant melanoma of the face (clinical conference)] **Harefuah** 1989 Feb 1;116(3):178–84 (Heb)

[Is iris melanoma really a nevus?] Kremer I, et al. **Harefuah** 1989 Mar 1;116(5):252–4 (Eng. Abstr.) (Heb)

[A tumor metastasizing into another tumor] Zalatnai A. **Orv Hetil** 1988 Nov 20;129(47):2535–6, 2539 (Eng. Abstr.) (Hun)

[Subungual melanoma: problems of differential diagnosis] Arcangeli F, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):545–6 (Ita)

[Local-regional infiltration: principal prognostic factors in stage I melanoma] Leo E, et al. **G Ital Oncol** 1988 Apr–Jun; 8(2):71–4 (11 ref.) (Eng. Abstr.) (Ita)

[Balloon cell malignant melanoma] Napoli P. **Pathologica** 1988 May–Jun;80(1067):379–85 (Eng. Abstr.) (Ita)

[Malignant melanoma in the anorectal region—a report of two cases] Kunieda K, et al. **Gan No Rinsho** 1988 Sep; 34(11):1613–8 (Eng. Abstr.) (Jpn)

[Two cases of anorectal malignant melanoma] Sakamoto S, et al. **Gan No Rinsho** 1989 Sep;35(10):1189–94 (Eng. Abstr.) (Jpn)

[Clinical symptoms and prognosis in malignant melanoma of the pubic region] Sasaki H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1721–7 (Eng. Abstr.) (Jpn)

[Malignant melanoma of male urethra: a case report] Yamamoto N, et al. **Hinyokika Kiyo** 1989 Jan;35(1):121–6 (14 ref.) (Eng. Abstr.) (Jpn)

[Clinical and histopathologic analyses of pigmented macular lesions on the soles of Japanese—proposal of a clinical guideline for detection of early malignant melanoma on the sole] Saida T, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Feb;99(2):117–28 (Eng. Abstr.) (Jpn)

[Histologic characteristics of pigmented macular region of primary malignant melanoma on the sole: histopathologic model of malignant melanoma in situ on the sole] Saida T. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(4):453–60 (Eng. Abstr.) (Jpn)

[Mucosal melanomas of the head and neck] Hatano Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):879–86 (Eng. Abstr.) (Jpn)

[Primary intracranial malignant melanoma associated with nevus of Ota: a case report] Kabuto M, et al. **No Shinkei Geka** 1988 Jun;16(7):875–80 (32 ref.) (Eng. Abstr.) (Jpn)

[An autopsy case of malignant melanoma possibly originating in the sphenoid sinus] Shinbori T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):636–42 (Eng. Abstr.) (Jpn)

[Relation of the clinical course of malignant melanoma of the skin and its population features, site, staging and histopathologic characteristics] Chmielowska E. **Patol Pol** 1988 Apr–Jun;39(2):83–93 (Eng. Abstr.) (Pol)

[Tapioca melanoma of the iris] Marin C. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):231–3 (Eng. Abstr.) (Rum)

[Malignant uveal melanoma and cutaneous pigmented nevi] Talea L. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):217–20 (Eng. Abstr.) (Rum)

[Ocular melanoma metastases to primary liver carcinoma] Samsonov VA. **Arkh Patol** 1989;51(5):67–9 (Eng. Abstr.) (Rus)

[The capacity of the cells of a human skin melanoma to be preserved long-term in an intact state in vitro] Mosienko MD, et al. **Eksp Onkol** 1988;10(4):34–6 (Eng. Abstr.) (Rus)

[Clinico-morphologic manifestations of the regression of a primary focus of malignant melanoma of the skin] Naleskina LA, et al. **Klin Khir** 1989;(5):24–7 (Eng. Abstr.) (Rus)

[Intensive intraperitoneal growth of human melanoma in immunocompetent mice following whole-body irradiation] Lokshin A, et al. **Vestn Akad Med Nauk SSSR** 1988; (12):69–73 (Eng. Abstr.) (Rus)

[Melanoma of female distal urethra: apropos of a case] Sanz Velez JI, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):63–4 (Eng. Abstr.) (Spa)

[Melanoma of the glans penis: report of a case and review of the literature] Castiñeiras J, et al. **Arch Esp Urol** 1988 Nov-Dec;41(9):880–3 (19 ref.) (Eng. Abstr.) (Spa)

[Meningeal melanocytoma. Presentation of a case and review of the literature] Córdoba A, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):93–9 (26 ref.) (Eng. Abstr.) (Spa)

[A peculiar case of anorectal melanoma (letter)] Albiach M, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):527–8 (Spa)

[Anorectal melanoma. Report of a new case (letter)] Gómez Portilla A, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):635–6 (Spa)

[Primary melanoma of the esophagus, associated with melanosis. Report of a case] Martínez Araque MJ, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):67–9 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Mast cell–tumour cell interactions: matrix degradation and the demonstration of histamine H2 receptors on human melanoma. Woolley DE, et al. **Adv Exp Med Biol** 1988; 233:81–90 (38 ref.)

Lymphatic anatomy: functional nodal basins. Eberbach MA, et al. **Ann Plast Surg** 1989 Jan;22(1):25–31

Iris melanoma with increased intraocular pressure. Differentiation of focal solitary tumors from diffuse or multiple tumors. Char DH, et al. **Arch Ophthalmol** 1989 Apr;107(4):548–51

Platelet–tumor cell interaction: effect of prostacyclin and a synthetic analog on metastasis formation. Costantini V, et al. **Cancer Chemother Pharmacol** 1988;22(4):289–93

Phorbol ester impairs melanotropin receptor function and stimulates growth of cultured M2R melanoma cells. Gerst JE, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):29–39

Human melanoma cells express a novel integrin receptor for laminin. Kramer RH, et al. **J Biol Chem** 1989 Sep 15; 264(26):15642–9

Influence of morphology and malignancy of three new human melanoma cell lines on the cyclooxygenase pathway. Malle E, et al. **Prostaglandins** 1989 Mar; 37(3):389–98

The pathophysiology and staging of cutaneous malignant melanoma. Schultz S, et al. **Semin Oncol** 1989 Feb;16(1 Suppl 1):27–33 (46 ref.)

Role of hormones and growth factors in melanomas. Walker MJ. **Semin Oncol** 1988 Dec;15(6):512–23 (175 ref.)

[Follow-up of malignant melanoma] Truchetet F, et al. **Ann Dermatol Venereol** 1989;116(5):437–40 (20 ref.) (Fre)

[Natural history of malignant melanoma of the uvea (apropos of 2 cases: 1—Malignant melanoma of the uvea followed-up without treatment during 25 years. 2—Simultaneous discovery of a malignant melanoma of the uvea and meningeal metastases)] Bacin F, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):675–8 (12 ref.) (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

A phase II study of the efficacy of diamminedichloroplatinum (cisplatin) for the control of locally recurrent and intransit malignant melanoma of the extremities using tourniquet outflow-occlusion techniques. Bland KI, et al.

Ann Surg 1989 Jan;209(1):73–80

Prevention and early detection of skin cancer/melanoma. Kopf AW. **Cancer** 1988 Oct 15;62(8 Suppl):1791–5

How much does the public know about moles, skin cancer and malignant melanoma? The results of a postal survey. Newman S, et al. **Community Med** 1988 Nov;10(4):351–7

Screening for melanoma/skin cancer: theoretic and practical considerations. Koh HK, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):159–72 (81 ref.)

Melanoma risk assessment [letter] Dick DC. **Lancet** 1989 Sep 30;2(8666):799

Adolescent use of sun-protection measures. Cockburn J, et al. **Med J Aust** 1989 Aug 7;151(3):136–40

A strategy for the control of malignant melanoma in New Zealand. Elwood JM, et al. **N Z Med J** 1988 Sep 28; 101(854):602–4 (33 ref.)

Precursors to malignant melanoma.
Natl Inst Health Consensus Dev Conf Summ 1984;4(9):6 p. (0 ref.)

Sunburns, melanoma, and the pediatrician. Williams ML, et al. **Pediatrics** 1989 Aug;84(2):381–2

Evaluating the efficacy of skin self-exam and other surveillance measures in persons at various levels of risk for cutaneous malignant melanoma: an ongoing case-control study. Berwick M, et al.
Prog Clin Biol Res 1989;293:297–305

1989 Texas Skin Cancer/Melanoma Project [editorial] Dany MP. **Tex Med** 1989 Feb;85(2):6

[How can melanoma be stopped? The prevention of melanoma and early recognition of melanoma precursors] Jung EG. **Dtsch Med Wochenschr** 1989 Mar 10; 114(10):393–7 (14 ref.) **(Ger)**

[Public education in recognizing melanoma] Illig L, et al. **Z Hautkr** 1989 Jul 15;64(7):537–8, 543–6, 551–63 (67 ref.) (Eng. Abstr.) **(Ger)**

[Preventive removal of pigmented nevi: dermatologic and psychological indicators based on personal experience] Bogdanowski T, et al. **Przegl Dermatol** 1988 Sep–Oct; 75(5):358–62 (Eng. Abstr.) **(Pol)**

[Dysplastic nevus syndrome: diagnosis as prevention of melanoma (letter)] Lareo de la Cierva FJ, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):119 **(Spa)**

RADIOGRAPHY

Primary malignant melanoma of the vagina. Constant O, et al. **Br J Radiol** 1989 Jul;62(739):623–4

Two cases of primary malignant melanoma of the oesophagus. Isaacs JL, et al. **Clin Radiol** 1988 Jul; 39(4):455–7

[Use of computer tomography in the diagnosis of malignant melanoma of the choroid] Anders M, et al.
Cesk Oftalmol 1988 Nov;44(6):419–29 (Eng. Abstr.) **(Cze)**

[The role of lymphography in melanoma of the limbs. Personal experience] Ettorre GC, et al.
Radiol Med (Torino) 1989 May;77(5):512–6 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Re: Woods et al: lymphoscintigraphy as a guide to treatment in malignant melanoma [letter] Bennett JE.
Ann Plast Surg 1989 Sep;23(3):275

Lymphoscintigraphy as a guide to treatment in malignant melanoma. Woods JE, et al. **Ann Plast Surg** 1989 Feb; 22(2):150–5

Evaluation of metastatic melanoma with planar and SPECT scintigraphy using ZME 018 and 96.5 radiolabeled monoclonal antibodies. Jaffe RM, et al.
Cancer Detect Prev 1988;12(1–6):303–12

A patient study with radioiodine labelled 5-iodo-2-thiouracil. van Langevelde A, et al.
Eur J Nucl Med 1988;14(12):640–1

Radioimmunoscintigraphy with melanoma-associated monoclonal antibody fragments in choroidal melanoma. Schaling DF, et al. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):291–4

Radiolabeled porphyrin vs gallium-67 citrate for the detection of human melanoma in athymic mice. Maric N, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):543–51

Successful imaging of malignant melanoma with technetium-99m-labeled monoclonal antibodies. Eary JF, et al. **J Nucl Med** 1989 Jan;30(1):25–32

Melanoma targeting with a cocktail of monoclonal antibodies to distinct determinants of the human HMW-MAA. Matzku S, et al. **J Nucl Med** 1989 Mar;30(3):390–7

Immunoscintigraphy and pharmacokinetics of indium-111-labeled ZME-018 monoclonal antibody in patients with malignant melanoma. Koizumi M, et al.
Jpn J Cancer Res 1988 Aug;79(8):973–81

Immunoscintigraphy in intraocular malignant melanoma. Scheidhauer K, et al. **Nucl Med Commun** 1988 Sep; 9(9):669–78

[Immunoscintigraphy with 99mTc marked melanoma antibody in patients with malignant melanoma] Rentsch M, et al. **Helv Chir Acta** 1989 Jun;56(1–2):11–3 (Eng. Abstr.) **(Ger)**

[Radioimmunoimaging of malignant melanoma with In-111 labeled monoclonal antibody 96.5 and ZME-0.18] Ishii K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1194–203 (Eng. Abstr.) **(Jpn)**

[The comparative study with Ga-67 and I-123 IMP in malignant melanoma] Kubo K, et al. **Kaku Igaku** 1988 Dec; 25(12):1329–35 (Eng. Abstr.) **(Jpn)**

[Scintigraphy using N-isopropyl-p-[123I]-iodoamphetamine in malignant melanoma] Morita K, et al. **Kaku Igaku** 1988 Oct;25(10):1149–53 **(Jpn)**

[Imaging of malignant melanoma with In-111-labeled monoclonal antibody (ZME-018) and Ga-67 scintigraphy] Murakami K, et al. **Kaku Igaku** 1989 Jan;26(1):113–9 **(Jpn)**

[Visualization of bone marrow with N-isopropyl-p-[123I]-iodoamphetamine in a case of malignant melanoma] Otsuka N, et al. **Kaku Igaku** 1988 Oct;25(10):1111–5 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Failure of preenucleation radiation to decrease uveal melanoma mortality. The Collaborative Ocular melanoma Study Steering Committee [letter] Fine SL, et al.
Am J Ophthalmol 1989 Apr 15;107(4):440–2

Effect of various doses of radiation for uveal melanoma on regression, visual acuity, complications, and survival. Kindy-Degnan NA, et al. **Am J Ophthalmol** 1989 Feb 15; 107(2):114–20

Noncontiguous local recurrence of posterior uveal melanoma after cobalt 60 episcleral plaque therapy. Duker JS, et al. **Arch Ophthalmol** 1989 Jul;107(7):1019–22

Echographic verification of radioactive plaque position in the treatment of melanomas. Williams DF, et al.
Arch Ophthalmol 1988 Nov;106(11):1623–4

Episcleral plaque radiotherapy for uveal melanoma. Giblin ME, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):153–6 (28 ref.)

Dose fractionation in neutron capture therapy for malignant melanoma. Allen BJ, et al. **Basic Life Sci** 1989;50:63–7

Thermal neutron capture therapy: the Japanese-Australian clinical trial for malignant melanoma. Allen BJ, et al.
Basic Life Sci 1989;50:69–73

Selective thermal neutron capture therapy and diagnosis of malignant melanoma: from basic studies to first clinical treatment. Mishima Y, et al. **Basic Life Sci** 1989;50:251–60

Working group on tumor compound and compound delivery system. Rockwell S, et al. **Basic Life Sci** 1989;50:263–72; discussion 272–6 (0 ref.)

Uveal melanoma management [letter] Char DH, et al.
Br J Ophthalmol 1989 Jun;73(6):476–7

Ruthenium applicators in the treatment of choroidal melanomas. Van Hijfte R, et al.
Bull Soc Belge Ophtalmol 1987;224:51–8

Effect of pre-enucleation radiotherapy on the viability of human choroidal melanoma cells. Rousseau AP, et al.
Can J Ophthalmol 1989 Feb;24(1):10–4

Local tumor control following single dose irradiation of human melanoma xenografts: relationship to cellular radiosensitivity and influence of an immune response by the athymic mouse. Rofstad EK. **Cancer Res** 1989 Jun 15; 49(12):3163–7

The treatment of primary intraocular malignancy. Brady LW, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1355–61 (34 ref.)

Computer assisted treatment planning for 125I ophthalmic plaque radiotherapy. Ling CC, et al.
Int J Radiat Oncol Biol Phys 1989 Aug;17(2):405–10

Conservative treatment of uveal melanoma: local recurrence after proton beam therapy. Munzenrider JE, et al.
Int J Radiat Oncol Biol Phys 1989 Sep;17(3):493–8

Treatment of uveal melanomas with charged particles [letter] Packer S, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep; 17(3):698

Lung metastases after curative or noncurative irradiation of microscopic primary melanomas. Nathanson SD, et al.
J Surg Oncol 1989 May;41(1):33–8

Treatment of malignant melanoma by single thermal neutron capture therapy with melanoma-seeking 10B-compound [letter] Mishima Y, et al. **Lancet** 1989 Aug 12;2(8659):388–9

Assessment of echographic regression criteria in ruthenium-irradiated melanoma. Menapace R, et al.
Ophthalmologica 1989;198(3):129–34

The risk of enucleation after proton beam irradiation of uveal melanoma. Egan KM, et al. **Ophthalmology** 1989 Sep; 96(9):1377–82; discussion 1382–3

Metastasis from uveal melanoma after proton beam irradiation. Gragoudas ES, et al. **Ophthalmology** 1988 Jul; 95(7):992–9

Recurrence of posterior uveal melanoma after 60Co episcleral plaque therapy. Karlsson UL, et al. **Ophthalmology** 1989 Mar;96(3):382–8

Complications after proton beam therapy for uveal malignant melanoma. A clinical and histopathologic study of five cases. Kincaid MC, et al. **Ophthalmology** 1988 Jul; 95(7):982–91

Proton beam therapy for uveal melanoma [letter] Lawton AW. **Ophthalmology** 1989 Jan;96(1):138–9

Ultrasound determination of the relationship of radioactive plaques to the base of choroidal melanomas. Pavlin CJ, et al. **Ophthalmology** 1989 Apr;96(4):538–42

Reasons for enucleation after plaque radiotherapy for posterior uveal melanoma. Clinical findings. Shields CL, et al. **Ophthalmology** 1989 Jun;96(6):919–23; discussion 924

Enucleation versus plaque irradiation for choroidal melanoma. Straatsma BR, et al. **Ophthalmology** 1988 Jul; 95(7):1000–4

A new inexpensive customized plaque for choroidal melanoma iodine-125 plaque therapy. Vine AK, et al.
Ophthalmology 1989 Apr;96(4):543–6

I-125 plaque irradiation [letter] Zografos L, et al.
Ophthalmology 1988 Aug;95(8):1155–7

Malignant melanoma of the nasal cavity. Hills P.
Radiography 1988 May-Jun;54(615):111–2

Irradiation of choroidal melanomas before enucleation? Kreissig I, et al. **Retina** 1989;9(2):101–4

In situ measurement on 10B concentrations and absorbed dose estimations in human malignant melanoma treated by BNCT. Kobayashi T, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):104–6

First human clinical trial of melanoma neutron capture. Diagnosis and therapy. Mishima Y, et al.
Strahlenther Onkol 1989 Feb-Mar;165(2-3):251–4

The incorporation of boronated substances into melanin in vitro—an experimental model for melanotic melanoma. Roberto A, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):165–7

DNA cell cycle studies in uveal melanoma. Char DH.
Trans Am Ophthalmol Soc 1989;86:561–80

[Curietherapy using a ruthenium and iridium disk in the treatment of choroid melanoma] Gérard JP, et al.
Ann Radiol (Paris) 1989;32(2):107–11 (Eng. Abstr.) **(Fre)**

[Impression cytology of the conjunctiva following high-dose brachytherapy of malignant melanoma of the uvea using 106Ru/106Rh applicators] Koch JM, et al.
Fortschr Ophthalmol 1988;85(6):642–5 (Eng. Abstr.) **(Ger)**

[Preoperative irradiation before enucleation in malignant melanoma of the uvea. Review of the literature and initial personal experiences] Bornfeld N, et al.
Klin Monatsbl Augenheilkd 1989 Apr;194(4):252–60 (107 ref.) (Eng. Abstr.) **(Ger)**

[Treatment of melanoma of the skin by pulsed laser irradiation] Moskalik KG, et al. **Sov Med** 1989;(2):94–7 **(Rus)**

SECONDARY

Subcutaneous metastases from malignant melanoma: prevalence and findings on CT. Patten RM, et al.
AJR Am J Roentgenol 1989 May;152(5):1009–12

Melanophagic dermatitis and panniculitis. A condition revealing an occult metastatic malignant melanoma. Piérard GE. **Am J Dermatopathol** 1988 Apr;10(2):133–6

Malignant melanoma with metastasis to a colonic polyp. Grignon DJ, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1298–300 (13 ref.)

Hepatic metastases of diffuse iris melanoma 17 years after enucleation. Shields JA, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):749–50

Patients presenting with thin melanomas (less than 0.76 mm thick) who subsequently have a poor prognosis by development of metastases [letter] Hughes LE, et al.
Ann Surg 1989 Aug;210(2):249–50

Malignant melanoma metastatic to the esophagus. Eng J, et al. **Ann Thorac Surg** 1989 Aug;48(2):287–8 (11 ref.)

Management of solitary melanoma metastasis of the brain. Guazzo EP, et al. **Aust N Z J Surg** 1989 Apr;59(4):321–4

The radiology of cystic liver tumours. Philips RL.
Australas Radiol 1989 Feb;33(1):66–8

Intralesional tumour necrosis factor combined with interferon gamma in metastatic melanoma. Retsas S, et al. **BMJ** 1989 May 13;298(6683):1290–1

A comparative study of the relative sensitivity and specificity of radiolabelled monoclonal antibody and computerised tomography in the detection of sites of disease in human malignant melanoma. Elliott AT, et al. **Br J Cancer** 1989 Apr;59(4):600–4

Malignant melanoma with metastasis to adenocarcinoma of the prostate. Grignon DJ, et al. **Cancer** 1989 Jan 1; 63(1):196–8

Preoperative cutaneous lymphoscintigraphy in malignant melanoma. Lock-Andersen J, et al. **Cancer** 1989 Jan 1; 63(1):77–82

Right ventricular metastatic melanoma 27 years after resection of the primary tumor. Mindell SM, et al.
Cancer 1989 Mar 15;63(6):1237–9

Effect of combined therapy with lymphokine-activated killer cells, interleukin 2 and specific monoclonal antibody on established B16 melanoma lung metastases. Eisenthal A, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7140–5

Pulmonary alveolar proteinosis. Occurrence with metastatic melanoma to lung. Schiller V, et al. **Chest** 1989 Feb; 95(2):466–7

Sequential use of indium-111 labeled monoclonal antibodies 96.5 and ZME-018 does not increase detection sensitivity for metastatic melanoma. Frontiera M, et al.
Clin Nucl Med 1989 May;14(5):357–66

Acute gangrenous cholecystitis due to metastatic melanoma detected by cholescintigraphy. Velchik MG.
Clin Nucl Med 1989 May;14(5):327–9

Metastases of malignant melanoma due to interferon alpha-2a? [letter] Bork K, et al. **Dermatologica** 1988; 177(4):249–50

Do we have markers for the metastatic potential of malignant melanomas? [editorial] Piérard GE. **Dermatologica** 1988; 177(4):197–9

Metastatic melanoma involving the colon. Report of a case. McClenathan JH. **Dis Colon Rectum** 1989 Jan;32(1):70–2

Malignant melanoma of the maxillary sinus. Hassard AD, et al. **Ear Nose Throat J** 1989 Jun;68(6):469–71

Regression analyses of prognostic factors in metastatic malignant melanoma. Heimdal K, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1219–23

Metastatic melanoma of unknown origin at autopsy. Aksłen LA, et al. **Eur J Surg Oncol** 1988 Oct;14(5):379–82

A case of metastatic malignant melanoma masquerading as disseminated mammary carcinoma. Barker JN, et al. **Histopathology** 1989 Feb;14(2):219–21

Metastatic melanoma of the parotid lymph nodes. Ord RA. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):165–7

Palliative radiotherapy for metastatic malignant melanoma: brain metastases, bone metastases, and spinal cord compression. Rate WR, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):859–64

Generalized melanosis in occult primary melanoma. Sexton M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):261–6

Induction of tumor-infiltrating lymphocytes in human malignant melanoma metastases by immunization to melanoma antigen vaccine. Oratz R, et al. **J Biol Response Mod** 1989 Aug;8(4):355–8

A phase II study of interleukin-2 and lymphokine-activated killer cells in patients with metastatic malignant melanoma. Dutcher JP, et al. **J Clin Oncol** 1989 Apr;7(4):477–85

Tumor localization of adoptively transferred indium-111 labeled tumor infiltrating lymphocytes in patients with metastatic melanoma. Fisher B, et al. **J Clin Oncol** 1989 Feb;7(2):250–61

Hypothyroidism after interleukin-2 therapy [letter] Hartmann LC, et al. **J Clin Oncol** 1989 May;7(5):686–7

High-dose thiotepa with autologous bone marrow transplantation for metastatic malignant melanoma: results of phase I and II studies of the North American Bone Marrow Transplantation Group. Wolff SN, et al. **J Clin Oncol** 1989 Feb;7(2):245–9

Ct detection of cerebral metastases inapparent on magnetic resonance imaging scan. Cooper JS, et al. **J Comput Tomogr** 1988 Jul;12(3):182–6

Melanoma metastatic to the head and neck. Harries ML. **J Laryngol Otol** 1988 Sep;102(9):842–4

Neoplastic meningitis in malignant melanoma: diagnosis with monoclonal antibodies. Moseley RP, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):881–6

Lymphoscintigraphy in the management of patients with cutaneous melanoma. Erickson KK, et al. **J Okla State Med Assoc** 1988 May;81(5):275–9

Histological evidence of natural killer cell aggregation against malignant melanoma induced by adoptive immunotherapy with lymphokine-activated killer cells. Yamamura T, et al. **J Pathol** 1989 Mar;157(3):201–4

Multimodality detection of metastatic melanoma. Kuan AK, et al. **J R Soc Med** 1988 Oct;81(10):579–82

Experimental model for metastasis of intraocular melanoma: preventive role of natural killer cells. Yokoyama T, et al. **Jpn J Ophthalmol** 1989;33(1):76–84

Brachytherapy in the treatment of recurrent solitary brain metastases. Heros DO, et al. **Neurosurgery** 1988 Dec; 23(6):733–7

Melanoma metastatic to the orbit. Orcutt JC, et al. **Ophthalmology** 1988 Aug;95(8):1033–7

Maternal malignant melanoma with placental metastasis: a case report with literature review. Anderson JF, et al. **Pediatr Pathol** 1989;9(1):35–42 (38 ref.)

Growth regulation of cancer metastases by their host organ. Sargent NS, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7251–5

Treatment of human metastatic melanoma with mouse monoclonal antibodies against GD3 ganglioside. Houghton AN, et al. **Prog Clin Biol Res** 1989;288:383–90

Systemic chemotherapy for metastatic melanoma. Mc Clay EF, et al. **Semin Oncol** 1988 Dec;15(6):569–77 (65 ref.)

Technetium-labeled monoclonal antibodies for imaging metastatic melanoma: results of a multicenter clinical study [published erratum appears in Semin Oncol 1989 Jun;16(3):xxiv] Salk D. **Semin Oncol** 1988 Dec;15(6):608–18

Experimental meningeal melanomatosis. Schabet M, et al. **Strahlenther Onkol** 1989 Jul;165(7):491–2

Computed tomography of posterior pararenal and properitoneal metastases. Posniak HV, et al. **Urol Radiol** 1988;10(2):75–9

[Epidermotropic and junctional metastases of malignant melanoma] Meunier L, et al. **Ann Dermatol Venereol** 1988; 115(12):1279–80 (Fre)

[Comment on the contribution by F. Ehring: Regression of over 150 skin metastases of malignant melanoma by homeopathic complex therapy] Grond K. **Hautarzt** 1989 Jul;40(7):464 (Ger)

[Meningeal metastasis of malignant melanoma] Gogoll M, et al. **Rontgenblatter** 1989 Aug;42(8):325–9 (Eng. Abstr.) (Ger)

[Regional lymph node micrometastases in malignant melanoma of the skin] Adolf W, et al. **Zentralbl Allg Pathol** 1988;134(3):251–7 (Eng. Abstr.) (Ger)

[Endometrium metastasis of a malignant melanoma of the skin] Pommerenke F, et al. **Zentralbl Gynakol** 1989; 111(5):324–8 (Eng. Abstr.) (Ger)

[Metastatic spread of extramammary malignant melanomas to the female breast and the clinical consequences] Wierrani F, et al. **Zentralbl Gynakol** 1988;110(18):1174–8 (Eng. Abstr.) (Ger)

[Ileus of the large intestine caused by metastatic melanoma] Hévizi M, et al. **Orv Hetil** 1988 Nov 6;129(45):2411–3 (Eng. Abstr.) (Hun)

[Simultaneous occurrence of breast cancer, causing disseminated metastases after 32 years verified by immunohistochemistry, and cured malignant melanoma] Nádasdy T, et al. **Orv Hetil** 1988 Dec 18;129(51):2743–6 (34 ref.) (Eng. Abstr.) (Hun)

[Prognostic significance of regional metastasis of malignant melanoma] Belli F, et al. **G Ital Oncol** 1988 Jul–Dec; 8(3–4):116–8 (Eng. Abstr.) (Ita)

[Diffusion modality of malignant melanoma by lymphatic pathways. Clinico-pathologic considerations] Belli F, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):119–22 (Eng. Abstr.) (Ita)

[Multiple jejunal metastases of a melanoma. Description of a clinical case] Toppino M, et al. **Minerva Chir** 1988 Oct 15;43(19):1643–8 (18 ref.) (Eng. Abstr.) (Ita)

[A case of metastasis of a melanocarcinoma of unknown primary origin to the kidney pelvis] Pamich G, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):45–8 (Eng. Abstr.) (Ita)

[Interatrial defect secondary to metastatic melanoma. A case report] Kasinski N, et al. **Arq Bras Cardiol** 1988 Sep; 51(3):265–8 (Eng. Abstr.) (Por)

SECRETION

Detection of glucocorticoid sensitive secretory proteins from human melanoma cells. Di Sorbo DM. **In Vitro Cell Dev Biol** 1989 Jun;25(6):557–63

SURGERY

A prospective, randomized controlled trial of megestrol acetate among high-risk patients with resected malignant melanoma. Creagan ET, et al. **Am J Clin Oncol** 1989 Apr; 12(2):152–5

Semiconductor diode laser photocoagulation of human malignant melanoma. Brancato R, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):295–6

The role of parotidectomy in the treatment of cutaneous head and neck melanoma. Caldwell CB, et al. **Am J Surg** 1988 Oct;156(4):318–22

Enucleation after argon laser photocoagulation for choroidal melanoma. Brancato R, et al. **Ann Ophthalmol** 1988 Aug; 20(8):296–8

Closure of wounds under tension. The horizontal mattress suture. Coldiron BM. **Arch Dermatol** 1989 Sep; 125(9):1189–90

Microscopic surgery for melanoma of the ear [letter] Byers RM. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1478–9

Patterns of relapse in 1001 consecutive patients with melanoma nodal metastases. Calabro A, et al. **Arch Surg** 1989 Sep;124(9):1051–5

Extent of lymph node dissection in melanoma of the trunk or lower extremity. Coit DG, et al. **Arch Surg** 1989 Feb; 124(2):162–6

The cervicofacial flap. Mercer DM. **Br J Plast Surg** 1988 Sep;41(5):470–4

Internal eye wall resection in the management of uveal melanoma. Peyman GA, et al. **Can J Ophthalmol** 1988 Aug; 23(5):218–23

The significance of conversion of skin reactivity to efficacy of bacillus Calmette-Guérin (BCG) vaccinations given immediately after radical surgery in stage II melanoma patients. Cascinelli N, et al. **Cancer Immunol Immunother** 1989;28(4):282–6

The decision. Cohen PR. **Cutis** 1988 Oct;42(4):283–4

Suture or graft? Changing trends in melanoma wound closure. Pritchard GA, et al. **Eur J Surg Oncol** 1988 Oct; 14(5):371–7

Malignant melanoma of the cervix. Chua S, et al. **Gynecol Obstet Invest** 1989;27(2):107–9

Urethral placement through a bilateral myocutaneous gracilis flap neovagina. Wheelock JB, et al. **Gynecol Oncol** 1989 Jan;32(1):88–90

Posterolateral neck dissection. de Langen ZJ, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):252–6

Surgical treatment of skin cancer. Robinson A, et al. **Ir Med J** 1989 Feb;82(1):14–5

Narrow versus wide margins in malignant melanoma. Rogers GS. **J Dermatol Surg Oncol** 1989 Jan;15(1):33–4

Melanoma update [letter] Zitelli JA. **J Dermatol Surg Oncol** 1989 Aug;15(8):881–2

Malignant melanoma of the vulva. Australian experience. Woolcott RJ, et al. **J Reprod Med** 1988 Aug;33(8):699–702

Management of nodal metastases from head and neck melanoma. Belli F, et al. **J Surg Oncol** 1989 Sep;42(1):47–53

Individual treatment for malignant melanoma. Polk HC Jr. **J Surg Oncol** 1989 Jan;40(1):46–8 (15 ref.)

Surgical management of malignant melanoma of the trunk and extremities. Pritchard DJ, et al. **Mayo Clin Proc** 1989 Jul;64(7):846–51 (23 ref.)

Treatment of thin melanomas [letter] **N Engl J Med** 1988 Dec 22;319(25):1669

Treatment of small choroidal melanomas with photocoagulation. Jalkh AE, et al. **Ophthalmic Surg** 1988 Oct;19(10):738–42

Surgical approach to lamellar sclerouvectomy for posterior uveal melanomas: the 1986 Schoenberg lecture. Shields JA, et al. **Ophthalmic Surg** 1988 Nov;19(11):774–80

Malignant melanomas of eyelid skin. Zoltie N, et al. **Plast Reconstr Surg** 1989 Jun;83(6):994–6 (12 ref.)

The influence of resection margin on prognosis in clinical stage I malignant melanoma of the lower leg. Elberg JJ, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(1):59–63

Current status of surgical treatment of melanoma. Das Gupta TK. **Semin Oncol** 1988 Dec;15(6):566–8

Major amputation for advanced malignant melanoma. Jaques DP, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):1–6

Solitary coin lesion in patients with malignant melanoma: an indication for thoracotomy? Jüttner FM, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):232–3

[Cryofixation during radical surgery in melanoblastoma] Cesaný P. **Rozhl Chir** 1988 Nov;67(11):720–2 (Eng. Abstr.) (Cze)

[Prognostic study of malignant melanoma of the uvea treated by enucleation] Bacin F, et al. **J Fr Ophtalmol** 1988; 11(10):639–49 (30 ref.) (Eng. Abstr.) (Fre)

[Follow-up after enucleation in choroid melanoma] Gliem H, et al. **Fortschr Ophthalmol** 1989;86(3):242–4 (Eng. Abstr.) (Ger)

[Enucleation with orbital implant in malignant melanoma of the uvea] Sassmannshausen J, et al. **Fortschr Ophthalmol** 1988;85(5):529–33 (Eng. Abstr.) (Ger)

[The surgical concept of malignant melanoma with special reference to lymphatic drainage scintigraphy] Wölbling RH, et al. **Hautarzt** 1988 Sep;39(9):581–3 (Eng. Abstr.) (Ger)

[Gas-no touch-enucleation] Kreissig I. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):489–92 (Eng. Abstr.) (Ger)

[Iridocyclectomy using a lamellar explorative technic. Long-term studies] Mackensen G, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):608–10 (Eng. Abstr.) (Ger)

[How do I manage lymph drainage of the neck in malignant melanoma of the head?] Wilmes E. **Laryngorhinootologie** 1989 Feb;68(2):132 (Ger)

[Scintigraphic studies of the lymph nodes in patients with melanoma following lymph node excision] Török L, et al. **Z Hautkr** 1988 Oct 15;63(10):822–7 (Eng. Abstr.) (Ger)

[Postoperative lymph node scintigraphy in patients with malignant melanoma] Török L, et al. **Orv Hetil** 1989 Jan 29;130(5):227–30 (Eng. Abstr.) (Hun)

[Indications for regional lymphadenectomy in skin melanomas: a problem still in debate. Personal experience and review of the literature] Leo E, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):27–30 (21 ref.) (Eng. Abstr.) (Ita)

[Malignant melanoma of the skin. Considerations on a case series] Sanlorenzo M, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1307–10 (Eng. Abstr.) (Ita)

[Modified surgery and combination with radiotherapy in tumors] Uchida M, et al. **Gan No Rinsho** 1988 Aug; 34(10):1511–4 (Eng. Abstr.) (Jpn)

[A resected case of malignant melanoma originated in the lung] Arita M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2117–21 (22 ref.) (Eng. Abstr.) (Jpn)

[Prognostic value of the method of treatment and various modelling factors in the localized form of primary cutaneous melanoma] Budiak VA, et al. **Klin Khir** 1989; (5):48–9 (Eng. Abstr.) (Rus)

[Indications for preventive regional lymphadenectomy in primary melanoma of the skin of the head and neck] Vagner RI, et al. **Vestn Khir** 1988 Oct;141(10):8–12 (Eng. Abstr.) (Rus)

[Morphological changes in the retina after argon laser coagulation of choroid tumors] Kaplina AV, et al. **Vestn Oftalmol** 1988 May–Jun;104(3):54–9 (Eng. Abstr.) (Rus)

[Anorectal melanomas. Presentation of 2 new cases] Fradejas López JM, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):377–9 (Eng. Abstr.) (Spa)

THERAPY

Treatment of malignant melanoma with interferon. Gröhn P. **Acta Chir Scand Suppl** 1989;549:52–5 (27 ref.)

Natural human interferon-beta in metastatic malignant melanoma. A phase II study. Abdi EA, et al. **Acta Oncol** 1988;27(6b):815–7

Potential therapeutic use of autologous human lymphocytes in metastatic melanoma: in vivo interleukin 2-activated peripheral blood lymphocytes and in vitro activated peripheral blood and tumor-infiltrating lymphocytes. Parmiani G, et al. **Adv Exp Med Biol** 1988;233:453–8

Recombinant interferons in the management of advanced malignant melanoma. Updated review of five prospective clinical trials and long-term responders. Creagan ET, et al. **Am J Clin Oncol** 1988 Dec;11(6):652–9

Improvement in disease-free survival of melanoma patients in conjunction with serologic response in a phase Ia/Ib Southeastern Cancer Study Group trial of vaccinia melanoma oncolysate. Wallack MK, et al. **Am Surg** 1989 Apr;55(4):243–7

Bromodeoxyuridine uptake in the assessment of hyperthermic therapy for intraocular tumor. Kindy-Degnan N, et al. **Arch Ophthalmol** 1989 May;107(5):746–50

Isolated regional perfusion in the treatment of subungual melanoma. Baas PC, et al. **Arch Surg** 1989 Mar;124(3):373–6 (20 ref.)

Alpha-interferons in malignant melanoma. McLeod GR.

Br J Clin Pract Symp Suppl 1988 Mar;62:22–6

Melanoma of the iris [editorial] **Br J Ophthalmol** 1989 Aug; 73(8):586

Hyperthermic isolated regional perfusion in the treatment of extremity melanoma in children and adolescents. Baas PC, et al. **Cancer** 1989 Jan 1;63(1):199–203

The management of vaginal melanoma. Bonner JA, et al. **Cancer** 1988 Nov 1;62(9):2066–72

A phase I–II trial of the combination of recombinant leukocyte A interferon and recombinant human interferon–gamma in patients with metastatic malignant melanoma. Creagan ET, et al. **Cancer** 1988 Dec 15; 62(12):2472–4

Prognostic variables in recurrent limb melanoma treated with hyperthermic antiblastic perfusion. Di Filippo F, et al. **Cancer** 1989 Jun 15;63(12):2551–61

Functional morbidity after regional isolated perfusion of the limb for melanoma. van Geel AN, et al. **Cancer** 1989 Mar 15;63(6):1092–6

Combined interferon and vinblastine treatment of advanced melanoma and renal cell cancer. Kellokumpu–Lehtinen P, et al. **Cancer Detect Prev** 1988;12(1–6):523–9

Synergistic enhancement of the antitumor activity of recombinant human TNF–alpha by recombinant human IFN–gamma. Taguchi T, et al. **Cancer Detect Prev** 1988; 12(1–6):105–14

Serum levels of the low–affinity interleukin–2 receptor molecule (TAC) during IL–2 therapy reflect systemic lymphoid mass activation. Voss SD, et al. **Cancer Immunol Immunother** 1989;29(4):261–9

Active immunotherapy of human melanoma exploiting the immunopotentiating effects of cyclophosphamide. Berd D, et al. **Cancer Invest** 1988;6(3):337–49

Differences between in vivo and in vitro activation of cancer patient lymphocytes by recombinant interleukin 2: possible role for lymphokine–activated killer cell infusion in the in vivo–induced activation. Gambacorti–Passerini C, et al. **Cancer Res** 1989 Sep 15;49(18):5230–4

Circulating cytokines in patients with metastatic cancer treated with recombinant interleukin 2 and lymphokine–activated killer cells. Gemlo BT, et al. **Cancer Res** 1988 Oct 15;48(20):5864–7

Optimization of radioimmunotherapy using human malignant melanoma multicell spheroids as a model. Kwok CS, et al. **Cancer Res** 1989 Jun 15;49(12):3276–81

Randomized trial of recombinant alpha 2b–interferon with or without indomethacin in patients with metastatic malignant melanoma. Miller RL, et al. **Cancer Res** 1989 Apr 1;49(7):1871–6

Active specific immunotherapy for melanoma: phase I trial of allogeneic lysates and a novel adjuvant. Mitchell MS, et al. **Cancer Res** 1988 Oct 15;48(20):5883–93

Interleukin–2 alone and in combination with other cytokines in melanoma: the investigational approach at the University of Texas M.D. Anderson Cancer Center. Parkinson DR, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:39–48 (40 ref.)

Review of interleukin–2 alone and interleukin–2/LAK clinical trials in metastatic malignant melanoma. Sznol M, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:29–38 (50 ref.)

Melanoma relapse of the upper third of the vagina treated with BCG and beta–interferon. Cappello F, et al. **Clin Exp Obstet Gynecol** 1989;16(2–3):88–92

Clinical and therapeutical considerations on a case of conjunctival melanoma. Scrivanti M, et al. **Doc Ophthalmol** 1988 Dec;70(4):287–92

In vivo effects of combination treatment with recombinant interferon–gamma and –alpha in metastatic melanoma. Osanto S, et al. **Int J Cancer** 1989 Jun 15;43(6):1001–6

The effects of ultrasonically induced hyperthermia on experimental tumors in the rabbit eye. Braakman R, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):835–44

Adjuvant therapy of high–risk malignant melanoma patients with gamma interferon. Landthaler M, et al. **J Am Acad Dermatol** 1989 Apr;20(4):687–8

A phase I trial of recombinant interferon–alpha and alpha–difluoromethylornithine in metastatic melanoma. Croghan MK, et al. **J Biol Response Mod** 1988 Aug; 7(4):409–15

Tumor localization of adoptively transferred indium–111 labeled tumor infiltrating lymphocytes in patients with metastatic melanoma. Fisher B, et al. **J Clin Oncol** 1989 Feb;7(2):250–61

Interleukin–2 and lymphokine–activated killer cell therapy of solid tumors: analysis of toxicity and management guidelines. Margolin KA, et al. **J Clin Oncol** 1989 Apr; 7(4):486–98

Phase I trial of a mouse monoclonal antibody against GD3 ganglioside in patients with melanoma: induction of inflammatory responses at tumor sites. Vadhan–Raj S, et al. **J Clin Oncol** 1988 Oct;6(10):1636–48

High–dose thiotepa with autologous bone marrow transplantation for metastatic malignant melanoma: results of phase I and II studies of the North American Bone Marrow Transplantation Group. Wolff SN, et al. **J Clin Oncol** 1989 Feb;7(2):245–9

Human high molecular weight–melanoma associated antigen as a target for active specific immunotherapy—a phase I clinical trial with murine antiidiotypic monoclonal antibodies. Ferrone S, et al. **J Dermatol (Tokyo)** 1988 Dec; 15(6):457–65

Phase II trial of a combination of interferon–beta ser and interferon–gamma in patients with advanced malignant melanoma. Schiller JH, et al. **J Interferon Res** 1988 Oct; 8(5):581–9

Current status of melanoma treatment with interferon, cytokines and other biologic response modifiers in Japan. Ishihara K, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):326S–328s

Treatment of malignant melanoma by selective thermal neutron capture therapy using melanoma–seeking compound. Mishima Y, et al. **J Invest Dermatol** 1989 May; 92(5 Suppl):321S–325S

Studies confirm value of IL–2/LAK treatment [news] Wittenberg C. **J Natl Cancer Inst** 1989 May 10;81(10):732–3

Stage II malignant melanoma: presentation of a prognostic model and an assessment of specific active immunotherapy in 1,273 patients. Slingluff CL Jr, et al. **J Surg Oncol** 1988 Nov;39(3):139–47

Chloroquine as a hyperthermia potentiator. Morrow M, et al. **J Surg Res** 1989 Jun;46(6):637–9

Gene therapy 'prelude' under way [news] Marwick C. **JAMA** 1989 Jul 7;262(1):16

Human monoclonal antibody to ganglioside GM2 for melanoma treatment [letter] Irie RF, et al. **Lancet** 1989 Apr 8;1(8641):786–7

Tumour–infiltrating lymphocytes and interleukin–2 in treatment of advanced cancer. Kradin RL, et al. **Lancet** 1989 Mar 18;1(8638):577–80

Regional and systemic strategies for metastatic malignant melanoma. Creagan ET. **Mayo Clin Proc** 1989 Jul; 64(7):852–60 (36 ref.)

Response of melanoma to heat and radiation therapy—a review of the literature and experience from The Prince of Wales Hospital, Sydney. Mameghan H, et al. **Med J Aust** 1988 Nov 7;149(9):474–6, 478–81 (28 ref.)

Use of tumor–infiltrating lymphocytes and interleukin–2 in the immunotherapy of patients with metastatic melanoma. A preliminary report. Rosenberg SA, et al. **N Engl J Med** 1988 Dec 22;319(25):1676–80

Tumor–infiltrating lymphocytes and interleukin–2 in melanomas [letter] Sondel PM, et al. **N Engl J Med** 1989 May 25;320(21):1418–9

Treatment of stage II malignant melanoma patients with a Newcastle disease virus oncolysate [letter] Cassel WA, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):351–2

Phase II trial of recombinant alpha–2b interferon in the treatment of metastatic skin melanoma. Sertoli MR, et al. **Oncology** 1989;46(2):96–8

Histopathologic effects of ultrasonically induced hyperthermia in intraocular malignant melanoma. Coleman DJ, et al. **Ophthalmology** 1988 Jul;95(7):970–81

Thermoradiotherapy of choroidal melanoma. Clinical experience. Finger PT, et al. **Ophthalmology** 1989 Sep; 96(9):1384–8

Low doses of chemotherapy to inhibit suppressor T cells. Berd D. **Prog Clin Biol Res** 1989;288:449–58

Active specific immunotherapy in the treatment of human cancers. Mitchell MS. **Prog Clin Biol Res** 1989;288:323–36

Effects of heat treatment in vitro and in vivo on human melanoma xenografts. Brustad T, et al. **Recent Results Cancer Res** 1988;109:183–97

Importance of thermotolerance for radiothermotherapy as assessed using two human melanoma cell lines. van Beuningen D, et al. **Recent Results Cancer Res** 1988; 109:203–13

Skin saver. **Sci Am** 1988 Jul;259(1):40–1

Current therapy for malignant melanoma. Legha SS. **Semin Oncol** 1989 Feb;16(1 Suppl 1):34–44 (82 ref.)

Newer immunologic approaches to the treatment of patients with melanoma. Mastrangelo MJ, et al. **Semin Oncol** 1988 Dec;15(6):589–94 (54 ref.)

Effects of hyperthermia, radiation and their combination on xenografts of human melanoma tumours in nude mice. Strohmenger U, et al. **Strahlenther Onkol** 1989 Jul; 165(7):521

A phase II study of the administration of recombinant interleukin 2 (rIL–2) plus lymphokine activated killer (LAK) cells in stage IV melanoma patients. Cascinelli N, et al. **Tumori** 1989 Jun 30;75(3):233–44

[Surgical treatment of malignant melanoma of the limbs combined with thermochemotherapy under extracorporeal circulation] Truchetet F, et al. **Ann Dermatol Venereol** 1988;115(5):573–85 (Eng. Abstr.) **(Fre)**

[Adoptive immunotherapy with interleukin 2. Initial results of a pilot study in 6 cancer patients] Sculier JP, et al. **Presse Med** 1989 Jun 10;18(23):1155–8 (Eng. Abstr.) **(Fre)**

[Initial experiences with an automatic data processing–assisted melanoma register of the dermatologic clinic of the Dresden–Friedrichstadt regional hospital] Seebacher C, et al. **Dermatol Monatsschr** 1988; 174(9):536–45 (Eng. Abstr.) **(Ger)**

[Immune modulators in the treatment of malignant melanoma] Weiss J, et al. **Fortschr Med** 1989 Feb 10; 107(4):41–2, 45 (12 ref.) (Eng. Abstr.) **(Ger)**

[Regression of over 150 skin metastases of malignant melanoma with complex homeopathic therapy] Ehring F. **Hautarzt** 1989 Jan;40(1):23–7 (Eng. Abstr.) **(Ger)**

[Adjuvant therapy with recombinant interferon alfa–2a in metastasized malignant melanoma] Elsässer–Beile U, et al. **Hautarzt** 1989 May;40(5):266–70 (Eng. Abstr.) **(Ger)**

[The treatment of solid tumors with monoclonal antibodies] Dippold WG, et al. **Immun Infekt** 1989 Feb;17(1):26–7 (Eng. Abstr.) **(Ger)**

[Hyperthermic therapy procedures for supplementing radiotherapy of malignant intraocular tumors] Riedel KG. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):131–7 (33 ref.) (Eng. Abstr.) **(Ger)**

[Trends and developments in the management of malignant uveal melanoma] Lund OE. **Klin Oczna** 1988 Apr–May; 90(4–5):159–64 **(Ger)**

[Leakage measurements with the dye extraction method and direct methotrexate level determination (enzyme immunoassay) during and after regional cytostatic limb perfusion] Krauss J, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):260–3 (Eng. Abstr.) **(Ger)**

[Therapy of malignant melanoma with beta–interferons] Faulhaber G, et al. **Z Hautkr** 1988 Oct 15;63(10):811–5 (Eng. Abstr.) **(Ger)**

[Role of interferon alfa–2 in melanoma. Results of a phase II study in 27 patients] Bernengo MG, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):185–8 (Eng. Abstr.) **(Ita)**

[Present status of cancer therapy in the field of dermatology] Ikeda S. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):978–86 (Eng. Abstr.) **(Jpn)**

[Immunohistological study of the mechanism of cytotoxic effect against cutaneous metastatic malignant melanoma by intralesional injection with anti–monosialoganglioside mouse monoclonal antibody (MAb 202)] Ota T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Aug;98(9):913–22 (Eng. Abstr.) **(Jpn)**

[Responses of tumor cell lines and surgical specimens transplanted into chorioallantoic membrane of chick embryo to anticancer agents in combination with/without hyperthermia] Uchibayashi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan;80(1):17–21 (Eng. Abstr.) **(Jpn)**

[Evolution of the principles of the treatment in melanoma of the skin (based on the records of the P. A. Hertzen Oncologic Research Institute in Moscow)] Demidov VP, et al. **Sov Med** 1989;(3):60–5 (30 ref.) **(Rus)**

ULTRASTRUCTURE

Meningeal melanocytoma. Report of a case and review of the literature. Jellinger K, et al. **Acta Neurochir (Wien)** 1988;94(1–2):78–87 (41 ref.)

Retinal ultrastructural findings in cone degeneration. Buchanan TA, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):405–13

A comparative study of morphometric measurements of nucleoli in uveal melanomas from electron micrographs and plastic–embedded and paraffin–embedded sections. Mikel UV, et al. **Anal Quant Cytol Histol** 1989 Apr; 11(2):111–4

Different ultrastructural feature of keratinocytes in human malignant melanomas. Klug H, et al. **Arch Geschwulstforsch** 1989;59(2):107–12

Nucleolar organizer regions in Spitz nevi and malignant melanomas. Howat AJ, et al. **Cancer** 1989 Feb 1;63(3):474–8

Inhibition of experimental metastasis and extracellular matrix degradation by butanol extracts from B16–F1 murine melanoma. Keren Z, et al. **Cancer Res** 1989 Jan 15; 49(2):295–300

The cell interaction sites of fibronectin in tumour metastasis. Humphries MJ, et al. **Ciba Found Symp** 1988;141:75–93 (30 ref.)

Human melanoma cell lines: an immunofluorescence and ultrastructural study. O'Valle F, et al. **J Cutan Pathol** 1988 Dec;15(6):374–9

Desmoplastic malignant melanoma—an electron microscopic and immunohistochemical study of a case. Nakagawa H, et al. **J Dermatol (Tokyo)** 1988 Apr;15(2):161–7

Nuclear size and shape parameters correlate with proliferative activity in cutaneous melanocytic tumors. Smolle J, et al. **J Invest Dermatol** 1989 Jul;93(1):178–82

Silver–stained nucleoli and nucleolar organizer region counts are of no prognostic value in thick cutaneous malignant melanoma. Howat AJ, et al. **J Pathol** 1988 Nov; 156(3):227–32

Skin surface microscopy: anything new under the sun? [editorial] **Lancet** 1989 Jun 3;1(8649):1239

Transmission and scanning electron microscopy and freeze–fracture replication of normal human melanocytes and human melanoma cells in tissue culture. Breathnach AS, et al. **Pigment Cell Res** 1988;1(5):315–25

[Dysplastic melanocytic nevi: quantitative ultrastructural investigation comparing intraepidermal melanocytes of dysplastic melanocytic nevi, superficial spreading melanoma, nevocellular nevi, and normal skin] Seki Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1093–103 (Eng. Abstr.) **(Jpn)**

URINE

A case of dark urine, hyperpigmentation and hepatomegaly. McClements BM, et al. **Ir J Med Sci** 1988 May;157(5):157

[Annual rhythm of the excretion of indole melanogen in human urine] Schwartze G. **Arch Geschwulstforsch** 1988; 58(5):341–4 (Eng. Abstr.) **(Ger)**

VETERINARY

The swine leucocyte antigen (SLA) complex and Sinclair

swine cutaneous malignant melanoma. Tissot RG, et al. **Anim Genet** 1989;20(1):51–7

Congenital malignant melanoma in two foals. Cox JH, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):945–7

Amplified DNA in cells of genetic melanoma of Xiphophorus. Schwab M, et al. **Oncogene** 1989 Feb; 4(2):139–44

Chromatophoromas in two species of Hawaiian butterflyfish, Chaetodon multicinctus and C. miliaris. Okihiro MS. **Vet Pathol** 1988 Nov;25(6):422–31

Pilar neurocristic melanoma in four dogs. Anderson WI, et al. **Vet Rec** 1988 Nov 12;123(20):517–8

[Pigmented formations in the redfish Sebastes mentella] Bogovskil SP, et al. **Eksp Onkol** 1989;11(3):18–21 (Eng. Abstr.) **(Rus)**

B16 MELANOMA see **MELANOMA, EXPERIMENTAL**

MELANOMA, CLOUDMAN S91 see **MELANOMA, EXPERIMENTAL**

MELANOMA, EXPERIMENTAL

Experimental models in human melanoma research: a logical perspective. Beattie CW, et al. **Semin Oncol** 1988 Dec; 15(6):500–11 (86 ref.)

Synthesis, antineoplastic activity and biodistribution of boron analogues of amino acids and related compounds. Spielvogel BF, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):123–5

ANALYSIS

Membrane lipids of B16 melanoma cells and heat-resistant variants. Anderson RL, et al. **Int J Radiat Biol** 1988 Nov; 54(5):813–23

Altered expression of a third actin accompanying malignant progression in mouse B16 melanoma cells. Taniguchi S, et al. **Jpn J Cancer Res** 1989 Jan;80(1):31–40

Substance immunologically cross-reactive with insulin (SICRI) stimulates cell division. Osmak M, et al. **Oncology** 1989;46(1):54–7

RNA and DNA in melanosomes of hamster melanoma. Vedralová E, et al. **Pigment Cell Res** 1987;1(2):76–80

[Detection of factors of differentiation in human malignant melanoma] Zershchikova TA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):478–80 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Capillary ultrastructure and microcirculatory function of malignant tumors. Endrich B, et al. **Adv Exp Med Biol** 1988;242:205–14 (30 ref.)

Vascular volume in B16 allografts and human melanoma xenografts estimated by means of Hoechst 33342. Fallowfield ME. **J Pathol** 1989 Mar;157(3):249–52

CHEMICALLY INDUCED

Environment: peculiar pigment cell neoplasm in fish. Kimura I, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):248S–254S

Ultrastructural study of melanocytic lesions in albino guinea pigs induced with 7,12-dimethyl-benzanthracene. Vicente V, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):43–53

DRUG THERAPY

Topographical analysis of proliferation ([3H]thymidine labelling index and mitotic index) as compared with tumour growth and tumour weight in xenotransplanted melanoma. Changes due to local and systemic application of azelaic acid. Nüssgen AI, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;143:67–74

Antitumor activity of novel ailanthone derivatives in vitro and in vivo. Kato T, et al. **Anticancer Res** 1988 Jul–Aug; 8(4):573–9

Photodynamic therapy for experimental intraocular melanoma using chloroaluminum sulfonated phthalocyanine. Panagopoulos JA, et al. **Arch Ophthalmol** 1989 Jun;107(6):886–90

Effect of verapamil on cell cycle transit and c-myc gene expression in normal and malignant murine cells. Huber KR, et al. **Br J Cancer** 1989 May;59(5):714–8

Antitumor activity and nucleic acid binding properties of dercitin, a new acridine alkaloid isolated from a marine Dercitus species sponge. Burres NS, et al. **Cancer Res** 1989 Oct 1;49(19):5267–74

Antitumor activity and mechanism of action of the novel marine natural products mycalamide-A and -B and onnamide. Burres NS, et al. **Cancer Res** 1989 Jun 1; 49(11):2935–40

In vivo characterization of combination antitumor chemotherapy with calcium channel blockers and cis-diamminedichloroplatinum(II). Onoda JM, et al. **Cancer Res** 1989 Jun 1;49(11):2844–50

Effect of cyclophosphamide and levan treatment on bone marrow and peripheral blood cells in B16–F10 melanoma-bearing mice. Leibovici J, et al. **Int J Immunopharmacol** 1989;11(2):133–47

Calicheamicins, a novel family of antitumor antibiotics: taxonomy, fermentation and biological properties. Maiese WM, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):558–63

Mono and bis(bioreductive) alkylating agents: synthesis and antitumor activities in a B16 melanoma model. Witiak DT, et al. **J Med Chem** 1989 Jul;32(7):1636–42

The therapeutic effect of human recombinant macrophage colony stimulating factor (CSF-1) in experimental murine metastatic melanoma. Hume DA, et al. **Lymphokine Res** 1989 Spring;8(1):69–77

Phenolic melanin precursors provide a rational approach to the design of antitumor agents for melanoma. Jimbow K, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):34–9

Specificity of growth inhibition of melanoma by 4-hydroxyanisole. Kulkarni GA, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):40–3

[Synthesis and melanoma inhibiting properties of 4-alkylpyrocatechol-2-O-beta-D-glucopyranosiduronic acids and their esters] Schwabe K, et al. **Pharmazie** 1988 Aug;43(8):521–3 (Eng. Abstr.) **(Ger)**

[Experimental antimetastatic activity of aclarubicin] Viadro MM, et al. **Antibiot Khimioter** 1988 Nov;33(11):845–8 (Eng. Abstr.) **(Rus)**

[The action of hypothalamic hormone on athymic mice with transplantable strains of human tumors] Bukharova IK, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):594–6 (Eng. Abstr.) **(Rus)**

[Effect of oxoplatin and platidiam on human melanoma strains and functional activity of blood lymphocytes in athymic mice] Bukharova IK, et al. **Eksp Onkol** 1988; 10(5):55–7 (Eng. Abstr.) **(Rus)**

[The action of amino acid di[2-haloethyl]hydrazides on DNA synthesis in normal and tumor cells and on the cell cycle kinetics in mice with melanoma B-16] Gorneva GA, et al. **Eksp Onkol** 1989;11(1):63–5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Isolation of human tyrosinase from cultured melanoma cells. Wittbjer A, et al. **Acta Derm Venereol (Stockh)** 1989; 69(2):125–31

Expression of five cathepsins in murine melanomas of varying metastatic potential and normal tissues. Qian F, et al. **Cancer Res** 1989 Sep 1;49(17):4870–5

Action of endogenous proteases on the distribution of tyrosinase isozymes in Harding-Passey mouse melanoma. Martinez JH, et al. **Cell Biochem Funct** 1989 Jan;7(1):21–6

Stimulation of Cloudman melanoma tyrosinase activity occurs predominantly in G2 phase of the cell cycle. Abdel-Malek ZA, et al. **Exp Cell Res** 1989 Jan; 180(1):198–208

Differences between beige and bg/+ mice in the disruption of plasma proteinase regulation in the tumor-bearing state or following Corynebacterium parvum treatment. Evidence for the involvement of polymorphonuclear leukocyte proteinases. Hart DA. **Haemostasis** 1988;18(3):154–62

Differences in induction of lysosomal protease activity by protease inhibitors in B16 melanoma cell lines. Nakao H, et al. **Int J Biochem** 1989;21(2):139–42

Interaction of tumor and surrounding tissue of mice inoculated B16 melanoma variants in terms of enzyme activity. Nakao H, et al. **Int J Biochem** 1989;21(7):739–43

Citrate activates tyrosinase from B-16 murine melanoma and human skin. Devi CC, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):117–22

Inhibition of tyrosinase activity and protein synthesis in melanoma cells by calcium ionophore A23187. Fuller BB. **Pigment Cell Res** 1987;1(3):176–80

Comparison of 5'-nucleotidase activities among cultured murine melanoma cell lines. Moody D, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):14–6

Regulation of tyrosinase mRNA levels in mouse melanoma cell clones by melanocyte-stimulating hormone and cyclic AMP. Hoganson GE, et al. **Somat Cell Mol Genet** 1989 May;15(3):255–63

ETIOLOGY

Cutaneous malignant melanoma and ultraviolet radiation: a review. Longstreth J. **Cancer Metastasis Rev** 1988 Dec; 7(4):321–33 (67 ref.)

GENETICS

P-glycoprotein gene amplification and expression in multidrug-resistant murine P388 and B16 cell lines. Capranico G, et al. **Br J Cancer** 1989 May;59(5):682–5

Identification and characterization of X-ray-induced proteins in human cells. Boothman DA, et al. **Cancer Res** 1989 Jun 1;49(11):2871–8

C-myc gene expression in heat-adapted and heat-shocked cells. Cajone F, et al. **Cell Biol Int Rep** 1988 Jul; 12(7):549–53

Cellular sialic acid level and phenotypic expression in B16 melanoma cells: comparison of spontaneous variations and bromodeoxyuridine- and theophylline-induced changes. Kinoshita Y, et al. **Cell Struct Funct** 1989 Feb;14(1):35–43

Spontaneous sister chromatid exchange in metastatic variants of the murine B16 melanoma and human astrocytomas in culture. Lakshmi MS, et al. **Invasion Metastasis** 1988; 8(4):205–16

cDNA cloning and sequence of a new type of actin in mouse B16 melanoma. Sadano H, et al. **J Biol Chem** 1988 Nov 5;263(31):15868–71

New variants of B16 mouse melanoma: differentiation and metastatic properties. Aubert C, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):17–25

IMMUNOLOGY

Interferon-mediated modulation of metastasis and MHC antigens. Lollini PL, et al. **Adv Exp Med Biol** 1988; 233:129–39

Use of the subrenal capsule assay to measure antibody-dependent, cell-mediated cytotoxicity against head and neck tumors. Kau R, et al. **Arch Otorhinolaryngol** 1989;246(3):165–8

Serological response of non-human primates to human melanoma disialoganglioside GD3. Stuhlmiller GM, et al. **Cancer Immunol Immunother** 1989;29(3):205–10

Natural killer sensitivity of four Bomirski melanoma variants. Bigda J, et al. **Cancer Lett** 1989 Jan;44(1):67–72

Modulation by interferons of HLA antigen, high-molecular-weight melanoma associated antigen, and intercellular adhesion molecule 1 expression by cultured melanoma cells with different metastatic potential. Maio M, et al. **Cancer Res** 1989 Jun 1;49(11):2980–7

Cyclophosphamide potentiates the antitumor activity of v-p97NY. Estin CD, et al. **Cell Immunol** 1989 Apr 15; 120(1):126–31

Anti-metastatic effect by in vivo administration of concanavalin A through augmentation of T-derived activated killer activity: efficacy to B16 melanoma expressed MHC antigen. Taniguchi K, et al. **Cell Immunol** 1989 May;120(2):460–9

Isolation and purification of a substance immunologically cross-reactive with insulin (SICRI) from tumor tissue. Levanat S, et al. **Int J Biochem** 1989;21(5):509–15

The intracellular association of B700 and B50 murine melanoma antigens and their role in tumor rejection. Gersten DM, et al. **Int J Cancer** 1989 Mar 15;43(3):497–500

Differential expression of cell adhesion molecules in variants of K1735 melanoma cells differing in metastatic capacity. Linnemann D, et al. **Int J Cancer** 1989 Apr 15;43(4):709–12

Transfected mouse melanoma lines that express various levels of human melanoma-associated antigen p97. Estin CD, et al. **J Natl Cancer Inst** 1989 Mar 15;81(6):445–8

Immunization with a syngeneic regressor tumor causes resorption in allo-pregnant mice. Tartakovsky B, et al. **J Reprod Immunol** 1988 Jul;13(2):113–22

Demonstration of B700 cross-reactive antigens on human and other animal melanomas. Gersten DM, et al. **Pigment Cell Res** 1988;1(6):434–8

Indirect presentation of alloantigen in vivo. Mirisklavos A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):151–2

Reconsidering the immunologic privilege and lymphatic drainage of the anterior chamber of the eye. Niederkorn JY, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):259–60

[Cryotherapy of metastatic B16 melanoma. Consequences of the immunogenic potential] Bellangeon M, et al. **C R Soc Biol (Paris)** 1988;182(5):453–7 (Eng. Abstr.) **(Fre)**

[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor-bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) **(Rus)**

METABOLISM

Lipoxygenase regulation of membrane expression of tumor cell glycoproteins and subsequent metastasis. Honn KV, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:439–43

Distribution of a boronated porphyrin in murine tumors. Kahl SB, et al. **Basic Life Sci** 1989;50:205–12

Modulation in vitro and in vivo of cytotoxicity but not cellular levels of doxorubicin by the calmodulin inhibitor trifluoperazine is dependent on the level of resistance. Ganapathi R, et al. **Br J Cancer** 1988 Sep;58(3):335–40

Growth rate dependence of differential incorporation of a guanosine triphosphate photoaffinity probe into the alpha subunit of a guanine nucleotide binding protein, Gs, from metastatic variants of B16 melanoma cells. Lange-Carter CA, et al. **Cancer Res** 1989 Jun 15;49(12):3173–7

Induction of protein kinase C in mouse melanoma cells by retinoic acid. Niles RM, et al. **Cancer Res** 1989 Aug 15; 49(16):4483–7

Biosynthesis and secretion of thrombospondin in human melanoma cells. Apelgren LD, et al. **Cell Biol Int Rep** 1989 Feb;13(2):189–95

Flow cytometric measurement of intracellular pH in B16 tumors: intercell variance and effects of pretreatment with glucose. Hedley DW, et al. **Exp Cell Res** 1989 Jan; 180(1):106–16

Pharmacokinetics of Ro 03-8799 in mice bearing melanosarcoma: comparison with tumors without melanin. Laurent F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1101–3

Hypoxia and reoxygenation in human melanoma xenografts. Rofstad EK. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):81–9

Relationship between cellular accumulation of rhodamine 123 (R123) and cytotoxicity in B16 melanoma cells. Krag DN, et al. **J Surg Res** 1989 Apr;46(4):361–5

UV exposure alters the membrane lipid composition and cell membrane fluidity of intact cultured B-16 melanoma cells. Sakanashi T, et al. **Kurume Med J** 1988;35(4):159–69

Paraquat is not accumulated in B16 tumor cells by the polyamine transport system. Minchin RF, et al. **Life Sci** 1989;45(1):63–9

L-tyrosine, L-dopa, and tyrosinase as positive regulators of

the subcellular apparatus of melanogenesis in Bomirski Ab amelanotic melanoma cells. Slominski A, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):109–16

Effect of UV-B irradiation on release of arachidonic acid from B–16 melanoma cells. Suematsu T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):153–6

Profile of intercellular adhesion molecule–1 (ICAM–1) synthesized by human melanoma cell lines. Temponi M, et al. **Semin Oncol** 1988 Dec;15(6):595–607

In vitro and in vivo studies of boron conjugated melanoma affined biochemicals. Allen BJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):163–5

MICROBIOLOGY

Ultrastructure of cultured mouse S91 melanoma cells with special emphasis on viral particles. Lauharanta J. **Arch Dermatol Res** 1989;281(4):284–7

PATHOLOGY

Therapeutic potential of cytokines. Talmadge JE, et al. **Adv Exp Med Biol** 1988;233:395–403

Identification of a second active site in laminin for promotion of cell adhesion and migration and inhibition of in vivo melanoma lung colonization. Kleinman HK, et al. **Arch Biochem Biophys** 1989 Jul;272(1):39–45

Selective cytotoxicity of a phenolic melanin precursor, 4–S–cysteaminylphenol, on in vitro melanoma cells. Yamada K, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2217–21

Sialic acids and penultimate oligosaccharides on metastatic tumour cell surfaces. Passaniti A, et al. **Biochem Soc Trans** 1989 Feb;17(1):33–6 (24 ref.)

Activity of the pyrazoloacridines against multidrug–resistant tumor cells. Sebolt J, et al. **Cancer Chemother Pharmacol** 1989;24(4):219–24

Transplantation, growth, and regression of mouse melanoma xenografts in neonatal marsupials. Fadem BH, et al. **Cancer Invest** 1988;6(4):403–8

Selective fractionation of hypoxic B16 melanoma cells by density gradient centrifugation. Fornabaio M, et al. **Cancer Lett** 1989 Mar;44(3):185–90

Induction of differentiated phenotypes in melanoma cells by a combination of an adenosine 3',5'-cyclic monophosphate stimulating agent and D–alpha tocopheryl succinate. Prasad KC. **Cancer Lett** 1989 Jan;44(1):17–22

Selective implantation and growth in rats and mice of experimental liver metastasis in acinar zone one. Barberá–Guillem E, et al. **Cancer Res** 1989 Jul 15; 49(14):4003–10

Type IV collagen–mediated melanoma cell adhesion and migration: involvement of multiple, distinct domains of the collagen molecule. Chelberg MK, et al. **Cancer Res** 1989 Sep 1;49(17):4796–802

Poorly metastatic tumor cell variants as primary targets of syngeneic antibody responses against murine melanoma. Parratto NP, et al. **Cancer Res** 1989 Jul 15;49(14):3722–8

Metastatic potential of cloned murine melanoma cells transfected with activated c–Ha–ras. Price JE, et al. **Cancer Res** 1989 Aug 1;49(15):4274–81

Inhibition of the metastasis of murine malignant melanoma by synthetic polymeric peptides containing core sequences of cell–adhesive molecules. Saiki I, et al. **Cancer Res** 1989 Jul 15;49(14):3815–22

Cycle reset in a melanoma cell line caused by cooling. Dewey DL. **Cell Tissue Kinet** 1987 Nov;20(6):603–9

Identification of 'non–proliferating' B16 melanoma cells using monoclonal antibody (AD203) against the M1 subunit of ribonucleotide reductase. Wong WS, et al. **Cell Tissue Kinet** 1988 Sep;21(5):353–61

The in vitro invasiveness and interactions with laminin of K–1735 melanoma cells. Evidence for different laminin–binding affinities in high and low metastatic variants. Albini A, et al. **Clin Exp Metastasis** 1989 Jul–Aug; 7(4):437–51

Changes in the tumorigenic and metastatic properties of murine melanoma cells treated with a triazene derivative. Allegrucci M, et al. **Clin Exp Metastasis** 1989 May–Jun; 7(3):329–41

B16 melanoma spontaneous brain metastasis: occurrence and development within leptomeninges blood vessels. Alterman AL, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):15–23

Differential tumor growth of blood–borne B16 melanoma variants in cerebral dura mater is related to tumor–host cell reactions. Kawaguchi T, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):1–14

Low–molecular–weight membrane component inhibits the metastatic phenotype of B16–F10 melanoma. Keren Z, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):315–28

Tumor cell haptotaxis on covalently immobilized linear and exponential gradients of a cell adhesion peptide. Brandley BK, et al. **Dev Biol** 1989 Sep;135(1):74–86

Autoradiographic characterization of newly developed melanoic cell group different from the melanoic tumor piece embedded into a liver lobe of mice. Momose Y, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):285–94

Carcinogenesis and aging. VIII. Effect of host age on tumour growth, metastatic potential, and chemotherapeutic sensitivity to 1,4–benzoquinone–guanylhydrazonethiosemicarbazone (ambazone) and 5–fluorouracil in mice and rats. Baumgart J, et al. **Exp Pathol** 1988;33(4):239–48

Differential response of adherent and unanchored melanoma cells to bromodeoxyuridine evidenced by specific lectin–binding protein changes. Rieber M, et al. **Int J Cancer** 1989 May 15;43(5):841–4

The role of intratumor environment in determining spontaneous metastatic activity of a B16 melanoma clone. Alterman AL, et al. **Invasion Metastasis** 1989;9(4):242–53

Cellular glycoproteins correlating with pulmonary–colonizing potential in B16 melanoma. Narita T. **Invasion Metastasis** 1989;9(1):1–14

Tumorigenicity and dissemination of primary and metastatic human melanomas implanted into different sites in athymic nude mice. Rodolfo M, et al. **Invasion Metastasis** 1988; 8(6):317–31

Novel synthetic heparin binding peptides of laminin and fibronectin which promote the adhesion of melanoma cells. Skubitz AP, et al. **Invasion Metastasis** 1989;9(2):89–101

Autoregulation of MeWo metastatic melanoma cell growth: characterization of intracellular (FGF, MGSA) and secreted (PDGF) growth factors. Pichon F, et al. **J Cell Physiol** 1989 Aug;140(2):344–58

Neural crest cell differentiation and carcinogenesis: capability of goldfish erythrophoroma cells for multiple differentiation and clonal polymorphism in their melanogenic variants. Matsumoto J, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):255S–260S

Complement activation, phagocytosis, tumor growth and parasitic infection after magnesium supplementation in diet of mice. Stankiewicz M, et al. **Magnesium** 1989;8(2):87–93

Invasive characteristics of neural crest cells in vitro. Gehlsen KR, et al. **Pigment Cell Res** 1987;1(1):16–21

Temporal synthesis and presentation of antigens by cultured B16 melanoma cells. Gersten DM, et al. **Pigment Cell Res** 1987;1(2):118–23

Melanocytic carcinogenesis in albino guinea pigs. Gomez S, et al. **Pigment Cell Res** 1988;1(6):390–6

RBE of thermal neutron capture therapy using 10B1–para–boronophenylalanine for human and B–16 melanoma cells. Ichihashi M, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):198–201

Relationship between melanogenicity and malignancy in malignant melanoma cells. Kim HI, et al. **Yonsei Med J** 1988;29(4):357–66

[Ultrastructural studies on invasion of inner limiting membrane by malignant tumor cells] Wang HH. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):56–8 (Eng. Abstr.) **(Chi)**

[The effect of retinoids on the capacity for colony formation by malignant cells] Xu CX, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):258–61 (Eng. Abstr.) **(Chi)**

[Induction of phenotypic reverse transformation by plant glycosides in cultured cancer cells] Odashima S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1483–9 (Eng. Abstr.) **(Jpn)**

[Combined effect of cisplatin and caffeine on murine B16–BL6 melanoma cells] Yasutake H, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2031–8 (Eng. Abstr.) **(Jpn)**

[Changes in biological properties of malignant melanoma B–16 after transplantation to (CBA x C57Bl/6)F1 mice] Kiseleva EG, et al. **Eksp Onkol** 1988;10(5):49–52 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Cloning efficiency of human melanoma cells is modulated after invasion through a reconstituted basement membrane. Yohem KH, et al. **Cancer Lett** 1989 May;45(2):135–43

Investigation of the regulation of pigmentation in alpha–melanocyte–stimulating hormone responsive and unresponsive cultured B16 melanoma cells. Hill SE, et al. **Pigment Cell Res** 1989 May–Jun;2(3):161–6

Differential radiosensitivity in cultured B–16 melanoma cells following interrupted melanogenesis induced by glucosamine. Mileo AM, et al. **Pigment Cell Res** 1989 May–Jun;2(3):167–70

RADIONUCLIDE IMAGING

Potential radiopharmaceuticals for the detection of ocular melanoma. Part III. A study with 14C and 11C labelled tyrosine and dihydroxyphenylalanine. van Langevelde A, et al. **Eur J Nucl Med** 1988;14(7–8):382–7

Monoclonal anti–CEA antibody: factors affecting localization in a preclinical study. Ripamonti M, et al. **Int J Biol Markers** 1988 Oct–Dec;3(4):249–58

Feasibility study of fluorine–18 labeled dopa for melanoma imaging. Ishiwata K, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):371–4

RADIOTHERAPY

Boron compounds for neutron capture therapy. Alam F, et al. **Basic Life Sci** 1989;50:107–11

Neutron capture therapy for melanoma. Coderre JA, et al. **Basic Life Sci** 1989;50:219–32

Tumor–seeking compounds for boron neutron capture therapy: synthesis and biodistribution. Gabel D. **Basic Life Sci** 1989;50:233–41

Distributions of sulfhydryl borane monomer and dimer in rodents and monomer in humans: boron neutron capture therapy of melanoma and glioma in boronated rodents. Slatkin DN, et al. **Basic Life Sci** 1989;50:179–91

Boron neutron capture therapy of a murine melanoma. Coderre JA, et al. **Cancer Res** 1988 Nov 15;48(22):6313–6

Uptake and therapeutic effectiveness of 125I– and 211At–methylene blue for pigmented melanoma in an animal model system. Link EM, et al. **Cancer Res** 1989 Aug 1;49(15):4332–7

Relationship of spontaneous regional lymph node metastases to dose of local irradiation of primary B16 melanomas. Nathanson SD, et al. **Cancer Res** 1989 Aug 15; 49(16):4412–6

Therapeutic effects of S–35–thiouracil in BALB/c mice carrying Harding–Passey melanoma. Fairchild RG, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):337–43

Hypoxia and reoxygenation in human melanoma xenografts. Rofstad EK. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):81–9

Boronophenylalanine for neutron capture therapy of melanoma. Coderre JA, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):215–7

Biological efficacy of thermal neutrons using Na2(10)B12H11SH studied in vivo on B–16 mouse melanoma. Spryshkova R, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):213–5

Boronated monoclonal antibodies for potential neutron capture therapy of malignant melanoma and leukaemia. Tamat SR, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):145–7

[RBEs of thermal neutron capture therapy and 10B(n, alpha)7Li reaction on melanoma bearing hamster] Hiratsuka J, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):759–66 (Eng. Abstr.) **(Jpn)**

SECONDARY

Eicosapentaenoic acid reduces the invasive and metastatic activities of malignant tumor cells. Reich R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):559–64

Human interferons inhibit experimental metastases of a human melanoma cell line in nude mice. Ramani P, et al. **Br J Cancer** 1988 Sep;58(3):350–4

The inhibition of murine lung metastasis by synthetic polypeptides [poly(arg–gly–asp) and poly(tyr–ile–gly–ser–arg)] with a core sequence of cell adhesion molecules. Saiki I, et al. **Br J Cancer** 1989 Feb; 59(2):194–7

Pharmacokinetics of bestatin and oral activity for treatment of experimental metastases. Abe F, et al. **Cancer Immunol Immunother** 1989;28(1):29–33

Comparative analysis of oncogene expression and chromosome abnormalities between metastatic and nonmetastatic B16 melanoma clones. Funasaka Y, et al. **Dermatologica** 1988;177(4):200–11

Tabulation of results on the heterogeneity of cellular characteristics among cells from B16 mouse melanoma cell lines with different colonization potentials. A summary of sixty reports. Maslow DE. **Invasion Metastasis** 1989; 9(3):182–91 (72 ref.)

Inhibition of metastases of a human melanoma xenograft by monoclonal antibody to the GD2/GD3 gangliosides. Iliopoulos D, et al. **J Natl Cancer Inst** 1989 Mar 15; 81(6):440–4

Experimental meningeal melanomatosis. Schabet M, et al. **Strahlenther Onkol** 1989 Jul;165(7):491–2

The effect of storage on the metastatic potential of tumor cells collected in autologous blood. An animal model. Lane TA. **Transfusion** 1989 Jun;29(5):418–20

SURGERY

Photoablation of ocular melanoma with a high–powered argon endolaser. Jaffe GJ, et al. **Arch Ophthalmol** 1989 Jan; 107(1):113–8

Effect of splenectomy upon the growth of B16–F10 melanoma and its relation to the interferon system. Stoll HL 3d, et al. **J Surg Oncol** 1989 Feb;40(2):79–84

THERAPY

Radiofrequency hyperthermia and topical retinoic acid therapy in murine melanoma. Levine N, et al. **Am J Med Sci** 1989 May;297(5):285–9

In vivo requirement for asialo GM1 and Thy1 positive leukocytes for antitumor effect of rIL–2 +/– rIFN–gamma. Silagi S, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1265–9

The independent action of radiation and cisplatin on the survival or recovery of human normal or tumour cells in vitro or in vivo. Basham C, et al. **Int J Radiat Biol** 1989 May;55(5):807–20

Potent in situ activation of murine lung macrophages and therapy of melanoma metastases by systemic administration of liposomes containing muramyltripeptide phosphatidylethanolamine and interferon gamma. Fidler IJ, et al. **Invasion Metastasis** 1989;9(2):75–88

Effect of murine alpha–, beta–, and gamma–interferons in combination with alpha–difluoromethylornithine, an inhibitor of polyamine biosynthesis, on the tumor growth and metastasis of B16 melanoma and Lewis lung carcinoma in mice. Sunkara PS, et al. **J Biol Response Mod** 1989 Apr; 8(2):170–9

Radiofrequency hyperthermia therapy of murine melanoma:

a comparison of fractionated versus single-dose treatments. Don SA, et al. **J Dermatol Surg Oncol** 1989 Aug; 15(8):845–9

Pre-clinical models for immunotherapy of melanoma. Reisfeld RA. **Prog Clin Biol Res** 1989;288:183–93 (17 ref.)

[Potentiation of the therapeutic effect of chemotherapy and hyperthermia on experimental tumor and reduction of immunotoxicity of mitomycin C by juzen-taiho-toh, a Chinese herbal medicine] Komiyama K, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):251–7 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

The biphasic nature of a human amelanotic melanoma tumour line HT–18. Iyengar B, et al. **Acta Morphol Hung** 1988; 36(3–4):235–40

Detection of receptor-mediated membrane effects of dexamethasone in B16 murine melanoma cell lines by cell partitioning in aqueous two-polymer systems. Risely GP, et al. **Exp Cell Biol** 1989;57(1):35–42

Electron microscopic evidence for stimulation of melanosomal maturation by lysosomotropic agents and monensin in cultured B16 mouse melanoma cells. Oikawa A, et al. **Pigment Cell Res** 1987;1(1):44–50

URINE

Melanin-related metabolites in urine of B16 melanoma-bearing mice. Wakamatsu K, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):385–9

MELANOMA, HARDING-PASSEY see **MELANOMA, EXPERIMENTAL**

MELANOPHORES

CYTOLOGY

Effects of exogenous guanosine on chromatophore differentiation in the axolotl. Frost SK, et al. **Pigment Cell Res** 1987;1(1):37–43

Control of melanoblast differentiation in amphibia by alpha-melanocyte stimulating hormone, a serum melanization factor, and a melanization inhibiting factor. Fukuzawa T, et al. **Pigment Cell Res** 1989 May–Jun; 2(3):171–81

Melanophore differentiation in the periodic albino mutant of Xenopus laevis. Fukuzawa T, et al. **Pigment Cell Res** 1987;1(3):197–201

Calcium-dependent irreversible effect of ionophore A23187 on melanophores. Hadley ME. **Pigment Cell Res** 1987; 1(1):57–61

Studies on cellular adhesion of Xenopus laevis melanophores: modulation of cell-cell and cell-substratum adhesion in vitro by endogenous Xenopus galactoside-binding lectin. Milos NC, et al. **Pigment Cell Res** 1987;1(3):188–96

[Microinjections of antibodies against microtubule proteins: the effect on distribution and movement of melanosomes in melanophores] Leonova EV, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1469–72 **(Rus)**

DRUG EFFECTS

Characterization of pigment aggregating alpha 2-adrenoceptors of fish melanophores by use of different agonists after partial irreversible receptor inactivation. Karlsson JO, et al. **Br J Pharmacol** 1989 May;97(1):222–8

Sublethal toxicity of an insecticide to the epidermal melanophores of Rana tadpoles. Tomar V, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):582–8

Melatonin analogues induce pigment granule condensation in isolated Xenopus laevis melanophores in tissue culture. Sugden D. **J Endocrinol** 1989 Jan;120(1):R1–3

Ionic requirements for melanin concentrating hormone (MCH) actions on teleost Poecilia reticulata melanophores. Visconti MA, et al. **Pigment Cell Res** 1989 May–Jun; 2(3):213–7

METABOLISM

The sympathetic neuro-melanophore transmission in a fresh-water Indian major carp, Labeo rohita (Ham.). Patil S, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun; 33(2):101–6

Serotoninergic activity stimulates melanin dispersion within dermal melanophores of newts. Miller LJ. **Life Sci** 1989; 44(5):355–9

[Pigment migration in the dermal melanophores of amphibian larvae in the interphase and during mitosis] Starodubov SM, et al. **Ontogenez** 1988 May–Jun;19(3):279–83 (Eng. Abstr.) **(Rus)**

PATHOLOGY

An association of melanophores appearing at metamorphosis as vehicles of asymmetric skin color formation with pigment anomalies developed under hatchery conditions in the Japanese flounder, Paralichthys olivaceus. Seikai T, et al. **Pigment Cell Res** 1987;1(3):143–51

PHYSIOLOGY

Melanin concentrating hormone (MCH): synthesis and bioactivity studies of MCH fragment analogues. Matsunaga TO, et al. **Peptides** 1989 Mar–Apr;10(2):349–54

Exploring the evolutionary history of melanin-concentrating and melanin-stimulating hormone receptors on melanophores: neopterygian (holostean) and chondrostean fishes. Sherbrooke WC, et al. **Pigment Cell Res** 1988; 1(5):344–9

Migration of epidermal melanophores to the dermis through the basement membrane during metamorphosis in the frog, Rana japonica. Yasutomi M. **Pigment Cell Res** 1987; 1(3):181–7

RADIATION EFFECTS

Light response of cultured melanophores of a freshwater teleost, Zacco temmincki. Naora H, et al. **Cell Struct Funct** 1989 Feb;14(1):113–20

ULTRASTRUCTURE

Identification of pigment cells during early amphibian development (Triturus alpestris, Ambystoma mexicanum). Epperlein HH, et al. **Cell Tissue Res** 1988 Sep; 253(3):493–505

Vimentin intermediate filaments in fish melanophores. Gyoeva FK, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):649–55

[Dynamics of the redistribution of pigmented granules in the dermal melanophores of anuran larvae. 2. Aggregation] Nikeriasova EN, et al. **Ontogenez** 1988 Nov–Dec; 19(6):618–25 **(Rus)**

MELANOSIS

Duodenal pseudomelanosis [letter] Kang JY. **J Clin Gastroenterol** 1989 Apr;11(2):237–8

[Pigmented lesions of the oral cavity. II. Melanosis and melanoma] Bucci E, et al. **Minerva Stomatol** 1989 May; 38(5):533–45 (162 ref.) (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Animal model of conjunctival primary acquired melanosis. Folberg R, et al. **Ophthalmology** 1989 Jul;96(7):1006–13

COMPLICATIONS

Fatal pneumococcal infection in neurocutaneous melanosis [letter] Adeyanju M, et al. **J Child Neurol** 1988 Oct; 3(4):293–4

Personal risk-factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

Intraspinal melanotic arachnoid cyst and lipoma in neurocutaneous melanosis. Kasantikul V, et al. **Surg Neurol** 1989 Feb;31(2):138–41

Neurofibromatosis and neural crest neoplasms: primary acquired melanosis and malignant melanoma of the conjunctiva. To KW, et al. **Surv Ophthalmol** 1989 Mar–Apr;33(5):373–9 (53 ref.)

CONGENITAL

Congenital Becker's melanosis. Picascia DD, et al. **Int J Dermatol** 1989 Mar;28(2):127–8

DIAGNOSIS

Penile melanosis. Revuz J, et al. **J Am Acad Dermatol** 1989 Apr;20(4):567–70

[Melanosis coli] Kuhl M, et al. **Wiad Lek** 1988 Aug 15; 41(16):1108–11 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Double-blind comparison of azelaic acid and hydroquinone in the treatment of melasma. Verallo-Rowell VM, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;143:58–61

[Use of a cream based on 20% azelaic acid in the treatment of melasma] Rigoni C, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):I–VI (Eng. Abstr.) **(Ita)**

[Double-blind clinical study of the treatment of melasma with azelaic acid versus hydroquinone] Piquero Martín J, et al. **Med Cutan Ibero Lat Am** 1988;16(6):511–4 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Melanosis coli. Prevalence, distribution, and histologic features in 200 consecutive autopsies at Kuopio University Central Hospital. Koskela E, et al. **Dis Colon Rectum** 1989 Mar;32(3):235–9

ETIOLOGY

Generalized melanosis in occult primary melanoma. Sexton M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):261–6

GENETICS

Familial iris melanosis—a misnomer? Joondeph BC, et al. **Br J Ophthalmol** 1989 Apr;73(4):289–93

PATHOLOGY

Blue nevus and melanosis of the prostate. Electron-microscopic and immunohistochemical studies. Ro JY, et al. **Am J Clin Pathol** 1988 Nov;90(5):530–5

Hyperpigmentation of the clavicular zone: a variant of friction melanosis. Magaña-García M, et al. **Int J Dermatol** 1989 Mar;28(2):119–22

Linear and whorled nevoid hypermelanosis. Kalter DC, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1037–44

Progressive macular hypomelanosis of the trunk: primary acquired hypopigmentation. Guillet G, et al. **J Cutan Pathol** 1988 Oct;15(5):286–9

Clinicopathologic characteristics of premalignant and malignant melanocytic lesions of the conjunctiva. Jakobiec FA, et al. **Ophthalmology** 1989 Feb;96(2):147–66 (58 ref.)

Giant median raphe cyst of the penis with diffuse melanosis of its epithelial lining. Hitti IF, et al. **Urol Int** 1989; 44(2):121–4

[Cutaneous melanosiderosis in patches] Poiares Baptista A, et al. **Ann Dermatol Venereol** 1989;116(5):401–4 **(Fre)**

[Primary malignant melanoma of the esophagus arising in melanosis. Histological, immunohistochemical and ultrastructural study of a case] Kanavaros P, et al. **Ann Pathol** 1989;9(1):57–61 (Eng. Abstr.) **(Fre)**

[Epididymal melanosis: presentation of a case associated with ureteral ectopy in the seminal vesicle] Ripa Saldias LM, et al. **Actas Urol Esp** 1988 May–Jun;12(3):299–303 (Eng. Abstr.) **(Spa)**

SURGERY

[Treatment of Dubreuilh's melanosis. Apropos of 30 cases] Darsonval V, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989; 110(2):187–90 (Eng. Abstr.) **(Fre)**

MELANOSOMES see **MELANOCYTES**

MELANOTROPIN see **MSH**

MELARSOPROL see under **ARSENICALS**

MELASMA see **MELANOSIS**

MELATONIN

ADMINISTRATION & DOSAGE

Effects of a four-day nocturnal melatonin treatment on the 24 h plasma melatonin, cortisol and prolactin profiles in humans. Mallo C, et al. **Acta Endocrinol (Copenh)** 1988 Dec; 119(4):474–80

ANALOGS & DERIVATIVES

Urinary 6-hydroxymelatonin in menstruating women. Hamilton JA, et al. **Biol Psychiatry** 1988 Nov;24(7):845–52

A study of sulphatoxymelatonin excretion and gonadotrophin status during weight gain in anorexia nervosa. Bearn J, et al. **Br J Psychiatry** 1988 Mar;152:372–6

Melatonin and sulphatoxymelatonin in eating disorder patients [letter] Kennedy SH, et al. **Br J Psychiatry** 1989 Feb;154:272–3

A melatonin agonist and N-acetyl-N2-formyl-5-methoxykynurenamine accelerate the reentrainment of the melatonin rhythm following a phase advance of the light-dark cycle. Kennaway DJ, et al. **Brain Res** 1989 Aug 28;495(2):349–54

Characteristics and autoradiographic localization of 2-[125I]iodomelatonin binding sites in Djungarian hamster brain. Duncan MJ, et al. **Endocrinology** 1989 Aug; 125(2):1011–8

2-[125I]iodomelatonin labels sites with identical pharmacological characteristics in chicken brain and chicken retina. Dubocovich ML, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):289–99

Melatonin analogues induce pigment granule condensation in isolated Xenopus laevis melanophores in tissue culture. Sugden D. **J Endocrinol** 1989 Jan;120(1):R1–3

2-[125I]iodomelatonin binding sites in hamster and chick exhibit differential sensitivity to prazosin. Pickering DS, et al. **J Pharm Pharmacol** 1989 May;41(5):356–7

Rapid and simple synthesis for the sulphate esters of 6-hydroxy-melatonin and N-acetyl-serotonin. Leone AM, et al. **J Pineal Res** 1988;5(4):367–71

A study of the mutagenicity of melatonin and 6-hydroxymelatonin. Neville S, et al. **J Pineal Res** 1989; 6(1):73–6

Alterations of temperature, sleepiness, mood, and performance in residents are not associated with changes in sulfatoxymelatonin excretion. Sharp KH, et al. **J Pineal Res** 1988;5(6):499–512

Antigonadal activity of the melatonin analogs 2-iodomelatonin and 2-chloromelatonin in the juvenile Djungarian hamster, Phodopus sungorus campbelli. Sugden D. **J Pineal Res** 1989;7(2):205–9

Rapid decrease in melatonin production during successful treatment of delayed puberty [letter] Arendt J, et al. **Lancet** 1989 Jun 10;1(8650):1326

Impact of circulating testosterone on iodomelatonin binding sites in the male rat brain. Zisapel N, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):119–26

ANALYSIS

Neurotransmitters and sex-hormone profiles in the human serum and ovarian follicular fluid of in vitro fertilization participants. Kamberi IA, et al. **Ann N Y Acad Sci** 1988; 541:190–6

Salivary melatonin estimation in assessment of pineal-gland function [letter] Miles A, et al. **Clin Chem** 1989 Mar; 35(3):514–5

Effect of environmental temperature and photoperiod on the melatonin levels in the pineal, lateral eye, and plasma of

the frog, Rana perezi: importance of ocular melatonin. Delgado MJ, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):46–53

Melatonin and other indoles in rat pineal. Chin JL. **J Chromatogr** 1988 Jun 24;428(1):206–8

Melatonin concentration in the cerebral vascular sinuses of sheep and evidence for its episodic release. Cozzi B, et al. **J Pineal Res** 1988;5(6):535–43

Effect of psychotropic drugs on the contents of melatonin, serotonin and N–acetylserotonin in rat pineal gland. Wakabayashi H, et al. **Jpn J Pharmacol** 1989 Feb; 49(2):225–34

Radioimmunoassay for melatonin and its application to fowl pineal research. Sigüenza AF, et al. **Rev Esp Fisiol** 1988 Jun;44(2):221–6

Serotonin and melatonin contents in the pineal glands from different stocks and strains of laboratory rats. Vollrath L, et al. **Z Versuchstierkd** 1989;32(2):57–63

ANTAGONISTS & INHIBITORS

Test of ML23 as an antagonist to the effects of melatonin in the ram. Lincoln GA, et al. **J Reprod Fertil** 1989 Jul; 86(2):737–43

A novel melatonin antagonist, N–(2,4–dinitrophenyl)–5–methoxytryptamine neutralizes some effects of melatonin in the female Syrian hamster. Nordio M, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):321–5

BIOSYNTHESIS

Effects of electrical stimulation of the superior cervical ganglia on the number of "synaptic" ribbons and the activity of melatonin–forming enzymes in the rat pineal gland. Reuss S, et al. **Anat Embryol (Berl)** 1989;179(4):341–5

The in vitro activation of cyclic AMP production by either forskolin or isoproterenol in the Syrian hamster pineal during the day is not accompanied by an increase in melatonin production. Santana C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):930–6

Synthesis of melatonin by the pineal modified photoreceptors of birds immunocytochemical localization of hydroxyindole–O–methyltransferase. Guerlotte J, et al. **Biol Cell** 1988;64(1):93–6

Twenty–four–hour pineal melatonin synthesis in the vasopressin–deficient Brattleboro rat. Schröder H, et al. **Brain Res** 1988 Sep 6;459(2):328–32

Relationship between light, calcium influx and cAMP in the acute regulation of melatonin production by cultured chick pineal cells. Zatz M. **Brain Res** 1989 Jan 16;477(1–2):14–8

Effects of thyroid hormone on light/dark melatonin synthesis and release by young and maturing rat pineal glands in vitro. Catala MD, et al. **Int J Dev Neurosci** 1988;6(3):285–8

Pineal sensitivity to nighttime swimming stress changes during the active season in Richardson's ground squirrels (Spermophilus richardsonii). Tannenbaum MG, et al. **J Exp Zool** 1989 Jun;250(3):298–303

Serotonin and melatonin synthesis in peripheral blood mononuclear cells: stimulation by interferon–gamma as part of an immunomodulatory pathway. Finocchiaro LM, et al. **J Interferon Res** 1988 Dec;8(6):705–16

Cyclic AMP–dependent melatonin production in Y79 human retinoblastoma cells. Pierce ME, et al. **J Neurochem** 1989 Jul;53(1):307–10

Role of postsynaptic alpha–adrenergic receptors in the beta–adrenergic stimulation of melatonin production in the Syrian hamster pineal gland in organ culture. Santana C, et al. **J Pineal Res** 1989;7(1):13–22

Melatonin production in organ cultured chicken pineal: modulation by adenosine and its analogs. Falcón J, et al. **Pflugers Arch** 1988 Nov;413(1):93–5

Swimming–induced suppression of rat pineal melatonin is prevented by pretreatment with calcium channel blockers. Morton DJ, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):105–8

12–Hydroperoxyeicosatetraenoic acid (12–HPETE) and 15–HPETE stimulate melatonin synthesis in rat pineals. Sakai K, et al. **Prostaglandins** 1988 Jun;35(6):969–76

[The rhythm of melatonin synthesis in the epiphysis and its control by light] Hartmann W, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr;41(4):224–9 (16 ref.) (Eng. Abstr.) **(Ger)**

BLOOD

Plasma melatonin levels in psoriasis. Mozzanica N, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):312–6

Enhanced circadian rhythm of melatonin in anorexia nervosa. Tortosa F, et al. **Acta Endocrinol (Copenh)** 1989 May; 120(5):574–8

Characteristic changes in psychiatric symptoms, cortisol and melatonin but not prolactin in primary hyperparathyroidism. Linder J, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):32–40

Thermal sensitivity of reptilian melatonin rhythms: "cold" tuatara vs. "warm" skink. Firth BT, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1160–3

Abnormal melatonin response to 5–methoxypsoralen in dementia. Souêtre E, et al. **Am J Psychiatry** 1989 Aug; 146(8):1037–40

Changes in melatonin levels but not cortisol levels are associated with depression in patients with eating disorders. Kennedy SH, et al. **Arch Gen Psychiatry** 1989 Jan; 46(1):73–8

Nocturnal plasma melatonin levels in schizophrenic patients. Fanget F, et al. **Biol Psychiatry** 1989 Feb 15;25(4):499–501

Effect of idazoxan on evening melatonin plasma concentrations in healthy volunteers. Grasby PM, et al. **Biol Psychiatry** 1989 Aug;26(4):412–6

Circadian rhythms of melatonin and cortisol in aging. Sharma M, et al. **Biol Psychiatry** 1989 Feb 1;25(3):305–19

Plasma melatonin levels in depressed patients before and after treatment with antidepressant medication. Stewart JW, et al. **Biol Psychiatry** 1989 Jan;25(1):33–8

Melatonin secretion and age [letter] Thomas DR, et al. **Biol Psychiatry** 1989 Feb 1;25(3):365–7

Melatonin secretion in depression [letter] Cavallo A. **Br J Psychiatry** 1988 Nov;153:707–8

Melatonin and sulphatoxymelatonin in eating disorder patients [letter] Kennedy SH, et al. **Br J Psychiatry** 1989 Feb;154:272–3

A comparison of melatonin secretion in depressed patients and normal subjects. Thompson C, et al. **Br J Psychiatry** 1988 Feb;152:260–5

Stage–dependent depression of melatonin in patients with primary breast cancer. Correlation with prolactin, thyroid stimulating hormone, and steroid receptors. Bartsch C, et al. **Cancer** 1989 Jul 15;64(2):426–33

The dim light melatonin onset as a marker for circadian phase position. Lewy AJ, et al. **Chronobiol Int** 1989;6(1):93–102

Rhythms of serum melatonin in patients with spinal lesions at the cervical, thoracic or lumbar region. Li Y, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):47–56

The effect of photoperiod on diurnal rhythms of serum gonadotrophins, prolactin and melatonin in ovariectomized heifers. Critser JK, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):23–34

Contribution of the photoperiod to circadian variations in serum cortisol and melatonin in boars. Minton JE, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):177–81

Daily cycles in plasma melatonin levels under long or short photoperiod in the common carp, Cyprinus carpio. Kezuka H, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):296–302

Nocturnal plasma melatonin levels in migraine: a preliminary report. Claustrat B, et al. **Headache** 1989 Apr;29(4):242–5

Neuroimmunomodulation in cancer patients: correlations between melatonin and beta–endorphin blood levels and T helper/suppressor ratio. Barni S, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):82–6

Serum levels of melatonin in cancer patients and their relation to body sizes. Barni S, et al. **Int J Biol Markers** 1988 Jul–Sep;3(3):193–6

Plasma melatonin levels in affective states. McIntyre IM, et al. **Int J Clin Pharmacol Res** 1989;9(2):159–64

Determination of plasma 5–hydroxytryptophan, 5–hydroxytryptamine, 5–hydroxyindoleacetic acid, tryptophan and melatonin by high–performance liquid chromatography with electrochemical detection. Sagara Y, et al. **J Chromatogr** 1988 Sep 23;431(1):170–6

Differences between circadian and ultradian organization of cortisol and melatonin rhythms during activity and rest. Rivest RW, et al. **J Clin Endocrinol Metab** 1989 Apr; 68(4):721–9

Increase in plasma melatonin, beta–endorphin, and cortisol after a 28.5–mile mountain race: relationship to performance and lack of effect of naltrexone. Strassman RJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):540–5

Absence of circadian patterns of secretion of melatonin or cortisol in Weddell seals under continuous natural daylight. Barrell GK, et al. **J Endocrinol** 1989 Aug;122(2):445–9

Maternal pinealectomy abolishes the diurnal rhythm in plasma melatonin concentrations in the fetal sheep and pregnant ewe during late gestation. McMillen IC, et al. **J Endocrinol** 1989 Mar;120(3):459–64

Nocturnal changes in serum melatonin during female puberty in rhesus monkeys: a longitudinal study. Wilson ME, et al. **J Endocrinol** 1989 Jun;121(3):553–62

Melatonin and cortisol "switches" during mania, depression, and euthymia in a drug–free bipolar patient. Kennedy SH, et al. **J Nerv Ment Dis** 1989 May;177(5):300–3

Plasma melatonin rhythm lost in preglaucomatous chicks. Lauber JK, et al. **J Ocul Pharmacol** 1986 Summer; 2(3):205–13

Effects of photoperiod on the 24–hour melatonin profiles of the Bennett's wallaby (Macropus rufogriseus rufogriseus). Curlewis JD, et al. **J Pineal Res** 1988;5(4):373–83

Melatonin and pituitary–gonadal function in disorders of eating behavior. Ferrari E, et al. **J Pineal Res** 1989; 7(2):115–24

Melatonin profile in marmots: the influence of catecholamines, hibernation, and light. Florant G, et al. **J Pineal Res** 1989;7(2):105–13

Seasonal variation in the daily pattern of plasma melatonin in a wild mammal: the mountain hare (Lepus timidus). Iason GR, et al. **J Pineal Res** 1989;6(2):157–67

Human melatonin suppression by light is intensity dependent. McIntyre IM, et al. **J Pineal Res** 1989;6(2):149–56

Preliminary observations on the suppression of nocturnal plasma melatonin levels by short–term administration of diazepam in humans. Monteleone P, et al. **J Pineal Res** 1989;6(3):253–8

Melatonin response to exercise training in women. Skrinar GS, et al. **J Pineal Res** 1989;7(2):185–94

Presence of melatonin in the umbilical cord blood of full–term human newborns. Vicente P, et al. **J Pineal Res** 1989;6(2):135–40

Supersensitivity to melatonin suppression by light in young people at high risk for affective disorder. A preliminary report. Nurnberger JI Jr, et al. **Neuropsychopharmacology** 1988 Sep;1(3):217–23

Fluvoxamine–melatonin–stimulation–test (FMST) in patients with depressive disorders. Demisch L, et al. **Pharmacopsychiatry** 1988 Nov;21(6):420–1

Biological effect of bright light. Byerley WF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):683–6

Light suppression of melatonin in unipolar depressed patients. Cummings MA, et al. **Psychiatry Res** 1989 Mar;27(3):351–5

Circadian rhythms in depression and recovery: evidence for blunted amplitude as the main chronobiological abnormality. Souêtre E, et al. **Psychiatry Res** 1989 Jun; 28(3):263–78

Human melatonin response to light at different times of the night. McIntyre IM, et al. **Psychoneuroendocrinology** 1989; 14(3):187–93

Evidence for a functional role of alpha–1 adrenoceptors in the regulation of melatonin secretion in man. Palazidou E, et al. **Psychoneuroendocrinology** 1989;14(1–2):131–5

An alpha 2 adrenoceptor antagonist, Org 3770, enhances nocturnal melatonin secretion in man. Palazidou E, et al. **Psychopharmacology (Berlin)** 1989;97(1):115–7

Consecutive melatonin circadian rhythms in normal volunteers. Coetzee JA, et al. **S Afr Med J** 1989 Feb 18; 75(4):163–5

The effect of total sleep deprivation on plasma melatonin and cortisol in healthy human volunteers. Salín–Pascual RJ, et al. **Sleep** 1988 Aug;11(4):362–9

A radiologic study by CT scan of pineal size in cancer patients: correlation to melatonin blood levels. Tagliabue M, et al. **Tumori** 1989 Jun 30;75(3):226–8

[Melatonin and mental disorders. Review of neuro–endocrinologic aspects. II: Melatonin and depressive disorders] Conde López V, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan–Feb;17(1):15–24 (58 ref.) (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Presence of a distinct 24–hour melatonin rhythm in the ventricular cerebrospinal fluid of the goat. Kanematsu N, et al. **J Pineal Res** 1989;7(2):143–52

Evidence of high concentrations of melatonin in lateral ventricular cerebrospinal fluid of sheep. Shaw PF, et al. **J Pineal Res** 1989;6(3):201–8

METABOLISM

REM sleep deprivation increases early morning pineal melatonin in castrated rats. Peder M, et al. **Behav Neural Biol** 1989 Mar;51(2):237–46

Amplitude modulation of the nightly melatonin rise in the neonatal lamb and the subsequent timing of puberty. Foster DL, et al. **Biol Reprod** 1989 May;40(5):920–8

Beta–adrenergic stimulation prior to darkness advances the nocturnal increase of Syrian hamster pineal melatonin synthesis. Gonzalez–Brito A, et al. **Brain Res** 1988 Dec 20;475(2):393–6

Short days induce changes in specific melatonin binding in hamster median eminence and anterior pituitary. Vaněček J, et al. **Brain Res** 1989 Jan 16;477(1–2):387–90

Pineal indoleamine metabolism in pyridoxine–deficient rats. Viswanathan M, et al. **Brain Res** 1988 Nov 8;473(1):37–42

Does calcium influx regulate melatonin production through the circadian pacemaker in chick pineal cells? Effects of nitrendipine, Bay K 8644, Co2+, Mn2+, and low external Ca2+. Zatz M, et al. **Brain Res** 1988 Nov 1;463(2):305–16

Release and effect of gamma–aminobutyric acid (GABA) on rat pineal melatonin production in vitro. Rosenstein RE, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):207–19

Immunohistochemical demonstration and radioimmunoassay of melatonin in the mink pineal gland. Tillet Y, et al. **Cell Tissue Res** 1989 Jul;257(1):23–8

Pineal melatonin content in photoperiodically responsive and non–responsive phenotypes of deer mice. Blank JL, et al. **Comp Biochem Physiol [A]** 1988;91(3):535–7

Diurnal rhythm of melatonin binding in the rat suprachiasmatic nucleus. Laitinen JT, et al. **Endocrinology** 1989 Mar;124(3):1585–7

Developmental changes in hypothalamic melatonin levels of male rats. Catala MD, et al. **Int J Dev Neurosci** 1987; 5(4):313–8

Demonstration of melatonin–binding sites on the pars tuberalis of the rat. Williams LM, et al. **J Endocrinol** 1988 Oct;119(1):R1–3

Melatonin–binding sites in the rat brain and pituitary mapped by in–vitro autoradiography. Williams LM. **J Mol Endocrinol** 1989 Jul;3(1):71–5

Low temperature in the golden hamster accelerates the gonadal atrophy induced by short photoperiod but does not affect the daily pattern of melatonin secretion. Pévet P, et al. **J Neural Transm** 1989;76(2):119–28

Neither the pituitary gland nor the sympathetic nervous system is responsible for eliciting the large drop in elevated rat pineal melatonin levels due to swimming. Troiani ME, et al. **J Neural Transm** 1988;74(3):149–60

Melatonin binding sites. Vaněček J. **J Neurochem** 1988 Nov; 51(5):1436–40

Voltage–dependent calcium channels regulate melatonin

output from cultured chick pineal cells. Harrison NL, et al. J Neurosci 1989 Jul;9(7):2462–7
Heme precursor 5–aminolevulinic acid alters brain tryptophan and serotonin levels without changing pineal serotonin and melatonin concentrations. Daya S, et al. J Neurosci Res 1989 Jul;23(3):304–9
N–acetyltransferase activity and melatonin level in the eyes of glaucomatous chickens. Aimoto T, et al. J Ocul Pharmacol 1985 Summer;1(2):149–60
Catecholamine receptors regulating serotonin N–acetyltransferase activity and melatonin content of chicken retina and pineal gland: D2–dopamine receptors in retina and alpha–2 adrenergic receptors in pineal gland. Zawilska J, et al. J Pharmacol Exp Ther 1989 Jul; 250(1):86–92
Melatonin content of the pineal gland in different mouse strains. Goto M, et al. J Pineal Res 1989;7(2):195–204
Inhibition of pineal type–II 5'–deiodinase does not affect the nocturnal increase of N–acetyltransferase activity and melatonin content in either euthyroid or thyroidectomized rats. Guerrero JM, et al. J Pineal Res 1988;5(6):513–20
Regulation of melatonin in the harderian glands of golden hamsters. Hoffman RA, et al. J Pineal Res 1989;6(1):63–71
Melatonin, serotonin, 5–hydroxyindole–3–acetic acid and N–acetyltransferase in the pineal of the European hamster (Cricetus cricetus) kept under natural environmental conditions: lack of a day/night rhythm in melatonin formation in spring and early summer. Pévet P, et al. J Pineal Res 1989;6(3):233–42
Rhythm development in pineal and circulating serotonin, N–acetylserotonin, and melatonin in Syrian hamsters. Sato T, et al. J Pineal Res 1989;7(1):45–54
Twenty–four–hour patterns of pineal melatonin and pituitary and plasma prolactin in male rats under 'natural' and artificial lighting conditions. Laakso ML, et al. Neuroendocrinology 1988 Sep;48(3):308–13
Melatonin receptors in discrete brain areas of the male rat. Impact of aging on density and on circadian rhythmicity. Laudon M, et al. Neuroendocrinology 1988 Dec; 48(6):577–83
Stimulatory effect of isoproterenol but not of dibutyryl cyclic AMP on N–acetyltransferase activity and melatonin content of Syrian hamster pineal gland in organ culture. Santana C, et al. Neuroendocrinology 1988 Sep;48(3):229–34
The melatonin receptors in rat ontogenesis. Vaněček J. Neuroendocrinology 1988 Aug;48(2):201–3
Melatonin and other serotonin derivatives in the guinea pig membranous cochlea. Biesalski HK, et al. Neurosci Lett 1988 Aug 15;91(1):41–6
Melatonin binding sites in the sheep pars tuberalis. de Reviers MM, et al. Neurosci Lett 1989 May 22;100(1–3):89–93
Lithium decreases retinal melatonin levels in the frog. Kemali M, et al. Neurosci Lett 1989 Jan 16;96(2):235–9
Cold exposure or norepinephrine injections altered melatonin levels in the quail retina. Lee PP, et al. Neurosci Lett 1989 May 22;100(1–3):130–4
Neurotransmitter systems in the outer plexiform layer of mammalian retina. Redburn DA. Neurosci Res Suppl 1988; 8:S127–36 (31 ref.)
Magnetic field effects on pineal N–acetyltransferase activity and melatonin content in the gerbil—role of pigmentation and sex. Stehle J, et al. Physiol Behav 1988;44(1):91–4
Retinal melatonin is metabolized within the eye of xenopus laevis. Cahill GM, et al. Proc Natl Acad Sci U S A 1989 Feb;86(3):1098–102
Pituitary–adrenal and thyroid effects on melatonin content of the rat pineal gland. Bauer MS, et al. Psychoneuroendocrinology 1989;14(3):165–75
Putative melatonin receptors in a human biological clock. Reppert SM, et al. Science 1988 Oct 7;242(4875):78–81

PHARMACOKINETICS

Plasma, cerebrospinal fluid, and brain distribution of 14C–melatonin in rat: a biochemical and autoradiographic study. Vitte PA, et al. J Pineal Res 1988;5(5):437–53

PHARMACOLOGY

Ultrastructure of secretory cells of male accessory sex glands of golden hamster (Mesocricetus auratus) and effect of melatonin. Chow PH, et al. Acta Anat (Basel) 1989; 134(4):327–40
Peak duration of serum melatonin and short–day responses in adult Siberian hamsters. Bartness TJ, et al. Am J Physiol 1988 Nov;255(5 Pt 2):R812–22
Effects of melatonin on long–day responses in short–day housed adult Siberian hamsters. Bartness TJ, et al. Am J Physiol 1988 Nov;255(5 Pt 2):R823–30
Exercise inhibits reproductive quiescence induced by exogenous melatonin in hamsters. Pieper DR, et al. Am J Physiol 1988 Nov;255(5 Pt 2):R718–23
Diurnal variation and melatonin induction of hepatic molybdenum hydroxylase activity in the guinea–pig. Beedham C, et al. Biochem Pharmacol 1989 May 1; 38(9):1459–64
Influences of the paraventricular and suprachiasmatic nuclei and olfactory bulbs on melatonin responses in the golden hamster. Bittman EL, et al. Biol Reprod 1989 Jan; 40(1):118–26
Maternal melatonin treatment influences rates of neonatal development of meadow vole pups. Lee TM, et al. Biol Reprod 1989 Mar;40(3):495–502
Melatonin mediates alternation of seasonality in Syrian hamsters. Paydar–Ravandi F, et al. Biol Reprod 1989 Mar; 40(3):475–80
Maternal transfer of photoperiodic information in Siberian hamsters. II. The nature of the maternal signal, time of signal transfer, and the effect of the maternal signal on peripubertal reproductive development in the absence of photoperiodic input. Stetson MH, et al. Biol Reprod 1989 Mar;40(3):458–65
Evidence that short photoperiod–induced gonadal regression in the Mongolian gerbil is mediated by the action of melatonin in the medial hypothalamus. Devries MJ, et al. Brain Res 1989 Aug 14;494(2):241–6
The effects of melatonin and pinealectomy upon local cerebral glucose utilization in awake unrestrained rats are restricted to a few specific regions. Vitte PA, et al. Brain Res 1989 Jun 12;489(2):273–82
Circadian stage–dependent effect of ACTH and melatonin on protein synthesis by rat adrenal cells. Marques N, et al. Braz J Med Biol Res 1988;21(4):759–62
Effects of the pineal hormone melatonin on the proliferation and morphological characteristics of human breast cancer cells (MCF–7) in culture. Hill SM, et al. Cancer Res 1988 Nov 1;48(21):6121–6
Induction of early seasonal sensitivity to melatonin in Suffolk–Cross ewes. Symons AM, et al. Chronobiol Int 1987;4(2):219–23
Effects of exogenous melatonin on human pituitary and adrenal secretions. Hormonal responses to specific stimuli after acute administration of different doses at two opposite circadian stages in men. Paccotti P, et al. Chronobiologia 1988 Oct–Dec;15(4):279–87
Effects of photoperiod, melatonin implants and castration on molting and on plasma thyroxine, testosterone and prolactin levels in the European badger (Meles meles). Maurel D, et al. Comp Biochem Physiol [A] 1989;93(4):791–7
Effects of exogenous melatonin prior to the breeding season on testis weight and epididymal androgen receptors in rams. Tekpetey FR, et al. Domest Anim Endocrinol 1988 Jul;5(3):257–64
Harderian gland N–acetyltransferase activity in the male Syrian hamster: effects of gonadectomy, short photoperiod exposure, or subcutaneous melatonin implants. Menendez–Pelaez A, et al. Endocr Res 1988;14(2–3):121–30
Effect of melatonin on the spermatogenesis of Rana hexadactyla (Lesson). Kasinathan S, et al. Endocrinol Jpn 1988 Apr;35(2):255–60
Fetal prolactin levels respond to a maternal melatonin implant. Serón–Ferré M, et al. Endocrinology 1989 Jul; 125(1):400–3
Cytosolic androgen receptors in the neuroendocrine tissues of the golden hamster: influence of photoperiod and melatonin treatment. Stankov B, et al. Endocrinology 1989 Sep;125(3):1742–4
Inhibitory effect of melatonin on ear epidermis cell proliferation in mice. Rybicka I, et al. Endokrynol Pol 1988; 39(5):263–8
The effect of melatonin and N–acetylserotonin on mitotic activity of thyroid gland and adrenal cortex in the rat. Sewerynek E, et al. Endokrynol Pol 1988;39(5):269–75
Inhibition of human ovarian cancer cell proliferation in vitro by neuroendocrine hormones. Kikuchi Y, et al. Gynecol Oncol 1989 Jan;32(1):60–4
Beta–endorphin and dynorphin mimic the circadian immunoenhancing and anti–stress effects of melatonin. Maestroni GJ, et al. Int J Immunopharmacol 1989; 11(4):333–40
Influence of concentration, duration and route of administration of melatonin on reproductive performance of spring–mated polypay and polypay–cross ewes. Stellflug JN, et al. J Anim Sci 1988 Aug;66(8):1855–63
Immunomodulation by indoleamines: serotonin and melatonin action on DNA and interferon–gamma synthesis by human peripheral blood mononuclear cells. Arzt ES, et al. J Clin Immunol 1988 Nov;8(6):513–20
Influence of age and splanchnic nerve on the action of melatonin in the adrenomedullary catecholamine content and blood glucose level in the avian group. Mahata SK, et al. J Comp Physiol [B] 1988;158(5):601–7
Inhibin concentrations in the peripheral blood of rams during a cycle in testicular activity induced by changes in photoperiod or treatment with melatonin. Lincoln GA, et al. J Endocrinol 1989 Jan;120(1):R9–13
Melatonin specifically stimulates type–II thyroxine 5'–deiodination in brown adipose tissue of Syrian hamsters. Puig–Domingo M, et al. J Endocrinol 1989 Aug; 122(2):553–6
Rate of reproductive involution following either exposure to short days or daily administration of melatonin is faster in inbred than in random–bred female Syrian hamsters. Reiter RJ, et al. J Endocrinol 1989 Mar;120(3):489–96
Effect of melatonin on the peripheral concentrations of LH and progesterone after oestrus, and on conception rate in ewes. Wallace JM, et al. J Endocrinol 1988 Dec; 119(3):523–30
Melatonin effects on prolactin secretion in pituitary–grafted female rats. Esquifino AI, et al. J Endocrinol Invest 1989 Mar;12(3):171–6
Beta–adrenergic blockers prevent short photoperiod–induced gonadal regression, but not melatonin–induced regression in male Syrian hamsters. Champney TH. J Exp Zool 1989 Feb;249(2):221–8
Modulating action of melatonin on serotonin–induced aggravation of ethanol ulceration and changes of mucosal blood flow in rat stomachs. Cho CH, et al. J Pineal Res 1989;6(1):89–97
Effects of melatonin and thyroxine treatment on reproductive organs and thyroid hormone levels in male hamsters. Creighton JA, et al. J Pineal Res 1989;6(4):317–23
Hypothalamic and neurohypophysial vasopressin and oxytocin in melatonin–treated pinealectomized male rats. Juszczak M, et al. J Pineal Res 1988;5(6):545–52
Effects of protein restriction, melatonin administration, and short daylength on brain benzodiazepine receptors in prepubertal male rats. Kennaway DJ, et al. J Pineal Res 1988;5(6):455–67
Melatonin does not affect in vitro secretion of testosterone in white–footed mouse testis. Knotts LK, et al. J Pineal Res 1988;5(6):521–6
Melatonin–induced suppression of human lymphocyte natural killer activity in vitro. Lewiński A, et al. J Pineal Res 1989; 7(2):153–64
Effect of methoxyindole administration on plasma cation levels in the rat. Morton DJ. J Pineal Res 1989;6(2):141–7
A study of the mutagenicity of melatonin and 6–hydroxymelatonin. Neville S, et al. J Pineal Res 1989; 6(1):73–6
Influence of subchronic intake of melatonin at various times of the day on fatigue and hormonal levels: a placebo–controlled, double–blind trial. Nickelsen T, et al. J Pineal Res 1989;6(4):325–34
Effects of daily afternoon melatonin administration on body weight and thyroid hormones in female hamsters. Petterborg LJ, et al. J Pineal Res 1989;6(4):367–73
Plasma prolactin concentrations in pinealectomized ewes receiving melatonin treatment and in pineal intact ewes maintained under a non–24–hour photoperiod. Poulton AL, et al. J Pineal Res 1989;6(3):243–52
Melatonin inhibits mitotic activity of adrenocortical cells in vivo and in organ culture. Sewerynek E, et al. J Pineal Res 1989;7(1):1–12
Stereological changes in rat ventral prostate induced by melatonin. Srivilai W, et al. J Pineal Res 1989;6(2):111–9
Activity of melatonin and other pineal indoles on the in vitro synthesis of cortisol, cortisone, and adrenal androgens. Touitou Y, et al. J Pineal Res 1989;6(4):341–50
Melatonin effects on prolactin secretion in pituitary–grafted male rats. Villanua MA, et al. J Pineal Res 1989;6(1):33–41
Neonatal melatonin administration advances rat vaginal opening and disrupts estrous cyclicity and estrogen–dependent regulatory mechanisms of luteinizing hormone and prolactin. Villanúa MA, et al. J Pineal Res 1989;7(2):165–74
Effects of melatonin and hypothyroidism on somatomedin levels of female Syrian hamsters. Vriend J, et al. J Pineal Res 1989;7(1):85–90
Effect of melatonin on the human electrocardiogram and simple reaction time responses. Wynn VT, et al. J Pineal Res 1988;5(5):427–35
Effects of subcutaneous melatonin implants on reproductive seasonality of farmed fallow deer (Dama dama). Asher GW, et al. J Reprod Fertil 1988 Nov;84(2):679–91
Stimulation of progesterone secretion by cultured human granulosa cells with melatonin and catecholamines. Webley GE, et al. J Reprod Fertil 1988 Nov;84(2):669–77
Short–day melatonin pattern advances puberty in seasonally breeding rhesus monkeys (Macaca mulatta). Wilson ME, et al. J Reprod Fertil 1989 Jul;86(2):435–44
Failure of melatonin to influence endogenous opioid effects on LH secretion in the anoestrous ewe. Yang KP, et al. J Reprod Fertil 1989 Mar;85(2):397–403
The mode of action of indomethacin, aspirin and melatonin on the blockage of the first ovulation in immature rat pretreated with PMSG. Tamura K, et al. Jpn J Pharmacol 1989 Aug;50(4):491–4
Effect of melatonin on steroid production by rat adrenals under in vitro superfusion conditions. Persengiev SP, et al. Life Sci 1989;44(25):1955–62
Differential effects of short day pretreatment on melatonin–induced adjustments in Djungarian hamsters. Puchalski W, et al. Life Sci 1988;43(12):1005–12
Delayed sexual maturation induced by daily melatonin administration eliminates the LH response to naloxone despite normal responsiveness to GnRH in juvenile male rats. Aubert ML, et al. Neuroendocrinology 1988 Jul; 48(1):72–80
Effects of suprachiasmatic nuclear ablation and melatonin on delayed implantation in the spotted skunk. Berria M, et al. Neuroendocrinology 1988 Oct;48(4):371–5
Daily melatonin injections affect the expression of circadian rhythmicity in Djungarian hamsters kept under a long–day photoperiod. Puchalski W, et al. Neuroendocrinology 1988 Sep;48(3):280–6
Lack of an acute modulatory effect of melatonin on human nocturnal thyrotropin and cortisol secretion. Strassman RJ, et al. Neuroendocrinology 1988 Oct;48(4):387–93
The effect of melatonin on normal sleep. James SP, et al. Neuropsychopharmacology 1987 Dec;1(1):41–4
The electrophysiological effects of melatonin and a putative melatonin antagonist (N–acetyltryptamine) on rat suprachiasmatic neurones in vitro. Mason R, et al. Neurosci Lett 1988 Dec 19;95(1–3):296–301
Effects of melatonin on neuronal activity in the rat suprachiasmatic nucleus in vitro. Shibata S, et al.

Neurosci Lett 1989 Feb 13;97(1-2):140-4

Possible prolactin-mediated effects of melatonin on gonadotropin secretion in the rat. Esquifino AI, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):157-62

Effects of pinealectomy and melatonin or 5-methoxytryptamine on testicular LH and PRL receptors in Syrian hamsters (Mesocricetus auratus). Amador AG, et al. **Rev Esp Fisiol** 1988 Mar;44(1):81-6

Fertility of ewes given either melatonin or progestogen sponges. Rajkumar RR, et al. **Vet Rec** 1989 Mar 4; 124(9):215-7

[Features of the response of the rat thyroid gland to melatonin in pinealectomized rats] Shchervakova VS, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):75-8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A role of melatonin in the initial stage of photoperiodism in the Japanese quail. Ohta M, et al. **Biol Reprod** 1989 May; 40(5):935-41

A melatonin agonist and N-acetyl-N2-formyl-5-methoxykynurenamine accelerate the reentrainment of the melatonin rhythm following a phase advance of the light-dark cycle. Kennaway DJ, et al. **Brain Res** 1989 Aug 28;495(2):349-54

Paraventricular nucleus projections mediating pineal melatonin and gonadal responses to photoperiod in the hamster. Smale L, et al. **Brain Res Bull** 1989 Feb; 22(2):263-9

Light and melatonin as zeitgebers in man. Arendt J, et al. **Chronobiol Int** 1987;4(2):273-82 (56 ref.)

Melatonin. Arendt J. **Clin Endocrinol (Oxf)** 1988 Aug; 29(2):205-29 (187 ref.)

The female rat as a model describing patterns of pulsatile LH secretion during puberty and their control by melatonin. Rivest RW. **Gynecol Endocrinol** 1987 Sep; 1(3):279-93

The protective function of the pineal gland in tardive dyskinesia. Sandyk R, et al. **Int J Neurosci** 1988 Dec; 43(3-4):215-8

Tardive dyskinesia and the pineal gland. Sandyk R. **Int J Neurosci** 1988 Nov;43(1-2):111-4 (31 ref.)

Melatonin mediates the antidyskinetic effects of naloxone in tardive dyskinesia [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):147-8

Effects of aggressive encounters on pineal melatonin formation in male gerbils (Meriones unguiculatus, Cricetidae). Heinzeller T, et al. **J Comp Physiol [A]** 1988 Nov;164(1):91-4

Loss of the circadian rhythms of locomotor activity, food intake, and plasma melatonin concentration induced by constant bright light in the pigeon (Columba livia). Yamada H, et al. **J Comp Physiol [A]** 1988 Aug;163(4):459-63

The hypothalamus and photoperiodic control of FSH secretion by melatonin in the male Syrian hamster. Bonnefond C, et al. **J Endocrinol** 1989 Jul;122(1):247-54

Undernutrition potentiates melatonin effects in maturing female rats. Nordio M, et al. **J Endocrinol Invest** 1989 Feb; 12(2):103-10

Existence and role of endogenous ocular melatonin. Rohde BH, et al. **J Ocul Pharmacol** 1985 Fall;1(3):235-43

In vivo effect of melatonin and gonadotropin-releasing hormone on testicular function in Rana temporaria. Alonso-Bedate M, et al. **J Pineal Res** 1988;5(4):323-32

Effects of melatonin and 6-methoxybenzoxazolinone on photoperiodic control of testis size in adult male golden hamsters. Anderson KD, et al. **J Pineal Res** 1988; 5(4):351-65

Influence of melatonin and N-acetylserotonin on the cyclic AMP concentration in the rat thyroid lobes incubated in vitro. Lewiński A, et al. **J Pineal Res** 1989;7(1):55-61

Melatonin: perspectives in the life sciences. Miles A. **Life Sci** 1989;44(6):375-85 (59 ref.)

[The season, melatonin and reproduction] Kauppila A, et al. **Duodecim** 1988;104(21):1687-93 **(Fin)**

[Factors regulating the synthesis and release of arginine vasotocin and its role in mammals] Kniażewski B, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):531-3 (Eng. Abstr.) **(Pol)**

[The role of melatonin in the regulation of functions of the genital system] Kniażewski B. **Pol Tyg Lek** 1988 Apr 25; 43(17):561-4 (40 ref.) (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

One millisecond of light suffices to suppress nighttime pineal melatonin synthesis in rats. Vollrath L, et al. **Neurosci Lett** 1989 Apr 10;98(3):297-8

SECRETION

The circadian rhythm of melatonin in hypothyroidism and hyperthyroidism. Soszyński P, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):240-4

Seasonal, menstrual and circadian secretions of melatonin, gonadotropins and prolactin in women. Kivelä A, et al. **Acta Physiol Scand** 1988 Mar;132(3):321-7

How does melatonin code for day length in the ewe: duration of nocturnal melatonin release or coincidence of melatonin with a light-entrained sensitive period? Wayne NL, et al. **Biol Reprod** 1988 Aug;39(1):66-75

Effect of maternal pinealectomy and reverse photoperiod on the circadian melatonin rhythm in the sheep and fetus during the last trimester of pregnancy. Yellon SM, et al. **Biol Reprod** 1988 Dec;39(5):1093-9

Melatonin secretion and anorexia nervosa--a serious type II error [letter] Evans C. **Br J Psychiatry** 1988 Jul;153:121-2

The ontogeny of melatonin secretion in the lamb. Claypool LE, et al. **Endocrinology** 1989 May;124(5):2135-43

The effect of a single dose of ethanol on melatonin secretion in women. Soszyński P, et al. **Endokrynol Pol** 1987; 38(6):415-9

5-Methoxypsoralen increases evening sleepiness in humans: possible involvement of the melatonin secretion. Souêtre E, et al. **Eur J Clin Pharmacol** 1989;36(1):91-2

The short term secretion pattern of human serum melatonin indicates apulsatile hormone release. Trinchard-Lugan I, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):663-9

Evidence that olfactory bulbectomy does not influence testicular regression in golden hamsters on short photoperiod by altering pineal melatonin production. Pieper DR, et al. **J Comp Physiol [B]** 1988;158(3):301-5

Regulation of melatonin secretion in a photoreceptive pineal organ: an in vitro study in the pike. Falcón J, et al. **J Neurosci** 1989 Jun;9(6):1943-50

Ethanol enhancement of isoproterenol-stimulated melatonin and cyclic AMP release from cultured pineal glands. Chung CT, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):16-22

Effects of prior exposure to prolonged continuous light on the pattern of melatonin secretion in sheep held under continuous darkness. Shaw PF, et al. **J Pineal Res** 1988; 5(5):469-77

Kinetic study of melatonin release from rat pineal glands using a perifusion technique. Simonneaux V, et al. **J Pineal Res** 1989;7(1):63-83

Quantal melatonin suppression by exposure to low intensity light in man. McIntyre IM, et al. **Life Sci** 1989;45(4):327-32

Reproductive refractoriness of the ewe to inhibitory photoperiod is not caused by alteration of the circadian secretion of melatonin. Malpaux B, et al. **Neuroendocrinology** 1988 Sep;48(3):264-70

Affective disorders, light and melatonin. Souêtre E, et al. **Photodermatol** 1988 Jun;5(3):107-9

[Bulimia, bulimia-anorexia and nocturnal secretion of melatonin and cortisol] Parienti V, et al. **Encephale** 1988 Nov-Dec;14(6):421-5 (33 ref.) (Eng. Abstr.) **(Fre)**

[Melatonin and mental disturbances. A review of the neuroendocrine aspects. 1: Anatomophysiologic aspects. Melatonin and mental disorders] Cuesta MJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep-Oct;16(5):301-4 (0 ref.) **(Spa)**

THERAPEUTIC USE

Effect of melatonin on jet lag after long haul flights. Petrie K, et al. **BMJ** 1989 Mar 18;298(6675):705-7

Endocrine and immune effects of melatonin therapy in metastatic cancer patients. Lissoni P, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):789-95

MELEDA DISEASE see **KERATOSIS PALMARIS ET PLANTARIS**

MELENA

CHEMICALLY INDUCED

Aspirin, other anti-inflammatory drugs and haematemesis and melaena. Langman MJ. **Agents Actions Suppl** 1988; 25:33-48 (29 ref.)

EPIDEMIOLOGY

Upper gastrointestinal bleeding in Kuala Lumpur, Malaysia [letter] Thein-Htut, et al. **Gastrointest Endosc** 1988 Sep-Oct;34(5):437

ETIOLOGY

Solitary exulceratio simplex (ulcer of Dieulafoy). Goossens A, et al. **Acta Chir Belg** 1989 Jan-Feb;89(1):54-7

Massive gastrointestinal bleeding due to cholecystoduodenal fistula. Case report. Kochhar R, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7-8):471-2

Haematemesis and melaena. Evans J. **Aust Fam Physician** 1988 Oct;17(10):898

[Ectopic pancreas in the gastric wall with massive bleeding] Shaked G, et al. **Harefuah** 1989 Apr 2;116(7):358-9 (Eng. Abstr.) **(Heb)**

[A rare case of gastric neuroma as a cause of hemorrhage from the upper segment of the digestive tract] Stelmach E. **Wiad Lek** 1988 Apr 1;41(7):459-63 (Eng. Abstr.) **(Pol)**

[A rare cause of gastrointestinal hemorrhage] Zhane AK, et al. **Vestn Khir** 1988 Sep;141(9):55-6 **(Rus)**

[A 63-year-old man with melena] Diego Rey P, et al. **Rev Clin Esp** 1988 Jun;183(1):35-6 **(Spa)**

PATHOLOGY

Bloody diarrhea and pneumoperitoneum in a 10-month-old girl [clinical conference] Sotelo-Avila C, et al. **J Pediatr** 1988 Dec;113(6):1098-104

VETERINARY

Hematochezia attributable to cranial mesenteric arterial aneurysm with connecting tracts to cecum and ileum in a horse. Kiper ML, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1278-80

MELENGESTROL see under **PREGNADIENES**

MELIBIOSE see under **DISACCHARIDES**

MELIOIDOSIS

Melioidosis in a traveller--Quebec. Germain M, et al. **Can Dis Wkly Rep** 1989 May 27;15(21):109-11 **(Eng, Fre)**

Acute suppurative parotitis caused by Pseudomonas pseudomallei in children. Dance DA, et al. **J Infect Dis** 1989 Apr;159(4):654-60

Melioidosis, the great mimicker: a report of 10 cases from Malaysia. Yee KC, et al. **J Trop Med Hyg** 1988 Oct; 91(5):249-54

Neonatal melioidosis: a report of 5 cases. Lumbiganon P, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):634-6

Melioidosis: review and update. Leelarasamee A, et al. **Rev Infect Dis** 1989 May-Jun;11(3):413-25 (94 ref.)

Childhood melioidosis in northeastern Thailand. Pongrithsukda V, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):309-16

COMPLICATIONS

Melioidosis with multiple cerebral abscesses. Pelekanos JT, et al. **Pediatr Neurol** 1989 Jan-Feb;5(1):48-52 (15 ref.)

DIAGNOSIS

Enzyme-linked immunosorbent assay for the diagnosis of clinical and subclinical melioidosis. Ashdown LR, et al. **J Infect Dis** 1989 Aug;160(2):253-60

Melioidosis in Bangladesh: a case report. Struelens MJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):777-8

[Antigenic properties of the electrophoretic fractions of the causative agent of melioidosis] Barkov AM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):6-9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Melioidosis: a major cause of community-acquired septicemia in northeastern Thailand. Chaowagul W, et al. **J Infect Dis** 1989 May;159(5):890-9

Clinical and laboratory studies of malaria and melioidosis. White NJ, et al. **Trans R Soc Trop Med Hyg** 1988; 82(1):15-20 (29 ref.)

IMMUNOLOGY

Melioidosis and latent infection [letter] Thompson JE, et al. **Med J Aust** 1989 Sep 4;151(5):298-9

Melioidosis: a serological survey in a tuberculosis sanatorium in Hong Kong. So SY, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):1017-9

MICROBIOLOGY

[Prospects of the use of chromosomal transformation for the identification of the causative agent melioidosis] Riapis LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug; (8):16-9 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Acute systemic melioidosis: an autopsy study of six cases. Atisook K, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):637-42

[A case of the pulmonary form of melioidosis with a favorable outcome] Petrunin IuP, et al. **Ter Arkh** 1988;60(11):136-7 **(Rus)**

PHYSIOPATHOLOGY

Pseudomonas pseudomallei and melioidosis, with special reference to the status in Thailand. Kanai K, et al. **Jpn J Med Sci Biol** 1988 Aug;41(4):123-57 (158 ref.)

PREVENTION & CONTROL

Halving of mortality of severe melioidosis by ceftazidime. White NJ, et al. **Lancet** 1989 Sep 23;2(8665):697-701

RADIOGRAPHY

Melioidosis with brain abscess. Pit S, et al. **Postgrad Med J** 1988 Feb;64(748):140-2

VETERINARY

Evaluation of four serological tests for the diagnosis of caprine melioidosis. Thomas AD, et al. **Aust Vet J** 1988 Sep;65(9):261-4

MELITTEN see under **BEE VENOMS**

MELKERSSON-ROSENTHAL SYNDROME

The Melkersson-Rosenthal syndrome--a report of two cases. El Mauhoub M, et al. **Ann Trop Paediatr** 1989 Mar; 9(1):62-4

Melkersson–Rosenthal syndrome. Abebe M. **Ethiop Med J** 1989 Apr;27(2):85–8
[Melkersson–Rosenthal syndrome] Nahlieli O, et al. **Harefuah** 1989 Mar 15;116(6):314–6 (Eng. Abstr.) **(Heb)**

CHEMICALLY INDUCED

Is the Melkersson–Rosenthal syndrome related to the exposure to food additives? A case report. Pachor ML, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):393–5

DIAGNOSIS

Melkersson–Rosenthal syndrome. Moreno MV, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):369–72
[Melkersson–Rosenthal syndrome. Current data and a report of a case] Le Toux G. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):44–6 (Eng. Abstr.) **(Fre)**
[Malignant lymphoma of parotid origin mimicking Melkersson–Rosenthal syndrome] Beuchat L, et al. **J Fr Ophtalmol** 1988;11(10):657–60 (Eng. Abstr.) **(Fre)**
[Melkersson–Rosenthal syndrome] Juryńczyk J. **Wiad Lek** 1988 Sep 1;41(17):1182–4 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Melkersson–Rosenthal syndrome: elevations in serum angiotensin converting enzyme and results of treatment with methotrexate. Leicht S, et al. **South Med J** 1989 Jan; 82(1):74–6

ETIOLOGY

Melkersson's syndrome associated with syphilis. Keane JR. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):249–53
[Melkersson–Rosenthal syndrome. Oligosymptomatic form developed during medical treatment of a phobic depressive process] Bagan Sebastian JV, et al. **Med Cutan Ibero Lat Am** 1988;16(4):281–4 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Melkersshon–Rosenthal syndrome with positive Kveim test. Nelson HM, et al. **Clin Exp Dermatol** 1988 Jan;13(1):49–50

MELNICK–NEEDLES SYNDROME see **OSTEOCHONDRODYSPLASIAS**

MELORHEOSTOSIS

COMPLICATIONS

Hypophosphataemic rickets and melorheostosis. Lee SH, et al. **Clin Radiol** 1989 Mar;40(2):209–11

RADIOGRAPHY

Case report 510: Melorheostosis of ilium, femur, and adjacent soft tissues. Khurana JS, et al. **Skeletal Radiol** 1988; 17(7):539–41

MELPHALAN

Highly potent analogues of luteinizing hormone–releasing hormone containing D–phenylalanine nitrogen mustard in position 6. Bajusz S, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6318–22

ADMINISTRATION & DOSAGE

High–dose melphalan, misonidazole, and autologous bone marrow transplantation for the treatment of metastatic colorectal carcinoma. A phase I study. Spitzer TR, et al. **Am J Clin Oncol** 1989 Apr;12(2):145–51
In vivo inhibitory effect of a conjugate of immunoglobulin G and melphalan, K18, on human tumors transplanted in nude mice. Imai S, et al. **Anticancer Res** 1989 Mar–Apr; 9(2):453–9
Binding and internalization of human immunoglobulin G conjugated with melphalan (K18) to human tumor cell lines. Nio Y, et al. **Anticancer Res** 1989 Jan–Feb;9(1):59–63
The inhibitory effect of a conjugate of human immunoglobulin G and melphalan, K18, on DNA synthesis of human tumor cells. Shiraishi T, et al. **Anticancer Res** 1989 May–Jun;9(3):599–604
CFU–GEMM correlate with neutrophil and platelet recovery in patients receiving autologous marrow transplantation after high–dose melphalan chemotherapy. Roodman GD, et al. **Bone Marrow Transplant** 1987 Aug; 2(2):165–73
Autograft using peripheral blood stem cells collected after high dose melphalan in high risk multiple myeloma [letter] Henon P, et al. **Br J Haematol** 1988 Oct;70(2):254–5
Intractible cutaneous non–Hodgkin's lymphoma of the lower limb. Complete remission after sequential regional isolated hyperthermic perfusion and perfusion with 1–phenylalanine–mustard (melphalan, L–Pam). Jansen RF, et al. **Cancer** 1989 Jul 15;64(2):392–5
High–dose melphalan dosage adjustment: possibility of using a test–dose. Tranchand B, et al. **Cancer Chemother Pharmacol** 1989;23(2):95–100
High–dose cyclophosphamide or melphalan with escalating doses of mitoxantrone and autologous bone marrow transplantation for refractory solid tumors. Mulder PO, et al. **Cancer Res** 1989 Aug 15;49(16):4654–8
Pharmacokinetics of buthionine sulfoximine (NSC 326231) and its effect on melphalan–induced toxicity in mice. Smith AC, et al. **Cancer Res** 1989 Oct 1;49(19):5385–91
Alternating combination chemotherapy (VMCP/VBAP) is not superior to melphalan/prednisone in the treatment of multiple myeloma patients stage III—a randomized study from MGCS. Osterborg A, et al. **Eur J Haematol** 1989 Jul;43(1):54–62
Intermediate–dose (25 mg/m2) intravenous melphalan for patients with multiple myeloma in relapse or refractory to standard treatment. Petrucci MT, et al. **Eur J Haematol** 1989 Mar;42(3):233–7
High–dose melphalan and autologous bone marrow support for treatment of ovarian carcinoma with positive second–look operation. Dauplat J, et al. **Gynecol Oncol** 1989 Sep;34(3):294–8
Phase II treatment of medulloblastoma and pineoblastoma with melphalan: clinical therapy based on experimental models of human medulloblastoma. Friedman HS, et al. **J Clin Oncol** 1989 Jul;7(7):904–11
The systemic administration of intravenous melphalan. Sarosy G, et al. **J Clin Oncol** 1988 Nov;6(11):1768–82 (103 ref.)
Mechanism of action of the antitumour effect of K18. Fujii T, et al. **J Int Med Res** 1989 Mar–Apr;17(2):132–40
Clinical experience of K18 (IgG–melphalan) for five cases of refractory multiple myeloma. Kanamaru R, et al. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec; 35(1–4):35–40
Isolated limb perfusion for stage I melanoma of the extremity: a comparison of melphalan and dacarbazine (DTIC). Edwards MJ, et al. **South Med J** 1989 Aug;82(8):985–7, 989
Pharmacokinetics of oral fluconazole in autologous bone marrow transplantation recipients given TBI and high–dose melphalan. Milliken S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3067
[Myelomatosis. A study of 138 patients treated with melphalan, prednisone and vincristine with particular attention to the prognostic value of a stage subdivision] Johnsen HE, et al. **Ugeskr Laeger** 1989 Mar 27; 151(13):816–21 (Eng. Abstr.) **(Dan)**
[High dose melphalan and autologous bone marrow transplantation in the treatment of small cell carcinoma of the lung] Wist E, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2271–4 (Eng. Abstr.) **(Nor)**

ADVERSE EFFECTS

Veno–occlusive disease in children after intensive chemo– and radiotherapy and repeated halothane anesthesias. A report of 2 cases. Gentet JC, et al. **Acta Oncol** 1988; 27(5):579–81
Myelodysplastic syndrome and secondary acute leukemia after treatment of essential thrombocythemia with melphalan [letter] Gris JC, et al. **Am J Hematol** 1989 Jan; 30(1):47–8
The chemotherapeutic drug melphalan induces breakage of chromosomes regions rearranged in secondary leukemia. Mamuris Z, et al. **Cancer Genet Cytogenet** 1989 Jan; 37(1):65–77
[A case report of acute renal failure induced by melphalan in a patient with ovarian cancer] Kashimura M, et al. **Gan No Rinsho** 1988 Nov;34(14):2015–8 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Phase I clinical trial of drug–monoclonal antibody conjugates in patients with advanced colorectal carcinoma: a preliminary report. Tjandra JJ, et al. **Surgery** 1989 Sep; 106(3):533–45
[Local peptichemio prophylaxis in surface tumors of the bladder (Ta–T1 stage)] Croce L, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):85–8 (Eng. Abstr.) **(Ita)**

ANTAGONISTS & INHIBITORS

Antagonism of chemotherapy–induced cytotoxicity for human breast cancer cells by antiestrogens. Osborne CK, et al. **J Clin Oncol** 1989 Jun;7(6):710–7

BLOOD

High–performance liquid chromatographic determination of m–bis(chloroethyl)aminophenyl–L–alanine in plasma. Springolo V, et al. **J Chromatogr** 1989 May 5;490(1):224–9

METABOLISM

Relevance of the hydrolysis and protein binding of melphalan to the treatment of multiple myeloma. Gera S, et al. **Cancer Chemother Pharmacol** 1989;23(2):76–80

PHARMACOKINETICS

Binding and internalization of human immunoglobulin G conjugated with melphalan (K18) to human tumor cell lines. Nio Y, et al. **Anticancer Res** 1989 Jan–Feb;9(1):59–63
Melphalan transport into human malignant lymphoid cells differs from the murine equivalent in vitro. Millar BC, et al. **Br J Cancer** 1989 May;59(5):710–3
Renal clearance and protein binding of melphalan in patients with cancer. Reece PA, et al. **Cancer Chemother Pharmacol** 1988;22(4):348–52
Plasma pharmacokinetics of high–dose oral melphalan in patients treated with trialkylator chemotherapy and autologous bone marrow reinfusion. Choi KE, et al. **Cancer Res** 1989 Mar 1;49(5):1318–21
Pharmacokinetics of oral melphalan in relation to renal function in multiple myeloma patients. Osterborg A, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):899–903
The pharmacokinetics of melphalan during intermittent therapy of multiple myeloma. Loos U, et al. **Eur J Clin Pharmacol** 1988;35(2):187–93
Oral melphalan pharmacokinetics—relation to dose in patients with multiple myeloma. Ehrsson H, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):151–4

PHARMACOLOGY

Cyclo–oxygenase inhibitors and cell killing by cytotoxic drugs. Bennett A, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:427–30
The inhibitory effect of a conjugate of human immunoglobulin G and melphalan, K18, on DNA synthesis of human tumor cells. Shiraishi T, et al. **Anticancer Res** 1989 May–Jun;9(3):599–604
Glutathione and glutathione S–transferases in a human plasma cell line resistant to melphalan. Gupta V, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1993–2000
Correlation of resistance to nitrogen mustards in chronic lymphocytic leukemia with enhanced removal of melphalan–induced DNA cross–links. Torres–Garcia SJ, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3122–3
Enhancement of the effectiveness of Lyt–2+ T–cells for adoptive chemoimmunotherapy by short–term exposure of tumor–bearer spleen cells to polyethylene glycol and/or melphalan. Wise JA, et al. **Cancer Res** 1989 Jul 1; 49(13):3613–9
Therapeutic concentrations of melphalan do not affect yeast cell phagocytosis by monocytes. Athlin L, et al. **Int J Immunopharmacol** 1988;10(4):435–8
Cyclophosphamide and melphalan as immunopotentiating agents in cancer therapy. Dray S, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):77–85 (22 ref.)
Enhanced DNA cross–link removal: the apparent mechanism of resistance in a clinically relevant melphalan–resistant human breast cancer cell line. Batist G, et al. **Mol Pharmacol** 1989 Aug;36(2):224–30
Misonidazole chen:osensitization of EMT6 spheroids to melphalan. Horsman MR, et al. **Radiother Oncol** 1989 May; 15(1):103–14
[Coprecipitation of proteins and DNA–protein complexes with magnesium sarcolysate: research on an association of topoisomerase I and RNA polymerase with DNA] Vasetskiĭ ES, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):148–51 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Primary amyloidosis with unusual bone involvement: reversibility with melphalan, prednisone, and colchicine. Schattner A, et al. **Am J Med** 1989 Mar;86(3):347–8
Clinical studies with granulocyte colony stimulating factor (G–CSF) in patients receiving cytotoxic chemotherapy. Morstyn G, et al. **Behring Inst Mitt** 1988 Aug;(83):234–9
Prognostic factors with high–dose melphalan for refractory multiple myeloma. Barlogie B, et al. **Blood** 1988 Dec; 72(6):2015–9
Intermediate–dose melphalan for refractory myeloma [letter] Maniatis A, et al. **Blood** 1989 Aug 15;74(3):1177
Melphalan and total body irradiation (TBI) versus cyclophosphamide and TBI as conditioning for allogeneic matched sibling bone marrow transplants for acute myeloblastic leukaemia in first remission. Helenglass G, et al. **Bone Marrow Transplant** 1988 Jan;3(1):21–9
High dose chemotherapy with autologous hematopoietic stem cell support in the treatment of refractory stage IV breast carcinoma. Kaminer LS, et al. **Bone Marrow Transplant** 1989 Jul;4(4):359–62
Repeated courses of high dose melphalan and unpurged autologous bone marrow transplantation in children with acute non–lymphoblastic leukemia in first complete remission. Michel G, et al. **Bone Marrow Transplant** 1988 Mar;3(2):105–11
Treatment of advanced Hodgkin's disease with high dose melphalan and autologous bone marrow transplantation. Russell JA, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):425–9
Potentiation of the anti–tumour effect of melphalan by the vasoactive agent, hydralazine. Stratford IJ, et al. **Br J Cancer** 1988 Aug;58(2):122–7
In vitro studies of ways to overcome resistance to VAMP—high dose melphalan in the treatment of multiple myeloma. Millar BC, et al. **Br J Haematol** 1989 Feb; 71(2):213–22
The role of postoperative alkylating agent therapy in early–stage epithelial ovarian cancer. Mackintosh J, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):353–7
Lysis of antigenically unrelated tumor cells mediated by Lyt 2+ splenic T–cells from melphalan–cured MOPC–315 tumor bearers. Barker E, et al. **Cancer Res** 1989 Sep 15; 49(18):5007–15
Interleukin 2 requirement for the in vitro generation of antitumor cytotoxicity by thymocytes from melphalan–cured MOPC–315 tumor bearers. Mokyr MB,

et al. **Cancer Res** 1989 Feb 15;49(4):870–6
Importance of Lyt 2+ T-cells in the curative effectiveness of a low dose of melphalan for mice bearing a large MOPC-315 tumor. Mokyr MB, et al. **Cancer Res** 1989 Aug 15;49(16):4597–606
Combination chemotherapy versus melphalan and prednisone in multiple myeloma. Gruber A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):725–6
Chromosomal aberrations in lymphocytes of patients treated with melphalan. Mamuris Z, et al. **Int J Cancer** 1989 Jan 15;43(1):80–6
Enhancement of the anti-tumor effect of melphalan in experimental mice by some vaso-active agents. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1137–9
Potentiation of the tumor cytotoxicity of melphalan by vasodilating drugs. Chaplin DJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1131–5
Hyperthermic regional perfusion using membrane- instead of bubble-oxygenators. An experimental and clinical study. van Os J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):523–32
Adjuvant CMFVP versus melphalan for operable breast cancer with positive axillary nodes: 10-year results of a Southwest Oncology Group Study. Rivkin SE, et al. **J Clin Oncol** 1989 Sep;7(9):1229–38
Increased melphalan activity in intracranial human medulloblastoma and glioma xenografts following buthionine sulfoximine-mediated glutathione depletion. Friedman HS, et al. **J Natl Cancer Inst** 1989 Apr 5; 81(7):524–7
The use of melphalan in conjunction with total body irradiation as treatment for acute leukaemia. Powles RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2955–7 (0 ref.)
[Interferon as a sensitizing agent toward chemotherapy in a case of multiple myeloma refractory to treatment] Seminara P, et al. **Recenti Prog Med** 1988 Oct;79(10):415–6 (Eng. Abstr.) (Ita)

TOXICITY

Deficiency in immunocompetence of mice cured from large MOPC-315 plasmacytomas by melphalan therapy. Shoval S, et al. **Cancer Immunol Immunother** 1989;29(4):279–87
Results of tests for micronuclei and chromosomal aberrations in mouse bone marrow cells with the human carcinogens 4-aminobiphenyl, treosulphan, and melphalan. Shelby MD, et al. **Environ Mol Mutagen** 1989;13(4):339–42
The effect of hyperthermia on the uptake and cytotoxicity of melphalan in Chinese hamster ovary cells. Bates DA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):187–91
Specificity of melphalan-induced rearrangements and their transmission through cell divisions. Mamuris Z, et al. **Mutagenesis** 1989 Mar;4(2):133–9

MEMANTINE see under **AMANTADINE**

MEMBRANE-BOUND IMMUNOGLOBULINS see **IMMUNOGLOBULINS, SURFACE**

MEMBRANE CHANNELS see **ION CHANNELS**

MEMBRANE FLUIDITY

Beta-adrenergic binding sites and membrane fluidity of guinea pig lymphocytes. Loesberg C, et al. **Agents Actions** 1989 Jan;26(1–2):55–6
Inheritance pattern of platelet membrane fluidity in Alzheimer disease. Chakravarti A, et al. **Am J Hum Genet** 1989 Jun;44(6):799–805
Decreased membrane fluidity of lymphocytes from patients with juvenile neuronal ceroid-lipofuscinosis. Kohlschütter A, et al. **Am J Med Genet Suppl** 1988;5:203–7
Role of BBM lipid composition and fluidity in impaired renal Pi transport in aged rat. Levi M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F85–94
Development of rat jejunum: lipid permeability, physical properties, and chemical composition. Meddings JB, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G931–40
Ontogeny of basolateral membrane lipid composition and fluidity in small intestine. Schwarz SM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G138–44
Mechanism of increased erythrocyte membrane fluidity during magnesium deficiency in weanling rats. Tongyai S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C270–6
Membrane fluidity of trophoblast cells and susceptibility to natural cytotoxicity. Szekeres-Bartho J, et al. **Am J Reprod Immunol** 1989 Mar;19(3):92–8
Lack of dynamic lipid changes after binding of interleukin 2 in chronic lymphatic leukemia lymphocytes indicates defective transmembrane signalling. Daefler S, et al. **Anticancer Res** 1989 May–Jun;9(3):743–8
Comparison of lipid content, surface membrane fluidity, and temperature dependence of cis-diamminedichloroplatinum(II) accumulation in sensitive and resistant human ovarian carcinoma cells. Mann SC, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1211–5
Age and sex related changes of plasma membrane fluidity in isolated rat hepatocytes. Benedetti A, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):840–5
A time-resolved fluorescence anisotropy study of bilayer membranes containing alpha-tocopherol. Bisby RH, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):386–91
Temperature dependence of plasma membrane physical state in living Madin-Darby canine kidney cells. Giocondi MC, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1004–9
Changes of erythrocyte membrane fluidity associated with childhood obesity: a molecular study using fluorescence spectroscopy. Ferretti G, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):101–8
Lipid molecular species retailoring and membrane fluidity. Thompson GA Jr. **Biochem Soc Trans** 1989 Apr;17(2):286–9
Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Aroeti B, et al. **Biochemistry** 1988 Jul 26; 27(15):5654–61
Change in membrane fluidity induced by lectin-mediated phase separation of the membrane and agglutination of phospholipid vesicles containing glycopeptides. Ohtoyo T, et al. **Biochemistry** 1988 Aug 23;27(17):6458–63
Activation energy of the slowest step in the glucose carrier cycle: break at 23 degrees C and correlation with membrane lipid fluidity. Whitesell RR, et al. **Biochemistry** 1989 Jun 27;28(13):5618–25
Osmoelastic coupling in biological structures: decrease in membrane fluidity and osmophobic association of phospholipid vesicles in response to osmotic stress. Yamazaki M, et al. **Biochemistry** 1989 May 2;28(9):3710–5
Modification of fluidity and lipid-protein relationships in pig intestinal brush-border membrane by dietary essential fatty acid deficiency. Christon R, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):77–84
Cytoskeletal restraints of band 3 rotational mobility in human erythrocyte membranes [published erratum appears in Biochim Biophys Acta 1989 Sep 18;984(3):391] Clague MJ, et al. **Biochim Biophys Acta** 1989 May 19;981(1):43–50
Intrinsic molecules in lipid membranes change the lipid-domain interfacial area: cholesterol at domain interfaces. Cruzeiro-Hansson L, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):166–76 (44 ref.)
Influence of plasmalogen deficiency on membrane fluidity of human skin fibroblasts: a fluorescence anisotropy study. Hermetter A, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):151–7
Lipid permeability of the intestinal microvillus membrane may be modulated by membrane fluidity in the rat. Meddings JB. **Biochim Biophys Acta** 1989 Sep 4; 984(2):158–66
Effect of acyl chain composition on salt-induced lamellar to inverted hexagonal phase transitions in cardiolipin. Sankaram MB, et al. **Biochim Biophys Acta** 1989 Apr 28; 980(3):389–92
The membrane fluidity concept revisited by polarized fluorescence spectroscopy on different model membranes containing unsaturated lipids and sterols. van Ginkel G, et al. **Biochimie** 1989 Jan;71(1):23–32
SOD-1 activity and platelet membrane fluidity in Alzheimer's disease. Zubenko GS, et al. **Biol Psychiatry** 1989 Mar 15;25(6):671–8
Membrane fluidity and kinetics of Ca2+-dependent potassium channels. Bregestovski PD, et al. **Biomed Biochim Acta** 1989;48(5–6):S382–7
A new analysis method for the membrane viscosity from steady-state fluorescence depolarization. Araiso T, et al. **Biorheology** 1988;25(1–2):253–9
Decreased membrane fluidity in polymorphonuclear cells in psoriasis. Offidani AM, et al. **Boll Soc Ital Biol Sper** 1988 Jun;64(6):495–500
Decreased membrane fluidity of erythrocytes and cultured vascular smooth muscle cells in spontaneously hypertensive rats: an electron spin resonance study. Tsuda K, et al. **Clin Sci** 1988 Nov;75(5):477–80
Phospholipid composition of hibernating ground squirrel (Citellus lateralis) kidney and low-temperature membrane function. Aloia RC. **Comp Biochem Physiol [B]** 1978; 60(1):19–26
Cystic fibrosis: II. Altered microviscosity of erythrocyte membrane. Witas H, et al. **Cytobios** 1989;57(228):55–9
Comparison between flow cytometry and fluorometry for the kinetic measurement of membrane fluidity parameters. Collins JM, et al. **Cytometry** 1989 Jan;10(1):44–9
A marked increase in latency of fetal rat liver UDP-glucuronosyltransferase accompanies the fluidization of the microsomal membrane in the perinatal period. Kapitulnik J, et al. **Dev Pharmacol Ther** 1989;12(1):30–4
Fractal scaling mechanisms in biomembranes. Oscillations in the lateral diffusion coefficient. Nonnenmacher TF. **Eur Biophys J** 1989;16(6):375–9
In vitro glycation of red blood cell proteins: high levels of glucose lower lipid fluidity of erythrocyte membranes. Watala C. **Exp Pathol** 1988;33(4):233–8
Reduced lateral mobility of a fluorescent lipid analog in cell membranes of rat fibroblasts transformed by simian virus 40. Kawasaki Y, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):65–8
Effect of oxidant gases on membrane fluidity and function in pulmonary endothelial cells [letter] Goldstein BD, et al. **Free Radic Biol Med** 1988;5(3):199–200
Decreased membrane fluidity in erythrocytes from patients with Crohn's disease. Aozaki S. **Gastroenterol Jpn** 1989 Jun;24(3):246–54
Phosphatidylcholine and phosphatidylethanolamine derivatives, membrane fluidity and changes in the lipolytic activity of ram spermatozoa plasma membranes during cryoconservation. Hinkovska-Galcheva V, et al. **Int J Biochem** 1988;20(8):867–71
Mechanism of fusion of Sendai virus: role of hydrophobic interactions and mobility constraints of viral membrane proteins. Effects of polyethylene glycol. Hoekstra D, et al. **J Biol Chem** 1989 Apr 25;264(12):6786–92
Fibronectin receptor exhibits high lateral mobility in embryonic locomoting cells but is immobile in focal contacts and fibrillar streaks in stationary cells. Duband JL, et al. **J Cell Biol** 1988 Oct;107(4):1385–96
Abnormal membrane fluidity and acetylcholinesterase activity in erythrocytes from insulin-dependent diabetic patients. Testa I, et al. **J Clin Endocrinol Metab** 1988 Dec; 67(6):1129–33
Endoplasmic reticulum abnormality in Alzheimer's disease: selective alteration in platelet NADH-cytochrome c reductase activity. Zubenko GS. **J Geriatr Psychiatry Neurol** 1989 Jan–Mar;2(1):3–10
Markedly increased platelet membrane fluidity in Down syndrome with a (14q, 21q) translocation. Zubenko GS, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):218–9
Change of membrane fluidity of rat neutrophils accompanying Escherichia coli inoculation. Masuda M, et al. **J Leukoc Biol** 1989 Aug;46(2):169–74
Role of mobility of redox components in the inner mitochondrial membrane. Lenaz G. **J Membr Biol** 1988 Sep;104(3):193–209 (134 ref.)
Ischemic modification of cerebrocortical membranes: 5-hydroxytryptamine receptors, fluidity, and inducible in vitro lipid peroxidation [published erratum appears in J Neurochem 1989 Oct;53(4):1329] Villacara A, et al. **J Neurochem** 1989 Aug;53(2):595–601
Electron spin resonance studies of erythrocyte membrane in spinocerebellar degeneration. Yasuda Y, et al. **J Neurol Sci** 1989 May;90(3):281–90
Effect of temperature on the fluidity of boar sperm membranes. Canvin AT, et al. **J Reprod Fertil** 1989 Mar; 85(2):533–40
Membrane fluidity of erythrocytes and its relevance to renin profile in essential hypertension. Tsuda K, et al. **Jpn Circ J** 1988 Nov;52(11):1301–8
ESR spin-labeling method of determining membrane fluidity in biological materials—tissue culture cells, cardiac mitochondria, erythrocytes and epidermal cells. Ogura R, et al. **Kurume Med J** 1988;35(4):171–82
Changes in receptor response by the effect of disease on membrane fluidity. Raber J, et al. **Med Hypotheses** 1989 Mar;28(3):169–71 (10 ref.)
Dietary fat and hormonal effects on erythrocyte membrane fluidity and lipid composition in adult women. Berlin E, et al. **Metabolism** 1989 Aug;38(8):790–6
A protein-free diet changes synaptosomal membrane fluidity and tyrosine and glutamate transport. Felipo V, et al. **Neurochem Res** 1989 May;14(5):431–5
Membrane lipid fluidity and filterability of red blood cells from adults and newborns. Crespo LM, et al. **Pediatr Res** 1988 Oct;24(4):433–7
Maternal tobacco smoking and changes in amino acid uptake by human placental villi: induction of uptake systems, gammaglutamyltranspeptidase and membrane fluidity. Sastry BV, et al. **Placenta** 1989 Jul–Aug;10(4):345–58
Biochemical localization of hepatic surface-membrane Na+,K+-ATPase activity depends on membrane lipid fluidity. Sutherland E, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8673–7
Is there any correlation between platelet aggregation, plasma lipoproteins, apoproteins and membrane fluidity of human blood platelets? Malle E, et al. **Thromb Res** 1989 Jan 15; 53(2):181–90
A role of the cancer cell membrane fluidity in the cancer metastases: an ESR study. Nakazawa I, et al. **Tohoku J Exp Med** 1989 Mar;157(3):193–8
The uptake of fatty acids by the liver. Zakim D, et al. **Trans Am Clin Climatol Assoc** 1987;99:41–6 (19 ref.)
[Erythrocyte morphology and membrane mobility in patients with hypercholesterolemia] Chen S. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct; 16(5):301–3 (Chi)
[Observation on plasma serotonin (5-HT) and platelet membrane fluidity in AMI patients] CHENG HY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):456–8 (Eng. Abstr.) (Chi)
[Changes of erythrocyte and lymphocyte membrane fluidity after plasma extraction in children with type II homozygous hypercholesterolemia] Motta C, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:83–5 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Membrane perturbing activity of beta-adrenoceptor blocking drugs in isolated rat mast cells. Nosál R, et al. **Agents Actions** 1989 Apr;27(1–2):36–8
Effects of lidocaine on sarcolemmal fluidity and cellular cAMP in rat cardiomyocytes. Roux S, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H422–7
Evoked effects of PGE2 and PGA2 on lipid fluidity and Ca2+-stimulated ATPase of Walker-256 tumor microsomal membranes. Deliconstantinos G, et al. **Ann N Y Acad Sci** 1988;551:245–8
Miconazole and amphotericin B alter polymorphonuclear leukocyte functions and membrane fluidity in similar fashions. Yasui K, et al. **Antimicrob Agents Chemother** 1988

Dec;32(12):1864–8
Progesterone induces transient changes in plasma membrane fluidity of amphibian oocytes during the first meiotic division. Morrill GA, et al. **Arch Biochem Biophys** 1989 Mar;269(2):690–4
Effects of alpha, beta-unsaturated aldehydes on macrophage and neutrophil membrane function, fluidity and sulfhydryl status. Witz G, et al. **Basic Life Sci** 1988;49:849–51
Alpha interferon accelerates lateral diffusion of Daudi cell surface differentiation antigens: measurement by fluorescence redistribution after photobleaching. Balint E, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):808–15
Altered properties of platelet membrane in childhood obesity. Tangorra A, et al. **Biochem Int** 1988 Nov;17(5):837–46
Decrease in the fluidity of brush-border membrane vesicles induced by gentamicin. A spin-labeling study. Moriyama T, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1169–74
Ajoene, the antiplatelet compound derived from garlic, specifically inhibits platelet release reaction by affecting the plasma membrane internal microviscosity. Rendu F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1321–8
Propranolol-induced alterations in rat erythrocyte membrane fluidity and apparent phase-transition temperatures. A depth-dependent process. Weitman SD, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):2949–55
Membrane fluidity as affected by the insecticide lindane. Antunes-Madeira MC, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):161–6
Dietary triacylglycerol modulates sodium-dependent D-glucose transport, fluidity and fatty acid composition of rat small intestinal brush-border membrane. Brasitus TA, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):177–86
Influence of dietary fatty acids on membrane fluidity and activation of rat platelets. Heemskerk JW, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):252–60
Effects of cholesteryl esters on the accessibility of LH/hCG receptors and membrane lipid fluidity in rat testes. Kolena J, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):279–86
The effect of nonadec(en)ylresorcinol on the fluidity of liposome and erythrocyte membranes. Kozubek A, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):465–72
Effects of antineoplastic ether lipids on model and biological membranes. Noseda A, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):92–100
Transbilayer effects of ethanol on fluidity of brain membrane leaflets. Schroeder F, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):85–94
Effects of long-chain acyl carnitine on membrane fluidity of human erythrocytes. Watanabe H, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):315–8
Fluidity and osmotic sensitivity changes of phospholipase A2-treated liposomes. Kinjo M, et al. **Biorheology** 1988; 25(3):517–25
Nucleoside uptake and membrane fluidity studies on N-trifluoroacetyladriamycin-14-O-hemiadipate-treated human leukemia and lymphoma cells. Lameh J, et al. **Cancer Res** 1989 Jun 1;49(11):2905–8
Vitamin A excess alters membrane flow in rat liver. Morré DM, et al. **Eur J Cell Biol** 1988 Jun;46(2):307–15
A spin label study of perturbation effects of N-(1-methyldodecyl)-N, N, N-trimethylammonium bromide and N-(1-methyldodecyl)-N, N-dimethylamine oxide on model membranes prepared from Escherichia coli-isolated lipids. Seršeň F, et al. **Gen Physiol Biophys** 1989 Apr;8(2):133–56
Effect of alcohols on gastric and small intestinal apical membrane integrity and fluidity. Ballard HJ, et al. **Gut** 1988 Dec;29(12):1648–55
Effect of pentoxifylline on developmental changes in neutrophil cell surface mobility and membrane fluidity. Newton JA, et al. **J Cell Physiol** 1989 Sep;140(3):427–31
Is AL721 really a lipid fluidity modulating agent? [letter] Offner FA, et al. **J Invest Dermatol** 1988 Dec;91(6):607–8
Increased membrane fluidity and cholestasis: associated but not linked consequences of estrogen treatment. Isaacson Y, et al. **J Lab Clin Med** 1988 Dec;112(6):663–6
Role of liver plasma membrane fluidity in the pathogenesis of estrogen-induced cholestasis. Smith DJ, et al. **J Lab Clin Med** 1988 Dec;112(6):679–85
Monosodium urate monohydrate crystal induced changes in membrane fluidity: a fluorescence polarization study. Burt HM, et al. **J Rheumatol** 1988 Jul;15(7):1144–51
Geraniol interferes with membrane functions in strains of Candida and Saccharomyces. Bard M, et al. **Lipids** 1988 Jun;23(6):534–8
Membrane fluidity of equine, bovine and canine lymphocytes during stimulation with concanavalin A. Tajima M, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):621–3
Abnormal membrane fluidity as a cause of impaired functional dynamics of chemoattractant receptors on neonatal polymorphonuclear leukocytes: lack of modulation of the receptors by a membrane fluidizer. Yasui K, et al. **Pediatr Res** 1988 Oct;24(4):442–6
The influence of soman on the membrane fluidity of rat superior cervical ganglion. Stalc A, et al. **Pharmacol Toxicol** 1989 Jan;64(1):144–6
Influence of aging on the histamine release and membrane fluidity of rat peritoneal mast cells. Mio M, et al. **Pharmacology** 1989;38(3):191–200
AL 721: a potent membrane modulating agent of human T-lymphocytes? Offner FA, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):597–9
Ethanol and the fluidity of the yeast plasma membrane. Jones RP, et al. **Yeast** 1987 Dec;3(4):223–32
[The biochemical and pharmacological effects of biphenyl dimethyl dicarboxylate (DDB) on rat liver cells] Chen L, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):881–5 (Eng. Abstr.) **(Chi)**
[The effect of pentoxifylline and propentofylline on the membrane fluidity of red blood cells in uncontrolled insulin-dependent (type 1) diabetic patients] Roul C, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1081–3 (Eng. Abstr.) **(Fre)**
[In vitro study of changes in the fluidity and activity of Na+/K+-ATPase of the microvillous placental membrane induced by alpha-methyldopa] Valensise H, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):411–8 (Eng. Abstr.) **(Ita)**
[The action of membranotropic compounds with various structures on the parameters of the phase transition of dimyristoylphosphatidylcholine] Sëmin BK, et al. **Biol Nauki** 1989;(5):32–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Membrane responses of B-16 melanoma cells to single exposure to ultraviolet light. Ogura R, et al. **Arch Dermatol Res** 1989;280(8):481–6
UV exposure alters the membrane lipid composition and cell membrane fluidity of intact cultured B-16 melanoma cells. Sakanashi T, et al. **Kurume Med J** 1988;35(4):159–69

MEMBRANE FUSION

Molecular mechanisms of membrane fusion and applications of membrane fusion techniques. Wilschut J, et al. **Adv Exp Med Biol** 1988;238:105–26 (86 ref.)
Hyphal fusion during initial stages of trap formation in Arthrobotrys oligospora. Nordbring-Hertz B, et al. **Antonie Van Leeuwenhoek** 1989;55(3):237–44
Osmotic phenomena in membrane fusion. Lucy JA. **Biochem Soc Trans** 1989 Aug;17(4):623–4 (29 ref.)
Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Aroeti B, et al. **Biochemistry** 1988 Jul 26; 27(15):5654–61
Mechanism of protein-induced membrane fusion: fusion of phospholipid vesicles by clathrin associated with its membrane binding and conformational change. Maezawa S, et al. **Biochemistry** 1989 Feb 7;28(3):1422–8
Intermediary structures during membrane fusion as observed by cryo-electron microscopy. Frederik PM, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):275–8
Induction of fusion in aggregated and nonaggregated liposomes bearing cationic detergents. Keren-Zur M, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):253–8
Fusogenic properties of reconstituted hybrid vesicles containing Sendai and influenza envelope glycoproteins: fluorescence dequenching and fluorescence microscopy studies. Lapidot M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):281–90
Fusion of the mitochondrial outer membrane: use in forming large, two-dimensional crystals of the voltage-dependent, anion-selective channel protein. Mannella CA. **Biochim Biophys Acta** 1989 May 19;981(1):15–20
Fusion of lipid vesicles with ascites tumor cells and their lipid-depleted variants. Studies with radioactive- and fluorescent-labeled vesicles. Seibicke S, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):487–96
Role of channels in the fusion of vesicles with a planar bilayer. Woodbury DJ, et al. **Biophys J** 1988 Dec; 54(6):1053–63
Entry mechanisms of enveloped viruses. Implications for fusion of intracellular membranes. Hoekstra D, et al. **Biosci Rep** 1989 Jun;9(3):273–305 (174 ref.)
ATP-dependent fusion of liposomes with the Golgi apparatus of perforated cells. Kobayashi T, et al. **Cell** 1988 Dec 2; 55(5):797–805
GTP-dependent Ca2+ release from rat liver microsomes. Vesicle fusion is not required. Kleineke J, et al. **FEBS Lett** 1989 Mar 13;245(1-2):274–8
pH-dependent fusion of reconstituted vesicular stomatitis virus envelopes with Vero cells. Measurement by dequenching of fluorescence. Paternostre MT, et al. **FEBS Lett** 1989 Jan 30;243(2):251–8
Electric field-induced fusion of mitochondria. Reynaud JA, et al. **FEBS Lett** 1989 Apr 10;247(1):106–12
Gamete membrane fusion in hamster spermatozoa with reacted equatorial segment. Vigil P. **Gamete Res** 1989 Jun; 23(2):203–13
The gamete membrane fusion test to assay the fertilizing ability of human spermatozoa. Barros C, et al. **Hum Reprod** 1988 Jul;3(5):637–44
Glycolipids, glycoproteins and membrane fusion. Hoekstra D. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1-2):76–84 (45 ref.)
Hydrophobic binding of the ectodomain of influenza hemagglutinin to membranes occurs through the "fusion peptide". Harter C, et al. **J Biol Chem** 1989 Apr 15; 264(11):6459–64
Fusion of liposomes with the plasma membrane of epithelial cells: fate of incorporated lipids as followed by freeze fracture and autoradiography of plastic sections. Knoll G, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2511–21
Genetic control of plasma membrane adhesion and fusion in Chlamydomonas gametes. Forest CL. **J Cell Sci** 1987 Dec;88 (Pt 5):613–21
Granule swelling and membrane fusion in exocytosis. Green DP. **J Cell Sci** 1987 Dec;88 (Pt 5):547–9 (30 ref.)
A molecular basis for synexin-driven, calcium-dependent membrane fusion. Pollard HB, et al. **J Exp Biol** 1988 Sep; 139:267–86 (51 ref.)
Fusion of phospholipid vesicles with a planar membrane depends on the membrane permeability of the solute used to create the osmotic pressure. Cohen FS, et al. **J Gen Physiol** 1989 Feb;93(2):201–10
Hydrostatic pressures developed by osmotically swelling vesicles bound to planar membranes. Niles WD, et al. **J Gen Physiol** 1989 Feb;93(2):211–44
Studies on the structure of the influenza virus haemagglutinin at the pH of membrane fusion. Ruigrok RW, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2785–95
Viral release from HIV-1-induced syncytia of CD4+ C8166 cells. Harris JR, et al. **J Med Virol** 1989 Jun;28(2):81–9
Biological studies of the fusion function of California serogroup Bunyaviruses. Pobjecky N, et al. **Microb Pathog** 1986 Oct;1(5):491–501
Membrane penetration of Sendai virus glycoproteins during the early stages of fusion with liposomes as determined by hydrophobic photoaffinity labeling. Novick SL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7433–7
Membrane fusion. Fusogenic agents and osmotic forces. Lucy JA, et al. **Subcell Biochem** 1989;14:189–228 (209 ref.)
What causes membrane fusion in exocytosis? [letter] Green DP. **Trends Neurosci** 1989 Aug;12(8):285
Amino acid substitution at position 226 of the hemagglutinin molecule of influenza (H1N1) virus affects receptor binding activity but not fusion activity. Nobusawa E, et al. **Virology** 1988 Nov;167(1):8–14
The use of sulfite to study the mechanism of membrane fusion induced by E1 of Semliki Forest virus. Omar A, et al. **Virology** 1989 Jan;168(1):177–9
[Vesiculation, vesicular transport, and membrane fusion in cells: sorted transport mechanism of proteins] Ohnishi S. **Seikagaku** 1988 Jun;60(6):409–23 (58 ref.) **(Jpn)**

DRUG EFFECTS

Action of rimantadine on the structure of influenza A virus haemagglutinin. Mikheeva AV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):131–6
Surfactant-induced liposome fusion: molecular mechanisms and biotechnological applications. Gonï FM, et al. **Adv Exp Med Biol** 1988;238:81–103
Fusion of phospholipid vesicles mediated by cytochrome c. Lee S, et al. **Arch Biochem Biophys** 1989 May 15; 271(1):188–99
Fusion of phosphatidylcholine liposomes induced by polyethylene glycol. Mishra RK, et al. **Biochem Int** 1988 Jun;16(6):1137–44
The kinetic mechanism of cation-catalyzed phosphatidylglycerol transbilayer migration implies close contact between vesicles as an intermediate state. Lentz BR, et al. **Biochemistry** 1989 May 30;28(11):4575–80
Synexin enhances the aggregation rate but not the fusion rate of liposomes. Meers P, et al. **Biochemistry** 1988 Jun 14;27(12):4430–9
Free fatty acid enhancement of cation-induced fusion of liposomes: synergism with synexin and other promoters of vesicle aggregation. Meers P, et al. **Biochemistry** 1988 Sep 6;27(18):6784–94
Cholesterol affects divalent cation-induced fusion and isothermal phase transitions of phospholipid membranes. Shavnin SA, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):405–16
Basic amphipathic helical peptides induce destabilization and fusion of acidic and neutral liposomes. Suenaga M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):143–50
Effect of membrane additives on vesicle fusion. Lee JK, et al. **Chem Phys Lipids** 1989 Apr;50(1):83–6
Effect of monovalent cations on polyvalent cation-induced fusion of phosphatidylserine small unilamellar vesicles. Sukumaran DK, et al. **Chem Phys Lipids** 1988 Nov; 49(1-2):9–14
Ricin A-chain induces fusion of small unilamellar vesicles at neutral pH. Utsumi T, et al. **FEBS Lett** 1989 Jan 2; 242(2):255–8
Lack of lysosomal fusion with phagosomes containing Ehrlichia risticii in P388D1 cells: abrogation of inhibition with oxytetracycline. Wells MY, et al. **Infect Immun** 1988 Dec;56(12):3209–15
Mechanism of fusion of Sendai virus: role of hydrophobic interactions and mobility constraints of viral membrane proteins. Effects of polyethylene glycol. Hoekstra D, et al. **J Biol Chem** 1989 Apr 25;264(12):6786–92

MEMBRANE GLYCOPROTEINS

The leukocyte integrins. Kishimoto TK, et al. **Adv Immunol** 1989;46:149–82 (166 ref.)
Nuclear envelope glycoprotein with poly(A) polymerase activity of rat liver: isolation, characterization, and immunohistochemical localization. Kurl RN, et al. **Biochemistry** 1988 Dec 13;27(25):8974–80
Cell and substrate adhesion molecules in embryonic and neural development. Crossin KL. **Clin Chem** 1989 May;

35(5):738–47 (80 ref.)
Surface expression of the T cell receptor complex requires charged residues within the alpha chain transmembrane region. John S, et al. **Eur J Immunol** 1989 Feb;19(2):335–9
Epithelial membrane antigen expression by the perineurium of peripheral nerve and in peripheral nerve tumours. Theaker JM, et al. **Histopathology** 1988 Aug;13(2):171–9
The osteonectin family of proteins. Tracy RP, et al. **Int J Biochem** 1988;20(7):653–60 (32 ref.)
Synthetic peptides mimic the assembly of transmembrane glycoproteins. Bormann BJ, et al. **J Biol Chem** 1989 Mar 5;264(7):4033–7
Biochemical characterization of the eta chain of the T-cell receptor. A unique subunit related to zeta. Orloff DG, et al. **J Biol Chem** 1989 Sep 5;264(25):14812–7
Transient adhesion of neutrophils to endothelium. Lo SK, et al. **J Exp Med** 1989 May 1;169(5):1779–93
Blast-1 possesses a glycosyl-phosphatidylinositol (GPI) membrane anchor, is related to LFA-3 and OX-45, and maps to chromosome 1q21–23. Staunton DE, et al. **J Exp Med** 1989 Mar 1;169(3):1087–99
Topology of cell adhesion molecules [published erratum appears in Proc Natl Acad Sci U S A 1989 Jul;86(14):5670] Becker JW, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):1088–92
Endothelial leukocyte adhesion molecule 1: an inducible receptor for neutrophils related to complement regulatory proteins and lectins. Bevilacqua MP, et al. **Science** 1989 Mar 3;243(4895):1160–5
Chemical crosslinking of glycoproteins on the envelope of herpes simplex virus. Zhu Q, et al. **Virology** 1988 Dec; 167(2):377–84

ANALYSIS

Immunohistochemical demonstration of epithelial membrane antigen (EMA), carcinoembryonic antigen (CEA), and keratin on mammary and extramammary Paget's disease. Mori O, et al. **Acta Histochem (Jena)** 1989;85(1):93–100
Distribution of epithelial membrane antigen in normal and neoplastic human ependyma. Uematsu Y, et al. **Acta Neuropathol (Berl)** 1989;78(3):325–8
Pseudoleukemia in Down's syndrome. Analysis of immunophenotype and gene rearrangement. Domenico DR, et al. **Am J Clin Pathol** 1989 Jun;91(6):709–14
Cell surface molecules of human melanoma. Immunohistochemical analysis of the gp57, GD3, and mel-CSPG antigenic systems. Garin-Chesa P, et al. **Am J Pathol** 1989 Feb;134(2):295–303
Immunohistochemical study of the membrane attack complex of complement and S-protein in idiopathic and secondary membranous nephropathy. Lai KN, et al. **Am J Pathol** 1989 Sep;135(3):469–76
Desmosomal plaque proteins are preserved in all grades of breast cancer. An immunohistochemical study utilizing monoclonal antibodies to desmoplakin. Dervan PA, et al. **Am J Surg Pathol** 1988 Nov;12(11):855–60
Identification of continuous epitopes of the envelope glycoprotein of dengue type 2 virus. Innis BL, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):676–87
Expression of intermediate filaments and desmoplakin in vertebrate olfactory mucosa. Ophir D, et al. **Anat Rec** 1988 Jul;221(3):754–60
A peanut agglutinin binding glycoprotein in CNS myelin and oligodendrocytes. Mikol DD, et al. **Ann N Y Acad Sci** 1988; 540:409–12
Lectin-binding pattern in human non-Hodgkin lymphoma xenografts. Kopper L, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1429–33
Immunocytochemical detection of a resistance-associated glycoprotein in tissue culture cells, ascites tumors and human tumor xenografts by Mab 265/F4. Volm M, et al. **Anticancer Res** 1988 Jul-Aug;8(4):531–5
Human milk-fat globule membrane antigens (Mam-3 group) in normal cycling endometrium and endometrial carcinomas—an immunohistochemical study. A preliminary report. Ravn V, et al. **APMIS** 1989 May; 97(5):452–8
Immunohistologic analysis of the distribution of cell adhesion molecules within the inflammatory synovial microenvironment. Hale LP, et al. **Arthritis Rheum** 1989 Jan;32(1):22–30
The major maturation glycoprotein found on rat cauda epididymal sperm surface is linked to the membrane via phosphatidylinositol. Moore A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):460–8
Structure of the pig pancreatic GP-2: role of intramolecular disulfides in the resistance to proteolysis. LeBel D, et al. **Biochem Cell Biol** 1989 Jun;67(6):281–7
The glycosylphosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Ferguson MA, et al. **Biochem Soc Trans** 1988 Jun; 16(3):265–8
Glycosylphosphatidylinositol: an anchor for eukaryotic membrane proteins. Low MG. **Biochem Soc Trans** 1988 Jun;16(3):271–2
Comparative studies of the sugar chains of aminopeptidase N and dipeptidylpeptidase IV purified from rat kidney brush-border membrane. Yamashita K, et al. **Biochemistry** 1988 Jul 26;27(15):5565–73
Molecular heterogeneity of the isolated surface glycoprotein from variant AnTat 1.1 of Trypanosoma brucei brucei. Boutignon F, et al. **Biol Cell** 1988;64(2):131–5
Changes in sperm surface membrane and luminal protein fluid content during epididymal transit in the boar. Dacheux JL, et al. **Biol Reprod** 1989 Mar;40(3):635–51
Reversed phase HPLC of different membrane-bound variant surface glycoprotein preparations from Trypanosoma brucei brucei. Tetaert D, et al. **Biomed Chromatogr** 1989 Mar;3(2):53–7
Regulation of expression of a human intercellular adhesion molecule (ICAM-1) during lymphohematopoietic differentiation. Boyd AW, et al. **Blood** 1989 May 15; 73(7):1896–903
Immunohistochemical detection and quantitation of P-glycoprotein in multiple drug-resistant human myeloma cells: association with level of drug resistance and drug accumulation. Dalton WS, et al. **Blood** 1989 Feb 15; 73(3):747–52
P-glycoprotein expression in plasma-cell myeloma is associated with resistance to VAD. Epstein J, et al. **Blood** 1989 Aug 15;74(3):913–7
Lineage- and differentiation-dependent alterations in the expression of receptors for glycoconjugates (lectins) in different human hematopoietic cell lines and low grade lymphomas. Gabius S, et al. **Blut** 1989 Aug;59(2):165–70
Distinguishing tumour cells of mammary from extramammary Paget's disease using antibodies to two different glycoproteins from human milk-fat-globule membrane. Imam A, et al. **Br J Cancer** 1988 Sep; 58(3):373–8
Isolation and sequence of lambda gt11 cDNA clones encoding the 5B4 antigen expressed on sprouting neurons. Ramos P, et al. **Brain Res Mol Brain Res** 1989 Jun; 5(4):297–303
B-cell lymphoma marking only with anti-epithelial membrane antigen. Mark AS, et al. **Cancer** 1989 Jun 1; 63(11):2152–5
P-glycoprotein expression in multidrug-resistant human ovarian carcinoma cell lines. Bradley G, et al. **Cancer Res** 1989 May 15;49(10):2790–6
Characterization of monoclonal antibodies recognizing a Mr 180,000 P-glycoprotein: differential expression of the Mr 180,000 and Mr 170,000 P-glycoproteins in multidrug-resistant human tumor cells. Meyers MB, et al. **Cancer Res** 1989 Jun 15;49(12):3209–14
Characterization of the multidrug resistance protein expressed in cell clones stably transfected with the mouse mdr1 cDNA. Schurr E, et al. **Cancer Res** 1989 May 15; 49(10):2729–33
The lectin binding characteristics of spontaneous and phenobarbitone induced hepatic lesions in C3H/He mice. Pritchard DJ, et al. **Carcinogenesis** 1989 Sep;10(9):1737–42
Monoclonal antibodies to a Mr 68,000 pore complex glycoprotein interfere with nuclear protein uptake in Xenopus oocytes. Dabauvalle MC, et al. **Chromosoma** 1988 Nov;97(3):193–7
Tissue distribution of the T cell activation antigen Ta1. Serological, immunohistochemical and biochemical investigations. Heike M, et al. **Clin Exp Immunol** 1988 Dec; 74(3):431–4
Spatial and temporal distribution of the adherens-junction-associated adhesion molecule A-CAM during avian embryogenesis. Duband JL, et al. **Development** 1988 Jun;103(2):325–44
Pleomorphic carcinoma of the pancreas with osteoclast-like giant cells expressing an epithelial-associated antigen detected by monoclonal antibody 44-3A6. Combs SG, et al. **Diagn Cytopathol** 1988;4(4):316–22
Monoclonal antibodies to CD18 and CD11A (LFA-1) distinguish Down's syndrome (trisomy 21) from normal lymphoblastoid cells. Robson AJ, et al. **Dis Markers** 1989 Jul-Sep;7(3):169–80
The LFA-1 antigen in human B lymphocyte activation. Zola H, et al. **Dis Markers** 1989 Apr-Jun;7(2):95–104
Terminal beta-D-galactofuranosyl epitopes recognized by antibodies that inhibit Trypanosoma cruzi internalization into mammalian cells. De Arruda MV, et al. **Eur J Biochem** 1989 Jun 15;182(2):413–21
The expression of milk fat globule antigens within human mammary tumours: relationship to steroid hormone receptors and response to endocrine treatment. Baildam AD, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):459–67
Epithelial membrane antigen (EMA) distribution in various biological fluids. Hendrick JC, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1589–94
Detection of the multidrug resistant phenotype in human tumours by monoclonal antibodies and the streptavidin-biotinylated phycoerythrin complex method. Volm M, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):743–9
Mouse strain variation in Ly-24 (Pgp-1) expression by peripheral T cells and thymocytes: implications for T cell differentiation. Lynch F, et al. **Eur J Immunol** 1989 Feb; 19(2):223–9
L3T4+ T cells promoting susceptibility to murine cutaneous leishmaniasis express the surface marker Ly-24 (Pgp-1). Moll H, et al. **Eur J Immunol** 1989 Feb;19(2):307–14
Variations in WGA-binding proteins in tumours growing in different implantation sites. Chan WS, et al. **Exp Cell Biol** 1989;57(1):11–8
Cell-surface location and molecular properties of cell-CAM 105 in intestinal epithelial cells. Hansson M, et al. **Exp Cell Res** 1989 Mar;181(1):63–74
Detection of glycoproteins in the Acanthamoeba plasma membrane. Psatero GI, et al. **Exp Cell Res** 1988 Nov; 179(1):253–62
Detection of cells with multidrug-resistant phenotype in myeloproliferative disorders before therapy. Kemnitz J, et al. **Hematol Pathol** 1989;3(2):73–8
Butyrophilin of milk lipid globule membrane contains N-linked carbohydrates and cross-links with xanthine oxidase. Valivullah HM, et al. **Int J Biochem** 1989; 21(1):103–7
Immunohistochemical detection of P-glycoprotein in human tumor cells with a low degree of drug resistance. Broxterman HJ, et al. **Int J Cancer** 1989 Feb 15;43(2):340–3
Expression of 7F7-antigen, a human adhesion molecule identical to intercellular adhesion molecule-1 (ICAM-1) in human carcinomas and their stromal fibroblasts. Vogetseder W, et al. **Int J Cancer** 1989 May 15; 43(5):768–73
A comparison of carcinoembryonic antigen (CEA) and epithelial membrane antigen (EMA) in human colorectal cancer. Davidson BR, et al. **Int J Cancer Suppl** 1988; 3:56–60
Cell surface biochemical and metastatic properties of Lens culinaris hemagglutinin-binding variants of a murine large cell lymphoma. Tressler RJ, et al. **Invasion Metastasis** 1988; 8(6):351–63
Differential targeting of an epithelial plasma membrane glycoprotein in polarized Madin-Darby canine kidney cells. Herz RE, et al. **J Biol Chem** 1989 Mar 15; 264(8):4605–12
Identification of integrin collagen receptors on human melanoma cells. Kramer RH, et al. **J Biol Chem** 1989 Mar 15;264(8):4684–8
Biochemical characterization of a glycoprotein required for rhinovirus attachment. Tomassini JE, et al. **J Biol Chem** 1989 Jan 25;264(3):1656–62
The hyaluronate receptor is preferentially expressed on proliferating epithelial cells. Alho AM, et al. **J Cell Biol** 1989 Apr;108(4):1557–65
Endolyn-78, a membrane glycoprotein present in morphologically diverse components of the endosomal and lysosomal compartments: implications for lysosome biogenesis. Croze E, et al. **J Cell Biol** 1989 May; 108(5):1597–613
Evidence for heterogeneity in the 160/165 x 10(3) Mr glycoprotein components of desmosomes. Jones JC, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):513–20
Endoplasmin is a reticuloplasmin. Koch GL, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):485–91
Membrane cofactor protein of complement is present on human fibroblast, epithelial, and endothelial cells. McNearney T, et al. **J Clin Invest** 1989 Aug;84(2):538–45
Recognition of an endothelial determinant for CD 18-dependent human neutrophil adherence and transendothelial migration. Smith CW, et al. **J Clin Invest** 1988 Nov;82(5):1746–56
Characterization and cytoskeletal association of a major cell surface glycoprotein, GP 140, in human neutrophils. Suchard SJ, et al. **J Clin Invest** 1989 Aug;84(2):484–92
Drug-resistance in multiple myeloma and non-Hodgkin's lymphoma: detection of P-glycoprotein and potential circumvention by addition of verapamil to chemotherapy. Dalton WS, et al. **J Clin Oncol** 1989 Apr;7(4):415–24
Electrophoretic analysis of 248 clinical breast cancer specimens for P-glycoprotein overexpression or gene amplification. Merkel DE, et al. **J Clin Oncol** 1989 Aug; 7(8):1129–36
Comparison of western blot analysis and immunocytochemical detection of P-glycoprotein in multidrug resistant cells. Friedlander ML, et al. **J Clin Pathol** 1989 Jul;42(7):719–22
Quantitation of human milk fat globule (HMFG1) expression in breast carcinoma and its association with survival. Parham DM, et al. **J Clin Pathol** 1988 Aug;41(8):875–9
Expression of an intercellular adhesion molecule, ICAM-1, by human thyroid cells. Weetman AP, et al. **J Endocrinol** 1989 Jul;122(1):185–91
Murine T cells express a cell surface receptor for multiple extracellular matrix proteins. Identification and characterization with monoclonal antibodies. Maxfield SR, et al. **J Exp Med** 1989 Jun 1;169(6):2173–90
Distribution of the beta 1 subgroup of the integrins in human cells and tissues. De Strooper B, et al. **J Histochem Cytochem** 1989 Mar;37(3):299–307
A family of cell-surface glycoproteins defined by a putative anti-endothelial cell receptor antibody in man. Kansas GS, et al. **J Immunol** 1989 May 1;142(9):3050–7
Adhesion molecules on the plasma membrane of epidermal cells. I. Human resting Langerhans cells express two members of the adherence-promoting CD11/CD18 family, namely, H-Mac-1 (CD11b/CD18) and gp 150,95 (CD11c/CD18). De Panfilis G, et al. **J Invest Dermatol** 1989 Jul;93(1):60–9
Desmoglein II-derived glycopeptides in human epidermis. King IA, et al. **J Invest Dermatol** 1989 Jan;92(1):22–6
Quantitation of intracellular Mac-1 (CD11b/CD18) pools in human neutrophils. Jones DH, et al. **J Leukoc Biol** 1988 Dec;44(6):535–44
Increased cytosolic pH in multidrug-resistant human lung tumor cells: effect of verapamil. Keizer HG, et al. **J Natl Cancer Inst** 1989 May 3;81(9):706–9
Does P-glycoprotein predict response to chemotherapy? [editorial] Ling V. **J Natl Cancer Inst** 1989 Jan 18;

81(2):84–5
Prediction of doxorubicin resistance in vitro in myeloma, lymphoma, and breast cancer by P-glycoprotein staining. Salmon SE, et al. **J Natl Cancer Inst** 1989 May 3; 81(9):696–701
Most synaptic vesicles isolated from rat brain carry three membrane proteins, SV2, synaptophysin, and p65. Floor E, et al. **J Neurochem** 1989 May;52(5):1433–7
Poly(N-acetyllactosaminyl) oligosaccharides of chromaffin granule membrane glycoproteins. Margolis RU, et al. **J Neurochem** 1988 Dec;51(6):1819–24
Differentiation-regulated loss of the polysialylated embryonic form and expression of the different polypeptides of the neural cell adhesion molecule by cultured oligodendrocytes and myelin. Trotter J, et al. **J Neurosci Res** 1989 Apr;22(4):369–83
Surface labeling of Pneumocystis carinii from in vitro culture. Radding JA, et al. **J Protozool** 1989 Jan–Feb;36(1):61S–62S
The 1A protein of respiratory syncytial virus is an integral membrane protein present as multiple, structurally distinct species. Olmsted RA, et al. **J Virol** 1989 May;63(5):2019–29
Involvement of an antigen distinct from the Heymann antigen in membranous glomerulonephritis in the mouse. Assmann KJ, et al. **Lab Invest** 1989 Jan;60(1):138–46
Human pulmonary alveolar type 2 cells contain an apical membrane glycoprotein common to malignant cells. Brody JS, et al. **Lab Invest** 1988 Oct;59(4):522–30
A sensitive method for immunocytochemical detection of P-glycoprotein in multidrug-resistant human ovarian carcinoma cell lines. Chan HS, et al. **Lab Invest** 1988 Dec; 59(6):870–5
A protein associated with prodigiosin formation in Serratia marcescens. Kobayashi N, et al. **Microbiol Immunol** 1989; 33(4):257–63
Biochemical properties of a 24 kilodalton membrane glycoprotein antigen complex from Schistosoma mansoni. Karcz SR, et al. **Mol Biochem Parasitol** 1988 Nov; 31(2):163–71
Isolation and characterisation of a surface membrane glycoprotein from adult Schistosoma mansoni. MacGregor AN, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):237–44
Importance of an 85 kDa membrane glycoprotein for a variety of cell–cell interactions. Schulz TF, et al. **Mol Immunol** 1988 Nov;25(11):1053–61
Immunohistochemical study of intracranial cysts. Inoue T, et al. **Neurosurgery** 1988 Nov;23(5):576–81
Localization of the integral membrane glycoprotein synaptophysin and the surface glycoprotein Egp-34 in the embryonic and adult human inner ear. Anniko M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(4):221–8
Alterations of pancreatic growth and of GP-2 content in the reserpinized rat model of cystic fibrosis. Leblond FA, et al. **Pediatr Res** 1989 May;25(5):478–81
The distribution of intermediate filament proteins, actin and desmoplakins in human placental tissue as revealed by polyclonal and monoclonal antibodies. Beham A, et al. **Placenta** 1988 Sep–Oct;9(5):479–92
Proteins associated with activity of Fc receptors on isolated human placental syncytiotrophoblast microvillous plasma membranes. Down JA, et al. **Placenta** 1989 May–Jun; 10(3):227–46
Derived protein sequence, oligosaccharides, and membrane insertion of the 120-kDa lysosomal membrane glycoprotein (lgp120): identification of a highly conserved family of lysosomal membrane glycoproteins. Howe CL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7577–81
Identification of pp120, an endogenous substrate for the hepatocyte insulin receptor tyrosine kinase, as an integral membrane glycoprotein of the bile canalicular domain. Margolis RN, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7256–9
Excreted factors and membrane-associated carbohydrates of Indian leishmaniae. Ghosh DK, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):595–9
Characterization of N- and O-linked oligosaccharides of glycoprotein 350 from Epstein–Barr virus. Serafini-Cessi F, et al. **Virology** 1989 May;170(1):1–10
[Leukocyte adhesion molecules and their clinical significance] Hurme M, et al. **Duodecim** 1988; 104(19):1507–14 (29 ref.) (Fin)
[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM-3 and MAM-6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) (Ger)
[The duality of Heymann nephritis antigen and immunogenoside—a minute quantity of a membranous nephritis-causing substance contained in somewhat crude nephritogenoside] Shibata S. **Arerugi** 1988 Jul; 37(7):397–403 (17 ref.) (Jpn)
[Detection of the epithelial membrane antigen in patients with varying status of the gastric mucosa using monoclonal antibodies] Vorob'eva TA, et al. **Arkh Patol** 1989; 51(5):47–51 (Eng. Abstr.) (Rus)
[Electron cytochemical detection of carbohydrate determinants of surface membrane of cultured neurons] Skibo GG, et al. **Dokl Akad Nauk SSSR** 1988;300(4):971–3 (Rus)
[A study of membrane glycoproteins from the rat brain using D-galactose-specific lectin] Berezin VA, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):9–14 (Eng. Abstr.) (Rus)
[Diagnosis of undifferentiated carcinoma using epithelial markers] Larregina A, et al. **Medicina (B Aires)** 1988; 48(4):401–5 (Eng. Abstr.) (Spa)
[Diagnostic usefulness of a monoclonal antibody against the common leukocyte antigen (letter)] Paterno E, et al. **Medicina (B Aires)** 1985;45(1):90–1 (Spa)

ANTAGONISTS & INHIBITORS

Clinical trials of agents that reverse multidrug-resistance. Gottesman MM, et al. **J Clin Oncol** 1989 Apr;7(4):409–11

BIOSYNTHESIS

Lipoxygenase regulation of membrane expression of tumor cell glycoproteins and subsequent metastasis. Honn KV, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:439–43
Induced multidrug-resistance in murine sarcoma 180 cells grown in vitro and in vivo and associated changes in expression of multidrug-resistance DNA-sequences and membrane glycoproteins. Volm M, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1169–78
Lysosomal integral membrane glycoproteins are expressed at high levels in the inclusion bodies of I-cell disease fibroblasts. Sandoval IV, et al. **Arch Biochem Biophys** 1989 May 15;271(1):157–67
Modulation of endothelial cell expression of intercellular adhesion molecule 1 by protein kinase C activation. Lane TA, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):945–52
Effect of inhibitors of glycoprotein processing on integrin and the adhesion of myoblasts to extracellular matrix proteins. Trudel GC, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1338–43
In vivo effect of tunicamycin on the expression of rat small intestinal brush border membrane glycoproteins and glycoenzymes. Miura S, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4081–8
Regulation of variant surface glycoprotein synthesis in Trypanosoma brucei. Czichos J, et al. **Biochem Soc Trans** 1988 Jun;16(3):261–3
Incorporation of non-acetylated hexosamines into plasma membrane glycoproteins of liver cells after galactosamine injection. Schulzke JD, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):957–64
Increased P-glycoprotein expression and multidrug-resistant gene (mdr1) amplification are infrequently found in fresh acute leukemia cells. Sequential analysis of 15 cases at initial presentation and relapsed stage. Ito Y, et al. **Cancer** 1989 Apr 15;63(8):1534–8
Transformation of rat liver epithelial cells with v-H-ras or v-raf causes expression of MDR-1, glutathione-S-transferase-P and increased resistance to cytotoxic chemicals. Burt RK, et al. **Carcinogenesis** 1988 Dec;9(12):2329–32
Biosynthesis and secretion of thrombospondin in human melanoma cells. Apelgren LD, et al. **Cell Biol Int Rep** 1989 Feb;13(2):189–95
The S-locus specific glycoproteins of Brassica accumulate in the cell wall of developing stigma papillae. Kandasamy MK, et al. **Dev Biol** 1989 Aug;134(2):462–72
Epithelial–mesenchymal interactions regulate the stage-specific expression of a cell surface proteoglycan, syndecan, in the developing kidney. Vainio S, et al. **Dev Biol** 1989 Aug;134(2):382–91
Thrombospondin is synthesized and secreted by human osteoblasts and osteosarcoma cells. A model to study the different effects of thrombospondin in cell adhesion. Clezardin P, et al. **Eur J Biochem** 1989 May 15;181(3):721–6
Retinoic acid induces a specific membrane glycoprotein in human epithelial cell lines. Bakke O, et al. **Exp Cell Res** 1989 Jan;180(1):20–9
Expression of membrane glycoproteins in normal keratinocytes and squamous carcinoma cell lines. Rayter Z, et al. **Exp Cell Res** 1989 Aug;183(2):443–52
Palmitylation of viral membrane glycoproteins takes place after exit from the endoplasmic reticulum. Bonatti S, et al. **J Biol Chem** 1989 Jul 25;264(21):12590–5
The elastin associated glycoprotein gp115. Synthesis and secretion by chick cells in culture. Colombatti A, et al. **J Biol Chem** 1988 Nov 25;263(33):17534–40
Specific overproduction of very late antigen 1 integrin in two human neuroblastoma cell lines selected for resistance to detachment by an Arg-Gly-Asp-containing synthetic peptide. Dedhar S, et al. **J Biol Chem** 1989 Mar 25; 264(9):4832–6
Processing and assembly of the integrin, glycoprotein IIb-IIIa, in HEL cells. Rosa JP, et al. **J Biol Chem** 1989 Jul 25;264(21):12596–603
Syndecan and tenascin expression is induced by epithelial–mesenchymal interactions in embryonic tooth mesenchyme. Vainio S, et al. **J Cell Biol** 1989 May; 108(5):1945–53
Differential expression of cell surface glycoproteins on various organ-derived microvascular endothelia and endothelial cell cultures. Belloni PN, et al. **J Cell Physiol** 1988 Sep;136(3):398–410
Regulation of expression of the cell adhesion receptors, integrins, by recombinant human interleukin-1 beta in human osteosarcoma cells: inhibition of cell proliferation and stimulation of alkaline phosphatase activity. Dedhar S. **J Cell Physiol** 1989 Feb;138(2):291–9
Cell-to-cell heterogeneity in the expression of carbohydrate-based epitopes of a mucin-type glycoprotein on the surface of human mammary carcinoma cells. Moss L, et al. **J Cell Physiol** 1988 Nov;137(2):310–20
Polarized expression of an apical membrane glycoprotein is established before functional tight junctions have developed in MCF-7 cells. Zou ZZ, et al. **J Histochem Cytochem** 1989 Jan;37(1):15–24
Biosynthesis and function of LFA-3 in human mutant cells deficient in phosphatidylinositol-anchored proteins. Hollander N, et al. **J Immunol** 1988 Dec 15;141(12):4283–90
Thrombospondin and fibronectin are synthesized by neutrophils in human inflammatory joint disease and in a rabbit model of in vivo neutrophil activation. Kreis C, et al. **J Immunol** 1989 Sep 15;143(6):1961–8
All-trans retinoic acid stimulates growth of adult human keratinocytes cultured in growth factor-deficient medium, inhibits production of thrombospondin and fibronectin, and reduces adhesion. Varani J, et al. **J Invest Dermatol** 1989 Oct;93(4):449–54
C3b receptor activity on transfected cells expressing glycoprotein C of herpes simplex virus types 1 and 2. Seidel-Dugan C, et al. **J Virol** 1988 Nov;62(11):4027–36
Synthesis, cellular location, and immunogenicity of bovine herpesvirus 1 glycoproteins gI and gIII expressed by recombinant vaccinia virus. van Drunen Littel-van den Hurk S, et al. **J Virol** 1989 May;63(5):2159–68
Synthesis of glycocalyx and associated structures in vestibular sensory cells. Takumida M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):116–23
Intercellular adhesion molecule 1 is induced on isolated endocrine islet cells by cytokines but not by reovirus infection. Campbell IL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4282–6
Failure to synthesize the human T-cell CD3-zeta chain and its consequence for the T-cell receptor-CD3 complex expression. Geisler C, et al. **Scand J Immunol** 1989 Aug; 30(2):191–7
Increased expression of leucocyte adherence-related glycoproteins by polymorphonuclear leucocytes during phagocytosis of staphylococci on an endothelial surface. Vandenbroucke-Grauls CM, et al. **Scand J Immunol** 1989 Jul;30(1):91–8

BLOOD

Definition of CD 11a, b, c, and CD 18 glycoproteins on chemotactically deficient granulocyte membranes in patients affected by myeloid disorders. Ricevuti G, et al. **Acta Haematol (Basel)** 1989;81(3):126–30
Distribution and movement of membrane-associated platelet glycoproteins: use of colloidal gold with correlative video-enhanced light microscopy, low-voltage high-resolution scanning electron microscopy, and high-voltage transmission electron microscopy. Albrecht RM, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):149–64
Distribution of integrins on human peripheral blood mononuclear cells. Klingemann HG, et al. **Blood** 1989 Sep; 74(4):1348–54
Detection of P-glycoprotein in human leukemias using monoclonal antibodies. Mattern J, et al. **Blut** 1989 Apr; 58(4):215–7
The binding of ligands to the 55 kDa component of the interleukin-2 receptor triggers increased turnover of phosphate bound to an 85 kDa protein. Evidence for the role of cyclic AMP. Mire-Sluis AR, et al. **FEBS Lett** 1989 Jan 30;243(2):280–4
Ultrastructural analysis of megakaryoblasts by simultaneous detection of platelet peroxidase and platelet glycoproteins. Kishimoto Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):102–12
Quantitation of platelet fibrinogen and thrombospondin in Glanzmann's thrombasthenia by electroimmunoassay. Disdier M, et al. **Thromb Res** 1989 Mar 15;53(6):521–33
[Atopic bronchial asthma as pathology of the membrane-receptor complex] Zhikharev SS, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):9–14 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

HMFG1 antigen: a new marker for carcinomatous meningitis. Moseley RP, et al. **Int J Cancer** 1989 Sep 15;44(3):440–4

DEFICIENCY

Membrane glycoproteins of neutrophils and related diseases. Ricevuti G, et al. **Haematologica (Pavia)** 1988 Sep–Oct; 73(5):415–22 (49 ref.)
Leukocyte adhesion deficiency. Aberrant splicing of a conserved integrin sequence causes a moderate deficiency phenotype. Kishimoto TK, et al. **J Biol Chem** 1989 Feb 25;264(6):3588–95
Effects of interferon-gamma (IFN-gamma) and tumor necrosis factor-alpha (TNF-alpha) on the expression of LFA-1 in the moderate phenotype of leukocyte adhesion deficiency (LAD). Dimanche-Boitrel MT, et al. **J Clin Immunol** 1989 May;9(3):200–7
Biosynthesis and function of LFA-3 in human mutant cells deficient in phosphatidylinositol-anchored proteins. Hollander N, et al. **J Immunol** 1988 Dec 15;141(12):4283–90
Case report: sepsis from a granulating wound in a patient with a white blood cell defect. Moran SG, et al. **Milit Med** 1988 Dec;153(12):643–4

GENETICS

Expression of the P-glycoprotein gene in multidrug-resistant Chinese hamster ovary cells. Mukhopadhyay T, et al. **Anticancer Res** 1989 May-Jun;9(3):575-8

P-glycoprotein gene (MDR1) cDNA from human adrenal: normal P-glycoprotein carries Gly185 with an altered pattern of multidrug resistance. Kioka N, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):224-31

Heparin increases mRNA levels of thrombospondin but not fibronectin in human vascular smooth muscle cells. Lyons-Giordano B, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1100-4

20 KDa homologous restriction factor of complement resembles T cell activating protein. Okada H, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1553-9

Expression of the mdr-1/P-170 gene in patients with acute lymphoblastic leukemia. Rothenberg ML, et al. **Blood** 1989 Sep;74(4):1388-95

P-glycoprotein gene amplification and expression in multidrug-resistant murine P388 and B16 cell lines. Capranico G, et al. **Br J Cancer** 1989 May;59(5):682-5

Smooth muscle cells transiently express NCAM. Akeson RA, et al. **Brain Res** 1988 Sep;464(2):107-20

The involvement of the cell matrix receptors, or VLA integrins, in the morphogenetic behavior of normal and malignant cells is gradually being uncovered. Cassiman JJ. **Cancer Genet Cytogenet** 1989 Aug;41(1):19-32 (97 ref.)

Atypical multidrug resistance in a therapy-induced drug-resistant human leukemia cell line (LALW-2): resistance to Vinca alkaloids independent of P-glycoprotein. Haber M, et al. **Cancer Res** 1989 Oct 1; 49(19):5281-7

Multidrug resistance in mitoxantrone-selected HL-60 leukemia cells in the absence of P-glycoprotein overexpression. Harker WG, et al. **Cancer Res** 1989 Aug 15;49(16):4542-9

Expression of anionic glutathione-S-transferase and P-glycoprotein genes in human tissues and tumors. Moscow JA, et al. **Cancer Res** 1989 Mar 15;49(6):1422-8

Transcript analysis of glp-1 and lin-12, homologous genes required for cell interactions during development of C. elegans. Austin J, et al. **Cell** 1989 Aug 11;58(3):565-71

glp-1 and lin-12, genes implicated in distinct cell-cell interactions in C. elegans, encode similar transmembrane proteins. Yochem J, et al. **Cell** 1989 Aug 11;58(3):553-63

The antibody spectrum in individuals with defect expression of HLA class II and the LFA-1 glycoprotein family genes. Smith CI, et al. **Clin Exp Immunol** 1988 Dec;74(3):449-53

Regional assignment of the human loci for uvomorulin (UVO) and chymotrypsinogen B (CTRB) with the help of two overlapping deletions on the long arm of chromosome 16. Natt E, et al. **Cytogenet Cell Genet** 1989; 50(2-3):145-8

Characterization and chromosomal localization of the gene encoding the human cell adhesion molecule uvomorulin. Mansouri A, et al. **Differentiation** 1988 Jun;38(1):67-71

Mouse CD1 is distinct from and co-exists with TL in the same thymus. Bradbury A, et al. **EMBO J** 1988 Oct; 7(10):3081-6

The MRC OX-45 antigen of rat leukocytes and endothelium is in a subset of the immunoglobulin superfamily with CD2, LFA-3 and carcinoembryonic antigens. Killeen N, et al. **EMBO J** 1988 Oct;7(10):3087-91

Molecular characterization of a new immunoglobulin superfamily protein with potential roles in opioid binding and cell contact. Schofield PR, et al. **EMBO J** 1989 Feb; 8(2):489-95

The primary structure of the alpha 4 subunit of VLA-4: homology to other integrins and a possible cell-cell adhesion function. Takada Y, et al. **EMBO J** 1989 May; 8(5):1361-8

Post-translational modifications in mitotic yeast cells. Nevalainen LT, et al. **Eur J Biochem** 1989 Sep 1; 184(1):165-72

Murine mRNA for the beta-subunit of integrin is increased in BALB/c-3T3 cells entering the G1 phase from the G0 state. Tominaga S. **FEBS Lett** 1988 Oct 10;238(2):315-9

Sequence of mdr3 cDNA encoding a human P-glycoprotein. van der Bliek AM, et al. **Gene** 1988 Nov 30;71(2):401-11

Alternative splicing of the neural cell adhesion molecule gene generates variant extracellular domain structure in skeletal muscle and brain. Thompson J, et al. **Genes Dev** 1989 Mar; 3(3):348-57

Amplification and overexpression of the P-glycoprotein genes and differential amplification of three other genes in SEWA murine multidrug-resistant cells. Ståhl F, et al. **Hereditas** 1988;108(2):251-8

Ataxia-telangiectasia fibroblasts have less fibronectin mRNA than control cells but have the same levels of integrin and beta-actin mRNA. Becker Y, et al. **Hum Genet** 1989 Jan; 81(2):165-70

Assignment of human platelet GP2B (GPIIb) gene to chromosome 17, region q21.1-q21.3. Cong NV, et al. **Hum Genet** 1988 Dec;80(4):389-92

Differential transport requirements of HLA and H-2 class I glycoproteins. Alexander J, et al. **Immunogenetics** 1989; 29(6):380-8

Physical linkage of genes encoding the lymphocyte adhesion molecules CD2 and its ligand LFA-3. Kingsmore SF, et al. **Immunogenetics** 1989;30(2):123-5

Acquisition of tumorigenic potential in the human myoepithelial HBL100 cell line is associated with decreased expression of HLA class I, class II and integrin beta 3 and increased expression of c-myc. Krief P, et al. **Int J Cancer** 1989 Apr 15;43(4):658-64

Protein glycosylation defects in the Saccharomyces cerevisiae mnn7 mutant class. Support for the stop signal proposed for regulation of outer chain elongation. Ballou L, et al. **J Biol Chem** 1989 Jul 15;264(20):11857-64

The isolation and characterization of the murine T cell antigen receptor zeta chain gene. Baniyash M, et al. **J Biol Chem** 1989 Aug 5;264(22):13252-7

Activators of protein kinase C up-regulate the cell surface expression of CD2 and CD5 T cell glycoproteins. Carrera AC, et al. **J Biol Chem** 1989 Sep 15;264(26):15650-5

Deletion and insertion mutants of the multidrug transporter. Currier SJ, et al. **J Biol Chem** 1989 Aug 25; 264(24):14376-81

Cloning of cDNAs encoding human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Comparison of their deduced amino acid sequences. Fukuda M, et al. **J Biol Chem** 1988 Dec 15;263(35):18920-8

Expression of a multidrug resistance-adenosine deaminase fusion gene. Germann UA, et al. **J Biol Chem** 1989 May 5;264(13):7418-24

Regulation of cell adhesion receptors by transforming growth factor-beta. Concomitant regulation of integrins that share a common beta 1 subunit. Heino J, et al. **J Biol Chem** 1989 Jan 5;264(1):380-8

Membrane orientation of rat gp110 as studied by in vitro translation. Hong WJ, et al. **J Biol Chem** 1988 Nov 15; 263(32):16892-8

Differential overexpression of three mdr gene family members in multidrug-resistant J774.2 mouse cells. Evidence that distinct P-glycoprotein precursors are encoded by unique mdr genes. Hsu SI, et al. **J Biol Chem** 1989 Jul 15;264(20):12053-62

Regulation of cell adhesion receptors by transforming growth factor-beta. Regulation of vitronectin receptor and LFA-1. Ignotz RA, et al. **J Biol Chem** 1989 Jan 5;264(1):389-92

Analysis of the tumor-associated antigen TSP-180. Identity with alpha 6-beta 4 in the integrin superfamily. Kennel SJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15515-21

Cloning and expression of a cDNA coding for a rat liver plasma membrane ecto-ATPase. The primary structure of the ecto-ATPase is similar to that of the human biliary glycoprotein I. Lin SH, et al. **J Biol Chem** 1989 Aug 25; 264(24):14408-14

Alternate overexpression of two phosphoglycoprotein genes is associated with changes in multidrug resistance in a J774.2 cell line. Lothstein L, et al. **J Biol Chem** 1989 Sep 25;264(27):16054-8

Evidence for positive and negative regulatory elements in the 5'-flanking sequence of the mouse sparc (osteonectin) gene. Nomura S, et al. **J Biol Chem** 1989 Jul 25; 264(21):12201-7

Expression and initial characterization of a recombinant human thrombospondin heparin binding domain. Yabkowitz R, et al. **J Biol Chem** 1989 Jun 25; 264(18):10888-96

Osteonectin promoter. DNA sequence analysis and S1 endonuclease site potentially associated with transcriptional control in bone cells. Young MF, et al. **J Biol Chem** 1989 Jan 5;264(1):450-6

Induced multidrug resistance in murine leukemia L1210 and associated changes in a surface-membrane glycoprotein. Volm M, et al. **J Cancer Res Clin Oncol** 1989;115(1):17-24

Primary structure of the leukocyte function-associated molecule-1 alpha subunit: an integrin with an embedded domain defining a protein superfamily. Larson RS, et al. **J Cell Biol** 1989 Feb;108(2):703-12

Expression and analysis of COOH-terminal deletions of the human thrombospondin molecule. Prochownik EV, et al. **J Cell Biol** 1989 Aug;109(2):843-52

Structure, biosynthesis, and localization of dipeptidyl aminopeptidase B, an integral membrane glycoprotein of the yeast vacuole. Roberts CJ, et al. **J Cell Biol** 1989 Apr; 108(4):1363-73

Molecular cloning of syndecan, an integral membrane proteoglycan. Saunders S, et al. **J Cell Biol** 1989 Apr; 108(4):1547-56

Structural gene for human membrane cofactor protein (MCP) of complement maps to within 100 kb of the 3' end of the C3b/C4b receptor gene. Bora NS, et al. **J Exp Med** 1989 Feb 1;169(2):597-602

CD19, the earliest differentiation antigen of the B cell lineage, bears three extracellular immunoglobulin-like domains and an Epstein-Barr virus-related cytoplasmic tail. Stamenkovic I, et al. **J Exp Med** 1988 Sep 1;168(3):1205-10

Isolation and chromosomal localization of cDNAs encoding a novel human lymphocyte cell surface molecule, LAM-1. Homology with the mouse lymphocyte homing receptor and other human adhesion proteins. Tedder TF, et al. **J Exp Med** 1989 Jul 1;170(1):123-33

Expression of Epstein-Barr virus membrane antigen gp340/220 in mouse fibroblasts using a bovine papillomavirus vector. Conway M, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):729-34

Characterization of a new temperature-sensitive and avirulent mutant of the rabies virus. Préhaud C, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):133-43

Expression of the glycoprotein of vesicular stomatitis virus by infectious adenovirus vectors. Schneider M, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):417-27

Pseudorabies virus displays variable numbers of a repeat unit adjacent to the 3' end of the glycoprotein gII gene. Simon A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1239-46

Molecular analysis of the gene encoding the major surface antigen of Toxoplasma gondii. Burg JL, et al. **J Immunol** 1988 Nov 15;141(10):3584-91

Expression of a multidrug resistance gene in human cancers. Goldstein LJ, et al. **J Natl Cancer Inst** 1989 Jan 18; 81(2):116-24

Characterization of a partial cDNA clone for the NILE glycoprotein and identification of the encoded polypeptide domain. Prince JT, et al. **J Neurosci** 1989 May;9(5):1825-34

Characterization of a partial cDNA clone for the NILE glycoprotein and identification of the encoded polypeptide domain. Prince JT, et al. **J Neurosci** 1989 Mar;9(3):876-83

Identification and sequence analysis of a gene encoding gp67, an abundant envelope glycoprotein of the baculovirus Autographa californica nuclear polyhedrosis virus. Whitford M, et al. **J Virol** 1989 Mar;63(3):1393-9

A protein associated with prodigiosin formation in Serratia marcescens. Kobayashi N, et al. **Microbiol Immunol** 1989; 33(4):257-63

Genes encoding the major surface glycoprotein in Leishmania are tandemly linked at a single chromosomal locus and are constitutively transcribed. Button LL, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):271-83

Expression site associated genes of Trypanosoma brucei rhodesiense. Son HJ, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):59-66

Structure and expression of the human MDR (P-glycoprotein) gene family. Chin JE, et al. **Mol Cell Biol** 1989 Sep;9(9):3808-20

Structural characterization of Dictyostelium discoideum prespore-specific gene D19 and of its product, cell surface glycoprotein PsA. Early AE, et al. **Mol Cell Biol** 1988 Aug;8(8):3458-66

Polymorphism in the procyclic acidic repetitive protein gene family of Trypanosoma brucei. Mowatt MR, et al. **Mol Cell Biol** 1988 Oct;8(10):4055-62

Identification of members of the P-glycoprotein multigene family. Ng WF, et al. **Mol Cell Biol** 1989 Mar;9(3):1224-32

The yeast STE6 gene encodes a homologue of the mammalian multidrug resistance P-glycoprotein. McGrath JP, et al. **Nature** 1989 Aug 3;340(6232):400-4

RFLP and mapping of human MOX-1 gene on chromosome 3. Douglas J, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9067

Nucleotide sequence of the cDNA from the mouse leukocyte adhesion protein CD18. Wilson RW, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5397

Multidrug-resistance gene (P-glycoprotein) is expressed by endothelial cells at blood-brain barrier sites. Cordon-Cardo C, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):695-8

Molecular cloning and amino acid sequence of human plakoglobin, the common junctional plaque protein. Franke WW, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4027-31

cDNA sequence for the alpha M subunit of the human neutrophil adherence receptor indicates homology to integrin alpha subunits. Hickstein DD, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):257-61

Molecular characterization of sialophorin (CD43), the lymphocyte surface sialoglycoprotein defective in Wiskott-Aldrich syndrome [published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4689] Shelley CS, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2819-23

Loss of HLA-A,B,C allele products and lymphocyte function-associated antigen 3 in colorectal neoplasia. Smith ME, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5557-61

An alternative cytoplasmic domain of the integrin beta 3 subunit. van Kuppevelt TH, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5415-8

Molecular cloning and chromosomal localization of the human T-cell receptor zeta chain: distinction from the molecular CD3 complex. Weissman AM, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9709-13

P-glycoprotein gene amplification or overexpression is not detected in clinical breast cancer specimens. Merkel DE, et al. **Prog Clin Biol Res** 1988;276:61-73

Structure and function of voltage-sensitive ion channels. Catterall WA. **Science** 1988 Oct 7;242(4875):50-61 (77 ref.)

Autoimmune target in Heymann nephritis is a glycoprotein with homology to the LDL receptor. Raychowdhury R, et al. **Science** 1989 Jun 9;244(4909):1163-5

Mouse lymph node homing receptor cDNA clone encodes a glycoprotein revealing tandem interaction domains. Siegelman MH, et al. **Science** 1989 Mar 3;243(4895):1165-72

Hereditary disorders of the red cell membrane skeleton. Davies KA, et al. **Trends Genet** 1989 Jul;5(7):222-7 (37 ref.)

Sequence analysis of the gene encoding the serotype-specific glycoprotein (VP7) of two new human rotavirus serotypes. Green KY, et al. **Virology** 1989 Feb;168(2):429-33

Structure and expression of the glycoprotein gene of Chandipura virus. Masters PS, et al. **Virology** 1989 Jul; 171(1):285-90

The human cytomegalovirus strain Towne glycoprotein H gene encodes glycoprotein p86. Pachl C, et al. **Virology** 1989 Apr;169(2):418-26

[The multidrug-resistance gene MDR1] Ueda K, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2858-62 (Eng.

Abstr.) (Jpn)

IMMUNOLOGY

Role of LFA-1 molecule in conjugate formation and recycling of human natural killer cells. Benczur M, et al. **Acta Paediatr Hung** 1988-89;29(1-2):105-8

Membrane glycoproteins and plant and animal proteins with lectin or lectin-like properties. Shen ZW. **Adv Exp Med Biol** 1988;228:187-203

Identification of an autoantibody to vascular endothelial cell-specific antigens in patients with systemic vasculitis. Brasile L, et al. **Am J Med** 1989 Jul;87(1):74-80

Nuclear uptake of monoclonal antibody to a surface glycoprotein and its effect on transcription. Rakowicz-Szulczynska EM, et al. **Arch Biochem Biophys** 1989 Jun;271(2):366-79

The human peripheral Ts lymphocytes are endowed with a heat stable E receptor. Olinescu A, et al. **Arch Roum Pathol Exp Microbiol** 1987 Oct-Dec; 46(4):311-20

Mapping of segmental antigenic determinants on structurally related variant surface glycoproteins of Trypanosoma brucei. Carruthers VB, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1231-7

Calcium transport by sarcoplasmic reticulum of skeletal muscle is inhibited by antibodies against the 53-kilodalton glycoprotein of the sarcoplasmic reticulum membrane. Kutchai H, et al. **Biochemistry** 1989 May 30;28(11):4830-9

The specificity of nephritogenic antibodies. V. Glomerular localization of anti-GP 330 and anti-GP 90 antibodies present in passive Heymann serum. Bagchus WM, et al. **Br J Exp Pathol** 1988 Dec;69(6):855-64

Monoclonal antibodies against osteonectin show conservation of epitopes across species. Bolander ME, et al. **Calcif Tissue Int** 1989 Aug;45(2):74-80

Expression of LFA-1 in non-Hodgkin's lymphoma. Medeiros LJ, et al. **Cancer** 1989 Jan 15;63(2):255-9

Antibodies to human milk fat globule molecules. Burchell J, et al. **Cancer Invest** 1989;7(1):53-61 (82 ref.)

Cell surface glycoprotein associated with human lung tumors that is similar to but distinct from the epidermal growth factor receptor. Chen FA, et al. **Cancer Res** 1989 Jul 1; 49(13):3642-9

Elimination of chemoresistant multiple myeloma clonogenic colony-forming cells by combined treatment with a plasma cell-reactive monoclonal antibody and a P-glycoprotein-reactive monoclonal antibody. Tong AW, et al. **Cancer Res** 1989 Sep 1;49(17):4829-34

Evidence that the leukocyte-common antigen is required for antigen-induced T lymphocyte proliferation. Pingel JT, et al. **Cell** 1989 Sep 22;58(6):1055-65

Peyer's patch-specific lymphocyte homing receptors consist of a VLA-4-like alpha chain associated with either of two integrin beta chains, one of which is novel. Holzmann B, et al. **EMBO J** 1989 Jun;8(6):1735-41

MLR3 molecule is an activation antigen shared by human B, T lymphocytes and T cell precursors. Risso A, et al. **Eur J Immunol** 1989 Feb;19(2):323-8

Triggering of the alternative pathway of human T cell activation involves members of the T 200 family of glycoproteins. Schraven B, et al. **Eur J Immunol** 1989 Feb; 19(2):397-403

Studies on CD11a and CD18 molecules with two new monoclonal antibodies: differential myelomonocytic antigen expression of PMA treated HL60 and U937 cell lines. Pedrinaci S, et al. **Hybridoma** 1989 Feb;8(1):13-23

Supergene families meet in the immune system. Dustin ML, et al. **Immunol Today** 1988 Jul-Aug;9(7-8):213-5 (29 ref.)

The leukocyte integrins. Hogg N. **Immunol Today** 1989 Apr; 10(4):111-4

gp 58/68, a parasite component that contributes to the escape of the trypomastigote form of T. cruzi from damage by the human alternative complement pathway. Fischer E, et al. **Immunology** 1988 Oct;65(2):299-303

Membrane glycoprotein M-2 protects against Leishmania amazonensis infection. Champsi J, et al. **Infect Immun** 1988 Dec;56(12):3272-9

Antibodies raised against synthetic peptides from the Arg-Gly-Asp-containing region of the Leishmania surface protein gp63 cross-react with human C3 and interfere with gp63-mediated binding to macrophages. Russell DG, et al. **Infect Immun** 1989 Feb;57(2):630-2

Cytoskeletal involvement in the sequential capping of rat thymocyte surface glycoproteins. Turner CE, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):309-19

Proliferation of highly purified T cells in response to signaling via surface receptors requires cell-cell contact. Schwartz D, et al. **J Clin Immunol** 1989 Mar;9(2):151-8

A human 88-kD membrane glycoprotein (CD36) functions in vitro as a receptor for a cytoadherence ligand on Plasmodium falciparum-infected erythrocytes. Barnwell JW, et al. **J Clin Invest** 1989 Sep;84(3):765-72

A unique antigenic epitope of human melanoma is carried on the common melanoma glycoprotein gp95/p97. Furukawa KS, et al. **J Exp Med** 1989 Feb 1;169(2):585-90

A human endothelial cell-restricted, externally disposed plasmalemmal protein enriched in intercellular junctions. Muller WA, et al. **J Exp Med** 1989 Aug 1;170(2):399-414

Reduction of inflammation, tissue damage, and mortality in bacterial meningitis in rabbits treated with monoclonal antibodies against adhesion-promoting receptors of leukocytes. Tuomanen EI, et al. **J Exp Med** 1989 Sep 1; 170(3):959-69

Characterization of Hantaan virus envelope glycoprotein antigenic determinants defined by monoclonal antibodies. Arikawa J, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):615-24

A human cytomegalovirus-neutralizing monoclonal antibody recognizes a normal cell protein. Michelson S, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):673-84

Monoclonal antibodies reactive with the T cell receptor zeta chain: production and characterization using a new method. Anderson P, et al. **J Immunol** 1989 Sep 15;143(6):1899-904

The effect of anti-intercellular adhesion molecule-1 on phorbol-ester-induced rabbit lung inflammation. Barton RW, et al. **J Immunol** 1989 Aug 15;143(4):1278-82

Triggering of co-mitogenic signals in T cell proliferation by anti-LFA-1 (CD18, CD11a), LFA-3, and CD7 monoclonal antibodies. Carrera AC, et al. **J Immunol** 1988 Sep 15;141(6):1919-24

Purified lymphocyte function-associated antigen-3 (LFA-3) activates human thymocytes via the CD2 pathway. Denning SM, et al. **J Immunol** 1988 Nov 1;141(9):2980-5

Induction of antigen-specific parasiticidal cytotoxic T cell splenocytes by a major membrane protein (P30) of Toxoplasma gondii. Khan IA, et al. **J Immunol** 1988 Nov 15;141(10):3600-5

Accumulation of 111In-neutrophils in rabbit skin in allergic and non-allergic inflammatory reactions in vivo. Inhibition by neutrophil pretreatment in vitro with a monoclonal antibody recognizing the CD18 antigen. Nourshargh S, et al. **J Immunol** 1989 May 1;142(9):3193-8

Requirement of leukocytic cell adhesion molecules (CD11a-c/CD18) in the enhanced NK lysis of iC3b-opsonized targets. Ramos OF, et al. **J Immunol** 1989 Jun 1;142(11):4100-4

The cell surface glycoprotein Mac-1 (CD11b/CD18) mediates neutrophil adhesion and modulates degranulation independently of its quantitative cell surface expression. Schleiffenbaum B, et al. **J Immunol** 1989 May 15; 142(10):3537-45

Structure of major surface determinants and DNA diagnosis of Pneumocystis carinii. Nakamura Y, et al. **J Protozool** 1989 Jan-Feb;36(1):58S-60S

IgA antibodies against P30 as markers of congenital and acute toxoplasmosis. Decoster A, et al. **Lancet** 1988 Nov 12; 2(8620):1104-7

Assay of bovine milk fat globule membrane antibody by a non-isotopic chemiluminescent method. Thomas E. **Med Lab Sci** 1988 Jul;45(3):266-9

A monoclonal antibody specifically modulates dihydropyridine-sensitive calcium current in BC3H1 myocytes. Caffrey JM, et al. **Mol Pharmacol** 1988 Oct; 34(4):518-26

Cotransfection of ICAM-1 and HLA-DR reconstitutes human antigen-presenting cell function in mouse L cells. Altmann DM, et al. **Nature** 1989 Apr 6;338(6215):512-4

The expression of intermediate filaments and mam-6 antigen in relation to the degree of morphologic differentiation of carcinoma of the head and neck: diagnostic implications. Henzen-Logmans SC, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):539-47

Specific detection of circulating surface/secreted glycoproteins of viable cysticerci in Taenia saginata cysticercosis. Harrison LJ, et al. **Parasite Immunol** 1989 Jul;11(4):351-70

Changes in CD45 isoform expression accompany antigen-induced murine T-cell activation. Birkeland ML, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6734-8

Oligodendrocyte-specific autoreactive T cells using an alpha/beta T-cell receptor kill their target without self restriction. Jewtoukoff V, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2824-8

Accessory cell-dependent T-cell activation via Ti-CD3. Involvement of CD2-LFA-3 interactions. Halvorsen R, et al. **Scand J Immunol** 1988 Sep;28(3):277-84

Immunological mapping of the human leucocyte adhesion glycoprotein gp90 (CD18) by monoclonal antibodies. Nortamo P, et al. **Scand J Immunol** 1988 Nov;28(5):537-46

Prevention of renal allograft rejection by perfusion with antileukocyte common monoclonal antibodies is dependent on good uptake of antibody by interstitial dendritic cells. Brewer Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1772-3

Lack of xenoantibody response in recipients of renal transplants pretreated with a mixture of antihuman leukocyte common monoclonal antibodies. Lloyd CM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1774-5

Immunogenicity of lymphoid cells and vascularized organs for the non-MHC antigen EAG-1. Paul LC, et al. **Transplant Proc** 1989 Apr;21(2):3255-6

Failure of a CD18/anti-LFA1 monoclonal antibody infusion to prevent graft rejection in leukemic patients receiving T-depleted allogeneic bone marrow transplantation. Baume D, et al. **Transplantation** 1989 Mar;47(3):472-4

Epithelial markers in synovial sarcoma. An immunohistochemical study on paraffin embedded tissues. Wrba F, et al. **Virchows Arch [A]** 1989;415(3):253-8

Antigenic analysis of the Epstein-Barr virus major membrane antigen (gp350/220) expressed in yeast and mammalian cells: implications for the development of a subunit vaccine. Emini EA, et al. **Virology** 1988 Oct;166(2):387-93

Synthetic peptides derived from the deduced amino acid sequence of the E-glycoprotein of Murray Valley encephalitis virus elicit antiviral antibody. Roehrig JT, et al. **Virology** 1989 Jul;171(1):49-60

The glycoprotein of infectious hematopoietic necrosis virus elicits neutralizing antibody and protective responses. Engelking HM, et al. **Virus Res** 1989 Jul;13(3):213-30

[Detection of multidrug resistant phenotype in leukemia and lymphoma by monoclonal antibodies] Shimoyama M, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2863-70 (Eng. Abstr.) (Jpn)

ISOLATION & PURIFICATION

Purification and characterization of human lysosomal membrane glycoproteins. Mane SM, et al. **Arch Biochem Biophys** 1989 Jan;268(1):360-78

Purification form human hepatoma cells of a 130-kDa membrane glycoprotein with properties of the heparin-binding growth factor receptor. DiSorbo D, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1007-14

Identification of P-glycoprotein in renal brush border membranes. Lieberman DM, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):244-52

Demonstration that the leukocyte common antigen CD45 is a protein tyrosine phosphatase. Tonks NK, et al. **Biochemistry** 1988 Nov 29;27(24):8695-701

Differences between individuals in high-molecular weight glycoproteins from mammary epithelia of several species. Patton S, et al. **Biochim Biophys Acta** 1989 Apr 28; 980(3):333-8

Isolation and characterization of the human adenocarcinoma-associated glycoprotein gp40. Sportsman JR, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):536-44

A study on the amphiphilic proteins of three Trypanosoma cruzi populations. Giovanni-de-Simone S, et al. **Braz J Med Biol Res** 1988;21(3):435-43

Complexity of MAM-6, an epithelial sialomucin associated with carcinomas. Hilkens J, et al. **Cancer Res** 1989 Feb 15;49(4):786-93

Comparison of lectin receptor and membrane coat-associated glycoproteins of milk lipid globule membranes. Murray LR, et al. **Comp Biochem Physiol [B]** 1979;63(1):137-45

Direct N-terminal sequence analysis of rat liver plasma membrane glycoproteins separated by two-dimensional polyacrylamide gel electrophoresis. Benjamin T, et al. **Electrophoresis** 1989 Jul;10(7):447-55

A novel integrin (alpha E beta 4) from human epithelial cells suggests a fourth family of integrin adhesion receptors. Kajiji S, et al. **EMBO J** 1989 Mar;8(3):673-80

Boar sperm surface glycoproteins: isolation, localization, and temporal expression during spermatogenesis. Klint M, et al. **Gamete Res** 1987 Jun;17(2):173-90

Human leucocyte surface glycoprotein CDw44 and lymphocyte homing receptor are identical molecules. Stefanová I, et al. **Immunogenetics** 1989;29(6):402-4

Chemical composition and tissue distribution of the human CDw44 glycoprotein. Flanagan BF, et al. **Immunology** 1989 Jun;67(2):167-75

Identification of wall-specific antigens synthesized during germ tube formation by Candida albicans. Casanova M, et al. **Infect Immun** 1989 Jan;57(1):262-71

Purification of a Trypanosoma cruzi membrane glycoprotein which elicits lytic antibodies. Norris KA, et al. **Infect Immun** 1989 Aug;57(8):2372-7

Identification and isolation of a major cell surface glycoprotein of Pneumocystis carinii. Radding JA, et al. **Infect Immun** 1989 Jul;57(7):2149-57

An intrinsic membrane glycoprotein of the golgi apparatus with O-linked N-acetylglucosamine facing the cytosol. Capasso JM, et al. **J Biol Chem** 1988 Dec 25; 263(36):19778-82

Isolation and characterization of human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Major sialoglycoproteins carrying polylactosaminoglycan. Carlsson SR, et al. **J Biol Chem** 1988 Dec 15; 263(35):18911-9

Desmoplakin I and desmoplakin II. Purification and characterization. O'Keefe EJ, et al. **J Biol Chem** 1989 May 15;264(14):8310-8

Purification and characterization of an estrogen-inducible membrane glycoprotein. Evidence that it is a transferrin receptor. Poola I, et al. **J Biol Chem** 1988 Dec 15; 263(35):19137-46

A family of abundant plasma membrane-associated glycoproteins related to the arabinogalactan proteins is unique to flowering plants. Pennell RI, et al. **J Cell Biol** 1989 May;108(5):1967-77

Identification and characterization of cell-substratum adhesion receptors on cultured human endothelial cells. Albelda SM, et al. **J Clin Invest** 1989 Jun;83(6):1992-2002

Human myeloid plasma membrane glycoprotein CD13 (gp150) is identical to aminopeptidase N. Look AT, et al. **J Clin Invest** 1989 Apr;83(4):1299-307

Identity of Leu-19 (CD56) leukocyte differentiation antigen and neural cell adhesion molecule. Lanier LL, et al. **J Exp Med** 1989 Jun 1;169(6):2233-8

Biochemical characterization of membrane cofactor protein of the complement system. Ballard LL, et al. **J Immunol** 1988 Dec 1;141(11):3923-9

Expression of the beta-subunit of the human leukocyte adherence receptor depends upon cell type and stage of differentiation. Hickstein DD, et al. **J Immunol** 1988 Dec 15;141(12):4313-7

BP-3 alloantigen. A cell surface glycoprotein that marks early B lineage cells and mature myeloid lineage cells in mice. McNagny KM, et al. **J Immunol** 1988 Oct 15;

141(8):2551–6
Highly restricted tumor-specific antigen of radiation leukemia virus–induced murine leukemias. Meseguer A, et al. **J Immunol** 1989 Jun 1;142(11):4093–9
Identification of a widely distributed 90-kDa glycoprotein that is homologous to the Hermes–1 human lymphocyte homing receptor. Pals ST, et al. **J Immunol** 1989 Aug 1; 143(3):851–7
Amastigote and epimastigote stage-specific components of Trypanosoma cruzi characterized by using monoclonal antibodies. Purification and molecular characterization of an 83–kilodalton amastigote protein. Pan AA, et al. **J Immunol** 1989 Aug 1;143(3):1001–8
Expression of the major surface glycoprotein of Leishmania donovani chagasi in virulent and attenuated promastigotes. Wilson ME, et al. **J Immunol** 1989 Jul 15;143(2):678–84
Identification and cDNA cloning of a new member of the L2/HNK–1 family of neural surface glycoproteins. Gennarini G, et al. **J Neurosci Res** 1989 Jan;22(1):1–12
Purification and characterization of stage-specific glycoproteins from Trypanosoma cruzi. Harth G, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):143–50
The mucosal vascular addressin is a tissue-specific endothelial cell adhesion molecule for circulating lymphocytes. Nakache M, et al. **Nature** 1989 Jan 12; 337(6203):179–81
Nephritogenic glycoprotein. XIII. Isolation and its immunochemical characterization of the antigenic substance of membranous glomerulonephritis induced by a single injection of crude nephritogenoside in homologous animals. Shibata S, et al. **Nephron** 1989;51(2):243–9
Identification of feline herpesvirus type 1–hemagglutinin. Horimoto T, et al. **Nippon Juigaku Zasshi** 1989 Jun; 51(3):607–12
Structure, expression and regulation of the murine 4F2 heavy chain. Parmacek MS, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1915–31
Related glycoproteins from normal secretory and malignant breast cells. Purification and initial comparative characterizations. Ishida M, et al. **Tumour Biol** 1989; 10(1):12–22

METABOLISM

Expression of the cell–cell adhesion glycoprotein cell–CAM 120/80 in normal human tissues and tumors. Eidelman S, et al. **Am J Pathol** 1989 Jul;135(1):101–10
A beta 1–integrin receptor for fibronectin in human kidney glomeruli. Kerjaschki D, et al. **Am J Pathol** 1989 Feb; 134(2):481–9
Colchicine-induced redistribution of an apical membrane glycoprotein (gp330) in proximal tubules. Gutmann EJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C397–407
Lectin affinity of Junin virus glycoproteins. Mersich SE, et al. **Ann Inst Pasteur Virol** 1988 Jul–Sep;139(3):277–83
The biochemistry of P-glycoprotein–mediated multidrug resistance. Endicott JA, et al. **Annu Rev Biochem** 1989; 58:137–71 (192 ref.)
N-linked oligosaccharides are responsible for rat striatal dopamine D2 receptor heterogeneity. Clagett-Dame M, et al. **Arch Biochem Biophys** 1989 Oct;274(1):145–54
Characterization of the maturation-associated galactose oxidase–sensitive glycoproteins of rat caudal sperm plasma membrane and epididymal fluid. Goldin BF, et al. **Arch Biochem Biophys** 1989 Apr;270(1):208–18
Biochemical analysis of a human epithelial surface antigen: differential cell expression and processing. Thampoe IJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):342–52
rp-120: a common endogenous substrate for insulin and IGF-1 receptor–associated tyrosine kinase activity in the highly malignant AS-30D rat hepatoma cells. Fanciulli M, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):168–73
Turnover and compartmentation of gp70/p15 E in psi 2 cells. Hare JF. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):596–603
Steroid hormones inhibit binding of Vinca alkaloid to multidrug resistance related P-glycoprotein. Naito M, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):1066–71
Photoaffinity labeling of P-glycoprotein in multidrug resistant cells with photoactive analogs of colchicine. Safa AR, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1402–8
Fatty acid acylation at the single cysteine residue in the cytoplasmic domain of the glycoprotein of vesicular-stomatitis virus. Mack D, et al. **Biochem J** 1988 Dec 15;256(3):1021–7
Analysis of structural features of dihydropyridine analogs needed to reverse multidrug resistance and to inhibit photoaffinity labeling of P-glycoprotein. Nogae I, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):519–27
Stability and covalent modification of P-glycoprotein in multidrug-resistant KB cells. Richert ND, et al. **Biochemistry** 1988 Oct 4;27(20):7607–13
Binding of plasma membrane glycoproteins to the cytoskeleton during patching and capping is consistent with an entropy–enhancement model. Shiozawa JA, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):361–6
Effects of detergent on the binding of solubilized sodium channels to immobilized wheat germ agglutinin: structural implications. Weiner JS, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):521–6
Biosynthesis, processing and half-life of P-glycoprotein in a human multidrug-resistant KB cell. Yoshimura A, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):307–14
Contact-dependent inhibition of growth of normal diploid human fibroblasts by plasma membrane glycoproteins. Wieser RJ, et al. **Biochimie** 1988 Nov;70(11):1661–71
Tumor necrosis factor leads to the internalization and degradation of thrombomodulin from the surface of bovine aortic endothelial cells in culture. Moore KL, et al. **Blood** 1989 Jan;73(1):159–65
Effect of calcium antagonists on the chemosensitivity of two multidrug-resistant human tumour cell lines which do not overexpress P-glycoprotein. Cole SP, et al. **Br J Cancer** 1989 Jan;59(1):42–6
Binding of anti–EMA, AGF 4:48 and the lectin UEA–1 to human ovarian carcinomas: histological and clinical correlations. Bradgate MG, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):854–60
Distribution of basement membrane components in human hepatocellular carcinoma. Donato MF, et al. **Cancer** 1989 Jan 15;63(2):272–9
Correlation between reversing of multidrug resistance and inhibiting of [3H]azidopine photolabeling of P-glycoprotein by newly synthesized dihydropyridine analogues in a human cell line. Kamiwatari M, et al. **Cancer Res** 1989 Jun 15;49(12):3190–5
Correlation of multidrug resistance with decreased drug accumulation, altered subcellular drug distribution, and increased P-glycoprotein expression in cultured SW–1573 human lung tumor cells. Keizer HG, et al. **Cancer Res** 1989 Jun 1;49(11):2988–93
Melanoma cell adhesion to basement membrane mediated by integrin-related complexes. Kramer RH, et al. **Cancer Res** 1989 Jan 15;49(2):393–402
Reversal mechanism of multidrug resistance by verapamil: direct binding of verapamil to P-glycoprotein on specific sites and transport of verapamil outward across the plasma membrane of K562/ADM cells. Yusa K, et al. **Cancer Res** 1989 Sep 15;49(18):5002–6
Isolation of exocytic carrier vesicles from BHK cells. de Curtis I, et al. **Cell** 1989 Aug 25;58(4):719–27
Dissection of a single round of vesicular transport: sequential intermediates for intercisternal movement in the Golgi stack. Orci L, et al. **Cell** 1989 Feb 10;56(3):357–68
The signal peptide of the rotavirus glycoprotein VP7 is essential for its retention in the ER as an integral membrane protein. Stirzaker SC, et al. **Cell** 1989 Mar 10;56(5):741–7
Physiological inducers of the acrosome reaction. Hoshi M, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:19–24 (15 ref.)
Hemangiopericytoma of the meninges: a clinicopathologic and immunohistochemical study. Iwaki T, et al. **Clin Neuropathol** 1988 May–Jun;7(3):93–9
Localization and developmental fate of ovoperoxidase and proteoliaisin, two proteins involved in fertilization envelope assembly. Somers CE, et al. **Dev Biol** 1989 Jan; 131(1):226–35
Glycoproteins and glycolipids of rat small intestinal microvillus and basolateral membranes. Morita A, et al. **Dig Dis Sci** 1989 Apr;34(4):596–605
The cytoplasmic domain of the cell adhesion molecule uvomorulin associates with three independent proteins structurally related in different species. Ozawa M, et al. **EMBO J** 1989 Jun;8(6):1711–7
Dephosphorylation of the human T lymphocyte CD3 antigen. Alexander D, et al. **Eur J Biochem** 1989 Apr 15; 181(1):55–65
Equilibrium, kinetic and photoaffinity labeling studies of daunomycin binding to P-glycoprotein–containing membranes of multidrug-resistant Chinese hamster ovary cells. Busche R, et al. **Eur J Biochem** 1989 Jul 15; 183(1):189–97
Reduced temperature does not prevent transport of lysosomal integral membrane proteins from endoplasmic reticulum and through the Golgi system to lysosomes. Morales PG, et al. **Eur J Biochem** 1989 Aug 1;183(2):407–12
Association of thrombospondin of endothelial cells with other matrix proteins and cell attachment sites and migration tracks. Vischer P, et al. **Eur J Cell Biol** 1988 Oct; 47(1):36–46
Integrin on developing and adult skeletal muscle. Bozyczko D, et al. **Exp Cell Res** 1989 Jul;183(1):72–91
Signal transduction via the beta 1 integrins is a required intermediate in interleukin–1 beta induction of alkaline phosphatase activity in human osteosarcoma cells. Dedhar S. **Exp Cell Res** 1989 Jul;183(1):207–14
The GPIIB–IIIa–like complex may function as a human melanoma cell adhesion receptor for thrombospondin. Tuszynski GP, et al. **Exp Cell Res** 1989 Jun;182(2):473–81
Strong association of bovine IgM with microvilli and their microfilament core from 13762 ascites tumor cells. Ye XH, et al. **Exp Cell Res** 1989 May;182(1):160–72
Solubilization and characterization of a ouabain–sensitive protein from transverse tubule membrane–junctional sarcoplasmic reticulum complexes (TTM–JSR) in cat cardiac muscle. Fujino S, et al. **Experientia** 1989 May 15; 45(5):466–9
Glycolysis in P-glycoprotein–overexpressing human tumor cell lines. Effects of resistance-modifying agents. Broxterman HJ, et al. **FEBS Lett** 1989 Apr 24; 247(2):405–10
Role of glycosylation in the incorporation of intrinsic mannoproteins into cell walls of Saccharomyces cerevisiae. Sanz P, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):265–9
Changes in binding of a 27-kilodalton chimpanzee cauda epididymal protein glycoprotein component to chimpanzee sperm. Young LG, et al. **Gamete Res** 1987 Oct;18(2):163–78
Brain astrocytes express region-specific surface glycoproteins in culture. Barbin G, et al. **GLIA** 1988;1(1):96–103
Epithelial membrane antigen expression by the perineurial cell: further studies of peripheral nerve lesions. Theaker JM, et al. **Histopathology** 1989 Jun;14(6):581–92
A protease of Bacteroides gingivalis degrades cell surface and matrix glycoproteins of cultured gingival fibroblasts and induces secretion of collagenase and plasminogen activator. Uitto VJ, et al. **Infect Immun** 1989 Jan; 57(1):213–8
Sodium–n–butyrate induces secretion and substrate accumulation of p52 in Kirsten sarcoma virus–transformed rat kidney fibroblasts. Ryan MP, et al. **Int J Biochem** 1989; 21(1):31–7
Hyposialylation of high-molecular-weight membrane glycoproteins parallels the loss of metastatic potential in wheat-germ agglutinin–resistant Friend leukemia cells. Benedetto A, et al. **Int J Cancer** 1989 Jan 15;43(1):126–33
Reduced cell adhesion to fibronectin and laminin is associated with altered glycosylation of beta 1 integrins in a weakly metastatic glycosylation mutant. Oz OK, et al. **Int J Cancer** 1989 Aug 15;44(2):343–7
In vitro adherence of bovine erythrocytes infected with Babesia bovis to thrombospondin and laminin. Parrodi F, et al. **Int J Parasitol** 1989 Aug;19(5):567–9
Two different regions of phosphoglycoprotein are photoaffinity–labeled by azidopine. Bruggemann EP, et al. **J Biol Chem** 1989 Sep 15;264(26):15483–8
Surface acid proteinase (gp63) of Leishmania mexicana. A metalloenzyme capable of protecting liposome–encapsulated proteins from phagolysosomal degradation by macrophages. Chaudhuri G, et al. **J Biol Chem** 1989 May 5;264(13):7483–9
Identification of a cell surface–binding protein for the core protein of the basement membrane proteoglycan. Clément B, et al. **J Biol Chem** 1989 Jul 25;264(21):12467–71
Mechanism for selective secretion of a lysosomal protease by transformed mouse fibroblasts. Dong JM, et al. **J Biol Chem** 1989 May 5;264(13):7377–83
Identification of integrin–like matrix receptors with affinity for interstitial collagens. Gullberg D, et al. **J Biol Chem** 1989 Jul 25;264(21):12686–94
Association of the VLA alpha 6 subunit with a novel protein. A possible alternative to the common VLA beta 1 subunit on certain cell lines. Hemler ME, et al. **J Biol Chem** 1989 Apr 15;264(11):6529–35
Transepithelial transport of drugs by the multidrug transporter in cultured Madin–Darby canine kidney cell epithelia. Horio M, et al. **J Biol Chem** 1989 Sep 5; 264(25):14880–4
A new major transmembrane glycoprotein, gp155, in goat erythrocytes. Isolation and characterization of its association to cytoskeleton through binding with band 3–ankyrin complex. Inaba M, et al. **J Biol Chem** 1988 Nov 25;263(33):17763–71
Membrane integration and intracellular transport of the coronavirus glycoprotein E1, a class III membrane glycoprotein. Mayer T, et al. **J Biol Chem** 1988 Oct 15; 263(29):14956–63
Progesterone interacts with P-glycoprotein in multidrug-resistant cells and in the endometrium of gravid uterus. Yang CP, et al. **J Biol Chem** 1989 Jan 15; 264(2):782–8
Cytoplasmic orientation and two-domain structure of the multidrug transporter, P-glycoprotein, demonstrated with sequence-specific antibodies. Yoshimura A, et al. **J Biol Chem** 1989 Sep 25;264(27):16282–91
Interferon alters intracellular transport of vesicular stomatitis virus glycoprotein. Singh VK, et al. **J Biol Regul Homeost Agents** 1988 Apr–Jun;2(2):53–62
Reassociation of microvillar core proteins: making a microvillar core in vitro. Coluccio LM, et al. **J Cell Biol** 1989 Feb;108(2):495–502
Brefeldin A redistributes resident and itinerant Golgi proteins to the endoplasmic reticulum. Doms RW, et al. **J Cell Biol** 1989 Jul;109(1):61–72
Sorting of mannose 6–phosphate receptors and lysosomal membrane proteins in endocytic vesicles. Geuze HJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2491–501
Isolation of Chinese hamster ovary cell lines temperature conditional for the cell–surface expression of integral membrane glycoproteins. Hearing J, et al. **J Cell Biol** 1989 Feb;108(2):339–53
Interactions of misfolded influenza virus hemagglutinin with binding protein (BiP). Hurtley SM, et al. **J Cell Biol** 1989 Jun;108(6):2117–26
Regulation of desmosome assembly in epithelial ceils: kinetics of synthesis, transport, and stabilization of desmoglein I, a major protein of the membrane core domain. Pasdar M, et al. **J Cell Biol** 1989 Jul;109(1):163–77
Spatial segregation of the regulated and constitutive secretory pathways. Rivas RJ, et al. **J Cell Biol** 1989 Jul;109(1):51–60
Expression of normal and mutant avian integrin subunits in rodent cells. Solowska J, et al. **J Cell Biol** 1989 Aug; 109(2):853–61
A human serum mannose–binding protein inhibits in vitro infection by the human immunodeficiency virus. Ezekowitz RA, et al. **J Exp Med** 1989 Jan 1;169(1):185–96

Wall mannoproteins of the yeast and mycelial cells of Candida albicans: nature of the glycosidic bonds and polydispersity of their mannan moieties. Elorza MV, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2393–403

The multidrug transporter: rapid modulation of efflux activity monitored in single cells by the morphologic effects of vinblastine and daunomycin. Konen PL, et al. **J Histochem Cytochem** 1989 Jul;37(7):1141–5

Immunohistochemical localization in normal tissues of different epitopes in the multidrug transport protein P170: evidence for localization in brain capillaries and crossreactivity of one antibody with a muscle protein. Thiebaut F, et al. **J Histochem Cytochem** 1989 Feb; 37(2):159–64

A possible ligand of serum origin for the kidney autoantigen of Heymann nephritis. Kanalas JJ, et al. **J Immunol** 1988 Dec 15;141(12):4152–7

Activation- and phorbol ester-stimulated phosphorylation of a plasma membrane glycoprotein antigen expressed on mouse IL-3-dependent mast cells and serosal mast cells. Katz HR, et al. **J Immunol** 1989 Feb 1;142(3):919–26

A monoclonal antibody that inhibits secretion from rat basophilic leukemia cells and binds to a novel membrane component. Ortega Soto E, et al. **J Immunol** 1988 Dec 15;141(12):4324–32

Postnatal development and possible ligand function of the CNS-specific membrane glycoprotein CNSgp130. Flanagan BF, et al. **J Neurochem** 1989 May;52(5):1468–73

Phosphorylation of P400 protein by cyclic AMP-dependent protein kinase and Ca2+/calmodulin-dependent protein kinase II. Yamamoto H, et al. **J Neurochem** 1989 Sep; 53(3):917–23

Distribution of dystrophin, nebulin and Ricinus communis I (RCA-I)-binding glycoprotein in tissues of normal and mdx mice. Voit T, et al. **J Neurol Sci** 1989 Feb; 89(2–3):199–211

Endocytosis and intracellular occurrence of the variant surface glycoprotein in Trypanosoma congolense. Frevert U, et al. **J Ultrastruct Mol Struct Res** 1988 May; 99(2):137–49

Leukemogenic membrane glycoprotein encoded by Friend spleen focus-forming virus: transport to cell surfaces and shedding are controlled by disulfide-bonded dimerization and by cleavage of a hydrophobic membrane anchor. Gliniak BC, et al. **J Virol** 1989 Sep;63(9):3561–8

Translocation of rubella virus glycoprotein E1 into the endoplasmic reticulum. Hobman TC, et al. **J Virol** 1988 Nov;62(11):4259–64

Analysis of the relationship between cleavability of a paramyxovirus fusion protein and length of the connecting peptide. Paterson RG, et al. **J Virol** 1989 Mar; 63(3):1293–301

A single-amino-acid substitution eliminates the stringent carbohydrate requirement for intracellular transport of a viral glycoprotein. Pitta AM, et al. **J Virol** 1989 Sep; 63(9):3801–9

Retention of glomerular basement membrane-proteoglycans accompanying loss of anionic site staining in experimental diabetes. Templeton DM. **Lab Invest** 1989 Aug; 61(2):202–11

Levels of viral glycoprotein provide a dose-dependent measure of tumor cell inhibition. Ritzi EM, et al. **Life Sci** 1989;44(26):2041–50

Molecular interactions of Leishmania promastigote surface protease with human alpha 2-macroglobulin. Heumann D, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):67–72

Association of dystrophin and an integral membrane glycoprotein. Campbell KP, et al. **Nature** 1989 Mar 16; 338(6212):259–62

Forward transport of glycoproteins on leading lamellipodia in locomoting cells. Kucik DF, et al. **Nature** 1989 Jul 27; 340(6231):315–7

Nanometre-level analysis demonstrates that lipid flow does not drive membrane glycoprotein movements. Sheetz MP, et al. **Nature** 1989 Jul 27;340(6231):284–8

Laminin receptor on platelets is the integrin VLA-6. Sonnenberg A, et al. **Nature** 1988 Dec 1;336(6198):487–9

Exposure of fibrinogen-binding sites on stored platelets on stimulation by aggregating agents—an electron microscopic study. Kitajima H, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):93–101

Integrins isolated from Rous sarcoma virus-transformed chicken embryo fibroblasts. Tapley P, et al. **Oncogene** 1989 Mar;4(3):325–33

Ligand-induced association between the T-cell antigen receptor and two glycoproteins. Fraser JD, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7133–7

Rapid activation of the T-cell tyrosine protein kinase pp56lck by the CD45 phosphotyrosine phosphatase. Mustelin T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6302–6

Essential features of the P-glycoprotein pharmacophore as defined by a series of reserpine analogs that modulate multidrug resistance. Pearce HL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5128–32

Photoaffinity labeling of the multidrug-resistance-related P-glycoprotein with photoactive analogs of verapamil. Safa AR. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7187–91

Evidence for the loop model of signal-sequence insertion into the endoplasmic reticulum. Shaw AS, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7592–6

Site of covalent attachment of alpha-scorpion toxin derivatives in domain I of the sodium channel alpha subunit. Tejedor FJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8742–6

Constitutive endocytosis of HLA class I antigens requires a specific portion of the intracytoplasmic tail that shares structural features with other endocytosed molecules. Vega MA, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2688–92

Localization of an Arg-Gly-Asp recognition site within an integrin adhesion receptor. D'Souza SE, et al. **Science** 1988 Oct 7;242(4875):91–3

Constraint of the translational diffusion of a membrane glycoprotein by its external domains. Wier M, et al. **Science** 1988 Oct 21;242(4877):412–4

Interaction of thrombin-stimulated platelets with vitronectin (S-protein of complement) substrate: inhibition by a monoclonal antibody to glycoprotein IIb-IIIa complex. Thiagarajan P, et al. **Thromb Haemost** 1988 Dec 22; 60(3):514–7

Intracellular transport and processing of Sindbis virus glycoproteins. Knipfer ME, et al. **Virology** 1989 May; 170(1):117–22

Interaction of rotavirus cores with the nonstructural glycoprotein NS28. Meyer JC, et al. **Virology** 1989 Jul; 171(1):98–107

[Intermediate receptors] Inki P, et al. **Duodecim** 1988; 104(20):1597–604 (47 ref.) **(Fin)**

[Immunocytochemical studies of epithelial markers in pleural and peritoneal effusions as an adjunct to cytologic diagnosis] Lossnitzer A, et al. **Zentralbl Allg Pathol** 1988; 134(6):539–45 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Stimulation of fibroblast proliferation by thrombospondin. Phan SH, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):56–63

Egasyn affects the processing of beta-glucuronidase in mouse liver. Pfister K, et al. **Biochem J** 1988 Nov 1;255(3):825–32

Cytotoxic effectors in human peripheral blood mononuclear cells induced by a mannoprotein complex of Candida albicans: a comparison with interleukin 2-activated killer cells. Ausiello CM, et al. **Cell Immunol** 1989 Jul; 121(2):349–59

PHYSIOLOGY

In vivo effect of chronic ethanol abuse on membrane alpha 1-glycoprotein of lymphocytes and immune response to various stimulating agents. Stefanini GF, et al. **Alcoholism (N Y)** 1989 Jun;13(3):444–8

Expression of neural cell adhesion molecules in normal and pathologic tissues. Brackenbury R. **Ann N Y Acad Sci** 1988; 540:39–46 (56 ref.)

H2O2 activates CD11b/CD18-dependent cell adhesion. Skoglund G, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):443–9

Neural cell recognition molecule F11: membrane interaction by covalently attached phosphatidylinositol. Wolff JM, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):931–8

Developmental regulation of cell-surface glycoproteins in clonal cultures of human skeletal muscle satellite cells. Champaneria S, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2–3):128–36

Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Aroeti B, et al. **Biochemistry** 1988 Jul 26; 27(15):5654–61

The common acute lymphoblastic leukemia antigen (CD10)—emancipation from a functional enigma. LeBien TW, et al. **Blood** 1989 Feb 15;73(3):625–35 (148 ref.)

Transmembrane TGF-alpha precursors activate EGF/TGF-alpha receptors. Brachmann R, et al. **Cell** 1989 Feb 24;56(4):691–700

A novel vitronectin receptor integrin (alpha v beta x) is responsible for distinct adhesive properties of carcinoma cells. Cheresh DA, et al. **Cell** 1989 Apr 7;57(1):59–69

Identification of a murine Peyer's patch--specific lymphocyte homing receptor as an integrin molecule with an alpha chain homologous to human VLA-4 alpha. Holzmann B, et al. **Cell** 1989 Jan 13;56(1):37–46

The function of PS integrins during Drosophila embryogenesis. Leptin M, et al. **Cell** 1989 Feb 10; 56(3):401–8

Changes in integrin receptors on oncogenically transformed cells. Plantefaber LC, et al. **Cell** 1989 Jan 27;56(2):281–90

Interleukin-6 triggers the association of its receptor with a possible signal transducer, gp130. Taga T, et al. **Cell** 1989 Aug 11;58(3):573–81

The interaction of CD2 with its LFA-3 ligand expressed by autologous erythrocytes results in enhancement of B cell responses. Virella G, et al. **Cell Immunol** 1988 Oct 15;116(2):308–19

Use of a novel Chlamydomonas mutant to demonstrate that flagellar glycoprotein movements are necessary for the expression of gliding motility. Bloodgood RA, et al. **Cell Motil Cytoskeleton** 1989;13(1):1–8

Modulated adhesion: a proposal for the role of myelin-associated glycoprotein in myelin wrapping. Attia J, et al. **Clin Chem** 1989 May;35(5):717–20 (35 ref.)

Proteases released from Xenopus laevis eggs at activation and their role in envelope conversion. Lindsay LL, et al. **Dev Biol** 1989 Sep;135(1):202–11

Temporal and spatial expression of a position specific antigen, AV-1, in chick limb buds. Ohsugi K, et al. **Dev Biol** 1988 Dec;130(2):454–63

Developmentally regulated cell-cell adhesion in Dictyostelium purpureum is mediated by a glycoprotein synthesized in nonadhesive cells. Springer WR. **Dev Biol** 1989 Jun;133(2):447–55

Myoblast migration specifically inhibited in the chick embryo by grafted CSAT hybridoma cells secreting an anti-integrin antibody. Jaffredo T, et al. **Development** 1988 Jul; 103(3):431–46

Cell binding function of E-cadherin is regulated by the cytoplasmic domain. Nagafuchi A, et al. **EMBO J** 1988 Dec 1;7(12):3679–84

A monoclonal antibody to LFA-3, the CD2 ligand, specifically immobilizes major histocompatibility complex proteins. Bierer BE, et al. **Eur J Immunol** 1989 Apr; 19(4):661–5

Unusual expression of CD2 in sheep: implications for T cell interactions. Mackay CR, et al. **Eur J Immunol** 1988 Nov; 18(11):1681–8

Phagocytosis in Dictyostelium discoideum is inhibited by antibodies directed primarily against common carbohydrate epitopes of a major cell-surface plasma membrane glycoprotein. Chia CP, et al. **Exp Cell Res** 1989 Mar; 181(1):11–26

(Arg-Gly-Asp)n-albumin conjugates as a model substratum for integrin-mediated cell adhesion. Danilov YN, et al. **Exp Cell Res** 1989 May;182(1):186–96

Identification of plasma membrane glycoproteins involved in the contact-dependent inhibition of growth of diploid human fibroblasts. Renauer D, et al. **Exp Cell Res** 1989 Feb;180(2):504–14

Mechanism of fibronectin-mediated cell migration: dependence or independence of cell migration susceptibility on RGDS-directed receptor (integrin). Straus AH, et al. **Exp Cell Res** 1989 Jul;183(1):126–39

Structure and function of endothelial cell integrins. Giltay JC, et al. **Haemostasis** 1988;18(4–6):376–89 (90 ref.)

Integrin molecules involved in lymphocyte homing to Peyer's patches. Holzmann B, et al. **Immunol Rev** 1989 Apr; 108:45–61 (46 ref.)

CD11/CD18-independent neutrophil adherence to inducible endothelial-leucocyte adhesion molecules (E-LAM) in vitro. Dobrina A, et al. **Immunology** 1989 Aug;67(4):502–8

Integrin-receptor-mediated differentiation and growth inhibition are enhanced by transforming growth factor-beta in colorectal tumour cells grown in collagen gel. Pignatelli M, et al. **Int J Cancer** 1989 Sep 15;44(3):518–23

Cell surface glycoproteins in embryonic development. Bourrillon R, et al. **Int Rev Cytol** 1989;116:257–338 (529 ref.)

The function of Gp170, the multidrug resistance gene product, in rat liver canalicular membrane vesicles. Kamimoto Y, et al. **J Biol Chem** 1989 Jul 15; 264(20):11693–8

Dissecting tumor cell invasion: epithelial cells acquire invasive properties after the loss of uvomorulin-mediated cell-cell adhesion. Behrens J, et al. **J Cell Biol** 1989 Jun; 108(6):2435–47

Characterization of a human homologue of the murine peripheral lymph node homing receptor. Bowen BR, et al. **J Cell Biol** 1989 Jul;109(1):421–7

Expression of cell adhesion molecule E-cadherin in Xenopus embryos begins at gastrulation and predominates in the ectoderm. Choi YS, et al. **J Cell Biol** 1989 Jun; 108(6):2449–58

Phorbol ester modulation of integrin-mediated cell adhesion: a postreceptor event. Danilov YN, et al. **J Cell Biol** 1989 May;108(5):1925–33

Addition of carbohydrate side chains at novel sites on influenza virus hemagglutinin can modulate the folding, transport, and activity of the molecule. Gallagher P, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2059–73

A novel member of the integrin receptor family mediates Arg-Gly-Asp-stimulated neutrophil phagocytosis. Gresham HD, et al. **J Cell Biol** 1989 May;108(5):1935–43

The role of the cell adhesion molecule uvomorulin in the formation and maintenance of the epithelial junctional complex. Gumbiner B, et al. **J Cell Biol** 1988 Oct; 107(4):1575–87

Integrin heterodimer and receptor complexity in avian and mammalian cells. Hynes RO, et al. **J Cell Biol** 1989 Jul; 109(1):409–20

Cell attachment to thrombospondin: the role of ARG-GLY-ASP, calcium, and integrin receptors. Lawler J, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2351–61

Thrombospondin modulates focal adhesions in endothelial cells. Murphy-Ullrich JE, et al. **J Cell Biol** 1989 Sep; 109(3):1309–19

Cytokine-induced respiratory burst of human neutrophils: dependence on extracellular matrix proteins and CD11/CD18 integrins. Nathan C, et al. **J Cell Biol** 1989 Sep;109(3):1341–9

The polarized distribution of an apical cell surface glycoprotein is maintained by interactions with the cytoskeleton of Madin-Darby canine kidney cells. Ojakian GK, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2377–87

Sequence of contactin, a 130-kD glycoprotein concentrated in areas of interneuronal contact, defines a new member of the immunoglobulin supergene family in the nervous

system. Ranscht B. **J Cell Biol** 1988 Oct;107(4):1561–73
Involvement of LFA–1 in lymphoma invasion and metastasis demonstrated with LFA–1–deficient mutants. Roossien FF, et al. **J Cell Biol** 1989 May;108(5):1979–85
Monoclonal antibodies to a membrane glycoprotein induce the phosphorylation of histone H1 in sea urchin spermatozoa. Vacquier VD, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 1):2021–7
Membrane–cytoskeleton interactions in the flagellum: a 240,000 Mr surface–exposed glycoprotein is tightly associated with the axoneme in Chlamydomonas moewusii. Reinhart FD, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):521–31
Integrin, a transmembrane glycoprotein complex mediating cell–substratum adhesion. Buck CA, et al.
J Cell Sci Suppl 1987;8:231–50 (56 ref.)
Glycoprotein IV mediates thrombospondin–dependent platelet–monocyte and platelet–U937 cell adhesion. Silverstein RL, et al. **J Clin Invest** 1989 Aug;84(2):546–52
Synergistic T cell activation via the physiological ligands for CD2 and the T cell receptor. Bierer BE, et al.
J Exp Med 1988 Sep 1;168(3):1145–56
Correlation of CD2 binding and functional properties of multimeric and monomeric lymphocyte function–associated antigen 3. Dustin ML, et al.
J Exp Med 1989 Feb 1;169(2):503–17
The CD2 ligand LFA–3 activates T cells but depends on the expression and function of the antigen receptor. Bockenstedt LK, et al. **J Immunol** 1988 Sep 15; 141(6):1904–11
Role of the LFA3–CD2 interaction in human specific B cell differentiation. Emilie D, et al. **J Immunol** 1988 Sep 15; 141(6):1912–8
A 19–kDa human erythrocyte molecule H19 is involved in rosettes, present on nucleated cells, and required for T cell activation. Comparison of the roles of H19 and LFA–3 molecules in T cell activation. Groux H, et al.
J Immunol 1989 May 1;142(9):3013–20
Endothelial–leukocyte adhesion molecule–1–dependent and leukocyte (CD11/CD18)–dependent mechanisms contribute to polymorphonuclear leukocyte adhesion to cytokine–activated human vascular endothelium. Luscinskas FW, et al. **J Immunol** 1989 Apr 1;142(7):2257–63
Multidrug resistance: P–glycoprotein and its allies—the elusive foes. Chabner BA, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):910–3
Multidrug resistance: molecular biology and clinical relevance. Rothenberg M, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):907–10
Is part of the molecular basis of the perineurial barrier function the lack of endogenous carbohydrate–binding proteins? Bardosi A, et al. **J Neurosci Res** 1989 Jan; 22(1):65–73
Growth cone migration across extracellular matrix components depends on integrin, but migration across glioma cells does not. Letourneau PC, et al.
J Neurosci Res 1988 Oct–Dec;21(2–4):286–97
Transport proteins. Export–import family expands [news] Higgins C. **Nature** 1989 Aug 3;340(6232):342
CD2–mediated adhesion facilitates T lymphocyte antigen recognition function. Moingeon P, et al. **Nature** 1989 May 25;339(6222):312–4
Drug resistant gene, resistant protein and their implication for therapy. Tsuruo T. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1327–31
Role of cell surface glycoproteins in the early development of the mouse embryo. Iwakura Y, et al.
Prog Clin Biol Res 1989;294:199–210
Multidrug resistance in cancer. Kartner N, et al. **Sci Am** 1989 Mar;260(3):44–51 (4 ref.)
Growth cone guidance in insects: fasciclin II is a member of the immunoglobulin superfamily. Harrelson AL, et al. **Science** 1988 Nov 4;242(4879):700–8
P–glycoprotein and multidrug resistance in cancer chemotherapy. Deuchars KL, et al. **Semin Oncol** 1989 Apr; 16(2):156–65 (83 ref.)
Leukocyte adhesion molecules involved in inflammation. Dunn SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):31–4 (19 ref.)
N–cadherin: a cell adhesion molecule in neural development [news] Rutishauser U. **Trends Neurosci** 1989 Aug; 12(8):275–6
Glycosylation is not required for the fusion activity of the G protein of vesicular stomatitis virus in insect cells. Bailey MJ, et al. **Virology** 1989 Apr;169(2):323–31
Arginine or lysine in position 333 of ERA and CVS glycoprotein is necessary for rabies virulence in adult mice. Tuffereau C, et al. **Virology** 1989 Sep;172(1):206–12
[Therapeutic approaches for multidrug resistance] Tsuruo T. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2848–52 (Eng. Abstr.) **(Jpn)**
[Functions and structure of complement inactivators in membrane proteins. 3). Membrane cofactor protein] Seya T. **Nippon Rinsho** 1988 Sep;46(9):1933–7 **(Jpn)**
[Accessory molecules of the intercellular interaction of T–lymphocytes as physiologically active peptides of the cell membrane] Leskov VP, et al.
Vestn Akad Med Nauk SSSR 1989;(4):83–9 (65 ref.) **(Rus)**

SECRETION

The calcium–binding protein SPARC is secreted by Leydig and Sertoli cells of the adult mouse testis. Vernon RB, et al. **Biol Reprod** 1989 Jun;40(6):1329–40
The influence of pH on the vesicular traffic to the surface of the polarized epithelial cell, MDCK. Parczyk K, et al. **Eur J Cell Biol** 1989 Apr;48(2):353–9
Secretory component in differentiating normal epithelium, benign lesions and malignancy in the human breast as monitored by monoclonal antibodies. Bártek J, et al.
Histochemistry 1989;91(3):235–44

THERAPEUTIC USE

Inhibition of the metastasis of murine malignant melanoma by synthetic polymeric peptides containing core sequences of cell–adhesive molecules. Saiki I, et al. **Cancer Res** 1989 Jul 15;49(14):3815–22

ULTRASTRUCTURE

Principles of organization in eubacterial and archaebacterial surface proteins. Baumeister W, et al. **Can J Microbiol** 1989 Jan;35(1):215–27 (58 ref.)
Disulfide–linked receptors for mitogenic lectins on piglet lymphocytes. Chilson OP, et al. **Eur J Immunol** 1988 Oct; 18(10):1581–6
Primary structure analysis of an integral membrane glycoprotein of the nuclear pore. Wozniak RW, et al.
J Cell Biol 1989 Jun;108(6):2083–92
Visualization of glycoproteins after tunicamycin and monensin treatment of herpes simplex virus infected cells. Lopez–Iglesias C, et al. **J Ultrastruct Mol Struct Res** 1988 Oct;101(1):75–91
Studies with crosslinking reagents on the oligomeric structure of the env glycoprotein of HIV. Schawaller M, et al.
Virology 1989 Sep;172(1):367–9

MEMBRANE LIPIDS

Biotechnological applications of lipid microstructures. Based on the proceedings of the Workshop on Technological Applications of Phospholipid Bilayers, Vesicles, and Thin Films, January 5–9, 1986, Tenerife, Canary Islands; and the Workshop on Biotechnological Applications of Membrane Studies, October 18–22, 1987, San Sebastian, Spain. **Adv Exp Med Biol** 1988;238:1–397
Biomembranes: structure of biomembranes and their models. Chapman D. **Adv Exp Med Biol** 1988;238:13–20 (56 ref.)
Time resolved X–ray analysis of E. coli lipid and membrane structural transitions. Ranck JL, et al.
Adv Exp Med Biol 1988;238:59–69
Immobilized artificial membrane chromatography: supports composed of membrane lipids. Pidgeon C, et al.
Anal Biochem 1989 Jan;176(1):36–47
Free radical–mediated degradation of proteins: the protective and deleterious effects of membranes. Hunt JV, et al.
Biochem Biophys Res Commun 1989 Aug 15;162(3):1076–84
Effect of dolichyl monophosphate on the permeability properties of lipid membranes [published erratum appears in Biochim Biophys Acta 1989 Jan 30;978(2):349] Alonso–Romanowski S, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):389–96
Interaction of electrically charged drug molecules with phospholipid membranes. Barthel D, et al.
Biochim Biophys Acta 1988 Nov 22;945(2):361–6
Surface potentials and electric dipole moments of ganglioside and phospholipid bilayers: contribution of the polar headgroup at the water/lipid interface. Beitinger H, et al.
Biochim Biophys Acta 1989 Sep 18;984(3):293–300
Effects of free fatty acids and transition temperature on the stability of dry liposomes. Crowe JH, et al.
Biochim Biophys Acta 1989 Feb 13;979(1):7–10
Association of synthetic model peptides with phospholipid vesicles induced by a membrane potential. de Kroon AI, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):371–3
Effects of non–electrolyte molecules with anesthetic activity on the physical properties of DMPC multilamellar liposomes. Hitzemann RJ. **Biochim Biophys Acta** 1989 Aug 7;983(2):205–11
Interactions of the lipopeptide antifungal iturin A with lipids in mixed monolayers. Maget–Dana R, et al.
Biochim Biophys Acta 1989 Jun 6;981(2):309–14
Thermodynamic–geometric correlations for the morphology of self–assembled structures of glycosphingolipids and their mixtures with dipalmitoylphosphatidylcholine. Maggio B, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):145–60
Effect of lipid–protein interaction on the color of bacteriorhodopsin. Pande C, et al.
Biochim Biophys Acta 1989 Feb 28;973(2):257–62
Conductance transition induced by an electric field in lipid bilayers. Robello M, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):173–6
A synthetic peptide corresponding to the hydrophobic amino terminal region of pardaxin can perturb model membranes of phosphatidyl choline and serine. Saberwal G, et al.
Biochim Biophys Acta 1989 Sep 18;984(3):360–4
Cholesterol affects divalent cation–induced fusion and isothermal phase transitions of phospholipid membranes. Shavnin SA, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):405–16
A fluorescent sterol probe study of cholesterol/phospholipid membranes. Smutzer G. **Biochim Biophys Acta** 1988 Dec 22;946(2):270–80
Changes in chemical structure and function in Escherichia coli cell membranes caused by freeze–thawing. I. Change of lipid state in bilayer vesicles and in the original membrane fragments depending on rate of freezing. Souzu H. **Biochim Biophys Acta** 1989 Jan 16;978(1):105–11
3–[p–(6–phenyl)–1,3,5–hexatrienyl]phenylpropionic acid (PA–DPH): characterization as a fluorescent membrane probe and binding to fatty acid binding proteins. Trotter PJ, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):131–9
Entrapment of lipid vesicles and membrane protein–lipid vesicles in gel bead pores. Wallstén M, et al.
Biochim Biophys Acta 1989 Jun 26;982(1):47–52
Lipid phase transitions in membranes involving intrinsic periodic curvature. Larsson K. **Chem Phys Lipids** 1988 Nov;49(1–2):65–7
Can hydration forces induce lateral phase separations in lamellar phases? Bryant G, et al. **Eur Biophys J** 1989; 16(6):369–74
Circular dichroism study of membrane dynamics focused on effect of monosialogangliosides. Nishiya T, et al.
J Biochem (Tokyo) 1988 Jul;104(1):62–5
Reconstitution of the lipid matrix of the outer membrane of gram–negative bacteria as asymmetric planar bilayer. Seydel U, et al. **J Membr Biol** 1989 Jul;109(2):95–103
Order and viscosity of membranes: analysis by time–resolved fluorescence depolarization. Heyn MP.
Methods Enzymol 1989;172:462–71
Sensitive protein assay in presence of high levels of lipid. Kaplan RS, et al. **Methods Enzymol** 1989;172:393–9
[Peroxidation chain reactions of lipid radicals in membrane injuries] Terao J. **Nippon Rinsho** 1988 Oct;46(10):2149–54 **(Jpn)**
[Biochemistry of the physiopathologic and clinical aspects of free radicals in radiation injuries] Yukawa O, et al.
Nippon Rinsho 1988 Oct;46(10):2262–8 **(Jpn)**
[Computer analysis of the spatial structure of the amphotericin channel] Khutorskii VE, et al. **Bioftizika** 1988 Sep–Oct;33(5):794–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Atherosclerosis, endothelium and plasma membrane lipid polarity. van Meer G. **Agents Actions Suppl** 1988;26:15–25 (39 ref.)
Role of BBM lipid composition and fluidity in impaired renal Pi transport in aged rat. Levi M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F85–94
Development of rat jejunum: lipid permeability, physical properties, and chemical composition. Meddings JB, et al.
Am J Physiol 1989 May;256(5 Pt 1):G931–40
Ontogeny of basolateral membrane lipid composition and fluidity in small intestine. Schwarz SM, et al.
Am J Physiol 1989 Jul;257(1 Pt 1):G138–44
Analysis of membrane lipids by 500 MHz 1H NMR. Sparling ML, et al. **Anal Biochem** 1989 Apr;178(1):67–76
Fusion of phospholipid vesicles mediated by cytochrome c. Lee S, et al. **Arch Biochem Biophys** 1989 May 15; 271(1):188–99
Nile red simultaneous staining of intracellular lipids and membrane network in human muscle cultures. Santilli I, et al. **Basic Appl Histochem** 1989;33(1):49–52
Di–O–alkylglycerol, mono–O–alkylglycerol and ceramide inositol phosphates of Leishmania mexicana mexicana promastigotes. Singh BN, et al.
Biochem Biophys Res Commun 1988 Dec 30;157(3):1239–46
Alcohol abuse increases the lipid structural order in human erythrocyte membranes. A steady–state and time–resolved anisotropy study. Beaugé F, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3823–8
The use of liposomes in the search for an understanding of the significance of membrane lipid diversity. de Gier J.
Biochem Soc Trans 1988 Dec;16(6):912–4
Transverse and lateral distribution of phospholipids and glycolipids in the membrane of the bacterium Micrococcus luteus. de Bony J, et al. **Biochemistry** 1989 May 2; 28(9):3728–37
Rotational diffusion of a steroid molecule in phosphatidylcholine membranes: effects of alkyl chain length, unsaturation, and cholesterol as studied by a spin–label method. Kusumi A, et al. **Biochemistry** 1988 Jun 14;27(12):4407–15
Human prostasome membranes exhibit very high cholesterol/phospholipid ratios yielding high molecular ordering. Arvidson G, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):167–73
Permeability studies of lipid vesicles from alkalophilic Bacillus firmus showing opposing effects of membrane isoprenoid and diacylglycerol fractions and suggesting a possible basis for obligate alkalophily. Clejan S, et al.
Biochim Biophys Acta 1988 Dec 8;946(1):40–8
Co–ordinate control of CDP–choline and phosphatidylethanolamine methyltransferase pathways for phosphatidylcholine biosynthesis occurs in response to change in diet fat. Hargreaves KM, et al.
Biochim Biophys Acta 1989 Feb 20;1001(3):262–7
Modelling the phase equilibria in two–component membranes of phospholipids with different acyl–chain lengths. Ipsen JH, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):121–34
Endosomes differ from plasma membranes in the phospholipid molecular species composition. Urade R, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):151–63
A 2H–NMR study on the glycerol backbone of phospholipids extracted from Escherichia coli grown under high osmotic pressure: evidence for multiconformations of phosphatidylethanolamine. Yoshikawa W, et al.

Biochim Biophys Acta 1988 Oct 20;944(3):321–8
Heterogeneous distribution of phospholipids in membranes along the secretory pathway in pancreatic B-cells. Coulombe PA, et al. **Biol Cell** 1989;65(1):83–6
The effect of thyroid hormones on the lipid composition of rat plasma and erythrocyte membranes. Digiorgio VM, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):979–84
Modification of electrocyte membrane lipid composition induced by denervation. Quintana EG, et al. **Braz J Med Biol Res** 1988;21(6):1163–71 (26 ref.)
X-ray diffraction studies of lipid phase transitions in hydrated mixtures of cholesterol and diacylphosphatidylcholines and their relevance to the structure of biological membranes. Finean JB. **Chem Phys Lipids** 1989 Mar;49(4):265–9
Interaction of surfactants with bilayer of negatively charged lipid: effect on gel–to–liquid–crystalline phase transition of dilauroylphosphatidic acid vesicle membrane. Inoue T, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):189–96
Effect of fish oil supplementation on erythrocyte lipid pattern, malondialdehyde production and glutathione–peroxidase activity in psoriasis. Corrocher R, et al. **Clin Chim Acta** 1989 Feb 15;179(2):121–31
Increase of erythrocyte resistance to hemolysis and modification of membrane lipids induced by hemodialysis. Peuchant E, et al. **Clin Chim Acta** 1988 Dec 30; 178(3):271–82
The influence of membrane lipid composition and physical properties of membrane structure and function in Acholeplasma laidlawii. McElhaney RN. **Crit Rev Microbiol** 1989;17(1):1–32 (65 ref.)
Lipid phase transitions measured in intact cells with Fourier transform infrared spectroscopy. Crowe JH, et al. **Cryobiology** 1989 Feb;26(1):76–84
Oxidation of glycolipids in liposomes by galactose oxidase. Lampio A, et al. **Eur J Biochem** 1988 Dec 1;178(1):87–91
The rotational diffusion of chloroplast phosphate translocator and of lipid molecules in bilayer membranes. Wagner R, et al. **Eur J Biochem** 1989 Jun 1;182(1):165–73
Characterization of the cross–reacting determinant (CRD) of the glycosyl–phosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Zamze SE, et al. **Eur J Biochem** 1988 Oct 1;176(3):527–34
Cyclic changes in fluorescence polarization of a membrane probe during the cell cycle of an erythroid precursor cell line. Muller CP. **Exp Hematol** 1989 Jan;17(1):1–5
Lipid changes in red cell membrane in leukaemia. Suhail M, et al. **Indian J Med Res** 1988 Oct;88:353–5
Plasma membrane lipid composition of vinblastine sensitive and resistant human leukaemic lymphoblasts. May GL, et al. **Int J Cancer** 1988 Nov 15;42(5):728–33
Membrane lipids of B16 melanoma cells and heat–resistant variants. Anderson RL, et al. **Int J Radiat Biol** 1988 Nov; 54(5):813–23
A comparison of membrane lipid content of normal and carrier–erythrocytes from cattle. DeLoach JR, et al. **Ital J Biochem** 1988 Nov–Dec;37(6):386–91
Fatty acid composition of erythrocyte and vesicle total lipids during storage of human erythrocytes in protein–free media and in citrate–phosphate–dextrose. Pessina GP, et al. **Ital J Biochem** 1988 Sep–Oct;37(5):293–301
Plasma membranes contain half the phospholipid and 90% of the cholesterol and sphingomyelin in cultured human fibroblasts. Lange Y, et al. **J Biol Chem** 1989 Mar 5; 264(7):3786–93
Lipid analysis of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase. Palmitoylation of inositol results in resistance to phosphatidylinositol–specific phospholipase C. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18766–75
Structural characterization of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase by fast atom bombardment mass spectrometry. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18776–84
Plasma membrane lipid organization and the adherence of differentiating lymphocytes to macrophages. Del Buono BJ, et al. **J Cell Physiol** 1989 Jan;138(1):61–9
Highly sensitive determination and characterization of intact cellular ester–linked phospholipids using liquid chromatography–plasma spray mass spectrometry. Odham G, et al. **J Chromatogr** 1988 Dec 29;434(1):31–41
Merocyanine 540 as a flow cytometric probe of membrane lipid organization in leukocytes. McEvoy L, et al. **J Leukoc Biol** 1988 Nov;44(5):337–44
Reversible alterations in fatty acid composition of heart muscle membrane phospholipids induced by epinephrine in rats fed different fats. Benediktsdottir VE, et al. **J Lipid Res** 1988 Jun;29(6):765–72
Modification of CaCo–2 cell membrane fatty acid composition by eicosapentaenoic acid and palmitic acid: effect on cholesterol metabolism. Murthy S, et al. **J Lipid Res** 1988 Jun;29(6):773–80
High performance thin–layer chromatography and densitometry of synaptic plasma membrane lipids. Wood WG, et al. **J Lipid Res** 1989 May;30(5):775–9
STM imaging of molecular collagen and phospholipid membranes. Voelker MA, et al. **J Microsc** 1988 Nov;152 (Pt 2):557–66
Ca2+–Mg2+ ATPase of mouse cardiac sarcoplasmic reticulum is affected by membrane n–6 and n–3 polyunsaturated fatty acid content. Swanson JE, et al. **J Nutr** 1989 Mar;119(3):364–72
Dietary fat ratios and liver plasma membrane lipid composition. Hamm MW, et al. **Lipids** 1988 Sep; 23(9):829–33
Cell membrane localization of long chain C24–C30 fatty acids in two marine demosponges. Lawson MP, et al. **Lipids** 1988 Aug;23(8):741–9
Cell membrane localization of sterols with conventional and unusual side chains in two marine demosponges. Lawson MP, et al. **Lipids** 1988 Aug;23(8):750–4
Age–related changes in respiration coupled to phosphorylation. I. Hepatic mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):263–77
Age–related changes in respiration coupled to phosphorylation. II. Cardiac mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):279–90
Cerebral microvascular and parenchymal phospholipid composition in the mouse. Williams WM, et al. **Neurochem Res** 1988 Aug;13(8):743–7
Abnormality of odd–numbered long–chain fatty acids in erythrocyte membrane lipids from patients with disorders of propionate metabolism. Wendel U. **Pediatr Res** 1989 Feb; 25(2):147–50
Studies of lipid fluctuations using polarized fluorescence spectroscopy. Davenport L, et al. **Prog Clin Biol Res** 1989; 292:97–106 (33 ref.)
Deuterium NMR as a monitor of organization and dynamics at the surface of membranes: the glycolipids. Smith IC, et al. **Prog Clin Biol Res** 1989;292:13–22 (10 ref.)
The lipids of archaebacteria. De Rosa M, et al. **Prog Lipid Res** 1988;27(3):153–75 (87 ref.)
Fluorescence studies of membrane dynamics and heterogeneity. Davenport L, et al. **Subcell Biochem** 1989; 14:145–88 (231 ref.)
Membrane lipid phase behavior and lipid–protein interactions. Quinn PJ. **Subcell Biochem** 1989;14:25–95 (252 ref.)
[Presence of phospholipid material in the eustachian tube epithelium of rabbits] Benazzo M, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:13–20 (Eng. Abstr.) **(Ita)**
[Surfactant in the upper airways: a preliminary plan of study] Passàli D, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:61–5 (Eng. Abstr.) **(Ita)**
[Analysis of plant membrane lipids] Sato N, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):163–70 (33 ref.) **(Jpn)**
[Changes in the physical properties of the lipid phase of neutrophils during their activation] Akopov SE, et al. **Biofizika** 1989 Mar–Apr;34(2):321–2 (Eng. Abstr.) **(Rus)**
[ESR–spectroscopy of cytochrome P-450 LM2 in the soluble and membrane–bound state] Uvarov VIu, et al. **Biofizika** 1988 Jul–Aug;33(4):719–20 (Eng. Abstr.) **(Rus)**
[Translocation of ribonuclease through the membrane of liposomes of various lipid composition] Ianopol'skaia ND, et al. **Biokhimiia** 1988 May;53(5):781–5 (Eng. Abstr.) **(Rus)**
[Effects of K+–depolarization on the physical state of membrane lipids in brain synaptosomes of the rat] Timofeev AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):24–7 (Eng. Abstr.) **(Rus)**
[Effect of estrogens on the lipid composition of the plasma membranes of the uterine cells in ovariectomized rats] Mineeva EN. **Farmakol Toksikol** 1988 Nov–Dec;51(6):51–2 (Eng. Abstr.) **(Rus)**
[Lipid composition of the erythrocyte membranes in rheumatoid arthritis] Noskov SM, et al. **Lab Delo** 1988; (5):73–4 **(Rus)**
[The spatial interrelationships between influenza virus hemagglutinin and the lipid phase in the liposomal membrane] Guliako AA, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):145–9 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Methionine as methyl–group donor in the synthesis of Mycobacterium avium envelope lipids, and its inhibition by DL–ethionine, D–norleucine and DL–norleucine. David HL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:77–80
Biosyntheses of galactosyl lipids and polysaccharide in Streptococcus mutans. Chiu TH. **Biochim Biophys Acta** 1988 Nov 25;963(2):359–66
Ganglioside GM2 expression on human melanoma cells correlates with sensitivity to lymphokine–activated killer cells. Hoon DS, et al. **Int J Cancer** 1989 May 15; 43(5):857–62
Mutation of Bacillus firmus OF4 to duramycin resistance results in substantial replacement of membrane lipid phosphatidylethanolamine by its plasmalogen form. Clejan S, et al. **J Bacteriol** 1989 Mar;171(3):1744–6
Effect of chlorpromazine associated with liposomes on the biosynthesis of acidic lipids in subcellular membranes. Stuhne–Sekalec L, et al. **J Microencapsul** 1986 Jan–Mar; 3(1):13–24
Sterol control of phospholipid biosynthesis in yeast. Bloch K. **Prog Clin Biol Res** 1988;282:3–9 (18 ref.)
[Inhibition of ischemic brain cell death by cell membrane lipid synthesis enhancers] Kogure K, et al. **Nippon Rinsho** 1988 Dec;46(12):2769–77 (23 ref.) **(Jpn)**

BLOOD

Changes in platelet membrane fatty acids after myocardial infarction. Maidment CG, et al. **Atherosclerosis** 1988 Nov; 74(1–2):9–14
Fatty acid composition of lipids which copurify with band 3. Maneri LR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1012–9
Modulation of inositol phospholipid metabolism by polyamines. Smith CD, et al. **Biochem J** 1988 Nov 15; 256(1):125–30
Effect of erythropoietin on membrane lipid peroxidation, superoxide dismutase, catalase, and glutathione peroxidase of rat RBC. Chakraborty M, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):8–18
The accumulation of malonyldialdehyde, an end product of membrane lipid peroxidation, can cause potassium leak in normal and sickle red blood cells. Jain SK, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):60–5
Exposure of endogenous phosphatidylserine at the outer surface of stimulated platelets is reversed by restoration of aminophospholipid translocase activity. Bevers EM, et al. **Biochemistry** 1989 Mar 21;28(6):2382–7
Asymmetric distribution of phospholipids in spectrin–poor erythrocyte vesicles. Calvez JY, et al. **Biochemistry** 1988 Jul 26;27(15):5666–70
Relationship between the transverse distribution of phospholipids in plasma membrane and shape change of human platelets. Sune A, et al. **Biochemistry** 1988 Sep 6; 27(18):6794–800
Evidence for bidirectional transverse diffusion of spin–labeled phospholipids in the plasma membrane of guinea pig blood cells. Sune A, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):315–27
Erythrocyte membrane stearic and oleic acid ratios in breast cancer. Thomas BS, et al. **Br J Surg** 1988 Nov; 75(11):1078–9
Insulin binding to erythrocytes and fatty acid composition of erythrocyte membrane phospholipids in healthy men. Pelikánová T, et al. **Clin Chim Acta** 1989 Feb 15; 179(2):197–200
A pitfall in the analysis of the fatty acid composition of plasma and erythrocyte membrane lipids [letter] Popp–Snijders C. **Clin Chim Acta** 1988 Aug 31;176(2):227–8
Effect of high/low dietary linoleic acid levels on the function and fatty acid composition of T–lymphocytes of normal and diabetic rats. Singh B, et al. **Diabetes Res** 1988 Jul; 8(3):129–34
Linoleic acid supplementation, membrane lipids and leucocyte sodium transport in normotensive humans. Robertson DA, et al. **J Hum Hypertens** 1989 Apr; 3(2):117–23
Deterioration of membrane morphology, phospholipids, and cytoskeletal protein in rat erythrocytes exposed to tert–butyl hydroperoxide: protection by exogenous glutathione fails in selenium deficiency. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):491–506
Boreal freshwater fish diet modifies the plasma lipids and prostanoids and membrane fatty acids in man. Agren JJ, et al. **Lipids** 1988 Oct;23(10):924–9
Dietary fat and hormonal effects on erythrocyte membrane fluidity and lipid composition in adult women. Berlin E, et al. **Metabolism** 1989 Aug;38(8):790–6
Phospholipid and fatty acid composition of erythrocytes in type I and type II diabetes. Freyburger G, et al. **Metabolism** 1989 Jul;38(7):673–8
Reconstitution of red blood cells: cytoskeletons coated with phospholipid membrane. Jung CY, et al. **Methods Enzymol** 1989;173:392–401
Transbilayer mobility of phosphatidylcholine in the red blood cell. Op den Kamp JA, et al. **Methods Enzymol** 1989; 173:223–31
Membrane lipid fluidity and filterability of red blood cells from adults and newborns. Crespo LM, et al. **Pediatr Res** 1988 Oct;24(4):433–7
Reactivity of photochemically–generated lipid hydroperoxides in cell membranes with glutathione peroxidase. Thomas JP, et al. **Photochem Photobiol** 1989 Feb;49(2):153–6
Regulation and function of transbilayer movement of phosphatidylserine in activated blood platelets and sickle cells. Zwaal RF, et al. **Prog Clin Biol Res** 1988;282:181–92 (21 ref.)
[Effect of vitamin E on the lipid composition of the erythrocytes of mice and of the malarial parasite Plasmodium berghei] Chuenkova MV, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):13–5 (Eng. Abstr.) **(Rus)**
[Characteristics of the lipid composition of erythrocyte membranes in patients with diabetes mellitus] Maksimova OV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr; 35(2):14–8 (Eng. Abstr.) **(Rus)**
[Lipids of blood and erythrocyte membranes in healthy persons and in patients with diffuse toxic goiter, residing in the European North of the USSR] Shatsova EN, et al. **Ter Arkh** 1988;60(9):47–50 (Eng. Abstr.) **(Rus)**
[Atopic bronchial asthma as pathology of the membrane–receptor complex] Zhikharev SS, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):9–14 (Eng. Abstr.) **(Rus)**
[Characteristics of phospholipid–glycerol metabolism in erythrocyte membranes during acoustic stress] Melkonian MM, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):68–71 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Biological activities of monoclonal antibodies to Mycoplasma pneumoniae membrane glycolipids. Chandler DK, et al. **Infect Immun** 1989 Apr;57(4):1131–6

A human immunoglobulin G receptor exists in both polypeptide–anchored and phosphatidylinositol–glycan–anchored forms. Scallon BJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5079–83

[The surface glycolipid antigen specific for the internal cell mass of the mouse blastocyst and of the stem cells of murine teratocarcinoma F9] Anfimova ML, et al. **Ontogenez** 1989 Mar–Apr;20(2):158–63 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Physical properties of membrane lipids isolated from a thermophilic eubacterium (Thermus sp.). Prado A, et al. **Adv Exp Med Biol** 1988;238:47–58

High–performance liquid chromatography of membrane lipids: glycosphingolipids and phospholipids. McCluer RH, et al. **Methods Enzymol** 1989;172:538–75

[Possible approaches to creating phospholipid preparations—acceptors of membrane cholesterol] Khalilov EM, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):451–3 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of chronic ethanol exposure on fatty acids of rat brain glycerophospholipids. Gustavsson L, et al. **Alcohol** 1989 Mar–Apr;6(2):139–46

Effects of ethanol on arachidonic acid incorporation into lipids of a plasma membrane fraction isolated from brain cerebral cortex. Lin TN, et al. **Alcoholism (NY)** 1988 Dec; 12(6):795–800

Time course of thermal adaptation in plasma membranes of trout kidney. II. Molecular species composition. Hazel JR, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R628–34

Mechanism of membrane phospholipid degradation in ischemic–reperfused rat hearts. Otani H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H252–8

Modulation of rat testes lipid composition by hormones: effect of PRL and hCG. Sebokova E, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E442–8

Lipid alterations and cellular properties of sickle red cells. Lubin B, et al. **Ann N Y Acad Sci** 1989;565:86–95 (37 ref.)

Metals and membrane lipid damage by oxy–radicals. Minotti G. **Ann N Y Acad Sci** 1988;551:34–44; discussion 45–6

Influence of unsaturated fatty acid membrane component on sensitivity of an Escherichia coli fatty acid auxotroph to conditions of nutrient depletion. Massa EM, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2107–11

Effect of oxidative stress on membrane phospholipid and protein organization in human erythrocytes. Arduini A, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):112–20

Ethanol causes decreased partitioning into biological membranes without changes in lipid order. Nie Y, et al. **Arch Biochem Biophys** 1989 Jan;268(1):349–59

Decreased activity of the pyruvate translocator and changes in the lipid composition in heart mitochondria from hypothyroid rats. Paradies G, et al. **Arch Biochem Biophys** 1989 Mar;269(2):595–602

Nuclear membrane lipid peroxidation products bind to nuclear macromolecules. Vaca CE, et al. **Arch Biochem Biophys** 1989 Mar;269(2):548–54

General kinetic model for protein–mediated phospholipid transfer between membranes. Yoshimura T, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):299–312

In–vivo incorporation of omega 3 fatty acids into membrane lipids of rat salivary glands and changes in adenylate–cyclase activity. Alam SQ, et al. **Arch Oral Biol** 1988;33(5):295–9

Expression of an NCA cDNA in NIH/3T3 cells yields a 110K glycoprotein, which is anchored into the membrane via glycosyl–phosphatidylinositol. Kolbinger F, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1126–34

Phase separation in bimolecular mixed lipid membranes induced by polylysine. Mittler–Neher S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):124–9

Evoked effects of cholesterol binding on integral proteins and lipid fluidity of dog brain synaptosomal plasma membranes. Deliconstantinos G, et al. **Biochem Cell Biol** 1989 Jan;67(1):16–24

Evidence of direct interaction between actin and membrane lipids. St–Onge D, et al. **Biochem Cell Biol** 1989 Jun; 67(6):297–300

Correlation between changes in membrane lipid composition induced by dietary lipid and membrane–bound enzyme activity in chick liver. Alejandre MJ, et al. **Biochem Int** 1988 Sep;17(3):461–9

The influence of fatty acid unsaturation and physical properties of microsomal membrane phospholipids on UDP–glucuronyltransferase activity. Castuma CE, et al. **Biochem J** 1989 Mar 15;258(3):723–31

Dexamethasone influences the lipid fluidity, lipid composition and glycosphingolipid glycosyltransferase activities of rat proximal–small–intestinal Golgi membranes. Dudeja PK, et al. **Biochem J** 1988 Jul 15;253(2):401–8

Mass spectrometric detection of cross–linked fatty acids formed during radical–induced lesion of lipid membranes. Frank H, et al. **Biochem J** 1989 Jun 15;260(3):873–8

Liposomes as carriers of poorly water–soluble substrates: linear modelling of membrane systems with catalytic or binding sites of different facedness. Significance of experimental membrane partition coefficients and of kinetic and equilibrium parameters [published erratum appears in Biochem J 1988 Nov 1;255(3):following 1061] Heirwegh KP, et al. **Biochem J** 1988 Aug 15;254(1):101–8

Surface characteristics of phosphatidylglycerol phosphate from the extreme halophile Halobacterium cutirubrum compared with those of its deoxy analogue, at the air/water interface. Quinn PJ, et al. **Biochem J** 1989 Jul 15; 261(2):377–81

Differential effects of amiodarone and propranolol on lipid dynamics and enzymatic activities in cardiac sarcolemmal membranes. Chatelain P, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1231–9

On the mechanism of muscarinic hydrolysis of choline phospholipids in the heart. Lindmar R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4689–95

Lymphoma–vesicle interactions: vesicle adsorption, membrane fragmentation, and intermembrane protein transfer [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4645–55

Lipid sorting in epithelial cells. Simons K, et al. **Biochemistry** 1988 Aug 23;27(17):6197–202 (98 ref.)

Modification of fluidity and lipid–protein relationships in pig intestinal brush–border membrane by dietary essential fatty acid deficiency. Christon R, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):77–84

Interaction of trichorzianines A and B with model membranes and with the amoeba Dictyostelium. el Hajji M, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):97–104

Reconstitution of the nicotinic acetylcholine receptor using a lipid substitution technique. Jones OT, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):359–66

A mismatch between the length of gramicidin and the lipid acyl chains is a prerequisite for HII phase formation in phosphatidylcholine model membranes. Killian JA, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):341–5

Lipid permeability of the intestinal microvillus membrane may be modulated by membrane fluidity in the rat. Meddings JB. **Biochim Biophys Acta** 1989 Sep 4; 984(2):158–66

Adsorption of the cationic antitumoral drug celiptium to phosphatidylglycerol in membrane model systems. Effect on membrane electrical properties. Sautereau AM, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):276–82

Modification of cellular fatty acid composition of Hep–G2 cells: effect of antioxidants on cholesterol esterification and secretion. Stein O, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):115–20

Modulation of membrane surface curvature by peptide–lipid interactions. Batenburg AM, et al. **Biosci Rep** 1988 Aug; 8(4):299–307 (50 ref.)

Choline increases acetylcholine release and protects against the stimulation–induced decrease in phosphatide levels within membranes of rat corpus striatum. Ulus IH, et al. **Brain Res** 1989 Apr 10;484(1–2):217–27

Dietary fat influences electric membrane properties of neurons in cell culture. Scott B, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):105–13

Characterization of a monoclonal antibody directed against a sulphoglycolipid that is evolutionarily conserved and developmentally regulated in rat brain. Borroni E, et al. **Cell Tissue Res** 1989;256(2):373–80

Deuterium nuclear magnetic resonance study of the interaction of branched chain compounds (phytanic acid, phytol) with a phospholipid model membrane. Yue J, et al. **Chem Phys Lipids** 1988 Dec;49(3):205–13

Plasma and cellular zinc levels and membrane lipid composition in streptozotocin diabetic rats. Burke JP, et al. **Comp Biochem Physiol [B]** 1989;93(2):409–12

Cystic fibrosis: II. Altered microviscosity of erythrocyte membrane. Witas H, et al. **Cytobios** 1989;57(228):55–9

Membrane lipid alterations and Na+–pumping activity in erythrocytes from IDDM and NIDDM subjects. Baldini P, et al. **Diabetes** 1989 Jul;38(7):825–31

Glycoproteins and glycolipids of rat small intestinal microvillus and basolateral membranes. Morita A, et al. **Dig Dis Sci** 1989 Apr;34(4):596–605

Characterization of the nucleoside–binding site inside the Tsx channel of Escherichia coli outer membrane. Reconstitution experiments with lipid bilayer membranes. Benz R, et al. **Eur J Biochem** 1988 Oct 1;176(3):699–705

Localization of adriamycin in model and natural membranes. Influence of lipid molecular packing. Dupou–Cézanne L, et al. **Eur J Biochem** 1989 May 15;181(3):695–702

Expression of the plasma membrane proteolipid in mouse neuroblastoma cells: transient increase in synthesis during differentiation with N6,O2–dibutyryl adenosine 3',5'–cyclic monophosphate. Shea TB, et al. **Exp Cell Biol** 1989; 57(3):131–8

A new approach to the modification of cell membrane glycosphingolipids: ganglioside composition of JTC–12 P3 cells altered by feeding with galactose as a sole carbohydrate source in protein– and lipid–free synthetic medium. Kawaguchi T, et al. **Exp Cell Res** 1988 Dec; 179(2):507–16

The lateral motion of lipid molecules in the apical plasma membrane of endothelial cells is reversibly affected by the presence of cell junctions. Tournier JF, et al. **Exp Cell Res** 1989 Apr;181(2):375–84

Effect of cell substratum on lateral mobility of lipids in the plasma membrane of vascular endothelial cells. Tournier JF, et al. **Exp Cell Res** 1989 Mar;181(1):105–15

Interaction between oxygen and cell membranes: modification of membrane lipids to enhance pulmonary artery endothelial cell tolerance to hypoxia. Block ER. **Exp Lung Res** 1988;14 Suppl:937–58

Membrane phospholipid methylation is associated with surfactant secretion in rabbit type II alveolar epithelial cells. Hendricks–Muñoz KD, et al. **Exp Lung Res** 1989; 15(1):63–76

On the mechanism of action of lonidamine: a study on human erythrocyte membrane. Malorni W, et al. **Exp Mol Pathol** 1988 Dec;49(3):361–72

Antioxidant behaviour of ubiquinone and beta–carotene incorporated in model membranes. Cabrini L, et al. **Free Radic Res Commun** 1986;2(1–2):85–92

Phospholipid composition of isolated guinea pig sperm outer acrosomal membrane and plasma membrane during capacitation in vitro. Stojanoff A, et al. **Gamete Res** 1988 Nov;21(3):297–311

Role of fatty acids in regulation of membrane properties in Epidermophyton floccosum. Sanadi S, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):422–7

Influence of supplementation of saturated alkanes on the membrane properties of Microsporum gypseum. Vaidya S, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):98–103

Incorporation of [3H]acetate into the membrane lipids of a murine tumour during the development of thermotolerance. Harms–Ringdahl M, et al. **Int J Radiat Biol** 1989 Feb; 55(2):297–305

Androgenic–anabolic steroid effects on serum and skin surface lipids, on red cells, and on liver enzymes. Király CL. **Int J Sports Med** 1988 Aug;9(4):249–52

Phase transitions and permeability changes in dry membranes during rehydration. Crowe JH, et al. **J Bioenerg Biomembr** 1989 Feb;21(1):77–91 (38 ref.)

Principles of membrane stability and phase behavior under extreme conditions. Quinn PJ. **J Bioenerg Biomembr** 1989 Feb;21(1):3–19 (64 ref.)

Biosyntheais of a variant surface glycoprotein of Trypanosoma brucei. Processing of the glycolipid membrane anchor and N–linked oligosaccharides. Bangs JD, et al. **J Biol Chem** 1988 Nov 25;263(33):17697–705

Staphylococcal alpha–toxin: a study of membrane penetration and pore formation. Harshman S, et al. **J Biol Chem** 1989 Sep 5;264(25):14978–84

The interactions of bilirubin with model and biological membranes. Leonard M, et al. **J Biol Chem** 1989 Apr 5; 264(10):5648–52

Phosphatidylinositol linkage of a truncated form of the platelet–derived growth factor receptor. Orchansky PL, et al. **J Biol Chem** 1988 Oct 15;263(29):15159–65

Plasma membrane lipid order and composition during adipocyte differentiation of 3T3F442A cells. Studies in intact cells with 1–[4–(trimethylamino)phenyl]–6–phenylhexatriene. Storch J, et al. **J Biol Chem** 1989 Jun 25;264(18):10527–33

Dietary changes in membrane lipids and leucocyte calcium. Bing RF, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 3:S110–3

Analysis of the signal for attachment of a glycophospholipid membrane anchor. Caras IW, et al. **J Cell Biol** 1989 Apr; 108(4):1387–96

Transport of fluorescent phospholipid analogues from the erythrocyte membrane to the parasite in Plasmodium falciparum–infected cells. Haldar K, et al. **J Cell Biol** 1989 Jun;108(6):2183–92

The initial events in myelin syntheais: orientation of proteolipid protein in the plasma membrane of cultured oligodendrocytes. Hudson LD, et al. **J Cell Biol** 1989 Aug; 109(2):717–27

Lipid recycling between the plasma membrane and intracellular compartments: transport and metabolism of fluorescent sphingomyelin analogues in cultured fibroblasts. Koval M, et al. **J Cell Biol** 1989 Jun;108(6):2169–81

Asymmetric distribution of phospholipids in the membrane of vesicles released during in vitro maturation of guinea pig reticulocytes: evidence precluding a role for "aminophospholipid translocase". Vidal M, et al. **J Cell Physiol** 1989 Sep;140(3):455–62

Ca2+, but not membrane lipid hydrolysis, mediates human chorionic gonadotropin production by luteinizing hormone–releasing hormone in human term placenta. Bélisle S, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):117–21

Cytochemical demonstration of increased phospholipid content in cell membranes in chlorphentermine–induced phospholipidosis. Coulombe PA, et al. **J Histochem Cytochem** 1989 Feb;37(2):139–47

Different membrane anchors of Fc gamma RIII (CD16) on K/NK–lymphocytes and neutrophils. Protein– vs lipid–anchor. Ueda E, et al. **J Immunol** 1989 Aug 15; 143(4):1274–7

Interactions between the metabolism of n–3 and n–6 fatty acids. Sprecher H. **J Intern Med Suppl** 1989;225(731):5–9 (20 ref.)

Possible molecular basis for the pharmacokinetics and pharmacodynamics of three membrane–active drugs: propranolol, nimodipine and amiodarone. Herbette LG, et al. **J Mol Cell Cardiol** 1988 May;20(5):373–8

Lipid peroxidation in normoxic and ischaemic–reperfused hearts of fish oil and lard fat fed pigs. Lamers JM, et al.

J Mol Cell Cardiol 1988 Jul;20(7):605–15
Effects of radioligand oxidation and ascorbate–induced lipid peroxidation on serotonin–1 receptor assay: use of ascorbate and ethylenediamine tetraacetic acid buffers to prevent (3H)–5–HT binding artifacts. May PC, et al. J Neurosci Res 1988;20(2):257–62
Effect of oral ingestion of different fractions of Allium cepa on the blood and erythrocyte membrane lipids and certain membrane–bound enzymes in rats. Ahluwalia P, et al. J Nutr Sci Vitaminol (Tokyo) 1989 Apr;35(2):155–61
Effects of alpha–tocopherol–nicotinate administration on the microdynamics of phospholipids of erythrocyte membranes in human subjects. Koyama T, et al. J Nutr Sci Vitaminol (Tokyo) 1988 Oct;34(5):449–57
Modulation of Kupffer cell membrane phospholipid function by n–3 polyunsaturated fatty acids. Bankey PE, et al. J Surg Res 1989 May;46(5):439–44
Hemodialysis and red cell cation transport in uremia: role of membrane free fatty acids. Kelly RA, et al. Kidney Int 1989 Feb;35(2):595–603
UV exposure alters the membrane lipid composition and cell membrane fluidity of intact cultured B–16 melanoma cells. Sakanashi T, et al. Kurume Med J 1988;35(4):159–69
Changes in phospholipid composition of the mitochondrial membrane after orthotopic liver transplantation. Tatsumi Y, et al. Life Sci 1989;44(15):1053–8
Ascorbate–enhanced lipid peroxidation in photooxidized cell membranes: cholesterol product analysis as a probe of reaction mechanism. Bachowski GJ, et al. Lipids 1988 Jun; 23(6):580–6
Neurochemical aspects of Alzheimer's disease: involvement of membrane phospholipids. Farooqui AA, et al. Metab Brain Dis 1988 Mar;3(1):19–35 (111 ref.)
Photochemical labeling of apolar phase of membranes. Brunner J. Methods Enzymol 1989;172:628–87 (241 ref.)
Reconstitution of skeletal muscle sarcoplasmic reticulum membranes: strategies for varying the lipid/protein ratio. Hymel L, et al. Methods Enzymol 1988;157:302–14
Modification of phospholipid environment in sarcoplasmic reticulum using nonspecific phospholipid transfer protein. Lunardi J, et al. Methods Enzymol 1988;157:369–77, 693
Membrane lipid components interacting with hepatitis A virus. Seganti L, et al. Microbiologica 1989 Jul;12(3):225–30
Alteration of lipid order profile and permeability of plasma membranes from Trypanosoma cruzi epimastigotes grown in the presence of ketoconazole. Urbina JA, et al. Mol Biochem Parasitol 1988 Aug;30(2):185–95
Binding of myosin I to membrane lipids. Adams RJ, et al. Nature 1989 Aug 17;340(6234):565–8
Control of transmembrane lipid asymmetry in chromaffin granules by an ATP–dependent protein. Zachowski A, et al. Nature 1989 Jul 6;340(6228):75–6
Sodium channel activation does not alter lipid metabolism in cultured neuroblastoma cells. Glanville TN, et al. Neurochem Res 1988 Nov;13(11):1015–21
Incorporation of exogenous ganglioside GM1 into neuroblastoma membranes: inhibition by calcium ion and dependence upon membrane protein. Leskawa KC, et al. Neurochem Res 1989 Jun;14(6):547–54
Changes in lipid composition of neuroblastoma C1300 N18 cell during differentiation. Gulaya NM, et al. Neuroscience 1989;30(1):153–64
Intrathecal opioids, potency and lipophilicity. McQuay HJ, et al. Pain 1989 Jan;36(1):111–5
Photooxidation of cell membranes using eosin derivatives that locate in lipid or protein to study the role of diffusible intermediates. Pooler JP. Photochem Photobiol 1989 Jul; 50(1):55–68
Protective effect of plant flavonoids, analogs and vitamin E against lipid peroxidation of membranes. Salvayre R, et al. Prog Clin Biol Res 1988;280:313–6
Intracellular transport of membrane lipids. Simoni RD. Prog Clin Biol Res 1988;282:29–41 (13 ref.)
Membrane phospholipid modification by dietary n–3 fatty acids: effects on eicosanoid formation and cell function. Weber PC. Prog Clin Biol Res 1988;282:263–74 (31 ref.)
Membrane fatty acids and erythrocyte Li–Na countertransport in nephrotic syndrome and their relationship. Corrocher R, et al. Ric Clin Lab 1989 Apr–Jun;19(2):149–56
Lectin–carbohydrate interactions in model and biological membrane systems. Hoekstra D, et al. Subcell Biochem 1989;14:229–78 (225 ref.)
Reconstitution of membrane molecular mechanisms in bilayer lipid membranes and patch–clamp bilayers. Vassilev PM, et al. Subcell Biochem 1989;14:97–143 (142 ref.)
A review of the biology and toxicologic implications of the induction of lysosomal lamellar bodies by drugs. Reasor MJ. Toxicol Appl Pharmacol 1989 Jan;97(1):47–56 (53 ref.)
A growing interest in bacterial ether lipids. Goldfine H, et al. Trends Biochem Sci 1988 Jun;13(6):217–21 (28 ref.)
Organization of lipids in the plasma membranes of malignant and stimulated cells: a new model. Mountford CE, et al. Trends Biochem Sci 1988 May;13(5):172–7
The mode of insertion of the paramyxovirus F1 N–terminus into lipid matrix, an initial step in host cell/virus fusion. Brasseur R, et al. Virus Genes 1988 Jul;1(4):325–32
[Metabolism of membrane phospholipids and reperfusion injury in myocardial ischemia] Liu FA, et al. Sheng Li Ko Hsueh Chin Chan 1989 Jan;20(1):78–80 (20 ref.) (Chi)
[Lipid domains in the plasma membrane of rabbit uterine epithelium from the time of ovum implantation. A freeze fracture–cytochemical study] Winterhager E, et al. Acta Histochem Suppl (Jena) 1988;36:395–8 (Ger)
[Lipid peroxidation of mononuclear cells of peripheral blood before and after therapy with vitamin E] Lubrano R, et al. Clin Ter 1988 Nov 15;127(3):203–6 (Eng. Abstr.) (Ita)
[Enhancement of membrane phospholipid breakdown and synthesis during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. Nippon Ganka Gakkai Zasshi 1989 Jan;93(1):142–8 (Eng. Abstr.) (Jpn)
[Membrane receptors and the metabolism of phosphatidylinositols: inositol triphosphate and diacylglycerol as secondary transmitters of information] Nowak JZ. Acta Physiol Pol 1988;39 Suppl 32:1–52 (Pol)
[Surface active compounds present in the dialysate from patients with uremia] Cichocki T, et al. Przegl Lek 1988; 45(7):549–54 (Eng. Abstr.) (Pol)
[Biochemistry of schistosomiasis mansoni. VII. Lipid changes of lysosomal membranes during the initial phase of liver injury] Rodrigues LE. Mem Inst Oswaldo Cruz 1988 Jan–Mar;83(1):47–52 (Eng. Abstr.) (Por)
[The role of the state of protein–lipid interactions in stimulated membranes in the conformation of C40–carotenoids] Maksimov GV, et al. Biofizika 1989 May–Jun;34(3):420–4 (Eng. Abstr.) (Rus)
[The action of a homologous series of ubiquinols on lipid peroxidation in brain mitochondrial and synaptosomal membranes] Kagan VE, et al. Biull Eksp Biol Med 1989 Apr;107(4):420–2 (Eng. Abstr.) (Rus)
[Mechanism of membranotropic effect of methylethyl(silatrane–1–yl methyl) sulfonium iodide] Kuznetsov IG, et al. Dokl Akad Nauk SSSR 1988; 301(5):1235–7 (Rus)
[Lysophospholipase activity in mitochondrial membranes of the rat liver] Gorbataia ON, et al. Ukr Biokhim Zh 1988 Nov–Dec;60(6):23–8 (Eng. Abstr.) (Rus)
[Lipid and protein composition of membranes and carbohydrate metabolism in rats subjected to bilateral adrenalectomy; correction of disorders by vitamins K and E] Lider VA. Ukr Biokhim Zh 1988 Nov–Dec;60(6):55–9 (Eng. Abstr.) (Rus)
[Changes in the lipid component of liver microsomal membranes during the postischemic period after administration of alpha–tocopherol and lidocaine] Grek OR. Vopr Med Khim 1988 Jul–Aug;34(4):57–63 (Eng. Abstr.) (Rus)
[Peroxidation and features of fatty acid composition of cell membrane lipids in patients with hypertension] Kulagin IuI, et al. Vopr Med Khim 1989 May–Jun;35(3):129–32 (Rus)

PHARMACOLOGY

Effect of membrane phospholipids on activation of the alternative complement pathway. Mold C. J Immunol 1989 Sep 1;143(5):1663–8
[Calpain II of rabbit skeletal muscle. Regulation of enzymatic activity: influence of the presence of membrane phospholipids on enzymatic autolysis in the presence or not of substrate] Cottin P, et al. Reprod Nutr Dev 1988; 28(3B):831–7 (Eng. Abstr.) (Fre)
[The action of gramicidin S on the ionic permeability of bilayer lipid membranes] Korolev PN, et al. Biol Nauki 1988;(7):31–5 (Eng. Abstr.) (Rus)
[The action of membranotropic compounds with various structures on the parameters of the phase transition of dimyristoylphosphatidylcholine] Sëmin BK, et al. Biol Nauki 1989;(5):32–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Excess membrane cholesterol alters calcium channels in arterial smooth muscle. Bialecki RA, et al. Am J Physiol 1989 Aug;257(2 Pt 1):C306–14
Proton permeability and lipid dynamics of gastric and duodenal apical membrane vesicles. Wilkes JM, et al. Am J Physiol 1989 Mar;256(3 Pt 1):G553–62
Assembly of phospholipids into cellular membranes: biosynthesis, transmembrane movement and intracellular translocation. Bishop WR, et al. Annu Rev Cell Biol 1988; 4:579–610 (151 ref.)
Role of carboxyl residues and membrane lipids in cation binding to bacteriorhodopsin. Hrabeta–Robinson E, et al. Arch Biochem Biophys 1989 Mar;269(2):476–84
Temperature dependence of plasma membrane physical state in living Madin–Darby canine kidney cells. Giocondi MC, et al. Biochem Biophys Res Commun 1989 Aug 15; 162(3):1004–9
Penetration of the signal sequence of Escherichia coli PhoE protein into phospholipid model membranes leads to lipid–specific changes in signal peptide structure and alterations of lipid organization. Batenburg AM, et al. Biochemistry 1988 Jul 26;27(15):5678–85
Calorimetric and spectroscopic studies of lipid thermotropic phase behavior in liver inner mitochondrial membranes from a mammalian hibernator. Pehowich DJ, et al. Biochemistry 1988 Jun 28;27(13):4632–8
Calcium–independent activation of prothrombin on membranes with positively charged lipids. Rosing J, et al. Biochemistry 1988 Dec 13;27(25):9048–55
Effects of cholesterol on (Na+,K+)–ATPase ATP hydrolyzing activity in bovine kidney. Yeagle PL, et al. Biochemistry 1988 Aug 23;27(17):6449–52
The effect of variations in growth temperature, fatty acid composition and cholesterol content on the lipid polar head–group composition of Acholeplasma laidlawii B membranes. Bhakoo M, et al. Biochim Biophys Acta 1988 Nov 22;945(2):307–14
Intrinsic molecules in lipid membranes change the lipid–domain interfacial area: cholesterol at domain interfaces. Cruzeiro–Hansson L, et al. Biochim Biophys Acta 1989 Feb 27;979(2):166–76 (44 ref.)
Enhancement of transbilayer mobility of a membrane lipid probe accompanies formation of membrane leaks during photodynamic treatment of erythrocytes. Deuticke B, et al. Biochim Biophys Acta 1989 Jun 26;982(1):53–61
Intervesicular exchange of lipids with weak acid and weak base characteristics: influence of transmembrane pH gradients. Eastman SJ, et al. Biochim Biophys Acta 1989 Jun 6;981(2):178–84
Interaction of amphiphiles with integral membrane proteins. II. A simple, minimal model for the nonspecific interaction of amphiphiles with the anion exchanger of the erythrocyte membrane. Gruber HJ. Biochim Biophys Acta 1988 Oct 20;944(3):425–36
Glucose–6–phosphate phosphohydrolase activity in guinea pig liver microsomes is influenced by phosphatidylcholine. Interaction with cholesterol–enriched membranes. Gumbhir K, et al. Biochim Biophys Acta 1989 May 19; 981(1):77–84
The effect of nonadec(en)ylresorcinol on the fluidity of liposome and erythrocyte membranes. Kozubek A, et al. Biochim Biophys Acta 1988 Oct 20;944(3):465–72
An improved procedure for the purification of ethanolaminephosphotransferase. Reconstitution of the purified enzyme with lipids. Roberti R, et al. Biochim Biophys Acta 1989 Jul 17;1004(1):80–8
Fusion of lipid vesicles with ascites tumor cells and their lipid–depleted variants. Studies with radioactive– and fluorescent–labeled vesicles. Seibicke S, et al. Biochim Biophys Acta 1988 Oct 20;944(3):487–96
Activity of myelin membrane Na+/K+–ATPase and 5'–nucleotidase in relation to phospholipid acyl profiles, ganglioside composition and phosphoinositides in developing brains of undernourished rats. Shantharam P, et al. Biochim Biophys Acta 1989 Jun 26;982(1):115–22
Changes in chemical structure and function in Escherichia coli cell membranes caused by freeze–thawing. II. Membrane lipid state and response of cells to dehydration. Souzu H, et al. Biochim Biophys Acta 1989 Jan 16; 978(1):112–8
Lipid topology and physical properties of the outer mitochondrial membrane of the yeast, Saccharomyces cerevisiae. Sperka–Gottlieb CD, et al. Biochim Biophys Acta 1988 Dec 22;946(2):227–34
Interaction between glycophorin and a spin–labeled cholesterol analogue in reconstituted dimyristoylphosphatidylcholine bilayer vesicles. Tampé R, et al. Biochim Biophys Acta 1989 Jun 26;982(1):41–6
Are disturbances in lipid–protein interactions by phospholipase–A2 a predisposing factor in affective illness? Hibbeln JR, et al. Biol Psychiatry 1989 Apr 1;25(7):945–61 (145 ref.)
The influence of cholesterol on synaptic fluidity and dopamine uptake. Maguire PA, et al. Brain Res Bull 1989 Feb;22(2):431–7
Modulation of calcium phosphate formation by phosphatidate–containing anionic liposomes. Eanes ED, et al. Calcif Tissue Int 1988 Oct;43(4):226–34
Influence of beta–adrenoceptor blocking drugs on lipid–protein interaction in synaptosomal membranes. An ESR study. Ondriaš K, et al. Chem Biol Interact 1989; 69(1):87–97
Inhibition of PhoE translocation across Escherichia coli inner–membrane vesicles by synthetic signal peptides suggests an important role of acidic phospholipids in protein translocation. De Vrije T, et al. Eur J Biochem 1989 Mar 15;180(2):385–92
Plasma membrane lipids modulate the response to water deprivation in rat kidney. Mourelle M, et al. Fundam Clin Pharmacol 1989;3(3):199–209
The role of membrane–active lipids in the protection of ram spermatozoa during cooling and storage. Holt WV, et al. Gamete Res 1988 Jan;19(1):77–89
Modulation of hepatic ferrochelatase activity by dietary manipulation of mitochondrial phospholipid fatty acyl groups. Kools AM, et al. Hepatology 1989 Apr;9(4):557–61
Lipid alterations in renal membrane of stoke–prone spontaneously hypertensive rats. Okamoto H, et al. Hypertension 1989 May;13(5):456–62
Low–temperature effects on cyanobacterial membranes. Murata N. J Bioenerg Biomembr 1989 Feb;21(1):61–75 (49 ref.)
Membrane acclimation by unicellular organisms in response to temperature change. Thompson GA Jr. J Bioenerg Biomembr 1989 Feb;21(1):43–60 (57 ref.)
Differential interactions of apo– and holocytochrome c with acidic membrane lipids in model systems and the implications for their import into mitochondria. Demel RA, et al. J Biol Chem 1989 Mar 5;264(7):3988–97
Initial stages of influenza hemagglutinin–induced cell fusion monitored simultaneously by two fluorescent events: cytoplasmic continuity and lipid mixing. Sarkar DP, et al.

J Cell Biol 1989 Jul;109(1):113–22
Possible role of adsorbed surfactant in controlling membrane permeability and function. Hills BA. Med Hypotheses 1989 Feb;28(2):85–92
Changes in receptor response by the effect of disease on membrane fluidity. Raber J, et al. Med Hypotheses 1989 Mar;28(3):169–71 (10 ref.)
Protein–lipid interactions in biological membranes—spin label studies and physiological implications. Benga G. Mol Aspects Med 1988;10(3):201–22
Membrane proteins. Detergent ringing true as a model for membranes [news] Barber J. Nature 1989 Aug 24; 340(6235):601
Nanometre-level analysis demonstrates that lipid flow does not drive membrane glycoprotein movements. Sheetz MP, et al. Nature 1989 Jul 27;340(6231):284–8
Calmodulin selectively modulates the guanylate cyclase activity by repressing the lipid phase separation temperature in the inner half of the bilayer of rat brain synaptosomal plasma membranes. Kopeikina-Tsiboukidou L, et al. Neurochem Res 1989 Feb;14(2):119–27
Autacoids from membrane phospholipids. Bruni A. Pharmacol Res Commun 1988 Jul;20(7):529–44 (544 ref.)
Nonanesthetic alcohols dissolve in synaptic membranes without perturbing their lipids. Miller KW, et al. Proc Natl Acad Sci U S A 1989 Feb;86(3):1084–7
Membrane lipid depuration of arsenic and antimony. Benson AA. Prog Clin Biol Res 1988;282:385–91 (9 ref.)
Autacoid properties of lysophosphatidylserine. Bruni A, et al. Prog Clin Biol Res 1988;282:165–79 (46 ref.)
n-3 fatty acids and the evolution of the brain. Crawford MA, et al. Prog Clin Biol Res 1988;282:333–54 (40 ref.)
Structure, physical properties, and function of archaebacterial lipids. Kates M. Prog Clin Biol Res 1988;282:357–84 (58 ref.)
Specialization in membrane structure and metabolism with respect to polyunsaturated lipids. Salem N Jr, et al. Prog Clin Biol Res 1988;282:319–33 (28 ref.)
Metabolic correction of defects in the lipid anchoring of Thy-1 in lymphoma mutants. Gupta D, et al. Science 1988 Dec 9;242(4884):1446–8
Sorting of apical surface proteins and lipids by epithelial cells: is there a common mechanism? Lisanti M, et al. Soc Gen Physiol Ser 1989;44:167–73
Involvement of lipids in solute transport in yeasts. Prasad R, et al. Yeast 1986 Dec;2(4):205–20 (122 ref.)

RADIATION EFFECTS

Membrane lipid peroxidation and its pathological consequences. Chatterjee SN, et al. Indian J Biochem Biophys 1988 Feb–Apr;25(1–2):25–31
[The radioprotective action of long-term anoxia on the membrane lipids in irradiated turtles] Ivanov VI, et al. Radiobiologiia 1989 Mar–Apr;29(2):215–20 (Eng. Abstr.) (Rus)
[The content of phospholipids and free fatty acids in the sarcoplasmic reticulum membranes in the early stage of an x-ray radiation lesion] Voltsitskii VM, et al. Radiobiologiia 1989 Mar–Apr;29(2):151–3 (Eng. Abstr.) (Rus)

TOXICITY

Lipolytic surface remnants of triglyceride-rich lipoproteins are cytotoxic to macrophages but not in the presence of high density lipoprotein. A possible mechanism of atherogenesis? Chung BH, et al. J Clin Invest 1989 Apr; 83(4):1363–74

MEMBRANE METALLO-ENDOPEPTIDASE

Identification of the active-site arginine in rat neutral endopeptidase 24.11 (enkephalinase) as arginine 102 and analysis of a glutamine 102 mutant. Bateman RC Jr, et al. J Biol Chem 1989 Apr 15;264(11):6151–7

ANALYSIS

Assay for enkephalin-degrading peptidases in rat brain tissues by high-performance liquid chromatography with on-line post-column fluorescence detection. Ohno M, et al. J Chromatogr 1988 Sep 9;430(2):291–8
Ultrastructural localization of angiotensin I-converting enzyme (EC 3.4.15.1) and neutral metalloendopeptidase (EC 3.4.24.11) in the proximal tubule of the human kidney. Schulz WW, et al. Lab Invest 1988 Dec;59(6):789–97
Electronmicroscopic immunocytochemistry of pig brain shows that endopeptidase-24.11 is localized in neuronal membranes. Barnes K, et al. Neurosci Lett 1988 Nov 22; 94(1–2):64–9
[The determination of neutral metalloendopeptidase (enkephalinase A) in biological material] Heder G, et al. Pharmazie 1988 Sep;43(9):637–9 (Eng. Abstr.) (Ger)

ANTAGONISTS & INHIBITORS

Enkephalinase inhibition and precursor amino acid loading improves inpatient treatment of alcohol and polydrug abusers: double-blind placebo-controlled study of the nutritional adjunct SAAVE. Blum K, et al. Alcohol 1988 Nov–Dec;5(6):481–93
Comparison of the effects of epithelium removal and of an enkephalinase inhibitor on the neurokinin-induced contractions of guinea-pig isolated trachea. Devillier P, et al. Br J Pharmacol 1988 Jul;94(3):675–84
Enkephalinase inhibition increases plasma atrial natriuretic peptide levels, glomerular filtration rate, and urinary sodium excretion in rats with reduced renal mass. Lafferty HM, et al. Circ Res 1989 Sep;65(3):640–6
Naloxone-reversible inhibition of gall-bladder mucosal fluid secretion in experimental cholecystitis in the cat by acetorphan, an enkephalinase inhibitor. Jivegård L, et al. Clin Sci 1989 Jul;77(1):49–54
Assessment of the abuse potential of acetorphan, an enkephalinase inhibitor. Knisely JS, et al. Drug Alcohol Depend 1989 Apr;23(2):143–51
Antidepressant action of imipramine and iprindole in mice is enhanced by inhibitors of enkephalin-degrading peptidases. de Felipe MC, et al. Eur J Pharmacol 1989 Jan 10;159(2):175–80
Comparison of selective and complete inhibitors of enkephalin-degrading enzymes on morphine withdrawal syndrome. Maldonado R, et al. Eur J Pharmacol 1989 Jun 20;165(2–3):199–207
Effects of an enkephalinase inhibitor on esophageal motility in man. Chaussade S, et al. Gastroenterol Clin Biol 1988 Nov;12(11):793–6
Enkephalin-degrading enzyme inhibitors. Crucial role of the C-terminal residue on the inhibitory potencies of retro-hydroxamate dipeptides. Fournié-Zaluski MC, et al. Int J Pept Protein Res 1989 Feb;33(2):146–53
Inhibition of neutral endopeptidase potentiates neurogenic inflammation in the rat trachea. Umeno E, et al. J Appl Physiol 1989 Jun;66(6):2647–52
Thiorphan, an inhibitor of endopeptidase 24.11, potentiates the natriuretic activity of atrial natriuretic peptide. Trapani AJ, et al. J Cardiovasc Pharmacol 1989 Sep;14(3):419–24
Neutral endopeptidase inhibitors potentiate substance P- and capsaicin-induced cough in awake guinea pigs. Kohrogi H, et al. J Clin Invest 1988 Dec;82(6):2063–8
Carboxyalkyl dipeptides with atrial natriuretic factor potentiating and antihypertensive activity. Haslanger MF, et al. J Med Chem 1989 Apr;32(4):737–9
Evaluation of enkephalinase inhibition in the living mouse, using [3H]acetorphan as a probe. De la Baume S, et al. J Pharmacol Exp Ther 1988 Nov;247(2):653–60
Inhibitors of neutral endopeptidase potentiate electrically and capsaicin-induced noncholinergic contraction in guinea pig bronchi. Djokic TD, et al. J Pharmacol Exp Ther 1989 Jan;248(1):7–11
Effects of UK 69 578: a novel atriopeptidase inhibitor. Northridge DB, et al. Lancet 1989 Sep 9;2(8663):591–3
Augmented analgesic effects of enkephalinase inhibitors combined with transcranial electrostimulation. Malin DH, et al. Life Sci 1989;44(19):1371–6
Effect of inhibitors of enkephalin degradation in the isolated guinea-pig ileum. van Amsterdam JG, et al. Life Sci 1988; 43(19):1529–36
Specific inhibitors of endopeptidase 24.11 inhibit the metabolism of atrial natriuretic peptides in vitro and in vivo. Olins GM, et al. Mol Cell Endocrinol 1989 Feb; 61(2):201–8
Kelatorphan, a potent enkephalinases inhibitor, and opioid receptor agonists DAGO and DTLET, differentially modulate self-stimulation behaviour depending on the site of administration. de Witte P, et al. Neuropharmacology 1989 Jul;28(7):667–76
Comparison of the behavioural effects induced by administration in rat nucleus accumbens or nucleus caudatus of selective mu and delta opioid peptides or kelatorphan an inhibitor of enkephalin-degrading-enzymes. Daugé V, et al. Psychopharmacology (Berlin) 1988; 96(3):343–52
Aminothiols: synthesis and effect on chicken brain aminopeptidases. Weiss B, et al. Res Commun Chem Pathol Pharmacol 1988 Oct; 62(1):113–23

BLOOD

Increased serum levels of endopeptidase 24.11 ('enkephalinase') in patients with end-stage renal failure. Deschodt-Lanckman M, et al. Life Sci 1989;45(2):133–41

GENETICS

Expression of enzymatically active enkephalinase (neutral endopeptidase) in mammalian cells. Gorman CM, et al. J Cell Biochem 1989 Mar;39(3):277–84
Common acute lymphocytic leukemia antigen is identical to neutral endopeptidase. Letarte M, et al. J Exp Med 1988 Oct 1;168(4):1247–53
Organization of the gene encoding common acute lymphoblastic leukemia antigen (neutral endopeptidase 24.11): multiple miniexons and separate 5' untranslated regions. D'Adamio L, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7103–7
Common acute lymphoblastic leukemia antigen (CALLA) is active neutral endopeptidase 24.11 ("enkephalinase"): direct evidence by cDNA transfection analysis. Shipp MA, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):297–301

IMMUNOLOGY

Monoclonal antibodies as probes for the transmembrane structure of neutral endopeptidase 24.11 ('enkephalinase'). Aubry M, et al. Biochim Biophys Acta 1988 Oct 13; 967(1):56–64

ISOLATION & PURIFICATION

Detection and analysis of neutral endopeptidase from tissues with substrate gel electrophoresis. Sullivan J, et al. Biochem Biophys Res Commun 1989 Jul 14;162(1):300–7

METABOLISM

Metabolism of gastrin and cholecystokinin by endopeptidase 24.11 from the pig stomach. Bunnett NW, et al. Am J Physiol 1988 Nov;255(5 Pt 1):G676–84
Determination of brush border membrane vesicle orientation using monoclonal antibodies recognizing extracytoplasmic and cytoplasmic domains of neutral endopeptidase-24.11. Vénien C, et al. Anal Biochem 1988 Oct;174(1):325–30
Neutral endopeptidase 24.11 and angiotensin converting enzyme like activity in CALLA positive and CALLA negative lymphoid cells. Beaumont A, et al. Biochem Biophys Res Commun 1989 May 15;160(3):1323–9
Preferential cleavage of amino- and carboxyl-terminal oligopeptides from vasoactive intestinal polypeptide by human recombinant enkephalinase (neutral endopeptidase, EC 3.4.24.11). Goetzl EJ, et al. Biochem Biophys Res Commun 1989 Feb 15;158(3):850–4
Degradation of porcine brain natriuretic peptide (pBNP-26) by endoprotease-24.11 from kidney cortical membranes. Vogt-Schaden M, et al. Biochem Biophys Res Commun 1989 Jun 30;161(3):1177–83
Hydrolysis of alpha-human atrial natriuretic peptide in vitro by human kidney membranes and purified endopeptidase-24.11. Evidence for a novel cleavage site. Vanneste Y, et al. Biochem J 1988 Sep 1;254(2):531–7
Degradation of atrial natriuretic peptides by an enzyme in rat kidney resembling neutral endopeptidase 24.11. Bertrand P, et al. Biochem Pharmacol 1988 Oct 15; 37(20):3817–21
Degradation of human gastrin and CCK by endopeptidase 24.11: differential behaviour of the sulphated and unsulphated peptides. Pauwels S, et al. Biochim Biophys Acta 1989 Jun 13;996(1–2):82–8
Autoradiographic study of mu and delta opioid binding sites and neutral endopeptidase-24.11 in rat after dorsal root rhizotomy. Zajac JM, et al. Brain Res 1989 Jan 16; 477(1–2):400–3
Characterisation of enkephalinase (EC 3.4.24.11) activity on various leukemic cells expressing the common acute lymphocytic leukemia antigen (CALLA). Arock M, et al. FEBS Lett 1989 May 8;248(1–2):123–6
Neutral endopeptidase and neurogenic inflammation in rats with respiratory infections. Borson DB, et al. J Appl Physiol 1989 Jun;66(6):2653–8
Neutral endopeptidase modulates neurotensin-induced airway contraction. Djokic TD, et al. J Appl Physiol 1989 May;66(5):2338–43
Down-regulation and inactivation of neutral endopeptidase 24.11 (enkephalinase) in human neutrophils. Erdös EG, et al. J Biol Chem 1989 Aug 25;264(24):14519–23
Fusion of a cleavable signal peptide to the ectodomain of neutral endopeptidase (EC 3.4.24.11) results in the secretion of an active enzyme in COS-1 cells. Lemay G, et al. J Biol Chem 1989 Sep 15;264(26):15620–3
Cigarette smoke induces bronchoconstrictor hyperresponsiveness to substance P and inactivates airway neutral endopeptidase in the guinea pig. Possible role of free radicals. Dusser DJ, et al. J Clin Invest 1989 Sep; 84(3):900–6
Common acute lymphoblastic leukemia antigen expressed on leukemia and melanoma cell lines has neutral endopeptidase activity. Jongeneel CV, et al. J Clin Invest 1989 Feb; 83(2):713–7
Fluorescent histochemical localization of neutral endopeptidase-24.11 (enkephalinase) in the rat spinal cord. Back SA, et al. J Comp Neurol 1989 Feb 15;280(3):436–50
Inactivation of dynorphin-(1–8) in isolated preparations by three peptidases. Numata H, et al. Jpn J Pharmacol 1988 Aug;47(4):417–23
Metalloendopeptidase (EC 3.4.24.11) but not angiotensin converting enzyme is involved in the inactivation of substance P by synaptic membranes of the rat substantia nigra. Oblin A, et al. Life Sci 1989;44(20):1467–74
Effects of repeated treatment with haloperidol on rat striatal neutral endopeptidase, and on mu- and delta-opioid binding sites: comparison with chronic morphine and chronic kelatorphan. Delay-Goyet P, et al. Neurosci Lett 1989 Aug 28;103(2):197–202
Endopeptidase-24.11 is striosomally ordered in pig brain and, in contrast to aminopeptidase N and peptidyl dipeptidase A ('angiotensin converting enzyme'), is a marker for a set of striatal efferent fibres. Barnes K, et al. Neuroscience 1988 Dec;27(3):799–817
Immunocytochemical localization of endopeptidase-24.11 in cultured neurons from pig striatum. Matsas R, et al. Neuroscience 1989;31(1):237–46
Detailed immunoautoradiographic mapping of enkephalinase (EC 3.4.24.11) in rat central nervous system: comparison with enkephalins and substance P. Pollard H, et al. Neuroscience 1989;30(2):339–76
Enzyme-resistant CCK analogs with high affinities for central receptors. Charpentier B, et al. Peptides 1988 Jul–Aug;9(4):835–41

PHARMACOLOGY

Effect of bradykinin on airway ciliary motility and its modulation by neutral endopeptidase. Tamaoki J, et al. **Am Rev Respir Dis** 1989 Aug;140(2):430–5

Recombinant human enkephalinase (neutral endopeptidase) prevents cough induced by tachykinins in awake guinea pigs. Kohrogi H, et al. **J Clin Invest** 1989 Sep;84(3):781–6

PHYSIOLOGY

Human neutral endopeptidase 24.11 (NEP, enkephalinase); function, distribution and release. Erdös EG, et al. **Adv Exp Med Biol** 1988;240:13–21

The common acute lymphoblastic leukemia antigen (CD10)—emancipation from a functional enigma. LeBien TW, et al. **Blood** 1989 Feb 15;73(3):625–35 (148 ref.)

Neutral endopeptidase 24.11 (enkephalinase) and related regulators of peptide hormones. Erdös EG, et al. **FASEB J** 1989 Feb;3(2):145–51 (42 ref.)

Airway neutral endopeptidase–like enzyme modulates tachykinin–induced bronchoconstriction in vivo. Dusser DJ, et al. **J Appl Physiol** 1988 Dec;65(6):2585–91

Cell–surface peptidases as modulators of growth and differentiation. Kenny AJ, et al. **Lancet** 1989 Sep 30; 2(8666):785–7 (29 ref.)

MEMBRANE POTENTIALS

Hepatic efflux of glutathione by the perfused rat liver: role of membrane potential difference. Wright TL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G547–55

Mitochondrial membrane potential in living cells. Chen LB. **Annu Rev Cell Biol** 1988;4:155–81 (120 ref.)

Uncoupled Na+–efflux on reconstituted shark Na,K–ATPase is electrogenic. Cornelius F. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):801–7

Stretch–activated ion channels in cultured mesangial cells. Craelius W, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):516–21

Membrane potential differences between adriamycin–sensitive and –resistant cells as measured by flow cytometry. Hasmann M, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):305–12

Determination of membrane potential and cell volume by 19F NMR using trifluoroacetate and trifluoroacetamide probes. London RE, et al. **Biochemistry** 1989 Mar 21; 28(6):2378–82

Dual–wavelength ratiometric fluorescence measurements of membrane potential. Montana V, et al. **Biochemistry** 1989 May 30;28(11):4536–9

Association of synthetic model peptides with phospholipid vesicles induced by a membrane potential. de Kroon AI, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):371–3

Fusion of the mitochondrial outer membrane: use in forming large, two–dimensional crystals of the voltage–dependent, anion–selective channel protein. Mannella CA. **Biochim Biophys Acta** 1989 May 19;981(1):15–20

Bilitranslocase is the protein responsible for the electrogenic movement of sulfobromophthalein in plasma membrane vesicles from rat liver: immunochemical evidence using mono– and poly–clonal antibodies. Miccio M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):115–20

The membrane potential of the cellular slime mold Dictyostelium discoideum is mainly generated by an electrogenic proton pump. van Duijn B, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):186–92

Electromobile surface charge alters membrane potential changes induced by applied electric fields. Gross D. **Biophys J** 1988 Nov;54(5):879–84

Voltage–sensitive ion channels. Jan LY, et al. **Cell** 1989 Jan 13;56(1):13–25 (149 ref.)

Signalling in taste receptor cells: cAMP–dependent protein kinase causes depolarization by closure of 44 pS K–channels. Avenet P, et al. **Comp Biochem Physiol [A]** 1988;90(4):681–5

Membrane voltage and neurotransmitter regulation of neuronal growth cone motility. McCobb DP, et al. **Dev Biol** 1988 Dec;130(2):599–609

Theoretical study of transmembrane and extracellular potentials under propagation block due to geometrical inhomogeneity. Dimitrova N. **Gen Physiol Biophys** 1988 Dec;7(6):581–9

Computer simulation for teaching membrane potential fundamentals. Soto E. **Int J Biomed Comput** 1989 Jul; 24(2):119–26

Electron transport and electrochemical proton gradient in membrane vesicles of Clostridium thermosutotrophicum. Hugenholtz J, et al. **J Bacteriol** 1989 May;171(5):2873–5

Ca2+ oscillations induced by hormonal stimulation of individual fura–2–loaded hepatocytes. Kawanishi T, et al. **J Biol Chem** 1989 Aug 5;264(22):12859–66

Antigen–triggered membrane potential changes in IgE–sensitized rat basophilic leukemia cells: evidence for a repolarizing response that is important in the stimulation of cellular degranulation. Labrecque GF, et al. **J Immunol** 1989 Jan 1;142(1):236–43

Voltage dependence of the basolateral membrane conductance in the Amphiuma collecting tubule. Horisberger JD, et al. **J Membr Biol** 1988 Nov; 105(3):257–63

Local superfusion modifies the inward rectifying potassium conductance of isolated retinal horizontal cells. Perlman I, et al. **J Neurophysiol** 1988 Oct;60(4):1322–32

Nonuniform release probabilities underlie quantal synaptic transmission at a mammalian excitatory central synapse. Walmsley B, et al. **J Neurophysiol** 1988 Sep;60(3):889–908

Bursting induces persistent all–or–none EPSPs by an NMDA–dependent process in piriform cortex. Hoffman WH, et al. **J Neurosci** 1989 Jan;9(1):206–15

Reversed polarity of vasculocutaneous potential and neonatal necrotising enterocolitis [letter] Millar MR, et al. **Lancet** 1988 Dec 17;2(8625):1417

Fluorescent indicators of membrane potential: microspectrofluorometry and imaging. Gross D, et al. **Methods Cell Biol** 1989;30:193–218 (32 ref.)

Preparation and use of micro– and macroelectrodes for measurement of transmembrane potentials and ion activities. Ammann D, et al. **Methods Enzymol** 1989; 172:136–55

Electron paramagnetic resonance methods for measuring pH gradients, transmembrane potentials, and membrane dynamics. Cafiso DS. **Methods Enzymol** 1989;172:331–45

Use of carbocyanine dyes to assay membrane potential of mouse ascites tumor cells. Eddy AA. **Methods Enzymol** 1989;172:95–101

Optical measurement of membrane potential in cells, organelles, and vesicles. Freedman JC, et al. **Methods Enzymol** 1989;172:102–22

Proton electrochemical potential gradient in vesicles, organelles, and prokaryotic cells. Rottenberg H. **Methods Enzymol** 1989;172:63–84

The effect of hypoosmolarity on the electrical properties of Madin Darby canine kidney cells. Paulmichl M, et al. **Pflugers Arch** 1989 Mar;413(5):456–62

Voltage dependence of adaptation and active bundle movement in bullfrog saccular hair cells. Assad JA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2918–22

Ontogenesis and localization of Ca2+ channels in mammalian skeletal muscle in culture and role in excitation–contraction coupling. Romey G, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2933–7

Mechanisms and significance of calcium entry at positive membrane potentials in guinea–pig ventricular muscle cells. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):121–39

Influence of halothane on contraction at positive membrane potentials in single cells isolated from guinea–pig ventricular muscle. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):141–51

Proportionality of 60–Hz electric field bioeffect severity to average induced transmembrane potential magnitude in a root model system. Brayman AA, et al. **Radiat Res** 1989 Feb;117(2):207–13

Odor–induced membrane currents in vertebrate–olfactory receptor neurons. Firestein S, et al. **Science** 1989 Apr 7; 244(4900):79–82

Calcium–permeable channels in vascular smooth muscle: voltage–activated, receptor–operated, and leak channels. Benham CD, et al. **Soc Gen Physiol Ser** 1987;42:45–64

[The value of measuring membrane potentials of urothelial cells using cytofluorometry in the study of tumors of the bladder. Preliminary analysis] Nicolas J, et al. **Ann Urol (Paris)** 1988;22(4):246–8 (Eng. Abstr.) **(Fre)**

[The fundamental law of electrostimulation] Irnich W. **Biomed Tech (Berlin)** 1989 Jul–Aug;34(7–8):158–67 (Eng. Abstr.) **(Ger)**

[Applicability of the ion–sensitive DDA+ electrode for measurement of rapid changes in transmembrane electric potentials] Schild L. **Z Med Lab Diagn** 1988;29(4):201–8 (Eng. Abstr.) **(Ger)**

[Submicrosecond imaging of membrane potential under a pulsed–laser fluorescence microscope—electroporation of cell membrane visualized] Kinosita K Jr, et al. **Seikagaku** 1988 Dec;60(12):1376–81 **(Jpn)**

[Important concepts and technology in the study of vision: membrane potential and surface potential] Kamo N. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):704–14 **(Jpn)**

[Dynamic interaction of membrane transport of cations and biosynthesis in the regulation of animal cell growth. A theoretical model] Il'in AS. **Biofizika** 1988 Sep–Oct; 33(5):821–7 (Eng. Abstr.) **(Rus)**

[Transmembrane electric potential as a regulator of functional activity of biomembranes] Konev SV, et al. **Biofizika** 1988 Nov–Dec;33(6):1018–22 (55 ref.) (Eng. Abstr.) **(Rus)**

[The effect of surface and membrane potential on 1–anilino–8–naphthalenesulfonate binding with E. coli membrane] Lebedev VS, et al. **Biofizika** 1988 Sep–Oct; 33(5):800–3 (Eng. Abstr.) **(Rus)**

[A study of the change in conductivity of the neuronal membrane caused by a generator potential using a method of computer modeling] Liberman EA, et al. **Biofizika** 1988 Nov–Dec;33(6):996–1000 (Eng. Abstr.) **(Rus)**

[Inward rectifier currents in endothelial cells from bovine pulmonary artery] Brzhestovskiĭ PD, et al. **Dokl Akad Nauk SSSR** 1988;302(5):1247–50 **(Rus)**

[Transmembrane potential as a factor determining the regularities of electrosurface phenomena in cell suspensions] Ul'berg ZR, et al. **Dokl Akad Nauk SSSR** 1988; 303(3):738–41 **(Rus)**

[Effect of pH on the potential–dependent functioning of staphylococcal toxin channels in phosphatidylcholine bilayer] Krasil'nikov OV, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):60–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of halothane on membrane ionic currents in guinea pig atrial and ventricular myocytes. Hirota K, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):239–44

Voltage–clamp models for the study of acute and chronic effects of ethanol on ionic currents in adult mammalian neurons. Ikeda SR, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):91–3

Isoflurane depresses membrane currents associated with contraction in myocytes isolated from guinea–pig ventricle. Terrar DA, et al. **Anesthesiology** 1988 Nov;69(5):742–9

Angiotensin II stimulates an endogenous response in Xenopus laevis ovarian follicles. Lacy MP, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):658–63

Homologous regulation of voltage–dependent calcium channels by 1,4–dihydropyridines. Skattebøl A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):929–36

Lymphocyte subpopulation with low membrane potential in the blood of cyclosporin– and prednisone–treated patients: in vivo selectivity for T4 subset. Aszalos A, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):25–9

Effects of L–alanine on membrane potential, potassium (86Rb) permeability and cell volume in hepatocytes from Raja erinacea. Ballatori N, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):261–9

Acid secretagogues induce Ca2+ mobilization coupled to K+ conductance activation in rat parietal cells in tissue culture. Ueda S, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):254–60

Pharmacological effects on oscillatory afterpotentials in partially depolarized ventricular myocardium. Albitz R, et al. **Biomed Biochim Acta** 1988;47(2):153–62

Mechanisms involved in generation of oscillatory afterpotentials in myocardium. Nilius B, et al. **Biomed Biochim Acta** 1988;47(2):163–71

Effects of sulphated cholecystokinin octapeptide (CCK–8) on the dorsal motor nucleus of the vagus. Plata–Salamán CR, et al. **Brain Res Bull** 1988 Nov;21(5):839–42

Effects of triiodothyronine on resting membrane potential of primary cultured rat submandibular gland cells. Bryant HJ, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1027–36

Weak bases mimic the fertilization–associated chloride conductance increase and induce morphological changes in the cortex of Xenopus laevis eggs. Charbonneau M. **Cell Differ Dev** 1989 Jan;26(1):39–51

Oxygen radicals and plasma membrane potential. Scott JA, et al. **Free Radic Biol Med** 1988;5(4):237–46 (58 ref.)

The effect of epidermal growth factor on membrane potential. Rapid hyperpolarization followed by persistent fluctuations. Pandiella A, et al. **J Biol Chem** 1989 Aug 5; 264(22):12914–21

Characterization of concentration– and use–dependent effects of quinidine from conduction delay and declining conduction velocity in canine Purkinje fibers. Packer DL, et al. **J Clin Invest** 1989 Jun;83(6):2109–19

Modulation of a subthreshold calcium current by the neuropeptide FMRFamide in Aplysia neuron R15. Kramer RH, et al. **J Neurophysiol** 1988 Nov;60(5):1728–38

Voltage–clamp analysis of taurine–induced suppression of excitatory postsynaptic potentials in frog spinal motoneurons. Yasunami T, et al. **J Neurophysiol** 1988 Oct; 60(4):1405–18

Histamine–induced intracellular free Ca++, inositol phosphates and electrical changes in murine N1E–115 neuroblastoma cells. Oakes SG, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):114–21

Neurotransmitter inhibition of neuronal calcium currents by changes in channel voltage dependence. Bean BP. **Nature** 1989 Jul 13;340(6229):153–6

Separation of different types of afterpotentials following penicillin–induced paroxysmal depolarization shifts of neurons in the motor cortex of the rat. Witte OW, et al. **Neurosci Lett** 1989 Jun 5;101(1):51–6

[The effect of cimetidine on the transmural potential difference (tPD) of the gastric mucosa in children and adults] König A, et al. **Kinderarztl Prax** 1988 Aug; 56(8):389–94 (Eng. Abstr.) **(Ger)**

[Energy cooperation between animal cells during complete blockade of the Na+, K+–pumps in a part of the cells] Aslanidi KB, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):990–3 **(Rus)**

[Ionic dependence of hyperpolarized changes of the membrane potential of breast secretory cells] Tolkunov IuA. **Fiziol Zh SSSR** 1989 Apr;75(4):567–74 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Ultraviolet radiation induces a change in cell membrane potential in vitro: a possible signal for ultraviolet radiation induced alteration in cell activity. Gallo RL, et al. **Photochem Photobiol** 1989 May;49(5):655–62

MEMBRANE PROTEINS

Chemistry and biology of cell surface glycoconjugates. Reuter G, et al. **Acta Histochem Suppl (Jena)** 1988;36:51–79 (130 ref.)

Biomembranes: structure of biomembranes and their models. Chapman D. **Adv Exp Med Biol** 1988;238:13–20 (56 ref.)

Biotechnological application of membrane proteins reconstituted into vesicular and planar lipid bilayers.

Dencher NA. **Adv Exp Med Biol** 1988;238:269–78 (37 ref.)
The bacterial photosynthetic reaction center as a model for membrane proteins. Rees DC, et al. **Annu Rev Biochem** 1989;58:607–33 (80 ref.)
The primary structure of the lymphocyte pore-forming protein perforin: partial amino acid sequencing and determination of isoelectric point. Persechini PM, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):740–5
Heavy metal derivatives of membrane proteins: selective mercurilation of bacteriorhodopsin. Sigrist H, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):640–6
Molecular cloning of a multifunctional chicken protein acting as the prolyl 4-hydroxylase beta-subunit, protein disulphide-isomerase and a cellular thyroid-hormone-binding protein. Comparison of cDNA-deduced amino acid sequences with those in other species. Parkkonen T, et al. **Biochem J** 1988 Dec 15; 256(3):1005–11
Investigation of membrane protein structure using Fourier transform infrared spectroscopy. Chapman D, et al. **Biochem Soc Trans** 1989 Aug;17(4):617–9 (15 ref.)
Association of synthetic model peptides with phospholipid vesicles induced by a membrane potential. de Kroon AI, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):371–3
Crystal structure of a zwitterionic detergent: n-octyl-2-hydroxyethylsulfoxide. Egner U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):404–6
A novel spin-label for study of membrane protein rotational diffusion using saturation transfer electron spin resonance. Application to selectively labelled class I and class II-SH groups of the shark rectal gland Na+/K+-ATPase. Esmann M, et al. **Biochim Biophys Acta** 1989 Jan 30; 978(2):205–15
Effect of lipid-protein interaction on the color of bacteriorhodopsin. Pande C, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):257–62
Membrane proteins are critical targets in free radical mediated cytolysis. Richards DM, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):281–8
Entrapment of lipid vesicles and membrane protein-lipid vesicles in gel bead pores. Wallstén M, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):47–52
The structure of a membrane-spanning polypeptide studied by molecular dynamics. Edholm O, et al. **Biophys Chem** 1988 Jul 15;30(3):279–92
Influence of proteins on the reorganization of phospholipid bilayers into large domains. Haverstick DM, et al. **Biophys J** 1989 Apr;55(4):677–82
Dynamics of melittin in water and membranes as determined by fluorescence anisotropy decay. John E, et al. **Biophys J** 1988 Nov;54(5):817–27
Reconstitution of membrane proteins: a selected bibliography from Biophysical Society workshop on membrane protein reconstitution, 2 March 1988. Silvius JR, et al. **Biophys J** 1989 Jan;55(1):207–8
Lipid-coated particles—a new approach to fix membrane-bound enzymes onto carrier surfaces. Rothe U, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):18–30
Periplasmic proteases of Escherichia coli. Cook RA. **Crit Rev Biotechnol** 1988;8(3):159–75
Structure and function of p21 ras proteins. Shih TY, et al. **Gene Amplif Anal** 1986;4:53–72 (64 ref.)
Immunoglobulin subunits of murine B lymphocytes: structure and associations with other membrane proteins. Vogel L, et al. **Immunology** 1989 Jun;67(2):251–7
Protein reconstitution: methodologies and applications. Madden TD. **Int J Biochem** 1988;20(9):889–95 (90 ref.)
Effect of preclotting and precoating agents on seeded venous grafts. Vo NM, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug;30(4):604–8
gamma-Aminobutyric acid-activated chloride channels: relationship to genetic differences in ethanol sensitivity. Allan AM, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):866–70
Modulation of gamma-aminobutyric acid-stimulated chloride influx by bicycloorthocarboxylates, bicyclophosphorus esters, polychlorocycloalkanes and other cage convulsants [published erratum appears in J Pharmacol Exp Ther 1988 Oct;247(1):397] Obata T, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):802–6
Inhibition of the GABA receptor-gated chloride ion channel in brain by noncompetitive inhibitors of the nicotinic receptor-gated cation channel. Schwartz RD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):963–70
Size and shape of membrane protein-detergent complexes: hydrodynamic studies. Clarke S, et al. **Methods Enzymol** 1989;172:696–709
Membrane protein molecular weight determined by low-angle laser light-scattering photometry coupled with high-performance gel chromatography. Hayashi Y, et al. **Methods Enzymol** 1989;172:514–28
Order and viscosity of membranes: analysis by time-resolved fluorescence depolarization. Heyn MP. **Methods Enzymol** 1989;172:462–71
Incorporation of membrane proteins into liposomal bilayers. Wrigglesworth JM. **Mol Aspects Med** 1988;10(3):223–32
The N-terminal amino acid sequences of the Plasmodium falciparum (FCB1) merozoite surface antigens of 42 and 36 kilodalton, both derived from the 185–195-kilodalton precursor. Heidrich HG, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):147–54
Protein structure. Ions, gates and channels [news] Green NM. **Nature** 1989 Jun 8;339(6224):424–5
Three-dimensional structure of CheY, the response regulator of bacterial chemotaxis. Stock AM, et al. **Nature** 1989 Feb 23;337(6209):745–9
Computer modeling of membrane-anchored cellular and viral proteins: organization and function. Becker Y. **Prog Clin Biol Res** 1989;289:109–29
Structural models of alpha helical membrane peptides and the GABA receptor channel. Guy HR, et al. **Prog Clin Biol Res** 1989;289:231–43
Hydrophobic organization of membrane proteins. Rees DC, et al. **Science** 1989 Aug 4;245(4917):510–3
Amphitropic proteins: a new class of membrane proteins. Burn P. **Trends Biochem Sci** 1988 Mar;13(3):79–83
Structural similarities between ion channel proteins. Maelicke A. **Trends Biochem Sci** 1988 Jun;13(6):199–202
[Functions and structure of complement inactivators in membrane proteins. 2). Decay-accelerating factor] Sugita Y. **Nippon Rinsho** 1988 Sep;46(9):1927–32 **(Jpn)**
[Amino acid sequence analysis of membrane proteins] Mitaku S. **Seikagaku** 1988 Nov;60(11):1267–71 **(Jpn)**
[Structure formation mechanism of membrane proteins] Mitaku S, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):518–27 **(Jpn)**

ANALYSIS

Heat-shock proteins in membrane vesicles of Bacillus subtilis. Fabisiewicz A, et al. **Acta Biochim Pol** 1988;35(4):367–76
Sugars on cell surfaces—lectins as detector molecules. **Acta Histochem Suppl (Jena)** 1988;36:1–446
Immunological relationships between specific sperm proteins and secretory polypeptides from seminal vesicles. Seitz J, et al. **Acta Histochem Suppl (Jena)** 1989;37:231–3
Immunological localization of an 80-kDa phosphoprotein to the apical membrane of gastric parietal cells. Hanzel DK, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1082–9
An optimized procedure for sodium dodecyl sulfate-polyacrylamide gel electrophoresis analysis of hydrophobic peptides from an integral membrane protein. Hennessey JP Jr, et al. **Anal Biochem** 1989 Feb 1; 176(2):284–9
Identification of Dictyostelium discoideum plasma membrane proteins by cell surface labeling and quantitative two-dimensional gel electrophoresis. Patton WF, et al. **Anal Biochem** 1989 May 15;179(1):37–49
Topography of membrane proteins. Jennings ML. **Annu Rev Biochem** 1989;58:999–1027 (199 ref.)
Protein-mediated membrane fusion. Stegmann T, et al. **Annu Rev Biophys Biophys Chem** 1989;18:187–211 (180 ref.)
Age-related cell surface proteins of human astrocytoma cells in culture. Hunt G, et al. **Anticancer Res** 1989 Jan-Feb; 9(1):157–9
Immunohistochemical analysis of the ras oncogene protein product in human thyroid neoplasms. Papadimitriou K, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1223–7
The 55-kd keratohyalin granule protein has the same epitope as the 43-kd stratum corneum membrane protein: immunofluorescence and immunoblotting studies using a monoclonal antibody to the 55-kd keratohyalin granule protein. Tezuka T, et al. **Arch Dermatol Res** 1989; 280(8):462–8
Outer membrane protein composition of Hafnia alvei. Witkowska D, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(6):711–5
Expression of pan-neuroendocrine proteins in 53 neuroblastic tumors. An immunohistochemical study with neuron-specific enolase, chromogranin, and synaptophysin. Hachitanda Y, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):381–4
Detection and differentiation of glycoconjugates in various cell types by lectin histochemistry. Spicer SS, et al. **Basic Appl Histochem** 1988;32(3):307–20 (52 ref.)
ras p21 and other Gn proteins are detected in mammalian cell lines by [gamma-35S]GTP gamma S binding. Comerford JG, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1269–74
In the absence of antibody IgGsorb precipitates human placenta phosphotyrosine-containing proteins. Goren HJ, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):332–6
Sequential changes in the expression of mitochondrial protein mRNA during the development of brown adipose tissue in bovine and ovine species. Sudden occurrence of uncoupling protein mRNA during embryogenesis and its disappearance after birth. Casteilla L, et al. **Biochem J** 1989 Feb 1;257(3):665–71
Cell fractionation studies indicate that dystrophin is a protein of surface membranes of skeletal muscle. Salviati G, et al. **Biochem J** 1989 Mar 15;258(3):837–41
Pyridoxal phosphate as a probe of the cytoplasmic domains of transmembrane proteins: application to the nicotinic acetylcholine receptor. Perez-Ramirez B, et al. **Biochemistry** 1989 Jun 13;28(12):5034–40
Detection of nearest neighbors to specific fluorescently tagged ligands in rod outer segment and lymphocyte plasma membranes by photosensitization of 5-iodonaphthyl 1-azide. Raviv Y, et al. **Biochemistry** 1989 Feb 7; 28(3):1313–9
Thylakoid membrane protein topography: transmembrane orientation of the chloroplast cytochrome b-559 psbE gene product. Tae GS, et al. **Biochemistry** 1988 Dec 27; 27(26):9075–80
Analysis of the major integral membrane proteins of peroxisomes from mouse liver. Chen NH, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):135–44
A refined method for the photoaffinity labelling of the nitrobenzylthioinosine-sensitive nucleoside transport protein: application to cell membranes of calf lung tissue. Uzerman AP, et al. **Biochim Biophys Acta** 1989 Feb 27; 979(2):153–6
Correlation between protein 4.1a/4.1b ratio and erythrocyte life span. Inaba M, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):256–64
Relationship of hyperthermia-induced hemolysis of human erythrocytes to the thermal denaturation of membrane proteins. Lepock JR, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):191–201
Bacterial proteins with N-terminal leader sequences resembling mitochondrial targeting sequences of eukaryotes. Saier MH Jr, et al. **Biochimie** 1988 Dec; 70(12):1743–8
Lectins in histochemistry. A survey. Danguy A, et al. **Biol Struct Morphog** 1988;1(3):93–106 (217 ref.)
Erythrocyte aging: a comparison of model systems for simulating cellular aging in vitro. Bosman GJ, et al. **Blood Cells** 1988;14(1):19–46
Localization and subcellular distribution of cellular ras gene products in rat brain. Mizoguchi A, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):31–44
ras oncogene expression and prognosis of invasive squamous cell carcinomas of the uterine cervix. Sagae S, et al. **Cancer** 1989 Apr 15;63(8):1577–82
Autocrine tumor cell growth-inhibiting activities from human malignant melanoma. Bogdahn U, et al. **Cancer Res** 1989 Oct 1;49(19):5358–63
Cloning of GMP-140, a granule membrane protein of platelets and endothelium: sequence similarity to proteins involved in cell adhesion and inflammation. Johnston GI, et al. **Cell** 1989 Mar 24;56(6):1033–44
Insertion of a multispanning membrane protein occurs sequentially and requires only one signal sequence. Wessels HP, et al. **Cell** 1988 Oct 7;55(1):61–70
2-D gel comparison of membrane proteins from freshly isolated and cultured fetal and adult hepatocytes. Radford J. **Cell Biol Int Rep** 1988 Dec;12(12):1011–25
Changes in the protein components of vitelline envelope during oogenesis of a tubiculous polychaete, Schizobranchia insignis. Lee YR. **Cell Differ Dev** 1988 Sep; 25(1):23–35
Cytoskeletal architecture and immunocytochemical localization of fodrin in the terminal web of the ciliated epithelial cell. Kobayashi N, et al. **Cell Motil Cytoskeleton** 1988;11(3):167–77
Immunochemical characterization of a Mr 115 lens fiber cell-specific extrinsic membrane protein. FitzGerald PG. **Curr Eye Res** 1988 Dec;7(12):1243–53
Age-related changes in a fiber cell-specific extrinsic membrane protein. FitzGerald PG. **Curr Eye Res** 1988 Dec; 7(12):1255–62
Effect of cell age on the quenching of erythrocyte membrane protein fluorescence. Grzelinska E, et al. **Cytobios** 1989; 57(230–231):149–54
Normal Merkel cells express a synaptophysin-like immunoreactivity. Ortonne JP, et al. **Dermatologica** 1988; 177(1):1–10
Identification of the cell surface molecule involved in sexual cell fusion of Dictyostelium discoideum. Suzuki K, et al. **Differentiation** 1989 Jun;40(3):159–65
Polypeptide patterns obtained by polyacrylamide gel electrophoresis of thylakoid membranes isolated from light and dark grown strains of Chlorogloea fritschii. Faulkner M. **Electrophoresis** 1988 Dec;9(12):807–11
A double-label two-dimensional procedure for the analysis of membrane proteins. Wheeler TT, et al. **Electrophoresis** 1988 Jun;9(6):279–87
Circular dichroic spectroscopy of membrane haemoproteins. The molecular determinants of the dichroic properties of the b cytochromes in various ubiquinol:cytochrome c reductases. Degli Esposti M, et al. **Eur J Biochem** 1989 Jun 1;182(1):27–36
Characterization of proteolytic fragments of the laminin-nidogen complex and their activity in ligand-binding assays. Mann K, et al. **Eur J Biochem** 1988 Dec 1;178(1):71–80
Composition of the ternary protein complex of the red cell membrane cytoskeleton. Pekrun A, et al. **Eur J Biochem** 1989 Jul 1;182(3):713–7
Structure and biological activity of basement membrane proteins. Timpl R. **Eur J Biochem** 1989 Apr 1; 180(3):487–502 (212 ref.)
The rotational diffusion of chloroplast phosphate translocator and of lipid molecules in bilayer membranes. Wagner R, et al. **Eur J Biochem** 1989 Jun 1;182(1):165–73
Characterization and partial purification of a high-molecular-mass, calmodulin-binding, tyrosyl-phosphorylated protein from lymphocyte plasma membranes. Kostka G. **Exp Cell Res** 1989 Mar;181(1):85–93
A hyaluronate binding protein transiently codistributes with p21k-ras in cultured cell lines. Turley E, et al. **Exp Cell Res** 1989 Jun;182(2):340–8
Immunocytochemical distribution of extracellular matrix receptors in human osteoclasts: a beta 3 integrin is colocalized with vinculin and talin in the podosomes of osteoclastoma giant cells. Zambonin-Zallone A, et al.

Exp Cell Res 1989 Jun;182(2):645–52
Toward an understanding of structure and function of ion channels. Krueger BK. FASEB J 1989 Jun;3(8):1906–14 (68 ref.)
Bovine lens 23, 21 and 19 kDa intrinsic membrane proteins have an identical amino-terminal amino acid sequence. Rao GN, et al. FEBS Lett 1989 Jul 3;250(2):483–6
Protein composition of two strains of Leptospira at different stages of their development. Vassilevska M. Folia Med (Plovdiv) 1987;29(2):41–7
Expression and topographical localization of cell surface fucosyltransferase activity during epididymal sperm maturation in the mouse. Ram PA, et al. Gamete Res 1989 Mar;22(3):321–32
Intermolecular cross-linking of vitelline envelope polypeptides predominates in the hardened sea urchin fertilization envelope. Santiago L, et al. Gamete Res 1987 May;17(1):63–75
Membrane molecules involved in adhesion properties of cultured Sertoli cells. Zani BM, et al. Gamete Res 1987 Dec;18(4):301–10
Identification of gastroenteropancreatic neuroendocrine cells in normal and neoplastic human tissue with antibodies against synaptophysin, chromogranin A, secretogranin I (chromogranin B), and secretogranin II. Wiedenmann B, et al. Gastroenterology 1988 Nov;95(5):1364–74
Na+-Ca2+ exchanger in the soluble fraction of crayfish striated muscle. Ruščák M, et al. Gen Physiol Biophys 1989 Jun;8(3):203–12
Efficient radioiodination and immunopurification of surface proteins from small numbers of cells. Pearse MJ, et al. Immunol Lett 1989 Jul;22(1):17–21
The lymphocyte pore-forming protein perforin is associated with granules by a pH-dependent mechanism. Persechini PM, et al. Immunol Lett 1989 Jul;22(1):23–7
Comparative analysis of surface components of adult, micro-filariae and infective larvae of Brugia malayi. Kaushal DC, et al. Indian J Biochem Biophys 1989 Feb; 26(1):52–5
Properties of membrane bound ferrochelatase purified from baboon liver mitochondria. Posnett SJ, et al. Int J Biochem 1988;20(8):845–55
Synaptophysin in the developing cochlea. Gil-Loyzaga P, et al. Int J Dev Neurosci 1988;6(2):155–60
2-Hydroxy-5-nitrobenzyl bromide as a specific reagent for tryptophan residues in membrane proteins: bacteriorhodopsin as an example. Sabés M, et al. J Biochem Biophys Methods 1988 Sep;17(1):17–24
Identification, purification, and partial characterization of a novel Mr 28,000 integral membrane protein from erythrocytes and renal tubules. Denker BM, et al. J Biol Chem 1988 Oct 25;263(30):15634–42
Evidence for the presence of two active forms of cytosolic 3,5,3'-triiodo-L-thyronine (T3)-binding protein (CTBP) in rat kidney. Specialized functions of two CTBPs in intracellular T3 translocation. Hashizume K, et al. J Biol Chem 1989 Mar 25;264(9):4864–71
Topology of the Mr 27,000 liver gap junction protein. Cytoplasmic localization of amino- and carboxyl termini and a hydrophilic domain which is protease-hypersensitive. Hertzberg EL, et al. J Biol Chem 1988 Dec 15; 263(35):19105–11
Chemical identification of cysteine as palmitoylation site in a transmembrane protein (Semliki Forest virus E1). Schmidt M, et al. J Biol Chem 1988 Dec 15;263(35):18635–9
Immunofluorescent and immunochemical evidence for the expression of cytovillin in the microvilli of a wide range of cultured human cells. Pakkanen R. J Cell Biochem 1988 Sep;38(1):65–75
A search for EGF-elicited degradation products of the EGF receptor. Stoscheck CM, et al. J Cell Biochem 1988 Sep; 38(1):51–63
Antisera directed against connexin43 peptides react with a 43-kD protein localized to gap junctions in myocardium and other tissues. Beyer EC, et al. J Cell Biol 1989 Feb; 108(2):595–605
Fractionation of Tetrahymena ciliary membranes with triton X-114 and the identification of a ciliary membrane ATPase. Dentler WL. J Cell Biol 1988 Dec;107(6 Pt 2):2679–88
The mouse neuronal cell surface protein F3: a phosphatidylinositol-anchored member of the immunoglobulin superfamily related to chicken contactin. Gennarini G, et al. J Cell Biol 1989 Aug;109(2):775–88
A membrane-cytoskeletal complex containing Na+,K+-ATPase, ankyrin, and fodrin in Madin-Darby canine kidney (MDCK) cells: implications for the biogenesis of epithelial cell polarity. Nelson WJ, et al. J Cell Biol 1989 Mar;108(3):893–902
Identification, by a monoclonal antibody, of a 53-kD protein associated with a tubulo-vesicular compartment at the cis-side of the Golgi apparatus. Schweizer A, et al. J Cell Biol 1988 Nov;107(5):1643–53
Comparative characterization of the 21-kD and 26-kD gap junction proteins in murine liver and cultured hepatocytes. Traub O, et al. J Cell Biol 1989 Mar;108(3):1039–51
Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. Van Hooff CO, et al. J Cell Biol 1989 Mar;108(3):1115–25
The structural organization and protein composition of lens fiber junctions. Zampighi GA, et al. J Cell Biol 1989 Jun; 108(6):2255–75
Sulfogalactolipid binding protein SLIP 1: a conserved function for a conserved protein. Law H, et al. J Cell Physiol 1988 Dec;137(3):462–8
Comparison of non-ionic detergents for extraction and ion-exchange high-performance liquid chromatography of Sendai virus integral membrane proteins. Van Ede J, et al. J Chromatogr 1989 Aug 4;476:319–27
High-performance liquid chromatographic separation of membrane proteins isolated from erythrocyte ghosts. Welinder BS, et al. J Chromatogr 1989 Jan 13;462:255–68
Effect of detergents on the structure of integral membrane proteins of Sendai virus studied with size-exclusion high-performance liquid chromatography and monoclonal antibodies. Welling-Wester S, et al. J Chromatogr 1988 Jun 29;443:255–66
Decay-accelerating factor is expressed on vascular smooth muscle cells in human atherosclerotic lesions. Seifert PS, et al. J Clin Invest 1989 Aug;84(2):597–604
Gap junction protein in rat hippocampus: correlative light and electron microscope immunohistochemical localization. Shiosaka S, et al. J Comp Neurol 1989 Mar 8;281(2):282–97
Gap junction protein in rat hippocampus: light microscope immunohistochemical localization. Yamamoto T, et al. J Comp Neurol 1989 Mar 8;281(2):269–81
Postreplication labeling of E-leaflet molecules: membrane immunoglobulins localized in sectioned, labeled replicas examined by TEM and HVEM. Dinchuk JE, et al. J Electron Microsc Tech 1987 Sep;7(1):1–16
Hydrophobic labelling of membrane-embedded proteins with lipophilic reagents. Incorporation of [125I]INA and [125I]TID into B lymphocyte membrane immunoglobulins. Vogel L, et al. J Immunol Methods 1989 Jan 6;116(1):31–6
Decay-accelerating factor in human skin is associated with elastic fibers. Werth VP, et al. J Invest Dermatol 1988 Nov; 91(5):511–6
Purification of proteins of the Na/Cl cotransporter from membranes of Ehrlich ascites cells using a bumetanide-sepharose affinity column. Feit PW, et al. J Membr Biol 1988 Jul;103(2):135–47
Relation between the anion exchange protein in kidney medullary collecting duct cells and red cell band 3. Janoshazi A, et al. J Membr Biol 1988 Jul;103(2):181–9
Most synaptic vesicles isolated from rat brain carry three membrane proteins, SV2, synaptophysin, and p65. Floor E, et al. J Neurochem 1989 May;52(5):1433–7
Subcellular distribution of 65,000 calmodulin-binding protein (p65) and synaptophysin (p38) in adrenal medulla. Fournier S, et al. J Neurochem 1989 Oct;53(4):1043–9
In adrenal medulla synaptophysin (protein p38) is present in chromaffin granules and in a special vesicle population. Obendorf D, et al. J Neurochem 1988 Nov;51(5):1573–80
Endogenous lectin CSL is present on the membrane of cilia of rat brain ependymal cells. Perraud F, et al. J Neurocytol 1988 Dec;17(6):745–51
Assembly of two-dimensional membrane crystals of Na,K-ATPase. Söderholm M, et al. J Ultrastruct Mol Struct Res 1988 Jun;99(3):234–43
Expression of merosin, a tissue-specific basement membrane protein, in the intermediate trophoblast cells of choriocarcinoma and placenta. Leivo I, et al. Lab Invest 1989 Jun;60(6):783–90
Heterogeneity in protein patterns of cells from terminal blast crisis in chronic granulocytic leukemia: discrimination between lymphatic and myeloid lineages. Doxiadis I, et al. Leukemia 1988 Dec;2(12 Suppl):57S–62S
Association of the intestinal brush-border membrane phospholipase A2 and lysophospholipase activities (phospholipase B) with a stalked membrane protein. Pind S, et al. Lipids 1989 May;24(5):357–62
Identification of membrane components of Trypanosoma cruzi modulators of complement system. Kipnis TL, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:571–5
Sensitive protein assay in presence of high levels of lipid. Kaplan RS, et al. Methods Enzymol 1989;172:393–9
Immunoelectron microscopic studies on spore coat proteins of Bacillus megaterium. Imagawa M, et al. Microbiol Immunol 1988;32(10):991–8
Characterization of a strain of Mycoplasma hominis lacking 120 kDa membrane protein isolated from Vero cell culture. Sasaki T, et al. Microbiol Immunol 1989;33(5):423–7
Use of Iodogen and sulfosuccinimidobiotin to identify and isolate cuticular proteins of the filarial parasite Brugia malayi. Alvarez RM, et al. Mol Biochem Parasitol 1989 Mar 1;33(2):183–9
A Thy-1 negative lymphoma cell variant defective in the formation of glycosyl-phosphatidylinositol membrane protein anchors. Teng MH, et al. Mol Immunol 1989 Apr; 26(4):391–402
Development of neuronal polarity: GAP-43 distinguishes axonal from dendritic growth cones. Goslin K, et al. Nature 1988 Dec 15;336(6200):672–4
Immunohistochemical quantification of the synapse-related protein synaptophysin in Alzheimer disease. Masliah E, et al. Neurosci Lett 1989 Aug 28;103(2):234–9
Localization of the integral membrane glycoprotein synaptophysin and the surface glycoprotein Egp-34 in the embryonic and adult human inner ear. Anniko M, et al. ORL J Otorhinolaryngol Relat Spec 1989;51(4):221–8
Partial characterization of the adsorbed protein layer on Dirofilaria immitis (Nematoda) cuticle. Kadipasaoglu AK, et al. Parasitol Res 1989;75(7):554–8
Automated purification of human protein band 3, the major integral protein of the erythrocyte membrane. Vasseur C, et al. Prep Biochem 1988;18(3):293–301
Identification of a protein associated with p21ras by chemical crosslinking. de Gunzburg J, et al. Proc Natl Acad Sci U S A 1989 Jun;86(11):4007–11
Polarized apical distribution of glycosyl-phosphatidylinositol-anchored proteins in a renal epithelial cell line. Lisanti MP, et al. Proc Natl Acad Sci U S A 1988 Dec;85(24):9557–61
Beta-amyloid precursor protein of Alzheimer disease occurs as 110- to 135-kilodalton membrane-associated proteins in neural and nonneural tissues. Selkoe DJ, et al. Proc Natl Acad Sci U S A 1988 Oct;85(19):7341–5
Monoclonal antibody identification of a 100-kDa membrane protein in HeLa cells and human spinal cord involved in poliovirus attachment. Shepley MP, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7743–7
The 43-kDa neuronal growth-associated protein (GAP-43) is present in plasma membranes of rat astrocytes. Vitković L, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(21):8296–300
Distribution of analogues of spectrin, fodrin and protein 4.1 in rat spermatogenic cells. De Cesaris P, et al. Prog Clin Biol Res 1989;296:149–52
Racemization of individual amino acid residues in membrane proteins. Shapira R, et al. Prog Clin Biol Res 1989; 292:487–96
Increased content of a minor ankyrin in erythrocyte membranes of bipolar subjects. Zhang Y, et al. Psychiatry Res 1989 Mar;27(3):267–75
Surface proteins of Bordetella pertussis. Parker CD, et al. Rev Infect Dis 1988 Jul-Aug;10 Suppl 2:S327–30 (17 ref.)
Molecular biology of synaptic vesicle-associated proteins [news] Trimble WS, et al. Trends Neurosci 1988 Jun; 11(6):241–2 (18 ref.)
Tissue fixation methods alter the immunohistochemical demonstrability of synaptophysin. Hoog A, et al. Ultrastruct Pathol 1988 Nov-Dec;12(6):673–8
The host-parasite interface in molluscan schistosomiasis: biotin as a probe for sporocyst and hemocyte surface peptides. Bayne CJ, et al. Vet Parasitol 1988 Sep; 29(2-3):131–42
[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. Pathologe 1989 Jul; 10(4):228–33 (Ger)
[Isolation of a peptide containing the active center of anion transport: an experiment on the isolation of hydrophobic peptides] Kawano Y, et al. Rinsho Byori 1987 Nov;Spec No 74:78–84 (Jpn)
[Glycophorin and membrane surface proteins] Tomita M, et al. Rinsho Byori 1987 Nov;Spec No 74:56–65 (30 ref.) (Jpn)
[Glycophospholipid-linked membrane proteins of human erythrocytes] Sugita Y. Seikagaku 1988 Jun;60(6):441–5 (20 ref.) (Jpn)
[A study of the dynamic properties of membrane proteins using Mössbauer spectroscopy] Aleksandrov AIu, et al. Biofizika 1988 Nov-Dec;33(6):962–7 (Eng. Abstr.) (Rus)
[The use of triplet-sensitized photochromism phenomenon for the study of dynamic interaction of membrane proteins] Mekler VM, et al. Biofizika 1988 Jul-Aug;33(4):720–2 (Eng. Abstr.) (Rus)
[Primary structure of the OSCP-protein, conferring the oligomycin sensitivity to the H+-ATPase complex. II. Hydrolysis of OSCP with proteinase from Staphylococcus aureus and reconstruction of the polypeptide chain] Grinkevich VA, et al. Bioorg Khim 1988 Jun;14(6):790–6 (Eng. Abstr.) (Rus)
[The use of polarographic methods for studying cobalamine-containing periplasmatic proteins from Propionibacterium shermanii cells] Datsiuk NM, et al. Mikrobiol Zh 1983 May-Jun;45(3):67–70 (Eng. Abstr.) (Rus)
[The protein spectrum of human erythrocyte membranes in normal conditions and in psoriasis] Goncharenko MS, et al. Vestn Dermatol Venerol 1989;(3):4–7 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Blocking kinetics of Cl- channels in colonic carcinoma cells (HT29) as revealed by 5-nitro-2-(3-phenylpropylamino)benzoic acid (NPPB). Dreinhöfer J, et al. Biochim Biophys Acta 1988 Dec 8; 946(1):135–42
Inhibition by aluminum hydroxide of the voltage-dependent closure of the mitochondrial channel, VDAC. Zhang DW, et al. Biochim Biophys Acta 1989 Apr 25;991(1):68–78

BIOSYNTHESIS

Biogenesis of endogenous plasma membrane proteins in epithelial cells. Hubbard AL, et al. Annu Rev Physiol 1989; 51:755–70 (64 ref.)
Synthesis of the major oil-body membrane protein in developing rapeseed (Brassica napus) embryos. Integration with storage-lipid and storage-protein synthesis and implications for the mechanism of oil-body formation. Murphy DJ, et al. Biochem J 1989 Feb 15;258(1):285–93
Mr 85,000 membrane protein specifically expressed in

adriamycin-resistant human tumor cells. Hamada H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7082-7
Resistance to etoposide induced by three glucose-regulated stresses in Chinese hamster ovary cells. Hughes CS, et al. **Cancer Res** 1989 Aug 15;49(16):4452-4
IL-1 secretion and membrane IL-1 expression by neonatal spleen cells during soluble antigen presentation. Levin D, et al. **Cell Immunol** 1988 Oct 15;116(2):382-91
Synthesis of two proteins in chloroplasts and mRNA distribution between thylakoids and stroma during the cell cycle of Chlamydomonas reinhardii. Breidenb..ch E, et al. **Eur J Biochem** 1988 Oct 15;177(1):225-32
Biosynthesis of intestinal microvillar proteins. Low temperature arrests both processing and intracellular transport. Danielsen EM, et al. **Eur J Cell Biol** 1989 Jun; 49(1):123-7
Antibody 12-15 cross-reacts with mouse Fc gamma receptors and CD2: study of thymus expression, genetic polymorphism and biosynthesis of the CD2 protein. Altevogt P, et al. **Eur J Immunol** 1989 Feb;19(2):341-6
Glucose deprivation results in the induction of glucose-regulated proteins and domes in MDCK monolayers in hormonally defined serum-free medium. Taub ML, et al. **Exp Cell Res** 1989 May;182(1):105-13
Membrane proteins stimulated by interferon-alpha in growth-inhibited, but not in resistant, Daudi cells. Quek A, et al. **Immunol Cell Biol** 1988 Oct-Dec;66 (Pt 5-6):353-9
Active transport of maltose in membrane vesicles obtained from Escherichia coli cells producing tethered maltose-binding protein. Dean DA, et al. **J Bacteriol** 1989 Jan;171(1):503-10
Lymphokine-independent induction of macrophage membrane IL-1 by autoreactive T cells recognizing either class I or class II MHC determinants. Wasik MA, et al. **J Immunol** 1988 Nov 15;141(10):3456-62
Functional analysis of monocyte-macrophages derived from nonadherent cord blood progenitor cells: correlation with the ontogeny of cell surface proteins. Santiago-Schwarz F, et al. **J Leukoc Biol** 1989 Sep;46(3):230-8
The maltose-inducible 43 kDa major outer membrane protein in Vibrio cholerae is immunogenic and common to different isolates. Lång HA, et al. **Microb Pathog** 1988 Sep; 5(3):169-75
Release of the variant surface glycoprotein during differentiation of bloodstream to procyclic forms of Trypanosoma brucei. Bülow R, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):85-92
Major peroxisomal membrane polypeptides are synthesized in cultured skin fibroblasts from patients with Zellweger syndrome. Suzuki Y, et al. **Pediatr Res** 1989 Aug; 26(2):150-3
Identification of a vitamin D-responsive protein on the surface of human osteosarcoma cells. Shull S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5405-9
Dynamic spatial distribution of proteins in the cell. Kaprelyants AS. **Trends Biochem Sci** 1988 Feb;13(2):43-6
[Characteristics of the effect of hydrocortisone on biosynthesis of mitochondrial proteins in the liver of thyroidectomized rats] Minchenko AG. **Vopr Med Khim** 1988 Sep-Oct;34(5):17-22 (Eng. Abstr.) **(Rus)**

BLOOD

Definition of CD 11a, b, c, and CD 18 glycoproteins on chemotactically deficient granulocyte membranes in patients affected by myeloid disorders. Ricevuti G, et al. **Acta Haematol (Basel)** 1989;81(3):126-30
Mechanism of increased erythrocyte membrane fluidity during magnesium deficiency in weanling rats. Tongyai S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C270-6
A nondenaturing vertical isoelectric focusing polyacrylamide slab gel system suitable for silver staining and electrophoretic blotting. Warlow RS, et al. **Anal Biochem** 1988 Dec;175(2):474-81
Inhibition of the proteolysis of rat erythrocyte membrane proteins by a synthetic inhibitor of calpain [published erratum appears in Biochem Biophys Res Commun 1989 Feb 28;159(1):371] Mehdi S, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1117-23
Identification of glucose and nucleoside transport proteins in neonatal pig erythrocytes using monoclonal antibodies against band 4.5 polypeptides of adult human and pig erythrocytes. Craik JD, et al. **Biochem Cell Biol** 1988 Aug; 66(8):839-52
Role of the phosphorylation of red blood cell membrane proteins. Boivin P. **Biochem J** 1988 Dec 15;256(3):689-95 (80 ref.)
Reconstitution of the L-lactate carrier from rat and rabbit erythrocyte plasma membranes. Poole RC, et al. **Biochem J** 1988 Sep 1;254(2):385-90
Membrane proteins in senescent erythrocytes. Suzuki T, et al. **Biochem J** 1989 Jan 1;257(1):37-41
Regulation of band 3 mobilities in erythrocyte ghost membranes by protein association and cytoskeletal meshwork. Tsuji A, et al. **Biochemistry** 1988 Sep 20; 27(19):7447-52
Low-pH association of proteins with the membranes of intact red blood cells. I. Exogenous glycophorin and the CD4 molecule. Arvinte T, et al. **Biochim Biophys Acta** 1989 May 19;981(1):51-60
Low-pH association of proteins with the membranes of intact red blood cells. II. Studies of the mechanism. Arvinte T, et al. **Biochim Biophys Acta** 1989 May 19;981(1):61-8
Macrophage recognition of periodate-treated erythrocytes: involvement of disulfide formation of the erythrocyte membrane proteins. Beppu M, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):35-45
A form of protease nexin I is expressed on the platelet surface during platelet activation. Gronke RS, et al. **Blood** 1989 Feb;73(2):472-8
Characterization of the serum In(Lu)-related antigen: identification of a serum protein related to erythrocyte p80. Lucas MG, et al. **Blood** 1989 Feb;73(2):596-600
Alterations in membrane proteins of mouse erythrocytes infected with different species and strains of malaria parasites. Yuthavong Y, et al. **Comp Biochem Physiol [B]** 1979;63(1):83-5
Purification and partial characterization of thyroid hormone binding proteins in canine serum. Larsson M, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):215-29
Gn-proteins are distinct from ras p21 and other known low molecular mass GTP-binding proteins in the platelet. Bhullar RP, et al. **FEBS Lett** 1988 Sep 12;237(1-2):168-72
Lymphocyte surface ferritin in malignant and inflammatory diseases. Steinhoff G, et al. **Haematologia (Budap)** 1988; 21(4):199-203
Clinical disorders of the erythrocyte membrane skeleton. McGuire M, et al. **Hematol Pathol** 1988;2(1):1-14 (119 ref.)
Effects of lead on red blood cell membrane proteins. Apostoli P, et al. **Int Arch Occup Environ Health** 1988;61(1-2):71-5
Isolation from human erythrocytes of a new membrane protein which inhibits the formation of complement transmembrane channels. Sugita Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):633-7
Purification and characterization of an erythrocyte membrane protein complex carrying Duffy blood group antigenicity. Possible receptor for Plasmodium vivax and Plasmodium knowlesi malaria parasite. Chaudhuri A, et al. **J Biol Chem** 1989 Aug 15;264(23):13770-4
The Rh polypeptide is a major fatty acid-acylated erythrocyte membrane protein. de Vetten MP, et al. **J Biol Chem** 1988 Dec 5;263(34):18193-6
Characterization and purification of membrane-associated phosphatidylinositol-4-phosphate kinase from human red blood cells. Ling LE, et al. **J Biol Chem** 1989 Mar 25; 264(9):5080-8
Membrane protein organization of peripheral blood lymphocytes from healthy young and aged adults. Rivich DA, et al. **Mech Ageing Dev** 1988 Oct;45(1):65-74
Chemical modification of the anion-transport system with phenylglyoxal. Bjerrum PJ. **Methods Enzymol** 1989; 173:466-94
Preparation of red cell membrane skeleton proteins. Horne WC, et al. **Methods Enzymol** 1989;173:380-92
Protein associations with band 3 at cytoplasmic surface of human erythrocyte membrane. Waseem A, et al. **Methods Enzymol** 1989;173:513-9
Trypanosoma cruzi: involvement of proteolytic activity during cell fusion induced by epimastigote form. Calderon RO, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):189-200
Identification of trophoblast membrane-originated proteins in human placental blood. Kim IC. **Tumour Biol** 1989; 10(1):31-7
[Two-dimensional map of membrane proteins from human erythrocytes] Gromov PS, et al. **Biokhimiia** 1988 Aug; 53(8):1316-26 (Eng. Abstr.) **(Rus)**
[Characteristics of endogenous proteolysis in preparations of human erythrocyte membranes] Gromov PS, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):292-7 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

The ras superfamily proteins. Chardin P. **Biochimie** 1988 Jul; 70(7):865-8 (23 ref.)

DEFICIENCY

Impaired echinocytic transformation of ankyrin- and spectrin-deficient erythrocytes in mice. Reinhart WH, et al. **Am J Hematol** 1988 Dec;29(4):195-200
Studies on the defect which causes absence of decay accelerating factor (DAF) from the peripheral blood cells of an individual with the Inab phenotype. Tate CG, et al. **Biochem J** 1989 Jul 15;261(2):489-93
A molecular study of heterozygous protein 4.1 deficiency in hereditary elliptocytosis. Lambert S, et al. **Blood** 1988 Dec;72(6):1926-9
The Inab phenotype: characterization of the membrane protein and complement regulatory defect. Telen MJ, et al. **Blood** 1989 Jul;74(1):437-41
Hereditary stomatocytosis: consistent association with an integral membrane protein deficiency. Eber SW, et al. **Br J Haematol** 1989 Jul;72(3):452-5
Absence of homologous restriction factor does not affect CTL-mediated cytolysis. Krähenbühl OP, et al. **Eur J Immunol** 1989 Jan;19(1):217-9
Heightened complement sensitivity of acquired immunodeficiency syndrome lymphocytes related to diminished expression of decay-accelerating factor. Lederman MM, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4205-9

GENETICS

Expression of specific isoforms of protein 4.1 in erythroid and non-erythroid tissues. Tang TK, et al. **Adv Exp Med Biol** 1988;241:81-95
Human nidogen: cDNA cloning, cellular expression, and mapping of the gene to chromosome 1q43. Olsen DR, et al. **Am J Hum Genet** 1989 Jun;44(6):876-85
The genes encoding major surface proteins of Borrelia burgdorferi are located on a plasmid. Barbour AG, et al. **Ann N Y Acad Sci** 1988;539:144-53
Environmentally regulated gene expression for membrane proteins in Escherichia coli. Forst S, et al. **Annu Rev Cell Biol** 1988;4:21-42 (93 ref.)
Messenger RNA expressed in mouse teratocarcinoma stem cells and down-regulated by a tumor-promoting phorbol ester codes for a novel transmembrane protein. Akagi J, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):548-57
Rabbit brown adipose tissue uncoupling protein MRNA: use of only one of two polyadenylation signals in its processing. Balogh AG, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):156-61
The gene for rat uncoupling protein: complete sequence, structure of primary transcript and evolutionary relationship between exons. Bouillaud F, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):783-92
The structure of the mouse lymphocyte pore-forming protein perforin. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):1-10
Molecular cloning and sequence analysis of human genomic DNA encoding a novel membrane protein which exhibits a slowly activating potassium channel activity. Murai T, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):176-81
Rat testis P-450(17)alpha cDNA: the deduced amino acid sequence, expression and secondary structural configuration. Namiki M, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):705-12
Effects of exposure temperature on brown adipose tissue uncoupling protein mRNA levels. Freeman KB, et al. **Biochem Cell Biol** 1989 Feb-Mar;67(2-3):147-51
Genetic control of red-cell nucleoside transport and its association with the B blood-group locus and nucleoside phosphorylase activity in sheep. Tucker EM, et al. **Biochem Genet** 1988 Aug;26(7-8):489-501
Probable detection of kil peptide derived from colicin E1 plasmid in the envelope fraction of Escherichia coli HB101 carrying pEAP31. Aono R. **Biochem J** 1988 Oct 1; 255(1):365-8
Molecular cloning and characterization of the gene coding for red cell membrane skeletal protein 4.1. Conboy J. **Biorheology** 1987;24(6):673-87 (53 ref.)
Structure of a gap junction gene: rat connexin-32. Miller T, et al. **Biosci Rep** 1988 Oct;8(5):455-64
GAP-43 gene expression during development: persistence in a distinctive set of neurons in the mature central nervous system. De la Monte SM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):161-8
A putative murine ecotropic retrovirus receptor gene encodes a multiple membrane-spanning protein and confers susceptibility to virus infection. Albritton LM, et al. **Cell** 1989 May 19;57(4):659-66
Molecular analysis of the para locus, a sodium channel gene in Drosophila. Loughney K, et al. **Cell** 1989 Sep 22; 58(6):1143-54
Two erbA homologs encoding proteins with different T3 binding capacities are transcribed from opposite DNA strands of the same genetic locus. Miyajima N, et al. **Cell** 1989 Apr 7;57(1):31-9
The yeast secretory pathway is perturbed by mutations in PMR1, a member of a Ca2+ ATPase family. Rudolph HK, et al. **Cell** 1989 Jul 14;58(1):133-45
Formation of gap junctions by expression of connexins in Xenopus oocyte pairs. Swenson KI, et al. **Cell** 1989 Apr 7;57(1):145-55
Mouse blastocyst surface expression of galactose-containing epitopes coinciding with trophoblast differentiation. Svalander PC, et al. **Cell Differ Dev** 1989 May; 26(3):191-200
Analysis of mammalian ras effector function. Hall A, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:855-62
Sevenless, a gene encoding a putative receptor for positional information. Rubin GM. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:417-24
The Drosophila fsh locus, a maternal effect homeotic gene, encodes apparent membrane proteins. Haynes SR, et al. **Dev Biol** 1989 Jul;134(1):246-57
Molecular analysis and rescue of a vitelline membrane mutant in Drosophila. Savant SS, et al. **Dev Biol** 1989 Sep; 135(1):43-52
The triose phosphate-3-phosphoglycerate-phosphate translocator from spinach chloroplasts: nucleotide sequence of a full-length cDNA clone and import of the in vitro synthesized precursor protein into chloroplasts. Flügge UI, et al. **EMBO J** 1989 Jan;8(1):39-46
Amino acid sequence of mouse nidogen, a multidomain basement membrane protein with binding activity for laminin, collagen IV and cells. Mann K, et al. **EMBO J** 1989 Jan;8(1):65-72
Molecular cloning of a maize gene involved in photosynthetic membrane organization that is regulated by Robertson's Mutator. Martienssen RA, et al. **EMBO J** 1989 Jun; 8(6):1633-9
Complex alternative splicing of acetylcholinesterase transcripts in Torpedo electric organ; primary structure

of the precursor of the glycolipid-anchored dimeric form. Sikorav JL, et al. **EMBO J** 1988 Oct;7(10):2983–93

Thyroid hormone regulation of nuclear-encoded mitochondrial inner membrane polypeptides of the liver. Joste V, et al. **Eur J Biochem** 1989 Sep 1;184(1):255–60

Detection of perforin and granzyme A mRNA in infiltrating cells during infection of mice with lymphocytic choriomeningitis virus. Müller C, et al. **Eur J Immunol** 1989 Jul;19(7):1253–9

Plasmodium falciparum: comparison of the genomic organization of the knob protein gene in knobby and knobless variants. Tan-Ariya P, et al. **Exp Parasitol** 1988 Dec;67(2):129–36

Intracellular targetting signals of polymeric immunoglobulin receptors are highly conserved between species. Banting G, et al. **FEBS Lett** 1989 Aug 28;254(1–2):177–83

Expression of RNA transcripts for the postsynaptic 43 kDa protein in innervated and denervated rat skeletal muscle. Froehner SC. **FEBS Lett** 1989 Jun 5;249(2):229–33

Import of a mutant mitochondrial precursor fails to respond to stimulation by a cytosolic factor. Randall SK, et al. **FEBS Lett** 1989 Jul 3;250(2):561–4

Delta, a Drosophila neurogenic gene, is transcriptionally complex and encodes a protein related to blood coagulation factors and epidermal growth factor of vertebrates. Kopczynski CC, et al. **Genes Dev** 1988 Dec;2(12B):1723–35

The secE gene encodes an integral membrane protein required for protein export in Escherichia coli. Schatz PJ, et al. **Genes Dev** 1989 Jul;3(7):1035–44

Cloning and characterization of a Chlamydia trachomatis L3 DNA fragment that codes for an antigenic region of the major outer membrane protein and specifically hybridizes to the C- and C-related-complex serovars. Carlson EJ, et al. **Infect Immun** 1989 Feb;57(2):487–94

Multiple and tandemly arranged promoters of the cell wall protein gene operon in Bacillus brevis 47. Adachi T, et al. **J Bacteriol** 1989 Feb;171(2):1010–6

Cloning and expression in Escherichia coli of genes encoding a multiprotein complex involved in secretion of proteins from Staphylococcus aureus. Adler LA, et al. **J Bacteriol** 1988 Nov;170(11):5337–43

Cloning and sequencing of the gene encoding a 125-kilodalton surface-layer protein from Bacillus sphaericus 2362 and of a related cryptic gene. Bowditch RD, et al. **J Bacteriol** 1989 Aug;171(8):4178–88

Both CheA and CheW are required for reconstitution of chemotactic signaling in Escherichia coli. Conley MP, et al. **J Bacteriol** 1989 Sep;171(9):5190–3

Specific amino acid residues in both the PstB and PstC proteins are required for phosphate transport by the Escherichia coli Pst system. Cox GB, et al. **J Bacteriol** 1989 Mar;171(3):1531–4

Involvement of ExbB and TonB in transport across the outer membrane of Escherichia coli: phenotypic complementation of exb mutants by overexpressed tonB and physical stabilization of TonB by ExbB. Fischer E, et al. **J Bacteriol** 1989 Sep;171(9):5127–34

Purification and characterization of the wild-type and mutant carboxy-terminal domains of the Escherichia coli Tar chemoreceptor. Kaplan N, et al. **J Bacteriol** 1988 Nov; 170(11):5134–40

virG, a plasmid-coded virulence gene of Shigella flexneri: identification of the virG protein and determination of the complete coding sequence. Lett MC, et al. **J Bacteriol** 1989 Jan;171(1):353–9

Evolutionary relationship between the TonB-dependent outer membrane transport proteins: nucleotide and amino acid sequences of the Escherichia coli colicin I receptor gene [published erratum appears in J Bacteriol 1989 Aug;171(8):4530] Nau CD, et al. **J Bacteriol** 1989 Feb; 171(2):1041–7

Cloning, nucleotide sequence, and mutagenesis of a gene (irpA) involved in iron-deficient growth of the cyanobacterium Synechococcus sp. strain PCC7942. Reddy KJ, et al. **J Bacteriol** 1988 Oct;170(10):4466–76

DNA sequence and regulation of the gene (cbpA) encoding the 42-kilodalton cytoplasmic membrane carotenoprotein of the cyanobacterium Synechococcus sp. strain PCC 7942. Reddy KJ, et al. **J Bacteriol** 1989 Jun;171(6):3486–93

Identification and genetic mapping of the structural gene for an essential Escherichia coli membrane protein. Williams MG, et al. **J Bacteriol** 1989 Jan;171(1):565–8

A protein required for transcriptional regulation of Agrobacterium virulence genes spans the cytoplasmic membrane. Winans SC, et al. **J Bacteriol** 1989 Mar; 171(3):1616–22

DNA sequence of the gene (tyrP) encoding the tyrosine-specific transport system of Escherichia coli. Wookey PJ, et al. **J Bacteriol** 1988 Oct;170(10):4946–9

Export of Escherichia coli alkaline phosphatase attached to an integral membrane protein, SecY. Akiyama Y, et al. **J Biol Chem** 1989 Jan 5;264(1):437–42

Triiodothyronine amplifies norepinephrine stimulation of uncoupling protein gene transcription by a mechanism not requiring protein synthesis. Bianco AC, et al. **J Biol Chem** 1988 Dec 5;263(34):18168–75

Structure of a bacterial sensory receptor. A site-directed sulfhydryl study. Falke JJ, et al. **J Biol Chem** 1988 Oct 15;263(29):14850–8

Dual regulation of GAP-43 gene expression by nerve growth factor and glucocorticoids. Federoff HJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19290–5

Two genes encode the major membrane-associated protein of methanol-induced peroxisomes from Candida boidinii. Garrard LJ, et al. **J Biol Chem** 1989 Aug 15; 264(23):13929–37

Cloning and expression of the yeast plasma membrane ATPase in Escherichia coli. Holzer KP, et al. **J Biol Chem** 1989 Aug 25;264(24):14389–95

Transmembrane topography and evolutionary conservation of synaptophysin. Johnston PA, et al. **J Biol Chem** 1989 Jan 15;264(2):1268–73

Partial primary structure of the 48- and 90-kilodalton core proteins of cell surface-associated heparan sulfate proteoglycans of lung fibroblasts. Prediction of an integral membrane domain and evidence for multiple distinct core proteins at the cell surface of human lung fibroblasts. Marynen P, et al. **J Biol Chem** 1989 Apr 25;264(12):7017–24

Developmental regulation of sodium channel expression in the rat forebrain. Scheinman RI, et al. **J Biol Chem** 1989 Jun 25;264(18):10660–6

Molecular cloning and sequencing of the cDNA for human membrane-bound carboxypeptidase M. Comparison with carboxypeptidases A, B, H, and N. Tan F, et al. **J Biol Chem** 1989 Aug 5;264(22):13165–70

Cytovillin, a microvillar Mr 75,000 protein. cDNA sequence, prokaryotic expression, and chromosomal localization. Turunen O, et al. **J Biol Chem** 1989 Oct 5;264(28):16727–32

Factors influencing the in vitro translocation of the Escherichia coli maltose-binding protein. Weiss JB, et al. **J Biol Chem** 1989 Feb 15;264(5):3021–7

In vitro membrane assembly of a polytopic, transmembrane protein results in an enzymatically active conformation. Ahrem B, et al. **J Cell Biol** 1989 May;108(5):1637–46

ZO-1 mRNA and protein expression during tight junction assembly in Caco-2 cells. Anderson JM, et al. **J Cell Biol** 1989 Sep;109(3):1047–56

Analysis of the signal for attachment of a glycophospholipid membrane anchor. Caras IW, et al. **J Cell Biol** 1989 Apr; 108(4):1387–96

A murine T lymphocyte antigen belongs to a supergene family of type II integral membrane proteins. Yokoyama WM, et al. **J Immunol** 1989 Aug 15;143(4):1379–86

Molecular basis for mutation in a surface protein expressed by malaria parasites. Hudson DE, et al. **J Mol Biol** 1988 Oct 5;203(3):707–14

The cpx proteins of Escherichia coli K12. Structure of the cpxA polypeptide as an inner membrane component. Weber RF, et al. **J Mol Biol** 1988 Sep 20;203(2):467–78

Developmental and regional expression of three new members of the ras-gene family in the mouse brain. Ayala J, et al. **J Neurosci Res** 1989 Apr;22(4):384–9

Activation of the c-H-ras proto-oncogene by retrovirus insertion and chromosomal rearrangement in a Moloney leukemia virus-induced T-cell leukemia. Ihle JN, et al. **J Virol** 1989 Jul;63(7):2959–66

cDNA cloning of sarcoplasmic reticulum proteins. Brandl CJ, et al. **Methods Enzymol** 1988;157:289–302

Molecular cloning and expression of a T-cell stimulating membrane protein of Francisella tularensis. Sjöstedt A, et al. **Microb Pathog** 1989 Jun;6(6):403–14

cDNA encoding an immunogenic region of a 22 kilodalton surface protein of Eimeria acervulina sporozoites. Jenkins MC, et al. **Mol Biochem Parasitol** 1989 Jan 15; 32(2–3):153–61

Expression of Trypanosoma brucei procyclin as a fusion protein in Escherichia coli. Roditi I, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):35–43

Phenobarbital specifically reduces gap junction protein mRNA level in rat liver. Mesnil M, et al. **Mol Carcinog** 1988;1(2):79–81

Characterization and expression of the human rhoH12 gene product. Avraham H, et al. **Mol Cell Biol** 1989 May; 9(5):2058–66

Sec59 encodes a membrane protein required for core glycosylation in Saccharomyces cerevisiae. Bernstein M, et al. **Mol Cell Biol** 1989 Mar;9(3):1191–9

Accumulation of viruslike particles in a yeast mutant lacking a mitochondrial pore protein. Dihanich M, et al. **Mol Cell Biol** 1989 Mar;9(3):1100–8

Inhibition of NIH 3T3 cell proliferation by a mutant ras protein with preferential affinity for GDP. Feig LA, et al. **Mol Cell Biol** 1988 Aug;8(8):3235–43

Reproducible and variable rearrangements of a Tetrahymena thermophila surface protein gene family occur during macronuclear development. Kile JP, et al. **Mol Cell Biol** 1988 Nov;8(11):5043–6

Variation of tandem repeats in the developmentally regulated procyclic acidic repetitive proteins of Trypanosoma brucei. Mowatt MR, et al. **Mol Cell Biol** 1989 Mar;9(3):1332–5

Polymorphism in the procyclic acidic repetitive protein gene family of Trypanosoma brucei. Mowatt MR, et al. **Mol Cell Biol** 1988 Oct;8(10):4055–62

Integral membrane protein located in the apical complex of Plasmodium falciparum. Peterson MG, et al. **Mol Cell Biol** 1989 Jul;9(7):3151–4

Identification of highly conserved regulatory domains and protein-binding sites in the promoters of the rat and human genes encoding the stress-inducible 78-kilodalton glucose-regulated protein. Resendez E Jr, et al. **Mol Cell Biol** 1988 Oct;8(10):4579–84

p21-ras effector domain mutants constructed by "cassette" mutagenesis. Stone JC, et al. **Mol Cell Biol** 1988 Aug; 8(8):3565–9

P21 v-ras inhibits induction of c-myc and c-fos expression by platelet-derived growth factor. Zullo JN, et al. **Mol Cell Biol** 1988 Dec;8(12):5080–5

A prolactin-inducible gene product which is a member of the calpactin/lipocortin family. Horseman ND. **Mol Endocrinol** 1989 May;3(5):773–9

Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. **Mol Endocrinol** 1988 Aug;2(8):706–13

The MIC2 gene product: epitope mapping and structural prediction analysis define an integral membrane protein. Banting GS, et al. **Mol Immunol** 1989 Feb;26(2):181–8

Isolation, molecular characterization and expression of the ushB gene of Salmonella typhimurium which encodes a membrane-bound UDP-sugar hydrolase. Garrett AR, et al. **Mol Microbiol** 1989 Feb;3(2):177–86

Topology and function of the integral membrane protein conferring immunity to colicin A. Geli V, et al. **Mol Microbiol** 1989 May;3(5):679–87

Molecular characterization of a surface protein antigen gene from serotype c Streptococcus mutans, implicated in dental caries. Okahashi N, et al. **Mol Microbiol** 1989 May; 3(5):673–8

Protein encoded by v-erbA functions as a thyroid-hormone receptor antagonist. Damm K, et al. **Nature** 1989 Jun 22; 339(6226):593–7

Lipoprotein-remnant receptors: second receptor verified? [news] Soutar AK. **Nature** 1989 Sep 14;341(6238):106–7

Nucleotide sequence of a cDNA encoding bovine brown fat uncoupling protein. Homology with ADP binding site of ADP/ATP carrier. Casteilla L, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2131

Soybean nodulin 26 is homologous to the major intrinsic protein of the bovine lens fiber membrane. Sandal NN, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9347

Conversion of placental alkaline phosphatase from a phosphatidylinositol-glycan-anchored protein to an integral transmembrane protein. Berger J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1457–60

Abnormal development and dye coupling produced by antisense RNA to gap junction protein in mouse preimplantation embryos. Bevilacqua A, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5444–8

Multiple protein 4.1 isoforms produced by alternative splicing in human erythroid cells. Conboy JG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9062–5

Growth hormone stimulates c-fos gene expression by means of protein kinase C without increasing inositol lipid turnover. Doglio A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1148–52

Partial cDNA sequence encoding a nuclear pore protein modified by O-linked N-acetylglucosamine. D'Onofrio M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9595–9

SecA suppresses the temperature-sensitive SecY24 defect in protein translocation in Escherichia coli membrane vesicles. Fandl JP, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8953–7

In vitro attachment of glycosyl-inositolphospholipid anchor structures to mouse Thy-1 antigen and human decay-accelerating factor. Fasel N, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6858–62

An Escherichia coli chemoreceptor gene is temporally controlled in Caulobacter. Frederikse PH, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4061–5

Functional expression of the amiloride-sensitive sodium channel in Xenopus oocytes. George AL Jr, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7295–8

Adaptational "crosstalk" and the crucial role of methylation in chemotactic migration by Escherichia coli. Hazelbauer GL, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1448–52

Sequential expression and cooperative interaction of c-Ha-ras and c-erbB genes in in vivo chemical carcinogenesis. Husain Z, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1264–8

Identification of genes from pattern formation, tyrosine kinase, and potassium channel families by DNA amplification. Kamb A, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4372–6

Cloning, analysis, and expression of murine perforin 1 cDNA, a component of cytolytic T-cell granules with homology to complement component C9. Lowrey DM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):247–51

A Drosophila gene encoding a protein resembling the human beta-amyloid protein precursor. Rosen DR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2478–82

Gating of single Shaker potassium channels in Drosophila muscle and in Xenopus oocytes injected with Shaker mRNA. Zagotta WN, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7243–7

Cloning and expression of a Xenopus embryonic gap junction protein. Ebihara L, et al. **Science** 1989 Mar 3; 243(4895):1194–5

Identification of the cystic fibrosis gene: cloning and characterization of complementary DNA. Riordan JR, et al. **Science** 1989 Sep 8;245(4922):1066–73

Cloning of a membrane protein that induces a slow voltage-gated potassium current. Takumi T, et al. **Science** 1988 Nov 18;242(4881):1042–5

Molecular genetic analysis of membrane protein topology. Manoil C, et al. **Trends Genet** 1988 Aug;4(8):223–6 (39 ref.)

Eukaryote membrane genetics: the Fo sector of

mitochondrial ATP synthase. Nagley P. **Trends Genet** 1988 Feb;4(2):46–51 (35 ref.)

[Recent trends and progress in molecular genetic study of the complement protein system] Takahashi M. **Nippon Rinsho** 1988 Sep;46(9):1993–9 (18 ref.) **(Jpn)**

[Change in the organization of the actin cytoskeleton and extracellular fibronectin in the REF(LT) cell line after a series of successive transfections of the Ha-ras oncogene] Komissarova EV, et al. **Dokl Akad Nauk SSSR** 1989; 306(4):985–7 **(Rus)**

IMMUNOLOGY

Chemistry of human erythrocyte polylactosamine glycopeptides (erythroglycans) as related to ABH blood group antigenic determinants. Laine RA, et al. **Adv Exp Med Biol** 1988;228:331–47 (58 ref.)

Function of granule perforin and esterases in T cell-mediated reactions. Components required for delivery of molecules to target cells. Podack ER, et al. **Ann N Y Acad Sci** 1988; 532:292–302 (29 ref.)

Phagocytic and bactericidal properties of macrophages of mice immunized with outer membrane proteins (OMP) of Shigella. Czarny A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):701–9

Autoantibodies to intracellular proteins in human systemic lupus erythematosus are not due to random polyclonal B cell activation. Gharavi AE, et al. **Arthritis Rheum** 1988 Nov;31(11):1337–45

Monoclonal antibody to the human glucose transporter that differentiates between the glucose and nucleoside transporters. Tai PK, et al. **Biochemistry** 1988 Aug 9; 27(16):6062–71

Bay K.8644 like activity of an antibody against a 60 kDa tubular membrane protein. Chatterjee D, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):104–8

Immunological identification of two lamina-like proteins in Saccharomyces cerevisiae. Galcheva-Gargova Z, et al. **Biosci Rep** 1988 Jun;8(3):287–91

Introduction of antibody (PL/IM 430) to a 100 kDa protein into permeabilised platelets inhibits intracellular sequestration of Ca2+. Hack N, et al. **Biosci Rep** 1988 Aug;8(4):379–88

Epstein-Barr virus (EBV) antigen-specific leukocyte migration inhibition in infectious mononucleosis. II. Kinetics of sensitization against five EBV-encoded nuclear proteins and the latent membrane protein. Szigeti R, et al. **Clin Immunol Immunopathol** 1989 Jun;51(3):396–405

Demonstration of immunochemical identity between the synaptic vesicle proteins synaptin and synaptophysin/p38. Gaardsvoll H, et al. **FEBS Lett** 1988 Dec 19;242(1):117–20

Phosphatidylinositol-anchored membrane proteins and lymphocyte activation. Robinson PJ, et al. **Immunol Lett** 1988 Oct;19(2):85–93 (75 ref.)

Perforin—a primary or auxiliary lytic mechanism? Clark WR. **Immunol Today** 1988 Apr;9(4):101–4

Trichomonas vaginalis surface proteinase activity is necessary for parasite adherence to epithelial cells. Arroyo R, et al. **Infect Immun** 1989 Oct;57(10):2991–7

Antibody response to Staphylococcus aureus surface proteins in rabbits with persistent osteomyelitis after treatment with demineralized bone implants. Thomas VL, et al. **Infect Immun** 1989 Feb;57(2):404–12

Identification of sperm antigens that regulate fertility. Shaha C, et al. **Int J Androl** 1988 Dec;11(6):479–91

Monoclonal antibodies recognizing different epitopes of the 27-kDa gap junction protein from rat liver. Takeda A, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):901–7

Topological distribution of two connexin32 antigenic sites in intact and split rodent hepatocyte gap junctions. Goodenough DA, et al. **J Cell Biol** 1988 Nov; 107(5):1817–24

Enzyme-linked immunosorbent fluorescence assay and high-pressure liquid chromatography for analysis of humoral immune responses to Coxiella burnetti proteins. Schmeer N, et al. **J Clin Microbiol** 1988 Dec;26(12):2520–5

IgG subclass responses to a transmembrane protein (gp41) peptide in HIV infection. Chiodi F, et al. **J Immunol** 1989 Jun 1;142(11):3809–14

Cell surface comodulation of CD4 and T cell receptor by anti-CD4 monoclonal antibody. Cole JA, et al. **J Immunol** 1989 Jul 15;143(2):397–402

Decay-accelerating factor functions as a signal transducing molecule for human T cells. Davis LS, et al. **J Immunol** 1988 Oct 1;141(7):2246–52

Monoclonal antibodies to murine IL-1 alpha. Production, characterization, and inhibition of membrane-associated IL-1 activity. Fuhlbrigge RC, et al. **J Immunol** 1988 Oct 15;141(8):2643–50

CD15 monoclonal antibodies react with a phosphotyrosine-containing protein on the surface of human neutrophils. Skubitz KM, et al. **J Immunol** 1988 Dec 15;141(12):4318–23

Serum antibodies against chondrocyte cell surface proteins in osteoarthritis and rheumatoid arthritis. Mollenhauer J, et al. **J Rheumatol** 1988 Dec;15(12):1811–7

Quantitation of a murine lung endothelial cell protein, P112, with a double monoclonal antibody assay. Kennel SJ, et al. **Lab Invest** 1988 Nov;59(5):692–701

IgA antibodies against P30 as markers of congenital and acute toxoplasmosis. Decoster A, et al. **Lancet** 1988 Nov 12; 2(8620):1104–7

Decay accelerating factor (DAF) as the host antigen with protective activity to complement killing of schistosomula. Ramalho-Pinto FJ. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:213–6 (18 ref.)

Cysteine-rich variant surface proteins of Giardia lamblia. Aggarwal A, et al. **Mol Biochem Parasitol** 1989 Jan 1; 32(1):39–47

Enhanced transmembrane signalling activity of monoclonal antibody heteroconjugates suggests molecular interactions between receptors on the T cell surface. Ledbetter JA, et al. **Mol Immunol** 1989 Feb;26(2):137–45

A monoclonal anti-double-stranded DNA autoantibody binds to a 94-kDa cell-surface protein on various cell types via nucleosomes or a DNA-histone complex. Jacob L, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4669–73

Effect of antibodies against the gap junction protein on differentiation of induced embryonic cells. Zeng MB, et al. **Sci Sin [B]** 1988 Nov;31(11):1315–8

Enhanced reaction with Vicia graminea lectin and exposed terminal N-acetyl-D-glucosaminyl residues on a sample of human red cells with Hb M-Hyde Park. King MJ, et al. **Transfusion** 1988 Nov-Dec;28(6):549–55

Synaptophysinlike immunoreactivity in the Merkel cells of pig-snout skin. García-Caballero T, et al. **Ultrastruct Pathol** 1989 Jan-Feb;13(1):55–61

Cromer-related antigens—blood group determinants on decay-accelerating factor. Daniels G. **Vox Sang** 1989; 56(4):205–11

[Current news on cell membrane molecules. The significance for immune response] Austgulen R. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2735–8 (Eng. Abstr.) **(Nor)**

[Perforines. The killer proteins of the lymphocytes] Hetland G. **Tidsskr Nor Laegeforen** 1988 Oct 10;108(28):2394–6 (Eng. Abstr.) **(Nor)**

ISOLATION & PURIFICATION

The GABA receptor-chloride ion channel protein complex. Olsen RW, et al. **Adv Exp Med Biol** 1988;236:1–14 (50 ref.)

Antibodies against purified epithelial sodium channel protein from bovine renal papilla. Sorscher EJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C835–43

Preparative polyacrylamide gel electrophoresis in the isolation of the nephritogenic proteins of passive Heymann nephritis. Miettinen A, et al. **APMIS** 1989 Jun;97(6):479–89

Evidence that the enoyl-CoA hydratase bifunctional protein of mouse liver peroxisomes is identical with the 70,000 dalton peroxisomal membrane protein. Crane DI, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):503–8

Primary structure of a novel 4-acetamido-4'-isothiocyanostilbene-2,2'-disulphonic acid (SITS)-binding membrane protein highly expressed in Torpedo californica electroplax. Jentsch TJ, et al. **Biochem J** 1989 Jul 1;261(1):155–66

Purification of the human erythrocyte nucleoside transporter by immunoaffinity chromatography. Kwong FY, et al. **Biochem J** 1988 Oct 1;255(1):243–9

28 kDa adenosine-binding proteins of brain and other tissues. Ravid K, et al. **Biochem J** 1989 Mar 15;258(3):653–61

Characterization of calcium channel subunit. Burgess AJ, et al. **Biochem Soc Trans** 1988 Aug;16(4):452–4

Isolation and purification of an Fc epsilon receptor activated ion channel from the rat mast cell line RBL-2H3. Hemmerich S, et al. **Biochemistry** 1988 Sep 20; 27(19):7488–98

Studies in pig heart tissue on various 60,000 Da phosphoproteins. Guesdon F, et al. **Biochimie** 1989 Mar; 71(3):351–61

Human placental ecto-5'-nucleotidase: isoforms and chemical crosslinking products of the membrane-bound and isolated enzyme. Buschette-Brambrink S, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):67–74

Extracellular adhesive molecules in neurite growth. Rauvala H, et al. **Biosci Rep** 1989 Feb;9(1):1–12 (52 ref.)

Monocyte antigen CD14 is a phospholipid anchored membrane protein. Simmons DL, et al. **Blood** 1989 Jan; 73(1):284–9

GBP: a membrane protein of presynaptic vesicles which specifically binds gangliosides. Popoli M, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):655–62

Identification of a platelet-aggregating factor of murine colon adenocarcinoma 26: Mr 44,000 membrane protein as determined by monoclonal antibodies. Watanabe M, et al. **Cancer Res** 1988 Nov 15;48(22):6411–6

Influence of Ca2+ on the isolation from rat brain mitochondria of a fraction enriched of boundary membrane contact sites. Sandri G, et al. **Cell Calcium** 1988 Aug; 9(4):159–65

Expression of functional cell surface C1-inactivator by U937 cells. Randazzo BP, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):463–77

Characterization of a purified co-transporting protein. Zeuthen T, et al. **Comp Biochem Physiol [A]** 1988; 90(4):687–91

Electrophoretic characterization and immunoblot analysis of the proteins from the myelin-like light membrane fraction of shrimp ventral nerve (Penaeus duorarum). Waehneldt TV, et al. **Comp Biochem Physiol [B]** 1989;92(2):369–74

Synaptobrevin: an integral membrane protein of 18,000 daltons present in small synaptic vesicles of rat brain. Baumert M, et al. **EMBO J** 1989 Feb;8(2):379–84

Purification and reconstitution of potassium channel proteins from squid axon membranes. Prestipino G, et al. **FEBS Lett** 1989 Jul 3;250(2):570–4

Fractionation of synaptophysin-containing vesicles from rat brain and cultured PC12 pheochromocytoma cells. Wiedenmann B, et al. **FEBS Lett** 1988 Nov 21; 240(1-2):71–7

Purification and reconstitution into liposomes of an integral membrane protein conferring immunity to colicin A. Geli V, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):239–43

Identification, isolation, and properties of a plasma membrane protein involved in the adhesion of boar sperm to the porcine zona pellucida. Peterson RN, et al. **Gamete Res** 1989 May;23(1):103–18

Solubilizing the T-cell receptor—problems in solution. Traunecker A, et al. **Immunol Today** 1989 Jan;10(1):29–32

Lipid-modified surface protein antigens expressing size variation within the species Mycoplasma hyorhinis. Boyer MJ, et al. **Infect Immun** 1989 Jan;57(1):245–54

Major integral membrane protein immunogens of Treponema pallidum are proteolipids. Chamberlain NR, et al. **Infect Immun** 1989 Sep;57(9):2872–7

Sequence analysis of the 47-kilodalton major integral membrane immunogen of Treponema pallidum. Hsu PL, et al. **Infect Immun** 1989 Jan;57(1):196–203

Characterization of integral membrane proteins of Leishmania major by Triton X-114 fractionation and analysis of vaccination effects in mice. Murray PJ, et al. **Infect Immun** 1989 Jul;57(7):2203–9

Protein 20, an immunodominant surface antigen of Eimeria bovis. Whitmire WM, et al. **Infect Immun** 1989 Jan; 57(1):289–90

Co-isolation of heat stress and cytoskeletal proteins with plasma membrane proteins. Tomasovic SP, et al. **Int J Hyperthermia** 1989 Mar-Apr;5(2):173–90

Purification and properties of the membrane-associated coenzyme F420-reducing hydrogenase from Methanobacterium formicicum. Baron SF, et al. **J Bacteriol** 1989 Jul;171(7):3846–53

Purification and characterization of a low-molecular-weight membrane protein with affinity for the Escherichia coli origin of replication. Jacq A, et al. **J Bacteriol** 1989 Mar; 171(3):1409–16

The procyclic acidic repetitive proteins of Trypanosoma brucei. Purification and post-translational modification. Clayton CE, et al. **J Biol Chem** 1989 Sep 5;264(25):15088–93

Endothelial albumin binding proteins are membrane-associated components exposed on the cell surface. Ghinea N, et al. **J Biol Chem** 1989 Mar 25; 264(9):4755–8

Purification and characterization of NADPH-dependent cytosolic 3,5,3'-triiodo-L-thyronine binding protein in rat kidney. Hashizume K, et al. **J Biol Chem** 1989 Mar 25; 264(9):4857–63

Structural inferences for the native skeletal muscle sodium channel as derived from patterns of endogenous proteolysis. Kraner S, et al. **J Biol Chem** 1989 Aug 5;264(22):13273–80

The sodium ion translocating oxaloacetate decarboxylase of Klebsiella pneumoniae. Sequence of the integral membrane-bound subunits beta and gamma. Laussermair E, et al. **J Biol Chem** 1989 Sep 5;264(25):14710–5

Isolation and characterization of a 58-kDa membrane- and microfilament-associated protein from ascites tumor cell microvilli. Liu Y, et al. **J Biol Chem** 1989 Jan 15; 264(2):1208–14

Biochemical and functional characterization of a membrane-associated pore-forming protein from the pathogenic ameboflagellate Naegleria fowleri. Young JD, et al. **J Biol Chem** 1989 Jan 15;264(2):1077–83

Isolation of a specific membrane protein by immunoaffinity chromatography with biotinylated antibodies immobilized on avidin-coated glass beads. Babashak JV, et al. **J Chromatogr** 1989 Aug 4;476:187–94

High-performance concanavalin A affinity chromatography of liver and hepatoma membrane proteins. Josić D, et al. **J Chromatogr** 1988 Jul 1;444:29–39

Comparison of ion-exchange high-performance liquid chromatography columns for purification of Sendai virus integral membrane proteins. Welling-Wester S, et al. **J Chromatogr** 1989 Aug 4;476:477–85

Isolation and characterization of a membrane protein from normal human erythrocytes that inhibits reactive lysis of the erythrocytes of paroxysmal nocturnal hemoglobinuria. Holguin MH, et al. **J Clin Invest** 1989 Jul;84(1):7–17

Evidence against the existence of a membrane form of murine IL-1 alpha. Minnich-Carruth LL, et al. **J Immunol** 1989 Jan 15;142(2):526–30

Purification of neuronal cell surface proteins and generation of epitope-specific monoclonal antibodies against cell adhesion molecules. Schlosshauer B. **J Neurochem** 1989 Jan;52(1):82–92

Major rat brain membrane-associated and cytosolic enkephalin-degrading aminopeptidases: comparison studies. Hui KS, et al. **J Neurosci Res** 1988;20(2):231–40

Extraction of major acidic Ca2+ dependent phosphoproteins from synaptic membranes. Perrone-Bizzozero NI, et al. **J Neurosci Res** 1988 Jul;20(3):346–50

Critical micellar concentrations of detergents. Zulauf M, et al. **Methods Enzymol** 1989;172:528–38

Isolation, characterization and partial purification of a transferable membrane channel (amoebapore) produced by Entamoeba histolytica. Rosenberg I, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):237–47

Identification, synthesis and immunogenicity of cuticular

collagens from the filarial nematodes Brugia malayi and Brugia pahangi. Selkirk ME, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):229-46

Purification and properties of a membrane-bound L-asparaginase of Tetrahymena pyriformis. Triantafillou DJ, et al. **Mol Cell Biochem** 1988 May;81(1):43-51

Antibodies against specific membrane proteins of neurosecretory granules isolated from bovine neural lobes. Caorsi CE, et al. **Neurosci Lett** 1989 Apr 10;98(3):241-6

Characterization and functional reconstitution of a soluble form of the hydrophobic membrane protein lac permease from Escherichia coli. Roepe PD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6087-91

"Bundle blot" purification and initial protein characterization of hair cell stereocilia. Shepherd GM, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4973-7

Three-dimensional crystallization of membrane proteins. Kühlbrandt W. **Q Rev Biophys** 1988 Nov;21(4):429-77 (90 ref.)

Surface proteins of Staphylococcus aureus. Cheung AL, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S351-5

Purification and reconstitution of chloride channels from kidney and trachea. Landry DW, et al. **Science** 1989 Jun 23;244(4911):1469-72

Isolation, chemical characterization, and immunohistochemical localization of a protein from the basolateral plasma membrane of the rat intestinal absorptive cell. Schiechl H. **Z Naturforsch [C]** 1989 Mar-Apr; 44(3-4):289-95

[Cytotoxic molecules, perforin and serine esterase in cytotoxic T lymphocyte] Koizumi H. **Arerugi** 1989 Jan; 38(1):41-8 (Eng. Abstr.) **(Jpn)**

METABOLISM

[3H]bumetanide binding to the purified putative co-transporter protein. Cherkesy BD, et al. **Acta Physiol Scand** 1988 Jun;133(2):267-8

Colony stimulating factor-1 stimulated macrophage membrane protein phosphorylation. Jubinsky PT, et al. **Adv Exp Med Biol** 1988;234:75-90

Biochemical and functional properties of purified GABA receptor/benzodiazepine receptor/chloride channel complex and application of its antibody for immunohistochemical studies. Kuriyama K, et al. **Adv Exp Med Biol** 1988;236:15-29

Differences in the solubility and susceptibility to proteolytic degradation of basement-membrane components in adult and embryonic mouse tissues. Dziadek M, et al. **Am J Anat** 1989 Apr;184(4):298-310

Hepatic immunohistochemical localization of the tight junction protein ZO-1 in rat models of cholestasis. Anderson JM, et al. **Am J Pathol** 1989 May;134(5):1055-62

Macrophage multinucleation is accompanied by the expression of new soluble and membrane antigens in mice. Vignery A. **Am J Pathol** 1989 Sep;135(3):565-70

Role of alpha 1- and alpha 2-adrenergic receptors in Cl- transport across frog corneal epithelium. Chu TC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C724-30

Internal pH-sensitive site couples Cl-(-)HCO3- exchange to Na+-H+ antiport in lymphocytes. Mason MJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C428-33

Reduction in sensitivity to Cl- channel blockers by HCO3--CO2 in rabbit cortical collecting duct. Matsuzaki K, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C102-9

Cold-induced changes in uncoupling protein and GDP binding sites in brown fat of ob/ob mice. Milner RE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R292-9

Multiple transport systems for organic cations in renal brush-border membrane vesicles. Miyamoto Y, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F540-8

Operational modes of the organic anion exchanger in canine renal brush-border membrane vesicles. Steffens TG, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F596-609

Changes in GDP binding to brown adipose tissue mitochondria and the uncoupling protein. Swick AG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E865-70

Pathology of membrane proteins in sickle erythrocytes. Platt OS. **Ann N Y Acad Sci** 1989;565:83-5

Quinoprotein D-glucose dehydrogenases in Acinetobacter calcoaceticus LMD 79.41: purification and characterization of the membrane-bound enzyme distinct from the soluble enzyme. Matsushita K, et al. **Antonie Van Leeuwenhoek** 1989 May;56(1):63-72

Glutathione-S-transferases are major cytosolic thyroid hormone binding proteins. Ishigaki S, et al. **Arch Biochem Biophys** 1989 Sep;273(2):265-72

Rat brain hexokinase: the hydrophobic N-terminus of the mitochondrially bound enzyme is inserted in the lipid bilayer. Xie GC, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):803-10

General kinetic model for protein-mediated phospholipid transfer between membranes. Yoshimura T, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):299-312

Characterization and quantitation of fatty acids covalently bound to erythrocyte membrane proteins: anion transporter contains 1 mol of fatty acid thiol ester. Zdebska E, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):223-9

The rho gene product expressed in E. coli is a substrate of botulinum ADP-ribosyltransferase C3. Aktories K, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):209-13

Prolactin differentially affects bacterial toxin-induced ADP-ribosylation of Nb2 lymphoma cell membrane proteins. Barkey RJ, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):776-82

Stimulation of Na-K-Cl cotransport in cultured vascular endothelial cells by atrial natriuretic peptide. Fujita T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):734-40

Kinetic analysis of the binding of guanine nucleotides to bovine brain rhoB p20, a ras p21-like GTP-binding protein. Kuroda S, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):674-81

Agonist-induced phosphorylation of an immunologically ras-related protein in human erythroleukemia cells. Lazarowski ER, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):972-8

Rapid postnatal changes in F1-ATPase proteins and in the uncoupling protein in brown adipose tissue mitochondria of the newborn rat. Luis AM, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):216-22

Rabbit intestine contains a protein that inhibits the dissociation of GDP from and the subsequent binding of GTP to rhoB p20, a ras p21-like GTP-binding protein. Ohga N, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1523-33

Stimulation of protein phosphorylation by atrial natriuretic factor in plasma membranes of bovine adrenal cortical cells. Pandey KN. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):988-94

Phosphorylation of protein B-50 (GAP-43) from adult rat brain cortex by casein kinase II. Pisano MR, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1207-12

Adrenergic regulation of the uncoupling protein expression in foetal rat brown adipocytes in primary culture. Porras A, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):541-7

Cleavage of a 100 kDa membrane protein (aggregin) during thrombin-induced platelet aggregation is mediated by the high affinity thrombin receptors. Puri RN, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1017-24

Relationship between a 47-kDa cytoplasmic membrane polypeptide and nitrate transport in Anacystis nidulans. Sivak MN, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):257-62

GTPase activating proteins for the smg-21 GTP-binding protein having the same effector domain as the ras proteins in human platelets. Ueda T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1411-9

Photoaffinity labeling of hamster brown adipose tissue mitochondria by an [125I] coenzyme A derivative: differential interaction with the uncoupling protein and ADP/ATP carrier. Woldegiorgis G, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):502-7

The concentration of uncoupling protein correlates with Mg2+ activated mitochondrial binding of GDP. Henningfield MF, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2-3):108-12

Phosphorylation of brain specific membrane proteins of developing chick embryo. David E, et al. **Biochem Int** 1988 Oct;17(4):681-9

The J.E. Purkyně lecture: the insertion of stalked proteins of the brush border membranes: the state of the art in 1988. Semenza G. **Biochem Int** 1989 Jan;18(1):15-33 (70 ref.)

Epidermal-growth-factor-stimulated phosphorylation of calpactin II in membrane vesicles shed from cultured A-431 cells. Blay J, et al. **Biochem J** 1989 Apr 15; 259(2):577-83

Erythrocyte protein 4.1 associates with tubulin. Correas I, et al. **Biochem J** 1988 Oct 1;255(1):217-21

Characterization of a membrane protein from brain mediating the inhibition of inositol 1,4,5-trisphosphate receptor binding by calcium. Danoff SK, et al. **Biochem J** 1988 Sep 15;254(3):701-5

A new class of Paramecium surface proteins anchored in the plasma membrane by a glycosylinositol phospholipid. Membrane anchor of Paramecium cross-reacting glycoproteins. Deregnaucourt C, et al. **Biochem J** 1988 Jul 15;253(2):395-400

Characterization of C1q-binding material released from the membranes of Raji and U937 cells by limited proteolysis with trypsin. Erdei A, et al. **Biochem J** 1988 Oct 15; 255(2):493-9

Morphine enhances the phosphorylation of a 58 kDa protein in mouse brain membranes. Nagamatsu K, et al. **Biochem J** 1989 Jan 1;257(1):165-71

Cholera toxin partially inhibits the T-cell response to phytohaemagglutinin through the ADP-ribosylation of a 45 kDa membrane protein. Nel AE, et al. **Biochem J** 1988 Dec 1;256(2):383-90

Correlation of neuropathy target esterase activity with specific tritiated di-isopropyl phosphorofluoridate-labelled proteins. Thomas TC, et al. **Biochem J** 1989 Jan 1; 257(1):109-16

Identification and partial purification of ABGP205, an integral membrane glycoprotein from brain that binds ankyrin. Treharne KJ, et al. **Biochem J** 1988 Jul 15; 253(2):345-50

Identification of the glucose transporter in mammalian cell membranes with a 125I-forskolin photoaffinity label. Wadzinski BE, et al. **Biochem J** 1988 Nov 1;255(3):983-90

Identification and isolation of the phosphorylated intermediate of the calcium pump in rat intestinal basolateral membranes. Wajsman R, et al. **Biochem J** 1988 Dec 1;256(2):593-8

36Cl- flux measurements on GABAA receptor-activated chloride exchange. Multiple mechanisms of the chloride channel inactivation. Kardos J. **Biochem Pharmacol** 1989 Aug 15;38(16):2587-91

Specific alterations of rat renal microsomal proteins induced by cephaloridine. Kramer W, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4135-40

In situ iodination of angiotensin-converting enzyme and other pulmonary endothelial membrane proteins. Merker M, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):983-92

Hydrophobic modifications of membrane proteins by palmitoylation in vitro. Schmidt MF, et al. **Biochem Soc Trans** 1989 Aug;17(4):625-6

Bis(sulfo-N-succinimidyl) [15N,2H16]doxyl-2-spiro-4'-pimelate, a stable isotope-substituted, membrane-impermeant bifunctional spin label for studies of the dynamics of membrane proteins: application to the anion-exchange channel in intact human erythrocytes. Anjaneyulu PS, et al. **Biochemistry** 1988 Sep 6;27(18):6844-51

Spectral properties of fluorescent derivatives of the oligomycin sensitivity conferring protein and analysis of their interaction with the F1 and F0 sectors of the mitochondrial ATPase complex. Duszynski J, et al. **Biochemistry** 1988 Aug 23;27(17):6288-96

Metabolic behavior of cell surface biotinylated proteins. Hare JF, et al. **Biochemistry** 1989 Jan 24;28(2):574-80

Elastin binds to a multifunctional 67-kilodalton peripheral membrane protein. Mecham RP, et al. **Biochemistry** 1989 May 2;28(9):3716-22

Lymphoma-vesicle interactions: vesicle adsorption, membrane fragmentation, and intermembrane protein transfer [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4645-55

A cytoplasmic thyroid hormone binding protein: characterization using monoclonal antibodies. Obata T, et al. **Biochemistry** 1989 Jan 24;28(2):617-23

Kinetics, binding constant, and activation energy of the 48-kDa protein-rhodopsin complex by extra-metarhodopsin II. Schleicher A, et al. **Biochemistry** 1989 Feb 21;28(4):1770-5

Thermodynamics of intersubunit interactions in cholera toxin upon binding to the oligosaccharide portion of its cell surface receptor, ganglioside GM1. Schön A, et al. **Biochemistry** 1989 Jun 13;28(12):5019-24

Novel methyl transfer during chemotaxis in Bacillus subtilis. Thoelke MS, et al. **Biochemistry** 1989 Jun 27;28(13):5585-9

Rapid attractant-induced changes in methylation of methyl-accepting chemotaxis proteins in Bacillus subtilis. Thoelke MS, et al. **Biochemistry** 1988 Nov 1;27(22):8453-7

Photoaffinity labeling by [3H]-N5-methyl-N5-isobutylamiloride of proteins which cofractionate with Na+/H+ antiport activity. Wu JS, et al. **Biochemistry** 1989 Apr 4;28(7):2980-4

Modification of fluidity and lipid-protein relationships in pig intestinal brush-border membrane by dietary essential fatty acid deficiency. Christon R, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):77-84

In dialyzed squid axons Ca2+i activates Ca2+o-Na+i and Na+o-Na+i exchanges in the absence of Ca chelating agents. DiPolo R, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):328-32

Modelling of chemical reactions catalysed by membrane-bound enzymes. Determination and significance of the kinetic constants. Heirwegh KP, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):151-9

Membrane-bound D-lactate dehydrogenase of Escherichia coli: a model for protein interactions in membranes. Ho C, et al. **Biochim Biophys Acta** 1989 May 9;988(2):173-84 (57 ref.)

Na+-dependent and -independent transport of uridine and its phosphorylation in mouse spleen cells. Plagemann PG, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):315-25

Association of hemin with protein 4.1 as compared to spectrin and actin. Solar I, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):199-204

The rat-liver microsomal AP endonuclease. The endoplasmic reticulum is presented as a net thrown into the cytosol to capture newly synthesized karyophilic proteins. Verly WG, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):183-8

Protein fatty acylation: a novel mechanism for association of proteins with membranes and its role in transmembrane regulatory pathways. Hu JS, et al. **Biofactors** 1988 Oct; 1(3):219-26 (100 ref.)

On the structure and function of endocytic transport systems. Singer SJ. **Biol Cell** 1989;65(1):1-5 (30 ref.)

Self diffusion of interacting membrane proteins. Abney JR, et al. **Biophys J** 1989 May;55(5):817-33

Determination of the fractal dimension of membrane protein aggregates using fluorescence energy transfer. Dewey TG, et al. **Biophys J** 1989 Aug;56(2):415-20

Lateral diffusion of membrane proteins in protein-rich membranes. A simple hard particle model for concentration dependence of the two-dimensional diffusion coefficient. Minton AP. **Biophys J** 1989 Apr;55(4):805-8

Evidence for similar function of transmembrane segments in receptor and membrane-anchored proteins. Brandl CJ, et al. **Biopolymers** 1988 Jul;27(7):1171-82

Modulation of membrane surface curvature by peptide-lipid interactions. Batenburg AM, et al. **Biosci Rep** 1988 Aug; 8(4):299-307 (50 ref.)

Resonance electroconformational coupling: a proposed mechanism for energy and signal transductions by membrane proteins. Tsong TY, et al. **Biosci Rep** 1989 Feb; 9(1):13–26 (54 ref.)

Release of soluble transferrin receptor from the surface of human leukemic HL60 cells. Chitambar CR, et al. **Blood** 1989 Aug 1;74(2):602–8

Dependence of GAP43 (B50, F1) transport on axonal regeneration in rat dorsal root ganglion neurons. Bisby MA. **Brain Res** 1988 Aug 16;458(1):157–61

Complex interactions between pregnenolone sulfate and the t-butylbicyclophosphorothionate-labeled chloride ionophore in rat brain. Gee KW, et al. **Brain Res** 1989 Mar 13;482(1):169–73

Genetic differences in coupling of benzodiazepine receptors to chloride channels. Harris RA, et al. **Brain Res** 1989 Jun 19;490(1):26–32

The pharmacological properties of GABA receptor-coupled chloride channels using 36Cl-influx in cultured spinal cord neurons. Lehoullier PF, et al. **Brain Res** 1989 May 22; 487(2):205–14

NMDA receptor blockade prevents the increase in protein kinase C substrate (protein F1) phosphorylation produced by long-term potentiation. Linden DJ, et al. **Brain Res** 1988 Aug 16;458(1):142–6

Protein changes during anterograde-to-retrograde conversion of axonally transported vesicles. Martz D, et al. **Brain Res** 1989 Jan 2;476(1):199–203

Cultured human and canine endothelial cells from brain microvessels. Gerhart DZ, et al. **Brain Res Bull** 1988 Nov; 21(5):785–93

Changes in the distribution of the neuron-specific B-50, neurofilament protein and glial fibrillary acidic proteins following an unilateral mesencephalic lesion in the rat. Oestreicher AB, et al. **Brain Res Bull** 1988 Nov; 21(5):713–22

Postnatal development of protein P-38 ('synaptophysin') immunoreactivity in pontine and medullary gustatory zones of rat. Lasiter PS, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):27–33

Assembly and N-glycosylation of all ACh receptor subunits are required for their efficient insertion into plasma membranes. Sumikawa K, et al. **Brain Res Mol Brain Res** 1989 May;5(3):183–92

Molecular properties of voltage-sensitive sodium and calcium channels. Catterall WA. **Braz J Med Biol Res** 1988; 21(6):1129–44 (57 ref.)

Uncoupling protein and its mRNA in brown adipose tissue of newborn rabbits. Rozon DK, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):54–8

Inhibition of tumor cell proliferation by a novel growth regulator from placenta: modulation of membrane phosphorylation and oncogene expression. Csaikl U, et al. **Cancer Lett** 1989 Mar;44(3):227–31

Malto-oligosaccharide homologues of 3,7-anhydro-2-azi-1,2-dideoxy-D-glycero-D-gulo-octitol+ ++: improved photoaffinity reagents for labelling the malto-oligosaccharide-binding protein of Escherichia coli. Lehmann J, et al. **Carbohydr Res** 1988 Dec 31;184:113–20

Short cytoplasmic sequences serve as retention signals for transmembrane proteins in the endoplasmic reticulum. Nilsson T, et al. **Cell** 1989 Aug 25;58(4):707–18

Interaction of ras p21 proteins with GTPase activating protein. McCormick F, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:849–54

Membrane self-digestion during erythrocyte storage. Gaczyńska M, et al. **Cytobios** 1989;57(229):87–92

Appearance of specific proteins in the apical plasma membrane of cultured renal collecting duct principal cell epithelium after chronic administration of aldosterone and arginine vasopressin. Minuth WW, et al. **Differentiation** 1988 Sep;38(3):194–202

Methyl-accepting taxis proteins in Halobacterium halobium. Alam M, et al. **EMBO J** 1989 Feb;8(2):631–9

A new method for detecting endocytosed proteins. Bretscher MS, et al. **EMBO J** 1988 Dec 20;7(13):4087–92

The mammalian G protein rhoC is ADP-ribosylated by Clostridium botulinum exoenzyme C3 and affects actin microfilaments in Vero cells. Chardin P, et al. **EMBO J** 1989 Apr;8(4):1087–92

Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor. Herz J, et al. **EMBO J** 1988 Dec 20;7(13):4119–27

Phosphorylation of an 85-kd membrane protein by a novel mechanism. Seydel U, et al. **EMBO J** 1988 Dec 20; 7(13):4163–7

Human lysosomal acid phosphatase is transported as a transmembrane protein to lysosomes in transfected baby hamster kidney cells. Waheed A, et al. **EMBO J** 1988 Aug; 7(8):2351–8

Post-translational transport of proteins into microsomal membranes of Candida maltosa. Wiedmann M, et al. **EMBO J** 1988 Jun;7(6):1763–8

Counterregulation of nuclear 3,5,3'-triiodo-L-thyronine (T3) binding by oxidized and reduced-nicotinamide adenine dinucleotide phosphates in the presence of cytosolic T3-binding protein in vitro. Hashizume K, et al. **Endocrinology** 1989 Apr;124(4):1678–83

Cytosolic 3,5,3'-triiodo-L-thyronine (T3)-binding protein (CTBP) regulation of nuclear T3 binding: evidence for the presence of T3-CTBP complex-binding sites in nuclei. Hashizume K, et al. **Endocrinology** 1989 Jun;124(6):2851–6

Dopamine withdrawal and addition of thyrotropin-releasing hormone stimulate membrane translocation of protein kinase-C and phosphorylation of an endogenous 80K substrate in enriched lactotrophs. Martínez de la Escalera G, et al. **Endocrinology** 1989 Sep;125(3):1168–73

Distinct affinity and effector residues in the binding site for a regulatory ligand. The mitochondrial uncoupling protein as a model. Ježek P, et al. **Eur Biophys J** 1988;16(2):101–8

Binding of nidogen and the laminin-nidogen complex to basement membrane collagen type IV. Aumailley M, et al. **Eur J Biochem** 1989 Sep 1;184(1):241–8

Identification and localization of the membrane-associated, ATP-binding subunit of the oligopeptide permease of Salmonella typhimurium. Gallagher MP, et al. **Eur J Biochem** 1989 Mar 1;180(1):133–41

The uncoupling protein dimer can form a disulfide cross-link between the mobile C-terminal SH groups. Klingenberg M, et al. **Eur J Biochem** 1989 Mar 1;180(1):123–31

Characterization of the interleukin-1-induced tyrosine phosphorylation of a 41-kDa plasma membrane protein of the human tumor cell line K 562. Martin M, et al. **Eur J Biochem** 1989 Mar 15;180(2):343–50

Effect of hydrophobic sulphydryl reagents on the uncoupling protein and inner-membrane anion channel of brown-adipose-tissue mitochondria. Rial E, et al. **Eur J Biochem** 1989 Jun 1;182(1):187–93

Ultrastructural localization of anionic sites on the surface of yeast, hyphal and germ-tube forming cells of Candida albicans. Horisberger M, et al. **Eur J Cell Biol** 1988 Aug; 46(3):444–52

Changes in the content and distribution of sialic acid on the basal surface of isoproterenol-stimulated mouse parotid acinar cells. Julieta González M, et al. **Eur J Cell Biol** 1989 Jun;49(1):171–9

Effect of protein synthesis inhibitors on formation and degradation of tight junctions in HT 29 adenocarcinoma cells. Ophir I, et al. **Eur J Cell Biol** 1989 Jun;49(1):116–22

Redistribution of Mr 75,000 plasma membrane protein, cytovillin, into newly formed microvilli in herpes simplex and Semliki Forest virus infected human embryonal fibroblasts. Pakkanen R, et al. **Eur J Cell Biol** 1988 Aug; 46(3):435–43

A growth hormone-vesicular stomatitis virus G hybrid protein is rapidly degraded in lysosomes following transport to the cell surface. Rizzolo LJ. **Eur J Cell Biol** 1989 Jun;49(1):92–8

Modification of host cell phagosomes by Toxoplasma gondii involves redistribution of surface proteins and secretion of a 32 kDa protein. Sibley LD, et al. **Eur J Cell Biol** 1988 Oct;47(1):81–7

Membrane anchoring and spontaneous release of CD16 (FcR III) by natural killer cells and granulocytes. Lanier LL, et al. **Eur J Immunol** 1989 Apr;19(4):775–8

The recycling of a secretory granule membrane protein. Hunter A, et al. **Exp Cell Res** 1989 Jun;182(2):445–60

Solubilization of rat kidney plasma membrane proteins associated with 3H-aldosterone. Ožegović B, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):194–8

The collisional limit: an important consideration for membrane-associated enzymes and receptors. Abbott AJ, et al. **FASEB J** 1988 Oct;2(13):2858–66 (40 ref.)

Glycosyl-phosphatidylinositol: a versatile anchor for cell surface proteins. Low MG. **FASEB J** 1989 Mar;3(5):1600–8 (40 ref.)

General anesthetics modulate GABA receptor channel complex in rat dorsal root ganglion neurons. Nakahiro M, et al. **FASEB J** 1989 May;3(7):1850–4

Membrane-binding sites for acyl carrier protein in Escherichia coli. Bayan N, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):221–5

Phosphorylation-activated chloride channels in human skin fibroblasts. Bear CE. **FEBS Lett** 1988 Sep 12; 237(1-2):145–9

Signal peptidase can cleave inside a polytopic membrane protein. Beltzer JP, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):93–8

The mitochondrial outer membrane channel, VDAC, is modulated by a soluble protein. Holden MJ, et al. **FEBS Lett** 1988 Dec 5;241(1-2):105–9

Carnitine cycle in brown adipose tissue mitochondria as a tool for studying the regulatory role of fatty acids in the uncoupling protein function. Ježek P, et al. **FEBS Lett** 1989 Jan 16;243(1):37–40

Three actin-binding proteins are developmentally regulated in rat liver plasma membranes. Keresztes M. **FEBS Lett** 1989 May 22;249(1):51–5

Complement C9 is inserted into membranes in a globular conformation. Marazziti D, et al. **FEBS Lett** 1989 Jan 30; 243(2):347–50

The gate of mitochondrial porin channel is controlled by a number of negative and positive charges. Mirzabekov TA, et al. **FEBS Lett** 1989 Jun 5;249(2):375–8

Covalent peptide transfer to cell membrane proteins (peptidyl transferase). Najjar VA, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):129–31

Role of the carboxyl-terminal region of the PVP protein (F0I subunit) in the H+ conduction of F0F1 H+-ATP synthase of bovine heart mitochondria. Papa S, et al. **FEBS Lett** 1989 May 22;249(1):62–6

Identification of rho as a substrate for botulinum toxin C3-catalyzed ADP-ribosylation. Quilliam LA, et al. **FEBS Lett** 1989 Apr 24;247(2):221–6

Association of a myristoylated protein with a biological membrane and its increased phosphorylation by protein kinase C. Utsumi T, et al. **FEBS Lett** 1988 Sep 26; 238(1):13–6

Characterization of cell surface polypeptides of unfertilized, fertilized, and protease-treated zona-free mouse eggs. Boldt J, et al. **Gamete Res** 1989 May;23(1):91–101

Incorporation and fate of specific sperm plasma membrane components following insemination as revealed by ultrastructural immunocytochemistry. Longo FJ. **Gamete Res** 1989 Jun;23(2):215–28

Presence of covalently bound metabolites on rat hepatocyte plasma membrane proteins after administration of isaxonine, a drug leading to immunoallergic hepatitis in man. Loeper J, et al. **Hepatology** 1989 May;9(5):675–8

Chitosan-colloidal gold complexes as polycationic probes for the detection of anionic sites by transmission and scanning electron microscopy. Horisberger M, et al. **Histochemistry** 1988;90(3):165–75

The cytolytic T lymphocyte—reply to commentary [letter] Berke G. **Immunol Lett** 1989 Mar;20(4):331–2

Heterogeneity in opsonic requirements of Staphylococcus epidermidis: relative importance of surface hydrophobicity, capsules and slime. van Bronswijk H, et al. **Immunology** 1989 May;67(1):81–6

Acylation of the 47-kilodalton major membrane immunogen of Treponema pallidum determines its hydrophobicity. Chamberlain NR, et al. **Infect Immun** 1989 Sep; 57(9):2878–85

Ouabain-insensitive Na-ATPase activity in the basolateral membrane from rat jejunum. Orsenigo MN, et al. **Int J Biochem** 1988;20(12):1411–5

Specific phosphorylation by calcium-EGTA complex of a 75 kDa human tumor plasma membrane protein (pp75). Ziai MR, et al. **Int J Biochem** 1989;21(7):731–8

3H-fucose incorporation into RPE cell surface proteins of normal and dystrophic rats. Clark VM. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1542–7

Synaptophysin in the human retina and retinoblastoma. An immunohistochemical and Western blotting study. Kivelä T, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):212–9

Erythrocyte membrane proteins in psychiatric disorders and controls. Fritze J, et al. **J Affective Disord** 1988 Sep-Oct; 15(2):187–90

Genetic reconstitution of the high-affinity L-arabinose transport system. Horazdovsky BF, et al. **J Bacteriol** 1989 Jun;171(6):3053–9

Rotation and protein-protein interactions of cytochrome P-450 in the inner membrane of adrenocortical mitochondria. Kawato S, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):188–91

Protein sorting between the outer and inner mitochondrial membranes: submitochondrial localization of cytochrome c1 whose presequence is replaced by the amino-terminal region of a 70 kDa outer membrane protein. Nakai M, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):181–7

Alkaline pH, membrane potential, and magnesium cations are negative modulators of purine nucleotide inhibition of H+ and Cl- transport through the uncoupling protein of brown adipose tissue mitochondria. Ježek P, et al. **J Bioenerg Biomembr** 1988 Oct;20(5):603–22

Biochemical properties of isolated transverse tubular membranes. Sabbadini RA, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):163–213 (218 ref.)

Guanine nucleotide-dependent carboxyl methylation of mammalian membrane proteins. Backlund PS Jr, et al. **J Biol Chem** 1988 Nov 5;263(31):15864–7

K+-transport protein TrkA of Escherichia coli is a peripheral membrane protein that requires other trk gene products for attachment to the cytoplasmic membrane. Bossemeyer D, et al. **J Biol Chem** 1989 Oct 5; 264(28):16403–10

An imported thylakoid protein accumulates in the stroma when insertion into thylakoids is inhibited. Cline K, et al. **J Biol Chem** 1989 Aug 25;264(24):14225–32

Several GTP-binding proteins, including p21c-H-ras, are preferred substrates of Pseudomonas aeruginosa exoenzyme S. Coburn J, et al. **J Biol Chem** 1989 May 25;264(15):9004–8

2-Acylglycerolphosphoethanolamine acyltransferase/acyl-acyl carrier protein synthetase is a membrane-associated acyl carrier protein binding protein. Cooper CL, et al. **J Biol Chem** 1989 May 5;264(13):7384–9

Diversity in membrane binding sites of ankyrins. Brain ankyrin, erythrocyte ankyrin, and processed erythrocyte ankyrin associate with distinct sites in kidney microsomes. Davis J, et al. **J Biol Chem** 1989 Apr 15;264(11):6417–26

Mapping the ankyrin-binding site of the human erythrocyte anion exchanger. Davis L, et al. **J Biol Chem** 1989 Jun 5;264(16):9665–72

The Tsr chemosensory transducer of Escherichia coli assembles into the cytoplasmic membrane via a SecA-dependent process. Gebert JF, et al. **J Biol Chem** 1988 Nov 15;263(32):16652–60

A new major transmembrane glycoprotein, gp155, in goat erythrocytes. Isolation and characterization of its association to cytoskeleton through binding with band 3-ankyrin complex. Inaba M, et al. **J Biol Chem** 1988 Nov 25;263(33):17763–71

Lymphoma protein kinase C is associated with the transmembrane glycoprotein, GP85, and may function in

GP85–ankyrin binding. Kalomiris EL, et al. J Biol Chem 1989 May 15;264(14):8113–9
ADP–ribosylation of the bovine brain rho protein by botulinum toxin type C1. Kikuchi A, et al. J Biol Chem 1988 Nov 5;263(31):16303–8
Localization of the ecto–ATPase (ecto–nucleotidase) in the rat hepatocyte plasma membrane. Implications for the functions of the ecto–ATPase. Lin SH. J Biol Chem 1989 Aug 25;264(24):14403–7
The active site of the thrombin–thrombomodulin complex. A fluorescence energy transfer measurement of its distance above the membrane surface. Lu RL, et al. J Biol Chem 1989 Aug 5;264(22):12956–62
Characterization of a proton–driven carrier for sialic acid in the lysosomal membrane. Evidence for a group–specific transport system for acidic monosaccharides. Mancini GM, et al. J Biol Chem 1989 Sep 15;264(26):15247–54
Enhanced carrier–mediated lactate entry into isolated hepatocytes from starved and diabetic rats. Metcalfe HK, et al. J Biol Chem 1988 Dec 25;263(36):19505–9
Identification of a lysosome membrane protein which could mediate ATP–dependent stable association of lysosomes to microtubules. Mithieux G, et al. J Biol Chem 1989 Mar 15;264(8):4664–8
Kinetic analysis of the hydrolysis of GTP by p21N–ras. The basal GTPase mechanism. Neal SE, et al. J Biol Chem 1988 Dec 25;263(36):19718–22
Affinity labeling of ras oncogene product p21 with guanosine diphospho– and triphosphopyridoxals. Ohmi N, et al. J Biol Chem 1988 Oct 5;263(28):14261–6
Enzymatic methylation of 23–29–kDa bovine retinal rod outer segment membrane proteins. Evidence for methyl ester formation at carboxyl–terminal cysteinyl residues. Ota IM, et al. J Biol Chem 1989 Aug 5;264(22):12879–84
Regulation of rhodopsin dephosphorylation by arrestin. Palczewski K, et al. J Biol Chem 1989 Sep 25; 264(27):15770–3
Stimulation of phosphatidylcholine hydrolysis, diacylglycerol release, and arachidonic acid production by oncogenic ras is a consequence of protein kinase C activation. Price BD, et al. J Biol Chem 1989 Oct 5;264(28):16638–43
Formaldehyde and photoactivatable cross–linking of the periplasmic binding protein to a membrane component of the histidine transport system of Salmonella typhimurium. Prossnitz E, et al. J Biol Chem 1988 Dec 5;263(34):17917–20
Membrane protein changes in an L1210 leukemia cell line with a translocation defect in the methotrexate–tetrahydrofolate cofactor transport carrier. Schuetz JD, et al. J Biol Chem 1989 Sep 25;264(27):16261–7
Reconstitution of membrane proteins. Spontaneous incorporation of integral membrane proteins into preformed bilayers of pure phospholipid. Scotto AW, et al. J Biol Chem 1988 Dec 5;263(34):18500–6
Asparagine residue in the rho gene product is the modification site for botulinum ADP–ribosyltransferase. Sekine A, et al. J Biol Chem 1989 May 25;264(15):8602–5
Ankyrin–independent membrane protein–binding sites for brain and erythrocyte spectrin. Steiner JP, et al. J Biol Chem 1988 Oct 5;263(28):14417–25
The redox state of cysteines 201 and 317 of the erythrocyte anion exchanger is critical for ankyrin binding. Thevenin BJ, et al. J Biol Chem 1989 Sep 25;264(27):15886–92
Dual control of the intracellular pH in aortic smooth muscle cells by a cAMP–sensitive HCO3–/Cl– antiporter and a protein kinase C–sensitive Na+/H+ antiporter. Vigne P, et al. J Biol Chem 1988 Dec 5;263(34):18023–9
Phorbol diesters regulate expression of the membrane neutral metalloendopeptidase (EC 3.4.24.11) in rabbit synovial fibroblasts and mammary epithelial cells. Werb Z, et al. J Biol Chem 1989 Jun 5;264(16):9111–3
Localization of the ankyrin–binding site on erythrocyte membrane protein, band 3. Willardson BM, et al. J Biol Chem 1989 Sep 25;264(27):15893–9
Evidence for multiple, ras–like, guanine nucleotide–binding proteins in Swiss 3T3 plasma membranes. Stimulation of GTPase activity by cytosolic factors. Wolfman A, et al. J Biol Chem 1989 Jun 25;264(18):10820–7
Introduction of basic amino acid residues after the signal peptide inhibits protein translocation across the cytoplasmic membrane of Escherichia coli. Relation to the orientation of membrane proteins. Yamane K, et al. J Biol Chem 1988 Dec 25;263(36):19690–6
Role of microtubules in polarized delivery of apical membrane proteins to the brush border of the intestinal epithelium. Achler C, et al. J Cell Biol 1989 Jul; 109(1):179–89
Nocodazole, a microtubule–active drug, interferes with apical protein delivery in cultured intestinal epithelial cells (Caco–2). Eilers U, et al. J Cell Biol 1989 Jan;108(1):13–22
Development of tight junctions de novo in the mouse early embryo: control of assembly of the tight junction–specific protein, ZO–1. Fleming TP, et al. J Cell Biol 1989 Apr; 108(4):1407–18
Inhibition of tyrosine sulfation in the trans–Golgi retards the transport of a constitutively secreted protein to the cell surface. Friederich E, et al. J Cell Biol 1988 Nov; 107(5):1655–67
Asynchronous assembly of the acetylcholine receptor and of the 43–kD nu1 protein in the postsynaptic membrane of developing Torpedo marmorata electrocyte. Kordeli E, et al. J Cell Biol 1989 Jan;108(1):127–39
Coat proteins isolated from clathrin coated vesicles can assemble into coated pits. Mahaffey DT, et al. J Cell Biol 1989 May;108(5):1615–24
Ankyrin links fodrin to the alpha subunit of Na,K–ATPase in Madin–Darby canine kidney cells and in intact renal tubule cells. Morrow JS, et al. J Cell Biol 1989 Feb; 108(2):455–65
Import pathways of precursor proteins into mitochondria: multiple receptor sites are followed by a common membrane insertion site. Pfaller R, et al. J Cell Biol 1988 Dec;107(6 Pt 2):2483–90
Primary sequence domains required for the retention of rotavirus VP7 in the endoplasmic reticulum. Poruchynsky MS, et al. J Cell Biol 1988 Nov;107(5):1697–706
Altered structure of the hybrid cell surface proteoglycan of mammary epithelial cells in response to transforming growth factor–beta. Rasmussen S, et al. J Cell Biol 1988 Nov;107(5):1959–67
Secreted hepatitis B surface antigen polypeptides are derived from a transmembrane precursor. Simon K, et al. J Cell Biol 1988 Dec;107(6 Pt 1):2163–8
Posttranslational membrane attachment and dynamic fatty acylation of a neuronal growth cone protein, GAP–43. Skene JH, et al. J Cell Biol 1989 Feb;108(2):613–24
Condensation–sorting events in the rough endoplasmic reticulum of exocrine pancreatic cells. Tooze J, et al. J Cell Biol 1989 Jul;109(1):35–50
Synaptophysin (p38) at the frog neuromuscular junction: its incorporation into the axolemma and recycling after intense quantal secretion. Valtorta F, et al. J Cell Biol 1988 Dec; 107(6 Pt 2):2717–27
Vasoconstrictor hormones depolarize renal glomerular mesangial cells by activating chloride channels. Kremer SG, et al. J Cell Physiol 1989 Jan;138(1):97–105
Temperature–dependent oligomerization of hsp85 in vitro. Lanks KW. J Cell Physiol 1989 Sep;140(3):601–7
Induction of glucose–regulated proteins in Xenopus laevis A6 cells. Winning RS, et al. J Cell Physiol 1989 Aug; 140(2):239–45
Differential partitioning of plasma membrane proteins into the triton X–100–insoluble cytoskeleton fraction during concanavalin A–induced receptor redistribution. Patton WF, et al. J Cell Sci 1989 Jan;92 (Pt 1):85–91
Distinct murine macrophage receptor pathway for human triglyceride–rich lipoproteins. Gianturco SH, et al. J Clin Invest 1988 Nov;82(5):1633–43
Synaptophysin expression during synaptogenesis in the rat cerebellar cortex. Leclerc N, et al. J Comp Neurol 1989 Feb 8;280(2):197–212
In vivo expression of perforin by CD8+ lymphocytes during an acute viral infection. Young LH, et al. J Exp Med 1989 Jun 1;169(6):2159–71
Highly efficient uptake of a rifamycin derivative via the FhuA–TonB–dependent uptake route in Escherichia coli. Pugsley AP, et al. J Gen Microbiol 1987 Dec;133 (Pt 12):3505–11
Membrane Ig–cytoskeletal interactions. I. Flow cytofluorometric and biochemical analysis of membrane IgM–cytoskeletal interactions. Albrecht DL, et al. J Immunol 1988 Dec 1;141(11):3915–22
Activation of normal human B cells through their antigen receptor induces membrane expression of IL–1 alpha and secretion of IL–1 beta. Bonnefoy JY, et al. J Immunol 1989 Aug 1;143(3):864–9
Membrane IL–1: IL–1 alpha precursor binds to the plasma membrane via a lectin–like interaction. Brody DT, et al. J Immunol 1989 Aug 15;143(4):1183–7
Late events in B cell activation. Expression of membrane alkaline phosphatase activity. Burg DL, et al. J Immunol 1989 Jan 15;142(2):381–7
Human Fc gamma RIII (CD16). Isoforms with distinct allelic expression, extracellular domains, and membrane linkages on polymorphonuclear and natural killer cells. Edberg JC, et al. J Immunol 1989 Sep 1;143(5):1642–9
Association of cytoskeletal re–organization with capping of the complement decay–accelerating factor on T lymphocytes. Kammer GM, et al. J Immunol 1988 Nov 1;141(9):2924–8
IL–2 receptor expression in autoimmune MRL–lpr/lpr mice. The expanded L3T4–, Lyt–2– population does not express p75 and cannot generate functional high–affinity IL–2 receptors. Rosenberg YJ, et al. J Immunol 1989 Oct 1; 143(7):2216–22
Different membrane anchors of Fc gamma RIII (CD16) on K/NK–lymphocytes and neutrophils. Protein– vs lipid–anchor. Ueda E, et al. J Immunol 1989 Aug 15; 143(4):1274–7
Peroxisomal integral membrane proteins in livers of patients with Zellweger syndrome, infantile Refsum's disease and X–linked adrenoleukodystrophy. Small GM, et al. J Inherited Metab Dis 1988;11(4):358–71
Cross–linking of cardiac gap junction connexons by thiol/disulfide exchanges. Dupont E, et al. J Membr Biol 1989 Jun;108(3):247–52
Role of calcium and calmodulin in the regulation of the rabbit ileal brush–border membrane Na+/H+ antiporter. Emmer E, et al. J Membr Biol 1989 Jun;108(3):207–15
Integral and peripheral protein composition of the apical and basolateral membrane domains in MDCK cells. Sargiacomo M, et al. J Membr Biol 1989 Mar;107(3):277–86
Recycling class I MHC antigens: dynamics of internalization, acidification, and ligand–degradation in murine T lymphoblasts. Tse DB, et al. J Mol Cell Immunol 1986; 2(6):315–29
Sensitive immunoassay shows selective association of peripheral and integral membrane proteins of the inhibitory glycine receptor complex. Becker CM, et al. J Neurochem 1989 Jul;53(1):124–31
Cell surface endothelial proteins altered in experimental allergic encephalomyelitis. Sternberger NH, et al. J Neuroimmunol 1989 Feb;21(2–3):241–8
A light and electron microscopical study of B–50 (GAP–43) in human intramuscular nerve and neuromuscular junctions during development. Hesselmans LF, et al. J Neurol Sci 1989 Feb;89(2–3):301–11
A search for protein abnormalities in erythrocyte membranes and platelets from patients with multiple sclerosis using double–label two–dimensional electrophoresis. Wheeler TT, et al. J Neurol Sci 1988 Dec;88(1–3):151–9
A developmentally regulated chicken neuronal protein associated with the cortical cytoskeleton. Allsopp TE, et al. J Neurosci 1989 Jan;9(1):13–24
Localization of the growth–associated phosphoprotein GAP–43 (B–50, F1) in the human cerebral cortex. Benowitz LI, et al. J Neurosci 1989 Mar;9(3):990–5
Expression of GAP–43, a rapidly transported growth–associated protein, and class II beta tubulin, a slowly transported cytoskeletal protein, are coordinated in regenerating neurons. Hoffman PN. J Neurosci 1989 Mar; 9(3):893–7
A unique membrane protein is expressed on early developing limbic system axons and cortical targets. Horton HL, et al. J Neurosci 1988 Dec;8(12):4653–61
Distribution and phosphorylation of the growth–associated protein GAP–43 in regenerating sympathetic neurons in culture. Meiri KF, et al. J Neurosci 1988 Jul;8(7):2571–81
Secretory function of the vestibular nerve calyx suggested by presence of vesicles, synapsin I, and synaptophysin. Scarfone E, et al. J Neurosci 1988 Dec;8(12):4640–5
Membrane proteins of the nerve growth cone and their developmental regulation. Simkowitz P, et al. J Neurosci 1989 Mar;9(3):1004–17
Axonal transport and localization of B–50/GAP–43–like immunoreactivity in regenerating sciatic and facial nerves of the rat. Tetzlaff W, et al. J Neurosci 1989 Apr; 9(4):1303–13
The expression of the growth associated protein B50/GAP43 in the olfactory system of neonatal and adult rats. Verhaagen J, et al. J Neurosci 1989 Feb;9(2):683–91
Gating scheme for single GABA–activated Cl– channels determined from stability plots, dwell–time distributions, and adjacent–interval durations. Weiss DS, et al. J Neurosci 1989 Apr;9(4):1314–24
Axonal transport of a clathrin uncoating ATPase (HSC70): a role for HSC70 in the modulation of coated vesicle assembly in vivo. de Waegh S, et al. J Neurosci Res 1989 Aug;23(4):433–40
Effect of hypocrellin A sensitization on the lateral mobility of cell membrane proteins. Cheng LS, et al. J Photochem Photobiol –B– 1988 Nov;2(3):395–8
Changes in the distribution of intramembranous particles and filipin–sterol complexes during epididymal maturation of golden hamster spermatozoa. Suzuki F. J Ultrastruct Mol Struct Res 1988 Jul;100(1):39–54
Cl–/base exchange in rat mesangial cells: regulation of intracellular pH. Ferdows M, et al. Kidney Int 1989 Mar; 35(3):783–9
Differentiation markers as an aid in the histological diagnosis of small–cell carcinoma of the lung: synopsis of intermediate filament protein and synaptophysin expression. Leube RE, et al. Klin Wochenschr 1988;66 Suppl 11:80–6 (77 ref.)
C–erbB–2 gene product, a membrane protein commonly expressed on human fetal epithelial cells. Mori S, et al. Lab Invest 1989 Jul;61(1):93–7
Expression of intermediate filaments and synaptophysin show neuronal properties and lack of glial characteristics in Y79 retinoblastoma cells. Virtanen I, et al. Lab Invest 1988 Nov; 59(5):649–56
Intracellular adenosine formation and its carrier–mediated release in cultured embryonic chick heart cells. Meghji P, et al. Life Sci 1988;43(23):1851–9
On the mechanism of sphingomyelin interaction with solubilized membrane proteins. Barak S, et al. Membr Biochem 1987–88;7(3):153–73
Cardiac sarcolemmal substrate of the cGMP–dependent protein kinase. Cuppoletti J, et al. Membr Biochem 1987–88; 7(3):135–42
Peroxidative aggregation of myelin membrane proteins. Konat G, et al. Metab Brain Dis 1986 Sep;1(3):177–85
Growth–associated protein 43 is down–regulated in cultured astrocytes. Vitković L, et al. Metab Brain Dis 1989 Mar; 4(1):47–53
Fluorescent labeling of cell surfaces. Edidin M. Methods Cell Biol 1989;29:87–102 (55 ref.)
Photochemical labeling of apolar phase of membranes. Brunner J. Methods Enzymol 1989;172:628–87 (241 ref.)
Nucleoside transport across red cell membranes. Cabantchik ZI. Methods Enzymol 1989;173:250–63
Circular dichroism for determining secondary structure and state of aggregation of membrane proteins. Heyn MP. Methods Enzymol 1989;172:575–84
Reconstitution of skeletal muscle sarcoplasmic reticulum membranes: strategies for varying the lipid/protein ratio. Hymel L, et al. Methods Enzymol 1988;157:302–14

Prediction of bilayer spanning domains of hydrophobic and amphipathic membrane proteins: application to the cytochrome b and colicin families. Shiver JW, et al. **Methods Enzymol** 1989;172:439–61

Membrane–impermeant cross–linking reagents. Staros JV, et al. **Methods Enzymol** 1989;172:609–28

Cl transport across the basolateral membrane of principal cells in frog skin. Dörge A, et al. **Miner Electrolyte Metab** 1989;15(3):155–62

Phosphorylation of erythrocyte membrane and cytoskeleton proteins in cells infected with Plasmodium falciparum. Murray MC, et al. **Mol Biochem Parasitol** 1989 May 15; 34(3):229–36

Changes to the integral membrane protein composition of mouse liver peroxisomes in response to the peroxisome proliferators clofibrate, Wy–14,643 and di(2–ethyl–hexyl)phthalate. Crane DI, et al. **Mol Cell Biochem** 1988 May;81(1):29–36

Application of percolation theory principles to the analysis of interaction of adenylate cyclase complex proteins in cell membranes. Sobolev AS, et al. **Mol Cell Biochem** 1988 May;81(1):19–28

Reduction of endogenous GRP78 levels improves secretion of a heterologous protein in CHO cells. Dorner AJ, et al. **Mol Cell Biol** 1988 Oct;8(10):4063–70

Recombinant human epidermal growth factor precursor is a glycosylated membrane protein with biological activity. Mroczkowski B, et al. **Mol Cell Biol** 1989 Jul;9(7):2771–8

Phosphorylation of proteins in rat ovarian plasma membranes by [gamma–32P]GTP: evidence for the formation of a high energy phosphoprotein. Amir–Zaltsman Y, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):175–87

Binding of transforming growth factor–beta to cell surface proteins varies with cell type. Segarini PR, et al. **Mol Endocrinol** 1989 Feb;3(2):261–72

Topology of membrane insertion in vitro and plasma membrane assembly in vivo of the yeast arginine permease. Ahmad M, et al. **Mol Microbiol** 1988 Sep;2(5):627–35

Analysis of the membrane–binding domain of penicillin–binding protein 5 of Escherichia coli. Jackson ME, et al. **Mol Microbiol** 1988 Sep;2(5):563–8

Interaction of [3H]dilazep at nucleoside transporter–associated binding sites on S49 mouse lymphoma cells. Gati WP, et al. **Mol Pharmacol** 1989 Jul; 36(1):134–41

meta– and para–isothiocyanato–t–butylbicycloorthobenzoate: irreversible ligands of the gamma–aminobutyric acid–regulated chloride ionophore. Lewin AH, et al. **Mol Pharmacol** 1989 Feb;35(2):189–94

Anion regulation of [3H]strychnine binding to glycine–gated chloride channels is explained by the presence of two anion binding sites. Marvizón JC, et al. **Mol Pharmacol** 1988 Dec; 34(6):806–13

Studies of water permeability and proteins of erythrocyte membranes in patients with Duchenne muscular dystrophy. Benga G, et al. **Muscle Nerve** 1989 Apr;12(4):294–301

Histidine phosphorylation and phosphoryl group transfer in bacterial chemotaxis. Hess JF, et al. **Nature** 1988 Nov 10; 336(6195):139–43

Phosphorylcholine acts as a Ca2+–dependent receptor molecule for lymphocyte perforin. Tschopp J, et al. **Nature** 1989 Jan 19;337(6204):272–4

Selective decline in protein F1 phosphorylation in hippocampus of senescent rats. Barnes CA, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):393–8

Cell–specific fatty acylation of proteins in cultured cells of neuronal and glial origin. Byers DM, et al. **Neurochem Res** 1989 Jun;14(6):503–9

A protein–free diet changes synaptosomal membrane fluidity and tyrosine and glutamate transport. Felipo V, et al. **Neurochem Res** 1989 May;14(5):431–5

In vitro and ex vivo effects of antidepressants on rat brain membrane–bound phosphatidylinositol synthetase activity. Li PP, et al. **Neurochem Res** 1988 Aug;13(8):789–95

Changes of mitochondrial membrane proteins in rat cerebellum during aging. Turpeenoja L, et al. **Neurochem Res** 1988 Sep;13(9):859–65

Action of L–acetylcarnitine on age–dependent modifications of mitochondrial membrane proteins from rat cerebellum. Villa RF, et al. **Neurochem Res** 1988 Oct;13(10):909–16

Ontogeny of glutamate accumulating activity in rat brain synaptic vesicles. Kish PE, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):185–90

Colchicine effect on B–50/GAP43 phosphoprotein localization in rat dorsal root ganglion explants. Schmidt–Michels M, et al. **Neurosci Lett** 1989 Feb 27; 97(3):285–90

Localization of neural cell adhesion molecule in denervated muscle to both the plasma membrane and extracellular compartments by immuno–electron microscopy. Booth CM, et al. **Neuroscience** 1988 Nov;27(2):699–709

Developmental and regeneration–associated regulation of the limbic system associated membrane protein in explant cultures of the rat brain. Keller F, et al. **Neuroscience** 1989; 28(2):455–74

Immunoelectron microscopic localization of synaptophysin in a Golgi subcompartment of developing hypothalamic neurons. Tixier–Vidal A, et al. **Neuroscience** 1988 Sep; 26(3):847–61

The ventral striatopallidal complex: an immunocytochemical analysis of medium–sized striatal neurons and striatopallidal fibers in the basal forebrain of the rat. Walaas SI, et al. **Neuroscience** 1989;28(3):663–72

Localization of major potential substrates of p60v–src kinase in the plasma membrane matrix fraction. Hamaguchi M, et al. **Oncogene Res** 1989;4(1):29–37

Small–conductance chloride channels activated by calcium on cultured endocrine cells from mammalian pars intermedia. Taleb O, et al. **Pflugers Arch** 1988 Oct; 412(6):641–6

A stereospecific binding site regulates the C1– ion channel in rat skeletal muscle. Conte Camerino D, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1077–8

Pharmacological block of chloride channels during development affects contractile and electrical properties of rat skeletal muscle. De Luca A, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1079–80

Photooxidation of cell membranes using eosin derivatives that locate in lipid or protein to study the role of diffusible intermediates. Pooler JP. **Photochem Photobiol** 1989 Jul; 50(1):55–68

GDP stimulates the phosphorylation of a 36–kDa membrane protein in Dictyostelium discoideum. Anschutz A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3665–8

Xenopus oocyte germinal–vesicle breakdown induced by [Val12]Ras is inhibited by a cytosol–localized Ras mutant. Gibbs JB, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6630–4

Altered membrane association of p60v–src and a murine 63–kDa N–myristoyl protein after incorporation of an oxygen–substituted analog of myristic acid. Heuckeroth RO, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5262–6

Low density lipoprotein receptor–related protein mediates uptake of cholesteryl esters derived from apoprotein E–enriched lipoproteins. Kowal RC, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5810–4

Pertussis toxin induces structural changes in G alpha proteins independently of ADP–ribosylation. Ribeiro–Neto FA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2577–81

A lamin B receptor in the nuclear envelope. Worman HJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8531–4

Dynamic properties of membrane proteins: reversible insertion into membrane vesicles of a colicin E1 channel–forming peptide. Xu S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7531–5

Membrane phosphoinositide–activated signals in mast cells and basophils. Beaven MA, et al. **Prog Allergy** 1988; 42:123–84 (274 ref.)

Na,K–ATPase co–distributes with ankyrin and spectrin in renal tubular epithelial cells. Kashgarian M, et al. **Prog Clin Biol Res** 1988;268B:245–50

Modification of proteins with covalent lipids. Olson EN. **Prog Lipid Res** 1988;27(3):177–97 (137 ref.)

Mechanism of membrane anchoring affects polarized expression of two proteins in MDCK cells. Brown DA, et al. **Science** 1989 Sep 29;245(4925):1499–501

Signal peptide for protein secretion directing glycophospholipid membrane anchor attachment. Caras IW, et al. **Science** 1989 Mar 3;243(4895):1196–8

A role for GTP–binding proteins in vesicular transport through the Golgi complex. Melançon P, et al. **Soc Gen Physiol Ser** 1989;44:175–88

Reconstitution and physiological protein translocation processes. Etémadi AH. **Subcell Biochem** 1989;14:379–486 (712 ref.)

Quantitation of nerve terminal populations: synaptic vesicle–associated proteins as markers for synaptic density in the rat neostriatum. Walaas SI, et al. **Synapse** 1988; 2(5):516–20

Plasma membrane protein sorting in epithelial cells: do secretory pathways hold the key? Bartles JR, et al. **Trends Biochem Sci** 1988 May;13(5):181–4

Is 'hydrophobicity analysis' sufficient to predict topography of membrane proteins? [letter] Ferenci T. **Trends Biochem Sci** 1989 Mar;14(3):96

Deciphering the language of cells. Tsong TY. **Trends Biochem Sci** 1989 Mar;14(3):89–92

Secretion and membrane assembly. Wickner W. **Trends Biochem Sci** 1989 Jul;14(7):280–3 (61 ref.)

Properties of a protein from Staphylococcus capitis that binds human serum high density lipoprotein. Osland A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):435–47

[Effects of poriatin on mouse peritoneal macrophage membrane and calf serum proteins in vitro] Lu D. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):294–8 (Eng. Abstr.) (Chi)

[Methylxanthines and phosphorylation of the constituents of the membrane of the human red blood cell] Biovin P, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1042–6 (Eng. Abstr.) (Fre)

[Interaction between various alkylxanthines and the proteins of the erythrocyte skeleton] Delaunay J, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1076–80 (Eng. Abstr.) (Fre)

[Identification of dopamine–D2 receptors on lymphocytes using the binding technic] Della Bella S, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):73–5 (Eng. Abstr.) (Ita)

[Non–enzymatic glycosylation of proteins in diabetic disease] Lapolla A, et al. **Minerva Endocrinol** 1988 Oct–Dec; 13(4):239–47 (Eng. Abstr.) (Ita)

[Role of non–enzymatic glycosylation of proteins in the pathogenesis of diabetic complications] Sampietro T. **Minerva Endocrinol** 1988 Oct–Dec;13(4):249–51 (Eng. Abstr.) (Ita)

[Vesiculation, vesicular transport, and membrane fusion in cells: sorted transport mechanism of proteins] Ohnishi S. **Seikagaku** 1988 Jun;60(6):409–23 (58 ref.) (Jpn)

[The kinase C system in the regulation of intracellular metabolism] Ratajczak MZ, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):963–7 (Pol)

[Surface active compounds present in the dialysate from patients with uremia] Cichocki T, et al. **Przegl Lek** 1988; 45(7):549–54 (Eng. Abstr.) (Pol)

[The effect of charged local anesthetics on the inactivation of Ca2+–activated Cl–channels of characean algae] Kataev AA, et al. **Biofizika** 1988 Nov–Dec;33(6):1006–12 (Eng. Abstr.) (Rus)

[The role of the state of protein–lipid interactions in stimulated membranes in the conformation of C40–carotenoids] Maksimov GV, et al. **Biofizika** 1989 May–Jun;34(3):420–4 (Eng. Abstr.) (Rus)

[Aggregation of membrane proteins of E. coli cells after treatment with singlet oxygen] Igumenov VL, et al. **Biokhimiia** 1988 Jun;53(6):925–30 (Eng. Abstr.) (Rus)

[Quinones and their interactions with enzyme complexes of energy–transducing biomembranes] Oleskin AV, et al. **Biokhimiia** 1988 Oct;53(10):1619–27 (62 ref.) (Eng. Abstr.) (Rus)

[Ca2+–phospholipid–dependent phosphorylation of vesicular preparations of myocardial sarcolemma] Vorobets ZD, et al. **Biokhimiia** 1988 Aug;53(8):1327–33 (Eng. Abstr.) (Rus)

[Energy cooperation between animal cells during complete blockade of the Na+, K+–pumps in a part of the cells] Aslanidi KB, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):990–3 (Rus)

[The effect of membrane protein methylation processes on the binding of [14C]–GABA by nerve endings in the brain of white rats] Vartanian AA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):1003–6 (Rus)

[Characteristics of the regulation of the process of protein phosphorylation on tumor cell membranes] Kaz'min SD. **Eksp Onkol** 1989;11(3):39–43 (Eng. Abstr.) (Rus)

[Actin interaction with the plasma membrane fraction of cells of murine fibroblast L sublines differing by growth type in culture] Pershina VP, et al. **Tsitologiia** 1988 May; 30(5):582–8 (Eng. Abstr.) (Rus)

[Lipid and protein composition of membranes and carbohydrate metabolism in rats subjected to bilateral adrenalectomy; correction of disorders by vitamins K and E] Lider VA. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):55–9 (Eng. Abstr.) (Rus)

[Vitamin D–dependent protein of smooth endoplasmic reticulum membranes of rat enterocytes] Morozova RP, et al. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):18–24 (Eng. Abstr.) (Rus)

[The biochemical adaptation of the photoreceptor membrane proteins in vertebrate retinal rods to temperature conditions as the evolutionary mechanism maintaining homeostasis at the cellular level] Berman AL, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):379–89 (Rus)

[Distribution of proteins and enzymes in 3 submitochondrial fractions isolated from the internal mitochondrial membrane of the rat liver] Eugui J. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):137–9 (Eng. Abstr.) (Spa)

PHARMACOKINETICS

Uptake and degradation in vivo and in vitro of laminin and nidogen by rat liver cells. Smedsrød B, et al. **Biochem J** 1989 Jul 1;261(1):37–42

PHARMACOLOGY

Ommatidia in the developing Drosophila eye require and can respond to sevenless for only a restricted period. Bowtell DD, et al. **Cell** 1989 Mar 24;56(6):931–6

A membrane protein with possible relevance to sexual cell fusion in Dictyostelium discoideum. Urushihara H, et al. **Cell Differ Dev** 1988 Nov;25(2):81–7

Mitochondrial porin regulates the sensitivity of anion carriers to inhibitors. Pronevich LA, et al. **FEBS Lett** 1989 Apr 24;247(2):330–2

Microinjection of a 19–kDa guanine nucleotide–binding protein inhibits maturation of Xenopus oocytes. Bahnson TD, et al. **J Biol Chem** 1989 Sep 5;264(25):14824–8

A similar pool of cyclic AMP phosphodiesterase in Xenopus oocytes is stimulated by insulin, insulin–like growth factor 1, and [Val12,Thr59]Ha–ras protein. Sadler SE, et al. **J Biol Chem** 1989 Jan 15;264(2):856–61

Resistance of cytolytic lymphocytes to perforin–mediated killing. Lack of correlation with complement–associated homologous species restriction. Jiang SB, et al. **J Exp Med** 1988 Dec 1;168(6):2207–19

PHYSIOLOGY

GABA–activated chloride channels in the retinal neurons and their role in the visual function. Kaneko A, et al. **Adv Exp Med Biol** 1988;236:47–60

Basement membrane proteins: molecular structure and function. Martin GR, et al. **Adv Protein Chem** 1988;39:1–50 (230 ref.)

Sensitivity to ethanol hypnosis and modulation of chloride

channels does not cosegregate with pentobarbital sensitivity in HS mice. Allan AM, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):428–34

Stilbene disulfonate blockade of colonic secretory Cl- channels in planar lipid bilayers. Bridges RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C902–12

Forskolin activates gated Cl- channels in frog skin. De Wolf I, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1239–49

Multiple calcium-mediated effector mechanisms regulate chloride secretory responses in T84-cells. Dharmsathaphorn K, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1224–30

Two types of chloride channel on duct cells cultured from human fetal pancreas. Gray MA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C240–51

GABA-induced chloride current in rat isolated Purkinje cells. Kaneda M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1153–9

Diluting power of thick limbs of Henle. I. Peritubular hypertonicity blocks basolateral Cl- channels. Molony DA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1128–37

Evidence for a chloride conductance in secretory membrane of parietal cells. Perez A, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):G299–305

Chloride channels in cultured glomus cells of the rat carotid body. Stea A, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C174–81

Characterization of an 80-kDa phosphoprotein involved in parietal cell stimulation. Urushidani T, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1070–81

Activation of an apical Cl- conductance by Ca2+ ionophores in cystic fibrosis airway epithelia. Willumsen NJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C226–33

A volume-sensitive chloride conductance in human colonic cell line T84. Worrell RT, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 1):C1111–9

Cell-surface anchoring of proteins via glycosyl-phosphatidylinositol structures. Ferguson MA, et al. **Annu Rev Biochem** 1988;57:285–320 (194 ref.)

Decay-accelerating factor: biochemistry, molecular biology, and function. Lublin DM, et al. **Annu Rev Immunol** 1989; 7:35–58 (78 ref.)

Axonal growth-associated proteins. Skene JH. **Annu Rev Neurosci** 1989;12:127–56 (155 ref.)

Functional reconstitution of prokaryote and eukaryote membrane proteins. Maloney PC, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):1–10

Inhibition of prostaglandin E2 synthesis by a blocker of epithelial chloride channels. Breuer W, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):398–405

Blockade of endothelin-induced contractions by dichlorobenzamil: mechanism of action. Criscione L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):247–54

Differential susceptibility of type III erythrocytes of paroxysmal nocturnal hemoglobinuria to lysis mediated by complement and perforin. Jiang S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):316–25

Calcium specificity of the antigen-induced channels in rat basophilic leukemia cells. Corcia A, et al. **Biochemistry** 1988 Sep 20;27(19):7499–506

Interaction of amphiphiles with integral membrane proteins. II. A simple, minimal model for the nonspecific interaction of amphiphiles with the anion exchanger of the erythrocyte membrane. Gruber HJ. **Biochim Biophys Acta** 1988 Oct 20;944(3):425–36

Pore-forming protein from Entamoeba histolytica forms voltage- and pH-controlled multi-state channels with properties similar to those of the barrel-stave aggregates. Keller F, et al. **Biochim Biophys Acta** 1989 Jun 26; 982(1):89–93

Bilitranslocase is the protein responsible for the electrogenic movement of sulfobromophthalein in plasma membrane vesicles from rat liver: immunochemical evidence using mono- and poly-clonal antibodies. Miccio M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):115–20

Identification of protein-bound riboflavin in rat hepatocyte plasma membrane as a source of autofluorescence. Nokubo M, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):303–8

Changes in the fluorescence parameters of bound N-(1-pyrene) maleimide by lipid peroxidation of intestinal brush-border membranes. Ohyashiki T, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):235–42

Concentration effects on reactions in membranes: rhodopsin and transducin. Saxton MJ, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):27–34

The gap junction proteins: vive la différence! Kistler J, et al. **Bioessays** 1988 Nov;9(5):167–8 (18 ref.)

Are disturbances in lipid-protein interactions by phospholipase-A2 a predisposing factor in affective illness? Hibbeln JR, et al. **Biol Psychiatry** 1989 Apr 1;25(7):945–61 (145 ref.)

Mutual diffusion of interacting membrane proteins. Abney JR, et al. **Biophys J** 1989 Aug;56(2):315–26

Membrane receptors in the gastrointestinal tract [published erratum appears in Biosci Rep 1988 Oct;8(5):493] Gespach C, et al. **Biosci Rep** 1988 Jun;8(3):199–232 (250 ref.)

Pregnenolone sulfate antagonizes GABAA receptor-mediated currents via a reduction of channel opening frequency. Mienville JM, et al. **Brain Res** 1989 Jun 5;489(1):190–4

Beta-carboline interactions at the BZ-GABA receptor chloride-ionophore complex in the rat cerebral cortex. Malatynska E, et al. **Brain Res Bull** 1989 May;22(5):845–8

Molecular mechanisms of lymphocyte-mediated killing. Young JD, et al. **Braz J Med Biol Res** 1988;21(6):1145–53 (29 ref.)

The bacterial chemosensory system. Hazelbauer GL. **Can J Microbiol** 1988 Apr;34(4):466–74 (90 ref.)

Transmembrane signaling by bacterial chemoreceptors: E. coli transducers with locked signal output. Ames P, et al. **Cell** 1988 Dec 2;55(5):817–26

S. cerevisiae encodes an essential protein homologous in sequence and function to mammalian BiP. Normington K, et al. **Cell** 1989 Jun 30;57(7):1223–36

Cell autonomy of lin-12 function in a cell fate decision in C. elegans. Seydoux G, et al. **Cell** 1989 Jun 30;57(7):1237–45

Influence of beta-adrenoceptor blocking drugs on lipid-protein interaction in synaptosomal membranes. An ESR study. Ondriaš K, et al. **Chem Biol Interact** 1989; 69(1):87–97

Influence of p21ras on phosphatidylinositol turnover. Downward J, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:883–92

ras oncogene proteins: three-dimensional structures, functional implications, and a model for signal transducer. Kim SH, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:273–81

Ion channels in Paramecium, yeast, and Escherichia coli. Saimi Y, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 2:667–73

Structure/function studies of the ras protein. Sigal IS, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:863–9

Critical role of cellular ras proteins in proliferative signal transduction. Stacey DW, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:871–81

Modulation of Na and Cl transport by mineralocorticoids. Clauss W, et al. **Comp Biochem Physiol [A]** 1988;90(4):583–9 (37 ref.)

Biophysical properties of a chloride channel in the apical membrane of a secretory epithelial cell. Halm DR, et al. **Comp Biochem Physiol [A]** 1988;90(4):597–601

Sulfate transport in toad skin: evidence for mitochondria-rich cell pathways in common with halide ions. Larsen EH, et al. **Comp Biochem Physiol [A]** 1988;90(4):709–14

Simulation of ionic transport mediated by membrane proteins for educational purposes. Holmgren M, et al. **Comput Methods Programs Biomed** 1989 May;29(1):43–50

Structure and function of perforin. Podack ER, et al. **Curr Top Microbiol Immunol** 1989;140:11–7 (32 ref.)

Clusters of 43-kDa protein are absent from genetic variants of C2 muscle cells with reduced acetylcholine receptor expression. LaRochelle WJ, et al. **Dev Biol** 1989 Mar; 132(1):130–8

A mycoplasma high-affinity transport system and the in vitro invasiveness of mouse sarcoma cells. Dudler R, et al. **EMBO J** 1988 Dec 1;7(12):3963–70

Evidence for high affinity binding-protein dependent transport systems in gram-positive bacteria and in Mycoplasma. Gilson E, et al. **EMBO J** 1988 Dec 1; 7(12):3971–4

Fractal scaling mechanisms in biomembranes. Oscillations in the lateral diffusion coefficient. Nonnenmacher TF. **Eur Biophys J** 1989;16(6):375–9

Properties of single chloride selective channel from sarcoplasmic reticulum. Rousseau E, et al. **Eur Biophys J** 1988;16(3):143–51

Correlation of anionic residue mobility at the filopodial plasma membranes with multilayer formation in transformed 3T3 cells. Kawai N, et al. **Exp Cell Biol** 1988; 56(3):143–52

Coupling of viral membrane proteins to phosphatidylinositide signalling system. Weinmann-Dorsch C, et al. **FEBS Lett** 1989 Apr 24;247(2):185–8

CTL-mediated cytolysis: perforin and alternative pathways? Nabholz M, et al. **Immunol Lett** 1989 Feb;20(3):179–80

Membrane-associated complement factor H on lymphoblastoid cell lines Raji expresses a co-factor activity for the factor I-mediated cleavage of C3b. Demares MJ. **Immunology** 1989 Aug;67(4):553–6

New approaches to the prediction of the folding of membrane proteins with redox function. Degli Esposti M, et al. **Ital J Biochem** 1989 Jan-Feb;38(1):1–22

Two-dimensional gel electrophoretic analysis of rat sperm membrane interaction with cauda epididymal fluid. Hall JC, et al. **J Androl** 1989 Jan-Feb;10(1):64–76

Localization and assembly into the Escherichia coli envelope of a protein required for entry of colicin A. Bourdineaud JP, et al. **J Bacteriol** 1989 May;171(5):2458–65

A methyl-accepting protein is involved in benzoate taxis in Pseudomonas putida. Harwood CS. **J Bacteriol** 1989 Sep; 171(9):4603–8

Maltose chemoreceptor of Escherichia coli: interaction of maltose-binding protein and the tar signal transducer. Kossmann M, et al. **J Bacteriol** 1988 Oct;170(10):4516–21

Roles of flagella, lipopolysaccharide, and a Ca2+-dependent cell surface protein in attachment of Rhizobium leguminosarum biovar viciae to pea root hair tips. Smit G, et al. **J Bacteriol** 1989 Jan;171(1):569–72

A novel, carbohydrate signal-mediated cell surface protein phosphorylation: ganglioside GQ1b stimulates ecto-protein kinase activity on the cell surface of a human neuroblastoma cell line, GOTO. Tsuji S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):498–503

Structure-function studies on bacteriorhodopsin. VIII. Substitutions of the membrane-embedded prolines 50, 91, and 186: the effects are determined by the substituting amino acids. Mogi T, et al. **J Biol Chem** 1989 Aug 25; 264(24):14192–6

Activator protein supporting the botulinum ADP-ribosyltransferase reaction. Ohtsuka T, et al. **J Biol Chem** 1989 Sep 5;264(25):15000–5

Biogenesis of peroxisomes: immunocytochemical investigation of peroxisomal membrane proteins in proliferating rat liver peroxisomes and in catalase-negative membrane loops. Baumgart E, et al. **J Cell Biol** 1989 Jun; 108(6):2221–31

A quantitative model of traffic between plasma membrane and secondary lysosomes: evaluation of inflow, lateral diffusion, and degradation. Draye JP, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2109–15

Selective anchoring in the specific plasma membrane domain: a role in epithelial cell polarity. Salas PJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2363–76

High resolution immunoelectron microscopic localization of functional domains of laminin, nidogen, and heparan sulfate proteoglycan in epithelial basement membrane of mouse cornea reveals different topological orientations. Schittny JC, et al. **J Cell Biol** 1988 Oct;107(4):1599–610

Integral membrane proteins specific to the inner nuclear membrane and associated with the nuclear lamina. Senior A, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2029–36

Localization of the tight junction protein, ZO-1, is modulated by extracellular calcium and cell-cell contact in Madin-Darby canine kidney epithelial cells. Siliciano JD, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2389–99

Tight junction structure and ZO-1 content are identical in two strains of Madin-Darby canine kidney cells which differ in transepithelial resistance. Stevenson BR, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2401–8

Role of surface proteins in staphylococcal adherence to fibers in vitro. Cheung AL, et al. **J Clin Invest** 1989 Jun; 83(6):2041–9

Cytoadherence by Plasmodium falciparum-infected erythrocytes is correlated with the expression of a family of variable proteins on infected erythrocytes. Magowan C, et al. **J Exp Med** 1988 Oct 1;168(4):1307–20

Target cell lysis by cytotoxic T lymphocytes that lack detectable hemolytic perforin activity. Allbritton NL, et al. **J Immunol** 1988 Nov 15;141(10):3243–8

Resistance of cytolytic lymphocytes to perforin-mediated killing. Murine cytotoxic T lymphocytes and human natural killer cells do not contain functional soluble homologous restriction factor or other specific soluble protective factors. Jiang S, et al. **J Immunol** 1989 Sep 1;143(5):1453–60

Effect of complement on the lateral mobility of erythrocyte membrane proteins. Evidence for terminal complex interaction with cytoskeletal components. Liu ZY, et al. **J Immunol** 1989 Apr 1;142(7):2370–6

Membrane IL-1 induces bone resorption in organ culture. Nishihara T, et al. **J Immunol** 1989 Sep 15;143(6):1881–6

Decay accelerating factor regulates complement activation on glomerular epithelial cells. Quigg RJ, et al. **J Immunol** 1989 Feb 1;142(3):877–82

Single chloride channels in colon mucosa and isolated colonic enterocytes of the rat. Diener M, et al. **J Membr Biol** 1989 Apr;108(1):21–30

Identification and comparison of bile acid-binding polypeptides in ileal basolateral membrane. Lin MC, et al. **J Membr Biol** 1988 Nov;106(1):1–11

Voltage-gated chloride currents in cultured canine tracheal epithelial cells. Schoppa N, et al. **J Membr Biol** 1989 Apr; 108(1):73–90

Conductance states activated by glycine and GABA in rat cultured spinal neurones. Smith SM, et al. **J Membr Biol** 1989 Apr;108(1):45–52

Calcium ions and 1-palmitoyl carnitine reduce erythrocyte electrophoretic mobility: test of a surface charge hypothesis. Mészáros J, et al. **J Mol Cell Cardiol** 1988 Jun; 20(6):481–92

Voltage-clamp characterization of Cl- conductance gated by GABA and L-glutamate in single neurons of Aplysia. King WM, et al. **J Neurophysiol** 1989 May;61(5):892–9

Benzodiazepine and beta-carboline interactions with GABAA receptor-gated chloride channels in mammalian cultured spinal cord neurons. Mehta AK, et al. **J Pharmacol Exp Ther** 1989 May;249(2):418–23

Cell-surface peptidases as modulators of growth and differentiation. Kenny AJ, et al. **Lancet** 1989 Sep 30; 2(8666):785–7 (29 ref.)

Protein-lipid interactions in biological membranes--spin label studies and physiological implications. Benga G. **Mol Aspects Med** 1988;10(3):201–22

Identity of the immunoglobulin heavy-chain-binding protein with the 78,000-dalton glucose-regulated protein and the role of posttranslational modifications in its binding function. Hendershot LM, et al. **Mol Cell Biol** 1988 Oct; 8(10):4250–6

The tremorigen aflatrem is a positive allosteric modulator of the gamma-aminobutyric acidA receptor channel expressed in Xenopus oocytes. Yao Y, et al. **Mol Pharmacol** 1989 Mar;35(3):319–23

A histamine-activated chloride channel involved in neurotransmission at a photoreceptor synapse. Hardie RC. **Nature** 1989 Jun 29;339(6227):704–6

Glucose-inhibition of glucagon secretion involves activation of GABAA-receptor chloride channels. Rorsman P, et al.

Nature 1989 Sep 21;341(6239):233–6
Membrane phospholipid polar heads influence the coupling of M2 muscarinic receptors to G proteins. Gies JP, et al. Neurochem Res 1988 Aug;13(8):737–42
Incorporation of exogenous ganglioside GM1 into neuroblastoma membranes: inhibition by calcium ion and dependence upon membrane protein. Leskawa KC, et al. Neurochem Res 1989 Jun;14(6):547–54
The multiple membrane-spanning segments of the BNLF-1 oncogene from Epstein-Barr virus are required for transformation. Baichwal VR, et al. Oncogene 1989 Jan; 4(1):67–74
What's new in the importance of receptors in pathology? Dietel M, et al. Pathol Res Pract 1988 Dec;184(1):116–27 (51 ref.)
Identification of resonances from an oncogenic activating locus of human N-RAS-encoded p21 protein using isotope-edited NMR. Burk SC, et al. Proc Natl Acad Sci U S A 1989 Feb;86(3):817–20
cAMP and forskolin decrease gamma-aminobutyric acid-gated chloride flux in rat brain synaptoneurosomes. Heuschneider G, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2938–42
Reconstitution of purified brown adipose tissue mitochondria uncoupling protein: demonstration of separate identity of nucleotide binding and proton translocation sites by chemical probes. Katiyar SS, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2559–62
Origin-specific DNA-binding membrane-associated protein may be involved in repression of initiation of DNA replication in Bacillus subtilis. Laffan JJ, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7452–6
Differences in the negative allosteric modulation of gamma-aminobutyric acid receptors elicited by 4'-chlorodiazepam and by a beta-carboline-3-carboxylate ester: a study with natural and reconstituted receptors. Puia G, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7275–9
Formation of hybrid cell-cell channels. Werner R, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5380–4
Single channel properties of lens MIP 28 reconstituted into planar lipid bilayers. Ehring GR, et al. Proc West Pharmacol Soc 1988;31:251–3
The protein F1/protein kinase C module and neurite growth: potential pathway for facilitating brain transplantation. Nelson RB, et al. Prog Brain Res 1988;78:339–45 (41 ref.)
ESR studies of transmembrane signaling processes: modulation of skeletal protein-protein interactions and their influence on the physical state of cell-surface carbohydrates in human erythrocyte membranes. Butterfield DA. Prog Clin Biol Res 1989;292:53–64 (27 ref.)
How killer cells kill. Young JD, et al. Sci Am 1988 Jan; 258(1):38–44 (0 ref.)
Single subunits of the GABAA receptor form ion channels with properties of the native receptor. Blair LA, et al. Science 1988 Oct 28;242(4878):577–9
Autonomic regulation of a chloride current in heart. Harvey RD, et al. Science 1989 May 26;244(4907):983–5
Cl- channels in CF: lack of activation by protein kinase C and cAMP-dependent protein kinase. Hwang TC, et al. Science 1989 Jun 16;244(4910):1351–3
Persistence of abnormal chloride conductance regulation in transformed cystic fibrosis epithelia. Jetten AM, et al. Science 1989 Jun 23;244(4911):1472–5
Regulation of chloride channels by protein kinase C in normal and cystic fibrosis airway epithelia. Li M, et al. Science 1989 Jun 16;244(4910):1353–6
Clathrin: a role in the intracellular retention of a Golgi membrane protein. Payne GS, et al. Science 1989 Sep 22; 245(4924):1358–65
Transient expression shows ligand gating and allosteric potentiation of GABAA receptor subunits. Pritchett DB, et al. Science 1988 Dec 2;242(4883):1306–8
Reconstitution and phosphorylation of chloride channels from airway epithelium membranes. Valdivia HH, et al. Science 1988 Dec 9;242(4884):1441–4
The neuronal growth-associated protein GAP-43 induces filopodia in non-neuronal cells. Zuber MX, et al. Science 1989 Jun 9;244(4909):1193–5
Sorting of apical surface proteins and lipids by epithelial cells: is there a common mechanism? Lisanti M, et al. Soc Gen Physiol Ser 1989;44:167–73
Effect of agonist concentration on the lifetime of GABA-activated membrane channels in spinal cord neurons. Mathers DA, et al. Synapse 1988;2(6):627–32
The dynamic photosynthetic membrane and regulation of solar energy conversion. Anderson JM, et al. Trends Biochem Sci 1988 Sep;13(9):351–5 (22 ref.)
The role of stress proteins in membrane biogenesis. Deshaies RJ, et al. Trends Biochem Sci 1988 Oct;13(10):384–8 (32 ref.)
Membrane-anchored growth factors work! Steele RE. Trends Biochem Sci 1989 Jun;14(6):201–2 (19 ref.)
Dual importance of positive charge in the C-terminal region of filamentous bacteriophage coat protein for membrane insertion and DNA-protein interaction in virus assembly. Greenwood J, et al. Virology 1989 Aug;171(2):444–52
[Effect of stress on the function of chloride channels associated with the GABA receptor complex] Concas A, et al. Ann Ist Super Sanita 1988;24(4):551–4 (Eng. Abstr.) (Ita)
[Expression and function of proteins associated with multidrug resistance] Hamada H, et al. Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 2):585–91 (7 ref.) (Eng. Abstr.) (Jpn)
[ras p21-like small MW GTP-binding proteins in transmembrane signaling] Takai Y, et al. Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 2):499–508 (49 ref.) (Eng. Abstr.) (Jpn)
[General outline of erythrocyte membrane proteins] Makino S. Rinsho Byori 1987 Nov;Spec No 74:1–7 (Jpn)
[Cellular interaction in neurogenesis: the role of receptor-like molecules] Takeichi M, et al. Tanpakushitsu Kakusan Koso 1988 Aug;33(10):1674–80 (28 ref.) (Jpn)
[Protein G as a "universal link" in signal transmission from the membrane receptors on their effectors—minireview] Kwiatkowska J. Postepy Biochem 1988;34(3):123–30 (41 ref.) (Pol)
[Effect of protein-modifying factors on sodium and potassium leakage currents of the secretory cell membranes] Klevets MIu. Fiziol Zh 1989 Mar-Apr;35(2):3–6 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Radiation inactivation of membrane components and molecular mass determination by target analysis. Kempner ES, et al. Methods Enzymol 1989;172:410–39

SECRETION

Functional role of specific secreted and cell surface molecules in tumour cell invasion and metastasis. Quigley JP, et al. Ciba Found Symp 1988;141:22–47 (25 ref.)
Protein secretion by constitutive and regulated pathways. Moore HP, et al. Soc Gen Physiol Ser 1989;44:189–201

THERAPEUTIC USE

Protection against nerve toxicity by monoclonal antibodies to the sodium channel blocker tetrodotoxin. Huot RI, et al. J Clin Invest 1989 Jun;83(6):1821–6

TOXICITY

Tumor cytotoxicity of human monocyte membrane-bound interleukin-1 alpha induced by synergistic actions of interferon-gamma and synthetic acyltripeptide, FK-565. Inamura N, et al. Cancer Immunol Immunother 1989; 28(3):164–70
Resistance of cytolytic lymphocytes to perforin-mediated killing. Induction of resistance correlates with increase in cytotoxicity. Liu CC, et al. J Exp Med 1989 Jun 1; 169(6):2211–25
Cell damage by cytolysin. Spontaneous recovery and reversible inhibition by divalent cations. Bashford CL, et al. J Immunol 1988 Dec 1;141(11):3965–74

ULTRASTRUCTURE

Orientation of alpha-helical peptides in a lipid bilayer. Huschilt JC, et al. Biochim Biophys Acta 1989 Feb 13; 979(1):139–41
Positions of the sites labeled by N-cyclohexyl-N'-(4-dimethylamino-1-naphthyl)= carbodiimide on the (Ca2+ + Mg2+)-ATPase. Munkonge F, et al. Biochim Biophys Acta 1989 Feb 13; 979(1):113–20
Topology of the 32-kd liver gap junction protein determined by site-directed antibody localizations. Milks LC, et al. EMBO J 1988 Oct;7(10):2967–75
Structural organization of the membrane-bound hydrogenase isolated from Alcaligenes eutrophus as revealed by electron microscopy. Gerberding H, et al. FEMS Microbiol Lett 1989 Jul 15;51(1):159–63
Three-dimensional structure of an open form of the surface layer from the fish pathogen Aeromonas salmonicida. Dooley JS, et al. J Bacteriol 1989 Jan;171(1):190–7
The projection structure of alpha-toxin from Staphylococcus aureus in human platelet membranes as analyzed by electron microscopy and image processing. Olofsson A, et al. J Ultrastruct Mol Struct Res 1988 Aug;100(2):194–200
Analysis of two-dimensional crystals of Ca2+-ATPase in sarcoplasmic reticulum. Taylor KA, et al. Methods Enzymol 1988;157:271–89
The transmembrane topology of the sn-glycerol-3-phosphate permease of Escherichia coli analysed by phoA and lacZ protein fusions. Gött P, et al. Mol Microbiol 1988 Sep;2(5):655–63
Membrane proteins. Detergent ringing true as a model for membranes [news] Barber J. Nature 1989 Aug 24; 340(6235):601
Detection of refolding conformers of complement protein C9 during insertion into membranes. Laine RO, et al. Nature 1989 Sep 7;341(6237):63–5
Detergent structure in crystals of a bacterial photosynthetic reaction center. Roth M, et al. Nature 1989 Aug 24; 340(6235):659–62
Predicting the orientation of eukaryotic membrane-spanning proteins. Hartmann E, et al. Proc Natl Acad Sci U S A 1989 Aug;86(15):5786–90
Direct visualization of the interrelationship between intramembrane and extracellular structures. Wade JB, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2723–7
Identification of synaptophysin as a hexameric channel protein of the synaptic vesicle membrane. Thomas L, et al. Science 1988 Nov 18;242(4881):1050–3
The E5 oncoprotein of bovine papillomavirus is oriented asymmetrically in Golgi and plasma membranes. Burkhardt A, et al. Virology 1989 May;170(1):334–9

MEMBRANE PROTEINS, VIRAL see **VIRAL MATRIX PROTEINS**

MEMBRANES

see related
CELL MEMBRANE
CELL WALL
MEMBRANE LIPIDS
MEMBRANE PROTEINS
NEURILEMMA
SYNOVIAL MEMBRANE

Depression of phase-transition temperature by anesthetics: nonzero solid membrane binding. Kaminoh Y, et al. Biochim Biophys Acta 1988 Dec 22;946(2):215–20
Amphiphilic components of the Murchison carbonaceous chondrite: surface properties and membrane formation. Deamer DW, et al. Orig Life Evol Biosph 1989;19(1):21–38

DRUG EFFECTS

Stimulation of Na+,K+-ATPase activity in certain membranes of the rat central nervous system (CNS) by acute administration of desipramine (DMI). Viola MS, et al. Cell Mol Neurobiol 1989 Jun;9(2):263–71
Anthracycline-induced oxygen consumption and oxidative damage in rat liver microsomes are not necessarily coupled. A study with 8 structurally related anthracyclines. Sterrenberg L, et al. Free Radic Res Commun 1985; 1(1):41–54
Photoreactive lipids for the study of membrane-penetrating toxins. Montecucco C. Methods Enzymol 1988;165:347–57

ENZYMOLOGY

Glucose-6-phosphatase: two concepts of membrane-function relationship. Sukalski KA, et al. Adv Enzymol 1989; 62:93–117 (46 ref.)

METABOLISM

Inhibition of peroxidation of membranes. Niki E, et al. Basic Life Sci 1988;49:561–6
Secondary structure prediction of 52 membrane-bound cytochromes P450 shows a strong structural similarity to P450cam. Nelson DR, et al. Biochemistry 1989 Jan 24; 28(2):656–60
Commentary on 'Thermodynamic Analysis of the Permeability of Biological Membranes to Non-Electrolytes'. Kedem O. Biochim Biophys Acta 1989; 1000:411–2
Thermodynamic analysis of the permeability of biological membranes to non-electrolytes. 1958 [classical article] Kedem O, et al. Biochim Biophys Acta 1989;1000:413–30
Membrane transport of electrolyte ions and time-dependent membrane potential. Ohshima H, et al. Biophys Chem 1988 Sep;31(3):225–9
Transepidermal water loss: the signal for recovery of barrier structure and function. Grubauer G, et al. J Lipid Res 1989 Mar;30(3):323–33
Proton flux mechanisms in model and biological membranes. Deamer DW, et al. J Membr Biol 1989 Feb;107(2):91–103 (82 ref.)
Photochemical labeling of apolar phase of membranes. Brunner J. Methods Enzymol 1989;172:628–87 (241 ref.)
Membrane transport of calcium: an overview. Carafoli E. Methods Enzymol 1988;157:3–11 (35 ref.)
Rotational and translational diffusion in membranes measured by fluorescence and phosphorescence methods. Jovin TM, et al. Methods Enzymol 1989;172:471–513
Before enzymes and templates: theory of surface metabolism. Wächtershäuser G. Microbiol Rev 1988 Dec;52(4):452–84 (172 ref.)
Transport properties of synthetic and biological membranes in correlation with their structure. Pusch W. Prog Clin Biol Res 1989;292:303–25 (23 ref.)

PHYSIOLOGY

Water movement: does thermodynamic interpretation distort reality? Essig A, et al. Am J Physiol 1989 Mar;256(3 Pt 1):C694–8
Arachidonic acid in the modulation of excitable membrane function and at the onset of brain damage. Bazan NG. Ann N Y Acad Sci 1989;559:1–16 (65 ref.)
pH dependence of electrostatic interaction between ion-penetrable membranes. Ohshima H, et al. Biophys Chem 1988 Dec;32(2-3):161–6
Characterization of non-linear behaviour of an animal membrane using electro-kinetic studies. Shukla PC, et al. Biophys Chem 1989 Mar;33(1):31–7
Electromobile surface charge alters membrane potential changes induced by applied electric fields. Gross D. Biophys J 1988 Nov;54(5):879–84
Simulation of concentration polarization in electrokinetic processes by network thermodynamic methods. Horno J, et al. Biophys J 1989 Mar;55(3):527–35
Particle counting by fluorescence correlation spectroscopy. Simultaneous measurement of aggregation and diffusion of molecules in solutions and in membranes. Meyer T, et al.

Biophys J 1988 Dec;54(6):983–93
Threshold for repetitive activity for a slow stimulus ramp: a memory effect and its dependence on fluctuations. Rinzel J, et al. Biophys J 1988 Sep;54(3):551–5
Role of G proteins in transmembrane signaling. Casey PJ, et al. Cold Spring Harb Symp Quant Biol 1988;53 Pt 1:203–8 (41 ref.)
Flux ratio theorems for nonlinear membrane transport under nonstationary conditions. Bass L, et al. J Theor Biol 1988 Jul 21;133(2):185–91
Biomembranes and diseases. Mol Aspects Med 1988; 10(3):197–298
The effects of tertiary amines on the state and transport properties of biomembranes. Constantinescu A, et al. Mol Aspects Med 1988;10(3):291–8 (16 ref.)
Osmosis in leaky pores: the role of pressure. Hill AE. Proc R Soc Lond [Biol] 1989 Aug 22;237(1288):363–7
Osmotic flow equations for leaky porous membranes. Hill AE. Proc R Soc Lond [Biol] 1989 Aug 22;237(1288):369–77
n–3 fatty acids and the evolution of the brain. Crawford MA, et al. Prog Clin Biol Res 1988;282:335–54 (40 ref.)

RADIATION EFFECTS

Radioprotection of membranes. Raleigh JA. Pharmacol Ther 1988;39(1–3):109–13 (31 ref.)

ULTRASTRUCTURE

Modulation of membrane surface curvature by peptide–lipid interactions. Batenburg AM, et al. Biosci Rep 1988 Aug; 8(4):299–307 (50 ref.)
Supramolecular structure of the thylakoid membrane of Prochlorothrix hollandica: a chlorophyll b–containing prokaryote. Miller KR, et al. J Cell Sci 1988 Dec;91 (Pt 4):577–86
Orienting synthetic and native biological membranes for time–averaged and time–resolved structure determinations. Herbette LG, et al. Methods Enzymol 1989;172:399–410
Order and viscosity of membranes: analysis by time–resolved fluorescence depolarization. Heyn MP. Methods Enzymol 1989;172:462–71
X–ray standing waves: a molecular yardstick for biological membranes. Bedzyk MJ, et al. Science 1988 Sep 30; 241(4874):1788–91

MEMBRANES, ARTIFICIAL

Membrane plasmapheresis and its current possibilities in internal medicine. Zadražil J, et al. Acta Univ Palacki Olomuc Fac Med 1987;117:185–93 (24 ref.)
Tangential flow filtration. Shilcoch J, et al. Adv Biotechnol Processes 1988;8:97–125
The chain conformations in membranes and micelles. Dill KA. Adv Colloid Interface Sci 1986 Nov;26(2–4):99–110 (29 ref.)
Electrical phenomena at the surface of phospholipid membranes relevant to the sorption of ionic compounds. Matsumura H, et al. Adv Colloid Interface Sci 1989 Jul; 30(1–2):71–109 (55 ref.)
Artificial cells with ultrathin lipid–polymer or lipid–protein membranes. Chang TM. Adv Exp Med Biol 1988; 238:215–23 (97 ref.)
Enzymes covalently bound on collagen membranes immobilization of blood clotting factor XIII. Gautheron DC, et al. Adv Exp Med Biol 1988;238:331–40 (44 ref.)
Immobilized photosynthetic membranes and cells for the production of fuels and chemicals. Hall DO, et al. Adv Exp Med Biol 1988;238:225–45 (49 ref.)
Bioincompatibility of dialysis membranes: factor H binding correlates inversely with complement activation indicating a local imbalance of involved proteases/anti–proteases. Rauterberg EW, et al. Adv Exp Med Biol 1988;240:365–75
Biocompatibility of haemodialysis membranes. van Berlo A, et al. Adv Exp Med Biol 1988;238:341–58 (22 ref.)
Photochemical reactions of dyes and olefins in monolayer films and supported multilayers. Whitten DG, et al. Adv Exp Med Biol 1988;238:291–304
Beta 2–microglobulin kinetics in maintenance hemodialysis: a comparison of conventional and high–flux dialyzers and the effects of dialyzer reuse. DiRaimondo CR, et al. Am J Kidney Dis 1989 May;13(5):390–5
Evaluation of a new disinfectant for dialyzer reuse. Husni L, et al. Am J Kidney Dis 1989 Aug;14(2):110–8
Reprocessing of hemodialyzers: a critical appraisal. Shusterman NH, et al. Am J Kidney Dis 1989 Aug; 14(2):81–91 (55 ref.)
Severe acute respiratory failure managed with continuous positive airway pressure and partial extracorporeal carbon dioxide removal by an artificial membrane lung. A controlled, randomized animal study. Borelli M, et al. Am Rev Respir Dis 1988 Dec;138(6):1480–7
The use of polyvinylidenedifluoride membranes as a general blotting matrix. Gültekin H, et al. Anal Biochem 1988 Aug 1;172(2):320–9
A modified primer extension procedure for specific detection of DNA–RNA hybrids on nylon membranes. Kainz P, et al. Anal Biochem 1989 Jun;179(2):366–70
Nick translation of DNA immobilized on nylon membranes. Kainz P, et al. Anal Biochem 1989 May 1;178(2):260–2
Immobilized artificial membrane chromatography: supports composed of membrane lipids. Pidgeon C, et al. Anal Biochem 1989 Jan;176(1):36–47
A quantitative solid–phase assay for identifying radiolabeled glycosaminoglycans in crude cell extracts. Rapraeger A, et al. Anal Biochem 1989 Jun;179(2):361–5
Elimination of the asymmetry in neutral–carrier–based solvent polymeric membranes induced by proteins. Dürselen LF, et al. Anal Chem 1988 Jul 15;60(14):1455–8
Phosphate–selective polymer membrane electrode. Glazier SA, et al. Anal Chem 1988 Nov 15;60(22):2540–2
Membrane filters for the concentration of trace elements in water: distribution of ion pairs between membrane filter and aqueous phases. Taguchi S, et al. Analyst 1989 Apr; 114(4):489–92
Fascicular tubulization: a comparison of experimental nerve repair techniques in the cat. Rosen JM, et al. Ann Plast Surg 1989 Jun;22(6):467–78
An improved membrane feeder for haematophagous arthropods. Elkins DB, et al. Ann Trop Med Parasitol 1988 Apr;82(2):217–9
Cellulosic versus synthetic membranes: a reasonable comparison? Baurmeister U, et al. Artif Organs 1989 Feb; 13(1):52–7 (29 ref.)
High shear rate hemofiltration: influence of fiber dimensions and shear rates. Gupta BB, et al. Artif Organs 1989 Apr; 13(2):97–102
Beta–2–microglobulin and main granulocyte components in hemodialysis patients. Haag–Weber M, et al. Artif Organs 1989 Apr;13(2):92–6
Eicosanoid release as laboratory indicator of biocompatibility. Mahiout A, et al. Artif Organs 1989 Jun; 13(3):251–4
In vitro evaluation of a bioartificial pancreas under various hemodynamic conditions. Moussy F, et al. Artif Organs 1989 Apr;13(2):109–15
Influence of the surface area of different dialysis membranes on granulocyte adherence and superoxide generation. Paul JL, et al. Artif Organs 1988 Aug;12(4):341–4
Characterization and identification of substances isolated from dialyzer extracts. Postaire E, et al. Artif Organs 1988 Dec;12(6):471–5
Use of a new plasma separation membrane for plasma donation. Technical and biological results. Schooneman F, et al. Artif Organs 1988 Dec;12(6):526–9
Hollow–fiber dialyzers on the market. Sigdell JE. Artif Organs 1988 Aug;12(4):345–50
New membrane for cell encapsulation. Tatarkiewicz K. Artif Organs 1988 Oct;12(5):446–8
Enzymatic detoxification using lipophilic hollow–fiber membranes: III. Oxidation reactions of sulfides. Yamamoto Y, et al. Artif Organs 1989 Apr;13(2):103–8
A high efficiency membrane separator for donor plasmapheresis. Bellhouse BJ, et al. ASAIO Trans 1988 Jul–Sep;34(3):747–54
Effect of chemical germicides on the integrity of hemodialyzer membranes. Bland LA, et al. ASAIO Trans 1988 Jul–Sep;34(3):172–5
Couette membrane filtration with constant shear stress. Fischel RJ, et al. ASAIO Trans 1988 Jul–Sep;34(3):375–85
Permeability decay in CAVH hemofilters. Jenkins RD, et al. ASAIO Trans 1988 Jul–Sep;34(3):590–3
Temperature dependence of macromolecular sieving across plasma fractionating membranes. Leypoldt JK, et al. ASAIO Trans 1988 Jul–Sep;34(3):420–4
Modified cellulosic dialyzer membranes: an investigative tool in thrombogenicity studies. Mahiout A, et al. ASAIO Trans 1988 Jul–Sep;34(3):878–81
A hybrid artificial vascular graft based upon an organ reconstruction model. Significance and design criteria of an artificial basement membrane. Matsuda T, et al. ASAIO Trans 1988 Jul–Sep;34(3):640–3
Development of an anaphylatoxin scavenging device. Principle, surface molecular design, and selective adsorption. Matsuda T, et al. ASAIO Trans 1988 Jul–Sep; 34(3):556–8
A biodegradable antiadhesion collagen membrane with slow release heparin. Miyata T, et al. ASAIO Trans 1988 Jul–Sep;34(3):687–91
Enhanced bacterial adhesion on surfaces pretreated with fibrinogen and fibronectin. Mohammad SF, et al. ASAIO Trans 1988 Jul–Sep;34(3):573–7
Removal of beta–2–microglobulin by diffusion alone is feasible using highly permeable dialysis membranes. Naitoh A, et al. ASAIO Trans 1988 Jul–Sep;34(3):630–4
Neutrophil behavior during hemodialysis. Role of membrane contact. Neveceral P, et al. ASAIO Trans 1988 Jul–Sep; 34(3):564–7
Anticoagulant and membrane effects on humoral and cellular changes during plasmapheresis. Omokawa S, et al. ASAIO Trans 1988 Jul–Sep;34(3):404–9
Clinical significance of a dialysis membrane that can remove beta 2–microglobulin (beta 2m). Ono T, et al. ASAIO Trans 1988 Jul–Sep;34(3):342–5
A protamine filter for extracorporeal blood heparin removal. Teng CL, et al. ASAIO Trans 1988 Jul–Sep;34(3):743–6
In vivo solute extraction by a new polysulphone membrane with low ultrafiltration capacity. Vanholder R, et al. ASAIO Trans 1988 Jul–Sep;34(3):598–601
Challenge of phagocyte metabolism by extracorporeal circulation and membrane contact. A biocompatibility test. Vanholder RC, et al. ASAIO Trans 1988 Jul–Sep; 34(3):543–5
Response of complement and neutrophils to hydrophilized synthetic membranes. Ward RA, et al. ASAIO Trans 1988 Jul–Sep;34(3):334–7
Characteristic effects of taste–compounds on the dynamic behavior of oleate–monolayer. Yoshikawa K, et al. Biochem Biophys Res Commun 1989 Apr 28;160(2):699–704
Mimicked translocation of glucose and glucose 6–phosphate with artificial enzyme membranes. Maisterrena B, et al. Biochem J 1989 Jun 1;260(2):455–61
Fluorescence depolarization of cis– and trans–parinaric acids in artificial and red cell membranes resolved by a double hindered rotational model. Calafut TM, et al. Biochemistry 1989 Jun 13;28(12):5051–8
Polymorphic phase behavior of lysopalmitoylphosphatidylcholine in poly(ethylene glycol)–water mixtures. King MD, et al. Biochemistry 1989 Jun 27;28(13):5643–7
Partition behavior of a nonionic detergent, octyl glucoside, between membrane and water phases, and its effect on membrane permeability. Ueno M. Biochemistry 1989 Jun 27;28(13):5631–4
A mismatch between the length of gramicidin and the lipid acyl chains is a prerequisite for HII phase formation in phosphatidylcholine model membranes. Killian JA, et al. Biochim Biophys Acta 1989 Jan 30;978(2):341–5
Combined effects exerted by amphotericin B and lucensomycin on cation permeability in a unilamellar vesicle system. Capuozzo E, et al. Biochimie 1989 Jan; 71(1):57–61
Interaction of the polyene antibiotic amphotericin B with model membranes: differences between small and large unilamellar vesicles. Milhaud J, et al. Biochimie 1989 Jan; 71(1):49–56
Interaction of lucensomycin with membranes: the role of non–steroidal components. Salerno C, et al. Biochimie 1989 Jan;71(1):63–6
Effects of oral administration of artificial cells immobilized phenylalanine ammonia–lyase on intestinal amino acids of phenylketonuric rats. Bourget L, et al. Biomater Artif Cells Artif Organs 1989;17(2):161–81
Structure and transport properties of the Ultracell membrane for hemodialysis. Eltsefon BS, et al. Biomater Artif Cells Artif Organs 1988–89;16(5):967–75
FTIR–ATR spectra of protein A immobilized on to functionalized polypropylene membranes by gaseous plasma of oxygen and of anhydrous ammonia. Sipehia R. Biomater Artif Cells Artif Organs 1988–89;16(5):955–66
Amphiphilic polyphosphazenes as membrane materials: influence of side group on radiation cross–linking. Allcock HR, et al. Biomaterials 1988 Nov;9(6):500–8
A comparative study of the permeation of dihexadecyl phosphate vesicles by various carboxylic acids and some of their tetrazole analogues. Pernice P, et al. Biophys Chem 1988 Oct;32(1):15–20
Electrical excitability of artificial enzyme membranes. IV. Theoretical approach of the membrane potential of synthetic proteinic films. Trubuil A, et al. Biophys Chem 1988 Sep;31(3):217–24
Lateral diffusion of membrane proteins in protein–rich membranes. A simple hard particle model for concentration dependence of the two–dimensional diffusion coefficient. Minton AP. Biophys J 1989 Apr;55(4):805–8
Transport rates of proteins in porous materials with known microgeometry. Saltzman WM, et al. Biophys J 1989 Jan; 55(1):163–71
Analysis of steric partition behavior of molecules in membranes using statistical physics. Application to gel chromatography and electrophoresis. Schnitzer JE. Biophys J 1988 Dec;54(6):1065–76
Development and use of enzyme membranes for biosensors. Tor R, et al. Biotechnology 1989;11:79–91 (17 ref.)
Generation and removal of anaphylatoxins during hemofiltration with five different membranes. Jørstad S, et al. Blood Purif 1988;6(6):325–35
Carpal tunnel syndrome and type of dialysis membrane. Chanard J, et al. BMJ 1989 Apr 1;298(6677):867–8
Human brain sodium channels in bilayers. Duch DS, et al. Brain Res 1988 Nov;464(3):171–7
Potassium concentration influences the gating of K+ channels from sarcoplasmic reticulum. Campos–de–Carvalho AC. Braz J Med Biol Res 1989; 22(1):107–9
Treatment of donor sites—Duoderm or Omiderm? Leicht P, et al. Burns Incl Therm Inj 1989 Feb;15(1):7–10
Omiderm treatment of scalds in children. Siim E, et al. Burns Incl Therm Inj 1989 Feb;15(1):4–6
High–efficiency dialytic membrane: personal survey. Mioli V, et al. Contrib Nephrol 1989;70:272–6
New trends in membrane development. von Sengbusch G. Contrib Nephrol 1989;70:250–9
Study of physical mechanisms of insulin reception. Hianik T, et al. Czech Med 1989;12(2):101–16
An improved method of high–voltage isoelectric focusing on cellulose acetate membranes. Toda T, et al. Electrophoresis 1988 Mar;9(3):149–50
Orientation measurements on membrane systems made from lipopolysaccharides and free lipid A by FT–IR spectroscopy. Brandenburg K, et al. Eur Biophys J 1988; 16(2):83–94
Curvature–electric effects in artificial and natural membranes studied using patch–clamp techniques. Petrov AG, et al. Eur Biophys J 1989;17(1):13–7
Membrane bending energy and shape determination of

phospholipid vesicles and red blood cells. Svetina S, et al. **Eur Biophys J** 1989;17(2):101–11

The use of a synthetic skin covering as a protective layer in the daily care of low birth weight infants. Barak M, et al. **Eur J Pediatr** 1989 Jun;148(7):665–6

HPLC study on the 'history' dependence of gramicidin A conformation in phospholipid model membranes. Bañó MC, et al. **FEBS Lett** 1989 Jun 19;250(1):67–71

A spin label study of perturbation effects of N-(1-methyldodecyl)-N, N, N-trimethylammonium bromide and N-(1-methyldodecyl)-N, N-dimethylamine oxide on model membranes prepared from Escherichia coli-isolated lipids. Seršeň F, et al. **Gen Physiol Biophys** 1989 Apr;8(2):133–56

Vacuum blotting: a simple method for transferring DNA from sequencing gels to nylon membranes. Gross DS, et al. **Gene** 1988 Dec 30;74(2):347–56

Liquid membrane phenomenon in the biological actions of gonadal steroid hormones. Nagappa AN, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):350–5

Liquid membrane phenomenon in the biological actions of benzodiazepines. Raju DB, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):104–8

Evaluation of reused hemodialyzers and membranes. Bruck SD. **Int J Artif Organs** 1989 Apr;12(4):211–5 (40 ref.)

Optimal reuse of cuprammonium rayon hollow-fibre dialyzers. Chan MK, et al. **Int J Artif Organs** 1989 Apr; 12(4):223–8

The effects of hemodialysis with different membranes on middle molecules and uremic neuropathy. Djukanović LJ, et al. **Int J Artif Organs** 1989 Jan;12(1):11–9

Modelling of plasma-separation through microporous membranes. Gupta BB, et al. **Int J Artif Organs** 1989 Jan; 12(1):51–8

Beta-2-microglobulin adsorption and release in-vitro: influence of membrane material, osmolality and heparin. Klinke B, et al. **Int J Artif Organs** 1988 Sep;11(5):355–60

Technical evaluation of newly-developed inorganic membranes for plasma fractionation. Ozawa K, et al. **Int J Artif Organs** 1989 Mar;12(3):195–8

Influence of different dialyzer membranes on plasma fibronectin levels in hemodialyzed patients. Pertosa G, et al. **Int J Artif Organs** 1989 Jan;12(1):36–40

Technical and clinical evaluation of a new synthetic low flux polysulphon membrane for hemodialysis. Ronco C, et al. **Int J Artif Organs** 1989 Jul;12(7):450–60

Clinical evaluation of a new high-flux cellulose acetate membrane. Schaefer RM, et al. **Int J Artif Organs** 1989 Feb;12(2):85–90

Enzymatic detoxification using lipophilic hollow-fiber membranes: IV. Glutathione conjugation reactions. Tsikas D, et al. **Int J Artif Organs** 1989 Feb;12(2):121–8

Membrane plasma fractionation: effect of the surface area. Wojcicki J, et al. **Int J Artif Organs** 1988 Sep;11(5):387–92

The interactions of bilirubin with model and biological membranes. Leonard M, et al. **J Biol Chem** 1989 Apr 5; 264(10):5648–52

Artificial cells as bioreactive biomaterials. Chang TM. **J Biomater Appl** 1988 Jul;3(1):116–25 (58 ref.)

Permeability of PEUU membranes: their modification towards blood compatibility. Jayasree G, et al. **J Biomater Appl** 1989 Jan;3(3):405–26

The interaction of cultured cells with membranes composed of random and block copolypeptides. Minoura N, et al. **J Biomed Mater Res** 1989 Feb;23(2):267–79

Binding of heparin onto ethylene-vinyl alcohol copolymer membrane. Shiomi T, et al. **J Biomed Mater Res** 1988 Dec; 22(3 Suppl):269–80

Effect of placement of occlusive membranes on root resorption and bone regeneration during healing of circumferential periodontal defects in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jul;16(6):371–9

Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jan;16(1):12–6

Use of membrane filters and osmium tetroxide etching in the preparation of sperm for scanning electron microscopy. van der Horst G, et al. **J Electron Microsc Tech** 1989 May; 12(1):65–70

Use of sparse-pore polycarbonate (Nuclepore) membrane for the measurement of chemotaxis of polymorphonuclear leukocytes. Comparison of 'micro-Boyden' chambers and estimation of 'drop-off' of cells. Bignold LP. **J Immunol Methods** 1989 Mar 31;118(2):217–25

Leakage of sulphobromophthalein from large simple bilayer phospholipid vesicles. Catalá A, et al. **J Microencapsul** 1988 Oct-Dec;5(4):319–24

Periodic characteristics of composite membrane permeability. Lee KB, et al. **J Microencapsul** 1989 Jan-Mar;6(1):59–70

Polyvinyl alcohol membrane permeability characteristics of 5-fluorouracil. Smith TJ, et al. **J Ocul Pharmacol** 1988 Summer;4(2):147–52

Healing of cutaneous and mucosal wounds grafted with collagen-glycosaminoglycan/silastic bilayer membranes: a preliminary report. Bertolami CN, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):971–8

Validation of computerized membrane integrity test systems. Wolber P, et al. **J Parenter Sci Technol** 1988 Jul-Aug; 42(4):106–10

Collagen membranes prevent apical migration of epithelium and support new connective tissue attachment during periodontal wound healing in dogs. Pitaru S, et al. **J Periodont Res** 1989 Jul;24(4):247–53

Different cross-linked types of collagen implanted in rat palatal gingiva. Minabe M, et al. **J Periodontol** 1989 Jan; 60(1):35–43

In vitro iontophoretic studies using a synthetic membrane. Tu YH, et al. **J Pharm Sci** 1989 Mar;78(3):211–3

Membrane-solvent-solute interaction in a model permeation system. Twist JN, et al. **J Pharm Sci** 1988 Jun;77(6):536–40

Experience with the polytetrafluoroethylene surgical membrane for pericardial closure in operations for congenital cardiac defects. Amato JJ, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):929–34

Long-term results of the clinical use of an expanded polytetrafluoroethylene surgical membrane as a pericardial substitute. Harada Y, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):811–5

A study on limulus amebocyte lysate (LAL) reactive material derived from dialyzers. Yoshioka T, et al. **Jpn J Surg** 1989 Jan;19(1):38–41

Cuprammonium membranes stimulate interleukin 1 release and arachidonic acid metabolism in monocytes in the absence of complement. Betz M, et al. **Kidney Int** 1988 Jul;34(1):67–73

Activation of the alternative pathway of complement by cellulosic hemodialysis membranes. Cheung AK, et al. **Kidney Int** 1989 Aug;36(2):257–65

Analysis of the complement C3 fragments associated with hemodialysis membranes. Cheung AK, et al. **Kidney Int** 1989 Feb;35(2):576–88

Markedly increased clearance of vancomycin during hemodialysis using polysulfone dialyzers. Lanese DM, et al. **Kidney Int** 1989 Jun;35(6):1409–12

Rapid removal of DFO-chelated aluminum during hemodialysis using polysulfone dialyzers. Molitoris BA, et al. **Kidney Int** 1988 Jul;34(1):98–101

Functional changes of monocytes due to dialysis membranes. Roccatello D, et al. **Kidney Int** 1989 Feb;35(2):622–31

A study of the change induced on cuprophan dialysis membrane by repeated use. Barozzi C, et al. **Life Support Syst** 1983;1 Suppl 1:207–10

Leukocytes deposition on dialyzer membranes. Beretta M, et al. **Life Support Syst** 1983;1 Suppl 1:187–90

A vortex-mixing membrane lung for open-heart surgery or for prolonged respiratory support. Bindslev L, et al. **Life Support Syst** 1983;1 Suppl 1:431–4

Unsteady oxygen transport in flat plate and tubular membrane oxygenators. Eason G, et al. **Life Support Syst** 1983;1 Suppl 1:345–9

A U-shaped flat membrane bio-artificial pancreas. Application of the ultrafiltration-based model to its design. Reach G, et al. **Life Support Syst** 1983;1 Suppl 1:49–52

Design and fabrication of laboratory-scale membrane separation units. el-Kalay MA, et al. **Med Biol Eng Comput** 1987 Nov;25(6):650–4

Determination of the diffusive and hydraulic permeabilities of capillary hollow fibre membranes: theoretical mathematical models. el-Kalay MA, et al. **Med Biol Eng Comput** 1988 May;26(3):243–50

Orienting synthetic and native biological membranes for time-averaged and time-resolved structure determinations. Herbette LG, et al. **Methods Enzymol** 1989;172:399–410

Platelet interaction with artificial surfaces: in vitro evaluation. Lindon JN, et al. **Methods Enzymol** 1989;169:104–17

Dynamic laser light scattering to determine size distributions of vesicles. Ruf H, et al. **Methods Enzymol** 1989;172:364–90

Dual effect of tannic acid on the preservation and ultrastructure of phosphatidyl choline vesicles. Schrijvers AH, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):91–6

Selective action of artificial membranes [letter] [published erratum appears in Nature 1989 Feb 9;337(6207):514] Fletcher S. **Nature** 1989 Jan 19;337(6204):216–7

Elimination of beta 2-microglobulin by a new polyacrylonitrile membrane dialyser: mechanism and physiokinetics. Akizawa T, et al. **Nephrol Dial Transplant** 1989;4(5):356–65

In vitro interleukin-1 production by different dialysis membranes. Amato M, et al. **Nephrol Dial Transplant** 1988; 3(4):432–4

Cellulosic membranes and leukocytes are not effective for in vitro generation of beta 2-microglobulin [letter] Bonucchi D, et al. **Nephrol Dial Transplant** 1988;3(5):708

Beta 2-microglobulin kinetics during haemofiltration. Floege J, et al. **Nephrol Dial Transplant** 1988;3(6):784–9

On the mechanisms of haemodialysis-induced neutropenia: a study with five new and re-used membranes. Heierli C, et al. **Nephrol Dial Transplant** 1988;3(6):773–83

Neutrophil oxygen radical production by dialysis membranes. Kuwahara T, et al. **Nephrol Dial Transplant** 1988;3(5):661–5

Erosive osteoarthropathy associated with beta 2-microglobulin amyloidosis in a uraemic patient treated exclusively by long-term haemofiltration with biocompatible membranes. Renaud H, et al. **Nephrol Dial Transplant** 1988;3(6):820–2

High-flux haemodialysis with 1.5 m2 modified cuprammonium rayon membrane: technical and clinical evaluation. Ronco C, et al. **Nephrol Dial Transplant** 1988; 3(4):440–7

Dialysis arthropathy, beta 2-microglobulin and the effect of dialyser membrane. Sethi D, et al. **Nephrol Dial Transplant** 1988;3(6):768–72

Adequacy of haemodiafiltration. Surian M, et al. **Nephrol Dial Transplant** 1989;4(1):32–6

Effects of Hemophan and Cuprophan dialysis on beta-2 microglobulin levels, exercise capacity, and symptoms scores [letter] Tomson CV, et al. **Nephrol Dial Transplant** 1988;3(3):355–6

Influence of haemodialysis membranes on beta 2-microglobulin kinetics: in vivo and in vitro studies. Zingraff J, et al. **Nephrol Dial Transplant** 1988;3(3):284–90

Dialysis membrane biocompatibility. Basile C, et al. **Nephron** 1989;52(2):113–8 (74 ref.)

Comparative study of C5a plasma levels with different hemodialysis membranes using an enzyme-linked immunosorbent assay. Bingel M, et al. **Nephron** 1989; 51(3):320–4

Plasma interleukin-1 activity during hemodialysis: the influence of dialysis membranes. Bingel M, et al. **Nephron** 1988;50(4):273–6

Which membrane? Should beta-2-microglobulin decide on the choice of today's hemodialysis membrane? Floege J, et al. **Nephron** 1988;50(3):177–81 (45 ref.)

Semipermeable polyurethane membrane as an artificial skin for the premature neonate. Knauth A, et al. **Pediatrics** 1989 Jun;83(6):945–50

Controlled release of steroids through microporous membranes with sodium dodecyl sulfate micelles. Johnson KA, et al. **Pharm Res** 1989 Mar;6(3):239–43

Dynamic properties of membrane proteins: reversible insertion into membrane vesicles of a colicin E1 channel-forming peptide. Xu S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7531–5

Separation of selected organic and inorganic solutes by low pressure reverse osmosis membranes. Bhattacharyya D, et al. **Prog Clin Biol Res** 1989;292:153–67

Effluent treatment by membrane technology—opportunities and challenges. Chakravorty B. **Prog Clin Biol Res** 1989; 292:169–80

Diffusion with immobilization in membranes: transport and failure mechanisms. Fisher RJ. **Prog Clin Biol Res** 1989; 292:129–51

Carbon composite membranes: novel separators in biological systems. Fleming HL. **Prog Clin Biol Res** 1989;292:203–13

A hollow fiber liquid supported membrane for separation of silver ions. Galindo L, et al. **Prog Clin Biol Res** 1989; 292:193–201

Transport properties of synthetic and biological membranes in correlation with their structure. Pusch W. **Prog Clin Biol Res** 1989;292:303–25 (23 ref.)

On studying asymmetric membranes made from polymethylmethacrylate/xylene by the thermal-inversion method. Tsai FJ, et al. **Prog Clin Biol Res** 1989;292:119–28

Membrane stabilization by vitamin E: magnetic resonance studies of the interaction of alpha-tocopherol with fatty acid acyl chains in phospholipid model membranes. Wassall SR, et al. **Prog Clin Biol Res** 1989;292:435–44

Artificial and reconstituted membrane systems. **Subcell Biochem** 1989;14:1–501

Fluorescence studies of membrane dynamics and heterogeneity. Davenport L, et al. **Subcell Biochem** 1989; 14:145–88 (231 ref.)

Lectin-carbohydrate interactions in model and biological membrane systems. Hoekstra D, et al. **Subcell Biochem** 1989;14:229–78 (225 ref.)

Membrane fusion. Fusogenic agents and osmotic forces. Lucy JA, et al. **Subcell Biochem** 1989;14:189–228 (209 ref.)

Membrane lipid phase behavior and lipid-protein interactions. Quinn PJ. **Subcell Biochem** 1989;14:25–95 (252 ref.)

The role of detergents in membrane reconstitution. Reynolds JA, et al. **Subcell Biochem** 1989;14:1–24 (35 ref.)

Immunoprotection by biocompatible membranes permits transplantation of piscine islets to rats. Schrezenmeir J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2730–5

Bioartificial pancreas: the use of different hollow fibers as a diffusion chamber. Zekorn T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2748–50

A novel method for removal of human immunodeficiency virus: filtration with porous polymeric membranes. Hamamoto Y, et al. **Vox Sang** 1989;56(4):230–6

Observations on the anaerobic membrane-filter technique for coliform counts in Nigerian surface waters. Ogan MT. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3-4):311–21

[What is the reason for the increase in beta-2-microglobulin levels in the blood when using cuprophane dialysis membranes?] Sulková S, et al. **Cas Lek Cesk** 1989 Apr 21; 128(17):520–3 (Eng. Abstr.) (Cze)

[Osteoarthropathy of hemodialysis: development at 2 years after passage on high permeability membrane] Foissac-Gegoux P, et al. **Nephrologie** 1988;9(3):129–33 (Eng. Abstr.) (Fre)

[Results of concurrent flow dialysis on capillary dialyzers with high permeability. Comparison with the classical counter-current technic (letter)] Montagnac R, et al. **Nephrologie** 1988;9(2):93–4 (Fre)

[Beta 2 microglobulin amyloidosis and biocompatibility of the membranes used for extrarenal blood purification] Fardellone P, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):127–8 (Fre)

[The use of polyurethane membranes in the enzymatic-amperometric determination of glucose in urine] Hanke G, et al. **Z Med Lab Diagn** 1988;29(7):390–4 (Eng. Abstr.) (Ger)

[Experiences with ultrafiltration membranes made from cellulose acetate] Schlesier B. **Z Med Lab Diagn** 1988; 29(5):295–6 (Ger)

[Biocompatibility in long-term hemodialysis: facts—theories—clinical significance] Bosch TH, et al. **Z Urol Nephrol** 1989 Feb;82(2):69–76 (35 ref.) (Eng. Abstr.) (Ger)

[Cellulose implants—biostability and tissue reaction] Luther B, et al. **Z Urol Nephrol** 1989 Jun;82(6):339–44 (Eng. Abstr.) (Ger)

[In vitro xenodiagnosis. I. Choice of anticoagulants and membranes] Campos R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):101–3 (Eng. Abstr.) (Por)

[Physicochemical mechanisms of the action of gramicidin S on a model membrane] Kocherginskii NM, et al. **Antibiot Khimioter** 1988 Jul;33(7):502–8 (Eng. Abstr.) (Rus)

[Translocation of ribonuclease through the membrane of liposomes of various lipid composition] Ianopol'skaia ND, et al. **Biokhimiia** 1988 May;53(5):781–5 (Eng. Abstr.) (Rus)

[Epitopic analysis of monoclonal antibodies based on countercurrent isotachophoresis on nitrocellulose membranes] Abelev GI, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):588–90 (Eng. Abstr.) (Rus)

[Use of a method of membrane filters for isolating Salmonella from drinking water] Chugunikhina NV. **Gig Sanit** 1988 Aug;(8):40–1 (Rus)

[Use of membrane drainage in treating suppurative peritonitis] Nifantév OE, et al. **Klin Khir** 1989;(1):31–3 (Eng. Abstr.) (Rus)

[Ways of intensification of hemodialysis therapy] Filiptsev PIa, et al. **Ter Arkh** 1988;60(6):44–7 (Eng. Abstr.) (Rus)

[Activation of monocytes during hemodialysis] Stetsiuk EA, et al. **Ter Arkh** 1988;60(6):57–60 (Eng. Abstr.) (Rus)

[Physico-chemical and medico-biological principles of creating "artificial skin"] Kuzin MI, et al. **Vestn Khir** 1988 Oct;141(10):140–2 (13 ref.) (Rus)

[Purification of infectious influenza virus by microfiltration] Luk'ianova EG, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):240–3 (Rus)

STANDARDS

Easy production of sterile, pyrogen-free dialysate. Erley CM, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):205–7

MEMBRANES, INTRACELLULAR see **INTRACELLULAR MEMBRANES**

MEMBRANOPROLIFERATIVE GLOMERULONEPHRITIS see **GLOMERULONEPHRITIS, MEMBRANOPROLIFERATIVE**

MEMBRANOUS GLOMERULOPATHY see **GLOMERULONEPHRITIS, MEMBRANOUS**

MEMORY

P300 and memory in adolescents with common migraine. Gallai V, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):187–92 (28 ref.)

The effect of prior sleep on retrieval. Tilley A, et al. **Acta Psychol (Amst)** 1989 Mar;70(2):199–203

Childhood events recalled by children and adults. Pillemer DB, et al. **Adv Child Dev Behav** 1989;21:297–340 (85 ref.)

The effects of repeated withdrawals from alcohol on the memory of male and female alcoholics. Glenn SW, et al. **Alcohol Alcohol** 1988;23(5):337–42

Hypnosis can not be fully nor reliably excluded from the courtroom. Beahrs JO. **Am J Clin Hypn** 1988 Jul; 31(1):18–27 (47 ref.)

Accuracy of self-reports of food intake in obese and normal-weight individuals: effects of parental obesity on reports of children's dietary intake. Klesges RC, et al. **Am J Clin Nutr** 1988 Nov;48(5):1252–6

Accuracy of self-reports of food intake in obese and normal-weight individuals: effects of obesity on self-reports of dietary intake in adult females. Myers RJ, et al. **Am J Clin Nutr** 1988 Nov;48(5):1248–51

Agreement between questionnaire data and medical records. The evidence for accuracy of recall. Harlow SD, et al. **Am J Epidemiol** 1989 Feb;129(2):233–48 (37 ref.)

Reporting accuracy among mothers of malformed and nonmalformed infants. Werler MM, et al. **Am J Epidemiol** 1989 Feb;129(2):415–21

Errors in reported dietary intakes. II. Long-term recall. Wu ML, et al. **Am J Epidemiol** 1988 Nov;128(5):1137–45

Memory for spatial location in children, adults, and mentally retarded persons. Ellis NR, et al. **Am J Ment Retard** 1989 Mar;93(5):521–6

Reconstruction and repetition: the significance of time-lags in psychoanalytic psychotherapy. Crisp P. **Am J Psychoanal** 1988 Winter;48(4):347–54

Similarity of encoding context does not influence resistance to memory impairment following misinformation. Bowman LL, et al. **Am J Psychol** 1989 Summer;102(2):249–64

Olfactory stimuli as context cues in human memory. Cann A, et al. **Am J Psychol** 1989 Spring;102(1):91–102

Interaction of memories and expectancies as mediators of choice behavior. Linwick D, et al. **Am J Psychol** 1988 Fall; 101(3):313–34

Effects of elaboration and relational distinctiveness on sentence memory. McDaniel MA, et al. **Am J Psychol** 1988 Fall;101(3):357–69

Lexical and semantic search in cued recall, fragment completion, perceptual identification, and recognition. Nelson DL, et al. **Am J Psychol** 1988 Winter;101(4):465–80

Recency effect in recall of a word list when an immediate memory task is performed after each word presentation. Watkins MJ, et al. **Am J Psychol** 1989 Summer; 102(2):265–70

Accuracy of recalled smoking data. Krall EA, et al. **Am J Public Health** 1989 Feb;79(2):200–2

Comparison of psychologic and cognitive functions after general or regional anesthesia. Ghoneim MM, et al. **Anesthesiology** 1988 Oct;69(4):507–15

Social cognition. Sherman SJ, et al. **Annu Rev Psychol** 1989; 40:281–326 (380 ref.)

Interindividual and intraindividual variation in repeated measures of 24-hour dietary recall in the elderly. McAvay G, et al. **Appetite** 1988 Oct;11(2):97–110

Recall and dating of psychiatric symptoms. Test-retest reliability of time-related symptom questions in a standardized psychiatric interview. Wittchen HU, et al. **Arch Gen Psychiatry** 1989 May;46(5):437–43

Cortical function in elderly non-insulin dependent diabetic patients. Behavioral and electrophysiologic studies. Mooradian AD, et al. **Arch Intern Med** 1988 Nov; 148(11):2369–72

Procedural memory during posttraumatic amnesia in survivors of severe closed head injury. Implications for rehabilitation. Ewert J, et al. **Arch Neurol** 1989 Aug; 46(8):911–6

The intracarotid amobarbital sodium procedure. False-positive errors during recognition memory assessment. Loring DW, et al. **Arch Neurol** 1989 Mar; 46(3):285–7

Memory following intracarotid amobarbital injection contralateral to hippocampal damage. Rausch R, et al. **Arch Neurol** 1989 Jul;46(7):783–8

Effects of flavor salience on aversion performance following relatively long-delay backward conditioning procedures. Franchina JJ. **Behav Neural Biol** 1989 Mar;51(2):127–35

Post-training memory facilitation blocks extinction but not retroactive interference. Izquierdo I, et al. **Behav Neural Biol** 1989 Jan;51(1):108–13

Preserved learning and memory in amnesia: intact adaptation-level effects and learning of stereoscopic depth. Benzing WC, et al. **Behav Neurosci** 1989 Jun;103(3):538–47

Rate of forgetting in H.M.: 6-month recognition. Freed DM, et al. **Behav Neurosci** 1988 Dec;102(6):823–7

Anxious mood and memory. Foa EB, et al. **Behav Res Ther** 1989;27(2):141–7

Memory deficits in compulsive checkers: replication and extension in a clinical sample. Sher KJ, et al. **Behav Res Ther** 1989;27(1):65–9

Selective recall of surprising visual scenes. An experimental note on Seligman and Yellen's theory of dreams. van den Hout MA, et al. **Behav Res Ther** 1989;27(2):199–201

Specific protein changes during memory acquisition and storage. Nelson TJ, et al. **Bioessays** 1989 Feb–Mar; 10(2–3):75–9 (34 ref.)

Modeling the process of problem-solving by associative networks capable of improving the performance. Hirai Y, et al. **Biol Cybern** 1988;59(6):353–65

Medication for the elderly: what do patients know? Joglekar M, et al. **Br J Clin Pract** 1988 Jul;42(7):289–91

Retrieval from semantic memory using meaningful and meaningless constructs by depressed, stable bipolar and manic patients. Calev A, et al. **Br J Clin Psychol** 1989 Feb; 28 (Pt 1):67–73

Mood state-dependent retention using identical or non-identical mood inductions at learning and recall. Haaga DA. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):75–83

The relation between subjective and objective memory impairment after stroke. Lincoln NB, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):61–5

The specificity of personal memories in depression. Moore RG, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):275–6

Another calendar savant. Hurst LC, et al. **Br J Psychiatry** 1988 Feb;152:274–7

The memory structure of autistic idiot-savant mnemonists. O'Connor N, et al. **Br J Psychol** 1989 Feb;80 (Pt 1):97–111

The 'reverse-generation' effect: a comparison of memory performance between blind and sighted children. Pring L. **Br J Psychol** 1988 Aug;79 (Pt 3):387–400

Repetition priming of face recognition in a serial choice reaction-time task. Roberts T, et al. **Br J Psychol** 1989 May;80 (Pt 2):201–11

Teaching an amnesic a complex cognitive skill. Charness N, et al. **Brain Cogn** 1988 Oct;8(2):253–72

Memory for action events in Alzheimer-type dementia: further evidence of an encoding failure. Dick MB, et al. **Brain Cogn** 1989 Jan;9(1):71–87

Memory for internally generated words in Alzheimer-type dementia: breakdown in encoding and semantic memory. Dick MB, et al. **Brain Cogn** 1989 Jan;9(1):88–108

Attempted clinical application of a technique for promoting robust free recall to a case of alcoholic Korsakoff's syndrome. Heinrichs RW. **Brain Cogn** 1989 Mar;9(2):151–7

Memory strategies with brain damage. Hirst W, et al. **Brain Cogn** 1988 Dec;8(3):379–408

Prosopagnosia: a defect in visual configural processing. Levine DN, et al. **Brain Cogn** 1989 Jul;10(2):149–70

Memory and awareness in a patient with multiple personality disorder. Nissen MJ, et al. **Brain Cogn** 1988 Aug; 8(1):117–34

Performance in free recall following rupture and repair of intracranial aneurysm. Richardson JT. **Brain Cogn** 1989 Mar;9(2):210–26

Discourse in aphasia: integration deficits in processing reference. Chapman SB, et al. **Brain Lang** 1989 May; 36(4):651–68

Priming and semantic memory loss in Alzheimer's disease. Chertkow H, et al. **Brain Lang** 1989 Apr;36(3):420–46

The nature of prolonged word search. Goodglass H, et al. **Brain Lang** 1989 Apr;36(3):411–9

Postaccess processes in the open vs. closed class distinction. Matthei EH, et al. **Brain Lang** 1989 Feb;36(2):163–80

Developmental dyslexia and word retrieval deficits. Murphy LA, et al. **Brain Lang** 1988 Sep;35(1):1–23

The effect of semantic and syntactic structure on verbal memory in Alzheimer's disease. Nebes RD, et al. **Brain Lang** 1989 Feb;36(2):301–13

Auditory temporal pattern learning in children with speech and language impairments. Robin DA, et al. **Brain Lang** 1989 May;36(4):604–13

Spontaneous hypnosis in the forensic context. Beahrs JO. **Bull Am Acad Psychiatry Law** 1989;17(2):171–81 (64 ref.)

Component processes in bridge bidding and novel problem-solving tasks. Charness N. **Can J Psychol** 1987 Jun;41(2):223–43

Spatial memory in pigeons on a four-arm radial maze. Dale RH. **Can J Psychol** 1988 Mar;42(1):78–83

Prospective memory and self-reports of memory abilities in older adults. Dobbs AR, et al. **Can J Psychol** 1987 Jun; 41(2):209–22

General and context-specific encoding: a life-span development study. Guttentag RE, et al. **Can J Psychol** 1986 Dec;40(4):457–62

Age differences in metamemory: resolving the inconsistencies. Hultsch DF, et al. **Can J Psychol** 1987 Jun; 41(2):193–208

Tests of a model of informational persistence. Irwin DE, et al. **Can J Psychol** 1987 Sep;41(3):317–38

Age differences in memory for item and source information. McIntyre JS, et al. **Can J Psychol** 1987 Jun;41(2):175–92

Neuropsychological assessment of memory in the elderly [published erratum appears in Can J Psychol 1987 Sep;41(3):preceding 271] Read DE. **Can J Psychol** 1987 Jun;41(2):158–74

Visual imagery and memory for appearance: does Clark Gable or George C. Scott have bushier eyebrows? Reisberg D, et al. **Can J Psychol** 1987 Dec;41(4):521–6

Memory for picture fragments in monkeys and humans. Roberts WA, et al. **Can J Psychol** 1987 Mar;41(1):1–19

Lexical memory in poor and normal readers: developmental differences in the use of category cues. Vellutino FR, et al. **Can J Psychol** 1988 Jun;42(2):216–41

The development of children's strategies for selective attention: evidence for a transitional period. . DeMarie-Dreblow D, et al. **Child Dev** 1988 Dec; 59(6):1504–13

Childhood derivatives of inhibition and lack of inhibition to the unfamiliar. Kagan J, et al. **Child Dev** 1988 Dec; 59(6):1580–9

How children choose among serial recall strategies. McGilly K, et al. **Child Dev** 1989 Feb;60(1):172–82

Individual differences in infants' information processing: reliability, stability, and prediction. Rose SA, et al. **Child Dev** 1988 Oct;59(5):1177–97

The facilitation of selective attention in preschoolers. Woody-Ramsey J, et al. **Child Dev** 1988 Dec; 59(6):1497–503

Children's recall of aggressive and withdrawn behaviors: recognition memory and likability judgments. Younger AJ, et al. **Child Dev** 1989 Jun;60(3):580–90

Diurnal rhythms in performance tests of school children with and without language disorders. Reinberg A, et al. **Chronobiol Int** 1988;5(3):291–9

Evaluation of genetic counselling: recall of information, post-counselling reproduction, and attitude of the counsellees. Somer M, et al. **Clin Genet** 1988 Dec; 34(6):352–65

Patterns of memory performance in young-old and old-old adults: a selective review. Nilsson LG, et al. **Compr Gerontol [B]** 1987 Aug;1(2):49–53

Effects of instructional set on amnesic recognition memory performance. Kovner R, et al. **Cortex** 1988 Sep; 24(3):477–83

The role of individual difference in determining the nature of comprehension defects in aphasia. Varney NR, et al. **Cortex** 1989 Mar;25(1):47–55

Amount of training and retention by infants. Ohr PS, et al. **Dev Psychobiol** 1989 Jan;22(1):69–80

Age differences in primary organization or processing variability? Part II: Evidence for processing variability. Allen PA, et al. **Exp Aging Res** 1988 Summer-Autumn; 14(2–3):151–7

Age differences in primary organization or processing variability? Part I: An examination of age and primary organization. Allen PA, et al. **Exp Aging Res** 1988 Summer-Autumn;14(2–3):143–9

The verbal selective reminding test: preliminary data for

healthy elderly. Banks PG, et al. **Exp Aging Res** 1987 Winter;13(4):203–7
Beliefs about fact retrieval and inferential reasoning across the adult lifespan. Camp CJ, et al. **Exp Aging Res** 1988 Summer–Autumn;14(2–3):89–97
The effect of mnemonic training on perceived recall confidence in the elderly. Hill RD, et al. **Exp Aging Res** 1987 Winter;13(4):185–8
A past well remembered.... Miller CM. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):28–9
Quality of instructions on prescription drug labels: effects on memory and comprehension in young and old adults. Morrell RW, et al. **Gerontologist** 1989 Jun;29(3):345–54
Slowing of memory-search performance in men with mild hypertension. Madden DJ, et al. **Health Psychol** 1989; 8(2):131–42
Attachment, loss and rediscovery. Vaillant GE. **Hillside J Clin Psychiatry** 1988;10(2):148–64
A mnemonic for the nephritic syndrome [letter] Baird JS. **Hosp Pract [Off]** 1989 Apr 15;24(4):23
Automaticity, resources, and memory: theoretical controversies and practical implications. Logan GD. **Hum Factors** 1988 Oct;30(5):583–98 (67 ref.)
Task-sharing within and between hemispheres: a multiple-resources approach. Polson MC, et al. **Hum Factors** 1988 Oct;30(5):633–43
Effectiveness of self-generated cues in younger and older adults: the role of retention interval. Bäckman L, et al. **Int J Aging Hum Dev** 1988;26(4):241–8
Autobiography: the negotiation of a lifetime. Tarman VI. **Int J Aging Hum Dev** 1988;27(3):171–91 (46 ref.)
The imagery factor in hypnotic hypermnesia. Dywan J. **Int J Clin Exp Hypn** 1988 Oct;36(4):312–26
Hypnosis and the recall of visually presented material: a failure to replicate Stager and Lundy. Lytle RA, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):327–35
Memory distortion in hypnosis. Sheehan PW. **Int J Clin Exp Hypn** 1988 Oct;36(4):296–311
Accuracy of maternal recall of birthweights of adolescent children [letter] Seidman DS, et al. **Int J Epidemiol** 1988 Sep;17(3):688–9
Asymmetries in tachistoscopic word recognition: scanning effects re-examined. Vaid J. **Int J Neurosci** 1988 Oct; 42(3–4):253–8
Imagining and remembering. Kestenberg JS. **Isr J Psychiatry Relat Sci** 1987;24(4):229–41
Working memory in skilled and less skilled readers. Swanson HL, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):145–56
Controlled processing and vigilance in hyperactivity: time will tell. van der Meere J, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):641–55
Rejoinder to Spanos, Bertrand, and Perlini. Kihlstrom JF, et al. **J Abnorm Psychol** 1988 Aug;97(3):381–3
Reality versus suggestion: pseudomemory in hypnotizable and simulating subjects. Lynn SJ, et al. **J Abnorm Psychol** 1989 May;98(2):137–44
Implicit and explicit memory bias in anxiety. Mathews A, et al. **J Abnorm Psychol** 1989 Aug;98(3):236–40
Hypnosis, the timing of its introduction, and acceptance of misleading information. Sheehan PW, et al. **J Abnorm Psychol** 1989 May;98(2):170–6
The effects of depression on structural aspects of the recall of prose. Watts FN, et al. **J Abnorm Psychol** 1989 May; 98(2):150–3
Hypnotic hypermnesia: enhanced memory accessibility or report bias? Whitehouse WG, et al. **J Abnorm Psychol** 1988 Aug;97(3):289–95
Long-term memory for unfamiliar voices. Papcun G, et al. **J Acoust Soc Am** 1989 Feb;85(2):913–25
Cognitive impairments in depression. Golinkoff M, et al. **J Affective Disord** 1989 Sep–Oct;17(2):105–12
Children's memory and proximity to violence. Pynoos RS, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar; 28(2):236–41
Day residue and screen memory in Freud's dream of the botanical monograph. Palombo SR. **J Am Psychoanal Assoc** 1988;36(4):881–904
Panic attacks facilitating recall and mastery: implications for psychoanalytic technique. Silber A. **J Am Psychoanal Assoc** 1989;37(2):337–64
A comparison of time delay and decreasing prompt hierarchy strategies in teaching banking skills to students with moderate handicaps. McDonnell J, et al. **J Appl Behav Anal** 1989 Spring;22(1):85–91
Effects of wait-time and intertrial interval durations on learning by children with multiple handicaps. Valcante G, et al. **J Appl Behav Anal** 1989 Spring;22(1):43–55
Eyewitnesses show hypermnesia for details about a violent event. Scrivner E, et al. **J Appl Psychol** 1988 Aug; 73(3):371–7
Eyewitness accuracy and confidence: within- versus between-subjects correlations. Smith VL, et al. **J Appl Psychol** 1989 Apr;74(2):356–9
Visual memory processes in high-functioning individuals with autism. Ameli R, et al. **J Autism Dev Disord** 1988 Dec;18(4):601–15
Memory impairments and communication in relatively able autistic children. Boucher J, et al. **J Child Psychol Psychiatry** 1989 Jan;30(1):99–122
Children's memory and the assessment of possible child sex abuse. Fundudis T. **J Child Psychol Psychiatry** 1989 May; 30(3):337–46 (52 ref.)
Recall of childhood illnesses. Krall EA, et al. **J Clin Epidemiol** 1988;41(11):1059–64
Estimating age incidence from survey data with adjustments for recall errors. Stewart W, et al. **J Clin Epidemiol** 1989; 42(9):869–75
Working memory and secondary memory deficits in Alzheimer's disease. Becker JT. **J Clin Exp Neuropsychol** 1988 Dec;10(6):739–53
Memory functioning following a left medial thalamic hematoma. Brown GG, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):206–18
California Verbal Learning Test (CVLT) performance in severely head-injured and neurologically normal adult males. Crosson B, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):754–68
Cued recall and release from proactive interference in Alzheimer's disease. Cushman LA, et al. **J Clin Exp Neuropsychol** 1988 Dec;10(6):685–92
Wechsler Memory Scale: a critical appraisal of the normative studies. D'Elia L, et al. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):551–68 (36 ref.)
Developmental aspects of linguistic and mnestic abilities in normal children. Halperin JM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):518–28
Visual Continuous Recognition Memory in normal and closed-head-injured adolescents. Hannay HJ, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):444–60
Patterns of performance on the Fuld Object Memory Evaluation in elderly inpatients with depression or dementia. La Rue A. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):409–22
Automatic and attentional mechanisms of semantic priming in Alzheimer's disease. Nebes RD, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):219–30
Selective Reminding Tests: a normative study of verbal learning in adults. Ruff RM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):539–50
Recognition memory span in mildly and moderately demented patients with Alzheimer's disease. Salmon DP, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):429–43
Self-ratings of memory dysfunction: different findings in depression and amnesia. Squire LR, et al. **J Clin Exp Neuropsychol** 1988 Dec;10(6):727–38
Cued recall and memory disorders in dementia. Tuokko H, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):278–94
Evaluating evidence for automaticity in frequency of occurrence judgments: a bias for bias? Tweedy JR, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):664–74
The retention of newly-acquired brushing and flossing skills. Stewart JE, et al. **J Clin Periodontol** 1989 May;16(5):331–2
Effects of mode of presentation on head-injured patients' recall of narrative information. Agresti AA, et al. **J Clin Psychol** 1989 Mar;45(2):270–6
Rey-Auditory Verbal Learning and Rey-Osterrieth Complex Figure Design performance in Alzheimer's disease and closed head injury. Bigler ED, et al. **J Clin Psychol** 1989 Mar;45(2):277–80
Recall of figure "A" of the Bender-Gestalt test among delinquents. Even A, et al. **J Clin Psychol** 1988 Nov; 44(6):988–94
A comparison of Turkish and Anglo-American normative data on the Wechsler Memory Scale. Gilleard E, et al. **J Clin Psychol** 1989 Jan;45(1):114–7
Differential effects on verbal-performance achievement levels on the WAIS-R as a function of progressive error rate on the Memory for Designs Test (MFD). Mandes E, et al. **J Clin Psychol** 1988 Sep;44(5):795–8
The psychometric structure of the Wechsler Memory Scale in comparison to the WAIS-R in a low-IQ clinical population. Oresick RJ, et al. **J Clin Psychol** 1988 Jul; 44(4):549–57
Effect of stimulus context and response coding variables on word retrieval performances in dysphasia. Dunn ND, et al. **J Commun Disord** 1989 Jun;22(3):209–23
Dental student stress, burnout, and memory. Davis EL, et al. **J Dent Educ** 1989 Mar;53(3):193–5
An inverse relationship between baseline fixed-interval response rate and the effects of a tandem response requirement. Bickel WK, et al. **J Exp Anal Behav** 1988 Sep;50(2):211–8
Response-reinforcer contingency and spatially defined operants: testing an invariance property of phi. Galbicka G, et al. **J Exp Anal Behav** 1989 Jan;51(1):145–62
Generalization of delayed identity matching in retarded children. Lowenkron B. **J Exp Anal Behav** 1988 Sep; 50(2):163–72
Young children's knowledge of their memory span: effects of task and experience. Cunningham JG, et al. **J Exp Child Psychol** 1989 Aug;48(1):32–44
Time and again: effects of repetition and retention interval on 2 year olds' event recall. Fivush R, et al. **J Exp Child Psychol** 1989 Apr;47(2):259–73
Discriminating between memories: evidence for children's spontaneous elaborations. Foley MA, et al. **J Exp Child Psychol** 1989 Aug;48(1):146–69
Metamemory, memory performance, and causal attributions in gifted and average children. Kurtz BE, et al. **J Exp Child Psychol** 1989 Aug;48(1):45–61
Expectancies and memory for spatiotemporal events in 5-month-old infants. Smith PH, et al. **J Exp Child Psychol** 1989 Apr;47(2):210–35
The effects of central processing strategies on learning disabled, mildly retarded, average, and gifted children's elaborative encoding abilities. Swanson HL. **J Exp Child Psychol** 1989 Jun;47(3):370–97
Discrimination of temporal relations by pigeons. Dreyfus LR, et al. **J Exp Psychol [Anim Behav]** 1988 Oct;14(4):349–67
Influences of misleading postevent information: misinformation interference and acceptance. Belli RF. **J Exp Psychol [Gen]** 1989 Mar;118(1):72–85
The effect of response bias on recall performance, with some observations on processing bias. Erdelyi MH, et al. **J Exp Psychol [Gen]** 1989 Sep;118(3):245–54
On the representation of events: a study of orientation, recall, and recognition. Hanson C, et al. **J Exp Psychol [Gen]** 1989 Jun;118(2):136–47
Phenomenal characteristics of memories for perceived and imagined autobiographical events. Johnson MK, et al. **J Exp Psychol [Gen]** 1988 Dec;117(4):371–6
On the status of nonconscious processes in human cognition: comment on Reber. Lewicki P, et al. **J Exp Psychol [Gen]** 1989 Sep;118(3):239–41
Misinformation and memory: the creation of new memories. Loftus EF, et al. **J Exp Psychol [Gen]** 1989 Mar; 118(1):100–4
Strategy choice procedures and the development of multiplication skill. Siegler RS. **J Exp Psychol [Gen]** 1988 Sep;117(3):258–75
Semantic and perceptual priming: how similar are the underlying mechanisms? Farah MJ. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):188–94 (33 ref.)
Precision and accuracy in the reproduction of simple tone sequences. Vos PG, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):179–87
Semantic facilitation with pictures and words. Bajo MT. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):579–89
Recognition memory and the mere exposure effect. Brooks JO 3d, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep; 15(5):968–76
Bizarre imagery, interference, and distinctiveness. Einstein GO, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan; 15(1):137–46
Interference in spatial memory. Elmes DG. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):668–75
Base-rate effects in category learning: a comparison of parallel network and memory storage-retrieval models. Estes WK, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):556–71
Perceptual organization and precategorical acoustic storage. Frankish C. **J Exp Psychol [Learn Mem Cogn]** 1989 May; 15(3):469–79
Evidence for auditory temporal distinctiveness: modality effects in order and frequency judgments. Glenberg AM, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):728–39
Immediate serial recall of mixed-modality lists. Greene RL. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):266–74
Time course of item and associative information: implications for global memory models. Gronlund SD, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep;15(5):846–58
Data-driven and conceptually driven processes in partial-word identification and recognition. Hashtroudi S, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):749–57
Contingent dissociation between recognition and fragment completion: the method of triangulation. Hayman CA, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):228–40
More on recognition and recall in amnesics. Hirst W, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):758–62
Wide-angle memories of close-up scenes. Intraub H, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):179–87
Episodic effects on picture identification: implications for theories of concept learning and theories of memory. Jacoby LL, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):275–81
Frequency judgements: the problem of defining a perceptual event. Johnson MK, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):126–36
Identification of disoriented objects: effects of context of prior presentation [published erratum appears in J Exp Psychol [Learn Mem Cogn] 1989 Jul;15(4):555] Jolicoeur P, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar; 15(2):200–10
Subjective hierarchies in spatial memory. McNamara TP, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):211–27
A reexamination of the role of imagery in learning and memory. Marschark M, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):710–20
Effects of talker variability on recall of spoken word lists. Martin CS, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):676–84
How many memory systems? Evidence from aging. Mitchell DB. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):31–49
Prior knowledge: the effects of natural category size on memory for implicitly encoded concepts. Nelson DL, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep;15(5):957–67
Word-fragment cuing: the lexical search hypothesis. Nelson DL, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 May; 15(3):388–97
Allocation of self-paced study time and the "labor-in-vain effect". Nelson TO, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):676–86
Rules and exemplars in categorization, identification, and

recognition. Nosofsky RM, et al.
J Exp Psychol [Learn Mem Cogn] 1989 Mar;15(2):282–304
Orientation specificity in spatial memory: what makes a path different from a map of the path? Presson CC, et al.
J Exp Psychol [Learn Mem Cogn] 1989 Sep;15(5):887–97
A bias interpretation of facilitation in perceptual identification. Ratcliff R, et al.
J Exp Psychol [Learn Mem Cogn] 1989 May;15(3):378–87
Effects of adult age and working memory on reasoning and spatial abilities. Salthouse TA, et al.
J Exp Psychol [Learn Mem Cogn] 1989 May;15(3):507–16
Modality specificity of implicit memory for new associations. Schacter DL, et al. J Exp Psychol [Learn Mem Cogn] 1989 Jan;15(1):3–12
Summary knowledge of results for skill acquisition: support for the guidance hypothesis. Schmidt RA, et al.
J Exp Psychol [Learn Mem Cogn] 1989 Mar;15(2):352–9
Long-term memory in amnesia: cued recall, recognition memory, and confidence ratings. Shimamura AP, et al.
J Exp Psychol [Learn Mem Cogn] 1988 Oct;14(4):763–70
Facilitating text memory with additional processing opportunities in rapid sequential reading. Sinclair GP, et al. J Exp Psychol [Learn Mem Cogn] 1989 May; 15(3):418–31
On the course of forgetting in very long-term memory. Squire LR. J Exp Psychol [Learn Mem Cogn] 1989 Mar; 15(2):241–5
Misled subjects may know more than their performance implies. Zaragoza MS, et al.
J Exp Psychol [Learn Mem Cogn] 1989 Mar;15(2):246–55
Memory for event frequency as a function of depression, age, intentionality, and level of processing. Norton NA, et al. J Gen Psychol 1988 Oct;115(4):369–81
Encoding and retrieval processes in learning-disabled, head-injured, and nondisabled young adults. O'Donnell JP, et al. J Gen Psychol 1988 Oct;115(4):355–68
Category breadth and memory in younger and older adults. Finley GE, et al. J Genet Psychol 1989 Mar;150(1):119–20
Geographical knowledge in patients with Alzheimer's disease. Beatty WW, et al. J Geriatr Psychiatry Neurol 1989 Apr–Jun;2(2):76–82
Memory complaints and memory deficits in young and old psychiatric inpatients. Chandler JD, et al.
J Geriatr Psychiatry Neurol 1988 Apr–Jun;1(2):84–8
Remembering faces and drawings: a test of Hasher & Zacks' model of automatic processing in a Turkish sample. Ozekes M, et al. J Gerontol 1989 Jul;44(4):P122–3
Semantic encoding by mildly retarded and non-retarded individuals. Stan EA, et al. J Ment Defic Res 1988 Oct; 32 (Pt 5):371–82
Metamemory perceptions in depressions of young and older adults. Niederehe G, et al. J Nerv Ment Dis 1989 Jan; 177(1):4–14
Patients' recollections of their posttraumatic coma. Tosch P. J Neurosci Nurs 1988 Aug;20(4):223–8
Developmental trends in memory and metamemory in children with attention deficit disorder. Voelker SL, et al. J Pediatr Psychol 1989 Mar;14(1):75–88
Predicting depression using earliest childhood memories. Acklin MW, et al. J Pers Assess 1989 Spring;53(1):51–9
Trivial persuasion in the courtroom: the power of (a few) minor details. Bell BE, et al. J Pers Soc Psychol 1989 May; 56(5):669–79
Stereotypic biases in social decision making and memory: testing process models of stereotype use. Bodenhausen GV. J Pers Soc Psychol 1988 Nov;55(5):726–37
Affect and memory: effects of pleasant and unpleasant odors on retrieval of happy and unhappy memories. Ehrlichman H, et al. J Pers Soc Psychol 1988 Nov;55(5):769–79
Effect of memory perspective on retrospective causal attributions. Frank MG, et al. J Pers Soc Psychol 1989 Sep;57(3):399–403
Repression of emotionally tagged memories: the architecture of less complex emotions. Hansen RD, et al.
J Pers Soc Psychol 1988 Nov;55(5):811–8
Conversation memory: the effects of speaker status on memory for the assertiveness of conversation remarks. Holtgraves T, et al. J Pers Soc Psychol 1989 Feb; 56(2):149–60
Women's theories of menstruation and biases in recall of menstrual symptoms. McFarland C, et al.
J Pers Soc Psychol 1989 Sep;57(3):522–31
Reversing roles: a cognitive strategy for undoing memory deficits associated with token status. Saenz DS, et al.
J Pers Soc Psychol 1989 May;56(5):698–708
The effect of non-factual post-training negative comment on the recall of verbal information. Izquierdo I, et al.
J Psychiatr Res 1988;22(3):165–9
Memories: a neglected concept in care. Calman KC.
Lancet 1988 Nov 19;2(8621):1184–5
Retention of cardiopulmonary resuscitation knowledge and skills by 11- and 12-year-old children. Plotnikoff R, et al. Med J Aust 1989 Mar 20;150(6):296, 298–9, 302
Recall of injury events by thirteen year olds. Langley JD, et al. Methods Inf Med 1989 Jan;28(1):24–7
The recent excitement about neural networks. Crick F.
Nature 1989 Jan 12;337(6203):129–32
Memory. Must what goes up come down? [news] Morris RG, et al. Nature 1989 May 18;339(6221):175–6
Memory. Dedicated in memoriam to Professor O.L. Zangwill (1913–1987). Neuropsychologia 1989;27(1):1–130
Pre- and postoperative memory of dichotically presented words in patients with complex partial seizures. Christianson SA, et al. Neuropsychologia 1989;27(4):427–36
Selective visual attention in Alzheimer's and Parkinson's patients: memory- and data-driven control. Cossa FM, et al. Neuropsychologia 1989;27(6):887–92
Frequency and recognition judgement by young and elderly adults. di Pellegrino G, et al. Neuropsychologia 1988; 26(5):765–8
Category-specificity and modality-specificity in semantic memory. Farah MJ, et al. Neuropsychologia 1989; 27(2):193–200
Retrieval from semantic and letter-initial categories in patients with Parkinson's disease. Gurd JM, et al.
Neuropsychologia 1989;27(5):743–6
Rates of forgetting in normal ageing: a comparison with dementia. Huppert FA, et al. Neuropsychologia 1989; 27(6):849–60
Memory improvement at different stages of Alzheimer's disease. Karlsson T, et al. Neuropsychologia 1989; 27(5):737–42
Continuous figure recognition in dementia and unilateral cerebral damage. Lang CJ. Neuropsychologia 1989; 27(5):619–28
Strategies for assessing learning and memory, 1978–1987: a comparison of behavioral toxicology, psychopharmacology, and neurobiology. Peele DB, et al. Neurosci Biobehav Rev 1989 Spring;13(1):33–8 (18 ref.)
Significance of hippocampal dysfunction in low level lead exposure of rats. Munoz C, et al. Neurotoxicol Teratol 1988 May–Jun;10(3):245–53
Determinants of long-term (24-year) diet recall ability using a 21-item food frequency questionnaire. Kuzma JW, et al. Nutr Cancer 1989;12(2):151–60
Long-term (24-year) recall reliability in cancer cases and controls using a 21-item food frequency questionnaire. Lindsted KD, et al. Nutr Cancer 1989;12(2):135–49
Accuracy of memory-guided saccades. Ohtsuka K, et al.
Ophthalmologica 1989;198(1):53–6
Use of games to improve scores on memory-type examinations. Preston AM. P R Health Sci J 1988 Dec; 7(3):257–61
Attention and memory. Bornstein MH. Pediatr Ann 1989 May;18(5):307–8, 310–2, 314 (0 ref.)
Attention and memory: progression and variation during the elementary school years. Levine MD. Pediatr Ann 1989 Jun;18(6):366–8, 370–2 (19 ref.)
An inquiry into the construct validity of the Vividness of Visual Imagery Questionnaire. Chara PJ Jr, et al.
Percept Mot Skills 1989 Aug;69(1):127–36
Association between paired subtests of auditory sequential memory administered to preschool children. Chermak GD, et al. Percept Mot Skills 1989 Feb;68(1):255–8
Memories of labor and birth: reliability of post partum questionnaire reports. Cogan R, et al.
Percept Mot Skills 1988 Aug;67(1):75–9
Reminiscence and strategies of performance in rotary pursuit tracking. Cuesta U. Percept Mot Skills 1989 Feb; 68(1):219–26
Effect of test expectancy on preferred study strategy use and test performance. Feldt RC, et al. Percept Mot Skills 1989 Jun;68(3 Pt 2):1157–8
Phasic activity and dream recall in 5- to 8-yr.-olds. Foulkes D, et al. Percept Mot Skills 1989 Aug;69(1):290
Processing of memories and knowledge in REM and NREM dreams. Foulkes D, et al. Percept Mot Skills 1989 Apr; 68(2):365–6
Effect of interpolated temporal activity on temporal short-term memory. Guay M, et al. Percept Mot Skills 1988 Dec;67(3):743–8
Bizarre imagery in paired-associate learning: an effective mnemonic aid with mixed context, delayed testing, and self-paced conditions. Iaccino JF, et al.
Percept Mot Skills 1989 Feb;68(1):307–16
Visual identification rate in search of a missing stimulus. Inamori Y, et al. Percept Mot Skills 1989 Aug;69(1):67–73
Infants' face-recognition by primiparous and multiparous women. Kaitz M, et al. Percept Mot Skills 1988 Oct; 67(2):495–502
Effects of variable practice on retention and motor schema development in Down syndrome subjects. Kanode JO, et al. Percept Mot Skills 1989 Aug;69(1):211–8
Gifted children and Visual Aural Digit Span test performance. Knoff HM. Percept Mot Skills 1986 Apr; 62(2):391–6
Do redundant visual and auditory target variables facilitate control behavior? McCord DM. Percept Mot Skills 1989 Aug;69(1):275–82
Influence of cognitive style and interstimulus interval on the hemispheric processing of tactile stimuli. Minagawa N, et al. Percept Mot Skills 1989 Jun;68(3 Pt 2):1031–9
Sex-role effects (if any). Payne RB. Percept Mot Skills 1986 Apr;62(2):385–6
Alternative theories of concept identification among older adults. Schroth ML. Percept Mot Skills 1988 Oct; 67(2):367–72
Perceptual identification thresholds for 150 fragmented pictures from the Snodgrass and Vanderwart picture set. Snodgrass JG, et al. Percept Mot Skills 1988 Aug; 67(1):3–36
Test of the neurolinguistic programming hypothesis that eye-movements relate to processing imagery. Wertheim EH, et al. Percept Mot Skills 1986 Apr;62(2):523–9
Lateral differences in schematic face encoding during dual-task performance with increasing levels of difficulty. Wilcox T, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):767–78
Recognition of random shapes after extended delay. Zusne L, et al. Percept Mot Skills 1986 Apr;62(2):592
The psychophysics of retrospective and prospective timing. Brown SW, et al. Perception 1988;17(3):297–310
Tactile memory in sighted and blind observers: the influence of orientation and rate of presentation. Heller MA.
Perception 1989;18(1):121–33
Maze performance: a direct comparison of food vs. water mazes. Kant GJ, et al. Pharmacol Biochem Behav 1988 Oct; 31(2):487–91
Multisensory bridges in response to object loss during the Holocaust. Brenner I. Psychoanal Rev 1988 Winter; 75(4):573–87
Memories from early childhood. Kestenberg JS.
Psychoanal Rev 1988 Winter;75(4):561–71
Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. Cowan N. Psychol Bull 1988 Sep;104(2):163–91 (236 ref.)
Cognition and olfaction: a review. Richardson JT, et al.
Psychol Bull 1989 May;105(3):352–60 (92 ref.)
Autobiographical memory. Sensitivity to age and education of a standardized enquiry. Borrini G, et al.
Psychol Med 1989 Feb;19(1):215–24
Priming and cued recall in elderly, alcohol intoxicated and sleep deprived subjects: a case of functionally similar memory deficits. Nilsson LG, et al. Psychol Med 1989 May; 19(2):423–33
Autobiographical memory in depression. Williams JM, et al.
Psychol Med 1988 Aug;18(3):689–95
Fear of failure and the Zeigarnik effect. Moot SA 3d, et al. Psychol Rep 1988 Oct;63(2):459–64
Person memory and judgment. Srull TK, et al.
Psychol Rev 1989 Jan;96(1):58–83 (59 ref.)
The affective memory and its implications for pathodynamics. Springer A. Psychopathology 1988; 21(2–3):116–21 (12 ref.)
Measuring memory. Baddeley A. Psychopharmacol Ser 1988; 6:12–22 (17 ref.)
The topology of performance curves during 72 hours of sleep loss: a memory and search task. Babkoff H, et al.
Q J Exp Psychol [A] 1988 Nov;40(4):737–56
Modality effects: do they fall on deaf ears? Engle RW, et al. Q J Exp Psychol [A] 1989 May;41(2):273–92
Mental representations of spatial and nonspatial relations. McNamara TP, et al. Q J Exp Psychol [A] 1989 May; 41(2):215–33
Movement and working memory: patterns and positions in space. Smyth MM, et al. Q J Exp Psychol [A] 1988 Aug; 40(3):497–514
Working memory for movements. Smyth MM, et al.
Q J Exp Psychol [A] 1989 May;41(2):235–50
Memories of trauma—repress or recall [letter] Weiss G.
S Afr Med J 1989 Jun 3;75(11):553
The impact of education about schizophrenia on relatives varying in expressed emotion. Cozolino LJ, et al.
Schizophr Bull 1988;14(4):675–87
Dichotic listening and recall in schizophrenia and mania. Wielgus MS, et al. Schizophr Bull 1988;14(4):689–700
Imaging of memory-specific changes in the distribution of protein kinase C in the hippocampus. Olds JL, et al.
Science 1989 Aug 25;245(4920):866–9
Reminiscence groups with confused nursing center residents: an experimental study. Orten JD, et al.
Soc Work Health Care 1989;14(1):73–86
Determinants of recall and recall bias in studying drug and chemical exposure in pregnancy. Feldman Y, et al.
Teratology 1989 Jul;40(1):37–45
[The brain and the computer] Dvořák I. Cas Lek Cesk 1988 Jul 1;127(27):833–6 (Eng. Abstr.) (Cze)
[Memory functions and models of their disorders in animals] Burešová O, et al. Cesk Psychiatr 1989 Feb;85(1):53–61 (95 ref.) (Cze)
[A course of memory training for the elderly. Preliminary description of design, organization and possible effects] Nouws A. Tijdschr Gerontol Geriatr 1988 Sep;19(4):211–4 (Eng. Abstr.) (Dut)
[Graphophonologic encoding in the process of identifying visual stimuli] Rossi JP, et al. Can J Psychol 1986 Dec; 40(4):463–72 (Eng. Abstr.) (Fre)
[The influence of English language text format on its German translation] Bosshardt HG, et al. Arch Psychol (Frankf) 1988;140(2):127–35 (Eng. Abstr.) (Ger)
[Anxiety and processing of self-referent information] Kerres M, et al. Arch Psychol (Frankf) 1988;140(1):1–13 (Eng. Abstr.) (Ger)
[Effect of information sets, emotional status and external storage access on solving social cases] Popp M.
Arch Psychol (Frankf) 1988;140(1):33–51 (Eng. Abstr.) (Ger)
[Continuing education for long-term memory] Heinzl S.
Med Monatsschr Pharm 1989 Jun;12(6):169 (Ger)
[Effect of divided attention on explicit and implicit aspects of recall] Wippich W, et al. Z Exp Angew Psychol 1989; 36(2):328–48 (Eng. Abstr.) (Ger)
[Continuous pattern recognition in the assessment of memory disorders in dementia] Lang C. Z Gerontol 1989 Jan–Feb; 22(1):49–53 (Eng. Abstr.) (Ger)

[Programming of structural properties of movement sequences] Ziessler M, et al. **Z Psychol** 1988;196(4):371–88 (Eng. Abstr.) (Ger)

[Priming effects on the relation between concepts and their relative properties in semantic memory] Inoue T. **Shinrigaku Kenkyu** 1989 Feb;59(6):319–25 (Eng. Abstr.) (Jpn)

[Effects of attribution and organization on person memory] Karasawa K. **Shinrigaku Kenkyu** 1988 Dec;59(5):266–72 (Eng. Abstr.) (Jpn)

[The processing unit and story structure in memory for story] Kawasaki E. **Shinrigaku Kenkyu** 1988 Apr;59(1):23–9 (Eng. Abstr.) (Jpn)

[Stages of information processing and cerebral hemispheric differences in random shape recognition] Nagae S. **Shinrigaku Kenkyu** 1988 Apr;59(1):16–22 (Eng. Abstr.) (Jpn)

[The effects of the item typicality for a script on memory for the text] Nakayachi K. **Shinrigaku Kenkyu** 1989 Feb; 59(6):361–4 (Eng. Abstr.) (Jpn)

[Directed forgetting in rats using the radial arm maze] Tsuda Y. **Shinrigaku Kenkyu** 1989 Feb;59(6):357–60 (Eng. Abstr.) (Jpn)

[Automation of research on memory using computers] Kulaichev AP. **Biol Nauki** 1989;(3):102–12 (Eng. Abstr.) (Rus)

[Memory changes in patients with functional and vascular psychic disorders at a late age] Alimova RA. **Zh Nevropatol Psikhiatr** 1989;89(1):106–11 (Eng. Abstr.) (Rus)

[Characteristics of the emotional memory of schizophrenic patients with defect traits] Garanian NG. **Zh Nevropatol Psikhiatr** 1988;88(8):111–5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Spatial working memory in rats: the effect of the dipeptide gamma–L–glutamyl–taurine and haloperidol. Schulz H. **Acta Physiol Hung** 1988;72(3–4):263–7

Influence of nootropic drugs on the memory–impairing effect of diethyldithiocarbamate and clonidine in "step down" passive avoidance in albino rats. Genkova–Papasova M, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):36–41

Memory effects of the combination of medazepam with nootropic agents. Rousseva S, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):27–35

Dietary tryptophan reverses alcohol–induced impairment of facial recognition but not verbal recall. Westrick ER, et al. **Alcoholism (NY)** 1988 Aug;12(4):531–3

Effects of theophylline on behavior and learning in children with asthma. Rappaport L, et al. **Am J Dis Child** 1989 Mar;143(3):368–72

Time course of antagonism of sedative and amnesic effects of diazepam by flumazenil. Ghoneim MM, et al. **Anesthesiology** 1989 Jun;70(6):899–904

Pharmacology of the memory process. Allain H, et al. **Arch Gerontol Geriatr Suppl** 1989;1:109–20 (31 ref.)

How to evaluate a drug efficacy at the behavioural level? Aquino JP, et al. **Arch Gerontol Geriatr Suppl** 1989;1:249–53

Memory training programs as a reference to the clinical evaluation of drugs in memory disorders. Israël L. **Arch Gerontol Geriatr Suppl** 1989;1:223–30 (15 ref.)

Evaluating the affective and cognitive effects of a drug: theoretical and methodological considerations. Jouvent R. **Arch Gerontol Geriatr Suppl** 1989;1:165–72

Delayed spatial alternation deficits resulting from perinatal PCB exposure in monkeys. Levin ED, et al. **Arch Toxicol** 1988;62(4):267–73

Effect of midazolam on memory. Borbély AA, et al. **Arzneimittelforschung** 1988 Jun;38(6):824–7

Transdermal scopolamine: a review of its effects upon motion sickness, psychological performance, and physiological functioning. Parrott AC. **Aviat Space Environ Med** 1989 Jan;60(1):1–9 (66 ref.)

The amygdala mediates the impairing effect of the selective kappa–opioid receptor agonist U–50,488 on memory in CD1 mice. Castellano C, et al. **Behav Brain Res** 1988 Oct; 30(3):259–63

A new one–trial test for neurobiological studies of memory in rats. II: Effects of piracetam and pramiracetam. Ennaceur A, et al. **Behav Brain Res** 1989 Jun 1; 33(2):197–207

Improvement of memory for an operant response by post–training glucose in mice. Messier C, et al. **Behav Brain Res** 1988 Dec 1;31(2):185–91

Blockade of the nootropic action of piracetam–like nootropics by adrenalectomy: an effect of dosage? Mondadori C, et al. **Behav Brain Res** 1989 Aug 1; 34(1–2):155–8

The memory–enhancing effects of the piracetam–like nootropics are dependent on experimental parameters. Mondadori C, et al. **Behav Brain Res** 1989 May 1; 33(1):79–82

Delayed response deficit in monkeys by locally disturbed prefrontal neuronal activity by bicuculline. Sawaguchi T, et al. **Behav Brain Res** 1988 Dec 1;31(2):193–8

Facilitation of inhibitory avoidance by hypertonic saline is reversed by a vasopressin and a nicotinic antagonist. Baratti CM, et al. **Behav Neural Biol** 1989 May;51(3):424–35

Retention enhancement by pre–test beta–endorphin and oxotremorine and its reversal by scopolamine. Brioni JD, et al. **Behav Neural Biol** 1988 Nov;50(3):251–4

Retention enhancement with post–training picrotoxin: lack of state dependency. Castellano C, et al. **Behav Neural Biol** 1989 Mar;51(2):165–70

Diazepam prevents post–training drug effects related to state dependency, but not post–training memory facilitation by epinephrine. Izquierdo I, et al. **Behav Neural Biol** 1989 Jan; 51(1):73–9

Strength of scopolamine–induced amnesia as a function of time between training and testing. Quartermain D, et al. **Behav Neural Biol** 1988 Nov;50(3):300–10

Scopolamine amnesia of passive avoidance: a deficit of information acquisition. Rush DK. **Behav Neural Biol** 1988 Nov;50(3):255–74

Idazoxan, an alpha–2 antagonist, facilitates memory retrieval in the rat. Sara SJ, et al. **Behav Neural Biol** 1989 May; 51(3):401–11

Memory facilitation by posttraining and pretest ACTH, epinephrine, and vasopressin administration: two separate effects. Izquierdo I, et al. **Behav Neurosci** 1988 Oct; 102(5):803–6

Parallel modifications of spatial memory performances, exploration patterns, and hippocampal theta rhythms in fornix–damaged rats: reversal by oxotremorine. Maho C, et al. **Behav Neurosci** 1988 Aug;102(4):601–4

Effect of lysine–8–vasopressin on retention and retrieval of a discrimination reward task in the rat. Mulvey DJ, et al. **Behav Neurosci** 1988 Aug;102(4):580–5

Influence of opioid peptides on learning and memory processes in the chick. Patterson TA, et al. **Behav Neurosci** 1989 Apr;103(2):429–37

Inhibition by diazepam of the effect of additional training and of extinction on the retention of shuttle avoidance behavior in rats. Pereira ME, et al. **Behav Neurosci** 1989 Feb;103(1):202–5

Improvement of memory by a vasopressin fragment: importance of individual differences in mnemonic function. Strupp BJ. **Behav Neurosci** 1989 Aug;103(4):743–54

Role of dentate gyrus cells in retention of a radial arm maze task and sensitivity of rats to cholinergic drugs. Tilson HA, et al. **Behav Neurosci** 1988 Dec;102(6):835–42

Serotonergic involvement in learning and memory. Hunter AJ. **Biochem Soc Trans** 1989 Feb;17(1):79–81

Different effects of 2–deoxy–sugars on memory formation. Grecksch G, et al. **Biomed Biochim Acta** 1988;47(7):655–61

The effects of flumazenil, a new benzodiazepine antagonist, on the reversal of midazolam sedation and amnesia in dental patients. Rosenbaum NL, et al. **Br Dent J** 1988 Dec 10; 165(11):400–2

Influence of cilazapril on memory functions and sleep behaviour in comparison with metoprolol and placebo in healthy subjects. Dietrich B, et al. **Br J Clin Pharmacol** 1989;27 Suppl 2:249S–261S

Neonatal 6–hydroxydopa, but not DSP–4, elevates brainstem monoamines and impairs inhibitory avoidance learning in developing rats. Cornwell–Jones CA, et al. **Brain Res** 1989 Jul 31;493(2):258–68

Septal vasopressin modulates social memory in male rats. Dantzer R, et al. **Brain Res** 1988 Aug 2;457(1):143–7

Effects of concurrent manipulations of cholinergic and noradrenergic function on learning and retention in mice. Decker MW, et al. **Brain Res** 1989 Jan 16;477(1–2):29–37

Retention of CS–US association learned under ketamine anesthesia. Edeline JM, et al. **Brain Res** 1988 Aug 9; 457(2):274–80

Effects of bombesin and gastrin–releasing peptide on memory processing. Flood JF, et al. **Brain Res** 1988 Sep 20; 460(2):314–22

Memory enhancement with intra–amygdala post–training naloxone is blocked by concurrent administration of propranolol. Introini–Collison IB, et al. **Brain Res** 1989 Jan 2;476(1):94–101

CGS 8216, a benzodiazepine receptor antagonist, enhances learning and memory in mice. Kumar BA, et al. **Brain Res** 1988 Sep 13;460(1):195–8

Spatial performance is severely impaired in rats with combined reduction of serotonergic and cholinergic transmission. Richter–Levin G, et al. **Brain Res** 1989 Jan 16;477(1–2):404–7

Effect of V–9–M, a peptide fragment derived from procholecystokinin, on memory processes in the rat. Takashima A, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):228–31

Comparison of the effects of bifemelane hydrochloride and indeloxazine hydrochloride on scopolamine hydrobromide–induced impairment in radial maze performance. Ogawa N, et al. **Clin Ther** 1988;10(6):704–11

The dose–response relationship for memory impairment by anticholinergic drugs. McEvoy JP, et al. **Compr Psychiatry** 1989 Mar–Apr;30(2):135–8

Orotate improves memory and enhances synaptic long–term potentiation in active avoidance behaviour in rats with perforant path stimulation as the conditioned stimulus. Bergado JA, et al. **Eur J Pharmacol** 1988 Nov 22; 157(2–3):155–63

NMDA receptor antagonists can enhance or impair learning performance in animals. Mondadori C, et al. **Exp Brain Res** 1989;75(3):449–56

Effect of Lathyrus sativus toxin on cognitive functions & urinary catecholamines in experimental animals. Karanth KS, et al. **Indian J Med Res** 1988 May;87:459–62

Four–arm radial open maze (FAROM) as a tool for assessing the effect of atropine in spatial memory of the rats. Dhume RA, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar; 33(1):1–9

Effect of cholinomimetic agents on learning and memory when administered by intra cerebroventricular (ICV) and intraperitonial (ip) routes. Kadlimatti SH, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):158–60

The effect of intellectual deterioration on retention deficits in amnesic alcoholics. Longmore BE, et al. **J Abnorm Psychol** 1988 Nov;97(4):448–54

Mood and memory changes in asthmatic children receiving corticosteroids. Bender BG, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):720–5

Chronic oral physostigmine without lecithin improves memory in Alzheimer's disease. Thal LJ, et al. **J Am Geriatr Soc** 1989 Jan;37(1):42–8 (62 ref.)

Cholinergic and serotonergic effects on the P3 potential and recent memory. Meador KJ, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):252–60

Anticholinergic effects on memory: benztropine versus amantadine. Gelenberg AJ, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):180–5

Effects of flunitrazepam on memory and their reversal by two antagonists. Gentil V, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):191–7

The effects of methylphenidate on learning in children with ADDH: the stimulus equivalence paradigm. Vyse SA, et al. **J Consult Clin Psychol** 1989 Jun;57(3):425–35

Repeated diazepam administration: effects on the acquisition and performance of response chains in humans. Bickel WK, et al. **J Exp Anal Behav** 1989 Jul;52(1):47–56

Quantification of the effects of chlorpromazine on performance under delayed matching to sample in pigeons. Watson JE, et al. **J Exp Anal Behav** 1989 May;51(3):317–28

Preference for unpredictable food rewards occurs with high proportion of reinforced trials or alcohol if rewards are not delayed. Daly HB. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):3–13

Glycopyrrolate versus atropine in post–ECT amnesia in the elderly. Sommer BR, et al. **J Geriatr Psychiatry Neurol** 1989 Jan–Mar;2(1):18–21

Low doses of atropine sulfate impair retention of a well–learned spatial task. Rauch TM, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):219–28

Inhibitor of protein synthesis blocks long–term behavioral sensitization in the isolated gill–withdrawal reflex of Aplysia. Castellucci VF, et al. **J Neurobiol** 1989 Jan; 20(1):1–9

The alpha–2 adrenergic agonist guanfacine improves memory in aged monkeys without sedative or hypotensive side effects: evidence for alpha–2 receptor subtypes. Arnsten AF, et al. **J Neurosci** 1988 Nov;8(11):4287–98

Lorazepam pharmacodynamics and pharmacokinetics in children. Relling MV, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):641–6

Conditioned suppression of motility: possibility for evaluation of learning and memory in mice. Nabeshima T, et al. **J Pharmacobiodyn** 1988 Dec;11(12):779–84

Effects of prenatal administration of phencyclidine on the learning and memory processes of rat offspring. Nabeshima T, et al. **J Pharmacobiodyn** 1988 Dec;11(12):816–23

Effects of continuous infusion of cholinergic drugs on memory impairment in rats with basal forebrain lesions. Miyamoto M, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):825–35

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 May 12; 261(18):2604

Amelioration of experimental amnesia (passive avoidance failure) in rodents by the selective M1 agonist AF102B. Nakahara N, et al. **Jpn J Pharmacol** 1988 Dec;48(4):502–6

Effects of N–(2,6–dimethylphenyl)–2–(2–oxo–1–pyrrolidinyl)= acetamide (DM–9384) on learning and memory in rats. Sakurai T, et al. **Jpn J Pharmacol** 1989 May;50(1):47–53

Retention of a spatial task after intraperitoneal, subcutaneous or intravenous injections of equal doses of atropine. Rauch TM, et al. **Life Sci** 1988;43(23):1913–20

Influence of nootropic drugs on the memory–impairing effect of clonidine in albino rats. Lazarova–Bakarova MB, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):235–9

Acute effects of oral pyridostigmine on memory and cognitive function in SDAT. Molloy DW, et al. **Neurobiol Aging** 1989 Mar–Apr;10(2):199–204

Interactions between angiotensin II and baclofen in shuttle–box and passive avoidance performance. Georgiev VP, et al. **Neuropeptides** 1988 Oct;12(3):155–8

Can vasopressin alone act as an unconditioned stimulus to produce passive avoidance behaviour in rats in a typical memory experiment? Ebenezer IS. **Neuropharmacology** 1988 Sep;27(9):903–7

Vasopressin (DDAVP) therapy in chronic schizophrenia: effects on negative symptoms and memory. Brambilla F, et al. **Neuropsychobiology** 1989;20(3):113–9

Effects of a cholinergic nootropic (WEB 1881 FU) on event–related potentials recorded in incidental and intentional memory tasks. Münte TF, et al. **Neuropsychobiology** 1988;19(3):158–68

Modelling dementia: effects of scopolamine on memory and attention. Broks P, et al. **Neuropsychologia** 1988; 26(5):685–700

Phosphatidylserine administration during postnatal development improves memory in adult mice. Fagioli S,

et al. **Neurosci Lett** 1989 Jun 19;101(2):229–33
Facilitation of retention performance in mice by pretest microinjection of AVP into dorsal or ventral hippocampus: differential influence of the peptide on appetitive task. Metzger D, et al. **Neurosci Lett** 1989 Jun 5;101(1):77–82
Effects of delay, intertrial interval, delay behavior and trimethyltin on spatial delayed response in rats. Bushnell PJ. **Neurotoxicol Teratol** 1988 May–Jun;10(3):237–44
Social memory deficits in adult male rats exposed to cadmium in infancy. Holloway WR Jr, et al. **Neurotoxicol Teratol** 1988 May–Jun;10(3):193–7
Behavioral and biochemical effects of postnatal parathion exposure in the rat. Stamper CR, et al. **Neurotoxicol Teratol** 1988 May–Jun;10(3):261–6
Intradentate colchicine disrupts the acquisition and performance of a working memory task in the radial arm maze. McLamb RL, et al. **Neurotoxicology** 1988 Fall; 9(3):521–8
The effects of structure–conformation modifications of melanotropin analogs on learning and memory: D-amino acid substituted linear and cyclic analogs. Beckwith BE, et al. **Peptides** 1989 Mar–Apr;10(2):361–8
Effects of systemic pancreastatin on memory retention. Flood JF, et al. **Peptides** 1988 Sep–Oct;9(5):1077–80
Effects of DGAVP on verbal memory. Pietrowsky R, et al. **Peptides** 1988 Nov–Dec;9(6):1361–6
Effects of alcohol and nicotine on free recall of relevant cues. Jubis RM. **Percept Mot Skills** 1986 Apr;62(2):363–9
Amnesic effect of the novel anticonvulsant MK–801. Benvenga MJ, et al. **Pharmacol Biochem Behav** 1988 May; 30(1):205–7
Effects of naloxone and naltrexone on memory consolidation in CD1 mice: involvement of GABAergic mechanisms. Castellano C, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):563–7
Long-term suppression of the cerebral spread of a memory: effects of idazoxan and clonidine. Church AC, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):749–56
Dihydroergocristine and memory alterations of aged male rats. Drago F, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):961–5
Nitrous oxide and human state-dependent memory. Mewaldt SP, et al. **Pharmacol Biochem Behav** 1988 May;30(1):83–7
Nicotine impairs acquisition of radial maze performance in rats. Mundy WR, et al. **Pharmacol Biochem Behav** 1988 May;30(1):119–22
Persistence of retrieval enhancement by amphetamine following scopolamine-induced amnesia. Quartermain D, et al. **Pharmacol Biochem Behav** 1989 May;33(1):51–4
Alleviation of scopolamine amnesia by different retrieval enhancing treatments. Quartermain D, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1093–6
Attenuation of forgetting by pharmacological stimulation of aminergic neurotransmitter systems. Quartermain D, et al. **Pharmacol Biochem Behav** 1988 May;30(1):77–81
Scopolamine in rats impairs acquisition but not retention in a 14-unit T-maze. Spangler EL, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):949–55
Effects of scopolamine on performance of rats in a delayed-response radial maze task. Bolhuis JJ, et al. **Physiol Behav** 1988;43(4):403–9
Selective working memory impairments following intradentate injection of colchicine: attenuation of the behavioral but not the neuropathological effects by gangliosides GM1 and AGF2. Emerich DF, et al. **Physiol Behav** 1989 Jan;45(1):93–101
Effects of caffeine on mood and memory. Loke WH. **Physiol Behav** 1988;44(3):367–72
Amphetamine enhances retrieval following diverse sources of forgetting. Quartermain D, et al. **Physiol Behav** 1988; 43(2):239–41
Effects of kappa-opioid receptor agonists on locomotor activity and memory processes in mice. Castellano C, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):507–13
Lesions of central amygdala abolish angiotensin II improvement of recall in passive avoidance situation. Winnicka MM, et al. **Pol J Pharmacol Pharm** 1988 Mar–Apr;40(2):129–34
Galanin antagonizes acetylcholine on a memory task in basal forebrain-lesioned rats. Mastropaolo J, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9841–5
The effects on performance of two antidepressants, alone and in combination with diazepam. Moskowitz H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):783–92
Distinct memory impairments following electroconvulsive therapy and imipramine. Calev A, et al. **Psychol Med** 1989 Feb;19(1):111–9
Inhibitory influence of oxytocin infusion on contingent negative variation and some memory tasks in normal men. Geenen V, et al. **Psychoneuroendocrinology** 1988; 13(5):367–75
Benzodiazepine receptor ligands, memory and information processing. Psychometric, psychopharmacological and clinical issues. International workshop. Puerto Rico, December 1986. **Psychopharmacol Ser** 1988;6:1–317
Benzodiazepine receptor ligands: tools for memory research in clinical pharmacology. Berenberg D, et al. **Psychopharmacol Ser** 1988;6:261–74 (41 ref.)
Lormetazepam, memory and information processing: a review. Bhatti JZ, et al. **Psychopharmacol Ser** 1988;6:169–79 (22 ref.)
Beta-carbolines as tools in memory research: human data with the beta-carboline ZK 93426. Duka T, et al. **Psychopharmacol Ser** 1988;6:246–60 (38 ref.)
Clinical relevance of effects of benzodiazepines on learning and memory. Lister RG, et al. **Psychopharmacol Ser** 1988; 6:117–27 (74 ref.)
The effect of anxiolytic drugs on memory in anxious subjects. Lucki I, et al. **Psychopharmacol Ser** 1988;6:128–39
Individual differences in benzodiazepine-induced changes of memory. Netter P. **Psychopharmacol Ser** 1988;6:90–113 (38 ref.)
Beta-carbolines as tools in memory research: animal data and speculations. Sarter M, et al. **Psychopharmacol Ser** 1988; 6:230–45 (43 ref.)
Assessment of the effects of drugs on memory. Wittenborn JR. **Psychopharmacol Ser** 1988;6:67–78 (72 ref.)
Delta-9-tetrahydrocannabinol impairs visual recognition memory but not discrimination learning in rhesus monkeys. Aigner TG. **Psychopharmacology (Berlin)** 1988;95(4):507–11
Effects of a subanesthetic concentration of nitrous oxide on overt and covert assessments of memory and associative processes. Block RI, et al. **Psychopharmacology (Berlin)** 1988;96(3):324–31
Antidepressants and human memory: an investigation of four drugs with different sedative and anticholinergic profiles [published erratum appears in Psychopharmacology (Berlin) 1989;97(1):139] Curran HV, et al. **Psychopharmacology (Berlin)** 1988;95(4):520–7
Low dose scopolamine affects discriminability but not rate of forgetting in delayed conditional discrimination. Kirk RC, et al. **Psychopharmacology (Berlin)** 1988;96(4):541–6
Physostigmine improves water maze performance following nucleus basalis magnocellularis lesions in rats. Mandel RJ, et al. **Psychopharmacology (Berlin)** 1988;96(3):421–5
Specific modulation of social memory in rats by cholinomimetic and nootropic drugs, by benzodiazepine inverse agonists, but not by psychostimulants. Perio A, et al. **Psychopharmacology (Berlin)** 1989;97(2):262–8
Effects of lorazepam on memory, attention and sedation in man: antagonism by Ro 15–1788. Preston GC, et al. **Psychopharmacology (Berlin)** 1989;97(2):222–7
The effects of scopolamine on working memory in healthy young volunteers. Rusted JM, et al. **Psychopharmacology (Berlin)** 1988;96(2):145–52
Dissociative effects of scopolamine on working memory in healthy young volunteers. Rusted JM. **Psychopharmacology (Berlin)** 1988;96(4):487–92
Effect of physostigmine on memory consolidation and retrieval processes in intact and nucleus basalis-lesioned rats. Santucci AC, et al. **Psychopharmacology (Berlin)** 1989; 99(1):70–4
Low-dose oral lorazepam administration in Alzheimer subjects and age-matched controls. Sunderland T, et al. **Psychopharmacology (Berlin)** 1989;99(1):129–33
The effects of long-term nicotine treatment on locomotion, exploration and memory in young and old rats. Welzl H, et al. **Psychopharmacology (Berlin)** 1988;96(3):317–23
Mechanism of action of scopolamine as an amnestic. Izquierdo I. **Trends Pharmacol Sci** 1989 May;10(5):175–7 (21 ref.)
[Epilepsy, antiepileptic drugs and memory disturbance] Shen DL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec;21(6):326–8, 384 (Eng. Abstr.) **(Chi)**
[Memory enhancement of [Arg8] vasopressin (AVP): effect and mechanism. I. Propranolol blocking effect on memory retention of AVP in mice] Zhang SY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):205–8 (Eng. Abstr.) **(Chi)**
[Improving effect of huperzine A on discrimination performance in aged rats and adult rats with experimental cognitive impairment] Lu WH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):11–5 (Eng. Abstr.) **(Chi)**
[Facilitated performance of learning and memory in rats by 3-n-butyl phthalide] Yu SR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):385–8 (Eng. Abstr.) **(Chi)**
[Improvement of impaired memory in mice by huperzine A and huperzine B] Zhu XD, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):492–7 (Eng. Abstr.) **(Chi)**
[Effects of eight antiepileptic drugs on coriariae and electric induced convulsion and impairment of learning and memory in mice] Wang L, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):490–3 (Eng. Abstr.) **(Chi)**
[Comparative repercussions of general and spinal anesthesia on the psychological functions of the aged subject] Maurette P, et al. **Ann Fr Anesth Reanim** 1988;7(4):305–8 (Eng. Abstr.) **(Fre)**
[Cholinergic effects of nootropics] Funk KF, et al. **Biomed Biochim Acta** 1988;47(4–5):417–21 (Eng. Abstr.) **(Ger)**
[New approaches in memory research. The beta-carboline substance class] Stephens DN, et al. **Fortschr Med** 1988 Nov 20;106(33):675–6, 677 (5 ref.) **(Ger)**
[Pharmacological studies on Y-8894. (VIII). Effects on learning and memory in the radial maze task in mice] Anami K, et al. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):113–8 (Eng. Abstr.) **(Jpn)**
[Characteristics of memory in MRL/1 mice and the effect of thymic peptides] Melekhin VD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):199–201 (Eng. Abstr.) **(Rus)**
[Effect of quinpirole on the retrieval of a memory trace in amnesia] Il'iuchenok RIu, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):24–7 (Eng. Abstr.) **(Rus)**
[Mnemonic effects of substituted amides of imidazole-4(5)-carboxylic acid in rats] Shabanov PD, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):29–32 (Eng. Abstr.) **(Rus)**
[Use of the elements of an automated system for studying the action of substances on the operative memory of experimental animals] Piruzian LA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul–Aug;(4):610–3 (Eng. Abstr.) **(Rus)**
[Effect an ACTH analog on the processes of learning and memory in rats] Getsova VM, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1041–7 (Eng. Abstr.) **(Rus)**
[Effect of substance P on the reproduction of memory engrams and on the amino acid composition of brain structures in rats with experimental neurosis] Nerush PA. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1152–7 (Eng. Abstr.) **(Rus)**
[Effect of tuftsin and its analog on learning, memory and exploratory behavior in rats] Semenova TP, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1033–40 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The accuracy of the dichotic, the visual half-field, and the intracarotid sodium amytal memory tests in preoperative neuropsychological investigation of epileptic patients. Nilsson LG, et al. **Acta Neurol Scand Suppl** 1988;117:73–8 (25 ref.)
Significance of the cerebral dopaminergic neurotransmission for the individual differences in learning and memory (experiments on rats). Kehayov R, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):76–82
Recall and recognition memory in patients with Alzheimer's and Parkinson's diseases. Helkala EL, et al. **Ann Neurol** 1988 Aug;24(2):214–7
Involvement of hormonal and neuromodulatory systems in the regulation of memory storage. McGaugh JL. **Annu Rev Neurosci** 1989;12:255–87 (216 ref.)
Neurobiological aspects of learning and memory. Matthies H. **Annu Rev Psychol** 1989;40:381–404 (104 ref.)
Information processing deficit in schizophrenia: a frontal lobe sign? [letter] Merriam AE, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):760
Memory and aging. Proceedings of a symposium. Lausanne, Switzerland, 3–4 June 1988. **Arch Gerontol Geriatr Suppl** 1989;1:1–255
Animal studies of brain acetylcholine and memory. Beninger RJ, et al. **Arch Gerontol Geriatr Suppl** 1989;1:71–89 (45 ref.)
The search for a biochemistry of memory. Chapouthier G. **Arch Gerontol Geriatr Suppl** 1989;1:7–19 (67 ref.)
Memory processes and aging: a defect of automatic rather than controlled processes? Delbecq-Derouesné J, et al. **Arch Gerontol Geriatr Suppl** 1989;1:121–50
Memory complaints in the elderly: a study of 367 community-dwelling individuals from 50 to 80 years old. Derouesné C, et al. **Arch Gerontol Geriatr Suppl** 1989; 1:151–63
Experimental dissociation of memory systems in mice: behavioral and neurochemical aspects. Jaffard R, et al. **Arch Gerontol Geriatr Suppl** 1989;1:55–70 (28 ref.)
Chronobiological rhythm constraints of memory processes. Leconte P. **Arch Gerontol Geriatr Suppl** 1989;1:21–35 (57 ref.)
Models of human memory. Tiberghien G. **Arch Gerontol Geriatr Suppl** 1989;1:37–53 (27 ref.)
A verbal memory test with high predictive accuracy for dementia of the Alzheimer type. Knopman DS, et al. **Arch Neurol** 1989 Feb;46(2):141–5
Medial thalamus and memory [letter] Mori E, et al. **Arch Neurol** 1989 May;46(5):482–4
Impairment of memory in a delayed non-matching to place task following mamillary body lesions in mice. Beracochea DJ, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):147–54
Responses of hippocampal formation neurons in the monkey related to delayed spatial response and object-place memory tasks. Cahusac PM, et al. **Behav Brain Res** 1989 Jul 1;33(3):229–40
An experimental test of the theory that visual information is stored in the inferotemporal cortex. Cirillo RA, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):43–53
Lesions of the anterior temporal stem and the performance of delayed match-to-sample and visual discriminations in monkeys. Cirillo RA, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):55–69
Forebrain commissures and visual memory: a new approach. Doty RW, et al. **Behav Brain Res** 1988 Aug;29(3):267–80
A new one-trial test for neurobiological studies of memory in rats. 1: Behavioral data. Ennaceur A, et al. **Behav Brain Res** 1988 Nov 1;31(1):47–59
Effects of excitotoxic lesions of the substantia innominata, ventral and dorsal globus pallidus on visual discrimination acquisition, performance and reversal in the rat. Evenden JL, et al. **Behav Brain Res** 1989 Mar 1;32(2):129–49
In vivo modulation of septo-hippocampal cholinergic activity in mice: relationships with spatial reference and

working memory performance. Galey D, et al. **Behav Brain Res** 1989 Mar 1;32(2):163–72

Central but not basolateral amygdala mediates memory for positive affective experiences. Kesner RP, et al. **Behav Brain Res** 1989 Jun 1;33(2):189–95

Enhanced detection of nucleus basalis magnocellularis lesion–induced spatial learning deficit in rats by modification of training regimen. Mandel RJ, et al. **Behav Brain Res** 1989 Jan 1;31(3):221–9

Retention deficits produced in monkeys with reversible cold lesions in the prestriate cortex. Martin–Elkins CL, et al. **Behav Brain Res** 1989 Apr 1;32(3):219–30

The effects of fornix section on win–stay/lose–shift and win–shift/lose–stay performance in the rat. Rawlins JN, et al. **Behav Brain Res** 1988 Nov 1;31(1):17–28

Effects of hippocampal manipulations on the classically conditioned nictitating membrane response: simulations by an attentional–associative model. Schmajuk NA, et al. **Behav Brain Res** 1989 Mar 1;32(2):173–89

The role of the fornix/fimbria and some related subcortical structures in place learning and memory. Sutherland RJ, et al. **Behav Brain Res** 1989 Apr 1;32(3):265–77

Differential hippocampal and cortical cholinergic activation during the acquisition, retention, reversal and extinction of a spatial discrimination in an 8–arm radial maze by mice. Toumane A, et al. **Behav Brain Res** 1988 Oct;30(3):225–34

Selective fimbria lesions impair acquisition of working and reference memory of rats in a complex spatial discrimination task. van der Staay FJ, et al. **Behav Brain Res** 1989 Mar 1;32(2):151–61

Dissociation of visual and olfactory conditioning in the neostriatum of rats. Viaud MD, et al. **Behav Brain Res** 1989 Feb 1;32(1):31–42

Effects of unilateral thalamic lesion upon interocular transfer of visual discrimination in pigeons. I. Lesion in the trained hemisphere (memory access deficits). Watanabe S. **Behav Brain Res** 1988 Aug;29(3):259–65

Effects of anterior or dorsomedial thalamic ibotenic lesions on learning and memory in rats. Beracochea DJ, et al. **Behav Neural Biol** 1989 May;51(3):364–76

Different forms of post–training memory processing. Izquierdo I. **Behav Neural Biol** 1989 Mar;51(2):171–202 (155 ref.)

Blood glucose and brain function: interactions with CNS cholinergic systems. Stone WS, et al. **Behav Neural Biol** 1988 Nov;50(3):325–34

Brain transplants enhance rather than reduce the impairment of spatial memory and olfaction in bulbectomized rats. Amemori T, et al. **Behav Neurosci** 1989 Feb;103(1):61–70

Stress and behavior in streptozotocin diabetic rats: biochemical correlates of passive avoidance learning. Bellush LL, et al. **Behav Neurosci** 1989 Feb;103(1):144–50

Effects of opioid microinjections into the medial septal area on spatial memory in rats. Bostock E, et al. **Behav Neurosci** 1988 Oct;102(5):643–52

Acquisition of a complex place task in rats with selective ibotenate lesions of hippocampal formation: combined lesions of subiculum and entorhinal cortex versus hippocampus. Bouffard JP, et al. **Behav Neurosci** 1988 Dec; 102(6):828–34

Successful performance by monkeys with lesions of the hippocampal formation on AB and object retrieval, two tasks that mark developmental changes in human infants. Diamond A, et al. **Behav Neurosci** 1989 Jun;103(3):526–37

Differential ontogeny of working memory and reference memory in the rat. Green RJ, et al. **Behav Neurosci** 1989 Feb;103(1):98–105

Retrospective and prospective coding of information: dissociation of parietal cortex and hippocampal formation. Kametani H, et al. **Behav Neurosci** 1989 Feb;103(1):84–9

Dissociation of item and order memory following parietal cortex lesions in the rat. Kesner RP, et al. **Behav Neurosci** 1989 Aug;103(4):907–10

Memory enhancement with posttraining intraventricular glucose injections in rats. Lee MK, et al. **Behav Neurosci** 1988 Aug;102(4):591–5

Effect of low–intensity hippocampal stimulation on spatial versus working memory in rats. Parker TW, et al. **Behav Neurosci** 1988 Oct;102(5):653–61

Role of the central nucleus of the amygdala in olfactory heart rate conditioning. Sananes CB, et al. **Behav Neurosci** 1989 Jun;103(3):519–25

Antagonism of NMDA receptors impairs acquisition but not retention of olfactory memory. Staubli U, et al. **Behav Neurosci** 1989 Feb;103(1):54–60

Association of sleep parameters and memory in intact old rats and young rats with lesions in the nucleus basalis magnocellularis. Stone WS, et al. **Behav Neurosci** 1989 Aug; 103(4):755–64

Differential effects of hippocampal ablations on dispositional and representational memory in the rat. Thomas GJ, et al. **Behav Neurosci** 1988 Oct;102(5):635–42

Acquisition of conditional associations and operant delayed spatial response alternation: effects of lesions in the medial prefrontal cortex. van Haaren F, et al. **Behav Neurosci** 1988 Aug;102(4):481–8

Retention of maze performance inversely correlates with N–methyl–D–aspartate receptor number in hippocampus and frontal neocortex in the rat. Wenk GL, et al. **Behav Neurosci** 1989 Jun;103(3):688–90

Basal forebrain lesions and memory: alterations in neurotensin, not acetylcholine, may cause amnesia. Wenk GL, et al. **Behav Neurosci** 1989 Aug;103(4):765–9

Cholinergic blockade in the rat impairs strategy selection but not learning and retention of nonspatial visual discrimination problems in a swimming pool. Whishaw IQ, et al. **Behav Neurosci** 1988 Oct;102(5):662–77

Effects of adrenal demedullation on the conditioned emotional response and on the memory improving action of glucose. White NM, et al. **Behav Neurosci** 1988 Aug; 102(4):499–503

Kynurenic acid protects against the neurochemical and behavioral effects of unilateral quinolinic acid injections into the nucleus basalis of rats. Wirsching BA, et al. **Behav Neurosci** 1989 Feb;103(1):90–7

Pattern recognition and associative memory as dynamical processes in a synergetic system. I. Translational invariance, selective attention, and decomposition of scenes [published erratum appears in Biol Cybern 1989;60(6):476] Fuchs A, et al. **Biol Cybern** 1988;60(1):17–22

Post–traumatic stress disorder, hormones, and memory [editorial] Pittman RK. **Biol Psychiatry** 1989 Jul; 26(3):221–3 (14 ref.)

ERPs predictive of subsequent recall and recognition performance. Paller KA, et al. **Biol Psychol** 1988 Jun; 26(1–3):269–76

Preserved memory abilities in thalamic amnesia. Nichelli P, et al. **Brain** 1988 Dec;111 (Pt 6):1337–53

Neuronal activity in human lateral temporal cortex related to short–term verbal memory, naming and reading. Ojemann GA, et al. **Brain** 1988 Dec;111 (Pt 6):1383–403

Verbal memory and learning in unilateral posterior cerebral infarction. A report on 30 cases. von Cramon DY, et al. **Brain** 1988 Oct;111 (Pt 5):1061–77

Role of the dorsolateral prefrontal cortex in organizing visually guided behavior. Barone P, et al. **Brain Behav Evol** 1989;33(2–3):132–5

Premotor cortex and the retrieval of movement. Passingham RE. **Brain Behav Evol** 1989;33(2–3):189–92

Preserved topographical memory following right temporal lobectomy. Beatty WW, et al. **Brain Cogn** 1988 Aug; 8(1):67–76

Equivalent spatial location memory deficits in rats with medial septum or hippocampal formation lesions and patients with dementia of the Alzheimer's type. Kesner RP, et al. **Brain Cogn** 1989 Mar;9(2):289–300

Regional cerebral blood flow for singers and nonsingers while speaking, singing, and humming a rote passage. Formby C, et al. **Brain Lang** 1989 May;36(4):690–8

Differential perseverations in verbal retrieval related to anterior and posterior left hemisphere lesions. Vilkki J. **Brain Lang** 1989 May;36(4):543–54

Involvement of the amygdala GABAergic system in the modulation of memory storage. Brioni JD, et al. **Brain Res** 1989 May 15;487(1):105–12

The role of cortical sympathetic ingrowth in the behavioral effects of nucleus basalis magnocellularis lesions. Harrell LE, et al. **Brain Res** 1988 Dec 6;474(2):353–8

Training induced dendritic spine density changes are specifically related to memory formation processes in the chick, Gallus domesticus. Patel SN, et al. **Brain Res** 1988 Oct 25;463(1):168–73

Raphe cells grafted into the hippocampus can ameliorate spatial memory deficits in rats with combined serotonergic/cholinergic deficiencies. Richter–Levin G, et al. **Brain Res** 1989 Jan 23;478(1):184–6

GM1 ganglioside attenuates the behavioral deficits but not the granule cell damage produced by intradentate colchicine. Walsh TJ, et al. **Brain Res** 1989 Jan 23; 478(1):24–33

Mode of [14C] 2–deoxy–D–glucose uptake into retrosplenial cortex and other memory–related structures of the monkey during a delayed response. Matsunami K, et al. **Brain Res Bull** 1989 May;22(5):829–38

Construction and reconstruction of memories. Izquierdo I, et al. **Braz J Med Biol Res** 1988;21(1):9–25 (77 ref.)

Context–dependent associations in linear distributed memories. Mizraji E. **Bull Math Biol** 1989;51(2):195–205

Personality and memory in childhood migraine. D'Andrea G, et al. **Cephalalgia** 1989 Mar;9(1):25–8

Does "benign senescent forgetfulness" exist? Bamford KA, et al. **Clin Geriatr Med** 1988 Nov;4(4):897–916 (60 ref.)

Sleep and aging in animals. Relationships with circadian rhythms and memory. Stone WS. **Clin Geriatr Med** 1989 May;5(2):363–79 (70 ref.)

Central cholinergic pathways and learning and memory processes: presynaptic aspects. Durkin T. **Comp Biochem Physiol [A]** 1989;93(1):273–80 (37 ref.)

Brain RNA synthesis and the retention of learning through metamorphosis in Tenebrio obscurus (Insecta: Coleoptera). Punzo F, et al. **Comp Biochem Physiol [A]** 1988;91(4):675–8

Cephalopods, memory, neurofilaments, mammalian hibernation, the vertebrate retina: an autobiographical research note for John H. Welsh in his 85th year. Boycott BB. **Comp Biochem Physiol [C]** 1988;91(1):25–9

Autobiographical memory. Its impairment in amnesic syndromes. Dall'Ora P, et al. **Cortex** 1989 Jun; 25(2):197–217

Encoding of frequency of occurrence by aphasia patients: attentional or linguistic deficit? Wiegersma S, et al. **Cortex** 1988 Sep;24(3):433–41

The performance of human infants on a measure of frontal cortex function, the delayed response task. Diamond A, et al. **Dev Psychobiol** 1989 Apr;22(3):271–94

Brain potentials in a memory–scanning task. II. Effects of aging on potentials to the probes. Pratt H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):507–17

Brain potentials in a memory–scanning task. I. Modality and task effects on potentials to the probes. Pratt H, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):407–21

Brain potentials in a memory–scanning task. III. Potentials to the items being memorized. Pratt H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul;73(1):41–51

Event–related potentials and recognition memory for words. Rugg MD, et al. **Electroencephalogr Clin Neurophysiol** 1989 May;72(5):395–406

The nature of memory. Alkon DL, et al. **Endeavour** 1989; 13(1):29–33

Hemisphere memory of concrete and abstract information determined with the intracarotid Sodium Amytal test. Christianson SA, et al. **Epilepsy Res** 1987 May;1(3):185–93

Age and individual differences in immediate and delayed effectiveness of mnemonic instructions. Erber JT, et al. **Exp Aging Res** 1988 Summer–Autumn;14(2–3):119–24

Pretraining enhances mnemonic training in elderly adults. Hill RD, et al. **Exp Aging Res** 1988 Winter;14(4):207–11

Instructional variation and adult age differences in activity memory. Kausler DH, et al. **Exp Aging Res** 1988 Winter; 14(4):195–9

Levels upon levels: predicting age differences in text recall. Stine EA, et al. **Exp Aging Res** 1987 Winter;13(4):179–83

Does the capacity of working memory change with age? Wingfield A, et al. **Exp Aging Res** 1988 Summer–Autumn; 14(2–3):103–7

Place memory and scene memory: effects of fornix transection in the monkey. Gaffan D, et al. **Exp Brain Res** 1989;74(1):202–12

Retrospective and prospective coding of information: role of the medial prefrontal cortex. Kesner RP. **Exp Brain Res** 1989;74(1):163–7

A comparative analysis of the role of fornix and cingulate cortex in memory: rats. Markowska AL, et al. **Exp Brain Res** 1989;74(1):187–201

Effects of fornix transection and cingulate cortical ablation on spatial memory in rhesus monkeys. Murray EA, et al. **Exp Brain Res** 1989;74(1):173–86

Intra–ventricular infusion of the NMDA antagonist AP5 impairs performance on a non–spatial operant DRL task in the rat. Tonkiss J, et al. **Exp Brain Res** 1988;73(1):181–8

Cognitive processes in the elderly: general factors to consider. Babins L. **Gerontol Geriatr Educ** 1987–88; 8(1–2):9–22 (43 ref.)

40–Hz EEG asymmetry during recall of emotional events in waking and hypnosis: differences between low and high hypnotizables. De Pascalis V, et al. **Int J Psychophysiol** 1989 Mar;7(1):85–96

The psychology of visual displays. Kosslyn SM. **Invest Radiol** 1989 May;24(5):417–9

A quantitative model for the kinetics of cAMP–dependent protein kinase (type II) activity. Long–term activation of the kinase and its possible relevance to learning and memory. Buxbaum JD, et al. **J Biol Chem** 1989 Jun 5; 264(16):9344–51

Dissociation of recognition memory components following temporal lobe lesions. Smith ME, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):50–60

Age and semantic inhibition in word retrieval. Bowles NL. **J Gerontol** 1989 May;44(3):P88–90

Age–related differences in three–dimensional spatial memory. Cherry KE, et al. **J Gerontol** 1989 Jan;44(1):P16–22

The memory advantages of the generation effect: age and process differences. Johnson MM, et al. **J Gerontol** 1989 May;44(3):P91–4

Age differences in encoding specificity. Puglisi JT, et al. **J Gerontol** 1988 Nov;43(6):P145–50

Correlates of memory in Parkinson's disease. Riklan M, et al. **J Nerv Ment Dis** 1989 Apr;177(4):237–40

Structural plasticity at identified synapses during long–term memory in Aplysia. Bailey CH, et al. **J Neurobiol** 1989 Jul;20(5):356–72 (50 ref.)

Effects of cholinergic drugs on learning impairment in ventral globus pallidus–lesioned rats. Ueki A, et al. **J Neurol Sci** 1989 Mar;90(1):1–21

Mnemonic coding of visual space in the monkey's dorsolateral prefrontal cortex. Funahashi S, et al. **J Neurophysiol** 1989 Feb;61(2):331–49

Activation of the hippocampus and dentate gyrus by working–memory: a 2–deoxyglucose study of behaving rhesus monkeys. Friedman HR, et al. **J Neurosci** 1988 Dec; 8(12):4693–706

Neuropsychological evidence for multiple implicit memory systems: a comparison of Alzheimer's, Huntington's, and Parkinson's disease patients. Heindel WC, et al. **J Neurosci** 1989 Feb;9(2):582–7

Differential effects of fornix and caudate nucleus lesions on two radial maze tasks: evidence for multiple memory systems. Packard MG, et al. **J Neurosci** 1989 May; 9(5):1465–72

A selective mnemonic role for the hippocampus in monkeys: memory for the location of objects. Parkinson JK, et al. **J Neurosci** 1988 Nov;8(11):4159–67

Hippocampal neurons in the monkey with activity related to the place in which a stimulus is shown. Rolls ET, et al. **J Neurosci** 1989 Jun;9(6):1835–45

The neurology of memory: quantitative assessment of retrograde amnesia in two groups of amnesic patients. Squire LR, et al. **J Neurosci** 1989 Mar;9(3):828–39

Lesions of the amygdala that spare adjacent cortical regions do not impair memory or exacerbate the impairment following lesions of the hippocampal formation. Zola-Morgan S, et al. **J Neurosci** 1989 Jun;9(6):1922–36

A homing procedure for studying spatial memory in immature and adult rodents. Schenk F. **J Neurosci Methods** 1989 Jan;26(3):249–58

Molecular approaches to learning and memory. Tsukada Y. **Jpn J Physiol** 1988;38(2):115–32 (69 ref.)

Dopamine and memory function in Parkinson's disease. Mohr E, et al. **Mov Disord** 1989;4(2):113–20

Cellular neurobiology. Synaptic memory molecules [news] Kennedy MB. **Nature** 1988 Oct 27;335(6193):770–2

Neuronal correlate of visual associative long-term memory in the primate temporal cortex. Miyashita Y. **Nature** 1988 Oct 27;335(6193):817–20

Temporally graded, age-related impairments in spatial memory in the rat. Aitken DH, et al. **Neurobiol Aging** 1989 May-Jun;10(3):273–6

What is the nature of the role of the serotonergic nervous system in learning and memory: prospects for development of an effective treatment strategy for senile dementia. Altman HJ, et al. **Neurobiol Aging** 1988 Sep-Dec; 9(5–6):627–38 (81 ref.)

Lack of efficacy of clonidine on memory in aged cebus monkeys. Bartus RT, et al. **Neurobiol Aging** 1988 Jul-Aug; 9(4):409–11

Effects of dietary restriction on radial-arm maze performance and flavor memory in aged rats. Bond NW, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):27–30

Neuroendocrine effects on memory in aged rodents and humans. Gold PE, et al. **Neurobiol Aging** 1988 Sep-Dec; 9(5–6):709–17 (57 ref.)

Reevaluation of the contribution of the basal forebrain cholinergic system to memory. Kesner RP. **Neurobiol Aging** 1988 Sep-Dec;9(5–6):609–16 (78 ref.)

Glucose effects on firing rate of neurons of the locus coeruleus: another attempt to put memory back in the brain. Sara SJ. **Neurobiol Aging** 1988 Sep-Dec;9(5–6):730–2

Specific neurochemical systems and memory. Whitehouse PJ. **Neurobiol Aging** 1988 Sep-Dec;9(5–6):639–40

Basal forebrain lesions impair tactile discrimination and working memory. Wozniak DF, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):173–9

Feeling our way in the dark. Zornetzer SF. **Neurobiol Aging** 1988 Sep-Dec;9(5–6):642–3

Memory during subclinical hippocampal seizures. Bridgman PA, et al. **Neurology** 1989 Jun;39(6):853–6

Mnemonic and neuropathological effects of occluding the posterior cerebral artery in Macaca mulatta. Bachevalier J, et al. **Neuropsychologia** 1989;27(1):83–105

Event-related potentials and the semantic matching of faces. Barrett SE, et al. **Neuropsychologia** 1989;27(7):913–22

The effect of categorization on verbal memory after temporal lobectomy. Channon S, et al. **Neuropsychologia** 1989; 27(6):777–85

Memory systems in the chick: dissociations and neuronal analysis. Horn G, et al. **Neuropsychologia** 1989;27(1):1–22 (112 ref.)

Remote and autobiographical memory, temporal context memory and frontal atrophy in Korsakoff and Alzheimer patients. Kopelman MD. **Neuropsychologia** 1989; 27(4):437–60

Language and memory functions after long recovery periods in left-hemispherectomized subjects. Ogden JA. **Neuropsychologia** 1988;26(5):645–59

Frontal cortex, timing and memory. Olton DS. **Neuropsychologia** 1989;27(1):121–30 (61 ref.)

Brain potentials reveal covert facial recognition in prosopagnosia. Renault B, et al. **Neuropsychologia** 1989; 27(7):905–12

Right hippocampal impairment in the recall of spatial location: encoding deficit or rapid forgetting? Smith ML, et al. **Neuropsychologia** 1989;27(1):71–81

The development of long-term potentiation in hippocampus and neocortex. Teyler TJ, et al. **Neuropsychologia** 1989; 27(1):31–9

Effect of activation and blockade of the GABAergic system on disturbance of memory trace reproduction. Dubrovina NI, et al. **Neurosci Behav Physiol** 1988 Jul-Aug;18(4):274–9

Do event-related potentials reveal the mechanism of the auditory sensory memory in the human brain? Näätänen R, et al. **Neurosci Lett** 1989 Mar 27;98(2):217–21

The neurobiology of learning and memory: elucidation of the mechanisms of cognitive dysfunction. Petit TL. **Neurotoxicology** 1988 Fall;9(3):413–28 (61 ref.)

The influence of physical and psychosocial factors on accuracy of memory for pain in chronic pain patients. Jamison RN, et al. **Pain** 1989 Jun;37(3):289–94

The old English rune poem: elements of mnemonics and psychoneurologic beliefs. Bradley DJ. **Percept Mot Skills** 1989 Aug;69(1):3–8

Exponential data-analysis of passive-avoidance behavior in rats and mice. Aliweis C, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):803–6

The effects of undernutrition during early life on spatial learning. Campbell LF, et al. **Physiol Behav** 1989 May; 45(5):883–90

The effect of embryonal amygdala grafts on the impairment of spatial working memory elicited in rats by kainate-induced amygdaloid damage. Ermakova IV, et al. **Physiol Behav** 1989 Feb;45(2):235–41

Enhancement of memory by auditory stimulation during postlearning REM sleep in humans. Guerrien A, et al. **Physiol Behav** 1989 May;45(5):947–50

Investigation into sex-related differences in locomotor activity, place learning and passive avoidance responding in NMRI mice. Lamberty Y, et al. **Physiol Behav** 1988; 44(6):787–90

Long-term memory for DRL: a comparison between weanling, adult and senescent rats. Lejeune H. **Physiol Behav** 1989 Feb;45(2):321–9

Exploratory behavior, reaction to novelty, and proactive memory in rats with temporo-entorhinal connections disrupted. Myhrer T. **Physiol Behav** 1989 Feb;45(2):431–6

Nucleus basalis lesions impair memory in rats trained on nonspatial and spatial discrimination tasks. Santucci AC, et al. **Physiol Behav** 1989 May;45(5):1025–31

Memory deficit in passive-avoidance learning in bulbectomized Long-Evans hooded rats. Thorne BM, et al. **Physiol Behav** 1988;44(3):339–45

Hole board food search task in rats: effects of hole depths and food deprivation. Vawter MP, et al. **Physiol Behav** 1989 May;45(5):891–5

In search of cellular mechanisms of memory. Matthies H. **Prog Neurobiol** 1989;32(4):277–349 (250 ref.)

Measures of memory and information processing in elderly volunteers. Aufdembrinke B, et al. **Psychopharmacol Ser** 1988;6:48–64

Models of memory: information processing. Eysenck MW. **Psychopharmacol Ser** 1988;6:3–11 (15 ref.)

Sleep and memory. Roth T, et al. **Psychopharmacol Ser** 1988; 6:140–5 (21 ref.)

Memory retrieval in noise and psychophysiological response in the young and old. Jennings JR, et al. **Psychophysiology** 1988 Nov;25(6):633–44

The temporal-hippocampal region and retention: the role of temporo-entorhinal connections in rats. Myhrer T, et al. **Scand J Psychol** 1989;30(1):72–80

Memory storage and neural systems. Alkon DL. **Sci Am** 1989 Jul;261(1):42–50

Dream recall after sleep interruption in brain-injured patients. Murri L, et al. **Sleep** 1985 Dec;8(4):356–62

Cognitive psychology and human memory. Baddeley A. **Trends Neurosci** 1988 Apr;11(4):176–81 (21 ref.)

Spatial learning and memory processes: the search for their neurobiological mechanisms in the rat. Barnes CA. **Trends Neurosci** 1988 Apr;11(4):163–9 (62 ref.)

Co-existence of galanin and acetylcholine: is galanin involved in memory processes and dementia? Crawley JN, et al. **Trends Neurosci** 1989 Aug;12(8):278–82 (46 ref.)

Cellular and molecular analysis of associative learning and memory in Hermissenda. Crow T. **Trends Neurosci** 1988 Apr;11(4):136–47 (48 ref.)

Olfactory cortex: model circuit for study of associative memory? Haberly LB, et al. **Trends Neurosci** 1989 Jul; 12(7):258–64 (55 ref.)

Memory: brain systems and behavior. Squire LR, et al. **Trends Neurosci** 1988 Apr;11(4):170–5 (59 ref.)

The making and shaking of memories. Izquierdo I. **Trends Pharmacol Sci** 1988 Mar;9(3):79–80 (9 ref.)

[The effect of aging on memory] Zhou YL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):329–31, 384 (Eng. Abstr.) **(Chi)**

[Memory facilitation by auditory stimulation during paradoxal sleep in man] Dujardin K, et al. **C R Acad Sci [III]** 1988;307(11):653–6 (Eng. Abstr.) **(Fre)**

[The concept of organic memory in T. Ribot's works] Gasser J. **Pubbl Stn Zool Napoli [II]** 1988;10(2):293–313 **(Fre)**

[Paradoxical fall in repetitive learning of a random series of digits] Imai S, et al. **Shinrigaku Kenkyu** 1988 Oct; 59(4):227–33 (Eng. Abstr.) **(Jpn)**

[Effects of test-expectancies and test-sequence orders on the recognition failure of recallable words] Maezawa K, et al. **Shinrigaku Kenkyu** 1988 Oct;59(4):234–40 (Eng. Abstr.) **(Jpn)**

[Establishing the theoretical and experimental principles of a simple medical neurolinguistic test] Pasternak R, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):756–9 (Eng. Abstr.) **(Pol)**

[Changes in the mnemonic functions of patients with tumors of the chiasm-sella area before and after surgical intervention and direct electrostimulation of the involved optic nerves] Nikol'skaia IM, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):364–70 **(Rus)**

[Problems of neurobiology and the development of memory] Vasilevskiĭ NN. **Zh Evol Biokhim Fiziol** 1988 May-Jun; 24(3):311–8 (17 ref.) **(Rus)**

[The role of cholinergic mechanisms in memory processes in experimental neurosis in dogs] Doronin AG, et al. **Zh Vysh Nerv Deiat** 1988 Nov-Dec;38(6):1138–44 (Eng. Abstr.) **(Rus)**

[Characteristics of the role of spatial memory in the choice reactions of white rats] Grigorian GE, et al. **Zh Vysh Nerv Deiat** 1989 Mar-Apr;39(2):259–66 (Eng. Abstr.) **(Rus)**

[The role of different neuromediator systems in regulating the reproduction of memory engrams in rats] Krauz VA, et al. **Zh Vysh Nerv Deiat** 1988 Nov-Dec;38(6):1107–12 (Eng. Abstr.) **(Rus)**

[Involvement of neural reinforcing substrates in learning and memory processes] Capdevila Ortís L, et al. **Arch Neurobiol (Madr)** 1988 Sep-Oct;51(5):269–77 (31 ref.) (Eng. Abstr.) **(Spa)**

MEMORY DISORDERS

Reporting seizures and blackouts [letter] Drucker F. **Am J Psychiatry** 1989 Oct;146(10):1354

Memory and aging. Proceedings of a symposium. Lausanne, Switzerland, 3–4 June 1988. **Arch Gerontol Geriatr Suppl** 1989;1:1–255

CHEMICALLY INDUCED

Neurobehavioural symptoms among workers occupationally exposed to toluene. Foo SC, et al. **Asia Pac J Public Health** 1988;2(3):192–7

Severe memory impairment with acute overdose lithium toxicity. A case report. Saxena S, et al. **Br J Psychiatry** 1988 Jun;152:853–4

AF64A-induced working memory impairment: behavioral, neurochemical and histological correlates. Chrobak JJ, et al. **Brain Res** 1988 Oct 25;463(1):107–17

Memory function—effects of different antihypertensive drugs. Richardson PJ, et al. **Drugs** 1988;35 Suppl 5:80–5 (20 ref.)

Exacerbation of aluminium encephalopathy after treatment with desferrioxamine. McCauley J, et al. **Nephrol Dial Transplant** 1989;4(2):110–4

Dose-dependent memory impairment in Parkinson's disease. Huber SJ, et al. **Neurology** 1989 Mar;39(3):438–40

Visual recognition memory deficits in methylmercury-exposed Macaca fascicularis infants. Gunderson VM, et al. **Neurotoxicol Teratol** 1988 Jul-Aug; 10(4):373–9

Effects of diazepam on recall memory: relationship to aging, dose, and duration of treatment. Pomara N, et al. **Psychopharmacol Bull** 1989;25(1):144–8

[Transient disorders of memory after a malaria attack. Caused by mefloquine? (letter)] Lapras J, et al. **Presse Med** 1989 Apr 15;18(15):776 **(Fre)**

COMPLICATIONS

The influence of problems with concentration and memory on emotional distress and daily activities in chronic pain patients. Jamison RN, et al. **Int J Psychiatry Med** 1988; 18(2):183–91

Grey mood: grey colours [letter] De Leo D, et al. **Lancet** 1989 Sep 2;2(8662):573–4

DIAGNOSIS

Methodology and statistical problems in the assessment of memory by rating scales. Fermanian J. **Arch Gerontol Geriatr Suppl** 1989;1:215–21

The Metamemory in Adulthood (MIA) questionnaire. Dixon RA, et al. **Psychopharmacol Bull** 1988;24(4):671–88

Memory Functioning Questionnaire (MFQ). Gilewski MJ, et al. **Psychopharmacol Bull** 1988;24(4):665–70

A computerized everyday memory battery for assessing treatment effects. Larrabee GJ, et al. **Psychopharmacol Bull** 1988;24(4):695–7

Assessment of memory complaints by rating scales and questionnaires. Zelinski EM, et al. **Psychopharmacol Bull** 1988;24(4):523–9 (43 ref.)

Diagnosis and treatment of normal and pathologic memory impairment in later life. Crook TH 3d. **Semin Neurol** 1989 Mar;9(1):20–30

[The memory clinic] Stähelin HB, et al. **Ther Umsch** 1989 Jan;46(1):72–7 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

AWD 52-39, an ergot derivative with potential nootropic activity. Hoffman W, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):56–7

Effects of idebenone on memory impairment induced in ischemic and embolization models of cerebrovascular disturbance in rats. Yamazaki N, et al. **Arch Gerontol Geriatr** 1989 May;8(3):213–24

Idebenone improves learning and memory impairment induced by cholinergic or serotonergic dysfunction in rats. Yamazaki N, et al. **Arch Gerontol Geriatr** 1989 May; 8(3):225–39

Clinical trials in memory disorders: objectives and methodology. Alperovitch A. **Arch Gerontol Geriatr Suppl** 1989;1:207–14

How to evaluate a drug efficacy at the behavioural level? Aquino JP, et al. **Arch Gerontol Geriatr Suppl** 1989;1:249–53

Drug development in age-related memory disorders. Guez D. **Arch Gerontol Geriatr Suppl** 1989;1:191–4 (4 ref.)

Inclusion and exclusion clinical criteria to form homogeneous groups of patients in the therapeutic trials of a memory enhancing drug. Piette F. **Arch Gerontol Geriatr Suppl** 1989; 1:195–200

A logical approach to the clinical assessment of cerebro-active drugs. Wertheimer J. **Arch Gerontol Geriatr Suppl** 1989;1:201–5

Intracerebral drug delivery in rats with lesion-induced memory deficits. Howard MA 3d, et al. **J Neurosurg** 1989 Jul;71(1):105–12

Assessment of desmopressin-enhanced cognitive function in a neurosurgical patient. Dons RF, et al. **Milit Med** 1989

Feb;154(2):83–5
Alzheimer's disease. Arresting memory decline [news] Robbins TW. **Nature** 1988 Nov 17;336(6196):207–8
Vasopressin and vasopressin analogues for treatment of memory disorders in clinical practice. Legros JJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S71–86 (75 ref.)
Assessment of drug effects in age-related memory disorders: clinical, theoretical, and psychometric considerations. Larrabee GJ, et al. **Psychopharmacol Bull** 1988;24(4):515–22 (82 ref.)
Vasopressin for ECT-induced memory impairment: a placebo-controlled comparison. Mattes JA, et al. **Psychopharmacol Bull** 1989;25(1):80–4
Benzodiazepine receptor ligands: tools for memory research in clinical pharmacology. Berenberg D, et al. **Psychopharmacol Ser** 1988;6:261–74 (41 ref.)
[Ameliorating effects of idebenone and indeloxazine hydrochloride on impairment of radial maze learning in cerebral embolized rats] Kiyota Y, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):197–202 (Eng. Abstr.) (Jpn)
[Use of preparations from the nootropic group for treating memory disorders in chronic alcoholism] Shabanov PD, et al. **Klin Med (Mosk)** 1988 Sep;66(9):114–6 (Eng. Abstr.) (Rus)
[Results of the use of dalargin electrophoresis to correct mental disorders in patients with hypertension grades I and II] Ezhov VA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):66–9 (Eng. Abstr.) (Rus)

ETIOLOGY

Patterns of verbal memory impairment in dementia. Alzheimer disease versus multinfarctual dementia. Parlato V, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):343–51
Corpus callosum surgery and recent memory. A review. Clark CR, et al. **Brain** 1989 Feb;112 (Pt 1):165–75 (34 ref.)
Memory dysfunction following unilateral transection of the fornix: a hippocampal disconnection syndrome. Tucker DM, et al. **Cortex** 1988 Sep;24(3):465–72
The role of individual difference in determining the nature of comprehension defects in aphasia. Varney NR, et al. **Cortex** 1989 Mar;25(1):47–55
Structural brain correlates of anterograde memory deficits in multiple sclerosis. Brainin M, et al. **J Neurol** 1988 Jul; 235(6):362–5
Lesions of the hippocampal formation but not lesions of the fornix or the mammillary nuclei produce long-lasting memory impairment in monkeys. Zola-Morgan S, et al. **J Neurosci** 1989 Mar;9(3):898–913
Memory impairment in amnesia and dementia: implications for the use of animal models. Mohs RC. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):465–8 (30 ref.)
Memory impairment in myasthenia gravis [letter] Riker WF. **Neurology** 1989 Apr;39(4):611–2
Interrelationship of brain edema, motor deficits, and memory impairment in rats exposed to focal ischemia. Tominaga T, et al. **Stroke** 1989 Apr;20(4):513–8
Failure to find residual memory deficits in monkeys after repeated HPNS. Overman WH, et al. **Undersea Biomed Res** 1989 Mar;16(2):115–27
[A study of memory disorder in patients with cerebral infarction] Xu SL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):212–5, 254–5 (Eng. Abstr.) (Chi)
[Memory impairment and its recovery in patients with intracranial hematoma after closed head injury] Yan XW. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):218–21, 255 (Eng. Abstr.) (Chi)
[Memory function after head injuries] Bjerke LG. **Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):684–6 (Eng. Abstr.) (Nor)
[The role of the endocrine system in memory disorders] Bidzan L. **Psychiatr Pol** 1988 Sep–Oct;22(5):363–8 (0 ref.) (Pol)
[The mechanisms of memory disorders at the stages in its acquisition and fixation] Sprints AM. **Fiziol Zh SSSR** 1988 Oct;74(10):1361–6 (Eng. Abstr.) (Rus)
[Neuropsychological symptoms in opticochiasmatic arachnoiditis] Nikol'skaia IM. **Zh Nevropatol Psikhiatr** 1989;89(2):73–7 (Eng. Abstr.) (Rus)

GENETICS

Spontaneous spongy degeneration of the brain stem in SAM-P/8 mice, a newly developed memory-deficient strain. Yagi H, et al. **J Neuropathol Exp Neurol** 1989 Sep; 48(5):577–90

METABOLISM

Neuropeptides: animal behaviour and human psychopathology. de Wied D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(5–6):323–31 (69 ref.)

NURSING

Only for the moment. Kutschke M. **Geriatr Nurs (New York)** 1988 Sep–Oct;9(5):296–7

PATHOLOGY

Memory processes and aging: a defect of automatic rather than controlled processes? Delbecq-Derouesné J, et al. **Arch Gerontol Geriatr Suppl** 1989;1:121–50

PHYSIOPATHOLOGY

Recall and recognition memory in patients with Alzheimer's and Parkinson's diseases. Helkala EL, et al. **Ann Neurol** 1988 Aug;24(2):214–7
Pharmacology of the memory process. Allain H, et al. **Arch Gerontol Geriatr Suppl** 1989;1:109–20 (31 ref.)
Memory complaints in the elderly: a study of 367 community-dwelling individuals from 50 to 80 years old. Derouesné C, et al. **Arch Gerontol Geriatr Suppl** 1989; 1:151–63
Experimental dissociation of memory systems in mice: behavioral and neurochemical aspects. Jaffard R, et al. **Arch Gerontol Geriatr Suppl** 1989;1:55–70 (28 ref.)
Comparative study of two types of cholinergic lesion in rats. Mayo W. **Arch Gerontol Geriatr Suppl** 1989;1:91–8 (28 ref.)
Psychometric procedures for analysis of memory losses in the elderly. Poitrenaud J, et al. **Arch Gerontol Geriatr Suppl** 1989;1:173–83
Noradrenergic–cholinergic interaction: its possible role in memory dysfunction associated with senile dementia. Sara SJ. **Arch Gerontol Geriatr Suppl** 1989;1:99–108 (39 ref.)
Transplantation of embryonic ventral forebrain grafts to the neocortex of rats with bilateral lesions of nucleus basalis magnocellularis ameliorates a lesion-induced deficit in spatial memory. Welner SA, et al. **Brain Res** 1988 Oct 25; 463(1):192–7
Age-related deterioration of ability of acquisition in memory and learning in senescence accelerated mouse: SAM-P/8 as an animal model of disturbances in recent memory. Yagi H, et al. **Brain Res** 1988 Nov 22;474(1):86–93
Experimental models of age-related memory dysfunction and neurodegeneration. Papers from a workshop. August 30–September 2, 1987, Baltimore, MD. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):443–780
Special behavioral paradigms in animals to study age-related changes in memory. Albert MS. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):507–9
Aging and the physiology of spatial memory. Barnes CA. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):563–8 (66 ref.)
Tetrahydroaminoacridine, 3,4 diaminopyridine and physostigmine: direct comparison of effects on memory in aged primates [published erratum appears in Neurobiol Aging 1989 Mar–Apr;10(2):225] Bartus RT, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):351–6
Preservation and loss of spatial memory in aged rats and humans: implications for the analysis of memory dysfunction in dementia. Beatty WW. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):557–61 (34 ref.)
Subpopulations, sites of interaction and therapy. Collier TJ. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):729–30
Age-dependent alterations in hippocampal synaptic plasticity: relation to memory disorders. deToledo-Morrell L, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):581–90 (88 ref.)
Spatial learning deficits in old rats: a model for memory decline in the aged. Gallagher M, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):549–56 (47 ref.)
Complex maze learning in rodents as a model of age-related memory impairment. Ingram DK. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):475–85 (64 ref.)
Hippocampal neurobiological mechanisms of age-related memory dysfunction. Landfield PW. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):571–9 (77 ref.)
Psychobiological modeling of age-related memory changes. Lister RG, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):505–6
Behavioral assessment of forgetting in aged rodents and its relationship to peripheral sympathetic function. Martinez JL Jr, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):697–708 (125 ref.)
Effects of aging on visual recognition memory in the rhesus monkey. Moss MB, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):495–502 (56 ref.)
Within-subjects, parametric manipulations to investigate aging. Olton DS, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):469–74 (24 ref.)
An animal model of human-type memory loss based on aging, lesion, forebrain ischemia, and drug studies with the rat. Ordy JM, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):667–83 (58 ref.)
Age-related cognitive impairments as assessed with an automated repeated measures memory task: implications for the possible role of acetylcholine and norepinephrine in memory dysfunction. Pontecorvo MJ, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):617–25 (80 ref.)
Age-related disruption of classical conditioning: a model systems approach to memory disorders. Solomon PR, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):535–46 (77 ref.)
Sleep and memory relationships in intact old and amnestic young rats. Stone WS, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):719–27 (74 ref.)
Classical conditioning: the Rosetta stone for brain substrates of age-related deficits in learning and memory. Thompson RF. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):547–8
The neural basis of memory decline in aged monkeys. Walker LC, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):657–66 (112 ref.)
A neuropsychological analysis of memory loss with age. Winocur G. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):487–94 (53 ref.)
Limited neocortical devascularizing lesions causing deficits in memory retention and choline acetyltransferase activity—effects of the monosialoganglioside GM1. Elliott PJ, et al. **Neuroscience** 1989;31(1):63–76
A model systems approach to age-related memory disorders. Solomon PR, et al. **Neurotoxicology** 1988 Fall;9(3):443–61 (94 ref.)
Age-associated memory impairment: diagnostic criteria and treatment strategies. Crook T, et al. **Psychopharmacol Bull** 1988;24(4):509–14 (49 ref.)
[Mechanisms of occurrence of dissociated cerebral states] Arkhipov VI, et al. **Usp Fiziol Nauk** 1989 Apr–Jun; 20(2):63–74 (68 ref.) (Rus)

PSYCHOLOGY

Memory impairment in patients with progressive supranuclear palsy. Litvan I, et al. **Arch Neurol** 1989 Jul; 46(7):765–7
Cholinergic 'blockade' as a model for cholinergic depletion. A comparison of the memory deficits with those of Alzheimer-type dementia and the alcoholic Korsakoff syndrome. Kopelman MD, et al. **Brain** 1988 Oct;111 (Pt 5):1079–110
The role of selective attention in the visuo-spatial memory of patients suffering from dementia of the Alzheimer type. Stuart-Hamilton IA, et al. **Compr Gerontol [B]** 1988 Dec; 2(3):129–34
A new scale for the assessment of functional status in Alzheimer's disease and related disorders. Loewenstein DA, et al. **J Gerontol** 1989 Jul;44(4):P114–21
Behavioral characteristics in mice with brain lesions induced by hypertonic saline. Takeshita M, et al. **Jikken Dobutsu** 1988 Oct;37(4):405–12
Neurologic fragments. II. Remarks on anosognosia, confabulation, memory, and other topics; and an appendix on self-observation. Fisher CM. **Neurology** 1989 Jan; 39(1):127–32

REHABILITATION

Memory training programs as a reference to the clinical evaluation of drugs in memory disorders. Israël L. **Arch Gerontol Geriatr Suppl** 1989;1:223–30 (15 ref.)
Techniques for cognitive training of memory in age-associated memory impairment. Yesavage JA. **Arch Gerontol Geriatr Suppl** 1989;1:185–90

THERAPY

The effectiveness of an electronic memory aid for a memory-impaired adult of normal intelligence. Giles GM, et al. **Am J Occup Ther** 1989 Jun;43(6):409–11
Reduction of post-ECT memory complaints through brief, partial restricted environmental stimulation (REST). Suedfeld P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):693–700
Is treating memory impairment in Alzheimer's disease an objective? [letter] Jansen KL. **Trends Neurosci** 1988 May; 11(5):210–2

MEMORY FOR DESIGNS TEST see **NEUROPSYCHOLOGICAL TESTS**

MEMORY, IMMEDIATE see **MEMORY, SHORT-TERM**

MEMORY, PHOTOGRAPHIC see **EIDETIC IMAGERY**

MEMORY, SHORT-TERM

Short-term memory constraints upon the generation of diagnosis hypotheses by novice clinicians. Niebuhr BR, et al. **Acad Med** 1989 Sep;64(9):550–1
Issues of representation and limited capacity in the visuospatial sketchpad. Frick RW. **Br J Psychol** 1988 Aug; 79 (Pt 3):289–308 (50 ref.)
Immediate memory functions in reading disability subtypes. Wood KM, et al. **Brain Lang** 1989 Feb;36(2):181–92
The development of working memory in normally achieving and subtypes of learning disabled children. Siegel LS, et al. **Child Dev** 1989 Aug;60(4):973–80
Age differences in adults' scene memory: knowledge and strategy interactions. Azmitia M, et al. **Compr Gerontol [B]** 1988 Aug;2(2):75–84
Hemispheric asymmetry in tactile forgetting induced by tactually-guided movement. Sullivan EV. **Cortex** 1989 Mar;25(1):83–92
Ontogenetic differences in short-term retention of Pavlovian conditioning. Miller JS, et al. **Dev Psychobiol** 1989 May; 22(4):377–87
Evidence of echoic memory with a multichannel cochlear prosthesis. Jerger S, et al. **Ear Hear** 1988 Oct;9(5):231–6
Multiple resources for processing and storage in short-term working memory. Klapp ST, et al. **Hum Factors** 1988 Oct; 30(5):617–32
Short-term serial recall in ADDH, normal, and reading-disabled boys. Benezra E, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):511–25
Age-related differences in short-term retention of separable

elements of an odor aversion. Miller JS, et al. **J Exp Psychol [Anim Behav]** 1989 Jul;15(3):194–201

Two forms of persistence in visual information processing. Di Lollo V, et al. **J Exp Psychol [Hum Percept]** 1988 Nov; 14(4):671–81

Immediate serial recall of mixed-modality lists. Greene RL. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):266–74

Illusory conjunctions of forms, objects, and scenes during rapid serial visual search. Intraub H. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):98–109

Age and decision strategies in running memory for speech: effects of prosody and linguistic structure. Wingfield A, et al. **J Gerontol** 1989 Jul;44(4):P106–13

Effects of anxiety on inferential reasoning task performance. Darke S. **J Pers Soc Psychol** 1988 Sep;55(3):499–505

Memory scanning speed in language-disordered children. Sininger YS, et al. **J Speech Hear Res** 1989 Jun;32(2):289–97

Effect of starting position on reproduction of movement: further evidence of interference between location and distance information. Imanaka K. **Percept Mot Skills** 1989 Apr;68(2):423–34

Immediate memory spans in dementia. Orsini A, et al. **Percept Mot Skills** 1988 Aug;67(1):267–72

Stimulus miscuing, electrodermal activity, and the allocation of processing resources. Packer JS, et al. **Psychophysiology** 1989 Mar;26(2):192–200

Impairment in processing meaningless verbal material in several modalities: the relationship between short-term memory and phonological skills. Bisiacchi PS, et al. **Q J Exp Psychol [A]** 1989 May;41(2):293–319

An attempt to improve auditory short-term memory in Down's syndrome individuals through reducing distractions. Marcell MM, et al. **Res Dev Disabil** 1988; 9(4):405–17

[Effects of mild iron-deficiency anemia on children's short-term memory and intelligence quotient] Han L. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Sep;22(5):290–2 (Eng. Abstr.) (Chi)

[Disorders of short-term memory, a necessary category in the multiaxial classification scheme?] Werner GM, et al. **Z Kinder Jugendpsychiatr** 1988 Jun;16(2):74–9 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Beta-blockers, mood and behaviour. **Drug Ther Bull** 1988 Sep 19;26(19):76

The effects of alcohol on psychological functions in normal volunteers after 8 days' treatment with pipequaline (PK 8165), diazepam or placebo. Eves FF, et al. **Eur J Clin Pharmacol** 1989;36(1):47–52

A long-acting cholinesterase inhibitor reverses spatial memory deficits in mice. Sweeney JE, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):141–7

[Effect of work in coke-processing plants on the efficiency of selected cognitive processes] Urbaniec W, et al. **Med Pr** 1989;40(1):44–8 (Eng. Abstr.) (Pol)

[The mechanisms of memory disorders at the stages in its acquisition and fixation] Sprints AM. **Fiziol Zh SSSR** 1988 Oct;74(10):1361–6 (Eng. Abstr.) (Rus)

[The effect of general anesthesia on memory in experimental animals] Mamchur VI, et al. **Zh Vysh Nerv Deiat** 1989 Jan–Feb;39(1):52–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Response of cortical and subcortical brain blood flow to memory activation. Mubrin Z. **Acta Med Iugosl** 1988; 42(4):241–59

Semantic activation and implicit memory in Alzheimer disease. Brandt J, et al. **Alzheimer Dis Assoc Disord** 1988; 2(2):112–9

Early-life undernutrition impairs the development of the learning and short-term memory processes mediating performance in a conditional-spatial discrimination task. Castro CA, et al. **Behav Brain Res** 1989 Apr 1;32(3):255–64

Properties of human visual memory for block patterns. Inui T. **Biol Cybern** 1988;59(3):179–87

Prefrontal representation of stimulus attributes during delay tasks. I. Unit activity in cross-temporal integration of sensory and sensory-motor information. Quintana J, et al. **Brain Res** 1988 Dec 6;474(2):211–21

Aetiological variation in the amnesic syndrome: comparisons using the Brown–Peterson task. Leng NR, et al. **Cortex** 1989 Jun;25(2):251–9

Interactions of epileptiform EEG discharges and cognition. Binnie CD, et al. **Epilepsy Res** 1987 Jul;1(4):239–45

The role of short-term visuo-spatial memory in control of rapid multi-joint prehensive movements. Kohler J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):189–95

Single unit activity in the auditory cortex of a monkey performing a short term memory task. Gottlieb Y, et al. **Exp Brain Res** 1989;74(1):139–48

Unit activity in monkey parietal cortex related to haptic perception and temporary memory. Koch KW, et al. **Exp Brain Res** 1989;76(2):292–306

Daytime napping and its effects on alertness and short-term memory performance in shiftworkers. Härmä M, et al. **Int Arch Occup Environ Health** 1989;61(5):341–5

The effect of internal visualization on digit span performance. Brooks DA, et al. **Int J Neurosci** 1988 Dec;43(3–4):145–7

Impaired sympathetic nervous system response to cognitive effort in early Alzheimer's disease. Borson S, et al. **J Gerontol** 1989 Jan;44(1):M8–12

Age differences in processing expository and narrative text. Tun PA. **J Gerontol** 1989 Jan;44(1):P9–15

Molecular approaches to learning and memory. Tsukada Y. **Jpn J Physiol** 1988;38(2):115–32 (69 ref.)

Memory and noise immunity in the recognition of emotional state by voice in patients with local lesions of the brain. Tarkhan AU. **Neurosci Behav Physiol** 1989 Mar–Apr; 19(2):129–34

Delay-dependent short-term memory deficits in aged rats. Dunnett SB, et al. **Psychopharmacology (Berlin)** 1988; 96(2):174–80

[How do we remember when and where?] Murata K, et al. **Shinrigaku Kenkyu** 1988 Oct;59(4):248–51 (Eng. Abstr.) (Jpn)

[Features of the spatial organization of the bioelectric activity of the brain in children with varying amounts of short-term memory] Artemenko OI. **Fiziol Cheloveka** 1988 Sep–Oct; 14(5):868–71 (Rus)

[Autonomic reactions in the mnemonic activity of subjects at various levels of functional mobility of neural processes] Makarenko NV, et al. **Fiziol Cheloveka** 1988 May–Jun; 14(3):355–63 (Rus)

[Neuropsychological symptoms in opticochiasmatic arachnoiditis] Nikol'skaia IM. **Zh Nevropatol Psikhiatr** 1989;89(2):73–7 (Eng. Abstr.) (Rus)

MEN

Weight control in the workplace: a needs assessment for men. Reid DJ, et al. **Can J Public Health** 1989 Jan–Feb; 80(1):24–7

Title X and family planning services for men. Danielson R, et al. **Fam Plann Perspect** 1988 Sep–Oct;20(5):234–7

Salary, education, and managerial-level differences of physical therapists in Maryland. Baker CL, et al. **Phys Ther** 1989 Jan;69(1):27–31

[Mammography from the male viewpoint: " a nuisance, waste of personnel, inconclusive"?] Elmér W. **Lakartidningen** 1988 Nov 23;85(47):4057 (Swe)

PSYCHOLOGY

Aristotle's remarks on old men. Howell TH. **Age Ageing** 1988 Sep;17(5):352–3

Dyadic adjustment/sexual satisfaction in women and men as a function of psychological sex role self-perception. Rosenzweig JM, et al. **J Sex Marital Ther** 1989 Spring; 15(1):42–56

MEN I see **NEOPLASMS, MULTIPLE ENDOCRINE**

MEN II see **NEOPLASMS, MULTIPLE ENDOCRINE**

MEN III see **NEOPLASMS, MULTIPLE ENDOCRINE**

MENADIONE see **VITAMIN K**

MENADIONE REDUCTASES see **QUINONE REDUCTASES**

MENAQUINONE see **VITAMIN K**

MENAQUINONE REDUCTASES see **QUINONE REDUCTASES**

MENARCHE

Torsion of normal uterine adnexa before menarche: CT appearance. Bellah RD, et al. **AJR** 1989 Jan;152(1):123–4

Combined effect of childbearing, menstrual events, and body size on age-specific breast cancer risk. Kampert JB, et al. **Am J Epidemiol** 1988 Nov;128(5):962–79

Uterine development and endocrine relationships after menarche. Porcu E, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):174–7

Age at menarche in relation to adult body size and physique. Sharma K, et al. **Ann Hum Biol** 1988 Nov–Dec;15(6):431–4

Seasonal variation of menarche in Sri Lanka. Balasuriya S, et al. **Ceylon Med J** 1988 Sep;33(3):105–9

Menarche in African secondary school girls in Kenya. Rogo KO, et al. **East Afr Med J** 1987 Aug;64(8):511–5

Menarche in African girls in some post-secondary institutions in Kenya. Rogo KO, et al. **East Afr Med J** 1987 Nov; 64(11):745–50

Menarche, menopause and reproduction in the Kipsigis of Kenya. Borgerhoff Mulder M. **J Biosoc Sci** 1989 Apr; 21(2):179–92

The time lag between menarche and marriage as a risk factor for cervical dysplasia [letter] Indira C, et al. **J Clin Epidemiol** 1989;42(9):925–8

Menarche in athletes: the influence of genetics and prepubertal training. Stager JM, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):369–73

[Ovarian function and ovulation inhibition after menarche] Borsos A, et al. **Orv Hetil** 1988 Jun 19;129(25):1313–6 (36 ref.) (Eng. Abstr.) (Hun)

[A prediction of age of menarche from adolescent growth pattern] Yoneyama K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):887–94 (Eng. Abstr.) (Jpn)

[The course and outcome of pregnancy in adolescence in relation to chronologic and gynecologic age] Mikulandra F, et al. **Jugosl Ginekol Perinatol** 1989 Jan–Apr; 29(1–2):19–23 (Eng. Abstr.) (Scr)

[Menarche in schoolgirls in Novi Sad] Vuković D, et al. **Med Pregl** 1989;42(1–2):69–70 (Eng. Abstr.) (Scr)

[Post-menarchal increase in height in young girls in a rural population of central Mexico] Cravioto J, et al. **Rev Invest Clin** 1988 Jul–Sep;40(3):223–30 (Eng. Abstr.) (Spa)

ETHNOLOGY

[Maturation in Czech girls] Prokopec M, et al. **Cesk Pediatr** 1988 Nov;43(11):690–1 (Cze)

[Menarche in schoolgirls in the city of Bissau] Ulić D. **Med Pregl** 1988;41(1–2):31–3 (Eng. Abstr.) (Scr)

PHYSIOLOGY

Age at menarche and postmenarcheal growth in rural Bangladeshi females. Riley AP, et al. **Ann Hum Biol** 1989 Jul–Aug;16(4):347–59

Effects of early maturation on fetal growth. Scholl TO, et al. **Ann Hum Biol** 1989 Jul–Aug;16(4):335–45

Weight and age at menarche. Stark O, et al. **Arch Dis Child** 1989 Mar;64(3):383–7

Examination of the critical weight–menarche hypothesis in a comparative study of weights and heights of menarcheal and premenarcheal Nigerian school girls years 12 to 15. Fakeye O. **East Afr Med J** 1988 Oct;65(10):686–91

Measured and predicted total body water in premenarcheal athletes and nonathletes. Plowman SA, et al. **Hum Biol** 1988 Oct;60(5):725–37

Ovarian function after the menarche and hormonal contraception. Borsos A, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):249–53

The timing of menarche in juvenile rheumatoid arthritis. Fraser PA, et al. **J Adolesc Health Care** 1988 Nov; 9(6):483–7

Exercise induced delayed menarche and amenorrhoea. Salvi V, et al. **J Postgrad Med** 1988 Oct;34(4):211–5

Relationship between menarcheal age and adult height. Shangold MM, et al. **South Med J** 1989 Apr;82(4):443–5

[Menarche, menstrual cycle and fertility in diabetic patients] Burkart W, et al. **Geburtshilfe Frauenheilkd** 1989 Feb; 49(2):149–54 (Eng. Abstr.) (Ger)

[Homeorrhesis in menarche] Ramos-Rodríguez RM. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):823–30 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Black adolescents' emotional response to menarche. Scott CS, et al. **J Natl Med Assoc** 1989 Mar;81(3):285–90 (27 ref.)

The perimenarche syndrome (a proposal). Ushijima S, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):209–16

MENGO VIRUS

GENETICS

Cloning and synthesis of infectious cardiovirus RNAs containing short, discrete poly(C) tracts. Duke GM, et al. **J Virol** 1989 Apr;63(4):1822–6

METABOLISM

Mengo virus maturation is accompanied by C-terminal modification of capsid protein VP1. Boege U, et al. **Virology** 1989 Feb;168(2):409–12

MENIERE'S DISEASE

Lermoyez's syndrome. A follow-up study in 12 patients. Schmidt PH, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):467–73

COMPLICATIONS

Low frequency air-bone gap in Menière's disease without middle ear pathology. A preliminary report. Muchnik C, et al. **Am J Otol** 1989 Jan;10(1):1–4

Conservative management of Tumarkin's otolithic crisis. Janzen VD, et al. **J Otolaryngol** 1988 Dec;17(7):359–61

DIAGNOSIS

Differential diagnosis of vertigo—combined galvanic test and MRI. Sekitani T. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:113–9

Influence of pressure loading to the external auditory canal on standing posture in normal and pathological subjects. Watanabe I, et al. **Adv Otorhinolaryngol** 1988;42:72–6

[The status of galvanic assessment of equilibrium] Brackmann T, et al. **HNO** 1989 Apr;37(4):174–8 (Eng. Abstr.) (Ger)

[Possibilities for quantifying vestibular vertigo] Hamann KF. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):457–9 (Eng. Abstr.) (Ger)

[The value of craniometric data in the diagnosis of Menière's disease] Shvartsman NA. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):73 (Rus)

DRUG THERAPY

Evaluation of flunarizine in patients with Menière's disease. Subjective and vestibular findings. Haid T. **Acta Otolaryngol Suppl (Stockh)** 1988;460:149–53

Middle ear ototoxic treatment for inner ear disease. Odkvist LM. **Acta Otolaryngol Suppl (Stockh)** 1989;457:83–6
Drop attacks in Menière's disease. Odkvist LM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:82–5
Pharmacological treatment of vertigo. Pyykkö I, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:77–81 (24 ref.)
Results of conservative treatment of Ménière's disease and prediction of the therapeutic effect by Hayashi's quantification method. Akagi H, et al. **Adv Otorhinolaryngol** 1988;42:265–8
Long-term effect of acetazolamide and chlorthalidone on the hearing loss of Menière's disease. Corvera J, et al. **Am J Otol** 1989 Mar;10(2):142–5
Clinical evaluation of medical treatment for Menière's disease, using a double-blind controlled study. Mizukoshi K, et al. **Am J Otol** 1988 Sep;9(5):418–22
Vestibular and audiologic functions in gentamicin-treated Menière's disease. Möller C, et al. **Am J Otol** 1988 Sep; 9(5):383–91
Transtympanic administration of aminoglycosides in patients with Menière's disease. Sala T. **Arch Otorhinolaryngol** 1988; 245(5):293–6
Intratympanic gentamycin therapy for Menière's disease placed by tubal catheter with systemic isosorbide. Yamazaki T, et al. **Arch Otorhinolaryngol** 1988;245(3):170–4
Streptomycin in Menière's disease: a case requiring multiple treatments. Glasscock ME 3d, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):237–41
[Menière's disease treated with traditional Chinese medicine combined with Western medicine] Tang DJ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):475–6, 453 (Eng. Abstr.) **(Chi)**
[Treatment of Menière's disease] Lehnhardt E, et al. **Dtsch Med Wochenschr** 1989 Jun 30;114(26):1050 **(Ger)**
[Principles of conservative therapy of peripheral and central disorders of equilibrium] Ehrenberger K. **HNO** 1988 Aug; 36(8):301–4 (18 ref.) (Eng. Abstr.) **(Ger)**
[Therapy of facial paralysis in herpes zoster oticus with acyclovir] Schrader B, et al. **Laryngorhinootologie** 1989 Mar;68(3):141–3 (Eng. Abstr.) **(Ger)**
[Menière's disease] Abyzov RA, et al. **Vrach Delo** 1988 Dec; (12):77–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Delayed endolymphatic hydrops syndrome after heavy exposure to impulse noise. Ylikoski J. **Am J Otol** 1988 Jul; 9(4):282–5
Electrocochleographic changes in endolymphatic hydrops induced by type II collagen immunization through the stylomastoid foramen. Ohashi T, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):556–62
Acoustic trauma-induced Meniere's syndrome. Roitman R, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(4):246–50 (14 ref.)
[Lermoyez syndrome. Clinical aspects and follow-up] Kempf HG, et al. **HNO** 1989 Jul;37(7):276–80 (Eng. Abstr.) **(Ger)**
[Expert assessment of Menière's disease] Stoll W. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):465–8 (Eng. Abstr.) **(Ger)**
[Unilateral vestibular failure. Causes, diagnosis, therapy] Schöder HJ. **Z Arztl Fortbild (Jena)** 1989;83(5):263–6 **(Ger)**

HISTORY

[The medical history of vertigo from Hippocrates to the modern interpretation of Menière's disease] Celestino D, et al. **Acta Otorhinolaryngol Ital** 1985;5 Suppl 5:5–30 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Immune status in patients with Menière's disease. Evans KL, et al. **Arch Otorhinolaryngol** 1988;245(5):287–92

METABOLISM

Electrochemical composition of the cochlear fluids in the early experimental hydrops. Preliminary results. Sziklai I, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):371–4
Immunohistochemical analysis of the lateral wall of the endolymphatic sac in Ménière's patients. Futaki T, et al. **Adv Otorhinolaryngol** 1988;42:129–34
C3 and C1q complement deposits in the membranous labyrinth of patients with Ménière's disease. Häusler R, et al. **Adv Otorhinolaryngol** 1988;42:116–22

PATHOLOGY

Morphometric analysis of the human endolymphatic sac. Galey FR, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 459:1–46
The incidence of fibrosis in the vestibular ganglia in Menière's disease. Quijano ML, et al. **Arch Otorhinolaryngol** 1988; 245(3):133–5

PHYSIOPATHOLOGY

Cochlear blood flow in endolymphatic hydrops. Larsen HC, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):404–8
Imbalanced calcium homeostasis and endolymphatic hydrops. Meyer zum Gottesberge AM. **Acta Otolaryngol Suppl (Stockh)** 1988;460:18–27 (35 ref.)
The examination of body sway in normal subjects and patients with Ménière's disease or cerebellar dysfunction. Ishizaki H, et al. **Adv Otorhinolaryngol** 1988;41:166–72
Visual modulatory influences of vestibulo-ocular reflex in patients with vertigo. Mizukoshi K, et al. **Adv Otorhinolaryngol** 1988;41:63–70
Long-term progression of Menière's disease. Stahle J, et al. **Am J Otol** 1989 May;10(3):170–3
Vestibulospinal findings in two syndromes with spontaneous vertigo attacks. Norré ME, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):191–5
Detection of temporal gaps in sinusoids by normally hearing and hearing-impaired subjects. Moore BC, et al. **J Acoust Soc Am** 1989 Mar;85(3):1266–75
Menière's disease: review and update. Brass L, et al. **J La State Med Soc** 1988 Jul;140(7):11–6 (24 ref.)
Clinical significance of SP/AP ratio in inner ear diseases. Ohashi T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(4):235–45
Comparison of tympanic membrane to promontory electrode recordings of electrocochleographic responses in patients with Menière's disease. Ruth RA, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):546–52
Change in the summating potential and action potential during the fluctuation of hearing in Ménière's disease. Asai H, et al. **Scand Audiol** 1989;18(1):13–7
The relationship of SP and AP findings to hearing level in Menière's disease. Mori N, et al. **Scand Audiol** 1988; 17(4):237–40
[The effect of the upper cervical spine on hearing ability] Hülse M, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):501–5 (Eng. Abstr.) **(Ger)**
[Gellé test in patients of Menière's disease and fluctuating low tone hearing loss] Kawase T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan;92(1):28–36 (Eng. Abstr.) **(Jpn)**
[Directional preponderance in Ménière's disease] Kaźmierczak H. **Otolaryngol Pol** 1988;42(1–2):80–5 (Eng. Abstr.) **(Pol)**
[Spectrum analysis of vestibular nystagmus] Telezhnikov AV, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):18–23 (Eng. Abstr.) **(Rus)**
[Status of the microcirculatory bed of the bulbar conjunctiva in various forms of vestibular dysfunction] Aleksandrov IuG, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):11–5 (Eng. Abstr.) **(Rus)**
[Equilibrium function in Menière's disease] Luchikhin LA. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):3–7 (Eng. Abstr.) **(Rus)**
[Electronystagmographic characteristics of peripheral vestibular asymmetries in compensation development stage II] Skliut IA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr; (2):6–9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Living with Ménière disease: an occupational therapist's perspective. Farber SD. **Am J Occup Ther** 1989 May; 43(5):341–3
Psychologic evolution of patients with Menière's disease in relation to therapy. Filipo R, et al. **Am J Otol** 1988 Jul; 9(4):306–9
Depersonalization, vertigo and Ménière's disease. Grigsby JP, et al. **Psychol Rep** 1989 Apr;64(2):527–34
[A study of predispositions of vertiginous patients—estimation by the Yatabe-Guilford Personality Test] Yokoyama H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1847–56 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

The vestibular aqueduct in clinical radiography. Wilbrand HF. **Scand Audiol Suppl** 1988;30:149–51
[Clinical investigation on pneumatization of the temporal bone. 3. Comparison of the size of the mastoid air cell system of patients with Menière's disease and normals] Yachiyama H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov; 91(11):1928–32 (Eng. Abstr.) **(Jpn)**

REHABILITATION

[Rehabilitation of patients with vestibular disorders] Hamann KF. **HNO** 1988 Aug;36(8):305–7 (12 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Surgical treatment of vertigo. Bagger-Sjöbäck D. **Acta Otolaryngol Suppl (Stockh)** 1988;455:86–9 (21 ref.)
Endolymphatic sac surgery. Bretlau P. **Acta Otolaryngol Suppl (Stockh)** 1988;449:13–4
Vestibular neurectomy. Palva T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:19–20
Cochleosacculotomy for Ménière's disease. Huang TS, et al. **Adv Otorhinolaryngol** 1988;42:275–9
Intramastoid drainage surgery for Ménière's disease—critical analysis of variation of surgical results for Ménière's disease. Kitahara M, et al. **Adv Otorhinolaryngol** 1988; 42:269–74
Vein graft drainage of the endolymphatic sac in patients with Menière's disease. A preliminary report. Futaki T, et al. **Am J Otol** 1988 Nov;9(6):476–80
The subarachnoid shunt for Menière's disease: sixteen years' experience. Gardner G, et al. **Am J Otol** 1988 May; 9(3):177–83
What I think of sac surgery in 1989. Glasscock ME 3d, et al. **Am J Otol** 1989 May;10(3):230–3
Endolymphatic sac surgery: methods of study and results. Monsell EM, et al. **Am J Otol** 1988 Sep;9(5):396–402
Endolymphatic sac revision for recurrent Menière's disease. Paparella MM, et al. **Am J Otol** 1988 Nov;9(6):441–7
Perfusion of the inner ear with streptomycin. Shea JJ. **Am J Otol** 1989 Mar;10(2):150–5
Combined retrolab-retrosigmoid vestibular neurectomy. An evolution in approach. Silverstein H, et al. **Am J Otol** 1989 May;10(3):166–9
Cryosurgical treatment of endolymphatic hydrops. Horowitz M, et al. **J Laryngol Otol** 1989 May;103(5):481–4 (33 ref.)
Persisting nystagmus following vestibular nerve section for Menière's disease. Shotton JC, et al. **J Laryngol Otol** 1989 Mar;103(3):263–8
Prognostic factors in labyrinthectomy. Willatt DJ, et al. **J Laryngol Otol** 1988 Sep;102(9):785–7
Selective vestibular neurectomy through the posterior fossa in Ménière's disease. Dufour JJ, et al. **J Otolaryngol** 1988 Oct;17(6):311–4
Prevention of vertigo in Ménière's syndrome by means of transtympanic ventilation tubes. Montandon P, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):377–81
Long-term hearing results following middle fossa vestibular nerve section. Glasscock ME 3d, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):35–40
Results of surgical treatment for Menière's disease. Jennings RP, et al. **Otolaryngol Head Neck Surg** 1989 Mar; 100(3):195–9
Natural history vs. surgery for Menière's disease. Silverstein H, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):6–16
[Surgical indications in Ménière's disease: value of electrocochleography] Dauman R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):249–50 (Eng. Abstr.) **(Fre)**
[Surgical interventions for ameliorating of equilibrium disorders refractory to conservative therapy] Haid T. **HNO** 1988 Aug;36(8):308–14 (35 ref.) (Eng. Abstr.) **(Ger)**
[Therapeutic success following endolymphatic sac surgery—postoperative course of vestibular compensation] Westhofen M, et al. **HNO** 1988 Aug;36(8):315–7 (Eng. Abstr.) **(Ger)**
[Surgical and physical therapy treatment of benign paroxysmal positional vertigo] Häusler R, et al. **Laryngorhinootologie** 1989 Jun;68(6):349–54 (Eng. Abstr.) **(Ger)**
[Trans-cochlear neurectomy of the vestibular part of the cochlear nerve] Latkowski B. **Otolaryngol Pol** 1988; 42(3):145–50 (Eng. Abstr.) **(Pol)**

THERAPY

Ultrasonic treatment of Menière's disease. Stahle J. **Acta Otolaryngol Suppl (Stockh)** 1988;449:11–2
Hearing in patients with Ménière's disease after exposure to low ambient pressure and after ingestion of glycerol and urea. Larsen HC, et al. **Adv Otorhinolaryngol** 1988;42:144–7
A medical management for Menière's disease. **Am J Otol** 1988 Jul;9(4):340–3
A medical management for Menière's disease [letter] Cohen NL, et al. **Am J Otol** 1989 Jan;10(1):78
Cochlear dialysis for Menière's disease. An update. Morris AW, et al. **Am J Otol** 1989 Mar;10(2):148–9
Conservative treatment of tinnitus in Menière's disease. Vernon J. **Am J Otol** 1988 May;9(3):201–2
[Compensation in peripheral vestibular disorders] Pichanič M, et al. **Cesk Otolaryngol** 1988 Jul;37(4):243–8 (Eng. Abstr.) **(Slo)**

MENINGEAL ARTERIES

[Preoperative selective embolization of intracranial meningiomas] Marchel A, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):335–9 (Eng. Abstr.) **(Pol)**

ABNORMALITIES

[An abnormal origin of the ophthalmic artery arising from the middle meningeal artery] Konishi M, et al. **Kaibogaku Zasshi** 1988 Apr;63(2):70–7 (25 ref.) (Eng. Abstr.) **(Jpn)**
[Partially thrombosed radiculomeningeal arterio-venous fistula in spinomedullary junction] Oda Y, et al. **No Shinkei Geka** 1989 Jan;17(1):63–8 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Accessory meningeal artery: an anatomic misnomer. Vitek JJ. **AJNR** 1989 May–Jun;10(3):569–73
[Mesoscopic anatomy of the arterial supply of meningeal origin to Gasser's ganglion] de Montes Meana C, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):27–30 (Eng. Abstr.) **(Fre)**

INJURIES

[Traumatic rupture of an aneurysm of the middle meningeal artery] Saribekian AS, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):49–50 **(Rus)**

INNERVATION

Neuronal pathways to the rat middle meningeal artery revealed by retrograde tracing and immunocytochemistry. Uddman R, et al. **J Auton Nerv Syst** 1989 Feb;26(1):69–75

MENINGEAL NEOPLASMS

Multiple cutaneous plexiform schwannomas with tumors of the central nervous system [letter] Rongioletti F, et al. **Arch Dermatol** 1989 Mar;125(3):431–2

The significance of an isolated central nervous system relapse, occurring as first relapse in children with acute lymphoblastic leukemia. Behrendt H, et al. **Cancer** 1989 May 15;63(10):2066–72

Meningioma, astrocytoma and germinoma: case presentations of three intracranial tumors. Hodges K. **J Neurosci Nurs** 1989 Apr;21(2):113–21

Meningioangiomatosis in a patient without von Recklinghausen's disease. Case report. Ogilvy CS, et al. **J Neurosurg** 1989 Mar;70(3):483–5

[Clinical analysis of 134 cases of central nervous system leukemia] Song YX, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):99–102, 127 (Eng. Abstr.) (Chi)

[Intracranial localization of Hodgkin's disease. Apropos of 2 cases] Constans JP, et al. **Bull Cancer (Paris)** 1989; 76(3):301–10 (31 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Ganglioside composition in human meningiomas. Davidsson P, et al. **J Neurochem** 1989 Sep;53(3):705–9

Some differences in steroid receptors between meningeal and neuroepithelial tumors. Sica G, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):71–5

Hormone dependency of meningiomas [letter] **Lancet** 1989 Jun 17;1(8651):1381–2

Immunocytochemical evidence of progesterone receptors in human meningiomas. Waelti ER, et al. **Surg Neurol** 1989 Mar;31(3):172–6

[Detection of cytokeratin in cells of the arachnoid and in meningiomas] Terpe HJ, et al. **Zentralbl Allg Pathol** 1988; 134(3):259–64 (Eng. Abstr.) (Ger)

[Assessment of the estrogen and progesterone receptor status of meningiomas. A preliminary study of 10 cases] Oddi G, et al. **Minerva Med** 1989 May;80(5):487–90 (Eng. Abstr.) (Ita)

BLOOD

Red blood cell polyamines in brain tumour patients. von Essen C, et al. **Acta Neurochir (Wien)** 1989;98(1–2):70–6

[Changes in blood coagulation and fibrinolysis in brain tumors] Hindersin P, et al. **Nervenarzt** 1989 Mar;60(3):154–8 (Ger)

BLOOD SUPPLY

Feeding arteries of parasellar meningiomas—angiographic study of medial sphenoid ridge and tuberculum sellae meningiomas. Yamaki T, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):553–8

[Preoperative selective embolization of intracranial meningiomas] Marchel A, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):335–9 (Eng. Abstr.) (Pol)

CEREBROSPINAL FLUID

Immunocytochemical identification of meningeal leukemia and lymphoma: poly-L-lysine-coated slides permit multimarker analysis even with minute cerebrospinal fluid cell specimens. Kranz BR, et al. **Blood** 1989 May 15; 73(7):1942–50

Pharmacokinetics of methotrexate in the cerebrospinal fluid after intracerebroventricular administration in patients with meningeal carcinomatosis and altered cerebrospinal fluid flow dynamics. Miller KT, et al. **Ther Drug Monit** 1989; 11(3):231–7

[Determination of thymidine kinase in the cerebrospinal fluid as a marker of leukemic meningosis] Musto P, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):49–51 (Eng. Abstr.) (Ita)

COMPLICATIONS

Astereognosis as a presenting symptom in cervical meningioma [letter] Endtz LJ, et al. **Acta Neurochir (Wien)** 1988;94(3–4):158–9

Prospective electroconvulsive therapy in a delusional depressed patient with a frontal meningioma. A case report. Greenberg LB, et al. **Br J Psychiatry** 1988 Jul;153:105–7

Cerebral edema associated with meningioma. Lee ST, et al. **Can J Neurol Sci** 1989 May;16(2):211–3

Central nervous system involvement in non-Hodgkin's lymphoma (excluding Burkitt's lymphoma) in Ugandan Africans. Katongole-Mbidde E, et al. **East Afr Med J** 1988 Dec;65(12):838–46

Extramedullary leukemia with central facial palsy originated from poorly differentiated abdominal lymphoma. Kilinç Y, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):281–6

Symptomatic relief of meningioma by buserelin maintenance therapy [letter] van Seters AP, et al. **Lancet** 1989 Mar 11; 1(8637):564–5

Multiple recurrence and foreign-body granuloma after total removal of falx meningioma—case report. Tanaka A, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1001–4

Meningioma and associated cavernous hemangioma as a parasellar tumor. Buchbender C. **Neurosurg Rev** 1988; 11(2):201–3

Correlation between sex hormone binding and peritumoral edema in intracranial meningiomas. Benzel EC, et al. **Neurosurgery** 1988 Aug;23(2):169–74

Peritumoral brain edema associated with meningiomas. Go KG, et al. **Neurosurgery** 1988 Aug;23(2):175–9

The association of carcinoma of the breast with meningioma. Rubinstein AB, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):334–6 (16 ref.)

Multiple meningiomas and their relation to neurofibromatosis. Review of the literature and report of seven cases. Eljamel MS, et al. **Surg Neurol** 1989 Aug;32(2):131–6

[Anatomo-clinical conference. Hôpital Cochin. Case No. 3–1989. Cerebral meningioma and adrenal mass in a 70-year-old woman] Grateau G, et al. **Ann Med Interne (Paris)** 1989;140(4):314–8 (Fre)

[Neuropsychiatric-ophthalmologic and radiologic findings in sphenoid wing meningioma] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):206–9 (Eng. Abstr.) (Ger)

[A case of acute subdural hematoma associated with convexity meningioma] Tokunaga T, et al. **No Shinkei Geka** 1988 Nov;16(12):1389–93 (19 ref.) (Eng. Abstr.) (Jpn)

[Meningosis in Hand-Schüller-Christian disease (letter)] Marco Vera P, et al. **Rev Clin Esp** 1989 Mar;184(4):215–6 (Spa)

DIAGNOSIS

Cystic meningiomas. Borovich B, et al. **Acta Neurochir Suppl (Wien)** 1988;42:147–51

Cystic changes in intracranial meningiomas. A review. Umansky F, et al. **Acta Neurochir (Wien)** 1988;95(1–2):13–8 (45 ref.)

Do folliculo-stellate adenomas of the pituitary gland exist or are they intrasellar meningiomas? Vogel H, et al. **Acta Neuropathol (Berl)** 1988;77(2):219–23

Primary meningeal melanoma. Helseth A, et al. **Acta Oncol** 1989;28(1):103–4

Benign extramedullary tumors of the foramen magnum. Guidetti B, et al. **Adv Tech Stand Neurosurg** 1988;16:83–120 (63 ref.)

Meningioma, meningeal hemangiopericytoma (angioblastic meningioma), peripheral hemangiopericytoma, and acoustic schwannoma. A comparative immunohistochemical study. Winek RR, et al. **Am J Surg Pathol** 1989 Apr;13(4):251–61 (29 ref.)

Cryptogenic oculomotor nerve palsy. The need for repeated neuroimaging studies. Abdul-Rahim AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):387–90

Cystic meningioma—a case report. Lee JP, et al. **Chang Keng I Hsueh** 1989 Mar 20;12(1):51–6

Recurrent spinal meningioma presenting as a neck mass diagnosed by fine-needle aspiration biopsy [letter] Nguyen GK, et al. **Diagn Cytopathol** 1988;4(4):361–2

Pituitary adenoma and meningioma in the same patient. Report of three cases. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):144–8

The utility of contrast media in MRI at 0.02 T. A preliminary report. Kormano M, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S289–91

Ethmoidal meningioma revealed by transient global amnesia. Cattaino G, et al. **Ital J Neurol Sci** 1989 Apr;10(2):187–91

Metastatic malignant meningioma. Slavin ML. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):55–9

Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):679–81

MR imaging of intrasellar meningiomas simulating pituitary adenomas. Michael AS, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):944–6

Thickening of dura surrounding meningiomas: MR features. Wilms G, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):763–8

Ocular pseudomyasthenia or ocular myasthenia 'plus': a warning to clinicians. Moorthy G, et al. **Neurology** 1989 Sep;39(9):1150–4

MR imaging of cerebral tumors: state of the art and work in progress. Higer HP, et al. **Neurosurg Rev** 1989; 12(2):91–106 (60 ref.)

Osteoblastic meningioma of the fourth ventricle. Johnson MD, et al. **Neurosurgery** 1989 Apr;24(4):587–90

Lipomeningioma: report of three cases and review of the literature. Salibi SS, et al. **Neurosurgery** 1989 Jul; 25(1):122–6 (20 ref.)

Meningioma subtypes: MR and PET features [letter; comment] Di Chiro G. **Radiology** 1989 Aug;172(2):578–9 . **Comment on:** Radiology 1989 Mar;170(3 Pt 1):857–62

Meningiomas: MR and histopathologic features [see comments] Elster AD, et al. **Radiology** 1989 Mar;170(3 Pt 1):857–62. **Comment in:** Radiology 1989 Aug;172(2):578–9

Large meningioma of the foramen magnum in a 4-year-old child. Siqueira EB, et al. **Surg Neurol** 1989 May; 31(5):409–11

[Meningioma of the optic canal. Diagnostic aspects apropos of 3 surgically treated cases] Bazin A, et al. **Neurochirurgie** 1988;34(3):164–72 (37 ref.) (Eng. Abstr.) (Fre)

[Neurocutaneous melanosis] Husstedt IW, et al. **Fortschr Neurol Psychiatr** 1989 Jun;57(6):250–4 (Eng. Abstr.) (Ger)

[Extracranial meningioma: a rare differential diagnosis of an intranasal tumor] Spindler MB, et al. **HNO** 1989 Apr; 37(4):162–4 (Eng. Abstr.) (Ger)

[Meningioma of the sphenoid bone with involvement of the tympanic cavity] Gollmitzer W, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):657–9 (Eng. Abstr.) (Ger)

[MR imaging of the meninges: normal and pathological findings] Schörner W, et al. **ROFO** 1988 Oct;149(4):361–8 (Eng. Abstr.) (Ger)

[Clinical and neuroradiological aspects of a case of cervical meningioma] Trebini F, et al. **Minerva Med** 1989 May; 80(5):483–5 (Eng. Abstr.) (Ita)

[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):152–7 (Eng. Abstr.) (Ita)

[Simultaneously diagnosed triple primary neoplasms—a case report] Murate T, et al. **Gan No Rinsho** 1989 May; 35(6):741–7 (Eng. Abstr.) (Jpn)

[Perifocal abnormal signal intensity area in MRI in meningiomas] Tsuyumu M, et al. **No Shinkei Geka** 1989 Apr;17(4):319–25 (Eng. Abstr.) (Jpn)

[Clinico-diagnostic aspects of meningiomas in parapharyngeal locations] Falileev GV, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):39–44 (Eng. Abstr.) (Rus)

[Differential diagnosis of intraspinal neurinomas and meningiomas by means of a bayesian system] Iglesias JR, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):333–41 (Spa)

[Meningeal sarcoma in childhood. Experiences with 17 cases] Martínez-Avalos A, et al. **Bol Med Hosp Infant Mex** 1989 Jan;46(1):47–50 (Eng. Abstr.) (Spa)

[Symptomatic cluster headache? Apropos of 4 case reports] Molins A, et al. **Med Clin (Barc)** 1989 Feb 11;92(5):181–3 (Eng. Abstr.) (Spa)

DRUG THERAPY

Experiences with the Ommaya reservoir for prophylaxis and treatment of the central nervous system in adult acute myelocytic leukemia. Haaxma-Reiche H, et al. **Blut** 1988 Dec;57(6):351–5

Central nervous system (CNS) leukemia: the role of high dose cytarabine (HDAra-C). Morra E, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:101–3

Phase I/II study of intraventricular and intrathecal ACNU for leptomeningeal neoplasia. Levin VA, et al. **Cancer Chemother Pharmacol** 1989;23(5):301–7

Toxicity of intrathecally administered cytotoxic drugs and their antitumor activity against an intrathecal Walker 256 carcinosarcoma model for meningeal carcinomatosis in the rat. Kooistra KL, et al. **Cancer Res** 1989 Feb 15; 49(4):977–82

Leptomeningeal metastases—treatment results in 98 consecutive patients. Pfeffer MR, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9–10):611–8

Intrathecal ACNU—a new therapeutic approach against malignant leptomeningeal tumors. Arita N, et al. **J Neurooncol** 1988 Nov;6(3):221–6

Improved tumor-specific immunotoxins in the treatment of CNS and leptomeningeal neoplasia. Johnson VG, et al. **J Neurosurg** 1989 Feb;70(2):240–8

Successful treatment of meningioma with octreotide [letter] Rünzi MW, et al. **Lancet** 1989 May 13;1(8646):1074

Treatment of meningioma with octreotide [letter] Rünzi MW, et al. **Lancet** 1989 Jul 22;2(8656):217–8

Endocrine manipulation of meningiomas with medroxyprogesterone acetate. Effect of MPA on growth of primary meningioma cells in monolayer tissue culture. Waelti ER, et al. **Surg Neurol** 1989 Feb;31(2):96–100

EPIDEMIOLOGY

Neoplasms of the central nervous system in Norway. V. Meningioma and cancer of other sites. An analysis of the occurrence of multiple primary neoplasms in meningioma patients in Norway from 1955 through 1986. Helseth A, et al. **APMIS** 1989 Aug;97(8):738–44

ETIOLOGY

Blue nevus and nevus of Ota associated with dural melanoma. Hartmann LC, et al. **Cancer** 1989 Jul 1;64(1):182–6

Intracranial meningiomas after high-dose irradiation. Soffer D, et al. **Cancer** 1989 Apr 15;63(8):1514–9 (41 ref.)

Meningioma—an unrecognised complication of fibrous dysplasia of the skull? [letter] Frankel J, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):546–7

GENETICS

Gene dosage effect in cells with monosomy of chromosome 22 derived from human meningiomas. Casalone R, et al. **Acta Neurochir Suppl (Wien)** 1988;43:114–7

Cytogenetic studies of 19 meningiomas and their clinical significance. I. Poulsgård L, et al. **Anticancer Res** 1989 Jan–Feb;9(1):109–12

A case of meningioma with frequent relapses and a hyperhaploid stemline. Rønne M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):545–7

Karyotypic evolution of human meningioma. Progression through malignancy. Casartelli C, et al.

Cancer Genet Cytogenet 1989 Jul 1;40(1):33–45

Incidence and origin of dicentric chromosomes in cultured meningiomas. Rey JA, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):55–60

Involvement of chromosome 22 in a Merkel cell carcinoma in a patient with a previous meningioma. Shabtai F, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):43–8

Meningiomas: karyotypes and histological patterns. Lopez-Gines C, et al. **Clin Neuropathol** 1989 May–Jun; 8(3):130–3

Altered restriction pattern of the putative DNA binding domain of estrogen receptor or related genes in primary human meningiomas. Vacca A, et al. **Int J Cancer** 1989 Apr 15;43(4):567–9

Molecular biology of brain tumors. McDonald JD, et al. **Neurosurgery** 1988 Nov;23(5):537–44 (34 ref.)

The molecular biology of human glial tumors. Martuza RL, et al. **Trends Neurosci** 1988 Jan;11(1):22–7 (40 ref.)

HISTORY

Cruveilhier on meningiomas (1829–1842). Bakay L. **Surg Neurol** 1989 Aug;32(2):159–64

METABOLISM

Abnormal amianthoid collagen fibers in meningioma. Harkin JC, et al. **Acta Neuropathol (Berl)** 1988;76(6):638–9

Coincidence of EGF receptors and somatostatin receptors in meningiomas but inverse, differentiation-dependent relationship in glial tumors. Reubi JC, et al. **Am J Pathol** 1989 Feb;134(2):337–44

Epidermal growth factor receptor in meningiomas is expressed predominantly on endothelial cells. Shiurba RA, et al. **Cancer** 1988 Nov 15;62(10):2139–44

Oestrogen and progesterone sensitivity in cultured meningioma cells. Maiuri F, et al. **Neurol Res** 1989 Mar; 11(1):9–13

Experimental meningeal carcinomatosis selectively depresses local cerebral glucose utilization in rat brain. Hiesiger EM, et al. **Neurology** 1989 Jan;39(1):90–5

Enhancement of growth of primary metastatic fresh human tumors of the nervous system by epidermal growth factor in serum-free short term culture. Frappaz D, et al. **Neurosurgery** 1988 Sep;23(3):355–9

Sex hormone receptors in a congenital meningioma. Carter DA, et al. **Pediatr Neurosci** 1988;14(1):15–7

(Neo)glycoproteins as tools in neuropathology: histochemical patterns of the extent of expression of endogenous carbohydrate-binding receptors, like lectins, in meningiomas. Bardosi A, et al. **Virchows Arch [B]** 1988; 56(1):35–43

NURSING

Meningioma: a nursing perspective. Berkshire J, et al. **J Neurosci Nurs** 1989 Apr;21(2):96–103

PATHOLOGY

Central nervous system involvement demonstrated by immunological study in prolymphocytic variant of chronic lymphocytic leukemia. López Guillermo A, et al. **Acta Haematol (Basel)** 1989;81(2):109–11

Elastosis in meningioma. A case report and electron microscopic study. Akagi S, et al. **Acta Pathol Jpn** 1988 Aug;38(8):1019–29

Uncommon type of meningiomas with conspicuous plasmo-lymphocytic infiltration. An immunohistochemical and histochemical study. Ohmori T, et al. **Acta Pathol Jpn** 1989 Mar;39(3):190–4

Recurrent primary leptomeningeal astrocytoma of the lumbosacral spinal cord resembling schwannoma. A case report. Saitoh A, et al. **Acta Pathol Jpn** 1988 Dec; 38(12):1591–9

MR imaging of the cranial meninges with emphasis on contrast enhancement and meningeal carcinomatosis. Sze G, et al. **AJNR** 1989 Sep–Oct;10(5):965–75

Epithelial differentiation in meningiomas. An immunohistochemical, histochemical, and ultrastructural study—with review of the literature. Radley MG, et al. **Am J Clin Pathol** 1989 Sep;92(3):266–72

Biology and pathogenesis of CNS leukemia. Bleyer WA. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):57–63

Meningeal leukemia: current concepts in biology and treatment. Introduction. Pochedly C. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):55–6

Primary meningeal small lymphocytic lymphoma. Nguyen D, et al. **Am J Surg Pathol** 1989 Jan;13(1):67–70

Meningeal nodules with features of extranodal sinus histiocytosis with massive lymphadenopathy. Song SK, et al. **Am J Surg Pathol** 1989 May;13(5):406–12

Focal leptomeningeal rhabdomyomatosis of the posterior fossa. Fix SE, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):872–3

Malignization of an arachnoid cyst. Rossitti SL, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):80–3

Meningeal tumors of childhood. Davidson GS, et al. **Cancer** 1989 Mar 15;63(6):1205–10

Differential tumor growth of blood-borne B16 melanoma variants in cerebral dura mater is related to tumor-host cell reactions. Kawaguchi T, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):1–14

Recurrent intracranial and spinal meningiomas: clinical and histological features. Baird M, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):41–4

Disseminated melanomatosis of the central nervous system and other organs: a case report. Iglesias-Rozas JR, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):11–5

Hemangiopericytoma of the meninges: a clinicopathologic and immunohistochemical study. Iwaki T, et al. **Clin Neuropathol** 1988 May–Jun;7(3):93–9

Primary malignant melanoma of the meninges. Thornton C, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):244–8

Fine-needle aspiration cytology of meningiomas with unusual presentations. Bose S, et al. **Diagn Cytopathol** 1988; 4(3):258–61

Microcystic meningiomas—an unusual morphological variant of meningiomas. Ng HK, et al. **Histopathology** 1989 Jan; 14(1):1–9

Kaposi's sarcoma of the dura mater. Ariza A, et al. **Hum Pathol** 1988 Dec;19(12):1461–3

View from beneath—pathology in focus. Primary intracranial mesenchymal chondrosarcoma. Shuangshoti S, et al. **J Laryngol Otol** 1989 May;103(5):545–9

Papillary meningioma with pulmonary metastasis. Case report. Fukushima T, et al. **J Neurosurg** 1989 Mar; 70(3):478–82

The prediction of recurrence in meningiomas. A flow cytometric study of paraffin-embedded archival material. May PL, et al. **J Neurosurg** 1989 Sep;71(3):347–51

Spinal meningioma arising from a lumbar nerve root. Case report. Ng TH, et al. **J Neurosurg** 1989 Apr;70(4):646–8

Meningeal leukaemia as the first manifestation of CGL blast crisis [letter] Kumar L, et al. **N Z Med J** 1989 Aug 23; 102(874):450

Atypical monoclonal plasma cell hyperplasia of the central nervous system: precursor of plasmacytoma with evolutionary considerations. Weidenheim KM, et al. **Neurosurgery** 1989 Mar;24(3):429–34

Meningio-angiomatosis. Paulus W, et al. **Pathol Res Pract** 1989 Apr;184(4):446–54 (51 ref.)

Malignant transformation of recurrent meningioma with pulmonary metastases. LeMay DR, et al. **Surg Neurol** 1989 May;31(5):365–8

Interface between the meningioma and the brain. Nakasu S, et al. **Surg Neurol** 1989 Sep;32(3):206–12

[Vacuolated meningioma with cyst formation. Case report] Matsukawa T, et al. **Neurol Med Chir (Tokyo)** 1988 Dec; 28(12):1209–13 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Spontaneous regression of a meningioma in Meckel's cave. Case report] Matsumoto M, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):925–9 (Eng. Abstr.) **(Jpn)**

[A case of vacuolated meningioma] Kunishio K, et al. **No Shinkei Geka** 1989 Jan;17(1):81–6 (Eng. Abstr.) **(Jpn)**

[Recurrent meningioma with malignant changes and extracranial multiple metastases] Mori H, et al. **No Shinkei Geka** 1988 Jun;16(7):899–902 (Eng. Abstr.) **(Jpn)**

[Cell kinetics of human meningiomas and neurinomas—Ki-67 PAP stain] Shibata T, et al. **No Shinkei Geka** 1988 Jul; 16(8):939–44 (Eng. Abstr.) **(Jpn)**

[Tissue culture study of meningioma and hemangiopericytoma] Kawano H, et al. **No To Shinkei** 1988 Sep;40(9):849–55 (Eng. Abstr.) **(Jpn)**

[Cytology of meningiomas. Morphological study of 23 cases. Correlation with the histopathology] Cerdá-Nicolás M, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):342–8 (Eng. Abstr.) **(Spa)**

[Meningeal melanocytoma. Presentation of a case and review of the literature] Córdoba A, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):93–9 (26 ref.) (Eng. Abstr.) **(Spa)**

[Meningioma of the third ventricle. Presentation of a case] Gelabert González M, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):100–4 (28 ref.) (Eng. Abstr.) **(Spa)**

[Osseous metastasis of an intracranial angioblastic meningioma: report of a case] Vélez R, et al. **Bol Asoc Med P R** 1989 Feb;81(2):54–6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Intrahemispheric gradients of brain tissue pressure in patients with brain tumours. Piek J, et al. **Acta Neurochir (Wien)** 1988;93(3–4):129–32

[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) **(Ger)**

[Orthostatic reactions of cerebral and systemic circulation in patients with tumors of the posterior cranial fossa operated on in a sitting position] Sokolovskaia IE, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):23–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Pulsatile growth hormone secretion in children with acute lymphoblastic leukemia after 1800 cGy cranial radiation. Blatt J, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):1001–6

The role of cranial irradiation in low risk ALL [letter] Elyan SJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):284–6

Intensive therapy for children with acute lymphoblastic leukaemia and unfavourable presenting features. Early conclusions of study CCG-106 by the Childrens Cancer Study Group. Gaynon PS, et al. **Lancet** 1988 Oct 22; 2(8617):921–4

[Combination of radio-chemotherapy for curing of childhood hematologic tumors: preventive approaches and problems on CNS involvement] Fujimoto T. **Gan No Rinsho** 1988 Oct;34(13):1903–8 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Suicide and Meningioma. Feigin G. **Am J Forensic Med Pathol** 1988 Dec;9(4):334–5

RADIOGRAPHY

Intracranial dural chondrosarcoma. Lee YY, et al. **AJNR** 1988 Nov–Dec;9(6):1189–93

Injected air mimicking leptomeningeal metastases on lumbar myelography: CT diagnosis. Harter SB, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):923–4

Gliomas with dural invasion: computed tomography and angiography. Hasuo K, et al. **J Comput Tomogr** 1988 Apr; 12(2):100–7

Two meningiomas and an astrocytoma of the third ventricle in the same patient. Report of a case with review of the literature. Gaudio R, et al. **J Neurosurg Sci** 1988 Oct–Dec; 32(4):183–8

Extradural spinal meningiomas with intrathoracic extension. Report of two cases. Martínez R, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):179–81

Three-dimensional computed tomographic reconstructions of intracranial meningiomas. Chalif DJ, et al. **Neurosurgery** 1988 Nov;23(5):570–5

Neuroradiologic appearance of cystic meningiomas. Ferrante L, et al. **Rays** 1987 Sep–Dec;12(3):15–21

Jugular foramen meningioma. Inagawa T, et al. **Surg Neurol** 1989 Apr;31(4):295–9

Huge meningioma in a child. Matsuda M, et al. **Surg Neurol** 1989 Apr;31(4):290–4

Papillary meningioma arising from the confluens sinuum with multidirectional extension through venous sinuses. Nakagawa H, et al. **Surg Neurol** 1989 Sep;32(3):219–24

[Intra-arterial digital subtraction angiography (IADSA) of intracranial lesions (an analysis of 600 cases)] Gao PY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):69–71 (Eng. Abstr.) **(Chi)**

[Atypical computed tomographic features of intracranial meningioma (analysis of 20 cases)] Guo XD. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct;22(5):273–5 (Eng. Abstr.) **(Chi)**

[Dynamic CT scanning of intracranial tumors] Guo DA. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):431–4, 30 (Eng. Abstr.) **(Chi)**

[Computed tomographic metrizamide myelography of intraspinal tumors. Report of 38 cases] Zeng YL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):272–4, 20 (Eng. Abstr.) **(Chi)**

[Spinal subdural space-occupying lesions—hematomas] Grobovschek M, et al. **ROFO** 1989 Jan;150(1):20–5 (Eng. Abstr.) **(Ger)**

[Atypical computed tomographic features of meningioma: a case report] Miyata I, et al. **No Shinkei Geka** 1989 Mar; 17(3):297–300 (Eng. Abstr.) **(Jpn)**

[A case of calcified metastatic brain tumors in breast cancer associated with meningioma] Mori S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):711–4 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Dynamic SPECT with iodine-123 IMP in meningiomas. Nakano S, et al. **J Nucl Med** 1988 Oct;29(10):1627–32

Dynamic SPECT with technetium-99m HM-PAO in meningiomas—a comparison with iodine-123 IMP. Nakano S, et al. **J Nucl Med** 1989 Jun;30(6):1101–5

[Increased iodine-123 amphetamine (IMP) uptake in two cases of meningioma] Nishimura T, et al. **Rinsho Hoshasen** 1988 Jul;33(7):813–6 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Advanced ovarian dysgerminoma with cure of tumor persistent in meninges. Jolles CJ, et al. **Gynecol Oncol** 1989 Jun;33(3):389–91

Cranial irradiation of children with soft-tissue sarcomas arising in parameningeal sites. Alert J, et al. **Neoplasma** 1988;35(6):627–33

Cerebral distribution of immunoconjugate after treatment for neoplastic meningitis using an intrathecal radiolabeled monoclonal antibody. Benjamin JC, et al. **Neurosurgery** 1989 Aug;25(2):253–8

Permanent high-activity iodine-125 in the management of petroclival meningiomas: case reports. Kumar PP, et al. **Neurosurgery** 1989 Sep;25(3):436–41; discussion 441–2

[Brain metastases. Clinical aspects, incidence, therapy and results] Schwegler N. **Schweiz Rundsch Med Prax** 1988 Nov 22;77(47):1280–5 (108 ref.) (Eng. Abstr.) **(Ger)**

SECONDARY

The management of spinal epidural metastases. Brihaye J, et al. **Adv Tech Stand Neurosurg** 1988;16:121–76 (192 ref.)

Gd-DTPA-enhanced MR detection of diffuse leptomeningeal metastases [letter] Cooley PA, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):888

Dural metastasis from laryngeal malignant carcinoid [published erratum appears in Am J Med 1989 Aug;87(2):250–1] Deleu D, et al. **Am J Med** 1989 Apr; 86(4):502–5

Breast carcinoma metastatic to a meningioma. Case report and review of the literature. Zon LI, et al. **Arch Intern Med** 1989 Apr;149(4):959–62 (20 ref.)

Adult onset medulloblastoma cerebelli with leptomeningeal dissemination and coincidental primary hyperparathyroidism. Hankey GJ, et al. **Australas Radiol** 1989 Feb;33(1):111–5

A lethal neurotoxic reaction after intraventricular methotrexate administration. ten Hoeve RF, et al. **Cancer** 1988 Nov 15;62(10):2111–3

Immunocytochemical localization of carcinoembryonic antigen in cerebrospinal fluid with metastatic carcinoma of the stomach: report of four cases. Iwa N, et al. **Diagn Cytopathol** 1988;4(4):312–5

High-dose etoposide for meningeal carcinomatosis in patients with small cell lung cancer. Postmus PE, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):377–8

HMFG1 antigen: a new marker for carcinomatous meningitis. Moseley RP, et al. **Int J Cancer** 1989 Sep 15;44(3):440–4

The case of the painful buttock [clinical conference] Gotchall JI, et al. **Iowa Med** 1989 Jun;79(6):283–9

Acute fever and delayed leukoencephalopathy following low dose intraventricular methotrexate. Boogerd W, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1277–83

Neoplastic meningitis in malignant melanoma: diagnosis with monoclonal antibodies. Moseley RP, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):881–6

Whole brain irradiation and intrathecal methotrexate in the treatment of solid tumor leptomeningeal metastases—a Southwest Oncology Group study. Sause WT, et al. **J Neurooncol** 1988 Sep;6(2):107–12

Serial lumbar and ventricular cerebrospinal fluid biochemical marker measurements in patients with leptomeningeal metastases from solid and hematological tumors. Twijnstra A, et al. **J Neurooncol** 1989 May;7(1):57–63

Intracranial and spinal meningiomas in patients with breast carcinoma: case reports. Knuckey NW, et al. **Neurosurgery** 1989 Jul;25(1):112–6; discussion 116–7 (31 ref.)

Isolated meningeal relapse following adjuvant chemotherapy for poor prognosis breast cancer. Harrison DT, et al. **Prog Clin Biol Res** 1988;278:185–96

Experimental meningeal melanomatosis. Schabet M, et al. **Strahlenther Onkol** 1989 Jul;165(7):491–2

[Natural history of malignant melanoma of the uvea (apropos of 2 cases: 1—Malignant melanoma of the uvea followed-up without treatment during 25 years. 2—Simultaneous discovery of a malignant melanoma of the uvea and meningeal metastases)] Bacin F, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):675–8 (12 ref.) (Eng. Abstr.) (Fre)

[Meningeal metastasis of malignant melanoma] Gogoll M, et al. **Rontgenblatter** 1989 Aug;42(8):325–9 (Eng. Abstr.) (Ger)

[Diffuse neoplastic infiltration of leptomeninges by malignant pleural mesothelioma] de Pangher Manzini V, et al. **Recenti Prog Med** 1989 Jan;80(1):16–7 (Eng. Abstr.) (Ita)

[Deep postoperative coma due to leptomeningeal carcinoma: a case report] Okamoto T, et al. **Masui** 1988 Oct; 37(10):1261–4 (Eng. Abstr.) (Jpn)

[Clinical significance of sialic acid in the CSF; in relation to the malignancy and leptomeningeal dissemination] Moroki K, et al. **No To Shinkei** 1989 Mar;41(3):305–7 (Eng. Abstr.) (Jpn)

[Leptomeningeal carcinomatosis as a metastasis from adenocarcinoma of the stomach] Dugonjić A, et al. **Neurologija** 1988;37(1–2):89–96 (Scr)

SURGERY

Management and surgical outcome of suprasellar meningiomas. Brihaye J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:124–9

The recurrence of supratentorial meningiomas after surgery. Beks JW, et al. **Acta Neurochir (Wien)** 1988;95(1–2):3–5

Surgery of brain neoplasms using 32-P tumour marker. Reinhardt H. **Acta Neurochir (Wien)** 1989;97(3–4):89–94

Cerebral meningiomas in children. Ferrante L, et al. **Childs Nerv Syst** 1989 Apr;5(2):83–6

Meningioma of the third ventricle. Hanieh A. **Childs Nerv Syst** 1989 Feb;5(1):41–2

Craniofacial resection of extensive malignant meningioma involving the base of anterior cranial fossa. Report of two cases. Tao ZD, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):740–4

Dissecting aneurysm of middle cerebral artery following resection of meningioma [letter] Heye N, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):683

Musical hallucinations following removal of a right frontal meningioma [letter] Keshavan MS, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1235–6

Multiple intracranial meningiomas. Domenicucci M, et al. **J Neurosurg** 1989 Jan;70(1):41–4

Cardiovascular and respiratory complications after elective supratentorial craniotomy. Gilsanz F, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):147–51

Ventricular meningiomas—report of 4 cases. Gruss P, et al. **Neurosurg Rev** 1987;10(4):295–8

Surgical treatment of tumors in the anterior skull base using the transbasal approach. Arita N, et al. **Neurosurgery** 1989 Mar;24(3):379–84

Intracranial meningiomas in the aged: surgical outcome in the era of computed tomography. Awad IA, et al. **Neurosurgery** 1989 Apr;24(4):557–60

Postoperative hemorrhage: a survey of 4992 intracranial procedures. Kalfas IH, et al. **Neurosurgery** 1988 Sep; 23(3):343–7

Cerebral and two spinal meningiomas removed from the same patient: case report. Kandel E, et al. **Neurosurgery** 1989 Sep;25(3):447–50

Primary intraosseous malignant meningioma of the skull: case report. Lee WH, et al. **Neurosurgery** 1988 Oct;23(4):505–8

Titanium mesh and acrylic cranioplasty. Malis LI. **Neurosurgery** 1989 Sep;25(3):351–5

Surgery of petroclival meningiomas: report of 24 cases. Samii M, et al. **Neurosurgery** 1989 Jan;24(1):12–7

Surgical treatment of intracavernous neoplasms: a four-year experience. Sekhar LN, et al. **Neurosurgery** 1989 Jan; 24(1):18–30

Spinal meningiomas: review of 174 operated cases. Solero CL, et al. **Neurosurgery** 1989 Aug;25(2):153–60 (43 ref.)

Sylvian fissure meningioma in a child: case report and review of the literature. Silbergeld D, et al. **Pediatr Neurosci** 1988; 14(1):50–3

Multiple meningiomas: a clinical, surgical, and cytogenetic analysis. Butti G, et al. **Surg Neurol** 1989 Apr;31(4):255–60

Malignant intraventricular meningioma with spinal metastasis through the cerebrospinal fluid. Kamiya K, et al. **Surg Neurol** 1989 Sep;32(3):213–8

Two dimensional echoencephalography during the neurosurgical operations. Santa M, et al. **Zentralbl Neurochir** 1988;49(2):86–92

[Intraosseous meningioma. A report of 2 cases] Zink PM, et al. **Nervenarzt** 1989 Jan;60(1):52–4 (Ger)

[Multiple intracerebral hemorrhages immediately after surgical excision of middle fossa arachnoid cysts and evacuation of chronic subdural hygroma. Case report] Mori H, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):142–5 (Eng. Abstr.) (Jpn)

[Surgical treatment of meningioma of the falx-tentorial angle] Gabibov GA, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):25–30 (Rus)

[Surgical treatment of meningiomas of the posterior surface of the pyramid of the temporal bone] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):14–9 (Eng. Abstr.) (Rus)

THERAPY

[Preoperative embolization in intracranial meningioma] Ling F. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):428–30, 30 (Eng. Abstr.) (Chi)

ULTRASTRUCTURE

Meningeal melanocytoma. Report of a case and review of the literature. Jellinger K, et al. **Acta Neurochir (Wien)** 1988;94(1–2):78–87 (41 ref.)

An immunohistochemical and ultrastructural study of cultured intracranial hemangiopericytoma. Kawano H, et al. **Clin Neuropathol** 1988 May–Jun;7(3):105–10

Intracytoplasmic lumina in meningioma: an ultrastructural and immunohistological study. Vakili ST, et al. **Neurosurgery** 1988 Aug;23(2):180–4

[Ultrastructural study of the growth pattern in an experimental meningeal gliomatosis model] Narumi S, et al. **No Shinkei Geka** 1988 Oct;16(11):1261–6 (Eng. Abstr.) (Jpn)

VETERINARY

Incidental meningeal lipoma in a horse. Anderson WI, et al. **Vet Pathol** 1988 Nov;25(6):530–1

Laminotomy of the axis for surgical access to the cervical spinal cord. A case report. Fingeroth JM, et al. **Vet Surg** 1989 Mar–Apr;18(2):123–9

A surgical approach to the canine olfactory bulb for meningioma removal. Kostolich M, et al. **Vet Surg** 1987 Jul–Aug;16(4):273–7

MENINGES

Experimental production of leptomeningeal heterotopias from dissociated fetal tissue. Tamagawa K, et al. **Acta Neuropathol (Berl)** 1989;78(2):153–8

A most unusual subdural block. Paech MJ. **Anaesth Intensive Care** 1988 Nov;16(4):488–90

Unusual complication of peritoneal drainage: migration of a shunt in the subdural space. Thauvoy C, et al. **Childs Nerv Syst** 1989 Feb;5(1):47–9 (11 ref.)

Multiple unusual leptomeningeal glioneural heterotopias in a case of adult micrencephaly. Tamagawa K, et al. **Clin Neuropathol** 1988 Nov–Dec;7(6):306–10

Effect of a subdural air collection on the sensory evoked potential during surgery in the sitting position. Watanabe E, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun;74(3):194–201

Fear episodes due to limbic seizures with normal ictal scalp EEG: a subdural electrographic study. Devinsky O, et al. **J Clin Psychiatry** 1989 Jan;50(1):28–30

Meningeal skin fistula. A complication following Harrington rod instrumentation and segmental wiring. Christodoulou AG, et al. **Spine** 1989 Feb;14(2):241–2

ANALYSIS

Iron and aluminum deposition in the meninges of the lamprey: identification of an aluminum–ferritin inclusion body. Youson JH, et al. **Anat Rec** 1989 Jan;223(1):13–20

ANATOMY & HISTOLOGY

[MR imaging of the meninges: normal and pathological findings] Schörner W, et al. **ROFO** 1988 Oct;149(4):361–8 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

Vascular tinnitus and arteriovenous meningeal fistula. Kuhweide R, et al. **Acta Otorhinolaryngol Belg** 1988; 42(4):513–28 (25 ref.)

Protein chemical and immunocytochemical studies of meningovascular beta-amyloid protein in Alzheimer's disease and normal aging. Joachim CL, et al. **Brain Res** 1988 Nov 22;474(1):100–11

The cerebral and meningeal venous valves during human ontogenesis. Kędzia A. **Folia Morphol (Warsz)** 1987; 46(3–4):197–206

[Disseminated intravascular coagulation and its pathogenetic significance in meningoencephalitis] Barshtein IuA, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):21–6 (Eng. Abstr.) (Rus)

CYTOLOGY

Occurrence of lymphohaemopoietic tissue in the meninges of the stingray Dasyatis akajei (Elasmobranchii, chondricthyes). Chiba A, et al. **Am J Anat** 1988 Nov; 183(3):268–76

An electron microscopic study of macrophages in the meninges of the human embryonic optic nerve. Sturrock RR. **J Anat** 1988 Apr;157:145–51

Meningeal cells increase in vitro astrocytic gap junctional communication as measured by fluorescence recovery after laser photobleaching. Anders JJ, et al. **J Neurocytol** 1989 Apr;18(2):257–64

DRUG EFFECTS

Effect of chymopapain on the meninges studied in an experimental model. Haughton VM, et al. **Radiology** 1988 Nov;169(2):475–8

EMBRYOLOGY

Fluorescent granular perithelial cells in the meninges and optic nerve of the human embryo. Sturrock RR. **Anat Anz** 1988;166(1–5):323–9

Morphogenesis of rat cranial meninges. A light- and electron-microscopic study. Angelov DN, et al. **Cell Tissue Res** 1989 Jul;257(1):207–16

A quantitative histological study of cell division and changes in cell number in the meningeal sheath of the embryonic human optic nerve. Sturrock RR. **J Anat** 1987 Dec; 155:133–40

METABOLISM

[Meningeal diffusion of cefpirome in adults] Chavanet P, et al. **Pathol Biol (Paris)** 1989 May;37(5):442–5 (Eng. Abstr.) (Fre)

PATHOLOGY

Differentiation between meningeal fibrosis and chronic subdural hematoma after ventricular shunting: value of enhanced CT and MR scans. Destian S, et al. **AJNR** 1989 Sep–Oct;10(5):1021–6

MR imaging of the cranial meninges with emphasis on contrast enhancement and meningeal carcinomatosis. Sze G, et al. **AJNR** 1989 Sep–Oct;10(5):965–75

Localised amyloidosis. Kapoor A, et al. **J Assoc Physicians India** 1988 Sep;36(9):569

Inflammatory reaction to synthetic dural substitute. Case report. Cohen AR, et al. **J Neurosurg** 1989 Apr;70(4):633–5

Long-term neurological effects of bone marrow transplantation in a canine lysosomal storage disease. Shull RM, et al. **Pediatr Res** 1988 Sep;24(3):347–52

Meningiomas: MR and histopathologic features [see comments] Elster AD, et al. **Radiology** 1989 Mar;170(3 Pt 1):857–62. **Comment in:** Radiology 1989 Aug;172(2):578–9

PHYSIOLOGY

Transcranial unifocal stimulation in rabbit: subcutaneous and meningeal changes. Sancesario G, et al. **Eur Neurol** 1989; 29(2):93–8

ULTRASTRUCTURE

Electron microscopic study of cat meninges. Angelov DN, et al. **Anat Anz** 1988;166(1–5):1–8

SEM of subdural space in mammals. Klika E, et al.

Prog Clin Biol Res 1989;295:389–93

MENINGIOMA

Middle ear meningioma: case report. Taylor JS, et al. Ala Med 1989 May;58(11):17–8

Multiple cutaneous plexiform schwannomas with tumors of the central nervous system [letter] Rongioletti F, et al. Arch Dermatol 1989 Mar;125(3):431–2

Intraocular meningothelial meningiomas. Mani H, et al. Int Ophthalmol 1988;12(4):207–11

Meningioma, astrocytoma and germinoma: case presentations of three intracranial tumors. Hodges K. J Neurosci Nurs 1989 Apr;21(2):113–21

Primary intraventricular meningioma of the fourth ventricle—case report. Matsumura M, et al. Neurol Med Chir (Tokyo) 1988 Oct;28(10):996–1000 (18 ref.)

Meningioma of the fourth ventricle—case report. Nakano S, et al. Neurol Med Chir (Tokyo) 1989 Jan;29(1):52–4

Primary calvarial meningiomas. Oka K, et al. Surg Neurol 1989 Oct;32(4):304–10 (59 ref.)

[Meningioma of the lateral ventricle. 3 recent cases] Bret P, et al. Neurochirurgie 1989;35(1):5–12 (26 ref.) (Eng. Abstr.) (Fre)

[Neurofibroma and meningioma of the spinal canal] Araszkiewicz H, et al. Neurol Neurochir Pol 1988 May–Jun; 22(3):264–7 (Eng. Abstr.) (Pol)

ANALYSIS

Ganglioside composition in human meningiomas. Davidsson P, et al. J Neurochem 1989 Sep;53(3):705–9

Hormone dependency of meningiomas [letter] Lancet 1989 Jun 17;1(8651):1381–2

Immunocytochemical evidence of progesterone receptors in human meningiomas. Waelti ER, et al. Surg Neurol 1989 Mar;31(3):172–6

[Immunohistochemistry of epidermal growth factor receptors in human meningioma] Sanson M, et al. Rev Neurol (Paris) 1989;145(5):350–4 (Eng. Abstr.) (Fre)

[Detection of cytokeratin in cells of the arachnoid and in meningiomas] Terpe HJ, et al. Zentralbl Allg Pathol 1988; 134(3):259–64 (Eng. Abstr.) (Ger)

[Assessment of the estrogen and progesterone receptor status of meningiomas. A preliminary study of 10 cases] Oddi G, et al. Minerva Med 1989 May;80(5):487–90 (Eng. Abstr.) (Ita)

BLOOD

Red blood cell polyamines in brain tumour patients. von Essen C, et al. Acta Neurochir (Wien) 1989;98(1–2):70–6

Tissue-type plasminogen activator in patients with intracranial meningiomas. Tsuda H, et al. Thromb Haemost 1988 Dec 22;60(3):508–13

[Changes in blood coagulation and fibrinolysis in brain tumors] Hindersin P, et al. Nervenarzt 1989 Mar;60(3):154–8 (Ger)

BLOOD SUPPLY

Feeding arteries of parasellar meningiomas—angiographic study of medial sphenoid ridge and tuberculum sellae meningiomas. Yamaki T, et al. Neurol Med Chir (Tokyo) 1988 Jun;28(6):553–8

[Preoperative selective embolization of intracranial meningiomas] Marchel A, et al. Neurol Neurochir Pol 1988 Jul–Aug;22(4):335–9 (Eng. Abstr.) (Pol)

COMPLICATIONS

Astereognosis as a presenting symptom in cervical meningioma [letter] Endtz LJ, et al. Acta Neurochir (Wien) 1988;94(3–4):158–9

Prospective electroconvulsive therapy in a delusional depressed patient with a frontal meningioma. A case report. Greenberg LB, et al. Br J Psychiatry 1988 Jul;153:105–7

Cerebral edema associated with meningioma. Lee ST, et al. Can J Neurol Sci 1989 May;16(2):211–3

Pseudo-pseudo-Foster Kennedy syndrome. Gelwan MJ, et al. J Clin Neuro Ophthalmol 1988 Mar;8(1):49–52

Recurrent meningitis associated with meningioma of the mastoid cavity. Kelleher RJ, et al. J Laryngol Otol 1989 Jan;103(1):99–100

Symptomatic relief of meningioma by buserelin maintenance therapy [letter] van Seters AP, et al. Lancet 1989 Mar 11; 1(8637):564–5

Multiple recurrence and foreign-body granuloma after total removal of falx meningioma—case report. Tanaka A, et al. Neurol Med Chir (Tokyo) 1988 Oct;28(10):1001–4

Meningioma and associated cavernous hemangioma as a parasellar tumor. Buchbender C. Neurosurg Rev 1988; 11(2):201–3

Correlation between sex hormone binding and peritumoral edema in intracranial meningiomas. Benzel EC, et al. Neurosurgery 1988 Aug;23(2):169–74

Peritumoral brain edema associated with meningiomas. Go KG, et al. Neurosurgery 1988 Aug;23(2):175–9

Intracranial and intratemporal meningiomas with primary otologic symptoms. Kumar A, et al. Otolaryngol Head Neck Surg 1988 Nov;99(5):444–54

The association of carcinoma of the breast with meningioma. Rubinstein AB, et al. Surg Gynecol Obstet 1989 Oct; 169(4):334–6 (16 ref.)

Multiple meningiomas and their relation to neurofibromatosis. Review of the literature and report of seven cases. Eljamel MS, et al. Surg Neurol 1989 Aug;32(2):131–6

Convexity meningioma with galactorrhea and hyperprolactinemia. A case report. Morioka T, et al. Surg Neurol 1989 Jan;31(1):69–70

[Anatomo-clinical conference. Hôpital Cochin. Case No. 3–1989. Cerebral meningioma and adrenal mass in a 70-year-old woman] Grateau G, et al. Ann Med Interne (Paris) 1989;140(4):314–8 (Fre)

[Neuropsychiatric-ophthalmologic and radiologic findings in sphenoid wing meningioma] Pittasch D, et al. Zentralbl Neurochir 1988;49(3):206–9 (Eng. Abstr.) (Ger)

[An extramedullary spinal cord tumor associated with syringomyelia: a case report] Nishiura I, et al. No Shinkei Geka 1989 Feb;17(2):181–5 (Eng. Abstr.) (Jpn)

[A case of acute subdural hematoma associated with convexity meningioma] Tokunaga T, et al. No Shinkei Geka 1988 Nov;16(12):1389–93 (19 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

Fine needle aspiration cytology of recurrent ectopic meningioma. González-Cápora R, et al. Acta Cytol 1989 Jan–Feb;33(1):85–8

Cystic meningiomas. Borovich B, et al. Acta Neurochir Suppl (Wien) 1988;42:147–51

Cystic changes in intracranial meningiomas. A review. Umansky F, et al. Acta Neurochir (Wien) 1988;95(1–2):13–8 (45 ref.)

Do folliculo-stellate adenomas of the pituitary gland exist or are they intrasellar meningiomas? Vogel H, et al. Acta Neuropathol (Berl) 1988;77(2):219–23

Benign extramedullary tumors of the foramen magnum. Guidetti B, et al. Adv Tech Stand Neurosurg 1988;16:83–120 (63 ref.)

The fat-cap sign: an aid to MR evaluation of extradural spinal tumors. Horner NB, et al. AJNR 1989 Sep–Oct;10(5 Suppl):S93

T1 and T2 measurements of meningiomas and neuromas before and after Gd-DTPA. Watabe T, et al. AJNR 1989 May–Jun;10(3):463–70

Correlation of ABR and medical imaging in patients with cerebellopontine angle tumors. Josey AF, et al. Am J Otol 1988 Dec;9 Suppl:12–6

Meningioma, meningeal hemangiopericytoma (angioblastic meningioma), peripheral hemangiopericytoma, and acoustic schwannoma. A comparative immunohistochemical study. Winek RR, et al. Am J Surg Pathol 1989 Apr;13(4):251–61 (29 ref.)

Cryptogenic oculomotor nerve palsy. The need for repeated neuroimaging studies. Abdul-Rahim AS, et al. Arch Ophthalmol 1989 Mar;107(3):387–90

Cystic meningioma—a case report. Lee JP, et al. Chang Keng I Hsueh 1989 Mar 20;12(1):51–6

Recurrent spinal meningioma presenting as a neck mass diagnosed by fine-needle aspiration biopsy [letter] Nguyen GK, et al. Diagn Cytopathol 1988;4(4):361–2

Pituitary adenoma and meningioma in the same patient. Report of three cases. Zentner J, et al. Eur Arch Psychiatry Neurol Sci 1989;238(3):144–8

The utility of contrast media in MRI at 0.02 T. A preliminary report. Kormano M, et al. Invest Radiol 1988 Sep;23 Suppl 1:S289–91

Ethmoidal meningioma revealed by transient global amnesia. Cattaino G, et al. Ital J Neurol Sci 1989 Apr;10(2):187–91

Gadolinium-DTPA enhancement of an optic nerve and chiasmal meningioma. Haik BG, et al. J Clin Neuro Ophthalmol 1989 Jun;9(2):122–5

Metastatic malignant meningioma. Slavin ML. J Clin Neuro Ophthalmol 1989 Mar;9(1):55–9

Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):679–81

MR imaging of intrasellar meningiomas simulating pituitary adenomas. Michael AS, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):944–6

Thickening of dura surrounding meningiomas: MR features. Wilms G, et al. J Comput Assist Tomogr 1989 Sep–Oct; 13(5):763–8

Ocular pseudomyasthenia or ocular myasthenia 'plus': a warning to clinicians. Moorthy G, et al. Neurology 1989 Sep;39(9):1150–4

High-dose contrast-enhanced computed tomography (CECT) with iopamidol in the detection of cerebral metastases. Tolerance of the contrast agent. Leonardi M, et al. Neuroradiology 1989;31(2):148–50

Comparison of multi echo and contrast-enhanced MR scans: image contrast and delineation of intracranial tumors. Schörner W, et al. Neuroradiology 1989;31(2):140–7

MR imaging of intraspinal tumors—capability in histological differentiation and compartmentalization of extramedullary tumors. Takemoto K, et al. Neuroradiology 1988; 30(4):303–9

MR imaging of cerebral tumors: state of the art and work in progress. Higer HP, et al. Neurosurg Rev 1989; 12(2):91–106 (60 ref.)

Osteoblastic meningioma of the fourth ventricle. Johnson MD, et al. Neurosurgery 1989 Apr;24(4):587–90

Lipomeningioma: report of three cases and review of the literature. Salibi SS, et al. Neurosurgery 1989 Jul; 25(1):122–6 (20 ref.)

Meningioma subtypes: MR and PET features [letter; comment] Di Chiro G. Radiology 1989 Aug;172(2):578–9 . Comment on: Radiology 1989 Mar;170(3 Pt 1):857–62

Meningiomas: MR and histopathologic features [see comments] Elster AD, et al. Radiology 1989 Mar;170(3 Pt 1):857–62. Comment in: Radiology 1989 Aug;172(2):578–9

Large meningioma of the foramen magnum in a 4-year-old child. Siqueira EB, et al. Surg Neurol 1989 May; 31(5):409–11

[The diagnosis and treatment of primary orbital meningioma] Song GX, et al. Yen Ko Hsueh Pao 1988 Sep;4(3):172–5 (Eng. Abstr.) (Chi)

[Respective contributions of x-ray computed tomography and MRI in the diagnosis of meningioma of the optic nerve] Catros A, et al. Bull Soc Ophtalmol Fr 1988 Nov; 88(11):1321–2 (Fre)

[Meningioma of the optic canal. Diagnostic aspects apropos of 3 surgically treated cases] Bazin A, et al. Neurochirurgie 1988;34(3):164–72 (37 ref.) (Eng. Abstr.) (Fre)

[Extracranial meningioma: a rare differential diagnosis of an intranasal tumor] Spindler MB, et al. HNO 1989 Apr; 37(4):162–4 (Eng. Abstr.) (Ger)

[Meningioma of the sphenoid bone with involvement of the tympanic cavity] Gollmitzer W, et al. Laryngol Rhinol Otol (Stuttg) 1988 Dec;67(12):657–9 (Eng. Abstr.) (Ger)

[MR imaging of the meninges: normal and pathological findings] Schörner W, et al. ROFO 1988 Oct;149(4):361–8 (Eng. Abstr.) (Ger)

[Clinical and neuroradiological aspects of a case of cervical meningioma] Trebini F, et al. Minerva Med 1989 May; 80(5):483–5 (Eng. Abstr.) (Ita)

[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. Radiol Med (Torino) 1988 Sep;76(3):152–7 (Eng. Abstr.) (Ita)

[Simultaneously diagnosed triple primary neoplasms—a case report] Murate T, et al. Gan No Rinsho 1989 May; 35(6):741–7 (Eng. Abstr.) (Jpn)

[Perifocal abnormal signal intensity area in MRI in meningiomas] Tsuyumu M, et al. No Shinkei Geka 1989 Apr;17(4):319–25 (Eng. Abstr.) (Jpn)

[A case of malignant extrameningeal meningioma of the spinal canal with multiple metastases in a 17-year-old patient. Clinical and morphologic studies] Sobaniec W, et al. Neurol Neurochir Pol 1988 Sep–Oct;22(5):450–3 (Eng. Abstr.) (Pol)

[Clinico-diagnostic aspects of meningiomas in parapharyngeal locations] Falileev GV, et al. Vestn Rentgenol Radiol 1988 Nov–Dec;(6):39–44 (Eng. Abstr.) (Rus)

[Differential diagnosis of intraspinal neurinomas and meningiomas by means of a bayesian system] Iglesias JR, et al. Arch Neurobiol (Madr) 1988 Nov–Dec;51(6):333–41 (Spa)

[Meningeal sarcoma in childhood. Experiences with 17 cases] Martínez-Avalos A, et al. Bol Med Hosp Infant Mex 1989 Jan;46(1):47–50 (Eng. Abstr.) (Spa)

[Symptomatic cluster headache? Apropos of 4 case reports] Molins A, et al. Med Clin (Barc) 1989 Feb 11;92(5):181–3 (Eng. Abstr.) (Spa)

DRUG THERAPY

Successful treatment of meningioma with octreotide [letter] Rünzi MW, et al. Lancet 1989 May 13;1(8646):1074

Treatment of meningioma with octreotide [letter] Rünzi MW, et al. Lancet 1989 Jul 22;2(8656):217–8

Endocrine manipulation of meningiomas with medroxyprogesterone acetate. Effect of MPA on growth of primary meningioma cells in monolayer tissue culture. Waelti ER, et al. Surg Neurol 1989 Feb;31(2):96–100

EPIDEMIOLOGY

Neoplasms of the central nervous system in Norway. V. Meningioma and cancer of other sites. An analysis of the occurrence of multiple primary neoplasms in meningioma patients in Norway from 1955 through 1986. Helseth A, et al. APMIS 1989 Aug;97(8):738–44

Neoplasms of the central nervous system in Norway. IV. A population-based epidemiological study of meningiomas. Helseth A, et al. APMIS 1989 Jul;97(7):646–54

ETIOLOGY

Intracranial meningiomas after high-dose irradiation. Soffer D, et al. Cancer 1989 Apr 15;63(8):1514–9 (41 ref.)

Intrasellar meningioma after radiotherapy for prolactinoma. Kasantikul V, et al. J Med Assoc Thai 1988 Sep;71(9):524–7

Meningioma—an unrecognised complication of fibrous dysplasia of the skull? [letter] Frankel J, et al. J Neurol Neurosurg Psychiatry 1989 Apr;52(4):546–7

GENETICS

Gene dosage effect in cells with monosomy of chromosome 22 derived from human meningiomas. Casalone R, et al. Acta Neurochir Suppl (Wien) 1988;43:114–7

Cytogenetic studies of 19 meningiomas and their clinical significance. I. Poulsgård L, et al. Anticancer Res 1989 Jan–Feb;9(1):109–12

A case of meningioma with frequent relapses and a hyperhaploid stemline. Rønne M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):545–7

Karyotypic evolution of human meningioma. Progression through malignancy. Casartelli C, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):33–45

Incidence and origin of dicentric chromosomes in cultured meningiomas. Rey JA, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):55–60

Involvement of chromosome 22 in a Merkel cell carcinoma in a patient with a previous meningioma. Shabtai F, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):43–8

Human KRAS oncogene expression in meningioma. Carstens C, et al. **Cancer Lett** 1988 Dec 1;43(1–2):37–41

Meningiomas: karyotypes and histological patterns. Lopez-Gines C, et al. **Clin Neuropathol** 1989 May–Jun; 8(3):130–3

Cytogenetic and in situ DNA–hybridization studies in intracranial tumors of a patient with central neurofibromatosis. Wullich B, et al. **Hum Genet** 1989 Apr; 82(1):31–4

Altered restriction pattern of the putative DNA binding domain of estrogen receptor or related genes in primary human meningiomas. Vacca A, et al. **Int J Cancer** 1989 Apr 15;43(4):567–9

Molecular biology of brain tumors. McDonald JD, et al. **Neurosurgery** 1988 Nov;23(5):537–44 (34 ref.)

The molecular biology of human glial tumors. Martuza RL, et al. **Trends Neurosci** 1988 Jan;11(1):22–7 (40 ref.)

HISTORY

Cruveilhier on meningiomas (1829–1842). Bakay L. **Surg Neurol** 1989 Aug;32(2):159–64

METABOLISM

Abnormal amianthoid collagen fibers in meningioma. Harkin JC, et al. **Acta Neuropathol (Berl)** 1988;76(6):638–9

Coincidence of EGF receptors and somatostatin receptors in meningiomas but inverse, differentiation-dependent relationship in glial tumors. Reubi JC, et al. **Am J Pathol** 1989 Feb;134(2):337–44

Epidermal growth factor receptor in meningiomas is expressed predominantly on endothelial cells. Shiurba RA, et al. **Cancer** 1988 Nov 15;62(10):2139–44

Elevated levels of head activator in human brain tumors and in serum of patients with brain and other neurally derived tumors. Schaller HC, et al. **J Neurooncol** 1988 Nov; 6(3):251–8

Oestrogen and progesterone sensitivity in cultured meningioma cells. Maiuri F, et al. **Neurol Res** 1989 Mar; 11(1):9–13

Enhancement of growth of primary metastatic fresh human tumors of the nervous system by epidermal growth factor in serum–free short term culture. Frappaz D, et al. **Neurosurgery** 1988 Sep;23(3):355–9

Sex hormone receptors in a congenital meningioma. Carter DA, et al. **Pediatr Neurosci** 1988;14(1):15–7

(Neo)glycoproteins as tools in neuropathology: histochemical patterns of the extent of expression of endogenous carbohydrate–binding receptors, like lectins, in meningiomas. Bardosi A, et al. **Virchows Arch [B]** 1988; 56(1):35–43

NURSING

Meningioma: a nursing perspective. Berkshire J, et al. **J Neurosci Nurs** 1989 Apr;21(2):96–103

PATHOLOGY

Brachial plexus meningioma, report of a case with immunohistochemical and ultrastructural examination. Coons SW, et al. **Acta Neuropathol (Berl)** 1989;77(4):445–8

Elastosis in meningioma. A case report and electron microscopic study. Akagi S, et al. **Acta Pathol Jpn** 1988 Aug;38(8):1019–29

Uncommon type of meningiomas with conspicuous plasmo–lymphocytic infiltration. An immunohistochemical and histochemical study. Ohmori T, et al. **Acta Pathol Jpn** 1989 Mar;39(3):190–4

Epithelial differentiation in meningiomas. An immunohistochemical, histochemical, and ultrastructural study—with review of the literature. Radley MG, et al. **Am J Clin Pathol** 1989 Sep;92(3):266–72

Meningeal nodules with features of extranodal sinus histiocytosis with massive lymphadenopathy. Song SK, et al. **Am J Surg Pathol** 1989 May;13(5):406–12

Breast carcinoma metastatic to a meningioma. Case report and review of the literature. Zon LI, et al. **Arch Intern Med** 1989 Apr;149(4):959–62 (20 ref.)

Neurofibromatosis type II of the head and neck. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):380–3

Meningeal tumors of childhood. Davidson GS, et al. **Cancer** 1989 Mar 15;63(6):1205–10

Differential tumor growth of blood–borne B16 melanoma variants in cerebral dura mater is related to tumor–host cell reactions. Kawaguchi T, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):1–14

Recurrent intracranial and spinal meningiomas: clinical and histological features. Baird M, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):41–4

Fine–needle aspiration cytology of meningiomas with unusual presentations. Bose S, et al. **Diagn Cytopathol** 1988; 4(3):258–61

Microcystic meningiomas—an unusual morphological variant of meningiomas. Ng HK, et al. **Histopathology** 1989 Jan; 14(1):1–9

Rudimentary meningocele: a variant of "primary cutaneous meningioma". Sibley DA, et al. **J Cutan Pathol** 1989 Apr; 16(2):72–80

Papillary meningioma with pulmonary metastasis. Case report. Fukushima T, et al. **J Neurosurg** 1989 Mar; 70(3):478–82

The prediction of recurrence in meningiomas. A flow cytometric study of paraffin–embedded archival material. May PL, et al. **J Neurosurg** 1989 Sep;71(3):347–51

Spinal meningioma arising from a lumbar nerve root. Case report. Ng TH, et al. **J Neurosurg** 1989 Apr;70(4):646–8

Relationship between flow cytometric features and clinical behavior of meningiomas. Crone KR, et al. **Neurosurgery** 1988 Dec;23(6):720–4

Meningio–angiomatosis. Paulus W, et al. **Pathol Res Pract** 1989 Apr;184(4):446–54 (51 ref.)

Meningioangiomatosis: a case report. Liu SS, et al. **Surg Neurol** 1989 May;31(5):376–80

Interface between the meningioma and the brain. Nakasu S, et al. **Surg Neurol** 1989 Sep;32(3):206–12

[Vacuolated meningioma with cyst formation. Case report] Matsukawa T, et al. **Neurol Med Chir (Tokyo)** 1988 Dec; 28(12):1209–13 (24 ref.) (Eng. Abstr.) **(Jpn)**

[A case of jugular foramen meningioma in a child] Arita K, et al. **No Shinkei Geka** 1989 Jan;17(1):87–92 (19 ref.) (Eng. Abstr.) **(Jpn)**

[A case of vacuolated meningioma] Kunishio K, et al. **No Shinkei Geka** 1989 Jan;17(1):81–6 (Eng. Abstr.) **(Jpn)**

[Recurrent meningioma with malignant changes and extracranial multiple metastases] Mori H, et al. **No Shinkei Geka** 1988 Jun;16(7):899–902 (Eng. Abstr.) **(Jpn)**

[Cell kinetics of human meningiomas and neurinomas—Ki–67 PAP stain] Shibata T, et al. **No Shinkei Geka** 1988 Jul; 16(8):939–44 (Eng. Abstr.) **(Jpn)**

[Tissue culture study of meningioma and hemangiopericytoma] Kawano H, et al. **No To Shinkei** 1988 Sep;40(9):849–55 (Eng. Abstr.) **(Jpn)**

[Cytology of meningiomas. Morphological study of 23 cases. Correlation with the histopathology] Cerdá–Nicolás M, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):342–8 (Eng. Abstr.) **(Spa)**

[Meningioma of the third ventricle. Presentation of a case] Gelabert González M, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):100–4 (28 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Intrahemispheric gradients of brain tissue pressure in patients with brain tumours. Piek J, et al. **Acta Neurochir (Wien)** 1988;93(3–4):129–32

Pre– and postoperative findings of pattern VECPs and ERGs in patients of orbital tumors. Mizota A, et al. **Doc Ophthalmol** 1988 May;69(1):41–9

[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) **(Ger)**

[Orthostatic reactions of cerebral and systemic circulation in patients with tumors of the posterior cranial fossa operated on in a sitting position] Sokolovskaia IE, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):23–7 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Suicide and Meningioma. Feigin G. **Am J Forensic Med Pathol** 1988 Dec;9(4):334–5

RADIOGRAPHY

Two meningiomas and an astrocytoma of the third ventricle in the same patient. Report of a case with review of the literature. Gaudio R, et al. **J Neurosurg Sci** 1988 Oct–Dec; 32(4):183–8

Extradural spinal meningiomas with intrathoracic extension. Report of two cases. Martínez R, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):179–81

Three–dimensional computed tomographic reconstructions of intracranial meningiomas. Chalif DJ, et al. **Neurosurgery** 1988 Nov;23(5):570–5

Neuroradiologic appearance of cystic meningiomas. Ferrante L, et al. **Rays** 1987 Sep–Dec;12(3):15–21

Jugular foramen meningioma. Inagawa T, et al. **Surg Neurol** 1989 Apr;31(4):295–9

Huge meningioma in a child. Matsuda M, et al. **Surg Neurol** 1989 Apr;31(4):290–4

Papillary meningioma arising from the confluens sinuum with multidirectional extension through venous sinuses. Nakagawa H, et al. **Surg Neurol** 1989 Sep;32(3):219–24

[Intra–arterial digital subtraction angiography (IADSA) of intracranial lesions (an analysis of 600 cases)] Gao PY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):69–71 (Eng. Abstr.) **(Chi)**

[Atypical computed tomographic features of intracranial meningioma (analysis of 20 cases)] Guo XD. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct;22(5):273–5 (Eng. Abstr.) **(Chi)**

[Dynamic CT scanning of intracranial tumors] Guo DA. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):431–4, 30 (Eng. Abstr.) **(Chi)**

[Atypical computed tomographic features of meningioma: a case report] Miyata I, et al. **No Shinkei Geka** 1989 Mar; 17(3):297–300 (Eng. Abstr.) **(Jpn)**

[A case of calcified metastatic brain tumors in breast cancer associated with meningioma] Mori S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):711–4 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Dynamic SPECT with iodine–123 IMP in meningiomas. Nakano S, et al. **J Nucl Med** 1988 Oct;29(10):1627–32

Dynamic SPECT with technetium–99m HM–PAO in meningiomas—a comparison with iodine–123 IMP. Nakano S, et al. **J Nucl Med** 1989 Jun;30(6):1101–5

Two patients with meningioma visualized as high uptake by SPECT with N–isopropyl–p–iodo–amphetamine (I–123). Nishimura T, et al. **Neuroradiology** 1988;30(4):351–4

[Increased iodine–123 amphetamine (IMP) uptake in two cases of meningioma] Nishimura T, et al. **Rinsho Hoshasen** 1988 Jul;33(7):813–6 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Optic nerve sheath meningioma [letter] Kupersmith MJ, et al. **J Neurosurg** 1989 Aug;71(2):305

Permanent high–activity iodine–125 in the management of petroclival meningiomas: case reports. Kumar PP, et al. **Neurosurgery** 1989 Sep;25(3):436–41; discussion 441–2

SECONDARY

The management of spinal epidural metastases. Brihaye J, et al. **Adv Tech Stand Neurosurg** 1988;16:121–76 (192 ref.)

Intracranial and spinal meningiomas in patients with breast carcinoma: case reports. Knuckey NW, et al. **Neurosurgery** 1989 Jul;25(1):112–6; discussion 116–7 (31 ref.)

Malignant transformation of recurrent meningioma with pulmonary metastases. LeMay DR, et al. **Surg Neurol** 1989 May;31(5):365–8

[Deep postoperative coma due to leptomeningeal carcinoma: a case report] Okamoto T, et al. **Masui** 1988 Oct; 37(10):1261–4 (Eng. Abstr.) **(Jpn)**

SURGERY

Management and surgical outcome of suprasellar meningiomas. Brihaye J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:124–9

The recurrence of supratentorial meningiomas after surgery. Beks JW, et al. **Acta Neurochir (Wien)** 1988;95(1–2):3–5

Surgery of brain neoplasms using 32–P tumour marker. Reinhardt H. **Acta Neurochir (Wien)** 1989;97(3–4):89–94

The combined supra–infratentorial pre–sigmoid sinus avenue to the petro–clival region. Surgical technique and clinical applications. Samii M, et al. **Acta Neurochir (Wien)** 1988; 93(1–2):6–12

Cerebral meningiomas in children. Ferrante L, et al. **Childs Nerv Syst** 1989 Apr;5(2):83–6

Meningioma of the third ventricle. Hanieh A. **Childs Nerv Syst** 1989 Feb;5(1):41–2

Craniofacial resection of extensive malignant meningioma involving the base of anterior cranial fossa. Report of two cases. Tao ZD, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):740–4

Dissecting aneurysm of middle cerebral artery following resection of meningioma [letter] Heye N, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):683

Musical hallucinations following removal of a right frontal meningioma [letter] Keshavan MS, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1235–6

Optic nerve sheath meningioma [letter] Arbit E. **J Neurosurg** 1989 Jul;71(1):151

Primary optic nerve sheath meningiomas. Report of nine cases. Clark WC, et al. **J Neurosurg** 1989 Jan;70(1):37–40

Multiple intracranial meningiomas. Domenicucci M, et al. **J Neurosurg** 1989 Jan;70(1):41–4

Cardiovascular and respiratory complications after elective supratentorial craniotomy. Gilsanz F, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):147–51

Trochlear nerve meningioma in von Recklinghausen's disease. Tada T, et al. **Neurochirurgia (Stuttg)** 1988 Nov; 31(6):226–7

Ventricular meningiomas—report of 4 cases. Gruss P, et al. **Neurosurg Rev** 1987;10(4):295–8

Surgical treatment of tumors in the anterior skull base using the transbasal approach. Arita N, et al. **Neurosurgery** 1989 Mar;24(3):379–84

Intracranial meningiomas in the aged: surgical outcome in the era of computed tomography. Awad IA, et al. **Neurosurgery** 1989 Apr;24(4):557–60

Cerebral and two spinal meningiomas removed from the same patient: case report. Kandel E, et al. **Neurosurgery** 1989 Sep;25(3):447–50

Primary intraosseous malignant meningioma of the skull: case

report. Lee WH, et al. **Neurosurgery** 1988 Oct;23(4):505–8
Titanium mesh and acrylic cranioplasty. Malis LI. **Neurosurgery** 1989 Sep;25(3):351–5
Surgery of petroclival meningiomas: report of 24 cases. Samii M, et al. **Neurosurgery** 1989 Jan;24(1):12–7
Surgical treatment of intracavernous neoplasms: a four-year experience. Sekhar LN, et al. **Neurosurgery** 1989 Jan; 24(1):18–30
Spinal meningiomas: review of 174 operated cases. Solero CL, et al. **Neurosurgery** 1989 Aug;25(2):153–60 (43 ref.)
Sylvian fissure meningioma in a child: case report and review of the literature. Silbergeld D, et al. **Pediatr Neurosci** 1988; 14(1):50–3
Multiple meningiomas: a clinical, surgical, and cytogenetic analysis. Butti G, et al. **Surg Neurol** 1989 Apr;31(4):255–60
Malignant intraventricular meningioma with spinal metastasis through the cerebrospinal fluid. Kamiya K, et al. **Surg Neurol** 1989 Sep;32(3):213–8
Two dimensional echoencephalography during the neurosurgical operations. Santa M, et al. **Zentralbl Neurochir** 1988;49(2):86–92
[Meningioma of the optic nerve in children] Manderieux N, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):967–8, 971 (Fre)
[Intraosseous meningioma. A report of 2 cases] Zink PM, et al. **Nervenarzt** 1989 Jan;60(1):52–4 (Ger)
[Ectopic meningioma of the ethmoid sinus: case report and a review of the literature] Minami S, et al. **No Shinkei Geka** 1989 Jan;17(1):57–62 (31 ref.) (Eng. Abstr.) (Jpn)
[Surgical treatment of meningioma of the falx-tentorial angle] Gabibov GA, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):25–30 (Rus)
[Surgical treatment of meningiomas of the posterior surface of the pyramid of the temporal bone] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):14–9 (Eng. Abstr.) (Rus)

THERAPY

The management of optic nerve sheath meningiomas. Kennerdell JS, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):450–7
Interventional neuroradiology in the community hospital. Dawson RC, et al. **J La State Med Soc** 1989 Jan; 141(1):27–32
[Preoperative embolization in intracranial meningioma] Ling F. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):428–30, 30 (Eng. Abstr.) (Chi)

ULTRASTRUCTURE

Mucin-producing microcystic meningioma: a case report with histochemical and ultrastructural findings. Kasantikul V, et al. **J Med Assoc Thai** 1988 Sep;71(9):513–7
Ultrastructural comparison of arachnoid villi and meningiomas in man. Yamashima T, et al. **Mod Pathol** 1988 May;1(3):224–34
Intracytoplasmic lumina in meningioma: an ultrastructural and immunohistological study. Vakili ST, et al. **Neurosurgery** 1988 Aug;23(2):180–4

VETERINARY

Meningioma in a woodchuck exhibiting central vestibular deficits. Podell M, et al. **J Wildl Dis** 1988 Oct;24(4):695–9
Laminotomy of the axis for surgical access to the cervical spinal cord. A case report. Fingeroth JM, et al. **Vet Surg** 1989 Mar–Apr;18(2):123–9
A surgical approach to the canine olfactory bulb for meningioma removal. Kostolich M, et al. **Vet Surg** 1987 Jul–Aug;16(4):273–7

MENINGISM

CEREBROSPINAL FLUID

[Meningism and meningitis, variations on a classical theme] de Vries TW, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22; 133(16):801–3 (Dut)

DIAGNOSIS

Meningismus as main symptom in toxic shock syndrome. Lund L, et al. **Acta Obstet Gynecol Scand** 1988;67(5):395
Subdural mass lesion secondary to sarcoid granuloma MR and CT findings and differential diagnosis. Brooks ML, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):199–205

ETIOLOGY

[Neurologic complications in malignant lymphoma] Nedelcheva E, et al. **Vutr Boles** 1988;27(4):58–61 (Eng. Abstr.) (Bul)

MENINGITIS

Recent advances in bacterial meningitis. Kaplan SL. **Adv Pediatr Infect Dis** 1989;4:83–110 (138 ref.)
Neonatal group B streptococcal bacteremia and meningitis. Smith AJ, et al. **Heart Lung** 1989 Jan;18(1):94–6
The management of fulminant meningitis in the intensive care unit. Roos KL, et al. **Infect Dis Clin North Am** 1989 Mar; 3(1):137–54 (85 ref.)
An unusual neonatal case presentation: neonatal candidemia and meningitis. Tisdell S, et al. **J Perinatol** 1987 Summer; 7(3):254–6
Coccidiodal meningitis and pregnancy: a case report. Peterson CM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):835–6
[The 3d case of Mollaret's benign multi-recurrent meningitis in Yugoslavia] Lesnicar J, et al. **Ann Med Psychol (Paris)** 1988 Jun;146(6):570–1 (Fre)
[Staphylococcus aureus meningitis (editorial)] Falcó V, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):660–2 (Spa)

BLOOD

CBC differential profile in distinguishing etiology of neonatal meningitis. Bonadio WA, et al. **Pediatr Emerg Care** 1989 Jun;5(2):94–6
[Hyperuricemia in various diseases in children] Prandota J, et al. **Pol Tyg Lek** 1988 Sep 26;43(39):1251–5 (Eng. Abstr.) (Pol)
[Changes in the cytochemical indices of the blood leukocytes in chronic cerebral leptomeningitis during combined treatment using decimeter waves] Kilichev IA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):35–8 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Correlation of lactic acid level, cell count and cytology in cerebrospinal fluid of patients with bacterial and non-bacterial meningitis. Kölmel HW, et al. **Acta Neurol Scand** 1988 Jul;78(1):6–9
Neonatal Staphylococcus epidermidis meningitis with unremarkable CSF examination results. Gruskay J, et al. **Am J Dis Child** 1989 May;143(5):580–2
Diffusion of ofloxacin into cerebrospinal fluid of patients with purulent meningitis or ventriculitis. Pioget JC, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):933–6
Pharmacokinetics of cefsulodin in rat cerebrospinal fluid during experimental Pseudomonas aeruginosa meningitis. Meulemans A, et al. **Chemotherapy** 1989;35(4):237–41
Amphotericin B concentration in cerebrospinal fluid of patients with AIDS and cryptococcal meningitis. Dugoni BM, et al. **Clin Pharm** 1989 Mar;8(3):220–1
Cerebrospinal fluid alpha-1-antitrypsin
alpha-1-antitrypsin-elastase complex levels in meningitis. Hoffman HD, et al. **Eur J Clin Invest** 1989 Feb;19(1):26–9
Pseudomeningitis: report of a case caused by Bacillus and review of the literature. Cunha BA, et al. **Heart Lung** 1989 Jul;18(4):418–20 (16 ref.)
Lymphocytic meningitis of elusive etiology. Riefler JF 3d. **Hosp Pract [Off]** 1989 Jan 30;24(1A):33–4
Pyogenic meningitis with special reference to lactic dehydrogenase in CSF. Das AK, et al. **J Indian Med Assoc** 1988 Aug;86(8):215–7
Klebsiella meningitis without pleocytosis in the cerebrospinal fluid [letter] Zaki M, et al. **J Infect** 1989 Jan;18(1):96–7
T-cell subsets in the cerebrospinal fluid in the course of inflammatory neurological diseases. Stark E. **J Neuroimmunol** 1988 Dec;20(2–3):259–60
Correlation of interleukin-1 beta and cachectin concentrations in cerebrospinal fluid and outcome from bacterial meningitis. Mustafa MM, et al. **J Pediatr** 1989 Aug;115(2):208–13
Meningitis without CSF pleocytosis [letter] Wright J. **N Z Med J** 1989 Jan 25;102(860):22
The predictive value of cerebrospinal fluid differential cytology in meningitis. Baker RC, et al. **Pediatr Infect Dis J** 1989 May;8(5):329–30
Bacillus species isolates from cerebrospinal fluid in patients without shunts. Feder HM Jr, et al. **Pediatrics** 1988 Dec; 82(6):909–13
Twenty-four hour after-treatment lumbar puncture: should it be done? [letter] Le CT. **Pediatrics** 1989 Oct;84(4):746–8
Meningitis: diagnosis and treatment. Wallace SJ. **Public Health** 1988 Sep;102(5):447–54 (32 ref.)
Penetration of cefoxitin into cerebrospinal fluid of dogs with and without experimental meningitis. Massip P, et al. **Rev Infect Dis** 1979 Jan–Feb;1(1):132–3
Detection of bacterial antigens in cerebrospinal fluid by a latex agglutination test in 'septic unknown' meningitis and serogroup B meningococcal meningitis. Muller PD, et al. **S Afr Med J** 1989 Sep 2;76(5):214–5
[Meningism and meningitis, variations on a classical theme] de Vries TW, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22; 133(16):801–3 (Dut)
[Lymphocytic meningoradiculitis (Bannwarth's syndrome)] Aho K, et al. **Duodecim** 1988;104(19):1550–3 (Fin)
[Cerebrospinal fluid lysozyme in meningitis in children. Value in establishing the etiologic diagnosis] Gerbaut L, et al. **Arch Fr Pediatr** 1988 Dec;45(10):799–803 (Eng. Abstr.) (Fre)
[Pharmacokinetics of ceftazidime in the cerebrospinal fluid] Decazes JM. **Presse Med** 1988 Oct 26;17(37):1914–6 (6 ref.) (Eng. Abstr.) (Fre)
[Post-proline hydrolysis activities in cerebrospinal fluid] Küllertz G, et al. **Z Med Lab Diagn** 1989;30(5):273–80 (Eng. Abstr.) (Ger)
[Cerebrospinal fluid levels of sulbactam/ampicillin in rabbits with staphylococcal meningitis] Haruta T, et al. **Jpn J Antibiot** 1989 Mar;42(3):594–7 (Eng. Abstr.) (Jpn)
[Cerebrospinal fluid lactic acidosis in bacterial meningitis. Clinical course and influence on arterial blood acid–base balance] Shimoda M, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1059–64 (Eng. Abstr.) (Jpn)
[Studies on meningitis phenomena in herpes zoster] Higuchi Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jun; 98(7):721–30 (Eng. Abstr.) (Jpn)
[Latex agglutination tests of the cerebrospinal fluid in bacterial meningitis: an analysis of 333 cases] Moreno-Carvalho OA, et al. **Arq Neuropsiquiatr** 1988 Dec; 46(4):365–8 (Eng. Abstr.) (Por)
[Alkaline phosphatase in the diagnosis of purulent and serous meningitis] Lutsik BD, et al. **Lab Delo** 1989;(4):15–7 (Eng. Abstr.) (Rus)
[The hemostatic properties of the cerebrospinal fluid] Noormaa UA. **Lab Delo** 1989;(5):25–9 (Eng. Abstr.) (Rus)
[Usefulness of reactive strips in the diagnosis of suppurative meningitis, at the patient's bedside] Oses Salvador JM, et al. **An Esp Pediatr** 1988 Aug;29(2):105–8 (Eng. Abstr.) (Spa)

CHEMICALLY INDUCED

Complement-derived polypeptide C3adesArg as a mediator of inflammation at the blood–brain barrier in a new experimental cat model. Höllerhage HG, et al. **Acta Neuropathol (Berl)** 1989;77(3):307–13
Trimethoprim-sulfamethoxazole-associated aseptic meningitis: case reports and review of the literature. Joffe AM, et al. **Am J Med** 1989 Sep;87(3):332–8 (90 ref.)
Ibuprofen-associated meningitis in a woman with only serologic evidence of a rheumatologic disorder. Ewert BH. **Am J Med Sci** 1989 May;297(5):326–7
Recurrent meningitis due to nonsteroidal anti-inflammatory drugs. Peterson DI, et al. **Bull Clin Neurosci** 1987;52:40–2
Sulindac-induced aseptic meningitis in mixed connective tissue disease. Yasuda Y, et al. **Clin Neurol Neurosurg** 1989; 91(3):257–60
Aseptic meningitis associated with muromonab CD3 administration [letter] Sutton JD, et al. **DICP** 1989 Mar; 23(3):257–8
Drug-related recurrent meningitis. Mifsud AJ. **J Infect** 1988 Sep;17(2):151–3
Aseptic meningitis associated with administration of carbamazepine [letter] Hilton E, et al. **J Infect Dis** 1989 Feb;159(2):363–4
Ibuprofen-induced meningitis in an elderly patient with systemic lupus erythematosus. Gilbert GJ, et al. **South Med J** 1989 Apr;82(4):514–5
Recurrent sulindac-induced aseptic meningitis in a patient tolerant to other nonsteroidal anti-inflammatory drugs. Greenberg GN. **South Med J** 1988 Nov;81(11):1463–4
[Acute aseptic meningitis induced by trimethoprim] Saha H, et al. **Duodecim** 1988;104(4):257–61 (Fin)

COMPLICATIONS

Audiological characteristics of hearing loss following meningitis. Harada T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:61–7
Recurrent infections with meningitis [clinical conference] Taylor AJ, et al. **Ann Allergy** 1989 Jun;62(6):492–3, 538–40
Persistent Cryptococcus neoformans infection of the prostate after successful treatment of meningitis. California Collaborative Treatment Group. Larsen RA, et al. **Ann Intern Med** 1989 Jul 15;111(2):125–8
Treatable causes of meningomyeloradiculitis in individuals infected with human immunodeficiency virus [letter; comment] Lanska DJ, et al. **Arch Neurol** 1989 Jul; 46(7):722–3. **Comment on:** Arch Neurol 1988 Jun;45(6):691–3
Chronic basal meningitis and vasculitis in acquired immunodeficiency syndrome. A possible role for human immunodeficiency virus. Scaravilli F, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):192–5
Chronic pachymeningitis associated to hypereosinophilia: case report. Correale J, et al. **Arq Neuropsiquiatr** 1988 Dec; 46(4):406–13
Post-inflammatory arachnoid cyst of the quadrigeminal cistern. Observation of development of the cyst. Yanaka K, et al. **Childs Nerv Syst** 1988 Oct;4(5):302–5 (20 ref.)
Group B streptococcal cellulitis and adenitis concurrent with meningitis. Rathore MH. **Clin Pediatr (Phila)** 1989 Sep; 28(9):411
Long-term effects of meningitis. Davies PA. **Dev Med Child Neurol** 1989 Jun;31(3):398–400 (16 ref.)
Cryptococcal hepatitis and meningitis in a patient with acquired immunodeficiency syndrome: a case report. Joshi MD, et al. **East Afr Med J** 1989 Jan;66(1):69–73
Isolated hypoglossal nerve palsy in pyogenic meningitis [letter] Singh S, et al. **Indian Pediatr** 1988 Jul;25(7):705–6
Untreated relapsing secondary syphilis with meningitis. Fiumara NJ, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):682–3
Bilateral sensorineural deafness following pyogenic meningitis [letter] Chogle AR, et al. **J Assoc Physicians India** 1989 Mar;37(3):243
Locked-in state in Borrelia burgdorferi meningitis. Merlo A, et al. **J Neurol** 1989 Jul;236(5):305–6
Sphenoid sinusitis associated with meningitis, visual disturbances and total ophthalmoplegia. Mizoguchi K, et al. **Kurume Med J** 1988;35(4):211–5
Aided auditory thresholds in children with postmeningitic deafness. Brookhouser PE, et al. **Laryngoscope** 1989 Aug;

99(8 Pt 1):800–8
Cryptococcal meningitis in AIDS. Wabitsch R, et al. **Mycoses** 1988;Suppl 1:96–101
Intermittent disconjugate eye movements—a sign of raised intracranial pressure with brain stem compression. Fenton T, et al. **Neuropediatrics** 1989 Feb;20(1):30–2
Meningitis-related hearing loss evaluated with evoked potentials. Cohen BA, et al. **Pediatr Neurol** 1988 Jan–Feb; 4(1):18–22
Seizures in bacterial meningitis: prevalence, patterns, pathogenesis, and prognosis. Rosman NP, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):278–85
Inflammatory central nervous system involvement in rheumatoid arthritis. Bathon JM, et al. **Semin Arthritis Rheum** 1989 May;18(4):258–66 (41 ref.)
[Meningitis as cause of prelingual deafness] van Dijk JH. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1125–7 (Eng. Abstr.) (Dut)
[Cryptococcus neoformans—infection in AIDS] Marg E. **Psychiatr Neurol Med Psychol Beih** 1988;40:70–1 (Ger)
[Transient and marked sinus node dysfunction during acute phase of aseptic meningitis] Mori M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):436–7 (Jpn)
[A case report of Streptococcus bovis meningitis associated with asymptomatic rectal carcinoma] Onuma M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):430–1 (Jpn)
[Syphilitic meningitis presenting facial paralysis and the eighth nerve dysfunction. A case report] Satoh J, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):581–2 (Jpn)
[A case of acute autonomic neuropathy and subperineural edema associated with aseptic meningitis] Kitajima I, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):365–71 (Eng. Abstr.) (Jpn)
[Polymyositis associated with aseptic meningitis: a case report] Matsuo H, et al. **Rinsho Shinkeigaku** 1988 Jul; 28(7):765–8 (Eng. Abstr.) (Jpn)
[A case of Cogan's syndrome with aseptic meningitis and hydrocephalus] Yoshioka T, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):878–82 (Eng. Abstr.) (Jpn)
[Multiloculated hydrocephalus: report of 2 cases] Guerreiro MM, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):312–5 (Eng. Abstr.) (Por)
[Clinical aspects, pathogenesis and treatment of encephalopathy and coma in suppurative meningitis and hepatitis] Bulychev VV. **Klin Med (Mosk)** 1989 Jun; 67(6):98–103 (Rus)
[Clinical aspects and treatment of bacterial thrombosis of the cavernous sinus in children] Manerov FK, et al. **Pediatriia** 1988;(4):83–5 (Rus)
[Neonatal meningitis. Study of 26 cases and a review of its sequelae after 5 years] Cervantes Pardo A, et al. **An Esp Pediatr** 1988 Jun;28(6):503–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Meningoradiculoneuritis mimicking vertebral disc herniation. A "neurosurgical" complication of Lyme-borreliosis. Meier C, et al. **Acta Neurochir (Wien)** 1989;98(1-2):42–6
Elastase-alpha 1-proteinase inhibitor: an early indicator of septicemia and bacterial meningitis in childhood. Speer CP, et al. **Adv Exp Med Biol** 1988;240:485–91
Dyke award. Gd-DTPA-enhanced MR imaging of experimental bacterial meningitis: evaluation and comparison with CT. Mathews VP, et al. **AJR** 1989 Jan; 152(1):131–6
Imported case of Bannwarth's syndrome (chronic lymphocytic meningoradiculitis or Lyme meningitis). Salit IE, et al. **Can Dis Wkly Rep** 1988 Feb 27;14(8):31–4 (Eng, Fre)
Prospective evaluation of bacterial antigen detection in cerebral spinal fluid in the diagnosis of bacterial meningitis in a predominantly adult hospital. Forward KR. **Diagn Microbiol Infect Dis** 1988 Oct;11(2):61–3
Laboratory aids in the diagnosis of bacterial meningitis. Strampfer MJ, et al. **Heart Lung** 1988 Nov;17(6 Pt 1):605–7 (10 ref.)
Coagglutination method in the rapid diagnosis of acute bacterial meningitis. Mercy J, et al. **Indian J Med Res** 1988 May;87:422–5
C.S.F. immunology in meningitis. Jagtap P, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):49–53 (10 ref.)
Rapid diagnosis of meningitis. Bhujwala RA. **Indian Pediatr** 1988 Apr;25(4):315–8
Neonatal Citrobacter meningitis. Rathi S, et al. **Indian Pediatr** 1989 Feb;26(2):175–7
Immunological tests in acute bacterial meningitis. Singh H, et al. **Indian Pediatr** 1988 Apr;25(4):323–8
Factitious meningitis: a recurring problem. Penn RL, et al. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):501–3
Dilated Virchow-Robin spaces in cryptococcal meningitis associated with AIDS: CT and MR findings. Wehn SM, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):756–62
Comparison of culture and latex agglutination in the diagnosis of bacterial meningitis. Komolpis P, et al. **J Med Assoc Thai** 1989 Jan;72(1):37–40
Coagglutination (COA) test for the rapid diagnosis of cryptococcal meningitis. Koshi G, et al. **J Med Microbiol** 1989 Jul;29(3):189–94
Escherichia coli meningitis and disseminated strongyloidiasis [letter] Thompson AJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1596–7
Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients. Ross D, et al. **J Neurosurg** 1988 Nov;69(5):669–74
Recurrent aseptic meningitis followed by transverse myelitis as a presentation of systemic lupus erythematosus. Sands ML, et al. **J Rheumatol** 1988;15(5):862–4
Cryptococcal meningitis manifested as transient ischemic attacks. Ferguson JV. **J Tenn Med Assoc** 1989 Aug; 82(8):411–4
Dysgonic fermenter-2 meningitis simulating viral meningitis [letter] Imanse JG, et al. **Lancet** 1989 Aug 12;2(8659):396–7
Lyme disease meningopolyneuritis simulating malignant lymphoma. Szyfelbein WM, et al. **Mod Pathol** 1988 Nov; 1(6):464–8
Cryptococcus meningitis following vertebral tuberculosis. Stempka R, et al. **Mycoses** 1988;Suppl 1:93–5
Salmonella meningitis. Unusual presentation and successful treatment with cefuroxime. Smith ML, et al. **N C Med J** 1989 Feb;50(2):68–70
Bacterial meningitis in childhood: a 13 year review. Dawson KP, et al. **N Z Med J** 1988 Nov 9;101(857):758–60
Bacterial meningitis and the general practitioner [letter] Hudson LJ. **N Z Med J** 1989 Feb 8;102(861):53
Intracerebral Nocardia brasiliensis infection. Schmid A, et al. **Neurosurg Rev** 1987;10(4):315–9
Clinical scoring system for Lumbar puncture in infants. Zuckerberg A, et al. **Pediatr Emerg Care** 1988 Dec; 4(4):301–2
Herpes simplex type 2 aseptic meningitis in a two-month-old infant. Thomas EE, et al. **Pediatr Infect Dis J** 1989 Mar; 8(3):184–6
Candida meningitis: clinical and radiographic diagnosis. Coker SB, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):317–9
Rickettsial infection presenting as culture-negative meningitis. Woo ML, et al. **Postgrad Med J** 1988 Aug; 64(754):614–6
Spinal infection: evaluation with MR imaging and intraoperative US. Post MJ, et al. **Radiology** 1988 Dec; 169(3):765–71
Gonococcal meningitis: case report and review of the literature. Cash JM, et al. **S D J Med** 1988 Nov;41(11):5–7 (12 ref.)
Children admitted for observation for suspected meningitis. Problems in diagnosis in general practice. Nielsen B, et al. **Scand J Prim Health Care** 1988 Nov;6(4):229–32
[A study on cryptococcal meningitis by ELISA] Shao GZ. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):37–40 (Chi)
[Use of new rapid examination methods in the diagnosis and therapy of purulent meningitis] Suškevičová L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Jul;37(4):230–8 (Eng. Abstr.) (Cze)
[Guidelines in bacterial meningitis in children (published erratum appears in 1989 May 27;133(21):1104)] Roord JJ. **Ned Tijdschr Geneeskd** 1989 Apr 22;133(16):831–4 (Eng. Abstr.) (Dut)
[Aseptic purulent meningitis in Kawasaki syndrome in an adult (letter)] Lucht F, et al. **Presse Med** 1988 Oct 8; 17(34):1763–4 (Fre)
[Cranial pachymeningitis of unknown origin. Study of 3 cases] Masson C, et al. **Rev Neurol (Paris)** 1989;145(1):16–23 (19 ref.) (Eng. Abstr.) (Fre)
[MR imaging of the meninges: normal and pathological findings] Schörner W, et al. **ROFO** 1988 Oct;149(4):361–8 (Eng. Abstr.) (Ger)
[Diagnostic viewpoints in meningitis and encephalitis in adulthood] Scheibe J, et al. **Z Arztl Fortbild (Jena)** 1988; 82(12):539–42 (18 ref.) (Ger)
[Viral or bacterial meningitis. Differential diagnostic problems] Aukrust P, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):448–50 (Eng. Abstr.) (Nor)
[Biochemical differential diagnosis of diseases of the central nervous system, especially meningitis] Górnicka G. **Pediatr Pol** 1988 Aug;63(8):502–6 (Pol)
[Characteristics of leptospiral meningitis] Lutsik BD, et al. **Vrach Delo** 1988 Aug;(8):110–2 (Rus)
[Clinical characteristics of tick-borne spirochete infection (Lyme disease)] Dekonenko EP, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):15–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Corticosteroids as adjunctive therapy in bacterial meningitis. A meta-analysis of clinical trials. Havens PL, et al. **Am J Dis Child** 1989 Sep;143(9):1051–5
Dexamethasone for children with bacterial meningitis. Should it be routine therapy? Kaplan SL. **Am J Dis Child** 1989 Mar;143(3):290–2
Dexamethasone therapy for bacterial meningitis in infants and children. McCracken GH Jr, et al. **Am J Dis Child** 1989 Mar;143(3):287–9
Treatment of cryptococcal meningitis with high-dose, long-term combination amphotericin B and flucytosine. Schmutzhard E, et al. **Am J Med** 1988 Nov;85(5):737–8
Analysis of emergency department management of suspected bacterial meningitis. Talan DA, et al. **Ann Emerg Med** 1989 Aug;18(8):856–62
Fluconazole for cryptococcal meningitis [letter] Esposito R, et al. **Ann Intern Med** 1989 Jan 15;110(2):170
Partner drugs: a new outlook for bacterial meningitis. Tuomanen E. **Ann Intern Med** 1988 Nov 1;109(9):690–2 (23 ref.)
Fluconazole for the treatment of fungal diseases in immunosuppressed patients. Dupont B, et al. **Ann N Y Acad Sci** 1988;544:564–70
Ketoconazole treatment of coccidioidal meningitis. Graybill JR, et al. **Ann N Y Acad Sci** 1988;544:488–96
Parenteral 5-fluorocytosine in the therapy of systemic mycoses. Mina FA, et al. **Ann N Y Acad Sci** 1988;544:571–4
Simulation of human serum pharmacokinetics of ticarcillin-clavulanic acid and ceftazidime in rabbits, and efficacy against experimental Klebsiella pneumoniae meningitis. Mizen L, et al. **Antimicrob Agents Chemother** 1989 May;33(5):693–9
Temocillin efficacy in experimental Klebsiella pneumoniae meningitis after infusion into rabbit plasma to simulate antibiotic concentrations in human serum. Woodnutt G, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1705–9
Pefloxacin treatment of meningitis caused by gram-negative bacteria. Segev S, et al. **Arch Intern Med** 1989 Jun; 149(6):1314–6
Amphotericin B induced ocular toxicity in cryptococcal meningitis. Li PK, et al. **Br J Ophthalmol** 1989 May; 73(5):397–8
An immunotoxin for the treatment of T-acute lymphoblastic leukemic meningitis: studies in rhesus monkeys. Hertler AA, et al. **Cancer Immunol Immunother** 1989;28(1):59–66
Therapy of neonatal meningitis. Brines J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):424–6
Aztreonam in the treatment of gram-negative meningitis in children. Isani Z, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):428–30
Pharmacokinetics and clinical evaluation of ceftriaxone (CRO) in children with purulent meningitis. Mallet E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):427
A comparative study with ceftriaxone (Rocephin) versus ampicillin and chloramphenicol in children with bacterial meningitis. Ngu J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):417–8
Susceptibility of Salmonella to eighteen antimicrobials: implications for treatment of Salmonella septicemia and meningitis. Sandett Namnyak S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):33–6
Aztreonam in the treatment of bacterial meningitis. Ayroza-Galvão PA, et al. **Chemotherapy** 1989;35 Suppl 1:39–44
Aztreonam in the treatment of gram-negative meningitis and other gram-negative infections. Feris J, et al. **Chemotherapy** 1989;35 Suppl 1:31–8
Treatment of childhood bacterial meningitis with ceftriaxone once daily: open, prospective, randomized, comparative study of short-course versus standard-length therapy. Kavaliotis J, et al. **Chemotherapy** 1989;35(4):296–303
Ceftriaxone in the treatment of bacterial meningitis in adults. Zavala I, et al. **Chemotherapy** 1988;34 Suppl 1:47–52
Guidelines issued on treatment of pediatric bacterial meningitis [news] **Clin Pharm** 1988 Sep;7(9):638
The management of fulminant meningitis in the intensive care unit. Roos KL, et al. **Crit Care Clin** 1988 Apr;4(2):375–92 (85 ref.)
Cefotaxime and desacetylcefotaxime in neonates and children: a review of microbiologic, pharmacokinetic, and clinical experience. Jacobs RF, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):93–9 (24 ref.)
Salmonella meningitis: the emergence of multi drug resistance. Nesbitt A, et al. **East Afr Med J** 1988 Mar; 65(3):165–70
Chloramphenicol in paediatrics: current prescribing practice and the need to monitor. Mulhall A, et al. **Eur J Pediatr** 1988 Aug;147(6):574–8
Evaluation of FCE 22101 in experimental meningitis caused by Escherichia coli and Streptococcus pneumoniae. Dworkin RJ, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:143–8
Drug transfer into cerebrospinal fluid after simultaneous administration of ampicillin with ceftriaxone or ceftazidime in rabbits with Staphylococcus aureus meningitis. Okura K, et al. **J Antimicrob Chemother** 1988 Aug;22(2):207–11
Gentamycin ototoxicity [letter] Khosla SN, et al. **J Assoc Physicians India** 1988 Feb;36(2):182
Treatment of coccidioidal meningitis with fluconazole [letter] Classen DC, et al. **J Infect Dis** 1988 Oct;158(4):903–4
Comparative efficacy of ceftriaxone and cefuroxime for treatment of bacterial meningitis. Lebel MH, et al. **J Pediatr** 1989 Jun;114(6):1049–54
Cephalosporins for bacterial meningitis: which one is best? [editorial] Steele RW. **J Pediatr** 1989 Jun;114(6):991–2
Ceftriaxone in bacterial meningitis [letter] **Lancet** 1989 Aug 26;2(8661):510
Chloramphenicol treatment of childhood bacterial meningitis [letter; comment] Forster J. **Lancet** 1989 Jul 15;2(8655):161 . **Comment on:** Lancet 1989 Jun 10;1(8650):1281–7
Randomised comparison of chloramphenicol, ampicillin, cefotaxime, and ceftriaxone for childhood bacterial meningitis. Finnish Study Group [see comments] Peltola H, et al. **Lancet** 1989 Jun 10;1(8650):1281–7. **Comment in:** Lancet 1989 Jul 15;2(8655):161
Management and outcome of childhood meningitis in east Malaysia. Lyn P, et al. **Med J Malaysia** 1988 Mar; 43(1):90–6
Dexamethasone for bacterial meningitis in children. **Med Lett Drugs Ther** 1989 Jan 27;31(784):6–7
Dexamethasone therapy for bacterial meningitis [letter] **N Engl J Med** 1989 Feb 16;320(7):463–5
Successful treatment of cryptococcal ventriculoatrial shunt

infection with systemic therapy alone. Yadav SS, et al. **Neurosurgery** 1988 Sep;23(3):372–3
Outpatient management of bacterial meningitis. **Pediatr Infect Dis J** 1989 Apr;8(4):258–60
Bacteroides fragilis meningitis in a premature infant successfully treated with metronidazole. Webber SA, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):886–7
Current therapy of acute bacterial meningitis in children: Part II. Bell WE, et al. **Pediatr Neurol** 1985 Jul–Aug;1(4):201–9 (64 ref.)
Current therapy of acute bacterial meningitis in children: Part I. Bell WE. **Pediatr Neurol** 1985 Jan–Feb;1(1):5–11 (30 ref.)
Delayed cerebrospinal fluid sterilization and adverse outcome of bacterial meningitis in infants and children. Lebel MH, et al. **Pediatrics** 1989 Feb;83(2):161–7
Pseudomonas meningitis therapy recommendation questioned [letter] Savarino SJ, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):632–3
Penetration of cefoxitin into cerebrospinal fluid and treatment of meningitis caused by gram–negative bacteria. Nair SR, et al. **Rev Infect Dis** 1979 Jan–Feb;1(1):134–43
TMP–SMZ in the treatment of brucellar meningitis [letter] Roldan A, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1233–4
Quinolone therapy for infections of the central nervous system. Scheld WM. **Rev Infect Dis** 1989 Jul–Aug;11 Suppl 5:S1194–202 (36 ref.)
Intramuscular ceftriaxone versus ampicillin–chloramphenicol in childhood bacterial meningitis. Girgis NI, et al. **Scand J Infect Dis** 1988;20(6):613–7
[Antibiotics in the treatment of Gram–negative bacillary meningitis] Hu DR. **Chung Hua Nei Ko Tsa Chih** 1988 Oct; 27(10):642–3 (12 ref.) **(Chi)**
[Ceftazidime in the treatment of bacterial meningitis] Duniewicz M, et al. **Sb Lek** 1988 Oct;90(10):318–22 (Eng. Abstr.) **(Cze)**
[The choice of antibiotics in purulent meningitis without bacteriologic diagnosis] Krarup HB. **Ugeskr Laeger** 1989 Apr 3;151(14):880–2 (Eng. Abstr.) **(Dan)**
[Results of treatment of meningitis during a 10–year period] Poulsgård L, et al. **Ugeskr Laeger** 1989 May 1; 151(18):1106–9 (Eng. Abstr.) **(Dan)**
[Choice of antibiotics in purulent meningitis without bacterial diagnosis (letter)] Stinhøj P, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1482–3 **(Dan)**
[Purulent meningitis in infants and children: which antibiotherapy?] Floret D. **Pediatrie** 1988;43(5):389–92 **(Fre)**
[Ceftazidime in the treatment of purulent meningitis] Astruc J. **Presse Med** 1988 Oct 26;17(37):1936–9 (15 ref.) (Eng. Abstr.) **(Fre)**
[Meningo–radiculitis in Lyme disease resistant to penicillin G (letter)] Gourmelen O, et al. **Presse Med** 1989 Mar 18; 18(11):584 **(Fre)**
[Meningitis in adults at the Vaudois University Hospital Center. Diagnosis, management and development of 112 cases] Genton B, et al. **Rev Med Suisse Romande** 1988 Sep; 108(9):795–803 **(Fre)**
[The treatment of bacterial meningitis in children with a 7–day course of daily–dose ceftriaxone by injection. Multicenter study in the non–university pediatric services of French–speaking Switzerland and of Tessin] Renevey F, et al. **Rev Med Suisse Romande** 1988 Aug;108(8):659–64 **(Fre)**
[AIDS: bad prognosis in candidiasis. Cryptococcosis in brain involvement is usually fatal—experiences with a new therapeutic drug] Dietrich D. **Fortschr Med** 1989 Mar 15; 107(8):52 **(Ger)**
[Treatment of purulent meningitis in childhood] Guggenbichler JP, et al. **Padiatr Padol** 1989;24(1):3–19 (21 ref.) (Eng. Abstr.) **(Ger)**
[Infections of the cerebrospinal fluid shunt] Menardi G. **Padiatr Padol** 1989;24(1):43–8 (Eng. Abstr.) **(Ger)**
[Purulent meningitis in childhood—some important aspects for basic medical management] Wässer S, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:37–40 **(Ger)**
[Therapeutic viewpoints in meningitis and encephalitis in adulthood] Schulz KR, et al. **Z Arztl Fortbild (Jena)** 1988; 82(12):543–6 (19 ref.) **(Ger)**
[A case of neonatal meningitis due to Flavobacterium meningosepticum successfully treated with cefmetazole and cefotaxime] Takeda A, et al. **Jpn J Antibiot** 1988 May; 41(5):557–62 (41 ref.) (Eng. Abstr.) **(Jpn)**
[A case of successfully treated cryptococcal meningitis, complicated with aplastic anemia] Sugishima H, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):664–8 (Eng. Abstr.) **(Jpn)**
[A case of aseptic meningoencephalitis with recurrent abnormal behavior, status epilepticus and aphthous stomatitis, improved by acyclovir] Shimada K, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):367–70 (Eng. Abstr.) **(Jpn)**
[Treatment of severe septicemia and meningitis in children] Reigstad H, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30; 108(24):1925–7 (Eng. Abstr.) **(Nor)**
[Bilateral deafness after intra–lumbar administration of kanamycin] Blagoveshchenskaia NS, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):56–7 **(Rus)**
[Treatment of bacterial meningitis: should our protocol be modified?] del Castillo Martín F. **An Esp Pediatr** 1988 Dec; 29(6):425–7 (30 ref.) **(Spa)**

ENZYMOLOGY

Diagnostic value of elastase–alpha 1–proteinase inhibitor in cerebrospinal fluid. Speer CP, et al. **Acta Neurol Scand** 1988 Dec;78(6):524–8

EPIDEMIOLOGY

Flavobacterium meningosepticum infections in a neonatal intensive care unit. Abrahamsen TG, et al. **Acta Paediatr Scand** 1989 Jan;78(1):51–5
Bacterial meningitis in adults. A community perspective. Harris LF. **Ala Med** 1988 Oct;58(4):20–4, 26 (14 ref.)
Re: "Possible association of mycoplasma and viral respiratory infections with bacterial meningitis" [letter] Rosenthal J, et al. **Am J Epidemiol** 1988 Dec;128(6):1385–6
Meningitis in the newborn—a 14 year review. Bell AH, et al. **Arch Dis Child** 1989 Jun;64(6):873–4
Central nervous system infections in the elderly. Behrman RE, et al. **Arch Intern Med** 1989 Jul;149(7):1596–9
Aseptic meningitis at Royal Alexandra Hospitals, Edmonton, Alberta. Cheung E, et al. **Can Dis Wkly Rep** 1988 Nov 12;14(45):205 **(Eng, Fre)**
The first human case of angiostrongyliasis cantonensis in the mainland of China. Yang SQ, et al. **Chin Med J [Engl]** 1988 Nov;101(11):783–6
Pyogenic meningitis in Nairobi children. Nesbitt A, et al. **East Afr Med J** 1988 Mar;65(3):189–96
Epidemic of Serratia marcescens bacteremia and meningitis in a neonatal unit in Mexico City. Zaidi M, et al. **Infect Control Hosp Epidemiol** 1989 Jan;10(1):14–20
An assessment of the use of Bayes' Theorem for forecasting in public health: the case of epidemic meningitis in China. Zeng G, et al. **Int J Epidemiol** 1988 Sep;17(3):673–9
Aseptic meningitis after vaccination against measles and mumps. Cižman M, et al. **Pediatr Infect Dis J** 1989 May; 8(5):302–8
Meningitis in an Irish community. Gillespie SH, et al. **Ulster Med J** 1988 Oct;57(2):167–71
[Meningitis and encephalitis 1986] Zabicka J. **Przegl Epidemiol** 1988;42(1):35–43 **(Pol)**
[Construction of a mathematical model for predicting serous meningitis morbidity] Spynu KI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):481–5 **(Rus)**
[Epidemiology of infectious diseases of the nervous system in children below 7 years of age in the autonomous community of Murcia] Rodríguez Costa T, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:70–4 **(Spa)**
[Purulent meningitis] Guerrero J, et al. **Rev Chil Pediatr** 1988 May–Jun;59(3):170–3 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Subdural fluid collections following transcortical approach to intra– or paraventricular tumours. Tanaka Y, et al. **Acta Neurochir (Wien)** 1989;99(1–2):20–5
Localized CNS brucellosis: report of 7 cases. Pascual J, et al. **Acta Neurol Scand** 1988 Oct;78(4):282–9
A new cause of chronic meningitis: infected lumbar pseudomeningocele. Koo J, et al. **Am J Med** 1989 Jan; 86(1):103–4
Aseptic meningitis complicating adult Kawasaki disease: case report and review of the literature. McIlroy MA, et al. **Am J Med** 1989 Jul;87(1):106–10 (20 ref.)
Meningitis in familial Mediterranean fever. Schwabe AD, et al. **Am J Med** 1988 Nov;85(5):715–7 (14 ref.)
Flavobacterium meningosepticum meningitis in an adult. Uchihara T, et al. **Am J Med** 1988 Nov;85(5):738–9
Neoplastic meningitis with eosinophilic pleocytosis in Hodgkin's disease: a case with cerebellar dysfunction and a review of the literature. Mulligan MJ, et al. **Am J Med Sci** 1988 Nov;296(5):322–6 (34 ref.)
Branhamella catarrhalis meningitis following otolaryngologic surgery. Naqvi SH, et al. **APMIS Suppl** 1988;3:74–5
Significance of Histoplasma antigen in the cerebrospinal fluid of patients with meningitis. Wheat LJ, et al. **Arch Intern Med** 1989 Feb;149(2):302–4
Lyme disease with acute purulent meningitis [published erratum appears in Br Med J [Clin Res] 1988 Oct 15;297(6654):950] Bourke SJ, et al. **BMJ** 1988 Aug 13; 297(6646):460
Dangers of an uncomplicated tooth extraction. A case of Streptococcus sanguis meningitis. Fernando IN, et al. **Br Dent J** 1988 Sep 24;165(6):220
Two cases of Streptococcus suis meningitis. Hay PE, et al. **Br J Ind Med** 1989 May;46(5):352–3
Chronic aseptic meningitis in a patient with systemic lupus erythematosus. Lancman ME, et al. **Can J Neurol Sci** 1989 Aug;16(3):354–6
Dermoids of the posterior fossa. Case reports and review. Starinsky R, et al. **Clin Pediatr (Phila)** 1988 Dec; 27(12):579–82 (8 ref.)
Aseptic meningitis associated with muromonab–CD3 therapy [letter] Joy ME, et al. **Clin Pharm** 1988 Oct;7(10):721
Disseminated strongyloidiasis presenting as septicaemia and meningitis: a case report. Chunge CN. **East Afr Med J** 1987 Dec;64(12):864–6
Recurrent meningitis: a case report. Ceccarelli M, et al. **Eur J Pediatr** 1989 Jun;148(7):646–7 (18 ref.)
Meningitis due to Borrelia burgdorferi in the initial stage of Lyme disease. Huppertz HI, et al. **Eur J Pediatr** 1989 Feb;148(5):428–30
Subacute meningitis caused by Brucella: a diagnostic challenge. Korman S, et al. **Eur J Pediatr** 1988 Nov; 148(2):120–1
Purulent meningitis due to spontaneous anterior sacral meningocele perforation. Case report. Fiumara F, et al. **Ital J Neurol Sci** 1989 Apr;10(2):211–3
Three cases of neonatal meningitis caused by Enterobacter sakazakii in powdered milk. Biering G, et al. **J Clin Microbiol** 1989 Sep;27(9):2054–6
Optic neuropathy associated with chronic lymphomatous meningitis. Coppeto JR, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):39–45
Chronic syphilitic meningitis resulting in superior orbital fissure syndrome and posterior fossa gumma. A report of two cases followed for 20 years. Currie JN, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):145–59 (91 ref.)
Recurrent meningitis associated with meningioma of the mastoid cavity. Kelleher RJ, et al. **J Laryngol Otol** 1989 Jan;103(1):99–100
Recurrent meningitis in children due to inner ear abnormalities. Quiney RE, et al. **J Laryngol Otol** 1989 May; 103(5):473–80
Inflammatory reaction to synthetic dural substitute. Case report. Cohen AR, et al. **J Neurosurg** 1989 Apr;70(4):633–5
Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients. Ross D, et al. **J Neurosurg** 1988 Nov;69(5):669–74
Streptococcus pyogenes meningitis after myelography [letter] Damani NN, et al. **JPMA** 1988 Jul;38(7):197–8
Mumps meningitis following measles, mumps, and rubella immunisation [letter] **Lancet** 1989 Aug 12;2(8659):394–5
Angiostrongylus cantonensis and eosinophilic meningitis [letter] Alicata JE. **Lancet** 1988 Dec 10;2(8624):1367–8
Cryptogenic meningitis and unexplained episodes of coma in a young child [letter] David TJ. **Lancet** 1989 Aug 26; 2(8661):513–4
Mumps vaccine and meningitis [letter] Ehrengut W. **Lancet** 1989 Sep 23;2(8665):751
The early signs and symptoms of neurotologic complications of chronic suppurative otitis media. Schwaber MK, et al. **Laryngoscope** 1989 Apr;99(4):373–5
Enterococcal meningitis: a subacute presentation. Brown DR, et al. **N Y State J Med** 1989 Feb;89(2):92–3
Meningitis following spinal puncture in a patient with a CSF leak. Lanska DJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):306–7
Posterior fossa subdural effusion due to head trauma. Nishizaki T, et al. **Neurosurgery** 1988 Jul;23(1):81–4
Bacterial meningitis following epidural anesthesia for vaginal delivery: a case report. Berga S, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):437–9
Mixed meningitis with Bacteroides ovatus caused by an occult congenital dermal sinus. Frank GR, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):401–3
Aseptic meningitis associated with Ehrlichia canis infection. Golden SE. **Pediatr Infect Dis J** 1989 May;8(5):335–7
Meningitis caused by Bifidobacterium in an infant. Hata D, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):669–71
Primary clostridial meningitis in infancy. Heidemann SM, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):126–8
Neurobrucellosis in children. Lubani MM, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):79–82
Mycoplasma hominis meningitis in a premature infant. McDonald JC, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):795–8
Neonatal sepsis and meningitis caused by Edwardsiella tarda. Vohra K, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):814–5
Vibrio vulnificus meningitis in a boy with thalassemia after eating raw oysters. Katz BZ. **Pediatrics** 1988 Nov; 82(5):784–6
Neonatal meningitis due to Streptococcus mitis. Bignardi GE, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):86–8
Angiostrongylus (Parastrongylus) eosinophilic meningitis. Koo J, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1155–62 (71 ref.)
Intracranial complications of sinusitis. Parker GS, et al. **South Med J** 1989 May;82(5):563–9
Mixed meningitis: report of 2 cases. Duh RW, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):1011–3
Brucellosis: atypical presentation with peritonitis and meningitis. Diab SM, et al. **Trop Geogr Med** 1989 Apr; 41(2):160–3
[Flavobacterium meningosepticum meningitis in a newborn infant—a case report] Sun KJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):173–6 (Eng. Abstr.) **(Chi)**
[Serious infections in alcoholics. 2. Etiology of bacteremia and meningitis in alcoholics discharged from hospitals in Funen 1981, 1984 and 1986] Siboni A. **Ugeskr Laeger** 1989 Feb 6;151(6):376–81 (Eng. Abstr.) **(Dan)**
[Meningovascular syphilis. Apropos of 4 cases] Zagnoli F, et al. **Ann Med Interne (Paris)** 1988;139(6):391–4 (Eng. Abstr.) **(Fre)**
[Malformation of the facial canal, meningitis and cerebrospinal otorrhea] Legent F, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):197–200 (8 ref.) (Eng. Abstr.) **(Fre)**
[Streptococcus group B tardive meningitis revealing chronic septic granulomatosis] Garel D, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):35–7 (Eng. Abstr.) **(Fre)**
[Spontaneously resolving meningeal cysticercosis reveals chronic lymphocytic meningitis (letter)] de Toffol B, et al. **Presse Med** 1989 Jan 21;18(2):81–2 **(Fre)**
[Listeria meningitis in a healthy young adult] Vanderheyden

JE, et al. **Rev Med Brux** 1988 Nov;9(9):430–2 (Eng. Abstr.) (Fre)

[Streptococcal meningitis secondary to inoculation. 2 cases (letter)] Dubost JJ, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):570 (Fre)

[Diseases caused by group G beta-hemolytic streptococci] Flissie R, et al. **Dtsch Med Wochenschr** 1989 Mar 24; 114(12):461–3 (Eng. Abstr.) (Ger)

[Prognosis of peripheral facial paralysis in Lyme borreliosis (Garin–Bujadoux, Bannwarth meningopolyradiculitis)] Laubert A, et al. **HNO** 1989 Apr;37(4):158–61 (Eng. Abstr.) (Ger)

[Materno-fetal colonization by group B beta-hemolytic streptococcus and neonatal meningitis] Castelli G, et al. **G Batteriol Virol Immunol** 1987 Jan–Dec;80(1–12):263–6 (15 ref.) (Eng. Abstr.) (Ita)

[A case of eosinophilic meningitis due to Angiostrongylus cantonensis] Fukuhara T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1067–71 (12 ref.) (Jpn)

[A case of psittacosis meningitis complicated with uveitis] Adachi K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):122–4 (Eng. Abstr.) (Jpn)

[An autopsy case of cryptococcal meningitis associated with smoldering adult T-cell leukemia] Matsumuro K, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):670–3 (Eng. Abstr.) (Jpn)

[A case of Wegener's granulomatosis with aseptic meningitis] Morita H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):417–22 (Eng. Abstr.) (Jpn)

[A case of systemic lupus erythematosus associated with meningitis, myelitis, and bilateral optic neuritis] Ichiki S, et al. **Ryumachi** 1989 Apr;29(2):126–33 (Eng. Abstr.) (Jpn)

[Cryptococcal cerebrospinal meningitis as a complication of acute blast crisis of chronic myeloid leukemia] Nowicka J, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):746–7 (Eng. Abstr.) (Pol)

[Infection with involvement of the central nervous system] Vengerov IuIa, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):28–33 (Eng. Abstr.) (Rus)

[Suppurative meningitis in adults due to rare species of the causative agent] Lisukova TE, et al. **Ter Arkh** 1988; 60(11):57–60 (Eng. Abstr.) (Rus)

[Infectious endocarditis, meningitis and pneumonia in alcoholic liver cirrhosis] Zharkov OB, et al. **Ter Arkh** 1988; 60(10):115–7 (Rus)

[Cerebral leptomeningitis in so-called sterile paranasal sinusitis] Valman MA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):46–9 (Eng. Abstr.) (Rus)

[Intracranial complications of otitis: the present-day situation] Fernández Rodríguez R, et al. **An Otorrinolaringol Ibero Am** 1989;16(3):281–97 (Eng. Abstr.) (Spa)

[Meningeal cryptococcosis] Lucentini MO, et al. **Medicina (B Aires)** 1987;47(5):516–20 (Eng. Abstr.) (Spa)

[Meningoradiculitis caused by Borrelia burgdorferi (letter)] Gómez Beldarrain M, et al. **Rev Clin Esp** 1989 Mar; 184(5):269–70 (Spa)

[Lymphomatous meningitis as the beginning of diffuse well-differentiated lymphocytic lymphoma (letter)] Solá C, et al. **Rev Clin Esp** 1988 Jun;183(1):53–4 (Spa)

IMMUNOLOGY

The importance of C3d estimation in the diagnosis of generalized bacterial infections in newborn infants. Guillois B, et al. **Acta Paediatr Scand** 1989 May;78(3):369–72

Local IgM production in meningoradiculitis Bannwarth and neurosyphilis. Boeer A, et al. **J Neuroimmunol** 1988 Dec; 20(2–3):315–6

Production of viral antibodies in vitro by CSF cells from mumps meningitis and multiple sclerosis patients. Salmi AA, et al. **J Neurol Sci** 1989 May;90(3):315–24

Immunocytochemical analysis of immunoglobulin-containing cells in CSF and blood in inflammatory disorders of the central nervous system. Weber T, et al. **J Neurol Sci** 1988 Aug;86(1):61–72

Cerebrospinal fluid interleukin 1-beta and tumor necrosis factor concentrations and outcome from neonatal gram-negative enteric bacillary meningitis. McCracken GH Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):155–9

[Secondary immunologic deficiency associated with deficiency of immunoglobulins and various aspects of its correction in the complex intensive therapy of patients with suppurative meningitis] Tsyganil AA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):45–8 (Eng. Abstr.) (Rus)

METABOLISM

[Meningeal diffusion of cefpirome in adults] Chavanet P, et al. **Pathol Biol (Paris)** 1989 May;37(5):442–5 (Eng. Abstr.) (Fre)

[Production of interferon in the blood and cerebrospinal fluid in children with meningitis of various etiologies] Reznikova EV, et al. **Pediatriia** 1989;(3):112 (Rus)

MICROBIOLOGY

A study on the etiology of purulent meningitis. Carvajal A. **Chemioterapia** 1987 Jun;6(2 Suppl):419–21

Etiology of meningitis in Portugal. Lecour H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):422–3

Bacillus Alcaligenes fecalis septicemia and meningitis in the newborn. Kishan J, et al. **Indian J Pediatr** 1988 May–Jun; 55(3):443–4

Flavobacterium meningitis. Ayyagari A, et al. **Indian Pediatr** 1988 Apr;25(4):335–7

Bacteriological profile of acute pyogenic meningitis. Fule RP, et al. **Indian Pediatr** 1989 Feb;26(2):174–5

Pseudomeningitis—another nosocomial headache [published erratum appears in Infect Control Hosp Epidemiol 1988 Nov;9(11):487] Cunha BA. **Infect Control Hosp Epidemiol** 1988 Sep;9(9):391–3 (22 ref.)

Bacillus species pseudomeningitis. Lettau LA, et al. **Infect Control Hosp Epidemiol** 1988 Sep;9(9):394–7

New causes of pneumonia, meningitis, and disseminated infections associated with immersion. Dworzack DL, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):615–33 (72 ref.)

Bacterial meningitis with initial normal cerebrospinal fluid findings. Rosenthal J, et al. **Isr J Med Sci** 1989 Apr; 25(4):186–8

Neisseria gonorrhoeae dissemination and gonococcal meningitis. Anan TJ, et al. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):123–5

Pneumonia and meningitis caused by a new nonfermentative unknown gram-negative bacterium. Casalta JP, et al. **J Clin Microbiol** 1989 Jul;27(7):1446–8

Achromobacter xylosoxidans (Alcaligenes xylosoxidans subsp. xylosoxidans) meningitis associated with a gunshot wound. D'Amato RF, et al. **J Clin Microbiol** 1988 Nov; 26(11):2425–6

Comparison of isolates of Neisseria gonorrhoeae causing meningitis and report of gonococcal meningitis in a patient with C8 deficiency. Del Rio C, et al. **J Clin Microbiol** 1989 May;27(5):1045–9

Meningitis due to Streptococcus mitis cross-reacting with Streptococcus pneumoniae [letter] Fraise AP, et al. **J Infect** 1989 Jul;19(1):75–7

Meningitis caused by Absidia corymbifera. Mackenzie DW, et al. **J Infect** 1988 Nov;17(3):241–8

Actinobacillus (formerly Pasteurella) ureae meningitis and bacteraemia: report of a case and review of the literature. Verhaegen J, et al. **J Infect** 1988 Nov;17(3):249–53 (24 ref.)

Association of homozygous C4B deficiency with bacterial meningitis. Rowe PC, et al. **J Infect Dis** 1989 Sep; 160(3):448–51

Fimbrial serotypes of Escherichia coli strains isolated from extra-intestinal infections. De Ree JM, et al. **J Med Microbiol** 1989 Jun;29(2):95–9

Polymicrobial central nervous system infection in the acquired immunodeficiency syndrome [letter] Sperber AD, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):998–9

Streptococcus acidominimus infections in a human. Akaike T, et al. **Jpn J Med** 1988 Aug;27(3):317–20

Streptococcus suis type 2—an underdiagnosed zoonotic agent? [letter] Robertson ID, et al. **Med J Aust** 1989 Aug 21;151(4):238

ColV increases the virulence of Escherichia coli K1 strains in animal models of neonatal meningitis and urinary infection. Aguero ME, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):211–6

Group A streptococcal meningitis and brain abscess. Jagdis F. **Pediatr Infect Dis J** 1988 Dec;7(12):885–6

Pathogenesis of brain abscess caused by Citrobacter diversus or Enterobacter sakazakii [letter] Kline MW. **Pediatr Infect Dis J** 1988 Dec;7(12):891–2

Simultaneous recovery of bacterial and viral pathogens from cerebrospinal fluid. Sferra TJ, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):552–6 (25 ref.)

Plesiomonas shigelloides septicemia and meningitis in a newborn. Waecker NJ, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):877–9

Bacillus species infections in neonates. Patrick CC, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):612–5 (18 ref.)

[Group B streptococcal infections in newborn infants and young infants. A 5-year analysis] Halle E, et al. **Kinderarztl Prax** 1988 Dec;56(12):585–91 (Eng. Abstr.) (Ger)

[Anaerobic meningitis in brain abscess] Temme N, et al. **Med Klin** 1988 Jul 15;83(15):492–3 (Ger)

[Type 2 Streptococcus suis (R–Streptococci) as pathogens of occupational diseases. Report of a case and a review of the literature] Köhler W, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):144–8 (54 ref.) (Eng. Abstr.) (Ger)

[Meningitis caused by Salmonella enteritidis in an infant] Labay Matías WV, et al. **An Esp Pediatr** 1989 Jan; 30(1):57–8 (Spa)

[Bacterial meningitis: identification of the etiologic agent by latex agglutination (published erratum appears in Rev Chil Pediatr 1988 May–Jun;59(3):227)] Burgos R, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):88–93 (Eng. Abstr.) (Spa)

[Cryptococcal meningitis] Tebas P, et al. **Rev Clin Esp** 1988 Nov;183(8):412–5 (53 ref.) (Eng. Abstr.) (Spa)

MORTALITY

[Complicated purulent meningitis in the adult: persisting high mortality caused by vasculitis and intracranial pressure] Pfister HW. **Nervenarzt** 1989 May;60(5):249–54 (56 ref.) (Ger)

PATHOLOGY

Leukocyte types in cerebrospinal fluid and peripheral blood enumerated immunoenzymatically in aseptic meningitis and the Guillain–Barré syndrome. Ernerudh J, et al. **Acta Neurol Scand** 1989 Jan;79(1):68–74

Mononuclear cell types in cerebrospinal fluid and blood of patients with multiple sclerosis. Quantitation by immunoenzyme microassay with panel of monoclonal antibodies. Fredrikson S, et al. **Arch Neurol** 1989 Apr; 46(4):372–5

Mollaret's meningitis revisited. Report of a case with a review of the literature. Kwong YL, et al. **Clin Neurol Neurosurg** 1988;90(2):163–7 (22 ref.)

Lymphocyte subtyping in aseptic and bacterial inflammation of the CNS. Bamborschke S, et al. **J Neuroimmunol** 1988 Dec;20(2–3):179–80

PHYSIOPATHOLOGY

Cerebrospinal fluid pressure in pyogenic meningitis. Minns RA, et al. **Arch Dis Child** 1989 Jun;64(6):814–20

Intracranial pressure in childhood central nervous system infections. Rebaud P, et al. **Intensive Care Med** 1988; 14(5):522–5

Neurotoxicity of benzylpenicillin in experimental Escherichia coli meningitis. Schliamser SE, et al. **J Antimicrob Chemother** 1988 Oct;22(4):521–8

Haemophilus influenzae lipopolysaccharide-induced blood brain barrier permeability during experimental meningitis in the rat. Wispelwey B, et al. **J Clin Invest** 1988 Oct; 82(4):1339–46

Intracranial hypertension causing visual failure in cryptococcus meningitis. Tan CT. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):944–6

Cerebrospinal fluid parameters and auditory brainstem responses following meningitis. Borkowski WJ Jr, et al. **Pediatr Neurol** 1985 May–Jun;1(3):134–9

Current concepts in bacterial meningitis [clinical conference] Hahn SM. **West J Med** 1989 Aug;151(2):180–6 (35 ref.)

[Intracranial pressure in comatose meningitis and encephalitis in children] Rebaud P, et al. **Pediatrie** 1988;43(6):539–44 (Eng. Abstr.) (Fre)

[The significance of albumino-rachia in the evaluation of the functional status of the hemato-encephalic barrier in patients with inflammatory diseases of the nervous system] Nikolić S, et al. **Med Pregl** 1988;41(7–8):319–22 (Eng. Abstr.) (Scr)

PREVENTION & CONTROL

Cryptococcal meningitis: seven years of maintenance amphotericin therapy without progressive renal failure. Reines E, et al. **Am J Med** 1988 Oct;85(4):591–2

"Infections related to intracranial pressure monitoring" [letter] Gardner D. **J Neurosci Nurs** 1988 Dec;20(6):342

Use of bacitracin for neurotologic surgery. Kartush JM, et al. **Laryngoscope** 1988 Oct;98(10):1050–4

[The problem of infection in measuring brain ventricle pressure] Rieger A, et al. **Zentralbl Chir** 1989;114(8):530–3 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Diffuse pneumocephalus from Clostridium perfringens meningitis: CT findings. Klein MA, et al. **AJNR** 1989 Mar–Apr;10(2):447

Hypertrophic cranial pachymeningitis: assessment with CT and MR imaging. Martin N, et al. **AJNR** 1989 May–Jun; 10(3):477–84

Chemical meningitis: unusual presentation of a cerebellar astrocytoma: case report and review of the literature. Lunardi P, et al. **Neurosurgery** 1989 Aug;25(2):264–70 (48 ref.)

Computed tomography in bacterial meningitis of childhood. Kline MW, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):855–7

Bacterial meningitis as an etiology of perinatal cerebral infarction. Ment LR, et al. **Pediatr Neurol** 1986 Sep–Oct; 2(5):276–9

RADIOTHERAPY

Sarcoid meningitis, high adenosine deaminase levels in CSF and results of cranial irradiation [letter] García-Moncó C, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1594–6

SURGERY

[Selection of the method of treatment of suppurative spinal epiduritis] Fadeev BP. **Vestn Khir** 1988 Sep;141(9):49–52 (Eng. Abstr.) (Rus)

THERAPY

Reduction of inflammation, tissue damage, and mortality in bacterial meningitis in rabbits treated with monoclonal antibodies against adhesion-promoting receptors of leukocytes. Tuomanen EI, et al. **J Exp Med** 1989 Sep 1; 170(3):959–69

[Resuscitation of severe meningitis in infants and children] Floret D. **Pediatrie** 1988;43(6):477–85 (Eng. Abstr.) (Fre)

[Severe meningitis in an intensive care unit] Jerbi Z, et al. **Tunis Med** 1989 Feb;67(2):71–4 (Eng. Abstr.) (Fre)

[Hemosorption in infectious pathology] Pokrovskiĭ VI, et al.

Ter Arkh 1989;61(5):130–4 (Eng. Abstr.) (Rus)
[Hydrocortisone acetate aerosol in the complex treatment of patients with cerebral leptomeningitis] Madzhidov NM, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1988 May–Jun; (3):32–5 (Rus)
[Experience with the use of ultraviolet irradiation of the blood in patients with suppurative meningitis] Chepkiĭ LP, et al. Vrach Delo 1988 Oct;(10):112–5 (Rus)

TRANSMISSION

Nosocomial meningitis due to Campylobacter fetus subsp. fetus in a neonatal intensive care unit [letter] Morooka T, et al. Eur J Pediatr 1988 Oct;148(1):89–90

URINE

Inappropriate antidiuretic hormone in children with viral meningitis. Fajardo JE, et al. Pediatr Neurol 1989 Jan–Feb; 5(1):37–40

VETERINARY

Suppurative spinal meningitis caused by an Actinomyces sp in an Arctic fox. Raju NR, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1194–5
Canine meningitis. A changing emphasis. Meric SM. J Vet Intern Med 1988 Jan–Mar;2(1):26–35 (123 ref.)
Identification of dorsal-spined larvae from free-ranging wapiti (Cervus elaphus) in southwestern Manitoba, Canada. Pybus MJ, et al. J Wildl Dis 1989 Apr;25(2):291–3
A murine model of Streptococcus suis type 2 meningitis in the pig. Williams AE, et al. Res Vet Sci 1988 Nov; 45(3):394–9

MENINGITIS, ASEPTIC see under MENINGITIS

MENINGITIS, HAEMOPHILUS

CEREBROSPINAL FLUID

C-reactive protein and bacterial meningitis. Cuevas LE, et al. Ann Trop Paediatr 1988 Dec;8(4):230–3
Gentamicin penetration into cerebrospinal fluid in experimental Haemophilus influenzae meningitis. Smith AL, et al. Antimicrob Agents Chemother 1988 Jul; 32(7):1034–9
How rapidly is cerebrospinal fluid pleocytosis manifested with bacterial meningitis? [letter] Bonadio WA. Pediatr Infect Dis J 1989 May;8(5):337–8
Normal cerebrospinal fluid cellularity in childhood pyogenic meningitis. Gururaj AK, et al. Singapore Med J 1988 Jun; 29(3):303–5
Cerebrospinal fluid cell counts and chemistries in bacterial meningitis. Arevalo CE, et al. South Med J 1989 Sep; 82(9):1122–7

COMPLICATIONS

The impact of Haemophilus influenzae type b meningitis on nutritional status. Sherry B, et al. Am J Clin Nutr 1989 Sep;50(3):425–34
Clinical identification and comparative prognosis of high-risk patients with Haemophilus influenzae meningitis. Gary N, et al. Am J Dis Child 1989 Mar;143(3):307–11
Meningitis caused by Haemophilus influenzae type b infection after epiglottitis. Foweraker JE, et al. BMJ 1989 Apr 15; 298(6679):1003–4
Invasion of the inner ear by Haemophilus influenzae type b in experimental meningitis. Kaplan SL, et al. J Infect Dis 1989 May;159(5):923–30
Ocular complications in meningitis: "fifteen years study". Hanna LS, et al. Metab Pediatr Syst Ophthalmol 1988; 11(4):160–2
[Postinfectious thrombocytosis as an acute phase reaction: the example of Haemophilus influenzae meningitis] Heyne K, et al. Monatsschr Kinderheilkd 1988 Sep;136(9):622–5 (Eng. Abstr.) (Ger)

DIAGNOSIS

A study on the etiology of purulent meningitis. Carvajal A. Chemioterapia 1987 Jun;6(2 Suppl):419–21
Nonvalue of antigen quantitation in diagnosis of Haemophilus meningitis [letter] Henne G, et al. Infection 1989 Mar–Apr; 17(2):107–8

DRUG THERAPY

Cefotaxime versus penicillin–chloramphenicol in purulent meningitis: a controlled single-blind clinical trial. Haffejee IE. Ann Trop Paediatr 1988 Dec;8(4):225–9
Aztreonam in the treatment of gram-negative meningitis in children. Isani Z, et al. Chemioterapia 1987 Jun;6(2 Suppl):428–30
Ceftriaxone alone compared to ampicillin and chloramphenicol in the treatment of bacterial meningitis. Girgis NI, et al. Chemotherapy 1988;34 Suppl 1:16–20
Anemia during Haemophilus influenzae type b meningitis: lack of an effect of chloramphenicol. Sherry B, et al. Dev Pharmacol Ther 1989;12(4):188–99
Antibiotic therapy of meningitis caused by ampicillin-resistant Haemophilus influenzae in Denmark and Greenland 1981 to 1987. Cordtz T, et al. Eur J Clin Microbiol Infect Dis 1988 Oct;7(5):646–50
Applications of therapy in animal models to bacterial infection in human disease. Tunkel AR, et al. Infect Dis Clin North Am 1989 Sep;3(3):441–59 (134 ref.)
Therapeutic efficacy of chloramphenicol, co-trimoxazole (trimethoprim/sulphamethoxazole), cefmenoxime and ceftriaxone in experimental bacteraemia and meningitis caused by ampicillin-resistant Haemophilus influenzae type b. Kim KS. J Antimicrob Chemother 1988 Nov; 22(5):697–706
Antibiotic treatment in bacterial meningitis [letter] Mecrow IK, et al. Lancet 1989 Sep 16;2(8664):685–6
Steroids for meningitis: tuberculous and bacterial [letter] Kendig EL Jr. Pediatr Infect Dis J 1989 Aug;8(8):541–2
Cefuroxime treatment failure and Haemophilus influenzae meningitis: case report and review of literature. Arditi M, et al. Pediatrics 1989 Jul;84(1):132–5 (36 ref.)
[Purulent meningitis in childhood caused by Haemophilus influenzae with ampicillin and chloramphenicol resistance] Rockstroh T, et al. Kinderarztl Prax 1989 Jun;57(6):271–5 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

Interannual variation of the incidence of Haemophilus influenzae type b meningitis. Sherry B, et al. JAMA 1989 Apr 7;261(13):1924–9
Bacterial meningitis in children in the Northern Territory [letter] Hanna JN. Med J Aust 1989 Aug 7;151(3):173
Differences in the epidemiology of childhood community-acquired bacterial meningitis between two ethnic populations cohabiting in one geographic area. Rosenthal J, et al. Pediatr Infect Dis J 1988 Sep;7(9):630–3
Epidemiology and prospects for prevention of disease due to Haemophilus influenzae in developing countries. Munson RS Jr, et al. Rev Infect Dis 1989 May–Jun;11 Suppl 3:S588–97 (62 ref.)
[Epidemiology of Haemophilus influenzae type b meningitis in 2 French departments] Livartowski A, et al. Arch Fr Pediatr 1989 Mar;46(3):175–9 (Eng. Abstr.) (Fre)

ETIOLOGY

Association of homozygous C4B deficiency with bacterial meningitis. Rowe PC, et al. J Infect Dis 1989 Sep; 160(3):448–51

IMMUNOLOGY

Induction of meningeal inflammation by outer membrane vesicles of Haemophilus influenzae type b. Mustafa MM, et al. J Infect Dis 1989 May;159(5):917–22
[The efficacy of counterimmunoelectrophoresis and coagglutination in detecting bacterial antigens in meningitis] Rusu V, et al. Arch Roum Pathol Exp Microbiol 1983 Jan–Mar;42(1):5–14 (Eng. Abstr.) (Fre)

MICROBIOLOGY

Haemophilus influenzae type e (biotype IV) meningitis [letter] Marshall GS, et al. Am J Dis Child 1989 Jan; 143(1):9–10 (17 ref.)
Haemophilus influenzae outer membrane vesicle-induced blood–brain barrier permeability during experimental meningitis. Wispelwey B, et al. Infect Immun 1989 Aug; 57(8):2559–62
Meningitis due to beta-lactamase producing chloramphenicol resistant Haemophilus influenzae type b in Kuwait [letter] Zaki M, et al. J Infect 1988 Jul;17(1):85–6
Meningitis due to Haemophilus influenzae type b resistant to ampicillin and chloramphenicol. Givner LB, et al. Rev Infect Dis 1989 Mar–Apr;11(2):329–34 (34 ref.)
[Meningitis in a previously health adult man caused by Haemophilus influenzae] Møller LA, et al. Ugeskr Laeger 1988 Oct 24;150(43):2587–8 (Eng. Abstr.) (Dan)

PHYSIOPATHOLOGY

Brain edema and increased intracranial pressure in the pathophysiology of bacterial meningitis. Niemöller UM, et al. Eur J Clin Microbiol Infect Dis 1989 Feb;8(2):109–17 (53 ref.)
The use of CSF pressure recordings in acute purulent meningitis. Minns RA, et al. Z Kinderchir 1988 Dec;43 Suppl 2:28–9

PREVENTION & CONTROL

Haemophilus influenzae meningitis in Manitoba and the Keewatin District, NWT: potential for mass vaccination. Hammond GW, et al. Can Med Assoc J 1988 Oct 15; 139(8):743–7
Haemophilus b polysaccharide vaccine [letter] Coles FB, et al. JAMA 1989 Feb 24;261(8):1152–3
Hemophilus influenzae type B vaccine. Few BJ. MCN 1988 Nov–Dec;13(6):407

MENINGITIS, LISTERIA

Listeria monocytogenes meningitis. Peeters A, et al. Clin Neurol Neurosurg 1989;91(1):29–36

CEREBROSPINAL FLUID

Listeria monocytogenes meningitis in previously healthy adults. Hearmon CJ, et al. Postgrad Med J 1989 Feb; 65(760):74–8

COMPLICATIONS

Listeria monocytogenes meningitis in a patient with AIDS-related complex [letter] Beninger PR, et al. J Infect Dis 1988 Dec;158(6):1396–7

DRUG THERAPY

[Solitary listerial abscess of the brain stem. Cure with antibiotic treatment] Outin HD, et al. Rev Neurol (Paris) 1989;145(2):153–6 (Eng. Abstr.) (Fre)

ETIOLOGY

Cheese-borne listeria meningitis in immunocompetent patient [letter] Azadian BS, et al. Lancet 1989 Feb 11;1(8633):322–3
Fatal listeria meningitis in immunosuppressed patient [letter] Girmenia C, et al. Lancet 1989 Apr 8;1(8641):794

MICROBIOLOGY

Outbreak of neonatal listeriosis in a regional hospital in Kuwait. Sethi SK, et al. Eur J Pediatr 1989 Jan; 148(4):368–70

PATHOLOGY

[Listeria meningitis in a 16-month-old infant without known immune deficiency] Doummar D, et al. Ann Pediatr (Paris) 1988 Oct;35(8):577–9 (Eng. Abstr.) (Fre)

MENINGITIS, MENINGOCOCCAL

Meningococcal infections [clinical conference] Wong VK, et al. West J Med 1989 Jan;150(1):68–73
[Guidelines for the diagnosis and treatment of meningococcal disease at hospitals] Tidsskr Nor Laegeforen 1989 May 10; 109(13):1408–11 (Eng. Abstr.) (Nor)
[Primary meningococcal conjunctivitis] Cerezo Pancorbo JM, et al. An Esp Pediatr 1988 Aug;29(2):179–80 (Spa)

BLOOD

The complex pattern of cytokines in serum from patients with meningococcal septic shock. Association between interleukin 6, interleukin 1, and fatal outcome. Waage A, et al. J Exp Med 1989 Jan 1;169(1):333–8
Complement deficiencies in patients over ten years old with meningococcal disease due to uncommon serogroups. Fijen CA, et al. Lancet 1989 Sep 9;2(8663):585–8

CEREBROSPINAL FLUID

Meningitis without CSF pleocytosis [letter] Wright J. N Z Med J 1989 Jan 25;102(860):22
Detection of bacterial antigens in cerebrospinal fluid by a latex agglutination test in 'septic unknown' meningitis and serogroup B meningococcal meningitis. Muller PD, et al. S Afr Med J 1989 Sep 2;76(5):214–5
Cerebrospinal fluid cell counts and chemistries in bacterial meningitis. Arevalo CE, et al. South Med J 1989 Sep; 82(9):1122–7

COMPLICATIONS

Cutaneous vasculitis—a rare complication of acute meningococcal meningitis in an adult. Singh N, et al. J Assoc Physicians India 1988 Dec;36(12):736–8
Plasma endotoxin as a predictor of multiple organ failure and death in systemic meningococcal disease. Brandtzaeg P, et al. J Infect Dis 1989 Feb;159(2):195–204
Paraplegia as a presenting feature of meningococcal meningitis [letter] Boothman BR, et al. J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1241
Ocular complications in meningitis: "fifteen years study". Hanna LS, et al. Metab Pediatr Syst Ophthalmol 1988; 11(4):160–2
Is activated C3 a premier factor of DIC development in septic shock? Wu QX, et al. Prog Clin Biol Res 1989;308:271–5
Sequelae of epidemic meningococcal meningitis in Africa. Smith AW, et al. Trans R Soc Trop Med Hyg 1988; 82(2):312–20
A case of meningococcal meningitis with unusual complications. Elechi CA. Trop Geogr Med 1988 Oct; 40(4):353–5
[Acute pericarditis in meningococcal infection] Hennion-Bernard C, et al. Arch Fr Pediatr 1988 Aug–Sep; 45(7):487–8 (Eng. Abstr.) (Fre)
[A successfully treated case of meningococcal meningitis in an adult with complement 7 deficiency] Moriyama K, et al. Kansenshogaku Zasshi 1988 Nov;62(11):1026–32 (Eng. Abstr.) (Jpn)
[Diagnosis of cardiac lesions in the generalized form of meningococcal infection] Radzivil GG, et al. Klin Med (Mosk) 1989 Feb;67(2):118–23 (Eng. Abstr.) (Rus)
[Experience using antihypoxic drugs in the treatment of acute neurosensory hearing loss in children with meningitis] Ryndina AM, et al. Vestn Otorinolaringol 1989 Mar–Apr; (2):14–7 (Eng. Abstr.) (Rus)
[Enzymologic diagnosis of cerebral lesions in generalized forms of meningococcal infection in the acute period] Radzivil GG, et al. Zh Nevropatol Psikhiatr 1989;89(2):10–5

(Eng. Abstr.) (Rus)
[Cortical blindness in meningococcal meningitis] Blasco González L, et al. **An Esp Pediatr** 1988 Aug;29(2):175–6 (7 ref.) (Spa)

DIAGNOSIS

A study on the etiology of purulent meningitis. Carvajal A. **Chemioterapia** 1987 Jun;6(2 Suppl):419–21
A case of indolent meningococcal infection. Nard JA 3d, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):265
Meningococcal meningitis. Clinical observations during an epidemic. Talukdar B, et al. **Indian Pediatr** 1988 Apr; 25(4):329–34
An evaluation of the accuracy of clinical diagnosis at admission in a population with epidemic meningococcal disease. Mathiassen B, et al. **J Intern Med** 1989 Aug; 226(2):113–6
Comparison of latex agglutination with established bacteriological tests for diagnosis of cerebrospinal meningitis [letter] Burans JP, et al. **Lancet** 1989 Jul 15; 2(8655):158–9
Comparison of gram stain and latex agglutination for diagnosis of meningococcal meningitis [letter] Coovadia YM, et al. **Lancet** 1989 Sep 16;2(8664):677
Recurrent meningitis in a black man [clinical conference] Cooper JF, et al. **South Med J** 1989 Feb;82(2):235–7
[Examination of the environment in meningococcal disease. Identification and clearing of the virulent microorganism from the environment of patients with meningococcal disease] Kristiansen BE, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1373–6 (Eng. Abstr.) (Nor)
[Clinical importance of a method for determining metabolites of mean molecular weight in the blood and cerebrospinal fluid in meningitis in children] Valiukh SV, et al. **Pediatriia** 1988;(8):44–6 (Rus)

DRUG THERAPY

Magnetic resonance imaging and dexamethasone therapy for bacterial meningitis. Lebel MH, et al. **Am J Dis Child** 1989 Mar;143(3):301–6
Short course chemotherapy for meningococcal meningitis. Isaacs RD, et al. **Aust N Z J Med** 1988 Aug;18(5):731–2
Aztreonam in the treatment of gram-negative meningitis in children. Isani Z, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):428–30
Ceftriaxone alone compared to ampicillin and chloramphenicol in the treatment of bacterial meningitis. Girgis NI, et al. **Chemotherapy** 1988;34 Suppl 1:16–20
Sulbactam/ampicillin in the treatment of epidemic meningococcal meningitis in northern Nigeria. Dutse AI, et al. **Drugs** 1988;35 Suppl 7:77–9
Once daily ceftriaxone for meningococcemia and meningococcal meningitis. Tuncer AM, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):711–3
[Shortened antibiotic therapy of meningococcal meningitis: 5-day administration of ceftriaxone] Auvergnat JC, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):735–7 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

Changing patterns in the epidemiology of meningococcal disease in Italy: results from a one-year survey. Stroffolini T, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):28–9
Global epidemiology of meningococcal disease. Schwartz B, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S118–24 (50 ref.)
Risk factors for meningococcal disease: a case control study in south west England. Stuart JM, et al. **Community Med** 1988 May;10(2):139–46
Meningitis in Israel: an imported outbreak. Slater PE, et al. **Isr J Med Sci** 1989 Jan;25(1):41–2
Meningococcal disease in Italy. Stroffolini T, et al. **J Infect** 1989 Jul;19(1):69–74
Meningococcal carriers in school children. Danchaivijitr S, et al. **J Med Assoc Thai** 1988 Oct;71(10):537–40
A description of the outbreak of meningitis in HMS Raleigh in February 1987. Evans CW, et al. **J R Nav Med Serv** 1988 Winter;74(3):187–93
Preliminary application of circular distribution in analysis of certain seasonal epidemic diseases. Huang WM, et al. **J Tongji Med Univ** 1988;8(3):186–92
Intercontinental spread of an epidemic group A Neisseria meningitidis strain. Moore PS, et al. **Lancet** 1989 Jul 29; 2(8657):260–3
The clinical features of paediatric meningococcal disease Auckland, 1985–87. Voss L, et al. **N Z Med J** 1989 May 24;102(868):243–5
An outbreak of meningococcal disease in Auckland, New Zealand. Lennon D, et al. **Pediatr Infect Dis J** 1989 Jan; 8(1):11–5
Differences in the epidemiology of childhood community-acquired bacterial meningitis between two ethnic populations cohabiting in one geographic area. Rosenthal J, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):630–3
Trends in meningococcal disease in Italy 1987. Stroffolini T, et al. **Public Health** 1989 Jan;103(1):31–4
[Periodic regression] Hu KZ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan;22(1):22–6 (Eng. Abstr.) (Chi)
[Epidemiology and prevention of cerebrospinal meningitis in Italy in the last 10 years] Melino C, et al. **Clin Ter** 1988 Jan 31;124(2):125–37 (Eng. Abstr.) (Ita)

ETIOLOGY

Association of homozygous C4B deficiency with bacterial meningitis. Rowe PC, et al. **J Infect Dis** 1989 Sep; 160(3):448–51
[Hereditary C5 deficiency and recurrent Neisseria meningitidis meningitis] Ducret F, et al. **Rev Med Interne** 1988 Nov-Dec;9(5):534–7 (14 ref.) (Eng. Abstr.) (Fre)
[Post-traumatic bacterial cerebrospinal meningitis treated at the Infectious Disease Clinic, Pomeranian Medical Academy, during the years 1976–1985] Gańczak M, et al. **Przegl Epidemiol** 1988;42(2):164–71 (Eng. Abstr.) (Pol)

GENETICS

The Stonehouse study: secretor status and carriage of Neisseria species. Blackwell CC, et al. **Epidemiol Infect** 1989 Feb;102(1):1–10
[Recurrent meningitis in a familial defect of the beta-subunit of the 8th complement component] Nürnberger W, et al. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):989–92 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Inherited deficiency of ninth component of complement: an increased risk of meningococcal meningitis. Nagata M, et al. **J Pediatr** 1989 Feb;114(2):260–4
Another Swedish family with complete properdin deficiency: association with fulminant meningococcal disease in one male family member. Söderström C, et al. **Scand J Infect Dis** 1989;21(3):259–65
[Studies on serum meningococcal antibodies in patients with meningococcal meningitis and a healthy population] Pang HM. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul; 22(4):233–5 (Eng. Abstr.) (Chi)
[The efficacy of counterimmunoelectrophoresis and coagglutination in detecting bacterial antigens in meningitis] Rusu V, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan-Mar;42(1):5–14 (Eng. Abstr.) (Fre)
[Immune response to meningococci] Flaegstad T. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):33–6 (Eng. Abstr.) (Nor)
[Clinical value of determining spontaneous chemiluminescence of neutrophils in young children with meningococcal infection] Susanova VF, et al. **Pediatriia** 1989;(7):40–3 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Comparison of the abilities of different protein sources of iron to enhance Neisseria meningitidis infection in mice. Schryvers AB, et al. **Infect Immun** 1989 Aug;57(8):2425–9
Clonal and variable properties of Neisseria meningitidis isolated from cases and carriers during and after an epidemic in The Gambia, West Africa. Crowe BA, et al. **J Infect Dis** 1989 Apr;159(4):686–700
Experimental meningococcal meningitis in the infant rat. Saukkonen K. **Microb Pathog** 1988 Mar;4(3):203–11
Periorbital cellulitis with meningococcal bacteremia. Ferson MJ, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):600–1
[Meningococcal disease in The Netherlands] Spanjaard L, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):100–3 (Dut)
[Interaction of Neisseria meningitidis with eukaryotic cells in a mixed infection in vitro] Gorokhova LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):47–51 (Eng. Abstr.) (Rus)
[Neonatal meningitis caused by Neisseria subflava] Martínez Tallo E, et al. **An Esp Pediatr** 1988 Dec;29(6):475–6 (Spa)

MORTALITY

Trends in mortality in children hospitalized with meningococcal infections, 1957 to 1987. Havens PL, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):8–11

PHYSIOPATHOLOGY

The use of CSF pressure recordings in acute purulent meningitis. Minns RA, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:28–9
[Characteristics of systemic macro- and microcirculation in meningococcal meningitis] Radzivil GG, et al. **Kardiologiia** 1989 Jun;29(6):115–7 (Rus)
[Cerebral blood flow in meningitis] Zaĭtsev IA. **Vrach Delo** 1989 Jan;(1):109–11 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Evaluation of single-dose ciprofloxacin in the eradication of Neisseria meningitidis from nasopharyngeal carriers. Dworzack DL, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1740–1
Vaccines for prevention of meningococcal disease. Frasch CE. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S134–8 (40 ref.)
Control of an outbreak of group C meningococcal meningitis with a polysaccharide vaccine. Masterton RG, et al. **J Infect** 1988 Sep;17(2):177–82
Meningococcal meningitis [editorial] [published erratum appears in Lancet 1989 Apr 1;1(8640):742] **Lancet** 1989 Mar 25;1(8639):647–8
Protective efficacy of monoclonal antibodies to class 1 and class 3 outer membrane proteins of Neisseria meningitidis B:15:P1.16 in infant rat infection model: new prospects for vaccine development. Saukkonen K, et al. **Microb Pathog** 1987 Oct;3(4):261–7
Meningococcal vaccine—do some children experience side effects? Hood DA, et al. **N Z Med J** 1989 Feb 22; 102(862):65–7
Febrile seizures after immunization with meningococcal A + C vaccine. Novelli VM, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):250–1
Incidence of reactions to meningococcal A&C vaccine among U.K. schoolchildren. Roberts JS, et al. **Public Health** 1988 Sep;102(5):471–6
[Meningococcal disease—sharpening control] Lystad A. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1369–71 (Nor)

TRANSMISSION

Public health approach to infectious disease imported by plane [letter] Caspari D. **Can Med Assoc J** 1989 Apr 15; 140(8):892, 894
Group A meningococcal carriage in travelers returning from Saudi Arabia. Moore PS, et al. **JAMA** 1988 Nov 11; 260(18):2686–9
Invasive meningococcal disease: secondary spread in a day-care center [published erratum appears in South Med J 1989 Jun;82(60:691] Leggiadro RJ, et al. **South Med J** 1989 Apr;82(4):511–3
[An infection route of meningococcal meningitis and eradication of carriers] Wada K, et al. **Kansenshogaku Zasshi** 1988 Mar;62(3):194–9 (Eng. Abstr.) (Jpn)

MENINGITIS, PNEUMOCOCCAL

Clinical evaluation of pneumococcal meningitis in adults over a twelve-year period. Bruyn GA, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):695–700

CEREBROSPINAL FLUID

C-reactive protein and bacterial meningitis. Cuevas LE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):230–3
Cerebrospinal fluid protein profile in experimental pneumococcal meningitis and its alteration by ampicillin and anti-inflammatory agents. Kadurugamuwa JL, et al. **J Infect Dis** 1989 Jan;159(1):26–34
Cerebrospinal fluid cell counts and chemistries in bacterial meningitis. Arevalo CE, et al. **South Med J** 1989 Sep; 82(9):1122–7

COMPLICATIONS

Haemolytic-uraemic syndrome associated with Streptococcus pneumoniae meningitis. Martinot A, et al. **Eur J Pediatr** 1989 Jun;148(7):648–9
Brain acidosis in experimental pneumococcal meningitis. Andersen NE, et al. **J Cereb Blood Flow Metab** 1989 Jun; 9(3):381–7
Ocular complications in meningitis: "fifteen years study". Hanna LS, et al. **Metab Pediatr Syst Ophthalmol** 1988; 11(4):160–2
Cerebellar infarction as a complication of pneumococcus meningitis. Floret D, et al. **Pediatr Infect Dis J** 1989 Jan; 8(1):57–8
[Cerebellar infarction in pneumococcal meningitis (letter)] Delmas MC, et al. **Arch Fr Pediatr** 1988 Aug-Sep; 45(7):514–5 (Fre)
[Suppurated pneumococcal meningitis in infants and children: complications and prognostic factors] Pesso JL, et al. **Pediatrie** 1988;43(3):263–7 (Eng. Abstr.) (Fre)
[A case of cerebral arteritis secondary to bacterial meningitis] Takeda N, et al. **No To Shinkei** 1988 Jul;40(7):647–50 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Fulminant bacterial meningitis without meningeal signs. Callaham M. **Ann Emerg Med** 1989 Jan;18(1):90–3
A study on the etiology of purulent meningitis. Carvajal A. **Chemioterapia** 1987 Jun;6(2 Suppl):419–21
Cross-reactive monoclonal antibodies for diagnosis of pneumococcal meningitis. Waltman WD 2d, et al. **J Clin Microbiol** 1988 Sep;26(9):1635–40

DRUG THERAPY

Influence of antibiotic dose, dosing interval, and duration of therapy on outcome in experimental pneumococcal meningitis in rabbits. Täuber MG, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):418–23
Ceftriaxone alone compared to ampicillin and chloramphenicol in the treatment of bacterial meningitis. Girgis NI, et al. **Chemotherapy** 1988;34 Suppl 1:16–20
Evaluation of FCE 22101 in experimental meningitis caused by Escherichia coli and Streptococcus pneumoniae. Dworkin RJ, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:143–8
[Pneumococcal infections in childhood—meningitis. 2: Discussion of the report on 58 cases and literature review] Handrick W, et al. **Padiatr Grenzgeb** 1988;27(4):287–94 (74 ref.) (Eng. Abstr.) (Ger)

[A case of pneumococcal meningitis resistant to beta-lactam antibiotic treatment] Arimasu O, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):682–3 **(Jpn)**

[Penicillin G in the treatment of pneumococcus meningitis. Current importance] do Carmo G, et al. **Acta Med Port** 1988 Jan–Feb;1(1):33–6 (Eng. Abstr.) **(Por)**

EPIDEMIOLOGY

Pyogenic meningitis in Nairobi children. Nesbitt A, et al. **East Afr Med J** 1988 Mar;65(3):189–96

Differences in the epidemiology of childhood community-acquired bacterial meningitis between two ethnic populations cohabiting in one geographic area. Rosenthal J, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):630–3

[Pneumococcal infection in childhood—meningitis. 1.: Report of 58 cases] Rieske K, et al. **Padiatr Grenzgeb** 1988; 27(4):273–85 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Recurrent bacterial meningitis. Secondary to malformation of the inner ear. Hayashi N, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):139–41

Meningitis after splenectomy. Selby CD, et al. **J R Soc Med** 1989 Apr;82(4):206–9

[Serious infections in alcoholics. 1. Bacteremia, lobar pneumococcal pneumonia and pneumococcal meningitis in alcoholics 1974–1987] Siboni A, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):374–6 (Eng. Abstr.) **(Dan)**

[Post-traumatic bacterial cerebrospinal meningitis treated at the Infectious Disease Clinic, Pomeranian Medical Academy, during the years 1976–1985] Gańczak M, et al. **Przegl Epidemiol** 1988;42(2):164–71 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

The role of complement in inflammation during experimental pneumococcal meningitis. Tuomanen E, et al. **Microb Pathog** 1986 Feb;1(1):15–32

[The efficacy of counterimmunoelectrophoresis and coagglutination in detecting bacterial antigens in meningitis] Rusu V, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan–Mar;42(1):5–14 (Eng. Abstr.) **(Fre)**

METABOLISM

Brain phosphorus magnetic resonance spectroscopy in acute bacterial meningitis. Matthews PM, et al. **Arch Neurol** 1989 Sep;46(9):994–6

MICROBIOLOGY

Meningitis caused by a penicillin- and chloramphenicol-resistant Streptococcus pneumoniae. Collignon PJ, et al. **Med J Aust** 1988 Nov 7;149(9):497–8

PATHOLOGY

[Morphology of pneumococcal meningitis in adults] Krukovskiĭ BV, et al. **Arkh Patol** 1989;51(1):55–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Brain edema and increased intracranial pressure in the pathophysiology of bacterial meningitis. Niemöller UM, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):109–17 (53 ref.)

MENINGITIS, TUBERCULOUS see **TUBERCULOSIS, MENINGEAL**

MENINGITIS, VIRAL

Type B-2 coxsackievirus meningitis in pregnancy. A case report. McKernan PD, et al. **J Reprod Med** 1988 Jul; 33(7):667–70

BLOOD

[Lysosomal secretion of peripheral blood leukocytes in children with meningitis of mumps etiology] Babachenko IV, et al. **Pediatriia** 1988;(10):107 **(Rus)**

COMPLICATIONS

Chronic meningitis and vasculitis in acquired immunodeficiency syndrome [letter] Rosenblum WI. **Arch Pathol Lab Med** 1989 Sep;113(9):966–7

DIAGNOSIS

Role of the virology laboratory in diagnosis and management of patients with central nervous system disease. Chonmaitree T, et al. **Clin Microbiol Rev** 1989 Jan;2(1):1–14 (167 ref.)

Definition of high-proficiency serological markers for diagnosis of varicella-zoster virus infections by enzyme immunoassay. Echevarría JM, et al. **J Med Virol** 1989 Mar; 27(3):224–30

Association of clinical presentation, laboratory findings, and virus serotypes with the presence of meningitis in hospitalized infants with enterovirus infection. Dagan R, et al. **J Pediatr** 1988 Dec;113(6):975–8

Dysgonic fermenter-2 meningitis simulating viral meningitis [letter] Imanse JG, et al. **Lancet** 1989 Aug 12;2(8659):396–7

Herpes simplex type 2 aseptic meningitis in a two-month-old infant. Thomas EE, et al. **Pediatr Infect Dis J** 1989 Mar; 8(3):184–6

[Viral or bacterial meningitis. Differential diagnostic problems] Aukrust P, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):448–50 (Eng. Abstr.) **(Nor)**

DRUG THERAPY

[Cytosine arabinoside treatment for ophthalmic herpes zoster with meningitis] Shoji H, et al. **Rinsho Shinkeigaku** 1975 Feb;15(2):75–80 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

[Acute benign lymphocytic meningitis. Apropos of a childhood epidemic in northwest Tunisia] Ben Ammar B, et al. **Tunis Med** 1987 Oct;65(10):609–12 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Mumps meningitis, possibly vaccine-related—Ontario. Hockin JC, et al. **Can Dis Wkly Rep** 1988 Nov 19; 14(46):209–11 **(Eng, Fre)**

Mumps meningitis following measles, mumps, and rubella immunisation [letter] Gray JA, et al. **Lancet** 1989 Jul 8; 2(8654):98

Mumps meningitis after measles, mumps, and rubella vaccination [letter] Murray MW, et al. **Lancet** 1989 Sep 16;2(8664):677

[Streptococcus B meningitis after splenic irradiation of Hodgkin's disease (letter)] Hennequin C, et al. **Presse Med** 1989 Jan 7–14;18(1):34 **(Fre)**

[A case of recurrent Epstein-Barr virus meningitis] Takeuchi M, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):85–8 (Eng. Abstr.) **(Jpn)**

[Meningoradiculitis associated with hepatitis A] Alonso Palacio J, et al. **An Esp Pediatr** 1988 Jul;29(1):73–6 (24 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Demonstration of zoster virus antibodies in cerebrospinal fluid cells. Beuche W, et al. **J Neurol** 1989 Jan;236(1):26–8

On the production of immunoglobulins in the central nervous system: an involvement of B cell stimulatory factor 2/interleukin 6 produced intrathecally? Fontana A, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):38–9

MICROBIOLOGY

Simultaneous recovery of bacterial and viral pathogens from cerebrospinal fluid. Sferra TJ, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):552–6 (25 ref.)

[Is Mollaret's meningitis caused by herpes simplex virus type 2?] Bergström T. **Lakartidningen** 1989 Apr 5;86(14):1279–80 (Eng. Abstr.) **(Swe)**

PHYSIOPATHOLOGY

Interferon induction and granulocyte function in patients with viral meningitis. Moringlane IL, et al. **J Clin Lab Immunol** 1988 Jun;26(2):85–8

THERAPY

The ameliorating effect of lumbar puncture in viral meningitis. Jaffe M, et al. **Am J Dis Child** 1989 Jun; 143(6):682–5

VETERINARY

Canine meningitis. A changing emphasis. Meric SM. **J Vet Intern Med** 1988 Jan–Mar;2(1):26–35 (123 ref.)

MENINGOCELE

[Intranasal meningoceles] Chaloupková J, et al. **Sb Lek** 1989 May;91(5):157–60 (Eng. Abstr.) **(Cze)**

COMPLICATIONS

Large pelvic mass in a patient with neurofibromatosis [clinical conference] Green WJ, et al. **Invest Radiol** 1988 Oct;23(10):772–4

Purulent meningitis due to spontaneous anterior sacral meningocele perforation. Case report. Fiumara F, et al. **Ital J Neurol Sci** 1989 Apr;10(2):211–3

Anterolateral cervical meningocele in association with neurofibromatosis: MR and CT studies. So CB, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):692–5 (16 ref.)

Encephalomeningocele presenting with spontaneous cerebrospinal fluid rhinorrhea in an elderly man: case report. Dempsey PK, et al. **Neurosurgery** 1988 Nov; 23(5):637–40

Dandy-Walker cyst associated with occipital meningocele. Suzuki Y, et al. **Pediatr Neurol** 1989 May–Jun;5(3):191–3

Lateral thoracic meningocele associated with neurofibromatosis: total excision by posterolateral extradural approach. A case report. Chee CP. **Spine** 1989 Jan;14(1):129–31

[Trans-sphenoid meningoencephalocele as a cause of anterior hypophyseal lobe insufficiency] Braunsdorf WE. **Nervenarzt** 1989 Jul;60(7):441–3 **(Ger)**

DIAGNOSIS

Sphenopharyngeal meningoencephalocele: unusual clinical and radiologic features. Boulanger T, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S80

Magnetic resonance imaging of post-surgical pseudomeningocele. Murayama S, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):335–9

Occult intrasacral meningocele: clinical and radiographic diagnosis. Doty JR, et al. **Neurosurgery** 1989 Apr; 24(4):616–25

The small midline occipital encephalomeningocele: definition of a syndrome. Schlitt M, et al. **Neurosurgery** 1989 Apr; 24(4):613–6

Parietal cephaloceles: radiographic and magnetic resonance imaging evaluation. Curnes JT, et al. **Pediatr Neurosci** 1988; 14(2):71–6

False-negative amniotic fluid acetylcholinesterase in a case of meningo-encephalocele. Boogert A, et al. **Prenat Diagn** 1989 Feb;9(2):133–8

[Case for diagnosis: meningoencephalocele] Lorette G, et al. **Ann Dermatol Venereol** 1988;115(8):847–8 **(Fre)**

[Sacral perineural cyst—report of a case] Kato T, et al. **No Shinkei Geka** 1988 Jun;16(7):893–7 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

A new cause of chronic meningitis: infected lumbar pseudomeningocele. Koo J, et al. **Am J Med** 1989 Jan; 86(1):103–4

Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410–1

GENETICS

Trisomy 18 associated with ectopia cordis and occipital meningocele. Bick D, et al. **Am J Med Genet** 1988 Jul; 30(3):805–10

PATHOLOGY

Rudimentary meningocele: a variant of "primary cutaneous meningioma". Sibley DA, et al. **J Cutan Pathol** 1989 Apr; 16(2):72–80

Interparietal meningoencephalocele. Clinico-pathological correlations. Fontanini G, et al. **Pathologica** 1987 Sep–Oct; 79(1063):635–9

[Congenital spinal cord hernia at the level of the first thoracic vertebra] Okladnikov GI, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):49 **(Rus)**

PHYSIOPATHOLOGY

Accessory limb associated with spinal bifida. Krishra A, et al. **J Pediatr Surg** 1989 Jun;24(6):604–6

Tethered cord syndrome: progressive symptomatology in adults. Case report: symptoms, diagnosis, treatment. Artmann H, et al. **Neurosurg Rev** 1989;12(2):173–5

RADIOGRAPHY

Extradural arachnoid cyst. Ticket L, et al. **J Belge Radiol** 1988;71(6):740–1

[A case of neurofibromatosis with spinal dural ectasia and vertebral body scalloping: a case report] Ito Y, et al. **No Shinkei Geka** 1988 Dec;16(13):1495–9 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Visualization of a pseudomeningocele on isotope cisternography. Tuvia J, et al. **Clin Nucl Med** 1988 Dec; 13(12):889–91

SURGERY

Lumboperitoneal shunt for the treatment of postoperative persistent collection of subcutaneous cerebrospinal fluid (pseudomeningocele). Aoki N. **Acta Neurochir (Wien)** 1989;98(1–2):32–4

Frontoethmoidal meningoencephalocystocele. Shah AK, et al. **Ann Plast Surg** 1989 Jun;22(6):523–7; discussion 528

Dermoid tumours occurring at the site of previous meningocele repair. Pansey BK, et al. **Clin Neurol Neurosurg** 1988;90(2):137–40

Observations on spinal dysraphism. Tripathy P, et al. **J Indian Med Assoc** 1989 Mar;87(3):62–4

An unusual sincipital meningoencephalocele: a case report. Narang R, et al. **J Pediatr Surg** 1989 Feb;24(2):208–9

The use of the reverse latissimus dorsi flap in the closure of lower spinal defects. McGeorge DD, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:30–2

[Diagnosis and therapy of ventral sacral meningoceles] Siedschlag WD, et al. **Zentralbl Neurochir** 1988;49(4):313–7 (Eng. Abstr.) **(Ger)**

[Pseudotumor cerebri after surgery of lumbosacral meningocele] Antić B, et al. **Vojnosanit Pregl** 1988 Jul–Aug; 45(4):308–10 **(Scr)**

MENINGOCOCCAL INFECTIONS

Meningococcal infections—what's next? [editorial] Smith AL. **West J Med** 1989 Jan;150(1):80–1

Meningococcal infections [clinical conference] Wong VK, et al. **West J Med** 1989 Jan;150(1):68–73

[Not meningitis but septic shock as the killer in acute meningococcal disease] Vos GD, et al. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):772-5 (Eng. Abstr.) **(Dut)**

[Primary meningococcal peritonitis] Saint-Martin J, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):600-1 **(Fre)**

[Late-presenting monoarthritis in meningococcal infection in a 3-year-old girl] de Inocencio Arocena J, et al. **An Esp Pediatr** 1988 Sep;29(3):259-60 (15 ref.) **(Spa)**

BLOOD

Serum opsonins to serogroup B meningococci in meningococcal disease. Halstensen A, et al. **Scand J Infect Dis** 1989;21(3):267-76

COMPLICATIONS

Meningococcal purpura fulminans: treatment of vascular insufficiency in a 2-yr-old child with lumbar epidural sympathetic blockade. Anderson CT, et al. **Anesthesiology** 1989 Sep;71(3):463-4

Neisseria meningitidis and Moraxella osloensis: dual infection in blood and peritoneal fluid. Tiosejo LL, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):209-13

Chondro-osseous growth abnormalities after meningococcemia. A clinical and histopathological study. Grogan DP, et al. **J Bone Joint Surg [Am]** 1989 Jul; 71(6):920-8

Late osteoarticular lesions following meningococcemia with disseminated intravascular coagulation. Santos E, et al. **Pediatr Radiol** 1989;19(3):199-202

Ultrasound diagnosis of adrenal hemorrhage in meningococcemia. Sarnaik AP, et al. **Pediatr Radiol** 1988; 18(5):427-8

Meningococcaemia complicated by myocarditis. A report of 2 cases. Sandler MA, et al. **S Afr Med J** 1989 Apr 15; 75(8):391-3

DIAGNOSIS

Meningococcal endophthalmitis without concomitant septicemia or meningitis. Auerbach SB, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):411-3

[Guidelines for diagnosis and treatment of meningococcal diseases at hospitals (letter)] Reigstad H, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2181-2 **(Nor)**

[A case of Waterhouse-Friderichsen syndrome] Kozlov VG, et al. **Klin Khir** 1989;(1):61-2 **(Rus)**

[Enzyme diagnosis of cardiac lesions in meningococcal infection] Radzivil GG, et al. **Ter Arkh** 1988;60(11):53-7 **(Rus)**

DRUG THERAPY

Intravenous benzyl penicillin [letter] Mathur SL, et al. **J Assoc Physicians India** 1988 Sep;36(9):571

Once daily ceftriaxone for meningococcemia and meningococcal meningitis. Tuncer AM, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):711-3

Ciprofloxacin in meningococcal carriers. Visakorpi R. **Scand J Infect Dis Suppl** 1989;60:108-11 (14 ref.)

EPIDEMIOLOGY

Nosocomial outbreak of group C meningococcal disease. Riewerts Eriksen NH, et al. **BMJ** 1989 Mar 4; 298(6673):568-9

Association of serotypes 2A and 2B with meningococcal disease in Canada. Ashton FE, et al. **Can Dis Wkly Rep** 1989 Mar 18;15(11):63-5 **(Eng, Fre)**

Meningococcal disease in Ontario during the winter of 1988-1989. Heimann GA, et al. **Can Dis Wkly Rep** 1989 Mar 18;15(11):59-62 **(Eng, Fre)**

Meningococcal disease in Canada. Surveillance summary to 1987. Varughese PV, et al. **Can Dis Wkly Rep** 1989 Apr 29;15(17):89-96 **(Eng, Fre)**

Meningococcal disease in Canada: surveillance summary to 1987. Varughese PV. **Can Med Assoc J** 1989 Sep 15; 141(6):567-9

Meningococcal infection in children. Noordin K, et al. **Ir J Med Sci** 1988 Aug;157(8):258-60

Screening for complement deficiencies in patients surviving from epidemic meningococcal disease. Rasmussen JM, et al. **J Clin Lab Immunol** 1988 Apr;25(4):161-5

Meningococcal disease in Italy. Stroffolini T, et al. **J Infect** 1989 Jul;19(1):69-74

Trends in meningococcal disease. Mukwaya G, et al. **J Okla State Med Assoc** 1989 May;82(5):216-20

Effect of smoking on meningococcal carriage. Stuart JM, et al. **Lancet** 1989 Sep 23;2(8665):723-5

Meningococcal diseases in the 1980s: epidemiology, prevention and control [editorial] Hansman D. **Med J Aust** 1988 Oct 3;149(7):349-51

Meningococcal disease in Norway 1981-1982, with focus on severe septicemia and death. Epidemiological trends and relation of cases to some health service factors. Bøvre K, et al. **NIPH Ann** 1989 Jun;12(1):13-20

Meningococcal infections in children: a review of 100 cases. Wong VK, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):224-7 (18 ref.)

[Epidemiology of meningococcal disease, 1970/1977. Onset and dissemination of the epidemic process] Barata R de C. **Rev Saude Publica** 1988 Feb;22(1):16-24 (Eng. Abstr.) **(Por)**

[Characteristics of the mechanism of the development of the epidemic process in meningococcal infection in organized collectives] Efimov EI. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):56-60 (Eng. Abstr.) **(Rus)**

[The role and place of serologic research in the system of epidemiologic surveillance of meningococcal infection] Kostiukova NN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):36-41 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Peritoneovenous shunt complicating a glomerulonephritis associated with bacteremia. Description of a clinical case] Rocca F, et al. **Recenti Prog Med** 1989 Apr;80(4):186-7 (Eng. Abstr.) **(Ita)**

GENETICS

Meningococcal disease and complement [letter] Gordon DL. **Med J Aust** 1989 Mar 6;150(5):286

IMMUNOLOGY

Cellular immune responses during gonococcal and meningococcal infections. Cooper MD, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S29-34 (40 ref.)

Human immune response to meningococcal outer membrane protein epitopes after natural infection or vaccination. Mandrell RE, et al. **Infect Immun** 1989 May;57(5):1590-8

Antibody responses to serogroup B meningococcal outer membrane antigens after vaccination and infection. Rosenqvist E, et al. **J Clin Microbiol** 1988 Aug;26(8):1543-8

Complement activation and endotoxin levels in systemic meningococcal disease. Brandtzaeg P, et al. **J Infect Dis** 1989 Jul;160(1):58-65

[Antibodies to meningococcal lipopolysaccharide in different forms of meningococcal infection] Martynov IuV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):55-60 (Eng. Abstr.) **(Rus)**

[The phenomenon of HLA antigen modification in meningococcal infection] Petrunin IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):94-8 (Eng. Abstr.) **(Rus)**

[Relationship of eicosanoids to cellular and humoral immunity factors in meningococcal infection] Pokrovskiĭ VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):63-8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Rifampin-resistant meningococcal infection in a patient given rifampin chemoprophylaxis. Berkey P, et al. **Am J Infect Control** 1988 Dec;16(6):250-2

Primary meningococcal arthritis caused by group A meningococcus: an unusual presentation of infection with an uncommon bacterial strain [letter] Melsom RD, et al. **Br J Rheumatol** 1989 Feb;28(1):85-6

Spontaneous peritonitis caused by Neisseria meningitidis serogroup B [letter] Bella Cueto F, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):695

Acute urethritis due to Neisseria meningitidis group A acquired by orogenital contact: case report. Wilson AP, et al. **Genitourin Med** 1989 Apr;65(2):122-3

ACP Broadsheet 121: June 1989. Investigation of meningococcal disease. Cartwright KA, et al. **J Clin Pathol** 1989 Jun;42(6):634-9

Primary meningococcal arthritis [letter] Travis S, et al. **J Infect** 1989 Jul;19(1):79-80

Meningococcal serogroups in New South Wales, 1977-1987. Munro R, et al. **Med J Aust** 1988 Oct 3;149(7):360-2

A potential role for the major iron-regulated protein expressed by pathogenic Neisseria species. Morse SA, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S306-10 (32 ref.)

[The prospects for a study of meningococcal infection caused by serogroup B today] Demina AA. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):111-7 (35 ref.) **(Rus)**

MORTALITY

[Total neutrophils and age as prognostic factors of meningococcal sepsis] Casado Flores J, et al. **An Esp Pediatr** 1988 Nov;29(5):374-6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Study of cardiac function in generalized meningococcal infection based on various biochemical indicators] Roslyĭ IM, et al. **Klin Med (Mosk)** 1989 Apr;67(4):54-8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Control of meningococcal disease [editorial] [published erratum appears in BMJ 1989 Mar 25;298(6676):772] [see comments] Jones DM. **BMJ** 1989 Mar 4;298(6673):542-3 . **Comment in:** BMJ 1989 Apr 15;298(6679):1033-4

Does eradication of meningococcal carriage in household contacts prevent secondary cases of meningococcal disease? Stuart JM, et al. **BMJ** 1989 Mar 4;298(6673):569-70

Control of meningococcal disease [letter; comment] Travis S. **BMJ** 1989 Apr 15;298(6679):1033-4. **Comment on:** BMJ 1989 Mar 4;298(6673):542-3

Meningococcal diseases in the 1980s: epidemiology, prevention and control [editorial] Hansman D. **Med J Aust** 1988 Oct 3;149(7):349-51

[Serological evaluation of an antimeningococcal mass vaccination campaign in Niger] Rey JL, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):248-54 (Eng. Abstr.) **(Fre)**

[Experience with the immunoprophylaxis of meningococcal infection in military collectives] Efimov EI. **Voen Med Zh** 1989 Apr;(4):49 **(Rus)**

[Tactics of vaccine prevention of meningococcal infections] Deviatkina NP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):115-20 (44 ref.) **(Rus)**

RADIOGRAPHY

[Waterhouse Fridericksen syndrome in adults. Radiological diagnosis. Apropos of a case] Braham M, et al. **J Radiol** 1988 Dec;69(12):779-82 (18 ref.) (Eng. Abstr.) **(Fre)**

THERAPY

Plasmapheresis for fulminant meningococcemia. Drapkin MS, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):399-400

[Clinical course of 76 cases of acute meningococcal infection admitted to the Children's Hospital of Trento from 1966 to 1986] Malossi R, et al. **Minerva Pediatr** 1988 Apr; 40(4):223-5 (Eng. Abstr.) **(Ita)**

TRANSMISSION

Secondary cases of meningococcal infection among close family and household contacts in England and Wales, 1984-7. Cooke RP, et al. **BMJ** 1989 Mar 4;298(6673):555-8

MENINGOCOCCUS see NEISSERIA MENINGITIDIS

MENINGOENCEPHALITIS

[Acute encephalitis: study of a childhood case load] Romanello C, et al. **Pediatr Med Chir** 1989 Jan-Feb; 11(1):21-5 (23 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

[Clinical application of C-reactive protein in meningoencephalitis] Pan CH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):67-70 (Eng. Abstr.) **(Chi)**

[Disseminated intravascular coagulation and its pathogenetic significance in meningoencephalitis] Barshtein IuA, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):21-6 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Sequestration of virus-specific T cells in the cerebrospinal fluid of a patient with varicella zoster viral meningoencephalitis. Duby AD, et al. **J Neuroimmunol** 1989 Mar;22(1):63-8

[Cerebrospinal fluid disorders in meningoencephalitis] Gebesh VV, et al. **Vrach Delo** 1988 Oct;(10):115-8 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Meningoencephalopathy following iopamidol myelography [letter] Reynolds DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410

COMPLICATIONS

Echovirus meningoencephalitis in X-linked hypogammaglobulinemia. Van Maldergem L, et al. **Acta Paediatr Scand** 1989 Mar;78(2):325-6

Coxsackie B3 virus encephalitis in a patient with agammaglobulinaemia. Hertel NT, et al. **Eur J Pediatr** 1989 Jun;148(7):642-3

Herpes simplex type I necrotizing meningo-encephalitis leading to arterial-venous thrombosis and brain death in an infant. A pictorial case report. de Baas PD, et al. **J Belge Radiol** 1988;71(6):701-8

Cryptococcal meningoencephalitis with parkinsonian features. Wszolek Z, et al. **Mov Disord** 1988;3(3):271-3

Simultaneous occurrence of mumps meningoencephalitis and tuberculosis meningitis. Kalis NN, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):476-7

Cryptococcal meningoencephalitis presenting transient focal cerebral symptoms. Nowack WJ, et al. **South Med J** 1989 Mar;82(3):395-6

[Cryptococcus neoformans meningoencephalitis and multiple infections in AIDS] Zoller WG, et al. **Klin Wochenschr** 1989 Jun 1;67(11):598-604 (Eng. Abstr.) **(Ger)**

[A case of empty sella syndrome with panhypopituitarism following acute meningoencephalitis] Muraoka A, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):684-5 **(Jpn)**

[Diagnosis of cardiac lesions in the generalized form of meningococcal infection] Radzivil GG, et al. **Klin Med (Mosk)** 1989 Feb;67(2):118-23 (Eng. Abstr.) **(Rus)**

[Enzymologic diagnosis of cerebral lesions in generalized

forms of meningococcal infection in the acute period] Radzivil GG, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):10–5 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Role of the virology laboratory in diagnosis and management of patients with central nervous system disease. Chonmaitree T, et al. **Clin Microbiol Rev** 1989 Jan;2(1):1–14 (167 ref.)

MRI in intraventricular neurocysticercosis: a case report. Hanlon KA, et al. **Infection** 1988 Jul–Aug;16(4):242–4

Reversibility of CT and MR findings in neuro–Behçet disease. Patel DV, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):669–73

Immunological diagnosis in viral infections of the central nervous system: course of antibody titres against homo- and heterologous viruses. Dennin RH, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):255–68

[Polymorphonuclear leukocyte elastase in the cerebrospinal fluid in the diagnosis of acute inflammatory central nervous system diseases] Stöffler A, et al. **Nervenarzt** 1989 Jul; 60(7):420–4 **(Ger)**

[Clinical polymorphism of herpetic lesions of the central nervous system] Protas II, et al. **Klin Med (Mosk)** 1989 Feb;67(2):33–7 (Eng. Abstr.) **(Rus)**

[Difficulties in the differential diagnosis of meningoencephalitis and encephalomyelitis of tuberculous and viral etiologies] Ponomareva EN, et al. **Probl Tuberk** 1988;(9):66–9 **(Rus)**

[Errors in the diagnosis of space-occupying processes in the brain] Bondarev LS, et al. **Vrach Delo** 1988 Oct;(10):110–2 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Meningoencephalitis in AIDS. Cave reduction of azidothymidine dose (news)] **Fortschr Med** 1988 Nov 10; 106(32):9–10 **(Ger)**

[A case of infectious mononucleosis with meningoencephalitis which improved distinctly after the corticosteroid therapy] Uyama E, et al. **Rinsho Shinkeigaku** 1988 May;28(5):558–62 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

[Cerebrospinal meningitis and encephalitis—1987. 1. Incidence and mortality] Zabicka J. **Przegl Epidemiol** 1989; 43(1):36–44 **(Pol)**

ETIOLOGY

Meningoencephalitis and cerebral abscess as a complication of the halo device. Lammens J, et al. **Acta Orthop Belg** 1988;54(3):360–2

Recurrent neonatal herpes presenting initially with hoarseness. Opitz JC, et al. **Am J Perinatol** 1989 Jul; 6(3):307–9

A human case of encephalitis associated with vesicular stomatitis virus (Indiana serotype) infection. Quiroz E, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):312–4

Studies on the pathogenesis of Acanthamoeba–associated meningoencephalitis. Kuhlencord A, et al. **Int J Med Microbiol** 1989 Jul;271(2):256–60

Primary amoebic meningoencephalitis in Thailand: report of a case and review literatures. Sirinavin S, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:174–6 (5 ref.)

Clinical neurology. A review. Rudge P. **J R Coll Physicians Lond** 1989 Apr;23(2):83–91 (28 ref.)

Neurobrucellosis in children. Lubani MM, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):79–82

Lyme disease: acute focal meningoencephalitis in a child. Feder HM Jr, et al. **Pediatrics** 1988 Dec;82(6):931–4 (31 ref.)

A high rate of neurological complications following Semple anti–rabies vaccine. Swaddiwuthipong W, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):472–5

[Meningoencephalitis in infectious mononucleosis. Apropos of 2 cases (letter)] Brinquin L, et al. **Ann Med Interne (Paris)** 1989;140(3):232–3 **(Fre)**

[Clinical neurological signs of human African trypanosomiasis at the meningoencephalitis stage (apropos of 23 cases)] Nkanga NG, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):449–58 (Eng. Abstr.) **(Fre)**

[Meningoencephalitis in Epstein–Barr virus reactivation in a renal transplant patient (letter)] Broyet C, et al. **Presse Med** 1989 Jun 10;18(23):1168 **(Fre)**

[Neurologic involvement in campylobacter infections. 5 cases] Clavelou P, et al. **Rev Neurol (Paris)** 1989; 145(3):208–14 (28 ref.) (Eng. Abstr.) **(Fre)**

[Cryptococcus meningoencephalitis presenting slowly progressive cerebellar ataxia] Ozawa T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):672–3 **(Jpn)**

[A case of meningoencephalitis caused by persistent Epstein–Barr (E–B) virus infection] Adachi K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):89–92 (Eng. Abstr.) **(Jpn)**

[Encephalitis in the acute period of herpes zoster in children] Shishov AS. **Zh Nevropatol Psikhiatr** 1988;88(8):51–6 (21 ref.) (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Lymphocyte analysis in a patient with X–linked agammaglobulinemia and isolated growth hormone deficiency after development of echovirus dermatomyositis and meningoencephalitis. Wagner DK, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):143–8

Borna disease, a progressive meningoencephalomyelitis as a model for CD4+ T cell–mediated immunopathology in the brain. Richt JA, et al. **J Exp Med** 1989 Sep 1; 170(3):1045–50

METABOLISM

[Plasma–cerebrospinal fluid distribution of phenylalanine and tyrosine in children] Ratzmann GW, et al. **Padiatr Grenzgeb** 1988;27(3):211–20 (39 ref.) (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Subacute meningoencephalitis associated with human T–lymphotrophic virus type I (HTLV–I). Report of a case. Araga S, et al. **Acta Neurol Scand** 1989 May;79(5):361–5

Dual meningoencephalitis with echovirus type 11 and adenovirus in combined (common variable) immunodeficiency. Lau YL, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):873–6

[Isolation of tick–borne encephalitis viruses from the cervical spinal cord in meningoencephalitis] Grešíková M, et al. **Bratisl Lek Listy** 1989 Apr;90(4):271–3 (Eng. Abstr.) **(Slo)**

MORTALITY

[Death caused by viral meningoencephalitis in a caseload of 1052 cases] Vargas Díaz J, et al. **Rev Cubana Med Trop** 1989 Jan–Apr;41(1):102–13 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Immunofluorescent localization of eosinophil granule major basic protein in fatal human cases of Baylisascaris procyonis infection. Hamann KJ, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):291–7

Primary amebic meningoencephalitis. Strauss RA. **Chic Med Sch Q** 1972;31(1–4):30–9 (41 ref.)

PATHOLOGY

Morphological changes in the cochlear aqueduct following herpes simplex virus inoculation into the subarachnoid space. Yanagita N, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:106–10

Primary amoebic meningoencephalitis: a second reported case in Thailand. Charoenlarp K, et al. **J Med Assoc Thai** 1988 Oct;71(10):581–6

[Clinical aspects and pathologico–anatomic findings in AIDS patients with Cryptococcus neoformans meningoencephalitis] Falk S, et al. **Nervenarzt** 1988 Sep; 59(9):553–8 **(Ger)**

[Central nervous system infection caused by Aspergillus fumigatus. A complication of immunosuppressive therapy in myasthenia gravis] Nau R, et al. **Nervenarzt** 1989 Mar; 60(3):178–80 **(Ger)**

PHYSIOPATHOLOGY

[Study of cardiac function in generalized meningococcal infection based on various biochemical indicators] Roslyi IM, et al. **Klin Med (Mosk)** 1989 Apr;67(4):54–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Inflammatory reaction in neurocysticercosis in experimental studies in rabbits] García de Llano CA, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):61–8 (Eng. Abstr.) **(Spa)**

THERAPY

Immunoglobulin administration into cerebral subarachnoid space in a child with hypogammaglobulinemia and aseptic meningoencephalitis. Etzioni A, et al. **Acta Paediatr Scand** 1988 Nov;77(6):914–5

[Characteristics of the treatment of severe forms of neuroinfection in children with altered immunologic response] Evtushenko SK, et al. **Pediatriia** 1989;(7):70–4 **(Rus)**

[Experience with extracorporeal ultraviolet irradiation of autologous blood in children with suppurative–septic diseases] Kurapov EP, et al. **Pediatriia** 1989;(4):59–61 **(Rus)**

VETERINARY

Fungal meningoencephalitis in a laboratory rat. Moody KD, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1152–3

Cerebrospinal fluid analysis and clinical outcome of eight dogs with eosinophilic meningoencephalomyelitis. Smith–Maxie LL, et al. **J Vet Intern Med** 1989 Jul–Sep; 3(3):167–74

A necrotizing meningoencephalitis of pug dogs. Cordy DR, et al. **Vet Pathol** 1989 May;26(3):191–4

Bovine meningoencephalitis from IBR virus [letter] Weiblen R, et al. **Vet Rec** 1989 Jun 24;124(25):666–7

MENINGOMYELOCELE

Spinal anaesthesia for caesarean section in a patient with spina bifida cystica. Broome IJ. **Anaesth Intensive Care** 1989 Aug; 17(3):377–9

Myelomeningocele: current concepts of management. Noetzel MJ. **Clin Perinatol** 1989 Jun;16(2):311–29 (90 ref.)

Pediatricians' knowledge of meningomyelocele [letter] Rotenstein D. **J Pediatr** 1989 Jun;114(6):1069–70

CHEMICALLY INDUCED

Valproic acid prenatal exposure. Association with lipomyelomeningocele. Carter BS, et al. **Clin Pediatr (Phila)** 1989 Feb;28(2):81–5 (17 ref.)

Fetal valproate phenotype is recognisable by mid pregnancy [letter] Serville F, et al. **J Med Genet** 1989 May;26(5):348–9

COMPLICATIONS

Myelomeningocele, Arnold–Chiari anomaly and hydrocephalus in focal dermal hypoplasia. Almeida L, et al. **Am J Med Genet** 1988 Aug;30(4):917–23

Biofeedback training for patients with myelomeningocele and fecal incontinence. Loening–Baucke V, et al. **Dev Med Child Neurol** 1988 Dec;30(6):781–90

Equinovarus deformity in arthrogryposis and myelomeningocele: evaluation of primary talectomy. Segal LS, et al. **Foot Ankle** 1989 Aug;10(1):12–6

Fractures in patients who have myelomeningocele. Lock TR, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1153–7

Arnold–Chiari malformation in Jarcho–Levin syndrome [letter] Young S, et al. **J Child Neurol** 1989 Jul;4(3):229–30

Myelomeningocele: a risk factor for necrotizing enterocolitis in term infants. Costello S, et al. **J Pediatr** 1988 Dec; 113(6):1041–4

Myelomeningocele and necrotizing enterocolitis [letter] Khoury MJ, et al. **J Pediatr** 1989 Aug;115(2):337–8

Ground reaction forces on the plantar surface of the foot after talectomy in the myelomeningocele. Sherk HH, et al. **J Pediatr Orthop** 1989 May–Jun;9(3):269–75

Surgical correction of myelomeningocele scoliosis: a critical appraisal of various spinal instrumentation systems. Ward WT, et al. **J Pediatr Orthop** 1989 May–Jun;9(3):262–8 (14 ref.)

Sonographic evaluation and conservative management of newborns with myelomeningocele and hydronephrosis. Erickson D, et al. **J Urol** 1989 Aug;142(2 Pt 2):592–4; discussion 603–5

Determinants of hydronephrosis and renal injury in patients with myelomeningocele. McLorie GA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1289–92

Prostatic suppuration and destruction in patients with myelodysplasia: a newly recognized entity. Steinhardt GF. **J Urol** 1988 Nov;140(5):1002–6

Exploring causes of paralysis in spina bifida [news] Marwick C. **JAMA** 1989 Jun 2;261(21):3069, 3074

Cerebrospinal fluid eosinophilia and sterile shunt malfunction. Traynelis VC, et al. **Neurosurgery** 1988 Nov;23(5):645–9

The role of hip location and dislocation in the functional status of the myelodysplastic patient. A review of 100 patients. Crandall RC, et al. **Orthopedics** 1989 May; 12(5):675–84 (17 ref.)

Megachoroid as a cause of isolated ventricle syndrome. Chadduck WM, et al. **Pediatr Neurol** 1989 May–Jun; 5(3):194–6

Meningomyelocele. Assessment and management. Wolraich ML, et al. **Pediatrician** 1988;15(1–2):21–8 (26 ref.)

Radiographic appearance of healed extremity fractures in children with spinal cord lesions. Hyre HM, et al. **Skeletal Radiol** 1989;18(3):189–92

Incidence of seizures in patients with myelomeningocele: a multifactorial analysis. Chadduck W, et al. **Surg Neurol** 1988 Oct;30(4):281–5

Split notochord syndrome with dorsal enteric fistula and sacral agenesis. Kramer EL, et al. **Teratology** 1988 Jul; 38(1):1–5

Midline communicating spinal extradural arachnoid cyst. Bhaskar M, et al. **West Indian Med J** 1988 Sep;37(3):175–8

Treatment of faecal incontinence in children with spina bifida by biofeedback and behavioural modification. Pappo I, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:36–7

The management of dropfoot using the Lambrinudi arthrodesis. Parsons SW, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:38–9

The handwriting of children with spina bifida. Pearson AM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:40–2

Endoscopic management of vesico–ureteric reflux in children with neuropathic bladder secondary to myelomeningocoele. Quinn FM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:43–5

[Spina bifida aperta—myelomeningocele. Chiari's malformation type II] Lapras C, et al. **Neurochirurgie** 1988; 34 Suppl 1:53–8 (18 ref.) **(Fre)**

[Spina bifida aperta—myelomeningocele. Other complications] Lapras C, et al. **Neurochirurgie** 1988;34 Suppl 1:59–60 (10 ref.) **(Fre)**

[Treatment of the bladder in myelomeningocele] Mollard P, et al. **Neurochirurgie** 1988;34 Suppl 1:61–6 **(Fre)**

[Spina bifida aperta—myelomeningocele. Hydrocephalus] Patet JD, et al. **Neurochirurgie** 1988;34 Suppl 1:47–52 (35 ref.) **(Fre)**

[Intermittent catheterization in children with neurogenic

bladder] Pilling L. **Padiatr Grenzgeb** 1989;28(3):157–62 (Eng. Abstr.) (Ger)
[Tethered cord syndrome of adult onset: report of a case and a review of the literature] Yamamura A, et al. **No Shinkei Geka** 1989 Jan;17(1):69–73 (25 ref.) (Eng. Abstr.) (Jpn)
[Teratoma of the membranes of a myelocele in a child] Kudriavtsev VA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):136 (Rus)

DIAGNOSIS

MR imaging of hindbrain deformity in Chiari II patients with and without symptoms of brainstem compression. Curnes JT, et al. **AJNR** 1989 Mar–Apr;10(2):293–302
Cranial sonographic evaluation in children with meningomyelocele. de la Cruz R, et al. **Childs Nerv Syst** 1989 Apr;5(2):94–8
Two spina bifida defects in the same child [letter] Binitie OP. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):545–6
Magnetic resonance imaging of lipomyelomeningocele and tethered cord. Brophy JD, et al. **Neurosurgery** 1989 Sep; 25(3):336–40
Correlation between magnetic resonance imaging and surgical findings in the tethered spinal cord. Moufarrij NA, et al. **Neurosurgery** 1989 Sep;25(3):341–6
Abnormal US appearance of the cerebellum (banana sign): indirect sign of spina bifida. Benacerraf BR, et al. **Radiology** 1989 Apr;171(1):151–3
Effacement of the fetal cisterna magna in association with myelomeningocele [see comments] Goldstein RB, et al. **Radiology** 1989 Aug;172(2):409–13, **Comment in:** Radiology 1989 Aug;172(2):309–311
Scoliosis in myelomeningocele. Significance of syringohydromyelia and Chiari malformations studied with magnetic resonance imaging. Samuelsson L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:310–1

EMBRYOLOGY

Does lumbosacral spina bifida arise by failure of neural folding or by defective canalisation? Copp AJ, et al. **J Med Genet** 1989 Mar;26(3):160–6
[Spina bifida sperta—myelomeningocele. Embryology] Choux M. **Neurochirurgie** 1988;34 Suppl 1:6–15 (50 ref.) (Fre)

EPIDEMIOLOGY

The use of health care resources by young adults with spina bifida. Benjamin C. **Z Kinderchir** 1988 Dec;43 Suppl 2:12–4
[Prevalence and geographic distribution of spina bifida aperta in West Germany] Lüder S, et al. **Klin Padiatr** 1989 Mar–Apr;201(2):73–7 (Eng. Abstr.) (Ger)

ETIOLOGY

[Spina bifida aperta—myelomeningocele. Etiology and genetics] Robert E. **Neurochirurgie** 1988;34 Suppl 1:16–28 (72 ref.) (Fre)

GENETICS

A mouse model for neural tube defects: the curtailed (Tc) mutation produces spina bifida occulta in Tc/+ animals and spina bifida with meningomyelocele in Tc/t. Park CH, et al. **Teratology** 1989 Mar;39(3):303–12

METABOLISM

Muscarinic cholinergic receptors in normal pediatric and myelodysplastic bladders. Gup DI, et al. **J Urol** 1989 Aug; 142(2 Pt 2):595–9; discussion 603–5

PATHOLOGY

The clinical significance of hindbrain herniation and deformity as shown on MR images of patients with Chiari II malformation. Wolpert SM, et al. **AJNR** 1988 Nov–Dec; 9(6):1075–8

PHYSIOPATHOLOGY

Urodynamics in children with myelomeningocele: early assessment of obstruction and incontinence. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):497–501
Ambulation in patients with myelomeningocele: a multivariate statistical analysis. Samuelsson L, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):569–75
Bladder compliance in meningomyelocele children. Ghoniem GM, et al. **J Urol** 1989 Jun;141(6):1404–6
The effect of intravesical pressure on glomerular filtration rate in patients with myelomeningocele. Steinhardt GF, et al. **J Urol** 1988 Nov;140(5 Pt 2):1293–5
Upper extremity dysfunction in children with myelomeningocele. Jacobs RA, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:19–21
Impaired mental capabilities and hand function in myelomeningocele patients. Mazur JM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:24–7

PSYCHOLOGY

Babies with spina bifida treated without surgery: parents' views on home versus hospital care. Delight E, et al. **BMJ** 1988 Nov 12;297(6658):1230–3
Temperament, coping, and psychological adjustment in young children with myelomeningocele. Lavigne JV, et al. **J Pediatr Psychol** 1988 Sep;13(3):363–78
[Evaluation of shunt treatment in hydrocephalus with myelomeningocele: some factors relating to mental prognosis] Kojima N, et al. **No To Shinkei** 1988 Dec; 40(12):1181–7 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Anterior sacral meningocele and the scimitar sign. Report of a case. Kovalcik PJ, et al. **Dis Colon Rectum** 1988 Oct; 31(10):806–7
Physeal widening in children with myelomeningocele. Roberts JA, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):30–2
The natural history of repaired myelomeningocele. Nelson MD Jr, et al. **Radiographics** 1988 Jul;8(4):695–706
[Congenital tilt of the sacral plateau and the fate of the spine] Carstens C. **Z Orthop** 1988 Sep–Oct;126(5):532–8 (Eng. Abstr.) (Ger)

REHABILITATION

Orthotic compensation for non-functioning hip extensors. Ogilvie C, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:33–5
[Myelomeningocele. Functional rehabilitation. Overall treatment] Berard C. **Neurochirurgie** 1988;34 Suppl 1:76–83 (25 ref.) (Fre)

SURGERY

The innervated tensor fasciae latae flap in patients with meningomyelocele. Posma AN. **Ann Plast Surg** 1988 Dec; 21(6):594–6
Undiversion in patients with meningomyelocele. Stewart D, et al. **Can J Surg** 1989 May;32(3):214–7
Simultaneous cyst excision and lumbo–peritoneal shunting in myelomeningocele. Adeloye A, et al. **Cent Afr J Med** 1988 Jul;34(7):153–8
Absorption of Tc-99m pertechnetate from the augmented bladder during direct nuclear cystography. Lowe B, et al. **Clin Nucl Med** 1989 May;14(5):347–9
Observations on spinal dysraphism. Tripathy P, et al. **J Indian Med Assoc** 1989 Mar;87(3):62–4
Delayed tethered cord syndrome after myelomeningocele repair [letter] Wilden JN, et al. **J Neurosurg** 1989 May; 70(5):815–6
Medical decisions and prognostications of pediatricians for infants with meningomyelocele. Siperstein GN, et al. **J Pediatr** 1988 Nov;113(5):835–40
Experience with simultaneous ventriculo–peritoneal shunt placement and myelomeningocele repair. Chadduck WM, et al. **J Pediatr Surg** 1988 Oct;23(10):913–6
A study of functional recovery for urination and defecation in patients with myelodysplasia: a modified seromuscular ileal flap fixation to the bladder. Shiomi T, et al. **J Urol** 1989 Feb;141(2):292–6
Transoral repair of a rare basioccipital meningocele in a neonate: case report. Azizkhan RG, et al. **Neurosurgery** 1989 Sep;25(3):469–71
MRI in the evaluation of spina bifida patients in the remote period after meningomyelocele repair. Williamson MR, et al. **Pediatr Radiol** 1989;19(6–7):442–3
Tethered cord syndrome in the adult postoperative myelomeningocele patient. A case report. Logan SR, et al. **Spine** 1989 Aug;14(8):895–7
[Treatment of myelomeningocele] Lapras C, et al. **Neurochirurgie** 1988;34 Suppl 1:42–6 (15 ref.) (Fre)
[Presacral tumor with sacral meningocele] Vogl D, et al. **Z Kinderchir** 1988 Oct;43(5):361–4 (Eng. Abstr.) (Ger)
[Spinal dysraphia and disordered ascension of the spinal cord in adults] Zumkeller M, et al. **Z Orthop** 1989 May–Jun; 127(3):336–42 (Eng. Abstr.) (Ger)
[Meningomyelocele in Puerto Rico] Brau RH, et al. **Bol Asoc Med P R** 1988 Jul;80(7):234–40 (Spa)

THERAPY

Myelomeningocele: comprehensive treatment. Alexander MA, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):637–41 (31 ref.)
Diaphragm pacing in infants and children. Hunt CE, et al. **PACE** 1988 Nov;11(11 Pt 2):2135–41

URINE

Urinary zinc and metallothionein in children with spina bifida. Zimmerman AW, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):23–7

MENISCI, TIBIAL

Torsional characteristics of the Minns meniscal knee prosthesis. Minns RJ. **Arch Orthop Trauma Surg** 1989; 108(1):49–52
A synovial ganglion of the popliteus tendon simulating a parameniscal cyst. Two case reports [letter] Fowler AW. **J Bone Joint Surg [Am]** 1989 Mar;71(3):474–5

ABNORMALITIES

Discoid lateral menisci: a report of 29 cases. Albertsson M, et al. **Arthroscopy** 1988;4(3):211–4
Discoid lateral meniscus in a young child: case report and review of the literature. Barnes CL, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):707–9 (15 ref.)

BLOOD SUPPLY

Direct, real time measurement of meniscal blood flow. An experimental investigation in sheep. Swiontkowski MF, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):429–33

INJURIES

Hemangioma mimicking meniscal injury. A report on 10 years of knee pain. Ryd L, et al. **Acta Orthop Scand** 1989 Apr;60(2):230–1
Patterns of meniscal injury with acute anterior cruciate ligament tears. Cerabona F, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):603–9
Healed meniscal tears in unstable knees. A long–term followup of seven years. Sommerlath K, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):161–3
Avulsion fracture. Special type of meniscal damage. Pauly T, et al. **Arch Orthop Trauma Surg** 1989;108(5):325–6
The predictive value of five clinical signs in the evaluation of meniscal pathology. Fowler PJ, et al. **Arthroscopy** 1989; 5(3):184–6
Peroneal nerve dysfunction as a complication of lateral meniscus repair: a case report and anatomic dissection. Jurist KA, et al. **Arthroscopy** 1989;5(2):141–7
X-ray diagnosis. Vertical concentric tear of the medial meniscus. Anzalotta J. **Bol Asoc Med P R** 1988 Oct; 80(10):396–7
Meniscal tears—comparison of arthrography, CT, and MRI. Manco LG, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):151–79 (69 ref.)
Tears of the medial meniscus associated with increased radionuclide activity of the proximal tibia. Report of three cases. Bauer HC, et al. **Int Orthop** 1989;13(2):153–5
A comparative study of arthroscopic and open meniscectomy. O'Byrne JO, et al. **Ir J Med Sci** 1988 Jun; 157(6):191–2
Double-blind assessment of the value of magnetic resonance imaging in the diagnosis of anterior cruciate and meniscal lesions. Glashow JL, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):113–9
Non-operative treatment of meniscal tears. Weiss CB, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):811–22
Meniscal lesions and chronic anterior cruciate ligament deficiency. Meniscal tears occurring before and after reconstruction. Bray RC, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):128–30
AAOS/NIH/ORS workshop. Injury and repair of the musculoskeletal soft tissues. Savannah, Georgia, June 18–20, 1987. Woo SL, et al. **J Orthop Res** 1988;6(6):907–31
[Meniscus injuries, symptoms and treatment] Nielsen HK. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):433–6 (Dut)
[Associated rupture of the anterior cruciate ligament and of the meniscus. Surgical indications in the light of 163 knees studies with arthroscopy] Cogan D. **Acta Orthop Belg** 1988; 54(2):237–43 (Eng. Abstr.) (Fre)
[Meniscal lesions in so-called "isolated" ruptures of the anterior cruciate ligament. Apropos of 59 cases] Saragaglia D, et al. **J Chir (Paris)** 1988 Oct;125(10):571–4 (Eng. Abstr.) (Fre)
[Validity and diagnostic value of magnetic resonance imaging in traumatic menisco-ligamentous pathology of the knee. Prospective study of 22 knees] Christel P, et al. **Rev Chir Orthop** 1988;74(5):402–12 (Eng. Abstr.) (Fre)
[Combined rupture of the anterior cruciate ligament and the menisci of the knee. Surgical indications in the light of 163 knee arthroscopies] Cogan D. **Rev Chir Orthop** 1988; 74 Suppl 2:174–7 (Fre)
[Personal experiences with arthroscopic meniscus surgery in high performance athletes—results of clinical follow-up] Ahrendt E, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb; 36(1–2):19–23 (Ger)
[Treatment of postoperative synovitis following meniscus operations with ibuprofen] Darsow F, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):616–20 (Eng. Abstr.) (Ger)
[Occupational disability following arthroscopic meniscectomy] Heinrich A, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):14–6 (Ger)
[Is meniscus refixation sensible?] Hertel P, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):28–32 (24 ref.) (Ger)
[Arthroscopic therapy of chondropathy and gonarthrosis] Kopka F, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb; 36(1–2):32–5 (Ger)
[Results of follow-up following arthroscopic meniscus operations] Kündiger R, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):7–14 (Ger)
[Results of follow-up of arthroscopic meniscus operations 1983–1987] Mildner K, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):16–9 (Ger)
[Arthroscopic meniscus refixation] Reschauer R, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):23–8 (Ger)
[Arthroscopic surgical treatment of circumscribed cartilage damage with spongiolization or Pridie drilling] Schmidt H, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):35–7 (Ger)
[Arthroscopy as a guide in surgical management of capsular ligament injuries of the knee joint] van Alste HE, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):54–8 (Ger)
[The use of CT in meniscopathy] Tellkamp H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):180–3 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography—a possibility for non-invasive meniscus diagnosis. 1. Experimentally produced lesions] Wacker F, et al. **Rontgenblatter** 1989 Jun; 42(6):233–8 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography—a possibility for non-invasive meniscus diagnosis. 2. Results of clinical application] Wacker F, et al. **Rontgenblatter** 1989 Jun; 42(6):239–45 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography of meniscopathies using 3DFT (3-Dimensional Fourier Transform) and a secondary reconstruction technic] Skalej M, et al. **Rontgenpraxis** 1988 Nov;41(11):395–9 (Ger)

[Meniscus preserving interventions of the knee joint] Paar O. **Sportverletz Sportschaden** 1988 Mar;2(1):16–9 (Eng. Abstr.) (Ger)

[Comparative study of arthroscopic and open meniscus surgery] Genelin F, et al. **Unfallchirurgie** 1989 Jun; 15(3):133–5 (Eng. Abstr.) (Ger)

[Capsule, ligament and internal injuries of the knee joint] Franke K, et al. **Z Arztl Fortbild (Jena)** 1989;83(2):77–81 (Ger)

[Arthroscopic surgery of the knee joint] Salacz T, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(4):291–9 (29 ref.) (Eng. Abstr.) (Hun)

[Meniscal injuries of the knee: arthrographic and echographic study] Corbetti F, et al. **Radiol Med (Torino)** 1989 Mar; 77(3):187–94 (Eng. Abstr.) (Ita)

[Classification of injuries of articular cartilages of the knee joint] Levenets VN, et al. **Ortop Travmatol Protez** 1989 Feb;(2):64–6 (Rus)

PATHOLOGY

Histological and enzyme histochemical study on the injured knee meniscus in human. Järvinen M, et al. **Acta Histochem (Jena)** 1989;85(1):9–14

Lateral discoid menisci in children. Bellier G, et al. **Arthroscopy** 1989;5(1):52–6

Intraarticular sodium hyaluronate injections in the Pond-Nuki experimental model of osteoarthritis in dogs. II. Morphological findings. Schiavinato A, et al. **Clin Orthop** 1989 Apr;(241):286–99

Magnetic resonance imaging of meniscal lesions of the knee. van Heuzen EP, et al. **Clin Radiol** 1988 Nov;39(6):658–60

Prevention of ligament and meniscus atrophy by active joint motion in a non-weight-bearing model. Klein L, et al. **J Orthop Res** 1989;7(1):80–5

Case report 483: Discoid lateral meniscus (DLM), medially displaced, with complex tear. Howe MA, et al. **Skeletal Radiol** 1988;17(4):293–4

[Meniscus sonography—basis for equipment and study technics] Heuchemer T, et al. **Rontgenpraxis** 1989 Jun; 42(6):205–10 (Ger)

PHYSIOLOGY

Mechanics of the healed meniscus in a canine model. Newman AP, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):164–75 (52 ref.)

An organ culture model for assaying wound repair of the fibrocartilaginous knee joint meniscus. Webber RJ, et al. **Am J Sports Med** 1989 May–Jun;17(3):393–400

Biomechanical considerations of the menisci of the knee. McBride ID, et al. **Can J Sport Sci** 1988 Dec;13(4):175–87 (128 ref.)

[Experimental study of regeneration of the meniscus after meniscectomy] Wang YC. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):267–71, 317 (Eng. Abstr.) (Chi)

RADIOGRAPHY

[Potentials of high-resolution native computed tomography in meniscal diagnosis] König H, et al. **ROFO** 1989 Jan; 150(1):39–43 (Eng. Abstr.) (Ger)

[Computed tomography of the menisci] Wagner-Manslau C, et al. **ROFO** 1988 Oct;149(4):392–5 (Eng. Abstr.) (Ger)

[Double-contrast arthrography in meniscal pathology. Remarks on 1000 cases] Lupi L, et al. **Radiol Med (Torino)** 1989 Jun;77(6):638–42 (Eng. Abstr.) (Ita)

SURGERY

Arthroscopic resection of meniscal flaps of the knee. Reikerås O. **Acta Orthop Scand** 1989 Feb;60(1):28–9

Arthroscopic partial meniscectomy in the anterior cruciate deficient knee. Aglietti P, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):597–602 (51 ref.)

Arthroscopic meniscus repair. Miller DB Jr. **Am J Sports Med** 1988 Jul–Aug;16(4):315–20

Experimental photoablation of meniscus cartilage by excimer laser energy. A new aspect in meniscus surgery. Kroitzsch U, et al. **Arch Orthop Trauma Surg** 1989;108(1):44–8

A modified soft tissue retractor for meniscal repair. Bach BR Jr. **Arthroscopy** 1988;4(4):295–6

Inflammatory synovial fluid and absorbable suture strength. Barber FA, et al. **Arthroscopy** 1988;4(4):272–7

Intraarticular bupivacaine (Marcaine) after arthroscopic meniscectomy: a randomized double-blind controlled study. Chirwa SS, et al. **Arthroscopy** 1989;5(1):33–5

Arthroscopic meniscal repair with two-year follow-up: a clinical review. Ryu RK, et al. **Arthroscopy** 1988; 4(3):168–73

Long-term results after conventional total meniscectomy: a point of reference. Sanchis M, et al. **Arthroscopy** 1988; 4(3):206–10

Arthroscopic treatment of the discoid lateral meniscus: results of long-term follow-up. Vandermeer RD, et al. **Arthroscopy** 1989;5(2):101–9

Treatment of longitudinal injuries in avascular area of meniscus in dogs by trephination. Zhang ZN, et al. **Arthroscopy** 1988;4(3):151–9

Meniscal suture. An experimental study in the dog. Kawai Y, et al. **Clin Orthop** 1989 Jun;(243):286–93

Arthroscopic meniscal repair. Graf B, et al. **Clin Sports Med** 1987 Jul;6(3):525–36 (37 ref.)

Late results after meniscectomy in children. Søballe K, et al. **Injury** 1987 May;18(3):182–4

Arthroscopic suture of peripheral meniscal tears. Johannsen HV, et al. **Int Orthop** 1988;12(4):287–90

Cystic degeneration of the external meniscus. Part 2: Arthroscopic meniscectomy. Calvisi V, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):33–41

Arthroscopic surgical technique in the treatment of lesions of the discoid meniscus. Pellacci F, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):357–62

Arthroscopic medial meniscectomy. Technique, results, complications and medium-term follow-up in adult patients with no ligamentous lesion. Pellacci F, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):157–66

Arthroscopic meniscectomy for discoid lateral meniscus in children. Hayashi LK, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1495–500

The effect of lateral meniscectomy on motion of the knee. Levy IM, et al. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):401–6

Arthroscopic surgery in the very young. Potts H, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):541

The effect of medial meniscectomy and coronal plane angulation on in vitro load transmission in the canine stifle joint. Newman AP, et al. **J Orthop Res** 1989;7(2):281–91

Density changes at the proximal tibia after medial meniscectomy. Odgaard A, et al. **J Orthop Res** 1989; 7(5):744–53

Long and mid-term assessment of the evolution of muscular strength and power, after meniscectomy. Felicetti G, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):381–6

[A non-immobilizing regimen following meniscal suturing] Hansen TB, et al. **Ugeskr Laeger** 1989 Jul 17;151(29):1866–8 (Eng. Abstr.) (Dan)

[Intramural internal meniscectomy using the Trillat technic. Long-term results of 258 operations] Neyret P, et al. **Rev Chir Orthop** 1988;74(7):637–46 (Eng. Abstr.) (Fre)

[Arthroscopic meniscus surgery in patients more than 40 years old. An analysis of 134 cases] Walther HU, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):434–42 (Eng. Abstr.) (Ger)

[Successful resuscitation in heart arrest during surgery] Korotkov GD. **Vestn Khir** 1989 Jan;142(1):97 (Rus)

TRANSPLANTATION

Homologous meniscus transplantation. Experimental and clinical results. Milachowski KA, et al. **Int Orthop** 1989; 13(1):1–11

[Transplantation of the meniscus. Experimental study] Weismeier K, et al. **Rev Chir Orthop** 1988;74(2):155–9 (Eng. Abstr.) (Fre)

[Meniscus transplantation—animal experiment study] Milachowski KA, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):20–4 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Canals in the semilunar meniscus: brief report. Bird MD, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):839

[Observation of the structure changes of chondrocyte in articular cartilage of knee following meniscectomy] Bi WC. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):429–31, 447 (Eng. Abstr.) (Chi)

MENOPAUSE

The end of reproductive life in mothers of twins: epidemiologic analysis of a large data base. Philippe P. **Acta Genet Med Gemellol (Roma)** 1988;37(3–4):249–62

Adjuvant therapy of premenopausal and menopausal high-risk breast cancer patients. Present status of the Danish Breast Cancer Cooperative Group Trials 77-B and 82-B. Dombernowsky P, et al. **Acta Oncol** 1988; 27(6A):691–7

Adjuvant treatment of postmenopausal patients with high risk primary breast cancer. Results from the Danish adjuvant trials DBCG 77 C and DBCG 82 C. Mouridsen HT, et al. **Acta Oncol** 1988;27(6A):699–705

Abnormal vaginal bleeding in perimenopausal women. Nesse RE. **Am Fam Physician** 1989 Jul;40(1):185–92 (13 ref.)

Diet and plasma androgens in postmenopausal vegetarian and omnivorous women and postmenopausal women with breast cancer. Adlercreutz H, et al. **Am J Clin Nutr** 1989 Mar;49(3):433–42

Bone mineral content in postmenopausal women: comparison of omnivores and vegetarians. Hunt IF, et al. **Am J Clin Nutr** 1989 Sep;50(3):517–23

Prognosis after breast cancer diagnosis in women exposed to estrogen and estrogen–progestogen replacement therapy. Bergkvist L, et al. **Am J Epidemiol** 1989 Aug;130(2):221–8

Combined effect of childbearing, menstrual events, and body size on age-specific breast cancer risk. Kampert JB, et al. **Am J Epidemiol** 1988 Nov;128(5):962–79

Occult human papillomavirus infection of the uterine cervix in postmenopausal women. Nuovo GJ, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):340–4

The use of transvaginal sonography for evaluation of postmenopausal ovarian size and morphology. Rodriguez MH, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):810–4

A randomized comparison of nonoral estradiol delivery in postmenopausal women. Stanczyk FZ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1540–6

Biological markers of overall aging [editorial] Butler RN. **Am J Public Health** 1989 Jun;79(6):687

Is early natural menopause a biologic marker of health and aging? Snowdon DA, et al. **Am J Public Health** 1989 Jun; 79(6):709–14

Calcitriol treatment is not effective in postmenopausal osteoporosis. Ott SM, et al. **Ann Intern Med** 1989 Feb 15; 110(4):267–74

American women in midlife. Eating patterns and menopause. Greeley SJ. **Ann N Y Acad Sci** 1989;561:162–6

Stimulation protocols for patients with "atypical response". Muasher SJ. **Ann N Y Acad Sci** 1988;541:82–95

Menopausal status and cut off levels of steroid receptor ligand binding assays in breast cancer. Norgren A, et al. **Anticancer Res** 1989 Jan–Feb;9(1):173–6

Insulin, body mass index, and cardiovascular risk factors in premenopausal women. Wing RR, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):479–84

An alternative regimen of hormone replacement therapy to improve patient compliance. Kemp JF, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):66–9

Post-menopausal bleeding. Wagman H. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):355–62 (9 ref.)

Oestrogens and cardiovascular disease. Beaglehole R. **BMJ** 1988 Sep 3;297(6648):571–2 (18 ref.)

Hormone replacement treatment. Belchetz P. **BMJ** 1989 Jun 3;298(6686):1467–8 (30 ref.)

Increased risk of atherosclerosis in women after the menopause [letter; comment] Bonithon-Kopp C, et al. **BMJ** 1989 May 13;298(6683):1311. **Comment on:** BMJ 1989 Mar 11;298(6674):642–4

Determinants of bone density in normal women: risk factors for future osteoporosis? Stevenson JC, et al. **BMJ** 1989 Apr 8;298(6678):924–8

Perimenopausal risk of falling and incidence of distal forearm fracture. Winner SJ, et al. **BMJ** 1989 Jun 3; 298(6686):1486–8

Increased risk of atherosclerosis in women after the menopause [see comments] Witteman JC, et al. **BMJ** 1989 Mar 11;298(6674):642–4. **Comment in:** BMJ 1989 May 13;298(6683):1311

Effects of age and menopause on vertebral bone density. Hui SL, et al. **Bone Miner** 1987 Apr;2(2):141–6

Zoladex: endocrine and therapeutic effects in post-menopausal breast cancer. Harris AL, et al. **Br J Cancer** 1989 Jan;59(1):97–9

Premature menopause: three teenage cases. Dunham A. **Br J Clin Pract** 1987 Oct;41(10):978–9

Are fixed- dose oestrogen/progestogen combinations ideal for all HRT users? Fraser D, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):776–82

Ovarian size in postmenopausal women. Goswamy RK, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):795–801

Gynaecological disorders and risk factors in premenopausal women predisposing to osteoporosis. A review. Lam SY, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):963–72 (90 ref.)

Broken bones—a gynaecological problem. Purdie DW. **Br J Obstet Gynaecol** 1988 Aug;95(8):737–9

A 47-year-old woman presenting with a 20-year history of SLE. Hughes GR. **Br J Rheumatol** 1989 Aug;28(4):349

Progesterone challenge test in postmenopausal women with pathological endometrium. Gorodeski IG, et al. **Cancer Invest** 1988;6(5):481–5

Reproductive histories and premenopausal breast cancer: different estimates using population, neighborhood, or hospital controls. Lund E. **Cancer Res** 1989 Jul 15; 49(14):4015–9

Hypertension induced by pregnancy, oral contraceptives, and postmenopausal replacement therapy. Kaplan NM. **Cardiol Clin** 1988 Nov;6(4):475–82 (33 ref.)

Estrogen replacement and coronary heart disease. Barrett-Connor E, et al. **Cardiovasc Clin** 1989;19(3):159–72 (47 ref.)

Premature menopause. Chimbira TH, et al. **Cent Afr J Med** 1987 Oct;33(10):235–9

Evaluation of urinary oestrogen assays after the menopause and their potential for screening. Rae MH, et al. **Clin Chim Acta** 1988 Aug 15;176(1):71–81

Positive and negative feed-back effect of progesterone on luteinizing hormone secretion in post-menopausal women. Steele PA, et al. **Clin Endocrinol (Oxf)** 1988 Jul;29(1):1–7

Serum osteocalcin (bone Gla-protein) following corticosteroid therapy in postmenopausal women with rheumatoid arthritis. Comparison of the effect of prednisone and deflazacort. Montecucco C, et al. **Clin Rheumatol** 1988 Sep;7(3):366–71

The number of children, use of oral contraceptives and menopausal status in relation to the number of remaining

teeth and the periodontal bone height. A population study of women in Gothenburg, Sweden. Halling A, et al. **Community Dent Health** 1989 Mar;6(1):39–45

A rational approach to the prevention and treatment of postmenopausal osteoporosis. Spector TD, et al. **Drugs** 1989 Feb;37(2):205–11 (33 ref.)

Phase II study of low dose aminoglutethimide 250 mg/day plus hydrocortisone in advanced postmenopausal breast cancer. Harris AL, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1105–11

The influence of perimenopausal age on estrogen receptor status and estradiol and DNA content in human breast cancer. Betta PG, et al. **Eur J Gynaecol Oncol** 1989; 10(2):157–61

Myoma uterus as a marker of oncogynecological pathology in pre- and post-menopause. Bokhman Ya, et al. **Eur J Gynaecol Oncol** 1988;9(5):355–9

Cigarette smoking and other correlates of cytologic estrogen effect in postmenopausal women. Baron JA, et al. **Fertil Steril** 1988 Nov;50(5):766–71

Galactose-1-phosphate uridyl transferase activity associated with age at menopause and reproductive history. Cramer DW, et al. **Fertil Steril** 1989 Apr;51(4):609–15

An association among blepharophimosis, resistant ovary syndrome, and true premature menopause. Fraser IS, et al. **Fertil Steril** 1988 Nov;50(5):747–51

Too much of a good thing? Use of progestogens in the menopause: an international consensus statement. Lobo RA, et al. **Fertil Steril** 1989 Feb;51(2):229–31 (12 ref.)

Is there any place for salmon calcitonin in prevention of postmenopausal bone loss? Reginster JY, et al. **Gynecol Endocrinol** 1988 Sep;2(3):195–204 (33 ref.)

A new biological carrier for follicle stimulating hormone: an aid for the diagnosis of menopause. Zakut H, et al. **Gynecol Endocrinol** 1987 Sep;1(3):263–8

Different dopaminergic control of plasma luteinizing hormone, follicle-stimulating hormone and prolactin in ovulatory and postmenopausal women: effect of ovariectomy. De Leo V, et al. **Gynecol Obstet Invest** 1989; 27(2):94–8

Ultrasonographic identification and measurement of the normal ovary in postmenopausal Japanese women. Hata K, et al. **Gynecol Obstet Invest** 1989;27(2):99–101

Risk factors for breast and endometrial cancer in a cohort of women treated with menopausal oestrogens. Bergkvist L, et al. **Int J Epidemiol** 1988 Dec;17(4):732–7

Premature ovarian failure in a 35-year-old woman with a Robertsonian translocation. Orczyk GP, et al. **Int J Fertil** 1989 May-Jun;34(3):184–7

Menarche, menopause and reproduction in the Kipsigis of Kenya. Borgerhoff Mulder M. **J Biosoc Sci** 1989 Apr; 21(2):179–92

Static and tetracycline-based bone histomorphometric data from 34 normal postmenopausal females. Recker RR, et al. **J Bone Miner Res** 1988 Apr;3(2):133–44

Metabolism of [3H]equilin-[35S]sulfate and [3H]equilin sulfate after oral and intravenous administration in normal postmenopausal women and men. Bhavnani BR, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):757–65

Radial and vertebral bone density in white and black women: evidence for racial differences in premenopausal bone homeostasis. Luckey MM, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):762–70

Inhibition of aromatase with CGS 16949A in postmenopausal women. Santen RJ, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):99–106

Sex steroids and bone density in premenopausal and perimenopausal women. Steinberg KK, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):533–9

Association of body fat distribution with plasma lipids, lipoproteins, apolipoproteins AI and B in postmenopausal women. Soler JT, et al. **J Clin Epidemiol** 1988; 41(11):1075–81

Effects of estrogen on circulating "free" and total 1,25-dihydroxyvitamin D and on the parathyroid-vitamin D axis in postmenopausal women. Cheema C, et al. **J Clin Invest** 1989 Feb;83(2):537–42

Effects of combined estrogen and progestin administration on plasma lipoprotein metabolism in postmenopausal women [published erratum appears in J Clin Invest 1989 May;83(5):following 1782] Wolfe BM, et al. **J Clin Invest** 1989 Jan;83(1):40–5

Goserelin, a depot gonadotrophin-releasing hormone agonist in the treatment of premenopausal patients with metastatic breast cancer. German Zoladex Trial Group. Kaufmann M, et al. **J Clin Oncol** 1989 Aug;7(8):1113–9

Six-year results of the Eastern Cooperative Oncology Group trial of observation versus CMFP versus CMFPT in postmenopausal patients with node-positive breast cancer. Taylor SG 4th, et al. **J Clin Oncol** 1989 Jul;7(7):879–89

Importance of body weight in determining rise and level of blood pressure in postmenopausal women. Grobbee DE, et al. **J Hypertens Suppl** 1988 Dec;6(4):S614–6

The effect of grip strength on radial bone in postmenopausal women. Sandler RB, et al. **J Orthop Res** 1989;7(3):440–4

Pelvic ultrasound—should it be used routinely in the diagnosis and screening of postmenopausal bleeding? Discussion paper. Ross LD. **J R Soc Med** 1988 Dec; 81(12):723–4

Postmenopausal endometriosis associated with hormone replacement therapy. A case report. Goodman HM, et al. **J Reprod Med** 1989 Mar;34(3):231–3

Anovaginal fistula presenting as a vulvar ulcer. A report of two cases in postmenopausal women. Josey WE. **J Reprod Med** 1988 Oct;33(10):857–8

Postmenopausal hormones and the incidence of rheumatoid arthritis. Carette S, et al. **J Rheumatol** 1989 Jul;16(7):911–3

Postmenopausal estrogen use and heart disease risk factors in the 1980s. Rancho Bernardo, Calif, revisited. Barrett-Connor E, et al. **JAMA** 1989 Apr 14; 261(14):2095–100

Efficacy of nonloading exercises in prevention of vertebral bone loss in postmenopausal women: a controlled trial. Sinaki M, et al. **Mayo Clin Proc** 1989 Jul;64(7):762–9

Leanness, peptide hormones and premenopausal breast cancer. Hill P. **Med Hypotheses** 1989 Jan;28(1):45–50 (76 ref.)

Management of hypercholesterolaemia in postmenopausal women [letter] Colquhoun D. **Med J Aust** 1989 Sep 4; 151(5):299–300

Estrogen/gestagen therapy changes soft tissue body composition in postmenopausal women. Hassager C, et al. **Metabolism** 1989 Jul;38(7):662–5

Menopause and risk factors for coronary heart disease. Matthews KA, et al. **N Engl J Med** 1989 Sep 7; 321(10):641–6

Prevention of recurrent urinary tract infections in postmenopausal women. Privette M, et al. **Nephron** 1988; 50(1):24–7

The menopausal syndrome. Brenner PF. **Obstet Gynecol** 1988 Nov;72(5 Suppl):6S–11S

Optimal use of postmenopausal hormone replacement. Ettinger B. **Obstet Gynecol** 1988 Nov;72(5 Suppl):31S–36S

The postmenopausal cystic adnexal mass: the potential role of ultrasound in conservative management. Goldstein SR, et al. **Obstet Gynecol** 1989 Jan;73(1):8–10

Menopausal hormone replacement therapy with continuous daily oral micronized estradiol and progesterone. Hargrove JT, et al. **Obstet Gynecol** 1989 Apr;73(4):606–12

Use of ultrasonography in the difficult postmenopausal dilation and curettage. Hunter RE, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):813–6

Adnexal torsion in postmenopausal women. Koonings PP, et al. **Obstet Gynecol** 1989 Jan;73(1):11–2

Progesterone feedback in normal and sulpiride-induced hyperprolactinemic postmenopausal women. Nakano R, et al. **Obstet Gynecol** 1989 Apr;73(4):617–21

Estrogen replacement therapy. Sarrel PM. **Obstet Gynecol** 1988 Nov;72(5 Suppl):2S–5S

Oral discomfort at menopause. Wardrop RW, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):535–40

A multivariate analysis of the prognostic significance of pathological features in breast cancer of perimenopausal age. Betta PG, et al. **Pathologica** 1988 May-Jun; 80(1067):287–92

An answer to Eva Barr's problems [letter] **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):927–8

Characteristics of noncontraceptive hormone users. Egeland GM, et al. **Prev Med** 1988 Jul;17(4):403–11

Ovarian steroid treatment blocks a postmenopausal increase in blood monocyte interleukin 1 release. Pacifici R, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2398–402

Lack of effect of oestradiol implant on platelet imipramine and 5-HT2 receptor binding in menopausal subjects. Best NR, et al. **Psychopharmacology (Berlin)** 1989;98(4):561

SBP and menopausal status in breast cancer patients. Berta L, et al. **Steroids** 1988 Oct;52(4):393–4

Pelvic abscesses in postmenopausal women. Vasilev SA, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):243–6

Hysterectomy and ovarian removal—a major health issue in the perimenopausal years. Greenwood S. **West J Med** 1988 Dec;149(6):771–2

[Morphological studies of the endometrium in hemorrhages in the premenopause] Rachev E, et al. **Akush Ginekol (Sofiia)** 1988;27(6):61–6 (Eng. Abstr.) **(Bul)**

[Diagnostic value of separate curettage in women with genital bleeding in the menopause] Zlatkov V, et al. **Akush Ginekol (Sofiia)** 1988;27(5):39–44 (Eng. Abstr.) **(Bul)**

[Changes in plasma sex hormone in postmenopausal type II diabetics and therapeutic effect of diagnosis and treatment with traditional Chinese medicine] Kuang AK. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):276–8, 261 (Eng. Abstr.) **(Chi)**

[Hormonal therapy of breast carcinoma (in pre-, peri- and postmenopausal women)] Freitag P. **Cesk Gynekol** 1989 Feb;54(1):37–45 **(Cze)**

[Initial experience with centralized care of women with bleeding in the climacteric and postmenopausal period] Rešlová T, et al. **Cesk Gynekol** 1989 Mar;54(2):101–5 (Eng. Abstr.) **(Cze)**

[Pseudo-condylomatous cytological aspects of smears in menopause. Study of 100 cases and review of the literature] Gestin E, et al. **Arch Anat Cytol Pathol** 1988;36(3):85–92 (15 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of the osteoprotective effects of orally administered equine conjugated estrogens and percutaneous 17 beta-estradiol] Reginster JY, et al. **Rev Med Liege** 1989 Jan 15;44(2):55–60 **(Fre)**

[Study of the density of vertebral bones by dichromatic photon absorptiometry. Influence of age, sex, menopause and body type] Audran M, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):141–6 **(Fre)**

[Treatment of postmenopausal with sodium fluoride. Effect on mineral bone content of the radius] de Guembecker W, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):499–503 **(Fre)**

[Microradiographic study of iliac bone biopsies taken after treatment of postmenopausal osteoporosis with sodium fluoride. Histomorphometric correlations] Duriez R, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):375–81 (Eng. Abstr.) **(Fre)**

[Prevention of postmenopausal bone loss with estrogens. Which molecule, which scheme, which dose?] Jamin C. **Rev Rhum Mal Osteoartic** 1989 May;56(6):429–32 (Eng. Abstr.) **(Fre)**

[The gynecologic check-up] Stoll W. **Ther Umsch** 1989 Jun; 46(6):361–7 (Eng. Abstr.) **(Ger)**

[Receptor status and ovarian function in carcinoma of the breast] Giuffrida D, et al. **G Ital Oncol** 1989 Apr-Sep; 9(2-3):73–6 (Eng. Abstr.) **(Ita)**

[Effects on the bones of nandrolone decanoate therapy in postmenopausal osteoporosis] Gennari C, et al. **Minerva Endocrinol** 1989 Jan-Mar;14(1):69–74 (Eng. Abstr.) **(Ita)**

[Topical therapy of postmenopausal dyspareunia] Grio R, et al. **Minerva Ginecol** 1988 Dec;40(12):695–7 (Eng. Abstr.) **(Ita)**

[Determination of salivary testosterone in women in menopause with epulides. Pathogenetic hypothesis] Amato R, et al. **Minerva Stomatol** 1988 Oct;37(10):729–32 (Eng. Abstr.) **(Ita)**

[Senile syndrome—a proposal of a new concept] Igarashi M. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1459–64 **(Jpn)**

[Evaluation of the effect of premenopausal oophorectomy on bone mineral content] Ueno N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):308–12 (Eng. Abstr.) **(Jpn)**

[Study on climacteric symptoms in relation to ovarian function ageing and psychologic factors] Yashiro Y. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):154–60 (Eng. Abstr.) **(Jpn)**

[Importance of the ectocervical atypical transformation zone in postmenopausal women] Focchi J, et al. **Rev Paul Med** 1988 May-Jun;106(3):147–9 (Eng. Abstr.) **(Por)**

[Molecular heterogeneity of circulating gonadotropins in menopause] Fonseca ME, et al. **Arch Invest Med (Mex)** 1988 Jan-Mar;19(1):41–8 (Eng. Abstr.) **(Spa)**

[Ovarian physiology. VII. An hormonal test for predicting menopause] Porras Cuéllar HL, et al. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):193–8 (Eng. Abstr.) **(Spa)**

[Effects of age and obesity on the conversion of androstenedione to estrone in postmenopausal women] Ortega E, et al. **Rev Esp Fisiol** 1988 Mar;44(1):13–6 (Eng. Abstr.) **(Spa)**

BLOOD

The epidemiology of serum sex hormones in postmenopausal women. Cauley JA, et al. **Am J Epidemiol** 1989 Jun; 129(6):1120–31

Lipoprotein and apolipoprotein levels in postmenopausal women on continuous oestrogen/progestogen therapy. Farish E, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):358–64

Effect of menopause and aging on serum total and ionized calcium and protein concentrations. Sokoll LJ, et al. **Calcif Tissue Int** 1989 Mar;44(3):181–5

Improved method for calculating calcium fractions in plasma: reference values and effect of menopause [published erratum appears in Clin Chem 1989 Apr;35(4):670] Nordin BE, et al. **Clin Chem** 1989 Jan;35(1):14–7

The relationships of SHBG with current and previous use of oral contraceptives and oestrogen replacement therapy. Key TJ, et al. **Contraception** 1989 Feb;39(2):179–86

Decreasing serum levels of sex hormone-binding globulin around the menopause and temporary relation to changing levels of ovarian steroids, as demonstrated in a longitudinal study. Gershagen S, et al. **Fertil Steril** 1989 Apr; 51(4):616–21

Gamete intra fallopian transfer (GIFT) and oocyte donation—a novel treatment for infertility in premature ovarian failure. Asch RH, et al. **Gynecol Endocrinol** 1987 Mar;1(1):105–11

Dehydroepiandrosterone sulfate in postmenopausal women: lack of influence of parity. Carlström K, et al. **Gynecol Obstet Invest** 1989;28(1):35–7

Biophysical and endocrine-metabolic changes during menopausal hot flashes: increase in plasma free fatty acid and norepinephrine levels. Cignarelli M, et al. **Gynecol Obstet Invest** 1989;27(1):34–7

Significance of initial plasma steroid concentrations in the prognosis of 'nonendocrine' malignant ovarian tumors. Mählck CG, et al. **Gynecol Obstet Invest** 1989;28(1):41–6

Postmenopausal endometrial patterns and serum estradiol concentrations. Ismail AA, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):101–5

Effects of oral contraceptive and estrogen administration on plasma calcitonin in pre- and postmenopausal women. Hurley DL, et al. **J Bone Miner Res** 1989 Feb;4(1):89–95

Endogenous estrogen levels and calcium intakes in postmenopausal women. Relationships with cortical bone measures [published erratum appears in JAMA 1989 Feb 24;261(8):1154] Cauley JA, et al. **JAMA** 1988 Dec 2;

260(21):3150–5
Effect of orally administered oestrogens on circulating oestrogen profiles in post–menopausal women. Aedo AR, et al. **Maturitas** 1989 Jun;11(2):159–68
Effect of orally administered oestrogens on gonadotrophin levels in post–menopausal women. Aedo AR, et al. **Maturitas** 1989 Jun;11(2):147–57
Serum levels of oestrogens, progesterone, follicle–stimulating hormone and sex–hormone–binding globulin during simultaneous vaginal administration of 17 beta–oestradiol and progesterone in the pre– and post–menopause. Carlström K, et al. **Maturitas** 1988 Dec;10(4):307–16
Biological and endocrine aspects of transdermal 17 beta–oestradiol administration in post–menopausal women. Jasonni VM, et al. **Maturitas** 1988 Dec;10(4):263–70
Long–term and withdrawal effects of two different oestrogen–progestogen combinations on lipid and lipoprotein profiles in post–menopausal women. Jensen J, et al. **Maturitas** 1989 Jun;11(2):117–28
Gonadotrophin response to releasing hormone in post–menopausal patients with ovarian tumours. Mango D, et al. **Maturitas** 1989 Jun;11(2):129–36
Serum levels of gonadotrophins and steroid hormones in the post–menopause and later life. Rozenberg S, et al. **Maturitas** 1988 Oct;10(3):215–24
The effects of estradiol on blood lipids and lipoproteins in postmenopausal women. Fåhraeus L. **Obstet Gynecol** 1988 Nov;72(5 Suppl):18S–22S
The effects of postmenopausal estrogen therapy on the incidence of arteriosclerotic vascular disease. Knopp RH. **Obstet Gynecol** 1988 Nov;72(5 Suppl):23S–30S (43 ref.)
A prospective one–year study of estrogen and progestin in postmenopausal women: effects on clinical symptoms and lipoprotein lipids. Sherwin BB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):759–66
Metabolic effects of continuous estradiol–progestin therapy in postmenopausal women. Sporrong T, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):754–8
[Pituitary gonadotropin production in uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofiia)** 1988;27(3):57–61 (Eng. Abstr.) **(Bul)**
[Concentration of steroid hormones in the ovarian vein and peripheral blood and the influence of ovariectomy on postmenopausal women] Wu FR. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):338–40, 386–7 (Eng. Abstr.) **(Chi)**
[Effect of insulin therapy on lipoprotein concentrations in secondary sulfonylurea treatment failures in menopause] Schauer UJ. **Z Gesamte Inn Med** 1988 Dec 1;43(23):666–9 (Eng. Abstr.) **(Ger)**
[The measurement of plasma–free testosterone in normal menstrual females, pregnant females, post menopausal females and vulvar dystrophy] Yamaguchi A, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):482–8 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Effects of vasoactive intestinal polypeptide, TRH, and dopamine on prolactin secretion in estrogen–primed postmenopausal women. Couzinet B, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):235–40
Does prolonged dopaminergic blockade alter the LH pulsatile secretion in normal cycling and postmenopausal women? Rossmanith WG, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):147–52
Pregnancy in premature ovarian failure after therapy with oral contraceptives despite resistance to previous human menopausal gonadotropin therapy. Check JH, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):114–5
Cardiovascular benefits of estrogen replacement therapy. Ross RK, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1301–6 (39 ref.)
Serum lipoprotein effects of conjugated estrogen and a sequential conjugated estrogen–medrogestone regimen in hysterectomized postmenopausal women. Sonnendecker EW, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1128–34
Transdermal oestrogen for postmenopausal women: a double blind crossover comparative study with ethinyl oestradiol. Pattison NS, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb; 29(1):62–5
Hormone replacement therapy and cancer. Baber RJ, et al. **Br J Hosp Med** 1989 Feb;41(2):142, 144–6, 148–9 (79 ref.)
Suppression of gonadotrophin secretion does not reverse premature ovarian failure [letter] van der Weiden RM, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):881
Estrogen replacement therapy (ERT) by a special regimen in the years following menopause. Blum M, et al. **Clin Exp Obstet Gynecol** 1989;16(1):9–11
Bone turnover in postmenopausal women after withdrawal of estrogen/gestagen replacement therapy. Thomsen K, et al. **Gynecol Endocrinol** 1987 Jun;1(2):169–75
Steroid replacement treatment increases beta–endorphin and beta–lipotropin plasma levels in postmenopausal women. Genazzani AR, et al. **Gynecol Obstet Invest** 1988; 26(2):153–9
Risks and benefits of steroid replacement therapy. Crosignani PG, et al. **Hum Reprod** 1988 Oct;3(7):924–6
Estrogen replacement therapy: an overview. Brenner PF. **Int J Fertil** 1986;31 Suppl:7–14 (34 ref.)
Preventing postmenopausal osteoporosis with estrogen replacement therapy. Ettinger B. **Int J Fertil** 1986;31 Suppl:15–20 (14 ref.)
Safety and efficacy of Estrace (micronized 17 beta–estradiol). Martin PL. **Int J Fertil** 1986;31 Suppl:39–44 (14 ref.)
Estrone v estradiol: an examination of relative carcinogenic potential. Notelovitz M. **Int J Fertil** 1986;31 Suppl:35–8 (38 ref.)
Clinical application of estrogen replacement therapy. Quigley JP, et al. **Int J Fertil** 1986;31 Suppl:45–50
Estrogen replacement therapy for atrophic vaginitis. Rigg LA. **Int J Fertil** 1986;31 Suppl:29–34
A rational approach to the use of hormonal replacement therapy in postmenopausal and older women. Terrell D. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):93–102 (117 ref.)
Attainment of therapeutic fluoride levels in serum without major side effects using a slow–release preparation of sodium fluoride in postmenopausal osteoporosis. Pak CY, et al. **J Bone Miner Res** 1986 Dec;1(6):563–71
Effect of estrogen/gestagen and 24R,25–dihydroxyvitamin D3 therapy on bone formation in postmenopausal women. Thomsen K, et al. **J Bone Miner Res** 1986 Dec;1(6):503–7
Estrogen replacement decreases the set point of parathyroid hormone stimulation by calcium in normal postmenopausal women. Boucher A, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):831–6
Consensus conference: Progestagen use in postmenopausal women. Whitehead M, et al. **Lancet** 1988 Nov 26; 2(8622):1243–4 (0 ref.)
Aspects of hormone replacement therapy in the post–menopause. Bengtsson C. **Maturitas** 1989 Mar; 11(1):35–41 (25 ref.)
Gynecologic consequences of long–term, unopposed estrogen replacement therapy. Ettinger B, et al. **Maturitas** 1988 Dec;10(4):271–82
The effects of the addition of nomegestrol acetate to post–menopausal oestrogen therapy. Fraser DI, et al. **Maturitas** 1989 Mar;11(1):21–34
Progestogen addition during oestrogen replacement therapy—effects on vasomotor symptoms and mood. Holst J, et al. **Maturitas** 1989 Mar;11(1):13–20
Endometrial and vaginal response to three different oestrogen preparations administered by the transdermal and oral routes. Johannisson E, et al. **Maturitas** 1988 Oct; 10(3):181–92
Prolonged administration of luteinizing hormone releasing hormone agonist for the induction of a post–menopausal state. Serr DM, et al. **Maturitas** 1989 Mar;11(1):1–3 (14 ref.)
Clinical and hormonal effects of long–term veralipride treatment in post–menopausal women. Verbeke K, et al. **Maturitas** 1988 Oct;10(3):225–30
A prospective 1–year study of estrogen and progestin in postmenopausal women: effects on the endometrium. Gelfand MM, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):398–402
Spontaneous and pharmacologically induced remissions in patients with premature ovarian failure. Kreiner D, et al. **Obstet Gynecol** 1988 Dec;72(6):926–8
Effects of the dopamine antagonist veralipride on hot flushes and luteinizing hormone secretion in postmenopausal women. Melis GB, et al. **Obstet Gynecol** 1988 Nov; 72(5):688–92
A prospective one–year study of estrogen and progestin in postmenopausal women: effects on clinical symptoms and lipoprotein lipids. Sherwin BB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):759–66
Estrogen replacement after menopause. When is it warranted? Charles AG. **Postgrad Med** 1989 Mar; 85(4):99–101, 104
Menopause and estrogen replacement therapy. Stuenkel CA. **Psychiatr Clin North Am** 1989 Mar;12(1):133–52 (91 ref.)
Estrogen and/or androgen replacement therapy and cognitive functioning in surgically menopausal women. Sherwin BB. **Psychoneuroendocrinology** 1988;13(4):345–57
Pregnancy without ovarian function. A case report. Wiswedel K, et al. **S Afr Med J** 1989 Jul 15;76(2):70–1
4–Hydroxyandrostenedione treatment for postmenopausal patients with advanced breast cancer. Coombes RC, et al. **Steroids** 1987 Jul–Sep;50(1–3):245–52
[Single–hormone prophylaxis of uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofiia)** 1989; 28(2):75–8 (Eng. Abstr.) **(Bul)**
[Cancer risk of hormone replacement treatment in the menopause] Pejovic–Lenfant MH. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(2):153–66 (79 ref.) (Eng. Abstr.) **(Fre)**
[A multicenter comparison of veralipride versus placebo in the vasomotor flushes of menopause. An evaluation of the prolonged effect] Boulot P, et al. **Rev Fr Gynecol Obstet** 1988 Dec;83(12):823–7 (Eng. Abstr.) **(Fre)**
[Extradigestive administration of estrogens: value in the treatment of menopause] Basdevant A. **Rev Med Interne** 1988 Sep–Oct;9(4):355–8 **(Fre)**
[Menopause: an efficacious therapeutic approach necessitates a global philosophy (interview by Robert Henry)] Maheux R. **Union Med Can** 1989 Jan–Feb;118(1):6–11 **(Fre)**
[What is appropriate in postmenopausal osteoporosis?] Jesserer H. **Z Gesamte Inn Med** 1988 Aug 1;43(15):416–8 (11 ref.) (Eng. Abstr.) **(Ger)**
[Transdermal estrogenic therapy in menopause] Nencioni T, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):49–52 (Eng. Abstr.) **(Ita)**
[Tibolone (Livial) in the treatment of disorders of the postmenopausal period (preliminary report)] Radowicki S, et al. **Ginekol Pol** 1988 Nov;59(11):705–8 (Eng. Abstr.) **(Pol)**

ETHNOLOGY

Cultural construction of the menopausal syndrome: the Japanese case. Lock M, et al. **Maturitas** 1988 Dec; 10(4):317–32

IMMUNOLOGY

Premature menopause: monoclonal antibody defined T lymphocyte abnormalities and anticvarian antibodies. Rabinowe SL, et al. **Fertil Steril** 1989 Mar;51(3):450–4
Evidence that the phagocytosis mediated by the peanut agglutinin–like activity of IgG(Fc) receptors of human monocytes is selectively modulated by estradiol and natural estrogens. Malaise MG, et al. **J Clin Immunol** 1988 Nov; 8(6):495–502
[Immunological aspects of hyperplastic processes, precancerous conditions and cancer of the endometrium during the post–menopausal period] Kadagidze ZG, et al. **Sov Med** 1988;(7):25–9 **(Rus)**

METABOLISM

Effects of repetitive administration of growth hormone–releasing hormone on growth hormone secretion, insulin–like growth factor I, and bone metabolism in postmenopausal women. Franchimont P, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):121–8
Metabolism of estrone sulfate in postmenopausal vaginal mucosa. Carlström K, et al. **Acta Obstet Gynecol Scand** 1988;67(3):241–2
Serum and bile lipid levels in a postmenopausal woman after percutaneous and oral natural estrogens. D'Amato G, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):600–1
Effects of smoking on serum lipoproteins and bone mineral content during postmenopausal hormone replacement therapy. Jensen J, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):820–5
Effects of nandrolone decanoate and antiresorptive therapy on vertebral density in osteoporotic postmenopausal women. Need AG, et al. **Arch Intern Med** 1989 Jan; 149(1):57–60
A study on the phalanx bone mineral content in 273 normal pre– and post–menopausal females (transverse study of age–dependent bone loss). Trouerbach WT, et al. **Bone Miner** 1987 Oct;3(1):53–62
Effects of estrogen on mineral metabolism in postmenopausal women as evaluated by multiple assays measuring parathyrin bioactivity. Stock JL, et al. **Clin Chem** 1989 Jan; 35(1):18–22
Endocrine aspects of menopause. Vagenakis AG. **Clin Rheumatol** 1989 Jun;8 Suppl 2:48–51 (15 ref.)
Lead and osteoporosis: mobilization of lead from bone in postmenopausal women. Silbergeld EK, et al. **Environ Res** 1988 Oct;47(1):79–94
Differences between premenopausal women and young men in the transamination pathway of methionine catabolism, and the protection against vascular disease. Blom HJ, et al. **Eur J Clin Invest** 1988 Dec;18(6):633–8
Rates of bone loss in normal women: evidence of accelerated trabecular bone loss after the menopause. Nilas L, et al. **Eur J Clin Invest** 1988 Oct;18(5):529–34
Nutritional intake of pre– and postmenopausal Australian women with special reference to calcium. Angus RM, et al. **Eur J Clin Nutr** 1988 Jul;42(7):617–25
The endogenous concentration and subcellular distribution of androgens in normal human premenopausal endometrium, myometrium and vagina. Vermeulen–Meiners C, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):121–30
Effect of exogenous and endogenous gonadotropin–releasing hormone on prolactin secretion in perimenopausal women. Cano A, et al. **Gynecol Obstet Invest** 1988;26(4):308–12
Regional differences in adipose tissue lipoprotein lipase activity in relation to body fat distribution and menopausal status in obese women. Raison J, et al. **Int J Obes** 1988; 12(5):465–72
Early vertebral trabecular bone loss in normal premenopausal women. Buchanan JR, et al. **J Bone Miner Res** 1988 Oct; 3(5):583–7
Ultradistal and cortical forearm bone density in the assessment of postmenopausal bone loss and nonaxial fracture risk. Price RI, et al. **J Bone Miner Res** 1989 Apr; 4(2):149–55
Personal opinion. Progestogens and lipids. Gambrell RD Jr. **Maturitas** 1988 Oct;10(3):175–9 (20 ref.)
Persistence of increased bone resorption and possible role of dehydroepiandrosterone as a bone metabolism determinant in osteoporotic women in late post–menopause. Taelman P, et al. **Maturitas** 1989 Mar; 11(1):65–73
Binding sites for gonadotropins in human postmenopausal ovaries. Nakano R, et al. **Obstet Gynecol** 1989 Feb; 73(2):196–200
Hypogonadotropinemia in non–thyroidal, non–pituitary critically ill post–menopausal women. Lee YJ, et al. **Taiwan I Hsueh Hsi Tsa Chih** 1988 Aug;87(8):765–72
[Post–menopausal virilism] Leinonen P, et al. **Duodecim** 1989; 105(10):933–40 **(Fin)**

[Peripheral biogenic monoamines and the hormonal profile in women with hypertension in the perimenopausal period] Stanosz S. **Ann Acad Med Stetin** 1988;34:211–46 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Menopause and coronary disease [letter] Stampfer MJ, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1649

Contributions of ovarian failure and aging to blood pressure in normotensive perimenopausal women: a mixed longitudinal study. van Beresteyn EC, et al. **Am J Epidemiol** 1989 May;129(5):947–55

Ovulation induction and pregnancy with an estrogen–gonadotropin stimulation technique in a menopausal woman with marked hypoplastic ovaries. Check JH, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):405–6

Calcium and osteoporosis. Nordin BE, et al. **Ann Chir Gynaecol** 1988;77(5–6):212–8 (33 ref.)

Premature ovarian failure: a clinical, histological and cytogenetic study. Tanaka S, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):293–300

Menopause—a multi system disease. Brincat M, et al. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):289–316 (136 ref.)

Brisk walking does not stop bone loss in postmenopausal women. Cavanaugh DJ, et al. **Bone** 1988;9(4):201–4

Influence of the menopause and aging on spinal density in French women. Ribot C, et al. **Bone Miner** 1988 Oct; 5(1):89–97

Effect of etidronate disodium on bone turnover following surgical menopause. Smith ML, et al. **Calcif Tissue Int** 1989 Feb;44(2):74–9

Influence of gender and menopause on gastric emptying and motility. Hutson WR, et al. **Gastroenterology** 1989 Jan; 96(1):11–7

Sexual dysfunction in postmenopausal women: the role of medical management. Bachmann GA. **Geriatrics** 1988 Nov; 43(11):79–83 (17 ref.)

Influence of the maturity of the vaginal epithelium upon the absorption of vaginally administered estradiol–17 beta and progesterone in postmenopausal women. Pschera H, et al. **Gynecol Obstet Invest** 1989;27(4):204–7

Absence of sustained reflex vasoconstriction in women with menopausal flushes. Rees MC, et al. **Hum Reprod** 1988 Oct; 3(7):823–5

Progestin and estrogen reduce sleep–disordered breathing in postmenopausal women. Pickett CK, et al. **J Appl Physiol** 1989 Apr;66(4):1656–61

Serum gonadotropins in postmenopausal women after long–term verapamil treatment. Hulthén UL, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S63–4

Effects of estrogens and calcium on calcitonin secretion in postmenopausal women. Body JJ, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):223–6

Effects of estrogen in vivo and in vitro on spontaneous interleukin–1 release by monocytes from postmenopausal women. Stock JL, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):364–8

Bone turnover in postmenopausal osteoporosis. Effect of calcitonin treatment. Civitelli R, et al. **J Clin Invest** 1988 Oct;82(4):1268–74

Detection of the patient at risk for osteoporosis at the time of the menopause. Dequeker J. **Maturitas** 1989 Jun; 11(2):85–94

Urodynamic changes following hormonal replacement therapy in women with premature ovarian failure. Karram MM, et al. **Obstet Gynecol** 1989 Aug;74(2):208–11

Libido, menopause, and estrogen replacement therapy. Beard MK, et al. **Postgrad Med** 1989 Jul;86(1):225–8 (9 ref.)

Menopause. Collins JB. **Prim Care** 1988 Sep;15(3):593–606 (14 ref.)

Premenopausal and postmenopausal women differ in their cardiovascular and neuroendocrine responses to behavioral stressors. Saab PG, et al. **Psychophysiology** 1989 May; 26(3):270–80

Urodynamic investigations and their reproducibility in healthy postmenopausal females. Sørensen S. **Scand J Urol Nephrol Suppl** 1988;114:42–7

Sleep patterns and stability in perimenopausal women. Shaver J, et al. **Sleep** 1988 Dec;11(6):556–61

Gynaecological problems causing neuro–endocrine changes of menopause and postmenopausal period and their drug therapy. Lampé L. **Ther Hung** 1988;36(3):95–102 (50 ref.)

The potential role of exercise in the alleviation of menstrual disorders and menopausal symptoms: a theoretical synthesis of recent research. Gannon L. **Women Health** 1988; 14(2):105–27 (85 ref.)

[Osteoporosis in menopause] Miranda R. **Gac Med Mex** 1988 Sep–Oct;124(9–10):381–3 (21 ref.) **(Spa)**

PSYCHOLOGY

Estrogen replacement therapy. A survey of women's knowledge and attitudes. Ferguson KJ, et al. **Arch Intern Med** 1989 Jan;149(1):133–6

Menopausal mood disorders. Morse CA. **Compr Ther** 1989 Mar;15(3):22–7

The menopause viewed in relation to other life events—a study performed in Belgium. Boulet M, et al. **Maturitas** 1988 Dec;10(4):333–42

[Attitude and sex behavior following hysterectomy] Seidenschnur G, et al. **Zentralbl Gynakol** 1989;111(1):53–9 (Eng. Abstr.) **(Ger)**

MENOPAUSE, PREMATURE see under **MENOPAUSE**

MENORRHAGIA

CHEMICALLY INDUCED

Vaginal hemorrhage associated with degenerating submucous leiomyomata during leuprolide acetate treatment. Friedman AJ. **Fertil Steril** 1989 Jul;52(1):152–4

COMPLICATIONS

Iron deficiency in pre–menopausal females. McKenna DM, et al. **Ir Med J** 1989 Jun;82(2):69–70

DRUG THERAPY

An objective evaluation of flurbiprofen and tranexamic acid in the treatment of idiopathic menorrhagia. Andersch B, et al. **Acta Obstet Gynecol Scand** 1988;67(7):645–8

Comparison between mefenamic acid and danazol in the treatment of established menorrhagia. Dockeray CJ, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):840–4

The use of a gonadotropin–releasing hormone analog and transdermal estrogen to preserve fertility in a woman with severe menorrhagia. Fedorkow DM, et al. **Fertil Steril** 1989 Sep;52(3):512–3

[Clinical and experimental study of gossypol in the treatment of dysfunctional menorrhagia, endometriosis and fibromyoma of the uterus] Ye XQ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):216–7, 197 (Eng. Abstr.) **(Chi)**

[Danazol in the treatment of menometrorrhagia in patients with mitral prosthesis treated with warfarin] Vernotico V, et al. **Minerva Ginecol** 1989 Jun;41(6):291–3 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

The activity of calcium dependent and calcium independent phospholipase A2 in normal endometrium and in endometrium from women suffering from menorrhagia and polycystic ovary syndrome. Bonney RC, et al. **Gynecol Endocrinol** 1988 Jun;2(2):131–8

ETIOLOGY

Life–threatening hemorrhage due to uterine vascular abnormality. Jensen H, et al. **Acta Obstet Gynecol Scand** 1988;67(4):363–5

Early hypothyroidism in patients with menorrhagia. Wilansky DL, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):673–7

Clinical experiences with the Spring Coil intrauterine device: a ten–year follow–up study. Batár I. **Int J Gynaecol Obstet** 1988 Aug;27(1):123–31

Studies on IUD–induced menorrhagia and increased synthesis of prostacyclin in endometrium. Zheng XL, et al. **J Tongji Med Univ** 1988;8(4):232–4

Arteriovenous malformations of the uterus. Fleming H, et al. **Obstet Gynecol** 1989 Feb;73(2):209–14

Increased endometrial fibrinolytic activity as a cause of menometrorrhagia in women using IUD's. Surico N, et al. **Panminerva Med** 1988 Jul–Sep;30(3):184–7

[What lesions of the myometrium are responsible for hemorrhage?] Delarue T, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):679–86 (Eng. Abstr.) **(Fre)**

[Changes in menstrual bleeding caused by the use of the IUD] Pedrón Nuevo N. **Arch Invest Med (Mex)** 1988 Jul–Sep; 19(3):245–52 (Eng. Abstr.) **(Spa)**

PATHOLOGY

The morphologic characteristics of menstrual hemostasis in patients with unexplained menorrhagia. Hourihan HM, et al. **Int J Gynecol Pathol** 1989;8(3):221–9

PHYSIOPATHOLOGY

Menorrhagia: a review. Van Eijkeren MA, et al. **Obstet Gynecol Surv** 1989 Jun;44(6):421–9 (137 ref.)

SURGERY

Transcervical resection of endometrium in women with menorrhagia [letter] Boto TC, et al. **BMJ** 1989 Jun 3; 298(6686):1518

Transcervical resection of endometrium in women with menorrhagia [published erratum appears in BMJ 1989 May 27;298(6685):1428] Magos AL, et al. **BMJ** 1989 May 6; 298(6682):1209–12

Absorption of irrigating fluid during laser photocoagulation of the endometrium in the treatment of menorrhagia. Morrison LM, et al. **Br J Obstet Gynaecol** 1989 Mar; 96(3):346–52

Resectoscopic removal of symptomatic intrauterine lesions. Brooks PG, et al. **J Reprod Med** 1989 Jul;34(7):435–7

Pulmonary edema after photocoagulation of the endometrium with the Nd:YAG laser. A case report. Feinberg BI, et al. **J Reprod Med** 1989 Jun;34(6):431–4

Laser ablation of the endometrium. Loffer FD. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):77–89 (12 ref.)

THERAPY

[Atmocausis vaporization. Most severe internal burns following intrauterine use of steam] Hardt W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):293–5 (Eng. Abstr.) **(Ger)**

MENOTROPIN RECEPTORS see **RECEPTORS, GONADOTROPIN**

MENOTROPINS

ADMINISTRATION & DOSAGE

Periovulatory serum prolactin and progesteron secretion in gonadotropin stimulated cycles. Meden–Vrtovec H, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):213–6

Further evaluation of first morning urinary oestrogen in monitoring gonadotrophin therapy. Tang GW, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):141–3

Treatment of polycystic ovarian disease by inducing ovulation with pulsatile subcutaneous administration of human menopausal gonadotrophin associated with luteinizing hormone–releasing hormone analogue. Nakamura Y, et al. **Clin Endocrinol (Oxf)** 1988 Oct; 29(4):395–402

Results of in vitro fertilization and embryo transfer by combined long–acting gonadotropin–releasing hormone analog D–Trp–6–luteinizing hormone–releasing hormone and gonadotropins. Caspi E, et al. **Fertil Steril** 1989 Jan; 51(1):95–9

Ovarian stimulation with pure follicle–stimulating hormone/human menopausal gonadotropin and improved laparoscopic aspiration needles influence the success of an in vitro fertilization program. Eisermann J, et al. **Fertil Steril** 1989 Jan;51(1):112–6

Artificial agonadism and hormone replacement for oocyte donation. Meldrum DR, et al. **Fertil Steril** 1989 Sep; 52(3):509–11

Clinical experience in the induction of ovulation and pregnancy with pulsatile subcutaneous administration of human menopausal gonadotropin: a low incidence of multiple pregnancy. Nakamura Y, et al. **Fertil Steril** 1989 Mar;51(3):423–9

Efficacy of human menopausal gonadotropins as therapy for abnormal cervical mucus. Soto–Albors C, et al. **Fertil Steril** 1989 Jan;51(1):58–62

Synchronization of donor's and recipient's cycles with GnRH analogues in an oocyte donation programme. Devroey P, et al. **Hum Reprod** 1989 Apr;4(3):270–4

Two–year comparison of testicular responses to pulsatile gonadotropin–releasing hormone and exogenous gonadotropins from the inception of therapy in men with isolated hypogonadotropic hypogonadism. Liu L, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1140–5

Increased human menopausal gonadotropin dose during the early follicular phase: effect on follicular recruitment and treatment outcome. Blankstein J, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):112–7

[Fertilization in vitro with frozen donor sperm after ovocyte stimulation with an LH–RH analog, HMG, and HCG using a short–term protocol] Sagot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):677–85 (Eng. Abstr.) **(Fre)**

[Transvaginal pulsed Doppler measurement of flow velocities in pelvic vessels following cycle stimulation] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):33–6 (Eng. Abstr.) **(Ger)**

[Menstrual cycle stimulation in the in vitro fertilization program—effects on estrogen and progesterone receptors of the endometrium] Seliger E, et al. **Zentralbl Gynakol** 1988;110(23):1499–506 (Eng. Abstr.) **(Ger)**

[Intended super–ovulation with HMG in the treatment of so–called functional sterility] Aisaka K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb; 41(2):196–202 (Eng. Abstr.) **(Jpn)**

[Ovulation induction using clomiphene and human gonadotropins in combined therapy] Stilinović K, et al. **Jugosl Ginekol Perinatol** 1989 Jan–Apr;29(1–2):41–3 (Eng. Abstr.) **(Scr)**

ADVERSE EFFECTS

Ovarian hyperstimulation syndrome following D–Trp–6 luteinizing hormone–releasing hormone microcapsules and menotropin for in vitro fertilization. Golan A, et al. **Fertil Steril** 1988 Dec;50(6):912–6

The role of gonadotropins in the etiology of ectopic pregnancy. Oelsner G, et al. **Fertil Steril** 1989 Sep; 52(3):514–6

Luteal phase hyperprolactinemia during ovulation induction with human menopausal gonadotropins: incidence, recurrence, and effect on pregnancy rates. Tippet PD, et al. **Obstet Gynecol** 1989 Apr;73(4):613–6

Unilateral pleural effusion as the presenting feature of ovarian hyperstimulation syndrome. Anderson K, et al. **Scott Med J** 1988 Oct;33(5):338–9

[Increased incidence of ovarian hyperstimulation syndrome following combined GnRH agonist/hMG therapy] Lindner C, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):337–44 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Follicular fluid cyclic nucleotides, prostaglandin E2, leukotriene B4, oestradiol, progesterone and luteinizing hormone in women stimulated by clomiphene and gonadotropins. Heinonen PK, et al. **Acta Eur Fertil** 1988 Nov-Dec;19(6):325–8

Ovulation monitored by serum 17 beta-estradiol and ultrasound: differential ovarian response to human gonadotropins in various anovulatory states. Padova G, et al. **Acta Eur Fertil** 1988 Sep-Oct;19(5):283–6

In vitro responsiveness of human testicular DNA synthesis to gonadotropins. Okuyama A, et al. **Arch Androl** 1989; 22(2):161–5

Induction of testicular DNA synthesis in vitro by hCG and hMG treatments in men with hypogonadotropic hypogonadism. Okuyama A, et al. **Arch Androl** 1989; 23(1):39–43

Effectiveness of hMG-hCG treatment for DNA/RNA syntheses in subfertile human testis in vitro. Okuyama A, et al. **Arch Androl** 1989;22(2):167–72

Ovulation induction for in-vitro-fertilization and embryo transfer applying decapeptyl (DTRP-6 LH/RH) in combination with HMG or FSH. Mettler L, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):245–51

A pharmacodynamic comparison of human urinary follicle-stimulating hormone and human menopausal gonadotropin in normal women and polycystic ovary syndrome. Anderson RE, et al. **Fertil Steril** 1989 Aug; 52(2):216–20

Ovarian response and outcome of in-vitro fertilization in patients treated with gonadotrophin-releasing hormone analogues in different phases of the menstrual cycle. Pellicer A, et al. **Hum Reprod** 1989 Apr;4(3):285–9

Delayed occurrence of an LH surge after HCG administration during ovarian stimulation with gonadotrophins: effect of LHRH treatment. Rojas FJ, et al. **Hum Reprod** 1989 Aug;4(6):643–6

Follicle-stimulating hormone as a prognostic indicator in clomiphene citrate/human menopausal gonadotrophin-stimulated cycles for in-vitro fertilization. Tanbo T, et al. **Hum Reprod** 1989 Aug;4(6):647–50

Digoxin-like immunoreactive factor(s) in human gonadotropin stimulated follicular fluid. Jakobi P, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):209–11

Combined clomiphene citrate (CC) and human menopausal gonadotropins (hMG) in a fixed schedule for follicular recruitment during in vitro fertilization: effects on premature luteinizing hormone (LH) surges. Blankstein J, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):121–4

Monitoring gonadotropin-stimulated cycles for in vitro fertilization and embryo transfer. Kreiner D, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):230–3

[Fertilization in vitro—embryo transfer (IVF-ET). I. Evaluation of the quality and degree of maturity of oocytes after patients' stimulation with clomiphene, hMG and hCG] Wołczyński S, et al. **Ginekol Pol** 1988 May;59(5):237–44 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Some observations on the role of LH receptor binding inhibitor of ovine corpora lutea in ovarian processes. Dhir RN, et al. **Endocr Res** 1988–89;14(4):345–64

SECRETION

Suppression of gonadotrophin secretion does not reverse premature ovarian failure. Ledger WL, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):196–9

THERAPEUTIC USE

Pregnancy in premature ovarian failure after therapy with oral contraceptives despite resistance to previous human menopausal gonadotropin therapy. Check JH, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):114–5

Trial of support treatment with human chorionic gonadotrophin in the luteal phase after treatment with buserelin and human menopausal gonadotrophin in women taking part in an in vitro fertilisation programme. Smith EM, et al. **BMJ** 1989 Jun 3;298(6686):1483–6

The potentiating effect of growth hormone on follicle stimulation with human menopausal gonadotropin in a panhypopituitary patient. Blumenfeld Z, et al. **Fertil Steril** 1989 Aug;52(2):328–31

Value of suppression with a gonadotropin-releasing hormone agonist prior to gonadotropin stimulation for in vitro fertilization. Droesch K, et al. **Fertil Steril** 1989 Feb; 51(2):292–7

Enzyme immune assay determination of CA-125 in serum, peritoneal fluid, and follicular fluid from women with minimal endometriosis after ovarian hyperstimulation. Eisermann J, et al. **Fertil Steril** 1989 Feb;51(2):344–7

Predictive value of hormonal profiles before stimulation for in vitro fertilization. Fénichel P, et al. **Fertil Steril** 1989 May;51(5):845–9

HCG support during HMG/HCG therapy [letter] Maier D. **Fertil Steril** 1989 Feb;51(2):366–8

Adjuvant leuprolide in normal, abnormal, and poor responders to controlled ovarian hyperstimulation for in vitro fertilization/gamete intrafallopian transfer. Sathanandan M, et al. **Fertil Steril** 1989 Jun;51(6):998–1006

The effect of gonadotropin suppression on the induction of ovulation in premature ovarian failure patients. Surrey ES, et al. **Fertil Steril** 1989 Jul;52(1):36–41

Induction of multiple follicular development as a therapy for unexplained or male-related infertility. Fioretti P, et al. **Gynecol Endocrinol** 1989;3(1):45–53

Use of combined exogenous gonadotropins and pulsatile gonadotropin-releasing hormone in patients with polycystic ovarian disease: a new approach to induction of ovulation. Venturini PL, et al. **Gynecol Endocrinol** 1988 Sep;2(3):205–13

The value of GnRH analogue therapy in IVF in women with unexplained infertility. Ashkenazi J, et al. **Hum Reprod** 1989 Aug;4(6):667–9

Ovarian stimulation for in-vitro fertilization: clomiphene and HMG. Lehmann F, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:11–21

Combined GnRH-agonist/gonadotrophin stimulation for in-vitro fertilization. Schmutzler RK, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:29–33

The luteal phase and early pregnancy after combined GnRH-agonist/HMG treatment for superovulation in IVF or GIFT. Smitz J, et al. **Hum Reprod** 1988 Jul;3(5):585–90

Addition of Buserelin to human menopausal gonadotrophins in patients with failed stimulations for IVF or GIFT. Smitz J, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:35–8

Practice management for ovulation induction. Bonaventura LM. **J Reprod Med** 1989 Jan;34(1 Suppl):86–9

Monitoring gonadotropin therapy. Caldwell BV. **J Reprod Med** 1989 Jan;34(1 Suppl):95–9

Intrauterine insemination and ovulation stimulation as treatment of infertility. Corson SL, et al. **J Reprod Med** 1989 Jun;34(6):397–406 (15 ref.)

Experience with ultrasound. March CM. **J Reprod Med** 1989 Jan;34(1 Suppl):100–3

Gonadotropin-induced fertility in a man with congenital hypogonadism after prolonged prior testosterone therapy. Johnson VP, et al. **S D J Med** 1988 Dec;41(12):5–7

Leydig cell insufficiency—diagnosis and treatment. Hammar M. **Scand J Urol Nephrol Suppl** 1988;110:41–5

[In vitro fertilization and embryo transfer after induction of ovulation by menotropin] Xu LL. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):500–2, 36 (Eng. Abstr.) **(Chi)**

[The beneficial effects of short-term administration of a LHRH agonist (buserelin) in in vitro fertilization] Loumaye E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(8):1081–7 (Eng. Abstr.) **(Fre)**

[Testicular follicle-stimulating hormone receptors and effectiveness of human menopausal gonadotropin-human chorionic gonadotropin treatment in idiopathic male infertility] Namiki M, et al. **Hinyokika Kiyo** 1988 Jun; 34(6):957–61 (Eng. Abstr.) **(Jpn)**

[Continuous subcutaneous infusion of GnRH agonist: effective dosage in the treatment of endometriosis and its influence on the ovarian response to human menopausal gonadotropin] Masaoka K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):729–36 (Eng. Abstr.) **(Jpn)**

[Results of the combination treatment of cryptorchidism with human chorionic gonadotropin and human menopausal gonadotropin] Prados R, et al. **Rev Clin Esp** 1988 May; 182(8):419–22 (Eng. Abstr.) **(Spa)**

MENSTRUAL CYCLE

CA-125 spontaneous modifications through the menstrual cycle: preliminary report. Negri P, et al. **Acta Eur Fertil** 1989 Jan-Feb;20(1):29–30

Prediction and detection of ovulation relationship between woman's observations of cervical mucus changes, thermic and echographic parameters of ovulation. Pagano G, et al. **Acta Eur Fertil** 1988 Sep-Oct;19(5):269–71

Bone mineral loss related to menstrual history. Georgiou E, et al. **Acta Orthop Scand** 1989 Apr;60(2):192–4

Adrenoceptor and imipramine receptor binding during the menstrual cycle. Stowell LI, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):366–8

Menstrual cycle and cigarette smoking behavior. Steinberg JL, et al. **Addict Behav** 1989;14(2):173–9

Hormones regulating lipid and carbohydrate metabolism in premenopausal women: modulation by dietary lipids. Bhathena SJ, et al. **Am J Clin Nutr** 1989 May;49(5):752–7

Dietary fat and menstrual-cycle effects on the erythrocyte ghost insulin receptor in premenopausal women. Bhathena SJ, et al. **Am J Clin Nutr** 1989 Sep;50(3):460–4

Menstrual cycle and voluntary food intake. Gong EJ, et al. **Am J Clin Nutr** 1989 Feb;49(2):252–8

Menstrual cycle effects on the metabolism of tryptophan loads. Hrboticky N, et al. **Am J Clin Nutr** 1989 Jul; 50(1):46–52

Does gender or the menstrual cycle affect colonic transit? Hinds JP, et al. **Am J Gastroenterol** 1989 Feb;84(2):123–6

Effects of clomiphene citrate on episodic luteinizing hormone secretion throughout the menstrual cycle. Archer DF, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):581–9; discussion 589–92

Mitotic activity in uterine leiomyomas during the menstrual cycle. Kawaguchi K, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):637–41

Immunohistochemical localization of renin and angiotensin II in human ovaries. Palumbo A, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):8–14

A novel approach for monitoring the endometrial cycle and detecting ovulation. Seif MW, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):357–62

Deoxyribonucleic acid polymerase alpha activity in the endometrium of the human uterus during the menstrual cycle. Shioda M, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):880–1

The moon and menses [letter] Whitten WK. **Am J Obstet Gynecol** 1989 Feb;160(2):519–23

Ecology and ovarian function among Lese women of the Ituri Forest, Zaire. Ellison PT, et al. **Am J Phys Anthropol** 1989 Apr;78(4):519–26

Alterations of the hypothalamic GnRH interpulse interval sequence over the normal menstrual cycle. Santoro N, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E696–701

Seasonal and mood independence of low basal prolactin secretion in premenopausal women with seasonal affective disorder. Depue RA, et al. **Am J Psychiatry** 1989 Aug; 146(8):989–93

Panic disorder and the menstrual cycle: panic disorder patients, healthy control subjects, and patients with premenstrual syndrome. Stein MB, et al. **Am J Psychiatry** 1989 Oct;146(10):1299–303

Influence of the menstrual cycle on airway function in asthmatic and normal subjects. Pauli BD, et al. **Am Rev Respir Dis** 1989 Aug;140(2):358–62

Protocols for induction of ovulation. The concept of programmed cycles. Mashiach S, et al. **Ann N Y Acad Sci** 1988;541:37–45

Menstrual cycle-associated alteration of sulfogalactosylceramide in human uterine endometrium: possible induction of glycolipid sulfation by sex steroid hormones. Kubushiro K, et al. **Arch Biochem Biophys** 1989 Jan;268(1):129–36

Correlation between sexual desire and menstrual cycle characteristics. Stanislaw H, et al. **Arch Sex Behav** 1988 Dec;17(6):499–508

Urinary 6-hydroxymelatonin in menstruating women. Hamilton JA, et al. **Biol Psychiatry** 1988 Nov;24(7):845–52

Isolation and characterization of cell subpopulations from the monkey corpus luteum of the menstrual cycle. Hild-Petito SA, et al. **Biol Reprod** 1989 May;40(5):1075–85

Estrogen interconversions in the induced cycle in female rhesus monkeys. Longcope C, et al. **Biol Reprod** 1989 May; 40(5):949–52

In vitro protein production by the human endometrium. Santoro N, et al. **Biol Reprod** 1989 May;40(5):1047–55

Excreted steroids in primate feces over the menstrual cycle and pregnancy. Wasser SK, et al. **Biol Reprod** 1988 Nov; 39(4):862–72

Variations in the percentages of lymphocyte subtypes during the menstrual cycle in women. Eichler F, et al. **Biomed Pharmacother** 1988;42(4):285–7

The effect of age and menstrual cycle upon proliferative activity of the normal human breast. Potten CS, et al. **Br J Cancer** 1988 Aug;58(2):163–70

Influence of menstrual cycle on antipyrine pharmacokinetics in healthy Indian female volunteers. Nayak VK, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):604–6

Premenstrual exacerbation of atopic dermatitis [letter] Kemmett D. **Br J Dermatol** 1989 May;120(5):715

Menstrual cyclic thrombocytopenia. Tomer A, et al. **Br J Haematol** 1989 Apr;71(4):519–24

Metabolic changes during the menstrual cycle. Bisdee JT, et al. **Br J Nutr** 1989 May;61(3):641–50

Changes in energy expenditure during the menstrual cycle. Bisdee JT, et al. **Br J Nutr** 1989 Mar;61(2):187–99

Transvaginal ultrasonic assessment of endometrial growth in spontaneous and hyperstimulated menstrual cycles. Randall JM, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):954–9

Association between hormonal and haemorheological changes during the menstrual cycle in healthy women. Solerte SB, et al. **Br J Obstet Gynaecol** 1988 Dec; 95(12):1305–8

Schizophreniform psychosis associated with the menstrual cycle. Gerada C, et al. **Br J Psychiatry** 1988 May;152:700–2

Menstrual history and breast cancer surgery [letter] Gruber SA, et al. **Breast Cancer Res Treat** 1989 Jul;13(3):278

Menstrual factors and risk of breast cancer. Brinton LA, et al. **Cancer Invest** 1988;6(3):245–54

Circatrigintan rhythm of prolactin. Tennekoon KH, et al. **Ceylon Med J** 1988 Jun;33(2):57–61

Rhythms in the ovulatory cycle. 1st: Prolactin. Chronobiological Research Group on Synthetic Peptides in Medicine. Carandente F, et al. **Chronobiologia** 1989 Jan-Mar;16(1):35–44

Hormonal profile and androgen status during the menstrual cycle in women with acne. Medda F, et al. **Clin Exp Obstet Gynecol** 1988;15(4):137–42

An evaluation of the BIOSELF 110 fertility indicator. Ismail M, et al. **Contraception** 1989 Jan;39(1):53–71

Menstrual patterns and progesterone circulating levels following different procedures of tubal occlusion. Rivera R, et al. **Contraception** 1989 Aug;40(2):157–69

Progestin-mediated changes in progesterone receptor forms in the normal human endometrium. Feil PD, et al. **Endocrinology** 1988 Nov;123(5):2506–13

Immunocytochemical localization of estradiol and progesterone receptors in the monkey ovary throughout the menstrual cycle. Hild-Petito S, et al. **Endocrinology** 1988 Dec;123(6):2896–905

Influence of menstrual cycle on serum cholinesterase. Fairbrother A, et al. **Environ Res** 1989 Aug;49(2):181–9
Unbalanced progesterone and estradiol secretion in catamenial epilepsy. Bonuccelli U, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):100–6
Control of sweating during the human menstrual cycle. Kolka MA, et al. **Eur J Appl Physiol** 1989;58(8):890–5
Predictive value of the FSH:LH ratio on follicular and luteal phase characteristics of the human menstrual cycle. Rotten D, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul; 28(3):229–39
Immunoradiometric assays of total renin and gonadotropins in serum during the menstrual cycle. De Hertogh R, et al. **Fertil Steril** 1989 Aug;52(2):209–15
Transvaginal pulsed Doppler measurement of blood flow velocity in the ovarian arteries during cycle stimulation and after follicle puncture. Deutinger J, et al. **Fertil Steril** 1989 Mar;51(3):466–70
Menstrual cyclicity has a profound effect on glucose homeostasis. Diamond MP, et al. **Fertil Steril** 1989 Aug; 52(2):204–8
Normal salivary progesterone levels throughout the ovarian cycle as determined by a direct enzyme immunoassay. Finn MM, et al. **Fertil Steril** 1988 Dec;50(6):882–7
Histochemical changes in cervical mucus-secreting epithelium during the normal menstrual cycle. Gilks CB, et al. **Fertil Steril** 1989 Feb;51(2):286–91
The relationship of sperm parameters to cycle fecundity in superovulated women undergoing intrauterine insemination. Horvath PM, et al. **Fertil Steril** 1989 Aug; 52(2):288–94
Serum luteinizing hormone profile during the menstrual cycle in polycystic ovarian syndrome. Minakami H, et al. **Fertil Steril** 1988 Dec;50(6):990–2
Luteal cytoplasmic estradiol and progesterone receptors in human endometrium: in vitro fertilization and normal cycles. Molina R, et al. **Fertil Steril** 1989 Jun;51(6):976–9
The effect of cycle length on the outcome of in vitro fertilization. Pampiglione JS, et al. **Fertil Steril** 1988 Oct; 50(4):603–6
In vitro fertilization in unstimulated cycles: a new application. Paulson RJ, et al. **Fertil Steril** 1989 Jun;51(6):1059–60
Dieting causes menstrual irregularities in normal weight young women through impairment of episodic luteinizing hormone secretion. Pirke KM, et al. **Fertil Steril** 1989 Feb; 51(2):263–8
Menstrual pattern change 1 year after sterilization: results of a controlled, prospective study. Shain RN, et al. **Fertil Steril** 1989 Aug;52(2):192–203
Correlation of serum inhibin concentrations with results in an ovarian hyperstimulation program. Tsuchiya K, et al. **Fertil Steril** 1989 Jul;52(1):88–94
Free testosterone levels during the menstrual cycle in obese versus normal women. Wajchenberg BL, et al. **Fertil Steril** 1989 Mar;51(3):535–7
Predicting pregnancy outcome after in vitro fertilization and embryo transfer using estradiol, progesterone, and human chorionic gonadotropin beta-subunit. Yamashita T, et al. **Fertil Steril** 1989 Feb;51(2):304–9
Disordered sympathetic reactivity in menstrual migraine. A cardiopressor and biochemical evaluation. Cavallini A, et al. **Funct Neurol** 1989 Jan–Mar;4(1):85–9
Role of protein kinase C activation in oocyte maturation and steroidogenesis in ovarian follicles of Rana pipiens: studies with phorbol 12–myristate 13–acetate. Kleis-San Francisco S, et al. **Gamete Res** 1988 Nov;21(3):323–34
Bowel function and transit rate during the menstrual cycle. Kamm MA, et al. **Gut** 1989 May;30(5):605–8
Relationships between symptoms, menstrual cycle and orocaecal transit in normal and constipated women. Turnbull GK, et al. **Gut** 1989 Jan;30(1):30–4
Menstrual migraine: a possible pathogenic implication of platelet function. Benedetto C, et al. **Gynecol Endocrinol** 1987 Dec;1(4):345–53
Menstrual migraine: a double-blind trial of percutaneous estradiol. Dennerstein L, et al. **Gynecol Endocrinol** 1988 Jun;2(2):113–20
Premenstrual increase of intracellular magnesium levels in women with ovulatory, asymptomatic menstrual cycles. Facchinetti F, et al. **Gynecol Endocrinol** 1988 Sep; 2(3):249–56
Activity of deoxyribonucleic acid polymerase alpha stimulated by estrogen in the endometrium of the human uterus during the menstrual cycle. Usuki S, et al. **Gynecol Endocrinol** 1988 Dec;2(4):283–91
A relationship between sex hormone binding globulin and dehydroepiandrosterone sulfate in normally menstruating females. Wathen NC, et al. **Gynecol Endocrinol** 1987 Mar; 1(1):47–50
Morphometric characteristics of the vaginal epithelium during the menstrual cycle. Sjöberg I, et al. **Gynecol Obstet Invest** 1988;26(2):136–44
Relevance of prostaglandins in true menstrual migraine. Nattero G, et al. **Headache** 1989 Apr;29(4):233–8
Salivary oestradiol in spontaneous and stimulated menstrual cycles. Berthonneau J, et al. **Hum Reprod** 1989 Aug; 4(6):625–8
A comparison of the effects on follicular development between clomiphene citrate, its two separate isomers and spontaneous cycles. Glasier AF, et al. **Hum Reprod** 1989 Apr;4(3):252–6
Doppler ultrasound studies of the uterine artery in spontaneous ovarian cycles. Goswamy RK, et al. **Hum Reprod** 1988 Aug;3(6):721–6
Repeated mid-cycle tests of in-vitro sperm penetration (Kremer tests) in healthy women during three menstrual cycles. Jonsson B, et al. **Hum Reprod** 1989 Aug;4(6):670–3
The effect of age on the cyclical patterns of plasma LH, FSH, oestradiol and progesterone in women with regular menstrual cycles. Lee SJ, et al. **Hum Reprod** 1988 Oct; 3(7):851–5
The value and role of plasma 17 beta-oestradiol measurements during ovarian hyperstimulation for in-vitro fertilization. Leerentveld RA, et al. **Hum Reprod** 1988 Aug; 3(6):735–9
The endometrial cycle: the expression of a secretory component correlated with the luteinizing hormone peak. Smith RA, et al. **Hum Reprod** 1989 Apr;4(3):236–42
Fertility prognosis in IVF treatment of patients with cancelled cycles. Van Rysselberge M, et al. **Hum Reprod** 1989 Aug;4(6):663–6
Structural changes in human cervical mucus. Pal T, et al. **Indian J Med Res** 1989 Feb;90:44–50
Metabolic rate studies in females in pre and post menstrual phases and immediate metabolic effects of oral ingestion. Mehta V, et al. **Indian J Med Sci** 1988 Dec;42(12):294–7
Changes in sialic acid concentration in human saliva during the menstrual cycle. Calamera JC, et al. **Int J Fertil** 1986 Mar–Apr;31(1):43–5
Detection of the fertile phase from changes in cervico-vaginal fluid volume. Flynn AM, et al. **Int J Fertil** 1988;33 Suppl:17–23
Self-palpation to assess cervical changes in relation to mucus and temperature. Parenteau-Carreau S, et al. **Int J Fertil** 1988;33 Suppl:10–6
Evaluation of the preovulatory rise of follicle stimulating hormone and progesterone in normally ovulating women of reproductive age. Spirtos NJ, et al. **Int J Fertil** 1989 Jan–Feb;34(1):62–6
Changes in enzyme levels in human cervical mucus during the menstrual cycle. Treves C, et al. **Int J Fertil** 1986 Mar–Apr;31(1):59–66
Ovarian function after the menarche and hormonal contraception. Borsos A, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):249–53
Changes in nuclear and nucleolar areas of endometrial glandular cells throughout the menstrual cycle. Roberts DK, et al. **Int J Gynecol Pathol** 1989;8(1):36–45
Recognition of ovulatory/anovulatory cycle pattern in adolescents by mucus self-detection. Klaus H, et al. **J Adolesc Health Care** 1989 Mar;10(2):93–6
Menstrual fluctuation in the symptoms of panic anxiety. Cameron OG, et al. **J Affective Disord** 1988 Sep–Oct; 15(2):169–74
Endogenous hormones subtly alter women's response to heat stress. Carpenter AJ, et al. **J Appl Physiol** 1988 Nov; 65(5):2313–7
Changes in plasma volume during bed rest: effects of menstrual cycle and estrogen administration. Fortney SM, et al. **J Appl Physiol** 1988 Aug;65(2):525–33
The possible relation of the menstrual cycle to susceptibility to fear acquisition. van der Molen GM, et al. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):127–33
Measurement of urinary estriol glucuronides during the menstrual cycle by high-performance liquid chromatography. Caccamo F, et al. **J Chromatogr** 1988 Dec 29;434(1):61–70
Occult ovarian failure: a syndrome of infertility, regular menses, and elevated follicle-stimulating hormone concentrations. Cameron IT, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1190–4
The abnormal response of polycystic ovarian disease patients to exogenous pulsatile gonadotropin-releasing hormone: characterization and management. Filicori M, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):825–31
Effect of exercise and menstrual cycle status on plasma lipids, low density lipoprotein particle size, and apolipoproteins. Lamon-Fava S, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):17–21
Heterogeneity of serum prolactin throughout the menstrual cycle and pregnancy in hyperprolactinemic women with normal ovarian function. Larrea F, et al. **J Clin Endocrinol Metab** 1989 May;68(5):982–7
Pulsatile secretion of chorionic gonadotropin during the normal menstrual cycle. Odell WD, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):528–32
Changes in adenylyl cyclase activity of the human and nonhuman primate corpus luteum during the menstrual cycle and pregnancy. Rojas FJ, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):379–85
Circulating immunoreactive oxytocin during the human menstrual cycle comes from the pituitary and is estradiol dependent. Shukovski L, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):455–60
Estrogen 2-hydroxylase oxidation and menstrual function among elite oarswomen. Snow RC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):369–76
Luteal phase deficiency: characterization of reproductive hormones over the menstrual cycle. Soules MR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):804–12
Luteal phase deficiency: abnormal gonadotropin and progesterone secretion patterns. Soules MR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):813–20
Immunohistological localization of the human endometrial secretory protein pregnancy-associated endometrial alpha 1-globulin, an insulin-like growth factor-binding protein, during the menstrual cycle. Waites GT, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1100–4
Human corpus luteum: luteinizing hormone and chorionic gonadotropin receptors during the menstrual cycle. Yeko TR, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):529–34
Reproductive hormones in menstrual blood. Zhou JP, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):338–42
Proliferative activity in endometrial stromal granulocytes throughout menstrual cycle and early pregnancy. Pace D, et al. **J Clin Pathol** 1989 Jan;42(1):35–9
The binding of peroxidase-labelled lectins to human endometrium in normal cyclical endometrium and endometrial adenocarcinoma. West KP, et al. **J Clin Pathol** 1989 Feb;42(2):140–7
Absence of tobramycin pharmacokinetic and creatinine clearance variation during the menstrual cycle: implied absence of variation in glomerular filtration rate. Nafziger AN, et al. **J Clin Pharmacol** 1989 Aug;29(8):757–63
Mood changes associated with the menstrual cycle. **J Clin Psychiatry** 1988 Dec;49(12):465–502
The menstrual cycle in context, I: Affective syndromes associated with reproductive hormonal changes. Hamilton JA, et al. **J Clin Psychiatry** 1988 Dec;49(12):474–80 (61 ref.)
The menstrual cycle in context, II: Human gonadal steroid hormone variability. Hamilton JA, et al. **J Clin Psychiatry** 1988 Dec;49(12):480–4 (38 ref.)
Evaluation of the human gonadotroph free alpha-subunit secretory pools by administration of gonadotropin hormone-releasing hormone into normal subjects at different phases of the ovarian cycle. Balin MS, et al. **J Endocrinol Invest** 1989 Jun;12(6):373–81
An in vitro model of Chlamydia trachomatis infection in the regenerative phase of the human endometrial cycle. Campbell S, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2077–87
Return to the natural cycle for in vitro fertilization (alleluia! alleluia!) [editorial] Garcia J. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):67–8
Returning to spontaneous cycles in in vitro fertilization [letter] Ranoux C, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):304–5
The effect of clomiphene citrate on human preovulatory oocyte maturation in vivo. Seibel MM, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):3–6
Catamenial hemoptysis. Maguire PJ. **J Okla State Med Assoc** 1988 Dec;81(12):729–30
Development and application of simple expert systems in obstetrics and gynecology. Riss PA, et al. **J Perinat Med** 1988;16(4):283–7
Screening and selection process for studies of menstrually-related changes. Halbreich U, et al. **J Psychiatr Res** 1989;23(1):65–72
Neuroendocrinology of the normal menstrual cycle. Hodgen GD. **J Reprod Med** 1989 Jan;34(1 Suppl):68–75 (4 ref.)
IgG and IgA content of vaginal fluid during the menstrual cycle. Usala SJ, et al. **J Reprod Med** 1989 Apr;34(4):292–4
Changes in pure-tone thresholds and temporary threshold shifts as a function of menstrual cycle and oral contraceptives. Swanson SJ, et al. **J Speech Hear Res** 1988 Dec;31(4):569–74
Brain evoked responses reflect information processing changes with the menstrual cycle in young female athletes. Zani A. **J Sports Med Phys Fitness** 1989 Mar;29(1):113–21
FSH and the control of follicular growth. Glasier AF, et al. **J Steroid Biochem** 1989 Jan;32(1B):167–70 (13 ref.)
Immunocytochemical study of progesterone receptors in the human endometrium during the menstrual cycle. Bergeron C, et al. **Lab Invest** 1988 Dec;59(6):862–9
Magnetic resonance imaging of the menstrual cycle. Janus CL, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):669–74
Nutritional, physiological, and menstrual status of distance runners. Kaiserauer S, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):120–5
Women's soccer injuries in relation to the menstrual cycle and oral contraceptive use. Möller-Nielsen J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):126–9
Daily assessment of ocular variables throughout the menstrual cycle. SriVatsa LP. **Metab Pediatr Syst Ophthalmol** 1988;11(3):113–4
Corticotropin-releasing hormone inhibition of gonadotropin secretion during the menstrual cycle. Barbarino A, et al. **Metabolism** 1989 Jun;38(6):504–6
Dietary fat and hormonal effects on erythrocyte membrane fluidity and lipid composition in adult women. Berlin E, et al. **Metabolism** 1989 Aug;38(8):790–6
Proenkephalin gene expression in the primate uterus: regulation by estradiol in the endometrium. Low KG, et al. **Mol Endocrinol** 1989 May;3(5):852–7
Individuality and stability in the transport of precursors of monoamines across the erythrocyte membrane of mentally normal subjects. Schulz P, et al. **Neuropsychobiology** 1988; 19(1):12–6
Changes in perceptual asymmetry with the menstrual cycle. Altemus M, et al. **Neuropsychologia** 1989;27(2):233–40
Shift of functional cerebral asymmetry during the menstrual cycle. Heister G, et al. **Neuropsychologia** 1989;27(6):871–80
Sensitivity to cold pressor pain in dysmenorrheic and non-dysmenorrheic women as a function of menstrual cycle phase. Hapidou EG, et al. **Pain** 1988 Sep;34(3):277–83

Basic review: endocrinology of the normal menstrual cycle. Franz WB 3d. **Prim Care** 1988 Sep;15(3):607–16 (16 ref.)

The OVEIA Dual Analyte assay—a new method for profiling the menstrual cycle. Baker TS. **Prog Clin Biol Res** 1988;285:101–18

Chemical and homogeneous enzyme immunoassay methods for the measurement of estrogens and pregnanediol and their glucuronides in urine. Brown JB, et al. **Prog Clin Biol Res** 1988;285:119–38

Monitoring of human endometrial function during non-conception and conception cycles by serum PEP determinations. Joshi SG. **Prog Clin Biol Res** 1989; 294:331–45

The function and regulation of the primate corpus luteum during the fertile menstrual cycle. Stouffer RL, et al. **Prog Clin Biol Res** 1989;294:129–42 (33 ref.)

Comment by P. V. Peplow on; Production Rates of Prostaglandin F, 6-Keto PGF1 alpha and Thromboxane B2 by Perifused Human Endometrium. Peplow PV. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):71–2

Endometrial content of prostaglandin precursors during the menstrual cycle. Rosing U, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):195–8

Premenstrual symptom changes and plasma beta-endorphin/beta-lipotropin throughout the menstrual cycle. Hamilton JA, et al. **Psychoneuroendocrinology** 1988; 13(6):505–14

Neuropsychological correlates of menstrual mood changes. Altemus M, et al. **Psychosom Med** 1989 May–Jun; 51(3):329–36

Attributional patterns, moods, and the menstrual cycle. Bains GK, et al. **Psychosom Med** 1988 Sep–Oct;50(5):469–76

Menstrual cycle abnormalities and subclinical eating disorders: a preliminary report. Kreipe RE, et al. **Psychosom Med** 1989 Jan–Feb;51(1):81–6

Women and their husbands: mood and arousal fluctuations across the menstrual cycle and days of the week. Mansfield PK, et al. **Psychosom Med** 1989 Jan–Feb;51(1):66–80

Perimenstrual symptoms: time course of symptom intensity in relation to endocrinologically defined segments of the menstrual cycle. Schechter D, et al. **Psychosom Med** 1989 Mar–Apr;51(2):173–94

Psychophysiological responses in women reporting severe premenstrual symptoms. van den Akker O, et al. **Psychosom Med** 1989 May–Jun;51(3):319–28

Urodynamic investigations in healthy fertile females during the menstrual cycle. Sørensen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:28–34

Long term reproducibility of urodynamic investigations in healthy fertile females. Sørensen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:35–41

Existence and biochemical analysis of estradiol binding protein (E2BP) in normal menstrual cycle. Saito N, et al. **Steroids** 1988 Oct;52(4):383–4

Coagulation and fibrinolysis during the normal menstrual cycle. Siegbahn A, et al. **Ups J Med Sci** 1989;94(2):137–52

Midcycle pneumothorax in a patient with catamenial pneumothoraces. Ghio AJ, et al. **West J Med** 1988 Oct; 149(4):462–3

[The relationship of phases of the menstrual cycle and the presence of sexual disorders in women] Tsekov V, et al. **Akush Ginekol (Sofiia)** 1988;27(6):57–60 (Eng. Abstr.) **(Bul)**

[Salivary estradiol testosterone and progesterone levels in women with normal cycles and in pregnancy] Lu YR. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):334–7, 386 (Eng. Abstr.) **(Chi)**

[Survey of menstrual cycle length and ovulation in healthy women in Beijing] Xiao BL. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):279–82, 317 (Eng. Abstr.) **(Chi)**

[Changes of hormone levels in follicular fluid in women with normal menstruation] Xiao S, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):97–101 (Eng. Abstr.) **(Chi)**

[Acute phase proteins in the normal cycle in women, in the premenstrual syndrome and in dysmenorrhea] Rotta L, et al. **Cesk Gynekol** 1988 Sep;53(8):561–9 (Eng. Abstr.) **(Cze)**

[Serum cortisol levels in normal cycles in women, in the premenstrual syndrome and in dysmenorrhea] Rotta L, et al. **Cesk Gynekol** 1988 Jul;53(6):420–4 (Eng. Abstr.) **(Cze)**

[C-reactive protein in women with normal cycles, in cycles with the premenstrual syndrome and in dysmenorrhea] Rotta L, et al. **Cesk Gynekol** 1988 Aug;53(7):493–6 (Eng. Abstr.) **(Cze)**

[Clinical value of inhibin in women] Pampfer S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):279–87 (68 ref.) (Eng. Abstr.) **(Fre)**

[Menarche, menstrual cycle and fertility in diabetic patients] Burkart W, et al. **Geburtshilfe Frauenheilkd** 1989 Feb; 49(2):149–54 (Eng. Abstr.) **(Ger)**

[The hormone profile in serum and cervix secretions in the course of a menstrual cycle] Fuchs U, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:125–6 (Eng. Abstr.) **(Ger)**

[Diurnal beta-endorphin rhythm in relation to menstrual cycle phase] Graf M, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:121–4 (Eng. Abstr.) **(Ger)**

[Relaxin, a re-discovered hormone in obstetrics and reproduction medicine] Jockenhövel F. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:127–39 (224 ref.) **(Ger)**

[Current status of gynecologic endocrinology] Zander J, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:81 **(Ger)**

[Differential diagnosis and therapy of cycle-dependent severe attacks of familial Mediterranean fever] Mergelsberg M, et al. **Med Klin** 1989 Jan 15;84(1):23–31, 64 **(Ger)**

[Effect of the menstrual cycle on MAC] Tanifuji Y, et al. **Masui** 1988 Oct;37(10):1240–2 (Eng. Abstr.) **(Jpn)**

[The measurement of plasma-free testosterone in normal menstrual females, pregnant females, post menopausal females and vulvar dystrophy] Yamaguchi A, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):482–8 (Eng. Abstr.) **(Jpn)**

[Qualitative and quantitative changes of luteinizing hormone (LH) in the pituitary glands in female Japanese monkeys (Macaca fuscata) during the menstrual cycle and after castration] Hamada K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar;41(3):241–8 (Eng. Abstr.) **(Jpn)**

[Clinical assessment of body hair growth in Japanese women. The relationship between a grade of hirsutism and the menstrual status] Ichikawa Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1719–24 (Eng. Abstr.) **(Jpn)**

[Changes in autonomic nerve function during the normal menstrual cycle measured by the coefficient of variation of R-R intervals] Kondo M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):513–8 (Eng. Abstr.) **(Jpn)**

[Glycosphingolipids in human uterine endometrium: expression of sulfoglycolipids and its fluctuation during menstrual cycle] Kubushiro K. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr; 41(4):397–404 (Eng. Abstr.) **(Jpn)**

[Pulsatile secretion of prolactin during the human menstrual cycle] Masaoka K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1793–9 (Eng. Abstr.) **(Jpn)**

[Analysis of the levels of CA125, CEA and CA19-9 in the cervical mucus samples obtained at various phases of the menstrual cycle and with inflammatory diseases of the uterine cervix] Nanbu Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1519–24 (Eng. Abstr.) **(Jpn)**

[Cyclic changes in sex steroids, prostaglandins and oxytocin receptors of normal fallopian tube throughout the menstrual cycle] Sato N. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1432–8 (Eng. Abstr.) **(Jpn)**

[Fundamental studies, reference values and relationship to menstrual cycle of prolactin RIA BEAD II] Kobayashi M, et al. **Radioisotopes** 1989 Jun;38(6):286–9 (Eng. Abstr.) **(Jpn)**

[The influence of the moon on deliveries] Backe B, et al. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3183–5 (Eng. Abstr.) **(Nor)**

[Plasma magnesium (Mg) level during the menstrual cycle] Paprotny P, et al. **Ginekol Pol** 1988 Aug;59(8):487–92 (Eng. Abstr.) **(Pol)**

[Age-related changes in the indicators of immunological homeostasis in women with intact menstrual rhythm] Khait OV. **Akush Ginekol (Mosk)** 1989 Feb;(2):61–6 (Eng. Abstr.) **(Rus)**

[Characteristics of lactation and restoration of the reproductive function after labor] Manuilova IA, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):39–43 (Eng. Abstr.) **(Rus)**

[The search for an endometrial infertility factor in patients with a regular ovulatory cycle] Minina LS, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):26–8 (Eng. Abstr.) **(Rus)**

[Serologic studies of the alpha 2-microglobulin in fertility in women with normal and anovulatory menstrual cycles] Olefirenko GA, et al. **Akush Ginekol (Mosk)** 1988 Aug; (8):20–2 (Eng. Abstr.) **(Rus)**

[Gonadotropic and ovarian hormone levels in the course of the menstrual cycle of patients with chronic pyelonephritis] Tanchev S, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):15–7 (Eng. Abstr.) **(Rus)**

[Adhesion of fungi of the genus Candida to vaginal epithelium in various physiological changes in the levels of sex hormones] Velichko EV, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):67–8 **(Rus)**

[Questions for discussion in the problem of menstrual epilepsy (a review)] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988;88(6):120–3 (47 ref.) **(Rus)**

[Ultrastructure of human endometrium in vitro in various phases of the menstrual cycle] González-Angulo A, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):23–8 (Eng. Abstr.) **(Spa)**

[Does the number of menstrual cycles influence the risk of breast cancer?] Olsson H, et al. **Lakartidningen** 1989 Mar 1;86(9):704 **(Swe)**

DRUG EFFECTS

Induction of ovulation for gamete intrafallopian transfer (GIFT) using a gonadotropin-releasing hormone agonist and "pure" FSH: results obtained in 30 normally menstruating women. La Sala GB, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):159–65

Structural and ultrastructural patterns of the human preovulatory endometrium following clomiphene citrate treatment. Fedele L, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):631–7

Inhibin levels in gonadotropin-treated cycles. Baird DT, et al. **Ann N Y Acad Sci** 1988;541:153–61

Synthesis and release of estrogen- and progesterone-dependent proteins by the baboon (Papio anubis) uterine endometrium. Fazleabas AT, et al. **Biol Reprod** 1988 Oct;39(3):729–36

Effect of treatment with aromatase inhibitor 4-hydroxandrostenedione on the nonhuman primate menstrual cycle. Brodie AM, et al. **Cancer Res** 1989 Sep 1;49(17):4780–4

Artificially induced menstrual cycle with natural estradiol and progesterone. Hung TT, et al. **Fertil Steril** 1989 Jun; 51(6):968–71

Studies on folliculogenesis and in vitro fertilization outcome after the administration of follicle-stimulating hormone at different times during the menstrual cycle. Sharma V, et al. **Fertil Steril** 1989 Feb;51(2):298–303

Trial of 17-hydroxyprogesterone caproate (Proluton Depot) in women with long-standing infertility; failure of estrogen positive feedback the following cycle. Mavroudis K, et al. **Gynecol Endocrinol** 1987 Jun;1(2):177–93

Variability of cortisol and adrenocorticotropic hormone responses to metoclopramide during the menstrual cycle. Seki K. **Gynecol Obstet Invest** 1989;27(4):201–3

Ovarian response and outcome of in-vitro fertilization in patients treated with gonadotrophin-releasing hormone analogues in different phases of the menstrual cycle. Pellicer A, et al. **Hum Reprod** 1989 Apr;4(3):285–9

Delayed occurrence of an LH surge after HCG administration during ovarian stimulation with gonadotrophins: effect of LHRH treatment. Rojas FJ, et al. **Hum Reprod** 1989 Aug;4(6):643–6

The effect of RU486 administered during the proliferative and secretory phase of the cycle on the bleeding pattern, hormonal parameters and the endometrium. Swahn ML, et al. **Hum Reprod** 1988 Oct;3(7):915–21

Follicle-stimulating hormone as a prognostic indicator in clomiphene citrate/human menopausal gonadotrophin-stimulated cycles for in-vitro fertilization. Tanbo T, et al. **Hum Reprod** 1989 Aug;4(6):647–50

Hormonal manipulation of endometrial maturation. Navot D, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):801–7

The effects of prolonged opioidergic blockade on LH pulsatile secretion during the menstrual cycle. Rossmanith WG, et al. **J Endocrinol Invest** 1989 Apr;12(4):245–52

Mood, sexuality, oral contraceptives and the menstrual cycle. Warner P, et al. **J Psychosom Res** 1988;32(4–5):417–27

Correlations between free plasma estradiol and estrogens determined by bioluminescence in saliva, plasma, and urine during spontaneous and FSH stimulated cycles in women. Mounib N, et al. **J Steroid Biochem** 1988 Nov;31(5):861–5

Periovulatory plasma prolactin response to synthetic growth hormone-releasing hormone in normal women. De Marinis L, et al. **Metabolism** 1989 Mar;38(3):275–7

Influence of the menstrual cycle on neuroendocrine and behavioral responses to an opiate agonist in humans: preliminary results. Hoehe M. **Psychoneuroendocrinology** 1988;13(4):339–44

[Transvaginal pulsed Doppler measurement of flow velocities in pelvic vessels following cycle stimulation] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):33–6 (Eng. Abstr.) **(Ger)**

[The behavior of cytoplasmic progesterone receptors in the cycling endometrium and the effect of hormonal contraceptives] Carol W, et al. **Zentralbl Gynakol** 1989; 111(12):793–9 (Eng. Abstr.) **(Ger)**

[Menstrual cycle stimulation in the in vitro fertilization program—effects on estrogen and progesterone receptors of the endometrium] Seliger E, et al. **Zentralbl Gynakol** 1988;110(23):1499–506 (Eng. Abstr.) **(Ger)**

[Possibilities of ultrasound in the study of endometrial changes in cycle stimulation in the fertilization in vitro and embryo transfer programs] Stanojević D, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):977–86 (Eng. Abstr.) **(Scc)**

MENSTRUAL CYCLE, FOLLICULAR PHASE see **FOLLICULAR PHASE**

MENSTRUAL CYCLE, LUTEAL PHASE see **LUTEAL PHASE**

MENSTRUAL PROLIFERATIVE PHASE see **MENSTRUAL CYCLE**

MENSTRUAL SECRETORY PHASE see **MENSTRUAL CYCLE**

MENSTRUATION

Serum thyroglobulin during the menstrual cycle, during pregnancy, and post partum. Rasmussen NG, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):168–73

Menstruation-related angioedema treated with tranexamic acid. Håkansson OM. **Acta Obstet Gynecol Scand** 1988; 67(6):571–2

Seasonal, menstrual and circadian secretions of melatonin, gonadotropins and prolactin in women. Kivelä A, et al. **Acta Physiol Scand** 1988 Mar;132(3):321–7

Re: "Combined effect of childbearing, menstrual events, and body size on age-specific breast cancer risk" [letter] Moolgavkar S, et al. **Am J Epidemiol** 1988 Nov; 128(5):1177–9

The effect of residual beta cell activity on menstruation and the reproductive hormone profile of insulin-dependent diabetics. Prelević GM, et al. **Arch Gynecol Obstet** 1989; 244(4):207–13

Menstruation and cerebral blood flow. Swihart AA, et al. **Biol Psychiatry** 1989 Mar 1;25(5):654–7

Progesterone cream for cyclic breast pain. McFadyen IJ, et al. **BMJ** 1989 Apr 8;298(6678):931

Uterine blood flow and myometrial activity at menstruation, and the action of vasopressin and a synthetic antagonist. Hauksson A, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):898–904

Menstrual factors and breast cancer risk. Kvåle G, et al. **Cancer** 1988 Oct 15;62(8):1625–31

Uncertain gestation and pregnancy outcome. Chimbira TH. **Cent Afr J Med** 1989 Feb;35(2):329–33

Effect of menses, estrogens and hemolysis on a serum-lectin-like factor in cystic fibrosis. Lieberman J, et al. **Chest** 1989 Jan;95(1):111–6

Catamenial hemoptysis—report of a case. Wu JY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):501–4

Gonadotrophins, oestradiol and progesterone during the menstrual cycle in bulimia nervosa. Pirke KM, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):265–70

Consequences of uterine blood loss caused by various intrauterine contraceptive devices in South American women. World Health Organization Special Programme of Research, Development and Research Training in Human Reproduction. Andrade AT, et al. **Contraception** 1988 Jul;38(1):1–18

Vaginal bleeding patterns among women using one natural and eight hormonal methods of contraception. Belsey EM. **Contraception** 1988 Aug;38(2):181–206

The analysis of menstrual bleeding patterns: a review. Belsey EM, et al. **Contraception** 1988 Aug;38(2):129–56 (30 ref.)

Determinants of menstrual bleeding patterns among women using natural and hormonal methods of contraception. I. Regional variations. Belsey EM, et al. **Contraception** 1988 Aug;38(2):227–42

Determinants of menstrual bleeding patterns among women using natural and hormonal methods of contraception. II. The influence of individual characteristics. Belsey EM, et al. **Contraception** 1988 Aug;38(2):243–57

A study of breastfeeding and the return of menses and pregnancy in Karachi, Pakistan. Khan T, et al. **Contraception** 1989 Sep;40(3):365–76

A bibliography of the statistical analysis of vaginal bleeding patterns. Mullee MA, et al. **Contraception** 1988 Aug; 38(2):259–85

A micro-computer software for the analysis of menstrual diaries: the menstrual diary system. Pinol A, et al. **Contraception** 1988 Aug;38(2):157–63

Serum calcium level in patients with carcinoma of the cervix in relation to menstrual status. Sengupta A, et al. **Eur J Gynaecol Oncol** 1989;10(2):153–5

Ovarian function in the non-mosaic Turner syndrome; a case report. Jacquemyn Y, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):187–91

Fewer Trichomonas vaginalis organisms in vaginas of infected women during menstruation [letter] Fox H. **Genitourin Med** 1988 Aug;64(4):280

Clinical usefulness of determination of CA 125 levels in the serum and menstrual blood. Takahashi K, et al. **Gynecol Obstet Invest** 1988;26(1):63–5

A hazards model analysis of breastfeeding variables and maternal age on return to menses postpartum in rural Indonesian women. Jones RE. **Hum Biol** 1988 Dec; 60(6):853–71

Menstrual regulation in Bangladesh: an evaluation of training and service programs. Amin R, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):265–71

Endometrial tissue in myometrial vessels not associated with menstruation. Sahin AA, et al. **Int J Gynecol Pathol** 1989; 8(2):139–46

Relationship between nutrient intake, body mass index, menstrual function, and ballet injury. Benson JE, et al. **J Am Diet Assoc** 1989 Jan;89(1):58–63

The influence of diet, body fat, menstrual cycling, and activity upon the bone density of females. Howat PM, et al. **J Am Diet Assoc** 1989 Sep;89(9):1305–7

Thermal and metabolic responses to cold by men and by eumenorrheic and amenorrheic women. Graham TE, et al. **J Appl Physiol** 1989 Jul;67(1):282–90

Menstrual characteristics of mothers of twins. Bønnelykke B. **J Biosoc Sci** 1989 Jul;21(3):329–34

Decreased follicular phase gonadotropin secretion is associated with impaired estradiol and progesterone secretion during the follicular and luteal phases in normally menstruating women. Schweiger U, et al. **J Clin Endocrinol Metab** 1989 May;68(5):888–92

Cyclical mastopathy: an evaluation of methods of assessment. Kersey P, et al. **J Clin Epidemiol** 1989;42(1):53–9

Menstrual factors and the risk of epithelial ovarian cancer. Parazzini F, et al. **J Clin Epidemiol** 1989;42(5):443–8

Evidence that the phagocytosis mediated by the peanut agglutinin-like activity of IgG(Fc) receptors of human monocytes is selectively modulated by estradiol and natural estrogens. Malnise MG, et al. **J Clin Immunol** 1988 Nov; 8(6):495–502

Anxiety, depression, and menstrual symptoms among freshman medical students. Sherry S, et al. **J Clin Psychiatry** 1988 Dec;49(12):490–3

Immunoreactive inhibin concentrations in serum throughout the menstrual cycle of the macaque: suppression of inhibin during the luteal phase after treatment with an LHRH antagonist. Fraser HM, et al. **J Endocrinol** 1989 Apr; 121(1):R9–12

Evidence for a menstrual-linked artifact in determining rates of depression. Hamilton JA, et al. **J Nerv Ment Dis** 1989 Jun;177(6):359–65

Women's theories of menstruation and biases in recall of menstrual symptoms. McFarland C, et al. **J Pers Soc Psychol** 1989 Sep;57(3):522–31

Premenstrual exacerbations in hepatic porphyria: prevention by intermittent administration of an LH-RH agonist in combination with a gestagen [letter] Bargetzi MJ, et al. **JAMA** 1989 Feb 10;261(6):864

The validity of gestational age estimation by menstrual dating in term, preterm, and postterm gestations. Kramer MS, et al. **JAMA** 1988 Dec 9;260(22):3306–8

Attitudes to withdrawal bleeding [letter] Rudd J. **Med J Aust** 1989 Jan 2;150(1):52

Psychiatric symptomatology across the menstrual cycle in women reporting high, medium, and low levels of premenstrual change. Rosen LN, et al. **Milit Med** 1989 Feb;154(2):62–3

Menstrual-related fluctuations in Parkinson's disease. Quinn NP, et al. **Mov Disord** 1986;1(1):85–7

Labour pain: correlations with menstrual pain and acute low-back pain before and during pregnancy. Melzack R, et al. **Pain** 1989 Feb;36(2):225–9

Anorexia nervosa, athletics, and amenorrhea. Mansfield MJ, et al. **Pediatr Clin North Am** 1989 Jun;36(3):533–49 (61 ref.)

Age, gender-role orientation, and attitudes toward menstruation. Chrisler JC. **Psychol Rep** 1988 Dec; 63(3):827–34

Sequential assessment of vaginal microflora in healthy women randomly assigned to tampon or napkin use. Chow AW, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S68–73; discussion S73–4

Normal vaginal microflora during use of various forms of catamenial protection. Onderdonk AB, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S61–7

Risk factors for menstrual toxic shock syndrome: results of a multistate case-control study. Reingold AL, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S35–41; discussion S41–2

Effects of menstruation and pregnancy on epilepsy. Holmes GL. **Semin Neurol** 1988 Sep;8(3):234–9 (52 ref.)

A biobehavioral model for breastfeeding effects on return to menses postpartum in Javanese women. Jones RE. **Soc Biol** 1988 Fall-Winter;35(3–4):307–23

[Evolution of salivary estradiol levels during the spontaneous menstrual cycle. Correlation between saliva and plasma] Berthonneau J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):47–52 (Eng. Abstr.) **(Fre)**

[Menstruation and the woman in Judaism] Schwarz D. **Zentralbl Gynakol** 1988;110(15):970–4 (Eng. Abstr.) **(Ger)**

[Immunoelectrophoresis in the study of blood stains of menstrual origin] Dunjic D. **Srp Ark Celok Lek** 1986 Apr; 114(4):375–81 (Eng. Abstr.) **(Scc)**

DRUG EFFECTS

Increased calcium response to ADP in blood platelets from women during ovulation compared with menstruation: cytoplasmic calcium measured with the fura-2 technique. Pedersen OS, et al. **Acta Physiol Scand** 1988 Mar; 132(3):335–9

Bleeding patterns and acceptability among Norplant users in two Asian countries. Balogh SA, et al. **Contraception** 1989 May;39(5):541–53

The association between vaginal bleeding patterns and reasons for discontinuation of contraceptive use. Belsey EM. **Contraception** 1988 Aug;38(2):207–25

Bleeding patterns with low-dose, monophasic oral contraceptives. Edgren RA, et al. **Contraception** 1989 Sep; 40(3):285–97

Effect of Norplant contraceptive use on hemoglobin, packed cell volume and menstrual bleeding patterns. Fakeye O, et al. **Contraception** 1989 Mar;39(3):265–74

Why does RU486 fail to prevent implantation despite success in inducing menstruation? Li TC, et al. **Contraception** 1988 Oct;38(4):401–6

Patterns of bleeding and body iron stores during the use of a levonorgestrel-releasing intracervical device. Ratsula K, et al. **Contraception** 1988 Sep;38(3):333–40

Menstrual disturbances and fertility in chronic alcoholic women. Becker U, et al. **Drug Alcohol Depend** 1989 Aug; 24(1):75–82

The effect of RU486 administered during the proliferative and secretory phase of the cycle on the bleeding pattern, hormonal parameters and the endometrium. Swahn ML, et al. **Hum Reprod** 1988 Oct;3(7):915–21

Alcohol effects on luteinizing hormone releasing hormone-stimulated anterior pituitary and gonadal hormones in women. Mendelson JH, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):902–9

Women's attitudes to withdrawal bleeding and their knowledge and beliefs about the oral contraceptive pill. Rutter W, et al. **Med J Aust** 1988 Oct 17;149(8):417–9

[Can naproxen impair menstruation?] Meyboom RH, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1326–7 (Eng. Abstr.) **(Dut)**

MENSTRUATION DISORDERS

Abnormal vaginal bleeding in perimenopausal women. Nesse RE. **Am Fam Physician** 1989 Jul;40(1):185–92 (13 ref.)

BLOOD

Immunoreactive prolactin in breast milk and plasma of women with hyperprolactinemia, galactorrhea and menstrual dysfunction. Yuen BH. **Int J Fertil** 1986 Mar-Apr;31(1):67–70

[Disorders of the menstrual cycle in women after entering a military training center. III. FSH, LH, prolactin, estradiol, progesterone and psychological stress 2 months after entering the center] Cížková J, et al. **Cesk Gynekol** 1988 Sep;53(8):556–60 (Eng. Abstr.) **(Cze)**

CHEMICALLY INDUCED

Absence of progestational activity of oral spironolactone. Nakajima ST, et al. **Fertil Steril** 1989 Jul;52(1):155–8

Effects of occupational exposure to low-level carbon disulfide (CS2) on menstruation and pregnancy. Zhou SY, et al. **Ind Health** 1988;26(4):203–14

Antialdosterones: incidence and prevention of sexual side effects. de Gasparo M, et al. **J Steroid Biochem** 1989 Jan; 32(1B):223–7

Menstrual disorders among dry-cleaning workers [letter] Zielhuis GA, et al. **Scand J Work Environ Health** 1989 Jun;15(3):238

COMPLICATIONS

Ocular vicarious menstruation. Barat M, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep-Oct;25(5):254–5

[Clinical picture and dynamics of borderline psychoneurotic disturbances in menstrual cycle disorders in girls at puberty] Mikirtumov BE. **Zh Nevropatol Psikhiatr** 1988; 88(8):75–9 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Elevated free androgen index as an indicator of polycystic ovaries in oligomenorrhoea without obesity or hirsuties. Eden JA, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):346–9

The value of hormonal measurement in gynaecological practice [editorial] **East Afr Med J** 1989 Jan;66(1):1

Abnormal uterine bleeding. Connell A. **Nurse Pract** 1989 Apr;14(4):40, 43–4, 47 passim (19 ref.)

DRUG THERAPY

Terguride in the treatment of prolactin-induced luteal insufficiency. Větr M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:289–94

Menstrual migraine and intermittent ergonovine therapy. Gallagher RM. **Headache** 1989 Jun;29(6):366–7

Use of biphasic cyclic hormone therapy in functional bleeding disorders of adolescents (Anteovin). Kis-Csitári I. **Ther Hung** 1988;36(2):73–6

[Lutenyl and menstrual disorders. A hospital study] Cohen A, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):741–3 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Menstrual characteristics of mothers of twins. Bønnelykke B. **J Biosoc Sci** 1989 Jul;21(3):329–34

ETIOLOGY

Neuroendocrine consequences of alcohol abuse in women. Mello NK, et al. **Ann N Y Acad Sci** 1989;562:211–40 (150 ref.)

The prevalence of polycystic ovaries in thin oligomenorrhoeic, anovulatory women. Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):70–1

Menstrual and ovulatory disturbance in bulimia. Cantopher T, et al. **BMJ** 1988 Oct 1;297(6652):836–7

The influence of method of contraception and cigarette smoking on menstrual patterns. Brown S, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):905–10

Improved sexual function in hemodialysis patients on recombinant erythropoietin: a possible role for prolactin. Schaefer RM, et al. **Clin Nephrol** 1989 Jan;31(1):1–5

Dieting causes menstrual irregularities in normal weight young women through impairment of episodic luteinizing hormone secretion. Pirke KM, et al. **Fertil Steril** 1989 Feb; 51(2):263–8

Luteal phase defect: the possibility of an immunohistochemical diagnosis. Seif MW, et al. **Fertil Steril** 1989 Feb;51(2):273–9

21-Hydroxylase deficiency in female hyperandrogenism: screening and diagnosis. Azziz R, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):577–84

Menstrual status in female athletes: correlation with reproductive hormones and bone density. Baker E, et al.

Obstet Gynecol 1988 Nov;72(5):683–7
Changes in menstrual symptoms among sterilized and comparison women: a prospective study. Rulin MC, et al. **Obstet Gynecol** 1989 Aug;74(2):149–54
Common menstrual disorders. Coupey SM, et al. **Pediatr Clin North Am** 1989 Jun;36(3):551–71 (33 ref.)
Solving the mystery of menstrual dysfunction. Redmond GP. **Postgrad Med** 1989 May 15;85(7):127–32 (7 ref.)
Midcycle pneumothorax in a patient with catamenial pneumothoraces. Ghio AJ, et al. **West J Med** 1988 Oct; 149(4):462–3
[Menstrual and reproductive functions in women with diseases of the central nervous system] Kucherova IV. **Akush Ginekol (Mosk)** 1989 Feb;(2):58–61 (Eng. Abstr.) (Rus)
[The role of environmental and genetic factors in the development of pathology of the reproductive system in girls] Kuznetsova MN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):38–41 (Eng. Abstr.) (Rus)
[Neuroendocrine syndrome with disorders of the reproductive functions: their clinical problems and pathogenesis] Serov VN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):10–4 (57 ref.) (Rus)
[Borderline schizophrenia and cyclothymic disorder associated with disorders of the menstrual cycle] Anufriev AK, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):86–91 (Eng. Abstr.) (Rus)
[Changes in menstrual bleeding caused by the use of the IUD] Pedrón Nuevo N. **Arch Invest Med (Mex)** 1988 Jul–Sep; 19(3):245–52 (Eng. Abstr.) (Spa)

PATHOLOGY

Ultrasonographic study of ovaries of 19 women with weight loss–related hypothalamic oligo–amenorrhea. Futterweit W, et al. **Biomed Pharmacother** 1988;42(4):279–83
Minor müllerian anomalies and oligomenorrhea in infertile women. A syndrome. Gynecologic and obstetric implications. Stampe Sørensen S. **Dan Med Bull** 1989 Jun; 36(3):248–63 (155 ref.)

PHYSIOPATHOLOGY

Obstetric behavior and ultrasonic uterine characteristics of oligomenorrheic women. Stampe Sørensen S, et al. **Acta Obstet Gynecol Scand** 1988;67(5):447–53
Eicosanoids in primary dysmenorrhea, endometriosis and menstrual migraine. Benedetto C. **Gynecol Endocrinol** 1989; 3(1):71–94 (105 ref.)

PSYCHOLOGY

Stress and menstrual dysfunction in medical students. Clarvit SR. **Psychosomatics** 1988 Fall;29(4):404–9
[Chronic stress and the degree of anxiety in girls with menstrual cycle disorders] Sirakov M, et al. **Akush Ginekol (Sofiia)** 1989;28(2):51–4 (Eng. Abstr.) (Bul)

RADIOGRAPHY

[The importance of x–ray study of the skull and the sella turcica in gynecologic practice] Volobuev AI, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):17–20 (Eng. Abstr.) (Rus)

SURGERY

Laser endometrial ablation. Treatment for dysfunctional uterine bleeding. Ball KA. **AORN J** 1988 Dec;48(6):1153, 1155–64
Dysfunctional uterine bleeding. Zimmermann R. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):107–10

THERAPY

The potential role of exercise in the alleviation of menstrual disorders and menopausal symptoms: a theoretical synthesis of recent research. Gannon L. **Women Health** 1988; 14(2):105–27 (85 ref.)
[Experience with using acupuncture–reflexotherapy in oligomenorrhea] Parshutin NP. **Akush Ginekol (Mosk)** 1989 Feb;(2):73–5 (Rus)
[Dynamic function of the hypothalamo–hypophyseal system under the influence of transcerebral exposure to a UHF electrical field (27.12 MHz) in women with a menstrual cycle disorder] Bogoliubov VM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):43–8 (Eng. Abstr.) (Rus)

MENSTRUATION, FOLLICULAR PHASE see **FOLLICULAR PHASE**

MENSTRUATION INDUCING AGENTS

ADMINISTRATION & DOSAGE

Menstrual regulation by intramuscular injections of 16–phenoxy–tetranor PGE2 methyl sulfonylamide (sulprostone). A multicentre study. World Health Organization. **Br J Obstet Gynaecol** 1989 Feb;96(2):207–12

DIAGNOSTIC USE

[Ovarian physiology. VII. An hormonal test for predicting menopause] Porias Cuéllar HL, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):193–8 (Eng. Abstr.) (Spa)

PHARMACOLOGY

The effect of RU486 administered during the proliferative and secretory phase of the cycle on the bleeding pattern, hormonal parameters and the endometrium. Swahn ML, et al. **Hum Reprod** 1988 Oct;3(7):915–21

MENSTRUATION, LUTEAL PHASE see **LUTEAL PHASE**

MENSTRUATION, RETROGRADE see **MENSTRUATION DISORDERS**

MENTAL DEFICIENCY see **MENTAL RETARDATION**

MENTAL DISORDERS

Attitudes towards mental illness. A review of the literature. Bhugra D. **Acta Psychiatr Scand** 1989 Jul;80(1):1–12 (115 ref.)
A prospective study of psychosocial background factors associated with congenital malformations. McNeil TF, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):643–51
Community attitudes and awareness of mental disorders. A key informant study in two Nicaraguan towns. Penayo U, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):561–6
A basic residency curriculum concerning the chronically mentally ill. Faulkner LR, et al. **Am J Psychiatry** 1989 Oct;146(10):1323–7
Physical and sexual assault histories among psychiatric outpatients. Jacobson A. **Am J Psychiatry** 1989 Jun; 146(6):755–8
Islamic view of mental disorders [letter] Mobaraky GH. **Am J Psychiatry** 1989 Apr;146(4):561
Mental illness in doctors [letter] a'Brook MF. **BMJ** 1989 Mar 4;298(6673):603
Arrest patterns among mentally disordered offenders. Robertson G. **Br J Psychiatry** 1988 Sep;153:313–6
The fourth special edition on child psychiatry. **Can J Psychiatry** 1989 Aug;34(6):481–605
Annual issue on child psychiatry. **Can J Psychiatry** 1988 Aug; 33(6):429–576
Political awareness of psychiatric patients [letter] Valentine MB, et al. **Can Med Assoc J** 1989 Mar 1;140(5):498
Length of hospital stay for active treatment psychiatric patients in Taiwan. Fan BY, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):245–54
Deinstitutionalization of the elderly mentally ill: factors affecting discharge to alternative living arrangements. Sommers I, et al. **Gerontologist** 1988 Oct;28(5):653–8
Seriously disabled mentally ill in Hawaii. **Hawaii Med J** 1989 Mar;48(3):55–97
Protecting the entitlements of the mentally disabled: the SSDI/SSI legal battles of the 1980s. Rubenstein LS, et al. **Int J Law Psychiatry** 1988;11(3):269–78
Disability in full–length feature films: frequency and quality of films over an 11 year span. Byrd EK, et al. **Int J Rehabil Res** 1988;11(2):143–8
Hepatitis B in a residential population with a mental handicap. Scanlon S, et al. **Ir Med J** 1989 Jun;82(2):80–2
HIV testing and mental disorder. Lundy S. **J Med Ethics** 1989 Jun;15(2):92–3
Circumstances of sexual and physical victimization of black psychiatric outpatients. Jenkins EJ, et al. **J Natl Med Assoc** 1989 Mar;81(3):246–52
Proceedings of the Psychiatric Research Society annual meeting. Radisson Park City, Utah, 10–13 March 1988. Abstracts. **J Psychiatr Res** 1988;22(4):309–20
The 10th annual meeting of the Japanese Society of Biological Psychiatry. (Kyoto: March 2526, 1988). Abstracts. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):657–96
The 9th annual meeting of the Japanese Society of Biological Psychiatry. (Sapporo: May 8–9, 1987). Abstracts. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):357–93
Health, culture and the nature of nerves: introduction. Davis DL, et al. **Med Anthropol** 1989 May;11(1):1–13
The variable character of nerves in a Newfoundland fishing village. Davis DL. **Med Anthropol** 1989 May;11(1):63–78
Words of fear, words of power: nerves and the awakening of political consciousness. Lock M. **Med Anthropol** 1989 May;11(1):79–90
Health, culture and the nature of nerves: a critique. Low SM. **Med Anthropol** 1989 May;11(1):91–5
Paradigms underlying the study of nerves as a popular illness term in eastern Kentucky. Van Schaik E. **Med Anthropol** 1989 May;11(1):15–28
The mental illness awakening. Baggett J. **N C Med J** 1988 Oct;49(10):517–8
Perestroika, new mental health legislation, and Soviet psychiatry. Halpern AL. **N Y State J Med** 1989 Mar; 89(3):135–7
Mental illness—who cares? Weller MP. **Nature** 1989 May 25;339(6222):249–52
Common psychiatric problems and the pediatrician. Hodgman CH. **Pediatr Ann** 1989 Feb;18(2):90, 92
An autosomal recessive disorder with retardation of growth, mental deficiency, ptosis, pectus excavatum and camptodactyly. Khaldi F, et al. **Pediatr Radiol** 1988; 18(5):432–5
Women's disorders. **Psychiatr Clin North Am** 1989 Mar; 12(1):1–235
Psychiatric and psychologic aspects of fibromyalgia syndrome. Goldenberg DL. **Rheum Dis Clin North Am** 1989 Feb;15(1):105–14 (24 ref.)
[Mentally ill homeless persons] Brandt P. **Ugeskr Laeger** 1989 Feb 27;151(9):533–5 (Eng. Abstr.) (Dan)
[Birth and vicissitudes of the mental disease concept] Pichot P. **Acta Psychiatr Belg** 1988 May–Jun;88(3):206–21 (Eng. Abstr.) (Fre)
[Handicaps and maladjustment: evaluation of social policies] Parisot D. **Int J Rehabil Res** 1988;11(2):149–66 (Eng. Abstr.) (Fre)
[Evaluation using DSM–III of the clinical activity of a psychiatry department at a general hospital] Cottraux J, et al. **Presse Med** 1988 Oct 29;17(38):2005–8 (Eng. Abstr.) (Fre)
[Proceedings of the meeting of the Swiss Society for Psychiatry. Münsterlingen, 15–16 September 1988] **Schweiz Arch Neurol Psychiatr** 1989;140(3):197–270 (Ger)
[Aerospace psychology with notes on psychopathology. 3] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Oct–Dec; 52(4):323–65 (Ita)
[Aerospace psychology with notes on psychopathology. 1] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Apr–Jun; 52(2):157–94 (Ita)
[Aerospace psychology with notes on psychopathology. 2] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Jul–Sep; 52(3):235–70 (Ita)
[84th meeting of the Japanese Society of Psychiatry. Osaka, 11–13 May 1988. Abstracts] **Seishin Shinkeigaku Zasshi** 1988;90(12):1079–173 (Jpn)
[82d meeting of the Japanese Society of Psychiatry and Neurology. 21–23 May 1986, Morioka] **Seishin Shinkeigaku Zasshi** 1986;88(12):981–1051 (Jpn)
[Human rights of psychiatric patients] Terashima S. **Seishin Shinkeigaku Zasshi** 1986;88(12):1011–27 (103 ref.) (Jpn)
[Psychosocial problems among refugees in Norway] Hauff E, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20; 109(17–18):1867–70 (Eng. Abstr.) (Nor)
[Social and public health data on the living conditions of mental patients in rural and urban localities (prior to illness and in the first illness)] Kosenko VG. **Zh Nevropatol Psikhiatr** 1989;89(1):117–20 (Eng. Abstr.) (Rus)
[Subgroups of chronic patients who repeatedly attend the emergency service at a general hospital] Segui Montesinos J. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):140–4 (Eng. Abstr.) (Spa)

BLOOD

Erythrocyte electrolytes in psychiatric illness. Esche I, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):695–7
Neuropsychiatric hirsutism [letter] [published erratum appears in Ann Intern Med 1989 Jun 15;110(12):1037] Braithwaite SS, et al. **Ann Intern Med** 1989 May 1; 110(9):748–9
Serum thyroxine change and clinical recovery in psychiatric inpatients. Southwick S, et al. **Biol Psychiatry** 1989 Jan; 25(1):67–74
Growth hormone–releasing factor in mental disorders: a diagnostic marker and therapeutic alternative. Cacabelos R. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):421–36 (100 ref.)
Lowered platelet [3H]–imipramine binding in panic disorder: reality or statistical artifact? [letter] Norman TR, et al. **Pharmacopsychiatry** 1989 Mar;22(2):87
Low MHPG and continuing treatment in panic disorder. Edlund MJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):701–7
Variation in the single dose pharmacokinetics of fluphenazine in psychiatric patients. Midha KK, et al. **Psychopharmacology (Berlin)** 1988;96(2):206–11
[A method of staining peripheral blood basophils and their dynamics in patients with psychic diseases during treatment with neuroleptics] Grishkova LI, et al. **Lab Delo** 1988; (6):13–6 (Eng. Abstr.) (Rus)
[Seasonal variations in dexamethasone suppression test in psychiatric patients] de la Gándara Martín JJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):94–102 (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Brain and CSF somatostatin concentrations in patients with psychiatric or neurological illness. An overview. Vecsei L, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):657–67 (90 ref.)
Seasonal changes of CSF monoamine metabolites in psychiatric patients: what is the source? Csernansky JG, et al. **Psychiatry Res** 1988 Sep;25(3):361–3

CHEMICALLY INDUCED

Complications of phenylpropanolamine. Dilsaver SC, et al. **Am Fam Physician** 1989 Apr;39(4):201–6 (31 ref.)
Adverse psychiatric reaction to ketoconazole [letter] Fisch RZ, et al. **Am J Psychiatry** 1989 Jul;146(7):939
Cocaine–induced behavioral sensitization and kindling: implications for the emergence of psychopathology and seizures. Post RM, et al. **Ann N Y Acad Sci** 1988; 537:292–308 (29 ref.)

Ranitidine-induced confusion with concomitant morphine [letter] Martinez-Abad M, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):914-5
Antiepileptic and behavioural actions of MK-801 in an animal model of spontaneous absence epilepsy. Peeters BW, et al. **Epilepsy Res** 1989 Mar-Apr;3(2):178-81
Adverse behavioral response to clonazepam as a function of Verbal IQ-Performance IQ discrepancy. Rosenfeld WE, et al. **Epilepsy Res** 1987 Nov-Dec;1(6):347-56
Regarding the article by Furukawa et al. [letter] **J Allergy Clin Immunol** 1989 Jun;83(6):1139-42
The effects of theophylline on cognitive and behavioral performance [editorial] Creer TL, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1027-9
Nitrous oxide mood disorder. Grigg JR. **J Psychoactive Drugs** 1988 Oct-Dec;20(4):449-50
Psychological sequelae to carbon monoxide poisoning in the child. Klees M, et al. **J Toxicol Clin Exp** 1985 Sep-Oct; 5(5):301-7
Psychiatric side effects attributed to phenylpropanolamine. Lake CR, et al. **Pharmacopsychiatry** 1988 Jul;21(4):171-81 (33 ref.)
[Mental disorders in the acute period of household poisoning by organophosphorus compounds] Smirnov VK, et al. **Voen Med Zh** 1988 Aug;(8):38-9 (Rus)

CLASSIFICATION

An empirical comparison of the stone and dangerousness criteria for civil commitment. Hoge SK, et al. **Am J Psychiatry** 1989 Feb;146(2):170-5
Field trials of the 1987 draft of Chapter V (F) of ICD-10. Burke JD Jr. **Br J Psychiatry** 1988 May;152 Suppl 1:33-7
The structure and presentation of contemporary psychiatric classifications with special reference to ICD-9 and 10. Cooper JE. **Br J Psychiatry** 1988 May;152 Suppl 1:21-8
Methodological issues in psychiatric classification. Jablensky A. **Br J Psychiatry** 1988 May;152 Suppl 1:15-20
International perspectives of psychiatric classification. Sartorius N. **Br J Psychiatry** 1988 May;152 Suppl 1:9-14
The concept of disease in psychiatry [letter] Vinar O. **Br J Psychiatry** 1988 Sep;153:415
DSM-III-R: the conflict over new psychiatric diagnoses. Kutchins H, et al. **Health Soc Work** 1989 May;14(2):91-101
Issues in the classification of child and adolescent psychopathology. Cantwell DP, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):521-33 (122 ref.)
Child psychiatric disorders in ICD-10. Rutter M. **J Child Psychol Psychiatry** 1989 Jul;30(4):499-513
Client classification. A "needs" approach. Hay MA, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):23-30
Classification of mental disorder in primary care [editorial] **Lancet** 1988 Oct 29;2(8618):1002-3
Mental disorder in primary care [letter] Froom J. **Lancet** 1988 Dec 10;2(8624):1371
A psychiatric patient classification system. An alternative to diagnosis-related groups. Ashcraft ML, et al. **Med Care** 1989 May;27(5):543-57
Psychiatric severity of illness. A case mix study. Horn SD, et al. **Med Care** 1989 Jan;27(1):69-84
An empirical taxometric alternative to traditional classification of temporomandibular disorders. Rudy TE, et al. **Pain** 1989 Mar;36(3):311-20
[Aspects of the 10th decennial revision of the international statistical classification of diseases (ICD-10)] Boleloucký Z. **Cesk Psychiatr** 1989 Jun;85(3):183-93 (Eng. Abstr.) (Cze)
[Empirical research of the classification of psychiatric disorders] Maier W, et al. **Nervenarzt** 1988 Aug; 59(8):449-55 (37 ref.) (Ger)
[Commentary on the nosography of pediatric psychiatry] Pirozynski T. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct-Dec;92(4):673-9 (19 ref.) (Eng. Abstr.) (Rum)
[The priority of O. V. Kerbikov in creating a genetic typology of psychopathies] Gindikin VIa. **Zh Nevropatol Psikhiatr** 1988;88(6):123-4 (Rus)
[Discussion aspects of the concept "mental disease" in present-day psychiatry] Kotov VP, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):145-8 (Rus)
[Trends in the development of the theory of current American psychiatry (data of the DSM-III-R)] Lichko AE. **Zh Nevropatol Psikhiatr** 1989;89(6):114-8 (Rus)

COMPLICATIONS

Development of histidinemic patients: follow-up study of five cases with neuropsychological symptoms. Ishikawa M, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):444-8
Psychopathology and personality characteristics of epileptic patients: epilepsy, psychopathology and personality. Garyfallos G, et al. **Acta Psychiatr Scand** 1988 Jul; 78(1):87-95
Substance abuse among general psychiatric patients: place of presentation, diagnosis, and treatment. Galanter M, et al. **Am J Drug Alcohol Abuse** 1988;14(2):211-35 (75 ref.)
Comorbidity of other psychiatric disturbances in depressed, psychiatrically hospitalized children. Alessi NE, et al. **Am J Psychiatry** 1988 Dec;145(12):1582-4
Comorbidity of substance abuse and other psychiatric disorders in adolescents. Bukstein OG, et al. **Am J Psychiatry** 1989 Sep;146(9):1131-41 (97 ref.)
Calcium channel blockers for tardive dyskinesia in geriatric psychiatric patients. Kushnir SL, et al. **Am J Psychiatry** 1989 Sep;146(9):1218-9
Medical evaluation of psychiatric patients. I. Results in a state mental health system. Koran LM, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):733-40
Treating the premenstrual syndrome [letter] Callender K, et al. **BMJ** 1988 Sep 10;297(6649):684
Consultation for physical illnesses by patients diagnosed and treated for psychiatric disorders by a general practitioner: 20 year follow up study. Wilkinson G, et al. **BMJ** 1988 Sep 24;297(6651):776-8
Language and speech disorders in children attending a day psychiatric programme. Kotsopoulos A, et al. **Br J Disord Commun** 1987 Dec;22(3):227-36
Screening for HIV [letter] Davies DR. **Br J Psychiatry** 1988 Jun;152:857
Screening for HIV [letter] Dunn J. **Br J Psychiatry** 1988 Oct;153:568-70
Psychiatric morbidity and social problems in patients with insulin-dependent diabetes mellitus. Wilkinson G, et al. **Br J Psychiatry** 1988 Jul;153:38-43
Preventing polydipsia in psychiatric patients [letter] Bhopal JS, et al. **Can Med Assoc J** 1989 Mar 1;140(5):497
Mental impairment of elderly hospitalized hip fracture patients. Furstenberg AL, et al. **Compr Gerontol [B]** 1987 Aug;1(2):80-5
Variation in cognitive functioning in nonorganic psychiatric disorders. Fabrega H Jr, et al. **Compr Psychiatry** 1989 Jul-Aug;30(4):346-54
Co-occurrence of psychiatric disorders in child psychiatric patients and nonpatients: a circumplex model. Pfeffer CR, et al. **Compr Psychiatry** 1989 Jul-Aug;30(4):275-82
The prevalence of serological markers, hepatitis B virus DNA and elevated serum amino transferase values in institutionalized mentally handicapped males and females: an epidemiological study of HBV infection in residents with Down's syndrome or other forms of mental deficiency. van Ditzhuijsen TJ, et al. **Eur J Epidemiol** 1988 Sep;4(3):349-56
The role of psychopathology in chronic headache: cause or effect? Blanchard EB, et al. **Headache** 1989 May; 29(5):295-301
Missed diagnosis of substance abuse in psychiatric patients. Ananth J, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):297-9
HIV and the mentally ill: an approach to the legal issues. Haimowitz S. **Hosp Community Psychiatry** 1989 Jul; 40(7):732-6 (24 ref.)
Lifetime psychiatric comorbidity in hospitalized alcoholics: subject and familial correlates. Hasin DS, et al. **Int J Addict** 1988 Aug;23(8):827-50
Psychosomatic patients in a psychiatric clinic. Chaturvedi SK, et al. **Int J Psychiatry Med** 1988;18(2):145-52
Empirical classification of speech/language impairment in children. II. Behavioral characteristics. Beitchman JH, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan; 28(1):118-23
Prevalence of unsuspected language disorders in a child psychiatric population. Cohen NJ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):107-11
History-taking in the elderly with and without cognitive impairment. How useful is it? Davis PB, et al. **J Am Geriatr Soc** 1989 Mar;37(3):249-55
Fragile X syndrome: genetic predisposition to psychopathology. Bregman JD, et al. **J Autism Dev Disord** 1988 Sep;18(3):343-54
The psychiatric and neuropsychiatric aspects of HIV disease. Woo SK. **J Palliat Care** 1988 Dec;4(4):50-3
Psychopathology and self-concept in asthmatic children. Kashani JH, et al. **J Pediatr Psychol** 1988 Dec;13(4):509-20
Dual diagnosis: clinical and research perspectives. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):135-257
Psychosocial and neuropsychiatric aspects of HIV infection: review of their extent and implications for psychiatry. Catalan J. **J Psychosom Res** 1988;32(3):237-48 (96 ref.)
Seroprevalence of human immunodeficiency virus in mental health patients. Clair WK, et al. **J S C Med Assoc** 1989 Mar;85(3):103-6
The Stability of Coexisting Psychiatric Syndromes in Alcoholic Men After One Year [letter] Frawley PJ. **J Stud Alcohol** 1989 Sep;50(5):491-2
From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 Jun 23-30; 261(24):3517
Chest pain not always what it seems; panic disorder may be cause in some [news] Raymond C. **JAMA** 1989 Feb 24;261(8):1101-2
The neuropsychiatric aspects of human immunodeficiency virus infection and the acquired immunodeficiency syndrome: service implications [editorial] Raphael B, et al. **Med J Aust** 1989 May 1;150(9):473-5
Hyponatraemia in psychiatric patients. Tallis GA. **Med J Aust** 1989 Feb 6;150(3):151-3
Approaches to insomnia. Helping patients, avoiding pitfalls, doing no harm. Gregory JG, et al. **N C Med J** 1988 Oct; 49(10):502-4
Psychogenic tremors. Koller W, et al. **Neurology** 1989 Aug; 39(8):1094-9
The role of psychopathology in the familial transmission of drug abuse. Rounsaville BJ. **NIDA Res Monogr** 1988; 89:108-19
Drug surveillance/drug monitoring in psychiatric out-patient treatment: prescription of psychotropic drugs, diagnoses and adverse drug reaction--3 years. Bürke H, et al. **Pharmacopsychiatry** 1988 Nov;21(6):293-4
Benzodiazepine abuse and dependence in psychiatric inpatients. Wolf B, et al. **Pharmacopsychiatry** 1989 Mar; 22(2):54-60
Detecting physical disorders in emotionally disturbed patients. Herring ME, et al. **Postgrad Med** 1989 Aug; 86(2):135-7, 141-2
Angina-like chest pain: a joint medical and psychiatric investigation. Colgan SM, et al. **Postgrad Med J** 1988 Oct; 64(756):743-6
Serious assaults by inpatients [published erratum appears in Psychosomatics 1989 Summer;30(3):358] Reid WH, et al. **Psychosomatics** 1989 Winter;30(1):54-6
Psychiatric and neurological manifestations in systemic lupus erythematosus. Lim L, et al. **Q J Med** 1988 Jan; 66(249):27-38
A mysterious nail and screw artifact. Schenk L. **Radiol Technol** 1988 Nov-Dec;60(2):137-8
Mental health aspects of mental retardation: results of an NIMH-UIC conference. **Res Dev Disabil** 1989;10(3):223-94
Substance abuse and psychopathology. A diagnostic screening of Italian narcotic addicts. Clerici M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul;24(4):219-26
[Somatic disease at a department for acute psychiatric disease] Solstad K, et al. **Ugeskr Laeger** 1989 Jul 31; 151(31):1980-2 (Eng. Abstr.) (Dan)
[Can psychosis of neurons explain the low frequency of cancer in mental disease? Maybe] Merle H. **J Chir (Paris)** 1988 Oct;125(10):601-9 (Fre)
[Early auditory potentials in mental disorders in children] Coll J, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(4):337-8 (Eng. Abstr.) (Fre)
[Driver's license and psychiatric disorders] Kretschmer M. **Versicherungsmedizin** 1988 Sep 1;40(5):139-42 (Eng. Abstr.) (Ger)
[Prevalence of skin diseases in patients of a mental hospital] Pardo GB, et al. **G Ital Dermatol Venereol** 1988 Jun; 123(6):303-5 (Eng. Abstr.) (Ita)
[Captopril in hypertensive psychiatric patients] Beretta G, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):215-9 (Eng. Abstr.) (Ita)
[Mental disorders associated with disorders of menstruation function] Brutman VI. **Akush Ginekol (Mosk)** 1989 Jun; (6):58-61 (Eng. Abstr.) (Rus)
[Mental disorders in functional disorders of cardiac activity and results of psychotropic and anti-arrhythmia therapy] Smulevich AB, et al. **Klin Med (Mosk)** 1989 Jan;67(1):74-9 (Rus)
[Self injuries of eyes in mental patients] Gol'dovskaia IL. **Oftalmol Zh** 1988;(4):253-4 (Rus)
[Clinico-immunologic characteristics of patients with pulmonary tuberculosis, psychic diseases and a congenital glucose-6-phosphate dehydrogenase deficiency] Insanov AB, et al. **Probl Tuberk** 1989;(6):10-5 (Eng. Abstr.) (Rus)
[Occurrence, clinical manifestations, course and outcomes of tuberculosis of the lungs in patients with mental diseases and alcoholism] Rudoi NM, et al. **Probl Tuberk** 1989; (1):61-4 (Rus)
[Organization of the differential diagnosis of tuberculosis and other diseases of the lungs in patients with tuberculosis, suffering from psychic disorders] Shcherbatiuk AS, et al. **Probl Tuberk** 1989;(1):64-7 (Rus)
[Ontogenetic aspect of sensory-perceptive disorders in mental diseases] Dem'ianov IuG. **Zh Nevropatol Psikhiatr** 1988;88(8):69-71 (Eng. Abstr.) (Rus)
[Psychiatric emergencies: sociodemographic and care aspects (comparative analysis with a previous study)] Artal Simón JA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul-Aug;16(4):255-64 (Eng. Abstr.) (Spa)
[Description of the water intoxication syndrome in psychiatric patients] de Dios Francos A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 May-Jun;16(3):173-82 (Eng. Abstr.) (Spa)
[Psychosomatics and cancer] Delgado Martín ME, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May-Jun;17(3):169-75 (Eng. Abstr.) (Spa)
[Suicide among psychiatric patients] Ramos Brieva JA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May-Jun;17(3):209-14 (52 ref.) (Eng. Abstr.) (Spa)

DIAGNOSIS

DSM-III symptom disorders (Axis I) and personality disorders (Axis II) in an outpatient population. Alnaes R, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):348-55
Use of the Child Behavior Checklist in an Israeli adolescent psychiatric unit. Apter A, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):96-101
The Rutter Parent Scale A2 and Teacher Scale B2 in Chinese. II. Clinical validity among Chinese children. Wong CK. **Acta Psychiatr Scand** 1988 Jul;78(1):11-7
Screening for psychosocial disorders in pediatric practice. Jellinek MS, et al. **Am J Dis Child** 1988 Nov;142(11):1153-7
Substance abuse/mental illness: diagnostic issues. Ford J, et al. **Am J Drug Alcohol Abuse** 1989;15(3):297-307
Defense mechanisms in risk of suicide and risk of violence. Apter A, et al. **Am J Psychiatry** 1989 Aug;146(8):1027-31
Study of 60 patients with AIDS or AIDS-related complex requiring psychiatric hospitalization. Baer JW. **Am J Psychiatry** 1989 Oct;146(10):1285-8

Psychiatric diagnosis in China [letter] Chang SC. **Am J Psychiatry** 1989 Aug;146(8):1079–80
Effects of diagnosis and context on dangerousness [letter] Cooper AJ. **Am J Psychiatry** 1989 Feb;146(2):289–90
Psychiatric syndromes in adolescent substance abusers. DeMilio L. **Am J Psychiatry** 1989 Sep;146(9):1212–4
An empirical study of emergency commitment. Faulkner LR, et al. **Am J Psychiatry** 1989 Feb;146(2):182–6
Changing diagnostic criteria [editorial] Gift TE. **Am J Psychiatry** 1988 Nov;145(11):1414–5
The psychiatric emergency service holding area: effect on utilization of inpatient resources. Gillig PM, et al. **Am J Psychiatry** 1989 Mar;146(3):369–72
The normalcy of self-proclaimed "normal volunteers". Halbreich U, et al. **Am J Psychiatry** 1989 Aug; 146(8):1052–5
Determinants of emergency psychiatric admission for adolescents and adults. Hillard JR, et al. **Am J Psychiatry** 1988 Nov;145(11):1416–9
Commitment: the consistency of clinicians and the use of legal standards. Lidz CW, et al. **Am J Psychiatry** 1989 Feb; 146(2):176–81
Effect of a psychiatric liaison program on consultation rates and on detection of minor psychiatric disorders in cancer patients. McCartney CF, et al. **Am J Psychiatry** 1989 Jul; 146(7):898–901
Psychopathology in patients with Wilson's disease. Medalia A, et al. **Am J Psychiatry** 1989 May;146(5):662–4
DSM-III disorders in a large sample of psychiatric patients: frequency and specificity of diagnoses. Mezzich JE, et al. **Am J Psychiatry** 1989 Feb;146(2):212–9
DSM-III-R definition of mental disorder [letter] Sagar RS. **Am J Psychiatry** 1989 Aug;146(8):1077–8
Diagnosis of refugees [letter] Saxena S. **Am J Psychiatry** 1989 Mar;146(3):410–1
Civil commitment standards and patient mix in England/Wales, Italy, and the United States. Segal SP. **Am J Psychiatry** 1989 Feb;146(2):187–93
A crosswalk from DSM-III-R to ICD-9-CM. Thompson JW, et al. **Am J Psychiatry** 1989 Oct;146(10):1315–9
Criticisms of DSM-III-R [letter] Widiger TA, et al. **Am J Psychiatry** 1989 Apr;146(4):566–7
Somatization in psychiatric patients [letter] Wilson DR. **Am J Psychiatry** 1989 Mar;146(3):410
Psychiatric screening in the emergency department: its effect on physician behavior. Gold I, et al. **Ann Emerg Med** 1989 Aug;18(8):875–80
Diagnosis and clinical assessment: current status and major issues. McReynolds P. **Annu Rev Psychol** 1989;40:83–108 (155 ref.)
The art of turf creation [letter] Cancro R. **Arch Gen Psychiatry** 1989 Feb;46(2):191–4
The development of DSM-IV. Frances AJ, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):373–5
Diagnosing diagnoses. Receiver operating characteristic methods and psychiatry. Hsiao JK, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):664–7
An empirical study of defense mechanisms. I. Clinical interview and life vignette ratings. Perry JC, et al. **Arch Gen Psychiatry** 1989 May;46(5):444–52
Magnetoencephalography. Applications in psychiatry. Reeve A, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):573–6 (41 ref.)
The Composite International Diagnostic Interview. An epidemiologic Instrument suitable for use in conjunction with different diagnostic systems and in different cultures. Robins LN, et al. **Arch Gen Psychiatry** 1988 Dec; 45(12):1069–77
DSM-III and DSM-III-R [letter] Swartz CM. **Arch Gen Psychiatry** 1989 Apr;46(4):381
Psychiatric diagnosis in an outpatient population. A comparative study of PSE–Catego and DSM-III. van den Brink W, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):369–72
Recall and dating of psychiatric symptoms. Test–retest reliability of time-related symptom questions in a standardized psychiatric interview. Wittchen HU, et al. **Arch Gen Psychiatry** 1989 May;46(5):437–43
Why are we rushing to publish DSM-IV? Zimmerman M. **Arch Gen Psychiatry** 1988 Dec;45(12):1135–8
The mental health of patients with a chief complaint of chronic fatigue. A prospective evaluation and follow-up. Manu P, et al. **Arch Intern Med** 1988 Oct;148(10):2213–7
Psychiatric presentation in general practice. Rose AT. **Aust Fam Physician** 1988 Sep;17(9):802–3, 805
Disquiet on the research front [letter] McConaghy N. **Aust N Z J Psychiatry** 1988 Sep;22(3):226–8
Validity of the GHQ-28 in New Zealand women. Romans-Clarkson SE, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):187–96
Psychoanalysis today [letter] Watson PB. **Aust N Z J Psychiatry** 1988 Sep;22(3):231–2
The General Health Questionnaire: reliability and validity for Australian youth. Winefield HR, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):53–8
Blink rate on routine EEGs: possible psychiatric significance. Boutros NN, et al. **Biol Psychiatry** 1988 Oct;24(6):717–20
Specificity of the salivary cortisol dexamethasone suppression test across psychiatric diagnoses. Copolov DL, et al. **Biol Psychiatry** 1989 Apr 1;25(7):879–93
The computer will see you now. Pelosi AJ, et al. **BMJ** 1989 Jul 15;299(6692):138–9 (12 ref.)
Psychological problems in general practice patients: two assumptions explored. Salmon P, et al. **Br J Clin Psychol** 1988 Nov;27 (Pt 4):371–9
Psychophysiology and clinical psychiatry [editorial] Turpin G. **Br J Hosp Med** 1989 Mar;41(3):219
Comprehension and motivation in responses to a psychiatric screening instrument. Validity of the SRQ in Ethiopia. Kortmann F, et al. **Br J Psychiatry** 1988 Jul;153:95–101
The Geriatric Mental State Examination as a case-finding instrument in the community. McWilliam C, et al. **Br J Psychiatry** 1988 Feb;152:205–8
On developing a psychiatric multiaxial schema for ICD-10. Mezzich JE. **Br J Psychiatry** 1988 May;152 Suppl 1:38–43
The diagnostic and statistical manual of mental disorders in the courts. Shuman DW. **Bull Am Acad Psychiatry Law** 1989;17(1):25–32
An appraisal of the DSM-III system. Adamson J. **Can J Psychiatry** 1989 May;34(4):303–10 (90 ref.)
A paradoxical outcome of a regional review board decision: a case report [letter] Cashman FE. **Can J Psychiatry** 1988 Nov;33(8):778
Mentally disordered offenders and the insanity verdict [letter] Green CM. **Can J Psychiatry** 1988 Nov;33(8):778–80
Mentally disordered offenders and the insanity verdict [letter] Norton WA. **Can J Psychiatry** 1989 Jun;34(5):478–80
Forensic psychiatrists' and psychologists' understanding of insanity: misguided expertise? Rogers R, et al. **Can J Psychiatry** 1988 Nov;33(8):691–5
DSM-III in residency training: results of a Canadian survey. Velamoor VR, et al. **Can J Psychiatry** 1989 Mar; 34(2):103–6
Hidden psychiatric morbidity. Part II: Training health care workers in detection: a pre- and post-study at Karanda Mission Hospital. Hall A, et al. **Cent Afr J Med** 1987 Nov; 33(11):255–8
Diagnosis and treatment of mental illness in mentally retarded children: a developmental model. Dosen A. **Child Psychiatry Hum Dev** 1989 Fall;20(1):73–84 (28 ref.)
Validity of record ratings of the Global Assessment Scale. Dill DL, et al. **Compr Psychiatry** 1989 Jul–Aug;30(4):320–3
Development of a graphic psychiatric self-rating scale. Ernst M, et al. **Compr Psychiatry** 1989 Mar–Apr;30(2):189–94
The role of quantitative topographic mapping or 'neurometrics' in the diagnosis of psychiatric and neurological disorders: the cons. Fisch BJ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul;73(1):5–9
The role of quantitative EEG topographic mapping or 'neurometrics' in the diagnosis of psychiatric and neurological disorders: the pros. John ER. **Electroencephalogr Clin Neurophysiol** 1989 Jul;73(1):2–4
The validity of the French version of the GHQ-28 and PSYDIS in a community sample of 20 year olds in Switzerland. Bolognini M, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(2):161–8
The Munich Personality Test (MPT)—a short questionnaire for self-rating and relatives' rating of personality traits: formal properties and clinical potential. von Zerssen D, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(2):73–93
Primary health care providers' recognition and diagnosis of mental disorders in their patients. Borus JF, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):317–21
Psychiatric consultation on an otolaryngology liaison service. Bronheim H, et al. **Gen Hosp Psychiatry** 1989 Mar; 11(2):95–102
Effect of liaison psychiatry on attitudes toward psychiatry, rate of consultation, and psychosocial documentation. Schubert DS, et al. **Gen Hosp Psychiatry** 1989 Mar; 11(2):77–87
Classification and diagnosis in social work in health care. Carlton TO. **Health Soc Work** 1989 May;14(2):83–5
Labeling patients [letter] Berger BR, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):305–6
Clinicians' effectiveness in detecting patients' requests during an initial screening. Champion R, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):413–5
Consultation–liaison psychiatry and HIV-related disorders. Fernandez F, et al. **Hosp Community Psychiatry** 1989 Feb; 40(2):146–53 (64 ref.)
Assessing the victimized psychiatric patient. Westermeyer J, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):245–9
Risk assessment of violence among the mentally disordered: generating useful knowledge. Monahan J. **Int J Law Psychiatry** 1988;11(3):249–57 (40 ref.)
Unlearning psychiatry: a cohort effect in the training environment. Badger LW, et al. **Int J Psychiatry Med** 1988; 18(2):123–35
Mental health training of primary care physicians: an outcome study. Jones LR, et al. **Int J Psychiatry Med** 1988; 18(2):107–21
The tip of the iceberg: psychiatric consultations on an orthopedic service. Kuhn WF, et al. **Int J Psychiatry Med** 1988;18(4):375–82
Psychiatric outpatients in a general hospital of Ethiopia: diagnostic and sociodemographic characteristics. Khandelwal SK, et al. **Int J Soc Psychiatry** 1988 Autumn; 34(3):230–5
The structure and correlates of self-reported symptoms in 11-year-old children. Williams S, et al. **J Abnorm Child Psychol** 1989 Feb;17(1):55–71
Psychometric properties of the K-SADS-P in an Israeli adolescent inpatient population. Apter A, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):61–5
Psychiatric disorders among preschool children. Hooks MY, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep; 27(5):623–7
The Child Behavior Checklist: normative information for inpatients. Jones RN, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):632–5
Psychopathology in hospitalized, adopted children. Rogeness GA, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep; 27(5):628–31
A Parent Practices Scale and its relation to parent and child mental health. Strayhorn JM, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):613–8
Comparison of DISC with clinicians' DSM-III diagnoses in psychiatric inpatients. Weinstein SR, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):53–60
Reevaluation of chronically ill psychiatric patients [letter] **J Clin Psychiatry** 1988 Oct;49(10):413–4
Clinical use of topographic brain electrical activity mapping in psychiatry. Garber HJ, et al. **J Clin Psychiatry** 1989 Jun;50(6):205–11
Nasopharyngeal EEG recording in psychiatric patients. Gupta BK, et al. **J Clin Psychiatry** 1989 Jul;50(7):262–4
Psychiatric diagnoses in patients who have chronic fatigue syndrome [published erratum appears in J Clin Psychiatry 1989 Apr;50(4):148] Kruesi MJ, et al. **J Clin Psychiatry** 1989 Feb;50(2):53–6
Evaluation and management of premenstrual syndrome in clinical psychiatric practice. Osofsky HJ, et al. **J Clin Psychiatry** 1988 Dec;49(12):494–8
The utility of the MCMI as a DSM-III Axis I diagnostic tool. Bonato DP, et al. **J Clin Psychol** 1988 Nov; 44(6):867–75
DSM-III diagnosis and code types of the Diagnostic Inventory of Personality and Symptoms in public hospital settings. Coker RR, et al. **J Clin Psychol** 1989 Jul; 45(4):521–30
Understanding the accuracy of tests with cutting scores: the sensitivity, specificity, and predictive value model. Glaros AG, et al. **J Clin Psychol** 1988 Nov;44(6):1013–23
Disguise and the structured self-report assessment of psychopathology: II. A clinical replication. Holden RR. **J Clin Psychol** 1989 Jul;45(4):583–6
MMPI profile of women and men convicted of domestic homicide. Kalichman SC. **J Clin Psychol** 1988 Nov; 44(6):847–53
Factor structure of a brief symptom checklist for acute psychiatric inpatients. McNiel DE, et al. **J Clin Psychol** 1989 Jan;45(1):66–72
Personality characteristics of work-ready workers' compensation clients. Patrick J. **J Clin Psychol** 1988 Nov; 44(6):1009–12
Comparison of two IQ conversion tables for the Vocabulary–Block Design short form. Ryan JJ, et al. **J Clin Psychol** 1988 Nov;44(6):950–2
Inventory of interpersonal problems: psychometric properties and clinical applications. Horowitz LM, et al. **J Consult Clin Psychol** 1988 Dec;56(6):885–92
Assessment of positive automatic cognition. Ingram RE, et al. **J Consult Clin Psychol** 1988 Dec;56(6):898–902
Factor structure of mental health measures for older adults. Zautra AJ, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):514–9
Psychosocial screening in pediatric practice: identifying high-risk children. Walker WO Jr, et al. **J Dev Behav Pediatr** 1989 Jun;10(3):134–8
Psychiatric diagnosis as reified measurement. Mirowsky J, et al. **J Health Soc Behav** 1989 Mar;30(1):11–25; discussion 26–40
Mental illness, substance abuse, and criminal behavior. Ermutlu IM, et al. **J Med Assoc Ga** 1989 Apr;78(4):213–7
The hermeneutic role of the consultation–liaison psychiatrist. Leder D. **J Med Philos** 1988 Nov;13(4):367–78
The family resemblance hypothesis applied to psychiatric classification. Blashfield RK, et al. **J Nerv Ment Dis** 1989 Aug;177(8):492–7
Social class and psychiatric disorder. The examination of an extreme. Gift TE, et al. **J Nerv Ment Dis** 1988 Oct; 176(10):593–7
Diagnosis of severely ill inpatients in China. A collaborative project using the structured clinical interview for DSM-III (SCID). Wilson LG, et al. **J Nerv Ment Dis** 1988 Oct; 176(10):585–92
Psychiatric diagnoses in patients with psychogenic dizziness or severe tinnitus. Simpson RB, et al. **J Otolaryngol** 1988 Oct;17(6):325–30
It only takes one psychologist to demonstrate the impact of psychological assessment. Zacker J. **J Pers Assess** 1989 Spring;53(1):173–9
The recognition of psychiatric morbidity on a medical oncology ward. Hardman A, et al. **J Psychosom Res** 1989; 33(2):235–9
Development and use of a short self-rating instrument to screen for psychosocial disorder. Corney RH. **J R Coll Gen Pract** 1988 Jun;38(311):263–6
Myasthenia gravis presenting as respiratory failure: confusion with a psychiatric illness. Jordan CB 2d, et al. **J S C Med Assoc** 1989 Jun;85(6):292–4
Differential diagnosis of psychiatric comorbidity in substance abusers. Kosten TR, et al. **J Subst Abuse Treat** 1988; 5(4):201–6
Characterizing healthy adolescent development; distinguishing it from possible disturbances [news] Zylke JW. **JAMA** 1989 Aug 18;262(7):880–1
Proceedings of the 7th annual meeting of the Japanese

Committee for the International Diagnostic Criteria in Psychiatry (JCIDCP). November 7, 1987, Nagoya. Abstracts. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):395–410

The recognition, diagnosis, and treatment of mental disorders by primary care physicians. Andersen SM, et al. **Med Care** 1989 Sep;27(9):869–86

Vignette method for psychiatric case detection in a rural community. Khare CB, et al. **Med J Malaysia** 1988 Jun; 43(2):100–8

The ME syndrome [letter] Werry JS. **N Z Med J** 1988 Oct 12;101(855):642

The evaluation of the impaired physician. Logan WS. **New Dir Ment Health Serv** 1989 Spring;(41):33–53

Screening for psychiatric illness in patients with oral dyaesthesia by means of the General Health Questionnaire—twenty-eight item version (GHQ-28) and the Irritability, Depression and Anxiety Scale (IDA). Zilli C, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):384–9

The Last-Weiss Rorschach Ego-Strength Scale as a prognostic measure for psychiatric outpatients. Greenwald DF, et al. **Percept Mot Skills** 1988 Aug;67(1):199–207

The use of research assistants in polydiagnostic research. Philipp M, et al. **Pharmacopsychiatry** 1988 Nov;21(6):465–6

The dexamethasone suppression test: its relationship to diagnoses, severity of depression and response to treatment. Dratcu L, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):99–117

Psychiatric diagnosis in the medical discharge summary as a measure of consultation outcome. Peterson LG, et al. **Psychiatr Med** 1988;6(3):59–66

Improving the accuracy of clinical judgment. Faust D, et al. **Psychiatry** 1989 May;52(2):197–208

Attitudes of psychiatrists toward diagnostic options and issues. Smith D, et al. **Psychiatry** 1989 Feb;52(1):66–78

Psychiatric diagnosis in cocaine abuse. Nunes EV, et al. **Psychiatry Res** 1989 Apr;28(1):105–14

Clinical judgment, clinical training, and professional experience. Garb HN. **Psychol Bull** 1989 May; 105(3):387–96 (110 ref.)

The General Health Questionnaire: a psychometric analysis using latent trait theory. Andrich D, et al. **Psychol Med** 1989 May;19(2):469–85

Clinical validity. Kendell RE. **Psychol Med** 1989 Feb; 19(1):45–55 (33 ref.)

The development of a computerized assessment for minor psychiatric disorder. Lewis G, et al. **Psychol Med** 1988 Aug;18(3):737–45

Polymorphic DNA markers and mental disease. Owen MJ, et al. **Psychol Med** 1988 Aug;18(3):529–33 (19 ref.)

Diagnostic grammar and assessment: translating criteria into questions. Robins LN. **Psychol Med** 1989 Feb;19(1):57–68

How often is multiple sclerosis mistaken for a psychiatric disorder? Skegg K, et al. **Psychol Med** 1988 Aug; 18(3):733–6

Validation of a computerized assessment (PROQSY) of minor psychological morbidity by Relative Operating Characteristic analysis using a single GP's assessments as criterion measures. Wilkinson G, et al. **Psychol Med** 1989 Feb;19(1):225–31

Discriminating between substance abusers with single and dual diagnoses using MMPI profiles and the Mac Andrews Alcoholism Scale: Axis I and Axis II subtypes. Rozensky RH, et al. **Psychol Rep** 1988 Dec;63(3):985–6

There's more in a number than you think: new validity data for the Global Assessment Scale. Sohlberg S. **Psychol Rep** 1989 Apr;64(2):455–61

Kinetic Family Drawings and MMPI diagnostic indicators in adolescent psychiatric inpatients. Stawar TL, et al. **Psychol Rep** 1989 Aug;65(1):142–6

Nosology and etiology of a spirit disorder (vimbuza) in Malawi. Peltzer K. **Psychopathology** 1989;22(2–3):145–51

Assessment in diagnosis and treatment of geropsychiatric patients. **Psychopharmacol Bull** 1988;24(4):501–810

Instrumental Activities of Daily Living (IADL) Scale. Original observer-rated version. "Does do" form—for women only. **Psychopharmacol Bull** 1988;24(4):785–7

Instrumental Activities of Daily Living (IADL) Scale. Self-rated version. Incorporated in the Philadelphia Geriatric Center. Multilevel Assessment Instrument (MAI). **Psychopharmacol Bull** 1988;24(4):789–91

Mini-Mental State Examination (MMSE). Cockrell JR, et al. **Psychopharmacol Bull** 1988;24(4):689–92

Neuropsychological evaluation of treatment effects in the elderly: a critique of tests in current use. Flicker C. **Psychopharmacol Bull** 1988;24(4):535–56 (252 ref.)

Multidimensional Observation Scale for Elderly Subjects (MOSES). Helmes E. **Psychopharmacol Bull** 1988; 24(4):733–45

Physical and Mental Impairment-of-Function Evaluation (PAMIE). Linn MW. **Psychopharmacol Bull** 1988; 24(4):755–7

A critical review of scales used to evaluate social and interpersonal adjustment in the community. Linn MW. **Psychopharmacol Bull** 1988;24(4):615–21 (22 ref.)

Assessments of the aged by relatives or significant others. Niederehe G. **Psychopharmacol Bull** 1988;24(4):595–600 (30 ref.)

Clinician-rated scales for multidimensional assessment of psychopathology in the elderly. Overall JE, et al. **Psychopharmacol Bull** 1988;24(4):587–94 (31 ref.)

Global Assessment of Psychiatric Symptoms (GAPS). Raskin A, et al. **Psychopharmacol Bull** 1988;24(4):721–5

Relative's Assessment of Global Symptomatology (RAGS). Raskin A, et al. **Psychopharmacol Bull** 1988;24(4):759–63

Geriatric Evaluation by Relative's Rating Instrument (GERRI). Schwartz GE. **Psychopharmacol Bull** 1988; 24(4):713–6

The GIP: an observational ward behavior scale. Verstraten PF. **Psychopharmacol Bull** 1988;24(4):717–9

Integration of DSM–III and ICD–8 to be used in a consultation–liaison psychiatric service. Preliminary experiences. Poulsen DL, et al. **Psychother Psychosom** 1987;48(1–4):78–82

Metodological issues in measuring the detection of emotional disorders by primary care physicians. A review of the literature. Iacoponi E. **Rev Saude Publica** 1988 Feb; 22(1):46–56 (51 ref.)

Diagnostic evaluation of the mentally impaired elderly living at home. Engedal K, et al. **Scand J Prim Health Care** 1989 Mar;7(1):5–11

Clinical versus actuarial judgment. Dawes RM, et al. **Science** 1989 Mar 31;243(4899):1668–74 (50 ref.)

Psychiatric diagnosis [letter] Spitzer RL, et al. **Science** 1988 Nov 4;242(4879):651–2

Examination of the highest cerebral functions in the elderly. Pryse-Phillips W. **Semin Neurol** 1989 Mar;9(1):8–19

Administrative influences on psychiatric diagnosis. Gattaz WF. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul; 23(3):145–8

Teaching Zimbabwean medical students an awareness of hidden psychological disorder in an urban outpatient setting. Williams H, et al. **Trop Doct** 1989 Apr;19(2):52–4

[Refugees' encounter with the psychiatric system in Denmark] Jensen SB, et al. **Ugeskr Laeger** 1988 Dec 19; 150(51):3171–5 (Eng. Abstr.) **(Dan)**

[Psychological diagnosis of mental disorders. Problems concerning the validity and reproducibility] Olesen J, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2214–5 **(Dan)**

[The criminal responsibility of the mental patient] Cassiers L, et al. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):5–19 (Eng. Abstr.) **(Fre)**

[Non-invasive or minor invasive methods of diagnosis and therapeutic follow-up in psychiatry] Macher JP, et al. **Ann Med Psychol (Paris)** 1988 Jun;146(6):584–7 **(Fre)**

[The rights and duties of the occupational health physician and of the employer in employee mental illnesses] Möllhoff G. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):1005–7 **(Ger)**

[Evoked potentials in psychiatry] Hegerl U. **Nervenarzt** 1988 Dec;59(12):701–83 (38 ref.) **(Ger)**

[Knowledge of the diagnosis and drug treatment of psychiatric patients] Luderer HJ. **Nervenarzt** 1989 Apr; 60(4):213–9 (Eng. Abstr.) **(Ger)**

[Forensic psychiatric assessment in the USSR] Friemert K. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):671–7 (Eng. Abstr.) **(Ger)**

[Some problems in forensic assessment] Schlegel J, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):641–6 (Eng. Abstr.) **(Ger)**

[The Bellak and Associates Ego Function Rating in general practice of psychiatric expert assessment] Schmidt P. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb;41(2):88–91 (Eng. Abstr.) **(Ger)**

[Ethical problems in forensic-psychiatric assessment] Barbey I. **Psychiatr Prax** 1988 Sep;15(5):176–81 (32 ref.) (Eng. Abstr.) **(Ger)**

[Subjective aspects of psychiatric diagnosis] Priebe S. **Psychiatr Prax** 1989 Mar;16(2):86–9 (Eng. Abstr.) **(Ger)**

[The memory clinic] Stähelin HB, et al. **Ther Umsch** 1989 Jan;46(1):72–7 (Eng. Abstr.) **(Ger)**

[Psychiatric epidemiology in the community: the importance of the definition of "case"] Brown GW, et al. **Epidemiol Prev** 1987 Jun;9(31):12–21 (70 ref.) (Eng. Abstr.) **(Ita)**

[Importance of weekly mental health services tied in early diagnosis and therapy of occupational mental disorders viewed from a sixteen-year experience as occupational psychiatrist] Hirose T. **Seishin Shinkeigaku Zasshi** 1988; 90(10):887–92 **(Jpn)**

[Recent trials in quantification and imaging of EEG] Saito M. **Seishin Shinkeigaku Zasshi** 1988;90(11):935–44 **(Jpn)**

[New diagnostic methods and their significance in psychiatry] Krzymińska E, et al. **Psychiatr Pol** 1988 Jul–Aug; 22(4):321–6 (19 ref.) **(Pol)**

[Sources of discrepancy in psychiatric diagnosis at hospitals in Rio de Janeiro, Brazil] Coutinho E da S, et al. **Bol Of Sanit Panam** 1989 May;106(5):396–406 (Eng. Abstr.) **(Por)**

[Psychoautonomic syndrome in occlusive lesions of the basin of the internal carotid artery] Pelekh LE, et al. **Vrach Delo** 1989 Jan;(1):45–7 (Eng. Abstr.) **(Rus)**

[The most frequent psychopathologic manifestations in recruits— problems in diagnosis and evaluation of suitability for military service] Petković S. **God Vojnomed Akad** 1987;29:85–90 (Eng. Abstr.) **(Scr)**

[Diagnosis of early psychological damage and disorders during development] Popov I, et al. **Med Pregl** 1988; 41(7–8):301–4 (Eng. Abstr.) **(Scr)**

[Psychiatric diagnostic classification in transcultural epidemiologic studies] Canino GJ, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):251–9 (Eng. Abstr.) **(Spa)**

[Towards an existential phenomenologic configuration of psychodiagnosis] Guberman M, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Dec;34(4):332–4 (Eng. Abstr.) **(Spa)**

[Emotional disorders in the mothers of children treated at a mental health center] Fernández Abeijón MD, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):176–84 (Eng. Abstr.) **(Spa)**

[Psychiatric diagnosis in patients with acquired immunodeficiency syndrome admitted to a general hospital (letter)] Lluch J, et al. **Med Clin (Barc)** 1989 Feb 25; 92(7):277–8 **(Spa)**

[Physical examination even for psychiatric patients] Juhlin L. **Lakartidningen** 1988 Dec 7;85(49):4309 **(Swe)**

[Diagnosis as an indication of prognosis in mentally disturbed offenders] Ojesjö L. **Lakartidningen** 1988 Dec 14; 85(50):4400–1 **(Swe)**

DRUG THERAPY

30th International Annual Psychopharmacology Meeting. Jeseník Spa, January 1988. Proceedings. **Act Nerv Super (Praha)** 1989 Apr;31(1):24–80

Psychochemistry in psychiatry. Papers presented in memory of Ole J. Rafaelsen. **Acta Psychiatr Scand Suppl** 1988; 345:1–123

From Rogers to Rivers: the rights of the mentally ill to refuse medication. Clayton EW. **Am J Law Med** 1987;13(1):7–52 (201 ref.)

A retrospective study of mentally retarded patients with behavioral disorders who were treated with carbamazapine. Langee HR. **Am J Ment Retard** 1989 May;93(6):640–3

Psychotropic drug patterns in a large ICF/MR facility: a ten-year experience. Poindexter AR. **Am J Ment Retard** 1989 May;93(6):624–6

Importance of the transference and therapeutic alliance in pharmacotherapy [letter] Kaminstein P. **Am J Psychiatry** 1989 Mar;146(3):404–5

Psychoactive drug use in a general population sample, Sweden: correlates with perceived health, psychiatric diagnoses, and mortality in an automated record-linkage study. Allgulander C. **Am J Public Health** 1989 Aug; 79(8):1006–10

Prescribing of psychotropic medication by primary care physicians and psychiatrists. Beardsley RS, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1117–9

A mechanism for the involvement of colocalized neuropeptides in the actions of antipsychotic drugs. Gariano RF, et al. **Biol Psychiatry** 1989 Jul;26(3):303–14 (120 ref.)

Rediscovering monoamine oxidase inhibitors [see comments] Bass C, et al. **BMJ** 1989 Feb 11;298(6670):345–6 (20 ref.)
. **Comment in: BMJ** 1989 Mar 11;298(6674):671

Prescribing for the long-term mentally ill [letter] Anderson DN. **Br J Psychiatry** 1988 Sep;153:409–10

Prescribing for the long-term mentally ill. A study of treatment practices. Holloway F. **Br J Psychiatry** 1988 Apr; 152:511–5

Drug treatment refusal and length of hospitalization of insanity acquittees. Williams MH, et al. **Bull Am Acad Psychiatry Law** 1988;16(3):279–84

The use and misuse of psychotropic prescribing for elderly psychiatric patients. Ancill RJ, et al. **Can J Psychiatry** 1988 Oct;33(7):585–9

Carbamazepine in psychiatry: a review. Israel M, et al. **Can J Psychiatry** 1988 Oct;33(7):577–84 (68 ref.)

Pediatric psychopharmacology. Simeon JG. **Can J Psychiatry** 1989 Mar;34(2):115–22 (97 ref.)

Ergoloid mesylates ('Hydergine') in the treatment of mental deterioration in the elderly: a 6-month double-blind, placebo-controlled trial. Rouy JM, et al. **Curr Med Res Opin** 1989;11(6):380–9

Psychotropic drug use in pregnancy. Cohen LS. **Hosp Community Psychiatry** 1989 Jun;40(6):566–7 (6 ref.)

A comparison of clinical and judicial procedures for reviewing requests for involuntary medication in New York. Cournos F, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):851–5

Drug noncompliance [letter] Geller J. **Hosp Community Psychiatry** 1989 Feb;40(2):191–2

The cost-effectiveness of a clinical pharmacy service in an outpatient mental health clinic. Lobeck F, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):643–5

NIMH report. Treating nonaffective disorders with lithium. Sargent M. **Hosp Community Psychiatry** 1989 Jun; 40(6):579–81 (11 ref.)

Medication refusal and the rehospitalized mentally ill inmate. Smith LD. **Hosp Community Psychiatry** 1989 May; 40(5):491–6

Ethics of nonformulary review in psychiatry. Van Vort WB. **Hosp Community Psychiatry** 1988 Dec;39(12):1253–5

Mental impairment in aging: selection of patients, methods of evaluation and therapeutic possibilities of acetyl-L-carnitine. Passeri M, et al. **Int J Clin Pharmacol Res** 1988;8(5):367–76

Lithium salts adopted for psychopharmacological use as the modulators of protein synthesis in the brain: analytical review. Kuznetsov DA. **Int J Neurosci** 1989 Mar; 45(1–2):1–6 (24 ref.)

How does psychiatric drug therapy work? Ostow M. **Isr J Psychiatry Relat Sci** 1987;24(4):265–79

Psychopharmacology—a word of caution [letter] Cavallo A. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):457

Treatment of psychiatric emergencies. **J Clin Psychiatry** 1988 Dec;49 Suppl:1–36

Rapid tranquilization: antipsychotics or benzodiazepines? Dubin WR. **J Clin Psychiatry** 1988 Dec;49 Suppl:5–12 (58 ref.)

Patients with neuroleptic malignant syndrome histories: what happens when they are rehospitalized? Gelenberg AJ, et al. **J Clin Psychiatry** 1989 May;50(5):178–80

Psychostimulant response in AIDS-related complex patients. Holmes VF, et al. **J Clin Psychiatry** 1989 Jan;50(1):5–8

Valproate in psychiatric disorders: literature review and clinical guidelines. McElroy SL, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:23–9 (60 ref.)

Acute cardiovascular response to monoamine oxidase inhibitors: a prospective assessment. Keck PE Jr, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):203–6

Pretreatment systolic orthostatic blood pressure depression in Down's syndrome [letter] Pary RJ. **J Clin Psychopharmacol** 1989 Apr;9(2):146–7

Considerations in using psychotropic medication with dual diagnosis patients in recovery. Zweben JE, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):221–8 (36 ref.)

Undesirable weight gain and psychotropic medications. Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Oct; 26(10):38–40

Medication refusal: what does it mean? Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):31–2

Drugs for psychiatric disorders. **Med Lett Drugs Ther** 1989 Feb 24;31(786):13–20

Natural history and treatment of tardive dystonia. Kang UJ, et al. **Mov Disord** 1986;1(3):193–208

Effects of prenatal exposure to neuroleptic drugs on children's growth. Platt JE, et al. **Neuropsychopharmacology** 1988 Sep;1(3):205–12

Pharmacotherapy of concomitant psychiatric disorders in adolescent substance abusers. Geller B. **NIDA Res Monogr** 1988;77:94–112 (108 ref.)

A combined group and individual approach to outpatient lithium treatment. Seeger PA, et al. **Ohio Med** 1989 Apr; 85(4):300–2

A comparison of carbamazepine divitabs with carbamazepine normal formulation in psychiatric and oligophrenic patients. Preliminary pharmacokinetic results. Loonen AJ, et al. **Pharm Weekbl [Sci]** 1989 Feb 24;11(1):23–6

15th AGNP-Symposium. Arbeitsgemeinschaft für Neuropsychopharmakologie und Pharmakopsychiatrie. Nuremberg, October 1987. **Pharmacopsychiatry** 1988 Nov; 21(6):263–466

Is psychopharmacotherapy symptom or diagnosis directed? Bauer M, et al. **Pharmacopsychiatry** 1988 Nov;21(6):268–9

Psychostimulants, analeptics, nootropics: an attempt to differentiate and assess drugs designed for the treatment of impaired brain functions. Coper H, et al. **Pharmacopsychiatry** 1988 Sep;21(5):211–7 (86 ref.)

Psychopharmacological acute trials: methodological problems and approaches for solutions. Janke W, et al. **Pharmacopsychiatry** 1988 Nov;21(6):288–9

Study to establish the indication for the selective S2 antagonist ritanserin. Klieser E, et al. **Pharmacopsychiatry** 1988 Nov;21(6):391–3

Zuclopenthixol and haloperidol/levomepromazine in the treatment of elderly patients with symptoms of aggressiveness and agitation: a double-blind, multi-centre study. Fuglum E, et al. **Pharmatherapeutica** 1989; 5(5):285–91

Zuclopenthixol decanoate in the management of behavioural disorders in mentally handicapped patients. Izmeth MG, et al. **Pharmatherapeutica** 1988;5(4):217–27

The use of psychotropic agents in pregnancy and lactation. Mortola JF. **Psychiatr Clin North Am** 1989 Mar;12(1):69–87 (140 ref.)

Plasma prolactin response to gonadotropin-releasing hormone during benzodiazepine treatment. De Marinis L, et al. **Psychoneuroendocrinology** 1988;13(4):325–31

Annual NCDEU meeting 1988. Abridged proceedings. 28th annual meeting of the New Clinical Drug Evaluation Unit. May 31–June 3, 1988, Key Biscayne, Florida. **Psychopharmacol Bull** 1989;25(1):1–153

Tricyclic antidepressants and monoamine oxidase inhibitors in the treatment of panic disorder: brief review. Liebowitz MR. **Psychopharmacol Bull** 1989;25(1):17–20 (25 ref.)

Diagnostic and clinical assessment issues in the development and therapeutic evaluation of psychopharmacologic agents. Robinson DS, et al. **Psychopharmacol Bull** 1989;25(1):9–15 (18 ref.)

Treatment of panic disorder: nonbenzodiazepine anxiolytics, including buspirone. Robinson DS, et al. **Psychopharmacol Bull** 1989;25(1):21–6

Lorazepam vs. alprazolam in the treatment of panic disorder. Schweizer E, et al. **Psychopharmacol Bull** 1988;24(2):224–7

Selective monoamine uptake inhibitors and a serotonin antagonist in the treatment of panic disorder. Westenberg HG, et al. **Psychopharmacol Bull** 1989;25(1):119–23

Treatment guidelines for psychotropic drug use in pregnancy. Cohen LS, et al. **Psychosomatics** 1989 Winter;30(1):25–33 (82 ref.)

The use of psychotropic drugs in the medically ill. Dedicated to the memory of Thomas P. Hackett. **Psychother Psychosom** 1988;49(2):60–136

Improving compliance in Xhosa psychiatric patients. Gillis LS, et al. **S Afr Med J** 1989 Sep 2;76(5):205–8

[Use of calciotropic agents in psychiatry and neurology] Zofková I. **Cas Lek Cesk** 1989 Jun 9;128(24):737–41 (Eng. Abstr.) **(Cze)**

[Prescription of psychopharmaceuticals in general practice. 2. Purpose, psychiatric diagnosis and treatment, addiction] Holm M, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2126–9 (Eng. Abstr.) **(Dan)**

[The use of psychopharmaceutical agents in children] Minderaa RB, et al. **Ned Tijdschr Geneeskd** 1989 Feb 4; 133(5):252–6 **(Dut)**

[The clinical use of carbamazepine. Review of the literature and personal results] Botte L, et al. **Acta Psychiatr Belg** 1988 May–Jun;88(3):181–94 (56 ref.) (Eng. Abstr.) **(Fre)**

[Importance of medical information for the institutionalized patient] Peretti SC, et al. **Can J Psychiatry** 1989 Jun; 34(5):405–12 (Eng. Abstr.) **(Fre)**

[Psychotropic drugs in childhood and adolescence. Value and indications for pharmacotherapy of psychiatric disorders] Elliger T, et al. **Fortschr Med** 1989 Apr 20; 107(12):263–5 (33 ref.) (Eng. Abstr.) **(Ger)**

[Psychoactive drugs and cortical evoked potentials] Hegerl U. **Fortschr Neurol Psychiatr** 1989 Jul;57(7):267–80 (125 ref.) (Eng. Abstr.) **(Ger)**

[The 30th anniversary of Janssen's research in psychiatry. 7 October 1988, Antwerp] **Nervenarzt** 1988 Dec;59(12 Suppl):1–12 **(Ger)**

[Therapeutic use of metadoxine in alcohol-related mental and behavioral disorders] Carboni MA, et al. **Clin Ter** 1987 Dec 31;123(6):469–73 (Eng. Abstr.) **(Ita)**

[Clinical results of phosphatidylserine in 40 climacteric and elderly women with psycho-organic disorders] Manfredi M, et al. **Clin Ter** 1987 Jan 15;120(1):33–6 (Eng. Abstr.) **(Ita)**

[Endorphins between psychosomatics and psychiatric therapy] Messini P. **Clin Ter** 1988 Jan 31;124(2):139–44 (84 ref.) (Eng. Abstr.) **(Ita)**

[Problems of psychopharmacological therapy in pregnancy] Piccione E. **Clin Ter** 1988 Mar 31;124(6):483–7 (38 ref.) **(Ita)**

[A survey of prescribing psychotropic drugs in 7 psychiatric hospitals in Tohoku district—comparison with 1979] Sakamoto J, et al. **Seishin Shinkeigaku Zasshi** 1989; 91(1):28–39 **(Jpn)**

[Use of fenibut in psychiatry and neurology and its place among other psychotropic drugs (review of the literature)] Khaunina RA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(4):142–51 (95 ref.) **(Rus)**

[Patient non-compliance with medication] Lagomarsino AJ. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):127–34 (Eng. Abstr.) **(Spa)**

ECONOMICS

The medically indigent mentally ill: approaches to financing. Frank RG. **Hosp Community Psychiatry** 1989 Jan; 40(1):9–12

Disability and welfare benefits for young adult chronic patients. Holcomb WR, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1104–6

Psychiatric emergency room dispositions of HMO enrollees [published erratum appears in Hosp Community Psychiatry 1989 Aug;4(8):835] Olfson M. **Hosp Community Psychiatry** 1989 Jun;40(6):639–41

Money management services for the homeless mentally ill. Stoner MR. **Hosp Community Psychiatry** 1989 Jul; 40(7):751–3

The economics of mental health. **Inquiry** 1989 Summer; 26(2):137–306

Measuring comorbidity and overlap in the hospitalization cost for alcohol and drug abuse and mental illness. Rice DP, et al. **Inquiry** 1989 Summer;26(2):249–60

Childhood disorder DRG: consideration for a predictive model. Christ AE, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):47–52

[Economic considerations in psychiatric treatment] Nishimura S, et al. **Seishin Shinkeigaku Zasshi** 1988; 90(11):946–55 **(Jpn)**

ENZYMOLOGY

Reflection of central aminergic-cholinergic imbalance by peripheral enzymes in psychiatric disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Jul;21(4):182–5

A radioenzymatic assay for the determination of phospholipase A2 in serum suitable for psychiatric and non-psychiatric patients. Schulze RM, et al. **Pharmacopsychiatry** 1988 Nov;21(6):348–9

EPIDEMIOLOGY

Birth complications and psychological deviancy: a 25-year prospective inquiry. Buka SL, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):537–46

The incidence of specific DIS/DSM-III mental disorders: data from the NIMH Epidemiologic Catchment Area Program. Eaton WW, et al. **Acta Psychiatr Scand** 1989 Feb; 79(2):163–78

Psychotropic drug use in a representative community sample: the Upper Bavarian study. Fichter MM, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):68–77

Prevalence of psychiatric disorders in Taiwan defined by the Chinese Diagnostic Interview Schedule. Hwu HG, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):136–47

Psychiatric case identification in two Athenian communities: estimation of the probable prevalence. Madianos MG, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):24–31

Prevalence of psychiatric disorders among subjects exposed to a natural disaster. Maj M, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):544–9

Some characteristics of the psychiatric population attending a primary care centre in Kuwait. Suleiman MA, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):199–204

Distribution of major mental disorders in an US metropolis. Escobar JI, et al. **Acta Psychiatr Scand Suppl** 1988; 344:45–53

Psychiatric admissions of the elderly. Strömgren E. **Acta Psychiatr Scand Suppl** 1988;345:56–60

National differences in psychiatric morbidity: methodological issues, scientific interpretations and social implications. Westermeyer J. **Acta Psychiatr Scand Suppl** 1988;344:23–31 (120 ref.)

Prevalence of severe mental disorders in disaffiliated and homeless people in inner Melbourne. Herrman H, et al. **Am J Psychiatry** 1989 Sep;146(9):1179–84

The prevalence of psychiatric disorders in a primary care practice. Barrett JE, et al. **Arch Gen Psychiatry** 1988 Dec; 45(12):1100–6

Psychiatric disorders in pediatric primary care. Prevalence and risk factors. Costello EJ, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1107–16

The prevalence of specific psychiatric disorders among homeless individuals in the inner city of Los Angeles. Koegel P, et al. **Arch Gen Psychiatry** 1988 Dec; 45(12):1085–92

One-month prevalence of mental disorders in the United States. Based on five Epidemiologic Catchment Area sites. Regier DA, et al. **Arch Gen Psychiatry** 1988 Nov; 45(11):977–86

The prevalence of psychiatric disorders in patients with alcohol and other drug problems. Ross HE, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1023–31

Psychiatric problems in homeless men. Lifetime psychosis, substance use, and current distress in new arrivals at New York City shelters. Susser E, et al. **Arch Gen Psychiatry** 1989 Sep;46(9):845–50

Prevalence of psychologic disorders after surgical treatment of seizures. Koch-Weser M, et al. **Arch Neurol** 1988 Dec; 45(12):1308–11

DSM-III diagnoses of patients with myofascial pain syndrome (fibrositis). Fishbain DA, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):433–8

Maudsley Hospital Survey: prevalence of alcohol problems and other psychiatric disorders in a hospital population. Glass IB, et al. **Br J Addict** 1988 Sep;83(9):1105–11

Sex differences in the prevalence of psychiatric disorders in patients with alcohol and drug problems. Ross HE, et al. **Br J Addict** 1988 Oct;83(10):1179–92

Implications of epidemiology for clinical psychologists. Ingham JG. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):201–12 (25 ref.)

Psychogeriatrics 1974 to 1984. Expanding problems and fixed resources. Christie AB, et al. **Br J Psychiatry** 1987 Dec; 151:813–7

Non-psychotic psychiatric disorder after childbirth. A prospective study of prevalence, incidence, course and nature. Cooper PJ, et al. **Br J Psychiatry** 1988 Jun; 152:799–806

Mental disorders among Yugoslav medical students. Erić L, et al. **Br J Psychiatry** 1988 Jan;152:127–9

Lifetime and six-month prevalence of psychiatric disorders among sentenced female offenders. Daniel AE, et al. **Bull Am Acad Psychiatry Law** 1988;16(4):333–42

Psychiatric epidemiology. Bland RC. **Can J Psychiatry** 1988 Oct;33(7):618–25 (115 ref.)

Ontario Child Health Study. Implications for clinical services, research and training. Grant NR, et al. **Can J Psychiatry** 1989 Aug;34(6):492–9 (31 ref.)

Ontario Child Health Study. Summary of selected results. Offord DR, et al. **Can J Psychiatry** 1989 Aug;34(6):483–91

Hidden psychiatric morbidity. Part I: A study of prevalence in an out-patient population at Bindura Provincial Hospital. Hall A, et al. **Cent Afr J Med** 1987 Oct;33(10):239–43

Crime and mental illness: a retrospective study of a cohort of court referrals to a provincial psychiatric clinic in Kenya. Matete FG. **East Afr Med J** 1988 Oct;65(10):664–9

Medical disorders associated with psychiatric comorbidity and prolonged hospital stay. Fulop G, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):80–2

Problems of epidemiologic method in assessing the type and extent of mental illness among homeless adults. Susser E, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):261–5 (37 ref.)

Psychiatric morbidity. Singhal PK, et al. **Indian J Pediatr** 1988 Jul–Aug;55(4):575–9

Mental illness causality: a sociological appraisal. Singh R. **Indian J Public Health** 1988 Jan–Mar;32(1):31–6

Admission to general hospital psychiatric wards in Italy. 1. A comparison between two catchment areas with differing provision of outpatient care. de Girolamo G, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):248–57

Admission to general hospital psychiatric wards in Italy. 2. Inpatient characteristics. de Girolamo G, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):258–66

Treated incidence data [letter] Griffin JA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):300–1

Elderly patients admitted to the psychiatric unit of a general

hospital. Conwell Y, et al. **J Am Geriatr Soc** 1989 Jan; 37(1):35–41
Sexual assault and mental disorders in a community population. Burnam MA, et al. **J Consult Clin Psychol** 1988 Dec;56(6):843–50
Psychological dysfunction and physical health among elderly medical inpatients. Rapp SR, et al.
J Consult Clin Psychol 1988 Dec;56(6):851–5
Psychiatric symptoms in dental students. Lloyd C, et al.
J Nerv Ment Dis 1989 Feb;177(2):61–9
Obstacles to research analysis. Maurin JT, et al.
J Psychosoc Nurs Ment Health Serv 1989 Jun;27(6):19–23
Windows [editorial] Smoyak SA.
J Psychosoc Nurs Ment Health Serv 1989 Jun;27(6):3
Psychiatric screening in general practice: comparison of the general health questionnaire and the hospital anxiety depression scale. Wilkinson MJ, et al.
J R Coll Gen Pract 1988 Jul;38(312):311–3
Health and mental health problems of homeless men and women in Baltimore. Breakey WR, et al. **JAMA** 1989 Sep 8;262(10):1352–7
The General Health Questionnaire by interview. Performance in relation to recent use of health services. Ford DE, et al. **Med Care** 1989 Apr;27(4):367–75
Psychiatric disorders in obstetrics. Hatherley LI, et al.
Med J Aust 1979 Oct 20;2(8):399–401
The workload of New Zealand psychiatrists. Andrews G, et al. **N Z Med J** 1988 Nov 9;101(857):753–5
Disadvantaged adolescents in psychiatric treatment. Almqvist F. **Scand J Soc Med** 1988;16(3):167–71
From the child to the young adult: sex differences in the antecedents of psychological problems. A retrospective study over ten years. Bolognini M, et al.
Soc Psychiatry Psychiatr Epidemiol 1989 Jul;24(4):179–86
Mental hospital admission rates of immigrants to England: a comparison of 1971 and 1981. Cochrane R, et al.
Soc Psychiatry Psychiatr Epidemiol 1989 Jan;24(1):2–11
Estimating psychiatric morbidity in the community. Standardization of the Italian versions of GHQ and CIS. Lattanzi M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):267–72
Experiences of a psychiatric outpatient team in Nicaragua. Mental health problems seen in a primary care setting. Penayo U. **Soc Psychiatry Psychiatr Epidemiol** 1989 May; 24(3):151–5
The influence of sociocultural factors on the interaction between physical and mental disturbances in a rural community. Vazquez-Barquero JL, et al.
Soc Psychiatry Psychiatr Epidemiol 1988 Jul;23(3):195–201
The stability of the ecolcgical distribution of the incidence of treated mental disorders in the city of Mannheim. Weyerer S, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):57–62
[Invalidism due to mental disorders in the North Bohemia Region in 1986] Sedivý M. **Cesk Psychiatr** 1989 Feb; 85(1):41–5 (Eng. Abstr.) (Cze)
[Mental health problems among refugees after the 2nd World War] Andersen HS. **Ugeskr Laeger** 1988 Dec 19; 150(51):3168–71 (30 ref.) (Eng. Abstr.) (Dan)
[Community psychiatry in big cities in England. A study trip] Gjerris A, et al. **Ugeskr Laeger** 1989 Aug 28; 151(35):2223–6 (Dan)
[The psychiatric central registry is necessary for the treatment of patients and research] Munk-Jørgensen P. **Ugeskr Laeger** 1989 Jun 5;151(23):1491–3 (Dan)
[Psychiatric admissions among city bus drivers. A prospective study] Netterstrøm B, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):302–5 (Eng. Abstr.) (Dan)
[Regional distribution and possibilities for psychiatric treatment. A review of the psychiatric activity at the Copenhagen County Hospital in Gentofte in 1985] Nordentoft M, et al. **Ugeskr Laeger** 1988 Nov 28; 150(48):2958–61 (Eng. Abstr.) (Dan)
[Trends in the intramural management of psychiatric patients in The Netherlands. A quantitative retrospective view] Haveman MJ. **Nervenarzt** 1989 Apr;60(4):236–42 (Ger)
[Epidemiologic aspects of the psychiatric management of immediate commitment] Spengler A, et al. **Nervenarzt** 1989 Apr;60(4):226–32 (Ger)
[Increasing effectiveness by sectorization of psychiatric care—an epidemiologic study] Schmal D.
Z Gesamte Hyg 1989 Jan;35(1):41–3 (Eng. Abstr.) (Ger)
[Epidemiological investigation of old age mental disorders in a small isolated island of Okinawa prefecture; comparison between mental disorders observed in 1979 and 1984] Ichinowatari N, et al. **Seishin Shinkeigaku Zasshi** 1988; 90(8):612–35 (Eng. Abstr.) (Jpn)
[Correlation-regression analysis of the influence of psychiatric service resources on the dynamics of detected morbidity in the populations of Siberia and the Far East] Potapov AI, et al. **Zh Nevropatol Psikhiatr** 1988; 88(10):107–10 (Eng. Abstr.) (Rus)
[Clinico-epidemiologic characteristics of mental diseases in one of the regions of western Siberia] Vul' FR, et al.
Zh Nevropatol Psikhiatr 1988;88(10):111–6 (Eng. Abstr.) (Rus)
[Prevalence of mental health problems in parents of children with malnutrition in one area of Tegucigalpa, Honduras] Meza JM. **Acta Psiquiatr Psicol Am Lat** 1988 Jun; 34(2):145–8 (Eng. Abstr.) (Spa)
[Syndromic structure of mental illness in London and Cantabria] Vázquez-Barquero JL, et al.
Actas Luso Esp Neurol Psiquiatr Cienc Afines 1988 Sep-Oct;16(5):347–55 (Eng. Abstr.) (Spa)
[Psychiatric epidemiology: old and new perspectives] Bernardo Arroyo M. **Med Clin (Barc)** 1989 Feb 25; 92(7):269–75 (Spa)

ETHNOLOGY

The empirical basis of ethnocultural and linguistic bias in mental health evaluations of Hispanics. López S.
Am Psychol 1988 Dec;43(12):1095–7
Psychiatric illness among British Afro-Caribbeans [letter] Glover GR. **BMJ** 1988 Aug 13;297(6646):487
Psychiatric investigations among American Indians and Alaska natives: a critical review. O Nell TD.
Cult Med Psychiatry 1989 Mar;13(1):51–87 (90 ref.)
Greek women and broken nerves in Montreal. Dunk P.
Med Anthropol 1989 May;11(1):29–45
The multiple meanings of ataques de nervios in the Latino community. Guarnaccia PJ, et al. **Med Anthropol** 1989 May;11(1):47–62
Ethnic group and compulsory detention. Moodley P, et al.
Med Sci Law 1988 Oct;28(4):324–8
The pattern of psychiatric admissions of Caribbean-born immigrants in London. Glover GR.
Soc Psychiatry Psychiatr Epidemiol 1989 Jan;24(1):49–56
Differences in psychiatric admission patterns between Caribbeans from different islands. Glover GR.
Soc Psychiatry Psychiatr Epidemiol 1989 Jul;24(4):209–11

ETIOLOGY

Cognitive, psychiatric and neuropsychological aspects of elevated lead levels in asymptomatic children: a controlled study. Leung PW, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):339–51
Psychic vulnerability as a sequel to perinatal morbidity. A longitudinal twin study with special reference to psychiatric morbidity and inter-twin dependency. Moilanen I. **Acta Paediatr Scand Suppl** 1988;344:95–105
A longitudinal study of mental health problems in a suburban population in Sudan. Cederblad M, et al.
Acta Psychiatr Scand 1989 Jun;79(6):537–43
A prospective study of psychosocial background factors associated with congenital malformations. McNeil TF, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):643–51
Behavioral symptomatology in dementia of the Alzheimer type. Kumar A, et al. **Alzheimer Dis Assoc Disord** 1988; 2(4):363–5
The cost of the split between psychodynamic and psychobiological perspectives: a resident's point of view [letter] Rosen EH. **Am J Psychiatry** 1989 Sep;146(9):1232
"Somatization" of psychiatric disorders [letter] Schwartz V.
Am J Psychiatry 1989 Apr;146(4):570–1
Use of DSM-III axis IV in clinical practice: rating etiologically significant stressors. Skodol AE, et al.
Am J Psychiatry 1989 Jan;146(1):61–6
Sugar intolerance: is there evidence for its effects on behavior in children. Wolraich ML. **Ann Allergy** 1988 Dec;61(6 Pt 2):58–62 (24 ref.)
Early parental loss and development of adult psychopathology. Breier A, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):987–93
Husbands' layoff and wives' mental health. A prospective analysis. Penkower L, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):994–1000
Parental loss in childhood. Its effect in adult life. Tennant C. **Arch Gen Psychiatry** 1988 Nov;45(11):1045–50 (58 ref.)
The biology of personality. Society of Biological Psychiatry, forty-fourth annual convention & scientific program. May 4–8, 1989, San Francisco, California. Abstracts.
Biol Psychiatry 1989 Apr 1;25(7A):1A–248A
Mental distress and social conditions and lifestyle in northern Norway. Hansen V, et al. **BMJ** 1989 Jul 8;299(6691):85–8
Mental illness in doctors. Pilowski L, et al. **BMJ** 1989 Feb 4;298(6669):269–70
Physical and psychosocial functioning of adult survivors of allogeneic bone marrow transplantation. Andrykowski MA, et al. **Bone Marrow Transplant** 1989 Jan;4(1):75–81
Psychological disabilities amongst patients with port wine stains. Lanigan SW, et al. **Br J Dermatol** 1989 Aug; 121(2):209–15
Psychiatric complications of some basal-ganglia disorders. Whitlock FA. **Br J Hosp Med** 1988 Nov;40(5):391, 394–5 (32 ref.)
Behaviourally disturbed HIV patients [letter] Davies DR.
Br J Psychiatry 1988 Apr;152:577–8
Changes in behaviour in dementia: a neglected research area. Fairburn CG, et al. **Br J Psychiatry** 1988 Mar;152:406–7
Psychiatric morbidity in spouses of women admitted to a mother and baby unit. Harvey I, et al. **Br J Psychiatry** 1988 Apr;152:506–10
Viruses, immunity and mental disorder. King DJ, et al.
Br J Psychiatry 1989 Jan;154:1–7 (107 ref.)
Benign hereditary chorea. A case report. Loosmore SJ, et al. **Br J Psychiatry** 1988 Jan;152:131–4
The aetiology of post-traumatic morbidity: predisposing, precipitating and perpetuating factors. McFarlane AC.
Br J Psychiatry 1989 Feb;154:221–8
Report of the consultation on the neuropsychiatric aspects of HIV infection. **Bull Pan Am Health Organ** 1989; 23(1–2):195–205
Issues in social psychiatry [letter] Holland R.
Can J Psychiatry 1988 Nov;33(8):776
Stress and psychopathology in children of international employees. Aisenstein C. **Child Psychiatry Hum Dev** 1988 Fall;19(1):45–59
Sjogren's syndrome. Its contribution to neuropsychiatric syndrome in patients with primary biliary cirrhosis. Tarter RE, et al. **Dig Dis Sci** 1989 Jan;34(1):9–12
Mood disorders, psychiatric symptoms, and distress in women presenting for infertility evaluation. Downey J, et al. **Fertil Steril** 1989 Sep;52(3):425–32
Psychiatric responses to trauma. Rundell JR, et al.
Hosp Community Psychiatry 1989 Jan;40(1):68–74 (84 ref.)
Psychopathology in epilepsy: prevalence, phenomenology and management. Mendez MF. **Int J Psychiatry Med** 1988; 18(3):193–210 (84 ref.)
What are the psychiatric manifestations of vitamin B12 deficiency? Hector M, et al. **J Am Geriatr Soc** 1988 Dec; 36(12):1165–12 (87 ref.)
Indications for medical screening prior to behavioral programming for severely and profoundly mentally retarded clients. Gunsett RP, et al.
J Autism Dev Disord 1989 Mar;19(1):167–72
Psychiatric disorders in mainstreamed developmentally disabled adolescents. Myers BA. **J Dev Behav Pediatr** 1988 Aug;9(4):227–8
Neuropsychological deficits in right hemisphere stroke patients. I: Methods and results from factor analysis. Finset A. **J Oslo City Hosp** 1988 Aug-Sep;38(8–9):77–83
Neuropsychological deficits in right hemisphere stroke patients. II: Relationships to intra-hemispheric lesion location. Finset A, et al. **J Oslo City Hosp** 1988 Aug-Sep; 38(8–9):85–92
Mental symptoms presenting in phaeochromocytoma: a case report and review. Medvei VC, et al. **J R Soc Med** 1988 Sep;81(9):550–1 (14 ref.)
Epidemiologic study of sleep disturbances and psychiatric disorders. An opportunity for prevention? Ford DE, et al. **JAMA** 1989 Sep 15;262(11):1479–84
From the Alcohol, Drug Abuse, and Mental Health Administration. Cause of AIDS mental problems. Goodwin FK. **JAMA** 1988 Dec 9;260(22):3250
The implications of sleep disturbance epidemiology [editorial] Reynolds CF 3d. **JAMA** 1989 Sep 15;262(11):1514
Overt dialysis encephalopathy and mildly raised plasma aluminium [letter] Brancaccio D, et al. **Lancet** 1989 Sep 23;2(8665):736
Cognitive and psychiatric abnormalities in multiple sclerosis. Petersen RC, et al. **Mayo Clin Proc** 1989 Jun;64(6):657–63 (50 ref.)
A unified theory of mental illness. Anderson B.
Med Hypotheses 1989 Jul;29(3):173–5
Concurrent psychiatric illness in inpatients with post-traumatic stress disorder. Hryvniak MR, et al.
Milit Med 1989 Aug;154(8):399–401
Systemic lupus erythematosus of the central nervous system: 2. Molecular theories and models for mental disease. Moskowitz N. **Mt Sinai J Med (NY)** 1989 Jan;56(1):23–9
Cobalamin deficiency and neuropsychiatric disorders [letter] **N Engl J Med** 1988 Dec 29;319(26):1733–5
Where next with psychiatric illness? **Nature** 1988 Nov 10; 336(6195):95–6
Klüver-Bucy syndrome in a child with bilateral arachnoid cysts: report of a case. Rossitch E Jr, et al.
Neurosurgery 1989 Jan;24(1):110–2
Food sensitivities and psychological disturbance: a review. Gettis A. **Nutr Health** 1989;6(3):135–46 (60 ref.)
Psychological problems of disabled adolescents and young adults. Strax TE. **Pediatr Ann** 1988 Dec;17(12):756, 758–9, 761
Social competence and behavioral adjustment of children who are long-term survivors of cancer. Mulhern RK, et al. **Pediatrics** 1989 Jan;83(1):18–25
Mother-blaming among college students. Der-Karabetian A, et al. **Percept Mot Skills** 1989 Apr;68(2):453–4
Postpartum psychiatric syndromes [published erratum appears in Nature 1989 Aug 31;340(6236):732] Hamilton JA. **Psychiatr Clin North Am** 1989 Mar;12(1):89–103 (31 ref.)
Psychotherapy and the etiology of psychiatric disorders. Guze SB. **Psychiatr Dev** 1988 Autumn;6(3):183–93
Child temperament as a developmental or an epidemiological concept: a methodological point of view. Maziade M.
Psychiatr Dev 1988 Autumn;6(3):195–211
Biological psychiatry: is there any other kind? Guze SB.
Psychol Med 1989 May;19(2):315–23
MMPI correlates of college women who reported experiencing child/adult sexual contact with father, stepfather, or with other persons. Roland B, et al.
Psychol Rep 1989 Jun;64(3 Pt 2):1159–62
Psychiatric aspects of HIV disease. Fernandez F, et al.
South Med J 1989 Aug;82(8):999–1004 (37 ref.)
Psychiatric manifestations of AIDS spectrum disorders. Vomvouras S. **South Med J** 1989 Mar;82(3):352–7 (27 ref.)
Psychiatric injury in the workplace.
State Art Rev Occup Med 1988 Oct-Dec;3(4):587–730
Assessing the effect of psychiatric disorders on work function. Enelow AJ. **State Art Rev Occup Med** 1988 Oct-Dec;3(4):621–7 (1 ref.)
Workers' compensation and psychiatric disability. London DB, et al. **State Art Rev Occup Med** 1988 Oct-Dec; 3(4):595–609 (24 ref.)
[Psychological symptoms in patients with hearing and

equilibrium disorders and possibilities of treatment with psychopharmacologic agents] Baštecký J, et al. **Cesk Psychiatr** 1989 Apr;85(2):82–8 (Eng. Abstr.) (Cze)

[Psychosocial strain among patients at a psychiatric emergency unit] Petersen P, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2195–8 (Eng. Abstr.) (Dan)

[Human immunodeficiency virus (HIV) infection: psychiatric aspects] Sno HN, et al. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1489–92 (Eng. Abstr.) (Dut)

[Biographical anamnesis and social amnesia. A review of medical history taking, exploration, clinical interview, biographical analysis and diagnostic–clinical consultation] Kobbé U. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):321–35 (69 ref.) (Eng. Abstr.) (Ger)

[Coronary Care Unit: an approach to potential hazards of a psychopathological order] Fragasso G, et al. **Cardiologia** 1988 Sep;33(9):829–31 (Ita)

[Effect of pathogenic–modulating factors on the clinical and psychophysiological indices in mental diseases] Seliukov GI, et al. **Vrach Delo** 1988 Jul;(7):93–5 (Eng. Abstr.) (Rus)

[Space and time in the intensive care unit. (Study of psychiatric problems which are seen in the ICU] Dörr Zegers O. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul–Aug;16(4):246–54 (Eng. Abstr.) (Spa)

[Relationship between psychiatric emergencies and meteorologic factors] García Carretero L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan–Feb;17(1):59–67 (Eng. Abstr.) (Spa)

[The Lundby project: Do psychiatric risk factors in childhood influence mental health in adulthood?] Cederblad M, et al. **Lakartidningen** 1988 Dec 7; 85(49):4317–8, 4321 (Swe)

GENETICS

Genetics and psychiatry: past discoveries, current dilemmas, and future directions. Pardes H, et al. **Am J Psychiatry** 1989 Apr;146(4):435–43 (62 ref.)

Limitations of the ratio of concordance rates in monozygotic and dizygotic twins [letter] Kendler KS. **Arch Gen Psychiatry** 1989 May;46(5):477–8

A controlled family history study of prepubertal major depressive disorder. Puig–Antich J, et al. **Arch Gen Psychiatry** 1989 May;46(5):406–18 (185 ref.)

Selection of controls for family studies. Biases and implications. Tsuang MT, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1006–8

Psychiatry, molecular genetics and ethics: the new discoveries and the new issues. McGrath J. **Aust N Z J Psychiatry** 1989 Mar;23(1):67–72 (40 ref.)

Molecular genetics and human disease. Implications for modern psychiatric research and practice. Baron M, et al. **Br J Psychiatry** 1988 Jun;152:741–53 (72 ref.)

Twin birth and adult psychiatric disorder. An examination of the case records of the Maudsley Hospital. Chitkara B, et al. **Br J Psychiatry** 1988 Mar;152:391–8

Molecular genetics and human disease [letter] Pelosi AJ. **Br J Psychiatry** 1988 Oct;153:570–1

Family history and five–year suicide risk. Scheftner WA, et al. **Br J Psychiatry** 1988 Dec;153:805–9

Familial psychiatric illness in chronic posttraumatic stress disorder. Davidson J, et al. **Compr Psychiatry** 1989 Jul–Aug;30(4):339–45

Evolutionary approaches to psychiatry and problems of method. Lane LW, et al. **Compr Psychiatry** 1988 Nov–Dec; 29(6):598–603 (15 ref.)

The biology of panic–genetic evidence. Burrows GD, et al. **Int J Clin Pharmacol Res** 1989;9(2):147–9

A systematic cytogenetic study of a population of 1170 mentally retarded and/or behaviourly disturbed patients including fragile X–screening. The Hondsberg experience. Schreppers–Tijdink GA, et al. **J Genet Hum** 1988 Dec; 36(5):425–46

Exploring drug abuse with genetic strategies: cautionary tales. Gottesman II. **NIDA Res Monogr** 1988;89:150–64

Children of mentally ill mothers: social situation and psychometric testing of mental development. Bågedahl–Strindlund M, et al. **Scand J Soc Med** 1989; 17(2):171–9

Troubles encountered in gene linkage land [news] Barnes DM. **Science** 1989 Jan 20;243(4889):313–4

[Use of the polymorphism of flanking DNA probes with respect to the Xq–27 region in a great fragile X pedigree] Berriche S, et al. **Rev Neurol (Paris)** 1989;145(5):401–5 (Eng. Abstr.) (Fre)

[The Wenner–Gren symposium and meeting of the Swedish Medical Society: genetics of neuropsychiatric disease] Gustavson KH, et al. **Lakartidningen** 1988 Nov 9; 85(45):3850–1, 3854 (Swe)

HISTORY

Historical overview of psychosurgery and its problematic. Ballantine HT Jr. **Acta Neurochir Suppl (Wien)** 1988; 44:125–8

Moral treatment: contexts considered. Peloquin SM. **Am J Occup Ther** 1989 Aug;43(8):537–44

The history and present status of moral insanity. Ellard J. **Aust N Z J Psychiatry** 1988 Dec;22(4):383–9

Electricity: a history of its use in the treatment of mental illness in Britain during the second half of the 19th century. Beveridge AW, et al. **Br J Psychiatry** 1988 Aug;153:157–62

Rudolph Hess's mental illness [letter] Torrey EF. **Br J Psychiatry** 1987 Dec;151:858–9

Community management of mental disorders in antebellum America. Thielman SB. **J Hist Med Allied Sci** 1989 Jul; 44(3):351–74

Vincent van Gogh and the thujone connection. Arnold WN. **JAMA** 1988 Nov 25;260(20):3042–4

'Poe–phyria,' madness, and The Fall of the House of Usher [letter] Rickman LS, et al. **JAMA** 1989 Feb 10;261(6):863–4

Women and Jews in a private nervous clinic in late nineteenth–century Vienna. Shorter E. **Med Hist** 1989 Apr; 33(2):149–83

The psychodynamic action of psychopharmacologic drugs and the target symptom versus the anti–psychotic approach to psychopharmacologic therapy: thirty years later. Sarwer–Foner GJ. **Psychiatr J Univ Ottawa** 1989 Mar; 14(1):268–78

The fate of the mentally ill in Germany during the Third Reich. Meyer JE. **Psychol Med** 1988 Aug;18(3):575–81

Mental illness and the late Victorians: a study of patients admitted to three asylums in York, 1880–1884. Renvoize EB, et al. **Psychol Med** 1989 Feb;19(1):19–28

Expertise, procedure and the possibility of a comparative history of forensic psychiatry in the nineteenth century. Smith R. **Psychol Med** 1989 May;19(2):289–300

Rich and mad in Victorian England. Turner T. **Psychol Med** 1989 Feb;19(1):29–44

[Mental disorders and their treatment in the works of A. Cornelius Celsus] Sedivec V. **Cas Lek Cesk** 1988 Oct 14; 127(42):1307–8 (Cze)

[The mental patient and society according to Esquirol and Ferrus] Dubois JC. **Ann Med Psychol (Paris)** 1988 Sep–Oct; 146(9):817–20 (Fre)

[Social psychiatric traditions between the empire period and national socialism] Gast U. **Psychiatr Prax** 1989 Mar; 16(2):78–85 (Eng. Abstr.) (Ger)

[Kraepelin's basic nosologic postulates. An attempt at a critical evaluation of the later works of Kraepelin] Hoff P. **Z Klin Psychol Psychopathol Psychother** 1988; 36(4):328–36 (Eng. Abstr.) (Ger)

[The beginning of work of the Psychiatric Department in Subotica and a review of the pathology 1905–1914] Sakač D. **Med Pregl** 1988;41(11–12):512–4 (Eng. Abstr.) (Scr)

IMMUNOLOGY

Cold agglutinin titers in psychiatric patients. Spivak B, et al. **Am J Psychiatry** 1988 Nov;145(11):1460–1

Current perspectives on immunology and psychiatry. O'Donnell M, et al. **Aust N Z J Psychiatry** 1988 Dec; 22(4):366–82 (112 ref.)

METABOLISM

Time and the dopamine hypothesis [letter] Aldenhoff JB. **Br J Psychiatry** 1988 May;152:717–9

In vivo assay for neuroleptic receptor binding in the striatum. Positron tomography in humans. Cambon H, et al. **Br J Psychiatry** 1987 Dec;151:824–30

The involvement of serotonin in psychiatric disorders and behaviour. López–Ibor JJ Jr. **Br J Psychiatry** 1988 Sep;153 Suppl 3:26–39 (173 ref.)

Biogenic amines and their metabolites in body fluids of normal, psychiatric and neurological subjects. Davis BA. **J Chromatogr** 1989 Apr 19;466:89–218 (972 ref.)

The asymmetry of 3H–imipramine binding may predict psychiatric illness. Demeter E, et al. **Life Sci** 1989; 44(19):1403–10

Imipramine binding in panic disorder. Marazziti D. **Pharmacopsychiatry** 1989 May;22(3):128–9

Pharmacokinetics of carbamazepine in psychiatric patients. Kanarkowski R, et al. **Pol J Pharmacol Pharm** 1988 Jan–Feb;40(1):55–61

[Functional vs. nosological approach in biological psychiatry: the serotonergic dimension (editorial)] Bleich A, et al. **Harefuah** 1988 Sep;115(5–6):156–8 (Heb)

MORTALITY

Mortality in psychiatric inpatients. Casadebaig F, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):257–64

Mortality among psychiatric patients—the groups at risk. Zilber N, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):248–56

The use of mental status in death certification of suicide. Batten PJ, et al. **Am J Forensic Med Pathol** 1988 Sep; 9(3):203–6

Relief care and risk of death in psychogeriatric patients [letter] McCaffrey P, et al. **BMJ** 1989 Jun 3;298(6686):1522

The mortality of long–stay patients following interhospital relocation. Morriss RK, et al. **Br J Psychiatry** 1988 May; 152:705–6

Morbidity and mortality of certified adolescent psychiatric patients. Stein BA, et al. **Can J Psychiatry** 1988 Aug; 33(6):488–93

Mortality in psychiatric populations: a review. Abiodun OA. **Cent Afr J Med** 1988 Sep;34(9):222–5 (30 ref.)

A preliminary study of excess mortality using a psychiatric case register. Hassall C, et al. **J Epidemiol Community Health** 1988 Sep;42(3):286–9

Ambidirectional studies—an extension of longitudinal studies in psychiatry. Mortensen PB. **Psychiatr Dev** 1988 Summer; 6(2):173–81 (22 ref.)

Mortality and rate of suicide of first admission psychiatric patients. A 5–year follow–up of a prospective longitudinal study. Blumenthal S, et al. **Psychopathology** 1989;22(1):50–6

Mortality among criminals with suspected mental disturbance. Lidberg L, et al. **Scand J Soc Med** 1989; 17(1):59–65

Mortality risk and psychiatric disorders. Results of a general physician survey. Murphy JM, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 May;24(3):134–42

Are hospital suicides on the increase? A survey of reports on hospital suicides in the psychiatric literature of the 19th and 20th century. Wolfersdorf M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):207–16 (90 ref.)

[Risk of cardiovascular mortality of hospitalized psychiatric patients] Schwalb H, et al. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):119–23 (Eng. Abstr.) (Ger)

[Mortality of in–patients at public psychiatric hospitals in the Lazio Region: first results] Bacigalupi M, et al. **Epidemiol Prev** 1988 Jun;10(35):11–6 (Eng. Abstr.) (Ita)

NURSING

At risk for suicide.... Brown BB, et al. **Am J Nurs** 1988 Oct; 88(10):1358–61

Culturological assessment: an important factor in psychiatric consultation–liaison nursing. Campinha–Bacote J. **Arch Psychiatr Nurs** 1988 Aug;2(4):244–50

Geropsychiatric nursing: focus and setting. Fopma–Loy J. **Arch Psychiatr Nurs** 1989 Aug;3(4):183–90 (38 ref.)

Nurse educators respond to the needs of the chronically mentally disabled. Harris J, et al. **Arch Psychiatr Nurs** 1989 Jun;3(3):148–52

The three Cs and the chronically mentally ill [editorial] Krauss JB. **Arch Psychiatr Nurs** 1989 Apr;3(2):59–60

A guide for nursing assessment of the psychiatric inpatient. Sanger E, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):334–8

Use of flow–charts by nurses dealing with mental patients: an evaluation in Lesotho. Meursing K, et al. **Bull WHO** 1988;66(4):507–14

Preparing nurses to work with the chronically mentally ill. Fox JC, et al. **Community Ment Health J** 1988 Winter; 24(4):296–309

When whiting out won't work [editorial] Huey FL. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):173

Job satisfaction and attitudes of nursing staff on a unit for the elderly severely mentally infirm, with change of location. Humphris GM, et al. **J Adv Nurs** 1989 Apr; 14(4):298–307

Integrative care planning in acute psychiatry. Meades S. **J Adv Nurs** 1989 Aug;14(8):630–9 (12 ref.)

Caring for clients with legal charges on a voluntary psychiatric unit. Bender BM, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Mar;27(3):16–20

Internship programs are safeguarding the future of psychiatric nursing. Caroselli–Karinja MF, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):28–31

Strategies for improving education. Connolly PM. **J Psychosoc Nurs Ment Health Serv** 1989 Jun;27(6):24–8

A nonsmoking policy on an acute psychiatric unit. Dingman P, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Dec; 26(12):11–4

Coping with transition. Gonzales–Osler E. **J Psychosoc Nurs Ment Health Serv** 1989 Jun;27(6):29, 32–3

A psychiatric nurse's role. Gullberg PL. **J Psychosoc Nurs Ment Health Serv** 1989 Jun;27(6):9–13

Providing shelter. Ryan MT. **J Psychosoc Nurs Ment Health Serv** 1989 Jun;27(6):14–6, 18

Coping with suicidal behavior. Gemma PB. **MCN** 1989 Mar–Apr;14(2):101–3

PHYSIOPATHOLOGY

The clinical implications of corticotropin–releasing hormone. Gold PW, et al. **Adv Exp Med Biol** 1988;245:507–19 (82 ref.)

A comparison of motor performance of preschoolers enrolled in mental health programs and non–mental health programs. Kramer LA, et al. **Am J Occup Ther** 1988 Aug; 42(8):520–5

The mesocorticolimbic dopamine system. **Ann N Y Acad Sci** 1988;537:1–540

Prefrontal–type cognitive deficits and chronic psychiatric conditions [letter] Wong ML. **Arch Gen Psychiatry** 1988 Nov;45(11):1054–5

Some biological aspects of panic disorder. Evans L. **Int J Clin Pharmacol Res** 1989;9(2):139–45 (48 ref.)

Serotonin and panic disorders: a review of clinical studies. Norman TR, et al. **Int J Clin Pharmacol Res** 1989; 9(2):151–7 (35 ref.)

Functional imaging of the brain in psychiatry—mapping of EEG and evoked potentials. Maurer K, et al. **Neurosurg Rev** 1987;10(4):275–82

Impact of neuropeptides in biological psychiatry. Current status and perspectives in clinical studies. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S1–187

Clinical relevance of endorphins in psychiatry. Naber D. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S119–35 (122 ref.)

Somatostatin in neuropsychiatric disorders. Rubinow DR, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S137–55 (147 ref.)

Substance P involved in mental disorders. Takeuchi K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S157–64 (41 ref.)
Neuropeptide Y (NPY) and the central nervous system: distribution effects and possible relationship to neurological and psychiatric disorders. Wahlestedt C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):31–54 (120 ref.)
The association of tardive dyskinesia and pseudoparkinsonism. Yassa R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):909–14
Sleep disturbances in various nonaffective psychiatric disorders. Gierz M, et al. **Psychiatr Clin North Am** 1987 Dec;10(4):565–81 (105 ref.)
Are the neurodevelopmental effects of gonadal hormones related to sex differences in psychiatric illnesses? Sikich L, et al. **Psychiatr Dev** 1988 Winter;6(4):277–309 (210 ref.)
The relevance of developmental and genetic studies in animals to the neurobiology of psychiatric disorders. Zorumski CF. **Psychiatr Dev** 1988 Autumn;6(3):227–40 (56 ref.)
Psychophysiology and psychopathology: a motivational approach. Fowles DC. **Psychophysiology** 1988 Jul; 25(4):373–91 (117 ref.)
Power spectral analysis of photic driving elicited by flickering dot pattern and red flicker stimuli in adult psychiatric outpatients—with special reference to age and gender. Takahashi T, et al. **Tohoku J Exp Med** 1988 Oct; 156(2):165–73
[Neuroendocrinology in psychiatry] Höschl C. **Bratisl Lek Listy** 1989 May;90(5):360–72 (Eng. Abstr.) (Cze)
[Gonadal steroids and emotional stability in women] Raboch J. **Cesk Psychiatr** 1989 Jun;85(3):194–203 (Cze)
[Symposium. Neurotransmitter interactions: implications in neuro and psychopathology. Dopaminergic systems. Cannes, 4–6 March 1988. Proceedings] **Encephale** 1989 Jan–Feb;15 Spec No:63–207 (Fre)
[Early auditory potentials in the diagnosis of multihandicap] Coll J. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):339–40 (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

Attitudes toward mental illness prevention in routine pediatric practice. Yager J, et al. **Am J Dis Child** 1989 Sep;143(9):1087–90
Epidemiology and child psychiatry: entering the second phase. Earls F. **Am J Orthopsychiatry** 1989 Apr; 59(2):279–83
The search for effective prevention programs: what we learned along the way. Price RH, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):49–58 (21 ref.)
Prevention and the field of mental health: a psychiatric perspective. Pardes H, et al. **Annu Rev Public Health** 1989; 10:403–22 (54 ref.)
Primary care and the prevention of psychiatric disorder: family planning, antenatal care and childbirth. Raphael B. **Aust Fam Physician** 1976 Sep;5(8):1087–96, 1105–9 (14 ref.)
Validity of the GHQ–30 in a Nigerian medical outpatient clinic. Oduwole OO, et al. **Can J Psychiatry** 1989 Feb; 34(1):20–3
Preventive interventions in adolescence. Diekstra RF. **Crisis** 1989 Apr;10(1):1–3
Prevention of psychiatric disorders in children. McClellan J, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):630–6 (57 ref.)
Validation of 30- and 12-item versions of the Chinese Health Questionnaire (CHQ) in patients admitted for general health screening. Chong MY, et al. **Psychol Med** 1989 May; 19(2):495–505
Validity of the Japanese version of the GHQ among antenatal clinic attendants. Kitamura T, et al. **Psychol Med** 1989 May; 19(2):507–11
Recent research activities in WHO's mental health programme. Sartorius N. **Psychol Med** 1989 Feb; 19(1):233–44
Role of the occupational physician in mental health services. Felton JS. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):707–17 (28 ref.)
[Mental health, psychosocial factors and prevention] Sand EA. **Arch Belg** 1988;46(5–6):241–7 (Fre)
[Some aspects of mental health protection from the psychotherapy viewpoint] Froese M. **Z Arztl Fortbild (Jena)** 1989;83(8):431–3 (15 ref.) (Ger)
[Stimulating environmental conditions and the prevention and treatment of mental disorders in elderly persons] Sękowski T. **Psychiatr Pol** 1988 May–Jun;22(3):245–50 (Eng. Abstr.) (Pol)

PSYCHOLOGY

The valence theory of Bion and the significance of (DSM–III) diagnoses for inpatient group behavior. Karterud S. **Acta Psychiatr Scand** 1988 Oct;78(4):462–70
Psychiatric aspects of Down's syndrome. Lund J. **Acta Psychiatr Scand** 1988 Sep;78(3):369–74
Prevalence of risk factors for aggressive behavior: characteristics of an involuntarily admitted population. Palmstierna T, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):227–9
Evaluation of the Brief Psychopathological Rating Scale in relation to aggressive behavior by acute involuntarily admitted patients. Palmstierna T, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):313–6
Mental disorder in youth suicide. DSM–III–R Axes I and II. Runeson B. **Acta Psychiatr Scand** 1989 May;79(5):490–7
Intimacy and mental disorder in late middle age. Report of the TURVA project. Salokangas RK, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):555–60
Differences in adjustment among university-educated men and women. Holmström R, et al. **Acta Psychiatr Scand Suppl** 1988;343:1–109
Cross-cultural research on severe mental disorders: issues and findings. Marsella AJ. **Acta Psychiatr Scand Suppl** 1988; 344:7–22 (65 ref.)
Psychiatric phenomenology across countries: constitutional, cultural, or environmental? Ndetei DM. **Acta Psychiatr Scand Suppl** 1988;344:33–44
A theoretical framework for linking the experience of dysfunctional parental rearing attitudes with manifest psychopathology. Perris C. **Acta Psychiatr Scand Suppl** 1988;344:93–109 (95 ref.)
Psychiatric and social problems among immigrants. Rack PH. **Acta Psychiatr Scand Suppl** 1988;344:167–73 (26 ref.)
Measurement of subjective variables: the Discan method. Singh AC, et al. **Acta Psychiatr Scand Suppl** 1989;347:1–38
Art and psychopathology: the message of "outsider" art. Eaman AH. **Adolesc Psychiatry** 1988;15:160–81
The lunatic, the lover, and the poet: a study of Shakespeare's conception of creativity. Frattaroli EJ. **Adolesc Psychiatry** 1988;15:221–46
The semiotics of play fighting at a residential treatment center. Horan R. **Adolesc Psychiatry** 1988;15:367–81
On the relation between creativity and cutting corners. Mechling J. **Adolesc Psychiatry** 1988;15:346–66
Suggested posthypnotic amnesia in four diagnostic groups of hospitalized psychiatric patients. Evans FJ, et al. **Am J Clin Hypn** 1989 Jul;32(1):27–35
Inner-city substance abuse patterns: a study of psychiatric inpatients. Fernandez-Pol B, et al. **Am J Drug Alcohol Abuse** 1988;14(1):41–50
Perceptions of mental retardation and mental illness. Caruso DR, et al. **Am J Ment Retard** 1988 Sep;93(2):118–24
Social disability in the young adult mentally ill. Dozier M, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):613–7
Influence of nondepressive psychiatric symptoms on whether patients tell a doctor about depression. Bucholz KK, et al. **Am J Psychiatry** 1989 May;146(5):640–4
Physical assaults in a psychiatric unit of a general hospital. Edwards JG, et al. **Am J Psychiatry** 1988 Dec; 145(12):1568–71
Splitting in hospital treatment. Gabbard GO. **Am J Psychiatry** 1989 Apr;146(4):444–51 (47 ref.)
Parents' attitudes and patients' behavior: a prospective study. Greenman DA, et al. **Am J Psychiatry** 1989 Feb; 146(2):226–30
Religious beliefs and practices among 52 psychiatric inpatients in Minnesota [see comments] Kroll J, et al. **Am J Psychiatry** 1989 Jan;146(1):67–72. **Comment in:** Am J Psychiatry 1989 Aug;146(8):1088
Videotape recording of assaultive inpatients [letter] Leong GB, et al. **Am J Psychiatry** 1989 Feb;146(2):287–8
Obstacles in the treatment of dying patients. Levinson P. **Am J Psychiatry** 1975 Jan;132(1):28–32
Patterns of contagion in self-mutilation epidemics. Rosen PM, et al. **Am J Psychiatry** 1989 May;146(5):656–8
Murder and assault arrests of White House cases: clinical and demographic correlates of violence subsequent to civil commitment. Shore D, et al. **Am J Psychiatry** 1989 May; 146(5):645–51
The psychopathology of choice. Headlee R, et al. **Am J Psychother** 1988 Oct;42(4):532–42
Reflections on creativity and madness. Ludwig AM. **Am J Psychother** 1989 Jan;43(1):4–14 (43 ref.)
Paleodigms and paleodigmatics: a new theoretical construct applicable to Munchausen's syndrome by proxy, child-abuse dwarfism, paraphilias, anorexia nervosa, and other syndromes. Money J. **Am J Psychother** 1989 Jan; 43(1):15–24
Assassination of Indira Gandhi: impact on psychiatric patients. Varma VK, et al. **Am J Psychother** 1989 Jan; 43(1):77–86
Psychologists and families of the severely mentally ill. The role of family consultation. Bernheim KF. **Am Psychol** 1989 Mar;44(3):561–4 (29 ref.)
Conservation of resources. A new attempt at conceptualizing stress. Hobfoll SE. **Am Psychol** 1989 Mar;44(3):513–24 (118 ref.)
Family burden and family stigma in major mental illness. Lefley HP. **Am Psychol** 1989 Mar;44(3):556–60 (36 ref.)
Children's mental health. The gap between what we know and what we do. Saxe L, et al. **Am Psychol** 1988 Oct; 43(10):800–7 (78 ref.)
Clinicians can agree in assessing relationship patterns in psychotherapy. The Core Conflictual Relationship Theme method. Crits-Christoph P, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1001–4
The dangerousness of psychiatrists. Ellard J. **Aust N Z J Psychiatry** 1989 Jun;23(2):169–75 (28 ref.)
Psychopathology in adult mentally handicapped hospital patients. Glue P, et al. **Aust N Z J Psychiatry** 1988 Sep; 22(3):312–5
The psychiatry of leadership and the psychiatrist as leader. Lawrence J. **Aust N Z J Psychiatry** 1988 Sep;22(3):246–56 (18 ref.)
Developmental psychiatry: a perspective. Solinski S. **Aust N Z J Psychiatry** 1989 Jun;23(2):197–206 (68 ref.)
Sexual drive of patients in psychiatric hospitals [letter] **BMJ** 1988 Aug 20–27;297(6647):561
Sexual drive of patients in psychiatric hospitals [letter] Chase JC. **BMJ** 1988 Oct 29;297(6656):1129
What do psychiatric inpatients really want? McIntyre K, et al. **BMJ** 1989 Jan 21;298(6667):159–60
Unrealistic optimism and attitudes towards mental health. Mahatane J, et al. **Br J Clin Psychol** 1989 May;28 (Pt 2):181–2
Violence and mental disorder. Mullen PE. **Br J Hosp Med** 1988 Dec;40(6):460–3 (50 ref.)
Does contact with the mentally ill affect nurses' attitudes to mental illness? Weller L, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):277–84
Barking mad [letter] **Br J Psychiatry** 1988 Mar;152:432–3
Shoplifting as a symptom of stress in families of mentally handicapped persons: a case report [letter] Fishbain D. **Br J Psychiatry** 1988 Nov;153:713
Child and family factors associated with referral to child psychiatrists. Garralda ME, et al. **Br J Psychiatry** 1988 Jul;153:81–9
Assaults on staff by psychiatric in-patients. A critical review. Haller RM, et al. **Br J Psychiatry** 1988 Feb;152:174–9 (33 ref.)
Aspects of psychiatric symptoms at different stages in the treatment of transsexualism. Mate-Kole C, et al. **Br J Psychiatry** 1988 Apr;152:550–3
Lifelong eccentricity and social isolation. I. Psychiatric, social, and forensic aspects. Tantam D. **Br J Psychiatry** 1988 Dec;153:777–82
AIDS as a current psychopathological theme. A report on five heterosexual patients. Todd J. **Br J Psychiatry** 1989 Feb;154:253–5
The role of unconscious guilt in psychopathology and psychotherapy. Bush M. **Bull Menninger Clin** 1989 Mar; 53(2):97–107
The role of culture and family in mental illness [clinical conference] Jaschke V, et al. **Bull Menninger Clin** 1989 Mar;53(2):154–8
The role of marital intimacy in psychiatric help-seeking. Chamberlaine C, et al. **Can J Psychiatry** 1989 Feb;34(1):3–7
Criminalization of the mentally ill [letter] Fahy TA. **Can J Psychiatry** 1988 Oct;33(7):673–5
Mental hospital depopulation in Canada: patient perspectives. Herman NJ, et al. **Can J Psychiatry** 1989 Jun;34(5):386–91
Relationship between psychiatric illness and conduct disorder in adolescents. Kutcher SP, et al. **Can J Psychiatry** 1989 Aug;34(6):526–9
Pathological habit disorder? Matthews PC. **Can J Psychiatry** 1988 Dec;33(9):826–9 (21 ref.)
Abuse and neglect in psychiatrically hospitalized multihandicapped children. Ammerman RT, et al. **Child Abuse Negl** 1989;13(3):335–43
Interpersonal understanding and moral judgment in adolescents with emotional and cognitive disorders. Sigman M, et al. **Child Psychiatry Hum Dev** 1988 Fall;19(1):36–44
Are jails replacing the mental health system for the homeless mentally ill? Belcher JR. **Community Ment Health J** 1988 Fall;24(3):185–95
Social support and life stress: a mental health consumers perspective. Sullivan WP, et al. **Community Ment Health J** 1989 Spring;25(1):21–32
Two measures of mental illness: contingent negative variation and spiral after-effect. Abraham P. **Comp Biochem Physiol [A]** 1989;93(1):291–3
Self-medication among addicts with primary psychiatric disorders. Casteneda R, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):80–3
Psychotherapy refusers. Mohl PC, et al. **Compr Psychiatry** 1989 May–Jun;30(3):245–50
Correlates of suicide and violence risk 1: the suicide risk measure. Plutchik R, et al. **Compr Psychiatry** 1989 Jul–Aug; 30(4):296–302
Other psychiatric disorders among bulimic patients. Powers PS, et al. **Compr Psychiatry** 1988 Sep–Oct;29(5):503–8
Family factors associated with the use of psychotropic drugs, alcohol abuse, and minor psychiatric morbidity in the community. Zimmermann-Tansella C, et al. **Compr Psychiatry** 1988 Sep–Oct;29(5):460–6
Work and psychiatric illness: the significance of the posthospitalization occupational environment for the course of psychiatric illnesses. Vogel R, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):213–9
Effects of a smoking ban on a general hospital psychiatric unit. Thorward SR, et al. **Gen Hosp Psychiatry** 1989 Jan; 11(1):63–7
The initial presentation of depression in family practice and psychiatric outpatients. Williamson PS, et al. **Gen Hosp Psychiatry** 1989 May;11(3):188–93; discussion 216–21
Enhancing the autonomy of mentally impaired nursing home residents. Hegeman C, et al. **Gerontologist** 1988 Jun;28 Suppl:71–5
Crisis screening and diversion services. Jacobs LS. **Hawaii Med J** 1989 Mar;48(3):73–6
Patient or client? [letter] **Hosp Community Psychiatry** 1989 May;40(5):535–8
Mental illness complicated by the santeria belief in spirit

possession. Alonso L, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1188–91
Weapon carrying among patients in a psychiatric emergency room. Anderson AA, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):845–7
Knowledge about AIDS among psychiatric inpatients. Bear JW, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):986–8
Homelessness: consequence of a crisis or a long–term process? Benda BB, et al. **Hosp Community Psychiatry** 1988 Aug; 39(8):884–6
Working with families [letter] Bernheim KF. **Hosp Community Psychiatry** 1989 Apr;40(4):419–20
Management of HIV–positive psychiatric patients who fail to reduce high–risk behaviors. Carlson GA, et al. **Hosp Community Psychiatry** 1989 May;40(5):511–4
Psychiatrists' accuracy in predicting violent behavior on an inpatient unit. Janofsky JS, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1090–4
Relationship between preadmission threats and later violent behavior by acute psychiatric inpatients. McNiel DE, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):605–8
A video–based program to educate high school students about serious mental illness. Petchers MK, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1102–3
Defining the homeless mentally ill: a methodological note. Santiago JM, et al. **Hosp Community Psychiatry** 1988 Oct; 39(10):1100–2
Use of telephone prompts at an inner–city outpatient clinic. Shivack IM, et al. **Hosp Community Psychiatry** 1989 Aug; 40(8):851–3
The effect of a nurses' strike on the functioning of chronic patients. Sigal M, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):409–11
Mental illness: NAMI's view [letter] Snavely W. **Hosp Community Psychiatry** 1988 Sep;39(9):994–5
Crime, inpatient admissions, and violence among male mental patients. Klassen D, et al. **Int J Law Psychiatry** 1988; 11(3):305–12
Ambiguity in excess: an obstacle to common ground. Abrams S. **Int J Psychoanal** 1989;70 (Pt 1):3–7
Where does the common ground among psychoanalysts end? Appy G. **Int J Psychoanal** 1989;70 (Pt 1):7–11
Conflict and deficit: implications for technique. Killingmo B. **Int J Psychoanal** 1989;70 (Pt 1):65–79
"A normality for us without confinement for them": notes on the associations of families of the mentally ill. Giannichedda MG. **Int J Soc Psychiatry** 1989 Spring; 35(1):62–70
Social factors affecting clinical caseload in Italian good practice areas. Lesage AD. **Int J Soc Psychiatry** 1989 Spring;35(1):54–61
Measuring patient satisfaction with life in a long–stay psychiatric hospital. MacDonald L, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):292–304
Quality of life and the chronically mentally ill. Tantam D. **Int J Soc Psychiatry** 1988 Winter;34(4):243–7 (28 ref.)
A study of emotion and behaviour in children attending a normal school in an urban area. Murphy M, et al. **Ir J Med Sci** 1989 Jun;158(6):144–7
Psychosocial stress and minor psychiatric morbidity: a community study in Taiwan. Cheng TA. **J Affective Disord** 1989 Sep–Oct;17(2):137–52
Social functioning in community residents with depression and other psychiatric disorders: results of the New Haven Epidemiologic Catchment Area Study. Fredman L, et al. **J Affective Disord** 1988 Sep–Oct;15(2):103–12
Comorbidity of mental disorders in the post–mortem diagnosis of completed suicide in children and adolescents. Shafii M, et al. **J Affective Disord** 1988 Nov–Dec; 15(3):227–33
Clinical and demographic characteristics of child and adolescent partial hospital patients. Doan RJ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):66–9
Coping with parental quarrels. Jenkins JM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):182–9
Father absence: effects on child and maternal psychopathology. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):171–5
Abnormalities of growth in 7– to 18–year–old psychiatric patients. Karlsson A, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):269–73
Residential instability in adolescent inpatients. Mundy P, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar; 28(2):176–81
Gender differences in adolescent symptomatology: a normative study. Ostrov E, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):394–8
Risk, protective factors, and the prevalence of behavioral and emotional disorders in children and adolescents. Rae–Grant N, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):262–8
Adaptive functioning in children hospitalized for psychiatric disturbances. Sholle–Martin S, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):636–41
Psychiatric status of intrafamilial child sexual abuse victims. Sirles EA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):225–9
Psychopathology of parents of abused and neglected children and adolescents. Kaplan SJ, et al. **J Am Acad Child Psychiatry** 1983 May;22(3):238–44
The "adoption process" in the inpatient treatment of children and adolescents. Palmer AJ, et al. **J Am Acad Child Psychiatry** 1983 May;22(3):286–93
Aggression management [letter] Logan PH. **J Clin Psychiatry** 1988 Oct;49(10):412–3
Replicated item level factor structure of the MMPI: racial and sexual differences. Beck NC, et al. **J Clin Psychol** 1989 Jul;45(4):553–60
The latent factor structure of the WAIS–R: a factor analysis of individual item responses. Beck NC, et al. **J Clin Psychol** 1989 Mar;45(2):281–93
Identifying psychiatric suicides for research purposes. Evenson RC, et al. **J Clin Psychol** 1988 Nov;44(6):1029–32
Life events and psychopathology severity: comparisons between psychiatric outpatients and inpatients. Harder DW, et al. **J Clin Psychol** 1989 Mar;45(2):202–9
Criteria for assessing inconsistent patterns of item endorsement on the MMPI: rationale, development, and empirical trials. Nichols DS, et al. **J Clin Psychol** 1989 Mar;45(2):239–50
The utility of MMPI subtle, obvious scales for detecting fake good and fake bad response sets. Peterson GW, et al. **J Clin Psychol** 1989 Jul;45(4):575–83
Object representations and symptomatology: preliminary findings in young adult psychiatric inpatients. Procidano ME, et al. **J Clin Psychol** 1989 Mar;45(2):309–16
Effects of therapist title on competence as perceived by a psychiatric sample. Reed TL, et al. **J Clin Psychol** 1989 Jan;45(1):129–34
Relation of patient pretreatment characteristics to the therapeutic alliance in diverse psychotherapies. Gaston L, et al. **J Consult Clin Psychol** 1988 Aug;56(4):483–9
Coping in chest pain patients with and without psychiatric disorders. Vitaliano PP, et al. **J Consult Clin Psychol** 1989 Jun;57(3):338–43
Families, family roles, and psychological diagnoses in primary care. Schor EL. **J Dev Behav Pediatr** 1988 Dec; 9(6):327–32
Concurrent posttraumatic stress disorder in psychogeriatric patients. Rosen J, et al. **J Geriatr Psychiatry Neurol** 1989 Apr–Jun;2(2):65–9
Does isolation of patients with infections induce mental illness? Wilkins EG, et al. **J Infect** 1988 Jul;17(1):43–7
Cultural relativism and psychiatric illness. Fabrega H Jr. **J Nerv Ment Dis** 1989 Jul;177(7):415–25; discussion 426–30 (120 ref.)
The low turning point. A control mechanism in the course of mental disorder. Rakfeldt J, et al. **J Nerv Ment Dis** 1989 Jan;177(1):32–7
Resuming social approaches to psychiatric disorder: a critical contemporary need. Westermeyer J. **J Nerv Ment Dis** 1988 Dec;176(12):703–6
A comparative clinical investigation of the "How" and "Charlie" MMPI subtypes. DiFrancesca KR, et al. **J Pers Assess** 1989 Summer;53(2):396
The construct validity of the MMPI alexithymia scale with psychiatric inpatients. Greenberg RP, et al. **J Pers Assess** 1988 Fall;52(3):459–64
Optimized split–half reliability for the Bender visual motor Gestalt test: further evidence for the use of the maximization procedure. Wagner EE, et al. **J Pers Assess** 1988 Fall;52(3):454–8
Psychometric properties of Loevinger's Sentence Completion Test in an adult psychiatric outpatient sample. Weiss DS, et al. **J Pers Assess** 1989 Fall;53(3):478–86
Inpatient violence: trait and state. Krakowski MI, et al. **J Psychiatr Res** 1989;23(1):57–64
Substance abuse prognosis with an additional psychiatric diagnosis: understanding the relationship. Stoffelmayr BE, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):145–52
Implicit learning: robustness in the face of psychiatric disorders. Abrams M, et al. **J Psycholinguist Res** 1988 Sep; 17(5):425–39
At risk. Children of the mentally ill. Gross D. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):14–9 (35 ref.)
The social support. Social dissupport continuum. Malone J. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):18–22
Human interaction and personal boundaries. Scott AL. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):23–7 (11 ref.)
Family environments and the young chronically mentally ill. Wilk J. **J Psychosoc Nurs Ment Health Serv** 1988 Oct; 26(10):15–20
Patient access to psychiatric records: the patients' view. Parrott J, et al. **J R Soc Med** 1988 Sep;81(9):520–2
The stability of coexisting psychiatric syndromes in alcoholic men after one year. Penick EC, et al. **J Stud Alcohol** 1988 Sep;49(5):395–405
Prison, mental illness, and identity [letter] James DV. **Lancet** 1988 Dec 10;2(8624):1371
Dream doctors as healers in drama and film: a paradigm, an antecedent, and an imitation. Welsh JM. **Lit Med** 1987; 6:117–27
Public attitudes to mental illness: the influence of the Hungerford massacre. Appleby L, et al. **Med Sci Law** 1988 Oct;28(4):291–5
Behavior during middle childhood: developmental themes and clinical issues. Dworkin PH. **Pediatr Ann** 1989 Jun; 18(6):347–8, 350–2, 354–5 (12 ref.)
Speech Sounds Perception Test: nonrandom response locations form a logical fallacy in structure. Reddon JR, et al. **Percept Mot Skills** 1989 Aug;69(1):235–40
Neuropsychological characteristics of young adult chronic psychiatric patients: preliminary observations. Zacker J, et al. **Percept Mot Skills** 1989 Apr;68(2):391–9
Ethological studies in animals and man, their use in psychiatry. Dixon AK, et al. **Pharmacopsychiatry** 1989 Feb; 22 Suppl 1:44–50 (22 ref.)
Measuring the quality of life: a comparison between physically and mentally chronically ill patients and healthy persons. Huber D, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):453–5
Efficiency of the AMDP anamnestic data in psychiatric research. Schönell H. **Pharmacopsychiatry** 1988 Nov; 21(6):456–7
Vocal behavior and psychopathology. Wallbott HG. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:13–6 (21 ref.)
Should the mentally ill adopt children? How physicians can influence the decision. Bacani–Oropilla T, et al. **Postgrad Med** 1988 Nov 1;84(6):201–5
Childhood separation anxiety and panic disorder: a comparative study. Ayuso JL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):665–71
Changing attitudes of citizens toward mental health care. Pardes H. **Psychiatr Q** 1988 Fall;59(3):155–64
A theory of mental illness: integrating social and emotional aspects. Retzinger SM. **Psychiatry** 1989 Aug;52(3):325–35
Commentary on Retzinger. Strauss JS. **Psychiatry** 1989 Aug; 52(3):336–8
Levels of adaptation and narcissistic psychopathology. Wilson A. **Psychiatry** 1989 May;52(2):218–36
Correlates of psychopathology in adolescents. Kashani JH, et al. **Psychiatry Res** 1988 Nov;26(2):141–8
Correlates of suicide and violence risk: III. A two–stage model of countervailing forces. Plutchik R, et al. **Psychiatry Res** 1989 May;28(2):215–25
Aptitude–treatment interaction research in the clinical setting: a review of attempts to dispel the "patient uniformity" myth. Dance KA, et al. **Psychol Bull** 1988 Sep; 104(2):192–213 (100 ref.)
Psychiatric symptoms and related factors in a sample of Japanese workers. Iwata N, et al. **Psychol Med** 1988 Aug; 18(3):659–63
An analysis of the re–test artefact in longitudinal studies of psychiatric symptoms and personality. Jorm AF, et al. **Psychol Med** 1989 May;19(2):487–93
Statistical versus clinical significance in research with the MMPI. Holmes CB, et al. **Psychol Rep** 1989 Feb; 64(1):159–62
Mental health of Iranian high school and college students. Makaremi A. **Psychol Rep** 1989 Feb;64(1):19–22
Physical Self–Maintenance Scale (PSMS). Self–rated version. Incorporated in the Philadelphia Geriatric Center. Multilevel Assessment Instrument (MAI). **Psychopharmacol Bull** 1988;24(4):795–7
Physical Self–Maintenance Scale (PSMS). Original observer–rated version. **Psychopharmacol Bull** 1988; 24(4):793–4
Rapid Disability Rating Scale–2 (RDRS–2). Linn MW. **Psychopharmacol Bull** 1988;24(4):799–80
TRIMS Behavioral Problem Checklist (BPC). Niederehe G. **Psychopharmacol Bull** 1988;24(4):771–8
Mood Scales–Elderly (MS–E). Raskin A, et al. **Psychopharmacol Bull** 1988;24(4):727–32
Sandoz Clinical Assessment–Geriatric (SCAG). Shader RI, et al. **Psychopharmacol Bull** 1988;24(4):765–9
Prevalence of psychopathology among mentally retarded adults. Iverson JC, et al. **Res Dev Disabil** 1989;10(1):77–83
The psychopathology instrument for mentally retarded adults: psychometric characteristics, factor structure, and relationship to subject characteristics. Watson JE, et al. **Res Dev Disabil** 1988;9(3):277–90
Theoretical modeling to predict violence in hospitalized psychiatric patients. Morrison EF. **Res Nurs Health** 1989 Feb;12(1):31–40
Adult victims of childhood sexual abuse: in a clinical population. Williams WV, et al. **S D J Med** 1988 Sep; 41(9):5–9
What protects a child during migration? Moilanen I, et al. **Scand J Soc Med** 1989;17(1):21–4
Attitudes toward mental illness: recognition, desired social distance, expected burden and negative influence on mental health among Turkish freshmen. Eker D. **Soc Psychiatry Psychiatr Epidemiol** 1989 May;24(3):146–50
University students' attitudes toward mental patients in a developing country. Eker D. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):264–6
Suicidal behaviour, social networks and psychiatric diagnosis. Hart EE, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):222–8
Social rejection of the mentally ill: a replication study of public attitude. Trute B, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):69–76
Psychiatric disorders and selected variables among medical students in Belgrade (Yugoslavia). Erić L, et al. **Soc Sci Med** 1988;27(2):187–90
Cultural variations in the response to psychiatric disorders and emotional distress. Kirmayer LJ. **Soc Sci Med** 1989; 29(3):327–39 (103 ref.)
From vice to madness: the semantics of naturalistic and personalistic understandings in Trinidadian local medicine. Littlewood R. **Soc Sci Med** 1988;27(2):129–48 (88 ref.)
Humoral concepts of mental illness in India. Weiss MG, et

al. **Soc Sci Med** 1988;27(5):471–7
Stress reactions in the job setting: case examples. McLean AA. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):639–51
Psychological testing of the psychiatrically injured worker. Morgenthaler ES. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):629–38 (21 ref.)
Exploring environmental cycles in psychiatric patients. Temte JL. **Wis Med J** 1989 Jan;88(1):17–20
Mothers alone and supporting chronically mentally ill adult children: a greater vulnerability to illness. Belcher JR. **Women Health** 1988;14(2):61–80
Gender role nonconformity and perception of mental illness. Waisberg J, et al. **Women Health** 1988;14(1):3–16
[Child and adolescent psychiatry in mentally retarded children and youths] Dosen A. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):213–6 (Dut)
[Personality tests in forensic psychiatry] Hengesch G, et al. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):28–41 (Eng. Abstr.) (Fre)
[Discovery of the "deep personality" and revision of the Kraepelin concept of autonomic mental disease] Baruk H. **Ann Med Psychol (Paris)** 1989 Jan;147(1):47–56 (Eng. Abstr.) (Fre)
["Fractal" forms and developments in mental disorders] Marchais P. **Ann Med Psychol (Paris)** 1988 Oct; 146(10):966–73 (Fre)
[The young homeless of Montreal: a longitudinal study] Lamontagne Y, et al. **Can J Psychiatry** 1988 Nov; 33(8):716–22 (Eng. Abstr.) (Fre)
[The outcome of deprived infants: a retrospective study] Plante GC, et al. **Can J Psychiatry** 1989 Aug;34(6):534–41 (Eng. Abstr.) (Fre)
[From the other side of the mirror] Tordera-Jugnet M. **Rev Med Suisse Romande** 1988 Oct;108(10):823–6 (Fre)
[Medical guarantor responsibility and suicide of the psychiatric patient] Oehmichen M, et al. **Beitr Gerichtl Med** 1988;46:43–7 (Eng. Abstr.) (Ger)
[Are pediatric and adolescent psychiatric diseases preliminary stages of psychiatric diseases of adulthood?] Remschmidt H, et al. **Fortschr Neurol Psychiatr** 1989 Jul;57(7):281–98 (140 ref.) (Eng. Abstr.) (Ger)
[Possibilities and limits of the systems theory approach in psychopathology] Frommer J. **Nervenarzt** 1989 Feb; 60(2):65–70 (62 ref.) (Ger)
[Hemispheric functions and psychiatric diseases] Gaebel W. **Nervenarzt** 1988 Aug;59(8):437–48 (201 ref.) (Ger)
[Changes in the paradigms of psychopathology] Klosterkötter J. **Nervenarzt** 1989 Jun;60(6):319–31 (36 ref.) (Ger)
[Physician–patient relations in psychiatry] Meyer JE. **Nervenarzt** 1989 Feb;60(2):102–5 (15 ref.) (Ger)
[Aggressive behavior in the psychiatric clinic] Genz A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep; 40(9):542–50 (Eng. Abstr.) (Ger)
[Forensic-psychologic-psychiatric assessment from the viewpoint of perpetrators—data from a survey] Littmann E. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):655–64 (Eng. Abstr.) (Ger)
["Sexual atrophy" in psychiatric patients—an essay review] Kobbé U. **Psychiatr Prax** 1988 Nov;15(6):192–201 (125 ref.) (Eng. Abstr.) (Ger)
[The hall—reflections on the site of open interaction between patients and the therapeutic team] Schröder S, et al. **Psychiatr Prax** 1989 May;16(3):113–7 (Eng. Abstr.) (Ger)
[Aggressive conflicts in physician–patient relations in the course of inpatient treatment—considerations based on case examples] Steinert T, et al. **Psychiatr Prax** 1988 Sep; 15(5):171–5 (Eng. Abstr.) (Ger)
[The status of sexuality in routine psychiatric practice—results of a personal survey] Strauss B, et al. **Psychiatr Prax** 1988 Nov;15(6):202–8 (Eng. Abstr.) (Ger)
[The Diamed Test System (König & Partner System House, 1984)—a review] Lamberti G, et al. **Rehabilitation (Stuttg)** 1989 Feb;28(1):27–9 (Ger)
[Testing with the computer—the Diamed System] Lehrl S, et al. **Rehabilitation (Stuttg)** 1989 Feb;28(1):15–26 (70 ref.) (Eng. Abstr.) (Ger)
[Reflections on sexuality at a large psychiatric hospital] Nitzsche M, et al. **Z Gesamte Hyg** 1988 Oct;34(10):598–600 (Eng. Abstr.) (Ger)
[Trusting relations in family members of psychiatric patients] John U. **Z Klin Psychol Psychopathol Psychother** 1988; 36(3):212–29 (Eng. Abstr.) (Ger)
[Study of the psychiatric personality] Kirikae T. **Seishin Shinkeigaku Zasshi** 1986;88(12):981–3 (Jpn)
[Suicide in psychiatric hospitals] Kacperczyk JM. **Psychiatr Pol** 1988 Sep–Oct;22(5):368–73 (28 ref.) (Pol)
[The significance of psychological exploration in a rehabilitative program for severely handicapped children at a clinic for chronic patients] Fintină N, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):687–92 (Eng. Abstr.) (Rum)
[The concept of responsibility in the function of mental capacity and its relationship to large groups of mental diseases arranged by the intensity of the disorders] Predescu V, et al. **Rev Med Interna [Neurol Psihiatr]** 1988 Apr–Jun; 33(2):97–110 (Rum)
[Social networks and mental disease] Di Marco G, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):157–68 (Eng. Abstr.) (Spa)
[Problems in the integration of social and biological psychiatry into a university setting. II. Indicators, theories and models] Conde López V, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 May–Jun;16(3):151–64 (Eng. Abstr.) (Spa)
[The history of attitudes toward mental illness] Ruiz Ruiz M, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul–Aug;16(4):285–93 (71 ref.) (Eng. Abstr.) (Spa)
[The limits of psychiatry] Ryn Z. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):126–31 (Spa)
[Spanish adaptation and validation of an anxiety scale derived from the AMDP (AMDP–AT) system. I: Adaptation and convergent validity] Sánchez Blanque A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):132–9 (Eng. Abstr.) (Spa)
[Changes in attitude towards mental patients and variations in personality measured by the SCL–90 scale in medical students] Ylla Segura L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):356–66 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Head CT in new geriatric psychiatry patients: a prospective study. Chandler JD, et al. **J Geriatr Psychiatry Neurol** 1989 Apr–Jun;2(2):101–5

REHABILITATION

Hospital programs for psychiatrically disturbed, drug-abusing adolescents. King JW, et al. **Adolesc Psychiatry** 1988;15:522–34
Surveys of community attitudes toward mental health facilities: reflections or provocations? Cheung FM. **Am J Community Psychol** 1988 Dec;16(6):877–82
Systemic organizational support for self-help groups. Leventhal GS, et al. **Am J Orthopsychiatry** 1988 Oct; 58(4):592–603
Defining and measuring stabilization of patients during 4 years of intensive community support. Wright RG, et al. **Am J Psychiatry** 1989 Oct;146(10):1293–8
Building bridges. Psychologists and families of the mentally ill. Backer TE, et al. **Am Psychol** 1989 Mar;44(3):546–50
The dual crisis: mental illness and substance abuse. Present and future directions. Brown VB, et al. **Am Psychol** 1989 Mar;44(3):565–9 (23 ref.)
The mental health movement in the United States. Carter R. **Am Psychol** 1989 Mar;44(3):551–2
Secondary neuropsychiatric complications in stroke: implications for acute care. Cushman LA. **Arch Phys Med Rehabil** 1988 Oct;69(10):877–9
Group process and social climate of GROW, a community mental health organisation. Young J, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):117–23
The evaluation of a hostel ward. A controlled study using modified cost-benefit analysis. Hyde C, et al. **Br J Psychiatry** 1987 Dec;151:805–12
Scottish survey of chronically ill day patients: 3-year follow-up. McCreadie RG, et al. **Br J Psychiatry** 1988 Aug;153:174–7
The chronically mentally ill in community facilities. A study of quality of life. Simpson CJ, et al. **Br J Psychiatry** 1989 Jan;154:77–82
Decanting a psychiatric hospital: development of a patient assessment methodology. Warner MM. **Bull Pan Am Health Organ** 1988;22(3):292–302
The homeless mentally ill and the need for a total care environment. Belcher JR. **Can J Psychiatry** 1989 Apr; 34(3):186–9
Training professionals to work with the chronically mentally ill. **Community Ment Health J** 1988 Winter;24(4):253–357
Professional pre-service training for working with the long-term mentally ill. Anthony WA, et al. **Community Ment Health J** 1988 Winter;24(4):258–69 (36 ref.)
State government at the grass roots: a community relations approach to mental health program development. Byalin K, et al. **Community Ment Health J** 1988 Fall;24(3):196–204
Capitated payments for mental health care: the Rhode Island programs. Christianson JB, et al. **Community Ment Health J** 1989 Summer;25(2):121–31
A model community psychiatry curriculum for psychiatric residents. Factor RM, et al. **Community Ment Health J** 1988 Winter;24(4):310–27
Training psychologists for work with the chronically mentally ill. Hargrove DS, et al. **Community Ment Health J** 1988 Winter;24(4):283–95 (29 ref.)
One-to-one relationships with the long-term mentally ill: issues in training professionals. Lamb HR. **Community Ment Health J** 1988 Winter;24(4):328–37
Training professionals to work with the chronically mentally ill. Lefley H, et al. **Community Ment Health J** 1988 Winter; 24(4):253–7
Training professionals to work with families of chronic patients. Lefley HP. **Community Ment Health J** 1988 Winter;24(4):338–57
Towards a model social work curriculum for practice with the chronically mentally ill. Rapp CA, et al. **Community Ment Health J** 1988 Winter;24(4):270–82
Geographic location and mental health services utilization among the chronically mentally ill. Sommers I. **Community Ment Health J** 1989 Summer;25(2):132–44
Predicting community tenure after psychiatric hospitalization. Sylvester CT, et al. **Community Ment Health J** 1989 Summer;25(2):109–20
Psychogeriatric inpatients and group work. Davis-Whelan J, et al. **Dimens Health Serv** 1989 Apr;66(3):28–9
The problem of readmission with respect to occupational factors. Course and predictive influences after 5 years. Blumenthal S, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep;237(6):327–33
Evaluation of care for the disabled mentally ill: theoretical issues. Häfner H, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):179–84
What's happening in self-contained special education classrooms? Algozzine B, et al. **Except Child** 1988 Nov; 55(3):259–65
Honig v. Doe: the suspension and expulsion of handicapped students. Yell ML. **Except Child** 1989 Sep;56(1):60–9
Psychosocial vocational rehabilitation services in Hawaii. Ridley DE, et al. **Hawaii Med J** 1989 Mar;48(3):78–81
Service provision for long-term non-resident psychiatric patients. Philip AE, et al. **Health Bull (Edinb)** 1988 Nov; 46(6):311–7
Refocusing on locus [letter] **Hosp Community Psychiatry** 1989 Apr;40(4):418–9
Titicut Follies: patients' rights and institutional reform. Appelbaum PS. **Hosp Community Psychiatry** 1989 Jul; 40(7):679–80
Caregivers of mentally ill adults: a women's agenda. Ascher-Svanum H, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):843–5
Some reflections from abroad. Bachrach LL. **Hosp Community Psychiatry** 1989 Jun;40(6):573–4
On exporting and importing model programs. Bachrach LL. **Hosp Community Psychiatry** 1988 Dec;39(12):1257–8
Programs and politics: toward new coalitions. Bachrach LL. **Hosp Community Psychiatry** 1988 Sep;39(9):927–8
An intensive community-based treatment alternative to state hospitalization. Bedell J, et al. **Hosp Community Psychiatry** 1989 May;40(5):533–5
Social work students as case managers: a model of service delivery and training. Billig NS, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):411–3
Work in rehabilitation [letter] Black BJ. **Hosp Community Psychiatry** 1989 Aug;40(8):858
Case management [letter] Blumberg I. **Hosp Community Psychiatry** 1989 Feb;40(2):190–1
A comparison of two crisis housing alternatives to psychiatric hospitalization. Bond GR, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):177–83
What do we really know about community support programs? Strategies for better monitoring. Brekke JS. **Hosp Community Psychiatry** 1988 Sep;39(9):946–52 (81 ref.)
Training volunteers to work with the chronic mentally ill in the community. Brook S, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):853–5
The bad-mad dilemma for public psychiatry. Cohen NL, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):677
A citizens' coalition in mental health advocacy: the Maryland experience. Cromwell HS Jr, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):959–62
The impact of outreach [letter] Davis L. **Hosp Community Psychiatry** 1989 Apr;40(4):420
Assessing the patient's functional performance. Denton P. **Hosp Community Psychiatry** 1988 Sep;39(9):935–6
Reducing treatment costs in a community support program. Dickstein D, et al. **Hosp Community Psychiatry** 1988 Oct; 39(10):1033–5
Housing instability and homelessness among aftercare patients of an urban state hospital. Drake RE, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):46–51
The role of the psychiatrist in board-and-care homes. Fleishman M. **Hosp Community Psychiatry** 1989 Apr; 40(4):415–8
Case management: a dissenting view. Franklin JL. **Hosp Community Psychiatry** 1988 Sep;39(9):921
Developing a unit for mentally retarded-mentally ill patients on the grounds of a state hospital. Gold IM, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):836–40
Community support [letter] Goldman HH. **Hosp Community Psychiatry** 1989 Aug;40(8):857–8
Misconceptions about use of case management services by the chronic mentally ill: a utilization analysis. Harris M, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1276–80
Sociodrama in the rehabilitation of chronic mentally ill patients. Hickling FW. **Hosp Community Psychiatry** 1989 Apr;40(4):402–6
The mentally ill in prisons: a review. Jemelka R, et al. **Hosp Community Psychiatry** 1989 May;40(5):481–91 (106 ref.)
Using group therapy to persuade dual-diagnosis patients to seek substance abuse treatment. Kofoed L, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1209–11
Predicting discharge and follow-up status of hospitalized adolescents. Kowitt MP, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):724–31
Deinstitutionalization at the crossroads. Lamb HR. **Hosp Community Psychiatry** 1988 Sep;39(9):941–5 (25 ref.)
National forum addresses need to enhance training in treating the seriously mentally ill. Lefley HP, et al. **Hosp Community Psychiatry** 1989 May;40(5):460–2, 470
Family burden [letter] Lyles WB, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):855–6

A psychosocial approach to deinstitutionalization. McCarthy-Funaro M, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1308-9
Chronic mental illness and the criminal justice system. McFarland BH, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):718-23
The tyranny of irresponsible freedom [editorial] Maier GJ. **Hosp Community Psychiatry** 1989 May;40(5):453
Effects of facility characteristics on the social adjustment of mentally ill residents of board-and-care homes. Nagy MP, et al. **Hosp Community Psychiatry** 1988 Dec; 39(12):1281-6
The psychiatrist and the Social Security Disability Insurance and Supplemental Security Income programs. Okpaku SO. **Hosp Community Psychiatry** 1988 Aug;39(8):879-83
The place of work in psychiatric rehabilitation. Palmer F. **Hosp Community Psychiatry** 1989 Mar;40(3):222-4
Behavior modification [letter] Rao K, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1311
Use of passes on a general hospital psychiatric unit. Remeikis G, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):988-9
Patient or client? Shore MF. **Hosp Community Psychiatry** 1988 Dec;39(12):1247
"It's the focus, not the locus." Hocus-pocus! Stein LI. **Hosp Community Psychiatry** 1988 Oct;39(10):1029
The assertive community treatment worker: an emerging role and its implications for professional training. Witheridge TF. **Hosp Community Psychiatry** 1989 Jun;40(6):620-4 (39 ref.)
Whom do mutual-help groups help? A typology of members. Young J, et al. **Hosp Community Psychiatry** 1988 Nov; 39(11):1178-82
Treatment providers' assessment of dual-prognosis patients: diagnosis, treatment, referral, and family involvement. Menicucci LD, et al. **Int J Addict** 1988 Jun;23(6):617-22
Organizational approaches to improving institutional estimations of dangerousness in forensic psychiatric hospitals: a Dutch perspective. Blankstein H. **Int J Law Psychiatry** 1988;11(4):341-5
A model for crisis intervention services within local jails. Cox JF, et al. **Int J Law Psychiatry** 1988;11(4):391-407
Community-based forensic evaluation. Fitch WL, et al. **Int J Law Psychiatry** 1988;11(4):359-70
A comprehensive mental health care system for prison inmates: retrospective look at New York's ten year experience. Greene RT. **Int J Law Psychiatry** 1988; 11(4):381-9
Risk management in forensic services. Halleck NH, et al. **Int J Law Psychiatry** 1988;11(4):347-58
Management of mentally ill offenders in Scandinavia. Høyer G. **Int J Law Psychiatry** 1988;11(4):317-27
Clinical considerations in the community treatment of mentally disordered offenders. Wasyliw OE, et al. **Int J Law Psychiatry** 1988;11(4):371-80
Community psychiatric rehabilitation in Israel. Levy A, et al. **Int J Rehabil Res** 1988;11(1):37-46
Clinical judgement on alternative care for longstay patients in Dutch mental hospitals. Haveman MJ. **Int J Soc Psychiatry** 1989 Summer;35(2):188-96
Assessment of the psychometric properties of the Adaptive Behavior Scale with psychiatric patients. Clinger MD, et al. **J Consult Clin Psychol** 1988 Aug;56(4):542-8
Cliffside: Four Winds—Westchester's program for psychiatric chemical dependency treatment. **J Subst Abuse Treat** 1989;6(1):55-8
The psychotherapy of dually diagnosed patients. Kaufman E. **J Subst Abuse Treat** 1989;6(1):9-18
The Special Treatment Team: an inpatient approach to the mentally ill alcoholic patient. Levy MS, et al. **J Subst Abuse Treat** 1988;5(4):219-27 (24 ref.)
Inpatient treatment of the mentally ill substance abuser: some medicolegal concerns. Mann DW. **J Subst Abuse Treat** 1989;6(1):19-21
An appraisal of services for persons with mental retardation and psychiatric impairments. Jacobson JW, et al. **Ment Retard** 1988 Dec;26(6):377-80
Quality of life: its measurement and use. Schalock RL, et al. **Ment Retard** 1989 Feb;27(1):25-31
A third party assessment of work capabilities. McPhee SD. **Milit Med** 1989 Feb;154(2):76-80
The link between inpatient care and case management services. Bebout RR. **New Dir Ment Health Serv** 1988 Winter;(40):53-6
The Fenwood Inn. Buffett WN. **New Dir Ment Health Serv** 1988 Fall;(39):49-63
The integrated clinically managed housing network. Crowel RL. **New Dir Ment Health Serv** 1988 Winter;(40):63-6
Clinical case management for the chronically mentally ill: a conceptual analysis. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):5-13 (27 ref.)
Case management and continuity of care for the "revolving-door" patient. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):57-62
New directions for clinical case management. Harris M. **New Dir Ment Health Serv** 1988 Winter;(40):87-96
A treatment-planning grid for clinical case managers. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):29-38 (19 ref.)
The Continuing Care Service. Hellman SJ. **New Dir Ment Health Serv** 1988 Fall;(39):73-87
The role of the family in delivering case management services. Intagliata J, et al. **New Dir Ment Health Serv** 1988 Winter;(40):39-52 (38 ref.)
Clinical issues in the case management relationship. Kanter JS. **New Dir Ment Health Serv** 1988 Winter;(40):15-27 (30 ref.)
Financing case management: making the money work. Lehman AF. **New Dir Ment Health Serv** 1988 Winter; (40):67-78
Behavioral treatment in partial hospitalization. Luber RF. **New Dir Ment Health Serv** 1988 Summer;(38):59-76 (31 ref.)
Behavioral treatment in partial hospitalization: commentary. Maxey JT. **New Dir Ment Health Serv** 1988 Summer; (38):77-84
"I want to go to the circus": a personal perspective on case management. Swayze FV. **New Dir Ment Health Serv** 1988 Winter;(40):79-86
Housing for the mentally ill: how to find it, fund it, and fight for it. Zanditon M. **New Dir Ment Health Serv** 1988 Fall;(39):89-98
A guide to photography in educational and counseling settings. Hubbard JT, et al. **Perspect Psychiatr Care** 1987; 24(1):20-4
A review of social skills training with chronic mental patients. Donahoe CP Jr, et al. **Prog Behav Modif** 1988;23:131-64 (85 ref.)
Development and applications of social skills training: a review and critique. Hollin CR, et al. **Prog Behav Modif** 1988;22:165-214 (310 ref.)
A comparison of practices, attitudes and interactions in two established units for people with a psychiatric disability. Allen CI, et al. **Psychol Med** 1989 May;19(2):459-67
Psychiatric morbidity in the clients of social workers: clinical outcome. Huxley P, et al. **Psychol Med** 1989 Feb; 19(1):189-97
Community care for 20 psychiatrically disabled older men. Pryce IG, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):166-74
Why are foster-care programs not a part of everyday routine in psychiatric treatment? Schmidt-Michel PO, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):163-5
Psychiatric day hospitals—another route to institutionalization? Tantam D, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):96-101
A cross-cultural comparison of mental health care delivery in Athens and Groningen. ten Horn GH, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jan;24(1):35-40
[Social psychiatric therapeutic possibilities for long-term psychiatric patients] Thusholt FJ, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1544-9 (Eng. Abstr.) **(Dan)**
[Social service for ambulatory psychiatric patients. Or how one regards the mentally disturbed person in his social projection] Bessat-Kapp Y. **Rev Med Suisse Romande** 1988 Oct;108(10):827-9 **(Fre)**
[A patient, a therapist, a day center: some of their interactions] Chèvre MA, et al. **Rev Med Suisse Romande** 1988 Oct;108(10):847-53 **(Fre)**
[Psychiatrically ill criminals. Epidemiology and current practice of of implementing forensic psychiatric measures] Leygraf N. **Monogr Gesamtgeb Psychiatr (Berlin)** 1988; 53:1-274 **(Ger)**
[Social psychiatric management of chronic psychiatric patients] Brücher K. **Off Gesundheitswes** 1988 Aug-Sep; 50(8-9):516-20 (Eng. Abstr.) **(Ger)**
[Responsibilities and perspectives of social psychiatric services of public health offices] Crefeld W. **Off Gesundheitswes** 1988 Aug-Sep;50(8-9):539-46 (Eng. Abstr.) **(Ger)**
[The hospital nursing home as a partner and supplement of district neurology clinics] Donalies C. **Psychiatr Neurol Med Psychol Beih** 1988;39:24-5 **(Ger)**
[Ethical questions in the management of psychiatric patients] Späte HF. **Psychiatr Neurol Med Psychol Beih** 1988;39:26-7 **(Ger)**
[The significance of evaluative research for psychiatric management] Giercke K. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):704-11 (Eng. Abstr.) **(Ger)**
[Some developmental questions on the organization of psychiatric care in East Germany—25 years after Rodewisch] Uhle M, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):697-703 (Eng. Abstr.) **(Ger)**
[Psychosocial management of deaf patients] Baur FR. **Psychiatr Prax** 1988 Nov;15(6):213-7 (Eng. Abstr.) **(Ger)**
[Experiences in community social psychiatric ambulatory care] Hoffmann H, et al. **Psychiatr Prax** 1989 Jan;16(1):8-13 (Eng. Abstr.) **(Ger)**
[A progress report from institutional ambulatory care] Köhler-Offierski A. **Psychiatr Prax** 1989 Jan;16(1):14-8 (Eng. Abstr.) **(Ger)**
[Long-term psychiatric patients in the workplace—a survey of employers] Hubschmid T, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):145-8 (Eng. Abstr.) **(Ger)**
[Difficulties in the occupational incorporation of the mentally handicapped] Junge KH, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):149-51 (Eng. Abstr.) **(Ger)**
[The Rodewischer declarations 1963 and 1983—expression of the responsibility of the entire society for rehabilitation of psychiatric patients] Späte HF. **Z Gesamte Hyg** 1989 Feb;35(2):106-8 (Eng. Abstr.) **(Ger)**
[Crisis and personal autonomy in patients at psychiatric facilities in the Tuscan region] Ferrara M, et al. **Epidemiol Prev** 1987 Jun;9(31):25-30 (Eng. Abstr.) **(Ita)**
[Doctrinal and methodological premises of the implementation of a rehabilitation program in a psychogeriatric center] Morosini C. **G Gerontol Suppl** 1967; 37:5-55 (Eng. Abstr.) **(Ita)**
[Directives for the implementation of a rehabilitation program in a psychogeriatric center] Morosini C, et al. **G Gerontol Suppl** 1967;37:79-84 (Eng. Abstr.) **(Ita)**
[Current situation of psychiatric day care at university and college hospitals in Japan] Ueno T, et al. **Seishin Shinkeigaku Zasshi** 1988;90(5):436-46 **(Jpn)**
[The guiding of curative factors in rehabilitative psychiatric care] Chiriță V, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):485-7 (Eng. Abstr.) **(Rum)**
[Psychiatric rehabilitation in the community] Malm U, et al. **Lakartidningen** 1989 May 3;86(18):1696-701 **(Swe)**

SURGERY

Ethics of psychosurgery. Bouckoms AJ. **Acta Neurochir Suppl (Wien)** 1988;44:173-8
Psychosurgery today. Laitinen LV. **Acta Neurochir Suppl (Wien)** 1988;44:158-62 (16 ref.)
Ethics of functional neurosurgery. Ramamurthi B. **Acta Neurochir Suppl (Wien)** 1988;44:179-80
Experiences in psycho-surgery in The Netherlands. van Manen J, et al. **Acta Neurochir Suppl (Wien)** 1988;44:167-9

THERAPY

A comparison between patients admitted to psychiatric hospitals in Botswana and South Australia. Ben-Tovim DI, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):222-6
Utilization of psychiatric inpatient care. A study of changes related to the introduction of a sectorized care organization. Hansson L. **Acta Psychiatr Scand** 1989 Jun;79(6):571-8
Different types of partial hospitalization programs: results of a nationwide survey in The Netherlands. Schene AH, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):515-22
Patterns of care in the field of mental health. Conceptual definition and research methods. Sytema S, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):1-10 (16 ref.)
Psychotherapy research between process and effect: the need of new methodological approaches. Werbart A. **Acta Psychiatr Scand** 1989 Jun;79(6):511-22 (83 ref.)
A survey of referral activities of agencies serving adolescents. Reis J, et al. **Adolescence** 1988 Winter;23(92):847-62
Hypno-play therapy with adults: theory, method, and practice. Shapiro MK. **Am J Clin Hypn** 1988 Jul;31(1):1-10
Burnout and stress among employees at a state institution for mentally retarded persons. Caton DJ, et al. **Am J Ment Retard** 1988 Nov;93(3):300-4
Implications of involuntary outpatient commitment for community mental health agencies. Wilk RJ. **Am J Orthopsychiatry** 1988 Oct;58(4):580-91 (40 ref.)
Decision making in the emergency room [letter] Bengelsdorf H, et al. **Am J Psychiatry** 1989 Feb;146(2):291-2
The greening of the HMO: implications for prepaid psychiatry. Bennett MJ. **Am J Psychiatry** 1988 Dec; 145(12):1544-9 (23 ref.)
The academic dilemma of the inpatient unit director. Leibenluft E, et al. **Am J Psychiatry** 1989 Jan;146(1):73-6 (12 ref.)
Reimbursement for partial hospitalization: a survey and policy implications. Leibenluft E, et al. **Am J Psychiatry** 1988 Dec;145(12):1514-20
Treatment of the severely mentally ill poor [letter] Levenson AJ. **Am J Psychiatry** 1989 Sep;146(9):1232-3
Treatment opportunities on a consultation/liaison service. Lyons JS, et al. **Am J Psychiatry** 1988 Nov;145(11):1435-7
The chronically mentally ill, residency training, and psychiatry [editorial] Peszke MA. **Am J Psychiatry** 1989 Oct;146(10):1249-50
Financing the medical management of mental disorders. Sharfstein SS, et al. **Am J Psychiatry** 1989 Mar;146(3):345-9
Psychiatric services in jails and prisons: who cares? [editorial] Weinstein HC. **Am J Psychiatry** 1989 Sep;146(9):1094-5
Experiential confinement as a condition of psychological change. Wilner W. **Am J Psychoanal** 1989 Mar;49(1):51-66
Termination criteria in psychotherapy: a comparison of private and public practice. DeBerry S, et al. **Am J Psychother** 1989 Jan;43(1):43-53
Reframing to deal with patient resistance: practical application. LaClave LJ, et al. **Am J Psychother** 1989 Jan; 43(1):68-76
Specifics and nonspecifics in psychotherapy. Omer H. **Am J Psychother** 1989 Apr;43(2):181-92 (46 ref.)
Public and private responsibility for mental health services. Bickman L, et al. **Am Psychol** 1989 Aug;44(8):1133-7 (25 ref.)
Children's mental health problems and services. Current federal efforts and policy implications. Dougherty D. **Am Psychol** 1988 Oct;43(10):808-12 (29 ref.)
Children's mental health issues. Inouye DK. **Am Psychol** 1988 Oct;43(10):813-6
Psychology and self-help groups. Predictions on a partnership. Jacobs MK, et al. **Am Psychol** 1989 Mar; 44(3):536-45
Outpatient benefits for mental health services in Medicare. Alignment with the private sector? McGuire TG. **Am Psychol** 1989 May;44(5):818-24

Public and private responsibility for mental health services. A report on the Tennessee Task Force. Perkey B. **Am Psychol** 1989 Aug;44(8):1148–50

The challenge of double jeopardy. Toward a mental health agenda for aging women. Rodeheaver D, et al. **Am Psychol** 1988 Aug;43(8):648–54 (107 ref.)

Private-sector care for chronically mentally ill individuals. The more things change, the more they stay the same. Shadish WR Jr. **Am Psychol** 1989 Aug;44(8):1142–7 (50 ref.)

Privatization and the mental health system. A private sector view. Simons LS. **Am Psychol** 1989 Aug;44(8):1138–41 (14 ref.)

Psychotherapy. Can the practitioner learn from the researcher? Strupp HH. **Am Psychol** 1989 Apr;44(4):717–24

Mental health services for children. The state of the art. Tuma JM. **Am Psychol** 1989 Feb;44(2):188–99 (36 ref.)

The mental health care revolution. Will psychology survive? Zimet CN. **Am Psychol** 1989 Apr;44(4):703–8

A market analysis comparing the practices of psychiatrists and psychologists. Knesper DJ, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):305–14 (57 ref.)

Adopted children in psychotherapy. Deering CG, et al. **Arch Psychiatr Nurs** 1989 Apr;3(2):79–85

A descriptive study of seclusion: the unit environment, patient behavior, and nursing interventions. Kirkpatrick H. **Arch Psychiatr Nurs** 1989 Feb;3(1):3–9

Residents' evaluation of a therapeutic community. Gara A, et al. **Aust Clin Rev** 1989 Mar;8(32):211–6

A comparison of patients in private and public psychiatric facilities. Goldney RD, et al. **Aust Clin Rev** 1988 Sep; 8(30):117–23

Attitudes towards psychiatric hospitalisation: a comparison of involuntary and voluntary patients. Spence ND, et al. **Aust Clin Rev** 1988 Sep;8(30):108–16

Evaluating treatment effectiveness. Andrews G. **Aust N Z J Psychiatry** 1989 Jun;23(2):181–6 (10 ref.)

Community treatment orders [letter] Bartholomew AA. **Aust N Z J Psychiatry** 1989 Jun;23(2):162–3

Children admitted to adult psychiatric hospitals [letter] Bornstein D, et al. **Aust N Z J Psychiatry** 1988 Sep; 22(3):235

Psychiatry in the community [letter] Greenwood J. **Aust N Z J Psychiatry** 1989 Jun;23(2):163–4

A survey of patients in a regional geriatric psychiatry inpatient unit. Harrison AW, et al. **Aust N Z J Psychiatry** 1988 Dec;22(4):412–7

The psychiatric nurse in liaison psychiatry. Hicks S. **Aust N Z J Psychiatry** 1989 Mar;23(1):89–96

The Third World Congress of Behaviour Therapy. Edinburgh, Scotland, 5–10 September 1988. A selection of papers. **Behav Res Ther** 1988;26(5):369–439

Psychiatric morbidity of long stay hospital population [letter] **BMJ** 1988 Nov 19;297(6659):1334

Mentally abnormal prisoners on remand [letter] **BMJ** 1988 Aug 13;297(6646):483–4

Social security benefits for the mentally ill [editorial] Marks BE. **BMJ** 1988 Nov 5;297(6657):1148

I don't want you to see a psychiatrist [letter] Mynors-Wallis L. **BMJ** 1988 Dec 3;297(6661):1473

Mentally abnormal prisoners on remand [letter] Weller MP, et al. **BMJ** 1988 Aug 20-27;297(6647):559–60

I don't want you to see a psychiatrist [editorial] Wilkinson G. **BMJ** 1988 Nov 5;297(6657):1144–5

Some simple statistical tests for exploring single-case time-series data. Morley S, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):1–18

In-patients' views of the helpful aspects of group psychotherapy: impact of therapeutic style and treatment setting. Mushet GL, et al. **Br J Med Psychol** 1989 Jun;62 (Pt 2):135–41

A comparison of referrals to primary-care and hospital out-patient clinics. Brown RM, et al. **Br J Psychiatry** 1988 Aug;153:168–73

Nelson's syndrome and behavioural changes reversed by selective adenomectomy. Buckler HM, et al. **Br J Psychiatry** 1988 Mar;152:412–4

Factors influencing non-attendance at child psychiatry out-patient appointments. Cottrell D, et al. **Br J Psychiatry** 1988 Feb;152:201–4

Evaluation of treatment effectiveness in psychiatric research. Newcombe RG. **Br J Psychiatry** 1988 May;152:696–7

Psychiatric liaison referrals of elderly in-patients in a teaching hospital. Poynton AM. **Br J Psychiatry** 1988 Jan; 152:45–7

Psychotherapy of the elderly [letter] Sheikh AJ. **Br J Psychiatry** 1988 Oct;153:574–5

Community care. Turner T. **Br J Psychiatry** 1988 Jan;152:1–3 (43 ref.)

Referrals from general practitioners to psychiatrists and paramedical mental health professionals. Wilkinson G. **Br J Psychiatry** 1989 Jan;154:72–6

Rorschach correlates of treatment difficulty in a long-term psychiatric hospital. Colson DB, et al. **Bull Menninger Clin** 1989 Jan;53(1):52–7

Between patient and doctor. Improving the quality of care for serious mental illness. Glick ID, et al. **Bull Menninger Clin** 1989 May;53(3):193–202

Long-term treatment of chronically suicidal patients. Litman RE. **Bull Menninger Clin** 1989 May;53(3):215–28 (14 ref.)

Length of stay, short stay units and psychiatric emergency admissions. Baker B, et al. **Can J Psychiatry** 1989 Feb; 34(1):39–42

The psychiatric acute observation unit in a general hospital. Birnie WA, et al. **Can J Psychiatry** 1988 Nov;33(8):707–10

A clinical study of violence in patients referred on a Form I to a general hospital psychiatric unit. Cooper AJ. **Can J Psychiatry** 1988 Nov;33(8):711–5

Assaultive behaviour: before it happens.... Durivage A. **Can J Psychiatry** 1989 Jun;34(5):393–7 (37 ref.)

The 40 year evolution of the first modern day hospital. Goldman DL. **Can J Psychiatry** 1989 Feb;34(1):18–9

Peer review: empirical data base and practical implications. el-Guebaly N. **Can J Psychiatry** 1988 Oct;33(7):645–9 (29 ref.)

Psychiatric review boards and medical ethics [letter] Holden TJ. **Can J Psychiatry** 1988 Aug;33(6):570

Training residents to care for the mentally ill. Kates N, et al. **Can J Psychiatry** 1989 Apr;34(3):195–9

Characteristics of patients who receive electroconvulsive therapy. Malla AK. **Can J Psychiatry** 1988 Nov; 33(8):696–701

A psychiatric intensive care unit in a psychiatric hospital. Musisi SM, et al. **Can J Psychiatry** 1989 Apr;34(3):200–4

The position of the Canadian Psychiatric Association on Mental Health Legislation. Pankratz WJ. **Can J Psychiatry** 1988 Dec;33(9):859–63 **(Eng, Fre)**

Viewpoint: development of mental health services and psychiatry in Canada: lessons from the past: problems of the present; and the future. Roberts CA. **Can J Psychiatry** 1989 May;34(4):291–8

Psychiatric admission of mentally ill mothers with their infants. Stewart DE. **Can J Psychiatry** 1989 Feb;34(1):34–8

Psychiatric acute observation unit [letter] Warneke LB. **Can J Psychiatry** 1989 Apr;34(3):262

Reasons for non-attendance at a child guidance clinic. Nimgaonkar VL, et al. **Child Care Health Dev** 1988 Nov-Dec;14(6):387–93

The psychiatric hospitalization of children: an overview. Dalton R, et al. **Child Psychiatry Hum Dev** 1989 Summer; 19(4):231–44 (56 ref.)

The chronically mentally ill case management—more than a response to a dysfunctional system. Anthony WA, et al. **Community Ment Health J** 1988 Fall;24(3):219–28 (36 ref.)

Low-income blacks in community mental health: forming a treatment relationship. Snowden LR, et al. **Community Ment Health J** 1989 Spring;25(1):51–9

A philosopher examines theories of human behavior. Stephens GL. **Fam Med** 1985 Sep-Oct;17(5):215–8

Family therapy in trouble: psychoeducation as solution and as problem. Hunter DE, et al. **Fam Process** 1988 Sep; 27(3):327–38

The evaluation of a consultation-liaison service. Chandarana PC, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):378–81

Med-psych units. Financial viability and quality assurance. Fogel BS. **Gen Hosp Psychiatry** 1989 Jan;11(1):17–22

A proposal for standardization of psychiatric consultation-liaison data. Hengeveld MW, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):410–22

Psychiatric consultation in the family physician's office. Advantages and hidden benefits. Kates N. **Gen Hosp Psychiatry** 1988 Nov;10(6):431–7

Compliance with psychiatric referrals from a general hospital psychiatry outpatient clinic. Krulee DA, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):339–45

Who gets treated where. A study of patients transferred and not transferred from a consultation-liaison service to a general hospital psychiatry unit. Leibenluft E, et al. **Gen Hosp Psychiatry** 1989 May;11(3):182–6

Length of stay on a psychiatry-medicine unit. Young LD, et al. **Gen Hosp Psychiatry** 1989 Jan;11(1):31–5

Medicaid recipients and psychiatric treatment. Chun WK. **Hawaii Med J** 1989 Jun;48(6):221–2, 225–6, 229–30 passim

Role of Hawaii State Hospital in the care of the seriously disabled mentally ill. Gudeman H, et al. **Hawaii Med J** 1989 Mar;48(3):67–9

Citizens' groups rank Hawaii 51st in the nation. Imbeault B. **Hawaii Med J** 1989 Mar;48(3):60–2

Outpatient services to the seriously disabled mentally ill in Hawaii. Leland T, et al. **Hawaii Med J** 1989 Mar; 48(3):89–90

Hawaii's residential alternative for the seriously mentally disabled person. Lundstrom J, et al. **Hawaii Med J** 1989 Mar;48(3):85–6, 88

The first shall be last; but can the last be first? Mee-Lee D. **Hawaii Med J** 1989 Mar;48(3):93–4, 96–7

History of the care of the seriously disabled mentally ill in Hawaii. Takata A. **Hawaii Med J** 1989 Mar;48(3):62–4

The corrections department: the forgotten branch of the mental health system. Thorburn KM. **Hawaii Med J** 1989 Mar;48(3):91–2

Psychiatric clinics in different settings—default rates. Zegleman FE. **Health Bull (Edinb)** 1988 Sep;46(5):286–90

Determining provider choice for the treatment of mental disorder: the role of health and mental health status. Frank RG, et al. **Health Serv Res** 1989 Apr;24(1):83–103

Accreditation surveys [letter] **Hosp Community Psychiatry** 1988 Nov;39(11):1211–3

Admitting children to psychiatric hospitals: a controversy revived. Appelbaum PS. **Hosp Community Psychiatry** 1989 Apr;40(4):334–5

Factors associated with better compliance with psychiatric aftercare. Axelrod S, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):397–401

The legacy of model programs. Bachrach LL. **Hosp Community Psychiatry** 1989 Mar;40(3):234–5

Defining the service needs of homeless mentally ill persons. Belcher JR. **Hosp Community Psychiatry** 1988 Nov; 39(11):1203–5

Psychiatric services to nursing homes: a liaison model. Bienenfeld D, et al. **Hosp Community Psychiatry** 1989 Aug; 40(8):793–4

Outpatients view their psychiatric treatment. Conte HR, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):641–3

Confinement practices [letter] Eilers R. **Hosp Community Psychiatry** 1988 Oct;39(10):1109

Factors in rehospitalization [letter] Feldmann TB, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):891–2

Recent developments in the Grenada mental health program. Fisher FD, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):980–5

Projecting inpatient admissions to state facilities in the 1990s. Fisher WH, et al. **Hosp Community Psychiatry** 1989 Jul; 40(7):747–9

Families' perceptions of burden of care for chronic mentally ill relatives. Francell CG, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1296–300

A contemporary perspective on psychoanalytically informed hospital treatment. Gabbard GO. **Hosp Community Psychiatry** 1988 Dec;39(12):1291–5

Frequent rehospitalization and noncompliance with treatment. Green JH. **Hosp Community Psychiatry** 1988 Sep;39(9):963–6

The hospitalizable patient as commodity: selling in a bear market. Greenberg WM, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):184–5

Families of the seriously mentally ill and their satisfaction with services. Grella CE, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):831–5

Providing culturally relevant mental health services for Central American immigrants. Hall LK Sr. **Hosp Community Psychiatry** 1988 Nov;39(11):1139–40, 1144

Arrest rates of patients treated at a community mental health center. Harry B, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):862–6

Quality assurance [letter] Helmes E. **Hosp Community Psychiatry** 1989 Jul;40(7):755–6

A follow-up of chronic patients committed to outpatient treatment. Hiday VA, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):52–9

The couch and the cloth: the need for linkage. Larson DB, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1064–9

Nursing homes [letter] Loebel P, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):997–8

National trends in use of psychotherapy in psychiatric inpatient settings. McCarrick AK, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):835–41

A continuum of mental health care for children and adolescents. McKelvey RS. **Hosp Community Psychiatry** 1988 Aug;39(8):870–3

Current procedural terminology codes for psychiatric services. Margolis JA, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):625–9

Use of a holding technique to control the violent behavior of seriously disturbed adolescents. Miller D, et al. **Hosp Community Psychiatry** 1989 May;40(5):520–4

Community residential treatment for elderly psychiatric patients. Moreno C, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):743–5

Characteristics of community support program clients in 1980 and 1984. Mulkern VM, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):165–72

A partially computerized treatment plan. Ormiston S, et al. **Hosp Community Psychiatry** 1989 May;40(5):531–3

Psychotherapy research in the 1980s: defining areas of consensus and controversy. Piper WE. **Hosp Community Psychiatry** 1988 Oct;39(10):1055–63 (77 ref.)

A model of consultation in occupational psychiatry. Rigaud MC. **Hosp Community Psychiatry** 1989 Jul;40(7):745–7

The paradoxes of professional liability. Rubenstein LS. **Hosp Community Psychiatry** 1988 Aug;39(8):815

Nursing homes [letter] Rylee KE, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):650–1

Evaluation questions for Philadelphia's capitation plan for mental health services. Schinnar AP, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):681–3

Residential crisis services: a review. Stroul BA. **Hosp Community Psychiatry** 1988 Oct;39(10):1095–9 (25 ref.)

Maximizing the role of state legislators in the development of public mental health policy. Trupin E, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):637–8

Involuntary outpatient commitment in Arizona: a retrospective study. Van Putten RA, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):953–8

Quality assurance in mental health care. Zusman J. **Hosp Community Psychiatry** 1988 Dec;39(12):1286–90 (21 ref.)

Delivery of services in rural settings to the elderly mentally retarded-mentally ill. Menolascino FJ, et al. **Int J Aging Hum Dev** 1989;28(4):261–75

Predicting positive goal attainment and symptom reduction from early group climate dimensions. Braaten LJ. **Int J Group Psychother** 1989 Jul;39(3):377–87

Video self-portraits: a novel approach to group psychotherapy with young adults. Cox E, et al. **Int J Group Psychother** 1989 Apr;39(2):237-53

Applications of cognitive testing to group therapies with the chronically mentally ill. Erickson RC. **Int J Group Psychother** 1989 Apr;39(2):223-35

A comparative study of six different inpatient groups with respect to their basic assumption functioning. Karterud S. **Int J Group Psychother** 1989 Jul;39(3):355-76

Group therapy in a public sector psychiatric clinic. Weiner MF. **Int J Group Psychother** 1988 Jul;38(3):355-65

Common ground in psychoanalysis. Aims and clinical process. As I see it. Aslan CM. **Int J Psychoanal** 1989;70 (Pt 1):12-6

A shared view of the world. Goldberg A. **Int J Psychoanal** 1989;70 (Pt 1):16-20

That which patients bring to analysis. Rey JH. **Int J Psychoanal** 1988;69 (Pt 4):457-70

Unwelcome guests: bugbears of the emergency room physician. Adityanjee, et al. **Int J Soc Psychiatry** 1988 Autumn;34(3):196-9

The psychiatric reform in Italy: summing up and looking ahead. Basaglia FO. **Int J Soc Psychiatry** 1989 Spring; 35(1):90-7

General practitioner referrals to an ambulatory psychiatric service. The effects of establishing an ease of access service. Boardman AP, et al. **Int J Soc Psychiatry** 1988 Autumn; 34(3):172-83

Psychiatric referrals in a neuropsychiatric centre. Chaturvedi SK, et al. **Int J Soc Psychiatry** 1989 Summer;35(2):197-203

Italian psychiatry and reform law: a review of the international literature. De Girolamo G. **Int J Soc Psychiatry** 1989 Spring;35(1):21-37 (170 ref.)

The quality of psychiatric care since the reform law: the 'Censis' survey. Frisanco R. **Int J Soc Psychiatry** 1989 Spring;35(1):81-9

The reception of family therapy: a view from the psychiatric journals. Hajal F. **Int J Soc Psychiatry** 1988 Autumn; 34(3):184-95 (45 ref.)

Inter-relationships of beliefs about mental illness, psychiatric diagnoses and mental health care delivery among Africans. Ilechukwu ST. **Int J Soc Psychiatry** 1988 Autumn; 34(3):200-6

Community psychiatric care in Italy: the Rome example. MacDonald LD. **Int J Soc Psychiatry** 1989 Spring; 35(1):71-80

Implementing psychiatric reform in southern Italy: the case of Campania. Maj M, et al. **Int J Soc Psychiatry** 1989 Spring;35(1):46-53

The politics of reform: origins and enactment of the Italian 'experience'. Mangen S. **Int J Soc Psychiatry** 1989 Spring; 35(1):7-20

A critical appraisal of papers describing Italian psychiatric services. Morosini P. et al. **Int J Soc Psychiatry** 1989 Spring;35(1):110-9

The impact of the Italian psychiatric reforms on North American and British professionals. Ramon S. **Int J Soc Psychiatry** 1989 Spring;35(1):120-7

Methodological lessons from the Italian psychiatric experience. Saraceno B, et al. **Int J Soc Psychiatry** 1989 Spring;35(1):98-109

Regional analysis of implementation. Tognoni G, et al. **Int J Soc Psychiatry** 1989 Spring;35(1):38-45

The relationship of psychiatry to the other branches of medicine. Greben SE. **Isr J Psychiatry Relat Sci** 1988; 25(2):65-77

A review of the literature on family therapy with adolescents 1979-1987. Breunlin DC, et al. **J Adolesc** 1988 Dec; 11(4):309-34 (131 ref.)

Reasons for admission to an adolescent unit. Jaffa T, et al. **J Adolesc** 1989 Jun;12(2):187-95

Changes in inpatient psychiatry [letter] Carrey NJ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):455

Changes in inpatient child psychiatry: consequences and recommendations. Jemerin JM, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):397-403 (35 ref.)

Use of a quiet room on an inpatient unit. Joshi PT, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):642-4

Community treatment of violent youth: seven years of experience with a class action suit. Keith CR. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):600-4

Goal-directed treatment planning and the principles of brief hospitalization. Nurcombe B. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):26-30

The AACAP and hospitalization for children and adolescents [letter] Pruitt DB, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):136-7

Behavior therapy with children and adolescents: a twenty-year overview. Werry JS, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):1-18 (171 ref.)

Transactional risk model for short and intermediate term psychiatric inpatient treatment of children. Woolston JL. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):38-41

Issues in child and adolescent psychiatric hospitalization. Woolston JL. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):20

The mentally ill student on campus: theory and practice. Hoffmann FL, et al. **J Am Coll Health** 1989 Jul;38(1):15-20

An inventory to measure knowledge of behavioral methods with inpatient adults. McKeegan GF, et al. **J Behav Ther Exp Psychiatry** 1988 Sep;19(3):229-36

IQ as a prognostic indicator in adult psychiatric first-admissions. Greenwald DF, et al. **J Clin Psychol** 1989 Jan;45(1):37-50

The MCMI-II as a treatment outcome measure for psychiatric inpatients. Piersma HL. **J Clin Psychol** 1989 Jan;45(1):87-93

The accuracy of therapists' interpretations and the outcome of dynamic psychotherapy. Crits-Christoph P, et al. **J Consult Clin Psychol** 1988 Aug;56(4):490-5

An introduction to survival analysis: statistical methods for analysis of clinical trial data. Greenhouse JB, et al. **J Consult Clin Psychol** 1989 Aug;57(4):536-44

Power to detect differences between alternative treatments in comparative psychotherapy outcome research. Kazdin AE, et al. **J Consult Clin Psychol** 1989 Feb;57(1):138-47

A strategy to use soft data effectively in randomized controlled clinical trials. Kraemer HC, et al. **J Consult Clin Psychol** 1989 Feb;57(1):148-54

The Psychotherapy Research Project of the Menninger Foundation: an overview. Wallerstein RS. **J Consult Clin Psychol** 1989 Apr;57(2):195-205

Characteristics of elderly patients admitted for the first time to a psychiatric facility. Burke WJ, et al. **J Geriatr Psychiatry Neurol** 1988 Jul-Sep;1(3):159-62

Adolescent dual diagnosis: a 12-step transformational model. Chatlos JC. **J Psychoactive Drugs** 1989 Apr-Jun; 21(2):189-201 (65 ref.)

Legal vulnerabilities in the treatment of chemically dependent dual diagnosis patients. Clark HW, et al. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):251-7

Psychopathology and substance abuse: what is being learned from research in therapeutic communities. De Leon G. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):177-88 (36 ref.)

Impediments to effective treatment of the dually diagnosed patient. Wallen MC, et al. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):161-8 (16 ref.)

Dual diagnosis patients in the urban psychiatric emergency room. Wolfe HL, et al. **J Psychoactive Drugs** 1989 Apr-Jun; 21(2):169-75

Multi-family meetings on the psychiatric unit. Harter L. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):18-22 (15 ref.)

Care of elderly people with mental illness. Specialist services and medical training. **J R Coll Physicians Lond** 1989 Apr; 23(2):79-81

Inpatient psychiatric units in nonteaching general hospitals. Response to public mental health policy or hospital economics? Camberg LC, et al. **Med Care** 1989 Feb; 27(2):130-9

Use of mental health services and persistence of emotional distress. An exploratory analysis. Frank RG. **Med Care** 1988 Dec;26(12):1203-15

General practitioners' recognition and management of psychiatric illness. McNamara K, et al. **Med J Aust** 1989 Sep 4;151(5):250-1, 254-7

Mental health care and the law in developing countries: the independent state of Papua New Guinea. Attah Johnson FY. **Med Law** 1988;7(4):359-63

Psychological services for persons with mental retardation and psychiatric impairments. Jacobson JW, et al. **Ment Retard** 1989 Feb;27(1):33-6

The treatment of severe behavior disorders: behavior analysis approaches. **Monogr Am Assoc Ment Retard** 1989; (12):1-190

Psychotherapy: one perspective. Vernon CR. **N C Med J** 1988 Oct;49(10):519-20

In defence of the psyche. Bragan K. **N Z Med J** 1989 Jan 25;102(860):10-1

User pays in the mental health service--256 discharges from Ashburn Hall. Dixon GS, et al. **N Z Med J** 1989 Aug 23;102(874):437-40

Serving the chronically mentally ill in an urban setting. The Massachusetts Mental Health Center experience. **New Dir Ment Health Serv** 1988 Fall;(39):1-107

A comprehensive private-practice approach to treating the chronically mentally ill. Deutschman DA. **New Dir Ment Health Serv** 1989 Summer;(42):75-80

The day hospital/inn model. Gudeman JE. **New Dir Ment Health Serv** 1988 Fall;(39):7-16

The day hospital. Rodriguez-Villa F, et al. **New Dir Ment Health Serv** 1988 Fall;(39):33-40

The intensive care unit. Rood L. **New Dir Ment Health Serv** 1988 Fall;(39):41-7

Organizing the system. Shore MF. **New Dir Ment Health Serv** 1988 Fall;(39):17-24

Treatment validity: an approach to evaluating the quality of assessment. Hayes SC. **NIDA Res Monogr** 1988; 77:113-27

Dog day afternoons. Athy D. **Ohio Med** 1989 Mar; 85(3):177-9

Psychiatric emergencies in general practice. Heard S, et al. **Practitioner** 1988 Aug;232(1453):857-60

Recent advances in psychology which affect general practice. Tomson P. **Practitioner** 1987 Oct 22;231(1437):1377-8, 1381-2

Discharges AMA and AWOL: a new "revolving door syndrome". Chandrasena R, et al. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):154-7

Lifetrack therapy. Ishizuka Y. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):198-207

Factors influencing outpatient attrition. Rapaport MH, et al. **Psychiatr Med** 1988;6(4):41-54

Clinical management of psychiatric disorders in HIV spectrum disease. Wolcott DL, et al. **Psychiatr Med** 1989; 7(2):107-27 (28 ref.)

Clinical and demographic characteristics of chronic inpatients: implication for treatment and research. Barber JW, et al. **Psychiatr Q** 1988 Winter;59(4):257-70

Ethical considerations of clinical use of Miranda-like warnings. Leong GB, et al. **Psychiatr Q** 1988 Winter; 59(4):293-305

Emergency room dispositions of professionally referred psychiatric patients. Olfson M. **Psychiatr Q** 1988 Fall; 59(3):225-34

Litigating a right to treatment: Woe is me. Rachlin S. **Psychiatr Q** 1988 Fall;59(3):182-92

Outpatient compliance of psychiatric emergency room patients by presenting problems. Solomon P, et al. **Psychiatr Q** 1988 Winter;59(4):271-83

E pluribus unum: striking back at disunity. Talbott JA. **Psychiatr Q** 1988 Winter;59(4):247-56

Assessment of therapeutic alliances in the psychiatric hospital milieu. Allen JG, et al. **Psychiatry** 1988 Aug;51(3):291-9

The catalytic function in psychotherapy. Bennett MJ. **Psychiatry** 1989 Aug;52(3):351-64

Scales to assess the emphasis of psychiatric hospital treatment. Colson DB, et al. **Psychiatry** 1988 Aug; 51(3):281-90

Countertransference and psychoanalytic technique. Abend SM. **Psychoanal Q** 1989 Jul;58(3):374-95 (41 ref.)

Psychoanalytic cure. Compton A. **Psychoanal Rev** 1988 Summer;75(2):217-29 (21 ref.)

Aspects of psychoanalytic cure. Marcus DM. **Psychoanal Rev** 1988 Summer;75(2):231-43

Placebos and common factors in two decades of psychotherapy research. Horvath P. **Psychol Bull** 1988 Sep; 104(2):214-25 (132 ref.)

Specialist mental health treatment in general practice: a meta-analysis. Balestrieri M, et al. **Psychol Med** 1988 Aug; 18(3):711-7 (35 ref.)

Differential effects of imipramine and behavior therapy on panic disorder with agoraphobia. Mavissakalian M. **Psychopharmacol Bull** 1989;25(1):27-9 (19 ref.)

Thoughts on patient care and the Emperor's New Clothes. Castelnuovo-Tedesco P. **Psychosomatics** 1989 Summer; 30(3):318-21

Geriatric psychiatry patients' care by primary care physicians. Thompson TL 2d, et al. **Psychosomatics** 1989 Winter;30(1):65-72

Assessment for three different forms of short-term dynamic psychotherapy. Findings from the Bergen Project. Barth K, et al. **Psychother Psychosom** 1988;49(3-4):153-9

Medical-psychiatric service. Fava GA. **Psychother Psychosom** 1987;48(1-4):96-100 (20 ref.)

Time and its relevance for a successful psychotherapy. Kordy H, et al. **Psychother Psychosom** 1988;49(3-4):212-22

Multidisciplinary teams in consultation-liaison psychiatry: the Yale model. Leigh H. **Psychother Psychosom** 1987; 48(1-4):83-9

Developments in liaison psychiatry in the United Kingdom. Lloyd GG. **Psychother Psychosom** 1987;48(1-4):90-5 (24 ref.)

Using treatment plans for quality assurance monitoring in a residential center. Price SB, et al. **QRB** 1988 Sep; 14(9):266-74

The family, the patient, and the psychiatric hospital: toward a new model. Group for the Advancement of Psychiatry. **Rep Group Adv Psychiatry** 1985;117:1-89

Bridging the two cultures of dual diagnosis: research and service. Keys CB, et al. **Res Dev Disabil** 1989;10(3):277-84 (12 ref.)

The effect of therapy on the mental health of the elderly. Burckhardt CS. **Res Nurs Health** 1987 Aug;10(4):277-85 (46 ref.)

On characterizing new psychiatric long-stay patients. Jakubaschk J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):88-95

Patterns and correlates of psychiatric hospitalization in a nationwide sample. I. Patterns of hospitalization with special reference to the "new chronic" patients. Lerner Y, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 May; 24(3):121-6

Involuntary admissions in a Canadian province: the influence of geographic and population factors. Malla A, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):247-51

International consultation and the homogenization of psychiatry in Southeast Asia. Higginbotham N, et al. **Soc Sci Med** 1988;27(5):553-61

Physical treatments in psychiatry: current and historical use in the southern United States. McCall WV. **South Med J** 1989 Mar;82(3):345-51 (23 ref.)

Ethical issues in psychiatry and occupational medicine. Larsen RC. **State Art Rev Occup Med** 1988 Oct-Dec; 3(4):719-26 (15 ref.)

The EAP and workplace psychiatric injury. Lawton B. **State Art Rev Occup Med** 1988 Oct-Dec;3(4):695-706 (18 ref.)

New nursing home law creates confusion. **Wis Med J** 1989 Apr;88(4):44

Laying foundations for improved care of the mentally ill. Saraceno B, et al. **World Health Forum** 1988;9(4):542-5

[A differentiated approach in the treatment of psychological disorders] Kučerová H. **Cas Lek Cesk** 1989 Apr 14;

128(16):485–6 (Eng. Abstr.) (Cze)
[The epilogue or the finale of human life? Thoughts and experience on the possibilities of psychotherapy in geriatrics] Smitka V, et al. **Cas Lek Cesk** 1988 Aug 12; 127(33):1043–5 (Cze)
[Intensive care in psychiatry. II. The link between intensive psychiatry care and somatic care] Havluj J, et al. **Cesk Psychiatr** 1988 Oct;84(5):347–53 (Cze)
[The role of the community physician in the care of persons with mental disorders] Snajdr J. **Cesk Psychiatr** 1989 Feb; 85(1):31–6 (Eng. Abstr.) (Cze)
[Electrostimulation in psychiatry (editorial)] Bolwig TG. **Ugeskr Laeger** 1988 Dec 5;150(49):3025–6 (Dan)
[Evaluation of treatment at the Copenhagen County Hospital, Stolpegård. A study of psychotherapeutic effects] Haahr U, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2726–32 (Eng. Abstr.) (Dan)
[Methods of evaluating community psychiatric services. Outpatient and inpatient treatment in psychiatric hospital services] Lindhardt A, et al. **Ugeskr Laeger** 1988 Sep 26; 150(39):2343–7 (Eng. Abstr.) (Dan)
[The legal status of voluntarily admitted psychiatric patients (published erratum appears in Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2392)] Legemaate J. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2167–70 (Dut)
[The Statement on Psychogeriatric Diseases; advice from the Public Health Council] Stolk PJ. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1963–5 (Dut)
[The legal position of the voluntarily admitted psychiatric patient] Stolk PJ. **Ned Tijdschr Geneeskd** 1988 Nov 19; 132(47):2139–41 (Dut)
[Multidisciplinary management in a (semi)residential child psychiatric setting] Verheij F, et al. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):260–3 (Dut)
[The Belgian Law of Social Defense: its drawbacks and a viewpoint of possible realization] Paquay HJ, et al. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):20–7 (Eng. Abstr.) (Fre)
[The place of the patient or the misfortune of the institution] Chanoit PF. **Ann Med Psychol (Paris)** 1988 May; 146(5):405–19 (Eng. Abstr.) (Fre)
[Physician, family, mayor and prefect confronting the 1838 law, or, the abusive lack of confinement] Gayda M, et al. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):846–9 (Fre)
[Erickson's hypnosis] Meggle D. **Ann Med Psychol (Paris)** 1988 Apr;146(4):311–24 (26 ref.) (Eng. Abstr.) (Fre)
[Opinion: informed consent and mental capacity in clinical psychiatric practice (a Quebec perspective)] Morrison D. **Can J Psychiatry** 1989 Mar;34(2):110–4 (49 ref.) (Eng. Abstr.) (Fre)
[Referral to the psychiatrist] De Coulon N. **Rev Med Suisse Romande** 1988 Oct;108(10):831–4 (Fre)
[The body, the soul, the physician] Fadda S. **Rev Med Suisse Romande** 1988 Oct;108(10):815–8 (Fre)
[Activities at a crisis center. The center for therapeutic intervention] Midi M, et al. **Rev Med Suisse Romande** 1988 Oct;108(10):835–8 (Fre)
[The function of a community hospital: justification and illustration] Söderström D. **Rev Med Suisse Romande** 1988 Oct;108(10):839–42 (Fre)
[The effectiveness of ambulatory psychiatric management. A model for the evaluation of extramural services] an der Heiden W, et al. **Monogr Gesamtgeb Psychiatr (Berlin)** 1989;56:1–172 (300 ref.) (Ger)
[Indications and duration of secured psychiatric treatment in relation to the legally determined length of stay] Bunse J. **Nervenarzt** 1989 Apr;60(4):233–5 (Ger)
[3 types of inpatient psychiatric management—a statistical comparison] Bruns G. **Off Gesundheitswes** 1989 Jan; 51(1):17–20 (Eng. Abstr.) (Ger)
[Contemporary organization and necessary scope of community social psychiatric service (exemplified by North Rhine Westphalia)] Creutz R. **Off Gesundheitswes** 1989 Jul; 51(7):340–8 (Eng. Abstr.) (Ger)
[Report of experiences with a model for the assessment of long-term inpatient psychiatric cases in a large city by the appointed public health service—the Berlin model for long-term psychiatric patients] Lieske V. **Off Gesundheitswes** 1988 Jul;50(7):389–91 (Eng. Abstr.) (Ger)
[Holding therapy] Störmer N, et al. **Prax Kinderpsychol Kinderpsychiatr** 1988 Nov;37(9):326–33 (25 ref.) (Eng. Abstr.) (Ger)
[Psychiatry and neurology in basic medical care. Proceedings of the meeting of the East German Society of Psychiatry and Neurology with international participation. 26–29 October 1986, Neubrandenburg] **Psychiatr Neurol Med Psychol Beih** 1988;39:1–116 (Ger)
[Basic, specialized and highly specialized care in the specialties of psychiatry and neurology] Dinger W, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:16–21 (Ger)
[The relation of basic management and intensive care in clinical neurology] Schulze HA. **Psychiatr Neurol Med Psychol Beih** 1988;39:13–6 (Ger)
[Foreign citizens as patients at a psychiatric clinic] Postrach F. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jul; 41(7):392–9 (Eng. Abstr.) (Ger)
[The causality principle of psychotherapy and supportive methods in group psychotherapy—reflections on the principles of method combinations] Röhrborn H. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Aug; 40(8):449–55 (9 ref.) (Eng. Abstr.) (Ger)
[Experience and interpretation—psychoanalysis in psychiatry] Bruns G. **Psychiatr Prax** 1988 Sep;15(5):155–9 (Eng. Abstr.) (Ger)
[Comments on electroconvulsive treatment from the viewpoint of the psychotherapy-oriented psychiatrist] Eichhorn H. **Psychiatr Prax** 1989 Jul;16(4):148–50 (Eng. Abstr.) (Ger)
[Indirect forms of iatrogenic violence in clinical psychiatry] Hinrichs R. **Psychiatr Prax** 1988 Sep;15(5):165–70 (Eng. Abstr.) (Ger)
[The patient care team—experiences with a problematic therapeutic interaction figure in psychiatry] Kisker KP. **Psychiatr Prax** 1988 Sep;15(5):149–54 (Eng. Abstr.) (Ger)
[2 to 3 years following inpatient crisis intervention: further inpatient treatment, present adjustment and subjective assessment of the index treatment in retrospect] Kolitzus H, et al. **Psychiatr Prax** 1989 Mar;16(2):71–7 (Eng. Abstr.) (Ger)
[The psychiatric facility and AIDS] Weymar W. **Psychiatr Prax** 1989 May;16(3):97–100 (Eng. Abstr.) (Ger)
[Representation of interactional configurations using process-accompanying semantic differentials] Geyer M, et al. **Psychother Psychosom Med Psychol** 1988 Jun; 38(6):211–7 (Eng. Abstr.) (Ger)
[Relapse in psychotherapy] Hambrecht M. **Psychother Psychosom Med Psychol** 1988 Dec;38(12):425–9 (33 ref.) (Eng. Abstr.) (Ger)
[Psycho-ecologic aspects of supportive psychotherapy] Willi J. **Psychother Psychosom Med Psychol** 1989 Jul; 39(7):225–31 (32 ref.) (Eng. Abstr.) (Ger)
[The practicing psychiatrist] Conne R. **Schweiz Arch Neurol Psychiatr** 1989;140(3):205–13 (Ger)
[Demographic determinants in using a psychiatric polyclinic] Keel PJ. **Schweiz Arch Neurol Psychiatr** 1988;139(5):75–88 (Eng. Abstr.) (Ger)
[Individualization as a social problem] Lüscher K. **Schweiz Arch Neurol Psychiatr** 1989;140(3):219–27 (Ger)
[Therapy evaluation in child and adolescent psychiatry: inpatient treatment, day care treatment and home treatment in comparison] Remschmidt H, et al. **Z Kinder Jugendpsychiatr** 1988 Sep;16(3):124–34 (Eng. Abstr.) (Ger)
[Psychotherapeutic processes—regarding the difficulty in explaining psychotherapeutic changes] Bastine R. **Z Klin Psychol Psychopathol Psychother** 1988; 36(4):296–307 (42 ref.) (Eng. Abstr.) (Ger)
[Use of services and treatment profile after the Psychiatric Reform Act] Bollini P, et al. **Epidemiol Prev** 1987 Jun; 9(31):31–4 (Ita)
[The experience of aging at a long-stay therapeutic community for psychiatric patients] Chinni C. **Minerva Psichiatr** 1988 Jan–Mar;29(1):13–5 (Eng. Abstr.) (Ita)
[Psychiatric home treatment as an alternative to hospitalization. Review of the research studies] Ciszewski L. **Psychiatr Pol** 1988 Sep–Oct;22(5):382–6 (8 ref.) (Pol)
[Psychiatric home treatment as an alternative of hospitalization. Review of the programs] Ciszewski L. **Psychiatr Pol** 1988 Sep–Oct;22(5):374–81 (34 ref.) (Pol)
[Experience in using reflexotherapy in the combined treatment of mental diseases] Kariukhina VS, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):25–8 (Eng. Abstr.) (Rus)
[Reflexotherapy of the mentally ill (a review)] Poliakov SE, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):133–7 (50 ref.) (Rus)
[The appropriate social network: an operative instrument for the evaluation of indications for psychiatric hospitalization] Graña DO, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Mar; 34(1):69–74 (Eng. Abstr.) (Spa)
[What is healing?] Saubidet RO. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):109–12 (Eng. Abstr.) (Spa)
[Family therapy often has a good effect on psychiatric problems] Hansson K, et al. **Lakartidningen** 1989 Feb 22; 86(8):621–3 (Swe)
[Activities of Balint groups—a way to survive] Silfverskiöld P. **Lakartidningen** 1989 Jul 26;86(30–31):2606–9 (Eng. Abstr.) (Swe)

MENTAL DISORDERS, ORGANIC see **ORGANIC MENTAL DISORDERS**

MENTAL DISORDERS, ORGANIC, PSYCHOTIC see **ORGANIC MENTAL DISORDERS, PSYCHOTIC**

MENTAL DISORDERS, ORGANIC, SUBSTANCE-INDUCED see **ORGANIC MENTAL DISORDERS, SUBSTANCE-INDUCED**

MENTAL HEALING

Salmonella arizona infections associated with ingestion of rattlesnake capsules [letter] Fleischman S, et al. **Arch Intern Med** 1989 Mar;149(3):701, 705
Spiritual aid for dying patients. Hebard AC. **Iowa Med** 1988 Aug;78(8):365–6
Family practice patients' experiences and beliefs in faith healing [see comments] King DE, et al. **J Fam Pract** 1988 Nov;27(5):505–8. **Comment in:** J Fam Pract 1989 May;28(5):624–5
A modern-day shamanistic healer in the Peruvian Amazon: pharmacopoeia and trance. Dobkin de Rios M. **J Psychoactive Drugs** 1989 Jan–Mar;21(1):91–9
A cross-cultural study of shamanistic healers. Winkelman M. **J Psychoactive Drugs** 1989 Jan–Mar;21(1):17–24 (6 ref.)
Faith, hope, and love in medicine. John CC. **Pharos** 1988 Fall;51(4):12–7
Ambiguity, synecdoche and affect in Semai medicine. Dentan RK. **Soc Sci Med** 1988;27(8):857–77
Symbolic, ritual and social dynamics of spiritual healing. Glik DC. **Soc Sci Med** 1988;27(11):1197–206
Supernaturalist curers and sorcery accusations in Thailand. Golomb L. **Soc Sci Med** 1988;27(5):437–43 (17 ref.)
The drum is the shaman, the spear guides his voice. Hoskins J. **Soc Sci Med** 1988;27(8):819–28
Healing thyself: a Korean shaman's afflictions. Kendall L. **Soc Sci Med** 1988;27(5):445–50
Wayward winds: Malay archetypes, and theory of personality in the context of shamanism. Laderman C. **Soc Sci Med** 1988;27(8):799–810
Hegemony and healing in rural North Yemen. Myntti C. **Soc Sci Med** 1988;27(5):515–20
On the specificity of healing functions: a study of diagnosis in three faith healing institutions in Feira (Bahia, Brazil). Ngokwey N. **Soc Sci Med** 1989;29(4):515–26
The semiotics of ritual healing in a North Indian Muslim shrine. Pfleiderer B. **Soc Sci Med** 1988;27(5):417–24
The pragmatics of aesthetics: the performance of healing among Senoi Temiar. Roseman M. **Soc Sci Med** 1988; 27(8):811–8
Severing the bonds of love: a case study in soul loss. Steedly MM. **Soc Sci Med** 1988;27(8):841–56
From Mantra to Matarâa: opacity and transparency in the language of Tobelo magic and medicine (Halmahera Island, Indonesia). Taylor PM. **Soc Sci Med** 1988;27(5):425–36 (24 ref.)
Healing boundaries in south Kalimantan. Tsing AL. **Soc Sci Med** 1988;27(8):829–39
Religion and medicine [letter] Kreisman S. **South Med J** 1988 Dec;81(12):1598

HISTORY

Word magic and the rhetoric of common sense: Erickson's metaphors for mind. Kirmayer LJ. **Int J Clin Exp Hypn** 1988 Jul;36(3):157–72
C. G. Jung and the shaman's vision. Groesbeck CJ. **J Anal Psychol** 1989 Jul;34(3):255–75
Robert Burton and psychological healing. Jackson SW. **J Hist Med Allied Sci** 1989 Apr;44(2):160–78
Medicine in the time of Saint Cuthbert. Weaver LT. **Perspect Biol Med** 1989 Spring;32(3):387–97
[Ancient mental healing and cognitive behavior therapy in comparison] Hoellen B, et al. **Z Klin Psychol Psychopathol Psychother** 1988;36(3):255–67 (Eng. Abstr.) (Ger)

MENTAL HEALTH

Infant care: a good start for mental health. Proceedings of a symposium. Finland, September 7–8, 1987. **Acta Paediatr Scand Suppl** 1988;344:1–105
Infant care: a good start for mental health. Forsius H. **Acta Paediatr Scand Suppl** 1988;344:5–7
Mental health in young people in relation to child welfare and institutional care in childhood. Almqvist F. **Acta Psychiatr Scand** 1988 Jul;78(1):41–8
Mental and physical health of elderly people: five-year follow-up of a total population. Jagger C, et al. **Age Ageing** 1989 Mar;18(2):77–82 (17 ref.)
Resilient children, psychological wellness, and primary prevention. Cowen EL, et al. **Am J Community Psychol** 1988 Aug;16(4):591–607 (90 ref.)
The role of self-understanding in resilient individuals: the development of a perspective. Beardslee WR. **Am J Orthopsychiatry** 1989 Apr;59(2):266–78
The meaning of culturally sensitive research in mental health. Rogler LH. **Am J Psychiatry** 1989 Mar;146(3):296–303
Comparison of psychologic and cognitive functions after general or regional anesthesia. Ghoneim MM, et al. **Anesthesiology** 1988 Oct;69(4):507–15
Prevention and the field of mental health: a psychiatric perspective. Pardes H, et al. **Annu Rev Public Health** 1989; 10:403–22 (54 ref.)
The effects of insurance generosity on the psychological distress and psychological well-being of a general population. Wells KB, et al. **Arch Gen Psychiatry** 1989 Apr; 46(4):315–20
Closing the gap between grand theory and mental health practice with families. Part 2: The control-congruence model for mental health nursing of families. Friedemann ML. **Arch Psychiatr Nurs** 1989 Feb;3(1):20–8
Martial arts and psychological health. Fuller JR. **Br J Med Psychol** 1988 Dec;61 (Pt 4):317–28 (45 ref.)
A prospective longitudinal study of social, psychological and obstetric factors in pregnancy: response rates and demographic characteristics of the 8556 respondents. Keeping JD, et al. **Br J Obstet Gynaecol** 1989 Mar;

96(3):289–97
Psychosocial factors causing specificity of work at sea. Nitka J, et al. **Bull Inst Marit Trop Med Gdynia** 1987; 38(3–4):193–8
International Conference on Promoting the Mental health of Children and Youth. Papers and subplenary summaries. October 1987, Ottawa, Ontario. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S1–61 (Eng, Fre)
Mental health for Canadians: striking a balance. Authority of the Minister of National Health and Welfare. **Can J Public Health** 1988 Sep–Oct;79(5):327–72 (Eng, Fre)
Addressing youth and family vulnerability: empowerment in an ecological context. Cochran M. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S10–6 (Eng, Fre)
Promoting the mental health of children and youth: foundation for the future. Epp J. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S6–9 (Eng, Fre)
Health promotion strategies: keynote address. Sartorius N. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S3–5 (Eng, Fre)
The state and mental health of the children of the world. Wilson L. **Can J Public Health** 1988 Nov–Dec;79 Suppl 2:S29–33 (Eng, Fre)
Interdisciplinary issues in mental health and aging. Santos JF, et al. **Gerontol Geriatr Educ** 1989;9(3):1–6
A mental health training program in nursing homes. Chartock P, et al. **Gerontologist** 1988 Aug;28(4):503–7
Determining provider choice for the treatment of mental disorder: the role of health and mental health status. Frank RG, et al. **Health Serv Res** 1989 Apr;24(1):83–103
Mental health research: the need for collaboration [editorial] Shore JH. **Hosp Community Psychiatry** 1989 Apr;40(4):333
Effect of mid-day meal programme on physical growth & mental function. Agarwal DK, et al. **Indian J Med Res** 1989 Jun;90:163–74
The effect of Medicaid policy on mental health and poverty. Frank RG, et al. **Inquiry** 1989 Summer;26(2):283–90
Mental health and the labor force participation of older workers. Mitchell JM, et al. **Inquiry** 1989 Summer; 26(2):262–71
The effects of the transcendental mediation technique and progressive muscle relaxation on EEG coherence, stress reactivity, and mental health in black adults. Gaylord C, et al. **Int J Neurosci** 1989 May;46(1–2):77–86
Rethinking the approach to evaluating mental functioning of older persons. The value of careful observations. Jones TV, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1128–34
Four illustrations of healthy personality: a prescription for living the good life. Hightower E. **J Clin Psychol** 1988 Jul;44(4):527–35
Mental health consultation and referral [letter] Wagner CM. **J Fam Pract** 1988 Nov;27(5):462
Dimensions of the OARS mental health measures. Liang J, et al. **J Gerontol** 1989 Sep;44(5):P127–38
The effects of women's employment: personal control and sex differences in mental health. Rosenfield S. **J Health Soc Behav** 1989 Mar;30(1):77–91
Race, socioeconomic status, and psychological distress: an examination of differential vulnerability. Ulbrich PM, et al. **J Health Soc Behav** 1989 Mar;30(1):131–46
Short-term psychological outcome of anterior temporal lobectomy. Hermann BP, et al. **J Neurosurg** 1989 Sep; 71(3):327–34
Characterizing healthy adolescent development; distinguishing it from possible disturbances [news] Zylke JW. **JAMA** 1989 Aug 18;262(7):880–1
Use of mental health services and persistence of emotional distress. An exploratory analysis. Frank RG. **Med Care** 1988 Dec;26(12):1203–15
Effect of social change on the behavior of school-age children. A transcultural perspective. Minde KK. **Pediatrician** 1988;15(3):170–5 (31 ref.)
Pattern of psychological fitness as related to pattern of physical fitness among older adults. Netz Y, et al. **Percept Mot Skills** 1988 Oct;67(2):647–55
Relations between physical activity, weight discrepancies, body-cathexis, and psychological well-being in college women. Seggar JF, et al. **Percept Mot Skills** 1988 Oct; 67(2):659–69
The mental health advantages of twinship. Anderson ML. **Perspect Psychiatr Care** 1985;23(3):114–6
The effect of therapy on the mental health of the elderly. Burckhardt CS. **Res Nurs Health** 1987 Aug;10(4):277–85 (46 ref.)
Unemployment, mental health and the psychological functions of work in male welfare clients in Stockholm. Isaksson K. **Scand J Soc Med** 1989;17(2):165–9
Unemployment, re-employment and mental well-being. A panel survey of industrial jobseekers in Finland. Lahelma E. **Scand J Soc Med Suppl** 1989;43:1–170 (203 ref.)
Stanford inquiry casts doubt on 11 papers [news] Norman C. **Science** 1988 Nov 4;242(4879):659–61
A programme of mental health for political refugees: dealing with the invisible pain of political exile. Barudy J. **Soc Sci Med** 1989;28(7):715–27 (26 ref.)
Life experiences, response styles and mental health among mothers and children in Beirut, Lebanon. Bryce JW, et al. **Soc Sci Med** 1989;28(7):685–95
The impacts of positive psychological states on physical health: a review and theoretical framework. Edwards JR, et al. **Soc Sci Med** 1988;27(12):1447–59 (121 ref.)
Gender differences in the perception and utilization of social support: theoretical perspectives and an empirical test. Flaherty J, et al. **Soc Sci Med** 1989;28(12):1221–8
What diagnosis does not tell: the case for a noncategorical approach to chronic illness in childhood. Stein RE, et al. **Soc Sci Med** 1989;29(6):769–78
Progress in mental health [editorial] Weiner MF. **Tex Med** 1988 Sep;84(9):5
What pets contribute to health, and communicating that to your clients. Hart LA. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:70S–75S
Comparison of mental health and life satisfaction of five elderly ethnic groups. Johnson FL, et al. **West J Nurs Res** 1988 Oct;10(5):613–28
Mental health of older adults. Reed PG. **West J Nurs Res** 1989 Apr;11(2):143–57; discussion 158–63
Mental health and older women. Grau L. **Women Health** 1988;14(3–4):75–91
Employment characteristics, social support and the well-being of women. Pugliesi K. **Women Health** 1988; 14(1):35–58
[The sauna and the psyche] Sorri P. **Duodecim** 1988; 104(8):641–4 (Fin)
[Mental health, psychosocial factors and prevention] Sand EA. **Arch Belg** 1988;46(5–6):241–7 (Fre)
[Indicators of individual health status in children] Mader U. **Z Arztl Fortbild (Jena)** 1988;82(19):950–1 (Ger)
[Epidemiological findings for occupational psychiatry: occupational environment, physical health, sex, age and mental conditions] Abe K, et al. **Seishin Shinkeigaku Zasshi** 1988;90(10):893–9 (Jpn)
[Present status and countermeasures for problems in occupational mental health] Miyasato K. **Seishin Shinkeigaku Zasshi** 1988;90(10):881–6 (Jpn)
[Goldberg's General Health Questionnaire] Malt UF, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1391–4 (Eng. Abstr.) (Nor)
[Marital status and the first consultation at a psychiatric outpatient clinic. A 5-year follow-up study] Vatten LJ, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1395–8 (Eng. Abstr.) (Nor)
[Stimulating environmental conditions and the prevention and treatment of mental disorders in elderly persons] Sękowski T. **Psychiatr Pol** 1988 May–Jun;22(3):245–50 (Eng. Abstr.) (Pol)
[Relationship between industrial environmental factors and the state of general and mental health] Beliaeva GG. **Sov Zdravookhr** 1988;(7):28–33 (Eng. Abstr.) (Rus)
[Characteristics of psychoprophylactic and mental hygiene work in the navy] Shinskiĭ SE. **Voen Med Zh** 1989 Apr; (4):55–8 (Rus)
[The development of autonomic regulation in the virtually healthy human subject] Kolosova OA, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):20–4 (Eng. Abstr.) (Rus)
[Health promotion (editorial)] Vidal G. **Acta Psiquiatr Psicol Am Lat** 1988 Mar;34(1):11–2 (Spa)
[Overburdening and the mental health of the families of functional psychotics] Merino García MJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 May–Jun;16(3):190–200 (Spa)
[Evaluation of the mental state of the elderly patient] Perlado F. **Rev Clin Esp** 1988 Oct;183(5):267–72 (Spa)
[Overview of mental health in Mexico] De la Fuente R. **Salud Publica Mex** 1988 Nov–Dec;30(6):861–71 (Eng. Abstr.) (Spa)

MENTAL HEALTH ASSOCIATION see under **VOLUNTARY HEALTH AGENCIES**

MENTAL HEALTH SERVICES

Decision making in the emergency room [letter] Bengelsdorf H, et al. **Am J Psychiatry** 1989 Feb;146(2):291–2
Determinants of emergency psychiatric admission for adolescents and adults. Hillard JR, et al. **Am J Psychiatry** 1988 Nov;145(11):1416–9
Media power and public mental health policy. Marcos LR. **Am J Psychiatry** 1989 Sep;146(9):1185–9
An airport director's perspective on disaster planning and mental health needs. Anderson T. **Am Psychol** 1988 Sep; 43(9):721–3
The neglected entity in air disaster planning. Psychological services. Butcher JN, et al. **Am Psychol** 1988 Sep; 43(9):724–9
Primary prevention in aircraft disasters. Integrating research and practice. Williams CL, et al. **Am Psychol** 1988 Sep; 43(9):730–9
The Victim Care Service: a program for victims of sexual assault. Minden P. **Arch Psychiatr Nurs** 1989 Feb;3(1):41–6
Alcohol-related problems in the emergency room of an Indian general hospital. Adityanjee, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):274–8
Full circle or forward. Fritz ME. **Child Abuse Negl** 1989; 13(3):313–8
Characteristics of child sexual abuse treatment programs. Keller RA, et al. **Child Abuse Negl** 1989;13(3):361–8
Psychological services as an integral component of Delaware's public health program. Linden J, et al. **Del Med J** 1988 Dec;60(12):711–2
Compliance with psychiatric referrals from a general hospital psychiatry outpatient clinic. Krulee DA, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):339–45
Conference on interdisciplinary issues in mental health and aging: workshop issues and recommendations. Rickards LD. **Gerontol Geriatr Educ** 1989;9(3):61–77
Mental health services and older adult minorities: an assessment. Fellin PA, et al. **Gerontologist** 1988 Aug; 28(4):442–7
A model for church-based services for frail elderly persons and their families. Filinson R. **Gerontologist** 1988 Aug; 28(4):483–6
Older women's perceptions of female counselors: the influence of therapist age and problem intimacy. Hayslip B Jr, et al. **Gerontologist** 1989 Apr;29(2):239–44
Changing elderly persons' attitudes toward mental health professionals. Woodruff JC, et al. **Gerontologist** 1988 Dec; 28(6):800–2
The corrections department: the forgotten branch of the mental health system. Thorburn KM. **Hawaii Med J** 1989 Mar;48(3):91–2
Weapon carrying among patients in a psychiatric emergency room. Anderson AA, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):845–7
Some reflections from abroad. Bachrach LL. **Hosp Community Psychiatry** 1989 Jun;40(6):573–4
Models of state funding for mental health research. Fine T, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):383–7
A national study of state-supported psychiatric research institutes. Levin BL, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):388–92
Factors that influence state funding for mental health research. Ridge R, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):377–82
Family phone therapy in university counseling and psychological service centers: a family systems approach. DeSalvo FJ Jr. **J Am Coll Health** 1988 Sep;37(2):71–6
Mental health consultation in campus discipline: a program of primary prevention. Dodson WW, et al. **J Am Coll Health** 1988 Sep;37(2):85–8
Looking back to see the present. Maholick LT. **J Med Assoc Ga** 1989 Aug;78(8):543–8
The psychiatric emergency patients at Srinagarind hospital. Paholpak S. **J Med Assoc Thai** 1988 Nov;71(11):612–7
Alcohol and substance abuse among schizophrenic patients presenting to an emergency psychiatric service. Barbee JG, et al. **J Nerv Ment Dis** 1989 Jul;177(7):400–7
Psychological consultation in a children's hospital: an evaluation of services. Olson RA, et al. **J Pediatr Psychol** 1988 Dec;13(4):479–92
Polish Americans. Historical and cultural perspectives of influence in the use of mental health services. Knab S. **J Psychosoc Nurs Ment Health Serv** 1986 Jan;24(1):31–4
The mental health needs of elementary schoolchildren. Goodwin LD, et al. **J Sch Health** 1988 Sep;58(7):282–7
Greeks in Victoria: implications for mental-health services [letter] Piperoglou M. **Med J Aust** 1989 Jul 3;151(1):55–6
Forensic mental health services provided by mental health organizations, United States, 1985. Redick RW, et al. **Ment Health Stat Note** 1989 May;(190):1–13
Psychological services for persons with mental retardation and psychiatric impairments. Jacobson JW, et al. **Ment Retard** 1989 Feb;27(1):33–6
Emergency room dispositions of professionally referred psychiatric patients. Olfson M. **Psychiatr Q** 1988 Fall; 59(3):225–34
Outpatient compliance of psychiatric emergency room patients by presenting problems. Solomon P, et al. **Psychiatr Q** 1988 Winter;59(4):271–83
The role of social support and life stress events in use of mental health services. Sherbourne CD. **Soc Sci Med** 1988; 27(12):1393–400
Challenges of mental health service [editorial] Jones DR. **Tex Med** 1988 Sep;84(9):5–6
Laying foundations for improved care of the mentally ill. Saraceno B, et al. **World Health Forum** 1988;9(4):542–5
[Emergency referrals and admissions to the Copenhagen County Hospital, Nordvang. An analysis of a 6-month period] Aggernaes H, et al. **Ugeskr Laeger** 1988 Sep 26; 150(39):2338–43 (Eng. Abstr.) (Dan)
[Organic disease among patients at an open psychiatric outpatient clinic] Solstad K, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):298–300 (Eng. Abstr.) (Dan)
[Referral of acute psychiatric patients. II. A description of patients referred to a 24-hour reception ward] Valbak K, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3100–5 (Eng. Abstr.) (Dan)
[The role of child and adolescent psychiatry in youth assistance] Treffers DA, et al. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):202–6 (Dut)
[Profile of a psychiatric consultation service for students] Michel L. **Rev Med Suisse Romande** 1989 Feb; 109(2):119–23 (Fre)
[Importance of weekly mental health services tied in early diagnosis and therapy of occupational mental disorders viewed from a sixteen-year experience as occupational psychiatrist] Hirose T. **Seishin Shinkeigaku Zasshi** 1988; 90(10):887–92 (Jpn)
[The present state of mental health services in the Tohoku District] Kanaya T, et al. **Seishin Shinkeigaku Zasshi** 1989; 91(2):84–104 (Jpn)
[Task to mental health by the local government] Yoshizumi A, et al. **Seishin Shinkeigaku Zasshi** 1988;90(7):519–58 (Jpn)

[Correlation–regression analysis of the influence of psychiatric service resources on the dynamics of detected morbidity in the populations of Siberia and the Far East] Potapov AI, et al. **Zh Nevropatol Psikhiatr** 1988; 88(10):107–10 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Current procedural terminology codes for psychiatric services. Margolis JA, et al.
Hosp Community Psychiatry 1989 Jun;40(6):625–9

ECONOMICS

Ethical concerns about new socioeconomic trends in mental health care [letter] Nol EA. **Am J Psychiatry** 1989 Feb; 146(2):286–7

Toward a fairer prospective payment system. Essock SM, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1041–4

Comparative costs and impacts of Canadian and American payment systems for mental health services. Bigelow DA, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):805–8

Public mental health funding in California, 1959 to 1989. Elpers JR. **Hosp Community Psychiatry** 1989 Aug; 40(8):799–804

The medically indigent mentally ill: approaches to financing. Frank RG. **Hosp Community Psychiatry** 1989 Jan; 40(1):9–12

Evaluation questions for Philadelphia's capitation plan for mental health services. Schinnar AP, et al.
Hosp Community Psychiatry 1989 Jul;40(7):681–3

Money management services for the homeless mentally ill. Stoner MR. **Hosp Community Psychiatry** 1989 Jul; 40(7):751–3

Managed mental health moves inpatients out. Larkin H. **Hospitals** 1989 Apr 20;63(8):64, 66

Expanding insurance coverage to alternative types of psychotherapists: demand and substitution effects of direct reimbursement to social workers. Fairbank A. **Inquiry** 1989 Summer;26(2):170–81

Provider response to Medicare's PPS: reductions in length of stay for psychiatric patients treated in scatter beds. Freiman MP, et al. **Inquiry** 1989 Summer;26(2):192–201

Estimation of offset and income effects on the demand for mental health treatment. Goodman AC. **Inquiry** 1989 Summer;26(2):235–48

Cost–effectiveness of intensive clinical and case management compared with an existing system of care. Jerrell JM, et al. **Inquiry** 1989 Summer;26(2):224–34

Combining demand- and supply-side cost sharing: the case of inpatient mental health care. McGuire TG. **Inquiry** 1989 Summer;26(2):292–303

Analysis of the effect of disproportionately large share of low-income patients on psychiatric costs in general hospitals. Rupp A, et al. **Inquiry** 1989 Summer;26(2):216–21

Quality and cost–effective management of mental health care. Burton WN, et al. **J Occup Med** 1989 Apr;31(4):363–7

Mental health care benefits costs [letter] Harris JS.
J Occup Med 1988 Aug;30(8):662–3

Employers must reassess worker mental healthcare coverage. Chenoweth D. **Occup Health Saf** 1989 Apr;58(4):52–7

[Mental health services carried on by each prefecture in Japan] Yoshizumi A, et al. **Seishin Shinkeigaku Zasshi** 1988; 90(11):1000–6 **(Jpn)**

HISTORY

History of the care of the seriously disabled mentally ill in Hawaii. Takata A. **Hawaii Med J** 1989 Mar;48(3):62–4

[History of the development of psychiatric care in Kursk Province] Terent'ev EI, et al. **Zh Nevropatol Psikhiatr** 1988; 88(11):110–4 **(Rus)**

LEGISLATION & JURISPRUDENCE

Current legal developments in medical staff credentialing disputes. Callahan MR, et al.
New Dir Ment Health Serv 1989 Spring;(41):81–93

Legal interest in mental health practice. Miller RD.
New Dir Ment Health Serv 1989 Spring;(41):1–8

[The Psychiatric Health Unit of the Police Precinct, application of the law of 30 June 1838 and the medicolegal circuits of Paris and its region] Soubrier JP, et al.
Ann Med Psychol (Paris) 1988 Sep–Oct;146(9):883–8 **(Fre)**

[The rights and duties of the occupational health physician and of the employer in employee mental illnesses] Möllhoff G. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):1005–7 **(Ger)**

[Use of services and treatment profile after the Psychiatric Reform Act] Bollini P, et al. **Epidemiol Prev** 1987 Jun; 9(31):31–4 **(Ita)**

[Mental health legislation and clinical psychiatry] Kotachi H. **Seishin Shinkeigaku Zasshi** 1988;90(11):997–1000 **(Jpn)**

[Historic considerations in mental–health–service legislation] Nakayama K. **Seishin Shinkeigaku Zasshi** 1988;90(11):990–6 **(Jpn)**

[Role, educational training and qualification of future psychiatrists—psychiatric specialists and physicians designated by mental health services] Nishizono M.
Seishin Shinkeigaku Zasshi 1988;90(11):1006–14 **(Jpn)**

[Criticism of the Mental Health Act, 1987] Okada Y.
Seishin Shinkeigaku Zasshi 1989;91(3):170–8 **(Jpn)**

[Tasks under the mental–health legislation] Tahara A.
Seishin Shinkeigaku Zasshi 1988;90(11):1015–20 **(Jpn)**

MANPOWER

Recent developments in antitrust: challenges to medical autonomy. Miller RD. **New Dir Ment Health Serv** 1989 Spring;(41):69–80

ORGANIZATION & ADMINISTRATION

Problems in public psychiatric organizations [letter]
Am J Psychiatry 1988 Nov;145(11):1489–90

New perspectives in psychiatry in the Veterans Administration. Baker JJ. **Am J Psychiatry** 1975 Jan; 132(1):70–3

An empirical study of emergency commitment. Faulkner LR, et al. **Am J Psychiatry** 1989 Feb;146(2):182–6

The psychiatric emergency service holding area: effect on utilization of inpatient resources. Gillig PM, et al.
Am J Psychiatry 1989 Mar;146(3):369–72

The making of the psychiatrist–executive. Silver MA, et al.
Am J Psychiatry 1989 Jan;146(1):29–34 (87 ref.)

Containing mental health treatment costs through program design: a Massachusetts study. Dickey B, et al.
Am J Public Health 1989 Jul;79(7):863–7

The psychiatric acute observation unit in a general hospital. Birnie WA, et al. **Can J Psychiatry** 1988 Nov;33(8):707–10

Responding to mental health needs of the elderly in rural areas: a collaborative Geriatric Education Center model. Buckwalter KC, et al. **Gerontol Geriatr Educ** 1988; 8(3–4):69–80

Recent developments in the Grenada mental health program. Fisher FD, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):980–5

The mentally ill student on campus: theory and practice. Hoffmann FL, et al. **J Am Coll Health** 1989 Jul;38(1):15–20

Psychiatric intervention in the community hospital emergency room. Dunn J. **J Nurs Adm** 1989 Oct; 19(10):36–40

Emergency/outpatient services. Bennett MI.
New Dir Ment Health Serv 1988 Fall;(39):65–72

The day hospital/inn model. Gudeman JE.
New Dir Ment Health Serv 1988 Fall;(39):7–16

The Continuing Care Service. Hellman SJ.
New Dir Ment Health Serv 1988 Fall;(39):73–87

Organizing the system. Shore MF.
New Dir Ment Health Serv 1988 Fall;(39):17–24

Mental health and older women. Grau L. **Women Health** 1988;14(3–4):75–91

[Social psychiatric therapeutic possibilities for long–term psychiatric patients] Thusholt FJ, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1544–9 (Eng. Abstr.) **(Dan)**

[The administrative control of involuntary commitment in the department of Gironde 150 years following promulgation of the law of 30 June 1838] Bénézech M, et al. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):889–93 (Eng. Abstr.) **(Fre)**

[Psychiatric care and epidemiologic culture] Crepet P.
Epidemiol Prev 1987 Jun;9(31):1–5 **(Ita)**

[Crisis and personal autonomy in patients at psychiatric facilities in the Tuscan region] Ferrara M, et al.
Epidemiol Prev 1987 Jun;9(31):25–30 (Eng. Abstr.) **(Ita)**

[Evaluation of the operative style of psychiatric services: presentation and validation of a new questionnaire] Starace F, et al. **Epidemiol Prev** 1987 Jun;9(31):22–4 (Eng. Abstr.) **(Ita)**

["Telephone patronage" for elderly psychiatric patients] Kontsevol VA, et al. **Sov Med** 1989;(1):58–60 **(Rus)**

[The hospital and semi–inpatient clinic in the structure of psychiatric care for adolescents] Gurovich IIa, et al.
Zh Nevropatol Psikhiatr 1988;88(8):107–11 (Eng. Abstr.) **(Rus)**

STANDARDS

Between patient and doctor. Improving the quality of care for serious mental illness. Glick ID, et al.
Bull Menninger Clin 1989 May;53(3):193–202

Mental health services in southern countries of the European Region. Report on a WHO meeting. **EURO Rep Stud** 1988; 107:1–46

Quality assurance in mental health care. Zusman J.
Hosp Community Psychiatry 1988 Dec;39(12):1286–90 (21 ref.)

Patient satisfaction with mental health services. Zastowny TR, et al. **QRB** 1988 Sep;14(9):284–9 (56 ref.)

STATISTICS & NUMERICAL DATA

Specialty mental health organizations, United States, 1985. Sunshine JH, et al. **Ment Health Stat Note** 1988 Aug; (189):1–22

SUPPLY & DISTRIBUTION

Mental health for Canadians: striking a balance. Authority of the Minister of National Health and Welfare.
Can J Public Health 1988 Sep–Oct;79(5):327–72 **(Eng, Fre)**

A physician's guide through the child and adolescent mental health system. McKelvey RS. **Tex Med** 1989 Jul;85(7):36–9

[Down's syndrome and dementia: a growing problem in the care of the mentally retarded] Evenhuis HM, et al.
Ned Tijdschr Geneeskd 1988 Aug 13;132(33):1513–6 **(Dut)**

[First evaluation of the enactment of the Psychiatric Reform Act: function status and typologic models of new services in the light of the results of a national inquiry] Cardea R, et al. **Epidemiol Prev** 1987 Jun;9(31):41–52 (Eng. Abstr.) **(Ita)**

[Analysis of activity and use of psychiatric ambulatory services in Rome] Crepet P, et al. **Epidemiol Prev** 1987 Jun;9(31):35–40 (Eng. Abstr.) **(Ita)**

TRENDS

The mental health care revolution. Will psychology survive? Zimet CN. **Am Psychol** 1989 Apr;44(4):703–8

The impact of privatization of psychiatric care on children and adolescents [editorial] Pothier PC.
Arch Psychiatr Nurs 1989 Jun;3(3):123–4

Length of stay, short stay units and psychiatric emergency admissions. Baker B, et al. **Can J Psychiatry** 1989 Feb; 34(1):39–42

Viewpoint: development of mental health services and psychiatry in Canada: lessons from the past: problems of the present; and the future. Roberts CA.
Can J Psychiatry 1989 May;34(4):291–8

Report from the American Psychological Association. Goodstein LD. **Gerontol Geriatr Educ** 1989;9(3):39–48

The changing context of mental health care for the elderly. Grau L. **Gerontol Geriatr Educ** 1989;9(3):7–15

The network trilogy project: linking aging, mental health and health agencies. Persky T, et al.
Gerontol Geriatr Educ 1989;9(3):79–88

Meeting the challenge of Hawaii's mental health crisis: new opportunities and innovations in the state mental health system for the 1990s. Lewin JC. **Hawaii Med J** 1989 Mar; 48(3):55, 57–9

The first shall be last; but can the last be first? Mee–Lee D. **Hawaii Med J** 1989 Mar;48(3):93–4, 96–7

An emergency psychiatry update. Ellison JM, et al.
Hosp Community Psychiatry 1989 Mar;40(3):250–60 (114 ref.)

Resolved: child and adolescent psychiatric practice in the twenty–first century will largely be hospital based. Rafferty FT, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):815–8

Mental health monopoly: corporate trends in mental health services. Brown P, et al. **Soc Sci Med** 1989;28(11):1129–38 (69 ref.)

[Epidemiologic study of the estimated number of older patients with Down's syndrome in 1990–2025] Steffelaar JW, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1121–5 (Eng. Abstr.) **(Dut)**

[Towards more ambulatory psychogeriatrics. Various impressions from Adelaide (Australia)] van Veldhuizen JR.
Tijdschr Gerontol Geriatr 1989 Jun;20(3):123–4 **(Dut)**

[Current problems in Japanese psychiatry] Jugon JC.
Ann Med Psychol (Paris) 1988 Jul–Aug;146(8):719–36 (Eng. Abstr.) **(Fre)**

[Prevention of deviant behaviors under the current conditions of mental care in Romania] Predescu V, et al.
Rev Med Interna [Neurol Psihiatr] 1988 Apr–Jun; 33(2):111–24 (86 ref.) **(Rum)**

UTILIZATION

Use of mental health services in south Verona and Groningen. A comparative case–register study. Sytema S, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):153–62

Sexual assault history and use of health and mental health services. Golding JM, et al. **Am J Community Psychol** 1988 Oct;16(5):625–44

Patterns of psychotherapy utilization. Howard KI, et al.
Am J Psychiatry 1989 Jun;146(6):775–8

Psychiatric clinics in different settings. A case register study. Low CB, et al. **Br J Psychiatry** 1988 Aug;153:243–5

Characteristics of patients admitted to a newly established mental health center crisis unit. Swigar ME, et al.
Conn Med 1988 Jul;52(7):391–4

Evolutions in utilization and quality management. A crisis for psychiatric services? Rodriguez AR.
Gen Hosp Psychiatry 1989 Jul;11(4):256–63

Psychiatric clinics in different settings—default rates. Zegleman FE. **Health Bull (Edinb)** 1988 Sep;46(5):286–90

Determining provider choice for the treatment of mental disorder: the role of health and mental health status. Frank RG, et al. **Health Serv Res** 1989 Apr;24(1):83–103

Factors predicting utilization of acute psychiatric inpatient services by frequently hospitalized patients. Havassy BE, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):820–3

Psychiatric emergency room dispositions of HMO enrollees [published erratum appears in Hosp Community Psychiatry 1989 Aug;4(8):835] Olfson M.
Hosp Community Psychiatry 1989 Jun;40(6):639–41

Geropsychiatric emergency services: utilization and outcome predictors. Thienhaus OJ, et al.
Hosp Community Psychiatry 1988 Dec;39(12):1301–5

Demand analysis of mental health service use among ethnic subpopulations. Scheffler RM, et al. **Inquiry** 1989 Summer; 26(2):202–15

Mental health first appointment no–shows. Hersh JB, et al.
J Am Coll Health 1989 Mar;37(5):236–7

The college student–athlete: psychological considerations and interventions. Pinkerton RS, et al.
J Am Coll Health 1989 Mar;37(5):218–26 (80 ref.)

Correlates, associated impairments and patterns of service

utilization of children with attention deficit disorder: findings from the Ontario Child Health Study. Szatmari P, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):205–17

Compliance with a prescription for psychotherapeutic counseling in childhood. Joost JC, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):98–102 (15 ref.)

Role incongruence and gender variation in the provision of prison mental health services. Baskin DR, et al. **J Health Soc Behav** 1989 Sep;30(3):305–14

The help-seeking behavior of black Americans. A summary of findings from the National Survey of Black Americans. Neighbors HW. **J Natl Med Assoc** 1988 Sep;80(9):1009–12

The General Health Questionnaire by interview. Performance in relation to recent use of health services. Ford DE, et al. **Med Care** 1989 Apr;27(4):367–75

Effects of a psychiatrists' strike on emergency psychiatric referral and admissions. Schlosberg A, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):84–7

[Responses of the psychotherapeutic center of Bondy to emergency requests] Rennesson P. **Agressologie** 1989 Apr; 30(4):197–9 (Eng. Abstr.) **(Fre)**

[Activity and use of psychiatric emergency care in a hospital] Rizzardo R, et al. **Minerva Psichiatr** 1988 Jul–Sep; 29(3):131–8 (Eng. Abstr.) **(Ita)**

[Subgroups of chronic patients who repeatedly attend the emergency service at a general hospital] Segui Montesinos J. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):140–4 (Eng. Abstr.) **(Spa)**

MENTAL HEALTH SERVICES, COMMUNITY see **COMMUNITY MENTAL HEALTH SERVICES**

MENTAL HOSPITALS see **HOSPITALS, PSYCHIATRIC**

MENTAL HYGIENE see **MENTAL HEALTH**

MENTAL HYGIENE SERVICES see **MENTAL HEALTH SERVICES**

MENTAL PROCESSES

The problem of mind in Eastern philosophy. Nakamura H. **Acta Neurochir Suppl (Wien)** 1988;44:19–32

Evaluation of mental competency. Farnsworth MG. **Am Fam Physician** 1989 Jun;39(6):182–90

Spinal cord injury and concomitant traumatic brain injury. Results of a longitudinal investigation. Richards JS, et al. **Am J Phys Med Rehabil** 1988 Oct;67(5):211–6

In reluctant defense of dualism in psychiatry [letter] Benjamin J. **Am J Psychiatry** 1989 Jan;146(1):126

Psychological consequences of blunt head trauma and relation to other indices of severity of injury. Gensemer IB, et al. **Ann Emerg Med** 1989 Jan;18(1):9–12

Neuropsychological consequences of volatile substance abuse: a population based study of secondary school pupils. Chadwick O, et al. **BMJ** 1989 Jun 24;298(6689):1679–83

Comparison of perioperative mental function after general anaesthesia and spinal anaesthesia with intravenous sedation. Chung FF, et al. **Can J Anaesth** 1989 Jul; 36(4):382–7

Effectiveness of two modes of training to overcome deficits of concentration. Strache W. **Int J Rehabil Res** 1987;10(4 Suppl 5):141–5

Interpretation, psychoanalysis, and the philosophy of mind. Cavell M. **J Am Psychoanal Assoc** 1988;36(4):859–79

Mental decline in normal aging: a review. Rinn WE. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):144–58 (112 ref.)

Analysis and intuition: the need for both in nursing education. Miller VG, et al. **J Nurs Educ** 1989 Feb;28(2):84–6

Sleep deprivation and performance of residents [letter] **JAMA** 1989 Feb 10;261(6):859–63

Cognitive and psychiatric abnormalities in multiple sclerosis. Petersen RC, et al. **Mayo Clin Proc** 1989 Jun;64(6):657–63 (50 ref.)

Assessing patients' capacities to consent to treatment [published erratum appears in N Engl J Med 1989 Mar 16;320(11):748] Appelbaum PS, et al. **N Engl J Med** 1988 Dec 22;319(25):1635–8

Folk psychology of mental activities. Rips LJ, et al. **Psychol Rev** 1989 Apr;96(2):187–207 (69 ref.)

Measures of memory and information processing in elderly volunteers. Aufdembrinke B, et al. **Psychopharmacol Ser** 1988;6:48–64

Dementia syndrome and the onset of mind. Matsuzawa T, et al. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec; 35(1–4):29–34

[The structure, functions and classification of mental states and their study in work activities] Gancheva P. **Probl Khig** 1988;13:49–56 (16 ref.) (Eng. Abstr.) **(Bul)**

[The brain and the computer] Dvořák I. **Cas Lek Cesk** 1988 Jul 1;127(27):833–6 (Eng. Abstr.) **(Cze)**

[Aspects of cognitive functioning in the aged. A transversal study] Mas JM, et al. **Tijdschr Gerontol Geriatr** 1988 Oct; 19(5):237–50 (Eng. Abstr.) **(Dut)**

[Psyche and soma—friend or enemy?] Furman B. **Duodecim** 1989;105(13–14):1288–9 **(Fin)**

[P. Janet's concept of the notion of time] Fouks L, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):941–52 (Eng. Abstr.) **(Fre)**

[Analysis and cognitive modelling of the analogical process in psychosis] Ohayon M. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):779–814 (Eng. Abstr.) **(Fre)**

[Focalized neuropsychological pathology in degenerative dementia] Machado F, et al. **Rev Med Suisse Romande** 1989 Apr;109(4):247–51 **(Fre)**

[The body as an outlet. Reflections on psychosomatic diseases] Tordera J. **Rev Med Suisse Romande** 1988 Oct; 108(10):871–80 **(Fre)**

[Basic problems in psychiatry] Degkwitz R. **Fortschr Neurol Psychiatr** 1988 Jul;56(7):205–15 (84 ref.) (Eng. Abstr.) **(Ger)**

[Deterioration in schizophrenic psychosis] Fagiani MB, et al. **Minerva Psichiatr** 1988 Jul–Sep;29(3):125–30 (Eng. Abstr.) **(Ita)**

[The concept of responsibility in the function of mental capacity and its relationship to large groups of mental diseases arranged by the intensity of the disorders] Predescu V, et al. **Rev Med Interna [Neurol Psihiatr]** 1988 Apr–Jun; 33(2):97–110 **(Rum)**

[Use of a method of stepwise formation of mental activity during preparation for practical tasks in the department of pathophysiology] Lindenbraten VD, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):77–9 **(Rus)**

[Supervalent ideas in adolescence and youth] Gur'eva VA, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):60–4 (Eng. Abstr.) **(Rus)**

[Problems of the regulation of mental activity in schizophrenia] Kritskaia VP, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):104–9 (Eng. Abstr.) **(Rus)**

[Effects of the use of cranial radiotherapy. Findings obtained by computerized axial tomography and intellectual function tests] Moro Bayón C, et al. **An Esp Pediatr** 1988 May; 28(5):441–4 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

The influence of anesthetic methods on mental function. Jones MJ. **Acta Chir Scand Suppl** 1989;550:169–75; discussion 175–6 (57 ref.)

Beta-blockade and mental performance [letter] Oliner CM, et al. **Arch Intern Med** 1989 Feb;149(2):474–5

Effects of low dose L-triiodothyronine administration on mental, behavioural and thyroid states in elderly subjects. Mori T, et al. **Endocrinol Jpn** 1988 Aug;35(4):585–92

Behavioral studies in petrol pump workers. Kumar P, et al. **Int Arch Occup Environ Health** 1988;61(1–2):35–8

Mental impairment in aging: selection of patients, methods of evaluation and therapeutic possibilities of acetyl-L-carnitine. Passeri M, et al. **Int J Clin Pharmacol Res** 1988;8(5):367–76

A comparative study on the effects of brotizolam and flurazepam on sleep and performance in the elderly. Mamelak M, et al. **J Clin Psychopharmacol** 1989 Aug; 9(4):260–7

Port Pirie Cohort study: childhood blood lead and neuropsychological development at age two years. Wigg NR, et al. **J Epidemiol Community Health** 1988 Sep; 42(3):213–9

Behavioral performance effects of antihypertensive drugs: human and animal studies. Turkkan JS. **Neurosci Biobehav Rev** 1988 Summer;12(2):111–22 (146 ref.)

Recording automatic and controlled information processing by means of bioelectrical brain signals in normals and paranoid schizophrenics with and without neuroleptic medication. Krieger S, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):331–3

The neurotoxic, teratogenic, and behavioral teratogenic effects of lead at low dose: a paradigm for transplacental toxicants. Needleman HL. **Prog Clin Biol Res** 1988; 281:279–87 (22 ref.)

Benzodiazepine receptor ligands, memory and information processing. Psychometric, psychopharmacological and clinical issues. International workshop. Puerto Rico, December 1986. **Psychopharmacol Ser** 1988;6:1–317

Lormetazepam, memory and information processing: a review. Bhatti JZ, et al. **Psychopharmacol Ser** 1988;6:169–79 (22 ref.)

Information processing, critical flicker fusion threshold and benzodiazepines: results and speculations. Hindmarch I. **Psychopharmacol Ser** 1988;6:79–89 (39 ref.)

Drugs and information processing in skilled performance. Sanders AF, et al. **Psychopharmacol Ser** 1988;6:23–47 (83 ref.)

Light, vitamin D and psychiatry. Role of 1,25 dihydroxyvitamin D3 (soltriol) in etiology and therapy of seasonal affective disorder and other mental processes. Stumpf WE, et al. **Psychopharmacology (Berlin)** 1989; 97(3):285–94 (83 ref.)

[Quantified EEG and psychometric effects of 3 doses of dexfenfluramine in the young adult] Baud P, et al. **Neurophysiol Clin** 1989 Jun;19(3):241–55 (Eng. Abstr.) **(Fre)**

[Sex hormones and mental performance. The contribution of Düker to the pharmacopsychology of reproductive hormones] Netter P. **Arch Psychol (Frankf)** 1988; 140(4):261–72 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

The effects of a three-month exercise programme on neuropsychological function in elderly institutionalized women: a randomized controlled trial. Molloy DW, et al. **Age Ageing** 1988 Sep;17(5):303–10

Tendon reflex asymmetry by voluntary mental effort in healthy subjects. Stam J, et al. **Arch Neurol** 1989 Jan; 46(1):70–3

Effects of intake and rejection tasks on auditory fatigue. Chermak GD. **Br J Audiol** 1988 Nov;22(4):309–12

Consistency and changes in the development of extremely low birthweight infants. Sugita K, et al. **Brain Dev** 1988; 10(4):231–5

Frontal lobe function. Bowen M. **Brain Inj** 1989 Apr–Jun; 3(2):109–28 (5 ref.)

Reproducibility of haemodynamic and plasma catecholamine responses to isometric exercise and mental arithmetic in normo- and hyper-tensive subjects. Lenders J, et al. **Clin Sci** 1988 Dec;75(6):615–9

Sexual dimorphism in the human brain: dispelling the myths. Janowsky JS. **Dev Med Child Neurol** 1989 Apr;31(2):257–63 (38 ref.)

Neurological outcome of twins dissimilar in size at birth. Ylitalo V, et al. **Early Hum Dev** 1988 Aug–Sep; 17(2–3):245–55

The P300 component of the event-related brain potential and mental effort. Ullsperger P, et al. **Ergonomics** 1988 Aug;31(8):1127–37

Heart rate and blood pressure reactivity during active coping with a mental task in healthy 18- to 73-year-old subjects. Faucheux BA, et al. **Gerontology** 1989;35(1):19–30

The impact of physical and mental activity on toxicokinetics and toxicodynamics of workplace chemicals. Rutenfranz J, et al. **Int Arch Occup Environ Health** 1988;Suppl:121–3 (13 ref.)

The right cerebral hemisphere: emotion, music, visual-spatial skills, body-image, dreams, and awareness. Joseph R. **J Clin Psychol** 1988 Sep;44(5):630–73 (350 ref.)

Dual mental functioning in a split-brain patient. Joseph R. **J Clin Psychol** 1988 Sep;44(5):770–9

On the quantum physical theory of subjective antedating. Wolf FA. **J Theor Biol** 1989 Jan 9;136(1):13–9

The clinical and electroencephalographic studies of juvenile myoclonic epilepsy. Matsuoka H, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):556–7

Cognitive function during absence seizures. Sengoku A, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):558–9

Effect of a mental arithmetic task on dark focus of accommodation. Jaschinski-Kruza W, et al. **Ophthalmic Physiol Opt** 1988;8(4):432–7

Mental status examination of children with learning problems. Brunquell PJ, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):32–6

Visual projections induced into auditory thalamus and cortex: implications for thalamic and cortical information processing. Sur M. **Prog Brain Res** 1988;75:129–36 (129 ref.)

The "Siamese twinship" of the cerebral hemispheres and of the brain-mind continuum. Toward a "psychology" for the corpus callosum. Grotstein JS. **Psychiatr Clin North Am** 1988 Sep;11(3):399–413 (62 ref.)

Models of memory: information processing. Eysenck MW. **Psychopharmacol Ser** 1988;6:3–11 (15 ref.)

The observing subject and psychophysiological research: an epistemological discourse. Ulrich G, et al. **Theor Med** 1989 Mar;10(1):59–65

Central representations of human limb movement as revealed by studies of drawing and handwriting. Lacquaniti F. **Trends Neurosci** 1989 Aug;12(8):287–91 (35 ref.)

HPNS effects among 18 divers during compression to 360 msw on heliox. Vaernes RJ, et al. **Undersea Biomed Res** 1988 Jul;15(4):241–55

[Endocrinology from the veterinary viewpoint] Karasszon D. **Z Gesamte Inn Med** 1988 Aug 1;43(15):432–3 (Eng. Abstr.) **(Ger)**

[Increasing mental performance by multistep oxygen therapy. Computer-assisted measurements of information processing capacity, intelligence, short-term memory and further parameters of cerebral performance] von Ardenne M, et al. **ZFA** 1989 Jan–Feb;44(1):37–48 (Eng. Abstr.) **(Ger)**

[Do phonological and semantic processings of Kanji finish at the same time?] Wang JM. **Shinrigaku Kenkyu** 1988 Oct; 59(4):252–5 (Eng. Abstr.) **(Jpn)**

[Characteristics of autonomic and hormonal reactions during the performance of different types of intellectual work] Belova EV, et al. **Fiziol Cheloveka** 1988 May–Jun; 14(3):482–5 **(Rus)**

[Cerebral circulation during intense mental work] Fedorov BM, et al. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):48–55 **(Rus)**

[Oscillatory structure of the psychophysiological parameters as a source of information on the productivity of mental activity] Karpenko AV. **Fiziol Cheloveka** 1988 Sep–Oct; 14(5):730–8 **(Rus)**

[Nervous mechanisms of disturbance of intellectual activity in pathologically excited personalities] Kostandov EA, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):13–21 **(Rus)**

[Changes in omega-potential in children 6–7 years of age during completion of mental, sensorimotor and physical tasks] Krivolapchuk IA. **Fiziol Cheloveka** 1988 Nov–Dec; 14(6):1024–6 **(Rus)**

[Significance of the initial functional state in responses to mental load and physical exercise] Diadichkin VP. **Fiziol Zh** 1988 Sep–Oct;34(5):112–7 (Eng. Abstr.) **(Rus)**

[Epidemiology of ischemic heart disease and its risk factors in men 20–54 years of age engaged in mental and physical activity, in various populations of the Soviet Union (a

cooperative study)] Konstantinov VV, et al. **Ter Arkh** 1989; 61(5):79–86 **(Rus)**

[Effect of iron deficiency of the body on the work capacity of women engaged in mental work] Kuleshova EA, et al. **Ter Arkh** 1989;61(1):92–5 (Eng. Abstr.) **(Rus)**

[Clinico–psychological mechanisms of compensation for disorders of brain activities in patients with traumatic lesions of the polar–basal sections of the frontal lobes] Niagu AI, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):40–5 (Eng. Abstr.) **(Rus)**

[Amplitude–temporal parameters of the evoked potentials of the visual and motor areas in the visual perception and mental representation of an image] Puchinskaia LM, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):812–20 (Eng. Abstr.) **(Rus)**

[Evaluation of the mental state of the elderly patient] Perlado F. **Rev Clin Esp** 1988 Oct;183(5):267–72 **(Spa)**

MENTAL RETARDATION

see related
CHROMOSOME ABNORMALITIES
CRETINISM
EDUCATION OF MENTALLY RETARDED
METABOLISM, INBORN ERRORS

Advocacy for the mentally impaired elderly: a case study analysis. Kayser-Jones J, et al. **Am J Law Med** 1989; 14(4):353–76

Constitutional protection of confessions made by mentally retarded defendants. Praiss DM. **Am J Law Med** 1989; 14(4):431–65

Protective efficacy of a recombinant deoxyribonucleic acid hepatitis B vaccine in institutionalized mentally handicapped clients. Van Damme P, et al. **Am J Med** 1989 Sep 4;87(3A):26S–29S

Hepatitis D virus infection in Illinois state facilities for the developmentally disabled. Epidemiology and clinical manifestations. Hershow RC, et al. **Ann Intern Med** 1989 May 15;110(10):779–85

Oral function in the physically handicapped with or without severe mental retardation. Oreland A, et al.
ASDC J Dent Child 1989 Jan–Feb;56(1):17–25

Can social workers damage your dental health? [letter]
Br Dent J 1989 Jan 21;166(2):37

Can social workers damage your dental health? [letter] Hope R, et al. **Br Dent J** 1988 Dec 10;165(11):391

Can social workers damage your dental health? [letter] Howells L. **Br Dent J** 1989 Feb 25;166(4):110–1

Dental treatment for mentally handicapped adults in general practice: parents' and dentists' views. Davies KW, et al. **Community Dent Health** 1988 Dec;5(4):381–7

Correlation of manual dexterity and comprehension with oral hygiene and periodontal status in mentally handicapped adults. Shaw L, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):187–9

Dental plaque and gingival condition of mentally handicapped children in Mathare Special Training Centre, Nairobi, Kenya. Maina SW, et al. **East Afr Med J** 1988 May;65(5):330–4

Angelman ("happy puppet") syndrome—seven new cases documented by cerebral computed tomography: review of the literature. Dörries A, et al. **Eur J Pediatr** 1988 Dec; 148(3):270–3 (21 ref.)

Utilization of aging network services by elderly persons with mental retardation. Seltzer MM, et al. **Gerontologist** 1989 Apr;29(2):234–8

Medical problems and care needs of elderly patients in a mental handicap hospital. Flynn G, et al.
Health Bull (Edinb) 1988 May;46(3):173–5

Rett's syndrome. Dhand UK, et al. **Indian Pediatr** 1988 Mar; 25(3):296–9

Hepatitis B core antibody–negative HBsAg carriers [letter] Vranckx R, et al. **Infection** 1989 Jul–Aug;17(4):250–1

Self–management "additives" for improving work productivity of mentally retarded workers in sheltered workshops. Mullen H, et al. **Int J Rehabil Res** 1988; 11(2):125–41

A comparison of sources of nursing stress and job satisfaction among mental handicap and hospice nursing staff. Power KG, et al. **J Adv Nurs** 1988 Nov;13(6):726–32

Causes of death of patients in an institution for the developmentally disabled. Blisard KS, et al.
J Forensic Sci 1988 Nov;33(6):1457–62

Animals, handicapped children and the tragedy of marginal cases. Nelson JL. **J Med Ethics** 1988 Dec;14(4):191–3

California case file on cerebral palsy and mental retardation. Grether JK. **J Perinatol** 1987 Spring;7(2):100–4

The use of 0.2% chlorhexidine spray as an adjunct to oral hygiene and gingival health in physically and mentally handicapped adults. Kalaga A, et al. **J Periodontol** 1989 Jul;60(7):381–5

Prescribing requirements of the elderly mentally handicapped [letter] Collacott RA. **J R Coll Gen Pract** 1988 Sep; 38(314):423

A comparison of symbol transparency in nonspeaking persons with intellectual disabilities. Mirenda P, et al.
J Speech Hear Disord 1989 May;54(2):131–40

Communicative profiles of preschool children with handicaps: implications for early identification. Wetherby AM, et al. **J Speech Hear Disord** 1989 May;54(2):148–58

Hepatitis B in mental handicap hospitals [letter; comment] **Lancet** 1989 Apr 15;1(8642):840–2. **Comment on:** Lancet 1989 Jan 7;1(8628):44–5

Sterilisation of mentally handicapped woman approved by House of Lords. Brahams D. **Lancet** 1989 May 13; 1(8646):1089

Incompetent adults and consent to treatment. Brahams D. **Lancet** 1989 Feb 11;1(8633):340

Sterilisation and mental handicap. Brahams D. **Lancet** 1988 Dec 10;2(8624):1377–8

Legal power to sterilise incompetent women. Brahams D. **Lancet** 1989 Apr 15;1(8642):854–5

Hepatitis B and mental handicap [letter] Gannon MA, et al. **Lancet** 1989 Feb 25;1(8635):436

Preparing medical undergraduates for their increasing role with patients who also have a mental handicap: a retrospective study. Bradley E. **Med Teach** 1988; 10(3–4):283–8

How mental handicap is taught in U.K. medical schools. Hollins S. **Med Teach** 1988;10(3–4):289–96

Attitudes of medical students to mental handicap. Holt G, et al. **Med Teach** 1988;10(3–4):305–7

Attitude to handicap: measuring change. Laking PJ.
Med Teach 1988;10(3–4):297–303

Mental handicap in the undergraduate curriculum. May D.
Med Teach 1988;10(3–4):265–8

Symposium on aging and mental retardation.
Ment Retard 1988 Aug;26(4):177–217

Misconceptions relating to mental retardation. Antonak RF, et al. **Ment Retard** 1989 Apr;27(2):91–7

Trends in mental retardation in the 1990s. Rowitz L.
Ment Retard 1989 Feb;27(1):iii–vi

Metaphors as a means of understanding staff–resident relationships. Sumarah J. **Ment Retard** 1989 Feb; 27(1):19–23

The killing thought in the eugenic era and today: a commentary on Hollander's essay. Wolfensberger W.
Ment Retard 1989 Apr;27(2):63–5

Parents for children, children for parents. The adoption alternative. Glidden LM.
Monogr Am Assoc Ment Retard 1989;(11):i–xii, 1–209

Gynecologic surgery and surgical morbidity in mentally handicapped women. McNeeley SG, et al.
Obstet Gynecol 1989 Aug;74(2):155–8

Cortical heterotopia in Aicardi's syndrome—CT findings. Bešenski N, et al. **Pediatr Radiol** 1988;18(5):391–3

Mental retardation. Healy A. **Pediatr Rev** 1987 Jul;9(1):15–22 (11 ref.)

Characteristics of frequently cited articles in mental retardation. Swanson HL, et al. **Res Dev Disabil** 1988; 9(3):213–27

[Forensic psychiatric appraisement of 645 cases] Shen MC. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):166–8, 190 (Eng. Abstr.) **(Chi)**

[The criminal legal ability of mental patients] Tian ZE.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Jun; 21(3):169–71, 190 (Eng. Abstr.) **(Chi)**

[Forensic psychiatric appraisement on the sexual crime of 12 mentally retarded cases] Zhu GJ.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Jun; 21(3):172–4, 190 (Eng. Abstr.) **(Chi)**

[Trends in the broadening of care of oligophrenic children] Höllge J. **Cesk Zdrav** 1989 Apr;37(4):169–73 (Eng. Abstr.) **(Cze)**

[Family physician reprimanded for interfering with judgment concerning a mentally handicapped subject]
Ned Tijdschr Geneeskd 1988 Dec 17;132(51):2332–3 **(Dut)**

[Non–therapeutic scientific studies in mentally incompetent persons] De Beaufort I. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):737–40 **(Dut)**

[Sterilization of handicapped within the scope of a discussion outline for a new guardianship law] Dörner K.
Nervenarzt 1988 Aug;59(8):491–2 **(Ger)**

[Ambulatory anesthesia in pediatric dentistry] Tarján I, et al. **Fogorv Sz** 1989 Feb;82(2):45–8 (Eng. Abstr.) **(Hun)**

[Study of stereopsis using the Lang and Titmus stereo–tests to assess the presence of changes in binocular vision of children with mental retardation] Filippello M, et al.
Minerva Pediatr 1988 Aug;40(8):473–6 (Eng. Abstr.) **(Ita)**

[Coffin–Lowry syndrome. Description of a clinical case] Venura A, et al. **Pediatr Med Chir** 1988 Jul–Aug; 10(4):449–50 (Eng. Abstr.) **(Ita)**

[A modern, functionally designed social institution for the care of severely and mildly mentally retarded persons] Nikolić V, et al. **Med Pregl** 1988;41(9–10):412–6 (Eng. Abstr.) **(Scr)**

[Autonomic infantilism] Popov I. **Med Pregl** 1989; 42(1–2):41–4 (Eng. Abstr.) **(Scr)**

BLOOD

Phenylketonuria: implications of initial serum phenylalanine levels on cognitive development. Barclay A, et al.
Psychol Rep 1988 Aug;63(1):135–42

CHEMICALLY INDUCED

In utero exposure to organic solvents and human neurodevelopment. Eskenazi B, et al.
Dev Med Child Neurol 1988 Aug;30(4):492–501

CLASSIFICATION

Classification of normally achieving and mildly mentally retarded students on the basis of their oddity transfer performance. Scott MS, et al. **Am J Ment Retard** 1989 Mar; 93(5):527–34

A cluster analysis of institutionalized mentally retarded individuals [published erratum appears in Am J Ment Retard 1989 Sep;94(2):118] Silverstein AB, et al.
Am J Ment Retard 1989 Jul;94(1):1–5; discussion 6–11

Reflections on "A Cluster Analysis of institutionalized mentally retarded individuals". Silverstein AB, et al.
Am J Ment Retard 1989 Jul;94(1):12–4

Issues in the classification of mental retardation: differentiating among organic etiologies. Burack JA, et al.
J Child Psychol Psychiatry 1988 Nov;29(6):765–79 (82 ref.)

COMPLICATIONS

Ophthalmology in mentally retarded adults. A clinical survey. Jacobson L. **Acta Ophthalmol (Copenh)** 1988 Aug; 66(4):457–62

Discontinuance of antiepileptic medications in patients with developmental disability and diagnosis of epilepsy [published erratum appears in Am J Ment Retard 1989 Sep;94(2):118] Alvarez N. **Am J Ment Retard** 1989 May; 93(6):593–9

Alzheimer–type neuropathology and clinical symptoms of dementia in mentally retarded people without Down syndrome. Barcikowska M, et al. **Am J Ment Retard** 1989 Mar;93(5):551–7

Discontinuation of antiepileptic medications in patients with developmental disability and the diagnosis of epilepsy. Holmes GL. **Am J Ment Retard** 1989 May;93(6):600–1

Anticonvulsants for mentally retarded persons. Kline TF.
Am J Ment Retard 1989 May;93(6):601–2

A retrospective study of mentally retarded patients with behavioral disorders who were treated with carbamazapine. Langee HR. **Am J Ment Retard** 1989 May;93(6):640–3

Antiepileptic medication for persons with mental retardation. Moser H. **Am J Ment Retard** 1989 May;93(6):602–3

Psychotropic drug patterns in a large ICF/MR facility: a ten–year experience. Poindexter AR.
Am J Ment Retard 1989 May;93(6):624–6

The clinical challenge of a complex population: seizures, anticonvulsants, mental retardation, and institutions. Rubin L. **Am J Ment Retard** 1989 May;93(6):603–4

The provision of services to persons with mental retardation and subsequent infection with human immunodeficiency virus (HIV). Kastner TA, et al. **Am J Public Health** 1989 Apr;79(4):491–4

Periodic hypersomnia, congenital ectodermal disorders and multiple exostosis. Reimão R, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):76–9

Relaxation training as a treatment for chronic headaches in an individual having severe developmental disabilities. Michultka DM, et al. **Biofeedback Self Regul** 1988 Sep; 13(3):257–66

Rapid cycling affective disorders in the mentally retarded. Glue P. **Biol Psychiatry** 1989 Jul;26(3):250–6

Gastro–oesophageal disorders in adults with severe mental impairment. Kuruvilla J, et al. **BMJ** 1989 Jul 8; 299(6691):95–6

Vigabatrin in epilepsy in mentally retarded patients. Matilainen R, et al. **Br J Clin Pharmacol** 1989;27 Suppl 1:113S–118S

Autoscopy, mental handicap and epilepsy. A case report. Collacott RA, et al. **Br J Psychiatry** 1988 Dec;153:825–7

Clinical aspects of mental retardation. The chief complaint. Montgomery TR. **Clin Pediatr (Phila)** 1988 Nov; 27(11):529–31

Efficacy of benztropine therapy for drooling. Camp–Bruno JA, et al. **Dev Med Child Neurol** 1989 Jun;31(3):309–19

Cognitive processing of children with Williams syndrome. Crisco JJ, et al. **Dev Med Child Neurol** 1988 Oct;30(5):650–6

Videofluoroscopic investigation of feeding disorders of children with multiple handicap. Griggs CA, et al.
Dev Med Child Neurol 1989 Jun;31(3):303–8

Feeding disorders in children with multiple handicaps. Jones PM. **Dev Med Child Neurol** 1989 Jun;31(3):404–6 (14 ref.)

A unique association of Marfan syndrome with craniofacial hypoplasia, oligophrenia and severe microphthalmia. Capocchi G, et al. **Ital J Neurol Sci** 1988 Aug;9(4):397–400

Segmental neurofibromatosis. Sanchez Conejo–Mir J, et al.
J Am Acad Dermatol 1989 Apr;20(4):681–2

Joubert syndrome: early diagnosis by recognition of the behavioral phenotype and confirmation by cranial sonography. Edwards BO Jr, et al. **J Child Neurol** 1988 Oct;3(4):247–9

The use of valproate in the treatment of mentally retarded persons with typical and atypical bipolar disorders. Sovner R. **J Clin Psychiatry** 1989 Mar;50 Suppl:40–3

Polycystic ovary disease, manic–depressive illness and mental retardation. Ghaziuddin M. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):335–8

Prevalence of dyskinesia and related movement disorders in a developmentally disabled population. Stone RK, et al.
J Ment Defic Res 1989 Feb;33 (Pt 1):41–53

Obsessive–compulsive disorder in mentally retarded patients. Vitiello B, et al. **J Nerv Ment Dis** 1989 Apr;177(4):232–6

Diffuse esophageal spasm: a cause of paroxysmal posturing and irritability in infants and mentally retarded children. Wyllie E, et al. **J Pediatr** 1989 Aug;115(2):261–3

Surgical management of the severely multiply handicapped individual. Louis DS, et al. **J Pediatr Orthop** 1989 Jan–Feb; 9(1):15–8

Death from eczema herpeticum in a child with severe eczema, mental retardation and cataracts. Ewing CI, et al. **J R Soc Med** 1989 Mar;82(3):169–70

Effects of imitation on language comprehension and transfer to production in children with mental retardation. Ezell HK, et al. **J Speech Hear Disord** 1989 Feb;54(1):49–56

Aniridia, ectopia lentis, abnormal upper incisors and mental retardation—an autosomal recessive syndrome. Zamzam AM, et al. **Jpn J Ophthalmol** 1988;32(4):375–8

Sterilisation of a mentally incapable woman. Brahams D. **Lancet** 1989 Jun 3;1(8649):1275–6

Psychological services for persons with mental retardation and psychiatric impairments. Jacobson JW, et al. **Ment Retard** 1989 Feb;27(1):33–6

Treatment of acrophobia of an institutionalized adult with mental retardation. Spencer CR, et al. **Ment Retard** 1989 Feb;27(1):1–4

Autosomal recessive microcephaly, mental retardation with nonpigmentary retinopathy and a distinctive electroretinogram. Harbord MG, et al. **Neuropediatrics** 1989 Aug;20(3):139–41

Ocular injuries by autostimulation in mentally retarded and nearly blind children. Hayasaka S, et al. **Ophthalmic Paediatr Genet** 1988 Nov;9(3):157–9

Increased renal medullary echogenicity in patients with Williams syndrome. Cote G, et al. **Pediatr Radiol** 1989; 19(6–7):481–3

Mental health aspects of mental retardation: results of an NIMH–UIC conference. **Res Dev Disabil** 1989;10(3):223–94

[Harmful influences on the prognosis of mental retardation in children] Höllge J. **Cesk Zdrav** 1988 Jul;36(6–7):269–75 (Eng. Abstr.) **(Cze)**

[Onychodystrophy, sensory and mental deficits, neonatal seizures ("DOORS syndrome") (letter)] Sadoun E, et al. **Arch Fr Pediatr** 1989 Jun–Jul;46(6):465 **(Fre)**

[Homocystinuria in Israel] Waisman Y, et al. **Harefuah** 1988 Nov 1;115(9):221–4 (Eng. Abstr.) **(Heb)**

[Dental treatment under anesthesia in institutionalized mentally retarded patients] Pásztor E, et al. **Fogorv Sz** 1988 Sep;81(9):281–4 (Eng. Abstr.) **(Hun)**

[The problem of screening for HIV infection in mentally retarded institutionalized subjects] Broggini M, et al. **Boll Ist Sieroter Milan** 1988;67(1):77–8 (Eng. Abstr.) **(Ita)**

[Acquired localized hypertrichosis in a mentally retarded man] Pardo GB. **G Ital Dermatol Venereol** 1988 Apr; 123(4):151–2 (Eng. Abstr.) **(Ita)**

[An outbreak of scarlet fever caused by type T3 streptococci in an institution for mentally retarded children] Takizawa Y, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):862–8 (Eng. Abstr.) **(Jpn)**

[Epilepsy in severely mentally retarded children] Takač–Kovač J, et al. **Med Pregl** 1988;41(11–12):497–9 (Eng. Abstr.) **(Scr)**

[Prevalence of hepatitis B infection in institutions for the mentally retarded. Epidemiologic characteristics in the province of Vizcaya] Aristegui Fernández J, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):323–7 (Eng. Abstr.) **(Spa)**

[Mentally deficient patients and infection caused by hepatitis B virus. Prevalence in our area] García Bengoechea M, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):10–3 (Eng. Abstr.) **(Spa)**

CONGENITAL

The open opercular sign: diagnosis and significance. Tatum WO, et al. **Ann Neurol** 1989 Feb;25(2):196–9

Polymicrogyria: a case detected by MRI. Curatolo P, et al. **Brain Dev** 1989;11(4):257–9

Muscle and brain disease. Gordon N. **Dev Med Child Neurol** 1988 Aug;30(4):546–9 (17 ref.)

Case 2, 1988. Congenital mental retardation and juvenile parkinsonism. Jankovic J, et al. **Mov Disord** 1988; 3(4):352–61

A variant of Fukuyama congenital muscular dystrophy in a non-Japanese child. Kohrman MH, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):290–3

DIAGNOSIS

Low IQ samples and WAIS-R factor structure. Atkinson L, et al. **Am J Ment Retard** 1988 Nov;93(3):278–82

Differential validity of the K-ABC for lower functioning preschool children versus those of higher ability. Bloom AS, et al. **Am J Ment Retard** 1988 Nov;93(3):273–7

Comparison of parent and teacher ratings of adaptive behavior of children with mental retardation. Foster-Gaitskell D, et al. **Am J Ment Retard** 1989 Sep; 94(2):177–81

Assessing movement control in children with mental retardation: a generalizability analysis of observers. Ulrich DA, et al. **Am J Ment Retard** 1989 Sep;94(2):170–6

Expanded assessment for discrimination learning with mentally retarded persons: a practical strategy for research and training. Yu D, et al. **Am J Ment Retard** 1989 Sep; 94(2):161–9 (38 ref.)

The Rett syndrome: magnetic resonance imaging and clinical findings in four girls. Krägeloh-Mann I, et al. **Brain Dev** 1989;11(3):175–8

Diagnosis and treatment of mental illness in mentally retarded children: a developmental model. Dosen A. **Child Psychiatry Hum Dev** 1989 Fall;20(1):73–84 (28 ref.)

The Adolescent and Adult Psychoeducational Profile: assessment of adolescents and adults with severe developmental handicaps. Mesibov GB, et al. **J Autism Dev Disord** 1989 Mar;19(1):33–40

Rett syndrome: review and discussion of current diagnostic criteria. Burd L, et al. **J Child Neurol** 1988 Oct;3(4):263–8 (63 ref.)

Psychometric scatter in retarded, autistic preschoolers as measured by the Cattell. McDonald MA, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):599–604

A method of displaying assessment information about people with multiple handicaps as a disability profile. Rohde J, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):95–8

Misleading cues in the diagnosis of mental retardation and infantile autism in the preschool child. Myers BA. **Ment Retard** 1989 Apr;27(2):85–90

Rett syndrome: clinical peculiarities, diagnostic approach, and possible cause. Hagberg BA. **Pediatr Neurol** 1989 Mar–Apr;5(2):75–83 (68 ref.)

Aicardi syndrome with holoprosencephaly and cleft lip and palate. Sato N, et al. **Pediatr Neurol** 1987 Mar–Apr; 3(2):114–6

Rett syndrome [letter] Trevathan E. **Pediatrics** 1989 Apr;83(4 Pt 2):636–7

Cognitive battery for differential diagnosis of mental retardation vs. psychosis. Kay SR. **Res Dev Disabil** 1989; 10(3):251–60 (18 ref.)

Issues in the definition of mental retardation and the representativeness of studies. Richardson SA. **Res Dev Disabil** 1989;10(3):285–94 (18 ref.)

[Referral-related diagnosis of psychological competence of children and adolescents with severe mental handicaps. Experiences with a new methodologic approach] Zimmermann W. **Arztl Jugendkd** 1988;79(4):229–37 (Eng. Abstr.) **(Ger)**

[The diagnosis of mental retardation in children in the tension field of medicine, psychology and pedagogy] Brack UB. **Prax Kinderpsychol Kinderpsychiatr** 1989 Mar;38(3):83–90 (Eng. Abstr.) **(Ger)**

[Rett syndrome: clinical aspects and EEG for an early diagnostic assessment] Battistella PA, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):595–601 (Eng. Abstr.) **(Ita)**

[A new clinico-cytogenetic syndrome—a proximal deletion of the short arm of chromosome 17] Zaletaev DV, et al. **Pediatriia** 1988;(11):82–4 **(Rus)**

[Polymorphism of clinical manifestations and characteristics of imbecility in the Laurence-Moon-Biedl syndrome] Bliumina MG. **Zh Nevropatol Psikhiatr** 1989;89(3):17–22 (Eng. Abstr.) **(Rus)**

[Characteristics of the conceptual and logical thinking of younger schoolchildren from the aspect of diagnosing intellectual impairment] Peresleni LI, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):35–9 (Eng. Abstr.) **(Rus)**

DIET THERAPY

Vitamin supplements and purported learning enhancement in mentally retarded children. Menolascino FJ, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Jun;35(3):181–92

DRUG THERAPY

Haloperidol treatment with chronically medicated residents: dose effects on clinical behavior and reinforcement contingencies. Aman MG, et al. **Am J Ment Retard** 1989 Jan;93(4):452–60

Monitoring and evaluating psychotropic drug use for persons with mental retardation: a follow-up report. Briggs R. **Am J Ment Retard** 1989 May;93(6):633–9

Psychotropic medication of mentally retarded residents in community long-term care facilities. Buck JA, et al. **Am J Ment Retard** 1989 May;93(6):618–23

Maladaptive behaviors associated with neuroleptic drug maintenance. Chadsey-Rusch J, et al. **Am J Ment Retard** 1989 May;93(6):607–17

Review of states' practices on the use of psychotropic medication. Rinck C, et al. **Am J Ment Retard** 1989 May; 93(6):657–68

Prevalence and prediction of psychotropic drug use in California developmental centers. Stone RK, et al. **Am J Ment Retard** 1989 May;93(6):627–32

Stimulant medication and the retarded [letter] Helsel WJ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan; 28(1):138–9

Thioridazine dose effects with reference to stereotypic behavior in mentally retarded residents. Aman MG, et al. **J Autism Dev Disord** 1988 Sep;18(3):355–66

Akathisia in neuroleptic medicated mentally handicapped subjects. Ganesh S, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):323–9

Tardive dyskinesia with schizophrenic relapse. Jawed SH, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):331–4

Neuroleptic-induced parkinsonian side effects in the mentally handicapped. Rao JM, et al. **J Ment Defic Res** 1989 Feb; 33 (Pt 1):81–6

The use of drugs for physical conditions in adults with mental retardation. Searle GF, et al. **J Ment Defic Res** 1989 Feb; 33 (Pt 1):69–79

Neuroleptic malignant syndrome with hypomania and mental retardation. Ward MR, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):339–42

Prescribing requirements of the elderly mentally handicapped: future demands on primary health care teams. Walters RM. **J R Coll Gen Pract** 1988 Jul;38(312):317–9

Neuroleptic malignant syndrome in a man with mental retardation. McNally RJ, et al. **Ment Retard** 1988 Dec; 26(6):385–6

Psychometric properties of the Dyskinesia Identification System: Condensed User Scale (DISCUS). Sprague RL, et al. **Ment Retard** 1989 Jun;27(3):141–8

Research in mental retardation: underreporting of medication information. Agran M, et al. **Res Dev Disabil** 1988; 9(4):351–7

Psychotropic drug use in older developmentally disabled with behavioral difficulties. Harper DC, et al. **Res Dev Disabil** 1989;10(1):53–60

[Pharmacologic interventions in agitated mentally retarded patients] Sidoun P, et al. **Can J Psychiatry** 1989 Feb; 34(1):63–8 (33 ref.) (Eng. Abstr.) **(Fre)**

[Treatment with anti-epileptic drugs—a survey of mentally handicapped adults] Meins W. **Rehabilitation (Stuttg)** 1989 Feb;28(1):10–4 (Eng. Abstr.) **(Ger)**

ECONOMICS

Balance of powers: Social Security and the mentally disabled, 1980–1985. Goldman HH, et al. **Milbank Q** 1988; 66(3):531–51

ENZYMOLOGY

Recurrent myoglobinuria in a child with mental retardation: phosphoglycerate kinase deficiency. Sugie H, et al. **J Child Neurol** 1989 Apr;4(2):95–9

EPIDEMIOLOGY

Mentally retarded persons in the People's Republic of China: review of epidemiological studies and services. Tao KT. **Am J Ment Retard** 1988 Sep;93(2):193–9

Neurodevelopmental outcome of babies weighing less than 2001 g at birth: influence of perinatal transfer and mechanical ventilation. Marlow N, et al. **Arch Dis Child** 1988 Sep;63(9):1069–74

Trends in the prevalence of severe mental handicap in Sheffield since 1960. Martindale A, et al. **Community Med** 1988 Nov;10(4):331–40

Prevalence of mental retardation related to fragile X syndrome and other chromosomal abnormalities in the Republic of San Marino. Cammarata S, et al. **Dev Med Child Neurol** 1988 Oct;30(5):646–9

Socio-demographic background of children referred to the psychological assessment clinic. Resnick CA, et al. **East Afr Med J** 1988 Oct;65(10):658–63

The epidemiology and public health significance of Rett syndrome. Trevathan E, et al. **J Child Neurol** 1988;3 Suppl:S17–20 (27 ref.)

The prevalence of mental handicap in New Zealand. Joyce C, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):660–2

[Prevalence of disability in 2 different social groups in Salvador, Brazil] Santos Júnior AC, et al. **Bol Of Sanit Panam** 1989 Apr;106(4):304–13 (Eng. Abstr.) **(Por)**

[Epidemiology of mental retardation. Study of a dependent population of a telephone company] Pascual Pascual SI, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:66–70 (14 ref.) **(Spa)**

[Prevalence of mental subnormality recorded in the province of Jaen] Delgado Rodríguez M, et al. **Gac Sanit** 1989 Jan–Feb;3(10):327–32 (Eng. Abstr.) **(Spa)**

[Socio-family and age features in the diagnosis of mental retardation in the province of Jaén] Delgado Rodríguez M, et al. **Gac Sanit** 1988 Nov–Dec;2(9):281–5 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Epilepsy and mental retardation following febrile seizures in childhood. Wolf SM, et al. **Acta Paediatr Scand** 1989 Mar;78(2):291–5

Antenatal and perinatal conditions correlated to handicap among 4-year-old children. Holst K, et al. **Am J Perinatol** 1989 Apr;6(2):258–67

Encephalitis among Cree children in northern Quebec. Black DN, et al. **Ann Neurol** 1988 Oct;24(4):483–9

Aetiology of mild mental retardation. Lamont MA, et al. **Arch Dis Child** 1988 Sep;63(9):1032–8

Handicapping and genetic disorders in Zimbabwean institutions: a diagnostic survey. Viljoen DL, et al. **Cent Afr J Med** 1989 Feb;35(2):323–6

Sagittal synostosis—clinical significance? [letter; comment] Boltshauser E. **Childs Nerv Syst** 1989 Apr;5(2):53. **Comment on:** Childs Nerv Syst 1988 Aug;4(4):223–30

Cerebral gigantism (Soto's syndrome) [letter] Udani RH, et al. **Indian Pediatr** 1988 Apr;25(4):392–4

Maternal hyperthermia as a cause of "idiopathic" mental retardation. Upfold JB, et al. **Med Hypotheses** 1988 Sep; 27(1):89–92

The relationship between intrapartum obstetric care and chronic neurodevelopmental handicaps in children. Newton ER. **N Y State J Med** 1988 Oct;88(10):531–8 (65 ref.)

Continuous spikes and waves during slow sleep: a 30 months follow-up study of neuropsychological recovery and EEG findings. Boel M, et al. **Neuropediatrics** 1989 Aug;

20(3):176–80
Foetal risks following antenatal radionuclide administration. Mountford PJ. **Nucl Med Commun** 1989 Feb;10(2):79–81
Possible foetotoxic effects of mercury vapour: a case report. Gelbier S, et al. **Public Health** 1989 Jan;103(1):35–40
A study of clinical diagnosis and evaluation of ability of mentally handicapped children. Lee YH, et al. **Yonsei Med J** 1988;29(4):333–40
[Dynamics of neurologic and mental development of children born by cesarean section] German DG, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):62–5 (Eng. Abstr.) **(Rus)**
[Factors in the development of mild mental retardation] Nikolić V. **Med Pregl** 1988;41(1-2):51–3 (Eng. Abstr.) **(Scr)**
[Rett syndrome. A frequent cause of progressive mental retardation in girls] Rodríguez-Núñez A, et al. **An Esp Pediatr** 1989 Mar;30(3):187–9 (Eng. Abstr.) **(Spa)**

GENETICS

A cytogenetic study of nonpolymalformed patients with mental retardation of clinically undefined etiology: application of a high resolution banding technique. Kikkawa K, et al. **Acta Med Okayama** 1989 Apr; 43(2):105–14
A deletion map of the WAGR region on chromosome 11. Gessler M, et al. **Am J Hum Genet** 1989 Apr;44(4):486–95
Prenatal diagnosis and carrier detection of a cryptic translocation by using DNA markers from the short arm of chromosome 5. Overhauser J, et al. **Am J Hum Genet** 1989 Aug;45(2):296–303
X-linked mental retardation 3. Proceedings of the Third International Workshop on Fragile X and X-linked Mental Retardation. Troina, Italy, September 13–16, 1987 [published erratum appears in Am J Med Genet 1988 Nov;31(3):727–30] **Am J Med Genet** 1988 May-Jun; 30(1-2):1–702
Linkage analysis suggests at least two loci for X-linked non-specific mental retardation. Arveiler B, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):473–83
Congenital diaphragmatic hernia, coarse facies, and acral hypoplasia: Fryns syndrome. Bamforth JS, et al. **Am J Med Genet** 1989 Jan;32(1):93–9
A patient with an interstitial deletion of the proximal portion of the long arm of chromosome 4. Beall MH, et al. **Am J Med Genet** 1988 Nov;31(3):553–7 (7 ref.)
De novo reciprocal 1p;2q translocation in a child with multiple congenital anomalies/mental retardation syndrome. Chitayat D, et al. **Am J Med Genet** 1989 Jan; 32(1):36–41
Interstitial deletion of the long arm of chromosome 4. Chudley AE, et al. **Am J Med Genet** 1988 Nov;31(3):549–51
Terminal deletion 4q in a severely retarded boy. de Michelena MI, et al. **Am J Med Genet** 1989 Jun;33(2):228–30
A new case of Zimmermann–Laband syndrome with mild mental retardation, asymmetry of limbs, and hypertrichosis. de Pina Neto JM, et al. **Am J Med Genet** 1988 Nov; 31(3):691–5
Rett syndrome: genetic clues based on mitochondrial changes in muscle [letter] Eeg-Olofsson O, et al. **Am J Med Genet** 1989 Jan;32(1):142–4
Megalocornea and mental retardation syndrome: a new case. Grønbech-Jensen M. **Am J Med Genet** 1989 Apr; 32(4):468–9 (7 ref.)
Probable localisation of the Coffin–Lowry locus in Xp22.2–p22.1 by multipoint linkage analysis. Hanauer A, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):523–30
Postaxial acrofacial dysostosis syndrome with microcephaly, seizures and profound mental retardation. Hauss-Albert H, et al. **Am J Med Genet** 1988 Nov;31(3):701–3
Angelman and Prader–Willi syndromes share a common chromosome 15 deletion but differ in parental origin of the deletion. Knoll JH, et al. **Am J Med Genet** 1989 Feb; 32(2):285–90
Macrosomia and mental retardation: evidence of autosomal dominant inheritance in four generations. Mangano L, et al. **Am J Med Genet** 1989 Jan;32(1):67–71
Kabuki make-up (Niikawa–Kuroki) syndrome: a study of 62 patients. Niikawa N, et al. **Am J Med Genet** 1988 Nov; 31(3):565–89 (24 ref.)
A girl with the Pitt–Rogers–Danks syndrome. Oorthuys JW, et al. **Am J Med Genet** 1989 Jan;32(1):140–1
Simpson–Golabi–Behmel syndrome: follow-up of the Michigan family. Opitz JM, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):301–8
FG syndrome update 1988: note of 5 new patients and bibliography. Opitz JM, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):309–28 (18 ref.)
A family with the Coffin Lowry syndrome revisited: localization of CLS to Xp21-pter. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):509–21
X-linked mental retardation with dystonic movements of the hands. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):251–62
Fragile X expression in normal and mentally retarded subjects: effect of treatment with an antifolic agent. Sanfilippo S, et al. **Am J Med Genet** 1988 May-Jun; 30(1-2):369–76
Bibliography on X-linked mental retardation, the fragile X and related subjects IV (1988). Spano LM, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):31–60
Linkage studies with the gene for an X-linked syndrome of mental retardation, microcephaly and spastic diplegia (MRX2). Sutherland GR, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):493–508
A non-syndromal form of X-linked mental retardation (XLMR) is linked to DXS14. Suthers GK, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):485–91
A new syndrome with mental retardation, short stature and an Xq duplication. Thode A, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):239–50
X-linked mental retardation associated with psoriasis: a new syndrome? Tranebjaerg L, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):263–73
Further delineation of a syndrome of cerebellar vermis hypo/aplasia, oligophrenia, congenital ataxia, coloboma, and hepatic fibrosis. Verloes A, et al. **Am J Med Genet** 1989 Feb;32(2):227–32
GOMBO syndrome of growth retardation, ocular abnormalities, microcephaly, brachydactyly, and oligophrenia: a possible "new" recessively inherited MCA/MR syndrome. Verloes A, et al. **Am J Med Genet** 1989 Jan;32(1):15–8
Duplication of a small segment of 5p due to maternal recombination within a paracentric shift. Webb GC, et al. **Am J Med Genet** 1988 Aug;30(4):875–81
MCA/MR syndrome in a female infant with tetraploidy mosaicism: review of the human polyploid phenotype. Wilson GN, et al. **Am J Med Genet** 1988 Aug;30(4):953–61 (43 ref.)
Partial aniridia, cerebellar ataxia, and mental deficiency (Gillespie syndrome) in two brothers. Wittig EO, et al. **Am J Med Genet** 1988 Jul;30(3):703–8
Tricho–rhino–phalangeal syndrome type I with severe mental retardation due to interstitial deletion of 8q23.3–24.13. Yamamoto Y, et al. **Am J Med Genet** 1989 Jan;32(1):133–5
De novo dir dup (1)(q3200——4200) in an adult. Further delineation of the pure 1q trisomy syndrome. Barros-Núñez P, et al. **Ann Genet** 1989;32(2):97–101 (26 ref.)
Partial trisomy 13q22——qter. A new case. Galán F, et al. **Ann Genet** 1989;32(2):114–6
A case of the ring 20 syndrome. Thomsen SG, et al. **Ann Genet** 1989;32(2):111–3
A family with the Bardet–Biedl syndrome and diabetes mellitus. Escallon F, et al. **Arch Ophthalmol** 1989 Jun; 107(6):855–7
The 49,XXXXY syndrome. Clinical and psychological follow-up data. Borghgraef M, et al. **Clin Genet** 1988 Jun; 33(6):429–34
Interstitial deletion of the long arm of chromosome 6(q22.2q23) in a boy with phenotypic features of Williams syndrome [letter] Bzdúch V, et al. **Clin Genet** 1989 Mar; 35(3):230–1
A genetic-diagnostic survey in an institutionalized population of 158 mentally retarded patients. The Viaene experience. Dereymaeker AM, et al. **Clin Genet** 1988 Aug;34(2):126–34
Coffin–Lowry syndrome: a multicenter study. Gilgenkrantz S, et al. **Clin Genet** 1988 Oct;34(4):230–45
Four copies of 8p in a mentally retarded boy with the mosaic karyotype 47,XY, + i(8p)/46,XY. Kristoffersson U, et al. **Clin Genet** 1988 Sep;34(3):201–3
The fragile X-chromosome: an evaluation of the results in a routine cytogenetic laboratory in the period 1981–1986. Veenema H, et al. **Clin Genet** 1988 Jun;33(6):410–7
Complex chromosome rearrangements involving chromosomes 1;3 and 2;3 in two abnormal children. Voullaire LE, et al. **Clin Genet** 1988 Nov;34(5):313–20
Familial achalasia, microcephaly, and mental retardation. Case report and review of literature. Khalifa MM. **Clin Pediatr (Phila)** 1988 Oct;27(10):509–12 (26 ref.)
Fragile X syndrome: a major cause of X-linked mental retardation. Butler MG. **Compr Ther** 1988 Jul;14(7):3–7 (10 ref.)
Molecular definition of de novo and genetically transmitted WAGR-associated rearrangements of 11p13. Lavedan C, et al. **Cytogenet Cell Genet** 1989;50(2-3):70–4
Molybdenum co-factor deficiency: an easily missed inborn error of metabolism. Aukett A, et al. **Dev Med Child Neurol** 1988 Aug;30(4):531–5
Molecular mapping and cloning of the breakpoints of a chromosome 11p14.1–p13 deletion associated with the AGR syndrome. Gessler M, et al. **Genomics** 1988 Aug; 3(2):117–23
Mental retardation and Y/8 translocation [karyotype: 46,XY, t(Y;8)(q12;q24)] in father and son. Fryns JP, et al. **Helv Paediatr Acta** 1988 Aug;43(1-2):87–90
Detection of an unbalanced translocation (4;14) in a mildly retarded father and son by flow cytometry. Cooke A, et al. **Hum Genet** 1989 Aug;83(1):83–7
Siblings with chromosome mosaicism, microcephaly, and growth retardation: the phenotypic expression of a human mitotic mutant? Tolmie JL, et al. **Hum Genet** 1988 Oct; 80(2):197–200
Dissociation between mental retardation and fragile site expression in a family with fragile X-linked mental retardation. Voelckel MA, et al. **Hum Genet** 1988 Dec; 80(4):375–8
A systematic cytogenetic study of a population of 1170 mentally retarded and/or behaviourly disturbed patients including fragile X-screening. The Hondsberg experience. Schreppers-Tijdink GA, et al. **J Genet Hum** 1988 Dec; 36(5):425–46
The recurrence risks for mild idiopathic mental retardation. Bundey S, et al. **J Med Genet** 1989 Apr;26(4):260–6
Chromosome studies of males in an institution for the mentally handicapped. English CJ, et al. **J Med Genet** 1989 Jun;26(6):379–81
Hypohidrotic ectodermal dysplasia, primary hypothyroidism, and agenesis of the corpus callosum. Fryns JP, et al. **J Med Genet** 1989 Aug;26(8):520–1
Microcephaly, mental retardation, cataracts, and hypogonadism in sibs: Martsolf's syndrome. Harbord MG, et al. **J Med Genet** 1989 Jun;26(6):397–400
A third case of de novo partial trisomy 4p. Oorthuys JW, et al. **J Med Genet** 1989 May;26(5):344–5
The association of Angelman's syndrome with deletions within 15q11–13. Pembrey M, et al. **J Med Genet** 1989 Feb;26(2):73–7
A new recognisable syndrome in three sibs with congenital heart disease, round face with depressed nasal bridge, short stature, and developmental retardation. Sonoda T, et al. **J Med Genet** 1988 Oct;25(10):711–3
X linked mental retardation: a family with a separate syndrome? Thompson EM, et al. **J Med Genet** 1989 Jun; 26(6):373–8
A terminal deletion (14)(q31.1) in a child with microcephaly, narrow palate, gingival hypertrophy, protuberant ears, and mild mental retardation. Yen FS, et al. **J Med Genet** 1989 Feb;26(2):130–3
Psychological findings in three children with ring 15 chromosome. Borghgraef M, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):337–47 (23 ref.)
The Miller–Dieker syndrome: a case report and review of the literature. Izmeth MG, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):267–70 (9 ref.)
Unbalanced form of translocation deletion between chromosomes 6 and 22 in a mentally handicapped female [45,XX,-6,-22,+der(6),t(6;22)(q25.1:q11.2)] Jancar J, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):255–9
Clinico-neurological investigations in the fra(X) form of mental retardation. Vieregge P, et al. **J Neurol** 1989 Feb; 236(2):85–92
Fragile X chromosome in institutionalized male adults with mental retardation. Aoi T, et al. **Keio J Med** 1989 Mar; 38(1):36–9
Usher syndrome: clinical findings and gene localization studies. Kimberling WJ, et al. **Laryngoscope** 1989 Jan; 99(1):66–72
Genetic and cytogenetic analysis of patients showing reduced esterase-D levels and mental retardation from a survey of 500 individuals with retinoblastoma. Cowell JK, et al. **Ophthalmic Paediatr Genet** 1989 Jun;10(2):117–27
Mental retardation and EEG abnormalities in Waardenburg's syndrome: two case reports (EEG anomalies in Waardenburg's syndrome). Cantani A, et al. **Padiatr Padol** 1989;24(2):137–40
Ring 18 chromosome with mental retardation, hemidysmorphism, and mitochondrial encephalomyopathy. Amit R, et al. **Pediatr Neurol** 1988 Sep-Oct;4(5):301–4
Congenital alopecia, seizures, and psychomotor retardation in three siblings. Wessel HB, et al. **Pediatr Neurol** 1987 Mar-Apr;3(2):101–7 (40 ref.)
[Unbalanced translocation 8/X in a girl] Ickstadt A, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):239–42 (Eng. Abstr.) **(Ger)**
[Familial hypo-beta-lipoproteinemia associated with mental retardation and spastic paraparesis] Sueoka E, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1715–20 **(Jpn)**
[Case of unbalanced translocation (18, 22) in a child with congenital mental retardation] Ginzburg IA, et al. **Tsitol Genet** 1988 May-Jun;22(3):52–3 (Eng. Abstr.) **(Rus)**
[Neuroectodermal dysplasia in 2 Uzbek families] Dadali EL, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):58–61 (Eng. Abstr.) **(Rus)**
[Chromosome aberrations in a group of mentally retarded persons] Sršeň S, et al. **Cesk Psychiatr** 1989 Feb;85(1):9–16 (Eng. Abstr.) **(Slo)**
[Microcephalia vera. Genetic heterogeneity and mental retardation] Baldellou Vázquez A, et al. **An Esp Pediatr** 1988 Nov;29(5):397–400 (Eng. Abstr.) **(Spa)**
[Coffin Lowry syndrome associated with repeated pneumonia] Bustos Lozano G, et al. **An Esp Pediatr** 1988 May;28(5):451–3 (Eng. Abstr.) **(Spa)**
[Mental deficiency associated with a fragility of the X chromosome] Guitart Feliubadalo M, et al. **An Esp Pediatr** 1988 Nov;29(5):377–81 (Eng. Abstr.) **(Spa)**
[Penta-X syndrome. Report of a case with 47,XXX/48,XXXX/49,XXXXX mosaicism] Gómez-Valencia L, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):417–21 (19 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

Early interest in the idiot savant [letter] Foerstl J. **Am J Psychiatry** 1989 Apr;146(4):566
From Munchausen to Cassandra: a critique of Hollander's "Euthanasia and Mental Retardation". Heifetz LJ. **Ment Retard** 1989 Apr;27(2):67–9
Euthanasia and mental retardation: suggesting the unthinkable. Hollander R. **Ment Retard** 1989 Apr; 27(2):53–61
Response to Wolfensberger and Heifetz. Hollander R. **Ment Retard** 1989 Apr;27(2):71–4

Schizophrenia and mental handicap: an historical review, with implications for further research. Turner TH. **Psychol Med** 1989 May;19(2):301–14

IMMUNOLOGY

Varicella serology in institutional exposure management. Sulkes SB, et al. **Am J Ment Retard** 1988 Sep;93(2):113–7

Absence of antibodies to HIV in long term institutionalized psychiatric patients [letter] Mondelli MU, et al. **Eur J Epidemiol** 1989 Jun;5(2):263–4

"HBV status among mentally retarded". Joshi N, et al. **J Assoc Physicians India** 1988 Feb;36(2):166–7

Low prevalence of hepatitis B in mental handicap hospital [letter] [see comments] Thomson RG, et al. **Lancet** 1989 Jan 7;1(8628):44–5. **Comment in:** Lancet 1989 Apr 15;1(8642):840–2

Duration of immunity to hepatitis B vaccination in institutionalized mentally retarded patients. Torre D, et al. **Vaccine** 1989 Apr;7(2):102–3

METABOLISM

Disialotransferrin developmental deficiency syndrome. Kristiansson B, et al. **Arch Dis Child** 1989 Jan;64(1):71–6

Hair trace elements and mental retardation among children. Shrestha KP, et al. **Arch Environ Health** 1988 Nov–Dec; 43(6):396–8

Alpha B–crystallin is expressed in non–lenticular tissues and accumulates in Alexander's disease brain. Iwaki T, et al. **Cell** 1989 Apr 7;57(1):71–8

MORTALITY

A study of mortality experiences in a mental–handicap hospital. McLoughlin IJ. **Br J Psychiatry** 1988 Nov; 153:645–9

NURSING

When whiting out won't work [editorial] Huey FL. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):173

Writing behavioural objectives: an evaluation of a simple, inexpensive method. Sturmey P, et al. **J Adv Nurs** 1988 Jul;13(4):496–500

[Health care for the mentally retarded—special care. Consequences of liquidation (editorial)] Evang T. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):426–7 **(Nor)**

[Who is left in the institutions? Some problems in connection with the process of deinstitutionalization] Linaker O, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):473–5 (Eng. Abstr.) **(Nor)**

PARASITOLOGY

An outbreak of Trichuris trichiura in a mental handicap hospital. Allen KD, et al. **J Hosp Infect** 1989 Feb; 13(2):161–6

PATHOLOGY

Peroral lynestrenol and arterial disease in mentally retarded women. A case–control study based on autopsy findings. Huovinen K, et al. **Acta Obstet Gynecol Scand** 1988; 67(3):211–4

Post mortem findings in a patient with 46,XX,fra(2)(q13). Smith A, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):87–93

Neuropsychiatric studies of the "pellucidumsyndrom". Mizukami K, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):67–75

Marshall–Smith syndrome: new aspects. Roodhooft AM, et al. **Neuropediatrics** 1988 Nov;19(4):179–82

[Xanthomatoses, cataracts, mental retardation, adynamia and equilibrium disturbances (clinical conference)] **Harefuah** 1988 Nov 1;115(9):249–54 **(Heb)**

PHYSIOPATHOLOGY

Development of righting reflexes, gross motor functions and balance in infants with labyrinth hypoactivity with or without mental retardation. Kaga K, et al. **Adv Otorhinolaryngol** 1988;41:152–61

Does gastrostomy and fundoplication prevent aspiration pneumonia in mentally retarded persons? Bui HD, et al. **Am J Ment Retard** 1989 Jul;94(1):16–9

Diurnal weight gain among patients with mental retardation. Vieweg WV, et al. **Am J Ment Retard** 1989 Mar; 93(5):558–65 (56 ref.)

Hyperventilation in the awake state: potentially treatable component of Rett syndrome. Southall DP, et al. **Arch Dis Child** 1988 Sep;63(9):1039–48

Neurophysiological findings in the Rett syndrome, I: EMG, conduction velocity, EEG and somatosensory–evoked potential studies. Bader GG, et al. **Brain Dev** 1989; 11(2):102–9

Neurophysiological findings in the Rett syndrome, II: Visual and auditory brainstem, middle and late evoked responses. Bader GG, et al. **Brain Dev** 1989;11(2):110–4

Angelman's (happy puppet) syndrome: clinical, CT scan and serial electroencephalographic study. Ganji S, et al. **Clin Electroencephalogr** 1989 Apr;20(2):128–40

Visual evoked potentials of mildly mentally retarded and control children. Gasser T, et al. **Dev Med Child Neurol** 1988 Oct;30(5):638–45

Peroxisomopathies: new developments [letter] Zellweger H. **Dev Med Child Neurol** 1989 Apr;31(2):264–6

Comparison of the identifiability of the low intensity ABR and MLR in the mentally handicapped patient. Kavanagh KT, et al. **Ear Hear** 1989 Apr;10(2):124–30

EEG development in Rett syndrome. A study of 30 cases. Hagne I, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):1–6

The effects of the everyday environment on epileptic activity in three mentally retarded individuals. Neill JC, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):198–206

Stair stepping efficiency of mentally handicapped and nonhandicapped adult females. Seidl C, et al. **Ergonomics** 1989 May;32(5):519–24

Visual and auditory affect recognition in singly diagnosed mentally retarded patients, mentally retarded patients with autism and normal young children. Gioia JV, et al. **Int J Neurosci** 1988 Dec;43(3–4):149–63

A low–cost method for simultaneous video–recording of ambulant subject and electroencephalograph: the Quarrier's system. Kerr AM, et al. **J Ment Defic Res** 1988 Dec;32 (Pt 6):497–500

Rett syndrome: case reports and management strategies. Burd L, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):283–7

Neurologic features of Williams and Down syndromes. Trauner DA, et al. **Pediatr Neurol** 1989 May–Jun; 5(3):166–8

Atypical laterality and retardation. Pipe ME. **Psychol Bull** 1988 Nov;104(3):343–7 (55 ref.)

Nutritional status of institutionalized children and adolescents with developmental disabilities. Pesce KA, et al. **Res Dev Disabil** 1989;10(1):33–52

Longitudinal examinations in the course of dietotherapy of mentally retarded obese in–patients. Antal M, et al. **Z Ernahrungswiss** 1988 Jun;27(2):101–8

[A preliminary study of multiple brain evoked potentials in an idiot savant] Zhang MD. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):65–7, 126 (Eng. Abstr.) **(Chi)**

[Pituitary reserve of growth hormone in adolescent patients with cerebral palsy and mental retardation] Hayashi Y, et al. **No To Hattatsu** 1989 May;21(3):239–44 (Eng. Abstr.) **(Jpn)**

[A case of frontal lobe epilepsy which evolved from Lennox–Gastaut syndrome] Sumi T, et al. **No To Hattatsu** 1988 Nov;20(6):497–502 (Eng. Abstr.) **(Jpn)**

[Electrophysiological study of children with various hereditary forms of mental retardation] Puchinskaia LM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):51–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Screening of congenital hypothyroidism, phenylketonuria, galactosemia, homocystinuria, and maple syrup urine disease in moderate to severe mentally retarded Chinese children. Hsiao KJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):18–22

[Estimation of the cost benefit relation of a program of early detection of congenital hypothyroidism] Ward LS, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):106–10 (Eng. Abstr.) **(Por)**

[Developmental quotient/intelligence quotient (DQ/IQ) in children with congenital hypothyroidism] Illig R, et al. **An Esp Pediatr** 1988 May;28(5):389–94 (Eng. Abstr.) **(Spa)**

[Early diagnosis of phenylketonuria and congenital hypothyroidism. Prevention of mental retardation] de Pediatria SC, et al. **Rev Chil Pediatr** 1988 May–Jun; 59(3):200–3 **(Spa)**

PSYCHOLOGY

Substance use and abuse among mentally retarded persons: a comparison of patients and a survey population. Westermeyer J, et al. **Am J Drug Alcohol Abuse** 1988; 14(1):109–23

Relation between the receptive language and mental age of persons with mental retardation. Abbeduto L, et al. **Am J Ment Retard** 1989 Mar;93(5):535–43

Sexual expression of mentally retarded people: educational and legal implications. Abramson PR, et al. **Am J Ment Retard** 1988 Nov;93(3):328–34 (68 ref.)

Sibling relationships involving developmentally disabled people. Begun AL. **Am J Ment Retard** 1989 Mar; 93(5):566–74

Structure of adaptive behavior in samples with and without mental retardation. Bruininks R, et al. **Am J Ment Retard** 1988 Nov;93(3):265–72

Oddity learning in developmentally delayed children: facilitation by means of familiar stimuli. Bryant JT, et al. **Am J Ment Retard** 1988 Sep;93(2):138–43

Perceptions of mental retardation and mental illness. Caruso DR, et al. **Am J Ment Retard** 1988 Sep;93(2):118–24

Revealing hidden competencies: a new method for studying language comprehension in children with motor impairments. Cauley KM, et al. **Am J Ment Retard** 1989 Jul;94(1):53–63

Maternal language environment of children with mental retardation. Davis H, et al. **Am J Ment Retard** 1988 Sep; 93(2):144–53

Automatic–effortful processing and cognitive inertia in persons with mental retardation. Ellis NR, et al. **Am J Ment Retard** 1989 Jan;93(4):412–23

Memory for spatial location in children, adults, and mentally retarded persons. Ellis NR, et al. **Am J Ment Retard** 1989 Mar;93(5):521–6

Intelligence as a correlate of children's problem solving. Ferretti RP, et al. **Am J Ment Retard** 1989 Jan;93(4):424–33

Deficits in stereoscopic depth perception by mildly mentally retarded adults. Fox R, et al. **Am J Ment Retard** 1988 Nov; 93(3):232–44

Recognition of emotion by mentally retarded adolescents and young adults. Hobson RP, et al. **Am J Ment Retard** 1989 Jan;93(4):434–43

Study of the similar structure hypothesis with mentally retarded adults and nonretarded children of comparable mental age. Hore AP, et al. **Am J Ment Retard** 1989 Sep; 94(2):182–8

Phasic alertness and differences in picture encoding speed. Merrill EC, et al. **Am J Ment Retard** 1988 Nov;93(3):245–9

What mentally retarded and nonretarded children expect of one another. Miller CT, et al. **Am J Ment Retard** 1989 Jan;93(4):396–405

Taxonomy of family life styles: III. Replication with families with severely mentally retarded children. Mink IT, et al. **Am J Ment Retard** 1988 Nov;93(3):250–64

Family resources and stress associated with having a mentally retarded child. Minnes PM. **Am J Ment Retard** 1988 Sep; 93(2):184–92

A multidimensional model of mental retardation: impairment, subnormal behavior, role failures, and socially constructed retardation. St. Claire L. **Am J Ment Retard** 1989 Jul; 94(1):88–96 (46 ref.)

Construct validity of the adapted Questionnaire on Resources and Stress—short form. Salisbury CL. **Am J Ment Retard** 1989 Jul;94(1):74–9

Validity of messages from quadriplegic persons with cerebral palsy. Sappington J, et al. **Am J Ment Retard** 1989 Jul; 94(1):49–52

Childcare responsibilities, peer relations, and sibling conflict: older siblings of mentally retarded children. Stoneman Z, et al. **Am J Ment Retard** 1988 Sep;93(2):174–83

Acceptability of behavioral interventions for self–injurious behavior. Tarnowski KJ, et al. **Am J Ment Retard** 1989 Mar;93(5):575–80

Psychopathology in fragile X syndrome. Hagerman RJ, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):142–52 (59 ref.)

Midazolam for aggressivity and violence in three mentally retarded patients. Bond WS, et al. **Am J Psychiatry** 1989 Jul;146(7):925–6

Living with a mentally handicapped brother or sister. Gath A. **Arch Dis Child** 1989 Apr;64(4):513–6

Psychopathology in adult mentally handicapped hospital patients. Glue P, et al. **Aust N Z J Psychiatry** 1988 Sep; 22(3):312–5

Similar–sequence and similar–structure in retarded and non–retarded children's development. Lister C, et al. **Br J Educ Psychol** 1989 Feb;59 (Pt 1):8–18

Dementia and mental handicap: attitudes, emotional distress and caregiving. Whittick JE. **Br J Med Psychol** 1989 Jun; 62 (Pt 2):181–9

Standardised assessment of personality disorders in mental handicap [letter] Ballinger BR, et al. **Br J Psychiatry** 1988 Apr;152:577

Behavioural disorder in the mentally handicapped. The role of life events. Ghaziuddin M. **Br J Psychiatry** 1988 May; 152:683–6

The mentally handicapped criminal offender. A 10–year study of two hospitals. Kearns A, et al. **Br J Psychiatry** 1988 Jun;152:848–51

Pica as a cause of death in three mentally handicapped men. McLoughlin IJ. **Br J Psychiatry** 1988 Jun;152:842–5

Shop–lifting as a symptom of stress in families of mentally handicapped persons. A case report. Roy M. **Br J Psychiatry** 1988 Jun;152:845–6

Mania following bereavement in a mentally handicapped man [letter] Singh I, et al. **Br J Psychiatry** 1988 Jun;152:866–7

Psychotropic medication and antisocial behavior in a mental handicap hospital [letter] Summerfield D. **Br J Psychiatry** 1988 Sep;153:417

What's in a face? The case of autism. Hobson RP, et al. **Br J Psychol** 1988 Nov;79 (Pt 4):441–53

Calendar calculating in 'idiots savants': how do they do it? Howe MJ, et al. **Br J Psychol** 1988 Aug;79 (Pt 3):371–86

Mentally retarded adolescent sex offenders. A survey and pilot study. Gilby R, et al. **Can J Psychiatry** 1989 Aug; 34(6):542–8

Abuse and neglect in psychiatrically hospitalized multihandicapped children. Ammerman RT, et al. **Child Abuse Negl** 1989;13(3):335–43

The development of speech act comprehension in mentally retarded individuals and nonretarded children. Abbeduto L, et al. **Child Dev** 1988 Dec;59(6):1460–72

Collaborative skill instruction for promoting positive interactions between mentally handicapped and nonhandicapped children. Putnam JW, et al. **Except Child** 1989 Apr;55(6):550–7

Dementia, mental retardation, and competency to make decisions. Kaplan KH, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):385–8

The chief scientist reports ... the meaning of independent living for people with a mental handicap. Markova I, et al. **Health Bull (Edinb)** 1988 Jul;46(4):246–53

Age and pattern of intellectual decline among Down syndrome and other mentally retarded adults. Gibson D, et al. **Int J Rehabil Res** 1988;11(1):47–55

Dilemmas of adolescents with developmental retardation: a review. Dossetor DR, et al. **J Adolesc** 1989 Jun; 12(2):167–85 (50 ref.)

Enuresis following masturbation in a mentally retarded adolescent. Rockney RM, et al. **J Adolesc Health Care** 1989 Mar;10(2):165–7

Bipolar disorder in mentally retarded adolescents. McCracken JT, et al.
J Am Acad Child Adolesc Psychiatry 1988 Jul;27(4):494–9

Child–environment relationships: a cross–cultural study of educable mentally retarded children and their families. Nihira K, et al. **J Autism Dev Disord** 1988 Sep;18(3):327–41

Mentally handicapped people as parents. Gath A.
J Child Psychol Psychiatry 1988 Nov;29(6):739–44 (20 ref.)

Low intelligence and special abilities. O'Connor N, et al.
J Child Psychol Psychiatry 1988 Jul;29(4):391–6 (29 ref.)

Neurofibromatosis and psychological processes. Varnhagen CK, et al. **J Dev Behav Pediatr** 1988 Oct;9(5):257–65

Emergent simple discrimination established by indirect relation to differential consequences. de Rose JC, et al.
J Exp Anal Behav 1988 Jul;50(1):1–20

Stimulus class formation and stimulus–reinforcer relations. Dube WV, et al. **J Exp Anal Behav** 1989 Jan;51(1):65–76

Stimulus class formation and concept learning: establishment of within– and between–set generalization and transitive relationships via conditional discrimination procedures. Haring TG, et al. **J Exp Anal Behav** 1989 Jul;52(1):13–25

Generalization of delayed identity matching in retarded children. Lowenkron B. **J Exp Anal Behav** 1988 Sep; 50(2):163–72

Conditional discrimination in mentally retarded adults: the effect of training the component simple discriminations. Saunders KJ, et al. **J Exp Anal Behav** 1989 Jul;52(1):1–12

The merger and development of equivalence classes by unreinforced conditional selection of comparison stimuli. Saunders RR, et al. **J Exp Anal Behav** 1988 Sep; 50(2):145–62

The effects of central processing strategies on learning disabled, mildly retarded, average, and gifted children's elaborative encoding abilities. Swanson HL.
J Exp Child Psychol 1989 Jun;47(3):370–97

Factors influencing the selection of toys for handicapped and normally developing preschool children. Fallon MA, et al. **J Genet Psychol** 1989 Jun;150(2):125–34

Differences in the behavior and development of profoundly and severely retarded adults. ter Laak JJ.
J Genet Psychol 1989 Mar;150(1):85–92

Williams' syndrome in adulthood: a case study focusing on psychological and psychiatric aspects. Bradley EA, et al.
J Ment Defic Res 1989 Apr;33 (Pt 2):175–84

Analysis of ward staff initiatives towards mentally retarded residents: clues for intervention. Duker PC, et al.
J Ment Defic Res 1989 Feb;33 (Pt 1):55–67

The mentally handicapped person with epilepsy: a comparative study investigating psychosocial functioning. Espie CA, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):123–35

Habituation of optically evoked blink reflex in mentally retarded adults. Gandhavadi B, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):1–11

Referral of mentally handicapped patients to the psychiatrist: a community study. Ghaziuddin M. **J Ment Defic Res** 1988 Dec;32 (Pt 6):491–5

The social reception of mainstreamed children in the regular classroom. Gillmore JL, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):301–11

The relationship of depression to social skills and intellectual functioning in mentally retarded adults. Helsel WJ, et al.
J Ment Defic Res 1988 Oct;32 (Pt 5):411–8

Lay people's judgements of storytellers as mentally retarded or not retarded. Kernan KT, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):149–57

Peer relationships of mildly retarded young adults living in the community. Koller H, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):321–31

Adaptation of the Zung self–rating anxiety scale for people with a mental handicap. Lindsay WR, et al.
J Ment Defic Res 1988 Dec;32 (Pt 6):485–90

The effects of stereotyped behaviour on orienting and tonic cardiac activity. MacLean WE Jr, et al.
J Ment Defic Res 1989 Feb;33 (Pt 1):31–9

Sensorimotor intelligence in severely mentally handicapped children. Macpherson F, et al. **J Ment Defic Res** 1988 Dec; 32 (Pt 6):465–78

Assessing the understanding of emotional states in a population of adolescents and young adults with mental handicaps. Reed J, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):229–33

A comparison of two behaviour reduction procedures: traditional extinction alone and interpolated reinforcement followed by extinction. Schmid TL. **J Ment Defic Res** 1988 Aug;32 (Pt 4):289–300

Semantic encoding by mildly retarded and non–retarded individuals. Stan EA, et al. **J Ment Defic Res** 1988 Oct; 32 (Pt 5):371–82

The view from Walter's window: social environment and the communicative competence of adults with a mental handicap. van der Gaag AD. **J Ment Defic Res** 1989 Jun; 33 (Pt 3):221–7

Youngsters with moderate or severe mental retardation and severe spoken language impairments. I: Extant communicative patterns. Romski MA, et al.
J Speech Hear Disord 1989 Aug;54(3):366–73

Language and cognition in two children with Williams syndrome. Thal D, et al. **J Speech Hear Res** 1989 Sep; 32(3):489–500

Teaching parents about their impaired adolescent's sexuality. Taylor MO. **MCN** 1989 Mar–Apr;14(2):109–12

Antilibidinal drugs and mental retardation: a review. Clarke DJ. **Med Sci Law** 1989 Apr;29(2):136–46 (111 ref.)

Mothers' verbal directives to delayed and nondelayed children. Garrard KR. **Ment Retard** 1989 Feb;27(1):11–8

Therapeutic intervention for grandparents and extended family of children with developmental delays. George JD.
Ment Retard 1988 Dec;26(6):369–75

Informal support networks among aging persons with mental retardation: a pilot study. Krauss MW, et al.
Ment Retard 1988 Aug;26(4):197–201

Provision of respite care for children with developmental disabilities: changes in maternal coping and stress over time. Rimmerman A. **Ment Retard** 1989 Apr;27(2):99–103

Functional characteristics of elderly persons with mental retardation in community settings and nursing homes. Seltzer GB, et al. **Ment Retard** 1988 Aug;26(4):213–7

Social relationships of adolescents with moderate mental retardation. Siperstein GN, et al. **Ment Retard** 1989 Feb; 27(1):5–10

Siblings of children with severe handicaps. Wilson J, et al.
Ment Retard 1989 Jun;27(3):167–73

Salient domains in the self–conception of adults with mental retardation. Zetlin AG, et al. **Ment Retard** 1988 Aug; 26(4):219–22

Handedness and language among the mentally retarded: implications for the model of pathological left–handedness and gender differences in hemispheric specialization. Lucas JA, et al. **Neuropsychologia** 1989;27(5):713–23

Relation between musical aptitude and intelligence among mentally retarded, advantaged, and disadvantaged subjects. Braswell C, et al. **Percept Mot Skills** 1988 Oct;67(2):359–64

Behavioral weight reduction program for mentally retarded adult females. Fisher E. **Percept Mot Skills** 1986 Apr; 62(2):359–62

Elementary counting of cardinal and ordinal numbers by persons with mental retardation. Marx MH.
Percept Mot Skills 1989 Jun;68(3 Pt 2):1176–8

Social acceptance of mentally retarded children in regular schools in relation to years mainstreamed. Brewer N, et al. **Psychol Rep** 1989 Apr;64(2):375–80

Social network analysis for mildly mentally retarded adults. Hough S. **Psychol Rep** 1988 Oct;63(2):543–6

Social skills of formerly institutionalized mentally retarded persons. McKay T, et al. **Psychol Rep** 1989 Apr;64(2):354

Comparability of WAIS and WAIS—R scores among mentally retarded adults. Raggio DJ. **Psychol Rep** 1989 Aug;65(1):292–4

Effects of experimenter surveillance on reactive self–monitoring. Belfiore PJ, et al. **Res Dev Disabil** 1989; 10(2):171–82

Friendship patterns and community integration of family care residents. Crapps JM, et al. **Res Dev Disabil** 1989; 10(2):153–69

Problem solving and strategy production in mentally retarded persons. Ferretti RP. **Res Dev Disabil** 1989;10(1):19–31 (58 ref.)

Stimulus equalization: temporary reduction of stimulus complexity to facilitate discrimination learning. Hoko JA, et al. **Res Dev Disabil** 1988;9(3):255–75

Prevalence of psychopathology among mentally retarded adults. Iverson JC, et al. **Res Dev Disabil** 1989;10(1):77–83

Behavior disorders and mental retardation: the family system perspective. Margalit M, et al. **Res Dev Disabil** 1989; 10(3):315–26

Schizophrenia in mental retardation: clinical features. Reid AH. **Res Dev Disabil** 1989;10(3):241–9 (26 ref.)

Role relations between children who are mentally retarded and their older siblings: observations in three in–home contexts. Stoneman Z, et al. **Res Dev Disabil** 1989; 10(1):61–76

The psychopathology instrument for mentally retarded adults: psychometric characteristics, factor structure, and relationship to subject characteristics. Watson JE, et al.
Res Dev Disabil 1988;9(3):277–90

Personality development and the dually diagnosed person. Zigler E, et al. **Res Dev Disabil** 1989;10(3):225–40 (92 ref.)

[The criminal motive of mental patients] Tian ZE.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Jun; 21(3):175–7, 190 (Eng. Abstr.) (Chi)

[Child and adolescent psychiatry in mentally retarded children and youths] Dosen A. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):213–6 (Dut)

[A fantasy game as group psychotherapy for handicapped children] Maxeiner V.
Prax Kinderpsychol Kinderpsychiatr 1988 Sep;37(7):252–7 (Eng. Abstr.) (Ger)

[Craniosynostosis and criminal behavior] Fehlow P.
Psychiatr Neurol Med Psychol (Leipz) 1988 Nov; 40(11):683–7 (Eng. Abstr.) (Ger)

[Causes and incidence of self–mutilation in severely mentally handicapped patients] Fehlow P.
Psychiatr Neurol Med Psychol (Leipz) 1989 May; 41(5):293–6 (Eng. Abstr.) (Ger)

[Raising physically and psychologically disabled children and non–disabled children within the family] Siek K, et al.
Z Gesamte Hyg 1989 Jan;35(1):46–7 (Eng. Abstr.) (Ger)

[The knowledge of disabled and non–disabled children of the respective other group] Siek K, et al.
Z Gesamte Hyg 1989 Jan;35(1):48–9 (Eng. Abstr.) (Ger)

[Psychopathology of fragile X syndrome] von Gontard A.
Z Kinder Jugendpsychiatr 1989 Jun;17(2):91–7 (39 ref.) (Ger)

[The motives for the participation in work processes of severely mentally retarded persons at a psychoneurology boarding house] Dement'eva NF, et al.
Zh Nevropatol Psikhiatr 1988;88(10):97–102 (Eng. Abstr.) (Rus)

[Structural and dynamic characteristics of patients with oligophrenia at a forensic–psychiatric clinic] Gorinov VV.
Zh Nevropatol Psikhiatr 1989;89(3):39–43 (Eng. Abstr.) (Rus)

[Objectives of improving the system of teaching children with various forms of intellectual impairment] Kovalev VV, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):43–7 (Eng. Abstr.) (Rus)

[Comparative age–related characteristics of psychopathy–like syndrome in mentally retarded children] Kryzhanovskaia IL. **Zh Nevropatol Psikhiatr** 1989;89(3):32–5 (Eng. Abstr.) (Rus)

[Clinico–psychological study of deaf children and adolescents with residual organic syndromes and oligophrenia] Saraev SIa. **Zh Nevropatol Psikhiatr** 1988;88(7):119–24 (Eng. Abstr.) (Rus)

[Clinico–electrophysiological study of behavior disorders in children with oligophrenia] Shipitsina LM, et al.
Zh Nevropatol Psikhiatr 1989;89(3):47–51 (Eng. Abstr.) (Rus)

[Imbecility of moderate degree in schoolchildren] Ustinova EV. **Zh Nevropatol Psikhiatr** 1989;89(3):28–32 (Eng. Abstr.) (Rus)

[Neurotic and neurosis–like disorders in the school maladaptation of children with retardation of mental development] Zakharov NP. **Zh Nevropatol Psikhiatr** 1988; 88(8):72–5 (Eng. Abstr.) (Rus)

REHABILITATION

Change and the causes of change. Abrahamsen AA, et al.
Am J Ment Retard 1989 Mar;93(5):506–20

Concomitants of success in acquiring an augmentative communication system: changes in attention, communication, and sociability. Abrahamsen AA, et al.
Am J Ment Retard 1989 Mar;93(5):475–96 (60 ref.)

Social ecology of the workplace: contextual variables affecting social interactions of employees with and without mental retardation. Chadsey–Rusch J, et al.
Am J Ment Retard 1989 Sep;94(2):141–51

Design and methodological requirements for studying the role of language acquisition in cognitive/social development. Greenfield DB, et al. **Am J Ment Retard** 1989 Mar;93(5):497–9

Analysis of employment specialist intervention time in supported competitive employment. Kregel J, et al.
Am J Ment Retard 1988 Sep;93(2):200–8

Augmentative and alternative communication. Lloyd LL.
Am J Ment Retard 1989 Mar;93(5):500–2

Reliability and validity of the vocational assessment and curriculum guide. Menchetti BM, et al.
Am J Ment Retard 1988 Nov;93(3):283–9

Indirect aspects of communicative gains: toward fuller accounts of sequence and process. Nelson KE.
Am J Ment Retard 1989 Mar;93(5):503–5

Placement into nonsheltered employment: findings from national employment surveys. Schalock RL, et al.
Am J Ment Retard 1989 Jul;94(1):80–7

Equipment adaptations to improve workshop performance. Chase J. **Am J Occup Ther** 1989 Aug;43(8):545–8

Developmental psychology and mental retardation. Integrating scientific principles with treatment practices. Landesman S, et al. **Am Psychol** 1989 Feb;44(2):409–15 (52 ref.)

Effects of undesirable, competing behaviors on the generalization of adaptive skills. A case study. Horner RH, et al. **Behav Modif** 1989 Jan;13(1):74–90

Self–monitoring and self–managed reinforcement procedures for improving work productivity of developmentally disabled workers. A review. Martin GL, et al.
Behav Modif 1989 Jul;13(3):322–39 (42 ref.)

A hospital–based treatment programme for male mentally handicapped offenders. Day K. **Br J Psychiatry** 1988 Nov; 153:635–44

Evaluation of a staffed ordinary house for children with severe learning difficulties. Beail N.
Child Care Health Dev 1989 Mar–Apr;15(2):117–27

Supporting parents with mental retardation. Heighway SM, et al. **Child Today** 1988 Nov–Dec;17(6):24–7

Capitated payments for mental health care: the Rhode Island programs. Christianson JB, et al.
Community Ment Health J 1989 Summer;25(2):121–31

Managing local government opposition to community–based residential facilities for the mentally disabled. Hogan R.
Community Ment Health J 1989 Spring;25(1):33–41

Model services for treatment/management of the mentally retarded–mentally ill. Menolascino FJ.
Community Ment Health J 1989 Summer;25(2):145–55

Community involvement of persons with severe retardation

living in community residences. Aveno A. **Except Child** 1989 Jan;55(4):309–14
Postsecondary transition needs and employment patterns of individuals with mild disabilities. Neubert DA, et al. **Except Child** 1989 Apr;55(6):494–500
Current disciplinary practices with handicapped students: suspensions and expulsions. Rose TL. **Except Child** 1988 Nov;55(3):230–9
Permanency planning for children and youth: out-of-home placement decisions. Taylor SJ, et al. **Except Child** 1989 Apr;55(6):541–9
The general hospitals' role in the care of the seriously disabled mentally ill. Holzgang AJ. **Hawaii Med J** 1989 Mar;48(3):70, 72–3
Developing a unit for mentally retarded–mentally ill patients on the grounds of a state hospital. Gold IM, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):836–40
Training chronic mental patients to independently practice personal grooming skills. Wong SE, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):874–9
Classification of handicaps in 6–7-year-old mentally retarded children. Usefulness and inter-observer agreement of a child adapted handicap code of WHO's ICIDH. Ferngren H, et al. **Int Disabil Stud** 1988;10(4):155–8
Changing educational counsellors' attitudes toward mental retardation: comparison of two measurement techniques. Zwiebel A. **Int J Rehabil Res** 1987;10(4):383–9
The role of referential speech in sign learning by mentally retarded children: a comparison of total communication and sign-alone training. Clarke S, et al. **J Appl Behav Anal** 1988 Winter;21(4):419–26
Building response classes: a comparison of two procedures for teaching generalized pouring to learners with severe disabilities. Day HM, et al. **J Appl Behav Anal** 1989 Summer;22(2):223–9
Parent education project. III: Increasing affection and responsivity in developmentally handicapped mothers: component analysis, generalization, and effects on child language. Feldman MA, et al. **J Appl Behav Anal** 1989 Summer;22(2):211–22
Replacing maladaptive speech with verbal labeling responses: an analysis of generalized responding. Foxx RM, et al. **J Appl Behav Anal** 1988 Winter;21(4):411–7
Improving residential treatment services: implementation and norm-referenced evaluation of a comprehensive management system. Parsons MB, et al. **J Appl Behav Anal** 1989 Summer;22(2):143–56
An evaluation of labeling-then-doing with moderately handicapped persons: acquisition and generalization with complex tasks. Wacker DP, et al. **J Appl Behav Anal** 1988 Winter;21(4):369–80
Training students with profound or multiple handicaps to make requests via microswitches. Wacker DP, et al. **J Appl Behav Anal** 1988 Winter;21(4):331–43
Indications for medical screening prior to behavioral programming for severely and profoundly mentally retarded clients. Gunsett RP, et al. **J Autism Dev Disord** 1989 Mar;19(1):167–72
A comparison of procedures in teaching self-help skills: increasing assistance, time delay, and observational learning. Schoen SF, et al. **J Autism Dev Disord** 1989 Mar; 19(1):57–72
Child life services and persons with mental retardation. Kastner T, et al. **J Dev Behav Pediatr** 1989 Aug; 10(4):198–200
The development of a psychosocial behaviour scale for the assessment of mentally handicapped people. Espie CA, et al. **J Ment Defic Res** 1988 Oct;32 (Pt 5):395–403
Social competence as a future direction for early intervention programmes. Guralnick MJ. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):275–81 (36 ref.)
Occupational engagement of low-functioning individuals: extending the applicability of a computer-aided programme. Lancioni GE, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):313–22
Comparison of trends in admissions and discharges in two adjacent hospitals for the mentally handicapped. Rao JM. **J Ment Defic Res** 1988 Aug;32 (Pt 4):301–7
Hospital to community: a pilot rehabilitation project for elderly mentally retarded. Singh TH, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):25–9
Psychometric properties of the Social Training Achievement Record (the STAR profile). Sturmey P, et al. **J Ment Defic Res** 1988 Oct;32 (Pt 5):383–94
Mental handicap and the community [letter] Singh TH. **Lancet** 1988 Oct 29;2(8618):1026
Investigation of use of goal attainment scaling to evaluate individual progress of clients with severe and profound mental retardation. Bailey DB Jr, et al. **Ment Retard** 1988 Oct;26(5):289–95
1988 news from Washington. Croser MD. **Ment Retard** 1988 Dec;26(6):iii–vi
Protecting adults with mental retardation: a model statute. Furey EM, et al. **Ment Retard** 1989 Jun;27(3):135–40
Impact of group homes on the values of adjacent residential properties. Gelman SR, et al. **Ment Retard** 1989 Jun; 27(3):127–34
Mental retardation: the future [published erratum appears in Ment Retard 1989 Feb;27(1):18] Glidden LM. **Ment Retard** 1988 Oct;26(5):318–21
Vocational preparation for high school students labeled mentally retarded: employment as a graduation goal. Hasazi SB, et al. **Ment Retard** 1988 Dec;26(6):343–9
Accreditation of developmental disabilities programs. Hemp R, et al. **Ment Retard** 1988 Oct;26(5):257–67
Behavior modification and normalization in conflict? Jacobson JW. **Ment Retard** 1989 Jun;27(3):179–81
An appraisal of services for persons with mental retardation and psychiatric impairments. Jacobson JW, et al. **Ment Retard** 1988 Dec;26(6):377–80
The AAMR position statement on aversive therapy: the controversy. Keyes JB, et al. **Ment Retard** 1988 Oct; 26(5):314–8
Employment environments and outcome for adults with developmental disabilities. Kiernan WE, et al. **Ment Retard** 1988 Oct;26(5):279–88
Longitudinal patterns in ICF-MR utilization, 1977–1986. Lakin KC, et al. **Ment Retard** 1989 Jun;27(3):149–58
Comparison of treatments to teach number matching skills to adults with moderate mental retardation. Lalli JS, et al. **Ment Retard** 1989 Apr;27(2):75–83
Social-vocational skills of workers with and without mental retardation in two community employment sites. Lignugaris/Kraft B, et al. **Ment Retard** 1988 Oct; 26(5):297–305
Supported employment: promoting employee independence. Rusch FR, et al. **Ment Retard** 1988 Dec;26(6):351–5
The role of the AAMR in the aversives controversy [editorial] Schroeder SR, et al. **Ment Retard** 1989 Jun; 27(3):iii–v
Analysis of labor and economics: needs for the next decade. Stark J, et al. **Ment Retard** 1988 Dec;26(6):363–8
Toward great expectations for vocational opportunities: family—professional partnerships. Turnbull AP, et al. **Ment Retard** 1988 Dec;26(6):337–42
Lead poisoning traced to a ceramic glaze workshop. Vacanti MP, et al. **Ment Retard** 1989 Jun;27(3):175–7
Conquest of mental retardation. Walker VS. **Ment Retard** 1988 Oct;26(5):251–5
Supported employment: toward equal employment opportunity for persons with severe disabilities. Wehman P. **Ment Retard** 1988 Dec;26(6):357–61
Self-injurious behavior, behavioristic responses, and social role valorization: a reply to Mulick and Kedesdy. Wolfensberger W. **Ment Retard** 1989 Jun;27(3):181–4
Social ecology of the workplace: employers' perceptions versus direct observation. Chadsey-Rusch J, et al. **Res Dev Disabil** 1988;9(3):229–45
Methodological nuances and pitfalls of benefit-cost analysis: a critique. Heal LW, et al. **Res Dev Disabil** 1989; 10(2):201–12
Movement of developmentally disabled individuals among out-of-home residential facilities. Heal LW, et al. **Res Dev Disabil** 1989;10(3):295–313
A 20 year review of punishment and alternative methods to treat problem behaviors in developmentally delayed persons. Matson JL, et al. **Res Dev Disabil** 1989; 10(1):85–104 (20 ref.)
Identification of co-worker involvement in supported employment: a review and analysis. Rusch FR, et al. **Res Dev Disabil** 1988;9(3):247–54 (26 ref.)
An analysis of employer evaluations of workers with mental retardation. Shafer MS, et al. **Res Dev Disabil** 1988; 9(4):377–91
Establishing control by spoken words with profoundly mentally retarded individuals. Stoddard LT, et al. **Res Dev Disabil** 1989;10(2):141–51
Stereotypic behavior of mentally retarded adults adjunctive to a positive reinforcement schedule. Wieseler NA, et al. **Res Dev Disabil** 1988;9(4):393–403
Entamoeba histolytica infection in a rehabilitation center for mentally retarded persons in Japan [letter] Kaneda Y, et al. **Scand J Infect Dis** 1988;20(6):687
[Health pedagogic foster families. A model for the rehabilitation of handicapped children from families at-risk] Weiler H, et al. **Padiatr Padol** 1988;23(3):185–93 (Eng. Abstr.) **(Ger)**
[A district psychiatric clinic and therapeutic pedagogic facility—development of a management concept for mentally handicapped patients] Koester H. **Psychiatr Prax** 1988 Nov;15(6):209–12 (Eng. Abstr.) **(Ger)**
[Use of psychotropic drugs in mentally handicapped adults] Meins W. **Psychiatr Prax** 1988 Nov;15(6):218–22 (Eng. Abstr.) **(Ger)**
[Leisure activities of former special education students] Patejdl W. **Z Gesamte Hyg** 1989 May;35(5):293–4 (Eng. Abstr.) **(Ger)**
[How do we deal with the mentally retarded in nursing homes?] Kuhlmey J. **ZFA** 1989 May-Jun;44(3):169–79 (51 ref.) (Eng. Abstr.) **(Ger)**
[Health care for patients with mental retardation. Special care—consequences of institutionalization] Skeie G. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2334–5 **(Nor)**

THERAPY

Reducing severe aggressive and self-injurious behaviors with functional communication training. Bird F, et al. **Am J Ment Retard** 1989 Jul;94(1):37–48
Treatment of mentally retarded people with severe behavior problems [editorial] Butterfield EC. **Am J Ment Retard** 1989 Jul;94(1):15
A maintenance strategy for discontinuing aversive procedures: a 52-month follow-up of the treatment of aggression. Foxx RM, et al. **Am J Ment Retard** 1989 Jul; 94(1):27–36
Effects of staff management on the quality of residential care for mentally retarded individuals. Seys D, et al. **Am J Ment Retard** 1988 Nov;93(3):290–9
Liaison psychiatry in a child development clinic. Evered CJ, et al. **Arch Dis Child** 1989 May;64(5):754–8
Parents' acceptability ratings of alternative treatments for use with mentally retarded children. Singh NN, et al. **Behav Modif** 1987 Jan;11(1):17–26
The acceptability of electric shock programs. Spreat S, et al. **Behav Modif** 1989 Apr;13(2):245–56
Mental handicap: update. Kirman B. **Br J Psychiatry** 1988 Jun;152:869–70 (19 ref.)
Delivery of services in rural settings to the elderly mentally retarded–mentally ill. Menolascino FJ, et al. **Int J Aging Hum Dev** 1989;28(4):261–75
Rumination in pediatric populations: a behavioral analysis. Winton AS, et al. **J Am Acad Child Psychiatry** 1983 May; 22(3):269–75 (54 ref.)
Functional analysis and treatment of bizarre speech. Mace FC, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):289–96
Polydipsia, water intoxication, and psychiatric illness [letter] Vieweg WV, et al. **J Behav Ther Exp Psychiatry** 1989 Mar; 20(1):85–6
A behavioural intervention for Gilles de la Tourette syndrome in a severely mentally handicapped girl. Zarkowska E, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):245–53
Dental treatment program for patients with mental retardation. Barnett ML, et al. **Ment Retard** 1988 Oct; 26(5):310–3
Development of services for elderly persons with mental retardation in a rural state. Cotten PD, et al. **Ment Retard** 1988 Aug;26(4):187–90
Older caregivers of adults with mental retardation: service utilization. Engelhardt JL, et al. **Ment Retard** 1988 Aug; 26(4):191–5
Permanency planning among black and white family caregivers of older adults with mental retardation. Heller T, et al. **Ment Retard** 1988 Aug;26(4):203–8
Self-injurious behavior, its treatment, and normalization. Mulick JA, et al. **Ment Retard** 1988 Aug;26(4):223–9 (28 ref.)
ICF/general: an alternative for older ICF/MR residents with geriatric care needs. Redjali SM, et al. **Ment Retard** 1988 Aug;26(4):209–12
Caregiving—a lifetime concern [editorial] Rowitz L. **Ment Retard** 1988 Oct;26(5):iii–iv
Structure and patterns of service utilization by elderly persons with mental retardation. Seltzer MM. **Ment Retard** 1988 Aug;26(4):181–5
ECT treatment of an elderly mentally retarded man. Goldstein MZ, et al. **Psychosomatics** 1989 Winter; 30(1):104–6
Individual psychotherapy with mentally retarded individuals: a review and call for research. Hurley AD. **Res Dev Disabil** 1989;10(3):261–75 (50 ref.)
Bridging the two cultures of dual diagnosis: research and service. Keys CB, et al. **Res Dev Disabil** 1989;10(3):277–84 (12 ref.)
A comparison of anxiety treatments with adults who have moderate and severe mental retardation. Lindsay WR, et al. **Res Dev Disabil** 1989;10(2):129–40
New nursing home law creates confusion. **Wis Med J** 1989 Apr;88(4):44
[The medical management of the mentally retarded child] Cremers MJ. **Ned Tijdschr Geneeskd** 1989 Feb 4; 133(5):263–5 **(Dut)**
[The psychiatric facility and AIDS] Weymar W. **Psychiatr Prax** 1989 May;16(3):97–100 (Eng. Abstr.) **(Ger)**

URINE

Dicarboxylic aminoaciduria associated with mental retardation. Swarna M, et al. **Hum Genet** 1989 Jun; 82(3):299–300
Urinary levels of biogenic amine metabolites in mentally retarded children. Nalini K, et al. **J Ment Defic Res** 1988 Oct;32 (Pt 5):419–24
Urinary levels of taurine in mentally retarded children. Nalini K, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):271–4

MENTAL RETARDATION, PSYCHOSOCIAL

COMPLICATIONS

[A patient with psychosocial growth retardation] Geertsma A, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2022–5 (Eng. Abstr.) **(Dut)**

GENETICS

The geneticist and the so-called "socio cultural" familial mental retardation. Gillerot Y, et al. **J Genet Hum** 1989 Jun;37(2):103–12

PREVENTION & CONTROL

Which homes? A response to Scarr and McCartney (1988).

Leventstein P. Child Dev 1989 Apr;60(2):514–8

MENTAL STATUS SCHEDULE see under PSYCHIATRIC STATUS RATING SCALES

MENTAL TESTS see INTELLIGENCE TESTS

MENTHOL

Mentholated cigarette use among multiphasic examinees, 1979–86. Sidney S, et al. Am J Public Health 1989 Oct; 79(10):1415–6

ADVERSE EFFECTS

Menthol cigarette smoking and oesophageal cancer. Hebert JR, et al. Int J Epidemiol 1989 Mar;18(1):37–44

ANALOGS & DERIVATIVES

Sting Eze keratitis [letter] Blanchard DL. Arch Ophthalmol 1989 Jun;107(6):791

Contribution of menthofuran to the hepatotoxicity of pulegone: assessment based on matched area under the curve and on matched time course. Thomassen D, et al. J Pharmacol Exp Ther 1988 Mar;244(3):825–9

Hepatotoxicity of pulegone in rats: its effects on microsomal enzymes, in vivo. Moorthy B, et al. Toxicology 1989 May 15;55(3):327–37

Metabolism of a monoterpene ketone, R-(+)-pulegone—a hepatotoxin in rat. Moorthy B, et al. Xenobiotica 1989 Feb; 19(2):217–24

[Skin absorption of volatile oils. Pharmacokinetics] Weyers W, et al. Pharm Unserer Zeit 1989 May;18(3):82–6 (Eng. Abstr.) (Ger)

METABOLISM

Studies on the metabolism of l-menthol in rats. Madyastha KM, et al. Drug Metab Dispos 1988 Sep–Oct;16(5):765–72

MENTORS

Mentors: a continuum in orthodontic education. Manasse RJ. Angle Orthod 1989 Summer;59(2):145–54

Preceptors in the OR. Learning to evaluate others. deBlois CA. AORN J 1989 May;49(5):1387, 1390–1, 1394–5

What are the roles of a surgical mentor? Cox K. Aust N Z J Surg 1989 Aug;59(8):601–9

Mentoring in doctoral education. Davidhizar RE. J Adv Nurs 1988 Nov;13(6):775–81

Women physicians and their mentors. Ochberg RL, et al. J Am Med Wom Assoc 1989 Jul–Aug;44(4):123–6

A mentor program for nursing majors. Cahill MF, et al. J Nurs Educ 1989 Jan;28(1):40–2

Medical mentors. The people who shape tomorrow's doctors. Moore MP. Minn Med 1989 May;72(5):274–8

Strategies for teaching nursing research. The use of modeling in teaching nursing research on the graduate level. Beal JA. West J Nurs Res 1989 Apr;11(2):247–50

PSYCHOLOGY

Master and apprentice: the mentoring relationship in the development of adolescent creativity. Halperin DA. Adolesc Psychiatry 1988;15:279–87

Anxiety, supervision and a space for thinking: some narcissistic perils for clinical psychologists in learning psychotherapy. Mollon P. Br J Med Psychol 1989 Jun;62 (Pt 2):113–22

MENTORSHIPS see MENTORS

MENU PLANNING see under FOOD SERVICES

MEPACRINE see QUINACRINE

MEPARTRICIN see under POLYENES

MEPERIDINE

Obstetric analgesia and infant outcome in monkeys: infant development after intrapartum exposure to meperidine or alfentanil. Golub MS, et al. Am J Obstet Gynecol 1988 Nov;159(5):1280–6

Meperidine addiction associated with amphotericin treatment in leukemia: case study and staff reaction. Fincannon J. Arch Psychiatr Nurs 1988 Oct;2(5):302–6

Epidural bupivacaine-pethidine mixture clinical experience using a low-dose combination in labour. Brownridge P. Aust N Z J Obstet Gynaecol 1988 Feb;28(1):17–24

Epidural block or parenteral pethidine as analgesic in labour; a randomized study concerning progress in labour and instrumental deliveries. Philipsen T, et al. Eur J Obstet Gynecol Reprod Biol 1989 Jan;30(1):27–33

Pulse oximetry for monitoring during ward analgesia: epidural morphine versus parenteral narcotics. Choi HJ, et al. J Clin Monit 1989 Apr;5(2):87–9

Epidural meperidine: a novel approach to anesthetic management for extracorporeal shock wave lithotripsy—a comparison with epidural marcaine. Hsieh JC, et al. Ma Tsui Hsueh Tsa Chi 1988 Sep;26(3):273–82

[Spinal anesthesia with pethidine—a clinical study] Stoianov E, et al. Khirurgiia (Sofiia) 1988;41(5):66–71 (Bul)

[Use of 2 opioids in blocks of the brachial plexus] Gobeaux D, et al. Cah Anesthesiol 1988 Oct;36(6):437–40 (Fre)

[Atrioventricular block (Wenckebach type) induced by atropine during 5% pethidine spinal anesthesia] Shimai N, et al. Masui 1989 May;38(5):684–7 (Eng. Abstr.) (Jpn)

[Use of sacral anesthesia, prolonged by opiates, in patients with acute proctologic diseases] Koplatadze AM, et al. Klin Khir 1989;(2):39–41 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

Intravenous, deltoid, or gluteus administration of meperidine during labor? Lazebnik N, et al. Am J Obstet Gynecol 1989 May;160(5 Pt 1):1184–9

Epidural pethidine or fentanyl during caesarean section: a double-blind comparison. Paech MJ. Anaesth Intensive Care 1989 May;17(2):157–65

Oxyhemoglobin saturation following cesarean section in patients receiving epidural morphine, PCA, or im meperidine analgesia. Brose WG, et al. Anesthesiology 1989 Jun;70(6):948–53

Comparison of oral transmucosal fentanyl citrate and an oral solution of meperidine, diazepam, and atropine for premedication in children. Nelson PS, et al. Anesthesiology 1989 Apr;70(4):616–21

A comparison of morphine, meperidine, and oxymorphone as utilized in patient-controlled analgesia following cesarean delivery. Sinatra RS, et al. Anesthesiology 1989 Apr;70(4):585–90

Analgesia for children—options and choices [editorial] Barkin RM. Ann Emerg Med 1989 May;18(5):592–4

Intramuscular meperidine, promethazine, and chlorpromazine: analysis of use and complications in 487 pediatric emergency department patients. Terndrup TE, et al. Ann Emerg Med 1989 May;18(5):528–33

Sedation for endoscopy: midazolam or diazepam and pethidine? Boldy DA, et al. Br J Anaesth 1988 Dec; 61(6):698–701

Sublingual buprenorphine and pethidine for immediate postoperative pain relief in major gynecologic surgery: a comparative study. Tungphaisal S, et al. J Med Assoc Thai 1989 Mar;72(3):150–3

Comparison of one technique of patient-controlled postoperative analgesia with intramuscular meperidine. McGrath D, et al. Pain 1989 Jun;37(3):265–70

[The use of naloxone (Narcantil) in newborns after maternal analgesia with meperidine] Svane D, et al. Ugeskr Laeger 1988 Dec 5;150(49):3035–8 (Eng. Abstr.) (Dan)

[Pethidine analgesia and cerebrovascular circulation in very small premature infants] Jorch G, et al. Klin Padiatr 1989 May–Jun;201(3):195–8 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Alterations in oxygen saturation and ventilation after intravenous sedation for peritoneoscopy. Brady CE 3d, et al. Arch Intern Med 1989 May;149(5):1029–32

Severe hypotension from epidural meperidine in a high-risk patient after thoracotomy. Balaban M, et al. Can J Anaesth 1989 Jul;36(4):450–3

Loss prevention case of the month. Where is that prenatal record? Avery JK. J Tenn Med Assoc 1988 Oct;81(10):640

ANALOGS & DERIVATIVES

Analgesic effect and bioavailability of oral ketogan given as tablets or mixture to patients with chronic pain of malignant origin. Kjaer M, et al. Acta Oncol 1988; 27(5):583–9

Photoaffinity labelling of mitochondrial NADH: ubiquinone reductase with pethidine analogues. Werner S. Biochem Pharmacol 1989 Jun 1;38(11):1807–18

Analgesic effect and tolerance of Voltaren and Ketogan in acute renal or ureteric colic. Sommer P, et al. Br J Urol 1989 Jan;63(1):4–6

CSF and plasma pharmacokinetics of pethidine and norpethidine in man after epidural and intrathecal administration of pethidine. Nordberg G, et al. Eur J Clin Pharmacol 1988;34(6):625–31

Effects of addition of a 2-methyl group to ethyl nipecotates (beta-meperidines) on receptor affinities and opiate agonist/antagonist activities. Lawson JA, et al. J Med Chem 1988 Oct;31(10):2015–21

Meperidine and normeperidine distribution in the rhesus monkey. Morrison JC, et al. J Perinatol 1988 Winter; 8(1):24–6

Phenolic analogues of diastereoisomeric 2-methyl reversed esters of pethidine. Casy AF, et al. J Pharm Pharmacol 1989 Mar;41(3):209–11

[Postoperative analgesia using endolymphatic administration of promedol in children after spinal surgery] Ul'rikh EV, et al. Vestn Khir 1989 Jan;142(1):97–9 (Rus)

ANTAGONISTS & INHIBITORS

Duration of antagonistic effects of nalmefene and naloxone in opiate-induced sedation for emergency department procedures. Barsan WG, et al. Am J Emerg Med 1989 Mar; 7(2):155–61

BLOOD

Meperidine binding to isolated alpha 1-acid glycoprotein and albumin. Julius HC, et al. DICP 1989 Jul–Aug; 23(7–8):568–72

METABOLISM

Species differences in the hydrolysis of meperidine and its inhibition by organophosphate compounds. Luttrell WE, et al. Fundam Appl Toxicol 1988 Aug;11(2):323–32

PHARMACOKINETICS

Distribution of 11C-labelled morphine and pethidine after spinal administration to Rhesus monkey. Gustafsson LL, et al. Acta Anaesthesiol Scand 1989 Feb;33(2):105–11

Patient-controlled analgesia [letter] Smith MB, et al. Anaesthesia 1988 Sep;43(9):802–3

Arterial and ventricular CSF pharmacokinetics after intrathecal meperidine in humans. Maurette P, et al. Anesthesiology 1989 Jun;70(6):961–6

CSF and plasma pharmacokinetics of pethidine and norpethidine in man after epidural and intrathecal administration of pethidine. Nordberg G, et al. Eur J Clin Pharmacol 1988;34(6):625–31

Pharmacokinetics of meperidine in pregnancy. Todd EL, et al. Int J Gynaecol Obstet 1989 Jun;29(2):143–6

Meperidine and normeperidine distribution in the rhesus monkey. Morrison JC, et al. J Perinatol 1988 Winter; 8(1):24–6

Transdermal drug delivery of meperidine. Ritschel WA, et al. Methods Find Exp Clin Pharmacol 1989 Mar; 11(3):165–72

Pharmacokinetics of intramuscularly administered pethidine in dogs and the influence of anaesthesia and surgery. Waterman AE, et al. Vet Rec 1989 Mar 25;124(12):293–6

PHARMACOLOGY

Comparison of pethidine and tilidine in man. Tammisto T, et al. Acta Anaesthesiol Scand Suppl 1974;54:1–24

Development of tolerance to pethidine in rats, pretreated or not, with beta-naphtoflavone or SKF 525 A. Cenajek D, et al. Acta Physiol Pol 1988 Jul–Aug;39(4):281–7

Prolactin and cortisol levels during spontaneous and oxytocin induced labour and the effect of meperidine. Onur E, et al. Arch Gynecol Obstet 1989;244(4):227–32

Antroduodenal motility, pH and gastric emptying during balanced anaesthesia: comparison of pethidine and fentanyl. Schurizek BA, et al. Br J Anaesth 1989 Jun;62(6):674–82

Evaluation of acepromazine/meperidine/atropine premedication followed by thiopental anesthesia in the cat. Dyson DH, et al. Can J Vet Res 1988 Oct;52(4):419–22

Pre-stimulus/post-stimulus relations in EEG spectra and their modulations by an opioid and an antidepressant. Bromm B, et al. Electroencephalogr Clin Neurophysiol 1989 Sep;73(3):188–97

Effect of hydroxyzine and meperidine on arterial blood gases in healthy human volunteers. Zsigmond EK, et al. J Clin Pharmacol 1989 Jan;29(1):85–90

Preparation and in vitro activity of liposome encapsulated opioids. Reig F, et al. J Microencapsul 1989 Jul–Sep; 6(3):277–83

The use of meperidine hydrochloride for chemical restraint in certain cetaceans and pinnipeds. Joseph BE, et al. J Wildl Dis 1988 Oct;24(4):691–4

Electrophysiological studies on the effects of opiates on dorsal horn nociceptive neurones at 51 atmospheres absolute. Smallman K, et al. Pain 1989 Jul;38(1):57–64

The effect of buprenorphine on the analgesic and respiratory depressant effects of pethidine: a preliminary study. Vedig AE, et al. Pain 1988 Sep;34(3):253–9

THERAPEUTIC USE

Comparative efficacy of chlorpromazine and meperidine with dimenhydrinate in migraine headache. Lane PL, et al. Ann Emerg Med 1989 Apr;18(4):360–5

Meperidine to control shivering associated with platelet transfusion reaction. Friedlander M, et al. Can J Anaesth 1989 Jul;36(4):460–2

Management of pain caused by pancreatitis [letter] Shapiro BS, et al. J Pediatr 1989 Mar;114(3):506–7

Butorphanol and pethidine in premedication—a comparative study. Atiyat B, et al. Middle East J Anesthesiol 1988 Oct; 9(6):553–9

Epidural xylocaine and pethidine for control of labor pain—a comparative study. Takrouri MS, et al. Middle East J Anesthesiol 1988 Oct;9(6):545–51

Postoperative epidural analgesia. After vaginal hysterectomy. Mayfield WR, et al. Mo Med 1988 Dec;85(12):795–8

Comparison of single-dose meperidine, butorphanol, and dihydroergotamine in the treatment of vascular headache. Belgrade MJ, et al. Neurology 1989 Apr;39(4):590–2

Double-blind comparison of nalbuphine and meperidine in combination with diazepam for intravenous conscious sedation in oral surgery outpatients. Dolan EA, et al. Oral Surg Oral Med Oral Pathol 1988 Nov;66(5):536–9

Comparison of ketamine and pethidine in experimental and postoperative pain. Maurset A, et al. Pain 1989 Jan; 36(1):37–41

[Nefopam in postoperative analgesia. Comparison with meperidine and morphine] Novelli GP, et al. Minerva Anestesiol 1988 Jun;54(6):259–67 (Eng. Abstr.) (Ita)

TOXICITY

Hepatotoxicity of the opioids morphine, heroin, meperidine, and methadone to cultured human hepatocytes.

Gómez-Lechón MJ, et al. **Mol Toxicol** 1987-88 Fall; 1(4):453-63

MEPHENESIN

ANALOGS & DERIVATIVES

An evaluation of the structure-activity relationships of a series of analogues of mephenesin and strychnine on the response to pressure in mice. Bowser-Riley F, et al. **Br J Pharmacol** 1989 Apr;96(4):789-94

PHARMACOLOGY

An evaluation of the structure-activity relationships of a series of analogues of mephenesin and strychnine on the response to pressure in mice. Bowser-Riley F, et al. **Br J Pharmacol** 1989 Apr;96(4):789-94

TOXICITY

Sub-acute toxicity study with mephenesin in rats. Varma RK, et al. **Mater Med Pol** 1988 Oct-Dec;20(4):252-4

MEPHENTERMINE

Mephentermine dependence with psychosis. A case report. Uday GJ, et al. **Br J Psychiatry** 1988 Jan;152:129-31

PHARMACOKINETICS

Urinary and biliary metabolites of mephentermine in male Wistar rats. Mori M, et al. **Xenobiotica** 1989 Mar; 19(3):287-99

MEPHENYTOIN see under **HYDANTOINS**

MEPHOBARBITAL

ANALYSIS

Simultaneous determination of phenobarbital, phenytoin and methylphenobarbital in tablet formulations by HPLC. Vio L, et al. **Farmaco [Prat]** 1988 May;43(5):157-64

PHARMACOKINETICS

Stereoselective metabolism and pharmacokinetics of racemic methylphenobarbital in humans. Lim WH, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):212-7

[The kinetics of methylphenobarbitol in newborn infants] Quednow B, et al. **Padiatr Grenzgeb** 1988;27(6):473-7 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Induction of bilirubin-eliminating processes by methylphenobarbital in mature newborn babies. Grauel L, et al. **J Perinat Med** 1988;16(5-6):431-5

MEPIVACAINE

Caudal mepivicaine and ventilation [letter] Edelist G. **Can J Anaesth** 1989 Mar;36(2):247-8

[Blockade of the suprascapular nerve in shoulder pain] Bruns J, et al. **Anasth Intensivther Notfallmed** 1989 Apr; 24(2):100-2 (Eng. Abstr.) **(Ger)**

[Continuous axillary catheter plexus anesthesia--a method of postoperative analgesia and sympathetic nerve block following hand surgery] Büttner J, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):29-32 (Eng. Abstr.) **(Ger)**

[Epidural anaesthesia for multiallergic pregnant patients] Shimai N, et al. **Masui** 1988 Jun;37(6):731-4 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Pudendal block in vaginal deliveries. Mepivacaine with and without epinephrine. Schierup L, et al. **Acta Obstet Gynecol Scand** 1988;67(3):195-7

[Dose requirement for caudal anesthesia in pediatric patient] Shiroshita N, et al. **Masui** 1989 Feb;38(2):164-9 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Epidural anaesthesia and postoperative colorectal motility--a possible hazard to a colorectal anastomosis. Carlstedt A, et al. **Int J Color Dis** 1989 Aug;4(3):144-9

[Peripheral facial paralysis after dental local anesthesia (letter)] Rives JM, et al. **Presse Med** 1989 Apr 8;18(14):729 **(Fre)**

[Degranulation test of basophils with scalar concentrations of 3% carbocaine. Evaluation of clinical cases with test over 40%] Moniaci D, et al. **Minerva Stomatol** 1989 Jan; 38(1):15-8 (Eng. Abstr.) **(Ita)**

BLOOD

Mepivacaine plasma levels after retrobulbar anesthesia. Michelson G, et al. **Ophthalmic Surg** 1988 Dec;19(12):885-6

DIAGNOSTIC USE

[Assessment of the functional origin of shoulder pain in chronic polyarthritis by diagnostic local anesthesia of inflamed distal joints. A pilot study] Hiemeyer K, et al. **Z Rheumatol** 1989 May-Jun;48(3):139-42 (Eng. Abstr.) **(Ger)**

[Allergologic tests: basophil degranulation in odontostomatology. Method and clinical application] Moniaci D, et al. **Minerva Stomatol** 1988 Dec;37(12):957-64 (Eng. Abstr.) **(Ita)**

PHARMACOKINETICS

Circadian phase-dependent pharmacokinetics and acute toxicity of mepivacaine. Bruguerolle B, et al. **J Pharm Pharmacol** 1988 Aug;40(8):592-4

PHARMACOLOGY

Changes in equine carpal joint synovial fluid in response to the injection of two local anesthetic agents. White KK, et al. **Cornell Vet** 1989 Jan;79(1):25-38

[Inhibition of mitochondrial respiration by mepivacaine] di Jeso F, et al. **C R Soc Biol (Paris)** 1988;182(3):266-9 (Eng. Abstr.) **(Fre)**

TOXICITY

Does pregnancy alter the systemic toxicity of local anesthetics? Santos AC, et al. **Anesthesiology** 1989 Jun; 70(6):991-5

Ultrastructure of mepivacaine-induced damage and regeneration in rat extraocular muscle. Okland S, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1643-51

MEPROBAMATE

METABOLISM

[Liver metabolism of meprobamate: clinical estimation in acute intoxication] Bismuth C, et al. **J Toxicol Clin Exp** 1985 Sep-Oct;5(5):321-8 (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

[Characteristics of drug pharmacodynamics in irradiated rats] Khakimov ZZ. **Radiobiologiia** 1989 Jul-Aug;29(4):492-4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Interactive effects of acute ethanol administration on meprobamate levels in blood and brain of rabbit and rat. Moriya F, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Feb;24(1):43-57

Effects of meprobamate on plasma lipids, lipoproteins, and experimental atherosclerosis. Wong HY, et al. **J Natl Med Assoc** 1987 Aug;79(8):855-64

POISONING

The use of flumazenil (Anexate, Ro 15-1788) in the management of drug overdose. Pollard BJ, et al. **Anaesthesia** 1989 Feb;44(2):137-8

THERAPEUTIC USE

Meprobamate use in the elderly. A report from the Dunedin program. Hale WE, et al. **J Am Geriatr Soc** 1988 Nov; 36(11):1003-5

Two double-blind, controlled studies comparing chlorethate, a new sedative-tranquilizer, with meprobamate and with phenobarbital. Beard WJ, et al. **J Clin Pharmacol J New Drugs** 1967 Jan-Feb;7(1):41-5

MEPTAZINOL see under **AZEPINES**

MER 29 see **TRIPARANOL**

MERACTINOMYCIN see **DACTINOMYCIN**

MERBROMINE see under **FLUORESCEINS**

MERCAPTAMINE see **CYSTEAMINE**

MERCAPTO COMPOUNDS see **SULFHYDRYL COMPOUNDS**

2-MERCAPTOETHANESULFONATE see under **MERCAPTOETHANOL**

MERCAPTOETHANOL

Breaking and rejoining of disulfide bonds in external glycoproteins of influenza virus. Selimova LM, et al. **Virology** 1988 Oct;166(2):591-3

ANALOGS & DERIVATIVES

The effect of sodium-2-mercaptoethane-sulphonate, N-acetylcysteine and cysteine on the uptake of cytosine arabinoside by normal and neoplastic thymus cells of mice. Jastrzębski Z, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):335-43

Phase II trial with high-dose ifosfamide and mesna given in a 24-h infusion for advanced GI tract cancer. Focan C, et al. **Cancer Chemother Pharmacol** 1989;23(3):192-3

High-dose ifosfamide with mesna uroprotection in Ewing's sarcoma. Jürgens H, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S40-4

Severe renal failure following high-dose ifosfamide and mesna. Willemse PH, et al. **Cancer Chemother Pharmacol** 1989;23(5):329-30

Mesna-induced urticaria [letter] Pratt CB, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):913-4

Arginine 2-mercaptoethane sulfonate and sodium 2-mercaptoethane sulfonate: a comparative study of their effects upon tumour cells. Magnolfi Zipoli G, et al. **Drugs Exp Clin Res** 1988;14(7):473-8

In vitro inhibition of brain glutamic acid decarboxylase by sodium 2-mercaptoethanesulphonate and endogenous thiols and its possible in vivo consequences. Shaw IC, et al. **Hum Toxicol** 1989 May;8(3):221-4

Toxicity and response to high-dose ifosfamide + mesna as salvage therapy for advanced breast cancer. Steger GG, et al. **J Cancer Res Clin Oncol** 1988;114(6):602-4

Effects of fosfomycin, mesna, and sodium thiosulfate on the toxicity and antitumor activity of cisplatin. Wagner T, et al. **J Cancer Res Clin Oncol** 1988;114(5):497-501

Ifosfamide and mesna: marginally active in patients with advanced carcinoma of the pancreas. Ajani JA, et al. **J Clin Oncol** 1988 Nov;6(11):1703-7

Response to ifosfamide and mesna: 124 previously treated patients with metastatic or unresectable sarcoma. Antman KH, et al. **J Clin Oncol** 1989 Jan;7(1):126-31

Mesna: continuous or bolus infusion? [letter] Willemse PH, et al. **J Clin Oncol** 1989 Jun;7(6):817-9

Efficacy of mesna in preventing further cyclophosphamide-induced hemorrhagic cystitis. Luce JK, et al. **Med Pediatr Oncol** 1988;16(6):372-4

Clinical studies of ifosfamide/mesna at St Jude Children's Research Hospital, 1983-1988. Pratt CB, et al. **Semin Oncol** 1989 Feb;16(1 Suppl 3):51-5

Phase II experience with ifosfamide/mesna in gynecologic malignancies: preliminary report of Gynecologic Oncology Group studies. Sutton GP, et al. **Semin Oncol** 1989 Feb; 16(1 Suppl 3):68-72

[The effect of Prehepon (sodium 2-mercaptoethanesulfonate) on reproduction in rats] Stětinová V, et al. **Cesk Farm** 1988 Dec;37(10):450-2 (Eng. Abstr.) **(Cze)**

METABOLISM

Application of rapid-scanning, stopped-flow spectroscopy to the characterization of intermediates formed in the reactions of L- and D-tryptophan and beta-mercaptoethanol with Escherichia coli tryptophan synthase. Drewe WF Jr, et al. **Biochimie** 1989 Apr; 71(4):509-19

Full replacement of 2-mercaptoethanol by cysteine plus selenium compounds in augmenting DNA synthesis of mitogen-stimulated mouse spleen lymphocytes. Ishii T, et al. **Cell Struct Funct** 1989 Jun;14(3):287-97

Raman spectroscopy of calf lens gamma-II crystallin: direct evidence for the formation of mixed disulfide bonds with 2-mercaptoethanol and glutathione. Yu NT, et al. **Exp Eye Res** 1989 Mar;48(3):399-410

PHARMACOLOGY

2-Mercaptoethanol and n-acetylcysteine enhance T cell colony formation in AIDS and ARC. Wu J, et al. **Clin Exp Immunol** 1989 Jul;77(1):7-10

Determination of lecithin:cholesterol acyltransfer in mouse plasma and the influence of mercaptoethanol and sulphydryl blocking agents on its activity. Owen JS, et al. **Comp Biochem Physiol [B]** 1979;63(2):261-5

Preferential enhancement by 2-mercaptoethanol of IL-2 responsiveness of T blast cells from old over young mice is associated with potentiated protein kinase C translocation. Fong TC, et al. **Immunol Lett** 1989 Jan 31; 20(2):149-54

Protection of phosphoglycerate kinase against in vitro aging by selective cysteine methylation. Cook LL, et al. **J Biol Chem** 1988 Oct 5;263(28):13991-3

Involvement and relative importance of at least two distinct mechanisms in the effects of 2-mercaptoethanol on murine lymphocytes in culture. Pruett SB, et al. **J Cell Physiol** 1989 Oct;141(1):40-5

Enhancement by various cytokines or 2-beta-mercaptoethanol of Ia antigen expression on Langerhans cells in skin from normal aged and young mice. Effect of cyclosporine A. Belsito DV, et al. **J Immunol** 1989 Sep 1;143(5):1530-6

Conformational change of rubella virus spike proteins induced by 2-mercaptoethanol. Katow S, et al. **Jpn J Med Sci Biol** 1988 Jun;41(3):109-15

Effect of 2-mercaptoethanol on some metabolic indices of ageing of CBA/Ca inbred mice. Pénzes L, et al. **Mech Ageing Dev** 1988 Oct;45(1):75-92

The effect of time, 2-mercaptoethanol and inhibitors of proteases on isolation of cardiac myosin and its properties. Syrový I. **Physiol Bohemoslov** 1989;38(3):287-8

Induction of an antioxidant protein of Saccharomyces cerevisiae by O2, Fe3+, or 2-mercaptoethanol. Kim IH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6018-22

POISONING

Mercaptoethanol poisoning: report of a fatal case and analytical determinations. Eriksson A, et al. **J Anal Toxicol** 1989 Jan-Feb;13(1):60-2

MERCAPTOETHYLAMINES

PHARMACOLOGY

Cistiside-M, a new protective agent. Minkova M, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):77–82

Radioprotection of mice with ascorbic acid, desferal and mercaptoethylamine. Singh A, et al. **Basic Life Sci** 1988; 49:587–90

Improved contractile function in the reperfused rat heart by the radical scavenger 2-[3-aminopropylamino] ethane thiol. Pissarek M, et al. **Biomed Biochim Acta** 1989; 48(2–3):S126–31

The effect of 2-[(aminopropyl)amino] ethanethiol on fission-neutron-induced DNA damage and repair. Grdina DJ, et al. **Br J Cancer** 1989 Jan;59(1):17–21

Cell cycle redistribution of cultured cells after treatment with chemical radiation protectors. Sigdestad CP, et al. **Cell Tissue Kinet** 1988 May;21(3):193–200

Protection by WR1065 and WR151326 against fission-neutron-induced mutations at the HGPRT locus in V79 cells. Grdina DJ, et al. **Radiat Res** 1989 Mar; 117(3):500–10

Protection against radiation-induced mutagenesis in V79 cells by 2-[(aminopropyl)amino] ethanethiol under conditions of acute hypoxia. Grdina DJ, et al. **Radiat Res** 1989 Feb; 117(2):251–8

THERAPEUTIC USE

[Dependence of the radioprotective effect of beta-mercaptoethylamine on the thiol level of the outer cell membrane] Konstantinova MM, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):280–2 (Eng. Abstr.) **(Rus)**

MERCAPTOPHOS see FENTHION

3-MERCAPTOPROPIONIC ACID see under SULFHYDRYL COMPOUNDS

MERCAPTOPROPIONYLGLYCINE

ADMINISTRATION & DOSAGE

Efficacy of two-route chemotherapy using intraperitoneal neocarzinostatin and its antidote, intravenous tiopronin, for peritoneally disseminated tumors in mice. Hasuda K, et al. **Jpn J Cancer Res** 1989 Mar;80(3):283–9

ADVERSE EFFECTS

Lichenoid eruption due to mercaptopropionylglycine. Kawabe Y, et al. **J Dermatol (Tokyo)** 1988 Oct;15(5):434–9

[A bullous erythema multiforme type drug eruption induced by tiopronin showed pemphigus like eruption] Nakajima H, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):803–8 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis, antiinflammatory and antiarthritic properties of a new tiopronine gold derivative. Coppi G, et al. **Boll Chim Farm** 1989 Jan;128(1):22–4

GENETICS

Meprin phenotype and cyclosporin A toxicity in mice. Reckelhoff JF, et al. **Adv Exp Med Biol** 1988;240:293–304

PHARMACOLOGY

Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83–8

Marked reduction of free radical generation and contractile dysfunction by antioxidant therapy begun at the time of reperfusion. Evidence that myocardial "stunning" is a manifestation of reperfusion injury. Bolli R, et al. **Circ Res** 1989 Sep;65(3):607–22

The use of N-(2-mercaptopropionyl)-glycine (MPG) for preparation and storage of platelets. Bergmann I, et al. **Folia Haematol (Leipz)** 1988;115(4):455–9

Inhibition of platelet activation by 2-mercaptopropionylglycin in vitro and in vivo. Loesche W, et al. **Folia Haematol (Leipz)** 1988;115(1–2):185–8

Effect of tiopronin on prostaglandin synthesis in rabbit kidney medulla slices. Fujita T, et al. **J Pharm Pharmacol** 1988 Sep;40(9):650–1

Differential neutralizing effect of tiopronin on the toxicity of neocarzinostatin and SMANCS: a new rescue cancer chemotherapy. Oda T, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):394–9

Chemical radioprotection to bone marrow stem cells after whole body gamma irradiation to mice. Dey J, et al. **Strahlenther Onkol** 1988 Nov;164(11):681–3

[Inhibitory action of tiopronin on free radicals] Rommain M, et al. **Rev Rhum Mal Osteoartic** 1989 Apr 30;56(5 Pt 2):34–7 (Eng. Abstr.) **(Fre)**

[In vitro study of platelet concentrate preparations from whole blood using N-(2-mercaptopropionyl)-glycine] Bergmann I, et al. **Folia Haematol (Leipz)** 1988; 115(6):869–80 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Myocardial protection by 2-mercaptopropionylglycine during global ischemia in dogs. Beyersdorf F, et al. **Arzneimittelforschung** 1989 Jan;39(1):46–9

2-Mercaptopropionylglycine improves aortic flow after reoxygenation in working rat hearts. Zimmer G, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):445–51

The Emory mouse cataract: the effects on cataractogenesis of alpha-tocopherol, penicillamine, triethylenetetramine, and mercaptopropionylglycine. Kuck JF Jr, et al. **J Ocul Pharmacol** 1988 Fall;4(3):243–51

Tiopronin for cystinuria. **Med Lett Drugs Ther** 1989 Jan 27; 31(784):7–8

MPG protection and crypt cell kinetics in mouse ileum. Mathur VB. **Radiobiol Radiother (Berl)** 1988;29(4):417–20

[Tolerability and therapeutic maintenance of tiopronin, new basic treatment of rheumatoid arthritis. Apropos of long-term follow-up of 268 cases] Delecoeuillerie G. **Rev Rhum Mal Osteoartic** 1989 Apr 30;56(5 Pt 2):38–42 (Eng. Abstr.) **(Fre)**

[Alpha-mercaptopropionylglycine in the experimental hemorrhagic shock animal model] Weidler B, et al. **Arzneimittelforschung** 1988 Oct;38(10):1393–7 (Eng. Abstr.) **(Ger)**

6-MERCAPTOPURINE

In celebration of a Nobel Prize [editorial] Chabner BA. **J Natl Cancer Inst** 1988 Dec 7;80(19):1512–3

ADMINISTRATION & DOSAGE

Micronucleus test with 6-mercaptopurine monohydrate administered intraperitoneally and orally. Hara T, et al. **Mutat Res** 1989 Aug;223(4):349–52

ADVERSE EFFECTS

Pyoderma gangrenosum in acute myeloid leukaemia during immunosuppression. van de Kerkhof PC, et al. **Eur J Pediatr** 1988 Oct;148(1):34–6

ANALOGS & DERIVATIVES

HPLC analysis of 6-mercaptopurine and metabolites in extracellular body fluids. Rudy JL, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):504–9

Kinetic study of the interaction of glutathione with four antitumor disulfides: possible mechanism for cellular glutathione depletion. Kirkpatrick DL. **Chem Biol Interact** 1989;69(2–3):225–34

Inhibition of biosynthetic processes in P388 and Ehrlich ascites cells by cloturin. Miko M, et al. **Drugs Exp Clin Res** 1988;14(9):575–80

Substances with antineoplastic activity. XCVI. Some pharmacological properties and therapeutic synergism of 6-purinyl-N-(2-chloroethyl)thiocarbamate with cytosine arabinoside. Mělka M, et al. **Neoplasma** 1989;36(4):419–25

[Substances with antineoplastic effects. XCVI. Separation of (35S) cloturin in tissue, blood and the digestive system and its excretion in rats] Francová V, et al. **Cesk Farm** 1988 Jul;37(6):246–50 (Eng. Abstr.) **(Cze)**

ANALYSIS

Coulometric determination of 6-mercaptopurine. Nikolić KI, et al. **J Pharm Belg** 1988 Nov-Dec;43(6):455–7

BLOOD

HPLC analysis of 6-mercaptopurine and metabolites in extracellular body fluids. Rudy JL, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):504–9

PHARMACOKINETICS

Chronopharmacokinetics of oral methotrexate and 6-mercaptopurine: is there diurnal variation in the disposition of antileukemic therapy? Balis FM, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):324–6

Pharmacokinetics of 6-thiouric acid and 6-mercaptopurine in renal allograft recipients after oral administration of azathioprine. Chan GL, et al. **Eur J Clin Pharmacol** 1989; 36(3):265–71

Analysis of drug penetration through skin considering donor concentration decrease. Hashida M, et al. **J Pharmacobiodyn** 1988 Sep;11(9):636–44

PHARMACOLOGY

Beneficial effect of 6-mercaptopurine on the mitotic index of trisomy 21 lymphocytes. Implications for future research. Peeters MA, et al. **Ann Genet** 1989;32(1):21–5

Inhibition of phytohemagglutinine-induced T lymphocyte proliferation by 6-(octadecyldithio)purine, a novel liposomal prodrug of 6-mercaptopurine. Daniel PT, et al. **Arch Toxicol Suppl** 1989;13:179–82

In vitro inhibition of prostaglandin production by azathioprine and 6-mercaptopurine. Homo-Delarche F, et al. **Prostaglandins** 1988 Apr;35(4):479–91

Protection against isoproterenol-induced myocardial necrosis in rats by 6-mercaptopurine and 6-thioguanine or by irradiation. Joseph X, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):385–94

THERAPEUTIC USE

Effective therapy for a severe case of the idiopathic hypereosinophilic syndrome. Marshall GM, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):178–83 (26 ref.)

Plasma protein fractions and alpha 1-acidglycoprotein as tumor markers in acute lymphoblastic leukemia. Abdalla A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):743–4

6-Mercaptopurine and other immunosuppressive agents in the treatment of Crohn's disease and ulcerative colitis. Present DH. **Gastroenterol Clin North Am** 1989 Mar; 18(1):57–71 (64 ref.)

[Long-time treatment with full-dosage ranitidine in a case of myelodyserythropoiesis (blastic leukosis) treated with prednisone and antiblastic agents] De Gaetano G, et al. **Clin Ter** 1988 Sep 30;126(6):427–30 (Eng. Abstr.) **(Ita)**

TOXICITY

Effect of 6-mercaptopurine on 65Zn distribution in the pregnant rat. Amemiya K, et al. **Teratology** 1989 Apr; 39(4):387–93

URINE

Rapid method for evaluating compliance of 6-mercaptopurine therapy in children with leukemia. Azeemuddin S, et al. **J Chromatogr** 1988 Aug 19; 430(1):163–9

MERCAPTOVALINE see PENICILLAMINE

MERCAPTURIC ACID see ACETYLCYSTEINE

MERCURIAL DIURETICS see DIURETICS, MERCURIAL

MERCURIBENZOATES

METABOLISM

Kinetics of p-mercuribenzoate binding to sulfhydryl groups on the isolated cytoplasmic fragment of band 3 protein. Effect of hemoglobin binding on the conformation. Salhany JM, et al. **J Biol Chem** 1989 Jan 25;264(3):1399–404

PHARMACOLOGY

Chemical modification of acyl-CoA:cholesterol O-acyltransferase. 2. Identification of a coenzyme A regulatory site by p-mercuribenzoate modification. Kinnunen PM, et al. **Biochemistry** 1988 Sep 20; 27(19):7351–6

The effects of p-mercuribenzenesulfonate on purified spectrin and actin. Clark SJ, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):243–53

MERCURIC CHLORIDE

Fixative evaluation and histologic appearance of embryonic rodent tissue. Howard WB, et al. **Stain Technol** 1989 Jan; 64(1):1–8

Radiographic examination of eyes fixed in Zenker's solution. Davidson HJ, et al. **Vet Pathol** 1989 Jan;26(1):83–5

[Chemical reactions in the preparation of baisheng dan and baijiang dan] Meng NC. **Chung Yao Tung Pao** 1988 Sep; 13(9):25–8, 62 (Eng. Abstr.) **(Chi)**

ADMINISTRATION & DOSAGE

Influence of 2,3-dimercaptopropane-1-sulfonate and dimercaptosuccinic acid on the mobilization of mercury from tissues of rats pretreated with mercuric chloride, phenylmercury acetate or mercury vapors. Buchet JP, et al. **Toxicology** 1989 Mar;54(3):323–33

ANTAGONISTS & INHIBITORS

Cyclosporin A induces long-term unresponsiveness in mercuric chloride-induced autoimmune glomerulonephritis. Aten J, et al. **Clin Exp Immunol** 1988 Aug;73(2):307–11

BLOOD

Mercury incorporation by mature and immature red blood cells. Garrett RJ, et al. **Life Sci** 1974 Aug 15;15(4):733–40

METABOLISM

Simplified X-ray film method for detection of bacterial volatilization of mercury chloride by Escherichia coli. Nakamura K, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2871–3

2,3-Dimercaptopropane-1-sodium sulfonate for reducing retention of ingested 203Hg in suckling rats. Kostial K, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):185–8

Binding of mercuric chloride to nuclear proteins in human peripheral blood T lymphocytes. Holst M, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):381–3

The effect of dietary zinc status on biliary metal excretion of rats. Jaw S, et al. **J Nutr** 1988 Nov;118(11):1385–90

PHARMACOKINETICS

Mechanisms of absorption of inorganic mercury from rat small intestine. II. Composite effects of pH and halide ions

on transport of mercuric chloride into isolated brush border membrane vesicles in rats. Endo T, et al. **Pharmacol Toxicol** 1988 Nov;63(5):361–8

Mercury–selenium interaction: distribution and excretion of 203Hg2+ in rats after simultaneous administration of selenite or selenate. Cikrt M, et al. **Toxicol Lett** 1989 Aug; 48(2):159–64

PHARMACOLOGY

Mercurial reagents inhibit flow through ADH-induced water channels in toad bladder. Hoch BS, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F948–53

Studies on the antioxidant defence system and activation of human blood platelets under mercuric chloride treatment in vitro. Mukhopadhyay S, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):438–41

Different modulating effects of the monoamines adrenaline, noradrenaline, and serotonin on the DNA synthesis response of human peripheral blood T lymphocytes activated by mercuric chloride and nickel sulfate. Nordlind K, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):317–20

Differential effects of methylmercuric chloride and mercuric chloride on the histochemistry of rat thyroid peroxidase and the thyroid peroxidase activity of isolated pig thyroid cells. Nishida M, et al. **J Histochem Cytochem** 1989 May; 37(5):723–7

Inhibition of amino acid transport and protein synthesis by HgCl2 and methylmercury in astrocytes: selectivity and reversibility. Brookes N, et al. **J Neurochem** 1989 Oct; 53(4):1228–37

Mercuric chloride activates latent, anion-dependent cation transport systems in the plasma membrane of Ehrlich ascites tumour cells. Kramhøft B, et al. **Pharmacol Toxicol** 1989 May;64(5):421–5

Mercuric chloride induces autoantibodies against U3 small nuclear ribonucleoprotein in susceptible mice. Reuter R, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):237–41

Actinobacillus (Haemophilus) actinomycetemcomitans: resistance to mercuric chloride of 41 strains isolated in Brazil. Avila-Campos MJ, et al. **Res Microbiol** 1989 Jan; 140(1):51–5

Do selenium and glutathione inhibit the toxic effects of mercury in marine lamellibranchs? Patel B, et al. **Sci Total Environ** 1988 Oct 15;76(2–3):147–65

POISONING

Mercury as a health hazard [letter] Mucklow ES. **Arch Dis Child** 1988 Nov;63(11):1416–7

Peritoneal lavage with mercuric chloride: toxic and unnecessary. Friedland JS, et al. **Br J Surg** 1989 Mar; 76(3):314

The behaviour of activity of selected enzymes in urine and in serum in experimental intoxication of animals with sublimate (mercury chloride). Part I. Acute intoxication. Starnawska M, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):108–15

Severe sublimate intoxication in the rat. Influence of thyroxine on renal enzymes of fatty acid degradation and on the survival rate of intoxicated rats. Kramar R, et al. **Exp Pathol** 1989;36(2):97–103

The topography of mercurial lymphadenopathy in brown Norway rats. Levine S, et al. **Lymphology** 1988 Sep; 21(3):161–8

Coagulation and fibrinolysis in rats poisoned with mercuric chloride. Michalska M, et al. **Pol J Pharmacol Pharm** 1988 Jul–Aug;40(4):365–71

[Exposure to mercury and the immune system] Moszczyński P, et al. **Pol Tyg Lek** 1988 May 16;43(20):640–4 (52 ref.) **(Pol)**

[Electron microscopic-radioautographic study of RNA synthesis in the epithelial cells of the kidney urinary tubules of white rats in corrosive sublimate poisoning] Andreev VP, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):357–60 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Suppression of experimental allergic encephalomyelitis in rats by mercuric chloride. Levine S, et al. **Chem Biol Interact** 1989;69(1):17–21

TOXICITY

Mercuric chloride-induced autoimmunity in the brown Norway rat. Cellular kinetics and major histocompatibility complex antigen expression. Aten J, et al. **Am J Pathol** 1988 Oct;133(1):127–38

Toxicity and ultrastructural localization of mercuric chloride in cultured murine macrophages. Christensen M, et al. **Arch Toxicol** 1988;62(6):440–6

The effect of sodium chromate pretreatment on mercuric chloride-induced nephrotoxicity. Sparrow S, et al. **Arch Toxicol** 1988;61(6):440–3

Renal ultrastructural alterations and cardiovascular functional changes in rats exposed to mercuric chloride. Carmignani M, et al. **Arch Toxicol Suppl** 1989;13:353–6

Comparative study on the toxicity of acetaminophen and mercuric chloride in normal and athymic mice and rats. Svendsen O, et al. **Arch Toxicol Suppl** 1989;13:191–6

Mediating effect of calcium in HgCl2 cytotoxicity in sea urchin egg: role of mitochondria in Ca2+-mediated death. Walter P, et al. **Biochim Biophys Acta** 1989 Aug 15; 1012(3):219–26

Toxic effects of mercuric chloride, methylmercuric chloride, and emisan 6 (an organic mercurial fungicide) on ovarian recrudescence in the catfish Clarias batrachus (L.). Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):902–9

Studies on the role of gastrointestinal tract contents in the methylation of inorganic mercury compounds. Ludwicki JK. **Bull Environ Contam Toxicol** 1989 Feb;42(2):283–8

Changes in tissue glutathione and mercury concentrations in rats following mercuric chloride injection through the hepatic portal vein. Sin WC, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):942–8

Absorption of mercuric chloride and mercuric sulphide and their possible effects on tissue glutathione in mice. Sin YM, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):307–14

Toxic effects of mercurials on thyroid function of the catfish, Clarias batrachus (L.). Kirubagaran R, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):265–71

Toxicity of various combinations of X-rays, caffeine, and mercury in mouse embryos. Müller WU. **Int J Radiat Biol** 1989 Sep;56(3):315–23

Mercury induced time-dependent alterations in lipid profiles and lipid peroxidation in different body organs of cat-fish Heteropneustes fossilis. Bano Y, et al. **J Environ Sci Health [B]** 1989 Apr;24(2):145–66

Genotoxicity and bioaccumulation of methyl mercury and mercuric chloride in vivo in the newt Pleurodeles waltl. Zoll C, et al. **Mutagenesis** 1988 Jul;3(4):337–43

Toxic exposure to ethylene dibromide and mercuric chloride: effects on laboratory-reared octopuses. Adams PM, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):519–23

Different histochemical findings in the brain produced by mercuric chloride and methyl mercury chloride in rats. Suda I, et al. **Neurotoxicology** 1989 Spring;10(1):113–25

Effects of mercuric chloride on [3H]dopamine release from rat brain striatal synaptosomes. Hare MF, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):266–75

Methylmercury- and mercuric-chloride-induced alterations in rat epididymal sperm. Chowdhury AR, et al. **Toxicol Lett** 1989 May;47(2):125–34

Effects of selenium on toxicity and ultrastructural localization of mercury in cultured murine macrophages. Christensen M, et al. **Toxicol Lett** 1989 Jun;47(3):259–70

[Autoradiographic research on RNA biosynthesis in renal tissue in the early period of corrosive sublimate-induced necronephrosis] Andreev VP, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):632–5 (Eng. Abstr.) **(Rus)**

[Hygienic evaluation of the gonadotoxic effect of mercury after its combined administration] Ermachenko AB. **Gig Sanit** 1988 Jun;(6):81–3 **(Rus)**

MERCURY

see related

ORGANOMERCURY COMPOUNDS

Heavy metal derivatives of membrane proteins: selective mercurilation of bacteriorhodopsin. Sigrist H, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):640–6

Transcriptional switching by the metalloregulatory MerR protein: initial characterization of DNA and mercury (II) binding activities. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2331–9

Mercury-induced renal autoimmunity in the MAXX rat. Henry GA, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):187–203

Recommendations on dental mercury hygiene. Revision of FDI Technical Report No. 7. **Int Dent J** 1988 Sep; 38(3):191–2

Translation of merD in Tn21. Lee IW, et al. **J Bacteriol** 1989 Apr;171(4):2222–5

Corrosion of dental amalgam and mercury vapor emission in vitro. Moberg LE. **Scand J Dent Res** 1988 Oct; 96(5):473–7

A comparison of the rates of methylation of mercury(II) species in aquatic media by various organotin and organosilicon moieties. Bellama JM, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):39–51

Possible methylation of inorganic mercury by silicones in the environment. Nagase H, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):29–38

A new instrument for mercury vapor evacuation during clinical work with dental amalgam. Pohl L, et al. **Swed Dent J** 1988;12(5):193–9

[Atmospheric pollution and mercury poisoning caused by peasants mercury smelting] Wu DL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):83–6 (Eng. Abstr.) **(Chi)**

[Chemical reactions in the preparation of baisheng dan and baijiang dan] Meng NC. **Chung Yao Tung Pao** 1988 Sep; 13(9):25–8, 62 (Eng. Abstr.) **(Chi)**

ADMINISTRATION & DOSAGE

Repeated suicide attempts by the intravenous injection of elemental mercury. Giombetti RJ, et al. **Int J Psychiatry Med** 1988;18(2):153–67 (19 ref.)

Influence of 2,3-dimercaptopropane-1-sulfonate and dimercaptosuccinic acid on the mobilization of mercury from tissues of rats pretreated with mercuric chloride, phenylmercury acetate or mercury vapors. Buchet JP, et al. **Toxicology** 1989 Mar;54(3):323–33

ADVERSE EFFECTS

Risk of tumors of the nervous system among mercury and other seed disinfectant applicators in Swedish agriculture [letter] Wiklund K, et al. **Acta Oncol** 1988;27(6b):865

Occupational mercury exposure and male reproductive health. Alcser KH, et al. **Am J Ind Med** 1989;15(5):517–29

Occupational allergic contact dermatitis from metallic mercury. Goh CL, et al. **Contact Dermatitis** 1988 Sep; 19(3):232–3

Mercury dermatitis. Pambor M, et al. **Contact Dermatitis** 1989 Feb;20(2):157

Enzymuria in workers exposed to inorganic mercury. Barregård L, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):65–9

Cardiovascular reflexes and low long-term exposure to mercury vapour. Piikivi L. **Int Arch Occup Environ Health** 1989;61(6):391–5

Probable coexisting exogenous ochronosis and mercurial pigmentation managed by dermabrasion. Lang PG Jr. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):942–6

Health hazard from mercury soap [letter] Mucklow ES. **Lancet** 1989 Feb 25;1(8635):448

An epidemiologic study of the relation between symptoms of fatigue, dental amalgam and other factors. Michel I, et al. **Swed Dent J** 1989;13(1–2):33–8

[Multicenter survey related to the frequency of positive patch tests with mercury and thiomersal] Lachapelle JM, et al. **Ann Dermatol Venereol** 1988;115(8):793–6 (Eng. Abstr.) **(Fre)**

[Patch test of mercury compounds and disinfectant solutions and the clinical picture of mercury contact dermatitis] Sato M. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):15–23 (Eng. Abstr.) **(Jpn)**

[Organic function of the mouth in mercury workers] Potilko VI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):23–5 (Eng. Abstr.) **(Rus)**

[Effect of low mercury concentrations on the natural resistance of the body] Kirillov IuB, et al. **Vrach Delo** 1988 Aug;(8):97–8 (Eng. Abstr.) **(Rus)**

ANALYSIS

Determination of total mercury in water and urine by a gold film sensor following Fenton's reagent digestion. Ping L, et al. **Anal Chem** 1989 Jun 1;61(11):1230–5

Isotope dilution spark-source mass spectrometric determination of total mercury in botanical and biological samples. Moody JR, et al. **Analyst** 1988 Jun;113(6):923–7

Long term persistence of mercury in the brain. Cavanagh JB. **Br J Ind Med** 1988 Oct;45(10):649–51 (21 ref.)

Mercury in freshwater fish and clams from the Cerro Prieto geothermal field of Baja California, México. Gutiérrez-Galindo EA, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):201–7

Mercury and cadmium content in green mussel, Mytilus viridis L. from Onrust waters, Jakarta Bay. Hutagalung HP. **Bull Environ Contam Toxicol** 1989 Jun;42(6):814–20

Water contamination by heavy metals (Hg, Cd, Pb, Cu and Zn) in Doñana National Park (Spain). Rico MC, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):582–8

Effect of decontamination project at Minamata Bay, Japan. Dramatic decrease of mercury dispersed into Yatsushiro Sea. Kudo A, et al. **Ecotoxicol Environ Safety** 1988 Jun; 15(3):339–43

Lead, cadmium, mercury and insecticide residue control of fresh vegetables. Köck M, et al. **Geogr Med** 1989;Suppl 2:91–100

The evaluation of neonatal hair mercury level as an indicator of the intrauterine exposure to mercury—a preliminary report. Sikorski R, et al. **Ginekol Pol** 1988 Apr;59(4):223–7

Atomic absorption spectrophotometric determination of mercury in undigested biological samples. Ngim CH, et al. **Ind Health** 1988;26(3):173–8

The effect of experimental parameters on the cold-vapor mercury atomic absorption determination. Speciation analysis of sulfhydryl-bound mercury. Daniels RS, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):214–7

The matrix effect in the cold-vapor atomic absorption analysis of mercury in environmental samples. Wigfield DC, et al. **J Anal Toxicol** 1989 May–Jun;13(3):191–2

Sn in the Ag-Hg phase of dental amalgam. Mahler DB, et al. **J Dent Res** 1988 Oct;67(10):1275–7

Silver enhancement of tissue mercury: demonstration of mercury in autometallographic silver grains from rat kidneys. Nørgaard JO, et al. **J Histochem Cytochem** 1989 Oct;37(10):1545–7

A study of mercury in the hair of dentists and dental-related professionals in 1985 and subcohort comparison of 1972 and 1985 mercury hair levels. Scarlett JM, et al. **J Toxicol Environ Health** 1988;25(3):373–81

Effect of industrial pollution on seafood content and dietary intake of total and methylmercury. Buzina R, et al. **Sci Total Environ** 1989 Jan;78:45–57

Natural levels of lead, cadmium and mercury in tissues and hair of newborn calves from different areas of Czechoslovakia. Cibulka J, et al. **Sci Total Environ** 1989 Aug;84:101–12

Mercury levels in total suspended matter and in plankton of the Mediterranean basin. Ferrara R, et al. **Sci Total Environ** 1989 Aug;84:129–34

Selenium, mercury, arsenic and cadmium in the lifecycle of the dunlin, Calidris alpina, a migrant wader. Goede AA,

et al. **Sci Total Environ** 1989 Jan;78:205–18

An assessment of pollutants in eggs of Audouin's gull (Larus audouinii), a rare species of the Mediterranean sea. Leonzio C, et al. **Sci Total Environ** 1989 Jan;78:13–22

Allium micronucleus (MNC) assay to assess bioavailability, bioconcentration and genotoxicity of mercury from solid waste deposits of a chloralkali plant, and antagonism of L-cysteine [published erratum appears in Sci Total Environ 1989 Apr;79(3):300] Panda KK, et al. **Sci Total Environ** 1989 Feb;79(1):25–36

A preliminary study of mercury contamination in the surface soil and river sediment of the Roscio District, Bolivar State, Venezuela. Shrestha KP, et al. **Sci Total Environ** 1989 Apr; 79(3):233–9

Mercury content of some marine fish from the southern Caribbean Sea. Shrestha KP, et al. **Sci Total Environ** 1988 Jul 15;73(3):181–7

Arsenic, cadmium, lead and mercury in meat, livers and kidneys of sheep slaughtered in The Netherlands. Vos G, et al. **Z Lebensm Unters Forsch** 1988 Jul;187(1):1–7

[Programmed analysis for the determination of mercury in biological materials after flameless atomic absorption spectrophotometry] Franzen E. **Z Med Lab Diagn** 1988; 29(5):293–4 (Ger)

[A study of the literature on the concentrations of arsenic, lead, cadmium and mercury in body fluids and tissues to define normal values and detection of overload. 1. Description of analytical methods and arsenic] Baron P, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):289–310 (0 ref.) (Eng. Abstr.) (Ger)

[A literature review of the concentrations of arsenic, lead, cadmium, and mercury in body fluids and tissues to establish normal levels and to detect exposure. 3. Mercury] Baron P, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):84–107 (0 ref.) (Eng. Abstr.) (Ger)

[Ionogenic liberation of mercury from dental amalgam in waste water and sludge] Senkpiel K, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):254–61 (Eng. Abstr.) (Ger)

[Mercury concentration in gray hair] Ando T, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1063–8 (Eng. Abstr.) (Jpn)

[Estimate of mercury accumulation in the body using mustache] Kobayashi S, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):979–86 (Eng. Abstr.) (Jpn)

[Mercury content in the lens of rats receiving in methylmercury] Kairada K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1044–7 (Eng. Abstr.) (Jpn)

[Mercury levels in the muscles, liver and kidneys of slaughter and game animals from the region of northern Poland 1985–1986] Falandysz J, et al. **Rocz Panstw Zakl Hig** 1988; 39(2):113–7 (Eng. Abstr.) (Pol)

[Evaluation of cadmium, mercury and lead levels in typical diets] Marzec Z, et al. **Rocz Panstw Zakl Hig** 1988; 39(5):344–8 (Eng. Abstr.) (Pol)

[Mercury concentration and gastrointestinal symptoms in patients from mines of the State of Bolívar] Romero A, et al. **GEN** 1987 Apr–Jun;41(2):41–7 (Eng. Abstr.) (Spa)

BLOOD

Blood mercury content after chewing. Forsten L. **Acta Odontol Scand** 1989 Apr;47(2):127–8

Blood mercury concentrations following methyl mercury exposure in adult and infant monkeys. Rice DC. **Environ Res** 1989 Jun;49(1):115–26

The contribution of dental amalgam to mercury in blood. Snapp KR, et al. **J Dent Res** 1989 May;68(5):780–5

IMMUNOLOGY

Mercury induced B-cell activation and antinuclear antibodies in mice. Hultman P, et al. **J Clin Lab Immunol** 1989 Mar; 28(3):143–50

ISOLATION & PURIFICATION

[Removal of mercury from equipment in chlorine production] Barmashenko VI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):36–9 (Eng. Abstr.) (Rus)

METABOLISM

Environmental significance of the potential for mer(Tn21)-mediated reduction of Hg^{2+} to Hg0 in natural waters. Barkay T, et al. **Appl Environ Microbiol** 1989 May; 55(5):1196–202

Effects of acidification on mercury methylation, demethylation, and volatilization in sediments from an acid-susceptible lake. Steffan RJ, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2003–9

Effects of some chelating agents on the uptake and distribution of 203Hg^{2+} in the brown trout (Salmo trutta): studies on ethyl- and isopropylxanthate, diethyl- and diisopropyldithiophosphate, dimethyl- and diethyldithiocarbamate and pyridinethione. Borg K, et al. **Arch Toxicol** 1988;62(5):387–91

Effect of arsenicals on biliary excretion of endogenous non-protein thiols, mercurials and sulfobromophthalein. Gyurasics A, et al. **Arch Toxicol Suppl** 1989;13:340–2

Biotransformations of mercury compounds. Summers AO. **Basic Life Sci** 1988;45:105–9 (14 ref.)

Transcriptional switching by the metalloregulatory MerR protein: initial characterization of DNA and mercury (II) binding activities. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2331–9

Transcriptional switching by the MerR protein: activation and repression mutants implicate distinct DNA and mercury(II) binding domains. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2340–4

Mercury in women exposed to methylmercury through fish consumption, and in their newborn babies and breast milk. Skerfving S. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):475–82

The MerR heavy metal receptor mediates positive activation in a topologically novel transcription complex. O'Halloran TV, et al. **Cell** 1989 Jan 13;56(1):119–29

Bioaccumulation of Hg in the mushroom Pleurotus ostreatus. Bressa G, et al. **Ecotoxicol Environ Safety** 1988 Oct; 16(2):85–9

Binding property of rat and Limulus C-reactive proteins (CRP) to mercury. Agrawal A, et al. **Experientia** 1989 Jun 15;45(6):567–70

Mercury–selenium interactions in relation to histochemical staining of mercury in the rat liver. Baatrup E, et al. **Histochem J** 1989 Feb;21(2):89–98

Influence of cations on the blue to purple transition of bacteriorhodopsin. Comparison of Ca^{2+} and Hg^{2+} binding and their effect on the surface potential. Dunach M, et al. **J Biol Chem** 1988 Nov 25;263(33):17378–84

Model of mercury vapor transport from amalgam restorations in the oral cavity. Olsson S, et al. **J Dent Res** 1989 Mar; 68(3):504–8

Mercury accumulation in lens following single administration of methylmercury. Kairada K, et al. **Jpn J Ophthalmol** 1988;32(3):275–80

Epidemiologic study on the association between body burden mercury level and idiopathic Parkinson's disease. Ngim CH, et al. **Neuroepidemiology** 1989;8(3):128–41

In vitro oxidation of mercury by the blood. Hursh JB, et al. **Pharmacol Toxicol** 1988 Oct;63(4):266–73

Mechanism of mercury(II) reductase and influence of ligation on the reduction of mercury(II) by a water soluble 1,5-dihydroflavin. Gopinath E, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3041–4

Determination and metabolism of dithiol chelating agents. VIII. Metal complexes of meso-dimercaptosuccinic acid. Rivera M, et al. **Toxicol Appl Pharmacol** 1989 Aug; 100(1):96–106

PHARMACOKINETICS

Percutaneous absorption of mercury vapor by man. Hursh JB, et al. **Arch Environ Health** 1989 Mar–Apr;44(2):120–7

The effects of dose of elemental mercury and first-pass circulation time on exhalation and organ distribution of inorganic mercury in rats. Magos L, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):85–9

Uptake and distribution of 203Hg by fish fingerlings, Cirrhina mrigala, exposed to linear alkyl benzene sulphonate. Misra V, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):139–43

Studies on poisonous metals. XIX. Comparative effects of chelating agents on distribution and excretion of inorganic mercury in rats. Kiyozumi M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2599–606

Distribution and retention of organic and inorganic mercury in methyl mercury-treated neonatal rats. Thomas DJ, et al. **Environ Res** 1988 Oct;47(1):59–71

Levels of metallic mercury and mercuric ion in the venous and arterial bloods of normal and acatalasemic mice following exposure to mercury vapor. Aikoh H, et al. **Physiol Chem Phys Med NMR** 1988;20(3):177–81

Comparative effects of chelating agents on distribution, excretion, and renal toxicity of inorganic mercury in rats. Kojima S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun;64(3):471–84

Analyses of dental pulp in restored teeth. Lentz DL, et al. **Scanning Microsc** 1989 Mar;3(1):193–8

Mercury vapor uptake and hydrogen peroxide detoxification in human and mouse red blood cells. Halbach S, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):517–24

On the mechanism of transfer of heavy metals across cell membranes. Foulkes EC. **Toxicology** 1988 Nov 30; 52(3):263–72

[Mercury absorption during the use of Grob crusting in the treatment of burns—an experimental animal study] Schenke H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(6):348–54 (Eng. Abstr.) (Ger)

[A literature review of concentrations of arsenic, lead, cadmium and mercury in body fluids and tissues for establishing normal values and detection of body burden. 4. Lead, summary of average values for As, Cd, Hg and literature references] Baron P, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):195–239 (206 ref.) (Eng. Abstr.) (Ger)

[Studies on poisonous metals. XX. Effects of chelating agents on distribution and excretion of inorganic mercury in rats] Shimada H, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1209–14 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Hybridization of DNA probes with whole-community genome for detection of genes that encode microbial responses to pollutants: mer genes and Hg^{2+} resistance. Barkay T, et al. **Appl Environ Microbiol** 1989 Jun; 55(6):1574–7

Cell-free mercury volatilization activity from three marine caulobacter strains. Ji GY, et al. **Appl Environ Microbiol** 1989 Feb;55(2):523–5

Temperature dependence and mercury inhibition of tonoplast-type H+-ATPase. Tu SI, et al. **Arch Biochem Biophys** 1988 Oct;266(1):289–97

Differential effects of mercurial and methylmercurial ions on the phrenic nerve and diaphragm of the mouse. Fu WM, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:52–66

Sulfhydryl-induced restoration of myocardial contractility after alteration by mercury. Halbach S. **Arch Toxicol Suppl** 1989;13:349–52

In vitro and in vivo effect of mercury, lead and cadmium on the generation of chemiluminescence by human whole blood. Guillard O, et al. **Biochem Pharmacol** 1989 Sep 1; 38(17):2819–23

ADP-ribosyl proteins formed by pertussis toxin are specifically cleaved by mercury ions. Meyer T, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):579–83

Different blocking effects of Cd++ and Hg++ on the early outward current in myocardial mouse cells. Benndorf K, et al. **Gen Physiol Biophys** 1988 Aug;7(4):345–51

Infectious mercury resistance and its co-transfer with R-plasmids among Escherichia coli strains. Ahmad S, et al. **Indian J Exp Biol** 1988 Aug;26(8):601–5

Homologous metalloregulatory proteins from both gram-positive and gram-negative bacteria control transcription of mercury resistance operons. Helmann JD, et al. **J Bacteriol** 1989 Jan;171(1):222–9

Mercury operon regulation by the merR gene of the organomercurial resistance system of plasmid pDU1358. Nucifora G, et al. **J Bacteriol** 1989 Aug;171(8):4241–7

Role of cell wall in Saccharomyces cerevisiae mutants resistant to Hg^{2+}. Ono B, et al. **J Bacteriol** 1988 Dec; 170(12):5877–82

Genetic analysis of transcriptional activation and repression in the Tn21 mer operon. Ross W, et al. **J Bacteriol** 1989 Jul;171(7):4009–18

Nucleotide sequence of a chromosomal mercury resistance determinant from a Bacillus sp. with broad-spectrum mercury resistance. Wang Y, et al. **J Bacteriol** 1989 Jan; 171(1):83–92

Chemical modification of chalcone isomerase by mercurials and tetrathionate. Evidence for a single cysteine residue in the active site. Bednar RA, et al. **J Biol Chem** 1989 Aug 25;264(24):14272–6

Heavy metal-induced Ca^{2+} release from sarcoplasmic reticulum. Brunder DG, et al. **J Biol Chem** 1988 Dec 15; 263(35):18785–92

IIb group metal ions (Zn^{2+}, Cd^{2+}, Hg^{2+}) stimulate glucose transport activity by post-insulin receptor kinase mechanism in rat adipocytes. Ezaki O. **J Biol Chem** 1989 Sep 25;264(27):16118–22

Occurrence, transfer and mobilization in epilithic strains of Acinetobacter of mercury-resistance plasmids capable of transformation. Rochelle PA, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2933–41

The distribution and divergence of DNA sequences related to the Tn21 and Tn501 mer operons. Gilbert MP, et al. **Plasmid** 1988 Sep;20(2):127–36

Restriction pattern and polypeptide homology among plasmid-borne mercury resistance determinants. Jobling MG, et al. **Plasmid** 1988 Sep;20(2):106–12

Urinary excretion of metallothionein-I and its degradation product in rats treated with cadmium, copper, zinc or mercury. Sato M, et al. **Toxicology** 1989 May 31;56(1):23–33

[Comparative evaluation of the coagulation characteristics of hemoglobin and its polymer in the presence of a mercury cation] Myshkin AE, et al. **Gematol Transfuziol** 1988 Nov; 33(11):57–60 (Rus)

[Nucleotide sequences of mercury resistance determinants in bacteria isolated from mercury mines: detection of a family of recombinant mercury transposons in plasmids from Acinetobacter species] Lomovskaia OL, et al. **Genetika** 1988 Sep;24(9):1539–49 (Eng. Abstr.) (Rus)

TOXICITY

Neurological abnormalities associated with remote occupational elemental mercury exposure. Albers JW, et al. **Ann Neurol** 1988 Nov;24(5):651–9

Influence of a standard laboratory diet containing nutritionally adequate levels of selenium on renal pathology from mercury released by experimental amalgam tattoos. Eley BM, et al. **Biomaterials** 1988 Jul;9(4):339–44

Effects of selenium and mercury on glutathione and glutathione-dependent enzymes in experimental quail. Di Simplicio P, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):15–21

Body size and organ accumulation of mercury and selenium in young harbor seals (Phoca vitulina). Himeno S, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):503–9

Mercury in the Calcasieu River/Lake Complex, Louisiana. Mueller CS, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):71–80

Inhibition of sodium-dependent taurine transport in red blood cells from the marine polychaete, Glycera dibranchiata, after exposure to mercury. Preston RL, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):620–7

Mercurial induced changes in the hypothalamo-neurohypophysical complex in relation to reproduction in the teleostean fish, Channa punctatus

(Bloch). Ram RN, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):329–36

In vitro effect of mercury and cadmium on brain Ca2+–ATPase of the catfish Ictalurus punctatus. Reddy RS, et al. **Bull Environ Contam Toxicol** 1988 Sep; 41(3):324–8

Studies on activity recovery in some mercury-exposed freshwater fish by using selected weeds. Shrivastava S, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):840–6

Absorption of mercuric chloride and mercuric sulphide and their possible effects on tissue glutathione in mice. Sin YM, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):307–14

Gill ATPase activity in Procambarus clarkii as an indicator of heavy metal pollution. Torreblanca A, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):829–34

Ovarian damage to Channa punctatus after chronic exposure to low concentrations of Elsan, mercury, and ammonia. Dey S, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):247–57

Autoreactive T cells in mercury-induced autoimmunity. Demonstration by limiting dilution analysis. Rossert J, et al. **Eur J Immunol** 1988 Nov;18(11):1761–6

Hemodynamic and electrophysiological effects of mercury in intact anesthetized rabbits and in isolated perfused hearts. Rhee HM, et al. **Exp Mol Pathol** 1989 Jun;50(3):281–90

Effect of mercury and combined effect of mercury and dimethylsulphoxide (DMSO) on the activity of acetylcholinesterase (AchE–E.C. 3.1.1.7) of rat lymphocytes during in vitro incubation. Miszta H, et al. **Folia Haematol (Leipz)** 1989;116(1):151–5

Inhibition of testicular 3 beta-hydroxy-delta 5-steroid dehydrogenase (3 beta-HSD) activity in catfish Clarias batrachus (L.) by mercurials. Kirubagaran R, et al. **Indian J Exp Biol** 1988 Nov;26(11):907–8

Immunopathological signs in mice treated with mercury compounds—I. Identification by the popliteal lymph node assay of responder and nonresponder strains. Stiller-Winkler R, et al. **Int J Immunopharmacol** 1988; 10(4):475–84

Cloning and expression of Thiobacillus ferrooxidans mercury ion resistance genes in Escherichia coli. Shiratori T, et al. **J Bacteriol** 1989 Jun;171(6):3458–64

[The influence of chemical noxae on the sperm quality of boars used for insemination. 2. Mercury] Schulz O, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):610–7 (Eng. Abstr.) **(Ger)**

[Dynamic aspects of glutathione metabolism as a modulator of metal toxicity] Hirayama K, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1487–94 (52 ref.) **(Jpn)**

[Occurrence and biotransformation of mercury in the natural environment] Moszczyński P, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):979–83 (34 ref.) **(Pol)**

[Serum immunoglobulin levels in persons exposed to mercury fumes for various periods of time] Bartuś R, et al. **Wiad Lek** 1988 Jun 15;41(12):785–9 (Eng. Abstr.) **(Pol)**

[Toxicity of inorganic mercury derivatives] Korshun MN. **Gig Sanit** 1989 Jan;(1):69–70 **(Rus)**

[Study of the horizontal transfer of mercury resistance genes in natural populations of bacteria using antibodies to mercury reductases] Bogdanova ES, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):16–23 (Eng. Abstr.) **(Rus)**

URINE

[Studies on the relationship between the characteristics of daily food consumption and the concentration of mercury in urine] Shirai F. **Nippon Eiseigaku Zasshi** 1988 Oct; 43(4):923–33 (Eng. Abstr.) **(Jpn)**

MERCURY DICHLORIDE see MERCURIC CHLORIDE

MERCURY POISONING

Risks of industrial mercury exposure in pregnancy. Melkonian R, et al. **Obstet Gynecol Surv** 1988 Nov; 43(11):637–41

Effect of Escherichia coli free endotoxin on mercuric nitrate intoxicated rats. Hsueh YM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1149–56

[Concerning two cases of poisoning by metallic mercury (PBIV)] Van Tittelboom T, et al. **J Toxicol Clin Exp** 1985 May–Jun;5(3):185–93 (Eng. Abstr.) **(Fre)**

BLOOD

Hemoglobin and hematocrit values in the fish Oreochromis mossambicus (Peters) after short term exposure to copper and mercury. Cyriac PJ, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):315–20

[No deviating levels were found in persons with self-diagnosed mercury poisoning] Fredin B. **Lakartidningen** 1988 Dec 21;85(51):4517 **(Swe)**

COMPLICATIONS

Acute mercury vapour intoxication: report of six cases. Aguado S, et al. **Nephrol Dial Transplant** 1989;4(2):133–6

Possible foetotoxic effects of mercury vapour: a case report. Gelbier S, et al. **Public Health** 1989 Jan;103(1):35–40

[Acute pneumonitis caused by inhalation of mercury vapor—report of a case] Lin TC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;43(2):141–6 (Eng. Abstr.) **(Chi)**

[Fanconi syndrome caused by mercury chloride poisoning (letter)] García Rodríguez JF, et al. **Rev Clin Esp** 1989 Feb;184(2):111–2 **(Spa)**

DIAGNOSIS

Mercury poisoning. A case report and comment on 6 other cases. Shamley DJ, et al. **S Afr Med J** 1989 Aug 5; 76(3):114–6

[A literature review of concentrations of arsenic, lead, cadmium and mercury in body fluids and tissues for establishing normal values and detection of body burden. 4. Lead, summary of average values for As, Cd, Hg and literature references] Baron P, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):195–239 (206 ref.) (Eng. Abstr.) **(Ger)**

[A literature review of the concentrations of arsenic, lead, cadmium, and mercury in body fluids and tissues to establish normal levels and to detect exposure. 3. Mercury] Baron P, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):84–107 (0 ref.) (Eng. Abstr.) **(Ger)**

[Amalgam poisoning—a medical reality] Berglund F. **Lakartidningen** 1989 Jan 4;86(1–2):41–2 **(Swe)**

[Amalgam poisoning—unproved and uncertain] Elinder CG, et al. **Lakartidningen** 1989 Mar 22;86(12):1048–9 **(Swe)**

DRUG THERAPY

Intravenous self-administration of elemental mercury: efficacy of dimercaprol therapy. Murray KM, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):972–5

Medical management of occupational poisoning: report of 10 cases. Salvi RM. **J Toxicol Clin Exp** 1988 May–Jun; 8(3):205–10

Chelation in metal intoxication. XXIX: Alpha-mercapto-beta-aryl acrylic acids as antidotes to mercury (II) toxicity. Kachru DN, et al. **Pharmacol Toxicol** 1989 Feb;64(2):182–4

ETIOLOGY

Health hazard from mercury soap [letter] Mucklow ES. **Lancet** 1989 Feb 25;1(8635):448

Mercury poisoning from dental amalgam through a direct nose-brain transport [letter] Störtebecker P. **Lancet** 1989 May 27;1(8648):1207

Subjective symptoms and psychological performance of chlorine-alkali workers. Piikivi L, et al. **Scand J Work Environ Health** 1989 Feb;15(1):69–74

A possible case of mercury-related toxicity resulting from the grinding of old amalgam restorations. Taskinen H, et al. **Scand J Work Environ Health** 1989 Aug;15(4):302–4

[Atmospheric pollution and mercury poisoning caused by peasants mercury smelting] Wu DL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):83–6 (Eng. Abstr.) **(Chi)**

[Exposure to mercury—an evaluation of occupational risk factors] Aaseth J, et al. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1642–4 (Eng. Abstr.) **(Nor)**

["Amalgam disease", does it exist?] **Lakartidningen** 1988 Sep 14;85(37):2965–73 **(Swe)**

[Mercury poisoning in goldsmiths after working with dental gold] Blomqvist AM, et al. **Lakartidningen** 1989 Aug 23; 86(34):2782–3 **(Swe)**

[Amalgam sickness in dental care personnel—a pilot study] Lindberg E, et al. **Lakartidningen** 1989 Aug 23; 86(34):2735–8 **(Swe)**

HISTORY

Were the hatters of New Jersey "mad"? Wedeen RP. **Am J Ind Med** 1989;16(2):225–33

Was Paganini poisoned with mercury? O'Shea JG. **J R Soc Med** 1988 Oct;81(10):594–7

METABOLISM

Long term persistence of mercury in the brain. Cavanagh JB. **Br J Ind Med** 1988 Oct;45(10):649–51 (21 ref.)

Persistent mercury in nerve cells 16 years after metallic mercury poisoning. Hargreaves RJ, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):443–52

Nonsaturable amino acid reabsorption in kidneys of normal and mercury-poisoned rabbits. Foulkes EC, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):223–8

PHYSIOPATHOLOGY

Renal function and long-term low mercury vapor exposure. Piikivi L, et al. **Arch Environ Health** 1989 May–Jun; 44(3):146–9

Detection of hand tremor in workers exposed to mercury vapor: a comparative study of three methods. Roels H, et al. **Environ Res** 1989 Aug;49(2):152–65

The effects of methylmercury on the developing brain. Choi BH. **Prog Neurobiol** 1989;32(6):447–70 (124 ref.)

PREVENTION & CONTROL

Protective effect of sodium molybdate on the acute toxicity of mercuric chloride. V. Enhancement of renal regeneration after exposure to HgCl2. Koizumi T, et al. **Chem Biol Interact** 1988;67(3–4):185–97

Effect of Escherichia coli free endotoxin on mercuric nitrate intoxicated rats. Hsueh YM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1149–56

THERAPY

Subcutaneous deposition of elemental mercury. Tanner DC, et al. **J Tenn Med Assoc** 1988 Nov;81(11):698–9

[Rectal injury caused by a broken thermometer. Risks related to mercury] Maurage C, et al. **Arch Fr Pediatr** 1989 Apr; 46(4):277–9 (Eng. Abstr.) **(Fre)**

URINE

[Proteinuria caused by occupational exposure to mercury] Zhao JY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):140–2 (Eng. Abstr.) **(Chi)**

MERCY KILLING see EUTHANASIA

MERIONES see GERBILLINAE

MERKEL CELL TUMOR see CARCINOMA, MERKEL CELL

MERMITHID see MERMITHOIDEA

MERMITHOIDEA

Establishment and recycling of Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana ricelands. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):468–73

Distribution and prevalence of Octomyomermis troglodytis (Nematoda: Mermithidae), a parasite of the western tree hole mosquito, Aedes sierrensis. Washburn JO, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):341–6

DRUG EFFECTS

Susceptibility of Romanomermis culicivorax (Nematoda: Mermithidae) postparasites to agrichemicals used in Louisiana rice production. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):477–81

GENETICS

Sequence amplification and gene rearrangement in parasitic nematode mitochondrial DNA. Hyman BC, et al. **Genetics** 1988 Nov;120(3):707–12

ISOLATION & PURIFICATION

Mermis nigrescens (Mermithidae: Nematoda) recovered from the mouth of a child. Poinar GO Jr, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):478–9

Prevalence of parasitism of adult Aedes vexans by a mermithid (Nematoda: Mermithidae) in Oklahoma. Ewing SA, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):106–8

PHYSIOLOGY

Depth of oviposition by Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana riceland soils. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec; 1(4):528–30

Field application of Romanomermis culicivorax (Mermithidae: Nematoda) to control anopheline larvae in southern Iran. Zaim M, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):351–5

MEROMYOSINS

Thermal unfolding of myosin rod and light meromyosin: circular dichroism and tryptophan fluorescence studies. King L, et al. **Biochemistry** 1989 Apr 18;28(8):3498–502

Shape of the myosin head in the rigor complex. Three-dimensional image reconstruction of the actin-tropomyosin-heavy meromyosin complex. Kajiyama H. **J Mol Biol** 1988 Dec 5;204(3):639–52

GENETICS

Expression of native rabbit light meromyosin in Escherichia coli. Observation of a powerful internal translation initiation site. Maeda K, et al. **J Mol Biol** 1989 Jan 5; 205(1):269–73

ISOLATION & PURIFICATION

Preparation and characterization of heavy meromyosin and subfragment 1 from vertebrate cytoplasmic myosins. Sellers JR, et al. **Biochemistry** 1988 Sep 6;27(18):6977–82

METABOLISM

A tight-binding interaction between smooth-muscle native thin filaments and heavy meromyosin in the presence of MgATP. Marston SB. **Biochem J** 1989 Apr 1;259(1):303–6

Evidence for the association between two myosin heads in rigor acto-smooth muscle heavy meromyosin. Onishi H, et al. **Biochemistry** 1989 Feb 21;28(4):1898–904

Carbodiimide-catalyzed cross-linking sites in the heads of gizzard heavy meromyosin attached to F-actin. Onishi H, et al. **Biochemistry** 1989 Feb 21;28(4):1905–12

Interaction of tropomyosin with F-actin–heavy meromyosin complex. Szczęsna D, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):399–407

Calcium binding and calcium-sensitivity of heavy meromyosin and subfragment-1 from squid (Todarodes pacificus) mantle and scallop (Patinopecten yessoensis)

adductor muscles. Kamiya S, et al. **Comp Biochem Physiol [B]** 1989;92(3):481–6
Aorta caldesmon inhibits actin activation of thiophosphorylated heavy meromyosin Mg2+–ATPase activity by slowing the rate of product release. Marston S. **FEBS Lett** 1988 Sep 26;238(1):147–50
Characterization of thermotropic state changes in myosin subfragment–1 and heavy meromyosin by UV difference spectroscopy. Kamath U, et al. **J Biol Chem** 1989 Apr 5; 264(10):5586–92

MERPHALAN see **MELPHALAN**

MERSALYL see under **DIURETICS, MERCURIAL**

MESANGIOCAPILLARY GLOMERULONEPHRITIS see **GLOMERULONEPHRITIS, MEMBRANOPROLIFERATIVE**

MESANGIUM, GLOMERULAR see **GLOMERULAR MESANGIUM**

MESCALINE

HISTORY

The experimentation of S. Weir Mitchell with mescal. Metzer WS. **Neurology** 1989 Feb;39(2 Pt 1):303–4

PHARMACOLOGY

Involvement of 5–HT receptor subtypes in the discriminative stimulus properties of mescaline. Appel JB, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):41–6
Effects of intraocular mescaline and LSD on visual–evoked responses in the rat. Eells JT, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):191–6

MESENCEPHALIC CENTRAL GRAY see **PERIAQUEDUCTAL GRAY**

MESENCEPHALON

Mesencephalic hemorrhage and unilateral pupillary deficit. Shuaib A, et al. **J Clin Neuro Ophthalmol** 1989 Mar; 9(1):47–9
[Claude's syndrome (letter)] Sanguineti I, et al. **Rev Neurol (Paris)** 1988;144(12):840–1 **(Fre)**
[Hypothalamo–mesencephalic crises in endocrine diseases] Prikhozhan VM, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):38–42 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Occurrence of holoprosencephaly in chromosome 13 disorders cannot be explained by duplication/deficiency of a single locus. Wilson GN, et al. **Am J Med Genet Suppl** 1986;2:65–72

ANALYSIS

Predominant cytosolic distribution of serotonin in rat pineal gland in contrast to biogenic monoamine localization in midbrain and adrenal gland. Boschi G, et al. **J Pineal Res** 1989;7(1):23–9
A simple, fast and reliable method for obtaining dopamine histofluorescence from mesencephalic cultures. Futamachi KJ, et al. **Stain Technol** 1988 May;63(3):145–8
[Ascending mesencephalic dopaminergic pathways in the rat. Immunohistochemical demonstration of the coexistence of the amine with CCK–8 or neurotensin] Tramu G, et al. **Encephale** 1989 Jan–Feb;15 Spec No:73–8 **(Fre)**
[Effects of repeated acupuncture action on pain sensitivity and beta–endorphin contents of the hypothalamus and midbrain of the rat] Bragin EO, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):59–61 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Medullary and mesencephalic pathways and connections of lateral line neurons of the spiny dogfish Squalus acanthias. Boord RL, et al. **Brain Behav Evol** 1988;32(2):76–88
Reptilian somatosensory midbrain: identification based on input from the spinal cord and dorsal column nucleus. Pritz MB, et al. **Brain Behav Evol** 1989;33(1):1–14
Direct parasympathetic pathway to the eye: revisited. Burde RM. **Brain Res** 1988 Oct 25;463(1):158–62
Caudate afferents from the retrorubral nucleus and other midbrain areas in the cat. Vandermaelen CP, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):639–44
Origin and terminals of the pretectothalamoclaustral connections in the cat. Moryś J, et al. **Folia Morphol (Warsz)** 1987;46(3–4):129–40
The posterior part of the thalamus and anterior pretectum have two systems of connections with insula and claustrum in the rat. Moryś J, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):67–76
Ascending projections from the pedunculopontine tegmental nucleus and the adjacent mesopontine tegmentum in the rat. Hallanger AE, et al. **J Comp Neurol** 1988 Aug 22; 274(4):483–515
Afferent connections of the oculomotor nucleus in the chick. Labandeira–Garcia JL, et al. **J Comp Neurol** 1989 Apr 22; 282(4):523–34
Distribution of noradrenaline immunoreactivity in the forebrain and midbrain of the lizard Gekko gecko. Smeets WJ, et al. **J Comp Neurol** 1989 Jul 22;285(4):453–66
Putative cholinergic projections from the nucleus isthmi and the nucleus reticularis mesencephali to the optic tectum in the goldfish (Carassius auratus). Zottoli SJ, et al. **J Comp Neurol** 1988 Jul 15;273(3):385–98
Noradrenergic neurons with divergent projections to the motor trigeminal nucleus and the spinal cord: a double retrograde neuronal labeling study. Lyons WE, et al. **Neuroscience** 1988 Aug;26(2):681–93
[Cytoarchitecture and ultrastructure of the mesencephalon trigeminal nucleus of the domestic chicken] Hummel G, et al. **J Hirnforsch** 1988;29(6):695–700 (Eng. Abstr.) **(Ger)**
[Projection of the neurons of the substantia nigra and ventral field of the midbrain tegmen in the cat to the putamen] Gorbachevskaia AI. **Arkh Anat Gistol Embriol** 1989 Mar; 96(3):8–15 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Nimodipine enhances growth and vascularization of neural grafts. Finger S, et al. **Exp Neurol** 1989 Apr;104(1):1–9
[Paramedian thalamic and midbrain infarcts associated with palilalia] Yasuda Y, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):186–90 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Different developmental potentials of diencephalic and mesencephalic dopaminergic neurons in vitro. Engele J, et al. **Brain Res** 1989 Mar 27;483(1):98–109
Selective flow cytometric sorting of viable dopamine neurons. Lopez Lozano JJ, et al. **Brain Res** 1989 May 8; 486(2):351–6
Afferent and efferent connections of the cholinoceptive medial pontine reticular formation (region of the ventral tegmental nucleus) in the cat. Leichnetz GR, et al. **Brain Res Bull** 1989 Apr;22(4):665–88
The effect of acute and chronic treatment with SCH 23390 on the spontaneous activity of midbrain dopamine neurons. Esposito E, et al. **Eur J Pharmacol** 1989 Mar 14; 162(1):109–13
Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34
Survival and function of aggregate cultures of rat fetal dopamine neurons grafted in a rat model of Parkinson's disease. Strecker RE, et al. **Exp Brain Res** 1989; 76(2):315–22
Sex steroids promote neurite growth in mesencephalic tyrosine hydroxylase immunoreactive neurons in vitro. Reisert I, et al. **Int J Dev Neurosci** 1987;5(2):91–8
Morphological types of spinomesencephalic neurons in the marginal zone (lamina I) of the rat spinal cord, as shown after retrograde labelling with cholera toxin subunit B. Lima D, et al. **J Comp Neurol** 1989 Jan 8;279(2):327–39
Ventral mesencephalic neurons containing both cholecystokinin– and tyrosine hydroxylase–like immunoreactivities project to forebrain regions. Seroogy KB, et al. **J Comp Neurol** 1989 Jan 15;279(3):397–414
Forebrain projections from cholecystokininlike–immunoreactive neurons in the rat midbrain. Seroogy KB, et al. **J Comp Neurol** 1989 Jan 15; 279(3):415–35
Mesencephalic innervation of the turtle retina by a single serotonin–containing neuron. Schütte M, et al. **Neurosci Lett** 1988 Sep 12;91(3):289–94
The retinopetal system in the rat. Labandeira–Garcia JL. **Neurosci Res** 1988 Oct;6(1):88–95
5,7–Dihydroxytryptamine identifies living dopaminergic neurons in mesencephalic cultures. Silva NL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7346–50
Cryopreservation of fetal rat and non–human primate mesencephalic neurons: viability in culture and neural transplantation. Collier TJ, et al. **Prog Brain Res** 1988; 78:631–6
Ritanserin, a 5–HT2 receptor antagonist, activates midbrain dopamine neurons by blocking serotonergic inhibition. Ugedo L, et al. **Psychopharmacology (Berlin)** 1989; 98(1):45–50

DRUG EFFECTS

Amphetamine–induced rotation reveals post 6–OHDA lesion neurochemical reorganization. Lynch MR, et al. **Behav Brain Res** 1989 Feb 1;32(1):69–74
The role of mesolimbic dopamine in conditioned locomotion produced by amphetamine. Gold LH, et al. **Behav Neurosci** 1988 Aug;102(4):544–52
Similar effects of daily cocaine and stress on mesocorticolimbic dopamine neurotransmission in the rat. Kalivas PW, et al. **Biol Psychiatry** 1989 Apr 1;25(7):913–28
Ultrastructural alterations induced by 1–methyl–4–phenylpyridinium (MPP+) in canine substantia nigra and rat mesencephalon in vitro. Christie–Pope BC, et al. **Exp Neurol** 1989 Jun;104(3):235–40
Perinatal anti–androgen treatment and genotype affect the mesotelencephalic dopamine system and behavior in mice. Vadász C, et al. **Horm Behav** 1988 Dec;22(4):528–39
Chronic haloperidol–amphetamine interactions and mesolimbic dopamine. Lynch MR, et al. **Neuropsychobiology** 1988;19(2):97–103
[Electroencephalographic study on the central action of a new anxiolytic: 3a alpha, 4 beta, 7 beta, 7a alpha–hexahydro–2–(4–(4–(2–pyrimidinyl)–1–piperazinyl)–butyl)–4, 7–methano–1H–isoindole–1, 3(2H)–dione dihydrogen citrate (SM–3997)] Hirose A, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):41–7 (Eng. Abstr.) **(Jpn)**
[Effect of activation and blockade of the GABA–ergic system of the substantia nigra in the midbrain on the realization of conditioned food reflexes in dogs] Iakimovskii AF. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):829–35 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Culture conditions affect the cholinergic development of an isolated subpopulation of chick mesencephalic neural crest cells. Barald KF. **Dev Biol** 1989 Oct;135(2):349–66
Basic fibroblast growth factor promotes the survival and development of mesencephalic neurons in culture. Ferrari G, et al. **Dev Biol** 1989 May;133(1):140–7
Reinstatement of synaptic connectivity in the striatum of weaver mutant mice following transplantation of ventral mesencephalic anlagen. Triarhou LC, et al. **J Neurocytol** 1988 Apr;17(2):233–43
Simple method for the culture of glial cells from embryonic rat brain: implications for regional heterogeneity and the radial glial lineage. Wilkie MB, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):220–5
[Results of transplanting regions of the midbrain of human embryos into the brain of adult rats] Vasileshnikova IP, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):16–20 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Increase in the activity of tryptophan hydroxylase from cortex and midbrain of male Fischer 344 rats in response to acute or repeated sound stress. Boadle–Biber MC, et al. **Brain Res** 1989 Mar 20;482(2):306–16
Immunohistochemical localization of choline acetyltransferase in the chicken mesencephalon. Sorenson EM, et al. **J Comp Neurol** 1989 Mar 22;281(4):641–57
Glutamate decarboxylase immunoreactivity in the rat interpeduncular nucleus: a light and electron microscope investigation. Kawaja MD, et al. **Neuroscience** 1989; 30(3):741–53
Further observations on the relationship between adenosine deaminase–containing axons and trigeminal mesencephalic neurons: an electron microscopic, immunohistochemical and anterograde tracing study. Yamamoto T, et al. **Neuroscience** 1988 Aug;26(2):669–80

GROWTH & DEVELOPMENT

Scanning electron microscopy of transitory subependymal cysts in the developing midbrain of postnatal rats. Kaur C, et al. **Arch Histol Cytol** 1989 Jul;52(3):311–7
Afferent control of neuron numbers in the developing brain. Linden R, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):291–5
Postnatal development of cholecystokinin (CCK) binding sites in the rat forebrain and midbrain: an autoradiographic study. Pelaprat D, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):119–32
[The development of acetylcholinesterase activity and the effect of visual deprivation in the pretectal nucleus and the Edinger–Westphal nucleus of rats] Hayakawa S. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2063–70 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

The periaqueductal gray matter mediates opiate–induced immunosuppression. Weber RJ, et al. **Science** 1989 Jul 14; 245(4914):188–90

INJURIES

[Post–dislocation lesions of the midbrain and pons in neurosurgical patients] Borshchagovskii ML, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):22–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Stress and the mesocorticolimbic dopamine systems. Roth RH, et al. **Ann N Y Acad Sci** 1988;537:138–47 (24 ref.)
An in vivo voltammetric study of the response of mesocortical and mesoaccumbens dopaminergic neurons to environmental stimuli in strains of rats with differing levels of emotionality. Scatton B, et al. **Ann N Y Acad Sci** 1988;537:124–37 (45 ref.)
Behavioral and metabolic alterations in the opiate withdrawal syndrome induced by lesions of fasciculus retroflexus. Cutlip AC, et al. **Brain Res** 1988 Jun 7;451(1–2):54–8
Tachykinin binding sites in the interpeduncular nucleus of the rat: normal distribution, postnatal development and the effects of lesions. Murray M, et al. **Brain Res** 1988 Aug 30;459(1):76–92
Changes in mu opiate receptors following inescapable shock. Stuckey J, et al. **Brain Res** 1989 Jan 2;476(1):167–9
Effects of electrical stimulation of brain reward sites on release of dopamine in rat: an in vivo electrochemical study.

Gratton A, et al. **Brain Res Bull** 1988 Aug;21(2):319–24

Changes in the distribution of the neuron-specific B-50, neurofilament protein and glial fibrillary acidic proteins following an unilateral mesencephalic lesion in the rat. Oestreicher AB, et al. **Brain Res Bull** 1988 Nov; 21(5):713–22

A dorsomedial subdivision within the nucleus intercollicularis identified in the Japanese quail (Coturnix coturnix japonica) by means of alpha 2-adrenergic receptor autoradiography and estrogen receptor immunohistochemistry. Ball GF, et al. **Cell Tissue Res** 1989 Jul;257(1):123–8

Blockade of GABAA receptors in the midbrain periaqueductal gray abolishes nociceptive spinal dorsal horn neuronal activity. Sandkühler J, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):163–6

Cholecystokinin and tyrosine hydroxylase messenger RNAs in neurons of rat mesencephalon: peptide/monoamine coexistence studies using in situ hybridization combined with immunocytochemistry. Seroogy K, et al. **Exp Brain Res** 1989;74(1):149–62

Inappropriate sexual behavior and denervation supersensitivity of limbic and midbrain LHRH receptors in Tourette's syndrome [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):295–6

Differential colocalization of neuropeptide Y- and methionine-enkephalin-Arg6-Gly7-Leu8-like immunoreactivity in catecholaminergic neurons in the rat brain stem. Murakami S, et al. **J Comp Neurol** 1989 Mar 22;281(4):532–44

Distribution of mu, delta, and kappa opiate receptor types in the forebrain and midbrain of pigeons. Reiner A, et al. **J Comp Neurol** 1989 Feb 15;280(3):359–82

Production and characterization of a novel monoclonal antibody against neurotensin: immunohistochemical localization in the midbrain and hypothalamus. Williams FG, et al. **J Histochem Cytochem** 1989 Jun;37(6):831–41

Mesencephalic dopamine neurons become less sensitive to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine toxicity during development in vitro. Danias P, et al. **J Neurochem** 1989 Oct;53(4):1149–55

Glutamate stimulation of [3H]dopamine release from dissociated cell cultures of rat ventral mesencephalon. Mount H, et al. **J Neurochem** 1989 Apr;52(4):1300–10

Beta 1- and beta 2-adrenergic 125I-pindolol binding sites in the interpeduncular nucleus of the rat: normal distribution and the effects of deafferentation. Battisti WP, et al. **J Neurosci** 1989 Jul;9(7):2509–18

Identification and structural characterization of an inhibitor of catecholamine-induced free fatty acid mobilization from the calf midbrain. Hollett CR. **Life Sci** 1974 Oct 1; 15(7):1301–7

Role of histamine receptor in mesencephalic nucleus dorsalis raphe in cardiovascular regulation. Tangri KK, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):557–63

Effect of reduced glutathione (GSH) on dopamine (DA) and gamma-aminobutyric acid (GABA) concentration in the mouse brain following intoxication with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Smialek M. **Neuropatol Pol** 1988;26(3):415–22

Endogenous L-dopa, its immunoreactivity in neurons of midbrain and its projection fields in the cat. Kitahama K, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):47–52

The colocalization of cholecystokinin and tyrosine hydroxylase mRNAs in mesencephalic dopaminergic neurons in the rat brain examined by in situ hybridization. Savasta M, et al. **Neuroscience** 1989;29(2):363–9

Nerve growth factor receptor is associated with cholinergic neurons of the basal forebrain but not the pontomesencephalon. Woolf NJ, et al. **Neuroscience** 1989; 30(1):143–52

Habenular modulation of dynorphinergic systems in rat ventral mesencephalon. Ichikawa H, et al. **Peptides** 1988 Sep-Oct;9(5):1107–14

Does treatment with haloperidol for 3 weeks produce depolarization block in midbrain dopamine neurons of unanaesthetized rats? Andén NE, et al. **Psychopharmacology (Berlin)** 1988;96(4):558–60

Identification of L-dopa-dopamine and L-dopa cell bodies in the rat mesencephalic dopaminergic cell systems. Mons N, et al. **Synapse** 1989;4(2):99–105

PATHOLOGY

Solitary midbrain toxoplasmosis and olivary hypertrophy in a patient with acquired immunodeficiency syndrome. Kure K, et al. **Clin Neuropathol** 1989 Jan-Feb;8(1):35–40

A case of Tourette's syndrome with midbrain involvement. Sandyk R. **Int J Neurosci** 1988 Dec;43(3-4):171–5

What is it? Case 4, 1986. **Mov Disord** 1986;1(4):299–308

Isolated midbrain lesion resulting from closed head injury: a unique presentation of ataxic hemiparesis. Hershkowitz N, et al. **Neurology** 1989 Mar;39(3):452–3

PHYSIOLOGY

Phase resetting of respiratory rhythm: effect of changing respiratory "drive". Eldridge FL, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R271–7

The mesocorticolimbic dopamine system. **Ann N Y Acad Sci** 1988;537:1–540

Neurotensin and the mesocorticolimbic dopamine system. Bissette G, et al. **Ann N Y Acad Sci** 1988;537:397–404 (57 ref.)

Effects of acute and chronic neuroleptic treatment on the activity of midbrain dopamine neurons. Bunney BS. **Ann N Y Acad Sci** 1988;537:77–85 (55 ref.)

Modulation of mesolimbic dopaminergic behaviors by cholecystokinin. Crawley JN. **Ann N Y Acad Sci** 1988; 537:380–96 (75 ref.)

Mesocorticolimbic dopamine systems and reward. Fibiger HC, et al. **Ann N Y Acad Sci** 1988;537:206–15 (48 ref.)

In vivo and in vitro intracellular recordings from rat midbrain dopamine neurons. Grace AA. **Ann N Y Acad Sci** 1988; 537:51–76 (62 ref.)

Behavioral evidence for differential neuropeptide modulation of the mesolimbic dopamine system. Kelley AE, et al. **Ann N Y Acad Sci** 1988;537:415–34 (72 ref.)

The biochemistry and pharmacology of mesoamygdaloid dopamine neurons. Kilts CD, et al. **Ann N Y Acad Sci** 1988; 537:173–87 (59 ref.)

The functional output of the mesolimbic dopamine system. Koob GF, et al. **Ann N Y Acad Sci** 1988;537:216–27 (50 ref.)

Interactions between mesolimbic dopamine neurons, cholecystokinin, and neurotensin: evidence using in vivo voltammetry. Phillips AG, et al. **Ann N Y Acad Sci** 1988; 537:347–61 (51 ref.)

Mesencephalic dopaminergic neurons: role in the general economy of the brain. Simon H, et al. **Ann N Y Acad Sci** 1988;537:235–53 (80 ref.)

Relationships between mesolimbic dopamine function and eating behavior. Smith GP, et al. **Ann N Y Acad Sci** 1988; 537:254–61 (38 ref.)

Influence of the mesocortical/prefrontal dopamine neurons on their target cells. Thierry AM, et al. **Ann N Y Acad Sci** 1988;537:101–11 (42 ref.)

Ontogeny of open field activity in rats after neonatal lesioning of the mesocortical dopaminergic projection. Kalsbeek A, et al. **Behav Brain Res** 1989 Mar 1;32(2):115–27

Improvement of learning by mesencephalic reticular stimulation during postlearning paradoxical sleep. Hennevin E, et al. **Behav Neural Biol** 1989 May; 51(3):291–306

Food intake and lateral hypothalamic self-stimulation covary after medial hypothalamic lesions or ventral midbrain 6-hydroxydopamine injections that cause obesity. Hernandez L, et al. **Behav Neurosci** 1989 Apr;103(2):412–22

Mesencephalic reticular formation lesions made after habituation training abolish long-term habituation of the acoustic startle response in rats. Jordan WP. **Behav Neurosci** 1989 Aug;103(4):805–15

Adaptive changes of vertical vestibulo-ocular reflex induced by tenectomy of vertical recti muscles and neuronal behavior related to vertical eye movement in the region of the interstitial nucleus of Cajal in alert cats. Fukushima K, et al. **Brain Behav Evol** 1989;33(6):356–64

Anatomical mapping of brain stimulation reward sites in the anterior hypothalamic area: special attention to the stria medullaris. Blander A, et al. **Brain Res** 1989 Mar 27; 483(1):12–6

Modulation of locomotor activity induced by injections of carbachol into the tegmental pedunculopontine nucleus and adjacent areas in the rat. Brudzynski SM, et al. **Brain Res** 1988 Jun 7;451(1-2):119–25

Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw-closer motoneurons in the guinea pig. Chandler SH. **Brain Res** 1989 Jan 16;477(1-2):252–64

Burst firing induced in midbrain dopamine neurons by stimulation of the medial prefrontal and anterior cingulate cortices. Gariano RF, et al. **Brain Res** 1988 Oct 11; 462(1):194–8

Vocalization and stapedius muscle activity evoked by local electrical stimulation of midbrain in the chicken (Gallus gallus). Grassi S, et al. **Brain Res** 1989 Jun 26;490(2):345–9

Electrical stimulation of the rat ventral midbrain elicits antinociception via the dorsolateral funiculus. Guinan MJ, et al. **Brain Res** 1989 Apr 24;485(2):333–48

Cultured fetal tectal tissue grafted to the midbrain of newborn rats: morphology of grafts and innervation by host retinal and cortical axons. Harvey AR, et al. **Brain Res** 1988 Oct 11;462(1):89–98

Putative nociceptive modulatory neurons in the dorsolateral pontomesencephalic reticular formation. Haws CM, et al. **Brain Res** 1989 Apr 3;483(2):272–82

Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281–96

Differential actions of neurotrophic factors on lesion-induced damage of the serotonergic neurons projecting to the hippocampus. Lombardi G, et al. **Brain Res** 1988 Aug 23; 458(2):348–52

Activation of mesencephalic dopamine neurons by chemical stimulation of the nucleus tegmenti pedunculopontinus pars compacta. Niijima K, et al. **Brain Res** 1988 Jun 7; 451(1-2):163–71

Antinociceptive effect of agonists microinjected into the anterior pretectal nucleus of the rat. Prado WA. **Brain Res** 1989 Jul 24;493(1):147–54

Behavioral evidence for midbrain dopamine depolarization inactivation. Rompré PP, et al. **Brain Res** 1989 Jan 16; 477(1-2):152–6

Basal forebrain inputs to the interpeduncular nucleus in the rat studied with the Phaseolus vulgaris-leucoagglutinin tracing method. Groenewegen HJ, et al. **Brain Res Bull** 1988 Oct;21(4):643–9

Site-specific inhibition of receptivity by intracranial anisomycin in hamsters. Pleim ET, et al. **Brain Res Bull** 1988 Oct;21(4):581–5

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. I. Lateralization, parcellation, and an intermediate spatial representation. Masino T, et al. **Exp Brain Res** 1989; 75(2):227–44

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. II. Evidence for the involvement of a tecto-tegmento-spinal pathway. Masino T, et al. **Exp Brain Res** 1989;75(2):245–64

Anatomical and behavioral correlates of a xenograft-mediated pupillary reflex. Klassen H, et al. **Exp Neurol** 1988 Oct;102(1):102–8

Coding of free field intensity in the auditory midbrain of the leopard frog. I. Results for tonal stimuli. Eggermont JJ. **Hear Res** 1989 Jun 15;40(1-2):147–65

Masked thresholds of auditory midbrain neurons in the frog Rana ridibunda. Joermann G. **Hear Res** 1988 Sep 15; 35(2-3):191–9

Morphology and physiological properties of interneurons in the olfactory midbrain of the crayfish. Arbas EA, et al. **J Comp Physiol [A]** 1988 Dec;164(2):231–41

Response characteristics of vibration-sensitive neurons in the midbrain of the grassfrog, Rana temporaria. Christensen-Dalsgaard J, et al. **J Comp Physiol [A]** 1989 Jan;164(4):495–9

Sex recognition and neuronal coding of electric organ discharge waveform in the pulse-type weakly electric fish, Hypopomus occidentalis. Shumway CA, et al. **J Comp Physiol [A]** 1988 Aug;163(4):465–78

Physiological properties of sensory trigeminal neurons projecting to mesencephalic parabrachial area in the cat. Hayashi H, et al. **J Neurophysiol** 1989 Jun;61(6):1153–60

Induction of rhythmic jaw movements by stimulation of the mesencephalic reticular formation in the guinea pig. Hashimoto N, et al. **J Neurosci** 1989 Aug;9(8):2887–901

Dissociated mesencephalic responses to medial and ventral thalamic nuclei stimulation in rats. Relationship to analgesic mechanisms. Sakata S, et al. **J Neurosurg** 1989 Mar; 70(3):446–53

Electrophysiological characteristics and pharmacological responsiveness of midbrain dopaminergic neurons of the aged rat. Freeman AS, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):790–7

Neuronal coding of azimuthal sound direction in the auditory midbrain of the pigeon. Lewald J. **Naturwissenschaften** 1988 Sep;75(9):470–2

Estrogen-dependent and estrogen-independent effects of progesterone on the electrophysiological excitability of dorsal midbrain neurons in golden hamsters. Havens MD, et al. **Neuroendocrinology** 1988 Aug;48(2):120–9

The mesencephalic centre controlling locomotion in the rat. Coles SK, et al. **Neuroscience** 1989;28(1):149–57

Modulation of rhythmic function in the posterior midbrain. Garcia-Rill E, et al. **Neuroscience** 1988 Nov;27(2):639–54

Spinal lamina I projection neurons in the rat: collateral innervation of parabrachial area and thalamus. Hylden JL, et al. **Neuroscience** 1989;28(1):27–37

Bilateral neural transections at the level of mesencephalon increase food intake and reduce latency to onset of feeding in response to neuropeptide Y. Sahu A, et al. **Peptides** 1988 Nov-Dec;9(6):1269–73

Catecholamines and endogenous opioids in ventral tegmental self-stimulation reward. van Wolfswinkel L, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):589–95

Development of circadian rhythms in rats with lesions of serotonergic system. Ohi K, et al. **Physiol Behav** 1988; 44(3):393–403

The site and distribution of mechanoreceptors in the periodontal ligament of the cat represented in the mesencephalic nucleus and their possible regeneration following tooth extraction. Linden RW, et al. **Prog Brain Res** 1988;74:231–6

Chloral hydrate anesthesia alters the responsiveness of identified midbrain dopamine neurons to dopamine agonist administration. Kelland MD, et al. **Synapse** 1989;3(1):30–7

SKF 38393 alters the rate-dependent D2-mediated inhibition of nigrostriatal but not mesoaccumbens dopamine neurons. Kelland MD, et al. **Synapse** 1988;2(4):416–23

[The effects of acetylcholine on the electric activities of pain reaction neurons in nucleus parafascicularis of thalamus and midbrain reticular formation in rats] Zhao DC, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):326–34 (Eng. Abstr.) **(Chi)**

[The destruction of perikaryas of the mesencephalic reticular formation and the posterior hypothalamus does not cause major disorders of awakening in the cat] Denoyer M, et al. **C R Acad Sci [III]** 1989;309(7):265–74 (Eng. Abstr.) **(Fre)**

[Dopaminergic neurons of the mesencephalon and behavior] Simon H. **Encephale** 1989 Jan-Feb;15 Spec No:165–73 (36 ref.) **(Fre)**

[Subthalamic lesions eliminate sexual behavior in the male rat] Maillard CA, et al. **J Physiol (Paris)** 1988;83(1):50–5 (Eng. Abstr.) **(Fre)**

[Role of the nucleus of the optic tract on optokinetic

nystagmus and optokinetic after-nystagmus in monkeys] Hasegawa T. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):2039–50 (Eng. Abstr.) **(Jpn)**

[Participation of the thalamic reticular nucleus in the shaping of the interrelations of the mesencephalic reticular formation and the lateral geniculate body] Kul'gavin LE, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):643–5 (Eng. Abstr.) **(Rus)**

[Changes in the hormone content of the blood during chronic electrical stimulation of the midbrain] Danilov GE, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1010–4 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the central gray matter of the midbrain on responses of neurons of the ventroposteromedial nucleus of the thalamus in cats] Gura EV, et al. **Neirofiziologiia** 1988;20(5):688–94 (Eng. Abstr.) **(Rus)**

[Role of the serotoninergic system in inhibiting the jaw-opening reflex induced by stimulation of the central gray matter of the midbrain] Gura EV, et al. **Neirofiziologiia** 1989;21(1):45–52 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Intracerebral transplantation of dopamine neurons: understanding the functional role of the mesolimbocortical dopamine system and developing a therapy for Parkinson's disease. Brundin P, et al. **Ann N Y Acad Sci** 1988;537:148–60 (54 ref.)

Mesocortical dopaminergic function and human cognition. Weinberger DR, et al. **Ann N Y Acad Sci** 1988;537:330–8 (21 ref.)

Progressive degradation of serial grooming chains by descending decerebration. Berridge KC. **Behav Brain Res** 1989 Jul 1;33(3):241–53

Impulse activity of mesencephalic neurons on nociceptive stimulation in awake rats. Kiyatkin EA, et al. **Neurosci Behav Physiol** 1988 Sep–Oct;18(5):393–400

Microinjections of glutamate or morphine at coincident midbrain sites have different effects on nociceptive dorsal horn neurons in the rat. Carstens E, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):185–91

Subthalamic and mesencephalic locomotor regions: brain damage augments the importance of female movement for the display of sexual behavior in male rats. Edwards DA, et al. **Physiol Behav** 1988;44(6):803–9

[Pressure waves induced by electrical stimulation of upper pons and lower midbrain in dogs with experimental subarachnoid hemorrhage] Kogure Y, et al. **No To Shinkei** 1989 Mar;41(3):283–8 (Eng. Abstr.) **(Jpn)**

[Neuropathological studies of familial amyotrophic lateral sclerosis with special reference to systemic degeneration of dentato-rubral system and neuronal loss of Onuf's nuclei] Sakai M, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1197–205 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

[Mesencephalic hematoma as the presenting form of cerebral lymphoma (letter)] D'Olhaberriague L, et al. **Rev Clin Esp** 1989 May;184(8):450–2 **(Spa)**

SURGERY

Microsurgery of midbrain lesions. Pendl G, et al. **Acta Neurochir Suppl (Wien)** 1988;42:130–6

Stereotactic mesencephalic tractotomy in the treatment of chronic cancer pain. Frank F, et al. **Acta Neurochir (Wien)** 1989;99(1–2):38–40

TRANSPLANTATION

Transplantation in Parkinson's disease: stereotactic implantation of adrenal medulla and foetal mesencephalon. Hitchcock ER, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:48–50

Effect of dopaminergic denervation and transplant-derived reinnervation on a marker of striatal GABAergic function. Segovia J, et al. **Brain Res** 1989 Jul 24;493(1):185–9

Transplanted mesencephalic quail cells colonize selectively all primary visual nuclei of chick diencephalon: a study using heterotopic transplants. Martinez S, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):263–74

Plasticity and predetermination of mesencephalic and trunk neural crest transplanted into the region of the cardiac neural crest. Kirby ML. **Dev Biol** 1989 Aug;134(2):402–12

Intracerebral xenografts of dopamine neurons: the role of immunosuppression and the blood–brain barrier. Brundin P, et al. **Exp Brain Res** 1989;75(1):195–207

Human fetal dopamine neurons grafted in a rat model of Parkinson's disease: ultrastructural evidence for synapse formation using tyrosine hydroxylase immunocytochemistry. Clarke DJ, et al. **Exp Brain Res** 1988;73(1):115–26

Time-course of recovery of dopamine neuron activity during reinnervation of the denervated striatum by fetal mesencephalic grafts as assessed by in vivo voltammetry. Forni C, et al. **Exp Brain Res** 1989;76(1):75–87

Intrastriatal dopaminergic grafts restore inhibitory control over striatal cholinergic neurons. Herman JP, et al. **Exp Brain Res** 1988;73(2):236–48

Dopamine released from mesencephalic transplants restores modulation of striatal acetylcholine release after neonatal 6-hydroxydopamine: an in vitro analysis. Carder RK, et al. **Exp Neurol** 1989 Sep;105(3):251–9

Development of intracerebral dopaminergic grafts: a combined immunohistochemical and autoradiographic study of its time course and environmental influences. Abrous N, et al. **J Comp Neurol** 1988 Jul 1;273(1):26–41

Human fetal mesencephalic tissue grafted to dopamine-denervated striatum of athymic rats: light- and electron-microscopical histochemistry and in vivo chronoamperometric studies. Strömberg I, et al. **J Neurosci** 1989 Feb;9(2):614–24

Fetal dopamine-rich mesencephalic grafts in Parkinson's disease [letter] Lindvall O, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1483–4

Development of dopamine innervation and turning behavior in dopamine-depleted infant rats receiving unilateral nigral transplants. Snyder-Keller AM, et al. **Neuroscience** 1989; 30(3):779–94

Intracerebral xenografts of human mesencephalic tissue into athymic rats: immunochemical and in vivo electrochemical studies. Strömberg I, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8331–4

Cryopreservation, culture, and transplantation of human fetal mesencephalic tissue into monkeys. Redmond DE Jr, et al. **Science** 1988 Nov 4;242(4879):768–71

Human ventral mesencephalic xenografts to the catecholamine-depleted striata of athymic rats: ultrastructure and immunocytochemistry. Mahalik TJ, et al. **Synapse** 1989;4(1):19–29

[Immunocytochemical study of catecholaminergic neurons in grafted mesencephalon transplanted into the hypothalamus of the rat] Guy J, et al. **C R Soc Biol (Paris)** 1988;182(1):67–73 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Specialized ependyma in the posterior mesencephalon of the chicken: the fine structure of the subtrochlear organ. Uryu K, et al. **Cell Tissue Res** 1988;254(3):531–8

Topographical and ultrastructural investigation of the habenulo-interpeduncular pathway in the rat: a wheat germ agglutinin-horseradish peroxidase anterograde study. Kawaja MD, et al. **J Comp Neurol** 1988 Sep 1;275(1):117–27

HRP labeling and ultrastructural localization of prepacemaker terminals within the medullary pacemaker nucleus of the weakly electric gymnotiform fish Apteronotus leptorhynchus. Szabo T, et al. **J Comp Neurol** 1989 Jun 8;284(2):169–73

Epithelium-lined cyst of the pretectal region: case report and electron microscope study. Nishioka T, et al. **Surg Neurol** 1989 Jun;31(6):448–53

MESENCHYMOMA

[A case of mesenchymal hamartoma of the liver] Kanegawa K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1035–8 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Endolymphatic stromal myosis coexisting with adenocarcinoma of the uterus. Ohta H, et al. **Ultrastruct Pathol** 1988 Nov–Dec;12(6):559–66

DIAGNOSIS

Mesenchymal hamartoma in a 10-month-old infant: appearance by magnetic resonance imaging. Roberts EA, et al. **Can Assoc Radiol J** 1989 Aug;40(4):219–21

Chest wall mesenchymoma (hamartoma) in infancy. CT and MR findings. Schlesinger AE, et al. **Pediatr Radiol** 1989; 19(3):212–3

DRUG THERAPY

Treatment of rhabdomyosarcoma and other malignant mesenchymal tumours of childhood with ifosfamide + vincristine + dactinomycin (IVA) as front-line therapy (a SIOP study). Otten J, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S30

Cisplatin and adriamycin combination chemotherapy for uterine stromal sarcomas and mixed mesodermal tumors. Peters WA 3d, et al. **Gynecol Oncol** 1989 Sep;34(3):323–7

GENETICS

Distribution of structural chromosome aberrations in skin fibroblasts from patients with benign mesenchymal tumors. Mertens F, et al. **Hereditas** 1988;109(1):125–9

IMMUNOLOGY

Expression of the common acute lymphoblastic leukemia antigen (CD10) in mesenchymal tumors. Mechtersheimer G, et al. **Am J Pathol** 1989 May;134(5):961–5

PATHOLOGY

Intranodal hemorrhagic spindle-cell tumor with "amianthoid" fibers. Report of six cases of a distinctive mesenchymal neoplasm of the inguinal region that stimulates Kaposi's sarcoma. Suster S, et al. **Am J Surg Pathol** 1989 May;13(5):347–57

Palisaded myofibroblastoma. A benign mesenchymal tumor of lymph node. Weiss SW, et al. **Am J Surg Pathol** 1989 May;13(5):341–6

Chondrolipoma of the breast. Marsh WL Jr, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):369–71

Undifferentiated (embryonal) sarcoma of the liver. A clinicopathologic study of a survivor treated with combined technique therapy. Steiner M, et al. **Cancer** 1989 Sep 15;64(6):1318–22

Malignant renal rhabdoid tumour. Immunohistochemical and ultrastructural studies. Seo IS, et al. **Histopathology** 1988 Dec;13(6):657–66

Benign mesenchymoma of the palate: report of a case. Daly JM, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):890–2

A case report of malignant mesenchymoma with discussion of musculoskeletal tumor staging: the Enneking system. DePaolo CJ, et al. **Orthopedics** 1988 Sep;11(9):1263–76

Presacral mesenchymoma: a case report. Beneck D, et al. **Pediatr Pathol** 1988;8(6):643–7

Malignant neoplasms arising in cystic hamartomas of the lung in childhood. Hedlund GL, et al. **Radiology** 1989 Oct; 173(1):77–9

[Malignant para-testicular tumors. Apropos of 3 unusual cases] Mhiri MN, et al. **Ann Urol (Paris)** 1989;23(1):23–6 (Eng. Abstr.) **(Fre)**

[Hepatic undifferentiated (or embryonal) sarcoma. Diagnostic and therapeutic problems apropos of botryoid rhabdomyosarcoma] Vetter D, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):98–103 (68 ref.) (Eng. Abstr.) **(Fre)**

[Mesenchymal chondrosarcoma. Presentation of a case and a review of the literature] Angrisani P, et al. **Pathologica** 1988 Mar–Apr;80(1066):225–33 (53 ref.) (Eng. Abstr.) **(Ita)**

[Benign mesenchymoma of the hypopharynx] Ferbo U, et al. **Pathologica** 1988 May–Jun;80(1067):371–7 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

CT of malignant mesenchymoma of the esophagus. Onomura K, et al. **Gastrointest Radiol** 1989 Summer;14(3):202–4

Computed tomography of benign mesenchymoma of the neck. Darwin RH, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):514–6

Case report 499: Benign mesenchymoma of right thigh. Hertzanu Y, et al. **Skeletal Radiol** 1988;17(6):447–9

SECRETION

Increased insulin-like growth factor II production and consequent suppression of growth hormone secretion: a dual mechanism for tumor-induced hypoglycemia. Ron D, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):701–6

SURGERY

Malignant mesenchymoma of the liver in children. Newman KD, et al. **J Pediatr Surg** 1989 Aug;24(8):781–3

VETERINARY

Use of cisplatin for control of metastatic malignant mesenchymoma and hypertrophic osteopathy in a dog. Hahn KA, et al. **J Am Vet Med Assoc** 1989 Aug 1; 195(3):351–3

MESENTERIC ARTERIES

Aneurysm of the inferior mesenteric artery associated with occlusion of the celiac axis and superior mesenteric artery. Le Bas P, et al. **Ann Vasc Surg** 1986 Sep;1(2):254–7

Vascular escape from vasoconstriction and post-stimulatory hyperemia in the superior mesenteric artery of the cat. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1174–80

Transcatheter occlusion of inferior mesenteric arteriovenous fistula: a case report. Peer A, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):35–7

Effect of prostaglandin and leukotriene antagonists in acute mesenteric artery occlusion. Ben-Dahan J, et al. **Eur Surg Res** 1988;20(5–6):310–9

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordback I, et al. **Int Surg** 1989 Jan–Mar; 74(1):36–9

CT diagnosis of superior mesenteric arteriovenous fistula. Radin DR, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):721–3

Concurrent intracranial and intraabdominal aneurysms. Isla A, et al. **J Neurosurg Sci** 1988 Jul–Sep;32(3):121–2

Budd Chiari syndrome, visceral arterial occlusions, recurrent fetal loss and the "lupus anticoagulant" in systemic lupus erythematosus. Asherson RA, et al. **J Rheumatol** 1989 Feb; 16(2):219–24

Mesoaortic compression of the left renal vein (the so-called nutcracker syndrome): repair by a new stenting procedure. Barnes RW, et al. **J Vasc Surg** 1988 Oct;8(4):415–21

Traumatic superior mesenteric arteriovenous fistula: report of a case and review of the literature. Rosenthal D, et al. **J Vasc Surg** 1987 Mar;5(3):486–91 (22 ref.)

False aneurysm of splanchnic arteries—a scintigraphic pitfall. Dimopoulos PA, et al. **Nuklearmedizin** 1988 Dec; 27(6):272–3

[Double compression of the celiac trunk and superior mesenteric artery by the diaphragm. 2 new cases] Bacourt F, et al. **Chirurgie** 1988;114(10):762–8 (12 ref.) (Eng. Abstr.) **(Fre)**

[Action of adenosine on intestinal motility after experimental

mesenteric ischemia in dogs] Feit C, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):803–9 (31 ref.) (Eng. Abstr.) (Fre)

[Ischemic complications after surgery of the left colon in patients with arteriopathy] Armenio S. **Minerva Chir** 1989 Feb 15;44(3):525–33 (0 ref.) (Ita)

[Angiodysplasia of the colon] Festa V, et al. **Minerva Chir** 1989 May 15;44(9):1389–93 (12 ref.) (Eng. Abstr.) (Ita)

[A case of multiple aneurysms originated from the superior mesenteric artery branch, and a review of literature] Fukumoto T, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov; 89(11):1920–3 (17 ref.) (Eng. Abstr.) (Jpn)

[Chronic intestinal ischemia. Apropos of a case successfully treated with surgery] Pardo García JL, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):507–10 (Eng. Abstr.) (Spa)

ABNORMALITIES

Congenital arteriovenous fistula of the superior mesenteric vessels. Takehara H, et al. **J Pediatr Surg** 1988 Nov; 23(11):1029–31

[A case of situs inversus totalis associated with the replaced common hepatic artery arising from the superior mesenteric artery] Kitamura S, et al. **Kaibogaku Zasshi** 1988 Dec; 63(6):547–52 (Eng. Abstr.) (Jpn)

[An infrequent cause of digestive hemorrhage in a young patient. Angiodysplasia of the colon] López-Boado Serrat MA, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):627–8 (Spa)

ANALYSIS

[Content, location and action site of enkephalins in arterial walls] Lin SX, et al. **Sheng Li Hsueh Pao** 1989 Jun; 41(3):241–8 (Eng. Abstr.) (Chi)

DRUG EFFECTS

Vasodilator responses to alpha-human-atrial natriuretic peptide in isolated omental and pulmonary arteries from rabbit and man. Lindberg F, et al. **Acta Physiol Scand** 1988 Nov;134(3):391–7

The influence of antihypertensive treatment on the mesenteric arterial structure in spontaneously hypertensive rats. A morphometric study. Nordborg C. **Acta Physiol Scand** 1989 Jan;135(1):47–56

Mesenteric artery contractile properties during dietary calcium manipulation in spontaneously hypertensive and Wistar Kyoto normotensive rats. Bukoski RD, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):440–8

The contractile responses of isolated dog cerebral and extracerebral arteries to oxybarbiturates and thiobarbiturates. Hatano Y, et al. **Anesthesiology** 1989 Jul; 71(1):80–6

Characteristics of cromakalim-induced relaxations in the smooth muscle cells of guinea-pig mesenteric artery and vein. Nakao K, et al. **Br J Pharmacol** 1988 Nov; 95(3):795–804

Reactivity of macro- and microvessels of DOCA-salt hypertensive rats: role of the endothelial cell. Cordellini S, et al. **Braz J Med Biol Res** 1988;21(4):845–9

Contractile reactivity of the perfused mesenteric vascular bed from sinoaortic denervated rats to norepinephrine, methoxamine and verapamil. Vasquez EC, et al. **Braz J Med Biol Res** 1988;21(3):629–32

Evidence for a decreased noradrenaline sensitivity in mesenteric resistance vessels from rats with chemical renal medullectomy. Bund SJ, et al. **Clin Sci** 1989 Aug; 77(2):167–70

Effects of H2-blockers on rat mesenteric arterioles under resting conditions. Morini G, et al. **Farmaco** 1989 Mar; 44(3):323–8

Spontaneous and ouabain-induced efflux of catecholamines and dihydroxyphenylglycol in two canine blood vessels. Branco D, et al. **Fundam Clin Pharmacol** 1988;2(6):477–91

Alcohol suppresses endothelium-dependent relaxation in rat mesenteric vascular beds. Criscione L, et al. **Hypertension** 1989 Jun;13(6 Pt 2):964–7

Reassessment of the blocking activity of prazosin at low and high concentrations on sympathetic neurotransmission in the isolated mesenteric vasculature of rats. Yamamoto R, et al. **J Auton Pharmacol** 1988 Dec;8(4):303–9

Development of blood pressure in spontaneously hypertensive rats after withdrawal of long-term treatment related to vascular structure. Christensen KL, et al. **J Hypertens** 1989 Feb;7(2):83–90

Structural changes vary along individual arterioles in deoxycorticosterone acetate hypertensive rats. Vial JH, et al. **J Hypertens** 1989 Feb;7(2):151–8

Prostaglandin F2 alpha-induced contraction in isolated dog cerebral, coronary and mesenteric arteries soaked in excess potassium. Toda N, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):204–7

The prostaglandin outflow from perfused mesenteric vasculature of rats fed different fats. Huang YS, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):73–9

Effect of a peptide derived from fibrinogen degraded by leukocyte elastase on isolated bovine mesenteric arteries. Saldeen K, et al. **Thromb Res** 1989 Feb 1;53(3):279–86

Effect of carbon dioxide on conservation of vasoactivity of canine mesenteric arteries. Ohta T, et al. **Transplantation** 1989 Apr;47(4):740–2

ENZYMOLOGY

Glyceryl trinitrate inhibits phosphatidylinositol hydrolysis and protein kinase C activity in bovine mesenteric artery. Ahlner J, et al. **Life Sci** 1988;43(15):1241–8

INJURIES

[A wound of superior mesenteric vessels. Apropos of a case] Sechas M, et al. **Ann Chir** 1988;42(6):423–5 (Eng. Abstr.) (Fre)

INNERVATION

A simple and reliable method for visualization of the arterial autonomic nerve plexus by scanning electron microscopy. Chaldakov GN, et al. **Acta Morphol Neerl Scand** 1987; 25(4):273–7

Sympathetic transmission in small mesenteric arteries from the rat: highly calcium-dependent at low stimulation rates. Sjöblom-Widfeldt N, et al. **Acta Physiol Scand** 1989 Apr; 135(4):505–11

Pertussis toxin effects on transmitter release from perivascular nerve terminals. Nozaki M, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):H455–9

The interaction between catecholaminergic and peptidergic perivascular nerve fibres in the innervation of the rat mesenteric vascular bed. Woolgar JR, et al. **Artery** 1989; 16(4):223–32

Inhibition of adrenergic transmission by methionine- and leucine-enkephalins is impaired in the mesenteric vasculatures of spontaneously hypertensive rats. Tsuda K, et al. **Jpn Circ J** 1989 Mar;53(3):255–60

Kinetics of adenosine antagonism of sympathetic nerve induced vasoconstriction. Lockhart LK, et al. **Proc West Pharmacol Soc** 1988;31:105–7

METABOLISM

Glomerular and vascular atrial natriuretic factor receptors in adrenalectomized rats. Cachofeiro V, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1250–7

Vascular vasopressin receptors in renal hypertensive rats. Larivière R, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H693–8

Endothelin stimulates the release of prostacyclin from rat mesenteric arteries. Rakugi H, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):924–8

(5Z)-carbacyclin displays agonist-antagonist properties on prostacyclin-receptors in platelets and vascular myocytes. Corsini A, et al. **Biomed Biochim Acta** 1988; 47(10–11):S104–7

Effects of albumin on fatty acid, protein, and eicosanoid levels in rat mesenteric arterial bed perfusions. Jenkins DK, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):679–82

Sensitivity and adrenoceptor affinity in the mesenteric artery of the deoxycorticosterone acetate hypertensive rat. Perry PA, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1095–9

Sodium–lithium exchange and sodium–proton exchange are mediated by the same transport system in sarcolemmal vesicles from bovine superior mesenteric artery. Kahn AM, et al. **Circ Res** 1989 Sep;65(3):818–28

ATP regulation of the slow calcium channels in vascular smooth muscle cells of guinea pig mesenteric artery. Ohya Y, et al. **Circ Res** 1989 Jan;64(1):145–54

Norepinephrine overflow in perfused mesenteric arteries of spontaneously hypertensive rats. Hano T, et al. **Hypertension** 1989 Jul;14(1):44–53

Renin inhibitor and converting enzyme inhibitors suppress vascular angiotensin II. Saito H, et al. **Hypertension** 1989 Jun;13(6 Pt 2):749–53

Prostaglandin I2 and thromboxane A2 production in relation to alpha 1 and alpha 2-adrenoreceptor activation in the normotensive and hypertensive rat. Pipili E, et al. **J Auton Pharmacol** 1988 Dec;8(4):333–42

Effect of a chronic infusion of atrial natriuretic factor on glomerular and vascular receptors in spontaneously hypertensive rats. Cachofeiro V, et al. **J Hypertens** 1989 Apr;7(4):335–42

The measurement of internal pH in resistance arterioles: evidence that intracellular pH is more alkaline in SHR than WKY animals. Izzard AS, et al. **J Hypertens** 1989 Mar; 7(3):173–80

Functional and histological changes in mesenteric arteries and aortas from monkeys fed a high cholesterol diet. Toda N, et al. **Jpn J Pharmacol** 1988 Dec;48(4):441–51

[Quinacrine-positive structures in the mesenteric vascular region in the rat] Fríncu DL, et al. **Morphol Embryol (Bucur)** 1989 Jan–Mar;35(1):9–13 (Fre)

PARASITOLOGY

Hematochezia attributable to cranial mesenteric arterial aneurysm with connecting tracts to cecum and ileum in a horse. Kiper ML, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1278–80

Strongylus vulgaris in donkeys (Equus asinus) from the highveld of Zimbabwe. Pandey VS, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):173–9

PATHOLOGY

The analyses of intestinal microcirculation by histometrical studies of arterial media in Crohn's disease. Funayama Y, et al. **Gastroenterol Jpn** 1989 Apr;24(2):223

Sonographic evaluation of superior mesenteric vascular relationship in malrotation. Loyer E, et al. **Pediatr Radiol** 1989;19(3):173–5

[Calcified-dystrophic lesions of the abdominal aorta and of the initial segment of the superior mesenteric artery in old age. Critical considerations of 50 cases studied in their morpho-radiologic and anatomo-pathologic aspects] Zelli GP, et al. **Ann Ital Chir** 1987;59(1–6):415–29 (Eng. Abstr.) (Ita)

PHYSIOLOGY

Changes in plasma kallikrein and PGF2 alfa concentrations during circulatory shock. Studies with superior mesenteric artery occlusion in anesthetized dogs. Mózes T, et al. **Acta Chir Scand** 1989;155(1):15–8

Regional differences in the regulation of contraction-relaxation machinery of vascular smooth muscle. Kovach AG, et al. **Adv Exp Med Biol** 1989; 248:601–9

The influence of a temporary cessation and reperfusion of intestinal blood flow on the level of hepatic lipid peroxides. Lutz J, et al. **Adv Exp Med Biol** 1989;248:803–8

Regional hemodynamic responses to adrenoceptor antagonism in conscious rats. Gardiner SM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H813–24

Capsaicin-sensitive nerves are involved in bile-oleate-induced intestinal hyperemia. Rozsa Z, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G476–81

Dimethylsulfoxide prevents chemoattractant-induced leukocyte adherence. Sekizuka E, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H594–7

Postprandial celiac and superior mesenteric blood flows in conscious dogs. Takagi T, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 1):G522–8

The role of prostacyclin in the mesenteric traction syndrome during anesthesia for abdominal aortic reconstructive surgery. Gottlieb A, et al. **Ann Surg** 1989 Mar;209(3):363–7

Doppler analysis of superior mesenteric artery blood flow in preterm infants. Leidig E. **Arch Dis Child** 1989 Apr; 64(4):476–80

Endothelin enhances adrenergic vasoconstriction in perfused rat mesenteric arteries. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1304–8

Inhibition of norepinephrine-induced contractile responses of canine mesenteric artery by plant total saponins. Guan YY, et al. **Blood Vessels** 1988;25(6):312–5

Duplex ultrasound measurement of postprandial intestinal blood flow: effect of meal composition. Moneta GL, et al. **Gastroenterology** 1988 Nov;95(5):1294–301

Ploidy in mesenteric vessels of aged spontaneously hypertensive and Wistar-Kyoto rats. Lombardi DM, et al. **Hypertension** 1989 May;13(5):475–9

Stimulation of afferent fibres of the guinea-pig ureter evokes potentials in inferior mesenteric ganglion neurones. Amann R, et al. **J Physiol (Lond)** 1988 Aug;402:543–53

Duplex ultrasound measurement of changes in mesenteric flow velocity with pharmacologic and physiologic alteration of intestinal blood flow in man. Lilly MP, et al. **J Vasc Surg** 1989 Jan;9(1):18–25

Quantitative measurement of abdominal arterial blood flow using image-directed Doppler ultrasonography: superior mesenteric, splenic, and common hepatic arterial blood flow in normal adults. Nakamura T, et al. **JCU** 1989 May; 17(4):261–8

Inhibition of norepinephrine release by presynaptic alpha 2-adrenoceptors in mesenteric vasculature preparations from chronic DOCA-salt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Mar;30(2):231–9

Pulsed Doppler ultrasound blood flow measurements in the superior mesenteric artery of the newborn. Leidig E. **Pediatr Radiol** 1989;19(3):169–72

Characterization of intestinal collateral blood flow in the developing piglet. Crissinger KD, et al. **Pediatr Res** 1988 Oct;24(4):473–6

Leukotrienes cause mesenteric vasoconstriction and hemoconcentration in rats without activating thromboxane receptors. Schumacher WA, et al. **Prostaglandins** 1989 Sep; 38(3):335–44

The effects of ionophore A23187 on permeability of the frog mesentery microvasculature. Michel CC, et al. **Q J Exp Physiol** 1989 Jan;74(1):7–18

[The hemodynamics of the intestinal arteries of the dog with special reference to the flow rate] Lehmann C, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):97–104 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Biophysical aspects of resistance vessels studied in spontaneous and renal hypertensive rats. Mulvany MJ. **Acta Physiol Scand Suppl** 1988;571:129–37

Splanchnic artery aneurysm. Boevé J, et al. **Neth J Surg** 1988 Dec;40(6):163

Blunted responses to vasoconstrictors in mesenteric vasculature but not in portal vein of spontaneously hypertensive rats treated with relaxin. Massicotte G, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):254–9

[Mechanisms of hemodynamic disorders in occlusion and subsequent revascularization of the mesenteric arteries] Gubaev SA. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):36–9 (Eng. Abstr.) (Rus)

RADIOGRAPHY

The diagnostic yield of superior mesenteric angiography: correlation with the pattern of gastrointestinal bleeding. Fiorito JJ, et al. **Am J Gastroenterol** 1989 Aug;84(8):878–81

The value of angiography in the surgical management of pancreatic disease. Appleton GV, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):92–6

Aneurysms of superior mesenteric artery: CT demonstration. Lamorgese B. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):1059–60

Comparison of the value of emergency mesenteric angiography and intraoperative colonoscopy with antegrade colonic irrigation in massive rectal haemorrhage. Cussons PD, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):91–3

[Retrosternal coloplasties: contribution of postoperative mesenteric arteriography] Gossot D, et al. **Gastroenterol Clin Biol** 1988 Aug–Sep;12(8–9):619–23 (19 ref.) (Eng. Abstr.) (Fre)

[Mesenteric and hypogastric arteriography in surgery of cancer of the rectum] Fava C, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1177–82 (Eng. Abstr.) (Ita)

[Angiography of the celiac artery and superior mesenteric artery] Uchida H, et al. **Rinsho Hoshasen** 1988 Oct; 33(11):1319–49 (Jpn)

[Experience with using selective angiography of the mesenteric arteries in patients with cicatricial esophageal stenosis] Zingerman LS, et al. **Vestn Khir** 1988 May; 140(5):19–22 (Eng. Abstr.) (Rus)

SURGERY

Surgical approach to the superior mesenteric artery by the Kocher Maneuver: anatomy study and clinical applications. Bonnichon P, et al. **Ann Vasc Surg** 1987 May;1(4):505–8

Mesenteric shunting during thoracoabdominal aortic clamping to prevent disseminated intravascular coagulation in dogs. Cohen JR, et al. **Ann Vasc Surg** 1988 Jul;2(3):261–7

Embolization of the mesenteric arteries: surgical treatment in twenty-three consecutive cases. Lazaro T, et al. **Ann Vasc Surg** 1986 Nov;1(3):311–5

Visceral revascularization by anastomosis between the left renal and Drummond's marginal artery. Testart J, et al. **Ann Vasc Surg** 1988 Apr;2(2):185–8

[A case of chronic ischemic erosive gastropathy healed after surgical revascularization] Bouché O, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):94–7 (Eng. Abstr.) (Fre)

[Revascularization of the inferior mesenteric artery through an endoaortic approach. A prospective series of 51 cases] Cormier JM, et al. **J Chir (Paris)** 1989 Jun–Jul; 126(6–7):413–8 (Eng. Abstr.) (Fre)

[Aneurysms of digestive arteries. What are the indications?] Mellière D, et al. **J Mal Vasc** 1989;14(3):206–12 (Eng. Abstr.) (Fre)

[Revascularization technics of the inferior mesenteric artery] Cormier JM, et al. **Presse Med** 1989 May 27;18(21):1072–5 (Eng. Abstr.) (Fre)

[Reimplantation of the inferior mesenteric artery] Gullà P, et al. **Minerva Chir** 1988 Sep 15;43(17):1395–8 (Eng. Abstr.) (Ita)

[Details of a surgical technic in the revascularization of the inferior mesenteric artery] Locati P, et al. **Minerva Chir** 1988 Oct 31;43(20):1719–20 (Eng. Abstr.) (Ita)

[Intraorganic blood vessels of the intestinal graft after its ortho- and heterotopic transplantation] Kirpatovskiĭ ID, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):57–63 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

A new view of the arterial smooth muscle cells and autonomic nerve plexus by scanning electron microscopy in spontaneously hypertensive rats. Chaldakov GN, et al. **Exp Pathol** 1989;36(3):181–4

Vascular changes following hypothermic preservation. Neil DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1389–90

MESENTERIC CIRCULATION see SPLANCHNIC CIRCULATION

MESENTERIC CYST

COMPLICATIONS

Mesenteric cyst causing intestinal obstruction [letter] Lukram AS, et al. **Indian Pediatr** 1988 Mar;25(3):306–7

Bowel obstruction secondary to mesenteric cyst formation. Olivencia-Yurvati AH, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):355–6, 361

Enteric cyst as a cause of nonimmune hydrops fetalis: fetal thoracentesis with fluid analysis. Franzek DA, et al. **JCU** 1989 May;17(4):275–9

DIAGNOSIS

[Cysts of the intestinal mesentery] Uspenskiĭ LV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):121–4 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[Mesenteric cysts in Denmark in 1980–86] Jensen VJ, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):631–2 (Eng. Abstr.) (Dan)

RADIOGRAPHY

Mesenteric cyst with atypical computed tomography appearance. Stevens SK, et al. **Clin Imaging** 1989 Jun; 13(2):119–21

SURGERY

Retroperitoneal mesenteric cysts. Katsohis CD, et al. **Int Surg** 1989 Jan–Mar;74(1):28–31

Mesenteric cysts in pregnancy. A case report. Gast MJ, et al. **J Reprod Med** 1989 Feb;34(2):179–82

MESENTERIC LYMPHADENITIS

COMPLICATIONS

[2 cases of parotitis in Yersinia infection in adults] Markov IS. **Klin Med (Mosk)** 1989 Feb;67(2):132–3 (Rus)

DIAGNOSIS

Kikuchi's disease simulating acute appendicitis. McLoughlin J, et al. **Br J Surg** 1988 Dec;75(12):1206

[Mesenteric diseases: a report of 73 cases] Liao HL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):96–8, 135 (Eng. Abstr.) (Chi)

[Laparoscopic diagnosis of acute mesenteric lymphadenitis] Perminova GI, et al. **Klin Khir** 1989;(4):38–9 (Eng. Abstr.) (Rus)

[Pseudotuberculosis in surgical practice] Sizov OG, et al. **Vestn Khir** 1988 Sep;141(9):68–9 (Rus)

ETIOLOGY

Abdominal complications of infectious mononucleosis. Robinson RG. **J Am Board Fam Pract** 1988 Jul–Sep; 1(3):207–10 (47 ref.)

[Mesenteric adenitis, associated with the presence of nematode larvae?] Pampiglione S, et al. **Pathologica** 1988 May–Jun;80(1067):303–8 (Eng. Abstr.) (Ita)

RADIOGRAPHY

[Pseudolymphomatous aspects of mesenteric lymphadenopathies in Whipple's disease. Value of x-ray computed tomography monitoring] Jaubert D, et al. **Ann Med Interne (Paris)** 1988;139(5):341–3 (Eng. Abstr.) (Fre)

SURGERY

[Indications for surgical removal of calcified lymph nodes from the abdominal cavity] Shcherba BV, et al. **Probl Tuberk** 1988;(7):74–5 (Rus)

MESENTERIC PANNICULITIS see PANNICULITIS, PERITONEAL

MESENTERIC VASCULAR OCCLUSION

[Acute mesenteric vascular occlusive diseases. Report of 8 cases] Li DD, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):99–101, 135 (Eng. Abstr.) (Chi)

[Acute mesenteric infarction. Recent advances in relation to physiopathology, clinical features and therapy] Coraggio F, et al. **Clin Ter** 1988 Mar 15;124(5):343–56 (19 ref.) (Eng. Abstr.) (Ita)

BLOOD

Formation of thrombi on injured endothelium in mesenteric arterioles in guinea pigs. Johnson SA. **Thromb Diath Haemorrh Suppl** 1968;28:65–74; discussion 75–95

[Usefulness of determining blood phosphorus in acute experimental intestinal ischemia] Suso Alea FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):415–7 (Eng. Abstr.) (Spa)

CHEMICALLY INDUCED

Effect of vaso-active intestinal polypeptide on systemic and splanchnic haemodynamics: role in vasodilation following mesenteric ischaemia. Somjen G, et al. **Digestion** 1988; 40(3):133–43

Gastrointestinal vascular ischemia caused by ergotamine. Rogers DA, et al. **South Med J** 1989 Aug;82(8):1058–9

COMPLICATIONS

Contrast enhanced CT scan as a diagnostic procedure in mesenteric ischaemia due to mesenteric venous thrombosis. Clavien PA, et al. **Br J Surg** 1989 Jan;76(1):93–4

Mesenteric arteriovenous shunt associated with thrombosis of the portal venous system: case report. Matsunaga N, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):281–4

Abdominal angina in young adults [letter] Witte CL, et al. **Surgery** 1989 Jun;105(6):811–2

[Intestinal necrosis in a patient with fibromuscular dysplasia and digoxin poisoning] Roodnat JI, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2159–62 (Eng. Abstr.) (Dut)

[Wilkie's syndrome (letter)] van de Loosdrecht AA, et al. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1547–8 (Dut)

[Portal hypertension due to thromboses of the portal, splenic and mesenteric veins in congenital protein c deficiency] Höring E, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1847–9 (Eng. Abstr.) (Ger)

[Total gangrene of the small intestine caused by thrombosis of mesenteric veins] Serochkin GG, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):127–8 (Rus)

[Electrophysiologic and morphologic changes in the wall of the small intestine during occlusion of the mesenteric arteries and following restoration of the blood flow] Shkodivskiĭ NI. **Klin Khir** 1989;(2):29–31 (Eng. Abstr.) (Rus)

[Venous infarction of the small intestine after novocaine block of the mesenteric root] Mizaushev BA, et al. **Vestn Khir** 1988 Sep;141(9):133–5 (Rus)

DIAGNOSIS

Laboratory findings in acute mesenteric infarction. Susa A, et al. **Ital J Surg Sci** 1988;18(3):243–6

Acute mesenteric ischemia. Mishima Y. **Jpn J Surg** 1988 Nov; 18(6):615–9

[Acute obstruction of the mesenteric vessels--a diagnostic and therapeutic problem] Georgiev G. **Khirurgiia (Sofiia)** 1989;42(1):23–9 (Eng. Abstr.) (Bul)

[Mesenteric diseases: a report of 73 cases] Liao HL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):96–8, 135 (Eng. Abstr.) (Chi)

[Detection of superior mesenteric vein thrombosis following splenectomy using real-time and Doppler sonography] Mildenberger P, et al. **Radiologe** 1988 Aug;28(8):395–8 (Eng. Abstr.) (Ger)

[Role of echography in the diagnosis of visceral ischemic syndrome] Sartini G, et al. **Minerva Chir** 1989 Apr 30; 44(8):1249–51 (Eng. Abstr.) (Ita)

[Exercises of clinical reasoning] **Arq Gastroenterol** 1988 Jan–Mar;25(1):59–62 (Por)

[Immunoreactive urinary thromboxane B2 in experimental mesenteric thrombosis in dogs] Herrera Hernández MF, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):123–7 (Eng. Abstr.) (Spa)

DRUG THERAPY

Beneficial mechanisms of action of a prostacyclin enhancing agent in splanchnic artery occlusion shock. Aoki N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):275–89

ETIOLOGY

Splanchnic venous obstruction. A complication of chronic pancreatitis. Fogartie JA, et al. **Am Surg** 1989 Mar; 55(3):191–7

Aneurysm of the inferior mesenteric artery associated with occlusion of the celiac axis and superior mesenteric artery. Le Bas P, et al. **Ann Vasc Surg** 1986 Sep;1(2):254–7

Superior mesenteric vein thrombosis caused by Yersinia pseudotuberculosis. Stuart RC, et al. **Br J Surg** 1989 Mar; 76(3):272

Portal and mesenteric thrombosis revealing constitutional protein C deficiency [letter] Prat F, et al. **Gut** 1989 Mar; 30(3):416

Thrombosis of the superior mesenteric and portal veins after splenectomy and/or distal splenorenal shunts. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):71–6

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordback I, et al. **Int Surg** 1989 Jan–Mar; 74(1):36–9

Mesenteric thrombosis following sclerotherapy during vasopressin infusion: mechanism and therapeutic implications. Goldberg H, et al. **J Clin Gastroenterol** 1989 Feb;11(1):56–7

METABOLISM

Acute effects of unsaturated fatty acids in splanchnic artery occlusion shock. Aoki N, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):89–95

PATHOLOGY

[A 46-year-old woman with abdominal pain, ascites and pelvic mass] Glotzer DJ, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):95–104 (Ita)

PHYSIOPATHOLOGY

Beneficial effects of a specific leukotriene receptor antagonist in splanchnic artery occlusion shock. Lento PH, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):241–9

Laser Doppler flowmetry in experimental mesenteric vascular occlusion. Johansson K, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):183–90

Role of prostanoids in respiratory failure during circulatory shock of intestinal origin in dogs. Mózes T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):189–94

[Characteristics of the microcirculation and blood rheology in arterial and venous forms of mesenteric vascular occlusion] Aleksandrova NP, et al. **Biull Eksp Biol Med** 1989 May;107(5):532–4 (Eng. Abstr.) (Rus)

[Mechanisms of hemodynamic disorders in occlusion and subsequent revascularization of the mesenteric arteries]

Gubaev SA. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):36–9 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Effect of various glycosaminoglycans on laser-induced thrombus formation in the rat mesentery in correlation to inhibition of blood coagulation] Krupinski K, et al. **Vasa Suppl** 1988;23:257–9 **(Ger)**

RADIOGRAPHY

Urinary excretion of iohexol after intestinal administration in rats with bowel ischaemia. The effects of mesenteric arterial and/or venous occlusion. Stordahl A. **Acta Radiol** 1989 Jan–Feb;30(1):87–92

C.T. demonstration of thrombosis of the portal venous system. Lee WB, et al. **Australas Radiol** 1988 Aug; 32(3):360–4

Mesenteric venous thrombosis. Harward TR, et al. **J Vasc Surg** 1989 Feb;9(2):328–33

[Imaging procedures in gastroenterology. Angiography] Wenz W, et al. **Verh Dtsch Ges Inn Med** 1988;94:159–67 (30 ref.) **(Ger)**

RADIONUCLIDE IMAGING

Mesenteric vascular occlusion: a new diagnostic method using a radiolabeled monoclonal antibody reactive with platelets. Oster ZH, et al. **Radiology** 1989 Jun;171(3):653–6

SURGERY

Embolization of the mesenteric arteries: surgical treatment in twenty-three consecutive cases. Lazaro T, et al. **Ann Vasc Surg** 1986 Nov;1(3):311–5

Liver abscess following superior mesenteric artery revascularization for acute mesenteric ischemia. Shah PM, et al. **Ann Vasc Surg** 1989 Jul;3(3):261–3

Visceral revascularization by anastomosis between the left renal and Drummond's marginal artery. Testart J, et al. **Ann Vasc Surg** 1988 Apr;2(2):185–8

Acute mesenteric infarction in elderly patients. Finucane PM, et al. **J Am Geriatr Soc** 1989 Apr;37(4):355–8

Progress in chronic mesenteric arterial ischemia. MacFarlane SD, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr; 30(2):178–84

Surgical treatment of chronic mesenteric arterial insufficiency. Rheudasil JM, et al. **J Vasc Surg** 1988 Oct; 8(4):495–500

A case of acute superior mesenteric embolism successfully treated by embolectomy. Lee WJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):176–8

Renal and intestinal artery occlusive disease. van Dongen RJ. **World J Surg** 1988 Dec;12(6):777–87 (19 ref.)

[Mesenteric venous thrombosis. An 18-year retrospective study] Clavien PA, et al. **Helv Chir Acta** 1988 Jun; 55(1–2):29–34 (Eng. Abstr.) **(Fre)**

[Non-occlusive ischemia enteropathy. Diagnosis, therapy and prognosis] Bruch HP, et al. **Chirurg** 1989 Jun;60(6):419–25 (Eng. Abstr.) **(Ger)**

[First successful clinical small intestine transplantation. Tactics and surgical technic] Deltz E, et al. **Chirurg** 1989 Apr;60(4):235–9 (Eng. Abstr.) **(Ger)**

[Mesenterial infarct. New aspects of diagnosis and therapy] Paes E, et al. **Chirurg** 1988 Dec;59(12):828–35 (Eng. Abstr.) **(Ger)**

[Acute mesenterial infarcts—results of surgical therapy] Käch K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):23–7 (Eng. Abstr.) **(Ger)**

[Clinical aspects and therapy of isolated mesenteric venous thrombosis] Marty A, et al. **Helv Chir Acta** 1988 Jun; 55(1–2):25–8 (Eng. Abstr.) **(Ger)**

[Surgical tactics in acute mesenteric artery occlusion] Hagmüller G, et al. **Zentralbl Chir** 1988;113(20):1320–8 (Eng. Abstr.) **(Ger)**

[Surgical treatment of chronic mesenteric ischemia] Wolf Y, et al. **Harefuah** 1989 Apr 16;116(8):408–10 (Eng. Abstr.) **(Heb)**

[Surgical therapy of intestinal infarct] Daniele GM. **Minerva Chir** 1989 Feb 15;44(3):535–46 (54 ref.) **(Ita)**

[Reimplantation of the inferior mesenteric artery] Gullà P, et al. **Minerva Chir** 1988 Sep 15;43(17):1395–8 (Eng. Abstr.) **(Ita)**

[7 cases of extensive intestinal resection for massive mesenteric infarction] Talenti A, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2117–9 (Eng. Abstr.) **(Ita)**

[Thrombectomy from the superior mesenteric vein] Belokurov IuN, et al. **Khirurgiia (Mosk)** 1988 Oct; (10):130–1 **(Rus)**

[Successful surgical treatment of acute disorders of mesenteric circulation] Orlov AV, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):135–6 **(Rus)**

[Indications for the revascularization of visceral branches of the abdominal aorta in aorto-femoral reconstruction] Pokrovskiĭ AV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):11–7 (Eng. Abstr.) **(Rus)**

[Extensive resection of an infarcted intestine] Sergienko VS. **Khirurgiia (Mosk)** 1988 Oct;(10):116–9 **(Rus)**

THERAPY

[Mesenteric venous thrombosis: a new case of favorable course using conservative treatment] Ledo Barro L, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):720–2 (Eng. Abstr.) **(Spa)**

VETERINARY

Cecal torsion in a horse as a consequence of cecocolic fold hypoplasia. Harrison IW. **Cornell Vet** 1989 Oct;79(4):315–7

Artificial induction of red gut in sheep. Barrell GK, et al. **Res Vet Sci** 1989 May;46(3):318–21

MESENTERIC VEINS

Portal and mesenteric venous thrombosis as a complication of endoscopic sclerotherapy. Ashida H, et al. **Am J Gastroenterol** 1989 Mar;84(3):306–10

Transcatheter occlusion of inferior mesenteric arteriovenous fistula: a case report. Peer A, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):35–7

CT diagnosis of superior mesenteric arteriovenous fistula. Radin DR, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):721–3

Venous intravasation of barium into the inferior mesenteric vein mimicking a colloureteral fistula: a case report and literature review. Baer HM, et al. **J Urol** 1989 Jan; 141(1):117–9 (19 ref.)

Traumatic superior mesenteric arteriovenous fistula: report of a case and review of the literature. Rosenthal D, et al. **J Vasc Surg** 1987 Mar;5(3):486–91 (22 ref.)

Venous mesenteric ischaemia: conservative or surgical treatment? [letter] Clavien PA, et al. **Lancet** 1989 Jul 1; 2(8653):48

Transhepatic embolization of superior mesenteric varices in portal hypertension. Ozaki CK, et al. **Surgery** 1989 Mar; 105(3):446–8

[Mesenteric venous infarction and protein C deficiency (letter)] Théodore C, et al. **Gastroenterol Clin Biol** 1989; 13(2):226–7 **(Fre)**

[Paroxysmal nocturnal hemoglobinuria with multiple venous thrombosis and acute renal insufficiency. Description of a case] Tedde R, et al. **Minerva Med** 1989 Jun;80(6):615–8 (Eng. Abstr.) **(Ita)**

[A case of essential mesocaval shunt] Morita Y, et al. **Rinsho Hoshasen** 1989 May;34(5):633–6 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

A large inferior mesenteric–caval shunt via the internal iliac vein. Horiguchi Y, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):684–7

Congenital arteriovenous fistula of the superior mesenteric vessels. Takehara H, et al. **J Pediatr Surg** 1988 Nov; 23(11):1029–31

DRUG EFFECTS

Endothelium-dependent relaxing factors do not affect the smooth muscle of portal-mesenteric veins. Feletou M, et al. **Blood Vessels** 1989;26(1):21–32

Characteristics of cromakalim-induced relaxations in the smooth muscle cells of guinea-pig mesenteric artery and vein. Nakao K, et al. **Br J Pharmacol** 1988 Nov; 95(3):795–804

Contractile reactivity of the perfused mesenteric vascular bed from sinoaortic denervated rats to norepinephrine, methoxamine and verapamil. Vasquez EC, et al. **Braz J Med Biol Res** 1988;21(3):629–32

Reversal effect of thyroxine on altered vascular reactivity in diabetic rats. Takiguchi Y, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):520–4

Development of blood pressure in spontaneously hypertensive rats after withdrawal of long-term treatment related to vascular structure. Christensen KL, et al. **J Hypertens** 1989 Feb;7(2):83–90

[Effect of substance P and its N-terminal fragment on the components of the normal microcirculatory system and under stress] Gorizontova MP. **Fiziol Zh SSSR** 1989 May; 75(5):709–14 (Eng. Abstr.) **(Rus)**

INJURIES

Ligation as definitive management of injury to the superior mesenteric vein [letter] Patterson RB, et al. **J Trauma** 1988 Dec;28(12):1684

Superior mesenteric vein severance from blunt abdominal trauma: report of a case. Liu M, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):183–5

[A wound of superior mesenteric vessels. Apropos of a case] Sechas M, et al. **Ann Chir** 1988;42(6):423–5 (Eng. Abstr.) **(Fre)**

INNERVATION

The interaction between catecholaminergic and peptidergic perivascular nerve fibres in the innervation of the rat mesenteric vascular bed. Woolgar JR, et al. **Artery** 1989; 16(4):223–32

METABOLISM

[Quinacrine-positive structures in the mesenteric vascular region in the rat] Frîncu DL, et al. **Morphol Embryol (Bucur)** 1989 Jan–Mar;35(1):9–13 **(Fre)**

PATHOLOGY

Sonographic evaluation of superior mesenteric vascular relationship in malrotation. Loyer E, et al. **Pediatr Radiol** 1989;19(3):173–5

PHYSIOLOGY

Reflex control of mesenteric vein diameter and pressure in situ in rabbits. Ozono K, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1066–72

The role of prostacyclin in the mesenteric traction syndrome during anesthesia for abdominal aortic reconstructive surgery. Gottlieb A, et al. **Ann Surg** 1989 Mar;209(3):363–7

The effects of ionophore A23187 on permeability of the frog mesentery microvasculature. Michel CC, et al. **Q J Exp Physiol** 1989 Jan;74(1):7–18

[The role of adrenergic mechanisms in regulating venular permeability during short-term and prolonged immobilization] Gorizontova MP. **Biull Eksp Biol Med** 1989 Feb;107(2):142–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Time course of development of changes in the structure and reactivity of small veins from portal hypertensive rabbits. Juhl CO, et al. **Clin Sci** 1989 Aug;77(2):205–11

Inhibition of norepinephrine release by presynaptic alpha 2-adrenoceptors in mesenteric vasculature preparations from chronic DOCA-salt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Mar;30(2):231–9

Mesenteric venous hypertension: importance after portal systemic shunting? Landreneau RJ, et al. **Surgery** 1989 Jul; 106(1):11–20

Portal versus peripheral venous drainage in segmental pancreatic transplantation in diabetic rats. Lugagne PM, et al. **Transplantation** 1989 Mar;47(3):420–3

Compaction stasis due to gravitational red cell migration and floatational plasma skimming. Reversal of the fahraeus effect due to pathological RCA-formation in plastic tubes and mesenteric venules. Göbel W, et al. **Virchows Arch [A]** 1989;415(3):243–51

RADIOGRAPHY

Contrast enhanced CT scan as a diagnostic procedure in mesenteric ischaemia due to mesenteric venous thrombosis. Clavien PA, et al. **Br J Surg** 1989 Jan;76(1):93–4

CT findings in venous intravasation complicating diverticulitis. Kanehann LB, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1047–9

Mesenteric venous thrombosis. Harward TR, et al. **J Vasc Surg** 1989 Feb;9(2):328–33

Arteriovenous malformation of the pancreas associated with mesenteric varices: case report and review of the literature. Uchino A, et al. **Radiat Med** 1989 Jan–Feb;7(1):6–9 (26 ref.)

SURGERY

Mesoatrial shunt: a surgical option in the management of the Budd–Chiari syndrome. Stringer MD, et al. **Br J Surg** 1989 May;76(5):474–8

Haemorrhage from an adhesion-related mesenteric varix in a patient with portal hypertension. Crawford DJ, et al. **Scott Med J** 1988 Jun;33(3):271–3

[Budd–Chiari syndrome with thrombosis of the inferior vena cava. Treatment by mesenterico-innominate shunt] Hay JM, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):755–8 (Eng. Abstr.) **(Fre)**

[Prosthesis in surgery of portal hypertension] Morino F, et al. **Minerva Chir** 1989 Feb 15;44(3):477–9 **(Ita)**

[Intraorganic blood vessels of the intestinal graft after its ortho- and heterotopic transplantation] Kirpatovskiĭ ID, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):57–63 (Eng. Abstr.) **(Rus)**

MESENTERY

Fatal small intestinal infarction due to occlusion by mesenteric carcinoid tumor. Petrik PK. **Am J Forensic Med Pathol** 1989 Jun;10(2):146–8

Idiopathic retractile (sclerosing) mesenteritis and its differential diagnosis. Kelly JK, et al. **Am J Surg Pathol** 1989 Jun;13(6):513–21 (76 ref.)

Lymphangiolipoma of the mesentery. Radivoyevitch MA, et al. **Am Surg** 1989 Jul;55(7):435–7 (16 ref.)

Heterotopic ossification within the small-bowel mesentery. Myers MA, et al. **Arch Surg** 1989 Aug;124(8):982–3

Spontaneous mesenteric hematoma [letter] Singla SK, et al. **Indian J Gastroenterol** 1989 Apr;8(2):120–1

Desmoid tumors: report of a case responsive to antiestrogen and review of the literature. Balducci L, et al. **J Miss State Med Assoc** 1988 Aug;29(8):227–9 (10 ref.)

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 5–1089. A 27-year-old Greek woman with portal-vein thrombosis and an epigastric mass. **N Engl J Med** 1989 Feb 2;320(5):301–10

Cystic teratoma of the mesentery. Prieto ML, et al. **Pediatr Radiol** 1989;19(6–7):439

Peritonitis due to perforated mesenteric fibroma—an hormonal aetiology? Cole RP. **Postgrad Med J** 1988 Dec; 64(758):971–2

Mesenteric panniculitis. Monahan DW, et al. **South Med J** 1989 Jun;82(6):782–4 (12 ref.)

Benign lipoblastoma: first case report of a mesenteric origin. Zanetti G. **Tumori** 1988 Aug 31;74(4):495–8

Mesenteric panniculitis. Khachaturian T, et al.

West J Med 1988 Jun;148(6):700–1
[Lipoma of the mesentery causing ileus] Kalchev E, et al. **Khirurgiia (Sofiia)** 1989;42(2):80–1 **(Bul)**
[Mesenteric diseases: a report of 73 cases] Liao HL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):96–8, 135 (Eng. Abstr.) **(Chi)**
[Fibromyoma of the pancreas or mesentery? Apropos of a case] Verhaeghe P, et al. **Chirurgie** 1988;114(6):524–8 (11 ref.) (Eng. Abstr.) **(Fre)**
[Diagnostic imaging in a case of mesenteric liposarcoma] Francone A, et al. **Clin Ter** 1989 Feb 15;128(3):173–6 (Eng. Abstr.) **(Ita)**
[Mesenteric fibromatosis] De Giovanni L, et al. **Minerva Chir** 1988 Oct 31;43(20):1757–9 (Eng. Abstr.) **(Ita)**
[Unusual site of hydatidosis. A case with a mesenteric location] La Torre F, et al. **Minerva Chir** 1988 Oct 15; 43(19):1615–9 (Eng. Abstr.) **(Ita)**
[A case of thorotrastoma of the mesentery] Ponzio F, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1195–6 (Eng. Abstr.) **(Ita)**
[Acute inflammation of the appendix located in the mesentery of the transverse colon] Kovalenko IV. **Klin Khir** 1989; (4):63–4 **(Rus)**
[A case of location of the appendix in the ileal mesentery] Morozov SA, et al. **Klin Khir** 1989;(4):64 **(Rus)**
[Fibrosarcomatosis of the small intestine mesentery] Zvezdin VP, et al. **Klin Khir** 1989;(5):57 **(Rus)**
[Local tumor-like amyloidosis in a boy] Deliagin VM, et al. **Pediatriia** 1989;(2):88–9 **(Rus)**
[Exogastric leiomyosarcoma of the stomach] Egiazarian VT, et al. **Vestn Khir** 1988 Dec;141(12):34–6 **(Rus)**

ABNORMALITIES

[Case report of congenital intestinal atresia—a type of jejunal atresia with agenesis of the dorsal mesentery (apple peel small bowel)] Chytrý K, et al. **Cesk Pediatr** 1989 Apr; 44(4):240–1 **(Cze)**
[Late complications related to the persistence of the common mesentery in adults apropos of 5 cases] Ayachi K, et al. **Tunis Med** 1988 Aug–Sep;66(8–9):609–17 (Eng. Abstr.) **(Fre)**
[Late complications of mesenteric malposition] Ben Ammar M, et al. **Tunis Med** 1987 Mar;65(3):197–201 (Eng. Abstr.) **(Fre)**
[The death of a child caused by complications of a congenital defect of the mesentery] Kurbatov VS, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):46–7 **(Rus)**
[Perforative appendicitis complicated by diffuse peritonitis in an intramesenteric location of the appendix] Polukhin SI, et al. **Vestn Khir** 1988 Dec;141(12):39–40 **(Rus)**

BLOOD SUPPLY

Computerized 3-D reconstruction of small blood vessels from high voltage electron-micrographs of thick serial cross sections. Horn L, et al. **Adv Exp Med Biol** 1988;242:35–42
Fenestrated capillaries in mice submesothelial mesenteric microvasculature. Gotloib L, et al. **Int J Artif Organs** 1989 Jan;12(1):20–4
Distensibility of single capillaries and venules in the rat and frog mesentery. Swayne GT, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):25–42
Dynamic compliance of single perfused frog mesenteric capillaries and rat venules: a filtration coefficient correction. Swayne GT, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):43–52
Effects of neuropeptide Y on the renal, mesenteric and hindlimb vascular beds of the conscious rabbit. Minson R, et al. **J Auton Nerv Syst** 1989 Jul;27(2):139–46
Venous mesenteric ischaemia: conservative or surgical treatment? [letter] Clavien PA, et al. **Lancet** 1989 Jul 1; 2(8653):48
Active tone and arteriolar responses to increased oxygen availability in the mesoappendix of spontaneously hypertensive rats. Lombard JH, et al. **Microcirc Endothelium Lymphatics** 1988 Oct;4(5):339–53
The diagnosis of acute mesenteric ischaemia using 99Tcm-labelled 50H.19, a monoclonal antibody reacting with platelets. Oster ZH, et al. **Nucl Med Commun** 1988 Oct;9(10):843–7
Preferential distribution of leukocytes in rat mesentery microvessel networks. Ley K, et al. **Pflugers Arch** 1988 Jul;412(1–2):93–100
Effect of blood gases and pH on thromboembolic reactions in rabbit mesenteric microvessels. oude Egbrink MG, et al. **Pflugers Arch** 1989 Jul;414(3):324–30
[Influences of procaine in different serum concentrations on mesentery microcirculation of rabbits before and during hemorrhagic shock] Qian H. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):475–9, 510 (Eng. Abstr.) **(Chi)**
[Endotoxin in experimental mesenteric infarction] Gögler H. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):3–8 (Eng. Abstr.) **(Ger)**
[Changes in the venular epithelium of the mesentery in rats after application of hydrogen peroxide] Banin VV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):498–502 (Eng. Abstr.) **(Rus)**
[Effect of hydrogen peroxide on the permeability of the walls of the mesenteric venules for fluorescein] Banin VV, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1149–57 (Eng. Abstr.) **(Rus)**
[Reactive characteristics of the peripheral lymphatic and blood vessels under the influence of histamine] Toporova SG. **Fiziol Zh SSSR** 1988 Aug;74(8):1163–70 **(Rus)**
[The microcirculatory bed in rats under increased atmospheric pressure] Khachatrian SA, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):60–2 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Role of actin filaments in shape formation of mesenteric mesothelial cells of the bullfrog. Sugimoto K, et al. **J Morphol** 1988 Dec;198(3):321–9
Lymphocyte recirculation in cattle: patterns of localization by mammary and mesenteric lymph node lymphocytes. Harp JA, et al. **Vet Immunol Immunopathol** 1988 Dec; 20(1):31–9

DRUG EFFECTS

Endothelium-derived relaxing factor and the effects of acetylcholine and histamine on resistance blood vessels. Bhardwaj R, et al. **Br J Pharmacol** 1988 Nov;95(3):835–43
The role of alpha- and beta-adrenoceptors in the response to noradrenaline of lymphatic vessels isolated from the bovine mesentery. Mahe L, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):31–9
Rat endothelin is a vasodilator in the isolated perfused mesentery of the rat. Warner TD, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):325–6
Halothane-induced changes in contractions of mesenteric lymphatics of the rat. Takeshita T, et al. **Lymphology** 1988 Jun;21(2):128–30

IMMUNOLOGY

The sensitivity of guinea pig mesenteric and pulmonary mast cells to some histamine releasers. Brezezińska-Błaszczyk E, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):871–6

INJURIES

Bowel and mesenteric injury following blunt abdominal trauma: evaluation with CT. Rizzo MJ, et al. **Radiology** 1989 Oct;173(1):143–8

INNERVATION

Hemodynamic effects of activation of renal and mesenteric sensory nerves in rats. Janssen BJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R29–36
Tachykinins produce fast and slow depolarizations in sympathetic neurons of rat coeliac-superior mesenteric ganglia. Konishi S, et al. **Brain Res** 1989 Jun 19; 490(1):162–5
Coexistence of multiple peptides in small intensely fluorescent (SIF) cells of inferior mesenteric ganglion of the guinea pig. Chiba T, et al. **Cell Tissue Res** 1989 Mar;255(3):523–7
Electronic characteristics and membrane properties of neurons in the inferior mesenteric ganglion in guinea-pig. King BF, et al. **J Auton Nerv Syst** 1988 Sep;23(3):229–39
Effects of potassium channel-blocking agents on neurons in the inferior mesenteric ganglion in guinea-pig. King BF, et al. **J Auton Nerv Syst** 1988 Sep;23(3):241–52
Afterspike-hyperpolarization of neurons in the inferior mesenteric ganglion in guinea-pig. King BF, et al. **J Auton Nerv Syst** 1988 Sep;23(3):253–63
Neural and glial phenotypic expression by neural crest cells in culture: effects of control and presumptive aganglionic bowel from ls/ls mice. Coulter HD, et al. **J Neurobiol** 1988 Sep;19(6):507–31
Ventrolateral medullary neurones: effects on magnitude and rhythm of discharge of mesenteric and renal nerves in cats. Stein RD, et al. **J Physiol (Lond)** 1989;408:571–86
Convergence of noncholinergic afferent neurons in the inferior mesenteric ganglion of the guinea pig. Keef KD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):161–6
Non-cholinergic synaptic potentials mediated by lumbar colonic nerve in the guinea-pig inferior mesenteric ganglion in vitro. Hankins MW, et al. **Neuroscience** 1988 Sep;26(3):1073–81
Substance P-mediated membrane currents in voltage-clamped guinea pig inferior mesenteric ganglion cells. Griffith WH, et al. **Synapse** 1988;2(4):432–41
[Tonic afferent and efferent activities of the mesenteric nerves and their dependence on the motility of the small intestine] Soltanov VV, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1743–50 (Eng. Abstr.) **(Rus)**
[Venous infarction of the small intestine after novocaine block of the mesenteric root] Mizaushev BA, et al. **Vestn Khir** 1988 Sep;141(9):133–5 **(Rus)**

METABOLISM

An electron microscopic study on VIP-, BOM- and CCK-like immunoreactive terminals in the celiac-superior mesenteric ganglion complex of the guinea pig. Hamaji M, et al. **Brain Res** 1989 May 29;488(1–2):283–7
Splanchnic glucose balance and insulin resistance in the early postoperative phase of cardiac surgery. Nilsson F, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):574–8

PATHOLOGY

Giant lipoma of the mesentery. Locker A. **Br J Clin Pract** 1987 Oct;41(10):977–8
Mesenteric fibromatosis: cytologic, histologic, and ultrastructural findings in a case. Lin BP, et al. **Diagn Cytopathol** 1989;5(1):69–74
Mesenteric fibromatosis complicating familial adenomatous polyposis: predisposing factors and results of treatment. Lotfi AM, et al. **Int J Color Dis** 1989;4(1):30–6
Primary mesenteritis, mesenteric fibrosis and mesenteric fibromatosis. Report of four cases, pathology, and classification. Remmele W, et al. **Pathol Res Pract** 1988 Dec;184(1):77–85
[Mesenteric fibromatosis in childhood] Roscher R, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):393–6 (Eng. Abstr.) **(Ger)**
[Mesenteric fibrosis. Apropos of 1 of our cases] Bayeli P, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec; 34(4):273–6 (Eng. Abstr.) **(Ita)**
[The morphology of mesenteric lymph nodes in Whipple's disease] Zolotarevskiĭ VB, et al. **Arkh Patol** 1988; 50(10):63–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Suppression of fluid pumping in isolated bovine mesenteric lymphatics by interleukin-1: interaction with prostaglandin E2. Hanley CA, et al. **Microvasc Res** 1989 Mar;37(2):218–29

PHYSIOPATHOLOGY

Mesenteric lymphatic function after total small-intestinal transplantation in rats. Clark E, et al. **Curr Surg** 1989 Mar–Apr;46(2):115–7

RADIOGRAPHY

Mesenteric lipoma. Gupta DK, et al. **Indian Pediatr** 1988 Oct;25(10):1007–9
Computed tomography characteristics of intermesenteric hematomas. Chintapalli K, et al. **J Comput Tomogr** 1988 Apr;12(2):122–8
CT of the small bowel and mesentery. Merine D, et al. **Radiol Clin North Am** 1989 Jul;27(4):707–15 (29 ref.)

SURGERY

[Tumors of the small intestine] Zubarev PN, et al. **Vestn Khir** 1988 Aug;141(8):45–9 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

[Surgical methods in intestinal fistulas] Butsenko VN, et al. **Vestn Khir** 1988 Oct;141(10):111–2 **(Rus)**

MESIAL MOVEMENT OF TEETH see under **TOOTH MIGRATION**

MESILATE, ETHYL see **ETHYL METHANESULFONATE**

MESILATE, METHYL see **METHYL METHANESULFONATE**

MESMERISM see **HYPNOSIS**

MESOCESTOIDES see under **CESTODA**

MESOCOLON

A case of malignant melanoma of the transverse mesocolon. Yoshida S, et al. **J Pediatr Surg** 1988 Nov;23(11):1036–7
[Inflammatory pseudotumors of the colon and mesocolon] Gusev VI, et al. **Khirurgiia (Mosk)** 1989 May;(5):57–9 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Arterial blood supply of the mesocolic areas. An anatomical and radiological study. Bertelli E, et al. **Acta Anat (Basel)** 1989;134(3):253–6

DRUG EFFECTS

Pigmentation of kidneys and lymph nodes of mesocolon in rats fed diets containing the laxative danthron. Sjöberg P, et al. **Toxicol Lett** 1988 Dec;44(3):299–306

SURGERY

Sigmoid mesocolic hernia. Case report. Lyngdorf P, et al. **Acta Chir Scand** 1988 Oct;154(10):609–10
Mesosigmoidoplasty in the treatment of sigmoid volvulus in children. Ponticelli A, et al. **S Afr J Surg** 1989 Jul; 27(3):105–7
[A case of internal incarceration of the small intestine in the incisura of the sigmoid mesocolon] Viiachki I, et al. **Khirurgiia (Sofiia)** 1988;41(6):81–3 **(Bul)**
[Mesocoloplasty of sigmoid volvulus. An alternative to colonic resection] Chenebaux D, et al. **J Chir (Paris)** 1988 Nov;125(11):661–2 (Eng. Abstr.) **(Fre)**

MESOCRICETUS see under **HAMSTERS**

MESODERM

The expression of embryonic primary mesenchyme genes of the sea urchin, Strongylocentrotus purpuratus, in the adult skeletogenic tissues of this and other species of echinoderms. Drager BJ, et al. **Dev Biol** 1989 May;

133(1):14–23
Isolation of mesoderm-specific genes expressed in the Drosophila embryo. Meisen N, et al. **Gene** 1988 Dec 30; 74(2):457–64
Differentiation of rat intestinal epithelial cells is induced by organotypic mesenchymal cells in vitro. Stallmach A, et al. **Gut** 1989 Jul;30(7):959–70

ANALYSIS

Pattern of the insulin-like growth factor II gene expression during rat embryogenesis. Stylianopoulou F, et al. **Development** 1988 Jul;103(3):497–506
Tetranectin immunoreactivity in normal human tissues. An immunohistochemical study of exocrine epithelia and mesenchyme. Christensen L, et al. **Histochemistry** 1989; 92(1):29–35

CYTOLOGY

Interleukin-1, tumor necrosis factor, and the production of colony-stimulating factors by cultured mesenchymal cells. Sieff CA, et al. **Blood** 1988 Oct;72(4):1316–23
Mesodermal cell lineage determination and proto-oncogene expression. Ketelaar DA, et al. **Cell Differ Dev** 1988 Nov; 25(2):89–98
Use of the collagen I-deficient Mov13 mouse mutant to analyse epithelial-mesenchymal tissue interaction. Kratochwil K. **Cell Differ Dev** 1988 Nov;25 Suppl:119–26 (47 ref.)
Can proventricular mesenchyme promote differentiation of endocrine cells in gizzard endoderm? Rawdon BB, et al. **Cell Differ Dev** 1988 Nov;25(2):135–43
Intercellular adhesion and induction of epithelialization in the metanephric mesenchyme. Saxén L, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:111–7 (33 ref.)
Differentiation of endocrine cells in chick allantoic epithelium combined with pancreatic mesenchyme. Stein B, et al. **Cell Differ Dev** 1989 May;26(3):173–80
Tissue organizational stability and intercellular invasion. Armstrong PB. **Ciba Found Symp** 1988;141:5–21 (18 ref.)
Sea urchin primary mesenchyme cells: relation of cell polarity to the epithelial-mesenchymal transformation. Anstrom JA, et al. **Dev Biol** 1988 Nov;130(1):57–66
Embryonic heart mesenchymal cell migration in laminin. Davis LA, et al. **Dev Biol** 1989 May;133(1):37–43
Clonal analysis of mesoderm induction in Xenopus laevis. Godsave SF, et al. **Dev Biol** 1989 Aug;134(2):486–90
Dorsalization of mesoderm induction by lithium. Kao KR, et al. **Dev Biol** 1989 Mar;132(1):81–90
Mediolateral cell intercalation in the dorsal, axial mesoderm of Xenopus laevis. Keller R, et al. **Dev Biol** 1989 Feb; 131(2):539–49
Microinjection of lectins, hyaluronidase, and hyaluronate fragments interferes with cleavage delay and mesoderm induction in embryos of Patella vulgata. Kühtreiber WM, et al. **Dev Biol** 1989 Apr;132(2):436–41
Amphibian (urodele) myotomes display transitory anterior/posterior and medial/lateral differentiation patterns. Neff AW, et al. **Dev Biol** 1989 Apr;132(2):529–43
Epithelial-mesenchymal cell transformation in the embryonic heart can be mediated, in part, by transforming growth factor beta. Potts JD, et al. **Dev Biol** 1989 Aug; 134(2):392–401
Embryonic neurons as in vitro inducers of differentiation of nephrogenic mesenchyme. Sariola H, et al. **Dev Biol** 1989 Apr;132(2):271–81
Epithelial-mesenchymal interactions regulate the stage-specific expression of a cell surface proteoglycan, syndecan, in the developing kidney. Vainio S, et al. **Dev Biol** 1989 Aug;134(2):382–91
The allocation of cells in the presomitic mesoderm during somite segmentation in the mouse embryo. Tam PP. **Development** 1988 Jun;103(2):379–90
Integrated control of proliferation and differentiation of mesenchymal stem cells. Filipak M, et al. **Environ Health Perspect** 1989 Mar;80:117–25 (54 ref.)
10T1/2 cells: an in vitro model for molecular genetic analysis of mesodermal determination and differentiation. Pinney DF, et al. **Environ Health Perspect** 1989 Mar;80:221–7 (23 ref.)
Growth and differentiation of stage 24 limb mesenchyme cells in a serum-free chemically defined medium. Kujawa MJ, et al. **Exp Cell Res** 1989 Jul;183(1):45–61
Inhibitors of metalloendoproteases block spiculogenesis in sea urchin primary mesenchyme cells. Roe JL, et al. **Exp Cell Res** 1989 Apr;181(2):542–50
Developmentally regulated conversion of mesenchyme to epithelium. Ekblom P. **FASEB J** 1989 Aug;3(10):2141–50 (48 ref.)
Movement and adhesion of chick embryo sclerotome cells in vitro. Mohammed MB. **Folia Morphol (Praha)** 1988; 36(3):225–8
Dissimilar peptide growth factors can induce normal human mesothelial cell multiplication. Laveck MA, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1077–84
Differentiation of musculoskeletal tissues. Nathanson MA. **Int Rev Cytol** 1989;116:89–164 (444 ref.)
Type I collagen gel induces Madin-Darby canine kidney cells to become fusiform in shape and lose apical-basal polarity. Zuk A, et al. **J Cell Biol** 1989 Mar;108(3):903–19
Epidermal growth factor: modulator of murine embryonic palate mesenchymal cell proliferation, polyamine biosynthesis, and polyamine transport. Gawel-Thompson KJ, et al. **J Cell Physiol** 1989 Aug;140(2):359–70
Relative growth rates of maxillary mesenchyme in the chick embryo. Bailey LJ, et al. **J Craniofac Genet Dev Biol** 1988; 8(2):167–77
LN-6: a monoclonal antibody to vimentin expressed in non-hematopoietic mesenchymal cells and derived tumors and reactive in B5-fixed, paraffin-embedded tissues. Stathopoulos E, et al. **J Histochem Cytochem** 1989 Sep; 37(9):1363–70
Role of actin filaments in shape formation of mesenteric mesothelial cells of the bullfrog. Sugimoto K, et al. **J Morphol** 1988 Dec;198(3):321–9
Three-dimensional demonstration of the intracellular structures of mouse mesothelial cells by scanning electron microscopy. Inoué T, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):215–27
Mesoderm induction by transforming growth factor beta: medium conditioned by TGF-beta-treated ectoderm enhances the inducing activity. Knöchel W, et al. **Naturwissenschaften** 1989 Jun;76(6):270–2
The presence of fibroblast growth factor in the frog egg: its role as a natural mesoderm inducer. Kimelman D, et al. **Science** 1988 Nov 18;242(4881):1053–6
[Mesodermalizing factor from bovine amniotic fluid] Chertov OIu, et al. **Dokl Akad Nauk SSSR** 1989;305(3):749–51 **(Rus)**
[Detection of new sources and evaluation of properties of differentiation factors of mesodermal cell types] Khoperskaia OA, et al. **Dokl Akad Nauk SSSR** 1988; 301(5):1230–4 **(Rus)**

IMMUNOLOGY

The blood group I antigen defined by monoclonal antibody C6 is a marker of early mesoderm during murine embryogenesis. Fenderson BA, et al. **Differentiation** 1988 Jul;38(2):124–33

METABOLISM

Regulation of type VI collagen synthesis in transformed mesenchymal cells. Schreier T, et al. **Biochem J** 1988 Jul 15;253(2):381–6
Transient expression of simple epithelial keratins by mesenchymal cells of regenerating newt limb. Ferretti P, et al. **Dev Biol** 1989 Jun;133(2):415–24
A variant beta-tubulin isoform of Drosophila melanogaster (beta 3) is expressed primarily in tissues of mesodermal origin in embryos and pupae, and is utilized in populations of transient microtubules. Kimble M, et al. **Dev Biol** 1989 Feb;131(2):415–29
The distribution of fibronectin and laminin in the somitogenesis of Xenopus laevis. Wedlich D, et al. **Differentiation** 1989 May;40(2):77–83
The hepatic asialoglycoprotein receptor selectively binds to some endogenous tissues. Treichel U, et al. **Eur J Cell Biol** 1989 Feb;48(1):116–20
Stimulation of choline acetyltransferase in spinal cord explants by limb mesenchyme. Muhlach WL, et al. **Int J Dev Neurosci** 1989;7(4):383–7
Effects of epidermal growth factor and phorbol 12-myristate 13-acetate on protein phosphorylation in mouse embryo palate mesenchyme cells in vitro. Chepenik KP, et al. **J Craniofac Genet Dev Biol** 1988;8(2):147–53
[Local expression of cytokeratins 8, 17 and 18 in the mesenchyme and smooth muscles in the early stages of human organogenesis] Bozhok IuM, et al. **Ontogenez** 1989 May-Jun;20(3):250–7 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Myth of the mesoderm [letter; comment] Smith AS. **AJNR** 1989 Mar-Apr;10(2):449. **Comment on:** AJNR 1988 Mar-Apr;9(2):385–7
Mesodermal band deformity and associated pathologies. Case report. Ragnekar A, et al. **Indian J Med Sci** 1988 Jul; 42(7):162
[Role of collagen gels for the transformation of bovine lens epithelium to mesenchyme-like cells in vitro in relation to the appearance and development of anterior subcapsular cataract] Yajima Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2110–9 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Proposed role of microfilaments in the cell reorientation that accompanies somite formation in Xenopus. Burgess AM. **Acta Anat (Basel)** 1988;132(4):331–4
An association of caudal malformations arising from a defect in the "axial mesoderm" developmental field. Gardner RJ, et al. **Am J Med Genet Suppl** 1986;2:37–44
Molecular determinants of cranial neural crest-derived odontogenic ectomesenchyme during dentinogenesis. Slavkin HC, et al. **Am J Med Genet Suppl** 1988;4:7–22 (76 ref.)
Transfer of dorsoventral information from mesoderm to ectoderm at the onset of limb development. Geduspan JS, et al. **Anat Rec** 1989 May;224(1):79–87
Epithelial-mesenchymal interaction in the regulation of hyaluronate production during limb development. Knudson CB, et al. **Biochem Int** 1988 Oct;17(4):735–45
Mix.1, a homeobox mRNA inducible by mesoderm inducers, is expressed mostly in the presumptive endodermal cells of Xenopus embryos. Rosa FM. **Cell** 1989 Jun 16; 57(6):965–74
Sea urchin primary mesenchyme cells: ingression occurs independent of microtubules. Anstrom JA. **Dev Biol** 1989 Jan;131(1):269–75
Gastrulation and larval pattern in Xenopus after blastocoelic injection of a Xenopus-derived inducing factor: experiments testing models for the normal organization of mesoderm. Cooke J, et al. **Dev Biol** 1989 Feb; 131(2):383–400
Experimental analysis of the in vivo chondrogenic potential of the interdigital mesenchyme of the chick leg bud subjected to local ectodermal removal. Hurle JM, et al. **Dev Biol** 1989 Apr;132(2):368–74
Initial expression of type I procollagen in chick cardiac mesenchyme is dependent upon myocardial stimulation. Sinning AR, et al. **Dev Biol** 1988 Nov;130(1):167–74
Extracellular matrix triggers a directed cell migratory response in sea urchin primary mesenchyme cells. Solursh M, et al. **Dev Biol** 1988 Nov;130(1):397–401
Determination of somite cells: independence of cell differentiation and morphogenesis. Aoyama H, et al. **Development** 1988 Sep;104(1):15–28
The contribution made by a single somite to the vertebral column: experimental evidence in support of resegmentation using the chick-quail chimaera model. Bagnall KM, et al. **Development** 1988 May;103(1):69–85
The organization of mesodermal pattern in Xenopus laevis: experiments using a Xenopus mesoderm-inducing factor. Cooke J, et al. **Development** 1987 Dec;101(4):893–908
Skeletogenesis in the sea urchin embryo. Decker GL, et al. **Development** 1988 Jun;103(2):231–47 (76 ref.)
Mesoderm-inducing factors: a small class of molecules. Godsave SF, et al. **Development** 1988 Mar;102(3):555–66
Cytoskeleton and thyroglobulin expression change during transformation of thyroid epithelium to mesenchyme-like cells. Greenburg G, et al. **Development** 1988 Mar; 102(3):605–22
The role of secondary mesenchyme cells during sea urchin gastrulation studied by laser ablation. Hardin J. **Development** 1988 Jun;103(2):317–24
Interactions and fates of avian craniofacial mesenchyme. Noden DM. **Development** 1988;103 Suppl:121–40 (123 ref.)
Heat shock causes repeated segmental anomalies in the chick embryo. Primmett DR, et al. **Development** 1988 Oct; 104(2):331–9
Purification, partial characterization and biological effects of the XTC mesoderm-inducing factor. Smith JC, et al. **Development** 1988 Jul;103(3):591–600
Tenascin during gut development: appearance in the mesenchyme, shift in molecular forms, and dependence on epithelial-mesenchymal interactions [published erratum appears in J Cell Biol 1989 Mar;108(3):following 1175] Aufderheide E, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2341–9
Contact guidance on microfabricated substrata: the response of teleost fin mesenchyme cells to repeating topographical patterns. Wood A. **J Cell Sci** 1988 Aug;90 (Pt 4):667–81
Control of differentiation in human colorectal carcinoma cell lines: epithelial-mesenchymal interactions. Richman PI, et al. **J Pathol** 1988 Nov;156(3):197–211
Changes in intracellular pH and pH regulating mechanisms in somitic cells of the early chick embryo: a study using fluorescent pH-sensitive dye. Gillespie JI, et al. **J Physiol (Lond)** 1988 Nov;405:385–95
Loss of competence in amphibian induction can take place in single nondividing cells. Grainger RM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1900–4
Induction of mesoderm by a viral oncogene in early Xenopus embryos. Whitman M, et al. **Science** 1989 May 19; 244(4906):803–6
Growth factors and mesoderm induction. Harland R. **Trends Genet** 1988 Mar;4(3):62–3 (9 ref.)

TRANSPLANTATION

The formation of leg or wing specific structures by leg bud cells grafted to the wing bud is influenced by proximity to the apical ridge. Krabbenhoft KM, et al. **Dev Biol** 1989 Feb;131(2):373–82
Co-inoculation of tumorigenic rat prostate mesenchymal cells with non-tumorigenic epithelial cells results in the development of carcinosarcoma in syngeneic and athymic animals. Chung LW, et al. **Int J Cancer** 1989 Jun 15; 43(6):1179–87

ULTRASTRUCTURE

Ultrastructural study of contacts between cells of the dorsal ectoderm and chordamesoderm during gastrulation in Xenopus laevis. Bates AW, et al. **Acta Anat (Basel)** 1988; 133(1):5–9
Medial edge epithelium transforms to mesenchyme after embryonic palatal shelves fuse. Fitchett JE, et al. **Dev Biol** 1989 Feb;131(2):455–74
[Ultrastructure of microcalcifications of the pulp mesenchyme of human deciduous teeth] Arys A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):23–9 (Eng. Abstr.) **(Fre)**

MESONEPHROMA

Endodermal sinus tumor of the ovary [letter] Wawrzkiewicz

M. Gynecol Oncol 1989 Apr;33(1):129
[Yolk sac tumor of the ovary] Kudalbergenov TK, et al. Vopr Onkol 1989;35(7):877–8 (Rus)

COMPLICATIONS

Intraabdominal testis with yolk sac tumor in a 2-year-old child. Cox L, et al. J Pediatr Surg 1988 Aug;23(8):775–6
Endodermal sinus tumor and benign cystic teratoma of the ovary occurring simultaneously. Elhosseiny A, et al. N Y State J Med 1989 Apr;89(4):233–4

CONGENITAL

Endodermal sinus tumour in girls—improved survival in metastatic disease. Olsen L, et al. Z Kinderchir 1989 Apr; 44(2):83–5

DIAGNOSIS

Endodermal sinus (yolk sac) tumor in infants and children. A clinical and pathologic study: an 11 year review. Shebib S, et al. Am J Pediatr Hematol Oncol 1989 Spring; 11(1):36–9
An improved sensitive assay method for the heterogeneity of alpha-foetoprotein: possible application for early differential diagnosis. Ohkawa K, et al. J Clin Chem Clin Biochem 1989 May;27(5):337–41
Lactate dehydrogenase isoenzyme-1 in the mediastinal yolk sac tumor. Ito M, et al. Jpn J Surg 1988 Jul;18(4):419–22
[Endodermal sinus tumor (yolk sac tumor)—report of 52 cases and review of the literature of 1224 cases] Dong HJ, et al. Chung Hua Chung Liu Tsa Chih 1988 May;10(3):213–6 (9 ref.) (Eng. Abstr.) (Chi)
[Mesonephric adenocarcinoma of the endometrium. Reflections on a case] Vucusa C, et al. Minerva Ginecol 1988 Oct;40(10):609–11 (Eng. Abstr.) (Ita)

DRUG THERAPY

The effects of co-administration of selenium and cis-platin (CDDP) on CDDP-induced toxicity and antitumour activity. Ohkawa K, et al. Br J Cancer 1988 Jul;58(1):38–41
Adjuvant chemotherapy in a pregnant patient with endodermal sinus tumor of the ovary. Metz SA, et al. Gynecol Oncol 1989 Mar;32(3):371–4
Aggressive chemotherapy in endodermal sinus tumor. Athanikar N, et al. J Surg Oncol 1989 Jan;40(1):17–20
Endodermal sinus tumor of the infant vagina treated exclusively by chemotherapy. Collins HS, et al. Obstet Gynecol 1989 Mar;73(3 Pt 2):507–9
[Cisplatin, vinblastine, and bleomycin combination chemotherapy in a stage IV pure endodermal sinus tumor of the ovary—a case report of a long-term survival] Saito N, et al. Gan No Rinsho 1988 Dec;34(15):2114–8 (Eng. Abstr.) (Jpn)
[A case of chemotherapy induced necrosis of primary mediastinal germ cell tumor] Hatanaka N, et al. Nippon Kyobu Geka Gakkai Zasshi 1989 Feb;37(2):362–5 (Eng. Abstr.) (Jpn)
[Effects of chemotherapy on regional metastases of non-seminomatous tumors of the testis] Sakalo VS, et al. Vopr Onkol 1988;34(10):1219–24 (Eng. Abstr.) (Rus)

ENZYMOLOGY

[Histochemical study on glutathione S-transferase in patients with testicular tumor] Adachi Y, et al. Nippon Hinyokika Gakkai Zasshi 1989 Mar;80(3):396–401 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Prepubertal yolk sac testicular tumors—report of the testicular tumor registry. Kaplan GW, et al. J Urol 1988 Nov;140(5 Pt 2):1109–12

GENETICS

45,XO/46,X,dic(Yq) mosaicism in Turner's phenotype with endodermal sinus tumor of the ovary. Ono T, et al. Gynecol Obstet Invest 1989;27(1):45–7

IMMUNOLOGY

[Monoclonal antibodies raised against cultured cells and their application in cancer diagnosis] Nozawa S, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-3):1858–63 (Eng. Abstr.) (Jpn)

METABOLISM

Immunohistochemical differentiation of clear-cell carcinoma of the female genital tract and endodermal sinus tumor with the use of alpha-fetoprotein and Leu-M1. Zirker TA, et al. Am J Clin Pathol 1989 May;91(5):511–4

PATHOLOGY

Nephrogenic adenoma of the bladder. Lukkarinen O, et al. Ann Chir Gynaecol 1988;77(1):45–6
Retroperitoneal embryonal carcinoma/yolk sac tumor. A case report and a review of the histogenesis. Janda J, et al. Arch Geschwulstforsch 1988;58(5):333–40 (35 ref.)
Endodermal sinus tumor and mucinous cystadenofibroma of the ovary. Occurrence in an 82-year-old woman. Mazur MT, et al. Cancer 1988 Nov 1;62(9):2011–5
Intestinal variant of ovarian endodermal sinus tumor. Kim CR, et al. Gynecol Oncol 1989 Jun;33(3):379–81
Establishment and characterization of a human ovarian endodermal sinus tumor cell line—producing specific type of alpha-fetoprotein subfraction [letter] Talerman A. Gynecol Oncol 1988 Oct;31(2):367–8
[A case of yolk sac tumor of the eye] Frasik W, et al. Patol Pol 1988 Apr-Jun;39(2):149–52 (Eng. Abstr.) (Pol)

RADIONUCLIDE IMAGING

Immunoscintigraphy using CA 125 antibodies in the management of ovarian cancer. Brökelmann J, et al. Arch Gynecol Obstet 1989;244(4):193–206

SURGERY

Second-look laparotomy in endodermal sinus tumor: a report of two patients with normal levels of alpha-fetoprotein and residual tumor at reexploration. Curtin JP, et al. Obstet Gynecol 1989 May;73(5 Pt 2):893–5 (7 ref.)
[Characteristics of the surgical stage in the combined treatment of poorly differentiated cancer of the corpus uteri] Pronin VN, et al. Vopr Onkol 1988;34(9):1102–5 (Eng. Abstr.) (Rus)

THERAPY

Experience with the management of primary endodermal sinus tumor of the mediastinum. Sham JS, et al. Cancer 1989 Aug 1;64(3):756–61
Successful treatment of primary endodermal sinus tumor of the endometrium. Ohta M, et al. Gynecol Oncol 1988 Oct; 31(2):357–64
Vaginal neoplasms in infancy: the combined role of chemotherapy and conservative surgical resection. McHenry CR, et al. J Pediatr Surg 1988 Sep;23(9):842–5
Maternal and fetal survival following surgery and chemotherapy of endodermal sinus tumor of the ovary during pregnancy: a case report. Kim DS, et al. Obstet Gynecol 1989 Mar;73(3 Pt 2):503–7

ULTRASTRUCTURE

[Light and electron microscopic observations on endodermal sinus tumor of the ovary] Li GR. Chung Hua Fu Chan Ko Tsa Chih 1989 Mar;24(2):98–9, 125 (Eng. Abstr.) (Chi)

MESONEPHROS

On cell contribution to gonadal soma formation in quail-chick chimeras during the indifferent stage of gonadal development. Rodemer-Lenz E. Anat Embryol (Berl) 1989; 179(3):237–42
Osteosarcoma of the uterine cervix associated with hyperplastic and atypical mesonephric rests. Bloch T, et al. Cancer 1988 Oct 15;62(8):1594–600

MESONS see under ELEMENTARY PARTICLES

MESOPORPHYRINS see under PORPHYRINS

MESORIDAZINE

ANALYSIS

Synthesis and properties of haptens for the development of radioimmunoassays for thioridazine, mesoridazine, and sulforidazine. Chakraborty BS, et al. Pharm Res 1987 Jun; 4(3):207–13

PHARMACOLOGY

Comparative antidopaminergic properties of thioridazine, mesoridazine and sulforidazine on the corpus striatum. Niedzwiecki DM, et al. J Pharmacol Exp Ther 1989 Jul; 250(1):117–25
Comparative anticholinergic properties of thioridazine, mesoridazine and sulforidazine. Niedzwiecki DM, et al. J Pharmacol Exp Ther 1989 Jul;250(1):126–33

POISONING

Cardiotoxic manifestations of mesoridazine overdose. Marrs-Simon PA, et al. Ann Emerg Med 1988 Oct; 17(10):1074–8

MESOSIGMOID see MESOCOLON

MESOTHELIOMA

Natural history and staging of malignant mesothelioma. Antman KH. Chest 1989 Jul;96(1 Suppl):93S–95S
The epidemiology and pathogenesis of malignant mesothelioma. Craighead JE. Chest 1989 Jul;96(1 Suppl):92S–93S (26 ref.)
Asbestos-related malignancy. Talcott JA, et al. Curr Probl Cancer 1988 May-Jun;12(3):135–78 (179 ref.)
Adenomatoid tumours of the male genital tract. Review of 5 men presenting with an intrascrotal swelling subsequently diagnosed as an adenomatoid tumour. Davies JH, et al. Eur Urol 1989;16(5):393–4
Malignant mesothelioma. Rudd R. J R Soc Med 1989 Mar; 82(3):126–9 (51 ref.)
[Diffuse malignant peritoneal mesothelioma (letter)] Pialoux G, et al. Rev Med Interne 1988 Nov-Dec;9(5):559 (Fre)
[Radiologic diagnosis and therapy of pleural mesothelioma] Lange S. Rontgenblatter 1989 Jan;42(1):28–30 (Eng. Abstr.) (Ger)
[A rare case of neoplasm of the epididymis] Marino C, et al. Minerva Chir 1989 Apr 15;44(7):1193–5 (Eng. Abstr.) (Ita)
[Mesothelioma of a hernial sac] Kudla AA. Klin Khir 1989; (5):66 (Rus)
[Malignant pericardial mesothelioma] Vinogradova OM, et al. Ter Arkh 1988;60(7):118–20 (Rus)
[Localized mesotheliomas of the visceral pleura] Egiazarian VT, et al. Vestn Khir 1988 May;140(5):60 (Rus)

ANALYSIS

Non-occupational malignant mesotheliomas. Gibbs AR, et al. IARC Sci Publ 1989;(90):219–28
Asbestos fibre content of lungs with mesotheliomas in Osaka, Japan: a preliminary report. Morinaga K, et al. IARC Sci Publ 1989;(90):438–43
Is the profile of binding of a panel of neoglycoproteins useful as a diagnostic marker in human lung cancer? Kayser K, et al. Pathol Res Pract 1989 Jun;184(6):621–9

BLOOD

A longitudinal study of the hyaluronan level in the serum of patients with malignant mesothelioma under treatment. Hyaluronan as an indicator of progressive disease. Dahl IM, et al. Cancer 1989 Jul 1;64(1):68–73
Absence of components of coagulation and fibrinolysis pathways in situ in mesothelioma. Wojtukiewicz MZ, et al. Thromb Res 1989 Jul 15;55(2):279–84

CHEMICALLY INDUCED

Pleural mesothelioma in a lift mechanic. Huncharek M, et al. Br J Ind Med 1989 Jul;46(7):500–1
Intraperitoneal mesotheliomas induced in mice by a polycyclic aromatic hydrocarbon. Rice JM, et al. J Toxicol Environ Health 1989;27(1):153–60
Amosite mesothelioma in a cohort of asbestos workers. Ribak J, et al. Scand J Work Environ Health 1989 Apr; 15(2):106–10

COMPLICATIONS

Mesothelioma of the atrioventricular node and congenital complete heart block. Subramanian R, et al. Clin Cardiol 1989 Aug;12(8):469–72
Esophageal achalasia secondary to mesothelioma. Goldschmiedt M, et al. Dig Dis Sci 1989 Aug;34(8):1285–9
Paratesticular malignant mesothelioma associated with abdominoscrotal hydrocele. Velasco AL, et al. J Pediatr Surg 1988 Nov;23(11):1065–7 (10 ref.)
Dysphagia due to mesothelioma infiltrating the oesophagus: palliative treatment. Lockwood CA, et al. J R Soc Med 1989 Mar;82(3):168
Jugular vein thrombosis associated with distant malignancy. Carrington BM, et al. Postgrad Med J 1988 Jun; 64(752):455–8
[Pleural mesothelioma in a HIV seropositive patient (letter)] Quilichini R, et al. Presse Med 1989 Mar 4;18(9):495–6 (Fre)
[A case of malignant abdominal mesothelioma with remarkable leukocytosis] Matsumura M, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Mar;86(3):803–7 (Jpn)

DIAGNOSIS

Double contrast barium enema combined with non-invasive imaging in peritoneal mesothelioma. Cozzi G, et al. Acta Radiol 1989 Jan-Feb;30(1):21–4
Pleural mesothelioma. Davenport J. Am Fam Physician 1989 Mar;39(3):151–4 (18 ref.)
The immunohistochemical diagnosis of mesothelioma. Differentiation of mesothelioma and lung adenocarcinoma. Ordóñez NG. Am J Surg Pathol 1989 Apr;13(4):276–91
Peritoneal mesothelioma—a case report. Sawhney S, et al. Australas Radiol 1988 Nov;32(4):490–2
Immunocytology in malignant pleural mesothelioma. Expression of tumor markers and distribution of lymphocyte subsets. Guzman J, et al. Chest 1989 Mar; 95(3):590–5
Sudden death as the initial manifestation of diffuse pleural mesothelioma. Lie JT. Chest 1989 Mar;95(3):682–4
Concentration of hyaluronic acid in pleural fluid as a diagnostic aid for malignant mesothelioma. Pettersson T, et al. Chest 1988 Nov;94(5):1037–9
Immunohistochemical distinction of malignant mesothelioma from pulmonary adenocarcinoma with anti-surfactant apoprotein, anti-Lewisa, and anti-Tn antibodies. Noguchi M, et al. Hum Pathol 1989 Jan;20(1):53–7
Mesothelioma versus adenocarcinoma: false-positive CEA and Leu-M1 staining due to hyaluronic acid [letter] Robb JA. Hum Pathol 1989 Apr;20(4):400
MR imaging of malignant pleural mesothelioma. Lorigan JG, et al. J Comput Assist Tomogr 1989 Jul-Aug;13(4):617–20
Mesothelioma of the pericardium: CT and MR findings. Vogel HJ, et al. J Comput Assist Tomogr 1989 May-Jun; 13(3):543–4
Early diagnosis and monitoring of transplanted human malignant mesothelioma by serum hyaluronic acid. Roboz

J, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):924–8
Malignant mesothelioma of the pleura. Pisani RJ, et al. **Mayo Clin Proc** 1988 Dec;63(12):1234–44 (78 ref.)
Thoracoscopy in malignant mesothelioma. Boutin C. **Pneumologie** 1989 Feb;43(2):61–5
Cystic mesothelioma of the peritoneum. O'Neil JD, et al. **Radiology** 1989 Feb;170(2):333–7
Differentiation of malignant from normal and reactive mesothelial cells by the argyrophil technique for nucleolar organiser region associated proteins. Ayres JG, et al. **Thorax** 1988 May;43(5):366–70
Malignant mesothelioma of tunica vaginalis testis. Tyagi G, et al. **Urology** 1989 Aug;34(2):102–4
[Thoracoscopy using flexible fiberoptic bronchoscopy—a preliminary report of experimental and clinical studies] Zhang DH, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan; 28(1):3–6, 60 (Eng. Abstr.) (Chi)
[Solitary (localized) fibrous mesothelioma of the pleura] Olesen LL. **Ugeskr Laeger** 1988 Sep 5;150(36):2127–8 (Eng. Abstr.) (Dan)
[Immunohistochemistry in malignant mesothelioma (letter)] Mezger J. **Pathologe** 1989 May;10(3):197 (Ger)
[Benign cystic mesothelioma of the peritoneum] Betta PG, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):39–42 (Eng. Abstr.) (Ita)
[Is malignant mesothelioma of the pleura only an occupational disease?] Foresti V, et al. **Minerva Med** 1989 Feb;80(2):145–8 (Eng. Abstr.) (Ita)
[Diagnosis and prognosis of malignant mesothelioma. A description of 8 clinical cases] Piffer S, et al. **Minerva Med** 1989 Apr;80(4):405–10 (Eng. Abstr.) (Ita)
[A case of localized pleural mesothelioma, examined by magnetic resonance imaging] Inada T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):893–7 (Eng. Abstr.) (Jpn)
[Malignant fibrous mesothelioma and granulomas (letter)] Esquirol Puig X, et al. **Med Clin (Barc)** 1989 Feb 11; 92(5):198 (Spa)

DRUG THERAPY

24–hour cyclophosphamide infusion therapy for malignant mesothelioma of the pleura. Anderson H, et al. **Br J Dis Chest** 1988 Jan;82(1):64–9
Activity of pirarubicin (4'–0–tetrahydropyranyladriamycin) in malignant mesothelioma. Sridhar KS, et al. **Cancer** 1989 Mar 15;63(6):1084–91
A phase II study of vincristine in malignant mesothelioma—a negative report. Mårtensson G, et al. **Cancer Chemother Pharmacol** 1989;24(2):133–4
Interleukin–2 in malignant pleural mesothelioma (and adenocarcinoma of the lung). The use of intrapleural and continuous intravenous infusions: preliminary results. Thatcher N, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:16!–2
A phase II trial of ifosfamide/mesna with doxorubicin for malignant mesothelioma. Carmichael J, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):911–2
Phase II trial of five day intravenous infusion vinblastine sulfate in patients with diffuse malignant mesothelioma: a Southwest Oncology Group study [letter] Cowan JD, et al. **Invest New Drugs** 1988 Sep;6(3):247–8
A phase II study of VP–16 and cisplatin in patients with unresectable malignant mesothelioma. An NCI Canada Clinical Trials Group Study. Eisenhauer EA, et al. **Invest New Drugs** 1988 Dec;6(4):327–9
A phase II evaluation of cisplatin in unresectable diffuse malignant mesothelioma: a Southwest Oncology Group Study. Zidar BL, et al. **Invest New Drugs** 1988 Sep; 6(3):223–6
[A case of peritoneal malignant mesothelioma with disappearance of ascites result of intraperitoneal instillation of mitomycin C and oral administration of UFT] Hayashi T, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2449–52 (Eng. Abstr.) (Jpn)
[A case of malignant pleural mesothelioma and its sensitivity tests for anti–cancer drugs] Asakura S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):695–9 (Eng. Abstr.) (Jpn)
[Treatment of diffuse malignant mesothelioma of the pleura] Solheim O, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3091–3 (Eng. Abstr.) (Nor)

ENZYMOLOGY

A study of guanidinobenzoatase during development of mesothelioma induced in the rat by fibrous erionite. Steven FS, et al. **Br J Cancer** 1988 Nov;58(5):610–3

EPIDEMIOLOGY

Effects on health of non–occupational exposure to airborne mineral fibres. Gardner MJ, et al. **IARC Sci Publ** 1989; (90):375–97 (72 ref.)
Epidemiological observations on mesothelioma and their implications for non–occupational exposure. McDonald JC, et al. **IARC Sci Publ** 1989;(90):420–7
Mesothelioma in South Africa, 1976–84: incidence and case characteristics. Zwi AB, et al. **Int J Epidemiol** 1989 Jun; 18(2):320–9
Diffuse malignant mesothelioma of the pleura in Ontario and Quebec: a retrospective study of 332 patients. Ruffie P, et al. **J Clin Oncol** 1989 Aug;7(8):1157–68
Malignant mesothelioma—the rising epidemic [see comments] Ferguson D. **Med J Aust** 1989 Mar 6;150(5):233–5. **Comment in:** Med J Aust 1989 May 15;150(10):607
The incidence of malignant mesothelioma in Australia, 1947–1980. Musk AW, et al. **Med J Aust** 1989 Mar 6; 150(5):242–3, 246
The rising epidemic of malignant mesothelioma [letter; comment] Orr KB. **Med J Aust** 1989 May 15;150(10):607 **Comment on:** Med J Aust 1989 Mar 6;150(5):233–5

ETIOLOGY

On Dr. Dunnigan's commentary linking chrysotile asbestos with mesothelioma [letter] Becklake MR. **Am J Ind Med** 1988;14(2):239–40
Reply to Dr. Dunnigan. Chrysotile as a mesothelial carcinogen in man. Churg A. **Am J Ind Med** 1988; 14(2):235–8
Response to Dr. Dunnigan's commentary. The role of chrysotile in the pathogenesis of mesothelioma [letter] Craighead JM. **Am J Ind Med** 1988;14(2):241–3
On the statement by Jacques Dunnigan. Davis JM. **Am J Ind Med** 1988;14(5):629–30
Relative risk of mesothelioma among railroad machinists exposed to chrysotile [letter; comment] Higgins I. **Am J Ind Med** 1989;15(4):483–6. **Comment on:** Am J Ind Med 1988;13(6):639–57
Obfuscation: a reply to Dr. Dunnigan. Lilienfeld DE. **Am J Ind Med** 1988;14(5):625–8
Mesothelioma in railroad workers [letter] McDonald C, et al. **Am J Ind Med** 1989;15(4):487–90
Tremolite, other amphiboles, and mesothelioma [letter] [published erratum appears in Am J Ind Med 1989;15(1):127] McDonald JC. **Am J Ind Med** 1988; 14(2):247–9
Is chrysotile a significant risk factor for mesothelioma? Ohlson CG. **Am J Ind Med** 1989;15(3):351–6
Amphiboles and chrysotile asbestos exposure [letter] Roggli VL, et al. **Am J Ind Med** 1988;14(2):245–6
Linking chrysotile asbestos with mesothelioma [letter] Sluis–Cremer GK. **Am J Ind Med** 1988;14(5):631–2
Occurrence and morphology of tumors induced in nude mice transplanted with chrysotile–transformed rat pleural mesothelial cells. Fleury–Feith J, et al. **Biol Cell** 1989; 65(1):45–50
A study of guanidinobenzoatase during development of mesothelioma induced in the rat by fibrous erionite. Steven FS, et al. **Br J Cancer** 1988 Nov;58(5):610–3
Non–occupational asbestos related chest diseases in a small Anatolian village. Barış YI, et al. **Br J Ind Med** 1988 Dec; 45(12):841–2
Pleural mesothelioma in a brake mechanic. Huncharek M, et al. **Br J Ind Med** 1989 Jan;46(1):69–71
Domestic asbestos exposure, lung fibre burden, and pleural mesothelioma in a housewife. Huncharek M, et al. **Br J Ind Med** 1989 May;46(5):354–5
Asbestos associated tumours in car mechanics. Järvholm B, et al. **Br J Ind Med** 1988 Sep;45(9):645–6
Mesothelioma and asbestos fiber type. Evidence from lung tissue analyses. McDonald JC, et al. **Cancer** 1989 Apr 15; 63(8):1544–7
Specificity of asbestos–induced chromosomal aberrations in short–term cultured human mesothelial cells. Olofsson K, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):33–9
The epidemiology of pleural mesothelioma: current concepts and controversies. Huncharek M. **Cancer Invest** 1989; 7(1):93–9
Localized fibrous mesothelioma of pleura following external ionizing radiation therapy. Bilbey JH, et al. **Chest** 1988 Dec; 94(6):1291–2
Evaluation of the pleural malignant mesothelioma patients with the relation of asbestos exposure. Kishimoto T, et al. **Environ Res** 1989 Feb;48(1):42–8
Mesothelioma after crocidolite exposure during gas mask manufacture. McDonald AD, et al. **Environ Res** 1978 Dec; 17(3):340–6
Mesothelial cell proliferation and localized pleural pseudotumour associated with Mycoplasma pneumoniae infection. Abo W, et al. **Eur J Pediatr** 1988 Oct;148(1):62–3
Induction of angiogenesis by intraperitoneal injection of asbestos fibers. Branchaud RM, et al. **FASEB J** 1989 Apr; 3(6):1747–52
Mesotheliomas—asbestos exposure and lung burden. Berry G, et al. **IARC Sci Publ** 1989;(90):486–96
Fibre content of lung in amphibole– and chrysotile–induced mesothelioma: implications for environmental exposure. Churg A, et al. **IARC Sci Publ** 1989;(90):314–8
Development and use of asbestos risk estimates. Hughes JM, et al. **IARC Sci Publ** 1989;(90):471–5
Mesothelioma in Cyprus. McConnochie K, et al. **IARC Sci Publ** 1989;(90):411–9
Relation of environmental exposure to erionite fibres to risk of respiratory cancer. Simonato L, et al. **IARC Sci Publ** 1989;(90):398–405
Genesis of mesothelioma. **J Occup Med** 1989 Aug;31(8):643–4
Induction of thoracic malignancy in inorganic dust pneumoconiosis. Scatarige JC, et al. **J Thorac Imaging** 1988 Oct;3(4):67–79 (72 ref.)
Asbestos–contaminated nappies and familial mesothelioma [letter] Li FP, et al. **Lancet** 1989 Apr 22;1(8643):909–10
Iron, asbestos, and carcinogenicity [letter] Weinberg ED. **Lancet** 1989 Jun 17;1(8651):1399–400
Mesothelial papillary proliferation of the pleura associated with radiation therapy: does it have a role in the pathogenesis of mesothelioma? Jagirdar J, et al. **Mt Sinai J Med** 1989 Mar;56(2):147–9
Malignant pleural mesothelioma among Swiss furniture workers. A new high–risk group. Minder CE, et al. **Scand J Work Environ Health** 1988 Aug;14(4):252–6
[Asbestos and health: from patient presentation to recognition of occupational diseases in The Netherlands] Burdorf A, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2162–7 (48 ref.) (Dut)
[Late occupational disease (letter)] Buronfosse D, et al. **Rev Pneumol Clin** 1988;44(4):217 (Fre)
[Asbestos–induced malignant tumors] Kühne W, et al. **Zentralbl Allg Pathol** 1988;134(8):703–12 (27 ref.) (Eng. Abstr.) (Ger)
[Mesotheliomas among mechanics of the railways in Italy: a current problem] Maltoni C, et al. **Med Lav** 1989 Mar–Apr;80(2):103–10 (Eng. Abstr.) (Ita)
[Diffuse malignant mesothelioma of the pleura] Niezabitowski A, et al. **Nowotwory** 1988 Apr–Jun;38(2):128–32 (Eng. Abstr.) (Pol)
[Comparative carcinogenic properties of basalt fiber and chrysotile–asbestos] Nikitina OV, et al. **Gig Tr Prof Zabol** 1989;(4):7–11 (Eng. Abstr.) (Rus)

GENETICS

Expression of colony–stimulating factor genes by normal human mesothelial cells and human malignant mesothelioma cells lines in vitro. Demetri GD, et al. **Blood** 1989 Aug 15;74(3):940–6
Chromosomal translocations with specific breakpoints in asbestos–induced rat mesotheliomas. Libbus BL, et al. **Cancer Res** 1988 Nov 15;48(22):6455–61
Further analyses of the evolutionary characteristics of a sequentially studied human malignant mesothelioma. Mark J, et al. **Hereditas** 1989;110(1):85–6
Transplantation and chromosomal analysis of cell lines derived from mesotheliomas induced in rats with erionite and UICC chrysotile asbestos. Palekar LD, et al. **IARC Sci Publ** 1989;(90):167–72
Tumorigenicity of human mesothelial cell line transfected with EJ–ras oncogene. Reddel RR, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):945–8
[Familial malignant pleural mesothelioma. Report of 3 cases] Muñoz L, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):413–7 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Lysis of human malignant mesothelioma cells by natural killer (NK) and lymphokine–activated killer (LAK) cells. Manning LS, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1369–74
Verification of the histologic diagnosis of malignant mesothelioma in relation to the binding of an antimesothelial cell antibody. Donna A, et al. **Cancer** 1989 Apr 1;63(7):1331–6
Indomethacin augments lymphokine–activated killer cell generation by patients with malignant mesothelioma. Manning LS, et al. **Clin Immunol Immunopathol** 1989 Oct; 53(1):68–77
[A comparison of the sialyl SSEA–1 antigen and CEA in the histology of malignant mesothelioma, with special reference to adenocarcinoma of the lung] Kishimoto T, et al. **Gan No Rinsho** 1988 Nov;34(14):1951–5 (Eng. Abstr.) (Jpn)

METABOLISM

[Immunohistochemical and histochemical study of malignant mesothelioma] Yu G. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):280–2 (Eng. Abstr.) (Chi)
[Neoglycoproteins to characterize endogenous lectins in distinct differentiated malignant mesotheliomas] Berghäuser KH, et al. **Verh Dtsch Ges Pathol** 1988; 72:309–11 (Eng. Abstr.) (Ger)
[A case of malignant pleural mesothelioma producing colony–stimulating factor (CSF)] Okazaki H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):506–11 (Jpn)

MORTALITY

Mortality among employees of an Ontario factory that manufactured construction materials using chrysotile asbestos and coal tar pitch. Finkelstein MM. **Am J Ind Med** 1989;16(3):281–7
Cancer mortality in relation to measures of occupational exposure to crocidolite at Wittenoom Gorge in Western Australia. de Klerk NH, et al. **Br J Ind Med** 1989 Aug; 46(8):529–36
[Mortality caused by pleural mesothelioma in the 1979–1983 lustre in Italy regarding provinces and single local health districts] Facchini U, et al. **Med Lav** 1989 Mar–Apr; 80(2):148–54 (Eng. Abstr.) (Ita)

PATHOLOGY

An autopsy case of primary angiosarcoma of the pericardium mimicking malignant mesothelioma. Terada T, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1345–51
Linking chrysotile asbestos with mesothelioma. Dunnigan J. **Am J Ind Med** 1988;14(2):205–9
Mineral fiber concentration in lung tissue of mesothelioma

patients in Finland. Tuomi T, et al. **Am J Ind Med** 1989; 16(3):247–54

Establishment of a human in vitro mesothelial cell model system for investigating mechanisms of asbestos-induced mesothelioma. Ke Y, et al. **Am J Pathol** 1989 May; 134(5):979–91

Differentiation of adenocarcinoma of the lung from mesothelioma. Periodic acid–Schiff, monoclonal antibodies B72.3, and Leu M1. Warnock ML, et al. **Am J Pathol** 1988 Oct;133(1):30–8

Sarcomatous tumor of the chest wall with osteochondroid differentiation. Evidence of mesothelial origin. Andrion A, et al. **Am J Surg Pathol** 1989 Aug;13(8):707–12

Peritoneal malignant mesothelioma versus serous papillary adenocarcinoma. A histochemical and immunohistochemical comparison. Bollinger DJ, et al. **Am J Surg Pathol** 1989 Aug;13(8):659–70

Solitary fibrous tumor of the mediastinum. A report of 14 cases. Witkin GB, et al. **Am J Surg Pathol** 1989 Jul; 13(7):547–57

Malignant mesothelioma in infancy. Lin–Chu M, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):409–11 (15 ref.)

Progressive growth of a human pleural mesothelioma xenografted to athymic rats and mice. Lindén CJ, et al. **Br J Cancer** 1988 Nov;58(5):614–8

Localized fibrous tumor (localized fibrous mesothelioma) of the liver. Kottke-Marchant K, et al. **Cancer** 1989 Sep 1; 64(5):1096–102

Pathologic analysis of advanced adult soft tissue sarcomas, bone sarcomas, and mesotheliomas. The Eastern Cooperative Oncology Group (ECOG) experience. Shiraki M, et al. **Cancer** 1989 Jul 15;64(2):484–90

Mixed clinicopathologic behavior of a solitary mesothelioma. Hsu V, et al. **Chest** 1988 Dec;94(6):1293–4

Aspiration biopsy cytology of mesothelioma. Tao LC. **Diagn Cytopathol** 1989;5(1):14–21 (15 ref.)

Cytologic presentation of malignant mesothelioma in pleural effusions. Pedio G, et al. **Exp Cell Biol** 1988;56(4):211–6

Adenomatoid tumour of the uterus. Marcussen N, et al. **Histopathology** 1988 Nov;13(5):582–3

Flow cytometric analysis of malignant pleural mesotheliomas. Burmer GC, et al. **Hum Pathol** 1989 Aug;20(8):777–83

Familial mesothelioma: a report of two families. Hammar SP, et al. **Hum Pathol** 1989 Feb;20(2):107–12

Mesotheliomas of the pleura: a twelve year experience with fifteen cases. Bhaduri AS, et al. **Indian J Cancer** 1988 Mar; 25(1):7–15

Establishment of human malignant mesothelioma cell lines. Versnel MA, et al. **Int J Cancer** 1989 Aug 15;44(2):256–60

Pleural mesothelioma of connective tissue type, localized fibrous tumour of the pleura, and reactive submesothelial hyperplasia. An immunohistochemical comparison. Al-Izzi M, et al. **J Pathol** 1989 May;158(1):41–4

Mesothelioma of the AV node: potential utility of pacing. Strauss WE, et al. **PACE** 1988 Sep;11(9):1296–8 (15 ref.)

Malignant pleural mesothelioma in a child. Dische MR, et al. **Pediatr Pathol** 1988;8(4):437–41

Benign cystic mesothelioma of the peritoneum: immunohistochemical and ultrastructural features in a child. Raafat F, et al. **Pediatr Pathol** 1988;8(3):321–9

Malignant pleural mesothelioma in western Glasgow 1980–6. Hulks G, et al. **Thorax** 1989 Jun;44(6):496–500

Desmoplastic mesothelioma [letter] Thomas JS, et al. **Thorax** 1988 Jul;43(7):584

Benign mesothelioma of the epididymis: case report. Van Poppel H, et al. **Urol Int** 1988;43(6):370–1

Mesotheliomas of the tunica vaginalis testis and hernial sacs. Grove A, et al. **Virchows Arch [A]** 1989;415(3):283–92 (56 ref.)

[Morphology, diagnosis and differential diagnosis of mesothelioma] Wu RL, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):123–5 (Eng. Abstr.) **(Chi)**

[Pathological investigation of asbestosis complicated by mesothelioma: report of 4 cases] Zhang P. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):182–4 (Eng. Abstr.) **(Chi)**

[Pathological studies of an asbestosis case complicated by pleural malignant mesothelioma at autopsy] Wang MG. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):143–5 (Eng. Abstr.) **(Chi)**

[Malignant para-testicular tumors. Apropos of 3 unusual cases] Mhiri MN, et al. **Ann Urol (Paris)** 1989;23(1):23–6 (Eng. Abstr.) **(Fre)**

[Diffuse malignant peritoneal mesothelioma: apropos of a new case, review of the literature] Gilly F, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):388–91 (13 ref.) (Eng. Abstr.) **(Fre)**

[Pleural mesothelioma—problems in diagnosis and clinical course in 25 patients] Liewald F, et al. **Langenbecks Arch Chir** 1989;374(2):105–10 (Eng. Abstr.) **(Ger)**

[Malignant mesothelioma of the tunica vaginalis testis] Dressler W, et al. **Pathologe** 1988 Sep;9(5):318–21 **(Ger)**

[Cell marker for the differential diagnosis of malignant mesotheliomas] Hastka J, et al. **Pathologe** 1988 Jul; 9(4):245–7 **(Ger)**

[Mesothelioma register now in Bochum] Müller KM. **Pathologe** 1988 Jul;9(4):258–9 **(Ger)**

[Mediastinal neoplasms of mesenchymal origin] Bortolani EM, et al. **Minerva Chir** 1989 Apr 15;44(7):1163–6 (Eng. Abstr.) **(Ita)**

[Intrascrotal malignant mesothelioma] Okutani T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1852–7 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Mesothelioma of the tunica vaginalis testis] Rey López A, et al. **Arch Esp Urol** 1989 Mar;42(2):157–60 (Eng. Abstr.) **(Spa)**

[Ascites and pleural effusion in a 65-year-old woman with Hodgkin's disease (clinical conference)] **Medicina (B Aires)** 1985;45(1):57–64 **(Spa)**

[Clinicopathological study of 23 pleural malignant mesotheliomas] Bombi JA, et al. **Rev Clin Esp** 1988 May; 182(9):464–70 (Eng. Abstr.) **(Spa)**

[Primary pericardial mesothelioma. Apropos of a case (letter)] Martínez Sande JL, et al. **Rev Clin Esp** 1988 May; 182(8):445–6 **(Spa)**

PHYSIOPATHOLOGY

Nine-year survival in a case of untreated peritoneal mesothelioma. Norman PE, et al. **Med J Aust** 1989 Jan 2;150(1):43–4

RADIOGRAPHY

Pleural metastasis of malignant thymoma. A pitfall in the CT-diagnosis of pleural mesothelioma. Görich J, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):169–70

Computed tomography in the diagnosis of asbestos-related thoracic disease. Gamsu G, et al. **J Thorac Imaging** 1989 Jan;4(1):61–7 (25 ref.)

Conventional and high resolution computed tomography in the diagnosis of asbestos-related diseases. Lynch DA, et al. **Radiographics** 1989 May;9(3):523–51

[Primary pericardial mesothelioma: a report of four cases] Dai RP. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr; 23(2):90–2 (Eng. Abstr.) **(Chi)**

[A case of huge benign localized mesothelioma in which an abnormal shadow had been recognized since 43 years ago] Mizukoshi K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):1000–4 (Eng. Abstr.) **(Jpn)**

SECONDARY

Brain metastases in malignant pleural mesothelioma. Case report and review of the literature. Sridhar KS, et al. **Am J Clin Oncol** 1989 Jun;12(3):222–8 (35 ref.)

Multifocal extraovarian serous carcinoma. A histochemical and immunohistochemical study. Resta L, et al. **Eur J Gynaecol Oncol** 1988;9(6):474–8

[Diffuse neoplastic infiltration of leptomeninges by malignant pleural mesothelioma] de Pangher Manzini V, et al. **Recenti Prog Med** 1989 Jan;80(1):16–7 (Eng. Abstr.) **(Ita)**

SURGERY

Malignant mesothelioma of the pleura. A prospective therapeutic study of 132 patients from 1981–1985. Calavrezos A, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):607–13

THERAPY

Treatment of peritoneal mesothelioma [letter] Spratt JS. **Arch Surg** 1989 Feb;124(2):256

Malignant pleural mesothelioma treatment: the current state of the art. Falkson G, et al. **Cancer Treat Rev** 1988 Dec; 15(4):231–42 (78 ref.)

Therapeutic approach to malignant mesothelioma. Aisner J. **Chest** 1989 Jul;96(1 Suppl):95S–97S (12 ref.)

Cure of experimental human malignant mesothelioma in athymic mice by diphtheria toxin. Raso V, et al. **J Natl Cancer Inst** 1989 Apr 19;81(8):622–7

ULTRASTRUCTURE

Malignant peritoneal mesothelioma in childhood. Armstrong GR, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1159–62

Ultrastructural histochemistry of mesotheliomas and adenocarcinomas in malignant effusions. Barsotti P, et al. **Diagn Cytopathol** 1989;5(2):154–61

Microwave-stimulated incubation in immunoelectron microscopy: a quantitative study. Zondervan PE, et al. **Histochem J** 1988 Jun–Jul;20(6–7):359–64

Multicystic peritoneal mesothelioma: a case report. Alvarez-Fernandez E, et al. **Histopathology** 1989 Feb; 14(2):199–208

The ultrastructural pathology of malignant pleural mesothelioma. Coleman M, et al. **Pathol Annu** 1989;24 Pt 1:303–53 (101 ref.)

[Ultrastructural and immunohistochemical study of mesothelioma induced by asbestos in rat] Yang GH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):337–41 (Eng. Abstr.) **(Chi)**

VETERINARY

Metastatic malignant mesothelioma in a dog. Smith DA, et al. **J Comp Pathol** 1989 Jan;100(1):97–101

Mesothelioma in the tunica vaginalis of a bull. Sutton RH. **J Comp Pathol** 1988 Jul;99(1):78–82

An ultrastructural study of malignant mesotheliomas in two cows. Hashimoto N, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):327–36

MESOZOA see **INVERTEBRATES**

MESTEROLONE see under **STANOLONE**

MESTRANOL

A comparative clinical trial of Norinyl 1/35 versus Brevicon in Rio Clara, Brazil. Albuquerque LA, et al. **Contraception** 1988 Nov;38(5):525–39

ADMINISTRATION & DOSAGE

[Effective progestogen therapy of endometrial hyperplasia and adenocarcinoma by administration of a combined progestogen–estrogen preparation] Miyawaki Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2598–605 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Plasma reduced and total ascorbic acid in healthy women: effects of smoking and oral contraception. Basu J, et al. **Contraception** 1989 Jan;39(1):85–93

[Endometrial findings in long-term treatment with synthetic sex steroids in Turner syndrome] Rudolf K, et al. **Zentralbl Gynakol** 1989;111(1):39–42 (Eng. Abstr.) **(Ger)**

ANALYSIS

High-performance liquid chromatographic analysis of the by-products of the synthesis of ethynylestradiol, mestranol, 17 alpha-hydroxy-progesterone caproate and 17 alpha-hydroxy-6-dehydroprogesterone acetate. Levtchenko NK, et al. **J Chromatogr** 1988 Dec 16; 456(2):427–30

PHARMACOKINETICS

Pharmacokinetics of three bioequivalent norethindrone/mestranol–50 micrograms and three norethindrone/ethinyl estradiol–35 micrograms OC formulations: are "low-dose" pills really lower? Brody SA, et al. **Contraception** 1989 Sep;40(3):269–84

PHARMACOLOGY

The effects of estradiol and mestranol on alpha-adrenoceptors in select regions of the rat brain. Shackelford DP Jr, et al. **Brain Res Bull** 1988 Aug; 21(2):329–33

THERAPEUTIC USE

Blood coagulation profile in long-term hormone replacement therapy with mestranol. Al-Azzawi F, et al. **Maturitas** 1989 Jun;11(2):95–101

Differential effect of long-term oestrogen therapy on trabecular and cortical bone. Hosie CJ, et al. **Maturitas** 1989 Jun;11(2):137–45

[Estrogen therapy in digestive hemorrhage caused by diffuse vascular ectasia of the gastric antrum (letter)] Martínez Costa X, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):559 **(Spa)**

TOXICITY

Total exchangeable sodium in rats with mestranol-induced hypertension. Abas N, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):43–6

Chlamydial salpingitis in female guinea pigs receiving oral contraceptives. Barron AL, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):169–73

META-ANALYSIS

Physiotherapy for children with cerebral palsy. Evidence for its efficacy. Tirosh E, et al. **Am J Dis Child** 1989 May; 143(5):552–5 (33 ref.)

Estimating and correcting for confounder misclassification. Savitz DA, et al. **Am J Epidemiol** 1989 May;129(5):1062–71

Critical review of cancer epidemiology in petroleum industry employees, with a quantitative meta-analysis by cancer site. Wong O, et al. **Am J Ind Med** 1989;15(3):283–310

Vision anomalies and reading skill: a meta-analysis of the literature. Simons HD, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):893–904

Comments on meta-analysis [letter] Lowenfels AB. **Am J Public Health** 1989 Jan;79(1):102–3

Comments received on Walker's 'Odd man out' approach [letter] Sullivan KM, et al. **Am J Public Health** 1989 Jun; 79(6):781

Statistical approach to combining the results of similar experiments, with application to the hematologic effects of extremely-low-frequency electric field exposures. Morris MD, et al. **Bioelectromagnetics** 1989;10(1):23–34

Effects of fibrinolytic inhibitors on mortality from upper gastrointestinal haemorrhage. Henry DA, et al. **BMJ** 1989 Apr 29;298(6681):1142–6

Exercise-induced ST depression in the diagnosis of coronary artery disease. A meta-analysis. Gianrossi R, et al. **Circulation** 1989 Jul;80(1):87–98 (171 ref.)

An overview of randomized trials of rehabilitation with exercise after myocardial infarction. O'Connor GT, et al. **Circulation** 1989 Aug;80(2):234–44

Meta-analysis and evidence. Goodman SN. **Controlled Clin Trials** 1989 Jun;10(2):188–204

The likelihood ratio versus the p value in meta-analysis: where is the evidence? Comment on the paper by S. N. Goodman. Zucker D, et al. **Controlled Clin Trials** 1989 Jun;10(2):205–8; discussion 209–10

A method for meta-analysis of epidemiological studies. Einarson TR, et al. **Drug Intell Clin Pharm** 1988 Oct; 22(10):813–24

Meta-analysis of clinical trials: summary of an international conference. Boissel JP, et al. **Eur J Clin Pharmacol** 1988; 34(6):535–8

Satisfied conclusion validity of early intervention research with handicapped children. Ottenbacher KJ. **Except Child** 1989 Apr;55(6):534–40

Primary cytomegalovirus infection in pediatric nurses: a meta-analysis. Flowers RH 3d, et al. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):491–6

Meta-analysis in medicine. Where we are and where we want to go. Jenicek M. **J Clin Epidemiol** 1989;42(1):35–44 (94 ref.)

Drug treatment of functional dyspepsia. A meta-analysis of randomized controlled clinical trials. Dobrilla G, et al. **J Clin Gastroenterol** 1989 Apr;11(2):169–77

Meta-analysis of injectable gold in rheumatoid arthritis. Clark P, et al. **J Rheumatol** 1989 Apr;16(4):442–7

Meta-analysis of controlled clinical trials. Naylor CD. **J Rheumatol** 1989 Apr;16(4):424–6

Meta-analysis of alcohol and risk of breast cancer [letter] Rosenberg L. **JAMA** 1989 Jan 20;261(3):383

Adjuvant systemic treatment for breast cancer meta-analysed [editorial] **Lancet** 1989 Jan 14;1(8629):80–1

Horizontal transmission of hepatitis B virus. Davis LG, et al. **Lancet** 1989 Apr 22;1(8643):889–93

Patients' preference in indomethacin trials: an overview. Gøtzsche PC. **Lancet** 1989 Jan 14;1(8629):88–91 (49 ref.)

Atrial fibrillation and antithrombotic prophylaxis: a prospective meta-analysis [letter] Walker MD. **Lancet** 1989 Feb 11;1(8633):325–6

Which factors affect reported headache incidences after lumbar myelography? A statistical analysis of publications in the literature. Sand T. **Neuroradiology** 1989;31(1):55–9

Metaanalysis: methodology, biostatistic rules, application in onco-hematology. Lepage E. **Nouv Rev Fr Hematol** 1989; 31(2):89–91

Meta-analysis of the relationship between asymptomatic bacteriuria and preterm delivery/low birth weight. Romero R, et al. **Obstet Gynecol** 1989 Apr;73(4):576–82

Use of meta-analysis to evaluate tolonium chloride in oral cancer screening. Rosenberg D, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):621–7

Meta-analysis of non-medical treatments for chronic pain [published erratum appears in Pain 1989 Apr;37(1):128] Malone MD, et al. **Pain** 1988 Sep;34(3):231–44 (122 ref.)

Decision rules for selecting effect sizes in meta-analysis: a review and reanalysis of psychotherapy outcome studies. Matt GE. **Psychol Bull** 1989 Jan;105(1):106–15 (40 ref.)

Limitations and advantages of meta-analysis in clinical trials. Rockette HE, et al. **Recent Results Cancer Res** 1988; 111:99–104

Does treatment with essential amino acids and hypertonic glucose improve survival in acute renal failure?: A meta-analysis. Naylor CD, et al. **Ren Fail** 1987–88; 10(3–4):141–52

Meta-analysis: the quantitative approach to research review. Ellenberg SS. **Semin Oncol** 1988 Oct;15(5):472–81 (62 ref.)

A comparison of statistical methods for combining event rates from clinical trials. Berlin JA, et al. **Stat Med** 1989 Feb; 8(2):141–51

Inborn/outborn status and neonatal survival: a meta-analysis of non-randomized studies. Ozminkowski RJ, et al. **Stat Med** 1988 Dec;7(12):1207–21

Crystalloid versus colloid fluid resuscitation: a meta-analysis of mortality. Velanovich V. **Surgery** 1989 Jan;105(1):65–71

Meta-analysis in clinical medicine. Chalmers TC. **Trans Am Clin Climatol Assoc** 1987;99:144–50 (38 ref.)

[Meta-analysis in clinical research] Pignon JP. **Presse Med** 1988 Dec 10;17(44):2328–30 **(Fre)**

[More fetal monitoring, more cesarean sections? An attempt at meta-analysis of the problem] Le Coutour X, et al. **Rev Epidemiol Sante Publique** 1989;37(1):61–72 (64 ref.) (Eng. Abstr.) **(Fre)**

[Meta-analysis and Simpson's paradox (letter)] Belmonte Serrano MA. **Med Clin (Barc)** 1988 May 14;90(19):795–6 **(Spa)**

META-DIHYDROXYBENZENES see **RESORCINOLS**

META-HYDROXYNOREPHEDRINE see **METARAMINOL**

METABOLIC ACTIVATION see **BIOTRANSFORMATION**

METABOLIC CLEARANCE RATE

Reproducibility of quantitative 99Tcm-MAG 3 measurements in rats. Tondeur M, et al. **Nucl Med Commun** 1989 Jun;10(6):431–4

Interspecific scaling of toxicity data: a question of interpretation [letter] Chappell WR. **Risk Anal** 1989 Mar; 9(1):13–4

DRUG EFFECTS

Effect of endogenous and synthetic sex steroids on the clearance of antibody-coated cells. Schreiber AD, et al. **J Immunol** 1988 Nov 1;141(9):2959–66

METABOLIC DETOXICATION, DRUG

The role of glutathione transferase in the detoxication and repair of lipid and DNA hydroperoxides. Ketterer B, et al. **Basic Life Sci** 1988;49:669–74 (24 ref.)

Interindividual variation in phase II detoxification enzymes in normal human colon mucosa. Batist G, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4241–3

[The antipyrine test in occupational medicine research—evaluation of individual reproducibility and frequency distribution of half-life] Uhlig H, et al. **Z Gesamte Hyg** 1989 Feb;35(2):82–4 (Eng. Abstr.) **(Ger)**

METABOLIC DISEASES

Renal failure and associated metabolic disturbances. **Crit Care Clin** 1987 Oct;3(4):699–955

Metabolism and nervous system disease: a challenge for our times. Part I. Roberts E. **Metab Brain Dis** 1986 Mar; 1(1):3–23 (61 ref.)

[1st Forum on Lipids. The recognition and treatment of fat metabolism disorders in the prevention of atherosclerosis. Lindauer] **Internist (Berlin)** 1988 Oct;29(10 Suppl):1–12 **(Ger)**

[Advances in gastroenterology 1988. 43d meeting of the German Society of Digestive and Metabolic Diseases with the Section for Gastroenterologic Endoscopy. 21–24 September 1988, Heidelberg. Proceedings] **Z Gastroenterol [Verh]** 1989 Jul;24:1–319 **(Ger)**

[Symptoms related to body fluid physiology—definition, classification, differential diagnosis, and management] **Nippon Rinsho** 1987 Aug;Suppl:573–724 **(Jpn)**

[Metabolic disorders in newborn infants] Doménech E, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:2–7 (16 ref.) **(Spa)**

BLOOD

Clinical and biological correlations related to zinc depletion and lipid peroxide generation in some metabolic and endocrine diseases. Popovici D, et al. **Med Interne** 1989 Jan-Mar;27(1):57–64

CHEMICALLY INDUCED

Drug-induced metabolic disorders and parenteral nutrition in the intensive care unit: a pharmaceutical and metabolic perspective. Driscoll DF. **DICP** 1989 May;23(5):363–71 (95 ref.)

Hypocholesterolemia in patients treated with recombinant interleukin-2: appearance of remnant-like lipoproteins. Wilson DE, et al. **J Clin Oncol** 1989 Oct;7(10):1573–7

Complications of diuretic use. Nader PC, et al. **Semin Nephrol** 1988 Dec;8(4):365–87 (233 ref.)

COMPLICATIONS

Dementia secondary to metabolic and nutritional abnormalities. Gambert SR. **Clin Geriatr Med** 1988 Nov; 4(4):831–9

Late-onset acid maltase deficiency associated with intracranial aneurysm. Matsuoka Y, et al. **J Neurol** 1988 Jul;235(6):371–3

Conditions associated with hepatocellular carcinoma. Lisker-Melman M, et al. **Med Clin North Am** 1989 Jul; 73(4):999–1009 (82 ref.)

Infantile sialic acid storage disease associated with renal disease. Pueschel SM, et al. **Pediatr Neurol** 1988 Jul-Aug; 4(4):207–12 (34 ref.)

[Primary retinitis pigmentosa and associated with metabolic or non-metabolic diseases, hereditary and with neurologic symptomatology diseases] Stanescu-Segal B. **J Fr Ophtalmol** 1988;11(12):887–95 (111 ref.) **(Fre)**

[Abdominal pain in metabolic disorders. Guidelines for patient management for the general surgeon] Schuster HP. **Zentralbl Chir** 1988;113(15):945–51 (5 ref.) (Eng. Abstr.) **(Ger)**

[The stomato-dermatologic manifestations of some internal diseases] Gombos F, et al. **G Clin Med** 1989 Apr; 70(4):243–54 **(Ita)**

[Systemic diseases and pigmentary disorders] Hori Y. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):862–5 (8 ref.) **(Jpn)**

[Prevalence of metabolic disorders in 500 urolithiasis patients in the Argentinian littoral] Ferretti JL, et al. **Arch Esp Urol** 1988 Jul-Aug;41(6):434–40 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Mass spectrometry in diagnosis of metabolic disorders. Jellum E, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1-12):57–62

Eleventh week amniocentesis for prenatal diagnosis of metabolic diseases [letter] Chadefaux B, et al. **Lancet** 1989 Apr 15;1(8642):849

Laboratory detection of metabolic disease. Applegarth DA, et al. **Pediatr Clin North Am** 1989 Feb;36(1):49–65

[Detection of metabolic disorders as a cause of urolithiasis in clinical practice] Kočvara R, et al. **Cas Lek Cesk** 1989 Mar 3;128(10):295–8 (Eng. Abstr.) **(Cze)**

[A case of intermittent hypermethioninemia as the cause of disagreeable body odour] Påby P, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1551–2 (Eng. Abstr.) **(Dan)**

[Nuclear magnetic resonance spectroscopy in medicine] Kauppinen RA. **Duodecim** 1989;105(4):319–22 (18 ref.) **(Fin)**

[Selection and understanding of bedside tests. Metabolic and endocrinologic symptoms] Kondo S. **Rinsho Byori** 1987 Jul;Spec No 72:178–86 **(Jpn)**

DRUG THERAPY

Normalization of short-chain acylcoenzyme A dehydrogenase after riboflavin treatment in a girl with multiple acylcoenzyme A dehydrogenase-deficient myopathy. DiDonato S, et al. **Ann Neurol** 1989 May; 25(5):479–84

In vivo effects of (+)-catechin on iron-overloaded rats. Das NP, et al. **Prog Clin Biol Res** 1988;280:215–8

[Inhibition of intestinal absorption as a principle of the treatment of metabolic diseases] Frol'kis AV. **Sov Med** 1989;(3):57–60 (42 ref.) **(Rus)**

ENZYMOLOGY

Lipoprotein lipase. A multifunctional enzyme relevant to common metabolic diseases. Eckel RH. **N Engl J Med** 1989 Apr 20;320(16):1060–8 (81 ref.)

ETIOLOGY

Lipid storage myopathy due to glutaric aciduria type II: treatment of a potentially fatal myopathy. Turnbull DM, et al. **Dev Med Child Neurol** 1988 Oct;30(5):667–72

Some aspects of tropical endocrine and metabolic pediatrics. Wong HB. **J Singapore Paediatr Soc** 1988;30(1-2):31–45 (41 ref.)

[The urologist facing metabolic problems in anuria caused by obstruction] Gattegno B. **J Urol (Paris)** 1989;95(1):59–60 **(Fre)**

[Metabolic disorders caused by blood transfusions] Schmitt HJ, et al. **Infusionstherapie** 1988 Dec;15(6):254–60 (25 ref.) (Eng. Abstr.) **(Ger)**

[A marked Hegglin syndrome in pheochromocytoma] Nakamura T, et al. **Kokyu To Junkan** 1989 Mar; 37(3):347–50 (Eng. Abstr.) **(Jpn)**

[Excess body weight at a young age as a risk factor for developing metabolic diseases] Popova IuP, et al. **Vopr Pitan** 1989 Jan-Feb;(1):13–5 (Eng. Abstr.) **(Rus)**

GENETICS

Agenesis of the corpus callosum: a marker for inherited metabolic disease? Kolodny EH. **Neurology** 1989 Jun; 39(6):847–8

[Genetic metabolic disorders] Güttler F. **Ugeskr Laeger** 1988 Dec 19;150(51):3223–5 **(Dan)**

PATHOLOGY

Neuropathology in glutaric acidsemia type 1. Chow CW, et al. **Acta Neuropathol (Berl)** 1988;76(6):590–4

A new type of neuronal cytoplasmic inclusion: histological, ultrastructural, and immunocytochemical studies. Lew EO, et al. **Acta Neuropathol (Berl)** 1989;77(6):599–604

Ultrastructural pathology of dermal axons and Schwann cells in lysosomal diseases. Walter S, et al. **Acta Neuropathol (Berl)** 1988;76(5):489–95

Two familial cases of Jordans' anomaly. Ultrastructural studies and the development of fat-containing vacuoles in the neutrophilic series. Adachi H, et al. **Acta Pathol Jpn** 1989 Apr;39(4):254–9

Mitochondria-related encephalomyopathies. Goebel HH, et al. **Neuropathol Appl Neurobiol** 1989 Mar-Apr;15(2):97–119 (116 ref.)

Regarding Berman and Iseri [letter] Dingemans KP. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):577

PHYSIOPATHOLOGY

The effects of metabolic diseases on the cardiovascular system. Gilbert EF. **Am J Cardiovasc Pathol** 1987; 1(2):189–213 (228 ref.)

[Determination of total body fat by tritium dilution: method and relation of the results to body-mass-index (BMI)] Leonhardt W, et al. **Z Med Lab Diagn** 1988;29(5):280–5 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

[Prospects of using new low-calorie products based on a soybean protein isolate in the prevention and treatment of metabolic diseases] Vystotskil VG, et al. **Vopr Pitan** 1989 Jan-Feb;(1):25–8 (Eng. Abstr.) **(Rus)**

THERAPY

Common mistakes in managing metabolic disorders. Elms JJ. **Postgrad Med** 1988 Nov 15;84(7):115–6, 121–2

VETERINARY

Epidemiology of metabolic disorders in the periparturient dairy cow. Erb HN, et al. **J Dairy Sci** 1988 Sep; 71(9):2557–71 (80 ref.)

Epidemiology of metabolic disorders in dairy cattle: association among host characteristics, disease, and production. Gröhn YT, et al. **J Dairy Sci** 1989 Jul; 72(7):1876–85

Metabolic diseases of ruminant livestock. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):213–439

Metabolic profile testing. Ingraham RH, et al. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):391–411 (80 ref.)

Noninfectious diseases, metabolic diseases, toxicities, and neoplastic diseases of South American camelids. Smith JA. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):101–43 (78 ref.)

[The relationship between different blood parameters as criteria for metabolic disorders and the milk cell count in dairy cows] Lotthammer KH, et al. **DTW** 1988 Oct; 95(9):379–84 (Eng. Abstr.) (Ger)

METABOLISM

Control analysis provides a simple means of understanding the control structure of a metabolic pathway [letter] Groen AK, et al. **Biochem J** 1988 Jul 15;253(2):619–21

A simple matrix method for determining flux control coefficients in complex pathways. Barrett J. **Biochim Biophys Acta** 1989 Sep 15;992(3):369–74

Time delays in metabolic control systems. Mizraji E, et al. **Biosystems** 1988;22(1):11–7

The short-term metabolic effects of strenuous exercise in bodybuilders. McKillop G, et al. **Br J Sports Med** 1988 Sep;22(3):107–8

Analysis of metabolic systems with complex slow and fast dynamics. Dvořák I, et al. **Bull Math Biol** 1989;51(2):255–74 (27 ref.)

Metabolic and nutritional aspects of weaning from mechanical ventilation. Benotti PN, et al. **Crit Care Med** 1989 Feb;17(2):181–5 (45 ref.)

Models of quantitative variation of flux in metabolic pathways [published erratum appears in Genetics 1989 Jul;122(3):719] Keightley PD. **Genetics** 1989 Apr; 121(4):869–76

Stabilizing selection and metabolism. Beaumont MA. **Heredity (Edinburgh)** 1988 Dec;61 (Pt 3):433–8

Metabolic and hormonal factors controlling food intake. Scharrer E, et al. **Int J Vitam Nutr Res** 1988;58(2):249–61 (90 ref.)

Molecular biology and nutrition research. Hanson RW, et al. **J Nutr** 1989 Jul;119(7):957–64 (52 ref.)

Control analysis of biochemical pathways: a novel procedure for calculating control coefficients, and an additional theorem for branched pathways. Giersch C. **J Theor Biol** 1988 Oct 21;134(4):451–62

The matrix method of metabolic control analysis: its validity for complex pathway structures. Small JR, et al. **J Theor Biol** 1989 Jan 23;136(2):181–97

A hypercyclic illusion [letter] Szathmáry E. **J Theor Biol** 1988 Oct 21;134(4):561–3

The control of cell metabolism for homogeneous vs. heterogeneous enzyme systems. Welch GR, et al. **J Theor Biol** 1988 Feb 21;130(4):407–22

Metabolic consequences of resistive-type exercise. Dudley GA. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S158–61 (36 ref.)

Computation of the effective body mass for metabolic studies of lean and obese rats. Refinetti R. **Metabolism** 1989 Aug; 38(8):763–6

Anaerobic chemical changes and mechanical output during isometric tetani of rat skeletal muscle in situ. Westra HG, et al. **Pflugers Arch** 1988 Jul;412(1–2):121–7

Recovery and rehabilitation [letter] Woolfson AM. **Phys Ther** 1988 Dec;68(12):1951

Integrated metabolic regulation during acute rest states in man, similarity to fasting: a biochemical hypothesis. Jevning R. **Physiol Behav** 1988;43(6):735–7 (26 ref.)

Modern metabolism as a palimpsest of the RNA world. Benner SA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7054–8

Metabolite specific proton magnetic resonance imaging. Hurd RE, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4402–6

Measuring metabolic fluxes in organs and tissues with single and multiple tracers. Crabtree B, et al. **Proc Nutr Soc** 1988 Sep;47(3):353–64

Metabolic studies using localized magnetic resonance spectroscopy. Gadian DG. **Proc Nutr Soc** 1988 Sep; 47(3):349–52

Mathematical modeling in experimental nutrition. San Diego, California, U.S.A., June 15–16, 1987. Proceedings of the second conference. **Prog Food Nutr Sci** 1988;12(3):211–338

High resolution NMR in vivo. Shulman RG. **Trends Biochem Sci** 1988 Feb;13(2):37–9

[Sexual differentiation of the adipose tissue–muscle ratio. Its metabolic impact] Vague J, et al. **Bull Acad Natl Med** 1989 Mar;173(3):309–18; discussion 318–9 (Eng. Abstr.) (Fre)

[Hemodynamic and metabolic changes during orthotopic liver transplantation] Zadrobilek E, et al. **Anaesthesist** 1988 Nov;37(11):672–9 (Eng. Abstr.) (Ger)

[Endocrino–metabolic response to anesthesia and surgical stress] Sarcinelli L. **Minerva Chir** 1989 Jan 31;44(1–2):233–5 (Ita)

[Frequency and phase correlations of the biorhythms of metabolic indices in mice during their postnatal ontogeny] Weinert D, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):723–6 (Eng. Abstr.) (Rus)

[The role of neutrophils in the regulation of tissue metabolism (review of the literature)] Bakhov NI, et al. **Lab Delo** 1988; (6):3–12 (75 ref.) (Rus)

[Control of molecular transformations in polyenzyme systems: quantitative theory of the regulation of metabolism] Kholodenko BN. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1238–56 (Eng. Abstr.) (Rus)

[Metabolic system of acid–base homeostasis in the human and animal body] Mel'nichuk DA. **Ukr Biokhim Zh** 1989 May–Jun;61(3):3–21 (100 ref.) (Eng. Abstr.) (Rus)

DRUG EFFECTS

Acute effects of nicotine on resting metabolic rate in cigarette smokers. Perkins KA, et al. **Am J Clin Nutr** 1989 Sep; 50(3):545–50

High- and low-dose fentanyl anaesthesia: hormonal and metabolic responses during cholecystectomy. Giesecke K, et al. **Br J Anaesth** 1988 Nov;61(5):575–82

Local analgesic techniques for upper abdominal surgery—endocrine and metabolic effects. Hall GM, et al. **Br J Anaesth** 1988 Dec;61(6):649–51 (15 ref.)

The effect of ouabain on metabolic rate in guinea-pigs: estimation of energy cost of sodium pump activity. Swaminathan R, et al. **Br J Nutr** 1989 May;61(3):467–73

Metabolic effects of acarbose in young healthy men. Couet C, et al. **Eur J Clin Nutr** 1989 Mar;43(3):187–96 (48 ref.)

Early metabolic and endocrine effects of perorally administered beta-adrenoceptor agonists in calves. Blum JW, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):177–87

The influence of oral contraceptives on hormonal and metabolic homeostasis in young adolescents. Smith KW, et al. **J Adolesc Health Care** 1988 Nov;9(6):488–90

Theoretical and methodological bases of experimental simulation of the prepathological state under membrane-damaging effects of environmental factors. Sidorenko GI, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):369–74

Effect of nickel chloride on body temperature and behavioral thermoregulation in the rat. Gordon CJ. **Neurotoxicol Teratol** 1989 May–Jun;11(3):317–20

Breathing pattern and metabolic rate responses of rats exposed to ozone. Mautz WJ, et al. **Respir Physiol** 1989 Apr;76(1):69–77

RADIATION EFFECTS

Normal and diseased states related to interdependence of electromagnetic fields, growth, repair and genetic regulation of metabolic function. Jacobson JI. **Indian J Biochem Biophys** 1988 Oct;25(5):442–6

METABOLISM AND ENDOCRINOLOGY (SPECIALTY) see **ENDOCRINOLOGY**

METABOLISM, INBORN ERRORS

see related

ANEMIA, HEMOLYTIC, CONGENITAL

Inherited defects of mitochondrial fatty acid oxidation. Turnbull DM, et al. **Biochem Soc Trans** 1988 Jun; 16(3):424–7

Inherited disorders of vitamin B12 metabolism. Rosenblatt DS, et al. **Blood Rev** 1987 Sep;1(3):177–82 (20 ref.)

32 years of inherited metabolic diseases. A festschrift to honour Dr R. W. E. Watts upon his retirement. September 5th 1988. **J Inherited Metab Dis** 1989;12(2):181–246

Inherited metabolic disease. 25 years on. Proceedings of the Silver Jubilee meeting of the Society for the Study of Inborn Errors of Metabolism. Sheffield, 22–25 September 1987. **J Inherited Metab Dis** 1988;11 Suppl 1:1–129

[Prolidase deficiency. Apropos of a peculiar case] De Rijcke S, et al. **Ann Dermatol Venereol** 1989;116(4):309–12 (15 ref.) (Fre)

[Lysosomal disorders: present and future] Yabuuchi H. **Nippon Rinsho** 1989 Mar;47(3):705–14 (21 ref.) (Jpn)

BLOOD

Aspartoacylase deficiency and N-acetylaspartic aciduria in patients with Canavan disease [letter] Divry P, et al. **Am J Med Genet** 1989 Apr;32(4):550–1

Metabolic studies of carnitine in a child with propionic acidemia. Kurczynski TW, et al. **Pediatr Res** 1989 Jul; 26(1):63–6

Abnormality of odd-numbered long-chain fatty acids in erythrocyte membrane lipids from patients with disorders of propionate metabolism. Wendel U. **Pediatr Res** 1989 Feb; 25(2):147–50

Newborn screening for sickle cell disease and other hemoglobinopathies. Newborn screening. Guthrie R. **Pediatrics** 1989 May;83(5 Pt 2):836–8

COMPLICATIONS

Disialotransferrin developmental deficiency syndrome and olivopontocerebellar atrophy [letter] Jaeken J. **Arch Dis Child** 1989 May;64(5):764–5

Biotin-responsive multiple carboxylase deficiency and immunodeficiency. Williams ML. **Curr Probl Dermatol** 1989;18:89–92 (13 ref.)

Glucuronyl transferase deficiency and mild hereditary spherocytosis: effect of splenectomy. Eber SW, et al. **Eur J Pediatr** 1988 Aug;147(6):639–42

Persistent hyperkalaemia in vitamin B12 unresponsive methylmalonic acidaemia. Morita J, et al. **J Inherited Metab Dis** 1989;12(1):89–93

Dysmorphic syndromes with demonstrable biochemical abnormalities. Clayton PT, et al. **J Med Genet** 1988 Jul; 25(7):463–72 (55 ref.)

Cardiomyopathy and abnormal carnitine metabolism [letter] Christensen E. **J Pediatr** 1989 May;114(5):903

Metabolic stroke in methylmalonic acidemia [letter] Thompson GN, et al. **J Pediatr** 1989 Sep;115(3):499–500

Biotinidase deficiency associated with severe combined immunodeficiency [letter] Hurvitz H, et al. **Lancet** 1989 Jul 22;2(8656):228–9

Inborn errors of metabolism and unexpected infant deaths [letter] Leonard JV, et al. **Lancet** 1988 Oct 8;2(8615):854

Lactic acidosis in childhood: Part I. Evans OB. **Pediatr Neurol** 1985 Nov–Dec;1(6):325–8 (12 ref.)

Lactic acidosis in childhood: Part II. Evans OB. **Pediatr Neurol** 1986 Jan–Feb;2(1):5–12 (75 ref.)

[Diseases of the heart caused by metabolic defects] Przyrembel H. **Wien Klin Wochenschr** 1989 Jan 6;101(1):1–8 (47 ref.) (Eng. Abstr.) (Ger)

[Metabolic diseases causing acidosis in the neonatal period] Knudtzon J, et al. **Tidsskr Nor Laegeforen** 1989 Aug 20; 109(23):2319–23 (15 ref.) (Eng. Abstr.) (Nor)

[Evaluation of the progress in determining the causes of recurrent attacks of epilepsy in the first year of life] Czochańska J, et al. **Pediatr Pol** 1988 Sep;63(9):593–7 (Pol)

[Lactase deficiency syndrome] Valenkevich LN. **Klin Med (Mosk)** 1989 Apr;67(4):143–50 (Rus)

[Do defects in fatty acid oxidation cause sudden infant death?] Hagenfeldt L, et al. **Lakartidningen** 1989 Apr 26; 86(17):1575–6 (Swe)

DIAGNOSIS

Inborn errors of pterin metabolism. Blau N. **Annu Rev Nutr** 1988;8:185–209 (185 ref.)

New disorders of neurometabolism: when and how to investigate them. Haan EA. **Aust Paediatr J** 1988 Aug; 24(4):217–9

Diagnosis and prenatal diagnosis of lysosomal storage diseases. Shi HP, et al. **Chin Med J [Engl]** 1988 Jun; 101(6):383–7

Long-term follow up of a case of severe congenital chloride diarrhoea. Vermeylen D, et al. **Eur J Pediatr** 1988 Aug; 147(6):649–52

Diagnostic approach to coarse facies. Kagalwala TY, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):861–70

Chromatography for diagnosis of metabolic diseases. Jellum E. **J Chromatogr** 1988 Oct 28;452:435–41

ACP Broadsheet 120: January 1989. Guide to diagnosis of inborn errors of metabolism in district general hospitals. Green A. **J Clin Pathol** 1989 Jan;42(1):84–91

A histochemical principle bearing on correctness of diagnosis in storage diseases. Wolman M. **J Histochem Cytochem** 1989 Feb;37(2):217–22 (52 ref.)

Aqueous humour, a possible material for postmortem methylmalonic acidaemia diagnosis. Coude M, et al. **J Inherited Metab Dis** 1989;12(1):95–6

An unusual neurological disorder with abnormal copper metabolism. Ono S, et al. **J Neurol** 1988 Sep;235(7):397–9 (9 ref.)

Succinic semialdehyde dehydrogenase deficiency associated with combined 4-hydroxybutyric and dicarboxylic aciduria: potential for clinical misdiagnosis based on urinary organic acid profiling. Gibson KM, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):607–10

Pregnancy termination after detection of fetal chromosomal or metabolic abnormalities. Farmakides G, et al. **J Perinatol** 1988 Spring;8(2):101–4

Inborn errors of metabolism in children referred with Reye's syndrome. A changing pattern. Rowe PC, et al. **JAMA** 1988 Dec 2;260(21):3167–70

Metabolic myopathies: evaluation by graded exercise testing. Elliot DL, et al. **Medicine (Baltimore)** 1989 May; 68(3):163–72

Regional brain glucose utilization in adenylosuccinase-deficient patients measured by positron emission tomography [published erratum appears in Pediatr Res 1989 Feb;25(2):118] De Volder AG, et al. **Pediatr Res** 1988 Aug;24(2):238–42

Laboratory detection of aspartylglycosaminuria. Mononen I, et al. **Scand J Clin Lab Invest Suppl** 1988;191:7–11

[Prenatal diagnosis of ornithine transcarbamylase deficiency using a DNA marker analysis] Schwartz M, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2641–3 (Eng. Abstr.) (Dan)

[Hyperammonemia in children] Skovby F. **Ugeskr Laeger** 1988 Oct 31;150(44):2638–41 (Eng. Abstr.) (Dan)

[Biological diagnosis of hereditary metabolic diseases. From selective screening to the mutant-cell bank] Divry P, et al. **Ann Biol Clin (Paris)** 1988;46(6):381–6 (13 ref.) (Eng. Abstr.) (Fre)

[Prenatal diagnosis of hereditary metabolic diseases in 1987] Poenaru L. **Ann Biol Clin (Paris)** 1988;46(7):451–3 (Eng. Abstr.) (Fre)

[The phenylpropionate loading test and medium-chain acyl CoA dehydrogenase deficiency] De Parscau L, et al. **Arch Fr Pediatr** 1989 Apr;46(4):285–6 (Fre)

[Metabolic disorders—from biochemistry to DNA diagnosis]

Ueda K. **Rinsho Byori** 1988 May;36(5):535–7 (7 ref.) (Jpn)

[Use of DNA restriction fragment length polymorphisms in the diagnosis of genetically determined diseases] Ziętkiewicz E, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):269–78 (40 ref.) (Pol)

[Genetically determined metabolic disorders with cerebellar symptoms in children: diagnostic and therapeutic problems] Michałowicz R, et al. **Postepy Hig Med Dosw** 1988 Jan–Feb;42(1):94–114 (77 ref.) (Eng. Abstr.) (Pol)

[Hereditary alpha 1-antitrypsin deficiency: its clinical manifestations, methods of diagnosis and prospects of the treatment] Samil'chuk EI, et al. **Ter Arkh** 1988;60(7):141–4 (55 ref.) (Rus)

[Prenatal diagnosis of hereditary lysosomal diseases] Mirenburg TV, et al. **Vopr Med Khim** 1988 Jul–Aug; 34(4):41–6 (Eng. Abstr.) (Rus)

[Role of the biochemist-geneticist in genetic counseling] Tamparillas M. **An Esp Pediatr** 1988 Sep;29 Suppl 32:74–8 (Spa)

DIET THERAPY

Dietary restriction and methylmalonicaciduria [letter] Bain MD, et al. **Lancet** 1989 Aug 5;2(8658):337

DRUG THERAPY

Excretion of hippuric acid during sodium benzoate therapy in patients with hyperglycinaemia or hyperammonaemia. Barshop BA, et al. **J Inherited Metab Dis** 1989;12(1):72–9

Attempt at therapy in sulphite oxidase deficiency. Tardy P, et al. **J Inherited Metab Dis** 1989;12(1):94–5

Vigabatrin in GABA metabolism disorders [letter] Jaeken J, et al. **Lancet** 1989 May 13;1(8646):1074

ENZYMOLOGY

Unequal synthesis and differential degradation of propionyl CoA carboxylase subunits in cells from normal and propionic acidemia patients. Ohura T, et al. **Am J Hum Genet** 1989 Jul;45(1):33–40

Multiple sulfatase deficiency with a novel biochemical presentation. Constantopoulos G. **Eur J Pediatr** 1988 Aug; 147(6):634–8

Delta 4–3-oxosteroid 5 beta-reductase deficiency described in identical twins with neonatal hepatitis. A new inborn error in bile acid synthesis. Setchell KD, et al. **J Clin Invest** 1988 Dec;82(6):2148–57

Prolinase activity in prolidase-deficient fibroblasts. Miech G, et al. **J Inherited Metab Dis** 1988;11(3):266–9

Sudden infant death and long-chain 3-hydroxyacyl-CoA dehydrogenase [letter] Wanders RJ, et al. **Lancet** 1989 Jul 1;2(8653):52–3

Levels of metallic mercury and mercuric ion in the venous and arterial bloods of normal and acatalasemic mice following exposure to mercury vapor. Aikoh H, et al. **Physiol Chem Phys Med NMR** 1988;20(3):177–81

Diminished synthesis of catalase due to the decrease in catalase mRNA in Japanese-type acatalasemia. Wen JK, et al. **Physiol Chem Phys Med NMR** 1988;20(3):171–6

[Neuroepidemiology of metabolism inborn errors: diseases of lysosomal origin] Chabás A. **An Esp Pediatr** 1988 Sep; 29 Suppl 33:48–51 (8 ref.) (Spa)

EPIDEMIOLOGY

Studies on inborn errors of metabolism in Norway. Norum KR. **Arteriosclerosis** 1989 Jan–Feb;9(1 Suppl):I164–8

GENETICS

Nonketotic hyperglycinemia in a patient with the 9p– syndrome. Burton BK, et al. **Am J Med Genet** 1989 Apr; 32(4):504–5

Peroxisomal disorders: clinical commentary and future prospects. Wilson GN, et al. **Am J Med Genet** 1988 Jul; 30(3):771–92 (127 ref.)

Physiological processes revealed through an analysis of inborn errors. Gargus JJ, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):F1047–58 (71 ref.)

Osteogenesis imperfecta—a model for the analysis of inborn errors of connective tissue. Ramirez F. **Basic Life Sci** 1988; 48:45–51 (25 ref.)

Neuropsychopharmacology and genetics [editorial] Tu JB. **Biol Psychiatry** 1988 Sep;24(5):493–4

A non-enzymatic method for identification of citrullinemia heterozygotes [letter] Clemens PC, et al. **Clin Genet** 1989 Jun;35(6):468–9

Peptiduria presumably caused by aminopeptidase-P deficiency. A new inborn error of metabolism. Blau N, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:240–2

Trimethylaminuria: the detection of carriers using a trimethylamine load test. al-Waiz M, et al. **J Inherited Metab Dis** 1989;12(1):80–5

Sjögren-Larsson syndrome: inherited defect in the fatty alcohol cycle. Rizzo WB, et al. **J Pediatr** 1989 Aug; 115(2):228–34

Molecular heterogeneity in lysosomal storage diseases. Alpha-fucosidase and N-acetyl-beta-D-hexosaminidase deficiency variants. Dawson G, et al. **Neurochem Pathol** 1988 Jun;8(3):203–17

Nonketotic hyperglycinemia: studies in an atypical variant. Singer HS, et al. **Neurology** 1989 Feb;39(2 Pt 1):286–8

Infantile free sialuria without lysosomal storage. Roesel RA, et al. **Pediatr Neurol** 1987 Jan–Feb;3(1):40–3

[Prenatal biochemical diagnosis in genetically-induced metabolic diseases] Machill G, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1133–7 (Ger)

METABOLISM

Peroxisomal disorders. Biochemical and clinical diagnostic considerations. Singh I, et al. **Am J Dis Child** 1988 Dec; 142(12):1297–301 (53 ref.)

Is the metabolism of alfentanil subject to debrisoquine polymorphism? A study using human liver microsomes. Lavrijsen KL, et al. **Anesthesiology** 1988 Oct;69(4):535–40

Mitochondrial function in normal and genetically altered cells and tissues. Chance B, et al. **Ann N Y Acad Sci** 1988; 550:360–73

Genetic defects of lysosomal function in animals. Patel SC, et al. **Annu Rev Nutr** 1989;9:395–416 (129 ref.)

Disialotransferrin developmental deficiency syndrome. Kristiansson B, et al. **Arch Dis Child** 1989 Jan;64(1):71–6

Mitochondrial myopathies. Schapira AH. **BMJ** 1989 Apr 29; 298(6681):1127–8 (17 ref.)

The cerebral metabolism of glucose and oxygen measured with positron tomography in patients with mitochondrial diseases. Frackowiak RS, et al. **Brain** 1988 Oct;111 (Pt 5):1009–24

New variant of hyperphenylalaninaemia with excretion of 7-substituted pterins [letter] Blau N, et al. **Eur J Pediatr** 1988 Nov;148(2):176

Hereditary defect in carnitine membrane transport is expressed in skin fibroblasts [letter] Eriksson BO, et al. **Eur J Pediatr** 1988 Aug;147(6):662–3

Adenylosuccinase deficiency: an inborn error of purine nucleotide synthesis. Jaeken J, et al. **Eur J Pediatr** 1988 Nov;148(2):126–31

Animal models for lysosomal storage diseases: their past and future contribution. Alroy J, et al. **Hum Pathol** 1989 Sep; 20(9):823–6 (30 ref.)

A patient with mevalonic aciduria presenting with hepatosplenomegaly, congenital anaemia, thrombocytopenia and leukocytosis. de Klerk JB, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:233–6

Mevalonic aciduria: pathobiochemical effects of mevalonate kinase deficiency on cholesterol metabolism in intact fibroblasts. Hoffmann G, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:229–32

Abnormal fatty acid composition of biotin-responsive multiple carboxylase deficiency fibroblasts. Packman S, et al. **J Inherited Metab Dis** 1989;12(1):47–57

Comparison between the formation and the oxidation of dicarboxylylcarnitine esters in rat liver and skeletal muscle: possible implications for human inborn disorders of mitochondrial beta-oxidation. Vamecq J, et al. **J Inherited Metab Dis** 1989;12(1):58–63

Increased glucose transport by human fibroblasts with a heritable defect in insulin binding. Longo N, et al. **Metabolism** 1989 Jul;38(7):690–7

Effect of interesterified dietary fat mixtures on various lipid indices and liver metal content of rats in fat-metabolism disturbance. Zsinka AJ, et al. **Nahrung** 1988;32(9):815–21

Muscle coenzyme Q deficiency in familial mitochondrial encephalomyopathy. Ogasahara S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2379–82

Inborn errors of metabolism associated with cataracts. Cantani A, et al. **Riv Eur Sci Med Farmacol** 1987 Dec; 9(4):391–5 (15 ref.)

PATHOLOGY

Striatal degeneration in glutaric acidaemia type II. Chow CW, et al. **Acta Neuropathol (Berl)** 1989;77(5):554–6

Glutaric acidemia type II. Comparison of pathologic features in two infants. Colevas AD, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1133–9

The contribution of pathology to the study of storage disorders. Martin JJ, et al. **Pathol Res Pract** 1988 Aug; 183(4):375–85

[Mitochondrial defects] Sengers RC, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):308–11 (13 ref.) (Eng. Abstr.) (Ger)

[A case of mitochondrial enzymopathy] Parafiniuk W, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):260–3 (Eng. Abstr.) (Pol)

PREVENTION & CONTROL

Screening of congenital hypothyroidism, phenylketonuria, galactosemia, homocystinuria, and maple syrup urine disease in moderate to severe mentally retarded Chinese children. Hsiao KJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):18–22

[21 years "Austrian Program for Early Detection of Congenital Metabolic Abnormalities." Did the screening programs also contribute scientific knowledge?] Thalhammer O. **Wien Klin Wochenschr** 1988 Oct 7; 100(19):641–5 (10 ref.) (Eng. Abstr.) (Ger)

[Trends in research on hereditary pathology in pediatrics] Bochkov NP, et al. **Pediatriia** 1989;(5):5–11 (Rus)

SURGERY

Outcome of displacement bone marrow transplantation for inborn errors of metabolism. Hobbs JR. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):462–71 (47 ref.)

Bone marrow transplantation for genetic and metabolic disorders. Schaison G, et al. **Nouv Rev Fr Hematol** 1989; 31(2):119–23 (38 ref.)

THERAPY

We mean well: treatment of Mendelian disease. Scriver CR. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):472–80 (51 ref.)

Outcome of the treatment of inborn errors of metabolism. Watts RW. **Acta Paediatr Jpn Overseas Ed** 1988 Aug; 30(4):385–9 (24 ref.)

Replacement therapy for inherited enzyme deficiencies. Farrow BR. **Cornell Vet** 1989 Jul;79(3):211–6 (44 ref.)

[Gene therapy] Pettersson R, et al. **Duodecim** 1988; 104(22):1891–901 (45 ref.) (Fin)

URINE

Glutaric aciduria type II: review of the phenotype and report of an unusual glomerulopathy. Wilson GN, et al. **Am J Med Genet** 1989 Mar;32(3):395–401 (19 ref.)

Measurement of urinary free and acylcarnitines: quantitative acylcarnitine profiling in normal humans and in several patients with metabolic errors. Montgomery JA, et al. **Anal Biochem** 1989 Jan;176(1):85–95

Urinary organic acid excretion by babies born before 33 weeks of gestation. Walker V, et al. **Clin Chem** 1989 Jul; 35(7):1460–6

A simple concept for the screening of amino- and organic acidurias. Stöckler S, et al. **J Inherited Metab Dis** 1988; 11(4):432–3

VETERINARY

The lesions of an ovine lysosomal storage disease. Initial characterization. Murnane RD, et al. **Am J Pathol** 1989 Feb;134(2):263–70

Research on genetic diseases: reciprocal benefits to animals and man. Patterson DF, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1131–44 (94 ref.)

METABOLITE MARKERS, NEOPLASM see **TUMOR MARKERS, BIOLOGICAL**

METACARPOPHALANGEAL JOINT see under **FINGER JOINT**

METACARPUS

Aggressive osteoblastoma. A case previously reported as a recurrent osteoid osteoma. Morton KS, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):428–31

Osteochondrosis of the fourth metacarpal head after closed trauma. Smith RS, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):920–2

Locking of a metacarpo-phalangeal joint caused by a haemangioma of the volar plate. Fernandez GN. **J Hand Surg [Br]** 1988 Aug;13(3):323–4

A comparison of methods for proximal palmar metacarpal analgesia in horses. Ford TS, et al. **Vet Surg** 1989 Mar–Apr; 18(2):146–50

ABNORMALITIES

Acrodysostosis: report of a 13-year-old boy with review of literature and metacarpophalangeal pattern profile analysis. Butler MG, et al. **Am J Med Genet** 1988 Aug;30(4):971–80 (31 ref.)

Metacarpophalangeal pattern profile analysis in a patient with ring (9)/del(9p) mosaicism [letter] Leung AK, et al. **Am J Med Genet** 1988 Oct;31(2):481–2

Sensorineural deafness, hypospadias, and synostosis of metacarpals and metatarsals 4 and 5: a previously apparently undescribed MCA/MR syndrome. Pfeiffer RA, et al. **Am J Med Genet** 1988 Sep;31(1):5–10

ANATOMY & HISTOLOGY

Communications and boundaries of the middle carpal and carpometacarpal joints in horses. Ford TS, et al. **Am J Vet Res** 1988 Dec;49(12):2161–4

The metacarpal index in homozygous sickle-cell anaemia [letter] Calder JF. **Br J Radiol** 1988 Nov;61(731):1089

The ventral metacarpo- and metatarso-phalangeal sesamoid bones: comparative anatomy and evolutionary aspects. Le Minor JM. **Gegenbaurs Morphol Jahrb** 1988;134(5):693–731

Some geometric properties of the third metacarpal bone: a comparison between the thoroughbred and standardbred racehorse. Nunamaker DM, et al. **J Biomech** 1989; 22(2):129–34

Radiographic measurements of metacarpophalangeal lengths in Japanese children. Matsuura S, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):159–68

Combined 2.25 MHz ultrasound velocity and bone mineral density measurements in the equine metacarpus and their in vivo applications. McCartney RN, et al. **Med Biol Eng Comput** 1987 Nov;25(6):620–6

An application of the image analyzer to the soft radiogram of the third metacarpus in horses. Yoshihara T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):184–6

BLOOD SUPPLY

Microvasculature of the foal metacarpus. Marais J, et al.

Anat Histol Embryol 1988 Dec;17(4):343–8
Dorsal vascular network of the first web space. Anatomical bases of the kite flap. Dautel G, et al.
Surg Radiol Anat 1989;11(2):109–13
[Anatomic variations of the vascular network of the first dorsal commissure. Uses of the kite flap] Dautel G, et al.
Ann Chir Main 1989;8(1):53–8; discussion 59 (Eng. Abstr.) (Fre)

EMBRYOLOGY

Relative growth of the human metacarpals in the prenatal period: anatomic basis of preventive surgery for congenital deformities of the hand. de Barros RS, et al.
Surg Radiol Anat 1989;11(1):49–52

GROWTH & DEVELOPMENT

Studies on cortical index of the second metacarpal bone from 6 to 9th life decade. Skawina A, et al.
Folia Morphol (Warsz) 1987;46(1–2):9–15

INJURIES

Occult fractures of the carpals and metacarpals: demonstration by CT. Hindman BW, et al.
AJR Am J Roentgenol 1989 Sep;153(3):529–32
Ipsilateral carpal, metacarpal, and ankle fractures resulting from an attempted basketball slam-dunk. A case report. McClelland SJ, et al. Am J Sports Med 1988 Sep–Oct; 16(5):544–6
Stress fracture of the metacarpal in a adolescent tennis player. Murakami Y. Am J Sports Med 1988 Jul–Aug;16(4):419–20
Metacarpal fractures in the athlete. Rettig AC, et al.
Am J Sports Med 1989 Jul–Aug;17(4):567–72
The boxer's fracture: a prospective study of functional recovery [letter] Arch Emerg Med 1989 Jun;6(2):158–9
The boxers' fracture: a prospective study of functional recovery. Porter ML, et al. Arch Emerg Med 1988 Dec; 5(4):212–5
'Punch' actinomycosis causing osteomyelitis of the hand. Blinkhorn RJ Jr, et al. Arch Intern Med 1988 Dec; 148(12):2668–70 (14 ref.)
Stabilization of fractures in the hand and wrist with traumatic soft tissue and bone loss. Freeland AE, et al.
Hand Clin 1988 Aug;4(3):425–36 (35 ref.)
Management of malunited fractures of the metacarpal and phalangeal shafts. Seitz WH Jr, et al. Hand Clin 1988 Aug; 4(3):529–36 (13 ref.)
Epiphyseal fracture of the metacarpal head. Prosser AJ, et al. Injury 1988 Jan;19(1):34–5
Management of a severely comminuted fracture of the third metacarpal bone in a horse. Orsini JA, et al.
J Am Vet Med Assoc 1988 Sep 15;193(6):683–6
Necrosis of the skin over the metacarpal as a result of functional fracture-bracing. A report of three cases. Geiger KR, et al. J Bone Joint Surg [Am] 1989 Sep;71(8):1199–202
Composite wiring of metacarpal and phalangeal fractures. Greene TL, et al. J Hand Surg [Am] 1989 Jul;14(4):665–9
Metacarpal fracture fixation with interosseous nylon suture in a patient with metal allergies. Haas SB, et al.
J Hand Surg [Am] 1989 Jan;14(1):107–10
Multiple carpo-metacarpal dislocations. de Beer JD, et al. J Hand Surg [Br] 1989 Feb;14(1):105–8
Fractures of the fifth metacarpal neck: is reduction or immobilisation necessary? Ford DJ, et al.
J Hand Surg [Br] 1989 May;14(2):165–7
Intra-articular fracture of the metacarpal head of the locked index finger due to forced passive extension. Inoue G, et al. J Hand Surg [Br] 1988 Aug;13(3):320–2
Comminuted fractures of the base of the first metacarpal treated by distraction-external fixation. Schuind F, et al. J Orthop Trauma 1988;2(4):314–21
Long incomplete longitudinal fractures of the third metacarpal and metatarsal bone in horses. Barr AR, et al. Vet Rec 1989 Jun 3;124(22):580–2
Surgical management of proximal splint bone fractures in the horse. Peterson PR, et al. Vet Surg 1987 Sep–Oct; 16(5):367–72
Incomplete longitudinal fracture of the proximal palmar cortex of the third metacarpal bone in horses. Ross MW, et al. Vet Surg 1988 Mar–Apr;17(2):82–6
[Alpine skiing—a hand injury despite safety hand grips] Hellberg S. Ugeskr Laeger 1989 Jan 9;151(2):96 (Eng. Abstr.) (Dan)
[Fractures of the base of the first metacarpus] Obry C, et al. Ann Chir 1989;43(5):380–7 (Eng. Abstr.) (Fre)
[Orthopedic surgery in small carnivora. Surgical treatment of fracture of the lower part of the forelimb and metacarpus by single and simultaneous osteosynthesis] Pichard R.
Chirurgie 1988;114(3):265–7 (Fre)
[The value of compression screws in Bennett fractures. Apropos of a series of 44 case reports] Tourne Y, et al. Rev Chir Orthop 1988;74 Suppl 2:153–5 (Fre)
[Treatment possibilities in new and chronic Bennett's fracture] Dein W, et al. Beitr Orthop Traumatol 1989 May; 36(5):217–22 (Eng. Abstr.) (Ger)
[Ergotherapy in finger and middle hand fractures] Wolf M, et al. Beitr Orthop Traumatol 1989 Jun;36(6):274–8 (Eng. Abstr.) (Ger)
[Simultaneous dorsal carpometacarpal dislocation II–V with compartment syndrome] Amon K. Unfallchirurg 1988 Oct; 91(10):469–72 (Eng. Abstr.) (Ger)

METABOLISM

[Mechanism of the decrease in metacarpal bone mineral content due to oophorectomy] Ohta H, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Mar; 41(3):333–40 (Eng. Abstr.) (Jpn)

PATHOLOGY

Metacarpal index [letter] Sood V, et al.
J Assoc Physicians India 1988 Apr;36(4):296
[Diabetic osteopathy (an analysis of 37 cases)] Wang XY. Chung Hua Fang She Hsueh Tsa Chih 1989 Feb;23(1):31–4 (Eng. Abstr.) (Chi)
[Changes in selected parameters of calcium–phosphorus metabolism, the metacarpal index and results of the calcitonic test in patients with diabetes mellitus type 1] Gasińska T, et al. Endokrynol Pol 1988;39(3):155–63 (Eng. Abstr.) (Pol)

PHYSIOLOGY

Kinematic analysis of the instant centers of rotation of the equine metacarpophalangeal joint. Colahan P, et al.
Am J Vet Res 1988 Sep;49(9):1560–5

RADIOGRAPHY

Radiological changes in rheumatoid arthritis: measurement of area of juxta-articular bone as outcome event in clinical therapeutic trials of antirheumatic drugs. Buchanan HM, et al. Clin Rheumatol 1988 Dec;7(4):481–5
Osteoclastoma of metacarpal bone (a case report). Mishra GK, et al. Indian J Cancer 1987 Dec;24(4):191–5 (19 ref.)
[Exo- and endomarginal sclerosis of the metacarpal heads as a special reaction in chronic polyarthritis] Fischer E. Z Rheumatol 1988 Jul–Aug;47(4):209–12 (Eng. Abstr.) (Ger)

SURGERY

Effect of a glucocorticoid on the post-operative course following experimental orthopaedic surgery in dogs. Mbugua SW, et al. Acta Vet Scand 1988;29(1):43–9
Osteotomy of the metacarpals and phalanges stabilized by AO plates and screws. Lucas GL, et al.
Ann Chir Main 1989;8(1):30–8 (Eng, Fre)
Trapeziometacarpal stabilisation in arthrosis. Brunelli G, et al. Ital J Orthop Traumatol 1988 Sep;14(3):363–8
Giant cell tumor of metacarpal treated by cryosurgery. Meals RA, et al. J Hand Surg [Am] 1989 Jan;14(1):130–4
Aneurysmal bone cyst in the metacarpal of a child: a case report. Kotwal PP, et al. J Hand Surg [Br] 1988 Nov; 13(4):479–80
En bloc excision and reconstruction with a fibular autograft of giant-cell tumour of the metacarpal—a case report. Sanjay BK, et al. J Hand Surg [Br] 1989 May;14(2):226–8
A modified Cloward's technique for arthrodesis of the normal metacarpophalangeal joint in the horse. Crawley GR, et al. Vet Surg 1988 May–Jun;17(3):117–27
[Repair of burnt metacarpal and phalanges with free greater omentum grafting (a case report)] Sun YH, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Mar;1(1):43–4 (Eng. Abstr.) (Chi)
[Intermediate term results of treatment with the Francobal endoprosthesis in osteoarthritis] Helbig B, et al.
Handchir Mikrochir Plast Chir 1988 Nov;20(6):301–5 (Eng. Abstr.) (Ger)
[Giant cell tumor with regional lymph node metastasis] Scharfe U, et al. Zentralbl Chir 1988;113(22):1496–500 (Ger)

METAETHICS see **ETHICS**

METAGONIMIASIS see **TREMATODE INFECTIONS**

METAGONIMUS see **HETEROPHYIDAE**

METAL METABOLISM, INBORN ERRORS

Acrodermatitis enteropathica. Walling A, et al.
Am Fam Physician 1989 Feb;39(2):151–4

COMPLICATIONS

[A disorder with low serum copper level, dementia, dysarthria, gait disturbance and involuntary movements] Ono S, et al. Rinsho Shinkeigaku 1988 Apr;28(4):433–6 (Eng. Abstr.) (Jpn)

METALLO-ORGANIC COMPOUNDS see **ORGANOMETALLIC COMPOUNDS**

METALLOPORPHYRINS

Photodissociation of laser-desorbed ions as a structure determination tool. Nuwaysir LM, et al. Anal Chem 1989 Apr 1;61(7):689–94
Electropolymerized cobalt tetrakis(o-aminophenyl)porphyrin film mediated enzyme electrode for amperometric determination of glucose. Oyama N, et al. Anal Chem 1988 Nov 15;60(22):2534–6
Quantitative footprinting analysis using a DNA-cleaving metalloporphyrin complex. Dabrowiak JC, et al.
Biochemistry 1989 Apr 18;28(8):3314–22
Porphyrin and metalloporphyrin binding to DNA polymers: rate and equilibrium binding studies. Strickland JA, et al. Biochemistry 1988 Nov 29;27(24):8870–8
Interactions of water-soluble metalloporphyrins with nucleic acids studied by resonance Raman spectroscopy. Schneider JH, et al. Nucleic Acids Res 1988 Nov 11;16(21):10323–38
Photoinduced electron transfer across lipid bilayers containing magnesium octaethylporphyrin. Ilani A, et al. Photochem Photobiol 1989 May;49(5):673–9
[Optimization of biomimetic oxidation reactions achieved with the aid of an iodosylbenzene and meso-tetraphenylporphinatoiron (III): application to antergan] Pautet F, et al. Pharm Acta Helv 1988; 63(4–5):140–4 (Eng. Abstr.) (Fre)

ANALYSIS

[Biomimetic oxidation of iodosylbenzyl sulfides in the presence of synthetic metalloporphyrins] Pautet F, et al. Pharmazie 1988 Jun;43(6):437–8 (Fre)
[Phosphorescent immunoanalysis. Metalloporphyrins—an alternative to rare earth fluorescent measurements?] Savitskiĭ AP, et al. Dokl Akad Nauk SSSR 1989; 304(4):1005–8 (Rus)

METABOLISM

Magnesium monoperoxophtalate: an efficient single oxygen atom donor in DNA cleavage catalyzed by metalloporphyrin. Pratviel G, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):1212–8
Allosteric behavior of artificial compounds. Tabushi I, et al. Biomater Artif Cells Artif Organs 1988;16(1–3):321–9
Intercalation of tetracationic metalloporphyrins and related compounds into DNA. Dougherty G. J Inorg Biochem 1988 Oct;34(2):95–103
Interaction of porphyrins and metalloporphyrins with nucleic acids. Gibbs EJ, et al. Semin Hematol 1989 Apr;26(2):77–85 (52 ref.)

PHARMACOKINETICS

Pharmacokinetics of tin-mesoporphyrin in man and the effects of tin-chelated porphyrins on hyperexcretion of heme pathway precursors in patients with acute inducible porphyria. Galbraith RA, et al. Hepatology 1989 Jun; 9(6):882–8

PHARMACOLOGY

Properties of human kidney heme oxygenase: inhibition by synthetic heme analogues and metalloporphyrins. Martasek P, et al. Biochem Biophys Res Commun 1988 Dec 15; 157(2):480–7
Characterization of cytochrome b5 reconstituted with a ferric chlorin and a ferric oxochlorin. Martinis SA, et al.
Biochemistry 1989 Jan 24;28(2):879–84
Potentiation of radiation-induced cell kill by synthetic metalloporphyrins. O'Hara JA, et al.
Int J Radiat Oncol Biol Phys 1989 Apr;16(4):1049–52
Suppression of carbon monoxide excretion by zinc mesoporphyrin in adult Wistar rats: evidence for potent in vivo inhibition of bilirubin production. Hamori CJ, et al. Res Commun Chem Pathol Pharmacol 1988 Oct; 62(1):41–8
[Tetraphenylporphyrin-Sn4+ induction of cytochrome P-450] Golovenko NIa, et al. Biull Eksp Biol Med 1989 Mar;107(3):291–4 (Eng. Abstr.) (Rus)
[Inhibition of cytochrome P-450-dependent enzymes in rat liver microsomes by tetraphenylporphyrin and its metal complexes] Galkin BN, et al. Vopr Med Khim 1988 Sep–Oct;34(5):91–3 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Heme-dependent activation of soluble guanylate cyclase by nitric oxide: regulation of enzyme activity by porphyrins and metalloporphyrins. Ignarro LJ. Semin Hematol 1989 Jan;26(1):63–76 (41 ref.)

RADIATION EFFECTS

Laser flash photolysis of purpurins: novel potential photosensitizers of interest in photodynamic therapy. Borland CF, et al. J Photochem Photobiol [B] 1988 Dec; 2(4):427–34

THERAPEUTIC USE

The use of metalloporphyrins for the chemoprevention of neonatal jaundice. Stevenson DK, et al.
Am J Dis Child 1989 Mar;143(3):353–6 (37 ref.)
Tin-protoporphyrin in the management of children with Crigler-Najjar disease. Rubaltelli FF, et al. Pediatrics 1989 Oct;84(4):728–31

TOXICITY

Uptake and DNA photodamage induced in plant cells in vivo by two cationic porphyrins. Villanueva A, et al.
Mutagenesis 1989 Mar;4(2):157–9

METALLOPROTEASES see **METALLOPROTEINASES**

METALLOPROTEINASES

The structure of rat mast cell protease II at 1.9-A resolution. Remington SJ, et al. **Biochemistry** 1988 Oct 18; 27(21):8097-105

A unique signature identifies a family of zinc-dependent metallopeptidases. Jongeneel CV, et al. **FEBS Lett** 1989 Jan 2;242(2):211-4

From tadpole collagenase to a family of matrix metalloproteinases. Birkedal-Hansen H. **J Oral Pathol** 1988 Nov;17(9-10):445-51 (102 ref.)

ANALYSIS

Immunolocalization of matrix metalloproteinase 3 (stromelysin) in rheumatoid synovioblasts (B cells): correlation with rheumatoid arthritis. Okada Y, et al. **Ann Rheum Dis** 1989 Aug;48(8):645-53

Evidence that hatching enzyme of the sea urchin Strongylocentrotus purpuratus is a chymotrypsin-like protease. Post LL, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1200-9

Primary structure of H2-proteinase, a non-hemorrhagic metalloproteinase, isolated from the venom of the habu snake, Trimeresurus flavoviridis. Takeya H, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):151-7

Evidence for metalloproteinase and metalloproteinase inhibitor imbalance in human osteoarthritic cartilage. Dean DD, et al. **J Clin Invest** 1989 Aug;84(2):678-85

ANTAGONISTS & INHIBITORS

Inhibitors of metalloendoproteases block spiculogenesis in sea urchin primary mesenchyme cells. Roe JL, et al. **Exp Cell Res** 1989 Apr;181(2):542-50

Regional localization of the TIMP gene on the human X chromosome. Extension of a conserved synteny and linkage group on proximal Xp. Willard HF, et al. **Hum Genet** 1989 Feb;81(3):234-8

Inhibition and resumption of processing of the staphylokinase in some Escherichia coli prlA suppressor mutants. Iino T, et al. **J Biol Chem** 1988 Dec 15;263(35):19077-82

Metalloendoprotease inhibitors which block the differentiation of L6 myoblasts inhibit insulin degradation by the endogenous insulin-degrading enzyme. Kayalar C, et al. **J Biol Chem** 1989 May 25;264(15):8928-34

Metalloendoprotease inhibitors block protein synthesis, intracellular transport, and endocytosis in hepatoma cells. Strous GJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18197-204

Effects of tumor necrosis factor and epidermal growth factor on cell morphology, cell surface receptors, and the production of tissue inhibitor of metalloproteinases and IL-6 in human microvascular endothelial cells. Mawatari M, et al. **J Immunol** 1989 Sep 1;143(5):1619-27

Kinetic evidence for cooperative binding of two ortho-phenanthroline molecules to astacus protease during metal removal. Wolz RL, et al. **J Inorg Biochem** 1989 Mar; 35(3):157-67

Metalloendoprotease inhibitors block fast axonal transport. Hammerschlag R, et al. **J Neurochem** 1989 Jan;52(1):268-73

SCH 39370, a neutral metalloendopeptidase inhibitor, potentiates biological responses to atrial natriuretic factor and lowers blood pressure in desoxycorticosterone acetate-sodium hypertensive rats. Sybertz EJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):624-31

BIOSYNTHESIS

Human and rat malignant-tumor-associated mRNAs encode stromelysin-like metalloproteinases. Nicholson R, et al. **Biochemistry** 1989 Jun 13;28(12):5195-203

Genes for extracellular-matrix-degrading metalloproteinases and their inhibitor, TIMP, are expressed during early mammalian development. Brenner CA, et al. **Genes Dev** 1989 Jun;3(6):848-59

Biosynthesis of Astacus protease, a digestive enzyme from crayfish. Vogt G, et al. **Histochemistry** 1989;91(5):373-81

BLOOD

Cysteine and metalloproteinase activities in serum of Duchenne muscular dystrophic genotypes. Sohar I, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:277-9

Identification of a monocyte specific pre-interleukin 1 beta convertase activity. Kostura MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5227-31

GENETICS

Molecular cloning and amino acid sequence of rat kidney aminopeptidase M: a member of a super family of zinc-metallohydrolases. Malfroy B, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):236-41

Pump-1 cDNA codes for a protein with characteristics similar to those of classical collagenase family members. Quantin B, et al. **Biochemistry** 1989 Jun 27;28(13):5327-34

Import of proteins into yeast mitochondria: the nuclear MAS2 gene encodes a component of the processing protease that is homologous to the MAS1-encoded subunit. Jensen RE, et al. **EMBO J** 1988 Dec 1;7(12):3863-71

Import of proteins into yeast mitochondria: the purified matrix processing protease contains two subunits which are encoded by the nuclear MAS1 and MAS2 genes. Yang M, et al. **EMBO J** 1988 Dec 1;7(12):3857-62

Expression and secretion of interferon-alpha 1 by Streptomyces lividans: use of staphylokinase signals and amplification of a neo gene. Noack D, et al. **Gene** 1988 Aug 15;68(1):53-62

Distinct mutation sites in prlA suppressor mutant strains of Escherichia coli respond either to suppression of signal peptide mutations or to blockage of staphylokinase processing. Sako T, et al. **J Bacteriol** 1988 Nov; 170(11):5389-91

Netropsin increases formation of mRNA coding for a neutral metalloproteinase in Bacillus megaterium. Chaloupka J, et al. **J Basic Microbiol** 1988;28(1-2):11-6

Protease secretion by Erwinia chrysanthemi. Proteases B and C are synthesized and secreted as zymogens without a signal peptide. Delepelaire P, et al. **J Biol Chem** 1989 May 25;264(15):9083-9

Transcriptional regulation of human stromelysin. Quinones S, et al. **J Biol Chem** 1989 May 15;264(14):8339-44

Molecular cloning and sequencing of the cDNA for human membrane-bound carboxypeptidase M. Comparison with carboxypeptidases A, B, H, and N. Tan F, et al. **J Biol Chem** 1989 Aug 5;264(22):13165-70

Heat shock of rabbit synovial fibroblasts increases expression of mRNAs for two metalloproteinases, collagenase and stromelysin. Vance BA, et al. **J Cell Biol** 1989 Jun; 108(6):2037-43

Signal transduction through the fibronectin receptor induces collagenase and stromelysin gene expression. Werb Z, et al. **J Cell Biol** 1989 Aug;109(2):877-89

Cloning and nucleotide sequence of the highly thermostable neutral protease gene from Bacillus stearothermophilus. Kubo M, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1883-92

Analysis of a cloned sequence of Legionella pneumophila encoding a 38 kD metalloprotease possessing haemolytic and cytotoxic activities. Quinn FD, et al. **Mol Microbiol** 1989 Jun;3(6):797-805

Similar effects of adenovirus E1A and glucocorticoid hormones on the expression of the metalloprotease stromelysin. Offringa R, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):10973-84

Purification and characterization of the bacterial plasminogen activator staphylokinase secreted by a recombinant Bacillus subtilis. Gerlach D, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):314-22

ISOLATION & PURIFICATION

Purification of the neutral proteoglycan-degrading metalloproteinase from human articular cartilage tissue and its identification as stromelysin matrix metalloproteinase-3. Gunja-Smith Z, et al. **Biochem J** 1989 Feb 15;258(1):115-9

Identification of a metalloprotease co-purifying with rat tumour collagenase and the characteristics of fragments of both enzymes. Nethery A, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):149-60

Purification and characterization of an extracellular protease from Pseudomonas cepacia. McKevitt AI, et al. **Infect Immun** 1989 Mar;57(3):771-8

An M(III)-facilitated flocculation technique for enzyme recovery and concentration. Collingwood TN, et al. **J Biochem Biophys Methods** 1988 Dec;17(4):303-10

One-step affinity purification of Bacillus neutral proteases using bacitracin-silica. Van Den Burg B, et al. **J Biochem Biophys Methods** 1989 May;18(3):209-19

Purification and partial characterization of high choriolytic enzyme (HCE), a component of the hatching enzyme of the teleost, Oryzias latipes. Yasumasu S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):204-11

Isolation and some properties of low choriolytic enzyme (LCE), a component of the hatching enzyme of the teleost, Oryzias latipes. Yasumasu S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):212-8

Purification and characterization of the sea urchin embryo hatching enzyme. Lepage T, et al. **J Biol Chem** 1989 Mar 25;264(9):4787-93

Human carboxypeptidase M. Purification and characterization of a membrane-bound carboxypeptidase that cleaves peptide hormones. Skidgel RA, et al. **J Biol Chem** 1989 Feb 5;264(4):2236-41

Purification and properties of a small latent matrix metalloproteinase of the rat uterus. Woessner JF Jr, et al. **J Biol Chem** 1988 Nov 15;263(32):16918-25

Identification of matrix metalloendoproteinase inhibitor (TIMP) in human parotid and submandibular saliva: partial purification and characterization. Drouin L, et al. **J Periodont Res** 1988 Nov;23(6):370-7

Method for isolation of MMP-7-ase isoenzymes from rat muscle tissue extract. Guoth JG, et al. **Prep Biochem** 1988; 18(3):361-74

Identification of a connective tissue degrading enzyme in bovine inflammatory exudate. May SA, et al. **Res Vet Sci** 1988 Sep;45(2):259-61

Purification and some characteristics of a zinc metalloprotease from the venom of Bothrops jararaca (jararaca). Tanizaki MM, et al. **Toxicon** 1989;27(7):747-55

METABOLISM

Elastin degradation by human alveolar macrophages. A prominent role of metalloproteinase activity. Senior RM, et al. **Am Rev Respir Dis** 1989 May;139(5):1251-6

Activation of neutral metalloprotease in human osteoarthritic knee cartilage: evidence for degradation in the core protein of sulphated proteoglycan. Martel-Pelletier J, et al. **Ann Rheum Dis** 1988 Oct;47(10):801-8

Evidence that human rheumatoid synovial matrix metalloproteinase 3 is an endogenous activator of procollagenase. Ito A, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):211-6

Transforming growth factor-beta is a potent inhibitor of IL-1 induced protease activity and cartilage proteoglycan degradation. Chandrasekhar S, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1352-9

Specificity of endoproteinase Asp-N (Pseudomonas fragi): cleavage at glutamyl residues in two proteins. Ingrosso D, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1528-34

Mechanism of fibrin-specific fibrinolysis by staphylokinase: participation of alpha 2-plasmin inhibitor. Sakai M, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):830-7

A unique proteolytic action of HCE, a constituent protease of a fish hatching enzyme: tight binding to its natural substrate, egg envelope. Yasumasu S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):58-63

Degradation of basement membranes by human matrix metalloproteinase 3 (stromelysin). Bejarano PA, et al. **Biochem J** 1988 Dec 1;256(2):413-9

Tissue distribution of a novel neurotensin-degrading metallopeptidase. An immunological approach using monospecific polyclonal antibodies. Checler F, et al. **Biochem J** 1989 Jan 15;257(2):549-54

Enhanced Co2+ activation and inhibitor binding of carboxypeptidase M at low pH. Similarity to carboxypeptidase H (enkephalin convertase). Deddish PA, et al. **Biochem J** 1989 Jul 1;261(1):289-91

The precursor of a metalloendopeptidase from human rheumatoid synovial fibroblasts. Purification and mechanisms of activation by endopeptidases and 4-aminophenylmercuric acetate. Okada Y, et al. **Biochem J** 1988 Sep 15;254(3):731-41

Still degrading after all these years [letter] Probert L, et al. **Biochem J** 1989 Apr 15;259(2):621-3

The metabolism of neuropeptides. Hydrolysis of peptides by the phosphoramidon-insensitive rat kidney enzyme 'endopeptidase-2' and by rat microvillar membranes. Stephenson SL, et al. **Biochem J** 1988 Oct 1;255(1):45-51

Purification and biochemical characterization of atroxase, a nonhemorrhagic fibrinolytic protease from western diamondback rattlesnake venom. Willis TW, et al. **Biochemistry** 1988 Jun 28;27(13):4769-77

Evidence for lipid-associated serine proteases and metalloproteases in human bronchoalveolar lavage fluid. Burnett D, et al. **Clin Sci** 1988 Dec;75(6):601-7

Relationship of procollagenase activator, stromelysin and matrix metalloproteinase 3. Murphy G, et al. **Coll Relat Res** 1988 Jul;8(4):389-91

Neurite penetration into collagen gels requires Ca2+-dependent metalloproteinase activity. Pittman RN, et al. **Dev Neurosci** 1989;11(1):41-51

Degradation of type IX collagen by matrix metalloproteinase 3 (stromelysin) from human rheumatoid synovial cells. Okada Y, et al. **FEBS Lett** 1989 Feb 27;244(2):473-6

Activation of matrix metalloproteinase 3 (stromelysin) and matrix metalloproteinase 2 ('gelatinase') by human neutrophil elastase and cathepsin G. Okada Y, et al. **FEBS Lett** 1989 Jun 5;249(2):353-6

The human embryo produces basement membrane collagen (type IV collagen)-degrading protease activity. Puistola U, et al. **Hum Reprod** 1989 Apr;4(3):309-11

IgE-mediated release of rat mast cell protease II, beta-hexosaminidase and leukotriene C4 from cultured bone marrow-derived rat mast cells. MacDonald AJ, et al. **Immunology** 1989 Jul;67(3):414-8

Purification and characterization of a substance P-degrading endopeptidase from rat brain. Endo S, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):999-1006

Surface acid proteinase (gp63) of Leishmania mexicana. A metalloenzyme capable of protecting liposome-encapsulated proteins from phagolysosomal degradation by macrophages. Chaudhuri G, et al. **J Biol Chem** 1989 May 5;264(13):7483-9

Interaction of human rheumatoid synovial collagenase (matrix metalloproteinase 1) and stromelysin (matrix metalloproteinase 3) with human alpha 2-macroglobulin and chicken ovostatin. Binding kinetics and identification of matrix metalloproteinase cleavage sites. Enghild JJ, et al. **J Biol Chem** 1989 May 25;264(15):8779-85

Independent regulation of collagenase, 72-kDa progelatinase, and metalloendoproteinase inhibitor expression in human fibroblasts by transforming growth factor-beta. Overall CM, et al. **J Biol Chem** 1989 Jan 25;264(3):1860-9

Amino acid sequence of a Crotalus atrox venom metalloproteinase which cleaves type IV collagen and gelatin. Shannon JD, et al. **J Biol Chem** 1989 Jul 15; 264(20):11575-83

Phorbol diesters regulate expression of the membrane neutral metalloendopeptidase (EC 3.4.24.11) in rabbit synovial fibroblasts and mammary epithelial cells. Werb Z, et al. **J Biol Chem** 1989 Jun 5;264(16):9111-3

Immunolocalization of metalloproteinases and their inhibitor in the rabbit growth plate. Brown CC, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):580-93

Activation of the cell wall degrading protease, lysin, during sexual signalling in Chlamydomonas: the enzyme is stored as an inactive, higher relative molecular mass precursor

in the periplasm. Buchanan MJ, et al. J Cell Biol 1989 Jan; 108(1):199–207
Identification and characterization of calcium-dependent metalloproteases in rat brain. Nelson RB, et al. J Neurochem 1989 Aug;53(2):641–7
Neutral metalloprotease from tendons. Piening C, et al. J Orthop Res 1989;7(2):228–34
Gingival fibroblasts degrade type I collagen films when stimulated with tumor necrosis factor and interleukin 1: evidence that breakdown is mediated by metalloproteinases. Meikle MC, et al. J Periodont Res 1989 May;24(3):207–13
Effects of metalloendoprotease substrates on the human sperm acrosome reaction. Thomas P, et al. J Reprod Fertil 1989 Jan;85(1):241–9
Evidence for selenocysteine coordination to the active site nickel in the [NiFeSe]hydrogenases from Desulfovibrio baculatus. Eidsness MK, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):147–51
[Pepsinogen activation by microbial proteinases] Petrova EN, et al. Biokhimiia 1988 Aug;53(8):1389–96 (Eng. Abstr.) (Rus)
[Cytolytic activity of Legionella pneumophila] Belyi IuF, et al. Zh Mikrobiol Epidemiol Immunobiol 1989 Feb; (2):14–6 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Degradation of glomerular basement membrane by purified mammalian metalloproteinases. Baricos WH, et al. Biochem J 1988 Sep 1;254(2):609–12
Degradation of rat chondrosarcoma proteoglycans by a neutral metalloprotease from rabbit chondrocytes. Caputo CB, et al. Connect Tissue Res 1988;18(3):191–203
Survival of some non-starter bacteria in naturally ripened and enzyme-accelerated Cheddar cheese. Bautista L, et al. J Dairy Res 1988 Nov;55(4):597–602

PHYSIOLOGY

Characterization of a somatostatin-28 generating metallo-endoprotease from rat brain cytosol. Beinfeld MC, et al. Biochem Biophys Res Commun 1989 Apr 28; 160(2):968–76
Degradation of proteoglycan aggregate by a cartilage metalloproteinase. Evidence for the involvement of stromelysin in the generation of link protein heterogeneity in situ. Nguyen Q, et al. Biochem J 1989 Apr 1;259(1):61–7
Characterization of a Legionella pneumophila extracellular protease exhibiting hemolytic and cytotoxic activities. Keen MG, et al. Infect Immun 1989 Mar;57(3):732–8
Inactivation of various proteinase inhibitors and the complement system in human plasma by the 56-kilodalton proteinase from Serratia marcescens. Molla A, et al. Infect Immun 1989 Jun;57(6):1868–71
Glioblastoma infiltration into central nervous system tissue in vitro: involvement of a metalloprotease. Paganetti PA, et al. J Cell Biol 1988 Dec;107(6 Pt 1):2281–91
Evidence suggesting a role for sperm metalloendoprotease activity in penetration of zona-free hamster eggs by human sperm. Díaz-Pérez E, et al. J Exp Zool 1988 Nov; 248(2):213–21
Metalloproteinases and malignant conversion: does correlation imply causality? [editorial] Liotta LA, et al. J Natl Cancer Inst 1989 Apr 19;81(8):556–7

SECRETION

Expression pattern of a gene for a secreted metalloproteinase during late stages of tumor progression. Ostrowski LE, et al. Mol Carcinog 1988;1(1):13–9

THERAPEUTIC USE

Thrombolysis with a snake venom protease in a rat model of venous thrombosis. Willis TW, et al. Thromb Res 1989 Jan 1;53(1):19–29

TOXICITY

A direct-acting fibrinolytic enzyme from the venom of Agkistrodon contortrix contortrix: effects on various components of the human blood coagulation and fibrinolysis systems. Retzios AD, et al. Thromb Res 1988 Dec 15;52(6):541–52

METALLOPROTEINS

Acetylene inhibition of metalloenzymes. Hyman MR, et al. Anal Biochem 1988 Sep;173(2):207–20 (207 ref.)
The magnetic properties of the nickel cofactor F430 in the enzyme methyl-coenzyme M reductase of Methanobacterium thermoautotrophicum. Cheesman MR, et al. Biochem J 1989 Jun 1;260(2):613–6
Geometry of interaction of metal ions with sulfur-containing ligands in protein structures. Chakrabarti P. Biochemistry 1989 Jul 11;28(14):6081–5
EPR characterization of the iron-sulfur-containing NADH-ubiquinone oxidoreductase of the Escherichia coli aerobic respiratory chain. Meinhardt SW, et al. Biochemistry 1989 Mar 7;28(5):2153–60
The active site of hemerythrin as determined by X-ray absorption fine structure. Zhang K, et al. Biochemistry 1988 Sep 20;27(19):7470–9
Viscosity-dependent energy barriers and equilibrium conformational fluctuations in oxygen recombination with hemerythrin. Lavalette D, et al. Eur J Biochem 1988 Oct 15;177(1):97–108
Streptomyces griseus aminopeptidase is a calcium-activated zinc metalloprotein. Purification and properties of the enzyme. Spungin A, et al. Eur J Biochem 1989 Aug 1; 183(2):471–7
ESR studies on iron-sulfur clusters of complex II in Ascaris suum mitochondria which exhibits strong fumarate reductase activity. Hata-Tanaka A, et al. FEBS Lett 1988 Dec 19;242(1):183–6
A 2.0-A structure of the blue copper protein (cupredoxin) from Alcaligenes faecalis S-6. Adman ET, et al. J Biol Chem 1989 Jan 5;264(1):87–99
Magnetization and electron paramagnetic resonance studies of reduced uteroferrin and its "EPR-silent" phosphate complex. Day EP, et al. J Biol Chem 1988 Oct 25; 263(30):15561–7
The magnetic and electronic properties of Methanobacterium thermoautotrophicum (strain delta H) methyl coenzyme M reductase and its nickel tetrapyrrole cofactor F430. A low temperature magnetic circular dichroism study. Hamilton CL, et al. J Biol Chem 1989 Jul 15; 264(20):11605–13
The structure of a molybdopterin precursor. Characterization of a stable, oxidized derivative. Johnson JL, et al. J Biol Chem 1989 Aug 15;264(23):13440–7
Paramagnetic centers of carbon monoxide dehydrogenase from aceticlastic Methanosarcina barkeri. Krzycki JA, et al. J Biol Chem 1989 May 5;264(13):7217–21
Coordination chemistry of F430. Axial ligation equilibrium between square-planar and bis-aquo species in aqueous solution. Shiemke AK, et al. J Biol Chem 1989 Jul 5; 264(19):11236–45
Preliminary crystallographic data and primary sequence for anti-peptide Fab' B13I2 and its complex with the C-helix peptide from myohemerythrin. Stura EA, et al. J Biol Chem 1989 Sep 15;264(26):15721–5
Computer graphic study on models of the molybdenum cofactor of xanthine oxidase. Folkers G, et al. J Comput Aided Mol Des 1987 Apr;1(1):87–94
Structure and function of the mitochondrial bc1 complex. A mutational analysis of the yeast Rieske iron-sulfur protein. Gatti DL, et al. J Mol Biol 1989 Jan 20; 205(2):421–35
Three-dimensional model of stellacyanin and its implications for electron transfer reactivity. Wherland S, et al. J Mol Biol 1988 Nov 20;204(2):407–15
Destabilization of an alpha-helix-bundle protein by helix dipoles. Gilson MK, et al. Proc Natl Acad Sci U S A 1989 Mar;86(5):1524–8
[Hemerythrin] Tachi-iri Y, et al. Tanpakushitsu Kakusan Koso 1987 May;32(6):777–84 (21 ref.) (Jpn)

ADMINISTRATION & DOSAGE

Intra-articular orgotein in osteoarthritis of the knee: a placebo-controlled efficacy, safety, and dosage comparison. McIlwain H, et al. Am J Med 1989 Sep; 87(3):295–300
[Use of orgotein in the treatment of plastic penile induration] Randone DF, et al. Minerva Urol Nefrol 1988 Jan-Mar; 40(1):25–7 (Eng. Abstr.) (Ita)

ADVERSE EFFECTS

[Morvan's fibrillary chorea in patients on chrysotherapy for rheumatoid polyarthritis] Masson C, et al. Rev Rhum Mal Osteoartic 1989 Jan;56(1):27–30 (25 ref.) (Fre)

ANALYSIS

Analysis of the core of ferruginous bodies and the relationship between body type and core characteristics. Kimizuka G, et al. Acta Pathol Jpn 1988 Aug;38(8):989–1000
A sensitive gas chromatographic method for determination of protein-associated sulfur. Hannestad U, et al. Anal Biochem 1989 May 1;178(2):394–8
Micromolar protein concentrations and metalloprotein stoichiometries obtained by inductively coupled plasma atomic emission spectrometric determination of sulfur. Bongers J, et al. Anal Chem 1988 Dec 15;60(24):2683–6
Secretory granules from different glands contain neurocuprein-like protein. Mikaelyan MV, et al. Biochem Biophys Res Commun 1988 Sep 30;155(3):1430–6
The vanadium nitrogenase of Azotobacter chroococcum. Purification and properties of the Fe protein. Eady RR, et al. Biochem J 1988 Nov 15;256(1):189–96
Electron-nuclear double resonance spectroscopy of 15N-enriched phthalate dioxygenase from Pseudomonas cepacia proves that two histidines are coordinated to the [2Fe-2S] Rieske-type clusters. Gurbiel RJ, et al. Biochemistry 1989 May 30;28(11):4861–71
Spectroscopic characterization of the nickel and iron-sulphur clusters of hydrogenase from the purple photosynthetic bacterium Thiocapsa roseopersicina. 1. Electron spin resonance spectroscopy. Cammack R, et al. Eur J Biochem 1989 Jun 15;182(2):357–62
Spectroscopic characterization of the nickel and iron-sulphur clusters of hydrogenase from the purple photosynthetic bacterium Thiocapsa roseopersicina. 2. Electron spin-echo spectroscopy. Cammack R, et al. Eur J Biochem 1989 Jun 15;182(2):363–6
Complete assignment of the 1H NMR spectrum of a synthetic zinc finger from Xfin. Sequential resonance assignments and secondary structure. Lee MS, et al. FEBS Lett 1989 Aug 28;254(1-2):159–64
Incidence of ferruginous bodies in the lungs during a 45-year period and mineralogical analysis of the core fibres and uncoated fibres. Shishido S, et al. IARC Sci Publ 1989; (90):229–38
Evidence for only one iron-sulfur cluster in center X of photosystem I from higher plants. Guigliarelli B, et al. J Biol Chem 1989 Apr 15;264(11):6025–8
Subunit composition of photosystem I and identification of center X as a [4Fe-4S] iron-sulfur cluster. Scheller HV, et al. J Biol Chem 1989 Apr 25;264(12):6929–34
Intracellular localization and DNA-binding properties of human papillomavirus type 18 E6 protein expressed with a baculovirus vector. Grossman SR, et al. J Virol 1989 Jan;63(1):366–74
Usefulness of combined light and electron microscopy: evaluation of sputum samples for asbestos to determine past occupational exposure. Dodson RF, et al. Mod Pathol 1989 Jul;2(4):320–2
Crystallization and preliminary X-ray diffraction study of a protein with a high potential rubredoxin center and a hemerythrin-type Fe center. Sieker LC, et al. Proteins 1988;3(3):184–6
[Iron and iron-binding proteins in the differential diagnosis of pleural effusion] Franciolli M, et al. Schweiz Med Wochenschr 1989 Jun 3;119(22):785–90 (Eng. Abstr.) (Ger)
[Localization of the active centers in model molybdenum-sulfur and molybdenum-iron-sulfur proteins] Belonogova OV, et al. Izv Akad Nauk SSSR [Biol] 1988 Jul-Aug;(4):613–7 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Alaskan malamute chondrodysplasia—VIII. Incorporation of [14C]glucosamine and [3H]serine in hepatic metal-binding proteins of Canis familaris. McBride-Warren PA, et al. Comp Biochem Physiol [B] 1979;63(4):569–76
The site of synthesis of the iron-sulfur subunits of the flavoprotein and iron-protein fractions of human NADH dehydrogenase. Chomyn A, et al. J Biol Chem 1988 Nov 5;263(31):16395–400
Expression of functional zinc finger domain of human poly(ADP-ribose)polymerase in E. coli. Gradwohl G, et al. Nucleic Acids Res 1989 Sep 12;17(17):7112

BLOOD

31P NMR probes of sipunculan erythrocytes containing the O2-carrying protein hemerythrin. Robitaille PM, et al. Biochemistry 1988 Jun 14;27(12):4458–65
[Dinitrosyl complexes of nonheme iron in the blood plasma of animals and man] Mordvintsev NI, et al. Izv Akad Nauk SSSR [Biol] 1988 Nov-Dec;(6):942–6 (Eng. Abstr.) (Rus)

DEFICIENCY

Molybdenum cofactor deficiency in a patient previously characterized as deficient in sulfite oxidase. Johnson JL, et al. Biochem Med Metab Biol 1988 Aug;40(1):86–93
Molybdenum co-factor deficiency: an easily missed inborn error of metabolism. Aukett A, et al. Dev Med Child Neurol 1988 Aug;30(4):531–5
Report on a new patient with combined deficiencies of sulphite oxidase and xanthine dehydrogenase due to molybdenum cofactor deficiency. Endres W, et al. Eur J Pediatr 1988 Dec;148(3):246–9
Molybdenum cofactor biosynthesis in humans. Identification of two complementation groups of cofactor-deficient patients and preliminary characterization of a diffusible molybdopterin precursor. Johnson JL, et al. J Clin Invest 1989 Mar;83(3):897–903
Disproportionate deficiency of iron-sulfur clusters and subunits of complex I in mitochondrial encephalomyopathy. Ichiki T, et al. Pediatr Res 1989 Feb; 25(2):194–201

GENETICS

Cloning and sequence analysis of a cDNA encoding the Rieske iron-sulfur protein of rat mitochondrial cytochrome bc1 complex. Nishikimi M, et al. Biochem Biophys Res Commun 1989 Feb 28;159(1):19–25
The amino acid sequence of the 24-kDa subunit, an iron-sulfur protein, of rat liver mitochondrial NADH dehydrogenase deduced from cDNA sequence. Nishikimi M, et al. Biochem Biophys Res Commun 1988 Dec 30; 157(3):914–20
Transcriptional switching by the MerR protein: activation and repression mutants implicate distinct DNA and mercury(II) binding domains. Shewchuk LM, et al. Biochemistry 1989 Mar 7;28(5):2340–4
The sex-determining region of the mouse Y chromosome encodes a protein with a highly acidic domain and 13 zinc fingers. Mardon G, et al. Cell 1989 Mar 10;56(5):765–70
The human genome contains hundreds of genes coding for finger proteins of the Krüppel type. Bellefroid EJ, et al. DNA 1989 Jul-Aug;8(6):377–87
Developmental expression of an androgen-regulated

epididymal protein. Charest NJ, et al. **Endocrinology** 1989 Aug;125(2):942–7

The primary sequence of the PFK–1 inactivating zinc–binding protein as deduced from cDNA sequencing. Identity of the zinc–binding protein with rat parathymosin. Trompeter HI, et al. **FEBS Lett** 1989 Aug 14;253(1–2):63–6

Chromosomal localization of zinc finger protein genes in man and mouse. Ashworth A, et al. **Genomics** 1989 Apr; 4(3):323–7

In situ hybridization localizes the human putative oncogene GLI to chromosome subbands 12q13.3–14.1. Arheden K, et al. **Hum Genet** 1989 Apr;82(1):1–2

Mapping the human ZFX locus to Xp21.3 by in situ hybridization. Müller G, et al. **Hum Genet** 1989 Apr; 82(1):82–4

Molecular cloning, heterologous expression, and primary structure of the structural gene for the copper enzyme nitrous oxide reductase from denitrifying Pseudomonas stutzeri. Viebrock A, et al. **J Bacteriol** 1988 Oct; 170(10):4658–68

Mutational analysis of the mitochondrial Rieske iron–sulfur protein of Saccharomyces cerevisiae. I. Construction of a RIP1 deletion strain and isolation of temperature–sensitive mutants. Beckmann JD, et al. **J Biol Chem** 1989 Mar 5;264(7):3713–22

Subunit location of the iron–sulfur clusters in fumarate reductase from Escherichia coli. Johnson MK, et al. **J Biol Chem** 1988 Oct 15;263(29):14732–8

Mutational analysis of the mitochondrial Rieske iron–sulfur protein of Saccharomyces cerevisiae. II. Biochemical characterization of temperature–sensitive RIP1– mutations. Ljungdahl PO, et al. **J Biol Chem** 1989 Mar 5; 264(7):3723–31

Evidence from extended X–ray absorption fine structure and site–specific mutagenesis for zinc fingers in UvrA protein of Escherichia coli. Navaratnam S, et al. **J Biol Chem** 1989 Sep 25;264(27):16067–71

Characterization of the cysJIH regions of Salmonella typhimurium and Escherichia coli B. DNA sequences of cysI and cysH and a model for the siroheme–Fe4S4 active center of sulfite reductase hemoprotein based on amino acid homology with spinach nitrite reductase. Ostrowski J, et al. **J Biol Chem** 1989 Sep 15;264(26):15726–37

Multiple intracellular pathways induce expression of a zinc–finger encoding gene (EGR1): relationship to activation of the Na/H exchanger. Jamieson GA Jr, et al. **J Cell Physiol** 1989 May;139(2):262–8

The zinc finger region of simian virus 40 large T antigen. Loeber G, et al. **J Virol** 1989 Jan;63(1):94–100

Structure, chromosome location, and expression of the mouse zinc finger gene Krox–20: multiple gene products and coregulation with the proto–oncogene c–fos. Chavrier P, et al. **Mol Cell Biol** 1989 Feb;9(2):787–97

Genetic dissection of functional domains within the avian erythroblastosis virus v–erbA oncogene. Privalsky ML, et al. **Mol Cell Biol** 1988 Oct;8(10):4510–7

The GLI–Kruppel family of human genes. Ruppert JM, et al. **Mol Cell Biol** 1988 Aug;8(8):3104–13

Differential expression of a zinc finger–encoding gene in response to positive versus negative signaling through receptor immunoglobulin in murine B lymphocytes. Seyfert VL, et al. **Mol Cell Biol** 1989 May;9(5):2083–8

Molecular cloning of complementary deoxyribonucleic acid for an androgen–regulated epididymal protein: sequence homology with metalloproteins. Charest NJ, et al. **Mol Endocrinol** 1988 Oct;2(10):999–1004

Altering DNA–binding specificity of GAL4 requires sequences adjacent to the zinc finger. Corton JC, et al. **Nature** 1989 Aug 31;340(6236):724–7

Sex determination. Right gene, wrong chromosome [news] Hodgkin J. **Nature** 1988 Dec 22–29;336(6201):712

Sequences homologous to ZFY, a candidate human sex–determining gene, are autosomal in marsupials. Sinclair AH, et al. **Nature** 1988 Dec 22–29;336(6201):780–3

Evidence for distinguishable transcripts of the putative testis determining gene (ZFY) and mapping of homologous cDNA sequences to chromosomes X,Y and 9. Affara NA, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2987–99

Sequence of cDNA for murine Zfy–1, a candidate for Tdy. Ashworth A, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2864

Specific and ubiquitous expression of different Zn finger protein genes in the mouse. Chowdhury K, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):9995–10011

Pea early browning virus RNA1 encodes four polypeptides including a putative zinc–finger protein. MacFarlane SA, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2245–60

A chloroplast gene encoding a protein with one zinc finger. Sasaki Y, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6217–27

5' flanking sequence and genomic structure of Egr–1, a murine mitogen inducible zinc finger encoding gene. Tsai–Morris CH, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):8835–46

Structure of the NGFI–A gene and detection of upstream sequences responsible for its transcriptional induction by nerve growth factor. Changelian PS, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):377–81

A gene activated in mouse 3T3 cells by serum growth factors encodes a protein with "zinc finger" sequences. Christy BA, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7857–61

Point mutants of Moloney murine leukemia virus that fail to package viral RNA: evidence for specific RNA recognition by a "zinc finger–like" protein sequence. Gorelick RJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8420–4

Use of the DNA polymerase chain reaction for homology probing: isolation of partial cDNA or genomic clones encoding the iron–sulfur protein of succinate dehydrogenase from several species. Gould SJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1934–8

Molecular cloning, sequencing, and mapping of EGR2, a human early growth response gene encoding a protein with "zinc–binding finger" structure [published erratum appears in Proc Natl Acad Sci U S A 1989 Jan;86(2):515] Joseph LJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7164–8

Evolutionary conserved modules associated with zinc fingers in Xenopus laevis. Knöchel W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6097–100

Phorbol ester binding to protein kinase C requires a cysteine–rich zinc–finger–like sequence. Ono Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4868–71

Cloning and expression of the gene cluster encoding key proteins involved in acetyl–CoA synthesis in Clostridium thermoaceticum: CO dehydrogenase, the corrinoid/Fe–S protein, and methyltransferase. Roberts DL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):32–6

Mammalian ZFY sequences exist in reptiles regardless of sex–determining mechanism. Bull JJ, et al. **Science** 1988 Oct 28;242(4878):567–9

IMMUNOLOGY

An immunoassay of human band 5 ("tartrate–resistant") acid phosphatase that involves the use of anti–porcine uteroferrin antibodies. Whitaker KB, et al. **Clin Chem** 1989 Jan;35(1):86–9

Primary biliary cirrhosis: indication for a single mitochondrial antigenic epitope detected by patient autoantibodies and a novel monoclonal antibody. Mendel–Hartvig I, et al. **Scand J Immunol** 1988 Oct;28(4):403–10

ISOLATION & PURIFICATION

Studies on the structure of NADH:ubiquinone oxidoreductase complex: topography of the subunits of the iron–sulfur flavoprotein component. Han AL, et al. **Arch Biochem Biophys** 1988 Dec;267(2):490–6

1H NMR characterization of Chromatium gracile high–potential iron protein and its ruthenium–modified derivatives. Modulation of the reduction potentials in low– and high–potential [Fe4S4] ferredoxins. Sola M, et al. **Biochemistry** 1989 Jun 13;28(12):5261–8

EXAFS studies of the isolated bovine heart Rieske [2Fe–2S]1+(1+,2+) cluster. Powers L, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):293–8

Dissociation and auto–oxidation of hemerythrin induced by SH–modification: a kinetic study. Fuseya M, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):293–8

The protein responsible for center A/B in spinach photosystem I: isolation with iron–sulfur cluster(s) and complete sequence analysis. Oh–oka H, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):962–8

Putative metal finger structure of the human immunodeficiency virus type 1 enhancer binding protein HIV–EP1. Maekawa T, et al. **J Biol Chem** 1989 Sep 5; 264(25):14591–3

Poly(ADP–ribose)polymerase: a novel finger protein. Mazen A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4689–98

A ram epididymal secretory protein shares common antigenic determinants with rat epididymal proteins and human seminal plasma proteins. Fournier–Delpech S, et al. **Reprod Nutr Dev** 1988;28(5):1283–99

METABOLISM

Auto–oxidation of Lingula unguis and Siphonosoma cumanense hemerythrins induced by some perturbants. Tambo F, et al. **Biochem Int** 1989 Feb;18(2):311–7

Vanadium K–edge X–ray–absorption spectroscopy of the functioning and thionine–oxidized forms of the VFe–protein of the vanadium nitrogenase from Azotobacter chroococcum. Arber JM, et al. **Biochem J** 1989 Mar 15;258(3):733–7

Endonuclease III is an iron–sulfur protein. Cunningham RP, et al. **Biochemistry** 1989 May 16;28(10):4450–5

Nickel is required for the transfer of electrons from carbon monoxide to the iron–sulfur center(s) of carbon monoxide dehydrogenase from Rhodospirillum rubrum. Ensign SA, et al. **Biochemistry** 1989 Jun 13;28(12):4968–73

Resonance Raman studies of Escherichia coli sulfite reductase hemoprotein. 2. Fe4S4 cluster vibrational modes. Madden JF, et al. **Biochemistry** 1989 Jun 27;28(13):5471–7

Transcriptional switching by the metalloregulatory MerR protein: initial characterization of DNA and mercury (II) binding activities. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2331–9

Trimethylamine oxidation in liver tissue is not catalyzed by a molybdenum cofactor–dependent enzyme. Johnson JL. **Biofactors** 1988 Jul;1(2):153–5

Molybdopterin—problems and perspectives. Rajagopalan KV. **Biofactors** 1988 Dec;1(4):273–8 (35 ref.)

Amino acid sequence of the 9–kDa iron–sulfur protein of photosystem I in barley. Scheller HV, et al. **Carlsberg Res Commun** 1989;54(1):11–5

1H–NMR studies of high–potential iron–sulfur protein from the purple phototrophic bacterium, Rhodospirillum tenue. Krishnamoorthi R, et al. **Eur J Biochem** 1989 Apr 15; 181(1):81–5

Nitrous oxide reductase from Pseudomonas stutzeri. Redox properties and spectroscopic characterization of different forms of the multicopper enzyme. Riester J, et al. **Eur J Biochem** 1989 Jan 2;178(3):751–62

Substrate–modulated reactions of putidamonooxin. The nature of the active oxygen species formed and its reaction mechanism. Wende P, et al. **Eur J Biochem** 1989 Apr 15; 181(1):189–97

Formylmethanofuran dehydrogenase from methanogenic bacteria, a molybdoenzyme. Karrasch M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):226–30

Studies on distribution and changes in concentration of iron and iron–dependent inhibitor protein of hydroxymethylglutaryl CoA reductase. Devi SU, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):664–73

Two proteins encoded at the chlA locus constitute the converting factor of Escherichia coli chlA1. Pitterle DM, et al. **J Bacteriol** 1989 Jun;171(6):3373–8

Complex formation between methylamine dehydrogenase and amicyanin from Paracoccus denitrificans. Gray KA, et al. **J Biol Chem** 1988 Oct 5;263(28):13987–90

Fe:S cluster ligands are the only cysteines required for nitrogenase Fe–protein activities. Howard JB, et al. **J Biol Chem** 1989 Jul 5;264(19):11270–4

Studies on the electron transfer pathway, topography of iron–sulfur centers, and site of coupling in NADH–Q oxidoreductase. Krishnamoorthy G, et al. **J Biol Chem** 1988 Nov 25;263(33):17566–75

Structural relationship, biosynthesis, and immunocytochemical localization of uteroferrin–associated basic glycoproteins. Murray MK, et al. **J Biol Chem** 1989 Mar 5;264(7):4143–50

Structural and spectroscopic characterization of exogenous ligand binding to isolated factor F430 and its configurational isomers. Shiemke AK, et al. **J Biol Chem** 1989 May 5;264(13):7276–84

Escherichia coli DNA topoisomerase I is a zinc metalloprotein with three repetitive zinc–binding domains. Tse–Dinh YC, et al. **J Biol Chem** 1988 Nov 5; 263(31):15857–9

Cysteine residues in the zinc finger and amino acids adjacent to the finger are necessary for DNA binding by the LAC9 regulatory protein of Kluyveromyces lactis. Witte MM, et al. **Mol Cell Biol** 1988 Sep;8(9):3726–33

Reconstitution of neurocupreins by Cu–thioneins. Melkonyan VZ, et al. **Neurochem Res** 1989 Jun;14(6):589–91

Iron–sulfur clusters of hydrogenase I and hydrogenase II of Clostridium pasteurianum. Adams MW, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4932–6

A model for the tertiary structure of the 28 residue DNA–binding motif ('zinc finger') common to many eukaryotic transcriptional regulatory proteins. Gibson TJ, et al. **Protein Eng** 1988 Sep;2(3):209–18

Three–dimensional solution structure of a single zinc finger DNA–binding domain. Lee MS, et al. **Science** 1989 Aug 11;245(4918):635–7

Identification of a zinc finger protein that binds to the sterol regulatory element. Rajavashisth TB, et al. **Science** 1989 Aug 11;245(4918):640–3

A "zinc–finger"–type binding domain in tobacco streak virus coat protein. Sehnke PC, et al. **Virology** 1989 Jan; 168(1):48–56

PHARMACOLOGY

The action of the collagen–Fe2+ complex at tissular level. Mirancea N, et al. **Morphol Embryol (Bucur)** 1989 Jan–Mar; 35(1):59–61

PHYSIOLOGY

The iron–sulfur protein is necessary for the complete assembly of the low–molecular–weight subunits into the cytochrome b–c1 complex of yeast mitochondria. Japa S, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):716–20

Two amino acids within the knuckle of the first zinc finger specify DNA response element activation by the glucocorticoid receptor. Danielsen M, et al. **Cell** 1989 Jun 30;57(7):1131–8

ZFX has a gene structure similar to ZFY, the putative human sex determinant, and escapes X inactivation. Schneider–Gädicke A, et al. **Cell** 1989 Jun 30;57(7):1247–58

Determinants of target gene specificity for steroid/thyroid hormone receptors. Umesono K, et al. **Cell** 1989 Jun 30; 57(7):1139–46

The N–terminal DNA–binding 'zinc finger' of the oestrogen and glucocorticoid receptors determines target gene specificity. Green S, et al. **EMBO J** 1988 Oct;7(10):3037–44

Evidence that the iron–sulfur cluster of Bacillus subtilis glutamine phosphoribosylpyrophosphate amidotransferase determines stability of the enzyme to degradation in vivo. Grandoni JA, et al. **J Biol Chem** 1989 Apr 15; 264(11):6058–64

The yeast regulatory protein ADR1 binds in a zinc–dependent manner to the upstream activating sequence of ADH2. Eisen A, et al. **Mol Cell Biol** 1988 Oct;8(10):4552–6

sry h–1, a new Drosophila melanogaster multifingered protein gene showing maternal and zygotic expression.

Vincent A, et al. **Mol Cell Biol** 1988 Oct;8(10):4459–68
Are 'light-derepressible' genes controlled by metal–protein complexes? Hoober JK, et al. **Trends Biochem Sci** 1988 Oct;13(10):371–4 (29 ref.)

THERAPEUTIC USE

[Induratio penis plastica. Therapy with orgotein] Bickeböller R, et al. **Fortschr Med** 1988 Sep 20;106(27):558–60 (Ger)
[The activity and tolerability of ferroproteinsuccinylate in the treatment of iron deficiency in surgery] Ambrosini A. **Boll Chim Farm** 1988 Mar;127(3):40S–43S (Eng. Abstr.) (Ita)
[Ferroproteinsuccinylate in iron deficiency in children] Bianchi G. **Boll Chim Farm** 1988 Mar;127(3):30S–34S (Eng. Abstr.) (Ita)
[Ferroproteinsuccinylate in iron deficiency in obstetric and gynecology] Bracchitta R, et al. **Boll Chim Farm** 1988 Mar;127(3):35S–39S (Eng. Abstr.) (Ita)
[Comparison of the efficacy and tolerability of ferroproteinsuccinylate and ferritin preparations in iron deficiency in general medicine] Cogo R. **Boll Chim Farm** 1988 Mar;127(3):25S–29S (Eng. Abstr.) (Ita)
[The efficacy and tolerability of ferroproteinsuccinylate in iron deficiency] Scremin S, et al. **Boll Chim Farm** 1988 Mar;127(3):44S–49S (Eng. Abstr.) (Ita)
[A new therapeutic approach to iron deficiency] Manfredi B, et al. **Clin Ter** 1987 Oct 15;123(1):25–39 (Eng. Abstr.) (Ita)

ULTRASTRUCTURE

Structure of activated aconitase: formation of the [4Fe–4S] cluster in the crystal. Robbins AH, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3639–43

METALLOTHIONEIN

Conjugation of metallothionein to a murine monoclonal antibody. Brown BA, et al. **Anal Biochem** 1988 Jul; 172(1):22–8
Luminescence emission from Neurospora copper metallothionein. Time-resolved studies. Beltramini M, et al. **Biochem J** 1989 May 15;260(1):189–93
Comparative 113Cd–n.m.r. studies on rabbit 113Cd7-, (Zn1,Cd6)- and partially metal-depleted 113Cd6-metallothionein-2a. Vazquez F, et al. **Biochem J** 1988 Jul 15;253(2):611–4
113Cd NMR studies on metal–thiolate cluster formation in rabbit Cd(II)–metallothionein: evidence for a pH dependence. Good M, et al. **Biochemistry** 1988 Sep 6; 27(18):7163–6
Proton NMR studies of a metallothionein from Neurospora crassa: sequence-specific assignments by NOE measurements in the rotating frame. Malikayil JA, et al. **Biochemistry** 1989 Apr 4;28(7):2991–5
Luminescent Ag12–metallothionein: dependence of emission intensity on silver–thiolate cluster formation. Stillman MJ, et al. **FEBS Lett** 1988 Nov 21;240(1–2):159–62
Conformation of [Cd7]–metallothionein-2 from rat liver in aqueous solution determined by nuclear magnetic resonance spectroscopy. Schultze P, et al. **J Mol Biol** 1988 Sep 5;203(1):251–68

ANALYSIS

Metal-binding proteins of the Syrian hamster ovaries: apparent deficiency of metallothionein. Waalkes MP, et al. **Biol Reprod** 1988 Nov;39(4):953–61
Cadmium-binding proteins in midgut gland of freshwater crayfish Procambarus clarkii. Del Ramo J, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):241–6
Quantitative immunohistochemistry of metallothionein in rat placenta. Hazelhoff Roelfzema W, et al. **Histochemistry** 1989;90(5):365–9
Characterization of cadmium-binding proteins detected in rat liver by the western blotting technique. Aoki Y, et al. **J Biochem Toxicol** 1987 Spring;2:67–71
Interactions of selenium and cadmium with metallothionein-like and other cytosolic proteins of rat kidney and liver. Viljoen AJ, et al. **J Inorg Biochem** 1988 Dec;34(4):277–90
Enzyme-linked immunosorbent assay for human metallothionein: correlation of induction with infection. Grider A, et al. **J Lab Clin Med** 1989 Feb;113(2):221–8
The amino acid composition of the zinc-induced metallothionein isoforms in rat brain. Ebadi M, et al. **Neurochem Res** 1989 Jan;14(1):69–73
Cadmium and metallothionein levels in the liver of humans exposed to environmental cadmium in Upper Silesia, Poland. Bem EM, et al. **Toxicol Lett** 1989 Jan;45(1):35–9
Involvement of cardiac metallothionein in prevention of adriamycin induced lipid peroxidation in the heart. Satoh M, et al. **Toxicology** 1988 Dec 30;53(2–3):231–7
Metallothionein immunoreactivity in the liver and kidney of copper injected rats. Williams LM, et al. **Toxicology** 1989 May 15;55(3):307–16
Increased levels of hepatic metallothionein in rat and mouse after injection of acetaminophen. Wormser U, et al. **Toxicology** 1988 Dec 30;53(2–3):323–9

BIOSYNTHESIS

Metallothionein response to stress in rats: role in free radical scavenging. Hidalgo J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E518–24
Metallothionein induction by sodium selenite at two different ambient temperatures in mice. Iwai N, et al. **Arch Toxicol** 1988;62(6):447–51
Effect of age on cadmium-induced metallothionein synthesis in the rat. Wormser U, et al. **Arch Toxicol** 1988;62(5):392–4
Genetic differences in zinc and copper induction of liver metallothionein in inbred strains of the mouse. Farr C, et al. **Biochem Genet** 1989 Apr;27(3–4):199–217
A role of metallothionein in zinc regulation after oestradiol induction of vitellogenin synthesis in rainbow trout, Salmo gairdneri. Olsson PE, et al. **Biochem J** 1989 Jan 15; 257(2):555–9
Metallothionein induction in mouse tissues by cis-dichlorodiammineplatinum(II) and its hydrolysis products. Farnworth PG, et al. **Chem Biol Interact** 1989; 69(4):319–32
Cadmium-induced synthesis of metallothioneins in human T and B cell purified by a fluorescence activated cell sorter. Yamada H, et al. **Chem Biol Interact** 1989;70(1–2):117–26
The CUP2 gene product regulates the expression of the CUP1 gene, coding for yeast metallothionein. Welch J, et al. **EMBO J** 1989 Jan;8(1):255–60
Do cadmium and dexamethasone induce different types of metallothioneins? Andersen RA, et al. **Gen Pharmacol** 1989; 20(4):437–43
Are catecholamines positive regulators of metallothionein synthesis during stress in the rat? Hidalgo J, et al. **Horm Metab Res** 1988 Aug;20(8):530–2
Developmental and sex differences in cadmium distribution and metallothionein induction and localization. Blazka ME, et al. **J Appl Toxicol** 1988 Jun;8(3):217–22
Exposure to different forms of cadmium in mice: differences in metallothionein and alphafetoprotein mRNA induction in liver and kidney. Koropatnick J, et al. **J Biochem Toxicol** 1988 Fall;3:159–72
Combined nephrotoxicity of methylmercury, lead, and cadmium in Pekin ducks: metallothionein, metal interactions, and histopathology. Prasada Rao PV, et al. **J Toxicol Environ Health** 1989;26(3):327–48
Induction of metallothionein mRNA by tumor promoters in mouse skin and its constitutive expression in papillomas. Hashiba H, et al. **Mol Carcinog** 1989;2(2):95–100
Coordinate induction of metallothioneins I and II in rodent cells by UV irradiation. Fornace AJ Jr, et al. **Mol Cell Biol** 1988 Nov;8(11):4716–20
A new perspective of radiation protection by metallothionein induction. Matsubara J, et al. **Pharmacol Ther** 1988; 39(1–3):331–3
Metal-specific synthesis of two metallothioneins and gamma-glutamyl peptides in Candida glabrata. Mehra RK, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8815–9
Organ-specific metallothionein induction in mice by X irradiation. Koropatnick J, et al. **Radiat Res** 1989 Aug; 119(2):356–65
Acute exposure to formaldehyde induces hepatic metallothionein synthesis in mice. Goering PL. **Toxicol Appl Pharmacol** 1989 Apr;98(2):325–37
Induction of hepatic metallothionein in male B6C3F1 mice exposed to hepatic tumor promoters: effects of phenobarbital, acetaminophen, sodium barbital, and di(2-ethylhexyl) phthalate. Waalkes MP, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):217–26

CHEMICAL SYNTHESIS

Amino acids and peptides. XXI. Synthesis of N-terminal heptapeptide of mammalian metallothionein (MT) and evaluation of its immunoreactivity. Okada Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3614–8

DEFICIENCY

Metal-binding proteins of the Syrian hamster ovaries: apparent deficiency of metallothionein. Waalkes MP, et al. **Biol Reprod** 1988 Nov;39(4):953–61

DIAGNOSTIC USE

Pharmacokinetic evaluation of technetium-99–metallothionein–conjugated mouse monoclonal antibody B72.3 in rhesus monkeys. Burchiel SW, et al. **J Nucl Med** 1989 Aug;30(8):1351–7

GENETICS

Cloning, nucleotide sequence and molecular evolution of a rabbit processed metallothionein MT-2 pseudogene. Tam YC, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1403–10
Cyclic AMP induces metallothionein gene expression in rat hepatocytes but not in rat kidney. Nebes VL, et al. **Biochem J** 1988 Oct 15;255(2):741–3
Changes in nucleosome repeat lengths precede replication in the early replicating metallothionein II gene region of cells synchronized in early S phase. D'Anna JA, et al. **Biochemistry** 1989 Apr 4;28(7):2895–902
Expression of the mouse metallothionein-I gene in Escherichia coli: increased tolerance to heavy metals. Hou YM, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):230–4
Analysis of stress-induced gene expression in fish cell lines exposed to heavy meals and heat shock. Misra S, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):325–33
Copper activates metallothionein gene transcription by altering the conformation of a specific DNA binding protein [published erratum appears in Cell 1989 Jan 27;56(2):following 321] Fürst P, et al. **Cell** 1988 Nov 18; 55(4):705–17
A cis-acting sequence within the rat ribosomal DNA enhancer region can modulate RNA polymerase II-directed transcription of the metallothionein I gene in vitro. Dixit A, et al. **DNA** 1989 Jun;8(5):311–20
A zinc-responsive factor interacts with a metal-regulated enhancer element (MRE) of the mouse metallothionein-I gene. Westin G, et al. **EMBO J** 1988 Dec 1;7(12):3763–70
The expression of a metallothionein–ovine growth hormone fusion gene in transgenic mice does not impair fertility but results in pathological lesions in the liver. Orian JM, et al. **Endocrinology** 1989 Jan;124(1):455–63
Expression of a mouse metallothionein–Escherichia coli beta-galactosidase fusion gene (MT-beta gal) in early mouse embryos. Stevens ME, et al. **Exp Cell Res** 1989 Aug; 183(2):319–25
Tissue-specific regulation of zinc metabolism and metallothionein genes by interleukin 1. Cousins RJ, et al. **FASEB J** 1988 Oct;2(13):2884–90
Metallothionein RNA levels in HL-60 cells. Effect of cadmium, differentiation, and protein kinase C activation. Hanke T, et al. **FEBS Lett** 1988 Dec 5;241(1–2):159–63
Activation of the mouse metallothionein-I promoter in transiently transfected avian cells. Kelder B, et al. **Gene** 1989 Mar 15;76(1):75–80
Hyperinducible gene expression from a metallothionein promoter containing additional metal-responsive elements. McNeall J, et al. **Gene** 1989 Mar 15;76(1):81–8
Expression of a mouse metallothionein gene in transgenic plant tissues. Pautot V, et al. **Gene** 1989 Apr 15;77(1):133–40
Chemical synthesis and expression of copper metallothionein gene of Neurospora crassa. Sugimoto M, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):924–6
Ubiquitin–metallothionein fusion protein expression in yeast. A genetic approach for analysis of ubiquitin functions. Butt TR, et al. **J Biol Chem** 1988 Nov 5;263(31):16364–71
Interaction of a positive regulatory factor(s) with a 106-base pair upstream region controls transcription of metallothionein-I gene in the liver. Garg LC, et al. **J Biol Chem** 1989 Feb 5;264(4):2134–8
Microinjection and expression of a mouse metallothionein human growth hormone fusion gene in fertilized salmonid eggs. Rokkones E, et al. **J Comp Physiol [B]** 1989; 158(6):751–8
Expression of human or bovine growth hormone gene with a mouse metallothionein-1 promoter in transgenic swine alters the secretion of porcine growth hormone and insulin-like growth factor-I. Miller KF, et al. **J Endocrinol** 1989 Mar;120(3):481–8
Structure and expression of chicken metallothionein. Fernando LP, et al. **J Nutr** 1989 Feb;119(2):309–18 (70 ref.)
Maternal zinc deprivation and interleukin-1 influence metallothionein gene expression and zinc metabolism of rats. Huber KL, et al. **J Nutr** 1988 Dec;118(12):1570–6
In vitro and in vivo regulation of liver epithelial cells carrying a metallothionein-rasT24 fusion gene. Seyama T, et al. **Mol Carcinog** 1988;1(2):89–95
Fine mapping of a mouse metallothionein gene metal response element. Culotta VC, et al. **Mol Cell Biol** 1989 Mar; 9(3):1376–80
Calcium phosphate-mediated transfection alters metallothionein gene expression in response to Cd2+ and Zn2+. Foster R, et al. **Mol Cell Biol** 1989 Sep;9(9):4105–8
Differential repair of DNA damage in the human metallothionein gene family. Leadon SA, et al. **Mol Cell Biol** 1988 Dec;8(12):5331–8
A cysteine-rich nuclear protein activates yeast metallothionein gene transcription. Szczypka MS, et al. **Mol Cell Biol** 1989 Feb;9(2):421–9
Structure of the rainbow trout metallothionein B gene and characterization of its metal-responsive region. Zafarullah M, et al. **Mol Cell Biol** 1988 Oct;8(10):4469–76
A BamHI RFLP at MT2A on human chromosome 16. Bates LJ, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9071
Detection of a nuclear protein that interacts with a metal regulatory element of the mouse metallothionein 1 gene. Séguin C, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10547–60
Molecular cloning of cDNA for rat brain metallothionein-II and regulation of its gene expression. Saijoh K, et al. **Pharmacol Toxicol** 1989 May;64(5):464–8
Versatile cassettes designed for the copper inducible expression of proteins in yeast. Macreadie IG, et al. **Plasmid** 1989 Mar;21(2):147–50
Changes in brain gene expression shared by scrapie and Alzheimer disease. Duguid JR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7260–4
Copper-induced binding of cellular factors to yeast metallothionein upstream activation sequences. Huibregtse JM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):65–9
Expression in transgenic mice of class I histocompatibility antigens controlled by the metallothionein promoter. Morahan G, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3782–6
Elevation in metallothionein messenger RNA in rat tissues

after exposure to X-irradiation. Shiraishi N, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):501–6

Resistance of Drosophila to cadmium: biochemical factors in resistant and sensitive strains. Gill HJ, et al. **Toxicology** 1989 Jun 16;56(3):315–21

[Increase of hepatic and renal metallothionein mRNA level induced by whole body irradiation] Hayashi H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1467–71 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

A murine monoclonal anti-metallothionein autoantibody recognizes a chemically synthesized amino-terminal heptapeptide common to various animal metallothioneins. Kikuchi Y, et al. **Mol Immunol** 1988 Oct;25(10):1033–6

ISOLATION & PURIFICATION

Purification and properties of novel molluscan metallothioneins. Roesijadi G, et al. **Arch Biochem Biophys** 1989 Sep;273(2):403–13

Isolation and partial characterization of the low-molecular-mass zinc/cadmium-binding protein from the testes of the patas monkey (Erythrocebus patas). Distinction from metallothionein. Waalkes MP, et al. **Biochem J** 1988 Nov 15;256(1):131–7

Resistance of cultured hepatoma cells to copper toxicity. Purification and characterization of the hepatoma metallothionein. Freedman JH, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):145–54

Biochemical properties of metallothionein isoforms from bovine hippocampus. Paliwal VK, et al. **Exp Brain Res** 1989;75(3):477–82

Presence of a metallothionein-like protein in the bovine pineal gland. Awad A, et al. **J Neural Transm** 1989; 76(2):129–44

Purification of cadmium-binding proteins from related species of terrestrial Helicidae (Gastropoda, Mollusca): a comparative study. Dallinger R, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):135–45

METABOLISM

Metallothionein contents in selected tissues of cattle from copper-deficient areas in north-east Poland. Kleczkowski M. **Acta Vet Hung** 1988;36(1–2):101–6

Effect of zinc deficiency on the accumulation of metallothionein and cadmium in the rat liver and kidney. Sato M, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug; 18(4):587–93

A unique low frequency Raman band associated with metal binding to metallothionein. Elgren TE, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1093–9

Kinetic lability of zinc bound to metallothionein in Ehrlich cells. Krezoski SK, et al. **Biochem J** 1988 Oct 15; 255(2):483–91

Biochemistry of metallothionein. Kägi JH, et al. **Biochemistry** 1988 Nov 15;27(23):8509–15 (92 ref.)

Magnetic circular dichroism and electron paramagnetic resonance studies of iron(II)-metallothionein. Werth MT, et al. **Biochemistry** 1989 May 2;28(9):3982–8

Metallothionein-like cadmium binding protein in rat testes administered with cadmium and selenium. Ohta H, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):195–200

Cortisol induction of metallothionein in primary culture of rainbow trout hepatocytes. Hyllner SJ, et al. **J Cell Physiol** 1989 Apr;139(1):24–8

Immunohistochemical localization of metallothionein in developing rat tissues. Nishimura H, et al. **J Histochem Cytochem** 1989 May;37(5):715–22

Platinum(II) binding to metallothioneins. Bongers J, et al. **J Inorg Biochem** 1988 Sep;34(1):55–62

Structural and functional diversity of copper-metallothioneins from the American lobster Homarus americanus. Brouwer M, et al. **J Inorg Biochem** 1989 Apr;35(4):289–303

The effect of dietary zinc status on biliary metal excretion of rats. Jaw S, et al. **J Nutr** 1988 Nov;118(11):1385–90

Effects of iron deficiency on metallothionein–I concentrations in blood and tissues of rats. Robertson A, et al. **J Nutr** 1989 Mar;119(3):439–45

Metallothionein and copper in liver disease with copper retention—a histopathological study. Elmes ME, et al. **J Pathol** 1989 Jun;158(2):131–7

Metabolic changes in glutathione and metallothionein in newborn rat liver. Gallant KR, et al. **J Pharmacol Exp Ther** 1989 May;249(2):631–7

Role of metallothionein in biliary metal excretion. Jaw S, et al. **J Toxicol Environ Health** 1989;28(1):39–51

The CUP2 gene product, regulator of yeast metallothionein expression, is a copper-activated DNA-binding protein. Buchman C, et al. **Mol Cell Biol** 1989 Sep;9(9):4091–5

Reconstitution of neurocupreins by Cu–thioneins. Melkonyan VZ, et al. **Neurochem Res** 1989 Jun;14(6):589–91

Hepatic metallothionein as a source of zinc and cysteine during the first year of life. Zlotkin SH, et al. **Pediatr Res** 1988 Sep;24(3):326–9

Degradation of zinc-metallothionein in monolayer cultures of rat hepatocytes. Chen ML, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):130–8

Immunohistochemical localization of metallothionein in the rat prostate gland during postnatal development. Timms BG, et al. **Prostate** 1989;14(4):367–82

Influence of diethyldithiocarbamate on nickel-induced hepatic metallothionein in rats. Khandelwal S, et al. **Toxicol Ind Health** 1989 May;5(3):405–13

Characterization and development of metallothionein in fetal forelimbs, brain and liver from the mouse. Muñoz C, et al. **Toxicol Lett** 1989 Jan;45(1):83–91

Metallothionein–I accumulation in the rat lung following a single paraquat administration. Sato M, et al. **Toxicol Lett** 1989 Jan;45(1):41–7

PHARMACOLOGY

Modulation of the catalytic activity of pyridoxal kinase by metallothionein. Churchich JE, et al. **Biochem Int** 1988 Sep; 17(3):395–403

DNA radiation damage and its modification by metallothionein. Greenstock CL, et al. **Free Radic Res Commun** 1987;2(4–6):233–9

Inhibition of hydroxyl-radical-generated DNA degradation by metallothionein. Abel J, et al. **Toxicol Lett** 1989 May; 47(2):191–6

PHYSIOLOGY

Protective effect of zinc against hepatotoxic agents in the rat liver slice system: role of metallothionein. Wormser U, et al. **Arch Toxicol Suppl** 1989;13:316–8

Activation of pyridoxal kinase by metallothionein. Churchich JE, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):181–6

Effect of metallothionein on granulocyte chemotaxis and superoxide generation. Hanada K, et al. **Dermatologica** 1989;179 Suppl 1:143

Stimulation of peroxidation in rat liver microsomes by (copper, zinc)–metallothioneins. Arthur JR, et al. **Free Radic Res Commun** 1987;4(1):15–20

Is metallothionein involved in deposition of cadmium in bile? Mikalsen A, et al. **Gen Pharmacol** 1989;20(1):11–5

Effects of cadmium–metallothionein on renal organic ion transport and lipid peroxidation in rats. Suzuki CA, et al. **J Biochem Toxicol** 1988 Spring;3:11–20

Recent developments in trace element metabolism and function: role of metallothionein in copper and zinc metabolism. Richards MP. **J Nutr** 1989 Jul;119(7):1062–70 (94 ref.)

Overexpression of metallothionein confers resistance to anticancer drugs. Kelley SL, et al. **Science** 1988 Sep 30; 241(4874):1813–5

[Metallothionein as a resistance factor for antitumor drugs] Imura N, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):599–604 (Eng. Abstr.) **(Jpn)**

[The protective effect of simultaneous selenium administration on acute cadmium toxicity and metallothionein] Ohta H, et al. **Sangyo Igaku** 1988 Nov; 30(6):451–8 (Eng. Abstr.) **(Jpn)**

TOXICITY

The teratogenicity of cadmium–metallothionein in the rat. Webb M, et al. **Arch Toxicol** 1988;61(6):457–67

Renal glutathione depletion and nephrotoxicity of cadmium–metallothionein in rats. Suzuki CA, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):544–52

Comparisons of the toxicity of CdCl2 and Cd–metallothionein in isolated rat hepatocytes. Sendelbach LE, et al. **Toxicology** 1989 Apr;55(1–2):83–91

URINE

Chronic cadmium intake results in dose-related excretion of metallothionein in urine. Shaikh ZA, et al. **Experientia** 1989 Feb 15;45(2):146–8

Urinary zinc and metallothionein in children with spina bifida. Zimmerman AW, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):23–7

A sensitive cadmium–affinity assay for the determination of thionein in urine. Payan JP, et al. **Toxicol Lett** 1988 Nov; 44(1–2):121–30

Urinary excretion of metallothionein–I and its degradation product in rats treated with cadmium, copper, zinc or mercury. Sato M, et al. **Toxicology** 1989 May 31;56(1):23–33

METALLURGY

Vestibulo–oculomotor disturbances caused by occupational hazards. Wenngren BI, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:7–10 (23 ref.)

An industrial hygiene appraisal of triethylamine and dimethylethylamine exposure limits in the foundry industry. Warren DW Jr, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):630–4

Responses to collective risk: appraisal and coping among workers exposed to occupational health hazards. Brody JG. **Am J Community Psychol** 1988 Oct;16(5):645–63

Elevated serum zinc levels in metal fume fever. Noel NE, et al. **Am J Emerg Med** 1988 Nov;6(6):609–10

A comparison of several measures of exposure to arsenic. Matched case–control study of copper smelter employees. Lee–Feldstein A. **Am J Epidemiol** 1989 Jan;129(1):112–24

Epidemiology of coca and alcohol use among high–altitude miners in Argentina. Schinder EO, et al. **Am J Ind Med** 1989;15(5):579–87

Does aluminum smelting cause lung disease? Abramson MJ, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1042–57 (92 ref.)

Cobalt exposure and lung disease in tungsten carbide production. A cross-sectional study of current workers. Sprince NL, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1220–6

Chemical composition and particle morphology of brazing fume from cadmium brazing alloy and fluoroborate flux. Thorne BD, et al. **Ann Occup Hyg** 1988;32(4):489–97

Longitudinal study of workers in an aluminum smelter. Chan–Yeung M, et al. **Arch Environ Health** 1989 May–Jun; 44(3):134–9

Evaluation of right and left ventricular function in hard metal workers. Horowitz SF, et al. **Br J Ind Med** 1988 Nov; 45(11):742–6

Relations between liver cadmium, cumulative exposure, and renal function in cadmium alloy workers. Mason HJ, et al. **Br J Ind Med** 1988 Dec;45(12):793–802

Respiratory hazards in hard metal workers: a cross sectional study. Meyer–Bisch C, et al. **Br J Ind Med** 1989 May; 46(5):302–9

Cancer incidence and mortality among Swedish smelter workers. Sandström AI, et al. **Br J Ind Med** 1989 Feb; 46(2):82–9

Hepatocellular carcinoma and exposure to hexachlorobenzene: a case report. Seldén A, et al. **Br J Ind Med** 1989 Feb;46(2):138–40

Respiratory disease mortality patterns among South African iron moulders. Sitas F, et al. **Br J Ind Med** 1989 May; 46(5):310–5

Cancer mortality in a cohort of United Kingdom steel foundry workers: 1946–85. Sorahan T, et al. **Br J Ind Med** 1989 Feb;46(2):74–81

Incidence of laryngeal cancer and exposure to acid mists. Steenland K, et al. **Br J Ind Med** 1988 Nov;45(11):766–76

Dermatoses in metal workers. (I). Irritant contact dermatitis. de Boer EM, et al. **Contact Dermatitis** 1989 Mar;20(3):212–8

Dermatoses in metal workers. (II). Allergic contact dermatitis. de Boer EM, et al. **Contact Dermatitis** 1989 Apr; 20(4):280–6

Dyshidrotic eczema as an occupational dermatitis in metal workers. de Boer EM, et al. **Contact Dermatitis** 1988 Sep; 19(3):184–8

Occupational exposure to volatile nitrosamines in foundries using the "Ashland" core-making process. Ducos P, et al. **Environ Res** 1988 Oct;47(1):72–8

Correlation between airborne U exposure and U urinalysis results at Bear Creek Uranium. Chase GR. **Health Phys** 1989 Feb;56(2):195–9

Plant/soil concentration ratios of 226Ra for contrasting sites around an active U mine–mill. Ibrahim SA, et al. **Health Phys** 1988 Dec;55(6):903–10

Monitoring of mutagenicity in cutting fluids during their recycled use. Kira S, et al. **Ind Health** 1989;27(1):17–21

Occupational lead poisoning among silver jewellery workers. Kachru DN, et al. **Indian J Med Sci** 1989 Apr;43(4):89–91

Effectiveness of the United Steel Workers of America Coke Oven Intervention Program. Parkinson DK, et al. **J Occup Med** 1989 May;31(5):464–72

Mortality among bearing plant workers exposed to metalworking fluids and abrasives. Silverstein M, et al. **J Occup Med** 1988 Sep;30(9):706–14

A near–fatal poisoning. Schreiner RD, et al. **J Tenn Med Assoc** 1989 Mar;82(3):138

A fresh start. Report of a one–day workshop on occupational asthma in the aluminium industry. Winder C, et al. **Med J Aust** 1989 Sep 4;151(5):273–6

Chronic bronchitis in the iron and steel industry: prevalence study. Scotti PG, et al. **Med Lav** 1989 Mar–Apr; 80(2):123–31

Acute occupational fatalities in a foundry—Indiana, 1974–1986. **MMWR** 1989 May 5;38(17):293–7

Occupational asthma due to soft corrosive soldering fluxes containing zinc chloride and ammonium chloride. Weir DC, et al. **Thorax** 1989 Mar;44(3):220–3

Workers under stress. Self-reported health and well-being of Weirton steel workers before and after becoming an ESOP company. Levine A, et al. **W V Med J** 1988 Dec; 84(12):561–7

[Correlation of the level of exposure to silicotic dusts and the health status of a group of workers in the manufacture of refractory products in the metallurgy industry] Todea A, et al. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):343–9 (Eng. Abstr.) **(Fre)**

[Cobalt allergy with special reference to the hard metal industry] Metzner HH. **Dermatol Monatsschr** 1988; 174(12):713–22 (Eng. Abstr.) **(Ger)**

[Aluminum dust lungs] Lapp H, et al. **Z Erkr Atmungsorgane** 1988;171(3):235–42 (Eng. Abstr.) **(Ger)**

[Changed manifestation of fluorosis as an occupational disease within the past 15 years] Runge H. **Z Gesamte Hyg** 1988 Jul;34(7):396–8 (Eng. Abstr.) **(Ger)**

[Effect of smelting with propane–butane–oxygen and an acetylene–oxygen flame on the properties of Co and Ni base alloys] Lenz E, et al. **Zahn Mund Kieferheilkd** 1988; 76(7):683–91 (Eng. Abstr.) **(Ger)**

[Effect of heavy metal ions on male fertility] Matthies J, et al. **Zentralbl Gynakol** 1989;111(3):155–66 (Eng. Abstr.) **(Ger)**

[Risks and respiratory pathology in a metal manufacturing factory] Talini D, et al. **Med Lav** 1988 Sep–Oct; 79(5):377–85 (Eng. Abstr.) **(Ita)**

[Cadmium level in the blood of the Cracow population] Zielonka E, et al. **Folia Med Cracov** 1988;29(1–2):99–110 (Eng. Abstr.) **(Pol)**

[Gynecologic examinations of women working in the metallurgy industry] Kula B, et al. **Ginekol Pol** 1988 Jul; 59(7):450–4 (Eng. Abstr.) (Pol)

[Studies of the correlation of physiologic energy out put and efficiency and physical work capacity (VO2max) of turners] Jopkiewicz A. **Med Pr** 1988;39(4):271–5 (Eng. Abstr.) (Pol)

[Evaluation of exposure to fumes arising during welding of non-alloyed and low-alloyed steel by various methods] Matczak W, et al. **Med Pr** 1988;39(4):253–61 (Eng. Abstr.) (Pol)

[Causes and rates of absenteeism in selected branches of industry during the years 1970–1987] Szubert Z, et al. **Med Pr** 1988;39(6):446–54 (Eng. Abstr.) (Pol)

[Presence of potentially pathogenic bacteria and fungi in the cooling–lubricating emulsion used in the aluminum sheet rolling process] Włodarczak K, et al. **Med Pr** 1989; 40(1):24–7 (Eng. Abstr.) (Pol)

[Clinical and control studies of cancer of the lungs. Smoking and employment in metallurgy] Jędrychowski W, et al. **Przegl Lek** 1989;46(3):329–33 (Eng. Abstr.) (Pol)

[Incidence of anemia in pregnancy and the condition of newborn infants born to women working in industrial plants in Białystok] Bielecki M, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:245–9 (Eng. Abstr.) (Pol)

[Osteoarticular changes in vibration disease] Ablamunets KIa, et al. **Gig Sanit** 1988 Oct;(10):24–6 (Eng. Abstr.) (Rus)

[External respiratory function in foundry shop workers exposed to synthetic resin destruction products] Shestakov NM, et al. **Gig Sanit** 1989 Feb;(2):89–90 (Rus)

[Effect of occupational factors on the condition of the oral cavity in workers engaged in the processing of non-ferrous metals] Abduazimov AD. **Gig Tr Prof Zabol** 1988 Aug; (8):34–6 (Eng. Abstr.) (Rus)

[Hygienic evaluation of the technologic process of lead recovery from metallurgic dust of a copper–smelting plant] Babkin VO, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):44–6 (Eng. Abstr.) (Rus)

[Working conditions in manufacturing stable magnets using the powder metallurgy method] Dubelkovskaia LS, et al. **Gig Tr Prof Zabol** 1989;(6):17–9 (Eng. Abstr.) (Rus)

[Industrial hygiene and toxicology problems in the manufacture of titanium and its compounds (a review of the literature)] Felgin BG. **Gig Tr Prof Zabol** 1988 Jul; (7):30–3 (41 ref.) (Rus)

[Occupational morbidity of workers of the Krivbass iron ore works: ways of its reduction and prevention] Makarenko NA, et al. **Gig Tr Prof Zabol** 1989;(6):1–4 (Eng. Abstr.) (Rus)

[Status of visual function in persons working at metal–rolling hot shops of a metallurgic combine] Mambetov EK, et al. **Gig Tr Prof Zabol** 1989;(4):55–6 (Rus)

[Experimental evaluation of the combined effect of the noise and aerosols in the air of steel mills] Paranko NM, et al. **Gig Tr Prof Zabol** 1989;(1):21–4 (Eng. Abstr.) (Rus)

[Causes of primary disability of miners at the iron ore mining–processing plants] Pavlenko ME, et al. **Gig Tr Prof Zabol** 1989;(6):4–6 (Eng. Abstr.) (Rus)

[Characteristics of the physiological functions in the operators of foundry transfer lines in the course of the work day and week] Solov'eva LP, et al. **Gig Tr Prof Zabol** 1989; (2):17–20 (Eng. Abstr.) (Rus)

[Health problems related to the reconstruction of copper smelting plants] Vartazarian LD. **Gig Tr Prof Zabol** 1989; (6):9–12 (Eng. Abstr.) (Rus)

[Sanitary improvement in the working conditions at the core departments of foundries in relation to the use of synthetic resins] Vilisov BA, et al. **Gig Tr Prof Zabol** 1988 Jul; (7):33–6 (Eng. Abstr.) (Rus)

[Characteristics of functional reorganization of the body after exposure to noise in the initial period of work activity] Zvereva GS. **Gig Tr Prof Zabol** 1988 Dec;(12):25–8 (Eng. Abstr.) (Rus)

[Treatment of tendovaginitis crepitans of the forearm by the method of local ethyl chloride hypothermia] Il'inskii IS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):116–7 (Rus)

[Anomalies of refraction and optimal correction of ametropia in workers in the metallurgy industry] Mambetov EK, et al. **Oftalmol Zh** 1989;(1):33–4 (Eng. Abstr.) (Rus)

[The visual functions of workers at the converter shop of the Karaganda Metallurgical Combine from an ophthalmic ergonomic viewpoint] Ul'danov GA, et al. **Oftalmol Zh** 1988;(5):296–9 (Eng. Abstr.) (Rus)

[Estimation of the total mutagenic activity of the industrial environment at ferrous metallurgy enterprises] Sedova KS. **Tsitol Genet** 1989 Mar–Apr;23(2):16–20 (Eng. Abstr.) (Rus)

[Epidemiology and the characteristics of foot mycoses in metallurgy workers] Kovalenko IuB, et al. **Vestn Dermatol Venerol** 1988;(7):53–7 (Eng. Abstr.) (Rus)

[Vitamin status of workers in the chromium industry] Karimov TK. **Vopr Pitan** 1988 May–Jun;(3):20–2 (Eng. Abstr.) (Rus)

[Physiologo–hygienic features of workers engaged in welding cast–iron items with preliminary heating] Kucheruk TK, et al. **Vrach Delo** 1989 Feb;(2):92–5 (Eng. Abstr.) (Rus)

[Ventilatory function in aluminum extraction workers: a 4–year follow–up study] Gomzi M. **Arh Hig Rada Toksikol** 1988 Sep;39(3):289–96 (Eng. Abstr.) (Scr)

[The effect of occupational damage registered in the metalworking industry on the basis of pulmonary function in workers] Popović V, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):203–13 (Eng. Abstr.) (Scr)

[Occupational skin diseases in rolling–mill workers in aluminum mills] Balić J, et al. **Ljec Vjesn** 1989 Apr–May; 111(4–5):139–43 (Eng. Abstr.) (Scr)

HISTORY

[Brunon Nowakowski, a distinguished representative of Polish occupational medicine and the organizer and first rector of the Silesian Medical Academy] Puzio A. **Arch Hist Filoz Med** 1988;51(3):359–72 (Eng. Abstr.) (Pol)

INSTRUMENTATION

Analysis of electric and magnetic fields leaking from induction heaters. Andreuccetti D, et al. **Bioelectromagnetics** 1988;9(4):373–9

[Evaluation of impulse noise at an industrial blacksmith's shop] Soletski L. **Gig Tr Prof Zabol** 1988 Dec;(12):22–4 (Eng. Abstr.) (Rus)

STANDARDS

[Evaluation of occupational exposure to nickel and other metals based on the analysis of air in the production of nickel alloys] Dobecki M, et al. **Med Pr** 1988;39(6):399–405 (Eng. Abstr.) (Pol)

[Methodology and evaluation of exposure to fumes formed during welding of chromium–nickel steel] Matczak W, et al. **Med Pr** 1988;39(3):175–85 (Eng. Abstr.) (Pol)

[Problem of the evaluation of working conditions and morbidity of workers in copper, zinc and lead industries] Abdazimov AD. **Gig Tr Prof Zabol** 1989;(5):18–21 (Eng. Abstr.) (Rus)

[Introduction of hygienic recommendations in the construction of health centers at the Iu.V. Andropov Novolipetsk metallurgical combine] Libanov AS, et al. **Gig Tr Prof Zabol** 1989;(5):34–5 (Rus)

METALS

see related

ORGANOMETALLIC COMPOUNDS

Osseointegration of metallic implants. I. Light microscopy in the rabbit. Linder L. **Acta Orthop Scand** 1989 Apr; 60(2):129–34

Osseointegration of metallic implants. II. Transmission electron microscopy in the rabbit. Linder L, et al. **Acta Orthop Scand** 1989 Apr;60(2):135–9

Vibrational spectroscopic studies of the structure of species derived from the chemisorption of hydrocarbons on metal single–crystal surfaces. Sheppard N. **Annu Rev Phys Chem** 1988;39:589–644 (169 ref.)

Particles from drill bit and metal suction tip friction distort magnetic resonance imaging. Groah L, et al. **AORN J** 1989 Mar;49(3):882–3

The role of metals in aqueous superoxide chemistry. Bielski BH. **Basic Life Sci** 1988;49:123–30

Electron spin resonance of the semiquinone of the antitumor antibiotic streptonigrin and its metal complexes. Soedjak HS, et al. **Basic Life Sci** 1988;49:203–10

Interaction of mithramycin with metal ions and DNA. Cons BM, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):517–24

Interactions of metal ions with phosphatidylserine bilayer membranes: effect of hydrocarbon chain unsaturation. Mattai J, et al. **Biochemistry** 1989 Mar 7;28(5):2322–30

The saga of IMAC and MIT. Sulkowski E. **Bioessays** 1989 May;10(5):170–5 (40 ref.)

Preliminary evaluation of metal pollution from wear of auto tires. Sadiq M, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):743–8

Use of a metal ring–marked catheter for geometric calibration in quantitative coronary angiography. Jacobs JH Jr, et al. **Cathet Cardiovasc Diagn** 1988;15(2):121–4

Interaction of metallic neurosurgical implants with magnetic resonance imaging at 1.5 Tesla as a cause of image distortion and of hazardous movement of the implant. Go KG, et al. **Clin Neurol Neurosurg** 1989;91(2):109–15

Evaluation of the metal–ion–coordinating differences between the 2'–, 3'– and 5'–monophosphates of adenosine. Massoud SS, et al. **Eur J Biochem** 1989 Feb 1;179(2):451–8

A site–specific mechanism for free radical induced biological damage: the essential role of redox–active transition metals. Chevion M. **Free Radic Biol Med** 1988;5(1):27–37 (153 ref.)

A (re)investigation of the influence of some metal ions on the mean size of 99mTc(Sn)–MDP constituents at neutral pH. Huigen YM, et al. **Int J Rad Appl Instrum [A]** 1989; 40(5):431–2

Synthesis, characterization, and antitumor properties of some metal complexes of 2,6–diacetylpyridine bis(N4–azacyclic thiosemicarbazones). Mohan M, et al. **J Inorg Biochem** 1988 Sep;34(1):41–54

Intraoperative excision of metal prominences: a technical note. Kaufer H, et al. **J Pediatr Orthop** 1989 May–Jun; 9(3):341–2

Heating effects of metallic implants by MRI examinations. Buchli R, et al. **Magn Reson Med** 1988 Jul;7(3):255–61

Electrode material in iontophoresis [letter] Linblad LE, et al. **Pharm Res** 1987 Oct;4(5):438

A study of the metal complexation behaviour of some penicillins, cephalosporins and their derivatives. Van Krimpen PC, et al. **Pharm Weekbl [Sci]** 1988 Dec 9; 10(6):259–66

Surface topography of histidine residues: a facile probe by immobilized metal ion affinity chromatography. Hemdan ES, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1811–5

Adsorption of viruses to diatomaceous earth modified by in situ precipitation of metallic salts. Farrah SR, et al. **Z Gesamte Hyg** 1988 Sep;34(9):520–1

[The pH–dependent solubility of heavy metals from sewage sludge of different compositions] Rothe N, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):112–24 (Eng. Abstr.) (Ger)

[Significance of electrocardiographic studies in the detection of coronary pathology during prophylactic mass screening of miners working in polymetal mines] Abdrashitova GA, et al. **Gig Tr Prof Zabol** 1989;(6):49–50 (Rus)

ADVERSE EFFECTS

Implantation of orthopaedic devices in patients with metal allergy. Carlsson A, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):62–6

On welding, wheezing, and whimsy. Morgan WK. **Am Ind Hyg Assoc J** 1989 Feb;50(2):59–69 (75 ref.)

Respiratory diseases from hard metal or cobalt exposure. Solving the enigma [editorial] Demedts M, et al. **Chest** 1989 Jan;95(1):2–3

Dermatoses in metal workers. (I). Irritant contact dermatitis. de Boer EM, et al. **Contact Dermatitis** 1989 Mar;20(3):212–8

Mechanisms of metal–induced renal cell injury: roles of high–affinity metal–binding proteins. Fowler BA. **Contrib Nephrol** 1988;64:83–92 (43 ref.)

Serum antibodies to Pseudomonas pseudoalcaligenes in metal workers exposed to infected metal–working fluids. Mattsby–Baltzer I, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):304–11

Metacarpal fracture fixation with interosseous nylon suture in a patient with metal allergies. Haas SB, et al. **J Hand Surg [Am]** 1989 Jan;14(1):107–10

Electrophysiology and metallosis: support for an oxidative (free radical) mechanism in the human eye. Good P, et al. **Ophthalmologica** 1988;196(4):204–9 (15 ref.)

[Heavy metal exposure of the dental technician] Vollmer D, et al. **Z Gesamte Hyg** 1988 May;34(5):317–9 (Eng. Abstr.) (Ger)

[Effect of heavy metal ions on male fertility] Matthies J, et al. **Zentralbl Gynakol** 1989;111(3):155–66 (Eng. Abstr.) (Ger)

[Contact dermatitis caused by benzalkonium chloride mimicking metal dermatitis] Trevisan G, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):513–5 (Eng. Abstr.) (Ita)

[Carcinogenic metals] Norseth T. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1638–41 (Eng. Abstr.) (Nor)

[Pathologic skin changes in workers at electric and thermoelectric power plants] Kieć–Swierczyńska M, et al. **Med Pr** 1988;39(6):423–8 (Eng. Abstr.) (Pol)

[The role of metals in the development of allergy in workers in the electrotechnical industry] Kieć–Swierczyńska M. **Przegl Dermatol** 1988 Jul–Aug;75(4):272–6 (Eng. Abstr.) (Pol)

[Ecologic aspects of the circulation of carcinogenic PAH and heavy metals in the geochemical landscapes of the Ural River basin] Beliakova TM, et al. **Eksp Onkol** 1988; 10(6):62–6 (Eng. Abstr.) (Rus)

ANALYSIS

Continuum source atomic absorption spectrometry in a graphite furnace with photodiode array detection. Jones BT, et al. **Anal Chem** 1989 Aug 1;61(15):1670–4

Algae columns with anodic stripping voltammetric detection. Kubiak WW, et al. **Anal Chem** 1989 Mar 1;61(5):468–71

Automated two–column ion exchange system for determination of the speciation of trace metals in natural waters. Liu Y, et al. **Anal Chem** 1989 Mar 15;61(6):525–9

Determination of nanogram amounts of iodine by chemisorption on metals and subsequent isotope dilution. Application to biological reference materials. Mantel M. **Analyst** 1988 Jun;113(6):973–5

Toxic environmental chemicals in human semen: analytical method and case studies. Stachel B, et al. **Andrologia** 1989 May–Jun;21(3):282–91

Metals of bovine heart cytochrome c oxidase. Yewey GL, et al. **Ann N Y Acad Sci** 1988;550:22–32

Organochlorine chemical and heavy metal contaminants in white–beaked dolphins (Lagenorhynchus albirostris) and pilot whales (Globicephala melaena) from the coast of Newfoundland, Canada. Muir DC, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):613–29

Analytical characterization of cytochrome oxidase preparations with regard to metal and phospholipid contents, peptide composition and catalytic activity. Oblad M, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):267–70

Altered element concentrations in tissues of spontaneously hypertensive rats. Leblondel G, et al. **Biomed Pharmacother** 1988;42(2):121–9

Heavy metals in bivalve molluscs in the Huelva estuary. López–Artíguez M, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):634–42

Distribution of Cr, Pb, Cd, Zn, Fe and Mn in Lake Victoria

sediments, east Africa. Onyari JM, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):807–13

Determination of metal content in three types of human gallstone. Yamamoto I, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):1–8

Effects of scalding injury on the components of rabbit paw lymph. Hiroto Y, et al. **Burns Incl Therm Inj** 1988 Aug; 14(4):313–9

Regional metal concentrations in Parkinson's disease, other chronic neurological diseases, and control brains. Uitti RJ, et al. **Can J Neurol Sci** 1989 Aug;16(3):310–4

Age dependence of metals in hair in a selected U.S. population. Paschal DC, et al. **Environ Res** 1989 Feb; 48(1):17–28

Chronic exposure of sheep to a zinc smelter in Peru. Reif JS, et al. **Environ Res** 1989 Jun;49(1):40–9

Changes of elemental concentrations around/on the rat sperm plasma membrane during maturation in the male genital tract. Ozawa Y, et al. **Gamete Res** 1987 Dec;18(4):311–8

Assessment of variability in individual exposure to metals. Piscator M. **Int Arch Occup Environ Health** 1988; Suppl:17–21 (19 ref.)

Heavy metal, pH, and total solid content of maple sap and syrup produced in eastern Canada. Robinson AR, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):674–9

Methods of analysis for toxic elements in food products. 1. Mineralization methods to determine heavy metals and arsenic according to the USSR standard. Skurikhin IM. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):286–90

Methods of analysis for toxic elements in food products. 2. Review of USSR standards on determinations of heavy metals and arsenic. Skurikhin IM. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):290–3

Evidence that the endogenous heat-stable glucocorticoid receptor stabilizing factor is a metal component of the untransformed receptor complex. Meshinchi S, et al. **J Biol Chem** 1988 Nov 15;263(32):16809–17

Projections from the medial cortex in the brain of lizards: correlation of anterograde and retrograde transport of horseradish peroxidase with Timm staining. Olucha F, et al. **J Comp Neurol** 1988 Oct 22;276(4):469–80

Oxygen ordering and twinning in YBa2Cu3O7-x. Barry JC. **J Electron Microsc Tech** 1988 Mar;8(3):325–37

A new technique for preparing metal/oxide TEM cross sections. Doychak J. **J Electron Microsc Tech** 1989 Feb; 11(2):180–2

Cross-sectional TEM specimens of metal contacts to semiconductors. Ivey DG, et al. **J Electron Microsc Tech** 1988 Feb;8(2):233–5

Evaluation of high-resolution electron microscopy as a method for studying Y–Ba–Cu–O superconductors. Krakow W, et al. **J Electron Microsc Tech** 1988 Mar; 8(3):273–84

A variation of transmission electron microscope sample preparation for VLSI analysis. Madden MC, et al. **J Electron Microsc Tech** 1989 Feb;11(2):161–6

Electron microscopy study of twin behavior in GdBa2Cu3Ox and YBa2Cu3Ox. Mitchell TE, et al. **J Electron Microsc Tech** 1988 Mar;8(3):317–23

Structural characterization of Ba2YCu3O7 by high resolution transmission electron microscopy. Ourmazd A, et al. **J Electron Microsc Tech** 1988 Mar;8(3):251–62

Analytical electron microscopy study of high Tc superconductor YBa2Cu3O7. Sabatini RL, et al. **J Electron Microsc Tech** 1988 Mar;8(3):307–9

Structure of superconducting thin films of YBa2Cu3O7-x grown on SrTiO3 and cubic zirconia. Tietz LA, et al. **J Electron Microsc Tech** 1988 Mar;8(3):263–72

WHO issues report on heavy metal and PAH compounds from municipal incinerators [news] **JAPCA** 1989 Jun; 39(6):792–4

Computer programs for calculating total from specified free or free from specified total ionic concentrations in aqueous solutions containing multiple metals and ligands. Fabiato A. **Methods Enzymol** 1988;157:378–417

Metallic contaminants in Andalusian vinegars. Troncoso González AM, et al. **Nahrung** 1988;32(8):743–8

Development of a validation test for self-reported abstinence from smokeless tobacco products: preliminary results. Robertson JB, et al. **Prev Med** 1988 Jul;17(4):496–502

Element concentrations in the air of an indoor shooting range. Dams R, et al. **Sci Total Environ** 1988 Nov 1; 77(1):1–13

The Shipham report. An investigation into cadmium contamination and its implications for human health. Metal contamination at Shipham. Morgan H. **Sci Total Environ** 1988 Aug 15;75(1):11–20

Sources and storm loading variations of metal species in a gullypot catchment. Morrison GM, et al. **Sci Total Environ** 1989 May 15;80(2–3):267–78

Heavy metal pollution induced by a ferro-nickel smelting plant in Greece. Nicolaidou A, et al. **Sci Total Environ** 1989 Aug;84:113–7

Heavy metal concentrations in urban snow as an indicator of air pollution. Sakai H, et al. **Sci Total Environ** 1988 Dec; 77(2–3):163–74

The Shipham report. An investigation into cadmium contamination and its implications for human health. Metal content of soils and dusts. Thornton I. **Sci Total Environ** 1988 Aug 15;75(1):21–39

Size distribution of atmospheric aerosols in urban sites in India. Tripathi RM, et al. **Sci Total Environ** 1988 Dec; 77(2–3):237–44

The levels of zinc, copper, manganese, selenium, chromium, nickel, cobalt, and aluminium in the meat, liver and kidney of swedish pigs and cattle. Jorhem L, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):39–44

[Clinical significance of metal elements analysis in herbals affecting the kidney] Chen TJ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):238–40 **(Chi)**

[Determination of the levels of lead, cadmium, copper, zinc, and iron in selected foods] Krełowska-Kułas M. **Nahrung** 1988;32(7):649–52 (Eng. Abstr.) **(Ger)**

[Contaminating substances in 22 over-the-counter fish oil and cod liver oil preparations: cholesterol, heavy metals and vitamin A] Koller H, et al. **Z Ernahrungswiss** 1989 Mar;28(1):76–83 (Eng. Abstr.) **(Ger)**

[Comparative studies on cadmium, chromium, nickel and lead accumulation in coxarthrosis and idiopathic femur head necrosis] Milachowski KA, et al. **Z Orthop** 1988 Jul–Aug; 126(4):408–12 (Eng. Abstr.) **(Ger)**

[Use of agricultural chemicals in greenhouse cultivation: problems of pollution in the soil and superficial strata. 3. Further information on the presence of organochlorine pesticides and heavy metals in the water table of Marsala] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec; 39(6):651–8 (Eng. Abstr.) **(Ita)**

[Migration of heavy metals into food-simulating solvents from aluminum pans] Sugita T, et al. **Eisei Shikenjo Hokoku** 1988;(106):124–6 (Eng. Abstr.) **(Jpn)**

[Evaluation of intraocular metallic foreign bodies by multi-element neutron activation analysis] Otoshi T, et al. **Sangyo Igaku** 1988 Nov;30(6):459–66 (Eng. Abstr.) **(Jpn)**

[Fly ash and its biological effects. I. Production, utilization and physico-chemical properties of fly ash] Woźniak H, et al. **Med Pr** 1988;39(5):338–46 (Eng. Abstr.) **(Pol)**

[Level of heavy metals in the liver of sheep in experimental poisoning with copper oxide from industrial emissions] Vrzgula L, et al. **Vet Med (Praha)** 1989 May;34(5):297–306 (Eng. Abstr.) **(Slo)**

BLOOD

Early changes of some serum proteins and metals in diabetic children. Kobbah AM, et al. **Acta Paediatr Scand** 1988 Sep; 77(5):734–40

Copper intrauterine contraceptive devices and serum essential metals. Ayangade SO, et al. **Adv Contracept** 1988 Sep;4(3):207–12

Abnormal aluminium, cobalt, manganese, strontium and zinc concentrations in untreated epilepsy. Davidson DL, et al. **Epilepsy Res** 1988 Sep–Oct;2(5):323–30

Metal content of neutrophil granules is altered in chronic inflammation. Hällgren R, et al. **Inflammation** 1989 Aug; 13(4):383–92

Inadvertent metal loading of critically ill patients with acute renal failure by human albumin solution infusion therapy. Köppel C, et al. **J Toxicol Clin Toxicol** 1988;26(5–6):337–56

[Cooperative effect in metal-substituted hybrid hemoglobins] Morimoto H, et al. **Tanpakushitsu Kakusan Koso** 1987 May; 32(6):557–65 (29 ref.) **(Jpn)**

METABOLISM

Microbial metabolism, desolubilization, and deposition of heavy metals: metal uptake by immobilized cells and application to the detoxification of liquid wastes. Macaskie LE, et al. **Adv Biotechnol Processes** 1989;12:159–201 (128 ref.)

Equilibrium constants for the complexation of metal ions by serum transferrin. Harris WR. **Adv Exp Med Biol** 1989; 249:67–93

Chronic cadmium–ethanol administration alters metal distribution and some biochemicals in rat brain. Murthy RC, et al. **Biochem Int** 1989 Jul;19(1):135–43

Preparation and reconstitution with divalent metal ions of class I and class II Clostridium histolyticum apocollagenases. Angleton EL, et al. **Biochemistry** 1988 Sep 20;27(19):7406–12

Preparation by direct metal exchange and kinetic study of active site metal substituted class I and class II Clostridium histolyticum collagenases. Angleton EL, et al. **Biochemistry** 1988 Sep 20;27(19):7413–8

Multinuclear NMR studies of the divalent metal binding site of NADP-dependent isocitrate dehydrogenase from pig heart. Ehrlich RS, et al. **Biochemistry** 1989 Mar 7; 28(5):2058–65

Metal binding sites of the estradiol receptor from calf uterus and their possible role in the regulation of receptor function. Medici N, et al. **Biochemistry** 1989 Jan 10; 28(1):212–9

The engineering of binding affinity at metal ion binding sites for the stabilization of proteins: subtilisin as a test case. Pantoliano MW, et al. **Biochemistry** 1988 Nov 1; 27(22):8311–7

Some examples of the functions of metal ions in biology. Williams RJ. **Biosci Rep** 1988 Dec;8(6):653–68

Bioaccumulation of four heavy metals in two populations of grass shrimp, Palaemonetes pugio. Khan AT, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):339–43

Bioaccumulation and depuration of some trace metals in the mussel, Perna viridis (Linnaeus). Lakshmanan PT, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):131–8

Levels and interactions of selenium with group IIB metals in mussels from Swansea Bay, South Wales, U.K. Micallef S, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):344–51

Influence of metallic carcinogenesis in lung and colorectal neoplasia. Metals in neoplastic processes. Martín Mateo MC, et al. **Clin Physiol Biochem** 1988;6(6):321–6

Induction of metal binding proteins in striped bass, Morone saxatilis, following cadmium treatment. Baksi SM, et al. **Comp Biochem Physiol [C]** 1988;91(2):355–63

Identification of the magnesium, europium and lead binding sites in E. coli and lupine tRNAPhe by specific metal ion-induced cleavages. Marciniec T, et al. **FEBS Lett** 1989 Jan 30;243(2):293–8

Conversion of amino acid residues in proteins and amino acid homopolymers to carbonyl derivatives by metal-catalyzed oxidation reactions. Amici A, et al. **J Biol Chem** 1989 Feb 25;264(6):3341–6

The spatial resolution of protein adsorption on surfaces of heterogeneous metallic biomaterials. Williams RL, et al. **J Biomed Mater Res** 1989 Mar;23(3):339–50

Blood and placental concentrations of cadmium, lead, and mercury in mothers and their newborns. Truska P, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):141–7

Increased nigral iron content and alterations in other metal ions occurring in brain in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Jun;52(6):1830–6

Transition metals, ferritin, glutathione, and ascorbic acid in parkinsonian brains. Riederer P, et al. **J Neurochem** 1989 Feb;52(2):515–20

Effect of interesterified dietary fat mixtures on various lipid indices and liver metal content of rats in fat-metabolism disturbance. Zsinka AJ, et al. **Nahrung** 1988;32(9):815–21

Levels and sub-cellular distribution of physiologically important metal ions in neuronal cells cultured from chick embryo cerebral cortex. Tholey G, et al. **Neurochem Res** 1988 Dec;13(12):1163–7

A theoretical model of metal binding sites in proteins. Krauss M, et al. **Prog Clin Biol Res** 1989;289:95–107

The Shipham report. An investigation into cadmium contamination and its implications for human health. Metal availability. Alloway BJ, et al. **Sci Total Environ** 1988 Aug 15;75(1):41–69

The Shipham report. An investigation into cadmium contamination and its implications for human health. Intakes of metal. Morgan H, et al. **Sci Total Environ** 1988 Aug 15;75(1):71–100

Molecular recognition and metal ion template synthesis. McMurry TJ, et al. **Science** 1989 May 26;244(4907):938–43 (46 ref.)

[Interaction of divalent metal ions with human serum albumin] Chikvaidze EN. **Biofizika** 1988 Jul–Aug; 33(4):723–5 (Eng. Abstr.) **(Rus)**

[Biomonitoring of metals] Mozhaev EA, et al. **Gig Sanit** 1988 Jul;(7):53–6 (44 ref.) **(Rus)**

PHARMACOKINETICS

Evaluation of the metal uptake of several algae strains in a multicomponent matrix utilizing inductively coupled plasma emission spectrometry. Mahan CA, et al. **Anal Chem** 1989 Mar 15;61(6):624–7

Variability in toxicokinetics in exposure to metals. Norseth T. **Int Arch Occup Environ Health** 1988;Suppl:39–45 (17 ref.)

Uptake of aluminum, cadmium, copper, lead, and zinc by human scalp hair and elution of the adsorbed metals. Wilhelm M, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):17–21

Dentine hypersensitivity. I. Effects produced by the uptake in vitro of metal ions, fluoride and formaldehyde onto dentine. Addy M, et al. **J Oral Rehabil** 1988 Nov; 15(6):575–85

Dentine hypersensitivity. II. Effects produced by the uptake in vitro of toothpastes onto dentine. Addy M, et al. **J Oral Rehabil** 1989 Jan;16(1):35–48

Inhaled soluble aerosols insolubilised by lysosomes of alveolar cells. Application to some toxic compounds; electron microprobe and ion microprobe studies. Berry JP, et al. **Toxicology** 1988 Nov 14;52(1–2):127–39

[Relation between the blood resorption of chemical elements (metals) from the gastrointestinal tract and their physico-chemical properties] Pavlovskaia NA, et al. **Gig Sanit** 1989 Feb;(2):87–9 **(Rus)**

PHARMACOLOGY

Plasmid-mediated heavy metal resistances. Silver S, et al. **Annu Rev Microbiol** 1988;42:717–43 (123 ref.)

Effects of cadmium, copper, magnesium, and zinc on the decomposition of citrate by a Klebsiella sp. Brynhildsen L, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1375–9

Steady-state kinetic studies of the metal ion–dependent decarboxylation of oxalacetate catalyzed by pyruvate kinase. Kiick DM, et al. **Arch Biochem Biophys** 1989 May 1;270(2):647–54

Effect of metal ions on the adaptive response induced by N-methyl-N-nitrosourea in Escherichia coli. Takahashi K, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1124–30

Expression of the mouse metallothionein-I gene in Escherichia coli: increased tolerance to heavy metals. Hou YM, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):230–4

The effects of heavy metal cations and sulfhydryl reagents

on degranulation from digitonin-permeabilized neutrophils. Sandborg RR, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):330-7

Effects of metal ions on the antioxidant enzyme activities, protein contents and lipid peroxidation of carp tissues. Radi AA, et al. **Comp Biochem Physiol [C]** 1988;90(1):69-72

Transition metal complexes as sensitizers or protectors against O2- toxicity. Czapski G, et al. **Free Radic Res Commun** 1989;6(2-3):167-9

The effect of metals and alcohol on sexual isolation in Drosophila melanogaster. Kilias G, et al. **Genetica** 1987 Nov 16;75(1):31-7

In vitro studies on toxicity of heavy metals against Sclerotium rolfsii sacc. A foot-rot pathogen of barley. Singh RK. **Hindustan Antibiot Bull** 1988 Feb-May;30(1-2):40-3

Effect of selected metal ions on the motility and carbohydrate metabolism of ejaculated human spermatozoa. Kanwar U, et al. **Indian J Physiol Pharmacol** 1988 Jul-Sep; 32(3):195-201

Introduction of a metal-dependent regulatory switch into an enzyme [published erratum appears in J Biol Chem 1989 Jun 5;264(16):9707] Corey DR, et al. **J Biol Chem** 1989 Mar 5;264(7):3666-9

Inhibition of phorbol ester binding and protein kinase C activity by heavy metals. Speizer LA, et al. **J Biol Chem** 1989 Apr 5;264(10):5581-5

Detection of genotoxicity of metallic compounds by the bacterial bioluminescence test. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr-Jun;2(2):95-9

Tumor promoter 12-0-tetradecanoyl-phorbol-13-acetate (TPA) can reduce the Ca-transporting ability of Ca-ionophores in T lymphocytes: the involvement of intracellular heavy metal ions. Csermely P, et al. **J Cell Physiol** 1989 Mar;138(3):593-602

Use of metal complexes in neuroendocrine studies. Barnea A. **Methods Enzymol** 1989;168:710-5

A further examination of heavy metal inhibition of gas production by thermophilic anaerobic sludges. Tomlin C, et al. **Microbios** 1988;56(226):7-17

The interaction of cations with activity of soluble protein kinase C from mouse brain. Saijoh K, et al. **Pharmacol Toxicol** 1988 Oct;63(4):221-4

Comparative ability of exogenously administered metals to alter tissue levels and urinary output of copper and zinc. Rosenberg DW, et al. **Pharmacology** 1989;38(3):159-66

[Inhibition mechanisms of delta-aminolevulinic acid dehydratase by heavy metals. I. Application of immobilized enzyme] Fukano S, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):651-8 (Eng. Abstr.) **(Jpn)**

[Inhibition mechanisms of delta-aminolevulinic acid dehydratase by heavy metals. II. Simulation of enzyme inhibition] Fukano S. **Nippon Eiseigaku Zasshi** 1988 Jun; 43(2):659-68 (Eng. Abstr.) **(Jpn)**

[Fecal coliforms in sewage waters. I. Resistance to antibiotics, heavy metals and colicinogeny] Ribeiro Dias JC, et al. **Mem Inst Oswaldo Cruz** 1987 Jul-Sep;82(3):335-43 (Eng. Abstr.) **(Por)**

[Distribution of the inhibiting activity among bivalent metal cations] Krupianko VI. **Biokhimiia** 1988 Jun;53(6):905-11 (Eng. Abstr.) **(Rus)**

[Effect of metal cations on the formation of antibiotic and pigment by the mycophilic fungus Hypomyces rosellus 94/77] Toropova EG, et al. **Biol Nauki** 1989;(4):84-8 (Eng. Abstr.) **(Rus)**

[Effect of inhibitors and cations on the proteolytic activity of Bacillus mesentericus] Imshenetskii AA, et al. **Mikrobiologiia** 1988 May-Jun;57(3):394-7 (Eng. Abstr.) **(Rus)**

[Activation of lipid peroxidation in the adrenal cortex by metal ions] Doroshkevich NA, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):88-90 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The role of metal ions in ischemia/reperfusion injury in skin flaps. Yoon JO, et al. **J Surg Res** 1989 Feb;46(2):163-5

FNR-dependent repression of the ndh gene of Escherichia coli and metal ion requirement for FNR-regulated gene expression. Spiro S, et al. **Mol Microbiol** 1989 May; 3(5):601-8

Role of cysteine residues and of metal ions in the regulatory functioning of FNR, the transcriptional regulator of anaerobic respiration in Escherichia coli. Trageser M, et al. **Mol Microbiol** 1989 May;3(5):593-9

POISONING

Clustering of multiple sclerosis in Galion, Ohio, 1982-1985. Ingalls TH. **Am J Forensic Med Pathol** 1989 Sep; 10(3):213-5

2,3-Dimercaptosuccinic acid treatment of heavy metal poisoning in humans. Fournier L, et al. **Med Toxicol Adverse Drug Exp** 1988 Nov-Dec; 3(6):499-504

Toxicology of oil field wastes. Hazards to livestock associated with the petroleum industry. Edwards WC. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):363-74 (17 ref.)

[Metal pollutants in infants] Köhler-Schmidt H, et al. **Beitr Gerichtl Med** 1988;46:155-9 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Chinese ointment [letter] Last PM. **Med J Aust** 1989 Sep 4;151(5):304

[Radioprotective activity of complexes of copper, cobalt and zinc with substituted acylhydrazones] Arapov OV, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):691-4 (Eng. Abstr.) **(Rus)**

TOXICITY

Effect of heavy metals on the growth of tissue cultures (II). Maróti M, et al. **Acta Biol Hung** 1988;39(1):75-85

Metal contents in liver tissues of non-fledged goldeneye, Bucephala clangula, ducklings: a comparison between samples from acidic, circumneutral, and limed lakes in south Sweden. Eriksson MO, et al. **Arch Environ Contam Toxicol** 1989 Jan-Apr;18(1-2):255-60

Effect of heavy metals on bay scallops, surf clams, and blue mussels in acute and long-term exposures. Nelson DA, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):595-600

Effect of in vitro addition of some metal ions on serum alkaline phosphatase in calves. Shaker M, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):628-35

Metals--epidemiological and experimental evidence for carcinogenicity. Lauwerys RR. **Arch Toxicol Suppl** 1989; 13:21-7 (33 ref.)

Induction of heme oxygenase in rat hepatoma cells by exposure to heavy metals and hyperthermia. Taketani S, et al. **Biochem Int** 1988 Oct;17(4):665-72

Organochlorines and heavy metals in herring gull (Larus argentatus) eggs and chicks from the same clutch. Becker PH, et al. **Bull Environ Contam Toxicol** 1989 May; 42(5):721-7

Heavy metal effects on cellular shape changes, cleavage, and larval development of the marine gastropod mollusk, (Ilyanassa obsoleta Say). Conrad GW. **Bull Environ Contam Toxicol** 1988 Jul;41(1):79-85

Heavy metal toxicity to fiddler crabs, Uca annulipes latreille and Uca triangularis (Milne Edwards): respiration on exposure to copper, mercury, cadmium, and zinc. Devi VU, et al. **Bull Environ Contam Toxicol** 1989 Jul; 43(1):165-72

In vitro inactivation of hepatic alcohol dehydrogenase and aldehyde dehydrogenases from rats by dithiocarbamates with or without metals. Freundt KJ, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):540-7

Sensitivity of freshwater pulmonate snails, Lymnaea luteola L., to heavy metals. Khangarot BS, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):208-13

Sensitivity of midge larvae of Chironomus tentans Fabricius (Diptera Chironomidae) to heavy metals. Khangarot BS, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):325-30

Effect of heavy metals ions on enzyme activity in the Mediterranean mussel, Donax trunculus. Mizrahi L, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):854-9

Metal concentrations in pearl oyster, Pinctada radiata, collected from Saudi Arabian coast of the Arabian Gulf. Sadiq M, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):111-8

Combined toxicity of copper, cadmium, zinc, lead, nickel, and chrome to the copepod Tisbe holothuriae. Verriopoulos G, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):378-84

In vitro cytotoxicity of heavy metals, acrylamide, and organotin salts to neural cells and fibroblasts. Borenfreund E, et al. **Cell Biol Toxicol** 1987 Mar;3(1):63-73

Heavy metals in the terrestrial isopod Porcellio scaber Latreille. II. Subcellular fractionation of metal-accumulating lysosomes from hepatopancreas. Dallinger R, et al. **Cell Biol Toxicol** 1988 Mar;4(1):97-109

Genotoxic effects of heavy metals in rat hepatocytes. Denizeau F, et al. **Cell Biol Toxicol** 1989 Jan;5(1):15-25

Heavy metals in the terrestrial isopod Porcellio scaber Latreille. I. Histochemical and ultrastructural characterization of metal-containing lysosomes. Prosi F, et al. **Cell Biol Toxicol** 1988 Mar;4(1):81-96

Effect of several metal compounds on the mutagenicity and deoxyribonucleic acid binding of 1-nitropyrene in Salmonella typhimurium TA 100. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4900-7

Effect of bimetallic combinations of Ni, Cr, and Pb on growth, uptake of nitrate and ammonia, 14CO2 fixation, and nitrogenase activity of Nostoc muscorum. Rai LC, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):75-85

Use of algal fluorescence for determination of phytotoxicity of heavy metals and pesticides as environmental pollutants. Samson G, et al. **Ecotoxicol Environ Safety** 1988 Dec; 16(3):272-8

Ultrastructure in leaves of Fagus silvatica and Carpinus betulus individuals tolerant and susceptible to SO2 and heavy metal pollutants. Stirban M, et al. **Ecotoxicol Environ Safety** 1988 Aug;16(1):45-56

Toxicity of metallic ions and oxides to rabbit alveolar macrophages. Labedzka M, et al. **Environ Res** 1989 Apr; 48(2):255-74

The effect of metals on IL-2-related lymphocyte proliferation. Warner GL, et al. **Int J Immunopharmacol** 1988;10(5):629-37

Assessment of two alternative methods for predicting the in vivo toxicities of metallic compounds. Hulme LM, et al. **Mol Toxicol** 1987-88 Fall;1(4):589-96

Immunomodulation of in vitro antigen presentation by cations. Smith KL, et al. **Toxicol Appl Pharmacol** 1988 Dec; 96(3):476-84

Using the nematode Caenorhabditis elegans to predict mammalian acute lethality to metallic salts. Williams PL, et al. **Toxicol Ind Health** 1988 Dec;4(4):469-78

Metal-induced alteration of the cell membrane/cytoplasm complex studied by flow cytometry and detergent lysis. Zucker RM, et al. **Toxicology** 1988 Dec 16;53(1):69-78

[A methodological approach for analysis of scientific literature apropos of metals and their derivatives] Dufour F, et al. **J Toxicol Clin Exp** 1988 Jul-Aug;8(4):235-41 (Eng. Abstr.) **(Fre)**

[Evaluation of occupational exposure to nickel and other metals based on the analysis of air in the production of nickel alloys] Dobecki M, et al. **Med Pr** 1988;39(6):399-405 (Eng. Abstr.) **(Pol)**

[Beta-galactosidase activity in the seminal fluid and gonadal tissue as a biochemical criterion of the gonadotoxic effect of chemical substances] Votiakov AV, et al. **Gig Sanit** 1989 Mar;(3):62-3 **(Rus)**

[Genotoxic effects of heavy metals and their salts in an experiment on Drosophila and mammals] Chopikashvili LV, et al. **Tsitol Genet** 1989 May-Jun;23(3):35-8 (Eng. Abstr.) **(Rus)**

URINE

Biological monitoring of toxic metals in urine by simultaneous inductively coupled plasma-atomic emission spectrometry. Lo FB, et al. **Am Ind Hyg Assoc J** 1989 May;50(5):245-51

METALS, ACTINIDE

METABOLISM

Intake retention functions and their applications to bioassay and the estimation of internal radiation doses. Skrable KW, et al. **Health Phys** 1988 Dec;55(6):933-50

PHARMACOKINETICS

Cellular aspects of retention and transport of inhaled soluble and insoluble actinide compounds in the rat lung. Müller HL, et al. **Sci Total Environ** 1989 Jul 15;83(3):239-51

METALS, ALKALI

BLOOD

Alkali metal/proton exchange. Cala PM, et al. **Methods Enzymol** 1989;173:330-46

TOXICITY

Effect of separate and combined maternal ingestion of alkali metals on the developing mouse. Messina FS. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):205-8

METALS, ALKALINE EARTH

METABOLISM

Interaction of D-glucose with alkaline-earth metal ions. Synthesis, spectroscopic, and structural characterization of Mg(II)- and Ca(II)-D-glucose adducts and the effect of metal-ion binding on anomeric configuration of the sugar. Tajmir-Riahi HA. **Carbohydr Res** 1988 Nov 15; 183(1):35-46

[Structure of a model of the metabolism of alkaline earth elements] Zaltsev IuA. **Radiobiologiia** 1988 Nov-Dec; 28(6):852-6 (Eng. Abstr.) **(Rus)**

METALS, RARE EARTH

New improved lanthanide-based methods for the localization of acid and alkaline phosphatase activity at the light and electron microscopical level. Halbhuber KJ, et al. **Acta Histochem Suppl (Jena)** 1989;37:169-73

Volume changes in the binding of lanthanides to peptide analogues of loop II of calmodulin. Kupke DW, et al. **Biochemistry** 1989 May 16;28(10):4409-15

Rare earth screens: prevention of radiogenic cancers versus local budgets [letter] Matthews IP, et al. **Clin Radiol** 1988 Jul;39(4):464

Rare earth filters for intraoral radiography: exposure reduction as a function of kV(p) with comparisons of image quality. Kircos LT, et al. **J Am Dent Assoc** 1989 May; 118(5):605-9

Direct observation of molecular images of lanthanide phthalocyanines: III. Structural defects. Zhang WP, et al. **J Electron Microsc Tech** 1989 Apr;11(4):326-32

Structural studies of lanthanide phthalocyanines by high-resolution electron microscopy. Zhang WP, et al. **J Electron Microsc Tech** 1987 Dec;7(4):255-62

Lanthanides as probes for time-resolved fluorometric immunoassays. Hemmilä I. **Scand J Clin Lab Invest** 1988 Sep;48(5):389-99 (49 ref.)

[Conformation of lanthanide complexes with Schiff bases of pyridoxal and dipeptides] Babushkina TA, et al. **Biofizika** 1988 Jul-Aug;33(4):551-5 (Eng. Abstr.) **(Rus)**

[Phosphorescent immunoanalysis. Metalloporphyrins--an alternative to rare earth fluorescent measurements?] Savitskii AP, et al. **Dokl Akad Nauk SSSR** 1989; 304(4):1005-8 **(Rus)**

ANALYSIS

Probing the environment of lanthanide binding sites in yeast

tRNA(Phe) by specific metal-ion-promoted cleavages. Ciesiolka J, et al. **Eur J Biochem** 1989 Jun 15;182(2):445-50

[141Ce tracer study concerning the effect of washing procedures on analysis of hair rare earth elements] Tong SL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):79-81 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

Light-microscopic histochemistry of non-specific alkaline phosphatase using lanthanide-citrate complexes. Halbhuber KJ, et al. **Histochemistry** 1988;90(1):67-72

HISTORY

Pioneer discovery of rare-earth fluorescence [letter] Russell JG. **Br J Radiol** 1989 Aug;62(740):765-6

METABOLISM

Plasma and synovial fluid lanthanides in rheumatoid arthritis: variations after intra-articular therapy. Cutolo M, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):243-6

Distances between functional sites in cardiac sarcoplasmic reticulum (Ca^{2+} + Mg^{2+})-ATPase. Inter-lanthanide energy transfer. Joshi NB, et al. **Eur J Biochem** 1988 Dec 15;178(2):483-7

METAMORPHOSIS, BIOLOGICAL

Myofiber turnover is used to retrofit frog jaw muscles during metamorphosis. Alley KE. **Am J Anat** 1989 Jan;184(1):1-12

Amphibian metamorphosis: an immunologic opportunity! Ruben LN, et al. **Bioessays** 1989 Jan;10(1):8-12 (28 ref.)

Evolution of spinal nerve number in anuran larvae. Nishikawa K, et al. **Brain Behav Evol** 1989;33(1):15-24

Thyroxin specifically stimulates anuran larvae epidermal sodium pump during metamorphosis. Burón MI, et al. **Comp Biochem Physiol [A]** 1988;91(4):693-5

Brain RNA synthesis and the retention of learning through metamorphosis in Tenebrio obscurus (Insecta: Coleoptera). Punzo F, et al. **Comp Biochem Physiol [A]** 1988;91(4):675-8

Metamorphic variations in the hemoglobins of Bombina variegata (L.). Cardellini P, et al. **Comp Biochem Physiol [B]** 1979;64(1):113-6

Alanine aminopeptidase activity and autolysis in the tails of Rana catesbeiana larvae during metamorphosis. Little GH, et al. **Comp Biochem Physiol [B]** 1979;62(2):163-5

Expression and hormonal control of a new larval cuticular multigene family at the onset of metamorphosis of the tobacco hornworm. Horodyski FM, et al. **Dev Biol** 1989 Apr;132(2):292-303

Metaphors for development: how important are experiences early in life? Klopfer P. **Dev Psychobiol** 1988 Nov; 21(7):671-8 (39 ref.)

Cell proliferation and early differentiation during embryonic development and metamorphosis of Hydractinia echinata. Plickert G, et al. **Development** 1988 Aug;103(4):795-803

The role of 3,5,3'-triiodothyronine in the physiological action of thyroxine in the premetamorphic tadpole. Galton VA. **Endocrinology** 1989 May;124(5):2427-33

Morphological integration in the cranium during anuran metamorphosis. Hanken J, et al. **Experientia** 1989 Sep 15; 45(9):872-5

Endocrine control of metamorphosis in Poekilocerus pictus Fabr. (Insecta). Gupta US, et al. **Folia Morphol (Praha)** 1988;36(3):324-30

Cytochemical study of larval skin in Amphibia: occurrence of ruthenium red positive cells in cutaneous gland anlagen. Delfino G, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(6):885-901

Serotonin-immunoreactive neurons in the brain of Manduca sexta during larval development and larval-pupal metamorphosis. Granger NA, et al. **Int J Dev Neurosci** 1989;7(1):55-72

Nutrient accumulation in three mosquitoes during larval development and its effect on young adults. Van Handel E. **J Am Mosq Control Assoc** 1988 Sep;4(3):374-6

Timing of pupal-adult apolysis in mosquitoes. Walker ED, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):224-5

Vasopressin- and proctolin-like immunoreactive efferent neurons in blowfly abdominal ganglia: development and ultrastructure. Nässel DR, et al. **J Comp Neurol** 1989 May 15;283(3):450-63

Sex-specific neuronal respecification during the metamorphosis of the genital segments of the tobacco hornworm moth Manduca sexta. Thorn RS, et al. **J Comp Neurol** 1989 Jun 22;284(4):489-503

Metamorphosis of the ecdysis motor pattern in the hawkmoth, Manduca sexta. Mesce KA, et al. **J Comp Physiol [A]** 1988 Jul;163(3):287-99

Blood flow patterns in the salamander, Ambystoma tigrinum, before, during and after metamorphosis. Malvin GM, et al. **J Exp Biol** 1988 Jul;137:53-74

Precursor immigration and thymocyte succession during larval development and metamorphosis in Xenopus. Turpen JB, et al. **J Immunol** 1989 Jan 1;142(1):41-7

Morphology of the exocrine pancreas of the southern hemisphere lamprey, Geotria australis, and changes during metamorphosis. Hilliard RW, et al. **J Morphol** 1988 Jul; 197(1):33-52

The use of hormonally induced mosaics to study alterations in the synaptic connections made by persistent sensory neurons during insect metamorphosis. Levine RB, et al. **J Neurobiol** 1989 Jul;20(5):326-38

Respecification of larval proleg motoneurons during metamorphosis of the tobacco hornworm, Manduca sexta: segmental dependence and hormonal regulation. Weeks JC, et al. **J Neurobiol** 1989 Sep;20(6):569-92

Expansion of the central arborizations of persistent sensory neurons during insect metamorphosis: the role of the steroid hormone, 20-hydroxyecdysone. Levine RB. **J Neurosci** 1989 Mar;9(3):1045-54

Trigeminal motoneurons in frogs develop a new dendritic field during metamorphosis. Rosenthal BM, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):53-8

Specificity of synapse formation in the cockroach. Blagburn JM. **P R Health Sci J** 1988 Aug;7(2):171-6

Post-embryonic development of an intertidal hermit crab (Crustacea; Diogenidae) at different salinities. Brossi-Garcia AL. **Rev Bras Biol** 1988 Nov;48(4):741-6

Attempts to break perimetamorphically induced skin graft tolerance by treatment of Xenopus with cyclophosphamide and interleukin-2. Horton JD, et al. **Transplantation** 1989 May;47(5):883-7

[Changes in corticosterone and aldosterone concentrations in various tissues of Xenopus laevis tadpoles during the metamorphosis] Leloup-Hatey J, et al. **C R Soc Biol (Paris)** 1988;182(4):354-60 (Eng. Abstr.) **(Fre)**

[Morphological observations on the alteration of the myenteric plexus neurons in the bullfrog small intestine during metamorphosis] Torihashi S. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):465-77 (Eng. Abstr.) **(Jpn)**

[Culture of Lutzomyia (C) orestes (Diptera: Psychodidae) from a cave-dwelling population from the province of La Habana] Lugo Mendoza J, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):76-85 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Sodium nitrilotriacetate (NTA) influences the larval development and metamorphosis of marine invertebrates. Brunetti R, et al. **Bull Environ Contam Toxicol** 1989 Feb; 42(2):234-40

Developmental patterns of peroxisomal enzymes in amphibian liver during spontaneous and triiodothyronine-induced metamorphosis. Ciolek E, et al. **Comp Biochem Physiol [B]** 1989;93(2):477-84

RADIATION EFFECTS

Effect of a light pulse during the dark on photoperiodic regulation of the rate of thyroxine-induced, spontaneous, and prolactin-inhibited metamorphosis in Rana pipiens tadpoles [published erratum appears in J Exp Zool 1988 Nov;248(2):251] Wright ML, et al. **J Exp Zool** 1988 Jul; 247(1):99-108

METANEPHRINE see under **EPINEPHRINE**

METAPHASE

Prometaphase chromosomes in the tricho-rhino-phalangeal syndrome type I. Yamamoto Y, et al. **Am J Med Genet** 1989 Apr;32(4):524-7

Murine oocyte cryopreservation: comparison between fertilization success rates of fresh and frozen metaphase I and II oocytes. Hamlett DK, et al. **Arch Androl** 1989; 23(1):27-31

A method for the preparation of metaphase chromosomes from rat small intestine. Ellsworth JL, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):191-5

DNA alteration induced by ultraviolet light in human metaphase chromosomes substituted with 5'-bromodeoxy uridine: monitoring by monoclonal antibodies to double-stranded and single stranded DNA. Mezzanotte R, et al. **Chromosoma** 1989 Mar;97(5):356-62

Nuclease activity in human metaphase chromosomes substituted with 5'-bromodeoxyuridine. Mezzanotte R, et al. **Chromosoma** 1989 Jan;97(4):334-8

Changes in metaphasic chromosomal ultrastructure caused by denaturing treatments. Cerdán E, et al. **Cytobios** 1988; 55(222-223):167-70

Mitosis and protein synthesis. 2. Synthesis of protein and RNA in synchronous HeLa S-3 cell populations entering and leaving M-phase of the cell cycle. Wheatley DN, et al. **Cytobios** 1988;55(222-223):191-204

Behavior of sperm nuclei in intact and bisected metaphase II mouse oocytes fertilized in the presence of colcemid. Borsuk E, et al. **Gamete Res** 1988 Jul;20(3):365-76

Microtubule dynamics investigated by microinjection of Paramecium axonemal tubulin: lack of nucleation but proximal assembly of microtubules at the kinetochore during prometaphase. Geuens G, et al. **J Cell Biol** 1989 Mar;108(3):939-53

Microtubules of the kinetochore fiber turn over in metaphase but not in anaphase. Gorbsky GJ, et al. **J Cell Biol** 1989 Aug;109(2):653-62

Microtubule-dependent cell cycle regulation is implicated in the G2 phase of Hydra cells. Dübel S, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):347-59

DRUG EFFECTS

Effect of metabolic inhibitors on sucrose-induced metaphase spindle elongation and spindle recovery. Snyder JA. **Cell Motil Cytoskeleton** 1988;11(4):291-302

Protein synthesis and mitosis. 1. Influence of anti-tubulins on protein synthetic activity in synchronous M-phase and asynchronous populations of HeLa S-3 cells. Wheatley DN, et al. **Cytobios** 1988;55(220):41-50

6-Dimethylaminopurine (6-DMAP), a reversible inhibitor of the transition to metaphase during the first meiotic cell division of the mouse oocyte. Rime H, et al. **Dev Biol** 1989 May;133(1):169-79

Quin2-induced metaphase arrest in stamen hair cells can be reversed by 1,2-dioctanoylglycerol but not by 1,3-dioctanoylglycerol. Larsen PM, et al. **Eur J Cell Biol** 1989 Apr;48(2):212-9

Induction of metaphase chromosome condensation in human sperm by Xenopus egg extracts. Lohka MJ, et al. **Exp Cell Res** 1988 Nov;179(1):303-9

[Phenylhydrazine as mitoticostimulant] Cucchi C, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):419-23 (Eng. Abstr.) **(Ita)**

[An analysis of the action of nonspecific and restriction nucleases on metaphase chromosomes in situ] Smirnov AF, et al. **Tsitologiia** 1989 Feb;31(2):182-8 (Eng. Abstr.) **(Rus)**

METAPHYSICS

Metaphysics and innateness: a psychoanalytic perspective. Hanly C. **Int J Psychoanal** 1988;69 (Pt 3):389-99 (27 ref.)

Empiricism in family practice [editorial] Young PR. **J Am Board Fam Pract** 1988 Jul-Sep;1(3):151

All things considered ... then what? Boisvert M. **J Palliat Care** 1988 May;4(1-2):115-8

Spiritual care: the software of life. Eaton S. **J Palliat Care** 1988 May;4(1-2):91-3

Spiritual or pastoral care: two models. Wald FS. **J Palliat Care** 1988 May;4(1-2):94-7

Sleepers awake: Thomas Moffet's challenge to the College of Physicians of London, 1584. Houliston VH. **Med Hist** 1989 Apr;33(2):235-46

METAPLASIA

see related
MYELOID METAPLASIA

COMPLICATIONS

Lumbosacral hyperlordosis due to fibrosis of the paravertebral muscles. Case report. Budassi R, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):395-9

ETIOLOGY

Intestinal metaplasia and dysplasia of prostatic urethra secondary to stricture. Maung R, et al. **Urology** 1988 Oct; 32(4):361-3

PATHOLOGY

A method of quantitating Paneth cell metaplasia of the stomach by image analysis. Rubio CA, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):115-8

Clear cell metaplasia of the breast: a lesion showing eccrine differentiation. Viña M, et al. **Histopathology** 1989 Jul; 15(1):85-92

METAPROTERENOL see **ORCIPRENALINE**

METARADRIN see **METARAMINOL**

METARAMINOL

ADVERSE EFFECTS

The metaraminol test and adverse cardiac effects [letter] Buades J, et al. **Ann Intern Med** 1989 Aug 1;111(3):259-60

[Epilepsy and hypertensive crisis after intracavernous injection of metaraminol in the treatment of priapism secondary to a papaverine test (letter)] Vailly B, et al. **Presse Med** 1989 May 20;18(20):1034-5 **(Fre)**

DIAGNOSTIC USE

[Metaraminol provocation test for familial Mediterranean fever (letter)] Lorente JA, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):401-2 **(Spa)**

PHARMACOLOGY

Effects of metaraminol on the resistance and capacitance vessels in humans [letter] Baraka A, et al. **Anesth Analg** 1989 Apr;68(4):545

Acute effects of noradrenalin related vasoactive agents on the ototoxicity of aspirin: an experimental study in the guinea pig. Cazals Y, et al. **Hear Res** 1988 Oct;36(1):89-96

Effects of metaraminol on the secretion of fluid and glycoproteins from the rat submandibular gland. Iwabuchi Y, et al. **Jpn J Pharmacol** 1989 Apr;49(4):491-500

THERAPEUTIC USE

[Metaraminol in therapy of various forms of priapism] Block T, et al. **Urologe [A]** 1988 Jul;27(4):225-9 (Eng. Abstr.) **(Ger)**

METASQUALENE see TRIPARANOL

METASTASIS see NEOPLASM METASTASIS

METASTRONGYLOIDEA

ANATOMY & HISTOLOGY

Species of the genus Elaphostrongylus parasite of Swedish cervidae. A description of E. alces n. sp. Stéen M, et al. **Ann Parasitol Hum Comp** 1989;64(2):134–42

ENZYMOLOGY

Hexokinase of Angiostrongylus cantonensis: presence of a glucokinase. Oguchi M, et al. **Comp Biochem Physiol [B]** 1979;63(3):335–40

IMMUNOLOGY

Local antibody production and immune complex formation in rats experimentally infected with Angiostrongylus cantonensis. Kanbara T, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):353–60

Influence of immune treatments against Dirofilaria immitis infection in dogs. Hayasaki M, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):540–6

Total and specific IgE in serum and cerebrospinal fluid of rats and guinea pigs infected with Angiostrongylus cantonensis. Pérez O, et al. **Parasitol Res** 1989;75(6):476–81

Preparation of monoclonal antibody against Angiostrongylus cantonensis antigen. Yen CM, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):119–24

[Procurement and evaluation of antigens of excretion-secretion in adult females of Angiostrongylus cantonensis] Huesca N, et al. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):112–21 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Gastropod intermediate hosts of Parelaphostrongylus tenuis (Nematoda: Metastrongyloidea) from northwestern Indiana. Platt TR. **J Parasitol** 1989 Aug;75(4):519–23

Identification of dorsal-spined larvae from free-ranging wapiti (Cervus elaphus) in southwestern Manitoba, Canada. Pybus MJ, et al. **J Wildl Dis** 1989 Apr;25(2):291–3

Heartworm infection death in a young dog [letter] Martin M. **Vet Rec** 1989 Apr 29;124(17):470

METABOLISM

De novo purine ribonucleotide biosynthesis in adult Angiostrongylus cantonensis (Nematoda: Metastrongyloidea). Wong PC, et al. **Comp Biochem Physiol [B]** 1979;62(2):129–32

ULTRASTRUCTURE

[Scanning electron microscopic observations on adults of Angiostrongylus cantonensis] Xu S, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):32–4 (Eng. Abstr.) **(Chi)**

METASYMPATOL see PHENYLEPHRINE

METATARSAL BONES

Haematogenous osteomyelitis of the first metatarsal sesamoid. A case report and review of the literature. Freund KG. **Arch Orthop Trauma Surg** 1989;108(1):53–4

Fracture-dislocation of the articular surface of the third metatarsal head. Dutkowsky J, et al. **Foot Ankle** 1989 Aug; 10(1):43–4

Case report 538. Osteoblastoma of the second metatarsal. Ellis BI, et al. **Skeletal Radiol** 1989;18(3):228–32

ABNORMALITIES

Sensorineural deafness, hypospadias, and synostosis of metacarpals and metatarsals 4 and 5: a previously apparently undescribed MCA/MR syndrome. Pfeiffer RA, et al. **Am J Med Genet** 1988 Sep;31(1):5–10

Brachymetatarsia. A unique surgical approach. Pasternack WA. **J Am Podiatr Med Assoc** 1988 Aug;78(8):415–8

ANATOMY & HISTOLOGY

Determination of adult stature from metatarsal length. Byers S, et al. **Am J Phys Anthropol** 1989 Jul;79(3):275–9

New first metatarsal (SKX 5017) from Swartkrans and the gait of Paranthropus robustus. Susman RL, et al. **Am J Phys Anthropol** 1988 Sep;77(1):7–15

EMBRYOLOGY

Human metatarsal growth: an allometrical analysis in prenatal period. de Vasconcellos HA, et al. **Arch Ital Anat Embriol** 1988 Jul–Sep;93(3):155–62

INJURIES

Stress fracture of the lateral metatarsals following double-stem silicone implant arthroplasty of the hallux metatarsophalangeal joint. Kitaoka HB, et al. **Clin Orthop** 1989 Feb;(239):211–6

Metabolic bone disease presenting as multiple recurrent metatarsal fractures: a case report. Harper MC. **Foot Ankle** 1989 Feb;9(4):207–9

Combined effect of foot arch structure and an orthotic device on stress fractures. Simkin A, et al. **Foot Ankle** 1989 Aug; 10(1):25–9

Fractures of the metatarsals: management of complicated injuries with a simple traction system. Ahmed A, et al. **Injury** 1988 Sep;19(5):345–9

Crohn's disease. History and case report of associated metatarsal stress fracture. Bartley JJ Jr. **J Am Podiatr Med Assoc** 1989 Feb;79(2):82–3

Detection of stress fractures in athletes and nonathletes. Aspegren D, et al. **J Manipulative Physiol Ther** 1989 Aug; 12(4):298–303

Tarsometatarsal fractures and dislocations. Pérez Blanco R, et al. **J Orthop Trauma** 1988;2(3):188–94

Spontaneous fractures in patients with diabetic neuropathy. Krentz AJ, et al. **J R Coll Physicians Lond** 1989 Apr; 23(2):111–3

Diagnostic imaging of tarsal and metatarsal stress fractures. Part I. Santi M, et al. **Orthop Rev** 1989 Feb;18(2):178–85 (31 ref.)

Long incomplete longitudinal fractures of the third metacarpal and metatarsal bone in horses. Barr AR, et al. **Vet Rec** 1989 Jun 3;124(22):580–2

Surgical management of proximal splint bone fractures in the horse. Peterson PR, et al. **Vet Surg** 1987 Sep–Oct; 16(5):367–72

[Changes in the skeleton of the middle foot caused by professional classical dancing] Huwyler J. **Sportverletz Sportschaden** 1989 Mar;3(1):14–20 (Eng. Abstr.) **(Ger)**

[Dislocation fractures of the Chopart and Lisfranc joint] Suren EG, et al. **Unfallchirurg** 1989 Mar;92(3):130–9 (Eng. Abstr.) **(Ger)**

[March fracture (Deutschländer's disease) in sportsmen] Greida BP. **Sov Med** 1988;(7):118–9 **(Rus)**

PATHOLOGY

Metatarsal periosteal reactions: a common non-specific finding in radiographs of the diabetic foot. Williams CE, et al. **BMJ** 1988 Nov 12;297(6658):1243–4

Osteotomy of the first metatarsal [letter] Mann RA. **Foot Ankle** 1989 Aug;10(1):51

Mandibular metastasis of angiosarcoma. A case report. Nardi P, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):386–7

High-resolution ultrasound in the preoperative and postoperative assessment of distal metatarsal osteotomy. Preliminary report. Graf PM, et al. **Invest Radiol** 1988 Nov; 23(11):827–31

[Diabetic osteopathy (an analysis of 37 cases)] Wang XY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):31–4 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Forces loading the tarsal joint in the hind limb of the horse, determined from in vivo strain measurements of the third metatarsal bone. Schamhardt HC, et al. **Am J Vet Res** 1989 May;50(5):728–33

PHYSIOPATHOLOGY

[Morton's symptoms—but which?] Palo J, et al. **Duodecim** 1989;105(10):925–8 **(Fin)**

RADIOGRAPHY

Bilateral avascular necrosis of the first metatarsal head in adolescence. A case report. Fu FH, et al. **Clin Orthop** 1989 Sep;(246):282–4

Interevaluator variability in the measurement of proximal articular set angle. Sullivan BT, et al. **J Foot Surg** 1988 Sep–Oct;27(5):466–8

SURGERY

Resection arthroplasty of the rheumatoid forefoot. Gáspárdy G, et al. **Acta Chir Hung** 1989;30(2):101–8

Correction of metatarsus primus varus with the Chevron metatarsal osteotomy. An analysis of corrective factors. Harper MC. **Clin Orthop** 1989 Jun;(243):180–3

Medial displacement metatarsal osteotomy for treatment of painful bunionette. Kitaoka HB, et al. **Clin Orthop** 1989 Jun;(243):172–9

Fixation of metatarsal head osteotomies: when, why, and how? Cangiano SA. **Clin Podiatr Med Surg** 1989 Jan; 6(1):71–82 (25 ref.)

New concepts in metatarsal head osteotomies: reverse buckling techniques. Cavaliere RG. **Clin Podiatr Med Surg** 1989 Jan;6(1):161–78 (9 ref.)

Hallux valgus and metatarsus adductus: the surgical dilemma. Trepal MJ. **Clin Podiatr Med Surg** 1989 Jan;6(1):103–13 (31 ref.)

Metatarsal osteotomy for primary metatarsalgia: radiographic and pedobarographic study. Dreeben SM, et al. **Foot Ankle** 1989 Apr;9(5):214–8

Dorsiflexion osteotomy in Freiberg's disease. Kinnard P, et al. **Foot Ankle** 1989 Apr;9(5):226–31

Mathematical analysis of first metatarsal osteotomies. Kummer FJ. **Foot Ankle** 1989 Jun;9(6):281–9

Osteotomy of the first metatarsal base for metatarsus primus varus. Limbird TJ, et al. **Foot Ankle** 1989 Feb;9(4):158–62

Distal oblique osteotomy for intractable plantar keratosis of the middle three metatarsals. Pedowitz WJ. **Foot Ankle** 1988 Aug;9(1):7–9

Treatment of metatarsalgia by sliding distal metatarsal osteotomy. Winson IG, et al. **Foot Ankle** 1988 Aug;9(1):2–6

The surgical correction of metatarsal dysmetria. Nogarin L, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):77–80

Hohmann-Thomasen metatarsal osteotomy for tailor's bunion (bunionette). Steinke MS, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):423–6

Oblique osteotomy of the fifth metatarsal: a five year review. Catanzariti AR, et al. **J Foot Surg** 1988 Jul–Aug; 27(4):316–20

Cross screw compression fixation technique in proximal osteotomies of the first metatarsal for correction of hallux abducto valgus. Kirchwehm WW. **J Foot Surg** 1988 Sep–Oct;27(5):412–7

Distal metatarsal osteotomy for bunionette deformity. Konradsen L, et al. **J Foot Surg** 1988 Nov–Dec;27(6):493–6

Modifications of the distal metaphyseal osteotomy to better facilitate use of the Herbert bone screw for fixation. Markus TA, et al. **J Foot Surg** 1988 Sep–Oct;27(5):447–52

Orientation of the first metatarsal base wedge osteotomy: perpendicular to the metatarsal versus weight-bearing surface. Palladino SJ. **J Foot Surg** 1988 Jul–Aug; 27(4):294–8

Metatarsal osteotomy using internal fixation with compression screws. Turan I, et al. **J Foot Surg** 1989 Mar–Apr;28(2):116–9

METATARSAL DEFORMITY see FOOT DEFORMITIES

METATARSALS see METATARSAL BONES

METATARSOPHALANGEAL JOINT see under TOE JOINT

METATARSUS

see related
METATARSAL BONES

Metastatic sweat gland carcinoma in an adolescent: a case report. Morrissey K, et al. **Foot Ankle** 1988 Oct;9(2):96–100

Unicameral bone cyst of the first metatarsal. Perlman MD, et al. **J Foot Surg** 1989 Jan–Feb;28(1):38–41 (19 ref.)

[Osteochondroma as an unusual cause of metatarsus primus varus] Krämer KL, et al. **Z Orthop** 1989 Jan–Feb; 127(1):22–4 (Eng. Abstr.) **(Ger)**

[The Giaccai syndrome as a cause of the development of trophic leg ulcers] Izmailov GA. **Klin Med (Mosk)** 1989 Jun;67(6):130–2 **(Rus)**

ANATOMY & HISTOLOGY

The ventral metacarpo- and metatarso-phalangeal sesamoid bones: comparative anatomy and evolutionary aspects. Le Minor JM. **Gegenbaurs Morphol Jahrb** 1988;134(5):693–731

BLOOD SUPPLY

[Interosseous dorsal artery of the first intermetatarsal space: anatomic variations and value in functional vascular studies] Lefebvre D, et al. **J Mal Vasc** 1989;14(1):39–41 (Eng. Abstr.) **(Fre)**

INJURIES

An unusual cause of metatarsal pain in a young kendo player. Sakamoto K, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):296–7

[A case of osteochondropathy of the sesamoid bone of the 1st metatarsophalangeal joint] Greida BP. **Ortop Travmatol Protez** 1989 Feb;(2):49–50 **(Rus)**

SURGERY

Proposed treatment of cystic lesions in the first metatarsal in polyarthritic patients. Turan I, et al. **J Foot Surg** 1989 Jan–Feb;28(1):51–3

Chondromyxoid fibroma of bone. Goswami PK, et al. **J Indian Med Assoc** 1989 Feb;87(2):40–2

[The Helal procedure in the treatment of static metatarsalgia due to flatfoot] Vichard P, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:227–9 **(Fre)**

[Treatment of splay foot with the Helal metatarsal osteotomy] Schmidt K, et al. **Z Orthop** 1989 May–Jun;127(3):322–5 (Eng. Abstr.) **(Ger)**

METAVANADATE see VANADATES

METENCEPHALON see PONS

METEOROLOGICAL FACTORS

The cellular circadian oscillator—a fundamental biological mechanism corresponding to a geophysical periodicity. Hardeland R, et al. **Int J Biometeorol** 1988 Sep;32(3):149–62 (241 ref.)

A voice from the past. Hill AB. **Public Health** 1988 Sep; 102(5):407

Clustering of strokes in association with meteorologic factors in the Negev Desert of Israel: 1981–1983. Berginer VM, et al. **Stroke** 1989 Jan;20(1):65–9

[The relationship between carbon monoxide poisoning and meteorological conditions in Baishan district] Sui Z. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):9–12 (Eng. Abstr.) **(Chi)**

[Effect of meteorologic factors on the unexpected appearance of cerebral vascular complications (letter)] Bertrand F, et al. **Presse Med** 1989 Apr 29;18(17):897 (Fre)

[Influence of meteorological factors on the morbidity of acute myocardial infarct] Cordioli E, et al. **G Clin Med** 1988 May;69(5):329–32 (Eng. Abstr.) (Ita)

[The annual variations in airborne Cryptomeria japonica and Cupressaceae pollen counts and meteorological conditions in Fukuoka City—prediction of Cryptomeria j. and Cupressaceae pollen counts] Kishikawa R, et al. **Arerugi** 1988 Jun;37(6):355–63 (Eng. Abstr.) (Jpn)

[The influence of meteorological factors upon the pollen counts of Cryptomeria japonica] Inamura N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):907–14 (Eng. Abstr.) (Jpn)

[Evaluation of the effect of meteorological factors on the incidence of abortion] Krasnodębski J, et al. **Ginekol Pol** 1988 Jan;59(1):11–8 (Eng. Abstr.) (Pol)

[Characteristics of the conditions for the formation of meteoropathic effects of the atmosphere in the piedmont and midlands belts of Kirghizia] Sumanov EV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):10–3 (Eng. Abstr.) (Rus)

[The role of psychopharmacological and heliogeophysical factors in the pathomorphosis of depressive states] Sonnik GT, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):93–8 (Eng. Abstr.) (Rus)

[Relationship between psychiatric emergencies and meteorologic factors] García Carretero L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan–Feb;17(1):59–67 (Eng. Abstr.) (Spa)

[Ischemic cerebrovascular accident and climatologic factors] Palao Sánchez A, et al. **Arch Neurobiol (Madr)** 1989 May–Jun;52(3):161–5 (Eng. Abstr.) (Spa)

METESTRUS see under ESTRUS

METFORMIN

ADMINISTRATION & DOSAGE

Metformin efficacy and tolerance in obese non-insulin dependent diabetics: a comparison of two dosage schedules. Menzies DG, et al. **Curr Med Res Opin** 1989;11(5):273–8

ADVERSE EFFECTS

Diarrhea and metformin in a diabetic clinic. Dandona P, et al. **Diabetes Care** 1983 Sep–Oct;6(5):472–4

Lactic acidosis due to metformin therapy in a low risk patient [letter] Broom J, et al. **Postgrad Med J** 1989 Jan;65(759):57

Lactic acidosis due to metformin therapy in a low risk patient. Tymms DJ, et al. **Postgrad Med J** 1988 Mar;64(749):230–1

PHARMACOKINETICS

The influence of Guar gum on absorption of metformin from the gut in healthy volunteers. Gin H, et al. **Horm Metab Res** 1989 Feb;21(2):81–3

Hemodialysis in the treatment of lactic acidosis in diabetics treated by metformin: a study of metformin elimination. Lalau JD, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):285–8

PHARMACOLOGY

Inhibition of hepatic gluconeogenesis by metformin. Synergism with insulin. Wollen N, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4353–8

Metformin potentiates B-cell response to high glucose: an in vitro study on isolated perfused pancreas from normal rats. Gregorio F, et al. **Diabete Metab** 1989 May–Jun; 15(3):111–7

Study of the effect of metformin on platelet aggregation in insulin-dependent diabetics. Gin H, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):61–7

The effects of metformin on adipocyte insulin action and metabolic control in obese subjects with type 2 diabetes. Pedersen O, et al. **Diabetic Med** 1989 Apr;6(3):249–56

Metformin treatment of lean and obese Zucker rats modulates the ability of glucagon and insulin to regulate hepatocyte adenylate cyclase activity. Gawler DJ, et al. **J Endocrinol** 1989 Jul;122(1):207–12

[Action of metformin on vascular risk factors in diabetes] Isnard F, et al. **Journ Annu Diabetol Hotel Dieu** 1988; :349–62 (71 ref.) (Fre)

[New approach to the vascular action of metformin] Isnard F, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:299–314 (58 ref.) (Fre)

THERAPEUTIC USE

Metformin improves peripheral but not hepatic insulin action in obese patients with type II diabetes. Hother-Nielsen O, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):257–65

Treatment—metformin. Bailey CJ, et al. **Baillieres Clin Endocrinol Metab** 1988 May;2(2):455–76 (116 ref.)

Metformin in the management of type 2 diabetes [letter] Howlett HC. **Diabetic Med** 1989 Mar;6(2):179–80

The effect of glibenclamide and metformin on serum lipoproteins in type 2 diabetes. Rains SG, et al. **Diabetic Med** 1988 Oct;5(7):653–8

Different effects of insulin and oral antidiabetic agents on glucose and energy metabolism in type 2 (non-insulin-dependent) diabetes mellitus. Groop L, et al. **Diabetologia** 1989 Aug;32(8):599–605

A comparison of metformin versus guar in combination with sulphonylureas in the treatment of non insulin dependent diabetes. Wilson JA, et al. **Horm Metab Res** 1989 Jun; 21(6):317–9

Effects of improved glycaemic control on calcium and magnesium homeostasis in type II diabetes. McBain AM, et al. **J Clin Pathol** 1988 Sep;41(9):933–5

The reduction of low density lipoprotein cholesterol by metformin is maintained with long-term therapy. Rains SG, et al. **J R Soc Med** 1989 Feb;82(2):93–4

[Lipoatrophic diabetes with insulin resistance controlled by metformin] Labeille B, et al. **Ann Dermatol Venereol** 1988; 115(11):1151–2 (Fre)

[New findings on the metabolic effects of biguanides. In vitro and in vivo studies] Marchetti P, et al. **Minerva Endocrinol** 1988 Jul–Sep;13(3):173–80 (Eng. Abstr.) (Ita)

METHACHOLINE COMPOUNDS

ADMINISTRATION & DOSAGE

[The bronchial response to high doses of methacholine in healthy persons] Kajba S, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):121–6 (Eng. Abstr.) (Scr)

ANTAGONISTS & INHIBITORS

Propranolol antagonizes hypotension induced by alpha-blockers but not by sodium nitroprusside or methacholine. Tabrizchi R, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):83–7

Transdermal scopolamine attenuates methacholine-induced bronchospasm. Khadra I, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):55–9

DIAGNOSTIC USE

The effect of ipratropium bromide on nasal hypersecretion induced by methacholine in patients with vasomotor rhinitis. A double-blind, cross-over, placebo-controlled and randomized dose-response study. Sjögren I, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):453–9

Tolerance to methacholine inhalation challenge in nonasthmatic subjects. Beckett WS, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1499–501

A protocol for performing reproducible methacholine inhalation tests in children with moderate to severe asthma. Weiss ME, et al. **Am Rev Respir Dis** 1989 Jan;139(1):67–72

Methacholine inhalation challenge in young children: results of testing and follow-up. Adinoff AD, et al. **Ann Allergy** 1988 Oct;61(4):282–6

Differential effects of nifedipine and diltiazem on methacholine-induced bronchospasm in allergic asthma. Ferrari M, et al. **Ann Allergy** 1989 Sep;63(3):196–200

Associations between respiratory symptoms, bronchial response to methacholine, and atopy in two age groups of schoolchildren. Clifford RD, et al. **Arch Dis Child** 1989 Aug;64(8):1133–9

Prevalence of atopy and range of bronchial response to methacholine in 7 and 11 year old schoolchildren. Clifford RD, et al. **Arch Dis Child** 1989 Aug;64(8):1126–32

The effect of nifedipine on bronchial reactivity to inhaled histamine and methacholine: a comparative study in normal and asthmatic subjects. Henderson AF, et al. **Br J Dis Chest** 1988 Oct;82(4):374–81

Intrasubject between-day variability of PD20 methacholine assessed by the dosimeter inhalation test. Balzano G, et al. **Chest** 1989 Jun;95(6):1239–43

Comparison of responses to methacholine and cold air in patients suspected of having asthma. Filuk RB, et al. **Chest** 1989 May;95(5):948–52

Theophylline does not inhibit allergen-induced increase in airway responsiveness to methacholine. Cockcroft DW, et al. **J Allergy Clin Immunol** 1989 May;83(5):913–20

Relationship between deposition of and responsiveness to inhaled methacholine in normal and asymptomatic subjects. Donna E, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):456–61

Airway responsiveness to methacholine after inhalation of nebulized hypertonic saline in bronchial asthma. O'Hickey SP, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):472–6

Corticosteroids decrease airway hyperresponsiveness in the Basenji-Greyhound dog model of asthma. Darowski MJ, et al. **J Appl Physiol** 1989 Mar;66(3):1120–6

Effect of breathing pattern during inhalation challenge on the shape and position of the dose-response curve. Guillemi S, et al. **Lung** 1989;167(2):95–106

Evaluation of bronchial responsiveness by pharmacological challenges in asthma. Inhaled propranolol in comparison with histamine and methacholine. Chetta A, et al. **Respiration** 1988;54 Suppl 1:84–9

Comparison of histamine and methacholine for use in bronchial challenge tests in community studies. Higgins BG, et al. **Thorax** 1988 Aug;43(8):605–10

Methacholine bronchial challenge using a dosimeter with controlled tidal breathing. Nieminen MM, et al. **Thorax** 1988 Nov;43(11):896–900

[Refractoriness on repeated methacholine provocation test] Su WJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan; 41(1):31–6 (Eng. Abstr.) (Chi)

[Bronchoreactivity induced by physical exercise and methacholine in children with rhinitis and allergic asthma. A comparative study] Barberio G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):169–70 (Eng. Abstr.) (Ita)

[Effect of beta-adrenergic stimulants on bronchoconstriction induced by methacholine] Hashizume N, et al. **Arerugi** 1988 Sep;37(9):935–43 (Eng. Abstr.) (Jpn)

[The changes in nasal mucosa with sex and age—measuring by methacholine inhalation test] Takeyasu Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):926–32 (Eng. Abstr.) (Jpn)

[Effect of deep inspiration on measurement of bronchial responsiveness to methacholine—evaluation by partial and maximum expiratory flow-volume curve] Kamio Y, et al. **Rinsho Byori** 1988 Dec;36(12):1447–53 (Jpn)

[Effect of spirometric maneuver on methacholine provocation test in asthmatic patients and normal subjects] Yaden A, et al. **Rinsho Byori** 1989 Feb;37(2):209–14 (Jpn)

PHARMACOLOGY

Norepinephrine content in guinea-pig nasal mucosa response to histamine and methacholine provocation. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:39–43

Mechanism of inhibition by methacholine of norepinephrine-stimulated ANP secretion. Schiebinger RJ. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1429–33

The effect of inhaled budesonide on the maximal degree of airway narrowing to leukotriene D4 and methacholine in normal subjects in vivo. Bel EH, et al. **Am Rev Respir Dis** 1989 Feb;139(2):427–31

Comparison of maximal bronchoconstriction in vivo and airway smooth muscle responses in vitro in nonasthmatic humans. de Jongste JC, et al. **Am Rev Respir Dis** 1988 Aug;138(2):321–6

Mild isocapnic hypoxia enhances the bronchial response to methacholine in asthmatic subjects. Denjean A, et al. **Am Rev Respir Dis** 1988 Oct;138(4):789–93

Airway responsiveness to methacholine does not change during chemotherapy in patients with chronic bronchitis and bronchial carcinoma. Magnussen H, et al. **Am Rev Respir Dis** 1989 Mar;139(3):844–6

Pathophysiology of rhinitis. 1. Assessment of the sources of protein in methacholine-induced nasal secretions. Raphael GD, et al. **Am Rev Respir Dis** 1988 Aug;138(2):413–20

Serial distribution of bronchoconstriction in normal subjects. Methacholine versus histamine. Sekizawa K, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1312–6

Long-term treatment with thymomodulin reduces airway hyperresponsiveness to methacholine. Bagnato A, et al. **Ann Allergy** 1989 May;62(5):425–8

Muscarinic inhibition of [3H]-noradrenaline release on rabbit iris in vitro: effects of stimulation conditions on intrinsic activity of methacholine and pilocarpine. Bognar IT, et al. **Br J Pharmacol** 1988 Jul;94(3):890–900

Cholinergic mechanisms in the cerebral circulation of the newborn piglet: effect of inhibitors of arachidonic acid metabolism. Wagerle LC, et al. **Circ Res** 1989 May; 64(5):1030–6

Protective effect of tulobuterol on methacholine-induced bronchospasm in asthmatic children. Riba A, et al. **Eur J Clin Pharmacol** 1988;35(1):77–9

Bronchial responsiveness to inhaled methacholine in epidemiological studies: comparison of different indices. Bruschi C, et al. **Eur Respir J** 1989 Jul;2(7):630–6

Active sensitization of guinea-pig airways in vivo enhances in vivo and in vitro responsiveness. Featherstone RL, et al. **Eur Respir J** 1988 Oct;1(9):839–45

Breathing 30 per cent oxygen attenuates bronchial responsiveness to methacholine in asthmatic patients. Inoue H, et al. **Eur Respir J** 1989 Jun;2(6):506–12

The relative responsiveness to inhaled leukotriene E4, methacholine and histamine in normal and asthmatic subjects. O'Hickey SP, et al. **Eur Respir J** 1988 Dec; 1(10):913–7

Muscarinic M-1 receptors mediate the bronchial hyperresponsiveness during methacholine inhalation. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):71–6

Tracheal mucosal blood flow responses to autonomic agonists. Barker JA, et al. **J Appl Physiol** 1988 Aug; 65(2):829–34

Effect of a thromboxane receptor antagonist on PGD2- and allergen-induced bronchoconstriction. Beasley RC, et al. **J Appl Physiol** 1989 Apr;66(4):1685–93

Effects of elastase-induced emphysema on airway responsiveness to methacholine in rats. Bellofiore S, et al. **J Appl Physiol** 1989 Feb;66(2):606–12

Antigen challenge of sensitized rats increases airway responsiveness to methacholine. Bellofiore S, et al. **J Appl Physiol** 1988 Oct;65(4):1642–6

Parenchymal interdependence and airway response to methacholine in excised dog lobes. Gunst SJ, et al. **J Appl Physiol** 1988 Dec;65(6):2490–7

Effects of lung volume, volume history, and methacholine on lung tissue viscance. Kariya ST, et al. **J Appl Physiol** 1989 Feb;66(2):977–82

Methacholine-induced bronchoconstriction in dogs: effects of lung volume and O3 exposure. Kariya ST, et al. **J Appl Physiol** 1988 Dec;65(6):2679–86

Stimulation of ciliary beat frequency by autonomic agonists: in vivo. Wong LB, et al. **J Appl Physiol** 1988 Aug;

65(2):971–81
Ipratropium bromide: bronchodilator action and effect on methacholine-induced bronchoconstriction. Larsson K. **J Asthma** 1987;24(1):29–35
No evidence for the differential antagonism of the initial fast and secondary slow contractile responses of the rat portal vein to phenylephrine, 5-hydroxytryptamine or methacholine. Doggrell SA. **J Auton Pharmacol** 1988 Jun; 8(2):69–78
Muscarinic-stimulated norepinephrine release and phosphoinositide hydrolysis in PC12 cells are independent events. Takashima A, et al. **J Biol Chem** 1989 Jun 25; 264(18):10654–9
Electron probe X-ray microanalysis of cellular ions in the eccrine secretory coil cells during methacholine stimulation. Saga K, et al. **J Membr Biol** 1989 Jan; 107(1):13–24
Bronchial hyperresponsiveness to methacholine in patients with impaired left ventricular function. Cabanes LR, et al. **N Engl J Med** 1989 May 18;320(20):1317–22
Effect of muscarinic receptor stimulation on release of cysteinyl-leukotrienes and thromboxane B2 from anaphylactic guinea-pig hearts. Wittmann G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):577–81
Duration of effect of gallopamil, a calcium channel blocker, on methacholine-induced bronchoconstriction. Massey KL, et al. **Pharmacotherapy** 1988;8(3):189–92
Heart rate and blood pressure response to methacholine in long term streptozotocin diabetic rats. Chang KS, et al. **Proc West Pharmacol Soc** 1988;31:173–6
Relationship between in vivo airway reactivity and in vitro responsiveness of tracheal smooth muscle in inbred rats. Di Maria GU, et al. **Respiration** 1988;54 Suppl 1:108–13
Cholinergic modulation of frequency receptive fields in auditory cortex: I. Frequency-specific effects of muscarinic agonists. McKenna TM, et al. **Synapse** 1989;4(1):30–43
Bronchial reactivity to methacholine after combined heart-lung transplantation. Banner NR, et al. **Thorax** 1988 Dec;43(12):955–9
Abolition of methacholine induced bronchoconstriction by the hyperventilation of exercise or volition. Freedman S, et al. **Thorax** 1988 Aug;43(8):631–6
Effect of methacholine induced bronchoconstriction on the pulmonary distribution and plasma pharmacokinetics of inhaled sodium cromoglycate in subjects with normal and hyperreactive airways. Richards R, et al. **Thorax** 1988 Aug; 43(8):611–6

METHACRYLATES see under **ACRYLATES**

METHACRYLIC ACID POLYMERS see **POLYMETHACRYLIC ACIDS**

METHACYCLINE

THERAPEUTIC USE

[Treatment of cutaneous leishmaniasis with methacycline and doxycycline (vibramycin)] Khalrulin FIa, et al. **Vestn Dermatol Venerol** 1989;(3):62–6 (Eng. Abstr.) **(Rus)**

METHADONE

Low prevalence of human immunodeficiency virus infection in methadone program attenders and pregnant intravenous drug users in the western metropolitan region of Sydney. Dwyer D, et al. **Aust N Z J Med** 1989 Aug;19(4):407–8
Extradural bupivacaine and methadone for extracorporeal shock-wave lithotripsy [see comments] Drenger B, et al. **Br J Anaesth** 1989 Jan;62(1):82–6. **Comment in:** Br J Anaesth 1989 May;62(5):579–80
Extradural bupivacaine and methadone for extracorporal shock-wave lithotripsy [letter; comment] Lim M. **Br J Anaesth** 1989 May;62(5):579–80. **Comment on:** Br J Anaesth 1989 Jan;62(1):82–6
Symmetrical columnar necrosis of the basal ganglia and brain stem in an adult following cardiac arrest. Révész T, et al. **Clin Neuropathol** 1988 Nov–Dec;7(6):294–8
Misunderstandings about methadone. Zweben JE, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):275–81 (36 ref.)
[Methadone—pharmacokinetics and pharmacodynamics of an opiate] Jage J. **Anaesthesist** 1989 Apr;38(4):159–66 (30 ref.) (Eng. Abstr.) **(Ger)**
[Complications following parenteral administration of oral methadone solution] Naschitz JE, et al. **Harefuah** 1988 Nov 15;115(10):271–4 (Eng. Abstr.) **(Heb)**
[The newborn infant of the drug-addicted mother. Experience relative to the period 1978–1986] Fabris C, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):177–85 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

Contingency management in methadone maintenance: effects of reinforcing and aversive consequences on illicit polydrug use. Iguchi MY, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):1–7
Treatment of postoperative pain: comparison between administration at fixed hours and 'on demand' with intramuscular analgesics. De Conno F, et al. **Eur J Surg Oncol** 1989 Jun;15(3):242–6
Methadone maintenance programs in Sweden [letter] Blix O. **JAMA** 1989 Apr 21;261(15):2202
Marijuana and benzodiazepines in patients receiving methadone treatment [letter] DuPont RL, et al. **JAMA** 1989 Jun 16;261(23):3409
Effects of exposure in utero to methadone and buprenorphine on enkephalin levels in the developing rat brain. Tiong GK, et al. **Neurosci Lett** 1988 Oct 31;93(1):101–6
Intrathecal Opioids, Potency and Lipophilicity [letter] Shir Y. **Pain** 1989 Aug;38(2):235–6
[Effects of pyridoxine on the hypothalamo-hypophyseal-gonadal axis during chronic treatment with methadone] Tridenti G, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):55–6 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Neurobehavioral functioning in children exposed to narcotics in utero. Davis DD, et al. **Addict Behav** 1988;13(3):275–83
Methadone maintenance has a tragic price [news] Scherer P. **Am J Nurs** 1988 Dec;88(12):1630, 1632
Developmental consequences of prenatal exposure to methadone. Hans SL. **Ann N Y Acad Sci** 1989;562:195–207
Abnormalities in thyroid function associated with chronic therapy with methadone. English TN, et al. **Clin Chem** 1988 Nov;34(11):2202–4
Behavior and development patterns in children born to heroin-addicted and methadone-addicted mothers. Hayford SM, et al. **J Natl Med Assoc** 1988 Nov; 80(11):1197–200 (11 ref.)
Group psychotherapy with methadone-maintained pregnant women. Mackie-Ramos RL, et al. **J Subst Abuse Treat** 1988;5(3):151–61
[Effects of maternal methadone addiction on the growth and health of the fetus] Rosati P, et al. **Minerva Ginecol** 1988 Oct;40(10):597–601 (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

In vivo carcinogenesis assay of L-alpha-acetylmethadol.HCl in rodents. Rosenkrantz H, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):626–39

ANALYSIS

Determination of methadone in human hair by radioimmunoassay. Balabanova S, et al. **Z Rechtsmed** 1989; 102(1):1–4

BLOOD

Methadone and theories of addiction [letter] **JAMA** 1989 Apr 7;261(13):1879–80

METABOLISM

Valproic acid, unlike other anticonvulsants, has no effect on methadone metabolism: two cases. Saxon AJ, et al. **J Clin Psychiatry** 1989 Jun;50(6):228–9
Metabolism of methadone by chicken embryos prevents induction of chronic opioid-type dependence after a single injection: use of osmotic pumps for continuous infusion. Seran GF, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):357–63
Effect of glucose administration on various rat hepatic constituents and on the spectral binding of hexobarbital and methadone to rat hepatic cytochrome P450. Buchholz J, et al. **Pharmacology** 1989;38(2):129–36

PHARMACOKINETICS

Methadone concentrations in human hair of the head, axillary and pubic hair. Balabanova S, et al. **Z Rechtsmed** 1989; 102(5):293–6
[Cephalic migration of methadone administered by the spinal route (letter)] Villalonga Morales A, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb;36(1):60 **(Spa)**

PHARMACOLOGY

Methadone and thyroid-function tests [letter] Novick DM, et al. **Clin Chem** 1989 Aug;35(8):1807–8
Cardiorespiratory and sedative effects of a combination of acepromazine, xylazine and methadone in the horse. Nilsfors L, et al. **Equine Vet J** 1988 Sep;20(5):364–7
Intermittent naloxone attenuates the development of physical dependence on methadone in rhesus monkeys. Krystal JH, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):331–8
Suppression of human peripheral blood mononuclear cell function by methadone and morphine. Peterson PK, et al. **J Infect Dis** 1989 Mar;159(3):480–7
Effects of buprenorphine, methadone and naloxone on acquisition of behavioral chains. Cleary J, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):569–75
Plasma arginine vasopressin response to intravenous methadone and naloxone in conscious dogs. Hellebrekers LJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):329–33
The effects of methadone treatment on the reactivity of the nonstress test. Archie CL, et al. **Obstet Gynecol** 1989 Aug; 74(2):254–5
Interaction of reinforcement history with methadone on responding maintained under a fixed-interval schedule. Nader MA, et al. **Pharmacol Biochem Behav** 1989 Mar; 32(3):643–9

THERAPEUTIC USE

Consequences and costs of shutting off methadone. Anglin MD, et al. **Addict Behav** 1989;14(3):307–26
Cross-sectional study of immunologic abnormalities in intravenous drug abusers on methadone maintenance in New York City [published erratum appears in Aids 1989 Jul;3(7):following A100] Grieco MH, et al. **Aids** 1989 Apr; 3(4):235–7
Alcohol use by heroin addicts: evidence for an inverse relationship. A study of methadone maintenance and drug-free treatment samples. Anglin MD, et al. **Am J Drug Alcohol Abuse** 1989;15(2):191–207
Alcohol use and psychopathology in opioid addicts on methadone maintenance. Roszell DK, et al. **Am J Drug Alcohol Abuse** 1986;12(3):269–78
The allocation of drug addicts to different types of treatment. An evaluation and a two-year follow-up. Segest E, et al. **Am J Drug Alcohol Abuse** 1989;15(1):41–53
Immunologic assessment of a cluster of asymptomatic HTLV-I-infected individuals in New Orleans. deShazo RD, et al. **Am J Med** 1989 Jan;86(1):65–70
Intrathecal methadone and morphine for postoperative analgesia: a comparison of the efficacy, duration, and side effects. Jacobson L, et al. **Anesthesiology** 1989 May; 70(5):742–6
The Bethlem Study on NET: putting the record straight [letter] Gossop M, et al. **Br J Addict** 1989 Jul;84(7):818–9
Neuro-electric therapy: criticisms of the 1984 Bethlem Study [letter] Patterson MA. **Br J Addict** 1989 Jul;84(7):818
Cyclizine abuse among a group of opiate dependents receiving methadone. Ruben SM, et al. **Br J Addict** 1989 Aug;84(8):929–34
Success and failure at inpatient heroin detoxification. San L, et al. **Br J Addict** 1989 Jan;84(1):81–7
Chlordiazepoxide vs. methadone in opiate withdrawal: a preliminary double blind trial. Drummond DC, et al. **Drug Alcohol Depend** 1989 Jan;23(1):63–71
Methadone-assisted rehabilitation of Swedish heroin addicts. Grönbladh L, et al. **Drug Alcohol Depend** 1989 Aug; 24(1):31–7
Cocaine use in a population of drug abusers on methadone. Cushman P Jr. **Hosp Community Psychiatry** 1988 Nov; 39(11):1205–7
Urban community reaction to health facilities in residential areas: lessons from the placement of methadone facilities in New York City. Genevie L, et al. **Int J Addict** 1988 Jun;23(6):603–16
Literature on methadone maintenance clinics. Liappas JA, et al. **Int J Addict** 1988 Sep;23(9):927–40 (90 ref.)
Methadone in The Netherlands: an evaluation. van de Wijngaart GF. **Int J Addict** 1988 Sep;23(9):913–25 (46 ref.)
A review of the characteristics and treatment progress of 45 pregnant opiate addicts attending the Irish National Drug Advisory and Treatment Centre over a two year period. O'Connor JJ, et al. **Ir J Med Sci** 1988 May; 157(5):146–9
Differences in the Symptom Check List-90 profiles of black and white methadone patients. Platt JJ, et al. **J Clin Psychol** 1989 Mar;45(2):342–5
Psychological symptoms in methadone maintenance patients: prevalence and change over treatment. Corty E, et al. **J Consult Clin Psychol** 1988 Oct;56(5):776–7
Reducing the risk of AIDS through methadone maintenance treatment. Ball JC, et al. **J Health Soc Behav** 1988 Sep; 29(3):214–26
Natural killer cell activity and lymphocyte subsets in parenteral heroin abusers and long-term methadone maintenance patients. Novick DM, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):606–10
Money for methadone. II: Unintended consequences of limited-duration methadone maintenance. Murphy S, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):397–402
Methadone maintenance program for AIDS-affected opiate addicts. Sorensen JL, et al. **J Subst Abuse Treat** 1989; 6(2):87–94
Methadone treatment and acquired immunodeficiency syndrome. Cooper JR. **JAMA** 1989 Sep 22–29; 262(12):1664–8 (88 ref.)
Implications of methadone maintenance for theories of narcotic addiction. Dole VP. **JAMA** 1988 Nov 25; 260(20):3025–9 (33 ref.)
Methadone treatment and the acquired immunodeficiency syndrome epidemic [editorial] Dole VP. **JAMA** 1989 Sep 22–29;262(12):1681–2
Methadone maintenance [letter] Kell MJ, et al. **JAMA** 1988 Nov 18;260(19):2835–6
Methadone maintenance treatment remains controversial even after 23 years of experience [news] Kirn TF. **JAMA** 1988 Nov 25;260(20):2970–1, 2975
Workload, setting of clinics often far from ideal [news] Kirn TF. **JAMA** 1988 Nov 25;260(20):2975–6
From the Food and Drug Administration. Nightingale SL. **JAMA** 1989 Apr 14;261(14):2021
Basic issues pertaining to the effectiveness of methadone maintenance treatment. Ball JC, et al. **NIDA Res Monogr** 1988;86:178–91
The criminal justice system and opiate addiction: a historical perspective. Joseph H. **NIDA Res Monogr** 1988;86:106–25
Methadone maintenance in pregnancy: consequences to care and outcome [letter] Boyd KL. **Obstet Gynecol** 1989 Jan; 73(1):136
Does intravenous methadone provide longer lasting analgesia

than intravenous morphine? A randomized, double-blind study. Grochow L, et al. **Pain** 1989 Aug;38(2):151-7
Correlates of participation in AIDS education and HIV antibody testing by methadone patients. Magura S, et al. **Public Health Rep** 1989 May-Jun;104(3):231-40
[The drug addict in prison: Medical response and its limitations] Jeanmonod R, et al. **Soz Praventivmed** 1988; 33(6):274-80 (Eng. Abstr.) (Fre)
[Drug substitution with methadone—pro arguments] Hüsgen HA. **Off Gesundheitswes** 1988 Aug-Sep;50(8-9):530-2 (Eng. Abstr.) (Ger)
[Drug substitution with methadone—contra arguments] Lux F. **Off Gesundheitswes** 1988 Aug-Sep;50(8-9):533-8 (Eng. Abstr.) (Ger)
[Accepted methadone treatment] Gunne LM. **Lakartidningen** 1989 Jun 7;86(23):2194, 2196 (Swe)

TOXICITY

In vivo carcinogenesis assay of DL-methadone.HCl in rodents. Rosenkrantz H, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):640-51
Hepatotoxicity of the opioids morphine, heroin, meperidine, and methadone to cultured human hepatocytes. Gómez-Lechón MJ, et al. **Mol Toxicol** 1987-88 Fall; 1(4):453-63

URINE

Evaluation of the TDx and ADx methadone immunoassays. Caplan YH, et al. **Clin Chem** 1989 Aug;35(8):1794

METHADYL ACETATE see under **METHADONE**

METHAGENS see **METHANOGENS**

METHALAMIC ACID see **IOTHALAMIC ACID**

METHALLIBURE see under **THIOUREA**

METHAMINODIAZEPOXIDE see **CHLORDIAZEPOXIDE**

METHAMPHETAMINE

Evidence for dual mechanisms involved in methamphetamine-induced increases in striatal preprotachykinin mRNA. Haverstick DM, et al. **J Biol Chem** 1989 Aug 5;264(22):13140-4
[An autopsy case of subarachnoid and intracerebral hemorrhage and necrotizing angitis associated with methamphetamine abuse] Shibata S, et al. **No To Shinkei** 1988 Nov;40(11):1089-94 (Eng. Abstr.) (Jpn)
[Effects of selective D-1 and D-2 dopamine antagonists on methamphetamine-induced behavioral sensitization] Ujike H, et al. **Seishin Shinkeigaku Zasshi** 1988;90(8):636-41 (Jpn)

ADMINISTRATION & DOSAGE

Long-term effects of chronic methamphetamine administration in rhesus monkeys. Woolverton WL, et al. **Brain Res** 1989 May 1;486(1):73-8

ADVERSE EFFECTS

Caudal thalamic infarction following intranasal methamphetamine use. Sachdeva K, et al. **Neurology** 1989 Feb;39(2 Pt 1):305-6
Effects of transplacental exposure to cocaine and methamphetamine on the neonate. Dixon SD. **West J Med** 1989 Apr;150(4):436-42
[Study on experimental models of methamphetamine-induced mental disorders—relationship between rat brain dopamine and changes in behavior] Koyama T, et al. **Seishin Shinkeigaku Zasshi** 1988;90(10):853-62 (Jpn)

ANALOGS & DERIVATIVES

Evaluation of the neurotoxic potential of N,N-dimethylamphetamine: an illicit analog of methamphetamine. Ricaurte GA, et al. **Brain Res** 1989 Jun 26;490(2):301-6
Simultaneous determination of methamphetamine and its metabolites in monkey urine by gas chromatography/mass spectrometry with selected ion monitoring. Yamamoto T, et al. **J Anal Toxicol** 1989 Mar-Apr;13(2):117-9
Separation of optical isomers of methoxyphenamine and its metabolites as N-heptafluorobutyryl-L-prolyl derivatives by fused-silica capillary gas chromatography. Roy SD, et al. **J Chromatogr** 1988 Sep 23;431(1):210-5
Enantioselective gas chromatographic assays with electron-capture detection for methoxyphenamine and its three primary metabolites in human urine. Srinivas NR, et al. **J Chromatogr** 1989 Jan 27;487(1):61-72
A preliminary behavioral investigation of PMMA, the 4-methoxy analog of methamphetamine. Glennon RA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):9-13
Influence of ion-pair-formation on the pharmacokinetic properties of drugs. Part 3: Influence of hexylsalicylic acid on the pharmacokinetics of pholedrine. Neubert R, et al. **Pharmazie** 1988 Sep;43(9):632-3
Effect of sparteine and quinidine on the metabolism of methoxyphenamine by Cunninghamella bainieri. Foster BC, et al. **Xenobiotica** 1989 Apr;19(4):445-52
Selective in vivo inhibition by quinidine of methoxyphenamine oxidation in rat models of human debrisoquine polymorphism. Muralidharan G, et al. **Xenobiotica** 1989 Feb;19(2):189-97
Simultaneous quantitative analysis of methamphetamine and 4-hydroxymethamphetamine in body fluids by gas chromatography/mass spectrometry. Hara K, et al. **Z Rechtsmed** 1988;100(4):231-6
[Synthesis, detection and pharmacokinetic behavior of pholedrine sulphate esters. 7. Comparison of free- and sustained-release tablets in vivo and in vitro] Fürst W, et al. **Pharmazie** 1989 Mar;44(3):234 (Ger)
[Preparation, detection and pharmacokinetic behavior of pholedrine sulfuric acid ester. 5. Methods for determining pholedrine and pholedrine sulfuric acid esters in plasma] Petzsche M, et al. **Pharmazie** 1988 Dec;43(12):867-8 (Ger)
[Preparation, detection and pharmacokinetic behavior of pholedrine sulfuric acid ester. 6. Determination of pholedrine and pholedrine sulfuric acid esters in plasma after oral administration of pholedrine] Petzsche M, et al. **Pharmazie** 1988 Dec;43(12):875 (Ger)
[Immunohistochemical determination of methamphetamine analogues in the animal tissue] Mukaida M, et al. **Nippon Hoigaku Zasshi** 1988 Jun;42(3):324-30 (Eng. Abstr.) (Jpn)

ANALYSIS

Illicit methamphetamine: analysis, synthesis, and availability [published erratum appears in Am J Drug Alcohol Abuse 1989;15(3):353] Puder KS, et al. **Am J Drug Alcohol Abuse** 1988;14(4):463-73
Analysis of methamphetamine in hair, nail, sweat, and saliva by mass fragmentography. Suzuki S, et al. **J Anal Toxicol** 1989 May-Jun;13(3):176-8
Design and development of a single-reagent polarization fluoroimmunoassay for methamphetamine. Eremin SA, et al. **Ther Drug Monit** 1988;10(3):327-32
Simultaneous quantitative analysis of methamphetamine and 4-hydroxymethamphetamine in body fluids by gas chromatography/mass spectrometry. Hara K, et al. **Z Rechtsmed** 1988;100(4):231-6
Forensic toxicologic analysis of methamphetamine and amphetamine optical isomers by high performance liquid chromatography. Nagai T, et al. **Z Rechtsmed** 1988; 101(3):151-9

IMMUNOLOGY

Preparation of monoclonal antibodies against methamphetamine. Usagawa T, et al. **J Immunol Methods** 1989 Apr 21;119(1):111-5

METABOLISM

Biphasic effects of alcohol drinking on methamphetamine metabolism in man. Shimosato K, et al. **Alcohol Alcohol** 1988;23(5):351-7

PHARMACOLOGY

Effects of chronic administration of haloperidol, methamphetamine or cocaine on "wet-dog shakes" elicited by stimulation of the rat hippocampus. Araki H, et al. **Arch Int Pharmacodyn Ther** 1989 Jan-Feb;297:217-24
Subchronic methamphetamine treatment enhances methamphetamine- or cocaine-induced dopamine efflux in vivo. Kazahaya Y, et al. **Biol Psychiatry** 1989 Apr 1; 25(7):903-12
Reduction of rat striatal thyrotropin-releasing hormone receptors produced by repeated methamphetamine administration. Nakashima M, et al. **Biol Psychiatry** 1989 Jan 15;25(2):191-9
Selective reduction of serotonin immunoreactivity in some forebrain regions of rats induced by acute methamphetamine treatment; quantitative morphometric analysis by serotonin immunocytochemistry. Fukui K, et al. **Brain Res** 1989 Mar 13;482(1):198-203
Characterization of methamphetamine effects on the striatal-nigral dynorphin system. Hanson GR, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):11-8
Effect of MK-801 on the decrease in tryptophan hydroxylase induced by methamphetamine and its methylenedioxy analog. Johnson M, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):315-8
Cholecystokinin binding sites in the rat forebrain: effects of acute and chronic methamphetamine administration. Suzuki T, et al. **J Neural Transm** 1989;77(2-3):181-95
Effects of SCH23390 injection into the dorsal striatum and nucleus accumbens on methamphetamine-induced gnawing and hyperlocomotion in rats. Koshikawa N, et al. **J Nihon Univ Sch Dent** 1989 Jun;31(2):451-7
Enhancement of dopamine actions on rat nucleus accumbens neurones in vitro after methamphetamine pre-treatment. Higashi H, et al. **J Physiol (Lond)** 1989;408:587-603
Enhancement of ambulation-increasing effect of methamphetamine by peripherally-administered 6R-L-erythro-5,6,7,8-tetrahydrobiopterin (R-THBP) in mice. Asami T, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):175-84
Reverse tolerance to ambulation-increasing effects of methamphetamine and morphine in 6 mouse strains. Kuribara H, et al. **Jpn J Pharmacol** 1989 Feb;49(2):197-203
Alterations of accumbens neuronal activity in freely moving rats following methamphetamine. Fukuzako H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):331-5
Regulation of dopamine release by the autoreceptor after repeated methamphetamine treatment in rats: an intracerebral dialysis study. Kazahaya Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):839-43
Effects of chronic treatment of methamphetamine and imipramine on amygdaloid seizure's generation. Minabe Y, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):337-43
Effect of dopamine receptor antagonist on in vivo dopamine release induced by intrastriatal perfusion with methamphetamine in freely moving rats. Watanabe H, et al. **Methods Find Exp Clin Pharmacol** 1989 Feb;11(2):81-5
Effects of dopaminergic and serotonergic receptor blockade on neurochemical changes induced by acute administration of methamphetamine and 3,4-methylenedioxymethamphetamine. Johnson M, et al. **Neuropharmacology** 1988 Nov;27(11):1089-96
Effects of methamphetamine upon circadian rhythms in multiple unit activity inside and outside the suprachiasmatic nucleus in the golden hamster (Mesocricetus auratus). Omata K, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):218-22
Relative importance of the dopaminergic system in haloperidol-catalepsy and the anticataleptic effect of antidepressants and methamphetamine in rats. Al-Khatib IM, et al. **Pharmacol Biochem Behav** 1989 May;33(1):93-7
Rhythms in behaviors, body temperature and plasma corticosterone in SCN lesioned rats given methamphetamine. Honma S, et al. **Physiol Behav** 1988; 44(2):247-55
Methamphetamine induced locomotor rhythm entrains to restricted daily feeding in SCN lesioned rats. Honma S, et al. **Physiol Behav** 1989 May;45(5):1057-65
A compact and inexpensive device using an electronic calculator for measuring ambulatory activity in mice. Masuda Y, et al. **Physiol Behav** 1988;44(3):413-5
Effects of dopaminergic and GABAergic antagonists on methamphetamine-induced locomotor activity in mice selectively bred for their differences in locomotor activity. Masserano JM, et al. **Proc West Pharmacol Soc** 1989; 32:195-9
Inhibitory effect of a selective kappa receptor agonist, U-50, 488H, on methamphetamine-elicited ipsilateral circling behavior in rats with unilateral nigral lesions. Ohno M, et al. **Psychopharmacology (Berlin)** 1989;97(2):219-21
Effects of selective D-1 and D-2 dopamine antagonists on development of methamphetamine-induced behavioral sensitization. Ujike H, et al. **Psychopharmacology (Berlin)** 1989;98(1):89-92

POISONING

Cocaine- and methamphetamine-related deaths in San Diego County (1987): homicides and accidental overdoses. Bailey DN, et al. **J Forensic Sci** 1989 Mar;34(2):407-22
The hazards of smokable methamphetamine [letter] Jackson JG. **N Engl J Med** 1989 Sep 28;321(13):907
[Changes in behavior and central monoaminergic systems in the rat after repeated methamphetamine pretreatment: presynaptic regulatory mechanism] Ichikawa J. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):389-403 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Effects of anti-motion sickness drugs on motion sickness in rats. Morita M, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):330-3

TOXICITY

Neurotoxicity in dopamine and 5-hydroxytryptamine terminal fields: a regional analysis in nigrostriatal and mesolimbic projections. Seiden LS, et al. **Ann N Y Acad Sci** 1988;537:161-72 (48 ref.)
Functional consequences following methamphetamine-induced neuronal damage. De Vito MJ, et al. **Psychopharmacology (Berlin)** 1989;97(4):432-5
Role for excitatory amino acids in methamphetamine-induced nigrostriatal dopaminergic toxicity. Sonsalla PK, et al. **Science** 1989 Jan 20; 243(4889):398-400
Methylphenidate and pemoline do not cause depletion of rat brain monoamine markers similar to that observed with methamphetamine. Zaczek R, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):227-33

URINE

Ranitidine and high concentrations of phenylpropanolamine cross react in the EMIT monoclonal amphetamine/methamphetamine assay. Grinstead GF. **Clin Chem** 1989 Sep;35(9):1998-9
Resolution of methamphetamine stereoisomers in urine drug testing: urinary excretion of R(-)-methamphetamine following use of nasal inhalers. Fitzgerald RL, et al. **J Anal Toxicol** 1988 Sep-Oct;12(5):255-9
Quantitation of methamphetamine and amphetamine in urine by capillary GC/MS. Part I. Advantages of trichloroacetyl derivatization. Hornbeck CL, et al. **J Anal Toxicol** 1989 May-Jun;13(3):144-9
Comparison of three commercial amphetamine immunoassays

for detection of methamphetamine, methylenedioxyamphetamine, methylenedioxymethamphetamine, and methylenedioxyethylamphetamine. Ruangyuttikarn W, et al. **J Anal Toxicol** 1988 Jul-Aug;12(4):229-33

Simultaneous determination of methamphetamine and its metabolites in monkey urine by gas chromatography/mass spectrometry with selected ion monitoring. Yamamoto T, et al. **J Anal Toxicol** 1989 Mar-Apr;13(2):117-9

Headspace gas chromatography of stimulants in urine by in-column trifluoroacetyl derivatization method. Tsuchihashi H, et al. **J Chromatogr** 1989 Apr 21; 467(1):227-35

METHANDIENONE see **METHANDROSTENOLONE**

METHANDRIO... see under **ANDROSTENEDIOLS**

METHANDROSTENOLONE

ANALYSIS

Determination of methandrostenolone and its metabolites in equine plasma and urine by coupled-column liquid chromatography with ultraviolet detection and confirmation by tandem mass spectrometry. Edlund PO, et al. **J Chromatogr** 1989 Feb 24;487(2):341-56

PHARMACOLOGY

Appearance and ultrastructure of intranuclear crystalloids in tendon fibroblasts induced by an anabolic steroid hormone in the mouse. Michna H. **Acta Anat (Basel)** 1988; 133(3):247-50

Intra- and extracellular lysosomes in tendon tissue of the mouse after treatment with an anabolic steroid hormone. Ultrastructural and cytochemical study. Michna H. **Acta Anat (Basel)** 1989;134(1):57-61

Collagen fibril dynamics in the anulus fibrosus induced by an anabolic steroid hormone. Michna H. **Acta Anat (Basel)** 1989;135(1):12-6

[Effects of metanabol and training on liver function and selected biochemical indicators of the blood and urine in weight lifters] Fojt E, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1189-92 (Pol)

[The action of methandrostenolone and ecdysterone on the physical endurance of animals and on protein metabolism in the skeletal muscles] Chermnykh NS, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):57-60 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

[Chronic stimulation of the fibrinolytic system as supplementary treatment of intrauterine fetal hypotrophy] Uszyński M, et al. **Ginekol Pol** 1988 Jul;59(7):429-34 (Eng. Abstr.) (Pol)

METHANE

Methylation of thymine and uracil with free methyl cations formed due to beta-decay of tritiated methane: possible implication in mutagenesis and carcinogenesis. Korsakov MV, et al. **Biochimie** 1989 May;71(5):633-7

On-line preparation of [11C]carbon dioxide from [11C]methane [letter] Landais P, et al. **Int J Rad Appl Instrum [A]** 1989;40(3):265-6

Ultrathin coating of plasma polymer of methane applied on the surface of silicone contact lenses. Ho CP, et al. **J Biomed Mater Res** 1988 Oct;22(10):919-37

ADVERSE EFFECTS

Fatalities attributed to methane asphyxia in manure waste pits—Ohio, Michigan, 1989. **MMWR** 1989 Aug 25; 38(33):583-6

ANALOGS & DERIVATIVES

Nitromethane interferes in assay of creatinine by the Jaffé reaction. De Leacy EA, et al. **Clin Chem** 1989 Aug; 35(8):1772-4

Tetranitromethane modification of the muscarinic receptors in bovine adrenal medulla. Yamanaka K, et al. **Jpn J Pharmacol** 1988 Sep;48(1):67-76

An analysis of magnetic cross-relaxation between water and methylene protons in a model system. Gore JC, et al. **Magn Reson Med** 1989 Mar;9(3):333-42

Effect of tetranitromethane on the biological activities of botulinum neurotoxin types A, B and E. Woody M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):159-69

[Study on the effect of some group-specific agents on clostridiopeptidase] Balaevskaia TO, et al. **Biokhimiia** 1989 May;54(5):804-10 (Eng. Abstr.) (Rus)

[Modification of micrococcal histidine decarboxylase with tetranitromethane] Gonchar NA, et al. **Vopr Med Khim** 1989 May-Jun;35(3):112-6 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Use of a three-stage continuous culture system to study the effect of mucin on dissimilatory sulfate reduction and methanogenesis by mixed populations of human gut bacteria. Gibson GR, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2750-5

Electron-transport-driven sodium extrusion during methanogenesis from formaldehyde and molecular hydrogen by Methanosarcina barkeri. Müller V, et al. **Eur J Biochem** 1988 Dec 15;178(2):519-25

Effect of nitrate on methane production and fermentation by slurries of human faecal bacteria. Allison C, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1397-405

Elucidation of methanogenesis seems well on its way. Hauska G. **Trends Biochem Sci** 1988 Jan;13(1):2-4 (26 ref.)

[Intestinal production of methane in relation to gastrointestinal diseases] Callegari C, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):178-80 (Eng. Abstr.) (Ita)

METABOLISM

Nonabsorbed carbohydrate: effect on fecal pH in methane-excreting and nonexcreting individuals. Flick JA, et al. **Am J Clin Nutr** 1989 Jun;49(6):1252-7

Metabolic and nutritional parameters in patients after colonic polypectomy. Scheppach W, et al. **Digestion** 1988; 41(2):94-100

In vivo 31P- and 13C-NMR studies of ATP synthesis and methane formation by Methanosarcina barkeri. Santos H, et al. **Eur J Biochem** 1989 Mar 15;180(2):421-7

Physiology, biochemistry, and specific inhibitors of CH4, NH4+, and CO oxidation by methanotrophs and nitrifiers. Bédard C, et al. **Microbiol Rev** 1989 Mar;53(1):68-84 (180 ref.)

[Characteristics of the methane fermentation of waste of animal husbandry complexes with respect to the biomass of microorganisms and volatile fatty acids] Vedenina IIa, et al. **Mikrobiologiia** 1988 Jul-Aug;57(4):695-7 (Eng. Abstr.) (Rus)

POISONING

[Therapeutic and resuscitation measures in encephalopathy caused by acute methane poisoning] Novikova RI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):40-2 (Eng. Abstr.) (Rus)

[Changes in the function of the cardiovascular system and cerebral circulation in patients poisoned by carbon monoxide and methane] Novikova RI, et al. **Ter Arkh** 1988; 60(10):140-2 (Eng. Abstr.) (Rus)

METHANE-OXIDIZING BACTERIA see **METHYLOMONADACEAE**

METHANESULFONATES

BLOOD

Analysis of clomesone in plasma by gas chromatography-electrolytic conductivity detection. Chan KK, et al. **J Chromatogr** 1988 Jul 15;428(2):331-9

CHEMICAL SYNTHESIS

New water-soluble fluorogenic amine. 7-Aminocoumarin-4-methanesulfonic acid (ACMS) and related substrates for proteinases. Sato E, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3496-502

PHARMACOKINETICS

The regulation of the proliferation and differentiation of rat Leydig cell precursor cells after EDS administration or daily HCG treatment. Teerds KJ, et al. **J Androl** 1988 Sep-Oct;9(5):343-51

PHARMACOLOGY

Differential effects of the destruction of Leydig cells by administration of ethane dimethane sulphonate to postnatal rats. Risbridger G, et al. **Biol Reprod** 1989 Apr;40(4):801-9

Mutagenicity and induction of sister chromatid exchange by optically active enantiomers of secondary butyl methanesulfonate. Ball JC, et al. **Environ Mol Mutagen** 1989;13(2):100-6

Functional properties of developing rat Leydig cells after treatment with ethylene dimethanesulphonate (EDS). Vreeburg JT, et al. **J Reprod Fertil** 1988 Sep;84(1):63-9

Effect of ethane dimethane sulphonate on proopiomelanocortin (POMC) mRNA and POMC-derived peptides in the rat testis. Li H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1-2):203-7

THERAPEUTIC USE

Antitumor activity of 2-chloroethyl (methylsulfonyl)methanesulfonate (clomesone, NSC 33847) against selected tumor systems in mice. Dykes DJ, et al. **Cancer Res** 1989 Mar 1;49(5):1182-6

Potentiation of therapeutic effect of methanesulphonate and protection against its organ cytotoxicity by vitamin C in Ehrlich ascites carcinoma bearing mice. el-Merzabani MM, et al. **J Pharm Belg** 1989 Mar-Apr;44(2):109-16

TOXICITY

Inducibility of thymic lymphomas in female Hsd: (ICR)BR mice following subcutaneous injection of ethyl- and isopropyl methanesulfonate. Segal A, et al. **Cancer Lett** 1989 Mar;44(3):199-204

The dependence of the mutagenicity of methanesulphonic acid esters in S. typhimurium TA100 on the alkylation mechanism. Eder E, et al. **Chem Biol Interact** 1989; 69(1):45-59

Accelerated recovery of Leydig cells of the immature rat testis after administration of the cytotoxic ethylene dimethanesulphonate. Edwards G, et al. **J Endocrinol** 1988 Dec;119(3):475-82

Inhibition of testicular and somatic development after treatment of the postnatal rat with the Leydig cell cytotoxic ethylene dimethanesulphonate. Morris ID, et al. **J Endocrinol** 1988 Dec;119(3):467-74

Induction of SOS repair by monofunctional methanesulphonates in various Escherichia coli strains. Structure-activity relationships in comparison with mutagenicity in Salmonella typhimurium. Eder E, et al. **Mutagenesis** 1989 May;4(3):179-86

Genotoxicity of monofunctional methanesulphonates in the SOS chromotest as a function of alkylation mechanisms. A comparison with the mutagenicity in S. typhimurium TA100. Eder E, et al. **Mutat Res** 1989 Mar;211(1):51-64

METHANOBACTERIA see **METHANOGENS**

METHANOGENS

ANALYSIS

Structure determination of the UDP-disaccharide fragment of cytoplasmic cofactor isolated from Methanobacterium thermoautotrophicum. Marsden BJ, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1404-10

7-methylpterin derivatives in extracts of methanogens characterized by a relatively low methanopterin content. Gorris LG, et al. **Biofactors** 1988 Jan;1(1):105-9

Isolation, characterization, and biological activity of the Methanococcus thermolithotrophicus ferredoxin. Hatchikian EC, et al. **J Bacteriol** 1989 May;171(5):2384-90

Structural diversity among methanofurans from different methanogenic bacteria. White RH. **J Bacteriol** 1988 Oct; 170(10):4594-7

CLASSIFICATION

Methanocorpusculaceae fam. nov., represented by Methanocorpusculum parvum, Methanocorpusculum sinense spec. nov. and Methanocorpusculum bavaricum spec. nov. Zellner G, et al. **Arch Microbiol** 1989; 151(5):381-90

ENZYMOLOGY

Purification and characterization of an anabolic fumarate reductase from Methanobacterium thermoautotrophicum. Khandekar SS, et al. **Appl Environ Microbiol** 1989 Apr; 55(4):856-61

Changes in concentrations of coenzyme F420 analogs during batch growth of Methanosarcina barkeri and Methanosarcina mazei. Peck MW. **Appl Environ Microbiol** 1989 Apr;55(4):940-5

Reversible conversion of coenzyme F420 to the 8-OH-AMP and 8-OH-GMP esters, F390-A and F390-G, on oxygen exposure and reestablishment of anaerobiosis in Methanobacterium thermoautotrophicum. Kiener A, et al. **Arch Microbiol** 1988;150(3):249-53

Effects of acetylene on hydrogenases from the sulfate reducing and methanogenic bacteria. He SH, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):127-33

Dicyclohexylcarbodiimide-binding protein is a subunit of the Methanosarcina barkeri ATPase complex. Inatomi K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1585-90

Aerobic purification of N5,N10-methylenetetrahydromethanopterin dehydrogenase, separated from N5,N10-methylenetetrahydromethanopterin cyclohydrolase, from Methanobacterium thermoautotrophicum strain Marburg. Mukhopadhyay B, et al. **Can J Microbiol** 1989 Apr;35(4):499-507

Methyl-coenzyme-M reductase from Methanobacterium thermoautotrophicum (strain Marburg). Purity, activity and novel inhibitors. Ellermann J, et al. **Eur J Biochem** 1989 Sep 1;184(1):63-8

Purification and characterization of an oxygen-stable carbon monoxide dehydrogenase of Methanothrix soehngenii. Jetten MS, et al. **Eur J Biochem** 1989 May 1;181(2):437-41

Purification of isoleucyl-tRNA synthetase from Methanobacterium thermoautotrophicum by pseudomonic acid affinity chromatography. Rechsteiner T, et al. **Eur J Biochem** 1989 Apr 15;181(1):41-6

The H+ ATPase regulatory subunit of Methanococcus thermolithotrophicus: amplification of an 800 bp fragment by polymerase chain reaction. Bernasconi P, et al. **FEBS Lett** 1989 Jul 17;251(1-2):132-6

A methyl-CoM methylreductase system from methanogenic bacterium strain Gö 1 not requiring ATP for activity. Deppenmeier U, et al. **FEBS Lett** 1988 Dec 5;241(1-2):60-4

Formylmethanofuran dehydrogenase from methanogenic bacteria, a molybdoenzyme. Karrasch M, et al. **FEBS Lett** 1989 Aug 14;253(1-2):226-30

Reconstitution and properties of a coenzyme F420-mediated formate hydrogenlyase system in Methanobacterium formicicum [published erratum appears in J Bacteriol 1989 Sep;171(9):5237] Baron SF, et al. **J Bacteriol** 1989 Jul; 171(7):3854-9

Purification and properties of the membrane-associated coenzyme F420-reducing hydrogenase from Methanobacterium formicicum. Baron SF, et al. **J Bacteriol** 1989 Jul;171(7):3846–53

Isolation, characterization, and biological activity of ferredoxin-NAD+ reductase from the methane oxidizer Methylosinus trichosporium OB3b. Chen YP, et al. **J Bacteriol** 1989 Sep;171(9):5012–6

Isolation of subunits from Methanosarcina barkeri ATPase: nucleotide-binding site in the alpha subunit. Inatomi K, et al. **J Bacteriol** 1988 Dec;170(12):5960–2

Component A3 of the methylcoenzyme M methylreductase system of Methanobacterium thermoautotrophicum delta H: resolution into two components. Rouvière PE, et al. **J Bacteriol** 1989 Sep;171(9):4556–62

Purification and characterization of acetate kinase from acetate-grown Methanosarcina thermophila. Evidence for regulation of synthesis. Aceti DJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15444–8

Characterization of a P-type ATPase of the archaebacterium Methanococcus voltae. Dharmavaram RM, et al. **J Biol Chem** 1989 Aug 25;264(24):14085–9

Methane monooxygenase from Methylosinus trichosporium OB3b. Purification and properties of a three-component system with high specific activity from a type II methanotroph. Fox BG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10023–33

Different isozymes of methylcobalamin:2-mercaptoethanesulfonate methyltransferase predominate in methanol- versus acetate-grown Methanosarcina barkeri. Grahame DA. **J Biol Chem** 1989 Aug 5;264(22):12890–4

The biosynthesis and assembly of protein A of soluble methane monooxygenase of Methylococcus capsulatus (Bath). Green J, et al. **J Biol Chem** 1988 Nov 25; 263(33):17561–5

The magnetic and electronic properties of Methanobacterium thermoautotrophicum (strain delta H) methyl coenzyme M reductase and its nickel tetrapyrrole cofactor F430. A low temperature magnetic circular dichroism study. Hamilton CL, et al. **J Biol Chem** 1989 Jul 15; 264(20):11605–13

Amino acid sequence of the alpha and beta subunits of Methanosarcina barkeri ATPase deduced from cloned genes. Similarity to subunits of eukaryotic vacuolar and F0F1-ATPases. Inatomi K, et al. **J Biol Chem** 1989 Jul 5;264(19):10954–9

Purification and properties of Methanobacterium thermoautotrophicum DNA photolyase. Kiener A, et al. **J Biol Chem** 1989 Aug 15;264(23):13880–7

Paramagnetic centers of carbon monoxide dehydrogenase from aceticlastic Methanosarcina barkeri. Krzycki JA, et al. **J Biol Chem** 1989 May 5;264(13):7217–21

Molecular evolution of H+-ATPases. I. Methanococcus and Sulfolobus are monophyletic with respect to eukaryotes and Eubacteria. Gogarten JP, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):641–50

GENETICS

Conserved gene structures and expression signals in methanogenic archaebacteria. Allmansberger R, et al. **Can J Microbiol** 1989 Jan;35(1):52–7

Gene organization and structure of two transcriptional units from Methanococcus coding for ribosomal proteins and elongation factors. Auer J, et al. **Can J Microbiol** 1989 Jan;35(1):200–4

Comparative studies of ribosomal proteins and their genes from Methanococcus vannielii and other organisms. Köpke AK, et al. **Can J Microbiol** 1989 Jan;35(1):11–20

A comparison of the methyl reductase genes and gene products. Weil CF, et al. **Can J Microbiol** 1989 Jan; 35(1):101–8

Nucleotide sequence of the glyceraldehyde-3-phosphate dehydrogenase gene from the mesophilic methanogenic archaebacteria Methanobacterium bryantii and Methanobacterium formicicum. Comparison with the respective gene structure of the closely related extreme thermophile Methanothermus fervidus. Fabry S, et al. **Eur J Biochem** 1989 Feb 1;179(2):405–13

Expression of the glyceraldehyde-3-phosphate dehydrogenase gene from the extremely thermophilic archaebacterium Methanothermus fervidus in E. coli. Enzyme purification, crystallization, and preliminary crystal data. Fabry S, et al. **FEBS Lett** 1988 Sep 12; 237(1-2):213–7

Sequence of the gene for ribosomal protein L23 from the archaebacterium Methanococcus vannielii. Köpke AK, et al. **FEBS Lett** 1988 Nov 7;239(2):313–8

Transcription initiation and a RNA polymerase binding site upstream of the purE gene of the archaebacterium Methanobacterium thermoautotrophicum strain delta H. Brown JW, et al. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):131–6

Genes encoding 5S rRNA and tRNAs in the extremely thermophilic archaebacterium Methanothermus fervidus. Haas ES, et al. **Gene** 1989 Apr 30;77(2):253–63

Characterization and cloning of MwoI (GCN7GC), a new type-II restriction-modification system from Methanobacterium wolfei. Lunnen KD, et al. **Gene** 1989 Apr 15;77(1):11–9

Plasmid DNA from the acetotrophic methanogen Methanosarcina acetivorans. Sowers KR, et al. **J Bacteriol** 1988 Oct;170(10):4979–82

Structure and comparative analysis of the genes encoding component C of methyl coenzyme M reductase in the extremely thermophilic archaebacterium Methanothermus fervidus. Weil CF, et al. **J Bacteriol** 1988 Oct; 170(10):4718–26

Isolation and characterization of an archaebacterial viruslike particle from Methanococcus voltae A3. Wood AG, et al. **J Bacteriol** 1989 Jan;171(1):93–8

Organization and nucleotide sequence of a transcriptional unit of Methanococcus vannielii comprising genes for protein synthesis elongation factors and ribosomal proteins. Lechner K, et al. **J Mol Evol** 1989 Jul;29(1):20–7

Comparative analysis of genes encoding methyl coenzyme M reductase in methanogenic bacteria. Klein A, et al. **Mol Gen Genet** 1988 Aug;213(2-3):409–20

A hydrogenase-linked gene in Methanobacterium thermoautotrophicum strain delta H encodes a polyferredoxin. Reeve JN, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3031–5

[Clindamycin-resistant mutants of a Methanobrevibacter species] Xu BX, et al. **Wei Sheng Wu Hsueh Pao** 1988 Sep; 28(3):189–92 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Beta-aminoglutaric acid is a major soluble component of Methanococcus thermolithotrophicus. Robertson DE, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):320–6

ISOLATION & PURIFICATION

[Species composition of methane bacteria in fermented cattle manure] Nozhevnikova AN, et al. **Prikl Biokhim Mikrobiol** 1988 Jul-Aug;24(4):555–60 (Eng. Abstr.) **(Rus)**

METABOLISM

Dependence of tetrachloroethylene dechlorination on methanogenic substrate consumption by Methanosarcina sp. strain DCM. Fathepure BZ, et al. **Appl Environ Microbiol** 1988 Dec;54(12):2976–80

Excretion of amino acids by 1,2,4-triazole-3-alanine-resistant mutants of Methanococcus voltae. Sment KA, et al. **Appl Environ Microbiol** 1989 May;55(5):1295–7

A novel biosynthesis of medium chain length alpha-ketodicarboxylic acids in methanogenic archaebacteria. White RH. **Arch Biochem Biophys** 1989 May 1;270(2):691–7

Physiological and 15N-NMR analysis of molecular nitrogen fixation by Methanococcus thermolithotrophicus, Methanobacterium bryantii and Methanospirillum hungatei. Belay N, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):233–45

Methanogen factor 390 formation: species distribution, reversibility and effects of non-oxidative cellular stresses. Gloss LM, et al. **Biofactors** 1988 Oct;1(3):237–40

Methanopterin and methanogenic bacteria. Keltjens JT, et al. **Biofactors** 1988 Jan;1(1):95–103 (89 ref.)

A search for intermediates in the bacterial biosynthesis of PQQ. van Kleef MA, et al. **Biofactors** 1988 Dec; 1(4):297–302

Biosynthesis of pseudomurein: isolation of putative precursors from Methanobacterium thermoautotrophicum. König H, et al. **Can J Microbiol** 1989 Jan;35(1):176–81

The role of sodium ions in methanogenesis. Formaldehyde oxidation to CO2 and 2H2 in methanogenic bacteria is coupled with primary electrogenic Na+ translocation at a stoichiometry of 2-3 Na+/CO2. Kaesler B, et al. **Eur J Biochem** 1989 Sep 1;184(1):223–32

Electron-transport-driven sodium extrusion during methanogenesis from formaldehyde and molecular hydrogen by Methanosarcina barkeri. Müller V, et al. **Eur J Biochem** 1988 Dec 15;178(2):519–25

In vivo 31P- and 13C-NMR studies of ATP synthesis and methane formation by Methanosarcina barkeri. Santos H, et al. **Eur J Biochem** 1989 Mar 15;180(2):421–7

Competition for hydrogen between sulphate-reducing bacteria and methanogenic bacteria from the human large intestine. Gibson GR, et al. **J Appl Bacteriol** 1988 Sep; 65(3):241–7

Occurrence of sulphate-reducing bacteria in human faeces and the relationship of dissimilatory sulphate reduction to methanogenesis in the large gut. Gibson GR, et al. **J Appl Bacteriol** 1988 Aug;65(2):103–11

Activation of formylmethanofuran synthesis in cell extracts of Methanobacterium thermoautotrophicum. Bobik TA, et al. **J Bacteriol** 1989 Mar;171(3):1423–7

Structural and spectroscopic characterization of exogenous ligand binding to isolated factor F430 and its configurational isomers. Shiemke AK, et al. **J Biol Chem** 1989 May 5;264(13):7276–84

[Action of human methanogenic microbiaflora on the absorption and fixation of bismuth in the rat] Chaleil D, et al. **Ann Pharm Fr** 1988;46(2):133–7 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Enhanced resistance of anaerobic rumen fungi to the ionophores monensin and lasalocid in the presence of methanogenic bacteria. Stewart CS, et al. **J Appl Bacteriol** 1989 Jan;66(1):85–93

Chemotaxis in the archaebacterium Methanococcus voltae. Sment KA, et al. **J Bacteriol** 1989 May;171(5):2870–2

ULTRASTRUCTURE

Ultrastructure and biochemistry of Methanococcus voltae. Jarrell KF, et al. **Crit Rev Microbiol** 1989;17(1):53–87 (217 ref.)

METHANOL see **ALCOHOL, METHYL**

METHANOMONADACEAE see **METHYLOMONADACEAE**

METHAPYRILENE see under **AMINOPYRIDINES**

METHAQUALONE

Comparative study of the abuse liability of alprazolam, lorazepam, diazepam, methaqualone, and placebo. Orzack MH, et al. **Int J Addict** 1988 May;23(5):449–67 (14 ref.)

Sex differences in physical dependence on methaqualone in the rat. Suzuki T, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):483–8

ANALOGS & DERIVATIVES

[Experimental studies on the effect of Bulgarian anxiolytic lonetil on some endocrine functions] Boiadzhieva N. **Eksp Med Morfol** 1989;28(1):37–40 **(Bul)**

BLOOD

Methaqualone analysis by derivative UV spectrophotometry. Singh V, et al. **Pharmazie** 1989 Mar;44(3):229–30

METHARBITAL see under **BARBITURATES**

METHAZOLAMIDE see under **THIADIAZOLES**

METHBIPYRANONE see **METYRAPONE**

METHEMALBUMIN see under **HEMEPROTEINS**

METHEMOGLOBIN

Vector electron paramagnetic resonance spectroscopy with first and second harmonic displays of ferrihemoglobin. Watari H, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):681–5

ANALOGS & DERIVATIVES

Resonance Raman assignment and evidence for noncoupling of individual 2- and 4-vinyl vibrational modes in a monomeric cyanomethemoglobin. Gersonde K, et al. **Biochemistry** 1989 May 2;28(9):3960–6

Proton NMR investigation of the influence of subunit assembly on the low-spin in equilibrium high-spin equilibrium of met-azido hemoglobin A. Yamamoto Y, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):187–94

Nuclear-magnetic-resonance investigation of the cooperative homodimeric hemoglobin from the mollusc Scapharca inaequivalvis. Molecular and electronic structure of the cyano-met derivative. McGourty JL, et al. **Eur J Biochem** 1989 Sep 1;184(1):53–61

XANES spectroscopy sensitivity to small electronic changes. Case of carp azidomethemoglobin. Pin S, et al. **FEBS Lett** 1989 Jan 2;242(2):401–4

ANALYSIS

Cyanide poisoning successfully treated without therapeutic methemoglobin levels'. Johnson WS, et al. **Am J Emerg Med** 1989 Jul;7(4):437–40

Characterization of protein spin labeling by maleimide: evidence for nitroxide reduction. Perussi JR, et al. **Anal Biochem** 1988 Sep;173(2):289–95

Spin equilibria in human methemoglobin: effects of bezafibrate and inositol hexaphosphate as measured by susceptometry and visible spectroscopy. Noble RW, et al. **Biochemistry** 1989 Jun 13;28(12):5288–92

Spin equilibrium in human methemoglobin: effects of inositol hexaphosphate and bezafibrate as measured by resonance Raman spectroscopy. Noble RW, et al. **Biochemistry** 1989 Jun 13;28(12):5293–7

Study on the effects of heat on blood and on the post-mortem estimation of carboxyhaemoglobin and methaemoglobin. Fechner GG, et al. **Forensic Sci Int** 1989 Jan;40(1):63–7

[Does the development of methemoglobin in the newborn infant affect the suitability of prilocaine for pudendal anesthesia? A clinical study in the peripartum phase] Biscoping J, et al. **Reg Anaesth** 1989 May;12(3):50–2 (Eng. Abstr.) **(Ger)**

[Optical spectroscopy of methemoglobin from the Lampetra fluviatilis river lamprey and its complexes reduced at 77K] Artiukh RI, et al. **Biofizika** 1988 Nov-Dec;33(6):939–43 (Eng. Abstr.) **(Rus)**

[Cytospectrophotometric research on hemoglobin in human erythrocytes. I. The methemoglobin content in intact erythrocytes and its alteration under the influence of chromosmon, ascorbic acid, riboflavin and glutathione] Filev LV, et al. **Tsitologiia** 1989 Mar;31(3):336–43 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Detection of free radicals as intermediates in the methemoglobin formation from oxyhemoglobin induced by hydroxylamine. Stolze K, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3055–9

[Cytospectrophotometric study of hemoglobin in human erythrocytes. II. Methemoglobin formation in acute hypobaric hypoxia] Filev LV, et al. **Tsitologiia** 1989 Apr; 31(4):465–8 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

[Method and clinical significance of cerebrospinal fluid spectrophotometry] Müller FA, et al. **Nervenarzt** 1989 May;60(5):255–61 (Eng. Abstr.) (Ger)

METABOLISM

Haem derivatives in subdural haematomas. Wahlgren NG, et al. **Acta Neurochir (Wien)** 1988;95(3–4):109–13

Ferrihaemoglobin formation by amyl nitrite and sodium nitrite in different species in vivo and in vitro. Klimmek R, et al. **Arch Toxicol** 1988;62(2–3):152–60

Methemoglobin reduction under near physiological conditions. Mansouri A. **Biochem Med Metab Biol** 1989 Aug;42(1):43–51

Anomalously slow cyanide binding to Glycera dibranchiata monomer methemoglobin component II: implication for the equilibrium constant. Mintorovitch J, et al. **Biochemistry** 1988 Oct 18;27(21):8045–50

Inactivation of intracellular copper–zinc superoxide dismutase by copper chelating agents without glutathione depletion and methemoglobin formation. Kelner MJ, et al. **Free Radic Biol Med** 1989;6(4):355–60

Copper–manganese interactions concerning red-cell and plasma lipid peroxidation. Fernandes AC, et al. **Free Radic Res Commun** 1988;5(3):177–84

Iron release from metmyoglobin, methaemoglobin and cytochrome c by a system generating hydrogen peroxide. Harel S, et al. **Free Radic Res Commun** 1988;5(1):11–9

The reduction of methemoglobin levels by antioxidants. Stratton LP, et al. **Hemoglobin** 1988;12(4):353–68

Heparin inhibits the "quasi-lipoxygenase" activity of hemoglobin toward linoleic acid by oxidant scavenging. Brestel EP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):21–4

Glucose-6-phosphate dehydrogenase and glutathione reductase activity in methemoglobin reduction by methylene blue and cystamine. Study on glucose-6-phosphate dehydrogenase-deficient individuals, on normal subjects and on riboflavin-treated subjects. Barraviera B, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct;30(5):370–8

Phosphoenolpyruvate in the rejuvenation of stored red cells in SAGM medium: optimal conditions and the indirect effect of methemoglobin formation. Matsuyama H, et al. **Transfusion** 1989 Sep;29(7):614–9

Inhibition of heme-promoted enzymatic lipid peroxidation by desferrioxamine and EDTA. Carlin G, et al. **Ups J Med Sci** 1988;93(3):215–23

Residual motion of hemoglobin-bound spin labels as a probe for protein dynamics. Steinhoff H, et al. **Z Naturforsch [C]** 1989 Mar–Apr;44(3–4):280–8

[Cytochrome b5 and methemoglobin reduction] Sugita Y. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):866–9 (22 ref.) (Jpn)

[Mechanism of oxidation and reduction of hemoglobin] Tomoda A, et al. **Tanpakushitsu Kakusan Koso** 1987 May; 32(6):842–53 (34 ref.) (Jpn)

[Stabilization of hemoglobin by aldehydes in reactions of autooxidation to methemoglobin] Stepuro II, et al. **Biokhimiia** 1989 Feb;54(2):244–9 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Inactivation of mutagenic heterocyclic and aryl amines by linoleic acid 13-monohydroperoxide and methemoglobin. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4963–70

Exogenous methemoglobin as a cyanide antidote in rats. Boswell GW, et al. **Pharm Res** 1988 Dec;5(12):749–52

ULTRASTRUCTURE

Conformational transition of aquomethemoglobin: intramolecular histidine E7 binding reaction to the heme iron in the temperature range between 220 K and 295 K as seen by EPR and temperature-jump measurements. Steinhoff HJ, et al. **Biochim Biophys Acta** 1989 Jun 13; 996(1–2):49–56

METHEMOGLOBIN REDUCTASE see under **NADH, NADPH OXIDOREDUCTASES**

METHEMOGLOBINEMIA

BLOOD

Pulse oximetry in methemoglobinemia. Watcha MF, et al. **Am J Dis Child** 1989 Jul;143(7):845–7

Pulse oximetry in methaemoglobinaemia. Failure to detect low oxygen saturation. Rieder HU, et al. **Anaesthesia** 1989 Apr;44(4):326–7

Effects of methemoglobinemia on pulse oximetry and mixed venous oximetry. Barker SJ, et al. **Anesthesiology** 1989 Jan; 70(1):112–7

Susceptibility of glucose-6-phosphate dehydrogenase deficient red cells to primaquine enantiomers and two putative metabolites—I. Effect on reduced glutathione, methemoglobin content and release of hemoglobin. Agarwal S, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4605–9

Interpretation of color change in blood with varying degree of methemoglobinemia. Henretig FM, et al. **J Toxicol Clin Toxicol** 1988;26(5–6):293–301

Hemoglobin FM–Fort Ripley: another lesson from the neonate. Glader BE. **Pediatrics** 1989 May;83(5):792–3

[Formation of transferrin and ceruloplasmin in the blood of rats with acute nitrite-induced methemoglobinemia] Kisliakoc Iulia, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug; (4):51–4 (Eng. Abstr.) (Rus)

[Cytospectrophotometric research on hemoglobin in human erythrocytes. I. The methemoglobin content in intact erythrocytes and its alteration under the influence of chromosmon, ascorbic acid, riboflavin and glutathione] Filev LV, et al. **Tsitologiia** 1989 Mar;31(3):336–43 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Neonatal cyanosis, methaemoglobinaemia and haemolytic anaemia. Menahem S. **Acta Paediatr Scand** 1988 Sep; 77(5):755–6

Benzocaine-induced methemoglobinemia in an adult: accuracy of pulse oximetry with methemoglobinemia. Anderson ST, et al. **Anesth Analg** 1988 Nov; 67(11):1099–101

Cetacaine-induced acute methemoglobinemia. Ferraro L, et al. **Anesthesiology** 1988 Oct;69(4):614–5

Methemoglobinemia due to ingestion of N,N-dimethyl-p-toluidine, a component used in the fabrication of artificial fingernails. Potter JL, et al. **Ann Emerg Med** 1988 Oct;17(10):1098–100

Report of adverse drug reaction editorial comment. Prilocaine hydrochloride and neonatal methemoglobinemia [letter] Menahem S. **Aust N Z J Obstet Gynaecol** 1988 Feb; 28(1):76

Acute acquired methaemoglobinaemia after amyl nitrite poisoning. Pierce JM, et al. **BMJ** 1989 Jun 10; 298(6687):1566

Organic nitrate-induced methemoglobinemia. Buenger JW, et al. **DICP** 1989 Apr;23(4):283–8 (26 ref.)

Phenazopyridine-induced methemoglobinemia [letter] Terrell JR, et al. **Drug Intell Clin Pharm** 1988 Nov; 22(11):915

Methaemoglobinaemia following metoclopramide [letter] Ozsoylu S. **Eur J Pediatr** 1988 Nov;148(2):172

Methemoglobinemia following neonatal circumcision [letter] Mandel S. **JAMA** 1989 Feb 3;261(5):702

Acquired methemoglobinemia. A case report. Foxworth JW, et al. **Mo Med** 1987 Apr;84(4):187–9

Methemoglobinemia and hemolytic anemia after phenazopyridine hydrochloride (Pyridium) administration in end-stage renal disease. Fincher ME, et al. **South Med J** 1989 Mar;82(3):372–4

Severe methaemoglobinaemia after flexible fibreoptic bronchoscopy. Kotler RL, et al. **Thorax** 1989 Mar; 44(3):234–5

Formation of methemoglobin by photoactivation of nitrofurantoin or of 5-nitrofurfural in rats exposed to UV-A light. Busker RW, et al. **Toxicology** 1988 Oct; 51(2–3):255–66

[An unusual cause of cyanosis] Hassenforder M, et al. **Ann Fr Anesth Reanim** 1988;7(6):515–6 (Eng. Abstr.) (Fre)

[Methemoglobinemia after accidental Nestosyl ingestion] Autret E, et al. **Arch Fr Pediatr** 1989 Apr;46(4):271–2 (Eng. Abstr.) (Fre)

[Acylanilides. 3. Methemoglobin formation and metabolism in the rat] Knabe J, et al. **Arch Pharm (Weinheim)** 1988 Oct;321(10):739–41 (Eng. Abstr.) (Ger)

[Supraclavicular plexus blockade using prilocaine in patients with chronic anemia] Wald-Oboussier G, et al. **Reg Anasth** 1989 Mar;12(2):31–3 (Eng. Abstr.) (Ger)

[Paracetamol poisoning in a swine model] Henne-Bruns D, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):255–63 (Eng. Abstr.) (Ger)

[Estimation of parental resistance in evaluating the effect of chemical substances on children's health] Prokopenko IuI, et al. **Gig Sanit** 1989 Mar;(3):26–8 (Eng. Abstr.) (Rus)

[Infantile methemoglobinemia caused by nitrates] de Fernicola NA. **Bol Of Sanit Panam** 1989 Jan;106(1):32–40 (34 ref.) (Eng. Abstr.) (Spa)

COMPLICATIONS

Coexisting hereditary methaemoglobinaemia and heterozygous beta-thalassaemia. Kumar R, et al. **Acta Paediatr Scand** 1989 Jan;78(1):149–51

CONGENITAL

The congenital methemoglobinemias. Physiology and pathophysiology of the hemiglobin metabolism. Tönz O. **Bibl Haematol** 1968;(28):1–146 (323 ref.)

Congenital methemoglobinemia due to NADH-methemoglobin reductase deficiency: report of a case. Cheng NJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):823–7

[Congenital deficiency of metahemoglobin-reductases (diaphorases). A case of cyanosis during general anesthesia] Sodano R, et al. **Minerva Anestesiol** 1989 Jan–Feb; 55(1–2):53–6 (Eng. Abstr.) (Ita)

DIAGNOSIS

Cases from the aerospace medicine residents' teaching file. Case #31. A special operations person with methemoglobinemia is discussed, with attention to operation of nuclear weapons [clinical conference] Parmet AJ, et al. **Aviat Space Environ Med** 1989 May;60(5):465–6

Methemoglobin and carboxyhemoglobin levels in smokers and non smokers. Imbriani M, et al. **G Ital Med Lav** 1987 Jan;9(1):11–4

ETIOLOGY

Methemoglobinemia and hemolytic anemia associated with Campylobacter jejuni enteritis. Smith MA, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):35–8

Cow's milk protein intolerance in infants with methaemo globinaemia and diarrhoea [letter] Wirth S, et al. **Eur J Pediatr** 1988 Nov;148(2):172

Methemoglobinemia resulting from smoke inhalation. Hoffman RS, et al. **Vet Hum Toxicol** 1989 Apr;31(2):168–70 (14 ref.)

[Schwartz-Bartter syndrome as a complication of severe well water poisoning] Töpke B, et al. **Kinderarztl Prax** 1988 Sep;56(9):443–7 (Eng. Abstr.) (Ger)

GENETICS

[An infant with hereditary methemoglobinemia] Golterman LK, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):60–2 (Eng. Abstr.) (Dut)

[Hereditary methemoglobinemia] Tanishima K. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):870–6 (33 ref.) (Jpn)

THERAPY

[Resuscitation and combined therapy of exotoxic shock caused by methemoglobin-forming poisons] Kosonogov LF, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):61–3 (Eng. Abstr.) (Rus)

METHENAMINE

Senile plaque-like structures: observation of a probably unknown type of senile plaque by periodic-acid methenamine silver (PAM) electron microscopy. Ikeda K, et al. **Acta Neuropathol (Berl)** 1989;78(2):137–42

Differential staining of mitoses in tissue sections and cultured cells by a modified methenamine-silver method. Busch C, et al. **Lab Invest** 1988 Dec;59(6):876–8

ANALOGS & DERIVATIVES

Recurrent bacteriuria: 1. Prior therapy [letter] **Hosp Pract [Off]** 1989 Jan 30;24(1A):18

DIAGNOSTIC USE

Methenamine-silver staining in macular corneal dystrophy. Johannsson JH, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):630–1

Comparison of methenamine silver nitrate and Giemsa stain for detection of Pneumocystis carinii in bronchoalveolar lavage specimens from HIV infected patients. Holten-Andersen W, et al. **APMIS** 1989 Aug;97(8):745–7

Rapid methenamine silver stain [letter] Yu PK, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):111

THERAPEUTIC USE

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369–73 (Eng. Abstr.) (Rus)

METHERGOLINE see under **ERGOLINES**

METHETHARIMIDE see **BEMEGRIDE**

METHICILLIN

In vitro susceptibility to 10 antibiotics of methicillin-resistant (MRSA) Staphylococcus aureus in Chile. Montiel F, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):145–8

ANTAGONISTS & INHIBITORS

New genetic location of gentamicin-resistance in methicillin-resistant Staphylococcus aureus [letter] Rahman M, et al. **Lancet** 1988 Nov 26;2(8622):1256

[Experimental phages for differentiating nontypable methicillin-resistant Staphylococcus aureus] Zueva EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):19–24 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

[Penetration of cefazolin and methicillin into tissues of rats

with aseptic inflammation] Agapitova IV. **Antibiot Khimioter** 1989 Feb;34(2):120–3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Methicillin resistant Staphylococcus aureus (MRSA). Nagendran T, et al. **Ala Med** 1989 May;58(11):29–30

Morbidity and mortality of an endemic pathogen: methicillin–resistant Staphylococcus aureus. Hunt JL, et al. **Am J Surg** 1988 Dec;156(6):524–8

Low–level methicillin resistance in strains of Staphylococcus aureus. Chambers HF, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):424–8

Methicillin–resistant staphylococci: genetics and mechanisms of resistance. Hackbarth CJ, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):991–4 (57 ref.)

Methicillin–resistant staphylococci: detection methods and treatment of infections. Hackbarth CJ, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):995–9 (97 ref.)

Cloning and expression of methicillin resistance from Staphylococcus epidermidis in Staphylococcus carnosus. Tesch W, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1494–9

Macrodilution MBC result reproducibility for methicillin–susceptible and reputedly tolerant Staphylococcus aureus isolates [letter] Wolfrey BF, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1464

In vitro activity of dicloxacillin against methicillin–susceptible and methicillin–resistant Staphylococcus–aureus. Frimodt–Møller N, et al. **APMIS** 1989 Mar;97(3):207–11

Resistance to dicloxacillin, methicillin and oxacillin in methicillin–susceptible and methicillin–resistant Staphylococcus aureus detected by dilution and diffusion methods. Rosdahl VT, et al. **APMIS** 1989 Aug; 97(8):715–22

Surveillance of MRS in Poland. Borowski J. **Br J Clin Pract Symp Suppl** 1988 Feb;57:72–3

Survey on methicillin/oxacillin–resistant staphylococci (MORS) in Hungary. Thege MK, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:66–71

Methicillin resistant Staphylococcus aureus: identification of a community outbreak by monitoring of hospital isolates. Dammann TA, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):312–4

In vitro activity of sulbactam/ampicillin and ampicillin against methicillin–sensitive and methicillin–resistant Staphylococcus aureus and Staphylococcus epidermidis. Fabbri A, et al. **Chemioterapia** 1988 Oct;7(5):306–8

Methicillin–resistant staphylococci. Thornsberry C. **Clin Lab Med** 1989 Jun;9(2):255–67 (21 ref.)

Methicillin–resistant staphylococci. Chambers HF. **Clin Microbiol Rev** 1988 Apr;1(2):173–86 (177 ref.)

Commercially available technique for rapid laboratory detection of methicillin resistance among Staphylococcus aureus. Piper J, et al. **Diagn Microbiol Infect Dis** 1988 Nov; 11(3):177–80

Methicillin–resistant Staphylococcus aureus from China characterized by digestion of total DNA with restriction enzymes. Hall LM, et al. **Epidemiol Infect** 1989 Aug; 103(1):183–92

Lower autolytic activity in a homogeneous methicillin–resistant Staphylococcus aureus strain compared to derived heterogeneous–resistant and susceptible strains. Gustafson JE, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):107–11

Antibiotic resistance pattern of Staphylococcus aureus with special reference to methicillin resistant strains. Chakravarty A, et al. **Indian J Med Res** 1988 Jun;87:570–2

Skin–isolated, community–acquired Staphylococcus aureus: in vitro resistance to methicillin and erythromycin. Ohana N, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):544–6

Genetics of methicillin resistance in Staphylococcus aureus. Berger–Bächi B. **J Antimicrob Chemother** 1989 May; 23(5):671–3

Natural methicillin resistance in comparison with that selected by in–vitro drug exposure in Staphylococcus aureus. Berger–Bächi B, et al. **J Antimicrob Chemother** 1989 Feb;23(2):179–88

Activity of penems against methicillin–resistant Staphylococcus aureus [letter] Fontana R. **J Antimicrob Chemother** 1988 Jul;22(1):86

Elimination of nasal carriage of methicillin–resistant Staphylococcus aureus with mupirocin during a hospital outbreak. Hill RL, et al. **J Antimicrob Chemother** 1988 Sep; 22(3):377–84

Activity of penems against methicillin–resistant Staphylococcus aureus [letter] Holt HA, et al. **J Antimicrob Chemother** 1988 Jul;22(1):87–8

In–vitro activity and beta–lactamase stability of methicillin, isoxazolyl penicillins and cephalothin against coagulase–negative staphylococci. Jarløv JO, et al. **J Antimicrob Chemother** 1988 Aug;22(2):119–25

Adaptation of methicillin–resistant Staphylococcus aureus during antibiotic therapy. Menzies RE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):923–7

Modification of homogeneous resistance in a methicillin–resistant strain of Staphylococcus aureus by acquisition of a beta–lactamase encoding plasmid. Opal SM, et al. **J Antimicrob Chemother** 1989 Mar;23(3):315–25

Activity of penems against methicillin–resistant Staphylococcus aureus [letter] Van der Auwera P. **J Antimicrob Chemother** 1988 Sep;22(3):385–7

The epidemiology of methicillin–resistant Staphylococcus aureus in a burn center. Heggers JP, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):610–2

Methicillin–resistant strains of Staphylococcus aureus resistant to quinolones. Schaefler S. **J Clin Microbiol** 1989 Feb;27(2):335–6

The expression in Staphylococcus aureus of cloned DNA encoding methicillin resistance. Inglis B, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1465–9

Amplification of a section of chromosomal DNA in methicillin–resistant Staphylococcus aureus following growth in high concentrations of methicillin. Matthews PR, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1455–64

Two populations of methicillin– and gentamicin–resistant Staphylococcus aureus strains in a regional hospital in Hong Kong: epidemiology and plasmid profile studies [letter] Cheng AC, et al. **J Hosp Infect** 1988 Oct;12(3):241–3

Methicillin–resistant Staphylococcus aureus bacteraemia in Hong Kong. Cheng AF, et al. **J Hosp Infect** 1988 Aug; 12(2):91–101

Plasmid analysis of 219 methicillin–resistant Staphylococcus aureus strains with uncommon profiles isolated in Lisbon. Cristino JA, et al. **J Hosp Infect** 1989 Feb;13(2):133–41

The emergence of methicillin–resistant Staphylococcus aureus infections in an Israeli hospital. Finkelstein R, et al. **J Hosp Infect** 1989 Jul;14(1):55–61

Chromosomally–encoded aminoglycoside resistance in methicillin–resistant Staphylococcus aureus [letter] Jordens JZ, et al. **J Hosp Infect** 1988 Aug;12(2):134–6

Strategies for molecular characterisation of methicillin– and gentamicin–resistant Staphylococcus aureus in a Canadian nosocomial outbreak. Bigelow N, et al. **J Med Microbiol** 1989 Sep;30(1):51–8

A comparison of immunoblot and DNA restriction patterns in characterising methicillin–resistant isolates of Staphylococcus aureus. Burnie JP, et al. **J Med Microbiol** 1989 Aug;29(4):255–61

A new methicillin– and gentamicin–resistant Staphylococcus aureus in Dublin: molecular genetic analysis. Carroll JD, et al. **J Med Microbiol** 1989 Jan;28(1):15–23

Plasmid profiles and restriction enzyme fragmentation patterns of plasmids of methicillin–sensitive and methicillin–resistant isolates of Staphylococcus aureus from hospital and the community. Coia JE, et al. **J Med Microbiol** 1988 Dec;27(4):271–6

Methicillin resistant staphylococcus aureus in a teaching hospital of Karachi—a laboratory study. Ashiq B, et al. **JPMA** 1989 Jan;39(1):6–9

The carrier state: methicillin–resistant Staphylococcus aureus. A hospital study "screening of hospital personnel" for nasal carriage of Staph aureus. Ashiq B. **JPMA** 1989 Feb;39(2):35–8

Ciprofloxacin resistance in epidemic methicillin–resistant Staphylococcus aureus [letter] **Lancet** 1988 Oct 8; 2(8615):843

Gentamicin and antiseptic resistance in epidemic methicillin–resistant Staphylococcus aureus [letter] Gillespie MT, et al. **Lancet** 1989 Mar 4;1(8636):503

World–wide antibiotic resistance in methicillin–resistant Staphylococcus aureus. Maple PA, et al. **Lancet** 1989 Mar 11;1(8637):537–40

Antibiotic resistance in Staphylococcus aureus [editorial] Marples RR. **Med J Aust** 1989 Jan 16;150(2):58–9

Methicillin resistance in staphylococci: an evaluation of conditions for detection. Jolly J, et al. **Med Lab Sci** 1989 Jan;46(1):2–5

A comparison of disc agar diffusion and agar dilution for the detection of methicillin resistant staphylococci. Diller DL, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):695–7

Distribution of methicillin–resistance and of protein A among Staphylococcus aureus strains isolated from different hosts. Pessione E, et al. **Microbios** 1988;55(224–225):147–53

Methicillin–resistant Staphylococcus aureus. Brumfitt W, et al. **N Engl J Med** 1989 May 4;320(18):1188–96 (120 ref.)

A descriptive survey of uncontrolled methicillin–resistant Staphylococcus aureus in a twin site general hospital. Barrett SP, et al. **Postgrad Med J** 1988 Aug;64(754):606–9

Intracellular methicillin selection of Listeria monocytogenes mutants unable to replicate in a macrophage cell line. Camilli A, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5522–6

Bactericidal activity of fusafungine towards nosocomial methicillin–resistant staphylococcal strains. German–Fattal M. **Rhinology** 1988;Suppl 5:29–36

Methicillin resistance and beta–lactamase production in Staphylococcus aureus. de Villiers FJ, et al. **S Afr Med J** 1989 Mar 4;75(5):217–9

Evaluation of antibacterial sensitivity testing methods for methicillin–resistant Staphylococcus aureus in a dermatology outpatient population. McBride ME, et al. **South Med J** 1989 Feb;82(2):165–8

[Staphylococcus species: differentiation in lyogroups and incidence of methicillin resistance in various species] Renzini V, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun; 39(3):271–81 (Eng. Abstr.) **(Ita)**

[The enzymatic mechanisms of resistance to aminoglycoside antibiotics in methicillin–cephem–resistant Staphylococcus aureus] Matsuhashi Y, et al. **Jpn J Antibiot** 1988 May; 41(5):523–9 (Eng. Abstr.) **(Jpn)**

[Isolation of methicillin–resistant Staphylococcus aureus (MRSA) and study on these MRSA isolates in the ICU of our hospital] Kawakami H, et al. **Kansenshogaku Zasshi** 1988 Aug;62(8):695–701 (Eng. Abstr.) **(Jpn)**

[A case report of sepsis and multiple lung abscess associated with purulent arthritis of knee joint due to methicillin resistant Staphylococcus aureus] Watanabe K, et al. **Kansenshogaku Zasshi** 1988 Mar;62(3):266–72 (Eng. Abstr.) **(Jpn)**

[Experiences of postoperative staphylococcal enteritis caused by methicillin–cephem resistant Staphylococcus aureus (MRSA) and the state of the isolation of MRSA] Takahashi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):517–23 (Eng. Abstr.) **(Jpn)**

[Correlation between coagulase typing and antibiotic susceptibility in methicillin resistant Staphylococcus aureus] Takesue Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):5–11 (Eng. Abstr.) **(Jpn)**

[Reliability of the MS–2 system in detecting Staphylococcus aureus resistant to methicillin] Tobita M, et al. **Rinsho Byori** 1988 Aug;36(8):984–7 **(Jpn)**

[Resistance of Staphylococcus aureus to methicillin] Roncoroni AJ, et al. **Rev Argent Microbiol** 1983; 15(4):227–31 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Methicillin–resistant staphylococcal mastitis. Kalstone C. **Am J Obstet Gynecol** 1989 Jul;161(1):120

Are aminoglycosides essential in the treatment of continuous ambulatory peritoneal dialysis (CAPD) peritonitis? Drinovec J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):483–4

Transmission and control of methicillin–resistant Staphylococcus aureus in a skilled nursing facility. Thomas JC, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):106–10

The activity of isoxazolyl penicillins in experimental staphylococcal infection. Renneberg J, et al. **J Infect Dis** 1989 Jun;159(6):1128–32

METHIMAZOLE

ADMINISTRATION & DOSAGE

Extended long–term drug monotherapy of Graves' disease. Tadžer I, et al. **Acta Med Iugosl** 1989;43(3):181–7

Methimazole and serum thyroid hormone concentrations in hyperthyroid patients: effects of single and multiple daily doses. Roti E, et al. **Ann Intern Med** 1989 Jul 15; 111(2):181–2

The significance of the initial FT4–index for the management of single daily dose methimazole treatment of hyperthyroidism. Arntzenius AB, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):239–47

Reduction of UV–induced erythema in normal subjects by applying methimazole. Moseley H, et al. **Photodermatol** 1989 Feb;6(1):32–6

[Treatment with deflazacort associated with a thyrostatic therapy in a case of juvenile Basedow's ophthalmopathy. Clinical and hematochemical evaluation of therapeutic results] Letizia C, et al. **Clin Ter** 1989 Feb 28;128(4):261–5 (Eng. Abstr.) **(Ita)**

[Effectiveness of intravenous administration of methimazole in patients with thyroid crisis] Sowiński J, et al. **Endokrynol Pol** 1988;39(2):67–73 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Adverse effects related to thionamide drugs and their dose regimen. Werner MC, et al. **Am J Med Sci** 1989 Apr; 297(4):216–9

Methimazole–induced agranulocytosis and granulocyte–colony stimulating factor [letter] Heinrich B, et al. **Ann Intern Med** 1989 Oct 1;111(7):621–2

Hyperglucagonemia of insulin autoimmune syndrome induced by methimazole in a patient with Graves' disease. Yoshikawa H, et al. **Endocrinol Jpn** 1989 Feb;36(1):125–34

The potential immune mechanism in a case of methimazole–induced agranulocytosis [letter] Heimpel H. **Eur J Haematol** 1988 Sep;41(3):302

Methimazole–induced arthritis. Hietarinta M, et al. **Scand J Rheumatol** 1989;18(1):61–2

Rebound of antibody titer to insulin following rechallenge with thiamazole in a patient with insulin autoimmune syndrome. Tanaka A, et al. **Tokushima J Exp Med** 1988 Jun;35(1–2):37–41

[Clinical significance of the immunologic differences between pseudolupus and lupus] Andelković Z, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):370–4 **(Scr)**

METABOLISM

Metabolism of 35S– and 14C–labeled 1–methyl–2–mercaptoimidazole in vitro and in vivo. Taurog A, et al. **Endocrinology** 1989 Jan;124(1):30–9

Screening and confirmation of thyreostatics in urine by gas chromatography with nitrogen–phosphorus detection and gas chromatography–mass spectrometry after sample clean–up with a mercurated affinity column. Schilt R, et al. **J Chromatogr** 1989 Apr 7;489(1):127–37

PHARMACOLOGY

Histamine H2–receptor mediated stimulation of gastric acid secretion by mercaptomethylimidazole. Bhattacharjee M,

et al. **Biochem Pharmacol** 1989 Mar 15;38(6):907–14
The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin-releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8
Increased plasma 3,5,3'-triiodothyronine sulfate in rats with inhibited type I iodothyronine deiodinase activity, as measured by radioimmunoassay. Rooda SJ, et al. **Endocrinology** 1989 Feb;124(2):740–5
Direct effect of methimazole on rat thyroidal cell growth induced by thyrotropin and insulin-like growth factor I. Taniguchi S, et al. **Endocrinology** 1989 May;124(5):2046–51
Effects of propylthiouracil and methimazole on splanchnic hemodynamics in awake and unrestrained rats. Kawasaki T, et al. **Hepatology** 1989 Sep;10(3):273–8
Methimazole blocks Graves' IgG but not interferon-gamma HLA-DR expression by thyroid cells. Bodolay E, et al. **Immunol Lett** 1988 Jul;18(3):167–71
Effect of methimazole-induced hypothyroidism on multiple opioid receptors in rat brain regions. Bhargava HN, et al. **Pharmacology** 1988;37(6):356–64
[The study of direct effect of methimazole on thymidine incorporation in FRTL-5 cells] Urabe M. **Nippon Naibunpi Gakkai Zasshi** 1989 Jan 20;65(1):32–41 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Detectability of thyroid anti-microsomal antibodies, changes in thyroid-stimulating immunoglobulins (TSI) and thyrotropin-binding-inhibiting immunoglobulins (TBII) during methimazole treatment of Graves' disease patients. Szabó J, et al. **Acta Med Hung** 1989;46(1):23–30
Treatment of amiodarone induced hyperthyroidism with potassium perchlorate and methimazole during amiodarone treatment. Reichert LJ, et al. **BMJ** 1989 Jun 10; 298(6687):1547–8
Insulin autoimmune syndrome in methimazole or carbimazole treated Chinese patients of Graves' disease. Lin HD, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):163–8
Comparison of methimazole, methimazole and sodium ipodate, and methimazole and saturated solution of potassium iodide in the early treatment of hyperthyroid Graves' disease. Roti E, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):305–14
Immunomodulation by methimazole therapy in Graves' disease: rapid changes in activation stage of circulating regulatory T cell subsets, B cells and NK cells. Karlsson FA, et al. **Clin Exp Immunol** 1988 Nov;74(2):258–63
Increased insulin action and clearance in hyperthyroid newly diagnosed IDDM patient. Restoration to normal with antithyroid treatment. Nijs HG, et al. **Diabetes Care** 1989 May;12(5):319–24
The significance of antithyroglobulin and antithyroidal microsomal antibodies in patients with hyperthyroidism due to Graves' disease treated with antithyroidal drugs. Takaichi Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1097–100
Methimazole treatment of 262 cats with hyperthyroidism. Peterson ME, et al. **J Vet Intern Med** 1988 Jul–Sep; 2(3):150–7
[Effect of merkazolyl on the level of thyrostimulating immunoglobulins of the blood in patients with diffuse toxic goiter] Oleinik VA, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):32–5 (Eng. Abstr.) **(Rus)**
[Antibodies to the plasma membranes of thyrocytes in patients with diffuse toxic goiter during treatment with mercazole] Saarma VA, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):17–9 (Eng. Abstr.) **(Rus)**
[The effect of mercasolyl on immunologic indicators in patients with diffuse toxic goiter] Epishin AV, et al. **Vrach Delo** 1989 Feb;(2):11–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Neurological consequences of congenital hypothyroidism in Fischer 344 rats. Albee RR, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):171–83

METHIOCARB see under **INSECTICIDES, CARBAMATE**

METHIONINE

The effect of homocysteine on MetR regulation of metE, metR and metH expression in vitro. Cai XY, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):79–83
Effect of troxerutin and methionine on spin trapping of free oxy-radicals. Blasig IE, et al. **Biomed Biochim Acta** 1988; 47(10–11):S252–5
Effect of site-specific mutagenesis of tyrosine-55, methionine-110 and histidine-217 in porcine kidney D-amino acid oxidase on its catalytic function. Watanabe F, et al. **FEBS Lett** 1988 Oct 10;238(2):269–72
Conformation and hydrogen bonding of N-formylmethionyl peptides. II. Crystal and molecular structure of N-formyl-L-methionyl-L-phenylalanine. Parthasarathy R, et al. **Int J Pept Protein Res** 1989 Apr;33(4):308–12
Chemical modification of tryptophanase by chloramine T: a possible involvement of the methionine residue in enzyme activity. Oda T, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):178–83
Recognition of modified forms of ribonuclease A by the ubiquitin system. Dunten RL, et al. **J Biol Chem** 1989 Oct 5;264(28):16739–47
A gamma methionine-310 to threonine substitution and consequent N-glycosylation at gamma asparagine-308 identified in a congenital dysfibrinogenemia associated with posttraumatic bleeding, fibrinogen Asahi. Yamazumi K, et al. **J Clin Invest** 1989 May;83(5):1590–7
The effects of dietary amino acid levels upon lysine and methionine requirements for growing rats. Hosoi A, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):245–59
Photoexcitation of the methionine–iron bond in iron(III) cytochrome c: bimolecular reaction with NADH. Ferri A, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):341–53
Signal–peptide recognition. GTP and methionine bristles [news] Rothman JE. **Nature** 1989 Aug 10;340(6233):433–4
[Biological oxidation and reduction of methionine and methionine sulfoxide residues] Hayashi R. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3080–6 **(Jpn)**

ADMINISTRATION & DOSAGE

Rumen-protected methionine and lysine: effects on animal performance, milk protein yield, and physiological measures. Donkin SS, et al. **J Dairy Sci** 1989 Jun; 72(6):1484–91
Production responses of dairy cows fed various amounts of rumen-protected methionine and lysine. Rogers JA, et al. **J Dairy Sci** 1989 Jul;72(7):1800–17
New approaches to cancer chemoprevention with difluoromethylornithine and selenite. Ip C, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):839–43
[Lipid metabolism in the gastrointestinal tract of lactating cows during the duodenal infusion of choline chloride and methionine] Dudina VM, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):1001–9 (Eng. Abstr.) **(Rus)**
[Amino acid reserves of the blood in patients with schizophrenia and their correction in insulin coma] Turianitsa IM, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):96–9 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Labeled plasma metabolites of L-methyl-hydrogen-3-methionine and L-methyl-carbon-14-methionine in the dog. Buonomo C, et al. **Am J Physiol Imaging** 1988;3(4):178–81
Effects of parasitism and of supplementing ewes with methyl methionine hydroxy analogue on the wool production of their lambs as adults. Wheeler JL, et al. **Aust Vet J** 1988 Nov;65(11):358–9
Effect of inhibition of glutathione synthesis on the metabolism and protein conjugation of [14C]captopril in the rat. Yeung JH, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1188–92
Use of methionine-enkephalin sulfoxide and leucine-enkephalin radio-immunoassays for the measurement of enkephalins in the rat brain. Tiong GK, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):89–95
Regional coupling of blood flow and methionine uptake in an experimental tumor assessed with autoradiography. Abe Y, et al. **Eur J Nucl Med** 1988;14(7–8):388–92
Influence of methionine derivatives on effluent flow of methionine from continuous culture of ruminal bacteria. Windschitl PM, et al. **J Anim Sci** 1988 Nov;66(11):2937–47
Identification of N-acetylmethionine as the product released during the NH2-terminal processing of a pseudo-class I actin. Sheff DR, et al. **J Biol Chem** 1989 Jul 5; 264(19):11491–6
Metabolism of DL-methionine and methionine analogs by rumen microorganisms. Patterson JA, et al. **J Dairy Sci** 1988 Dec;71(12):3292–301
Effect on days of lactation and methionine hydroxy analog on incorporation of plasma fatty acids into plasma triglycerides. Pullen DL, et al. **J Dairy Sci** 1989 Jan; 72(1):49–58
Methionine hydroxy analog (free acid) reduces avian kidney damage and urolithiasis induced by excess dietary calcium. Wideman RF Jr, et al. **J Nutr** 1989 May;119(5):818–28
Cytotoxic effects of methionine alkyl esters and amides in normal and neoplastic cell lines. Clement MA, et al. **J Pharm Sci** 1989 Jun;78(6):465–9
Absorption of 14C-2-hydroxy-4-(methylthio)butanoic acid (Alimet) from the hindgut of the broiler chick. Dibner JJ, et al. **Poult Sci** 1988 Sep;67(9):1314–21
[Changes in the (11C-methyl)-L-methionine uptake index in gliomas following radiotherapy] Mineura K, et al. **Gan No Rinsho** 1989 Sep;35(10):1101–4 (Eng. Abstr.) **(Jpn)**
[Double tracer whole body autoradiography using a short-lived positron emitter and a long-lived beta emitter] Sato T, et al. **Radioisotopes** 1989 Jan;38(1):7–12 (Eng. Abstr.) **(Jpn)**
[Biological oxidation and reduction of methionine and methionine sulfoxide residues] Hayashi R. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3080–6 **(Jpn)**

ANALYSIS

Effect of choline deficiency on S-adenosylmethionine and methionine concentrations in rat liver. Zeisel SH, et al. **Biochem J** 1989 May 1;259(3):725–9
Carp gamma-crystallins with high methionine content: cloning and sequencing of the complementary DNA. Chang T, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):226–9
Selective oxidation of methionine residues in Kunitz-type protease inhibitors. Concetti A, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):723–8
Short term effect of nitrous oxide on methionine and S-adenosyl methionine concentrations. Royston BD, et al. **Br J Anaesth** 1989 Apr;62(4):419–24
Isolation and sequence of a gene encoding a methionine-rich 10-kDa zein protein from maize. Kirihara JA, et al. **Gene** 1988 Nov 30;71(2):359–70
Semisynthesis of Arg15, Glu15, Met15, and Nle15-aprotinin involving enzymatic peptide bond resynthesis. Beckmann J, et al. **J Protein Chem** 1989 Feb;8(1):101–13
Identification and isolation of methionine-cysteine rich proteins in soybean seed. Kho CJ, et al. **Plant Foods Hum Nutr** 1988;38(4):287–96
[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. **Z Ernahrungswiss** 1988 Jun;27(2):109–18 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Quantitation of carbon flow through the hepatic folate-dependent one-carbon pool in rats. Schalinske KL, et al. **Arch Biochem Biophys** 1989 May 15;271(1):49–55
Methionine synthesis in Escherichia coli: effect of the MetR protein on metE and metH expression. Cai XY, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4407–11
Regulation of methionine synthesis in Escherichia coli: effect of the MetR protein on the expression of the metE and metR genes. Maxon ME, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):85–9

BLOOD

Placental transfer of methionine during protein restriction in the rhesus monkey studied by position emission tomography. Berglund L, et al. **Placenta** 1989 Jul–Aug; 10(4):387–97
[A case of intermittent hypermethioninemia as the cause of disagreeable body odour] Pâby P, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1551–2 (Eng. Abstr.) **(Dan)**

DEFICIENCY

Reversal of pigment gallstone disease in a canine model. Dawes LG, et al. **Arch Surg** 1989 Apr;124(4):463–6
Modulation of chromatin structure and histone H1 content of rat intestinal epithelial cells in response to dietary methionine-cysteine restriction. Norell M, et al. **Biochem Int** 1989 Feb;18(2):351–63
Altered expression of retrovirus-like sequences and cellular oncogenes in mice fed methyl-deficient diets. Hsieh LL, et al. **Cancer Res** 1989 Jul 15;49(14):3795–9
Rapid appearance of hypomethylated DNA in livers of rats fed cancer-promoting, methyl-deficient diets. Wainfan E, et al. **Cancer Res** 1989 Aug 1;49(15):4094–7
Diet-induced DNA damage and altered nucleotide metabolism in lymphocytes from methyl-donor-deficient rats. James SJ, et al. **Carcinogenesis** 1989 Jul;10(7):1209–14
Effect of a diet low in methionine-cysteine on rat liver chromatin and nuclear proteins. Norell M, et al. **Cell Mol Biol** 1989;35(1):63–74
O6-methylguanine-DNA methyltransferase levels in tissues of methionine-cysteine deficient subadult and adult mice. Klaude M, et al. **Comp Biochem Physiol [C]** 1988; 91(2):603–6
Lipid peroxidation in choline-methionine deficiency. Tan KH, et al. **Free Radic Res Commun** 1987;3(1–5):273–8
Phosphatidylethanolamine levels and regulation of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1989 Jan 15;264(2):1203–7
Effect of dietary methyl group deficiency on one-carbon metabolism in rats. Cook RJ, et al. **J Nutr** 1989 Apr; 119(4):612–7
Effect of dietary methyl group deficiency on folate metabolism in rats. Horne DW, et al. **J Nutr** 1989 Apr; 119(4):618–21
DNA strand break accumulation, thymidylate synthesis and NAD levels in lymphocytes from methyl donor-deficient rats. James SJ, et al. **J Nutr** 1989 Apr;119(4):661–4
Changes in enzymatic activity of small intestine and kidney of rats by a methionine deficient diet. Rebolledo E, et al. **Rev Esp Fisiol** 1988 Dec;44(4):395–9
Influence of L-methionine-deprived total parenteral nutrition on the tumor tissue and plasma amino acids fraction and the host metabolism: experimental study with Sato lung carcinoma-bearing rats. Goseki N, et al. **Tohoku J Exp Med** 1989 Mar;157(3):251–60

DIAGNOSTIC USE

Labeled plasma metabolites of L-methyl-hydrogen-3-methionine and L-methyl-carbon-14-methionine in the dog. Buonomo C, et al. **Am J Physiol Imaging** 1988;3(4):178–81
Comparative double-tracer whole-body autoradiography: uptake of 11C-, 18F- and 3H-labeled compounds in rat tumors. d'Argy R, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):577–85
Differential diagnosis of solitary pulmonary nodules with positron emission tomography using [11C]L-methionine.

Kubota K, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):794–6

[Clinical investigation of 18F–fluorophenylalanine for brain tumor imaging—comparison with 11C–methionine] Shishido F, et al. **Kaku Igaku** 1988 Dec;25(12):1431–5 (Eng. Abstr.) (Jpn)

GENETICS

Homozygosity for the transthyretin–met30–gene in two Swedish sibs with familial amyloidotic polyneuropathy. Holmgren G, et al. **Clin Genet** 1988 Nov;34(5):333–8

Salmonella typhimurium metC operator–constitutive mutations. Park YM, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):137–41

Targeted transformation of Ascobolus immersus and de novo methylation of the resulting duplicated DNA sequences. Goyon C, et al. **Mol Cell Biol** 1989 Jul;9(7):2818–27

Salmonella typhimurium LT2 metF operator mutations. Stauffer GV, et al. **Mol Gen Genet** 1988 Sep;214(1):32–6

Presence of phosphorylated O–ribosyl–adenosine in T–psi–stem of yeast methionine initiator tRNA. Desgrès J, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):865–82

METABOLISM

Sulphate and methionine as sulphur sources for cysteine and cephalosporin C synthesis in Cephalosporium acremonium. Lewandowska M, et al. **Acta Microbiol Pol** 1988; 37(1):17–26

Differential identification of Candida species and other yeasts by analysis of [35S]methionine–labeled polypeptide profiles. Shen HD, et al. **Anal Biochem** 1988 Dec;175(2):548–51

Effect of chemical carcinogens and partial hepatectomy on "in vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1412–7

"In vivo" (35S)–methionine interaction with rat–liver DNA and the effect of chemical carcinogens. Kanduc D, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):373–8

"In vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):255–61

Identification of unusual replacement of methionine by norleucine in recombinant interleukin–2 produced by E. coli. Lu HS, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):807–13

Effect of 3–deazaadenosine on methionine metabolism in isolated perfused livers. Duerre JA. **Biochem Cell Biol** 1988 Oct;66(10):1032–9

Methylthioadenosine toxicity and metabolism to methionine in mammalian cells. Christa L, et al. **Biochem J** 1988 Oct 1;255(1):145–52

Is methionine transaminated in skeletal muscle? Wu GY, et al. **Biochem J** 1989 Jan 1;257(1):281–4

Substrate flux through methylenetetrahydrofolate dehydrogenase: predicted effects of the concentration of methylenetetrahydrofolate on its partitioning into pathways leading to nucleotide biosynthesis or methionine regeneration. Green JM, et al. **Biochemistry** 1988 Oct 18; 27(21):8014–22

A deuterium surface coil NMR study of the metabolism of D–methionine in the liver of the anesthetized rat. London RE, et al. **Biochemistry** 1988 Oct 4;27(20):7864–9

Novel methyl transfer during chemotaxis in Bacillus subtilis. Thoelke MS, et al. **Biochemistry** 1989 Jun 27;28(13):5585–9

Effect of selective chemical modification and CNBr–cleavage at methionine20 in catalytic activity and substrate binding properties of porcine pancreatic phospholipase A2. van der Wiele FC, et al. **Biochimie** 1988 Sep;70(9):1215–22

Glucose metabolism in Xanthomonas campestris and influence of methionine on the carbon flow. Pielken P, et al. **Can J Microbiol** 1988 Dec;34(12):1333–7

Altered methionine metabolism in metastatic variants of a human melanoma cell line. Liteplo RG. **Cancer Lett** 1989 Jan;44(1):23–31

Biochemical analysis of the role of transmethylation in the methionine dependence of tumor cells. Judde JG, et al. **Cancer Res** 1989 Sep 1;49(17):4859–65

Cystathionase activity and glutathione metabolism in redifferentiating rat hepatocyte primary cultures. Meredith MJ. **Cell Biol Toxicol** 1987 Dec;3(4):361–77

Transamination of methionine in humans. Blom HJ, et al. **Clin Sci** 1989 Jan;76(1):43–9

In vitro inhibition of methionine incorporation in the dorsal bodies of Helix aspersa by synthetic FMRFamide. Griffond B, et al. **Comp Biochem Physiol [C]** 1989;92(1):45–9

Effects of prolonged acetaminophen ingestion and dietary methionine on mouse liver glutathione. Reicks M, et al. **Drug Nutr Interact** 1988;5(4):351–63

Differences between premenopausal women and young men in the transamination pathway of methionine catabolism, and the protection against vascular disease. Blom HJ, et al. **Eur J Clin Invest** 1988 Dec;18(6):633–8

Spontaneous and 5–azacytidine–induced revertants of methionine–dependent tumor–derived and H–ras–1–transformed cells. Vanhamme L, et al. **Exp Cell Res** 1989 Mar;181(1):159–68

The effect of eye–derived–growth–factor (EDGFs) on methionine incorporation in the different cell populations of bovine adult lens in organ culture. Mascarelli F, et al. **Exp Eye Res** 1989 Feb;48(2):177–86

Different selectivities of oxidants during oxidation of methionine residues in the alpha–1–proteinase inhibitor. Maier KL, et al. **FEBS Lett** 1989 Jul 3;250(2):221–6

Influence of methionine derivatives on effluent flow of methionine from continuous culture of ruminal bacteria. Windschitl PM, et al. **J Anim Sci** 1988 Nov;66(11):2937–47

Role of homocysteine in metR–mediated activation of the metE and metH genes in Salmonella typhimurium and Escherichia coli. Urbanowski ML, et al. **J Bacteriol** 1989 Jun;171(6):3277–81

Metabolism of DL–methionine and methionine analogs by rumen microorganisms. Patterson JA, et al. **J Dairy Sci** 1988 Dec;71(12):3292–301

Characteristics of viable Brevibacterium linens cells, methionine and cysteine in milkfat–coated microcapsules. Kim SC, et al. **J Microencapsul** 1985 Jul–Sep;2(3):197–206

Source of methyl groups in brain and nerve tissue in the rat. Long M, et al. **J Neurochem** 1989 Feb;52(2):377–80

Relationship between histologic type of primary lung cancer and carbon–11–L–methionine uptake with positron emission tomography. Fujiwara T, et al. **J Nucl Med** 1989 Jan;30(1):33–7

Prolonged acetaminophen ingestion in mice: effects on the availability of methionine for metabolic functions. Reicks M, et al. **J Nutr** 1989 Jul;119(7):1042–9

Transport of selenoamino acids and their sulfur analogues across the intestinal brush border membrane of pigs. Wolffram S, et al. **J Nutr** 1989 May;119(5):706–12

Dietary selenium intake controls rat plasma selenoprotein P concentration. Yang JG, et al. **J Nutr** 1989 Jul; 119(7):1010–2

Cystathionine–synthase–deficient patients do not use the transamination pathway of methionine to reduce hypermethioninemia and homocystinemia. Blom HJ, et al. **Metabolism** 1989 Jun;38(6):577–82

Identification of minor tightly bound H1 histone subfractions which fail to cleave their initiator methionine. Medvedev ZA, et al. **Mol Biol Rep** 1988–89;13(3):145–9

Genetic studies of mutants in a high–affinity methionine transport system in Salmonella typhimurium. Cottam AN, et al. **Mol Gen Genet** 1989 Jan;215(2):358–63

Bilirubin toxicity in a neuroblastoma cell line N–115: I. Effects on Na+K+ ATPase, [3H]–thymidine uptake, L–[35S]–methionine incorporation, and mitochondrial function. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):364–8

Rat bioassays for methionine availability in 16 food sources. McDonough FE, et al. **Plant Foods Hum Nutr** 1989; 39(1):77–84

The use of Streptococcus zymogenes for estimating tryptophan and methionine bioavailability in 17 foods. Wells P, et al. **Plant Foods Hum Nutr** 1989;39(1):121–7

Relative bioavailability of manganese in a manganese–methionine complex for broiler chicks. Henry PR, et al. **Poult Sci** 1989 Jan;68(1):107–12

Alterations in phospholipid composition of egg yolks from laying hens fed choline and methionine–supplemented diets. Tsiagbe VK, et al. **Poult Sci** 1988 Dec;67(12):1717–24

The role of transcobalamin II in the methionine dependency of human lymphocytes. Hall CA, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):217–22

[The effect of DL–methionine, N–hydroxymethyl–DL–methionine calcium salt (Mepron) and DL–methionine hydroxy analog calcium salt (MHA) on the N–deposits of calves] Schmidt J, et al. **Arch Tierernahr** 1989 Jan–Feb;39(1–2):141–9 (Eng. Abstr.) (Ger)

[Experimental 3–month study of safety of textured soybeans Becsei] Tóth K, et al. **Vopr Pitan** 1988 May–Jun;(3):38–41 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Effect of methionine loading and endogenous hypermethioninaemia on blood mercaptans in man. Al Mardini H, et al. **Clin Chim Acta** 1988 Aug 15;176(1):83–9

Zinc methionine for ruminants: relative bioavailability of zinc in lambs and effects of growth and performance of growing heifers. Spears JW. **J Anim Sci** 1989 Mar;67(3):835–43

Carbon–11–L–methionine uptake with PET as a predictor of prognosis for bronchogenic carcinoma patients [letter] Shih WJ, et al. **J Nucl Med** 1989 Aug;30(8):1420–2

[C–14–labeled methionine level in the organs of rats with acute lindane poisoning] Sulik M, et al. **Rocz Panstw Zakl Hig** 1988;39(4):309–13 (Eng. Abstr.) (Pol)

PHARMACOLOGY

Methionine lowers circulating levels of acetaldehyde after ethanol ingestion. Tabakoff B, et al. **Alcoholism (NY)** 1989 Apr;13(2):164–71

Antimutagenic action of methionine in Chinese hamster fibroblasts: an opposite of methionine mutagenicity. Hill M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):701–5

Effect of D– or L–methionine and cysteine on the growth inhibitory effects of feeding 1% paracetamol to rats. McLean AE, et al. **Biochem Pharmacol** 1989 Jan 15; 38(2):347–52

The effect of methionine on methotrexate metabolism in rat hepatocytes in monolayer culture. Rhee MS, et al. **Biochim Biophys Acta** 1989 May 10;1011(2–3):122–8

Induction of tyrosinase by L–methionine in Streptomyces antibioticus. Katz E, et al. **Can J Microbiol** 1988 Dec; 34(12):1297–303

Patterns of methionine auxotrophy in normal and neoplastic cells: the methionine independence of lymphocyte mitogenesis and low frequency of the methionine–dependent phenotype in human tumors. Judde JG, et al. **Cancer Res** 1988 Dec 1;48(23):6775–9

Cycles of repeated augmentation pressure in rapid production of pancreatic and cholangiocellular carcinomas in hamsters initiated with N–nitrosobis(2–oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1457–9

Serine and methionine enhancement of selenite inhibition of DNA synthesis in a mouse mammary epithelial cell line. Morrison DG, et al. **Carcinogenesis** 1988 Oct;9(10):1811–5

Short time action of antirheumatic substances on the liver of rat. Protective effect of tryptophan + methionine. Kröger H, et al. **Gen Pharmacol** 1989;20(2):211–2

Effect of methionine supplementation on lanthanum chloride and neodymium chloride induced alterations in enzymes of the antioxidant defence system and gamma–glutamyl cycle in chick liver. Ghosh N, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):336–40

Effects of rumen–protected amino acids on ruminant nitrogen balance, plasma amino acid concentrations and performance. Wright MD, et al. **J Anim Sci** 1988 Aug; 66(8):2014–27

Retinoic acid or methionine enhance interferon's inhibition of the transformed phenotype with no effect on tumorigenicity. Brouty–Boyé D, et al. **J Biol Regul Homeost Agents** 1988 Jan–Mar;2(1):45–9

Influence of dietary methionine on the metabolism of selenomethionine in rats. Butler JA, et al. **J Nutr** 1989 Jul; 119(7):1001–9

Effect of EDTA and zinc–methionine complex on zinc absorption by rat intestine. Hempe JM, et al. **J Nutr** 1989 Aug;119(8):1179–87

Methionine–oxidized horse heart cytochrome c. III. Ascorbate reduction and the methionine–80–sulfur–iron linkage. Myer YP, et al. **J Protein Chem** 1989 Feb; 8(1):33–50

Lack of effect of dietary factors on nicarbazin toxicity in broiler chicks. Bartov I. **Poult Sci** 1989 Jan;68(1):145–52

Inhibition by ethanol of rat liver plasma membrane (Na+,K+)ATPase: protective effect of S–adenosyl–L–methionine, L–methionine, and N–acetylcysteine. Pascale R, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):216–29

[Protected methionine in Sardinian sheep: effects on milk production and wool growth] Floris B, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1143–9 (Eng. Abstr.) (Ita)

PHYSIOLOGY

Translation initiation at non–AUG triplets in mammalian cells. Peabody DS. **J Biol Chem** 1989 Mar 25;264(9):5031–5

THERAPEUTIC USE

[Preliminary study of L–methionine in the treatment of rheumatoid polyarthritis] Delrieu F, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):995–7 (Fre)

[The biological activity of platinum and methionine complexes: the antitumor action and inhibition of root growth by complexes of differing compositions and structures] Ivanov VB, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):469–73 (Eng. Abstr.) (Rus)

TOXICITY

Increased hepatic lipid peroxidation with methionine toxicity in the rat. Lynch SM, et al. **Free Radic Res Commun** 1989; 5(4–5):221–6

URINE

Excessive urinary excretion of methionine in mutant mice lacking D–amino–acid oxidase activity. Konno R, et al. **Metabolism** 1988 Dec;37(12):1139–42

[Increased urinary excretion of methionine, cystathionine and cystine in adults during parenteral nutrition] Iapichino G, et al. **G Clin Med** 1988 Mar;69(3):175–81 (Eng. Abstr.) (Ita)

METHIONINE ADENOSYLTRANSFERASE see under **TRANSFERASES**

METHIONINE ENKEPHALIN see **ENKEPHALIN, METHIONINE**

METHIONINE SULFOXIMINE

ANALOGS & DERIVATIVES

The pulmonary effects of buthionine sulfoximine treatment and glutathione depletion in rats. Coursin DB, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1471–9

Effect of buthionine sulfoximine on orthophenylphenol–induced hepato– and nephrotoxic potential in male rats. Nakagawa Y, et al. **Arch Toxicol** 1988;62(6):452–7

Buthionine sulfoximine–mediated depletion of glutathione in intracranial human glioma–derived xenografts. Skapek SX, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4313–7

Effects of chronic inhibition of glutathione biosynthesis on cholesterol and bile acid metabolism in rats. Hassan AS.

Biochim Biophys Acta 1988 Nov 25;963(2):131–8
The effect of cimetidine, phenobarbitone and buthionine sulphoximine on the disposition of N-5-dimethyl-9-[(2-methoxy-4-methyl-sulphonylamino)phenylamino]- 4-acridinecarboxamide (CI-921) in the rabbit. Paxton JW, et al. Cancer Chemother Pharmacol 1989;23(5):291–5
Potentiation of doxorubicin cytotoxicity by buthionine sulfoximine in multidrug-resistant human breast tumor cells. Duarc L, et al. Cancer Res 1989 Feb 1;49(3):511–5
Sensitivity of human melanoma cells to L-dopa and DL-buthionine (S,R)-sulfoximine. Kable EP, et al. Cancer Res 1989 May 1;49(9):2327–31
Pharmacokinetics of buthionine sulfoximine (NSC 326231) and its effect on melphalan-induced toxicity in mice. Smith AC, et al. Cancer Res 1989 Oct 1;49(19):5385–91
Effects of buthionine sulfoximine on the development of ozone-induced pulmonary fibrosis. Sun JD, et al. Exp Mol Pathol 1988 Oct;49(2):254–66
The effect of glutathione (GSH) depletion in vivo by buthionine sulfoximine (BSO) on the radiosensitization of SR 2508. Kramer RA, et al. Int J Radiat Oncol Biol Phys 1989 May;16(5):1325–9
Potentiation of X ray sensitivity by combinations of sodium butyrate and buthionine sulfoximine. Leith JT. Int J Radiat Oncol Biol Phys 1988 Oct;15(4):949–51
Radiosensitization by misonidazole during recovery of cellular thiols following depletion by BSO or DEM. McNally NJ, et al. Int J Radiat Oncol Biol Phys 1989 May; 16(5):1331–4
Effect of thiol manipulation on chemopotentiation by nitroimidazoles. Siemann DW, et al. Int J Radiat Oncol Biol Phys 1989 May;16(5):1341–5
Increased melphalan activity in intracranial human medulloblastoma and glioma xenografts following buthionine sulfoximine-mediated glutathione depletion. Friedman HS, et al. J Natl Cancer Inst 1989 Apr 5; 81(7):524–7
Reduction of brain glutathione by L-buthionine sulfoximine potentiates the dopamine-depleting action of 6-hydroxydopamine in rat striatum. Pileblad E, et al. J Neurochem 1989 Mar;52(3):978–80
Effect of buthionine sulfoximine, an inhibitor of glutathione biosynthesis, on the selenium-induced lethality in mice. Ishikawa M, et al. Jpn J Pharmacol 1988 Oct;48(2):283–6
Anti-hypoxic effect of glutathione depletors. Masukawa T, et al. Life Sci 1989;44(5):311–8
Marked reduction of rat brain glutathione following intracerebroventricular administration of the glutathione synthesis inhibitor L-buthionine sulfoximine. Pileblad E, et al. Neurosci Lett 1988 Dec 19;95(1-3):302–6
Glutathione metabolism in the lung: inhibition of its synthesis leads to lamellar body and mitochondrial defects. Mårtensson J, et al. Proc Natl Acad Sci U S A 1989 Jul; 86(14):5296–300
Influence of buthionine sulfoximine on the lethality of ifosfamide and ifosfamide-induced urotoxicity in mice. Ishikawa M, et al. Res Commun Chem Pathol Pharmacol 1989 Mar;63(3):455–8
Enhancement of murine phenytoin teratogenicity by the gamma-glutamylcysteine synthetase inhibitor L-buthionine-(S,R)-sulfoximine and by the glutathione depletor diethyl maleate. Wong M, et al. Teratology 1989 Aug;40(2):127–41
Unilateral depletion of testicular glutathione levels in the rat following intratesticular injections of diethylmaleate and buthionine sulfoximine. Slott VL, et al. Toxicol Appl Pharmacol 1989 Apr;98(2):369–73

PHARMACOLOGY

Effects of varying doses of methionine sulfoximine on liver glutamine synthetase activity and time courses of blood and urinary nitrogenous compounds in the chicken (Gallus domesticus). Karasawa Y, et al. Comp Biochem Physiol [B] 1988;91(4):789–92
Regulation of glycogen content in primary astrocyte culture: effects of glucose analogues, phenobarbital, and methionine sulfoximine. Swanson RA, et al. J Neurochem 1989 May; 52(5):1359–65
Study of the hypothermia induced by methionine sulfoximine in the rat. Ginefri-Gayet M, et al. Pharmacol Biochem Behav 1988 Dec;31(4):797–802

TOXICITY

Astrocytic pathology of methionine sulfoximine-induced encephalopathy. Yamamoto T, et al. Acta Neuropathol (Berl) 1989;77(4):357–68
Age-dependent variation in the sensitivity of rat brain glutamine synthetase to L-methionine-DL-sulfoximine. Rao VL, et al. Int J Dev Neurosci 1988;6(5):425–30

METHIONYL T RNA SYNTHETASE see under AMINO ACYL T RNA SYNTHETASES

METHIOTHEPIN see under DIBENZOTHIEPINS

METHISAZONE see under THIOSEMICARBAZONES

METHOCARBAMOL

Evaluation of the abuse potential of methocarbamol. Preston KL, et al. J Pharmacol Exp Ther 1989 Mar;248(3):1146–57

PHARMACOKINETICS

Pharmacokinetics and bioavailability of methocarbamol in rats. Obach R, et al. Biopharm Drug Dispos 1988 Sep–Oct; 9(5):501–11

METHODS see under SCIENCE

METHOFLURANUM see METHOXYFLURANE

METHOHEXITAL

Comparison of propofol induction with thiopentone or methohexitone in short outpatient general anaesthesia. Raeder JC, et al. Acta Anaesthesiol Scand 1988 Nov; 32(8):607–13
Comparison of methohexital and propofol for electroconvulsive therapy: effects on hemodynamic responses and seizure duration. Rampton AJ, et al. Anesthesiology 1989 Mar;70(3):412–7
A comparison of propofol and methohexitone as anaesthetic agents for electroconvulsive therapy. Bone ME, et al. Eur J Anaesthesiol 1988 Jul;5(4):279–86
A comparison of the anaesthetic properties of propofol and methohexitone when used as the sole induction agent for thermocoagulation of the gasserian ganglion. Vercauteren M, et al. Eur J Anaesthesiol 1989 Mar;6(2):121–9
[Total intravenous anesthesia in direct laryngoscopy. A comparison of methohexital (Brietal) and thiopental] Schou H, et al. Ugeskr Laeger 1989 Jun 26;151(26):1679–81 (Eng. Abstr.) (Dan)
[A comparison of the course of anesthesia using a bolus application of propofol, methohexital or etomidate as hypnotics and alfentanil analgesia] Ensink FB, et al. Anaesthesist 1989 Jul;38(7):333–40 (Eng. Abstr.) (Ger)
[Methohexital/alfentanil–thiopental/alfentanil for total intravenous anesthesia for direct laryngoscopy with 100% O2 jet ventilation] Tolksdorf W, et al. Anasth Intensivther Notfallmed 1988 Aug;23(4):191–4 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Rectal methohexital for induction of anesthesia in children with and without rectal aspiration after sleep: a pharmacokinetic and pharmacodynamic study. Kestin IG, et al. Anesth Analg 1988 Nov;67(11):1102–4
Continuous infusion of methohexital and alfentanil hydrochloride for general anesthesia in outpatient third molar surgery. Dachowski MT, et al. J Oral Maxillofac Surg 1989 Mar;47(3):233–7
[Anesthesia using intramuscular methohexital for cerebral computed tomography in the child. Apropos of 100 cases] Bemer M, et al. Can Anesthesiol 1988 Dec;36(8):611–4 (Eng. Abstr.) (Fre)

ADVERSE EFFECTS

Pain on injection of methohexitone. The use of lignocaine to modify pain on injection of methohexitone during anaesthesia for electroconvulsive therapy. Simpson KH, et al. Anaesthesia 1989 Aug;44(8):688–9

BLOOD

Quantitative analysis of serum methohexital by GLC using capillary column and nitrogen-selective detection. Le Normand Y, et al. Fundam Clin Pharmacol 1988;2(6):551–8

DIAGNOSTIC USE

Barbiturate effects on EEG abnormality in complex partial epilepsy. Aasly J, et al. J Neurol 1989 Jan;236(1):15–20

PHARMACOKINETICS

Pharmacokinetics and haemodynamic effects of prolonged methohexitone infusion. Le Normand Y, et al. Br J Clin Pharmacol 1988 Nov;26(5):589–94
Pharmacokinetics of two per cent rectal methohexitone in children. Forbes RB, et al. Can J Anaesth 1989 Mar; 36(2):160–4

PHARMACOLOGY

Comparison of sedative infusions during regional anesthesia--methohexital, etomidate, and midazolam [published erratum appears in Anesth Analg 1989 Apr;68(4):550] Urquhart ML, et al. Anesth Analg 1989 Mar; 68(3):249–54
Midazolam acts synergistically with methohexitone for induction of anaesthesia. Tverskoy M, et al. Br J Anaesth 1989 Jul;63(1):109–12
Different actions of a short-acting barbiturate on sodium and potassium conductances in invertebrate and vertebrate neurons. Johansen J, et al. Neuropharmacology 1989 Feb; 28(2):153–60
[The amount of histamine released in vivo by hypnotics (thiopental, methohexital, propofol) studied by assays of plasma histamine] Widmer S, et al. Allerg Immunol (Paris) 1988 Nov;20(9):346–7 (Eng. Abstr.) (Fre)

METHOHEXITONE see METHOHEXITAL

METHOMYL see under INSECTICIDES, CARBAMATE

METHONIUM COMPOUNDS

PHARMACOLOGY

Characterization of the antimuscarinic effect of heptane-1,7-bis-(dimethyl-3'-phthalimidopropyl ammonium bromide). Choo LK, et al. Eur J Pharmacol 1989 Mar 29;162(3):429–35
[Antimicrobial properties of surface-active antiseptic agents--polymethylene diamine derivatives] Gudz' OV, et al. Mikrobiol Zh 1987 Mar–Apr;49(2):82–5 (Eng. Abstr.) (Rus)

METHOPRENE see under JUVENILE HORMONES

METHOPYRAPONE see METYRAPONE

METHOTREXATE

Drug/antibody conjugates. In vitro cytotoxicity of a human serum albumin-mediated conjugate of methotrexate with anti-MM46 monoclonal antibody. Endo N, et al. Acta Paediatr Jpn Overseas Ed 1987 Aug;29(4):566–8
An alternative method for assaying cerebrospinal fluid protein in the presence of methotrexate. Kasper LM, et al. Clin Chem 1988 Oct;34(10):2091–2
Orientation and structure-building role of the water molecules bound at the contact surface of the dihydrofolate reductase-methotrexate complex. Nagy P. J Comput Aided Mol Des 1988 Apr;2(1):65–76

ADMINISTRATION & DOSAGE

Mucous membrane manifestations of pemphigus vulgaris. A 25-year survey of 185 patients treated with corticosteroids or with combination of corticosteroids with methotrexate or heparin. Mashkilleyson N, et al. Acta Derm Venereol (Stockh) 1988;68(5):413–21
Results of low-dose methotrexate treatment of persistent gestational trophoblastic disease in Sheffield 1980–1987. Dorreen MS, et al. Acta Oncol 1988;27(5):551–6
Local methotrexate injection: a nonsurgical treatment of ectopic pregnancy. Pansky M, et al. Am J Obstet Gynecol 1989 Aug;161(2):393–6
Anal submucosal injection: a new route for drug administration in pelvic malignancies. IV. Submucosal anal injection in the treatment of cancer of uterine cervix--preliminary study. Shafik A. Am J Obstet Gynecol 1989 Jul;161(1):69–72
The role of liver biopsies in psoriatic patients receiving long-term methotrexate treatment. Improvement in liver abnormalities after cessation of treatment. Newman M, et al. Arch Dermatol 1989 Sep;125(9):1218–24
A prospective randomised trial of cyclosporin versus methotrexate after HLA-identical sibling marrow transplantation for patients with acute leukemia in first remission: analysis 2.5 years after last patient entry. Atkinson K, et al. Aust N Z J Med 1988 Jun;18(4):594–9
Treatment of ectopic pregnancy with intraamniotic methotrexate--a case report. Clark L, et al. Aust N Z J Obstet Gynaecol 1989 Feb;29(1):84–5
The use of low-dose methotrexate for the treatment of allograft rejection is associated with significant drug toxicity. Robinson JA, et al. Bibl Cardiol 1988;(43):35–8
Selective delivery of drugs to macrophages through a highly specific receptor. An efficient chemotherapeutic approach against leishmaniasis. Chaudhuri G, et al. Biochem Pharmacol 1989 Sep 15;38(18):2995–3002
Inhibition of cell proliferation with antibody-targeted liposomes containing methotrexate-gamma-dimyristoylphosphatidylethanolamine. Noé C, et al. Biochim Biophys Acta 1988 Dec 22;946(2):253–60
In vitro drug delivery mediated by ecto-NAD+-glycohydrolase ligand-targeted liposomes. Salord J, et al. Biochim Biophys Acta 1988 Sep 16; 971(2):197–206
Importance of age and methotrexate dosage: prognosis in children and young adults with high-grade osteosarcomas. Delepine N, et al. Biomed Pharmacother 1988;42(4):257–62
Methotrexate and cyclosporine versus cyclosporine alone for prophylaxis of graft-versus-host disease in patients given HLA-identical marrow grafts for leukemia: long-term follow-up of a controlled trial. Storb R, et al. Blood 1989 May 1;73(6):1729–34
Methotrexate dosage in patients aged over 50 with psoriasis. Fairris GM, et al. BMJ 1989 Mar 25;298(6676):801–2
A comparison of diethylstilbestrol or orchiectomy with buserelin and with methotrexate plus diethylstilbestrol or orchiectomy in newly diagnosed patients with clinical stage D2 cancer of the prostate. Huben RP, et al. Cancer 1988 Nov 1;62(9):1881–7
In vivo antitumor effect of methotrexate conjugated to a monoclonal IgM antibody specific for stage-specific embryonic antigen-1, on MH-15 mouse teratocarcinoma. Persiani S, et al. Cancer Immunol Immunother 1989; 29(3):167–70
Targeting of methotrexate-containing liposomes with a monoclonal antibody against human renal cancer. Singh M, et al. Cancer Res 1989 Jul 15;49(14):3976–84
Methotrexate and dipyridamole combination chemotherapy based upon inhibition of nucleoside salvage in humans.

Willson JK, et al. **Cancer Res** 1989 Apr 1;49(7):1866–70

Methotrexate for corticosteroid-resistant polymyalgia rheumatica and giant cell arteritis. Krall PL, et al. **Cleve Clin J Med** 1989 May;56(3):253–7

Combination chemotherapy including high dose methotrexate and radiotherapy, in the treatment of small cell carcinoma of the lung. Burdon JG, et al. **Clin Exp Pharmacol Physiol Suppl** 1979;5:17–21

Preparation and characterization of methotrexate–immunoglobulin conjugates. Ghosh MK, et al. **Drug Des Deliv** 1989 Jan;4(1):13–25

Outpatient chemotherapy of unruptured ectopic pregnancy. Stovall TG, et al. **Fertil Steril** 1989 Mar;51(3):435–8

Treatment of nonmetastatic gestational trophoblastic disease with sequential intramuscular and oral methotrexate. Barter JF, et al. **Gynecol Oncol** 1989 Apr;33(1):82–4

Leptomeningeal metastases—treatment results in 98 consecutive patients. Pfeffer MR, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):611–8

A randomized trial of cisplatin versus cisplatin plus methotrexate in advanced cancer of the urothelial tract. Hillcoat BL, et al. **J Clin Oncol** 1989 Jun;7(6):706–9

Immunomodulation by low-dose methotrexate. I. Methotrexate selectively inhibits Lyt-2+ cells in murine acute graft-versus-host reactions. Gibbons JJ Jr, et al. **J Immunol** 1989 Mar 15;142(6):1867–73

The effect of niosomes and polysorbate 80 on the metabolism and excretion of methotrexate in the mouse. Azmin MN, et al. **J Microencapsul** 1986 Apr–Jun;3(2):95–100

Methotrexate transport from the internal phase of multiple w/o/w emulsions. Omotosho JA, et al. **J Microencapsul** 1989 Apr–Jun;6(2):183–92

Induction of partial synchronization of leukemia cells by continuous infusion of low-dose methotrexate followed by citrovorum factor [letter] D'Incalci M, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1509–10

High-dose methotrexate for non-AIDS primary central nervous system lymphoma. Report of 13 cases. Gabbai AA, et al. **J Neurosurg** 1989 Feb;70(2):190–4

Liposomes coupled with monoclonal antibodies against glioma-associated antigen for targeting chemotherapy of glioma. Kito A, et al. **J Neurosurg** 1989 Sep;71(3):382–7

Cervical pregnancy treated with methotrexate. A case report. Skannal D, et al. **J Reprod Med** 1989 Jul;34(7):496–8

Increasing methotrexate effect with increasing dose in the treatment of resistant rheumatoid arthritis. Furst DE, et al. **J Rheumatol** 1989 Mar;16(3):313–20

The effect of liposome encapsulated antineoplastic agents on transitional cell carcinoma in tissue culture. Egerdie RB, et al. **J Urol** 1989 Aug;142(2):390–8

Methotrexate clearance and clinical toxicity in osteosarcoma following high-dose methotrexate therapy. Iqbal MP, et al. **JPMA** 1989 Feb;39(2):38–42

Enhancement of 5-fluorouracil antitumor effects by the prior administration of methotrexate. Damon LE, et al. **Pharmacol Ther** 1989;43(2):155–85 (181 ref.)

Receptor-mediated drug delivery to macrophages in chemotherapy of leishmaniasis. Mukhopadhyay A, et al. **Science** 1989 May 12;244(4905):705–7

[Postoperative adjuvant chemotherapy of high dose MTX for osteogenic sarcoma] **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):233–5 (Eng. Abstr.) **(Chi)**

[A bone cement containing methotrexate in an experiment and in clinical practice] Bozděch Z, et al. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):134–42 (Eng. Abstr.) **(Cze)**

[Local and systemic methotrexate for unruptured tubal pregnancy] Katz A, et al. **Harefuah** 1988 Oct; 115(7–8):165–7 (Eng. Abstr.) **(Heb)**

[A new method for treating ectopic pregnancy with methotrexate] Csaba I, et al. **Orv Hetil** 1989 Jul 30; 130(31):1653–4 (Eng. Abstr.) **(Hun)**

[Bolus and maintenance infusion of high-dose methotrexate] Amino K, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2045–9 (Eng. Abstr.) **(Jpn)**

[Successful conservative treatment of cervical pregnancy] Yamaguchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):629–32 **(Jpn)**

[Serial spectral EEG analysis in children treated with intermediate-dose methotrexate (ID-MTX)] Fujii Y, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2062–7 (Eng. Abstr.) **(Jpn)**

[Treatment of diffuse malignant mesothelioma of the pleura] Solheim O, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3091–3 (Eng. Abstr.) **(Nor)**

[Monitoring of methotrexate treatment of children with proliferative diseases of the hematopoietic system] Boguslawska-Jaworska J, et al. **Pol Tyg Lek** 1988 Aug 15; 43(33):1053–6 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Development of metastatic skin cancer during methotrexate therapy for psoriasis [letter] Jensen DB, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):274–5

Serum aminoterminal propeptide of type III procollagen. A non-invasive test for liver fibrogenesis in methotrexate-treated psoriatics. Zachariae H, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):241–4

Experimental study on subacute neurotoxicity of methotrexate in cats. Shibutani M, et al. **Acta Neuropathol (Berl)** 1989;78(3):291–300

Disseminated necrotizing encephalopathy induced by methotrexate therapy alone. Asada Y, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1305–12

MR findings in methotrexate-induced CNS abnormalities. Ebner F, et al. **AJNR** 1989 Sep–Oct;10(5):959–64

Revised guidelines on methotrexate use and liver biopsy [letter] Borislow DS, et al. **Am J Gastroenterol** 1989 Jul; 84(7):841

Methotrexate-induced chronic liver injury: guidelines for detection and prevention. The ACG Committee on FDA-related matters. American College of Gastroenterology. Lewis JH, et al. **Am J Gastroenterol** 1988 Dec;83(12):1337–45 (82 ref.)

Oral low-dose methotrexate (MTX) to be efficient in refractory rheumatoid arthritis and adult-onset Still's disease [letter] Kenouch S, et al. **Am J Kidney Dis** 1989 Jul;14(1):76–7

Methotrexate-associated hepatotoxicity: retrospective analysis of 210 patients with rheumatoid arthritis. Shergy WJ, et al. **Am J Med** 1988 Dec;85(6):771–4

Neurotoxicity due to central nervous system therapy for childhood leukemia. Ochs JJ. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):93–105 (117 ref.)

Methotrexate pneumonitis. Bronchoalveolar lavage findings suggest an immunologic disorder. White DA, et al. **Am Rev Respir Dis** 1989 Jan;139(1):18–21

Pancytopenia and methotrexate with trimethoprim-sulfamethoxazole [letter] Jeurissen ME, et al. **Ann Intern Med** 1989 Aug 1;111(3):261

Life threatening acute pneumonitis during low dose methotrexate treatment for rheumatoid arthritis: a case report and review of the literature. Ridley MG, et al. **Ann Rheum Dis** 1988 Sep;47(9):784–8 (22 ref.)

Pneumocystis carinii pneumonia complicating low dose methotrexate treatment for psoriatic arthropathy. Wallis PJ, et al. **Ann Rheum Dis** 1989 Mar;48(3):247–9

Drug-induced photosensitivity reaction [letter] Nedorost ST, et al. **Arch Dermatol** 1989 Mar;125(3):433–4

Detection of hepatotoxicity associated with methotrexate therapy for psoriasis. O'Connor GT, et al. **Arch Dermatol** 1989 Sep;125(9):1209–17

Validation of a diagnostic test. Epidemiologic principles in dermatology. Weinstock MA. **Arch Dermatol** 1989 Sep; 125(9):1260–4

Leukoencephalopathy after prophylactic radiation for leukaemia in ataxia telangiectasia. Eyre JA, et al. **Arch Dis Child** 1988 Sep;63(9):1079–80

Methotrexate-associated, early-onset pancytopenia in rheumatoid arthritis. Doolittle GC, et al. **Arch Intern Med** 1989 Jun;149(6):1430–1

Toxicity of methotrexate compared with azathioprine in the treatment of rheumatoid arthritis. A case-control study of 131 patients. McKendry RJ, et al. **Arch Intern Med** 1989 Mar;149(3):685–9

Folic acid treatment in methotrexate-treated rheumatoid arthritis patients: comment on the article by Furst and Kremer [letter; comment] **Arthritis Rheum** 1989 Jan; 32(1):113–4. **Comment on:** Arthritis Rheum 1988 Mar;31(3):305–14

Histopathologic findings in the liver of rheumatoid arthritis patients treated with long-term bolus methotrexate. Aponte J, et al. **Arthritis Rheum** 1988 Dec;31(12):1457–64

Hepatic ultrastructure after methotrexate therapy for rheumatoid arthritis. Bjorkman DJ, et al. **Arthritis Rheum** 1988 Dec;31(12):1465–72

Methotrexate-associated bone marrow suppression following surgery [letter] [see comments] Howland WL. **Arthritis Rheum** 1988 Dec;31(12):1586–7. **Comment in:** Arthritis Rheum 1989 Jun;32(6):813–4

Liver histology in rheumatoid arthritis patients receiving long-term methotrexate therapy. A prospective study with baseline and sequential biopsy samples. Kremer JM, et al. **Arthritis Rheum** 1989 Feb;32(2):121–7

Fatal methotrexate pneumonitis in rheumatoid arthritis [letter] Newman ED, et al. **Arthritis Rheum** 1988 Dec; 31(12):1585–6

Pancytopenia induced by low-dose methotrexate for rheumatoid arthritis. Kevat SG, et al. **Aust N Z J Med** 1988 Aug;18(5):697–700

Acute cerebral oedema induced by methotrexate [letter] Ellis SJ. **BMJ** 1989 Jul 8;299(6691):122–3

Acute cerebral oedema induced by methotrexate. Hughes PJ, et al. **BMJ** 1989 May 13;298(6683):1315

Drug interactions with methotrexate [letter] Liddle BJ, et al. **Br J Dermatol** 1989 Apr;120(4):582–3

The use of antipyrine clearance to measure liver damage in psoriatic patients receiving methotrexate. Paramsothy J, et al. **Br J Dermatol** 1988 Dec;119(6):761–5

Aminoterminal propeptide of type III procollagen in methotrexate-induced liver fibrosis and cirrhosis. Risteli J, et al. **Br J Dermatol** 1988 Sep;119(3):321–5

Cutaneous vasculitis after intermediate dose of methotrexate (IDMTX). Fondevila Carlos G, et al. **Br J Haematol** 1989 Aug;72(4):591–2

A lethal neurotoxic reaction after intraventricular methotrexate administration. ten Hoeve RF, et al. **Cancer** 1988 Nov 15;62(10):2111–3

Severe renal toxicity due to intermediate-dose methotrexate. Stark AN, et al. **Cancer Chemother Pharmacol** 1989; 24(4):243–5

Drug-induced osteoporosis. Mazanec DJ, et al. **Cleve Clin J Med** 1989 May;56(3):297–303 (64 ref.)

Methotrexate-induced impairment of taste acuity. Duhra P, et al. **Clin Exp Dermatol** 1988 Mar;13(2):126–7

Reactivation of cutaneous radionecrosis associated with methotrexate therapy for psoriasis. Logan RA, et al. **Clin Exp Dermatol** 1988 Sep;13(5):350–2

Complications of tumour overkill when associated with high dose methotrexate therapy. Bell R, et al. **Clin Exp Pharmacol Physiol Suppl** 1979;5:47–55

Liquoral myelin basic protein in acute lymphoblastic leukemia [letter] Pagano L. **Eur J Haematol** 1989 Apr; 42(4):407–8

Pyoderma gangrenosum in acute myeloid leukaemia during immunosuppression. van de Kerkhof PC, et al. **Eur J Pediatr** 1988 Oct;148(1):34–6

Methotrexate-induced erythema multiforme. Taylor SW, et al. **Gynecol Oncol** 1989 Jun;33(3):376–8

Dose-dependent acute hepatitis associated with administration of high dose methotrexate. Banerjee AK, et al. **Hum Toxicol** 1988 Nov;7(6):561–2

Behavioral side-effects of CNS prophylaxis [letter] Waters BG, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar; 28(2):299–300

Methotrexate pneumonitis: a case report and summary of the literature. Hand SH, et al. **J Med Assoc Ga** 1989 Sep; 78(9):625–8 (10 ref.)

Acute fever and delayed leukoencephalopathy following low dose intraventricular methotrexate. Boogerd W, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1277–83

Severe reversible interstitial pneumonitis induced by low dose methotrexate [letter] Alarcón GS, et al. **J Rheumatol** 1989 Jul;16(7):1007–8

Severe bone marrow failure due to low dose oral methotrexate [letter] Buchbinder R, et al. **J Rheumatol** 1988 Oct;15(10):1586–8

Nocardiosis associated with low dose methotrexate for rheumatoid arthritis [letter] Keegan JM, et al. **J Rheumatol** 1988 Oct;15(10):1585–6

Low dose methotrexate and acute respiratory insufficiency [letter] Xavier AM, et al. **J Rheumatol** 1988 Oct;15(10):1588

Methotrexate therapy for psoriasis [letter] **JAMA** 1988 Nov 25;260(20):3003–5

Acute renal failure after high-dose methotrexate therapy. Role of hemodialysis and plasma exchange in methotrexate removal [letter] Thierry FX, et al. **Nephron** 1989; 51(3):416–7

Folate status of patients on low-dose methotrexate therapy. **Nutr Rev** 1989 Feb;47(2):43–5 (17 ref.)

Primitive neuroectodermal tumor presenting as a delayed sequela to cranial irradiation and intrathecal methotrexate. Barasch ES, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):375–8

[Metastasizing squamous cell carcinoma in patients with psoriasis treated with immunosuppressive agents] Jensen DB, et al. **Ugeskr Laeger** 1989 Jul 17;151(29):1884–5 (Eng. Abstr.) **(Dan)**

[Ophthalmoplegia after low-dose methotrexate] Sørensen TT, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3197–8 (Eng. Abstr.) **(Dan)**

[Methotrexate in dermatology: current aspects] Plantin P, et al. **Ann Dermatol Venereol** 1989;116(2):109–15 (76 ref.) (Eng. Abstr.) **(Fre)**

[3 cases of pneumopathy during treatment of rheumatoid polyarthritis with methotrexate] Le Goff P, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):23–5 (20 ref.) **(Fre)**

[Acute pneumopathy during the treatment of severe rheumatoid polyarthritis with low fractionated doses of methotrexate administered orally] L'Hirondel JL, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):419–24 (23 ref.) **(Fre)**

[Management of the administration of leucovorin calcium in high-dose methotrexate therapy] Kickinger W, et al. **Arzneimittelforschung** 1989 Jun;39(6):728–31 (Eng. Abstr.) **(Ger)**

[Extensive erosive hemorrhagic lesions in psoriasis plaques caused by methotrexate poisoning] Rytter M, et al. **Dermatol Monatsschr** 1989;175(1):55–8 **(Ger)**

[Pancytopenia during low-dose oral methotrexate therapy of psoriatic arthritis] Kohler S, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1286–8 (Eng. Abstr.) **(Ger)**

[Reactivation of sunburn by methotrexate] Lawrenz-Wolf B, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):335–8 (Eng. Abstr.) **(Ger)**

[You make the diagnosis: methotrexate pneumonitis] Hauer C, et al. **Padiatr Padol** 1988;23(4):337–42 **(Ger)**

[Increased secretion of vasopressin and edema formation in high dosage methotrexate therapy] Frahm H, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):411–4 (Eng. Abstr.) **(Ger)**

[Interstitial nephritis developed during maintenance chemotherapy in a child with acute lymphocytic leukemia] Morioka Y, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2127–31 (Eng. Abstr.) **(Jpn)**

[Lyell's syndrome from the repeat treatment of psoriasis with methotrexate] Tynterov AI, et al. **Vestn Dermatol Venerol** 1988;(6):46–8 (Eng. Abstr.) **(Rus)**

[Epilepsy as a late sequela of therapy in acute lymphoblastic leukosis—case report] Sterio M, et al. **Med Pregl** 1988; 41(9–10):387–90 (Eng. Abstr.) **(Scr)**

ANALOGS & DERIVATIVES

Rescue effect of exogenous reduced folates on methotrexate polyglutamylation and dihydrofolate reductase activity in L1210 cells. **Balińska M. Acta Biochim Pol** 1988; 35(3):199–205

Photoaffinity analogues of methotrexate as folate antagonist binding probes. **Freisheim JH, et al. Adv Enzyme Regul** 1988;27:15–29

Chemotherapeutic potential of methotrexate peptides. **Kuefner U, et al. Adv Enzyme Regul** 1988;27:3–13 (20 ref.)

Alpha-monoamides of methotrexate as potential prodrugs. **Antonjuk DJ, et al. Arzneimittelforschung** 1989 Jan; 39(1):12–5

Inhibition of human dihydrofolate reductase by antifolyl polyglutamates. **Kumar P, et al. Biochem Pharmacol** 1989 Feb 1;38(3):541–3

Further studies on the pharmacologic effects of the 7-hydroxy catabolite of methotrexate in the L1210 murine leukemia cell. **Seither RL, et al. Biochem Pharmacol** 1989 Mar 1;38(5):815–22

Carboxypeptidase-mediated release of methotrexate from methotrexate alpha-peptides. **Kuefner U, et al. Biochemistry** 1989 Mar 7;28(5):2288–97

In vitro drug delivery mediated by ecto-NAD+-glycohydrolase ligand-targeted liposomes. **Salord J, et al. Biochim Biophys Acta** 1988 Sep 16; 971(2):197–206

Pharmacokinetics of methotrexate (MTX) and 7-hydroxymethotrexate (7-OH-MTX) in rats and evidence for the metabolism of MTX to 7-OH-MTX. **Fahrig L, et al. Cancer Chemother Pharmacol** 1989;23(3):156–60

Formation and elimination of 7-hydroxymethotrexate in the rat in vivo after methotrexate administration. **Bremnes RM, et al. Cancer Res** 1989 May 1;49(9):2460–4

Biochemical and growth inhibitory effects of the erythro and threo isomers of gamma-fluoromethotrexate, a methotrexate analogue defective in polyglutamylation. **McGuire JJ, et al. Cancer Res** 1989 Aug 15;49(16):4517–25

Structural design, biochemical properties, and evidence for improved therapeutic activity of 5-alkyl derivatives of 5-deazaaminopterin and 5-deazamethotrexate compared to methotrexate in murine tumor models. **Sirotnak FM, et al. Cancer Res** 1988 Oct 15;48(20):5686–91

Wild-type and drug-resistant Leishmania major hydrolyze methotrexate to N-10-methyl-4-deoxy-4-aminopteroate without accumulation of methotrexate polyglutamates. **Ellenberger TE, et al. J Biol Chem** 1989 Sep 25; 264(27):15960–6

Stable and sensitive method for the simultaneous determination of N5-methyltetrahydrofolate, leucovorin, methotrexate and 7-hydroxymethotrexate in biological fluids. **van Tellingen O, et al. J Chromatogr** 1989 Mar 24; 488(2):379–88

Pharmacology of dichloromethotrexate [letter] **Bertino JR. J Natl Cancer Inst** 1989 May 10;81(10):815–6

Clinical and pharmacologic reappraisal of dichloromethotrexate. **Hantel A, et al. J Natl Cancer Inst** 1988 Dec 7;80(19):1547–53

Impairment of methotrexate (MTX)-polyglutamate formation of MTX-resistant K562 cell lines. **Koizumi S. Jpn J Cancer Res** 1988 Nov;79(11):1230–7

In vitro methotrexate polyglutamate formation is elevated in acute lymphoid leukemia cells compared with acute myeloid leukemia and normal bone marrow cells. **Yamauchi H, et al. Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):766–73

Pharmacokinetics of 7-hydroxy-methotrexate and methotrexate in the rat. **Slørdal L, et al. Pharmacol Toxicol** 1988 Aug;63(2):81–4

Synthesis of analogues of folic acid, aminopterin and methotrexate as antitumour agents. **Palmer DC, et al. Prog Med Chem** 1988;25:85–231 (291 ref.)

[Inhibition of muscle glycogen phosphorylase b by 5-methyltetrahydrofolic acid, 3'-chloro- and 3',6'-dichloromethotrexates] **Klinov SV, et al. Bioorg Khim** 1988 Sep;14(9):1162–5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Determination of methotrexate in untreated body fluids by micellar liquid chromatography. **Palmisano F, et al. Anal Chem** 1989 May 1;61(9):946–50

Rapid quantitation of methotrexate and its metabolites in human serum, urine and bile, using solid-phase extraction and high-performance liquid chromatography. **Nuernberg B, et al. J Chromatogr** 1989 Feb 24;487(2):476–82

Methotrexate concentrations in serum and saliva in children treated with high doses of methotrexate i.v. **Frauendienst-Egger G, et al. J Clin Chem Clin Biochem** 1989 Apr;27(4):228–9

Physiochemical characterization of methotrexate-bovine serum albumin conjugates. **Halbert GW, et al. J Pharm Pharmacol** 1989 Apr;41(4):222–6

Electrochemistry of the anticancer agents methotrexate and alpha-difluoromethylornithine in iminium form. **Kovacic P, et al. J Pharm Sci** 1988 Dec;77(12):999–1002

[Leakage measurements with the dye extraction method and direct methotrexate level determination (enzyme immunoassay) during and after regional cytostatic limb perfusion] **Krauss J, et al. Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):260–3 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Beneficial effects of leucovorin after methotrexate treatment in rheumatoid arthritis: a case report [letter] **Polk JR. Arthritis Rheum** 1988 Dec;31(12):1587–8

BLOOD

A fluorescein-methotrexate-based flow cytometric bioassay for measurement of plasma methotrexate and trimetrexate levels. **Assaraf YG, et al. Anal Biochem** 1989 May 1; 178(2):287–93

Adsorptive cathodic stripping voltammetry of amethopterine at a static mercury drop electrode and its application to serum drug determination. **Cataldi TR, et al. Analyst** 1988 Jun;113(6):869–73

Development and evaluation of an enzyme inhibition assay for methotrexate. **Kelly MG. Ann Clin Biochem** 1988 Sep; 25 (Pt 5):516–21

Methotrexate serum-level determinations during low-dose therapy of rheumatoid and psoriatic arthritis. **Leeb B, et al. Int J Clin Pharmacol Res** 1989;9(3):209–15

Serum methotrexate and human chorionic gonadotropin concentrations during five-day chemotherapy for low-risk metastatic gestational trophoblastic neoplasia. **Hilgers RD, et al. Int J Gynaecol Obstet** 1988 Dec;27(3):421–5

CEREBROSPINAL FLUID

Analysis of methotrexate in cerebrospinal fluid by fluorescence polarization immunoassay [letter] **Glasco GB, et al. Drug Intell Clin Pharm** 1988 Nov;22(11):912–3

Pharmacokinetics of methotrexate in the cerebrospinal fluid after intracerebroventricular administration in patients with meningeal carcinomatosis and altered cerebrospinal fluid flow dynamics. **Miller KT, et al. Ther Drug Monit** 1989; 11(3):231–7

CHEMICAL SYNTHESIS

Alpha-monoamides of methotrexate as potential prodrugs. **Antonjuk DJ, et al. Arzneimittelforschung** 1989 Jan; 39(1):12–5

ISOLATION & PURIFICATION

Preparation and in vitro cytotoxicity of a methotrexate-anti-MM46 monoclonal antibody conjugate via an oligopeptide spacer. **Umemoto N, et al. Int J Cancer** 1989 Apr 15;43(4):677–84

METABOLISM

Analogs of tetrahydrofolate directed at folate-dependent purine biosynthetic enzymes. Characteristics of mediated entry and transport-related resistance in L1210 cells for 5,10-dideazatetrahydrofolate and two 10-alkyl derivatives. **Sirotnak FM, et al. Biochem Pharmacol** 1988 Dec 15; 37(24):4775–7

The effect of methionine on methotrexate metabolism in rat hepatocytes in monolayer culture. **Rhee MS, et al. Biochim Biophys Acta** 1989 May 10;1011(2-3):122–8

Formation and elimination of 7-hydroxymethotrexate in the rat in vivo after methotrexate administration. **Bremnes RM, et al. Cancer Res** 1989 May 1;49(9):2460–4

Inherent resistance of human squamous carcinoma cell lines to methotrexate as a result of decreased polyglutamylation of this drug. **Pizzorno G, et al. Cancer Res** 1989 Oct 1; 49(19):5275–80

Characterization by flow cytometry of fluorescein-methotrexate transport in Chinese hamster ovary cells. **Assaraf YG, et al. Cytometry** 1989 Jan; 10(1):50–5

Wild-type and drug-resistant Leishmania major hydrolyze methotrexate to N-10-methyl-4-deoxy-4-aminopteroate without accumulation of methotrexate polyglutamates. **Ellenberger TE, et al. J Biol Chem** 1989 Sep 25; 264(27):15960–6

Amplification of a polymorphic dihydrofolate reductase gene expressing an enzyme with decreased binding to methotrexate in a human colon carcinoma cell line, HCT-8R4, resistant to this drug. **Srimatkandada S, et al. J Biol Chem** 1989 Feb 25;264(6):3524–8

Stable and sensitive method for the simultaneous determination of N5-methyltetrahydrofolate, leucovorin, methotrexate and 7-hydroxymethotrexate in biological fluids. **van Tellingen O, et al. J Chromatogr** 1989 Mar 24; 488(2):379–88

Dipyridamole potentiates the growth-inhibitory action of methotrexate and 5-fluorouracil in human keratinocytes in vitro. **Schwartz PM, et al. J Invest Dermatol** 1989 Oct; 93(4):523–7

Structural specificity of mechanisms controlling the hepatic uptake and biliary output of methotrexate in the rat. **Deutsch JC, et al. J Pharmacol Exp Ther** 1989 Jul; 250(1):221–6

A free-energy perturbation study of the binding of methotrexate to mutants of dihydrofolate reductase. **Singh UC, et al. Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9519–23

PHARMACOKINETICS

Variability of methotrexate pharmacokinetics and pharmacodynamics. **Dawson AH, et al. Agents Actions Suppl** 1988;24:226–35

Chronopharmacokinetics of oral methotrexate and 6-mercaptopurine: is there diurnal variation in the disposition of antileukemic therapy? **Balis FM, et al. Am J Pediatr Hematol Oncol** 1989 Fall;11(3):324–6

Characterization of the methotrexate transport pathway in murine L1210 leukemia cells: involvement of a membrane receptor and a cytosolic protein. **Price EM, et al. Biochemistry** 1988 Oct 4;27(20):7853–8

PharmCalc: program for the calculation of clinical pharmacokinetic parameters of methotrexate. **Borsi JD, et al. Cancer Chemother Pharmacol** 1988;22(4):339–43

Pharmacokinetics of methotrexate (MTX) and 7-hydroxymethotrexate (7-OH-MTX) in rats and evidence for the metabolism of MTX to 7-OH-MTX. **Fahrig L, et al. Cancer Chemother Pharmacol** 1989;23(3):156–60

Identification of the bromosulfophthalein-sensitive efflux route for methotrexate as the site of action of vincristine in the vincristine-dependent enhancement of methotrexate uptake in L1210 cells. **Henderson GB, et al. Cancer Res** 1988 Nov 1;48(21):5995–6001

Identification of a membrane-associated folate-binding protein in human leukemic CCRF-CEM cells with transport-related methotrexate resistance. **Jansen G, et al. Cancer Res** 1989 May 1;49(9):2455–9

Methotrexate pharmacokinetics: long and short infusions. **Marty JJ, et al. Clin Exp Pharmacol Physiol Suppl** 1979; 5:29–34

Relative bioavailability of oral low dose methotrexate. A comparison of 2 different formulations. **Fossâ SD, et al. Eur J Clin Pharmacol** 1988;34(5):517–9

High-dose methotrexate: pharmacokinetics in children and young adults. **Raude E, et al. Int J Clin Pharmacol Ther Toxicol** 1988 Jul;26(7):364–70

Pharmacokinetics of subcutaneous methotrexate. **Balis FM, et al. J Clin Oncol** 1988 Dec;6(12):1882–6

Retention and distribution of liposome-entrapped [3H]methotrexate injected into normal or arthritic rabbit joints. **Foong WC, et al. J Pharm Pharmacol** 1988 Jul; 40(7):464–8

Pharmacokinetics of low-dose methotrexate in rheumatoid arthritis patients. **Herman RA, et al. J Pharm Sci** 1989 Feb; 78(2):165–71

Transport of methotrexate by the in vitro isolated rabbit proximal tubule. **Besseghir K, et al. J Pharmacol Exp Ther** 1989 Aug;250(2):688–95

Methotrexate kinetics in rheumatoid arthritis: is there an interaction with nonsteroidal antiinflammatory drugs? **Ahern M, et al. J Rheumatol** 1988 Sep;15(9):1356–60

Methotrexate pharmacokinetics in patients with rheumatoid arthritis. **Sinnett MJ, et al. J Rheumatol** 1989 Jun; 16(6):745–8

Effects of combination of vasodilator drugs and hypertonic solutions on methotrexate distribution into the rat brain. **Abe H. Jpn J Pharmacol** 1988 Nov;48(3):373–6

Complementation of a methotrexate uptake defect in Chinese hamster ovary cells by DNA-mediated gene transfer. **Underhill TM, et al. Mol Cell Biol** 1989 Apr;9(4):1754–8

Pharmacokinetics of 7-hydroxy-methotrexate and methotrexate in the rat. **Slørdal L, et al. Pharmacol Toxicol** 1988 Aug;63(2):81–4

Pharmacokinetics of methotrexate given intrathecally to children with acute lymphoblastic leukemia. **Skibińska L, et al. Pol J Pharmacol Pharm** 1988 Mar-Apr;40(2):135–43

Mutant Chinese hamster ovary cells with defective methotrexate uptake are distinguishable by reversion analysis. **Underhill TM, et al. Somat Cell Mol Genet** 1989 Jan;15(1):49–59

[Blood cell concentration of methotrexate in long-term therapy of inflammatory rheumatic diseases] **Leeb B, et al. Acta Med Austriaca** 1988;15(5):140–4 (Eng. Abstr.) **(Ger)**

[Urinary beta 2-microglobulin as an indicator for impaired excretion of methotrexate] **Amino K, et al. Gan To Kagaku Ryoho** 1988 Nov;15(11):3103–7 (Eng. Abstr.) **(Jpn)**

[Transperitoneal transport of methotrexate: in vitro studies] **Czyżewska K, et al. Przegl Lek** 1988;45(5):421–5 (Eng. Abstr.) **(Pol)**

[Pharmacokinetics of methotrexate in children with acute lymphoblastic leukemia] **Lares-Asseff I, et al. Bol Med Hosp Infant Mex** 1988 Oct;45(10):671–80 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Cyclo-oxygenase inhibitors and cell killing by cytotoxic drugs. **Bennett A, et al. Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:427–30

Synergistic antiproliferative effects on HL-60 cells: deferoxamine enhances cytosine arabinoside, methotrexate, and daunorubicin cytotoxicity. **Estrov Z, et al. Am J Pediatr Hematol Oncol** 1988 Winter;10(4):288–91

The folate antagonist, methotrexate, is a potent inhibitor of murine and human cytomegalovirus in vitro. **Shanley JD, et al. Antiviral Res** 1989 Mar;11(2):99–106

The influence of plasma catecholamines on methotrexate-enhanced rat salivary gland protein secretion. **McBride RK, et al. Arch Oral Biol** 1988; 33(8):575–8

Inhibition of in vitro vascular endothelial cell proliferation and in vivo neovascularization by low-dose methotrexate. **Hirata S, et al. Arthritis Rheum** 1989 Sep;32(9):1065–73

Antiproliferative effects of methotrexate on peripheral blood mononuclear cells. Olsen NJ, et al. **Arthritis Rheum** 1989 Apr;32(4):378–85

The effects of methotrexate on the production and activity of interleukin-1. Segal R, et al. **Arthritis Rheum** 1989 Apr; 32(4):370–7

A qualitative and quantitative assay of dihydrofolate reductase in carrot cells resistant to methotrexate. Nano R, et al. **Basic Appl Histochem** 1989;33(2):81–92

Inhibition by methotrexate of the stable incorporation of 5-fluorouracil into murine bone marrow DNA. Sawyer RC, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2305–11

The effect of methotrexate on hepatic levels of reduced glutathione in mice. Wiebkin P, et al.
Biochem Pharmacol 1989 May 15;38(10):1551–4

Potentiation of methotrexate lymphocytotoxicity in vitro by inhibitors of nucleoside transport. Hughes JM, et al.
Br J Cancer 1989 Mar;59(3):381–4

Therapeutic perturbation of the tumor ecosystem in reconstructed heterogeneous mouse mammary tumors. Miller BE, et al. **Cancer Res** 1989 Jul 15;49(14):3747–53

Relationship of reduced folate changes to inhibition of DNA synthesis induced by methotrexate in L1210 cells in vivo. Priest DG, et al. **Cancer Res** 1989 Aug 1;49(15):4204–9

Enhancement of the frequency of methotrexate resistance by gamma-radiation in Chinese hamster ovary and mouse 3T6 cells. Sharma RC, et al. **Cancer Res** 1989 Jul 15; 49(14):3861–6

Methotrexate: studies on cellular metabolism. III.—Effect on the transplasma-membrane redox activity and on ferricyanide-induced proton extrusion by HeLa cells. Oliveira MB, et al. **Cell Biochem Funct** 1989 Apr;7(2):135–7

Methotrexate: studies on cellular metabolism. II—Effects on mitochondrial oxidative metabolism and ion transport. Yamamoto N, et al. **Cell Biochem Funct** 1989 Apr; 7(2):129–34

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. A reply [letter] Afane M, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):336–7

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. Johnston C, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):391–3

Differential methotrexate sensitivity: a test to distinguish Enterococcus faecalis from Enterococcus faecium [letter] Hamilton-Miller JM. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):696–7

Histochemical changes in the composition of mucins in goblet cells during methotrexate-induced mucosal atrophy in rats. Koninkx JF, et al. **Exp Pathol** 1988;34(3):125–32

Methotrexate-resistant mechanisms in human choriocarcinoma cells. Sakai K, et al. **Gynecol Oncol** 1989 Jul;34(1):7–11

Increased methotrexate-induced chromosome breakage in patients with free trisomy 21 and their parents. Pelz L, et al. **Hum Genet** 1988 Dec;81(1):38–40

Drug resistance in KHT fibrosarcoma cell lines with different metastatic ability. Cillo C, et al. **Int J Cancer** 1989 Jan 15;43(1):107–11

Multiple fractions of gamma rays induced resistance to cis-dichloro-diammineplatinum (II) and methotrexate in human HeLa cells. Osmak M, et al.
Int J Radiat Oncol Biol Phys 1989 Jun;16(6):1537–41

Mechanism of acquired resistance to methotrexate in P388 murine leukemia cells and in their doxorubicin-resistant subline. Ramu N, et al. **Isr J Med Sci** 1988 Sep–Oct; 24(9–10):477–82

Effect of methotrexate alone and in combination with antifungal drugs on the growth of Candida albicans. Warnock DW, et al. **J Antimicrob Chemother** 1989 Jun; 23(6):837–47

Analysis of amplified DNAs from drug-resistant Leishmania by orthogonal-field-alternation gel electrophoresis. The effect of size and topology on mobility. Hightower RC, et al. **J Biol Chem** 1989 Feb 15;264(5):2979–84

The H circles of Leishmania tarentolae are a unique amplifiable system of oligomeric DNAs associated with drug resistance. White TC, et al. **J Biol Chem** 1988 Nov 15;263(32):16977–83

Methotrexate-induced morphological changes mimic those seen after heat shock. Jackson DA, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):37–49

Cross-resistance to the lipid-soluble antifolate trimetrexate in human carcinoma cells with the multidrug-resistant phenotype. Assaraf YG, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):290–4

Resistance to drugs associated with the multidrug resistance phenotype following selection with high-concentration methotrexate. Haber M, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1250–4

Morphologic alterations in rat brain following systemic and intraventricular methotrexate injection: light and electron microscopic studies. Gregorios JB, et al.
J Neuropathol Exp Neurol 1989 Jan;48(1):33–47

Methotrexate inhibits macrophage activation as well as vascular and cellular inflammatory events in rat adjuvant induced arthritis. Johnson WJ, et al. **J Rheumatol** 1988; 15(5):745–9

Inhibition of human renal cancer by methotrexate linked to a monoclonal antibody. Singh M, et al. **J Urol** 1989 Feb; 141(2):428–31

Impairment of methotrexate (MTX)-polyglutamate formation of MTX-resistant K562 cell lines. Koizumi S. **Jpn J Cancer Res** 1988 Nov;79(11):1230–7

Effect of methotrexate on local cerebral blood flow in conscious rats. Mizusawa S, et al. **Jpn J Pharmacol** 1988 Dec;48(4):499–501

H DNA amplification in Leishmania resistant to both arsenite and methotrexate. Katakura K, et al.
Mol Biochem Parasitol 1989 May 1;34(2):189–91

The dihydrofolate reductase amplicons in different methotrexate-resistant Chinese hamster cell lines share at least a 273-kilobase core sequence, but the amplicons in some cell lines are much larger and are remarkably uniform in structure. Looney JE, et al. **Mol Cell Biol** 1988 Dec; 8(12):5268–79

Construction and properties of replication-competent murine retroviral vectors encoding methotrexate resistance. Stuhlmann H, et al. **Mol Cell Biol** 1989 Jan;9(1):100–8

Photoaffinity and immunological probes of methotrexate transport proteins in drug-sensitive and -resistant leukemia cells. Freisheim JH, et al. **Prog Clin Biol Res** 1989; 292:453–60

Effect of the antineoplastic agents doxorubicin and methotrexate on rat caries and secondary dentin formation. Pajari U. **Scand J Dent Res** 1989 Feb;97(1):14–9

Enhancement of methotrexate cytotoxicity by modulation of proliferative activity in normal and neoplastic T lymphocytes and in a myeloid leukemia cell line. Ciaiolo C, et al. **Tumori** 1988 Oct 31;74(5):537–42

[Potentiated antitumor effect of methotrexate by dipyridamole] Cao SS.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Feb; 11(1):7–12 (Eng. Abstr.) **(Chi)**

[Osteogenesis in distraction in animals submitted to anti-cancer chemotherapy. Experimental study in rabbits] Prevot J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:98–100 **(Fre)**

[Modification of hCG secretion by biological modulators of cell response and cytostatics in the normal placenta and choriocarcinoma cells] Marth C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:62–3 **(Ger)**

[Methotrexate and its drug resistance] Nagura E.
Gan To Kagaku Ryoho 1988 Oct;15(10):2882–7 (Eng. Abstr.) **(Jpn)**

[Methotrexate resistance of rat clonogenic hemopoietic cells with an inserted bacterial dihydrofolate reductase gene] Khrushchov NG, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):981–3 **(Rus)**

[Effect of methotrexate amplification at the gene level] Rapoport IA, et al. **Zh Obshch Biol** 1988 Nov–Dec; 49(6):777–85 (Eng. Abstr.) **(Rus)**

POISONING

[Role of hemodialysis and plasma exchange in the removal of methotrexate (letter)] Thierry FX, et al. **Presse Med** 1988 Dec 10;17(44):2356 **(Fre)**

THERAPEUTIC USE

Methotrexate treatment in scleroderma. van den Hoogen FH, et al. **Am J Med** 1989 Jul;87(1):116–7

Twelve years experience with methotrexate infusions in childhood ALL. Moe PJ, et al. **An Esp Pediatr** 1988 Oct; 29 Suppl 34:54–8

Methotrexate use for asthma: a critical appraisal. Kaslow JE, et al. **Ann Allergy** 1989 Jun;62(6):541–5

Methotrexate and rheumatoid arthritis [letter]
Ann Intern Med 1989 Jan 1;110(1):88–90

Methotrexate induces clinical and histologic remission in patients with refractory inflammatory bowel disease. Kozarek RA, et al. **Ann Intern Med** 1989 Mar 1; 110(5):353–6

Methotrexate and inflammatory bowel disease [letter] Meyers S. **Ann Intern Med** 1989 May 15;110(10):845

Methotrexate in rheumatoid arthritis. Feedback on American College of Physicians guidelines. Tugwell P, et al.
Ann Intern Med 1989 Apr 15;110(8):581–3 (22 ref.)

Methotrexate therapy in cutaneous sarcoidosis [letter] Webster GF, et al. **Ann Intern Med** 1989 Sep 15; 111(6):538–9

Methotrexate in corticosteroid-resistant urticaria [letter] Weiner MJ. **Ann Intern Med** 1989 May 15;110(10):848

Topical methotrexate therapy for psoriasis. Weinstein GD, et al. **Arch Dermatol** 1989 Feb;125(2):227–30

Comment on the letter by Jaffe [letter] Buhner D.
Arthritis Rheum 1988 Dec;31(12):1584–5

Reversal of neutropenia with methotrexate treatment in patients with Felty's syndrome. Correlation of response with neutrophil-reactive IgG. Fiechtner JJ, et al.
Arthritis Rheum 1989 Feb;32(2):194–201

Favorable results using methotrexate in the treatment of patients with ankylosing spondylitis [letter] Handler RP.
Arthritis Rheum 1989 Feb;32(2):234

Combination methotrexate and sulfasalazine in the management of rheumatoid arthritis: case observations. Shiroky JB, et al. **Arthritis Rheum** 1989 Sep;32(9):1160–4

Successful treatment of cervical pregnancy by cervical evacuation after use of methotrexate. Kim DS, et al.
Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):71–5

Methotrexate in rheumatoid arthritis [editorial] Brooks PM. **Aust N Z J Med** 1988 Dec;18(7):831–2

Cyclosporin A versus methotrexate, followed by rescue with folinic acid as prophylaxis of acute graft-versus-host disease after bone marrow transplantation. Torres A, et al. **Blut** 1989 Feb;58(2):63–8

An increased risk of relapse in cyclosporin-treated compared with methotrexate-treated patients: long-term follow-up of a randomized trial. Bäckman L, et al.
Bone Marrow Transplant 1988 Sep;3(5):463–71

A randomized trial comparing use of cyclosporin and methotrexate for graft-versus-host disease prophylaxis in bone marrow transplant recipients with haematological malignancies. Ringdén O, et al.
Bone Marrow Transplant 1986 May;1(1):41–51

Evidence for CSF accumulation of 5-methyltetrahydrofolate during repeated courses of methotrexate plus folinic acid rescue. Thyss A, et al. **Br J Cancer** 1989 Apr;59(4):627–30

Intestinal folate absorption in methotrexate treated psoriatic patients. Duhra P, et al. **Br J Dermatol** 1988 Sep; 119(3):327–32

Graft-versus-host disease prevention by methotrexate combined with cyclosporin compared to methotrexate alone in patients given marrow grafts for severe aplastic anaemia: long-term follow-up of a controlled trial. Storb R, et al. **Br J Haematol** 1989 Aug;72(4):567–72

Methotrexate given concurrently with radiotherapy in the treatment of transitional cell carcinoma. Tomlinson MJ, et al. **Br J Radiol** 1988 Oct;61(730):959–60

A patient with seropositive rheumatoid arthritis. Capell H. **Br J Rheumatol** 1989 Aug;28(4):340

Prospective long term follow-up of methotrexate therapy in rheumatoid arthritis: toxicity, efficacy and radiological progression. Hanrahan PS, et al. **Br J Rheumatol** 1989 Apr; 28(2):147–53

Intractable RA—treatment with combined methotrexate, azathioprine and hydroxychloroquine [letter] Langevitz P, et al. **Br J Rheumatol** 1989 Jun;28(3):271–2

Adjuvant chemotherapy in T3 carcinoma of the bladder. A prospective trial: preliminary report. Shearer RJ, et al.
Br J Urol 1988 Dec;62(6):558–64

Thymidylate synthetase and thymidine kinase activities and methotrexate cytotoxicity during growth of L1210 and Ehrlich ascites tumor. Hullán L, et al.
Cancer Biochem Biophys 1988 Nov;10(2):131–9

Proliferation-dependent cytotoxicity of methotrexate in murine L5178Y leukemia. Fernandes DJ, et al.
Cancer Res 1988 Oct 15;48(20):5638–44

Structural design, biochemical properties, and evidence for improved therapeutic activity of 5-alkyl derivatives of 5-deazaaminopterin and 5-deazamethotrexate compared to methotrexate in murine tumor models. Sirotnak FM, et al.
Cancer Res 1988 Oct 15;48(20):5686–91

Hyperthermia plus methotrexate combination modality treatment in transplanted Walker sarcoma. Kosmidis P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):690–1

Combination of hyperthermia and methotrexate in the treatment of transplanted Walker sarcoma. Kosmidis PA, et al. **Chemioterapia** 1988 Jun;7(3):184–8

Reversal of recalcitrant cardiac allograft rejection with methotrexate. Costanzo-Nordin MR, et al. **Circulation** 1988 Nov;78(5 Pt 2):III47–57

Methotrexate treatment of rheumatoid arthritis. Wilke WS.
Cleve Clin J Med 1989 Jul–Aug;56(5):474

Results of treatment of head and neck carcinoma with high dose methotrexate. Bell R, et al.
Clin Exp Pharmacol Physiol Suppl 1979;5:23–7

Clinical use of high dose methotrexate within the Queensland Radium Institute. Bourne RG.
Clin Exp Pharmacol Physiol Suppl 1979;5:5–9

Some aspects of the development of methotrexate therapy. Snyder RD. **Clin Exp Pharmacol Physiol Suppl** 1979;5:1–4 (16 ref.)

Advances in the drug management of rheumatoid arthritis. Klippel JH, et al. **Del Med J** 1988 Nov;60(11):633–6

Single agent activity of methotrexate in advanced non-seminomatous testicular germ cell tumours. Smith IE, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1779–81

T-cell depletion versus methotrexate as GvHD-prophylaxis in allogeneic bone marrow transplantation for leukaemia. Wiesneth M, et al. **Eur J Haematol** 1988 Sep;41(3):243–9

Primary central nervous system lymphoma: long-term survival following treatment with radiation and methotrexate. Petursson SR. **Eur J Surg Oncol** 1989 Feb; 15(1):69–72

Rising human chorionic somatomammotropin predicts ectopic pregnancy rupture following methotrexate chemotherapy. Carson SA, et al. **Fertil Steril** 1989 Apr; 51(4):593–7

Successful treatment of persistent ectopic pregnancy with oral methotrexate therapy. Patsner B, et al. **Fertil Steril** 1988 Dec;50(6):982–3

Successful nonsurgical treatment of cervical pregnancy with methotrexate. Stovall TG, et al. **Fertil Steril** 1988 Oct; 50(4):672–4

Alteration of interleukin-1 production and the acute phase response following medication of adjuvant arthritic rats with cyclosporin-A or methotrexate. Connolly KM, et al.
Int J Immunopharmacol 1988;10(6):717–28

Palliative therapy of inoperable oesophageal carcinoma with radiotherapy and methotrexate: final results of a controlled clinical trial. Roussel A, et al.
Int J Radiat Oncol Biol Phys 1989 Jan;16(1):67–72

Interstitial pregnancy—successful treatment with

methotrexate. Shalev E, et al. **Isr J Med Sci** 1989 Apr; 25(4):239–40

The effects of methotrexate (MTX) on bone. A densitometric study conducted on 59 patients with MTX administered at different doses. Gnudi S, et al.
Ital J Orthop Traumatol 1988 Jun;14(2):227–31

Preclinical trials using an immunoconjugate of T101 and methotrexate in an athymic mouse/human T-cell tumor model. Shawler DL, et al. **J Biol Response Mod** 1988 Dec; 7(6):608–18

Reversible treatment-related leukoencephalopathy. Gay CT, et al. **J Child Neurol** 1989 Jul;4(3):208–13

A comparison of carboplatin plus methotrexate versus methotrexate alone in patients with recurrent and metastatic head and neck cancer. Eisenberger M, et al.
J Clin Oncol 1989 Sep;7(9):1341–5

Treatment of esthesioneuroblastoma with chemotherapy: a report of two cases. Heros DO, et al. **J Neurooncol** 1988 Sep;6(2):141–5

Whole brain irradiation and intrathecal methotrexate in the treatment of solid tumor leptomeningeal metastases—a Southwest Oncology Group study. Sause WT, et al.
J Neurooncol 1988 Sep;6(2):107–12

Methotrexate therapy in rheumatoid arthritis: 2-year retrospective followup study. Fehlauer CS, et al.
J Rheumatol 1989 Mar;16(3):307–12

Concurrent use of folinic acid and methotrexate in rheumatoid arthritis. Hanrahan PS, et al. **J Rheumatol** 1988 Jul;15(7):1078–80

Felty's syndrome: response to low dose oral methotrexate. Izasi C, et al. **J Rheumatol** 1989 Jul;16(7):983–5

Methotrexate 1989—the evolving story. Kremer JM.
J Rheumatol 1989 Mar;16(3):261–3

Gold sodium thiomalate compared to low dose methotrexate in the treatment of rheumatoid arthritis—a randomized, double blind 26-week trial. Morassut P, et al.
J Rheumatol 1989 Mar;16(3):302–6

Liver biopsy findings in patients with rheumatoid arthritis undergoing longterm treatment with methotrexate. Rau R, et al. **J Rheumatol** 1989 Apr;16(4):489–93

Methotrexate suppresses passive adjuvant arthritis: studies on the metabolism of methotrexate in mononuclear cells derived from normal and adjuvant arthritic rats. Ridge SC, et al. **J Rheumatol** 1988 Aug;15(8):1193–7

Coexistence of adult onset Still's disease and polymyositis with rhabdomyolysis successfully treated with methotrexate and corticosteroids. Samuels AJ, et al.
J Rheumatol 1989 May;16(5):685–7 (15 ref.)

Short term effects of low dose methotrexate on the acute phase reaction in patients with rheumatoid arthritis. Segal R, et al. **J Rheumatol** 1989 Jul;16(7):914–7

A randomized controlled trial of parenteral methotrexate compared with sodium aurothiomalate (Myochrysine) in the treatment of rheumatoid arthritis. Suarez-Almazor ME, et al. **J Rheumatol** 1988;15(5):753–6

Alternating methotrexate and dactinomycin in nonmetastatic gestational trophoblastic disease. Rose PG, et al.
J Surg Oncol 1989 Jul;41(3):148–52

Effect of methotrexate on relapse after bone-marrow transplantation for acute lymphoblastic leukaemia. International Bone Marrow Transplant Registry. **Lancet** 1989 Mar 11;1(8637):535–7

High-dose methotrexate improves clinical outcome in children with acute lymphoblastic leukemia: St. Jude Total Therapy Study X. Abromowitch M, et al.
Med Pediatr Oncol 1988;16(5):297–303

Methotrexate in the rheumatic diseases. Solomon SD.
N J Med 1989 Mar;86(3):213–5 (11 ref.)

Methotrexate therapy in connective tissue diseases: a review of the literature. Jeurissen ME, et al. **Neth J Med** 1989 Aug;35(1–2):44–58 (103 ref.)

Role of immunosuppressive drugs for prevention of graft-v-host disease after bone marrow transplantation. Devergie A, et al. **Nouv Rev Fr Hematol** 1989;31(2):73–5

Intrarticular methotrexate in the therapy of rheumatoid arthritis. Franchi F, et al. **Recenti Prog Med** 1989 May; 80(5):261–2

Methotrexate therapy in the treatment of rheumatoid arthritis. Kremer JM. **Rheum Dis Clin North Am** 1989 Aug; 15(3):533–56 (83 ref.)

Prospective analysis of liver biopsies before and after methotrexate therapy in rheumatoid patients. Brick JE, et al. **Semin Arthritis Rheum** 1989 Aug;19(1):31–44

Melkersson-Rosenthal syndrome: elevations in serum angiotensin converting enzyme and results of treatment with methotrexate. Leicht S, et al. **South Med J** 1989 Jan; 82(1):74–6

Combination prophylactic immunosuppression in bone marrow transplantation. Szer J. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3011–2

Results of four different protocols for prophylaxis against graft-versus-host disease. Tollemar J, et al.
Transplant Proc 1989 Feb;21(1 Pt 3):3008–10

Pulmonary function of haplotype-matched and mismatched allografts in dogs treated with total-body irradiation, autologous marrow transplantation, methotrexate, and donor blood. Blumenstock DA, et al. **Transplantation** 1988 Oct;46(4):496–501

Methotrexate may help arthritis [news] **W V Med J** 1988 Sep;84(9):416

Methotrexate therapy in rheumatoid arthritis. Brick JE, et al. **W V Med J** 1989 Feb;85(2):50–3

[Conservative treatment with methotrexate in a case of cervical pregnancy] Atanasov A, et al.
Akush Ginekol (Sofiia) 1988;27(5):11–5 (Eng. Abstr.) **(Bul)**

[Methotrexate (MTX) in the treatment of rheumatoid arthritis] Ge MZ, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):81–3, 126 (Eng. Abstr.) **(Chi)**

[Methotrexate in the treatment of rheumatoid arthritis] Yang JL. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):772–4 (17 ref.) **(Chi)**

[Conservative treatment with methotrexate in a case of ectopic pregnancy after a microsurgical operation associated with tubal gamete transfer] Mardešić T, et al.
Cesk Gynekol 1988 May;53(4):295–7 **(Cze)**

[Methotrexate in the management of rheumatoid arthritis] Isomäki H, et al. **Duodecim** 1989;105(1):1–3 (18 ref.) **(Fin)**

[Methotrexate in rheumatic practice] Jacquemier JM, et al.
Ann Med Interne (Paris) 1989;140(3):192–6 (59 ref.) **(Fre)**

[Use of methotrexate in a child with trisomy 21. Value of blood levels] Chevallier B, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):598–9 (Eng. Abstr.) **(Fre)**

[Osteogenic osteosarcoma, a model of a disease that is curable using a multidisciplinary treatment approach] Desbois JC, et al. **C R Soc Biol (Paris)** 1988;182(6):523–37 **(Fre)**

[Efficacy and tolerance of methotrexate in rheumatoid polyarthritis. Results of an open study on 104 patients] Krause E, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):15–21 (54 ref.) **(Fre)**

[Low-dose oral methotrexate in the treatment of rheumatoid polyarthritis] Chamot AM, et al.
Schweiz Med Wochenschr 1988 Sep 10;118(36):1267–71 (Eng. Abstr.) **(Fre)**

[Combination of radio-chemotherapy for curing of childhood hematologic tumors: preventive approaches and problems on CNS involvement] Fujimoto T. **Gan No Rinsho** 1988 Oct;34(13):1903–8 (Eng. Abstr.) **(Jpn)**

[An experimental attempt to potentiate therapeutic effects of combined use of pulsing magnetic fields and antitumor agents] Omote Y. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1155–66 (Eng. Abstr.) **(Jpn)**

[A trial of non-surgical therapy of unruptured ectopic pregnancy with fetal viability] Ito M, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Mar; 41(3):357–60 **(Jpn)**

[Meningeal involvement in ALL. Comparative study of 2 methods of protecting the CNS] Verdeguer A, et al.
An Esp Pediatr 1988 Oct;29 Suppl 34:52–3 **(Spa)**

[Prevention of acute graft versus host disease using 3 prophylactic schemes] Conde E, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):5–9 (Eng. Abstr.) **(Spa)**

TOXICITY

Rescue effect of exogenous reduced folates on methotrexate polyglutamylation and dihydrofolate reductase activity in L1210 cells. Balińska M. **Acta Biochim Pol** 1988; 35(3):199–205

High-dose leucovorin reverses acute high-dose methotrexate neurotoxicity in the rat. Phillips PC, et al. **Ann Neurol** 1989 Apr;25(4):365–72

Lack of acute effects of methotrexate on rat parotid salivary gland function. Wolff A, et al. **Arch Oral Biol** 1989; 34(2):109–15

Methotrexate in rheumatoid arthritis. Toxic effects as the major factor in limiting long-term treatment. Alarcón GS, et al. **Arthritis Rheum** 1989 Jun;32(6):671–6

Comment on the letter by Howland [letter; comment] Kremer JM. **Arthritis Rheum** 1989 Jun;32(6):813–4,
Comment on: Arthritis Rheum 1988 Dec;31(12):1586–7

Toxicity and serum levels of methotrexate in children with juvenile rheumatoid arthritis. Wallace CA, et al.
Arthritis Rheum 1989 Jun;32(6):677–81

Central nervous system toxicity associated with weekly low-dose methotrexate treatment. Wernick R, et al.
Arthritis Rheum 1989 Jun;32(6):770–5

Enhancement of methotrexate-induced growth inhibition, cell killing and DNA lesions in cultured L5178Y cells by the reduction of DNA repair efficiency. Gołos B, et al.
Biochem Pharmacol 1989 Jun 1;38(11):1743–8

Cytotoxicities of two disulfide-bond-linked conjugates of methotrexate with monoclonal anti-MM46 antibody. Umemoto N, et al. **Cancer Immunol Immunother** 1989; 28(1):9–16

Methotrexate neurotoxicity: in vitro studies using cerebellar explants from rats. Gilbert MR, et al. **Cancer Res** 1989 May 1;49(9):2502–5

Toxic rash associated with high dose methotrexate therapy. Bell R, et al. **Clin Exp Pharmacol Physiol Suppl** 1979; 5:57–61

Methotrexate nephrotoxicity. Fox RM.
Clin Exp Pharmacol Physiol Suppl 1979;5:43–5

The effects of long term methotrexate therapy on the gonadal function and morphology. Koehler M, et al.
Endokrynol Pol 1988;39(1):33–40

Alterations in serum levels, anti-tumor activity and toxicity of methotrexate in rats after a short period of nutritional depletion. Dunki Jacobs PB, et al.
Eur J Cancer Clin Oncol 1989 Mar;25(3):415–22

The effects of dipyridamole and indomethacin on methotrexate cytotoxicity in LoVo human colon cancer cells. Gaffen JD, et al. **J Pharm Pharmacol** 1989 May; 41(5):350–2

Synergistic effect of methotrexate and 1-beta-D-arabinofuranosylcytosine on the generation of DNA strand breaks in a human promyelocytic leukemia cell line. Tanizawa A, et al. **Leuk Res** 1989;13(2):151–6

An animal model to detect the neuropsychological toxicity of anticancer agents. Yanovski JA, et al.
Med Pediatr Oncol 1989;17(3):216–21

The cytotoxic effect of methotrexate as evaluated by colony-forming activity of hemopoietic and tumor cells. Jurášková V. **Neoplasma** 1988;35(5):583–9

[Decrease in the blood toxicity of antitumor preparations during enterosorption] Bonatskaia LV, et al.
Eksp Onkol 1989;11(1):71–3 (Eng. Abstr.) **(Rus)**

METHOTRIMEPRAZINE

Blotting of proteins onto Immobilon membranes. In situ characterization and comparison with high-performance liquid chromatography. Choli T, et al. **J Chromatogr** 1989 Aug 4;476:59–72

ADVERSE EFFECTS

Use of neuroleptics after an episode of neuroleptic malignant syndrome. Padgett R, et al. **Can J Psychiatry** 1989 May; 34(4):323–5

Contact urticaria from levomepromazine. Johansson G.
Contact Dermatitis 1988 Oct;19(4):304

PHARMACOLOGY

The effect of methotrimeprazine on arterial blood gases in human volunteers. Zsigmond EK, et al.
J Clin Pharmacol 1988 Nov;28(11):1033–7

POISONING

[Fatal poisoning with tizertsin and amitriptyline] Naumov VN, et al. **Sud Med Ekspert** 1988 Jul-Sep;31(3):56–7 **(Rus)**

SUPPLY & DISTRIBUTION

Immobilon supply to holders of Home Office licensed dart guns [letter] Dalby KJ. **Vet Rec** 1989 Jan 7;124(1):22

THERAPEUTIC USE

Levomepromazine (Nozinan) reduces nonspecific bronchial hyperreactivity in asthmatics. Faurschou P, et al.
Eur Respir J 1989 May;2(5):415–20

Zuclopenthixol and haloperidol/levomepromazine in the treatment of elderly patients with symptoms of aggressiveness and agitation: a double-blind, multi-centre study. Fuglum E, et al. **Pharmatherapeutica** 1989; 5(5):285–91

[Levomepromazine (Nozinan) and pain therapy in acute myocardial infarction (letter)] Nielsen FE, et al.
Ugeskr Laeger 1989 Aug 7;151(32):2048 **(Dan)**

METHOXAMEDRIN see **METHOXAMINE**

METHOXAMINE

ADMINISTRATION & DOSAGE

Randomized study of epinephrine versus methoxamine in prehospital ventricular fibrillation. Olson DW, et al.
Ann Emerg Med 1989 Mar;18(3):250–3

DIAGNOSTIC USE

[Pharmacodynamic tests in patients with mitral valve prolapse] Suzuki J, et al. **J Cardiol** 1987;17 Suppl 14:149–54 **(Jpn)**

PHARMACOLOGY

Vascular catecholamine sensitivity during pregnancy in the ewe. McLaughlin MK, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):47–53

Alpha-adrenergic regulation of Na-Cl cotransport in human airway epithelium. Liedtke CM. **Am J Physiol** 1989 Aug; 257(2 Pt 1):L125–9

Contractile reactivity of the perfused mesenteric vascular bed from sinoaortic denervated rats to norepinephrine, methoxamine and verapamil. Vasquez EC, et al.
Braz J Med Biol Res 1988;21(3):629–32

Evidence for regionally selective changes in response to potassium chloride but not vasopressin or methoxamine in vasculature from diabetic rats. Hebden RA, et al.
Can J Physiol Pharmacol 1988 Nov;66(11):1464–7

Alpha-adrenergic supersensitivity and decreased number of alpha-adrenoceptors in heart from acute diabetic rats. Wald M, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1154–60

Action and interaction of two alpha 1-adrenoceptor agonists, methoxamine and St 587, on the rabbit's blood pressure and EEG. Pichler L, et al. **Experientia** 1988 Oct 15; 44(10):888–9

Age changes in secretory function of male and female rat parotid glands in response to methoxamine and pilocarpine. Inanaga A, et al. **J Dent Res** 1988 Mar;67(3):565–73

Glycogen phosphorylase activation by two different alpha 1-adrenergic receptor subtypes: methoxamine selectively stimulates a putative alpha 1-adrenergic receptor subtype

(alpha 1a) that couples with Ca2+ influx. Tsujimoto G, et al. **Mol Pharmacol** 1989 Jul;36(1):166–76
Vascular reactivity to methoxamine in conscious sinoaortic denervated rats. Moysés MR, et al.
Pharmacol Res Commun 1988 Nov;20(11):993–9
Increases in diversive exploration in rats during hippocampal microinfusions of isoproterenol but not methoxamine. Geyer MA, et al. **Physiol Behav** 1989 Jan;45(1):213–7
Methoxamine is an effective unconditioned stimulus for cardiovascular conditioning. Gibbs CM, et al.
Physiol Behav 1988;43(2):177–85
Drug induced release of ATP from rabbit aorta. Sedaa K, et al. **Proc West Pharmacol Soc** 1988;31:197–9
[Hemodynamic effects of dobutamine, dopamine and methoxamine during thoracic epidural anesthesia in dogs with coronary stenosis] Kitahata H, et al. **Masui** 1989 Feb; 38(2):216–28 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Pretreatment with an inhaled alpha 1-adrenergic agonist, methoxamine, reduces exercise-induced asthma. Dinh Xuan AT, et al. **Eur Respir J** 1989 May;2(5):409–14
[Efficacy of intravenous methoxamine in propafenone poisoning (letter)] Olm M, et al. **Presse Med** 1989 Jun 3; 18(22):1124 **(Fre)**
[Erection of the penis: complication of transurethral surgery. Study of a case treated with methoxamine] Dávila Muñoz PA, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun; 35(3):159–60 (Eng. Abstr.) **(Spa)**

METHOXSALEN

Relative affinity of 5-methoxypsoralen and 8-methoxypsoralen towards beta-cyclodextrin: a fluorescence, circular dichroism and chromatographic study. Blais J, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):455–65
A new class of psoralen photoadducts to DNA components: isolation and characterization of 6-MOP adducts to the osidic moiety of 2'-deoxyadenosine. Cadet J, et al.
J Photochem Photobiol -B- 1988 Nov;2(3):321–39
Triplet state properties and triplet–state–oxygen interactions of some linear and angular furocoumarins. Knox CN, et al. **J Photochem Photobiol -B-** 1988 Mar;1(3):315–21
Photophysical behaviour of 5-methoxypsoralen in dioxane–water mixtures. Sá e Melo T, et al.
Photochem Photobiol 1988 Oct;48(4):429–37

ADMINISTRATION & DOSAGE

Incorrect dosage recommendations of Oxsoralen-Ultra [letter] Hartman ME, et al. **Am J Hosp Pharm** 1988 Aug; 45(8):1666
Cutaneous drug eruption caused by 8-methoxypsoralen. Cox NH, et al. **Photodermatol** 1989 Apr;6(2):96–7
[Experience in the photochemotherapy of psoriasis with rectal administration of the photosensitizer] Shinskiĭ GE, et al. **Vestn Dermatol Venerol** 1989;(1):72–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Topical phototoxicity from oral methoxsalen capsules [letter] Morison WL. **Arch Dermatol** 1989 Mar;125(3):433
Drug fever caused by 8-methoxypsoralen. Berg M.
Photodermatol 1989 Jun;6(3):149–50
[The pharmacokinetic and toxicologic profile of 8-methoxypsoralen. The basis for safe and effective PUVA therapy] Schmid J, et al. **Derm Beruf Umwelt** 1988 Nov–Dec;36(6):177–85 (60 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

Flow cytometric analysis of 8-methoxypsoralen–DNA photoadducts in human keratinocytes. Yang XY, et al.
Cancer Res 1988 Dec 15;48(24 Pt 1):7013–7

BLOOD

[Phototoxic effect and plasma levels of 8-MOP] Monfrecola G, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):393–6 (Eng. Abstr.) **(Ita)**

METABOLISM

Activation of 8-methoxypsoralen by cytochrome P-450. Enzyme kinetics of covalent binding and influence of inhibitors and inducers of drug metabolism. Mays DC, et al. **Biochem Pharmacol** 1989 May 15;38(10):1647–55
Detection and quantification of 8-methoxypsoralen–DNA adducts. Santella RM, et al. **IARC Sci Publ** 1988; (89):333–40
8-Methoxypsoralen–DNA adducts in patients treated with 8-methoxypsoralen and ultraviolet A light. Yang XY, et al. **J Invest Dermatol** 1989 Jan;92(1):59–63
UVA-induced binding of 8-methoxypsoralen to cells of Saccharomyces cerevisiae: separation and characterization of DNA photoadducts. Bankmann M, et al.
J Photochem Photobiol [B] 1989 Feb;3(1):33–52
In vitro binding of nitracrine to DNA in chromatin. Wilmańska D, et al. **Z Naturforsch [C]** 1989 Mar–Apr; 44(3–4):307–11

PHARMACOLOGY

The effects of bergapten and sunlight on cutaneous pigmentation. Levine N, et al. **Arch Dermatol** 1989 Sep; 125(9):1225–30
To tan or not to tan. A burning question [editorial] Morison WL. **Arch Dermatol** 1989 Sep;125(9):1258–60
Adaptations to plant pro-oxidants in a phytophagous insect model: enzymatic protection from oxidative stress. Pardini RS, et al. **Basic Life Sci** 1988;49:725–8
Effects of 8-methoxypsoralen and ultraviolet light A on EGF receptor (HER-1) expression. Yang XY, et al.
Biochem Biophys Res Commun 1988 Dec 15;157(2):590–6
Inhibition of DNA-dependent RNA synthesis by 8-methoxypsoralen. Gniazdowski M, et al.
Biochim Biophys Acta 1988 Sep 7;950(3):346–53
Use of 8-methoxypsoralen and long-wavelength ultraviolet radiation for decontamination of platelet concentrates. Lin L, et al. **Blood** 1989 Jul;74(1):517–25
Repair of 8-methoxypsoralen + UVA-induced damage in specific sequences in chromosomal and episomal DNA in human cells. Dean SW. **Carcinogenesis** 1989 Jul; 10(7):1253–6
Pretreatment with UV light renders the chromatin in human fibroblasts more susceptible to the DNA-damaging agents bleomycin, gamma radiation and 8-methoxypsoralen. Ljungman M. **Carcinogenesis** 1989 Mar;10(3):447–51
5-Methoxypsoralen increases the sensitivity of the retina to light in humans. Souêtre E, et al.
Eur J Clin Pharmacol 1989;36(1):59–61
5-Methoxypsoralen increases evening sleepiness in humans: possible involvement of the melatonin secretion. Souêtre E, et al. **Eur J Clin Pharmacol** 1989;36(1):91–2
Evidence that 8-methoxypsoralen (8-MOP) is a T-lymphocyte immunomodulatory agent. Cox GW, et al.
Int J Immunopharmacol 1988;10(6):773–81
Modification of sunburn cell production in 8-MOP sensitized mouse epidermis: a method of assessing UVA sunscreen efficacy. Garmyn M, et al. **J Invest Dermatol** 1989 Apr; 92(4):642–5
Cytometric analysis of the proliferative capacity of HUT 102 lymphoblasts exposed to long-wave UV light and psoralen. Hornicek FJ, et al. **J Invest Dermatol** 1989 Jul;93(1):96–9
A possible role of prostaglandins in PUVA-induced inflammation: implication by organ cultured skin. Imokawa G, et al. **J Invest Dermatol** 1989 Feb;92(2):296–300
Suicide inactivation of cytochrome P-450 by methoxsalen. Evidence for the covalent binding of a reactive intermediate to the protein moiety. Labbe G, et al.
J Pharmacol Exp Ther 1989 Sep;250(3):1034–42
Lysosomes: a possible target for psoralen photodamage. Frederiksen S, et al. **J Photochem Photobiol [B]** 1989 Jun; 3(3):437–47
Immunological assay of 8-MOP photoadducts in DNA. Gasparro FP. **J Photochem Photobiol [B]** 1988 Sep; 2(2):286–8
Structural modifications of lipid vesicles by 8-methoxypsoralen. Páli T, et al.
J Photochem Photobiol [B] 1989 Jun;3(3):359–67
PSO4: a novel gene involved in error-prone repair in Saccharomyces cerevisiae. Henriques JA, et al.
Mutat Res 1989 Sep;218(2):111–24
The basal and the mutagen-induced levels of ADP-ribosyl transferase activity are not modified in Fanconi's anemia cells. Scovassi AI, et al. **Mutat Res** 1989 Jan–Feb; 225(1–2):65–9
8-Methoxypsoralen–photoinduced DNA cross-links as determined in yeast by alkaline step elution under different reirradiation conditions. Relation with genetic effects. Cundari E, et al. **Photochem Photobiol** 1988 Sep; 48(3):315–20
Responses of the planarian Dugesia dorotocephala to ultraviolet radiation or photosensitized treatments. Lytle CD, et al. **Photochem Photobiol** 1988 Oct;48(4):457–9
Inhibition of UV radiation-induced DNA damage by a 5-methoxypsoralen tan in human skin. Young AR, et al.
Pigment Cell Res 1988;1(5):350–4
[Determination of the 8-methoxypsoralen spectrum of action in vitro on lymphocytes] Gast W, et al.
Dermatol Monatsschr 1988;174(7):419–20 **(Ger)**

THERAPEUTIC USE

Methoxsalen and extracorporeal photoactivation in the treatment of cutaneous T-cell lymphoma [letter] Miwa LJ, et al. **DICP** 1989 Jul–Aug;23(7–8):615
Palmoplantar psoriasis: experience with 8-methoxypsoralen soaks plus ultraviolet A with the use of a high-output metal halide device. Coleman WR, et al.
J Am Acad Dermatol 1989 Jun;20(6):1078–82
[Photochemotherapy in vitro—direct effect on epidermal lectin-binding of psoriatic and normal skin] Wollina U, et al. **Dermatol Monatsschr** 1988;174(6):312–8 (Eng. Abstr.) **(Ger)**

TOXICITY

Toxicity of 8-methoxypsoralen in cynomolgous monkeys (Macaca fascicularis). Rozman T, et al.
Drug Chem Toxicol 1989 Mar;12(1):21–37
Toxicity studies of amphetamine sulfate, ampicillin trihydrate, codeine, 8-methoxypsoralen, alpha-methyldopa, penicillin VK and propantheline bromide in rats and mice. Dunnick JK, et al.
Toxicology 1989 Jun 1;56(2):123–36
[Mechanism of action of interferon is linked to its ability to protect the cell from interstrand cross-linking of DNA, induced by 8-methoxypsoralen, activated by long-wave UV-light] Makedonov GN, et al. **Genetika** 1989 Mar; 25(3):552–4 (Eng. Abstr.) **(Rus)**

METHOXYCHLOR

POISONING

[Changes in the glucosephosphate dehydrogenase activity in the liver and blood of albino rats after poisoning with chloride-containing pesticides] Krysanova AI, et al.
Gig Sanit 1988 Oct;(10):82–3 **(Rus)**

TOXICITY

A dose-response analysis of methoxychlor-induced alterations of reproductive development and function in the rat. Gray LE Jr, et al. **Fundam Appl Toxicol** 1989 Jan; 12(1):92–108
Methoxychlor. **Rev Environ Contam Toxicol** 1988;104:161–71 (46 ref.)
Methoxychlor induces estrogen-like alterations of behavior and the reproductive tract in the female rat and hamster: effects on sex behavior, running wheel activity, and uterine morphology. Gray LE Jr, et al.
Toxicol Appl Pharmacol 1988 Dec;96(3):525–40

METHOXYDIMETHYLTRYPTAMINES see under **TRYPTAMINES**

METHOXYFLURANE

Alterations in host defense associated with inhalation anesthesia and blood transfusion. Waymack JP, et al.
Anesth Analg 1989 Aug;69(2):163–8
Calcium oxalate retinopathy associated with methoxyflurane abuse. Novak MA, et al. **Retina** 1988;8(4):230–6

ADMINISTRATION & DOSAGE

Blood gas tensions, acid-base status and cardiovascular function in miniature swine anaesthetized with halothane and methoxyflurane or intravenous metomidate hydrochloride. Svendsen P, et al. **Pharmacol Toxicol** 1989 Jan;64(1):88–93

ADVERSE EFFECTS

Hepatitis and renal tubular acidosis after anesthesia with methoxyflurane. Zeana CD, et al. **Med Interne** 1982 Oct–Dec;20(4):295–7

ANTAGONISTS & INHIBITORS

The imidazobenzodiazepine Ro 15-4513 antagonizes methoxyflurane anesthesia. Moody EJ, et al. **Life Sci** 1988; 43(16):1269–76

METABOLISM

Methoxyflurane acts at the substrate binding site of cytochrome P450 LM2 to induce a dependence on cytochrome b5. Lipka JJ, et al. **Arch Biochem Biophys** 1989 Jan;268(1):152–60

PHARMACOLOGY

General anaesthetic modification of synaptic facilitation and long-term potentiation in hippocampus. MacIver MB, et al. **Br J Anaesth** 1989 Mar;62(3):301–10
Methoxyflurane enhances allyl alcohol hepatotoxicity in rats. Possible involvement of increased acrolein formation. Kershaw WC, et al. **Drug Metab Dispos** 1989 Mar–Apr; 17(2):117–22
Clinical concentrations of volatile anesthetics reduce depolarization-evoked release of [3H]norepinephrine, but not [3H]acetylcholine, from rat cerebral cortex. Bazil CW, et al. **J Neurochem** 1989 Sep;53(3):962–5
Perturbation of opiate and other receptors in vitro by quasi-clinical concentrations of inhalational anesthetics. LaBella FS, et al. **Proc West Pharmacol Soc** 1988;31:245–9

METHOXYHYDROXYMANDELIC ACID see **VANILMANDELIC ACID**

3-METHOXY-4-HYDROXYPHENYLETHANOL see under **CATECHOLS**

METHOXYHYDROXYPHENYLGLYCOL see under **GLYCOLS**

8-METHOXYPSORALEN see **METHOXSALEN**

5-METHOXYTRYPTAMINE see under **SEROTONIN**

METHYCLOTHIAZIDE

THERAPEUTIC USE

The effects of terazosin and methyclothiazide on blood pressure and serum lipids. Luther RR, et al.
Am Heart J 1989 Apr;117(4):842–7

METHYL N-BUTYL KETONE see under KETONES

METHYL CHLORIDE

BLOOD

Different affinity of erythrocyte glutathione-S-transferase to methyl chloride in humans. Peter H, et al. **Arch Toxicol Suppl** 1989;13:128-32

METABOLISM

Influence of cytochrome P-450 inhibitors on the inhalative uptake of methyl chloride and methylene chloride in male B6C3F1 mice after exposure to methyl chloride. Ristau C, et al. **Arch Toxicol Suppl** 1989;13:243-5

The use of multiple endpoints to define the mechanism of action of reproductive toxicants and germ cell mutagens. Working PK, et al. **Prog Clin Biol Res** 1989;302:211-27 (43 ref.)

METHYL CYANIDES see ACETONITRILES

METHYL ETHERS

ADVERSE EFFECTS

Lung cancer due to chloromethyl ethers: bias in cohort definition. Weiss W. **J Occup Med** 1989 Feb;31(2):102-5

ANALYSIS

Simultaneous capillary gas chromatographic profiling of medium-and long-chain fatty acid methyl esters with split injection. Correction for injection-related discrimination by the 'bracketing' method. Volmer M, et al. **J Chromatogr** 1988 Dec 30;434(2):385-94

BLOOD

Profiling of plasma cholesterol ester and triglyceride fatty acids as their methyl esters by capillary gas chromatography, preceded by a rapid aminopropyl-silica column chromatographic separation of lipid classes. Hoving EB, et al. **J Chromatogr** 1988 Dec 30; 434(2):395-409

CHEMICAL SYNTHESIS

Chemical study of the mechanism for conversion of dimethylacetal obtained by methanolysis of plasmalogen to alkenylmethylether. Hara A, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):1011-5

DIAGNOSTIC USE

Homogeneous enzyme immunoassay of estradiol using estradiol-3-O-carboxymethyl ether as hapten. Dhar TK, et al. **Steroids** 1988 May-Jun;51(5-6):519-26

IMMUNOLOGY

Production of highly specific polyclonal and monoclonal antibodies using estradiol-3-O-carboxymethyl ether as hapten. Mandal C, et al. **Steroids** 1988 Nov-Dec; 52(5-6):551-60

METABOLISM

The role of enzyme induction on metabolite formation of bis(2-methoxyethyl) ether in the rat. Cheever KL, et al. **Toxicol Ind Health** 1989 May;5(3):601-7

TOXICITY

Comparison of potency of human carcinogens: vinyl chloride, chloromethylmethyl ether and bis(chloromethyl)ether. Van Duuren BL. **Environ Res** 1989 Aug;49(2):143-51 (41 ref.)

METHYL-GAG see MITOGUAZONE

METHYL GREEN see under ROSANILINE DYES

METHYL MERCAPTOPHOS see under INSECTICIDES, ORGANOTHIOPHOSPHATE

METHYL MERCURY COMPOUNDS see METHYLMERCURY COMPOUNDS

METHYL MESILATE see METHYL METHANESULFONATE

METHYL METHANESULFONATE

ADMINISTRATION & DOSAGE

Micronucleus test with methyl methanesulfonate administered by intraperitoneal injection and oral gavage. Tsuyoshi T, et al. **Mutat Res** 1989 Aug;223(4):383-6

ANALOGS & DERIVATIVES

Phase II trial of methylene dimethane sulphonate (MDMS) in advanced soft tissue sarcomas of the adult. A study of the EORTC Soft Tissue and Bone Sarcoma Group. Steward WP, et al. **Eur J Cancer Clin Oncol** 1989 Aug; 25(8):1251-3

Isolation and characterization of proteins cross-linked to DNA by the antitumor agent methylene dimethanesulfonate and its hydrolytic product formaldehyde. O'Connor PM, et al. **J Biol Chem** 1989 Apr 15;264(11):6391-7

PHARMACOLOGY

Methylmethanesulfonate-induced DNA damage and its repair in cultured human fibroblasts: normal rates of induction and removal of alkali-labile sites in xeroderma pigmentosum (group A) cells. Mirzayans R, et al. **Carcinogenesis** 1988 Dec;9(12):2257-63

Altered induction of the adaptive response to alkylation damage in Escherichia coli recF mutants. Volkert MR. **J Bacteriol** 1989 Jan;171(1):99-103

Alternative pathways of methyl methanesulfonate-induced mutagenesis in Escherichia coli. Sledziewska-Gójska E, et al. **Mol Gen Genet** 1989 Mar;216(1):126-31

Genetic effects of methylmethanesulphonate during meiosis in Saccharomyces cerevisiae. Kelly SL, et al. **Mutagenesis** 1986 Mar;1(2):151-5

Epistasis, photoreactivation and mutagen sensitivity of DNA repair mutants upr-1 and mus-26 in Neurospora crassa. Ishii C, et al. **Mutat Res** 1989 Sep;218(2):95-103

MMS-induced primary aneuploidy and other genotoxic effects in mitotic cells of Aspergillus. Käfer E. **Mutat Res** 1988 Oct;201(2):385-99

Dosage-response relationships for methyl methanesulfonate in Drosophila melanogaster spermatozoa: DNA methylation per nucleotide vs. sex-linked recessive lethal frequency. Lee WR, et al. **Mutat Res** 1989 Apr; 211(2):243-57

Synergism of mutant frequencies in the mouse lymphoma cell mutagenicity assay by binary mixtures of methyl methanesulfonate and ethyl methanesulfonate [published erratum appears in Mutat Res 1989 Apr;222(4):415] Tarlo KS, et al. **Mutat Res** 1988 Oct;206(2):239-46

[The modifying action of methylmethane sulfonate on unscheduled DNA synthesis in the UV irradiation of human peripheral blood lymphocytes] Genter EI, et al. **Radiobiologia** 1989 Jul-Aug;29(4):562-4 (Eng. Abstr.) **(Rus)**

TOXICITY

Tumor induction in initiated mouse skin by phorbol esters and methyl methanesulfonate: correlation between chromosomal damage and conversion ('stage I of tumor promotion') in vivo. Fürstenberger G, et al. **Carcinogenesis** 1989 Apr;10(4):749-52

Toxic effects of methyl methanesulfonate (MMS) on activated macrophages from chickens. Qureshi MA, et al. **Environ Mol Mutagen** 1989;13(3):253-62

Different action of MMS and EMS in UV-sensitive strains of Aspergillus nidulans. Babudri N, et al. **Mutat Res** 1989 May;217(3):211-7

Methyl methanesulphonate (MMS) is clearly mutagenic in S. typhimurium strain TA1535; a comparison with strain TA100. Eder E, et al. **Mutat Res** 1989 Jul;226(3):145-9

Influence of dam and mismatch repair system on mutagenic and SOS-inducing activity of methyl methanesulfonate in Escherichia coli. Janion C, et al. **Mutat Res** 1989 Jan; 210(1):15-22

Modifying action of gamma-radiation in mutagenesis of E. coli WU36-10 induced by ethylene oxide, ethyl methanesulfonate and methyl methanesulfonate. Kolman A, et al. **Mutat Res** 1989 Jun;212(2):269-74

The role of short-lived lesions in the induction of micronuclei in rat liver by ethylnitrosourea and methyl methanesulphonate: the importance of experimental design. Tates AD, et al. **Mutat Res** 1989 Feb;210(2):271-9

METHYL PARATHION see under PARATHION

METHYL VIOLET see GENTIAN VIOLET

METHYL VIOLOGEN see PARAQUAT

METHYLADENINE RECEPTORS see RECEPTORS, PURINERGIC

METHYLAMINES

Periodate-methylamine degradation of ribonucleotides in rat liver extracts in comparison to extracts of cultured cells. Andersson M. **Anal Biochem** 1988 Oct;174(1):271-4

Modeling the reactivity of acrylic acid and acrylate anion with biological nucleophiles. Frederick CB, et al. **Toxicol Lett** 1989 Jun;47(3):241-7

ANALYSIS

Fecal methylamine and dimethylamine in chronic renal failure. Baba S, et al. **Anal Biochem** 1988 Nov 15; 175(1):252-7

A rapid, sensitive high-performance liquid chromatography analysis of ammonia and methylamine for nitrogenase assays. Bravo M, et al. **Anal Biochem** 1988 Dec; 175(2):482-91

BIOSYNTHESIS

Formation of aliphatic amine precursors of N-nitrosodimethylamine after oral administration of choline and choline analogues in the rat. Zeisel SH, et al. **Food Chem Toxicol** 1989 Jan;27(1):31-4

Conversion of dietary choline to trimethylamine and dimethylamine in rats: dose-response relationship. Zeisel SH, et al. **J Nutr** 1989 May;119(5):800-4

ISOLATION & PURIFICATION

Isolation of trimethyl amine oxide and other bases from the hydroid Tubularia larynx. Gupta KC, et al. **Comp Biochem Physiol [B]** 1978;61(1):105-6

METABOLISM

Trimethylamine oxidation in liver tissue is not catalyzed by a molybdenum cofactor-dependent enzyme. Johnson JL. **Biofactors** 1988 Jul;1(2):153-5

Variable metabolism of pinacidil: lack of correlation with the debrisoquine and trimethylamine C- and N-oxidative polymorphisms. Ayesh R, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):423-8

Isolation of an ammonium or methylammonium ion transport mutant of Escherichia coli and complementation by the cloned gene. Jayakumar A, et al. **J Bacteriol** 1989 Feb; 171(2):996-1001

Trimethylamine N-oxide respiration by aerobic photosynthetic bacterium, Erythrobacter sp. OCh 114. Arata H, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1011-5

Two different carriers transport both ammonium and methylammonium in Chlamydomonas reinhardtii. Franco AR, et al. **J Biol Chem** 1988 Oct 5;263(28):14039-43

Metabolism of trimethylamines in kelp bass (Paralabrax clathratus) and marine and freshwater pink salmon (Oncorhynchus gorbuscha). Charest RP, et al. **J Comp Physiol [B]** 1988;158(5):609-19

A new type of methylamine oxidase: the sole oxidase produced during growth of Sporobolomyces albo-rubescens on primary alkylamines. Sherlock LA, et al. **Yeast** 1986 Jun;2(2):87-92

PHARMACOLOGY

Selective inactivation of MAO-B by benzyl-dimethyl-silyl-methanamines in vitro. Danzin C, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):540-4

T-lymphocyte killing by T101-ricin A-chain immunotoxin: pH-dependent potentiation with lysosomotropic amines. Casellas P, et al. **Blood** 1988 Oct;72(4):1197-202

Large intramolecular movement in human complement protein C3 induced by methylamine. A small-angle scattering study using monoclonal antibodies as markers. Osterberg R, et al. **Eur J Biochem** 1989 Aug 15; 183(3):507-11

Changes in trypsin-binding properties and conformation of rabbit alpha-2-macroglobulin on reaction with methylamine. Tamamizu S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):898-904

Image processing of proteinase- and methylamine-transformed human alpha 2-macroglobulin. Localization of the proteinases. Boisset N, et al. **J Biol Chem** 1989 Jul 15;264(20):12046-52

POISONING

[Preliminary data on the biological significance of urinary dimethylamine in workers with chronic occupational exposure to alkylamines] Scutaru B, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):593-6 (Eng. Abstr.) **(Rum)**

RADIATION EFFECTS

Photochemical reactions of cytosine and 5-methylcytosine with methylamine and n-butylamine. Shetlar MD, et al. **Photochem Photobiol** 1988 Jun;47(6):779-86

URINE

An unusual case of trimethylaminuria. Ruocco V, et al. **Br J Dermatol** 1989 Mar;120(3):459-61

Lactulose in trimethylaminuria, the fish-odour syndrome. Pike MG, et al. **Helv Paediatr Acta** 1989 Feb;43(4):345-8

Trimethylaminuria: the detection of carriers using a trimethylamine load test. al-Waiz M, et al. **J Inherited Metab Dis** 1989;12(1):80-5

The enhanced daily excretion of urinary methylamine in rats treated with semicarbazide or hydralazine may be related to the inhibition of semicarbazide-sensitive amine oxidase activities. Lyles GA, et al. **J Pharm Pharmacol** 1989 Feb; 41(2):97-100

METHYLARECAIDIN see ARECOLINE

METHYLATION

De novo methylation as major event in the inactivation of transfected herpesvirus thymidine kinase genes in human cells. Tasseron-de Jong JG, et al.

Biochim Biophys Acta 1989 Mar 1;1007(2):215–23
18th annual UCLA symposium. Abstracts: Nuclei acid methylation. **J Cell Biochem Suppl** 1989;13D:197–226
E. coli C: a convenient host strain for rescue of highly methylated DNA. Gossen JA, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9343

METHYLAZOXYMETHANOL ACETATE see under **AZO COMPOUNDS**

METHYLCELLULOSE

Craniofacial contouring and porous acrylic cement. Vaandrager JM, et al. **Ann Plast Surg** 1988 Dec; 21(6):583–93
Porous acrylic cement: evaluation of a novel implant material. van Mullem PJ, et al. **Ann Plast Surg** 1988 Dec; 21(6):576–82
Analysis of positions of substitution of O-methyl or O-ethyl groups in partially methylated or ethylated cellulose by the reductive-cleavage method. D'Ambra AJ, et al. **Carbohydr Res** 1988 Jun 15;177:111–6
Sustained release tablets based on chitosan and carboxymethylcellulose sodium. Inouye K, et al. **Drug Des Deliv** 1987 May;1(4):297–305
[Bacteriologic evaluation of ophthalmic methylcellulose preparations prepared at the hospital] Irkeç M, et al. **Mikrobiyol Bul** 1988;22(3):235–7 (Eng. Abstr.) **(Tur)**

ANALOGS & DERIVATIVES

Effects of intracameral injection of viscoelastic solutions on intraocular pressure in dogs [published erratum appears in Am J Vet Res 1989 Jun;50(6):989] Gerding PA Jr, et al. **Am J Vet Res** 1989 May;50(5):624–8
Methylcellulose for endothelial cell protection. Steele AD, et al. **Aust N Z J Ophthalmol** 1988 Aug;16(3):251–4
Comparison of 2% hydroxypropyl methylcellulose and 1% sodium hyaluronate in implant surgery. Hazariwala K, et al. **Can J Ophthalmol** 1988 Oct;23(6):259–61
Viscoelastic agents. Larson RS, et al. **CLAO J** 1989 Apr–Jun; 15(2):151–60 (128 ref.)
Determination of carboxymethyl-D-glucoses in the product of hydrolytic depolymerization of carboxymethylcellulose by isotachophoresis. Pospíšilík K. **Electrophoresis** 1989 Jan; 10(1):20–2
Assessment of carboxymethylcellulose and 32% dextran 70 for prevention of adhesions in a rabbit uterine horn model. Diamond MP, et al. **Int J Fertil** 1988 Jul–Aug;33(4):278–82
Adhesion re-formation in the rabbit uterine horn model: I. Reduction with carboxymethylcellulose. Diamond MP, et al. **Int J Fertil** 1988 Sep–Oct;33(5):372–5
Tumor response to interferon inducer and radiation effect of serum interferon levels. Lvovsky EA, et al. **J Biol Regul Homeost Agents** 1988 Jan–Mar;2(1):1–6
Elimination of hydroxypropyl methylcellulose from the anterior chamber of the rabbit. Fernandez-Vigo J, et al. **J Cataract Refract Surg** 1989 Mar;15(2):191–5
The kinetics of interferon induction by poly ICLC in humans. Bever CT Jr, et al. **J Interferon Res** 1988 Aug;8(4):419–25
Production of monodispersed capsules. Matsumoto S, et al. **J Microencapsul** 1986 Jan–Mar;3(1):25–31
Thermal characterization of drug/polymer and excipient/polymer interactions in some film coating formulation. Okhamafe AO, et al. **J Pharm Pharmacol** 1989 Jan;41(1):1–6
Thixotropic behavior of a microcrystalline cellulose-sodium carboxymethylcellulose gel. Dolz-Planas M, et al. **J Pharm Sci** 1988 Sep;77(9):799–801
An animal study of different treatments to prevent postoperative pelvic adhesions. Graebe RA, et al. **Microsurgery** 1989;10(1):53–5
Dry eye before and after therapy with hydroxypropyl methylcellulose. Ultrastructural and cytochemical study in 20 patients. Versura P, et al. **Ophthalmologica** 1989; 198(3):152–62
Effect of extender viscosity on the insemination dose for chickens. Bootwalla SM, et al. **Poult Sci** 1988 Aug; 67(8):1218–21
[Concentration-related effects of viscoelastic substances on the cell growth of bovine corneal endothelial cells] Imkamp E, et al. **Fortschr Ophthalmol** 1988;85(4):434–6 (Eng. Abstr.) **(Ger)**
[The tolerance of hydroxypropylmethylcellulose in implantation of posterior chamber lenses] Bigar F, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):21–4 (Eng. Abstr.) **(Ger)**
[In vitro studies of the tolerance of hydroxypropyl methylcellulose (HPMC) with regard to the human corneal endothelium] Schimmelpfennig B. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):668–71 (Eng. Abstr.) **(Ger)**
[Photometric determination of calcium-carboxymethylcellulose in the air of the work area] Dorogova VB, et al. **Gig Tr Prof Zabol** 1989;(5):39–40 **(Rus)**

PHARMACOLOGY

Colony growth of normal and neoplastic cells in various concentrations of methylcellulose. Kluin-Nelemans HC, et al. **Exp Hematol** 1988 Dec;16(11):922–8

TOXICITY

Quantitative measurement of water consumption patterns in lactating female and neonatal Fischer 344 rats employing [14C]methylcellulose. Kirk HD, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):181–4

METHYLCEPHAELINE see **EMETINE**

METHYLCHOLANTHRENE

Dissociation of cellular protein and DNA content in mild and moderate dysplasia as a reflection of the degree of aneuploidy in cancer. Sennerstam R, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):255–60
Complete cDNA sequence of a major 3-methylcholanthrene-inducible cytochrome P-450 isozyme (P-450AFB) of Syrian hamsters with high activity toward aflatoxin B1. Fukuhara M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):265–72
Modulatory influences of exogenous estrogen on MCA-induced carcinogenesis in the uterine cervix of mouse. Das P, et al. **Cancer Lett** 1988 Dec 1;43(1–2):73–7
Modulation of methylcholanthrene-induced carcinogenesis in the uterine cervix of mouse by indomethacin. Rao AR, et al. **Cancer Lett** 1988 Dec 1;43(1–2):15–9
Protection against polycyclic aromatic hydrocarbon-induced skin tumor initiation in mice by green tea polyphenols. Wang ZY, et al. **Carcinogenesis** 1989 Feb;10(2):411–5
[Localization and invasion of the femur in the rat by a soft tissue tumor induced by pellets made of hydroxypropylcellulose mixed with 20-methylcholanthrene: special reference to effects of the periosteum] Yoshida N. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):345–54 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Bacterial mutagenicity of new cyclopenta-fused cata-annelated polycyclic aromatic hydrocarbons, and identification of the major metabolites of benz[j]acephenanthrylene formed by Aroclor-treated rat liver microsomes. Ball LM, et al. **Mutat Res** 1989 Sep; 224(1):115–25

METABOLISM

Modification of transplacental tumorigenesis by 3-methylcholanthrene in mice by genotype at the Ah locus and pretreatment with beta-naphthoflavone. Anderson LM, et al. **Cancer Res** 1989 Apr 1;49(7):1676–81

PHARMACOLOGY

Suppression in the expression of a male-specific cytochrome P450, P450-male: difference in the effect of chemical inducers on P450-male mRNA and protein in rat livers. Shimada M, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):578–87
Phenolsulphonphthalein conjugation and biliary excretion in the rat: influence of phenobarbital and 3-methylcholanthrene. Collado PS, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):17–23
Enhancement of 3-methylcholanthrene-mediated induction of cytochrome P-450 by 17 alpha-ethynylestradiol: immunochemical studies. Sundstrom S, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2215–7
Identification of a novel P450 expressed in rat lung: cDNA cloning and sequence, chromosome mapping, and induction by 3-methylcholanthrene. Kimura S, et al. **Biochemistry** 1989 May 2;28(9):3798–803
Strain- and organ-dependent differences in induction of aryl hydrocarbon hydroxylase activity by 3-methylcholanthrene. Kiyohara C, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):185–91
Characterization of 3-methylcholanthrene effects on the rat glucocorticoid receptor in vivo. Sunahara GI, et al. **Cancer Res** 1989 Jul 1;49(13):3535–41
Enhancement of gap junctional communication by retinoids correlates with their ability to inhibit neoplastic transformation. Hossain MZ, et al. **Carcinogenesis** 1989 Sep; 10(9):1743–8
Transplacental induction of cytochromes P-450IA1 and P-450IA2 by polycyclic aromatic carcinogens: TCDD-binding protein level as the rate-limiting step. Marie S, et al. **Carcinogenesis** 1988 Nov;9(11):2059–63
Differential induction of fetal mouse liver and lung cytochromes P-450 by beta-naphthoflavone and 3-methylcholanthrene. Miller MS, et al. **Carcinogenesis** 1989 May;10(5):875–91
3-Methylcholanthrene does induce mixed function oxidase activity in hepatopancreas of spiny crab Maja crispata. Batel R, et al. **Comp Biochem Physiol [C]** 1988;90(2):435–8
In vitro transformation of rat cells by 3-methylcholanthrene: activation of the ras oncogene. Ehm I, et al. **Exp Pathol** 1988;34(3):133–9
Synthesis of sex-specific forms of cytochrome P-450 in rat liver is transiently suppressed by hepatic monooxygenase inducers. Emi Y, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):40–3
Purification and characterization of cytochromes P-450 from liver microsomes of 3-methylcholanthrene-treated crab-eating monkeys. Ohmachi T, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):307–11
Purification and properties of a form of UDP-glucuronyltransferase from liver microsomes of 3-methylcholanthrene-treated rats. Yokota H, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):531–6
Influence of selenium on 3-methylcholanthrene induced skin carcinogenesis in mice. Bansal MP, et al. **J Environ Pathol Toxicol Oncol** 1988;8(7 Spec No):49–53
Epidermal cytochrome P-450: immunochemical characterization of isoform induced by topical application of 3-methylcholanthrene to neonatal rat. Khan WA, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):921–7
Potentiation of 3-methylcholanthrene induction of rat hepatic cytochrome P450IA1 by dexamethasone in vivo. Sherratt AJ, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):667–72
Detection and characterization of a low affinity form of cytosolic Ah receptor in livers of mice nonresponsive to induction of cytochrome P1-450 by 3-methylcholanthrene. Okey AB, et al. **Mol Pharmacol** 1989 Jun;35(6):823–30
The human cytochrome Cyp1A2 gene contains regulatory elements responsive to 3-methylcholanthrene. Quattrochi LC, et al. **Mol Pharmacol** 1989 Jul;36(1):66–71
Tissue distribution of inducible aldehyde dehydrogenase activity in the rat after treatment with phenobarbital or methylcholanthrene. Vasiliou V, et al. **Pharmacol Toxicol** 1989 Jan;64(1):39–42
Influence of protein and RNA synthesis inhibitors on methylcholanthrene-mediated induction of aryl hydrocarbon hydroxylase activity in intestinal mucosa. Al-Turk WA, et al. **Pharmacology** 1988;37(6):403–11
Tumorigenic methylcholanthrene transformants of C3H/10T1/2 cells have a common nucleotide alteration in the c-Ki-ras gene. Chen AC, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1608–11
[Identification of molecular forms of cytochrome P-450 isolated from liver microsomes of rats induced with phenobarbital and 3-methylcholanthrene] Guliaeva LF, et al. **Biokhimiia** 1989 Mar;54(3):487–94 (Eng. Abstr.) **(Rus)**

TOXICITY

Uroporphyria produced in mice by 20-methylcholanthrene and 5-aminolaevulinic acid. Urquhart AJ, et al. **Biochem J** 1988 Jul 15;253(2):357–62
Induction of hepatic cytochrome P-450 activity in wild cotton rats (Sigmodon hispidus) by phenobarbital and 3-methylcholanthrene. Elangbam CS, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):716–20
Influence of long term treatment with 3-methylcholanthrene or carbaryl on mixed-function oxidase activity in 3T3 fibroblasts: studies by microspectrofluorimetry on single cells. Lahmy S, et al. **Cell Biochem Funct** 1988 Oct; 6(4):275–82
Chromosomal changes in cell lines from mouse tumors induced by nickel sulfide and methylcholanthrene. Christie NT, et al. **Cell Biol Toxicol** 1988 Dec;4(4):427–45
Differentiation of cultured epithelial cells: response to toxic agents. Rice RH, et al. **Environ Health Perspect** 1989 Mar; 80:239–46
The relative importance of Ah versus H-2 genotype on Trichinella resistance following exposure to 3-methylcholanthrene. Johnson BE, et al. **Int J Immunopharmacol** 1989;11(2):217–27
Modulation of 3-methylcholanthrene toxicity in cultured neoplastic keratinocytes by glucocorticoids and retinoids is not accounted for by macromolecular adduct formation. Rubin AL, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2961–5
Cytosolic aldehyde dehydrogenases of rat liver. Properties of forms present in liver nodules from 20-methylcholantrene treated and untreated rats, and in livers from 20-methylcholantrene treated normal rats. Ritter E, et al. **Prog Clin Biol Res** 1989;290:35–47
[Tumor formation in the lungs of mice of various strains during virus-chemical cocarcinogenesis and the action of immunostimulants] Shevchenko IN. **Mikrobiol Zh** 1987 Sep–Oct;49(5):70–6 (Eng. Abstr.) **(Rus)**
[Natural killer activity of the splenocytes in C3HA strain mice during 20-methylcholanthrene-induced carcinogenesis] Pogodina ON, et al. **Tsitologiia** 1989 Feb; 31(2):220–5 (Eng. Abstr.) **(Rus)**

METHYLDIMETHYLAMINOAZOBENZENE see under **DIMETHYLAMINOAZOBENZENE**

METHYLDIPHENYLHYDRAMINE see **ORPHENADRINE**

METHYLDOPA

ADMINISTRATION & DOSAGE

The effect of a single daily low dose of methyldopa and K+ sparing diuretic on blood pressure in the elderly. Fidel J, et al. **Br J Clin Pract** 1988 Dec;42(12):491–4

ADVERSE EFFECTS

Manic syndrome after discontinuation of methyldopa [letter] Labbate LA, et al. **Am J Psychiatry** 1989 Aug; 146(8):1075–6
Alpha-methyldopa-induced systemic vasculitis confused

with Wegener's granulomatosis [letter] Matteson EL, et al. **Arthritis Rheum** 1989 Mar;32(3):356–7
Methyldopa–induced systemic lupus erythematosus. Nordstrom DM, et al. **Arthritis Rheum** 1989 Feb; 32(2):205–8
Cholestatic liver injury after prolonged exposure to methyldopa. Moses A, et al. **Digestion** 1989;42(1):57–60
Methyldopa–induced syndrome of inappropriate antidiuretic hormone secretion and bone marrow granulomatosis. Varkel Y, et al. **Drug Intell Clin Pharm** 1988 Sep; 22(9):700–1
Methyldopa–related convergence insufficiency. Tassinari J. **J Am Optom Assoc** 1989 Apr;60(4):311–4
Chronic hepatitis and indolent cirrhosis due to methyldopa: the bottom of the iceberg? Lee WM, et al. **J S C Med Assoc** 1989 Feb;85(2):75–9
Complete atrioventricular block induced by methyldopa. Rosen B, et al. **PACE** 1988 Nov;11(11 Pt 1):1555–8

ANALOGS & DERIVATIVES

The preparation of a urokinase–AT–III–PGE1–methyldopa complex, and its effects on platelet adhesion, coagulation times, protein adsorption, and fibrinolysis. Chandy T, et al. **Artif Organs** 1989 Jun;13(3):229–37

ANALYSIS

Spectrophotometric determination of microquantities of Carbidopa, Levodopa and alpha–methyldopa using molybdatophosphoric acid. Issopoulos PB. **Pharm Acta Helv** 1989;64(3):82–5

METABOLISM

Comparison of in vitro dissolution of proprietary methyl dopa preparations. Morton DJ. **Cent Afr J Med** 1988 Jan; 34(1):7–9
alpha–Methyldopa metabolism in central serotonergic nerve terminals: effects on serotonin levels, synthesis and release. Wolf WA, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):43–53

PHARMACOKINETICS

Comparative pharmacokinetics of D– and L–alphamethyldopa in plasma, aqueous humor, and cerebrospinal fluid in rabbits. Auclair E, et al. **Fundam Clin Pharmacol** 1988;2(4):283–93
Use of the peptide carrier system to improve the intestinal absorption of L–alpha–methyldopa: carrier kinetics, intestinal permeabilities, and in vitro hydrolysis of dipeptidyl derivatives of L–alpha–methyldopa. Hu M, et al. **Pharm Res** 1989 Jan;6(1):66–70

PHARMACOLOGY

alpha–Methyldopa produces mydriasis in the rat by stimulation of CNS alpha 2–adrenoceptors. Hey JA, et al. **Br J Pharmacol** 1988 Jul;94(3):834–8
Limitation of the alpha–methylnorepinephrine hypothesis in the hypotensive effect of alpha–methyldopa. Tung CS, et al. **Clin Exp Hypertens [A]** 1989;11(1):45–58
Effect of methyldopa on prolactin serum concentration. Comparison between normal and sustained–release formulations. Baldini M, et al. **Eur J Clin Pharmacol** 1988; 34(5):513–5
Correlation between fall in blood pressure and in vivo amine release after alpha–methylDOPA. Kapoor V, et al. **Eur J Pharmacol** 1989 May 30;164(3):531–8
Possible involvement of beta endorphin(1–31) and dynorphin(1–13) in the central hypotensive mechanism of action of alpha methyldopa. van Giersbergen PL, et al. **Neuroendocrinology** 1989 Jan;49(1):71–9
[In vitro study of changes in the fluidity and activity of Na+/K+–ATPase of the microvillous placental membrane induced by alpha–methyldopa] Valensise H, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):411–8 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

The effects of long term methyldopa in patients with hypoxic cor pulmonale. Evans TW, et al. **Br J Dis Chest** 1988 Oct; 82(4):405–13
Comparison of antihypertensive efficacy and perinatal safety of labetalol and methyldopa in the treatment of hypertension in pregnancy: a randomized controlled trial. Plouin PF, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):868–76
Refractory hypertension [letter] Neill P. **Cent Afr J Med** 1988 Feb;34(2):37–8
Ketanserin in mild to moderate hypertension in the elderly: a double–blind study versus methyldopa. Cattin L, et al. **Clin Ther** 1989 May–Jun;11(3):363–72
Treatment of resistant hypertension: 3 years of follow–up with the combination of verapamil and methyldopa. Spritzer N, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S65–7
[Randomized, comparative study on the treatment of moderate arterial hypertension during pregnancy: methyldopa, acebutolol, labetalol] Lardoux H, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:137–40 (Eng. Abstr.) **(Fre)**
[Effect of hydrochlorothiazide and methyldopa on lipid metabolism in patients with essential hypertension] Mion Júnior D, et al. **AMB Rev Assoc Med Bras** 1988 Mar–Apr; 34(2):41–3 (Eng. Abstr.) **(Por)**
[Chronotherapy of hypertension with dopegit] Zaslavskaia RM, et al. **Sov Med** 1988;(6):79–81 **(Rus)**

TOXICITY

Neurobehavioral teratogenic effects of clomipramine and alpha–methyldopa. De Boer S, et al. **Neurotoxicol Teratol** 1989 Jan–Feb;11(1):77–84
Toxicity studies of amphetamine sulfate, ampicillin trihydrate, codeine, 8–methoxypsoralen, alpha–methyldopa, penicillin VK and propantheline bromide in rats and mice. Dunnick JK, et al. **Toxicology** 1989 Jun 1;56(2):123–36

METHYLDOPAHYDRAZINE see **CARBIDOPA**

METHYLDOPATE see **METHYLDOPA**

METHYLENE BLUE

Laser flash spectroscopy of methylene blue with nucleic acids. Effects of ionic strength and pH. van der Putten WJ, et al. **Photochem Photobiol** 1989 Feb;49(2):145–51

ADMINISTRATION & DOSAGE

Uptake and therapeutic effectiveness of 125I– and 211At–methylene blue for pigmented melanoma in an animal model system. Link EM, et al. **Cancer Res** 1989 Aug 1;49(15):4332–7
[Experiences on application of a silver sulphadiazine–methylene blue cream for tangential excision and escharotomy of burn wounds] Li TZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):55–6, 49 (Eng. Abstr.) **(Chi)**

ADVERSE EFFECTS

Methylene blue baby [letter] Troche BI. **N Engl J Med** 1989 Jun 29;320(26):1756–7
The dark side of methylene blue [letter] Johnson PC, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1076–7

ANALOGS & DERIVATIVES

Permanent metachromatic effect of 1,9–dimethyl–methylene blue on acidic mucopolysaccharides of mastocytes. Pokorny E, et al. **Acta Morphol Hung** 1988;36(3–4):143–6
Dimethylmethylene blue–based spectrophotometry of glycosaminoglycans in untreated urine: a rapid screening procedure for mucopolysaccharidoses. de Jong JG, et al. **Clin Chem** 1989 Jul;35(7):1472–7
[Indirect spectrophotometric microdetermination of sulfated glycosaminoglycans with dimethylmethylene blue] Müller G, et al. **Z Med Lab Diagn** 1989;30(3):180–5 (Eng. Abstr.) **(Ger)**

ANALYSIS

High–performance liquid chromatography of gentian violet, its demethylated metabolites, leucogentian violet and methylene blue with electrochemical detection. Roybal JE, et al. **J Chromatogr** 1989 Apr 21;467(1):259–66

DIAGNOSTIC USE

An evaluation of the intraoperative staining technique using methylene blue for the detection of hyperplastic parathyroid glands. Kobayashi S, et al. **Jpn J Surg** 1988 Nov;18(6):729–31
Effect of methylene blue on estrogen–receptor activity [published erratum appears in Radiology 1989 Jun;171(3):878] Hirsch JI, et al. **Radiology** 1989 Apr; 171(1):105–7

ISOLATION & PURIFICATION

[Thin–layer and high performance liquid chromatographic study of tetramethylthionin chloride (methylene blue) used in general medicine and tetramethylthionin base for the eyes] Balansard G, et al. **Ann Pharm Fr** 1988;46(2):129–32 (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

The distribution of drugs administered using the Bier's technique [letter] Beaumont AC, et al. **Anaesthesia** 1989 Jun;44(6):529–30

PHARMACOLOGY

Effects of methylene blue on rhythmic activity and membrane potential in the canine proximal colon. Sanders KM, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G779–84
Methylene blue plus light mediates 8–hydroxyguanine formation in DNA. Floyd RA, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):106–11
Effect of methylene blue and cobaltous chloride on the alloxan–induced changes in collagen characteristics in the skin of garden lizard Calotes versicolor. Mishra G, et al. **Arch Gerontol Geriatr** 1989 Jan;8(1):1–12
Potential of methylene blue to block oxygen radical generation in reperfusion injury. Kelner MJ, et al. **Basic Life Sci** 1988;49:895–8
Reduction of doxorubicin toxicity by methylene blue in cultured rat myocardial cells. Anderson RJ, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2568–72
Methylene blue inhibits the arachidonic acid metabolism in human blood platelets. Lösche W, et al. **Biomed Biochim Acta** 1988;47(10–11):S100–3
Methylene blue but not changes in cyclic GMP inhibits resting and bradykinin–stimulated production of prostacyclin by pig aortic endothelial cells. Martin W, et al. **Br J Pharmacol** 1989 May;97(1):51–6
Detergent and methylene blue affect endothelium–dependent vasorelaxation and pressure/flow relations in rat blood perfused mesenteric arterial bed. Randall MD, et al. **Br J Pharmacol** 1988 Dec;95(4):1081–8
Effect of artificial electron acceptors on the cytotoxicity of mitomycin C and doxorubicin in human lung tumor cells. Keizer HG, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1113–8
Methylene blue protects intestinal mucosa from free radical–mediated sublethal radiation damage. Hrushesky WJ, et al. **Free Radic Biol Med** 1988;5(4):207–13
In–vitro toxoplasmacidal activity of cationic electron carriers. Chang HR, et al. **J Antimicrob Chemother** 1989 Feb;23(2):229–35
Methylene blue selectively inhibits pulmonary vasodilator responses in cats. Hyman AL, et al. **J Appl Physiol** 1989 Mar;66(3):1513–7
Methylene blue potentiates vascular reactivity in isolated rat lungs. Mazmanian GM, et al. **J Appl Physiol** 1989 Mar; 66(3):1040–5
The roles of superoxide anion and methylene blue in the reductive activation of indoleamine 2,3–dioxygenase by ascorbic acid or by xanthine oxidase–hypoxanthine. Sono M. **J Biol Chem** 1989 Jan 25;264(3):1616–22
Effects of methylene blue on the uptake, release and metabolism of noradrenaline in mesenteric arterial vessels. Soares–da–Silva P, et al. **J Pharm Pharmacol** 1988 Aug; 40(8):534–8
Action of methylene blue and haemoglobin in rabbit aorta in relation to the surface of drug entry. Pascual R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):340–7
Circadian susceptibility–resistance cycles to radiation and their manipulability by methylene blue. Scheving LE, et al. **Pharmacol Ther** 1988;39(1–3):397–402
Methylene blue enhances lateral association of fibrin resulting in rapid gelation and thick fiber formation. Carr ME Jr, et al. **Thromb Haemost** 1989 Apr 25;61(2):230–3
Methylene blue for neutralization of heparin. Sloand EM, et al. **Thromb Res** 1989 Jun 15;54(6):677–86
[Cytospectrophotometric research on hemoglobin in human erythrocytes. I. The methemoglobin content in intact erythrocytes and its alteration under the influence of chromosmon, ascorbic acid, riboflavin and glutathione] Filev LV, et al. **Tsitologiia** 1989 Mar;31(3):336–43 (Eng. Abstr.) **(Rus)**

POISONING

[Neonatal hemolytic anemia after intra–amniotic injection of methylene blue] Poinsot J, et al. **Arch Fr Pediatr** 1988 Nov; 45(9):657–60 (13 ref.) (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Methylene blue in mania [letter] Naylor GJ, et al. **Biol Psychiatry** 1988 Dec;24(8):941–2
On "suicide with dapsone" [letter] Pannikar VK, et al. **Indian J Lepr** 1989 Apr;61(2):306

TOXICITY

Adverse effects of methylene blue on human sperm motility, components of human reproductive tract fluids, and mouse embryo cleavage. Coddington CC, et al. **Fertil Steril** 1989 Mar;51(3):480–5

METHYLENE CHLORIDE see under **HYDROCARBONS, CHLORINATED**

METHYLENEBIS(CHLOROANILINE) see under **BENZHYDRYL COMPOUNDS**

3,4–METHYLENEDIOXYAMPHETAMINE see under **AMPHETAMINES**

METHYLENESULFONATES see **METHANESULFONATES**

METHYLENETETRAHYDROFOLATE DEHYDROGENASE see under **OXIDOREDUCTASES**

METHYLERGOBASIN see **METHYLERGONOVINE**

METHYLERGOMETRIN see **METHYLERGONOVINE**

METHYLERGONOVINE

ADVERSE EFFECTS

Methylergonovine–induced hypertonus in term pregnancy. A case report. Moise KJ Jr, et al. **J Reprod Med** 1988 Sep;33(9):771–3

DIAGNOSTIC USE

Effect of intracoronary nicardipine on

methylergonovine-induced coronary artery spasm in patients with variant angina. Bertrand ME, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):39-43

[Effect of ergonovine and the cold stress test on time intervals of left ventricular systole and their significance for the diagnosis of coronary heart disease] Gawor Z, et al. **Z Gesamte Inn Med** 1988 Aug 15;43(16):445-9 (Eng. Abstr.) **(Ger)**

METHYLESTRENOLONE see **NORMETHANDROLONE**

METHYLGALACTOSIDES see under **METHYLGLYCOSIDES**

METHYLGLUCAMINE DIATRIZOATE see **DIATRIZOATE MEGLUMINE**

METHYLGLUCOSIDES see under **METHYLGLYCOSIDES**

METHYLGLYCINE see under **GLYCINE**

METHYLGLYCOSIDES

X-ray structural and n.m.r.-spectral studies of methyl alpha-L-evalopyranoside: reassignment of anomeric configuration for the methanolysis product of methyl 6-deoxy-3-C-methyl-alpha-L-mannofuranoside. Giuliano RM, et al. **Carbohydr Res** 1989 Jan 15;185(1):61-7

Improved synthesis of the 2-, 3-, and 4-deoxy derivatives from methyl beta-D-galactopyranoside. Lin TH, et al. **Carbohydr Res** 1989 Jun 1;188:228-38

Semiempirical, sodium-D molar rotations of pyranosides and other carbohydrate model compounds. Sathyanarayana BK, et al. **Carbohydr Res** 1988 Oct 1;181:223-8

ANALYSIS

Determination of carboxymethyl-D-glucoses in the product of hydrolytic depolymerization of carboxymethylcellulose by isotachophoresis. Pospíšilík K. **Electrophoresis** 1989 Jan; 10(1):20-2

BLOOD

Analysis of protein-mediated 3-O-methylglucose transport in rat erythrocytes: rejection of the alternating conformation carrier model for sugar transport. Helgerson AL, et al. **Biochemistry** 1989 May 30;28(11):4580-94

CHEMICAL SYNTHESIS

A facile formation of 2,5-anhydro sugars by ring contraction in methyl hexopyranoside 2-triflates under conditions of nucleophilic displacement. Baer HH, et al. **Carbohydr Res** 1989 Apr 1;187(1):67-92

Synthesis of branched-chain sugars: a stereoselective route to sibirosamine, kansosamine, and vinelose from a common precursor. Giuliano RM, et al. **Carbohydr Res** 1988 Dec 1;183(2):277-85

Preparation and calculated conformations of the 2'-, 3'-, 4'-, and 6'-deoxy, 3'-O-methyl, 4'-epi, and 4'- and 6'-deoxy-fluoro derivatives of methyl 4-O-alpha-D-galactopyranosyl-beta-D-galactopyranoside (methyl beta-D-galabioside). Kihlberg J, et al. **Carbohydr Res** 1989 Feb 1;185(2):171-90

Systematic chemical synthesis and n.m.r. spectra of methyl alpha-glycosides of isomalto-oligosaccharides and related compounds. Kováč P, et al. **Carbohydr Res** 1988 Dec 31; 184:87-112

Improved synthesis of the 2-, 3-, and 4-deoxy derivatives from methyl beta-D-galactopyranoside. Lin TH, et al. **Carbohydr Res** 1989 Jun 1;188:228-38

[Synthetic studies in the series of polyene macrolide antibiotics. 4. Synthesis of methyl-2,4,6-trideoxy-3-0-benzoyl-2,4-di-C-methyl-alpha-L-talo-hexopyranoside and 2,4,6-trideoxy-2,4-di-C-methyl-L- galactitol, the stereoisomers of the fragment C33-C38 of amphotericin B] Romanovich AIu, et al. **Bioorg Khim** 1988 Aug; 14(8):1103-8 (Eng. Abstr.) **(Rus)**

[Synthetic studies in the series of polyene macrolide antibiotics. 5. Synthesis of methyl-2,4,6-trideoxy-2,4-di-C-methyl-alpha-L-gluco-hexopyranoside and methyl-2,4,6-trideoxy-2,4-di-C-methyl-alpha-L-manno-hexopyranoside, the stereoisomers of the C33-C38 fragment of amphotericin B] Romanovich AIu, et al. **Bioorg Khim** 1988 Aug;14(8):1109-12 (Eng. Abstr.) **(Rus)**

[Synthetic studies in the series of polyene macrolide antibiotics. 6. Synthesis of methyl-2,4,6-trideoxy-2,4-dimethyl-alpha-altro-hexopyranoside, the C33-C38 fragment of amphotericin B] Romanovich AIu, et al. **Bioorg Khim** 1988 Aug; 14(8):1113-6 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Measurement of blood-brain hexose transport with dynamic PET: comparison of [18F]2-fluoro-2-deoxyglucose and [11C]O-methylglucose. Herholz K, et al. **J Cereb Blood Flow Metab** 1989 Feb;9(1):104-10

METABOLISM

Prolonged increase in insulin-stimulated glucose transport in muscle after exercise. Cartee GD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E494-9

Rapid and transitory stimulation of 3-O-methylglucose transport by growth hormone. Carter-Su C, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E723-9

Na+-coupled sugar transport: membrane potential-dependent Km and Ki for Na+. Kimmich GA, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C486-94

Effect of diltiazem on skeletal muscle 3-O-methylglucose transport in bacteremic rats. Westfall MV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R716-21

2-Deoxy-D-glucose accumulation in adipocytes: apparent transport discrimination between 2-deoxy-D-glucose and 3-O-methyl-D-glucose. Thompson KA, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):58-60

3-O-methyl-D-glucose uptake in cultured bovine adrenal chromaffin cells. Bigornia L, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):402-7

Selective pivaloylation of 2-acetamido-2-deoxy sugars. Ljevaković D, et al. **Carbohydr Res** 1988 Nov 1; 182(2):197-205

Dysregulation of glucose transport and transporters in perfused hearts of genetically obese (fa/fa) rats. Zaninetti D, et al. **Diabetologia** 1989 Jan;32(1):56-60

Intestinal transport in megacolonic mice. Alterations in sugar absorption. Carey HV, et al. **Dig Dis Sci** 1989 Feb; 34(2):185-92

Glucose transport into rat skeletal muscle: interaction between exercise and insulin. Wallberg-Henriksson H, et al. **J Appl Physiol** 1988 Aug;65(2):909-13

IIb group metal ions (Zn2+, Cd2+, Hg2+) stimulate glucose transport activity by post-insulin receptor kinase mechanism in rat adipocytes. Ezaki O. **J Biol Chem** 1989 Sep 25;264(27):16118-22

Sulfonylurea binding to adipocyte membranes and potentiation of insulin-stimulated hexose transport. Martz A, et al. **J Biol Chem** 1989 Aug 15;264(23):13672-8

Stimulation of glucose analogue uptake by cerebral microvessel endothelial cells by a product released by astrocytes. Maxwell K, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):69-80

Insulin resistant glucose transport activity in adipose cells from the SHR/N-corpulent rat. Baly DL, et al. **J Nutr** 1989 Apr;119(4):628-32

Increased glucose transport by human fibroblasts with a heritable defect in insulin binding. Longo N, et al. **Metabolism** 1989 Jul;38(7):690-7

Measuring hexose transport in suspended cells. Gliemann J. **Methods Enzymol** 1989;173:616-34

Effect of acute and chronic vanadate administration on sugar transport in rat jejunum. Hajjar JJ, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):35-41

PHARMACOKINETICS

Regulation of glucose carrier activity by AlCl3 and phospholipase C in fat-cells. Obermaier-Kusser B, et al. **Biochem J** 1988 Dec 1;256(2):515-20

Induction of intestinal glucose carriers in streptozocin-treated chronically diabetic rats. Fedorak RN, et al. **Gastroenterology** 1989 Jan;96(1):37-44

[Somatostatin does not modify 3-oxymethylglucose and leucine uptake by rat enterocytes] Crespo CA, et al. **Rev Esp Fisiol** 1988 Sep;44(3):283-6 (Eng. Abstr.) **(Spa)**

METHYLGLYOXAL BIS(GUANYLHYDRAZONE) see **MITOGUAZONE**

METHYLGUANIDINE see under **GUANIDINES**

METHYLHISTAMINES

ANALYSIS

Simultaneous determination of histidine-containing dipeptides, histamine, methylhistamine and histidine by high-performance liquid chromatography. Kasziba E, et al. **J Chromatogr** 1988 Nov 18;432:315-20

BLOOD

Histamine and Nt-methylhistamine in the circulation during intravenous infusion of histamine in normal volunteers. Sheinman BD, et al. **Agents Actions** 1988 Dec;25(3-4):263-6

Analysis of histamine and N tau-methylhistamine in plasma by gas chromatography-negative ion-chemical ionization mass spectrometry. Payne NA, et al. **Anal Biochem** 1989 May 1;178(2):414-20

CEREBROSPINAL FLUID

Rostral-caudal concentration gradients of histamine metabolites in human cerebrospinal fluid. Prell GD, et al. **Agents Actions** 1989 Mar;26(3-4):267-72

Elevated levels of histamine metabolites in cerebrospinal fluid of aging, healthy humans. Prell GD, et al. **Compr Gerontol [A]** 1988 Oct;2(3):114-9

DIAGNOSTIC USE

Highly potent and selective ligands for a new class H3 of histamine receptor. Arrang JM, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S130-2

METABOLISM

tele-Methylhistamine levels and histamine turnover in nuclei of the rat hypothalamus and amygdala. Itoh Y, et al. **J Neurochem** 1989 Sep;53(3):844-8

PHARMACOLOGY

The third histamine receptor. Highly potent and selective ligands. Arrang JM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):79-81

Effects of the histamine H3-agonist (R)-alpha-methylhistamine and the antagonist thioperamide on histamine metabolism in the mouse and rat brain. Oishi R, et al. **J Neurochem** 1989 May; 52(5):1388-92

[Potential interest in powerful and specific ligands for the histamine H3 receptor] Arrang JM, et al. **Allerg Immunol (Paris)** 1988 Nov;20(9):327-9, 331 (Eng. Abstr.) **(Fre)**

URINE

Effect of continuous administration of nicotine on urinary histamine and N tau-methylhistamine levels in the guinea pig. Houdi AA, et al. **Toxicol Lett** 1988 Nov;44(1-2):161-6

METHYLHISTIDINES see under **HISTIDINE**

METHYLHYDRAZINES

Hemoglobin-mediated oxidation of the carcinogen 1,2-dimethylhydrazine to methyl radicals. Netto LE, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):562-72

N-acetylneuraminic acid and N-glycolylneuraminic acid in glycopeptides of colonic tumor and mucosa in rats treated with carrageenan and 1,2-dimethylhydrazine. Arakawa S, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):452-6

Premalignant alterations in rat colonic N1-acetylspermidine levels induced by 1,2-dimethylhydrazine: effects of a high corn oil dietary regimen. Halline AG, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):280-7

Colonic cancer induced by 1,2-dimethylhydrazine: promotion by experimental colitis. Chester JF, et al. **Br J Cancer** 1989 May;59(5):704-5

Induction of renal tumors in cynomolgus monkeys (Macaca fascicularis) by prenatal exposure to 1,2-dimethylhydrazine. Beniashvili DS. **J Natl Cancer Inst** 1989 Sep 6;81(17):1325-7

[Cocarcinogenic and promoting effects of choleretic cholagogues on large bowel carcinogenesis evoked by 1,2-dimethylhydrazine in Wistar rats] Zhang WD. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):286-8 (Eng. Abstr.) **(Chi)**

[Modifying effect of ascorbic acid and sodium ascorbate on uterine carcomogenesis induced by 1,2-dimethylhydrazine in CBA mice] Trukhanova LS. **Eksp Onkol** 1988;10(5):65-6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Induction of rat intestinal carcinogenesis with single doses, low and high repeated doses of 1,2-dimethylhydrazine. Decaens C, et al. **Carcinogenesis** 1989 Jan;10(1):69-72

ANALYSIS

Monomethylhydrazine degradation and its effect on carbon dioxide evolution and microbial populations in soil. Ou LT, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):454-60

METABOLISM

Degradation of monomethylhydrazine by two soil bacteria. Ou LT. **Bull Environ Contam Toxicol** 1988 Dec;41(6):851-7

PHARMACOKINETICS

Free radical activation of monomethyl and dimethyl hydrazines in isolated hepatocytes and liver microsomes. Albano E, et al. **Free Radic Biol Med** 1989;6(1):3-8

PHARMACOLOGY

Enhancement of murine mixed lymphocyte response by 1,1-dimethylhydrazine: characterization and possible mechanism. Tarr MJ, et al. **Cancer Detect Prev** 1988; 12(1-6):573-81

1,2-Dimethylhydrazine-induced alterations in N1-acetylspermidine levels and spermidine N1-acetyltransferase activity in rat colonic mucosa. Halline AG, et al. **Cancer Res** 1989 Feb 1;49(3):633-8

Inositol-phosphate-induced enhancement of natural killer cell activity correlates with tumor suppression. Baten A, et al. **Carcinogenesis** 1989 Sep;10(9):1595-8

An endogenous colon mitosis inhibitor reduces the increased cell proliferation in colonic epithelium induced by dietary cholic acid and treatment with 1,2-dimethylhydrazine. Skraastad O, et al. **Carcinogenesis** 1989 Jan;10(1):79-82

Effect of 3-(2,2,2-trimethylhydrazinium) propionate, gamma-butyrobetaine hydroxylase inhibitor, on isoproterenol-induced mitochondrial dysfunction. Hanaki Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):157-60

[Stimulation with quaterin of DNA replication and repair] Blium IaB, et al. **Ukr Biokhim Zh** 1988 Nov-Dec; 60(6):19-23 (Eng. Abstr.) **(Rus)**

[Regulation of carnitine-dependent metabolism of fatty acids in the rat myocardium using 3-(2,2,2-trimethylhydrazinium) propionate] Shutenko ZhV, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):59-64 (Eng. Abstr.) **(Rus)**

[Effect of DL-carnitine and gamma-butyrobetaine hydroxylase inhibitor 3-(2,2,2-trimethylhydrazinium) propionate on isoproterenol-induced changes in the metabolism of the rat myocardium] Simkhovich BZ, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):30-4 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[Cardioprotective effect of carnitine and its synthetic analog 3-(2,2,2-trimethylhydrazinium) propionate in rats with experimental myocardial infarction] Ianson TM, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):122-5 (Eng. Abstr.) **(Rus)**

TOXICITY

1,2-Dimethylhydrazine-induced alterations in N1-acetylspermidine levels in rat distal colonic mucosa: effects of 2-difluoromethylornithine. Halline AG, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):106-14

Suppression of a a carcinogen (1,2-dimethylhydrazine dihydrochloride)-induced increase in mitotic activity in the colonic crypts of rats by addition of dietary cellulose. Cameron IL, et al. **Cancer Res** 1989 Feb 15;49(4):991-5

Inositol and inositol hexaphosphate suppress cell proliferation and tumor formation in CD-1 mice. Shamsuddin AM, et al. **Carcinogenesis** 1989 Aug;10(8):1461-3

1,2-Dimethylhydrazine carcinogenesis in neonatally androgenized CBA mice. Smirnova IO, et al. **Carcinogenesis** 1988 Nov;9(11):1927-9

Characterization of stereomicroscopically identified preneoplastic lesions during dimethylhydrazine-induced colonic carcinogenesis. Sandforth F, et al. **Eur J Clin Invest** 1988 Dec;18(6):655-62

Chloroform inhibition of 1,2-dimethylhydrazine-induced gastrointestinal tract tumors in the Fisher 344 rat. Daniel FB, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):40-5

DNA methylation in rat liver by daminozide, 1,1-dimethylhydrazine, and dimethylnitrosamine. Sagelsdorff P, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):723-30

Genetic factors controlling inheritance of susceptibility to 1,2-dimethylhydrazine. Deschner EE, et al. **J Cancer Res Clin Oncol** 1989;115(4):335-9

Promoter function of carrageenan on development of colonic tumors induced by 1,2-dimethylhydrazine in rats. Arakawa S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec; 34(6):577-85

Influence of dietary cis and trans fats on DMH-induced colon tumors, steroid excretion, and eicosanoid production in rats prone to colon cancer. Sugano M, et al. **Nutr Cancer** 1989; 12(2):177-87

Dose- and time-response of colon carcinogenesis in Fischer-344 rats after a single dose of 1,2-dimethylhydrazine. Glauert HP, et al. **Toxicol Lett** 1989 Sep;48(3):283-7

[The production of epidermal growth factor and polypeptides similar to it in the intestinal mucosa of rats in 1,2-dimethylhydrazine-induced carcinogenesis and compensatory regeneration] Fil'chenko AA, et al. **Eksp Onkol** 1989;11(4):16-20 (Eng. Abstr.) **(Rus)**

[Effect of estradiol dipropionate on the development of uterine sarcoma induced by 1,2-dimethylhydrazine in mice] Morozova OV, et al. **Vopr Onkol** 1989;35(1):52-7 (Eng. Abstr.) **(Rus)**

METHYLHYDROXYPROGESTERONE see **MEDROXYPROGESTERONE**

1-METHYL-3-ISOBUTYLXANTHINE see under **THEOPHYLLINE**

METHYLMALONIC ACID see under **MALONATES**

METHYLMALONYL COA MUTASE see under **ISOMERASES**

METHYLMANNOSIDES see under **METHYLGLYCOSIDES**

METHYLMERCURY COMPOUNDS

Comparative triplet-state properties of the three tryptophan residues in bacteriophage T4 lysozyme and in the enzyme complex with methylmercury(II). Zang LH, et al. **Biochemistry** 1988 Oct 4;27(20):7820-5

A laser Raman spectroscopic study of the interaction of the methylmercury cation with AMP, ADP and ATP. Tajmir-Riahi HA, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):211-6

Volatilization of mercury compounds by methylmercury-volatilizing bacteria in Minamata Bay sediment. Nakamura K, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):651-6

A comparison of the rates of methylation of mercury(II) species in aquatic media by various organotin and organosilicon moieties. Bellama JM, et al. **Sci Total Environ** 1988 Jul 1;73(1-2):39-51

Possible methylation of inorganic mercury by silicones in the environment. Nagase H, et al. **Sci Total Environ** 1988 Jul 1;73(1-2):29-38

ADVERSE EFFECTS

Combined toxicity of ethanol and methylmercury in rat. McNeil SI, et al. **Toxicology** 1988 Dec 30;53(2-3):345-63

ANALYSIS

Methylmercury concentrations in broiler's meat and hen's meat and eggs. Kambamanoli-Dimou A, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):728-34

Water hyacinth (Eichhornia crassipes) to biomonitor genotoxicity of low levels of mercury in aquatic environment. Panda BB, et al. **Mutat Res** 1988 Oct; 206(2):275-9

Effect of industrial pollution on seafood content and dietary intake of total and methylmercury. Buzina R, et al. **Sci Total Environ** 1989 Jan;78:45-57

BLOOD

Mercury incorporation by mature and immature red blood cells. Garrett RJ, et al. **Life Sci** 1974 Aug 15;15(4):733-40

[Evaluation of blood methyl-mercury using HPLC in dentists and their assistants] Perotti R, et al. **Minerva Stomatol** 1989 May;38(5):501-4 (Eng. Abstr.) **(Ita)**

METABOLISM

Methyl mercury uptake across bovine brain capillary endothelial cells in vitro: the role of amino acids. Aschner M, et al. **Pharmacol Toxicol** 1989 Mar;64(3):293-7

Analysis of methyl mercury binding sites on tubulin subunits and microtubules. Vogel DG, et al. **Pharmacol Toxicol** 1989 Feb;64(2):196-201

Species differences in biliary excretion of methylmercury--role of non-protein sulfhydryls in bile. Urano T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):339-51

PHARMACOKINETICS

Uptake of methylmercury in the rat brain: effects of amino acids. Aschner M, et al. **Brain Res** 1988 Oct 11;462(1):31-9

Distribution and retention of organic and inorganic mercury in methyl mercury-treated neonatal rats. Thomas DJ, et al. **Environ Res** 1988 Oct;47(1):59-71

Pharmacokinetics of methylmercury in the blood of monkeys (Macaca fascicularis). Rice DC, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):23-33

Brain and tissue levels of mercury after chronic methylmercury exposure in the monkey. Rice DC. **J Toxicol Environ Health** 1989;27(2):189-98

Distribution of dietary mercury in a dog. Quantitation and localization of total mercury in organs and central nervous system. Hansen JC, et al. **Sci Total Environ** 1989 Jan; 78:23-43

Distribution of mercury 203 in pregnant rats and their fetuses following systemic infusions with thiol-containing amino acids and glutathione during late gestation. Aschner M, et al. **Teratology** 1988 Aug;38(2):145-55

[Effect of ethanol on the accumulation and excretion of mercury in rats] Ando T, et al. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):717-23 (Eng. Abstr.) **(Jpn)**

[Effects of dietary lipids on lipid peroxidation and the accumulation of mercury in rat tissues] Sakamoto M, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):917-22 (Eng. Abstr.) **(Jpn)**

[Mercury content in the lens of rats receiving in methylmercury] Kairada K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1044-7 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Enhanced full-length transcription of Sindbis virus RNA by effective denaturation with methylmercury hydroxide. Schelp C, et al. **Acta Virol (Praha)** 1989 May;33(3):297-302

Differential effects of mercurial and methylmercurial ions on the phrenic nerve and diaphragm of the mouse. Fu WM, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:52-66

Duration dependent effect of methylmercury chloride and antagonists on the enzymes of the central nervous system of rat: II. Acid phosphatase study on the brain. Sood PP, et al. **Cell Mol Biol** 1988;34(3):271-7

Effects of methylmercury on mitotic mouse glioma cells. Miura K, et al. **Environ Res** 1978 Dec;17(3):453-71

The inhibitory effects of nitrous oxide and methylmercury in vivo on methionine synthase (EC 2.1.1.13) activity in the brain, liver, ovary and spinal cord of the rat. Brennt CE, et al. **Gen Pharmacol** 1989;20(4):427-31

Effect of methylmercury body burden on kidney following unilateral nephrectomy. Chen WJ, et al. **J Environ Pathol Toxicol Oncol** 1988;8(7 Spec No):7-13

Differential effects of methylmercuric chloride and mercuric chloride on the histochemistry of rat thyroid peroxidase and the thyroid peroxidase activity of isolated pig thyroid cells. Nishida M, et al. **J Histochem Cytochem** 1989 May; 37(5):723-7

Inhibition of amino acid transport and protein synthesis by HgCl2 and methylmercury in astrocytes: selectivity and reversibility. Brookes N, et al. **J Neurochem** 1989 Oct; 53(4):1228-37

Rapid cell death induced by methyl mercury in suspension of cerebellar granule neurons. Sarafian T, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):1-10

Block of 45Ca uptake into synaptosomes by methylmercury: Ca++- and Na+-dependence. Shafer TJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):696-702

Methyl mercury stimulates chain elongation by purified HeLa RNA polymerase II. Frenkel GD, et al. **Mol Pharmacol** 1988 Nov;34(5):702-6

Brain, kidney and liver 203Hg-methyl mercury uptake in the rat: relationship to the neutral amino acid carrier. Aschner M. **Pharmacol Toxicol** 1989 Jul;65(1):17-20

POISONING

The auditory system in methyl mercurial intoxication: a neuropathological investigation on 14 autopsy cases in Niigata, Japan. Oyanagi K, et al. **Acta Neuropathol (Berl)** 1989;77(6):561-8

Histophysiological changes of sex organs in methylmercury intoxicated mice. Rao MV. **Endocrinol Exp** 1989 Mar; 23(1):55-62

Dose-response analysis of infants prenatally exposed to methyl mercury: an application of a single compartment model to single-strand hair analysis. Cox C, et al. **Environ Res** 1989 Aug;49(2):318-32

[Neurotoxicity of organic mercury compounds] van Welsum RA, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2198-201 (25 ref.) **(Dut)**

TOXICITY

Abnormal neuronal distribution within the cerebral cortex after prenatal methylmercury intoxication. Peckham NH, et al. **Acta Neuropathol (Berl)** 1988;76(3):222-6

Cytogenetic effects of methylmercury in embryos of the killifish, Fundulus heteroclitus. Perry DM, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):569-74

In vivo and in vitro effects of methylmercury on the activities of aminoacyl-tRNA synthetases in rat brain. Hasegawa K, et al. **Arch Toxicol** 1988;62(6):470-2

Developmental disturbances of the fetal brain in guinea-pigs caused by methylmercury. Inouye M, et al. **Arch Toxicol** 1988 Aug;62(1):15-21

Differential effects of methylmercury on the synthesis of protein species in dorsal root ganglia of the rat. Kasama H, et al. **Arch Toxicol** 1989;63(3):226-30

An attempt to assess the inheritable effect of methylmercury toxicity subsequent to prenatal exposure of mice. Inouye M, et al. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):508-14

Toxic effects of mercuric chloride, methylmercuric chloride, and emisan 6 (an organic mercurial fungicide) on ovarian recrudescence in the catfish Clarias batrachus (L.). Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):902-9

Studies on the role of gastrointestinal tract contents in the methylation of inorganic mercury compounds. Ludwicki JK. **Bull Environ Contam Toxicol** 1989 Feb;42(2):283-8

Mercury in women exposed to methylmercury through fish consumption, and in their newborn babies and breast milk. Skerfving S. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):475-82

In vitro cytotoxicity of heavy metals, acrylamide, and organotin salts to neural cells and fibroblasts. Borenfreund E, et al. **Cell Biol Toxicol** 1987 Mar;3(1):63-73

Effects of methylmercury on retinoic acid-induced neuroectodermal derivatives of embryonal carcinoma cells. Cadrin M, et al. **Cell Biol Toxicol** 1988 Mar;4(1):61-80

The effects of methylmercury on the cytoskeleton of murine embryonal carcinoma cells. Wasteneys GO, et al. **Cell Biol Toxicol** 1988 Mar;4(1):41-60

A cell line with decreased sensitivity to the methyl mercury-induced stimulation of alpha-amanitin sensitive RNA synthesis in isolated nuclei. Frenkel GD, et al. **Comp Biochem Physiol [B]** 1988;91(3):477-82

Toxic effects of mercurials on thyroid function of the catfish, Clarias batrachus (L.). Kirubagaran R, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):265-71

Modification of methylmercury neurotoxicity by vitamin E. Chang LW, et al. **Environ Res** 1978 Dec;17(3):356-66

Blood mercury concentrations following methyl mercury exposure in adult and infant monkeys. Rice DC. **Environ Res** 1989 Jun;49(1):115-26

Mechanism of inhibition of rat brain (Na+-K+)-stimulated adenosine triphosphatase reaction by cadmium and methyl mercury. Ahammadsahib KI, et al. **J Biochem Toxicol** 1987 Fall-Winter;2:169-80

Ultrastructure of kidney of ducks exposed to methylmercury, lead and cadmium in combination. Rao PV, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):19-44

Quantitative estimation of enzymatic changes in the trigeminal ganglia of rat with acute high dose of methylmercuric chloride. Unnikumar KR, et al. **J Environ Pathol Toxicol Oncol** 1989 Mar-Apr;9(2):201-9

Regional cerebral glucose metabolism and blood flow during the silent phase of methylmercury neurotoxicity in rats. Hargreaves RJ, et al. **J Neurochem** 1988 Nov;51(5):1350-5

Methylmercury-induced movement and postural disorders in developing rat: high-affinity uptake of choline, glutamate, and gamma-aminobutyric acid in the cerebral cortex and caudate-putamen. O'Kusky JR, et al. **J Neurochem** 1989 Oct;53(4):999-1006

Cellular mechanisms underlying the increase in cytosolic free calcium concentration induced by methylmercury in cerebrocortical synaptosomes from guinea pig. Kauppinen RA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1248-54

Combined nephrotoxicity of methylmercury, lead, and cadmium in Pekin ducks: metallothionein, metal interactions, and histopathology. Prasada Rao PV, et al. **J Toxicol Environ Health** 1989;26(3):327-48

Genotoxicity and bioaccumulation of methyl mercury and mercuric chloride in vivo in the newt Pleurodeles waltl. Zoll C, et al. **Mutagenesis** 1988 Jul;3(4):337-43

Visual recognition memory deficits in methylmercury-exposed Macaca fascicularis infants. Gunderson VM, et al. **Neurotoxicol Teratol** 1988 Jul-Aug; 10(4):373-9

Different histochemical findings in the brain produced by mercuric chloride and methyl mercury chloride in rats. Suda I, et al. **Neurotoxicology** 1989 Spring;10(1):113-25

Hormonal influence on carcinogenicity of methylmercury in mice. Hirano M, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):886-93

The effects of methylmercury on the developing brain. Choi BH. **Prog Neurobiol** 1989;32(6):447-70 (124 ref.)

Behavioral teratogenic effect of methylmercury and d-amphetamine: meta-analysis and power analysis of data from the Collaborative Behavioral Teratology Study of National Center for Toxicological Research. Tachibana T. **Teratology** 1989 Aug;40(2):93-100

Effects of methylmercury on neurotransmitter release from rat brain synaptosomes. Minnema DJ, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):510-21

Studies on the etiology of trace metal-induced porphyria: effects of porphyrinogenic metals on coproporphyrinogen oxidase in rat liver and kidney. Woods JS, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):183-90

Methylmercury- and mercuric-chloride-induced alterations in rat epididymal sperm. Chowdhury AR, et al. **Toxicol Lett** 1989 May;47(2):125-34

Effects of prenatal methylmercury exposure on urinary proximal tubular enzyme excretion in neonatal rats. Saillenfait AM, et al. **Toxicology** 1989 Apr;55(1-2):153-60

[Effects of methylmercuric chloride on the ultradian rhythms of the locomotor activity in rats] Watanabe H, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):688-93 (Eng. Abstr.) **(Jpn)**

METHYLMESYLATE see **METHYL METHANESULFONATE**

METHYLMETHACRYLATES

A case of methylmethacrylate bladder stone. Radford PJ, et al. **Acta Orthop Scand** 1989 Apr;60(2):218-9

Antibiotic beads in the management of surgical infections. Calhoun JH, et al. **Am J Surg** 1989 Apr;157(4):443-9 (73 ref.)

Craniofacial contouring and porous acrylic cement. Vaandrager JM, et al. **Ann Plast Surg** 1988 Dec; 21(6):583-93

Porous acrylic cement: evaluation of a novel implant material. van Mullem PJ, et al. **Ann Plast Surg** 1988 Dec; 21(6):576-82

Clinical significance of a dialysis membrane that can remove beta 2-microglobulin (beta 2m). Ono T, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):342-5

Microencapsulation of mammalian cells in a hydroxyethyl methacrylate-methyl methacrylate copolymer: preliminary development. Stevenson WT, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):747-69

Use of high-performance polyethylene fibres as a reinforcing phase in poly(methylmethacrylate) bone cement. Wagner HD, et al. **Biomaterials** 1989 Mar;10(2):139-41

Coating of pharmaceutical powders by fluidized bed process. III. Aqueous coating with ethyl acrylate-methyl methacrylate-2-hydroxyethyl methacrylate copolymer and the dissolution properties of the products. Fukumori Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3070-8

Comparing like with like: a prospective study of hydrogel and polymethylmethacrylate lenses. Percival SP. **Dev Ophthalmol** 1989;18:111-3

The influence of cementing technique and blood on the strength of the bone-cement interface. Bannister GC, et al. **Eng Med** 1988 Jul;17(3):131-3

Synthetic hydrogel microspheres as substrata for cell adhesion and growth. Shivakumar K, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):353-7

Adaptation of acrylic resin dentures as influenced by the activation mode of polymerization. Takamata T, et al. **J Am Dent Assoc** 1989 Aug;119(2):271-6

Comparison and optimization of three centrifugation systems for reducing porosity of Simplex P bone cement. Davies JP, et al. **J Arthroplasty** 1989;4(1):15-20

Influence of antibiotic impregnation on the fatigue life of Simplex P and Palacos R acrylic bone cements, with and without centrifugation. Davies JP, et al. **J Biomed Mater Res** 1989 Apr;23(4):379-97

Creep studies of multiphase acrylic systems. Oysaed H, et al. **J Biomed Mater Res** 1989 Jul;23(7):719-33

Elastic and ultimate properties of acrylic bone cement reinforced with ultra-high-molecular-weight polyethylene fibers. Pourdeyhimi B, et al. **J Biomed Mater Res** 1989 Jan;23(1):63-80

Compressive properties of polymer coated synthetic hydroxyapatite for bone grafting. Tencer AF, et al. **J Biomed Mater Res** 1985 Oct;19(8):957-69

Characterization of tissue from the bone-polymethylmethacrylate interface in a rat experimental model. Demonstration of collagen-degrading activity and bone-resorbing potential. Coe MR, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):863-74

In vitro evaluation of iris chafe protection afforded by hydrophilic surface modification of polymethylmethacrylate intraocular lenses. Hofmeister FM, et al. **J Cataract Refract Surg** 1988 Sep;14(5):514-9

Antibiotic-impregnated bone cement: an in vitro comparative analysis. Heard GS, et al. **J Foot Surg** 1989 Jan-Feb; 28(1):54-9

Cranioplasty with Palacos R in reconstruction of frontal sinus defects. Mann W, et al. **J Laryngol Otol** 1988 Sep; 102(9):824-7

Sorption of 5-fluorouracil from aqueous solutions onto methyl methacrylate nanoparticles. Yalabik-Kas HS, et al. **J Microencapsul** 1986 Apr-Jun;3(2):71-5

Clandestine foreign body of the middle ear: a warning to hearing aid dispensers. Mast WR, et al. **J Okla State Med Assoc** 1988 Dec;81(12):733-4

The in vivo behavior of gentamicin-PMMA beads in the maxillofacial region. Alpert B, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):46-9

Composite laminate veneers: a clinical study. Walls AW, et al. **J Oral Rehabil** 1988 Sep;15(5):439-54

The use of tobramycin-impregnated polymethylmethacrylate beads in the therapy of deep bone and joint infections. Tsukayama DT, et al. **J Orthop Trauma** 1987;1(3):263-4

Anterior skull defect reconstruction with methyl methacrylate. Robinson AC, et al. **J Otolaryngol** 1989 Aug; 18(5):241-4

Dimensional stability of injection and conventional processing of denture base acrylic resin. Anderson GC, et al. **J Prosthet Dent** 1988 Sep;60(3):394-8

The effectiveness of two disinfectants on denture base acrylic resin with an organic load. Bell JA, et al. **J Prosthet Dent** 1989 May;61(5):580-3

The effect of vacuum-mixed autopolymerizing acrylic resins on porosity and transverse strength. Chee WW, et al. **J Prosthet Dent** 1988 Oct;60(4):517-9

Bond strength of 4-META acrylic resin denture base to cobalt chromium alloy. Jacobson TE, et al. **J Prosthet Dent** 1988 Nov;60(5):570-6

A comparison of the physical properties of four prosthetic veneering materials. Jones RM, et al. **J Prosthet Dent** 1989 Jan;61(1):38-44

Evaluation of primers used for bonding silicone to denture base material. McMordie R, et al. **J Prosthet Dent** 1989 May;61(5):636-9

Measuring fracture toughness of high-impact poly(methyl methacrylate) with the short rod method. Neihart TR, et al. **J Prosthet Dent** 1988 Aug;60(2):249-53

Effect of metal fillers on some physical properties of acrylic resin. Sehajpal SB, et al. **J Prosthet Dent** 1989 Jun; 61(6):746-51

The use of acrylic bone cement for cervical fusion in patients with rheumatoid arthritis. Wilde GP, et al. **J R Soc Med** 1988 Sep;81(9):523-5

Ablation of bone and polymethylmethacrylate by an XeCl (308 nm) excimer laser. Yow L, et al. **Lasers Surg Med** 1989;9(2):141-7

Gel artificial cells as enzyme carrier. Arca E, et al. **Life Support Syst** 1983;1 Suppl 1:262-5

Prospective study comparing hydrogel with PMMA lens implants. Percival P. **Ophthalmic Surg** 1989 Apr; 20(4):255-61

Two views of the use of methylmethacrylate for stabilization of the cervical spine. Clark CR, et al. **Orthopedics** 1989 Apr;12(4):589-96

Prefabricated methyl methacrylate implant for reconstruction of the hemimandible and temporomandibular joint complex [letter] Govila A. **Plast Reconstr Surg** 1989 Aug;84(2):370-2

Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. **Spine** 1989 Jan;14(1):108-10

A rapid method for producing stained sections of plastic embedded undecalcified bone specimens. Emmanual J. **Stain Technol** 1988 Sep;63(5):329-31

Alkaline and acid phosphatase demonstration in human bone and cartilage: effects of fixation interval and methacrylate embedments. Gruber HE, et al. **Stain Technol** 1988 Sep; 63(5):299-306

A simple method for preparing thin (10 microM) histological sections of undecalcified plastic embedded bone with implants. van der Lubbe HB, et al. **Stain Technol** 1988 May; 63(3):171-6

Gentamicin-impregnated polymethylmethacrylate beads for the treatment of septic arthritis. Brown A, et al. **Vet Rec** 1988 Dec 10;123(24):625-6

The prognosis of cranioplasty following large craniectomy in children. Gruber R, et al. **Z Kinderchir** 1988 Dec; 43(6):375-83

[A bonding state between each layer of light-cured resins: a preliminary study] Wang WJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):351-3 **(Chi)**

[Superacryl in plastic surgery in depressions of the forehead and its biological tolerance] Voldřich Z, et al. **Cesk Otolaryngol** 1988 Jul;37(4):227-33 (Eng. Abstr.) **(Cze)**

[The effect of lens haptics on postoperative anterior chamber depth in PMMA posterior chamber lenses] Thill-Schwaninger M, et al. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):427-32 (Eng. Abstr.) **(Ger)**

[Difference of the cellular response between PMMA and silicone intraocular lens material] Matoba M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2150-5 (Eng. Abstr.) **(Jpn)**

[Fibrin deposits on the surface modified PMMA IOLs] Matsumoto T, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):118-23 (Eng. Abstr.) **(Jpn)**

[Prevention of postoperative eventration] Baĭmyshev ES, et al. **Vestn Khir** 1988 Jul;141(7):119-20 **(Rus)**

ADMINISTRATION & DOSAGE

Air embolism during total hip replacement: comparison of two surgical techniques. Evans RD, et al. **Br J Anaesth** 1989 Mar;62(3):243-7

Wound and serum levels of tobramycin with the prophylactic use of tobramycin-impregnated polymethylmethacrylate beads in compound fractures. Eckman JB Jr, et al. **Clin Orthop** 1988 Dec;(237):213-5

[Occlusion therapy in chronic recurrent parotitis? A report of clinical experiences with the use of a fibrin glue-gentamycin mixture] Laskawi R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):367-8 (Eng. Abstr.) **(Ger)**

[Local antibiotic therapy in postoperative and post-traumatic osteitis with the Septopal chain] Weise K, et al. **Unfallchirurg** 1988 Sep;91(9):416-21 (Eng. Abstr.) **(Ger)**

[Improving fiber adhesion by surface oxidation in carbon fiber reinforced bone cement] Hopf T, et al. **Z Orthop** 1989 Mar-Apr;127(2):248-52 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Intra-operative collapse or death related to the use of acrylic cement in hip surgery. Duncan JA. **Anaesthesia** 1989 Feb; 44(2):149-53

Acrylic cement in hip surgery [letter] James ML. **Anaesthesia** 1989 Aug;44(8):694-5

Bone cement [letter] Slade JM. **Anaesthesia** 1989 Feb; 44(2):180

Contact dermatitis from methyl methacrylate in an above-knee prosthesis. Foussereau J, et al. **Contact Dermatitis** 1989 Jan;20(1):69-70

Contact stomatitis due to methyl methacrylate monomer. Kanzaki T, et al. **Contact Dermatitis** 1989 Feb;20(2):146-8

Mortality patterns among men exposed to methyl methacrylate. Collins JJ, et al. **J Occup Med** 1989 Jan; 31(1):41-6

[Organic dementia among dental technicians. A cross-sectional study of dental technicians with opticians as the control group] Prescott E, et al. **Ugeskr Laeger** 1989 Jul 17;151(29):1868-71 (Eng. Abstr.) **(Dan)**

[Tolerance for artificial silicone lenses] Conrad H, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):127-8 **(Fre)**

[Pretumorous states of the stomach in workers manufacturing organic glass] Sharova TG, et al. **Vrach Delo** 1988 Sep; (9):105-7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Release of gentamicin from acrylic bone cement. Elution and diffusion studies. Baker AS, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1551-7

Ridley intraocular lens revisited: chemical analysis of residuals in the original lens material. Chirila TV, et al. **J Cataract Refract Surg** 1989 May;15(3):283-8

The release of residual monomeric methyl methacrylate from acrylic appliances in the human mouth: an assay for monomer in saliva. Baker S, et al. **J Dent Res** 1988 Oct; 67(10):1295-9

Reducing the amount of monomers in intraocular lenses through sterilization by gamma radiation. Ludwig K, et al. **Ophthalmic Res** 1988;20(5):304-7

On studying asymmetric membranes made from polymethylmethacrylate/xylene by the thermal-inversion method. Tsai FJ, et al. **Prog Clin Biol Res** 1989;292:119-28

[Comparative materials testing of human bone and Kallocryl Cf] Schneider D. **Zahn Mund Kieferheilkd** 1988;76(6):607-8 **(Ger)**

[Free methyl-methacrylate content of some dental acrylates] Szabó G, et al. **Fogorv Sz** 1989 Jul;82(7):193-7 (Eng. Abstr.) **(Hun)**

CHEMICAL SYNTHESIS

Synthesis and chemiluminescence of copolymers of 5-amino-8-vinyl-phthalazine-1,4(2H,3H)-dione with methyl methacrylate or styrene, and of alpha, omega-bis[5-amino-phthalazine-1,4(2H,3H)-dion-]8-yl alkanes [= alpha, omega-bis(6-luminyl) alkanes]: investigations on an intramolecular 'distance effect'. Gundermann KD, et al. **J Biolumin Chemilumin** 1987 Sep; 1(4):201-13

ISOLATION & PURIFICATION

Residual monomer in Ridley lens [letter] Drews RC. **J Cataract Refract Surg** 1989 Jul;15(4):463

METABOLISM

Nuclear magnetic resonance spectroscopic studies of the interaction of methyl methacrylate and ethylene dimethacrylate with phosphatidylcholine liposomes as a model for biomembranes. Fujisawa S, et al. **Biomaterials** 1989 Jan;10(1):51–5

[The role of rat liver microsomes in the metabolism of methylmethacrylate to formaldehyde] Kotlovskiĭ IuV, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):14–7 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Pharmacokinetics of methylmethacrylate monomer during total hip replacement in man. Wenda K, et al. **Arch Orthop Trauma Surg** 1988;107(5):316–21

Percutaneous absorption of methyl methacrylate by dental technicians. Rajaniemi R, et al. **Br J Ind Med** 1989 May; 46(5):356–7

Fate of 14C-terpolymer (methylmethacrylate-14C, 2-hydroxyethylmethacrylate, butylacrylate) nanoparticles after peroral administration to rats. Kukan M, et al. **Pharmazie** 1989 May;44(5):339–40

PHARMACOLOGY

Comparison of multinucleated cells elicited in rats by particulate bone, polyethylene, or polymethylmethacrylate. Glowacki J, et al. **J Bone Miner Res** 1986 Aug;1(4):327–31

Multinucleated cells elicited in response to implants of devitalized bone particles possess receptors for calcitonin. Goldring SR, et al. **J Bone Miner Res** 1988 Feb;3(1):117–20

Effects of polymethylmethacrylate exposure upon macrophages. Horowitz SM, et al. **J Orthop Res** 1988; 6(6):827–32

Mechanical effects of intramedullary acrylic cement on osteotomy healing in rats. Reikerås O, et al. **J Orthop Trauma** 1988;2(3):218–21

Lack of sister-chromatid exchange induction by polymethyl methacrylate bone cement in human lymphocytes cultured in vitro. Bigatti MP, et al. **Mutat Res** 1989 Sep;227(1):21–4

Calcium antagonism in isolated rat uterus by methylmethacrylate. Born CK, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):213–26

POISONING

[Various approaches to the study of the late effects of occupational diseases] Penknovich AA, et al. **Gig Tr Prof Zabol** 1989;(5):43–4 (Rus)

[Chronic gastritis in patients with methylmethacrylate poisoning] Sharova TG. **Gig Tr Prof Zabol** 1989;(3):12–6 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

A new form of damage to PMMA intraocular lenses by Nd:YAG laser photodisruptors. Mellerio J, et al. **Eye** 1988; 2 (Pt 4):376–81

[The effect of Co-60 irradiation on the monomer fraction of intraocular PMMA lenses] Ludwig K, et al. **Fortschr Ophthalmol** 1989;86(1):38–40 (Eng. Abstr.) (Ger)

THERAPEUTIC USE

Successful treatment of an infected vascular graft with gentamicin beads. Bailey IS, et al. **Eur J Vasc Surg** 1987 Apr;1(2):143–4

[Use of Septopal in the treatment of bone infections] Foldyna K, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):218–24 (Eng. Abstr.) (Cze)

[Percutaneous injection of methyl-metacrylate in osteoporosis and severe vertebral osteolysis (Galibert's technic)] Lapras C, et al. **Ann Chir** 1989;43(5):371–6 (Eng. Abstr.) (Fre)

TOXICITY

Permanent loss of fingernails due to allergic reaction to an acrylic nail preparation: a sixteen-year follow-up study. Fisher AA. **Cutis** 1989 May;43(5):404–6

Effects of gentamicin and monomer on bone. An in vitro study. Pedersen JG, et al. **J Arthroplasty** 1988;3 Suppl:S63–8

Testing of dioxolan-methyl-metaacrylate (DMA) for hepatotoxicity and nephrotoxicity. Kersten L, et al. **Pharmazie** 1988 Oct;43(10):711–4

Two-year inhalation carcinogenesis studies of methyl methacrylate in rats and mice: inflammation and degeneration of nasal epithelium. Chan PC, et al. **Toxicology** 1988 Nov 30;52(3):237–52

[Intraocular lens materials in the anterior chamber implantation test] Ehrich W, et al. **Klin Monatsbl Augenheilkd** 1989 Feb;194(2):101–4 (Eng. Abstr.) (Ger)

[Experimental research on the Dacryl-4B material for denture bases] Kalivradzhiian ES, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):56–7 (Eng. Abstr.) (Rus)

METHYLMETHANE SULFONATE see METHYL METHANESULFONATE

METHYLMETHYLERGONOVINE see METHYSERGIDE

METHYLNITRONITROSOGUANIDINE

Promotion by ethanol of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Iishi H, et al. **Br J Cancer** 1989 May;59(5):719–21

Enhancement of experimental gastric carcinogenesis induced in spontaneously hypertensive rats by N-methyl-N'-nitro-N-nitrosoguanidine. Tatsuta M, et al. **Cancer Res** 1989 Feb 15;49(4):794–8

Role of neighbouring bases and assessment of strand specificity in ethylmethanesulphonate and N-methyl-N'-nitro-N-nitrosoguanidine mutagenesis in the SUP4-o gene of Saccharomyces cerevisiae. Kohalmi SE, et al. **J Mol Biol** 1988 Dec 5;204(3):561–8

Promotion by nialamide of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Jpn J Cancer Res** 1989 Jun;80(6):521–5

ANALOGS & DERIVATIVES

The complexity of nitrosoguanidine mutagenesis increases with size: observations of the mutational specificity of N-propyl-N'-nitro-N-nitrosoguanidine. van der Vliet GM, et al. **Carcinogenesis** 1989 May;10(5):949–52

Inhibitory effect of (-)-epigallocatechin gallate on carcinogenesis with N-ethyl-N'-nitro-N-nitrosoguanidine in mouse duodenum. Fujita Y, et al. **Jpn J Cancer Res** 1989 Jun;80(6):503–5

Mutation spectra of N-ethyl-N'-nitro-N-nitrosoguanidine and 1-(2-hydroxyethyl)-1-nitrosourea in Escherichia coli. Richardson KK, et al. **Mol Gen Genet** 1988 Nov; 214(3):460–6

ANTAGONISTS & INHIBITORS

Crude tea extracts decrease the mutagenic activity of N-methyl-N'-nitro-N-nitrosoguanidine in vitro and in intragastric tract of rats. Jain AK, et al. **Mutat Res** 1989 Jan;210(1):1–8

METABOLISM

Non-random alkylation of DNA sequences induced in vivo by chemical mutagens. Durante M, et al. **Carcinogenesis** 1989 Aug;10(8):1357–61

DNA methylation in rat stomach and duodenum following chronic exposure to N-methyl-N'-nitro-N-nitrosoguanidine and the effect of dietary taurocholate. Kobori O, et al. **Carcinogenesis** 1988 Dec;9(12):2271–4

PHARMACOLOGY

Cell cycle perturbation and cell death after exposure of a human lymphoblastoid cell strain to N-methyl-N'-nitro-N-nitrosoguanidine. Black KA, et al. **Am J Pathol** 1989 Jan;134(1):53–61

Potentiation of N-methyl-N'-nitro-N-nitrosoguanidine-induced O6-methylguanine-DNA-methyltransferase activity in a rat hepatoma cell line by poly (ADP-ribose) synthesis inhibitors. Lefebvre P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):599–604

Sensitivity to N-methyl-N'-nitro-N-nitrosoguanidine in fibroblasts from patients with schizophrenia. Cohen MR, et al. **Biol Psychiatry** 1989 Jan 15;25(2):239–42

Interaction between N-methyl-N'-nitro-N-nitrosoguanidine and 2 steroid hormones in the glandular stomach of mouse. I. Acceleration of hydrocortisone turnover by use of a salt-rich diet and the carcinogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(3):197–205

Interaction between N-methyl-N'-nitro-N-nitrosoguanidine and 2 steroid hormones in the glandular stomach of mouse. II. Retardation of local dihydrotestosterone turnover by use of a rice-rich diet and the carcinogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(3):207–13

Endogenous retroviral env genes after N-methyl-N'-nitro-N-nitrosoguanidine treatment of mouse tumor cells: stable DNA amplification and rearrangement. Apt D, et al. **Cancer Res** 1989 Jul 15; 49(14):3966–71

Induction of foci of morphologically transformed cells in synchronized populations of 10T1/2 cells by N-methyl-N'-nitro-N-nitrosoguanidine and the effect of spontaneous transformation on calculated transformation frequency. Grisham JW, et al. **Cancer Res** 1988 Nov 1; 48(21):5977–83

Immunological characteristics of immunogenic variants induced in the MCA-F murine fibrosarcoma using 1-methyl-3-nitro-1-nitrosoguanidine, 5-aza-2'-deoxycytidine, or ultraviolet radiation. Simcik W, et al. **Cancer Res** 1989 Aug 1;49(15):4192–8

Synergistic killing of virus-transformed human cells with interferon and N-methyl-N'-nitro-N-nitrosoguanidine. Babich MA, et al. **Carcinogenesis** 1989 Feb;10(2):265–8

Induction of plasminogen activator by N-methyl-N'-nitro-N-nitrosoguanidine in mer+ and mer- human tumour cell strains. Brdar B, et al. **Carcinogenesis** 1988 Dec;9(12):2191–5

An in vivo unscheduled DNA synthesis (UDS) assay in the rat gastric mucosa: preliminary development. Burlinson B. **Carcinogenesis** 1989 Aug;10(8):1425–8

Chromosomal and c-K-ras oncogene alterations induced by a chemical carcinogen and phorbol ester in skin fibroblasts of individuals with familial polyposis coli. Marczynska B, et al. **Carcinogenesis** 1988 Oct;9(10):1897–900

Proliferation kinetics of pepsinogen altered pyloric gland cells in rats treated with N-methyl-N'-nitro-N-nitrosoguanidine. Tatematsu M, et al. **Carcinogenesis** 1989 May;10(5):907–11

An adaptive response to alkylating agents in Aspergillus nidulans. Hooley P, et al. **Curr Genet** 1988 Nov;14(5):445–9

N-methyl-N'-nitro-N-nitrosoguanidine (MNNG) in experimental rat gastrocarcinogenesis: comparative sensibility to MNNG-carcinogenic action of the gland epithelium and the epithelium of experimental endophytic hyperplastic adenomatous structures. Volfson NI, et al. **Exp Pathol** 1988;35(1):57–60

Altered induction of the adaptive response to alkylation damage in Escherichia coli recF mutants. Volkert MR. **J Bacteriol** 1989 Jan;171(1):99–103

Pretreatment of primary rat cutaneous epidermal keratinocyte culture with a low concentration of MNNG: effect on DNA cross-linking measured in situ after challenge with bis-2-chloroethyl sulfide. Sorscher DH, et al. **J Toxicol Environ Health** 1989;27(3):367–79

Poly(ADP-ribose) catabolism in mammalian cells exposed to DNA-damaging agents. Alvarez-Gonzalez R, et al. **Mutat Res** 1989 Sep;218(2):67–74

Frequency and distribution of N-methyl-N'-nitro-N-nitrosoguanidine (MNNG)-induced structural chromosome aberrations in fibroblasts from sarcoma and non-Hodgkin's lymphoma patients. Mertens F, et al. **Mutat Res** 1989 Jan;210(1):63–70

Protective role of potentially lethal damage repair in the neoplastic transformation of Balb/c 3T3 cells treated with N-methyl-N'-nitro-N-nitrosoguanidine. Nakano S, et al. **Mutat Res** 1989 Jan;217(1):45–51

Deoxynucleoside triphosphate pool perturbation is not a general feature in mutagen-treated mammalian cells. Snyder RD, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):51–6

Enhancement and inhibition of mutation by o-vanillin in Escherichia coli. Watanabe K, et al. **Mutat Res** 1989 Sep; 218(2):105–9

Glucocorticoid enhances alkylating agent-induced fragmentation of DNA through suppression of poly(ADP-ribosyl)ation in L-1210 cells. Kitamura A, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2525–31

Repeated doses of gamma rays induce resistance to N-methyl-N'-nitro-N-nitrosoguanidine in Chinese hamster cells. Osmak M. **Radiat Res** 1988 Sep;115(3):609–16

Amplification of bovine papillomavirus DNA by N-methyl-N'-nitro-N-nitrosoguanidine, ultraviolet irradiation, or infection with herpes simplex virus. Schmitt J, et al. **Virology** 1989 Sep;172(1):73–81

[Mutagenic effects of N-methyl-N-nitro-N-nitrosoguanidine (MNNG) and ethyl methanesulfonate (EMS) on chloroquine resistance in Plasmodium berghei ANKA strain] Yao SN, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):356–60 (Eng. Abstr.) (Chi)

[Effects of combined exposure to gamma radiation and sulfur dioxide or N-methyl-N'-nitro-N-nitrosoguanidine on bacteria and higher plants] Kal'chenko VA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov-Dec;(6):908–14 (Rus)

[Isolation of auxotrophic mutants under the action of N-methyl-N'-nitro-N-nitrosoguanidine and UV radiation and the mapping of new loci on the Streptomyces griseus chromosome by protoplast fusion] Serdechnaia AI, et al. **Mikrobiol Zh** 1987 Sep–Oct;49(5):3–8 (Eng. Abstr.) (Rus)

TOXICITY

Changes in rat and human pepsinogen phenotypes induced by N'-methyl-N'nitro-N-nitrosoguanidine. Defize J, et al. **Cancer** 1988 Nov 1;62(9):1958–61

Modification of the mutagenicity of aflatoxin B1 and N-methyl-N'-nitro-N-nitrosoguanidine by certain phenolic compounds. Francis AR, et al. **Cancer Lett** 1989 Jun;45(3):177–82

Promotion by dihydroxybenzene derivatives of N-methyl-N'-nitro-N-nitrosoguanidine-induced F344 rat forestomach and glandular stomach carcinogenesis. Hirose M, et al. **Cancer Res** 1989 Sep 15;49(18):5143–7

Promotion by neurotensin of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Feb 15;49(4):843–6

Timing of proto-oncogene replication: a possible determinant of early S phase sensitivity of C3H 10T1/2 cells to transformation by chemical carcinogens. Doggett NA, et al. **Mol Carcinog** 1988;1(1):41–9

Response of Lactococcus (Streptococcus) lactis to N-methyl-N'-nitro-N-nitrosoguanidine: absence of adaptive response. Auffray Y, et al. **Mutagenesis** 1989 Jul; 4(4):280–2

Hyperthermia-induced modulation of killing and mutation by UV and N-methyl-N'-nitro-N-nitrosoguanidine in V79 cells. Banerjee S, et al. **Mutat Res** 1989 May;226(1):69–73

Influence of benzamide on killing and mutation of density-inhibited V79 cells by MNNG. Ghosh R, et al. **Mutat Res** 1989 Mar;225(3):137–41

Base-pair substitutions alter the site-specific mutagenicity of UV and MNNG in the SUP4–o gene of yeast. Kunz BA, et al. **Mutat Res** 1989 Aug;226(4):273–8

Induction of gastric cancer in monkeys by N-methyl-N-nitro-N-nitrosoguanidine (MNNG). Sharashidze LK, et al. **Neoplasma** 1989;36(2):129–33

[Proto-oncogene expression in human carcinomas of the stomach and in the gastric mucosa of rats exposed to N-methyl-N'-nitro-N-nitrosoguanidine-induced gastric carcinogenesis] Novikov LB, et al. **Eksp Onkol** 1989; 11(1):18–21 (Eng. Abstr.) **(Rus)**

[Effect of methylnitronitrosoguanidine on DNA synthesis in animal cells: decrease in the rate of replication fork movement] Liapunova NA, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):20–5 (Eng. Abstr.) **(Rus)**

METHYLNITROPHOS see **FENITROTHION**

METHYLNITROSONITROGUANIDINE see **METHYLNITRONITROSOGUANIDINE**

METHYLNITROSOUREA

Cell cycle dependence of N-methyl-N-nitrosourea-induced tumour development in the proliferating, partially resected rat urinary bladder. Kunze E, et al. **Br J Exp Pathol** 1989 Apr;70(2):125–42

Effect of age on dose-response relationship in carcinogenesis induced by single administration of N-nitrosomethylurea in female rats. Anisimov VN. **J Cancer Res Clin Oncol** 1988;114(6):628–35

Humic acids inhibit the formation but not the mutagenicity of N-methyl-N-nitrosourea. Badaev SA, et al. **Mutat Res** 1989 Jan;210(1):9–13

Curcumins as inhibitors of nitrosation in vitro. Nagabhushan M, et al. **Mutat Res** 1988 Nov;202(1):163–9

Formation and removal of DNA adducts after treatment of Chinese hamster ovary cells with N-methyl- and N-ethyl-N-nitrosourea. Thielmann HW, et al. **Mutat Res** 1988 Nov;202(1):235–50

Impaired Biel and radial arm maze learning in rats with methylnitrosourea-induced microcephaly. Akaike M, et al. **Neurotoxicol Teratol** 1988 Jul-Aug;10(4):327–32

ADVERSE EFFECTS

Diabetogenic effects of N-nitrosomethylurea in rats. Voss C, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):25–31

ANALOGS & DERIVATIVES

Carcinogenicity and organ specificity of N-trimethylsilylmethyl-N-nitrosourea (TMS-MNU), N-neopentyl-N-nitrosourea (neoPNU), and N-methyl-N-nitrosourea (MNU) in rats. Maekawa A, et al. **J Cancer Res Clin Oncol** 1988;114(5):473–6

Carcinogenesis in rats by nitrosodialkylureas containing methyl and ethyl groups given by gavage and in drinking water. Lijinsky W, et al. **J Toxicol Environ Health** 1989; 28(1):27–38

[Comparative evaluation of the antitumor, cytogenetic and immunodepressive effects of dimetinur when used perorally and parenterally] Osatrovskaia LA, et al. **Eksp Onkol** 1988; 10(6):44–8 (Eng. Abstr.) **(Rus)**

[The pharmacokinetics of the antitumor preparation of dimetinur] Ostrovskaia LA, et al. **Eksp Onkol** 1989; 11(2):57–62 (Eng. Abstr.) **(Rus)**

ANALYSIS

Spectrofluorimetric determination of N-nitroso-N-methylurea with sodium sulphide, taurine and o-phthalaldehyde. Sano A, et al. **Analyst** 1988 Nov; 113(11):1669–71

ANTAGONISTS & INHIBITORS

The prevention of nitrosomethylurea-induced mammary tumors by d-limonene and orange oil. Maltzman TH, et al. **Carcinogenesis** 1989 Apr;10(4):781–3

CHEMICAL SYNTHESIS

Synthesis of an N-methyl-N-nitrosourea linked to a methidium chloride analogue and its reactions with 32P-end-labeled DNA. Konakahara T, et al. **Biochemistry** 1988 Nov 15;27(23):8606–13

METABOLISM

Excision repair of O6-methylguanine synthesized at the rat H-ras N-methyl-N-nitrosourea activation site and introduced into Escherichia coli. Rossi SC, et al. **Carcinogenesis** 1989 Feb;10(2):373–7

Inhibitory effects of para-aminobenzoic acid on the formation and mutagenicity of N-nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329–31

PHARMACOLOGY

Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al. **Basic Life Sci** 1988;49:457–60

Effect of chemical carcinogens and partial hepatectomy on "in vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1412–7

Effect of metal ions on the adaptive response induced by N-methyl-N-nitrosourea in Escherichia coli. Takahashi K, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1124–30

Tolerance to methylnitrosourea-induced DNA damage is associated with 6-thioguanine resistance in CHO cells. Aquilina G, et al. **Carcinogenesis** 1989 Jul;10(7):1219–23

O6-methyltransferase-deficient and -proficient CHO cells differ in their responses to ethyl- and methyl-nitrosourea-induced DNA alkylation. Bignami M, et al. **Carcinogenesis** 1989 Jul;10(7):1329–32

Properties of N-methyl-N-nitrosourea-resistant, Mex- derivatives of an SV40-immortalized human fibroblast cell line. Green MH, et al. **Carcinogenesis** 1989 May;10(5):893–8

Further evidence that mitogen-induced cell proliferation does not support the formation of enzyme-altered islands in rat liver by carcinogens. Ledda-Columbano GM, et al. **Carcinogenesis** 1989 May;10(5):847–50

Chromatographic detection of 7-methyladenine in urine of rats administered N-methylnitrosourea: a potential marker for monitoring exposure to methylating carcinogens. Mandel HG, et al. **Carcinogenesis** 1989 Apr;10(4):757–62

Molecular mechanisms of alkylation sensitivity in Indian muntjac cell lines. Musk SR, et al. **Carcinogenesis** 1989 Jul; 10(7):1299–306

Evaluation of the pancreatic B-cell function in the rat after prenatal exposure to streptozotocin or N-nitrosomethylurea. Serradas P, et al. **Diabete Metab** 1989 Jan-Feb;15(1):30–7

Radiation and chemical activation of ras oncogenes in different mouse strains. Newcomb EW, et al. **Environ Health Perspect** 1989 May;81:33–7 (20 ref.)

No diabetogenic effect of N-nitrosomethylurea on pregnant BALB/c mice and their progeny. Voss C, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):20–4

Biochemical characterization of retinal protein and phospholipid synthesis in mice exposed transplacentally to N-methyl-N-nitrosourea. Smith SB, et al. **Exp Eye Res** 1988 Nov;47(5):713–25

Separation of the SOS-dependent and SOS-independent components of alkylating-agent mutagenesis. Couto LB, et al. **J Bacteriol** 1989 Aug;171(8):4170–7

Nuclear phenotypical changes of human breast epithelial cells treated with carcinogens. de Campos Vidal B, et al. **Microsc Electron Biol Celular** 1987 Dec;11(2):145–57

Expression of an E.coli O6-alkylguanine DNA alkyltransferase gene in Chinese hamster cells protects against N-methyl and N-ethylnitrosourea induced reverse mutation at the hypoxanthine phosphoribosyl transferase locus. Fox M, et al. **Mutagenesis** 1988 Sep;3(5):409–13

Are SCE frequencies indicative of adaptive response of plant cells? Schubert I, et al. **Mutat Res** 1989 Apr;211(2):301–6

[Liver aldolase as a possible target for the action of N-methyl-N-nitrosourea] Treshchenkova IuA, et al. **Biokhimiia** 1989 Mar;54(3):516–23 (Eng. Abstr.) **(Rus)**

[The differential sensitivity of chromosomes to chemical agents] Spitkovskiĭ DM, et al. **Dokl Akad Nauk SSSR** 1989; 304(4):988–90 **(Rus)**

TOXICITY

Effects of N-nitroso-N-methylurea on mammary and pituitary glands of young female Sprague-Dawley rats. Bernard DJ, et al. **Anticancer Res** 1988 Jul-Aug;8(4):717–24

Embryotoxicity induced by alkylating agents: 5. Dose-response relationships of teratogenic effects of methylnitrosourea in mice. Platzek T, et al. **Arch Toxicol** 1988;62(6):411–23

The promotional effect of testosterone on induction of prostate-cancer in MNU-sensitized L-W rats. Pollard M, et al. **Cancer Lett** 1989 Jun;45(3):209–12

Enhancement of methylnitrosourea-induced skin tumorigenesis and carcinogenesis in hairless mice by pretreatment with a mitosis-inhibiting epidermal pentapeptide. Iversen OH, et al. **Carcinogenesis** 1989 Feb; 10(2):241–4

Strong promoting activity by uracil on urinary bladder carcinogenesis and a possible inhibitory effect on thyroid tumorigenesis in rats initiated with N-methyl-N-nitrosourea. Masui T, et al. **Carcinogenesis** 1989 Aug;10(8):1471–4

DNA strand breaks in embryonic mouse limbs exposed to methylnitrosourea. Loch-Caruso R, et al. **Drug Chem Toxicol** 1988;11(3):275–87

Retinal degeneration in the mouse induced transplacentally by N-methyl-N-nitrosourea: effects of constant illumination or total darkness. Smith SB, et al. **Exp Eye Res** 1988 Sep;47(3):347–59

Carcinogenicity and organ specificity of N-trimethylsilylmethyl-N-nitrosourea (TMS-MNU), N-neopentyl-N-nitrosourea (neoPNU), and N-methyl-N-nitrosourea (MNU) in rats. Maekawa A, et al. **J Cancer Res Clin Oncol** 1988;114(5):473–6

Effects of the antioxidant butylated hydroxytoluene (BHT) on retinal degeneration induced transplacentally by a single low dosage of N-methyl-N-nitrosourea (MNU). Smith SB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):175–89

Methylnitrosourea induction of rat odontomas [letter] Berman JJ. **Toxicol Pathol** 1988;16(2):309

[Specificity of mutagenic effect of N-nitroso-N-methylurea and relation between its mutagenic activity and carbamoylating properties] Serebrianyĭ AM, et al. **Genetika** 1988 Oct;24(10):1786–94 (Eng. Abstr.) **(Rus)**

METHYLNOREPINEPHRINE see under **NOREPINEPHRINE**

METHYLNORTESTOSTERONE see **NORMETHANDROLONE**

METHYLOMONADACEAE

ANALYSIS

The poly-beta-hydroxybutyrate granule in vivo. A new insight based on NMR spectroscopy of whole cells. Barnard GN, et al. **J Biol Chem** 1989 Feb 25;264(6):3286–91

CLASSIFICATION

[Classification of methylotrophic bacteria according to 5S ribosomal RNA sequencing] Bulygina ES, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):18–24 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Quinoproteins in C1-dissimilation by bacteria. Anthony C. **Antonie Van Leeuwenhoek** 1989 May;56(1):13–23 (57 ref.)

Mutants of Methylobacterium organophilum unable to synthesize PQQ. Biville F, et al. **Antonie Van Leeuwenhoek** 1989 May;56(1):103–7

PQQ: biosynthetic studies in Methylobacterium AM1 and Hyphomicrobium X using specific 13C labeling and NMR. Houck DR, et al. **Antonie Van Leeuwenhoek** 1989 May; 56(1):93–101

The 'methylamine oxidase' system of an obligate methylotroph. Auton KA, et al. **Biochem J** 1989 May 15; 260(1):75–9

The magnetic properties of the nickel cofactor F430 in the enzyme methyl-coenzyme M reductase of Methanobacterium thermoautotrophicum. Cheesman MR, et al. **Biochem J** 1989 Jun 1;260(2):613–6

A stopped-flow kinetic study of soluble methane mono-oxygenase from Methylococcus capsulatus (Bath). Green J, et al. **Biochem J** 1989 Apr 1;259(1):167–72

The second subunit of methanol dehydrogenase of Methylobacterium extorquens AM1. Nunn DN, et al. **Biochem J** 1989 Jun 15;260(3):857–62

Solubilisation of methane monooxygenase from Methylococcus capsulatus (Bath). Smith DD, et al. **Eur J Biochem** 1989 Jul 1;182(3):667–71

GENETICS

Molecular analysis of methane monooxygenase from Methylococcus capsulatus (Bath). Stainthorpe AC, et al. **Arch Microbiol** 1989;152(2):154–9

Construction of Hfr-like donors of the obligate methanol-oxidizing bacterium Methylobacillus flagellatum KT. Serebrijski IG, et al. **FEMS Microbiol Lett** 1989 May; 50(1-2):203–6

Nucleotide sequence and transcriptional start site of the Methylobacterium organophilum XX methanol dehydrogenase structural gene. Machlin SM, et al. **J Bacteriol** 1988 Oct;170(10):4739–47

Plasmid analysis and cloning of the dichloromethane-utilization genes of Methylobacterium sp. DM4. Gälli R, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):943–52

Localization of a pyrroloquinoline quinone biosynthesis gene near the methanol dehydrogenase structural gene in Methylobacterium organophilum DSM 760. Mazodier P, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2513–24

ISOLATION & PURIFICATION

Characteristics of a nitrogen-fixing methanotroph, Methylocystis T-1. Takeda K. **Antonie Van Leeuwenhoek** 1988;54(6):521–34

METABOLISM

Two distinct azurins function in the electron-transport chain of the obligate methylotroph Methylomonas J. Ambler RP, et al. **Biochem J** 1989 Jul 15;261(2):495–9

PHYSIOLOGY

Physiology, biochemistry, and specific inhibitors of CH4, NH4+, and CO oxidation by methanotrophs and nitrifiers. Bédard C, et al. **Microbiol Rev** 1989 Mar;53(1):68–84 (180 ref.)

ULTRASTRUCTURE

[Observation on the ultrastructure of methanotroph] Zheng ZH, et al. **Wei Sheng Wu Hsueh Pao** 1988 Dec; 28(4):295–300 (Eng. Abstr.) **(Chi)**

METHYLPHENAZONIUM METHOSULFATE see under **PHENAZINES**

METHYLPHENIDATE

Pulmonary talc granulomatosis due to intravenous ritalin. Williams J, et al. **J Tenn Med Assoc** 1988 Sep;81(9):560–1

Comparison of four-drug discriminations in training compartments with four identical levers versus four different responses manipulanda. Overton DA, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):879–88

ADMINISTRATION & DOSAGE

Narcotics plus methylphenidate (Ritalin) for advanced cancer pain. Bruera E, et al. **Am J Nurs** 1988 Nov;88(11):1555–6

Use of methylphenidate [letter] Myers WC, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):754–5

Dosage effects and individual responsivity to methylphenidate in attention deficit disorder. Douglas VI, et al. **J Child Psychol Psychiatry** 1988 Jul;29(4):453–75

The effects of methylphenidate on learning in children with ADDH: the stimulus equivalence paradigm. Vyse SA, et al. **J Consult Clin Psychol** 1989 Jun;57(3):425–35

Dose–response effects of methylphenidate on academic performance and overt behavior in hyperactive children. Tannock R, et al. **Pediatrics** 1989 Oct;84(4):648–57

ADVERSE EFFECTS

Psychostimulant rebound in attention deficit disordered boys. Johnston C, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):806–10

Methylphenidate side effects [letter] Licamele WL. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):515–6

Methylphenidate treatment of attention-deficit hyperactivity disorder in boys with Tourette's syndrome. Sverd J, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):574–9; discussion 580–2

Tryptophan antagonism of stimulant-induced tics [letter] Chandler ML, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):69–70

[A case of hallucination from methylphenidate in an 8-year-old hyperkinetic boy] Albert E, et al. **J Toxicol Clin Exp** 1985 May–Jun;5(3):195–9 (Eng. Abstr.) (Fre)

PHARMACOKINETICS

The absorption of sustained-release methylphenidate formulations compared to an immediate-release formulation. Patrick KS, et al. **Biopharm Drug Dispos** 1989 Mar–Apr;10(2):165–71

Interaction in tissue distribution between methylphenidate and pemoline. I. Tissue distribution of methylphenidate and its metabolite in the rat. Kotaki H, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3190–5

PHARMACOLOGY

Methylphenidate and growth in hyperactive children. A controlled withdrawal study. Klein RG, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1127–30

Hyperactive boys almost grown up. III. Methylphenidate effects on ultimate height. Klein RG, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1131–4

Interactions in tissue distribution between methylphenidate and pemoline. II. Effects of methylphenidate or its metabolite on plasma and tissue concentrations of pemoline in the rat. Kotaki H, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4560–6

Comparison between methylphenidate and placebo as adjuvant in care and rehabilitation of geriatric patients. Larsson M, et al. **Compr Gerontol [A]** 1988 Jun;2(2):53–9

Acute and chronic effects of methylphenidate on cortical adrenoceptors in the rat. Mathieu JF, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):173–8

Effects of methylphenidate on cardiovascular responses in attention deficit hyperactivity disordered adolescents. Brown RT, et al. **J Adolesc Health Care** 1989 May; 10(3):179–83

The action of stimulant medication in attention deficit disorder with hyperactivity: dopaminergic, noradrenergic, or both? Levy F, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):802–5

Major depression in Parkinson's disease and the mood response to intravenous methylphenidate: possible role of the "hedonic" dopamine synapse. Cantello R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):724–31

A comparison of assessment techniques measuring the effects of methylphenidate, secobarbital, diazepam and diphenhydramine in abstinent alcoholics. Miller TP, et al. **Neuropsychobiology** 1988;19(2):90–6

Effects of chronic amphetamine in BALB/cBy mice, a strain that is not stimulated by acute administration of amphetamine. Logan L, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):675–82

Prenatal methylazoxymethanol treatment potentiates d-amphetamine- and methylphenidate-induced motor activity in male and female rats. Archer T, et al. **Pharmacol Toxicol** 1988 Oct;63(4):233–9

THERAPEUTIC USE

Methylphenidate in amytal-resistant mutism. Frost LH. **Acta Psychiatr Scand** 1989 Apr;79(4):408–10

Use of stimulant medications in children. Morgan AM. **Am Fam Physician** 1988 Oct;38(4):197–202 (15 ref.)

Methylphenidate in children with seizures and attention-deficit disorder. Feldman H, et al. **Am J Dis Child** 1989 Sep;143(9):1081–6

A controlled trial of stimulant medication in children with the fragile X syndrome. Hagerman RJ, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):377–92

Medication vs behavior management [letter] Huessy HR. **Am J Orthopsychiatry** 1989 Jan;59(1):153–4

Methylphenidate for cyclosporine-associated organic mood disorder [letter] Craven JL. **Am J Psychiatry** 1989 Apr; 146(4):553

Detecting acute drug effects. Little KY. **Biol Psychiatry** 1989 Mar 1;25(5):645–7

Stimulant treatment for the neurobehavioural sequelae of traumatic brain injury. Gualtieri CT, et al. **Brain Inj** 1988 Oct–Dec;2(4):273–90

Active drug placebo trial of methylphenidate—a clinical service for children with an attention deficit disorder. Fine S, et al. **Can J Psychiatry** 1989 Jun;34(5):447–9

ADDH and methylphenidate responders: effects on behavior controlled by complex reinforcement schedules. DuPaul GJ, et al. **Int Clin Psychopharmacol** 1988 Oct;3(4):349–61

Differential psychopharmacology of methylphenidate and the neuropsychology of childhood hyperactivity. Hicks RE, et al. **Int J Neurosci** 1989 Mar;45(1–2):7–32

Cognitive training in academically deficient ADDH boys receiving stimulant medication. Abikoff H, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):411–32

The effects of background illumination and stimulant medication on smooth pursuit eye movements of hyperactive children. Bylsma FW, et al. **J Abnorm Child Psychol** 1989 Feb;17(1):73–90

Self-paced learning in children with attention deficit disorder with hyperactivity. Dalby JT, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):269–75

The effects of methylphenidate on levels of processing and laterality in children with attention deficit disorder. Malone MA, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):379–95

Effects of methylphenidate on attention-deficit hyperactivity disorder with and without aggressive/noncompliant features. Klorman R, et al. **J Abnorm Psychol** 1988 Nov; 97(4):413–22

Attention-deficit hyperactivity disordered boys' evaluations of and attributions for task performance on medication versus placebo. Milich R, et al. **J Abnorm Psychol** 1989 Aug;98(3):280–4

The use of methylphenidate in autism [letter] Aman M. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):821–2

More on methylphenidate in autism [letter] Strayhorn J. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):299

Hyperactive girls and boys: stimulant drug effects on mother–child interactions. Barkley RA. **J Child Psychol Psychiatry** 1989 May;30(3):379–90

Psychostimulant response in AIDS-related complex patients. Holmes VF, et al. **J Clin Psychiatry** 1989 Jan;50(1):5–8

Does stimulant medication improve the peer status of hyperactive children? Whalen CK, et al. **J Consult Clin Psychol** 1989 Aug;57(4):545–9

The failure of antimotion sickness medication to improve reading in developmental dyslexia: results of a randomized trial. Fagan JE, et al. **J Dev Behav Pediatr** 1988 Dec; 9(6):359–66

Assessing response to methylphenidate for attention deficit disorder [letter] Wolraich M. **J Pediatr** 1989 May; 114(5):902–3

Behavior disorders and the Ritalin controversy [letter] Huessy HR. **JAMA** 1988 Oct 21;260(15):2219

Self-esteem in children medically managed for attention deficit disorder. Kelly PC, et al. **Pediatrics** 1989 Feb; 83(2):211–7

Comparative effects of methylphenidate on attention-deficit hyperactivity disorder with and without aggressive/noncompliant features. Klorman R, et al. **Psychopharmacol Bull** 1989;25(1):109–13

Effects of methylphenidate on achievement in hyperactive children with reading disorders. Winsberg BG, et al. **Psychopharmacol Bull** 1988;24(2):238–41

Methylphenidate in children with the attention deficit disorder [letter] S Afr Med J 1989 Mar 18;75(6):301–2

The use of stimulant medication in the treatment of childhood behavioural and learning disorders. A descriptive survey. Perry HC, et al. **S Afr Med J** 1988 Nov 19;74(10):510–1

Clinical neuropharmacology of sleep disorders. Manfredi RL, et al. **Semin Neurol** 1987 Sep;7(3):286–95 (112 ref.)

[Ritalin: a stimulating drug in the treatment of children with minimal brain dysfunction (MBD)] Flapper BC, et al. **Tijdschr Kindergeneeskd** 1989 Feb;57(1):14–20 (Eng. Abstr.) (Dut)

TOXICITY

Methylphenidate and pemoline do not cause depletion of rat brain monoamine markers similar to that observed with methamphetamine. Zaczek R, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):227–33

METHYLPHENOBARBITOL see **MEPHOBARBITAL**

METHYLPHENYL ETHERS see **ANISOLES**

METHYLPREDNISOLONE

Effects of chlorpromazine and methylprednisolone on perfusion preservation of rabbit livers. Sundberg R, et al. **Cryobiology** 1988 Oct;25(5):417–24

ADMINISTRATION & DOSAGE

Influence of aspirin and steroids on acute lung injury after i.v. Injection of a sclerosing agent. Sigurdsson GH, et al. **Acta Chir Scand** 1989 Mar;155(3):163–70

High dose intravenous methylprednisolone for chronic idiopathic thrombocytopenic purpura [letter] Ozsoylu S. **Acta Haematol (Basel)** 1989;81(2):112–3

High-dose intravenous methylprednisolone for childhood idiopathic thrombocytopenic purpura [letter] Ozsoylu S. **Am J Dis Child** 1988 Dec;142(12):1273–4

High-dose intravenous methylprednisolone for Kasabach–Merritt syndrome [letter; comment] Ozsoylu S. **Am J Hematol** 1989 Jul;31(3):219–20. **Comment on:** Am J Hematol 1988 Sep;29(1):44–8

High-dose intravenous corticosteroid treatment for patients with Diamond–Blackfan syndrome resistant or refractory to conventional treatment. Ozsoylu S. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):217–23

Acute dosing with methylprednisolone in normal subjects does not affect theophylline clearance. Kuthiala C, et al. **Ann Allergy** 1988 Nov;61(5):337–8

Combined suppressive drug treatment in severe refractory rheumatoid disease: an analysis of the relative effects of parenteral methylprednisolone, cyclophosphamide, and sodium aurothiomalate. Walters MT, et al. **Ann Rheum Dis** 1988 Nov;47(11):924–9

Comment on the article by Laxer et al [letter] Hrnčíř Z, et al. **Arthritis Rheum** 1989 Apr;32(4):505

Treatment of Felty's syndrome with auranofin and methylprednisolone [letter] Job-Deslandre C, et al. **Arthritis Rheum** 1989 Sep;32(9):1188–9

High-dose, pulse intravenous methylprednisolone enhances Fc gamma receptor-mediated mononuclear phagocyte function in systemic lupus erythematosus. Salmon JE, et al. **Arthritis Rheum** 1989 Jun;32(6):717–25

High-dose intravenous methylprednisolone for immune thrombocytopenic purpura [letter] Ozsoylu S. **Blood** 1989 Jan;73(1):354–5

High-dose intravenous methylprednisolone for constitutional pure red cell aplasia [letter] Ozsoylu S. **Blood** 1988 Nov; 72(5):1839

Intravenous methylprednisolone in the treatment of Graves' ophthalmopathy. Kendall-Taylor P, et al. **BMJ** 1988 Dec 17;297(6663):1574–8

Cyclosporine and methylprednisolone for prophylaxis of acute graft-versus-host disease. Shepherd JD, et al. **Bone Marrow Transplant** 1988 Nov;3(6):553–8

Comparison of the oral and intravenous routes for treating asthma with methylprednisolone and theophylline. Jónsson S, et al. **Chest** 1988 Oct;94(4):723–6

High-dose methylprednisolone for remission induction in children with acute nonlymphoblastic leukemia. Hiçsönmez G, et al. **Eur J Haematol** 1989 May;42(5):498–500

High-dose intravenous methylprednisolone (HIVMP) for acquired aplastic anemia [letter] Ozsoylu S. **Eur J Haematol** 1988 Nov;41(5):508

High-dose intravenous methylprednisolone for acute childhood idiopathic thrombocytopenic purpura. Ozsoylu S, et al. **Eur J Haematol** 1989 May;42(5):431–5

High dose intravenous methylprednisolone for Kassabach–Merritt syndrome. Ozsoylu S, et al. **Eur J Pediatr** 1989 Feb;148(5):403–5

High-dose methylprednisolone suppresses experimental allergic neuritis in the Lewis rat. Watts PM, et al. **Exp Neurol** 1989 Jan;103(1):101–4

Multiple sclerosis intra-blood-brain-barrier IgG synthesis: effect of pulse intravenous and intrathecal corticosteroids. Baumhefner RW, et al. **Ital J Neurol Sci** 1989 Feb; 10(1):19–32

Congenital pseudarthrosis of the tibia: treatment with local steroid infiltration. Asquasciati G, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):121–8

High-dose methylprednisolone as initial therapy in patients with acute bronchospasm. Schneider SM, et al. **J Asthma** 1988;25(4):189–93

A long-term follow-up of the effect of repeated corticosteroid injections for stenosing tenovaginitis. Faunø P, et al. **J Hand Surg [Br]** 1989 May;14(2):242–3

Methylprednisolone pulsing of heart transplant patients in the home. Miska PT, et al. **J Heart Transplant** 1988 Sep–Oct;7(5):353–5

High-dose steroid therapy in Guillain–Barré syndrome. Haass A, et al. **J Neuroimmunol** 1988 Dec;20(2–3):305–8

Methylprednisolone in multiple sclerosis: a comparative dose study [letter] Bindoff L, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1108–9

Autoimmune optic neuropathy: evaluation and treatment [published erratum appears in J Neurol Neurosurg Psychiatry 1989 May;52(5):692] Kupersmith MJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1381–6

Pulse methylprednisolone in rheumatoid arthritis [letter] **J Rheumatol** 1988 Oct;15(10):1588–9

Pulse steroid therapy, rheumatoid arthritis and the Journal of Rheumatology [letter] Kraus A. **J Rheumatol** 1988 Dec; 15(12):1872–4

OKT3-induced cytokine release attenuation by high-dose methylprednisolone [letter] Goldman M, et al. **Lancet** 1989 Sep 30;2(8666):802–3

A randomized trial of methylprednisolone and chlorambucil

in idiopathic membranous nephropathy. Ponticelli C, et al. **N Engl J Med** 1989 Jan 5;320(1):8–13

Low-dose vs high-dose intravenous methylprednisolone therapy for acute renal allograft rejection in patients receiving cyclosporin therapy. Lui SF, et al. **Nephrol Dial Transplant** 1989;4(5):387–9

A placebo-controlled, randomized, double-masked, variable dosage, clinical trial of azathioprine with and without methylprednisolone in multiple sclerosis. Ellison GW, et al. **Neurology** 1989 Aug;39(8):1018–26

Relative efficacy of intravenous methylprednisolone and ACTH in the treatment of acute relapse in MS. Thompson AJ, et al. **Neurology** 1989 Jul;39(7):969–71

Effective methylprednisolone "pulse" therapy in myeloerythroid aplasia associated with systemic lupus erythematosus: case report and literature review. Yamauchi K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):337–41 (21 ref.)

Preservation of rabbit livers by continuous hypothermic perfusion after donor pretreatment with chlorpromazine and methylprednisolone. Sundberg R, et al. **Transplant Proc** 1988 Oct;20(5):998

High-dose intravenous methylprednisolone in the treatment of acute nonlymphoblastic leukemia with ocular involvement. Hiçsönmez G, et al. **Turk J Pediatr** 1988 Jul–Sep;30(3):181–3

Immediate effects of methylprednisolone pulse therapy on the immune response. Lee SK, et al. **Yonsei Med J** 1988; 29(4):373–8

[Pulsed methylprednisolone therapy of patients with systemic connective tissue diseases and rheumatoid arthritis] Künev K, et al. **Vutr Boles** 1988;27(5):70–2 **(Bul)**

[Evoked potentials with intrathecal and systemic corticosteroid therapy in multiple sclerosis] Heun R, et al. **EEG EMG** 1989 Jun;20(2):88–91 (Eng. Abstr.) **(Ger)**

[Controlled use of glucocorticoids in asthma. Monitoring by peak flow measurements—new therapies] Stemmer B. **Fortschr Med** 1988 Sep 20;106(27):67–8 **(Ger)**

[A case of psittacosis presenting as adult respiratory distress syndrome and successfully treated with steroid pulse therapy] Hirata M, et al. **Kokyu To Junkan** 1988 Aug; 36(8):893–7 (Eng. Abstr.) **(Jpn)**

[Systemic lupus erythematosus associated with autoimmune hemolytic anemia and diversified symptoms responsive to methylprednisolone pulse therapy: a case report] Ushiroda S, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):736–7 **(Jpn)**

[Prospective evaluation of the effectiveness of high doses of methylprednisolone in multiple sclerosis] Wajgt A, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):188–94 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Does methylprednisolone pulse therapy deteriorate the course of rapidly progressive IgA nephropathy? [letter] Itami N, et al. **Am J Dis Child** 1989 Apr;143(4):441–2

The incidence of corticosteroid side effects in chronic steroid-dependent asthmatics on TAO (troleandomycin) and methylprednisolone. Harris R, et al. **Ann Allergy** 1989 Aug;63(2):110–1

Survey of the long term incidence of osteonecrosis of the hip and adverse medical events in rheumatoid arthritis after high dose intravenous methylprednisolone. Williams IA, et al. **Ann Rheum Dis** 1988 Nov;47(11):930–3

Visual disturbance resulting from intranasal steroid injection. Case report. Garland PE, et al. **Arch Ophthalmol** 1989 Jan; 107(1):22–3

Avascular necrosis and pulsed methylprednisolone in RA [letter] Jones JG. **Br J Rheumatol** 1988 Dec;27(6):497–8

Serious infectious complications of corticosteroid therapy for COPD. Wiest PM, et al. **Chest** 1989 Jun;95(6):1180–4

Porokeratosis and immunosuppressive treatment for pemphigus foliaceus [letter] Leibovici V, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):910–1

Hyperglycemia with non-insulin-dependent diabetes following intraarticular steroid injection. Black DM, et al. **J Fam Pract** 1989 Apr;28(4):462–3

Methylprednisolone sodium succinate-induced anaphylaxis in a nonatopic renal transplant recipient [letter] John GT, et al. **Transplantation** 1989 Sep;48(3):543

[A case of pseudotumor cerebri probably due to the withdrawal of adrenal corticosteroid hormone] Ujihara M, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):661–6 **(Jpn)**

ANALOGS & DERIVATIVES

Bell-shaped concentration-response curve for myocardial stimulation by glucocorticoids. An experimental study in the rat. Sellevold OF, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):61–5

Steroid-induced enhancement of functional recovery of postischemic, reperfused myocardium in conscious dogs. Wynsen JC, et al. **Am Heart J** 1988 Oct;116(4):915–25

Perceived dangers from intraspinal steroid injections [letter] Abram SE. **Arch Neurol** 1989 Jul;46(7):719–21

Safety of intrathecal steroids in multiple sclerosis [letter] Rivera VM. **Arch Neurol** 1989 Jul;46(7):718–9

Dangers from methylprednisolone acetate therapy by intraspinal injection [letter] Wilkinson H. **Arch Neurol** 1989 Jul;46(7):721–2

Comparative investigation of the antiproliferative efficacy of alclometasone. Lubach D, et al. **Arzneimittelforschung** 1989 Apr;39(4):490–2

Effect of intra-articular glucocorticoids on the disposition of sulphadimidine in chronic osteoarthritis patients. Reeves PT, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):563–8

Achilles paratendonitis: an evaluation of steroid injection. DaCruz DJ, et al. **Br J Sports Med** 1988 Jun;22(2):64–5

Failure of methylprednisolone acetate to prolong the antinauseant effect of intravenous methylprednisolone sodium succinate in patients receiving chemotherapy. Osoba D, et al. **Clin Invest Med** 1988 Oct;11(5):377–9

Effects of high-to-mega-dose synthetic corticosteroids on multiple sclerosis patients with special reference to cerebrospinal fluid antibodies to myelin basic protein. Warren KG, et al. **Clin Neuropharmacol** 1987 Oct; 10(5):397–411 (48 ref.)

Sepsis syndrome: a valid clinical entity. Methylprednisolone Severe Sepsis Study Group. Bone RC, et al. **Crit Care Med** 1989 May;17(5):389–93

Alcometasone dipropionate 0.05% ointment versus hydrocortisone 1.0% ointment in eczema & other dermatoses. Handa F, et al. **Indian J Dermatol** 1988 Jan; 33(1):5–8

A double-blind comparison of betamethasone dipropionate 0.05% cream versus beclomethasone dipropionate 0.025% cream in steroid-responsive dermatoses. Oberai C. **Indian J Dermatol** 1988 Oct;33(4):61–5

A randomised, double-blind comparison of alclometasone dipropionate 0.05% cream in atopic dermatitis and other dermatoses. Panja SK, et al. **Indian J Dermatol** 1988 Jan; 33(1):1–4

Efficacy and safety of alclometasone dipropionate 0.05% cream/ointment in 238 patients with steroid-responsive dermatoses. Sharma SD. **Indian J Dermatol** 1988 Oct; 33(4):56–60

Steroids do not alter pancreatic blood supply in hypovolemic dogs: implications on steroid action in acute pancreatitis. Robert JH, et al. **Int J Pancreatol** 1988 Dec;3(6):449–56

The pancreas and oxygen consumption (Part 2). Steroids do not modify resting pancreatic oxygen consumption in dogs: a preliminary report. Robert JH, et al. **Int J Pancreatol** 1989 Apr;4(3):353–9

Multiple sclerosis intra-blood-brain-barrier IgG synthesis: effect of pulse intravenous and intrathecal corticosteroids. Baumhefner RW, et al. **Ital J Neurol Sci** 1989 Feb; 10(1):19–32

Prevention of pulmonary complications by 6-methylprednisolone in major abdominal surgery. Zotti GC, et al. **Ital J Surg Sci** 1988;18(4):369–75

Simultaneous analysis of methylprednisolone hemisuccinate, cortisol and methylprednisolone by normal-phase high-performance liquid chromatography in human plasma. Kong AN, et al. **J Chromatogr** 1988 Nov 18; 432:308–14

Visual loss following intranasal corticosteroid injection. Johns KJ, et al. **JAMA** 1989 Apr 28;261(16):2413

Species and sex differences in the inhibitory action of the corticosteroid alclometasone dipropionate on the hepatic drug-metabolizing system. Nishibe Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):435–43

Effect of manno-heptulose on glucose kinetics in normal and gluco-corticoid treated dogs. Issekutz B Jr, et al. **Life Sci** 1974 Aug 15;15(4):635–43

The pancreas and oxygen consumption: 3. Do steroids improve pancreatic O2 consumption response to hypovolemia? Final Report. Robert JH, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):365–8

Pain in multiple sclerosis [letter; comment] Nelson DA. **Neurology** 1989 Jul;39(7):1000–1. **Comment on:** Neurology 1988 Dec;38(12):1830–4

Therapeutic effect of cyclosporin A and steroid on serum sickness type nephritis in the rat. 2. Suppressive effect on full-blown proliferative glomerulonephritis. Shigematsu H, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1115–22

Comparative pharmacokinetics of methylprednisolone phosphate and hemisuccinate in high doses. Möllmann H, et al. **Pharm Res** 1988 Aug;5(8):509–13

Transforming growth factor beta reverses the glucocorticoid-induced wound-healing deficit in rats: possible regulation in macrophages by platelet-derived growth factor. Pierce GF, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2229–33

Lupus nephritis: efficacy of monthly pulse therapy with intravenous methylprednisolone. Harisdangkul V, et al. **South Med J** 1989 Mar;82(3):321–7

Methylprednisolone in spinal cord compression. Hitchon PW, et al. **Spine** 1989 Jan;14(1):16–22

[Analysis of the effectiveness of treating severe cases of sciatica of radicular origin by intrathecal administration of Depo-Medrol] Niesyty M, et al. **Wiad Lek** 1989 Dec 1;41(23):1575–8 (Eng. Abstr.) **(Pol)**

[Effect of treatment with Encorton (Polfa), Solu-Medrol and Encorton and Cyclophosphamide and Encorton on the production of immunoglobulin G in the central nervous system in multiple sclerosis] Ochudło S. **Wiad Lek** 1989 Dec 1;41(23):1579–83 (Eng. Abstr.) **(Pol)**

[Effect of corticosteroids, quinacrine and L-652, 731 on experimental aggregation of polymorphonuclear leukocytes induced by complement and platelet activating factor (PAF)] Romero A, et al. **Rev Esp Fisiol** 1988 Dec; 44(4):407–12 (Eng. Abstr.) **(Spa)**

BLOOD

Analysis of methylprednisolone, methylprednisone and corticosterone for assessment of methylprednisolone disposition in the rat. Haughey DB, et al. **J Chromatogr** 1988 Sep 9;430(2):241–8

Simultaneous analysis of methylprednisolone hemisuccinate, cortisol and methylprednisolone by normal-phase high-performance liquid chromatography in human plasma. Kong AN, et al. **J Chromatogr** 1988 Nov 18; 432:308–14

PHARMACOKINETICS

Methylprednisolone pharmacokinetics after intravenous and oral administration. Al-Habet SM, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):285–90

Rapid methylprednisolone clearance in a patient with cystic fibrosis. Green CG, et al. **Drug Intell Clin Pharm** 1988 Nov; 22(11):876–8

Comparative pharmacokinetics of methylprednisolone phosphate and hemisuccinate in high doses. Möllmann H, et al. **Pharm Res** 1988 Aug;5(8):509–13

PHARMACOLOGY

Administration of perfluorochemicals under hyperbaric oxygen pressure and treatment with free oxygen radical scavengers. Lutz J, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):395–402

Effect of steroids during Escherichia coli endotoxinaemia in rabbits. Osterud B, et al. **Haemostasis** 1989;19(5):292–9

Inhibition of phytohemagglutinin (PHA) induced human T-cell colonies by methylprednisolone. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):237–45

Improved static lung preservation with corticosteroids and hypothermia. Hall TS, et al. **J Heart Transplant** 1988 Sep–Oct;7(5):348–52

Epidermal growth factor (EGF) prevents methylprednisolone-induced inhibition of wound healing. Laato M, et al. **J Surg Res** 1989 Oct;47(4):354–9

Effect of methylprednisolone on nitrogen dioxide (NO2)-induced pulmonary edema in guinea pigs. Vassilyadi M, et al. **Toxicol Appl Pharmacol** 1989 Feb; 97(2):256–66

Vesico-ureteric reflux and lymphoid resistance to in vitro steroid: adverse risk factors for renal transplantation. Dumble LJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2179–81

Immune signals involved in cyclosporine and methylprednisolone inhibition of A23187 ionophore induced proliferation. Schandene L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):82–3

THERAPEUTIC USE

Antiemetic activity of high-dose metoclopramide combined with methylprednisolone versus metoclopramide alone in dacarbazine-treated cancer patients. A randomized double-blind study of the Italian Oncology Group for Clinical Research. Basurto C, et al. **Am J Clin Oncol** 1989 Jun;12(3):235–8

Methylprednisolone pulse therapy for primary glomerulonephritis. Ponticelli C, et al. **Am J Nephrol** 1989; 9 Suppl 1:41–6 (38 ref.)

Severe acquired aplastic anemia in children: 11-year experience with bone marrow transplantation and immunosuppressive therapy. Halpérin DS, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):304–9

Corticosteroids prevent acute lung dysfunction caused by thoracic irradiation in unanesthetized sheep. Loyd JE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1227–33

Ineffectiveness of high-dose methylprednisolone in preventing parenchymal lung injury and improving mortality in patients with septic shock. Luce JM, et al. **Am Rev Respir Dis** 1988 Jul;138(1):62–8

Methylprednisolone therapy in patients with severe alcoholic hepatitis. A randomized multicenter trial. Carithers RL Jr, et al. **Ann Intern Med** 1989 May 1;110(9):685–90

Pseudophakic cystoid macular oedema and its treatment with local steroids. Suckling RD, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):353–9

Methylprednisolone and Graves' ophthalmopathy [letter] Dandona P, et al. **BMJ** 1989 Mar 25;298(6676):830

High dose intravenous methylprednisolone for idiopathic myelofibrosis [letter] Ozsoylu S. **Br J Haematol** 1988 Nov; 70(3):388

Effect of high-dose of methylprednisolone on tourniquet ischaemia. Goto H, et al. **Can J Anaesth** 1988 Sep; 35(5):484–8

A randomized controlled trial of methylprednisolone in the emergency treatment of acute exacerbations of COPD. Emerman CL, et al. **Chest** 1989 Mar;95(3):563–7

Treatment of severe aplastic anemia: comparison of bone marrow transplantation to immunotherapy. Tzeng CH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):21–8

Output of prostanoids from rat lung following endotoxin and its modification by methylprednisolone. Izumi T, et al. **Circ Shock** 1989 May;28(1):9–21

Primary intracerebral lymphoma in systemic lupus erythematosus treated with immunosuppressives. Cras P, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):200–5 (62 ref.)

Inhibition of complement activation by high-dose corticosteroids in total hip arthroplasty. Gammer W, et

al. **Clin Orthop** 1988 Nov;(236):205–9
Preliminary study of the effects of postoperative methylprednisolone therapy on lung function recovery in patients with chronic obstructive pulmonary disease. Fraser IM, et al. **Clin Pharm** 1989 Mar;8(3):214–9
Local proteolytic activation after pulmonary trauma is not prevented by high dose steroids. Andréasson S, et al. **Crit Care Med** 1989 Aug;17(8):792–7
Treatment of acute Pneumocystis carinii pneumonia with corticosteroids in a patient with acquired immunodeficiency syndrome. Gallacher BP, et al. **Crit Care Med** 1989 Jan;17(1):104–5
The use of pulse methylprednisolone and chlorambucil in the treatment of Sweet's syndrome. Case JD, et al. **Cutis** 1989 Aug;44(2):125–9
The influence of corticosteroids on sequential clinical and synovial fluid parameters in joints with acute infectious arthritis in the horse. Tulamo RM, et al. **Equine Vet J** 1989 Sep;21(5):332–7
Double-blind randomized trial of ACTH versus dexamethasone versus methylprednisolone in multiple sclerosis bouts. Clinical, cerebrospinal fluid and neurophysiological results. Milanese C, et al. **Eur Neurol** 1989;29(1):10–4
Early use of corticosteroids in severe closed chest injuries: a 10-year experience. Svennevig JL, et al. **Injury** 1987 Sep; 18(5):309–12
Protective effects of corticosteroids in contrast material anaphylaxis. Lasser EC, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S193–4
The possible role of corticosteroid therapy for pneumocystis pneumonia in the acquired immune deficiency syndrome (AIDS). Walmsley S, et al. **J Acquir Immune Defic Syndr** 1988;1(4):354–60
Corticosteroids decrease airway hyperresponsiveness in the Basenji-Greyhound dog model of asthma. Darowski MJ, et al. **J Appl Physiol** 1989 Mar;66(3):1120–6
Methylprednisolone and chlorpromazine in patients receiving cancer chemotherapy: a prospective non-randomized study. Gez E, et al. **J Chemother** 1989 Apr;1(2):140–3
The possible utility of steroids in the prevention of relapses of Crohn's disease in remission. A preliminary study. Brignola C, et al. **J Clin Gastroenterol** 1988 Dec;10(6):631–4
Use of steroids and heparin to treat retinal arterial occlusion in Mediterranean spotted fever [letter] Adan A, et al. **J Infect Dis** 1988 Nov;158(5):1139–40
Quantitative magnetic resonance imaging in multiple sclerosis: the effect of high dose intravenous methylprednisolone. Kesselring J, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):14–7
New pharmacological treatment of acute spinal cord trauma. Hall ED, et al. **J Neurotrauma** 1988;5(1):81–9 (30 ref.)
Treatment for solitary eosinophilic granuloma of the mandible by steroid injection: report of a case. Jones LR, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):306–9
High-dose intravenous methylprednisolone therapy for anemia associated with diaphyseal dysplasia [letter] Ozsoylu S. **J Pediatr** 1989 May;114(5):904
Microdensity of solitary bone cyst after steroid injection. Nakamura T, et al. **J Pediatr Orthop** 1988 Sep–Oct; 8(5):566–8
Considerations in the corticosteroid treatment of bone cysts. Rosenborg M, et al. **J Pediatr Orthop** 1989 Mar–Apr; 9(2):240–3
Central nervous system manifestations in juvenile systemic lupus erythematosus: a problem of management. Davies UM, et al. **J Rheumatol** 1988 Nov;15(11):1720–1
Intravenous cyclophosphamide and methylprednisolone for the treatment of bronchiolitis obliterans and interstitial fibrosis associated with crysotherapy. Fort JG, et al. **J Rheumatol** 1988;15(5):850–4
Posterior sub-Tenon's injections of corticosteroids in uveitis patients with cystoid macular edema. Jennings T, et al. **Jpn J Ophthalmol** 1988;32(4):385–91
Blood levels of free fatty acids and products of lipid peroxidation in rabbits during acute ischaemic hypoxia: protective effect of methylprednisolone. Orzechowski Z, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):159–62
Methylprednisolone pulse therapy in severe dysthyroid optic neuropathy. Guy JR, et al. **Ophthalmology** 1989 Jul; 96(7):1048–52; discussion 1052–3
Effect of corticosteroid administration in ischemia—ischemic injury. Zarem HA, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):865–71
Influence of methylprednisolone pretreatment on coagulation, fibrinolysis, hemodynamics and cellular responses in porcine endotoxemia. Røise O, et al. **Prog Clin Biol Res** 1989;308:873–7
Neuroendocrine and cardiovascular responses to high-dose corticosteroid therapy in canine endotoxin shock. Watson JD, et al. **Res Exp Med (Berl)** 1988;188(5):329–39
Brain enzyme changes as markers of brain damage in rat cardiac arrest model. Effects of corticosteroid therapy. Katz L, et al. **Resuscitation** 1989 Feb;17(1):39–53
High-dose corticosteroid therapy for Pneumocystis carinii pneumonia in patients with acquired immunodeficiency syndrome. Amundson DE, et al. **South Med J** 1989 Jun; 82(6):711–4, 718 (21 ref.)
Prevention of chronic cerebral vasospasm in dogs with ibuprofen and high-dose methylprednisolone. Chyatte D. **Stroke** 1989 Aug;20(8):1021–6
Therapeutic effect of corticosteroid, mannitol and silicon sponge on retraction induced brain edema. Lin SM. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):602–10
Renal transplantation in children using cyclosporin A and azathioprine. Clark AG, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1685–6
Synergistic effects of cyclosporine and steroid therapy in the induction of specific unresponsiveness to DLA-identical canine renal allografts. Hayashi R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):391–2
Steroid withdrawal in cyclosporine-treated living related donor renal transplant recipients. Kupin W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1623–4
Maintenance immunosuppression without steroids in pediatric liver transplantation. Margarit C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2230–1
Rabbit anti-thymocyte globulin treatment of steroid resistant rejection in renal allograft recipients immunosuppressed with cyclosporine A. O'Donoghue DJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1736–7
Is long-term triple drug therapy required for maintaining kidney allograft tolerance? Effect of azathioprine withdrawal at three months posttransplantation. Oncevski A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1625–6
Low-dose cyclosporin, prednisolone and anti-lymphocyte globulin immunosuppressive treatment in cadaveric kidney transplantation. Ono Y, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1657–9
Effect of duration of MALG therapy in a quadruple immunosuppressive protocol. Stratta RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1726–8
Methyl prednisolone in the treatment of acute spinal cord decompression sickness. Francis TJ, et al. **Undersea Biomed Res** 1989 Mar;16(2):165–74
[Treatment of patients in an acute stage of multiple sclerosis using high-dose methylprednisolone] Sanders EA. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2143–6 (28 ref.) **(Dut)**
[Acquired factor VII inhibitor: treatment using high-dose immunoglobulins, corticotherapy and plasma exchange] Delmer A, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:48–50 (Eng. Abstr.) **(Fre)**
[Comparison of the antiemetic effectiveness of high-dose corticosteroids with synacthene in nausea induced by chemotherapy: results of a randomized study] Brice P, et al. **Bull Cancer (Paris)** 1989;76(6):637–42 (Eng. Abstr.) **(Fre)**
[Efficacy of methylprednisolone embolus on the auditory involvement of Cogan syndrome (letter)] Hebbar M, et al. **Presse Med** 1989 Jan 28;18(3):129 **(Fre)**
[Treatment of vascular pain of the face by methylprednisolone injection into the area of the greater occipital nerve: 16 cases] Bigo A, et al. **Rev Neurol (Paris)** 1989;145(2):160–2 (Eng. Abstr.) **(Fre)**
[How are neurologic manifestations of Lyme borreliosis treated?] Pfister HW. **Nervenarzt** 1988 Nov;59(11):687–9 (21 ref.) **(Ger)**
[Amelioration of cisplatin-induced vomiting and anorexia by methylprednisolone] Matsumoto I, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):833–8 (Eng. Abstr.) **(Jpn)**
[Severe aplastic anemia remarkably improved by a treatment with antilymphocyte globulin, high-dose methylprednisolone and danazol] Miyamura K, et al. **Rinsho Ketsueki** 1989 Jan;30(1):72–7 (Eng. Abstr.) **(Jpn)**
[Are corticosteroids necessary in the treatment of acute non-severe asthma?] Pereira CA, et al. **Rev Paul Med** 1988 Jan–Feb;106(1):28–34 (Eng. Abstr.) **(Por)**

TOXICITY

Glucocorticoids activate a suicide process in thymocytes through an elevation of cytosolic Ca2+ concentration. McConkey DJ, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):365–70

METHYLPREDNISOLONE SUCCINATE see under **METHYLPREDNISOLONE**

METHYLPROMAZINE see **TRIMEPRAZINE**

METHYLROSANILINE CHLORIDE see **GENTIAN VIOLET**

METHYLSTANAZOL see **STANOZOLOL**

METHYLSULFADIAZINE see **SULFAMERAZINE**

METHYLTESTOSTERONE

ADMINISTRATION & DOSAGE

[Effect of gonadectomy and supplementary treatment with mesterone on the adrenal cortex of male albino rats] Zarębska A, et al. **Endokrynol Pol** 1988;39(2):93–102 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Methyltestosterone-induced cholestasis. The importance of disproportionately low serum alkaline phosphatase level. Borhan-Manesh F, et al. **Arch Intern Med** 1989 Sep; 149(9):2127–9

ANALYSIS

Chemiluminescence immunoassay for the detection and quantification of methyltestosterone residues in muscle tissue. van Peteghem C, et al. **J Chromatogr** 1989 Apr 7; 489(1):219–23

METABOLISM

The glucocorticoid antagonist 17 alpha-methyltestosterone binds to the 10 S glucocorticoid receptor and blocks agonist-mediated dissociation of the 10 S oligomer to the 4 S deoxyribonucleic acid-binding subunit. Raaka BM, et al. **Mol Endocrinol** 1989 Feb;3(2):332–41

PHARMACOLOGY

Testosterone changes the electric organ discharge and external morphology of the mormyrid fish, Gnathonemus petersii (Mormyriformes). Landsman RE, et al. **Experientia** 1988 Oct 15;44(10):900–3

URINE

Enzyme immunoassay screening procedure for the synthetic anabolic estrogens and androgens diethylstilbestrol, nortestosterone, methyltestosterone and trenbolone in bovine urine. Degand G, et al. **J Chromatogr** 1989 Apr 7;489(1):235–43
[Comparison of the excretion of 3 androgens registered in Czechoslovakia] Hampl R, et al. **Sb Lek** 1989 Jan; 91(1):16–20 (Eng. Abstr.) **(Cze)**

METHYLTHIOINOSINE see under **INOSINE**

METHYLTHIONINE CHLORIDE see **METHYLENE BLUE**

METHYLTRANSFERASES

Controlled partial restriction digestions of DNA by competition with modification methyltransferases. Hanish J, et al. **Anal Biochem** 1989 Jun;179(2):357–60
5' end labeling of RNA with capping and methylating enzymes. Moss B. **Gene Amplif Anal** 1981;2:253–66 (74 ref.)

ANALYSIS

Histamine methyltransferase in dispersed cells from rabbit fundic mucosa. Loiselle J, et al. **Agents Actions** 1989 Aug; 28(1–2):39–44
Heterogeneity of O6-alkylguanine-DNA alkyltransferase activity in peripheral blood lymphocytes: relationship between this activity in lymphocytes and in lymphoblastoid lines from normal controls and from patients with Hodgkin's disease or non-Hodgkin's lymphoma. Sagher D, et al. **Cancer Res** 1989 Oct 1;49(19):5339–44
Development and validation of a new assay for O6-alkylguanine-DNA-alkyltransferase based on the use of an oligonucleotide substrate, and its application to the measurement of DNA repair activity in extracts of biopsy samples of human urinary bladder mucosa. Souliotis VL, et al. **Carcinogenesis** 1989 Jul;10(7):1203–8
Probing the structure and function of U2 snRNP with antisense oligonucleotides made of 2'-OMe RNA. Lamond AI, et al. **Cell** 1989 Jul 28;58(2):383–90
Histamine, histidine decarboxylase and histamine-N-methyltransferase in brain areas of spontaneously hypertensive rats. Prast H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):573–6

ANTAGONISTS & INHIBITORS

Effect of nitrous oxide inactivation of vitamin B12-dependent methionine synthetase on the subcellular distribution of folate coenzymes in rat liver. Horne DW, et al. **Arch Biochem Biophys** 1989 May 1;270(2):729–33
Metabolism of 24(R,S),25-epiminolanosterol to 25-aminolanosterol and lanosterol by Gibberella fujikuroi. Nes WD, et al. **Arch Biochem Biophys** 1989 Aug 1; 272(2):323–31
Actions of the brain-penetrating H2-antagonist zolantidine on histamine dynamics and metabolism in rat brain. Hough LB, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4707–11
Methionine synthase activities in mice following acute exposures to ethanol and nitrous oxide. Koblin DD, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1353–8
Inhibition of the hepatic O6-alkylguanine-DNA alkyltransferase in vivo by pretreatment with antineoplastic agents. Meer L, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):929–34
Inactivation of O6-alkylguanine-DNA alkyltransferase in HeLa cells by cisplatin. Wang LG, et al. **Carcinogenesis** 1989 Sep;10(9):1681–4
Possible interaction of histamine and serotonin in the Arthus reaction induced in guinea pig skin. Tachibana T, et al. **Dermatologica** 1989;179 Suppl 1:127
The inhibitory effects of nitrous oxide and methylmercury in vivo on methionine synthase (EC 2.1.1.13) activity in the brain, liver, ovary and spinal cord of the rat. Brennt CE, et al. **Gen Pharmacol** 1989;20(4):427–31
Inhibition of histamine N-methyltransferase activity in guinea-pig pulmonary alveolar macrophages by nicotine. Gairola C, et al. **J Pharm Pharmacol** 1988 Oct;40(10):724–6
Inhibition of the catalytic activity of bovine pineal gland

hydroxyindole-O-methyltransferase (EC 2.1.1.4) by estrone, estradiol, progesterone, and testosterone but not pteridines. Morton DJ, et al. **J Pineal Res** 1989;6(3):259-65

BLOOD

Specificity of endoproteinase Asp-N (Pseudomonas fragi): cleavage at glutamyl residues in two proteins. Ingrosso D, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1528-34

Pharmacogenetics of acute azathioprine toxicity: relationship to thiopurine methyltransferase genetic polymorphism. Lennard L, et al. **Clin Pharmacol Ther** 1989 Aug; 46(2):149-54

Phosphatidylethanolamine N-methyltransferase in human red blood cell membrane preparations. Kinetic mechanism. Reitz RC, et al. **J Biol Chem** 1989 May 15;264(14):8097-106

S-methylation in motorneuron disease and Parkinson's disease. Waring RH, et al. **Lancet** 1989 Aug 12; 2(8659):356-7

GENETICS

The effect of homocysteine on MetR regulation of metE, metR and metH expression in vitro. Cai XY, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):79-83

Expression of mammalian O6-alkylguanine-DNA alkyltransferase in a cell line sensitive to alkylating agents. Dolan ME, et al. **Carcinogenesis** 1989 Sep;10(9):1613-9

Properties of N-methyl-N-nitrosourea-resistant, Mex- derivatives of an SV40-immortalized human fibroblast cell line. Green MH, et al. **Carcinogenesis** 1989 May;10(5):893-8

O6-methylguanine-DNA methyltransferase-defective human cell mutant: O6-methylguanine, DNA strand breaks and cytotoxicity. Kalamegham R, et al. **Carcinogenesis** 1988 Oct;9(10):1749-53

Characterization of the phage P1 dam gene. Coulby JN, et al. **Gene** 1988 Dec 25;74(1):191

Single amino acid changes which alter the sequence specificity of the T4 and T2 (Dam) DNA-adenine methyltransferases. Miner Z, et al. **Gene** 1988 Dec 25; 74(1):275-6

Salmonella typhimurium metE operator-constitutive mutations. Plamann LS, et al. **Gene** 1988 Dec 15; 73(1):201-8

The control region of the metH gene of Salmonella typhimurium LT2: an atypical met promoter. Urbanowski ML, et al. **Gene** 1988 Dec 15;73(1):193-200

Two genes in Streptomyces alboniger puromycin biosynthesis pathway are closely linked. Vara JA, et al. **Gene** 1988 Sep 15;69(1):135-40

Cloning of the BamHI methyl transferase gene from Bacillus amyloliquefaciens. Connaughton JF, et al. **Gene Anal Tech** 1988 Nov-Dec;5(6):116-24

Mutations in the Saccharomyces cerevisiae opi3 gene: effects on phospholipid methylation, growth and cross-pathway regulation of inositol synthesis. McGraw P, et al. **Genetics** 1989 Jun;122(2):317-30

Induction of ermC methylase in the absence of macrolide antibiotics and by pseudomonic acid A. Kadam SK. **J Bacteriol** 1989 Aug;171(8):4518-20

Role of homocysteine in metR-mediated activation of the metE and metH genes in Salmonella typhimurium and Escherichia coli. Urbanowski ML, et al. **J Bacteriol** 1989 Jun;171(6):3277-81

Cloning and sequence analysis of the Escherichia coli metH gene encoding cobalamin-dependent methionine synthase and isolation of a tryptic fragment containing the cobalamin-binding domain. Banerjee RV, et al. **J Biol Chem** 1989 Aug 15;264(23):13888-95

Alleviation of type I restriction in adenine methylase (dam) mutants of Escherichia coli. Efimova EP, et al. **Mol Gen Genet** 1988 Oct;214(2):313-6

Expression of an E.coli O6-alkylguanine DNA alkyltransferase gene in Chinese hamster cells protects against N-methyl and N-ethylnitrosourea induced reverse mutation at the hypoxanthine phosphoribosyl transferase locus. Fox M, et al. **Mutagenesis** 1988 Sep;3(5):409-13

Cloning and expression of the Bacillus subtilis methyltransferase gene in Escherichia coli ada- cells. Kodama KI, et al. **Mutat Res** 1989 Sep;218(2):153-63

Bacillus subtilis gene coding for constitutive O6-methylguanine-DNA alkyltransferase. Morohoshi F, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6531-43

Methyltransferase pharmacogenetics. Weinshilboum R. **Pharmacol Ther** 1989;43(1):77-90 (67 ref.)

Cloning and expression of the gene cluster encoding key proteins involved in acetyl-CoA synthesis in Clostridium thermoaceticum: CO dehydrogenase, the corrinoid/Fe-S protein, and methyltransferase. Roberts DL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):32-6

Prevention of translational frameshifting by the modified nucleoside 1-methylguanosine. Björk GR, et al. **Science** 1989 May 26;244(4907):986-9

Association of the Sindbis virus RNA methyltransferase activity with the nonstructural protein nsP1. Mi S, et al. **Virology** 1989 Jun;170(2):385-91

IMMUNOLOGY

An antiserum against chicken hydroxyindole-O-methyltransferase reacts with the enzyme from pineal gland and retina and labels pineal modified photoreceptors. Voisin P, et al. **Brain Res** 1988 Aug;464(1):53-61

Polyclonal antibodies against O6-methylguanine-DNA methyltransferase in adapted bacteria. Ceccoli J, et al. **Mutat Res** 1988 Nov;194(3):219-26

ISOLATION & PURIFICATION

S-adenosyl-L-methionine:trans-caffeoyl-coenzyme A 3-O-methyltransferase from elicitor-treated parsley cell suspension cultures. Pakusch AE, et al. **Arch Biochem Biophys** 1989 Jun;271(2):488-94

Confirmation of a ping-pong mechanism for S-adenosyl-L-methionine:magnesium protoporphyrin methyltransferase of etiolated wheat by an exchange reaction. Yee WC, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):483-90

Purification and properties of O6-methylguanine-DNA-methyltransferase in human hepatic tissue. Yawetz A, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):177-83

Cobalamin-dependent methionine synthase from Escherichia coli B: electron paramagnetic resonance spectra of the inactive form and the active methylated form of the enzyme. Frasca V, et al. **Biochemistry** 1988 Nov 1; 27(22):8458-65

Purification and characterization of S-adenosyl-L-methionine: uroporphyrinogen III methyltransferase from Pseudomonas denitrificans. Blanche F, et al. **J Bacteriol** 1989 Aug;171(8):4222-31

Purification, characterization, and kinetic mechanism of S-adenosyl-L-methionine:macrocin O-methyltransferase from Streptomyces fradiae. Bauer NJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15619-25

Affinity purification and characterization of human O6-alkylguanine-DNA alkyltransferase complexed with BCNU-treated, synthetic oligonucleotide. Gonzaga PE, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6581-90

Characterization of cobalamin-dependent methionine synthase purified from the human malarial parasite, Plasmodium falciparum. Krungkrai J, et al. **Parasitol Res** 1989;75(7):512-7

Purification and characterization of a methyltransferase from Aspergillus parasiticus SRRC 163 involved in aflatoxin biosynthetic pathway. Bhatnagar D, et al. **Prep Biochem** 1988;18(3):321-49

METABOLISM

Potentiation of N-methyl-N'-nitro-N-nitrosoguanidine-induced O6-methylguanine-DNA-methyltransferase activity in a rat hepatoma cell line by poly (ADP-ribose) synthesis inhibitors. Lefebvre P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):599-604

A N-methyltransferase in human brain catalyses N-methylation of 1,2,3,4-tetrahydroisoquinoline into N-methyl-1,2,3,4-tetrahydroisoquinoline, a precursor of a dopaminergic neurotoxin, N-methylisoquinolinium ion. Naoi M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1213-9

A specific inhibition of induction of adaptive response by o-vanillin, a potent comutagen. Takahashi K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1376-81

Rat and human mammary tissue can synthesize choline moiety via the methylation of phosphatidylethanolamine. Yang EK, et al. **Biochem J** 1988 Dec 15;256(3):821-8

O6-methylguanine-DNA methyltransferase content in human lymphocytes following surgical trauma. Klaude M, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):171-6

Recombinant rat liver guanidinoacetate methyltransferase: reactivity and function of sulfhydryl groups. Fujioka M, et al. **Biochemistry** 1988 Oct 4;27(20):7658-64

Co-ordinate control of CDP-choline and phosphatidylethanolamine methyltransferase pathways for phosphatidylcholine biosynthesis occurs in response to change in diet fat. Hargreaves KM, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):262-7

In vitro phosphorylation of phosphatidylethanolamine N-methyltransferase by cAMP-dependent protein kinase: lack of in vivo phosphorylation in response to N6-2'-O-dibutryladenosine 3',5'-cyclic monophosphate. Ridgway ND, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):261-70

S-adenosylmethionine-dependent enzyme activation. Kozarich JW. **Biofactors** 1988 Jul;1(2):123-8 (47 ref.)

Synthesis of melatonin by the pineal modified photoreceptors of birds immunocytochemical localization of hydroxyindole-O-methyltransferase. Guerlotte J, et al. **Biol Cell** 1988;64(1):93-6

Effect of nutritional zinc-deficiency on O6-alkylguanine-DNA-methyl-transferase activities in rat tissues. Fong LY, et al. **Cancer Lett** 1988 Nov;42(3):217-23

Modulation of O6-alkylguanine-DNA alkyltransferase in rats following intravenous administration of O6-methylguanine. Dexter EU, et al. **Cancer Res** 1989 Jul 1;49(13):3520-4

Modulation of human lymphocyte O6-alkylguanine-DNA alkyltransferase by streptozotocin in vivo. Gerson SL. **Cancer Res** 1989 Jun 1;49(11):3134-8

Relationships among cell survival, O6-alkylguanine-DNA alkyltransferase activity, and reactivation of methylated adenovirus 5 and herpes simplex virus type 1 in human melanoma cell lines. Maynard K, et al. **Cancer Res** 1989 Sep 1;49(17):4813-7

Importance of the DNA repair enzyme O6-alkyl guanine alkyltransferase (AT) in cancer chemotherapy. D'Incalci M, et al. **Cancer Treat Rev** 1988 Dec;15(4):279-92 (99 ref.)

Cell specific differences in O6-methylguanine-DNA methyltransferase activity and removal of O6-methylguanine in rat pulmonary cells. Belinsky SA, et al. **Carcinogenesis** 1988 Nov;9(11):2053-8

O6-methyltransferase-deficient and -proficient CHO cells differ in their responses to ethyl- and methyl-nitrosourea-induced DNA alkylation. Bignami M, et al. **Carcinogenesis** 1989 Jul;10(7):1329-32

Sequence specificity of guanine alkylation and repair. Dolan ME, et al. **Carcinogenesis** 1988 Nov;9(11):2139-43

Hypersensitivity of human tumor xenografts lacking O6-alkylguanine-DNA alkyltransferase to the anti-tumor agent 1-(4-amino-2-methyl-5-pyrimidinyl)methyl-3-(2-chloroethyl)-3-nitros ourea. Fujio C, et al. **Carcinogenesis** 1989 Feb;10(2):351-6

Effects of dietary sinigrin or indole-3-carbinol on O6-methylguanine-DNA-transmethylase activity and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA methylation and tumorigenicity in F344 rats. Morse MA, et al. **Carcinogenesis** 1988 Oct;9(10):1891-5

Phenobarbital: a non-genotoxic agent which induces the repair of O6-methylguanine from hepatic DNA. O'Connor PJ, et al. **Carcinogenesis** 1988 Nov;9(11):2033-8

The relationship between O6-alkylguanine alkyltransferase activity and sensitivity to alkylation-induced sister chromatid exchanges in human lymphoblastoid cell lines. Schwartz JL, et al. **Carcinogenesis** 1989 Apr;10(4):681-5

O6-methylguanine-DNA methyltransferase levels in tissues of methionine-cysteine deficient subadult and adult mice. Klaude M, et al. **Comp Biochem Physiol [C]** 1988; 91(2):603-6

The rate of Dam-mediated DNA adenine methylation in Escherichia coli. Campbell JL, et al. **Gene** 1988 Dec 25; 74(1):189-90

In vivo methylation of yeast DNA by prokaryotic DNA methyltransferases. Fehér Z, et al. **Gene** 1988 Dec 25; 74(1):193-5

The DNA and S-adenosylmethionine-binding regions of EcoDam and related methyltransferases. Guschlbauer W. **Gene** 1988 Dec 25;74(1):211-4

Characterization of the major DNA repair methyltransferase activity in unadapted Escherichia coli and identification of a similar activity in Salmonella typhimurium. Rebeck GW, et al. **J Bacteriol** 1989 Sep;171(9):4563-8

Methylation of 23S rRNA caused by tlrA (ermSF), a tylosin resistance determinant from Streptomyces fradiae. Zalacain M, et al. **J Bacteriol** 1989 Aug;171(8):4254-60

Preferential site-specific hemimethylation of GATC sites in pBR322 DNA by Dam methyltransferase from Escherichia coli. Bergerat A, et al. **J Biol Chem** 1989 Mar 5; 264(7):4064-70

Mono- and dimethylating activities and kinetic studies of the ermC 23 S rRNA methyltransferase. Denoya C, et al. **J Biol Chem** 1989 Feb 15;264(5):2615-24

Different isozymes of methylcobalamin:2-mercaptoethanesulfonate methyltransferase predominate in methanol- versus acetate-grown Methanosarcina barkeri. Grahame DA. **J Biol Chem** 1989 Aug 5;264(22):12890-4

Two distinctive O-methyltransferases catalyzing penultimate and terminal reactions of macrolide antibiotic (tylosin) biosynthesis. Substrate specificity, enzyme inhibition, and kinetic mechanism. Kreuzman AJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15626-33

Phosphatidylethanolamine levels and regulation of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1989 Jan 15;264(2):1203-7

Specificity of rat hepatic phosphatidylethanolamine N-methyltransferase for molecular species of diacyl phosphatidylethanolamine. Ridgway ND, et al. **J Biol Chem** 1988 Nov 15;263(32):16856-63

Kinetic mechanism of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1988 Nov 15;263(32):16864-71

Phosphorylation modulates the activity of glycine N-methyltransferase, a folate binding protein. In vitro phosphorylation is inhibited by the natural folate ligand. Wagner C, et al. **J Biol Chem** 1989 Jun 5;264(16):9638-42

Proteolytic cleavage of Ada protein that carries methyltransferase and transcriptional regulator activities. Yoshikai T, et al. **J Biol Chem** 1988 Dec 15; 263(35):19174-80

Probable mechanism of catalysis of pineal gland hydroxyindole-O-methyltransferase (HIOMT) from rainbow trout (Salmo gairdneri). Morton DJ, et al. **J Neural Transm** 1989;75(1):65-71

O6-alkylguanine-DNA alkyltransferase and sensitivity to procarbazine in human brain-tumor xenografts. Schold SC Jr, et al. **J Neurosurg** 1989 Apr;70(4):573-7

Effect of dietary methyl group deficiency on one-carbon metabolism in rats. Cook RJ, et al. **J Nutr** 1989 Apr; 119(4):612-7

Pineal gland hydroxyindole-O-methyl transferase (HIOMT) from rainbow trout (Salmo gairdneri) subject to temperature-dependent substrate inhibition by N-acetylserotonin. Morton DJ, et al. **J Pineal Res** 1989; 7(1):31-6

The biosynthesis of 5-methoxy-N,N-dimethyltryptamine in vitro. Mandel LR, et al. **Life Sci** 1974 Oct 15;15(8):1457-63

Age-dependent modulation of tissue-specific repair activity for 3-methyladenine and O6-methylguanine in DNA in inbred mice. Washington WJ, et al. **Mech Ageing Dev** 1989 Apr;48(1):43-52

Combined effect of dimethylnitrosamine and a lysine-restricted diet on O6-methylguanine-DNA methyltransferase levels in mouse tissues. Klaude M, et al. **Mutat Res** 1989 Sep;218(2):135-42

Age and strain dependence of O6-methylguanine DNA methyltransferase activity in mice. Nakatsuru Y, et al. **Mutat Res** 1989 Jan;219(1):51-6

Pineal gland N-acetyltransferase and hydroxyindole-O-methyltransferase activity in the rainbow trout (Salmo gairdneri): seasonal variation linked to photoperiod. Morton DJ, et al. **Neurosci Lett** 1988 Dec 5;94(3):333-7

The effect of gamma radiation on DNA methylation. Kalinich JF, et al. **Radiat Res** 1989 Feb;117(2):185-97

Histamine metabolism of the human gastric mucosa--a study on the regional distribution of the amine and enzyme activities. Lönroth H, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):23-31

[O6-mdGuo demethylation in cells and tissues] Wang JJ. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):223-9 (Eng. Abstr.) **(Chi)**

[Effect of nitrous oxide on methionine synthetase activity in human placenta] Jendryczko A, et al. **Wiad Lek** 1988 Oct 1;41(19):1286-8 (Eng. Abstr.) **(Pol)**

[Effect of the structure of oligonucleotide substrates on interaction with methylase Eco dam] Malygin EG, et al. **Biokhimiia** 1988 Oct;53(10):1639-47 (Eng. Abstr.) **(Rus)**

[Interaction between Eco dam methylase and double-stranded oligodeoxyribonucleotide] Tuzikov FV, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb;304(1):231-4 **(Rus)**

[The effect of ionizing radiation on the transmethylation of phospholipids in the high molecular complex acyl-tRNA-synthetase] Babenko AIu, et al. **Radiobiologiia** 1989 Jan-Feb;29(1):41-3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Repair of O6-methylguanine, O6-ethylguanine, O6-isopropylguanine and O4-methylthymine in synthetic oligodeoxynucleotides by Escherichia coli ada gene O6-alkylguanine-DNA-alkyltransferase. Graves RJ, et al. **Carcinogenesis** 1989 Apr;10(4):661-6

PHYSIOLOGY

The role of O6-alkylguanine DNA alkyltransferase in limiting nitrosourea-induced sister chromatid exchanges in proliferating human lymphocytes. Trey JE, et al. **Cancer Res** 1989 Apr 15;49(8):1899-903

P1 plasmid replication requires Escherichia coli Dam-methylated DNA. Abeles AL, et al. **Gene** 1988 Dec 25;74(1):185-6

Methylation-dependent gene expression in phage Mu. Bölker M, et al. **Gene** 1988 Dec 25;74(1):187-8

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690-5

[Role of O6-methylguanine-DNA methyltransferase in repair of DNA damaged by alkylating agents] Sekiguchi M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):466-72 (16 ref.) (Eng. Abstr.) **(Jpn)**

METHYLTYROSINES

DIAGNOSTIC USE

Imaging of brain tumors with L-3-[123I]iodo-alpha-methyl tyrosine and SPECT. Biersack HJ, et al. **J Nucl Med** 1989 Jan;30(1):110-2

PHARMACOLOGY

Catecholamine depletion produces irrepressible saccadic eye movements in normal humans. Tychsen L, et al. **Ann Neurol** 1989 May;25(5):444-9

Kainic acid-induced seizures: potentiation by alpha-methyl-p-tyrosine. Baran H, et al. **Brain Res** 1989 Aug 28;495(2):253-60

Effect of alpha-methyl-p-tyrosine and an antiserum to rat growth hormone (GH)-releasing factor (GRF) on plasma GH secretory profile during a continuous infusion of human GRF in rats. Sugihara H, et al. **Brain Res** 1988 Dec 13;475(1):128-33

The NMDA antagonist MK-801 causes marked locomotor stimulation in monoamine-depleted mice. Carlsson M, et al. **J Neural Transm** 1989;75(3):221-6

The effect of bombesin on basal, alpha-methyl-p-tyrosine, haloperidol, morphine, bremazocine and stress-induced prolactin secretion. Buydens P, et al. **Life Sci** 1988; 43(21):1755-60

Involvement of norepinephrine activity in the regulation of alpha 1 adrenergic receptors in the medial preoptic nucleus of estradiol-treated rats. Sortino MA, et al. **Life Sci** 1989; 44(17):1223-9

Effects of alpha-methyl-p-tyrosine on monoamines and catecholamine receptors in rat cerebral cortex and neostriatum. Sauvé Y, et al. **Neurochem Res** 1988 Sep; 13(9):807-15

Hypersensitivity to alpha-methyl-p-tyrosine suggests that behavioural recovery of rats receiving neonatal 6-OHDA lesions is mediated by residual catecholamine neurones. Rogers DC, et al. **Neurosci Lett** 1989 Jul 17;102(1):108-13

METHYLUREA COMPOUNDS

Curcumins as inhibitors of nitrosation in vitro. Nagabhushan M, et al. **Mutat Res** 1988 Nov;202(1):163-9

ADMINISTRATION & DOSAGE

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369-73 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[The role of various pesticides in nitrosamine-induced carcinogenesis] Ponomareva LA, et al. **Gig Sanit** 1989 May; (5):7-9 **(Rus)**

CHEMICAL SYNTHESIS

Ketomethylureas. A new class of angiotensin converting enzyme inhibitors. Natarajan S, et al. **J Enzym Inhib** 1988; 2(2):91-7

METABOLISM

Inhibitory effects of para-aminobenzoic acid on the formation and mutagenicity of N-nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329-31

METHYLXANTHINE RECEPTORS see **RECEPTORS, PURINERGIC**

METHYMAZOL see **METHIMAZOLE**

METHYPREGNONE see **MEDROXYPROGESTERONE**

METHYSERGIDE

ADVERSE EFFECTS

[Ergotism revealing Horton's disease] Zouiten F, et al. **Tunis Med** 1987 Oct;65(10):617-22 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Ergot alkaloids block neurogenic extravasation in dura mater: proposed action in vascular headaches. Saito K, et al. **Ann Neurol** 1988 Dec;24(6):732-7

Blockade of the postictal prolactin surge by methysergide [letter] Zis AP, et al. **Arch Gen Psychiatry** 1989 Apr; 46(4):385-7

Methysergide-induced nipple attachment depends on suckling experience in juvenile rats. Lichtman AH, et al. **Behav Neurosci** 1989 Apr;103(2):254-61

Participation of serotonergic mechanisms in the anticonvulsant effect of stress in mice treated with pentylenetetrazol. De-Lima TC, et al. **Braz J Med Biol Res** 1988;21(2):333-5

The effect of intrathecal serotonergic antagonists on the pressor response to stimulation of the brainstem in the rat. Mills EH, et al. **Clin Exp Hypertens [A]** 1989;11(2):265-76

Pathogenesis of low dose streptozotocin induced diabetes in mice: requirement for alpha 1-adrenoceptor activation and vasoactive amine release. Martin S, et al. **Diabetologia** 1989 Feb;32(2):140-2

Cholinergic and serotonergic effects on the P3 potential and recent memory. Meador KJ, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):252-60

Effects of 5-HT2 receptor antagonist on cycloheximide-induced amnesia in mice. Nabeshima T, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):787-90

Analgesia induced by continuous versus intermittent cold water swim in the rat: differential effects of intrathecal administration of phentolamine and methysergide. Rochford J, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):27-31

Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. **Prog Brain Res** 1988;77:321-7

Increased food intake in satiated rats induced by the 5-HT antagonists methysergide, metergoline and ritanserin. Fletcher PJ. **Psychopharmacology (Berlin)** 1988; 96(2):237-42

Ventilatory response to sustained hypoxia: effect of methysergide and verapamil. Long GR, et al. **Respir Physiol** 1989 Feb;75(2):173-82

THERAPEUTIC USE

Methysergide, a serotonin antagonist, does not inhibit the expression of autoimmune encephalomyelitis in the rabbit. Simmons RD, et al. **J Neuroimmunol** 1989 Mar;22(1):77-9

METIAMIDE see under **THIOUREA**

METMYOGLOBIN see under **HEMEPROTEINS**

METOCLOPRAMIDE

Metoclopramide. Singh RP, et al. **Indian Pediatr** 1988 Oct; 25(10):993-6

Structural requirements of Na+-dependent antidopaminergic agents: Tropapride, Piquindone, Zetidoline, and Metoclopramide. Comparison with Na+-independent ligands. Collin S, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):39-53

ADMINISTRATION & DOSAGE

Metoclopramide and ureteric colic. Hedenbro JL, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7-8):439-40

Does prolonged dopaminergic blockade alter the LH pulsatile secretion in normal cycling and postmenopausal women? Rossmanith WG, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):147-52

Antiemetic activity of high-dose metoclopramide combined with methylprednisolone versus metoclopramide alone in dacarbazine-treated cancer patients. A randomized double-blind study of the Italian Oncology Group for Clinical Research. Basurto C, et al. **Am J Clin Oncol** 1989 Jun;12(3):235-8

Dose-ranging antiemetic trial of high-dose oral metoclopramide. Tyson LB, et al. **Am J Clin Oncol** 1989 Jun;12(3):239-43

Comparison of intermittent versus continuous infusion metoclopramide in control of acute nausea induced by cisplatin chemotherapy. Navari RM. **J Clin Oncol** 1989 Jul;7(7):943-6

Oral metoclopramide, glycopyrrolate and magnesium trisilicate on gastric volume and pH in paediatric patients. Bhanja DC, et al. **J Indian Med Assoc** 1988 Jul;86(7):175-6

Control of cisplatin-induced delayed emesis with metoclopramide and dexamethasone: a randomized controlled trial. Shinkai T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):40-4

Chlorpromazine and dexamethasone versus high-dose metoclopramide and dexamethasone in patients receiving cancer chemotherapy, particularly cis-platinum: a prospective randomized crossover study. Gez E, et al. **Oncology** 1989;46(3):150-4

Betamethasone-dixyrazine combination versus high-dose metoclopramide as antiemetic treatment in doxorubicin and cisplatin chemotherapy. Sorbe B, et al. **Radiother Oncol** 1989 Jun;15(2):161-7

Effect of dopamine and dopamine-antagonist infusion on blood platelet count, size and release reaction in hypertensive and normotensive subjects. Lande K, et al. **Scand J Clin Lab Invest** 1989 Jun;49(4):307-15

[Hypogalactia: therapeutic possibilities] Rolfini G, et al. **Clin Ter** 1989 May 15;129(3):185-91 (Eng. Abstr.) **(Ita)**

[Antiemetic efficacy of betamethasone versus betamethasone combined with metoclopramide in cisplatin-treated cancer patients] Kagami Y, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 1):807-10 (Eng. Abstr.) **(Jpn)**

[Comparative study on the tolerance and efficacy of high doses of metoclopramide and clebopride in vomiting induced by cisplatin] Martín M, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):50-3 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Acute upper airway obstruction due to supraglottic dystonia induced by a neuroleptic. Newton-John H. **BMJ** 1988 Oct 15;297(6654):964-5

Methaemoglobinaemia following metoclopramide [letter] Ozsoylu S. **Eur J Pediatr** 1988 Nov;148(2):172

Neuroleptic malignant syndrome in a child treated with metoclopramide for chemotherapy-related nausea [letter] Brower RD, et al. **J Child Neurol** 1989 Jul;4(3):230-2

Acute dystonic reaction with asterixis and myoclonus following metoclopramide therapy [letter] Lu CS, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1002-3

Metaclopramide neurotoxicity. Santos A, et al. **J S C Med Assoc** 1988 Nov;84(11):542-5 (12 ref.)

Metoclopramide and prochlorperazine: "the blue-tongue sign" [letter] Alroe C, et al. **Med J Aust** 1989 Jun 19; 150(12):724-5

Metoclopramide-induced agranulocytosis [letter] Manoharan A. **Med J Aust** 1988 Nov 7;149(9):508

Neuroleptic malignant-like syndrome induced by metoclopramide. Samie MR. **Mov Disord** 1987;2(1):57-60

Life-threatening tardive dyskinesia caused by metoclopramide. Samie MR, et al. **Mov Disord** 1987; 2(2):125-9

Oculogyric crisis after metoclopramide therapy. Edwards M, et al. **Optom Vis Sci** 1989 Mar;66(3):179-80

[Adverse neurologic effects of metoclopramide. Report of 60 cases] Sun B, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):358-60, 390 (Eng. Abstr.) **(Chi)**

[Dystonic-dyskinetic syndrome following metoclopramide (Cerucal) administration to promote lactation] Quiel V. **Z Arztl Fortbild (Jena)** 1989;83(10):539-40 **(Ger)**

[Metoclopramide-induced gynecomastia (letter)] Ubach Serna J, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):558 **(Spa)**

ANALOGS & DERIVATIVES

Prolactin levels in male and female rats perinatally treated with bromopride. Felicio LF, et al. **Braz J Med Biol Res** 1988;21(1):133-6

Acute bromopride treatments: effects on general activity and inhibitory avoidance in rats. Nasello AG, et al. **Braz J Med Biol Res** 1988;21(4):841–3

BMY–25801, an antiemetic agent free of D2–dopamine receptor antagonist properties. Gylys JA, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):830–7

ANALYSIS

Stability–indicating high–performance liquid chromatographic assay for the determination of metoclopramide hydrochloride in pharmaceutical dosage forms. Suleiman MS, et al. **Analyst** 1989 Mar;114(3):365–8

BLOOD

An automated high–performance liquid chromatographic trace enrichment method for the determination of metoclopramide in serum and its application to a bioequivalence human volunteer study. Fairhead AP, et al. **Food Chem Toxicol** 1989 May;27(5):341–5

DIAGNOSTIC USE

Defective dopaminergic regulation of prolactin secretion in patients with hyperprolactinemia. Serri O, et al. **Clin Invest Med** 1988 Dec;11(6):387–91

The metoclopramide test: a useful tool with the luteinizing hormone–releasing hormone test in distinguishing between constitutional delay of puberty and hypogonadotropic hypogonadism. Lanes R, et al. **Fertil Steril** 1989 Jul; 52(1):55–9

Metoclopramide–mediated prolactin secretion in patients with idiopathic hypogonadotropic hypogonadism: effect of testosterone therapy. Modebe O. **Fertil Steril** 1989 May; 51(5):855–8

Abdominal and pelvic CT: use of oral metoclopramide to enhance bowel opacification. Thoeni RF, et al. **Radiology** 1988 Nov;169(2):391–3

[Prolactin stimulation using the metoclopramide test in females taking oral contraceptives] Carol W, et al. **Zentralbl Gynakol** 1988;110(23):1515–21 (Eng. Abstr.) **(Ger)**

[Effect of metoclopramide and acth on aldosterone secretion in patients with insufficiency of the anterior pituitary gland] Słowińska–Srzednicka J, et al. **Pol Arch Med Wewn** 1985 Oct;74(4):250–60 (Eng. Abstr.) **(Pol)**

PHARMACOKINETICS

Liquid chromatographic analysis of metoclopramide with fluorescence detection in cirrhotic patients. Albani F, et al. **Biomed Chromatogr** 1987;2(3):135–6

A single dose pharmacokinetic study of Gastrobid Continus and Maxolon in the perioperative period. Madej TH, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):747–51

Linearity of metoclopramide kinetics at doses of 5–20 mg. Wright MR, et al. **Br J Clin Pharmacol** 1988 Oct; 26(4):469–73

Effect of haemodialysis on metoclopramide kinetics in patients with severe renal failure. Wright MR, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):474–7

Metoclopramide pharmacokinetics and pharmacodynamics in infants with gastroesophageal reflux. Kearns GL, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):823–9

PHARMACOLOGY

Clinical and pharmacological characterization of anomalous metoclopramide–induced growth hormone secretion in insulin–dependent diabetes mellitus. Caviezel F, et al. **Acta Diabetol Lat** 1989 Apr–Jun;26(2):133–45

The effects of metoclopramide and cloxacepride on human mast cells from adenoidal tissues. Schmutzler W, et al. **Agents Actions** 1989 Apr;27(1–2):110–2

Scintigraphic determination of the effect of metoclopramide and morphine on small intestinal transit time. Prokop EK, et al. **Am J Physiol Imaging** 1988;3(4):201–4

Prolongation of succinylcholine block by metoclopramide. Kao YJ, et al. **Anesthesiology** 1989 Jun;70(6):905–8

Effect of metoclopramide on gastric ulceration and secretion in albino rats. Gupta RK, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:158–65

Effect of metoclopramide and ranitidine on acetylcholine release from isolated rat stomach. Yoshida N, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:245–56

Dopamine and preparatory behavior: III. Effects of metoclopramide and thioridazine. Blackburn JR, et al. **Behav Neurosci** 1989 Aug;103(4):903–6

Effects of metoclopramide on spontaneous and pharmacologically–induced yawning in the rat. Urba–Holmgren R, et al. **Bol Estud Med Biol** 1987 Jul–Dec; 35(3–4):203–6

The effect of antacids and metoclopramide on omeprazole absorption and disposition. Howden CW, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):779–81

Comparison of the effect of cisapride and metoclopramide on morphine–induced delay in gastric emptying. Rowbotham DJ, et al. **Br J Clin Pharmacol** 1988 Dec; 26(6):741–6

The inhibitory effect of metoclopramide on plasma cholinesterase activity. Kambam JR, et al. **Can J Anaesth** 1988 Sep;35(5):476–8

Metoclopramide blocks the phenyl diguanide and 5–hydroxytryptamine induced cardiorespiratory reflexes in cats and dogs. Ravi K, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):776–82

Prolactin response to metoclopramide does not distinguish patients with hypogonadotrophic hypogonadism from delayed puberty. Cristiano AM, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):75–82

Effect of metoclopramide on dopamine–induced changes in renal function in healthy controls and in patients with renal disease. Smit AJ, et al. **Clin Sci** 1988 Oct;75(4):421–8

From metoclopramide to selective gut motility stimulants and 5–HT3 receptor antagonists. Sanger GJ, et al. **Drug Des Deliv** 1988 Dec;3(4):273–95 (153 ref.)

Provocation of a paradoxical growth hormone response to corticotropin–releasing hormone by pretreatment with metoclopramide in patients with acromegaly and normal subjects. Nishida S, et al. **Endocrinol Jpn** 1988 Dec; 35(6):783–9

Effect of neostigmine on metoclopramide–induced aldosterone secretion in man. Sommers DK, et al. **Eur J Clin Pharmacol** 1989;36(4):411–3

Variability of cortisol and adrenocorticotropic hormone responses to metoclopramide during the menstrual cycle. Seki K. **Gynecol Obstet Invest** 1989;27(4):201–3

Metoclopramide–induced changes in plasma aldosterone "in vivo" are independent from renin–angiotensin system activity. Bernardi M, et al. **Horm Metab Res** 1988 Aug; 20(8):532–4

Prolactin and gonadotrophin dynamics in response to antagonists of LHRH and dopamine in ovariectomized rhesus monkeys: a dissection of their common secretion. Geisthoevel F, et al. **Hum Reprod** 1988 Jul;3(5):591–5

The variability in oro–cecal transit time assessed using a bean–based test meal and its use in the study of the effect of metoclopramide and BRL 24924 on transit time. Staniforth DH, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Mar;27(3):97–101

Effects of metoclopramide on steers grazing endophyte–infected fescue. Lipham LB, et al. **J Anim Sci** 1989 Apr;67(4):1090–7

Humoral effects of metoclopramide and domperidone in normal subjects and in hypertensive patients. Bernini GP, et al. **J Endocrinol Invest** 1988 Nov;11(10):711–6

Prokinetic effects of cisapride, naloxone and parasympathetic stimulation at the equine ileo–caeco–colonic junction. Ruckebusch Y, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):322–9

Effects of dopaminergic blockade on the sleep–associated changes of luteinizing hormone pulsatility in early follicular phase women. Rossmanith WG, et al. **Neuroendocrinology** 1988 Dec;48(6):634–9

Physostigmine and metoclopramide in oesophageal peristaltic spread in man. Tolu E, et al. **Pharmacol Res Commun** 1988 Oct;20(10):869–82

Effect of metoclopramide, bethanechol, and loperamide on gastric residence time, gastric emptying, and mouth–to–cecum transit time. Kirby MG, et al. **Pharmacotherapy** 1989;9(4):226–31

Blockade of acquisition of one–way conditioned avoidance responding by haloperidol and metoclopramide but not by thioridazine or clozapine: implications for screening new antipsychotic drugs. Blackburn JR, et al. **Psychopharmacology (Berlin)** 1989;98(4):453–9

[Comparative study of the effects of metoclopramide and metopimazine on the duodenojejunal motility during the interdigestive period: a manometric study in healthy subjects] Badji F, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):369–74 (Eng. Abstr.) **(Fre)**

[Circling behavior produced by the unilateral intra–accumbens injection of dopaminergic agonist and two dopaminergic antagonists in mice] Mrabet O, et al. **C R Acad Sci [III]** 1989;309(3):77–82 (Eng. Abstr.) **(Fre)**

[Urodynamic evaluation of the effects of metoclopramide on the function of the detrusor muscle] Cecchi M, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):257–9 (Eng. Abstr.) **(Ita)**

[Antidopaminergic effect of metoclopramide on the rat testis and epididymis] Kamińska B. **Ann Acad Med Stetin** 1988; 34:69–86 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Betamethasone–dixyrazine versus metoclopramide as antiemetic treatment in cancer chemotherapy. Sorbe B, et al. **Acta Oncol** 1988;27(4):357–60

Dose–response study of droperidol and metoclopramide as antiemetics for outpatient anesthesia. Pandit SK, et al. **Anesth Analg** 1989 Jun;68(6):798–802

Gastroparesis following traumatic brain injury and response to metoclopramide therapy. Jackson MD, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):553–5

The possible use of metoclopramide to prevent watery mouth in lambs in commercial flocks. Scott PR. **Br Vet J** 1988 Nov–Dec;144(6):570–2

Metoclopramide versus metoclopramide and lorazepam. Superiority of combined therapy in the control of cisplatin–induced emesis. Gordon CJ, et al. **Cancer** 1989 Feb 1;63(3):578–82

A prospective, randomized double–blind trial comparing metoclopramide alone with metoclopramide plus dexamethasone in preventing emesis induced by high–dose cisplatin. Parikh PM, et al. **Cancer** 1988 Nov 15; 62(10):2263–6

Prognostic factors influencing cisplatin–induced emesis. Definition and validation of a predictive logistic model. Pollera CF, et al. **Cancer** 1989 Sep 1;64(5):1117–22

A prospective randomized double–blind crossover study comparing the antiemetic activity of alizapride and metoclopramide in patients receiving cisplatin chemotherapy. Basurto C, et al. **Cancer Invest** 1988; 6(5):475–9

The effect of metoclopramide and prochlorperazine on the absorption of effervescent paracetamol in migraine. Tokola RA. **Cephalalgia** 1988 Sep;8(3):139–47

Safety and antiemetic effects of metoclopramide in metrizamide myelography. Goldsmith TL, et al. **Clin Pharm** 1987 Oct;6(10):807–10

Metoclopramide promotes enteral feeding in preterm infants with feeding intolerance. Meadow WL, et al. **Dev Pharmacol Ther** 1989;13(1):38–45

A multicenter placebo–controlled clinical trial of oral metoclopramide in diabetic gastroparesis. McCallum RW, et al. **Diabetes Care** 1983 Sep–Oct;6(5):463–7

Tumor–associated gastroparesis with esophageal carcinoma. Use of intravenous metoclopramide during radionuclide gastric emptying studies to predict clinical response. Choe AI, et al. **Dig Dis Sci** 1989 Jul;34(7):1132–4

Domperidone: an alternative to metoclopramide [published erratum appears in Drug Ther Bull 1988 Aug 22;26(17):68] **Drug Ther Bull** 1988 Jul 25;26(15):59–60

Effects of carbamazepine on pituitary responsiveness to luteinizing hormone–releasing hormone, thyrotropin–releasing hormone, and metoclopramide in epileptic patients. Isojärvi JI, et al. **Epilepsia** 1989 Jan–Feb; 30(1):50–6

Antiemetic treatment of chemotherapy–induced nausea in ovarian carcinoma patients. Sorbe B, et al. **Gynecol Oncol** 1989 Aug;34(2):141–4

Controlling delayed vomiting: double–blind, randomized trial comparing placebo, dexamethasone alone, and metoclopramide plus dexamethasone in patients receiving cisplatin. Kris MG, et al. **J Clin Oncol** 1989 Jan;7(1):108–14

Antiemetic therapy for chemotherapy–induced vomiting: metoclopramide, benztropine, dexamethasone, and lorazepam regimen compared with chlorpromazine alone. Marshall G, et al. **J Pediatr** 1989 Jul;115(1):156–60

Randomized, prospective double–blind trial of metoclopramide and placebo for gastroesophageal reflux in infants. Tolia V, et al. **J Pediatr** 1989 Jul;115(1):141–5

Self–injury, regurgitation, and antiemetics [letter] Russell JE, et al. **Lancet** 1989 Jan 28;1(8631):225–6

Comparative study of famotidine and metoclopramide alone or combined for prophylaxis of aspiration pneumonitis. Chan–Liao DM, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):139–46

Metoclopramide utilization review. Mason BJ. **QRB** 1989 Apr;15(4):114–6

Metaclopramide for preventing watery mouth [letter] Biggs AM, et al. **Vet Rec** 1989 Mar 25;124(12):312

Metaclopramide for preventing watery mouth [letter] Stewart M. **Vet Rec** 1989 May 6;124(18):497–8

Metoclopramide reversal of decreased gastrointestinal myoelectric and contractile activity in a model of canine postoperative ileus. Graves GM, et al. **Vet Surg** 1989 Jan–Feb;18(1):27–33

[The effect of metoclopramide on postoperative nausea and vomiting] Vollmer–Larsen B, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):154–5 (Eng. Abstr.) **(Dut)**

[Phytobezoar of the gastric stump] Guzzetti A, et al. **Chir Ital** 1988 Apr;40(2):170–6 (Eng. Abstr.) **(Ita)**

[Alizapride vs metoclopramide in the control of emesis induced by chemotherapy] Gioffrè Florio MA, et al. **G Ital Oncol** 1987 Oct–Dec;7(4):205–7 (Eng. Abstr.) **(Ita)**

[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy–vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) **(Jpn)**

[The effect of metoclopramide on the hypophyseo–ovarian relations in patients with amenorrhea resulting from body mass loss] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):44–8 (Eng. Abstr.) **(Rus)**

[The combination of ranitidine and metoclopramide using the intravenous route for prevention of the acid aspiration syndrome in elective surgery. Evaluation of the effective period of protection] D'Este JP, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):301–7 (Eng. Abstr.) **(Spa)**

METOLAZONE see under **DIURETICS, SULFAMYL**

METOLQUIZOLONE see **METHAQUALONE**

METOMIDATE see under **IMIDAZOLES**

METOPROLOL

ADMINISTRATION & DOSAGE

Effect of intravenous metoprolol on left ventricular performance in Q–wave acute myocardial infarction. Dell'Italia LJ, et al. **Am J Cardiol** 1989 Jan 15;63(3):166–71

Effects of intravenous metoprolol on global and regional left

ventricular function after coronary arterial reperfusion in acute myocardial infarction. Steingart RM, et al. **Am J Cardiol** 1989 Apr 1;63(12):767–71

Long–term beta–blockade in dilated cardiomyopathy. Effects of short– and long–term metoprolol treatment followed by withdrawal and readministration of metoprolol. Waagstein F, et al. **Circulation** 1989 Sep;80(3):551–63

Combined beta 1–adrenoceptor blockade and/or beta 2– or beta 1/2 adrenoceptor stimulation as treatment of essential hypertension. Schulte KL, et al. **J Hypertens Suppl** 1988 Dec;6(4):S658–61

Control and long–term inhibition of foetal supraventricular tachyarrhythmia with a cardioselective beta–receptor blocker administered to the mother. Resch B, et al. **Ther Hung** 1988;36(4):164–9

[Metoprolol and metipranolol in the treatment of hypertension— comparison of the effects of a single dose and administration for 1 month] Hamplová V, et al. **Vnitr Lek** 1989 Mar;35(3):256–63 (Eng. Abstr.) (Cze)

[Prevention of migraine with metoprolol and flunarizine. A double–blind crossover study] Grotemeyer KH, et al. **Nervenarzt** 1988 Sep;59(9):549–52 (Ger)

[Ways of individualizing use of anti–anginal preparations] Katsenovich RA, et al. **Kardiologiia** 1989 Feb;29(2):5–9 (Rus)

ADVERSE EFFECTS

Metoprolol–induced hepatitis: is the rate of oxidation related to drug–induced hepatotoxicity? Lennard MS. **Hepatology** 1989 Jan;9(1):163–4

Intrauterine exposure to the beta–adrenergic receptor–blocking agent metoprolol and allergy. Björkstén B, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):59–62

Bradycardia induced by an interaction between phenelzine and beta blockers. Reggev A, et al. **Psychosomatics** 1989 Winter;30(1):106–8

[Modification of the autonomic vascular reaction and peripheral circulation in the handgrip and orthostasis test by beta–blockage in patients with and without peripheral arterial occlusive disease] Valentin A, et al. **Vasa Suppl** 1988;26:220–2 (Ger)

[The pattern of adverse effects of Seloken ZOC] **Lakartidningen** 1989 May 10;86(19):1821 (Swe)

ANALOGS & DERIVATIVES

Determination of metoprolol and its alpha–hydroxy metabolite in urine by direct–injection reversed–phase high–performance liquid chromatography with fluorimetric detection. Moncrieff J, et al. **J Chromatogr** 1989 Mar 24; 488(2):498–502

Simultaneous determination of metoprolol and alpha–hydroxymetoprolol in human plasma and urine by liquid chromatography with a preliminary observation on metoprolol oxidation in Japanese subjects. Horai Y, et al. **Ther Drug Monit** 1988;10(4):428–33

BLOOD

The effect of hydralazine on steady–state plasma concentrations of metoprolol in pregnant hypertensive women. Lindeberg S, et al. **Eur J Clin Pharmacol** 1988; 35(2):131–5

Determination of alprenolol and metoprolol in plasma by column liquid chromatography. Devi KP, et al. **J Chromatogr** 1988 Dec 29;434(1):265–70

Reversed–phase high–performance liquid chromatographic assay to quantitate diastereomeric derivatives of metoprolol enantiomers in plasma. Schuster D, et al. **J Chromatogr** 1988 Dec 9;433:318–25

Changes in serum phosphate during beta–blockade in healthy men are not due to changes in the renal handling of phosphate. Kayser L, et al. **J Intern Med** 1989 Mar; 225(3):197–200

Radioreceptor assay of metoprolol in human plasma: comparison with an enantiospecific high–performance liquid chromatographic (HPLC) procedure. Spahn H, et al. **Pharm Res** 1989 Feb;6(2):152–5

An evaluation of the perioperative efficacy of selective beta 1–blockade in coronary surgery. Studies with a late preoperative dose of metoprolol. Wesslén O, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):151–4

METABOLISM

Metoprolol oxidation in a Japanese population: evidence for only one poor metaboliser among 262 subjects [letter] Horai Y, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):807–8

Stereoselective metabolism of metoprolol in Caucasians and Nigerians—relationship to debrisoquine oxidation phenotype. Lennard MS, et al. **Br J Clin Pharmacol** 1989 May;27(5):613–6

Metoprolol and mephenytoin oxidation polymorphisms in Far Eastern Oriental subjects: Japanese versus mainland Chinese. Horai Y, et al. **Clin Pharmacol Ther** 1989 Aug; 46(2):198–207

Metoprolol alpha–hydroxylation polymorphism in the San Bushmen of southern Africa. Sommers DK, et al. **Hum Toxicol** 1989 Jan;8(1):39–43

Use of quinidine inhibition to define the role of the sparteine/debrisoquine cytochrome P450 in metoprolol oxidation by human liver microsomes. Otton SV, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):242–7

Preparation of multi–chamber Gastrointestinal Diffusion System for metoprolol tartrate. Jędras Z, et al. **Pharmazie** 1988 Jul;43(7):514

Simultaneous determination of metoprolol and alpha–hydroxymetoprolol in human plasma and urine by liquid chromatography with a preliminary observation on metoprolol oxidation in Japanese subjects. Horai Y, et al. **Ther Drug Monit** 1988;10(4):428–33

PHARMACOKINETICS

Racial differences in drug response: isoproterenol effects on heart rate following intravenous metoprolol. Rutledge DR, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):380–6

Central nervous system kinetics of atenolol and metoprolol in the dog during long term treatment. Abrahamsson T, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):82–6

Effect of diltiazem on the pharmacokinetics of propranolol, metoprolol and atenolol. Tateishi T, et al. **Eur J Clin Pharmacol** 1989;36(1):67–70

Effect of turpentine–induced inflammation on the disposition kinetics of propranolol, metoprolol, and antipyrine in the rat. Belpaire FM, et al. **Fundam Clin Pharmacol** 1989; 3(2):79–88

Metoprolol–controlled release, zero order kinetics. Kendall MJ. **J Clin Pharm Ther** 1989 Jun;14(3):159–79 (58 ref.)

Obesity and beta–blockers: influence of body fat on their kinetics and cardiovascular effects. Galletti F, et al. **J Clin Pharmacol** 1989 Mar;29(3):212–6

Aqueous humor concentration of metoprolol after oral administration. Calissendorff B, et al. **J Ocul Pharmacol** 1989 Spring;5(1):27–31

PHARMACOLOGY

The influence of antihypertensive treatment on the mesenteric arterial structure in spontaneously hypertensive rats. A morphometric study. Nordborg C. **Acta Physiol Scand** 1989 Jan;135(1):47–56

Mechanism of antihypertensive action of dilevalol compared with that of "cardioselective" beta–blocking agents. Strom JA, et al. **Am J Cardiol** 1989 Jun 5;63(19):25I–33I

Antitrophic properties of antihypertensive drugs may depend solely on their blood pressure–lowering capability. A comparative study of isradipine, hydralazine, and metoprolol. Nielsen H, et al. **Am J Med** 1989 Apr 17; 86(4A):67–9

Cardiovascular and sympathoadrenal responses to mental stress: influence of beta–blockade. Freyschuss U, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1443–51

Beta–blockers and cognitive performance in older patients [letter; comment] Mintzer J. **Arch Intern Med** 1989 May; 149(5):1223–4. **Comment on:** Arch Intern Med 1988 Apr;148(4):779–84

Influence of cilazapril on memory functions and sleep behaviour in comparison with metoprolol and placebo in healthy subjects. Dietrich B, et al. **Br J Clin Pharmacol** 1989;27 Suppl 2:249S–261S

Quantitative spectral analysis of carotid Doppler signal: evaluation as a method for measurement of drug effects. Spence JD. **Clin Invest Med** 1989 Apr;12(2):82–9

Difference between beta–1–selective and non–selective beta–blockade during continuous and intermittent exercise. Gullestad L, et al. **Clin Physiol** 1988 Oct;8(5):487–99

Interaction of metoprolol and lidocaine on the ventricular fibrillation threshold in the anesthetized dog. de Langen CD, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):683–8

Adrenergic blocking agents and lipoprotein lipase activity. Rubba P, et al. **J Endocrinol Invest** 1989 Feb;12(2):119–22

Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64

Differential effects of triiodothyronine on rat left and right ventricular function and the influence of metoprolol. Zierhut W, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):617–24

THERAPEUTIC USE

Intraoperative heart rate reduction—alinidine versus metoprolol. Gombotz H, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):686–90

Randomized double–blind comparison of metoprolol, nifedipine, and their combination in chronic stable angina: effects on total ischemic activity and heart rate at onset of ischemia. Egstrup K. **Am Heart J** 1988 Oct;116(4):971–8

Regression of left ventricular mass is accompanied by improvement in rapid left ventricular filling following antihypertensive therapy with metoprolol. White WB, et al. **Am Heart J** 1989 Jan;117(1):145–50

Critical comments on recent literature. SCRAAPHY about MAPHY from HAPPHY. Kaplan NM. **Am J Hypertens** 1988 Oct;1(4 Pt 1):428–30

A randomized, double–blind, placebo–controlled study of verapamil and metoprolol in treatment of multifocal atrial tachycardia [published erratum appears in Am J Med 1989 Jan;86(1):142] Arsura E, et al. **Am J Med** 1988 Oct; 85(4):519–24

Beta blockade to decrease silent myocardial ischemia during peripheral vascular surgery. Pasternack PF, et al. **Am J Surg** 1989 Aug;158(2):113–6

Pre–operative assessment of anxiety and measurement of arterial plasma catecholamine concentrations. The effect of oral beta–adrenergic blockade with metoprolol. Jakobsen CJ, et al. **Anaesthesia** 1989 Mar;44(3):249–52

No difference in general well–being during antihypertensive treatment with atenolol or metoprolol CR. Dahlöf C, et al. **Ann Clin Res** 1988;20 Suppl 48:42–50

Central effects of drugs used in migraine prophylaxis evaluated by visual evoked potentials. Diener HC, et al. **Ann Neurol** 1989 Feb;25(2):125–30

Atherosclerosis in rabbits identified as high and low responders to an atherogenic diet and the effect of treatment with a beta 1–blocker. Lindqvist P, et al. **Atherosclerosis** 1988 Aug;72(2–3):163–72

Treating hypertension in black compared with white non–insulin dependent diabetics: a double blind trial of verapamil and metoprolol. Cruickshank JK, et al. **BMJ** 1988 Nov 5;297(6657):1155–9

Sensitivity to insulin during treatment with atenolol and metoprolol: a randomised, double blind study of effects on carbohydrate and lipoprotein metabolism in hypertensive patients. Pollare T, et al. **BMJ** 1989 Apr 29; 298(6681):1152–7

Cerebral blood flow during anaesthesia: influence of pretreatment with metoprolol or captopril. Jensen K, et al. **Br J Anaesth** 1989 Mar;62(3):321–3

Comparative evaluation of captopril and metoprolol as first choice anti–hypertensive in Indian patients. Yajnik VH, et al. **Br J Clin Pract** 1988 Oct;42(10):407–11

Cardioselective beta–blockade with metoprolol in rest angina: a randomized, double–blind, placebo–controlled, cross–over trial. Polese A, et al. **Cardiologia** 1989 Apr; 34(4):333–9

Effect of early metoprolol injection followed by oral dosage on CK–MB release, and myocardial function in suspected acute myocardial infarction. A double–blind controlled study. Halinen MO, et al. **Cardiology** 1989;76(3):180–92

Morbidity and quality of life 5 years after early intervention with metoprolol in suspected acute myocardial infarction. Herlitz J, et al. **Cardiology** 1988;75(5):357–64

Symptoms of classic migraine attacks: modifications brought about by metoprolol. Hedman C, et al. **Cephalalgia** 1988 Dec;8(4):279–84

Increased beta–receptor density and improved hemodynamic response to catecholamine stimulation during long–term metoprolol therapy in heart failure from dilated cardiomyopathy. Heilbrunn SM, et al. **Circulation** 1989 Mar;79(3):483–90

Suppression of silent ischemia by metoprolol without alteration of morning increase of platelet aggregability in patients with stable coronary artery disease. Willich SN, et al. **Circulation** 1989 Mar;79(3):557–65

Tocainide and metoprolol: an efficacious therapeutic combination in the treatment of premature ventricular beats. Capucci A, et al. **Clin Cardiol** 1989 Jun;12(6):322–31

Ketanserin in the treatment of essential hypertension. A double blind trial against metoprolol followed by one–year open treatment. Milei J, et al. **Clin Exp Hypertens [A]** 1989; 11(3):371–89

Effects of metoprolol on mortality and late infarction in diabetics with suspected acute myocardial infarction. Retrospective data from two large studies. Malmberg K, et al. **Eur Heart J** 1989 May;10(5):423–8

Identification of Patients at Low Risk of Dying After Acute Myocardial Infarction, By Simple Clinical and Submaximal Exercise Test Criteria [letter] Rehnqvist N, et al. **Eur Heart J** 1989 Jan;10(1):97

Diltiazem in comparison with metoprolol in stable angina pectoris. van Dijk RB, et al. **Eur Heart J** 1988 Nov; 9(11):1194–9

Effects of beta blockade with metoprolol on simple and complex task performance. Streufert S, et al. **Health Psychol** 1989;8(2):143–58

Does hormone analysis predict the antihypertensive response of basic medical treatment? Witzgall H, et al. **Herz** 1989 Jun;14(3):197–203

Beta blockade for patients of mitral stenosis in sinus rhythm. Ahuja RC, et al. **Indian Heart J** 1989 Jan–Feb;41(1):58–61

Early treatment with intravenous metoprolol for suspected acute myocardial infarction: a phase IV United States trial. Phase IV Metoprolol in Myocardial Infarction Study Group. Antman EM, et al. **Int J Cardiol** 1989 May; 23(2):185–97

Early use of metoprolol and serum potassium in suspected acute myocardial infarction. Herlitz J, et al. **Int J Cardiol** 1989 Feb;22(2):169–75

Does acute–phase beta–blockade reduce mortality in acute myocardial infarction by limiting infarct size? Murray DP, et al. **Int J Cardiol** 1988 Sep;20(3):327–39

Effect of metoprolol on early exercise–induced ST–segment changes and ventricular arrhythmias in patients with suspected acute myocardial infarction. Rønnevik PK, et al. **Int J Cardiol** 1989 Jan;22(1):51–7

The effects of dilevalol, metoprolol, and placebo on ventilatory function in asthmatics. Chodosh S, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 2:S18–24

Early treatment of unstable angina with nifedipine and metoprolol—the HINT trial. Tijssen JG, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S71–7

Efficacy of low–dose metoprolol in neuroleptic–induced akathisia. Kim A, et al. **J Clin Psychopharmacol** 1989 Aug; 9(4):294–6

The effects of combining felodipine and metoprolol in moderate to severe hypertension—a one year study. Chow J. **J Hum Hypertens** 1988 Jun;2(1):27–31

Effects of a low–sodium high–potassium salt in hypertensive

patients treated with metoprolol: a multicentre study. Suppa G, et al. **J Hypertens** 1988 Oct;6(10):787–90

The relationship between casual and ambulatory blood pressure in essential hypertension: the influence of work, duration of hypertension and antihypertensive treatment. Eiskjaer H, et al. **J Intern Med** 1989 Mar;225(3):165–72

Noradrenergic activity and silent ischaemia in hypertensive patients with stable angina: effect of metoprolol. Lee DD, et al. **Lancet** 1989 Feb 25;1(8635):403–6

Adjuvant xamoterol or metoprolol in patients with malignant ventricular arrhythmia resistant to amiodarone. Paul V, et al. **Lancet** 1989 Aug 5;2(8658):302–5

[Systolic pressure—left-ventricular telesystolic volume ratio in the treatment of hypertension with a cardioselective beta-blockader without inner sympathomimetic activity] Sirakova V. **Vutr Boles** 1988;27(3):47–50 (Eng. Abstr.) **(Bul)**

[Long-term treatment of hypertension with a selective beta-1-blockader without sympathomimetic activity. II. Changes in the structure and function of the left ventricle] Sirakova V, et al. **Vutr Boles** 1989;28(1):31–6 (Eng. Abstr.) **(Bul)**

[Long-term treatment of hypertension with a selective beta 1-blocker without sympathomimetic activity. I. Antihypertensive and hemodynamic effects] Sirakova V, et al. **Vutr Boles** 1988;27(6):21–5 (Eng. Abstr.) **(Bul)**

[The effects of captopril and metoprolol on blood pressure and side effects in patients with mild to moderate hypertension] Kornerup HJ, et al. **Ugeskr Laeger** 1989 Apr 3;151(14):890–2 (Eng. Abstr.) **(Dan)**

[Metoprolol, a new effective antimigraine agent] Raveau-Landon C, et al. **Presse Med** 1988 Oct 15; 17(35):1805–9 (Eng. Abstr.) **(Fre)**

[Dose-dependent anti-arrhythmia effect of retard metoprolol in coronary disease patients with ventricular arrhythmia] Hartwig CA, et al. **Z Kardiol** 1988 Nov;77(11):704–12 (Eng. Abstr.) **(Ger)**

[Effect of metoprolol in patients with renal hypertension] Yasumoto R, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1669–73 (Eng. Abstr.) **(Jpn)**

[Effects of a new positive inotropic agent, OPC-8212 in patients with effort angina—comparison with beta-blocker, metoprolol] Kinoshita H, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1199–203 (Eng. Abstr.) **(Jpn)**

[A case of chronic hyperventilation syndrome effectively treated by metoprolol] Suenaga N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):898–903 (Eng. Abstr.) **(Jpn)**

[Adrenergic beta receptor blockaders in congestive heart failure: potential mechanisms of their action] Ruth-Maurin A, et al. **Kardiol Pol** 1988;31(6):391–401 (70 ref.) **(Pol)**

[Comparative effects of metoprolol and acebutolol in primary arterial hypertension] Kawecka-Jaszcz K, et al. **Pol Tyg Lek** 1988 Sep 5;43(36):1153–5 (Eng. Abstr.) **(Pol)**

[Comparative anti-angina effectiveness of metoprolol and propranolol] Katsenovich RA, et al. **Kardiologiia** 1989 Mar; 29(3):21–4 (Eng. Abstr.) **(Rus)**

[Possibilities and limitations of selective beta 1 adrenergic receptor blockade in clinical practice] Ol'binskaia LI, et al. **Ter Arkh** 1988;60(8):31–4 (Eng. Abstr.) **(Rus)**

[Multicenter clinical trial on the prevention of sudden death after myocardial infarction by the use of anti-arrhythmia agents. Investigator Group of the Spanish Study on Sudden Death] **Rev Esp Cardiol** 1989 Feb;42(2):77–83 (Eng. Abstr.) **(Spa)**

TOXICITY

Ventricular blood pressure and cardiac output changes in epinephrine- and metoprolol-treated chick embryos. Rajala GM, et al. **Teratology** 1988 Sep;38(3):291–6

URINE

Determination of metoprolol and its alpha-hydroxy metabolite in urine by direct-injection reversed-phase high-performance liquid chromatography with fluorimetric detection. Moncrieff J, et al. **J Chromatogr** 1989 Mar 24; 488(2):498–502

METRIAL GLAND

CYTOLOGY

Granulated metrial gland cells. Peel S. **Adv Anat Embryol Cell Biol** 1989;115:1–112 (196 ref.)

Time course of the differentiation of granulated metrial gland cells in chimeric mice. Peel S, et al. **Cell Differ Dev** 1988 Dec;25(3):197–202

Leucocyte membrane antigens on mouse granulated metrial gland cells. Mukhtar DD, et al. **J Reprod Immunol** 1989 Jul;15(3):269–79

Lymphokine-activated killer (LAK) cells are identical to the uterine granulated metrial gland (GMG) cells. Ginsburg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):186–9

IMMUNOLOGY

Evaluation of the murine metrial gland for immunological function. Croy BA, et al. **J Reprod Immunol** 1989 Mar; 15(1):51–69

PHYSIOLOGY

Hormonal dependence of the metrial gland: further studies on oestradiol and progesterone receptor levels in the rat. Martel D, et al. **J Endocrinol** 1989 Mar;120(3):465–72

METRIC SYSTEM

Quantitative data on very highly diluted solutions. Hauton JC. **Biochimie** 1988 Dec;70(12):1849–50

SI units in drug therapeutics [published erratum appears in Drug Intell Clin Pharm 1989 Mar;23(3):262] McLeod DC. **Drug Intell Clin Pharm** 1988 Dec;22(12):990–3

Animal nutrition [letter] Mellors A. **FASEB J** 1989 Feb; 3(2):219

Metric mix-up in rice flour muffin formulation [letter] **J Am Diet Assoc** 1989 May;89(5):622

A meterstone [editorial] Downs FS. **Nurs Res** 1989 Jan-Feb; 38(1):3

American Academy of Pediatrics Committee on Drugs: SI units. **Pediatrics** 1989 Jan;83(1):129–31

[Endoscopic evaluation of esophageal varices. Comparison of a classic method and the metric system] Parra OM, et al. **Arq Gastroenterol** 1987 Apr-Jun;24(2):88–92 (Eng. Abstr.) **(Por)**

STANDARDS

Have SI units arrived in India? [letter] Christo CG. **Indian Pediatr** 1988 Jun;25(6):583–4

METRIFONATE see **TRICHLORFON**

METRIZAMIDE

The use of metrizamide for stabilizing against convection in sedimentation equilibrium. Ralston GB, et al. **Anal Biochem** 1989 Apr;178(1):198–201

ADMINISTRATION & DOSAGE

In vitro release and depot effect after intratumoral application of metrizamide-containing liposomes. Mentrup E, et al. **Arzneimittelforschung** 1989 Apr;39(4):421–3

ADVERSE EFFECTS

Malignant hyperthermia-like syndrome associated with metrizamide myelography. Ong RO, et al. **Anesth Analg** 1989 Jun;68(6):795–7

Absence status epilepticus with computed tomographic brain changes following metrizamide myelography. Obeid T, et al. **Ann Neurol** 1988 Oct;24(4):582–4

Serial EEG recordings following intrathecal metrizamide administration. Drory VE, et al. **Clin Electroencephalogr** 1989 Jul;20(3):202–8

Safety and antiemetic effects of metoclopramide in metrizamide myelography. Goldsmith TL, et al. **Clin Pharm** 1987 Oct;6(10):807–10

Absence status following metrizamide myelography: management of nonresponders. Amer-Ferrer G, et al. **Eur Neurol** 1988;28(6):341–4

F-responses after metrizamide and iohexol lumbar myelography. Sand T. **Neuroradiology** 1988;30(6):534–7

[The effects of metrizamide myelography on electroencephalographic changes] Lai CL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun; 5(6):324–9 (Eng. Abstr.) **(Chi)**

[Metrizamide encephalopathy in a child with hydrocephalus—effects of L-threo-DOPS on persistent disturbance of consciousness and L-dopa on extrapyramidal symptoms] Usui S, et al. **No To Shinkei** 1988 Nov;40(11):1075–80 (Eng. Abstr.) **(Jpn)**

[Adverse reactions and intracranial contrast medium after myelography] Fujii K, et al. **Rinsho Hoshasen** 1989 Mar; 34(3):323–7 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Comparative clinical study with iotrolan versus metrizamide in lumbar myelography. Inoue S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:161–6

Evaluation of CSF rhinorrhea by computerized tomography with metrizamide. Chow JM, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):99–105

[CT measurement of metrizamide myelography of 100 normal adults] Zhang YT. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):148–50 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

[The effect of the x-ray contrast medium Amipaque on selected laboratory chemical and hematologic parameters of human blood taking into consideration electron microscopic studies] Jäger B, et al. **Rontgenpraxis** 1989 Jul; 42(7):225–30 **(Ger)**

TOXICITY

Risk of seizures after myelography: comparison of iohexol and metrizamide. Maly P, et al. **AJNR** 1988 Sep;9(5):879–83

A possible mechanism for the neural adverse reactions caused by metrizamide. Azuma H, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:134–42

In vitro models for testing the metabolic effects of myelographic contrast media. Morris TW, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S213–6

METRIZOATE see under **IODOBENZOATES**

METRONIDAZOLE

Electrochemical characteristics of nitro-heterocyclic compounds of biological interest. IV. Lifetime of the metronidazole radical anion. Tocher JH, et al. **Free Radic Res Commun** 1989;6(1):39–45

ADMINISTRATION & DOSAGE

Failure of topically applied antibiotics, added to systemic prophylaxis, to reduce perineal wound infection in abdominoperineal excision of the rectum. Moesgaard F, et al. **Acta Chir Scand** 1988 Oct;154(10):589–92

Timing of prophylactic antibiotics in abdominal surgery: trial of a pre-operative versus an intra-operative first dose. Bates T, et al. **Br J Surg** 1989 Jan;76(1):52–6

Comparative clinical and pharmacokinetic aspects of cefotetan versus cefoxitin plus metronidazole in vaginal hysterectomy. Engel K, et al. **Chemioterapia** 1988 Aug; 7(4):256–60

One versus three doses of metronidazole/mezlocillin for antibiotic prophylaxis in colon surgery. Grundmann R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):604–5

Topical metronidazole for severe and recalcitrant rosacea: a prospective open trial. Lowe NJ, et al. **Cutis** 1989 Mar; 43(3):283–6

Intraincisional antibiotic in addition to systemic antibiotic treatment fails to reduce wound infection rates in contaminated abdominal surgery. A controlled clinical trial. Moesgaard F, et al. **Dis Colon Rectum** 1989 Jan;32(1):36–8

Cefoxitin for one day vs. ampicillin and metronidazole for three days in elective colorectal surgery. A prospective, randomized, multicenter study. Rørbaek-Madsen M, et al. **Dis Colon Rectum** 1988 Oct;31(10):774–7

Instillation of metronidazole into a brain abscess cavity [letter] Gentile G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):582–3

Trichomonal vaginitis refractory to conventional treatment [letter] Seligman SA. **Genitourin Med** 1989 Jun;65(3):200–1

Prophylactic short course rectal metronidazole for cesarean section. A double-blind controlled trial of a simple low cost regimen. de Boer CN, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):103–7

Prophylaxis against post-appendicectomy wound infection. A controlled clinical trial of intravenous (i.v.) metronidazole versus i.v. metronidazole-ampicillin-gentamicin. Grant C, et al. **Int Surg** 1989 Apr-Jun;74(2):129–32

Twelve-hourly dosage schedule for oral and intravenous metronidazole. Earl P, et al. **J Antimicrob Chemother** 1989 Apr;23(4):619–21

Once daily administration of netilmicin compared with thrice daily, both in combination with metronidazole, in gangrenous and perforated appendicitis. Fan ST, et al. **J Antimicrob Chemother** 1988 Jul;22(1):69–74

The effectiveness of single-dose metronidazole therapy for patients and their partners with bacterial vaginosis. Mengel MB, et al. **J Fam Pract** 1989 Feb;28(2):163–71

A trial of mezlocillin versus cefuroxime with or without metronidazole for the prevention of wound sepsis after biliary and gastrointestinal surgery. Cann KJ, et al. **J Hosp Infect** 1988 Oct;12(3):207–14

A prospective randomized trial to compare triple dose mezlocillin with triple dose cefuroxime plus metronidazole as prophylaxis in colorectal surgery. Diamond T, et al. **J Hosp Infect** 1988 Oct;12(3):215–9

Single dose mezlocillin versus three dose cefuroxime plus metronidazole for prophylaxis in large bowel surgery [letter] Rowe-Jones DC, et al. **J Hosp Infect** 1988 Aug; 12(2):131–2

Split dose metronidazole in the treatment of vaginal trichomoniasis. O-Prasertsawat P, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:58–60

A comparative study of two prophylactic antibiotic regimens in abdominal hysterectomy. Suvonnakote T. **J Med Assoc Thai** 1988 Aug;71(8):431–5

Use of antimicrobial containing acrylic strips in the treatment of chronic periodontal disease. A three month follow-up study. Addy M, et al. **J Periodontol** 1988 Sep;59(9):557–64

Systemic plus local metronidazole and cephazolin in complicated appendicitis: a prospective controlled trial. el-Sefi TA, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):13–6

Treatment of bacterial vaginosis with intravaginal sponges containing metronidazole. Edelman DA, et al. **J Reprod Med** 1989 May;34(5):341–4

Topical metronidazole for rosacea. **Med Lett Drugs Ther** 1989 Aug 11;31(798):75–6

Contribution to some radiobiological aspects of the investigation of chemical radiosensitizers of hypoxic cells. Part V: Metronidazole—dependence of its radiosensitizing effect on the dose, time interval of administration and hypoxia degree of the bone marrow evaluated according to the changes of its cellularity in rats. Vodička I, et al. **Radiobiol Radiother (Berl)** 1989;30(1):61–8

A comparison of ciprofloxacin with doxycycline plus metronidazole in the treatment of acute pelvic

inflammatory disease. Heinonen PK, et al. **Scand J Infect Dis Suppl** 1989;60:66–73

[Metronidazole-containing teflon fibers in the treatment of periodontitis] Fan MW. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):324–7, 384 (Eng. Abstr.) (Chi)

[Long-term experience with rectal administration of metronidazole in the treatment of perforated appendicitis] Brousil L. **Rozhl Chir** 1988 Jul;67(7):482–7 (Eng. Abstr.) (Cze)

[Antibiotic prevention with a single dose of metronidazole in appendectomy in children] Lansade A, et al. **Ann Chir** 1989;43(3):207–9 (Eng. Abstr.) (Fre)

[Morphologic change in Campylobacter pylori associated gastritis in and following successful antibacterial therapy] Rühl GH, et al. **Pathologe** 1989 Jan;10(1):64–5 (Ger)

[Wound infection following appendectomy. Metronidazole vs ornidazole as single-dose prophylaxis in non-perforated appendix] Barth A, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1403–5 (Eng. Abstr.) (Ger)

[The concentration and duration of the action of metronidazole in the gingival pocket following local application] Pässler R, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):12–6 (Eng. Abstr.) (Ger)

[Follow-up and wound healing following cesarean section with prophylactic use of Vagimid in comparison with the puerperal course without the use of Vagimid] Sokolowski H, et al. **Zentralbl Gynakol** 1989;111(7):461–5; discussion 466–8 (Eng. Abstr.) (Ger)

[Cutaneous leishmaniasis in the light of personal observations with regard to its diagnosis and treatment in tropical countries] Kotlowski A. **Wiad Parazytol** 1988; 34(4–6):509–14 (Pol)

[Intratumoral and parametric administration of metronidazole in the radiotherapy of cancer of the cervix] Balmukhanov SB, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):26–30 (Eng. Abstr.) (Rus)

[Treatment of dermatophytoses and onychodystrophies using metronidazole ointment] Korsunskaia IM, et al. **Vestn Dermatol Venerol** 1988;(6):65–7 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Metronidazole-induced pancreatitis. Celifarco A, et al. **Am J Gastroenterol** 1989 Aug;84(8):958–60

Excessive drug challenge [letter] Donaldson RM Jr. **Ann Intern Med** 1989 Mar 1;110(5):410

Metronidazole-associated pancreatitis. Sanford KA, et al. **Ann Intern Med** 1988 Nov 1;109(9):756–7

Central nervous system toxicosis associated with metronidazole treatment of dogs: five cases (1984–1987). Dow SW, et al. **J Am Vet Med Assoc** 1989 Aug 1; 195(3):365–8

Metronidazole and cancer [letter] Friedman GD, et al. **JAMA** 1989 Feb 10;261(6):866

Metronidazole neuropathy: a case report. Takeuchi H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):291–5

Haemolytic-uraemic syndrome after treatment with metronidazole. Powell HR, et al. **Med J Aust** 1988 Aug 15;149(4):222–3

[Neurotoxic risk of metronidazole in severe renal insufficiency (letter)] Moulin B, et al. **Ann Med Interne (Paris)** 1988;139(5):369 (Fre)

[Therapy of chronic inflammatory bowel diseases. Clinical aspects and therapy of drug-induced side effects] Dölle W, et al. **Verh Dtsch Ges Inn Med** 1988;94:184–91 (15 ref.) (Ger)

ANALOGS & DERIVATIVES

Dimetridazole residues in pork tissue. II. Application of liquid chromatographic method to monitor elimination of drug and its major metabolite. Carignan G, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1146–9

[HPLC determination of benzoylmetronidazole and metronidazole in biological materials] Avramova J. **Pharmazie** 1988 Jun;43(6):436 (Ger)

[The pharmacokinetics of 2-methyl-4-nitroimidazole-1-ethanol (isometronidazole) in man] Siegmund W, et al. **Pharmazie** 1988 Aug; 43(8):546–8 (Eng. Abstr.) (Ger)

ANALYSIS

Dissolution of metronidazole from oral and vaginal dosage forms in sink and non-sink conditions. Bećirević M, et al. **Pharmazie** 1988 Aug;43(8):544–6

[HPLC determination of benzoylmetronidazole and metronidazole in biological materials] Avramova J. **Pharmazie** 1988 Jun;43(6):436 (Ger)

METABOLISM

Reduction of nitroheterocyclic drugs by ascorbate and catecholamines: a possible mechanism for the neurotoxicity of nitroheterocyclic drugs. Rao DN, et al. **Basic Life Sci** 1988;49:787–94

Metabolism of metronidazole and antipyrine in isolated rat hepatocytes. Influence of sex and enzyme induction and inhibition. Loft S, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1125–36

Altered uptake of metronidazole in vitro by stocks of Giardia intestinalis with different drug sensitivities. Boreham PF, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):104–6

PHARMACOKINETICS

Metronidazole excretion in human milk and its effect on the suckling neonate. Passmore CM, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):45–51

Metronidazole kinetics and liver function in hepatic cirrhosis. Kampf D, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):311–2

Lack of effect of cimetidine on the pharmacokinetics and metabolism of a single oral dose of metronidazole. Loft S, et al. **Eur J Clin Pharmacol** 1988;35(1):65–8

The penetration of antibiotics into human pancreas. Büchler M, et al. **Infection** 1989 Jan–Feb;17(1):20–5

Comparative bioavailability of two tablet preparations of metronidazole. Paton DM, et al. **Int J Clin Pharmacol Res** 1988;8(4):227–9

Clinical pharmacokinetics of metronidazole in horses. Baggot JD, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):417–20

Complex formation between metronidazole and sodium urate: effect on photodegradation of metronidazole. Habib MJ, et al. **Pharm Res** 1989 Jan;6(1):58–61

The adsorption of metronidazole and tinidazole to activated charcoal and the effect of magnesium sulfate. Akintonwa A, et al. **Vet Hum Toxicol** 1988 Dec;30(6):556–8

[Pharmacokinetics of oral metronidazole in the healthy adult's saliva secretion] Yang YZ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):180–2 (Chi)

[Antibiotic prophylaxis with a single dose of 1000 mg metronidazole or ornidazole in colorectal surgery (letter)] Martin C, et al. **Presse Med** 1989 Mar 25;18(12):635 (Fre)

[Relative bioavailability among metronidazole tablets] Montoya-Cabrera MA, et al. **Gac Med Mex** 1988 Jan–Feb; 124(1–2):19–25 (Spa)

PHARMACOLOGY

In vitro susceptibilities of Entamoeba histolytica to azithromycin, CP-63,956, erythromycin, and metronidazole. Ravdin JI, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):960–2

Effects of clindamycin and metronidazole on the intestinal colonization and translocation of enterococci in mice. Wells CL, et al. **Antimicrob Agents Chemother** 1988 Dec; 32(12):1769–75

Effect of etomidate and metronidazole on platelet aggregation [letter] Olesen AS, et al. **Br J Anaesth** 1988 Oct;61(4):514–5

Effect of metronidazole on the cell surface charge of Trichomonas vaginalis and Tritrichomonas foetus. Silva-Filho FC, et al. **Braz J Med Biol Res** 1988; 21(5):1037–45

Bactericidal efficacy of metronidazole against bacteria of human carious dentin in vitro. Hoshino E, et al. **Caries Res** 1988;22(5):280–2

Evolution in antibiotic susceptibility of Bacteroides fragilis group strains in France based on periodic surveys. Dubreuil L, et al. **Infection** 1989 May–Jun;17(3):197–200 (33 ref.)

Association experiments with aerobic and anaerobic pathogens: a model of in-vitro susceptibility testing in mixed infections. Activity of enoxacin, clindamycin, and metronidazole. Heizmann WR, et al. **Infection** 1989 May–Jun;17(3):160–4

Ciprofloxacin in combination with metronidazole. Werk R, et al. **Infection** 1988 Jul–Aug;16(4):257–60

Bacteroides fragilis resistant to metronidazole, clindamycin and cefoxitin. Brogan O, et al. **J Antimicrob Chemother** 1989 Apr;23(4):660–2

Activity of metronidazole in mixed cultures [letter] Ingham HR, et al. **J Antimicrob Chemother** 1988 Sep;22(3):387

Enhancement of antimicrobial activity of metronidazole in mixed cultures of Bacteroides fragilis and Escherichia coli [letter] Moran FJ, et al. **J Antimicrob Chemother** 1988 Aug; 22(2):261–2

Metronidazole-resistant Bacteroides melaninogenicus [letter] Sprott MS, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):951–2

Susceptibility of 114 isolates of the Bacteroides fragilis group to imipenem and eight other antimicrobial agents. Downes J, et al. **Pathology** 1988 Jul;20(3):260–3

Contribution to some radiobiological aspects of the investigation of radiosensitizers of hypoxic cells. Part IV: Radiosensitizing effect of metronidazole evaluated on the level of postirradiation changes of bone marrow cellularity in rats protected by induced hypoxia of lower body half. Vodička I, et al. **Radiobiol Radiother (Berl)** 1989;30(1):55–9

[In vitro activity of beta-lactams, clindamycin and metronidazole on Clostridium difficile] Sedallian A, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):682–4 (Eng. Abstr.) (Fre)

[Determination of the minimal inhibitory concentration of metronidazole for isolates of Actinobacillus actinomycetemcomitans] Avila-Campos MJ, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun;30(2):65–7 (Eng. Abstr.) (Por)

[Metronidazole activity and human erythrocytes] Birzhanova NKh, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):43–5 (Rus)

[Reliability of the PEHPS culture medium for the in vitro evaluation of antiamebic drugs] González-Garza MT, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):29–32 (Eng. Abstr.) (Spa)

THERAPEUTIC USE

Cost-effective treatment of pseudomembranous colitis [letter] McKenna JP, et al. **Am Fam Physician** 1989 Apr;39(4):74, 78

Appropriateness of metronidazole use in a teaching hospital. Wang JC, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1385–9

Prophylactic perioperative use of clindamycin and metronidazole in vaginal hysterectomy without pelvic floor repair. Egarter C, et al. **Arch Gynecol Obstet** 1988; 244(1):53–7

Management of severe incisional abscesses following laparotomy. Early reclosure under cover of metronidazole and ampicillin. Gottrup F, et al. **Arch Surg** 1989 Jun; 124(6):702–4

Oral prophylaxis with neomycin and erythromycin in colorectal surgery. More proof for efficacy than failure. Kling PA, et al. **Arch Surg** 1989 Jun;124(6):705–7

Metronidazole and Campylobacter pylori infection [letter] Stebbing MA, et al. **Br J Hosp Med** 1988 Nov;40(5):405

Amoxycillin-clavulanic acid (Augmentin) versus metronidazole as prophylaxis in hysterectomy: a prospective randomized clinical trial [letter] Giles JA. **Br J Obstet Gynaecol** 1988 Sep;95(9):951

Bacterial vaginosis: a double-blind randomized trial of the effect of treatment of the sexual partner. Vejtorp M, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):920–6

Management of severe intra-abdominal sepsis: single agent antibiotic therapy with cefotetan versus combination therapy with ampicillin, gentamicin and metronidazole. Huizinga WK, et al. **Br J Surg** 1988 Nov;75(11):1134–8

Is neomycin necessary for bowel preparation in surgery of the colon? Oral neomycin plus erythromycin versus erythromycin-metronidazole. Lewis RT, et al. **Can J Surg** 1989 Jul;32(4):265–70

Bactericidal efficacy of metronidazole against bacteria of human carious dentin in vivo. Hoshino E, et al. **Caries Res** 1989;23(2):78–80

Determination of healing response by immunostimulant therapy (levamisole) in cutaneous leishmaniasis. Makled M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):214–6

Single-shot antibiotic prophylaxis in colon surgery. Mendel V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):597–600

Therapy of Clostridium difficile in pseudomembranous and antibiotic-associated colitis. Panichi G. **Chemioterapia** 1987 Jun;6(2 Suppl):493–4

A comparative study of cefotetan versus cefoxitin plus metronidazole in the treatment of gynecological infections. Schwiersch U, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):541–2

Comparison of cefotetan versus combination therapy in peritonitis and serious intra-abdominal sepsis. Scott SD, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):475–6

Open study of different perioperative prophylactic regimens with mezlocillin/metronidazole in proctectomy. Wenzel M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):569

Perioperative infection prophylaxis in colon surgery. Wohlfahrt R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):603–4

Metronidazole and spiramycin therapy of mixed Bacteroides spp. and Neisseria gonorrhoeae infection in mice. Brook I. **Chemotherapy** 1989;35(2):105–12

Metronidazole vs. erythromycin, neomycin, and cefazolin in prophylaxis for colonic surgery. Khubchandani IT, et al. **Dis Colon Rectum** 1989 Jan;32(1):17–20

Clinical implications of metronidazole antianaerobic prophylaxis in major head and neck surgical procedures. Sawyer R. **Ear Nose Throat J** 1988 Sep;67(9):655–6, 658, 660–2

Treatment failure in Trichomonas vaginalis vaginitis. Lumsden WH, et al. **Genitourin Med** 1988 Aug;64(4):217–8 (12 ref.)

Intratumoral and parametrial infusion of metronidazole in the radiotherapy of uterine cervix cancer: preliminary report. Balmukhanov SB, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1061–3

Localized trichorrhexis nodosa. Camacho-Martínez F. **J Am Acad Dermatol** 1989 Apr;20(4):696–7

Intestinal amebiasis, lichen planus, and treatment with metronidazole. Wahba-Yahav AV. **J Am Acad Dermatol** 1989 Jun;20(6):1128–9

Synergy between spiramycin and metronidazole in the treatment of polymicrobial infections. Brook I. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:77–85

Efficacy of FCE 22101 compared with imipenem and with gentamicin plus metronidazole in the treatment of experimental intra-abdominal infections in rats. Nord CE, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:137–41

The use of metronidazole (Flagyl) in Crohn's disease. Babb RR. **J Clin Gastroenterol** 1988 Oct;10(5):479–81 (29 ref.)

A comparison of metronidazole and sulfasalazine in the maintenance of remission in patients with ulcerative colitis. Gilat T, et al. **J Clin Gastroenterol** 1989 Aug;11(4):392–5

Systemic metronidazole in the treatment of periodontitis. Jenkins WM, et al. **J Clin Periodontol** 1989 Aug; 16(7):443–50

Metronidazole plus amoxycillin in the treatment of Actinobacillus actinomycetemcomitans associated periodontitis. van Winkelhoff AJ, et al. **J Clin Periodontol** 1989 Feb;16(2):128–31

Failure of parenteral metronidazole in the treatment of

pseudomembranous colitis [letter] [see comments] Guzman R, et al. **J Infect Dis** 1988 Nov;158(5):1146–7. **Comment in:** J Infect Dis 1989 Jul;160(1):170–1

Failure of intravenous vancomycin and intravenous metronidazole to prevent or treat antibiotic-associated pseudomembranous colitis [letter] Oliva SL, et al. **J Infect Dis** 1989 Jun;159(6):1154–5

New topical therapy for acne rosacea offers conspicuous improvement, no systemic effects [news] Goldsmith MF. **JAMA** 1989 Apr 14;261(14):2014–5

Morphology and frequency distribution of protozoan Blastocystis hominis. Zafar MN. **JPMA** 1988 Dec; 38(12):322–4

The use of metronidazole, tinidazole and dimetridazole in eliminating trichomonads from laboratory mice. Roach PD, et al. **Lab Anim** 1988 Oct;22(4):361–4

Clindamycin versus metronidazole in the treatment of bacterial vaginosis [letter] Bignardi GE. **Obstet Gynecol** 1989 Aug;74(2):281–2

Clindamycin versus metronidazole in the treatment of bacterial vaginosis. Greaves WL, et al. **Obstet Gynecol** 1988 Nov;72(5):799–802

Metronidazole, clindamycin, and quinolones. Hammill HA. **Obstet Gynecol Clin North Am** 1989 Jun;16(2):317–28 (55 ref.)

Metronidazole in the management of anaerobic neck infection in acute leukemia. Barrett AP. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):287–9

Bacteroides fragilis meningitis in a premature infant successfully treated with metronidazole. Webber SA, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):886–7

Amoxycillin/clavulanic acid ('Augmentin') compared with a combination of aminopenicillin, aminoglycoside and metronidazole in the treatment of pelvic inflammatory disease. Cirau-Vigneron N, et al. **Pharmatherapeutica** 1989; 5(5):312–9

Development of periodontal disease in a single flock of sheep: clinical signs, morphology of subgingival plaque and influence of antimicrobial agents. Spence JA, et al. **Res Vet Sci** 1988 Nov;45(3):324–31

A multicenter study to compare cefotetan alone with cefotetan and metronidazole as prophylaxis against infection in elective colorectal operations. Morton AL, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):41–5

Suramin and metronidazole in the treatment of Trypanosoma brucei rhodesiense. Arroz J, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):421

[A question for the practitioner and the answer. Treatment of rosacea with metronidazole] Bourrel M. **Ann Dermatol Venereol** 1989;116(1):44 **(Fre)**

[Antimicrobial therapy with nitroheterocyclic compounds, for example, metronidazole and nitrofurantoin] Hof H. **Immun Infekt** 1988 Dec;16(6):220–5 (52 ref.) (Eng. Abstr.) **(Ger)**

[Preoperative topical antibiotics in patients subjected to short term prophylaxis for colorectal surgery] Di Palo S, et al. **Minerva Chir** 1989 Mar 31;44(6):1029–31 (Eng. Abstr.) **(Ita)**

[Rosacea. Clinical features and treatment] Bjerke JR. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2295–7 (Eng. Abstr.) **(Nor)**

[Treatment of peritonitis in children using thymalin and metronidazole] Lomachenko IN, et al. **Klin Khir** 1988; (6):41–3 (Eng. Abstr.) **(Rus)**

[Hemostasis in cancer patients during radiation therapy using metronidazole] Chekalina SI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):52–6 (Eng. Abstr.) **(Rus)**

[Prevention of local radiation injuries using metronidazole] Tokarev OIu, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):45–8 (Eng. Abstr.) **(Rus)**

[Therapeutic results in Giardia lamblia infestation] Martínez Costa C, et al. **An Esp Pediatr** 1988 May;28(5):425–8 (Eng. Abstr.) **(Spa)**

[Gastroduodenal ulcer and Campylobacter pylori. Behavior under treatment with de-nol or metronidazole] Velasco Elizalde C, et al. **GEN** 1987 Jul-Sep;41(3):99–103 (21 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Effect of metronidazole on fertility and testicular function in male rats. McClain RM, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):386–96

[Effect of the combined use of metronidazole and alcohol on fetal development in rats] Boiadzhieva N. **Eksp Med Morfol** 1988;27(2):31–5 (Eng. Abstr.) **(Bul)**

URINE

Glyoxal: an artefact from metronidazole and glyoxylic acid in urinary organic acid analysis. Mills GA, et al. **Clin Chem** 1989 Apr;35(4):673

METRORRHAGIA

BLOOD

[Indicators of lipid metabolism and aminotransferase activity in girls with dysfunctional uterine hemorrhage] Kokolina VF, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):44–6 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[Adenomyosis] Gwóźdź AZ. **Ginekol Pol** 1988 Oct; 59(10):632–6 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Increased endometrial fibrinolytic activity as a cause of menometrorrhagia in women using IUD's. Surico N, et al. **Panminerva Med** 1988 Jul-Sep;30(3):184–7

[Isolated metrorrhagia in a prepubertal child caused by functional ovarian cyst] Berlier P, et al. **Pediatrie** 1988; 43(9):749–51 (Eng. Abstr.) **(Fre)**

[What lesions of the myometrium are responsible for hemorrhage?] Delarue T, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):679–86 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Radiotherapy in benign uterine bleeding disorders. The Radiumhemmet metropathia cohort 1912–1977. Short and long term results. Ryberg M, et al. **Ups J Med Sci** 1989; 94(2):161–9

SURGERY

[The therapeutic value of hysteroscopy in the treatment of uterine hemorrhage and infertility] Dequesne J. **Rev Med Suisse Romande** 1989 Jun;109(6):483–8 **(Fre)**

METYRAPONE

METABOLISM

Characterization of microsomal and cytoplasmic metyrapone reducing enzymes from mouse liver. Maser E. **Arch Toxicol Suppl** 1989;13:271–4

Purification and properties of a metyrapone-reducing enzyme from mouse liver microsomes—this ketone is reduced by an aldehyde reductase. Maser E, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3049–54

PHARMACOLOGY

Augmented pituitary corticotropin response to a threshold dosage of human corticotropin-releasing hormone in depressives pretreated with metyrapone. Lisansky J, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):641–9

Metyrapone decreases the glutathione concentration in liver and kidney. Appenroth D, et al. **Biomed Biochim Acta** 1989; 48(4):355–8

Chemical adrenalectomy reduces hippocampal damage induced by kainic acid. Stein BA, et al. **Brain Res** 1988 Nov 8;473(1):175–80

Effect of metopirone-ditartrate on thermogenesis in the guinea-pig. Werner R. **Comp Biochem Physiol [C]** 1988; 90(2):445–50

THERAPEUTIC USE

Blunting of ACTH response to human CRH in depressed patients is avoided by metyrapone pretreatment. von Bardeleben U, et al. **Biol Psychiatry** 1988 Nov;24(7):782–6

Metyrapone block of thyroid-induced cardiomegaly. Schreiber V, et al. **Physiol Bohemoslov** 1988;37(4):343–6

MEVALONIC ACID

ANALOGS & DERIVATIVES

Substrate binding order in mevalonate 5-diphosphate decarboxylase from chicken liver. Jabalquinto AM, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):257–9

ANALYSIS

Measurement of mevalonate in human plasma and urine by multiple selected ion monitoring. Del Puppo M, et al. **Biomed Environ Mass Spectrom** 1989 Mar;18(3):174–6

METABOLISM

Age-related changes in the mevalonate metabolism in vivo in chick kidneys. Aguilera JA, et al. **Arch Int Physiol Biochim** 1988 Jun;96(2):121–6

Prenylated proteins: demonstration of a thioether linkage to cysteine of proteins. Rilling HC, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):143–8

Regulation of 3-hydroxy-3-methylglutaryl-CoA reductase mRNA contents in human hepatoma cell line Hep G2 by distinct classes of mevalonate-derived metabolites. Cohen LH, et al. **Biochem J** 1988 Oct 1;255(1):61–7

All ras proteins are polyisoprenylated but only some are palmitoylated. Hancock JF, et al. **Cell** 1989 Jun 30; 57(7):1167–77

Characterization of mevalonate-activating enzymes in the neonatal chick liver. Garcia-Martinez J, et al. **Comp Biochem Physiol [B]** 1978;61(2):275–9

Post-translational isoprenylation of cellular proteins is altered in response to mevalonate availability. Repko EM, et al. **J Biol Chem** 1989 Jun 15;264(17):9945–52

Incorporation of a product of mevalonic acid metabolism into proteins of Chinese hamster ovary cell nuclei. Beck LA, et al. **J Cell Biol** 1988 Oct;107(4):1307–16

Requirement for mevalonate in cycling cells: quantitative and temporal aspects. Doyle JW, et al. **J Cell Physiol** 1988 Oct; 137(1):133–40

Mevalonate-metabolizing enzymes in Arachis hypogaea. Lalitha R, et al. **Mol Cell Biochem** 1989 Jun 1;87(2):161–70

PHARMACOLOGY

Regulation of squalene synthetase in human hepatoma cell line Hep G2 by sterols, and not by mevalonate-derived non-sterols. Cohen LH, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):69–73

Sterol-independent regulation of 3-hydroxy-3-methylglutaryl-CoA reductase by mevalonate in Chinese hamster ovary cells. Magnitude and specificity. Panini SR, et al. **J Biol Chem** 1989 Jul 5; 264(19):11044–52

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431–8

Role of mevalonic acid in the regulation of natural killer cell cytotoxicity. Cutts JL, et al. **J Cell Physiol** 1989 Jun; 139(3):550–7

URINE

Increased urinary mevalonic acid excretion in patients with abetalipoproteinemia and homozygous hypobetalipoproteinemia. Illingworth DR, et al. **Atherosclerosis** 1989 Mar;76(1):21–7

Mevalonate kinase in lysates of cultured human fibroblasts and lymphoblasts: kinetic properties, assay conditions, carrier detection and measurement of residual activity in a patient with mevalonic aciduria. Gibson KM, et al. **Enzyme** 1989;41(1):47–55

Mevalonate kinase deficiency in a child with cerebellar ataxia, hypotonia and mevalonic aciduria. Gibson KM, et al. **Eur J Pediatr** 1988 Dec;148(3):250–2

A patient with mevalonic aciduria presenting with hepatosplenomegaly, congenital anaemia, thrombocytopenia and leukocytosis. de Klerk JB, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:233–6

Mevalonic aciduria: pathobiochemical effects of mevalonate kinase deficiency on cholesterol metabolism in intact fibroblasts. Hoffmann G, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:229–32

Reduction in plasma low-density lipoprotein cholesterol and urinary mevalonic acid by lovastatin in patients with heterozygous familial hypercholesterolemia. Pappu AS, et al. **Metabolism** 1989 Jun;38(6):542–9

MEVINOLIN see **LOVASTATIN**

MEVINPHOS see under **INSECTICIDES, ORGANOPHOSPHATE**

MEXICAN AMERICANS see **HISPANIC AMERICANS**

MEXILETINE

ADMINISTRATION & DOSAGE

Combination of disopyramide and mexiletine for better tolerance and additive effects for treatment of ventricular arrhythmias. Kim SG, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):659–64

Mexiletine-quinidine combination: enhanced antiarrhythmic and electrophysiologic activity in the dog. Duff HJ. **J Pharmacol Exp Ther** 1989 May;249(2):617–22

[2 cases of lidocaine-resistant ventricular tachycardia treated with i.v. mexiletine during complicated acute myocardial infarct] Romanò M, et al. **Clin Ter** 1987 Nov 30; 123(4):297–301 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Proarrhythmia related to a kinetic and dynamic interaction of mexiletine and theophylline. Kessler KM, et al. **Am Heart J** 1989 Apr;117(4):964–6

Mexiletine-theophylline interaction. Stanley R, et al. **Am J Med** 1989 Jun;86(6 Pt 1):733–4

Lidocaine & tocainide & mexiletine [letter] Martinez R, et al. **Ann Emerg Med** 1989 Mar;18(3):334

Prolongation of ventricular depolarization. ECG manifestation of mexiletine toxicity. Nora MO, et al. **Chest** 1989 Apr;95(4):925–8

ANALOGS & DERIVATIVES

High-performance liquid chromatographic method for the determination of p-hydroxylated and hydroxymethylated metabolites of mexiletine in human serum. Filipek M, et al. **J Chromatogr** 1988 Sep 9;430(2):406–11

BLOOD

High-performance liquid chromatographic method for the determination of p-hydroxylated and hydroxymethylated metabolites of mexiletine in human serum. Filipek M, et al. **J Chromatogr** 1988 Sep 9;430(2):406–11

METABOLISM

High-performance liquid chromatographic assay for mexiletine hydroxylation in microsomes of human liver. Broly F, et al. **J Chromatogr** 1988 Oct 14;431(2):369–78

PHARMACOKINETICS

Kinetics of oral and intravenous mexiletine: lack of effect of cimetidine and ranitidine. Brockmeyer NH, et al. **Eur J Clin Pharmacol** 1989;36(4):375–8

Pharmacokinetics of mexiletine in the elderly. Grech-Bélanger O, et al. **J Clin Pharmacol** 1989 Apr; 29(4):311–5

The pharmacokinetics of the enantiomers of mexiletine in humans. Igwemezie L, et al. **Xenobiotica** 1989 Jun; 19(6):677–82

PHARMACOLOGY

Electrophysiological mechanism for the antiarrhythmic action of propafenone: a comparison with mexiletine. Amerini S, et al. **Br J Pharmacol** 1988 Dec;95(4):1039–46

Atenolol, but not mexiletine, protects against stimulus-induced ventricular tachycardia in a chronic canine model. Uprichard AC, et al. **Br J Pharmacol** 1989 Jan;96(1):220–6

A comparison of the cellular electrophysiology of mexiletine and sotalol, singly and combined, in canine Purkinje fibers. Berman ND, et al. **J Cardiovasc Pharmacol** 1988 Sep; 12(3):286–92

Electrophysiologic interactions between mexiletine and propafenone in guinea pig papillary muscles. Valenzuela C, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):351–7

Arrhythmogenic effects of mexiletine in infarcted Purkinje tissues. Han J, et al. **J Electrocardiol** 1989 Jan;22(1):81–7

Class IB antiarrhythmic drugs: tocainide, mexiletine, and moricizine. Snyder DW. **J La State Med Soc** 1989 May; 141(5):21–5 (20 ref.)

THERAPEUTIC USE

Mexiletine hydrochloride in an infant with intractable epilepsy. Kohyama J, et al. **Brain Dev** 1988;10(4):258–60

Mexiletine for paroxysmal atrial fibrillation [letter] Inoue D, et al. **Chest** 1988 Dec;94(6):1317

Mexiletine and tocainide: a comparison of antiarrhythmic efficacy, adverse effects, and predictive value of lidocaine testing. Murray KT, et al. **Clin Pharmacol Ther** 1989 May; 45(5):553–61

Prediction of efficacy and tolerance of oral mexiletine by intravenous lidocaine application. Zehender M, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):389–95

Efficacy of mexiletine in ventricular arrhythmias among patients in Taiwan: assessment by 24-hour Holter electrocardiography. Hwang YS, et al. **Clin Ther** 1989 May-Jun;11(3):392–7

Mexiletine for the treatment of ventricular arrhythmias associated with chronic obstructive pulmonary disease. Fracalossi C, et al. **G Ital Cardiol** 1989 Jan;19(1):46–52

Efficacy of mexiletine in chronic ventricular arrhythmias: a multicentre double-blind medium-term trial. Poggesi L, et al. **Int J Clin Pharmacol Res** 1989;9(4):269–75

Mexilitene use in pregnancy. Gregg AR, et al. **J Perinatol** 1988 Winter;8(1):33–5

[Treatment of ventricular arrhythmia with mexiletine (Mexitil), monitored by Holter ambulatory electrocardiography] Garimoldi M, et al. **Minerva Cardioangiol** 1988 Apr;36(4):159–65 (Eng. Abstr.) **(Ita)**

[Effect of mexiletine on human atrial vulnerability] Omori I, et al. **Kokyu To Junkan** 1989 Jun;37(6):663–7 (Eng. Abstr.) **(Jpn)**

[Comparative study of the effectiveness of allapinin in patients with frequent and stable extrasystole] Abdalla A, et al. **Kardiologiia** 1988 Nov;28(11):95–7 **(Rus)**

[Changes in thrombocyte-vascular hemostasis and cyclic nucleotide levels after anti-arrhythmia therapy in patients with ischemic heart disease] Liusov VA, et al. **Kardiologiia** 1989 Jan;29(1):9–13 (Eng. Abstr.) **(Rus)**

[Study of the comparative anti-arrhythmic effectiveness of allapinin, ethacizine and mexitil in patients with ventricular disorders of cardiac rhythm] Smetnev AS, et al. **Ter Arkh** 1988;60(8):34–8 (Eng. Abstr.) **(Rus)**

MEZCALIN see MESCALINE

MEZLOCILLIN

ADMINISTRATION & DOSAGE

One versus three doses of metronidazole/mezlocillin for antibiotic prophylaxis in colon surgery. Grundmann R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):604–5

A prospective randomized trial to compare triple dose mezlocillin with triple dose cefuroxime plus metronidazole as prophylaxis in colorectal surgery. Diamond T, et al. **J Hosp Infect** 1988 Oct;12(3):215–9

Single dose mezlocillin versus three dose cefuroxime plus metronidazole for prophylaxis in large bowel surgery [letter] Rowe-Jones DC, et al. **J Hosp Infect** 1988 Aug; 12(2):131–2

[Comparative study of the value of a single dose of mezlocillin versus continuous therapy with cefuroxime-garamycin in the prevention of infection in cardiovascular surgery] Popović M, et al. **Acta Chir Iugosl** 1988;35(1):5–20 (Eng. Abstr.) **(See)**

ADVERSE EFFECTS

Comparative effects of mezlocillin and carbenicillin on platelet function and thromboxane generation in patients with cancer. Mehta P, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):286–91

An unforeseen complication of home parenteral antibiotic therapy. Burks JH, et al. **Arch Intern Med** 1989 Jul; 149(7):1603–4

BLOOD

Solid-phase ion-pair extraction and liquid chromatography of mezlocillin in serum. Jones CW, et al. **Clin Chem** 1988 Oct;34(10):2155–6

METABOLISM

Azlocillin and mezlocillin concentration in human prostatic tissue. Smith RP, et al. **Chemotherapy** 1988;34(4):267–71

PHARMACOKINETICS

Dose-dependent pharmacokinetics of mezlocillin in rats. Jungbluth GL, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):839–43

Pharmacokinetics of intravenous mezlocillin in elderly patients. Mounier M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):254–5

Influence of coadministration on the pharmacokinetics of mezlocillin and cefotaxime in healthy volunteers and in patients with renal failure. Rodondi LC, et al. **Clin Pharmacol Ther** 1989 May;45(5):527–34

Developmental pharmacokinetics of mezlocillin in 4 newborn infants. Jungbluth GL, et al. **Dev Pharmacol Ther** 1988; 11(6):317–21

The penetration of antibiotics into human pancreas. Büchler M, et al. **Infection** 1989 Jan-Feb;17(1):20–5

PHARMACOLOGY

In vitro antibacterial activity of mezlocillin against anaerobic bacteria. Sedallian A. **Chemioterapia** 1987 Jun;6(2 Suppl):72–3

Sulbactam and clavulanic acid: studies of enzyme kinetics and synergy with ampicillin and mezlocillin. Cullmann W, et al. **Drugs** 1988;35 Suppl 7:71–6

Comparison of in vitro susceptibilities among gram-negative rods. Westblom TU, et al. **W V Med J** 1989 Jul;85(7):279–80

[In vitro activity of mezlocillin and azlocillin on hospital bacterial strains] Rusu V, et al. **Rev Ig [Bacteriol]** 1988 Oct-Dec;33(4):347–56 (Eng. Abstr.) **(Rum)**

THERAPEUTIC USE

Prospective randomized comparison of mezlocillin therapy alone with combined ampicillin and gentamicin therapy for patients with cholangitis. Gerecht WB, et al. **Arch Intern Med** 1989 Jun;149(6):1279–84

Cost-benefit analysis of cephradine and mezlocillin prophylaxis for abdominal and vaginal hysterectomy. Davey PG, et al. **Br J Obstet Gynaecol** 1988 Nov; 95(11):1170–7

Mezlocillin and prophylaxis of postoperative infections in biliary surgery. Balbo G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):592–3

Critical evaluation of common clinical parameters of postoperative pneumonia after thoracic surgery with perioperative prophylaxis. Bardua R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):580–2

Systemic chemoprophylaxis in pacemaker surgery: a prospective randomized study. Bonini W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):584–5

Therapeutic results with mezlocillin in acute prostatitis. Comi L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):528–9

Evaluation of mezlocillin versus placebo as a prophylactic agent in cesarean section. Conturso R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):611–3

Intraoperative microbiological sampling is unhelpful after prophylactic antibiotic. Cooper M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):563

Are aminoglycosides essential in the treatment of continuous ambulatory peritoneal dialysis (CAPD) peritonitis? Drinovec J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):483–4

Short-term antibiotic prophylaxis in elective oral and maxillofacial surgery with mezlocillin and oxacillin. Dumbach J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):570–2

Results of antibiotic prophylaxis in head and neck surgery. Elies W. **Chemioterapia** 1987 Jun;6(2 Suppl):575–6

Perioperative antibiotic prophylaxis in mandibular fracture treatment. Gerlach K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):568

Prophylactic use of mezlocillin in acute cholecystitis. Groezinger KH. **Chemioterapia** 1987 Jun;6(2 Suppl):590

Surgery prophylaxis with mezlocillin versus other beta-lactams. Isabella V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):588–9

Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583

Influence of perioperative prophylaxis with mezlocillin on cellular immune response. Koenig UD. **Chemioterapia** 1987 Jun;6(2 Suppl):216–7

The results of perioperative prophylaxis in thoracic surgery. Lenz J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):578

Single-shot antibiotic prophylaxis in colon surgery. Mendel V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):597–600

Abdominal hysterectomy prophylaxis with mezlocillin. Valsecchi A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):620–1

Open study of different perioperative prophylactic regimens with mezlocillin/metronidazole in proctectomy. Wenzel M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):569

A comparative analysis of aztreonam + clindamycin versus tobramycin + clindamycin or amikacin + mezlocillin in the treatment of gram-negative lower respiratory tract infections. Rivera-Vazquez CR, et al. **Chemotherapy** 1989; 35 Suppl 1:89–100

A trial of mezlocillin versus cefuroxime with or without metronidazole for the prevention of wound sepsis after biliary and gastrointestinal surgery. Cann KJ, et al. **J Hosp Infect** 1988 Oct;12(3):207–14

Safety and efficacy of mezlocillin: a single-drug therapy for penetrating abdominal trauma. Lou MA, et al. **J Trauma** 1988 Nov;28(11):1541–7

Presumptive antibiotics for penetrating abdominal wounds. Moore FA, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):99–103

[Mezlocillin in bronchopneumopathy caused by neoplasm obstruction] Bruno CG. **Arch Monaldi Mal Torace** 1987 Jul-Aug;42(4):389–96 (Eng. Abstr.) **(Ita)**

[Use of mezlocillin in the treatment of bacterial infections of the lower respiratory tract] Gandola L, et al. **Arch Monaldi Mal Torace** 1987 Jul-Aug;42(4):405–11 (Eng. Abstr.) **(Ita)**

[Mezlocillin in the treatment of acute and chronic exacerbated respiratory infections] Pettine GC, et al. **Arch Monaldi Mal Torace** 1987 Jul-Aug;42(4):397–404 (Eng. Abstr.) **(Ita)**

[Therapy of acute or recurring chronic respiratory infections with mezlocillin] Romagnoli E, et al. **Arch Monaldi Mal Torace** 1987 Nov-Dec;42(6):551–4 (Eng. Abstr.) **(Ita)**

[Use of azlocillin-mezlocillin combinations in orthopedic surgery prophylaxis] Broggi S. **Boll Chim Farm** 1988 Nov-Dec;127(11-12):65S–66S (Eng. Abstr.) **(Ita)**

MGN see GLOMERULONEPHRITIS, MEMBRANOUS

MHC CLASS I GENES see GENES, MHC CLASS I

MIANSERIN

[Mianserin] Tiraboschi P. **Medicina (Firenze)** 1988 Jul-Sep; 8(3):351–3 (26 ref.) (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Mianserin withdrawal and the pupil response of depressed and recovered patients: a preliminary report. Muijen M, et al. **Biol Psychiatry** 1989 Mar 15;25(6):810–4

Combined mianserin and tranylcypromine [letter] Graham PM. **Br J Psychiatry** 1988 Sep;153:415–7

Involuntary movements associated with mianserin treatment. A case report. Otani K, et al. **Br J Psychiatry** 1989 Jan; 154:113–4

Mianserin and mania [letter] Sturdy JL, et al. **Br J Psychiatry** 1988 Aug;153:269–70

Mianserin [letter] **Lancet** 1989 Feb 18;1(8634):382

Mianserin product licence [letter] Brahams D. **Lancet** 1989 Feb 25;1(8635):452

Perception of drug hazards [letter] Girard M. **Lancet** 1988 Oct 8;2(8615):857

Mianserin [letter] Medawar C, et al. **Lancet** 1989 Jan 28; 1(8631):220

New drugs for old: an issue for debate? [editorial] Smith AJ, et al. **Med J Aust** 1988 Dec 5-19;149(11-12):581–2

A commentary on Swift, Swift and Tiplady (1988) 'first dose' response to mianserin: effects of age. Baksi AK, et al. **Psychopharmacology (Berlin)** 1988;96(2):277

ANALOGS & DERIVATIVES

An alpha 2 adrenoceptor antagonist, Org 3770, enhances nocturnal melatonin secretion in man. Palazidou E, et al. **Psychopharmacology (Berlin)** 1989;97(1):115–7

ANALYSIS

High-performance liquid chromatographic determination of mianserin in plasma and brain and its application to pharmacokinetic studies in the rat. Kurata K, et al. **J Chromatogr** 1988 Dec 29;434(1):278–82

METABOLISM

Activation of mianserin and its metabolites by human liver microsomes. Lambert C, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2853–8

An in vitro study of the microsomal metabolism and cellular toxicity of phenytoin, sorbinil and mianserin. Riley RJ, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):577–88

PHARMACOKINETICS

Variability in the elimination of mianserin in elderly patients. Begg EJ, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):445–51

PHARMACOLOGY

Effects of tetracyclic antidepressant drugs on the electrophysiological properties of canine cardiac Purkinje fibres. Brennan FJ, et al. **Can J Cardiol** 1988 Sep;4(6):281–6

Electrophysiological studies on the effects of mianserin, a

tetracyclic antidepressant agent, on isolated guinea-pig papillary muscle. Kinugawa T, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):197–202

The effects of imipramine, mianserin and trazodone on the chronotropic, inotropic and coronary vascular responses in the isolated perfused rat heart. Boschmans SA, et al. **Gen Pharmacol** 1989;20(2):233–7

"First-dose" response to mianserin: effects of age. Swift CG, et al. **Psychopharmacology (Berlin)** 1988;96(2):273–6

[Behavior analysis based on neurochemical mechanisms of action of viloxazine and mianserin] Danchev N, et al. **Eksp Med Morfol** 1989;28(1):23–8 (Eng. Abstr.) **(Bul)**

THERAPEUTIC USE

The efficacy of mianserin (Lerivon) in various forms of depression. Florkowski A, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):25–6

A comparative clinical trial of fluoxetine, mianserin and placebo in depressed outpatients. Muijen M, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):384–90

Clinical activity and tolerability of trazodone, mianserin, and amitriptyline in elderly subjects with major depression: a controlled multicenter trial. Altamura AC, et al. **Clin Neuropharmacol** 1989;12 Suppl 1:S25–33; S34–7

Clomipramine and mianserin in chronic idiopathic pain syndrome. A placebo controlled study. Loldrup D, et al. **Psychopharmacology (Berlin)** 1989;99(1):1–7

TOXICITY

A stereochemical investigation of the cytotoxicity of mianserin metabolites in vitro. Riley RJ, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):823–30

MICE

Difethialone (LM-2219): a new anticoagulant rodenticide for use against warfarin-resistant and -susceptible strains of Rattus norvegicus and Mus musculus. Nahas K, et al. **Ann Rech Vet** 1989;20(2):159–64

Inherited neuromuscular diseases in the mouse. A review of the literature. Torres LF. **Arq Neuropsiquiatr** 1988 Sep; 46(3):298–307 (115 ref.)

Pathogenicity of field isolates of Erysipelothrix rhusiopathiae in mice, rats and pigs. Eamens GJ. **Aust Vet J** 1988 Sep; 65(9):280–4

Adenocarcinoma of the salivary gland in a white Swiss mouse. Bundza A, et al. **Can J Vet Res** 1989 Jul;53(3):363–5

Once again, mice come to research's rescue, this time as infection models in AIDS studies [news] Raymond C. **JAMA** 1989 Feb 3;261(5):676–7

Mebendazole for worming mice: effectiveness and side effects. Baskerville M, et al. **Lab Anim** 1988 Jul;22(3):263–8

The use of repeated treatment with Ivomec and Neguvon spray in the control of murine fur mites and oxyurid worms. Baumans V, et al. **Lab Anim** 1988 Jul;22(3):246–9

The effectiveness of Ivomec and Neguvon in the control of murine mites. Baumans V, et al. **Lab Anim** 1988 Jul; 22(3):243–5

Arthropod transmission of Eperythrozoon coccoides in mice. Berkenkamp SD, et al. **Lab Anim Sci** 1988 Aug; 38(4):398–401

Duration and patterns of transmission of Theiler's mouse encephalomyelitis virus infection. Brownstein D, et al. **Lab Anim Sci** 1989 Jul;39(4):299–301

An evaluation of intra-cage ventilation in three animal caging systems. Keller LS, et al. **Lab Anim Sci** 1989 May; 39(3):237–42

Evaluation of mouse thymic virus antibody detection techniques. Lussier G, et al. **Lab Anim Sci** 1988 Oct; 38(5):577–9

Retroviral particles in radionuclide-induced murine osteosarcomas: mouse strain-related differences. Marquart KH. **Lab Anim Sci** 1989 Mar;39(2):127–31

Use of a fluid dispensing apparatus for bronchoalveolar lavage in mice. Moores HK, et al. **Lab Anim Sci** 1989 Mar; 39(2):149–52

Ankylosis of hock joints in group caged male B6C3F1 mice. Rao GN, et al. **Lab Anim Sci** 1988 Aug;38(4):417–21

A murine model of Streptococcus suis type 2 meningitis in the pig. Williams AE, et al. **Res Vet Sci** 1988 Nov; 45(3):394–9

Genetic control of susceptibility to mycobacterial infections. Skamene E. **Rev Infect Dis** 1989 Mar-Apr;11 Suppl 2:S394–9 (27 ref.)

[Action of PMA (phorbol myristate acetate), scopolamine, propranolol, and oxotremorine on memorization of an active or passive avoidance test] Laborit H, et al. **Encephale** 1989 Jan-Feb;15(1):29–35 (Eng. Abstr.) **(Fre)**

[Mechanism of action of clonidine in the forced-swimming test in mice] Malinge M, et al. **Encephale** 1989 Jan-Feb; 15(1):37–41 (Eng. Abstr.) **(Fre)**

[A special case of bolus fatality] Schneider V, et al. **Arch Kriminol** 1988 Sep-Oct;182(3–4):65–74 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

Vertebral malformations. Theiler K. **Adv Anat Embryol Cell Biol** 1988;112:1–99 (123 ref.)

ANATOMY & HISTOLOGY

Anatomical studies in the hyoid region of the mouse in term of evolutional importance. Nakano T, et al. **Anat Anz** 1988; 167(2):105–12

Occurrence of large groups of mast cells in subcutaneous connective tissue in the mouse. Moskalewski S, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):141–50

The vessels of the stria vascularis: quantitative comparison of three rodent species. Carlisle L, et al. **Hear Res** 1989 Mar;38(1–2):111–7

A quantitative histological study of neuroglial number in the retrofacial, facial and trigeminal motor nuclei in the ageing mouse brain. Sturrock RR. **J Anat** 1988 Dec;161:153–7

Coarctation of the stapedial artery: an unusual adaptive response to competing functional demands in the middle ear of some eutherians. Diamond MK. **J Morphol** 1989 Apr;200(1):71–86

Scanning electron microscopic observation on the distal part of the male urethra of the mouse. Nakano T, et al. **Z Mikrosk Anat Forsch** 1989;103(1):28–35

EMBRYOLOGY

Relationship of the primary choanae and anterior cranial base in the mouse embryo. Sim DW. **Acta Anat (Basel)** 1989; 134(3):242–4

Metabolism of murine and human embryos: search for a growth indicator in vitro culture medium. Naz RK, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1590–7

An immunohistochemical study on the embryonic development of renin-containing cells in the mouse and pig. Kon Y, et al. **Anat Histol Embryol** 1989 Mar; 18(1):14–26

Morphogenesis of the secondary palate in mouse embryos with special reference to the development of rugae. Sakamoto MK, et al. **Anat Rec** 1989 Mar;223(3):299–310

From egg to epithelium. Fleming TP, et al. **Annu Rev Cell Biol** 1988;4:459–85 (138 ref.)

Cell allocation and lineage in the early mouse embryo. Gardner RL. **Ciba Found Symp** 1989;144:172–81; discussion 181–6, 208–11 (25 ref.)

Differential antero-posterior expression of two proteins encoded by a homeobox gene in Xenopus and mouse embryos. Oliver G, et al. **EMBO J** 1988 Oct;7(10):3199–209

Expression of homeo box genes during mouse development: a review. Holland PW, et al. **Genes Dev** 1988 Jul; 2(7):773–82 (68 ref.)

The effects of tritium on embryo development: the embryotoxic effects of [3H]tryptophan. Killen HM, et al. **Int J Radiat Biol** 1989 Aug;56(2):139–49

Suppressed development of cultured mouse and swine embryos by diethylstilbestrol [published erratum appears in J Anim Sci 1988 Nov;66(11):3019] Gardiner CS, et al. **J Anim Sci** 1988 Sep;66(9):2401–6

A review of early mouse embryogenesis and its applications to domestic species. Prather RS, et al. **J Anim Sci** 1988 Oct;66(10):2626–35 (141 ref.)

Time course of expression of neuropeptide Y, calcitonin gene-related peptide, and NADPH diaphorase activity in neurons of the developing murine bowel and the appearance of 5-hydroxytryptamine in mucosal enterochromaffin cells. Branchek TA, et al. **J Comp Neurol** 1989 Jul 8;285(2):262–73

Mammalian limb bud development: in situ fate maps of early hindlimb buds. Muneoka K, et al. **J Exp Zool** 1989 Jan; 249(1):50–4

Strain differences in early mouse embryo development in vitro: role of the nucleus. Robl JM, et al. **J Exp Zool** 1988 Sep;247(3):251–6

Evidence for regulation following amputation and tissue grafting in the developing mouse limb. Wanek N, et al. **J Exp Zool** 1989 Jan;249(1):55–61

A staging system for mouse limb development. Wanek N, et al. **J Exp Zool** 1989 Jan;249(1):41–9

Ultrastructure of trophoblast giant cell transformation during the invasive stage of implantation of the mouse embryo. Bevilacqua EM, et al. **J Morphol** 1988 Dec;198(3):341–51

Tumor promoter-inducible genes are differentially expressed in the developing mouse. Tippetts MT, et al. **Mol Cell Biol** 1988 Oct;8(10):4570–2

[Comparative studies of the cryopreservation of mouse embryos with glycerin supplemented with sucrose or royal jelly] Visintin JA, et al. **DTW** 1988 Oct;95(9):398–401 (Eng. Abstr.) **(Ger)**

[The first cycle of DNA replication in mouse embryogenesis studied by microinjections of 3H-thymidine into the cytoplasm of fertilized ova] Samoshkina NA, et al. **Ontogenez** 1988 Nov-Dec;19(6):582–90 (Eng. Abstr.) **(Rus)**

GENETICS

Physical maps of the mouse and human immunoglobulin-like loci. Lai E, et al. **Adv Immunol** 1989;46:1–59 (357 ref.)

Genetics and development of ocular oxidases in the mouse: evidence for a new locus (Eox-1) closely linked with the aldehyde oxidase loci on chromosome 1. Hintz M, et al. **Anim Genet** 1988;19(3):227–36

Burrowing behavior in wild house mice: variation within and between populations. Bouchard PR, et al. **Behav Genet** 1989 May;19(3):447–56

Genetic analysis of an avoidance-avoidance response in Mus domesticus. Henderson ND. **Behav Genet** 1989 May; 19(3):387–407

Environmental influences on the preferences of wild female house mice for males of differing t-complex genotypes. Lenington S, et al. **Behav Genet** 1989 Mar;19(2):257–66

Analysis of a genetic recognition system in wild house mice. Lenington S, et al. **Behav Genet** 1988 Jul;18(4):549–64

Genomic structure of murine beta-1,4-galactosyltransferase. Hollis GF, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1069–75

Evolutionary relationships between laboratory mice and subspecies of Mus musculus based on the restriction fragment length variants of the chymotrypsin gene at the Prt-2 locus. Watanabe T, et al. **Biochem Genet** 1989 Feb; 27(1–2):119–30

The murine M-CSF gene is localized on chromosome 3. Gisselbrecht S, et al. **Blood** 1989 May 1;73(6):1742–5

Genetic differences in coupling of benzodiazepine receptors to chloride channels. Harris RA, et al. **Brain Res** 1989 Jun 19;490(1):26–32

A recombination hotspot in the LTR of a mouse retrotransposon identified in an in vitro system. Edelmann W, et al. **Cell** 1989 Jun 16;57(6):937–46

The murine and Drosophila homeobox gene complexes have common features of organization and expression. Graham A, et al. **Cell** 1989 May 5;57(3):367–78

tctex-1: a candidate gene family for a mouse t complex sterility locus. Lader E, et al. **Cell** 1989 Sep 8;58(5):969–79

The sex-determining region of the mouse Y chromosome encodes a protein with a highly acidic domain and 13 zinc fingers. Mardon G, et al. **Cell** 1989 Mar 10;56(5):765–70

Report of the committee on comparative mapping. Lalley PA, et al. **Cytogenet Cell Genet** 1988;49(1–3):227–35

An automated system for karyotyping mouse chromosomes. Piper J, et al. **Cytogenet Cell Genet** 1989;50(2–3):111–5

Murine glutamine synthetase: cloning, developmental regulation, and glucocorticoid inducibility. Magnuson SR, et al. **Dev Biol** 1988 Dec;130(2):536–42

Mapping the mouse X chromosome: possible symmetry in the location of a family of sequences on the mouse X and Y chromosomes. Avner P, et al. **Development** 1987;101 Suppl:107–16

Sex determination in mice: Y and chromosome 17 interactions. Erickson RP, et al. **Development** 1987;101 Suppl:25–32

Hox-7, a mouse homeobox gene with a novel pattern of expression during embryogenesis. Robert B, et al. **EMBO J** 1989 Jan;8(1):91–100

The genetics of diabetes susceptibility in mice. Leiter EH. **FASEB J** 1989 Sep;3(11):2231–41 (74 ref.)

Cloning of a mammalian DNA methyltransferase. Bestor TH. **Gene** 1988 Dec 25;74(1):9–12

A steep cline for mitochondrial DNA in Danish mice. Vanlerberghe F, et al. **Genet Res** 1988 Dec;52(3):185–93

Chromosomal localization of zinc finger protein genes in man and mouse. Ashworth A, et al. **Genomics** 1989 Apr; 4(3):323–7

Synteny on mouse chromosome 5 of homologs for human DNA loci linked to the Huntington disease gene. Cheng SV, et al. **Genomics** 1989 Apr;4(3):419–26

Linkage analysis of the murine mos proto-oncogene on chromosome 4. Dandoy F, et al. **Genomics** 1989 May; 4(4):546–51

Molecular cloning and mapping of the ecotropic leukemia provirus Emv-23 provides molecular access to the albino-deletion complex in mouse chromosome 7. Rinchik EM, et al. **Genomics** 1989 Apr;4(3):251–8

Mini-editorial set: selection for longer-lived rodents. **Growth Dev Aging** 1988 Winter;52(4):207–11

Postnatal development of the organ of Corti in the wild house mouse, laboratory mouse, and their hybrid. Burda H, et al. **Hear Res** 1988 Oct;36(1):97–105

Regulation of Qa-1 expression and determinant modification by an H-2D-linked gene, Qdm. Aldrich CJ, et al. **Immunogenetics** 1988;28(5):334–44

A linkage map of the mouse immunoglobulin lambda light chain locus. Carson S, et al. **Immunogenetics** 1989; 29(3):173–9

High frequency of H-2E0 alleles among wild mice. Figueroa F, et al. **Immunogenetics** 1989;30(3):222–5

The mouse Igh-1a and Igh-1b H chain constant regions are derived from two distinct isotypic genes. Jouvin-Marche E, et al. **Immunogenetics** 1989;29(2):92–7

Physical mapping of a family of interferon-activated genes, serum amyloid P-component, and alpha-spectrin on mouse chromosome 1. Kingsmore SF, et al. **Immunogenetics** 1989; 30(3):169–74

The mouse CD3-gamma, -delta, and -epsilon genes reside within 50 kilobases on chromosome 9, whereas CD3-zeta maps to chromosome 1, band H. Letourneur F, et al. **Immunogenetics** 1989;29(4):265–8

Molecular characterization of four intra-t mouse recombinants. Mizuno K, et al. **Immunogenetics** 1989; 30(2):112–8

Biochemical similarity of Ly-19, Ly-32, and Lyb-2 alloantigens encoded in the gene cluster on mouse chromosome 4. Nakamura S, et al. **Immunogenetics** 1988; 28(5):314–9

Linkage of the mouse Hsp84 heat shock protein structural gene to the H-2 complex. Romano JW, et al. **Immunogenetics** 1989;29(2):142–4

New evidence for trans-species evolution of the H-2 class I polymorphism. Sagai T, et al. **Immunogenetics** 1989; 30(2):89–98

A mouse chromosome 17 gene encodes a testes-specific

transcript with unusual properties. Sarvetnick N, et al. **Immunogenetics** 1989;30(1):34–41
Molecular genetics of mouse serum amyloid P component (SAP): cloning and gene mapping. Whitehead AS, et al. **Immunogenetics** 1988;28(5):388–90
TCR V beta genes in man and mouse and the factors that shape the linkage pattern of immune receptor genes. Acuto O, et al. **Immunol Today** 1989 Jan;10(1):14–7 (44 ref.)
Isolation and characterization of the beta and epsilon subunit genes of mouse muscle acetylcholine receptor. Buonanno A, et al. **J Biol Chem** 1989 May 5;264(13):7611–6
Characterization of the mouse rod transducin alpha subunit gene. Raport CJ, et al. **J Biol Chem** 1989 May 5; 264(13):7122–8
Cytochalasin D–induced triploidy in the mouse. Speirs S, et al. **J Exp Zool** 1989 Jun;250(3):339–45
I-J alternates—a commentary. Tada T, et al. **J Mol Cell Immunol** 1985;2(2):104–5
Unusual evolutionary conservation of 5S rRNA pseudogenes in Aspergillus nidulans: similarity of the DNA sequence associated with the pseudogenes with the mouse immunoglobulin switch region. Borsuk P, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):125–30
The compositional distribution of coding sequences and DNA molecules in humans and murids. Mouchiroud D, et al. **J Mol Evol** 1988;27(4):311–20
A putative int domain for mouse mammary tumor virus on mouse chromosome 7 is a 5' extension of int-2. Peters G, et al. **J Virol** 1989 Mar;63(3):1448–50
Influenza virus–susceptible mice carry Mx genes with a large deletion or a nonsense mutation. Staeheli P, et al. **Mol Cell Biol** 1988 Oct;8(10):4518–23
Functional and structural analyses of mouse genomic regions screened by the morphological specific-locus test. Russell LB. **Mutat Res** 1989 May;212(1):23–32
Nucleotide sequence of the mouse interferon-beta gene. Kuga T, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3291
Pig Hox-2.4 has accumulated a frameshift mutation relative to mouse Hox-2.4. Miller JR, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10364
Nucleotide sequence of cDNA for mouse osteopontin–like protein. Miyazaki Y, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3298
Chromosomal mapping of genes for transforming growth factors beta 2 and beta 3 in man and mouse: dispersion of TGF-beta gene family. Barton DE, et al. **Oncogene Res** 1988;3(4):323–31
Molecular organization of the class II genes of the human and mouse major histocompatibility complexes. Carson S, et al. **Oxf Surv Eukaryot Genes** 1986;3:63–94 (149 ref.)
Homoeo box genes of the mouse. Colberg-Poley AM, et al. **Oxf Surv Eukaryot Genes** 1987;4:92–115 (77 ref.)
Molecular genetics of class I genes in the mammalian major histocompatibility complex. Mellor AL. **Oxf Surv Eukaryot Genes** 1986;3:95–140 (109 ref.)
Structural arrangement and tissue-specific expression of the two murine alpha-amylase loci Amy-1 and Amy-2. Schibler U, et al. **Oxf Surv Eukaryot Genes** 1986;3:210–34 (47 ref.)
Hereditary nature of the pattern of the motor activity circadian rhythm in mice. Díez-Noguera A, et al. **Physiol Behav** 1989 Feb;45(2):307–11
Analysis of a lethal mutation (tw18) in the mouse t-complex. Martin GR, et al. **Prog Clin Biol Res** 1988;284:147–61 (30 ref.)
Two cultures find common ground [news] Marx JL. **Science** 1989 May 12;244(4905):652–3
Assignment of retinoblastoma susceptibility gene to mouse chromosome 14. Hsieh CL, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):461–4
Genes for HMG-CoA reductase and serotonin 1a receptor are on mouse chromosome 13. Sundaresan S, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):465–9
Gene for alpha 2(I) collagen is on mouse chromosome 6 not 16. Sundaresan S, et al. **Somat Cell Mol Genet** 1989 Sep; 15(5):471–3
An eighth complementation group of rodent cells hypersensitive to ultraviolet radiation. Thompson LH, et al. **Somat Cell Mol Genet** 1988 Nov;14(6):603–12
Allelic variation linked to adenine phosphoribosyltransferase locus in mouse teratocarcinoma cell line and feral-derived mouse strains. Turker MS, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):159–66
Why isn't a mouse more like a man? Erickson RP. **Trends Genet** 1989 Jan;5(1):1–3
[Genetic analysis of the hybridization zone between two subspecies Mus musculus domesticus and Mus musculus musculus in Bulgaria] Vanlerberghe F, et al. **Genome** 1988 Jun;30(3):427–37 (Eng. Abstr.) **(Fre)**
[The effect of reciprocal translocations on the fertility of the mouse] Michelmann HW. **DTW** 1988 Jul–Aug;95(7):271–4 (Eng. Abstr.) **(Ger)**
[atwp mutation in an albino mouse substrain (AB/Hum-1)] Bundschuh VG, et al. **Z Versuchstierkd** 1988;31(6):249–54 (Eng. Abstr.) **(Ger)**
[Two polymorphic repetitive sequences: evolution and genetic instability] Kominami R. **Seikagaku** 1989 Apr; 61(4):261–70 (31 ref.) **(Jpn)**
[Incidence of dominant lethals in the progeny of young male house mice (Mus musculus L.) after exposure to excretory products of mature males of the same species] Daev EV, et al. **Genetika** 1988 Nov;24(11):2015–21 (Eng. Abstr.) **(Rus)**
[Genetic divergence of Mus musculus musculus and M. m. hortulanus] Mezhzherin SV. **Genetika** 1988 Dec; 24(12):2197–201 (Eng. Abstr.) **(Rus)**
[A new variant of chromosome 1 in the house mouse] Agul'nik SI, et al. **Tsitologiia** 1988 Jun;30(6):773–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Development of mitochondrial helical sheath in the middle piece of the mouse spermatid tail: regular dispositions and synchronized changes. Otani H, et al. **Anat Rec** 1988 Sep; 222(1):26–33
The quantitative relationship between nutritional effects on preweaning growth and behavioral development in mice. Wainwright P, et al. **Dev Psychobiol** 1989 Mar;22(2):183–95
Ontogenetic development of the leptomeninges of the laboratory mouse (Mus musculus v. alba). Zajícová A. **Folia Morphol (Praha)** 1988;36(4):431–40
Dissecting mouse development with toxigenics. Evans GA. **Genes Dev** 1989 Mar;3(3):259–63 (22 ref.)
The influence of prenatal and/or postnatal exposure to lead on behavior of preweanling mice. Draski LJ, et al. **Physiol Behav** 1989 Apr;45(4):711–5
Hardness of diet pellets and its influence on growth of pre-weaned and weaned mice. Koopman JP, et al. **Z Versuchstierkd** 1989;32(2):71–5

IMMUNOLOGY

Susceptibility of W/WV mice to murine cytomegalovirus infection. Ohashi T, et al. **Arch Virol** 1988;101(3–4):237–46
A role for Lys-His-Gly-NH2 in avian and murine B cell development. Lassila O, et al. **Cell Immunol** 1989 Sep; 122(2):319–28
Class I gene regulation of haplotype preference may influence antiviral immunity in vivo. Thomsen AR, et al. **Cell Immunol** 1989 Sep;122(2):365–76
A rat model for imaging the effect of anti mouse antibody responses on the biodistribution of radiolabelled mouse monoclonal antibodies. Pimm MV, et al. **Eur J Nucl Med** 1988;14(9–10):507–11
Identification and characterization of a mouse cell surface antigen with alternative molecular forms. Baecher CM, et al. **Immunogenetics** 1988;28(5):295–302
Serological survey of complement factor H in common laboratory and wild mice: a new third allotype. Harada Y, et al. **Immunogenetics** 1989;29(3):148–54
Anti-murine antibody response to mouse monoclonal antibodies: clinical findings and implications. Reynolds JC, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):121–5
A simple qualitative determination of human antibodies to murine immunoglobulins (HAMA) in serum samples. Seccamani E, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):167–70
Cellular induction of chronic allotype suppression of IgG2a in Ighb/b homozygous mice and its abrogation by in vivo treatment with anti-CD8 monoclonal antibody. Benaroch P, et al. **J Exp Med** 1988 Sep 1;168(3):891–904
In vitro complex formation and biodistribution of mouse antitumor monoclonal antibody in cancer patients. Sakahara H, et al. **J Nucl Med** 1989 Aug;30(8):1311–7
Rheumatoid factors in mice. Tarkowski A, et al. **Monogr Allergy** 1989;26:214–29 (74 ref.)
The presence of serotonin–immunoreactive nerve fibers in the optic nerve of the mouse. Mikkelsen JD. **Neurosci Lett** 1988 Dec 5;94(3):253–8
Inmunity in mice to an oncosphere infection by using oncospheral antigens from Taenia solium or Taeniarhynchus saginatus. Molinari JL, et al. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):325–33

METABOLISM

Hematopoietic, lymphopoietic, and proinflammatory cytokines produced by human and murine keratinocytes. Kupper TS, et al. **Ann N Y Acad Sci** 1988;548:262–70 (15 ref.)
A comparison of bone turnover in athymic (nude) and euthymic mice: biochemical, histomorphometric, bone ash and in vitro studies. McCauley LK, et al. **Bone** 1989; 10(1):29–34
Eukaryotic DNA methyltransferase: tissue and species distribution. Adams RL, et al. **Gene** 1988 Dec 25; 74(1):125–8
Differential binding properties of the peripheral-type benzodiazepine ligands [3H]PK 11195 and [3H]Ro 5–4864 in trout and mouse brain membranes. Eshleman AJ, et al. **J Neurochem** 1989 Aug;53(2):494–502
Climatic adaptation in thermogenesis and thermal insulation in wood mice (Apodemus argenteus). Yanagidaira Y, et al. **Jpn J Physiol** 1989;39(2):229–40

MICROBIOLOGY

Leakey virus: a new hantavirus isolated from Mus musculus in the United States. Baek LJ, et al. **J Gen Virol** 1988 Dec; 69 (Pt 12):3129–32
Use of the mouse for the isolation and investigation of stomach-associated, spiral-helical shaped bacteria from man and other animals. Dick E, et al. **J Med Microbiol** 1989 May;29(1):55–62
Ear tag induced Staphylococcus infection in mice. Cover CE, et al. **Lab Anim** 1989 Jul;23(3):229–33
Elimination of murine viral pathogens from the caecal contents of mice by anaerobic preparation. Koopman JP, et al. **Lab Anim** 1989 Jan;23(1):76–80
Differences in the gastrointestinal microbiota of specific pathogen free mice: an often unknown variable in biomedical research. O'Rourke J, et al. **Lab Anim** 1988 Oct; 22(4):297–303
The use of dirty bedding for detection of murine pathogens in sentinel mice. Thigpen JE, et al. **Lab Anim Sci** 1989 Jul;39(4):324–7
[First report of an endemic area of epidemic hemorrhagic fever in boarding prefecture] Liu ZS. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Jun; 9(3):145–7 (Eng. Abstr.) **(Chi)**

PARASITOLOGY

The humoral response to Hymenolepis diminuta in serum and intestinal lavages of Mus musculus. Dhont H, et al. **Ann Soc Belg Med Trop** 1988 Dec;68(4):343–52
The use of metronidazole, tinidazole and dimetridazole in eliminating trichomonads from laboratory mice. Roach PD, et al. **Lab Anim** 1988 Oct;22(4):361–4
Cysticercus fasciolaris infection in a breeding colony of mice. Davis JA, et al. **Lab Anim Sci** 1989 May;39(3):250–2
Schistosoma mansoni: migration patterns in normal and immunized Swiss Webster mice, by means of autoradiographic analysis. Pinto RM, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:231–2
[Behavior of Schistosoma mansoni strain LE, after passage through an accidentally infected human host] Araújo N, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):213–8 (Eng. Abstr.) **(Por)**
[The occurrence of protozoa in the intestinal microflora of laboratory mice] Jalili NA, et al. **Bratisl Lek Listy** 1989 Jan;90(1):42–4 (Eng. Abstr.) **(Slo)**

PHYSIOLOGY

The mouse pericardium: it allows passage of particulate matter from the pleural to the pericardial cavity. Fukuo Y, et al. **Anat Rec** 1988 Sep;222(1):1–5
Cross-adapted sugar responses in the mouse taste cell. Tonosaki K, et al. **Comp Biochem Physiol [A]** 1989; 92(2):181–3
Evaluation of rodent sperm, vaginal cytology, and reproductive organ weight data from National Toxicology Program 13-week studies. Morrissey RE, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):343–58
Effect of food restriction on reproduction and lactation in house mice mated post partum. Krackow S. **J Reprod Fertil** 1989 May;86(1):341–7
Fertility in intersubspecific hybrids of laboratory mice (Mus musculus domesticus) and molossinus mice (M. m. molossinus). Niwa M, et al. **Jikken Dobutsu** 1988 Oct; 37(4):387–92
Cage design reduces emotionality in mice. Chamove AS. **Lab Anim** 1989 Jul;23(3):215–9
The effects of different anaesthetic agents on the estimation of uterine vascular permeability in mice. Milligan SR, et al. **Lab Anim** 1988 Oct;22(4):343–6
Embryo production in B6D2-F1 mice using two superovulating regimens. Cosby NC, et al. **Lab Anim Sci** 1989 May;39(3):249–50
Analysis of cold and warm receptor activity in vampire bats and mice. Schäfer K, et al. **Pflugers Arch** 1988 Jul; 412(1–2):188–94
Aggression and adaptation to the light–dark cycle: role of intrinsic and extrinsic control. Benus RF, et al. **Physiol Behav** 1988;43(2):131–7
Mouse pup urine as an infant signal. Londei T, et al. **Physiol Behav** 1989 Mar;45(3):579–83
Restricted water intake influences male reproduction in two strains of house mice (Mus musculus). Nelson RJ. **Physiol Behav** 1988;43(2):217–21
[Marking activity, morphometric analysis of steroid-dependent organs and species specificity of the sexual activity of male house and mount-building mice] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1988; 300(5):1270–3 **(Rus)**

MICE, DEER see **PEROMYSCUS**

MICE, HAIRLESS see **MICE, INBRED HRS**

MICE, HOUSE see **MICE**

MICE, INBRED A

GENETICS

ATH-3, a new gene for atherosclerosis in the mouse. Stewart-Phillips JL, et al. **Clin Invest Med** 1989 Apr; 12(2):121–6

IMMUNOLOGY

The C5-sufficient A/J congenic mouse strain. Inflammatory response and resistance to Listeria monocytogenes. Gervais F, et al. **J Immunol** 1989 Mar 15;142(6):2057–60
Activation of T lymphocytes through the Ly-6 pathway is defective in A strain mice. Malek TR, et al. **J Immunol** 1989 Jul 15;143(2):439–45
Intracellular destruction of salmonellae in genetically

resistant mice. Lin FR, et al. **J Med Microbiol** 1989 Sep; 30(1):79–87

PARASITOLOGY

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

MICE, INBRED AKR

Urologic syndrome associated with wire caging in AKR mice. Everitt JI, et al. **Lab Anim Sci** 1988 Oct;38(5):609–11

GENETICS

Comparison of sister chromatid exchanges in spleen and thymus lymphocytes from AKR, C57BL/6N x DBA/2J F1, and CBA mice following in vivo exposure to N-methyl-N-nitrosourea. Neft RE, et al. **Cancer Res** 1989 Aug 15;49(16):4504–8

Nucleotide sequence analysis of the C.AKR Lyt-2a gene: structural polymorphism in alleles encoding the Lyt-2.1 T-cell surface alloantigen. Youn HJ, et al. **Immunogenetics** 1988;28(5):345–52

Structure and expression of the Lyt-3a gene of C.AKR mice. Youn HJ, et al. **Immunogenetics** 1988;28(5):353–61

IMMUNOLOGY

Correlations of in vivo growth of CTL-susceptible and -resistant variant tumor cell lines in CTL-responder AKR.H-2b:Fv-1b and -nonresponder AKR.H-2b mice. Azuma H, et al. **Cell Immunol** 1988 Oct 1;116(1):123–34

Development of donor-derived thymic lymphomas after allogeneic bone marrow transplantation in AKR/J mice. Yasumizu R, et al. **J Immunol** 1988 Sep 15;141(6):2181–6

Strain differences in the early development of the thymus-dependent cells: precocity of T lineage cells in AKR mice as compared to those in C3H mice. Katsume C, et al. **Microbiol Immunol** 1989;33(4):313–28

METABOLISM

A comparative study of 2-deoxyglucose patterns of glomerular activation in the olfactory bulbs of C57 BL/6J and AKR/J mice. Sicard G, et al. **Brain Res** 1989 Mar 6;481(2):325–34

MICROBIOLOGY

The role of bone marrow and thymic elements in the initiation and spread of virus production in the AKR thymus. Buckheit RW Jr, et al. **Virology** 1988 Oct; 166(2):533–41

MICE, INBRED BALB C

Murine models for antiretroviral therapy. Ruprecht RM. **Intervirology** 1989;30 Suppl 1:2–11

Experimental blastomycosis pneumonia in mice by infection with conidia. Sugar AM, et al. **J Med Vet Mycol** 1988; 26(6):321–6

Mycoplasma pulmonis depresses humoral and cell-mediated responses in mice. Lai WC, et al. **Lab Anim Sci** 1989 Jan; 39(1):11–5

ANATOMY & HISTOLOGY

Finite element method comparison of murine mandibular form differences. Moss ML. **J Craniofac Genet Dev Biol** 1988;8(1):3–20

[Moss fiber distribution in the hippocampus of chimeric mice] Bär I, et al. **Anat Anz** 1989;168(3):223–7 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

Patterns of cholinesterase staining during neural crest cell morphogenesis in mouse and chick embryos. Martins-Green M, et al. **J Exp Zool** 1988 Jul;247(1):62–8

GENETICS

Organic aciduria and butyryl CoA dehydrogenase deficiency in BALB/cByJ mice. Schiffer SP, et al. **Biochem Genet** 1989 Feb;27(1–2):47–58

Retarded and distinct progress of lens opacification in congenic hereditary cataract mice, Balb/c-nct/nct. Matsuzawa A, et al. **Exp Eye Res** 1988 Nov;47(5):705–11

Genetic and developmental defects of the mouse corpus callosum. Wahlsten D. **Experientia** 1989 Sep 15; 45(9):828–38 (99 ref.)

Gene organization of murine homeobox-containing gene clusters. Do MS, et al. **Genomics** 1988 Oct;3(3):195–200

Regulation of host resistance to Mycobacterium intracellulare in vivo and in vitro by the Bcg gene. Goto Y, et al. **Immunogenetics** 1989;30(3):218–21

Deficiency of the corpus callosum: incomplete penetrance and substrain differentiation in BALB/c mice. Wahlsten D. **J Neurogenet** 1989 Jan;5(1):61–76

CBXC: a set of recombinant inbred strains between CBA/Ca and BALB/c. Fernandez JL, et al. **Lab Anim** 1989 Jul; 23(3):200–2

Identification of a second interferon-regulated murine Mx gene. Staeheli P, et al. **Mol Cell Biol** 1988 Oct;8(10):4524–8

[Genotypic status of different tissues and organs in aggregated chimeras of BALB/c——C57BL/10 and BALB/c——B10.D2 with discovered chimeric drift] Fedorov LM. **Biull Eksp Biol Med** 1988 Oct;106(10):484–7 (Eng. Abstr.) **(Rus)**

[Chimeric drift in blood erythrocyte population in BALB/c——C57BL/10 and BALB——B10.D2 mice] Fedorov LM, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):344–7 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Studies of sequence heterogeneity of mitochondrial DNA from rat and mouse tissues: evidence for an increased frequency of deletions/additions with aging. Pikó L, et al. **Mech Ageing Dev** 1988 Jun;43(3):279–93

The effect of dietary fat on the mammary gland in immature mice. Nishinakagawa H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):447–9

IMMUNOLOGY

Spectrotype modulation of BALB/c anti (1——3) dextran 1355S responses. Stäb F, et al. **Adv Exp Med Biol** 1988; 237:871–5

Ability of monophosphoryl lipid A to augment the antibody response of young mice. Baker PJ, et al. **Infect Immun** 1988 Dec;56(12):3064–6

Mink-mouse hybridomas that secrete mink immunoglobulin G. Galakhar NL, et al. **J Immunol Methods** 1988 Nov 25; 115(1):39–43

Production of large amounts of mouse polyclonal antisera. Kurpisz M, et al. **J Immunol Methods** 1988 Dec 9; 115(2):195–8

Comparison of ascites production for monoclonal antibodies in BALB/c and BALB/c-derived cross-bred mice. Stewart F, et al. **J Immunol Methods** 1989 May 12; 119(2):269–75

Effects of a commercial malathion dip preparation on the cellular and humoral immune response of BALB/c mice. Relford RL, et al. **Lab Anim Sci** 1989 Jan;39(1):56–9

Evidence for a functional idiotypic network among natural antibodies in normal mice. Lundkvist I, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5074–8

[Passage of hybridomas in male BALB/c mice] Novikov VV, et al. **Antibiot Khimioter** 1988 Nov;33(11):836–8 (Eng. Abstr.) **(Rus)**

[Characteristics of the immunocyte cooperation in 2 strains of mice opposite in their sensitivity to dermaphytoses during the immune response to antigens of the causative agent] Medvedev IuA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):69–73 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Infectious properties of the N-tropic virus OA-3 isolated from the BALB/3T3 cell line] Iakovleva LS, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):614–7 **(Rus)**

PARASITOLOGY

Infectivity and virulence in a serodeme of Trypanosoma vivax. Joshua RA. **Comp Immunol Microbiol Infect Dis** 1988;11(2):99–104

Modulated immune responsiveness associated with experimental Encephalitozoon cuniculi infection in BALB/c mice. Didier ES, et al. **Lab Anim Sci** 1988 Dec; 38(6):680–4

Murine encephalitozoonosis: the effect of age and mode of transmission on occurrence of infection. Liu JJ, et al. **Lab Anim Sci** 1988 Dec;38(6):675–9

PHYSIOLOGY

Development of mouse embryos following conventional and ultra rapid cryopreservation. Reinthaller A, et al. **Arch Gynecol Obstet** 1988;244(1):33–8

Low temperature worsens mammalian oxygen toxicity. Jamieson D, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):639–43

Differential seizure sensitivities to picrotoxinin in two inbred strains of mice (DBA/2J and BALB/c ByJ): parallel changes in GABA receptor-mediated chloride flux and receptor binding. Schwartz RD, et al. **Brain Res** 1989 Feb 27;481(1):169–74

Genetics and senescence. I. Age-related changes in activity and exploration in three inbred strains of mice. Lhotellier L, et al. **Physiol Behav** 1989 Mar;45(3):491–3

Resolution of streptozotocin-induced diabetes mellitus by pancreatic transplantation in inbred mice. Pollak R, et al. **Transplantation** 1988 Oct;46(4):611–3

MICE, INBRED C3H

Immunopathology of experimental autoallergic sialadenitis in C3H/He mice. Hayashi Y, et al. **Clin Exp Immunol** 1989 Mar;75(3):471–6

Effect of a purified diet on dystrophic cardiac calcinosis in mice. Everitt JI, et al. **Lab Anim Sci** 1988 Aug;38(4):426–9

Idiopathic cardiomyopathy in C3Hf/Bd mice. Goad ME, et al. **Lab Anim Sci** 1989 Mar;39(2):137–41

EMBRYOLOGY

Laminin induces the stable expression of surface galactosyltransferase on lamellipodia of migrating cells. Eckstein DJ, et al. **J Cell Biol** 1989 Jun;108(6):2507–17

Thymus histogenesis in C3H mice. Moraux-Moyson A, et al. **Thymus** 1988–89;12(2):89–109

GENETICS

Substrain divergence in C3H inbred mice. Heimrich B, et al. **Behav Genet** 1988 Nov;18(6):671–4

Organization and structure of the Qa genes of the major histocompatibility complex of the C3H mouse: implications for Qa function and class I evolution. Watts S, et al. **EMBO J** 1989 Jun;8(6):1749–59

Sequence analysis of the C3H H-2K1k gene: relationship to the H-2 loci. Watts S, et al. **Immunogenetics** 1989; 29(5):355–7

Molecular characterization of the C3H/fB/HeN H-2Kkm2 mutation. Implications for the molecular basis of alloreactivity. Vogel JM, et al. **J Exp Med** 1988 Nov 1; 168(5):1781–800

IMMUNOLOGY

Immunomodulatory activity of monophosphoryl lipid A in C3H/HeJ and C3H/HeSnJ mice. Hiernaux JR, et al. **Infect Immun** 1989 May;57(5):1483–90

Inhibition of activated nonresponder C3H/HeJ lymphocytes by lipopolysaccharide endotoxin. Sultzer BM, et al. **Infect Immun** 1988 Dec;56(12):3040–5

Strain differences in the early development of the thymus-dependent cells: precocity of T lineage cells in AKR mice as compared to those in C3H mice. Katsume C, et al. **Microbiol Immunol** 1989;33(4):313–28

[The regulation of splenocyte natural killer activity in C3HA mice in the early period after hepatoma 22a transplantation] Filatova NA, et al. **Eksp Onkol** 1989;11(2):42–5 (Eng. Abstr.) **(Rus)**

[Natural killer activity of the splenocytes in C3HA strain mice during 20-methylcholanthrene-induced carcinogenesis] Pogodina ON, et al. **Tsitologiia** 1989 Feb; 31(2):220–5 (Eng. Abstr.) **(Rus)**

METABOLISM

[Purine compound transport and metabolism in the thymus and spleen lymphocytes of C3HA mice during the growth of hepatoma 22] Pimenov AM, et al. **Eksp Onkol** 1989; 11(4):33–7 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Relationship of route of infection to susceptibility and immune response of inbred mice to Y strain Trypanosoma cruzi. Murfin DJ, et al. **Am J Trop Med Hyg** 1989 Jul; 41(1):41–9

MICE, INBRED C57BL

Intraspinal dermoid cysts in a C57BL6 mouse. Nguyen HT. **Lab Anim Sci** 1988 Dec;38(6):739–40

The effect of transportation stress on splenic natural killer cell activity in C57BL/6J mice [letter] Standel PR. **Lab Anim Sci** 1988 Oct;38(5):557

Punta Toro virus infection of C57BL/6J mice: a model for phlebovirus-induced disease. Pifat DY, et al. **Microb Pathog** 1987 Dec;3(6):409–22

[Spontaneous hepatomas in hybrid mice (CBA x C57Bl/6)F1] Khar'kovskaia NA, et al. **Eksp Onkol** 1988;10(4):37–9 (Eng. Abstr.) **(Rus)**

[Growth characteristics of adenocarcinoma 755 recurrences in C57Bl/6 and (DBA/2 X C57Bl/6) F1 mouse strains] Soliakova TI, et al. **Eksp Onkol** 1988;10(6):32–4 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

A comparison of lung structure in male DBA and C57 black mice and their F1 offspring. Kida K, et al. **Am Rev Respir Dis** 1989 May;139(5):1238–43

Finite element method comparison of murine mandibular form differences. Moss ML. **J Craniofac Genet Dev Biol** 1988;8(1):3–20

[Moss fiber distribution in the hippocampus of chimeric mice] Bär I, et al. **Anat Anz** 1989;168(3):223–7 (Eng. Abstr.) **(Ger)**

BLOOD

[The content of tumor angiogenesis factor in the blood serum of C57Bl/6 mice during the growth and metastasis of transplanted tumors] Lisniak IA, et al. **Eksp Onkol** 1989; 11(4):76–7, 80 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular basis of mouse Himalayan mutation. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):252–60

Comparison of sister chromatid exchanges in spleen and thymus lymphocytes from AKR, C57BL/6N x DBA/2J F1, and CBA mice following in vivo exposure to N-methyl-N-nitrosourea. Neft RE, et al. **Cancer Res** 1989 Aug 15;49(16):4504–8

ATH-3, a new gene for atherosclerosis in the mouse. Stewart-Phillips JL, et al. **Clin Invest Med** 1989 Apr; 12(2):121–6

Hepatic phase II biotransformation in C57Bl/KsJ db/db mice: comparison to that in Swiss Webster and 129 REJ mice. Watkins JB 3d, et al. **Comp Biochem Physiol [C]** 1988; 90(2):417–21

Cellular site and mode of Fv-2 gene action. II. Conditional protection of Fv-2ss cells by admixture with Fv-2rr cells. Behringer RR, et al. **Exp Hematol** 1989 May;17(4):330–4

Recombinant inbred strain and interspecific backcross analysis of molecular markers flanking the murine agouti coat color locus. Siracusa LD, et al. **Genetics** 1989 Jul; 122(3):669–79

Multilocus molecular mapping of the mouse X chromosome. Mullins LJ, et al. **Genomics** 1988 Oct;3(3):187–94

HLA-B27 in inbred and non-inbred transgenic mice. Cell surface expression and recognition as an alloantigen in the absence of human beta 2-microglobulin. Taurog JD, et al. **J Immunol** 1988 Dec 1;141(11):4020–3

Molecular aspects of sex determination in mice: an alternative model for the origin of the Sxr region. Bishop CE, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):119–24

Early development in mice: V. Sensorimotor development of four coisogenic mutant strains. Noël M. **Physiol Behav** 1989 Jan;45(1):21–6

[Genotypic status of different tissues and organs in aggregated chimeras of BALB/c——C57BL/10 and BALB/c——B10.D2 with discovered chimeric drift] Fedorov LM. **Biull Eksp Biol Med** 1988 Oct;106(10):484–7 (Eng. Abstr.) **(Rus)**

[Chimeric drift in blood erythrocyte population in BALB/c——C57BL/10 and BALB——B10.D2 mice] Fedorov LM, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):344–7 (Eng. Abstr.) **(Rus)**

[Enhanced inhibition of splenic lymphocyte proliferation by 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57B1/10 (Ah+Ah+) mice compared to DBA/2 (AhAh) mice] Pavliak AL, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):331–3 (Eng. Abstr.) **(Rus)**

[Transfer of the gene of the BTSh 70 heat-shock protein from Drosophila into the mouse genome] Sergienko VG, et al. **Ontogenez** 1988 May-Jun;19(3):317–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

A testis-specific antigen of the C57BL/6 mouse. Mikami O, et al. **J Reprod Immunol** 1989 May;15(2):123–39

[Characteristics of the immunocyte cooperation in 2 strains of mice opposite in their sensitivity to dermaphytoses during the immune response to antigens of the causative agent] Medvedev IuA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):69–73 (Eng. Abstr.) **(Rus)**

INJURIES

Iatrogenic puncture of enlarged seminal vesicles in aged C57BL/6 mice. Doerning BJ, et al. **Lab Anim Sci** 1989 Mar;39(2):161–2

METABOLISM

A comparative study of 2-deoxyglucose patterns of glomerular activation in the olfactory bulbs of C57 BL/6J and AKR/J mice. Sicard G, et al. **Brain Res** 1989 Mar 6;481(2):325–34

Pigmented spleens in C57BL mice. Veninga TS, et al. **Lab Anim** 1989 Jan;23(1):16–20

[The action of nicotinamide on the adenine nucleotide system as well as on mitochondrial oxidation and phosphorylation processes in the liver of db/db strain mice] Obrosova IG, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):681–3 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

PHYSIOLOGY

Heterosis and resistance to DFP effects on spatial learning in C57BL X DBA hybrids. Upchurch M, et al. **Brain Res Bull** 1988 Sep;21(3):499–503

Eosinophilic spleen colonies are produced in rat-marrow-transplanted but not in murine-marrow-transplanted mice. Szabó LG, et al. **Eur J Haematol** 1988 Oct;41(4):347–51

A method for intratracheal instillation of endotoxin into the lungs of mice. Starcher B, et al. **Lab Anim** 1989 Jul; 23(3):234–40

Reproductive performance in C57BL and I strain mice. Hoover-Plow J, et al. **Lab Anim Sci** 1988 Oct;38(5):595–602

Feeding cycles entrain circadian rhythms of locomotor activity in CS mice but not in C57BL/6J mice. Abe H, et al. **Physiol Behav** 1989 Feb;45(2):397–401

Genetics and senescence. I. Age-related changes in activity and exploration in three inbred strains of mice. Lhotellier L, et al. **Physiol Behav** 1989 Mar;45(3):491–3

The difference in the tail-flick but not hot-plate response latency between C57BL/6 and DBA/2J mice. Vetulani J, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):381–5

[Comparative characteristics of the parameters of an aggressive reaction in 2 mouse genotypes] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat** 1988 Sep-Oct;38(5):889–96 (Eng. Abstr.) **(Rus)**

MICE, INBRED CBA

[Spontaneous hepatomas in hybrid mice (CBA x C57Bl/6)F1] Kharkovskaia NA, et al. **Eksp Onkol** 1988;10(4):37–9 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Cochlear nerve topography and fiber spectrum in the pigmented mouse. Anniko M, et al. **Arch Otorhinolaryngol** 1988;245(3):155–9

GENETICS

Comparison of sister chromatid exchanges in spleen and thymus lymphocytes from AKR, C57BL/6N x DBA/2J F1, and CBA mice following in vivo exposure to N-methyl-N-nitrosourea. Neft RE, et al. **Cancer Res** 1989 Aug 15;49(16):4504–8

Immortalized phenotype and the presence of active oncogenes correlate with the capacity of culture cells to induce reactivation of DNA synthesis in macrophage nuclei in heterokaryons. Prudovsky IA, et al. **Cell Differ Dev** 1989 May;26(3):221–8

Multi-gene/allele control of Mlsb of CBA/H. Click RE, et al. **Immunogenetics** 1989;29(3):155–60

Interaction and sequence diversity among T15 VH genes in CBA/J mice. Ferguson SE, et al. **J Exp Med** 1988 Oct 1;168(4):1339–49

CBXC: a set of recombinant inbred strains between CBA/Ca and BALB/c. Fernandez JL, et al. **Lab Anim** 1989 Jul; 23(3):200–2

[Genetic and oncologic characteristics of CBA/CaLacSto mice] Kharkovskaia NA, et al. **Eksp Onkol** 1989; 11(4):29–33 (Eng. Abstr.) **(Rus)**

[Transfer of the gene of the BTSh 70 heat-shock protein from Drosophila into the mouse genome] Sergienko VG, et al. **Ontogenez** 1988 May-Jun;19(3):317–9 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Early development in mice. VI: Additive and interactive effects of offspring genotype and maternal environments. Nosten M. **Physiol Behav** 1989 May;45(5):955–61

Changes of organ indices of CBA/Ca inbred mice as function of age. Pénzes L, et al. **Z Gerontol** 1989 May-Jun; 22(3):170–4

IMMUNOLOGY

CBA/N mice have marginal zone B cells with normal surface immunoglobulin phenotype. Liu YJ, et al. **Adv Exp Med Biol** 1988;237:105–11

[Enhanced resistance of mice (CBA strain) to infection caused by S. typhimurium depending on the nature of the fat in the diet] Volgarev MN, et al. **Vopr Pitan** 1988 Nov-Dec;(6):43–8 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

The host-parasite relationship of Schistosoma haematobium in CBA mice. Agnew AM, et al. **Parasitology** 1988 Dec; 97 (Pt 3):403–24

PHYSIOLOGY

The kinetics of pre-antral follicle development in ovaries of CBA/Ca mice during the first 14 weeks of life. Faddy MJ, et al. **Cell Tissue Kinet** 1987 Nov;20(6):551–60

Eosinophilic spleen colonies are produced in rat-marrow-transplanted but not in murine-marrow-transplanted mice. Szabó LG, et al. **Eur J Haematol** 1988 Oct;41(4):347–51

[Comparative characteristics of the parameters of an aggressive reaction in 2 mouse genotypes] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat** 1988 Sep-Oct;38(5):889–96 (Eng. Abstr.) **(Rus)**

MICE, INBRED DBA

Experimental arthropathy induced in rhesus monkeys and DBA/1 mice by a novel method: intraperitoneal implantation of type II collagen adsorbed onto nitrocellulose filters. Healy CT, et al. **Lab Invest** 1989 Mar; 60(3):462–70

An experimental mouse model of Yersinia-induced reactive arthritis. Yong Z, et al. **Microb Pathog** 1988 Apr; 4(4):305–10

Ultrastructure of spontaneous cardiac calcification in DBA/2NCrj mice. Itagaki S, et al. **Vet Pathol** 1988 Sep; 25(5):393–5

[Growth characteristics of adenocarcinoma 755 recurrences in C57Bl/6 and (DBA/2 X C57Bl/6) F1 mouse strains] Soliakova TI, et al. **Eksp Onkol** 1988;10(6):32–4 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

A comparison of lung structure in male DBA and C57 black mice and their F1 offspring. Kida K, et al. **Am Rev Respir Dis** 1989 May;139(5):1238–43

GENETICS

Comparison of sister chromatid exchanges in spleen and thymus lymphocytes from AKR, C57BL/6N x DBA/2J F1, and CBA mice following in vivo exposure to N-methyl-N-nitrosourea. Neft RE, et al. **Cancer Res** 1989 Aug 15;49(16):4504–8

Tissue- and species-specific regulation of murine alpha 1-antitrypsin gene transcription. Rheaume C, et al. **J Biol Chem** 1988 Oct 15;263(29):15118–21

[Enhanced inhibition of splenic lymphocyte proliferation by 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57B1/10 (Ah+Ah+) mice compared to DBA/2 (AhAh) mice] Pavliak AL, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):331–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Differential seizure sensitivities to picrotoxinin in two inbred strains of mice (DBA/2J and BALB/c ByJ): parallel changes in GABA receptor-mediated chloride flux and receptor binding. Schwartz RD, et al. **Brain Res** 1989 Feb 27;481(1):169–74

Heterosis and resistance to DFP effects on spatial learning in C57BL X DBA hybrids. Upchurch M, et al. **Brain Res Bull** 1988 Sep;21(3):499–503

Genetics and senescence. I. Age-related changes in activity and exploration in three inbred strains of mice. Lhotellier L, et al. **Physiol Behav** 1989 Mar;45(3):491–3

The difference in the tail-flick but not hot-plate response latency between C57BL/6 and DBA/2J mice. Vetulani J, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):381–5

MICE, INBRED HRS

The hairless mouse as a model for evaluating promoters of hair growth. Kligman LH. **Clin Dermatol** 1988 Oct-Dec; 6(4):163–8

Identification of papillomaviral DNA sequences in hairless mouse tumours induced by ultraviolet irradiation. Tilbrook PA, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):1005–9

ANATOMY & HISTOLOGY

The characterization of squamous cell carcinoma induced by ultraviolet irradiation in hairless mice. Canfield PJ, et al. **Pathology** 1988 Apr;20(2):109–17

The hairless mouse ear for in vivo studies of skin microcirculation. Barker JH, et al. **Plast Reconstr Surg** 1989 Jun;83(6):948–59

METABOLISM

In vitro percutaneous penetration: evaluation of the utility of hairless mouse skin. Hinz RS, et al. **J Invest Dermatol** 1989 Jul;93(1):87–91

MICE, INBRED ICR

An evaluation of distress following intraperitoneal immunization with Freund's adjuvant in mice. Toth LA, et al. **Lab Anim Sci** 1989 Mar;39(2):122–6

Mortality, major cause of moribundity, and spontaneous tumors in CD-1 mice. Maita K, et al. **Toxicol Pathol** 1988; 16(3):340–9

Characterization of low-virulent mouse coronavirus isolated from faeces in a mouse colony. Hirasawa T, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):435–42

ANATOMY & HISTOLOGY

Changes in venous size in mouse mammary glands from virgin through pregnancy, lactation, and post-weaning. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1262–3

BLOOD

Repetitive blood sampling in unrestrained and unstressed mice using a chronic indwelling right atrial catheterization apparatus. MacLeod JN, et al. **Lab Anim Sci** 1988 Oct; 38(5):603–8

EMBRYOLOGY

Sites of zona pellucida shedding by mouse embryo other than muran trophectoderm. Yamazaki K, et al. **J Exp Zool** 1989 Mar;249(3):347–9

GENETICS

A developmental-genetic analysis of aggressive behavior in mice. II. Cross-sex inheritance. Hood KE, et al. **Behav Genet** 1988 Sep;18(5):605–19

Rodent common fragile sites: are they conserved? Evidence from mouse and rat. Elder FF, et al. **Chromosoma** 1989 May;97(6):459–64

GROWTH & DEVELOPMENT

Postnatal development of the annulospiral endings of Ia fibers in muscle spindles of the mouse temporal muscle. Osawa K, et al. **Anat Anz** 1988;167(4):253–7

Vgr-1, a mammalian gene related to Xenopus Vg-1, is a member of the transforming growth factor beta gene superfamily. Lyons K, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4554–8

PHYSIOLOGY

Morphological studies of the neuromuscular mechanism shifting from sucking to biting of mice. Kubota K, et al. **Acta Anat (Basel)** 1988;133(3):200–8

Inter-species variations in myocardial responsiveness to cardiac glycosides: possible relations to the thyroid status. Felzen B, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):165–74

MICE, INBRED NZB

ANATOMY & HISTOLOGY

[Electron microscopic and morphometric studies of the hippocampus of the NZB mouse] Brinck U, et al. **Z Mikrosk Anat Forsch** 1988;102(3):445–60 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

Early development in mice. VI: Additive and interactive effects of offspring genotype and maternal environments. Nosten M. **Physiol Behav** 1989 May;45(5):955–61

IMMUNOLOGY

Immunological function of kidney-infiltrating lymphocytes from aged NZB mice. Bocchieri MH. **Cell Immunol** 1989 Sep;122(2):569–77

IL-2 antibody production in lupus mice. Ishizaka S, et al. **Cell Immunol** 1989 Jan;118(1):100–7

Effect of interferon-gamma on the abnormality of T cell activation in NZB mice. Minoda M, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):283–91

Bone marrow cells from young and old New Zealand black mice can reconstitute B lymphocytes in severe combined immunodeficient recipients. Dorshkind K, et al. **J Autoimmun** 1989 Apr;2(2):173–86

In vivo effects of hyperdiploid Ly-1+ B cells of NZB origin. Raveche ES, et al. **J Immunol** 1988 Dec 15;141(12):4133–9

MICE, INBRED STRAINS

Studies of aging using genetically defined rodents: a bibliography. Hazzard DG, et al. **Exp Aging Res** 1988 Summer-Autumn;14(2-3):59–81

Cytogenetic effect of dapsone, an antileprotic drug, in the mouse in vivo system. Roy B, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):574–9

Multiplicity of spontaneous lung tumors in CD-1 mice. Maita K, et al. **J Toxicol Sci** 1989 May;14(2):87–90

Strain differences in histamine release from mouse peritoneal mast cells induced by compound 48/80 or A23187. Toda S, et al. **Jikken Dobutsu** 1989 Apr;38(2):135–7

Fire devastates Jackson lab [news] Culliton BJ. **Science** 1989 May 19;244(4906):767–8

Wanted: $25 million for mouse house [news] Culliton BJ. **Science** 1989 Aug 18;245(4919):697–8

Spontaneous tumors in aging (C57BL/6N x C3H/HeN)F1 (B6C3F1) mice. Tamano S, et al. **Toxicol Pathol** 1988; 16(3):321–6

Epididymal interstitial (Leydig) cell tumors in B6C3F1 mice. Mitsumori K, et al. **Vet Pathol** 1989 Jan;26(1):65–9

[Variation of glycosaminoglycan in the growth of transplantable tumors derived from a spontaneous ddY mouse mammary tumor] Yamamoto H, et al. **Jikken Dobutsu** 1989 Jan;38(1):75–9 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Microanatomy of the mouse osseous cochlea: a scanning electron microscopic study. Küçük B, et al. **Arch Histol Cytol** 1989 May;52(2):173–82

Pattern of blood vessels in forelimbs of three strains of mice. Holmes LB, et al. **Artery** 1988;15(6):330–45

On the sources of strain and sex differences in granule cell number in the dentate area of house mice. Wimer CC, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):167–76

Quantitative and cytoarchitectural studies of the entorhinal region and the hippocampus of New Zealand black mice. Anstätt T. **J Neural Transm** 1988;73(3):249–57

[Structural characteristics of the hippocampus in various strains of rats and mice] Dmitrieva NI, et al. **Zh Evol Biokhim Fiziol** 1988 Sep-Oct;24(5):721–31 (62 ref.) (Eng. Abstr.) **(Rus)**

BLOOD

Erythrocyte sedimentation rate as a parameter for drug evaluation in the MRL/l autoimmune mouse [letter] Stim TB, et al. **Br J Rheumatol** 1989 Feb;28(1):82–4

EMBRYOLOGY

Development and growth of palatal rugae in the mouse. Luke DA. **Acta Anat (Basel)** 1988;133(1):41–4

Development and morphology of the periderm of mouse embryos (days 9–12 of gestation). M Boneko V, et al. **Acta Anat (Basel)** 1988;133(4):325–36

Growth of the clavicle and development of clavicular secondary cartilage in the embryonic mouse. Tran S, et al. **Acta Anat (Basel)** 1989;135(3):200–7

Neurulation in the mouse: manner and timing of neural tube closure. Sakai Y. **Anat Rec** 1989 Feb;223(2):194–203

Analysis of cytoplasmic factors in developmental cleavage of mouse embryo. Suzuki S, et al. **Cell Differ** 1988 Jul; 24(2):133–8

Transcriptional pattern of 21-hydroxylase gene (P-450C21) during embryonic development, before, and after birth in mice as determined by in situ hybridization. Raschellà G, et al. **J Histochem Cytochem** 1989 May;37(5):751–6

Rederivation of inbred strains of mice by means of embryo transfer [letter] Baker HJ. **Lab Anim Sci** 1988 Dec; 38(6):661–2

Rederivation of inbred strains of mice by means of embryo transfer. Reetz IC, et al. **Lab Anim Sci** 1988 Dec; 38(6):696–701

GENETICS

LS X SS recombinant inbred strains of mice: initial characterization. DeFries JC, et al. **Alcoholism (NY)** 1989 Apr;13(2):196–200

Analysis of granulomatous arteritis in MRL/Mp autoimmune disease mice bearing lymphoproliferative genes. The use of mouse genetics to dissociate the development of arteritis and glomerulonephritis. Nose M, et al. **Am J Pathol** 1989 Aug;135(2):271–80

Behavioral responses to novelty and structural variation of the hippocampus in mice. II. Multivariate genetic analysis. Crusio WE, et al. **Behav Brain Res** 1989 Feb 1;32(1):81–8

Behavioral responses to novelty and structural variation of the hippocampus in mice. I. Quantitative-genetic analysis of behavior in the open-field. Crusio WE, et al. **Behav Brain Res** 1989 Feb 1;32(1):75–80

Preweaning experience in the control of mating preferences by genes in the major histocompatibility complex of the mouse. Beauchamp GK, et al. **Behav Genet** 1988 Jul; 18(4):537–47

Behavioral and reproductive differences in mice as a function of inbreeding. Deckard BS, et al. **Behav Genet** 1989 May; 19(3):433–45

Sucrose octaacetate tasting in a heterogeneous population of CFW mice. Gannon KS, et al. **Behav Genet** 1989 May; 19(3):417–31

A threshold model for vocalization to handling in Mus domesticus. Henderson ND. **Behav Genet** 1988 Sep; 18(5):571–81

Genetic analysis of an avoidance-avoidance response in Mus domesticus. Henderson ND. **Behav Genet** 1989 May; 19(3):387–407

Studies into the mechanisms of strain differences in hippocampus-related behaviors. Pick CG, et al. **Behav Genet** 1989 Mar;19(2):315–25

The B6.SW bilineal congenic sucrose octaacetate (SOA)-taster mice. Whitney G, et al. **Behav Genet** 1989 May;19(3):409–16

Esterase-18 (ES-18) of the house mouse (Mus musculus): biochemical characterization and genetics of an allozyme system linked to chromosome 19. von Deimling OH, et al. **Biochem Genet** 1988 Oct;26(9-10):617–29

Evolutionary relationships between laboratory mice and subspecies of Mus musculus based on the restriction fragment length variants of the chymotrypsin gene at the Prt-2 locus. Watanabe T, et al. **Biochem Genet** 1989 Feb; 27(1-2):119–30

Phenotypic heterogeneity of spontaneous lymphomas of CWD mice. Thomas CY, et al. **Blood** 1989 Jan;73(1):240–7

Genetic variation in liver tumor susceptibility, plasma testosterone levels, and androgen receptor binding in six inbred strains of mice. Kemp CJ, et al. **Cancer Res** 1989 Sep 15;49(18):5044–7

Strain differences in hepatic tumor promotion by phenobarbital in diethylnitrosamine- and dimethylnitrosamine-initiated infant male mice. Weghorst CM, et al. **Carcinogenesis** 1989 Aug;10(8):1409–12

Hepatic phase II biotransformation in C57Bl/KsJ db/db mice: comparison to that in Swiss Webster and 129 REJ mice. Watkins JB 3d, et al. **Comp Biochem Physiol [C]** 1988; 90(2):417–21

Screening for mouse retinal degenerations. II. Molossinus MOLC and MOLD strains. Winston JV, et al. **Doc Ophthalmol** 1989 Mar;71(3):241–52

Cataract in senescence accelerated mouse (SAM). 2. Development of a new strain of mouse with late-appearing cataract. Hosokawa M, et al. **Exp Eye Res** 1988 Oct; 47(4):629–40

Genetic models in brain and behavior research, Part II. Progress report. Driscoll P. **Experientia** 1989 Sep 15; 45(9):787–8

Selected mouse lines, alcohol and behavior. Phillips TJ, et al. **Experientia** 1989 Sep 15;45(9):805–27 (146 ref.)

The genetics of tasting in mice. V. Glycine and cycloheximide. Lush IE, et al. **Genet Res** 1988 Dec; 52(3):207–12

Genetic divergence in mandible form in relation to molecular divergence in inbred mouse strains. Atchley WR, et al. **Genetics** 1988 Sep;120(1):239–53

Mapping of Abll within a conserved linkage group on distal mouse chromosome 1 syntenic with human chromosome 1 using an interspecific cross. Seldin MF, et al. **Genomics** 1989 Feb;4(2):221–3

Complexity, polymorphism, and recombination of mouse T-cell receptor alpha gene families. Jouvin-Marche E, et al. **Immunogenetics** 1989;30(2):99–104

The D17Tu5 locus in the t complex: implications for the origin of t haplotypes and inbred strains. Mizuno K, et al. **Immunogenetics** 1989;30(2):105–11

RIII S/J (H-2r). An inbred mouse strain with a massive deletion of T cell receptor V beta genes. Haqqi TM, et al. **J Exp Med** 1989 Jun 1;169(6):1903–9

Bone marrow cell transplants involving intra-H-2 recombinant inbred mouse strains. Evidence that hemopoietic histocompatibility-1 (Hh-1) genes are distinct from H-2D or H-2L. Rembecki RM, et al. **J Immunol** 1988 Oct 1;141(7):2253–60

Genetic control of diabetes and insulitis in the nonobese diabetic mouse. Pedigree analysis of a diabetic H-2nod/b heterozygote. Wicker LS, et al. **J Immunol** 1989 Feb 1; 142(3):781–4

Studies on recombination within the mouse H-2 complex: IV. Characterization of new recombinant haplotypes H-2t7, H-2t8, H-2as2, and H-2as3. Hauptfeld M, et al. **J Mol Cell Immunol** 1988;4(1):1–8

Autoreactive T cells with atypical MHC restriction from MRL-lpr/lpr mice: forbidden clones revisited. Naparstek Y, et al. **J Mol Cell Immunol** 1988;4(1):35–43

Genetic selection for novelty-induced rearing behavior in mice produces changes in hippocampal mossy fiber distributions. Crusio WE, et al. **J Neurogenet** 1989 Jan; 5(1):87–93

Genetic evidence for the role of Thy-1 in neurite outgrowth in the mouse. Greenspan RJ, et al. **J Neurogenet** 1989 Jan; 5(1):25–36

Genetic analysis of endogenous xenotropic murine leukemia viruses: association with two common mouse mutations and the viral restriction locus Fv-1. Frankel WN, et al. **J Virol** 1989 Apr;63(4):1763–74

Susceptibility to raf and raf/myc retroviruses is governed by different genetic loci. Klinken SP, et al. **J Virol** 1989 May;63(5):2411–4

Strain difference of mouse in susceptibility to Japanese encephalitis virus infection. Miura K, et al. **Jikken Dobutsu** 1988 Oct;37(4):365–73

Genetically determined differences in ethanol sensitivity influenced by body temperature during intoxication. Alkana RL, et al. **Life Sci** 1988;43(24):1973–82

Tumorigenic and molecular characterization of novel phorbol ester-resistant and -sensitive lines of mice. Cope FO, et al. **Mol Carcinog** 1988;1(2):116–24

Microrecombinations generate sequence diversity in the murine major histocompatibility complex: analysis of the Kbm3, Kbm4, Kbm10, and Kbm11 mutants. Geliebter J, et al. **Mol Cell Biol** 1988 Oct;8(10):4342–52

P1-450 and P3-450 gene expression and maximum life span in mice. Spindler SR, et al. **Mutat Res** 1989 Mar; 219(2):89–94

Strain polymorphism and tentative mapping of mouse ornithine decarboxylase. Colombo MP, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9075

Differential extra-renal expression of the mouse renin genes. Miller CC, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3117–28

Genetic differences in plasma corticosterone levels in response to nicotine injection. Freund RK, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1059–64

Influence of genotype on nicotine-induced increases of plasma corticosterone in mice as a result of acute nicotine pretreatment. Martin BJ, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1065–70

Linkage mapping of a mouse gene, iv, that controls left-right asymmetry of the heart and viscera. Brueckner M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5035–8

T-cell receptor alpha-chain variable-region haplotypes of normal and autoimmune laboratory mouse strains. Singer PA, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7729–33

[3H]inositol trisphosphate specific binding in cerebella of mouse lines selectively bred for differential ethanol sensitivity. Morrow EL, et al. **Proc West Pharmacol Soc** 1988;31:269–71

Learning in mice selectively bred for high and low aggressiveness. Kvist B. **Psychol Rep** 1989 Feb;64(1):127–30

Duplication, deletion, and polymorphism in the sex-determining region of the mouse Y chromosome. Mardon G, et al. **Science** 1989 Jan 6;243(4887):78–80

Histopathological characteristics of the kidney in recombinant inbred mice established from MRL/lpr x AKR crossing. Dissociation of severity of lupus nephritis from the degree of lymphadenopathy. Makino M, et al. **Virchows Arch [B]** 1988;56(1):59–65

Interferons as gene activators: a cluster of six interferon-activatable genes is linked to the erythroid alpha-spectrin locus on murine chromosome 1. Opdenakker G, et al. **Virology** 1989 Aug;171(2):568–78

[Study on biological characteristics of spontaneous diabetic KK mice] Chen QM. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):416–20 (Eng. Abstr.) **(Chi)**

[Exchange of the hematopoietic system changes chemosensory identity] Luszyk D, et al. **Z Exp Angew Psychol** 1989;36(2):239–50 (Eng. Abstr.) **(Ger)**

[A computer program that draws pedigree charts for inbred strains of animals] Kasai N, et al. **Jikken Dobutsu** 1989 Jan;38(1):89–92 (Eng. Abstr.) **(Jpn)**

[Establishment of a new hereditary-cataract mouse (CSM) strain derived from SENCAR mouse] Sato T, et al. **Jikken Dobutsu** 1988 Oct;37(4):375–80 (Eng. Abstr.) **(Jpn)**

[Pharmacogenetic studies on drug dependence] Suzuki T.

Yakubutsu Seishin Kodo 1988 Sep;8(3):367–80 (81 ref.) (Eng. Abstr.) **(Jpn)**

[Genotypic differences in the reactivity of the hypophyseo–adrenal system and the resistance of mice to cooling] Koriakina LA. **Genetika** 1988 Jul;24(7):1199–208 (Eng. Abstr.) **(Rus)**

[Genotypic differences in the metabolism of brain dopamine and in the dopamine–dependent forms of behavior in mice] Skrinskaia IuA, et al. **Genetika** 1988 Jul;24(7):1321–4 (Eng. Abstr.) **(Rus)**

[Comparison of the stability of morphometric and nonmetric skeletal characteristics of inbred mice with regard to environmental exposure in prenatal development] Vasil'eva IA, et al. **Genetika** 1988 Jul;24(7):1209–14 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

On the development of strain and sex differences in granule cell number in the area dentata of house mice. Wimer RE, et al. **Brain Res** 1988 Aug 1;470(2):191–7

Growth and body composition of mice selected for high body weight. Bailey DR, et al. **Genome** 1988 Aug;30(4):570–5

Age and strain dependence of O6–methylguanine DNA methyltransferase activity in mice. Nakatsuru Y, et al. **Mutat Res** 1989 Jan;219(1):51–6

Uterine and cytoplasmic effects on pup eyelid opening in two inbred strains of mice. Nosten M, et al. **Physiol Behav** 1988;43(2):167–71

IMMUNOLOGY

Innate anti–listerial resistance of mice differing in their susceptibility to listeriosis. Długońska H, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):151–9

Tolerance induction and immunological priming initiated by mucosal contacts with protein antigens in inbred strains of mice. Rios MJ, et al. **Braz J Med Biol Res** 1988; 21(4):825–36

Neonatal tolerance induction to Mlsa. I. Tolerance to Mlsa is restricted by shared MHC determinants. Waite DJ, et al. **Cell Immunol** 1988 Nov;117(1):70–7

Neonatal tolerance induction to Mlsa. II. T cells induce tolerance to Mlsa. Waite DJ, et al. **Cell Immunol** 1988 Nov; 117(1):78–88

Restriction fragment length polymorphism analysis of major histocompatibility complex genes in the non–obese diabetic mouse strain and its non–diabetic sister strains. Fujishima Y, et al. **Diabetologia** 1989 Feb;32(2):118–25

Immunotoxicological evaluation of toluene exposure via drinking water in mice. Hsieh GC, et al. **Environ Res** 1989 Jun;49(1):93–103

Maturation of the delayed–type hypersensitivity response in SJL mice: absence of effector cell induction. Matsushima GK, et al. **Eur J Immunol** 1988 Sep;18(9):1411–6

Acute rejection of allogeneic hemopoietic progenitors by genetically resistant mice. Shimamura K, et al. **Eur J Immunol** 1989 Jul;19(7):1165–70

Serological examinations for antibodies against West Nile virus, Semlikivirus and chikungunyavirus in laboratory mice, parasitized by nidicole fauna from swallow's nests. Sixl W, et al. **Geogr Med** 1988;Suppl 1:51–5

Age–related decline in cell–mediated immunity in the C58 leukemic mouse strain. Bocchieri MH, et al. **Gerontology** 1988;34(5–6):221–30

Production of H–2 class II (Ia.7) antibody is under Ir gene control. Hauptfeld–Dolejsek V, et al. **Immunogenetics** 1989; 30(2):126–7

Immune response gene control of the mouse antibody responses to human creatine kinase–MM and the lactate dehydrogenase–1 enzymes. Hauptfeld–Dolejsek V, et al. **Immunogenetics** 1989;30(2):128–31

Antigenic properties of 36 new H–2 congenic strains and 4 independently derived strains, W10LT, DDD, BZH, and FM. Hauptfeld–Dolejsek V, et al. **Immunogenetics** 1989; 30(2):132–6

Donor Igh–linked genetic control of allotype–specific antibody response. Inagi R, et al. **Immunogenetics** 1989; 30(2):70–5

Mouse strain differences in subset distribution and T cell antigen receptor expression among CD4–CD8– thymocytes. Shortman K, et al. **Immunol Cell Biol** 1988 Oct–Dec;66 (Pt 5–6):423–33

Schistosoma mansoni antigens differentially recognized by resistant WEHI 129/J mice. Wright MD, et al. **Infect Immun** 1988 Nov;56(11):2948–52

Non–MHC–restricted, tissue–specific T cells recognizing autologous oligodendrocytes in the normal SJL/J mouse. Jewtoukoff V, et al. **J Autoimmun** 1988 Oct;1(5):433–44

Resistance of mice to genital infection with Neisseria gonorrhoeae. Johnson AP, et al. **J Med Microbiol** 1989 Sep;30(1):33–6

Particle size of airborne mouse crude and defined allergens. Sakaguchi M, et al. **Lab Anim Sci** 1989 May;39(3):234–6

Serum colony stimulating activity and colony forming cells in murine brucellosis: relationship to immunopathology. Cheers C, et al. **Microb Pathog** 1987 Sep;3(3):185–94

Modulation of resistance to Salmonella typhimurium infection in mice by mouse hepatitis virus (MHV). Fallon MT, et al. **Microb Pathog** 1989 Feb;6(2):81–91

[Strain dependency of immune reactions in the mouse] Eckert R, et al. **Allerg Immunol (Leipz)** 1988;34(2):67–71 (Eng. Abstr.) **(Ger)**

[Functional capacity of T cell subpopulations in mice. II. Effect of allogenecically stimulated T–cell subpopulations on the primary MLR] Hückel C, et al. **Allerg Immunol (Leipz)** 1988;34(3):159–67 (Eng. Abstr.) **(Ger)**

[Analysis of the proliferative response to PHA, LPS, PWM, and con A in various inbred mouse strains] Rueda G, et al. **Sangre (Barc)** 1988 Aug;33(4):314–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Differences in the solubility and susceptibility to proteolytic degradation of basement–membrane components in adult and embryonic mouse tissues. Dziadek M, et al. **Am J Anat** 1989 Apr;184(4):298–310

Somatomedin C in the pancreas of young and adult, normal and obese, hyperinsulinemic mice. Hansson HA, et al. **Cell Tissue Res** 1989 Feb;255(2):467–74

Hepatic hydroxymethylglutaryl coenzyme A reductase activity in inbred strains of mice. Dupont J, et al. **Enzyme** 1988;40(4):198–203

Melatonin content of the pineal gland in different mouse strains. Goto M, et al. **J Pineal Res** 1989;7(2):195–204

Sensory and pulmonary irritation of inhaled n–butylamine in CF–1 and NMRI mice. Vinggaard AM, et al. **Lab Anim** 1989 Jan;23(1):1–6

Amyloid enhancing factor (AEF) in the aging mouse. Yokota T, et al. **Virchows Arch [A]** 1989;414(6):511–4

MICROBIOLOGY

Studies of the mechanism of spontaneous germline ecotropic provirus acquisition in mice. Lock LF, et al. **EMBO J** 1988 Dec 20;7(13):4169–77

Retrovirus–induced murine acquired immunodeficiency syndrome: natural history of infection and differing susceptibility of inbred mouse strains. Hartley JW, et al. **J Virol** 1989 Mar;63(3):1223–31

Pattern of expression of ecotropic murine leukemia virus in gonads of inoculated SWR/J mice. Panthier JJ, et al. **J Virol** 1989 May;63(5):2134–42

Specific sequence deletions in two classes of murine leukemia virus–related proviruses in the mouse genome. Ch'ang LY, et al. **Virology** 1989 Feb;168(2):245–55

Neural infection in mice after cutaneous inoculation with HSV–1 is under complex host genetic control. Simmons A, et al. **Virus Res** 1989 Jul;13(3):263–70

Further studies with the segmented filamentous intestinal bacteria of mice; effects of physical and chemical factors on survival and the effects of milk diet, para–aminobenzoic acid and mouse strain on colonization. Koopman JP, et al. **Z Versuchstierkd** 1988;31(6):270–5

PARASITOLOGY

Urban Trypanosoma cruzi: biological characterization of isolates from Panstrongylus geniculatus. Sampson–Ward L, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):95–106

Selection of mice for survival following an acute Nematospiroides dubius infection. Overend DJ, et al. **Int J Parasitol** 1988 Jul;18(5):633–8

Encephalitozoon cuniculi infection in MRL/MPJ–LPR (lymphoproliferation) mice. Liu JJ, et al. **Lab Anim Sci** 1988 Dec;38(6):685–8

PHYSIOLOGY

Hippocampal mossy fiber distribution and long–term potentiation in two inbred mouse strains. Heimrich B, et al. **Brain Res** 1989 Jun 26;490(2):404–6

The relationship between age, size and shape in the upper thoracic vertebrae of the mouse. Johnson DR, et al. **J Anat** 1988 Dec;161:73–82

A non–stereotaxic method for olfactory bulb kindling reveals distinct kindling rates among inbred mouse strains. Green RC, et al. **J Neurosci Methods** 1989 Mar;27(2):109–13

Changes in the estrous cycle and number of ovulated and fertilized ova in aging female IVCS mice. Tappa B, et al. **Jikken Dobutsu** 1989 Apr;38(2):115–9

Reverse tolerance to ambulation–increasing effects of methamphetamine and morphine in 6 mouse strains. Kuribara H, et al. **Jpn J Pharmacol** 1989 Feb;49(2):197–203

Reproductive performance in C57BL and I strain mice. Hoover–Plow J, et al. **Lab Anim Sci** 1988 Oct;38(5):595–602

Susceptibility of C58 mice to paralytic disease induced by lactate dehydrogenase–elevating virus correlates with increased expression of endogenous retrovirus in motor neurons. Contag CH, et al. **Microb Pathog** 1988 Oct; 5(4):287–96

Feeding cycles entrain circadian rhythms of locomotor activity in CS mice but not in C57BL/6J mice. Abe H, et al. **Physiol Behav** 1989 Feb;45(2):397–401

Restricted water intake influences male reproduction in two strains of house mice (Mus musculus). Nelson RJ. **Physiol Behav** 1988;43(2):217–21

[Characteristics of memory in MRL/1 mice and the effect of thymic peptides] Melekhin VD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):199–201 (Eng. Abstr.) **(Rus)**

MICE, JIMPY see under **MICE, NEUROLOGIC MUTANTS**

MICE, LABORATORY see **MICE**

MICE, MUTANT STRAINS

Golgi study on the homozygote (Ml/Ml) of macular mutant mouse. Iwane S, et al. **Brain Dev** 1989;11(3):154–60

Association of beta–cell–specific expression of endogenous retrovirus with development of insulitis and diabetes in NOD mouse. Suenaga K, et al. **Diabetes** 1988 Dec; 37(12):1722–6

The mast cell–committed progenitor. II. W/Wv mice do not make mast cell–committed progenitors and Sl/Sld fibroblasts do not support development of normal mast cell–committed progenitors. Jarboe DL, et al. **J Immunol** 1989 Apr 1;142(7):2418–23

Systemic candidosis in beige mice. Baghian A, et al. **J Med Vet Mycol** 1989;27(1):51–5

The piebald–lethal murine strain: investigation of the cause of early death. Caniano DA, et al. **J Pediatr Surg** 1989 Sep;24(9):906–10

Cecocolitis in immunodeficient mice associated with an enteroinvasive lactose negative E. coli. Waggie KS, et al. **Lab Anim Sci** 1988 Aug;38(4):389–93

Development of autoimmunity in MRL/lpr mice and the effects of drugs on this murine disease. Bartlett RR, et al. **Scand J Rheumatol Suppl** 1988;75:290–9

The MRL–lpr/lpr mouse. A model for the study of rheumatoid arthritis. Koopman WJ, et al. **Scand J Rheumatol Suppl** 1988;75:284–9 (46 ref.)

Fire devastates Jackson lab [news] Culliton BJ. **Science** 1989 May 19;244(4906):767–8

Wanted: $25 million for mouse house [news] Culliton BJ. **Science** 1989 Aug 18;245(4919):697–8

Alterations in cell surface galactosyltransferase activity during limb chondrogenesis in brachypod mutant mouse embryos. Elmer WA, et al. **Teratology** 1988 Nov; 38(5):475–84

ANATOMY & HISTOLOGY

Distribution of Langerhans cells in skin lesions of MRL/l mice. Kanauchi H, et al. **Arch Dermatol Res** 1988; 280(5):327–31

Morphometric and freeze–fracture studies on peripheral nerve in shiverer mice. Panagopoulos G, et al. **J Comp Neurol** 1989 Aug 15;286(3):337–44

Ultrastructural, morphometric, and immunocytochemical study of anterior horn cells in mice with "wasted" mutation. Lutsep HL, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):519–33

Characteristics of mutant mice (ICGN) with spontaneous renal lesions: a new model for human nephrotic syndrome. Ogura A, et al. **Lab Anim** 1989 Apr;23(2):169–74

BLOOD

Marrow transplantation in the treatment of a murine heritable hemolytic anemia. Barker JE, et al. **Blood** 1989 May 15; 73(7):2014–7

Hematologic abnormalities of the immunodeficient mouse mutant, viable motheaten (mev). Van Zant G, et al. **Exp Hematol** 1989 Feb;17(2):81–7

Hormonal characterization of female SL/Ni mice: a small thymus gland strain exhibiting ovarian dysgenesis. Michael SD, et al. **J Reprod Immunol** 1988 Mar;12(4):277–86

EMBRYOLOGY

Small eye (Sey): a mouse model for the genetic analysis of craniofacial abnormalities. Hogan BL, et al. **Development** 1988;103 Suppl:115–9

Rederivation of inbred strains of mice by means of embryo transfer [letter] Baker HJ. **Lab Anim Sci** 1988 Dec; 38(6):661–2

GENETICS

Molecular genetics of murine lupus models. Theofilopoulos AN, et al. **Adv Immunol** 1989;46:61–109 (150 ref.)

Age–related changes in the temporomandibular joint of the senescence accelerated mouse. SAM–P/3 as a new murine model of degenerative joint disease. Chen WH, et al. **Am J Pathol** 1989 Aug;135(2):379–85

Molecular basis of mouse Himalayan mutation. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):252–60

Compared expression levels of ornithine transcarbamylase and carbamylphosphate synthetase in liver and small intestine of normal and mutant mice. Dubois N, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):321–8

A splicing defect in the mouse transferrin gene leads to congenital atransferrinemia. Huggenvik JI, et al. **Blood** 1989 Jul;74(1):482–6

Marrow transplantation in the treatment of murine hereditary diseases. Barker JE. **Bone Marrow Transplant** 1988 Mar; 3(2):85–94 (65 ref.)

Genetic mapping and analysis of somatostatin expression in Snell dwarf mice. O'Hara BF, et al. **Brain Res** 1988 Dec; 464(4):283–92

Regulation of class II MHC gene expression by macrophages from Bcgr and Bcgs mice. Nath J, et al. **Cell Immunol** 1988 Nov;117(1):127–35

Reminiscences of a mouse specific–locus test addict. Russell WL. **Environ Mol Mutagen** 1989;14 Suppl 16:16–22

Expression of c–kit gene products in known cellular targets

of W mutations in normal and W mutant mice—evidence for an impaired c-kit kinase in mutant mice. Nocka K, et al. **Genes Dev** 1989 Jun;3(6):816–26

Identification of T-cell receptor V beta deletion mutant mouse strain AU/ssJ (H-2q) which is resistant to collagen-induced arthritis. Haqqi TM, et al. **Immunogenetics** 1989;29(3):180–5

Murine mucopolysaccharidosis type VII. Characterization of a mouse with beta-glucuronidase deficiency. Birkenmeier EH, et al. **J Clin Invest** 1989 Apr;83(4):1258–6

Oncogene expression in autoimmune mice. Mountz JD, et al. **J Mol Cell Immunol** 1985;2(3):121–31

Genetical and histological studies on a mouse displaying microphthalmia and cataract. Takeuchi IK, et al. **Jikken Dobutsu** 1988 Oct;37(4):413–9

Morphological and genetic characteristics of the open-eyelid mutant spontaneously occurring in NC-strain mice. Teramoto S, et al. **Jikken Dobutsu** 1988 Oct;37(4):455–62

Dermal characteristics of the hereditary hairless-athymic mouse and the multiplication at early stage of Mycobacterium leprae inoculated into the right hind foot. Yogi Y, et al. **Nippon Rai Gakkai Zasshi** 1988 Apr–Jun; 57(2):108–14

Genetic analysis of the dominant white-spotting (W) region on mouse chromosome 5: identification of cloned DNA markers near W. Geissler EN, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9635–9

Mouse mutants provide new insights into the role of extracellular matrix in cell migration and differentiation. Morrison-Graham K, et al. **Trends Genet** 1989 Apr; 5(4):116–21 (31 ref.)

[Novel partial t-haplotypes of domestic mouse: characteristics of basic properties] Agul'nik AI, et al. **Genetika** 1989 May;25(5):894–901 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Male BXSB mice develop a thymic hormonal dysfunction with presence of intraepithelial crystalline inclusions. Dardenne M, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):392–405

Nerve and muscle development in paralysé mutant mice. Blondet B, et al. **Dev Biol** 1989 Mar;132(1):153–66

The ontogeny of gamma-crystallin mRNAs in CatFraser mice. Kuliszewski M, et al. **Genet Res** 1988 Aug;52(1):45–9

IMMUNOLOGY

IL-2 antibody production in lupus mice. Ishizaka S, et al. **Cell Immunol** 1989 Jan;118(1):100–7

The C57BL/6 nude, beige mouse: a model of combined T cell and NK effector cell immunodeficiency. Pflumio F, et al. **Cell Immunol** 1989 Apr 15;120(1):218–29

Susceptible cytotoxicity to ultraviolet B light in fibroblasts and keratinocytes cultured from autoimmune-prone MRL/Mp-lpr/lpr mice. Furukawa F, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):460–72

xid mice fail to express an anti-dextran immune response but carry alpha(1-3)dextran-specific lymphocytes in their potential repertoire. Selinka HC, et al. **Eur J Immunol** 1988 Nov;18(11):1727–32

Type I diabetes in NOD mice is not associated with insulin-specific, autoreactive T cells. Hurtenbach U, et al. **J Autoimmun** 1989 Apr;2(2):151–61

The role of autoreactive T-cell lines in the restoration of the immune response to sheep red blood cells in C57Bl/6-lpr/lpr mice. Latta SL, et al. **J Autoimmun** 1989 Feb;2(1):15–24

The RHJ/Le rhino mutant: description of a unique murine model of autoimmunity. Roberts RD, et al. **J Comp Pathol** 1989 May;100(4):391–404

Antiglomerular basement membrane nephritis in beige mice. Deficiency of leukocytic neutral proteinases prevents the induction of albuminuria in the heterologous phase. Schrijver G, et al. **J Exp Med** 1989 Apr 1;169(4):1435–48

Further serological and RFLP analysis of the MRL-+/+ and MRL-lpr/lpr mice. Delarbre C, et al. **J Immunogenet** 1988 Oct-Dec;15(5-6):307–19

Production of large numbers of hybridomas producing monoclonal antibodies against rat IgE using mast cell-deficient w/wv and sl/sld strains of mice. Rup BJ. **J Immunol Methods** 1989 Aug 15;122(1):137–42

Evidence for defects in accessory and T cell subsets in mice expressing the xid defect. Clayberger C, et al. **J Mol Cell Immunol** 1985;2(2):61–9

Are xid B lymphocytes representative of any normal B cell population. A commentary. Mosier DE. **J Mol Cell Immunol** 1985;2(2):70

Murine "viable motheaten" mutation reveals a gene critical to the development of both B and T lymphocytes. Sidman CL, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6279–82

NOD mice with high incidence of type 1 diabetes are not T lymphocytopenic. Satoh J, et al. **Tohoku J Exp Med** 1988 Jun;155(2):151–8

Adoptive immunity in immune-deficient scid/scid mice. I. Differential requirements of naive and primed lymphocytes for CD4+ T cells during rejection of minor histocompatibility antigen-disparate skin grafts. Roopenian DC, et al. **Transplantation** 1988 Dec;46(6):899–904

[Urinary bladder carcinogenicity of BBN in beige mice (Chediak-Higashi disease model)] Kobayashi Y. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):650–8 (Eng. Abstr.) **(Jpn)**

METABOLISM

Golgi study on macular mutant mouse after copper therapy. Kawasaki H, et al. **Acta Neuropathol (Berl)** 1988; 76(6):606–12

Decreased activity of cytochrome c oxidase in the macular mottled mouse: an immuno-electron microscopic study. Seki K, et al. **Acta Neuropathol (Berl)** 1989;77(5):465–71

Low levels of intestinal calbindin-D28K in X-linked hypophosphatemic mice. Tohmon M, et al. **Bone Miner** 1989 Apr;6(1):15–23

Immunoelectron-microscopic demonstration of elastase in emphysematous lungs of tight-skin mice. de Santi MM, et al. **Exp Mol Pathol** 1989 Aug;51(1):18–30

Alteration of cerebral ganglioside metabolism in developing Snell dwarf mice. Sugisaki T, et al. **Int J Dev Neurosci** 1987;5(5-6):399–405

The astrocyte as a locus of carbonic anhydrase in the brains of normal and dysmyelinating mutant mice. Cammer W, et al. **J Comp Neurol** 1988 Sep 1;275(1):65–75

Oligodendrocytes express a normal phenotype in carbonic anhydrase II-deficient mice. Ghandour MS, et al. **J Neurosci Res** 1989 Jun;23(2):180–90

[The fluorescence of crystalline lens homogenates from CatFr-strain mice with hereditary cataract] Romanova LIu, et al. **Biull Eksp Biol Med** 1989 May;107(5):564–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A neurochemical study of a new mutant mouse presenting myoclonus-like involuntary movement: a possible model of spontaneous serotonergic hyperactivity. Ikeda M, et al. **Brain Res** 1989 Aug 28;495(2):337–48

El mouse as a model of focal epilepsy: a review. King JT Jr, et al. **Epilepsia** 1989 May-Jun;30(3):257–65 (72 ref.)

Neonatal W-mutant mice are favorable hosts for tracking development of marked hematopoietic stem cells. Capel B, et al. **Exp Hematol** 1989 Sep;17(8):872–6

Defective in vitro migratory capacity of bone marrow cells from viable motheaten mice in response to normal thymus culture supernatants. Haar JL, et al. **Exp Hematol** 1989 Jan;17(1):21–4

Evaluation and characterization of the hypothyroid hyt/hyt mouse. I: Somatic and behavioral studies. Adams PM, et al. **Neuroendocrinology** 1989 Feb;49(2):138–43

Evaluation and characterization of the hyt/hyt hypothyroid mouse. II. Abnormalities of TSH and the thyroid gland. Stein SA, et al. **Neuroendocrinology** 1989 May;49(5):509–19

In vitro duplication and in vivo cure of mast-cell deficiency of Sl/Sld mutant mice by cloned 3T3 fibroblasts. Fujita J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2888–91

Potentiation of response to insulin and anti-insulin action by two human pituitary peptides in lean agouti A/a, obese yellow Avy/A, and C57BL/6J-ob/ob mice. Salem MA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):113–23

[Morphofunctional characteristics of the reproductive system in female mice of the mutant strain B10-hr rhY] Ignat'eva EL, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):602–3 (Eng. Abstr.) **(Rus)**

MICE, NEUROLOGIC MUTANTS

[Behavioral effects of ceruletide in Wriggle Mouse Sagami—in comparison with in Rolling Mouse Nagoya] Matsui K, et al. **Jikken Dobutsu** 1989 Jan;38(1):61–4 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Cytoskeletal identification of intermediate filaments in the inner ear of the jerker mouse mutant. Anniko M, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):191–201

Vestibular hair cell pathology in the dancer mouse mutant. Wenngren BI, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):182–90

Abnormal neuromuscular junctions in the lateral rectus muscle of wobbler mice. La Vail JH, et al. **Brain Res** 1988 Oct 25;463(1):78–89

Excessive intra- and supragranular mossy fibers in the dentate gyrus of tottering (tg/tg) mice. Stanfield BB. **Brain Res** 1989 Feb 20;480(1-2):294–9

Expression of the jimpy gene in the spinal cords of heterozygous female mice. 2. Oligodendroglial and endothelial cell hyperplasia. Bartlett WP, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):1–11

Organization of spinocerebellar projection map in three types of agranular cerebellum: Purkinje cells vs. granule cells as organizer element. Arsénio Nunes ML, et al. **J Comp Neurol** 1988 Jul 1;273(1):120–36

Purkinje cell reduction in the reeler mutant mouse: a quantitative immunohistochemical study. Heckroth JA, et al. **J Comp Neurol** 1989 Jan 22;279(4):546–55

Spontaneous spongy degeneration of the brain stem in SAM-P/8 mice, a newly developed memory-deficient strain. Yagi H, et al. **J Neuropathol Exp Neurol** 1989 Sep; 48(5):577–90

Pathologic changes in the CNS of dystonia musculorum mutant mouse: an animal model for human spinocerebellar ataxia. Sotelo C, et al. **Neuroscience** 1988 Nov;27(2):403–24

BLOOD

Effects of trembler mouse serum and laminin on oligodendrocyte proliferation and differentiation in culture. Hantaz-Ambroise D, et al. **Int J Dev Neurosci** 1988; 6(3):289–99

EMBRYOLOGY

Cytochemical analysis of neural dysraphism in the vl mutant mouse. Wilson DB, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):609–17

GENETICS

Aberrant elemental composition of otoconia in the dancer mouse mutant with a semidominant gene causing a morphogenetic type of inner ear defect. Anniko M, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3-4):208–12

The duplicated myelin basic protein gene in mld mutant mice does not impair transcription. Roch JM, et al. **Brain Res** 1989 Jan 16;477(1-2):292–9

Early development in mice: V. Sensorimotor development of four coisogenic mutant strains. Noël M. **Physiol Behav** 1989 Jan;45(1):21–6

GROWTH & DEVELOPMENT

Serotonin concentration and turnover in cerebellum and other brain regions of pcd mutant mice. Ghetti B, et al. **Brain Res** 1988 Aug 23;458(2):367–71

Immunohistochemical analysis of the development of somatostatin in the reeler neocortex. Naus CC, et al. **Brain Res** 1988 Sep 1;471(1):61–8

Effects of mild hyperthyroidism on levels of amino acids in the developing Lurcher cerebellum. Messer A, et al. **J Neurogenet** 1989 Jan;5(1):77–85

The mdx mouse skeletal muscle myopathy: II. Contractile properties. Coulton GR, et al. **Neuropathol Appl Neurobiol** 1988 Jul-Aug;14(4):299–314

METABOLISM

Autoradiographic visualization of a calcium channel antagonist, [125I]omega-conotoxin GVIA, binding site in the brains of normal and cerebellar mutant mice (pcd and weaver). Maeda N, et al. **Brain Res** 1989 Jun 5;489(1):21–30

Autoradiographic localization of insulin-like growth factor II receptors in cerebellar cortex of weaver and Purkinje cell degeneration mutant mice. Mendelsohn LG, et al. **Brain Res** 1988 Aug 23;458(2):361–6

Striatal dopamine innervation and receptor density: regional effects of the weaver mutation. Pullara JM, et al. **Brain Res** 1989 Feb 20;480(1-2):225–33

The twitcher mouse: accumulation of galactosylsphingosine and pathology of the central nervous system. Tanaka K, et al. **Brain Res** 1989 Mar 20;482(2):347–50

Cell-specific localization of the alpha-subunit of calcium/calmodulin-dependent protein kinase II in Purkinje cells in rodent cerebellum. Walaas SI, et al. **Brain Res** 1988 Nov;464(3):233–42

Dendritic and axonal distribution of the microtubule-associated proteins MAP2 and tau in the cerebellum of the nervous mutant mouse. Brion JP, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):221–32

Astrocyte overgrowth in the brain stem and spinal cord of mice affected by spinal atrophy, wobbler. Laage S, et al. **Dev Neurosci** 1988;10(3):190–8

Differences between seizure-prone and non-seizure-prone mice with regard to glutamate and GABA receptor binding in the hippocampus and other regions of the brain. Frandsen A, et al. **Epilepsy Res** 1987 Mar;1(2):107–13

Depressed convulsions by diazepam and its effects on brain monoamines and amino acids in El mice. Hiramatsu M, et al. **Epilepsy Res** 1988 May-Jun;2(3):182–6

Reduced uptake and release of 5-hydroxytryptamine and taurine in the cerebral cortex of epileptic El mice. Hiramatsu M, et al. **Epilepsy Res** 1987 Jan;1(1):40–5

Distribution of Calbindin-D28K 1 (CaBP) in the cerebral cortex and hippocampus of the epileptic (El) mouse. Mody I, et al. **Epilepsy Res** 1987 Jan;1(1):46–52

Coexpression of glial fibrillary acidic protein and vimentin in the central and peripheral nervous systems of the twitcher mutant. Chiu FC, et al. **GLIA** 1988;1(2):105–12

L-aspartate and L-glutamate binding sites in developing normal and 'nervous' mutant mouse cerebellum. Angelatou F, et al. **Int J Dev Neurosci** 1987;5(5-6):373–81

In vitro evidence for a neurite growth-promoting activity in Trembler mouse serum. Koenig J, et al. **Int J Dev Neurosci** 1989;7(3):281–94

Recovery of proteolipid protein in mice heterozygous for the jimpy gene. Benjamins JA, et al. **J Neurochem** 1989 Jul;53(1):279–86

Developing rod photoreceptors from normal and mutant Rd mouse retinas: altered fatty acid composition early in development of the mutant. Scott BL, et al. **J Neurosci Res** 1988;20(2):202–11

Synthesis and acylation of myelin proteolipid protein in quaking mouse brain. Konat G, et al. **Metab Brain Dis** 1986 Dec;1(4):241–7

Development of somatostatin-like immunoreactivity in the hippocampal formation of normal and reeler mice. Naus CC. **Neurosci Lett** 1989 Jan 16;96(2):133–9

PHYSIOLOGY

Age-related auditory brainstem response (ABR) threshold changes in the dancer mouse mutant. Wenngren BI, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec;106(5-6):386-92

Pathology of the peripheral nerve in the twitcher mouse following bone marrow transplantation. Kondo A, et al. **Brain Res** 1988 Sep 13;460(1):178-83

Exploration and habituation in Purkinje cell degeneration mutant mice. Lalonde R, et al. **Brain Res** 1989 Feb 6; 479(1):201-3

Age-dependent supersensitivity to the glycogenolytic effect of K+ in the cerebral cortex of the spontaneously epileptic quaking mouse mutant. Hof PR, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):107-13

Myelination and remyelination in the central nervous system by transplanted oligodendrocytes using the shiverer model. Discussion on the remyelinating cell population in adult mammals. Gumpel M, et al. **Dev Neurosci** 1989;11(2):132-9 (42 ref.)

Horizontal optokinetic ocular nystagmus in wildtype (B6CBA+/+) and weaver mutant mice. Grüsser-Cornehls U, et al. **Exp Brain Res** 1988;72(1):29-36

Membrane properties, response to amines and to tetanic stimulation of hippocampal neurons in the genetically epileptic mutant mouse tottering. Kostopoulos G, et al. **Exp Brain Res** 1988;72(1):45-50

Persistent hypersynchronization of neocortical neurons in the mocha mutant of mouse. Noebels JL, et al. **J Neurogenet** 1989 Sep;6(1):53-6

Myelination by oligodendrocytes isolated from 4-6-week-old rat central nervous system and transplanted into newborn shiverer brain. Lubetzki C, et al. **J Neurol Sci** 1988 Dec;88(1-3):161-75

Autosomal recessively inherited electrolyte excretory defect in the parotid of the "cribriform degeneration" mouse mutant--possible analogy to cystic fibrosis. Kaiser D, et al. **Life Sci** 1974 Aug 15;15(4):803-10

Tonic/clonic seizures in a mouse mutant carrying the weaver gene. Eisenberg B, et al. **Neurosci Lett** 1989 Jan 16; 96(2):168-72

Reorganization of cerebellar cell suspension transplanted into the weaver mutant cerebellum and immunohistochemical detection of synaptic formation. Kohsaka S, et al. **Neurosci Res** 1988 Dec;6(2):162-6

Regional and topographic organization of the olivocerebellar projection in homozygous staggerer (sg/sg) mutant mice: an anterograde and retrograde tracing study. Blatt GJ, et al. **Neuroscience** 1989;30(3):703-15

Restoration of myelin formation by a single type of myelin basic protein in transgenic shiverer mice. Kimura M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5661-5

MICE, NUDE

Experimental sialodacryoadenitis virus infection in athymic CD-1 mice. Percy DH, et al. **Can J Vet Res** 1988 Jul; 52(3):370-4

Determination of subcutaneous tumor size in athymic (nude) mice. Tomayko MM, et al. **Cancer Chemother Pharmacol** 1989;24(3):148-54

Neoplasms in NIH type II athymic (nude) mice. Sadoff DA, et al. **Lab Anim Sci** 1988 Aug;38(4):407-12

The nude mouse as an experimental lepromatous leprosy model (continued): the NFS/N nude mouse as a new model using the intra-upper lip inoculation method. Nakamura K, et al. **Nippon Rai Gakkai Zasshi** 1988 Jul-Sep; 57(3):129-36

Cell cycle traverse in NHIK-3025 carcinoma of the uterine cervix after low-dose-rate irradiation. van Oostrum IE, et al. **Radiat Res** 1989 Apr;118(1):101-11

Nude mice in oncology 1987. **Strahlenther Onkol** 1989 Jul; 165(7):481-569

Nude mice in oncology 1987: workshop guide-lines for establishment and characterisation of human xenografted tumor lines. Bamberg M, et al. **Strahlenther Onkol** 1989 Jul;165(7):481-2

Establishment and characterization of human tumours in nu/nu-mice. Budach V, et al. **Strahlenther Onkol** 1989 Jul; 165(7):500-1

The influence of endogenous and exogenous factors on the course and the results of experimental work with human tumor tissue on athymic nude rodents. Fortmeyer HP. **Strahlenther Onkol** 1989 Jul;165(7):483-4

Establishment of a human gastrinoma in nude mice. Upp JR Jr, et al. **Surgery** 1988 Dec;104(6):1037-45

Can the association of athymic mice (Han:NMRI-nu) with Staphylococcus sciuri prevent infection with Staphylococcus aureus? Experiences from a field study. Wullenweber-Schmidt M, et al. **Z Versuchstierkd** 1989; 32(1):49-56

[Acinetobacter calcoaceticus var. Iwoffi as the cause of abscess formation in Han:NMRI nude mice] Remmers C, et al. **Berl Munch Tierarztl Wochenschr** 1988 Sep 1; 101(9):296-302 (Eng. Abstr.) **(Ger)**

GENETICS

Rearrangements of T-cell antigen receptor gamma and delta chain genes are detected in the long-term cultured bone marrow cells of athymic nude mice but not in those of euthymic mice. Yoshikai Y, et al. **Immunology** 1989 Apr; 66(4):512-6

Mycobacterium leprae-susceptibility of non-obese diabetic hybrid nude mice. Yogi Y, et al. **Nippon Rai Gakkai Zasshi** 1988 Jul-Sep;57(3):117-21

GROWTH & DEVELOPMENT

Cerebral aging: a quantitative study of gliosis in old nude mice. Mandybur TI, et al. **Acta Neuropathol (Berl)** 1989; 77(5):507-13

IMMUNOLOGY

Effector and precursor phenotypes of lymphokine-activated killer cells in mice with severe combined immunodeficiency (scid) and athymic (nude) mice. Hasui M, et al. **Cell Immunol** 1989 Apr 15;120(1):230-9

The C57BL/6 nude, beige mouse: a model of combined T cell and NK effector cell immunodeficiency. Pflumio F, et al. **Cell Immunol** 1989 Apr 15;120(1):218-29

Modulation of total IgE levels in serum of normal and athymic nude BALB/c mice by T cells and exogenous antigenic stimulation. Savelkoul HF, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):113-9

Thymosin, interleukins, isoprinosine and imuthiol do not reconstitute T-cells in athymic nude mice. Hadden JW, et al. **Int J Immunopharmacol** 1989;11(1):13-9

Anti-tumor cytostatic mechanism and delayed-type hypersensitivity against a syngeneic murine tumor. Comparison between neonatally thymectomized mice and congenitally athymic nude mice. Mitani M, et al. **J Immunol** 1989 Mar 15;142(6):2148-54

Mink-mouse hybridomas that secrete mink immunoglobulin G. Galakhar NL, et al. **J Immunol Methods** 1988 Nov 25; 115(1):39-43

Modulation of resistance to Salmonella typhimurium infection in mice by mouse hepatitis virus (MHV). Fallon MT, et al. **Microb Pathog** 1989 Feb;6(2):81-91

Immunological status of nude mice engrafted with allogeneic or syngeneic thymuses. Furukawa F, et al. **Thymus** 1988; 12(1):11-26

METABOLISM

A comparison of bone turnover in athymic (nude) and euthymic mice: biochemical, histomorphometric, bone ash and in vitro studies. McCauley LK, et al. **Bone** 1989; 10(1):29-34

Skin absorption of organic solvent vapors in nude mice in vivo. Tsuruta H. **Ind Health** 1989;27(2):37-47

Comparative biodistributions of yttrium- and indium-labeled monoclonal antibody B72.3 in athymic mice bearing human colon carcinoma xenografts. Roselli M, et al. **J Nucl Med** 1989 May;30(5):672-82

Normalization of blood glucose levels in nondiabetic nude mice by human fetal pancreas after induction of diabetes. Tuch BE, et al. **Transplantation** 1988 Oct;46(4):608-11

PHYSIOLOGY

Development of mouse embryos following conventional and ultra rapid cryopreservation. Reinthaller A, et al. **Arch Gynecol Obstet** 1988;244(1):33-8

[Effect of thymosin (fraction 5) on the development of functional activity of the adrenals and gonads in genetically athymic mice] Ignat'eva EV, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):83-6 (Eng. Abstr.) **(Rus)**

MICE, OBESE

IMMUNOLOGY

Detection of nuclear protein antigens to antinuclear antibodies in serum of NOD mouse. Arai T, et al. **Jikken Dobutsu** 1989 Apr;38(2):159-62

METABOLISM

Abnormal regulation of cAMP accumulation in pancreatic islets of obese mice. Black MA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E833-8

Cold-induced changes in uncoupling protein and GDP binding sites in brown fat of ob/ob mice. Milner RE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R292-9

Effects of cimaterol, a beta-adrenergic agonist, on energy metabolism in ob/ob mice. Walker HC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R952-60

Somatomedin C in the pancreas of young and adult, normal and obese, hyperinsulinemic mice. Hansson HA, et al. **Cell Tissue Res** 1989 Feb;255(2):467-74

Phospholipid metabolism and protein phosphorylation in sciatic nerve from genetically diabetic (db/db) mouse. Berti-Mattera LN, et al. **Diabetes** 1988 Dec;37(12):1703-7

Effects of enzyme induction therapy on glucose and drug metabolism in obese mice model of non-insulin dependent diabetes mellitus. Karvonen I, et al. **Diabetes Res** 1989 Feb; 10(2):85-92

Impaired insulin-like growth factor I-mediated stimulation of glucose incorporation into glycogen in vivo in the ob/ob mouse. Cascieri MA, et al. **Diabetologia** 1989 Jun; 32(6):342-7

Interactions of doxazosin with insulin or glucagon in the ob/ob mouse. Swindell AC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S20-4; discussion S24

PHYSIOLOGY

Adrenalectomy and response to corticosterone and MSH in the genetically obese yellow mouse. Shimizu H, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R494-500

Enhanced acute response to corticosterone in genetically obese (ob/ob) mice. Tokuyama K, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E133-8

Ethanol-induced hypothermia and hyperglycemia in genetically obese mice. Haller EW, et al. **Life Sci** 1989; 44(19):1377-85

Effects of MSH on food intake, body weight and coat color of the yellow obese mouse. Shimizu H, et al. **Life Sci** 1989; 45(6):543-52

MICE, QUAKING

GENETICS

Quaking shiverer double mutant mice: morphological phenotypes support possible dual actions of the shiverer locus. Wolf MK, et al. **Brain Res** 1988 Oct 4;461(2):257-73

METABOLISM

Developmental expression of 2',3'-cyclic-nucleotide 3'-phosphodiesterase mRNA in brains of normal and quaking mice. Kurihara T, et al. **Brain Res Mol Brain Res** 1989 May;5(3):247-50

Increased turnover of myelin proteolipid protein in quaking mouse brain. Konat G, et al. **Metab Brain Dis** 1987 Jun; 2(2):113-6

MICE, RED-BACKED see **CRICETIDAE**

MICE, TRANSGENIC

Cut, paste, and save: new approaches to altering specific genes in mice. Frohman MA, et al. **Cell** 1989 Jan 27; 56(2):145-7 (11 ref.)

Sperm cells as vectors for introducing foreign DNA into eggs: genetic transformation of mice. Lavitrano M, et al. **Cell** 1989 Jun 2;57(5):717-23

Transgenic mouse models and peptide producing endocrine tumours: morpho-functional aspects. Rindi G, et al. **Experientia Suppl** 1989;56:210-9 (42 ref.)

Transgenic mice as systems for analyses of biological functions. Katsuki M. **J Toxicol Sci** 1988 Nov;13(4):287-9

Oncomouse seeks European protection [news] Dickman S. **Nature** 1989 Jul 13;340(6229):85

Animal patents. Transgenic sticky issues [news] Ezzell C. **Nature** 1989 Mar 30;338(6214):366

Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes. Mansour SL, et al. **Nature** 1988 Nov 24;336(6197):348-52

Use of animals [letter] Worwood M. **Nature** 1988 Dec 22-29; 336(6201):708

A rapid and economical method for screening transgenic mice. Morahan G, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3608

Developmental study of SV40 large T antigen expression in transgenic mice with choroid plexus neoplasia. Messing A, et al. **Oncogene Res** 1988;3(1):87-97

Transgenic mice--possible inroads to research into rheumatoid arthritis? Prydz H. **Scand J Rheumatol Suppl** 1988;76:17-21

A tiny mouse came forth. Corcoran E. **Sci Am** 1989 Feb; 260(2):73

Europe says no to animal patents [news] Dickson D. **Science** 1989 Jul 7;245(4913):25

No patent for Harvard's mouse [news] Dickson D. **Science** 1989 Feb 24;243(4894 Pt 1):1003

Introduction of human DNA into mouse eggs by injection of dissected chromosome fragments. Richa J, et al. **Science** 1989 Jul 14;245(4914):175-7

Transgenic mouse production: pipette cleaning for pronuclear microinjection. Carnwath JW, et al. **Trends Genet** 1988 Jun;4(6):152

EMBRYOLOGY

Lack of expression of HLA-B27 gene in transgenic mouse trophoblast. Conserved genetic pressures underlying extra-embryonic development. Oudejans CB, et al. **J Exp Med** 1989 Feb 1;169(2):447-56

GENETICS

Dissecting multistep tumorigenesis in transgenic mice. Hanahan D. **Annu Rev Genet** 1988;22:479-519 (106 ref.)

Oncogenes in transgenic mice. Compere SJ, et al. **Biochim Biophys Acta** 1988 Nov 15;948(2):129-49 (167 ref.)

Expression of a hybrid immunoglobulin-T cell receptor protein in transgenic mice. Becker ML, et al. **Cell** 1989 Sep 8;58(5):911-21

Human CD2 3'-flanking sequences confer high-level, T cell-specific, position-independent gene expression in transgenic mice. Greaves DR, et al. **Cell** 1989 Mar 24; 56(6):979-86

bcl-2-immunoglobulin transgenic mice demonstrate extended B cell survival and follicular lymphoproliferation. McDonnell TJ, et al. **Cell** 1989 Apr 7;57(1):79-88

Genetic studies on Emu-myc transgenic mice. Sidman CL, et al. **Curr Top Microbiol Immunol** 1988;141:94-9

A mouse minialbumin gene is specifically expressed in differentiated hepatoma cells but not in transgenic mice. Lorès P, et al. **Differentiation** 1988 Jun;38(1):35–41

A rapid procedure to identify newborn transgenic mice. Lin CS, et al. **DNA** 1989 May;8(4):297–9

B islet cells of pancreas are the site of expression of the human insulin gene in transgenic mice. Bucchini D, et al. **Exp Cell Res** 1989 Feb;180(2):467–74

Perinatal lethality (ple): a mutation caused by integration of a transgene into distal mouse chromosome 15. Beier DR, et al. **Genomics** 1989 May;4(4):498–504

Transgenic mice in cancer research. Jenkins NA, et al. **Important Adv Oncol** 1989;:61–77 (119 ref.)

Transgenic animals. Gordon JW. **Int Rev Cytol** 1989; 115:171–229 (220 ref.)

Selective expression of class II E alpha d gene in transgenic mice. Burkly LC, et al. **J Immunol** 1989 Mar 15; 142(6):2081–8

Restricted assembly of MHC class II molecules in transgenic mice. Le Meur M, et al. **J Immunol** 1989 Jan 1;142(1):323–7

HLA-B27 in inbred and non-inbred transgenic mice. Cell surface expression and recognition as an alloantigen in the absence of human beta 2-microglobulin. Taurog JD, et al. **J Immunol** 1988 Dec 1;141(11):4020–3

Expression of human IFN-gamma genomic DNA in transgenic mice. Young HA, et al. **J Immunol** 1989 Oct 1;143(7):2389–94

Replication and gene expression of hepatitis B virus in a transgenic mouse that contains the complete viral genome. Farza H, et al. **J Virol** 1988 Nov;62(11):4144–52

Transgenic mice in the study of development. DeLoia JA, et al. **Mead Johnson Symp Perinat Dev Med** 1987;(29):41–6 (31 ref.)

Requirement for the simian virus 40 small tumor antigen in tumorigenesis in transgenic mice. Choi YW, et al. **Mol Cell Biol** 1988 Aug;8(8):3382–90

Comparison of the regulation of the whey acidic protein gene with that of a hybrid gene containing the whey acidic protein gene promoter in transgenic mice. Pittius CW, et al. **Mol Endocrinol** 1988 Nov;2(11):1027–32

Lambda phage shuttle vectors for analysis of mutations in mammalian cells in culture and in transgenic mice. Summers WC, et al. **Mutat Res** 1989 Mar–May; 220(2–3):263–8

Expression and amplification in transgenic mice of a polyoma virus mutant regulatory region. Krippl B, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8963–76

Divergent disease patterns in granulocyte-macrophage colony-stimulating factor transgenic mice associated with different transgene insertion sites. Metcalf D, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7767–71

Insertional mutations in transgenic mice. Costantini F, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:159–69

Drosophila foldback elements, primate L1 elements, and transgenic mice. Potter S, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:3–23 (39 ref.)

Transgenic mice as future tools in risk assessment. Cordaro JC. **Risk Anal** 1989 Jun;9(2):157–68 (127 ref.)

Making transgenic mice: is it really that easy? [news] Barinaga M. **Science** 1989 Aug 11;245(4918):590–1

O'Toole's charges [letter] Eisen HN. **Science** 1989 Sep 15; 245(4923):1166–7

Regeneration of Streptomyces lividans protoplasts on media containing antibacterial and antifungal agents. Melton RE, et al. **Trends Genet** 1988 Nov;4(11):325

Transgenes as molecular probes for genomic imprinting. Surani MA, et al. **Trends Genet** 1988 Mar;4(3):59–62 (16 ref.)

[The human insulin gene in the transgenic mouse] Jami J. **Bull Acad Natl Med** 1989 Jan;173(1):57–61; discussion 61–3 (Eng. Abstr.) **(Fre)**

[The patented oncomouse. Transgenic animals in medical research—knowledge and risks] Hobom B. **Fortschr Med** 1989 Jun 10;107(17):100–2 **(Ger)**

[Brave new world: trans-genic mice] Rechavi O, et al. **Harefuah** 1989 Apr 16;116(8):442–4 **(Heb)**

[Transgenic mice and their use in cancer study] Yamamura K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):733–9 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Production of transgenic rabbits and mice carrying the gene for bovine growth hormone] Gazarian KG, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct;(10):23–6 (Eng. Abstr.) **(Rus)**

[An analysis of factors affecting efficiency in obtaining transgenic mice] Isabekov BS, et al. **Ontogenez** 1989 Jan–Feb;20(1):28–32 (Eng. Abstr.) **(Rus)**

[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. **Ontogenez** 1989 May–Jun;20(3):323–6 (Eng. Abstr.) **(Rus)**

[Viral myc oncogene in the genome of transgenic mice and their progeny] Ermilov AN, et al. **Tsitologiia** 1988 May; 30(5):589–96 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Perturbations of lens development in the transgenic mouse. Westphal H. **Cell Differ Dev** 1988 Nov;25 Suppl:33–7 (11 ref.)

IMMUNOLOGY

Expression of immunoglobulin genes in transgenic mice and transfected cells. Storb U, et al. **Ann N Y Acad Sci** 1988; 546:51–6 (24 ref.)

T cell function and expression are dramatically altered in T cell receptor V gamma 1.1J gamma 4C gamma 4 transgenic mice. Ferrick DA, et al. **Cell** 1989 May 5; 57(3):483–92

Functional pancreatic beta-cell line from SV40 T-antigen transgenic mouse. Gilligan A, et al. **Diabetes** 1989 Aug; 38(8):1056–62

Cytotoxic T lymphocyte recognition of HLA-A2 antigens in normal and HLA-Cw3-transgenic mice. Hämmerling GJ, et al. **Eur J Immunol** 1989 Apr;19(4):599–604

SV40 T antigen acts as a minor histocompatibility antigen of SV40 T antigen tolerant transgenic mice. Juretic A, et al. **Immunogenetics** 1989;29(6):366–70

T-cell tolerance in transgenic mice expressing major histocompatibility class I molecules in defined tissues. Miller JF, et al. **Immunol Rev** 1989 Feb;107:109–23 (37 ref.)

The true function of the thymus [letter] Kisielow P. **Immunol Today** 1988 Dec;9(12):367

Puzzling diabetic transgenic mice: a lesson for human type 1 diabetes? Pujol-Borrell R, et al. **Immunol Today** 1988 Oct;9(10):303–6 (33 ref.)

MHC recombinant mice: genetic tools for study of resistance to viral disease. Chesebro B. **Int Rev Immunol** 1988 Aug; 3(4):393–6 (9 ref.)

Cytotoxic T lymphocytes from HLA-A2 transgenic mice specific for HLA-A2 expressed on human cells. Bernhard EJ, et al. **J Exp Med** 1988 Sep 1;168(3):1157–62

Tolerance in transgenic mice expressing class II major histocompatibility complex on pancreatic acinar cells. Lo D, et al. **J Exp Med** 1989 Jul 1;170(1):87–104

Restricted assembly of haplotype-mismatched A alpha:A beta complexes in transgenic mice [letter] Beck BN. **J Immunol** 1989 Jul 15;143(2):755–6

Cytotoxic T cell responses in HLA-A2.1 transgenic mice. Recognition of HLA alloantigens and utilization of HLA-A2.1 as a restriction element. Le AX, et al. **J Immunol** 1989 Feb 15;142(4):1366–71

Quantitative analysis of idiotypic mimicry and allelic exclusion in mice with a mu Ig transgene. Rath S, et al. **J Immunol** 1989 Sep 15;143(6):2074–80

A repertoire of monoclonal antibodies with human heavy chains from transgenic mice. Brüggemann M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6709–13

Thymidine kinase obliteration: creation of transgenic mice with controlled immune deficiency. Heyman RA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2698–702

METABOLISM

Expression of tissue-specific genes in transgenic mice. Yamamura K, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:47–51 (19 ref.)

Tissue-specific regulation of human alpha 1-antitrypsin gene expression in transgenic mice. Shen RF, et al. **DNA** 1989 Mar;8(2):101–8

Immunohistochemical analysis of human growth hormone-releasing hormone gene expression in transgenic mice. Brar AK, et al. **Endocrinology** 1989 Aug;125(2):801–9

Ultrastructure and electron immunocytochemistry of insulin-producing B-cell tumors from transgenic mice: comparison with counterpart human tumors. Holm R, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):547–59

MICROBIOLOGY

Use of transgenic animals to study human retroviruses. Hinrichs SH, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):311–20 (53 ref.)

Laboratory accident kills AIDS mice [news] Ezzell C. **Nature** 1988 Dec 15;336(6200):613

PHYSIOLOGY

Expression of mouse protamine 1 genes in transgenic mice. Peschon JJ, et al. **Ann N Y Acad Sci** 1989;564:186–97

Male sterility of transgenic mice carrying exogenous mouse interferon-beta gene under the control of the metallothionein enhancer-promoter. Iwakura Y, et al. **EMBO J** 1988 Dec 1;7(12):3757–62

Mechanisms contributing to the sex difference in levels of granulocyte-macrophage colony-stimulating factor in the urine of GM-CSF transgenic mice. Metcalf D. **Exp Hematol** 1988 Oct;16(9):794–800

Premature aging changes in neuromuscular junctions of transgenic mice with an extra human CuZnSOD gene: a model for tongue pathology in Down's syndrome. Yarom R, et al. **J Neurol Sci** 1988 Dec;88(1–3):41–53

MICE, WHITE-FOOTED see **PEROMYSCUS**

MICELLES see under **COLLOIDS**

MICONAZOLE

ADMINISTRATION & DOSAGE

Treatment of denture stomatitis by a sustained drug-delivery device: a preliminary study. Lamb DJ, et al. **J Dent** 1988 Oct;16(5):219–21

Comparison of three-day butoconazole treatment with seven-day miconazole treatment for vulvovaginal candidiasis. Kaufman RH, et al. **J Reprod Med** 1989 Jul; 34(7):479–83

[Evaluation of the topical antimycotic treatment in psoriatic onychopathy with severe perionychia] Santagostino L, et al. **G Ital Dermatol Venereol** 1988 May;123(5):253–9 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Contact allergy to miconazole. Perret CM, et al. **Contact Dermatitis** 1988 Jul;19(1):75

ANALOGS & DERIVATIVES

[Advantages of single-dose treatment of vaginal Candida albicans infection] Blum M, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):15–7 (Eng. Abstr.) **(Fre)**

[Local therapy of pityriasis versicolor with 3 imidazole derivatives--results of a therapeutic study. Studies of the rate of recurrence] Senff H, et al. **Z Hautkr** 1988 Dec 15; 63(12):1005–8 (Eng. Abstr.) **(Ger)**

ANALYSIS

Liquid chromatographic determination of miconazole nitrate in creams and suppositories. Tyler TA, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):442–4

High-performance liquid chromatographic method for the determination of miconazole in vaginal fluid. Selinger K, et al. **J Chromatogr** 1988 Dec 29;434(1):259–64

PHARMACOLOGY

Miconazole and amphotericin B alter polymorphonuclear leukocyte functions and membrane fluidity in similar fashions. Yasui K, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1864–8

Inhibition of human hepatic and placental xenobiotic monooxygenases by imidazole antimycotics. Pasanen M, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3861–6

In vitro antifungal susceptibility of fungi isolated from respiratory tract of patients and other sources. Chaturvedi VP, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar; 30(1):36–40

Coinduction of multiple hepatic cytochrome P-450 proteins and their mRNAs in rats treated with imidazole antimycotic agents. Hostetler KA, et al. **Mol Pharmacol** 1989 Mar;35(3):279–85

Requirement for nonprotonated drug molecules in the direct lethal action of miconazole against Candida albicans. Beggs WH. **Mycopathologia** 1988 Aug;103(2):91–4

Fungistatic activity of miconazole against Candida albicans in relation to pH and concentration of nonprotonated drug. Beggs WH. **Mycoses** 1989 May;32(5):239–44

[The synergistic abortive effect of anti-progestogen RU 38486 and aromatase inhibitors for pregnant rat] Sasaki J, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb; 41(2):179–84 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Prevention of fungal sepsis in patients with prolonged neutropenia: a randomized, double-blind, placebo-controlled trial of intravenous miconazole. Wingard JR, et al. **Am J Med** 1987 Dec;83(6):1103–10

Efficacy and tolerance of a miconazole-benzoyl peroxide cream combination versus a benzoyl peroxide gel in the topical treatment of acne vulgaris. Flückiger R, et al. **Dermatologica** 1988;177(2):109–14

Treatment of impetigo and ecthyma. A comparison of sulconazole with miconazole. Nolting S, et al. **Int J Dermatol** 1988 Dec;27(10):716–9

Pseudallescheria boydii brain abscess: association with near-drowning and efficacy of high-dose, prolonged miconazole therapy in patients with multiple abscesses. Dworzack DL, et al. **Medicine (Baltimore)** 1989 Jul; 68(4):218–24

MICROANGIOPATHY, DIABETIC see **DIABETIC ANGIOPATHIES**

MICROBIAL ANTAGONISM see **ANTIBIOSIS**

MICROBIAL SENSITIVITY TESTS

see related
DRUG RESISTANCE, MICROBIAL

Emergence of highly trimethoprim-sulfamethoxazole-resistant Shigella in a native American population: an epidemiologic study. Griffin PM, et al. **Am J Epidemiol** 1989 May;129(5):1042–51

Including cost data in antimicrobial agent sensitivity reports [letter] Havlovic DA. **Am J Hosp Pharm** 1989 Jun; 46(6):1126

Qualitative and quantitative drug-susceptibility tests in mycobacteriology. Heifets L. **Am Rev Respir Dis** 1988 May; 137(5):1217–22

MIC as a quantitative measurement of the susceptibility of Mycobacterium avium strains to seven antituberculosis drugs. Heifets L. **Antimicrob Agents Chemother** 1988 Aug; 32(8):1131–6

Evaluation of a disk approximation test of inducible beta-lactamases in Enterobacteriacae and Pseudomonas aeruginosa. Thore M, et al. **APMIS** 1989 Apr;97(4):317–24

Antibiotic sensitivity testing [letter] **Aust Dent J** 1989 Apr; 34(2):183–6

Antimicrobial susceptibility testing. **Clin Lab Med** 1989 Jun; 9(2):191–368

Antimicrobic susceptibility testing. A personal perspective. Sherris JC. **Clin Lab Med** 1989 Jun;9(2):191–202 (43 ref.)

Direct antimicrobial drug susceptibility testing of Mycobacterium tuberculosis by the radiometric method. Libonati JP, et al. **Diagn Microbiol Infect Dis** 1988 May; 10(1):41–8

Commercially available technique for rapid laboratory detection of methicillin resistance among Staphylococcus aureus. Piper J, et al. **Diagn Microbiol Infect Dis** 1988 Nov; 11(3):177–80

Characterization of beta–lactam antagonist in Supplement C. Woolfrey BF, et al. **Diagn Microbiol Infect Dis** 1988 Aug; 10(4):213–9

The epidemiology of respiratory tract pathogens in southern Netherlands. Davies BI, et al. **Eur Respir J** 1988 May; 1(5):415–20

Flow microcalorimetry as a tool for an improved analysis of antibiotic activity: the different stages of chloramphenicol action. Krüger D, et al. **Experientia** 1989 Apr 15;45(4):322–5

Aminoglycosides and beta–lactams. Different possible kind of interaction during the time between drugs and microorganisms. Carazzone M, et al. **G Ital Chemioter** 1987 Jan–Dec;34(1–3):29–39

Application of ATP assay for in vitro drug screening testing against human derived M. leprae. Katoch VM, et al. **Indian J Lepr** 1989 Jul;61(3):333–44

The problem of selecting antimicrobial agents before (or without) the results of susceptibility testing. Stratton CW. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):559–61 (15 ref.)

Bacteriostatic versus bactericidal activity. Mulligan MJ, et al. **Infect Dis Clin North Am** 1989 Sep;3(3):389–98 (73 ref.)

In vitro testing of antimicrobial agents. Washington JA. **Infect Dis Clin North Am** 1989 Sep;3(3):375–87 (23 ref.)

Isolation of Rickettsia prowazekii with reduced sensitivity to gamma interferon. Turco J, et al. **Infect Immun** 1989 Jun;57(6):1765–72

Disc sensitivity testing with ciprofloxacin [letter] Andrews JM, et al. **J Antimicrob Chemother** 1989 Jan;23(1):156–8

Comparison of cefadroxil and cephalothin disk susceptibility test results. Barry AL, et al. **J Clin Microbiol** 1989 Jul; 27(7):1460–3

Problems with the disk diffusion test for detection of vancomycin resistance in enterococci. Swenson JM, et al. **J Clin Microbiol** 1989 Sep;27(9):2140–2

Antimicrobial resistance in Streptococcus pneumoniae: a growing universal concern. Hussein SS, et al. **J Natl Med Assoc** 1989 Sep;81(9):937–41 (79 ref.)

Microcomputer program in Chinese to manage and analyze antimicrobial susceptibility results. Chan KW, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):244–8

Comments on otitis media [letter] Coffey JD Jr, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):540–1

Accuracy of microdilution and the AutoMicrobic System in detection of beta–lactam resistance in gram–negative bacterial mutants with derepressed beta–lactamase. Washington JA 2d, et al. **Rev Infect Dis** 1988 Jul–Aug; 10(4):824–9

Laboratory methods for the detection and phenotypic characterization of Neisseria gonorrhoeae strains resistant to antimicrobial agents. Knapp JS. **Sex Transm Dis** 1988 Oct–Dec;15(4):225–33 (86 ref.)

In–vitro sensitivity of organisms causing urinary tract infections to four common oral antibiotics and to pivmecillinam. Bansal AS. **West Indian Med J** 1988 Dec; 37(4):201–4

[Analysis of animal matter meal and animal feed for bacteria and their antibiotic resistance] Sixl W, et al. **Geogr Med** 1989;Suppl 2:159–71 **(Ger)**

[A guide for the determination of resistance to antimycotics] Dermoumi H. **Mycoses** 1988 Oct;31(10):532 **(Ger)**

[Chlorhexidine as a vaginal antiseptic in obstetrics] Ketscher KD, et al. **Zentralbl Gynakol** 1988;110(15):953–6 (Eng. Abstr.) **(Ger)**

[Activity of benzalkonium chloride, polyvinyl povidone and chlorhexidine on families of microorganisms isolated in a hospital environment] Mazara M, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):267–78 (Eng. Abstr.) **(Ita)**

[Evaluation of bacterial resistance at an intensive care unit: analysis of 29 antibiotics] Nascimento LO, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):272–8 (Eng. Abstr.) **(Por)**

INSTRUMENTATION

Development of a rapid method for determining the susceptibility of Mycobacterium tuberculosis to isoniazid using the Gen–Probe DNA Hybridization System. Kawa DE, et al. **Antimicrob Agents Chemother** 1989 Jul; 33(7):1000–5

Automated antibiotic susceptibility testing: comparative evaluation of four commercial systems and present state. Kiehlbauch J, et al. **Clin Lab Med** 1989 Jun;9(2):319–40 (30 ref.)

A comparison of the use of pipettes and loops for the inoculation of Mycobacterium tuberculosis onto media [letter] Palhano Júnior L, et al. **Tubercle** 1988 Sep;69(3):232

METHODS

An improved method for determining the microbial inhibitory activity of serum and its application to the study of patients with leukemia. Towns ML, et al. **Am J Clin Pathol** 1989 Aug;92(2):192–8

Antimicrobial susceptibility testing of Haemophilus influenzae, Branhamella catarrhalis, and Neisseria gonorrhoeae. Doern GV, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1747–53 (68 ref.)

Comparison of broth microdilution and agar dilution for susceptibility testing of Neisseria gonorrhoeae. Geers TA, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):233–4

Differences between in vitro and in vivo studies [letter] Lorian V. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1600–1

Comparison of two methods in the determination of the sensitivity of 84 herpes simplex virus (HSV) type 1 and 2 clinical isolates to acyclovir and alpha–interferon. Brisebois JJ, et al. **Antiviral Res** 1989 Mar;11(2):67–75

New automated methods in microbial diagnosis and chemosensitivity testing. Covelli I, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):12–6

Interpretive criteria for the agar diffusion susceptibility test with teicoplanin using the ICS–and DIN–methods, respectively. Grimm H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):119–20

ATB MIC API system for Neisseria gonorrhoeae. Prère M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):9–11

Conditions affecting the results of susceptibility testing for the quinolone compounds. Smith SM, et al. **Chemotherapy** 1988;34(4):308–14

Multicategory interpretive reporting of susceptibility testing with selected antimicrobial concentrations. Ten years of laboratory and clinical experience. Gill VJ, et al. **Clin Lab Med** 1989 Jun;9(2):221–38 (17 ref.)

Susceptibility testing of anaerobic bacteria. Rosenblatt JE. **Clin Lab Med** 1989 Jun;9(2):239–54 (37 ref.)

DNA probes for antimicrobial susceptibility testing. Tenover FC. **Clin Lab Med** 1989 Jun;9(2):341–7 (13 ref.)

Antibiotic susceptibility testing of anaerobic organisms using the agar dilution method: comparison of three techniques. Wexler HM, et al. **Clin Ther** 1988;10(6):747–60

Multicenter in vitro evaluation of lomefloxacin (NY–198, SC–47111), including tests against nearly 7,000 bacterial isolates and preliminary recommendations for susceptibility testing. Jones RN, et al. **Diagn Microbiol Infect Dis** 1988 Aug;10(4):221–40

Synergistic interaction of cefotaxime and its metabolite desacetylcefotaxime demonstrated by drug–impregnated disks. Stevens DL, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):73–80

Anticancer activities as well as antiviral and virus–enhancing properties of aqueous fruit extracts from fifty–six European plant species. Sauter C, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):987–90

Comparison of four commercial microdilution systems for susceptibility testing of anaerobic bacteria. Heizmann W, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):758–63

Interpretative criteria for the agar diffusion susceptibility test with azithromycin. Barry AL, et al. **J Antimicrob Chemother** 1988 Nov;22(5):637–41

Antimicrobial susceptibility testing: a critical evaluation. Isenberg HD. **J Antimicrob Chemother** 1988 Jul;22 Suppl A:73–86

Susceptibility of Legionella pneumophila to eight antimicrobial agents including four macrolides under different assay conditions. Liebers DM, et al. **J Antimicrob Chemother** 1989 Jan;23(1):37–41

The evolution of in–vitro antimicrobial susceptibility techniques. Wheat PF, et al. **J Antimicrob Chemother** 1988 Nov;22(5):579–82 (58 ref.)

The wet disc antimicrobial solution assay. An in vitro method to test efficacy of antimicrobial solutions for topical use. Holder IA. **J Burn Care Rehabil** 1989 May–Jun;10(3):203–8

Sensibility assay for topical agents. A new method. Lorenti AS, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):209–12

Novel application of video image processing to biochemical and antimicrobial susceptibility testing. D'Amato RF, et al. **J Clin Microbiol** 1988 Aug;26(8):1492–5

Inadequate mixing in microdilution wells during preparation of antimicrobial dilutions for susceptibility testing. Zhi JG, et al. **J Clin Microbiol** 1988 Oct;26(10):2218–20

A model for testing antiseptic efficacy: a preliminary study on Betadine and Germidine. Thamlikitkul V, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:29–32

A novel luminometer for rapid antimicrobial susceptibility tests on gram–positive cocci by ATP bioluminescence. Wheat PF, et al. **J Med Microbiol** 1989 Aug;29(4):277–82

Anti–HIV compound assessment by two novel high capacity assays. Averett DR. **J Virol Methods** 1989 Mar; 23(3):263–76

Assessment of antibiotic–sensitive, intermediate or resistant status of bacteria by agar dilution. Franklin JC. **Med Lab Sci** 1988 Jul;45(3):225–34

Antimicrobial susceptibility testing and biochemical identification using multipoint inoculation: 5 years' experience. Pease AA, et al. **Med Lab Sci** 1988 Jan; 45(1):28–33

Evaluation of antibacterial sensitivity testing methods for methicillin–resistant Staphylococcus aureus in a dermatology outpatient population. McBride ME, et al. **South Med J** 1989 Feb;82(2):165–8

[Antifungigram: interpretation and choice of a technic] Vermorel O, et al. **Ann Biol Clin (Paris)** 1989;47(2):85–90 (Eng. Abstr.) **(Fre)**

[Antifungigram of dermatophytes] Steiman R, et al. **Ann Inst Pasteur Microbiol** 1988 Jul–Aug;139(4):485–91 (Eng. Abstr.) **(Fre)**

[Influence of the inoculum effect on minimal inhibitory concentrations of 3 derivatives of 5–nitro–imidazole and 11 other antibiotics on Bacteroides fragilis] Dusart G, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):685–9 (Eng. Abstr.) **(Fre)**

[Quantitative determination of bacterial sensitivity—indications and methods] von Graevenitz A, et al. **Schweiz Rundsch Med Prax** 1988 Sep 20; 77(38):1006–12 (Eng. Abstr.) **(Fre)**

[Antimicrobial activity of sultamicillin against clinical isolates from upper respiratory tract infections II] Deguchi K, et al. **Jpn J Antibiot** 1988 Dec;41(12):2065–74 (Eng. Abstr.) **(Jpn)**

[Effect of the source of susceptibility–test agar on the in vitro activity of antibiotics against Staphylococcus aureus] Ito Y, et al. **Rinsho Byori** 1989 Jan;37(1):84–8 **(Jpn)**

[Drug susceptibility test of mycobacteria] Kusano N. **Rinsho Byori** 1988 Nov;36(11):1274–80 **(Jpn)**

[Reconsideration and view of the future on the susceptibility test of antimicrobial agents—from the clinical points of view] Shigeno Y. **Rinsho Byori** 1988 Nov;36(11):1281–8 **(Jpn)**

[Microdilution broth procedure] Sugahara K. **Rinsho Byori** 1988 Nov;36(11):1261–7 **(Jpn)**

[Single disc method for susceptibility testing] Sugahara K, et al. **Rinsho Byori** 1988 Nov;36(11):1243–9 **(Jpn)**

[Tri–disk method] Takemori K, et al. **Rinsho Byori** 1988 Nov; 36(11):1250–60 **(Jpn)**

[Reliability of the MS–2 system in detecting Staphylococcus aureus resistant to methicillin] Tobita M, et al. **Rinsho Byori** 1988 Aug;36(8):984–7 **(Jpn)**

[Automated systems for antimicrobial susceptibility testing] Yamane N. **Rinsho Byori** 1988 Nov;36(11):1268–73 **(Jpn)**

[A rapid immunofluorescent method of determining the antibiotic sensitivity of brucella] Gubina EA, et al. **Antibiot Khimioter** 1989 Feb;34(2):109–12 (Eng. Abstr.) **(Rus)**

[A microbiological test system for determining dioxidine levels in biological fluids] Ponomareva TR, et al. **Antibiot Khimioter** 1989 Apr;34(4):261–3 (Eng. Abstr.) **(Rus)**

[A rapid test of urine microflora sensitivity to antibacterial drugs in the treatment of children with nonspecific inflammatory diseases of the kidney and urinary tract] Rodoman VE, et al. **Pediatriia** 1989;(6):57–61 (Eng. Abstr.) **(Rus)**

[A method of determining the sensitivity of urinary microflora to antibacterial drugs] Rodoman VE, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):13–5 (Eng. Abstr.) **(Rus)**

[A new rapid antibiotic susceptibility test for enteric bacteria using a color change method] Kocagöz T, et al. **Mikrobiyol Bul** 1988;22(3):238–44 (Eng. Abstr.) **(Tur)**

STANDARDS

Standardization of antimicrobial susceptibility testing. Barry AL. **Clin Lab Med** 1989 Jun;9(2):203–19 (79 ref.)

Progress in standardizing antifungal susceptibility tests. Galgiani JN. **Clin Lab Med** 1989 Jun;9(2):269–77 (21 ref.)

Gentamicin–resistant pseudomonal infection. Rationale for a redefinition of ophthalmic antimicrobial sensitivities. Ormerod LD, et al. **Cornea** 1989 Sep;8(3):195–9

Evaluation of disk susceptibility testing of cefotaxime/desacetylcefotaxime. Fuchs PC, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):81–5

Quality control parameters and interpretive criteria for in vitro susceptibility tests with the macrolide azithromycin. Collaborative Antimicrobial Susceptibility Testing Group. Barry AL, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun; 8(6):544–9

Comparison of the Cobas–Bact five–hour susceptibility testing system with the NCCLS agar diffusion and dilution methods. Wüst J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):511–7

BSAC breakpoint recommendations [letter] Wheat PF. **J Antimicrob Chemother** 1989 Jul;24(1):79–81

Quality control limits for the standard anaerobic reference agar dilution susceptibility test procedure of the National Committee for Clinical Laboratory Standards. Barry AL, et al. **J Clin Microbiol** 1989 Jan;27(1):192–5

Ofloxacin susceptibility testing quality control parameters for microdilution and disk diffusion, and confirmation of disk diffusion interpretive criteria. Fuchs PC, et al. **J Clin Microbiol** 1989 Jan;27(1):49–52

Collaborative evaluation in seven laboratories of a standardized micromethod for yeast susceptibility testing. Guinet R, et al. **J Clin Microbiol** 1988 Nov;26(11):2307–12

New datum handling methods for the quality control of antibiotic solutions and plates used in the antimicrobial susceptibility test. McDermott SN, et al. **J Clin Microbiol** 1989 Aug;27(8):1814–25

Repeat antimicrobial susceptibility testing of identical isolates. Thomson RB Jr, et al. **J Clin Microbiol** 1989 May; 27(5):1108–11

Quality control guidelines for testing cefotetan in the

reference agar dilution procedure for susceptibility testing of anaerobic bacteria. Zabransky RJ, et al. **J Clin Microbiol** 1989 Jan;27(1):190–1

A statistical method to evaluate the reliability and reproducibility of a standardised technique for the conduct of antibiograms on two species of Enterobacteriaceae. Venter BJ. **J S Afr Vet Assoc** 1989 Mar;60(1):20–4

Additions and modifications to the range of antibiotics tested by the CDS method of antibiotic sensitivity testing. Bell SM. **Pathology** 1988 Jul;20(3):303–4

Susceptibility testing of anaerobes [letter] Wasilauskas BL. **Pediatr Infect Dis J** 1989 Aug;8(8):538–9

Species-specific interpretive breakpoints for ciprofloxacin disk diffusion susceptibility testing. Ringertz S, et al. **Scand J Infect Dis Suppl** 1989;60:46–53

VETERINARY

[Considerations on the sense and nonsense of sensitivity determinations for veterinary practice (published erratum appears in Tijdschr Diergeneeskd 1988 Nov 1;113(21):1188)] van den Bogaard AE Jr. **Tijdschr Diergeneeskd** 1988 Sep 1;113(17):921–32 (Eng. Abstr.) **(Dut)**

[Sensitivity pattern of Staphylococcus aureus isolated from quarter milk from cattle] Vecht U, et al. **Tijdschr Diergeneeskd** 1989 Mar 1;114(5):260–9 (Eng. Abstr.) **(Dut)**

MICROBIAL SUPERINVASION see **SUPERINFECTION**

MICROBIOLOGICAL TECHNICS

A new culture method for infectious endophthalmitis. Joondeph BC, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1334–7

Infectious diseases: diagnosis utilizing DNA probes. Understanding a developing clinical technology. McGowan KL. **Clin Pediatr (Phila)** 1989 Apr;28(4):157–62 (49 ref.)

Whole animal section in situ hybridization and protein blotting: new tools in molecular analysis of animal models for human disease. Lipkin WI, et al. **Curr Top Microbiol Immunol** 1989;143:33–54

Microbiological assay versus spectrophotometry for determination of rifampicin in urine. George J, et al. **Indian J Lepr** 1988 Jan;60(1):47–52

Clonal polymorphisms of outer membrane protein OspB of Borrelia burgdorferi. Bundoc VG, et al. **Infect Immun** 1989 Sep;57(9):2733–41

A procedure for handling microorganisms during preparation for electron microscopy. Griffin M, et al. **J Electron Microsc Tech** 1987 Sep;7(1):61–2

The genomic identity of different strains of mouse scrapie is expressed in hamsters and preserved on reisolation in mice. Kimberlin RH, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2017–25

A technology of preparing hepatitis A virus (HAV) from human stools. König J, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):337–44

Rapid quantitative assay of cytomegalovirus infectivity. Musiani M, et al. **J Virol Methods** 1988 Aug;20(4):333–40

Coupling of foot-and-mouth disease virus to sheep red blood cells using tannic acid for immunological assays. Pujol CA, et al. **J Virol Methods** 1988 Aug;20(4):275–84

Rapid identification of Mycobacterium species. Moinard D, et al. **Res Microbiol** 1989 Jan;140(1):33–41

Organization of microbiology laboratory services for the diagnosis of pulmonary infections in patients with human immunodeficiency virus infection. Hadley WK, et al. **Semin Respir Infect** 1989 Jun;4(2):85–92

[Cytomegalovirus (CMV): virologic protocols for transplantation] Gaudin O, et al. **Nephrologie** 1988; 9(4):159–62 (Eng. Abstr.) **(Fre)**

[The diagnosis of dermatomycoses by a non-specialist] Baudraz-Rosselet F, et al. **Rev Med Suisse Romande** 1989 Jun;109(6):429–32 **(Fre)**

[Current status of research and development of a microbiological method for purification of industrial waste water] Leonova VE, et al. **Antibiot Khimioter** 1988 Oct; 33(10):739–44 (66 ref.) **(Rus)**

[Possibilities of using nuclear filters in microbiological studies] Kapitonenko NA, et al. **Lab Delo** 1989;(2):55–6 (Eng. Abstr.) **(Rus)**

[Test of the potency of trivalent oral polio vaccines: comparison of 2 methods of reading] Chocarro LB, et al. **Rev Argent Microbiol** 1987 Apr-Jun;19(2):65–9 (Eng. Abstr.) **(Spa)**

[Obtaining beta-galactosidase using whey] Pomar FT, et al. **Rev Argent Microbiol** 1983;15(1):9–17 (Eng. Abstr.) **(Spa)**

[Biomass production and biological purification of distillation slops in a 2-step process] Waehner RS, et al. **Rev Argent Microbiol** 1983;15(1):47–50 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Evaluation of new in vitro diagnostic test procedures in clinical microbiology. Washington JA. **Infect Control Hosp Epidemiol** 1989 Feb;10(2):77–9

Low-cost digital impedance meter for the detection of micro-organisms. Felice CJ, et al. **J Biomed Eng** 1988 Oct; 10(5):448–52

Automated biochemical identification of bacterial fish pathogens using the Abbott Quantum II. Teska JD, et al. **J Wildl Dis** 1989 Jan;25(1):103–7

[Pros and cons on the automated system for clinical microbiology] Nakagomi O, et al. **Rinsho Byori** 1988 Jul; 36(7):802–7 **(Jpn)**

STANDARDS

The value of microbiologic culture of tissue samples in surgical pathology. Braunstein H. **Mod Pathol** 1989 May; 2(3):217–21 (18 ref.)

TRENDS

Automated and rapid methods in clinical microbiology: past, present and future. Tierno PM Jr, et al. **Clin Lab Med** 1988 Dec;8(4):643–51 (11 ref.)

MICROBIOLOGY

see related
BACTERIA
FUNGI
PROTOZOA
VIRUSES

Tenth congress of the Hungarian Society of Microbiology. Szeged, August 26–29, 1987. Abstracts. **Acta Microbiol Hung** 1988;35(2):121–219

Style notes: taxonomic names in microbiology and their adjectival derivatives [editorial] Huth EJ. **Ann Intern Med** 1989 Mar 15;110(6):419–20

Structuring strain data for storage and retrieval of information on fungi and yeasts in MINE, the Microbial Information Network Europe. Gams W, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1667–89

Privatisation [letter] Rich G. **J Hosp Infect** 1989 Feb; 13(2):200–1

The development of a third generation system for entering microbiology data into a clinical laboratory information system. Eggert AA, et al. **J Med Syst** 1988 Dec; 12(6):365–82

Microbiology at the crossroads [editorial] **Lancet** 1989 Feb 18;1(8634):360

[A standard code for naming microbes] Schindler J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):48–51 (Eng. Abstr.) **(Cze)**

[Status of immunologic reactivity and prospects of the implementation of occupational selection of workers at a microbiological plant] Artamonova VG, et al. **Gig Tr Prof Zabol** 1989;(1):5–8 (Eng. Abstr.) **(Rus)**

HISTORY

Medical protozoology: a brief, informal history. Kean BH. **Bull N Y Acad Med** 1988 Apr;64(3):252–61

[Virologic research at the Institute of Medical Microbiology at the Greifswald Ernst-Moritz-Arndt University] Döhner L. **Z Gesamte Hyg** 1989 Apr;35(4):184–6 (Eng. Abstr.) **(Ger)**

[Medical microbiology in Norway in 1945–1988. Development of county laboratories] Odegaard A. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3212–6 **(Nor)**

[Benchmark memorial medal dedicated to Avgust Kirkhenshtein (1872–1963)] Barshtein IuA. **Mikrobiol Zh** 1987 Nov-Dec;49(6):92–3 **(Rus)**

[Benchmark memorial medals dedicated to anniversary dates in the history of the sciences of microbiology and epidemiology] Barshtein IuA. **Mikrobiol Zh** 1988 Jul-Aug; 50(4):109–111 **(Rus)**

[The publication of the 50th volume of Mikrobiologicheskiĭ zhurnal] Diachenko SS. **Mikrobiol Zh** 1988 Nov-Dec; 50(6):93–8 **(Rus)**

[60th anniversary of the D. K. Zabolotnyĭ Institute of Microbiology and Virology of the Academy of Sciences of the Ukrainian SSR] Skripal' IG. **Mikrobiol Zh** 1988 May-Jun;50(3):3–14 **(Rus)**

INSTRUMENTATION

Assessment of the BACTEC NR660 blood culture system for the detection of bacteremia in young children. Anderson JD, et al. **J Clin Microbiol** 1989 Apr;27(4):721–3

TRENDS

The future direction of nutrition research: "And a little cell (child) shall lead them". Broquist HP. **J Nutr** 1989 Jul; 119(7):1071–4 (11 ref.)

Microbiology at the crossroads [letter] Stokes EJ. **Lancet** 1989 Mar 4;1(8636):508

[The Institute of Microbiology and Virology of the Academy of Sciences of the Ukrainian SSR on the 70th anniversary of the Great October Revolution (editorial)] **Mikrobiol Zh** 1987 Nov-Dec;49(6):3–4 **(Rus)**

MICROBODIES

Peroxisomal disorders in neurology. Wanders RJ, et al. **J Neurol Sci** 1988 Dec;88(1–3):1–39 (241 ref.)

Phenotypic and genotypic variability of generalized peroxisomal disorders. Naidu S, et al. **Pediatr Neurol** 1988 Jan-Feb;4(1):5–12 (55 ref.)

[Peroxisomes and neurologic diseases] Sereni C, et al. **Rev Neurol (Paris)** 1989;145(5):341–9 (83 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Analysis of the major integral membrane proteins of peroxisomes from mouse liver. Chen NH, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):135–44

Nonspecific lipid transfer protein (sterol carrier protein-2) is located in rat liver peroxisomes. Tsuneoka M, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):560–4

A glycosomal protein (p60) which is predominantly expressed in procyclic Trypanosoma brucei. Characterization and DNA sequence. Kueng V, et al. **J Biol Chem** 1989 Mar 25;264(9):5203–9

[Microbodies] Nishimura M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):37–42 (21 ref.) **(Jpn)**

DRUG EFFECTS

Effects of commercial chlorophenolate, 2,3,7,8-TCDD, and pure phenoxyacetic acids on hepatic peroxisome proliferation, xenobiotic metabolism and sister chromatid exchange in the rat. Mustonen R, et al. **Arch Toxicol** 1989; 63(3):203–8

The induction of liver peroxisomal proliferation by beta,beta'-methyl-substituted hexadecanedioic acid (MEDICA 16). Hertz R, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3571–7

Alkylthioacetic acid (3-thia fatty acids)—a new group of non-beta-oxidizable, peroxisome-inducing fatty acid analogues. I. A study on the structural requirements for proliferation of peroxisomes and mitochondria in rat liver. Berge RK, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):345–56

Co-induction by peroxisome proliferators of microsomal 1-acylglycerophosphocholine acyltransferase with peroxisomal beta-oxidation in rat liver. Kawashima Y, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):123–9

Lack of initiating activity of the peroxisome proliferator ciprofibrate in two-stage hepatocarcinogenesis. Glauert HP, et al. **Cancer Lett** 1989 Feb;44(2):95–100

Promoting effect of peroxisome proliferators in two-stage rat renal tumorigenesis. Kurokawa Y, et al. **Cancer Lett** 1988 Dec 1;43(1–2):145–9

Formation of 8-hydroxydeoxyguanosine in liver DNA of rats following long-term exposure to a peroxisome proliferator. Kasai H, et al. **Cancer Res** 1989 May 15;49(10):2603–5

Relationship of hepatic peroxisome proliferation and replicative DNA synthesis to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and [4-chloro-6-(2,3-xylidino)-2-pyrimidinylthio]acetic acid (Wy-14,643) in rats. Marsman DS, et al. **Cancer Res** 1988 Dec 1;48(23):6739–44

Induction of microsomal NADPH-cytochrome P-450 reductase and cytochrome P-450IVA1 (P-450LA omega) by dehydroepiandrosterone in rats: a possible peroxisomal proliferator. Wu HQ, et al. **Cancer Res** 1989 May 1; 49(9):2337–43

Relationship of oxidative damage to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and Wy-14,643. Conway JG, et al. **Carcinogenesis** 1989 Mar;10(3):513–9

Effects of 3,5,3'-triiodothyronine (T3) on rat liver peroxisomal compartment during cold exposure. Goglia F, et al. **Exp Biol** 1989;48(3):135–40

Biochemical effects and zonal heterogeneity of peroxisome proliferation induced by perfluorocarboxylic acids in rat liver. Just WW, et al. **Hepatology** 1989 Apr;9(4):570–81

Assessment of peroxisome proliferation and liver growth-stimulating potential by nondirectly genotoxic compounds in cultured hepatocytes. Bieri F, et al. **Mol Toxicol** 1987-88 Fall;1(4):439–44

Oxidative DNA damage caused by persistent peroxisome proliferation: its role in hepatocarcinogenesis. Reddy JK, et al. **Mutat Res** 1989 Sep;214(1):63–8 (60 ref.)

Chemically induced proliferation of peroxisomes: implications for risk assessment. Stott WT. **Regul Toxicol Pharmacol** 1988 Jun;8(2):125–59 (207 ref.)

Induction of peroxisomal beta-oxidation in the rat liver in vivo and in vitro by tetrazole-substituted acetophenones: structure-activity relationships. Eacho PI, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):177–84

Comparative studies on nafenopin-induced hepatic peroxisome proliferation in the rat, Syrian hamster, guinea pig, and marmoset. Lake BG, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):148–60

Differential induction and regulation of peroxisomal enzymes: predictive value of peroxisome proliferation in identifying certain nonmutagenic carcinogens. Nemali MR, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):72–87

The metabolism of mono-(2-ethylhexyl) phthalate (MEHP) and liver peroxisome proliferation in the hamster. Lhuguenot JC, et al. **Toxicol Ind Health** 1988 Dec; 4(4):431–41

Nafenopin, a peroxisome proliferator, depletes hepatic vitamin E content and elevates plasma oxidised glutathione levels in rats. Lake BG, et al. **Toxicol Lett** 1989 Feb; 45(2-3):221–9

Comparison of the peroxisome proliferator-induced pleiotropic response in the liver of nine strains of mice. Dwivedi RS, et al. **Toxicol Pathol** 1989;17(1 Pt 1):16–26

Induction of peroxisome proliferation in rat liver by dietary treatment with 2,2,4,4,6,8,8–heptamethylnonane. Ikeda T, et al. **Xenobiotica** 1988 Nov;18(11):1271–80

ENZYMOLOGY

Peroxisomal disorders. Biochemical and clinical diagnostic considerations. Singh I, et al. **Am J Dis Child** 1988 Dec; 142(12):1297–301 (53 ref.)

Adrenoleukodystrophy: impaired oxidation of fatty acids due to peroxisomal lignoceroyl–CoA ligase deficiency. Lazo O, et al. **Arch Biochem Biophys** 1989 May 1;270(2):722–8

Dual action of 2–decynoyl coenzyme A: inhibitor of hepatic mitochondrial trans–2–enoyl coenzyme A reductase and peroxisomal bifunctional protein and substrate for the mitochondrial beta–oxidation system. Nagi MN, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):1–12

Distinct long chain and very long chain fatty acyl CoA synthetases in rat liver peroxisomes and microsomes. Singh H, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):486–95

Evidence that the enoyl–CoA hydratase bifunctional protein of mouse liver peroxisomes is identical with the 70,000 dalton peroxisomal membrane protein. Crane DI, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):503–8

Detection of an ATPase activity in rat liver peroxisomes. del Valle R, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1353–9

Molecular analysis of peroxisomal beta–oxidation enzymes in infants with peroxisomal disorders indicates heterogeneity of the primary defect. Guerroui S, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):242–51

Alanine:glyoxylate aminotransferase is present as the apoenzyme in the peroxisomes of chicken kidney. Sakuraba H, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):696–9

The 3–hydroxyacyl–CoA epimerase activity of rat liver peroxisomes is due to the combined actions of two enoyl–CoA hydratases: a revision of the epimerase–dependent pathway of unsaturated fatty acid oxidation. Smeland TE, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):988–92

Co–ordinate induction of hepatic mitochondrial and peroxisomal carnitine acyltransferase synthesis by diet and drugs. Brady PS, et al. **Biochem J** 1989 May 15; 260(1):93–100

A luminometric assay for peroxisomal beta–oxidation. Effects of fasting and streptozotocin–diabetes on peroxisomal beta–oxidation. Osmundsen H, et al. **Biochem J** 1989 May 15;260(1):215–20

D–aspartate oxidase in rat, bovine and sheep kidney cortex is localized in peroxisomes. Zaar K, et al. **Biochem J** 1989 Jul 1;261(1):233–8

Species differences in the effects of bezafibrate, a hypolipidemic agent, on hepatic peroxisome–associated enzymes. Watanabe T, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):367–71

Intermediates of beta–oxidation. Bartlett K, et al. **Biochem Soc Trans** 1988 Jun;16(3):410–6

Comparative enzymology of beta–oxidation. Kunau WH, et al. **Biochem Soc Trans** 1988 Jun;16(3):418–20 (24 ref.)

Biogenesis of enzymes of peroxisomal beta–oxidation. Lazarow PB, et al. **Biochem Soc Trans** 1988 Jun;16(3):410 (17 ref.)

The enzymology of beta–oxidation. Introductory remarks. Sherratt HS. **Biochem Soc Trans** 1988 Jun;16(3):409

Cloning, sequencing, and regulation of rat liver carnitine octanoyltransferase: transcriptional stimulation of the enzyme during peroxisome proliferation. Chatterjee B, et al. **Biochemistry** 1988 Dec 13;27(25):9000–6

Changes in polyamine–oxidizing capacity of peroxisomes under various physiological conditions in rats. Hayashi H, et al. **Biochim Biophys Acta** 1989 May 31;991(2):310–6

Compartmentation of dicarboxylic acid beta–oxidation in rat liver: importance of peroxisomes in the metabolism of dicarboxylic acids. Suzuki H, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):25–30

Changes in peroxisomes and mitochondria in liver of ethionine exposed rats: a biochemical and morphological investigation. Aarsaether N, et al. **Carcinogenesis** 1989 Jun; 10(6):987–94

Developmental patterns of peroxisomal enzymes in amphibian liver during spontaneous and triiodothyronine–induced metamorphosis. Ciolek E, et al. **Comp Biochem Physiol [B]** 1989;93(2):477–84

Intestinal peroxisomes of goldfish (Carassius auratus)—examination for hydrolase, dehydrogenase and carnitine acetyltransferase activities. Temple NJ, et al. **Comp Biochem Physiol [B]** 1979;64(1):57–63

Dehydrogenases of the pentose phosphate pathway in rat liver peroxisomes. Antonenkov VD. **Eur J Biochem** 1989 Jul 15;183(1):75–82

Functional complementation of catalase–defective peroxisomes in a methylotrophic yeast by import of the catalase A from Saccharomyces cerevisiae. Hansen H, et al. **Eur J Biochem** 1989 Sep 1;184(1):173–9

Differential induction of peroxisomal and microsomal fatty–acid–oxidising enzymes by peroxisome proliferators in rat liver and kidney. Characterisation of a renal cytochrome P–450 and implications for peroxisome proliferation. Sharma RK, et al. **Eur J Biochem** 1989 Sep 1;184(1):69–78

Selective induction of peroxisomal enzymes by the hypolipidemic drug bezafibrate. Detection of modulations by automatic image analysis in conjunction with immunoelectron microscopy and immunoblotting. Beier K, et al. **Eur J Cell Biol** 1988 Aug;46(3):383–93

Immunocytochemical analysis of soluble epoxide hydrolase and catalase in mouse and rat hepatocytes demonstrates a peroxisomal localization before and after clofibrate treatment. Hollinshead M, et al. **Eur J Cell Biol** 1988 Aug; 46(3):394–402

Peroxisomes in pigment epithelium and Müller cells of amphibian retina possess D–amino acid oxidase as well as catalase. Beard ME, et al. **Exp Eye Res** 1988 Dec; 47(6):795–806

In vitro translation of cytosolic and peroxisomal epoxide hydrolase and catalase on liver polyribosomes from untreated and clofibrate–treated C57B1/6 mice. Joste V, et al. **FEBS Lett** 1989 May 22;249(1):83–8

Morphometric cytochemistry of diminution of catalase–containing peroxisomes in copper–loaded liver. Homer BL, et al. **Histochem J** 1989 Feb;21(2):63–71

Degradation of uric acid in fish liver peroxisomes. Intraperoxisomal localization of hepatic allantoicase and purification of its peroxisomal membrane–bound form. Hayashi S, et al. **J Biol Chem** 1989 Feb 25;264(6):3211–5

Peroxisomal bile acid–CoA:amino–acid N–acyltransferase in rat liver. Kase BF, et al. **J Biol Chem** 1989 Jun 5; 264(16):9220–3

An enzyme trafficking defect in two patients with primary hyperoxaluria type 1: peroxisomal alanine/glyoxylate aminotransferase rerouted to mitochondria. Danpure CJ, et al. **J Cell Biol** 1989 Apr;108(4):1345–52

A conserved tripeptide sorts proteins to peroxisomes. Gould SJ, et al. **J Cell Biol** 1989 May;108(5):1657–64

Peroxisomal oxidation of pipecolic acid in the rat. Kramar R, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):319–21

Peroxisomal bifunctional enzyme deficiency. Watkins PA, et al. **J Clin Invest** 1989 Mar;83(3):771–7

Heterogeneity of catalase staining in human hepatocellular peroxisomes. Roels F, et al. **J Histochem Cytochem** 1989 Mar;37(3):331–7

Enzymatic heterogeneity in primary hyperoxaluria type 1 (hepatic peroxisomal alanine: glyoxylate aminotransferase deficiency). Danpure CJ, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:205–7

X–linked adrenoleukodystrophy: identification of the primary defect at the level of a deficient peroxisomal very long chain fatty acyl–CoA synthetase using a newly developed method for the isolation of peroxisomes from skin fibroblasts. Wanders RJ, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:173–7

Peroxisomal chain–shortening of prostaglandin F2 alpha. Diczfalusy U, et al. **J Lipid Res** 1988 Dec;29(12):1629–36

Peroxisomal palmityl CoA oxidase activity in ocular tissues and cultured ciliary epithelial cells. Ng MC, et al. **J Ocul Pharmacol** 1989 Spring;5(1):65–70

Peroxisome targeting signal of rat liver acyl–coenzyme A oxidase resides at the carboxy terminus. Miyazawa S, et al. **Mol Cell Biol** 1989 Jan;9(1):83–91

Formation of irregular giant peroxisomes by overproduction of the crystalloid core protein methanol oxidase in the methylotrophic yeast Hansenula polymorpha. Roggenkamp R, et al. **Mol Cell Biol** 1989 Mar;9(3):988–94

Peroxisomal oxidative capacity of brown adipose tissue depends on the thyroid status. Giacobino JP, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):217–25

Nucleotide sequence of human peroxisomal 3–oxoacyl–CoA thiolase. Bout A, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10369

Complete cDNA sequence of human foetal liver peroxisomal 3–oxoacyl–CoA thiolase. Fairbairn LJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3588

Nucleotide sequence of peroxisomal catalase from the yeast Candida tropicalis pK233: identification of an upstream BamHI site polymorphism. Murray WW, et al. **Nucleic Acids Res** 1989 May 11;17(9):3600

Peroxisomal lignoceroyl–CoA ligase deficiency in childhood adrenoleukodystrophy and adrenomyeloneuropathy. Lazo O, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7647–51

Isolation and sequence determination of a cDNA clone for rat peroxisomal urate oxidase: liver–specific expression in the rat. Reddy PG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9081–5

[Peroxisomal disorders—clinical and biochemical studies] Shimozawa N, et al. **No To Hattatsu** 1988 Nov;20(6):480–91 (Eng. Abstr.) **(Jpn)**

[Microbody transition in higher plants] Nishimura M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):377–85 (26 ref.) **(Jpn)**

[Neutral proteinase in peroxisomes from rat liver cells] Komov VP, et al. **Biokhimiia** 1988 Sep;53(9):1532–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Peroxisomal disorders: clinical commentary and future prospects. Wilson GN, et al. **Am J Med Genet** 1988 Jul; 30(3):771–92 (127 ref.)

Biochemical mechanisms of induction of hepatic peroxisome proliferation. Lock EA, et al. **Annu Rev Pharmacol Toxicol** 1989;29:145–63 (119 ref.)

Existence of acetyl–CoA–dependent chain elongation system in hepatic peroxisomes of rat: effects of clofibrate and di–(2–ethylhexyl)phthalate on the activity. Horie S, et al. **Arch Biochem Biophys** 1989 Oct;274(1):64–73

Evidence for functional heterogeneity among microbodies in yeasts. Veenhuis M, et al. **Arch Microbiol** 1989; 151(2):105–10

Role of peroxisomal fatty acid beta–oxidation in ethanol metabolism. Inatomi N, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):418–23

Clofibrate does not induce peroxisomal 3 alpha,7 alpha,12 alpha–trihydroxy–5 beta–cholestanoyl coenzyme A oxidation in rat liver. Evidence that this reaction is catalyzed by an enzyme system different from that of peroxisomal acyl–coenzyme A oxidation. Pedersen JI, et al. **Biochem Int** 1988 Jul;17(1):163–9

On inhibition of peroxisomal beta–oxidation by antimycin A [letter] Hovik R, et al. **Biochem J** 1988 Oct 15; 255(2):745–8

Peroxisome biogenesis revisited. Borst P. **Biochim Biophys Acta** 1989 Jun 1;1008(1):1–13 (110 ref.)

Identification of 3 alpha, 7 alpha, 12 alpha–trihydroxy–5 beta–cholest–24–enoic acid as an intermediate in the peroxisomal conversion of 3 alpha,7 alpha,12 alpha–trihydroxy–5 beta–cholestanoic acid to cholic acid. Ostlund Farrants AK, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):198–202

Induction of peroxisomal beta–oxidation in 7800 C1 Morris hepatoma cells in steady state by fatty acids and fatty acid analogues. Spydevold O, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):72–9

Adrenoleukodystrophy and other peroxisomal disorders that affect the nervous system, including new observations on L–pipecolic acid oxidase in primates. Moser HW, et al. **Brain Dev** 1989;11(2):80–90 (81 ref.)

Stimulation of DNA synthesis but not of peroxisomal beta–oxidation by nafenopin in primary cultures of marmoset hepatocytes. Bieri F, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1077–87

An in vitro demonstration of peroxisome proliferation and increase in peroxisomal beta–oxidation system mRNAs in cultured rat hepatocytes treated with ciprofibrate. Thangada S, et al. **FEBS Lett** 1989 Jul 3;250(2):205–10

Inhibition of peroxisomal beta–oxidation and brain development in rats. Van den Branden C, et al. **GLIA** 1989; 2(4):260–5

Phytanic acid alpha–oxidation and complementation analysis of classical Refsum and peroxisomal disorders. Poll–The BT, et al. **Hum Genet** 1989 Jan;81(2):175–81

Two genes encode the major membrane–associated protein of methanol–induced peroxisomes from Candida boidinii. Garrard LJ, et al. **J Biol Chem** 1989 Aug 15; 264(23):13929–37

Free acetate production by rat hepatocytes during peroxisomal fatty acid and dicarboxylic acid oxidation. Leighton F, et al. **J Biol Chem** 1989 Jun 25; 264(18):10347–50

Alcohol oxidase expressed under nonmethylotrophic conditions is imported, assembled, and enzymatically active in peroxisomes of Hansenula polymorpha. Distel B, et al. **J Cell Biol** 1988 Nov;107(5):1669–75

Subcellular localization of sterol carrier protein–2 in rat hepatocytes: its primary localization to peroxisomes. Keller GA, et al. **J Cell Biol** 1989 Apr;108(4):1353–61

Plasmalogen biosynthesis in the diagnosis of peroxisomal disorders. Kremser K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):315–7

Phytanic acid and very long chain fatty acids in genetic peroxisomal disorders. Molzer B, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):309–14

Bile acid analyses in "pseudo–Zellweger" syndrome; clues to the defect in peroxisomal beta–oxidation. Clayton PT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:165–8

Peroxisomal integral membrane proteins in livers of patients with Zellweger syndrome, infantile Refsum's disease and X–linked adrenoleukodystrophy. Small GM, et al. **J Inherited Metab Dis** 1988;11(4):358–71

Peroxisomes and peroxisomal functions in hyperpipecolic acidaemia. Wanders RJ, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:161–4

Inhibitory effect of phenobarbital on peroxisome biogenesis in mouse hepatocytes. Kanamura S, et al. **J Ultrastruct Mol Struct Res** 1988 Sep;100(3):269–77

Constitutive appearance of peroxisomes in a regulatory mutant of the methylotrophic yeast Hansenula polymorpha. Roggenkamp R. **Mol Gen Genet** 1988 Aug;213(2–3):535–40

Chondrodysplasia punctatas and the peroxisomopathies: overlapping syndrome communities. Wilson GN, et al. **Pathol Immunopathol Res** 1988;7(1–2):113–8 (21 ref.)

Peroxisomal L–pipecolic acid oxidation is deficient in liver from Zellweger syndrome patients. Mihalik SJ, et al. **Pediatr Res** 1989 May;25(5):548–52

Genetic and phenotypic heterogeneity in disorders of peroxisome biogenesis—a complementation study involving cell lines from 19 patients. Roscher AA, et al. **Pediatr Res** 1989 Jul;26(1):67–72

Major peroxisomal membrane polypeptides are synthesized in cultured skin fibroblasts from patients with Zellweger syndrome. Suzuki Y, et al. **Pediatr Res** 1989 Aug; 26(2):150–3

Peroxisomal diseases. Goldfischer SL. **Prog Clin Biol Res** 1988;282:117–37 (130 ref.)

The role of peroxisomes in glycerol ether lipid metabolism. Hajra AK, et al. **Prog Clin Biol Res** 1988;282:99–116 (79 ref.)

Aberration in de novo ether lipid biosynthesis in peroxisomal

disorders. van den Bosch H, et al. **Prog Clin Biol Res** 1988; 282:139–50 (42 ref.)

Glycosomes may provide clues to the import of peroxisomal proteins. Opperdoes FR. **Trends Biochem Sci** 1988 Jul; 13(7):255–60 (27 ref.)

[Production of active oxygen radicals in peroxisome] Ueda M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2730–6 (Jpn)

PATHOLOGY

Pathology of hepatic peroxisomes in chronic hepatitis B and immunosuppression. Reinke P, et al. **Exp Pathol** 1988; 34(2):71–7

Hepatic peroxisomes in adrenoleukodystrophy and related syndromes: cytochemical and morphometric data. Roels F, et al. **Virchows Arch [A]** 1988;413(4):275–85

PHYSIOLOGY

Peroxisomal diseases. Moser HW. **Adv Pediatr** 1989;36:1–38 (182 ref.)

Single-channel analysis of a large conductance channel in peroxisomes from rat liver. Lemmens M, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):351–9

Peroxisomopathies: new developments [letter] Zellweger H. **Dev Med Child Neurol** 1989 Apr;31(2):264–6

Morphological and functional modifications of rat liver peroxisomal subpopulations during cold exposure. Goglia F, et al. **Exp Biol** 1989;48(3):127–33

Cytoplasmic requirement for peroxisome biogenesis in Chinese hamster ovary cells. Allen LA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7012–6

Role of liver peroxisomes in bile acid formation: inborn error of C27-steroid side chain cleavage in peroxisome deficiency (Zellweger syndrome). Kase BF. **Scand J Clin Lab Invest** 1989 Feb;49(1):1–10 (52 ref.)

Failure of the peroxisome proliferator WY-14,643 to initiate growth-selectable foci in rat liver. Cattley RC, et al. **Toxicology** 1989 May 31;56(1):1–7

ULTRASTRUCTURE

Alterations of pyrimidine and nucleic acid synthesis during adaptive growth of liver induced by nafenopin, a peroxisome proliferator. An in vivo study. Seifert J, et al. **Carcinogenesis** 1989 Aug;10(8):1383–8

Microperoxisomes in type II pneumocytes and interstitial cells of postnatal rat lungs. Van Meir F, et al. **Cell Biol Int Rep** 1988 Aug;12(8):579–86

Induction of cytosolic and microsomal epoxide hydrolases in mouse liver by peroxisome proliferators, with special emphasis on structural analogues of 2-ethylhexanoic acid. Lundgren B, et al. **Chem Biol Interact** 1988;68(3–4):219–40

Ultrastructure, peroxisomes and lipid peroxidation in reperfused myocardium. Vaughan DM, et al. **Cytobios** 1988;55(221):71–80

Hepatic peroxisomal abnormalities in abetalipoproteinemia. Collins JC, et al. **Gastroenterology** 1989 Sep;97(3):766–70

Biogenesis of peroxisomes: immunocytochemical investigation of peroxisomal membrane proteins in proliferating rat liver peroxisomes and in catalase-negative membrane loops. Baumgart E, et al. **J Cell Biol** 1989 Jun; 108(6):2221–31

Zellweger-like syndrome with detectable hepatic peroxisomes: a variant form of peroxisomal disorder. Suzuki Y, et al. **J Pediatr** 1988 Nov;113(5):841–5

Ultrastructural and histochemical investigations of Call–Exner bodies in rabbit Graafian follicles. Gosden RG, et al. **J Reprod Fertil** 1989 Mar;85(2):519–26

Reversible phenotypic modulation induced by deprivation of exogenous essential fatty acids. Laposata M, et al. **Lab Invest** 1988 Dec;59(6):838–47

Demonstration of glycosomes (microbodies) in the Bodonid flagellate Trypanoplasma borelli (Protozoa, Kinetoplastida). Opperdoes FR, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):155–63

Myopathy and peroxisomal disease [letter] Sarnat HB. **Pediatr Neurol** 1987 Jan–Feb;3(1):62

Myopathy in an infant with a fatal peroxisomal disorder. Wolff J, et al. **Pediatr Neurol** 1986 May–Jun;2(3):141–6

Biochemical and morphologic aspects of peroxisomes in the human rectal mucosa: diagnosis of Zellweger syndrome simplified by rectal biopsy. Shimozawa N, et al. **Pediatr Res** 1988 Dec;24(6):723–7

Isolation of peroxisome-deficient mutants of Saccharomyces cerevisiae. Erdmann R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5419–23

Proliferation of microbodies in Saccharomyces cerevisiae. Veenhuis M, et al. **Yeast** 1987 Jun;3(2):77–84

MICROCAPSULES see **CAPSULES**

MICROCEBUS see **LEMURIDAE**

MICROCEPHALY

Association of severe microcephaly, short palpebral fissures, micrognathia, growth retardation and early death: a new syndrome. Madokoro H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):186–8

Hirschsprung's disease, distinctive facies, and microcephaly [letter] Bankier A. **J Med Genet** 1989 Apr;26(4):287–8

[Dubowitz syndrome. Presentation of a case] De los Cobos-Villaseñor LF. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):543–5 (Eng. Abstr.) (Spa)

CHEMICALLY INDUCED

Toluene embryopathy: two new cases. Hersh JH. **J Med Genet** 1989 May;26(5):333–7

Retinoic acid causes an anteroposterior transformation in the developing central nervous system. Durston AJ, et al. **Nature** 1989 Jul 13;340(6229):140–4

Maternal cocaine use during pregnancy: effect on the newborn infant. Hadeed AJ, et al. **Pediatrics** 1989 Aug; 84(2):205–10

COMPLICATIONS

Unilateral Peters' syndrome. Evens P, et al. **Bull Soc Belge Ophtalmol** 1987;224:28–37

Autosomal recessive microcephaly, mental retardation with nonpigmentary retinopathy and a distinctive electroretinogram. Harbord MG, et al. **Neuropediatrics** 1989 Aug;20(3):139–41

DIAGNOSIS

A syndrome of progressive pancytopenia with microcephaly, cerebellar hypoplasia and growth failure. Hreidarsson S, et al. **Acta Paediatr Scand** 1988 Sep;77(5):773–5

[Diagnostic criteria of the cerebro-oculo-facio-skeletal syndrome or Pena-Shokeir II syndrome] Butomo IV, et al. **Pediatriia** 1988;(4):89–91 (Rus)

GENETICS

Angelman and Prader-Willi syndromes share a common chromosome 15 deletion but differ in parental origin of the deletion. Knoll JH, et al. **Am J Med Genet** 1989 Feb; 32(2):285–90

Two brothers with facial anomalies, microcephaly, hypoplastic genitalia, and a failure of psychomotor development. MacDermot KD, et al. **Am J Med Genet** 1989 Jan;32(1):60–2

Neu-Laxova syndrome: pathological, radiological, and prenatal findings in a stillborn female. Russo R, et al. **Am J Med Genet** 1989 Jan;32(1):136–9

Linkage studies with the gene for an X-linked syndrome of mental retardation, microcephaly and spastic diplegia (MRX2). Sutherland GR, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):493–508

GOMBO syndrome of growth retardation, ocular abnormalities, microcephaly, brachydactyly, and oligophrenia: a possible "new" recessively inherited MCA/MR syndrome. Verloes A, et al. **Am J Med Genet** 1989 Jan;32(1):15–8

Interstitial deletion of the long arm of chromosome 6. Chery M, et al. **Ann Genet** 1989;32(2):82–6

Familial achalasia, microcephaly, and mental retardation. Case report and review of literature. Khalifa MM. **Clin Pediatr (Phila)** 1988 Oct;27(10):509–12 (26 ref.)

Segregation frequency in microcephaly. Sujatha M, et al. **Hum Genet** 1989 Mar;81(4):388–90

Siblings with chromosome mosaicism, microcephaly, and growth retardation: the phenotypic expression of a human mitotic mutant? Tolmie JL, et al. **Hum Genet** 1988 Oct; 80(2):197–200

Microcephaly in familial holoprosencephaly. Ardinger HH, et al. **J Craniofac Genet Dev Biol** 1988;8(1):53–61

Microcephaly, mental retardation, cataracts, and hypogonadism in sibs: Martsolf's syndrome. Harbord MG, et al. **J Med Genet** 1989 Jun;26(6):397–400

Unknown syndrome: Hirschsprung's disease, microcephaly, and iris coloboma: a new syndrome of defective neuronal migration. Hurst JA, et al. **J Med Genet** 1988 Jul; 25(7):494–7

Autosomal dominant isolated ('uncomplicated') microcephaly. Merlob P, et al. **J Med Genet** 1988 Nov; 25(11):750–3

A case of interstitial deletion of 10q25.2——q26.1. Rooney DE, et al. **J Med Genet** 1989 Jan;26(1):58–60

A terminal deletion (14)(q31.1) in a child with microcephaly, narrow palate, gingival hypertrophy, protuberant ears, and mild mental retardation. Yen FS, et al. **J Med Genet** 1989 Feb;26(2):130–3

Microcephaly, holoprosencephaly, hypokinesia—second report of a new syndrome. Hockey A, et al. **Prenat Diagn** 1988 Nov;8(9):683–6

[Seckel dwarfism based on a personal case] Howanietz H, et al. **Klin Padiatr** 1989 Mar–Apr;201(2):139–41 (Eng. Abstr.) (Ger)

[7p-deletion syndrome] Hinkel GK, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):824–7 (Eng. Abstr.) (Ger)

[Neuroectodermal dysplasia in 2 Uzbek families] Dadali EL, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):58–61 (Eng. Abstr.) (Rus)

[Microcephalia vera. Genetic heterogeneity and mental retardation] Baldellou Vázquez A, et al. **An Esp Pediatr** 1988 Nov;29(5):397–400 (Eng. Abstr.) (Spa)

MICROBIOLOGY

Congenital cytomegalovirus infection and Potter's disease [letter] Wong TY, et al. **South Med J** 1988 Dec;81(12):1597

PATHOLOGY

[Cerebellar agenesia associated with microencephaly and agyria: report of an autopsied case in a newborn infant and a review of the literature] Pittella JE, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):385–92 (55 ref.) (Eng. Abstr.) (Por)

PHYSIOPATHOLOGY

Autoshaping in micrencephalic rats. Goldstein LH, et al. **Behav Neurosci** 1989 Jun;103(3):566–73

Impaired Biel and radial arm maze learning in rats with methylnitrosourea-induced microcephaly. Akaike M, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):327–32

[EEG findings in microcephaly with special reference to spike potentials] Fehlow P. **Padiatr Grenzgeb** 1988; 27(6):485–8 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[Cerebro-costo-mandibular syndrome] Fidalgo Alvarez I, et al. **An Esp Pediatr** 1988 Jun;28(6):591–3 (Spa)

MICROCHEMISTRY

INSTRUMENTATION

[Construction of automated micro-stopped flow apparatus and its application as a real-time analyzer in liquid chromatography] Takahashi K, et al. **Seikagaku** 1988 Dec; 60(12):1390–4 (Jpn)

[Precision and accuracy of automatic micropipettes (published erratum appears in Rev Invest Clin 1989 Apr–Jun;41(2):190)] Salas R, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):207–10 (Eng. Abstr.) (Spa)

METHODS

Micro-method for the measurement of carbonic anhydrase activity in cellular homogenates. Brion LP, et al. **Anal Biochem** 1988 Nov 15;175(1):289–97

[Micro-determination of protein concentration by dry weight method] Nozaki Y. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(15):2613–22 (Jpn)

[Micro-determination of protein concentration by dry weight method (II)] Nozaki Y. **Tanpakushitsu Kakusan Koso** 1989 Jan;34(1):52–7 (Jpn)

MICROCIRCULATION

Leukocyte endothelium adhesion and microvascular hemodynamics. Lipowsky HH, et al. **Adv Exp Med Biol** 1988;242:85–93

Microcirculatory disturbances in endotoxin-induced disseminated intravascular coagulation. The effects of heparin and gabexate mesilate on locomotive and metabolic changes of neutrophils. Suzuki M, et al. **Adv Exp Med Biol** 1988;242:135–41

Real time multivariable laser Doppler analysis of arterial and venous compromise. Phillips JG, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):26–31

Identification and characterization of the blood vessels of solid tumors that are leaky to circulating macromolecules. Dvorak HF, et al. **Am J Pathol** 1988 Oct;133(1):95–109

Intestinal microvascular exchange during lipid absorption. Granger DN, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G690–5

Intravital-microscopic observations on the intravascular behavior of blood cell components during dietary-induced hyperlipidemia in the male rabbit. Asano M, et al. **Biorheology** 1988;25(1–2):329–38

Substance P activates leukocytes and platelets in rabbit microvessels. Ohlén A, et al. **Blood Vessels** 1989;26(2):84–94

Pharmacological evidence for A1 and A2 adenosine receptors in the skin microcirculation. Stojanov I, et al. **Circ Res** 1989 Jul;65(1):176–84

Hypoperfusion of the intestinal microcirculation without decreased cardiac output during live Escherichia coli sepsis in rats. Whitworth PW, et al. **Circ Shock** 1989 Feb; 27(2):111–22

The diabetic arteriole: the impact of diabetic microangiopathy on microcirculatory control. Kastrup J. **Dan Med Bull** 1988 Aug;35(4):334–45 (113 ref.)

Abstracts presented at the scientific meeting of the British Microcirculation Society. Manchester/U.K., April 7–8, 1988. **Int J Microcirc Clin Exp** 1988 Nov;7(4):373–86

Abstracts presented at the 19th annual meeting of the Nordic Microcirculatory Society. Are, Sweden, February 2–4, 1989. **Int J Microcirc Clin Exp** 1989 Jul;8(3):321–42

Abstracts presented at the 4th annual meeting of the Benelux Society for Microcirculation. Amsterdam/The Netherlands, February 10, 1989. **Int J Microcirc Clin Exp** 1989 Jul;8(3):343–50

A versatile video image analysis system for microcirculatory research. Pries AR. **Int J Microcirc Clin Exp** 1988 Nov; 7(4):327–45

Estimation of amputation level with a laser Doppler flowmeter. Gebuhr P, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):514–7

Microvascular endothelial cell culture. Karasek MA. **J Invest Dermatol** 1989 Aug;93(2 Suppl):33S–38S (55 ref.)

Hypertension alters microvascular responses in skeletal muscle to hyperdynamic bacteremia and hypodynamic Escherichia coli sepsis. Lübbe AS, et al. **J Surg Res** 1989

Feb;46(2):108–17
EDRF and microvascular constriction after angioplasty [letter] Vallance P. **Lancet** 1989 May 20;1(8647):1139
Histamine and microcirculation. Schayer RW. **Life Sci** 1974 Aug 1;15(3):391–401 (34 ref.)
A two-fluid model for hematocrit distribution in microvascular networks. Hokkanen JE. **Med Phys** 1989 May–Jun;16(3):319–25
Vascular isolation of the rat cremaster muscle. Anderson GL, et al. **Microvasc Res** 1988 Jul;36(1):56–63
The Benjamin W. Zweifach Award lecture. Functional and structural "autoregulation"—some personal considerations concerning the century-old development of these microvascular concepts. Folkow B. **Microvasc Res** 1989 May;37(3):242–55 (54 ref.)
Role of flow dispersion in the computation of microvascular flows by the dual-slit method. Lee JS, et al. **Microvasc Res** 1989 May;37(3):280–8
Numerical study of asymmetric flows of red blood cells in capillaries. Sugihara-Seki M, et al. **Microvasc Res** 1988 Jul; 36(1):64–74
The microvascular effects of photodynamic therapy: evidence for a possible role of cyclooxygenase products. Reed MW, et al. **Photochem Photobiol** 1989 Sep; 50(3):419–23
Neutrophil-mediated vascular injury in shock and multiple organ failure. Vedder NB, et al. **Prog Clin Biol Res** 1989; 299:181–91 (48 ref.)
Ranking corrosion efficiency: a Latin square study on rat lung microvascular corrosion casts. Schraufnagel DE. **Scanning Microsc** 1989 Mar;3(1):299–302; discussion 302–4
Long-term culture of microvascular endothelial cells derived from Mongolian gerbil brain. Minakawa T. **Stroke** 1989 Jul;20(7):947–51
[Hemorheology, hemodynamics and microcirculation. 1] Larcan A, et al. **J Mal Vasc** 1989;14(3):240–53 (0 ref.) (Eng. Abstr.) **(Fre)**
[The blood vessel system of the tendon of the long head of the biceps brachii muscle] Korn S, et al. **Unfallchirurg** 1989 Jan;92(1):43–7 (Eng. Abstr.) **(Ger)**
[Hemorheology and microcirculation] Pretolani E. **G Clin Med** 1988 Oct;69(10):601–4 **(Ita)**
[Digital blood flow in peripheral vascular diseases. Action of drugs: buflomedil] Frausini G, et al. **Minerva Cardioangiol** 1988 Jun;36(6):319–22 (Eng. Abstr.) **(Ita)**
[The effect of hemodilution on capillary blood flow and arteriovenous shunt after resuscitation in dogs] Yano H, et al. **Masui** 1989 May;38(5):614–24 (Eng. Abstr.) **(Jpn)**
[State of pulmonary circulation in dust-induced bronchitis as shown by perfusion pulmonary scintigraphy] Livergant IuE, et al. **Gig Tr Prof Zabol** 1989;(6):52–3 **(Rus)**
[Correction of disorders of hemostasis, blood rheology and microcirculation in the postoperative period] Pavlovskiĭ DP. **Khirurgiia (Mosk)** 1989 Apr;(4):123–6 **(Rus)**
[State of carbohydrate metabolism and the microcirculation in ischemic muscles of the extremities in embolism of the aorta and the magistral arteries] Kosnikova IV, et al. **Klin Khir** 1988;(7):25–6 (Eng. Abstr.) **(Rus)**
[Disorders of microcirculation and rheologic properties of the blood in patients with acute pancreatitis] Petrushova LD. **Klin Khir** 1988;(12):29–31 (Eng. Abstr.) **(Rus)**
[Systemic thrombotic microangiopathy secondary to diclofenac (letter)] Claros González I, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):396 **(Spa)**

ANATOMY & HISTOLOGY

Computer simulation of cerebral microhemodynamics. Hudetz AG, et al. **Adv Exp Med Biol** 1989;248:293–304
A microcomputer-based system for mapping microvascular networks. Wu CH, et al. **Int J Microcirc Clin Exp** 1989 Jul;8(3):303–11
Red cell distribution at microvascular bifurcations. Pries AR, et al. **Microvasc Res** 1989 Jul;38(1):81–101
Microvascular patterns of the hard palatine mucosa in the Japanese monkey (Macaca fuscata). Kajiwara K. **Okajimas Folia Anat Jpn** 1989 May;66(1):39–51

CYTOLOGY

Haematocrit distribution in rabbit tenuissimus muscle. Ley K, et al. **Acta Physiol Scand** 1988 Mar;132(3):373–83

DRUG EFFECTS

Chronic administration of a gonadotropin-releasing hormone (GnRH) agonist affects testicular microvasculature. Mayerhofer A, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):75–80
An electrophysiological study of microvascular permeability and its modulation by chemical mediators. Olesen SP. **Acta Physiol Scand Suppl** 1989;579:1–28
Effects of isradipine and other calcium antagonists on arteriovenous-shunt flow in anesthetized rabbits and cats. Hof RP. **Am J Med** 1989 Apr 17;86(4A):40–9
Influence of endothelin on piglet cerebral microcirculation. Armstead WM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H707–10
Effects of TRH on blood flow and the microcirculation. Koskinen LO. **Ann N Y Acad Sci** 1989;553:353–69 (73 ref.)
Magnesium salts exert direct vasodilator effects on rat cremaster muscle microcirculation. Nagai I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:194–214
A note on the drug-induced arterialization of venous blood in schizophrenics: possible microcirculation disturbances. Takei M. **Biol Psychiatry** 1989 Jan;25(1):110–4
Endothelin induces potent microvascular constriction. Brain SD, et al. **Br J Pharmacol** 1988 Dec;95(4):1005–7
Etodolac, a new nonsteroidal anti-inflammatory drug: gastrointestinal microbleeding and endoscopic studies. Lanza FL, et al. **Clin Rheumatol** 1989 Mar;8 Suppl 1:5–15 (43 ref.)
Effects of nedocromil sodium on airway microvascular leakage and neural reflexes. Barnes PJ. **Drugs** 1989;37 Suppl 1:94–100; discussion 127–36 (34 ref.)
Angiotensin reactivity in the cheek pouch of the renovascular hypertensive hamster. Myers TO, et al. **Hypertension** 1988 Oct;12(4):373–9
Pharmacoclinical study of the action of vinburnin versus placebo: study of the hemodynamic, microcirculatory and rheological effects in angiopathy of the lower limbs in diabetes mellitus. Le Devehat C, et al. **Int Angiol** 1989 Jan–Mar;8(1):57–61
Calcium dobesilate and its effects on hemorheology and microcirculation. Költringer P, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):500–2
The effect of continuous subcutaneous insulin infusion (CSII) on microvascular blood flow in diabetes mellitus. Tymms DJ, et al. **Int J Microcirc Clin Exp** 1988 Nov;7(4):347–56
Evaluation of tumor energy metabolism and microvascular blood flow after glucose or mannitol administration using 31P nuclear magnetic resonance spectroscopy and laser Doppler flowmetry. Okunieff P, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1493–500
Endothelin-1: demonstration of potent effects on the microcirculation of humans and other species. Brain SD, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S147–9; discussion S150
The effect of photodynamic therapy on the microcirculation. Reed MW, et al. **J Surg Res** 1988 Nov;45(5):452–9
Suloctidil increases the rat brain cortex microvascular regeneration after a lesion. De Paermentier F, et al. **Life Sci** 1989;44(1):41–7
Acute microvascular effects of the chemotactic peptide N-formyl-methionyl-leucyl-phenylalanine: comparisons with leukotriene B4. Lewis RE, et al. **Microvasc Res** 1989 Jan;37(1):53–69
Microvascular effects of endothelin in the rabbit tenuissimus muscle and hamster cheek pouch. Ohlén A, et al. **Microvasc Res** 1989 Jan;37(1):115–8
Evaluation of capillary permeability and microcirculation in patients with chronic venous hypertension treated with venoruton by the vacuum suction chamber (VSC) device and laser-Doppler flowmetry. Belcaro G, et al. **Phlebologie** 1988 Nov–Dec;41(4):847–56
Blood flow distribution with adrenergic and histaminergic antagonists. Baker CH, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):260–7
A comparison of the effects of photodynamic therapy on normal and tumor blood vessels in the rat microcirculation. Reed MW, et al. **Radiat Res** 1989 Sep;119(3):542–52
Microvascular response to locally injected collagenase. An experimental investigation in hamsters and rabbits. Rydevik B, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(1):17–21
Stable prostacyclin analogue preventing microcirculatory derangement in experimental cerebral ischemia in cats. Tanaka K, et al. **Stroke** 1988 Oct;19(10):1267–74
[The effect of dalargin on systemic hemodynamics and microcirculation in experimental traumatic shock] Donskikh EA, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb; (1):39–42 (Eng. Abstr.) **(Rus)**
[Effect of hyperoxia on systemic hemodynamics, microcirculation, and oxygen regimen in rats in replacement of massive blood loss by albumin] Kochetygov NI, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):35–9 (Eng. Abstr.) **(Rus)**
[Various parameters of microcirculation in the postischemic period during esculamine administration] Speranskaia TV, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):55–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

[Ultrastructural regularities of new growth of secondary micro blood vessels in the prenatal period of human morphogenesis] Bobrik II, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):23–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. Björnberg J, et al. **Acta Physiol Scand** 1989 Feb; 135(2):83–94
Role of brain microvessels and choroid plexus in cerebral metabolism of leukotrienes. Lindgren JA, et al. **Ann N Y Acad Sci** 1989;559:112–20
Chronic exposure to high glucose decreases myo-inositol in cultured cerebral microvascular pericytes but not in endothelium. Sussman I, et al. **Diabetologia** 1988 Oct; 31(10):771–5
Endothelin-1 from pulmonary artery and microvessels acts on vascular and airway smooth muscle. Ryan US, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S57–62 discussion S74
Direct measurement of interstitial convection and diffusion of albumin in normal and neoplastic tissues by fluorescence photobleaching. Chary SR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5385–9

PATHOLOGY

Mechanisms of oxidant-mediated microvascular injury following reperfusion of the ischemic intestine. Zimmerman BJ, et al. **Basic Life Sci** 1988;49:881–6
Biomechanical interactions of cancer cells with the microvasculature during metastasis. Weiss L, et al. **Cell Biophys** 1989 Apr;14(2):187–215 (111 ref.)
Interactions between cancer cells and the microvasculature: a rate-regulator for metastasis. Weiss L, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):127–67 (256 ref.)
Progress in application of the image analysing system QUANTIMET 720 in the histomorphometry of the microcirculatory system. Blödner R, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):115–20
Progress in the histomorphometry of the microcirculatory system. Herrmann HJ, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):109–14 (23 ref.)
Morphologic and hemodynamic comparison of tumor and healing normal tissue microvasculature. Dewhirst MW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):91–9
Microcirculatory changes in cremaster muscle during early spontaneous hypertension in the rat. Struyker-Boudier HA, et al. **J Hypertens Suppl** 1988 Dec;6(4):S185–7
Cellular interactions in sepsis induced organ failure. Zeck-Kapp G, et al. **Prog Clin Biol Res** 1989;308:113–8 (9 ref.)
Early microvascular changes in small intestinal allografts. Crane PW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2906
Microvascular destruction in renal transplant rejection. Bishop GA, et al. **Transplantation** 1989 Sep;48(3):408–14
Evidence that cold preservation-induced microcirculatory injury in liver allografts is not mediated by oxygen-free radicals or cell swelling in the rat. Holloway CM, et al. **Transplantation** 1989 Aug;48(2):179–88
[The microcirculatory system and smooth muscle cells of major arteries in various rheumatic diseases] Kaminskiĭ IuV, et al. **Arkh Patol** 1989;51(4):9–15 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Physiology and pathobiology of the microcirculation. Granger HJ, et al. **Am J Otolaryngol** 1988 Nov–Dec; 9(6):264–77 (77 ref.)
Effect of hematocrit on microvascular pressures in 3- to 5-wk-old rabbit lungs. Raj JU, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H766–71
Role of arachidonic acid metabolites in ethanol vasoaction in rat gastric submucosa. Yonei Y, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G731–7
Mechanics of a thin walled collapsible microtube. Sipkema P, et al. **Ann Biomed Eng** 1989;17(3):203–17
Velocity profiles of blood flow in microvessels measured by ten channels' dual-sensor method. Sato M, et al. **Biorheology** 1988;25(1–2):279–88
A couple stress model of blood flow in the microcirculation. Pal D, et al. **Bull Math Biol** 1988;50(4):329–44
Observations on the photoplethysmograph pulse derived from a laser Doppler flowmeter. Almond NE, et al. **Clin Phys Physiol Meas** 1989 May;10(2):137–45
Microvascular networks: fractal structure, hemodynamic properties and physiological functions. A satellite symposium of the XXXI International Congress of Physiological Sciences. July 16–19, 1989. Abstracts. **Int J Microcirc Clin Exp** 1989 May;8 Suppl 1:S1–58
The effect of long-term activity on the microvasculature of rat glycolytic skeletal muscle. Dawson JM, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):53–69
Site of recruitment in the pulmonary microcirculation. Hanson WL, et al. **J Appl Physiol** 1989 May;66(5):2079–83
Fringe mode transmittance laser Doppler microscope anemometer: its adaptation for measurement in the microcirculation. Einav S, et al. **J Biomed Eng** 1988 Oct; 10(5):393–9
The effects of slip velocity at a membrane surface on blood flow in the microcirculation. Pal D, et al. **J Math Biol** 1988;26(6):705–12
Microvascular responses to chronic hypoxia by the chick chorioallantoic membrane: a morphometric analysis. Dusseau JW, et al. **Microvasc Res** 1989 Mar;37(2):138–47
Leukocyte phagocytosis and alterations in microvascular integrity elicited by FITC-dextran 150 and epi-illumination in the microcirculation of the hamster cheek pouch. Gawlowski DM, et al. **Microvasc Res** 1989 Jan;37(1):1–15
Arteriovenous distribution of transit times in cremaster muscle of the rat. McKay CB, et al. **Microvasc Res** 1988 Jul;36(1):75–91
Importance of light dose in fluorescent microscopy. Reed MW, et al. **Microvasc Res** 1988 Jul;36(1):104–7
Responses of the microcirculation to hot and cold environments. Grayson J. **Pharmacol Ther** 1988; 38(2):201–14 (41 ref.)
Mathematical analysis of transport and exchange in skeletal muscle. Salathe EP, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):303–18
Functional sympatholysis in the microcirculation of the cat

sartorius muscle. Dodd LR, et al.
Proc West Pharmacol Soc 1988;31:121–3
The influence of the fibrinolytic system on the affinity of fibrinogen for the endothelial–plasma interface. Witte S. **Thromb Res** 1988 Oct 15;52(2):111–7
Very high frequency pulsed Doppler apparatus. Berson M, et al. **Ultrasound Med Biol** 1989;15(2):121–31
[Morphologic mechanisms of blood flow regulation in the hemomicrocirculatory system of the human heart during ontogenesis] Makovetskiĭ VD, et al.
Arkh Anat Gistol Embriol 1989 Feb;96(2):26–33 (Eng. Abstr.) (Rus)
[Pathways of microvascularization of the peripheral nerves and their plasticity] Mel'man EP.
Arkh Anat Gistol Embriol 1988 Dec;95(12):72–9 (64 ref.) (Rus)

PHYSIOPATHOLOGY

Microchannels in prediabetes. Camerini-Davalos RA, et al. **Adv Exp Med Biol** 1988;246:197–203
Microvascular responses of intact and adrenal medullectomized rats to hemorrhagic shock. Baker CH, et al. **Circ Shock** 1988 Oct;26(2):203–18
The endothelium partially obscures enhanced microvessel reactivity in DOCA hypertensive rats. King CM, et al. **Hypertension** 1988 Oct;12(4):420–7
Hemodynamics and microcirculatory alterations in reduced renal mass hypertension. Lombard JH, et al. **Hypertension** 1989 Feb;13(2):128–38
Microvascular sites and characteristics of sickle cell adhesion to vascular endothelium in shear flow conditions: pathophysiological implications. Kaul DK, et al.
Proc Natl Acad Sci U S A 1989 May;86(9):3356–60
[changes in the microcirculation system during pain syndrome of spinal etiology] Kryzhanovskiĭ GN, et al.
Biull Eksp Biol Med 1988 Sep;106(9):280–2 (Eng. Abstr.) (Rus)
[Increase in the structural component of the vascular bed resistance in hypertension and its regulatory sequelae] Rodionov IM, et al. **Fiziol Zh SSSR** 1988 Nov; 74(11):1580–7 (34 ref.) (Eng. Abstr.) (Rus)
[Microcirculatory disorders in the system of conjunctival vessels in initial manifestations of inadequate blood supply to the brain] Iusupov AIu, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):41–3 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Delayed effects of neutron irradiation on central nervous system microvasculature in the rat. Goodman JH, et al. **Basic Life Sci** 1989;50:87–93
Protection of microvasculature in rat brain against late radiation injury by gammaphos. Plotnikova ED, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1197–201

RADIOGRAPHY

[Potential role of peritumoral vascular modifications on the peripheral enhancement of dynamic computerized radiography of hepatic metastases] Tshibwabwa-Tumba E, et al. **J Belge Radiol** 1988;71(4):471–4 (Eng. Abstr.) (Fre)

SURGERY

A new microvascular "sleeve" anastomosis. Duminy FJ. **J Surg Res** 1989 Mar;46(3):189–94
Posterior fossa partial trigeminal rhizotomy: an alternative to microvascular decompression. Gelber BR, et al. **Nebr Med J** 1989 May;74(5):105–8
A technique to prevent aneurysm formation in microvascular anastomoses. van den Broek TA, et al.
Z Exp Chir Transplant Kunstliche Organe 1988;21(4):182–4

ULTRASTRUCTURE

Experimentally induced bluetongue virus infection in white-tailed deer: ultrastructural findings. Howerth EW, et al. **Am J Vet Res** 1988 Nov;49(11):1914–22
Changes in density and architecture of microvessels of the rat mammary gland during pregnancy and lactation. Yasugi T, et al. **Arch Histol Cytol** 1989 May;52(2):115–22
Functional sorting of actin isoforms in microvascular pericytes. DeNofrio D, et al. **J Cell Biol** 1989 Jul; 109(1):191–202
Response of cerebral microvasculature to brain injury. Maxwell WL, et al. **J Pathol** 1988 Aug;155(4):327–35
Photodynamic therapy induced ultrastructural alterations in microvasculature of the rat cremaster muscle. Tseng MT, et al. **Photochem Photobiol** 1988 Nov;48(5):675–81
Placentation in the rat: a sem study of microvascular casts. Christofferson R, et al. **Prog Clin Biol Res** 1989;296:435–42
Corrosion casts in the microcirculation of skeletal muscle. Gaudio E, et al. **Prog Clin Biol Res** 1989;295:443–50
Scanning and transmission electron microscopic studies on the vascular system of xenotransplanted human tumors on nude mice. Konerding MA, et al. **Prog Clin Biol Res** 1989; 295:475–80
Microcirculation of the genital tract of the female rabbit during estrus and pregnancy. Kühnel W, et al.
Prog Clin Biol Res 1989;296:383–97
Morphometry of corrosion casts. Lametschwandtner A, et al. **Prog Clin Biol Res** 1989;295:427–33
Combined microcorrosion casts of maternal and fetal placental vasculature. A new method of characterizing different placental types. Leiser R, et al.
Prog Clin Biol Res 1989;296:421–33
Scanning electron microscopy of microvessels and perivascular cells in different organs after KOH digestion. Maggioni A, et al. **Prog Clin Biol Res** 1989;295:469–74
Application of the corrosion casts method to the anuran amphibian eye and mammalian cochlea. Miodoński AJ, et al. **Prog Clin Biol Res** 1989;295:527–35
Corrosion casts in liver and stomach microcirculation. Ohtani O. **Prog Clin Biol Res** 1989;295:317–26
Scanning electron microscopic study of the microcirculation of the rabbit's anterior uvea. O'Neill JG, et al.
Prog Clin Biol Res 1989;295:515–9
Design of microvasculature and gas exchange. Weibel ER. **Prog Clin Biol Res** 1989;295:147–55
[Ultrastructural organization of vessels of the slug (Agriolimax agrestis)] Gurina OIu, et al.
Arkh Anat Gistol Embriol 1988 Oct;95(10):51–5 (Eng. Abstr.) (Rus)

MICROCLIMATE see under **CLIMATE**

MICROCOCCACEAE

CLASSIFICATION

Characteristics of coagulase-negative staphylococci that help differentiate these species and other members of the family Micrococcaceae. Hébert GA, et al. **J Clin Microbiol** 1988 Oct;26(10):1939–49

DRUG EFFECTS

Endocarditis caused by relatively penicillin-resistant Stomatococcus mucilaginosus. Pinsky RL, et al.
J Clin Microbiol 1989 Jan;27(1):215–6
[Antibiotic sensitivity of 32 strains of Stomatococcus mucilaginosus in oral medicine patients in community practice] Chomarat M, et al. **Pathol Biol (Paris)** 1989 May; 37(5):378–81 (Eng. Abstr.) (Fre)

GENETICS

Nucleotide sequences of 5S ribosomal RNAs of Planococcus citreus, Planococcus kocurii and Sporosarcina ureae. Park JS, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10358

ISOLATION & PURIFICATION

Stomatococcus mucilaginosus catheter-associated infection with septicemia. Poirier LP, et al. **J Clin Microbiol** 1989 May;27(5):1125–6
Stomatococcus mucilaginosus as an agent of CAPD peritonitis. Lanzendörfer H, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):326–8

MICROCOCCAL NUCLEASE

Effects of denaturants at low concentrations on the reversible denaturation of staphylococcal nuclease. Shortle D, et al. **Arch Biochem Biophys** 1989 Jul;272(1):103–13
Hydrogen-1 NMR evidence for three interconverting forms of staphylococcal nuclease: effects of mutations and solution conditions on their distribution [published erratum appears in Biochemistry 1989 Apr 18;28(8):3628] Alexandrescu AT, et al. **Biochemistry** 1989 Jan 10; 28(1):204–11
A magnetization-transfer nuclear magnetic resonance study of the folding of staphylococcal nuclease. Evans PA, et al. **Biochemistry** 1989 Jan 10;28(1):362–70
NMR signal assignments of amide protons in the alpha-helical domains of staphylococcal nuclease. Torchia DA, et al. **Biochemistry** 1988 Jul 12;27(14):5135–41
Staphylococcal nuclease: sequential assignments and solution structure. Torchia DA, et al. **Biochemistry** 1989 Jun 27; 28(13):5509–24
Staphylococcal nuclease high-performance liquid chromatographic characterization of diaminooctane-modified DNA and its biotin and fluorescein derivatives. Cecchini DJ, et al.
J Chromatogr 1988 Jul 1;444:97–106
Nuclease digestion of transcriptionally active chromatin. Bellard M, et al. **Methods Enzymol** 1989;170:317–46
Transfer of a beta-turn structure to a new protein context. Hynes TR, et al. **Nature** 1989 May 4;339(6219):73–6
Micrococcal nuclease as a probe for bound and distorted DNA in lac transcription and repression complexes. Zhang L, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5017–28

ANALYSIS

Hydrogen-1 nuclear magnetic resonance studies of staphylococcal nuclease variant H124L: pH dependence of histidines and tyrosines. Chinami M, et al.
Arch Biochem Biophys 1989 Apr;270(1):126–36
The crystal structure of the ternary complex of staphylococcal nuclease, Ca2+, and the inhibitor pdTp, refined at 1.65 A. Loll PJ, et al. **Proteins** 1989;5(3):183–201
[Thermonuclease assay—a rapid method for screening Staphylococcus aureus food-poisoning] Xia SR.
Chung Hua Yu Fang I Hsueh Tsa Chih 1988 May; 22(3):164–6 (Eng. Abstr.) (Chi)

BIOSYNTHESIS

Staphylococcus aureus, thermostable nuclease and staphylococcal enterotoxins in raw ewes' milk Manchego cheese. Nuñez M, et al. **J Appl Bacteriol** 1988 Jul; 65(1):29–34

DIAGNOSTIC USE

[Study of the age-related features of the structural state of rat liver cell chromatin using micrococcal nuclease and circular dichroism] Konoplia EF, et al. **Biokhimiia** 1988 Nov;53(11):1876–82 (Eng. Abstr.) (Rus)

GENETICS

Residual structure in large fragments of staphylococcal nuclease: effects of amino acid substitutions. Shortle D, et al. **Biochemistry** 1989 Feb 7;28(3):936–44
Introduction of a metal-dependent regulatory switch into an enzyme [published erratum appears in J Biol Chem 1989 Jun 5;264(16):9707] Corey DR, et al. **J Biol Chem** 1989 Mar 5;264(7):3666–9
Crystallization and preliminary X-ray analysis of a quadruple mutant of staphylococcal nuclease. Loll PJ, et al.
J Biol Chem 1988 Dec 5;263(34):18190–2

IMMUNOLOGY

Generation and characterization of monoclonal antibodies against Staphylococcus aureus thermonuclease. Brakstad OG, et al. **APMIS** 1989 Feb;97(2):166–74
Relative contribution of "determinant selection" and "holes in the T-cell repertoire" to T-cell responses. Schaeffer EB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4649–53

METABOLISM

Behavior and application of immobilized micrococcal nuclease. Alcantara A, et al. **Ann N Y Acad Sci** 1988; 542:1–6
Native chromatin and damage induced by nuclease. Nicolini C, et al. **Biochem Biophys Res Commun** 1988 Sep 30; 155(3):1396–403
Calculations of free energy profiles for the staphylococcal nuclease catalyzed reaction. Aqvist J, et al.
Biochemistry 1989 May 30;28(11):4680–9
Staphylococcal nuclease active-site amino acids: pH dependence of tyrosines and arginines by 13C NMR and correlation with kinetic studies. Grissom CB, et al.
Biochemistry 1989 Mar 7;28(5):2116–24
Electron spin echo modulation and nuclear relaxation studies of staphylococcal nuclease and its metal-coordinating mutants. Serpersu EH, et al. **Biochemistry** 1988 Oct 18; 27(21):8034–44
Kinetic and magnetic resonance studies of the glutamate-43 to serine mutant of staphylococcal nuclease. Serpersu EH, et al. **Biochemistry** 1989 Feb 21;28(4):1539–48
Stability mutants of staphylococcal nuclease: large compensating enthalpy-entropy changes for the reversible denaturation reaction. Shortle D, et al. **Biochemistry** 1988 Jun 28;27(13):4761–8
Staphylococcal nuclease: sequential assignments and solution structure. Torchia DA, et al. **Biochemistry** 1989 Jun 27; 28(13):5509–24
Fluorescence lifetime studies with staphylococcal nuclease and its site-directed mutant. Test of the hypothesis that proline isomerism is the basis for nonexponential decays. Eftink MR, et al. **Biophys J** 1989 Mar;55(3):575–9
Intranuclear distribution of rat liver glucocorticoid receptors by nuclease digestion in a cell-free system. Sato N, et al. **Endocr Res** 1988–89;14(4):243–62
Micrococcal nuclease: its specificity and use for chromatin analysis. Telford DJ, et al. **Int J Biochem** 1989;21(2):127–37 (122 ref.)
Site-selective cleavage of structured RNA by a staphylococcal nuclease-DNA hybrid. Zuckermann RN, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1766–70
[Stability of DNA–protein interactions in chromatin fractions with different sensitivity to nucleases] S'lakste NI, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct;(10):30–4 (Eng. Abstr.) (Rus)

MICROCOCCUS

ANALYSIS

Transverse and lateral distribution of phospholipids and glycolipids in the membrane of the bacterium Micrococcus luteus. de Bony J, et al. **Biochemistry** 1989 May 2; 28(9):3728–37

DRUG EFFECTS

[Effect of salts on the lytic activity of gramicidin S and its derivatives] Bulgakova VG, et al. **Antibiot Khimioter** 1988 Sep;33(9):661–5 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Formation of a stable and catalytically active complex of the two essential components of hexaprenyl diphosphate synthase from Micrococcus luteus B-P 26. Yoshida I, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):448–52
Bacteriophage-T4 and Micrococcus luteus UV

endonucleases are not endonucleases but beta-elimination and sometimes beta delta-elimination catalysts. Bailly V, et al. **Biochem J** 1989 May 1;259(3):751-9

Protection of hexaprenyl-diphosphate synthase of Micrococcus luteus B-P 26 against inactivation by sulphydryl reagents and arginine-specific reagents. Yoshida I, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):138-43

Undecaprenyl diphosphate synthase from Micrococcus luteus B-P 26: essential factors for the enzymatic activity. Koyama T, et al. **J Biochem (Tokyo)** 1988 May; 103(5):867-71

Comparative spectral analysis of mammalian, fungal, and bacterial catalases. Resonance Raman evidence for iron-tyrosinate coordination. Sharma KD, et al. **J Biol Chem** 1989 Aug 5;264(22):12772-9

MscI, a type II restriction endonuclease from Micrococcus species which recognizes 5' TGGCCA 3'. Polisson C. **Nucleic Acids Res** 1989 Jul 25;17(14):5858

Comparison of phage T4 denV endonuclease V and M. luteus UV-DNA endonuclease by serology and DNA hybridization. Yarosh DB, et al. **Photochem Photobiol** 1989 Jan;49(1):53-7

[Modification of micrococcal histidine decarboxylase with tetranitromethane] Gonchar NA, et al. **Vopr Med Khim** 1989 May-Jun;35(3):112-6 (Eng. Abstr.) **(Rus)**

GENETICS

Micrococcus luteus homolog of the Escherichia coli uvrA gene: identification of a mutation in the UV-sensitive mutant DB7. Shiota S, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):332-40

Evidence for a Micrococcus luteus gene homologous to uvrB of Escherichia coli. Shiota S, et al. **Mol Gen Genet** 1988 Jul;213(1):21-9

ISOLATION & PURIFICATION

[Pharyngeal bacterial flora in newborn infants] Karnicki C, et al. **Wiad Lek** 1988 Jul 15;41(14):934-6 (Eng. Abstr.) **(Pol)**

[Population characteristics and biological properties of micrococci colonizing the skin of the breasts] Sytnik SI. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):16-20 (Eng. Abstr.) **(Rus)**

METABOLISM

Degradation of bacterial cell walls by immobilized lysozyme. Moser I, et al. **Appl Biochem Biotechnol** 1988 Dec; 19(3):243-9

A marine Micrococcus produces metabolites ascribed to the sponge Tedania ignis. Stierle AC, et al. **Experientia** 1988 Dec 1;44(11-12):1021

Characteristic bacteriolytic activities of Staphylococcus hyicus. Lämmler C. **J Clin Microbiol** 1989 Jul;27(7):1682-3

Inhibition of 125I-labeled ristocetin binding to Micrococcus luteus cells by the peptides related to bacterial cell wall mucopeptide precursors: quantitative structure-activity relationships. Kim KH, et al. **J Med Chem** 1989 Jan; 32(1):84-93

PHYSIOLOGY

Synergistic hemolytic reactions between staphylococci and Micrococcus lylae. Lämmler C, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):297-302

ULTRASTRUCTURE

Cell surface of Micrococcus luteus: chemical treatment of the cells and teichuronic acids on the surface. Monodane T, et al. **Microbiol Immunol** 1989;33(3):165-74

MICROCOCCUS DENITRIFICANS see **PARACOCCUS DENITRIFICANS**

MICROCOCCUS PYOGENES see **STAPHYLOCOCCUS AUREUS**

MICROCOMPUTERS

The "Electric Resident," a computer system for training psychiatry residents. Powsner SM, et al. **Acad Med** 1989 Aug;64(8):485

CT-guided "real time" stereotaxy. Reinhardt HF, et al. **Acta Neurochir Suppl (Wien)** 1989;46:107-8

Development of pressure monitoring and controlling system for quantitative analysis of experimentally induced perilymph fistula. Dohi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:74-82

High-speed digital imaging of vocal fold vibration. Hirose H. **Acta Otolaryngol Suppl (Stockh)** 1988;458:151-3

Computerized audiometry--a facility to prevent hearing damages caused by noise. Ivarsson A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:175-81

APHIN--animal productivity and health information network. Dohoo IR, et al. **Acta Vet Scand Suppl** 1988; 84:246-8

Microcomputer technology in the rehabilitation of brain disorders. Lynch WJ. **Adv Clin Rehabil** 1988;2:41-58 (37 ref.)

Objective and quantitative vestibular spinal testing by means of computer-video-cranio-corpo-graphy. Claussen CF, et al. **Adv Otorhinolaryngol** 1988;42:43-9

A personal-computer reporting system for mammography. Bates BF. **AJR** 1988 Dec;151(6):1237-9

The use of a microcomputer to make rapid and inexpensive lecture slides. Chew FS. **AJR** 1989 Jan;152(1):185-8

Semiautomated slide identification by using a personal computer and printer. Feuerstein IM. **AJR** 1989 Apr; 152(4):861-3

Semiautomated slide identification by using a personal computer and printer [letter] Hunter TB. **AJR Am J Roentgenol** 1989 Sep;153(3):656-7

Pictures for radiologic reports: use of a hand-held image scanner [letter] Yokoyama K, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):427

A comprehensive indexed bibliography data base using a micro computer. Anderson P, et al. **Alcohol Alcohol** 1988; 23(3):235-8

Repeated automated assessment of abstinent male alcoholics: essential fatty acid supplementation and age effects. Skinner FK, et al. **Alcohol Alcohol** 1989;24(2):129-39

A computer-mediated text system to develop communication skills for hearing-impaired students. MacGregor SK, et al. **Am Ann Deaf** 1988 Oct;133(4):280-4

Computerized spirometry using a portable microcomputer. Hansen DJ, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):373-8

Epidemiologic programs for computers and calculators. A microcomputer program for multiple logistic regression by unconditional and conditional maximum likelihood methods. Campos-Filho N, et al. **Am J Epidemiol** 1989 Feb;129(2):439-44

A dietary and risk factor questionnaire and analysis system for personal computers. Smucker R, et al. **Am J Epidemiol** 1989 Feb;129(2):445-9

Use of a microcomputer relational database in a long-term-care psychiatric facility. Salek WM. **Am J Hosp Pharm** 1988 Sep;45(9):1907-8

Using desktop publishing to enhance pharmacy publications [letter] Utt JK, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1863-4

What's new in interactive video? Rizzolo MA. **Am J Nurs** 1989 Mar;89(3):407-8

The effectiveness of an electronic memory aid for a memory-impaired adult of normal intelligence. Giles GM, et al. **Am J Occup Ther** 1989 Jun;43(6):409-11

Two augmentative communication systems for speechless disabled patients. Newman GC, et al. **Am J Occup Ther** 1989 Aug;43(8):529-34

A computer-controlled anaesthetic gas mixer. Boaden RW, et al. **Anaesthesia** 1989 Aug;44(8):665-9

A continuous cardiac output computer based on thermodilution principles. Normann RA, et al. **Ann Biomed Eng** 1989;17(1):61-73

A microcomputer based automated, quantitative coronary angiographic analysis system. Santamore WP, et al. **Ann Biomed Eng** 1988;16(4):367-77

Office-based system for voice analysis. Berke GS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):74-7

The diagnosis of microcytic anemia by a rule-based expert system using VP-Expert. O'Connor ML, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):985-8

A surgical pathology reporting and encoding system using industry-standard hardware and software. Taubman SB. **Arch Pathol Lab Med** 1988 Dec;112(12):1195-9

The Communication Analysis System. Merbitz CT, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):118-23

Software that works in school settings. A framework for choosing the right program. Schetz KF, et al. **ASHA** 1989 Jan;31(1):65-8

Use an encounter sheet to solve your problems. North J. **Aust Fam Physician** 1989 Jan;18(1):26-7

Cost effective data logger for electromedical equipment in-service safety testing. Young MR, et al. **Australas Phys Eng Sci Med** 1988 Jan-Mar;11(1):44

A modular analog neuron-model for research and teaching. Koch UT, et al. **Biol Cybern** 1988;59(4-5):303-12

Computerized chromatographic peak detection using the trigg tracking signal. An application devised for use with an online analog to digital converter connected between an amino acid analyser and a personal computer. Hartley TF, et al. **Biomed Chromatogr** 1987;2(3):104-9

Adaptive realtime compensatory feedback to open the light-pupil reflex loop. Baker SA, et al. **Biomed Sci Instrum** 1989;25:19-21

Defining respiratory epochs using an adaptive AR filter. Giolma JP. **Biomed Sci Instrum** 1989;25:227-32

Computer analysis of biological signals. Guse PA, et al. **Biomed Sci Instrum** 1989;25:247-50

A control unit for maximal-rate continuous tissue expansion (CTE). Logan SE, et al. **Biomed Sci Instrum** 1989;25:27-33

An analog data acquisition board for the Macintosh II. Morgan RJ, et al. **Biomed Sci Instrum** 1989;25:261-5

Arrhythmia analysis with an expert system. Redman TC, et al. **Biomed Sci Instrum** 1989;25:221-5

Data acquisition and processing system for drug release characterization by thin layer chromatography. Ryoo JP, et al. **Biomed Sci Instrum** 1989;25:251-9

A device for continuous monitoring of water consumption by rats. Schultz TJ, et al. **Biomed Sci Instrum** 1989;25:39-46

Comparison of ultrasound baseband signal processors for use with an implantable controller. Valenta HL Jr. **Biomed Sci Instrum** 1989;25:93-100

Microcomputer-based analyzer for the assessment of Doppler ultrasound blood velocity waveforms. Waite LR, et al. **Biomed Sci Instrum** 1989;25:113-8

Automated three dimensional movement analysis using the CODA-3 system. Mitchelson DL. **Biomed Tech (Berlin)** 1988 Jul-Aug;33(7-8):179-82

Computerised updating of clinical summaries: new opportunities for clinical practice and research? Llewelyn DE, et al. **BMJ** 1988 Dec 10;297(6662):1504-6

A survey of the use of micro-computers in general dental practice in Scotland. Shoolbread JW, et al. **Br Dent J** 1989 Apr 8;166(7):267-8

Initial experience with a microprocessor controlled current based defibrillator. Dalzell GW, et al. **Br Heart J** 1989 Jun;61(6):502-5

A computer controlled non-invasive haemodynamic monitoring system. McMenemin IM, et al. **Br J Anaesth** 1988 Oct;61(4):492-6

An automated interferometer for the analysis of anaesthetic gas mixtures. Sugg BR, et al. **Br J Anaesth** 1988 Oct; 61(4):484-91

A new microprocessor-controlled anaesthetic machine. Sykes MK, et al. **Br J Anaesth** 1989 Apr;62(4):445-55

Self-tuning, microprocessor-based closed-loop control of atracurium-induced neuromuscular blockade. Uys PC, et al. **Br J Anaesth** 1988 Dec;61(6):685-92

A microcomputer-based index filing system for the rapid retrieval of records in a surgical pathology laboratory. Chan KW, et al. **Br J Clin Pract** 1988 Feb;42(2):68-73

A flexible image archiving system using a personal computer and optical disk. Parkin A, et al. **Br J Radiol** 1989 Jul; 62(739):620-2

Microcomputer processing of film radiographs. Tait WH, et al. **Br J Radiol** 1989 Jul;62(739):613-9

Urological history-taking and management recommendations by microcomputer. Glen ES, et al. **Br J Urol** 1989 Feb; 63(2):117-21

Microcomputer-based cognitive rehabilitation of visual neglect: three multiple-baseline single-case studies. Robertson I, et al. **Brain Inj** 1988 Apr-Jun;2(2):151-63

A microcomputer-based system for automated EEG collection and scoring of behavioral state in cats. Mamelak A, et al. **Brain Res Bull** 1988 Nov;21(5):843-9

MEDTUTOR: a microcomputer-based training program for MEDLINE. Perkins ML, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):201-4

Comparison of whole-cell protein electrophoretic profiles of Haemophilus influenzae: implementation of a microcomputer mainframe linked system and description of a new similarity coefficient. Albritton WL, et al. **Can J Microbiol** 1988 Oct;34(10):1129-34

Head Start/IBM Partnership. Computers and preschoolers. Tsantis L, et al. **Child Today** 1989 Jan-Feb;18(1):21-3

Contact Tracker: contact lens management software. Mandelberg AI. **CLAO J** 1988 Jul-Sep;14(3):124-5, 128

New technologies in chemistry instrumentation: the basis for clinical chemistry automation. Lifshitz MS, et al. **Clin Lab Med** 1988 Dec;8(4):623-32 (13 ref.)

Knowledge-based automation. Sher PP. **Clin Lab Med** 1988 Dec;8(4):713-22 (20 ref.)

Nonlinear regression on a microcomputer: which program? Atkins GL. **Comput Appl Biosci** 1985;1(2):79-82

A general purpose non-linear curve fitting program for the British Broadcasting Corporation Microcomputer. Beynon RJ. **Comput Appl Biosci** 1985;1(2):111-5

Computers [editorial] Beynon RJ. **Comput Appl Biosci** 1985; 1(1):1

Microcomputer assisted identification of Bacillus species. Bryant TN, et al. **Comput Appl Biosci** 1985;1(1):23-7

The SEQANAL and SEQTALK programs: a new method of access to high-resolution nucleotide sequence comparison and analysis programs from a remote laboratory mini- or microcomputer. Burnett L, et al. **Comput Appl Biosci** 1985 Dec;1(4):241-7

A microcomputer program for comparison and alignment of DNA sequence gel readings. Dardel F. **Comput Appl Biosci** 1985 Sep;1(3):173-5

PEGASE: a machine language program for DNA sequence analysis on Apple II microcomputer using a binary coding of nucleotides. Dardel F. **Comput Appl Biosci** 1985; 1(1):19-22

Microcomputer simulation of steady-state enzyme kinetics for educational purposes. Daron HH, et al. **Comput Appl Biosci** 1986 Sep;2(3):207-9

ANTHEPROT: IBM PC and Apple Macintosh versions. Deléage G, et al. **Comput Appl Biosci** 1989 Apr;5(2):159-60

Computer-based learning of cooperativity and allostery. Franco R, et al. **Comput Appl Biosci** 1985 Sep;1(3):161-5

Microcomputers and neurobiology: a short review. Fraser PJ. **Comput Appl Biosci** 1985 Dec;1(4):219-24 (61 ref.)

Hand-held computer program for field-capture and analysis of herbage yield and composition data using a modified dry-weight-rank and yield estimate method. Griffin GF, et al. **Comput Appl Biosci** 1988 Apr;4(2):239-42

Protein graphics: historical development, future directions and microcomputer applications. Gross E, et al. **Comput Appl Biosci** 1986 Sep;2(3):173-9 (39 ref.)

MOLECULAR DESIGNER: an interactive program for the display of protein structure on the IBM-PC. Hannon GJ, et al. **Comput Appl Biosci** 1985 Sep;1(3):177-81

Fast and sensitive multiple sequence alignments on a microcomputer. Higgins DG, et al. **Comput Appl Biosci** 1989 Apr;5(2):151-3

The use of microcomputers for the quantitation of light

intensity patterns using digitized video signals. Lott TJ, et al. **Comput Appl Biosci** 1985 Dec;1(4):249–52

Data transfer from Beckman LS 5800 liquid scintillation counters to IBM personal computers. Maan AC. **Comput Appl Biosci** 1985 Sep;1(3):183–4

LEHM: a convenient non–linear regression microcomputer program for fitting Michaelis–Menten and Hill models to enzyme kinetic data. Marszalek J, et al. **Comput Appl Biosci** 1989 Jul;5(3):239–40

Lap computers in the laboratory. Minton AP, et al. **Comput Appl Biosci** 1986 Sep;2(3):167–71

Microcomputer tools for steady–state enzyme kinetics. Myers D, et al. **Comput Appl Biosci** 1985;1(2):105–10

TEFOOL/2: a program for theoretical drug design on microcomputers. Orozco M, et al. **Comput Appl Biosci** 1989 Jul;5(3):219–26

Analysis of repeating oligonucleotide sequences in ribonucleic acids using an Apple II microcomputer. Pandit MW, et al. **Comput Appl Biosci** 1986 Sep;2(3):189–94

A microcomputer program for the identification of tRNA genes. Paolella G, et al. **Comput Appl Biosci** 1985 Sep; 1(3):149–51

A fast DNA sequence handling program for Apple II computer in BASIC and 6502 assembler. Paolella G. **Comput Appl Biosci** 1985;1(1):43–9

A Pascal microcomputer program for prediction of protein secondary structure and hydropathic segments. Parrilla A, et al. **Comput Appl Biosci** 1986 Sep;2(3):211–5

CLEAVAGE: a microcomputer program for predicting signal sequence cleavage sites. Pascarella S, et al. **Comput Appl Biosci** 1989 Feb;5(1):53–4

A microcomputer network for biochemistry. Peterson JA. **Comput Appl Biosci** 1985;1(1):3–5

The IBM–PC network: a review of the network and associated programs. Peterson JA. **Comput Appl Biosci** 1985 Sep;1(3):143–8

BBC microcomputer controlled field inversion gel electrophoresis. Porter CD, et al. **Comput Appl Biosci** 1988 Apr;4(2):271–3

An approach to the collection and manipulation of time–based data using the IBM PC and BASICA. Roome PW Jr, et al. **Comput Appl Biosci** 1985;1(1):51–4

A BASIC microcomputer program for data analysis of limiting dilution assays. Sette A, et al. **Comput Appl Biosci** 1989 Apr;5(2):161

Solving algebraic equations on a microcomputer. Tucker EE. **Comput Appl Biosci** 1986 Sep;2(3):159–65

Optimal alignments of biological sequences on a microcomputer. Watanabe K, et al. **Comput Appl Biosci** 1985;1(2):83–7

A microcomputer–based system for multi–channel neurophysiological recording. Bermejo R, et al. **Comput Biol Med** 1989;19(1):35–54

An integrated microcomputer system using immobilized cellular electrodes for drug screening. Li XM, et al. **Comput Biol Med** 1988;18(5):367–76

A program for the identification of steady–state processes in biological systems. Vega–Catalan FJ. **Comput Biomed Res** 1988 Aug;21(4):343–8

Microcomputer–assisted univariate survival data analysis using Kaplan–Meier life table estimators. Campos–Filho N, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):223–8

Development of personal computer software for a visual electrophysiology laboratory. Fadda A, et al. **Comput Methods Programs Biomed** 1989 Jan;28(1):45–50

A microcomputer–based sleep stage analyzer. Goeller CJ, et al. **Comput Methods Programs Biomed** 1989 May; 29(1):31–6

Microcomputer–aided studies of cry jitter uttered by newborn children based upon high–resolution analysis of fundamental frequencies. Lüdge W, et al. **Comput Methods Programs Biomed** 1989 Mar;28(3):151–6

A microcomputer program to calculate elemental analysis of peptides. Mammi S. **Comput Methods Programs Biomed** 1989 Feb;28(2):119–20

A FORTRAN program for multivariate survival analysis on the personal computer. Mulder PG. **Comput Methods Programs Biomed** 1988 Sep–Oct; 27(2):175–88

A multiuser MUMPS language patient/physician scheduling system for microcomputers. Quattlebaum TG. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):287–93

A real–time system for the spectral analysis of the EEG. Quint SR, et al. **Comput Methods Programs Biomed** 1989 Jan;28(1):11–22

RIAPC: a microcomputer program for the analysis of radioimmunoassay data. Rieger D. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):249–55

Experimental data acquisition and manipulation by microcomputer. Smith TC, et al. **Comput Methods Programs Biomed** 1989 Jul;29(3):153–60

PC–based system for classifying dysmorphic syndromes in children. Wiener F, et al. **Comput Methods Programs Biomed** 1989 Feb;28(2):111–7

Use of Holter functions of the implantable pacemaker to control antiarrhythmic therapy of supraventricular and ventricular recurrent tachycardias. Lukl J. **Cor Vasa** 1988; 30(6):413–22

Automated determination of polygonality of corneal endothelial cells. Nishi O, et al. **Cornea** 1989;8(1):54–7

Clinical evaluation of computer–assisted self–monitoring of blood glucose system. Marrero DG, et al. **Diabetes Care** 1989 May;12(5):345–50

A programmable system to perform the polymerase chain reaction. Weier HU, et al. **DNA** 1988 Jul–Aug;7(6):441–7

Validation of a new pocket computer assisted method for metabolic rate estimation in field studies. Horwat F, et al. **Ergonomics** 1988 Aug;31(8):1155–64

Using microcomputers in rural preceptorships. Harris DL, et al. **Fam Med** 1989 Jan–Feb;21(1):35–7

Microcomputers in rural preceptorships [letter] Stanford JB. **Fam Med** 1989 May–Jun;21(3):165

Health Maintenance for your computer [letter] Walbroehl GS. **Fam Med** 1985 Sep–Oct;17(5):233

Opportunistic research in general practice using a low cost microcomputer based medical record system as a tool. Chan DH, et al. **Fam Pract** 1989 Jun;6(2):125–9

Bloodstain characterization in the EAP, Hp, Hb, AK and Glo I typing systems using minigels and the PhastSystem. Shutler GG, et al. **Forensic Sci Int** 1988 Oct;39(1):97–104

CLUSTAL: a package for performing multiple sequence alignment on a microcomputer. Higgins DG, et al. **Gene** 1988 Dec 15;73(1):237–44

A microcomputer algorithm for solving first–order compartmental models involving recycling. Birchall A, et al. **Health Phys** 1989 Jun;56(6):857–68

Ambulatory blood pressure recording in children and adolescents with a semi–automatic recording device. Eicke M, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):433–41

Interactive videodiscs: suicide and chronic mental illness. Alger I. **Hosp Community Psychiatry** 1989 Jun;40(6):582–3

Microcomputer–based interactive tracking of blood cells at biomaterial surfaces. Capson DW, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):860–4

A four–channel IBM PC/AT compatible biphasic pulse generator for nerve stimulation. Meadows PM, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):802–4

Algorithms, hardware, and software for a digital signal processor microcomputer–based speech processor in a multielectrode cochlear implant system. Morris LR, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):573–84

The design and use of a microcomputerized real–time muscle fatigue monitor based on the medial frequency shift in the electromyographic signal. Seroussi R, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):284–6

A simplified procedure to compute dialysis time and frequency by means of urea kinetics. Ahrenholz P, et al. **Int J Artif Organs** 1988 Sep;11(5):366–72

Automatic sleep–wake scoring in the rat on microcomputer APPLE II. Gandolfo G, et al. **Int J Biomed Comput** 1988 Oct;23(1–2):83–95

An automated method of separating patient from ventilator work on the lungs. Boom MJ, et al. **Int J Clin Monit Comput** 1988;5(4):235–42

Development and evaluation of a dual–pump microcomputer–based closed–loop arterial pressure control system. Colvin JR, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):31–5

A microcomputer–based software interface for automatic acquisition of fetal monitoring data. Subramanian S, et al. **Int J Clin Monit Comput** 1988;5(4):247–50

The development and evaluation of a computerised antenatal questionnaire. Fawdry R. **Int J Gynaecol Obstet** 1989 Mar; 28(3):229–35

A microcomputer–based system for mapping microvascular networks. Wu CH, et al. **Int J Microcirc Clin Exp** 1989 Jul;8(3):303–11

Rhinomanometry in the selection for adenoidectomy and its relation to preoperative radiology. Parker AJ, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):155–61

Rhinomanometry in children. Parker LP, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):127–37

Microcomputer–based technique for 3–D reconstruction and volume measurement of computer tomographic images. Part 1: Phantom studies. Albright RE Jr, et al. **Invest Radiol** 1988 Dec;23(12):881–5

Microcomputer–based technique for 3–D reconstruction and volume measurement of computed tomographic images. Part 2: Anaplastic primary brain tumors. Albright RE Jr, et al. **Invest Radiol** 1988 Dec;23(12):886–90

Comparison of a computerized and a manual method of food coding for nutrient intake studies. Feskanich D, et al. **J Am Diet Assoc** 1988 Oct;88(10):1263–7

Computerized optometric records and the law. Dister RE, et al. **J Am Optom Assoc** 1989 Jan;60(1):56–8

The application of microprocessor technology to psychological testing. Calvert EJ, et al. **J Audiov Media Med** 1988 Oct;11(4):144–8

Desktop publishing. Clapp R. **J Audiov Media Med** 1987 Oct; 10(4):124–30

Program yourself. Clapp R. **J Audiov Media Med** 1988 Oct; 11(4):139–43

Networked personal computers for desk–top publishing and graphics production. Williams R. **J Audiov Media Med** 1988 Apr;11(2):41–8

Use of a portable computer program to assist behavioral treatment in a case of obsessive compulsive disorder. Baer L, et al. **J Behav Ther Exp Psychiatry** 1988 Sep; 19(3):237–40

Videodisc utilization trends in the health sciences. Singarella T, et al. **J Biocommun** 1988 Summer;15(3):26–9

A week in the life of Mary: the impact of microtechnology on a severely handicapped person. Dymond EA, et al. **J Biomed Eng** 1988 Nov;10(6):483–90

Fetal ECG during labour: a presentation of a microprocessor system. Lilja H, et al. **J Biomed Eng** 1988 Jul;10(4):348–50

Topographical brain electrical activity mapping on an IBM–compatible personal computer. McCullagh PJ, et al. **J Biomed Eng** 1989 Mar;11(2):137–40

Simple computer controlled apparatus for in vitro mechanical testing of connective tissues. Sikoryn TA, et al. **J Biomed Eng** 1988 Jul;10(4):357–9

Clinical assessment of a flow–through fluorometric blood gas monitor. Bashein G, et al. **J Clin Monit** 1988 Jul; 4(3):195–203

Computerized artifact detection for ventilatory inductance plethysmographic apnea monitors. East KA, et al. **J Clin Monit** 1989 Jul;5(3):170–6

Computer–based video paging [letter] Ereth MH, et al. **J Clin Monit** 1989 Jul;5(3):217–9

A comparison of two microcomputer–based programs for bibliographic retrieval and formatting. Garfield JM, et al. **J Clin Monit** 1989 Jul;5(3):177–85

Is unified monitoring improving patient care? Nelissen RG, et al. **J Clin Monit** 1988 Jul;4(3):167–74

The use of a personal computer for trend data analysis with the Ohmeda 3700 pulse oximeter. Pasterkamp H, et al. **J Clin Monit** 1988 Jul;4(3):215–22

In vitro assessment of a flow–through fluorometric blood gas monitor. Pino JA, et al. **J Clin Monit** 1988 Jul; 4(3):186–94

Statistics on microcomputers. A non–algebraic guide to their appropriate use in biomedical research and pathology laboratory practice. A series of six articles. 1. Data handling and preliminary analysis. Brown RA, et al. **J Clin Pathol** 1988 Oct;41(10):1033–8

Statistics on microcomputers: a non–algebraic guide to their appropriate use in biomedical research and pathology laboratory practice. 4. Correlation and regression. Brown RA, et al. **J Clin Pathol** 1989 Jan;42(1):4–12

Statistics on microcomputers: a non–algebraic guide to the appropriate use of statistical packages in biomedical research and pathology laboratory practice. 6. Statistical methods for diagnostic tests. Brown RA, et al. **J Clin Pathol** 1989 Mar;42(3):225–30

Statistics on microcomputers. A non–algebraic guide to their appropriate use in biomedical research and pathology laboratory practice. 2. Confidence intervals and significance tests. Brown RA, et al. **J Clin Pathol** 1988 Nov;41(11):1148–54

Statistics on microcomputers. A non–algebraic guide to their appropriate use in biomedical research and pathology practice. 3. Analysis of variance and distribution–free methods. Brown RA, et al. **J Clin Pathol** 1988 Dec; 41(12):1256–62

Statistics on microcomputers. A non–algebraic guide to the appropriate use of statistics packages in biomedical research and pathology laboratory practice. 5. Analysis of categorical data. Brown RA, et al. **J Clin Pathol** 1989 Feb; 42(2):117–22

TOXBASE: a microcomputer database for post mortem toxicology. Robinson K, et al. **J Clin Pathol** 1988 Nov; 41(11):1240–1

Comparative review of molecular modelling software for personal computers. Sadek M, et al. **J Comput Aided Mol Des** 1988 Jul;2(2):81–90 (27 ref.)

Validity of Million's computerized interpretation system for the MCMI: comment on Moreland and Onstad. Cash TF, et al. **J Consult Clin Psychol** 1989 Apr;57(2):311–4

Spectral analysis of the electromyogram: a microcomputer system for use in the clinic and laboratory. Wastell DG, et al. **J Dent** 1988 Dec;16(6):297–9

Respiration and the ECG: a study using body surface potential maps. Amoore JN, et al. **J Electrocardiol** 1988 Aug;21(3):263–71

A real–time data–logger system using an optical disk WORM for archiving continuous 12–lead ECG data during exercise testing. Froning JN, et al. **J Electrocardiol** 1988;21 Suppl:S141–8

A personal computer–based arrhythmia generator based on mathematical models of cardiac arrhythmia. Ikeda N, et al. **J Electrocardiol** 1988;21 Suppl:S122–8

High–resolution ECG on a standard ECG cart. Reddy BR, et al. **J Electrocardiol** 1988;21 Suppl:S74–9

Laboratory use of the personal computer: a program in MS–DOS BASIC, for generating specimen labels and data sheets for electron microscopy. Ulrich RG. **J Electron Microsc Tech** 1988 Sep;10(1):53–65

A microcomputer program for the generation of random grid squares in quantitative analysis. Webber JS. **J Electron Microsc Tech** 1987 Nov;7(3):195–7

Microcomputer–generated reminders. Improving the compliance of primary care physicians with mammography screening guidelines. Chambers CV, et al. **J Fam Pract** 1989 Sep;29(3):273–80

The comprehensiveness of computer–assisted searches of the medical literature. DeNeef P. **J Fam Pract** 1988 Oct; 27(4):404–8

Effect of a microcomputer–based registry on adult immunizations. Klachko DM, et al. **J Fam Pract** 1989 Aug; 29(2):169–72

Data compression: 8–dimensional flow cytometric data processing with 28K addressable computer memory.

Watson JV, et al. **J Immunol Methods** 1988 Oct 26; 113(2):205–14

Evaluation of a computer–assisted method of analysing SDS–PAGE protein profiles in tracing a hospital outbreak of Serratia marcescens. Arzese A, et al. **J Infect** 1988 Jul; 17(1):35–42

The use of a hand–held computer to record clinical trial data in general practice: a pilot study. Tattersall AB, et al. **J Int Med Res** 1989 Mar–Apr;17(2):185–9

How I use a computer in my surgical practice. Headley WM. **J Med Assoc Ga** 1988 Aug;77(8):643–5

Discourse analysis and pragmatics in the design of a conversation prosthesis. Alm N, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):10–2

JAL2: an integrated tool to enhance communication and autonomy of disabled people. Arruabarrena A, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):28–33

The Internal Human Conditioning System: a multipurpose programmable biomedical system. Eychmans W, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):93–5

The monoselector: a new actuator for an environmental control system. Leliveld WH. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):44–7

A computer–controlled knee prosthesis: a preliminary report. Peeraer L, et al. **J Med Eng Technol** 1989 Jan–Apr; 13(1–2):134–5

New possibilities for enhanced keyboard input for the handicapped. Soede M, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):34–6

Computer–aided instruction with the multiply impaired. Aitken S. **J Ment Defic Res** 1988 Aug;32 (Pt 4):257–63 (11 ref.)

Occupational engagement of low–functioning individuals: extending the applicability of a computer–aided programme. Lancioni GE, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):313–22

A computer–aided programme for low–functioning persons: a reply to Odor and Aitken. Lancioni GE, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):265–9 (22 ref.)

Student models in machine–mediated learning. Odor JP. **J Ment Defic Res** 1988 Aug;32 (Pt 4):247–56 (6 ref.)

Observations on the applicability of the Wartenberg pendulum test to healthy, elderly subjects. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1171–7

Does the Wartenberg pendulum test differentiate quantitatively between spasticity and rigidity? A study in elderly stroke and Parkinsonian patients. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1178–86

Enhancing high–speed digitization of single–unit neuronal activity on a microcomputer using a hybrid software–hardware technique. Aldridge JW, et al. **J Neurosci Methods** 1989 Jun;28(3):205–8

Simple microcomputer system for mapping tissue sections with the light microscope. Alvarez–Buylla A, et al. **J Neurosci Methods** 1988 Sep;25(2):165–73

Microcomputer–controlled laboratory system for field potential experiments. Ashida H, et al. **J Neurosci Methods** 1989 Aug;29(2):115–20

A graphics–oriented personal computer–based microscope charting system for neuroanatomical and neurochemical studies. Tourtellotte WG, et al. **J Neurosci Methods** 1989 Jul;29(1):43–57

Using microcomputer telecommunications. DeVillier B. **J Nurs Adm** 1988 Oct;18(10):24–8

Real–time signal acquisition and analysis for clinical dental electromyography using a microcomputer–based system. Yuen SW, et al. **J Oral Rehabil** 1989 Jan;16(1):49–55

A simplified method for autoregulation of blood flow in the extracorporeal membrane oxygenation circuit. Atkinson JB, et al. **J Pediatr Surg** 1989 Mar;24(3):251–2

From mainframe to micro: decentralization of perinatal epidemiology. Bottoms SF, et al. **J Perinat Med** 1988; 16(4):345–8

On a portable memory device for physical activities and informations of maternal perception. Hasegawa T, et al. **J Perinat Med** 1988;16(4):349–56

Assessment of local area network based on the microcomputer system for data processing of perinatal medical information. Nakahara H, et al. **J Perinat Med** 1988;16(4):315–8

A simple microcomputer interface for tail–flick determination. Harris DP, et al. **J Pharmacol Methods** 1988 Sep;20(2):103–8

High resolution on–line analysis of cardiac action potentials using a Motorola 68000 microcomputer. King R, et al. **J Pharmacol Methods** 1988 Sep;20(2):151–60

Implementation of a microcomputer–based opportunistic health maintenance programme in a general practice teaching clinic. Chan DH, et al. **J R Coll Gen Pract** 1988 Aug;38(313):360–2

Computers: application of micro computer in a Royal Naval Air Station. Sheard SC, et al. **J R Nav Med Serv** 1987 Winter;73(3):189–91

Microcomputer networking in the hospital environment: powerful computing for the common man? Discussion paper. Cooper IC, et al. **J R Soc Med** 1989 May;82(5):285–7

Design and preliminary evaluation of a portable instrument for assisting physiotherapists and occupational therapists in the rehabilitation of the hand. Durand LG, et al. **J Rehabil Res Dev** 1989 Spring;26(2):47–54

Microprocessor–based hearing aid for the deaf. Shimizu Y. **J Rehabil Res Dev** 1989 Spring;26(2):25–36

Using simultaneous photodetection and nasometry to monitor velopharyngeal behavior during speech. Dalston RM. **J Speech Hear Res** 1989 Mar;32(1):195–202

The automatic extraction of pitch perturbation using microcomputers: some methodological considerations. Deem JF, et al. **J Speech Hear Res** 1989 Sep;32(3):689–97

An analysis of velopharyngeal timing in normal adult speakers using a microcomputer based photodetector system. Keefe MJ, et al. **J Speech Hear Res** 1989 Mar; 32(1):39–48

Choosing and using a microcomputer for tropical epidemiology. I. Preliminary considerations. Byass P. **J Trop Med Hyg** 1989 Aug;92(4):282–7

Rapid microcomputer surveys. Frerichs RR. **J Trop Pediatr** 1988 Aug;34(4):147–9

Microcomputer program in Chinese to manage and analyze antimicrobial susceptibility results. Chan KW, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):244–8

Implantation of programmable infusion pumps for insulin delivery in type I diabetic patients. Walter H, et al. **Klin Wochenschr** 1989 Jun 1;67(11):583–7

Practical computer applications for a head and neck cancer registry. Harvey JE, et al. **Laryngoscope** 1989 Apr; 99(4):438–47

Microcomputer assisted assessment of CO2 rebreathing during anaesthesia with coaxial system. Gregorini P, et al. **Life Support Syst** 1983;1 Suppl 1:407–10

A new bedside hemodialysis monitor for both acetate and bicarbonate dialysis. Hosokawa S, et al. **Life Support Syst** 1983;1 Suppl 1:166–9

Automatic control and regulation of two rollerpumps for biventricular bypass. Marinow N, et al. **Life Support Syst** 1983;1 Suppl 1:37–40

Chronic electrostimulation of muscles—a future way of energy production for implants. Stöhr H, et al. **Life Support Syst** 1983;1 Suppl 1:417–20

Use of an easy commercially available software (VISICALC) on a low–cost personal computer (APPLE II PLUS) to assess a dialysis simulation model. Vancini C. **Life Support Syst** 1983;1 Suppl 1:126–8

Organising a microcomputer system for departmental use—a personal experience. Cheong SK. **Malays J Pathol** 1988 Aug;10:15–20

Expert systems, medicine, and the Macintosh. Bergeron B, et al. **MD Comput** 1989 Mar–Apr;6(2):100–11

The advantages of a microcomputer–based procedure log. Wheeler RP. **MD Comput** 1989 Jan–Feb;6(1):24–6

Practice computerization: hints and suggestions. McCray HE. **Md Med J** 1989 Jan;38(1):77–9

Microcomputer–based system for 24–hour recording of oesophageal motility and pH profile with automated analysis. Breedijk M, et al. **Med Biol Eng Comput** 1989 Jan;27(1):41–6

Online measurement of ocular accommodation using a low–cost microcomputer system. Eadie AS, et al. **Med Biol Eng Comput** 1988 Mar;26(2):143–6

Computerised method for monitoring stored platelet packs. Järemo P. **Med Biol Eng Comput** 1988 Mar;26(2):193–8

Microprocessor automatic multiple temperature measurement device. Mahler Y, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):554–6

Microcomputer–based system for tensile testing of biological materials. Milthorpe BK, et al. **Med Biol Eng Comput** 1988 Mar;26(2):161–6

Nuclear magnetic resonance imaging using a microcomputer. Pittard S, et al. **Med Biol Eng Comput** 1988 Mar;26(2):221–4

Time–domain cross–correlation assembly language routine for the IBM PC and an application in neural signal analysis. Ricci D, et al. **Med Biol Eng Comput** 1988 Jul;26(4):454–6

Computerised analysis of urological parameters. Sanchez–Doblado F, et al. **Med Biol Eng Comput** 1988 May;26(3):325–7

Graphical data compression for small memory microcomputers. Small DR, et al. **Med Biol Eng Comput** 1988 Nov;26(6):665–6

Scoring the objective structured clinical examination using a microcomputer. Richards BF, et al. **Med Educ** 1989 Jul; 23(4):376–80

Applications of a microcomputer–based reconstruction system to produce realistic three–dimensional shaded images from serial sections. Holman JG, et al. **Med Inf (Lond)** 1989 Apr–Jun;14(2):173–84

Development and evaluation of a radiological reporting system for use with a personal computer. Murata K, et al. **Med Inf (Lond)** 1989 Jan–Mar;14(1):71–83

A microcomputer program for analog data collection with peak analysis. McGuffie GP, et al. **Med Lab Sci** 1988 Apr; 45(2):182–3

Acquisition and display of radiation dose distributions using microcomputer technology. Antolak J, et al. **Med Phys** 1988 Nov–Dec;15(6):924–9

Computer emulated oral exams: rationale and implementation of cue–free interactive computerised tests. Anbar M, et al. **Med Teach** 1988;10(2):175–80

A simple, microcomputer–based transcription system for radiology reports. Campbell AF. **Milit Med** 1989 Mar; 154(3):136–9

The Computerized Laboratory Notebook concept for genetic toxicology experimentation and testing. Strauss GH, et al. **Mutat Res** 1989 Mar;222(3):171–89

The National Library of Medicine. The great equalizer between small hospitals and major medical centers. Stead EA Jr. **N C Med J** 1988 Jul;49(7):360

Computer–virus infection of a medical diagnosis computer [letter] Juni JE, et al. **N Engl J Med** 1989 Mar 23; 320(12):811–2

Monitoring of the effects of antidepressant drugs in the freely moving rat by radioelectroencephalography (tele–stereo–EEG). Dimpfel W, et al. **Neuropsychobiology** 1988;19(2):116–20

Aspects of sleep–wakefulness architecture by computer analysis in cats. Granger P, et al. **Neuropsychobiology** 1988; 19(4):212–6

Selective visual attention in Alzheimer's and Parkinson's patients: memory– and data–driven control. Cossa FM, et al. **Neuropsychologia** 1989;27(6):887–92

Computer–based visual communication in aphasia. Steele RD, et al. **Neuropsychologia** 1989;27(4):409–26

Measurement of intracranial tissue volume using computed tomographic images and a personal computer. Criscuolo GR, et al. **Neurosurgery** 1988 Nov;23(5):671–4

Computer helps surgeon mold faces. Carlson MJ. **Ohio Med** 1988 Nov;84(11):863–4

POSSUM: the microcomputer laser–videodisk syndrome information system. Bankier A, et al. **Ophthalmic Paediatr Genet** 1989 Mar;10(1):51–2

Microcomputer based differential diagnosis of dysmorphic syndromes. Veloso ML, et al. **Ophthalmic Paediatr Genet** 1989 Mar;10(1):47–50

Microcomputer programs for video stimulation of eye movements. Huygen PL, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):130–4

The SPOCC (Selective Procedures, Operative Cases, and Consults) program as an advance in orthopaedic resident record keeping. Bear JV, et al. **Orthop Rev** 1989 Feb; 18(2):193–8

Computerised data reduction. Datson DJ, et al. **Pathology** 1988 Oct;20(4):393–4

Computer use in pediatric education. Gururaj VJ, et al. **Pediatrics** 1989 Mar;83(3):425–8

A home evaluation of a behavioral response measure of sleep/wakefulness. Bonato RA, et al. **Percept Mot Skills** 1989 Feb;68(1):87–96

Psychology of computer use: V. Computer use and the experience of time. Juhnke R, et al. **Percept Mot Skills** 1988 Dec;67(3):863–70

Psychology of computer use: IX. A menu of self–administered microcomputer–based neurotoxicology tests. Kennedy RS, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1255–72

An inexpensive sleep–wake state analyzer for the rat. Clark FM, et al. **Physiol Behav** 1988;43(5):681–3

Automated acquisition and analysis of animal behavior data utilizing an Apple IIe. Frackelton WH, et al. **Physiol Behav** 1988;43(2):253–7

A microcomputer controlled data acquisition system for research on feeding and drinking behavior in rats. Gill K, et al. **Physiol Behav** 1989 Apr;45(4):741–6

Using the SAS language to build a computerized system for logging and tabulation of behavioral observations. Herndon JG. **Physiol Behav** 1988;44(3):421–9

Long–term monitoring of mouse ultrasonic vocalizations. Warburton VL, et al. **Physiol Behav** 1988;44(6):829–31

An optic–fiber photocell detector for measuring tongue protrusion in the rat: evaluation of recovery from localized cortical lesions. Whishaw IQ, et al. **Physiol Behav** 1988; 43(3):397–401

A device for microcomputer controlled stimulation of cardiac muscle. Rohlíček V. **Physiol Bohemoslov** 1988;37(5):451–8

The impact of a microcomputer on a general practice immunisation clinic. Kelly SD. **Practitioner** 1988 Feb 22; 232(1443):197, 200–1

Coming to terms with computers. Lewis A. **Practitioner** 1987 Oct 8;231(1436):1275–8

A microcomputer–based respiratory heat exchange facility for use in the diagnosis of thermally induced asthma. Farley RD, et al. **Proc Inst Mech Eng [H]** 1989;203(H1):43–8

Lifetrack therapy. Ishizuka Y. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):198–207

The development of a computerized assessment for minor psychiatric disorder. Lewis G, et al. **Psychol Med** 1988 Aug;18(3):737–45

Validation of a computerized assessment (PROQSY) of minor psychological morbidity by Relative Operating Characteristic analysis using a single GP's assessments as criterion measures. Wilkinson G, et al. **Psychol Med** 1989 Feb;19(1):225–31

Microcomputer servo–controlled bicycle ergometer system for psychophysiological research. Laperriere AR, et al. **Psychophysiology** 1989 Mar;26(2):201–7

Microcomputer automated system for measuring systolic time intervals in response to exercise and a psychophysiological task. VanDercar DH, et al. **Psychophysiology** 1988 Nov; 25(6):703–11

Computer–assisted rapid surveys in developing countries. Frerichs RR, et al. **Public Health Rep** 1989 Jan–Feb; 104(1):14–23

Simple analytic procedures for rapid microcomputer–assisted cluster surveys in developing countries. Frerichs RR. **Public Health Rep** 1989 Jan–Feb;104(1):24–35

Spirometric forced volume measurements in the assessment of nasal patency after septoplasty. A prospective clinical study. Larsen K, et al. **Rhinology** 1988 Sep;26(3):203–8

Rhinomanometric method error in the assessment of nasal respiratory resistance. Sandham A. **Rhinology** 1988 Sep; 26(3):191–202

Quantitative analysis of slow eye movements with an IBM/AT compatible personal computer in the diagnosis of multiple sclerosis. Müri RM, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):44–6

A computer-based interview system for patients with back pain. A validation study. Thomas AM, et al. **Spine** 1989 Aug;14(8):844–6

A computerized kidney donor register—one-year review. Ross WB, et al. **Transplant Proc** 1988 Oct;20(5):816

Development of a coding system for recording clinical findings in farm animal practice. Williams PC, et al. **Vet Rec** 1989 Feb 4;124(5):118–22

Development of a microcomputer system for recording veterinary visits, preparing accounts, and as an aid to herd fertility and herd health schemes. Williams PC, et al. **Vet Rec** 1989 Mar 18;124(11):265–8

Development of a computerized EEG imaging system with a personal computer. Lee SH, et al. **Yonsei Med J** 1989; 30(1):45–53

[Realization of auxiliary management system of clinical nursing by computers] Wang CF. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):299–300 (Chi)

[Use of microcomputers in primary nursing care] Wang HP. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):300–2 (Chi)

[The microcomputer in aiding morphometry and analysis of lesions in experimental liver cell carcinoma] Ding L. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):704–5 (Chi)

[A study of computerized gait analysis system and three dimensional analysis of foot-ground reaction forces during level walking] Dai KR. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):360–4, 383–4 (Eng. Abstr.) (Chi)

[Rapid detection of protein and nucleic acid homology with a microcomputer] Li M. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):230–2 (Eng. Abstr.) (Chi)

[The Apple II e microcomputer as a databank for registering special donors] Láznička M, et al. **Vnitr Lek** 1989 Jan; 35(1):58–61 (Eng. Abstr.) (Cze)

[Literature storage and retrieval for library users using a microcomputer (letter)] Eger AJ. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):789 (Dut)

[Literature retrieval and storage by library users with the aid of a microcomputer] Volkers AC, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):294–7 (Dut)

[Microcomputers and the operative plan in strabismus: update on the Macintosh] Aflalo G. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):559–60 (Fre)

[A microcomputer and the operative plan in strabismus: update on the Macintosh] Aflalo G. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):903–5 (Fre)

[Importance of a micro-computer in determining blood groups and in research on irregular agglutinins. Report of a new system] Giacomini T, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):1027–31 (Eng. Abstr.) (Fre)

[Direct transfer of obstetrical data by magnetic means in a randomized multicenter trial of the subjective count of fetal movements by the mother-to-be] Alexander S, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):179–82 (Eng. Abstr.) (Fre)

[Computerized obstetrical record of the North Pas-de-Calais region] Delcroix M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):175–7 (Eng. Abstr.) (Fre)

[The pregnancy file on a magnetic card (CAM)] Paradinas P, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):173 (Fre)

[Computer-controlled infusion] Suttmann H, et al. **Anaesthesist** 1988 Aug;37(8):558–61 (Eng. Abstr.) (Ger)

[Computer simulation of the stable climate on the PC in veterinary practice] Schauberger G. **Berl Munch Tierarztl Wochenschr** 1989 Feb 1;102(2):58–63 (Eng. Abstr.) (Ger)

[Motion energy as a control variable for adapting stimulation frequency] Hubmann M, et al. **Biomed Tech (Berlin)** 1989 Jul–Aug;34(7–8):191–6 (Eng. Abstr.) (Ger)

[Use of a CCD array camera for reflectance spectrometry of blood. 1. Determination of hematocrit-independent oxygen saturation using a new evaluation procedure] Pahl R, et al. **Biomed Tech (Berlin)** 1988 Oct;33(10):240–6 (Eng. Abstr.) (Ger)

[Braindex—an expert system for the diagnosis of brain death] Pfurtscheller G, et al. **Biomed Tech (Berlin)** 1989 Jan–Feb; 34(1–2):3–8 (Eng. Abstr.) (Ger)

[Pre-ejection period controlled cardiac pacemaker] Schaldach M. **Biomed Tech (Berlin)** 1989 Jul–Aug; 34(7–8):177–84 (Eng. Abstr.) (Ger)

[Real-time analysis of orofacial movements using electromagnetic articulography] Schönle PW, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):126–30 (Eng. Abstr.) (Ger)

[Experiences with electronic data processing in vascular surgery] Loeprecht H. **Chirurg** 1989 Feb;60(2):90–4 (4 ref.) (Ger)

[Characteristics of electrical discharges by transcranial cortex stimulation activated motor units of the hand muscles of the human] Hess CW, et al. **EEG EMG** 1988 Dec; 19(4):216–21 (Eng. Abstr.) (Ger)

[The assessment of quantitative speaking voice production. The speaking voice field in the singing voice field] Hacki T. **Folia Phoniatr (Basel)** 1988;40(4):190–6 (Eng. Abstr.) (Ger)

[Long-term ECG analysis systems. Comparison of current methods] Distler WK. **Fortschr Med** 1989 Jul 10; 107(20):446–8 (Eng. Abstr.) (Ger)

[Automatic biometry and keratometry in comparison with the manual technic] Knorz MC, et al. **Fortschr Ophthalmol** 1989;86(2):157–8 (Eng. Abstr.) (Ger)

[The use of small and large computers for setting up data banks for morphometry] Wassilew G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):211–3 (Eng. Abstr.) (Ger)

[Computer-assisted rhinomanometry (CAR)] Bachert C, et al. **HNO** 1988 Jul;36(7):277–81 (Eng. Abstr.) (Ger)

[Transcutaneous stimulation in the emergency therapy of cardiac arrhythmias] Hoffmann E, et al. **Internist (Berlin)** 1989 Feb;30(2):73–6 (Ger)

[A computer program for registering all daily accumulated data at a school for vision disorders] Effert R, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):518–22 (Eng. Abstr.) (Ger)

[Procedures for the quantitative follow-up control of computerized perimetric findings in glaucoma] Grehn F, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):493–8 (Eng. Abstr.) (Ger)

[Normal values for the Octopus and their importance in the interpretation of findings] Haas AL. **Klin Monatsbl Augenheilkd** 1989 May;194(5):320–1 (Eng. Abstr.) (Ger)

[Tono-pen, a new position-independent tonometer. Comparison with the Goldmann tonometer by applanation measurement] Hessemer V, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):420–6 (Eng. Abstr.) (Ger)

[Sources of error in automated static perimetry] Rabineau PA, et al. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):307–19 (Eng. Abstr.) (Ger)

[Computer-assisted video processing of Phast gels with ELBA] Hensel J, et al. **Klin Wochenschr** 1989;67 Suppl 17:23–6 (Eng. Abstr.) (Ger)

[Ambulatory continuous 24-hour blood pressure monitoring in the diagnosis and therapy of arterial hypertension and modification by the antihypertensive agents enalapril, metoprolol, mepindolol and nitrendipine] Schrader J, et al. **Klin Wochenschr** 1988 Sep 15;66(18):928–39 (Eng. Abstr.) (Ger)

[Uses and advantages of a computer-assisted microbiologic diagnosis and database system for antibiotic therapy in surgery] Manncke K, et al. **Langenbecks Arch Chir** 1989; 374(2):77–83 (Eng. Abstr.) (Ger)

[A simple procedure for quantitative and time coded detection of snoring sounds in apnea and snoring patients] Schäfer J. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep; 67(9):449–52 (Eng. Abstr.) (Ger)

[Description and assessment of a rapid new method for measuring erythrocyte sedimentation rate] Wagner H, et al. **Med Klin** 1989 Jan 15;84(1):15–22 (Eng. Abstr.) (Ger)

[Compliance: a new monitoring method with the Medication Event Monitoring System. (interview)] Weber E. **Med Monatsschr Pharm** 1988 Sep;11(9):308–9 (Ger)

[Clinical assessment of a new glucose reflectance meter (Glucoscot II) for the detection of neonatal hypoglycemias] Leibundgut KE, et al. **Monatsschr Kinderheilkd** 1989 Jun; 137(6):330–2 (Eng. Abstr.) (Ger)

[Simplified monitoring of the drinking water supply using electronic data processing] Schmälzle E, et al. **Off Gesundheitswes** 1989 Mar;51(3):145–6 (Eng. Abstr.) (Ger)

[Transmission of Dusseldorf Integrated Medical Documentation data by a personal computer. A new concept in the flexibility of the Dusseldorf Integrated Medical Documentation system] Paassen A, et al. **Onkologie** 1988 Oct;11(5):242–6 (Eng. Abstr.) (Ger)

[Oscillatory impedance measurement of the respiratory tract in children] Berdel D, et al. **Pneumologie** 1989 Jul; 43(7):392–9 (Eng. Abstr.) (Ger)

[Bronchial provocation in children: a comparison between the polyfrequent oscillation method and body plethysmography] Buhr W, et al. **Pneumologie** 1989 Jul; 43(7):400–2 (Eng. Abstr.) (Ger)

[Oscillatory measurement of airway resistance with the custo vit in comparison with Oscillaire and whole body plethysmography] Fichter J, et al. **Pneumologie** 1989 Jul; 43(7):382–6 (Eng. Abstr.) (Ger)

[Report of a trial of polyfrequent oscillo-resistometry with the custo vit equipment] Glaser T, et al. **Pneumologie** 1989 Jul;43(7):369–75 (Eng. Abstr.) (Ger)

[Oscillometric differentiation of lung fibrosis and lung emphysema] Issa I, et al. **Pneumologie** 1989 Jul;43(7):358–62 (Eng. Abstr.) (Ger)

[Principle of solid-frequent oscillo-resistometry] Korn V. **Pneumologie** 1989 Jul;43(7):348–52 (Eng. Abstr.) (Ger)

[Oscillo-resistometry in bicycle ergometry stress] Lindemann H. **Pneumologie** 1989 Jul;43(7):403–8 (Eng. Abstr.) (Ger)

[Theoretical and experimental studies of the diagnostic relevance and comparability of mechanical oscillation parameters] Müller E, et al. **Pneumologie** 1989 Jul; 43(7):339–47 (Eng. Abstr.) (Ger)

[Measurement of nasal oscillatory resistance] Petro W, et al. **Pneumologie** 1989 Jul;43(7):387–91 (Eng. Abstr.) (Ger)

[Practical experiences with 2 oscillatory measuring procedures, Siregnost FD 5 and custo vit, in the assessment of chronic airway obstruction] Pleger E, et al. **Pneumologie** 1989 Jul;43(7):353–7 (Eng. Abstr.) (Ger)

[Expanded oscillo-resistometry—an independent method for studying lung function tests] Sebastiani O. **Pneumologie** 1989 Jul;43(7):363–8 (Eng. Abstr.) (Ger)

[Polyfrequent oscillometry measurement of airway resistance including the associated phase angle] Simm F. **Pneumologie** 1989 Jul;43(7):376–81 (Eng. Abstr.) (Ger)

[Optimizing monofrequent oscillometry] Smith HJ, et al. **Pneumologie** 1989 Jul;43(7):331–8 (Eng. Abstr.) (Ger)

[Computer-assisted model trials of cerebrospinal fluid dynamics of the craniospinal system] Meier U, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:100–2 (Ger)

[The diagnostic value of computer-assisted psychometric procedures] Krause A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep; 40(9):537–41 (Eng. Abstr.) (Ger)

[Product of the month: SPSS statistical package for the sciences] Horstmann GA. **Radiologe** 1988 Sep;28(9):438–9 (Ger)

[The personal computer as an aid for the handicapped and as a support measure in the rehabilitation of handicapped patients] Kielmann K. **Rehabilitation (Stuttg)** 1988 Nov; 27(4):199–203 (Eng. Abstr.) (Ger)

[The Diamed Test System (König & Partner System House, 1984)—a review] Lamberti G, et al. **Rehabilitation (Stuttg)** 1989 Feb;28(1):27–9 (Ger)

[The computer as an aid in attention training—a clinico-experimental study] Lamberti G, et al. **Rehabilitation (Stuttg)** 1988 Nov;27(4):190–8 (Eng. Abstr.) (Ger)

[Testing with the computer—the Diamed System] Lehrl S, et al. **Rehabilitation (Stuttg)** 1989 Feb;28(1):15–26 (70 ref.) (Eng. Abstr.) (Ger)

[Dynamic measurement of pressure distribution with flexible measuring mats—an innovative measuring procedure in sports orthopedics and traumatology. Development—use—value] Schaff P, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):185–222 (Eng. Abstr.) (Ger)

[Microcomputer systems in urology: hardware—mole's hole or useful equipment?] Goetz C, et al. **Urologe [A]** 1989 Jan;28(1):1–10 (Eng. Abstr.) (Ger)

[Computer-assisted plethysmographic vascular diagnosis: new methodologic aspects] Blazek V, et al. **Vasa Suppl** 1988;23:81–5 (Ger)

[Principles of computer-assisted documentation in the angiologic laboratory] Gutmann J, et al. **Vasa Suppl** 1988; 23:97–100 (Ger)

[Signal processing by analog/digital conversion using personal computers. II: Selection of hardware and software] Schreiner W. **Wien Klin Wochenschr** 1988 Nov 18;100(22):737–40 (Eng. Abstr.) (Ger)

[Signal detection by analog/digital conversion using personal computers. III: Examples from general practice and organizational aspects] Schreiner W. **Wien Klin Wochenschr** 1988 Dec 2;100(23):771–4 (Eng. Abstr.) (Ger)

[Measuring signal processing by analog/digital conversion using personal computers. I: General principles] Schreiner W. **Wien Klin Wochenschr** 1988 Sep 23;100(18):624–9 (Eng. Abstr.) (Ger)

[Supplemental views to the original contributions: Schreiner, W.: Data assessment by analog/digital conversion on personal computers. I, II and III (letter)] Weiss K, et al. **Wien Klin Wochenschr** 1989 May 12;101(10):368–70 (Ger)

[Evaluation of medical data using statistics software: the program packet ABSTAT] Bräuer D. **Z Arztl Fortbild (Jena)** 1988;82(18):905–8 (Ger)

[The computer on the physician's desk] Günterberg K. **Z Arztl Fortbild (Jena)** 1989;83(9):477–81 (Ger)

[The main features of an electronic data processing polyclinic information system in East Germany] Bohndorf HJ, et al. **Z Gesamte Hyg** 1988 Oct;34(10):556–8 (Eng. Abstr.) (Ger)

[Organization and use of a project for university-trained personnel in the area of health and social services] Lehmann F, et al. **Z Gesamte Hyg** 1988 Oct;34(10):552–4 (Eng. Abstr.) (Ger)

[A microcomputer project for medical documentation at polyclinics of the People's Republic of Poland] Melaniuk M. **Z Gesamte Hyg** 1988 Oct;34(10):555 (Eng. Abstr.) (Ger)

[Experimental studies of the heat effect of directed temperature radiation with microcomputer-assisted control of the study course, data recording and evaluation] Neuschulz H, et al. **Z Gesamte Hyg** 1988 May;34(5):320–5 (Eng. Abstr.) (Ger)

[Computer-assisted evaluation and analysis of bacteriologic findings] Patsch R, et al. **Z Gesamte Hyg** 1989 May; 35(5):247–50 (Eng. Abstr.) (Ger)

[Air public health. Distribution of air pollutants. A microcomputer program for special problems in the distribution of air pollutants] Schneider B, et al. **Z Gesamte Hyg** 1988 May;34(5):334–7 (Eng. Abstr.) (Ger)

[Computer-assisted perioperative blood glucose control in metabolically stable diabetic patients and diabetic patients

with coronary disease—a contribution to computer-assisted optimal therapy of diabetes] Möricke R, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):73–5 (Eng. Abstr.) (Ger)

[Testing a computer program for use in cardiology] Poll R, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):232–5 (Eng. Abstr.) (Ger)

[Computer-assisted documentation in dermatohistology] Bahmer FA. **Z Hautkr** 1989 Feb 15;64(2):113–4, 117–8 (Eng. Abstr.) (Ger)

[The significance of dermatologic management in computer-assisted occupational dermatology consultation] Rakoski J, et al. **Z Hautkr** 1989 Jan 15;64(1):31–3 (Eng. Abstr.) (Ger)

[Noninvasive registration of His bundle potentials with temporal and spatial averaging] Jie J, et al. **Z Kardiol** 1988 Jun;77(6):358–65 (Eng. Abstr.) (Ger)

[Supraventricular tachycardia: therapy with a variable antitachycardia stimulation program] Pfitzner P, et al. **Z Kardiol** 1988 Jun;77(6):366–72 (Eng. Abstr.) (Ger)

[A complex program for microcomputer-supported immunoassay analysis] Blobel B, et al. **Z Med Lab Diagn** 1989;30(3):186–91 (Eng. Abstr.) (Ger)

[Possibilities for using emergency abdominal ultrasound study and its significance in acute diseases of the abdominal cavity] Baricza S, et al. **Zentralbl Chir** 1988;113(13):860–8 (Eng. Abstr.) (Ger)

[Detection and evaluation of data in perinatal diagnosis using a personal computer] Natho W, et al. **Zentralbl Gynakol** 1988;110(24):1561–6 (Eng. Abstr.) (Ger)

[Microcomputer-assisted telemetry system for recording ultradian temperature rhythms in large animals] Mohr E, et al. **Zentralbl Veterinarmed** [A] 1989 May;36(5):331–9 (Eng. Abstr.) (Ger)

[Increasing mental performance by multistep oxygen therapy. Computer-assisted measurements of information processing capacity, intelligence, short-term memory and further parameters of cerebral performance] von Ardenne M, et al. **ZFA** 1989 Jan–Feb;44(1):37–48 (Eng. Abstr.) (Ger)

[Mass spectometry and personal computer in the study of pulmonary gas exchange] Maselli R, et al. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):315–25 (Eng. Abstr.) (Ita)

[Description of a system for automatic analysis of ambulatory electrocardiography using a microcomputer] Petrucci E, et al. **Cardiologia** 1989 Feb;34(2):143–8 (Eng. Abstr.) (Ita)

[Use of drugs in renal insufficiency. Computer program for microcomputer] Bologna E, et al. **Clin Ter** 1988 Nov 30; 127(4):259–70 (Eng. Abstr.) (Ita)

[Analytic calculation of total urea mass in a single-pass dialysate during hemodialysis] De Paoli Vitali E, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):83–4 (Ita)

[Optimization of dialysis time using a personal computer] Mandolfo S, et al. **Minerva Urol Nefrol** 1989 Jan–Mar; 41(1):79 (Ita)

[Follow-up of transplant patients by using a personal computer] Pacitti A, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):51–3 (Ita)

[Continuous computerized monitoring of hemodynamic parameters during bicarbonate dialysis (BD) and acetate-free biofiltration (AFBF)] Spongano M, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):73–4 (Ita)

[Software for record reporting and filing with the personal computer] Di Giandomenico E, et al. **Radiol Med (Torino)** 1989 Mar;77(3):246–9 (Eng. Abstr.) (Ita)

[Automation of radiotherapy plans with the use of a personal computer] Randaccio P, et al. **Radiol Med (Torino)** 1988 Oct;76(4):323–8 (Eng. Abstr.) (Ita)

[Synthesis and evaluation of the adaptive control system for the ventricular assist device by using the circulatory system simulator] Feng JS, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):8–18 (Eng. Abstr.) (Jpn)

[Mass flow anesthesia delivery system and its application] Takahashi M, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar; 27(1):19–25 (Eng. Abstr.) (Jpn)

[Effects of noise on sleep. Part 1. Development of an automatic analysing system for all-night sleep polygraphy by microcomputer] Aoki S, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1092–101 (Eng. Abstr.) (Jpn)

[Three-dimensional display of structures and lesions in the brainstem using a personal computer] Funahashi K, et al. **No Shinkei Geka** 1989 Apr;17(4):359–64 (Eng. Abstr.) (Jpn)

[Management of radioactive wastes using a personal computer] Hamada N, et al. **Radioisotopes** 1988 Nov; 37(11):615–8 (Eng. Abstr.) (Jpn)

[Statistic programs for personal computers] Hannisdal E, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):223–6 (Nor)

[Use of microcomputer technic in the hemodialysis department] Filutowicz J, et al. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):1034–7 (Eng. Abstr.) (Pol)

[The CVA database as an example of the use of a ZX SPECTRUM microcomputer for recording data on neurologic patients for the purpose of scientific research] Lass P, et al. **Wiad Lek** 1988 May 1;41(9):604–8 (Eng. Abstr.) (Pol)

[An applications program package for use in resuscitation practice] Ievlev ML. **Anesteziol Reanimatol** 1989 Mar–Apr; (2):42–6 (Eng. Abstr.) (Rus)

[Automated morphometry using a microcomputer] Protsenko VD, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):73–4 (Rus)

[Application of the microcomputer "Electronika BK-0010" in programmed monitoring of the degree of students' assimilation of a course in pathologic anatomy according to tests at the first level] Ptashekas RS, et al. **Arkh Patol** 1989;51(1):52–4 (Eng. Abstr.) (Rus)

[Processing of the results of experiments on molecular DNA-DNA hybridization by using the Elektronika BZ-34 programmable microcomputer] Petrov NB. **Biol Nauki** 1988;(5):105–10 (Eng. Abstr.) (Rus)

[Determination of the indices of genetic similarity and diversity using programmable microcomputers] Polupan IuP, et al. **Biol Nauki** 1988;(7):105–8 (Eng. Abstr.) (Rus)

[A micro-computer program for statistical analysis of data from twin studies] Kurashvili GB, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):87–90 (Eng. Abstr.) (Rus)

[Dispersion analysis in toxicologic and hygienic studies with data processing using a microcomputer "Elektronika MK-52"] Bogorad VS. **Gig Sanit** 1989 Apr;(4):49–52 (Rus)

[A method for plotting calibration graphs and assessing measurement error by using a microcomputer] Basova GM, et al. **Gig Tr Prof Zabol** 1989;(2):43–6 (Rus)

[Calculation of the indices of acid–base equilibrium using a microcomputer] Baishev IM. **Lab Delo** 1988;(10):59–61 (Eng. Abstr.) (Rus)

[Radial immunodiffusion determination of C-reactive protein in whole blood and serum and calculation of its concentration using a microcomputer] Denisov VN, et al. **Lab Delo** 1988;(10):16–9 (Eng. Abstr.) (Rus)

[A method of optimizing the calculations necessary for evaluating immune status using a microcomputer] Duka ED, et al. **Lab Delo** 1989;(2):77 (Rus)

[A mathematical method of estimating the activity of blood coagulation factors] Fedorova ZD, et al. **Lab Delo** 1989; (1):38–41 (Eng. Abstr.) (Rus)

[Experience in the use of computers at a centralized biochemical laboratory] Kadanova LIa. **Lab Delo** 1989; (4):76–7 (Rus)

[Microprocessors and microcomputers in the manufacture of medical instruments] Akhutin VM, et al. **Med Tekh** 1989 May–Jun;(3):3–8 (Rus)

[An expert consulting system for the epidemiologic physician] Amirova EK. **Med Tekh** 1989 May–Jun;(3):24–9 (Eng. Abstr.) (Rus)

[Use of microprocessor controllers for the analysis of Doppler signals of blood flow velocity] Beketova IV, et al. **Med Tekh** 1989 May–Jun;(3):34–9 (Eng. Abstr.) (Rus)

[A microprocessor monitoring system for control of the status of the fetus] Berezkin GS, et al. **Med Tekh** 1989 May–Jun; (3):39–41 (Eng. Abstr.) (Rus)

[A personal system of automated planning of microprocessor printing plates for radio-electronic medical equipment] Galaĭ IuP, et al. **Med Tekh** 1989 May–Jun;(3):42–8 (Eng. Abstr.) (Rus)

[An automated complex for the multiparametric analysis of galvanic skin response signals] Ishchenko AN, et al. **Med Tekh** 1989 May–Jun;(3):50–3 (Eng. Abstr.) (Rus)

[An automated system for evaluating the state of peripheral hemodynamics] Kozlov II, et al. **Med Tekh** 1989 May–Jun; (3):29–33 (Eng. Abstr.) (Rus)

[A complex of microprocessor facilities for medical technology] Mamdzhian GG, et al. **Med Tekh** 1989 May–Jun;(3):54–61 (Rus)

[A medical terminal based on a microcomputer] Rybchenko AA, et al. **Med Tekh** 1988 Nov–Dec;(6):41–4 (Eng. Abstr.) (Rus)

[A microcomputer complex of devices for routine diagnostic tests] Vishniakov AI, et al. **Med Tekh** 1989 May–Jun; (3):61–2 (Rus)

[Microprocessor control of perfusion during extracorporeal purification of physiologic fluids] Voĭtsekhovskaia EKh, et al. **Med Tekh** 1989 Mar–Apr;(2):15–8 (Eng. Abstr.) (Rus)

[Microprocessor control of the equipment for extracorporeal extrarenal purification of the blood] Voĭtsekhovskaia EKh, et al. **Med Tekh** 1989 May–Jun;(3):18–24 (Eng. Abstr.) (Rus)

[Realization of an adaptive method of simulating the process of temperature change of a cadaver on a microcomputer] Shved EF, et al. **Sud Med Ekspert** 1989 Apr–Jun;32(2):4–6 (Eng. Abstr.) (Rus)

[Computerized test control of students' knowledge in endocrinology] Makolkin VI, et al. **Ter Arkh** 1988; 60(9):149–53 (Rus)

[A microcomputer system of biotechnical feedback] Sokhadze EM, et al. **Vestn Akad Med Nauk SSSR** 1989; (3):75–83 (Eng. Abstr.) (Rus)

[Microcomputers for training and monitoring of exercises in ophthalmology] Skitsiuk SV. **Vestn Oftalmol** 1989 Jan–Feb; 105(2):29–32 (Eng. Abstr.) (Rus)

[Use of programmable microcomputers for the analysis of the multiyear dynamics of infectious morbidity] Katkov AI. **Voen Med Zh** 1988 Jul;(7):26–7 (Rus)

[The use of microcomputers for processing medical accounts] Kozhev AA, et al. **Voen Med Zh** 1989 May;(5):22–3 (Rus)

[Characteristics of modern programmable microcomputers and basic trends in their use in military medicine] Malinskiĭ DM, et al. **Voen Med Zh** 1988 Jul;(7):22–6 (Rus)

[Personal computers and the efficiency of the information activities of military medical institutions] Romanovskiĭ VV. **Voen Med Zh** 1988 Jul;(7):19–22 (Rus)

[Optimizing the analysis of results of functional tests with the use of automated work stations] Spichev VP, et al. **Voen Med Zh** 1989 May;(5):17–9 (Rus)

[The use of a personal microcomputer in balneology] Vladeva L, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr;(2):33–5 (Rus)

[Use of microcomputers for information systems for the preparation of combined parenteral drugs] Mušková M, et al. **Bratisl Lek Listy** 1988 Aug;89(8):596–9 (Eng. Abstr.) (Slo)

[Personal bibliographic systems in medicine. Practical suggestions and usefulness of microcomputers] Belmonte Serrano MA. **Med Clin (Barc)** 1989 Jan 21;92(2):60–8 (17 ref.) (Spa)

[Personal bibliographic systems in medicine. Practical suggestions and the usefulness of microcomputers (letter)] Obrador A. **Med Clin (Barc)** 1989 Jun 3;93(1):37 (Spa)

[A computer surveillance system of the critically ill newborn infant patient] Juez G, et al. **Rev Chil Pediatr** 1987 Nov–Dec;58(6):490–6 (Eng. Abstr.) (Spa)

[A system based on a microcomputer for clinical measurement of auditory evoked potentials. I. Description of the computer programs used] Echeverría E. **Rev Med Chil** 1987 Nov;115(11):1019–23 (Eng. Abstr.) (Spa)

[A system based on a microcomputer for clinical measurement of auditory evoked potentials. II. The system used and normative values] Echeverría E, et al. **Rev Med Chil** 1987 Nov;115(11):1024–8 (Eng. Abstr.) (Spa)

ECONOMICS

Image processing for the rest of us: the potential utility of inexpensive computerized image analysis in clinical pathology and radiology. McEachron DL, et al. **Comput Med Imaging Graph** 1989 Jan–Feb;13(1):3–30

Wise CEOs know when to sell their computers. Lappa K. **Hospitals** 1989 Sep 5;63(17):78

Computers for the small office practice: one clinician's experience. Caldwell JR. **J Fla Med Assoc** 1989 Jan; 76(1):201–3

Does the computerisation of a general practice increase doctor's fees? Thomson AN. **N Z Med J** 1988 Dec 14; 101(859):821–3

A more cost-effective method of preoperative computerized imaging. Webber WB. **Plast Reconstr Surg** 1989 Jul; 84(1):143–57

[The way out for linear ECG? Price reduction of processing instruments—the cheapest instrument of Bulgarian production] Schwing C. **Fortschr Med** 1989 Jan 20; 107(2):63–4 (Ger)

INSTRUMENTATION

A high-speed multichannel neural data acquisition system for IBM PC compatibles. Novak JL, et al. **J Neurosci Methods** 1989 Jan;26(3):239–47

STATISTICS & NUMERICAL DATA

Personal computer use in hospitals soars: survey. Packer CL. **Hospitals** 1989 Sep 20;63(18):100

TRENDS

Children and computers. Approaching the twenty-first century. Lepper MR, et al. **Am Psychol** 1989 Feb; 44(2):170–8 (66 ref.)

UTILIZATION

Computer usage on the rise. Shewan CM. **ASHA** 1989 Feb; 31(2):35

Hospital CEOs don't use personal computers—yet. Lappa K. **Hospitals** 1989 Jul 20;63(14):24, 28, 30

MICROELECTRODES

Effect of bevelling on C1-selective microelectrodes: experimental and model study. Ikonomov OC, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):84–90

Microelectrodes in microbial ecology. Boots S. **Anal Chem** 1989 Mar 15;61(6):425A–427A

Ultramicroelectrode array behavior of one-dimensional organic conductor electrodes. Freund MS, et al. **Anal Chem** 1989 May 1;61(9):1048–52

Intracellular magnesium ion selective microelectrode based on a neutral carrier. Hu ZM, et al. **Anal Chem** 1989 Mar 15;61(6):574–6

Signal-to-noise ratio in microelectrode-array-based electrochemical detectors. Weber SG. **Anal Chem** 1989 Feb 15;61(4):295–302

Localization of the microelectrode tip combining a rapid procedure method and marking with pontamine sky blue. Sánchez-Alvarez M, et al. **Bol Estud Med Biol** 1988; 36(1–4):55–9

A simplified method of preparing and filling multibarreled glass microelectrodes. Reader TA. **Brain Res Bull** 1978

Nov-Dec;3(6):719-20
Intra-operative unit recordings in the human dorsal horn with a simplified floating microelectrode. Jeanmonod D, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):450-4
Batch-fabricated thin-film electrodes for stimulation of the central auditory system. Anderson DJ, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):693-704
In vitro life tests of faradaic neural stimulation electrodes at high current densities. Ballestrasse CL, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):870-4
Performance of planar multisite microprobes in recording extracellular single-unit intracortical activity. Drake KL, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):719-32
A long-term in vitro silicon-based microelectrode-neuron connection. Regehr WG, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1023-32
A simple device for the reliable production of varnish-insulated, high-impedance tungsten microelectrodes. Ciancone MT, et al. **J Neurosci Methods** 1989 Feb;27(1):77-9
Improving performance of motorized slides for micromanipulation. Gao XQ, et al. **J Neurosci Methods** 1989 Jun;28(3):225-7
The influence of the convulsant pentylenetetrazol on Ca2+-selective microelectrodes (neutral carrier ETH 1001). Lücke A, et al. **J Neurosci Methods** 1989 Aug; 29(2):139-42
Ultra-low noise silver-plated carbon fibre microelectrodes. Millar J, et al. **J Neurosci Methods** 1988 Aug;25(1):59-62
Effects of temperature and temperature gradients on ion-sensitive microelectrodes. Reid KH, et al. **J Neurosci Methods** 1988 Aug;25(1):49-57
A simple glass-coated, fire-polished tungsten electrode with conductance adjustment using hydrofluoridic acid. Wörgötter F, et al. **J Neurosci Methods** 1988 Sep; 25(2):135-8
Inner ear implants for experimental electrical stimulation of auditory nerve arrays. Xue XL, et al. **J Neurosci Methods** 1989 Jun;28(3):189-96
Compact and easy-to-use tungsten-in-glass microelectrode manufacturing workstation. Bullock DC, et al. **Med Biol Eng Comput** 1988 Nov;26(6):669-72
Oxygen sensitivity of recessed and unrecessed antimony pH microelectrodes. Kiani MF, et al. **Med Biol Eng Comput** 1988 Sep;26(5):541-6
Long-term implants of Parylene-C coated microelectrodes. Schmidt EM, et al. **Med Biol Eng Comput** 1988 Jan; 26(1):96-101
The effect of electrode design on the efficiency of delivery of radiofrequency energy to cardiac tissue in vitro. Blouin LT, et al. **PACE** 1989 Jan;12(1 Pt 2):136-43
De- and regeneration of axons after minor lesions in the rat sciatic nerve. Effects of microneurography electrode penetrations. Fried K, et al. **Pain** 1989 Jan;36(1):93-102
[Manufacturing of K+-potassium microelectrodes for electroretinographic studies] Vitanova L. **Eksp Med Morfol** 1989;28(2):25-9 (Eng. Abstr.) **(Bul)**
[Identification of the site of mediator release in the frog motor nerve ending using 3 extracellular microelectrodes] Benish TV, et al. **Dokl Akad Nauk SSSR** 1988;302(2):477-80 **(Rus)**
[A method of rapid beveling of microelectrodes using vibration] Malskii VA, et al. **Fiziol Zh** 1989 May-Jun; 35(3):107-9 (Eng. Abstr.) **(Rus)**
[A method of recording super-slow physiologic processes in the rabbit brain and lungs in a chronic experiment] Bokarius VB, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):582-5 **(Rus)**
[Electrodes for cochlear implantation] Fedorova VN, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):50-2 (Eng. Abstr.) **(Rus)**

MICROENCAPSULATION see **DRUG COMPOUNDING**

MICROFILAMENT PROTEINS

Molecular biology of gelsolin, a calcium-regulated actin filament severing protein. Kwiatkowski DJ, et al. **Biorheology** 1987;24(6):643-7
Sequence of human villin: a large duplicated domain homologous with other actin-severing proteins and a unique small carboxy-terminal domain related to villin specificity. Arpin M, et al. **J Cell Biol** 1988 Nov; 107(5):1759-66

ANALYSIS

Structural proteins of the neonatal and adult lamina cribrosa. Morrison JC, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1220-4
End-label fingerprintings show that the N- and C-termini of actin are in the contact site with gelsolin. Sutoh K, et al. **Biochemistry** 1989 Jun 13;28(12):5269-75
35 kDa proteins are not components of vertebrate smooth muscle thin filaments. Lehman W. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):57-61
Cytoskeletal architecture and immunocytochemical localization of fodrin in the terminal web of the ciliated epithelial cell. Kobayashi N, et al. **Cell Motil Cytoskeleton** 1988;11(3):167-77
Indirect immunofluorescence localization of ponticulin in motile cells. Wuestehube LJ, et al. **Cell Motil Cytoskeleton** 1989;13(4):245-63
Electron microscopic localization of myosin II and ABP-120 in the cortical actin matrix of Dictyostelium amoebae using IgG-gold conjugates. Ogihara S, et al. **Dev Genet** 1988; 9(4-5):505-20
Tissue-specific expression of profilin. Buss F, et al. **FEBS Lett** 1989 May 22;249(1):31-4
Functional comparison of villin and gelsolin. Effects of Ca2+, KCl, and polyphosphoinositides. Janmey PA, et al. **J Biol Chem** 1988 Nov 15;263(32):16738-43
A membrane-cytoskeletal complex containing Na+,K+-ATPase, ankyrin, and fodrin in Madin-Darby canine kidney (MDCK) cells: implications for the biogenesis of epithelial cell polarity. Nelson WJ, et al. **J Cell Biol** 1989 Mar;108(3):893-902
The Dictyostelium gelation factor shares a putative actin binding site with alpha-actinins and dystrophin and also has a rod domain containing six 100-residue motifs that appear to have a cross-beta conformation. Noegel AA, et al. **J Cell Biol** 1989 Aug;109(2):607-18
Identification of two species of actin depolymerizing factor in cultures of BHK cells. Koffer A, et al. **J Muscle Res Cell Motil** 1988 Aug;9(4):320-8
Marfan's syndrome starting to yield secrets [news] Kirn TF. **JAMA** 1988 Dec 2;260(21):3108
Alpha-fodrin (brain spectrin) immunocytochemical localization in rat vestibular hair cells. Scarfone E, et al. **Neurosci Lett** 1988 Oct 31;93(1):13-8
Distribution of analogues of spectrin, fodrin and protein 4.1 in rat spermatogenic cells. De Cesaris P, et al. **Prog Clin Biol Res** 1989;296:149-52
A common theme in the amino acid sequences of actin and many actin-binding proteins? Tellam RL, et al. **Trends Biochem Sci** 1989 Apr;14(4):130-3
Villin, intestinal brush border hydrolases and keratin polypeptides in intestinal metaplasia and gastric cancer; an immunohistologic study emphasizing the different degrees of intestinal and gastric differentiation in signet ring cell carcinomas. Osborn M, et al. **Virchows Arch [A]** 1988; 413(4):303-12

ANTAGONISTS & INHIBITORS

Gelsolin-polyphosphoinositide interaction. Full expression of gelsolin-inhibiting function by polyphosphoinositides in vesicular form and inactivation by dilution, aggregation, or masking of the inositol head group. Janmey PA, et al. **J Biol Chem** 1989 Mar 25;264(9):4825-31

BIOSYNTHESIS

Stage-specific polypeptide and villin expression during thyroid-hormone-induced substitution of the amphibian intestinal epithelium. Figiel A, et al. **Differentiation** 1989 Jun;40(3):166-75
Villin expression in the visceral endoderm and in the gut anlage during early mouse embryogenesis. Maunoury R, et al. **EMBO J** 1988 Nov;7(11):3321-9

BLOOD

Depression of gelsolin levels and detection of gelsolin-actin complexes in plasma of patients with acute lung injury. Lind SE, et al. **Am Rev Respir Dis** 1988 Aug;138(2):429-34
Formation of vitamin D-binding protein-actin and binary and ternary plasma gelsolin-actin complexes in human serum. Ohsawa M, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):195-200
Affinity separation of human plasma gelsolin on Affi-Gel Blue. Yamamoto H, et al. **J Biochem (Tokyo)** 1989 May; 105(5):799-802
In situ phosphorylation of platelet actin-binding protein by cAMP-dependent protein kinase stabilizes it against proteolysis by calpain. Chen M, et al. **J Biol Chem** 1989 Aug 25;264(24):14282-9
Association of gelsolin with actin filaments and cell membranes of macrophages and platelets. Hartwig JH, et al. **J Cell Biol** 1989 Feb;108(2):467-79
Expression of human plasma gelsolin in Escherichia coli and dissection of actin binding sites by segmental deletion mutagenesis. Way M, et al. **J Cell Biol** 1989 Aug; 109(2):593-605
Nucleotide sequence of pig plasma gelsolin. Comparison of protein sequence with human gelsolin and other actin-severing proteins shows strong homologies and evidence for large internal repeats. Way M, et al. **J Mol Biol** 1988 Oct 20;203(4):1127-33

GENETICS

Actin-binding proteins are conserved from slime molds to man. Schleicher M, et al. **Dev Genet** 1988;9(4-5):521-30
Expression, cloning and cDNA sequence of a fibroblast serum-regulated gene encoding a putative actin-associated protein (p27). Almendral JM, et al. **Exp Cell Res** 1989 Apr; 181(2):518-30
cDNAs encoding the beta subunit of cap Z, the actin-capping protein of the Z line of muscle. Caldwell JE, et al. **J Biol Chem** 1989 Jul 25;264(21):12648-52
Cloning of murine gelsolin and its regulation during differentiation of embryonal carcinoma cells. Dieffenbach CW, et al. **J Biol Chem** 1989 Aug 5;264(22):13281-8
Ca2+-independent F-actin capping proteins. Cap 32/34, a capping protein from Dictyostelium discoideum, does not share sequence homologies with known actin-binding proteins. Hartmann H, et al. **J Biol Chem** 1989 Jul 25; 264(21):12639-47
Identification of critical functional and regulatory domains in gelsolin. Kwiatkowski DJ, et al. **J Cell Biol** 1989 May; 108(5):1717-26
The intron-containing gene for yeast profilin (PFY) encodes a vital function. Magdolen V, et al. **Mol Cell Biol** 1988 Dec;8(12):5108-15
The gelsolin (GSN) cDNA clone, from 9q32-34, identifies BclI and StuI RFLPs. Kwiatkowski DJ, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4425
Total coding sequence of profilin cDNA from Mus musculus macrophage. Widada JS, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2855
Isolation and characterization of cDNA encoding the alpha subunit of Cap Z(36/32), an actin-capping protein from the Z line of skeletal muscle. Casella JF, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5800-4
A yeast actin-binding protein is encoded by SAC6, a gene found by suppression of an actin mutation. Adams AE, et al. **Science** 1989 Jan 13;243(4888):231-3

ISOLATION & PURIFICATION

Properties of purified actin depolymerizing factor from chick brain. Giuliano KA, et al. **Biochemistry** 1988 Dec 13; 27(25):8931-8
The use of poly(L-proline)-Sepharose in the isolation of profilin and profilactin complexes. Lindberg U, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):391-400
Isolation of an immunoreactive analogue of brain fodrin that is associated with the cell cortex of Dictyostelium amoebae. Bennett H, et al. **Cell Motil Cytoskeleton** 1988;11(4):303-17
Preparation of immobilized monomeric actin and its use in the isolation of protease-free and ribonuclease-free pancreatic deoxyribonuclease I. Nefsky B, et al. **Eur J Biochem** 1989 Jan 15;179(1):215-9
Purification and characterization of Ca2+/calmodulin-dependent actin-binding proteins from squid retina. Asai H, et al. **FEBS Lett** 1989 Apr 24; 247(2):377-80
An actin-depolymerizing protein in embryonic chicken skeletal muscle: purification and characterization. Abe H, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):172-80
A novel actin filament-capping protein from sea urchin eggs: a 20,000-molecular-weight protein-actin complex. Ishidate S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):72-80
Isolation of profilin from embryonic chicken skeletal muscle and evaluation of its interaction with different actin isoforms. Ohshima S, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):855-7
Isolation and characterization of a 58-kDa membrane- and microfilament-associated protein from ascites tumor cell microvilli. Liu Y, et al. **J Biol Chem** 1989 Jan 15; 264(2):1208-14
Purification and characterization of a Ca2+-dependent actin filament severing protein from bovine adrenal medulla. Maekawa S, et al. **J Biol Chem** 1989 May 5;264(13):7458-65
Crystallization of actophorin, an actin filament-severing protein from Acanthamoeba. Magnus KA, et al. **J Biol Chem** 1988 Dec 5;263(34):18143-4
A new 82-kD barbed end-capping protein (radixin) localized in the cell-to-cell adherens junction: purification and characterization. Tsukita S, et al. **J Cell Biol** 1989 Jun; 108(6):2369-82

METABOLISM

Gelsolin modulation in epithelial and stromal cells of mammary carcinoma. Chaponnier C, et al. **Am J Pathol** 1989 Mar;134(3):597-603
An electrophoretic procedure for detecting proteins that bind actin monomers. Safer D. **Anal Biochem** 1989 Apr; 178(1):32-7
Viscoelasticity of F-actin and F-actin/gelsolin complexes. Janmey PA, et al. **Biochemistry** 1988 Oct 18;27(21):8218-27
End-label fingerprintings show that an N-terminal segment of depactin participates in interaction with actin. Sutoh K, et al. **Biochemistry** 1989 Jan 10;28(1):102-6
F9 teratocarcinoma aggregates express villin upon differentiation into visceral endoderm-like cells. Buc-Caron MH, et al. **Biol Cell** 1989;65(2):195-8
Sodium butyrate induces major morphological changes in C6 glioma cells that are correlated with increased synthesis of a spectrin-like protein. Hargreaves AJ, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):291-5
Changes in the association of actin-binding proteins with the actin cytoskeleton during chemotactic stimulation of Dictyostelium discoideum. Dharmawardhane S, et al. **Cell Motil Cytoskeleton** 1989;13(1):57-63
Gelsolin immunoreactivity and development of the tectorial membrane in the cochlea of normal and hypothyroid rats. Rabié A, et al. **Cell Tissue Res** 1988 Oct;254(1):241-5
Oxidative cross-linking of fodrin parallels a membrane conductance increase in the mammalian lens. Gandolfi SA, et al. **Curr Eye Res** 1988 Aug;7(8):747-54
Differential distribution of villin and villin MRNA in mouse intestinal epithelial cells. Boller K, et al. **Differentiation** 1988 Nov;39(1):51-7
Immunoelectron microscopic localization of actin, alpha-actinin, actin-binding protein and myosin in resting and activated human blood platelets. Sixma JJ, et al.

Eur J Cell Biol 1989 Apr;48(2):271–81
Three actin-binding proteins are developmentally regulated in rat liver plasma membranes. Keresztes M. FEBS Lett 1989 May 22;249(1):51–5
The calmodulin-binding site in alpha-fodrin is near the calcium-dependent protease-I cleavage site. Harris AS, et al. J Biol Chem 1988 Oct 25;263(30):15754–61
Annealing of gelsolin-severed actin fragments by tropomyosin in the presence of Ca2+. Potentiation of the annealing process by caldesmon. Ishikawa R, et al. J Biol Chem 1989 Oct 5;264(28):16764–70
Differential modulation of actin-severing activity of gelsolin by multiple isoforms of cultured rat cell tropomyosin. Potentiation of protective ability of tropomyosins by 83-kDa nonmuscle caldesmon. Ishikawa R, et al. J Biol Chem 1989 May 5;264(13):7490–7
Characterization of the calmodulin-binding site of nonerythroid alpha-spectrin. Recombinant protein and model peptide studies. Leto TL, et al. J Biol Chem 1989 Apr 5;264(10):5826–30
Interactions among serum vitamin D binding protein, monomeric actin, profilin, and profilactin. Mc Leod JF, et al. J Biol Chem 1989 Jan 15;264(2):1260–7
The calmodulin and F-actin binding sites of smooth muscle caldesmon lie in the carboxyl-terminal domain whereas the molecular weight heterogeneity lies in the middle of the molecule. Riseman VM, et al. J Biol Chem 1989 Feb 15; 264(5):2869–75
Reassociation of microvillar core proteins: making a microvillar core in vitro. Coluccio LM, et al. J Cell Biol 1989 Feb;108(2):495–502
Ankyrin links fodrin to the alpha subunit of Na,K-ATPase in Madin-Darby canine kidney cells and in intact renal tubule cells. Morrow JS, et al. J Cell Biol 1989 Feb; 108(2):455–65
Acanthamoeba actin and profilin can be cross-linked between glutamic acid 364 of actin and lysine 115 of profilin. Vandekerckhove JS, et al. J Cell Biol 1989 Aug; 109(2):619–26
Immunoelectron microscopy of fodrin in the rat uriniferous and collecting tubular epithelium. Fujimoto T, et al. J Histochem Cytochem 1989 Sep;37(9):1345–52
Cloning and deletion mutagenesis using direct protein-protein interaction on an expression vector. Identification of the calmodulin binding domain of alpha-fodrin. Sri Widada J, et al. J Mol Biol 1989 Jan 20; 205(2):455–8
Proteolytic processing of human brain alpha spectrin (fodrin): identification of a hypersensitive site. Harris AS, et al. J Neurosci 1988 Jul;8(7):2640–51
Actin polymerization induces a shape change in actin-containing vesicles. Cortese JD, et al. Proc Natl Acad Sci U S A 1989 Aug;86(15):5773–7
[Binding of actin to serum actin-binding proteins and determination of actin in blood of cadavers using anti Gc] Ohsawa M. Nippon Hoigaku Zasshi 1988 Dec;42(6):546–54 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Characteristic structures of actin gels induced with hepatic actinogelin or with chicken gizzard alpha-actinin: implication for their function. Tsukita S, et al. Cell Motil Cytoskeleton 1988;10(4):451–63
Gelsolin sensitivity of microfilaments as a marker for muscle differentiation. Huckriede A, et al. Eur J Cell Biol 1988 Aug;46(3):506–12
Yeast actin-binding proteins: evidence for a role in morphogenesis. Drubin DG, et al. J Cell Biol 1988 Dec; 107(6 Pt 2):2551–61

PHYSIOLOGY

A Dictyostelium mutant deficient in severin, an F-actin fragmenting protein, shows normal motility and chemotaxis. André E, et al. J Cell Biol 1989 Mar; 108(3):985–95
Proteins regulating actin assembly in oogenesis and early embryogenesis of Xenopus laevis: gelsolin is the major cytoplasmic actin-binding protein. Ankenbauer T, et al. J Cell Biol 1988 Oct;107(4):1489–98
Smooth muscle gelsolin and a Ca2+-sensitive contractile cell model. Kanno K, et al. J Cell Physiol 1989 Apr; 139(1):58–67
Brush border myosin filament assembly and interaction with actin investigated with monoclonal antibodies. Citi S, et al. J Muscle Res Cell Motil 1988 Aug;9(4):306–19
Villin, a specific marker for some epithelia specialized in transport, to study the differentiation of intestinal and kidney cells in vivo and in a human colon adenocarcinoma line HT29 in culture. Arpin M, et al. Mol Aspects Med 1988;10(3):257–72 (42 ref.)

MICROFILAMENTS see under CYTOSKELETON

MICROFILARIA see under FILARIOIDEA

MICROFILMING

METHODS

[Electrophotographic microfilming for archiving roentgenograms and electroroentgenograms] Mamontov VV, et al. Med Radiol (Mosk) 1988 Oct;33(10):70–3 (Eng. Abstr.) (Rus)

STANDARDS

[Quality assurance in the microfilming of x-ray pictures] Haverkamp U, et al. ROFO 1989 Apr;150(4):472–4 (Eng. Abstr.) (Ger)

MICROFLUOROMETRY see CYTOPHOTOMETRY

MICROFLUOROMETRY, FLOW see FLOW CYTOMETRY

MICROGNATHISM

Association of severe microcephaly, short palpebral fissures, micrognathia, growth retardation and early death: a new syndrome. Madokoro H, et al. Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):186–8

CHEMICALLY INDUCED

Teratogenicity of 3,3-dimethyl-1-phenyltriazene in the rat: gross malformations including micrognathism. Frank AA, et al. Teratology 1989 Jan;39(1):53–61

COMPLICATIONS

[Cohen syndrome. Contribution to its clinical delineation] Lapetina F, et al. Pediatr Med Chir 1988 Mar-Apr; 10(2):217–21 (Eng. Abstr.) (Ita)

DIAGNOSIS

Otocephaly: report of a case with ultrasound findings. Dao AH, et al. J Tenn Med Assoc 1988 Dec;81(12):736–7

ETIOLOGY

Jaw deformity caused by juvenile rheumatoid arthritis and its correction. Myall RW, et al. Arthritis Rheum 1988 Oct; 31(10):1305–10

SURGERY

Surgical treatment of patients with upper micrognathia or retrognathia. Bezrukov VM, et al. Acta Chir Plast 1988; 30(3):138–46

MICROINJECTIONS

Identification of microinjected cells using biotinylated antibodies and Strep-avidin-conjugated horseradish peroxidase. Riabowol KT. Anal Biochem 1988 Nov 1; 174(2):601–12
Micro-injections in the avian embryo: technical notes. Heaton MB, et al. Brain Res Bull 1978 Nov-Dec;3(6):715–7
Limitations of the technique of pressure microinjection of excitatory amino acids for evoking responses from localized regions of the CNS. Lipski J, et al. J Neurosci Methods 1988 Dec;26(2):169–79
Altered metabolism of rat contralateral sciatic nerve after microinjection into the endoneurium of the ipsilateral sciatic nerve. Souyri F, et al. Neurosci Lett 1989 Jan 30; 96(3):351–5

INSTRUMENTATION

Performance of an automated system for capillary microinjection into living cells. Ansorge W, et al. J Biochem Biophys Methods 1988 Aug;16(4):283–92
Manufacture and use of fused silica cannulas for intracerebral injections in freely moving rats [published erratum appears in J Neurosci Methods 1989 Jul;29(1):91] Berger ML, et al. J Neurosci Methods 1989 Apr;27(3):225–34
Transgenic mouse production: pipette cleaning for pronuclear microinjection. Carnwath JW, et al. Trends Genet 1988 Jun;4(6):152

METHODS

Quantitation of the volume of liquid injected into cells by means of pressure. Minaschek G, et al. Exp Cell Res 1989 Aug;183(2):434–42
Single cell assay with an automated capillary microinjection system. Pepperkok R, et al. Exp Cell Res 1988 Oct; 178(2):369–76
Microinjection of cultured rat embryos: a new technique for studies in chemical dysmorphogenesis. Stark KL, et al. Toxicol Appl Pharmacol 1989 Sep 15;100(3):411–6
[Use of reconstructed Sendai virus envelopes for the microinjection of proteins into monolayer cells] Bokhon'ko AI, et al. Vopr Virusol 1988 Sep-Oct;33(5):600–3 (Eng. Abstr.) (Rus)
[A simple method for microinjections into the brain of conscious laboratory rats] Pavlásek J, et al. Cesk Fysiol 1986;35(5):429–31 (Slo)

MICROINTERFEROMETRY see MICROSCOPY, INTERFERENCE

MICROMANIPULATION

Micromanipulation studies of the mitotic apparatus in sand dollar eggs. Hiramoto Y, et al. Cell Motil Cytoskeleton 1988;10(1-2):172–84
Micromanipulation of mammalian embryos. Sugawara S. J Toxicol Sci 1988 Nov;13(4):279–86 (13 ref.)

INSTRUMENTATION

Improving performance of motorized slides for micromanipulation. Gao XQ, et al. J Neurosci Methods 1989 Jun;28(3):225–7
A microdrive positioning adapter for chronic single unit recording. Aldridge JW, et al. Physiol Behav 1988; 44(6):821–3

MICROMONOSPORA

ENZYMOLOGY

Reactions catalyzed by purified L-glutamine: keto-scyllo-inositol aminotransferase, an enzyme required for biosynthesis of aminocyclitol antibiotics. Lucher LA, et al. Antimicrob Agents Chemother 1989 Apr;33(4):452–9

GENETICS

Efficient transformation of Micromonospora purpurea with pIJ702 plasmid. Kelemen GH, et al. J Antibiot (Tokyo) 1989 Feb;42(2):325–8

METABOLISM

Common biosynthetic feature of fortimicin-group antibiotics. Dairi T, et al. J Antibiot (Tokyo) 1989 Jun;42(6):934–43
Biosynthetic similarity between Streptomyces tenjimariensis and Micromonospora olivasterospora which produce fortimicin-group antibiotics. Hotta K, et al. J Antibiot (Tokyo) 1989 May;42(5):745–51
Izenamicins: macrolide antibiotics. Imai H, et al. J Antibiot (Tokyo) 1989 Jun;42(6):1000–2
Calicheamicins, a novel family of antitumor antibiotics. 3. Isolation, purification and characterization of calicheamicins beta 1Br, gamma 1Br, alpha 2I, alpha 3I, beta 1I, gamma 1I and delta 1I. Lee MD, et al. J Antibiot (Tokyo) 1989 Jul;42(7):1070–87
Calicheamicins, a novel family of antitumor antibiotics: taxonomy, fermentation and biological properties. Maiese WM, et al. J Antibiot (Tokyo) 1989 Apr;42(4):558–63
LL-E19085 alpha, a novel antibiotic from Micromonospora citrea: taxonomy, fermentation and biological activity. Maiese WM, et al. J Antibiot (Tokyo) 1989 Jun;42(6):846–51
Isolation of gentamicin C compounds from culture filtrates of Micromonospora purpurea. Jork H, et al. J Chromatogr 1988 Oct 19;450(1):115–9
[Direct screening for producers of antibiotics among the Micromonospora] Bibikova MV, et al. Antibiot Khimioter 1989 Apr;34(4):248–51 (Eng. Abstr.) (Rus)

MICROMONOSPORACEAE

IMMUNOLOGY

Characterization of Micropolyspora faeni antigens by human antibodies and immunoblot analysis. Iranitalab M, et al. Allergy 1989 Jul;44(5):314–21
Immunomodulating properties of lymphocytes activated by farmer's lung associated bacterium Thermoactinomyces vulgaris in vitro. Jägerroos HJ. Allergy 1988 Nov; 43(8):586–92
Five-year follow-up of Micropolyspora faeni antibody in smoking and nonsmoking farmers. Kusaka H, et al. Am Rev Respir Dis 1989 Sep;140(3):695–9
Spontaneous regression in murine hypersensitivity pneumonitis: lack of immunological tolerance. Takizawa H, et al. Int Arch Allergy Appl Immunol 1989; 89(2-3):173–80
Lymphocyte activation with release of soluble mediators induced by Thermoactinomyces vulgaris in vitro. Jägerroos HJ, et al. Int J Immunopharmacol 1989;11(1):1–7
[Farmer's lung: IgG-subclass reactivities against thermophilic actinomycetes] Reese G, et al. Immun Infekt 1989 Apr; 17(2):59–60 (Eng. Abstr.) (Ger)

MICRONUCLEUS ASSAYS see MICRONUCLEUS TESTS

MICRONUCLEUS BIOASSAYS see MICRONUCLEUS TESTS

MICRONUCLEUS TESTS

Chromosome elimination in micronuclei: a common cause of hypoploidy. Ford JH, et al. Am J Hum Genet 1988 Nov; 43(5):733–40
The search for the molecular lesions responsible for the induction of chromosomal damage by alkylating agents. Bonatti S, et al. Ann Ist Super Sanita 1989;25(1):205–12
Trenbolone induces micronucleus formation and neoplastic transformation in Syrian hamster embryo fibroblasts but not in mouse C3H10T1/2 cells. Schiffmann D, et al. Arch Toxicol 1988 Aug;62(1):49–53
Ultraviolet-induced formation of micronuclei and sister chromatid exchange in cultured fibroblasts of patients with cutaneous malignant melanoma. Roser M, et al. Cancer Genet Cytogenet 1989 Aug;41(1):129–37
Identification of aneuploidy-inducing agents using cytokinesis-blocked human lymphocytes and an

antikinetochore antibody. Eastmond DA, et al. **Environ Mol Mutagen** 1989;13(1):34–43

A procedure for data analysis of the rodent micronucleus test involving a historical control. Hayashi M, et al. **Environ Mol Mutagen** 1989;13(4):347–56

Initiating carcinogen, triethylenemelamine, induces micronuclei in skin target cells. He SI, et al. **Environ Mol Mutagen** 1989;14(1):1–5

Results of tests for micronuclei and chromosomal aberrations in mouse bone marrow cells with the human carcinogens 4-aminobiphenyl, treosulphan, and melphalan. Shelby MD, et al. **Environ Mol Mutagen** 1989;13(4):339–42

Effect of erythropoietin on the micronucleus test. Suzuki Y, et al. **Environ Mol Mutagen** 1989;13(4):314–8

Micronuclei test in routine smears from uterine cervix. Chakrabarti RN, et al. **Eur J Gynaecol Oncol** 1988; 9(5):370–2

Micronucleus tests in mice on 39 food additives and eight miscellaneous chemicals. Hayashi M, et al. **Food Chem Toxicol** 1988 Jun;26(6):487–500

Genotype and the cryopreservation process affect the levels of aneuploidy and chromosome breakage in cultured human fibroblasts. Rudd NL, et al. **Genome** 1989 Apr; 32(2):196–202

Frequency and size distribution of micronuclei in lymphocytes stimulated with phytohemagglutinin and pokeweed mitogen in workers exposed to piperazine. Högstedt B, et al. **Hereditas** 1988;109(1):139–42

Frequencies of micronuclei in human peripheral blood lymphocytes stimulated in vitro by phytohemagglutinin and pokeweed mitogen. Högstedt B, et al. **Hereditas** 1988; 109(1):53–5

DNA adducts, micronuclei and leukoplakias as intermediate endpoints in intervention trials. Stich HF, et al. **IARC Sci Publ** 1988;(89):137–45

Micronuclei in cytokinesis-blocked lymphocytes as an index of occupational exposure to alkylating cytostatic drugs. Yager JW, et al. **IARC Sci Publ** 1988;(89):213–6

Micronucleus test in mice fed on an irradiated diet. Endoh D, et al. **Jpn J Vet Res** 1989 Apr;37(2):41–7

Antikinetochore antibodies and flow karyotyping: new techniques to detect aneuploidy in mammalian cells induced by ionizing radiation and chemicals. Nüsse M, et al. **Mol Toxicol** 1987–88 Fall;1(4):393–405

Use of newt larvae for in vivo genotoxicity testing of water: results on 19 compounds evaluated by the micronucleus test. Fernandez M, et al. **Mutagenesis** 1989 Jan;4(1):17–26

The identification of micronucleated chromosomes: a possible assay for aneuploidy. Thomson EJ, et al. **Mutagenesis** 1988 Sep;3(5):415–8

The mouse bone marrow micronucleus assay can be used to distinguish aneugens from clastogens. Vanderkerken K, et al. **Mutagenesis** 1989 Jan;4(1):6–11

Genetic toxicology testing and biomonitoring of environmental or occupational exposure. **Mutat Res** 1989 Aug;223(4):329–414

The mouse bone marrow micronucleus test: evaluation of 21 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun; 223(2):129–40

Production of chromosome aberrations, micronuclei, and sister-chromatid exchanges by 24-keV epithermal neutrons in human G0 lymphocytes. Aghamohammadi SZ, et al. **Mutat Res** 1989 Apr;211(2):225–30

Micronucleus test with colchicine given by intraperitoneal injection and oral gavage. Asano N, et al. **Mutat Res** 1989 Aug;223(4):391–4

The rat-liver carcinogen N-nitrosomorpholine initiates unscheduled DNA synthesis and induces micronuclei in the rat liver in vivo. Ashby J, et al. **Mutat Res** 1989 Apr; 225(4):143–7

Micronucleus test with benzo[a]pyrene using a single peroral administration and intraperitoneal injection in males of the MS/Ae and CD-1 mouse strains. Awogi T, et al. **Mutat Res** 1989 Aug;223(4):353–6

Statistical analysis of the micronucleus test--a modelling approach. Brodin U. **Mutat Res** 1989 Apr;211(2):259–64

Micronucleus, chromosome aberration, and small-colony TK mutant analysis to quantitate chromosomal damage in L5178Y mouse lymphoma cells. Doerr CL, et al. **Mutat Res** 1989 Mar;222(3):191–203

Micronucleus induction in mouse bone marrow by phenacetin administered intraperitoneally or orally. Hachiya N, et al. **Mutat Res** 1989 Aug;223(4):365–8

Micronucleus test with 6-mercaptopurine monohydrate administered intraperitoneally and orally. Hara T, et al. **Mutat Res** 1989 Aug;223(4):349–52

Micronucleus test with 1-beta-D-arabinofuranosylcytosine administered by intraperitoneal injection and oral gavage. Hayashi M, et al. **Mutat Res** 1989 Aug;223(4):345–8

Difference between intraperitoneal and oral gavage application in the micronucleus test. The 3rd collaborative study by CSGMT/JEMS.MMS. Collaborative Study Group for the Micronucleus Test/Mammalian Mutagenesis Study Group of the Environmental Mutagen Society of Japan. Hayashi M, et al. **Mutat Res** 1989 Aug;223(4):329–44

Kinetochore immunofluorescence in micronuclei: a rapid method for the in situ detection of aneuploidy and chromosome breakage in human fibroblasts. Hennig UG, et al. **Mutat Res** 1988 Dec;203(6):405–14

Micronucleus test with procarbazine hydrochloride administered by intraperitoneal injection and oral gavage. Inouye T, et al. **Mutat Res** 1989 Aug;223(4):411–4

Micronucleus test with ethyl methanesulfonate administered by intraperitoneal injection and oral gavage. Kondo K, et al. **Mutat Res** 1989 Aug;223(4):373–5

Use of the cytokinesis-block method for the analysis of micronuclei in V79 Chinese hamster lung cells: results with mitomycin C and cyclophosphamide. Krishna G, et al. **Mutat Res** 1989 Jan;222(1):63–9

In vitro induction of chromosome damage by sulphasalazine in human lymphocytes. Mackay JM, et al. **Mutat Res** 1989 Jan;222(1):27–36

Administration-route-related difference in the micronucleus test with 7,12-dimethylbenz[a]anthracene. Mizuhashi F, et al. **Mutat Res** 1989 Aug;223(4):357–60

Effect of route of administration in the micronucleus test with potassium bromate. Nakajima M, et al. **Mutat Res** 1989 Aug;223(4):399–402

Micronucleus test with vincristine administered by intraperitoneal injection and oral gavage. Ohuchida A, et al. **Mutat Res** 1989 Aug;223(4):395–8

Induction of micronuclei in pre-implantation rat embryos in vivo. Ornaghi F, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):71–4

The prevention of benzene-induced genotoxicity in mice by indomethacin. Pirozzi SJ, et al. **Mutat Res** 1989 Mar; 222(3):291–8

The automated bone marrow micronucleus test. Romagna F, et al. **Mutat Res** 1989 Jul;213(1):91–104

A comparison of intraperitoneal injection and oral gavage in the micronucleus test with mitomycin C in mice. Sato S, et al. **Mutat Res** 1989 Aug;223(4):387–90

Acentric chromosomal fragments and micronuclei: the time-displacement factor. Savage JR. **Mutat Res** 1989 Apr; 225(4):171–3

Characterization of an in vitro micronucleus assay with Syrian hamster embryo fibroblasts. Schmuck G, et al. **Mutat Res** 1988 Dec;203(6):397–404

Micronucleus test with potassium chromate(VI) administered intraperitoneally and orally to mice. Shindo Y, et al. **Mutat Res** 1989 Aug;223(4):403–6

Micronucleus test with 2-acetylaminofluorene by intraperitoneal injection and oral administration. Sugiyama C, et al. **Mutat Res** 1989 Aug;223(4):361–4

Administration-route-related differences in the micronucleus test with N-ethyl-N-nitrosourea. Sutou S, et al. **Mutat Res** 1989 Aug;223(4):377–81

Administration-route-related differences in the micronucleus test with benzene. Suzuki S, et al. **Mutat Res** 1989 Aug; 223(4):407–10

The role of short-lived lesions in the induction of micronuclei in rat liver by ethylnitrosourea and methyl methanesulphonate: the importance of experimental design. Tates AD, et al. **Mutat Res** 1989 Feb;210(2):271–9

Micronucleus test with methyl methanesulfonate administered by intraperitoneal injection and oral gavage. Tsuyoshi T, et al. **Mutat Res** 1989 Aug;223(4):383–6

Micronucleus test with cyclophosphamide administered by intraperitoneal injection and oral gavage. Wakata A, et al. **Mutat Res** 1989 Aug;223(4):369–72

Effect of tetrandrine on micronucleus formation and sister-chromatid exchange in both in vitro and in vivo assays. Xing SG, et al. **Mutat Res** 1989 Sep;224(1):5–10

Rapid screening of organosulfur agents for potential chemopreventive activity using the murine NA assay. Wargovich MJ, et al. **Nutr Cancer** 1989;12(2):189–93

Screening for interindividual differences in radiosensitivity by means of the micronucleus assay in human lymphocytes. Huber R, et al. **Radiat Environ Biophys** 1989;28(2):113–20

An in vitro micronucleus assay for determining the radiosensitivity of hepatocytes. Alati T, et al. **Radiat Res** 1989 Sep;119(3):562–8

Frequency of micronuclei in lymphocytes from in vitro gamma-irradiated human peripheral blood. Khadzhidekova V. **Radiobiol Radiother (Berl)** 1989;30(2):157–61

Allium micronucleus (MNC) assay to assess bioavailability, bioconcentration and genotoxicity of mercury from solid waste deposits of a chloralkali plant, and antagonism of L-cysteine [published erratum appears in Sci Total Environ 1989 Apr;79(3):300] Panda KK, et al. **Sci Total Environ** 1989 Feb;79(1):25–36

Micronucleus induction in mouse and rat fetuses treated transplacentally during histogenesis with mitomycin C and 7,12-dimethylbenz(a)anthracene. Müller L. **Teratogenesis Carcinog Mutagen** 1988;8(5):303–13

[Study on mutagenicity of Toxoflavin from Pseudomonas farinofermentans] Yue QA. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):77–9 (Eng. Abstr.) (Chi)

[The micronucleus test] Müller WU, et al. **Strahlenschutz Forsch Prax** 1988;30:259–75 (51 ref.) (Ger)

[Mechanisms of the formation of micronuclei in human lymphocyte cultures exposed to mitomycin C] Shinkawa K, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):628–33 (Eng. Abstr.) (Jpn)

[Methods used for evaluating mutagenic and genotoxic properties of chemical compounds. I. The micronucleus test in vivo (an abridged version)] Przybojewska B. **Med Pr** 1988;39(5):365–72 (Eng. Abstr.) (Pol)

[5-Chlorodeoxyuridine, more effectively than 5-bromodeoxyuridine, induces the formation of specific dicentric chromosomes in cells with micronuclei] Stobetskii VI, et al. **Tsitologiia** 1988 Dec;30(12):1498–500 (Eng. Abstr.) (Rus)

METHODS

The fetal blood erythrocyte micronucleus assay: classification of RNA-positive erythrocytes into two age populations by RNA aggregation state. MacGregor JT, et al. **Mutagenesis** 1989 May;4(3):190–9

The micronucleus test in Xenopus: a new and simple 'in vivo' technique for detection of mutagens in fresh water. Van Hummelen P, et al. **Mutagenesis** 1989 Jan;4(1):12–6

Tobacco smoke-induced clastogenicity in mouse fetuses and in newborn mice. Balansky RM, et al. **Mutat Res** 1989 May; 223(1):1–6

Induction of micronuclei in Vicia faba root tips treated with heavy metals (cadmium and chromium) in the presence of NTA. De Marco A, et al. **Mutat Res** 1988 Nov; 206(3):311–5

Micronucleus formation in 2-cell embryos after in vitro X-irradiation of mouse spermatozoa. Pampfer S, et al. **Mutat Res** 1989 Jan;210(1):191–6

Series: 'current issues in mutagenesis and carcinogenesis'.12. Improved method of preparing bone marrow micronucleus assay slides. Romagna F. **Mutat Res** 1988 Nov;206(3):307–9

C-banding as a simple tool to discriminate between micronuclei induced by clastogens and aneugens. Verschaeve L, et al. **Stain Technol** 1988 Nov;63(6):351–4

[The micronuclei detection test in stimulated human peripheral lymphocytes using cytochalasin B] Kočišová J, et al. **Cas Lek Cesk** 1989 Apr 28;128(18):568–70 (Eng. Abstr.) (Cze)

[Cypermethrin induction of micronuclei in mammalian somatic cells] Bakhitova LM, et al. **Tsitol Genet** 1988 Jul-Aug;22(4):32–5 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

The detection and importance of outliers in the in vivo micronucleus assay. Mitchell IG, et al. **Mutagenesis** 1988 Nov;3(6):491–5

MICROPHTHALMOS

[H.A.R.D. syndrome. Oculocerebral manifestations apropos of a case] Costet C, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep;88(8-9):1087–90 (Eng. Abstr.) (Fre)

BLOOD

Little or no induction of hyperglycemia by 2-deoxy-D-glucose in hereditary blind microphthalmic rats. Nagai K, et al. **Life Sci** 1988;43(20):1575–82

COMPLICATIONS

A unique association of Marfan syndrome with craniofacial hypoplasia, oligophrenia and severe microphthalmia. Capocchi G, et al. **Ital J Neurol Sci** 1988 Aug;9(4):397–400

Optic pit, microphthalmos and orbital cyst. Sherman J, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):131–3

[Bone choristoma of the bilateral choroid and asymmetric microphthalmia] Santoni G, et al. **J Fr Ophtalmol** 1988; 11(4):363–7 (Eng. Abstr.) (Fre)

[Anophthalmia-microphthalmia with dementia and epilepsy as well as osteopathia antieleptica] Fehlow P. **Padiatr Grenzgeb** 1988;27(4):317–21 (Eng. Abstr.) (Ger)

DIAGNOSIS

[Diagnostic criteria of the cerebro-oculo-facio-skeletal syndrome or Pena-Shokeir II syndrome] Butomo IV, et al. **Pediatriia** 1988;(4):89–91 (Rus)

EMBRYOLOGY

The optic fissure in the normal and microphthalmic mouse. Hero I. **Exp Eye Res** 1989 Aug;49(2):229–39

ETIOLOGY

[Antenatal herpes: microphthalmos and retinitis] Durquety MC, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul; 88(6-7):811–3 (Fre)

GENETICS

GOMBO syndrome of growth retardation, ocular abnormalities, microcephaly, brachydactyly, and oligophrenia: a possible "new" recessively inherited MCA/MR syndrome. Verloes A, et al. **Am J Med Genet** 1989 Jan;32(1):15–8

Nonsyndromal microphthalmia [letter; comment] Teebi AS, et al. **Clin Genet** 1989 Apr;35(4):311–2. **Comment on:** Clin Genet 1988 May;33(5):321–4

Microphthalmia: a new recessive mutation in the Norway rat. Moutier R, et al. **J Hered** 1989 Jan-Feb;80(1):76–8

Genetical and histological studies on a mouse displaying microphthalmia and cataract. Takeuchi IK, et al. **Jikken Dobutsu** 1988 Oct;37(4):413–9

Morphological and genetic characteristics of the open-eyelid mutant spontaneously occurring in NC-strain mice. Teramoto S, et al. **Jikken Dobutsu** 1988 Oct;37(4):455–62

Macrosomia, microphthalmia, and early rapid or sudden infant death: a new syndrome? [letter] Teebi AS, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):647–8

[Meyer-Schwickerath syndrome] Huet F, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep;88(8-9):1017–9 (Eng.

Abstr.) (Fre)
[Familial nanophthalmos] Martorina M. **J Fr Ophtalmol** 1988; 11(4):357–61 (Eng. Abstr.) (Fre)

PATHOLOGY

Microphthalmos with upper eye lid cyst—a case report. Thakur S, et al. **Indian J Ophthalmol** 1988 Apr–Jun; 36(2):100–1

SURGERY

[Congenital anophthalmos. Control of osteogenesis with an expanding intraorbital prosthesis] Rodallec A, et al. **J Fr Ophtalmol** 1988;11(10):661–8 (Eng. Abstr.) (Fre)

MICROPORE FILTERS

Bronchoalveolar lavage fluid processing. Effect of membrane filtration preparation on neutrophil recovery. Thompson AB, et al. **Acta Cytol** 1989 Jul–Aug;33(4):544–9
Methods and theory for analysis of flow of white cell subpopulations through micropore filters. Nash GB, et al. **Br J Haematol** 1988 Oct;70(2):165–70
Effects of preparative procedures and of cell activation on flow of white cells through micropore filters. Nash GB, et al. **Br J Haematol** 1988 Oct;70(2):171–6
Interaction of some sterilizing filter materials with some technetium-99m radiopharmaceuticals. Billinghurst MW, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1255–8
Particle gathering and microstreaming near ultrasonically activated gas-filled micropores. Miller DL. **J Acoust Soc Am** 1988 Oct;84(4):1378–87
Use of sparse-pore polycarbonate (Nuclepore) membrane for the measurement of chemotaxis of polymorphonuclear leukocytes. Comparison of 'micro-Boyden' chambers and estimation of 'drop-off' of cells. Bignold LP. **J Immunol Methods** 1989 Mar 31;118(2):217–25
The effect of membrane filtration on protein conformation [letter] Howard G Jr. **J Parenter Sci Technol** 1988 Sep–Oct; 42(5):144–6
[Insertion of a temporary percutaneous filter before suprarenal caval thrombectomy (letter)] Du Cailar C, et al. **Presse Med** 1989 Jun 17;18(24):1208–9 (Fre)
[Removal of human immunodeficiency virus by filtration with microporous regenerated cellulose membrane and by fractionation with polyethylene glycol] Hamamoto Y, et al. **Nippon Rinsho** 1989 Jan;47(1):161–7 (Jpn)
[Use of membrane filters for the isolation of campylobacter] Boltsov AG, et al. **Lab Delo** 1988;(7):62–3 (Eng. Abstr.) (Rus)
[Possibilities of using nuclear filters in microbiological studies] Kapitonenko NA, et al. **Lab Delo** 1989;(2):55–6 (Eng. Abstr.) (Rus)

MICROPROCESSORS see MICROCOMPUTERS

MICROPUNCTURES see PUNCTURES

MICRORADIOGRAPHY

Nuclear cataract—a microradiographic study. Palmquist BM, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):671–7
Bone mass determination from microradiographs by computer-assisted videodensitometry. II. Aluminium as a reference substance. Kälebo P, et al. **Acta Radiol** 1988 Sep–Oct;29(5):611–7

METHODS

A method of semi-quantitative microradiographic analysis of root surface lesion remineralization. Graves CN, et al. **J Oral Pathol** 1988 May;17(5):241–9
Microradiographic demonstration of human intrarenal microlymphatic pathways. Cuttino JT Jr, et al. **Urol Radiol** 1989;11(2):83–7

MICROSCOPY

Temperature-controlled perfusion apparatus for microscope using transparent conducting film heater. Toyotomi S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C214–7
Sampling density and quantitative microscopy. Young IT. **Anal Quant Cytol Histol** 1988 Aug;10(4):269–75
A modified slit lamp for examination of wheelchair-bound patients. Javitt JC. **Arch Ophthalmol** 1989 Mar;107(3):453–4
Photic retinopathy from the operating room microscope. Study with filters. Robertson DM, et al. **Arch Ophthalmol** 1989 Mar;107(3):373–5
Use and limitations of light microscopy for diagnosing malaria at the primary health care level. Payne D. **Bull WHO** 1988;66(5):621–6
Quantitative analysis of wide-field specular microscopy. II. Precision of sampling from the central corneal endothelium. Hirst LW, et al. **Invest Ophthalmol Vis Sci** 1989 Sep; 30(9):1972–9
Frequency dependence of tissue attenuation measured by acoustic microscopy. Daft CM, et al. **J Acoust Soc Am** 1989 May;85(5):2194–201
Spectacles for microscopists and astronomers. Blue PW, et al. **J Am Optom Assoc** 1989 Jan;60(1):19–21
Light, scanning, and transmission electron microscopy of a single population of detergent-extracted cardiac myocytes in vitro. Delcarpio JB, et al. **J Electron Microsc Tech** 1989 May;12(1):24–8
Simple microcomputer system for mapping tissue sections with the light microscope. Alvarez-Buylla A, et al. **J Neurosci Methods** 1988 Sep;25(2):165–73
Method evaluation: automated microscopy as a compendial test for particulates in parenteral solutions. Barber TA, et al. **J Parenter Sci Technol** 1989 Jan–Feb;43(1):27–47
The use of carbon dioxide gas to displace flowing blood during angioscopy. Silverman SH, et al. **J Vasc Surg** 1989 Sep;10(3):313–7
Videomicroscopic measurements in living cells: dynamic determination of multiple end points for in vitro toxicology. Weiss DG. **Mol Toxicol** 1987–88 Fall;1(4):465–88
Improved resolution of specular micrographs. Merin LM, et al. **Ophthalmic Surg** 1989 Jun;20(6):427–9
Retinal phototoxicity from the operating microscope. The role of inspired oxygen [see comments] Jaffe GJ, et al. **Ophthalmology** 1988 Aug;95(8):1130–41. **Comment in:** Ophthalmology 1989 Jun;96(6):925–6
Scanning tunneling microscopy and atomic force microscopy: application to biology and technology. Hansma PK, et al. **Science** 1988 Oct 14;242(4876):209–16 (63 ref.)
New microscope images ions' ins and outs [news] Pool R. **Science** 1989 Feb 3;243(4891):609
Practical specular microscopy. Notz RG, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1988;40:713–5
[Ergonomic aspects of visual conditions in microscope work] Krueger H, et al. **Biomed Tech (Berlin)** 1988 Sep; 33(9):196–202 (Eng. Abstr.) (Ger)
[Capillaroscopic evaluation of the effects of nifedipine in patients with Raynaud's phenomenon] Riccio A, et al. **Clin Ter** 1988 May 15;125(3):185–90 (Eng. Abstr.) (Ita)
[Dermal vasculitis in rheumatoid arthritis and systemic lupus erythematosus. A study using capillaroscopy of the nailfold] Binaghi F, et al. **Minerva Cardioangiol** 1988 Jun; 36(6):305–10 (Eng. Abstr.) (Ita)
[Loss of motility of subgingival bacteria in specimens prepared for dark-field microscopy examination] Santarelli G, et al. **Minerva Stomatol** 1988 Nov;37(11):807–11 (Eng. Abstr.) (Ita)
[Open auto-keratoplasty and reflected-light microscopy of the endothelium] Kasparov AA, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):24–6 (Eng. Abstr.) (Rus)

HISTORY

Charles Spencer (1813–1881), microscope maker. Edmonson JM. **J Lab Clin Med** 1989 Jul;114(1):93–4

INSTRUMENTATION

The site of operating microscope light-induced injury on the human retina. Brod RD, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):390–7
Luminescence digital imaging microscopy. Jovin TM, et al. **Annu Rev Biophys Biophys Chem** 1989;18:271–308 (239 ref.)
Interactive morphometry: the influence of magnification. Torkkeli T, et al. **Appl Pathol** 1989;7(1):19–25
Three-dimensional measurement: the accuracy and precision of the Reflex Microscope. Speculand B, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):276–83
An indigenous, inexpensive operating microscope. Govila A. **Br J Plast Surg** 1989 Mar;42(2):233–4
Progress in video microscopy. Inoué S. **Cell Motil Cytoskeleton** 1988;10(1–2):13–7 (21 ref.)
Automated determination of polygonality of corneal endothelial cells. Nishi O, et al. **Cornea** 1989;8(1):54–7
New accessories for operation microscopes in ophthalmic microsurgery. Brock H. **Dev Ophthalmol** 1989;18:16–23 (3 ref.)
Aspects of microsurgical technology. Improvement in microscopes, cutting technique and implant technology. Draeger J. **Dev Ophthalmol** 1989;18:7–15 (0 ref.)
Prerequisites for strabismus microsurgery. Microscope instruments and sutures. Véronneau-Troutman S. **Dev Ophthalmol** 1989;18:24–35 (12 ref.)
Adjusting eyepieces [letter] Mooi WJ, et al. **Histopathology** 1988 Jul;13(1):120–1
A frameless stereotaxic operating microscope for neurosurgery. Friets EM, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):608–17
Contrast enhancement amplifier for television microscopy. Intaglietta M, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):253–60
Fringe mode reflectance laser Doppler microscope system. Einav S, et al. **J Biomed Eng** 1989 Jan;11(1):57–62
A graphics-oriented personal computer-based microscope charting system for neuroanatomical and neurochemical studies. Tourtellotte WG, et al. **J Neurosci Methods** 1989 Jul;29(1):43–57
Versatile perfusion chamber for high-magnification microscopy. Braga PC. **J Pharmacol Methods** 1989 Aug; 22(1):1–6
Skin surface microscopy: anything new under the sun? [editorial] **Lancet** 1989 Jun 3;1(8649):1239
The portable, plastic McArthur microscope for the examination of skin-smears in leprosy [letter] Longmore T. **Lepr Rev** 1988 Jun;59(2):182–3
Acid-fast smears: a cause of false positive reactions. Allen MA, et al. **Med Lab Sci** 1988 Apr;45(2):184–6
Solid-state imagers for microscopy. Aikens RS, et al. **Methods Cell Biol** 1989;29:291–313 (5 ref.)
Culturing cells on the microscope stage. Mckenna NM, et al. **Methods Cell Biol** 1989;29:195–205 (7 ref.)
A horizontal intravital microscope-plus-bone chamber system for observing bone microcirculation. Winet H. **Microvasc Res** 1989 Jan;37(1):105–14
Infection affects workers [news] **Occup Health Saf** 1989 Mar; 58(3):14
Photographic slit-lamp biomicroscopes. Martonyi CL. **Ophthalmology** 1989 Sep;Pt 2:6–19
Imaging crystals, polymers, and processes in water with the atomic force microscope. Drake B, et al. **Science** 1989 Mar 24;243(4898):1586–9
The scanning ion-conductance microscope. Hansma PK, et al. **Science** 1989 Feb 3;243(4891):641–3
Confocal microscopy: applications in neurobiology. Fine A, et al. **Trends Neurosci** 1988 Aug;11(8):346–51 (26 ref.)
Hypospadias repair: optical magnification versus Zeiss reconstruction microscope. Shapiro SR. **Urology** 1989 Jan; 33(1):43–6 (19 ref.)
[Accommodation-convergence coupling using the stereomicroscope] Draeger J, et al. **Fortschr Ophthalmol** 1989;86(1):84–8 (Eng. Abstr.) (Ger)
[Laser scan microscopy: a new imaging procedure in quality assessment of artificial lenses] Rochels R, et al. **Fortschr Ophthalmol** 1989;86(1):41–3 (Eng. Abstr.) (Ger)
[Comment on the work by H.P. Soyer, J. Smolle, H. Kresbach, S. Hödl, P. Glavanovitz, H. Pachernegg and H. Kerl: Direct light microscopy of pigment tumors of the skin (letter)] Schwermann M, et al. **Hautarzt** 1988 Dec; 39(12):795 (Ger)
[Ultrasound microscopy of skin sections] Buhles N, et al. **Z Hautkr** 1988 Nov 15;63(11):926–34 (Eng. Abstr.) (Ger)
[A device for studying large, flat macro-microscopic preparations] Stepanov SP. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):69 (Rus)
[The working conditions of microscope operators and the ways for their sanitary improvement in the manufacture of microelectronic devices] Liman AD, et al. **Gig Tr Prof Zabol** 1989;(2):14–6 (Eng. Abstr.) (Rus)
[A fixation device for experimental intravital microscopy] Val'kov VI. **Khirurgiia (Mosk)** 1988 Aug;(8):125–7 (Rus)
[A trial of and prospects for the use of computerized television analyzers for the quantitative microscopy of normal and pathological brain tissue] Adrianov OS, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):13–8 (Rus)
[Instrument-associated myopia and its effect on the work capacity of microscopists] Niurenberg OIu. **Vestn Oftalmol** 1988 Sep–Oct;104(5):52–4 (Eng. Abstr.) (Rus)
[A device for determining the capillary asymmetry index] Chernetsov AA. **Voen Med Zh** 1988 Sep;(9):61–2 (Rus)

METHODS

Use of dark-field and fluorescence microscopy to examine extracellular hyaline accumulation in the mouse. Wordinger RJ. **Acta Anat (Basel)** 1988;132(4):327–30
Detection of gold probes with video-enhanced contrast microscopy: nanovid microscopy. De Brabander M, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):282–95
Surface microscopy. A new approach to the diagnosis of cutaneous pigmented tumors. Soyer HP, et al. **Am J Dermatopathol** 1989 Feb;11(1):1–10
A contact lens for specular microscopic observation. Tsubota K. **Am J Ophthalmol** 1988 Nov 15;106(5):627–8
The new stereological tools: disector, fractionator, nucleator and point sampled intercepts and their use in pathological research and diagnosis. Gundersen HJ, et al. **APMIS** 1988 Oct;96(10):857–81 (45 ref.)
The interior of a whole and unmodified biological object—the zymogen granule—viewed with a high-resolution X-ray microscope. Rothman SS, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):484–6
Images of DNA fragments in an aqueous environment by scanning tunneling microscopy. Barris B, et al. **Biopolymers** 1988 Oct;27(10):1691–6
Videomicroscopy of acute brain slices from amygdala and hippocampus. Keenan CL, et al. **Brain Res Bull** 1988 Sep; 21(3):373–83
Objective histopathologic grading of cutaneous malignant melanomas by stereologic estimation of nuclear volume. Prediction of survival and disease-free period. Sørensen FB. **Cancer** 1989 May 1;63(9):1784–98
Dynamics of microtubules visualized by darkfield microscopy: treadmilling and dynamic instability. Hotani H, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):229–36
Nanometer-scale measurements using video light microscopy. Schnapp BJ, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):47–53
Measurement of cell motility and morphology with an automated microscope system. Thurston G, et al. **Cytometry** 1988 Sep;9(5):411–7
First International Conference on 3-D Image Processing in Microscopy. Gissen, 9–11 March 1988. Abstracts. **Eur J Cell Biol Suppl** 1989;25:1–184
Three-dimensional reconstruction of transmitter-identified central neurons by "en bloc" immunofluorescence histochemistry and confocal scanning microscopy. Brodin L, et al. **Exp Brain Res** 1988;73(2):441–6
The specular microscope: its impact on laboratory and clinical studies of the cornea. Hodson SA, et al. **Eye** 1988; 2 Suppl:S81–97 (56 ref.)

Information characteristic of morphology of the adaptational norm, disadaptation, and pathology under the aspect of diagnostic microscopy. Avtandilov GG. **Gegenbaurs Morphol Jahrb** 1989;135(1):169–71

Progress in application of the image analysing system QUANTIMET 720 in the histomorphometry of the microcirculatory system. Blödner R, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):115–20

A "two-objective, one-area" procedure in absorption microphotometry and its application using an inverted microscope. Chaubal KA. **Gen Physiol Biophys** 1988 Aug; 7(4):413–26

A double staining method for measuring DNA content of specific cell populations utilizing computerized microscopy. Kerem E, et al. **Histochemistry** 1989; 91(1):47–50

A new method of the immunohistochemical detection of cellular antigens for light and electron microscopy. Seno S, et al. **Histochemistry** 1989;91(6):449–54

Comparative studies of airborne asbestos in occupational and non-occupational environments using optical and electron microscope techniques. Cherrie J, et al. **IARC Sci Publ** 1989;(90):304–9

Morphometric analysis of the corneal endothelium. Specular microscopy vs. alizarin red staining. Geroski DH, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):254–9

Three-dimensional counting: an accurate and direct method to estimate numbers of cells in sectioned material [published erratum appears in J Comp Neurol 1989 Mar 8;281(2):335] Williams RW, et al. **J Comp Neurol** 1988 Dec 15; 278(3):344–52

First image from a positron reemission microscope. Rich A, et al. **J Electron Microsc Tech** 1988 Jun;9(2):209–10

A simple device to aid tissue processing of large numbers of blocks for light or electron microscopy. Smith KJ, et al. **J Electron Microsc Tech** 1988 Feb;8(2):223–4

The use of double Formvar film to support paraffin sections for light microscopy and subsequent STEM/X-ray microanalysis. Tvedt KE, et al. **J Electron Microsc Tech** 1988 Feb;8(2):237–8

Rapid localization of carbon 14-labeled molecules in biological samples by ion mass microscopy. Hindie E, et al. **J Histochem Cytochem** 1989 Feb;37(2):135–8

Morphological and elemental integrity of freeze-fractured, freeze-dried cultured cells during ion microscopic analysis. Ausserer WA, et al. **J Microsc** 1989 Apr;154 (Pt 1):39–57

A confocal laser microscope scanner for digital recording of optical serial sections. Carlsson K, et al. **J Microsc** 1989 Feb;153 (Pt 2):171–80

Processing of secondary ion microscope images: an example of application to the thyroid. Cavellier JF, et al. **J Microsc** 1989 Apr;154 (Pt 1):31–8

Magnification changes produced by cover slip compensation rings on microscope objectives [letter] Chole RA. **J Microsc** 1989 Jan;153 (Pt 1):119

A perfusion chamber for high-resolution light microscopy of cultured cells. Finch SA, et al. **J Microsc** 1988 Jul;151 (Pt 1):71–5

A no-moving-parts video rate laser beam scanning type 2 confocal reflected/transmission microscope. Goldstein S. **J Microsc** 1989 Feb;153 (Pt 2):RP1–2

Video microscopic image processing facilitates the evaluation of light microscopic autoradiography at high magnification. Montag M, et al. **J Microsc** 1988 Jun;150 (Pt 3):245–9

Three-dimensional visualization methods for confocal microscopy. van der Voort HT, et al. **J Microsc** 1989 Feb; 153 (Pt 2):123–32

Three-dimensional imaging in confocal systems. Wilson T. **J Microsc** 1989 Feb;153 (Pt 2):161–9

Edge detection in images using Marr-Hildreth filtering techniques. Smith TG Jr, et al. **J Neurosci Methods** 1988 Nov;26(1):75–81

Identification of unsuspected cases of giardiasis by wet-film microscopy [letter] Gibb AP. **Lancet** 1989 Jul 22; 2(8656):216–7

Scanning tunnelling microscopy of Z-DNA. Arscott PG, et al. **Nature** 1989 Jun 8;339(6224):484–6

Microscopes: probing biological structure [news] Crowther RA. **Nature** 1989 Jun 8;339(6224):426–7

An improved method for cutting of thick serial sections for light microscopy from Epon-embedded tissues. Sasaki F. **Okajimas Folia Anat Jpn** 1988 Dec;65(5):283–9

Review of scanning tunneling microscopy—new biological frontier? Vidić B. **Prog Clin Biol Res** 1989;295:589–95 (19 ref.)

Cell cycle of normal bladder urothelium in developing and adult mice. Jost SP. **Virchows Arch [B]** 1989;57(1):27–36

[Specular microscopy] Ullern M. **J Fr Ophtalmol** 1988; 11(6–7):525–40 (130 ref.) (Fre)

[3d symposium. Morphometry in research and clinical practice with special reference to automated microscopic image analysis] **Gegenbaurs Morphol Jahrb** 1989; 135(1):1–125 (Ger)

[The interactive image processing system AMBA/R] Roth K, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):25–32 (4 ref.) (Eng. Abstr.) (Ger)

[A simple device for accomplishing the continual dehydration of biological objects] Greissl R, et al. **Z Mikrosk Anat Forsch** 1988;102(6):1036–44 (Eng. Abstr.) (Ger)

[A method of improving darkfield microscopy] Podkorytov IuI. **Lab Delo** 1989;(3):74–5 (Rus)

STANDARDS

Histopathologists, malignancies, and undefined high-power fields [letter] Sadler DW, et al. **Lancet** 1989 Apr 8; 1(8641):785–6

MICROSCOPY, ELECTRON

Selective use of electron microscopy in fine needle aspiration cytology. Dabbs DJ, et al. **Acta Cytol** 1988 Nov-Dec; 32(6):880–4

Electron microscopy of fine needle aspiration biopsies of mediastinal and paramediastinal lesions. Taccagni G, et al. **Acta Cytol** 1988 Nov-Dec;32(6):868–79

Trends and prospects of bio-medical electron microscopy. David H. **Acta Histochem (Jena)** 1989;85(2):155–65 (48 ref.)

New improved lanthanide-based methods for the localization of acid and alkaline phosphatase activity at the light and electron microscopical level. Halbhuber KJ, et al. **Acta Histochem Suppl (Jena)** 1989;37:169–73

High voltage electron microscopic studies of endothelial cell tubular structures in the mouse blood-brain barrier following brain trauma. Lossinsky AS, et al. **Acta Neuropathol (Berl)** 1989;77(5):480–8

The envelope structure of Branhamella catarrhalis as studied by transmission electron microscopy. Hellio R, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct;139(5):515–25

Molecular shape of Lumbricus terrestris erythrocruorin studied by electron microscopy and image analysis. Boekema EJ, et al. **Biochim Biophys Acta** 1988 Dec 2; 957(3):370–9

Intermediary structures during membrane fusion as observed by cryo-electron microscopy. Frederik PM, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):275–8

What is the value of electron microscopy in fine-needle aspiration biopsy? Yazdi HM, et al. **Diagn Cytopathol** 1988; 4(2):177–82

Immunoelectron microscopic demonstration of antigenic sites on lymphoid cells using a human monoclonal antibody (Ha6D3). Hansmann ML, et al. **Eur J Haematol** 1989 Jul; 43(1):35–40

Direct observation of microtubules with the scanning tunneling microscope. Simić-Krstić Y, et al. **FASEB J** 1989 Aug;3(10):2184–8

Potency of microwave irradiation during fixation for electron microscopy. Wild P, et al. **Histochemistry** 1989; 91(3):213–20

The electron microscopy of the People's Republic of China, Part II: Material science. **J Electron Microsc Tech** 1987 Dec;7(4):237–340

Electron crystallography of organic materials. **J Electron Microsc Tech** 1989 Apr;11(4):243–332

Transmission and scanning electron microscopy of the kidney: Part II. **J Electron Microsc Tech** 1988 Jul; 9(3):213–98

Transmission and scanning electron microscopy of the kidney: Part I. **J Electron Microsc Tech** 1988 Jun; 9(2):113–210

Determination of unit cell. Ayer R. **J Electron Microsc Tech** 1989 Sep;13(1):16–26 (13 ref.)

Ultrastructural localization of DNA on ultrathin sections of resin-embedded tissues by the lactoferrin-gold complex. Benhamou N. **J Electron Microsc Tech** 1989 May; 12(1):1–10

Electron diffraction of synthetic polymers: the model compound approach to polymer structure. Brisse F. **J Electron Microsc Tech** 1989 Apr;11(4):272–9

Light, scanning, and transmission electron microscopy of a single population of detergent-extracted cardiac myocytes in vitro. Delcarpio JB, et al. **J Electron Microsc Tech** 1989 May;12(1):24–8

Packing of linear molecules: an electron microscope study of disorder in mesophases and binary solids. Dorset DL. **J Electron Microsc Tech** 1989 Apr;11(4):298–309

High-resolution imaging of organic crystals. Fryer JR. **J Electron Microsc Tech** 1989 Apr;11(4):310–25

Data acquisition system for maximum-likelihood analysis of electron microscopic autoradiographs. Fuhrmann DR, et al. **J Electron Microsc Tech** 1987 Nov;7(3):199–204

Electron diffraction and diffraction contrast imaging of thin organic films. Hui SW. **J Electron Microsc Tech** 1989 Apr; 11(4):286–97

Dynamic hydration effects in an electron microscope cold stage. Lamvik MK, et al. **J Electron Microsc Tech** 1988 Apr;8(4):349–54

Three-dimensional reconstruction of cells from serial sections and whole-cell mounts using multilevel contouring of stereo micrographs. Marko M, et al. **J Electron Microsc Tech** 1988 Aug;9(4):395–411

Interpretation of electron diffraction data from organic microcrystals: a theoretical perspective. Moss B. **J Electron Microsc Tech** 1989 Apr;11(4):245–50

A computer program for morphometry of circular and elliptical profiles on the microscope. Núñez-Durán H, et al. **J Electron Microsc Tech** 1987 Nov;7(3):191–3

Digitization of electron micrographs: a comparison of three different types of scanners. Olofsson A, et al. **J Electron Microsc Tech** 1988 Apr;8(4):381–8

Electron crystallography of linear polysaccharides. Pérez S, et al. **J Electron Microsc Tech** 1989 Apr;11(4):280–5

Transmission electron microscopy studies of plasma-etched silicon nitride/silicon carbide composites. Pink FX, et al. **J Electron Microsc Tech** 1987 Nov;7(3):161–6

Three-dimensional reconstruction of single particles from random and nonrandom tilt series. Radermacher M. **J Electron Microsc Tech** 1988 Aug;9(4):359–94 (88 ref.)

Achievement of atomic resolution electron microscopy. Smith DJ. **J Electron Microsc Tech** 1989 May;12(1):11–23

Computer image processing of electron micrographs of biological structures with helical symmetry. Stewart M. **J Electron Microsc Tech** 1988 Aug;9(4):325–58 (99 ref.)

Introduction to the computer image processing of electron micrographs of two-dimensionally ordered biological structures. Stewart M. **J Electron Microsc Tech** 1988 Aug; 9(4):301–24 (63 ref.)

Sample preparation technique for transmission electron microscopy of thin films on sapphire. Summerville MK, et al. **J Electron Microsc Tech** 1989 May;12(1):56–7

Symmetry analysis. Tanaka M. **J Electron Microsc Tech** 1989 Sep;13(1):27–39

Laboratory use of the personal computer: a program in MS-DOS BASIC, for generating specimen labels and data sheets for electron microscopy. Ulrich RG. **J Electron Microsc Tech** 1988 Sep;10(1):53–65

High-resolution electron microscopic investigation of supported platinum particles reduced at high temperatures. Wang L, et al. **J Electron Microsc Tech** 1988 Sep;10(1):7–14

A microcomputer program for the generation of random grid squares in quantitative analysis. Webber JS. **J Electron Microsc Tech** 1987 Nov;7(3):195–7

Dynamic focussing for recording images from tilted samples in small-spot scanning with a transmission electron microscope. Zemlin F. **J Electron Microsc Tech** 1989 Apr; 11(4):251–7

Direct observation of molecular images of lanthanide phthalocyanines: III. Structural defects. Zhang WP, et al. **J Electron Microsc Tech** 1989 Apr;11(4):326–32

Effects of the coherence of illumination on electron microdiffraction pattern intensities. Zhu J, et al. **J Electron Microsc Tech** 1987 Nov;7(3):177–83

FORTRAN source listing for simulating three-dimensional convergent beam patterns with absorption by the Bloch wave method. Zuo JM, et al. **J Electron Microsc Tech** 1989 May;12(1):29–55

The forty-fourth annual meeting of the Japanese Society of Electron Microscopy. Sendai, June 1–3, 1988. Abstracts. **J Electron Microsc (Tokyo)** 1988;37(5):232–86

The thirty-third symposium of the Japanese Society of Electron Microscopy. Fukuoka, Japan, October 13–14, 1988. Abstracts. **J Electron Microsc (Tokyo)** 1989; 38(1):70–6

Abstracts of papers, twenty-ninth Hokkaido regional meeting of the Japanese Society of Electron Microscopy. Sapporo, February 6, 1988. **J Electron Microsc (Tokyo)** 1989; 38(1):77–81

Ethidium bromide- and propidium iodide-PTA staining of nucleic acids at the electron microscopic level. Biggiogera M, et al. **J Histochem Cytochem** 1989 Jul;37(7):1161–6

Techniques to preserve soluble surface components in birch pollen wall: a scanning and transmission electron microscopic study. Grote M. **J Histochem Cytochem** 1989 Jul;37(7):981–7

Paramagnetic microspheres as immunological markers for light and electron microscopy. Rana MT, et al. **J Immunol Methods** 1988 Dec 9;115(2):209–17

Immunoelectron microscopic approaches [letter] Manara GC. **J Invest Dermatol** 1988 Oct;91(4):373–4

Electron microscopy in the diagnosis of pediatric disease. Daugherty CC, et al. **Pediatr Clin North Am** 1989 Feb; 36(1):199–226 (66 ref.)

Biological photocathodes. Griffith OH, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1826–30

Scanning tunneling microscopy of uncoated recA-DNA complexes. Amrein M, et al. **Science** 1989 Mar 31; 243(4899):1708–11

Scanning tunneling microscopy of nucleic acids. Lee G, et al. **Science** 1989 Apr 28;244(4903):475–7

Images of the DNA double helix in water. Lindsay SM, et al. **Science** 1989 Jun 2;244(4908):1063–4

Electron microscopy in an oncologic institution. Diagnostic usefulness in surgical pathology. Lombardi L, et al. **Tumori** 1988 Oct 31;74(5):531–5

Selected abstracts from the fortieth annual meeting of the Scandinavian Society for Electron Microscopy, SCANDEM-88. Aarhus, June 6–8. **Ultramicroscopy** 1988; 26(4):411–22

Abstracts of papers presented at the annual conference of The Netherlands Society of Electron Microscopy. 30 November 1988–2 December 1988, Kerkrade, The Netherlands. **Ultramicroscopy** 1989 Mar;27(2):193–221

Abstracts of papers presented at the 22nd scientific meeting of the Israel Society of Electron Microscopy. 7 June 1988, Tel-Aviv. **Ultramicroscopy** 1988;26(4):423–36

Electron-beam-induced spectroscopies with high spatial resolution. Selected papers from the NSF/CNRS workshop. Aussois, France, 28 February–5 March 1988. **Ultramicroscopy** 1989 Apr 1;28(1–4):1–368

[Verification of the quality of commercial glutaraldehyde solutions used in electron microscopy] Subrtová D, et al. **Sb Ved Fr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):713–24 (Eng. Abstr.) (Cze)

[Electron microscopy in the diagnosis of enteritis in cats] Herbst W, et al. **Tijdschr Diergeneeskd** 1989 Mar 15; 114(6):328–33 (Eng. Abstr.) (Dut)

[Three-country meeting on electron microscopy. Meeting of the Austrian Society for Electron Microscopy, meeting of the Swiss Society for Electron Microscopy, 24th meeting of the German Society for Electron Microscopy, 22d colloquium of the Study Groups for Electron Microscopy Direct Imaging and Surface Analysis. Salzburg, 10-16 September 1989. Abstracts] **Eur J Cell Biol Suppl** 1989; 27:1-109 (Ger)

[The effect of the x-ray contrast medium Amipaque on selected laboratory chemical and hematologic parameters of human blood taking into consideration electron microscopic studies] **Jäger B, et al. Rontgenpraxis** 1989 Jul; 42(7):225-30 (Ger)

[Rapid preparation of bronchoalveolar lavage cells for electron microscopic study] Filippenko LN. **Lab Delo** 1988; (8):40-2 (Eng. Abstr.) (Rus)

HISTORY

[Stages in the development of electron microscopy] Ringelhann B. **Orv Hetil** 1989 Feb 19;130(8):411-3 (Hun)

INSTRUMENTATION

A glow discharge unit to render electron microscope grids and other surfaces hydrophilic. Aebi U, et al. **J Electron Microsc Tech** 1987 Sep;7(1):29-33

A surface durable and strongly bonded phosphor viewing screen for T.E.M. Beauregard P Sr. **J Electron Microsc Tech** 1988 Oct;10(2):211-2

Modification of a TEM cross-section lapping apparatus in order to accommodate VCR dimpler platen. Cole MW, et al. **J Electron Microsc Tech** 1988 Sep;10(1):125-6

A procedure for making phosphor viewing screens for the transmission electron microscope. King MV. **J Electron Microsc Tech** 1988 Apr;8(4):389-90

Magnetic field emission gun with zirconiated emitter. Troyon M. **J Electron Microsc Tech** 1989 Mar;11(3):191-5

Application of the "imaging plate" to TEM image recording. Mori N, et al. **Ultramicroscopy** 1988;25(3):195-201

The resolution of photoelectron microscopes with UV, X-ray, and synchrotron excitation sources. Rempfer GF, et al. **Ultramicroscopy** 1989 Apr;27(3):273-300

High-precision tilt stage for the high-voltage electron microscope. Turner JN, et al. **Ultramicroscopy** 1988; 26(4):337-43

METHODS

Cationic dyes reveal proteoglycans structurally integrated within the characteristic lesions of Alzheimer's disease. Snow AD, et al. **Acta Neuropathol (Berl)** 1989;78(2):113-23

Immunoelectron microscopic study of S-100 beta-positive human T-lymphocytes with special reference to double immunostaining. Ohtsuki Y, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1167-73

Immunoelectron microscopic study of thyroid microsomal antigen. Yokoyama S, et al. **Acta Pathol Jpn** 1988 Sep; 38(9):1141-8

Computerized 3-D reconstruction of small blood vessels from high voltage electron-micrographs of thick serial cross sections. Horn L, et al. **Adv Exp Med Biol** 1988;242:35-42

High-voltage electron microscopy and three-dimensional graphic study of R and T cells in head and neck carcinomas. Song MJ, et al. **Am J Otolaryngol** 1989 May-Jun;10(3):165-72

Electron microscopy of nuclear matrices prepared in situ under oxidizing conditions. Chaly N. **Cell Biol Int Rep** 1988 Aug;12(8):587-95

Resolution as a function of accelerating voltage in electron microscopy of semithick biological specimens. Cole RW, et al. **Cell Biophys** 1988 Oct;13(2):133-40

Electron microscopy, electron diffraction, and element analysis of wet biological specimens. Parsons DF. **Cell Biophys** 1988 Dec;13(3):159-71

Shape, size, and distribution of cell structures by 3-D graphics reconstruction and stereology. I. The regulatory volume decrease of astroglial cells. Parsons DF, et al. **Cell Biophys** 1989 Feb;14(1):27-42

Quantification of low numbers of immunogold label on Lowicryl K4M sections. Kushnaryov VM, et al. **Cytobios** 1988;54(218-219):167-73

Electron microscopy of hepatitis B virus core antigen expressing yeast cells by freeze-substitution fixation. Yamaguchi M, et al. **Eur J Cell Biol** 1988 Oct;47(1):138-43

Electron microscopy of nucleic acids. Garon CF. **Gene Amplif Anal** 1981;2:573-89

Detection and location of single-base mutations in large DNA fragments by immunomicroscopy. Ganguly A, et al. **Genomics** 1989 May;4(4):530-8

A simple fixation and embedding method for use in hybridization histochemistry on plant tissues. McFadden GI, et al. **Histochem J** 1988 Oct;20(10):575-86

Preservation of capsular material of streptococcal cells by specific lectins determined by immunoelectron microscopy. Molinari A, et al. **Histochem J** 1988 Sep;20(9):526-30

Use of light microscopic immunotechniques in selecting preparation conditions and immunoprobes for ultrastructural immunolabelling of lactoferrin. Mutasa HC, et al. **Histochem J** 1988 Oct;20(10):558-66

Preservation of structure and cytochemical reactivity at the ultrastructural level, using microwave irradiation. Van Dort JB, et al. **Histochem J** 1988 Jun-Jul;20(6-7):365-72

Microwave-stimulated incubation in immunoelectron microscopy: a quantitative study. Zondervan PE, et al. **Histochem J** 1988 Jun-Jul;20(6-7):359-64

Ultrastructural cytochemistry of hepatic lysosomes and their protein components is selectively revealed by the ninhydrin-dimethyl sulfoxide-thiocarbohydrazide-silver proteinate reaction. Malinin GI, et al. **Histochemistry** 1989; 90(5):339-45

A new method of the immunohistochemical detection of cellular antigens for light and electron microscopy. Seno S, et al. **Histochemistry** 1989;91(6):449-54

EM-compatible melamine substrate foil for cell culture [letter] Westphal C, et al. **In Vitro Cell Dev Biol** 1989 May; 25(5):393-4

Convergent-beam diffraction, Part I. **J Electron Microsc Tech** 1989 Sep;13(1):1-75

Advances in image processing for electron microscopy: Part I. **J Electron Microsc Tech** 1988 Aug;9(4):301-424

A study of section wrinkling on single-hole coated grids using TEM and SEM. Abad A. **J Electron Microsc Tech** 1988 Feb;8(2):217-22

Study of local atomic order in amorphous materials in a computerized transmission electron microscope. Balossier G, et al. **J Electron Microsc Tech** 1989 Mar;11(3):186-90

Oxygen ordering and twinning in YBa2Cu3O7-x. Barry JC. **J Electron Microsc Tech** 1988 Mar;8(3):325-37

Preliminary study of electron-energy-loss spectra of YBa2Cu3O7-delta. Batson PE, et al. **J Electron Microsc Tech** 1988 Mar;8(3):311-5

Use of sputter coating to prepare whole mounts of cytoskeletons for transmission and high-resolution scanning and scanning transmission electron microscopy. Bell PB Jr, et al. **J Electron Microsc Tech** 1987 Nov; 7(3):149-59

Image registration in electron microscopy: application of a robust method. Bonnet N, et al. **J Electron Microsc Tech** 1988 Sep;10(1):27-33

Which image parameter(s) for the automation of the electron microscope? Bonnet N, et al. **J Electron Microsc Tech** 1989 Mar;11(3):196-201

Comparison of TEM and APFIM in microstructural characterization and interpretation: an overview. Burke MG, et al. **J Electron Microsc Tech** 1988 Feb;8(2):201-10 (28 ref.)

Computer software for specimen orientation adjustment using double-tilt or rotation holders. Chou CT. **J Electron Microsc Tech** 1987 Dec;7(4):263-8

Extraction of carbon 14-labeled compounds from plant tissue during processing for electron microscopy. Coetzee J, et al. **J Electron Microsc Tech** 1989 Feb;11(2):155-60

An ultrathin sectioning alignment tool with application to cell monolayers. Cramer CT. **J Electron Microsc Tech** 1989 Feb;11(2):172-3

Montaging electron micrographs. Crang RE. **J Electron Microsc Tech** 1987 Sep;7(1):53-60

High Tc ceramic superconductors: introduction, background, and challenges to the electron microscopist. Davies PK. **J Electron Microsc Tech** 1988 Mar;8(3):247-50

A new technique for preparing metal/oxide TEM cross sections. Doychak J. **J Electron Microsc Tech** 1989 Feb; 11(2):180-2

Cross-sectional transmission electron microscopy of silicon LSI circuits and Josephson junction devices. Du AY, et al. **J Electron Microsc Tech** 1987 Dec;7(4):319-22

Object-marking, a bridge between light and analytical electron microscopy for particles characterization. Dumortier P, et al. **J Electron Microsc Tech** 1988 Feb; 8(2):229-30

Applications of convergent beam electron diffraction in materials science. Eaglesham DJ. **J Electron Microsc Tech** 1989 Sep;13(1):66-75 (55 ref.)

Estimation of the mean caliper: a new simple approach. Elmalek M, et al. **J Electron Microsc Tech** 1988 Feb; 8(2):173-7

Critical underfocus in low-magnification electron microscopy: rationale and practice. Fahrenbach WH, et al. **J Electron Microsc Tech** 1988 Apr;8(4):433-9

Transmission electron microscopy studies in relation to production of solar cells from polycrystalline silicon sheets (R.A.D. process). Gervais A. **J Electron Microsc Tech** 1989 Mar;11(3):230-3

A procedure for handling microorganisms during preparation for electron microscopy. Griffin M, et al. **J Electron Microsc Tech** 1987 Sep;7(1):61-2

Transmission electron microscopy of undecalcified bone. Grills BL, et al. **J Electron Microsc Tech** 1989 Feb; 11(2):178-9

Three-dimensional morphometrical study of dendritic spines of the granule cell in the rat dentate gyrus with HVEM stereo images. Hama K, et al. **J Electron Microsc Tech** 1989 Jun;12(2):80-7

Volume determination of TEM specimens containing particles or precipitates. Hare TM, et al. **J Electron Microsc Tech** 1988 Sep;10(1):1-6

Examples of high-resolution electron microscopy (HREM) investigation of complex oxides related to perovskite. Hervieu M. **J Electron Microsc Tech** 1989 Mar;11(3):202-21

A simple method for the removal of glass coverslips from flat-embedded cultured cells for transmission electron microscopy. Howell AS, et al. **J Electron Microsc Tech** 1988 Feb;8(2):239-40

Cross-sectional TEM specimens of metal contacts to semiconductors. Ivey DG, et al. **J Electron Microsc Tech** 1988 Feb;8(2):233-5

Improved preservation of bacterial capsule for electron microscopy. Jacques M, et al. **J Electron Microsc Tech** 1989 Feb;11(2):167-9

Digital image processing of crystalline specimens examined by electron microscopy. Kanaya K. **J Electron Microsc Tech** 1988 Dec;10(4):319-67 (105 ref.)

Enhanced visualization of delicate macromolecules by negative staining followed by low angle rotary shadowing. Keene DR. **J Electron Microsc Tech** 1987 Nov;7(3):233-4

Preparation of cultured mammalian cells for transmission and scanning electron microscopy using Aclar film. Kingsley RE, et al. **J Electron Microsc Tech** 1988 Sep;10(1):77-85

Visualization of the inner and outer surfaces of the cell membrane and cytoskeleton by polyethylene glycol embedding, subsequent deembedding, and rotary replication with platinum. Kondo H. **J Electron Microsc Tech** 1987 Sep;7(1):17-27

Evaluation of high-resolution electron microscopy as a method for studying Y-Ba-Cu-O superconductors. Krakow W, et al. **J Electron Microsc Tech** 1988 Mar; 8(3):273-84

Calibration methods for quantitative image processing in electron microscopy. Lamvik MK, et al. **J Electron Microsc Tech** 1989 Feb;11(2):97-101

Method for obtaining a cross section layer of tissue culture for EM without pelleting or re-embedding. Larramendi PC. **J Electron Microsc Tech** 1988 Sep;10(1):119-21

Method for obtaining thin sections for EM from different areas of the same block. Larramendi PC. **J Electron Microsc Tech** 1989 Aug;12(4):417-8

A good support for the thick frozen sections for immunolabeling when post embedding in plastic for EM is required. Larramendi PC. **J Electron Microsc Tech** 1988 Sep;10(1):123-4

High-resolution electron microscopy and its applications. Li FH. **J Electron Microsc Tech** 1987 Dec;7(4):237-54

Improved method for electron microscopy immunocytochemistry of muscle. McGuffee LJ, et al. **J Electron Microsc Tech** 1989 Aug;12(4):419-21

A simple method for the preparation of isolated enamel crystallites for transmission electron microscopy. McKee MD, et al. **J Electron Microsc Tech** 1988 Feb;8(2):225-6

A variation of transmission electron microscope sample preparation for VLSI analysis. Madden MC, et al. **J Electron Microsc Tech** 1989 Feb;11(2):161-6

EELS log-ratio technique for specimen-thickness measurement in the TEM. Malis T, et al. **J Electron Microsc Tech** 1988 Feb;8(2):193-200

Practical phase identification by convergent beam electron diffraction. Mansfield J. **J Electron Microsc Tech** 1989 Sep; 13(1):3-15

High-resolution electron microscopy of high-temperature superconductors. Marks LD, et al. **J Electron Microsc Tech** 1988 Mar;8(3):297-306 (26 ref.)

Aclar film in biological electron microscopy. Masurovsky EB, et al. **J Electron Microsc Tech** 1989 Jun;12(2):172-3

Electron microscopy study of twin behavior in GdBa2Cu3Ox and YBa2Cu3Ox. Mitchell TE, et al. **J Electron Microsc Tech** 1988 Mar;8(3):317-23

Electron microscopy of ceramic superconductors: a bibliography. Mitchell TE. **J Electron Microsc Tech** 1988 Mar;8(3):339-41

Application of two-bath development processing to transmission electron films and plates. Morse DF. **J Electron Microsc Tech** 1987 Sep;7(1):47-52

A simple embedding method for optimizing the thin sectioning of pre-embedded immunocytochemically stained tissue. Olschowka JA. **J Electron Microsc Tech** 1988 Dec;10(4):373-4

Structural characterization of Ba2YCu3O7 by high resolution transmission electron microscopy. Ourmazd A, et al. **J Electron Microsc Tech** 1988 Mar;8(3):251-62

Quantitative analytical electron microscopy of multiphase alloys. Prybylowski J, et al. **J Electron Microsc Tech** 1989 Feb;11(2):126-33

First stages of crystallization in a silicate glass: study by high-resolution electron microscopy. Ramos A, et al. **J Electron Microsc Tech** 1989 Mar;11(3):238-41

Measurement of lattice parameter and strain using convergent beam electron diffraction. Randle V, et al. **J Electron Microsc Tech** 1989 Sep;13(1):51-65 (33 ref.)

Analytical electron microscopy study of high Tc superconductor YBa2Cu3O7. Sabatini RL, et al. **J Electron Microsc Tech** 1988 Mar;8(3):307-9

Technique for preparing cross-section transmission electron microscopy specimens from ceramic oxide braze joints. Santella ML, et al. **J Electron Microsc Tech** 1988 Feb; 8(2):211-5

Artifacts introduced by ion milling in Al-Li-Cu alloys. Singh AK, et al. **J Electron Microsc Tech** 1988 Apr;8(4):355-61

High-resolution electron microscopy image simulation on a Cray 1S/2300 computer. Spycher R, et al. **J Electron Microsc Tech** 1988 Dec;10(4):369-72

Structure of superconducting thin films of YBa2Cu3O7-x grown on SrTiO3 and cubic zirconia. Tietz LA, et al. **J Electron Microsc Tech** 1988 Mar;8(3):263-72

Optimum specimen positioning in the electron microscope using a double-tilt stage. Turner JN, et al. **J Electron Microsc Tech** 1989 Jan;11(1):33-40

Control of specimen orientation and environment. Turner

JN, et al. **J Electron Microsc Tech** 1989 Apr;11(4):258–71
Preparation of collagen gel matrices for light and electron microscopy. Turner JW, et al. **J Electron Microsc Tech** 1989 Feb;11(2):134–6
Defect structure of superconducting YBa2Cu3O7–delta. Van Tendeloo G, et al. **J Electron Microsc Tech** 1988 Mar; 8(3):285–95 (15 ref.)
Techniques of convergent beam electron diffraction. Vincent R. **J Electron Microsc Tech** 1989 Sep;13(1):40–50
Reflection high resolution analytical electron microscopy: a technique for studying crystal surfaces. Wang ZL. **J Electron Microsc Tech** 1988 Sep;10(1):35–43
Preparation of cross-sectional transmission electron microscopy samples by electron beam lithography and reactive ion etching. Wetzel JT. **J Electron Microsc Tech** 1989 Jan;11(1):62–9
Standardless EDS analysis of bulk and thin specimens. Wu ZQ. **J Electron Microsc Tech** 1987 Dec;7(4):323–9
High-resolution electron microscopy and domain structures of pentagonal Frank-Kasper phases. Ye HQ. **J Electron Microsc Tech** 1987 Dec;7(4):283–92
Structural studies of lanthanide phthalocyanines by high-resolution electron microscopy. Zhang WP, et al. **J Electron Microsc Tech** 1987 Dec;7(4):255–62
An application of high-resolution transmission electron microscopy to the study of the fine structure of dislocations in potassium feldspars. Zheng YL, et al. **J Electron Microsc Tech** 1989 Mar;11(3):234–7
Microdiffraction and analysis. Zhu J. **J Electron Microsc Tech** 1987 Dec;7(4):313–7
Stereo-imaging made easy. Zurek AK. **J Electron Microsc Tech** 1989 Feb;11(2):174–7
An improved embedding method employing epoxy resin Quetol 651 for stereoscopic observation of thick sections under a 300 kV transmission electron microscope. Kushida T, et al. **J Electron Microsc (Tokyo)** 1988;37(4):212–4
A method for staining ultrathin sections on slotted grids. Pylypas SP, et al. **J Electron Microsc (Tokyo)** 1988; 37(3):163–6
The substitution-fixation of Staphylococcus aureus. Takade A, et al. **J Electron Microsc (Tokyo)** 1988;37(4):215–7
Electron spectroscopic imaging for high-resolution immunocytochemistry: use of boronated protein A. Bendayan M, et al. **J Histochem Cytochem** 1989 May; 37(5):573–80
On the use of Percoll as a marker for liposomes in electron microscopy of mouse spleen tissue. Cudd A, et al. **J Microencapsul** 1986 Oct–Dec;3(4):275–82
Imaging liposomes at electron microscopic level: encapsulated colloidal iron as an electrondense marker for liposome–cell interactions. Foldvari M, et al. **J Microencapsul** 1988 Jul–Sep;5(3):231–41
Digital image analysis of two-dimensional Na,K-ATPase crystals: dissimilarity between pump units. Beall HC, et al. **J Microsc** 1989 Apr;154 (Pt 1):71–82
Energy filtered STEM imaging of thick biological sections. Colliex C, et al. **J Microsc** 1989 Jan;153 (Pt 1):1–21
Comparison of methods for the estimation of the thickness of ultrathin tissue sections [published erratum appears in J Microsc 1989 Apr;154(Pt 1):99] De Groot DM. **J Microsc** 1988 Jul;151 (Pt 1):23–42
Phospholipid, nature's own slide and cover slip for cryo-electron microscopy. Frederik PM, et al. **J Microsc** 1989 Jan;153 (Pt 1):81–92
An investigation of the fixation and staining of lipids by a combination of malachite green or other triphenylmethane dyes with glutaraldehyde. Lawton JR. **J Microsc** 1989 Apr; 154 (Pt 1):83–92
Tomographic reconstruction from energy-filtered images of thick biological sections. Olins AL, et al. **J Microsc** 1989 Jun;154 (Pt 3):257–65
Reconstruction from stereo and multiple tilt electron microscope images of thick sections of embedded biological specimens using computer graphic methods. Peachey LD, et al. **J Microsc** 1989 Feb;153 (Pt 2):193–204
The 'catch' mechanism in molluscan muscle: an electron microscopy study of freeze-substituted anterior byssus retractor muscle of Mytilus edulis. Bennett PM, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):297–311
There is no simple adequate sampling scheme for estimating the myelinated fibre size distribution in human peripheral nerve: a statistical ultrastructural study. Torch S, et al. **J Neurosci Methods** 1989 Mar;27(2):149–64
Improved procedures for pineal gland fixation for electron microscopy. Schultz RL, et al. **J Pineal Res** 1989; 6(3):267–84
A comparative fine structure study of rat cerebral cortex following ultra-rapid freezing and conventional chemical fixation procedures. Reger JF, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):691–700
The substructure of marginal bundles in human blood platelets. Xu Z, et al. **J Ultrastruct Mol Struct Res** 1988 Jun;99(3):244–53
Alignment and intracytoplasmic disintegration of synaptic vesicles in the brain cortex. González-Aguilar F, et al. **Neuroscience** 1989;30(2):521–34
Direct visualization of the interrelationship between intramembrane and extracellular structures. Wade JB, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2723–7
Cells and tissues: a three-dimensional approach by modern techniques in microscopy. A celebrative symposium: the "Opera Omnia" of Marcello Malpighi. Proceedings of the VIIIth International Symposium on Morphological Sciences. Rome, Italy, July 10–15, 1988. **Prog Clin Biol Res** 1989;295:1–650
Micromorphology by cryo-HVEM. Fotino M. **Prog Clin Biol Res** 1989;295:581–7
Development of the quick-freeze, deep-etch, rotary-replication technique of sample preparation for 3-D electron microscopy. Heuser JE. **Prog Clin Biol Res** 1989; 295:71–83
Statistical, morphometric and stereological basics in the morphological sciences and their possible applications in corrosion cast studies. James NT. **Prog Clin Biol Res** 1989; 295:457–67 (11 ref.)
Observations of colloidal gold labelled platelet microtubules: high voltage electron microscopy and low voltage–high resolution scanning electron microscopy. Albrecht RM, et al. **Scanning Microsc** 1989 Mar;3(1):273–7; discussion 277–8
Image and signal processing in electron microscopy. Proceedings of the 6th Pfefferkorn Conference. April 28 to May 2, 1987, Niagara Falls, Canada. **Scanning Microsc Suppl** 1988;2:1–396
Three-dimensional reconstruction from serial section images by computer graphics. Baba N, et al. **Scanning Microsc Suppl** 1988;2:303–14
Towards a digital model for an electron–microscope image. Burge RE, et al. **Scanning Microsc Suppl** 1988;2:191–212
Maximum entropy methods in dark field electron micrographs and elemental maps. Farrow NA, et al. **Scanning Microsc Suppl** 1988;2:75–81
Biological macromolecules explored by pattern recognition. van Heel M, et al. **Scanning Microsc Suppl** 1988;2:295–301 (73 ref.)
Image interpretation of metal shadowed specimens with the aid of Monte Carlo simulation of the shadowing process. Winkler H, et al. **Scanning Microsc Suppl** 1988;2:379–86
A quick preparative method for electron microscopy observations of delicate objects using alginate embedding medium. Tamponnet C, et al. **Stain Technol** 1988 May; 63(3):155–8
Computer image analysis of two-dimensional crystals of beef heart NADH: ubiquinone oxidoreductase fragments. I. Comparison of crystal structures in various negative stains [published erratum appears in Ultramicroscopy 1989 Apr;27(3):334] Brink J, et al. **Ultramicroscopy** 1989 Jan–Feb;27(1):79–90
Computer image analysis of two-dimensional crystals of beef heart NADH: ubiquinone oxidoreductase fragments. II. Comparison of frozen hydrated and negatively stained specimens. Brink J, et al. **Ultramicroscopy** 1989 Jan–Feb; 27(1):91–9
The characterization of structural variations within a crystal field. Frank J, et al. **Ultramicroscopy** 1988;26(4):345–60
Spatial rotational alignment of identical particles in the case of (almost) coaxial projections. Gelfand MS, et al. **Ultramicroscopy** 1989 Apr;27(3):301–6
Three-dimensional reconstructions from incomplete data: interpretability of density maps at "atomic" resolution. Glaeser RM, et al. **Ultramicroscopy** 1989 Apr;27(3):307–18
Effects of certain electron-microscope stains on phospholipid monolayers [letter] Gorwyn D, et al. **Ultramicroscopy** 1989 Jan–Feb;27(1):113–4
A corrected double-deflection electron spectrometer equipped with a parallel recording system. Haider M. **Ultramicroscopy** 1989 Apr 1;28(1–4):190–200
Substrate properties affect the mass loss rate in collodion at liquid helium temperature. Lamvik MK, et al. **Ultramicroscopy** 1989 Apr;27(3):241–9
Separation of overlapping core edges in electron energy loss spectra by multiple-least-squares fitting. Leapman RD, et al. **Ultramicroscopy** 1988;26(4):393–403
Electron spectroscopic imaging of frozen-hydrated sections. Probst W, et al. **Ultramicroscopy** 1989 Apr 1;28(1–4):312–4
Three-dimensional reconstruction from electron micrographs of disordered specimens. I. Method. Provencher SW, et al. **Ultramicroscopy** 1988;25(3):209–21
Contrast transfer for frozen-hydrated specimens: determination from pairs of defocused images. Toyoshima C, et al. **Ultramicroscopy** 1988;25(4):279–91
Three-dimensional reconstruction from electron micrographs of disordered specimens. II. Implementation and results. Vogel RH, et al. **Ultramicroscopy** 1988;25(3):223–39
Electron microscopy for the rapid detection and identification of viruses from clinical specimens. Fong CK. **Yale J Biol Med** 1989 Mar–Apr;62(2):115–30 (56 ref.)
[A simple device for accomplishing the continual dehydration of biological objects] Greissl R, et al. **Z Mikrosk Anat Forsch** 1988;102(6):1036–44 (Eng. Abstr.) (Ger)
[A method for the combined electron microscopic study of sputter films] Müller RF. **Zahn Mund Kieferheilkd** 1988; 76(5):490–2 (Ger)
[HVEM (high-voltage electron microscopy) and computer-assisted 3D reconstruction] Takasaka T. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):473–7 (13 ref.) (Jpn)
[Important concepts and technology in the study of vision: fine structures of photoreceptor cells revealed by recent techniques in electron microscopy] Usukura J. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):715–23 (Jpn)
[A method of fixation of the membranous labyrinth for microscopic studies] Burak GG. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):78–81 (Rus)
[A simplified method of preparing a nerve tissue culture for electron microscopy purposes] Buravlev VM, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):85–6 (Eng. Abstr.) (Rus)

TRENDS

Subjects in search of an author: speculations on the future of electron image processing. Hawkes PW. **J Electron Microsc Tech** 1988 Aug;9(4):421–4

MICROSCOPY, ELECTRON, SCANNING

A simple and reliable method for visualization of the arterial autonomic nerve plexus by scanning electron microscopy. Chaldakov GN, et al. **Acta Morphol Neerl Scand** 1987; 25(4):273–7
Alkaline phosphatase cytochemistry in confocal scanning light microscopy for imaging the bone marrow stroma. Bianco P, et al. **Basic Appl Histochem** 1989;33(1):17–23
Scanning electron microscopic study on the shape of infertile seminiferous tubules: a hypothesis of pathogenesis of idiopathic male infertility. Yamamoto M, et al. **Int J Fertil** 1988 Jul–Aug;33(4):265–72
Transmission and scanning electron microscopy of the kidney: Part II. **J Electron Microsc Tech** 1988 Jul; 9(3):213–98
Transmission and scanning electron microscopy of the kidney: Part I. **J Electron Microsc Tech** 1988 Jun; 9(2):113–210
Light, scanning, and transmission electron microscopy of a single population of detergent-extracted cardiac myocytes in vitro. Delcarpio JB, et al. **J Electron Microsc Tech** 1989 May;12(1):24–8
Spin drying for scanning electron microscopy sample preparation. Doucet RG, et al. **J Electron Microsc Tech** 1989 May;12(1):58–9
Observation of GaAs—AlxGa1—xAs heterostructures and quantum-well-wire structures using backscattered electron image. Hirayama Y, et al. **J Electron Microsc Tech** 1989 May;12(1):60–4
An inexpensive detector for water-vapour in the low temperature scanning electron microscope. Lawton DM, et al. **J Electron Microsc Tech** 1989 Jan;11(1):90–1
Use of membrane filters and osmium tetroxide etching in the preparation of sperm for scanning electron microscopy. van der Horst G, et al. **J Electron Microsc Tech** 1989 May; 12(1):65–70
Application of ion-beam etching techniques to the fine structure of biological specimens as examined with a field emission SEM at low voltage. Yonehara K, et al. **J Electron Microsc Tech** 1989 May;12(1):71–7
Techniques to preserve soluble surface components in birch pollen wall: a scanning and transmission electron microscopic study. Grote M. **J Histochem Cytochem** 1989 Jul;37(7):981–7
The Third International Conference on Scanning Tunnelling Electron Microscopy. Oxford, July 1988. Proceedings. **J Microsc** 1988 Oct;152 (Pt 1):1–297
Scanning tunnelling microscopy of biomacromolecules. Guckenberger R, et al. **J Microsc** 1988 Dec;152 (Pt 3):795–802
A fully automated, 'thimble-size' scanning tunnelling microscope. Laegsgaard E, et al. **J Microsc** 1988 Dec;152 (Pt 3):663–9
Scanning probe microscopy of biological samples and other surfaces. Marti O, et al. **J Microsc** 1988 Dec;152 (Pt 3):803–9
Particulate matter content of D5/NS for injection [letter] **J Parenter Sci Technol** 1989 Mar–Apr;43(2):53–5
The role of scanning electron microscopy in ophthalmic science. Versura P, et al. **Scanning Microsc** 1988 Sep; 2(3):1695–723 (304 ref.)
Scanning tunneling microscopy and atomic force microscopy: application to biology and technology. Hansma PK, et al. **Science** 1988 Oct 14;242(4876):209–16 (63 ref.)
A method for mounting specimens for scanning electron microscopy. Konig G. **Trends Genet** 1988 Sep;4(9):270
[Drying with hexamethyldisilizane—a time-saving alternative to the "critical point" method] Kühnel T, et al. **Handchir Mikrochir Plast Chir** 1989 May;21(3):164–5 (Eng. Abstr.) (Ger)
[The filter effectiveness of common 15-micron filters (DIN 58362). II: Scanning electron microscopy and roentgen analysis] Walpot H, et al. **Infusionstherapie** 1989 Jun; 16(3):133–9 (Eng. Abstr.) (Ger)
[Script crossing in scanning electron microscopy] Oehmichen M, et al. **Z Rechtsmed** 1989;102(4):219–30 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Specimen chambers for critical point drying for scanning electron microscopy. Hess WM, et al. **J Electron Microsc Tech** 1988 Apr;8(4):443–4
An easily made, inexpensive, cover slip carrier for critical point drying. Hollander BA, et al. **J Electron Microsc Tech** 1988 Feb;8(2):231–2
A small scanning tunnelling microscope with large scan range for biological studies. Emch R, et al. **J Microsc** 1988 Oct;

152 (Pt 1):85–92
A new versatile holder for the calibrating standard used for quantitative analysis in a JEOL 840 SEM. Dvorachek M. **Scanning Microsc** 1989 Mar;3(1):111–4
Quantitative margin analysis in the scanning electron microscope. Roulet JF, et al. **Scanning Microsc** 1989 Mar; 3(1):147–58; discussion 158–9

METHODS

A simple preparatory method for scanning electron microscopy of the mouthparts of muscoid flies (diptera). Kovács FS. **Acta Biol Hung** 1988;39(4):441–7
Lectin cytochemistry in scanning electron microscopy. Horisberger M. **Acta Histochem Suppl (Jena)** 1988; 36:101–11 (20 ref.)
Mapping gold-labeled receptors on cell surfaces by backscattered electron imaging and digital image analysis: studies of the IgE receptor on mast cells. Stump RF, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):128–41
Scanning electron microscopy of skin surface and the internal structure of corneocyte in normal human skin. An application of the osmium–dimethyl sulfoxide–osmium method. Mihara M. **Arch Dermatol Res** 1988;280(5):293–9
DNA–fluorescence of mammalian intra–nucleolar chromatin detected by confocal laser scanning microscopy (CLSM). Spring H, et al. **Biol Cell** 1988;64(3):371–4
High resolution scanning electron microscopy of the cell. Tanaka K. **Biol Cell** 1989;65(2):89–98
Use of a gelatin substrate for viewing sessile aquatic organisms by scanning electron microscopy. Bart KM, et al. **J Electron Microsc Tech** 1989 Feb;11(2):170–1
Use of sputter coating to prepare whole mounts of cytoskeletons for transmission and high-resolution scanning and scanning transmission electron microscopy. Bell PB Jr, et al. **J Electron Microsc Tech** 1987 Nov; 7(3):149–59
Observation of microdiffraction patterns with a dedicated STEM instrument. Cowley JM, et al. **J Electron Microsc Tech** 1989 Feb;11(2):143–54 (36 ref.)
Backscattered electron imaging of lectin binding sites in tissues following freeze–fracture cytochemistry. Kan FW, et al. **J Electron Microsc Tech** 1988 Apr;8(4):363–70
Use of Peldri II (a fluorocarbon solid at room temperature) as an alternative to critical point drying for biological tissues. Kennedy JR, et al. **J Electron Microsc Tech** 1989 Feb;11(2):117–25
Utilization of digital image processing to study dynein arms (ATPase) in normal and immotile cilia. Kennedy JR, et al. **J Electron Microsc Tech** 1988 Feb;8(2):159–72
Preparation of cultured mammalian cells for transmission and scanning electron microscopy using Aclar film. Kingsley RE, et al. **J Electron Microsc Tech** 1988 Sep;10(1):77–85
Titanium plates as bacterial adhesion substrates for scanning electron microscopy. Lentz DL, et al. **J Electron Microsc Tech** 1989 Jun;12(2):174–5
Silver enhancement of gold probes (5–40 nm): single and double labeling of antigenic sites on cell surfaces imaged with backscattered electrons. Namork E, et al. **J Electron Microsc Tech** 1989 Feb;11(2):102–8
Microvascular casting of the lung: effects of various fixation protocols. Schraufnagel DE, et al. **J Electron Microsc Tech** 1988 Feb;8(2):185–91
Application of an ultrahigh–resolution scanning electron microscope (UHS–T1) to biological specimens. Tanaka K, et al. **J Electron Microsc Tech** 1989 Jun;12(2):146–54
Scanning electron microscopic study of periendothelial cells of the rat cerebral vessels revealed by a combined method of corrosion casting and KOH digestion. Inokuchi T, et al. **J Electron Microsc (Tokyo)** 1989;38(3):201–13
Conditions required for detection of specimen–specific SE–I secondary electrons in an analytical SEM. Apkarian RP. **J Microsc** 1989 May;154 (Pt 2):177–88
Morphological and elemental integrity of freeze–fractured, freeze–dried cultured cells during ion microscopic analysis. Ausserer WA, et al. **J Microsc** 1989 Apr;154 (Pt 1):39–57
Examination of mucosal surfaces by scanning electron microscopy before and after removal of debris. Dickson GR, et al. **J Microsc** 1989 Jan;153 (Pt 1):75–9
Freeze–fracture of 3T3 cells for high–resolution scanning electron microscopy. Haggis GH, et al. **J Microsc** 1988 Jun;150 (Pt 3):211–8
STM imaging of molecular collagen and phospholipid membranes. Voelker MA, et al. **J Microsc** 1988 Nov;152 (Pt 2):557–66
Scanning electron microscopy in clinics. Laschi R, et al. **Prog Clin Biol Res** 1989;295:605–21 (37 ref.)
Microdissection by ultrasonication for scanning electron microscopy. Low FN. **Prog Clin Biol Res** 1989;295:571–80
Colored scanning electron microscopic pictures in teaching anatomy. Motta PM, et al. **Prog Clin Biol Res** 1989; 295:629–34
Tandem scanning microscope—a new tool for three–dimensional microanatomy. Petráň M, et al. **Prog Clin Biol Res** 1989;295:551–8
Osmium impregnation and micromanipulation. Their association in studies using secondary or backscattered electrons. Reiss G, et al. **Prog Clin Biol Res** 1989; 295:563–70
Scanning electron microscopy in biomedicine. Rosenbauer KA. **Prog Clin Biol Res** 1989;295:597–604
Ultra–high resolution scanning electron microscopy of biological materials. Tanaka K, et al. **Prog Clin Biol Res** 1989;295:21–30
Surface visualisation of tissue interfaces by scanning electron microscopy. Methods for exposure of the basal lamina and associated structures in human amnion. Allen TD, et al. **Scanning Microsc** 1988 Dec;2(4):2067–76
The use of scanning electron microscopy for investigations into the three dimensional organisation of the interphase nucleus. Allen TD, et al. **Scanning Microsc** 1989 Mar; 3(1):287–96; discussion 296–8
Preparation of cytoskeletons of cells in culture for high resolution scanning and scanning transmission electron microscopy. Bell PB Jr, et al. **Scanning Microsc** 1988 Sep; 2(3):1647–61 (66 ref.)
Visualization and analysis techniques for three dimensional information acquired by confocal microscopy. Brakenhoff GJ, et al. **Scanning Microsc** 1988 Dec;2(4):1831–8
Interpretation of structural patterns appearing on corrosion casts of small blood and initial lymphatic vessels. Castenholz A. **Scanning Microsc** 1989 Mar;3(1):315–25
Ion microscopy: a new approach for subcellular localization of labelled molecules. Hindie E, et al. **Scanning Microsc** 1988 Dec;2(4):1821–9
IgG receptors on eosinophils—using immune scanning electron microscopy. Kishimoto T. **Scanning Microsc** 1988 Dec;2(4):2105–8
Vascular "sphincter" and microangioarchitecture in the central nervous system: constriction of intraparenchymal blood vessels following a treatment of vasoconstrictive neurotransmitter. Nakai K, et al. **Scanning Microsc** 1989 Mar;3(1):337–41
Attachment of plasma membranes of cultured cells to silicon chips for high magnification imaging in scanning electron microscopy. Peters KR, et al. **Scanning Microsc** 1988 Dec; 2(4):2055–66
Determination of protein and nucleic acid concentration and localization of specific elements by scanning transmission electron microscopy. Reichelt R, et al. **Scanning Microsc** 1989 Mar;3(1):43–54; discussion 54–5
Ranking corrosion efficiency: a Latin square study on rat lung microvascular corrosion casts. Schraufnagel DE. **Scanning Microsc** 1989 Mar;3(1):299–302; discussion 302–4
A rapid method for observing the internal morphology of amphibian embryos. Smith SC, et al. **Scanning Microsc** 1988 Dec;2(4):2087–90
Preparation of isolated blood capillaries. Wagner RC, et al. **Scanning Microsc** 1988 Dec;2(4):2109–16
Estimation of missing cone data in three–dimensional electron microscopy. Barth M, et al. **Scanning Microsc Suppl** 1988; 2:277–84
Processing of quantitative scanning transmission electron micrographs. Engel A, et al. **Scanning Microsc Suppl** 1988; 2:285–93
Evaluation and optimization of the performance of elastic and inelastic scanning transmission electron microscope imaging by correlation analysis. Mory C, et al. **Scanning Microsc Suppl** 1988;2:329–42
Direct observation of native DNA structures with the scanning tunneling microscope. Beebe TP Jr, et al. **Science** 1989 Jan 20;243(4889):370–2
A scanning electron microscopic method for intracellular and extracellular structure. Van Aelst AC, et al. **Stain Technol** 1988 Sep;63(5):327–8
Filtered dark–field and pure Z–contrast: two novel imaging modes in a Scanning Transmission Electron Microscope. Haider M. **Ultramicroscopy** 1989 Apr 1;28(1–4):240–7
Absorption edge imaging of bacterial endospores with synchrotron radiation. Panessa–Warren BJ, et al. **Ultramicroscopy** 1989 Mar;27(2):151–60
[Application of high resolution scanning electron microscopy in osteopathic surgery] Tanaka K. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):370–6 **(Jpn)**
[Study of clinical strains of microorganisms in a scanning electron microscope] Gladshtein AI, et al. **Lab Delo** 1989; (4):58 (Eng. Abstr.) **(Rus)**

MICROSCOPY, ELECTRON, X-RAY MICROANALYSIS see **ELECTRON PROBE MICROANALYSIS**

MICROSCOPY, FLUORESCENCE

The use of direct epifluorescent microscopy (DEM) and the direct epifluorescent filter technique (DEFT) to assess microbial populations on food contact surfaces. Holah JT, et al. **J Appl Bacteriol** 1988 Sep;65(3):215–21
Confocal scanning fluorescence microscopy: a new method for phagocytosis research. Hook GR, et al. **J Leukoc Biol** 1989 Apr;45(4):277–82
Three–dimensional imaging of neurons by confocal fluorescence microscopy. Carlsson K, et al. **J Microsc** 1989 Jul;155 (Pt 1):15–26 (22 ref.)
Importance of light dose in fluorescent microscopy. Reed MW, et al. **Microvasc Res** 1988 Jul;36(1):104–7
[Submicrosecond imaging of membrane potential under a pulsed–laser fluorescence microscope—electroporation of cell membrane visualized] Kinosita K Jr, et al. **Seikagaku** 1988 Dec;60(12):1376–81 **(Jpn)**

INSTRUMENTATION

A digital image microscopy system for rare–event detection using fluorescent probes. Lee BR, et al. **Cytometry** 1989 May;10(3):256–62
Fluorescence ratio imaging microscopy. Bright GR, et al. **Methods Cell Biol** 1989;30:157–92 (67 ref.)
Designing, building, and using a fluorescence recovery after photobleaching instrument. Wolf DE. **Methods Cell Biol** 1989;30:271–306 (37 ref.)

METHODS

Use of dark–field and fluorescence microscopy to examine extracellular hyaline accumulation in the mouse. Wordinger RJ. **Acta Anat (Basel)** 1988;132(4):327–30
Simultaneous Nomarski and fluorescence imaging during video microscopy of cells. Foskett JK. **Am J Physiol** 1988 Oct;255(4 Pt 1):C566–71
Three–dimensional light microscopy of diploid Drosophila chromosomes. Agard DA, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):18–27
The use of fluorescence microscopy for sexing of mouse cells. Loevy H, et al. **Chic Med Sch Q** 1972;31(1–4):1–4
Three–color fluorescence in situ hybridization for the simultaneous detection of multiple nucleic acid sequences. Nederlof PM, et al. **Cytometry** 1989 Jan;10(1):20–7
Evaluation of algorithms for ratio imaging in fluorescence microscopy. Rogowska J, et al. **Cytometry** 1989 Jul; 10(4):357–74
Algorithm to estimate cell biovolume using image analyzed microscopy. Sieracki ME, et al. **Cytometry** 1989 Sep; 10(5):551–7
Three–dimensional imaging in fluorescence by confocal scanning microscopy. Brakenhoff GJ, et al. **J Microsc** 1989 Feb;153 (Pt 2):151–9
Three–dimensional molecular distribution in single cells analysed using the digital imaging microscope. Fay FS, et al. **J Microsc** 1989 Feb;153 (Pt 2):133–49
Non–invasive intravital fluorescent microscopy of the hamster gingiva. Miller FN, et al. **J Periodont Res** 1989 Jul;24(4):261–6
Intravital fluorescence microscopy of endothelial cells on vascular grafts. Mechem C, et al. **J Surg Res** 1989 Jul; 47(1):1–7
Fluorescence microscopy of living cells in culture. Part B. Quantitative fluorescence microscopy—imaging and spectroscopy. **Methods Cell Biol** 1989;30:1–498
Fluorescence microscopy of living cells in culture. Part A. Fluorescent analogs, labelling cells, and basic microscopy. **Methods Cell Biol** 1989;29:1–328
Fluorescence microscopy in three dimensions. Agard DA, et al. **Methods Cell Biol** 1989;30:353–77 (27 ref.)
Fluorescence labeling and microscopy of DNA. Arndt–Jovin DJ, et al. **Methods Cell Biol** 1989;30:417–48 (107 ref.)
Fluorescence polarization microscopy. Axelrod D. **Methods Cell Biol** 1989;30:333–52 (7 ref.)
Total internal reflection fluorescence microscopy. Axelrod D. **Methods Cell Biol** 1989;30:245–70 (22 ref.)
Preservation of biological specimens for observation in a confocal fluorescence microscope and operational principles of confocal fluorescence microscopy. Bacallao R, et al. **Methods Cell Biol** 1989;31:437–52
Three–dimensional confocal fluorescence microscopy. Brakenhoff GJ, et al. **Methods Cell Biol** 1989;30:379–98 (26 ref.)
Fluorescent indicators of membrane potential: microspectrofluorometry and imaging. Gross D, et al. **Methods Cell Biol** 1989;30:193–218 (32 ref.)
Resonance energy transfer microscopy. Herman B. **Methods Cell Biol** 1989;30:219–43 (17 ref.)
Characteristics of low light level television cameras. Spring KR, et al. **Methods Cell Biol** 1989;29:269–89 (16 ref.)
Basic fluorescence microscopy. Taylor DL, et al. **Methods Cell Biol** 1989;29:207–37 (35 ref.)
Multiple spectral parameter imaging. Waggoner A, et al. **Methods Cell Biol** 1989;30:449–78 (82 ref.)
Quantitative fluorescence microscopy using photomultiplier tubes and imaging detectors. Wampler JE, et al. **Methods Cell Biol** 1989;29:239–67 (57 ref.)
Image fidelity: characterizing the imaging transfer function. Young IT. **Methods Cell Biol** 1989;30:1–45 (21 ref.)
Optical recording with single cell resolution from monolayered slice cultures of rat hippocampus. Bonhoeffer T, et al. **Neurosci Lett** 1988 Oct 17;92(3):259–64
Use of ultramicrofluorometric methods for the study of single preimplantation embryos. Clarke RN, et al. **Poult Sci** 1989 Jul;68(7):972–8 (16 ref.)
[Use of very low density light fluorescence microscopy: study of real–time of the development of chromatin of unicellular mouse embryos] Debey P, et al. **C R Acad Sci [III]** 1989; 309(6):197–202 (Eng. Abstr.) **(Fre)**

STANDARDS

Multiple spectral parameter imaging in quantitative fluorescence microscopy. I: Quantitation of bead standards. Galbraith W, et al. **Comput Med Imaging Graph** 1989 Jan–Feb;13(1):47–60
Fluorescent standards. Sisken JE. **Methods Cell Biol** 1989; 30:113–26 (24 ref.)

MICROSCOPY, INTERFERENCE

METHODS

Simultaneous Nomarski and fluorescence imaging during video microscopy of cells. Foskett JK. **Am J Physiol** 1988

Oct;255(4 Pt 1):C566–71
Long-term observation of cultured cells by interference-reflection microscopy: near-infrared illumination and Y-contrast image processing. Zand MS, et al. **Cell Motil Cytoskeleton** 1989;13(2):94–103

MICROSCOPY, PHASE CONTRAST

Paramagnetic microspheres as immunological markers for light and electron microscopy. Rana MT, et al. **J Immunol Methods** 1988 Dec 9;115(2):209–17

METHODS

Improved detection and quantification of the (immuno) peroxidase product using reflection contrast microscopy. Cornelese-ten Velde I, et al. **Histochemistry** 1989; 92(2):153–60

MICROSCOPY, POLARIZATION

[Quantitative polarization microscopy demonstration of collagen type I and type III in histologic paraffin sections] Ogbuihi S, et al. **Z Rechtsmed** 1988;100(2–3):101–11 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Compensated polarised microscopy: a simple and cheap modification. Veerapen K, et al. **Med J Malaysia** 1987 Sep; 42(3):217–8

METHODS

An improved method for detecting and quantifying cardiac muscle disarray in hypertrophic cardiomyopathy. Whittaker P, et al. **Am Heart J** 1989 Aug;118(2):341–6
Sirius red polarization method is useful to visualize the organization of connective tissues but not the molecular composition of their fibrous polymers. Piérard GE. **Matrix** 1989 Jan;9(1):68–71

MICROSOMES

ANALYSIS

Effect of hypophysectomy and hormone replacement on fatty elongation in isolated microsomes of rat testes. Coniglio JG, et al. **Arch Androl** 1988;20(3):193–201
Spectral perturbation of human microsomal cytochrome P-450 by flavonoid binding. Moochhala SM, et al. **Biochem Int** 1988 Oct;17(4):755–62
Topogenic analysis of the human immunodeficiency virus type 1 envelope glycoprotein, gp160, in microsomal membranes. Haffar OK, et al. **J Cell Biol** 1988 Nov; 107(5):1677–87
Changes in rat lung microsomal lipids after p-xylene: relationship to inhibition of benzo[a]pyrene metabolism. Roberts AE, et al. **J Toxicol Environ Health** 1988; 25(4):479–94

DRUG EFFECTS

Inhibition of rat heart and liver microsomal lipid peroxidation by nifedipine. Engineer F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1279–85
Antioxidant activity of dihydrolipoate against microsomal lipid peroxidation and its dependence on alpha-tocopherol. Scholich H, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):256–61
Effect of anesthetics on calcium stores and membrane order of brain microsomes. Daniell LC, et al. **Mol Pharmacol** 1989 Sep;36(3):471–7
Microsome-mediated clastogenicity of butylated hydroxyanisole (BHA) in cultured Chinese hamster ovary cells: the possible role of reactive oxygen species. Phillips BJ, et al. **Mutat Res** 1989 Sep;214(1):105–14
Antiaggregatory effect of selenium incorporated into algae with no effect on the microsomal enzymes in rats [letter] Blaskó G, et al. **Thromb Res** 1988 Aug 1;51(3):337–8
[Various effects of captopril pharmacokinetics on drug metabolizing systems] Markova S. **Eksp Med Morfol** 1989; 28(2):56–9 (Eng. Abstr.) **(Bul)**

ENZYMOLOGY

Characterization of human liver and kidney cytochrome P-450-dependent arachidonic acid epoxygenase. Abraham NG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:347–50
Partial purification and characterization of leukotriene C4 synthase from guinea pig lung. Izumi T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:90–3
Pulmonary P-450-mediated eicosanoid metabolism and regulation in the pregnant rabbit. Masters BS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:335–8
Simultaneous determination of cytosolic glutathione S-transferase and microsomal epoxide hydrolase activity toward benzo[a]pyrene-4,5-oxide by high-performance liquid chromatography. Eaton DL, et al. **Anal Biochem** 1989 Apr;178(1):153–8
Isolation, characterization, and regulation of diacylglycerol lipases from the bovine brain. Farooqui AA, et al. **Ann N Y Acad Sci** 1989;559:25–36
Purification and kinetic properties of lysophosphatidylinositol acyltransferase from bovine heart muscle microsomes and comparison with lysophosphatidylcholine acyltransferase. Sanjanwala M, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):407–13
Cholesterol-lowering effect of N-(alpha-methylbenzyl)linoleamide (melinamide) in cholesterol-fed diabetic rats. Matsubara K, et al. **Atherosclerosis** 1988 Aug;72(2–3):199–204
Determination of multiple forms of cytochrome P-450 in microsomes from the digestive gland of Cryptochiton stelleri. Schlenk D, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):476–80
The effect of long-term consumption of fish oil on platelet-activating factor synthesis in rat renal microsomes. Yeo YK, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1238–42
Acylation of 2-acyl-glycerophosphocholine in guinea-pig heart microsomal fractions. Arthur G. **Biochem J** 1989 Jul 15;261(2):575–80
Lysophospholipase A2 activity in guinea-pig heart microsomal fractions displaying high activities with 2-acylglycerophosphocholines with linoleic and arachidonic acids. Arthur G. **Biochem J** 1989 Jul 15; 261(2):581–6
Identification of a glutathione S-transferase associated with microsomes of tumor cells resistant to nitrogen mustards. Clapper ML, et al. **Biochem Pharmacol** 1989 Jun 15; 38(12):1915–21
Characterization of distinct forms of cytochromes P-450, epoxide metabolizing enzymes and UDP-glucuronosyltransferases in rat skin. Pham MA, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2187–94
Organ distribution of epoxide hydrolases in cytosolic and microsomal fractions of normal and nafenopin-treated male DBA/2 mice. Waechter F, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3897–903
Characterization of rat and human steroid sulfatases. Kawano J, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):199–205
Selective acyl transfer in the reacylation of brain glycerophospholipids. Comparison of three acylation systems for 1-alk-1'-enylglycero-3-phosphoethanolamine, 1-acylglycero-3-phosphoethanolamine and 1-acylglycero-3-phosphocholine in rat brain microsomes. Masuzawa Y, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):1–12
Measurement of microsomal ATPase activities: a comparison between the inorganic phosphate-release assay and the NADH-coupled enzyme assay. Missiaen L, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):40–4
Acyl-CoA ligases from rat brain microsomes: an immunochemical study. Singh I, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):509–14
Participation of microsomal aldehyde reductase in long-chain fatty alcohol synthesis in the rat brain. Takahashi N, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):243–7
Xenobiotic microsomal epoxide hydrolase: 5' sequence of the human gene. Wilson NM, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):357–8
Phospholipid metabolism in rat submandibular gland. Positional distribution of fatty acids in phosphatidylcholine and microsomal lysophospholipid acyltransferase systems concerning proliferation. Yashiro K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):56–64
Intestinal microsomal enzyme induction by rifampicin. Hegazy I, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):325–7
Lipid peroxidation enzyme system in rainbow trout (Salmo gairdnerii) skeletal muscle microsomes. Han TJ, et al. **Comp Biochem Physiol [B]** 1989;93(2):485–91
Induction of multiple cytochrome P-450 species in housefly microsomes—SDS-gel electrophoresis studies. Stanton RH, et al. **Comp Biochem Physiol [B]** 1978;61(2):297–305
Effect of cadmium on pulmonary and renal microsomal drug metabolizing enzymes of the guinea-pig. Karakaya A, et al. **Comp Biochem Physiol [C]** 1988;90(1):241–4
Distribution of microsomal monooxygenases in the rabbit respiratory tract. Sabourin PJ, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):557–62
Induction of monooxygenase activity in the intestine of spot (Leiostomus xanthurus), a marine teleost, by dietary polycyclic aromatic hydrocarbons. van Veld PA, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):659–65
Monooxygenase mediating catecholestrogen formation by rat anterior pituitary is an estrogen-4-hydroxylase. Bui QD, et al. **Endocrinology** 1989 Feb;124(2):1085–7
Distribution and regulation of 5 alpha-androstane-3 beta,17 beta-diol hydroxylase in the rat central nervous system. Warner M, et al. **Endocrinology** 1989 Jun;124(6):2699–706
Purification and properties of microsomal carboxypeptidase N (kininase I) in human placenta. Ito Y, et al. **Enzyme** 1989; 42(1):8–14
Differential induction of peroxisomal and microsomal fatty-acid-oxidising enzymes by peroxisome proliferators in rat liver and kidney. Characterisation of a renal cytochrome P-450 and implications for peroxisome proliferation. Sharma RK, et al. **Eur J Biochem** 1989 Sep 1;184(1):69–78
Purification of ATP diphosphohydrolase from bovine aorta microsomes. Yagi K, et al. **Eur J Biochem** 1989 Apr 1; 180(3):509–13
Biosynthesis of psoralens. Psoralen 5-monooxygenase activity from elicitor-treated Ammi majus cells. Hamerski D, et al. **FEBS Lett** 1988 Nov 7;239(2):263–5
Antibodies to liver/kidney microsome1 in chronic active hepatitis recognize specific forms of hepatic cytochrome P-450. Waxman DJ, et al. **Gastroenterology** 1988 Nov; 95(5):1326–31
Cytosolic and microsomal glutathione S-transferase isoenzymes in normal human liver and intestinal epithelium. Hayes PC, et al. **Gut** 1989 Jun;30(6):854–9
Microsomal aromatase in testicular tumour tissue: increased activity in choriocarcinoma compared to embryonal carcinoma. Templ H, et al. **Horm Metab Res** 1988 Aug; 20(8):522–4
Purification and characterization of human microsomal dipeptidase. Adachi H, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):957–61
Translocation of a fragment of invertase across microsomal vesicles isolated from Neurospora crassa requires the hydrolysis of a nucleoside triphosphate. Addison R. **J Biol Chem** 1988 Oct 5;263(28):14281–7
On the mechanism of prostacyclin and thromboxane A2 biosynthesis. Hecker M, et al. **J Biol Chem** 1989 Jan 5; 264(1):141–50
Prostaglandin and fatty acid omega- and (omega-1)-oxidation in rabbit lung. Acetylenic fatty acid mechanism-based inactivators as specific inhibitors. Muerhoff AS, et al. **J Biol Chem** 1989 Jan 15;264(2):749–56
Kinetic studies of the gastric H,K-ATPase. Evidence for simultaneous binding of ATP and inorganic phosphate. Reenstra WW, et al. **J Biol Chem** 1988 Dec 25; 263(36):19618–25
Lecithin:retinol acyltransferase in retinal pigment epithelial microsomes. Saari JC, et al. **J Biol Chem** 1989 May 25; 264(15):8636–40
Signal transmission in exocrine cells is associated with rapid activity changes of acyltransferases and diacylglycerol kinase due to reversible protein phosphorylation. Söling HD, et al. **J Biol Chem** 1989 Jun 25;264(18):10643–8
Identification of an aldehyde dehydrogenase in the microsomes of human polymorphonuclear leukocytes that metabolizes 20-aldehyde leukotriene B4. Sutyak J, et al. **J Biol Chem** 1989 Sep 5;264(25):14818–23
High-performance liquid chromatographic determination of aminopeptidase P activity in Fischer F344 rat serum and kidney. Harada M, et al. **J Chromatogr** 1989 Aug 25; 493(1):176–81
Gestational changes in prostaglandin synthase activity of ovine cotyledonary microsomes. Rice GE, et al. **J Endocrinol** 1988 Aug;118(2):265–70
Relationship between zonal distribution of microsomal cytochrome P-450s (P-450(17)alpha,lyase and P-450C21) and steroidogenic activities in guinea-pig adrenal cortex. Shinzawa K, et al. **J Endocrinol** 1988 Nov;119(2):191–200
Inhibitors and dipeptide substrates for a microsomal tyrosylsulfotransferase from rat brain. Vargas F, et al. **J Enzym Inhib** 1986;1(2):105–12
The microsomal glucose-6-phosphatase enzyme of human gall-bladder. Hill A, et al. **J Pathol** 1989 May;158(1):53–6
Influence of 5-tridecylpyrazole-3-carboxylic acid, a new hypolipidaemic agent, on cholesteryl ester formation in rabbit intestinal mucosa. Seki K, et al. **J Pharm Pharmacol** 1988 Jul;40(7):473–7
Inhibition of human adrenal steroidogenic enzymes in vitro by imidazole drugs including ketoconazole. Ayub M, et al. **J Steroid Biochem** 1989 Apr;32(4):515–24
Dissociation of 19-hydroxy- 19-oxo-, and aromatizing-activities in human placental microsomes through the use of suicide substrates to aromatase. Bednarski PJ, et al. **J Steroid Biochem** 1989 Feb; 32(2):309–16
Regulation of the 3 beta-hydroxysteroid dehydrogenase activity in tissue fragments and microsomes from human term placenta: kinetic analysis and inhibition by steroids. Raimondi SG, et al. **J Steroid Biochem** 1989 Mar; 32(3):413–20
Isoelectric focusing analysis of detergent extracted renal 11 beta-hydroxysteroid dehydrogenase. Schulz W, et al. **J Steroid Biochem** 1989 Apr;32(4):581–90
Human placental 3 beta-hydroxy-5-ene-steroid dehydrogenase and steroid 5——4-ene-isomerase: purification from mitochondria and kinetic profiles, biophysical characterization of the purified mitochondrial and microsomal enzymes. Thomas JL, et al. **J Steroid Biochem** 1989 Aug;33(2):209–17
Metabolic and pharmacodynamic interactions of enantiomers of propoxyphene and methorphan. Cooper MJ, et al. **Life Sci** 1974 Nov 1;15(9):1665–72
Leukotriene C4 synthase from rat basophilic leukemia cell microsomes. Soberman RJ, et al. **Methods Enzymol** 1988; 163:353–7
Properties of fatty acyl-coenzyme A: estradiol-17 beta acyltransferase in bovine placenta microsomes. Martyn P, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):7–13
Defective co-translational formation of disulphide bonds in protein disulphide-isomerase-deficient microsomes. Bulleid NJ, et al. **Nature** 1988 Oct 13;335(6191):649–51
Proteolytic stimulation and solubilization of membrane-bound acetylcholinesterase from muscle sarcotubular system. Campoy FJ, et al. **Neurochem Res** 1989 Feb;14(2):197–204
Localization of aromatase in synaptosomal and microsomal

subfractions of quail (Coturnix coturnix japonica) brain. Schlinger BA, et al. **Neuroendocrinology** 1989 Apr; 49(4):434–41

Tissue specificity of induction of hamster monooxygenase activity by ethanol. Ueng TH, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):1–8

Localisation of a particulate luliberin hydrolysing activity in microsomal membranes of guinea pig brain. Elmore MA, et al. **Regul Pept** 1989 Jun–Jul;25(3):343–52

Immunoaffinity purification of aromatase cytochrome P-450 from human placental microsomes, metabolic switching from aromatization to 1 beta and 2 beta-monohydroxylation, and recognition of aromatase isozymes. Osawa Y, et al. **Steroids** 1987 Jul–Sep; 50(1–3):11–28

IMMUNOLOGY

Anti-liver-kidney microsome antibody type 1 recognizes human cytochrome P450 db1. Gueguen M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):542–7

Analysis of TSH receptors and microsomal antigen in different human thyroid tissue specimens. Furmaniak J, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):589–600

A new antigen recognized by anti-liver-kidney-microsome antibody (LKMA). Codoñer-Franch P, et al. **Clin Exp Immunol** 1989 Mar;75(3):354–8

Graves' disease: changes in TSH receptor and anti-microsomal antibodies after thyroidectomy. De Bruin TW, et al. **Clin Exp Immunol** 1988 Jun;72(3):481–5

Thyroid microsomal/thyroid peroxidase autoantibodies show discrete patterns of cross-reactivity to myeloperoxidase, lactoperoxidase and horseradish peroxidase. Banga JP, et al. **Immunology** 1989 Jun;67(2):197–204

The significance of antithyroglobulin and antithyroidal microsomal antibodies in patients with hyperthyroidism due to Graves' disease treated with antithyroidal drugs. Takaichi Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1097–100

The effect of sulphydryl reagents on the human thyroid microsomal antigen. Gardas A, et al. **J Endocrinol Invest** 1988 May;11(5):385–8

[Correlation between thyroid hypofunction and the presence of circulating antithyroid microsomal antibodies. A phenomenon in the aged, prevalent in women] Custro N, et al. **G Clin Med** 1989 Jan;70(1):27–31 (Eng. Abstr.) **(Ita)**

[Thyroid hormone anomalies in patients with insulin-dependent diabetes mellitus and circulating antithyroid microsomal antibodies] Custro N, et al. **Minerva Med** 1989 May;80(5):427–30 (Eng. Abstr.) **(Ita)**

[Occurrence of thyroid anti-microsomal antibodies in thyroid diseases and in healthy persons] Łącka K, et al. **Pol Arch Med Wewn** 1985 Oct;74(4):242–9 (Eng. Abstr.) **(Pol)**

[Anti-thyroglobulin and anti-microsomal antibodies in patients with hyperthyroidism treated with radioactive iodine] Barańska H, et al. **Pol Tyg Lek** 1988 Apr 25; 43(17):534–8 (Eng. Abstr.) **(Pol)**

[Usefulness of the radioimmunological and immunoenzyme methods in determining the levels of thyroid anti-microsomal antibodies] Łącka K, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1308–10 (Eng. Abstr.) **(Pol)**

METABOLISM

Effect of high carbohydrate and high protein diets on microsomal fatty acid composition, "fluidity" and delta 6 desaturation activity in kidney and lung. Mandon EC, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):49–58

Effects of hyperoxia and vitamin E on the fatty acid composition of rat lung microsomes and mitochondria. Dilley ED, et al. **Am Rev Respir Dis** 1989 Aug;140(2):423–9

Spectrophotometric assay for the condensing enzyme activity of the microsomal fatty acid chain elongation system. Nagi MN, et al. **Anal Biochem** 1989 Jun;179(2):251–61

Is the metabolism of alfentanil subject to debrisoquine polymorphism? A study using human liver microsomes. Lavrijsen KL, et al. **Anesthesiology** 1988 Oct;69(4):535–40

Mode of action studies. Basis for the search of new antifungal drugs. Vanden Bossche H, et al. **Ann N Y Acad Sci** 1988; 544:191–207

Cytochrome P-448 induction restores the propagation of .O2—induced lipid peroxidation in hepatoma microsomes. Galeotti T, et al. **Basic Life Sci** 1988;49:513–6

Prevention by propionylcarnitine of NADPH and tert-butyl hydroperoxide-dependent chemiluminescence in heart microsomes. Schinetti ML, et al. **Basic Life Sci** 1988; 49:243–7

Enhancement of chemical activation via radical-dependent mechanisms: an emerging concept in chemical-chemical interactions. Trush MA, et al. **Basic Life Sci** 1988;49:739–44

Co-localization of a glucose transporter and the insulin receptor in microsomes of insulin-treated rat adipocytes. Ezaki O, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1368–74

Differences in calcium uptake in native canine cardiac microsomes are correlated with the ratio of unphosphorylated to phosphorylated phospholamban as determined by Western blot analysis. Kasinathan C, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1296–301

Fractionation of endocytic vesicles and glucose-transporter-containing vesicles in rat adipocytes. James DE, et al. **Biochem J** 1988 Dec 15;256(3):725–32

The effect of external calcium and pH on inositol trisphosphate-mediated calcium release from cerebellum microsomal fractions. Joseph SK, et al. **Biochem J** 1989 Feb 15;258(1):261–5

The Ins(1,4,5)P3 binding site of bovine adrenocortical microsomes: function and regulation. Palmer S, et al. **Biochem J** 1989 Jun 1;260(2):593–6

Specific alterations of rat renal microsomal proteins induced by cephaloridine. Kramer W, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4135–40

Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—I. Lung and liver microsomes. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3709–15

Free-radical formation by mitomycin C and its novel analogs in cardiac microsomes and the perfused rat heart. Politi PM, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):341–8

Spontaneous calcium release induced by ethanol in the isolated rat brain microsomes. Shah J, et al. **Brain Res** 1988 Nov 22;474(1):94–9

Vanadium-mediated lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):696–703

Regional differences in lipid composition and incorporation of saturated and unsaturated fatty acids into microsomal membranes of rat small intestine. Garg ML, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):794–800

Lack of influence of butylated hydroxytoluene on modification of lung microsome mediated aflatoxin B1-DNA binding: role of pulmonary glutathione S-transferase. Allameh A, et al. **Cancer Lett** 1988 Dec 1; 43(1–2):125–31

Arachidonic acid-dependent peroxidative activation of carcinogenic arylamines by extrahepatic human tissue microsomes. Flammang TJ, et al. **Cancer Res** 1989 Apr 15;49(8):1977–82

Molecular basis for the sex-related difference in renal N-nitrosodimethylamine demethylase in C3H/HeJ mice. Hong JY, et al. **Cancer Res** 1989 Jun 1;49(11):2973–9

Purification and characterization of cytochrome P-450 induced by benz(a)anthracene in mouse skin microsomes. Ichikawa T, et al. **Cancer Res** 1989 Feb 15;49(4):806–9

Metabolism of 1,8-dinitropyrene by rabbit lung. Tee LB, et al. **Carcinogenesis** 1988 Oct;9(10):1869–74

Metabolism of androstenedione by placental microsomes in pregnancy hypertension. Hähnel ME, et al. **Clin Chim Acta** 1989 Apr 28;181(1):103–8

An efficient cell-free translation system from Aspergillus nidulans and in vitro translocation of prepro-alpha-factor across Aspergillus microsomes. Devchand M, et al. **Curr Genet** 1988 Dec;14(6):561–6

Enzymatic conjugation of hexachloro-1,3-butadiene with glutathione. Formation of 1-(glutathion-S-yl)-1,2,3,4,4-pentachlorobuta-1,3-diene and 1,4-bis(glutathion-S-yl)-1,2,3,4-tetrachlorobuta-1,3-diene. Dekant W, et al. **Drug Metab Dispos** 1988 Sep–Oct; 16(5):701–6

Post-translational transport of proteins into microsomal membranes of Candida maltosa. Wiedmann M, et al. **EMBO J** 1988 Jun;7(6):1763–8

Seventy-kilodalton heat shock proteins and an additional component from reticulocyte lysate stimulate import of M13 procoat protein into microsomes. Zimmermann R, et al. **EMBO J** 1988 Sep;7(9):2875–80

A cytochrome P450 immunochemically related to P450c,d (P450I) localized to the smooth microsomes and inner zone of the guinea pig adrenal. Black VH, et al. **Endocrinology** 1989 May;124(5):2480–93

In vitro metabolism of 25-hydroxyvitamin D3 by human trophoblastic homogenates, mitochondria, and microsomes: lack of evidence for the presence of 25-hydroxyvitamin D3-1 alpha- and 24R-hydroxylases. Hollis BW, et al. **Endocrinology** 1989 Sep;125(3):1224–30

Metabolism of triiodothyroacetic acid (TA3) in rat liver. I. Deiodination of TA3 and TA3 sulfate by microsomes. Rutgers M, et al. **Endocrinology** 1989 Jul;125(1):424–32

Immunodetection of Na,K-ATPase alpha 3-isoform in renal and nerve tissues. Arystarkhova EA, et al. **FEBS Lett** 1989 Jul 3;250(2):545–8

Inhibition of lipid peroxidation by dihydroquinoline-type antioxidant (CH 402). Blázovics A, et al. **Free Radic Res Commun** 1988;4(6):409–13

Effect of alpha-tocopherol on the microsomal lipid peroxidation induced by doxorubicin: influence of ascorbic acid. Geetha A, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):53–8

NADPH-dependent drug redox cycling and lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Int J Biochem** 1989;21(2):183–90

Lipid composition of brown adipose tissue mitochondria and microsomes in hyperthyroid rats. Ruggiero FM, et al. **Int J Biochem** 1989;21(3):327–32

Ca2+ uptake in bovine adrenocortical microsomes: formation of phosphorylated intermediate of Ca2+ dependent ATPase. Sumida M, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):687–92

Effects of cadmium in vitro on microsomal steroid metabolism in the inner and outer zones of the guinea pig adrenal cortex. Colby HD, et al. **J Biochem Toxicol** 1987 Spring;2:1–11

Mechanism of inhibition by alloxan of ATP-driven calcium transport by vascular smooth muscle microsomes. Kwan CY, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):517–31

Chicken and Xenopus mannose 6-phosphate receptors fail to bind insulin-like growth factor II. Clairmont KB, et al. **J Biol Chem** 1989 Oct 5;264(28):16390–2

The inositol 1,4,5-trisphosphate-binding site in adrenal cortical cells is distinct from the endoplasmic reticulum. Rossier MF, et al. **J Biol Chem** 1989 Aug 25; 264(24):14078–84

Modulation by polyelectrolytes of canine cardiac microsomal calcium uptake and the possible relationship to phospholamban. Xu ZC, et al. **J Biol Chem** 1989 Oct 5; 264(28):16644–51

Progesterone interacts with P-glycoprotein in multidrug-resistant cells and in the endometrium of gravid uterus. Yang CP, et al. **J Biol Chem** 1989 Jan 15; 264(2):782–8

Immunocytological identification of the microsomal calcium store of nonmuscle cells. Pozzan T, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S80–4 (15 ref.)

Evidence for a two-step mechanism involved in assembly of functional signal recognition particle receptor. Andrews DW, et al. **J Cell Biol** 1989 Mar;108(3):797–810

Access of proteinase K to partially translocated nascent polypeptides in intact and detergent-solubilized membranes. Connolly T, et al. **J Cell Biol** 1989 Feb; 108(2):299–307

NH2-terminal substitutions of basic amino acids induce translocation across the microsomal membrane and glycosylation of rabbit cytochrome P450IIC2. Szczesna-Skorupa E, et al. **J Cell Biol** 1989 Apr; 108(4):1237–43

Liposomes as cyclosporin A carriers: positively charged lecithin-cholesterol liposomes associated with cyclosporin A do not inhibit biosynthesis of mitochondrial polyglycerophosphatides and microsomal phosphatidylinositol. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Apr–Jun;6(2):177–82

Specificity of steroid binding to testicular microsomal cytochrome P-450. Relation of steroid structure to type-I spectral responses after correction for hydrophobic association with the membrane. Kühn-Velten N, et al. **J Steroid Biochem** 1989 Jul;33(1):33–9

Biosynthesis of estradiol-17 beta fatty acyl esters by microsomes derived from bovine liver and adrenals. Paris A, et al. **J Steroid Biochem** 1989 Sep;33(3):465–72

Potentiation of ethanol-induced lipid peroxidation of biological membranes by vitamin C. Ahmad FF, et al. **Life Sci** 1988;43(14):1169–76

Spironolactone and cytochrome P-450: impairment of steroid hydroxylation in the adrenal cortex. Menard RH, et al. **Life Sci** 1974 Nov 1;15(9):1639–48

Influence of polyphloretin phosphate on cholesterol esterifying activity in subcellular fractions from aorta, adrenal and testes of cholesterol-fed rabbits. Morin RJ, et al. **Life Sci** 1974 Oct 1;15(7):1267–75

Metabolism of benzo(a)pyrene by microsomes from tissues of pregnant and fetal hamsters. Wang IY, et al. **Life Sci** 1974 Oct 1;15(7):1291–300

Reconstitution of transport from the ER to the Golgi complex in yeast using microsomes and permeabilized yeast cells. Ruohola H, et al. **Methods Cell Biol** 1989;31:143–54

The relationship between inositol trisphosphate receptor density and calcium release in brain microsomes. Joseph SK, et al. **Mol Pharmacol** 1989 Mar;35(3):355–9

Inositol tetrakisphosphate mobilizes calcium from cerebellum microsomes. Joseph SK, et al. **Mol Pharmacol** 1989 Sep; 36(3):391–7

Activation of two environmental mixtures by plant S9. Shane BS, et al. **Mutat Res** 1989 Jan;222(1):9–18

Decreased peroxidative potential in rat brain microsomal fractions during ageing. Devasagayam TP. **Neurosci Lett** 1989 Aug 14;103(1):92–6

Glucuronidation of morphine in human kidney microsomes. Yue QY, et al. **Pharmacol Toxicol** 1988 Nov;63(5):337–41

Cyclic AMP-dependent phosphorylation of a brain inositol trisphosphate receptor decreases its release of calcium. Supattapone S, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8747–50

Formation of 5,16-androstadien-3 beta-ol from pregnenolone in human testicular microsomes. Kohara H. **Steroids** 1988 Sep;52(3):295–309

Furazolidone-enhanced production of free radicals by avian cardiac and hepatic microsomal membranes. Stroo WE, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):81–6

In vitro formation of organ-specific ultimate carcinogens of 4-dimethylaminoazobenzene and urethan by microsomes. Gupta R, et al. **Toxicol Lett** 1989 Jan;45(1):49–54

Role of kidney microsomal cytochrome P-450 in cyclosporin induced nephropathy. Yoshimura R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):934–6

In vitro inhibition by stiripentol of rat brain cytochrome P-450-mediated naphthalene hydroxylation. Mesnil M, et al. **Xenobiotica** 1988 Sep;18(9):1097–106

[Chelating and antiradical effect of rutin during peroxidation of lipids from microsomes and liposomes] Dorozhko AI, et al. **Biokhimiia** 1988 Oct;53(10):1660–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of WR-2721 on radiation-induced lipid peroxidation and enzyme release in erythrocytes and microsomes. Ayene SI, et al. **Int J Radiat Biol** 1989 Sep;56(3):265-75

ULTRASTRUCTURE

Sedimentation field flow fractionation of mitochondrial and microsomal membranes from corn roots. Mozersky SM, et al. **Anal Biochem** 1988 Jul;172(1):113-23

Characteristics of the isolated apical plasmalemma and intracellular tubulovesicles of the gastric acid secreting cells: demonstration of secretagogue-induced membrane mobilization. Ray TK, et al. **Biochemistry** 1988 Dec 13; 27(25):8958-68

Isolation of transverse tubule membranes from skeletal muscle: ion transport activity, reformation of triad junctions, and isolation of junctional spanning protein of triads. Caswell AH, et al. **Methods Enzymol** 1988;157:68-84

Junctional and longitudinal sarcoplasmic reticulum of heart muscle. Inui M, et al. **Methods Enzymol** 1988;157:100-6

Isolation of triads from skeletal muscle. Mitchell RD, et al. **Methods Enzymol** 1988;157:51-68

MICROSOMES, LIVER

Non-metabolic covalent binding of nicotine-delta 1(5')-iminium ion to liver microsomes and sulfhydryl-containing polyamino acids. Obach RS, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4601-4

ANALYSIS

Isolation and characterization of a bovine liver tyrosine-O-sulfate-binding protein--a putative receptor molecular for tyrosine-sulfated proteins? Liu MC, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):964-9

Cytosol components from human placenta and rat liver in iodothyronine 5- and 5'-deiodination. Iwase K, et al. **Biochem Cell Biol** 1989 Jan;67(1):58-63

Rat hepatic microsomal cytochrome b5. A simple large-scale purification procedure and antibody production by antigen-containing liposomes. Carlsen J, et al. **Biochem J** 1988 Dec 15;256(3):1051-4

Nutrition and biomembranes: additional information concerning the incidence of dietary polyunsaturated fatty acids on membrane organization and biological activity. Léger CL, et al. **Biochimie** 1989 Jan;71(1):159-65

Fatty acid composition of phospholipids in mitochondria and microsomes during diethylnitrosamine carcinogenesis in rat liver. Canuto RA, et al. **Cell Biochem Funct** 1989 Jan; 7(1):11-9

Metabolism of cyclosporin A. IV. Purification and identification of the rifampicin-inducible human liver cytochrome P-450 (cyclosporin A oxidase) as a product of P450IIIA gene subfamily. Combalbert J, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):197-207

Purification of a distinct placental lactogen receptor, a new member of the growth hormone/prolactin receptor family. Freemark M, et al. **J Clin Invest** 1989 Mar;83(3):883-9

The proteins immunochemically related to P-450 HFLa, a major form of cytochrome P-450 in human fetal livers, are present in liver microsomes from various animal species. Kitada M, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct;62(1):31-40

Isocratic separation of phenytoin metabolites by high-performance liquid chromatography from human and animal microsomes and urine. Roy D, et al. **Ther Drug Monit** 1989;11(1):57-62

DRUG EFFECTS

Induction of rat hepatic microsomal drug metabolizing enzymes by pyrazole and 4-substituted pyrazoles. Hayes AL, et al. **Adv Alcohol Subst Abuse** 1988;7(3-4):199-203

Inhibition of rat liver microsomal lipid peroxidation by N-acyldehydroalanines: an in vitro comparative study. Buc-Calderon P, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):339-46

Disruption of rat hepatic microsomal electron transport chains by the selenium-containing anti-inflammatory agent Ebselen. Nagi MN, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):264-71

The effects of prochloraz on some microsomal parameters in rat liver. Grolier P, et al. **Arch Toxicol** 1988 Aug; 62(1):101-2

Effects of muroctasin on the activities of drug metabolizing enzymes in liver microsomes of rats. Kamataki T, et al. **Arzneimittelforschung** 1988 Jul;38(7A):1019-22

Induction of drug-metabolizing enzymes in Gunn rat liver. Effect of polycyclic aromatic hydrocarbons on cytochrome P-450 regulation. Celier C, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2825-32

Interactions between paraquat and ferric complexes in the microsomal generation of oxygen radicals. Puntarulo S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2911-8

Effect of cobalt protoporphyrin on hepatic drug-metabolizing enzymes. Specificity for cytochrome P-450. Spaethe SM, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2027-38

The acute and subchronic effects of ketoconazole on hepatic microsomal monooxygenases in the rat. Thomson RG, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3975-80

Fatty acid desaturase activities are modulated by phytosterol incorporation in microsomes. Leikin AI, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):187-91

Microsomal lipid peroxidation induced by adriamycin, epirubicin, daunorubicin and mitoxantrone: a comparative study. Vile GF, et al. **Cancer Chemother Pharmacol** 1989; 24(2):105-8

Inhibition of human liver microsomal epoxide hydrolase by valproate and valpromide: in vitro/in vivo correlation [published erratum appears in Clin Pharmacol Ther 1989 Sep;46(3):343] Kerr BM, et al. **Clin Pharmacol Ther** 1989 Jul;46(1):82-93

Effects of 2-arylbenzimidazoles on rat hepatic microsomal monooxygenase system. Iscan MY, et al. **Comp Biochem Physiol [C]** 1989;92(1):109-15

Effect of bleached kraft pulp mill effluent on hepatic biotransformation reactions in vendace (Coregonus albula L.). Lindström-Seppä P, et al. **Comp Biochem Physiol [C]** 1989;92(1):51-4

In vitro effects of polyhalogenated hydrocarbons on liver mitochondria respiration and microsomal cytochrome P-450. Fiorucci L, et al. **Drug Chem Toxicol** 1988; 11(4):387-403

Effects of iron-EDTA on uroporphyrinogen oxidation by liver microsomes. Jacobs JM, et al. **FEBS Lett** 1989 Jul 3;250(2):349-52

The effect of heparin on the inositol 1,4,5-trisphosphate receptor in rat liver microsomes. Dependence on sulphate content and chain length. Tones MA, et al. **FEBS Lett** 1989 Jul 31;252(1-2):105-8

Effects of alpha-tocopherol on carbon tetrachloride metabolism in rat liver microsomes. Cheeseman KH, et al. **Free Radic Res Commun** 1987;3(1-5):325-30

Inhibitory effects of ebselen on lipid peroxidation in rat liver microsomes. Hayashi M, et al. **Free Radic Res Commun** 1986;2(3):179-85

Non-enzymic lipid peroxidation in microsomes and microsomal phospholipids induced by anthracyclines. Sterrenberg L, et al. **Free Radic Res Commun** 1986; 1(6):369-78

Effects of inhibition of NADPH: cytochrome P-450 reductase on benzo(a)pyrene metabolism in mouse liver microsomes. Byczkowski JZ, et al. **Int J Biochem** 1989; 21(5):525-9

Rifampicin and drug interactions [editorial] Joshi VR, et al. **J Assoc Physicians India** 1988 Jun;36(6):361

Alterations in platelet aggregation and microsomal benzo-alpha-pyrene hydroxylase activities after exposure of rats to a Prudhoe Bay crude oil. Chaudhury S, et al. **J Biochem Toxicol** 1987 Summer;2:93-104

Neonatal phenobarbital imprinting of rat hepatic microsomal testosterone hydroxylations. Haake JM, et al. **J Biochem Toxicol** 1988 Winter;3:309-19

Alteration of glucose-6-phosphatase activity and regenerative, and total DNA concentrations in regenerating and normal rat liver of aqueous extracts of two Nigerian plants. Oruambo IF. **J Environ Pathol Toxicol Oncol** 1989 Mar-Apr;9(2):191-9

Effects of bromocriptine on hepatic cytochrome P-450 monooxygenase system. Moochhala SM, et al. **Jpn J Pharmacol** 1989 Feb;49(2):285-91

Metabolism of benz(a)anthracene catalyzed by liver microsomes of untreated and nicotine-pretreated rats. Schmoldt A, et al. **Klin Wochenschr** 1988;66 Suppl 11:108-13

Effects of aurothioglucose on iron-induced rat liver microsomal lipid peroxidation. Beckman JK, et al. **Lipids** 1988 Sep;23(9):899-903

Effects of ethanol on microsomal drug metabolism in aging female rats. I. Induction. Rikans LE. **Mech Ageing Dev** 1989 Jun;48(3):267-80

Furazolidone-enhanced production of free radicals by avian cardiac and hepatic microsomal membranes. Stroo WE, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):81-6

Effect of ethanol on hepatotoxicity of acetaminophen in mice and on reactive metabolite formation by mouse and human liver microsomes. Thummel KE, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):391-7

Interaction of carbaryl and N-nitrosocarbaryl with microsomal monooxygenase activities. Beraud M, et al. **Toxicol Lett** 1989 Feb;45(2-3):251-60

Effect of acetaminophen hepatotoxicity on hepatic mitochondrial and microsomal calcium contents in mice. Burcham PC, et al. **Toxicol Lett** 1988 Nov;44(1-2):91-9

Activity of liver microsomal Ca2+-ATPase in relation to perturbation of membrane hydrophobic interactions induced by methoxybenzene derivatives and n-aliphatic alcohols. Fernandez Y, et al. **Toxicol Lett** 1988 Nov; 44(1-2):31-8

Effect of 1,3-butanediol on rat liver microsomal NDMA demethylation and other monooxygenase activities. Li D, et al. **Toxicol Lett** 1989 Feb;45(2-3):141-7

Detection of reactive metabolites in vitro. Garle MJ, et al. **Toxicology** 1989 Jan;54(1):101-10

Prevention of acetaminophen-induced hepatotoxicity by dimethyl sulfoxide. Park Y, et al. **Toxicology** 1988 Nov 14;52(1-2):165-75

Induction of rat liver microsomal cytochrome P-450 isozymes and epoxide hydrolase by a series of 4'-substituted-2,3,4,5-tetrachlorobiphenyls. Parkinson A, et al. **Toxicology** 1988 Dec 30;53(2-3):289-300

Comparative studies on the effect of fenbendazole on the liver and liver microsomal enzymes in goats, quail and rats. Dalvi RR. **Vet Res Commun** 1989;13(2):135-9

Acridine orange-mediated photodamage of microsomal- and lysosomal fractions. Olsson GM, et al. **Virchows Arch [B]** 1989;56(4):247-57

Lindane-induced oxidative stress. I. Time course of changes in hepatic microsomal parameters, antioxidant enzymes, lipid peroxidative indices and morphological characteristics. Junqueira VB, et al. **Xenobiotica** 1988 Nov; 18(11):1297-304

[Effect of kerosine hydrocarbons and phenobarbital on components of the microsomal electron transport chain in the rat liver] Starek A, et al. **Folia Med Cracov** 1988; 29(1-2):49-57 (Eng. Abstr.) (Pol)

[Effect of radioprotectors on lipid peroxidation in liver microsomes induced by ultraviolet irradiation of the skin in rats] Gorodovikova EN, et al. **Biol Nauki** 1989;(4):15-8 (Eng. Abstr.) (Rus)

[Protective action of fat- and water-soluble antioxidants on the cytochrome P-450 system during lipid peroxidation in liver microsomes] Serbinova EA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):187-8 (Eng. Abstr.) (Rus)

[Effect of fepromaron on the enzyme activity of the liver monooxygenase system] Imambaev SE, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):50-2 (Eng. Abstr.) (Rus)

[Effect of isomers and the basic metabolites of endosulfan on the status of the microsomal system of the liver] Koshkarian AO, et al. **Gig Sanit** 1989 Mar;(3):93-4 (Rus)

[Effect of bucid on oxidation-reduction processes in the microsomes and mitochondria of the animal liver] Sinitskaia TA, et al. **Gig Sanit** 1989 May;(5):87-8 (Rus)

[The effect of a lipid food component on enzymatic activity of rat liver endoplasmic reticulum upon the action of polychlorinated biphenyls] Lashneva NV, et al. **Vopr Pitan** 1989 Mar-Apr;(2):24-30 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Kinetics of benzo(a)pyrene hydroxylation at varying concentrations of NADPH and NADH in liver microsomes of nontreated and beta-naphthoflavone-treated C57BL/2 and DBA/2 mice. Brauze D, et al. **Acta Biochim Pol** 1988; 35(3):159-68

Characterization of human liver and kidney cytochrome P-450-dependent arachidonic acid epoxygenase. Abraham NG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:347-50

The effect of age upon the affinity of microsomal mono-oxygenase enzymes for substrate in human liver. Wynne HA, et al. **Age Ageing** 1988 Nov;17(6):401-5

Induction and quail liver diamine oxidase (histaminase). Part I: Interference of spermidine synthase on the diamine oxidase activity assay using putrescine as substrate. Ignesti G, et al. **Agents Actions** 1988 Aug;25(1-2):37-42

Induction and quail liver diamine oxidase (histaminase). Part II: Different responses to the inducers. Ignesti G, et al. **Agents Actions** 1988 Aug;25(1-2):43-7

In vitro inhibition of a polymorphic human liver P-450 isozyme by narcotic analgesics. Henthorn TK, et al. **Anesthesiology** 1989 Feb;70(2):339-42

Effect of vitamin A on rat hepatic mixed-function oxidases, glutathione transferase activity and generations of oxygen radicals. Ayalogu EO, et al. **Ann Nutr Metab** 1988; 32(2):75-82

Characterization of human microsomal cytochrome P-450 enzymes. Guengerich FP. **Annu Rev Pharmacol Toxicol** 1989;29:241-64 (152 ref.)

In vitro deacetylation studies with isomeric acetamidobiphenyls using selective carboxylesterase inhibitors. Sertkaya NN, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1345-50

The microsomal ethanol oxidizing system mediates metabolic tolerance to ethanol in deermice lacking alcohol dehydrogenase. Alderman J, et al. **Arch Biochem Biophys** 1989 May 15;271(1):33-9

Regulation of rat liver microsomal glutathione S-transferase activity by thiol/disulfide exchange. Aniya Y, et al. **Arch Biochem Biophys** 1989 Apr;270(1):330-4

Purification of two isozymes of rat liver microsomal cytochrome P450 with testosterone 7 alpha-hydroxylase activity. Arlotto MP, et al. **Arch Biochem Biophys** 1989 May 1;270(2):441-57

Identification of cytochrome P450a (P450IIA1) as the principal testosterone 7 alpha-hydroxylase in rat liver microsomes and its regulation by thyroid hormones. Arlotto MP, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):458-71

24-Dehydrovitamin D is potent inhibitor of rat liver microsomal vitamin D-25-hydroxylase. Bolt MJ, et al. **Arch Biochem Biophys** 1988 Nov 1;267(2):532-8

Characterization of a phenobarbital-inducible dog liver cytochrome P450 structurally related to rat and human enzymes of the P450IIIA (steroid-inducible) gene subfamily. Ciaccio PJ, et al. **Arch Biochem Biophys** 1989 Jun;271(2):284-99

The metabolism of xenobiotics and endogenous compounds by the constitutive dog liver cytochrome P450 PBD-2. Duignan DB, et al. **Arch Biochem Biophys** 1988 Nov 15; 267(1):294-304

Phosphorylation of cytochrome P450: regulation by

cytochrome b5. Epstein PM, et al.
Arch Biochem Biophys 1989 Jun;271(2):424–32

N-glycosylation of purified rat and rabbit hepatic UDP-glucuronosyltransferases. Green MD, et al.
Arch Biochem Biophys 1989 Aug 15;273(1):72–8

Rabbit microsomal epoxide hydrolase: isolation and characterization of the xenobiotic metabolizing enzyme cDNA. Hassett C, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):380–9

Monoclonal antibody-directed characterization of rat hepatic P450 catalyzing the omega-1 and omega-2 hydroxylation of prostaglandins. Holm KA, et al.
Arch Biochem Biophys 1989 Mar;269(2):664–77

Pyrazole is different from acetone and ethanol as an inducer of the polysubstrate monooxygenase system in mice: evidence that pyrazole-inducible P450Coh is distinct from acetone-inducible P450ac. Honkakoski P, et al.
Arch Biochem Biophys 1988 Dec;267(2):589–98

Mouse liver phenobarbital-inducible P450 system: purification, characterization, and differential inducibility of four cytochrome P450 isozymes from D2 mouse. Honkakoski P, et al. **Arch Biochem Biophys** 1989 Aug 15; 273(1):42–57

Hepatic mitochondrial coumarin 7-hydroxylase: comparison with the microsomal enzyme. Honkakoski P, et al.
Arch Biochem Biophys 1988 Dec;267(2):558–67

Purification and characterization of an ethanol-induced UDP-glucuronosyltransferase. Hutabarat RM, et al.
Arch Biochem Biophys 1989 Aug 15;273(1):16–25

Rapid hydrolysis of diacylglycerol formed during phosphatidate phosphatase assay by lipase activities in rat liver cytosol and microsomes. Ide H, et al.
Arch Biochem Biophys 1989 May 15;271(1):177–87

Interaction of ferric complexes with rat liver nuclei to catalyze NADH-and NADPH-Dependent production of oxygen radicals. Kukielka E, et al.
Arch Biochem Biophys 1989 Sep;273(2):319–30

Action of Ebselen on rat hepatic microsomal enzyme-catalyzed fatty acid chain elongation, desaturation, and drug biotransformation. Laguna JC, et al.
Arch Biochem Biophys 1989 Feb 15;269(1):272–83

Metabolism of retinol and retinoic acid by human liver cytochrome P450IIC8. Leo MA, et al.
Arch Biochem Biophys 1989 Feb 15;269(1):305–12

Expression of rat liver heme oxygenase gene during development. Lin JH, et al. **Arch Biochem Biophys** 1989 May 1;270(2):623–9

Purification and characterization of hepatic steroid hydroxylases from untreated rainbow trout. Miranda CL, et al. **Arch Biochem Biophys** 1989 Jan;268(1):227–38

Oxidation of aldehydic products of lipid peroxidation by rat liver microsomal aldehyde dehydrogenase. Mitchell DY, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):11–7

Acetaminophen activation by human liver cytochromes P450IIE1 and P450IA2. Raucy JL, et al.
Arch Biochem Biophys 1989 Jun;271(2):270–83

Vanadate-dependent NAD(P)H oxidation by microsomal enzymes. Reif DW, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):137–43

Suppression in the expression of a male-specific cytochrome P450, P450-male: difference in the effect of chemical inducers on P450-male mRNA and protein in rat livers. Shimada M, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):578–87

Distinct long chain and very long chain fatty acyl CoA synthetases in rat liver peroxisomes and microsomes. Singh H, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):486–95

Further characterization of RLM2 and comparison with a related form of cytochrome P-450, RLM2b. Thummel KE, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):319–33

Isolation and characterization of human fetal liver cytochrome P450HLp2: a third member of the P450III gene family. Wrighton SA, et al.
Arch Biochem Biophys 1989 Jan;268(1):144–51

A rabbit liver constitutive form of cytochrome P450 responsible for amphetamine deamination. Yamada H, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):26–33

Inhibition of hepatic microsomal carboxylesterase activity by paraoxon. Castle MC. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:7–16

Interaction of 1,4-benzoquinone and 2,4-dichlorophenoxyacetic acid with microsomal glutathione transferase from rat liver. Dierickx PJ.
Arch Int Physiol Biochim 1988 Mar;96(1):1–5

Relative induction of molecular forms of cytochrome P-450 in gamma-hexachlorocyclohexane exposed rat liver microsomes. Kumar A, et al. **Arch Toxicol** 1988; 62(6):479–81

Profile of drug metabolizing enzymes in the nuclear and microsomal fractions from rat liver nodules and normal liver. Pacifici GM, et al. **Arch Toxicol** 1988;62(5):336–40

Evidence for several hepatic proteins related to microsomal epoxide hydrolase. Friedberg T, et al.
Arch Toxicol Suppl 1989;13:145–52

Characterization of microsomal and cytoplasmic metyrapone reducing enzymes from mouse liver. Maser E.
Arch Toxicol Suppl 1989;13:271–4

Generation of superoxide by the microsomal mixed-function oxidase system. Morehouse LA, et al. **Basic Life Sci** 1988; 49:517–21

The role of phospholipase A2 in microsomal lipid peroxidation induced with t-butyl hydroperoxide. Borowitz SM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1021–8

Oleate-induced translocation of protein kinase C to hepatic microsomal membranes. Boscá L, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):1243–9

Age-related changes in the iron spin state of testosterone-binding rat liver microsomal cytochromes P-450. Friedman FK, et al.
Biochem Biophys Res Commun 1989 Jan 31;158(2):480–4

Point mutations at threonine-301 modify substrate specificity of rabbit liver microsomal cytochromes P-450 (laurate (omega-1)-hydroxylase and testosterone 16 alpha-hydroxylase). Imai Y, et al.
Biochem Biophys Res Commun 1989 Feb 15;158(3):717–22

Attenuation of low dose phenobarbital induction of hepatic microsomal aminopyrine N-demethylase activity in rats by cimetidine. Levine M, et al.
Biochem Biophys Res Commun 1989 Aug 15;162(3):1363–9

A lecithin:retinol acyltransferase activity in human and rat liver. MacDonald PN, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):157–63

Liver microsomes contain two distinct NADPH-Monooxygenases with NH2-terminal segments homologous to the flavin containing NADPH-monooxygenase of Pseudomonas fluorescens. Ozols J. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):49–55

Mitochondria and microsomal membranes have a free radical reductase activity that prevents chromanoxyl radical accumulation. Packer L, et al.
Biochem Biophys Res Commun 1989 Feb 28;159(1):229–35

Obesity as a risk factor for drug-induced organ injury. VI. Increased hepatic P450 concentration and microsomal ethanol oxidizing activity in the obese overfed rat. Salazar DE, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):315–20

Rat liver type I iodothyronine deiodinase is not identical to protein disulfide isomerase. Schoenmakers CH, et al.
Biochem Biophys Res Commun 1989 Jul 31;162(2):857–68

15-Hydroxyeicosatetraenoic acid dehydrogenase activity in microsomal fraction of mouse liver homogenate. Sok DE, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):524–9

Posttranslational and direct integration of heme oxygenase into microsomes. Yoshida T, et al.
Biochem Biophys Res Commun 1989 Sep 15;163(2):1086–92

Benzanthrone: a new substrate for hepatic microsomal cytochrome P-450. Das M, et al. **Biochem Int** 1989 Jun; 18(6):1237–44

Effect of fraction V powder from bovine serum on rat liver microsomal glutathione S-transferase activity. Nishino H. **Biochem Int** 1989 Jun;18(6):1269–77

Purification and some properties of NADPH-cytochrome P-450 reductase from crab-eating monkey liver microsomes. Ohmori S, et al. **Biochem Int** 1988 Aug; 17(2):249–56

Differences in adult and foetal human cytochrome P-450 forms recognized by monoclonal antibodies with specificity for the P450III family. Barnes TS, et al. **Biochem J** 1989 Jun 15;260(3):635–40

Kinetic characteristics of a thioredoxin-activated rat hepatic and renal low-Km iodothyronine 5'-deiodinase. Bhat GB, et al. **Biochem J** 1989 Mar 15;258(3):785–92

The influence of fatty acid unsaturation and physical properties of microsomal membrane phospholipids on UDP-glucuronyltransferase activity. Castuma CE, et al. **Biochem J** 1989 Mar 15;258(3):723–31

Fluorimetric coupled enzyme assay for lysoplasmalogenase activity in liver. Hirashima Y, et al. **Biochem J** 1989 Jun 1;260(2):605–8

Human microsomal glutathione S-transferase. Its involvement in the conjugation of hexachlorobuta-1,3-diene with glutathione. McLellan LI, et al. **Biochem J** 1989 Feb 15;258(1):87–93

Activation of rat liver microsomal glutathione transferase by limited proteolysis. Morgenstern R, et al. **Biochem J** 1989 Jun 1;260(2):577–82

Postnatal changes in dolichol-pathway enzyme activities in rat liver. Oda-Tamai S, et al. **Biochem J** 1989 Jul 15; 261(2):371–5

Preparation and characterization of dog pancreas microsomal membranes specifically depleted of protein disulphide-isomerase. Paver JL, et al. **Biochem J** 1989 Feb 1;257(3):657–63

Anomeric specificity of D-glucose phosphorylation by rat liver glucose-6-phosphatase. Ramírez R, et al.
Biochem J 1989 Jul 15;261(2):509–13

Immunochemical characterization and biosynthesis of pI-6.4 esterase, a carboxylesterase of rat liver microsomal extracts. Robbi M, et al. **Biochem J** 1988 Aug 15;254(1):51–7

Vitamin K1 reduction in human liver. Location of the coumarin-drug-insensitive enzyme. Wallin R, et al.
Biochem J 1989 Jun 15;260(3):879–84

Induction of the rat hepatic microsomal mixed-function oxidases by two aza-arenes. A comparison with their non-heterocyclic analogues. Ayrton AD, et al.
Biochem Pharmacol 1988 Dec 1;37(23):4565–71

Inhibitory effects of nilutamide, a new androgen receptor antagonist, on mouse and human liver cytochrome P-450. Babany G, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):941–7

A comparative study of 1-substituted imidazole and 1,2,4-triazole antifungal compounds as inhibitors of testosterone hydroxylations catalysed by mouse hepatic microsomal cytochromes P-450. Ballard SA, et al.
Biochem Pharmacol 1988 Dec 15;37(24):4643–51

Effect of cannabidiol on cytochrome P-450 isozymes. Bornheim LM, et al. **Biochem Pharmacol** 1989 Sep 1; 38(17):2789–94

Human liver microsomal cytochrome P-450IIE1. Immunological evaluation of its contribution to microsomal ethanol oxidation, carbon tetrachloride reduction and NADPH oxidase activity. Ekström G, et al.
Biochem Pharmacol 1989 Feb 15;38(4):689–93

Rat liver microsomal NADPH-supported oxidase activity and lipid peroxidation dependent on ethanol-inducible cytochrome P-450 (P-450IIE1). Ekström G, et al.
Biochem Pharmacol 1989 Apr 15;38(8):1313–9

Evidence for metabolism of 3-methylindole by prostaglandin H synthase and mixed-function oxidases in goat lung and liver microsomes. Formosa PJ, et al.
Biochem Pharmacol 1988 Nov 15;37(22):4359–66

Induction of rat liver microsomal and nuclear cytochrome P-450 by dietary 2-acetylaminofluorene and butylated hydroxytoluene. Friedman FK, et al.
Biochem Pharmacol 1989 Sep 15;38(18):3075–81

Substrate specificities of cytochrome P-450, C-P-450(16)alpha and P-450(15)alpha, and contribution to steroid hydroxylase activities in mouse liver microsomes. Harada N, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4778–80

Interspecies homology of liver microsomal cytochrome P-450. A form of dog cytochrome P-450 (P-450-D1) crossreactive with antibodies to rat P-450-male. Komori M, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):235–40

Comparison of microsomal drug-metabolizing enzymes in 14 rat inbred strains. Koster AS, et al.
Biochem Pharmacol 1989 Mar 1;38(5):759–65

Purification and properties of a metyrapone-reducing enzyme from mouse liver microsomes—this ketone is reduced by an aldehyde reductase. Maser E, et al.
Biochem Pharmacol 1989 Sep 15;38(18):3049–54

Depression of liver microsomal vitamin K epoxide reductase activity associated with antibiotic-induced coagulopathy. Matsubara T, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2693–701

Fluorometric assay of hepatic microsomal monooxygenases by use of 7-methoxyquinoline. Mayer RT, et al.
Biochem Pharmacol 1989 Apr 15;38(8):1364–8

Modification of cytochrome P-450, NADPH-cytochrome c reductase and aryl hydrocarbon hydroxylase activities by schistosomicidal drugs. Mostafa MH, et al.
Biochem Pharmacol 1989 Jan 15;38(2):251–5

Additive effect of combined spironolactone and phenobarbital treatment on hepatic bilirubin UDP-glucuronyltransferase. Mottino AD, et al.
Biochem Pharmacol 1989 Mar 1;38(5):851–3

Properties of the microsomal and cytosolic glutathione transferases involved in hexachloro-1:3-butadiene conjugation. Oesch F, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):353–9

Comparative study of cytochrome P-450 in liver microsomes. A form of monkey cytochrome P-450, P-450-MK1, immunochemically cross-reactive with antibodies to rat P-450-male. Ohi H, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):361–5

Oxidative N-demethylation of N,N-dimethylaniline by purified isozymes of cytochrome P-450. Pandey RN, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2181–5

Monoclonal antibodies to rat liver cytochrome P-450 2c/RLM5 that regiospecifically inhibit steroid metabolism. Park SS, et al. **Biochem Pharmacol** 1989 Sep 15; 38(18):3067–74

Inhibition of human hepatic and placental xenobiotic monooxygenases by imidazole antimycotics. Pasanen M, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3861–6

Mouse hepatic cytochrome P-450 isozyme induction by 1,4-bis[2-(3,5-dichloropyridyloxy)]benzene, pyrazole, and phenobarbital. Raunio H, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4141–7

In vitro interaction of rat liver cytochromes P-450 with erythromycin, oleandomycin and erythralosamine derivatives. Importance of structural factors. Sartori E, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2061–8

Comparison of the form(s) of cytochrome P-450 induced by ethanol and glutethimide in cultured chick hepatocytes. Sinclair JF, et al. **Biochem Pharmacol** 1989 Feb 15; 38(4):657–64

Enhancement of 3-methylcholanthrene-mediated induction of cytochrome P-450 by 17 alpha-ethynylestradiol: immunochemical studies. Sundstrom S, et al.
Biochem Pharmacol 1989 Jul 1;38(13):2215–7

The microsomal ethanol oxidizing system: its role in ethanol and xenobiotic metabolism. Lieber CS.
Biochem Soc Trans 1988 Jun;16(3):232–9

Oxidative metabolism of spironolactone: evidence for the involvement of electrophilic thiosteroid species in drug-mediated destruction of rat hepatic cytochrome P450. Decker CJ, et al. **Biochemistry** 1989 Jun 13;28(12):5128–36

Characterization of cDNAs, mRNAs, and proteins related to human liver microsomal cytochrome P-450 (S)-mephenytoin 4'-hydroxylase. Ged C, et al.
Biochemistry 1988 Sep 6;27(18):6929–40

Occurrence and inducibility of cytochrome P450IIIA in

maternal and fetal rats during prenatal development. Hulla JE, et al. **Biochemistry** 1989 May 30;28(11):4871–9

Modulation of dolichyl–phosphomannose synthase activity by changes in the lipid environment of the enzyme. Jensen JW, et al. **Biochemistry** 1988 Aug 23;27(17):6315–20

Phospholipase–induced modulation of dolichyl–phosphomannose synthase activity. Jensen JW, et al. **Biochemistry** 1989 Jan 24;28(2):851–5

Evidence for concerted kinetic oxidation of progesterone by purified rat hepatic cytochrome P–450g. Swinney DC, et al. **Biochemistry** 1988 Jul 26;27(15):5461–70

Identification of the membrane anchor of microsomal rat liver cytochrome P–450. Vergères G, et al. **Biochemistry** 1989 May 2;28(9):3650–5

Absence of hepatic cytochrome P450buf1 causes genetically deficient debrisoquine oxidation in man. Zanger UM, et al. **Biochemistry** 1988 Jul 26;27(15):5447–54

Role of ketone bodies in the diabetes–induced changes in hepatic mixed–function oxidase activities. Barnett CR, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):250–4

Age–related changes in the translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in rat liver. Cascales C, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):384–8

Modulation of HMG–CoA reductase activity by pantetheine/pantethine. Cighetti G, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):389–93

Dietary cholesterol and/or n–3 fatty acid modulate delta 9–desaturase activity in rat liver microsomes. Garg ML, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):330–6

Glucose–6–phosphate phosphohydrolase activity in guinea pig liver microsomes is influenced by phosphatidylcholine. Interaction with cholesterol–enriched membranes. Gumbhir K, et al. **Biochim Biophys Acta** 1989 May 19; 981(1):77–84

Interaction of uridine 5'–diphosphoglucuronic acid with microsomal UDP–glucuronosyltransferase in primate liver: the facilitating role of uridine 5'–diphospho–N–acetylglucosamine. Hauser SC, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):141–8

Solubilization, purification and characterization of lysoplasmalogen alkenylhydrolase (lysoplasmalogenase) from rat liver microsomes. Jurkowitz–Alexander M, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):203–12

Characterization of rat and human steroid sulfatases. Kawano J, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):199–205

Co–induction by peroxisome proliferators of microsomal 1–acylglycerophosphocholine acyltransferase with peroxisomal beta–oxidation in rat liver. Kawashima Y, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):123–9

In vivo cholesterol removal from liver microsomes induces changes in fatty acid desaturase activities. Leikin AI, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):311–9

Control of dolichyl phosphoglucose formation in human liver microsomes. Kinetic and inhibition studies of nucleosides, nucleotides and analogues of UDPglucose. Matern H, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):67–72

Purification of cytochrome P–450 from polychlorinated biphenyl–treated crab–eating monkeys: high homology to a form of human cytochrome P–450. Ohta K, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):142–5

Biotinidase and lipoamidase in guinea pig livers. Oizumi J, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):410–4

Structure of cytochrome b5 and its topology in the microsomal membrane. Ozols J. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):121–30

Identification of a calcium–dependent microsomal proteinase responsible for monobasic cleavage of chicken proalbumin. Peach RJ, et al. **Biochim Biophys Acta** 1989 Mar 24; 990(3):276–9

Distinct type–1 protein phosphatases are associated with hepatic glycogen and microsomes. Schelling D, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):221–31

Effects of 6,6–difluorocholestanol and 7,7–difluorocholestanol on hepatic enzymes of cholesterol metabolism. Suckling KE, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):401–4

The rat–liver microsomal AP endonuclease. The endoplasmic reticulum is presented as a net thrown into the cytosol to capture newly synthesized karyophilic proteins. Verly WG, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):183–8

Synthesis of menaquinone–2 derivatives as substrates for the liver microsomal vitamin K–dependent carboxylase. Cheung A, et al. **Biofactors** 1988 Jan;1(1):61–5

Effect of streptozotocin–induced diabetes on the activity of 7 alpha–hydroxy–4–cholesten–3–one–specific 12 alpha–hydroxylase in rats. Kimura K, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1117–20

Development of the rat hepatic microsomal glucose–6–phosphatase system and its glucocorticoid inducibility. Burchell A, et al. **Biol Neonate** 1988; 54(2):107–15

Gamma–glutamyl transpeptidase alterations in liver and serum induced by haloperidol. Eryürek F, et al. **Biomed Biochim Acta** 1988;47(3):289–91

The ratio of two isozyme groups in microsomal cytochrome P–450 under exogenous influence of carbon tetrachloride and cyclophosphamide. Izotov MV, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):545–50

In vitro inhibition studies of tolbutamide hydroxylase activity of human liver microsomes by azoles, sulphonamides and quinolines. Back DJ, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):23–9

Effect of quinidine on the dextromethorphan O–demethylase activity of microsomal fractions from human liver. Broly F, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):29–36

An in vitro study of the microsomal metabolism and cellular toxicity of phenytoin, sorbinil and mianserin. Riley RJ, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):577–88

Human liver morphine UDP–glucuronyl transferase enantioselectivity and inhibition by opioid congeners and oxazepam. Wahlström A, et al. **Br J Pharmacol** 1988 Jul; 94(3):864–70

Using the scoparone O–demethylase assay for categorizing types of hepatic microsomal monooxygenase inducers. Kato S, et al. **Bull Environ Contam Toxicol** 1989 Apr; 42(4):489–94

Biotransformations of alpha–terpineol in the rat: its effects on the liver microsomal cytochrome P–450 system. Madyastha KM, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):17–25

Effect of chronic cysteamine treatment on mouse liver aryl hydrocarbon hydroxylase activity. Peterson TC. **Can J Physiol Pharmacol** 1988 Nov;66(11):1433–6

Effects of elevated temperature on misonidazole O–demethylation by mouse liver microsomes: kinetic and stability studies of a model mixed–function oxidase reaction. Walton MI, et al. **Cancer Chemother Pharmacol** 1989; 24(3):172–6

Enhanced demethylation and denitrosation of N–nitrosodimethylamine by human liver microsomes from alcoholics. Amelizad S, et al. **Cancer Lett** 1989 Jul 1; 46(1):43–9

Effect of diallyl sulfide on rat liver microsomal nitrosamine metabolism and other monooxygenase activities. Brady JF, et al. **Cancer Res** 1988 Nov 1;48(21):5937–40

Anticancer drugs as inhibitors of two polymorphic cytochrome P450 enzymes, debrisoquin and mephenytoin hydroxylase, in human liver microsomes. Relling MV, et al. **Cancer Res** 1989 Jan 1;49(1):68–71

Human liver microsomal cytochrome P–450 enzymes involved in the bioactivation of procarcinogens detected by umu gene response in Salmonella typhimurium TA 1535/pSK1002. Shimada T, et al. **Cancer Res** 1989 Jun 15; 49(12):3218–28

Hepatocarcinogenic heterocyclic aromatic amines that induce cytochrome P–448 isozymes, mainly cytochrome P–448H (P–450IA2), responsible for mutagenic activation of the carcinogens in rat liver. Degawa M, et al. **Carcinogenesis** 1989 Jun;10(6):1119–22

Increases in cytochrome P–450 mediated 17 beta–estradiol 2–hydroxylase activity in rat liver microsomes after both acute administration and subchronic administration of 2,3,7,8–tetrachlorodibenzo–p–dioxin in a two–stage hepatocarcinogenesis model. Graham MJ, et al. **Carcinogenesis** 1988 Nov;9(11):1935–41

Aflatoxin B1 hydroxylation by the pregnenolone–16 alpha–carbonitrile–inducible form of rat liver microsomal cytochrome P–450. Halvorson MR, et al. **Carcinogenesis** 1988 Nov;9(11):2103–8

Immunochemical comparison of human and rhesus monkey liver microsomal and the hepatocellular carcinoma–induced human serum epoxide hydrolases (preneoplastic antigens): basis for an enzyme–linked immunoabsorbent assay. Moody DE, et al. **Carcinogenesis** 1989 Feb;10(2):343–9

Immunochemical characterization of cytochrome P–450 isozymes responsible for benzene oxidation in the rat liver. Nakajima T, et al. **Carcinogenesis** 1989 Sep;10(9):1713–7

High affinity diethylnitrosamine–deethylase in liver microsomes from acetone–induced rats. Puccini P, et al. **Carcinogenesis** 1989 Sep;10(9):1629–34

Glucose–6–phosphatase activity in the liver microsomes of pregnant and hypercholesterolemic rats. Bruscalupi G, et al. **Cell Mol Biol** 1988;34(5):563–9

Induction of P–450 isoenzyme activities in Syrian golden hamster liver compared to rat liver as probed by the rate of 7–alkoxyresorufin–O–dealkylation. Blaich G, et al. **Chem Biol Interact** 1988;67(1–2):129–38

Streptozotocin–induced diabetes modulates the metabolic activation of chemical carcinogens. Ioannides C, et al. **Chem Biol Interact** 1988;68(3–4):189–202

Induction of cytosolic and microsomal epoxide hydrolases in mouse liver by peroxisome proliferators, with special emphasis on structural analogues of 2–ethylhexanoic acid. Lundgren B, et al. **Chem Biol Interact** 1988;68(3–4):219–40

Cytochrome P–455 nm complex formation in the metabolism of phenylalkylamines. IX. A comparative study with enantiomeric 2–nitroso–1–phenylpropane in microsomes and a reconstituted cytochrome P–450 system from rat liver. Paulsen–Sörman U, et al. **Chem Biol Interact** 1988; 67(1–2):49–58

Identification of structural characteristics of some potential H2–receptor antagonists that determine the interaction with rat hepatic P–450. Rekka E, et al. **Chem Biol Interact** 1988; 67(1–2):117–27

Metabolism of 32–hydroxylated 24,25–dihydrolanosterols by partially purified cytochrome P–450(14)DM from rat liver microsomes. Sekigawa Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3049–54

Metabolism of 24,25–dihydrolanosterol analogs by partially purified cytochrome P–450(14DM) from rat liver microsomes. Sonoda Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):718–22

Activation of hepatic microsomal Ca2+–adenosine triphosphatase by calcium–binding protein regucalcin. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1031–4

Effects of Ca2+ and V5+ on glucose–6–phosphatase activity in rat liver microsomes: the Ca2+ effect is reversed by regucalcin. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):388–90

Microsomal induction, alcohol, and lipoprotein metabolism: is there a three–way relationship? Goldberg DM, et al. **Clin Biochem** 1989 Feb;22(1):57–67 (102 ref.)

Caffeine as indicator of metabolic functions of microsomal liver enzymes. Varagnolo M, et al. **Clin Chim Acta** 1989 Jul 31;183(1):91–4

Dextromethorphan O–demethylation in liver microsomes as a prototype reaction to monitor cytochrome P–450 db1 activity. Dayer P, et al. **Clin Pharmacol Ther** 1989 Jan; 45(1):34–40

Evidence for glycosyltransferases in trout liver microsomes (Salmo gairdneri). Cornillon B, et al. **Comp Biochem Physiol [B]** 1979;63(3):419–21

Distinct pulmonary and hepatic forms of flavin–containing monooxygenase in sheep. Williams DE, et al. **Comp Biochem Physiol [B]** 1989;93(2):465–70

Cadmium sensitivity differences between liver microsomal drug metabolizing enzyme systems of guinea–pig and rat. Iscan M, et al. **Comp Biochem Physiol [C]** 1988;90(1):101–5

Effects of energy and/or protein restriction on hepatic microsomal mixed function oxidase in male broiler chicks. Takahashi K, et al. **Comp Biochem Physiol [C]** 1988; 91(2):483–6

A marked increase in latency of fetal rat liver UDP–glucuronosyltransferase accompanies the fluidization of the microsomal membrane in the perinatal period. Kapitulnik J, et al. **Dev Pharmacol Ther** 1989;12(1):30–4

Effects of enzyme induction therapy on glucose and drug metabolism in obese mice model of non–insulin dependent diabetes mellitus. Karvonen I, et al. **Diabetes Res** 1989 Feb; 10(2):85–92

Substrate specificity and enantioselectivity of arylcarboxylic acid glucuronidation. Fournel–Gigleux S, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):627–34

Ascorbic acid deficiency and hepatic UDP–glucuronyltransferase. Neumann CM, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):551–6

Activities of cytosolic and microsomal drug oxidases of rat hepatocytes in primary culture. Sherratt AJ, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):20–5

Coordinated maternal imprinting and paternal genotype determined the ultimate level of hepatic cytochrome P–450 and associated monooxygenase activities. Simpson VJ, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):576–81

Female–predominant rat hepatic P–450 forms j (IIE1) and 3 (IIA1) are under hormonal regulatory controls distinct from those of the sex–specific P–450 forms. Waxman DJ, et al. **Endocrinology** 1989 Jun;124(6):2954–66

Hepatic mixed–function oxidase activity in rainbow trout exposed to several polycyclic aromatic compounds. Gerhart EH, et al. **Environ Res** 1978 Oct;17(2):284–95

Hepatic hydroxymethylglutaryl coenzyme A reductase activity in inbred strains of mice. Dupont J, et al. **Enzyme** 1988;40(4):198–203

Purification and characterization of trimming glucosidase I from pig liver. Bause E, et al. **Eur J Biochem** 1989 Aug 15;183(3):661–9

Novel inhibitors and substrates of bilirubin: UDP–glucuronosyltransferase. Arylalkylcarboxylic acids. Fournel–Gigleux S, et al. **Eur J Biochem** 1989 Aug 15; 183(3):653–9

Expression of cytochrome P–450 isozymes in the liver of hypophysectomized rats. Evidence for different regulation mechanisms concerning P450IIB and P450IIIA subfamilies. Lemoine A, et al. **Eur J Biochem** 1988 Nov 15; 177(3):597–604

On the role of phospholipids in the reconstituted cytochrome P–450 system. A model study using dilauroyl and distearoyl glycerophosphocholine. Rietjens IM, et al. **Eur J Biochem** 1989 May 1;181(2):309–16

Preferential induction of the rat hepatic P450 I proteins by the food carcinogen 2–amino–3–methyl–imidazo[4,5–f]quinoline. Rodrigues AD. et al. **Eur J Biochem** 1989 May 15;181(3):627–31

Comparative effects of rifabutin and rifampicin on hepatic microsomal enzyme activity in normal subjects. Perucca E, et al. **Eur J Clin Pharmacol** 1988;34(6):595–9

In vivo effects of immunostimulating lipopeptides on mouse liver microsomal cytochromes P–450 and on paracetamol–induced toxicity. Migliore–Samour D, et al. **Experientia** 1989 Sep 15;45(9):882–6

Identification of the human hepatic microsomal glucose–6–phosphatase enzyme. Burchell A, et al. **FEBS Lett** 1988 Dec 19;242(1):153–6

Squalene epoxide cyclase and microemulsion. Lee KM, et al. **FEBS Lett** 1989 Feb 27;244(2):347–50

Effect of age on tests of intestinal and hepatic function in healthy humans. Arora S, et al. **Gastroenterology** 1989 Jun; 96(6):1560–5

Antibodies to liver/kidney microsome1 in chronic active hepatitis recognize specific forms of hepatic cytochrome P–450. Waxman DJ, et al. **Gastroenterology** 1988 Nov; 95(5):1326–31

Procainamide N–acetyltransferase: modulation by clofibrate

and a microsomal form. Kang ES, et al. **Gen Pharmacol** 1989;20(2):223–7

Effects of experimental hypo- and hyperthyroidism on hepatic long-chain fatty acyl-CoA synthetase and hydrolase. Dang AQ, et al. **Horm Metab Res** 1989 Jul; 21(7):359–61

Estradiol induced vaginal cornification in spayed rats: a model to study hepatic microsomal enzyme induction. Shanbhag TV, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):31–4

Enzyme induction: its relevance for internal exposure and health risks. Kolmodin-Hedman B. **Int Arch Occup Environ Health** 1988;Suppl:76–83 (50 ref.)

Nutrition-related alterations in liver microsomal testosterone hydroxylases. Gil L, et al. **Int J Androl** 1988 Aug; 11(4):339–48

Comparison of highly purified sheep liver and lung NADPH-cytochrome P-450 reductases by the analysis of kinetic and catalytic properties. Işcan MY, et al. **Int J Biochem** 1988;20(11):1189–96

Testosterone metabolism by microsomal cytochrome P-450 in liver of rats treated with some inducers. Lee DW, et al. **Int J Biochem** 1989;21(1):49–57

Comparison of hepatic, renal and intestinal bilirubin UDP-glucuronyl transferase activities in rat microsomes. Mottino AD, et al. **Int J Biochem** 1988;20(10):1113–6

Effect of Ginkgo biloba extract on microsomal enzyme induction. Duche JC, et al. **Int J Clin Pharmacol Res** 1989; 9(3):165–8

Molecular enzymology of the reductive bioactivation of hypoxic cell cytotoxins. Walton MI, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):983–6

Accelerated elimination of pimonidazole following microsomal enzyme induction in mice: a possible approach to reduced neurotoxicity of the pimonidazole–etanidazole combination. Workman P. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1011–4

Purification and properties of 5-hydroxytryptamine UDP-glucuronyltransferase from rat liver microsomes. Abe N, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):421–6

Sex-related difference in vitamin D3 25-hydroxylase of rat liver microsomes. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May;103(5):863–6

Immunochemical evidence for the catalysis of vitamin D3 25-hydroxylation and testosterone 16 alpha-hydroxylation by homologous forms of cytochrome P-450 in rat liver microsomes. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May; 103(5):853–7

Expression of a rat liver microsomal cytochrome P-450 catalyzing testosterone 16 alpha-hydroxylation in Saccharomyces cerevisiae: vitamin D3 25-hydroxylase and testosterone 16 alpha-hydroxylase are distinct forms of cytochrome P-450. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May;103(5):858–62

Purification and characterization of two forms of chicken liver cytochrome P-450 induced by 3,4,5,3′,4′-pentachlorobiphenyl. Hokama Y, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):355–61

Constitutive testosterone 6 beta-hydroxylase in rat liver. Imaoka S, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):481–7

Cytochrome P-450 in human liver microsomes: high-performance liquid chromatographic isolation of three forms and their characterization. Komori M, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):912–6

The NH2-terminal structures of human and rat liver microsomal NADH-cytochrome b5 reductases. Murakami K, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):312–7

Structures of sugar chains of a p-nitrophenyl acetate-hydrolyzing esterase from the microsomes of rat liver. Natsuka S, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):986–91

Purification and properties of cytochrome P-450 generally acting as a catalyst on benzo[a]pyrene hydroxylation from liver microsomes of untreated rats. Ohgiya N, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):234–8

Purification and characterization of cytochromes P-450 from liver microsomes of 3-methylcholanthrene-treated crab-eating monkeys. Ohmachi T, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):307–11

Thiamine pyrophosphatase (nucleoside diphosphatase) in the Golgi apparatus is distinct from microsomal nucleoside diphosphatase. Sano S, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):678–81

Molecular cloning and nucleotide sequence of cDNA of microsomal carboxyesterase E1 of rat liver. Takagi Y, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):801–6

Localization of the active center of nitroxide radical reduction in rat liver microsomes: its relation to cytochrome P-450 and membrane fluidity. Utsumi H, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):239–44

Purification and properties of a form of UDP-glucuronyltransferase from liver microsomes of 3-methylcholanthrene-treated rats. Yokota H, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):531–6

Activation of rat liver microsomal glutathione S-transferase by reduced oxygen species. Aniya Y, et al. **J Biol Chem** 1989 Feb 5;264(4):1998–2002

Cytochrome P-450 hPCN3, a novel cytochrome P-450 IIIA gene product that is differentially expressed in adult human liver. cDNA and deduced amino acid sequence and distinct specificities of cDNA-expressed hPCN1 and hPCN3 for the metabolism of steroid hormones and cyclosporine. Aoyama T, et al. **J Biol Chem** 1989 Jun 25;264(18):10388–95

Membrane topology of mammalian cytochromes P-450 from liver endoplasmic reticulum. Determination by trypsinolysis of phenobarbital-treated microsomes. Brown CA, et al. **J Biol Chem** 1989 Mar 15;264(8):4442–9

Regulation of UDP-glucuronosyltransferase by lipid-protein interactions. Comparison of the thermotropic properties of pure reconstituted enzyme with microsomal enzyme. Dannenberg A, et al. **J Biol Chem** 1989 Jan 5;264(1):238–42

Purification and characterization of a novel monomeric glutathione peroxidase from rat liver. Duan YJ, et al. **J Biol Chem** 1988 Dec 15;263(35):19003–8

Purification and characterization of an alpha-1,2-mannosidase involved in processing asparagine-linked oligosaccharides. Forsee WT, et al. **J Biol Chem** 1989 Mar 5;264(7):3869–76

Gene conversion and differential regulation in the rat P-450 IIA gene subfamily. Purification, catalytic activity, cDNA and deduced amino acid sequence, and regulation of an adult male-specific hepatic testosterone 15 alpha-hydroxylase. Matsunaga T, et al. **J Biol Chem** 1988 Dec 5;263(34):17995–8002

Radiation inactivation analysis of rat liver microsomal glucose-6-phosphatase. Ness GC, et al. **J Biol Chem** 1989 May 5;264(13):7111–4

Topography of rat hepatic microsomal enzymatic components of the fatty acid chain elongation system. Osei P, et al. **J Biol Chem** 1989 Apr 25;264(12):6844–9

Isolation, properties, and the complete amino acid sequence of a second form of 60-kDa glycoprotein esterase. Orientation of the 60-kDa proteins in the microsomal membrane. Ozols J. **J Biol Chem** 1989 Jul 25; 264(21):12533–45

Phosphorylation of native 97-kDa 3-hydroxy-3-methylglutaryl-coenzyme A reductase from rat liver. Impact on activity and degradation of the enzyme. Parker RA, et al. **J Biol Chem** 1989 Mar 25;264(9):4877–87

Phosphatidylethanolamine levels and regulation of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1989 Jan 15;264(2):1203–7

Induction of rat hepatic N-nitrosodimethylamine demethylase by acetone is due to protein stabilization. Song BJ, et al. **J Biol Chem** 1989 Feb 25;264(6):3568–72

Localization of the glucose phosphotransferase to a cytoplasmically accessible site on intracellular membranes. Srisomsap C, et al. **J Biol Chem** 1988 Nov 25; 263(33):17792–7

In situ structural analysis of microsomal UDP-glucuronyltransferases by radiation inactivation. Vessey DA, et al. **J Biol Chem** 1989 Apr 15;264(11):6334–8

Quantitative structure-activity relationship of coumarin derivatives. Involvement of partition between aqueous and membrane phase. Düren R, et al. **J Chromatogr** 1988 Jul 8;445(1):49–58

Separation and purification of component proteins of the cytochrome P-450-dependent microsomal monooxygenase system by high-performance liquid chromatography. Taniguchi H, et al. **J Chromatogr** 1989 Aug 4;476:299–308

Downregulation of the male-specific hepatic microsomal steroid 16 alpha-hydroxylase, cytochrome P-450UT-A, in rats with portal bypass. Relevance to estradiol accumulation and impaired drug metabolism in hepatic cirrhosis. Cantrill E, et al. **J Clin Invest** 1989 Apr; 83(4):1211–6

The presence of essential carboxyl group for binding of cytochrome c in rat hepatic NADPH-cytochrome P-450 reductase by the reaction with 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. Inano H, et al. **J Enzym Inhib** 1985;1(1):47–59

Inactivation and activation of various membranal enzymes of the cholesterol biosynthetic pathway by digitonin. Eilenberg H, et al. **J Lipid Res** 1989 Aug;30(8):1127–35

A potent, tissue-selective, synthetic inhibitor of HMG-CoA reductase. Balasubramanian N, et al. **J Med Chem** 1989 Sep;32(9):2038–41

p-Nitrophenetole deethylase activity of rat liver microsomes entrapped in polyelectrolyte capsules. Jung C, et al. **J Microencapsul** 1987 Jan–Mar;4(1):1–9

Effects of chlorobenzenes and their methyl sulfone metabolites on microsomal enzymes associated with drug metabolism in rat liver. Kato Y, et al. **J Pharmacobiodyn** 1988 Nov;11(11):758–62

Effects of ozagrel (OKY-046), a thromboxane synthase inhibitor, on oxidative drug-metabolizing enzymes in mouse hepatic microsomes. Morita K, et al. **J Pharmacobiodyn** 1988 Jul;11(7):519–25

7-ethenyloxycoumarin as a new substrate for fluorophotometric assay of hepatic microsomal epoxidizing activities. Sone T, et al. **J Pharmacobiodyn** 1989 Mar; 12(3):149–58

Suicide inactivation of cytochrome P-450 by methoxsalen. Evidence for the covalent binding of a reactive intermediate to the protein moiety. Labbe G, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1034–42

Role of acetone, dietary fat and total energy intake in induction of hepatic microsomal ethanol oxidizing system. Lieber CS, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):791–5

Secretory pattern of growth hormone regulates steroid sulfatase activity in rat liver. Eriksson L, et al. **J Steroid Biochem** 1989 Sep;33(3):413–6

Rat liver microsomal progesterone metabolism: evidence for differential troleandomycin and pregnenolone 16 alpha-carbonitrile inductive effects in the cytochrome P-450 III family. Larroque C, et al. **J Steroid Biochem** 1989 Aug;33(2):277–86

Evidence for kinetically distinct forms of corticosteroid 11 beta-dehydrogenase in rat liver microsomes. Monder C, et al. **J Steroid Biochem** 1989 Jan;32(1A):77–83

2-Bromo- and 16-bromo-estrogens and related compounds: potential inhibitors for both estradiol 2- and 16 alpha-hydroxylases in rat liver microsomes. Numazawa M, et al. **J Steroid Biochem** 1989 Jul;33(1):111–7

Kinetic studies of inhibition of estradiol 2- and 16 alpha-hydroxylases with 17 alpha-ethynyl and 17 beta-cyano steroids: preferential inhibition of the 16 alpha-hydroxylase. Numazawa M, et al. **J Steroid Biochem** 1989 Jan;32(1A):85–90

Comparison of assays for catechol estrogen synthase activity: product isolation vs radioenzymatic catechol-O-methyltransferase-coupled procedures. Roy D, et al. **J Steroid Biochem** 1989 Aug;33(2):243–9

Effect of ethanol, carbon tetrachloride, and methyl ethyl ketone on butanol oxidase activity in rat lung and liver. Carlson GP. **J Toxicol Environ Health** 1989;27(2):255–61

Acute effect of amitriptyline, phenobarbital or cobaltous chloride on delta-aminolevulinic acid synthetase, heme oxygenase and microsomal heme content and drug metabolism in rat liver. Hoshi K, et al. **Jpn J Pharmacol** 1989 Jul;50(3):289–93

In vitro effect of beta-lactam antibiotics and N-methyltetrazolethiol on microsomal vitamin K epoxide reductase in rats. Kawamoto K, et al. **Jpn J Pharmacol** 1988 Jun;47(2):169–78

Effect of N-methyltetrazolethiol on liver microsomal vitamin K reductase. Kawamoto K, et al. **Jpn J Pharmacol** 1989 Jun;50(2):159–65

Interspecies homology of cytochrome P-450: inhibition by anti-P-450-male antibodies of testosterone hydroxylases in liver microsomes from various animal species including man. Miura T, et al. **Jpn J Pharmacol** 1989 Mar; 49(3):365–74

Comparison of the effects of various inducers on 7-alkoxycoumarin O-dealkylase activities in liver microsomes. Okuno H, et al. **Jpn J Pharmacol** 1989 May; 50(1):1–9

Effect of sizofilan, an immunomodulator, on hepatic microsomal mixed-function oxidase activities in rats. Yomogida S, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):499–502

Inhibition of the mono-oxygenase system by butylated hydroxyanisole and butylated hydroxytoluene. Yang CS, et al. **Life Sci** 1974 Oct 15;15(8):1497–505

Microsomal delta 5 desaturation of eicosa-8,11,14-trienoic acid is activated by a cytosolic fraction. Leikin AI, et al. **Lipids** 1989 Feb;24(2):101–4

The activation of glucose dehydrogenase by p-chloromercuribenzoate. Bublitz C, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):101–6

On the interactions of catalase with subcellular structure. Pegg M, et al. **Mol Cell Biochem** 1989 Mar 16;86(1):77–85

Involvement of cytochrome b5 in the cytotoxic response to Escherichia coli lipopolysaccharide. Portolés MT, et al. **Mol Cell Biochem** 1989 May 4;87(1):79–84

The inadequacy of perinatal glucuronidation: immunoblot analysis of the developmental expression of individual UDP-glucuronosyltransferase isoenzymes in rat and human liver microsomes. Coughtrie MW, et al. **Mol Pharmacol** 1988 Dec;34(6):729–35

Specific inactivation by 17 beta-substituted steroids of rabbit and rat liver cytochromes P-450 responsible for progesterone 21-hydroxylation. Halpert J, et al. **Mol Pharmacol** 1989 Jan;35(1):148–56

Hypophysectomy differentially alters P-450 protein levels and enzyme activities in rat liver: pituitary control of hepatic NADPH cytochrome P-450 reductase. Waxman DJ, et al. **Mol Pharmacol** 1989 Apr;35(4):519–25

Interspecies homology of cytochrome P-450: toxicological significance of cytochrome P-450 cross-reactive with anti-rat P-448-H antibodies in liver microsomes from dogs, monkeys and humans. Ohta K, et al. **Mutat Res** 1989 Jul; 226(3):163–7

Microsomal cytochrome P-450: substrate binding, membrane interactions, and topology. Vergères G, et al. **Mutat Res** 1989 Jul;213(1):83–90

Effect of isoprothiolane on hepatic lesions of heifer caused by carbon tetrachloride. Nagasawa S, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):284–93

Specific reduction of hepatic microsomal benzo[a]pyrene hydroxylase activity after administration of eugenol to the rat. Ohgiya N, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):843–50

Depression of the hepatic cytochrome P-450 monooxygenase system by the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Shahi GS, et al. **Pharmacol Toxicol** 1989 Jan;64(1):107–10

Human anti-endoplasmic reticulum antibodies in sera of patients with halothane-induced hepatitis are directed against a trifluoroacetylated carboxylesterase. Satoh H, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):322–6

Evidence for cytochrome P-450NF, the nifedipine oxidase, being the principal enzyme involved in the bioactivation of aflatoxins in human liver. Shimada T, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):462–5

Selective effects of mercaptoundecahydrododecaborate (Na2B12H11SH) on the hepatic microsomal mono-oxygenase enzyme system and on hexobarbital induced sleep in mice. Fontenelle LJ, et al. **Proc West Pharmacol Soc** 1988;31:153–6

Dietary restriction postpones the age-dependent compromise of male rat liver microsomal monooxygenases. Schmucker DL, et al. **Prog Clin Biol Res** 1989;287:283–8

Effects of hypophysectomy and pituitary hormones on hepatic microsomal carboxylesterase isozymes in male rats. Hosokawa M, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):279–88

Form-specific degradation of cytochrome P-450 by lipid peroxidation in rat liver microsomes. Kitada M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):175–88

Differences in cytochrome P-450 levels between isolated hepatocytes and hepatic microsomes from phenobarbital treated rats. Muñoz JJ, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):129–31

Effects of chemical pollution on the activities of hepatic xenobiotic metabolizing enzymes in fish from the River Rhône. Monod G, et al. **Sci Total Environ** 1988 Jul 15; 73(3):189–201

Analysis of glucose-6-phosphate translocase and hexose-6-phosphate phosphohydrolase, the two obligatory components of microsomal glucose-6-phosphatase system, in rat liver. Hata K, et al. **Tohoku J Exp Med** 1988 Jun; 155(2):173–81

Induction of cytochromes P450IIE1 and P450IIB1 by secondary ketones and the role of P450IIE1 in chloroform metabolism. Brady JF, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):342–9

Thyroid and liver trophic changes in rats secondary to liver microsomal enzyme induction caused by an experimental leukotriene antagonist (L-649,923). Sanders JE, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):378–87

Translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in thioacetamide-induced liver tumours in rats. Cascales C, et al. **Toxicol Lett** 1989 Apr;47(1):9–16

Purification and properties of cytochrome P-450 from liver microsomes of phenobarbital-treated marmoset monkeys (Callithrix jacchus). Kastner M, et al. **Toxicol Lett** 1989 Feb;45(2-3):261–70

Biotransformation enzymes in nasal mucosa and liver of Sprague-Dawley rats. Longo V, et al. **Toxicol Lett** 1988 Dec;44(3):289–97

The significance of hepatic microsomal enzyme induction and altered thyroid function in rats: implications for thyroid gland neoplasia. McClain RM. **Toxicol Pathol** 1989; 17(2):294–306 (65 ref.)

Characterization of the induction of rat hepatic microsomal drug-metabolizing enzymes by 1-nitropyrene metabolites, 1-aminopyrene and N-acetylaminopyrene. Belisario MA, et al. **Toxicology** 1989 Jul 3;57(1):15–27

Hepatotoxicity of pulegone in rats: its effects on microsomal enzymes, in vivo. Moorthy B, et al. **Toxicology** 1989 May 15;55(3):327–37

Hepatic blood flow and drug metabolism in glycerol-rechallenged rats. Nakatani T, et al. **Urol Res** 1989;17(4):235–7

Microsomal enzyme induction by permethrin in rats. Anadon A, et al. **Vet Hum Toxicol** 1988 Aug;30(4):309–12

The low reactivity of 5H-dibenzo[a, d]cycloheptene 10,11-oxide in microsomal epoxide hydrolase catalysed hydration. Bellucci G, et al. **Xenobiotica** 1989 Mar; 19(3):279–85

Alteration of hepatic carboxylesterase activity by soman: inhibition in vitro and enhancement in vivo. Castle MC. **Xenobiotica** 1989 Jan;19(1):115–21

Age- and sex-related changes in the components of the hepatic microsomal mixed function oxidase system in Sprague-Dawley rats. Chengelis CP. **Xenobiotica** 1988 Nov;18(11):1211–24

Effects of the fungicide prochloraz on xenobiotic metabolism in rainbow trout: inhibition in vitro and time course of induction in vivo. Snegaroff J, et al. **Xenobiotica** 1989 Mar; 19(3):255–67

Effects of induction on the metabolism and cytochrome P-450 binding of harman and other beta-carbolines. Tweedie DJ, et al. **Xenobiotica** 1988 Jul;18(7):785–96

[Influence of 3,5,3'-triiodo-L-thyronine on the hepatic enzyme activities responsible for the metabolism of xenobiotics during the development of the chick embryo] Goudonnet H, et al. **C R Soc Biol (Paris)** 1988; 182(3):316–23 (Eng. Abstr.) **(Fre)**

[Hepatic microsomal delta 9 desaturation of stearic acid in the spontaneously diabetic female BB rat] Mimouni V, et al. **C R Soc Biol (Paris)** 1988;182(3):324–34 (Eng. Abstr.) **(Fre)**

[Ingestion of soybean epoxide oil. Effects on monooxygenases, epoxide hydrolase and activities of UDP glucuronosyltransferases in hepatic microsomes of the rat] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(1):105–17 (Eng. Abstr.) **(Fre)**

[Effects of 3,5,3'-triiodo-L-thyronine on the enzymes responsible for the metabolism of xenobiotics in the rat after increase in the dietary supply of cholesterol] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(3):308–15 (Eng. Abstr.) **(Fre)**

[Enrichment of cytochrome P-450 in human liver microsomes by the action of proteases] Isa M, et al. **J Pharm Belg** 1989 Jan-Feb;44(1):41–9 (Eng. Abstr.) **(Fre)**

[Biotransformation of benzamidine and benzamidoxime by microsomal enzymes of the rabbit] Clement B, et al. **Arch Pharm (Weinheim)** 1989 Jul;322(7):431–5 (Eng. Abstr.) **(Ger)**

[The effect of azoxybenzene on microsomal liver enzymes in the rat] Plass R, et al. **Nahrung** 1988;32(10):989–97 (Eng. Abstr.) **(Ger)**

[Evaluation of toxic effects on Yusho causal substances by chick embryo hepatic microsomal enzymes activities] Kashimoto T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):210–20 (Eng. Abstr.) **(Jpn)**

[Effects of 3-methylsulphonyl-4,5,3',4-tetrachlorobiphenyl and 7,8-benzoflavone on aryl hydrocarbon hydroxylase activity] Nagayama J, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):201–9 (Eng. Abstr.) **(Jpn)**

[Changes in hepatic microsomal cytochrome P-450 in glycerol rechallenged acute renal failure rats] Iwai Y, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):727–33 (Eng. Abstr.) **(Jpn)**

[Effects of flutropium bromide, a new antiasthma drug, with repeated administration on bronchomotor response and hepatic drug metabolizing enzymes] Mizuno H, et al. **Nippon Yakurigaku Zasshi** 1989 Jun;93(6):333–40 (Eng. Abstr.) **(Jpn)**

[A new electron transfer system functioned as drug reducing enzyme system] Kitamura S. **Yakugaku Zasshi** 1988 Apr; 108(4):296–309 (45 ref.) (Eng. Abstr.) **(Jpn)**

[Effect of benzodiazepines on drug-metabolizing enzymes. I. In vivo effect of clonazepam on microsomal monooxygenases of the rat liver in increased environmental temperature] Pachecka J, et al. **Acta Pol Pharm** 1988; 45(2):176–80 (Eng. Abstr.) **(Pol)**

[Effect of benzodiazepines on drug-metabolizing enzymes. II. Increased environmental temperature as a modifier of the effect of nitrazepam on microsomal monooxygenases of the rat liver] Pachecka J, et al. **Acta Pol Pharm** 1988; 45(3):271–5 (Eng. Abstr.) **(Pol)**

[Effect of age on the activity of hepatic mixed function oxidases in female rats] Plewka D, et al. **Med Pr** 1988; 39(2):81–90 (Eng. Abstr.) **(Pol)**

[Perfluorocarbons do not induce cytochrome P-448 in the rat liver] Obraztsov VV, et al. **Biofizika** 1989 Jan-Feb; 34(1):146–7 (Eng. Abstr.) **(Rus)**

[Relation between the 7-ethoxyresorufin-O-deethylase activity of the liver microsomal monooxygenase system and the level of methylcholanthrene-induced form of cytochrome P-450] Grishanova AIu, et al. **Biokhimiia** 1988 Jun;53(6):956–9 (Eng. Abstr.) **(Rus)**

[Identification of molecular forms of cytochrome P-450 isolated from liver microsomes of rats induced with phenobarbital and 3-methylcholanthrene] Gulisaeva LF, et al. **Biokhimiia** 1989 Mar;54(3):487–94 (Eng. Abstr.) **(Rus)**

[Affinity modification of membrane-bound microsomal cytochrome P-450 with lipophilic analogs of substrates] Subkhankulova TN, et al. **Biokhimiia** 1989 Jan;54(1):17–26 (Eng. Abstr.) **(Rus)**

[Determination of liver cholesterol-7 alpha-monooxygenase activity in an in vivo experiment] Tverdokhlib VP, et al. **Biol Nauki** 1989;(5):30–2 (Eng. Abstr.) **(Rus)**

[Functional status of the monooxygenase system of the liver microsomes in potassium bichromate poisoning] Nurmagambetov TZh, et al. **Gig Sanit** 1988 Oct;(10):85–6 **(Rus)**

[Modification of the mutagenic effect of cyclophosphamide after long-term induction of the microsomal monooxygenase system] Sycheva LP, et al. **Gig Sanit** 1989 Mar;(3):82–4 **(Rus)**

[The study of the structure of active center of membrane-bound cytochrome p-450 using 1-naphthoxyalcanthiols] Slyn'ko NM, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):999–1004 (Eng. Abstr.) **(Rus)**

[Use of immunospecific methods for quantitative estimation of microsomal epoxide hydrolase] D'iakov VL, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):47–52 (Eng. Abstr.) **(Rus)**

[Inhibition of cytochrome P-450-dependent enzymes in rat liver microsomes by tetraphenylporphyrin and its metal complexes] Galkin BN, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):91–3 (Eng. Abstr.) **(Rus)**

[Oxygenase reactions in rat liver microsomes during antioxidant deficiency] Gubskiĭ IuI, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):81–5 (Eng. Abstr.) **(Rus)**

[Comparative study of the effect of vitamin B12 coenzymes on monooxygenase system and lipid peroxidation in the liver of rabbits poisoned with phenylhydrazine] Korsova TL, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):97–102 (Eng. Abstr.) **(Rus)**

[Induction of microsomal monooxygenase by completely fluorinated organic compounds (review)] Obraztsov VV, et al. **Vopr Med Khim** 1989 May-Jun;35(3):9–18 (68 ref.) **(Rus)**

[The action of different food factors on the lipid peroxidation processes in the liver microsomes of rats] Feoktistova AI, et al. **Vopr Pitan** 1988 Sep-Oct;(5):46–51 (Eng. Abstr.) **(Rus)**

[The liver monooxygenase system in nutritional deficiency in rats in early ontogeny] Khakimov ZZ, et al. **Vopr Pitan** 1988 Nov-Dec;(6):62–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

A human cytochrome P-450 is recognized by anti-liver/kidney microsome antibodies in autoimmune chronic hepatitis. Kiffel L, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):283–9

A new antigen recognized by anti-liver-kidney-microsome antibody (LKMA). Codoñer-Franch P, et al. **Clin Exp Immunol** 1989 Mar;75(3):354–8

Major antigen of liver kidney microsomal autoantibodies in idiopathic autoimmune hepatitis is cytochrome P450db1. Manns MP, et al. **J Clin Invest** 1989 Mar;83(3):1066–72

Specificity of antisera directed against rat liver cytochrome P-448. Thomas PE, et al. **Life Sci** 1974 Oct 15; 15(8):1475–83

METABOLISM

Biotransformation of demecolcine by rat liver microsomes. Lukič V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:429–34

The hepatic microsomal Ca2+ sequestering system. Kraus-Friedmann N, et al. **Adv Exp Med Biol** 1988; 232:59–68

Characteristics of the hepatic cytochrome P-450 catalyzing omega hydroxylation of prostaglandins. Kupfer D, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:339–42

Acylation of lysophosphatidylcholine in liver microsomes of thermally acclimated trout. Livermore RC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R923–8

Analysis of oxidative warfarin metabolites by thermospray high-performance liquid chromatography/mass spectrometry. Spink DC, et al. **Anal Biochem** 1989 Mar; 177(2):307–13

Interaction of dimethylformamide and its metabolites with cytochrome P-450 in microsomal fraction of rat liver. Bryła P. **Ann Univ Mariae Curie Sklodowska [Med]** 1984; 39:105–12

Identification of microsomal metabolites of spirogermanium. Benfenati E, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):507–10

Selective potent restriction of P450b- but not P450e-dependent 7,12-dimethylbenz[a]anthracene metabolism by the microsomal environment. Christou M, et al. **Arch Biochem Biophys** 1989 Apr;270(1):162–72

Redox cycling of resorufin catalyzed by rat liver microsomal NADPH-cytochrome P450 reductase. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):605–16

Reduction of 7-alkoxyresorufins by NADPH-cytochrome P450 reductase and its differential effects on their O-dealkylation by rat liver microsomal cytochrome P450. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):617–29

Genetic contributions to the variation among rabbits of liver microsomal deoxycorticosterone synthesis. Johnson EF, et al. **Arch Biochem Biophys** 1989 Sep;273(2):273–80

Kinetic deuterium isotope effects on deamination and N-hydroxylation of cyclohexylamine by rabbit liver microsomes. Kurebayashi H. **Arch Biochem Biophys** 1989 Apr;270(1):320–9

Methoxyflurane acts at the substrate binding site of cytochrome P450 LM2 to induce a dependence on cytochrome b5. Lipka JJ, et al. **Arch Biochem Biophys** 1989 Jan;268(1):152–60

Studies of ascorbate-dependent, iron-catalyzed lipid peroxidation. Miller DM, et al. **Arch Biochem Biophys** 1989 May 15;271(1):113–9

tert-butyl hydroperoxide-dependent microsomal release of iron and lipid peroxidation. I. Evidence for the reductive release of nonheme, nonferritin iron. Minotti G. **Arch Biochem Biophys** 1989 Aug 15;273(1):137–43

Adriamycin-dependent release of iron from microsomal membranes. Minotti G. **Arch Biochem Biophys** 1989 Jan; 268(1):398–403

tert-butyl hydroperoxide-dependent microsomal release of iron and lipid peroxidation. II. Evidence for the involvement of nonheme, nonferritin iron in lipid peroxidation. Minotti G. **Arch Biochem Biophys** 1989 Aug 15;273(1):144–7

Microsomal glutathione-dependent protection against lipid peroxidation acts through a factor other than glutathione peroxidase and glutathione S-transferase in rat liver. Nagasaka Y, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):82–6

Ethanol causes decreased partitioning into biological membranes without changes in lipid order. Nie Y, et al. **Arch Biochem Biophys** 1989 Jan;268(1):349–59

Nutritionally triggered alterations in the regiospecificity of arachidonic acid oxygenation by rat liver microsomal cytochrome P450. Orellana M, et al. **Arch Biochem Biophys** 1989 Oct;274(1):251–8

Temperature dependence of the microsomal oxidation of ethanol by cytochrome P450 and hydroxyl radical-dependent reactions. Puntarulo S, et al. **Arch Biochem Biophys** 1989 Mar;269(2):569–75

Increased NADPH-dependent chemiluminescence by microsomes after chronic ethanol consumption. Puntarulo S, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):435–45

MgATP-dependent, glucose 6-phosphate-stimulated liver microsomal Ca2+ accumulation: difference between rough and smooth microsomes. Romani A, et al. **Arch Biochem Biophys** 1988 Oct;266(1):1-9

Microsomal reduction of low-molecular-weight Fe3+ chelates and ferritin: enhancement by adriamycin, paraquat, menadione, and anthraquinone 2-sulfonate and inhibition by oxygen. Vile GF, et al. **Arch Biochem Biophys** 1988 Dec;267(2):606-13

Evidence for hydroxyl free radical formation during paraquat but not for nifurtimox liver microsomal biotransformation. A dimethyl-sulfoxide scavenging study. Castro GD, et al. **Arch Toxicol** 1988;62(5):355-8

In vitro covalent binding of the pyrethroids cismethrin, cypermethrin and deltamethrin to rat liver homogenate and microsomes. Catinot R, et al. **Arch Toxicol** 1989; 63(3):214-20

Modulation of 17 alpha-ethinylestradiol and 7,8-benzoflavone metabolism in hamster liver microsomes is possibly related to hepatotumorigenesis. Tritscher AM, et al. **Arch Toxicol Suppl** 1989;13:230-2

Microsomal fatty acid composition and Ca2+ uptake modifications induced by SOD depletion in rat liver. Bartoli GM, et al. **Basic Life Sci** 1988;49:717-20

Vanadate stimulation of pyridine nucleotide oxidation in mammalian liver microsomal membranes. Coulombe RA Jr, et al. **Basic Life Sci** 1988;49:777-80

Quantitative determination of fatty acid hydroperoxides in vivo. Frank H, et al. **Basic Life Sci** 1988;49:175-8

Cytochrome P-448 induction restores the propagation of .O2—induced lipid peroxidation in hepatoma microsomes. Galeotti T, et al. **Basic Life Sci** 1988;49:513-6

Direct chemical ionization mass spectrometry of underivatized arachidonic acid metabolites: application to leukotriene biosynthesis. Gut J, et al. **Basic Life Sci** 1988; 49:185-9

Free radical formation by cytotoxic alkylaminoanthraquinones in liver microsomes. Patterson LH, et al. **Basic Life Sci** 1988;49:803-6

Distance between lysine 384 and heme of cytochrome P-450 LM2 (P-450 IIB4) studied by fluorescence energy transfer measurements. Bernhardt R, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1282-9

The metabolism of pentachlorobenzene by rat liver microsomes: the nature of the reactive intermediates formed. den Besten C, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1275-81

NAD(P)H-dependent reduction of 12-ketoeicosatetraenoic acid to 12(R)- and 12(S)-hydroxyeicosatetraenoic acid by rat liver microsomes. Falgueyret JP, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1083-9

Liver cytosolic non-dialysable factor(s) can counteract GTP-dependent Ca2+ release in rat liver microsomal fractions. Fulceri R, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):823-9

Age-related changes in linoleate and alpha-linolenate desaturation by rat liver microsomes. Hrelia S, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):348-55

Effect of interferon inducers on superoxide anion generation from rat liver microsomes detected by lucigenin chemiluminescence. Ischiropoulos H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1042-8

Purification and characterization of a cytochrome P-450 isozyme isolated from the liver of rats pretreated with clofibrate. Kiffel L, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):282-9

Altered hepatic microsomal function and elevated protooncogene expression as residual effects in rats exposed to delta-9-tetrahydrocannabinol. Prasanna HR, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):217-21

Nitric oxide formation during microsomal hepatic denitration of glyceryl trinitrate: involvement of cytochrome P-450. Servent D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1210-6

A comparison of acetylation in vitro of microsomal, homogenate, and Golgi fractions of rat liver. Sambasivam H, et al. **Biochem Cell Biol** 1988 Oct;66(10):1152-61

Aging influence on delta-6-desaturase activity and fatty acid composition of rat liver microsomes. Bordoni A, et al. **Biochem Int** 1988 Dec;17(6):1001-9

Lipid peroxidation in rat liver microsomes. I. Stimulation of the NADPH-cytochrome P-450 reductase-dependent process in hyperthyroid state. Landriscina C, et al. **Biochem Int** 1988 Aug;17(2):385-93

The mechanism of initiation of lipid peroxidation. Evidence against a requirement for an iron(II)-iron(III) complex. Aruoma OI, et al. **Biochem J** 1989 Mar 1;258(2):617-20

A discoordinate increase in the cellular amount of 3-hydroxy-3-methylglutaryl-CoA reductase results in the loss of rate-limiting control over cholesterogenesis in a tumour cell-free system. Azrolan NI, et al. **Biochem J** 1989 Mar 1;258(2):421-5

The effect of limited proteolysis on GTP-dependent Ca2+ efflux and GTP-dependent fusion in rat liver microsomal vesicles. Comerford JG, et al. **Biochem J** 1989 Mar 15; 258(3):823-9

Kinetics and mechanism of electron transfer from dithionite to microsomal cytochrome b5 and to forms of the protein associated with charged and neutral vesicles. Davies DM, et al. **Biochem J** 1989 Mar 1;258(2):375-80

Detection of peroxyl and alkoxyl radicals produced by reaction of hydroperoxides with rat liver microsomal fractions. Davies MJ. **Biochem J** 1989 Jan 15;257(2):603-6

Oxidation of uroporphyrinogen by methylcholanthrene-induced cytochrome P-450. Essential role of cytochrome P-450d. Jacobs JM, et al. **Biochem J** 1989 Feb 15;258(1):247-53

Changes in both acyl-CoA:cholesterol acyltransferase activity and microsomal lipid composition in rat liver induced by distal-small-bowel resection. Molina MT, et al. **Biochem J** 1989 May 15;260(1):115-9

The in vitro reduction of dimethylpropion. Markantonis SL, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):1-8

Mechanism of the microsomal N-hydroxylation of para-substituted benzamidines. Clement B, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4747-52

Characterization of midazolam metabolism using human hepatic microsomal fractions and hepatocytes in suspension obtained by perfusing whole human livers. Fabre G, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4389-97

Interactions of the anti-tumor ametantrone and mitoxantrone with rat hepatic microsomes. al-Gailany KA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3803-6

Metabolism in rat liver microsomes of the nitroxide spin probe tempol. Iannone A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2581-6

Perturbation of liver microsomal calcium homeostasis by ochratoxin A. Khan S, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):67-72

Activation of mianserin and its metabolites by human liver microsomes. Lambert C, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2853-8

The effects of propiconazole on hepatic xenobiotic biotransformation in the rat. Leslie C, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4177-81

Metabolism of diethylnitrosamine by microsomes of human respiratory nasal mucosa and liver. Longo V, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1867-9

Microsomal nicotine metabolism: a comparison of relative activities of six purified rabbit cytochrome P-450 isozymes. McCoy GD, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1185-8

Sex hormone-mediated effects on the phase I and phase II metabolism of N-2-fluorenylacetamide. Modulation of 9-hydroxylation. Malejka-Giganti D, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1075-82

Histamine inhibition of mixed function oxidase activity in rat and human liver microsomes and in the isolated perfused rat liver. Morris CQ, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2639-44

Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—I. Lung and liver microsomes. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3709-15

In vivo and in vitro studies of the hepatotoxic effects of 4-chlorophenol in mice. Phornchirasilp S, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):961-72

Microsomal warfarin binding and vitamin K 2,3-epoxide reductase. Thijssen HH, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1115-20

In vitro metabolism of azasqualene derivatives and their effects on aminopyrine N-demethylase activity in rat liver microsomes. Viola F, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2497-503

Formation of similar species to carbon monoxide during hepatic microsomal metabolism of cannabidiol on the basis of spectral interaction with cytochrome P-450. Watanabe K, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4719-26

Cytochrome P-450 inactivation by 3-alkylsydnones. Mechanistic implications of N-alkyl and N-alkenyl heme adduct formation. Grab LA, et al. **Biochemistry** 1988 Jun 28;27(13):4805-14

Differential methylation patterns in molecular species of phosphatidylethanolamine derivatives in rat liver membranes. Audubert F, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):62-8

Nonesterified fatty acids inhibit iron-dependent lipid peroxidation. Balasubramanian KA, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):232-7

Interplay between lipoic acid and glutathione in the protection against microsomal lipid peroxidation. Bast A, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):558-61

Dehydroxylation of a 7 beta-hydroxy-C27 plant sterol in rat liver. Boberg KM, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):321-6

Characteristics of GTP-mediated microsomal Ca2+ release. Joseph SK, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):185-94

Effect of CS-514, a competitive inhibitor of hydroxymethylglutaryl coenzyme A reductase, on cholesterol gallstone formation in hamsters. Koide K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):65-71

Action of lead(II) and aluminium (III) ions on iron-stimulated lipid peroxidation in liposomes, erythrocytes and rat liver microsomal fractions. Quinlan GJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):196-200

The biosynthesis of dehydrodolichyl phosphates by rat liver microsomes. Sagami H, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):218-24

Synthesis of trifluoromethyl analogs of vitamin K as substrates for the liver microsomal vitamin K-dependent carboxylase. Grossman CP, et al. **Biofactors** 1988 Oct; 1(3):255-9

Compartmentation of hepatic fatty-acid-binding protein in liver cells and its effect on microsomal phosphatidic acid biosynthesis. Bordewick U, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):229-38

Differences in the binding of substrates to cytochromes P-450b and P-450e from rat liver microsomes. Sebestian J, et al. **Biomed Biochim Acta** 1988;47(9):837-42

Thermospray mass spectroscopy/high performance liquid chromatographic identification of the metabolites formed from arteether using a rat liver microsome preparation. Baker JK, et al. **Biomed Environ Mass Spectrom** 1989 May; 18(5):337-51

Microsomal cytochrome P-450-linked monooxygenase systems and lipid composition of human hepatocellular carcinoma. Hamamoto I, et al. **Br J Cancer** 1989 Jan; 59(1):6-11

Comparative effects of two antimycotic agents, ketoconazole and terbinafine on the metabolism of tolbutamide, ethinyloestradiol, cyclosporin and ethoxycoumarin by human liver microsomes in vitro. Back DJ, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):166-70

A comparative study of the formation of chemically reactive drug metabolites by human liver microsomes. Kitteringham NR, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):13-21

In vivo effect of dietary factors on the molecular action of aflatoxin B1: role of vitamin A on the catalytic activity of liver fractions. Bhattacharya RK, et al. **Cancer Lett** 1989 Feb;44(2):83-8

Microsomal metabolism of the Z and E isomers of N-nitroso-N-methyl-N-n-pentylamine. He C, et al. **Cancer Lett** 1989 Jun;45(3):189-94

Comparative metabolism of phenanthrene and benzo[f]quinoline by rat liver microsomes. Kandaswami C, et al. **Cancer Lett** 1988 Dec 15;43(3):197-205

Metabolic oxidation of the carcinogens 4-aminobiphenyl and 4,4'-methylene-bis(2-chloroaniline) by human hepatic microsomes and by purified rat hepatic cytochrome P-450 monooxygenases. Butler MA, et al. **Cancer Res** 1989 Jan 1;49(1):25-31

Metabolism and murine pharmacokinetics of the 8-(N,N-dimethylcarboxamide) analogue of the experimental antitumor drug mitozolomide (NSC353451). Horspool KR, et al. **Cancer Res** 1989 Sep 15;49(18):5023-6

Formation of hydroxy derivatives, aldehydes, and nitrite from N-nitrosomethyl-n-amylamine by rat liver microsomes and by purified cytochrome P-450 IIB1. Ji C, et al. **Cancer Res** 1989 Oct 1;49(19):5299-304

Liver microsomal inactivation of 4-methyl-5-amino-1-formylisoquinoline thiosemicarbazone as an inhibitor of ribonucleotide reductase. Williams MT, et al. **Cancer Res** 1988 Nov 15; 48(22):6375-8

Hydrolysis of bisphenol A diglycidylether by epoxide hydrolases in cytosolic and microsomal fractions of mouse liver and skin: inhibition by bis epoxycyclopentylether and the effects upon the covalent binding to mouse skin DNA. Bentley P, et al. **Carcinogenesis** 1989 Feb;10(2):321-7

Metabolism of the carcinogen [3H]6-nitrochrysene in the preweanling mouse: identification of 6-aminochrysene-1,2-dihydrodiol as the probable proximate carcinogenic metabolite. Delclos KB, et al. **Carcinogenesis** 1988 Oct;9(10):1875-84

Genotoxicity of the food mutagen 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP): formation of 2-hydroxamino-PhIP, a directly acting genotoxic metabolite. Holme JA, et al. **Carcinogenesis** 1989 Aug;10(8):1389-96

Activation of the food-derived mutagen 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine by rabbit and human liver microsomes and purified forms of cytochrome P-450. McManus ME, et al. **Carcinogenesis** 1989 Feb;10(2):357-63

Improvement of short-term tests for mutagenicity: on the optimal pH for the liver microsomal assay. Paolini M, et al. **Carcinogenesis** 1988 Dec;9(12):2265-70

Oxidative metabolism of 7-methoxy-2-nitro-naphtho[2,1-b]furan (R 7000) by the microsomal system isolated from 3-methylcholanthrene-induced rat liver. Strapélias H, et al. **Carcinogenesis** 1988 Nov;9(11):1987-93

N- and O-deacetylation of N-acetoxy-N-arylacetamides by mammalian hepatic microsomes. Yamada H, et al. **Carcinogenesis** 1988 Nov;9(11):1995-2002

Study of the in vitro bioactivation of albendazole in human liver microsomes and hepatoma cell lines. Rolin S, et al. **Cell Biol Toxicol** 1989 Jan;5(1):1-14

Metabolic activation of alpha-naphthoflavone by 2,3,7,8-tetrachlorodibenzodioxin-induced rat liver microsomes. Andries M, et al. **Chem Biol Interact** 1988; 67(1-2):33-47

The in vitro metabolites of 2,4,6-trichlorophenol and their DNA strand breaking properties. Juhl U, et al. **Chem Biol Interact** 1989;69(4):333-44

Microsomal metabolism of hexavalent chromium. Inhibitory effect of oxygen and involvement of cytochrome P-450. Mikalsen A, et al. **Chem Biol Interact** 1989;69(2-3):175-92

Features of microsomal and cytosolic glutathione conjugation of hexachlorobutadiene in rat liver. Wallin A, et al. **Chem Biol Interact** 1988;68(1-2):1-11

Studies on the mechanism of reduction of azo dye carcinogens by rat liver microsomal cytochrome P-450. Zbaida S, et al. **Chem Biol Interact** 1989;69(1):61-71

An unstable epoxy intermediate formed by the microsomal

oxidation of 4-nitrophenyl vinyl ether. Isobe M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2267-9

Synthesis of alpha-deuterium-labelled cyclohexylamine and its deamination by rabbit liver microsomes. Kurebayashi H, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1097-9

The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647-51

Species differences in the hepatic microsomal metabolism of the pyrrolizidine alkaloid senecionine. Winter CK, et al. **Comp Biochem Physiol [C]** 1988;90(2):429-33

Metabolic activation of chemical carcinogens by hepatic preparations from streptozotocin-treated rats. Flatt PR, et al. **Diabetologia** 1989 Feb;32(2):135-9

Stereoselective N-oxygenation of zimeldine and homozimeldine by the flavin-containing monooxygenase. Cashman JR, et al. **Drug Metab Dispos** 1988 Jul-Aug; 16(4):616-22

Enzymatic conjugation of hexachloro-1,3-butadiene with glutathione. Formation of 1-(glutathion-S-yl)-1,2,3,4,4-pentachlorobuta-1,3-diene and 1,4-bis(glutathion-S-yl)-1,2,3,4-tetrachlorobuta-1,3-diene. Dekant W, et al. **Drug Metab Dispos** 1988 Sep-Oct; 16(5):701-6

Metabolism of lovastatin by rat and human liver microsomes in vitro. Greenspan MD, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):678-82

Comparison of human and mouse liver microsomal metabolism of bromobenzene and chlorobenzene to 2- and 4-halophenols. Kerger BD, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):672-7

Metabolism of bambuterol in rat liver microsomes: identification of hydroxylated and demethylated products by liquid chromatography mass spectrometry. Lindberg C, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):311-22

Studies on the metabolism of l-menthol in rats. Madyastha KM, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):765-72

Mechanism for inhibitory effect of cannabidiol on microsomal testosterone oxidation in male rat liver. Narimatsu S, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):880-9

Stereoselective oxidation of nilvadipine, a new dihydropyridine calcium antagonist, in rat and dog liver. Niwa T, et al. **Drug Metab Dispos** 1989 Jan-Feb;17(1):64-8

Characteristics of warfarin hydroxylation catalyzed by human liver microsomes. Rettie AE, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):265-70

Hepatic drug metabolism in female Fischer rats as a function of age. Rikans LE. **Drug Metab Dispos** 1989 Jan-Feb; 17(1):114-6

Metabolism of kadsurenone and 9,10-dihydrokadsurenone in rhesus monkeys and rat liver microsomes. Thompson KL, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):737-43

Glucuronidation in 4-chlorobiphenyl metabolism by rat and human liver microsomes. Volp RP. **Drug Metab Dispos** 1988 Jul-Aug;16(4):650-2

Metabolic interaction between morphine and naloxone in human liver. A common pathway of glucuronidation? Wahlström A, et al. **Drug Metab Dispos** 1989 Mar-Apr; 17(2):218-20

Metabolism of N,N-diethyl-m-toluamide (DEET) by liver microsomes from male and female rats. Simultaneous quantitation of DEET and its metabolites by high performance liquid chromatography. Yeung JM, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):600-4

Hepatic cytochrome P-450 and in vitro drug metabolism in an overfed rat model of obesity. Matsumoto RM, et al. **Drug Nutr Interact** 1988;5(4):236-47

Effect of the microenvironment on the tertiary structure of cytochrome P-450 LM2. Uvarov VYu, et al. **Eur J Biochem** 1989 May 1;181(2):391-6

Incorporation of chlorpromazine into bilayer liposomes for protection against microsomal metabolism and liver absorption. Schwendener RA. **Eur J Drug Metab Pharmacokinet** 1988 Apr-Jun; 13(2):135-41

The effects of vitamin A nutritional status on microsomal lipid peroxidation and alpha-tocopherol level in rat liver. Pelissier MA, et al. **Experientia** 1989 Apr 15;45(4):342-3

Increased oxygen radical-dependent inactivation of metabolic enzymes by liver microsomes after chronic ethanol consumption. Dicker E, et al. **FASEB J** 1988 Oct; 2(13):2901-6

Evidence for the induction of cytochrome P-452 in rat liver by Aroclor 1254, a commercial mixture of polychlorinated biphenyls. Borlakoglu JT, et al. **FEBS Lett** 1989 Apr 24; 247(2):327-9

Resonance Raman study of the cytochrome P-450 LM2-halothane intermediate complex. Hildebrandt P, et al. **FEBS Lett** 1988 Sep 12;237(1-2):15-20

GTP-dependent Ca2+ release from rat liver microsomes. Vesicle fusion is not required. Kleineke J, et al. **FEBS Lett** 1989 Mar 13;245(1-2):274-8

Inhibition of adriamycin-promoted microsomal lipid peroxidation by beta-carotene, alpha-tocopherol and retinol at high and low oxygen partial pressures. Vile GF, et al. **FEBS Lett** 1988 Oct 10;238(2):353-6

Metabolism of linamarin in rats. Maduagwu EN. **Food Chem Toxicol** 1989 Jul;27(7):451-4

Free radical activation of monomethyl and dimethyl hydrazines in isolated hepatocytes and liver microsomes. Albano E, et al. **Free Radic Biol Med** 1989;6(1):3-8

Mechanism(s) of bioreductive activation. The example of diaziquone (AZQ). Gutierrez PL. **Free Radic Biol Med** 1989;6(4):405-45 (93 ref.)

Oxygen-concentration dependence of microsomal chemiluminescence. Puntarulo S, et al. **Free Radic Biol Med** 1989;7(3):269-73

Microsomal lipid peroxidation: mechanisms of initiation. The role of iron and iron chelators. Ursini F, et al. **Free Radic Biol Med** 1989;6(1):31-6

Free radical metabolism of alcohols by rat liver microsomes. Albano E, et al. **Free Radic Res Commun** 1987;3(1-5):243-9

Stimulation of peroxidation in rat liver microsomes by (copper, zinc)-metallothioneins. Arthur JR, et al. **Free Radic Res Commun** 1987;4(1):15-20

The role of secondary messengers in the regulation of lipid peroxidation in rat liver microsomes. Baldenkov GN, et al. **Free Radic Res Commun** 1988;4(5):277-81

Antioxidant activity of 5-hydroxytryptophan, 5-hydroxyindole, and DOPA against microsomal lipid peroxidation and its dependence on vitamin E. Cadenas E, et al. **Free Radic Res Commun** 1989;6(1):11-7

Factors influencing the formation of the carbon dioxide radical anion (.CO2-) spin adduct of PBN in the rat liver metabolism of halocarbons. Janzen EG, et al. **Free Radic Res Commun** 1988;4(6):359-69

The influence of dietary history on the production of free radicals in rat liver microsomes. McPhail DB, et al. **Free Radic Res Commun** 1988;4(5):337-42

NADPH-induced microsomal lipid peroxidation as measured by malondialdehyde production in rat liver. Inhibitory effect of naftidrofuryl. Parussini R, et al. **Free Radic Res Commun** 1986;2(1-2):93-100

Anthracycline-induced oxygen consumption and oxidative damage in rat liver microsomes are not necessarily coupled. A study with 8 structurally related anthracyclines. Sterrenberg L, et al. **Free Radic Res Commun** 1985; 1(1):41-54

Application of theophylline metabolite assays to the exploration of liver microsome oxidative function in man. Naline E, et al. **Fundam Clin Pharmacol** 1988;2(4):341-51

Effect of aging on in vivo and in vitro ethanol metabolism and its toxicity in F344 rats. Seitz HK, et al. **Gastroenterology** 1989 Aug;97(2):446-56

A comparison of the effects of cyclosporine (CsA) on hepatic microsomal drug metabolism in three different strains of rat. Augustine JA, et al. **Gen Pharmacol** 1989;20(2):137-41

Studies on binding of berenil to microsomal protein and its significance with respect to microsomal metabolism of trypanocidal drug. Dalvi R. **Indian J Exp Biol** 1988 Jun; 26(6):464-6

Effect of cadmium ions on ascorbate influence on cholesterol metabolism in guinea pigs. Dasgupta S, et al. **Indian J Exp Biol** 1988 Dec;26(12):976-8

Cardiac sarcolemma enzymes & liver microsomal cytochrome P450 in isoproterenol treated rats. Kaul S, et al. **Indian J Med Res** 1989 Feb;90:62-8

Inhibition of the redox cycling of vitamin K3 (menadione) in mouse liver microsomes. Byczkowski JZ, et al. **Int J Biochem** 1988;20(10):1073-9

Halothane-induced hepatic microsomal lipid peroxidation in guinea pigs and rats. Akita S, et al. **J Appl Toxicol** 1989 Feb;9(1):9-14

Mitochondrial and microsomal lipid peroxidation in rat liver after acute acetaldehyde and ethanol intoxication. Uysal M, et al. **J Appl Toxicol** 1989 Jun;9(3):155-8

Synthesis of sex-specific forms of cytochrome P-450 in rat liver is transiently suppressed by hepatic monooxygenase inducers. Emi Y, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):40-3

A sex-specific form of cytochrome P-450 catalyzing propoxycoumarin O-depropylation and its identity with testosterone 6 beta-hydroxylase in untreated rat livers: reconstitution of the activity with microsomal lipids. Yamazoe Y, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):785-90

Purification of rat liver microsomal cytochrome P-450b without the use of nonionic detergent. Dutton DR, et al. **J Biochem Toxicol** 1988 Summer;3:131-45

Transduction of cytochrome P3-450 by retroviruses: constitutive expression of enzymatically active microsomal hemoprotein in animal cells. Battula N. **J Biol Chem** 1989 Feb 15;264(5):2991-6

Chicken and Xenopus mannose 6-phosphate receptors fail to bind insulin-like growth factor II. Clairmont KB, et al. **J Biol Chem** 1989 Oct 5;264(28):16390-2

Characteristics of bile acid-mediated Ca2+ release from permeabilized liver cells and liver microsomes. Combettes L, et al. **J Biol Chem** 1989 Jan 5;264(1):157-67

Vitamin K-dependent carboxylation. In vitro modification of synthetic peptides containing the gamma-carboxylation recognition site. Hubbard BR, et al. **J Biol Chem** 1989 Aug 25;264(24):14145-50

Positive effectors of the binding of an active site-directed amino steroid to rabbit cytochrome P-450 3c. Johnson EF, et al. **J Biol Chem** 1988 Nov 25;263(33):17672-7

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448-52

Inhibition of lipid peroxidation by spin labels. Relationships between structure and function. Nilsson UA, et al. **J Biol Chem** 1989 Jul 5;264(19):11131-5

Regulation of the rabbit cytochrome P-450 3c gene. Age-dependent expression and transcriptional activation by rifampicin. Potenza CL, et al. **J Biol Chem** 1989 Sep 25;264(27):16222-8

Coenzyme A-dependent transacylation system in rabbit liver microsomes. Sugiura T, et al. **J Biol Chem** 1988 Nov 25; 263(33):17490-8

Reconstitution of phosphatidylserine import into rat liver mitochondria. Voelker DR. **J Biol Chem** 1989 May 15; 264(14):8019-25

Mechanism of androstenedione formation from testosterone and epitestosterone catalyzed by purified cytochrome P-450b. Wood AW, et al. **J Biol Chem** 1988 Nov 25; 263(33):17322-32

Esterification by rat liver microsomes of retinol bound to cellular retinol-binding protein. Yost RW, et al. **J Biol Chem** 1988 Dec 15;263(35):18693-701

High-performance liquid chromatographic assay for mexiletine hydroxylation in microsomes of human liver. Broly F, et al. **J Chromatogr** 1988 Oct 14;431(2):369-78

Identification of 9-hydroxylamine-1,2,3,4-tetrahydroacridine as a hepatic microsomal metabolite of tacrine by high-performance liquid chromatography and electrochemistry. Hendrickson HP, et al. **J Chromatogr** 1989 Feb 24;487(2):401-8

Radiometric high-performance liquid chromatographic procedure for the determination of theobromine metabolites in microsomal incubations. Lelo A, et al. **J Chromatogr** 1988 Aug 19;430(1):203-6

Intrahepatic assembly of very low density lipoproteins: immunologic characterization of apolipoprotein B in lipoproteins and hepatic membrane fractions and its intracellular distribution. Davis RA, et al. **J Lipid Res** 1989 Aug;30(8):1185-96

Studies on acyl-coenzyme A: cholesterol acyltransferase activity in human liver microsomes. Einarsson K, et al. **J Lipid Res** 1989 May;30(5):739-46

Eicosapentaenoic acid reduces hepatic synthesis and secretion of triacylglycerol by decreasing the activity of acyl-coenzyme A:1,2-diacylglycerol acyltransferase. Rustan AC, et al. **J Lipid Res** 1988 Nov;29(11):1417-26

Effect of liposomes on substrate uptake by isolated guinea-pig liver mitochondrial and microsomal membranes. Stuhne-Sekalec L, et al. **J Microencapsul** 1985 Oct-Dec; 2(4):305-13

The effect of dietary essential fatty acid deficiency on the composition and properties of the liver microsomal membrane of rats. Christon R, et al. **J Nutr** 1988 Nov; 118(11):1311-8

Effect of dietary lipid composition on rat liver microsomal phosphatidylcholine synthesis. Hargreaves KM, et al. **J Nutr** 1989 Mar;119(3):344-8

QSAR study on species differences in microsomal N-oxygenation of N,N-dimethylalkylamines. Devinsky F, et al. **J Pharm Pharmacol** 1989 Jan;41(1):57-9

Conformational analysis of 9-substituted adenines in relation to their microsomal N1-oxidation. Lam SP, et al. **J Pharm Pharmacol** 1989 Jun;41(6):373-8

Sex-related differences in hepatic drug-oxidizing capacity of streptozotocin-induced diabetic rats. Tanaka E, et al. **J Pharmacobiodyn** 1988 Jun;11(6):416-23

Identification of cannabielsoin, a new metabolite of cannabidiol formed by guinea-pig hepatic microsomal enzymes, and its pharmacological activity in mice. Yamamoto I, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):833-8

Stereoselectivity of styrene oxidation in microsomes and in purified cytochrome P-450 enzymes from rat liver. Foureman GL, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):492-7

Use of quinidine inhibition to define the role of the sparteine/debrisoquine cytochrome P450 in metoprolol oxidation by human liver microsomes. Otton SV, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):242-7

Effect of pretreatment of male Syrian golden hamsters with 7,8-benzoflavone and with diethylstilbestrol on P-450 isoenzyme activities and on microsomal diethylstilbestrol metabolism. Blaich G, et al. **J Steroid Biochem** 1988 Dec; 31(6):971-8

Cobalt-protoporphyrin, a synthetic heme analogue, feminizes hepatic androgen metabolism in the rat. Galbraith RA, et al. **J Steroid Biochem** 1989 Mar;32(3):421-6

Biosynthesis of estradiol-17 beta fatty acyl esters by microsomes derived from bovine liver and adrenals. Paris A, et al. **J Steroid Biochem** 1989 Sep;33(3):465-72

Inhibition of catechol estrogen formation in rat liver microsomes by hormonal steroids and related compounds. Quail JA, et al. **J Steroid Biochem** 1988 Oct;31(4A):421-6

In vitro influence of molybdenum on beazo[a]pyrene metabolism in hepatic and pulmonary rat microsomes. Bompart G, et al. **J Toxicol Environ Health** 1989; 26(4):459-68

Effects of various inducers on the activities of cytochrome P-450-mixed function oxidases and aflatoxin B1 activation in microsomes of hamster livers. Sunouchi M, et al. **J Toxicol Sci** 1988 Nov;13(4):193-204

Zearanol metabolism by subcellular fractions from lamb liver. Pompa G, et al. **J Vet Pharmacol Ther** 1988 Jun; 11(2):197-203

Metabolic activation of pyrolysate arylamines by human liver microsomes; possible involvement of a P-488-H type

cytochrome P-450. Yamazoe Y, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1159–67
Effects of dietary cholesterol in the Mongolian gerbil and the rat: a comparative study. Temmerman AM, et al. **Lab Anim** 1989 Jan;23(1):30–5
Interactions of prostaglandins with hepatic microsomal cytochrome P-450. Kupfer D. **Life Sci** 1974 Aug 15; 15(4):657–70
The hepatic microsomal metabolism of beta-3,4-methylenedioxyamphetamine (MDA). Marquardt GM, et al. **Life Sci** 1974 Nov 1;15(9):1603–10
Evidence for the involvement of cytochrome P-450 in tiaramide N-oxide reduction. Sugiura M, et al. **Life Sci** 1974 Oct 15;15(8):1433–42
Promotion of iron-induced rat liver microsomal lipid peroxidation by copper. Beckman JK, et al. **Lipids** 1988 Jun;23(6):559–63
Cholesterol metabolism in frog (Rana esculenta) liver: seasonal and sex-related variations. Bruscalupi G, et al. **Lipids** 1989 Feb;24(2):105–8
Microsomal desaturation-elongation of linoleic acid following parenteral feeding with lipid emulsions in the rat. Innis SM, et al. **Lipids** 1988 Jun;23(6):546–50
Changes in lipid composition of liver microsomes and fatty acyl-CoA desaturase activities induced by medium chain triglyceride feeding. Periago JL, et al. **Lipids** 1989 May; 24(5):383–8
Rat hepatic and renal 5'-deiodination of rT3 during fasting: supportive role of intermediate Mr cytosolic non-glutathione thiol cofactor and NADPH. Iwase K, et al. **Metabolism** 1989 Mar;38(3):230–7
Purification and characterization of insulin-like growth factor-II receptors. Scott CD, et al. **Methods Enzymol** 1989;168:309–24
Enantioselective N-oxygenation of verapamil by the hepatic flavin-containing monooxygenase. Cashman JR. **Mol Pharmacol** 1989 Sep;36(3):497–503
Inducible bilirubin-degrading system in the microsomal fraction of rat liver. De Matteis F, et al. **Mol Pharmacol** 1989 Jun;35(6):831–8
Two sites of azo reduction in the monooxygenase system. Peterson FJ, et al. **Mol Pharmacol** 1988 Oct;34(4):597–603
Caffeine inhibits hepatic-microsomal activation of some dietary genotoxins. Alldrick AJ, et al. **Mutagenesis** 1988 Sep;3(5):423–7
Mutagenicity of furoquinoline alkaloids in the Salmonella/microsome assay. Mutagenicity of dictamnine is modified by various enzyme inducers and inhibitors. Hilfele F, et al. **Mutagenesis** 1988 Jul;3(4):349–53
Structure-activity relationship studies on the mutagenicity of some azo dyes in the Salmonella/microsome assay. Lin GH, et al. **Mutagenesis** 1988 Jul;3(4):311–5
Inter-individual variation in the mutagenic activation of 2-acetylaminofluorene by human liver in relation to animal metabolic models. Smith AJ, et al. **Mutagenesis** 1988 Jul; 3(4):323–8
Bacterial mutagenicity of new cyclopenta-fused cata-annelated polycyclic aromatic hydrocarbons, and identification of the major metabolites of benz[j]acephenanthrylene formed by Aroclor-treated rat liver microsomes. Ball LM, et al. **Mutat Res** 1989 Sep; 224(1):115–25
Dietary cholesterol and liver microsomal fatty acid desaturases. **Nutr Rev** 1988 Nov;46(11):397–8
Interaction between phencyclidine and its pyrolysis product, 1-phenylcyclohexene. Chaturvedi AK, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1035–43
Inhibition of NADPH-induced microsomal lipid peroxidation in the livers of cholestatic rats. Aykaç G, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):39–42
Deuterium isotope effects as a tool in the study of ethanol oxidation in rat liver microsomes. Lundquist F, et al. **Pharmacol Toxicol** 1989 Jul;65(1):45–54
Inhibition of hepatic microsomal drug metabolism in rats by five calcium antagonists. Mäenpää J, et al. **Pharmacol Toxicol** 1989 May;64(5):446–50
Effects of triethyl lead chloride on oestradiol metabolism in the female rat liver microsomal fraction. Odenbro A, et al. **Pharmacol Toxicol** 1988 Oct;63(4):248–52
Species differences in hepatic microsomal drug-metabolizing enzymes. Danek L, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):351–6
Mutagenicity of dipyridyls and their methylated derivatives in Salmonella typhimurium/rat liver microsome system. Lin JK, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):56–63
Binding characterization of the peripheral type benzodiazepine receptor (P-BZ) in rat liver. Duerson KC, et al. **Proc West Pharmacol Soc** 1988;31:133–5
cAMP dependent inhibition of thromboxane A2, prostacyclin and PGF2 alpha synthesis in mouse hepatocytes. Mandl J, et al. **Prostaglandins** 1988 Dec;36(6):761–72
Halothane-induced liver injury as a consequence of enhanced microsomal lipid peroxidation in guinea pigs. Akita S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):227–43
Relationship between liver microsomal function and serum thyroid hormones in rats treated with carbon tetrachloride. Itoh S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):111–4
Oxidation of diethyldithiocarbamate to disulfiram by liver microsomes in the presence of NADPH and subsequent loss of microsomal enzyme activity in vitro. Masuda Y. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):251–66
Evidence for potentiation of lipid peroxidation in the rat liver after chronic ethanol feeding. Yamada S, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):627–32
The biochemistry of alcohol and alcohol abuse. Palmer TN. **Sci Prog** 1989;73(289 Pt 1):1–15
Inhibition of tolbutamide metabolism by antimalarial drugs. Karbwang J, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):235–41
4-Hydroxyestradiol is conjugated with thiols primarily at C-2: evidence from regiospecific displacement of tritium by rat liver microsomes or tyrosinase. Jellinck PH. **Steroids** 1988 Mar-Apr;51(3-4):395–409
Metabolism of C26 bile alcohols in the bullfrog, Rana catesbeiana. Noma Y, et al. **Steroids** 1988 Mar-Apr; 51(3-4):385–94
The effect of inducers of mixed-function oxidases on hepatic microsome-mediated aflatoxin B1 transformation in C3H/10T1/2 cells. Faletto MB, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):252–62
Metabolism of trans, trans-muconaldehyde, a microsomal hematotoxic metabolite of benzene, by purified yeast aldehyde dehydrogenase and a mouse liver soluble fraction. Kirley TA, et al. **Toxicol Appl Pharmacol** 1989 Sep 1; 100(2):360–7
Metabolism of 1,3-butadiene by lung and liver microsomes of rats and mice repeatedly exposed by inhalation to 1,3-butadiene. Bond JA, et al. **Toxicol Lett** 1988 Nov; 44(1-2):143–51
In vitro formation of organ-specific ultimate carcinogens of 4-dimethylaminoazobenzene and urethan by microsomes. Gupta R, et al. **Toxicol Lett** 1989 Jan;45(1):49–54
Lipid peroxidation activation and cytochrome P-450 decrease in rat liver endoplasmic reticulum under oxidative stress. Serbinova EA, et al. **Toxicol Lett** 1989 May; 47(2):119–23
Protective effect of alpha tocopherol on Ca2+ regulation by microsomal fractions isolated from preserved rat livers. Kawada T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1301–2
"4S" polycyclic aromatic hydrocarbon binding protein. Its role as a benzo(a) pyrene cytosolic carrier to the microsomes of DBA/2N mouse liver. Masucci MT, et al. **Tumori** 1989 Jun 30;75(3):211–6
Comparative in vitro and in vivo drug metabolism in major and minor food-producing species. Dalvi RR. **Vet Hum Toxicol** 1988;30 Suppl 1:22–5
Comparison of caffeine metabolism by slices, microsomes and hepatocyte cultures from adult human liver. Berthou F, et al. **Xenobiotica** 1989 Apr;19(4):401–17
Investigations on the spectral interactions of fusarin C with rat liver microsomal cytochrome P-450. Gelderblom WC, et al. **Xenobiotica** 1988 Sep;18(9):1005–14
Metabolism of diamantane by rat liver microsomal cytochromes P-450. Hodek P, et al. **Xenobiotica** 1988 Oct; 18(10):1109–18
A comparative in vitro metabolic study of methaphenilene and pyribenzamine. Kammerer RC, et al. **Xenobiotica** 1988 Sep;18(9):1085–96
Oxidative deamination of alicyclic primary amines by liver microsomes from rats and rabbits. Kurebayashi H, et al. **Xenobiotica** 1988 Sep;18(9):1039–48
Modifications of hepatic microsomal 9-oxidation of N-2-fluorenylacetamide in response to gonadectomy and treatment of rats with phenobarbital or diethylnitrosamine. Malejka-Giganti D, et al. **Xenobiotica** 1989 Apr; 19(4):431–44
Comparative microsomal oxidation of febantel and its metabolite fenbendazole in various animal species. Montesissa C, et al. **Xenobiotica** 1989 Jan;19(1):97–100
Hepatic microsomal metabolism of leukotriene B4 in rats: biochemical characterization, effect of inducers, and age- and sex-dependent differences. Mukhtar H, et al. **Xenobiotica** 1989 Feb;19(2):151–9
Formation of ortho-phenylphenol glutathione conjugates in the rat liver. Nakagawa Y, et al. **Xenobiotica** 1989 May; 19(5):499–507
On the sulphoxidation of cimetidine and etintidine by rat and human liver microsomes. Schulz M, et al. **Xenobiotica** 1988 Aug;18(8):983–9
Comparison of covalent binding from halothane metabolism in hepatic microsomes from phenobarbital-induced and hyperthyroid rats. Smith AC, et al. **Xenobiotica** 1988 Aug; 18(8):991–1001
Hydrogen peroxide-dependent liver microsomal N-demethylation and N-oxygenation of stobadine, a gamma-carboline antiarrhythmic and cardioprotective agent. Stefek M, et al. **Xenobiotica** 1989 Jun;19(6):627–34
Interaction of 1,1,1-trichloroethane with the mixed-function oxidation system in rat liver microsomes. Takano T, et al. **Xenobiotica** 1988 Dec;18(12):1457–64
[Production of active oxygen in microsomes] Shimada O, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2737–43 **(Jpn)**
[Rate of microsomal protein metabolism in the mouse liver] Dovgil' AI, et al. **Biokhimiia** 1989 Apr;54(4):681–6 (Eng. Abstr.) **(Rus)**
[Antioxidative activity of flavonoids in various systems of lipid peroxidation] Kostiuk VA, et al. **Biokhimiia** 1988 Aug; 53(8):1365–70 (Eng. Abstr.) **(Rus)**
[Modifying effect of antioxidants on the rate of lipid peroxidation in liver microsomes at early stages of diethylnitrosamine biotransformation] Pakhomov VIu, et al. **Eksp Onkol** 1988;10(5):20–3 (Eng. Abstr.) **(Rus)**
[Biochemical evaluation of the status of the bronchopulmonary system and liver in workers engaged in the manufacture of graphite products] Arkhipova OG, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):24–7 (Eng. Abstr.) **(Rus)**
[Individual characteristics and effects of spasmolytics in relation to the oxidation phenotype of the marker preparation amidopyrine in children with digestive and respiratory diseases] Tarakhovskiĭ ML, et al. **Pediatriia** 1988;(4):43–7 (Eng. Abstr.) **(Rus)**
[Changes in the lipid component of liver microsomal membranes during the postischemic period after administration of alpha-tocopherol and lidocaine] Grek OR. **Vopr Med Khim** 1988 Jul-Aug;34(4):57–63 (Eng. Abstr.) **(Rus)**
[125I-n-iodophenamine as a prototype compound for the study of microsomal oxidation] Kendysh IN, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):66–72 (Eng. Abstr.) **(Rus)**
[The role of rat liver microsomes in the metabolism of methylmethacrylate to formaldehyde] Kotlovskiĭ IuV, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):14–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Inhibition of reverse transcription in rat liver intracisternal A-particles by thymidine derivatives. Pyrinova GB, et al. **FEBS Lett** 1989 Apr 10;247(1):57–60

PHYSIOLOGY

Functional reconstitution of prokaryote and eukaryote membrane proteins. Maloney PC, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):1–10

ULTRASTRUCTURE

Effects of mineral and vitamin supplementation on the alcohol-induced fatty liver and microsomal induction. Lieber CS, et al. **Alcoholism (NY)** 1989 Feb;13(1):142–3
Lipid peroxidation and physical properties of smooth and rough hepatoma microsomes. Masotti L, et al. **Cell Biophys** 1989 Feb;14(1):53–65

MICROSPHERES

see related
ENZYMES, IMMOBILIZED
Pharmacokinetics of intra-arterial mitomycin C with or without degradable starch microspheres (DSM) in the treatment of non-resectable liver cancer. Andersson M, et al. **Acta Oncol** 1989;28(2):219–22
IV injection of air-filled human albumin microspheres to enhance arterial Doppler signal: a preliminary study in rabbits. Hilpert PL, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):613–6
Quantitating error in blood flow measurements with radioactive microspheres. Austin RE Jr, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H280–8
Effect of the size and surface charge of polymer microspheres on their phagocytosis by macrophage. Tabata Y, et al. **Biomaterials** 1988 Jul;9(4):356–62
Elimination of myeloma cells from bone marrow by using monoclonal antibodies and magnetic immunobeads. Shimazaki C, et al. **Blood** 1988 Oct;72(4):1248–54
Immunomagnetic removal of B-lymphoma cells from human bone marrow: a procedure for clinical use. Kvalheim G, et al. **Bone Marrow Transplant** 1988 Jan;3(1):31–41
Fluorescent latex microspheres as a retrograde tracer in the peripheral nervous system. Colin W, et al. **Brain Res** 1989 May 8;486(2):334–9
Implication of activation of intraperitoneal macrophages with bio-degradable microspheres. Okawa T, et al. **Cell Biol Int Rep** 1989 Jun;13(6):547–53
Model system evaluating fluorescein-labeled microbeads as internal standards to calibrate fluorescence intensity on flow cytometers. Vogt RF Jr, et al. **Cytometry** 1989 May; 10(3):294–302
The role of lateral migration in the formation of acetylcholine receptor clusters induced by basic polypeptide-coated latex beads. Peng HB, et al. **Dev Biol** 1989 Jan;131(1):197–206
Recent advances in the use of microspheres for targeted therapy. Davis SS, et al. **Drugs Exp Clin Res** 1985; 11(9):633–40
The concentration and resolution of primitive hemopoietic cells from normal mouse bone marrow by negative selection using monoclonal antibodies and Dynabead monodisperse magnetic microspheres. Bertoncello I, et al. **Exp Hematol** 1989 Feb;17(2):171–6
Human lung deposition of particles suspended in air or in helium/oxygen mixture. Svartengren M, et al. **Exp Lung Res** 1989 Jul;15(4):575–85
Image analysis of transparent particle systems by mathematical morphology methods. Mikeš J, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):199–201
Cochlear blood flow increases after systemic hemodilution: comparison of simultaneous laser Doppler flowmetry and radioactive microsphere measurements. Nuttall AL, et al.

Hear Res 1988 Aug;34(3):215–23
Microspheres as drug carriers. Davis SS, et al. **Horiz Biochem Biophys** 1989;9:131–53 (83 ref.)
Ocular blood flow in dogs using radiolabelled microspheres. Roy MS, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):81–4
Effects of traumatic brain injury on regional cerebral blood flow in rats as measured with radiolabeled microspheres. Yamakami I, et al. **J Cereb Blood Flow Metab** 1989 Feb; 9(1):117–24
Calibration methods for quantitative image processing in electron microscopy. Lamvik MK, et al. **J Electron Microsc Tech** 1989 Feb;11(2):97–101
A minibead method for detection of membrane lectins. Matsuoka T, et al. **J Histochem Cytochem** 1989 Jan; 37(1):91–6
Blocking of lymphokine activated killer (LAK) cell mediated cytotoxicity by cell–sized beads bearing tumor cell proteins. Chong AS, et al. **J Immunol** 1988 Dec 15;141(12):4418–24
Non–specific cell binding characteristics of para–magnetic polystyrene microspheres used for antibody–mediated cell selection. Janssen WE, et al. **J Immunol Methods** 1989 Jul 26;121(2):289–94
A general reagent for amplifying ELISAs. Nilsson B. **J Immunol Methods** 1988 Nov 10;114(1–2):89–93
Paramagnetic microspheres as immunological markers for light and electron microscopy. Rana MT, et al. **J Immunol Methods** 1988 Dec 9;115(2):209–17
Preparation of polymer nano– and microspheres by vinyl polymerization techniques. Arshady R. **J Microencapsul** 1988 Apr–Jun;5(2):101–14 (49 ref.)
Polylactic acid microspheres containing quinidine base and quinidine sulphate prepared by the solvent evaporation technique. I. Methods and morphology. Bodmeier R, et al. **J Microencapsul** 1987 Oct–Dec;4(4):279–88
Polylactic acid microspheres containing quinidine base and quinidine sulphate prepared by the solvent evaporation technique. II. Some process parameters influencing the preparation and properties of microspheres. Bodmeier R, et al. **J Microencapsul** 1987 Oct–Dec;4(4):289–97
Structure of hollow polystyrene microspheres: an SEM study. Ganguly S, et al. **J Microencapsul** 1989 Apr–Jun; 6(2):193–8
Factorial design based optimization of the formulation of albumin microspheres containing adriamycin. Gupta PK, et al. **J Microencapsul** 1989 Apr–Jun;6(2):147–60
Preparation of microspheres of water–soluble pharmaceuticals. Huang HP, et al. **J Microencapsul** 1989 Apr–Jun;6(2):219–25
Albumin microspheres as delivery systems for photodynamic drugs: physico–chemical studies and their implications for in vivo situations. Margalit R, et al. **J Microencapsul** 1985 Jul–Sep;2(3):183–96
Radiopaque hydrogel microspheres. Thanoo BC, et al. **J Microencapsul** 1989 Apr–Jun;6(2):233–44
Selective transfer of cyclosporin to thoracic lymphatic systems by the application of lipid microspheres. Yanagawa A, et al. **J Microencapsul** 1989 Apr–Jun;6(2):161–4
Size distribution of rhodamine–labelled microspheres retrogradely transported in cultured neurons. Holländer H, et al. **J Neurosci Methods** 1989 Jul;29(1):1–4
In vitro and in vivo transplantation of fetal rat brain cells following incubation with various anatomic tracing substances. Stoppinni L, et al. **J Neurosci Methods** 1989 Mar;27(2):121–32
Characterization of the sphericity of particles by the one plane critical stability. Chapman SR, et al. **J Pharm Pharmacol** 1988 Jul;40(7):503–5
Employment of magnet–susceptible microparticles for the targeting of drugs. Kharkevich DA, et al. **J Pharm Pharmacol** 1989 Apr;41(4):286–8
Polyanhydride microsphere formulation by solvent extraction. Bindschaedler C, et al. **J Pharm Sci** 1988 Aug; 77(8):696–8
Considerations in use of microspheres for myocardial blood–flow measurements in long–term experiments on rats. Medvedev OS, et al. **J Pharmacol Methods** 1988 Sep; 20(2):143–9
Comparison of gas clearance and radioactive microspheres for pancreatic blood flow measurement. DeMar AR, et al. **Pancreas** 1989;4(2):161–8
The use of cytodex microcarrier beads in patch–clamp studies on cultured epithelial cells. Poronnik P, et al. **Pflugers Arch** 1988 Nov;413(1):90–2
Receptor–mediated magnetic carriers: basis for targeting. Gallo JM, et al. **Pharm Res** 1988 May;5(5):300–4
Porous biodegradable microspheres for controlled drug delivery. I. Assessment of processing conditions and solvent removal techniques. Sato T, et al. **Pharm Res** 1988 Jan; 5(1):21–30
Magnetic microspheres (MMS) coupled to selective lectins: a new tool for large–scale extraction and purification of human pancreatic islets. Winoto–Morbach S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2628–30
[Study of myocardial perfusion at rest using technetium Tc 99m methoxy–isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al. **G Ital Cardiol** 1988 Nov;18(11):907–13 (Eng. Abstr.) **(Ita)**
[Redistribution of intrahepatic arterial blood flow after ligation of an aberrant lobar artery. Use of degradable starch microspheres] Balletto N, et al. **Minerva Chir** 1988 Apr 15;43(7):375–80 (Eng. Abstr.) **(Ita)**

MICROSPORUM

CLASSIFICATION

Mycological studies on zoophilic dermatophyte isolates of Finish and Swedish origin. Aho R. **Mycoses** 1988 Jun; 31(6):295–302

DRUG EFFECTS

Activities of compound G2 isolated from alfalfa roots against dermatophytes. Evron R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1586–7
Influence of supplementation of saturated alkanes on the membrane properties of Microsporum gypseum. Vaidya S, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):98–103
Susceptibility of Microsporum and Trichophyton species to suicide inhibitors of polyamine biosynthesis. Boyle SM, et al. **J Med Vet Mycol** 1988;26(4):227–35

GROWTH & DEVELOPMENT

Microsporum canis with polymorphous macroconidia. Brasch J. **Mycoses** 1989 Jan;32(1):33–8

IMMUNOLOGY

Fungal ribosomal vaccines. II. Dermatophyte vaccine—initial studies on the antigenicity of a crude ribosomal fraction from Microsporum canis. Elad D, et al. **Mycopathologia** 1989 Jan;105(1):49–51

ISOLATION & PURIFICATION

The hair follicle mites (Demodex spp.). Could they be vectors of pathogenic microorganisms? Wolf R, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):535–7
Fungus invasion of human hair tissue in tinea capitis caused by Microsporum canis: light and electron microscopic study. Okuda C, et al. **Arch Dermatol Res** 1989; 281(4):238–46
Tinea capitis caused by Microsporum canis in an adult. Stehlich G, et al. **Mycoses** 1989 Feb;32(2):97–8

METABOLISM

Dermatophyte–hormone relationships: characterization of progesterone–binding specificity and growth inhibition in the genera Trichophyton and Microsporum. Clemons KV, et al. **J Clin Microbiol** 1988 Oct;26(10):2110–5

PATHOGENICITY

Genetic basis of virulence in dermatophytes. Weigl E. **Acta Univ Palacki Olomuc Fac Med** 1988;119:111–22
A rare microsporosis from Satpura region: identity and discussion on its taxonomy. Rai MK. **Hindustan Antibiot Bull** 1988 Aug–Nov;30(3–4):87–9
[Etiology of dermatomycoses in the Łódź region] Bienias L, et al. **Przegl Dermatol** 1988 Mar–Apr;75(2):136–40 (Eng. Abstr.) **(Pol)**

MICROSTOMIA see under **MOUTH DISEASES**

MICROSURGERY

Problems of microsurgical replantation. Bařinka L, et al. **Acta Chir Plast** 1988;30(2):78–85
Conclusions on peripheral nerve microsurgery. Ionescu D. **Acta Chir Plast** 1988;30(4):234–9
Clinical use of nociceptive flexion reflex recording in the evaluation of functional neurosurgical procedures. García–Larrea L, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:53–7
A comparative histologic study on the healing process after tissue transection. I. Carbon dioxide laser and electromicrosurgery. Filmar S, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1062–7
Hematoma in a latissimus dorsi donor site 21 months after surgery. Lineaweaver WC, et al. **Ann Plast Surg** 1988 Aug; 21(2):143–4
Microscopic endonasal surgery of the paranasal sinuses and the parasellar region. Amedee RG, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1103–6 (10 ref.)
Microdiscectomy [letter] **BMJ** 1988 Aug 13;297(6646):481
Preoperative angiography in reconstructive microsurgery of the maxillofacial region. Kärcher H, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):317–21
Microvascular anastomoses in diabetes: an experimental study. Barr LC, et al. **Br J Plast Surg** 1989 Jan;42(1):50–3
Microvascular surgery as an adjunct to craniomaxillofacial reconstruction. Fisher J, et al. **Br J Plast Surg** 1989 Mar; 42(2):146–54
Immediate return of nerve function following microsurgical repair. Grace PA, et al. **Br J Plast Surg** 1989 Mar; 42(2):212–5
Microvascular ear replantation. Katsaros J, et al. **Br J Plast Surg** 1988 Sep;41(5):496–9
Microarterial grafting into the carotid artery of the rabbit: some considerations concerning species–dependent thrombogenicity. van der Lei B, et al. **Br J Plast Surg** 1989 Jan;42(1):59–64
The significance of resection length on the patency rate, and the histopathology, of experimentally avulsed and microsurgically repaired blood vessels. Zeeman BJ, et al. **Br J Plast Surg** 1988 Sep;41(5):509–14
Microsurgical reversal of female mechanical sterilization techniques. Vercruysse P, et al. **Contraception** 1988 Jul; 38(1):99–107
Successful microsurgical removal of a pronucleus from tripronuclear human zygotes. Gordon JW, et al. **Fertil Steril** 1989 Sep;52(3):367–72
Embryonic development after microsurgical repair of polyspermic human zygotes. Malter HE, et al. **Fertil Steril** 1989 Sep;52(3):373–80
Proximal tubal occlusion: microsurgery versus IVF—a review. Marana R, et al. **Int J Fertil** 1988 Sep–Oct; 33(5):338–40 (15 ref.)
Reconstructive microsurgery of the upper urinary tract. Oesterwitz H, et al. **Int Urol Nephrol** 1988;20(5):453–9
Treatment of colloid cysts of the third ventricle by stereotaxic microsurgical laser craniotomy. Abernathey CD, et al. **J Neurosurg** 1989 Apr;70(4):525–9
Microsurgical reoperation following lumbar disc surgery. Timing, surgical findings, and outcome in 92 patients. Ebeling U, et al. **J Neurosurg** 1989 Mar;70(3):397–404
The home microsurgery laboratory [letter] **J Reconstr Microsurg** 1988 Jul;4(4):347
The 14th annual meeting of the Japanese Society of Reconstructive Microsurgery. Tsukuba City, Japan, December 5, 1987. Abstracts. **J Reconstr Microsurg** 1989 Apr;5(2):175–90
The ninth symposium of the International Society of Reconstructive Microsurgery. April 17–22, 1988, Yamanashi, Japan. Abstracts. **J Reconstr Microsurg** 1988 Oct;4(5):427–69
The fourth annual meeting of the American Society for Reconstructive Microsurgery. Baltimore, Maryland, September 17–19, 1988. Abstracts. **J Reconstr Microsurg** 1989 Jul;5(3):275–300
Factors influencing the failure of microsurgical composite tissue transplantation. Fukui A, et al. **J Reconstr Microsurg** 1988 Jul;4(4):285–90
Use of leeches in plastic and reconstructive surgery: a review. Kraemer BA, et al. **J Reconstr Microsurg** 1988 Oct; 4(5):381–6 (62 ref.)
An experimental investigation into the use of implanted thermocouples and differential thermometry as monitors for microvascular anastomoses. Roberts JO, et al. **J Reconstr Microsurg** 1985 Oct;2(1):51–7
Histologic response to microsuture materials. Beauchamp PJ, et al. **J Reprod Med** 1988 Jul;33(7):615–23
Two births after microsurgical sperm aspiration in congenital absence of vas deferens [letter] Patrizio P, et al. **Lancet** 1988 Dec 10;2(8624):1364
Induction of experimental aneurysms on the rat common carotid artery using a microsurgical CO2 laser. Ammirati M, et al. **Microsurgery** 1988;9(2):78–81
Experimental microvascular autogenous vein grafts for arterial defects: II. A histopathologic study of the grafts. Fletcher CD, et al. **Microsurgery** 1988;9(2):82–6
Re–endothelialization stages at the microvascular anastomosis. Isogai N, et al. **Microsurgery** 1988;9(2):87–94
Postoperative monitoring of microsurgical free tissue transfers for head and neck reconstruction. Jones NF. **Microsurgery** 1988;9(2):159–64 (60 ref.)
Microvascular reconstruction of the pharyngoesophagus with free jejunal graft. McDonough JJ, et al. **Microsurgery** 1988; 9(2):116–27
Recent microsurgical advances in China. Pan YC, et al. **Microsurgery** 1988;9(2):65–74 (68 ref.)
Reconstruction of complex cranial and craniofacial defects utilizing iliac crest–internal oblique microsurgical free flap. Shenaq SM. **Microsurgery** 1988;9(2):154–8
Immediate microvascular reconstruction of combined palatal and midfacial defects using soft tissue only. Shestak KC, et al. **Microsurgery** 1988;9(2):128–31
The role of microvascular surgery in head and neck reconstruction. Swartz WM. **Microsurgery** 1988;9(2):115
The microsurgical treatment of cerebral aneurysms. Arseni C, et al. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec; 26(4):189–208
Single–vessel forearm arterial repairs. Patency rates using nuclear angiography. Stricker SJ, et al. **Orthopedics** 1989 Jul;12(7):963–5
Macro assumptions from micro experiments [letter; comment] McMahon R. **Plast Reconstr Surg** 1989 Jul;84(1):174–5. **Comment on:** Plast Reconstr Surg 1988 Sep;82(3):473–9
Experience with microlymphaticovenous anastomoses for congenital and acquired lymphoedema. Ipsen T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):233–6
Limited surgical discectomy and microdiscectomy. A clinical comparison. Kahanovitz N, et al. **Spine** 1989 Jan; 14(1):79–81
Bowel perforation following microsurgical lumbar discectomy. A case report. Schwartz AM, et al. **Spine** 1989 Jan;14(1):104–6
Applications of microsurgery in urology. Belker AM, et al. **Surg Clin North Am** 1988 Oct;68(5):1157–78 (100 ref.)
Microsurgical anatomy in China. Zhong SZ, et al. **Surg Radiol Anat** 1989;11(2):115–22 (120 ref.)
Microsurgical renal transplant models in rats: a comparison of four anastomotic techniques. Chin J, et al. **Transplant Proc** 1989 Apr;21(2):3351–2
Improved design for microsurgery table. Lewis EL, et al. **Urology** 1988 Nov;32(5):452–3
The contribution of microsurgical reconstruction to

craniofacial surgery. Jones NF. **World J Surg** 1989 Jul–Aug;13(4):454–64

Laser in anterior segment and glaucoma microsurgery. Brancato R. **Yen Ko Hsueh Pao** 1986 Sep;2(3):164–8

Gamete intrafallopian transfer (GIFT) as a complement to the tubal microsurgery. Mardešić T, et al. **Zentralbl Gynakol** 1989;111(5):276–80

[Advances of modern ear micro–surgery and the skill requirements of operating nurses] LI P. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):303–4 (Chi)

[The clinical application of closed–type intraocular microsurgery—30 cases of extraction of intraocular foreign bodies] Yuan NR, et al. **Yen Ko Hsueh Pao** 1988 Jun; 4(2):100–2 (Eng. Abstr.) (Chi)

[Microsurgical therapy of post–inflammatory tubal sterility] Uher J, et al. **Cesk Gynekol** 1988 Nov;53(9):636–43 (Eng. Abstr.) (Cze)

[Microsurgical reconstruction of the upper urinary tract] Dvořáček J, et al. **Rozhl Chir** 1988 Oct;67(10):659–65 (Eng. Abstr.) (Cze)

[Microsurgery of lumbar disk prolapse] Kosteljanetz M. **Ugeskr Laeger** 1988 Dec 12;150(50):3109–11 (Eng. Abstr.) (Dan)

[Microsurgical neurolysis of post–radiotherapy brachial plexitis. Results apropos of 20 cases. Experimental justification of the treatment] Merle M, et al. **Chirurgie** 1988;114(5):421–31 (23 ref.) (Eng. Abstr.) (Fre)

[Epiplooplasty with microsurgery. Apropos of 96 cases] Patricio J, et al. **Chirurgie** 1988;114(5):394–404 (56 ref.) (Eng. Abstr.) (Fre)

[Automatized percutaneous nucleotomy in lumbar disc pathology] Lesoin F, et al. **J Chir (Paris)** 1989 Mar; 126(3):185–8 (Eng. Abstr.) (Fre)

[Lasers and microsurgery. The use of the CO2 laser in microsurgical vascular sutures. Experimental study of 240 anastomoses and initial clinical cases] Travers V, et al. **Rev Chir Orthop** 1988;74 Suppl 2:252–4 (Fre)

[Intra– and postoperative effect of various plasma substitutes on blood rheology and conjunctival oxygen partial pressure in microsurgical intervertebral disk operations] Simon J, et al. **Infusionstherapie** 1989 Feb;16(1):30–8 (Eng. Abstr.) (Ger)

[Free functional muscle transplantation with microneurovascular anastomosis: development of a standardized surgical procedure] Frey M. **Wien Klin Wochenschr** 1989 Jan 20;101(2):57–62 (Eng. Abstr.) (Ger)

[Comparative animal experiments of bile duct anastomoses using microsurgical technics] Petzold A. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):244–53 (Eng. Abstr.) (Ger)

[Microsurgery of paranasal sinuses and adjoining regions: discussion] **Acta Otorhinolaryngol Ital** 1988 May–Jun; 8(3):257–62 (Ita)

[Microsurgery in marital sterility: methodology comparison] Ortensi A, et al. **Ann Ital Chir** 1987;59(1–6):329–34 (Ita)

[Polydioxanone and polyglactin 910 in gynecological microsurgery. Experimental study] Formelli G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1007–11 (Eng. Abstr.) (Ita)

[Surgical and microsurgical treatment of varicocele. Our experience] Cavallaro G, et al. **Minerva Chir** 1988 Sep 15; 43(17):1343–7 (Eng. Abstr.) (Ita)

[Vascular microprosthesis: a comparative experimental study] Cerillo A, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1183–6 (Eng. Abstr.) (Ita)

[Experimental study on the use of fibrin glue in vascular microsurgery] Cerillo A, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1261–5 (Eng. Abstr.) (Ita)

[Injuries of the brachial plexus] Morelli E, et al. **Minerva Chir** 1989 Feb 28;44(4):749–54 (Ita)

[Comparative study of mechanical and microsurgical anastomosis of small–diameter arteries] Santoro G, et al. **Minerva Chir** 1988 Apr 15;43(7):567–74 (Eng. Abstr.) (Ita)

[Microsurgical sutures of the trachea and bronchi (experimental study)] Biriukov IuV, et al. **Grudn Khir** 1989 Mar–Apr;(2):55–9 (Eng. Abstr.) (Rus)

[Computed tomography in the Multidisciplinary Science and Technology Complex "Eye Microsurgery"] Fedorov SN, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):57–9 (Eng. Abstr.) (Rus)

[The use of microsurgery in traumatology and orthopedics] Grishin IG, et al. **Voen Med Zh** 1989 Apr;(4):37–40 (Rus)

[The use of microsurgery in traumatology and orthopedics] Tkachenko SS, et al. **Voen Med Zh** 1989 Feb;(2):22–3 (Rus)

[Use of local infiltration anesthesia in microsurgical interventions in the middle ear] Petrović N, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):1083–92 (Eng. Abstr.) (Scc)

[Surgical treatment using microdissection of compressive lumbar pain syndrome caused by a herniated disk and degenerative diseases] Tadić R. **God Vojnomed Akad** 1987; 29:63–8 (Eng. Abstr.) (Scr)

[Controlled hypotension in microsurgery of the middle ear] Bačić A, et al. **Lijec Vjesn** 1988 Jun–Jul;110(6–7):213–4 (Eng. Abstr.) (Scr)

ADVERSE EFFECTS

Microvascular surgical experimental thrombosis model: rationale and design. Kersh RA, et al. **Plast Reconstr Surg** 1989 May;83(5):866–72; discussion 873–4

[Rupture of the blood–retinal barrier after microsurgery of retinal detachment] Bonnet M, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):29–31 (Eng. Abstr.) (Fre)

[How reliable is microvascular surgery?] Lanz U. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):263–5 (Eng. Abstr.) (Ger)

[Prevention of thromboses in vascular microanastomoses. Experimental study on the role of anti–aggregant drugs. Preliminary remarks] Cerillo A, et al. **Minerva Chir** 1988 Oct 15;43(19):1593–5 (Eng. Abstr.) (Ita)

[Complications of laser microsurgery on the eye, their prevention and treatment. II. The posterior eye segment] Saprykin PI, et al. **Oftalmol Zh** 1988;(3):187–9 (27 ref.) (Rus)

ECONOMICS

[Economic aspects of reconstruction of the thumb using a microsurgical toe transplant procedure] Egloff DV, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(1):50–6 (Fre)

EDUCATION

Use of small–caliber polytetrafluoroethylene (Gore–Tex) grafts in microsurgical training. Korber KE, et al. **Microsurgery** 1989;10(2):113–5

Heterotopic renal transplantation in the rat: an advanced microsurgical training exercise. Korber KE, et al. **Microsurgery** 1988;9(4):286–91

Training program for transanal endoscopic microsurgery. Kipfmüller K, et al. **Surg Endosc** 1988;2(1):24–7

[Temporal bone of the rabbit in the otologic microsurgery training] Nosengo S, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):535–40 (Eng. Abstr.) (Ita)

INSTRUMENTATION

The stereotactic operating microscope: accuracy refinement and clinical experience. Roberts DW, et al. **Acta Neurochir Suppl (Wien)** 1989;46:112–4

The risk of ischaemic brain damage during the use of self–retaining brain retractors. Rosenørn J. **Acta Neurol Scand Suppl** 1989;120:1–30

Partial labyrinthectomy with argon laser. Okuno T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:111–6

A comparative histologic study on the healing process after tissue transection. II. Carbon dioxide laser and surgical microscissors. Filmar S, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1068–72

The site of operating microscope light–induced injury on the human retina. Brod RD, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):390–7

Plasma–mediated excimer laser ablation of bone: a potential microsurgical tool. Sarkar R, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):76–84

A new double–armed microsuture. Hallock GG, et al. **Ann Plast Surg** 1988 Aug;21(2):183–5

A combined needle holder and scissors. Patel BC, et al. **Arch Ophthalmol** 1988 Oct;106(10):1472

Transmission of 308 nm excimer laser radiation for ophthalmic microsurgery—medical, technical and safety aspects. Müller–Stolzenburg N, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):131–8 (67 ref.)

An indigenous, inexpensive operating microscope. Govila A. **Br J Plast Surg** 1989 Mar;42(2):233–4

Simplified microvascular clamps. Govila A. **Br J Plast Surg** 1989 May;42(3):347–8

Vacuum fixation of corneal lenticules for refractive surgery. Böhnke M, et al. **Dev Ophthalmol** 1989;18:212–6

New accessories for operation microscopes in ophthalmic microsurgery. Brock H. **Dev Ophthalmol** 1989;18:16–23 (3 ref.)

Autologous corneal refractive microsurgery. A new technical approach. Draeger J, et al. **Dev Ophthalmol** 1989;18:217–21

Aspects of microsurgical technology. Improvement in microscopes, cutting technique and implant technology. Draeger J. **Dev Ophthalmol** 1989;18:7–15 (0 ref.)

Three ophthalmological instruments: the rotating contact glass holder, the cutying forceps and the diamond cystotome. Huber C. **Dev Ophthalmol** 1989;18:102–6

Microscissors for vitreo–retinal surgery. Mateus F, et al. **Dev Ophthalmol** 1989;18:95–6

Early vitrectomy in type I proliferative diabetic retinopathy using afocal microscopy. Shea M. **Dev Ophthalmol** 1989; 18:75–9 (8 ref.)

Prerequisites for strabismus microsurgery. Microscope instruments and sutures. Véronneau–Troutman S. **Dev Ophthalmol** 1989;18:24–35 (12 ref.)

Wide–field system for posterior segment microsurgery—an advantage? Winter R, et al. **Dev Ophthalmol** 1989;18:97–101 (6 ref.)

Razor blade excision of Mohs specimens for superficial basal cell carcinomas of the distal nose. Grabski WJ, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1290–2

The UNILINK system for mechanical microvascular anastomosis in hand surgery. Nylander G, et al. **J Hand Surg [Am]** 1989 Jan;14(1):44–8

Vibrating glass stylets: tools for precise microsurgery on cuticular structures. Gödde J. **J Neurosci Methods** 1989 Jul;29(1):77–83

Microvenous end–to–side anastomosis: an experimental study comparing the Unilink system and sutures. Ragnarsson R, et al. **J Reconstr Microsurg** 1989 Jul;5(3):217–24

A microvascular anastomotic device: part I. A hemodynamic evaluation in rabbit femoral arteries and veins. Blair WF, et al. **Microsurgery** 1989;10(1):21–8

A microvascular anastomotic device: Part II. A histologic study in arteries and veins. Blair WF, et al. **Microsurgery** 1989;10(1):29–39

Strength of microvascular anastomoses: comparison between the unilink anastomotic system and sutures. Gilbert RW, et al. **Microsurgery** 1989;10(1):40–6

Lacrimal catheterization [published erratum appears in Ophthalmic Surg 1989 May;20(5):374] Corin SM, et al. **Ophthalmic Surg** 1989 Mar;20(3):202–4

Usefulness of the silicone microsurgical background [letter] Isogai N, et al. **Plast Reconstr Surg** 1989 Aug;84(2):366–7

Microvascular anastomosis of interpositional vein grafts with the UNILINK system. A comparative experimental study. Ragnarsson R, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):23–8

Evaluation of new Owen microforceps and microneedleholderscissors for microvasovasostomy. Wosnitzer M. **Urology** 1989 Jun;33(6):483–5

[Permanent manual magnets in microsurgery of the eye] Novák J, et al. **Cesk Oftalmol** 1989 Feb;45(1):50–5 (Eng. Abstr.) (Cze)

[Surgical management of impotence] Lukkarinen O, et al. **Duodecim** 1988;104(19):1524–9 (Fin)

[The use of Zeiss' operative keratometry] Lecoq PJ, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):77–81 (Fre)

[Significance of the micro–chisel osteotomy for esthetics in functional rhinoplasty] Fritzemeier U. **Fortschr Kiefer Gesichtschir** 1989;34:50–2 (Ger)

[An improved lamellar incision technic] Draeger J, et al. **Fortschr Ophthalmol** 1988;85(3):251–4 (Eng. Abstr.) (Ger)

[Principles of the practical use of viscoelastic substances in eye surgery] Eisner G. **Fortschr Ophthalmol** 1989; 86(1):19–22 (Eng. Abstr.) (Ger)

[Results of reconstructive surgery of the lacrimal ducts] Ruprecht KW, et al. **Fortschr Ophthalmol** 1988;85(5):526–8 (Eng. Abstr.) (Ger)

[Continuous axillary catheter plexus anesthesia—a method of postoperative analgesia and sympathetic nerve block following hand surgery] Büttner J, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):29–32 (Eng. Abstr.) (Ger)

[Equipment for CO2 laser surgery] Rudert H. **HNO** 1989 Feb;37(2):76–7 (Eng. Abstr.) (Ger)

[Microscope and endoscope–assisted surgery of inflammatory diseases of the paranasal sinuses. Value of the Messerklinger infundibulotomy] Rudert H. **HNO** 1988 Dec;36(12):475–82 (32 ref.) (Eng. Abstr.) (Ger)

[Fluid–gas exchange in vitreous surgery using the BIOM, VPFS and SDI wide–angle observation systems] Oldendoerp J. **Klin Monatsbl Augenheilkd** 1989 Feb; 194(2):129–32 (Eng. Abstr.) (Ger)

[Procurement of an ethmoid bone block from a cadaver for microanatomic preparation] Hosemann W, et al. **Laryngorhinootologie** 1989 Feb;68(2):130–1 (Ger)

[Transanal endoscopic microsurgery of the small rectal cancer] Buess G, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:183–5 (Ger)

[Role of Vater's papilla and Wirsung's duct in acute biliary pancreatitis. Surgery with laser and operating microscope] Casaccia M, et al. **Minerva Chir** 1989 Jan 31;44(1–2):203–10 (19 ref.) (Ita)

[AS & A (aqua–stream and aspirator) in neurosurgery: comparison with laser and CUSA] Ito H, et al. **No Shinkei Geka** 1988 Dec;16(13):1451–5 (Eng. Abstr.) (Jpn)

[An ophthalmic microsurgical instrumental complex] Skitsiuk SV, et al. **Med Tekh** 1988 Jul–Aug;(4):39–41 (Rus)

[A modified micro–spatula] Dzhumagulov OD. **Oftalmol Zh** 1989;(1):63–4 (Rus)

[Development of atraumatic microneedles for use in ophthalmology] Frenkel' AG, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):27–9 (Eng. Abstr.) (Rus)

METHODS

Intra–operative spinal cord evoked potentials during cervical and lumbo–sacral microsurgical DREZ–tomy (MDT) for chronic pain and spasticity (preliminary data). Jeanmonod D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:58–61

Microvascular decompression for trigeminal neuralgia. Dahle L, et al. **Acta Neurochir (Wien)** 1989;99(3–4):109–12

Surgical approach to pineal tumours. Pluchino F, et al. **Acta Neurochir (Wien)** 1989;96(1–2):26–31

Aesthetic aspects in reconstructive microsurgery. Berger A, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):115–20

Free tissue transfer in head and neck reconstruction. Arena S, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):110–23

The modified MOHS micrographic surgery. Harahap M, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):505–8

Experimental microvascular anastomoses with a CO2 laser. A series of 240 anastomoses. Travers V, et al. **Ann Chir Main** 1988;7(3):202–9 (Eng, Fre)

Resolution of experimental microvascular vasoconstriction in rats by topical application of lidocaine hydrochloride in varying concentrations. Beekman WH, et al. **Ann Plast Surg** 1988 Dec;21(6):570–5

The sensory potential of free flap donor sites. Brown CJ, et al. **Ann Plast Surg** 1989 Aug;23(2):135–40

Arteriovenous shunts in free vascularized tissue transfer for extremity reconstruction. Freedman AM, et al. **Ann Plast Surg** 1989 Aug;23(2):123–8

Correlation of postoperative bone scintigraphy with healing of vascularized fibula transfer: a clinical study. Greenberg BM, et al. **Ann Plast Surg** 1989 Aug;23(2):147–54

Neovascularized free cutaneous cartilage flap transfer with microsurgical anastomosis: an experimental model in the rabbit. Hirasé Y, et al. **Ann Plast Surg** 1988 Oct;21(4):342–7

Experiences with the lateral calcaneal artery flap. Hovius SE, et al. **Ann Plast Surg** 1988 Dec;21(6):532–5

Clinical application of the free scapular fascial flap. Jin YT, et al. **Ann Plast Surg** 1989 Aug;23(2):170–7

Midline fascial preservation in double-pedicle TRAM flap breast reconstruction. Kroll SS. **Ann Plast Surg** 1989 Aug; 23(2):104–11

Immediate skin grafting on microvascular free tissue transfers. Lineaweaver W, et al. **Ann Plast Surg** 1988 Aug; 21(2):124–6

Selection of optimal axon ratio for nerve regeneration. Mackinnon SE, et al. **Ann Plast Surg** 1989 Aug;23(2):129–34

The effect of tension on muscle flaps. Manstein CH, et al. **Ann Plast Surg** 1988 Aug;21(2):116–20

On expander pressure and skin blood flow during tissue expansion in the pig. Min Z, et al. **Ann Plast Surg** 1988 Aug;21(2):134–9

The innervated tensor fasciae latae flap in patients with meningomyelocele. Posma AN. **Ann Plast Surg** 1988 Dec; 21(6):594–6

Distally based lateral plantar artery island flap. Sakai S, et al. **Ann Plast Surg** 1988 Aug;21(2):165–9

Lower leg reconstruction using a sural fasciocutaneous flap. Satoh K, et al. **Ann Plast Surg** 1989 Aug;23(2):97–103

Eye socket reconstruction with free radial forearm flap. Tahara S, et al. **Ann Plast Surg** 1989 Aug;23(2):112–6

"Insert sutures first, tie later": new microvascular anastomosis techniques. Tark KC, et al. **Ann Plast Surg** 1989 Apr; 22(4):343–6

Reconstruction of bone and soft tissue defects with free fibula transfer. van Twisk R, et al. **Ann Plast Surg** 1988 Dec; 21(6):555–8

Multiple microvascular transplants: a preliminary report of simultaneous versus sequential reconstruction. Whitney TM, et al. **Ann Plast Surg** 1989 May;22(5):391–404 (30 ref.)

Microvenous grafts to arterial defects. The use of mechanical or suture anastomoses. Gilbert RW, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):970–6

Proposition for a new continuous suturing technique for microvascular anastomosis: a comparative study. Adani A, et al. **Br J Plast Surg** 1988 Sep;41(5):506–8

Microlymphatic bypass in obstructive lymphoedema. Ho LC, et al. **Br J Plast Surg** 1988 Sep;41(5):475–84

Salvage of the ring avulsed finger in heavy manual workers. Hung LK, et al. **Br J Plast Surg** 1989 Jan;42(1):43–5

Microvascular anastomosis using polyethylene glycol 4000 and fibrin glue. Kamiji T, et al. **Br J Plast Surg** 1989 Jan; 42(1):54–8

Ischemia of the hand in systemic disease. The potential role of microsurgical revascularization and digital sympathectomy. Jones NF. **Clin Plast Surg** 1989 Jul; 16(3):547–56 (33 ref.)

Strategies in the microsurgical management of brachial plexus injuries. Terzis JK, et al. **Clin Plast Surg** 1989 Jul; 16(3):605–16 (22 ref.)

Microsurgical restoration of distal digital function. Wei FC, et al. **Clin Plast Surg** 1989 Jul;16(3):443–55 (144 ref.)

New microsurgical concepts II. Cornea, posterior segment, external microsurgery. Proceedings of the International Ophthalmic Microsurgery Study Group. Funchal/Madeira, May 21–25, 1988. **Dev Ophthalmol** 1989;18:1–226

Small incision intraocular lens: past, present and future. Blaydes JE. **Dev Ophthalmol** 1989;18:107–10

Microsurgery in lacrimal disorders. Busse H. **Dev Ophthalmol** 1989;18:50–2 (0 ref.)

First results with soft lens implants. Cornic JC, et al. **Dev Ophthalmol** 1989;18:114–20

Micropuncture of retinal vessels. Cunha-Vaz JG, et al. **Dev Ophthalmol** 1989;18:90–4

Limbal autograft transplantation for chemical and thermal burns. Kenyon KR. **Dev Ophthalmol** 1989;18:53–8 (7 ref.)

Intravitreal phacoemulsification for luxated lenses. Laqua H. **Dev Ophthalmol** 1989;18:66–8 (0 ref.)

Novel technology in microsurgery. Parel JM. **Dev Ophthalmol** 1989;18:1–6 (22 ref.)

Microsurgery for strabismus. Roth A. **Dev Ophthalmol** 1989; 18:36–49 (12 ref.)

Technical concepts of an excimer laser for corneal surgery. Schröder E. **Dev Ophthalmol** 1989;18:146–53 (0 ref.)

Displacement of the cristalline lens. Urrets-Zavalia A. **Dev Ophthalmol** 1989;18:59–65 (3 ref.)

Microsurgery for benign lesions of the vocal folds. Bouchayer M, et al. **Ear Nose Throat J** 1988 Jun; 67(6):446–9, 452–4, 456–64 passim

Microsurgical arterialization for vascular impotence. Wagenknecht LV. **Eur Urol** 1989;16(4):262–6

Summary and prospects of fourteen years' experience with treatment of chyluria by microsurgery. Zhao WP, et al. **Eur Urol** 1988;15(3–4):219–22

Mohs' micrographic surgery adapted to the limited resources of developing countries [letter] [published erratum appears in Int J Dermatol 1989 Jan–Feb;28(1):43] Harahap M, et al. **Int J Dermatol** 1988 Sep;27(7):526

Treatment of hydrosalpinx using a single incision eversion procedure. Kosasa TS, et al. **Int J Fertil** 1988 Sep–Oct; 33(5):319–23

Micrographic surgery for the microscopically controlled excision of carcinoma of the external ear. Mohs F, et al. **J Am Acad Dermatol** 1988 Oct;19(4):729–37

A new technique of microlympho-venous anastomoses. Experimental study. al Assal F, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):552–5

Neoplasms of the conchal bowl: treatment with Mohs micrographic surgery. Clark DP, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1223–8 (30 ref.)

A simple method of tissue embedding for Mohs micrographic surgery. Honda NS, et al. **J Dermatol Surg Oncol** 1989 May;15(5):502–4

Pseudoepitheliomatous hyperplasia following Mohs micrographic surgery. Weber PJ, et al. **J Dermatol Surg Oncol** 1989 May;15(5):557–60

The rat renal transplant model. Details of microsurgical technique and complications. Asfar SK, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):314–7

Microvascular reconstruction of a devascularized ileal segment during ileo-anal anastomosis. Chick LR, et al. **J Reconstr Microsurg** 1988 Oct;4(5):359–61

Segmentally innervated latissimus dorsi muscle. Microsurgical transfer for facial reanimation. Dellon AL, et al. **J Reconstr Microsurg** 1985 Oct;2(1):7–12

Use of the vascular punch in microsurgery. Pederson WC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):115–8

Bursting strength in CO2 laser-assisted microvascular anastomoses. Ruiz-Razura A, et al. **J Reconstr Microsurg** 1988 Jul;4(4):291–6

Microvascular revascularization of the tongue. Shemen L, et al. **J Reconstr Microsurg** 1988 Jul;4(4):267–9

Aesthetic reconstruction of long fingers with toe-to-hand transfer. Vitkus K. **J Reconstr Microsurg** 1988 Oct; 4(5):369–80

Microsurgical reversal of female sterilization. Long-term follow-up of 117 cases. Xue P, et al. **J Reprod Med** 1989 Jul;34(7):451–5

Microvascular reconstructive "bench" surgery for donor kidneys before transplantation: techniques and results. Chin JL. **J Urol** 1989 Jul;142(1):23–7

Microsurgical penile revascularization using the central corporeal penile artery. Konnak JW, et al. **J Urol** 1989 Aug;142(2):305–8

Mohs micrographic surgery [letter] Skouge JW. **Laryngoscope** 1989 Mar;99(3):350

Intimal hyperplasia in end-to-end versus end-to-side arterial anastomosis. Becquemin JP, et al. **Life Support Syst** 1983; 1 Suppl 1:396–9

Microsurgical techniques for studying functional correlates of hypothalamohypophyseal axis. Murai I, et al. **Methods Enzymol** 1989;168:234–54

Microvascular replantation in a seven-month-old girl: a case report. Gaul JS 3d, et al. **Microsurgery** 1988;9(3):204–7

New directions in male reproductive microsurgery. Gilbert BR, et al. **Microsurgery** 1988;9(4):281–5 (33 ref.)

Improving microgratt patency. Nichter LS, et al. **Microsurgery** 1988;9(4):235–41

Microsurgery for male infertility. Silber SJ. **Microsurgery** 1988;9(4):251–7 (45 ref.)

Epididymal microsurgery: current techniques and new horizons. Southwick GJ, et al. **Microsurgery** 1988; 9(4):266–77

Microsurgical arterialization for vascular impotence. Wagenknecht LV. **Microsurgery** 1988;9(4):258–61

Microsurgical phalloplasty. Wagenknecht LV. **Microsurgery** 1988;9(4):262–5

Mohs micrographic surgery. Morman MR. **N J Med** 1989 May;86(5):369–73

Aid to exposure of the upper basilar artery [letter] Dorsch NW. **Neurosurgery** 1989 Jun;24(6):961

The microsurgical anatomy of the infratentorial lateral supracerebellar approach to the trigeminal nerve for tic douloureux. Matsushima T, et al. **Neurosurgery** 1989 Jun; 24(6):890–5

Outpatient microdiscectomy [letter] Rogers LA. **Neurosurgery** 1988 Jul;23(1):128

Microsurgical DREZ-otomy for the treatment of spasticity and pain in the lower limbs. Sindou M, et al. **Neurosurgery** 1989 May;24(5):655–70

Microvascular applications in limb sparing tumor surgery. Hausman M. **Orthop Clin North Am** 1989 Jul;20(3):427–37 (52 ref.)

New method of microvascular anastomosis. Ahn, et al. **Osaka City Med J** 1988 Oct;34(2):77–113

The laser-assisted end-to-side microvascular anastomosis. Ruiz-Razura A, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):511–7

Microsurgical treatment of recurrent nasal polyposis. Wigand ME, et al. **Rhinology** 1989;Suppl 8:25–9

Clinical results of transanal endoscopic microsurgery. Buess G, et al. **Surg Endosc** 1988;2(4):245–50

Endoscopic microsurgical dissection of the esophagus. Results in an animal model. Kipfmüller K, et al. **Surg Endosc** 1989;3(2):63–9

Splenorenal anastomosis during resection of juxtarenal aortic aneurysm. McCann RL, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):271–2

Management of small branching vessels in microsurgery: an experiment on a rat model. Hou SM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1045–9

Microsurgery of conjunctiva and Tenon's capsule. Crock GW. **Yen Ko Hsueh Pao** 1986 Jun;2(2):69–70, 74

A new technique for a better exposure of the posterior wall of the end-to-side-microvascular anastomosis—technical note. Aydin IH. **Zentralbl Neurochir** 1988;49(4):324–5

[Low-frequency jet ventilation in laryngoscopic surgery] Claes J, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):477–82 (Eng. Abstr.) (Dut)

[Anesthesia with isoflurane using a circuit filter in otologic microsurgery] Hannebicque V, et al. **Cah Anesthesiol** 1988 Oct;36(6):429–36 (Fre)

[The osteocutaneous outer arm flap. A new concept in microsurgical mandibular reconstructions] Martin D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):281–7 (Eng. Abstr.) (Fre)

[Significance of microsurgery revascularized soft tissue and bone transplants in plastic reconstructive interventions of the extremities] Röhner H, et al. **Aktuel Traumatol** 1988 Oct;18(5):215–8 (Eng. Abstr.) (Ger)

[Microvascular re-anastomosis of the testis in management of recurrent inguinal hernia] Jung D, et al. **Chirurg** 1989 Jan;60(1):60–2 (Ger)

[The parascapular cutaneous latissimus dorsi osteomycutaneous double flap. Free monobloc transfer in facial reconstruction] Nassif TM, et al. **Chirurg** 1988 Nov; 59(11):793–6 (Ger)

[The anterior tibial muscle as a distal pedicled osteomuscular transposition flap] Papp C, et al. **Chirurg** 1988 Sep; 59(9):610–3 (Ger)

[Differential indications of subcutaneous and vascular pedicled island flaps of the face] Bock NJ, et al. **Fortschr Kiefer Gesichtschir** 1989;34:168–70 (Ger)

[Augmentation of a frontoparietal bone defect with autogenous rib cartilage] Eskici A, et al. **Fortschr Kiefer Gesichtschir** 1989;34:98–100 (Ger)

[Microinjection of spermatozoa into the oocyte. An experimental model for assisted conjugation in oligo-asthenozoospermia as a cause of sterility] Mettler L, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):625–9 (Eng. Abstr.) (Ger)

[Differential indications for surgical technics in reproductive medicine—microsurgery, in vitro fertilization and embryo transfer, gamete intrafallopian transfer and tubal embryo transfer] Wiedemann R, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):416–22 (16 ref.) (Eng. Abstr.) (Ger)

[Clinical research in hand surgery: the problem and value of retrospective studies] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):62–5 (Eng. Abstr.) (Ger)

[Comments on vascular pedicled nerve transplantation in the area of the upper extremity] Frey HP, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):4–9 (Eng. Abstr.) (Ger)

[Technic and problems of resection of small intestine segments for free transplantation] Löhlein D. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):189–91 (3 ref.) (Eng. Abstr.) (Ger)

[Trophic disorders following primary nerve sutures of the upper extremity] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):72–3 (Eng. Abstr.) (Ger)

[A sub-pectoral gliding flap for covering the lateral triangle of the neck] Millesi W, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):26–8 (Eng. Abstr.) (Ger)

[Experimental studies of vascular replacement in microsurgery] Müller GH. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):192–4 (Eng. Abstr.) (Ger)

[What significance does superselective angiography of the hip joint have in femur head necrosis of the adult before and after management with a vascular pedicled ileal crest graft?] Schwetlick G, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):195–7 (Eng. Abstr.) (Ger)

[Multi-sided free transplants for closure of multifocal tissue defects] Steinau HU, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):23–5 (Eng. Abstr.) (Ger)

[The neurovascular pedicled abductor digiti minimi muscle flap for covering the median nerve or its branches] Ulmer J, et al. **Handchir Mikrochir Plast Chir** 1988 Nov; 20(6):338–41 (Eng. Abstr.) (Ger)

[Refertilization operation in men using microsurgical technics] Leibundgut B, et al. **Helv Chir Acta** 1988 Jul; 55(3):281–4 (Eng. Abstr.) (Ger)

[Microvascular tissue transplantation of the ear, nose and throat] Bootz F, et al. **HNO** 1988 Nov;36(11):456–61 (Eng. Abstr.) (Ger)

[The free forearm flap in covering defects of the pharynx and oral cavity] Bootz F. **HNO** 1988 Nov;36(11):462–6 (Eng. Abstr.) (Ger)

[Is there a preference among fibrin glues for nerve anastomosis?] Herter T. **HNO** 1989 Jun;37(6):255–8 (Eng. Abstr.) (Ger)

[Function-saving microsurgery in suboccipital removal of large acoustic neuromas] Strauss C, et al. **HNO** 1989 Jul; 37(7):281–6 (Eng. Abstr.) (Ger)

[Modified full-lid transplants ("tarsomarginal transplants")

in reconstructive eyelid surgery] Hübner H. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):647–50 (Eng. Abstr.) (Ger)
[Microsurgery of retinal detachment using biological implant material] Winter R, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):611–4 (Eng. Abstr.) (Ger)
[Results of microsurgical lymphovenous anastomoses in lymphedema—report of 110 cases] Huang GK. **Langenbecks Arch Chir** 1989;374(4):194–9 (Eng. Abstr.) (Ger)
[Microvascular facial profile-plasty in facial hemiatrophy] Mees K, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):547–8 (Ger)
[Free microvascular tissue transfer. Clinical significance in reconstructive surgery of the head and neck] Mees K. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):12–8 (Eng. Abstr.) (Ger)
[Do fibrin glue sleeves produce fibrosis in transplanted nerves?] Herter T, et al. **Neurochirurgia (Stuttg)** 1989 Jan; 32(1):16–20 (Eng. Abstr.) (Ger)
[Results in microsurgical carotid artery endarterectomy] Steiger HJ, et al. **Schweiz Med Wochenschr** 1989 May 6; 119(18):555–60 (Eng. Abstr.) (Ger)
[The interposition technic. A possibility for avoiding the end-to- side technic in free microvascular myocutaneous flap transfer of the latissimus dorsi muscle] Müller JE, et al. **Unfallchirurg** 1988 Sep;91(9):402–4 (Eng. Abstr.) (Ger)
[The femoral neck pseudarthrosis following medial femoral neck fracture. An indication for the vascularized pedicled iliac crest transplant] Schwetlick G, et al. **Unfallchirurg** 1989 Feb;92(2):73–8 (Eng. Abstr.) (Ger)
[A comparative study of the single knot and continuous suture technic of the aorta of the growing rat] Zöch G, et al. **Vasa** 1988;17(3):171–6 (Eng. Abstr.) (Ger)
[A model for microsurgical interference of the rat cranium] Steube D, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):334–9 (Eng. Abstr.) (Ger)
[Vascular pedicled iliac bone graft in therapy of femur head necrosis in the adult. Clinical and angiographic results] Schwetlick G, et al. **Z Orthop** 1988 Sep–Oct;126(5):500–7 (Eng. Abstr.) (Ger)
[Variable defect coverage and primary reconstruction following resection of T-4 cancer of the oropharynx by free transplanted small intestine] Siedek M, et al. **Zentralbl Chir** 1989;114(10):684–9 (Ger)
[What is the current status of microsurgery of the fallopian tube?] Fritzsche H. **Zentralbl Gynakol** 1989;111(4):257–8 (Ger)
[Wirsung-septoplasty during interventions on Vater's ampulla] Fronticelli CM, et al. **Minerva Chir** 1989 Mar 15; 44(5):833–6 (Eng. Abstr.) (Ita)
[Role of microsurgery in the treatment of idiopathic varicocele] Puleo S, et al. **Minerva Chir** 1989 Feb 28; 44(4):755–8 (9 ref.) (Ita)
[Microsurgery in kidney transplants. Experimental and clinical aspects] Rosati R, et al. **Minerva Chir** 1989 Jan 31;44(1–2):37–40 (Ita)
[The use of fibrin glue in experimental tubal microsurgery. Comparison of two methods] Cavallaro G, et al. **Minerva Ginecol** 1988 Apr;40(4):281–5 (Eng. Abstr.) (Ita)
[Large cyst of the epiglottis treated with microlaryngosurgical technique—histopathological findings and therapeutic method in 3 cases] Kawaida M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun; 91(6):895–900 (Eng. Abstr.) (Jpn)
[Experimental and clinical studies on free toe-joint transplantation to replace a finger joint by microvascular technic] Watanabe M. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):495–510 (Eng. Abstr.) (Jpn)
[Analysis of internal carotid-posterior communicating artery aneurysms with difficulty in clipping: with special reference to radiometry] Nagasawa S, et al. **No Shinkei Geka** 1988 Jul;16(8):959–64 (Eng. Abstr.) (Jpn)
[A new experimental model for direct in vivo observation of microcirculation in microsurgery] Siemionow M. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):1–7 (Eng. Abstr.) (Pol)
[A complex arm wound resolved by an epiploon autograft—microsurgical technics] Ciuce C, et al. **Rev Chir [Chir]** 1988 Jul–Aug;37(4):289–95 (Eng. Abstr.) (Rum)
[Autotransplantation of the 2d toe in the reconstruction of the index finger. The microsurgical technic] Ciuce C, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):371–8 (Eng. Abstr.) (Rum)
[Experimental microsurgical transplantation of the heart (review of the literature)] Akchurin RS, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):140–3 (41 ref.) (Rus)
[Treatment of nerve injuries using microsurgical technics] Sia'n-chZhun Ch, et al. **Khirurgiia (Mosk)** 1989 Jun; (6):8–10 (Rus)
[The role of epithelialization of prolapsed membranes in the microsurgical treatment of corneoscleral eye wounds] Shatilova TA, et al. **Oftalmol Zh** 1988;(6):353–4 (Eng. Abstr.) (Rus)
[The effectiveness of the microsurgical removal of the nuclei in early mouse embryos depending on the time before cleavage division] Chaflakhian LM, et al. **Ontogenez** 1989 Jan–Feb;20(1):33–9 (Eng. Abstr.) (Rus)
[The organization, equipment and performing of microsurgical operations on the bile ducts] Trunin MA, et al. **Vestn Khir** 1989 Mar;142(3):105–7 (Rus)
[An aspiration-irrigation method in microsurgery of the eye] Alekseev BN. **Vestn Oftalmol** 1988 Sep–Oct;104(5):14–6 (Eng. Abstr.) (Rus)
[2-stage microsurgical autoneuroplasty under pharmacologic effects (experimental research)] Chalkovskii IuB. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):18–21 (Eng. Abstr.) (Rus)
[Microsurgical reinnervation of the bladder in spinal cord lesions] Livshits AV, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):44–8 (Eng. Abstr.) (Rus)
[Laser microsurgery of brain tumors] Zozulia IuA, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):3–7 (Eng. Abstr.) (Rus)
[Successful autotransplantation of intra-abdominal testes into the scrotum using microvascular technics] Perović S, et al. **Acta Chir Iugosl** 1989;36(1):117–26 (Eng. Abstr.) (Sec)
[Microsurgical catheterization of the intrathecal space in the rat for chronic infusion of drugs] González-Darder JM, et al. **Rev Esp Anestesiol Reanim** 1989 May–Jun;36(3):153–6 (Eng. Abstr.) (Spa)

NURSING

Microvascular reconstruction. Nursing management. Goodman T, et al. **AORN J** 1988 Oct;48(4):666–9, 672–6

TRENDS

Evolution and present status of orthopedic microsurgery in Greece. Soucacos PN, et al. **Clin Orthop** 1989 Sep; (246):65–9
Microsurgery in China and the development of Western reconstructive microsurgery. Cooney WP. **Microsurgery** 1988;9(2):75–7
[Problems in introducing microsurgical technology into surgery of the locomotor system] Tkachenko SS, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):6–10 (Eng. Abstr.) (Rus)

MICROSURGERY, LASER see **LASER SURGERY**

MICROSURGICAL REVASCULARIZATION, CEREBRAL see **CEREBRAL REVASCULARIZATION**

MICROTINES see **CRICETIDAE**

MICROTOMY

Clinicopathologic management of tumors of the thyroid gland in an endemic goiter area. Combined use of preoperative fine needle aspiration biopsy and intraoperative frozen section. Schmid KW, et al. **Acta Cytol** 1989 Jan–Feb;33(1):27–30
Frozen section diagnosis of breast cancer. Eskelinen M, et al. **Acta Oncol** 1989;28(2):183–6
Application of a quick immunoenzymatic labeling as an adjunct to frozen-section diagnosis. Tabibzadeh SS, et al. **Am J Clin Pathol** 1989 Jan;91(1):63–6
Rapid freezing of small biopsies and standard for cryosectioning and X-ray microanalysis. Tvedt KE, et al. **Am J Clin Pathol** 1989 Jul;92(1):51–6
Guidelines for practical utilization of intraoperative frozen sections. Prey MU, et al. **Arch Surg** 1989 Mar;124(3):331–5
Frozen section control of excision of eyelid basal cell carcinomas: 8 1/2 years' experience. Frank HJ. **Br J Ophthalmol** 1989 May;73(5):328–32
Histomorphometry of fresh frozen iliac crest bone biopsies. Carter DH, et al. **Calcif Tissue Int** 1989 Jun;44(6):387–92
Reliability of frozen section examination in identifying poor prognostic indicators in stage I endometrial adenocarcinoma. Malviya VK, et al. **Gynecol Oncol** 1989 Sep;34(3):299–304
Comparison of the usefulness of bone marrow sections and smears in diagnosis of multiple myeloma. Buss DH, et al. **Hematol Pathol** 1987;1(1):35–43
Frozen section appearances simulating invasive lobular carcinoma in breast tissue adjacent to inflammatory lesions and biopsy sites. Underwood JC, et al. **Histopathology** 1988 Aug;13(2):232–4
Interpretation of Mohs micrographic frozen sections: a peer review comparison study. Grabski WJ, et al. **J Am Acad Dermatol** 1989 Apr;20(4):670–4
Extraction of DNA from small sections of frozen tissue with simultaneous histological examination. Cotter FE, et al. **J Clin Pathol** 1988 Oct;41(10):1125–6
Improved method for immunoperoxidase detection of membrane antigens in frozen sections. Green MA, et al. **J Clin Pathol** 1989 Aug;42(8):875–80
Use of microwave oven improves morphology and staining of cryostat sections. Kennedy A, et al. **J Clin Pathol** 1989 Jan;42(1):101–5
A simple method of tissue embedding for Mohs micrographic surgery. Honda NS, et al. **J Dermatol Surg Oncol** 1989 May;15(5):502–4
Volume determination of TEM specimens containing particles or precipitates. Hare TM, et al. **J Electron Microsc Tech** 1988 Sep;10(1):1–6
A good support for the thick frozen sections for immunolabeling when post embedding in plastic for EM is required. Larramendi PC. **J Electron Microsc Tech** 1988 Sep;10(1):123–4
X-ray microanalysis of freeze-dried and frozen-hydrated cryosections. Zierold K. **J Electron Microsc Tech** 1988 May;9(1):55–82
A modified anti-roll plate as a remedy for the ill-effects of electrical charge during cryosectioning. Viebahn C, et al. **J Histochem Cytochem** 1989 Jul;37(7):1157–60
Comparison of methods for the estimation of the thickness of ultrathin tissue sections [published erratum appears in J Microsc 1989 Apr;154(Pt 1):99] De Groot DM. **J Microsc** 1988 Jul;151 (Pt 1):23–42
Quick sampling and perpendicular cryosectioning of cell monolayers for the X-ray microanalysis of diffusible elements. Tvedt KE, et al. **J Microsc** 1988 Jul;151 (Pt 1):49–59
Elemental concentrations in air-exposed and vacuum-stored cryosections of rat liver cells. von Zglinicki T, et al. **J Microsc** 1989 Jun;154 (Pt 3):227–35
In situ elemental analysis and visualization in cryofixed nervous tissues. X-ray microanalytical investigations of embryological and mature brain, inner ear, photoreceptors, muscle and muscle spindles. Comparison of preparation methods for analysis and visualization at cellular and subcellular levels. Wróblewski R. **J Microsc** 1989 Jul;155 (Pt 1):81–112 (67 ref.)
Brain and spinal cord slice preparations. A selection of papers from the second international conference. June 15–17, 1988, Louisville, KY, U.S.A. **J Neurosci Methods** 1989 May; 28(1–2):1–154
Steroid receptor assay from cryostat sections: practical aspects. Dangerfield VJ. **Med Lab Sci** 1988 Jan;45(1):57–68
Treatment of bone marrow trephine biopsies prior to cryotomy for immunocytochemical demonstration of cell surface antigens. Phillpotts CJ, et al. **Med Lab Sci** 1988 Jan;45(1):52–6
Inflation of lung biopsies for frozen section. Gianoulis M, et al. **Mod Pathol** 1988 Sep;1(5):357–8
Touch preparations in the rapid intraoperative diagnosis of central nervous system lesions. A comparison with frozen sections and paraffin-embedded sections. Martinez AJ, et al. **Mod Pathol** 1988 Sep;1(5):378–84
An evaluation of potentially suitable fixatives for immunoperoxidase staining of estrogen receptors in imprints and frozen sections of breast carcinoma. Raymond WA, et al. **Pathology** 1988 Oct;20(4):320–5
Localization of actin and cytokeratin in hepatocytes and biliary epithelial cells in normal human livers using a low temperature resin and post-embedding immunohistochemistry. Kono N, et al. **Tohoku J Exp Med** 1989 Apr;157(4):325–35
Electron spectroscopic imaging of frozen-hydrated sections. Probst W, et al. **Ultramicroscopy** 1989 Apr 1;28(1–4):312–4
Contrast transfer for frozen-hydrated specimens: determination from pairs of defocused images. Toyoshima C, et al. **Ultramicroscopy** 1988;25(4):279–91
Are frozen-section examinations of ureteral margins required for all patients undergoing radical cystectomy for bladder cancer? Johnson DE, et al. **Urology** 1989 Jun;33(6):451–4
[Structure of Staphylococcus aureus cell wall determined by the freeze-substitution method] Umeda A. **Nippon Saikingaku Zasshi** 1988 Nov;43(6):961–9 (Jpn)
[Transition and trend in rapid frozen section diagnosis at the surgical pathology division of a university hospital] Nemoto N, et al. **Rinsho Byori** 1988 Jun;36(6):737–42 (Jpn)

HISTORY

Unbiased estimation of particle number using sections—an historical perspective with special reference to the stereology of glomeruli. Bendtsen TF, et al. **J Microsc** 1989 Jan;153 (Pt 1):93–102

INSTRUMENTATION

Semiautomatic operation of the rotatory microtome II. Lisoněk P, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:41–5
Cryostat use and tissue processing in Mohs micrographic surgery. Hanke CW, et al. **J Dermatol Surg Oncol** 1989 Jan;15(1):29–32
An ultrathin sectioning alignment tool with application to cell monolayers. Cramer CT. **J Electron Microsc Tech** 1989 Feb;11(2):172–3
New cryoultramicrotome with a feedback-advance system. Wolf B. **J Electron Microsc Tech** 1987 Nov;7(3):185–9
A modified watchmaker's forceps for optimal transfer of thin and semithin sections. Alonso JR, et al. **Stain Technol** 1988 Nov;63(6):376–7
An alternative antiroll plate for cryostat sectioning. Lindroos OF. **Stain Technol** 1988 Nov;63(6):373–5
Large area sectioning for morphologic studies of nonhuman primate nasal cavities. Randall HW, et al. **Stain Technol** 1988 Nov;63(6):355–62
[A method of low-temperature strengthening of microtome knives and medical cutting instruments] Stepanov PF, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):77 (Rus)

METHODS

Stamping method for frozen section. Radivoyevitch MA. **Am J Surg Pathol** 1989 Mar;13(3):244–5
A method for determining reference points in celloidin specimens for computer graphic reconstruction. Hara M, et al. **Arch Otorhinolaryngol** 1989;246(2):97–9

Use of poly(vinylpyrrolidone) and poly(vinyl alcohol) for cryoultramicrotomy. Tokuyasu KT. **Histochem J** 1989 Mar;21(3):163–71

Three–dimensional counting: an accurate and direct method to estimate numbers of cells in sectioned material [published erratum appears in J Comp Neurol 1989 Mar 8;281(2):335] Williams RW, et al. **J Comp Neurol** 1988 Dec 15; 278(3):344–52

A study of section wrinkling on single–hole coated grids using TEM and SEM. Abad A. **J Electron Microsc Tech** 1988 Feb;8(2):217–22

A new technique for preparing metal/oxide TEM cross sections. Doychak J. **J Electron Microsc Tech** 1989 Feb; 11(2):180–2

Method for obtaining thin sections for EM from different areas of the same block. Larramendi PC. **J Electron Microsc Tech** 1989 Aug;12(4):417–8

EELS log–ratio technique for specimen–thickness measurement in the TEM. Malis T, et al. **J Electron Microsc Tech** 1988 Feb;8(2):193–200

Preparation of collagen gel matrices for light and electron microscopy. Turner JW, et al. **J Electron Microsc Tech** 1989 Feb;11(2):134–6

The use of double Formvar film to support paraffin sections for light microscopy and subsequent STEM/X–ray microanalysis. Tvedt KE, et al. **J Electron Microsc Tech** 1988 Feb;8(2):237–8

An improved embedding method employing epoxy resin Quetol 651 for stereoscopic observation of thick sections under a 300 kV transmission electron microscope. Kushida T, et al. **J Electron Microsc (Tokyo)** 1988;37(4):212–4

Three–dimensional reconstruction: a tissue embedding method for alignment of serial sections. Meyer EP, et al. **J Neurosci Methods** 1988 Dec;26(2):129–32

Olfactory and nasal respiratory epithelia, and foliate taste buds visualized with rapid–freeze freeze–substitution and Lowicryl K11M embedding. Ultrastructural and initial cytochemical studies. Menco BP. **Scanning Microsc** 1989 Mar;3(1):257–72

X–ray microanalysis of calcium containing organelles in resin embedded tissue. Nicaise G, et al. **Scanning Microsc** 1989 Mar;3(1):199–219; discussion 219–20 (233 ref.)

Modifications of a method for preparing retinal wholemounts for sectioning. Colello R. **Stain Technol** 1988 May; 63(3):183–8

Plant protoplasts immobilized in calcium alginate: a simple method of preparing fragile cells for transmission electron microscopy. Draget KI, et al. **Stain Technol** 1988 May; 63(3):159–64

A rapid method for producing stained sections of plastic embedded undecalcified bone specimens. Emmanual J. **Stain Technol** 1988 Sep;63(5):329–31

A simple procedure to obtain one–micrometer sections of routinely embedded paraffin material. Junqueira LC, et al. **Stain Technol** 1989 Jan;64(1):39–42

A quick preparative method for electron microscopy observations of delicate objects using alginate embedding medium. Tamponnet C, et al. **Stain Technol** 1988 May; 63(3):155–8

A simple method for preparing thin (10 microM) histological sections of undecalcified plastic embedded bone with implants. van der Lubbe HB, et al. **Stain Technol** 1988 May; 63(3):171–6

Visualization of fungi in histological sections. Wachsmuth ED. **Virchows Arch [B]** 1988;56(1):1–4

Cutting–technique and autoradiographic method for studies on undecalcified mineralized dental tissues. Reichardt R. **Z Mikrosk Anat Forsch** 1988;102(5):785–95

STANDARDS

Intraoperative pathologic consultation. An audit of 1,000 recent consecutive cases. Oneson RH, et al. **Am J Surg Pathol** 1989 Mar;13(3):237–43

MICROTRABECULAR LATTICE see **CYTOSKELETON**

MICROTUBULE–ASSOCIATED PROTEINS

Polypeptide composition of paired helical filaments. Ihara Y, et al. **Ann Med** 1989;21(2):121–5 (34 ref.)

Antarctic fish tubulins: heterogeneity, structure, amino acid compositions and charge. Detrich HW 3d, et al. **Comp Biochem Physiol [B]** 1988;90(3):593–600

Beta–internexin is a microtubule–associated protein identical to the 70–kDa heat–shock cognate protein and the clathrin uncoating ATPase. Green LA, et al. **J Biol Chem** 1989 Sep 15;264(26):15210–5

Tau proteins: the molecular structure and mode of binding on microtubules. Hirokawa N, et al. **J Cell Biol** 1988 Oct; 107(4):1449–59

ANALYSIS

Altered levels of microtubule proteins in brains of Alzheimer's disease patients. Nieto A, et al. **Acta Neuropathol (Berl)** 1989;78(1):47–51

A 70 kDa microtubule–associated protein in NIL8 cells comigrates with the 70 kDa heat shock protein [published erratum appears in Biol Cell 1989;65(1):88] Weller NK. **Biol Cell** 1988;63(3):307–17

Accumulation of abnormally phosphorylated tau precedes the formation of neurofibrillary tangles in Alzheimer's disease. Bancher C, et al. **Brain Res** 1989 Jan 16; 477(1–2):90–9

Microtubule–associated proteins MAP5 and MAP1x: closely related components of the neuronal cytoskeleton with different cytoplasmic distributions in the developing brain. Garner CC, et al. **Brain Res Mol Brain Res** 1989 Jan; 5(1):85–92

Vesikin, a vesicle associated ATPase from squid axoplasm and optic lobe, has characteristics in common with vertebrate brain MAP 1 and MAP 2. Do CV, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):246–54

Dynamics of microtubules visualized by darkfield microscopy: treadmilling and dynamic instability. Hotani H, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):229–36

Microtubule–associated proteins characteristic of embryonic brain are found in the adult mammalian retina. Tucker RP, et al. **Dev Biol** 1988 Dec;130(2):423–34

Sea urchin sperm creatine kinase: the flagellar isozyme is a microtubule–associated protein. Tombes RM, et al. **Exp Cell Res** 1988 Oct;178(2):307–17

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: characterization of monoclonal antibodies against axolinin. Arai T, et al. **Hybridoma** 1988 Dec;7(6):583–93

Quantitation of microtubule–associated protein MAP–1B in brain and other tissues. Díaz–Nido J, et al. **Int J Biochem** 1989;21(7):723–30

Sertoli cell processes have axoplasmic features: an ordered microtubule distribution and an abundant high molecular weight microtubule–associated protein (cytoplasmic dynein). Neely MD, et al. **J Cell Biol** 1988 Nov; 107(5):1767–76

The molecular and cellular pathology of Alzheimer neurofibrillary lesions. Kosik KS. **J Gerontol** 1989 May; 44(3):B55–8 (42 ref.)

The intracellular precursor of IL–1 beta is associated with microtubules in activated U937 cells. Baldari CT, et al. **J Immunol** 1989 Feb 1;142(3):785–91

Subcellular localization of functionally differentiated microtubules in squid neurons: regional distribution of microtubule–associated proteins and beta–tubulin isotypes. Arai T, et al. **J Neurochem** 1988 Dec;51(6):1825–38

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: cellular and subcellular localization of axolinin in the squid neuron. Arai T, et al. **J Neurochem** 1989 Jan;52(1):93–100

Denervation induces long–lasting changes in the distribution of microtubule proteins in hippocampal neurons. Kwak S, et al. **J Neurocytol** 1988 Apr;17(2):189–95

Anti–200 kDa neurofilament antibody cross–reacts with microtubule–associated protein–2 (MAP–2). Allende ML, et al. **J Neurosci Res** 1989 Feb;22(2):130–3

Tau protein immunoreactivity in dementia of the Alzheimer type: II. Electron microscopy and pathogenetic implications. Effects of fixation on the morphology of the Alzheimer's abnormal filaments. Papasozomenos SC. **Lab Invest** 1989 Mar;60(3):375–89

Tau protein immunoreactivity in dementia of the Alzheimer type. I. Morphology, evolution, distribution, and pathogenetic implications. Papasozomenos SC. **Lab Invest** 1989 Jan;60(1):123–37

Selective localization of messenger RNA for cytoskeletal protein MAP2 in dendrites. Garner CC, et al. **Nature** 1988 Dec 15;336(6200):674–7

Identification and localization of a tau peptide to paired helical filaments of Alzheimer disease. Iqbal K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5646–50

[Alzheimer's disease. Biochemistry of paired helical filaments (PHF)] Ihara Y. **Nippon Ronen Igakkai Zasshi** 1988 Jul; 25(4):364–7 (Eng. Abstr.) **(Jpn)**

BLOOD

Platelets contain a 210K microtubule–associated protein related to a similar protein in HeLa cells. Tablin F, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):317–24

GENETICS

The repeat region of microtubule–associated protein tau forms part of the core of the paired helical filament of Alzheimer's disease. Crowther T, et al. **Ann Med** 1989; 21(2):127–32 (23 ref.)

A distinct form of tau is selectively incorporated into Alzheimer's paired helical filaments. Mori H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1221–6

Age–dependent expression of microtubule–associated protein 2 in the ventromedial nucleus of the hypothalamus. Crandall JE, et al. **Brain Res Bull** 1989 Mar;22(3):571–4

Cloning and sequencing of the cDNA encoding an isoform of microtubule–associated protein tau containing four tandem repeats: differential expression of tau protein mRNAs in human brain. Goedert M, et al. **EMBO J** 1989 Feb;8(2):393–9

Single–shot cloning of multiple cDNAs coding for a set of related microtubule–associated proteins. Garner CC, et al. **Gene** 1988 Nov 30;71(2):483–90

A common amino acid sequence in 190–kDa microtubule–associated protein and tau for the promotion of microtubule assembly. Aizawa H, et al. **J Biol Chem** 1989 Apr 5;264(10):5885–90

Mutations at twelve independent loci result in absence of outer dynein arms in Chylamydomonas reinhardtii. Kamiya R. **J Cell Biol** 1988 Dec;107(6 Pt 1):2253–8

Expression of multiple tau isoforms and microtubule bundle formation in fibroblasts transfected with a single tau cDNA. Kanai Y, et al. **J Cell Biol** 1989 Sep;109(3):1173–84

Cloning of a cDNA encoding MAP1B in rat brain: regulation of mRNA levels during development. Safaei R, et al. **J Neurochem** 1989 Jun;52(6):1871–9

Tau consists of a set of proteins with repeated C–terminal microtubule–binding domains and variable N–terminal domains. Himmler A, et al. **Mol Cell Biol** 1989 Apr; 9(4):1381–8

Structure of the bovine tau gene: alternatively spliced transcripts generate a protein family. Himmler A. **Mol Cell Biol** 1989 Apr;9(4):1389–96

Primary structure of a human mitochondrial protein homologous to the bacterial and plant chaperonins and to the 65–kilodalton mycobacterial antigen. Jindal S, et al. **Mol Cell Biol** 1989 May;9(5):2279–83

Embryonic MAP2 lacks the cross–linking sidearm sequences and dendritic targeting signal of adult MAP2. Papandrikopoulou A, et al. **Nature** 1989 Aug 24; 340(6235):650–2

Complete sequence of a cDNA encoding mouse MAP2. Wang D, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11369–70

IMMUNOLOGY

The reinterpretation of the immunochemical study of Alzheimer neurofibrillary tangles. Nukina N. **Ann Med** 1989;21(2):117–9 (19 ref.)

Immunoaffinity demonstration that paired helical filaments of Alzheimer disease share epitopes with neurofilaments, MAP2 and tau. Mulvihill P, et al. **Brain Res** 1989 Apr 10;484(1–2):150–6

Developmental regulation of two microtubule–associated proteins (MAP2 and MAP5) in the embryonic avian retina. Tucker RP, et al. **Development** 1987 Nov;101(3):535–46

A novel tubulin–dependent protein kinase forming a paired helical filament epitope on tau. Ishiguro K, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):319–21

Distribution of phosphate–independent MAP2 epitopes revealed with monoclonal antibodies in microwave–denatured human nervous system tissues. Trojanowski JQ, et al. **J Neurosci Methods** 1989 Aug; 29(2):171–80

Monoclonal antibody G10 against microtubule–associated protein 1x distinguishes between growing and regenerating axons. Woodhams PL, et al. **Neuroscience** 1989;28(1):49–59

ISOLATION & PURIFICATION

Small zone gel chromatography of interacting systems: theoretical and experimental evaluation of elution profiles for kinetically controlled macromolecule–ligand reactions. Cann JR, et al. **Anal Biochem** 1988 Dec;175(2):462–73

Monoclonal antibody to microtubule–associated STOP protein: affinity purification of neuronal STOP activity and comparison of antigen with activity in neuronal and nonneuronal cell extracts. Pirollet F, et al. **Biochemistry** 1989 Jan 24;28(2):835–42

Glyceraldehyde–3–phosphate dehydrogenase is a microtubule binding protein in a human colon tumor cell line. Launay JF, et al. **Biochim Biophys Acta** 1989 Jun 13; 996(1–2):103–9

Microtubule–associated protein tau. Identification of a novel peptide from bovine brain. Iqbal K, et al. **FEBS Lett** 1989 May 8;248(1–2):87–91

The characterization of phospholipids associated with microtubules, purified tubulin and microtubule associated proteins in vitro. Hargreaves AJ, et al. **Int J Biochem** 1988; 20(10):1133–8

A novel 58–kDa protein associates with the Golgi apparatus and microtubules. Bloom GS, et al. **J Biol Chem** 1989 Sep 25;264(27):16083–92

A glycosomal protein (p60) which is predominantly expressed in procyclic Trypanosoma brucei. Characterization and DNA sequence. Kueng V, et al. **J Biol Chem** 1989 Mar 25;264(9):5203–9

The isolation and in situ location of adligin: the microtubule cross–linking protein from Caenorhabditis elegans. Aamodt E, et al. **J Cell Biol** 1989 Mar;108(3):955–63

METABOLISM

Tau, paired helical filaments and amyloid in the neocortex: a morphometric study of 15 cases with graded intellectual status in aging and senile dementia of Alzheimer type. Delaère P, et al. **Acta Neuropathol (Berl)** 1989;77(6):645–53

High molecular weight microtubule–associated proteins bind to actin lattices (Hirano bodies). Peterson C, et al. **Acta Neuropathol (Berl)** 1988;77(2):168–74

Progressive supranuclear palsy: extensive neuropil threads in addition to neurofibrillary tangles. Very similar antigenicity of subcortical neuronal pathology in progressive supranuclear palsy and Alzheimer's disease. Probst A, et al. **Acta Neuropathol (Berl)** 1988;77(1):61–8

Increased tau accumulation in senile plaques as a hallmark in Alzheimer's disease. Shin RW, et al. **Am J Pathol** 1989 Jun;134(6):1365–71

Along the way to a neurofibrillary tangle: a look at the structure of tau. Kosik KS, et al. **Ann Med** 1989; 21(2):109–12 (32 ref.)

Proteolysis of tau by calpain. Johnson GV, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1505–11

Phosphorylation of microtubule–associated protein 2 by MAP kinase primarily involves the projection domain. Silliman CC, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):993–8

A role for repeated 18–amino–acid stretches in the sequence of synapsin I in tubulin binding? [letter] Baines AJ. **Biochem J** 1989 May 15;260(1):311–2

The specific binding of the microtubule–associated protein 2 (MAP2) to the outer membrane of rat brain mitochondria. Lindén M, et al. **Biochem J** 1989 Jul 1;261(1):167–73

Microtubule–associated polypeptides tau are altered in Alzheimer paired helical filaments. Grundke–Iqbal I, et al. **Brain Res** 1988 Aug;464(1):43–52

Immunocytochemical localization of microtubule–associated proteins 1A and 2 in the rat retina. Okabe S, et al. **Brain Res** 1989 Apr 3;483(2):335–46

Dendritic and axonal distribution of the microtubule–associated proteins MAP2 and tau in the cerebellum of the nervous mutant mouse. Brion JP, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):221–32

Distribution of MAP2 in dendritic spines and its colocalization with actin. An immunogold electron–microscope study. Morales M, et al. **Cell Tissue Res** 1989 Jun;256(3):447–56

Immunohistochemical localization of microtubule–associated proteins in the nervous system of the small intestine of guinea pig. Murofushi H, et al. **Cell Tissue Res** 1989 Feb; 255(2):315–22

Abnormal tau species are produced during Alzheimer's disease neurodegenerating process. Flament S, et al. **FEBS Lett** 1989 Apr 24;247(2):213–6

Alzheimer's disease: microtubule–associated proteins 2 (MAP 2) are not components of paired helical filaments. Rosemblatt M, et al. **FEBS Lett** 1989 Jul 31;252(1–2):91–4

Inhibitory effects of poly(L–aspartic acid) on the assembly of brain microtubules and the interaction of microtubule–associated protein 2 with F–actin in vitro. Nakamura A, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):93–7

Two separate 18–amino acid domains of tau promote the polymerization of tubulin. Ennulat DJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5327–30

Estramustine binds a MAP–1–like protein to inhibit microtubule assembly in vitro and disrupt microtubule organization in DU 145 cells. Stearns ME, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2647–56

Estramustine binds MAP–2 to inhibit microtubule assembly in vitro. Stearns ME, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):331–42

Distribution of tau proteins in the normal human central and peripheral nervous system. Trojanowski JQ, et al. **J Histochem Cytochem** 1989 Feb;37(2):209–15

Timing of expression of tau and its encoding mRNAs in the developing cerebral neocortex and cerebellum of the mouse. Mangin G, et al. **J Neurochem** 1989 Jul;53(1):45–50

The earliest–generated neurons of the cat cerebral cortex: characterization by MAP2 and neurotransmitter immunohistochemistry during fetal life. Chun JJ, et al. **J Neurosci** 1989 May;9(5):1648–67

MAP 1A and MAP 1B are structurally related microtubule associated proteins with distinct developmental patterns in the CNS. Schoenfeld TA, et al. **J Neurosci** 1989 May; 9(5):1712–30

The sequential appearance of low– and high–molecular–weight forms of MAP2 in the developing cerebellum. Tucker RP, et al. **J Neurosci** 1988 Dec; 8(12):4503–12

The presence of tau distinguishes Lewy bodies of diffuse Lewy body disease from those of idiopathic Parkinson disease. Galloway PG, et al. **Neurosci Lett** 1989 May 22; 100(1–3):6–10

Effect of hypothyroidism on the expression of three microtubule–associated proteins (1A, 1B and 2) in developing rat cerebellum. Benjamin S, et al. **Neuroscience** 1988 Dec;27(3):931–9

Rearrangement of microtubule associated protein parallels the morphological transformation of neurons from dorsal root ganglion. Hernández MA, et al. **Neuroscience** 1989; 29(2):471–7

Rapid turnover of microtubule–associated protein MAP2 in the axon revealed by microinjection of biotinylated MAP2 into cultured neurons. Okabe S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4127–31

Microtubule–associated protein MAP2 shares a microtubule binding motif with tau protein. Lewis SA, et al. **Science** 1988 Nov 11;242(4880):936–9

[Direct demonstration of abnormal phosphorylation of Tau microtubular proteins in Alzheimer's disease] Flament S, et al. **C R Acad Sci [III]** 1989;308(3):77–82 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Microinjection of antibodies to a 62 kd mitotic apparatus protein arrests mitosis in dividing sea urchin embryos. Dinsmore JH, et al. **Cell** 1989 Apr 7;57(1):127–34

Tubulin and MAP2 regulate the PCSL phosphatase activity. A possible new role for microtubular proteins. Jessus C, et al. **Eur J Biochem** 1989 Mar 1;180(1):15–22

PHYSIOLOGY

Microtubule–associated protein–2 stimulates DNA synthesis catalyzed by the nuclear matrix. Shioda M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):834–41

High–Mr microtubule–associated proteins: properties and functions. Wiche G. **Biochem J** 1989 Apr 1;259(1):1–12 (163 ref.)

Microtubule–assembly inhibitor protein. Its distribution, localization and physicochemical properties. Kotani S, et al. **Eur J Biochem** 1988 Oct 1;176(3):573–80

Cell cycle–dependent changes in the dynamics of MAP 2 and MAP 4 in cultured cells. Olmsted JB, et al. **J Cell Biol** 1989 Jul;109(1):211–23

Phylogenetic conservation of brain microtubule–associated proteins MAP2 and tau. Viereck C, et al. **Neuroscience** 1988 Sep;26(3):893–904

Plasticity in brain development. Aoki C, et al. **Sci Am** 1988 Dec;259(6):56–64 (4 ref.)

Biochemical effects of Navelbine on tubulin and associated proteins. Fellous A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):9–14

Immature and mature variants of MAP2 and tau proteins and neuronal plasticity [news] Nunez J. **Trends Neurosci** 1988 Nov;11(11):477–9 (30 ref.)

MICROTUBULE PROTEINS

ANALYSIS

Immunocytochemical studies with antibodies to three proteins prominent in the isolated microtubule cytoskeleton of a trypanosomatid. Bramblett GT, et al. **Cell Motil Cytoskeleton** 1989;13(3):145–57

Distribution of phosphorylated spindle–associated proteins in the diatom Stephanopyxis turris. Wordeman L, et al. **Cell Motil Cytoskeleton** 1989;12(1):33–41

Microtubules in cardiac myocytes. Rappaport L, et al. **Int Rev Cytol** 1988;113:101–43 (159 ref.)

Monoclonal antibodies to kinesin heavy and light chains stain vesicle–like structures, but not microtubules, in cultured cells. Pfister KK, et al. **J Cell Biol** 1989 Apr;108(4):1453–63

Lewy bodies contain epitopes both shared and distinct from Alzheimer neurofibrillary tangles. Galloway PG, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):654–63

IMMUNOLOGY

Inhibition of kinesin–driven microtubule motility by monoclonal antibodies to kinesin heavy chains. Ingold AL, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2657–67

Characterization of antibodies as probes for structural and biochemical studies of tektins from ciliary and flagellar microtubules. Linck RW, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):453–66

[Microinjections of antibodies against microtubule proteins: the effect on distribution and movement of melanosomes in melanophores] Leonova EV, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1469–72 **(Rus)**

ISOLATION & PURIFICATION

Copurification of kinesin polypeptides with microtubule–stimulated Mg–ATPase activity and kinetic analysis of enzymatic properties. Wagner MC, et al. **Cell Motil Cytoskeleton** 1989;12(4):195–215

METABOLISM

In vitro binding of [14C]acrylamide to neurofilament and microtubule proteins of rats. Lapadula DM, et al. **Brain Res** 1989 Feb 27;481(1):157–61

Isolation of a 45–kDa fragment from the kinesin heavy chain with enhanced ATPase and microtubule–binding activities. Kuznetsov SA, et al. **J Biol Chem** 1989 Jan 5;264(1):589–95

Molecular interaction of S–100 proteins with microtubule proteins in vitro. Donato R, et al. **J Neurochem** 1989 Aug; 53(2):566–71

MICROTUBULES

Microtubule dynamics in the chromosomal spindle fiber: analysis by fluorescence and high–resolution polarization microscopy. Cassimeris L, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):185–96

Dynamics of microtubules visualized by darkfield microscopy: treadmilling and dynamic instability. Hotani H, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):229–36

Dynein as a microtubule translocator in ciliary motility: current studies of arm structure and activity pattern. Satir P. **Cell Motil Cytoskeleton** 1988;10(1–2):263–70

Microtubule dynamics determine chromosome lagging and transport of acentric fragments. Bajer AS, et al. **Mutat Res** 1988 Oct;201(2):271–81

[Cell biological effects of fibronectin and collagen on the organization of keratin intermediate filaments and microtubules in cultured human keratinocytes] Inoue S. **Nippon Hifuka Gakkai Zasshi** 1988 Jun;98(7):709–20 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Immunocytochemical studies with antibodies to three proteins prominent in the isolated microtubule cytoskeleton of a trypanosomatid. Bramblett GT, et al. **Cell Motil Cytoskeleton** 1989;13(3):145–57

Colocalisation of acetylated microtubules, glial filaments, and mitochondria in astrocytes in vitro. Cambray–Deakin MA, et al. **Cell Motil Cytoskeleton** 1988;10(3):438–49

Establishment of a stable, acetylated microtubule bundle during neuronal commitment. Falconer MM, et al. **Cell Motil Cytoskeleton** 1989;12(3):169–80

Detection of single fluorescent microtubules and methods for determining their dynamics in living cells. Sammak PJ, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):237–45

Tubulin oligomers and microtubule oscillations. Antagonistic role of microtubule stabilizers and destabilizers. Lange G, et al. **Eur J Biochem** 1988 Dec 1;178(1):61–9

The characterization of phospholipids associated with microtubules, purified tubulin and microtubule associated proteins in vitro. Hargreaves AJ, et al. **Int J Biochem** 1988; 20(10):1133–8

A novel 58–kDa protein associates with the Golgi apparatus and microtubules. Bloom GS, et al. **J Biol Chem** 1989 Sep 25;264(27):16083–92

Albumin is a major protein component of transverse tubule vesicles isolated from skeletal muscle. Knudson CM, et al. **J Biol Chem** 1989 Jun 25;264(18):10795–8

The isolation and in situ location of adligin: the microtubule cross–linking protein from Caenorhabditis elegans. Aamodt E, et al. **J Cell Biol** 1989 Mar;108(3):955–63

Subcellular localization of functionally differentiated microtubules in squid neurons: regional distribution of microtubule–associated proteins and beta–tubulin isotypes. Arai T, et al. **J Neurochem** 1988 Dec;51(6):1825–38

[Biochemical and immunocytochemical study of the axonal domain of mature and immature microtubules] Binet S, et al. **Rev Neurol (Paris)** 1988;144(11):688–96 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Fast disassembly of microtubules induced by Mg2+ or Ca2+. Gal V, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1464–70

Phenylazoxycyanide damages microtubular protein more than its reference antibiotic, calvatic acid. Gadoni E, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1121–4

Effect of microtubule reactive drugs on steroid– and centrifugation–induced germinal vesicle migration during goldfish oocyte meiosis. Lessman CA, et al. **Biol Cell** 1988; 64(3):293–9

Comparison of the neurotoxic effects of colchicine, the vinca alkaloids, and other microtubule poisons. Goldschmidt RB, et al. **Brain Res** 1989 May 1;486(1):133–40

Taxol reveals cortical sites of microtubule assembly in Xenopus oocytes. Role of the nucleus. Jessus C, et al. **Cell Differ Dev** 1988 Sep;25(1):57–63

Spindle microtubule dynamics: modulation by metabolic inhibitors. Wadsworth P, et al. **Cell Motil Cytoskeleton** 1988;11(2):97–105

Mechanisms by which mammalian cells acquire resistance to drugs that affect microtubule assembly. Cabral F, et al. **FASEB J** 1989 Mar;3(5):1593–9 (60 ref.)

Elimination of permeability mutants from selections for drug resistance in mammalian cells. Schibler MJ, et al. **FASEB J** 1989 Feb;3(2):163–8

Increased spindle resistance to antimicrotubule agents in cells prone to chromosomal nondisjunction. Avivi L, et al. **Hum Genet** 1989 Sep;83(2):165–70

Inhibitory effects of poly(L–aspartic acid) on the assembly of brain microtubules and the interaction of microtubule–associated protein 2 with F–actin in vitro. Nakamura A, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):93–7

End–to–end joining of taxol–stabilized GDP–containing microtubules. Williams RC Jr, et al. **J Biol Chem** 1989 Jan 25;264(3):1663–70

Actions of cytochalasins on the organization of actin filaments and microtubules in a neuronal growth cone. Forscher P, et al. **J Cell Biol** 1988 Oct;107(4):1505–16

'Corkscrewing', as evidence for force generation within a detergent–extracted microtubule translocation system from insect ovaries. Stebbings H, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):21–7

Acetaldehyde substoichiometrically inhibits bovine neurotubulin polymerization. Smith SL, et al. **J Clin Invest** 1989 Jul;84(1):337–41

Dissociation of the inhibition of fast axonal transport by chlorimipramine from an effect on axonal microtubules. Lavoie PA, et al. **J Neurobiol** 1988 Sep;19(6):498–506

Cluster formation in PHA–stimulated mononuclear cells from peripheral blood: effects of colcemid and taxol. Sondell K, et al. **Lymphology** 1988 Sep;21(3):181–6

Effect of taxol on the heparin–induced secretion of lipoprotein lipase from cardiac myocytes. Severson DL, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):17–22

Selective inhibition of cytokinesis in sea urchin embryos by low concentrations of stypoldione, a marine natural product that reacts with sulfhydryl groups. O'Brien ET, et al. **Mol Pharmacol** 1989 May;35(5):635–42

Studies of the interaction of chemicals with microtubule assembly in vitro can be used as an assay for detection of cytotoxic chemicals and possible inducers of aneuploidy. Wallin M, et al. **Mutat Res** 1988 Oct;201(2):303–11 (48 ref.)

The interaction of triethyl lead with tubulin and microtubules. Zimmermann HP, et al. **Mutat Res** 1988 Oct; 201(2):293–302

Uptake of colchicine, a microtubular system disrupting agent,

by isolated rat hepatocytes. Wierzba K, et al. **Pharm Res** 1989 Mar;6(3):235–8

Microtubule-dependent effect of phorbol ester on the contractility of cytoskeleton of cultured fibroblasts. Lyass LA, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9538–41

Intracellular effects of estramustine (Estracyt/Emcyt). Tew KD, et al. **Prog Clin Biol Res** 1989;303:169–75 (24 ref.)

In situ analysis of the action of Navelbine on various types of microtubules using immunofluorescence. Binet S, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):5–8

The influence of high dietary aluminum on brain microtubule polymerization in mice. Oteiza PI, et al. **Toxicol Lett** 1989 Jun;47(3):279–85

[The effects of the calmodulin antagonist–trifluoperazine in cell proliferation and microtubule assembly] Zhao YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):481–91 (Eng. Abstr.) **(Chi)**

[Reaction of the cell center to exposure to the calcium ionophore A-23187] Alieva IB, et al. **Tsitologiia** 1989 Mar; 31(3):259–66 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Characterization of a microtubule-stimulated adenosinetriphosphatase activity associated with microtubule gelation–contraction. Gao BC, et al. **Biochemistry** 1988 Jul 12;27(14):5032–8

Glyceraldehyde-3-phosphate dehydrogenase is a microtubule binding protein in a human colon tumor cell line. Launay JF, et al. **Biochim Biophys Acta** 1989 Jun 13; 996(1–2):103–9

Casein kinases I and II bound to pig brain microtubules. Risnik VV, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):315–24

Association of casein kinase II with microtubules. Serrano L, et al. **Exp Cell Res** 1989 Mar;181(1):263–72

The distribution, abundance and subcellular localization of kinesin. Hollenbeck PJ. **J Cell Biol** 1989 Jun;108(6):2335–42

Monoclonal antibodies to kinesin heavy and light chains stain vesicle-like structures, but not microtubules, in cultured cells. Pfister KK, et al. **J Cell Biol** 1989 Apr;108(4):1453–63

Histochemical features of tubular aggregates in diseased human skeletal muscle fibres. Meijer AE. **J Neurol Sci** 1988 Aug;86(1):73–82

IMMUNOLOGY

Immunocytochemical localization of cytoskeletal antigens in KB and HEp-2 cells. Price AS, et al. **Diagn Clin Immunol** 1988;5(6):400–13

Production of antibodies directed against microtubular aggregates in hepatocytes of chimpanzees with non-A, non-B hepatitis. Maeda T, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1401–7

METABOLISM

Effects of microtubular transport blockade in peripheral nerve axons on chronic unallayable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105

Mechanism of GTP hydrolysis in tubulin polymerization: characterization of the kinetic intermediate microtubule-GDP-Pi using phosphate analogues. Carlier MF, et al. **Biochemistry** 1989 Feb 21;28(4):1783–91

Dynamics of Antarctic fish microtubules at low temperatures. Himes RH, et al. **Biochemistry** 1989 Jun 13;28(12):5089–95

Biochemical dissection of the role of the one-kilodalton carboxyl-terminal moiety of tubulin in its assembly into microtubules. Vera JC, et al. **Biochemistry** 1989 Jan 10; 28(1):333–9

Stimulation of microtubule assembly by recombinant human interferon-alpha and interferon-gamma. Ward LD, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):317–9

A three-domain structure of kinesin heavy chain revealed by DNA sequence and microtubule binding analyses. Yang JT, et al. **Cell** 1989 Mar 10;56(5):879–89

Quantitative evaluation of changes in the microtubule content of lymphocytes. Bilej M, et al. **Cell Biol Int Rep** 1989 Apr; 13(4):337–43

In vitro phosphorylation of Paramecium axonemes and permeabilized cells. Hamasaki T, et al. **Cell Motil Cytoskeleton** 1989;12(1):1–11

Binding of kinesin to stress fibers in fibroblasts under condition of microtubule depolymerization. Okuhara K, et al. **Cell Motil Cytoskeleton** 1989;12(2):71–7

Calmodulin is associated with microtubules forming in PTK1 cells upon release from nocodazole treatment. Sweet SC, et al. **Cell Motil Cytoskeleton** 1989;12(2):113–22

Arthropod immune system. V. Activated immunocytes (granulocytes) of the German cockroach, Blattella germanica (L.) (Dictyoptera: Blattellidae) show increased number of microtubules and nuclear pores during immune reaction to foreign tissue. Han SS, et al. **Cell Struct Funct** 1988 Aug;13(4):333–43

A variant beta-tubulin isoform of Drosophila melanogaster (beta 3) is expressed primarily in tissues of mesodermal origin in embryos and pupae, and is utilized in populations of transient microtubules. Kimble M, et al. **Dev Biol** 1989 Feb;131(2):415–29

Acetylated alpha-tubulin in microtubules during mouse fertilization and early development. Schatten G, et al. **Dev Biol** 1988 Nov;130(1):74–86

Involvement of cdc13+ in mitotic control in Schizosaccharomyces pombe: possible interaction of the gene product with microtubules. Booher R, et al. **EMBO J** 1988 Aug;7(8):2321–7

Oscillations in microtubule polymerization: the rate of GTP regeneration on tubulin controls the period. Melki R, et al. **EMBO J** 1988 Sep;7(9):2653–9

Binding Ca2+ to intracellular or to extracellular sites of dihydropyridine receptor of rabbit skeletal muscle discriminates between in vitro binding of Ca2+-channel agonist and antagonist. Kanngiesser U, et al. **Eur J Biochem** 1989 May 1;181(2):467–73

Reclustering of scattered Golgi elements occurs along microtubules. Ho WC, et al. **Eur J Cell Biol** 1989 Apr; 48(2):250–63

Secretory granules and endosomes show saltatory movement biased to the anterograde and retrograde directions, respectively, along microtubules in AtT20 cells. Kreis TE, et al. **Eur J Cell Biol** 1989 Jun;49(1):128–39

Induction of random microtubule polymerization in cold and drug-treated PtK1 cells following hyperosmotic shock treatment. Mullins JM, et al. **Eur J Cell Biol** 1989 Jun; 49(1):149–53

Organization of the vimentin system and its spatial relationship to the microtubule complex during the division of mammalian cells growing attached and in suspension. Paulin-Levasseur M, et al. **Eur J Cell Biol** 1989 Jun; 49(1):189–95

Calmodulin colocalization with cold-stable and nocodazole-stable microtubules in living PtK1 cells. Sweet SC, et al. **Eur J Cell Biol** 1988 Oct;47(1):88–93

cAMP-dependent phosphorylation of soluble and crude microtubule fractions of rat cerebral cortex after prolonged desmethylimipramine treatment. Perez J, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):305–16

Solubilization and characterization of a ouabain-sensitive protein from transverse tubule membrane-junctional sarcoplasmic reticulum complexes (TTM-JSR) in cat cardiac muscle. Fujino S, et al. **Experientia** 1989 May 15; 45(5):466–9

A common amino acid sequence in 190-kDa microtubule-associated protein and tau for the promotion of microtubule assembly. Aizawa H, et al. **J Biol Chem** 1989 Apr 5;264(10):5885–90

Isolation of a 45-kDa fragment from the kinesin heavy chain with enhanced ATPase and microtubule-binding activities. Kuznetsov SA, et al. **J Biol Chem** 1989 Jan 5;264(1):589–95

Identification of a lysosome membrane protein which could mediate ATP-dependent stable association of lysosomes to microtubules. Mithieux G, et al. **J Biol Chem** 1989 Mar 15;264(8):4664–8

Microtubule dynamics investigated by microinjection of Paramecium axonemal tubulin: lack of nucleation but proximal assembly of microtubules at the kinetochore during prometaphase. Geuens G, et al. **J Cell Biol** 1989 Mar;108(3):939–53

Microtubules of the kinetochore fiber turn over in metaphase but not in anaphase. Gorbsky GJ, et al. **J Cell Biol** 1989 Aug;109(2):653–62

Posttranslational modification of distinct microtubule subpopulations during cell polarization and differentiation in the mouse preimplantation embryo. Houliston E, et al. **J Cell Biol** 1989 Feb;108(2):543–51

Isolated beta-heavy chain subunit of dynein translocates microtubules in vitro. Sale WS, et al. **J Cell Biol** 1988 Nov; 107(5):1793–7

Asymmetric behavior of severed microtubule ends after ultraviolet-microbeam irradiation of individual microtubules in vitro. Walker RA, et al. **J Cell Biol** 1989 Mar;108(3):931–7

Microtubules are acetylated in domains that turn over slowly. Webster DR, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):57–65

Interaction between S-100 proteins and steady-state and taxol-stabilized microtubules in vitro. Donato R, et al. **J Neurochem** 1989 Apr;52(4):1010–7

Immunofluorescence studies of the cytoskeletal and contractile elements in cultured human trabecular cells. Tamura M, et al. **Jpn J Ophthalmol** 1989;33(1):95–102

Measurement of calcium release in isolated membrane systems: coupling between the transverse tubule and sarcoplasmic reticulum. Ikemoto N, et al. **Methods Enzymol** 1988;157:469–80

Tyrosination-detyrosination of tubulin and microtubules during the development of chick erythrocytes. Beltramo DM, et al. **Mol Cell Biochem** 1989 Aug 15;89(1):47–56

Binding of vinblastine to stabilized microtubules. Singer WD, et al. **Mol Pharmacol** 1989 Sep;36(3):366–70

Assembly and disassembly of brain tubulin is affected by high ammonia levels. Miñana MD, et al. **Neurochem Res** 1989 Mar;14(3):235–8

Analysis of methyl mercury binding sites on tubulin subunits and microtubules. Vogel DG, et al. **Pharmacol Toxicol** 1989 Feb;64(2):196–201

Microtubule-associated protein MAP2 shares a microtubule binding motif with tau protein. Lewis SA, et al. **Science** 1988 Nov 11;242(4880):936–9

[45 kDa fragment of the kinesin molecule possesses high ATPase activity and binds to microtubules] Kuznetsov SA, et al. **Mol Biol (Mosk)** 1989 Mar-Apr;23(2):580–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Reconstitution of endoplasmic reticulum in rapidly dividing cells of early Xenopus embryos. Manuel Dominguez J, et al. **Am J Anat** 1989 Sep;186(1):99–113

To what extent is microtubular network involved in antidiuretic response? Valenti G, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1098–106

Microtubule dynamics and kinetochore function in mitosis. Mitchison TJ. **Annu Rev Cell Biol** 1988;4:527–49 (67 ref.)

The role of microtubules in platelet secretory release. Berry S, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):46–56

Post-translational modifications of tubulin and the dynamics of microtubules in mouse oocytes and zygotes. de Pennart H, et al. **Biol Cell** 1988;64(3):375–8

From cilia and flagella to intracellular motility and back again: a review of a few aspects of microtubule-based motility. Huitorel P. **Biol Cell** 1988;63(2):249–58 (93 ref.)

Plant actin filament and microtubule interactions during anaphase—telophase transition: effects of antagonist drugs. Schmit AC, et al. **Biol Cell** 1988;64(3):309–19

Head and tail. Schliwa M. **Cell** 1989 Mar 10;56(5):719–20 (19 ref.)

Studies of the mechanisms of nuclear control over the synthesis of mitochondrial DNA in sea urchin eggs. Rinaldi AM, et al. **Cell Biol Int Rep** 1989 Feb;13(2):181–7

Force production and microtubule-coupled cell movement. Conference on Cell Motility. August 20–25, 1988, Bolton Valley, Vermont. Abstracts. **Cell Motil Cytoskeleton** 1988; 11(3):182–217

Cultured cell extracts support organelle movement on microtubules in vitro. Dabora SL, et al. **Cell Motil Cytoskeleton** 1988;10(4):482–95

2-Chloro adenosine triphosphate as substrate for sea urchin axonemal movement. Omoto CK, et al. **Cell Motil Cytoskeleton** 1989;13(4):239–44

Microtubules are required for centrosome expansion and positioning while microfilaments are required for centrosome separation in sea urchin eggs during fertilization and mitosis. Schatten H, et al. **Cell Motil Cytoskeleton** 1988;11(4):248–59

Control of reactivation and microtubule sliding by calcium, strontium, and barium in detergent-extracted macrocilia of Beroë. Tamm SL. **Cell Motil Cytoskeleton** 1989; 12(2):104–12

Copurification of kinesin polypeptides with microtubule-stimulated Mg-ATPase activity and kinetic analysis of enzymatic properties. Wagner MC, et al. **Cell Motil Cytoskeleton** 1989;12(4):195–215

Microtubule gelation-contraction in vitro and its relationship to component a of slow axonal transport. Weisenberg RC, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):331–40

ADH-induced water permeability: what role for the microtubular network? Bourguet J, et al. **Comp Biochem Physiol [A]** 1988;90(4):669–72 (33 ref.)

Sea urchin primary mesenchyme cells: ingression occurs independent of microtubules. Anstrom JA. **Dev Biol** 1989 Jan;131(1):269–75

Teloplasm formation in a leech, Helobdella triserialis, is a microtubule-dependent process. Astrow SH, et al. **Dev Biol** 1989 Oct;135(2):306–19

Opposing microtubule- and actin-dependent forces in the development and maintenance of structural polarity in retinal photoreceptors. Madreperla SA, et al. **Dev Biol** 1989 Jan;131(1):149–60

Effects of cytoskeletal inhibitors on ooplasmic segregation and microtubule organization during fertilization and early development in the ascidian Molgula occidentalis. Sawada T, et al. **Dev Biol** 1989 Apr;132(2):331–42

Initiation of DNA synthesis by microtubule disruption in quiescent rat 3Y1 cells. Shinohara Y, et al. **Eur J Biochem** 1989 Aug 1;183(2):275–80

Microtubule and centrosome distribution during sheep fertilization. Le Guen P, et al. **Eur J Cell Biol** 1989 Apr; 48(2):239–49

Dynamic instability of native microtubules from squid axons is rare and independent of gliding and vesicle transport. Seitz-Tutter D, et al. **Exp Cell Res** 1988 Oct;178(2):504–12

Role of microtubules in pigment granule migration in teleost retinal pigment epithelial cells. Troutt LL, et al. **Exp Eye Res** 1989 Mar;48(3):433–43

The stimulatory effect of bilirubin on phagocytic activity. Bilej M, et al. **Folia Microbiol (Praha)** 1989;34(2):136–40

Microtubule assembly is required for the formation of the pronuclei, nuclear lamin acquisition, and DNA synthesis during mouse, but not sea urchin, fertilization. Schatten H, et al. **Gamete Res** 1989 Jul;23(3):309–22

Biological implications of microtubule dynamics. Kirschner MW. **Harvey Lect** 1987–88;83:1–20 (37 ref.)

The role of the cytoskeletal protein, tubulin, in the mode of action and mechanism of drug resistance to benzimidazoles [published erratum appears in Int J Parasitol 1989 May;19(3):359] Lacey E. **Int J Parasitol** 1988 Nov; 18(7):885–936 (282 ref.)

Function of microtubules under inadequate protein diet. Bhutani V, et al. **Int J Vitam Nutr Res** 1988;58(4):452–5

Role of nucleotide hydrolysis in the dynamics of actin filaments and microtubules. Carlier MF. **Int Rev Cytol** 1989; 115:139–70 (142 ref.)

Quantitative analysis of sea urchin egg kinesin-driven microtubule motility. Cohn SA, et al. **J Biol Chem** 1989 Mar 15;264(8):4290–7

Dynein ATPases as microtubule motors. Gibbons IR. **J Biol Chem** 1988 Nov 5;263(31):15837–40 (62 ref.)

Enzymes for microtubule-dependent motility. McIntosh JR,

et al. **J Biol Chem** 1989 Apr 15;264(11):6001–4 (58 ref.)
Microtubules are involved in the secretion of proteins at the apical cell surface of the polarized epithelial cell, Madin–Darby canine kidney. Parczyk K, et al. **J Biol Chem** 1989 Oct 5;264(28):16837–46
Role of microtubules in polarized delivery of apical membrane proteins to the brush border of the intestinal epithelium. Achler C, et al. **J Cell Biol** 1989 Jul; 109(1):179–89
The cortical microfilament system of lymphoblasts displays a periodic oscillatory activity in the absence of microtubules: implications for cell polarity. Bornens M, et al. **J Cell Biol** 1989 Sep;109(3):1071–83
Real-time observations of microtubule dynamic instability in living cells. Cassimeris L, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 1):2223–31
Nocodazole, a microtubule-active drug, interferes with apical protein delivery in cultured intestinal epithelial cells (Caco-2). Eilers U, et al. **J Cell Biol** 1989 Jan;108(1):13–22
Tau proteins: the molecular structure and mode of binding on microtubules. Hirokawa N, et al. **J Cell Biol** 1988 Oct; 107(4):1449–59
Inhibition of kinesin-driven microtubule motility by monoclonal antibodies to kinesin heavy chains. Ingold AL, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2657–67
Functions of microtubules in the Saccharomyces cerevisiae cell cycle. Jacobs CW, et al. **J Cell Biol** 1988 Oct; 107(4):1409–26
Progressive and spatially differentiated stability of microtubules in developing neuronal cells. Lim SS, et al. **J Cell Biol** 1989 Jul;109(1):253–63
Cell cycle–dependent changes in the dynamics of MAP 2 and MAP 4 in cultured cells. Olmsted JB, et al. **J Cell Biol** 1989 Jul;109(1):211–23
Spatial segregation of the regulated and constitutive secretory pathways. Rivas RJ, et al. **J Cell Biol** 1989 Jul;109(1):51–60
Interactions of cytoplasmic granules with microtubules in human neutrophils. Rothwell SW, et al. **J Cell Biol** 1989 Jun;108(6):2313–26
Formation of membrane networks in vitro by kinesin-driven microtubule movement. Vale RD, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2233–41
Microtubule translocation properties of intact and proteolytically digested dyneins from Tetrahymena cilia. Vale RD, et al. **J Cell Biol** 1989 Jun;108(6):2327–34
Dynamic instability of individual microtubules analyzed by video light microscopy: rate constants and transition frequencies. Walker RA, et al. **J Cell Biol** 1988 Oct; 107(4):1437–48
The reorganization of microfilaments, centrosomes, and microtubules during in vitro small wound reendothelialization. Wong MK, et al. **J Cell Biol** 1988 Nov;107(5):1777–83
Alteration of microtubule physiology in hepatocytes by insulin. Caron JM. **J Cell Physiol** 1989 Mar;138(3):603–10
Microtubule-dependent cell cycle regulation is implicated in the G2 phase of Hydra cells. Dübel S, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):347–59
The use of cell division cycle mutants to investigate the control of microtubule distribution in the fission yeast Schizosaccharomyces pombe. Hagan IM, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):343–57
Chance encounters and precision in mitosis [editorial] Nicklas RB. **J Cell Sci** 1988 Mar;89 (Pt 3):283–5
Actin cortex and microtubular system in morphogenesis: cooperation and competition. Vasiliev JM. **J Cell Sci Suppl** 1987;8:1–18 (36 ref.)
Microtubule polarity and distribution in teleost photoreceptors. Troutt LL, et al. **J Neurosci** 1988 Jul; 8(7):2371–80
Relations between cell volume control, microfilaments and microtubules networks in T2 and PC12 cultured cells. Cornet M, et al. **J Physiol (Paris)** 1988;83(1):43–9
Subpopulations of microtubules with differential sensitivity to nocodazole: role in the structural organization of the Golgi complex and the lysosomal system. Thyberg J, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):259–74
A thermodynamic model for force integration and microtubule assembly during axonal elongation. Buxbaum RE, et al. **J Theor Biol** 1988 Oct 7;134(3):379–90
Cell division. Photoactive microtubule flux [news] Burns R. **Nature** 1989 Aug 17;340(6234):511–2
Tubulin genes and the diversity of microtubule function. Cowan NJ. **Oxf Surv Eukaryot Genes** 1984;1:36–60 (36 ref.)
Colchicine analogues that bind reversibly to tubulin define microtubular requirements for newly synthesized protein secretion in rat lacrimal gland. Herman G, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4515–9
Dynein is the motor for retrograde axonal transport of organelles. Schnapp BJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1548–52
Direct measurements of sliding between outer doublet microtubules in swimming sperm flagella. Brokaw CJ. **Science** 1989 Mar 24;243(4898):1593–6
Growth at the growth cone. Gordon-Weeks PR. **Trends Neurosci** 1989 Jul;12(7):238–40 (22 ref.)
[Study on the nuclear microtubule organizing center (MTOC)] Qi HL. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):87–99 (Eng. Abstr.) (Chi)

ULTRASTRUCTURE

Intranuclear bundles of microfilaments and microtubules in chromaffin cells of the auricle of the heart of a lungfish, Protopterus aethiopicus. Scheuermann DW, et al. **Acta Anat (Basel)** 1988;133(3):173–82
Localization of microfilaments and microtubules during dental development in the rat. Diekwisch T. **Acta Histochem Suppl (Jena)** 1989;37:209–12
Immunogold-labeled microtubule crossbridges in platinum-carbon replicas of the marginal band of erythrocyte cytoskeletons. Centonze VE, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):327–34
Microtubule–granule relationships in motile human polymorphonuclear leukocytes. Ryder MI, et al. **Anat Rec** 1988 Jul;221(3):679–86
Changes in the distribution of microtubules in rat Sertoli cells during spermatogenesis. Vogl AW. **Anat Rec** 1988 Sep; 222(1):34–41
Structure and utilization of tubulin isotypes. Sullivan KF. **Annu Rev Cell Biol** 1988;4:687–716 (152 ref.)
Secondary structure analysis of tubulin and microtubules with Raman spectroscopy. Audenaert R, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):110–5
Isolated cytoskeletons of human blood platelets: dark-field imaging of coiled and uncoiled microtubules. Kowit JD, et al. **Biol Cell** 1988;64(3):283–91
Spatial organization of microtubules in various types of cells in the embryonic tectal plate of mouse using immunofluorescence after PEG embedding. Meininger V, et al. **Biol Cell** 1988;64(3):301–8
Monotonic versus oscillating microtubule assembly: a cryo–electron microscope study. Wade RH, et al. **Biol Cell** 1989;65(1):37–44
Microtubule cytoskeleton and morphogenesis in the amoebae of the myxomycete Physarum polycephalum. Wright M, et al. **Biol Cell** 1988;63(2):239–48 (51 ref.)
Dendrites of mitral cell neurons contain microtubules of opposite polarity. Burton PR. **Brain Res** 1988 Nov 8; 473(1):107–15
Developmental study of factors controlling microtubule in vitro cold-stability in rat cerebrum. Faivre-Sarrailh C, et al. **Brain Res** 1988 Aug 1;470(2):199–204
High hydrostatic pressure effects in vivo: changes in cell morphology, microtubule assembly, and actin organization. Bourns B, et al. **Cell Motil Cytoskeleton** 1988;10(3):380–90
Microtubule-associated organelle and vesicle transport in fibroblasts. Hayden JH. **Cell Motil Cytoskeleton** 1988; 10(1–2):255–62
Dynamic instability and motile events of native microtubules from squid axoplasm. Weiss DG, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):285–95
Presence of microtubules in isolated cortices of prophase I and metaphase II oocytes in Xenopus laevis. Huchon D, et al. **Cell Tissue Res** 1988 Nov;254(2):415–20
Tension, microtubule rearrangements, and the proper distribution of chromosomes in mitosis. Ault JG, et al. **Chromosoma** 1989 Jun;98(1):33–9
Differences in microtubule stability to colchicine in extracts of guinea pig, rat and rabbit brain. Wallin M, et al. **Comp Biochem Physiol [B]** 1979;62(3):275–9
Distribution of cytoplasmic microtubules in migrating corneal epithelial cells. An immunofluorescence study. Soong HK, et al. **Cornea** 1988;7(4):267–72
Sea urchin oocytes possess elaborate cortical arrays of microfilaments, microtubules, and intermediate filaments. Boyle JA, et al. **Dev Biol** 1989 Jul;134(1):72–84
Behaviour of microtubules and actin filaments in living Drosophila embryos. Kellogg DR, et al. **Development** 1988 Aug;103(4):675–86
Microtubule bundles of Reticulomyxa networks are of uniform polarity. Euteneuer U, et al. **Eur J Cell Biol** 1989 Aug;49(2):373–6
Temperature-dependent formation of vacuolar and canalicular systems in association with degranulation in stimulated neutrophils. Hara Y, et al. **Eur J Haematol** 1989 May;42(5):474–80
Centrosome splitting during nuclear elongation in the Drosophila embryo. Callaini G, et al. **Exp Cell Res** 1988 Oct;178(2):415–25
Direct observation of microtubules with the scanning tunneling microscope. Simić-Krstić Y, et al. **FASEB J** 1989 Aug;3(10):2184–8
Distribution of microtubules during the first meiotic cell division in the mouse oocyte: effect of taxol. Rime H, et al. **Gamete Res** 1987 May;17(1):1–13
mec-7 is a beta-tubulin gene required for the production of 15-protofilament microtubules in Caenorhabditis elegans. Savage C, et al. **Genes Dev** 1989 Jun;3(6):870–81
The microtubular cytoskeleton and chromosomes of unfertilized human oocytes aged in vitro. Eichenlaub-Ritter U, et al. **Hum Genet** 1988 Nov; 80(3):259–64
Characteristics of microtubules at the different stages of neuronal differentiation and maturation. Meininger V, et al. **Int Rev Cytol** 1989;114:21–79 (295 ref.)
Microtubules in cardiac myocytes. Rappaport L, et al. **Int Rev Cytol** 1988;113:101–43 (159 ref.)
Microtubule depolymerization inhibits the regulation of alpha 1-acid glycoprotein mRNA by hepatocyte stimulating factor. Carter KC, et al. **J Biol Chem** 1989 Jan 5; 264(1):515–9
The effect of podophyllotoxin on microtubule dynamics. Schilstra MJ, et al. **J Biol Chem** 1989 May 25; 264(15):8827–34
Microtubule assembly in Friend erythroleukemia cells spread on fibronectin- and lectin-coated substrates. Benedetto A, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):53–8
Structural evidence for direct interaction between the molecular components of the transverse tubule/sarcoplasmic reticulum junction in skeletal muscle. Block BA, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2587–600
Centrosome movement in the early divisions of Caenorhabditis elegans: a cortical site determining centrosome position. Hyman AA. **J Cell Biol** 1989 Sep; 109(3):1185–93
Mutations at twelve independent loci result in absence of outer dynein arms in Chylamydomonas reinhardtii. Kamiya R. **J Cell Biol** 1988 Dec;107(6 Pt 1):2253–8
Expression of multiple tau isoforms and microtubule bundle formation in fibroblasts transfected with a single tau cDNA. Kanai Y, et al. **J Cell Biol** 1989 Sep;109(3):1173–84
Polewards microtubule flux in the mitotic spindle: evidence from photoactivation of fluorescence. Mitchison TJ. **J Cell Biol** 1989 Aug;109(2):637–52
Microtubule polarities indicate that nucleation and capture of microtubules occurs at cell surfaces in Drosophila. Mogensen MM, et al. **J Cell Biol** 1989 Apr;108(4):1445–52
Sertoli cell processes have axoplasmic features: an ordered microtubule distribution and an abundant high molecular weight microtubule-associated protein (cytoplasmic dynein). Neely MD, et al. **J Cell Biol** 1988 Nov; 107(5):1767–76
Centrin-mediated microtubule severing during flagellar excision in Chlamydomonas reinhardtii. Sanders MA, et al. **J Cell Biol** 1989 May;108(5):1751–60
Estramustine binds a MAP-1-like protein to inhibit microtubule assembly in vitro and disrupt microtubule organization in DU 145 cells. Stearns ME, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2647–56
Release of intact microtubule-capping structures from Tetrahymena cilia. Suprenant KA, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2259–69
The unusual microtubule polarity in teleost retinal pigment epithelial cells. Troutt LL, et al. **J Cell Biol** 1988 Oct; 107(4):1461–4
Evidence for active interactions between microfilaments and microtubules in myxomycete flagellates. Uyeda TQ, et al. **J Cell Biol** 1989 May;108(5):1727–35
Flexural rigidity of marginal bands isolated from erythrocytes of the newt. Waugh RE, et al. **J Cell Biol** 1989 May; 108(5):1711–6
Microtubules associate with actin-containing filaments at discrete sites along the ventral surface of Allogromia reticulopods. Bowser SS, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):297–307
Centriolar location during blood cell spreading and motion in vitro: an ultrastructural analysis. Gudima GO, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):225–41
Ultraviolet microbeam irradiation of microtubules in vitro. The action spectrum for local depolymerization of marginal band microtubules in vitro matches that for reducing birefringence of chromosomal spindle fibres in vivo. Hughes K, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):469–78
The shape of cultured epithelial cells does not depend on the integrity of their microtubules. Middleton CA, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):337–45
Intermicrotubular actin filaments in the transalar cytoskeletal arrays of Drosophila. Mogensen MM, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):431–8
Effects of elevated intracellular magnesium on cytoskeletal integrity. Prescott AR, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):321–9
Tubulin post-translational modifications and the construction of microtubular organelles in Trypanosoma brucei. Sasse R, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):577–89
Ultraviolet microbeam irradiation of chromosomal spindle fibres shears microtubules and permits study of the new free ends in vivo. Wilson PJ, et al. **J Cell Sci** 1988 Dec; 91 (Pt 4):455–68
Concanavalin A binding sites of rough endoplasmic reticulum containing intracisternal microtubules in canine neurones. Atoji Y, et al. **J Comp Pathol** 1988 Jul;99(1):55–63
Neonatal lupus syndrome and microtubular structure. Nitta Y, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):54–8
Cytoplasmic tubular arrays in canine neurons containing intracisternal microtubules. Atoji Y, et al. **J Electron Microsc (Tokyo)** 1988;37(4):208–11
Comparison of the effects of critical point-drying and freeze-drying on cytoskeletons and microtubules. Lindroth M, et al. **J Microsc** 1988 Aug;151 (Pt 2):103–14
The reorientation of the Golgi apparatus and the microtubule-organizing center in the cytotoxic effector cell is a prerequisite in the lysis of bound target cells. Kupfer A, et al. **J Mol Cell Immunol** 1985;2(1):37–49
Vacuolation of muscle fibers near sarcolemmal breaks represents T-tubule dilatation secondary to enhanced sodium pump activity. Casademont J, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):618–28
Differential localization of microtubules in cerebellar cells. Ginzburg I, et al. **J Neurosci** 1989 Jun;9(6):1961–7
Taxol-induced microtubules from different sources: an ultrastructural comparison. Tiezzi A, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):613–7
The substructure of marginal bundles in human blood platelets. Xu Z, et al. **J Ultrastruct Mol Struct Res** 1988 Jun;99(3):244–53

Early changes in the substructure of the marginal bundle in human blood platelets responding to adenosine diphosphate. Xu Z, et al. **J Ultrastruct Mol Struct Res** 1988 Jun;99(3):254–60

Stabilization of blood platelet microtubular system by staurosporine. Ishihara N, et al. **Life Sci** 1989; 44(18):1309–16

Isolation of transverse tubule membranes from skeletal muscle: ion transport activity, reformation of triad junctions, and isolation of junctional spanning protein of triads. Caswell AH, et al. **Methods Enzymol** 1988;157:68–84

Isolation of sarcoplasmic reticulum fractions referable to longitudinal tubules and junctional terminal cisternae from rabbit skeletal muscle. Chu A, et al. **Methods Enzymol** 1988; 157:36–46

Isolation and characterization of cytoplasmic fibrils from treponemes. Masuda K, et al. **Microbiol Immunol** 1989; 33(8):619–30

Membrane domains of AChR clusters of cultured rat myotubes revealed by rapid-freeze, deep-etch, rotary-replication. Pumplin DW, et al. **P R Health Sci J** 1988 Aug;7(2):96–9

Polarity orientation of microtubules in hippocampal neurons: uniformity in the axon and nonuniformity in the dendrite. Baas PW, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8335–9

Observations of colloidal gold labelled platelet microtubules: high voltage electron microscopy and low voltage-high resolution scanning electron microscopy. Albrecht RM, et al. **Scanning Microsc** 1989 Mar;3(1):273–7; discussion 277–8

The development of microtubular arrays in the germ tissue of an insect telotrophic ovary. Valdimarsson G, et al. **Tissue Cell** 1989;21(1):123–38

The basis of polarity in neurons. Black MM, et al. **Trends Neurosci** 1989 Jun;12(6):211–4 (35 ref.)

Frequent occurrence of microtubuloreticular complexes encountered during routine ultrastructural examination at a children's hospital. Mills AE, et al. **Ultrastruct Pathol** 1988 Nov-Dec;12(6):599–604

Immunotactoid glomerulopathy with fingerprint immune deposits. A variant of lupus nephritis? Lai FM, et al. **Virchows Arch [A]** 1989;415(2):181–6

Effects of partial hepatectomy on microtubules and hepatocellular transport of indocyanine green in rats. Fukuyama T, et al. **Virchows Arch [B]** 1988;56(1):5–12

[Stereoscopic analysis of the arrangement of microtubules around the centrosome in a tissue culture] Alieva IB, et al. **Dokl Akad Nauk SSSR** 1989;305(5):1232–4 **(Rus)**

[The effect of high hydrostatic pressure on the cell center and microtubules in tissue culture cells] Vorob'ev IA, et al. **Tsitologiia** 1989 Feb;31(2):170–5 (Eng. Abstr.) **(Rus)**

MICROTUS see CRICETIDAE

MICROVILLI

Membrane water and solute permeability determined quantitatively by self-quenching of an entrapped fluorophore. Chen PY, et al. **Biochemistry** 1988 Jul 26; 27(15):5713–8

ANALYSIS

Nutrition and biomembranes: additional information concerning the incidence of dietary polyunsaturated fatty acids on membrane organization and biological activity. Léger CL, et al. **Biochimie** 1989 Jan;71(1):159–65

Expression of brush border calmodulin-binding proteins during human small and large bowel differentiation. Rochette-Egly C, et al. **Cell Differ** 1988 Jul;24(2):119–31

Unique isoactins in the brush border of rat intestinal epithelial cells. Sawtell NM, et al. **Cell Motil Cytoskeleton** 1988; 11(4):318–25

Z-protein, a component of the skeletal muscle Z-line, is located at the apical tips of microvilli of chicken intestinal epithelial cells. Ohashi K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):115–8

Topography and microfilament core association of a cell surface glycoprotein of ascites tumor cell microvilli. Sheng Z, et al. **J Cell Biochem** 1989 Aug;40(4):453–66

Comparative chromatographic study of modifications of brush-border membrane vesicles induced by an essential fatty acid-deficient diet. Alessandri JM, et al. **J Chromatogr** 1988 Nov 18;432:75–91

ANATOMY & HISTOLOGY

Quantitative histochemistry of brush border-associated neutral alpha-D-glucosidases in rat jejunum and kidney. Ruhnke M, et al. **Acta Histochem Suppl (Jena)** 1989;37:53–8

DRUG EFFECTS

Effect of chronic ethanol administration on thiamine transport in microvillous vesicles of rat small intestine. Gastaldi G, et al. **Alcohol Alcohol** 1989;24(2):83–9

Decrease in the fluidity of brush-border membrane vesicles induced by gentamicin. A spin-labeling study. Moriyama T, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1169–74

ENZYMOLOGY

Determination of brush border membrane vesicle orientation using monoclonal antibodies recognizing extracytoplasmic and cytoplasmic domains of neutral endopeptidase-24.11. Vénien C, et al. **Anal Biochem** 1988 Oct;174(1):325–30

Effect of heat-stable and heat-labile enterotoxins of Escherichia coli on intestinal brush border membrane enzymes of mice. Kohli M, et al. **Biochem Int** 1989 Jul; 19(1):173–83

Ectoenzymes of the kidney microvillar membrane. Affinity purification, characterization and localization of the phospholipase C-solubilized form of renal dipeptidase. Littlewood GM, et al. **Biochem J** 1989 Jan 15;257(2):361–7

Post-translational suppression of expression of intestinal brush border enzymes by fructose. Danielsen EM. **J Biol Chem** 1989 Aug 15;264(23):13726–9

5'-Nucleotidase of human placental trophoblastic microvilli possesses cobalt-stimulated FAD pyrophosphatase activity. Lee RS, et al. **J Biol Chem** 1988 Oct 15;263(29):14878–83

Human carboxypeptidase M. Purification and characterization of a membrane-bound carboxypeptidase that cleaves peptide hormones. Skidgel RA, et al. **J Biol Chem** 1989 Feb 5;264(4):2236–41

IMMUNOLOGY

Host response to Escherichia coli heat-labile enterotoxin via two microvillus membrane receptors in the rat intestine. Zemelman BV, et al. **Infect Immun** 1989 Oct;57(10):2947–52

METABOLISM

Villous sodium gradient associated with volume absorption in the feline intestine: an electron-microprobe study on freeze-dried tissue. Sjöqvist A, et al. **Acta Physiol Scand** 1989 Jun;136(2):271–9

Computer analysis reveals changes in renal Na+-glucose cotransporter in diabetic rats. Blank ME, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C385–96

Brush-border TEA transport in intact proximal tubules and isolated membrane vesicles. Dantzler WH, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F290–7

D-glucose and L-leucine transport by human intestinal brush-border membrane vesicles. Harig JM, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G618–23

Chloride transport across placental microvillous membranes measured by fluorescence. Illsley NP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C789–97

Active transport of taurine in rabbit jejunal brush-border membrane vesicles. Miyamoto Y, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G65–72

Amino acid transport across the hen colon: interactions between leucine and lysine. Munck BG. **Am J Physiol** 1989 Mar;256(3 Pt 1):G532–9

Glucocorticoid inhibition of Na-SO4 transport by chick renal brush-border membranes. Renfro JL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1176–83

Regulation of intestinal biotin transport in the rat: effect of biotin deficiency and supplementation. Said HM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G306–11

Carrier-mediated transport of pyroglutamyl-histidine in renal brush border membrane vesicles. Skopicki HA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C822–7

Brush-border inositol transport by intestines of carnivorous and herbivorous teleosts. Vilella S, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G501–8

Amiloride transport in rabbit renal brush-border membrane vesicles. Wright SH, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F462–8

Inhibition of Na+-dependent phosphate transport by group-specific covalent reagents in rat kidney brush border membrane vesicles. Evidence for the involvement of tyrosine and sulfhydryl groups on the interior of the membrane. Pratt RD, et al. **Arch Biochem Biophys** 1989 Jan;268(1):9–19

Brush border membrane vesicles formed from human duodenal biopsies exhibit Na+-dependent concentrative L-leucine and D-glucose uptake. Harig JM, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):164–70

Sodium-hydrogen exchange system in brush border membranes from cortical and medullary regions of the proximal tubule. Moran A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):269–75

Amphotericin B-induced changes in renal membrane permeation: a model of nephrotoxicity. Schell RE, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1165–70

Dexamethasone blocks adaptive increase of Na+-Pi cotransport in renal brush border membrane elicited by thyroid hormone. Yusufi AN, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1160–5

Effect of cholesterol and temperature perturbations on membrane hydrolases and transport of calcium and glucose in guinea pig brush border membrane vesicles. Minocha R, et al. **Biochem Int** 1988 Jun;16(6):1019–25

The J.E. Purkyně lecture: the insertion of stalked proteins of the brush border membranes: the state of the art in 1988. Semenza G. **Biochem Int** 1989 Jan;18(1):15–33 (70 ref.)

The mechanism of uptake of retinol by plasma-membrane vesicles. Sivaprasadarao A, et al. **Biochem J** 1988 Oct 15; 255(2):571–9

The interaction of retinol-binding protein with its plasma-membrane receptor. Sivaprasadarao A, et al. **Biochem J** 1988 Oct 15;255(2):561–9

In vivo effect of tunicamycin on the expression of rat small intestinal brush border membrane glycoproteins and glycoenzymes. Miura S, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4081–8

Modification of fluidity and lipid-protein relationships in pig intestinal brush-border membrane by dietary essential fatty acid deficiency. Christon R, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):77–84

Dicarboxylate transport in human placental brush-border membrane vesicles. Ogin C, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):248–54

Effect of lipid peroxidation on membrane-bound Ca2+-ATPase activity of the intestinal brush-border membranes. Ohta A, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):151–7

Effect of phosphonoformic acid, dietary phosphate and the Hyp mutation on kinetically distinct phosphate transport processes in mouse kidney. Tenenhouse HS, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):207–13

Determination of solute reflection coefficients in kidney brush-border membrane vesicles by light scattering: influence of the refractive index. Van der Goot F, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):272–4

Transport of glutamine in rat intestinal brush-border membrane vesicles. Van Voorhis K, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):51–5

How many Na+-dependent carriers for L-alanine and L-proline in the eel intestine? Studies with brush-border membrane vesicles. Vilella S, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):188–92

Cytochalasin B-sensitive, sodium ion-dependent glucose transport in intestinal microvillous membrane. Uezato T, et al. **Biochimie** 1988 Dec;70(12):1775–9

NaCl reflection coefficients in proximal tubule apical and basolateral membrane vesicles. Measurement by induced osmosis and solvent drag. Pearce D, et al. **Biophys J** 1989 Jun;55(6):1251–9

Amphibian intestinal brush border membranes-I. Isolation from Rana catesbeiana tadpole. Dauca M, et al. **Comp Biochem Physiol [B]** 1979;64(2):155–9

Parathyroid hormone receptor in human placental syncytiotrophoblast brush border and basal plasma membranes. Lafond J, et al. **Endocrinology** 1988 Dec; 123(6):2834–40

The effects of iron-mediated oxidative stress in isolated renal cortical brush border membrane vesicles at normothermic and hypothermic temperatures. Horton R, et al. **Free Radic Res Commun** 1989;5(4-5):267–75

Evidence for an imipramine-sensitive serotonin transporter in human placental brush-border membranes. Balkovetz DF, et al. **J Biol Chem** 1989 Feb 5;264(4):2195–8

Cl/HCO3 exchange in human placental brush border membrane vesicles. Grassl SM. **J Biol Chem** 1989 Jul 5; 264(19):11103–6

Inhibitory effect of diethyl pyrocarbonate on the H+/organic cation antiport system in rat renal brush-border membranes. Hori R, et al. **J Biol Chem** 1989 Jul 25;264(21):12232–7

Identification and purification of a renal amiloride-binding protein with properties of the Na+-H+ exchanger. Huot SJ, et al. **J Biol Chem** 1989 Jan 15;264(2):683–6

Cytovillin, a microvillar Mr 75,000 protein. cDNA sequence, prokaryotic expression, and chromosomal localization. Turunen O, et al. **J Biol Chem** 1989 Oct 5;264(28):16727–32

Mechanism of cis- and trans-substrate interactions at the tetraethylammonium/H+ exchanger of rabbit renal brush-border membrane vesicles. Wright SH, et al. **J Biol Chem** 1988 Dec 25;263(36):19494–7

Vitamin D status and brush border membrane vesicles: 1,25-dihydroxyvitamin D3 induced destabilization. Putkey JA, et al. **J Bone Miner Res** 1986 Aug;1(4):305–11

Glomerular and tubular alpha 1- and alpha 2-adrenoceptors in the rat kidney: distribution in basolateral and brush border membranes of tubular cells. Sundaresan PR, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):16–24

Role of microtubules in polarized delivery of apical membrane proteins to the brush border of the intestinal epithelium. Achler C, et al. **J Cell Biol** 1989 Jul; 109(1):179–89

Parallel modulation of brush border myosin conformation and enzyme activity induced by monoclonal antibodies. Citi S, et al. **J Cell Biol** 1989 Aug;109(2):549–56

Reassociation of microvillar core proteins: making a microvillar core in vitro. Coluccio LM, et al. **J Cell Biol** 1989 Feb;108(2):495–502

Modification of CaCo-2 cell membrane fatty acid composition by eicosapentaenoic acid and palmitic acid: effect on cholesterol metabolism. Murthy S, et al. **J Lipid Res** 1988 Jun;29(6):773–80

Binding and degradation of 125I-insulin by isolated rat renal brush border membranes: evidence for low affinity, high capacity insulin recognition sites. Meezan E, et al. **J Membr Biol** 1988 Oct;105(2):113–29

Ca2+ dependency of Na+ transport by rabbit renal brush border membrane. Morduchowicz GA, et al. **J Membr Biol** 1989 Jul;109(2):105–12

Transport of selenoamino acids and their sulfur analogues across the intestinal brush border membrane of pigs. Wolffram S, et al. **J Nutr** 1989 May;119(5):706–12

Intestinal absorption of cephalosporin antibiotics: correlation between intestinal absorption and brush-border membrane transport. Hori R, et al. **J Pharm Pharmacol** 1988 Sep; 40(9):646–7

Involvement of sialic acid in high-affinity binding of quaternary ammonium compounds by brush border membrane from rat intestine. Saitoh H, et al.

J Pharm Pharmacol 1989 Jul;41(7):459–63
Transport characteristics of [3H]-chlorpromazine across rat small intestinal brush border membrane. Saitoh H, et al. J Pharm Pharmacol 1989 Mar;41(3):200–2
Dopamine receptor subtypes in renal brush border and basolateral membranes. Felder CC, et al. Kidney Int 1989 Aug;36(2):183–93
Methyl isobutyl amiloride: a new probe to assess the number of Na–H antiporters. Talor Z, et al. Life Sci 1989; 45(6):517–23
Tracer studies with isolated membrane vesicles. Hopfer U. Methods Enzymol 1989;172:313–31
Transport studies with renal proximal tubular and small intestinal brush border and basolateral membrane vesicles: vesicle heterogeneity, coexistence of transport system. Murer H, et al. Methods Enzymol 1989;172:346–64
Compensatory changes in calcium uptake and phospholipid composition in rat renal brush border membranes after unilateral nephrectomy. Ferrari C, et al. Miner Electrolyte Metab 1988;14(5):297–301
The determination of kinetic parameters for carrier-mediated transport of non-labelled substrate analogues: a general method applied to the study of divalent anion transport in placental membrane vesicles. Deves R, et al. Proc R Soc Lond [Biol] 1989 Jun 22;237(1286):85–97
Rat atrial natriuretic factor (ANP-III) inhibits phosphate transport in brush border membrane from superficial and juxtamedullary cortex. Yusufi AN, et al. Proc Soc Exp Biol Med 1989 Jan;190(1):87–90
In vitro effects of epinephrine on Na influx into brush border vesicles from the rat kidney. Satta A, et al. Riv Eur Sci Med Farmacol 1987 Jun;9(2):233–8
Interaction of cadmium with brush border membrane vesicles from the rat small intestine. Bevan C, et al. Toxicology 1989 Mar;54(3):297–309
[Transport system of renal brush border membrane in spontaneously hypertensive rats] Hirano K. Nippon Jinzo Gakkai Shi 1988 Jun;30(6):767–75 (Eng. Abstr.) (Jpn)
[Effect on uptake of D-glucose, L-leucine and L-leucylglycine into intestinal brush border membrane vesicles isolated from rats fed either oligopeptide or amino acid elemental diet] Obata H, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Apr;86(4):865–75 (Eng. Abstr.) (Jpn)

MICROBIOLOGY

Sialo-oligosaccharide receptors for Mycoplasma pneumoniae and related oligosaccharides of poly-N-acetyllactosamine series are polarized at the cilia and apical-microvillar domains of the ciliated cells in human bronchial epithelium. Loveless RW, et al. Infect Immun 1989 Apr;57(4):1285–9

PATHOLOGY

Clinical response to the long acting somatostatin analogue SMS 201–995 in a child with congenital microvillus atrophy. Couper RT, et al. Gut 1989 Jul;30(7):1020–4
[Vasculitis with anemia infarcts of the villi of the synovial membrane in rheumatoid arthritis] Geiler G, et al. Z Rheumatol 1989 Mar–Apr;48(2):63–7 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Renal reabsorption of phosphate during development: transport kinetics in BBMV. Neiberger RE, et al. Am J Physiol 1989 Aug;257(2 Pt 2):F268–74
Na-dependent L-proline transport by eel intestinal brush-border membrane vesicles. Vilella S, et al. Am J Physiol 1988 Oct;255(4 Pt 2):R648–53
Proton permeability and lipid dynamics of gastric and duodenal apical membrane vesicles. Wilkes JM, et al. Am J Physiol 1989 Mar;256(3 Pt 1):G553–62
Dual control over microvillus elongation during enterocyte development. Smith MW, et al. Comp Biochem Physiol [A] 1989;93(3):623–8
Comparative aspects of microvillus development in avian and mammalian enterocytes. Smith MW, et al. Comp Biochem Physiol [A] 1989;93(3):617–22
A close relationship between microvilli and metabolic cooperation deficiency in embryonal carcinoma cells. Purcell IF, et al. Exp Cell Res 1989 May;182(1):84–9
Sperm-engulfing response of sea urchin egg surfaces inseminated with acrosome-reacted starfish sperm. Kyozuka K, et al. Gamete Res 1988 Oct;21(2):169–77
The 110-kD protein-calmodulin complex of the intestinal microvillus (brush border myosin I) is a mechanoenzyme. Mooseker MS, et al. J Cell Biol 1989 Jun;108(6):2395–400
How epithelia grease their microvilli. van Meer G. Trends Biochem Sci 1988 Jul;13(7):242–3

ULTRASTRUCTURE

Techniques for isolation of brush-border and basolateral membrane vesicles from dog kidney cortex. Hilden SA, et al. Biochim Biophys Acta 1989 Jul 24;983(1):77–81
The involvement of cytoskeletal proteins in the maintenance of phospholipid topology in renal brush-border membranes. Vénien C, et al. Biochim Biophys Acta 1988 Dec 22;946(2):307–14
Preparation of microvillus membrane vesicles from the intestine of embryonic and young chicks. Black BL, et al. Comp Biochem Physiol [B] 1989;93(1):39–48
Microfilament association of ASGP-2, the concanavalin A-binding glycoprotein of the cell-surface sialomucin complex of 13,762 rat mammary ascites tumor cells. Vanderpuye OA, et al. Exp Cell Res 1988 Oct; 178(2):211–23
Strong association of bovine IgM with microvilli and their microfilament core from 13762 ascites tumor cells. Ye XH, et al. Exp Cell Res 1989 May;182(1):160–72
Isolation and characterization of a 58-kDa membrane- and microfilament-associated protein from ascites tumor cell microvilli. Liu Y, et al. J Biol Chem 1989 Jan 15; 264(2):1208–14
(Na+ + K+)-ATPase and plasma membrane polarity of intestinal epithelial cells: presence of a brush border antigen in the distal large intestine that is immunologically related to beta subunit. Marxer A, et al. J Cell Biol 1989 Sep; 109(3):1057–69
Characterization of intestinal microvillar membrane disks: detergent-resistant membrane sheets enriched in associated brush border myosin I (110K-calmodulin). Mooseker MS, et al. J Cell Biol 1989 Sep;109(3):1153–61
Brush border myosin filament assembly and interaction with actin investigated with monoclonal antibodies. Citi S, et al. J Muscle Res Cell Motil 1988 Aug;9(4):306–19
Alterations in the intestinal microvillous surface area during the whole life span of the female rat ileum. Pénzes L, et al. ZFA 1988 Sep–Oct;43(5):251–8

MICROWAVES

see related
DIATHERMY

The use of conductive thermoplastic wires as oxygen sensors in microwave fields. Bicher HI, et al. Adv Exp Med Biol 1989;248:119–24
Accelerated immunogold silver and immunoperoxidase staining of paraffin sections with the use of microwave irradiation. Factors influencing results. Boon ME, et al. Am J Clin Pathol 1989 Feb;91(2):137–43
Determination of aqueous fluoride with a helium microwave-induced plasma and flow injection analysis. Gehlhausen JM, et al. Anal Chem 1989 Apr 1;61(7):674–7
Microwave irradiation as a form of fixation for dental pulp. Monsour PA, et al. Aust Dent J 1989 Jun;34(3):272–6
Comparison of denture acrylic resins cured by boiling water and microwave energy. Truong VT, et al. Aust Dent J 1988 Jun;33(3):201–4
Slow potentials and spike unit activity of the cerebral cortex of rabbits exposed to microwaves. Chizhenkova RA. Bioelectromagnetics 1988;9(4):337–45
Specific absorption rate (SAR) in models of the human head exposed to hand-held UHF portable radios. Cleveland RF Jr, et al. Bioelectromagnetics 1989;10(2):173–86
Microwave effects on acetylcholine-induced channels in cultured chick myotubes. D'Inzeo G, et al. Bioelectromagnetics 1988;9(4):363–72
Low-level microwave irradiation and central cholinergic activity: a dose-response study. Lai H, et al. Bioelectromagnetics 1989;10(2):203–8
Acute low-level microwave exposure and central cholinergic activity: studies on irradiation parameters. Lai H, et al. Bioelectromagnetics 1988;9(4):355–62
Effects of 2.45-GHz microwave and 100-MHz radiofrequency radiation on liposome permeability at the phase transition temperature. Liu LM, et al. Bioelectromagnetics 1988;9(3):249–57
Outdoor measurement of SAR in a full-sized human model exposed to 29.9 MHz in the near field. Olsen RG, et al. Bioelectromagnetics 1989;10(2):161–71
Microwave effect on camphor binding to rat olfactory epithelium. Philippova TM, et al. Bioelectromagnetics 1988; 9(4):347–54
Acute thermoregulatory responses of the immature rat to warming by low-level 2,450-MHz microwave radiation. Spiers DE, et al. Biol Neonate 1989;56(1):48–56
Dielectric behavior of aqueous solutions of plasmid DNA at microwave frequencies [published erratum appears in Biophys J 1989 Jun;55(6):1277–8] Gabriel C, et al. Biophys J 1989 Jan;55(1):29–34
Temperature and concentration behavior of anomalous microwave resonances in DNA. Davis ME, et al. Biopolymers 1989 Aug;28(8):1429–33
Retention of nutrients in microwave-cooked foods. Klein BP. Bol Asoc Med P R 1989 Jul;81(7):277–9
A hospital microwave system for library telecommunication. Hempel RM, et al. Bull Med Libr Assoc 1988 Oct; 76(4):339–42
Micro-quantity tissue digestion for metal measurements by use of a microwave acid-digestion bomb. Nicholson JR, et al. Clin Chem 1989 Mar;35(3):488–90
Quantitative assessment of impedance tomography for temperature measurements in microwave hyperthermia. Amasha HM, et al. Clin Phys Physiol Meas 1988;9 Suppl A:49–53
Low intensity microwave radiation effects on the ultrastructure of Chang liver cells. Dwivedi RS, et al. Exp Cell Res 1989 Jan;180(1):253–65
Formation of N-nitrosamines in microwaved versus skillet-fried bacon containing nitrite. Miller BJ, et al. Food Chem Toxicol 1989 May;27(5):295–9
Effects of microwave-induced hyperthermia on the anterior segment of healthy rabbit eyes. Bollemeijer JG, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(3):271–6
Microwave attenuation of ethanol-induced interactions with noradrenergic neurotransmitter systems. Hjeresen DL, et al. Health Phys 1989 May;56(5):767–76
An automated dosimetry system for microwave and thermal exposure of biological samples in vitro. Joyner KH, et al. Health Phys 1989 Mar;56(3):303–7
Papers from the First Course on the Application of Microwaves in Histopathology. Heidelberg-Rohrbach, 23 October 1987. Histochem J 1988 Jun–Jul;20(6–7):311–404
Formaldehyde fixation and microwave irradiation. Boon ME, et al. Histochem J 1988 Jun–Jul;20(6–7):313–22
Microwave stimulation of an immunological reaction (CEA/anti-CEA) and its use in immunohistochemistry. Hjerpe A, et al. Histochem J 1988 Jun–Jul;20(6–7):388–96
Differentiating the effects of microwave and heat on tissue proteins and their crosslinking by formaldehyde. Hopwood D, et al. Histochem J 1988 Jun–Jul;20(6–7):341–6
Microwave-stimulated immunogold silver staining. Jackson P, et al. Histochem J 1988 Jun–Jul;20(6–7):353–8
Rapid microwave fixation—a comparative morphometric study. Kayser K, et al. Histochem J 1988 Jun–Jul; 20(6–7):347–52
Histoprocessing with the microwave oven: an update. Kok LP, et al. Histochem J 1988 Jun–Jul;20(6–7):323–8
Microwave fixation provides excellent preservation of tissue, cells and antigens for light and electron microscopy. Login GR, et al. Histochem J 1988 Jun–Jul;20(6–7):373–87
Brain enzyme histochemistry following stabilization by microwave irradiation. Marani E, et al. Histochem J 1988 Jun–Jul;20(6–7):397–404
Microwave-aided technique to detect bromodeoxyuridine in S-phase cells using immunogold-silver staining and plastic-embedded sections. van de Kant HJ, et al. Histochem J 1988 Jun–Jul;20(6–7):335–40
Preservation of structure and cytochemical reactivity at the ultrastructural level, using microwave irradiation. Van Dort JB, et al. Histochem J 1988 Jun–Jul;20(6–7):365–72
Microwave-stimulated incubation in immunoelectron microscopy: a quantitative study. Zondervan PE, et al. Histochem J 1988 Jun–Jul;20(6–7):359–64
Potency of microwave irradiation during fixation for electron microscopy. Wild P, et al. Histochemistry 1989; 91(3):213–20
Quantitative assessment of cellular changes provoked by microwave enhanced fixation of parathyroids. Wild P, et al. Histochemistry 1989;92(1):69–72
Design and test of microwave interstitial applicators with improved longitudinal heating pattern. Roos D, et al. Int J Hyperthermia 1988 Nov–Dec;4(6):609–15
Effects of microwaving human milk: changes in IgA content and bacterial count. Sigman M, et al. J Am Diet Assoc 1989 May;89(5):690–2
The rapid decomposition of biological materials by using a microwave acid digestion bomb. Stripp RA, et al. J Anal Toxicol 1989 Jan–Feb;13(1):57–9
Enhancement of the kinetics of the aeration of ethylene oxide sterilized polymers using microwave radiation. Matthews IP, et al. J Biomed Mater Res 1989 Feb;23(2):143–56
Simultaneous quantitative high-performance liquid chromatographic determination of cyclic adenosine 3',5'-monophosphate and adenosine in mouse brain after microwave irradiation: application to isoprenaline effect in vivo. Guattari B. J Chromatogr 1989 Apr 14;489(2):394–8
Use of microwave oven improves morphology and staining of cryostat sections. Kennedy A, et al. J Clin Pathol 1989 Jan;42(1):101–5
Listeria survives microwave heating [letter] Sheeran MR, et al. J Hosp Infect 1989 Jul;14(1):84–6
Bacterial survival and thermal responses of beef loaf after microwave processing. Lin W, et al. J Microw Power Electromagn Energy 1988;23(3):183–94
In situ fixation of the spinal cord using microwave radiation. Gower DJ, et al. J Neurosurg 1988 Nov;69(5):719–22
Antigen preservation in microwave-irradiated tissues: a comparison with formaldehyde fixation. Leong AS, et al. J Pathol 1988 Dec;156(4):275–82
Demonstration of AgNOR-related proteins in microwave-fixed tissues [letter] Leong AS, et al. J Pathol 1988 Dec;156(4):352
The use of microwave energy for processing acrylic resins. Levin B, et al. J Prosthet Dent 1989 Mar;61(3):381–3
Microwave sterilization: a method for home sterilization of urinary catheters. Silbar EC, et al. J Urol 1989 Jan; 141(1):88–90
Destruction of Listeria monocytogenes during microwave cooking [letter] Lund BM, et al. Lancet 1989 Jan 28; 1(8631):218
Alumina ceramic as a biomaterial for use in afterloading radiation catheters for hyperthermia. Ferraro FT, et al. Neurosurgery 1989 Aug;25(2):209–12; discussion 212–3
Microwave radiation, in the absence of hyperthermia, has no detectable effect on synapsin I levels or phosphorylation. Browning MD, et al. Neurotoxicol Teratol 1988 Sep–Oct;10(5):461–4
Microwave irradiation in histopathology. Leong AS. Pathol Annu 1988;23 Pt 2:213–34 (49 ref.)
Induction of neoplastic transformation in C3H/10T1/2 cells by 2.45-GHz microwaves and phorbol ester. Balcer-Kubiczek EK, et al. Radiat Res 1989 Mar; 117(3):531–7

Application of microwave irradiation to immunohistochemistry: preservation of antigens of the extracellular matrix. Moran RA, et al. **Stain Technol** 1988 Sep;63(5):263–9

Thawing of fresh–frozen plasma with a new microwave oven. Söhngen D, et al. **Transfusion** 1988 Nov–Dec;28(6):576–80

[Optical and ultrastructural changes in the rabbit lens caused by microwaves] Li CJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):200–3 (Eng. Abstr.) (Chi)

[Effect of microwave irradiation on spermatozoa of rat epididymis in vivo] Yue LM, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):257–60 (Eng. Abstr.) (Chi)

[Effect of microwave radiation on morphology and histochemical changes in rat epididymis] Yue LM, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):261–4 (Eng. Abstr.) (Chi)

[Accelerated decalcification using microwaves] Balaton AJ, et al. **Ann Pathol** 1989;9(2):140–1 (Eng. Abstr.) (Fre)

[Burns by ingestion of milk warmed–up in a microwave oven (letter)] Picherot G, et al. **Arch Fr Pediatr** 1988 Jun–Jul; 45(6):439 (Fre)

[The humanitarian stunning of fowl for slaughter with microwaves (2450 MHz)] Zeller W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):311–3 (Eng. Abstr.) (Ger)

[Exposure to radio waves in physiotherapy] Gobbato F, et al. **Med Lav** 1988 Jan–Feb;79(1):70–7 (Eng. Abstr.) (Ita)

[Acoustic detection of absorption of millimeter–band electromagnetic waves in biological objects] Polnikov IG, et al. **Biofizika** 1988 Sep–Oct;33(5):893–4 (Eng. Abstr.) (Rus)

[Energy and plastic metabolism of the heart muscle in rabbits undergoing thyroid irradiation with decimeter waves] Bogoliubov VM, et al. **Biull Eksp Biol Med** 1989 May; 107(5):570–2 (Eng. Abstr.) (Rus)

[Temperature distribution in normal and tumor tissues of animals subjected to local SHF–hyperthermia] Rudakov NP, et al. **Eksp Onkol** 1988;10(5):69–70 (Eng. Abstr.) (Rus)

[Effect of microwave irradiation and temperature on the spontaneous impulse activity of the ventral spinal roots in the frog] Pakhomov AG. **Neirofiziologiia** 1988;20(6):723–8 (Eng. Abstr.) (Rus)

[Effect of microwaves on the expression by thymocytes of various surface membrane markers] Evstropov VM, et al. **Tsitologiia** 1988 Nov;30(11):1345–9 (Eng. Abstr.) (Rus)

[Effect of the multiplicity of local microwave exposures on the immunohormonal indices of intact animals] Frenkel' ID, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr;(2):54–7 (Rus)

[The immune and hormonal effects of the local action of microwaves of different intensities] Pershin SB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):16–21 (Eng. Abstr.) (Rus)

[The behavioral effect of a single exposure to microwave energy in rats] Navakatikian MA, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):764–6 (Rus)

ADVERSE EFFECTS

Lack of behavioral effects in the rhesus monkey: high peak microwave pulses at 1.3 GHz. D'Andrea JA, et al. **Bioelectromagnetics** 1989;10(1):65–76

Some behavioral effects of short–term exposure of rats to 2.45 GHz microwave radiation. Mitchell CL, et al. **Bioelectromagnetics** 1988;9(3):259–68

Results of a United States and Soviet Union joint project on nervous system effects of microwave radiation. Mitchell CL, et al. **Environ Health Perspect** 1989 May;81:201–9

Absence of mutagenic interaction between microwaves and mitomycin C in mammalian cells. Meltz ML, et al. **Environ Mol Mutagen** 1989;13(4):294–303

Radio–microwave interactions with biological materials. Barnes FS. **Health Phys** 1989 May;56(5):759–66 (25 ref.)

Microwave effects on the central nervous system—a study of radar mechanics. Nilsson R, et al. **Health Phys** 1989 May;56(5):777–9

Damage criteria for determining microwave exposure. Servantie B. **Health Phys** 1989 May;56(5):781–6 (15 ref.)

Graded spinal cord injuries produced in rabbits with non–invasive microwave hyperthermia. Sutton CH. **J Am Paraplegia Soc** 1988 Jul–Oct;11(2):41–9

Effects of 2.8–GHz microwaves on restrained and ketamine–anesthetized rats. Frei MR, et al. **Radiat Environ Biophys** 1989;28(2):155–64

Cataracts induced by microwave and ionizing radiation. Lipman RM, et al. **Surv Ophthalmol** 1988 Nov–Dec; 33(3):200–10 (74 ref.)

[Ultrastructure of the cerebral cortex in the rat after the effect of electromagnetic impulse] Gaĭdamkin NA, et al. **Arkh Anat Gistol Embriol** 1988 Jul;95(7):14–8 (Eng. Abstr.) (Rus)

[Quantitative histologic changes of the glioneuronal complex in the central and intermediate parts of the visual analyzer exposed to microwaves of thermogenic intensity] Logvinov SV. **Radiobiologiia** 1989 Mar–Apr;29(2):247–50 (Eng. Abstr.) (Rus)

[Immune suppression in transcerebral exposure to 460–MHz microwaves] Pershin SB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):7–11 (Eng. Abstr.) (Rus)

[Immunobiological effects of decimeter–range microwaves of athermic intensity] Pershin SB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):8–10 (Eng. Abstr.) (Rus)

[The effect of microwave diathermy equipment on pacemaker function] Dordević Z, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):431–3 (Ser)

DIAGNOSTIC USE

Pneumocystis carinii: rapid diagnosis with the microwave oven [letter] Loughman NT. **Acta Cytol** 1989 May–Jun; 33(3):416–7

Microwave fixation of biopsy specimens [letter] Bezahler GH. **Am J Dermatopathol** 1989 Jun;11(3):295

[Digital noninvasive microwave thermography in the diagnosis of breast disease] Fan KH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):200–4 (Eng. Abstr.) (Chi)

INSTRUMENTATION

[Effect of high frequency treatment on several microorganisms important to food health] Rosenberg U, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):271–83 (Eng. Abstr.) (Ger)

THERAPEUTIC USE

Interstitial microwave hyperthermia combined with iridium–192 radiotherapy for recurrent tumors. Petrovich Z, et al. **Am J Clin Oncol** 1989 Jun;12(3):264–8

Microwave energy compared with heater probe and BICAP in canine models of peptic ulcer hemorrhage. Michaletz PA, et al. **Gastroenterology** 1989 Sep;97(3):676–84

SAR distributions for 915 MHz interstitial microwave antennas used in hyperthermia for cancer therapy. Jones KM, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):851–7

Microwave applicator for transurethral hyperthermia of benign prostatic hyperplasia. Astrahan MA, et al. **Int J Hyperthermia** 1989 May–Jun;5(3):283–96

A technique for combining microwave hyperthermia with intraluminal brachytherapy of the oesophagus. Astrahan MA, et al. **Int J Hyperthermia** 1989 Jan–Feb;5(1):37–51

Changes in heating patterns of interstitial microwave antenna arrays at different insertion depths. Chan KW, et al. **Int J Hyperthermia** 1989 Jul–Aug;5(4):499–507

Noninvasive microwave phased arrays for local hyperthermia: a review. Magin RL, et al. **Int J Hyperthermia** 1989 Jul–Aug;5(4):429–50 (94 ref.)

Comparative thermal dosimetry of interstitial microwave and radiofrequency–LCF hyperthermia. Stauffer PR, et al. **Int J Hyperthermia** 1989 May–Jun;5(3):307–18

Design and performance of a high speed driver circuit for PIN diode switches used in microwave hyperthermia. Ryan TP, et al. **J Biomed Eng** 1989 Mar;11(2):130–2

Microwave: an alternative to electric heating in the treatment of peripheral lymphedema. Chang TS, et al. **Lymphology** 1989 Mar;22(1):20–4

Hyperthermia: principles and quality assurance. Paliwal BR, et al. **Med Dosim** 1989;14(2):117–23 (17 ref.)

The efficiency of clinical microwave applicators measured by a calorimetric method. Anhalt D, et al. **Med Phys** 1988 Nov–Dec;15(6):919–21

Interstitial helical coil microwave antenna for experimental brain hyperthermia. Satoh T, et al. **Neurosurgery** 1988 Nov; 23(5):564–9

Microwave disinfection of soft contact lenses. Harris MG, et al. **Optom Vis Sci** 1989 Feb;66(2):82–6

Clinical considerations in the use of external microwaves for local hyperthermia. Steeves RA. **Radiol Clin North Am** 1989 May;27(3):519–24 (18 ref.)

Effects of continuous and pulsed microwave irradiation on distribution of heat in the gluteal region of minipigs. A comparative study. Conradi E, et al. **Scand J Rehabil Med** 1989;21(1):59–62

Combination therapy with microwave coagulation and intracavitary irradiation for bladder cancer. Technique and preliminary clinical results. Harada T, et al. **Urol Int** 1988; 43(3):160–6

Microwave coagulation therapy for urinary bladder tumors. Harada T, et al. **Urol Int** 1988;43(3):179–84

[An animal experiment and clinical use of endoscopic microwave therapy] Zhang ZH, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):483–5, 519 (Eng. Abstr.) (Chi)

[Characterization of helical coil microwave antenna for interstitial hyperthermia] Satoh T, et al. **Gan No Rinsho** 1988 Sep;34(11):1544–9 (Eng. Abstr.) (Jpn)

[Microwave surgery as a tool for better prostatic electroresection. Part I: Experimental study] Etori K. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):888–98 (Eng. Abstr.) (Jpn)

[Microwave surgery as a tool for better prostatic electroresection. Part II: Clinical study] Etori K. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):899–902 (Eng. Abstr.) (Jpn)

[Transurethral microwave coagulation in patients with dysuria caused by prostatic cancer] Kigure T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1686–91 (Eng. Abstr.) (Jpn)

[Microwave interstitial hyperthermia—fundamental experiments for clinical applications] Aoyagi Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):735–48 (Eng. Abstr.) (Jpn)

[Electrotherapy in ophthalmology. Low–frequency impulsed currents, diadynamic currents, high–frequency electric currents and microwave therapy] Sobecki R. **Klin Oczna** 1988 Mar;90(3):112–4 (Eng. Abstr.) (Pol)

[Possible mechanisms of the radiomodifying action of exogenous hypoxia and electromagnetic radiation in the SHF range] Tabukashvili RI, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):529–32 (Eng. Abstr.) (Rus)

[The use of local deep microwave hyperthermia in urology] Berklaid PM, et al. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):73–8 (73 ref.) (Rus)

[Changes in the blood serum protein spectrum in children with viral hepatitis under the influence of microwaves] Belen'kaia TV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):50–3 (Rus)

[Effect of microwaves (460 MHz) on spermatogenesis, hormonal metabolism and immunity in patients with secondary sterility with exposure in the area of the adrenal projection] Karpukhin IV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug; (4):38–40 (Eng. Abstr.) (Rus)

[Changes in the cytochemical indices of the blood leukocytes in chronic cerebral leptomeningitis during combined treatment using decimeter waves] Kilichev IA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):35–8 (Eng. Abstr.) (Rus)

[Impulse decimeter–wave therapy of patients with chronic nonspecific lung diseases at the medical rehabilitation stage] Krupennikov AI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb;(1):39–43 (Rus)

[The therapeutic use of electromagnetic millimeter waves of nonthermal intensity—millimeter–wave therapy] Skurikhina LA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):65–72 (78 ref.) (Rus)

[Clinico–morphologic validation of the therapeutico–prophylactic use of decimeter waves following obstetric surgery] Zheleznova EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):51–3 (Rus)

[The use of microwave resonance therapy on patients with chronic nonspecific lung diseases] Dziublik AA, et al. **Vrach Delo** 1989 Mar;(3):55–6 (Eng. Abstr.) (Rus)

[The physiologic validation of microwave immunologic correction (a review of the literature)] Giulling EV, et al. **Vrach Delo** 1988 Dec;(12):4–8 (35 ref.) (Rus)

[Treatment of hypertensive patients with oxygen baths and decimeter waves] Lavrinets VI, et al. **Vrach Delo** 1988 Dec; (12):26–7 (Eng. Abstr.) (Rus)

MIDAZOLAM

Midazolam combined with paracervical blockade compared to general anaesthesia for curettage of the uterus. Nielsen HK, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):643–6

Effects of the benzodiazepine antagonist flumazenil on postoperative performance following total intravenous anaesthesia with midazolam and alfentanil. Nilsson A, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):441–6

Recovery from fixed–dose midazolam–induced anaesthesia and antagonism with flumazenil for outpatient arthroscopy. Zuurmond WW, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):160–3

Temazepam or midazolam for night sedation. A double–blind study. Irjala J, et al. **Anaesthesia** 1989 Aug;44(8):685–7

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia. I. Mothers. Crawford ME, et al. **Anesth Analg** 1989 Mar; 68(3):229–33

Midazolam–alfentanil synergism for anesthetic induction in patients. Vinik HR, et al. **Anesth Analg** 1989 Aug; 69(2):213–7

Use of hospital beds. **BMJ** 1989 Feb 25;298(6672):525–6

'Dental sedation. A review' [letter] Birch BR, et al. **Br Dent J** 1989 Feb 25;166(4):111–2

Benzodiazepine premedication in minor day–case surgery: comparison of oral midazolam and temazepam with placebo. Hargreaves J. **Br J Anaesth** 1988 Nov;61(5):611–6

Comparison of chloral hydrate and midazolam by mouth as premedicants in children undergoing otolaryngological surgery. Saarnivaara L, et al. **Br J Anaesth** 1988 Oct; 61(4):390–6

Haemodynamic stability with midazolam–sufentanil analgesia in cardiac surgical patients. Raza SM, et al. **Can J Anaesth** 1988 Sep;35(5):518–25

Sedation for upper gastrointestinal endoscopy: a comparative study of midazolam and diazepam. Lee MG, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):82–4

Midazolam: newcomer to the benzodiazepine family. Karb VB. **J Neurosci Nurs** 1989 Feb;21(1):64–6

Long–term anaesthesia with alfentanil and midazolam for lung transplantation in the dog. Flecknell PA, et al. **Lab Anim** 1989 Jul;23(3):278–84

Midazolam as an induction agent for thoracotomy in comparison with diazepam with or without nifedipine. Hseu SS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):147–52

Alfentanil and midazolam: new anesthetic drugs for continuous infusion and an automated method of administration. Reves JG, et al. **Mt Sinai J Med** 1989 Mar; 56(2):99–107

[A combination of epidural analgesia (anesthesia) with midazolam (Dormicum) sedation] Iordanov I, et al. **Khirurgiia (Sofiia)** 1988;41(5):63–6 **(Bul)**

[Analgesia–sedation using ketamine and benzodiazepines in mini–abortion] Machač J, et al. **Cesk Gynekol** 1989 Feb; 54(1):23–6 **(Cze)**

[Comparison of 2 anesthetic protocols in colonoscopy on a series of 100 patients] Germain JL, et al. **Agressologie** 1989 Apr;30(4):171–4 (Eng. Abstr.) **(Fre)**

[Deafness surgery in adults. The growing role of improved local anesthesia] Martin C, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):65–7 (Eng. Abstr.) **(Fre)**

[Significant CO2 retention in children after premedication with Dormicum and Thalamonal] Büttner W, et al. **Anaesthesist** 1989 Jun;38(6):285–7 (Eng. Abstr.) **(Ger)**

[Hemodynamic effects of the benzodiazepine antagonist flumazenil following laparotomy under total intravenous anesthesia using midazolam] Crozier TA, et al. **Anaesthesist** 1989 Apr;38(4):193–9 (Eng. Abstr.) **(Ger)**

[Analgosedation with midazolam and fentanyl as an alternative to general anesthesia in transvaginal follicle puncture with the scope of in vitro fertilization] Bein T, et al. **Anasth Intensivther Notfallmed** 1989 Apr; 24(2):77–80 (Eng. Abstr.) **(Ger)**

[Postoperative, opiate–induced respiratory depression is not dependent on arousal] Tolksdorf W, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):94–9 (Eng. Abstr.) **(Ger)**

[Perioperative anxiety behavior of IVF patients and a suitable simplified analgo–sedation procedure in transvaginal follicle puncture] Klapproth CE, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):676–8 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Continuous infusion of midazolam or bolus of diazepam for postoperative sedation in cardiac surgical patients. Barvais L, et al. **Acta Anaesthesiol Belg** 1988;39(4):239–45

Comparison of rectal to intramuscular administration of midazolam and atropine for premedication of children. De Jong PC, et al. **Acta Anaesthesiol Scand** 1988 Aug; 32(6):485–9

Continuous infusion of midazolam during anaesthesia and postoperative sedation after maxillofacial surgery. Driessen JJ, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):116–21

Double–blind comparison of midazolam and temazepam as oral premedicants for outpatient anaesthesia. Short TG, et al. **Anaesth Intensive Care** 1989 May;17(2):151–6

Ketamine–midazolam continuous infusion in cardiac surgical patients [letter] Chai M, et al. **Anaesthesia** 1989 Apr; 44(4):364

Inadvertent epidural midazolam and fentanyl [letter] Stedmon J, et al. **Anaesthesia** 1989 Jan;44(1):75

Analgesic and hyperalgesic effects of midazolam: dependence on route of administration. Niv D, et al. **Anesth Analg** 1988 Dec;67(12):1169–73

Preanesthetic sedation of preschool children using intranasal midazolam. Wilton NC, et al. **Anesthesiology** 1988 Dec; 69(6):972–5

Midazolam sedation for outpatient fibreoptic endoscopy: evaluation of alfentanil supplementation. Milligan KR, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):304–6

Midazolam: saint or sinner? Eubanks JR Jr. **AORN J** 1989 Jul;50(1):155–6

Sedation for endoscopy: midazolam or diazepam and pethidine? Boldy DA, et al. **Br J Anaesth** 1988 Dec; 61(6):698–701

Comparison of i.v. sedation with midazolam and inhalation sedation with isoflurane in dental outpatients. Parbrook GD, et al. **Br J Anaesth** 1989 Jul;63(1):81–6

Midazolam as intravenous sedative for electrocardioversion. Khan AH, et al. **Chest** 1989 May;95(5):1068–71

Massive doses of midazolam infusion for delirium tremens [letter] Hansbrough JF. **Crit Care Med** 1989 Jun;17(6):597

Patient controlled anxiolysis with midazolam [letter] Loper KA, et al. **Crit Care Med** 1989 Feb;17(2):200–1

Midazolam versus diazepam for combined esophagastroduodenoscopy and colonoscopy. Brouillette DE, et al. **Dig Dis Sci** 1989 Aug;34(8):1265–71

Comparison of the hemodynamic effects of midazolam and diazepam in patients with coronary occlusion. Raza SM, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):1–6

Anesthesia for outpatient dermatologic cosmetic surgery: midazolam—low–dosage ketamine anesthesia. Scarborough DA, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):658–63

Duration of amnesia associated with midazolam/fentanyl intravenous sedation. Miller RI, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):155–8

Diazepam, flunitrazepam and midazolam for elective endoscopy—a comparative study. Takrouri MS, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):529–36

Excellent anxiolytic effect achieved with low doses of Versed [letter] Conrad MR. **Radiology** 1989 Feb;170(2):579

Midazolam infusion and the benzodiazepine antagonist flumazenil for sedation of intensive care patients. Geller E, et al. **Resuscitation** 1988;16 Suppl:S31–9

[Midazolam used for intramuscular premedication in locoregional anesthesia in urology. Usefulness of late premedication] Pennarguear A, et al. **Cah Anesthesiol** 1988 Sep;36(5):353–7 (Eng. Abstr.) **(Fre)**

[Intraoperative sedation by midazolam during spinal anesthesia. A study of elderly women undergoing surgery of the hip and femur neck] Racle JP, et al. **Cah Anesthesiol** 1988 Sep;36(5):341–7 (Eng. Abstr.) **(Fre)**

[Rectal premedication with midazolam in children. A comparative clinical study] Piotrowski R, et al. **Anaesthesist** 1989 Jan;38(1):16–21 (Eng. Abstr.) **(Ger)**

[Midazolam in combination with piritramid versus Thalamonal in premedication in ambulatory ENT interventions in childhood] Bein T, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):187–90 (Eng. Abstr.) **(Ger)**

[Effectiveness and tolerance of flumazenil in regional anesthesia with midazolam sedation] Bläss JJ, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):195–9 (Eng. Abstr.) **(Ger)**

[Continuous sedation for regional anesthesia with propofol (Disoprivan) and midazolam (Dormicum). A comparative study] Dertwinkel R, et al. **Reg Anaesth** 1988 Oct; 11(4):84–91 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

An unusual result with flumazenil [letter] Williams D, et al. **Anaesth Intensive Care** 1989 Aug;17(3):387

Midazolam, hypotension and neurological sequelae [letter] Birch B, et al. **Anaesthesia** 1989 Mar;44(3):259

Inadvertent epidural midazolam and fentanyl [letter] Goodchild CS, et al. **Anaesthesia** 1989 Jul;44(7):609–10

Hypotension and neurological sequelae following intramuscular midazolam [letter] Matson AM, et al. **Anaesthesia** 1988 Oct;43(10):896

Cerebral effects of anaesthesia and hypothermia. Stephan H, et al. **Anaesthesia** 1989 Apr;44(4):310–6

A reaction to midazolam: a topical solution [letter] Yates A, et al. **Anaesthesia** 1989 May;44(5):449

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: II. Neonates. Ravlo O, et al. **Anesth Analg** 1989 Mar; 68(3):234–7

Midazolam in a malignant hyperthermia–susceptible patient [letter] Brooks JH. **Anesthesiology** 1989 Jan;70(1):167–8

A complication associated with the use of midazolam [letter] Engstrom RH, et al. **Anesthesiology** 1989 Apr;70(4):719

Oxygen desaturation following sedation for regional analgesia. Smith DC, et al. **Br J Anaesth** 1989 Feb; 62(2):206–9

Acute benzodiazepine withdrawal syndrome after midazolam infusions in children [letter] Sury MR, et al. **Crit Care Med** 1989 Mar;17(3):301–2

Precipitation of benzodiazepine withdrawal following sudden discontinuation of midazolam. Finley PR, et al. **DICP** 1989 Feb;23(2):151–2

Midazolam disinhibition reaction [letter] Lobo BL, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):725

[Midazolam causing respiratory arrest and hypotension] Tilly–Kiesi M, et al. **Duodecim** 1989;105(1):61–4 **(Fin)**

[Is there a risk of global respiratory insufficiency with the use of intramuscular midazolam as premedication for bronchoscopy?] Wild A, et al. **Schweiz Med Wochenschr** 1988 Sep 24;118(38):1375–7 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Rapid and sensitive high–performance liquid chromatographic assay for midazolam and 1–hydroxymidazolam, the major metabolite, in human serum. Blackett A, et al. **J Chromatogr** 1988 Dec 9; 433:326–30

ANTAGONISTS & INHIBITORS

Flumazenil used for antagonizing the central effects of midazolam and diazepam in outpatients. Jensen S, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):26–8

Reversal of prolonged sedation using flumazenil in critically ill patients. Bodenham A, et al. **Anaesthesia** 1989 Jul; 44(7):603–5

Aminophylline reversal of midazolam sedation [letter] Gallen JS. **Anesth Analg** 1989 Aug;69(2):268

Benzodiazepine antagonism does not provoke a stress response. White PF, et al. **Anesthesiology** 1989 Apr; 70(4):636–9

Flumazenil in reversal of the central effects of midazolam used as induction agent in general anesthesia. Dimitriou B, et al. **Arzneimittelforschung** 1989 Mar;39(3):399–400

The effects of flumazenil, a new benzodiazepine antagonist, on the reversal of midazolam sedation and amnesia in dental patients. Rosenbaum NL, et al. **Br Dent J** 1988 Dec 10; 165(11):400–2

Antagonism of midazolam sedation by flumazenil: a placebo–controlled study in patients recovering from intravenous anaesthesia with high doses of midazolam. Hennis PJ, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):369–76

[The efficacy of the benzodiazepine antagonist flumazenil (Ro 15–1788) based on the EEG of mechanically ventilated intensive care patients] Kulka PJ, et al. **Anaesthesist** 1989 Aug;38(8):424–30 (Eng. Abstr.) **(Ger)**

BLOOD

Rapid and sensitive high–performance liquid chromatographic assay for midazolam and 1–hydroxymidazolam, the major metabolite, in human serum. Blackett A, et al. **J Chromatogr** 1988 Dec 9; 433:326–30

METABOLISM

Characterization of midazolam metabolism using human hepatic microsomal fractions and hepatocytes in suspension obtained by perfusing whole human livers. Fabre G, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4389–97

Extra–hepatic metabolism of midazolam. Park GR, et al. **Br J Clin Pharmacol** 1989 May;27(5):634–7

No evidence of a genetic polymorphism in the oxidative metabolism of midazolam. Kassai A, et al. **Clin Pharmacokinet** 1988 Nov;15(5):319–25

Oxidation of midazolam and triazolam by human liver cytochrome P450IIIA4. Kronbach T, et al. **Mol Pharmacol** 1989 Jul;36(1):89–96

PHARMACOKINETICS

Prolonged elimination of midazolam after i.m. administration. Raeder JC, et al. **Acta Anaesthesiol Scand** 1988 Aug; 32(6):464–6

Pharmacokinetics of midazolam and alfentanil in outpatient general anesthesia. A study with concomitant thiopentone, flumazenil or placebo administration. Raeder JC, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):467–72

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: III. Placental transfer and elimination in neonates. Bach V, et al. **Anesth Analg** 1989 Mar;68(3):238–42

A pharmacokinetic study of midazolam in paediatric patients undergoing cardiac surgery. Mathews HM, et al. **Br J Anaesth** 1988 Sep;61(3):302–7

The pharmacokinetics of midazolam following orthotopic liver transplantation. Shelly MP, et al. **Br J Clin Pharmacol** 1989 May;27(5):629–33

Pharmacokinetic and electroencephalographic study of intravenous diazepam, midazolam, and placebo. Greenblatt DJ, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):356–65

Effects of age, gender and oral contraceptives on intramuscular midazolam pharmacokinetics. Holazo AA, et al. **J Clin Pharmacol** 1988 Nov;28(11):1040–5

Pharmacokinetics of midazolam following intravenous and oral administration in patients with chronic liver disease and in healthy subjects. Pentikäinen PJ, et al. **J Clin Pharmacol** 1989 Mar;29(3):272–7

Pharmacokinetics and pharmacodynamics of midazolam in the enflurane–anesthetized dog. Hall RI, et al. **J Pharmacokinet Biopharm** 1988 Jun;16(3):251–62

Transient insomnia and rapidly eliminated hypnotics. Nicholson AN. **Sleep** 1986 Jun;9(2):317–23

[The pharmacokinetics of midazolam following intramuscular administration] Behne M, et al. **Anaesthesist** 1989 Jun; 38(6):278–84 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Midazolam does not potentiate the effect of vecuronium in patients. Husby P, et al. **Acta Anaesthesiol Scand** 1989 May; 33(4):280–2

The skin–dwelling microfilarine of Monanema martini in Lemniscomys striatus as potential drug screening model for onchocerciasis: midazolam effect in vitro. Laukamm–Josten U, et al. **Acta Trop (Basel)** 1988 Dec; 45(4):373–7

Midazolam—iatrogenic drug abuse? Eubanks JR Jr. **Ala Med** 1989 May;58(11):13–4

Cardiovascular effects of sedative infusions of propofol and midazolam after spinal anaesthesia. Blake DW, et al. **Anaesth Intensive Care** 1988 Aug;16(3):292–8

Effect of midazolam pretreatment on the intravenous toxicity of lidocaine with and without epinephrine in rats. Torbiner ML, et al. **Anesth Analg** 1989 Jun;68(6):744–9

Midazolam–morphine sedative interaction in patients. Tverskoy M, et al. **Anesth Analg** 1989 Mar;68(3):282–5

Comparison of sedative infusions during regional anesthesia—methohexital, etomidate, and midazolam [published erratum appears in Anesth Analg 1989 Apr;68(4):550] Urquhart ML, et al. **Anesth Analg** 1989 Mar; 68(3):249–54

Dose–related changes in the rate of cerebrospinal fluid formation and resistance to reabsorption of cerebrospinal fluid following administration of thiopental, midazolam, and etomidate in dogs. Artru AA. **Anesthesiology** 1988 Oct; 69(4):541–6

Effect of midazolam and diazepam premedication on central nervous system and cardiovascular toxicity of bupivacaine in pigs. Bernards CM, et al. **Anesthesiology** 1989 Feb; 70(2):318–23

The effect of benzodiazepine receptor antagonism by flumazenil on the MAC of halothane in the rat. Greiner AS, et al. **Anesthesiology** 1989 Apr;70(4):644–8

Anesthetic interactions of midazolam and fentanyl: is there acute tolerance to the opioid? Schwieger IM, et al. **Anesthesiology** 1989 Apr;70(4):667–71

Intrathecal midazolam and fentanyl in the rat: evidence for different spinal antinociceptive effects [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Serrao JM, et al. **Anesthesiology** 1989 May;70(5):780–6

Effect of midazolam on memory. Borbély AA, et al. **Arzneimittelforschung** 1988 Jun;38(6):824–7

Acute effects of two dosages of orally administered

midazolam on psychomotor performance in healthy volunteers. Schaffler K, et al. **Arzneimittelforschung** 1989 Mar;39(3):395–8

Isoflurane compared with midazolam for sedation in the intensive care unit. Kong KL, et al. **BMJ** 1989 May 13; 298(6683):1277–80

Midazolam acts synergistically with methohexitone for induction of anaesthesia. Tverskoy M, et al. **Br J Anaesth** 1989 Jul;63(1):109–12

A comparison of diazepam and midazolam as endoscopy premedication assessing changes in ventilation and oxygen saturation. Bell GD, et al. **Br J Clin Pharmacol** 1988 Nov; 26(5):595–600

Benzodiazepines and the mammalian retina. II. Actions on retinal ganglion cells. Robbins J, et al. **Brain Res** 1989 Feb 13;479(2):323–33

A comparison of the effects of midazolam and pentobarbital on the dose-response of GABA-gated Cl- influx in rat brain microsacs. Yu OF, et al. **Brain Res** 1988 Jun 7; 451(1–2):376–80

Injection of benzodiazepines but not GABA or muscimol into pars reticulata substantia nigra suppresses pentylenetetrazol seizures. Zhang H, et al. **Brain Res** 1989 May 29;488(1–2):73–9

Independence of aversive and pain mechanisms in the dorsal periaqueductal gray matter of the rat. Borges PC, et al. **Braz J Med Biol Res** 1988;21(5):1027–31

The effects of midazolam on hippocampal dentate gyrus granule neurons from young and old Fischer 344 rats. Reynolds JN, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):359–62

Dose equivalence of midazolam and triazolam. A psychometric study based on flicker sensitivity, reaction time and digit symbol substitution test. Sostmann HJ, et al. **Eur J Clin Pharmacol** 1989;36(2):181–7

Shortening recovery time from diazepam and midazolam [letter] Prakash C. **Gastrointest Endosc** 1988 Nov–Dec; 34(6):491–2

Discriminative stimulus properties of midazolam in the pigeon. Evans SM, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):29–38

The effect of midazolam and succinylcholine on systemic blood pressure and intraocular pressure. Badran I, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):517–28

Effect of sodium thiopentone and midazolam on intraocular pressure, pulse rate and blood pressure—a comparative study. Ukra HS, et al. **Middle East J Anesthesiol** 1988 Oct; 9(6):491–504

Myorelaxant effect after intrathecal injection of antispastic drugs in rats. Klockgether T, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):221–6

Changes of transcranially evoked motor responses in man by midazolam, a short acting benzodiazepine. Schönle PW, et al. **Neurosci Lett** 1989 Jul 3;101(3):321–4

Effects of midazolam (a benzodiazepine) on cerebral perfusion and oxygenation in dogs. Yeh FC, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul;12(3):174–9

Discriminative stimulus properties of midazolam: comparison with other benzodiazepines. Woudenberg F, et al. **Psychopharmacology (Berlin)** 1989;97(4):466–70

Clinical pharmacology of dormicum (midazolam) and anexate (flumazenil). Amrein R, et al. **Resuscitation** 1988;16 Suppl:S5–27 (94 ref.)

[Low-dose midazolam. Effect on the induction doses of fentanyl and on hemodynamics in the coronary patient] Neidhart P, et al. **Ann Fr Anesth Reanim** 1988;7(4):294–8 (Eng. Abstr.) **(Fre)**

[The plasma histamine level during anesthesia induction using midazolam] Behne M, et al. **Anaesthesist** 1989 Jul; 38(7):348–52 (Eng. Abstr.) **(Ger)**

[Acoustic and somatosensory evoked cortical potentials in sedation with midazolam and drug antagonism with flumazenil] Kochs E, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):49–56 (Eng. Abstr.) **(Ger)**

POISONING

Postmortem determination of the biological distribution of sufentanil and midazolam after an acute intoxication. Ferslew KE, et al. **J Forensic Sci** 1989 Jan;34(1):249–57

THERAPEUTIC USE

Sedation and reversal of sedation in intensive care. Bursztein S. **Acta Anaesthesiol Belg** 1989;40(1):11–6

Chest wall rigidity during fentanyl- and midazolam-fentanyl induction: ventilatory and haemodynamic effects. Neidhart P, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):1–5

Intravenous infusion of midazolam, propofol and vecuronium in a patient with severe tetanus. Orko R, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):590–2

Midazolam for aggressivity and violence in three mentally retarded patients. Bond WS, et al. **Am J Psychiatry** 1989 Jul;146(7):925–6

Residual psychomotor effects following reversal of midazolam sedation with flumazenil. Short TG, et al. **Anaesth Intensive Care** 1989 Aug;17(3):290–7

Patient-controlled anxiolysis with midazolam. Loper KA, et al. **Anesth Analg** 1988 Nov;67(11):1118–9

Isoflurane compared with midazolam in the intensive care unit [letter] McLellan I. **BMJ** 1989 Jul 22;299(6693):259–60

Isoflurane compared with midazolam in the intensive care unit [letter] Park GR, et al. **BMJ** 1989 Jun 17; 298(6688):1642

Midazolam in upper gastrointestinal endoscopy: a single-blind dose-finding study. Sutherland LR, et al. **Clin Invest Med** 1989 Apr;12(2):99–103

Improving patient tolerance for esophageal laser therapy [letter] Bullimore DW. **Gastrointest Endosc** 1989 Jan–Feb; 35(1):68

Midazolam-associated alterations in cardiorespiratory function during colonoscopy. Hartke RH Jr, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):232–8

Diazepam versus midazolam (versed) in outpatient colonoscopy: a double-blind randomized study. Lewis BS, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):33–6

Midazolam infusion for basal sedation in intensive care: absence of accumulation. Michalk S, et al. **Intensive Care Med** 1988;15(1):37–41

Amnesic effect of midazolam as premedication in interval laparoscopic sterilization. Pausawasdi S, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:65–7

Comparison of propofol and midazolam for sedation in critically ill patients. Aitkenhead AR, et al. **Lancet** 1989 Sep 23;2(8665):704–9

Midazolam: an effective antiemetic agent for cytotoxic chemotherapy [letter] Olnyk JK, et al. **Med J Aust** 1989 Apr 17;150(8):466

Proceedings of the International Symposium on the Uses of Midazolam and Flumazenil in Intensive Care. Saint-Paul-de Vence, France, October 16, 1986. **Resuscitation** 1988;16 Suppl:S1–106

[Double-blind parallel comparison of midazolam and triazolam in sleep disorders in the aged] Francescangeli MA, et al. **Clin Ter** 1987 Jan 31;120(2):125–30 (Eng. Abstr.) **(Ita)**

MIDBRAIN see **MESENCEPHALON**

MIDBRAIN CENTRAL GRAY see **PERIAQUEDUCTAL GRAY**

MIDDLE AGE

Clustering and consistency of use of medicines among mid-aged women. Hemminki E, et al. **Med Care** 1989 Sep; 27(9):859–68

PSYCHOLOGY

Intimacy and mental disorder in late middle age. Report of the TURVA project. Salokangas RK, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):555–60

Subjective age, age identity, and middle-age adults. Steitz JA, et al. **Exp Aging Res** 1988 Summer–Autumn; 14(2–3):83–8

Life after divorce: a study of newly divorced middle-aged men in Sweden. Hallberg H, et al. **Fam Pract** 1989 Mar; 6(1):9–15

A decade of reminders: changing age consciousness between fifty and sixty years old. Karp DA. **Gerontologist** 1988 Dec; 28(6):727–38

The Men's Adult Life Experiences Inventory: an instrument for assessing developmental concerns of middle age. De Lucci MF, et al. **Psychol Rep** 1989 Apr;64(2):479–85

MIDDLE EAR IMPLANT see **OSSICULAR REPLACEMENT PROSTHESIS**

MIDDLE EAR VENTILATION

Do we treat "the right" children with secretory otitis media at the ENT clinic? Augustsson I, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:39–40

Tympanostomy tubes [letter] **Am Fam Physician** 1989 May; 39(5):34–5

Chronic secretory otitis media: effects of surgical management. Gates GA, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Jan;138:2–32

Gentamicin therapy in tympanostomy [letter] Pickard RE. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):394

The prevention of tympanic membrane perforation following the removal of long-term Paparella type II ventilation tubes [letter] Bingham BJ, et al. **Clin Otolaryngol** 1988 Dec; 13(6):501

Goode T-tubes: do the benefits of their use outweigh their complications? Brockbank MJ, et al. **Clin Otolaryngol** 1988 Oct;13(5):351–6

Why do tympanostomy tubes block? Reid AP, et al. **Clin Otolaryngol** 1988 Aug;13(4):279–83

A 15 year follow-up of a controlled trial of the use of grommets in glue ear. Skinner DW, et al. **Clin Otolaryngol** 1988 Oct;13(5):341–6

Experience with a new topical anaesthetic in otology. Timms MS, et al. **Clin Otolaryngol** 1988 Dec;13(6):485–90

An evaluation of topical anaesthesia for myringotomy. Whittet HB, et al. **Clin Otolaryngol** 1988 Dec;13(6):481–4

Speech sound discrimination pre- and posttympanostomy: a clinical case report. DeMarco S, et al. **Ear Hear** 1989 Feb;10(1):64–7

Automatic immittance audiometry on children with transtympanic ventilation tubes. Painton SW. **Ear Hear** 1989 Jun;10(3):209–10

Thermal myringotomy versus grommets in the management of secretory otitis media. Kent SE.

Int J Pediatr Otorhinolaryngol 1989 Feb;17(1):31–5

Prognostic factors in otitis media with effusion. Robinson PM. **J Laryngol Otol** 1988 Nov;102(11):989–91

Aspiration of middle ear effusions prior to grommet insertion an etiological factor in tympanosclerosis. McRae D, et al. **J Otolaryngol** 1989 Aug;18(5):229–31

Is aspiration of middle ear effusions prior to ventilation tube insertion really necessary? Youngs RP, et al. **J Otolaryngol** 1988 Aug;17(5):204–6

Recovery from OME-related phonologic delay following tube placement. Paden EP, et al. **J Speech Hear Disord** 1989 Feb;54(1):94–100

Middle ear pressure changes after general anesthesia [letter] Finkelstein Y, et al. **Laryngoscope** 1989 Mar;99(3):349

Prevention of vertigo in Ménière's syndrome by means of transtympanic ventilation tubes. Montandon P, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):377–81

The use of tympanostomy tubes. Felder H. **Pediatr Ann** 1988 Oct;17(10):616, 618–9

Antimicrobial drugs and surgical procedures in the prevention of otitis media. Paradise JL. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S35–7 (32 ref.)

[Is otitis media with effusion harmful for the language development of young children? (letter)] Mulder HJ. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):131–2 **(Dut)**

[Diagnosis and incidence of recurrence of chronic tubal secretory otitis media in childhood] Mertens H, et al. **HNO** 1988 Dec;36(12):507–10 (Eng. Abstr.) **(Ger)**

[Serous otitis: long-term efficacy of transtympanic drainage] Cuchí A. **An Otorrinolaringol Ibero Am** 1989;16(2):179–86 (Eng. Abstr.) **(Spa)**

[Exploration, diagnosis and treatment of eustachian tube diseases by means of positive pressure through a tympanic membrane perforation, or by paracentesis and transtympanic drainage] Doménec Llavallol O. **An Otorrinolaringol Ibero Am** 1989;16(2):215–28 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Tympanostomy tubes: long-term effects. Hughes LA, et al. **Am Fam Physician** 1988 Nov;38(5):186–90

Otorrhea during transtympanal ventilation. Debruyne F, et al. **Am J Otol** 1988 Jul;9(4):316–7

Hearing loss in tympanosclerosis caused by grommets. Tos M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):931–5

Bacteremia associated with tympanostomy tube insertion [letter] Lohr JA, et al. **J Infect Dis** 1989 Mar;159(3):594–5

Perforations of the tympanic membrane following the use of Goode-Type 'long term' tympanostomy tubes. Hawthorne MR, et al. **J Laryngol Otol** 1988 Nov; 102(11):997–9

Grommets and cholesteatoma in children. Herdman R, et al. **J Laryngol Otol** 1988 Nov;102(11):1000–2

[Short-term complications of transtympanic aerators] François M, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(5):349–53 (Eng. Abstr.) **(Fre)**

[Intrapetrous carotid aneurysm and tube prosthesis. Apropos of a case] Legent F, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):210–3 (Eng. Abstr.) **(Fre)**

INSTRUMENTATION

A prospective study of titanium ventilation tubes. Handler SD, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct; 16(1):55–60

A prospective randomized study of four commonly used tympanostomy tubes. Weigel MT, et al. **Laryngoscope** 1989 Mar;99(3):252–6

The punch myringotomy system. Goldsmith MM. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):642–3

METHODS

Lack of efficacy of middle-ear inflation: treatment of otitis media with effusion in children. Chan KH, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):317–23

MIDDLE LOBE SYNDROME

DIAGNOSIS

[Differential diagnosis of middle lobe diseases] Babanova NG, et al. **Probl Tuberk** 1988;(9):23–6 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Pathology of the middle lobe syndromes. A histopathological and pathogenetic analysis of sixty surgically-cured cases. Eskenasy A, et al. **Med Interne** 1982 Jan–Mar;20(1):73–80

MIDDLE PROMOTERS see **PROMOTER REGIONS (GENETICS)**

MIDGES, BITING see **CERATOPOGONIDAE**

MIDODRIN see under **ETHANOLAMINES**

MIDTRIMESTER see **PREGNANCY TRIMESTER, SECOND**

MIDWIFERY

Disciplining midwives [letter] **BMJ** 1988 Oct 29; 297(6656):1125–6

Home birth: "we did it, all of us". Goldman B. **Can Med Assoc J** 1988 Oct 15;139(8):773–4

Family planning practice among Nigerian student midwives. Adetoro OO, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):415–20

Characteristics of traditional midwives and their beliefs and practices in rural Bangladesh. Amin R, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):119–25

A study to compare the practice style of graduate and non-graduate nurses and midwives: the pilot study. Bircumshaw D, et al. **J Adv Nurs** 1988 Sep;13(5):605–14

Wibangbe: the making of a documentary about the training and supervision of traditional birth attendants in Zaire. Vansintejan GA, et al. **J Nurse Midwifery** 1988 Nov–Dec; 33(6):280–2

Obstetric protest [letter; comment] Corbishley H. **Lancet** 1989 Jul 15;2(8655):162. **Comment on:** Lancet 1989 Jun 10;1(8650):1303–4

Use of ghee during delivery [letter; comment] Murthy GV, et al. **Lancet** 1989 Jul 8;2(8654):109–10. **Comment on:** Lancet 1989 Mar 4;1(8636):486–8

The use of community health aides as perceived by their supervisors in Jamaica, West Indies (1987/88). Ennever O, et al. **West Indian Med J** 1988 Sep;37(3):131–8

[Duration of the second stage and the condition of the neonate in midwife-managed deliveries] Knuist M, et al. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):932–6 (Eng. Abstr.) **(Dut)**

[Evaluation of a survey of extreme poverty: discussion and perceptions of midwives of an obstetrical clinic] Baumann M, et al. **Cah Sociol Demogr Med** 1988 Jan–Mar;28(1):3–19 **(Fre)**

ECONOMICS

Payment for deliveries in Sierra Leone. Edwards NC, et al. **Bull WORLD Health Organ** 1989;67(2):163–9

EDUCATION

Integrating philosophy into the doctoral preparation for nurse–midwives. Rhodes JM. **J Nurse Midwifery** 1988 Nov–Dec;33(6):283–4

Early suckling and postpartum haemorrhage: controlled trial in deliveries by traditional birth attendants. Bullough CH, et al. **Lancet** 1989 Sep 2;2(8662):522–5

Cosmopolitical obstetrics: some insights from the training of traditional midwives. Jordan B. **Soc Sci Med** 1989; 28(9):925–37; discussion 937–44

Fulfilling the potential of traditional birth attendants. Okubagzhi GS. **World Health Forum** 1988;9(3):426–31

HISTORY

The training and practice of midwives: a Wisconsin study. Borst CG. **Bull Hist Med** 1988 Winter;62(4):606–27

Midwifery: past to present. Lops VR. **J Prof Nurs** 1988 Nov–Dec;4(6):402–7

Midwife regulation, education, and practice in The Netherlands during the nineteenth century. van Lieburg MJ, et al. **Med Hist** 1989 Jul;33(3):296–317

[Dissension: Velpeau, midwives and others] Logeay R. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):731–5 (Eng. Abstr.) **(Fre)**

[An outline of the history of midwifery up to the 20th century] Matuszewska E. **Ginekol Pol** 1988 Sep; 59(9):577–83 (Eng. Abstr.) **(Pol)**

[Women in medicine—a barber-surgeon, a midwife, a saint, a witch (Elizabeth Blackwell)] Hakulinen E. **Lakartidningen** 1989 Mar 1;86(9):747–9 **(Swe)**

LEGISLATION & JURISPRUDENCE

Professional midwifery [letter] Myers SJ, et al. **Am J Public Health** 1989 Apr;79(4):520

Opportunities for lay midwifery practice [letter] Starzyk PM. **Am J Public Health** 1989 Apr;79(4):520–1

Despite CMA misgivings, support for midwifery appears to be growing. LeBourdais E. **Can Med Assoc J** 1988 Oct 15;139(8):769–72

METHODS

Midwifery care routines and prevention of heat loss in the newborn: a study in Zambia. Christensson K, et al. **J Trop Pediatr** 1988 Oct;34(5):208–12

The practice of traditional birth attendants in Zululand. Jepson AP, et al. **Trop Doct** 1988 Oct;18(4):177–9

STANDARDS

Disciplining midwives [letter] Alment A. **BMJ** 1988 Oct 15; 297(6654):981

Disciplining midwives [editorial] Drife JO. **BMJ** 1988 Oct 1;297(6652):806–7

Traditional birth attendants [letter; comment] Feyi-Waboso M. **Lancet** 1989 Jul 15;2(8655):162. **Comment on:** Lancet 1989 Mar 25;1(8639):676–7

[The professional ethics of midwives] Matuszewska E. **Ginekol Pol** 1988 Sep;59(9):570–6 (Eng. Abstr.) **(Pol)**

MIGRAINE

Migraineur, or migraineuse: a cheval of a different color? [letter] Appel H. **Arch Neurol** 1989 Aug;46(8):839

Migraineur, or migraineuse? [letter] Jonas S. **Arch Neurol** 1988 Nov;45(11):1180

Migraineur, or migraineuse? [letter] Leys D, et al. **Arch Neurol** 1989 Sep;46(9):946

Headache in childhood. Rossi LN. **Childs Nerv Syst** 1989 Jun;5(3):129–34 (40 ref.)

A note on migraine and the nose [letter] Blau JN. **Headache** 1988 Aug;28(7):495

Migraine, quo vadis? Graham JR. **Headache** 1988 Nov; 28(10):681–8

The relationship between muscle contraction headache and migraine: a multivariate analysis study. Takeshima T, et al. **Headache** 1988 May;28(4):272–7

Juvenile alternating hemiplegic migraine [letter] Laan LA, et al. **Neuropediatrics** 1988 Nov;19(4):224

[The etiology and pathogenesis of migraine] Ivanišević V, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):243–8 (Eng. Abstr.) **(Scr)**

BLOOD

Platelet function in classic migraine during attack-free periods. Hedman C, et al. **Acta Neurol Scand** 1988 Oct; 78(4):271–7

Platelet catecholamines in migraine. D'Andrea G, et al. **Cephalalgia** 1989 Mar;9(1):3–5

Muscle contraction headache and migraine. Platelet activation and plasma norepinephrine during the cold pressor test. Takeshima T, et al. **Cephalalgia** 1989 Mar; 9(1):7–13

Significance of hormonal changes in migraine and cluster headache. Martignoni E, et al. **Gynecol Endocrinol** 1987 Sep;1(3):295–319 (100 ref.)

Nocturnal plasma melatonin levels in migraine: a preliminary report. Claustrat B, et al. **Headache** 1989 Apr;29(4):242–5

Differential changes in receptor-mediated transduction in migraine and cluster headache: studies on polymorphonuclear leucocytes. de Belleroche J, et al. **Headache** 1988 Jul;28(6):409–13

Platelet alpha 2-adrenoceptor binding in migraine. Hasselmark L, et al. **Headache** 1988 Oct;28(9):587–9

Cytosolic ionized calcium homeostasis in platelets: an abnormal sensitivity to PAF-activation in migraine. Joseph R, et al. **Headache** 1988 Jul;28(6):396–402

Relevance of prostaglandins in true menstrual migraine. Nattero G, et al. **Headache** 1989 Apr;29(4):233–8

Correlation between expression of blood platelet receptors for fibrinogen and plasma cholesterol in migraine patients [letter] Walkowiak B, et al. **Headache** 1988 Jul;28(6):435–6

The increased contents of beta-thromboglobulin and fibrinogen in migraine platelets indicate an abnormality in thrombopoiesis [letter] Walkowiak B, et al. **Headache** 1989 Apr;29(4):257

[Platelet phenol sulfotransferase activities: a migraine marker?] Launay JM, et al. **Therapie** 1988 Jun–Jul; 43(4):273–7 (32 ref.) (Eng. Abstr.) **(Fre)**

CEREBROSPINAL FLUID

Cerebrospinal fluid (CSF) investigations in migraine. Kovács K, et al. **Cephalalgia** 1989 Mar;9(1):53–7

CHEMICALLY INDUCED

Migrainelike headache and cocaine use. Satel SL, et al. **JAMA** 1989 May 26;261(20):2995–6

CLASSIFICATION

Variants of chronic paroxysmal hemicrania [letter] Solomon S. **Cephalalgia** 1989 Mar;9(1):79–80

COMPLICATIONS

Migraine and status epilepticus [letter] Shuaib A. **Acta Neurol Scand** 1988 Nov;78(5):445

Migraine-related stroke: brain infarction in superior cerebellar artery territory demonstrated by nuclear magnetic resonance. Titus F, et al. **Acta Neurol Scand** 1989 May;79(5):357–60

Bilateral central retinal artery occlusions, disk drusen, and migraine. Newman NJ, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):236–40

Transient comitant esotropia in a child with migraine. Slavin ML. **Am J Ophthalmol** 1989 Feb 15;107(2):190–1

Cerebral hypoperfusion followed by hyperperfusion in classic migraine [letter; comment] Spierings EL, et al. **Arch Neurol** 1989 Jun;46(6):605–6. **Comment on:** Arch Neurol 1988 Feb;45(2):154–9

Migraine and intracerebral hemorrhage. Shuaib A, et al. **Cephalalgia** 1989 Mar;9(1):59–61

Acute confusional migraine. Case report and review of literature. Haan J, et al. **Clin Neurol Neurosurg** 1988; 90(3):275–8

Migraine-epilepsy relationships. Andermann F. **Epilepsy Res** 1987 Jul;1(4):213–26 (72 ref.)

The transient global amnesia-migraine connection. Case report. Santoro G, et al. **Funct Neurol** 1988 Jul–Sep; 3(3):353–60

Headache as a risk factor in atherosclerosis-related diseases. Couch JR, et al. **Headache** 1989 Jan;29(1):49–54

Cerebral infarction in patients with migraine accompaniments. Shuaib A, et al. **Headache** 1988 Oct; 28(9):599–601

An adolescent girl with headache and syncope. Smith MS, et al. **J Adolesc Health Care** 1989 Jan;10(1):54–6

A controlled study of ischemic stroke risk in migraine patients. Henrich JB, et al. **J Clin Epidemiol** 1989; 42(8):773–80

Limb pain in migraine and cluster headache. Guiloff RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1022–31

Stokes-Adams attacks with migraine [letter] Lewis NP, et al. **Lancet** 1989 Jan 21;1(8630):165–6

Pericranial muscle tenderness and pressure-pain threshold in the temporal region during common migraine. Jensen K, et al. **Pain** 1988 Oct;35(1):65–70

Vertebrobasilar occlusive disease and childhood migraine. Dunn DW. **Pediatr Neurol** 1985 Jul–Aug;1(4):252–4

Facial pain due to migraine and cluster headache. Campbell JK. **Semin Neurol** 1988 Dec;8(4):324–31 (35 ref.)

Migraine headaches and drug abuse [letter] el-Mallakh RS. **South Med J** 1989 Jun;82(6):805

[Permanent deficiency of the visual field following migraine (letter)] Rouland JF, et al. **Presse Med** 1988 Oct 1; 17(33):1705 **(Fre)**

[Paroxysmal hemicrania preceding Pancoast's syndrome] Delreux V, et al. **Rev Neurol (Paris)** 1989;145(2):151–2 (Eng. Abstr.) **(Fre)**

[Temporal arteritis in a patient with long-standing migraine] Blaser KU, et al. **Schweiz Rundsch Med Prax** 1988 Dec 6;77(49):1355–6 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Migraine markers [editorial] Edmeads J. **Headache** 1988 Sep; 28(8):568

A diagnostic test for migraine using the visual evoked potential. Marsters JB, et al. **Headache** 1988 Sep; 28(8):526–30

Acute demyelination mimicking vascular hemicrania. Nager BJ, et al. **Headache** 1989 Jul;29(7):423–4

Cluster headache and its variants. Sjaastad O. **Headache** 1988 Nov;28(10):667–8

Cold spot question heats up [letter] Swerdlow B, et al. **Headache** 1989 Feb;29(2):122–3

Complicated migraine, migrainous infarction ... or what? [letter] Tourbah A, et al. **Headache** 1988 Nov;28(10):689

V.E.P.'s not a marker for migraine [letter] Vijayan N. **Headache** 1989 Jan;29(1):61

Migraine headaches in children. Elser J. **J Arkansas Med Soc** 1988 Oct;85(5):207–10 (8 ref.)

Hemiplegic migraine in childhood [letter] Appleton RE. **Practitioner** 1988 Mar 8;232(1444):219

Visual disturbances of migraine. Hupp SL, et al. **Surv Ophthalmol** 1989 Jan–Feb;33(4):221–36 (118 ref.)

DIET THERAPY

Oligoantigenic diet treatment of children with epilepsy and migraine. Egger J, et al. **J Pediatr** 1989 Jan;114(1):51–8

DRUG THERAPY

Comparative efficacy of chlorpromazine and meperidine with dimenhydrinate in migraine headache. Lane PL, et al. **Ann Emerg Med** 1989 Apr;18(4):360–5

Flunarizine in the treatment of migraine: state of the art. Symposium to the 3rd congress of the International Headache Society. Florence, September 23, 1987. Proceedings. **Cephalalgia** 1988;8 Suppl 8:1–40

Onset of action of various migraine prophylactics. Amery WK. **Cephalalgia** 1988;8 Suppl 8:11–3

Double-blind study of naproxen vs placebo in the treatment of acute migraine attacks. Andersson PG, et al. **Cephalalgia** 1989 Mar;9(1):29–32

Treatment of acute migraine with subcutaneous GR43175 in West Germany. Baar HA, et al. **Cephalalgia** 1989;9 Suppl 9:83–7

Combined low-dose acetylsalicylic acid and dihydroergotamine in migraine prophylaxis. A double-blind, placebo-controlled crossover study. Bousser MG, et al. **Cephalalgia** 1988 Sep;8(3):187–92

Initial clinical experience with the use of subcutaneous GR43175 in treating acute migraine. Brion N, et al. **Cephalalgia** 1989;9 Suppl 9:79–82

Effective improvement of symptoms in patients with acute migraine by GR43175 administered in dispersible tablets. Doenicke A, et al. **Cephalalgia** 1989;9 Suppl 9:89–92

Spectral EEG analysis and flunarizine treatment in migraine patients. Formisano R, et al. **Cephalalgia** 1988;8 Suppl 8:31–3

Placebo-controlled double-blind trial of pirprofen and an ergotamine tartrate compound in migraine attacks. Kinnunen E, et al. **Cephalalgia** 1988 Sep;8(3):175–9

Flunarizine vs. propranolol in the prophylaxis of migraine: two double-blind comparative studies in more than 400 patients. Lücking CH, et al. **Cephalalgia** 1988;8 Suppl 8:21–6

Flunarizine (Sibelium) in the prophylaxis of migraine. An open, long-term, multicenter trial. Martínez-Lage JM. **Cephalalgia** 1988;8 Suppl 8:15–20

Overview of initial clinical studies with intravenous and oral GR43175 in acute migraine. Perrin VL, et al. **Cephalalgia** 1989;9 Suppl 9:63–72

Flunarizine i.v. in the acute treatment of the migraine attack.

A double-blind placebo-controlled study. Soyka D, et al. **Cephalalgia** 1988;8 Suppl 8:35–40

Flunarizine vs. pizotifen in migraine prophylaxis: a review of comparative studies. Spierings EL, et al. **Cephalalgia** 1988;8 Suppl 8:27–30

Early clinical experience with subcutaneous GR43175 in acute migraine: an overview. Tfelt-Hansen P, et al. **Cephalalgia** 1989;9 Suppl 9:73–7

The effect of metoclopramide and prochlorperazine on the absorption of effervescent paracetamol in migraine. Tokola RA. **Cephalalgia** 1988 Sep;8(3):139–47

Flunarizine, a calcium-entry blocker, in childhood migraine, epilepsy, and alternating hemiplegia. Caers LI, et al. **Clin Neuropharmacol** 1987 Apr;10(2):162–8 (23 ref.)

Symptomatic relief of migraine: multicenter comparison of Cafergot P-B, Cafergot, and placebo. Friedman AP, et al. **Clin Ther** 1989;11(1):170–82

Treatment of migraine: review and update. Swanson JW. **Compr Ther** 1989 Mar;15(3):3–6 (0 ref.)

New possibilities for anti-migraine drugs: prostanoid antagonists and progesterone-mimicking stabilizers of excitable cells. Leathard HL. **Drug Des Deliv** 1989 Mar; 4(2):85–91

Do non-steroidal anti-inflammatory agents have a role in the treatment of migraine headaches? Diamond S, et al. **Drugs** 1989 Jun;37(6):755–60 (46 ref.)

Chronic ergotamine abuse: evidence of functional impairment of long ascending spinal tracts. Ludolph AC, et al. **Eur Neurol** 1988;28(6):311–6

Menstrual migraine: a double-blind trial of percutaneous estradiol. Dennerstein L, et al. **Gynecol Endocrinol** 1988 Jun;2(2):113–20

The dark side of medication abuse [editorial] Edmeads J. **Headache** 1989 Mar;29(3):190–1

Menstrual migraine and intermittent ergonovine therapy. Gallagher RM. **Headache** 1989 Jun;29(6):366–7

Enhancing the effectiveness of abortive therapy: a controlled evaluation of self-management training. Holroyd KA, et al. **Headache** 1989 Mar;29(3):148–53

"Nadolol in migrainous patients" [letter] Pascual J. **Headache** 1988 Oct;28(9):623–4

Treatment review: non-steroid anti-inflammatory drugs in the treatment and long-term prevention of migraine attacks. Pradalier A, et al. **Headache** 1988 Sep;28(8):550–7 (33 ref.)

Aborting a migraine attack: naproxen sodium v ergotamine plus caffeine. Sargent JD, et al. **Headache** 1988 May; 28(4):263–6

Flunarizine i.v. in the acute treatment of common or classical migraine attacks—a placebo-controlled double blind trial. Soyka D, et al. **Headache** 1989 Jan;29(1):21–7

Sublingual administration of flunarizine for acute migraine: will flunarizine take the place of ergotamine? Takeshima T, et al. **Headache** 1988 Oct;28(9):602–6

Migraine treatment [letter] McGrath M. **Ir Med J** 1989 Feb; 82(1):42

Pirprofen in the treatment of migraine and episodic headache attacks: a placebo-controlled crossover clinical trial. Guidotti M, et al. **J Int Med Res** 1989 Jan-Feb;17(1):48–54

Flunarizine increases PRL secretion in normal and in migraineous women. Bonuccelli U, et al. **J Neural Transm** 1988;74(1):43–53

Chronic paroxysmal hemicrania. MacMillan JC, et al. **N Z Med J** 1989 May 24;102(868):251–2

Pharmacologic treatment of migraine. Diamond S, et al. **Ration Drug Ther** 1988 Oct;22(10):1–5 (23 ref.)

Drugs and the treatment of migraine. Peatfield R. **Trends Pharmacol Sci** 1988 Apr;9(4):141–5 (32 ref.)

[Effect of sapogenins from the leaves of Panax notoginseng on migraine] Hu GC, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):726–7, 709 (Eng. Abstr.) (Chi)

[Ergotism in migraine. Peripheral vascular complications in 14 patients with migraine] Aabech J, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2067–70 (Eng. Abstr.) (Dan)

[Metoprolol, a new effective antimigraine agent] Raveau-Landon C, et al. **Presse Med** 1988 Oct 15; 17(35):1805–9 (Eng. Abstr.) (Fre)

[Use of calcium inhibitors excluding cardiac pathology and arterial hypertension] Hugues FC, et al. **Therapie** 1989 May-Jun;44(3):175–81 (53 ref.) (Eng. Abstr.) (Fre)

[Ergotism revealing Horton's disease] Zouiten F, et al. **Tunis Med** 1987 Oct;65(10):617–22 (Eng. Abstr.) (Fre)

[Proctomucosectomy and colo-anal anastomosis in rectovaginal fistula following the use of suppositories containing ergotamine] Schwab A, et al. **Chirurg** 1988 Jun; 59(6):432–4 (Eng. Abstr.) (Ger)

[Drug therapy of migraine] Pfaffenrath V, et al. **Wien Med Wochenschr** 1988 Dec 31;138(23-24):591–9 (61 ref.) (Eng. Abstr.) (Ger)

[Benefits and risk of migraine drugs containing ergotamine] Böhme HR, et al. **Z Arztl Fortbild (Jena)** 1988; 82(24):1267–71 (78 ref.) (Ger)

[Pharmacotherapy of migraine—indications and experiences] Richter R. **Z Arztl Fortbild (Jena)** 1988;82(24):1243–5 (4 ref.) (Ger)

[Use of flunarizine in the therapy of hemicrania. Clinical evaluation in 25 patients] Augliera G, et al. **Clin Ter** 1987 Nov 30;123(4):263–70 (Eng. Abstr.) (Ita)

[Calcium channel blockers in preventive treatment of migraine] Rødahl E. **Tidsskr Nor Laegeforen** 1988 Sep 10; 108(25):2040–2 (Eng. Abstr.) (Nor)

[Treatment of migraine with vasopressin] Lobzin VS, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):54–8 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Prevalence of migraine in Udo, a rural community in southern Nigeria. Longe AC, et al. **East Afr Med J** 1988 Sep;65(9):621–4

Epidemiology of migraine: a survey in 21 provinces of the People's Republic of China, 1985. Zhao F, et al. **Headache** 1988 Sep;28(8):558–65

Estimating age incidence from survey data with adjustments for recall errors. Stewart W, et al. **J Clin Epidemiol** 1989; 42(9):869–75

The Nottingham Health Profile [letter] Carr-Hill RA, et al. **Soc Sci Med** 1989;28(8):885

[Migraine in the child. Clinical study of 212 patients] Calderón-González R, et al. **Bol Med Hosp Infant Mex** 1988 Oct;45(10):637–44 (Eng. Abstr.) (Spa)

ETIOLOGY

Analysis of commercially available cheeses for the migraine inducer tyramine by thin-layer chromatography and spectrophotometry. Evans CS, et al. **Analyst** 1988 Oct; 113(10):1605–6

A study of headaches and migraine in Sjögren's syndrome and other rheumatic disorders. Pal B, et al. **Ann Rheum Dis** 1989 Apr;48(4):312–6

Cases from the aerospace medicine residents' teaching file. Case #28. An aviator with exertional migraines [clinical conference] Katchen MS. **Aviat Space Environ Med** 1988 Dec;59(12):1203–4

Basilar migraine with loss of consciousness in pregnancy. Case report. Jacobson SL, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):494–5

Migraine, insomnia, reactive depression due to brain serotonin deficiency [letter] Bucci L. **Br J Psychiatry** 1988 Jun;152:867–8

Vascular headache: a prescnting symptom of multiple sclerosis. Freedman MS, et al. **Can J Neurol Sci** 1989 Feb; 16(1):63–6

Hemicranial attacks or permanent hemicrania—a sequel of upper cervical root compression. Jansen J, et al. **Cephalalgia** 1989 Jun;9(2):123–30

Is a migraine patient more sensitive to stressors? A neuropsychological and neurophysiological study. Formisano R, et al. **Electromyogr Clin Neurophysiol** 1988 Nov-Dec;28(7–8):405–8

Menstrual migraine: a possible pathogenic implication of platelet function. Benedetto C, et al. **Gynecol Endocrinol** 1987 Dec;1(4):345–53

Preventing migraine: a study of precipitating factors. Blau JN, et al. **Headache** 1988 Aug;28(7):481–3

Migraine—resuscitation of the vascular theory [editorial] Edmeads J. **Headache** 1989 Jan;29(1):55–6

Hypothesis: stress induced vascular entrapment and migraine. Gage AA. **Headache** 1988 May;28(4):267–8

Migraine-like visual phenomena associated with cerebral venous thrombosis. Newman DS, et al. **Headache** 1989 Feb; 29(2):82–5

More on transcranial Doppler [letter] Peatfield RC. **Headache** 1989 Jan;29(1):59

Recent advances in the understanding of migraine. Spierings EL. **Headache** 1988 Nov;28(10):655–8 (16 ref.)

Migraine as a defect of brain oxidative metabolism: a hypothesis [letter] Montagna P, et al. **J Neurol** 1989 Feb; 236(2):124–5

Head injury induced migraine coma simulating acute extradural intracranial haemorrhage [letter] Duncan R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):801–2

An approach to migraine. Whitney CM, et al. **J Neurosci Nurs** 1988 Oct;20(5):284–9 (19 ref.)

Hemiplegic migraine following third molar extractions under intravenous sedation: report of a case. Strauss RA, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):184–6

The migraine syndrome in children and adolescents. Rothner AD. **Pediatr Neurol** 1986 May-Jun;2(3):121–6 (44 ref.)

Migraine and magnesium: eleven neglected connections. Swanson DR. **Perspect Biol Med** 1988 Summer; 31(4):526–57 (158 ref.)

Migrainous stroke [letter] Rothrock JF, et al. **Stroke** 1988 Oct;19(10):1306

[Migraine and the motor system] Lewit K. **Cesk Neurol Neurochir** 1988 Nov;51(6):377–82 (Eng. Abstr.) (Cze)

[Spontaneous dissection of the cervical internal carotid artery disclosed by migraine attack (letter)] Giroud M, et al. **Ann Med Interne (Paris)** 1989;140(1):59–61 (11 ref.) (Fre)

[Ophthalmic migraine and arterial cervico-cephalic malformations: apropos of a case report] Benrabah R, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):27–31 (Fre)

[Is migraine an allergic disease?] Pradalier A, et al. **Presse Med** 1989 Mar 4;18(9):459–61 (Fre)

[Migraine after red wine (letter)] Giesemann G. **Dtsch Med Wochenschr** 1988 Dec 9;113(49):1941 (Ger)

[On the pathogenesis of migraine] Taubert K. **Z Arztl Fortbild (Jena)** 1988;82(24):1227–38 (102 ref.) (Ger)

[Migraine after subarachnoid anesthesia: etiopathogenic hypothesis] Bonarelli S, et al. **Minerva Anestesiol** 1988 Jun; 54(6):269–73 (Eng. Abstr.) (Ita)

[Migraine and food] Pacor ML, et al. **Recenti Prog Med** 1989 Feb;80(2):53–5 (Eng. Abstr.) (Ita)

[Precipitating and associated factors in migraine headache] Corona-Vázquez T, et al. **Gac Med Mex** 1988 Sep-Oct; 124(9–10):359–63 (Spa)

HISTORY

Fifty years of migraine research. Lance JW. **Aust N Z J Med** 1988 May;18(3):311–7

Migraine aura as artistic inspiration. Fuller GN, et al. **BMJ** 1988 Dec 24–31;297(6664):1670–2

IMMUNOLOGY

Lupus anticoagulant, antiphospholipid antibodies and migraine. Hogan MJ, et al. **Can J Neurol Sci** 1988 Nov; 15(4):420–5

Migraine and anti-phospholipid antibodies. Shuaib A, et al. **Headache** 1989 Jan;29(1):42–5

[Local and general humoral immunity in patients with migraine, Horton's syndrome and autonomic pain] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):56–8 (Eng. Abstr.) (Rus)

METABOLISM

5-Hydroxytryptamine and its putative aetiological involvement in migraine. Lance JW, et al. **Cephalalgia** 1989; 9 Suppl 9:7–13 (46 ref.)

Brain pH in migraine: an in vivo phosphorus-31 magnetic resonance spectroscopy study. Welch KM, et al. **Cephalalgia** 1988 Dec;8(4):273–7

Mitochondrial abnormalities in migraine. Preliminary findings. Montagna P, et al. **Headache** 1988 Aug; 28(7):477–80

Low brain magnesium in migraine. Ramadan NM, et al. **Headache** 1989 Jul;29(7):416–9

Serotonin metabolism in migraine. Ferrari MD, et al. **Neurology** 1989 Sep;39(9):1239–42

Preliminary observations on brain energy metabolism in migraine studied by in vivo phosphorus 31 NMR spectroscopy. Welch KM, et al. **Neurology** 1989 Apr; 39(4):538–41

PATHOLOGY

Platelet activation and analysis of organelles in migraineurs. Riddle JM, et al. **Headache** 1989 Jan;29(1):28–33

PHYSIOPATHOLOGY

Neurophysiological findings in headache patients. Psychogalvanic reflex investigation in migraineurs and tension headache patients. Covelli V, et al. **Acta Neurol (Napoli)** 1987 Oct-Dec;9(5–6):354–8

P300 and memory in adolescents with common migraine. Gallai V, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):187–92 (28 ref.)

Regional cerebral blood flow in classic migraine [letter; comment] Vijayan N. **Arch Neurol** 1989 Jun;46(6):605. **Comment on:** Arch Neurol 1988 Feb;45(2):154–9

Stimulation of brainstem nuclei in the cat: effect on neuronal activity in the primary visual cortex of relevance to cerebral blood flow and migraine. Adams RW, et al. **Cephalalgia** 1989 Jun;9(2):107–18

EMG in common migraine: changes in absolute and proportional EMG levels during real-life stress. Goudswaard P, et al. **Cephalalgia** 1988 Sep;8(3):163–74

Migraine and left-handedness: is there a connection? Messinger HB, et al. **Cephalalgia** 1988 Dec;8(4):237–44

Chronic paroxysmal hemicrania (CPH): nomenclature as far as the various stages are concerned [editorial] Sjaastad O. **Cephalalgia** 1989 Mar;9(1):1–2

Unilaterality of headache in classic migraine. Sjaastad O, et al. **Cephalalgia** 1989 Mar;9(1):71–7

Disordered sympathetic reactivity in menstrual migraine. A cardiopressor and biochemical evaluation. Cavallini A, et al. **Funct Neurol** 1989 Jan-Mar;4(1):85–9

Platelet as a model to test autonomic function in migraine. D'Andrea G, et al. **Funct Neurol** 1989 Jan-Mar;4(1):79–83

Vegetative imbalance in migraine. A dynamic TV pupillometric evaluation. Micieli G, et al. **Funct Neurol** 1989 Jan-Mar;4(1):105–11

The localization of the initial pain of attack. A comparison between classic migraine and cervicogenic headache. Sjaastad O, et al. **Funct Neurol** 1989 Jan-Mar;4(1):73–8

Eicosanoids in primary dysmenorrhea, endometriosis and menstrual migraine. Benedetto C. **Gynecol Endocrinol** 1989; 3(1):71–94 (105 ref.)

Pupillary adrenergic sensitivity and idiopathic headache in pediatric patients. Battistella PA, et al. **Headache** 1989 Mar; 29(3):163–6

The vascular theory of migraine—resuscitated or more moribund? [letter] Blau JN. **Headache** 1989 Jun;29(6):384

Impaired cardiovascular reflexes in cluster headache and migraine patients: evidence for an autonomic dysfunction. Boiardi A, et al. **Headache** 1988 Jul;28(6):417–22

Are there objective criteria to follow up migrainous patients? A prospective study with thermography and evoked potentials. Dalla Volta G, et al. **Headache** 1988 Jul; 28(6):423–5

Long-latency auditory event related potentials in migraine.

Drake ME Jr, et al. **Headache** 1989 Apr;29(4):239–41
Autonomic dysfunction in migraine: a survey of 188 patients. Havanka–Kanniainen H, et al. **Headache** 1988 Aug; 28(7):465–70
Ocular blood flow changes in cluster headache and chronic paroxysmal hemicrania. Horven I, et al. **Headache** 1989 Jun;29(6):373–6
Regional cerebral blood flow in the different clinical types of migraine. Juge O. **Headache** 1988 Sep;28(8):537–49
Hyperperfusion of cerebral cortex, thalamus and basal ganglia during spontaneously occurring migraine headaches. Kobari M, et al. **Headache** 1989 May;29(5):282–9
Clinical and electrophysiological responses to dietary challenge in migraineurs. Lai CW, et al. **Headache** 1989 Mar;29(3):180–6
Hemiplegic migraine in pregnancy. Mandel S. **Headache** 1988 Jul;28(6):414–6 (24 ref.)
Pattern-reversal visual evoked potentials and EEG correlations in common migraine patients. Mariani E, et al. **Headache** 1988 May;28(4):269–71
Interhemispheric attentional functioning in classic migraine subjects during paroxysmal and interparoxysmal phases. Mazzucchi A, et al. **Headache** 1988 Aug;28(7):488–93
Cardiovascular sympathetic hypofunction in muscle contraction headache and migraine. Mikamo K, et al. **Headache** 1989 Feb;29(2):86–9
Visual evoked potential in patients with migraine. Raudino F. **Headache** 1988 Sep;28(8):531–3
Blood flow and vascular reactivity during attacks of classic migraine—limitations of the Xe–133 intraarterial technique. Skyhøj Olsen T, et al. **Headache** 1989 Jan;29(1):15–20
Fluctuating hearing losses in children can be migraine equivalents. Bernard PA, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):141–8
The sensorium of the migraineur. Amery WK, et al. **Ital J Neurol Sci** 1988 Dec;9(6):539–45
Can association between transient global amnesia and migraine tell us something about the pathophysiology of transient global amnesia? Nichelli P, et al. **Ital J Neurol Sci** 1988 Apr;Suppl 9:41–3
Ophthalmoplegic migraine with bilateral involvement [letter] Hutchinson DO, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):807–8
Oral habits in common between tension headache and non–headache populations. Moss RA, et al. **J Oral Rehabil** 1989 Jan;16(1):71–4
Transient global amnesia, epilepsy, and migraine: diagnostic comparisons and distinctions. Duncan MB, et al. **Milit Med** 1989 Aug;154(8):424–7
Disturbances of cerebral blood flow in interictal phase of complicated migraine. Nikolić I, et al. **Neurologija** 1988; 37(3–4):41–9
The effects of aging on cerebral blood flow in migraine. Robertson WM, et al. **Neurology** 1989 Jul;39(7):947–51
Visual field loss in migraine. Lewis RA, et al. **Ophthalmology** 1989 Mar;96(3):321–6
[Cervicogenic headache. An over- or underdiagnosed headache syndrome?] Pfaffenrath V. **Fortschr Med** 1989 Mar 15;107(8):189–93 (27 ref.) (Eng. Abstr.) **(Ger)**
[Migraine in childhood. Peculiarities from the neurologic viewpoint] Pothmann R. **Fortschr Med** 1988 Aug 20; 106(24):489–91 (31 ref.) (Eng. Abstr.) **(Ger)**
[Hemicrania–epilepsy syndrome: clinical contribution and pathogenetic interpretation] Floris V, et al. **Riv Neurol** 1988 Nov–Dec;58(6):249–55 (Eng. Abstr.) **(Ita)**
[Evaluation of the vestibular system in patients with migraine] Split W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):383–6 (Eng. Abstr.) **(Pol)**
[A migraine hemisyndrome in childhood] González Herrera R, et al. **An Esp Pediatr** 1988 May;28(5):437–9 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Valproate: a new drug in migraine prophylaxis. Sørensen KV. **Acta Neurol Scand** 1988 Oct;78(4):346–8
Migraine: a food-related immune reaction? [letter] Giacovazzo M, et al. **Ann Allergy** 1989 Sep;63(3):255
Central effects of drugs used in migraine prophylaxis evaluated by visual evoked potentials. Diener HC, et al. **Ann Neurol** 1989 Feb;25(2):125–30
Nimodipine in migraine prophylaxis. Ansell E, et al. **Cephalalgia** 1988 Dec;8(4):269–72
Symptoms of classic migraine attacks: modifications brought about by metoprolol. Hedman C, et al. **Cephalalgia** 1988 Dec;8(4):279–84
Nifedipine versus propranolol for the initial prophylaxis of migraine. Albers GW, et al. **Headache** 1989 Apr;29(4):215–8
Long acting propranolol in the prophylaxis of migraine. Comparison of the daily doses of 80 mg and 160 mg. Havanka–Kannisinen H, et al. **Headache** 1988 Oct; 28(9):607–11
Successful aspirin prophylaxis in a child with chronic paroxysmal hemicrania. Kudrow DB, et al. **Headache** 1989 May;29(5):280–1
Flunarizine and propranolol in the treatment of migraine. Ludin HP. **Headache** 1989 Apr;29(4):219–24
Verapamil in migraine prophylaxis—a five-year review. Solomon GD. **Headache** 1989 Jul;29(7):425–7 (16 ref.)
Effect of prophylactic administration of nimodipine in patients with migraine. Stewart DJ, et al. **Headache** 1988 May;28(4):260–2
Efficacy of transdermal clonidine for headache prophylaxis and reduction of narcotic use in migraine patients. A randomized crossover trial. Bredfeldt RC, et al. **J Fam Pract** 1989 Aug;29(2):153–6; discussion 157–8
Nifedipine in the prophylaxis of classic migraine: a crossover, double–masked, placebo–controlled study of headache frequency and side effects. McArthur JC, et al. **Neurology** 1989 Feb;39(2 Pt 1):284–6
[Comparative study of indoramin versus dihydroergotamine in the preventive treatment of migraine] Pradalier A, et al. **Therapie** 1988 Jun–Jul;43(4):293–7 (Eng. Abstr.) **(Fre)**
[Calcium antagonist effective in migraine attack. Problems with ergotamine—sublingual administration is necessary for calcium antagonists] Müller–Plettenberg D. **Fortschr Med** 1988 Sep 20;106(27):71 **(Ger)**
[Prevention of migraine with metoprolol and flunarizine. A double–blind crossover study] Grotemeyer KH, et al. **Nervenarzt** 1988 Sep;59(9):549–52 **(Ger)**

PSYCHOLOGY

Electromyographic and vasomotor activity in tension, migraine, and combined headache patients: the influence of postural variation. Ahles TA, et al. **Behav Res Ther** 1988; 26(6):519–25
The relationship between headaches and mood. Martin PR, et al. **Behav Res Ther** 1988;26(4):353–6
Personality and memory in childhood migraine. D'Andrea G, et al. **Cephalalgia** 1989 Mar;9(1):25–8
Relaxation prophylaxis for childhood migraine: a randomized placebo–controlled trial. McGrath PJ, et al. **Dev Med Child Neurol** 1988 Oct;30(5):626–31
The migraine. Walling AD. **Fam Med** 1988 Jul–Aug; 20(4):249, 309
Different forms of migraine in childhood and adolescence: notes on personality traits. Lanzi G, et al. **Headache** 1988 Oct;28(9):618–22
Psychological aspects of weekend headache sufferers in comparison with migraine patients. Nattero G, et al. **Headache** 1989 Feb;29(2):93–9
The migraine aura as a cause of avoidance behavior. Spierings EL, et al. **Headache** 1989 Apr;29(4):255–6
Prevalence of migraine and muscle tension headache in depressive disorders. Marchesi C, et al. **J Affective Disord** 1989 Jan–Feb;16(1):33–6
Exploration of the type A behavior pattern in chronic headaches sufferers. Rappaport NB, et al. **J Consult Clin Psychol** 1988 Aug;56(4):621–3
Psychophysiological reactivity of migraine sufferers in conditions of stress and relaxation. Kröner–Herwig B, et al. **J Psychosom Res** 1988;32(4–5):483–92
[A telepathic phenomenon] Leuschner W. **Psyche (Stuttg)** 1989 May;43(5):415–28 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Brain imaging with 123I–IMP–SPECT in migraine between attacks. Schlake HP, et al. **Headache** 1989 Jun;29(6):344–9
[Alternating hemiplegia in childhood. Clinical report and single photon emission computed tomography study] Siemes H, et al. **Monatsschr Kinderheilkd** 1988 Aug; 136(8):467–70 (Eng. Abstr.) **(Ger)**

REHABILITATION

[Treatment of migraine with controlled reflex methods and stimulation therapy] Heydenreich A. **Z Arztl Fortbild (Jena)** 1988;82(24):1247–9 (0 ref.) **(Ger)**

THERAPY

Helping adolescents manage migraine headaches. Lascelles MA, et al. **Am J Nurs** 1989 Sep;89(9):1215–6
Temperature–biofeedback treatment of migraine headache. Specific effects and the effects of "generalization training". Johansson J, et al. **Behav Modif** 1987 Apr;11(2):182–99
Treating migraine. Clough C. **BMJ** 1989 Jul 15; 299(6692):141–2 (37 ref.)
The treatment of migraine with variable frequency photo–stimulation. Anderson DJ. **Headache** 1989 Mar; 29(3):154–5
Home– vs. clinic–based biofeedback treatment for pediatric migraine: results of treatment through one–year follow–up. Burke EJ, et al. **Headache** 1989 Jul;29(7):434–40
Cognitive–behavioral therapy for migraine headaches: a minimal–therapist–contact approach versus a clinic–based approach. Richardson GM, et al. **Headache** 1989 Jun; 29(6):352–7
Long–term effects of training in relaxation and stress–coping in patients with migraine: a 3–year follow–up. Sorbi M, et al. **Headache** 1989 Feb;29(2):111–21
Treatment of migraine. Wilkinson M. **Headache** 1988 Nov; 28(10):659–61
Relief of common migraine by exercise [letter] Ferrari MD. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1011
Four steps in managing migraine. Edmeads J. **Postgrad Med** 1989 May 1;85(6):121–4, 127–8, 131–4 (25 ref.)
[Punctate transcutaneous electrical nerve stimulation in migraine therapy] Heydenreich A. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):717–23 (Eng. Abstr.) **(Ger)**
[Responsibilities and possibilities of pain consultation] Kiehl U. **Z Arztl Fortbild (Jena)** 1988;82(24):1263–5 **(Ger)**
[Progressive relaxation and propranolol in migraine therapy] Schulz HD, et al. **Z Arztl Fortbild (Jena)** 1988; 82(24):1259–60 **(Ger)**
[Punctate transcutaneous electrical nerve stimulation in functional vertebragenic disorders and in migraine] Heydenreich A. **Z Gesamte Inn Med** 1988 Nov 15; 43(22):651–3 (Eng. Abstr.) **(Ger)**
[Manual lymph drainage in migraine treatment—a pathophysiologic explanatory model] Trettin H. **Z Lymphol** 1989 Jul;13(1):48–53 (17 ref.) (Eng. Abstr.) **(Ger)**
[Principles of pathogenetic treatment of cyclic migraine–like cephalalgia in women] Govorukhina EM. **Sov Med** 1989; (5):98–102 **(Rus)**
[Therapy of migraine] Jovičić A, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):249–53 (Eng. Abstr.) **(Scr)**

URINE

Inhibition of vasopressin secretion during migraine. Poole CJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1441–4

MIGRANTS see **TRANSIENTS AND MIGRANTS**

MIGRATION, CELL see **CELL MOVEMENT**

MIGRATION INHIBITION FACTORS, MACROPHAGE see **MACROPHAGE MIGRATION INHIBITORY FACTORS**

MIKAMYCINS see **VIRGINIAMYCINS**

MILIARIA

PHYSIOPATHOLOGY

Nonconventional remission of miliaria rubra during heat acclimation: a case report. Armstrong L, et al. **Milit Med** 1988 Aug;153(8):402–4

MILIEU THERAPY

Use of open report as a staff–patient model of communication on a schizophrenia research unit: a case report. Puskar KR, et al. **Arch Psychiatr Nurs** 1988 Oct;2(5):274–80
What is therapeutic about inpatient alcoholism treatment? Adelman SA, et al. **Hosp Community Psychiatry** 1989 May; 40(5):515–9 (41 ref.)
Use of milieu as a problem–solving strategy in addiction treatment. Jack LW. **Nurs Clin North Am** 1989 Mar; 24(1):69–80 (20 ref.)
Assessment of therapeutic alliances in the psychiatric hospital milieu. Allen JG, et al. **Psychiatry** 1988 Aug;51(3):291–9
[Pharmacotherapy and milieu therapy in senile dementia] Wettstein A. **Ther Umsch** 1989 Jan;46(1):66–71 (Eng. Abstr.) **(Ger)**

METHODS

Adapting milieu approaches to acute inpatient care for schizophrenic patients. Kahn EM, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):609–14
The Quilt–Work Theory: a milieu approach. Goldberg K. **New Dir Ment Health Serv** 1988 Summer;(38):5–21
The Quilt–Work Theory: commentary. Wilner M. **New Dir Ment Health Serv** 1988 Summer;(38):23–9

MILITARY ANTI-SHOCK TROUSERS see **G SUITS**

MILITARY HYGIENE

[Sanitary microbiologic characteristics of barracks] Gritsenko VK, et al. **Voen Med Zh** 1989 Feb;(2):43–5 **(Rus)**
[A method for assessing the sanitary status of the area and water supply of a troop unit] Konyshev IS, et al. **Voen Med Zh** 1988 Nov;(11):38–40 **(Rus)**
[Methods for the sanitary inspection of barbershops] Zviagintsev AP. **Voen Med Zh** 1988 Sep;(9):41–3 **(Rus)**

METHODS

[Experience in performing sanitary hygiene and epidemic–control measures among troops deployed in an area of destruction] Konyshev NS, et al. **Voen Med Zh** 1989 Feb;(2):11–3 **(Rus)**

STANDARDS

[Ways to improve health inspection (a discussion of the article by L. A. Ianyshin)] Danilenko VI. **Voen Med Zh** 1988 Oct; (10):52–3 **(Rus)**
[Hygienic analysis of the irradiation dosages in the practical health inspection of the provision of radiation safety in radiology facilities] Petrov OI. **Voen Med Zh** 1988 Jun; (6):42–4 **(Rus)**

TRENDS

[The decisions of the All–Union Congress of Physicians—put into the practice of military public health] **Voen Med Zh** 1988 Nov;(11):3–7 **(Rus)**
[Towards efficiency in prevention] Borisenko IA, et al. **Voen Med Zh** 1988 Aug;(8):8–10 **(Rus)**
[Let us raise the efficacy of health inspection] Chvyrev VG. **Voen Med Zh** 1988 Jun;(6):3–7 **(Rus)**

[Health inspection problems at the current stage] Shevelo FS, et al. **Voen Med Zh** 1989 Apr;(4):51–2 **(Rus)**

MILITARY MEDICINE

see related
SURVIVAL
WOUNDS AND INJURIES

Middle ear injury in animals exposed to complex blast waves inside an armored vehicle. Phillips YY, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:17–22

Use of modeling in predicting tympanic membrane rupture. Stuhmiller JH. **Ann Otol Rhinol Laryngol Suppl** 1989 May; 140:53–60

The development of personal conditioning in military aviation. Allan JR. **Ergonomics** 1988 Jul;31(7):1031–40

Physiological aspects of electrically heated garments. Haisman MF. **Ergonomics** 1988 Jul;31(7):1049–63 (36 ref.)

A personal conditioning system based on a liquid-conditioned vest and a thermoelectric supply system. Richardson G, et al. **Ergonomics** 1988 Jul;31(7):1041–7

Will the increased military low-level flying activity in Labrador be detrimental to the hearing of humans in the region? Baxter JD, et al. **J Otolaryngol** 1989 Feb; 18(1):68–73

Unde venimus et quo vademus? [editorial] **J R Army Med Corps** 1989 Feb;135(1):3–4

Lands of contrast—soldiering abroad: discussion paper. Whelan TR. **J R Soc Med** 1988 Dec;81(12):721–2

Front line, sources of conflict all too close for US military physicians in divided Korea [news] Cowart VS. **JAMA** 1989 May 19;261(19):2797–8

Now and then, even rugged Marines may need a few good physicians [news] Cowart VS. **JAMA** 1989 May 19; 261(19):2776

Venerable Presidio houses varied medical, research programs for Army [news] Goldsmith MF. **JAMA** 1989 May 19; 261(19):2810, 2814

At US Army and Air Force bases in Europe, babies and broken bones head medical care list [news] Goldsmith MF. **JAMA** 1989 May 19;261(19):2802, 2806–7

Air Force, Army, Navy physicians face unusual variety of challenges [news] Gunby P. **JAMA** 1989 May 19; 261(19):2755–7

Assessing quality [editorial] Kelly JT. **JAMA** 1988 Nov 11; 260(18):2715–6

Army, Navy, Air Force, Reserve flight surgeons share aerial working conditions of 'patients' [news] Kirn TF, et al. **JAMA** 1989 May 19;261(19):2761, 2768–9

Army emphasizes burn research, treatment; Air Force provides rapid transportation [news] Marwick C. **JAMA** 1989 May 19;261(19):2801

Coast Guard turns to Public Health Service, civilian physicians to meet medical needs [news] Marwick C. **JAMA** 1989 May 19;261(19):2784

Military medical 'commuting' may mean flying 12 hours to a turnkey hospital in mid-Europe [news] Raymond C. **JAMA** 1989 May 19;261(19):2774–5

When the enemy is the environment, medical research may help provide effective defense [news] Raymond C. **JAMA** 1989 May 19;261(19):2822

Heart-rate and blood-pressure response in medium-artillery gun crews. Carter NL. **Med J Aust** 1988 Aug 15; 149(4):185–9

Editorial counterpoint: medical ethics and military medicine; another perspective. Auster SL. **Milit Med** 1988 Nov; 153(11):576–7

Sterilization in the field—a place for glutaraldehyde [letter] Boland JP. **Milit Med** 1988 Dec;153(12):652–3

Traumatic sternal fractures: current concepts in diagnosis and management. Carey S, et al. **Milit Med** 1988 Sep; 153(9):451–3

Medical ethics and military medicine [letter] Carter BS. **Milit Med** 1989 Jul;154(7):379–80

Improving the Army's Primary Care Delivery System [letter] Clarke R. **Milit Med** 1989 Feb;154(2):103–4

The effectiveness of role playing in cardiac care rehabilitation education. Collins JA. **Milit Med** 1988 Sep;153(9):464–8

Clinical nuclear pharmacy practice in the U.S. Army. Dydek GJ. **Milit Med** 1988 Dec;153(12):609–11

One-year prevalence of lower extremity injuries among active duty military soldiers. Fleming JL. **Milit Med** 1988 Sep;153(9):476–8

Rebuttal to Simon Auster's essay, "Editorial Counterpoint" [editorial] Frisina ME. **Milit Med** 1989 Jul;154(7):376–7

Developing and implementing a quality assurance program in a U.S. Coast Guard ambulatory health care facility. Kaplowitz GJ. **Milit Med** 1988 Dec;153(12):625–8

Staff surgeon stress syndrome [letter] Lamb JM. **Milit Med** 1988 Oct;153(10):540

Quality assurance in military medicine is not unique [editorial] Leonard EP. **Milit Med** 1989 Mar;154(3):159–60

AIDS. Case for diagnosis series, 1988. Macher AM, et al. **Milit Med** 1988 Dec;153(12):M81–8 (26 ref.)

Utilization of hydrocortisone phonophoresis in United States Army Physical Therapy Clinics. Pottenger FJ, et al. **Milit Med** 1989 Jul;154(7):355–8

AIDS. Case for diagnosis series, 1988. Tuur SM, et al. **Milit Med** 1988 Sep;153(9):M57–64

Experiences in Third World anesthesia: peacetime training for operational deployment. Whitten CE. **Milit Med** 1988 Dec;153(12):629–32

Stress fractures in female soldiers: an epidemiological investigation of an outbreak. Zahger D, et al. **Milit Med** 1988 Sep;153(9):448–50

Medical success in El Salvador. Zajtchuk R, et al. **Milit Med** 1989 Feb;154(2):59–61

Implementation of a smoking policy in the United States Army. Hagey A. **N Y State J Med** 1989 Jan;89(1):42–4

Requirements of radioprotectors for military and emergency needs. Walker RI. **Pharmacol Ther** 1988;39(1-3):13–20 (19 ref.)

[Juvenile obesity and fitness for military service] Frehner C, et al. **Schweiz Med Wochenschr** 1988 Oct 8; 118(40):1427–36 (Eng. Abstr.) **(Ger)**

[Inventors and innovators in medicine (1)] **Voen Med Zh** 1989 Mar;(3):57–8 **(Rus)**

[Current demands for a medical first aid record and ways for its improvement] Abdrashitov RS, et al. **Voen Med Zh** 1988 Oct;(10):13–20 **(Rus)**

[The experience of creative cooperation of the official military- physician commission and scientists] Adamenko AM, et al. **Voen Med Zh** 1989 May;(5):21–2 **(Rus)**

[Determination of the need and the demand for medical supplies by a troop unit] Chakchir BA, et al. **Voen Med Zh** 1988 Aug;(8):55–7 **(Rus)**

[The term "medical protection"] Karakchiev NI. **Voen Med Zh** 1989 Feb;(2):18 **(Rus)**

[Optimization of the work of surgeons at a military polyclinic] Pashnev VIa, et al. **Voen Med Zh** 1988 Jul; (7):59–60 **(Rus)**

[The official visit of military physicians of the USA to the Soviet Union] Pogrebenkov VI, et al. **Voen Med Zh** 1989 Apr;(4):73–7 **(Rus)**

[Organization of the work of specialist physicians in a district military hospital in a troop unit] Vissarionov VF. **Voen Med Zh** 1988 Jun;(6):25–6 **(Rus)**

[Military medical terminology] Voitenko MF. **Voen Med Zh** 1989 Feb;(2):17–8 **(Rus)**

[Medical ethics and deontology in the practice of health inspection] Zybov AM. **Voen Med Zh** 1988 Aug;(8):48–9 **(Rus)**

EDUCATION

Medicine and the military. Gano RG. **JAMA** 1988 Nov 4; 260(17):2588

Academy provides training in many aspects of military medicine and its applications [news] Marwick C. **JAMA** 1989 May 19;261(19):2794

The "civilianization" of the Army Medical Department [letter] Cloonan CC. **Milit Med** 1988 Oct;153(10):537–8

Curriculum design: operational medicine. Goodell TP, et al. **Milit Med** 1989 Jan;154(1):36–7

Medical Readiness Education and Training Exercises by United States Army medical personnel in Kenya. Hand R, et al. **Milit Med** 1989 Aug;154(8):417–21

Combat casualty care training for reserve forces. Hayunga EG, et al. **Milit Med** 1988 Nov;153(11):574–5

How shall we train for combat casualty care [letter] Kerstein MD. **Milit Med** 1988 Oct;153(10):537

Oncology Pharmacy Residency at Walter Reed Army Medical Center. Martin SC. **Milit Med** 1988 Aug; 153(8):413–6

Gynecologic surgery training in a Third World country. Mayer AR. **Milit Med** 1988 Oct;153(10):533–5

The medical care system and medical readiness training exercises (MEDRETEs) in Honduras. Wittich AC. **Milit Med** 1989 Jan;154(1):19–23

[Current problems of training students in orthopedics-traumatology and military and field surgery at the medical institutes of the country] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Nov;(11):68–70 **(Rus)**

[The museum and its role in the training of physicians] Losev GS, et al. **Sov Zdravookhr** 1988;(11):45–8 **(Rus)**

[Activities of the organizational-methodologic council with regard to controlling the quality of the training of physicians] Shendrik IuG. **Sov Zdravookhr** 1989;(1):59–62 (Eng. Abstr.) **(Rus)**

[The activities of the institutions of higher education in military rear units raised to a new quality level] **Voen Med Zh** 1988 Sep;(9):7–10 **(Rus)**

[The higher military medical school on the pathway of perestroika] **Voen Med Zh** 1988 Jun;(6):8–11 **(Rus)**

[Professional orientation in the teaching of social and political disciplines at the military medicine department] Arenko VA, et al. **Voen Med Zh** 1988 Aug;(8):16–9 **(Rus)**

[The pride of the faculty] Arenko VA. **Voen Med Zh** 1989 Jan;(1):19–21 **(Rus)**

[50th anniversary of internships for medical personnel of the Moscow Military District] Chernilevskii LI. **Voen Med Zh** 1988 Aug;(8):78–9 **(Rus)**

[The professional orientation of troop physicians] Dronov VN, et al. **Voen Med Zh** 1989 Mar;(3):18–20 **(Rus)**

[Increased quality of the academic training process in the internship of medical personnel] Dronov VN, et al. **Voen Med Zh** 1988 Aug;(8):11–4 **(Rus)**

[A scale on the attitude of medical institute students to the academic disciplines in a military department] Druzhinin GA, et al. **Voen Med Zh** 1988 Nov;(11):22 **(Rus)**

[Evaluation of the work of the teacher] Frolov SS. **Voen Med Zh** 1988 Aug;(8):19–22 **(Rus)**

[The training of medical personnel for the naval forces of the USA] Konovalov VD, et al. **Voen Med Zh** 1989 Mar; (3):72–4 (12 ref.) **(Rus)**

[The use of visual aids in the academic process in the military department of a medical institute] Liashchenko NE, et al. **Voen Med Zh** 1988 Sep;(9):14–6 **(Rus)**

[The use of computer technology in instructing students in the military department of a medical institute] Losenok AM, et al. **Voen Med Zh** 1988 Dec;(12):22–3 **(Rus)**

[Teaching the problems of organizing treatment and prevention work in the troop unit] Osipov NA, et al. **Voen Med Zh** 1988 Aug;(8):14–6 **(Rus)**

[Patriotic and international instruction during the training of the military physician] Pakhomov NV. **Voen Med Zh** 1988 Nov;(11):16–8 **(Rus)**

[The importance of technical teaching aids in optimizing the academic process] Pakhunov OF, et al. **Voen Med Zh** 1988 Oct;(10):26–7 **(Rus)**

[Military patriotic training at the institute] Pakhunov OF, et al. **Voen Med Zh** 1988 Aug;(8):22–3 **(Rus)**

[A method for conducting exercises in the basics of organizing epidemic control measures in a troop unit] Podkorytov IuA, et al. **Voen Med Zh** 1988 Oct;(10):27 **(Rus)**

[Experience in the training of military medical personnel for the Czechoslovak People's Army (the Czechoslovak Socialist Republic)] Ryšanek J. **Voen Med Zh** 1988 Aug; (8):75–7 **(Rus)**

[The making of the military physician (a response to opponents)] Skachkov NM. **Voen Med Zh** 1988 Dec; (12):19–22 **(Rus)**

[Experience in teaching military naval therapy] Sukhanova GI, et al. **Voen Med Zh** 1989 Apr;(4):33–4 **(Rus)**

[The troop physician: the problems of his formation (interview by Iu. S. Golovyl] Vasin VV. **Voen Med Zh** 1989 Feb;(2):8–10 **(Rus)**

[Irregular-staff school for health instructors—a new form of training youth for military service] Vlasenko VF, et al. **Voen Med Zh** 1988 Aug;(8):24–5 **(Rus)**

[Improvement in the military medical training of students (we discuss the problems of teaching military field surgery and military field therapy in the medical institute)] Zybov AM. **Voen Med Zh** 1988 Jun;(6):23–4 **(Rus)**

HISTORY

Samuel A. Levine and his World War I experience. Wooley CF, et al. **Am J Cardiol** 1988 Nov 1;62(13):952–6

Blast injury of the ear: historical perspective. Chait RH, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:9–12

Rupert Downes memorial lecture: distinguished Australian military surgeons. Smithurst BA. **Aust N Z J Surg** 1989 Sep;59(9):731–41

British medical services at the Battle of Waterloo. Howard MR. **BMJ** 1988 Dec 24–31;297(6664):1653–6

The U.S. Army Medical Museum. McMasters TO. **Caduceus** 1989 Summer;5(2):85–91

Do not forget MDs' wartime sacrifices, CMA president urges. Sullivan P. **Can Med Assoc J** 1988 Nov 15; 139(10):1000–1

Teaching of medicine in the Dutch East Indies. De Moulin D. **Clio Med** 1987–88;21(1–4):119–24

Vascular problems at the Battle of Waterloo. Crumplin MK. **Eur J Vasc Surg** 1987 Apr;1(2):137–42

Medical museum notes. Bonsett CA. **Indiana Med** 1988 Aug; 81(8):672, 740

The Combat Fitness Test—its Victorian origins. Bennett JD. **J R Army Med Corps** 1989 Jun;135(2):91–2

AFIP: pathology laboratory to the world [news] Merz B. **JAMA** 1989 May 19;261(19):2807, 2809–10

Lessons of Pearl Harbor. Hardaway RM. **Milit Med** 1988 Oct;153(10):495–8

The Army Medical Department and the Civil War: historical lessons for current medical support. Nolan DL, et al. **Milit Med** 1989 May;154(5):265–71

Saudade 1944: working with the Brazilian medical corps. Weinberger LM. **Pharos** 1989 Summer;52(3):17–20

Evolution of civil aeromedical helicopter aviation. Meier DR, et al. **South Med J** 1989 Jul;82(7):885–91

[Nicolas Puzos: an obstetrician of the 18th century. From military surgery to obstetrics and from milk fever to placenta praevia] Dumont M. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):431–7 (Eng. Abstr.) **(Fre)**

[Polish health care in Hungary during WW II] Kapronczay K. **Orv Hetil** 1989 Jul 23;130(30):1613–4 **(Hun)**

[Activities of medical supervisory committees during the Hungarian freedom-fight of 1848] Kapronczay K. **Orv Hetil** 1989 Aug 6;130(32):1721 **(Hun)**

[Academic dissertations of military pharmacists on the history of pharmacy] Markowski W. **Arch Hist Filoz Med** 1988; 51(3):391–400 (Eng. Abstr.) **(Pol)**

[Who knows the fate of the flag of the School for Military Medical Personnel in Warsaw?] Skrobacki A. **Arch Hist Filoz Med** 1988;51(2):251–3 **(Pol)**

[Health services of the Home Army] Jaśniewicz Z, et al. **Przegl Lek** 1989;46(1):107–24 **(Pol)**

[Health services of the Home Army in the Rabka district] Marczyński A. **Przegl Lek** 1989;46(1):125–32 **(Pol)**

[Scientific activity of Prof. A. A. Maksimov at the military-medical academy] Klishov AA. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):86–9 **(Rus)**

[The centenary of the Department of Traumatology and Orthopedics of the S.M. Kirov Order of Lenin, Red Banner, Military Medical Academy] Tkachenko SS.

Ortop Travmatol Protez 1988 Aug;(8):6–12 (Rus)
[Activities of medical scientists in the Western Siberia during World War II] Zelenin SF. Sov Zdravookhr 1988;(11):53–5 (Rus)
[On the centenary of the Department of Military Traumatology and Orthopedics of the S. M. Kirov Military Medical Academy] Voen Med Zh 1988 Oct;(10):74–6 (Rus)
[M. I. Baranov and the journal Voenno-sanitarnoe delo] Voen Med Zh 1989 Jan;(1):64–5 (Rus)
[Evacuation of the sick and wounded via inland water routes during World War II] Amusin BM. Voen Med Zh 1988 Jun;(6):71–3 (Rus)
[The organization of the technical supplies of the medical service of the Armed Forces in the prewar years] Chirkov AI, et al. Voen Med Zh 1989 Apr;(4):68–70 (Rus)
[The work organization of a pharmacy in a division medical aid battalion] Chirkov AI, et al. Voen Med Zh 1988 Sep;(9):71–3 (Rus)
[The tasks of military medicine historians in the light of perestroika] Georgievskiĭ AS, et al. Voen Med Zh 1989 Feb;(2):71–4 (Rus)
[The experience of carrying and transporting those wounded in battles at Ardon in November–December of 1942] Ivanov AI. Voen Med Zh 1989 May;(5):72–4 (Rus)
[50th anniversary of the Department of the Organization and Tactics of the Naval Medical Service] Konoplin AS. Voen Med Zh 1989 Apr;(4):66–8 (Rus)
[Medics of the 64th guards rifle division in the battle of "Iskra"] Krasnopeev II. Voen Med Zh 1989 May;(5):70–2 (Rus)
[Mobile repair units of the medical corps during World War II] Kuvshinskiĭ CS, et al. Voen Med Zh 1989 May;(5):74–5 (Rus)
[Measuring devices and equipment in the practical work of medical personnel during World War II] Kuvshinskiĭ VD, et al. Voen Med Zh 1989 Feb;(2):77 (Rus)
[Troop medical supplies during the battle on the Kursk arch] Lapin VP. Voen Med Zh 1988 Jul;(7):16–8 (Rus)
[Medical support of the Soviet troops in the Kursk defensive operation] Lobastov OS, et al. Voen Med Zh 1988 Jun;(6):12–7 (Rus)
[Medical support for the Soviet troops in the Kursk offensive operation] Lobastov OS, et al. Voen Med Zh 1988 Jul;(7):11–5 (Rus)
[The organization of medical support for Soviet troops in the battle for the Dnieper] Sokolov VI. Voen Med Zh 1988 Dec;(12):11–8 (Eng. Abstr.) (Rus)
[The training and utilization of gynecology specialists during World War II] Tsvelev IuV, et al. Voen Med Zh 1988 Sep;(9):73–4 (Rus)
[The scientific work of physicians of the Black Sea Fleet] Ugulava SN, et al. Voen Med Zh 1988 Jul;(7):74–6 (Rus)
[Unresolved problems of the medical support for the Armed Forces in World War II] Voĭtenko MF. Voen Med Zh 1988 May;(5):22–5 (Rus)
[The return home] Zakharov VP. Voen Med Zh 1988 Aug;(8):26–8 (Rus)
[Return to the homeland] Zakharov VP. Voen Med Zh 1989 Mar;(3):8–11 (Rus)
[Procurement of medical supplies from occupied regions as a specific source of medical provisions during the National War of Liberation] Katan E, et al. Vojnosanit Pregl 1988 Nov–Dec;45(6):454–8 (Scr)
[About Miss Barry and her career as Inspector General James Barry MD] Freedman D. Lakartidningen 1989 Apr 26;86(17):1576 (Swe)
[The French revolution—a revolution even for health care] Hakulinen E. Lakartidningen 1989 Jul 12;86(28–29):2535–7 (Swe)

INSTRUMENTATION

A survey of U.S. Army aeromedical equipment. Mitchell GW, et al. Aviat Space Environ Med 1989 Aug;60(8):807–10
Spandra: a sustained release battlefield wound dressing. Szycher M, et al. J Biomater Appl 1986 Oct;1(2):274–304 (29 ref.)
[A portable ENT kit for the ship's physician] Revskoĭ IuK, et al. Voen Med Zh 1988 Dec;(12):49–50 (Rus)

LEGISLATION & JURISPRUDENCE

The Armed Forces medical examiner system: a change for the better. Clark MA, et al. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A1–3
[International legal aspects of rendering medical care at sea] Markov VIu, et al. Voen Med Zh 1988 Jun;(6):49–50 (Rus)

MANPOWER

Pharmacy technicians and the military. Vallone SJ. Am J Hosp Pharm 1989 Mar;46(3):522–6

ORGANIZATION & ADMINISTRATION

Otolaryngic health service support in the airland battle. Zajtchuk JT. Ann Otol Rhinol Laryngol Suppl 1989 May;140:5–8
1987 survey of military optometrists: activities, roles and attitudes. Shipp MD, et al. J Am Optom Assoc 1988 Oct;59(10):802–14
A perspective on operational medical readiness. Nolan DL. Milit Med 1988 Oct;153(10):526–9
Ancillary service consumption by Military Health Service System special programs: implications for diagnosis related group resource allocation. Optenberg SA, et al. Milit Med 1989 Aug;154(8):413–7
[2 weeks in Spitak] Golov IuS. Voen Med Zh 1989 Apr;(4):23–7 (Rus)
[The organization of therapeutic care for the victims] Ivashkin VT, et al. Voen Med Zh 1989 Apr;(4):15–8 (Rus)
[The scientific organization of the work of a military medical specialist] Melekhov PA, et al. Voen Med Zh 1988 Sep;(9):13–4 (Rus)
[The military medical aspects of rendering surgical care to earthquake victims] Nechaev EA, et al. Voen Med Zh 1989 Apr;(4):11–4 (Rus)
[Use of computers in the management of ambulatory care] Poliakov LE, et al. Voen Med Zh 1989 Jan;(1):21–3 (Rus)
[The structure of automated expert systems for assessing the operation of military health care facilities] Romanovskiĭ VV. Voen Med Zh 1989 May;(5):14–7 (Rus)
[Fidelity to duty] Sarkisov AS. Voen Med Zh 1989 Apr;(4):18–21 (Rus)
[Optimizing the analysis of results of functional tests with the use of automated work stations] Spichev VP, et al. Voen Med Zh 1989 May;(5):17–9 (Rus)
[Experience in organizing surgical care for the wounded in the Army of the Republic of Afghanistan] Tutokhel AK, et al. Voen Med Zh 1989 Jan;(1):27–30 (Rus)
[Problems in organizing a march of medical service units and installations] Tyts VV. Voen Med Zh 1989 Mar;(3):16–8 (Rus)
[Use of a minicomputer for automating the accounting at a medical stores depot] Voronkov OV, et al. Voen Med Zh 1989 Mar;(3):50–2 (Rus)

STANDARDS

Diagnostic performance of United States Air Force cytology laboratories. An eight-year experience in central monitoring. Luff RD, et al. Acta Cytol 1989 Jul–Aug;33(4):475–8
Military emergency medical systems. Ann Emerg Med 1989 Feb;18(2):214–21
Descriptive analysis of medical attrition in U.S. Army aviation. Edwards RJ, et al. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A92–7
The Department of Defense's external civilian peer review of medical care [letter] JAMA 1989 Oct 13;262(14):1950–1
A first report of the Department of Defense external civilian peer review of medical care. Mayer W, et al. JAMA 1988 Nov 11;260(18):2690–3
Euthanasia on the battlefield [letter] Butz RO Jr. Milit Med 1988 Oct;153(10):539–40
The emergency treatment record: time for a change [letter] Walsh MJ. Milit Med 1988 Dec;153(12):651–2
[Toward a high professional level in carrying out health inspections] Gasanov EG. Voen Med Zh 1988 Jul;(7):50–1 (Rus)
[New standards for the procurement of medical stores] Il'in GI. Voen Med Zh 1988 Nov;(11):47–50 (Rus)
[The classification of medical instruments] Sobolenko AK, et al. Voen Med Zh 1988 Nov;(11):50–1 (Rus)

TRENDS

Morale in battle—the medical and the military. Carver. J R Soc Med 1989 Feb;82(2):67–71
[Internal pathology in trauma—an important branch of internal medicine and military medicine] Gembitskiĭ EV. Klin Med (Mosk) 1989 May;67(5):3–9 (Rus)
[The results of the work of the medical service of the Armed Forces in 1988 and tasks for the new academic year] Voen Med Zh 1989 Jan;(1):3–9 (Rus)
[Let us bring democratization and glasnost to the work of military medical personnel] Voen Med Zh 1989 Jan;(1):10–3 (Rus)
[Perestroika of research in the field of aviation medicine in the practical interests of the troops] Bugrov SA, et al. Voen Med Zh 1988 May;(5):48–51 (Rus)
[The status and means for the further improvement of specialized surgical care] Lisitsyn KM. Voen Med Zh 1988 Aug;(8):3–7 (Rus)
[The development of resources in informatics, computer technology and management automation in the medical service of the armed forces of the main NATO-block countries] Litvinov AM, et al. Voen Med Zh 1989 Mar;(3):68–72 (19 ref.) (Rus)
[Characteristics of modern programmable microcomputers and basic trends in their use in military medicine] Malinskiĭ DM, et al. Voen Med Zh 1988 Jul;(7):22–6 (Rus)
[Towards a further rise in innovation and efficiency work] Marasanov RA. Voen Med Zh 1988 Dec;(12):3–8 (Rus)
[Towards a further increase in the efficiency and quality of medical support for the troops] Ramodin GI. Voen Med Zh 1988 Nov;(11):8–12 (Rus)
[At the center of attention—care for man] Romanenko VI. Voen Med Zh 1989 May;(5):6–8 (Rus)
[The main trends in the further improvement of sanatorium-health resort support in the Army and the Navy] Sinopal'nikov IV, et al. Voen Med Zh 1988 Jul;(7):3–7 (Rus)
[The pathway of perestroika and further improvement in military traumatology and injury prevention] Tkachenko SS. Voen Med Zh 1988 Sep;(9):3–6 (Rus)

MILITARY NURSING

The White House nurses. Gierlich C, et al. Am J Nurs 1989 Mar;89(3):334–6
The wartime experience of military nurses in Vietnam, 1965–1973. Norman EM. West J Nurs Res 1989 Apr;11(2):219–33

HISTORY

A history of volunteerism and patriotism in the Army Nurse Corps. Sarnecky MT. Milit Med 1989 Jul;154(7):358–64
Uncle Sam needs nurses—one woman's response. Glass LK. West J Nurs Res 1988 Jun;10(3):356–9

MILITARY PERSONNEL

see related

VETERANS

Myopia and its relationship to education, intelligence and height. Preliminary results from an on-going study of Danish draftees. Teasdale TW, et al. Acta Ophthalmol Suppl (Copenh) 1988;185:41–3
Suicide among soldiers and young men in the Nordic countries 1977–1984. Hytten K, et al. Acta Psychiatr Scand 1989 Mar;79(3):224–8
Nutritional survey of the US Navy SEAL trainees. DeBolt JE, et al. Am J Clin Nutr 1988 Nov;48(5):1316–23
Magnesium, zinc, and copper status of US Navy SEAL trainees. Singh A, et al. Am J Clin Nutr 1989 Apr;49(4):695–700
Hematologic evaluation of employees with leukopenia. Naval Weapons Center, China Lake, California. Luiken GA, et al. Am J Clin Pathol 1988 Dec;90(6):679–84
Viral hepatitis in the US Navy, 1975–1984. Hyams KC, et al. Am J Epidemiol 1989 Aug;130(2):319–26
An outbreak of influenza A/Taiwan/1/86 (H1N1) infections at a naval base and its association with airplane travel. Klontz KC, et al. Am J Epidemiol 1989 Feb;129(2):341–8
Incidence of gastrectomy in United States army hospitals worldwide from 1975 to 1985. Burkhalter E. Am J Gastroenterol 1988 Nov;83(11):1231–4
Delayed endolymphatic hydrops syndrome after heavy exposure to impulse noise. Ylikoski J. Am J Otol 1988 Jul;9(4):282–5
Mumps in the US Army 1980–86: should recruits be immunized? Arday DR, et al. Am J Public Health 1989 Apr;79(4):471–4
Hypertension in Israeli adolescents: prevalence according to weight, sex and parental origin. Shohat M, et al. Am J Public Health 1989 May;79(5):582–5
The use of ketamine in civilian and military surgery [letter] Lippmann M, et al. Anaesthesia 1989 Jun;44(6):533–4
Protection of personnel during prolonged exposure to cold, wet environments. Oakley EH, et al. Ann Occup Hyg 1988;32(4):549–51
Treatment of blast injury to the ear. Casler JD, et al. Ann Otol Rhinol Laryngol Suppl 1989 May;140:13–6
Blast injuries of the ear in military operations. Phillips YY, et al. Ann Otol Rhinol Laryngol Suppl 1989 May;140:3–4
Toward a measure of auditory handicap in the Army. Price GR, et al. Ann Otol Rhinol Laryngol Suppl 1989 May;140:42–52
Otolaryngic health service support in the airland battle. Zajtchuk JT. Ann Otol Rhinol Laryngol Suppl 1989 May;140:5–8
Non-Hodgkin's lymphomas in U.S. Navy personnel. Garland FC, et al. Arch Environ Health 1988 Nov–Dec;43(6):425–9
Incidence of airsickness among military parachutists. Antuñano MJ, et al. Aviat Space Environ Med 1989 Aug;60(8):792–7
Measuring moment-to-moment pilot workload using synchronous presentations of secondary tasks in a motion-based trainer. Bortolussi MR, et al. Aviat Space Environ Med 1989 Feb;60(2):124–9
Treatment of essential hypertension with yoga relaxation therapy in a USAF aviator: a case report. Brownstein AH, et al. Aviat Space Environ Med 1989 Jul;60(7):684–7
Bone scintigraphy in the evaluation of ejection injuries. Bury RF. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A16–7
Thermal comparison of aircrew clothing aboard OV-10 aircraft. Constable R, et al. Aviat Space Environ Med 1988 Dec;59(12):1190–2
Space motion sickness during 24 flights of the space shuttle. Davis JR, et al. Aviat Space Environ Med 1988 Dec;59(12):1185–9
Descriptive analysis of medical attrition in U.S. Army aviation. Edwards RJ, et al. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A92–7
Screening for mitral valve prolapse: an analysis of benefits and costs in the U.S. Air Force. Everett WD. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A80–8
U.S. Army anthropometric standards for rotary-wing aviators in the light observation helicopter. Farr WD, et al. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A74–6
Soviet space flight: the human element. Garshnek V. Aviat Space Environ Med 1989 Jul;60(7):695–705
Central serous chorioretinopathy in U.S. Air Force aviators:

a review. Green RP Jr, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1170–5

An evaluation of proposed causal mechanisms for "ejection associated" neck injuries. Guill FC, et al.
Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A26–47

Aircrew selection systems. Kantor JE, et al.
Aviat Space Environ Med 1988 Nov;59(11 Pt 2):A32–8

Cases from the aerospace medicine residents' teaching file. Case #28. An aviator with exertional migraines [clinical conference] Katchen MS. **Aviat Space Environ Med** 1988 Dec;59(12):1203–4

State-of-the-art management of renal stone disease in aviators and military special duty personnel. Lynch DF Jr. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1066–9

Fatal pulmonary decompression sickness: a case report. Neubauer JC, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1181–4

Triazolam impairs learning and fails to improve sleep in a long-range aerial deployment. Penetar DM, et al.
Aviat Space Environ Med 1989 Jun;60(6):594–8

Review of malaria prophylactic drugs for performance effects in naval aviators. Reams GG. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A77–9 (22 ref.)

Kinematics of U.S. Army helicopter crashes: 1979–85. Shanahan DF, et al. **Aviat Space Environ Med** 1989 Feb; 60(2):112–21

Depth perception after prolonged usage of night vision goggles. Sheehy JB, et al. **Aviat Space Environ Med** 1989 Jun;60(6):573–9

Period prevalence of acute neck injury in U.S. Air Force pilots exposed to high G forces. Vanderbeek RD.
Aviat Space Environ Med 1988 Dec;59(12):1176–80

Programs and prospects in aircrew performance measurement. Waag WL. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A46–51

Defining risk in aerospace medical unconsciousness research. Whinnery JE. **Aviat Space Environ Med** 1989 Jul; 60(7):688–94 (30 ref.)

Observations on the neurophysiologic theory of acceleration (+Gz) induced loss of consciousness. Whinnery JE.
Aviat Space Environ Med 1989 Jun;60(6):589–93

Review of postperinatal mortality in a health district with a garrison town. Rao M, et al. **BMJ** 1988 Sep 10; 297(6649):662

Technical aspects of war wound excision. Coupland RM. **Br J Surg** 1989 Jul;76(7):663–7 (7 ref.)

Selected somatic and psychological problems of asthmatic syndrome sufferers. Jerzemowski J.
Bull Inst Marit Trop Med Gdynia 1987;38(1–2):100–7

Psychological and somatic factors and the conditions of service at sea in relation to the different stages of coronary heart disease among sailors. Jerzemowski J.
Bull Inst Marit Trop Med Gdynia 1987;38(1–2):33–41

Influenza B outbreak at a Canadian Forces Base—Nova Scotia. Lee SH, et al. **Can Dis Wkly Rep** 1988 May 14; 14(19):82 **(Eng, Fre)**

Evidence of prolonged myocardial dysfunction in heat stroke. Zahger D, et al. **Chest** 1989 May;95(5):1089–91

Diagnosis and prevalance of sexually transmitted diseases of draftees in Taipei. Chao TJ, et al.
Chung Hua I Hsueh Tsa Chih 1987 Aug;40(2):223–30

Asthma and allergic rhinitis in Swedish conscripts. Aberg N. **Clin Exp Allergy** 1989 Jan;19(1):59–63

Nonfocal scintigraphic lesions in military recruits with lower leg pain [letter] Goldfarb R, et al. **Clin Orthop** 1988 Dec; (237):286–7

The effect of pretraining sports activity on the incidence of stress fractures among military recruits. A prospective study. Swissa A, et al. **Clin Orthop** 1989 Aug;(245):256–60

Caries experience, dental health behaviour and social status. A comparative study among Danish military recruits in 1972 and 1982. Antoft PE, et al.
Community Dent Health 1988 Sep;5(3):255–64

Evaluation of simple periodontal screening technique currently used in the UK armed forces. Eaton KA, et al.
Community Dent Oral Epidemiol 1989 Aug;17(4):190–5

Association between cigarette smoking and prevalence of oral mucosal lesions among Malaysian army personnel. Zain RB, et al. **Community Dent Oral Epidemiol** 1989 Jun; 17(3):148–9

Habits of health in the Royal Navy. Bull AR.
Community Med 1988 May;10(2):130–8

Prevalence of human immunodeficiency virus antibody in U.S. active-duty military personnel, April 1988.
Conn Med 1988 Oct;52(10):616–7

Retest stability of the communication profile for the hearing impaired. Demorest ME, et al. **Ear Hear** 1988 Oct; 9(5):237–42

Waterborne outbreak of Campylobacter enteritis after outdoors infantry drill in Utti, Finland. Aho M, et al.
Epidemiol Infect 1989 Aug;103(1):133–41

Mass treatment approach to acute diarrhoeal disease in Afabet Hospital, northern Ethiopia. Sebhatu B.
Ethiop Med J 1989 Jul;27(3):155–9

Changes in nutrient intakes of conditioned men during a 5-day period of increased physical activity and other stresses. Smoak BL, et al. **Eur J Appl Physiol** 1988; 58(3):245–51

Marcher's digitalgia paresthetica among recruits. Stein M, et al. **Foot Ankle** 1989 Jun;9(6):312–3

Vulnerability of the retina to injury from a military ruby rangefinder at battlefield distances. Anderberg B, et al.
Health Phys 1989 May;56(5):743–8

Microwave effects on the central nervous system—a study of radar mechanics. Nilsson R, et al. **Health Phys** 1989 May;56(5):777–9

High-voltage electrical injury. Whelan TR, et al. **Injury** 1988 Sep;19(5):364–5

Epidemiologic characteristics of scabies in the Israel Defense Force. Kimchi N, et al. **Int J Dermatol** 1989 Apr; 28(3):180–2

The natural history of human immunodeficiency virus infection in screened HIV positive U.S. Air Force personnel: a preliminary report. Reid MJ, et al.
J Acquir Immune Defic Syndr 1988;1(5):508–15

The relationship of serum IgA concentration to human immunodeficiency virus (HIV) infection: a cross-sectional study of HIV-seropositive individuals detected by screening in the United States Air Force. Fling JA, et al.
J Allergy Clin Immunol 1988 Dec;82(6):965–70

Work-site health promotion: the effects of a goal-setting program on nutrition-related behaviors. Berry MW, et al.
J Am Diet Assoc 1989 Jul;89(7):914–20, 923

Nutrition education: a review of results and a report of activities provided by Army dietitians. Johnson KD, et al.
J Am Diet Assoc 1988 Dec;88(12):1582–4

Energy and nutrient intakes of soldiers consuming MRE operational rations: physiological correlates. Wenkam NS, et al. **J Am Diet Assoc** 1989 Mar;89(3):407–9

Validity of self-estimated and weighed dietary data for assessment of military rations. Wenkam NS, et al.
J Am Diet Assoc 1989 Feb;89(2):203–8

Prevalence and variation of astigmatism in a military population. Satterfield DS. **J Am Optom Assoc** 1989 Jan; 60(1):14–8

Use of doubly labeled water technique in soldiers training for jungle warfare. Forbes-Ewan CH, et al.
J Appl Physiol 1989 Jul;67(1):14–8

AIDS in Arkansas. AIDS 1988. Boswell RN.
J Arkansas Med Soc 1988 Jul;85(2):73–85 (0 ref.)

Occurrence of urticaria as a manifestation of Falciparum malaria. Singh RP, et al. **J Assoc Physicians India** 1988 Apr;36(4):261–2

Falciparum malaria presenting as testicular pain and swelling—a rejoinder [letter] Virmani SK.
J Assoc Physicians India 1988 Apr;36(4):295

Fibronectin levels of unstimulated saliva from naval recruits with and without chronic inflammatory periodontal disease. Lamberts BL, et al. **J Clin Periodontol** 1989 Jul;16(6):342–6

Cutaneous leishmaniasis in the peace keeping force in East Sinai. Mansour NS, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):725–32

The physical effects of lightning injury. Epperly TD, et al.
J Fam Pract 1989 Sep;29(3):267–72 (13 ref.)

Comparison of drug abuse in different military populations. Needleman SB, et al. **J Forensic Sci** 1989 Jul;34(4):848–57

Surgical service nosocomial infections at a Veterans Administration medical center. Hinahon J, et al.
J Natl Med Assoc 1988 Sep;80(9):999–1005

Paternal military service in Vietnam and risk of spontaneous abortion. Aschengrau A, et al. **J Occup Med** 1989 Jul; 31(7):618–23

Bronchial asthma in servicemen—a personal view. Carson J. **J R Army Med Corps** 1988 Oct;134(3):138–45

Heat-exercise hyperpyrexia. Dickinson JG.
J R Army Med Corps 1989 Feb;135(1):27–9

Pulmonary tuberculosis in Gurkhas in Hong Kong in the period 1984–1987 and the role played by routine radiology in case detection. Fairley IM, et al.
J R Army Med Corps 1989 Feb;135(1):31–2

Packaging of resuscitation fluids [letter] Hawley A.
J R Army Med Corps 1989 Jun;135(2):97

Asthma in the Army [letter] Johnston JH.
J R Army Med Corps 1988 Oct;134(3):155–6

TB in Gurkhas [letter] Johnston JH.
J R Army Med Corps 1989 Jun;135(2):96

Selection of soldiers. Physical build as an entry factor [letter] Kilpatrick WG. **J R Army Med Corps** 1989 Jun;135(2):95–6

Management of sucking chest wounds [letter] Lawrence BA.
J R Army Med Corps 1989 Jun;135(2):94

Infertility in a large Royal Air Force general practice. Martin TE. **J R Army Med Corps** 1989 Jun;135(2):68–75

Penicillin allergy, gas gangrene and casualty treatment regime [letter] Millar KN. **J R Army Med Corps** 1988 Oct; 134(3):156

Stress fractures in parachute regiment recruits [letter] Murphy GR. **J R Army Med Corps** 1988 Oct;134(3):158

Rickettsia in the regiment. Stephenson R.
J R Army Med Corps 1989 Feb;135(1):21–4

The arthroscope in the Services. Surtees P.
J R Army Med Corps 1988 Oct;134(3):130–4

Ileostomy: a personal viewpoint. **J R Nav Med Serv** 1987 Winter;73(3):183–4

A nutritional analysis of food provided to Royal Naval personnel at sea. Alexander DC, et al.
J R Nav Med Serv 1988 Spring;74(1):24–32

Step testing as an assessment of physical fitness on Polaris submarines. Berth-Jones J, et al. **J R Nav Med Serv** 1988 Summer;74(2):115–20

Actigraph measurements of work/sleep patterns during a navy operation. Brooks CJ, et al. **J R Nav Med Serv** 1988 Winter;74(3):153–63

Lighting in submarines. Brown DC. **J R Nav Med Serv** 1988 Summer;74(2):78–85 (12 ref.)

A description of the outbreak of meningitis in HMS Raleigh in February 1987. Evans CW, et al.
J R Nav Med Serv 1988 Winter;74(3):187–93

An audiological survey of aircrew. Jones DG.
J R Nav Med Serv 1988 Spring;74(1):44–50

Physiological problems in the use of submarine escape chambers. Jones DG. **J R Nav Med Serv** 1988 Summer; 74(2):100–6

A review of the treatment and recurrence of varicose veins in the Royal Naval Hospital, Plymouth 1981–1985. Quaile A, et al. **J R Nav Med Serv** 1987 Winter;73(3):185–8

The incidence of symptomatic urolithiasis in Royal Naval submariners comparison with personnel of the surface fleet. Raffaelli PI. **J R Nav Med Serv** 1988 Summer;74(2):86–94

A simple test for the assessment of aerobic fitness. Smith DJ, et al. **J R Nav Med Serv** 1988 Summer;74(2):107–14

Toe temperatures during Dartmoor training. Travis SP.
J R Nav Med Serv 1988 Winter;74(3):181–5

Coxsackie B viruses and the post viral syndrome in nuclear submariners. Warnock PJ, et al. **J R Nav Med Serv** 1988 Summer;74(2):95–9

The influence of periodontal screening upon dental hygienist practice in the Royal Navy. Woodman AJ.
J R Nav Med Serv 1988 Winter;74(3):165–71

Injury in U.S. Army helicopter crashes October 1979–September 1985. Shanahan DF, et al. **J Trauma** 1989 Apr;29(4):415–22; discussion 423

Displaced stress fractures of the femoral neck in young male adults: a report of twelve operative cases. Visuri T, et al.
J Trauma 1988 Nov;28(11):1562–9

Malpractice claims for urogenital injuries. Morey AF, et al.
J Urol 1988 Dec;140(6):1475–8

Leads from the MMWR. Acute rheumatic fever among army trainees—Fort Leonard Wood, Missouri, 1987–1988.
JAMA 1988 Oct 21;260(15):2185, 2188

Leads from the MMWR. Trends in human immunodeficiency virus infection among civilian applicants for military service—United States, October 1985–March 1988.
JAMA 1988 Dec 2;260(21):3113–4

Follow-up: 15 years after captivity in SE Asia; 50 years after World War II flight training [news] Kirn TF. **JAMA** 1989 May 19;261(19):2776, 2781, 2784

Like other segments of culture, military has had to come to grips with drug abuse problems [news] Marwick C, et al. **JAMA** 1989 May 19;261(19):2784–5, 2788

Heat injury and the armed forces [editorial] **Lancet** 1989 Sep 30;2(8666):782

Avoidable heatstroke in the armed forces [letter] Brahams D. **Lancet** 1989 Aug 12;2(8659):399

Legal and moral responsibility for heatstroke in the armed forces. Brahams D. **Lancet** 1989 Sep 30;2(8666):814–5

Israel: doctors and defence forces [letter] Cutting P.
Lancet 1989 Apr 8;1(8641):788–9

Heat illness in servicemen. Linsell WD. **Lancet** 1989 Sep 30; 2(8666):803

Heat illness and servicemen [letter] Porter A. **Lancet** 1989 Aug 12;2(8659):398

International response to disasters [letter] Redmond AD.
Lancet 1989 May 13;1(8646):1080

Nutritional lessons from war-time Sierra Leone [letter] Yudkin J. **Lancet** 1989 Aug 19;2(8660):452–3

The boring story of Agent Orange and the Australian Royal Commission [letter] Hardell L, et al. **Med J Aust** 1989 May 15;150(10):602

The prevalence of serological markers for hepatitis B virus infection in Australian Naval personnel. Pavli P, et al.
Med J Aust 1989 Jul 17;151(2):71, 74–5

HIV 'top cause' of DoD mortality [news] **Milit Med** 1989 May;154(5):A10

Silent serious neurological ... sequelae among competitive boxers [letter] Algeo JH Jr. **Milit Med** 1988 Oct; 153(10):538–9

Nonconventional remission of miliaria rubra during heat acclimation: a case report. Armstrong L, et al.
Milit Med 1988 Aug;153(8):402–4

High altitude penetrating chest trauma: a case report. Baird RE, et al. **Milit Med** 1989 Jul;154(7):337–40

Small cell lung cancer: the Wilford Hall experience. Baisden CE, et al. **Milit Med** 1988 Aug;153(8):406–8

Smoking and tobacco use by U.S. military personnel. Ballweg JA, et al. **Milit Med** 1989 Apr;154(4):165–8

A study of the reasons for patients seeking after hours emergency dental treatment. Beckelheimer RG, et al.
Milit Med 1989 Apr;154(4):174–7

Slight hysteria. Bellamy RF, et al. **Milit Med** 1989 Feb; 154(2):94–7

Incidence of hypercholesterolemia in the active duty Navy population in 1986. Blair TP, et al. **Milit Med** 1989 Jan; 154(1):29–31

Goal abdominal measurements: a method to help male soldiers monitor their progress in the Army Weight Control Program. Bolan JL, et al. **Milit Med** 1988 Nov; 153(11):559–61

Screening military aircrews for anosmia [letter] Bombard AT.
Milit Med 1988 Nov;153(11):596

Prevalence, trends, and correlates of alcohol use, nonmedical drug use, and tobacco use among U.S. military personnel. Bray RM, et al. **Milit Med** 1989 Jan;154(1):1–11

The measurement of visual efficiency standards for pilots in the United States Air Force. Buzzelli AR, et al.
Milit Med 1989 Jul;154(7):345–7

Acquisition, development, and treatment of Panamanian

cutaneous leishmaniasis: a case history. Chaniotis BN, et al. **Milit Med** 1988 Aug;153(8):405–6

Smoking and physical fitness among Navy shipboard men. Conway TL, et al. **Milit Med** 1988 Nov;153(11):589–94

Subcutaneous tumors: incidence of malignancy. Crabbe MM, et al. **Milit Med** 1988 Oct;153(10):519–21

Experience with a pre-basic fitness program at Fort Jackson, South Carolina. DiBenedetto M. **Milit Med** 1989 May; 154(5):259–63

Aerobic capacity of Polish soldiers. Drabik J, et al. **Milit Med** 1989 Apr;154(4):196–8

Communications Supporting Field Medical Units [letter] Fay MJ. **Milit Med** 1989 Feb;154(2):101–2

Blood Typing Errors on U.S. Army Identification Cards and Tags [letter] Frohman EM. **Milit Med** 1989 May; 154(5):273–4

Blood typing errors on U.S. Army identification cards and tags. Gaydos JC, et al. **Milit Med** 1988 Dec;153(12):618–20

Dating and sexual behavior in military dependent adolescents. Getts AG. **Milit Med** 1988 Dec;153(12):614–7

The incidence of silent ischemia in asymptomatic soldiers [letter] Hall RJ. **Milit Med** 1988 Oct;153(10):537

Hot refueling hazards. Hammer DL. **Milit Med** 1989 Mar; 154(3):150–3

Combat casualty care training for reserve forces. Hayunga EG, et al. **Milit Med** 1988 Nov;153(11):574–5

A descriptive summary of active-duty deaths in the U.S. Navy in 1986. Helmkamp JC. **Milit Med** 1988 Dec; 153(12):621–5

Common clinical presentations among active duty personnel with traumatically induced reflex sympathetic dystrophy. Hemler DE, et al. **Milit Med** 1988 Oct;153(10):493–5

Management of Low Back Pain in the Military Population [letter] Hopper KD. **Milit Med** 1989 Jul;154(7):378–9

Dating and sexual behavior in military dependent adolescents [letter] Jahan MS. **Milit Med** 1989 Jul;154(7):379

Contracting out military health care. Jensen RG. **Milit Med** 1989 Aug;154(8):394–8

Evaluating the occupational physical fitness of Canadian forces infantry personnel. Jetté M, et al. **Milit Med** 1989 Jun;154(6):318–22

Hats: design and protection from ultraviolet radiation. Keeling JH, et al. **Milit Med** 1989 May;154(5):250–5

Reduction of dental emergencies through dental readiness. Keller DL. **Milit Med** 1988 Oct;153(10):498–501

An outbreak of hookworm infection associated with military operations in Grenada. Kelley PW, et al. **Milit Med** 1989 Feb;154(2):55–9

The Army Physical Fitness Test (APFT): a review of the literature. Knapik J. **Milit Med** 1989 Jun;154(6):326–9 (32 ref.)

Physiologic monitoring of combat casualties. Lamiell JM, et al. **Milit Med** 1989 Apr;154(4):186–91

Management of low back pain in the military population. Leech JJ, et al. **Milit Med** 1988 Oct;153(10):501–5

A study of United States Army dental fitness Class 3 patients. McClave RJ, et al. **Milit Med** 1988 Dec;153(12):633–7

Ban Military Boxing [letter] McNally JJ. **Milit Med** 1989 Feb;154(2):102–3

Injury pattern aboard the USS Enterprise. McNiesh LM. **Milit Med** 1989 May;154(5):236–8

Combat casualty care research and informed consent. Maningas PA. **Milit Med** 1989 Feb;154(2):71–3 (22 ref.)

Parachute static line injury with vascular compromise. Mellen PF. **Milit Med** 1989 Jul;154(7):364–5

Psychiatric casualties among U.S. Marines in Vietnam. Palinkas LA, et al. **Milit Med** 1988 Oct;153(10):521–6

The military preventive medicine role in surveillance of the gonococcus [letter] Papadimos TJ, et al. **Milit Med** 1989 May;154(5):272–4

Quantitative muscle strength testing: a comparison of job strength requirements and actual worker strength among military technicians. Pedersen DM, et al. **Milit Med** 1989 Jan;154(1):14–8

Circumcision at the 121st Evacuation Hospital: report of a questionnaire with cross-cultural observations. Pienkos EJ. **Milit Med** 1989 Apr;154(4):169–71

Tracheobronchial disruption from blunt chest trauma. Reyes A, et al. **Milit Med** 1988 Aug;153(8):395–6

Suicide in United States Air Force personnel, 1981–1985. Rothberg JM, et al. **Milit Med** 1988 Dec;153(12):645–8

Heart size and function of soldiers, athletes, and sedentary men. Rubal BJ, et al. **Milit Med** 1989 Mar;154(3):153–8 (30 ref.)

Weight-load marching as a method of conditioning Australian Army recruits. Rudzki SJ. **Milit Med** 1989 Apr; 154(4):201–5

A plea for compulsiveness [editorial] Ruffin WK. **Milit Med** 1988 Dec;153(12):655

Dietary tyrosine as an aid to stress resistance among troops. Salter CA. **Milit Med** 1989 Mar;154(3):144–6

The Joint Health Benefits Delivery Program: improving access and reducing costs—successes and pitfalls [editorial] Segal HE, et al. **Milit Med** 1988 Aug;153(8):430–1

Medical care of U.S. military personnel deployed to Honduras. Shanks GD, et al. **Milit Med** 1988 Nov; 153(11):564–7

Effectiveness of permethrin-treated military uniform fabric against human body lice. Sholdt LL, et al. **Milit Med** 1989 Feb;154(2):90–3

An unusual cause of occupational anaphylaxis occurring in the Army [letter] Squire EN Jr. **Milit Med** 1989 Jul; 154(7):380–1

Frostbite injuries during winter maneuvers: a long-term disability. Taylor MS, et al. **Milit Med** 1989 Aug; 154(8):411–2

Exertional rhabdomyolysis and acute renal failure following the Army Physical Fitness Test. Tietjen DP, et al. **Milit Med** 1989 Jan;154(1):23–5

Experience in a military trauma surgery department with external skeletal fixation of femur fractures. Titius WA, et al. **Milit Med** 1989 Jul;154(7):348–52

Smoking and physical fitness among Navy shipboard men [letter] Tow DJ. **Milit Med** 1989 May;154(5):274

Myotonic muscular dystrophy in the military. Tuttle PV 3d, et al. **Milit Med** 1988 Oct;153(10):505–9

The role of the podiatrist in a wartime scenario. Weaver TD, et al. **Milit Med** 1988 Aug;153(8):391–3

Eczema vaccinatum in an 18-month-old male. Wien TM, et al. **Milit Med** 1988 Aug;153(8):397–9

Medical success in El Salvador. Zajtchuk R, et al. **Milit Med** 1989 Feb;154(2):59–61

Preliminary experience with topical phenytoin in wound healing in a war zone. el Zayat SG. **Milit Med** 1989 Apr; 154(4):178–80

HIV prevalence in the military [news] **Minn Med** 1988 Oct; 71(10):640

Prevalence of drug use among applicants for military service—United States, June–December 1988. **MMWR** 1989 Aug 25;38(33):580–3

Trends in human immunodeficiency virus infection among civilian applicants for military service—United States, October 1985–March 1988. **MMWR** 1988 Nov 11; 37(44):677–9

Testing for druga of abuse in urine. Turk J. **Mo Med** 1989 Jun;86(6):337–40

A morphologic study of Vietnam veterans. Irey NS, et al. **Mod Pathol** 1989 Jul;2(4):360–4

Descriptive epidemiologic survey of head injury in the Army: 1983 hospitalized cases. McCarroll JE, et al. **Neuroepidemiology** 1989;8(1):48–52

Use of obstetrical care compared among military and civilian families. Horton JA, et al. **Public Health Rep** 1989 May–Jun;104(3):309–10

Speech intelligibility in difficult signal/noise circumstances. Kiukaanniemi H, et al. **Scand Audiol Suppl** 1988;30:215–8

A cross-sectional study of DMFT and CPITN scores in a group of Indonesian soldiers. Gaare D, et al. **Scand J Dent Res** 1989 Feb;97(1):20–4

Penicillinase-producing Neisseria gonorrhoeae in various seaport cities of Latin America. Escamilla J, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):141–3

Antimicrobial susceptibility of Neisseria gonorrhoeae isolates from a military population in San Diego. Papadimos TJ, et al. **Sex Transm Dis** 1988 Oct–Dec;15(4):196–9

Innocent systolic murmurs in healthy young males: a study of the characteristics and prevalence in the SAF pre-enlistee population. Tan CC, et al. **Singapore Med J** 1988 Aug;29(4):337–40

Boxing-related ocular injuries in the United States Army, 1980 to 1985. Enzenauer RW, et al. **South Med J** 1989 May;82(5):547–9

Dengue fever in American military personnel in the Philippines: clinical observations on hospitalized patients during a 1984 epidemic. Hayes CG, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):1–8

Oral status and estimated treatment need in Swedish air force conscripts. Petersson LG, et al. **Swed Dent J** 1989; 13(1–2):69–76

Leg length inequality. A prospective study of young men during their military service. Hellsing AL. **Ups J Med Sci** 1988;93(3):245–53

Passive lumbar mobility. A prospective study of back pain in young men during their military service. Hellsing AL. **Ups J Med Sci** 1988;93(3):255–65

Tightness of hamstring- and psoas major muscles. A prospective study of back pain in young men during their military service. Hellsing AL. **Ups J Med Sci** 1988; 93(3):267–76

[A study on the features of nailfold microcirculation in 103 healthy pilots of jet fighter] Liu ZY. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):497–9, 34 (Eng. Abstr.) **(Chi)**

[A twenty-seven year survey of hypobaric chamber physiological reactions of the Chinese Air Force] Wen TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):103–8 (Eng. Abstr.) **(Chi)**

[Study on the infectious state of legionella in Chinese soldiers] Zhong FJ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug;9(4):203–5 (Eng. Abstr.) **(Chi)**

[Definitive treatment of thoracic penetrating injuries due to missiles: report of 155 cases] Huang XM. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):622–3, 639 (Eng. Abstr.) **(Chi)**

[Disorders of the menstrual cycle in women after entering a military training center. III. FSH, LH, prolactin, estradiol, progesterone and psychological stress 2 months after entering the center] Cížková J, et al. **Cesk Gynekol** 1988 Sep;53(8):556–60 (Eng. Abstr.) **(Cze)**

[Medial stress syndrome in military conscripts] Hald N, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2070–2 (Eng. Abstr.) **(Dan)**

[Functional amblyopia. Survey at a military selection center] Péchereau A, et al. **Bull Soc Ophtalmol Fr** 1988 Apr; 88(4):553–4, 557 (Eng. Abstr.) **(Fre)**

[Functional amblyopia. Study at a military selection center] Péchereau A, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul; 88(6–7):899–901 (Eng. Abstr.) **(Fre)**

[An epidemiologic survey of treated and non-treated occlusion] Amoric M. **Orthod Fr** 1987;58 Pt 2:823–31 (Eng. Abstr.) **(Fre)**

[Diagnostic difficulties and current clinical aspects of Plasmodium falciparum malaria upon returning from a chemoresistance area] Touze JE, et al. **Presse Med** 1988 Sep 17;17(31):1573–5 (Eng. Abstr.) **(Fre)**

[Epidemiological aspects of hepatitis B in military environment] Bahri M, et al. **Tunis Med** 1988 Jun–Jul; 66(6–7):531–4 (Eng. Abstr.) **(Fre)**

[Intestinal polyparasitism in a military milieu] Bahri M, et al. **Tunis Med** 1987 Nov;65(11):705–7 (Eng. Abstr.) **(Fre)**

[Ophthalmologic ability in military aviation (apropos of 359 cases)] Gabsi S, et al. **Tunis Med** 1988 Dec;66(12):837–41 (Eng. Abstr.) **(Fre)**

[Ophthalmologic causes of unfitness for military service in Tunisia (apropos of 1165 cases)] Gabsi S, et al. **Tunis Med** 1987 Dec;65(12):755–8 (Eng. Abstr.) **(Fre)**

[AIDS. HIV test: accuracy alone is not enough (news)] Marcus U. **Fortschr Med** 1989 Jan 20;107(2):8 **(Ger)**

[Juvenile obesity and fitness for military service] Frehner C, et al. **Schweiz Med Wochenschr** 1988 Oct 8; 118(40):1427–36 (Eng. Abstr.) **(Ger)**

[Symptoms of functional disorders—epidemiologic research on the masticatory system of recruits (1974 and 1985)] Jenni M, et al. **Schweiz Monatsschr Zahnmed** 1988;98(11):1185–90 (Eng. Abstr.) **(Ger)**

[Oral health—the status of knowledge 1985. An analysis of a repeated survey of 761 Swiss recruits] Oes P, et al. **Schweiz Monatsschr Zahnmed** 1989;99(3):281–91 (Eng. Abstr.) **(Ger)**

[Fatigue fractures of the femoral neck in a military recruit] Frick T, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13; 77(50):1376–8 (Eng. Abstr.) **(Ger)**

[Teeth as an intermediate target—a cause for rapid disintegration of the full metal-jacketed bullets used by the military] Pollak S, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):729–33 (Eng. Abstr.) **(Ger)**

[Ergospirometry and blood lactate data in the assessment of conditioning of soldiers in relation to physical activity within the scope of military service in the Austrian army] Baumgartl P, et al. **Wien Med Wochenschr** 1988 Sep 15; 138(17):433–7 (Eng. Abstr.) **(Ger)**

[Health indicators and screening of military recruits] Jäschke G. **Z Arztl Fortbild (Jena)** 1988;82(19):952–4 **(Ger)**

[The application of positive health status indicators in the framework of fitness for military service and health suitability of candidates for military professions] Klinger F. **Z Arztl Fortbild (Jena)** 1988;82(19):954–6 **(Ger)**

[Epidemiologic analysis of infection incidence in the NVA and the border troops of the German Democratic Republic] Kulicke B, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):946–7 **(Ger)**

[Organization and occupational health monitoring of army personnel] Hollenbach K, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):400–3 (11 ref.) (Eng. Abstr.) **(Ger)**

[Gunshot wounds of the head in soldiers wearing military helmets— general aspects and experiments and observations on the biomechanics and wound morphology] Missliwetz J, et al. **Z Rechtsmed** 1989;102(1):41–54 (Eng. Abstr.) **(Ger)**

[Hearing loss as a result of basic military training] Gold S, et al. **Harefuah** 1989 Apr 2;116(7):377–9 (Eng. Abstr.) **(Heb)**

[Clinico-statistical evaluation of oral hygiene standards in a sample of military recruits] Bianco A. **Minerva Stomatol** 1988 Nov;37(11):911–4 (Eng. Abstr.) **(Ita)**

[Aerospace psychology with notes on psychopathology. 1] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Apr–Jun; 52(2):157–94 **(Ita)**

[Military insurance. Military insurance regulations and the handling of diseases/injuries among draftees] Dobloug I. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):363–4 (Eng. Abstr.) **(Nor)**

[Health and military service. The loss of conscripts because of various medical grounds] Hanoa R, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1417–9 (Eng. Abstr.) **(Nor)**

[Occurrence of Chlamydia trachomatis and Neisseria gonorrhoeae among asymptomatic soldiers (letter)] Hoverak A, et al. **Tidsskr Nor Laegeforen** 1989 May 10; 109(13):1429 **(Nor)**

[A snow avalanche in Vassdalen. Medical experiences] Rostrup M, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10; 109(7–8):807–13 (Eng. Abstr.) **(Nor)**

[Analysis of cases treated by hyperbaric oxygenation at the Polish Army Center for the Training of Divers and Frogmen 1983–1986] Krzyżak J. **Pol Tyg Lek** 1988 Jun 27;43(26):833–7 (Eng. Abstr.) **(Pol)**

[Islet flaps from the forearm in plastic surgery of the hand] Belousov AE, et al. **Vestn Khir** 1988 Sep;141(9):85–8 (Eng. Abstr.) **(Rus)**

[The complex evaluation of the efficacy of therapeutic and health-promoting measures among predraft contingents] Adamenko AM, et al. **Voen Med Zh** 1988 Dec;(12):23–6

(Rus)
[Medical rehabilitation of neurologic patients at a military sanatorium] Akimov GA, et al. **Voen Med Zh** 1988 Jul;(7):65–7 (Rus)
[Problems in raising the quality of dental care for servicemen] Aleksandrov NM. **Voen Med Zh** 1988 May;(5):36–7 (Rus)
[The thermal state of the body and the work capacity of operators under high environmental temperature conditions] Azhaev AN, et al. **Voen Med Zh** 1988 Aug;(8):50–2 (Rus)
[Experience in organizing personnel hygiene education] Bazhenov VG. **Voen Med Zh** 1989 Jan;(1):50–1 (Rus)
[Effect of depth diving and holding the breath on the acid–base state of the blood] Chernetz MI, et al. **Voen Med Zh** 1988 Aug;(8):53–4 (Rus)
[Use of thymalin in stimulating an immune response in subjects inoculated with influenza vaccine] Degtiarev AA, et al. **Voen Med Zh** 1988 Sep;(9):37–8 (Rus)
[Experience with the immunoprophylaxis of meningococcal infection in military collectives] Efimov EI. **Voen Med Zh** 1989 Apr;(4):49 (Rus)
[Eye injuries in servicemen and their prevention] Filippenko VI, et al. **Voen Med Zh** 1989 Feb;(2):32–3 (Rus)
[Psychophysiologic evaluation of the motor habit of flying a plane in pilots during retraining] Frolov NI, et al. **Voen Med Zh** 1989 Jan;(1):54–7 (Rus)
[More attention to a healthy life style for flight personnel] Frolov NI, et al. **Voen Med Zh** 1989 Feb;(2):55–7 (Rus)
[The outlook for introducing the Konsul'tant–2 expert medical system on board ships] Grigorenko GF, et al. **Voen Med Zh** 1989 Feb;(2):49–50 (Rus)
[The basic principles of the pathogenetic treatment of explosive mine wounds] Gritsanov AI, et al. **Voen Med Zh** 1988 Jul;(7):31–4 (Rus)
[Sanitary microbiologic characteristics of barracks] Gritsenko VK, et al. **Voen Med Zh** 1989 Feb;(2):43–5 (Rus)
[Prevention of pneumonia and the dispensary care of recovering patients] Iakovlev VA, et al. **Voen Med Zh** 1988 Sep;(9):26–8 (Rus)
[Cryosurgical treatment of chronic tonsillitis and vasomotor and hypertrophic rhinitis in a troop unit] Karal–Ogly IuR. **Voen Med Zh** 1988 May;(5):61–2 (Rus)
[Use of programmable microcomputers for the analysis of the multiyear dynamics of infectious morbidity] Katkov AI. **Voen Med Zh** 1988 Jul;(7):26–7 (Rus)
[Functional and morphologic changes of the internal organs in mine blast trauma] Khabibi V, et al. **Voen Med Zh** 1989 Feb;(2):19–21 (Rus)
[The organizational aspects of rendering medical care to wounded patients with explosive mine trauma] Khabibi V, et al. **Voen Med Zh** 1989 Apr;(4):35–7 (Rus)
[Characteristics of the work organization of a specialized military field surgical hospital for head, neck and spinal wounds] Khil'ko VA, et al. **Voen Med Zh** 1988 Sep;(9):11–3 (Rus)
[Constant attention and concern for the health of the soldiers of the Antiaircraft Defense Forces] Khorovets GM. **Voen Med Zh** 1989 Apr;(4):3–5 (Rus)
[Soldiers of mercy] Kikeshev NI. **Voen Med Zh** 1989 Apr;(4):21–3 (Rus)
[Correction of the body function of flight instructors in aviation schools during intensive flights] Kopanev VI, et al. **Voen Med Zh** 1988 Oct;(10):54–6 (Rus)
[Medics of the 64th guards rifle division in the battle of "Iskra"] Krasnopeev II. **Voen Med Zh** 1989 May;(5):70–2 (Rus)
[Organization of research on the body function and work capacity of the personnel of mobile military equipment installations] Kudrin ID, et al. **Voen Med Zh** 1988 Sep;(9):39–41 (Rus)
[Epidemiology, laboratory diagnosis and prevention of legionellosis (a review of the literature)] Lebedinskiĭ VA, et al. **Voen Med Zh** 1988 Sep;(9):33–7 (30 ref.) (Rus)
[Epidemic and clinical sequelae of the belated detection and treatment of infectious patients] Liashenko IuI. **Voen Med Zh** 1988 Jun;(6):58–9 (Rus)
[The prognosis of the immediate and late sequelae of irradiation by ionizing radiations (a review of the literature)] Lisovskiĭ IV, et al. **Voen Med Zh** 1988 Dec;(12):44–6 (20 ref.) (Rus)
[Assessment of the functional potentials of the body in adapting to different altitudes] Makhnovskiĭ VP, et al. **Voen Med Zh** 1988 Nov;(11):40–2 (Rus)
[Rehabilitative treatment of patients with acute pneumonia] Mal'tsev LM, et al. **Voen Med Zh** 1988 Sep;(9):23–6 (Rus)
[A complex clinical x-ray morphologic approach to determining the surgical procedure in mine–blast wounds] Minnullin IP, et al. **Voen Med Zh** 1989 Jan;(1):30–2 (Rus)
[Diagnosis and treatment of hemorrhagic edema of the lower extremities] Mirzamagomedov TM, et al. **Voen Med Zh** 1988 Oct;(10):60 (Rus)
[Detection of disorders of heart rhythm and conduction in pilots using a combined functional test] Mukhamedov EG, et al. **Voen Med Zh** 1989 Mar;(3):46–7 (Rus)
[The incidence of detecting and the clinico–functional characteristics of the premature ventricular repolarization syndrome] Mukhamedov EG. **Voen Med Zh** 1989 Jan;(1):44–5 (Rus)
[Treatment of wounded patients with gun–shot diaphyseal fractures of the bones of the forearm] Mussa M, et al. **Voen Med Zh** 1988 Jun;(6):30–4 (Rus)
[The organization of the delivery of medical care to the wounded and ill during their evacuation] Nikulin ND. **Voen Med Zh** 1989 Apr;(4):28–9 (Rus)
[Organizational and methodological problems of using computers in the dispensary care of the officer corps in a military polyclinic] Novikov NP, et al. **Voen Med Zh** 1988 May;(5):28–30 (Rus)
[Dietotherapy of obesity combined with group autogenic training exercises at a sanatorium] Panchenko MF, et al. **Voen Med Zh** 1989 Feb;(2):45 (Rus)
[Dynamic cytochemical indices of the blood of flight personnel] Pashchenko PS. **Voen Med Zh** 1988 Jul;(7):55–7 (Rus)
[Let us raise the prevention of infectious diseases to a new level of quality] Perepelkin VS. **Voen Med Zh** 1988 May;(5):4–7 (Rus)
[The etiology of sandfly fever in Soviet servicemen in Afghanistan] Perepelkin VS, et al. **Voen Med Zh** 1989 Jan;(1):48–9 (Rus)
[Epidemiology and prevention of malaria in a mountain desert locale with a hot climate] Perepelkin VS, et al. **Voen Med Zh** 1988 Jun;(6):39–41 (Rus)
[A method for conducting exercises in the basics of organizing epidemic control measures in a troop unit] Podkorytov IuA, et al. **Voen Med Zh** 1988 Oct;(10):27 (Rus)
[Physiological mechanisms of autogenic training and its use with sailors on a prolonged cruise] Pogorelov IA, et al. **Voen Med Zh** 1988 Jul;(7):57–8 (Rus)
[Assessment of the effectiveness of the medical rehabilitation of patients with acute pneumonia] Polozhentsev SD, et al. **Voen Med Zh** 1988 Sep;(9):49–50 (Rus)
[A portable ENT kit for the ship's physician] Revskoĭ IuK, et al. **Voen Med Zh** 1988 Dec;(12):49–50 (Rus)
[Prevention and treatment of infectious complications of gunshot wounds] Rudakov BIa. **Voen Med Zh** 1988 Jul;(7):34–7 (12 ref.) (Rus)
[The effect of physical loads and temperature–humidity conditions on the functional status of the serviceman] Shabalin VA. **Voen Med Zh** 1989 May;(5):54–5 (Rus)
[Features of rendering orthodontic aid to servicemen] Shaĭdullin MS, et al. **Voen Med Zh** 1989 May;(5):33–5 (Rus)
[Effect of heat and physical training on the nonspecific resistance of the body] Sobolevskiĭ VI. **Voen Med Zh** 1988 Sep;(9):54–6 (Rus)
[The early diagnosis of myocardial infarct (the Czechoslovak Socialist Republic)] Sohor K. **Voen Med Zh** 1988 Oct;(10):78 (Rus)
[Use of the constitutional approach in assessing the activities of sensing equipment operators] Tartakovskiĭ SN, et al. **Voen Med Zh** 1989 Jan;(1):51–3 (Rus)
[Treatment experience with suppurative diseases of the fingers and hands] Teplitskiĭ SS, et al. **Voen Med Zh** 1989 Mar;(3):37–8 (Rus)
[Emergency care of acute pneumonia at the polyclinic and at the hospital] Tikhomirov ES, et al. **Voen Med Zh** 1988 Sep;(9):20–2 (Rus)
[On the march for health] Titov VT. **Voen Med Zh** 1988 Sep;(9):57–8 (Rus)
[The importance of the polarographic study of oxygen tension in the tissues in assessing body functional state in sailors] Tiunov LA, et al. **Voen Med Zh** 1989 Mar;(3):47–9 (Rus)
[The pathway of perestroika and further improvement in military traumatology and injury prevention] Tkachenko SS. **Voen Med Zh** 1988 Sep;(9):3–6 (Rus)
[Prevention of acute neurovascular disorders of the syncope type in flight personnel] Topuriia GI, et al. **Voen Med Zh** 1988 Jun;(6):48 (Rus)
[Experience in organizing surgical care for the wounded in the Army of the Republic of Afghanistan] Tutokhel AK, et al. **Voen Med Zh** 1989 Jan;(1):27–30 (Rus)
[Diagnosis and treatment of typhoid–related perforations of the small intestine] Tyniankin NA, et al. **Voen Med Zh** 1989 Mar;(3):24–7 (Rus)
[Clinico–immunologic characteristics of the course of acute pneumonia in the local and newly arrived inhabitants of western Siberia] Vasil'ev NV, et al. **Voen Med Zh** 1988 Sep;(9):50–1 (Rus)
[The effectiveness of rapid iridodiagnosis in mass examinations in a polyclinic] Vel'khover ES, et al. **Voen Med Zh** 1988 Jun;(6):36–8 (Rus)
[Mechanisms of the development and the clinical prodromata of secondary pneumonias in mine–explosion trauma (1)] Viazitskiĭ PO, et al. **Voen Med Zh** 1988 Nov;(11):25–8 (Rus)
[Adaptation of young servicemen to conditions of military service and prevention of maladaptive disorders (2)] Viazitskiĭ PO, et al. **Voen Med Zh** 1988 Oct;(10):48–52 (Rus)
[Mechanisms of the development and clinical prodromes of secondary pneumonia in explosive mine trauma (2)] Viazitskiĭ PO, et al. **Voen Med Zh** 1989 Mar;(3):21–4 (Rus)
[Adaptation to the conditions of military service and the prevention of maladaptive disorders (1)] Viazitskiĭ PO, et al. **Voen Med Zh** 1988 Aug;(8):45–7 (Rus)
[Troop trials—an important stage in the development of new medical protective agents] Vladimirov VG, et al. **Voen Med Zh** 1989 Feb;(2):14–5 (Rus)
[Questions of morbidity and the medical disqualification of flight personnel (a review of the literature)] Vlasov VD, et al. **Voen Med Zh** 1988 Sep;(9):44–6 (19 ref.) (Rus)
[AIDS and characteristics of the medical measures relating to this infection in the Armed Forces of the USA] Vorob'ev AI. **Voen Med Zh** 1989 Jan;(1):67–70 (16 ref.) (Rus)
[Use of fiber esophagogastroduodenoscopy in the ambulatory care of personnel in troop units] Voronov VA, et al. **Voen Med Zh** 1988 Oct;(10):64 (Rus)
[The work capacity prognosis for servicemen during various periods of acute respiratory diseases] Zakharov AV, et al. **Voen Med Zh** 1989 Mar;(3):43–5 (Rus)
[Increase in the effectiveness of shaping flight habits with the use of a G-load simulation system in the trainer] Zhernavkov VF, et al. **Voen Med Zh** 1988 Jun;(6):45–8 (Rus)
[Medical support for diving operations in the Far North using a drifting ice floe] Zhukov VG, et al. **Voen Med Zh** 1988 Oct;(10):56–7 (Rus)
[Mycoses of the foot in student pilots] Zhuravel' VG. **Voen Med Zh** 1989 May;(5):35–6 (Rus)
[The indirect immunofluorescence test in the study of Toxocara species in soldiers] Joković B, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):413–6 (Eng. Abstr.) (Scr)
[Epidemiologic characteristics of an epidemic of food poisoning infection caused by Salmonella enteritidis] Kostić S, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):266–9 (Eng. Abstr.) (Scr)
[The effect of nutrition and planned physical activity on the nutritional status, development and physical fitness in soldiers] Pavlica M, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):254–8 (Eng. Abstr.) (Scr)
[Stress (march) fractures] Posinković B, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):173–8 (Eng. Abstr.) (Scr)
[Nutritional status, physical development and physical fitness of soldiers before and after training] Sovtić P, et al. **Vojnosanit Pregl** 1989 Jan–Feb;46(1):7–10 (Eng. Abstr.) (Scr)
[The effect of the weight of equipment and weapons on physiologic indicators during the movement of soldiers belonging to mortar units] Sovtić P, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):168–72 (Eng. Abstr.) (Scr)
[Dental status in a group of soldiers] Tušek I. **Vojnosanit Pregl** 1989 Mar–Apr;46(2):136–7 (Scr)
[Characteristics of psychophysiologic stress in the rowing of cutters] Zivotić–Vanović M, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):259–65 (Eng. Abstr.) (Scr)
[Acoustic trauma from firearms: study of auditory function] Jiménez J, et al. **An Otorrinolaringol Ibero Am** 1989; 16(3):299–311 (Eng. Abstr.) (Spa)

HISTORY

Britannia rules the seas: the health of seamen, Edinburgh, 1791–1800. Risse GB. **J Hist Med Allied Sci** 1988 Oct; 43(4):426–46
Historical vignette #8. General Ulysses S. Grant's hip fracture. Lewis GB. **Orthop Rev** 1987 Nov;16(11):866–8
[Sorrows and joys at the hospital for Polish prisoners of war at Skarbowa Street No. 2 in Cracow] Mianowska A. **Przegl Lek** 1989;46(1):150–9 (Pol)
[Dr. Walter Weisspfennig, the murderer of shipwrecked men] Sterkowicz S. **Przegl Lek** 1989;46(1):141–3 (Pol)
[Music therapy in the treatment of commander–in–chief Stefan Czarniecki's illness in 1659] Jonécko A. **Wiad Lek** 1988 Oct 1;41(19):1330–5 (Eng. Abstr.) (Pol)

PSYCHOLOGY

Psychosocial coping in young adulthood of male child psychiatric outpatients: implications of early treatment. Piha J. **Am J Orthopsychiatry** 1988 Oct;58(4):524–31
Alcohol use in the Army: patterns and associated behaviors. Greden JF, et al. **Am J Psychiatry** 1975 Jan;132(1):11–6
Transsexuals in the military: flight into hypermasculinity. Brown GR. **Arch Sex Behav** 1988 Dec;17(6):527–37
Existence of transsexualism in the military setting [letter] Brown GR. **Arch Sex Behav** 1989 Aug;18(4):371–3
The highlights, and the lows, of aviation medicine in the 1940's: the human element. Cheetham RW. **Aviat Space Environ Med** 1989 Jul;60(7):706–10
Becoming a flight surgeon. Gallé–Tessonneau JR. **Aviat Space Environ Med** 1988 Dec;59(12):1198–202
Interpersonal and group–behavior skills training for crews on space station. Nicholas JM. **Aviat Space Environ Med** 1989 Jun;60(6):603–8
Aircraft coordination training in the U.S. Air Force Air Training Command. Shaud JA. **Aviat Space Environ Med** 1989 Jun;60(6):601–2
Combat stress in the chemical and biological warfare environment. [editorial] Ursano RJ. **Aviat Space Environ Med** 1988 Dec;59(12):1123–4
Failing aviator syndrome: a case history. Voge VM. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A89–91
Characteristic expressions of combat–related posttraumatic stress disorder among Israeli soldiers in the 1982 Lebanon War. Solomon Z, et al. **Behav Med** 1988 Winter;14(4):171–8
Somatic complaints, stress reaction, and posttraumatic stress disorder: a three–year follow–up study. Solomon Z.

Behav Med 1988 Winter;14(4):179–85
Problem drinking in a military endoscopy clinic. Wilson KC, et al. **Br J Addict** 1988 Sep;83(9):1063–8
Compliance with psychiatric referrals from a general hospital psychiatry outpatient clinic. Krulee DA, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):339–45
Indoor human response to blast sounds that generate rattles. Schomer PD, et al. **J Acoust Soc Am** 1989 Aug; 86(2):665–73
Job satisfaction among military prevention specialists. Whorley LW. **J Drug Educ** 1989;19(2):133–8
Aspects of personality of soldiers presenting to an endoscopy clinic. Wilson KC, et al. **J Psychosom Res** 1989;33(1):85–91
Morale in battle—the medical and the military. Carver. **J R Army Med Corps** 1989 Feb;135(1):5–9
Lockerbie air disaster [letter] Tyrer M. **J R Army Med Corps** 1989 Jun;135(2):93–4
Minimizing the impact of deployment separation on military children: stages, current preventive efforts, and system recommendations. Amen DG, et al. **Milit Med** 1988 Sep; 153(9):441–6
Human responses to simulated chemical warfare training in U.S. Army Reserve personnel. Carter BJ, et al. **Milit Med** 1989 Jun;154(6):281–8
Evaluation of smoking interventions in recruit training. Cronan TA, et al. **Milit Med** 1989 Jul;154(7):371–5
Does the military family syndrome exist? Fernandez-Pol B. **Milit Med** 1988 Aug;153(8):418–20
Camptocormia and depression: a case report. Massa E, et al. **Milit Med** 1989 Jul;154(7):352–5 (24 ref.)
A survey of the effect of the Vietnam Memorial dedication on psychiatric symptoms in Vietnam veterans. Parsons JP, et al. **Milit Med** 1988 Nov;153(11):578–82
Impact of military life stress on the quality of life of military wives. Rosen LN, et al. **Milit Med** 1989 Mar;154(3):116–20
[The Guilford–Zimmerman Temperament Survey (GZTS). The results of its first use in military aeronautics: descriptive statistics, intercorrelation matrix and competitive validity with the MMPI. A study on a sample of 150 student officer pilots of the Pozzuoli Aeronautics Academy] Giambelluca A, et al. **Riv Med Aeronaut Spaz** 1985 Jan–Mar;52(1):29–46 (Eng. Abstr.) (Ita)
[Aerospace psychology with notes on psychopathology. 2] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Jul–Sep; 52(3):235–70 (Ita)
[Aerospace psychology with notes on psychopathology. 3] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Oct–Dec; 52(4):323–65 (Ita)
[Use of the methods of multivariate statistical analysis to improve psychological job selection] Kulagin BV, et al. **Voen Med Zh** 1988 Nov;(11):18–21 (Rus)
[Possibilities of psychophysiological prediction of success in professional activities] Liakh IuE, et al. **Voen Med Zh** 1989 May;(5):55–6 (Rus)
[Experience in organizing a rest during the cruise for the ship's crew on a hospital ship] Lukavskiĭ MI, et al. **Voen Med Zh** 1988 Nov;(11):45–6 (Rus)
[Use of an automated system for troop unit buildup taking into account the psychological compatibility of the servicemen] Poliakov LE, et al. **Voen Med Zh** 1989 Feb; (2):16–7 (Rus)
[A method for assessing the psychophysiologic reserves of pilots] Shakula AV, et al. **Voen Med Zh** 1989 Feb;(2):46–9 (Rus)
[Characteristics of psychoprophylactic and mental hygiene work in the navy] Shinskiĭ SE. **Voen Med Zh** 1989 Apr; (4):55–8 (Rus)
[Organization of the work of a department to remove the psychological load] Svetlanov AG. **Voen Med Zh** 1988 Nov;(11):21–2 (Rus)
[The emotionally immature personality and possibilities of adaptation to the military environment] Matijäs B. **God Vojnomed Akad** 1987;29:30–3 (Eng. Abstr.) (Scr)
[The most frequent psychopathologic manifestations in recruits— problems in diagnosis and evaluation of suitability for military service] Petković S. **God Vojnomed Akad** 1987;29:85–90 (Eng. Abstr.) (Scr)
[Methodologic problems in the evaluation of the psychological capabilities of military recruits] Petković S, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):192–4 (Scr)
[Psychoneurotic disorders in soldiers. Experience in military ambulatory care] Trnjak Z, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):216–8 (Scr)

STATISTICS & NUMERICAL DATA

Boxing-related injuries in the US Army, 1980 through 1985. Enzenauer RW, et al. **JAMA** 1989 Mar 10;261(10):1463–6

MILITARY PSYCHIATRY

Disaster and refugee psychiatry: guidelines for the armed forces medical officer. Vincenti GE. **J R Nav Med Serv** 1987 Winter;73(3):178–82
Early mental health intervention in combat situations: the USS Stark. Sokol RJ. **Milit Med** 1989 Aug;154(8):407–9
[Competency for military arrest as a psychiatric problem] Grinspoon A, et al. **Harefuah** 1989 Apr 16;116(8):405–7 (Eng. Abstr.) (Heb)

EDUCATION

Organizational diagnosis and training plan for psychiatrists-commanders of small psychiatric teams treating soldiers suffering from combat reactions. Student M, et al. **Isr J Psychiatry Relat Sci** 1988;25(2):102–12

TRENDS

[The psychoanalyst as a military psychiatrist. An open letter to Peter Kutter] Cremerius J. **Psyche (Stuttg)** 1989 Jun; 43(6):558–63 (Ger)

MILITARY PSYCHOLOGY see PSYCHOLOGY, MILITARY

MILITARY SCIENCE

Theory-based ability measurement: the learning abilities measurement program. Christal RE. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A52–8
Ciguatera in the Pacific: a link with military activities. Ruff TA. **Lancet** 1989 Jan 28;1(8631):201–5
Arms or health? Coventry and Warwickshire Medical Campaign Against Nuclear Weapons. **Med War** 1988 Oct–Dec;4(4):213–26
Marine mammals join the Navy [news] Morrison DC. **Science** 1988 Dec 16;242(4885):1503–4
Navy marine mammals [letter] Ridgway SH. **Science** 1989 Feb 17;243(4893):875
[National policy in the Army and Navy] **Voen Med Zh** 1989 Mar;(3):3–6 (Rus)
[Let us increase discipline and good organization] Khrobostov VP. **Voen Med Zh** 1989 Feb;(2):3–7 (Rus)
[Problems in organizing a march of medical service units and installations] Tyts VV. **Voen Med Zh** 1989 Mar;(3):16–8 (Rus)

HISTORY

The death and mortal remains of Francisco Pizarro. Maples WR, et al. **J Forensic Sci** 1989 Jul;34(4):1021–36
A review of the history of Portsmouth's Armament depots. Pugh CE. **J R Nav Med Serv** 1988 Spring;74(1):18–23

MILK

Dietary treatment of PKU using a low-phenylalanine peptide milk. Owada M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):405–9
Effect of an acidified milk on diarrhoea and the carrier state in infants of low socio-economic stratum. Brunser O, et al. **Acta Paediatr Scand** 1989 Mar;78(2):259–64
The water buffalo of Egypt. Shalash MR. **Acta Vet Scand Suppl** 1988;83:66–79 (75 ref.)
Prophylactic and therapeutic aspects of fermented milk. Hitchins AD, et al. **Am J Clin Nutr** 1989 Apr;49(4):675–84 (137 ref.)
Yogurt and fermented-then-pasteurized milk: effects of short-term and long-term ingestion on lactose absorption and mucosal lactase activity in lactase-deficient subjects. Lerebours E, et al. **Am J Clin Nutr** 1989 May;49(5):823–7
Relative efficiency of yogurt, sweet acidophilus milk, hydrolyzed-lactose milk, and a commercial lactase tablet in alleviating lactose maldigestion. Onwulata CI, et al. **Am J Clin Nutr** 1989 Jun;49(6):1233–7
The acceptability of milk and milk products in populations with a high prevalence of lactose intolerance. Scrimshaw NS, et al. **Am J Clin Nutr** 1988 Oct;48(4 Suppl):1079–159 (597 ref.)
Milk intolerance due to lactose and giardiasis [letter] Tolboom JJ. **Am J Clin Nutr** 1989 Jul;50(1):178–9
Manganese absorption from human milk, cow's milk, and infant formulas in humans. Davidsson L, et al. **Am J Dis Child** 1989 Jul;143(7):823–7
The changing epidemiology of human brucellosis in Texas, 1977–1986. Taylor JP, et al. **Am J Epidemiol** 1989 Jul; 130(1):160–5
Acute gastroenteritis in children—aetiology and comparison of two modes of treatment. Ooi BC, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):40–2
Osmolalities of bottle- and breast-milk fed to poor urban Brazilian infants. Dorea JG, et al. **Ann Trop Paediatr** 1988 Sep;8(3):181–3
Acute gastroenteritis in well nourished infants: comparison of four feeding regimens. Conway SP, et al. **Arch Dis Child** 1989 Jan;64(1):87–91
Impact of a school milk programme on the nutritional status of school children. Chen ST. **Asia Pac J Public Health** 1989;3(1):19–25
Effect of skim milk and whey diets on plasma lipid levels of rabbits in a cross-over study. Vrecko K, et al. **Atherosclerosis** 1988 Jul;72(1):11–7
New methods of milk processing. Fox PF. **Bibl Nutr Dieta** 1989;(43):71–7
The susceptibility of breast-fed and cow's milk formula-fed infant guinea pigs to upper respiratory tract infection with influenza virus. Ali HM, et al. **Br J Exp Pathol** 1988 Aug; 69(4):563–75
Fluoride bioavailability from disodium monofluorophosphate fluoridated milk in children and rats. Villa A, et al. **Caries Res** 1989;23(3):179–83
Nycthemeral changes in plasma cortisol levels in preruminant calves with different milk proteins. Gardy-Godillot M, et al. **Chronobiol Int** 1988;5(4):345–51
Effect of maternal avoidance of eggs, cow's milk and fish during lactation upon allergic manifestations in infants. Hattevig G, et al. **Clin Exp Allergy** 1989 Jan;19(1):27–32
Milestones in clinical pharmacology. Remember the Sippy regimen for peptic ulcer? Farrar GE Jr. **Clin Ther** 1989 Mar–Apr;11(2):278–9
Substitution of skimmed milk for high-fat milk in the diets of men and women in South Wales. Lloyd-Hughes E, et al. **Eur J Clin Nutr** 1988 Aug;42(8):715–23
Spoon vs bottle: a controlled evaluation of milk feeding in young infants. Kumar H, et al. **Indian Pediatr** 1989 Jan; 26(1):11–7
Influence of milk on the bioavailability of doxycycline—new aspects. Meyer FP, et al. **Infection** 1989 Jul–Aug; 17(4):245–6
The use of waters with a low saline content (oligomineral waters) in the feeding of babies. Agostini G, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:21–9
Milk tester's dermatitis. Herzog J, et al. **J Am Acad Dermatol** 1988 Sep;19(3):503–8
Hemorrhagic colitis and hemolytic uremic syndrome caused by Escherichia coli in people consuming undercooked beef and unpasteurized milk [letter] Dorn CR. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1360–1
BST milk safety [letter] Kronfeld DS. **J Am Vet Med Assoc** 1989 Aug 1;195(3):288–9
Breath hydrogen excretion after lactose and whole milk ingestion. A prospective comparison in lactase deficiency. Sategna-Guidetti C, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):287–9
Ewes' milk cheese: technology, microbiology and chemistry. Nuñez M, et al. **J Dairy Res** 1989 May;56(2):303–21 (189 ref.)
Loss of antigens from immunoblotting membranes. DenHollander N, et al. **J Immunol Methods** 1989 Aug 15; 122(1):129–35
Encapsulation of proteins and peptides in milkfat: encapsulation efficiency and temperature and freezing stabilities. Braun SD, et al. **J Microencapsul** 1986 Apr–Jun; 3(2):115–26
The role of liquid diet formulation in the postnatal ethanol exposure of rats via mother's milk. Sanchis R, et al. **J Nutr** 1989 Jan;119(1):82–8
Reduction of plasma and hepatic triacylglycerides with whole milk-containing diets in rats. Schneeman BO, et al. **J Nutr** 1989 Jul;119(7):965–70
Evaluation of infant feeding in acute gastroenteritis. Armitstead J, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb; 8(2):240–4
Functional assessment of colonic interposition with 99Tcm-labeled milk. Sutton R, et al. **J Pediatr Surg** 1989 Sep;24(9):874–81
Age-related changes in rat brain ATPases during treatment with chlordecone. Jinna RR, et al. **J Toxicol Environ Health** 1989;27(2):199–208
Aluminium in infant formulas [letter] Bishop N, et al. **Lancet** 1989 Mar 11;1(8637):565
Aluminium and infant formulae [letter] Lawson M, et al. **Lancet** 1989 Mar 18;1(8638):614–5
An experimental study on the influence of milk aspiration on bronchial reactivity to cigarette smoke in guinea pigs. Yamada S, et al. **Nippon Eiseigaku Zasshi** 1988 Jun; 43(2):638–44
Lactobezoar causing an abdominal triad of colicky pain, emesis, and mass. Singer JI. **Pediatr Emerg Care** 1988 Sep; 4(3):194–6
Plasma beta-casomorphin-7 immunoreactive peptide increases after milk intake in newborn but not in adult dogs. Singh M, et al. **Pediatr Res** 1989 Jul;26(1):34–8
Relationship of milk intake and vitamin K supplementation to vitamin K status in newborns. Motohara K, et al. **Pediatrics** 1989 Jul;84(1):90–3
Further studies with the segmented filamentous intestinal bacteria of mice; effects of physical and chemical factors on survival and the effects of milk diet, para-aminobenzoic acid and mouse strain on colonization. Koopman JP, et al. **Z Versuchstierkd** 1988;31(6):270–5
[Calculating milk, water and electrolyte requirements of the premature infant] Cai YN, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):422–3 (Chi)
[Dietary milk for infants supplemented with vitamin D: is it for the near future? Comité de Nutrition et Groupe d'étude du Métabolisme du Calcium en Pédiatrie, Société Française de Pédiatrie] **Arch Fr Pediatr** 1988 Aug–Sep; 45(7):511–3 (Fre)
[Burns by ingestion of milk warmed-up in a microwave oven (letter)] Picherot G, et al. **Arch Fr Pediatr** 1988 Jun–Jul; 45(6):439 (Fre)
[Is the dilution of milk necessary in benign acute diarrhea in eutrophic infants?] Touhami M, et al. **Arch Fr Pediatr** 1989 Jan;46(1):25–30 (Eng. Abstr.) (Fre)
[The significance of mycotoxin assimilation for the contamination of milk and milk products] Heeschen W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):355–60 (18 ref.) (Eng. Abstr.) (Ger)
[Effect of an egg-milk-vegetarian diet on nutritional and blood status. II. Findings of a study on circulation, blood status; discussion] Wirths W, et al. **Z Ernahrungswiss** 1988 Jun;27(2):84–100 (Eng. Abstr.) (Ger)
[Correlations between consumption, intolerance and

malabsorption of milk in the aged] Levantesi F, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):80-1 (Eng. Abstr.) **(Ita)**

[Nutrition errors in children] Paci A, et al. **Pediatr Med Chir** 1989 Mar-Apr;11(2):171-81 (Eng. Abstr.) **(Ita)**

[Anti-anemic effect of iron-fortified milk-carbohydrate products] Wysokińska Z, et al. **Pediatr Pol** 1974 Feb; 49(2):149-56 (Eng. Abstr.) **(Pol)**

[Decreasing noise level during bottling of liquid foods] Kuroian NA, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):43-4 (Eng. Abstr.) **(Rus)**

[Physiologic and hygienic evaluation of the work of operators of mechanical milking] Shenkman GS, et al. **Gig Tr Prof Zabol** 1989;(5):14-6 (Eng. Abstr.) **(Rus)**

[Biologically active additives and possibilities of their use in child nutrition] Ladodo KS, et al. **Pediatriia** 1988; (9):42-6 **(Rus)**

[Serum levels and urinary excretion of magnesium in pregnancy. Effect of milk intake] Salinas M, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):444-53 (Eng. Abstr.) **(Spa)**

[Obtaining beta-galactosidase using whey] Pomar FT, et al. **Rev Argent Microbiol** 1983;15(1):9-17 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Studies of food allergy--lymphocyte blastogenesis to ovalbumin or bovine serum albumin for detection of allergens in hen's egg and cow's milk allergy. Kondo N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):667-71

A prospective study of cow's milk allergy in exclusively breast-fed infants. Incidence, pathogenetic role of early inadvertent exposure to cow's milk formula, and characterization of bovine milk protein in human milk. Høst A, et al. **Acta Paediatr Scand** 1988 Sep;77(5):663-70

Cow's milk allergy in the first year of life. An Italian Collaborative Study. **Acta Paediatr Scand Suppl** 1988; 348:1-14

Lymphocyte blastogenesis in children with cow's milk hypersensitivity after its elimination from the diet. Brarda OA, et al. **Allergol Immunopathol (Madr)** 1989 Jan-Feb; 17(1):45-8

Some aspects of the allergy to cow's milk. Morphological alterations of the jejunal mucosa. Gómez Chávez M, et al. **Allergol Immunopathol (Madr)** 1988 Sep-Oct;16(5):333-8

CD4+, CD8+ cells, IgE and prick test in infants allergic to cow's milk. Vanella L, et al. **Allergol Immunopathol (Madr)** 1988 Sep-Oct;16(5):327-31

Milk whey-specific immune complexes in allergic and non-allergic subjects. Bell SJ, et al. **Allergy** 1988 Oct; 43(7):497-503

Basophil histamine release in children with adverse reactions to cow milk. Comparison with RAST and skin prick test. Prahl P, et al. **Allergy** 1988 Aug;43(6):442-8

Allergy to cow's milk with onset in adult life. Olalde S, et al. **Ann Allergy** 1989 Mar;62(3):185a-185b

Autres pays, autres moeurs [letter] Segall J. **BMJ** 1989 Feb 11;298(6670):385

Clinical manifestations of cows' milk allergy in childhood. I. Associations with in-vitro cellular immune responses. Hill DJ, et al. **Clin Allergy** 1988 Sep;18(5):469-79

Clinical manifestations of cows' milk allergy in childhood. II. The diagnostic value of skin tests and RAST. Hill DJ, et al. **Clin Allergy** 1988 Sep;18(5):481-90

Diet-related eczema [letter] Hill DJ, et al. **Clin Exp Allergy** 1989 Jan;19(1):81-2

The role of milk and lactose intolerance in Ethiopian patients with non-ulcer dyspepsia: a case control study. Tsega E, et al. **Ethiop Med J** 1989 Jul;27(3):135-45

Milk drinking, other beverage habits, and lung cancer risk. Mettlin C. **Int J Cancer** 1989 Apr 15;43(4):608-12

Recovery from milk allergy in early childhood: antibody studies. Hill DJ, et al. **J Pediatr** 1989 May;114(5):761-6

Food-induced alterations of intestinal permeability in children with cow's milk-sensitive enteropathy and atopic dermatitis. Dupont C, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):459-65

Leads from the MMWR. Update--listeriosis and pasteurized milk. **JAMA** 1989 Feb 24;261(8):1119

Opioid peptides from milk as a possible cause of sudden infant death syndrome. Ramabadran K, et al. **Med Hypotheses** 1988 Nov;27(3):181-7 (76 ref.)

Update--listeriosis and pasteurized milk. **MMWR** 1988 Dec 16;37(49):764-6

Iron-deficiency anemia with hypoproteinemia in an infant. **Nutr Rev** 1989 Feb;47(2):48-50

Antigen absorption by the jejunal epithelium of children with cow's milk allergy. Heyman M, et al. **Pediatr Res** 1988 Aug;24(2):197-202

Milk intolerance in children with persistent sleeplessness: a prospective double-blind crossover evaluation. Kahn A, et al. **Pediatrics** 1989 Oct;84(4):595-603

Assessment of the excess risk of Salmonella dublin infection associated with the use of certified raw milk. Richwald GA, et al. **Public Health Rep** 1988 Sep-Oct;103(5):489-93

[Possible pathological effects of the antibiotic content of milk on humans in Hungary] Kováts J, et al. **Orv Hetil** 1988 Dec 18;129(51):2737-8, 2741-2 (Eng. Abstr.) **(Hun)**

ANALYSIS

Relationship between rectal findings of corpus luteum and whole milk progesterone levels in postpartum dairy cows. Heironen K. **Acta Vet Scand** 1988;29(2):239-43

Milk progesterone samples in identifying cycling dairy cows. Heinonen K, et al. **Acta Vet Scand** 1988;29(2):245-8

Quantitative estimation of residual milk in bovine udders--a methodological study. Isaksson A, et al. **Acta Vet Scand** 1988;29(2):259-62

Milk plasmin, antitrypsin, N-acetyl-beta-D-glucosaminidase and bacterial growth in lactoserum during the early post partum period. Pyörälä S, et al. **Acta Vet Scand** 1988; 29(2):145-50

Influence of management factors on the occurrence of antibiotic residues in milk: a case-control study in Michigan dairy herds, with examples of suspected information bias. Kaneene JB, et al. **Acta Vet Scand Suppl** 1988;84:473-6

Pharmacokinetics of sodium cephapirin in lactating dairy cows. Prades M, et al. **Am J Vet Res** 1988 Nov; 49(11):1888-90

Role of leukotriene B4 in the pathogenesis of Klebsiella pneumoniae-induced bovine mastitis. Rose DM, et al. **Am J Vet Res** 1989 Jun;50(6):915-8

Microanalysis of the metabolic intermediates of lactose synthesis in human milk and plasma using bioluminescent methods. Arthur PG, et al. **Anal Biochem** 1989 Feb 1; 176(2):449-56

Simultaneous determination of bromide and iodide as acetone derivatives by gas chromatography and electron capture detection in natural waters and biological fluids. Maros L, et al. **Anal Chem** 1989 Apr 1;61(7):733-5

Evidence for a third allele at the beta-lactoglobulin (beta-Lg) locus of sheep milk and its occurrence in different breeds. Erhardt G. **Anim Genet** 1989;20(2):197-204

Effect of the presence of a urea fertilizer plant on the nitrate content of berseem and constituents of milk and blood of buffaloes. el-Ayoty SA, et al. **Arch Tierernahr** 1989 Apr-May;39(4-5):491-8

Goat milk oligosaccharides: purification and characterization by HPLC and high-field 1H-NMR spectroscopy. Chaturvedi P, et al. **Biochim Biophys Acta** 1988 Oct 13; 967(1):115-21

Identification of the phyto-oestrogen 3',7-dihydroxyisoflavan, an isomer of equol, in human urine and cow's milk. Bannwart C, et al. **Biomed Environ Mass Spectrom** 1988 Jul;17(1):1-6

Detection of residues of chloramphenicol in crude extracts of fish and milk by tandem mass spectrometry. Ramsey ED, et al. **Biomed Environ Mass Spectrom** 1989 Jan; 18(1):5-11

The use of milk progesterone analysis to monitor reproductive activity in the camel (Camelus dromedarius). Abdel Rahim SE. **Br Vet J** 1989 Jan-Feb;145(1):23-7

Characterization of the vitamin B12-binding protein isolated from sow's milk and its affinity for cyanocobalamin and other corrinoids. Trugo NM. **Braz J Med Biol Res** 1988; 21(5):883-94

PCB and DDE residues in milk supplies of Ontario, Canada 1985-1986. Frank R, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):666-9

The associations between milk production, milk composition and Salmonella in the bulk milk supplies of dairy farms in Ontario. McClure LH, et al. **Can J Vet Res** 1989 Apr; 53(2):188-94

Iodine in milk and the incidence of thyrotoxicosis in England. Phillips DI, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):61-6

Comparative study of triacylglycerol fatty acids in milk from two Leporidae species: rabbit (Oryctolagus cuniculus) and hare (Lepus europaeus). Demarne Y, et al. **Comp Biochem Physiol [B]** 1978;61(2):223-6

A comparative study of vitamin D binding globulins in milk. Hollis BW, et al. **Comp Biochem Physiol [B]** 1979;64(1):41-6

Gel electrophoresis of human tears reveals various forms of tear lactoferrin. Kijlstra A, et al. **Curr Eye Res** 1989 Jun; 8(6):581-8

Variations in the levels of aflatoxin in cows milk consumed in the city of São Paulo, Brazil. Sabino M, et al. **Food Addit Contam** 1989 Jul-Sep;6(3):321-6

Methods for determination of aflatoxin M1 in milk and milk products--a review of performance characteristics. Scott PM. **Food Addit Contam** 1989 Jul-Sep;6(3):283-305 (68 ref.)

Decrease in ovine milk radiocesium following removal of sheep from a contaminated pasture. Assimakopoulos PA, et al. **Health Phys** 1989 Jul;57(1):183-6

Feeding green-cut forage contaminated by radioactive fallout to dairy cows. Bertilsson J, et al. **Health Phys** 1988 Dec; 55(6):855-62

Technetium metabolism by lactating goats. Ennis ME Jr, et al. **Health Phys** 1989 Aug;57(2):321-30

Monitoring of 131I in milk and rain water in Japan following the reactor accident at Chernobyl and estimates of human thyroidal dose equivalents. Nishizawa K, et al. **Health Phys** 1988 Nov;55(5):773-7

Effects of bentonite on transfer of radionuclides from forage to milk. Piva G, et al. **Health Phys** 1989 Jul;57(1):181-2

Transfer to milk of 131I and 137Cs released during the Chernobyl reactor accident. Tracy BL, et al. **Health Phys** 1989 Feb;56(2):239-43

Butyrophilin of milk lipid globule membrane contains N-linked carbohydrates and cross-links with xanthine oxidase. Valivullah HM, et al. **Int J Biochem** 1989; 21(1):103-7

Use of an enzyme immunoassay to determine concentrations of progesterone in caprine plasma and milk. Bretzlaff KN, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):664-8

Effects of intramuscular injections of folic acid during lactation on folates in serum and milk and performance of sows and piglets. Matte JJ, et al. **J Anim Sci** 1989 Feb; 67(2):426-31

The effects of dietary fat or fiber addition on yield and composition of milk from sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb; 67(2):482-95

Comparison of Babcock and ether extraction methods for determination of fat content of milk: collaborative study. Barbano DM, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct; 71(5):898-914

Survey of lead in canned evaporated milk. Capar SG, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):416-7

Direct competitive enzyme-linked immunosorbent assay for sulfamethazine residues in milk. Dixon-Holland DE, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):447-50

Pesticide residues in milk and fish samples collected from upper Egypt. Dogheim SM, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct;71(5):872-4

Determination of nitrogen content in milk by the Kjeldahl method using copper sulfate: interlaboratory study. Grappin R, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct; 71(5):893-8

Sensitive enzyme immunoassay of cephalexin residues in milk, hen tissues, and eggs. Kitagawa T, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct;71(5):915-20

Differential characteristics of fatty acids in cheese from milk of various animal species by capillary gas chromatography. Prager MJ. **J Assoc Off Anal Chem** 1989 May-Jun; 72(3):418-21

Liquid chromatographic determination of zearalenone and alpha- and beta-zearalenols in milk. Scott PM, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1176-9

Simultaneous determination of oxytetracycline, tetracycline, and chlortetracycline in milk by liquid chromatography. Thomas MH. **J Assoc Off Anal Chem** 1989 Jul-Aug; 72(4):564-7

Rapid determination of total cholesterol in homogenized milk. Tsui IC. **J Assoc Off Anal Chem** 1989 May-Jun; 72(3):421-4

Liquid chromatographic determination of sulfamethazine in milk. Weber JD, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):445-7

Selective, on-column extraction of organochlorine pesticide residues from milk. Di Muccio A, et al. **J Chromatogr** 1988 Dec 2;456(1):143-8

Determination of native folates in milk and other dairy products by high-performance liquid chromatography. Holt DL, et al. **J Chromatogr** 1988 Sep 30;449(1):271-9

Identification of the more complex triacylglycerols in bovine milk fat by gas chromatography-mass spectrometry using polar capillary columns. Myher JJ, et al. **J Chromatogr** 1988 Oct 28;452:93-118

Rapid determination of vitamin D in fortified skim milk. O'Keefe SF, et al. **J Chromatogr** 1988 Jul 8;445(1):305-9

Determination of hormone contaminants in milk replacers by high-performance liquid chromatography and immunoassay. Rapp M, et al. **J Chromatogr** 1989 Apr 7; 489(1):181-9

Development of an analytical method for penicillin G in bovine milk by liquid chromatography with ultraviolet-visible detection and confirmation by mass spectrometric detection. Tyczkowska K, et al. **J Chromatogr** 1989 May 5;490(1):101-13

Distribution of cholesterol in milk fat fractions. Arul J, et al. **J Dairy Res** 1988 Aug;55(3):361-71

Changes in the concentration of metabolites in milk from cows fed on diets supplemented with soyabean oil or fatty acids. Faulkner A, et al. **J Dairy Res** 1989 May;56(2):179-83

Lack of correlation between milk glucose concentrations and rates of milk production in the rat. Grigor MR, et al. **J Dairy Res** 1989 Feb;56(1):37-43

Effect of hydraulic milking on milking performance, teat condition and lipolysis. Grindal RJ, et al. **J Dairy Res** 1989 Feb;56(1):45-53

Effects of beta-lactoglobulin and kappa-casein genetic variants and concentrations on syneresis of gels from renneted heated milk. McLean DM, et al. **J Dairy Res** 1989 May;56(2):297-301

Oxygen concentration in milk of healthy and mastitic cows and implications of low oxygen tension for the killing of Staphylococcus aureus by bovine neutrophils. Mayer SJ, et al. **J Dairy Res** 1988 Nov;55(4):513-9

Experiments on the heat-induced salt balance changes in cow's milk. Pouliot Y, et al. **J Dairy Res** 1989;56(3):513-9

Increased secretion of insulin-like growth factor I into milk of cows treated with recombinantly derived bovine growth hormone. Prosser CG, et al. **J Dairy Res** 1989 Feb; 56(1):17-26

Evidence of calmodulin in bovine milk with high somatic cell counts. Alston-Mills B, et al. **J Dairy Sci** 1988 Aug; 71(8):2246-9

Iodine concentrations in milk of dairy cattle fed various amounts of iodine as ethylenediamine dihydroiodide. Berg JN, et al. **J Dairy Sci** 1988 Dec;71(12):3283-91

Mammary transfer of vitamin E in dairy cows. Hidiroglou M. **J Dairy Sci** 1989 Apr;72(4):1067-71

Application of a monoclonal antibody to a comparative study

of alpha-lactalbumins from various species. Kaminogawa S, et al. **J Dairy Sci** 1989 May;72(5):1124-9

Characterization of multiple forms of lactophorin isolated from bovine milk whey. Kanno C. **J Dairy Sci** 1989 Jul; 72(7):1732-9

Effect of disc moistening method on Bacillus stearothermophilus disc assay zone diameters. Ryan JJ, et al. **J Dairy Sci** 1988 Sep;71(9):2384-7

Persistence of residues in milk following antibiotic treatment of dairy cattle. Seymour EH, et al. **J Dairy Sci** 1988 Aug; 71(8):2292-6

Effects of Rumen-Mate on lactational performance of Holsteins fed a high grain diet. Solorzano LC, et al. **J Dairy Sci** 1989 Jul;72(7):1831-41

Milk production and composition in cows and goats fed alpha-ketoisocaproate. Vandehaar MJ, et al. **J Dairy Sci** 1988 Dec;71(12):3352-61

Orotic acid in guinea pig milk: changes in concentration during lactation. Wahab IM, et al. **J Dairy Sci** 1988 Sep; 71(9):2554-6

Recent research involving the transfer of radionuclides to milk. Ward GM. **J Dairy Sci** 1989 Jan;72(1):284-7

Effects of bovine somatotropin on milk yield and composition, dry matter intake, and some physiological functions of Holstein cows during heat stress. Zoa-Mboe A, et al. **J Dairy Sci** 1989 Apr;72(4):907-16

Effects of addition of arginine, cystine, and glycine to the bovine milk-simulated amino acid mixture on the level of plasma and liver cholesterol in rats. Yoshida K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec;34(6):567-76

Erratum: composition of Similac and Similac Special Care formulas [letter] Barrington K. **J Pediatr** 1988 Dec; 113(6):1118

Determination of diphenhydramine in rat milk and plasma and its effects on milk composition and mammary gland nucleic acids. Dostal LA, et al. **J Pharm Sci** 1989 May; 78(5):423-6

A comparison of alkaline phosphatase, beta-galactosidase, penicillinase and peroxidase used as labels for progesterone determination in milk by heterologous microtitre plate enzymeimmunoassay. Sauer MJ, et al. **J Steroid Biochem** 1989 Sep;33(3):423-31

The influence of heterology, enzyme label and assay conditions on the sensitivity of microtitre plate enzymeimmunoassays for progesterone in milk. Sauer MJ, et al. **J Steroid Biochem** 1989 Sep;33(3):433-8

Kinetic and insecticidal properties of ivermectin residues in the milk of dairy cows. Toutain PL, et al. **J Vet Pharmacol Ther** 1988 Sep;11(3):288-91

Bovine somatotropin and milk composition [letter] Prosser CG. **Lancet** 1988 Nov 19;2(8621):1201

Isolation and identification of neuroendocrine peptides from milk. Hazum E. **Methods Enzymol** 1989;168:494-7

Proteolysis and electrophoretic pattern of casein of some fermented milks. Hegazi FZ. **Nahrung** 1988;32(6):539-43

The determination of milk powder added to whole milk. Madkour MA, et al. **Nahrung** 1989;33(1):77-82

Effect of the drying process on the nutritive value of milk. Part 1. Biochemical composition. el-Shafei MM, et al. **Nahrung** 1988;32(6):553-7

Effect of the drying process on the nutritive value of milk. Part 2. Biological evaluation. El-Shafei MM, et al. **Nahrung** 1988;32(6):559-64

US opposition to milk hormone [news] Shulman S. **Nature** 1989 Aug 31;340(6236):667

The relationship between the (beta 1-3) N-acetylglucosaminyltransferase and the presence of oligosaccharides containing lacto-N-triose II structure in bovine and human milk. Hosomi O, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):1-6

Effect of dietary sodium bicarbonate and magnesium oxide on cows with milk fat depression in several dairy herds. Shimada Y, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):373-9

High levels of a parathyroid hormone-like protein in milk. Budayr AA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7183-5

Milk lipid globules: control of their size distribution. Valivullah HM, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8775-9

Relationship between milk composition and pup's growth in mice. Nagasawa H, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):78-81

Relationship among iodine, bromine and chlorine concentrations in cow's milk in Japan. Ohno S, et al. **Radioisotopes** 1989 Jun;38(6):279-81

Iodine nutrition in ewes: effects of low to high iodine intake on iodine content of biological fluids in pregnant and lactating ewes. Aumont G, et al. **Reprod Nutr Dev** 1989; 29(1):113-25

Plasma lactose after weaning and its relationship with lactose content of milk, post-weaning plasma oestradiol-17 beta and weaning to mating interval in sows. Matte JJ, et al. **Reprod Nutr Dev** 1989;29(1):75-82

Indicators of inflammation to evaluate the recovery from acute bovine mastitis. Pyörälä S. **Res Vet Sci** 1988 Sep; 45(2):166-9

Milk fat depression and the influence of diet on milk composition. Emery RS. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):289-305

Development and evaluation of an enzyme-linked immunosorbent assay for endotoxin in milk. Mohammed AH, et al. **Vet Microbiol** 1988 Sep;18(1):27-39

Monitoring milk for chloramphenicol residues by an immunoassay (Quik-card). Nouws JF, et al. **Vet Q** 1988 Oct;10(4):270-2

Comparison of fat and cream content in normal and mastitic milk of cows. Vandeputte-Van Messom G, et al. **Vet Q** 1989 Jan;11(1):61-4

The milk progesterone test as an aid to the diagnosis of cystic ovaries in dairy cows. Booth JM. **Vet Rec** 1988 Oct 22; 123(17):437-9

Antibiotic residues and clinical records [letter] O'Rourke DJ, et al. **Vet Rec** 1989 Jun 24;124(25):667-8

Pharmacokinetics and distribution of sulphadimidine in plasma, milk and uterine fluid of female buffaloes. Singh MK, et al. **Vet Res Commun** 1988;12(1):41-6

Determination of the phospholipid content of human milk, cow's milk and various infant formulas. Kynast G, et al. **Z Ernahrungswiss** 1988 Dec;27(4):252-65

Milk analysis for the iodine status of dairy cows. Binnerts WT. **Z Gesamte Hyg** 1989 Jan;35(1):12-5

Chemometric studies of some trace elements in cows' milk. Favretto LG, et al. **Z Lebensm Unters Forsch** 1989 Aug; 189(2):123-7

Detection of adulteration of pasteurised milk with whey by determination of the casein-bound phosphorus and protein nitrogen content. Wolfschoon-Pombo AF, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):16-21

Free fatty acids and lipid peroxidation in normal and mastitic bovine milk. Atroshi F, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):321-30

Sequential changes of mineral and trace elements in milk during the course of endotoxin-induced mastitis as analyzed by particle induced -X-ray (PIXE), -gamma-ray emission (PIGE) and ion selective electrodes. Lappalainen R, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):664-76

[Antibiotic residue in milk, milk products and its lasting time in milk secreted by sick cows in Jiangsu Province] Zhou SN. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):167-9 (Eng. Abstr.) (Chi)

[Effects of a duodenal infusion of rapeseed oil in cows in full lactation. 1. Food intake, production and composition of milk, content of circulating metabolites] Chilliard Y, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:173-4 (Eng. Abstr.) (Fre)

[Secretion of fatty acids into milk as a function of the characteristics of the diet and the nutritional status of the goat at the onset of lactation] Sauvant D, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:177-8 (Eng. Abstr.) (Fre)

[Modification of the potential acidity of cow's milk due to quantitative changes of milk substances in udder diseases and alimentary-conditioned metabolic burdens] Mielke H, et al. **Arch Exp Veterinarmed** 1988 May;42(3):328-46 (Eng. Abstr.) (Ger)

[A standardized test method for determination of aflatoxin M1 in milk and milk products] Bauer S, et al. **Nahrung** 1989;33(2):217-9 (Ger)

[Group separation of caseins from cow milk on hydroxyapatite] Sienkiewicz T, et al. **Nahrung** 1988; 32(8):749-54 (Eng. Abstr.) (Ger)

[Practice relevant rapid tests for milk progesterone in cattle compared with a laboratory-connected routine method] Sobiraj A, et al. **Tierarztl Prax** 1989;17(1):21-5 (Eng. Abstr.) (Ger)

[The determination of the urea content in cow's milk with the help of the dry chemical system Reflotron] Staudacher G. **Tierarztl Prax** 1989;17(1):105-8 (Eng. Abstr.) (Ger)

[Polychlorinated biphenyls: determination of individual components in raw milk and contaminated fodder] Kypke-Hutter K, et al. **Z Lebensm Unters Forsch** 1989 Feb;188(2):127-34 (Eng. Abstr.) (Ger)

[Critical aspects in determining total radioactivity of biological samples] Del Vecchio MP, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):281-7 (Eng. Abstr.) (Ita)

[Research on possible aluminum contamination of commercial milk] Moni L, et al. **Minerva Pediatr** 1988 Oct; 40(10):595-8 (Eng. Abstr.) (Ita)

[Chloro-organic pesticides in milk samples of sheep from areas of Marsala used for protected culture] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 May-Jun;39(3):191-201 (Eng. Abstr.) (Ita)

[Analysis of iodine levels in milk and milk products] Buliński R, et al. **Rocz Panstw Zaki Hig** 1988;39(3):198-202 (Eng. Abstr.) (Pol)

[A method of atomic absorption spectrophotometry in determining the levels of cadmium and lead in milk-cereal products, cereals and canned vegetables and meat for children up to 3 years of age] Jędrzejczak R. **Rocz Panstw Zaki Hig** 1988;39(2):118-24 (Eng. Abstr.) (Pol)

[Degree of structural homology of lactoferrins from milk and neutrophilic granulocytes] Kokriakov VN, et al. **Biokhimiia** 1988 Nov;53(11):1837-43 (Eng. Abstr.) (Rus)

[A spectrophotometric method of determining the levels of nitrates in animal feed, milk and meat] Saiapin VP, et al. **Gig Sanit** 1988 Jul;(7):43-4 (Rus)

[Seasonal changes in the levels of various metabolites and proteins in cow milk and colostrum] Sugeĭl' KhA, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):77-81 (Eng. Abstr.) (Rus)

[The amino acid composition of dried buttermilk and its effect on the blood amino acid spectrum in white rats] Voronetskene IV. **Vopr Pitan** 1988 Nov-Dec;(6):66-7 (Rus)

CYTOLOGY

Variations in measures of udder health within a short period of time. I. The dynamic characteristics in diagnostics of subclinical mastitis based on cytological and bacteriological parameters. Jensen NE, et al. **Acta Vet Scand** 1988; 29(3-4):421-30

Differential cell counting in fraction-collected milk from dairy cows. Ostensson K, et al. **Acta Vet Scand** 1988; 29(3-4):493-500

Using individual somatic cell counts to help diagnose herd mastitis problems. Dohoo IR, et al. **Acta Vet Scand Suppl** 1988;84:145-7

Relationship between test-day measures of somatic cell count and milk production in California dairy cows. Tyler JW, et al. **Can J Vet Res** 1989 Apr;53(2):182-7

Use of dairy herd improvement somatic cell information by Ohio dairy producers and their perceptions of mastitis. Miller GY, et al. **J Dairy Sci** 1988 Aug;71(8):2284-91

Effectiveness of intramammary antibiotic therapy based on somatic cell count. Seymour EH, et al. **J Dairy Sci** 1989 Apr;72(4):1057-62

Morphology of goat milk-derived mammary epithelial cells cultured in collagen gel. Kawano A, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1252-8

Effects of exogenous estrogen administration to ovariectomized cows on the blood and milk-leukocyte counts and -neutrophil phagocytosis measured by flow cytometry. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):654-63

[The relationship between different blood parameters as criteria for metabolic disorders and the milk cell count in dairy cows] Lotthammer KH, et al. **DTW** 1988 Oct; 95(9):379-84 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Cromoglycate induces a rebound effect on blood/milk permeability in subclinical mastitis. Pyörälä S, et al. **Acta Vet Scand** 1988;29(1):139-41

Growth of Escherichia coli in whole and skim milk from endotoxin-induced mastitic quarters: in vitro effects of deferoxamine, zinc, and iron supplementation. Lohuis JA, et al. **J Dairy Sci** 1988 Oct;71(10):2772-81

ENZYMOLOGY

Activation of plasmin in mastitic milk. Kaartinen L, et al. **Acta Vet Scand** 1988;29(3-4):485-91

Relative efficiency of yogurt, sweet acidophilus milk, hydrolyzed-lactose milk, and a commercial lactase tablet in alleviating lactose maldigestion. Onwulata CI, et al. **Am J Clin Nutr** 1989 Jun;49(6):1233-7

Pathological changes in the mammary gland and biochemical changes in milk of the goat following oral dosing with leaf of the avocado (Persea americana). Craigmill AL, et al. **Aust Vet J** 1989 Jul;66(7):206-11

A kinetic study of hypoxanthine oxidation by milk xanthine oxidase. Escribano J, et al. **Biochem J** 1988 Sep 15; 254(3):829-33

Bovine milk-fat-globule membrane contains an enzymically inactive form of acetyl-CoA carboxylase. Shriver BJ, et al. **Biochem J** 1989 Feb 1;257(3):925-7

The isolation of demolybdo xanthine oxidase from bovine milk. Ventom AM, et al. **Biochem J** 1988 Nov 1; 255(3):949-56

Specificity of milk-clotting enzymes towards bovine kappa-casein. Drøhse HB, et al. **Biochim Biophys Acta** 1989 May 1;995(3):221-4

Purification of camel milk lysozyme and its lytic effect on Escherichia coli and Micrococcus lysodeikticus. Duhaiman AS. **Comp Biochem Physiol [B]** 1988;91(4):793-6

Structure of bovine milk lipoprotein lipase. Yang CY, et al. **J Biol Chem** 1989 Oct 5;264(28):16822-7

Enhanced inactivation of bacterial lipases and proteinases in whole milk by a modified ultra high temperature treatment. Bucky AR, et al. **J Dairy Res** 1988 Aug;55(3):373-80

Milk alkaline proteinase. Grufferty MB, et al. **J Dairy Res** 1988 Nov;55(4):609-30 (115 ref.)

Paracellular leakage of lipoprotein lipase across the mammary epithelium of the goat. Azzara CD, et al. **J Dairy Sci** 1989 May;72(5):1159-68

N-acetyl-beta-D-glucosaminidase activity in whole milk and milk fractions. Fox LK, et al. **J Dairy Sci** 1988 Nov; 71(11):2915-22

Assessment of lipoprotein activators of skim milk lipoprotein lipase and the relationship between lipoprotein lipase activity and milk fat synthesis. Grummer RR, et al. **J Dairy Sci** 1989 Jun;72(6):1451-8

Environmental factors affecting plasmin activity in milk. Politis I, et al. **J Dairy Sci** 1989 Jul;72(7):1713-8

Plasmin and plasminogen in bovine milk: a relationship with involution? Politis I, et al. **J Dairy Sci** 1989 Apr;72(4):900-6

Contribution of leucocytes to the origin of lactate dehydrogenase isozymes in milk of bovine mastitis. Kato K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):530-9

Covalently bound phosphate residues in bovine milk xanthine oxidase and in glucose oxidase from Aspergillus niger: a reevaluation. Johnson JL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6493-7

Assessment of the visually read N-acetylglucosaminidase test to detect mastitis in herd surveys. Ball HJ, et al. **Vet Rec** 1989 Feb 11;124(6):145–6

Total and differential cell counts and N-acetyl-beta-D-glucosaminidase activity in sow milk during lactation. Hurley WL, et al. **Vet Res Commun** 1988; 12(2–3):149–53

Compartmentalization of milk N-acetyl-beta-D-glucosaminidase (NAGase). Release of NAGase from the cellular compartment by storage, freezing and thawing, detergent and using cell stimulants. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1988 Jul; 35(6):408–14

Glucose oxidase (GOD) as a source of hydrogen peroxide for the lactoperoxidase (LPO) system in milk: antibacterial effect of the GOD–LPO system against mastitis pathogens. Sandholm M, et al. **Zentralbl Veterinarmed [B]** 1988 Jun; 35(5):346–52

[A method for the rapid selection of protoplast-fusion recombinants with higher milk-coagulating activity] Valerianov Ts, et al. **Acta Microbiol Bulg** 1988;22:39–43 (Eng. Abstr.) **(Bul)**

IMMUNOLOGY

Plasma antibodies to cow's milk are increased by early weaning and consumption of unmodified milk, but production of plasma IgA and IgM cow's milk antibodies is stimulated even during exclusive breast-feeding. Tainio VM, et al. **Acta Paediatr Scand** 1988 Nov;77(6):807–11

Relationship among transmissible gastroenteritis virus antibody titers in serum, colostrum, and milk from vaccinated sows, and protection in their suckling pigs. Moxley RA, et al. **Am J Vet Res** 1989 Jan;50(1):119–25

Detection of Salmonella dublin mammary gland infection in carrier cows, using an enzyme-linked immunosorbent assay for antibody in milk or serum. Smith BP, et al. **Am J Vet Res** 1989 Aug;50(8):1352–60

Lactogenic immunity to transmissible gastroenteritis (TGE) of swine induced by the attenuated Nouzilly strain of TGE virus: neutralizing antibody classes and protection. Shiraï J, et al. **Ann Rech Vet** 1988;19(4):267–72

Association of serum IgA antibodies to milk antigens with severe atherosclerosis. Muscari A, et al. **Atherosclerosis** 1989 Jun;77(2–3):251–6

Identification of inflammatory cells in bovine milk by flow cytometry. Redelman D, et al. **Cytometry** 1988 Sep; 9(5):463–8

Ingestion and killing of Listeria monocytogenes by blood and milk phagocytes from mastitic and normal cattle. Czuprynski CJ, et al. **J Clin Microbiol** 1989 May; 27(5):812–7

Physiological and pathological factors influencing bovine immunoglobulin G2 concentration in milk. Caffin JP, et al. **J Dairy Sci** 1988 Aug;71(8):2035–43

Assay of bovine milk fat globule membrane antibody by a non-isotopic chemiluminescent method. Thomas E. **Med Lab Sci** 1988 Jul;45(3):266–9

Immunology. MHC meets mother's milk [news] Parham P. **Nature** 1989 Jan 12;337(6203):118–9

Evaluation of an anti-inflammatory factor derived from hyperimmunized cows. Owens WE, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):79–86

Effects of Staphylococcus aureus mastitis on bovine mammary gland plasma cell populations and immunoglobin concentrations in milk. Doymaz MZ, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):87–93

Detection of antibodies to bovine leukemia virus in bovine milk samples with an ELISA involving two monoclonal antibodies. Florent G, et al. **Vet Microbiol** 1988 Sep; 18(1):89–93

Effect of ketone bodies on the mitogenic response of bovine milk lymphocytes. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):626–31

Effect of ketone bodies on the phagocytic activity of bovine milk macrophages and polymorphonuclear leukocytes. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep; 35(8):632–9

Evidence of protection against diarrhoea in suckling piglets by a hormone-like protein in the sow's milk. Lönnroth I, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):628–35

Evaluation of an enzyme-linked immunosorbent assay for detection of antibodies to bovine virus diarrhoea virus in milk. Niskanen R, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):113–8

Humoral immune response of bovine mammary glands colonized with Corynebacterium bovis: enumeration of plasma cell populations in tissue and immunoglobulin concentrations in milk. Sordillo LM, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):617–27

[Variations in the concentrations of the immunoglobulins IgG1, IgG2, IgM and IgA in sheep. 1. Changes in the blood serum and in the milk of sheep of different breeds and cross-breeds during lactation] Klobasa F, et al. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1;102(4):123–9 (Eng. Abstr.) **(Ger)**

[Studies of specific IgE and IgG antibodies in allergic children. Changes in specific IgE and IgG antibodies to egg white, milk, soybean and mite from children with atopic dermatitis] Akasawa A, et al. **Arerugi** 1989 Mar; 38(3):254–62 (Eng. Abstr.) **(Jpn)**

[Correlation of specific IgG4 antibody titers and specific IgE RAST score to EGG white, milk and soybean in allergic children] Moroi T. **Arerugi** 1988 Jun;37(6):331–43 (Eng. Abstr.) **(Jpn)**

[Percentage of positive specific IgG and IgE antibodies to egg white, milk, soy and mite (Dermatophagoides farinae), their changes with age in pediatric allergic diseases] Odajima Y, et al. **Arerugi** 1988 Jul;37(7):419–26 (Eng. Abstr.) **(Jpn)**

[Usefulness of the analysis of IgE and food antibodies of the IgE class for the diagnosis and treatment of food allergy in children] Rujner J, et al. **Wiad Lek** 1988 Apr 15; 41(8):494–9 (Eng. Abstr.) **(Pol)**

METABOLISM

Calcium absorption from milk in lactase-deficient subjects. Griessen M, et al. **Am J Clin Nutr** 1989 Feb;49(2):377–84

Calcium supplements and milk: effects on acid–base balance and on retention of calcium, magnesium, and phosphorus. Lewis NM, et al. **Am J Clin Nutr** 1989 Mar;49(3):527–33

Fate of milk calcium in the gastrointestinal tract of suckling rats. Simmons MA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1063–9

Changes in alpha-lactalbumin, total lactose, UDP-galactose hydrolase and other factors in tammar wallaby (Macropus eugenii) milk during lactation. Messer M, et al. **Aust J Biol Sci** 1987;40(1):37–46

Effects of maternally administered cimetidine during lactation on the development of drug metabolizing enzymes in mouse pups. Kwanashie HO, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):204–6

Concentration of lactoferrin and transferrin throughout lactation in cow's colostrum and milk. Sánchez L, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1005–8

Patterns of serum glucose and galactose concentrations in term newborn infants after milk feeding. Siegel CD, et al. **Biol Neonate** 1988;54(6):301–6

Milk-substitutes comparable to rat's milk; their preparation, composition and impact on development and metabolism in the artificially reared rat. Auestad N, et al. **Br J Nutr** 1989 May;61(3):495–518

Longitudinal manganese and copper balances in young infants and preterm infants fed on breast-milk and adapted cow's milk formulas. Dörner K, et al. **Br J Nutr** 1989 May; 61(3):559–72

Estimation of the intake of milk by lambs, from the turnover of deuterium- or tritium-labelled water. Dove H. **Br J Nutr** 1988 Sep;60(2):375–87

Impact of maternal iron deficiency on quality and quantity of milk ingested by neonatal rats. O'Connor DL, et al. **Br J Nutr** 1988 Nov;60(3):477–85

Importance of body tissues as sources of nutrients for milk synthesis in the cow, using 13C as a marker. Wilson GF, et al. **Br J Nutr** 1988 Nov;60(3):605–17

On the maternal transfer of 4-aminobiphenyl in rats. La Voie EJ, et al. **Carcinogenesis** 1989 Feb;10(2):231–6

Presence of calcitonin-like peptide in rat milk: possible physiological role in regulation of neonatal prolactin secretion. Shah GV, et al. **Endocrinology** 1989 Jul; 125(1):61–7

Nifedipine is excreted in human milk. Penny WJ, et al. **Eur J Clin Pharmacol** 1989;36(4):427–8

Excretion of penicillins and cephalexin in bovine milk following intramammary administration. Moretain JP, et al. **Food Addit Contam** 1989 Jan–Mar;6(1):79–89

Metabolic rate studies in females in pre and post menstrual phases and immediate metabolic effects of oral ingestion. Mehta V, et al. **Indian J Med Sci** 1988 Dec;42(12):294–7

Carbon kinetics of milk formation in Holstein cows in late lactation. Boutton TW, et al. **J Anim Sci** 1988 Oct; 66(10):2636–45

Effect of milk on fibronectin and collagen type I binding to Staphylococcus aureus and coagulase-negative staphylococci isolated from bovine mastitis [published erratum appears in J Clin Microbiol 1989 Jul;27(7):1705] Miedzobrodzki J, et al. **J Clin Microbiol** 1989 Mar; 27(3):540–4

Zinc binding in bovine milk. Singh H, et al. **J Dairy Res** 1989 May;56(2):249–63

Binding of zinc to bovine and human milk proteins. Singh H, et al. **J Dairy Res** 1989 May;56(2):235–48

Influence of bovine mastitis on lipolysis and proteolysis in milk. Murphy SC, et al. **J Dairy Sci** 1989 Mar;72(3):620–6

Influence of milk and food on fluoride bioavailability from NaF and Na2FPO3 in man. Trautner K, et al. **J Dent Res** 1989 Jan;68(1):72–7

Insulin-like growth factor-I and its association with binding proteins in bovine milk. Campbell PG, et al. **J Endocrinol** 1989 Jan;120(1):21–9

Measurement of calcium and phosphorus fluxes during lactation in the rat. Brommage R. **J Nutr** 1989 Mar; 119(3):428–38

Fractional contributions to total carnitine in the neonatal rat. Davis AT. **J Nutr** 1989 Feb;119(2):262–7

Effect of altered serum protein binding on propranolol distribution into milk in the lactating rabbit. Fleishaker JC, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):925–8

In vivo evaluation in the lactating rabbit of a model for xenobiotic distribution into breast milk. Fleishaker JC, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):919–24

Lactose digestion and clinical tolerance to milk, lactose-prehydrolyzed milk and enzyme-added milk: a study in undernourished continuously enteral-fed patients. Rosado JL, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr;13(2):157–61

Effect of lactose hydrolysis on calcium absorption during duodenal milk perfusion. Birlouez-Aragon I. **Reprod Nutr Dev** 1988;28(6A):1465–72

Carprofen in veterinary medicine. I. Plasma disposition, milk excretion and tolerance in milk-producing cows. Ludwig B, et al. **Schweiz Arch Tierheilkd** 1989;131(2):99–106

The impact of milk and weaning diet on gastrointestinal permeability in English and Gambian infants. Weaver LT. **Trans R Soc Trop Med Hyg** 1988;82(5):784–9

Endotoxin levels in milk and plasma of mastitis-affected cows measured with a chromogenic limulus test. Hakogi E, et al. **Vet Microbiol** 1989 Jul;20(3):267–74

Endotoxin-induced mastitis. Inhibition of casein synthesis and activation of the caseinolytic system. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1988 Jun;35(5):353–60

[Variability in the levels of carotenoids and vitamin A in the blood serum and milk of cows] Lesiak M. **Pol Arch Weter** 1987;27(2–3):137–52 (Eng. Abstr.) **(Pol)**

[The mother-newborn infant system as a natural biological model for the study of the effects of exogenous chemical substances and the products of their biotransformation] Goncharuk EI, et al. **Gig Sanit** 1988 Jun;(6):10–2 (Eng. Abstr.) **(Rus)**

[Seasonal changes in the mineral composition of colostrum and milk whey of cows] Sugeĭ' KhA, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):92–4 (Eng. Abstr.) **(Rus)**

[Data on the buffer effect of food based on the study of intragastric proteolytic activity in patients metabolic-alimentary obesity] Sintsova NV. **Vopr Pitan** 1988 May–Jun;(3):17–20 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Sensitivity and specificity of latex agglutination tests used to identify Streptococcus agalactiae and Staphylococcus aureus isolated from bulk tank milk. Hogan JS, et al. **Am J Vet Res** 1988 Sep;49(9):1537–9

Comparative recovery of uninjured and heat-injured Listeria monocytogenes cells from bovine milk. Crawford RG, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1490–4

Non-clinical intramammary infection in lactating ewes and its association with clinical mastitis. Bor A, et al. **Br Vet J** 1989 Mar–Apr;145(2):178–84

Physiological studies on the growth and utilization of sugars by Listeria species. Pine L, et al. **Can J Microbiol** 1989 Feb;35(2):245–54

Evaluation of a digitonin disk assay to discriminate between acholeplasma and mycoplasma isolates from bovine milk. Thurmond MC, et al. **Cornell Vet** 1989 Jan;79(1):71–81

Isolation of verocytotoxin-producing Escherichia coli from milk filters in south-western Ontario. Clarke RC, et al. **Epidemiol Infect** 1989 Apr;102(2):253–60

Production of bacteriocin by isolates of Yersinia enterocolitica from fresh buffalo milk. Toora S, et al. **Folia Microbiol (Praha)** 1989;34(2):151–6

Partial immunological characterization of heat-stable proteinases from Pseudomonas spp. of dairy origin. Azcona JI, et al. **J Appl Bacteriol** 1989 Mar;66(3):227–33

Variation in the behaviour of enterotoxigenic Staphylococcus aureus after heat stress in milk. Batish VK, et al. **J Appl Bacteriol** 1989 Jan;66(1):27–35

The occurrence of Campylobacter jejuni in raw cows' milk. Beumer RR, et al. **J Appl Bacteriol** 1988 Aug;65(2):93–6

A numerical taxonomic study of proteolytic and lipolytic psychrotrophs isolated from caprine milk. Cox JM, et al. **J Appl Bacteriol** 1989 Feb;66(2):137–52

Growth of psychrotrophic bacteria in raw and UHT-treated goats' milk. Cox JM, et al. **J Appl Bacteriol** 1988 May; 64(5):403–7

The incidence of Listeria monocytogenes in raw milk from farm bulk tanks in north-east Scotland. Fenlon DR, et al. **J Appl Bacteriol** 1989 Mar;66(3):191–6

Campylobacter and Salmonella contamination of unpasteurized cows' milk on sale to the public. Humphrey TJ, et al. **J Appl Bacteriol** 1988 Dec;65(6):463–7

A medium for the detection of Lancefield Group D cocci in skimmed milk powder by measurement of conductivity changes. Neaves P, et al. **J Appl Bacteriol** 1988 Dec; 65(6):437–48

Partial purification and characterization of phospholipase C from Yersinia enterocolitica. Toora S, et al. **J Appl Bacteriol** 1989 Apr;66(4):303–9

Three cases of neonatal meningitis caused by Enterobacter sakazakii in powdered milk. Biering G, et al. **J Clin Microbiol** 1989 Sep;27(9):2054–6

Survival of Campylobacter pylori in artificially contaminated milk [letter] Karim QN, et al. **J Clin Pathol** 1989 Jul; 42(7):778

Assessment of different selective agar media for enumeration and isolation of Listeria from dairy products. Dominguez L, et al. **J Dairy Res** 1988 Nov;55(4):579–83

Use of California Mastitis Test, N-acetyl-beta-glucosaminidase, and antitrypsin to diagnose caprine subclinical mastitis. Maisi P, et al. **J Dairy Res** 1988 Aug;55(3):309–14

Thermal inactivation of Campylobacter species, Yersinia enterocolitica, and hemorrhagic Escherichia coli 0157:H7 in fluid milk. D'Aoust JY, et al. **J Dairy Sci** 1988 Dec; 71(12):3230–6

Industry response to the problems of pathogenic bacteria. Everson TC. **J Dairy Sci** 1988 Oct;71(10):2820–9

Regulatory response to the problem of pathogenic bacteria in the dairy industry. Kozak JJ. **J Dairy Sci** 1988 Oct; 71(10):2817–9

A method for determining beta–galactosidase activity of yogurt cultures in skim milk. Lin WJ, et al. **J Dairy Sci** 1989 Feb;72(2):351–9

Conventional tube and microplate Limulus amoebocyte lysate procedures for determination of gram–negative bacteria in milk. May SA, et al. **J Dairy Sci** 1989 May; 72(5):1137–41

Premilking udder hygiene. Pankey JW. **J Dairy Sci** 1989 May;72(5):1308–12

Effect of freezing on bacteriologic culturing of mastitis milk samples. Schukken YH, et al. **J Dairy Sci** 1989 Jul; 72(7):1900–6

Pathogenic bacteria in milk—a review. Vasavada PC. **J Dairy Sci** 1988 Oct;71(10):2809–16 (83 ref.)

The milk kitchen, Sheffield Children's Hospital, before and after a review. Burnett IA, et al. **J Hosp Infect** 1989 Feb; 13(2):179–85

Milk–borne infection. Sharp JC. **J Med Microbiol** 1989 Aug; 29(4):239–42 (30 ref.)

Screening of milk and milk products for staphylococcal counts with special reference to public health. Masud T, et al. **JPMA** 1988 Nov;38(11):286–8

Reinfection of virus free mice with mouse mammary tumour virus. Lee AE, et al. **Lab Anim** 1989 Apr;23(2):133–7

Incidence and population of enterotoxigenic Staphylococcus aureus in raw milk from milking to milk plant. Shinagawa K, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1060–4

Listeria and pasteurisation [letter] Cooke M. **Vet Rec** 1989 Mar 4;124(9):227

Probiotic use [letter] David GP. **Vet Rec** 1988 Dec 10; 123(24):632

Chlamydia psittaci excretion in ovine milk tested. Jones GE, et al. **Vet Rec** 1989 May 27;124(21):562

Incidence of clinical mastitis on farms with low somatic cell counts in bulk milk. Schukken YH, et al. **Vet Rec** 1989 Jul 15;125(3):60–3

Chlamydia in ovine milk [letter] Venables C, et al. **Vet Rec** 1989 Aug 5;125(6):137

Chlamydia in ovine milk [letter] Wilsmore AJ. **Vet Rec** 1989 Jun 10;124(23):618–9

Flotation of mastitis pathogens with cream from subclinically infected quarters. Prospects for developing a cream–rising test for detecting mastitis caused by major mastitis pathogens. Sandholm M, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):27–34

[Bacteriological findings in samples of milk from cows studied for the causative agent of mastitis] Mazura F. **Vet Med (Praha)** 1989 Mar;34(3):149–56 (Eng. Abstr.) (Cze)

[Isolation and characteristics of nutritional variants of streptococci of animal origin] Skardová O. **Vet Med (Praha)** 1989 May;34(5):257–66 (Eng. Abstr.) (Cze)

[The sensitivity pattern of Staphylococcus aureus isolated from quarter milk of cattle (letter)] van den Bogaard AE Jr. **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):634–5 (Dut)

[Sensitivity pattern of Staphylococcus aureus isolated from quarter milk from cattle] Vecht U, et al. **Tijdschr Diergeneeskd** 1989 Mar 1;114(5):260–9 (Eng. Abstr.) (Dut)

[Effect of milk fermented with Bifidobacterium longum on colonic fermentation (letter)] Mathieu–Chandelier C, et al. **Presse Med** 1989 Feb 18;18(7):358 (Fre)

[Comparison of the effectiveness of detection of coagulase–positive staphylococci in milk in 3 liquid media] Szteyn J, et al. **Rocz Panstw Zakl Hig** 1988;39(6):485–8 (Eng. Abstr.) (Pol)

[Control of the sanitary and bacteriologic quality of dairy products at milk–processing plants by laboratories at sanitary–epidemiologic stations] Levkovich LB, et al. **Gig Sanit** 1989 Jan;(1):64–6 (Rus)

[Hygienic evaluation of the conditions of the dairying process and the quality of milk products at subsidiary farms] Tulupov VP. **Gig Sanit** 1988 Nov;(11):21–4 (Eng. Abstr.) (Rus)

[Hygienic problems of allocating and planning for milk pasteurization and processing plants at subsidiary farms] Tulupov VP. **Gig Sanit** 1988 Dec;(12):68–70 (Rus)

[Detection of toxigenic Staphylococcus in milk] Dediukhina VP, et al. **Vopr Pitan** 1988 Sep–Oct;(5):71 (Rus)

[Colonization of unboiled milk with toxigenic Staphylococcus and its resistance upon pasteurization] Pavlova ZhP, et al. **Vopr Pitan** 1989 Jan–Feb;(1):67–8 (Rus)

[The survival of Campylobacter coli in raw milk] Diker KS, et al. **Mikrobiyol Bul** 1987 Jul;21(3):200–5 (Eng. Abstr.) (Tur)

PARASITOLOGY

Toxocara vitulorum: treatment based on the duration of the infectivity of buffalo cows (Bubalus bubalis) for their calves. Roberts JA. **J Vet Pharmacol Ther** 1989 Mar; 12(1):5–13

[Experimental study on the transmission of Chagas' disease by milk] Campos R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):146–7 (Eng. Abstr.) (Por)

PHYSIOLOGY

Maternal modulation of growth hormone secretion in the neonatal rat. I. Involvement of milk factors. Kacsoh B, et al. **Endocrinology** 1989 Sep;125(3):1326–36

The guinea pig as a model for the study of the effects of milk on growth and development. Weaver LT, et al. **Growth Dev Aging** 1988 Summer;52(2):91–6

Effect of ionic composition of milk on transepithelial potential in the goat mammary gland. Blatchford DR, et al. **J Physiol (Lond)** 1988 Aug;402:533–41

[Creating the optimal microecology of the intestines in premature newborn infants with the sour–milk mixture "biphilin"] Abrosimova NA, et al. **Pediatriia** 1989;(3):30–3 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

[Exposure of the fetoplacental unit, breast milk and cow's milk to radionuclides 1 year after Chernobyl] Schlotter CM, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):557–60 (Eng. Abstr.) (Ger)

SECRETION

Role of milk secretion in transport of prolactin from blood into milk. Akers RM, et al. **Horm Metab Res** 1989 Jul; 21(7):362–5

Milk and fat production in dairy cattle influenced by advanced subclinical bovine leukemia virus infection. Wu MC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):993–6

Synthetic and secretory processes of lactation. Dils RR. **Proc Nutr Soc** 1989 Jan;48(1):9–15 (49 ref.)

Constraints on frequent or continuous lactation. Knight CH. **Proc Nutr Soc** 1989 Jan;48(1):45–51 (30 ref.)

Questions of validity in mammary physiology: methodology and ethics. Mepham TB. **Proc Nutr Soc** 1989 Jan;48(1):1–7 (38 ref.)

Sources of variability in lactational performance. Oldham JD, et al. **Proc Nutr Soc** 1989 Jan;48(1):33–43 (34 ref.)

[Boiled maltum water decreased milk secretion of the parturient rat mammary gland] Wang TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):485–92 (Eng. Abstr.) (Chi)

SUPPLY & DISTRIBUTION

Changes in the demand and supply for milk and dairy products. Roberts DJ. **Proc Nutr Soc** 1988 Sep;47(3):323–9

TOXICITY

Brain monoamine levels in suckling mice following postnatal exposure to secalonic acid D via the dam's milk. Bolon B, et al. **Toxicol Lett** 1988 Dec;44(3):263–72

[Nitrate and nitrite levels in the milk and formulas for infants and children] Gajewska R, et al. **Rocz Panstw Zakl Hig** 1988;39(6):430–7 (Eng. Abstr.) (Pol)

[Behavioral characteristics and protein synthesis in the brain of rats receiving ethanol with the mother's milk] Maĭzelis MIa, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):657–60 (Eng. Abstr.) (Rus)

[Nitrate level in milk produced at subsidiary farms] Tulupov VP, et al. **Gig Sanit** 1989 Feb;(2):83–4 (Rus)

MILK–ALKALI SYNDROME see **HYPERCALCEMIA**

MILK EJECTION see under **LACTATION**

MILK FACTOR see **MAMMARY CANCER VIRUS**

MILK FEVER, ANIMAL see **PARTURIENT PARESIS**

MILK, HUMAN

Influence of fatty diet on neonatal jaundice in breast–fed infants. Amato M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):492–6

Improved bone mineral status in very low birthweight infants fed human milk mixed with preterm formula. Tsukahara H, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb; 31(1):58–64

Manganese absorption from human milk, cow's milk, and infant formulas in humans. Davidsson L, et al. **Am J Dis Child** 1989 Jul;143(7):823–7

Better breast milk for preemies? Wink DM. **Am J Nurs** 1989 Jan;89(1):48–9

Osmolalities of bottle– and breast–milk fed to poor urban Brazilian infants. Dorea JG, et al. **Ann Trop Paediatr** 1988 Sep;8(3):181–3

Diarrhoea due to breast milk: case of fucose intolerance? [letter] **Arch Dis Child** 1988 Oct;63(10):1296–7

Estimation of chemical hazards in breast milk. Poitrast BJ, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A87–92

Calcium and phosphorus homeostasis in very–low–birth–weight infants appropriate for gestational age fed human milk. Boehm G, et al. **Biomed Biochim Acta** 1988;47(6):529–36

From wet nurse directory to milk bank: the delivery of human milk in Boston, 1909–1927. Golden J. **Bull Hist Med** 1988 Winter;62(4):589–605

A reappraisal of protein turnover values in neonates fed human milk or formula. Pencharz PB, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):282–6

Is high protein milk beneficial for SGA–terms? Awasthi S, et al. **Indian Pediatr** 1989 Jan;26(1):45–51

Mother's milk feeding in gross prematurity [letter] Singh D, et al. **Indian Pediatr** 1988 Jun;25(6):582

Sensory characterization of human milk. McDaniel MR, et al. **J Dairy Sci** 1989 May;72(5):1149–58

Bone mineralization in former very low birth weight infants fed either human milk or commercial formula: one–year follow–up observation. Abrams SA, et al. **J Pediatr** 1989 Jun;114(6):1041–4

Late neonatal vitamin K deficiency associated with subclinical liver dysfunction in human milk–fed infants. Matsuda I, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):602–5

Human milk and the rate of small intestinal mucosal recovery in protracted diarrhea. Shulman RJ, et al. **J Pediatr** 1989 Feb;114(2):218–24

Three–year growth and developmental follow–up of very low birth weight infants fed own mother's milk, a premature infant formula, or one of two standard formulas. Cooper PA, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):348–54

Nutrient balance studies in premature infants fed premature formula or fortified preterm human milk. Ehrenkranz RA, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):58–67

Predictors of breast milk intake in rural northern Thailand. Imong SM, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):359–70 (43 ref.)

The effect of short–term refrigeration of milk and addition of breast milk fortifier on the delivery of lipids during tube feeding. Lavine M, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):496–9

Human Milk Banking Association of North America [letter] Asquith MT. **J Perinatol** 1989 Mar;9(1):121

Breast milk collection and storage practices among mothers of hospitalized neonates. Forte A, et al. **J Perinatol** 1987 Winter;7(1):35–9

Nutritional composition and volume of milk produced by mothers of preterm infants in developing countries [letter] Dawodu AH, et al. **J Trop Pediatr** 1989 Apr;35(2):95–6

Fortified high calorie human milk for optimal growth of low birth weight babies. Singhania RU, et al. **J Trop Pediatr** 1989 Apr;35(2):77–81

Inhibition of enteropathogenic bacteria by human milk whey in vitro. Dolan SA, et al. **Pediatr Infect Dis J** 1989 Jul; 8(7):430–6

Human milk feeding enhances the urinary excretion of immunologic factors in low birth weight infants. Goldblum RM, et al. **Pediatr Res** 1989 Feb;25(2):184–8

Growth of very low birth weight infants on varying amounts of human milk protein. Polberger SK, et al. **Pediatr Res** 1989 Apr;25(4):414–9

15N tracer studies of protein metabolism in low birth weight preterm infants: a comparison of 15N glycine and 15N yeast protein hydrolysate and of human milk– and formula–fed babies. Stack T, et al. **Pediatr Res** 1989 Feb;25(2):167–72

Human milk for preterm infants: nutritional and immune factors. Schanler RJ. **Semin Perinatol** 1989 Apr;13(2):69–77 (54 ref.)

[Lower intestinal obstruction caused by a lactobezoar] Freitas L, et al. **Chir Pediatr** 1988;29(6):351–2 (Eng. Abstr.) (Fre)

[Feeding sick neonates separated from their mothers with maternal milk] Polloni C, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):143–7 (Eng. Abstr.) (Ita)

[Biologically active additives and possibilities of their use in child nutrition] Ladodo KS, et al. **Pediatriia** 1988; (9):42–6 (Rus)

ANALYSIS

Prolactin release during nursing in early puerperium. Godo G, et al. **Acta Med Hung** 1988;45(2):171–7

Human alpha–lactalbumin in infant serum has the same molecular size as the protein purified from human milk. Andersson C, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):629–30

Thymosin alpha 1 in milk specimens from Guatemalan women. Cruz JR, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):522–4

Development of a human milk protein standard. Donovan SM, et al. **Acta Paediatr Scand** 1989 Mar;78(2):171–9

A prospective study of cow's milk allergy in exclusively breast–fed infants. Incidence, pathogenetic role of early inadvertent exposure to cow's milk formula, and characterization of bovine milk protein in human milk. Høst A, et al. **Acta Paediatr Scand** 1988 Sep;77(5):663–70

The levels of zinc in breast milk of urban African women in Zimbabwe. Nyazema NZ, et al. **Afr J Med Med Sci** 1989 Jun;18(2):159–62

Molybdenum content of human milk [letter] Casey CE. **Am J Clin Nutr** 1989 Jun;49(6):1329–30

Isolation of the nonprotein nitrogen fraction from human milk by gel–filtration chromatography and its separation by fast protein liquid chromatography. Donovan SM, et al. **Am J Clin Nutr** 1989 Jul;50(1):53–7

Human milk proteins: separation of whey proteins and their analysis by polyacrylamide gel electrophoresis, fast protein liquid chromatography (FPLC) gel filtration, and anion–exchange chromatography. Kunz C, et al. **Am J Clin Nutr** 1989 Mar;49(3):464–70

Studies in human lactation: milk volumes in lactating women during the onset of lactation and full lactation. Neville MC,

et al. **Am J Clin Nutr** 1988 Dec;48(6):1375–86

Breast–milk composition in women with cystic fibrosis: report of two cases and a review of the literature. Shiffman ML, et al. **Am J Clin Nutr** 1989 Apr;49(4):612–7

Abnormal zinc content in human milk. Risk for development of nutritional zinc deficiency in infants. Atkinson SA, et al. **Am J Dis Child** 1989 May;143(5):608–11

Radioactivity in breast milk and placentas during the year after Chernobyl. Gori G, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1232–4

A radiometric microbiological assay for pantothenic acid in biological fluids. Guilarte TR. **Anal Biochem** 1989 Apr; 178(1):63–6

Western immunoblotting: temperature–dependent reduction in background staining. Thean ET, et al. **Anal Biochem** 1989 Mar;177(2):256–8

Chromogenic labeling of milk oligosaccharides: purification by affinity chromatography and structure determination. Towbin H, et al. **Anal Biochem** 1988 Aug 15;173(1):1–9

Transfer of dietary protein in breast milk. Harmatz PR, et al. **Ann Allergy** 1988 Dec;61(6 Pt 2):21–4 (21 ref.)

A novel sialylhexasaccharide from human milk: purification by affinity chromatography on immobilized wheat germ agglutinin. Tarrago MT, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):353–62

Organochlorine chemicals in human breast milk in Hong Kong. Ip HM, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug;18(4):490–4

Breastfeeding debate [letter] Amir L. **Aust Fam Physician** 1989 Feb;18(2):86

Free and bound tryptophan in human milk during early lactation. Zanardo V, et al. **Biol Neonate** 1989;56(1):57–9

Lactoferrin from human breast milk and from neutrophil granulocytes. Comparative studies of isolation, quantitation, characterization and iron binding properties. Bezwoda WR, et al. **Biomed Chromatogr** 1989 May; 3(3):121–6

Secretion of radioactivity in breast milk following administration of 123I hippuran [letter] Mountford PJ, et al. **Br J Radiol** 1989 Apr;62(736):388–9

Levels of organochlorine insecticides in milk of mothers from urban and rural areas of Botucatu, SP, Brazil. Sant'Ana LS, et al. **Bull Environ Contam Toxicol** 1989 Jun; 42(6):911–8

Mercury in women exposed to methylmercury through fish consumption, and in their newborn babies and breast milk. Skerfving S. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):475–82

DDT residues in human milk samples from Delhi, India. Zaidi SS, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):427–30

Liquid ion–exchange chromatography under pressure of milk oligosaccharides using a pulsed amperometric detector. Wang WT, et al. **Carbohydr Res** 1989 Jun 15;189:1–11

Disopyramide and N–monodesalkyl disopyramide in serum and breast milk. Ellsworth AJ, et al. **DICP** 1989 Jan; 23(1):56–7

Long–chain n–3 fatty acids in breast milk of Inuit women consuming traditional foods. Innis SM, et al. **Early Hum Dev** 1988 Dec;18(2–3):185–9

Human milk fat content: within–feed variation. Woodward DR, et al. **Early Hum Dev** 1989 Apr;19(1):39–46

Two–dimensional electrophoretic analysis of human milk proteins. Goldfarb MF, et al. **Electrophoresis** 1989 Jan; 10(1):67–70

Primary structure of twenty three neutral and monosialylated oligosaccharides O–glycosidically linked to the human secretory immunoglobulin A hinge region determined by a combination of permethylation analysis and 400–MHz 1H–NMR spectroscopy. Pierce–Crétel A, et al. **Eur J Biochem** 1989 Jun 15;182(2):457–76

Iron, zinc, folate and vitamin B12 nutritional status and milk composition of low–income Brazilian mothers. Donangelo CM, et al. **Eur J Clin Nutr** 1989 Apr;43(4):253–66 (53 ref.)

Milk concentrations of flupenthixol, nortriptyline and zuclopenthixol and between–breast differences in two patients. Matheson I, et al. **Eur J Clin Pharmacol** 1988; 35(2):217–20

Ampicillin in breast milk during puerperal infections. Matheson I, et al. **Eur J Clin Pharmacol** 1988;34(6):657–9

Insulin–like growth factor (IGF–I) and its low molecular weight binding protein in human milk. Suikkari AM. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan;30(1):19–25

Is there a relationship between metabolic control and glucose concentration in breast milk of type 1 (insulin–dependent) diabetic mothers? Ratzmann KP, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):32–6

Anti–bovine beta–lactoglobulin antibodies react with a human lactoferrin fragment and bovine beta–lactoglobulin present in human milk. Monti JC, et al. **Experientia** 1989 Feb 15;45(2):178–80

Radiocesium levels measured in breast milk one year after the reactor accident at Chernobyl. Assimakopoulos PA, et al. **Health Phys** 1989 Jan;56(1):103–6

Cesium–137 levels in breast milk and placentae after fallout from the reactor accident at Chernobyl. Gattavecchia E, et al. **Health Phys** 1989 Feb;56(2):245–8

The significance of some significant features of breast milk. Jain S, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun; 33(2):118–28 (61 ref.)

Breast milk total nitrogen, non–protein nitrogen and lactoferrin content [letter] Mathur GP, et al. **Indian Pediatr** 1988 Jul;25(7):701–2

Breast milk total nitrogen nonprotein nitrogen and lactoferrin content. Raghuvanshi RS, et al. **Indian Pediatr** 1988 Feb; 25(2):149–59

Maternal milk and plasma glucose and insulin levels: studies in normal and diabetic subjects. Jovanovic–Peterson L, et al. **J Am Coll Nutr** 1989 Apr;8(2):125–31

Structures of neutral O–linked polylactosaminoglycans on human skim milk mucins. A novel type of linearly extended poly–N–acetyllactosamine backbones with Gal beta(1–4)GlcNAc beta(1–6) repeating units. Hanisch FG, et al. **J Biol Chem** 1989 Jan 15;264(2):872–83

Determination of roxatidine in human plasma, urine and milk by capillary gas chromatography using nitrogen–selective detection. Burrows JL, et al. **J Chromatogr** 1988 Nov 18; 432:199–208

Analysis of term human milk concentrations of 3,5,3'–triiodo–L–thyronine by high–performance liquid chromatography and radioimmunoassay: correlation with circulating serum levels in lactating women. Oberkotter LV. **J Chromatogr** 1989 Feb 24;487(2):445–9

Application of a monoclonal antibody to a comparative study of alpha–lactalbumins from various species. Kaminogawa S, et al. **J Dairy Sci** 1989 May;72(5):1124–9

Residues of polychlorinated biphenyls in breast milk of women non–occupationally exposed to PCBs. Hrubá D, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):273–8

Selenium content and glutathione peroxidase activity of milk from vegetarian and nonvegetarian women. Debski B, et al. **J Nutr** 1989 Feb;119(2):215–20

Nifedipine transfer into human milk. Ehrenkranz RA, et al. **J Pediatr** 1989 Mar;114(3):478–80

Development after exposure to polychlorinated biphenyls and dichlorodiphenyl dichloroethene transplacentally and through human milk. Gladen BC, et al. **J Pediatr** 1988 Dec; 113(6):991–5

Milk produced by mothers with galactosemia [letter; comment] Ng WG, et al. **J Pediatr** 1989 Jul;115(1):166–7 . **Comment on:** J Pediatr 1988 Jul;113(1 pt 1):90–1

State of the art vitamin K in human milk. Canfield LM, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):430–41 (98 ref.)

Lack of correlation between changes in the concentrations of linoleate and arachidonate in human milk relative to total milk lipid [letter] Clark RM. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):937–8

Low breast milk phosphorus concentration in familial hypophosphatemia. Jonas AJ, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):541–3

Human lactoferrin supplementation of infant formulas increases thymidine incorporation into the DNA of rat crypt cells. Nichols BL, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):102–9

Half lives of nicotine in milk of smoking mothers: implications for nursing [letter] Steldinger R, et al. **J Perinat Med** 1988; 16(3):261–2

Relationship between human milk lipid–ultrafiltrate and octanol–water partition coefficients. Atkinson HC, et al. **J Pharm Sci** 1988 Sep;77(9):796–8

Possible effect of lactational period on the milk–to–plasma drug concentration ratio in lactating women: results of an in vitro evaluation. Fleishaker JC, et al. **J Pharm Sci** 1989 Feb;78(2):137–41

Zinc concentrations in human milk during lactation: a 6–month longitudinal study in southern Brazil. Lamounier JA, et al. **J Trop Pediatr** 1989 Feb;35(1):31–4

Longitudinal study in biochemical composition of human milk during first year of lactation. Nagra SA. **J Trop Pediatr** 1989 Jun;35(3):126–8

Nutritional significance of human milk vitamin D in neonatal period. Nakao H. **Kobe J Med Sci** 1988 Jun;34(3):121–8

Evolutionary traits in human milk proteins. Bounous G, et al. **Med Hypotheses** 1988 Oct;27(2):133–40 (35 ref.)

Comparative study on breast milk of mothers delivering preterm and term infants—protein, fat and lactose. Darwish A el M, et al. **Nahrung** 1989;33(3):249–51

A review of the secretion of radioactivity in human breast milk: data, quantitative analysis and recommendations. Mountford PJ, et al. **Nucl Med Commun** 1989 Jan; 10(1):15–27 (55 ref.)

Transfer of isotopic dietary fatty acids into human milk. **Nutr Rev** 1989 Mar;47(3):75–7 (8 ref.)

Lipid composition of milk from mothers with cystic fibrosis [letter] Golembeski DJ, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):631–2

Feeding and urine cotinine values in babies whose mothers smoke. Labrecque M, et al. **Pediatrics** 1989 Jan;83(1):93–7

High levels of a parathyroid hormone–like protein in milk. Budayr AA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7183–5

The effect of suckling and diurnal influences on the concentrations of free amino acids in milk. Shubat PJ, et al. **Proc West Pharmacol Soc** 1989;32:73–8

Effects of hormonal contraceptives on breast milk composition and infant growth. World Health Organization (WHO) Task Force on Oral Contraceptives. **Stud Fam Plann** 1988 Nov–Dec;19(6 Pt 1):361–9

Plasma pyridoxal phosphate levels in newborn infants, their mothers and in the mothers' breast milk. Hamfelt A, et al. **Ups J Med Sci** 1989;94(1):95–9

Determination of the phospholipid content of human milk, cow's milk and various infant formulas. Kynast G, et al. **Z Ernahrungswiss** 1988 Dec;27(4):252–65

[Potential risk of polychlorinated biphenyls for infants] Hrubá D. **Cesk Pediatr** 1989 Jun;44(6):345–8 (Cze)

[Foreign substances in maternal milk] Zahradníček L, et al. **Cesk Pediatr** 1989 Feb;44(2):80–3 (Eng. Abstr.) (Cze)

[Consequences of the composition of breast milk for the nutrition of underweight newborn infants. I. Calcium and phosphorus] Boehm G, et al. **Kinderarztl Prax** 1988 Sep; 56(9):429–35 (Eng. Abstr.) (Ger)

[Chlorinated hydrocarbons in breast milk] Lechner W, et al. **Wien Klin Wochenschr** 1988 Sep 23;100(18):622–4 (Eng. Abstr.) (Ger)

[Lead content of breast milk in heavy traffic and light traffic areas of Tyrol] Lechner W, et al. **Wien Klin Wochenschr** 1988 Aug 5;100(15):519–22 (Eng. Abstr.) (Ger)

[Results and evaluation of levels of p,p'–DDE, p,p'–DDT and polychlorobiphenyls (PCB) in samples of human milk taken from the Rome area] Dommarco R, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):219–32 (Eng. Abstr.) (Ita)

[Changes in the lipid content during the storage of human milk] Hurgoiu V, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jan–Mar; 38(1):75–8 (Rum)

[Organochlorine contaminants in human milk (editorial)] Conde C. **An Esp Pediatr** 1988 Jun;28(6):489–91 (Spa)

[Controversies in the the management of breast feeding] González Rodríguez J, et al. **An Esp Pediatr** 1989 Apr; 30(4):309–12 (29 ref.) (Spa)

CYTOLOGY

Comparative functional study of colostral macrophages from mothers delivering preterm and at term. Rodriguez C, et al. **Acta Paediatr Scand** 1989 May;78(3):337–41

In vivo distribution of human milk leucocytes after ingestion by newborn baboons. Jain L, et al. **Arch Dis Child** 1989 Jul;64(7):930–3

Growth inhibition and induction of phenotypic alterations by tiazofurin: differential effects on MCF–7 breast cancer and HBL–100 breast cell lines. Sidi Y, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):883–9

Chemokinetic agents for monocytes in human milk: possible role of tumor necrosis factor–alpha. Mushtaha AA, et al. **Pediatr Res** 1989 Jun;25(6):629–33

DRUG EFFECTS

Enalapril treatment of a nursing with slightly impaired renal function [letter] Huttunen K, et al. **Clin Nephrol** 1989 May; 31(5):278

ENZYMOLOGY

Kinetics of acylglycerol sequential hydrolysis by human milk bile salt activated lipase and effect of taurocholate as fatty acid acceptor. Wang CS, et al. **Biochemistry** 1988 Jun 28; 27(13):4834–40

Inhibition of human milk bile–salt–dependent lipase by boronic acids. Implication to the bile salts activator effect. Abouakil N, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):215–20

Human milk bile–salt stimulated lipase: further investigations on the amino–acids residues involved in the catalytic site. Abouakil N, et al. **Biochim Biophys Acta** 1989 Apr 3; 1002(2):225–30

Isolation and characterization of human breast milk lipoamidase. Hayakawa K, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):345–51

Preparation of antibodies against xanthine oxidase from human milk. Graham K, et al. **Int J Biochem** 1989; 21(7):715–22

Lipases in human milk: effect of gestational age and length of lactation on enzyme activity. Freed LM, et al. **J Am Coll Nutr** 1989 Apr;8(2):143–50

Lipid–lipid interactions as regulators of carboxylester lipase activity. Tsujita T, et al. **J Biol Chem** 1989 May 25; 264(15):8612–8

Multiple molecular forms of human lactoferrin. Identification of a class of lactoferrins that possess ribonuclease activity and lack iron–binding capacity. Furmanski P, et al. **J Exp Med** 1989 Aug 1;170(2):415–29

A rapid and sensitive separation of retinol and retinyl palmitate using a small, disposable bonded–phase column: kinetic applications. O'Connor CJ, et al. **J Lipid Res** 1988 Dec;29(12):1693–7

Human breast milk: laboratory detection of enzymes, and their use as markers for control of the pasteurisation process. Rees E. **Med Lab Sci** 1987 Oct;44(4):345–9

[Effect of human milk enzymes on carbohydrate metabolism during adaptation of newborn infants in the early neonatal period] Nabukhotnyi TK, et al. **Vopr Pitan** 1988 May–Jun; (3):34–8 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Breast milk anti–Escherichia coli heat–labile toxin IgA antibodies protect against toxin–induced infantile diarrhea. Cruz JR, et al. **Acta Paediatr Scand** 1988 Sep;77(5):658–62

Breast–milk IgA and lactoferrin survival in the gastrointestinal tract—a study in rural Gambian children. Prentice A, et al. **Acta Paediatr Scand** 1989 Jul;78(4):505–12

Expression of proteins immunologically related to murine

mammary tumour virus (MMTV) core proteins in the cells of breast cancer continuous lines MCF-7, T47D, MDA-231 and cells from human milk. Litvinov SV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):137–42

Anaphylactic reactions to a cow's milk whey protein hydrolysate (Alfa-Ré, Nestlé) in infants with cow's milk allergy. Businco L, et al. **Ann Allergy** 1989 Apr;62(4):333–5

Immunology of breast-feeding. Hanson LA, et al. **Beitr Infusionther** 1989;22:10–19 (34 ref.)

CA 125 in human milk and serum. Fuith LC, et al. **Gynecol Obstet Invest** 1989;28(1):11–3

Human milk immunoglobulin A antibodies to Shigella virulence determinants. Cleary TG, et al. **Infect Immun** 1989 Jun;57(6):1675–9

Immunoglobulin A antibody response to respiratory syncytial virus structural proteins in colostrum and milk. Tsutsumi H, et al. **J Clin Microbiol** 1989 Sep;27(9):1949–51

Psychological factors, immunocompetence, and health of breast-feeding mothers and their infants. Dillon KM, et al. **J Genet Psychol** 1989 Jun;150(2):155–62

Protection against neonatal rotavirus infection by breast milk antibodies and trypsin inhibitors. Jayashree S, et al. **J Med Virol** 1988 Nov;26(3):333–8

Human immunodeficiency virus antibodies of IgG, IgA, and IgM subclasses in milk of seropositive mothers. Van de Perre P, et al. **J Pediatr** 1988 Dec;113(6):1039–41

Polymeric and monomeric IgA response in serum and milk after parenteral cholera and oral typhoid vaccination. Mascart-Lemone F, et al. **Scand J Immunol** 1988 Oct; 28(4):443–8

Avidity of IgA antibody to Escherichia coli polysaccharide and diphtheria toxin in breast milk from Swedish and Pakistani mothers. Roberton DM, et al. **Scand J Immunol** 1988 Dec;28(6):783–9

Anti-coccidial activity of human milk. Folz SD, et al. **Vet Parasitol** 1989 Mar;30(4):273–8

[Neutralizing activity against herpes simplex in maternal milk] Lopez I, et al. **Arch Fr Pediatr** 1989 Apr;46(4):263–5 (Eng. Abstr.) (Fre)

[Allergological study of breast feeding, ovalbumin and specific IgG, IgM and IgA antibodies to ovalbumin in human milk] Ogura H, et al. **Arerugi** 1989 Apr;38(4):342–51 (Eng. Abstr.) (Jpn)

[Sensitization of children to food antigens in breast feeding] Kuvaeva IB, et al. **Pediatriia** 1988;(9):46–51 (Rus)

METABOLISM

Macromolecular absorption in preterm and term infants. Axelsson I, et al. **Acta Paediatr Scand** 1989 Jul;78(4):532–7

Milk protein quantity and quality and protein requirements during development. Räihä NC. **Adv Pediatr** 1989; 36:347–68 (83 ref.)

Analytical methods for the determination of terbinafine and its metabolites in human plasma, milk and urine. Schatz F, et al. **Arzneimittelforschung** 1989 Apr;39(4):527–32

Fatty acids generated by gastric lipase promote human milk triacylglycerol digestion by pancreatic colipase-dependent lipase. Bernbäck S, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):286–93

Patterns of serum glucose and galactose concentrations in term newborn infants after milk feeding. Siegel CD, et al. **Biol Neonate** 1988;54(6):301–6

The binding of drugs to major human milk whey proteins. Atkinson HC, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):107–9

Excretion of tiapamil in breast milk. Hartmann D, et al. **Br J Clin Pharmacol** 1988 Aug;26(2):183–6

Metronidazole excretion in human milk and its effect on the suckling neonate. Passmore CM, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):45–51

Longitudinal manganese and copper balances in young infants and preterm infants fed on breast-milk and adapted cow's milk formulas. Dörner K, et al. **Br J Nutr** 1989 May; 61(3):559–72

Piroxicam in breast milk after long-term treatment. Ostensen M, et al. **Eur J Clin Pharmacol** 1988;35(5):567–9

Nitrendipine in human plasma and breast milk. White WB, et al. **Eur J Clin Pharmacol** 1989;36(5):531–4

The excretion of ketorolac tromethamine into breast milk after multiple oral dosing. Wischnik A, et al. **Eur J Clin Pharmacol** 1989;36(5):521–4

Excretion of radioiodine in human milk following a therapeutic dose of I-131. Rubow S, et al. **Eur J Nucl Med** 1988;14(12):632–3

Thallium-201 in human milk: observations and radiological consequences. Murphy PH, et al. **Health Phys** 1989 Apr; 56(4):539–41

Immunoreactive prolactin in breast milk and plasma of women with hyperprolactinemia, galactorrhea and menstrual dysfunction. Yuen BH. **Int J Fertil** 1986 Mar-Apr;31(1):67–70

Immunoaffinity isolation of a sialyl-Le(a) oligosaccharide from human milk. Kitagawa H, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):591–4

Breast milk tocainide levels [letter] Wilson JH. **J Cardiovasc Pharmacol** 1988 Oct;12(4):497

Flurbiprofen in post-partum women: plasma and breast milk disposition. Smith IJ, et al. **J Clin Pharmacol** 1989 Feb; 29(2):174–84

Binding of zinc to bovine and human milk proteins. Singh H, et al. **J Dairy Res** 1989 May;56(2):235–48

Incorporation of deuterium-labeled fatty acids into human milk, plasma, and lipoprotein phospholipids and cholesteryl esters. Emken EA, et al. **J Lipid Res** 1989 Mar; 30(3):395–402

Excretion of radioiodine in breast milk [letter] Hedrick WR, et al. **J Nucl Med** 1989 Jan;30(1):127–8

Excretion of radioiodine in breast milk. Romney B, et al. **J Nucl Med** 1989 Jan;30(1):124–6

Regulation of milk fat synthesis. Neville MC. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):426–9 (29 ref.)

Bone mineralization and mineral homeostasis in very low-birth-weight infants fed either human milk or fortified human milk. Pettifor JM, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):217–24

Breast-milk fatty acids of rural Gambian mothers: effects of diet and maternal parity. Prentice A, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):486–90

Excretion of platinum into breast milk [letter] [published erratum appears in Lancet 1989 Apr 8;1(8641):798] de Vries EG, et al. **Lancet** 1989 Mar 4;1(8636):497

Absorption of calcium and magnesium from fortified human milk by very low birth weight infants. Liu YM, et al. **Pediatr Res** 1989 May;25(5):496–502

[Elimination of nalbuphine in human milk] Wischnik A, et al. **Arzneimittelforschung** 1988 Oct;38(10):1496–8 (Eng. Abstr.) (Ger)

[Detection of cyclosporin A in breast milk—is breast feeding contraindicated?] Behrens O, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):207–9 (Eng. Abstr.) (Ger)

[Variations in the composition of breast milk in Wilson's disease] Bunke H, et al. **Kinderarztl Prax** 1989 Feb; 57(2):89–92 (Eng. Abstr.) (Ger)

[The effect of food supplements on the bioavailability of breast milk for premature infants—fecal fat and carbohydrate excretion] Plath C, et al. **Kinderarztl Prax** 1989 Apr;57(4):185–91 (Eng. Abstr.) (Ger)

[Breast milk and drugs] Teller WM. **Padiatr Padol** 1988; 23(4):349–56 (6 ref.) (Eng. Abstr.) (Ger)

[The iodine status in the puerperium and in newborn infants] Peiker G, et al. **Zentralbl Gynakol** 1989;111(6):364–7 (Eng. Abstr.) (Ger)

[Pharmacokinetic and clinical studies of ceftizoxime in obstetrical and gynecological field (2)] Ito K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1155–63 (Eng. Abstr.) (Jpn)

[Smoking and passive smoking during pregnancy and after labor: their effects on birth weight, duration of lactation and cotinine level in mother's milk and its urinary excretion by the infant] Dróżdż M, et al. **Ginekol Pol** 1988 Sep; 59(9):528–33 (Eng. Abstr.) (Pol)

MICROBIOLOGY

Acquired cytomegalovirus infection of breast milk in infancy. Wu J, et al. **Chin Med J [Engl]** 1989 Feb;102(2):124–8

Is ingestion of milk-associated bacteria by premature infants fed raw human milk controlled by routine bacteriologic screening? Law BJ, et al. **J Clin Microbiol** 1989 Jul; 27(7):1560–6

A comparison of colony counts of breast milk using two methods of breast cleansing. Costa KM. **J Obstet Gynecol Neonatal Nurs** 1989 May-Jun;18(3):231–6

HIV and breastmilk: non-proven alarmism [editorial] Jelliffe DB, et al. **J Trop Pediatr** 1988 Aug;34(4):142

Effect of freeze-thawing breast milk on vertical HTLV-I transmission from seropositive mothers to children. Ando Y, et al. **Jpn J Cancer Res** 1989 May;80(5):405–7

Transmission of Listeria monocytogenes from mother's milk to her baby and to puppies [letter] Svabić-Vlahović M, et al. **Lancet** 1988 Nov 19;2(8621):1201

Human immunodeficiency virus and other viruses in human milk: placing the issues in broader perspective. Oxtoby MJ. **Pediatr Infect Dis J** 1988 Dec;7(12):825–35 (96 ref.)

[Effect of antibiotic treatment on fecal floral of very low birth-weight premature infants in relation to feeding with raw breast milk] Mohr C, et al. **Kinderarztl Prax** 1988 Jun; 56(6):277–81 (Eng. Abstr.) (Ger)

PARASITOLOGY

Evaluation of Chagas' disease transmission through breast-feeding. Bittencourt AL, et al. **Mem Inst Oswaldo Cruz** 1988 Jan-Mar;83(1):37–9

[Transmission of Trypanosoma cruzi in a case, during lactation, in a non-endemic area] Medina-Lopes M das D. **Rev Soc Bras Med Trop** 1988 Jul-Sep;21(3):151–3 (Eng. Abstr.) (Por)

PHYSIOLOGY

Human milk and the premature baby. **Nutr Rev** 1988 Aug; 46(8):287–9 (22 ref.)

The effect of saccharolactone on rat intestinal absorption of bilirubin in the presence of human breast milk. Gourley GR, et al. **Pediatr Res** 1989 Mar;25(3):234–8

[The bifidogenic effect of breast milk. Theories and facts] Heine W. **Kinderarztl Prax** 1989 Mar;57(3):109–16 (36 ref.) (Eng. Abstr.) (Ger)

RADIATION EFFECTS

Effects of microwaving human milk: changes in IgA content and bacterial count. Sigman M, et al. **J Am Diet Assoc** 1989 May;89(5):690–2

[Exposure of the fetoplacental unit, breast milk and cow's milk to radionuclides 1 year after Chernobyl] Schlotter CM, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):557–60 (Eng. Abstr.) (Ger)

[Radioactive burden in the perinatal period following the reactor accident at Chernobyl] Dadak C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:256–8 (Ger)

SECRETION

Studies in human lactation: secretion of zinc, copper, and manganese in human milk. Casey CE, et al. **Am J Clin Nutr** 1989 May;49(5):773–85

MILK PROTEINS

Are babies more satisfied by casein based formulas? Taitz LS, et al. **Arch Dis Child** 1989 Apr;64(4):619–21

Spurious cross-reactions between plant viruses and monoclonal antibodies can be overcome by saturating ELISA plates with milk proteins. Zimmermann D, et al. **Arch Virol** 1989;106(1-2):15–22

Surface activity, film formation, and emulsifying properties of milk proteins. Leman J, et al. **CRC Crit Rev Food Sci Nutr** 1989;28(2):115–38 (145 ref.)

[Obtention and evaluation of a precooked flour of auyama (Cucurbita maxima) and rice, enriched with oleaginous proteins and/or skim milk] Garrido de Cayuela R, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):143–51 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

Metabolic differences between AGA- and SGA-infants of very low birthweight. II. Relationship to protein intake. Boehm G, et al. **Acta Paediatr Scand** 1988 Sep;77(5):642–6

Immunoenhancing property of dietary whey protein in mice: role of glutathione. Bounous G, et al. **Clin Invest Med** 1989 Jun;12(3):154–61

Is high protein milk beneficial for SGA-terms? Awasthi S, et al. **Indian Pediatr** 1989 Jan;26(1):45–51

Diurnal pattern of plasma cortisol in preruminant calves fasted or fed different milk proteins. Gardy-Godillot M, et al. **J Dairy Sci** 1989 Jul;72(7):1842–6

Growth of very low birth weight infants on varying amounts of human milk protein. Polberger SK, et al. **Pediatr Res** 1989 Apr;25(4):414–9

[Feminar with whey (serum) proteins prepared by thermal denaturation. Nitrogen and lipid balance in neonates with a low birth weight] Melichar V, et al. **Cesk Pediatr** 1989 Jan;44(1):1–5 (Eng. Abstr.) (Cze)

ADVERSE EFFECTS

Gastrointestinal milk intolerance of infancy. Berezin S, et al. **Am J Dis Child** 1989 Mar;143(3):361–2

Anaphylactic reactions to a cow's milk whey protein hydrolysate (Alfa-Ré, Nestlé) in infants with cow's milk allergy. Businco L, et al. **Ann Allergy** 1989 Apr;62(4):333–5

Preliminary data on a field study with a new hypo-allergic formula. Vandenplas Y, et al. **Eur J Pediatr** 1988 Dec; 148(3):274–7

Cow's milk protein intolerance in infants with methaemo globinaemia and diarrhoea [letter] Wirth S, et al. **Eur J Pediatr** 1988 Nov;148(2):172

Necrotizing enterocolitis and milk protein intolerance. Causes of rectal bleeding in a term infant. Eggertsen SC, et al. **J Fam Pract** 1989 Feb;28(2):219–23

Cow's milk-induced pulmonary hemosiderosis. Williams S, et al. **J La State Med Soc** 1989 Aug;141(8):19–22

Cow milk protein as a cause of infantile colic [letter] Fischer H. **J Pediatr** 1989 Jun;114(6):1066–7

Severity and extent of upper small bowel mucosal damage in cow's milk protein-sensitive enteropathy. Iyngkaran N, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct; 7(5):667–74

Is colic in infants associated with diet? **Nutr Rev** 1988 Nov; 46(11):374–6 (17 ref.)

Cow's milk whey protein elicits symptoms of infantile colic in colicky formula-fed infants: a double-blind crossover study [published erratum appears in Pediatrics 1989 Jul;84(1):17] Lothe L, et al. **Pediatrics** 1989 Feb;83(2):262–6

[Cow's milk protein allergy, a new disease (letter)] van Isselt JW. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1763 (Dut)

[Rescue from sudden death syndrome and allergy to milk proteins (apropos of a case)] Petrus M, et al. **Allerg Immunol (Paris)** 1989 Feb;21(2):77–8 (Eng. Abstr.) (Fre)

[Skin reactivity to hydrolyzed milk in protein intolerance to cow's milk] Angrisano A, et al. **Pediatr Med Chir** 1988 Mar-Apr;10(2):151–4 (Eng. Abstr.) (Ita)

[Intolerance to cow's milk proteins: cases contribution] Cortigiani L, et al. **Pediatr Med Chir** 1989 Jan-Feb; 11(1):51–3 (Eng. Abstr.) (Ita)

[Hypersensitivity to cow's milk proteins. Diagnostic methods in vivo] Botey J, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:166–70 (4 ref.) (Spa)

[Allergy to cow's milk proteins] Eseverri Asín JL. **An Esp Pediatr** 1988 Sep;29 Suppl 33:163–6 (0 ref.) (Spa)

[Treatment and prevention of allergy to cow's milk proteins] Muñoz-López F. **An Esp Pediatr** 1988 Sep;29 Suppl 33:170–2 (0 ref.) (Spa)

ANALYSIS

Development of a human milk protein standard. Donovan SM, et al. **Acta Paediatr Scand** 1989 Mar;78(2):171–9

A prospective study of cow's milk allergy in exclusively breast-fed infants. Incidence, pathogenetic role of early inadvertent exposure to cow's milk formula, and characterization of bovine milk protein in human milk. Høst A, et al. **Acta Paediatr Scand** 1988 Sep;77(5):663–70

Isolation of the nonprotein nitrogen fraction from human milk by gel-filtration chromatography and its separation by fast protein liquid chromatography. Donovan SM, et al. **Am J Clin Nutr** 1989 Jul;50(1):53–7

Purification of a human milk protein closely similar to tumor-secreted phosphoproteins and osteopontin. Senger DR, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):43–8

High resolution two-dimensional electrophoresis and sodium dodecyl sulphate-polyacrylamide gel electrophoresis of cheese proteins after rapid solubilisation. Marshall T, et al. **Electrophoresis** 1988 Mar;9(3):143–7

Fast isoelectric focusing of milk proteins on small ultrathin polyacrylamide gels containing urea. Moio L, et al. **Electrophoresis** 1989 Jul;10(7):533–5

A core protein epitope of the polymorphic epithelial mucin detected by the monoclonal antibody SM-3 is selectively exposed in a range of primary carcinomas. Girling A, et al. **Int J Cancer** 1989 Jun 15;43(6):1072–6

Characterization of multiple forms of lactophorin isolated from bovine milk whey. Kanno C. **J Dairy Sci** 1989 Jul; 72(7):1732–9

Evolutionary traits in human milk proteins. Bounous G, et al. **Med Hypotheses** 1988 Oct;27(2):133–40 (35 ref.)

Quality of zabadi made from cow's milk fortified with whey and soy proteins. el-Neshawy AA, et al. **Nahrung** 1988; 32(10):939–43

Utilization of milk proteins and cereal starches to obtain co-extrudates. Smietana Z, et al. **Nahrung** 1988; 32(6):545–51

[The effect of monensin Na on the protein content of cow's milk and further performance criteria] Schüler D. **Arch Tierernahr** 1988 Oct;38(10):947–54 (Eng. Abstr.) (Ger)

[Seasonal changes in the levels of various metabolites and proteins in cow milk and colostrum] Sugeĭ' KhA, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):77–81 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Regulation of milk protein and basement membrane gene expression: the influence of the extracellular matrix. Aggeler J, et al. **J Dairy Sci** 1988 Oct;71(10):2830–42 (49 ref.)

Rumen-protected methionine and lysine: effects on animal performance, milk protein yield, and physiological measures. Donkin SS, et al. **J Dairy Sci** 1989 Jun; 72(6):1484–91

Influence of breed and hormones on production of milk proteins by mammary explants from prepubertal heifers. McFadden TB, et al. **J Dairy Sci** 1989 Jul;72(7):1754–63

Milk protein secretion by explants of prepubertal bull mammary tissue: breed differences. McFadden TB, et al. **J Dairy Sci** 1988 Nov;71(11):2904–14

GENETICS

Hormonal regulation of milk protein gene expression. Vonderhaar BK, et al. **Annu Rev Physiol** 1989;51:641–52 (66 ref.)

Regulation of mammary differentiation by the extracellular matrix. Blum JL, et al. **Environ Health Perspect** 1989 Mar; 80:71–83 (122 ref.)

In vitro transcription of the mouse whey acidic protein promoter is affected by upstream sequences. Lubon H, et al. **FEBS Lett** 1989 Jul 17;251(1–2):173–6

Comparison of the regulation of the whey acidic protein gene with that of a hybrid gene containing the whey acidic protein gene promoter in transgenic mice. Pittius CW, et al. **Mol Endocrinol** 1988 Nov;2(11):1027–32

Recent data on the structure of rabbit milk protein genes and on the mechanism of the hormonal control of their expression. Devinoy E, et al. **Reprod Nutr Dev** 1988; 28(4B):1145–64

[Gene technology in animal husbandry, new research approaches exemplified by the milk protein gene of cattle] Geldermann H. **DTW** 1989 Feb;96(2):52–5 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Serum antibodies to cow's milk proteins in pediatric inflammatory bowel disease. Crohn's disease versus ulcerative colitis. Lerner A, et al. **Acta Paediatr Scand** 1989 May;78(3):384–9

Serum antibodies to cow's milk proteins in pediatric inflammatory bowel disease: Crohn's disease vs. ulcerative colitis. Lerner A, et al. **Acta Paediatr Scand** 1989 Jan; 78(1):81–6

Occurrence and subclass distribution of IgG antibodies to dietary antigens in children with atopic dermatitis and in their mothers. de Martino M, et al. **Ann Allergy** 1988 Oct; 61(4):253–8

Allergy to cow's milk in the first year of life and its prevention. Wilson NW, et al. **Ann Allergy** 1988 Nov; 61(5):323–7 (25 ref.)

The immunoenhancing property of dietary whey protein concentrate. Bounous G, et al. **Clin Invest Med** 1988 Aug; 11(4):271–8

Reactivity of anti-human milk fat globule antibodies with synthetic peptides. Xing PX, et al. **J Immunol** 1989 May 15;142(10):3503–9

Generation of polyclonal antibodies against purified rat whey acidic proteins and the synthesis of a tracer fusion protein suitable for use in radioimmunoassays. Krozowski Z. **Mol Cell Endocrinol** 1989 May;63(1–2):15–22

[Immunological changes in cow's milk proteins in peptic digestion] Heine W, et al. **Kinderarztl Prax** 1988 Aug; 56(8):375–9 (Eng. Abstr.) (Ger)

ISOLATION & PURIFICATION

Human milk proteins: separation of whey proteins and their analysis by polyacrylamide gel electrophoresis, fast protein liquid chromatography (FPLC) gel filtration, and anion-exchange chromatography. Kunz C, et al. **Am J Clin Nutr** 1989 Mar;49(3):464–70

Differences between individuals in high-molecular weight glycoproteins from mammary epithelia of several species. Patton S, et al. **Biochim Biophys Acta** 1989 Apr 28; 980(3):333–8

Two-dimensional electrophoretic analysis of human milk proteins. Goldfarb MF, et al. **Electrophoresis** 1989 Jan; 10(1):67–70

Purification and separation of multiple forms of lactophorin from bovine milk whey and their immunological and electrophoretic properties. Kanno C. **J Dairy Sci** 1989 Apr; 72(4):883–91

METABOLISM

Milk protein quantity and quality and protein requirements during development. Räihä NC. **Adv Pediatr** 1989; 36:347–68 (83 ref.)

Hypocholesterolemic effect of vegetable protein in a hypocaloric diet. Jenkins DJ, et al. **Atherosclerosis** 1989 Aug;78(2–3):99–107

Regulation of intracellular casein degradation by secreted milk proteins. Wilde CJ, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):315–9

The binding of drugs to major human milk whey proteins. Atkinson HC, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):107–9

Effect of protein and(or) carbohydrate fractions of dried whey on performance and nutrient digestibility of early weaned pigs. Tokach MD, et al. **J Anim Sci** 1989 May; 67(5):1307–12

Binding of zinc to bovine and human milk proteins. Singh H, et al. **J Dairy Res** 1989 May;56(2):235–48

Effect of whey proteins, their oligopeptide hydrolysates and free amino acid mixtures on growth and nitrogen retention in fed and starved rats. Poullain MG, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):382–6

Studies concerning the ergogenic value of protein supply and l-carnitine in elite junior cyclists. Drăgan GI, et al. **Physiologie** 1988 Jul-Sep;25(3):129–32

[Gastro-entero-pancreatic production and hepatic uptake of gastrin and somatostatin in the preruminant calf receiving milk proteins or milk serum] Guilloteau P, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:163–4 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Iron absorption in humans as influenced by bovine milk proteins. Hurrell RF, et al. **Am J Clin Nutr** 1989 Mar; 49(3):546–52

Milk plasma supports growth and differentiation of a mouse teratocarcinoma cell line [letter] Subramanian V, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):391–2

[Effect of glucomacropeptide on the cellular interrelations of the humoral immune response] Kenarova B, et al. **Acta Microbiol Bulg** 1988;23:63–8 (Eng. Abstr.) (Bul)

SECRETION

Effect of dietary fat on milk protein secretion of lactating rats. Cant JP, et al. **Lab Anim Sci** 1989 Jul;39(4):351–3

MILK SICKNESS see **PLANT POISONING**

MILKER'S NODES see under **POXVIRUS INFECTIONS**

MILLET see under **CEREALS**

MILROY'S DISEASE see **LYMPHEDEMA**

MIMAE see **ACINETOBACTER**

MIMAE INFECTIONS see **ACINETOBACTER INFECTIONS**

MIMETIC MUSCLES see **FACIAL MUSCLES**

MIMOSINE see under **PYRIDONES**

MINAMATA DISEASE see **MERCURY POISONING**

MINERAL OIL

Thermally induced formation of polychlorinated dibenzofurans from Aroclor 1254-contaminated mineral oil. Narang RS, et al. **Environ Health Perspect** 1989 Feb; 79:273–82

[Acute lethal respiratory distress syndrome after accidental immersion in mineral oil] Piperno D, et al. **Rev Med Interne** 1988 Sep-Oct;9(4):414–6 (Fre)

[Study of possible reproduction of causative agents of suppurative skin diseases in the lubricating-cooling liquid "Ukrinol-1M"] Solovarov VP, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):42–3 (Rus)

ADVERSE EFFECTS

Photoallergic contact dermatitis due to mineral oil. Sakakibara S, et al. **Contact Dermatitis** 1989 Apr; 20(4):291–4

Mineral oil lubricants cause rapid deterioration of latex condoms. Voeller B, et al. **Contraception** 1989 Jan; 39(1):95–102

[Pathologic skin changes in workers at electric and thermoelectric power plants] Kieć-Swierczyńska M, et al. **Med Pr** 1988;39(6):423–8 (Eng. Abstr.) (Pol)

PHARMACOLOGY

Effect of mineral oil and linoleic-acid-containing emulsions on the skin vapour loss of sodium-lauryl-sulphate-induced irritant skin reactions. Blanken R, et al. **Contact Dermatitis** 1989 Feb;20(2):93–7

Rapid [14C]heptachlor clearance from body stores of ovines: ingested mineral oil and parenteral trans-stilbene oxide lack effects. Smith GS, et al. **J Anim Sci** 1989 Jan;67(1):187–95

[Comparison of the action of pristan and Freund's incomplete adjuvant on the development of ascites in mice—the recipients of hybridoma cells] Novikov VV, et al. **Antibiot Khimioter** 1988 Jul;33(7):530–2 (Eng. Abstr.) (Rus)

POISONING

Exogenous lipoid pneumonia. Cornacchia DJ, et al. **J Am Osteopath Assoc** 1989 May;89(5):659–63

TOXICITY

Evaluation of carcinogenic effect of jute batching oil (JBO-P) fractions following topical application to mouse skin. Agarwal R, et al. **Arch Toxicol** 1988;62(6):406–10

Sebaceous gland suppression as a short-term test of the cutaneous carcinogenic activity of mineral oils. Peristianis GC. **J Appl Toxicol** 1989 Aug;9(4):245–54

Role of GSSG-reductase and a thiol oxidant diethylmaleate (DEM) in skin tumorigenesis induced by jute batching oil. Antony M, et al. **Toxicol Lett** 1989 Sep;48(3):259–64

MINERAL WATERS

Long-term survival of hepatitis A virus and poliovirus type 1 in mineral water. Biziagos E, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2705–10

Studies in the field of hydric nourishment: experimental research. Proceedings of a symposium presented at the First International Congress on Food and Health. Salsomaggiore Terme, Italy, 28–31 October 1985. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:1–44

Bacterial species detected in some bottled mineral waters sold in Italy. Macerata UM, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:31–7

[Effect of water containing calcium and magnesium sulfates on the elimination of cholesterol in the rat] Toussaint C, et al. **Arch Int Physiol Biochim** 1988 Jun;96(2):89–100 (Eng. Abstr.) (Fre)

[Preliminary study of the lymphology unit at the hospital of La Ferté-Macé (Orne)] Orhan J. **Phlebologie** 1989 Apr-Jun;42(2):195–200 (Eng. Abstr.) (Fre)

[Pruritus caused by sweat: prevention by ablutions using Vichy Saint-Yorre water (letter)] Dupond JL. **Presse Med** 1988 Oct 29;17(38):2038 (Fre)

[Water loading diuresis test in albino rats. Critical study of approximately 12,000 tests. 3. Loading tests using several mineral waters bottled under various experimental conditions] Federici PC, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):147–74 (Eng. Abstr.) (Ita)

[Prophylaxis of idiopathic kidney calculi with oligo-mineral water therapy] Dormia G. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):85–8 (Eng. Abstr.) (Ita)

[Asymptomatic urinary hospital infections: choice of treatment with drinking water] Borzone A, et al. **Clin Ter** 1988 Feb 15;124(3):183–6 (Eng. Abstr.) (Ita)

[Effects of crenotherapy with a salso-bromo-iodine mineral water in hyperuricemic patients] Grassi M, et al. **Clin Ter** 1987 Sep 30;122(6):459–64 (Eng. Abstr.) (Ita)

[Endoscopic and clinical evaluation of the therapeutic action of a bicarbonate-calcium mineral water in patients with gastroduodenitis] Grassi M, et al. **Clin Ter** 1988 Jul 31; 126(2):123–30 (Eng. Abstr.) (Ita)

[Gastroenteropancreatic endocrine system and crenotherapy with mineral waters] Grassi M, et al. **Clin Ter** 1988 Dec 15;127(5):379–84 (28 ref.) (Eng. Abstr.) (Ita)

[Influence of mineral waters on functional dyspepsia] Grossi F. **Clin Ter** 1989 May 31;129(4):261–70 (Eng. Abstr.) (Ita)

[Effect of treatment with alkaline bicarbonate mineral water on the metabolic response to physical exercise in insulin-dependent diabetics] Marcelli M, et al. **Clin Ter** 1987 Aug 15;122(3):213–8 (Eng. Abstr.) (Ita)

[Dynamics of the lower urinary tract after a rapid bolus intake of Fabia water] Micali F, et al. **Clin Ter** 1987 Sep 15;122(5):373–7 (Eng. Abstr.) (Ita)

[Effect of immersion (WI) in mineral water on plasma renin activity (PRA) and aldosterone (ALD) and vasopressin (VP) levels in the blood of patients with arterial hypertension] Kiersztejn M, et al. **Kardiol Pol** 1988;31 Suppl 1:16–21 (Eng. Abstr.) (Pol)

[Effect of the health resort treatment in Wysowa on the adrenal cortex function] Kokot F, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1306–7 (Eng. Abstr.) (Pol)

[Study of the acidity of gastric contents determined by pH-metry after fractional administration Of Krynica mineral water Zuber III] Mach T, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1227–9 (Eng. Abstr.) (Pol)

[Crystallization of calcium oxalate in mineral waters of Cieplice health resort] Lorenz J, et al. **Wiad Lek** 1988 Mar 1;41(5):286–90 (Eng. Abstr.) (Pol)

[Digestive and transport enzymes of the small intestine under the action of low-mineralized water "Naftusya" and its components] Vavilova GL, et al. **Fiziol Zh** 1989 Jan–Feb; 35(1):13–7 (Eng. Abstr.) (Rus)

[The role of osmotic factors in the effect of mineral water Naftusia on smooth muscles of the portal vein] Zagorodniuk VP, et al. **Fiziol Zh** 1989 May–Jun; 35(3):26–32 (Eng. Abstr.) (Rus)

[The role of a sanatorium-health resort factor in the complex treatment of patients with chronic prostatitis] Darenkov AF, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):17–21 (Eng. Abstr.) (Rus)

[The use of mineral water type "Naftusia-Shklo" in the treatment of chronic cholecystitis] Komissarov VA, et al. **Voen Med Zh** 1989 May;(5):65–6 (Rus)

[Iron-containing mineral water in the complex treatment of iron-deficiency anemia] Barkarevich TV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):64–6 (Rus)

[Insulinotropic effect of naftusia mineral water in treating diabetics] Iaremenko MS, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):52–3 (Rus)

[Metabolic status of the liver mitochondria in rats drinking water containing various forms of iodine] Nikulina LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug; (4):59–62 (Eng. Abstr.) (Rus)

[Changes in lipid peroxidation in the liver tissue and blood serum of rats with chronic toxic hepatitis under the influence of naftusia mineral water] Pukavskil KV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):57–9 (Eng. Abstr.) (Rus)

[Effect of potable mineral waters with various chemical compositions on reparative processes of the mucosa of the gastroduodenal area] Serebriakov SN. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):44–6 (Eng. Abstr.) (Rus)

[Health resort factors in the rehabilitation of children with diseases of the digestive organs] Tarverdian TA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):71–3 (Rus)

ADVERSE EFFECTS

Increased vertebral bone density in heavy drinkers of mineral water rich in fluoride [letter] Meunier PJ, et al. **Lancet** 1989 Jan 21;1(8630):152

ANALYSIS

Chemical composition of bottled mineral water. Allen HE, et al. **Arch Environ Health** 1989 Mar–Apr;44(2):102–16

Influence of calcium content in mineral water on chemistry and crystallization conditions in urine of calcium stone formers. Ackermann D, et al. **Eur Urol** 1988;14(4):305–8

The use of waters with a low saline content (oligomineral waters) in the feeding of babies. Agostini G, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:21–9

The protective action of a water poor in calcium on the kidney of guinea-pigs treated with 9-alpha-fluoro-16-beta-methylprednisolone. Agostini G, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:11–9

The protective action of a water poor in calcium on the liver and digestive apparatus of guinea-pigs chronically treated with 9-alpha-fluoro-16-beta-methylprednisolone. Agostini G, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:1–10

On the presence and identification of organic substances in drinking water and mineral waters. Lapucci PL, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:39–44

Fluoride in mineral water [letter] LaDou J. **West J Med** 1988 Oct;149(4):465–6

[Report of the National Health Laboratory (Department of Hydrological and Thermal Studies)] Lapeyre. **Bull Acad Natl Med** 1989 Feb;173(2):160–70 (Fre)

[The effect of mineral water containing calcium on supersaturation of urine with calcium oxalate] Gutenbrunner C, et al. **Urologe [A]** 1989 Jan;28(1):15–9 (Eng. Abstr.) (Ger)

[The physicochemical composition of mineral waters of the territory of Moldavia used therapeutically] Nastasă V, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun; 92(2):321–5 (Eng. Abstr.) (Rum)

[Evaluation of the biological activity of "Naftusia" mineral water] Iaremenko MS, et al. **Fiziol Zh** 1988 Nov–Dec; 34(6):80–5 (Eng. Abstr.) (Rus)

[Comparative characteristics of organic substances in the low-mineral springs of the Irkutsk Province and in naftusia mineral water] Vasil'eva IuK, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct; (5):37–40 (Rus)

MINERALOCORTICOIDS

ANALYSIS

Analysis of the mineralocorticoid receptor in rat heart with the aid of two new spirolactone derivatives. Agarwal MK, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):36–45

ANTAGONISTS & INHIBITORS

Clinical applications of antimineralocorticoids. Waeber B, et al. **J Steroid Biochem** 1988 Oct;31(4B):739–44 (59 ref.)

Molecular mechanism of antisteroid hormones at the receptor level. Baulieu EE. **Kidney Int Suppl** 1988 Oct;26:S2–7 (50 ref.)

BLOOD

Stimulation and suppression of the mineralocorticoid hormones in normal subjects and adrenocortical disorders. Kater CE, et al. **Endocr Rev** 1989 May;10(2):149–64

Longitudinal study of progestins, mineralocorticoids, and glucocorticoids throughout human pregnancy. Dörr HG, et al. **J Clin Endocrinol Metab** 1989 May;68(5):863–8

DEFICIENCY

Mineralocorticoid deficiency in HIV infection [see comments] Guy RJ, et al. **BMJ** 1989 Feb 25; 298(6672):496–7. **Comment in: BMJ** 1989 Apr 29;298(6681):1181

METABOLISM

The intrarenal localization of mineralocorticoid receptors and 11 beta-dehydrogenase: immunocytochemical studies. Rundle SE, et al. **Endocrinology** 1989 Sep;125(3):1700–4

Mineralocorticosteroid receptor of the chick intestine. Oligomeric structure and transformation. Rafestin-Oblin ME, et al. **J Biol Chem** 1989 Jun 5;264(16):9304–9

Mineralocorticoid effector mechanism of liquorice derivatives in human mononuclear leukocytes. Armanini D, et al. **J Endocrinol Invest** 1989 May;12(5):303–6

The specificity of the human mineralocorticoid receptor: clinical clues to a biological conundrum. Edwards CR, et al. **J Steroid Biochem** 1989 Jan;32(1B):213–6 (25 ref.)

Cushing's disease of the kidney [editorial] **Lancet** 1988 Oct 29;2(8618):1002

Localisation of 11 beta-hydroxysteroid dehydrogenase—tissue specific protector of the mineralocorticoid receptor. Edwards CR, et al. **Lancet** 1988 Oct 29;2(8618):986–9

PHARMACOLOGY

Modulation of angiotensin II binding sites in neuronal cultures by mineralocorticoids. Sumners C, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C121–9

Enhanced natriuretic effect of atrial natriuretic factor during mineralocorticoid escape in humans. Gaillard CA, et al. **Hypertension** 1988 Oct;12(4):450–6

The cellular pool of Na^+ channels in the amphibian cell line A6 is not altered by mineralocorticoids. Analysis using a new photoactive amiloride analog in combination with anti-amiloride antibodies. Kleyman TR, et al. **J Biol Chem** 1989 Jul 15;264(20):11995–2000

Inhibition of bovine adrenocortical mitochondrial cytochrome P-450(11)beta-mediated reactions by imidazole derivatives and mineralocorticoid analogs. Wada A, et al. **J Steroid Biochem** 1988 Nov;31(5):803–8

Escape from the sodium-retaining effects of mineralocorticoids: role of ANF and intrarenal hormone systems. Gonzalez-Campoy JM, et al. **Kidney Int** 1989 Mar; 35(3):767–77 (112 ref.)

PHYSIOLOGY

Mineralocorticoids are not involved in the antihypertensive effect of neonatal thymectomy in the genetically hypertensive LH rat. Bataillard A, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):875–82

Modulation of Na and Cl transport by mineralocorticoids. Clauss W, et al. **Comp Biochem Physiol [A]** 1988;90(4):583–9 (37 ref.)

How can aldosterone act as a mineralocorticoid? Funder JW. **Endocr Res** 1989;15(1–2):227–38

Mechanisms of action of mineralocorticoid hormones. Rossier BC. **Endocr Res** 1989;15(1–2):203–26 (25 ref.)

Identification and implications of new types of mineralocorticoid hypertension. Biglieri EG, et al. **J Steroid Biochem** 1989 Jan;32(1B):199–204

A new form of the syndrome of apparent mineralocorticoid excess. Ulick S, et al. **J Steroid Biochem** 1989 Jan; 32(1B):209–12

[Role of cAMP in the regulation of adrenal mineralocorticoid function by potassium ions] Pushkarev VM, et al. **Biokhimiia** 1989 Feb;54(2):323–7 (Eng. Abstr.) (Rus)

[Mineralocorticoid function of the rat adrenal gland and thyroid hormones] Komarova IV, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):63–6 (Eng. Abstr.) (Rus)

[Biochemical mechanisms of the regulation of mineralocorticoid function of the adrenal glands by potassium ions] Pushkarev VM, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):78–83 (66 ref.) (Rus)

SECRETION

ACTH effects on aldosterone, cortisol, and other steroids. Biglieri EG. **Hosp Pract [Off]** 1989 Jan 15;24(1):145–9, 152, 157–9 passim

MINERALS

The effects of chronic dietary calcium supplementation on bone mineral density in ovariectomized beagles. Shih MS, et al. **Calcif Tissue Int** 1988 Aug;43(2):122–4

Nutritional supplements in the ambulatory elderly population: patterns of use and requirements. Stewart RB. **DICP** 1989 Jun;23(6):490–5

The reproducibility of single photon absorptiometry in a clinical setting. Valkema R, et al. **Eur J Nucl Med** 1989; 15(5):269–73

Increased indoor Rn levels due to actinide containing mineral collections displayed in living areas. Burkart W, et al. **Health Phys** 1989 Sep;57(3):413–6

Non-occupational exposure to mineral fibres. **IARC Sci Publ** 1989;(90):1–529

Mineral fibres in the non-occupational environment. Bignon J. **IARC Sci Publ** 1989;(90):3–29 (106 ref.)

Adsorption of polycyclic aromatic hydrocarbons on to asbestos and man-made mineral fibres in the gas phase. Gerde P, et al. **IARC Sci Publ** 1989;(90):140–8

Experimental data on in vitro fibre solubility. Larsen G. **IARC Sci Publ** 1989;(90):134–9

Production of oxygen radicals by the reduction of oxygen arising from the surface activity of mineral fibres. Pezerat H, et al. **IARC Sci Publ** 1989;(90):100–11

1986 program & abstracts. Eighth annual scientific meeting, American Society for Bone and Mineral Research. June 21–24, 1986, Anaheim, CA. **J Bone Miner Res** 1986 Jun; 1 Suppl 1:451 abstracts

Lifetime fracture risk: an approach to hip fracture risk assessment based on bone mineral density and age. Melton LJ 3d, et al. **J Clin Epidemiol** 1988;41(10):985–94

Decreased bone density and thyroxine [letter] Heath H 3d. **JAMA** 1988 Oct 21;260(15):2219–20

Symmetry of hip bone mineral density [letter] Shukla SS. **Radiology** 1988 Dec;169(3):875

ADMINISTRATION & DOSAGE

Effects of mineral and vitamin supplementation on the alcohol-induced fatty liver and microsomal induction. Lieber CS, et al. **Alcoholism (NY)** 1989 Feb;13(1):142–3

Promotion and selling of unnecessary food supplements: quackery or ethical pharmacy practice? Nelson V. **Am Pharm** 1988 Oct;NS28(10):34–6

Influence of dietary mineral imbalance on the incidence of urolithiasis in Egyptian calves. Ahmed AS, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):73–7

Evaluation of prenatal vitamin-mineral supplements. Newman V, et al. **Clin Pharm** 1987 Oct;6(10):770–7

Nutritional status in Linxian, China: effects of season and supplementation. Zheng SF, et al. **Int J Vitam Nutr Res** 1989;59(2):190–9

Effects of pH on mineral-phytate, protein-mineral-phytate, and mineral-fiber interactions. Possible consequences of atrophic gastritis on mineral bioavailability from high-fiber foods. Champagne ET. **J Am Coll Nutr** 1988 Dec; 7(6):499–508 (72 ref.)

Vitamin and mineral supplementation practices of adults in seven western states. Medeiros DM, et al. **J Am Diet Assoc** 1989 Mar;89(3):383–6

Targeting messages to supplement users. Raab CA, et al. **J Am Diet Assoc** 1989 Apr;89(4):545–6

The contribution of enrichment and fortification to nutrient intake of women. Subar AF, et al. **J Am Diet Assoc** 1988 Oct;88(10):1237–42, 1245

ADVERSE EFFECTS

Effects on health of non-occupational exposure to airborne mineral fibres. Gardner MJ, et al. **IARC Sci Publ** 1989; (90):375–97 (72 ref.)

Public perception of risk and its consequences: the case of a natural fibrous mineral deposit. Major G, et al. **IARC Sci Publ** 1989;(90):497–508

Effect on health of man-made mineral fibres in kindergarten ceilings. Rindel A, et al. **IARC Sci Publ** 1989;(90):449–53

Endothelial cell loss with Bss plus and Ringer lactate in posterior chamber lens implantation: a specular microscopic evaluation. Kalra VK, et al. **Indian J Ophthalmol** 1987;35(5–6):246–8

Health effects of asbestos and of some other minerals and fibres as reflected in the worlds' literature: a compendium of references and abstracts 1906–1986. Volume III. **J Environ Pathol Toxicol Oncol** 1988 Sep–Dec;

8(5–6):1659–2413

Health effects of asbestos and of some other minerals and fibres as reflected in the worlds' literature: a compendium of references and abstracts 1906–1986. Volume I. **J Environ Pathol Toxicol Oncol** 1988 Jan–Apr;8(1–2):1–823

Health effects of asbestos and of of some other minerals and fibres as reflected in the worlds' literature: a compendium of references and abstracts 1906–1986. Volume II. **J Environ Pathol Toxicol Oncol** 1988 May–Aug; 8(3–4):825–1658

Adverse effects of overdosage of vitamins and minerals. Barness LA. **Pediatr Rev** 1986 Jul;8(1):20–4 (17 ref.)

[The occupational risk in the manufacture of mineral pigments and iron oxide dyes] Khinkova L, et al. **Probl Khig** 1988;13:118–23 (Eng. Abstr.) **(Bul)**

[Health damage caused by asbestos and other mineral fibers] Skaug V, et al. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1786–9 (Eng. Abstr.) **(Nor)**

[Comparative carcinogenic properties of basalt fiber and chrysotile-asbestos] Nikitina OV, et al. **Gig Tr Prof Zabol** 1989;(4):7–11 (Eng. Abstr.) **(Rus)**

[Current state of the use of short-term tests in identifying potential carcinogenicity of industrial mineral dusts (review of the literature)] Vanchugova NN. **Gig Tr Prof Zabol** 1989; (1):34–8 (57 ref.) **(Rus)**

ANALYSIS

The analysis of mineral deposits and proteoglycans content in the cartilage of mouse trachea using PIXE in combination with proton microprobe. Cichocki T, et al. **Acta Histochem (Jena)** 1989;85(1):39–45

Bone mineral loss related to menstrual history. Georgiou E, et al. **Acta Orthop Scand** 1989 Apr;60(2):192–4

Mineral content and strength of lumbar vertebrae. A cadaver study. Granhed H, et al. **Acta Orthop Scand** 1989 Feb; 60(1):105–9

Increased fracture risk in hypercalcemia. Bone mineral content measured in hyperparathyroidism. Larsson K, et al. **Acta Orthop Scand** 1989 Jun;60(3):268–70

Total body bone mineral in light-for-gestational-age infants and appropriate-for-gestational-age infants. Petersen S, et al. **Acta Paediatr Scand** 1989 May;78(3):347–50

Local differences in mineral content in vertebral trabecular bone measured by dual-energy computed tomography. Nepper-Rasmussen J, et al. **Acta Radiol** 1989 Jul–Aug; 30(4):369–71

Quantitative computed tomography in measurement of vertebral trabecular bone mass. A modified method. Nilsson M, et al. **Acta Radiol** 1988 Nov–Dec;29(6):719–25

In vivo mineral contents of dietary fiber determined by EDX analysis. Dintzis FR, et al. **Adv Exp Med Biol** 1989; 249:147–59

Dual-energy radiographic absorptiometry for bone densitometry: current status and perspective. Sartoris DJ, et al. **AJR** 1989 Feb;152(2):241–6 (30 ref.)

Lifetime calcium intake and physical activity habits: independent and combined effects on the radial bone of healthy premenopausal Caucasian women. Halioua L, et al. **Am J Clin Nutr** 1989 Mar;49(3):534–41

Dual-photon absorptiometry: comparison of bone mineral and soft tissue mass measurements in vivo with established methods. Heymsfield SB, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1283–9

Bone mineral content in postmenopausal women: comparison of omnivores and vegetarians. Hunt IF, et al. **Am J Clin Nutr** 1989 Sep;50(3):517–23

Relation of bone mineralization measures to serum biochemical measures [letter] Abrams SA, et al. **Am J Dis Child** 1988 Dec;142(12):1276–8

Decreased bone mineral content in infants of diabetic mothers. Mimouni F, et al. **Am J Perinatol** 1988 Oct; 5(4):339–43

Distribution of the mineralized tissues in the nasal ventral conchae (os conchae nasalis ventralis) of piglets after birth: relationship with atrophic rhinitis. Trépanier H, et al. **Anat Rec** 1988 Nov;222(3):237–44

Bone mineral densitometry. Health and Public Policy Committee, American College of Physicians [letter] **Ann Intern Med** 1988 Nov 15;109(10):846

Bone mass is low in relatives of osteoporotic patients. Evans RA, et al. **Ann Intern Med** 1988 Dec 1;109(11):870–3

Total body and regional analysis by dual-photon absorptiometry in osteogenesis imperfecta. Nuti R, et al. **Ann N Y Acad Sci** 1988;543:180–5

Bone mass in women with hip fractures. McLaren MI, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):77–8

Bone mineralisation in preterm infants measured by dual energy radiographic densitometry. Lyon AJ, et al. **Arch Dis Child** 1989 Jul;64(7):919–23

Effects of nandrolone decanoate and antiresorptive therapy on vertebral density in osteoporotic postmenopausal women. Need AG, et al. **Arch Intern Med** 1989 Jan; 149(1):57–60

X-ray diffraction and thermal studies of crystals from the outer and inner layers of human dental enamel. Sakae T. **Arch Oral Biol** 1988;33(10):707–13

Mineralization differences between human deciduous and permanent enamel measured by quantitative microradiography. Wilson PR, et al. **Arch Oral Biol** 1989; 34(2):85–8

Single photon absorptiometry and quantitative roentgenography in bone densitometry: a comparison. Price RI, et al. **Australas Phys Eng Sci Med** 1988 Jan–Mar; 11(1):36–43

Mineral density of bone in the forearm in premenopausal women with fractured wrists. Horowitz M, et al. **BMJ** 1988 Nov 19;297(6659):1314–5

Determinants of bone density in normal women: risk factors for future osteoporosis? Stevenson JC, et al. **BMJ** 1989 Apr 8;298(6678):924–8

Biophysical study of bone mineral in biopsies of osteoporotic patients before and after long-term treatment with fluoride. Baud CA, et al. **Bone** 1988;9(6):361–5

The effect of short-term treatment with vitamin D metabolites on bone lipid and mineral composition in healing vitamin D-deficient rats. Boskey AL, et al. **Bone** 1988;9(5):309–18

Mineralization in osteoblast cultures: a light and electron microscopic study. Ecarot-Charrier B, et al. **Bone** 1988; 9(3):147–54

Forearm mineral content in normal men: relationship to weight, height and plasma testosterone concentrations. McElduff A, et al. **Bone** 1988;9(5):281–3

Cross-over study of fat-corrected forearm mineral content during nandrolone decanoate therapy for osteoporosis. Need AG, et al. **Bone** 1989;10(1):3–6

Dietary intake and bone mineral density. Angus RM, et al. **Bone Miner** 1988 Jul;4(3):265–77

Bone mineral content in Japanese [letter] Fujii Y, et al. **Bone Miner** 1988 Jul;4(3):311–2

Comparison of bone mineral content between Japan-born and US-born Japanese subjects in Hawaii. Nomura A, et al. **Bone Miner** 1989 May;6(2):213–23

The relation between forearm and vertebral mineral density and fractures in postmenopausal women. Nordin BE, et al. **Bone Miner** 1988 Oct;5(1):21–33

Premenopausal bone mineral content relates to height, weight and calcium intake during early adulthood. Picard D, et al. **Bone Miner** 1988 Jul;4(3):299–309

The clinical relevance of calcaneus bone mineral measurements: a review. Vogel JM, et al. **Bone Miner** 1988 Oct;5(1):35–58 (82 ref.)

Bone mineral content of women receiving tamoxifen for mastalgia. Fentiman IS, et al. **Br J Cancer** 1989 Aug; 60(2):262–4

Trace nutrients. 5. Minerals and vitamins in the British household food supply. Lewis J, et al. **Br J Nutr** 1988 Nov; 60(3):413–24

Minerals and trace elements in total diets in The Netherlands. van Dokkum W, et al. **Br J Nutr** 1989 Jan;61(1):7–15

Bone mineral content in patients with carcinoma of the prostate. Mobb GE, et al. **Br J Urol** 1988 Oct;62(4):355–8

Tissue mineral element content in swine fed clinoptilolite. Pond WG, et al. **Bull Environ Contam Toxicol** 1989 May; 42(5):735–42

Sixth International Workshop on Bone and Soft Tissue Densitometry. Buxton, Derbyshire, England, UK, 22–25 September 1987. Abstracts. **Calcif Tissue Int** 1989 Feb; 44(2):145–53

The effects of muscle-building exercise on bone mineral density of the radius, spine, and hip in young men. Colletti LA, et al. **Calcif Tissue Int** 1989 Jul;45(1):12–4

Serum tartrate-resistant acid phosphatase and bone mineral content in postmenopausal osteoporosis. de la Piedra C, et al. **Calcif Tissue Int** 1989 Jul;45(1):58–60

Calcium environment in bone mineral determined by EXAFS spectroscopy. Harries JE, et al. **Calcif Tissue Int** 1988 Oct; 43(4):250–3

Estimation of the bone mineral density variation associated with changes in turnover rate. Jerome CP. **Calcif Tissue Int** 1989 Jun;44(6):406–10

Bone mineral density and fracture in postmenopausal women. Meltzer M, et al. **Calcif Tissue Int** 1989 Sep;45(3):142–5

The carbonate environment in bone mineral: a resolution-enhanced Fourier Transform Infrared Spectroscopy Study. Rey C, et al. **Calcif Tissue Int** 1989 Sep;45(3):157–64

Bone mineral content of mandibles: normal reference values—rate of age-related bone loss. von Wowern N. **Calcif Tissue Int** 1988 Oct;43(4):193–8

Some factors which influence the evaluation of a dual photon measurement of lumbar spine bone mineral mass. Webber CE. **Can Assoc Radiol J** 1989 Apr;40(2):87–91

Quality assurance and precision of dual photon absorptiometry in bone mineral measurement. Tzen KY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):1–8

Vertebral bone density in non-amenorrhoeic hyperprolactinaemic women. Ciccarelli E, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):1–6

Normal and abnormal features of the lumbar spine observed in dual photon absorptiometry scans. Hopkins A, et al. **Clin Nucl Med** 1989 Jun;14(6):410–4

The error due to fat inhomogeneity in lumbar spine bone mineral measurements. Farrell TJ, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):57–64

Noninvasive methods of bone-mass measurement. Sabatier JP, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:41–5 (15 ref.)

The locus of mineral crystallites in bone. Lees S, et al. **Connect Tissue Res** 1988;18(1):41–54

Low-protein diets: mineral and electrolyte contents. Gretz N, et al. **Contrib Nephrol** 1989;72:36–41

Bone mineral content in normally menstruating women with hyperprolactinaemia. Nyström E, et al. **Horm Res** 1988; 29(5–6):214–7

Fibre levels in lung and correlation with air samples. Case BW, et al. **IARC Sci Publ** 1989;(90):207–18 (66 ref.)

Alveolar and lung fibre levels in non-occupationally exposed subjects. Chiappino G, et al. **IARC Sci Publ** 1989;(90):310–3

Mineral fibres in the non-occupational environment: concluding remarks. Doll R. **IARC Sci Publ** 1989; (90):511–8

Exposure to ceramic man-made mineral fibres. Friar JJ, et al. **IARC Sci Publ** 1989;(90):299–303

Levels of atmospheric pollution by man-made mineral fibres in buildings. Gaudichet A, et al. **IARC Sci Publ** 1989; (90):291–8

Levels of airborne man-made mineral fibres in dwellings in the UK: results of a preliminary survey. Jaffrey SA, et al. **IARC Sci Publ** 1989;(90):319–22

Smoking and the pulmonary mineral particle burden. Kalliomäki PL, et al. **IARC Sci Publ** 1989;(90):323–9

Airborne mineral fibre concentrations in an urban area near an asbestos-cement plant. Marconi A, et al. **IARC Sci Publ** 1989;(90):336–46

Non-asbestos fibre content of selected consumer products. Méranger JC, et al. **IARC Sci Publ** 1989;(90):347–53

Mineral fibres and dusts in lungs of subjects living in an urban environment. Paoletti L, et al. **IARC Sci Publ** 1989; (90):354–60

Measurement of inorganic fibrous particulates in ambient air and indoors with the scanning electron microscope. Rödelsperger K, et al. **IARC Sci Publ** 1989;(90):361–6

Optimum neutron source to subject distance (ONSSD) and the influence of air-gap on body irradiation in activation analysis. Ebifegha ME. **Int J Rad Appl Instrum [A]** 1989; 40(1):73–7

Nuclear medicine studies of aging—III. Radial bone mineral content by single and dual photon absorptiometry. Gupta SM, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):429–30

Quantitative computed tomographic evaluation of femoral bone mineral content in renal osteodystrophy compared with radial photon absorptiometry. Sakurai K, et al. **Invest Radiol** 1989 May;24(5):375–82

Interrelationships of exogenous porcine growth hormone administration and feed intake level affecting various tissue levels of iron, copper, zinc and bone calcium of growing pigs. Caperna TJ, et al. **J Anim Sci** 1989 Mar;67(3):654–63

Physiological effects of feeding high levels of magnesium to sheep. Chester-Jones H, et al. **J Anim Sci** 1989 Apr; 67(4):1070–81

Liquid chromatographic methods for vitamins A and D in multivitamin-mineral formulations. Beaulieu N, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):247–54

Orientation of bone mineral and its role in the anisotropic mechanical properties of bone—transverse anisotropy. Sasaki N, et al. **J Biomech** 1989;22(2):157–64

Bone mineral and glycosaminoglycans in newborn and mature rabbits. Grynpas MD, et al. **J Bone Miner Res** 1988 Apr;3(2):159–64

Quantification of bone mineral content using dual-photon absorptiometry in a normal Japanese population. Hagiwara S, et al. **J Bone Miner Res** 1989 Apr;4(2):217–22

Bone mineral content in the senescent rat femur: an assessment using single photon absorptiometry. Kiebzak GM, et al. **J Bone Miner Res** 1988 Jun;3(3):311–7

Sequential bone mineral content in small preterm infants with and without fractures and rickets. Koo WW, et al. **J Bone Miner Res** 1988 Apr;3(2):193–7

Diagnostic sensitivity of bone densitometry [letter] Mazess RB. **J Bone Miner Res** 1988 Feb;3(1):121–3

Bone density measurement. Melton LJ 3d, et al. **J Bone Miner Res** 1988 Feb;3(1):ix–x

Bone mineral density in Australia compared with the United States. Pocock NA, et al. **J Bone Miner Res** 1988 Dec; 3(6):601–4

Detection of prefracture spinal osteoporosis using bone mineral absorptiometry. Ross PD, et al. **J Bone Miner Res** 1988 Feb;3(1):1–11

Bone mineral density in women with type II diabetes mellitus. Weinstock RS, et al. **J Bone Miner Res** 1989 Feb; 4(1):97–101

Unequal decrease in bone density of lumbar spine and ultradistal radius in Colles' and vertebral fracture syndromes. Eastell R, et al. **J Clin Invest** 1989 Jan; 83(1):168–74

Composition of pooled resting plaque fluid from caries-free and caries-susceptible individuals. Margolis HC, et al. **J Dent Res** 1988 Dec;67(12):1468–75

Bone mineral content of the maxilla estimated by dual-photon absorptiometry after augmentation with bone or hydroxyapatite. von Wowern N, et al. **J Dent Res** 1988 Nov;67(11):1405–8

Structural and chemical characterization of inorganic deposits in calcified human mitral valve. Bigi A, et al. **J Inorg Biochem** 1988 Oct;34(2):75–82

The effect of oral contraceptives on lumbar bone density in premenopausal women. Collins CL, et al. **J La State Med Soc** 1988 Sep;140(9):31–2, 35–9

Accuracy of dual photon absorptiometry in excised femurs. Erman J, et al. **J Nucl Med** 1988 Nov;29(11):1853–5

Bone mineral densitometry: SNM/ACNP opposes HCFA's intention to deny Medicare coverage [news] Tilyou S. **J Nucl Med** 1989 Feb;30(2):139–40

A comparison of single and multi-site BMC measurements for assessment of spine fracture probability. Wasnich RD, et al. **J Nucl Med** 1989 Jul;30(7):1166–71

Bone mineralization in former very low birth weight infants fed either human milk or commercial formula: one-year follow-up observation. Abrams SA, et al. **J Pediatr** 1989 Jun;114(6):1041–4

Bone mineral content, serum vitamin D metabolite concentrations, and ultraviolet B light exposure in infants fed human milk with and without vitamin D2 supplements. Greer FR, et al. **J Pediatr** 1989 Feb;114(2):204–12

Serum insulin and bone density in normal subjects. Sambrook PN, et al. **J Rheumatol** 1988 Sep;15(9):1415–7

Longitudinal study in biochemical composition of human milk during first year of lactation. Nagra SA. **J Trop Pediatr** 1989 Jun;35(3):126–8

Does densitometry have a predictive role in osteoporosis? Studies may give answer [news] Goldsmith MF. **JAMA** 1989 May 12;261(18):2598–9

Bone mineral content of the forearm in healthy Dutch women. Barentsen R, et al. **Maturitas** 1988 Oct; 10(3):231–41

Persistence of increased bone resorption and possible role of dehydroepiandrosterone as a bone metabolism determinant in osteoporotic women in late post-menopause. Taelman P, et al. **Maturitas** 1989 Mar; 11(1):65–73

New radiographic technique may renew credibility of bone densitometry [editorial] Sartoris DJ, et al. **Mayo Clin Proc** 1988 Nov;63(11):1147–50

Comparison of dual-energy x-ray absorptiometry and dual photon absorptiometry for bone mineral measurements of the lumbar spine. Wahner HW, et al. **Mayo Clin Proc** 1988 Nov;63(11):1075–84

Combined 2.25 MHz ultrasound velocity and bone mineral density measurements in the equine metacarpus and their in vivo applications. McCartney RN, et al. **Med Biol Eng Comput** 1987 Nov;25(6):620–6

Assessment of bone mineral content by in vivo measurement of flexural wave velocities. Stüssi E, et al. **Med Biol Eng Comput** 1988 Jul;26(4):349–54

Monitoring of bone mineral content in patients on regular hemodialysis. Eeckhout E, et al. **Nephron** 1989;52(2):158–61

Assessment of vertebral mineral content by means of a single-crystal scintillation camera. Vandevivere J, et al. **Nucl Med Commun** 1988 Aug;9(8):603–12

Artery wall calcification: correlation of atherosclerosis with mineralization. Cichocki T, et al. **Pathologica** 1989 Mar-Apr;81(1072):139–49

A theoretical analysis of the accuracy of single-energy CT bone-mineral measurements. Crawley EO, et al. **Phys Med Biol** 1988 Oct;33(10):1113–27

Tissue and phantom materials characterisation by scattering for in vivo XRF and mineralometric techniques. Tartari A, et al. **Phys Med Biol** 1989 May;34(5):617–23

Methods of bone mineral measurement. Tothill P. **Phys Med Biol** 1989 May;34(5):543–72 (95 ref.)

Yield and content in nitrates, minerals and ascorbic acid of leeks and turnips grown under mineral or organic nitrogen fertilizations. Termine E, et al. **Plant Foods Hum Nutr** 1987; 37(4):321–32

Developmental changes of selected minerals in Zucker rats. Serfass RE, et al. **Proc Soc Exp Biol Med** 1988 Nov; 189(2):229–39

Contribution of the trabecular component to mechanical strength and bone mineral content of the femoral neck. An experimental study on cadaver bones. Werner C, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):457–60

The effect of ambient cadmium air pollution on the hair mineral content of children. Stewart-Pinkham SM. **Sci Total Environ** 1989 Jan;78:289–96

Prediction of the compressive strength of vertebral bodies of the lumbar spine by quantitative computed tomography. Biggemann M, et al. **Skeletal Radiol** 1988;17(4):264–9

Sequential changes of mineral and trace elements in milk during the course of endotoxin-induced mastitis as analyzed by particle induced -X-ray (PIXE), -gamma-ray emission (PIGE) and ion selective electrodes. Lappalainen R, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):664–76

[Needle-like nonasbestos particles in Bulgarian mineral raw materials] Mikhallova-Docheva L. **Probl Khig** 1988; 13:151–6 (Eng. Abstr.) (Bul)

[Preliminary study of the mineral composition of gallstones] Xia LF. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):233–4, 256 (Eng. Abstr.) (Chi)

[Analysis of minerals of lobar lavage fluid from patients with silicosis, stannosis and cement pneumoconiosis] Wang LH. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):88–91 (Eng. Abstr.) (Chi)

[Measurement of bone mineral content of calcaneus by monophoton absorptiometry] Xiao ZJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):265–6 (Eng. Abstr.) (Chi)

[Dual-photon densitometry of the lumbar spine. Basic experience and results] Kapitola J, et al. **Cas Lek Cesk** 1989 Jan 2;128(1):20–4 (Eng. Abstr.) (Cze)

[In vitro activation analysis in the study of bone minerals] Rakovič M, et al. **Cas Lek Cesk** 1988 Jul 8;127(28):869–72 (Eng. Abstr.) (Cze)

[Measurement of the mineral composition of bones] Alhava E. **Duodecim** 1989;105(10):929–32 (Fin)

[Measurement of bone mineral content by quantitative digital radiography. First results in the lumbar vertebrae] Braillon P, et al. **Presse Med** 1989 May 27;18(21):1062–5 (Eng. Abstr.) (Fre)

[Treatment of postmenopausal with sodium fluoride. Effect on mineral bone content of the radius] de Guembecker W, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):499–503 (Fre)

[What to expect from the measurement of bone mass?] Pouilles JM, et al. **Rev Rhum Mal Osteoartic** 1989 May; 56(6):479–85 (59 ref.) (Eng. Abstr.) (Fre)

[Evaluation of bone mineral content by quantitative computed tomography (letter)] Di Pietrantonj F, et al. **Radiol Med (Torino)** 1988 Oct;76(4):363–4 (Ita)

[Bone mineral assessment using conventional gammacamera] Shiomi K, et al. **Kaku Igaku** 1988 Jun;25(6):557–60 (Jpn)

[Meaning in measurement of bone mineral content as preoperative evaluation of aged patients: preliminary report] Sugino K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):957 (Jpn)

[A study of bone mineral content in patients with calcium urolithiasis by microdensitometry] Sakamoto W, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):495–500 (Eng. Abstr.) (Jpn)

[Quantitative evaluation of bone mineral contents of hand bone using CR technique] Yamashita M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):214–6 (Eng. Abstr.) (Jpn)

[Effect of aging on bone mineral content. Part VI. Comparison of bone mineral measurement with single photon absorptiometry and dual photon absorptiometry] Shiraki M, et al. **Nippon Ronen Igakkai Zasshi** 1988 Nov; 25(6):591–6 (Eng. Abstr.) (Jpn)

[Effects of alfacalcidol (1 alpha-OH-D3) on post oophorectomy osteopenia as measured by microdensitometry] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):505–12 (Eng. Abstr.) (Jpn)

[A clinical study evaluating bone mineral mass in the radius during skeletal growth—single photon absorptiometry] Hagino H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan; 63(1):45–58 (Eng. Abstr.) (Jpn)

[Clinical usefulness of a dual photon absorptiometry system using X-ray for peripheral bone—comparison with a single photon absorptiometric system] Tomomitsu T, et al. **Radioisotopes** 1988 Sep;37(9):521–4 (Eng. Abstr.) (Jpn)

[Parathyroid hormone and bone mineral content in male and female patients receiving hemodialysis] Torizumi K, et al. **Radioisotopes** 1988 Jul;37(7):410–3 (Eng. Abstr.) (Jpn)

[Characteristics of the structure of a solid phase of ore aerosol during the operation of power-driven Diesel equipment] Chebotarev AG, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):50–2 (Rus)

[Contents of mineral substances in the spine and the possibility of fractures (review of the literature)] Sveshnikov AA. **Ortop Travmatol Protez** 1988 Nov; (11):76–8 (23 ref.) (Rus)

[Quantitative assessment of the mineral substances in bone tissue by 2-photon absorptiometry (a review of the literature)] Sveshnikov AA. **Ortop Travmatol Protez** 1988 May;(5):69–72 (40 ref.) (Rus)

[Content of zinc and some other minerals in food manufactured in Vietnam] Do Thi Kim Luen, et al. **Vopr Pitan** 1989 Mar-Apr;(2):60–2 (Rus)

BLOOD

Bone demineralization and impaired mineral metabolism in insulin-dependent diabetes mellitus. A possible role of magnesium deficiency. Saggese G, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):405–14

Effect of dietary ascorbic acid on levels of serum mineral nutrients in guinea pigs. Tsao CS, et al. **Int J Vitam Nutr Res** 1989;59(1):72–6

Serum zinc, iron and copper status during early gestation in sows fed a folic acid-supplemented diet. Tremblay GF, et al. **J Anim Sci** 1989 Mar;67(3):733–7

Plasma alpha-tocopherol, retinol, cholesterol, and mineral concentrations in captive gorillas. McGuire JT, et al. **J Med Primatol** 1989;18(2):155–61

Minerals and vitamin-A status in relation to gustatory functions for salt in healthy female college students. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr; 34(2):209–22

[Creatinine, urea and mineral levels during the first week of life in healthy premature calves and calves with a delayed asphyxia syndrome] Pickel M, et al. **Zentralbl Veterinarmed [A]** 1989 Feb;36(2):132–41 (Eng. Abstr.) (Ger)

DEFICIENCY

Cellular events associated with the induction of bone by demineralized bone. Bernick S, et al. **J Orthop Res** 1989; 7(1):1–11

The effects of demineralized bone matrix and direct current on an "in vivo" culture of bone marrow cells. Friedenberg ZB, et al. **J Orthop Res** 1989;7(1):22–7

METABOLISM

Changes with aging in the bone mineral content of the lumbar spine and femoral neck in healthy women in Hungary. Lakatos P, et al. **Acta Med Hung** 1989;46(1):73–83

Improved bone mineral status in very low birthweight infants fed human milk mixed with preterm formula. Tsukahara H, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb; 31(1):58–64

Mineral metabolism in obese children. Zamboni G, et al. **Acta Paediatr Scand** 1988 Sep;77(5):741–6

Digestion and faecal mineral content of virginiamycin-fed rabbits exposed to physiological and simulated stress. Fekete S, et al. **Acta Vet Hung** 1988;36(1–2):61–8

Effect of gastrointestinal conditions on the mineral-binding properties of dietary fibers. Laszlo JA. **Adv Exp Med Biol** 1989;249:133–45

Dietary fructose or starch: effects on copper, zinc, iron, manganese, calcium, and magnesium balances in humans. Holbrook JT, et al. **Am J Clin Nutr** 1989 Jun;49(6):1290–4

Comparative effects of meals high in protein, sucrose, or starch on human mineral metabolism and insulin secretion. Holl MG, et al. **Am J Clin Nutr** 1988 Nov;48(5):1219–25

Ovariectomy, dietary zinc, and bone metabolism in retired breeder rats. Sherman SS, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1184–91

Bone mineral status in hypopituitarism [letter] Arisaka O, et al. **Am J Dis Child** 1989 Mar;143(3):272–3

Effects of smoking on serum lipoproteins and bone mineral content during postmenopausal hormone replacement therapy. Jensen J, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):820–5

Mechanism of bone destruction due to middle ear cholesteatoma as revealed by laser-Raman spectrometry. Ohsaki K, et al. **Am J Otolaryngol** 1988 May-Jun; 9(3):117–26

Ion microprobe analysis of mouse calvariae in vitro: evidence for a "bone membrane". Bushinsky DA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E152–8

Calciotrophic hormone levels and calcium absorption during pregnancy in rats. Quan-Sheng D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E118–23

Effects of B-aminopropionitrile on mineralization during endochondral ossification in chick tibia. Sandhu HS, et al. **Anat Embryol (Berl)** 1988;178(5):449–54

Calcium transport during mineralization. Bawden JW. **Anat Rec** 1989 Jun;224(2):226–33 (55 ref.)

Biophysical aspects of lipid interaction with mineral: liposome model studies. Eanes ED. **Anat Rec** 1989 Jun; 224(2):220–5 (24 ref.)

Mineral phases of calcium phosphate. Nancollas GH, et al. **Anat Rec** 1989 Jun;224(2):234–41 (44 ref.)

Bone mineral content in women. Lee ST, et al. **Ann Acad Med Singapore** 1989 May;18(3):292–5

Spinal and peripheral bone mineral densities in acromegaly: the effects of excess growth hormone and hypogonadism. Diamond T, et al. **Ann Intern Med** 1989 Oct 1;111(7):567–73

Influence of dietary picolinic acid on mineral metabolism in the rat. Seal CJ. **Ann Nutr Metab** 1988;32(4):186–91

Effect of inorganic nutrients on the acclimation period preceding mineralization of organic chemicals in lake water. Jones SH, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3177–9

The mineralization of elastic fibers and alterations of extracellular matrix in pseudoxanthoma elasticum. Ultrastructure, immunocytochemistry, and X-ray analysis. Walker ER, et al. **Arch Dermatol** 1989 Jan;125(1):70–6

Bone mineral accretion rate and calcium intake in preterm infants. Horsman A, et al. **Arch Dis Child** 1989 Jul; 64(7):910–8

Association of mineral composition of neonatal intravenous feeding solutions and metabolic bone disease of prematurity. MacMahon P, et al. **Arch Dis Child** 1989 Apr; 64(4):489–93

Metabolic disturbances induced by organotins through subchronic treatment in chickens. Second communication: mineral metabolism. Guta-Socaciu C, et al. **Arch Exp Veterinarmed** 1989 May;43(3):421–5

Mineralization induced by beta-glycerophosphate in cultures leads to a marked increase in collagenase synthesis by mouse osteogenic MC3T3-E1 cells under subsequent stimulation with heparin. Sakamoto S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):773–80

Control of mineral metabolism in CAPD patients. Delmez JA. **Blood Purif** 1989;7(2–3):167–80 (68 ref.)

Local bone mineral response to brief exercise that stresses the skeleton. Beverly MC, et al. **BMJ** 1989 Jul 22; 299(6693):233–5

Nutrient interactions involving vitamins and minerals. Erdman JW Jr, et al. **Bol Asoc Med P R** 1988 Aug; 80(8):291–3

The comparative effect of ovarian hormone administration on bone mineral status in oophorectomized rats. Barbagallo M, et al. **Bone** 1989;10(2):113–6

Lack of seasonal variation in bone mass and biochemical estimates of bone turnover. Overgaard K, et al. **Bone** 1988; 9(5):285–8

Progression of mineral metabolism derangements in childhood chronic renal failure. Bianchi ML, et al. **Bone Miner** 1986 Dec;1(6):475–83

Long term administration of prostaglandin inhibitors in vivo fail to influence cartilage and bone mineral metabolism in the rat. Boiskin I, et al. **Bone Miner** 1988 Apr;4(1):27–36

Noncollagenous matrix proteins and their role in mineralization. Boskey AL. **Bone Miner** 1989 May; 6(2):111–23 (82 ref.)

Effects of high dietary contents of calcium and phosphorus on mineral metabolism and growth of vitamin D-deficient suckling and weaned rats. Clark SA, et al. **Bone Miner** 1987 Jul;2(4):257–70

Fluoride inhibition of bone mineralization may depend on physical/chemical properties. Harrison JE, et al. **Bone Miner** 1988 Apr;4(1):37–47

En recherche de la différence (P less than 0.05). Heaney RP. **Bone Miner** 1986 Apr;1(2):99–114

Long–term precision of dual photon absorptiometry in the lumbar spine in clinical settings. Nilas L, et al. **Bone Miner** 1988 Mar;3(4):305–15

Bone mineral density of the spine and proximal femur in normal and osteoporotic subjects in Japan. Norimatsu H, et al. **Bone Miner** 1989 Jan;5(2):213–22

Total body and regional bone mineral analysis by dual–photon absorptiometry in Paget's disease of bone. Nuti R, et al. **Bone Miner** 1988 Mar;3(4):359–67

Effect of number of suckling pups and dietary calcium on bone mineral content and mechanical properties of femurs of lactating rats. Peng TC, et al. **Bone Miner** 1988 Mar; 3(4):293–304

Correlation of bone mineralization in the radius and humerus of well premature neonates over the first 4 months of life. Pittard WB 3d, et al. **Bone Miner** 1988 Oct;5(1):69–76

Septal distribution and the relationship of matrix vesicle size to cartilage mineralization. Reinholt FP, et al. **Bone Miner** 1988 Apr;4(1):63–71

Age–related loss of bone mineral density in non–athletic and athletic women. Talmage RV, et al. **Bone Miner** 1986 Apr; 1(2):115–25

Effect of phosphorus supplementation on bone formation induced by osteosarcoma–derived bone–inducing substance in X–linked hypophosphatemic mice. Tanaka H, et al. **Bone Miner** 1988 Jul;4(3):237–46

Levamisole and inorganic pyrophosphate inhibit beta–glycerophosphate induced mineralization of bone formed in vitro. Tenenbaum HC. **Bone Miner** 1987 Oct; 3(1):13–26

Maintained improvement in calcium balance and bone mineral content in patients with osteoporosis treated with the bisphosphonate APD. Valkema R, et al. **Bone Miner** 1989 Jan;5(2):183–92

The influence of 1 alpha,25– and 24(R),25–dihydroxyvitamin D3 on bone constituents during early mineralization in the rat. Vukičević S, et al. **Bone Miner** 1986 Oct;1(5):383–96

Bone mineral density in women with breast cancer treated with adjuvant tamoxifen for at least two years. Love RR, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):297–302

Efficacy of wheat germ lectin–precipitated alkaline phosphatase in serum as an estimator of bone mineralization rate: comparison to serum total alkaline phosphatase and serum bone Gla–protein. Brixen K, et al. **Calcif Tissue Int** 1989 Feb;44(2):93–8

The effect of chronic caffeine administration on serum markers of bone mineral metabolism and bone histomorphometry in the rat. Glajchen N, et al. **Calcif Tissue Int** 1988 Nov;43(5):277–80

Mineral induction by immobilized polyanionic proteins. Linde A, et al. **Calcif Tissue Int** 1989 Apr;44(4):286–95

1–Hydroxyethylidene–1,1–bisphosphonate (HEBP) simultaneously induces two distinct types of hypomineralization in the rat incisor dentine. Ogawa Y, et al. **Calcif Tissue Int** 1989 Jan;44(1):46–60

Effect of gallium on bone mineral properties. Repo MA, et al. **Calcif Tissue Int** 1988 Nov;43(5):300–6

Microcarriers facilitate mineralization in MC3T3–E1 cells. Shima M, et al. **Calcif Tissue Int** 1988 Jul;43(1):19–25

Deterring bone loss by exercise intervention in premenopausal and postmenopausal women. Smith EL, et al. **Calcif Tissue Int** 1989 May;44(5):312–21

Mineralization of adult mouse bone marrow in vitro. Schoeters GE, et al. **Cell Tissue Kinet** 1988 Sep; 21(5):363–74

Effects of estrogen on mineral metabolism in postmenopausal women as evaluated by multiple assays measuring parathyrin bioactivity. Stock JL, et al. **Clin Chem** 1989 Jan; 35(1):18–22

Serum osteocalcin and bone mineral metabolism following successful renal transplantation. Boiskin I, et al. **Clin Nephrol** 1989 Jun;31(6):316–22

Fractures and vertebral bone mineral density in patients with renal osteodystrophy. Piraino B, et al. **Clin Nephrol** 1988 Aug;30(2):57–62

Quantification of bone mineralization by dual photon absorptiometry in osteopetrosis. Fig LM, et al. **Clin Nucl Med** 1989 Jul;14(7):544–5

Biomarks in secondary osteoporosis. Aroso Dias A, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:89–94

Osteocalcin and bone mineral content in rheumatoid arthritis. Peretz A, et al. **Clin Rheumatol** 1989 Mar;8(1):42–8

Calcium homeostasis and mineralization in puberty. Krabbe S. **Dan Med Bull** 1989 Apr;36(2):113–24 (116 ref.)

Effect of guar gum on mineral balances in NIDDM adults. Behall KM, et al. **Diabetes Care** 1989 May;12(5):357–64

Effects of a variety of calcium sources on mineral metabolism in anemic rats. Greger JL, et al. **Drug Nutr Interact** 1988; 5(4):387–94

Altered mineral metabolism: a mechanism underlying the fetal alcohol syndrome in rats. Zidenberg–Cherr S, et al. **Drug Nutr Interact** 1988;5(4):257–74

Oophorectomy did not show any additional effect on bone density and mineral content in thyroxine treated mice. Broulík PD, et al. **Endocrinol Exp** 1989 Mar;23(1):49–53

Bone mineral homeostasis in spontaneously diabetic BB rats. I. Abnormal vitamin D metabolism and impaired active intestinal calcium absorption. Nyomba BL, et al. **Endocrinology** 1989 Feb;124(2):565–72

The effect of cyclosporin A administration and its withdrawal on bone mineral metabolism in the rat. Schlosberg M, et al. **Endocrinology** 1989 May;124(5):2175–84

Bone mineral homeostasis in spontaneously diabetic BB rats. II. Impaired bone turnover and decreased osteocalcin synthesis. Verhaeghe J, et al. **Endocrinology** 1989 Feb; 124(2):573–82

Cortical and trabecular bone mineral content in women with endometriosis: effect of gonadotropin–releasing hormone agonist and danazol. Dawood MY, et al. **Fertil Steril** 1989 Jul;52(1):21–6

Several aspects of mineral/protein nutrition in relation to consumption of an oil involved in the toxic syndrome. Navarro MP, et al. **Food Chem Toxicol** 1988 Sep; 26(9):759–65

1988 International Symposium on Clinical Disorders of Bone and Mineral Metabolism. May 1988. **Henry Ford Hosp Med J** 1988;36(3):139–70

Unilateral linear basal cell nevus associated with diffuse osteoma cutis, unilateral anodontia, and abnormal bone mineralization. Aloi FG, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):973–8

Effects of dietary iron on performance and mineral utilization in lambs fed a forage–based diet. Prabowo A, et al. **J Anim Sci** 1988 Aug;66(8):2028–35

Prediction of properties of fracture callus by measurement of mineral density using micro–bone densitometry. Aro HT, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1020–30

Relationship of body composition, muscle strength, and aerobic capacity to bone mineral density in older men and women. Bevier WC, et al. **J Bone Miner Res** 1989 Jun; 4(3):421–32

Elevated calcium, phosphorus, and magnesium retention in pregnant rats prior to the onset of fetal skeletal mineralization. Brommage R, et al. **J Bone Miner Res** 1988 Dec;3(6):667–72

Comparison of cross–sectional and longitudinal measurements of age–related changes in bone mineral content. Davis JW, et al. **J Bone Miner Res** 1989 Jun; 4(3):351–7

Differences in the kinetics of the mineralization process in endochondral and intramembranous osteogenesis in human fetal development. Dziedzic–Goclawska A, et al. **J Bone Miner Res** 1988 Oct;3(5):533–9

In vitro mineralization of fetal rat parietal bones in defined serum–free medium: effect of beta–glycerol phosphate. Gronowicz G, et al. **J Bone Miner Res** 1989 Jun;4(3):313–24

Redox studies of the epiphyseal growth cartilage: pyridine nucleotide metabolism and the development of mineralization. Kakuta S, et al. **J Bone Miner Res** 1986 Oct;1(5):433–40

The fate of research grant applications on bone and mineral metabolism at the National Institutes of Health [editorial] Novello AC. **J Bone Miner Res** 1986 Feb;1(1):3–4

Ultradistal and cortical forearm bone density in the assessment of postmenopausal bone loss and nonaxial fracture risk. Price RI, et al. **J Bone Miner Res** 1989 Apr; 4(2):149–55

Bone demineralization, biochemical indices of bone remodeling, and estrogen replacement therapy in adults with Turner's syndrome. Stěpán JJ, et al. **J Bone Miner Res** 1989 Apr;4(2):193–8

Thrombospondin is an osteoblast–derived component of mineralized extracellular matrix. Robey PG, et al. **J Cell Biol** 1989 Feb;108(2):719–27

Recent developments in the roles of vitamins and minerals in reproduction. Hurley WL, et al. **J Dairy Sci** 1989 Mar; 72(3):784–804 (231 ref.)

Effect of reactivity rate and particle size of magnesium oxide on magnesium availability, acid–base balance, mineral metabolism, and milking performance of dairy cows. Xin Z, et al. **J Dairy Sci** 1989 Feb;72(2):462–70

Improvement of the caries resistance of human dental roots by a two–step conversion of the root mineral into fluoridated hydroxylapatite. Hoppenbrouwers PM, et al. **J Dent Res** 1988 Oct;67(10):1254–6

Mineral density and fluoride content of in vitro remineralized lesions. Iijima Y, et al. **J Dent Res** 1988 Mar;67(3):577–81

Image analysis of electron micrographs relating to mineralization in calcifying cartilage: theoretical considerations. Hunziker EB, et al. **J Electron Microsc Tech** 1989 Jan;11(1):9–15

An association between mineral metabolism and the renin–aldosterone system in human hypertension. Lind L, et al. **J Hum Hypertens** 1989 Apr;3(2):137–40

Vitamin D, parathyroid hormone, and bone mineral content of lumbar spine and femur in primary biliary cirrhosis. Almdal T, et al. **J Intern Med** 1989 Mar;225(3):207–13

The effect of chronic dietary acidification using ammonium chloride on acid–base and mineral metabolism in the adult cat. Ching SV, et al. **J Nutr** 1989 Jun;119(6):902–15

Mineral balances of men fed a diet containing fiber in fruits and vegetables and oxalic acid in spinach for six weeks. Kelsay JL, et al. **J Nutr** 1988 Oct;118(10):1197–204

The use of stable isotopes in mineral nutrition research. Turnlund JR. **J Nutr** 1989 Jan;119(1):7–14 (69 ref.)

Mineral homeostasis and bone mass in children treated for acute lymphoblastic leukemia. Atkinson SA, et al. **J Pediatr** 1989 May;114(5):793–800

Bone mineralization and mineral homeostasis in very low–birth–weight infants fed either human milk or fortified human milk. Pettifor JM, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):217–24

Attachment to and phagocytosis of mineral by alveolar bone osteoclasts. Pierce AM. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):63–71

Thyroxine replacement therapy and bone mineral density [letter] Heath H 3d. **Mayo Clin Proc** 1989 Feb;64(2):264–6

Effect of intervertebral changes of the spinal trabecular and cortical mineral content on the precision requirements in longitudinal single and dual energy computed tomography examinations. Sandor T, et al. **Med Phys** 1989 Mar–Apr; 16(2):218–24

Abstracts of the 10th national congress of the Italian Society of Mineral Metabolism. Fiuggi Terme, October 14–15, 1988. **Miner Electrolyte Metab** 1989;15(4):254–60

Ovariectomy abolishes the normalization of femoral mineral content in 40–week–old female X–linked hypophosphatemic mice. Soener RA, et al. **Miner Electrolyte Metab** 1988;14(6):321–31

Magnesium hydroxide as a complementary aluminium–free phosphate binder to moderate doses of oral calcium in uraemic patients on chronic haemodialysis: lack of deleterious effect on bone mineralisation. Morinière P, et al. **Nephrol Dial Transplant** 1988;3(5):651–6

The effects of lactation on bone mineral content in healthy postpartum women. Hayslip CC, et al. **Obstet Gynecol** 1989 Apr;73(4):588–92

Bone mineral and osteoporosis in aging rhesus monkeys. Grynpas MD, et al. **P R Health Sci J** 1989 Apr;8(1):197–204

Bone mineral content of the lumbar spine and lower extremities years after spinal cord lesion. Biering–Sørensen F, et al. **Paraplegia** 1988 Oct;26(5):293–301

Mineral metabolism of aging female rats fed various commercially available calcium supplements or yogurt. Behling AR, et al. **Pharm Res** 1988 Aug;5(8):501–5

Mineral utilization of malted sorghum and corn with added crayfish in rats. Obizoba IC. **Plant Foods Hum Nutr** 1989 Jun;39(2):179–86

The use of stable isotopes in studies of mineral metabolism. Buckley WT. **Proc Nutr Soc** 1988 Sep;47(3):407–16 (26 ref.)

Intravertebral fat measurement with quantitative CT in patients with Cushing disease and anorexia nervosa. Mayo–Smith W, et al. **Radiology** 1989 Mar;170(3 Pt 1):835–8

Nutritional evaluation of a lactose–hydrolyzed milk–based enteral formula diet: II. Energy, nitrogen and mineral bioavailability. Morales M, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):341–6

Mineral needs of the very–low–birthweight infant. Ehrenkranz RA. **Semin Perinatol** 1989 Apr;13(2):142–59 (136 ref.)

A cross–sectional study of age–related loss of mineral content of phalangeal bone in men and women. Trouerbach WT, et al. **Skeletal Radiol** 1988;17(5):338–43

Bone mineral content, gender, body posture, and build in relation to back pain in middle age. Bergenudd H, et al. **Spine** 1989 Jun;14(6):577–9

Bone metabolism following gastric surgery: microdensitometry and single–photon absorptiometry. Imamura M, et al. **Tohoku J Exp Med** 1988 Nov; 156(3):237–49

Bone mineral density following treatment of hyperprolactinemia. Park KH, et al. **Yonsei Med J** 1988; 29(3):239–43

[Effect of anticonvulsant drugs on calcium and phosphorus metabolism and bone mineral content (BMC) changes in epileptics] Zhang SH. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):129–33, 188 (Eng. Abstr.) (Chi)

[Mineral metabolism in diary cows during the administration of Liuos Asetona, a polyol–based anti–ketogenic preparation] Jagoš P, et al. **Vet Med (Praha)** 1988 Aug; 33(8):459–68 (Eng. Abstr.) (Cze)

[Mineral content and bone density: a gold standard for osteoporosis?] Michel D. **Fortschr Med** 1989 May 20; 107(15):16–7 (Ger)

[Computerized tomography determination of bone mineral content in quantitative diagnosis of osteoporosis] Banzer D, et al. **Orthopade** 1989 Feb;18(1):12–7 (Eng. Abstr.) (Ger)

[The effect of long–term increased protein administration on mineral metabolism and kidney function in the rat. I. Renal and enteral excretion of calcium, magnesium, phosphorus, sulfate and acid] Schneider W, et al. **Z Ernahrungswiss** 1988 Sep;27(3):170–85 (Eng. Abstr.) (Ger)

[The effect of long–term increased protein administration on mineral metabolism and kidney function in the rat. II. Kidney function and bone mineralization] Schneider W, et al. **Z Ernahrungswiss** 1988 Sep;27(3):186–200 (Eng. Abstr.) (Ger)

[Aluminum–induced osteopathy—pathogenetic mechanisms] Achenbach H. **Z Gesamte Inn Med** 1989 Mar 1;44(5):133–7 (50 ref.) (Eng. Abstr.) (Ger)

[Quantifying mineralization processes in post–traumatic algodystrophy using computerized tomography densitometry] Krawzak HW, et al. **Z Orthop** 1989 Mar–Apr;127(2):202–6 (Eng. Abstr.) (Ger)

[Mechanism of the decrease in metacarpal bone mineral content due to oophorectomy] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):333–40 (Eng. Abstr.) (Jpn)

[Evaluation of the effect of premenopausal oophorectomy on bone mineral content] Ueno N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):308–12 (Eng. Abstr.) **(Jpn)**

[Dynamics of the mineralization of the ground substance in newly formed bony tissue in organ cultures of mouse bone marrow] Luriia EA, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):614–6 (Eng. Abstr.) **(Rus)**

[Age-related changes in the content of mineral substances in the bones of the lower extremities of the healthy human] Sveshnikov AA, et al. **Fiziol Cheloveka** 1989 Jan–Feb; 15(1):148–53 **(Rus)**

[Correction of mineral and protein metabolism by anabolic preparations and vitamin D2 in rats with dental caries] Rudenko MM, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):35–9 (Eng. Abstr.) **(Rus)**

[Seasonal changes in the mineral composition of colostrum and milk whey of cows] Sugeil' KhA, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):92–4 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Low gastric hydrochloric acid secretion and mineral bioavailability. Champagne ET. **Adv Exp Med Biol** 1989; 249:173–84 (49 ref.)

Protein digestion and the absorption of mineral elements. Wapnir RA. **Adv Exp Med Biol** 1989;249:95–115 (138 ref.)

[Bioavailability of minerals. 1. Determination methods] Kujawa M, et al. **Nahrung** 1988;32(10):971–6 (27 ref.) (Eng. Abstr.) **(Ger)**

[Bioavailability study of micronutrients] Pietrzik K, et al. **Z Ernahrungswiss** 1989 Jun;28(2):130–41 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Mineral regulation of vitamin D metabolism. Carpenter TO. **Bone Miner** 1989 Mar;5(3):259–69 (47 ref.)

Effect of dietary protein and minerals on calcium and zinc utilization. Greger JL. **Crit Rev Food Sci Nutr** 1989; 28(3):249–71 (184 ref.)

Secretion of fibronectin by mineral dust–derived alveolar macrophages and activated peritoneal macrophages. Davies R, et al. **Exp Lung Res** 1989 Mar;15(2):285–97

Diet and intelligence. Gray M. **Food Chem Toxicol** 1988 Jun; 26(6):572–3

Mineral elements in unrefined sugar, and rat reproduction. Eisa O, et al. **Int J Vitam Nutr Res** 1989;59(1):77–9

Effects of the intake of selected vitamins and minerals on cancer prevention. Birt DF. **Magnesium** 1989;8(1):17–30 (103 ref.)

[Development of a tablet technology for dried standardized preparations based on brine and the native liquid phase of therapeutic mud] Sibil'eva LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):66–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Age changes in the crystallinity of bone mineral and in the disorder of its crystal. Matsushima N, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):155–9

In vivo calvarial bone cell responses to dietary perturbations and the implications for mineral homeostasis. Liu CC, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):385–92

THERAPEUTIC USE

In vivo comparison of caries inhibition by a plaque mineral enriching mouthrinse and a fluoride dentifrice. Pearce EI, et al. **Caries Res** 1988;22(6):362–70

Vitamin supplements and purported learning enhancement in mentally retarded children. Menolascino FJ, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Jun;35(3):181–92

Neurogenetic deficits caused by alcoholism: restoration by SAAVE, a neuronutrient intervention adjunct. Blum K, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):297–313 (94 ref.)

Clinical and legal aspects of nonphysician prescription of vitamins, amino acids and other nutritional supplements. Clark HW, et al. **J Psychoactive Drugs** 1988 Jul–Sep; 20(3):355–74 (147 ref.)

Clinical impressions of SAAVE and tropamine. Horne DE. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):333–6

Improvement of cocaine–induced neuromodulator deficits by the neuronutrient Tropamine. Trachtenberg MC, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):315–31 (90 ref.)

Prevention of neural tube defect recurrences in Yorkshire: final report [letter] Smithells RW, et al. **Lancet** 1989 Aug 26;2(8661):498–9

[Bishofit as a balneotherapy factor] Kiselev VB. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):64–6 (Eng. Abstr.) **(Rus)**

TOXICITY

Accumulation of mixed mineral dusts in the lungs of rats during chronic inhalation exposure. McMillan CH, et al. **Environ Res** 1989 Apr;48(2):218–37

Experimental studies on ingested fibres. Chouroulinkov I. **IARC Sci Publ** 1989;(90):112–26 (26 ref.)

Formation of DNA adduct 8–hydroxy–2'–deoxyguanosine induced by man–made mineral fibres. Leanderson P, et al. **IARC Sci Publ** 1988;(89):422–4

Carcinogenicity studies on natural and man–made fibres with the intraperitoneal test in rats. Pott F, et al. **IARC Sci Publ** 1989;(90):173–9

[Problems of improving working conditions for workers engaged in the production of nitrogen mineral fertilizers] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(3):1–4 (Eng. Abstr.) **(Rus)**

[The effect of mineral fertilizers on mosquito larvae (Culicidae)] Fedorova VG. **Parazitologiia** 1989 May–Jun; 23(3):193–9 (Eng. Abstr.) **(Rus)**

URINE

[Circadian rhythms of mineral–excreting kidney function in healthy persons and their changes in ischemic heart disease] Aslanian NL, et al. **Ter Arkh** 1989;61(4):45–8 (Eng. Abstr.) **(Rus)**

MINIATURE SWINE see **SWINE, MINIATURE**

MINIATURIZATION see under **ELECTRONICS**

MINICOMPUTERS see under **COMPUTERS**

MINIMAL BRAIN DYSFUNCTION see **ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY**

MINING

Accumulation of cadmium by plants of Zawar Mines, Rajasthan, India. Aery NC, et al. **Acta Biol Hung** 1988; 39(1):87–98

Body dimensions of miners in Ostrava. Holibka V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:59–99

Studies on blood alcohol in the workers of a Zambian copper mine. Buchanan DJ. **Alcohol Alcohol** 1988;23(3):239–42

Reduction of airborne radioactive dust by means of a charged water spray. Bigu J, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):336–45

Cancer mortality among a group of fluorspar miners exposed to radon progeny. Morrison HI, et al. **Am J Epidemiol** 1988 Dec;128(6):1266–75

Silica exposure and silicosis among Ontario hardrock miners: III. Analysis and risk estimates. Muir DC, et al. **Am J Ind Med** 1989;16(1):29–43

Silica exposure and silicosis among Ontario hardrock miners: I. Methodology. Muir DC, et al. **Am J Ind Med** 1989; 16(1):5–11

Lung functions in phosphate miners in Jordan: a pilot study. Samara N, et al. **Am J Ind Med** 1989;16(3):297–304

Epidemiology of coca and alcohol use among high–altitude miners in Argentina. Schinder EO, et al. **Am J Ind Med** 1989;15(5):579–87

Silica exposure and silicosis among Ontario hardrock miners: II. Exposure estimates. Verma DK, et al. **Am J Ind Med** 1989;16(1):13–8

Mineralogic correlates of fibrosis in chrysotile miners and millers. Churg A, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):891–6

Pulmonary tuberculosis in South African gold miners. Cowie RL, et al. **Am Rev Respir Dis** 1989 May;139(5):1086–9

Hard–rock mining exposures affect smokers and nonsmokers differently. Results of a community prevalence study. Kreiss K, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1487–93

Factors influencing the reading of small irregular opacities in a radiological survey of asbestos miners in South Africa. Sluis–Cremer GK, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):237–43

Determinants of chronic bronchitis and lung dysfunction in Western Australian gold miners [letter] Humble C, et al. **Br J Ind Med** 1988 Dec;45(12):845

Health of vermiculite miners exposed to trace amounts of fibrous tremolite. McDonald JC, et al. **Br J Ind Med** 1988 Sep;45(9):630–4

Respiratory cancer in chrysotile textile and mining industries: exposure inferences from lung analysis. Sebastien P, et al. **Br J Ind Med** 1989 Mar;46(3):180–7

Relation between asbestosis and bronchial cancer in amphibole asbestos miners. Sluis–Cremer GK, et al. **Br J Ind Med** 1989 Aug;46(8):537–40

Toxicity of potash brines to early developmental stages of Atlantic salmon (Salmo salar). Peterson RH, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):391–7

Gallium lung scanning and bronchoalveolar lavage in crocidolite–exposed workers. Hayes AA, et al. **Chest** 1989 Jul;96(1):22–6

Pulmonary complications in lead miners. Masjedi MR, et al. **Chest** 1989 Jul;96(1):18–21

Relationship of 220Rn and 222Rn progeny levels in Canadian underground U mines. Bigu J. **Health Phys** 1988 Sep; 55(3):525–32

Evaluation of MDA instant working level meters. Holub RF, et al. **Health Phys** 1989 Jul;57(1):61–70

Plant/soil concentration ratios of 226Ra for contrasting sites around an active U mine–mill. Ibrahim SA, et al. **Health Phys** 1988 Dec;55(6):903–10

Comments on Bigu's 'Relationship of 220Rn and 222Rn Progeny Levels in Canadian Underground U Mines' [letter] Johnson JR. **Health Phys** 1989 Jul;57(1):210

Health implications of radionuclide levels in cattle raised near U mining and milling facilities in Ambrosia Lake, New Mexico. Lapham SC, et al. **Health Phys** 1989 Mar; 56(3):327–40

Radon progeny exposure and lung cancer risk in New Mexico U miners: a case–control study. Samet JM, et al. **Health Phys** 1989 Apr;56(4):415–21

Bias in United States U miners' exposure data. Schiager KJ. **Health Phys** 1989 Jul;57(1):169–70

Risks of airborne particulate exposure in a copper mine in Chile. Romo–Kröger CM, et al. **Ind Health** 1989;27(2):95–9

Raynaud's phenomenon of fingers and toes of miners exposed to local and whole–body vibration and cold. Hedlund U. **Int Arch Occup Environ Health** 1989;61(7):457–61

Etiology of lung cancer at the Gejiu tin mine, China. Sun SQ. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:103–15

Respiratory enthalpy changes in mine rescue workers exercising under heat stress. Leigh J, et al. **J Appl Physiol** 1988 Dec;65(6):2714–9

Relationship of lung function loss to level of initial function: correcting for measurement error using the reliability coefficient. Irwig L, et al. **J Epidemiol Community Health** 1988 Dec;42(4):383–9

A simple field test for assessing salt balance in heat–stressed miners. Cross RB, et al. **J Occup Med** 1989 Aug; 31(8):668–73

Periodic examination of South African mine workers [comment] Frumkin H, et al. **J Occup Med** 1989 Jun; 31(6):563–5. **Comment on:** J Occup Med 1988 Jul;30(7):580–6

Follow–up study of pulmonary function and respiratory tract symptoms in workers in a Swedish iron ore mine. Jörgensen HS, et al. **J Occup Med** 1988 Dec;30(12):953–8

Uranium effects—an "enlightening" exchange [letter] Lieben J. **J Occup Med** 1981 Mar;23(3):156

Pneumoconiosis in iron ore surface mining in Labrador. Martin JR, et al. **J Occup Med** 1988 Oct;30(10):780–4

Mortality among men employed between 1943 and 1947 at a uranium–processing plant. Polednak AP, et al. **J Occup Med** 1981 Mar;23(3):169–78

Cigarette smoking and federal black lung benefits in bituminous coal miners. Roy TM, et al. **J Occup Med** 1989 Feb;31(2):98–101

Lung cancer mortality among nonsmoking uranium miners exposed to radon daughters. Roscoe RJ, et al. **JAMA** 1989 Aug 4;262(5):629–33

Lung cancer cell type and mining exposure. Davies JC, et al. **S Afr Med J** 1988 Dec 17;74(12):607–10

Evaluation of lung function in uranium mine workers [letter] Myers J. **S Afr Med J** 1989 Feb 18;75(4):195–6

Exposure to dust in the reprocessing of mine waste dumps [letter] Rees D, et al. **S Afr Med J** 1989 May 6;75(9):450–1

Development of a community intervention programme on miners' health and working environment in Nicaragua. Aragon A, et al. **Scand J Soc Med** 1988;16(4):237–40

Mortality among pyrite miners with low–level exposure to radon daughters. Battista G, et al. **Scand J Work Environ Health** 1988 Oct;14(5):280–5

Oral conditions among workers in the Danish granite industry. Petersen PE, et al. **Scand J Work Environ Health** 1988 Oct;14(5):328–31

Lung cancer risks of underground miners: cohort and case–control studies. Archer VE. **Yale J Biol Med** 1988 May–Jun;61(3):183–93 (36 ref.)

Models for the analysis of radon–exposed populations. Lubin JH. **Yale J Biol Med** 1988 May–Jun;61(3):195–214 (58 ref.)

[Use of SEM–EDX–WDX analysis in studying the etiology of lung cancer in tin miners of Yunnan] Sun SQ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):254–6, 18 (Eng. Abstr.) **(Chi)**

[Experimental study of pathogenic effects of dusts of vanad–titan–magnetite on rats lungs] Song YK. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):87–9 (Eng. Abstr.) **(Chi)**

[Analysis of minerals of lobar lavage fluid from patients with silicosis, stannosis and cement pneumoconiosis] Wang LH. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):88–91 (Eng. Abstr.) **(Chi)**

[Atmospheric pollution and mercury poisoning caused by peasants mercury smelting] Wu DL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):83–6 (Eng. Abstr.) **(Chi)**

[Nutritional status of vitamin A and carotenes in miners and lung cancer patients] Luo XN. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):223–5 (Eng. Abstr.) **(Chi)**

[Preventive stabilizing examinations in workers in the Czechoslovak Uranium Industry Enterprise] Ripová L, et al. **Cesk Otolaryngol** 1988 Dec;37(6):338–44 (Eng. Abstr.) **(Cze)**

[Forensic medical and dental problems of identification of victims of mining disasters] Neoral L, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:395–9 **(Ger)**

[Diagnosis and therapy of Raynaud's phenomenon in occupationally–induced vibration trauma] Roeser BE, et al. **Derm Beruf Umwelt** 1989 May–Jun;37(3):78–81 (Eng. Abstr.) **(Ger)**

[Visceral paracoccidioidomycosis in a gold miner from Brazil] Köhler C, et al. **Mycoses** 1988 Aug;31(8):395–403 (Eng. Abstr.) **(Ger)**

[Arguments against the recognition of arthroses of the knee joint following occupational stress as an occupational disease] Greinemann H. **Unfallchirurg** 1988 Aug; 91(8):374–80 (Eng. Abstr.) **(Ger)**

[The effect of occupational stress on blood pressure of miners in ore mines] Zwingenberger W, et al. **Z Gesamte Hyg** 1989 May;35(5):269–71 (Eng. Abstr.) **(Ger)**

[Work posture and spinal changes in porphyry miners] Colombini D, et al. **Med Lav** 1988 May–Jun;79(3):223–33 (Eng. Abstr.) **(Ita)**

[Cardiovascular stress in workers of porphyry mines] Zanettini R, et al. **Med Lav** 1988 May–Jun;79(3):211–8 (Eng. Abstr.) **(Ita)**

[Reaction time to single and double stimuli in operators of mining equipment] Gosk A, et al. **Med Pr** 1988;39(5):322–8 (Eng. Abstr.) **(Pol)**

[Classification of dusts with regard to the degree of fibrogenicity] Beletskiĭ VS. **Gig Sanit** 1988 Nov;(11):34–7 (Eng. Abstr.) **(Rus)**

[Determining the level of ascorbic acid in the urine in hygienic studies] Petrova GA. **Gig Sanit** 1989 May;(5):49–50 **(Rus)**

[Significance of electrocardiographic studies in the detection of coronary pathology during prophylactic mass screening of miners working in polymetal mines] Abdrashitova GA, et al. **Gig Tr Prof Zabol** 1989;(6):49–50 **(Rus)**

[Evaluation of the functional status of iron–ore miners based on the results of the mathematical analysis of cardiac rhythm] Antonik IP, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):27–31 (Eng. Abstr.) **(Rus)**

[Reaction of the pituitary gland–adrenal cortex system of miners to vibration and noise] ChatskiiGIa, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):52–3 **(Rus)**

[Evaluation of the efficacy of a stay in a preventorium for miners with cardiovascular pathology and the residual manifestations of craniocerebral injury] Davydova NN, et al. **Gig Tr Prof Zabol** 1989;(2):41–2 **(Rus)**

[A method for determining ammonium alum–based aerosol–forming dusts in mine air] Gorskaia RV, et al. **Gig Tr Prof Zabol** 1989;(2):46–7 **(Rus)**

[Function of the respiratory system in miners with chronic regional hypobaric hypoxia and hypothermia] Lutal AV, et al. **Gig Tr Prof Zabol** 1989;(2):25–8 (Eng. Abstr.) **(Rus)**

[Occupational morbidity of workers of the Krivbass iron ore works: ways of its reduction and prevention] Makarenko NA, et al. **Gig Tr Prof Zabol** 1989;(6):1–4 (Eng. Abstr.) **(Rus)**

[Causes of primary disability of miners at the iron ore mining–processing plants] Pavlenko ME, et al. **Gig Tr Prof Zabol** 1989;(6):4–6 (Eng. Abstr.) **(Rus)**

[Electrophysical processes during grinding of materials possessing piezoelectric properties, and fibrogenic activity of the dust (review of the literature)] Pecherskiĭ VI. **Gig Tr Prof Zabol** 1989;(4):34–6 (38 ref.) **(Rus)**

[Comparative informative value of endobronchial methods of biopsy in the diagnosis of silicotuberculosis] Krivonos AP, et al. **Probl Tuberk** 1988;(7):29–32 (Eng. Abstr.) **(Rus)**

[Development of disinfection regimens for the special clothing of miners on a test object model made from different fabrics] Mikhno IL, et al. **Vrach Delo** 1988 Jul;(7):116–8 (Eng. Abstr.) **(Rus)**

[Medical services for workers in the mining industry] Pavlenko ME, et al. **Vrach Delo** 1988 Sep;(9):117–8 **(Rus)**

[Effect of the microclimate of salt mines on T– and B–lymphocyte function in bronchial asthma patients] Simlonka IuM, et al. **Vrach Delo** 1989 Mar;(3):57–9 (Eng. Abstr.) **(Rus)**

[Mercury concentration and gastrointestinal symptoms in patients from mines of the State of Bolívar] Romero A, et al. **GEN** 1987 Apr–Jun;41(2):41–7 (Eng. Abstr.) **(Spa)**

HISTORY

Occupational health aspects of the arsenic extractive industry in Britain (1868–1925). Harper M. **Br J Ind Med** 1988 Sep;45(9):602–5

INSTRUMENTATION

Prevalence of vibration–induced white finger and assessment of vibration exposure among travertine workers in Italy. Bovenzi M, et al. **Int Arch Occup Environ Health** 1988;61(1–2):25–34

[Characteristics of the structure of a solid phase of ore aerosol during the operation of power–driven Diesel equipment] Chebotarev AG, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):50–2 **(Rus)**

[Central hemodynamic function of miners operating underground self–propelled equipment in the Arctic Kola Peninsula] Popondopulo AN, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):49–50 **(Rus)**

METHODS

Reducing workers' dust exposure during bag stacking in enclosed vehicles. Cecala AB, et al. **Am Ind Hyg Assoc J** 1989 Feb;50(2):99–104

STANDARDS

[Ways of further solving theoretical and practical problems regarding the prevention of dust–induced occupational diseases of the respiratory organs (data of the 2nd international symposium. Czechoslovakia, September 22–27, 1986)] Elovskaia LT. **Gig Tr Prof Zabol** 1988 Nov;(11):4–7 (Eng. Abstr.) **(Rus)**

[Various problems of occupational hygiene in gold mines in relation to the introduction of new technology in high–altitude Armenian S.S.R.] Melkonian AM, et al. **Gig Tr Prof Zabol** 1989;(5):44–6 **(Rus)**

[Physiologic and hygienic substantiation of rational systems of work and rest during shaft sinking in iron ore mines] Shevtsova VM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):14–8 (Eng. Abstr.) **(Rus)**

MINIPIGS see **SWINE, MINIATURE**

MINK

Monoclonal antibodies applied in an immunoperoxidase method for detection of parvovirus in specimens of small intestine from dog and mink. Jönsson L, et al. **Acta Vet Scand** 1988;29(2):263–4

[Experimental fumigatotoxicosis in mink] Kurbatskaia ZA, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):55–8 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Cyclic modulation of Sertoli cell junctional complexes in a seasonal breeder: the mink (Mustela vison). Pelletier RM. **Am J Anat** 1988 Sep;183(1):68–102

BLOOD

A chronic jugular catheterization for remote blood sampling in freely moving mink. Bonnefond C, et al. **Physiol Behav** 1988;44(1):141–6

GENETICS

Chromosomal and regional localization of the genes for UMPH2, APRT, PEPD, PEPS, PSP, and PGP in mink: comparison with man and mouse. Pack SD, et al. **Cytogenet Cell Genet** 1989;50(2–3):127–31

Subchromosomal localization and order of GLA, PGK1, HPRT, and G6PD loci on the X chromosome of the American mink (Mustela vison). Zhdanova NS, et al. **Cytogenet Cell Genet** 1988;48(1):2–5

Polycystic disease of the kidney in related mink. Henriksen P. **J Comp Pathol** 1988 Jul;99(1):101–4

[Regulatory gene controlling the expression of allotype H6 of immunoglobulin gamma–chain constant region in the American mink] Fomicheva II, et al. **Dokl Akad Nauk SSSR** 1988 Sep–Oct;302(1):215–7 **(Rus)**

[Genetics and evolution of the mink Lpm–system. VIII. Characteristic changes in the antigenic structure of Lpm–protein and alpha2– macroglobulin in Mustelidae family] Ermolaev VI, et al. **Genetika** 1988 Sep;24(9):1658–64 (Eng. Abstr.) **(Rus)**

[Effect of color mutation on the function of the adrenal cortex in chronic feed stress in American mink] Trapezov OV, et al. **Genetika** 1989 Mar;25(3):508–12 (Eng. Abstr.) **(Rus)**

[The distribution of 4 genes (alpha GAL, PGK–1, HPRT and G6PD) on the X chromosome of the American mink (Mustela vison)] Zhdanova NS, et al. **Genetika** 1988 Aug;24(8):1448–55 (Eng. Abstr.) **(Rus)**

[Karyotypic characteristics of a number of clonal lines of an interspecific mouse–mink hybridoma] Glazko TT. **Tsitologiia** 1988 May;30(5):597–605 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Mink–mouse hybridomas that secrete mink immunoglobulin G. Galakhar NL, et al. **J Immunol Methods** 1988 Nov 25;115(1):39–43

METABOLISM

Immunohistochemical demonstration and radioimmunoassay of melatonin in the mink pineal gland. Tillet Y, et al. **Cell Tissue Res** 1989 Jul;257(1):23–8

MICROBIOLOGY

The occurrence of thermophilic Campylobacter in mink and an experimental oral infection of pregnant mink by Campylobacter jejuni. Hänninen ML, et al. **Acta Vet Scand** 1988;29(3–4):463–8

Infection studies in mink with seal–derived morbillivirus. Blixenkrone–Møller M, et al. **Arch Virol** 1989;106(1–2):165–70

PHYSIOLOGY

Regulation of weight loss in male farm mink. Korhonen H, et al. **Comp Biochem Physiol [A]** 1989;92(3):355–7

In–vitro secretion of prolactin and growth hormone in the presence of melatonin by pituitary gland from mink kept under long or short days. Meunier M, et al. **J Endocrinol** 1988 Nov;119(2):287–92

Long–term effects of pinealectomy on testicular function, luteinizing hormone–releasing hormone hypothalamic system, and plasma prolactin levels in the mink, a short–day breeder. Boissin–Agasse L, et al. **J Pineal Res** 1988;5(4):385–96

Reproduction and fertility in the mink (Mustela vision). Sundqvist C, et al. **J Reprod Fertil** 1989 Mar;85(2):413–41 (352 ref.)

[The action of protein–vitamin preparations from micromycetes on fur–bearing animals] Bilaĭ VI, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):65–9 (Eng. Abstr.) **(Rus)**

[Gonadal and adrenal endocrine functions in female minks of 2 genotypes in postnatal ontogeny] Gulevich RG, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun;24(3):445–50 (Eng. Abstr.) **(Rus)**

MINK CELL FOCUS–INDUCING VIRUSES see under **MOUSE LEUKEMIA VIRUSES**

MINK ENCEPHALOPATHY VIRUS see under **VERTEBRATE VIRUSES, UNCLASSIFIED**

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY see **MMPI**

MINNOWS see **CYPRINIDAE**

MINOCYCLINE see under **TETRACYCLINES**

MINOR HISTOCOMPATIBILITY LOCI

Study of a human minor alloantigen in relation to clinical graft–versus–host disease. Elkins WL, et al. **Bone Marrow Transplant** 1987 Apr;1(4):397–403

The mechanism of graft–host–tolerance in murine radiation chimeras transplanted across minor histocompatibility barriers. Perreault C, et al. **Bone Marrow Transplant** 1989 Jan;4(1):83–7

Mechanism of immune dysfunction associated with minor antigen graft–vs–host disease in mice. Hamilton BL, et al. **Cancer Detect Prev** 1988;12(1–6):657–62

Maternally induced graft–vs–host disease to minor antigens as a possible etiology of an acquired immunodeficiency syndrome in mice. Hamilton MS, et al. **Cancer Detect Prev** 1988;12(1–6):205–10

Neonatal tolerance induction to Mlsa. I. Tolerance to Mlsa is restricted by shared MHC determinants. Waite DJ, et al. **Cell Immunol** 1988 Nov;117(1):70–7

Neonatal tolerance induction to Mlsa. II. T cells induce tolerance to Mlsa. Waite DJ, et al. **Cell Immunol** 1988 Nov;117(1):78–88

Peripheral tolerance mechanisms prevent the development of autoreactive T cells in chimeras grafted with two minor incompatible thymuses. Zamoyska R, et al. **Eur J Immunol** 1989 Jan;19(1):111–7

SV40 T antigen acts as a minor histocompatibility antigen of SV40 T antigen tolerant transgenic mice. Juretic A, et al. **Immunogenetics** 1989;29(6):366–70

Genetic and stimulator cell requirements for generation and activation of minor histocompatibility antigen–specific memory cytotoxic T–lymphocyte precursors. Ando KI, et al. **Immunology** 1988 Aug;64(4):661–7

Cellularly defined minor histocompatibility antigens are differentially expressed on human hematopoietic progenitor cells. Voogt PJ, et al. **J Exp Med** 1988 Dec 1;168(6):2337–47

Immune dysfunction associated with graft–vs–host reaction in mice transplanted across minor histocompatibility barriers. II. Reversible defect in T–dependent antibody responses. Budhecha S, et al. **J Immunol** 1989 Jun 1;142(11):3740–5

Cytotoxic T lymphocyte responses to minor H–43 alloantigens in H–43a and H–43b mice. Both anti–H–43b and anti–H–43a CTL activities are generated exclusively in the context of the same H–2Kb restriction element. Ishikawa H, et al. **J Immunol** 1988 Nov 1;141(9):2918–23

Recovery of activated cytotoxic T cells from minor H incompatible tumor graft rejection sites. Ksander BR, et al. **J Immunol** 1989 Jul 15;143(2):426–31

Immune dysfunction associated with graft–versus–host reaction in mice transplanted across minor histocompatibility barriers. I. Depressed antigen–specific antibody responses to bacteriophage phi chi 174. Hamilton BL, et al. **Transplantation** 1989 Jun;47(6):1061–7

Prolonged minor allograft survival in intravenously primed mice. Effect of recipient's age and of prior immunity to minor H antigens on the priming cells. Johnson LL. **Transplantation** 1989 Jun;47(6):1017–20

Developmental coupling of expression of the Igh–linked minor antigen H–40 to membrane immunoglobulin expression. Schreiber KL, et al. **Transplantation** 1989 Aug;48(2):331–8

MINORITY GROUPS

Congress challenges medical schools on progress in minority representation. Carr S. **Acad Med** 1989 Feb;64(2):81

Predicting the medical school progress of minority students who participated in a preparatory program. McGlinn S, et al. **Acad Med** 1989 Mar;64(3):164–6

Minorities and health [editorial] Nickens H. **Acad Med** 1989 Mar;64(3):148

Course selections and career plans of black participants in a summer intervention program for minority students. Watts VG, et al. **Acad Med** 1989 Mar;64(3):166–7

Pediatric patients, race, and DRG prospective hospital payment. Munoz E, et al. **Am J Dis Child** 1989 May;143(5):612–6

The problem of diabetic renal failure in the United States: an overview. Teutsch S, et al. **Am J Kidney Dis** 1989 Jan;

13(1):11–3
New AIDS Prevention Research Center to be established at Columbia University [news] **Am J Public Health** 1989 Apr;79(4):466
Inside the national office. Office of Minority Concerns. **ASHA** 1988 Aug;30(8):23–5
E Pluribus Pluribus: multicultural imperatives for the 1990s and beyond. Cole L. **ASHA** 1989 Sep;31(9):65–70
The need for multicultural literacy. Herer GR. **ASHA** 1989 Sep;31(9):79
Multicultural professional education. Hunter SL, et al. **ASHA** 1989 Sep;31(9):76–7
Minority audiologists: a critical need to establish a professional/community identity. Jones RC. **ASHA** 1988 Aug;30(8):35–7
Prospective study of the disadvantage of people from ethnic minority groups applying to medical schools in the United Kingdom. McManus IC, et al. **BMJ** 1989 Mar 18; 298(6675):723–6
Survey of dental health initiatives among ethnic minorities [letter] Williams S. **Br Dent J** 1989 Mar 25;166(6):197–8
Dentists and ethnic minority communities. Williams SA, et al. **Br Dent J** 1989 Mar 25;166(6):193–5
The Satanic Verses can damage your health [editorial] Karmi G. **Br J Hosp Med** 1989 May;41(5):411
The epidemiology of tuberculosis in the United States. Implications for diagnosis and treatment. Bloch AB, et al. **Clin Chest Med** 1989 Sep;10(3):297–313 (48 ref.)
Migration, ethnic minorities and tuberculosis [editorial] Tala E. **Eur Respir J** 1989 Jun;2(6):492–3
Hispanic and non-Hispanic elderly on admission to the nursing home: a pilot study. Espino DV, et al. **Gerontologist** 1988 Dec;28(6):821–4
Mental health services and older adult minorities: an assessment. Feilin PA, et al. **Gerontologist** 1988 Aug; 28(4):442–7
Minority aging research: opportunity and challenge [editorial] [published erratum appears in Gerontologist 1988 Oct;28(5):preceding 577] Gibson RC. **Gerontologist** 1988 Aug;28(4):559–60
The recruitment and retention of minority and disadvantaged allied health students. Baker J, et al. **J Allied Health** 1989 Summer;18(4):389–401
Effecting change in multicultural health promotion: a systems approach. Howe-Murphy R, et al. **J Allied Health** 1989 Spring;18(3):291–305
A profile of minority allied health faculty. Walker PW. **J Allied Health** 1989 Spring;18(3):307–13
Minority group dental students in a period of decreasing enrollment. Waldman HB. **J Am Coll Dent** 1988 Winter; 55(4):36–40 (8 ref.)
Health status of aged minorities: directions for clinical research [editorial] Anderson NB, et al. **J Gerontol** 1989 Jan;44(1):M1–2
Minority aging research: opportunity and challenge [editorial] Gibson RC. **J Gerontol** 1989 Jan;44(1):S2–3
Message to biologists from the GSA taskforce on minority issues in gerontology [editorial] Smith L, et al. **J Gerontol** 1989 Jan;44(1):B1–3
Investigational drugs for treatment use: an avenue of hope for minority populations. Veiga RV, et al. **J Natl Med Assoc** 1989 May;81(5):507–12 (22 ref.)
Leads from the MMWR. Leading major congenital malformations among minority groups in the United States, 1981–1986. **JAMA** 1989 Jan 13;261(2):205–9
Community empowerment as a strategy for health promotion for black and other minority populations. Braithwaite RL, et al. **JAMA** 1989 Jan 13;261(2):282–3
Policies, pills, and political will: a critique of policies to improve the health status of ethnic minorities. Ahmad WI. **Lancet** 1989 Jan 21;1(8630):148–50
For-profit smoking-cessation programs and their clients. Caplan RL, et al. **N J Med** 1989 Mar;86(3):181–3
Is the color of your skin dangerous to your health and safety at work? [editorial] Polakoff PL. **Occup Health Saf** 1989 Feb;58(2):15
Comparison of the preclinical academic performance of minority and majority medical students admitted with low academic credentials. Helfer RE. **Proc Annu Conf Res Med Educ** 1988;27:316–21
The limitations of traditional variables in predicting the progress of nontraditional students. Jackson EW, et al. **Proc Annu Conf Res Med Educ** 1988;27:304–9
Report of the Second Public Health Service AIDS Prevention and Control Conference. Minority issues in AIDS. **Public Health Rep** 1988;103 Suppl 1:91–4
Nursing and minority research [editorial] Williams MA. **Res Nurs Health** 1989 Aug;12(4):iii–iv
Glucose-6-phosphate dehydrogenase deficiency in ethnic minorities in The Netherlands. Wolf BH, et al. **Trop Geogr Med** 1988 Oct;40(4):322–30
Generational equity: issues of gender and race. Catchen H. **Women Health** 1988;14(3–4):21–38
Aging minority women: issues in research and health policy. Padgett D. **Women Health** 1988;14(3–4):213–25 (26 ref.)

EDUCATION

Cross-cultural health education: a pedagogical challenge. Airhihenbuwa CO, et al. **J Sch Health** 1988 Aug; 58(6):240–2
Minority physician training: critical for improving overall health of nation [news] Goldsmith MF, et al. **JAMA** 1989 Jan 13;261(2):187–9
Preventing twists, turns on road to medical education from becoming permanent detours [news] Raymond C. **JAMA** 1989 Jan 13;261(2):189, 193
Medical education for minorities at a US medical school. Yergan J, et al. **Med Educ** 1988 Jul;22(4):317–24
Mentor–protégé relationships: a critical element in affirmative action. Weekes DP. **Nurs Outlook** 1989 Jul–Aug; 37(4):156–7

PSYCHOLOGY

General self-esteem of adolescents from ethnic minorities in The Netherlands and the reflected appraisal process. Verkuyten M. **Adolescence** 1988 Winter;23(92):863–71
Alcohol, smoking and pregnancy: some observations on ethnic minorities in the United Kingdom. Waterson EJ, et al. **Br J Addict** 1989 Mar;84(3):323–5
Acquired immunodeficiency syndrome and adolescents: knowledge, attitudes, beliefs, and behaviors in a New York City adolescent minority population. Goodman E, et al. **Pediatrics** 1989 Jul;84(1):36–42

MINOXIDIL

ADMINISTRATION & DOSAGE

Topical minoxidil: its use in treatment of male pattern baldness. Kulick MI. **Ann Plast Surg** 1988 Sep;21(3):273–5 (23 ref.)
Extensive alopecia areata. Results of treatment with 3% topical minoxidil. Ranchoff RE, et al. **Cleve Clin J Med** 1989 Mar–Apr;56(2):149–54
Topical minoxidil used before and after hair transplantation. Bouhanna P. **J Dermatol Surg Oncol** 1989 Jan;15(1):50–3
Nifedipine substituted for minoxidil in the treatment of refractory hypertension. Heagerty AM, et al. **J Hum Hypertens** 1987 Sep;1(2):83–6

ADVERSE EFFECTS

The safety of topical minoxidil solution in the treatment of pattern baldness: the results of a 27-center trial. Spindler JR. **Clin Dermatol** 1988 Oct–Dec;6(4):200–12
Pruritic rash with actinic keratosis and impending exfoliation in a patient with hypertension managed with minoxidil. Ackerman BH, et al. **Drug Intell Clin Pharm** 1988 Sep; 22(9):702–3
Minoxidil and tail-like effect [letter] Baral J. **Int J Dermatol** 1989 Mar;28(2):140
Telogen effluvium and minoxidil. Bardelli A, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):572–3
Orthostatic hypotension occurring after discontinuation of long-term minoxidil therapy. Noel HC. **Nurse Pract** 1988 Aug;13(8):25, 28, 30–2
[Toxic effects of 2% minoxidil] Rigoni C, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):609–10 **(Ita)**

ANALOGS & DERIVATIVES

Glyburide blocks the relaxation response to BRL 34915 (cromakalim), minoxidil sulfate and diazoxide in vascular smooth muscle. Winquist RJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):149–56

HISTORY

The history of the development of minoxidil. Zins GR. **Clin Dermatol** 1988 Oct–Dec;6(4):132–47 (18 ref.)

PHARMACOKINETICS

Absorption of minoxidil after topical application: effect of frequency and site of application. Eller MG, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):396–402
The pharmacokinetics of 2.5- to 10-mg oral doses of minoxidil in healthy volunteers. Fleishaker JC, et al. **J Clin Pharmacol** 1989 Feb;29(2):162–7
Studies on the efficacy of methyl esters of n-alkyl fatty acids as penetration enhancers. Chukwumerije O, et al. **J Invest Dermatol** 1989 Sep;93(3):349–52

PHARMACOLOGY

An experimental study evaluating the effect of minoxidil on the growth cycle of hair follicles. Gobé GC, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):190–4
Arterial vasodilators, cardiac volume load, and cardiac hypertrophy in normotensive rats. Tsoporis J, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H876–80
Topical minoxidil: cardiac effects in bald man. Leenen FH, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):481–5
The effect of minoxidil on endothelial cells in vitro. Norris WD, et al. **Cell Biol Int Rep** 1989 Jun;13(6):555–62
Histologic response to topically applied minoxidil in male-pattern alopecia. Abell E. **Clin Dermatol** 1988 Oct–Dec;6(4):191–4
The stumptailed macaque as a model for androgenetic alopecia: effects of topical minoxidil analyzed by use of the folliculogram. Brigham PA, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):177–87 (16 ref.)
Direct T-cell effects of minoxidil. Fiedler VC, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):148–51
Androgenetic alopecia, trichotrophic substances, and histologic studies of the human scalp. Headington JT. **Clin Dermatol** 1988 Oct–Dec;6(4):188–90
The hairless mouse as a model for evaluating promoters of hair growth. Kligman LH. **Clin Dermatol** 1988 Oct–Dec; 6(4):163–8
The effect of testosterone, cyproterone acetate, and minoxidil on hair loss in the androchronogenetic alopecia mouse. Matias JR, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):169–76
Effects of minoxidil on human skin fibroblasts in culture. Pinnell SR, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):152–8
Minoxidil stimulates mouse vibrissae follicles in organ culture. Buhl AE, et al. **J Invest Dermatol** 1989 Mar; 92(3):315–20
Comparison of the effects of putative activators of K+ channels on pancreatic B-cell function. Plant TD, et al. **Pflugers Arch** 1989;414 Suppl 1:S152–3

PHYSIOLOGY

Endothelium-derived relaxing factor and minoxidil: active mechanisms in hair growth [letter] Proctor PH. **Arch Dermatol** 1989 Aug;125(8):1146

POISONING

Severe toxicity from ingestion of a topical minoxidil preparation. McCormick MA, et al. **Am J Emerg Med** 1989 Jul;7(4):419–21

THERAPEUTIC USE

Minoxidil. A few of the questions you're likely to hear. **Am Pharm** 1988 Nov;NS28(11):47–50
Is minoxidil (Rogaine) clinically effective? [letter] Feldman SR. **Arch Dermatol** 1989 Apr;125(4):572
Three percent topical minoxidil therapy for female androgenetic alopecia. Hordinsky MK, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):213–7
Topical minoxidil: review of efficacy. Katz HI. **Clin Dermatol** 1988 Oct–Dec;6(4):195–9 (19 ref.)
Topical minoxidil approved by FDA [news] **Clin Pharm** 1988 Dec;7(12):858, 862
Topical minoxidil: review of efficacy and safety. Katz HI. **Cutis** 1989 Jan;43(1):94–8 (44 ref.)
Baldness and minoxidil [letter] **Lancet** 1989 Apr 22; 1(8643):910
Baldness and minoxidil advertising [letter] Burton JL. **Lancet** 1989 Feb 25;1(8635):442–3
[Minoxidil: no hope for bald people] de Groot AC, et al. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):898–9 **(Dut)**
[New therapeutic aspects in non-cicatricial alopecias] Zaun H. **Z Hautkr** 1988 Aug 15;63(8):639–41 (17 ref.) (Eng. Abstr.) **(Ger)**
[Topical minoxidil in the treatment of alopecia] Zlotogorski A, et al. **Harefuah** 1988 Aug;115(3–4):79–81 (43 ref.) **(Heb)**
[Minoxidil—a hope for patients with androgen alopecia?] Mørk C, et al. **Tidsskr Nor Laegeforen** 1988 Oct 10; 108(28):2391–3 (Eng. Abstr.) **(Nor)**
[The peculiar magic of minoxidil] Grimalt F. **Med Cutan Ibero Lat Am** 1989;17(3):199–201 **(Spa)**

TOXICITY

A comparative study of minoxidil-induced myocardial lesions in beagle dogs and miniature swine. Herman EH, et al. **Toxicol Pathol** 1989;17(1 Pt 2):182–92
Pathogenesis of cardiovascular alterations in dogs treated with minoxidil. Mesfin GM, et al. **Toxicol Pathol** 1989;17(1 Pt 2):164–81
Review of cardiovascular findings in humans treated with minoxidil. Sobota JT. **Toxicol Pathol** 1989;17(1 Pt 2):193–202 (10 ref.)

MINUTE VIRUS OF MICE see under **PARVOVIRIDAE**

MIOPITHECUS TALAPOIN see **CERCOPITHECIDAE**

MIOTICS

Possible non-muscarinic miotic action of echothiophate iodide in humans. Alessandri M, et al. **Pharmacol Res** 1989 May-Jun;21(3):285–91
[Studies on ding gong teng in lowering of intraocular pressure and miosis] Zhou WB, et al. **Yen Ko Hsueh Pao** 1986 Sep; 2(3):150–3 (Eng. Abstr.) **(Chi)**
[Timolol and dapiprazole combination in patients with glaucoma] Sanfelici G, et al. **Ophtalmologie** 1988 Nov–Dec; 2(5):435–7 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Comparison of postoperative intraocular pressures after use of Miochol and Miostat. McKinzie JW, et al. **J Cataract Refract Surg** 1989 Mar;15(2):185–90

MIREX see under **INSECTICIDES, ORGANOCHLORINE**

MIRROR WRITING see **DOMINANCE, CEREBRAL**

MISARTICULATION see **ARTICULATION DISORDERS**

MISCARRIAGE see **ABORTION**

MISGURNUS see **CYPRINIFORMES**

MISONIDAZOLE

ADMINISTRATION & DOSAGE

High-dose melphalan, misonidazole, and autologous bone marrow transplantation for the treatment of metastatic colorectal carcinoma. A phase I study. Spitzer TR, et al. **Am J Clin Oncol** 1989 Apr;12(2):145–51

Induction of tumour hypoxia post-irradiation: a method for increasing the sensitizing efficiency of misonidazole and RSU 1069 in vivo. Stratford IJ, et al. **Int J Radiat Biol** 1989 Mar;55(3):411–22

ANALOGS & DERIVATIVES

The interaction between RSU-1069, hydralazine and hyperthermia in a C3H mammary carcinoma as assessed by tumour growth delay [letter] Horsman MR, et al. **Acta Oncol** 1988;27(6b):861–2

Comparative DNA damage induced by nitroimidazole-aziridine drugs: 1. Effects of methyl substitution on drug action. Dale LD, et al. **Anticancer Drug Des** 1988 Dec;3(3):169–75

Enhancement of DNA damage in mammalian cells upon bioreduction of the nitroimidazole-aziridines RSU-1069 and RSU-1131. Jenner TJ, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3837–42

High uptake of RSU 1069 and its analogues melanotic melanomas. Walling JM, et al. **Cancer Chemother Pharmacol** 1989;24(1):28–32

Pharmacokinetics and metabolism of the mixed-function hypoxic cell sensitizer prototype RSU 1069 in mice. Walton MI, et al. **Cancer Chemother Pharmacol** 1988;22(4):275–81

No-carrier-added synthesis of 3-[18F]fluoro-1-(2-nitro-1-imidazolyl)-2-propanol. A potential PET agent for detecting hypoxic but viable tissues. Hwang DR, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):117–26

Keynote address: cellular reduction of nitroimidazole drugs: potential for selective chemotherapy and diagnosis of hypoxic cells. Chapman JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):911–7 (45 ref.)

Comparative DNA damage and repair induced by misonidazole, CB 1954 and RSU 1069. Dale LD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):995–9

Toxicity of RSU-1069 for KHT cells treated in vivo or in vitro: evidence for a diffusible toxic product. Hill RP, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1111–4

Demonstration of tumor-selective retention of fluorinated nitroimidazole probes by 19F magnetic resonance spectroscopy in vivo. Maxwell RJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):925–9

Assessment of the repair and damage of DNA induced by parent and reduced RSU-1069, a 2-nitroimidazole-aziridine. O'Neill P, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):963–6

The chemosensitizing and cytotoxic effects of RSU 1164 and RSU 1165 in a murine tumor model. Siemann DW. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1115–8

A radiosynthesis of fluorine-18 fluoromisonidazole. Grierson JR, et al. **J Nucl Med** 1989 Mar;30(3):343–50

Enhanced binding of the hypoxic cell marker [3H]fluoromisonidazole in ischemic myocardium. Martin GV, et al. **J Nucl Med** 1989 Feb;30(2):194–201

Myocardial kinetics of fluorine-18 misonidazole: a marker of hypoxic myocardium. Shelton ME, et al. **J Nucl Med** 1989 Mar;30(3):351–8

Synergistic enhancement of the efficacy of the bioreductively activated alkylating agent RSU-1164 in the treatment of prostatic cancer by photodynamic therapy. Henry JM, et al. **J Urol** 1989 Jul;142(1):165–70

[Experimental study of the intra-operative radiation therapy in pancreatic cancer] Kodera T, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1233–40 (Eng. Abstr.) **(Jpn)**

[Radiosensitizing effect of the nitroimidazole derivatives RK28 and DNIE on murine tumors] Tanaka M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1249–60 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Competitive dose-modification between ascorbate and misonidazole in human and hamster cells: effects of glutathione depletion. Hodgkiss RJ, et al. **Int J Radiat Biol** 1988 Oct;54(4):601–10

DIAGNOSTIC USE

3H-misonidazole labeling and viability of hypoxic cells in the sandwich system, an in vitro tumor analogue. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):143–53

METABOLISM

Reduction of nitroheterocyclic drugs by ascorbate and catecholamines: a possible mechanism for the neurotoxicity of nitroheterocyclic drugs. Rao DN, et al. **Basic Life Sci** 1988;49:787–94

Metabolic binding of misonidazole to mouse tissues. Comparison between labels on the ring and side chain, and the production of tritiated water. Franko AJ, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):665–70

The effect of hypobaric hypoxia on misonidazole binding in normal and tumour-bearing mice. MacManus MP, et al. **Br J Cancer** 1989 Mar;59(3):349–52

Autoradiographic study of tritium-labeled misonidazole in the mouse. Cobb LM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):953–6

Comparison of 3H-misonidazole binding between CHO and 9L cells using the sandwich system. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):943–7

Misonidazole binding in SCCVII tumors in relation to the tumor blood supply. Olive PL, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):755–61

PHARMACOKINETICS

Microscopic distribution of misonidazole in mouse tissues. Cobb LM, et al. **Br J Cancer** 1989 Jan;59(1):12–6

Effects of elevated temperature on misonidazole O-demethylation by mouse liver microsomes: kinetic and stability studies of a model mixed-function oxidase reaction. Walton MI, et al. **Cancer Chemother Pharmacol** 1989; 24(3):172–6

Biodistribution of misonidazole and 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU) in rats bearing unclamped and clamped 9L subcutaneous tumors. Wong KH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):135–43

PHARMACOLOGY

Oxygen transfer from the nitro group of a nitroaromatic radiosensitizer to a DNA sugar damage product. Kappen LS, et al. **Biochemistry** 1989 May 30;28(11):4540–2

Misonidazole reduces blood flow in two experimental murine tumours. Murray JC, et al. **Br J Cancer** 1988 Aug; 58(2):128–32

Modulation of prostaglandin biosynthesis in hypoxic murine mammary adenocarcinoma cells by misonidazole. Shalinsky DR, et al. **Cancer Res** 1989 Jul 15;49(14):3853–6

Chemosensitization at reduced nitroimidazole concentrations by mixed-function compounds combining 2-nitroimidazole and chloroethylnitrosourea. Mulcahy RT, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1099–104

Misonidazole-induced radio-resistance in normal and preirradiated jejunal mucosa. Daly NJ, et al. **Int J Radiat Biol** 1988 Oct;54(4):611–9

Comparative DNA damage and repair induced by misonidazole, CB 1954 and RSU 1069. Dale LD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):995–9

Hypoxic toxicity of misonidazole in a glucose-6-phosphate dehydrogenase deficient mutant Chinese hamster ovary cell line. de Groot H, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1017–20

Radiosensitization by misonidazole during recovery of cellular thiols following depletion by BSO or DEM. McNally NJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1331–4

Effect of thiol manipulation on chemopotentiation by nitroimidazoles. Siemann DW, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1341–5

A comparison of colorimetric and clonogenic assays for hypoxic-specific toxins with hamster and human cells. Watts ME, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):939–42

Induction and repair of DNA damage in gamma-irradiated human lymphoblasts: irradiation in the presence and absence of misonidazole. Hentosh P. **Radiat Res** 1988 Sep; 115(3):436–47

Misonidazole chemosensitization of EMT6 spheroids to melphalan. Horsman MR, et al. **Radiother Oncol** 1989 May; 15(1):103–14

Thermal enhancement of the cell killing effect of X-irradiation in mammalian cells in vitro and in a transplantable mouse tumor: influence of pH, thermotolerance, hypoxia, or misonidazole. Haveman J, et al. **Recent Results Cancer Res** 1988;109:149–60 (44 ref.)

THERAPEUTIC USE

A controlled trial of misonidazole in the curative treatment of infiltrating bladder cancer. Bydder PV, et al. **Australas Radiol** 1989 Feb;33(1):8–14

Positive clinical experience with misonidazole in brachytherapy and external radiotherapy. Baillet F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1073–5

Results of a randomized trial comparing BCNU plus radiotherapy, streptozotocin plus radiotherapy, BCNU plus hyperfractionated radiotherapy, and BCNU following misonidazole plus radiotherapy in the postoperative treatment of malignant glioma. Deutsch M, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1389–96

A phase I/II study of the hypoxic cell sensitizer misonidazole as an adjunct to high fractional dose radiotherapy in patients with unresectable squamous cell carcinoma of the head and neck: a RTOG randomized study (#79-04). Lee DJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):465–70

Misonidazole combined with split-course radiotherapy in the treatment of invasive carcinoma of larynx and pharynx: report from the DAHANCA 2 study. Overgaard J, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1065–8

Misonidazole combined with radiotherapy in the treatment of carcinoma of the uterine cervix. Overgaard J, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1069–72

Radiation therapy alone or combined with misonidazole in the treatment of locally advanced non-oat cell lung cancer: report of an RTOG prospective randomized trial. Simpson JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1483–91

Misonidazole neuropathy. A prospective study. Melgaard B, et al. **J Neurooncol** 1988 Nov;6(3):227–30

[Polarographic analysis of tumor tissue oxygen tension after hyperthermia combined with misonidazole] Kokubun M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):371–7 (Eng. Abstr.) **(Jpn)**

TOXICITY

The role of glycolysis and hexose monophosphate pathway in the hypoxic toxicity of misonidazole. De Groot H, et al. **Free Radic Res Commun** 1987;3(1–5):93–8

Effects of nitroimidazoles on neuronal cells in vitro. Stevenson MA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1225–30

MISSIONS AND MISSIONARIES

Medicine in Uganda [letter] Fowles JV. **Can Med Assoc J** 1989 Jun 1;140(11):1261

Role of nongovernmental agencies in vaccine delivery. ma-Disu M. **Rev Infect Dis** 1989 May-Jun;11 Suppl 3:S646–8

Are missionaries at risk for AIDS? Evaluation for HIV antibodies in 3,207 protestant missionaries. Lange WR, et al. **South Med J** 1989 Sep;82(9):1075–8

HIV infection from casual contact [editorial] Thomison JB. **South Med J** 1989 Sep;82(9):1071–2

[Aspects of general surgery in humanitarian missions] Leclerc du Sablon M, et al. **Ann Chir** 1989;43(5):337–41 **(Fre)**

MISTLETOE see **VISCUM**

MISUSE, EQUIPMENT see **EQUIPMENT FAILURE**

MITE CONTROL see **TICK CONTROL**

MITE INFESTATIONS

Bovine and human infestation with Parasitus consanguineus Oudemans and Voigts (Mesostigmata:Parasitinae). Fox MT, et al. **Vet Rec** 1989 Jan 21;124(3):64

COMPLICATIONS

Papular pruritic eruption of Demodex folliculitis in patients with acquired immunodeficiency syndrome. Ashack RJ, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):306–7

Papulonodular demodicidosis associated with acquired immunodeficiency syndrome. Dominey A, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):197–201

Pityriasis folliculorum revisited. Dominey A, et al. **J Am Acad Dermatol** 1989 Jul;21(1):81–4

[A new method of treating mite-borne blepharoconjunctivitis] Parparov AB, et al. **Oftalmol Zh** 1988;(5):278–9 (Eng. Abstr.) **(Rus)**

[Diseases of the eyelids and anterior eye segment in connection with mite infestation (demodicosis)] Zav'ialova NA, et al. **Oftalmol Zh** 1988;(5):275–8 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Rat mite dermatitis. Fishman HC. **Cutis** 1988 Nov;42(5):414–6

[Clinico-immunologic characteristics of mite-borne bronchial asthma] Vaitsekauskaite RL, et al. **Ter Arkh** 1988; 60(10):97–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Unilateral demodectic rosacea. Shelley WB, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):915–7

[Use of tetraethylthiuram monosulfide in the treatment of ectoparasites in mice] Santos R de O, et al. **Rev Saude Publica** 1988 Feb;22(1):41–5 (Eng. Abstr.) **(Por)**

[A case of the treatment of keratitis aggravated by demodectic blepharitis] Kulakovskaia TS, et al. **Oftalmol Zh** 1988;(7):444–5 **(Rus)**

IMMUNOLOGY

Genetic regulation of allergic rhinitis. Kitao Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):654–7

Host immune responsiveness to the chigger, Eutrombicula cinnabaris. Wright SM, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):283–93

PARASITOLOGY

The hair follicle mites (Demodex spp.). Could they be vectors of pathogenic microorganisms? Wolf R, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):535–7

Sheep scab control [letter] [published erratum appears in Vet Rec 1988 Dec 3;123(23):608] Done JT. **Vet Rec** 1988 Nov 26;123(22):584

New canestriniid mites (Acari, Astigmata, Canestriniidae) connected with beetles of the subfamilies Dynastinae and Cetoniinae (Insecta, Coleoptera, Scarabaeidae). Haitlinger R. **Wiad Parazytol** 1989;35(1):43–60

[Demodex folliculorum] Huismans H. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):304–6 (Eng.

Abstr.) (Ger)

PREVENTION & CONTROL

Dust mite allergens and asthma: a worldwide problem. International Workshop report. **Bull WHO** 1988; 66(6):769–80 (73 ref.)

PSYCHOLOGY

[Dissimulated dermatozoon delusion with severe skin artifacts] Trnka J, et al. **Hautarzt** 1988 Oct;39(10):675–6 (Eng. Abstr.) (Ger)

RADIOTHERAPY

[The effect of UV rays on parasitic arthropods. 3. In vitro and in vivo studies of the effect of a fractionated UV irradiation on the development stages of Psoroptes cuniculi (Acaridida: Psoroptidae)] Hiepe T, et al. **Arch Exp Veterinarmed** 1989 May;43(3):367–77 (Eng. Abstr.) (Ger)

TRANSMISSION

[Who itches? sometimes it is not the dog but his master who has skin problems] Vroom MW. **Tijdschr Diergeneeskd** 1988 Sep 1;113(17):962–3 (Dut)

VETERINARY

Knemidocoptes intermedius identified in forest ravens (Corvus tasmanicus). Mason RW, et al. **Aust Vet J** 1988 Aug;65(8):260

Pseudoparasitism of broiler chicks by mites of the family Uropodidae, genus Fuscuropoda. Rives DV, et al. **Avian Dis** 1988 Jul–Sep;32(3):567–9

Effect of ivermectin on the ear mange mite, Psoroptes cuniculi, of rabbits. Pandey VS. **Br Vet J** 1989 Jan–Feb; 145(1):54–6

Trixacarus caviae infection of guinea pigs with genetically determined differences in susceptibility to Trichostrongylus colubriformis infection. Rothwell TL, et al. **Int J Parasitol** 1989 May;19(3):347–8

Demodicosis in two cats seropositive for feline immunodeficiency virus. Chalmers S, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):256–7

Hirstiella trombidiiformis infestation in a colony of chuckwallas. Mader DR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1138–9

Lipid layers in dermal vesicles of sheep scab. Sinclair AN. **J Comp Pathol** 1988 Jul;99(1):115–9

Dexamethasone-induced bovine T-lymphocyte suppression and the effect upon susceptibility to sheep scab mite (Acari: Psoroptidae) infestation. Pruett JH, et al. **J Econ Entomol** 1989 Feb;82(1):175–9

Parasites of prairie rattlesnakes (Crotalus viridis viridis) and gopher snakes (Pituophis melanoleucus sayi) from the eastern high plains of New Mexico. Pfaffenberger GS, et al. **J Wildl Dis** 1989 Apr;25(2):305–6

Knemidokoptes mutans (Acari: Knemidocoptidae) in a great-horned owl (Bubo virginianus). Schulz TA, et al. **J Wildl Dis** 1989 Jul;25(3):430–2

The effectiveness of Ivomec and Neguvon in the control of murine mites. Baumans V, et al. **Lab Anim** 1988 Jul; 22(3):243–5

The use of repeated treatment with Ivomec and Neguvon spray in the control of murine fur mites and oxyurid worms. Baumans V, et al. **Lab Anim** 1988 Jul;22(3):246–9

Otacariasis in tree shrews (Tupaia belangeri) caused by Criokeron quintus. Brack M, et al. **Lab Anim Sci** 1989 Jan; 39(1):79–80

Diagnostic exercise: macaque with dyspnea [letter] Geller EH. **Lab Anim Sci** 1988 Oct;38(5):558

The use of dirty bedding for detection of murine pathogens in sentinel mice. Thigpen JE, et al. **Lab Anim Sci** 1989 Jul;39(4):324–7

Efficacy of injectable ivermectin against the itch mite (Psorergates ovis) of sheep. Soll MD, et al. **Parasitol Res** 1988;75(1):81–2

Comparative analysis of precipitating antibodies in White Rock and Fayoumi hens injected with bovine serum albumin or crude mite extract with resulting effects on northern fowl mite, Ornithonyssus sylviarum (Acari: Macronyssidae) population densities. Burg JG, et al. **Poult Sci** 1988 Jul;67(7):1015–9

Development of precipitating antibody in chickens experimentally infested with northern fowl mite, Ornithonyssus sylviarum (Acari: Macronyssidae). Murano T, et al. **Poult Sci** 1989 Jun;68(6):842–5

Cheyletiellosis and scabies. Schmeitzel LP. **Vet Clin North Am [Small Anim Pract]** 1988 Sep; 18(5):1069–76 (50 ref.)

Efficacy of ivermectin against mange and gastrointestinal nematodes of buffalo (Bubalus bubalis). Gill BS, et al. **Vet Parasitol** 1989 May;31(2):141–7

Lipid ingestion from sheep epidermis by Psoroptes ovis (Acari: Psoroptidae). Sinclair AN, et al. **Vet Parasitol** 1989 May;31(2):149–64

An unusual species of demodex mite in a cat. Chesney CJ. **Vet Rec** 1988 Dec 24–31;123(26–27):671–3

Recurrent infestation of a cat by Cheyletus eruditus (Shrank 1781). McGarry JW. **Vet Rec** 1989 Jul 1;125(1):18

Use of ivermectin against ear mites in cats. Schneck G. **Vet Rec** 1988 Dec 3;123(23):599

Demodex mite in a cat [letter] Willoughby K. **Vet Rec** 1989 Feb 11;124(6):152

Ectoparasites of guinea fowl (Numida meleagris galeata Pallas) and local domestic chicken (Gallus gallus) in southern Guinea Savanna, Nigeria. Okaeme AN. **Vet Res Commun** 1988;12(4–5):277–80

[Size differences in Demodex bovis (Acari)] Hoffmann G. **Angew Parasitol** 1989 May;30(2):141–3 (Eng. Abstr.) (Ger)

[Otodectes cynotis infestation of dogs and cats: biology of the agent, epidemiology, pathogenesis and diagnosis and case description of generalized mange in dogs] Kraft W, et al. **Tierarztl Prax** 1988;16(4):409–15 (45 ref.) (Eng. Abstr.) (Ger)

[Mites (Acari) occurring in Poland on beetles of the genus Carabus Linnaeus 1758 (Insecta, Coleoptera, Carabidae)] Haitlinger R. **Wiad Parazytol** 1988;34(3):329–46 (Eng. Abstr.) (Pol)

[Effect of Varroa jacobsone invasion on the development of queen bees] Romaniuk K, et al. **Wiad Parazytol** 1988; 34(3):295–300 (Eng. Abstr.) (Pol)

[Mites as parasites of honey bee (Apis mellifera L.) and as beehive co-inhabitants] Tomaszewska B. **Wiad Parazytol** 1988;34(2):177–84 (Eng. Abstr.) (Pol)

MITES

Sensitization of children in the Stockholm area to house dust mites. Nordvall SL, et al. **Acta Paediatr Scand** 1988 Sep; 77(5):716–20

Dust mite allergens and asthma: a worldwide problem. International Workshop report. **Bull WHO** 1988; 66(6):769–80 (73 ref.)

Effective hyposensitization in allergic rhinitis using a potent partially purified extract of house dust mite. Ewan PW, et al. **Clin Allergy** 1988 Sep;18(5):501–8

Susceptibility of laboratory-reared northern fowl mites, Ornithonyssus sylviarum (Acari: Macronyssidae), to selected acaricides. Crystal MM, et al. **Exp Appl Acarol** 1988 Jul;4(4):353–8

Distribution of some anystid mites (Acari: Anystidae) in Australia and Indonesia and their role as possible predators of the cattle tick, Boophilus microplus (Acari: Ixodidae). Holm E, et al. **Exp Appl Acarol** 1989 Feb;6(1):77–83

Eosinophilic cellulitis caused by arthropod bites. Clark DP, et al. **Int J Dermatol** 1988 Jul–Aug;27(6):411–2

Defensive consumption of parasitic mites by Anopheles crucians larvae. Lanciani CA. **J Am Mosq Control Assoc** 1988 Jun;4(2):195

Tetanus from chigger flea sores [letter] Tonge BL. **J Trop Pediatr** 1989 Apr;35(2):94

[Transmission of Anhui fritillary rot by Rhizoglyphus robini Claparede and its control] Wu ZT, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):15–7, 62 (Eng. Abstr.) (Chi)

[Inhalation mite provocation in atopic patients in relation to high altitude conditions] Gühring H. **Z Hautkr** 1989 Jun 15;64(6):461–2, 465 (Eng. Abstr.) (Ger)

ANALYSIS

Structural studies on the allergen Der p1 from the house dust mite Dermatophagoides pteronyssinus: similarity with cysteine proteinases. Simpson RJ, et al. **Protein Seq Data Anal** 1989;2(1):17–21

[The protein pattern of Gasterophilus intestinalis larva (Diptera: Gasterophilidae), Psoroptes cuniculi and Chorioptes bovis (Acarida: Psoroptidae)] Ilchmann G, et al. **Angew Parasitol** 1989 May;30(2):111–5 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

The feather mites of the family Proctophyllodidae (acari, sarcoptiformes) from Nepalese birds. Černý V. **Folia Parasitol (Praha)** 1988;35(3):253–8

Ontogeny of Rhyncoptes grabberi, n. sp. (Acari: Astigmata: Rhyncoptidae) associated with Macaca mulatta. Klompen JS. **J Med Entomol** 1989 Jan;26(1):81–7

An unusual species of demodex mite in a cat. Chesney CJ. **Vet Rec** 1988 Dec 24–31;123(26–27):671–3

Two new species Photia genus Oudemans, 1904 (Acari, Astigmata, Canestriniidae) from Poland. Haitlinger R. **Wiad Parazytol** 1988;34(3):319–28

[Size differences in Demodex bovis (Acari)] Hoffmann G. **Angew Parasitol** 1989 May;30(2):141–3 (Eng. Abstr.) (Ger)

CLASSIFICATION

Knemidocoptes intermedius identified in forest ravens (Corvus tasmanicus). Mason RW, et al. **Aust Vet J** 1988 Aug;65(8):260

Pseudoparasitism of broiler chicks by mites of the family Uropodidae, genus Fuscuropoda. Rives DV, et al. **Avian Dis** 1988 Jul–Sep;32(3):567–9

Protomyobia (Acari: Myobiidae) species groups and the Brevisetosa complex of mites on North American shrews (Mammalia: Soricidae). Lukoschus FS, et al. **J Med Entomol** 1988 Nov;25(6):523–40

Clipeosoma jupiter Southcott, 1961 (Acari, Actinedida, Smarididae), a species new to the fauna of Poland. Gabryś G. **Wiad Parazytol** 1989;35(2):165–9

New canestriniid mites (Acari, Astigmata, Canestriniidae) connected with beetles of the subfamilies Dynastinae and Cetoniinae (Insecta, Coleoptera, Scarabaeidae). Haitlinger R. **Wiad Parazytol** 1989;35(1):43–60

New species Chrysomelobia donati and Coccipolipus arturi (Acari, Prostigmata, Podapolipidae) connected with insects from Cameroon and Sumatra. Haitlinger R. **Wiad Parazytol** 1989;35(2):161–4

Species of Geckobia megnin, 1878 (Acari, Prostigmata, Pterygosomidae) from Madagascar and Vietnam. Haitlinger R. **Wiad Parazytol** 1988;34(2):161–75

[Harvest mites of the family Trombiculidae in the steppe zone of the southeastern Ukraine] Gushcha GI, et al. **Parazitologiia** 1989 Jan–Feb;23(1):29–34 (Eng. Abstr.) (Rus)

DRUG EFFECTS

A controlled trial of house dust mite eradication using natamycin in homes of patients with atopic dermatitis: effect on clinical status and mite populations. Colloff MJ, et al. **Br J Dermatol** 1989 Aug;121(2):199–208

Susceptibility of Ornithodoros parkeri (Cooley) (Acari: Argasidae) and Dermanyssus gallinae (DeGeer) (Acari: Dermanyssidae) to ivermectin. Ash LS, et al. **J Med Entomol** 1989 May;26(3):133–9

Use of ivermectin against ear mites in cats. Schneck G. **Vet Rec** 1988 Dec 3;123(23):599

GROWTH & DEVELOPMENT

Population growth and developmental stages of the house dust mite, Dermatophagoides pteronyssinus (Acari: Pyroglyphidae). Andersen A. **J Med Entomol** 1988 Sep; 25(5):370–3

IMMUNOLOGY

Immunogenicity of monomeric and polymeric house dust mite Dermatophagoides pteronyssinus. Hajos SE, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb;17(1):11–4

Dose response curve of allergen and histamine in skin prick tests. Harris RI, et al. **Allergy** 1988 Nov;43(8):565–72

Bronchial provocation studies in farmers with positive RAST to the storage mite Lepidoglyphus destructor. van Hage-Hamsten M, et al. **Allergy** 1988 Nov;43(8):545–51

Specific immune response of the adenoids to a respiratory antigen. Harabuchi Y, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):138–42

Skin and serum reactivity to some storage mites in children sensitive to Dermatophagoides pteronyssinus. Boner AL, et al. **Ann Allergy** 1989 Jul;63(1):82–4

The study of house dust mites in Taiwan. Chang YC, et al. **Ann Allergy** 1989 Feb;62(2):101–6

Characterization and partial purification of the cockroach antigen in relation to housedust and housedust mite (D.f.) antigens. Kang BC, et al. **Ann Allergy** 1989 Sep; 63(3):207–12

Host immune responsiveness to the chigger, Eutrombicula cinnabaris. Wright SM, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):283–93

Familial background of respiratory atopy. A factor of type I allergy to house dust mite in patients with atopic dermatitis. Uehara M, et al. **Arch Dermatol** 1989 Jul; 125(7):939–43

Comparison of total IgE and anti-mite IgE antibody levels in the sera of patients with atopic dermatitis and/or atopic bronchial asthma. Okudaira H, et al. **Arerugi** 1989 Mar; 38(3):296–8

Development of an enzyme-linked immunosorbent assay for detection of IgE antibodies specific to Dermatophagoides pteronyssinus. Ho TM, et al. **Asian Pac J Allergy Immunol** 1988 Dec;6(2):103–6

Atopic dermatitis and house dust mites. Beck HI, et al. **Br J Dermatol** 1989 Feb;120(2):245–51

Reduction of house dust mites and mite allergens: effects of spraying carpets and blankets with Allersearch DMS, an acaricide combined with an allergen reducing agent. Green WF, et al. **Clin Exp Allergy** 1989 Mar;19(2):203–7

HLA class II restriction specificity of Dermatophagoides spp. reactive T lymphocyte clones that support IgE synthesis. Lamb JR, et al. **Clin Exp Allergy** 1989 Jul;19(4):389–93 (32 ref.)

Reduction of increased serum neutrophil chemotactic activity following effective hyposensitization in house dust mite allergy. McHugh SM, et al. **Clin Exp Allergy** 1989 May; 19(3):327–34

Skin-prick test preparations of Dermatophagoides pteronyssinus for prediction of a positive response to provocation testing. Ollier S, et al. **Clin Exp Allergy** 1989 Jul;19(4):457–62

The relative risks of sensitivity to grass pollen, house dust mite and cat dander in the development of childhood asthma. Sears MR, et al. **Clin Exp Allergy** 1989 Jul; 19(4):419–24

Suppression of the late asthmatic reaction by hyposensitization in asthmatic children allergic to house dust mite (Dermatophagoides pteronyssinus). Van Bever HP, et al. **Clin Exp Allergy** 1989 Jul;19(4):399–404

State of the art: mites and human allergy. Carswell F. **Immunology** 1988 Dec;65(4):497–500 (34 ref.)

MHC class II restriction specificity of cloned human T lymphocytes reactive with Dermatophagoides farinae (house dust mite). O'Hehir RE, et al. **Immunology** 1988 Aug;64(4):627–31

An in vitro model of allergen-dependent IgE synthesis by human B lymphocytes: comparison of the response of an atopic and a non-atopic individual to Dermatophagoides spp. (house dust mite). O'Hehir RE, et al. **Immunology** 1989 Apr;66(4):499–504

Isolation and characterization of an allergen-rich fraction derived from cultures of Dermatophagoides pteronyssinus. Preliminary purification of a protein. Andersen A. **Int Arch Allergy Appl Immunol** 1989;89(1):17–23

Effect of reduction and heat on the detection of house dust mite (Dermatophagoides pteronyssinus) allergen Der p I by protein blotting. Ford SA, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):318–20

Strong delayed-type hypersensitivity induced against house dust mite antigens in the mice. Nakano Y, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):434–8

Clonal analysis of the cellular immune response to the house dust mite Dermatophagoides farinae. O'Hehir R, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):170–2

Investigations of patients allergic to the house dust mite Dermatophagoides pteronyssinus by crossed radioimmunoelectrophoresis using purified mite bodies and whole mite culture extracts. Wahl R, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):109–12

Allergens of the house dust mite Dermatophagoides farinae. II. Immunological characterization of four allergenic molecules. Yamashita N, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):173–5

Comparative analysis of physicochemical and immunochemical properties of the two major allergens from Dermatophagoides pteronyssinus and the corresponding allergens from Dermatophagoides farinae. Yasueda H, et al. **Int Arch Allergy Appl Immunol** 1989; 88(4):402–7

Dust mite allergens and asthma—a worldwide problem. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):416–27 (61 ref.)

Allergic respiratory disease in grain workers: the role of storage mites. Blainey AD, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):296–303

Specific immunotherapy with a standardized Dermatophagoides pteronyssinus extract. II. Prediction of efficacy of immunotherapy. Bousquet J, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):971–7

Immunotherapy with a standardized Dermatophagoides pteronyssinus extract. Systemic reactions during the rush protocol in patients suffering from asthma. Bousquet J, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):797–802

Natural immunity to dust mites in patients with chronic rhinosinusitis. Freudenberger T, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):855–62

Allergenic and antigenic relationship between three species of storage mite and the house dust mite, Dermatophagoides pteronyssinus. Griffin P, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):108–17

Antigenic and structural analysis of group II allergens (Der f II and Der p II) from house dust mites (Dermatophagoides spp). Heymann PW, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1055–67

Correlations between levels of mite and cat allergens in settled and airborne dust. Swanson MC, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):776–83

Clinical significance and allergenic cross-reactivity of Euroglyphus maynei and other nonpyroglyphid and pyroglyphid mites. van Hage-Hamsten M, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):581–9

Prospective study on immunologic changes induced by two different Dermatophagoides pteronyssinus extracts prepared from whole mite culture and mite bodies. Wahn U, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):360–70

Mites in house dust as a cause of bronchial asthma [published erratum appears in J Assoc Physicians India 1988 Jul;36(7):448] Tandon N, et al. **J Assoc Physicians India** 1988 Feb;36(2):141–4

Detection of house dust mite allergens and immunoblot analysis in asthmatic children. Tang RB, et al. **J Asthma** 1988;25(2):83–8

Correlation between serum IgE and specific IgE antibody titer to house dust mite in children with asthma. Tsai LC, et al. **J Asthma** 1988;25(1):7–13

Decreased production of CD8 (T8) antigen after immunotherapy. Hsieh KH. **J Clin Immunol** 1989 Mar; 9(2):111–8

A two-site monoclonal antibody ELISA for the quantification of the major Dermatophagoides spp. allergens, Der p I and Der f I. Luczynska CM, et al. **J Immunol Methods** 1989 Mar 31;118(2):227–35

Production of multilamellar, small unilamellar and reverse-phase liposomes containing house dust mite allergens. Potential adjuvants in the immunotherapy of allergic disease. McWilliam AS, et al. **J Immunol Methods** 1989 Jul 6;121(1):53–60

Evaluating mite (Acari) allergenicity of house dust by guanine quantification. Van Bronswijk JE, et al. **J Med Entomol** 1989 Jan;26(1):55–9

Protease antigens from house dust mite [letter] Stewart GA, et al. **Lancet** 1989 Jul 15;2(8655):154–5

House dust mites and vernal keratoconjunctivitis. Mumcuoglu YK, et al. **Ophthalmologica** 1988;196(4):175–81

Development of precipitating antibody in chickens experimentally infested with northern fowl mite, Ornithonyssus sylviarum (Acari: Macronyssidae). Murano T, et al. **Poult Sci** 1989 Jun;68(6):842–5

Respiratory symptoms in arable farmworkers: role of storage mites. Blainey AD, et al. **Thorax** 1988 Sep;43(9):697–702

[Study of dust mite allergy in the Guangzhou area] Lai NK. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):347–9 (Eng. Abstr.) **(Chi)**

[Effect of a visit in an eradication environment on reactivity to mites in the respiratory mucus] Caubet Y, et al. **Allerg Immunol (Paris)** 1989 Mar;21(3):108–9, 112–3 (Eng. Abstr.) **(Fre)**

[Comparative studies of the effectiveness of specific immunotherapy in house dust mite allergy] Ebner H, et al. **Wien Klin Wochenschr** 1989 Aug 4;101(15):504–11 (Eng. Abstr.) **(Ger)**

[Sensitization to house dust mite allergens: diagnosis—therapy] Zimmermann T. **Wien Med Wochenschr** 1989 Apr 15;139(6–7):122–6 (49 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis and hyposensitization treatment of patients with house dust mite allergies in high mountain areas] Gühring H. **Z Hautkr** 1988;63 Suppl 4:58–9 (Eng. Abstr.) **(Ger)**

[Validity, sensitivity and reproducibility of specific bronchial provocation tests in biological units in asthmatic patients sensitized to dermatofagoides pteronissimus] Mazzarella G, et al. **Arch Monaldi Mal Torace** 1987 Nov–Dec; 42(6):563–70 (Eng. Abstr.) **(Ita)**

[Relation of bronchial and specific cutaneous response in asthmatic patients sensitized to dermatofagoides pteronissimus] Mazzarella G, et al. **Arch Monaldi Mal Torace** 1987 Nov–Dec;42(6):571–7 (Eng. Abstr.) **(Ita)**

[Bronchial response to a provocation test in children allergic to Dermatophagoides pteronyssinus] Novembre E, et al. **Pediatr Med Chir** 1988 May–Jun;10(3):267–72 (Eng. Abstr.) **(Ita)**

[Studies of specific IgE and IgG antibodies in allergic children. Changes in specific IgE and IgG antibodies to egg white, milk, soybean and mite from children with atopic dermatitis] Akasawa A, et al. **Arerugi** 1989 Mar; 38(3):254–62 (Eng. Abstr.) **(Jpn)**

[The immune response specific to Dermatophagoides pteronyssinus body antigen in asthmatics] Matsuoka H, et al. **Arerugi** 1988 Jul;37(7):427–37 (Eng. Abstr.) **(Jpn)**

[Measurement of IgE, IgG1 and IgG4 antibodies against mite Sephadex fractions and purified allergens by means of enzyme-linked immunosorbent assay] Nakada S, et al. **Arerugi** 1989 Jan;38(1):9–15 (Eng. Abstr.) **(Jpn)**

[Percentage of positive specific IgG and IgE antibodies to egg white, milk, soy and mite (Dermatophagoides farinae), their changes with age in pediatric allergic diseases] Odajima Y, et al. **Arerugi** 1988 Jul;37(7):419–26 (Eng. Abstr.) **(Jpn)**

[Specific IgG, IgM, IgA and IgE antibodies to Dermatophagoides farinae in asthmatic and healthy children—their changes with age] Ogura Y, et al. **Arerugi** 1988 Nov;37(11):1057–64 (Eng. Abstr.) **(Jpn)**

[The influence of Dermatophagoides farinae in asthmatic children] Sasamoto A. **Arerugi** 1988 Jun;37(6):364–70 (Eng. Abstr.) **(Jpn)**

[Lymphocyte proliferation test to Dermatophagoides farinae in patients with atopic dermatitis] Kawaguchi H, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1077–83 (Eng. Abstr.) **(Jpn)**

[Use of isoelectric focusing in studying the composition of allergens from mites] Emel'anova OIu, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):89–92 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Rat mite dermatitis. Fishman HC. **Cutis** 1988 Nov;42(5):414–6

Enhanced immunodetection of blotted house dust mite protein allergens on nitrocellulose following blocking with Tween 20. Tovey ER, et al. **Electrophoresis** 1989 Apr; 10(4):243–9

Ear mites from domestic goats in Florida. Friel J, et al. **Exp Appl Acarol** 1988 Jul;4(4):345–51

New feather mite species of Aralichus (Acarina, Pterolichidae) from the white-capped parrot, Pionus senilis (Spix). Pérez TM, et al. **J Parasitol** 1989 Feb;75(1):11–20

[Mites (Acari) occurring in Poland on beetles of the genus Carabus Linnaeus 1758 (Insecta, Coleoptera, Carabidae)] Haitlinger R. **Wiad Parazytol** 1988;34(3):329–46 (Eng. Abstr.) **(Pol)**

METABOLISM

[Biochemical structure and allergenic activity of dermatophagoid mites (Dermatophagoides pteronyssinus)] Ivanov LN, et al. **Med Parazitol (Mosk)** 1988 May–Jun; (3):42–5 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Transovarial transmission of Rickettsia tsutsugamushi in Leptotrombidium pallidum successively reared in the laboratory. Takahashi M, et al. **Jpn J Exp Med** 1988 Oct; 58(5):213–8

Electron microscopic observations of the embryo Leptotrombidium (Leptotrombidium) pallidum naturally infected with Rickettsia tsutsugamushi. Urakami H, et al. **Microbiol Immunol** 1988;32(9):967–72

[Yersinia pestis L-forms in rodents and ectoparasites] Zykin LF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):36–40 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Surface skin lipids of birds—a proper host kairomone and feeding inducer in the poultry red mite, Dermanyssus gallinae. Zeman P. **Exp Appl Acarol** 1988 Sep;5(1–2):163–73

A contribution to the parasite fauna in winter nests of the common mole (Talpa europaea L.) and incidence of its infection with tick-borne encephalitis virus (TBE) and rickettsia Coxiella burnetii. Kocianová E, et al. **Folia Parasitol (Praha)** 1988;35(2):175–80

Mortality in mite-infested, male Anopheles crucians. Lanciani CA. **J Am Mosq Control Assoc** 1987 Mar; 3(1):107–8

Determination and seasonal abundance of mite predators of the house fly eggs in Cairo and Giza, Egypt. Shanbaky NM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):551–62

Spermiogenesis and reproductive biology of Dermanyssus gallinae (DeGeer) (Parasitiformes: Dermanyssidae). Hutcheson HJ, et al. **J Med Entomol** 1988 Sep;25(5):321–30

Lipid ingestion from sheep epidermis by Psoroptes ovis (Acari: Psoroptidae). Sinclair AN, et al. **Vet Parasitol** 1989 May;31(2):149–64

[Phoresy and hyperparasitism in Ornithomya (Diptera, Hippoboscidae) in the Federal Republic of Germany] Walter G. **Angew Parasitol** 1989 Feb;30(1):43–6 (Eng. Abstr.) **(Ger)**

[Varroatosis and methods for its control] Sabolic M, et al. **Tierarztl Prax** 1989;17(2):221–5 (18 ref.) (Eng. Abstr.) **(Ger)**

[Mites as parasites of honey bee (Apis mellifera L.) and as beehive co-inhabitants] Tomaszewska B. **Wiad Parazytol** 1988;34(2):177–84 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

[The effect of UV rays on parasitic arthropods. 3. In vitro and in vivo studies of the effect of a fractionated UV irradiation on the development stages of Psoroptes cuniculi (Acaridida: Psoroptidae)] Hiepe T, et al. **Arch Exp Veterinarmed** 1989 May;43(3):367–77 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

[Demodex folliculorum] Huismans H. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):304–6 (Eng. Abstr.) **(Ger)**

[Ultrastructure of the salivary glands of hungry larvae of the mite Euschoengastia rotundata (Trombiculidae)] Shatrov AB. **Parazitologiia** 1989 May–Jun;23(3):200–7 (Eng. Abstr.) **(Rus)**

MITHRAMYCIN

Interaction of mithramycin with metal ions and DNA. Cons BM, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):517–24

High resolution hydroxyl radical footprinting of the binding of mithramycin and related antibiotics to DNA. Cons BM, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5447–59

ADVERSE EFFECTS

Cardiac arrest associated with hypokalaemia in a patient receiving mithramycin. Bashir Y, et al. **Postgrad Med J** 1988 Mar;64(749):228–9

[Death following administration of mithramycin] Soufarapis H, et al. **Cah Anesthesiol** 1988 Nov;36(7):567–9 **(Fre)**

[Lethal hemorrhagic syndrome after mithramycin. Lack of platelet aggregation and inhibitor of factor V (letter)] Thomas F, et al. **Presse Med** 1989 Feb 4;18(4):182 **(Fre)**

PHARMACOLOGY

Mithramycin blocks protein binding and function of the SV40 early promoter. Ray R, et al. **J Clin Invest** 1989 Jun; 83(6):2003–7

THERAPEUTIC USE

Metastatic carcinoma of unknown primary: complete response to second-line treatment with plicamycin. Hescock H Jr, et al. **Am J Med Sci** 1989 Jul;298(1):34–7

Mithramycin therapy for resistant hypercalcaemia in transformed chronic granulocytic leukaemia. Collin R, et al. **Clin Lab Haematol** 1989;11(2):156–9

Polyostotic fibrous dysplasia with contrasting responses to calcitonin and mithramycin: aetiological and therapeutic implications. Long A, et al. **Ir J Med Sci** 1988 Jul; 157(7):229–34

MITOBRONITOL see under **MANNITOL**

MITOCHONDRIA

A novel ubiquitous protein 'chaperonin' supports the endosymbiotic origin of mitochondrion and plant chloroplast. Gupta RS, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):780–7

Transfer RNA genes and the genetic code in Chlamydomonas reinhardtii mitochondria. Boer PH, et al. **Curr Genet** 1988 Dec;14(6):583–90

A mitochondrial frameshift suppressor maps in the

tRNASer-var1 region of the mitochondrial genome of the yeast S. cerevisiae. Weiss-Brummer B, et al. **Curr Genet** 1989 Apr;15(4):239-46

Structural and functional analysis of mitochondrial plasmids in Claviceps purpurea. Düvell A, et al. **Mol Gen Genet** 1988 Sep;214(1):128-34

Long-term coenzyme Q10 therapy for a mitochondrial encephalomyopathy with cytochrome c oxidase deficiency: a 31P NMR study. Nishikawa Y, et al. **Neurology** 1989 Mar;39(3):399-403

Evidence in a lethal infantile mitochondrial disease for a nuclear mutation affecting respiratory complexes I and IV. Zheng X, et al. **Neurology** 1989 Sep;39(9):1203-9

[Formation of mitochondrial ATP synthesizing system and its regulation] Kagawa Y, et al. **Seikagaku** 1989 Feb; 61(2):75-88 (117 ref.) **(Jpn)**

ANALYSIS

Protein composition of Saccharomyces cerevisiae mitochondrial ribosomes. Mieszczak M, et al. **Acta Biochim Pol** 1988;35(2):105-18

Molecular aspects of isolated and reconstituted carrier proteins from animal mitochondria. Krämer R, et al. **Biochim Biophys Acta** 1989 Apr 17;974(1):1-23 (192 ref.)

Porin of Paramecium mitochondria isolation, characterization and ion selectivity of the closed state. Ludwig O, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):319-27

Tissue-specific mitochondrial proteins. Vayssiere JL, et al. **Biochimie** 1989 Jul;71(7):787-91

A sensitive method for the determination of the mitochondrial susceptibility factor (MSF). Schmidt J, et al. **Biomed Biochim Acta** 1989;48(1):19-21

Purine compounds in mitochondria: a quantitative evaluation. Ziegler M, et al. **Biomed Biochim Acta** 1989;48(1):57-61

Microelectrophoretic fractionation of RNA from rat brain subsynaptosomal fractions. Di Battista A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1025-32

Influence of Ca2+ on the isolation from rat brain mitochondria of a fraction enriched of boundary membrane contact sites. Sandri G, et al. **Cell Calcium** 1988 Aug; 9(4):159-65

Colocalisation of acetylated microtubules, glial filaments, and mitochondria in astrocytes in vitro. Cambray-Deakin MA, et al. **Cell Motil Cytoskeleton** 1988;10(3):438-49

Specific properties of brown adipose tissue mitochondrial membrane. Houštěk J, et al. **Comp Biochem Physiol [B]** 1978;60(3):209-14

Identification in maize mitochondrial 26S rRNA of a short 5'-end sequence possibly involved in transcription initiation and processing. Maloney AP, et al. **Curr Genet** 1989 Mar; 15(3):207-12

Sulfhydryl groups of the uncoupling protein of brown adipose tissue mitochondria. Distinction between sulfhydryl groups of the H+ channel and the nucleotide binding site. Ježek P, et al. **Eur J Biochem** 1989 Jul 15; 183(1):89-95

Domain structure of mitochondrial and chloroplast targeting peptides. von Heijne G, et al. **Eur J Biochem** 1989 Apr 1;180(3):535-45

Characterization of a protein fraction containing cytochromes b and c1 from mitochondria of Leishmania tarentolae. Shaw JM, et al. **Exp Parasitol** 1989 May; 68(4):443-9

The mitochondrial ribosomal RNA molecules of Aspergillus nidulans. Dyson NJ, et al. **Gene** 1989 Jan 30;75(1):109-18

Semen selenium content and sperm mitochondrial volume in human and some animal species. Saaranen M, et al. **Hum Reprod** 1989 Apr;4(3):304-8

Biological oxidation and the mobilization of mitochondrial calcium during the differentiation of Physarum polycephalum. Nations C, et al. **J Cell Physiol** 1989 Aug; 140(2):311-6

Selective identification of the paternal mitochondrion in living sea urchin eggs and embryos by chlorotetracycline. Hinkley RE Jr, et al. **J Exp Zool** 1989 Jan;249(1):111-4

Use of immunoblotting to characterize the mitochondrial antigens recognized by anti-mitochondrial autoantibodies. al-Hussami O, et al. **J Immunol Methods** 1988 Oct 4; 113(1):61-73

Fluorescent labeling of mitochondria. Chen LB. **Methods Cell Biol** 1989;29:103-23 (127 ref.)

Three mitochondrial tRNA genes from Arabidopsis thaliana: evidence for the conversion of a tRNAPhe gene into a tRNATyr gene. Chen HC, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2613-21

Sequence of tRNA(Thr) and tRNA(Pro) from white sturgeon (Acipenser transmontanus) mitochondria. Gilbert TL, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11825

Molecular analysis of the linear 2.3 kb plasmid of maize mitochondria: apparent capture of tRNA genes. Leon P, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4089-99

Nucleotide sequence of bean mitochondrial tRNALeu4 and of its cytoplasmic counterpart. Re-examination of the modified nucleotide present at position 12 in bean mitochondrial and cytoplasmic tRNALeu1 sequences. Maréchal-Drouard L, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11812

Fatal lactic acidosis in infancy with a defect of complex III of the respiratory chain. Birch-Machin MA, et al. **Pediatr Res** 1989 May;25(5):553-9

Staining of xylem parenchyma mitochondria with photo-oxidized 3,3'-diaminobenzidine. Ros Barcelo A, et al. **Stain Technol** 1988 Sep;63(5):277-81

Organelle transformation. Howe CJ. **Trends Genet** 1988 Jun; 4(6):150-2 (10 ref.)

[Histochemical method of differentiating 2 types of sweat glands by the isoelectrical points of mitochondrial ribonucleoproteins] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1988 Jul-Aug;301(1):218-21 **(Rus)**

CYTOLOGY

Higher mitochondrial density in slow versus fast lobster sensory neurons. Mayes JI, et al. **Neurosci Lett** 1989 Jul 17;102(1):87-90

RNA splicing in yeast mitochondria: taking out the twists. Grivell LA, et al. **Trends Genet** 1989 Feb;5(2):39-41 (17 ref.)

DRUG EFFECTS

Ultrastructure and dynamics of selective mitochondrial injury in carcinoma cells after doxycycline photosensitization in vitro. Shea CR, et al. **Am J Pathol** 1988 Nov;133(2):381-8

Physiological activation of the mitochondrion and the transformation capacity of DFMO induced intermediate and short stumpy bloodstream form trypanosomes. Giffin BF, et al. **Am J Trop Med Hyg** 1989 May;40(5):487-93

Effects of idebenone and related compounds on respiratory activities of brain mitochondria, and on lipid peroxidation of their membranes. Imada I, et al. **Arch Gerontol Geriatr** 1989 May;8(3):323-41

The effects of SUN 1165, a novel sodium channel blocker, on ischemia-induced mitochondrial dysfunction and leakage of lysosomal enzymes in canine hearts. Sugiyama S, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):433-9

Effect of oleic acid on mitochondrial cytochrome c oxidase activity. Nagami M, et al. **Biochem Int** 1988 Oct; 17(4):763-71

Effect of oleic acid on mitochondrial oxidative phosphorylation in rat brain slices. Ogawa M, et al. **Biochem Int** 1988 Oct;17(4):773-82

Differentiation of rapid and slower-acting effects of insulin on mitochondrial processes in brown adipose tissue from streptozotocin-diabetic rats. Gualberto A, et al. **Biochem J** 1989 Feb 15;258(1):309-11

Primary mitochondrial activity of gossypol in yeast and mammalian cells. Bugeja V, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4217-24

Inhibition of phosphorylation of the mitochondrial 34 kDa protein. A unique effect of vanadium ions? Krivanek J, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2713-7

A new class of free radical scavengers reducing adriamycin mitochondrial toxicity. Praet M, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4617-22

Oxidative and mitochondrial toxic effects of cephalosporin antibiotics in the kidney. A comparative study of cephaloridine and cephaloglycin. Tune BM, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):795-802

Myxothiazol resistance in human mitochondria. Parker WD Jr, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):133-8

Effects of 6-hydroxydopamine on oxidative phosphorylation of mitochondria from rat striatum, cortex, and liver. Thakar JH, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):376-9

Control of DNA replication and cell growth by inhibiting the export of mitochondrially derived citrate. Rao S, et al. **Exp Cell Res** 1989 Feb;180(2):341-52

Action of piracetam and clonidine on different mitochondrial populations from hippocampus. Villa RF, et al. **Farmaco** 1989 Feb;44(2):215-26

Inhibition of target cell mitochondrial electron transfer by tumor necrosis factor. Lancaster JR Jr, et al. **FEBS Lett** 1989 May 8;248(1-2):169-74

Functional state of rat liver and kidney mitochondria during sterigmatocystin toxicosis. Banu S, et al. **Indian J Exp Biol** 1988 Nov;26(11):858-9

Differential effects of (+) and (-) gossypol enantiomers on mitochondrial function and proliferation of cultured TM4 cells. Tanphaichitr N, et al. **J Androl** 1988 Jul-Aug; 9(4):270-7

On the inhibition of the mitochondrial inner membrane anion uniporter by cationic amphiphiles and other drugs. Beavis AD. **J Biol Chem** 1989 Jan 25;264(3):1508-15

Cytotoxic effects of cisplatin, cis-dichlorodiammineplatinum(II), on Tetrahymena. Nilsson JR. **J Cell Sci** 1988 Aug;90 (Pt 4):707-16

Changes of secretory ameloblasts in mini-pig fetuses exposed to ethanol in vivo. Matthiessen ME, et al. **J Dent Res** 1988 Nov;67(11):1402-4

Inhibitory effects of mitochondrial metabolic inhibitors on interferon action. Richtsmeier WJ, et al. **J Interferon Res** 1989 Feb;9(1):87-96

Impairment by cyclosporine of membrane-mediated functions in kidney mitochondria. Strzelecki T, et al. **Kidney Int** 1988 Aug;34(2):234-40

The mitochondrion of Trypanosoma cruzi is a target of crystal violet toxicity. Gadelha FR, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):117-26

Mitochondria as the site of action of tetracycline on Plasmodium falciparum. Kiatfuengfoo R, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):109-15

New methods for cytotoxicity testing: quantitative video microscopy of intracellular motion and mitochondria-specific fluorescence. Maile W, et al. **Mol Toxicol** 1987-88 Fall;1(4):427-37

Effect of various aminoglycoside antibiotics on glucose formation in isolated rabbit kidney-cortex tubules. Michalik M, et al. **Pharmacol Res** 1989 Jul-Aug;21(4):405-14

Picosecond fluorescence of R3230AC mammary carcinoma mitochondria after treatment with hematoporphyrin derivative and Photofrin II in vivo. Hanzlik CA, et al. **Photochem Photobiol** 1989 Jul;50(1):45-53

The effect of a chalcogenapyrylium dye with and without photolysis on mitochondrial function in normal and tumor cells. Walstad DL, et al. **Photochem Photobiol** 1989 Mar; 49(3):285-91

Inhibition of mitochondrial respiration by cationic rhodamines as a possible teratogenicity mechanism. Ranganathan S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):81-9

Pentachlorobutadienyl-L-cysteine uncouples oxidative phosphorylation by dissipating the proton gradient. Schnellmann RG, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):498-505

Renal cortical mitochondrial integrity in experimental cyclosporine nephrotoxicity. Elzinga LW, et al. **Transplantation** 1989 Jul;48(1):102-6

Vanadate inhibition of mitochondrial respiration and H+ ATPase activity in Saccharomyces cerevisiae. Henderson GE, et al. **Yeast** 1989 Jan-Feb;5(1):73-7

[The action of a homologous series of ubiquinols on lipid peroxidation in brain mitochondrial and synaptosomal membranes] Kagan VE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):420-2 (Eng. Abstr.) **(Rus)**

[Effect of nitrosodimethylamine at various concentrations on various enzymatic systems in rat kidney endoplasmic reticulum and mitochondria depending on the duration of drug action] Litvinov NN, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):60-4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Decreased activity of cytochrome c oxidase in the macular mottled mouse: an immuno-electron microscopic study. Seki K, et al. **Acta Neuropathol (Berl)** 1989;77(5):465-71

19-Hydroxylase inhibition of adrenal mitochondrial P450 11 beta/18/19-hydroxylase by a suicide inhibitor. Griffing GT, et al. **Am J Med Sci** 1989 Aug;298(2):83-8

Population and biochemical genetics of the human mitochondrial malic enzyme. Papiha SS, et al. **Ann Hum Biol** 1989 Jul-Aug;16(4):369-74

The role of mitochondrial hexokinase in neoplastic phenotype and its sensitivity to lonidamine. Paggi MG, et al. **Ann N Y Acad Sci** 1988;551:358-60

Myoclonic epilepsy and ragged-red fibers with cytochrome oxidase deficiency: neuropathology, biochemistry, and molecular genetics. Lombes A, et al. **Ann Neurol** 1989 Jul; 26(1):20-33

Synthesis and targeting of hexokinase to mitochondria in hepatoma cells. Kabir F, et al. **Arch Biochem Biophys** 1989 Oct;274(1):94-9

Purification and characterization of two distinct forms of rat adrenal cytochrome P450(11) beta: functional and structural aspects. Lauber M, et al. **Arch Biochem Biophys** 1989 Oct;274(1):109-19

Aromatase and nonaromatizing 10-demethylase activity of adrenal cortex mitochondrial P-450(11)beta. Suhara K, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):31-7

Brain cytochrome oxidase activity of synaptic and nonsynaptic mitochondria during aging. Gorini A, et al. **Basic Appl Histochem** 1989;33(2):139-45

Evidence for the existence of tissue specific isoenzymes of mitochondrial NADH dehydrogenase. Clay VJ, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1423-8

Modulation of mitochondrial F0F1 catalysis by boundary and bulk phase phospholipids. Dabbeni-Sala F, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1013-20

Deficiencies in complex I subunits of the respiratory chain in Parkinson's disease. Mizuno Y, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1450-5

Nucleotide sequence and tissue distribution of the human mitochondrial aspartate aminotransferase mRNA. Pol S, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1309-15

Evidence for the formation of 26-hydroxycholesterol by cytochrome P-450 in pig kidney mitochondria. Postlind H, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1135-40

Anti-mitochondrial autoantibodies of primary biliary cirrhosis as a novel probe in the study of the biosynthetic regulation of the yeast 2-oxo acid dehydrogenase complexes. Sudoyo H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):220-7

Isolation of a single nuclear gene encoding human ubiquinone-binding protein in complex III of mitochondrial respiratory chain. Suzuki H, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):371-8

Characterization of aconitate hydratase from mitochondria and cytoplasm of ascites tumor cells. Hernanz A, et al. **Biochem Cell Biol** 1988 Jul;66(7):792-5

Synthesis and hydrolysis of ATP by the mitochondrial ATP synthase. Tuena Gómez-Puyou MT, et al. **Biochem Cell Biol** 1988 Jul;66(7):677-82 (54 ref.)

Stabilization of hexokinases I and II of ELD cells by binding to mitochondria. Okazaki H, et al. **Biochem Int** 1989 Jan; 18(1):211-6

Reconstitution of C27-steroid 26-hydroxylase activity from bovine brain mitochondria. Pedersen JI, et al. **Biochem Int** 1989 Mar;18(3):615–22

The association of the autoantigens of primary biliary cirrhosis with the mitochondrial H+-ATPase—a reassessment. Sudoyo H, et al. **Biochem Int** 1989 May; 18(5):951–60

Inhibition of mitochondrial-matrix inorganic pyrophosphatase by physiological [Ca2+], and its role in the hormonal regulation of mitochondrial matrix volume. Davidson AM, et al. **Biochem J** 1989 Mar 15;258(3):817–21

The enzymology of beta-oxidation. Introductory remarks. Sherratt HS. **Biochem Soc Trans** 1988 Jun;16(3):409

Inherited defects of mitochondrial fatty acid oxidation. Turnbull DM, et al. **Biochem Soc Trans** 1988 Jun; 16(3):424–7

Spectral properties of fluorescent derivatives of the oligomycin sensitivity conferring protein and analysis of their interaction with the F1 and F0 sectors of the mitochondrial ATPase complex. Duszynski J, et al. **Biochemistry** 1988 Aug 23;27(17):6288–96

Two bovine genes for mitochondrial ADP/ATP translocase expressed differences in various tissues. Powell SJ, et al. **Biochemistry** 1989 Jan 24;28(2):866–73

Electron paramagnetic resonance study of ferrous cytochrome P-450scc-nitric oxide complexes: effects of 20(R),22(R)-dihydroxycholesterol and reduced adrenodoxin. Tsubaki M, et al. **Biochemistry** 1988 Jun 28; 27(13):4856–62

Mitochondrial DNA polymerase from Drosophila melanogaster embryos: kinetics, processivity, and fidelity of DNA polymerization. Wernette CM, et al. **Biochemistry** 1988 Aug 9;27(16):6046–54

NADH-sensitive propionyl-CoA hydrolase in brown-adipose-tissue mitochondria of the rat. Alexson SE, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):13–9

Biosynthesis and import into the mitochondrion of L-3-glycerophosphate dehydrogenase, and the effect of thyroid hormone deficiency on gene expression. Clay VJ, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):112–8

Chloramphenicol inhibition of the formation of particulate mitochondrial enzymes of Saccharomyces cerevisiae. 1966 [classical article] Huang M, et al. **Biochim Biophys Acta** 1989;1000:367–9

Commentary on 'Chloramphenicol Inhibition of the Formation of Particulate Mitochondrial Enzymes of Saccharomyces cerevisiae'. Linnane AW. **Biochim Biophys Acta** 1989;1000:365–6

Mitochondrial H+-ATPase in mutants of Saccharomyces cerevisiae with defective subunit 8 of the enzyme complex. Marzuki S, et al. **Biochim Biophys Acta** 1989 Jul 13; 975(2):222–30

Almitrine, a new kind of energy-transduction inhibitor acting on mitochondrial ATP synthase. Rigoulet M, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):325–9

Cross-linking studies of the cholesterol hydroxylation system from bovine adrenocortical mitochondria. Turko IV, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):37–42

Postnatal development of the parabrachial gustatory zone in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1988 Jul; 21(1):79–94

Postnatal development of the rostral solitary nucleus in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1989 Feb;22(2):313–21

Clofibrate feeding increases cytoplasmic but not mitochondrial malic enzyme activity in rat kidney cortex. Zelewski M, et al. **Cell Biochem Funct** 1989 Apr;7(2):97–103

A critique on the preparation and enzymatic characterization of synaptic and nonsynaptic mitochondria from hippocampus. Villa RF, et al. **Cell Mol Neurobiol** 1989 Jun; 9(2):247–62

Serum mitochondrial aspartate aminotransferase activity: not useful as a marker of excessive alcohol consumption in an unselected population. Schiele F, et al. **Clin Chem** 1989 Jun;35(6):926–30

Activity of some dehydrogenase enzymes in mitochondria from Physarum polycephalum. McCarthy JL, et al. **Comp Biochem Physiol [B]** 1979;63(4):495–9

Soluble 25-hydroxyvitamin D3-1 alpha-hydroxylase from kidney mitochondria of rachitic pigs. Saarem K, et al. **Comp Biochem Physiol [B]** 1978;61(4):485–90

High activity of NADP-dependent malic enzyme in mitochondria from abdomen muscle of the crayfish Orconectes limosus. Skorkowski EF, et al. **Comp Biochem Physiol [B]** 1977;58(3):297–301

Some characteristics of mitochondrial monoamine oxidase activity in eggs of carp (Cyprinus carpio) and rainbow trout (Salmo gairdneri). Nicotra A, et al. **Comp Biochem Physiol [C]** 1989;92(2):401–4

Partial characterization of the gene coding for subunit IV of soybean mitochondrial NADH dehydrogenase. Wintz H, et al. **Curr Genet** 1989 Feb;15(2):155–60

Transferrin and mitochondrial aspartate aminotransferase in young adult alcoholics. Chan AW, et al. **Drug Alcohol Depend** 1989 Jan;23(1):13–8

The processing peptidase of yeast mitochondria: the two co-operating components MPP and PEP are structurally related. Pollock RA, et al. **EMBO J** 1988 Nov; 7(11):3493–500

Mitochondrial RNA polymerase of Saccharomyces cerevisiae: composition and mechanism of promoter recognition. Schinkel AH, et al. **EMBO J** 1988 Oct; 7(10):3255–62

Import of proteins into yeast mitochondria: the purified matrix processing protease contains two subunits which are encoded by the nuclear MAS1 and MAS2 genes. Yang M, et al. **EMBO J** 1988 Dec 1;7(12):3857–62

The Km of NADH dehydrogenase is decreased in mitochondria of cystic fibrosis cells. Dechecchi MC, et al. **Enzyme** 1988;40(1):45–50

Yeast adenylate kinase is active simultaneously in mitochondria and cytoplasm and is required for non-fermentative growth. Bandlow W, et al. **Eur J Biochem** 1988 Dec 15;178(2):451–7

Two genes encode the adenine nucleotide translocator of maize mitochondria. Isolation, characterisation and expression of the structural genes. Bathgate B, et al. **Eur J Biochem** 1989 Aug 1;183(2):303–10

A small isoform of NADH:ubiquinone oxidoreductase (complex I) without mitochondrially encoded subunits is made in chloramphenicol-treated Neurospora crassa. Friedrich T, et al. **Eur J Biochem** 1989 Mar 1;180(1):173–80

An atypical heme-binding structure of cytochrome c1 of Euglena gracilis mitochondrial complex III. Mukai K, et al. **Eur J Biochem** 1989 Jan 2;178(3):649–56

Purification of the yeast mitochondrial methionyl-tRNA synthetase. Common and distinctive features of the cytoplasmic and mitochondrial isoenzymes. Schwob E, et al. **Eur J Biochem** 1988 Dec 1;178(1):235–42

The amino acid sequence of adenylate kinase from Paracoccus denitrificans and its relationship to mitochondrial and microbial adenylate kinases. Spürgin P, et al. **Eur J Biochem** 1989 Feb 15;179(3):621–8

The pathway of the quinol/quinone transhydrogenation reaction in ubiquinol: cytochrome-c reductase of Neurospora mitochondria. Zweck A, et al. **Eur J Biochem** 1989 Jul 15;183(1):199–203

Induction of mitochondrial manganese superoxide dismutase by interleukin 1. Masuda A, et al. **FASEB J** 1988 Dec; 2(15):3087–91

Amino acid substitutions in mitochondrial ATP synthase subunit 9 of Saccharomyces cerevisiae leading to venturicidin or ossamycin resistance. Galanis M, et al. **FEBS Lett** 1989 Jun 5;249(2):333–6

ESR studies on iron-sulfur clusters of complex II in Ascaris suum mitochondria which exhibits strong fumarate reductase activity. Hata-Tanaka A, et al. **FEBS Lett** 1988 Dec 19;242(1):183–6

The isolation and reconstitution of the ADP/ATP carrier from wild-type Saccharomyces cerevisiae. Identification of primarily one type (AAC-2). Knirsch M, et al. **FEBS Lett** 1989 Feb 27;244(2):427–32

The ADP/ATP carrier from yeast (AAC-2) is uniquely suited for the assignment of the binding center by photoaffinity labeling. Mayinger P, et al. **FEBS Lett** 1989 Feb 27;244(2):421–6

Mitochondrial aspartate aminotransferase in nonalcoholic cirrhosis [letter] Cadiot G, et al. **Gastroenterology** 1989 Jul; 97(1):240–1

Sequence analysis of the wheat mitochondrial atp6 gene reveals a fused upstream reading frame and markedly divergent N termini among plant ATP6 proteins. Bonen L, et al. **Gene** 1988 Dec 15;73(1):47–56

Inheritance of mitochondrial aldehyde dehydrogenase: genotyping in Chinese, Japanese and South Korean families reveals dominance of the mutant allele. Singh S, et al. **Hum Genet** 1989 Sep;83(2):119–21

Purification and structural comparisons of the cytosolic and mitochondrial fumarases from baker's yeast. Boonyarat D, et al. **Int J Biochem** 1988;20(10):1125–32

Molecular cloning and expression of a gene for a factor which stabilizes formation of inhibitor-mitochondrial ATPase complex from Saccharomyces cerevisiae. Akashi A, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):526–30

Localization of the NADH kinase in the inner membrane of yeast mitochondria. Iwahashi Y, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):916–21

Topological investigations. Study of the trypsin sensitivity of the N-acetylglucosaminyl and mannosyl-transferase activities located in the outer mitochondrial membrane. Levrat C, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):133–8

Isolation of two distinct cytochromes P-45011 beta with aldosterone synthase activity from bovine adrenocortical mitochondria. Ogishima T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):497–9

Effect of cetyltrimethylammonium on ATP hydrolysis and proton translocation in the F0-F1 H+-ATP synthase of mitochondria. Bârzu O, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):403–14

Cytochrome c oxidase of Euglena gracilis: purification, characterization, and identification of mitochondrially synthesized subunits. Brönstrup U, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):359–73

A noncleavable signal for mitochondrial import of 3-oxoacyl-CoA thiolase. Amaya Y, et al. **J Biol Chem** 1988 Oct 5;263(28):14463–70

Functional significance of mitochondrial bound hexokinase in tumor cell metabolism. Evidence for preferential phosphorylation of glucose by intramitochondrially generated ATP. Arora KK, et al. **J Biol Chem** 1988 Nov 25;263(33):17422–8

A ubiquinone derivative that inhibits mitochondrial cytochrome b-c1 complex but not chloroplast cytochrome b6-f complex activity. Gu LQ, et al. **J Biol Chem** 1989 Mar 15;264(8):4506–12

Isolation and characterization of the gene and cDNA encoding human mitochondrial creatine kinase. Haas RC, et al. **J Biol Chem** 1989 Feb 15;264(5):2890–7

Electron transfer through center o of the cytochrome b-c1 complex of yeast mitochondria involves subunit VII, the ubiquinone-binding protein. Japa S, et al. **J Biol Chem** 1989 Aug 25;264(24):13994–7

Biogenesis of cytochrome c1. Role of cytochrome c1 heme lyase and of the two proteolytic processing steps during import into mitochondria. Nicholson DW, et al. **J Biol Chem** 1989 Jun 15;264(17):10156–68

Role of cytochrome c heme lyase in the import of cytochrome c into mitochondria. Nicholson DW, et al. **J Biol Chem** 1988 Dec 15;263(35):19034–42

Isolation of aldosterone synthase cytochrome P-450 from zona glomerulosa mitochondria of rat adrenal cortex. Ogishima T, et al. **J Biol Chem** 1989 Jul 5;264(19):10935–8

Ovine ceroid lipofuscinosis. The major lipopigment protein and the lipid-binding subunit of mitochondrial ATP synthase have the same NH2-terminal sequence. Palmer DN, et al. **J Biol Chem** 1989 Apr 5;264(10):5736–40

Drug-promoted cleavage of kinetoplast DNA minicircles. Evidence for type II topoisomerase activity in trypanosome mitochondria. Shapiro TA, et al. **J Biol Chem** 1989 Mar 5;264(7):4173–8

Structural organization of the human mitochondrial cytochrome c1 gene. Suzuki H, et al. **J Biol Chem** 1989 Jan 25;264(3):1368–74

Dispensable presequence for cellular localization and function of mitochondrial malate dehydrogenase from Saccharomyces cerevisiae. Thompson LM, et al. **J Biol Chem** 1989 Jul 15;264(20):12091–6

Comparison of pregnenolone synthesis by cytochrome P-450scc in mitochondria from porcine corpora lutea and granulosa cells of follicles. Tuckey RC, et al. **J Biol Chem** 1989 Apr 5;264(10):5704–9

The nature of the inhibition of 4,7-dioxobenzothiazole derivatives on mitochondrial ubiquinol-cytochrome c reductase. Yang FD, et al. **J Biol Chem** 1989 Jan 15; 264(2):891–8

Effects of Ca2+ on the activities of the calcium-sensitive dehydrogenases within the mitochondria of mammalian tissues. Denton RM, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S69–72 (30 ref.)

DNA sequences of two expressed nuclear genes for human mitochondrial ADP/ATP translocase. Cozens AL, et al. **J Mol Biol** 1989 Mar 20;206(2):261–80

Putative chicken "muscle-specific 7 S RNA" is related to the mitochondrial ATPase 6 gene. Desjardins P, et al. **J Mol Biol** 1989 Jun 5;207(3):625–9

The novel neuropsychotropic agent milacemide is a specific enzyme-activated inhibitor of brain monoamine oxidase B. Janssens de Varebeke P, et al. **J Neurochem** 1989 Oct; 53(4):1109–16

Progression from MERRF to MELAS phenotype in a patient with combined respiratory complex I and IV deficiencies. Byrne E, et al. **J Neurol Sci** 1988 Dec;88(1-3):327–37

Superoxide dismutase and cytochrome oxidase activities in light and heavy synaptic mitochondria from rat cerebral cortex during aging. Vanella A, et al. **J Neurosci Res** 1989 Mar;22(3):351–5

Subcellular distribution of branched-chain aminotransferase activity in rat tissues. Hutson SM. **J Nutr** 1988 Dec; 118(12):1475–81

Manganese-mediated increase in the rat brain mitochondrial cytochrome P-450 and drug metabolism activity: susceptibility of the striatum. Liccione JJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):222–8

Inhibition of human adrenal steroidogenic enzymes in vitro by imidazole drugs including ketoconazole. Ayub M, et al. **J Steroid Biochem** 1989 Apr;32(4):515–24

Human placental 3 beta-hydroxy-5-ene-steroid dehydrogenase and steroid 5——4-ene-isomerase: purification from mitochondria and kinetic profiles, biophysical characterization of the purified mitochondrial and microsomal enzymes. Thomas JL, et al. **J Steroid Biochem** 1989 Aug;33(2):209–17

Radioimmunoassay of mitochondrial aspartate aminotransferase in rat tissues. Aoki Y, et al. **Kitasato Arch Exp Med** 1988 Apr;61(1):73–80

Mitochondrial complex I deficiency in Parkinson's disease [letter] [see comments] Schapira AH, et al. **Lancet** 1989 Jun 3;1(8649):1269. **Comment in:** Lancet 1989 Jul 1;2(8653):49

Sudden infant death and long-chain 3-hydroxyacyl-CoA dehydrogenase [letter] Wanders RJ, et al. **Lancet** 1989 Jul 1;2(8653):52–3

Mitochondrial enzymes in hereditary ataxias. Sheu KF, et al. **Metab Brain Dis** 1988 Jun;3(2):151–60

Purification of vacuolar membranes, mitochondria, and plasma membranes from Neurospora crassa and modes of discriminating among the different H+-ATPases. Bowman EJ, et al. **Methods Enzymol** 1988;157:562–73

Branched-chain alpha-keto acid dehydrogenase phosphatase and its inhibitor protein from bovine kidney. Damuni Z, et al. **Methods Enzymol** 1988;166:321–9

Assay of branched-chain alpha-keto acid dehydrogenase kinase in mitochondrial extracts and purified branched-chain alpha-keto acid dehydrogenase complexes. Espinal J, et al. **Methods Enzymol** 1988;166:166–75

Determination of activity and activity state of branched-chain alpha-keto acid dehydrogenase in rat tissues. Goodwin GW, et al. **Methods Enzymol** 1988; 166:189-201

Assay of total complex and activity state of branched-chain alpha-keto acid dehydrogenase complex and of activator protein in mitochondria, cells, and tissues. Patston PA, et al. **Methods Enzymol** 1988;166:175-89

Branched-chain alpha-keto acid dehydrogenase complex from bovine kidney. Pettit FH, et al. **Methods Enzymol** 1988;166:309-12

Effects of Ca2+ and lipoxygenase inhibitors on hexokinase degradation in rabbit reticulocytes. Magnani M, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):3-7

Mitochondrial import and processing of mutant human ornithine transcarbamylase precursors in cultured cells. Isaya G, et al. **Mol Cell Biol** 1988 Dec;8(12):5150-8

Peroxisomal oxidative capacity of brown adipose tissue depends on the thyroid status. Giacobino JP, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):217-25

The beta-subunit of the bovine mitochondrial F1 ATPase specifically binds the amino terminal domain of parathyroid hormone. Laethem R, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1-2):155-9

Characterization and quantitation of monoamine oxidases A and B in mitochondria from human placenta. Riley LA, et al. **Mol Pharmacol** 1989 Jul;36(1):54-60

A defect in mitochondrial electron-transport activity (NADH-coenzyme Q oxidoreductase) in Leber's hereditary optic neuropathy. Parker WD Jr, et al. **N Engl J Med** 1989 May 18;320(20):1331-3

Human mitochondrial propionyl-CoA carboxylase: localization of the N-terminus of the pro- and mature alpha chains in the deduced primary sequence of a full-length cDNA. Lamhonwah AM, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4396

Nucleotide sequence of a fungal plasmid-like DNA containing the mitochondrial ATPase subunit 6 gene. Lin JJ, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9875

Nucleotide sequence of Chlamydomonas reinhardtii mitochondrial genes coding for subunit 6 of NADH dehydrogenase and tRNATrp. Ma DP, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11373

Nucleotide sequence of the Zea mays mitochondrial cytochrome oxidase subunit III gene. McCarty DM, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9873

Characterization of yeast mitochondrial RNase P: an intact RNA subunit is not essential for activity in vitro. Morales MJ, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6865-81

Mitochondrial myopathy and cardiomyopathy in siblings. Tulinius MH, et al. **Pediatr Neurol** 1989 May-Jun; 5(3):182-8

Heterogeneity of defects in mitochondrial acetoacetyl-CoA thiolase biosynthesis in fibroblasts from four patients with 3-ketothiolase deficiency. Nagasawa H, et al. **Pediatr Res** 1989 Aug;26(2):145-9

Extensive defects of mitochondrial electron-transfer chain in muscular cytochrome c oxidase deficiency. Tanaka M, et al. **Pediatr Res** 1988 Oct;24(4):447-54

Rapid purification of mitochondrial hexokinase from rat brain by a single affinity chromatography step on Affi-Gel blue. Wilson JE. **Prep Biochem** 1989;19(1):13-21

A plant manganese superoxide dismutase is efficiently imported and correctly processed by yeast mitochondria. Bowler C, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3237-41

Survey of amino-terminal proteolytic cleavage sites in mitochondrial precursor proteins: leader peptides cleaved by two matrix proteases share a three-amino acid motif. Hendrick JP, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4056-60

Mismatch-specific 3'----5' exonuclease associated with the mitochondrial DNA polymerase from Drosophila embryos. Kaguni LS, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6469-73

Deletion analysis of the maize mitochondrial superoxide dismutase transit peptide. White JA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3534-8

Mitochondrial import of rat pre-ornithine transcarbamylase: accurate processing of the precursor form is not required for uptake into mitochondria, nor assembly into catalytically active enzyme. Graf L, et al. **Protein Eng** 1988 Oct;2(4):297-300

Aminoacyl-tRNA synthetases are involved in RNA splicing in fungal mitochondria. Benne R. **Trends Genet** 1988 Jul; 4(7):181-2

Are intron-encoded specific endonucleases responsible for nonhomologous recombination? [letter] Koll F, et al. **Trends Genet** 1989 Jun;5(6):173 (12 ref.)

Eukaryote membrane genetics: the Fo sector of mitochondrial ATP synthase. Nagley P. **Trends Genet** 1988 Feb;4(2):46-51 (35 ref.)

Mitochondrial RNA polymerase: dual role in transcription and replication. Schinkel AH, et al. **Trends Genet** 1989 May;5(5):149-54 (31 ref.)

Cytochrome oxidase: an endogenous metabolic marker for neuronal activity. Wong-Riley MT. **Trends Neurosci** 1989 Mar;12(3):94-101 (89 ref.)

Protein phosphorylation in yeast mitochondria: cAMP-dependence, submitochondrial localization and substrates of mitochondrial protein kinases. Müller G, et al. **Yeast** 1987 Sep;3(3):161-74

[Effects of synthetic bioactive lipids on the activity of D-beta-hydroxybutyrate dehydrogenase, a membrane enzyme] Nasser B, et al. **C R Soc Biol (Paris)** 1988; 182(6):565-71 (Eng. Abstr.) **(Fre)**

[Role of the serum level of mitochondrial aspartate aminotransferase as marker of alcoholic intoxication in cirrhotic patients] Ink O, et al. **Presse Med** 1989 Jan 28; 18(3):111-4 (Eng. Abstr.) **(Fre)**

[Mitochondrial aspartate aminotransferase in the differentiation of hyperenzymuria] Dietrich B, et al. **Z Med Lab Diagn** 1988;29(5):245-53 (Eng. Abstr.) **(Ger)**

[DNA polymerases in the cells of higher eukaryotes] Siedlecki JA. **Postepy Biochem** 1988;34(3):153-72 (177 ref.) **(Pol)**

[Kinetics of the interaction of ATPase of submitochondrial fragments and a natural protein-inhibitor] Panchenko MV, et al. **Biokhimiia** 1989 Apr;54(4):569-79 (Eng. Abstr.) **(Rus)**

[Purification and properties of NADP-specific malate dehydrogenase from bovine adrenal cortex mitochondria] Senkevich SB. **Biokhimiia** 1988 Nov;53(11):1783-90 (Eng. Abstr.) **(Rus)**

[Hygienic evaluation of the biological effect of pulsed electromagnetic fields of 850-2750 mHz] Tomashevskaia LA, et al. **Gig Sanit** 1988 Sep;(9):22-4 (Eng. Abstr.) **(Rus)**

[Deamination of indolalkylamines in hyperthermia] Gureeva ZP. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):20-4 (Eng. Abstr.) **(Rus)**

[The effect of starvation on GABA-transaminase and glutamate decarboxylase activity on mitochondria of dog limbic structures during postnatal ontogenesis] Faradzhev AN. **Vopr Med Khim** 1988 Nov-Dec;34(6):32-6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Mitochondrial antigenic structure and enzyme activity in ageing human diploid fibroblasts. Flannery GR, et al. **Ann Hum Biol** 1989 May-Jun;16(3):259-64

A serial study of anticardiolipin antibody and antimitochondrial antibody type M5 in a patient with polyarthritis and polymyositis. Keane A, et al. **Br J Rheumatol** 1989 Apr;28(2):158-60

Two new serum immunoassays (RIA and EIA) for the determination of M2 antimitochondrial antibodies in primary biliary cirrhosis. Plebani M, et al. **Clin Chim Acta** 1989 May 15;181(2):201-6

Polyspecificity of human monoclonal antibodies reactive with Mycobacterium leprae, mitochondria, ssDNA, cytoskeletal proteins, and the acetylcholine receptor. Duggan DB, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):327-40

Cardiolipin-fluorescent (M1) antimitochondrial antibody and cholestatic hepatitis in secondary syphilis. Comer GM, et al. **Dig Dis Sci** 1989 Aug;34(8):1298-302

Identity of the M2 autoantigens in primary biliary cirrhosis. Mackay IR, et al. **Hepatology** 1989 Sep;10(3):389-90

Frequency of IgG and IgM autoantibodies to four specific M2 mitochondrial autoantigens in primary biliary cirrhosis. Mutimer DJ, et al. **Hepatology** 1989 Oct;10(4):403-7

Detection of autoantibodies to recombinant mitochondrial proteins in patients with primary biliary cirrhosis. Van de Water J, et al. **N Engl J Med** 1989 May 25;320(21):1377-80

Mitochondrial autoantigens in primary biliary cirrhosis. Association of disease-specific determinants with a subunit of complex I (NADH-ubiquinone reductase) of the inner mitochondrial membrane. Frostell A, et al. **Scand J Immunol** 1988 Dec;28(6):645-52

Primary biliary cirrhosis: in lication for a single mitochondrial antigenic epitope detected by patient autoantibodies and a novel monoclonal antibody. Mendel-Hartvig I, et al. **Scand J Immunol** 1988 Oct;28(4):403-10

[The value of resorting to 2 technics for detecting anti-mitochondrial antibodies] Gentric A, et al. **Ann Med Interne (Paris)** 1988;139(3):186-9 (Eng. Abstr.) **(Fre)**

[Prognostic significance of antimitochondrial antibody profiles A-D in primary biliary cirrhosis] Klein R, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1549-53 (Eng. Abstr.) **(Ger)**

METABOLISM

Nuclear gene affecting mitochondrial protein synthesis. Orlowska-Matuszewska G, et al. **Acta Biochim Pol** 1988; 35(2):95-103

Thyroid hormone and not growth hormone is the principle regulator of mammalian mitochondrial biogenesis. Mutvei A, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):223-8

Cytochemical examinations of Ca, cytochrome oxidase and succinate dehydrogenase enzymes in endometrium carcinomatous tissue after high dose progestogen treatment. Szarvas Z, et al. **Acta Morphol Hung** 1988;36(3-4):177-83

Effect of nimodipine on mitochondrial respiration in different rat brain areas after subarachnoid haemorrhage. Rodriguez y Baena R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:177-81

Monovalent cation antiport reactions in isolated mitochondria. Brierley GP, et al. **Adv Exp Med Biol** 1988; 232:47-57 (78 ref.)

Abnormal Ca2+ transport characteristics of hepatoma mitochondria and endoplasmic reticulum. Murphy AN, et al. **Adv Exp Med Biol** 1988;232:139-50

Calcium and magnesium movements through sarcoplasmic reticulum, endoplasmic reticulum, and mitochondria. Somlyo AV, et al. **Adv Exp Med Biol** 1988;232:221-9 (52 ref.)

Mechanism of the mitochondrial respiratory toxicity of cephalosporin antibiotics. Tune BM. **Adv Exp Med Biol** 1989;252:313-8

Regulation of valine and alpha-ketoisocaproate metabolism in rat kidney mitochondria. Miller RH, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E475-81

Cold-induced changes in uncoupling protein and GDP binding sites in brown fat of ob/ob mice. Milner RE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R292-9

Oxygen diffusion and mitochondrial respiration in neuroblastoma cells. Robiolio M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1207-13

Changes in GDP binding to brown adipose tissue mitochondria and the uncoupling protein. Swick AG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E865-70

Potential role of mitochondrial calcium metabolism during reperfusion injury. Vlessis AA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1196-206

Effects of hyperoxia and vitamin E on the fatty acid composition of rat lung microsomes and mitochondria. Dilley ED, et al. **Am Rev Respir Dis** 1989 Aug;140(2):423-9

Stable preparation of yeast mitochondria and mitoplasts synthesizing specific polypeptides. Kozłowski M, et al. **Anal Biochem** 1988 Aug 1;172(2):382-91

A simple colorimetric assay method for pyrophosphate in the presence of a 1000-fold excess of orthophosphate: application of the method to the study of pyrophosphate metabolism in mitochondria. Mansurova SE, et al. **Anal Biochem** 1989 Feb 1;176(2):390-4

Mitochondrial function in normal and genetically altered cells and tissues. Chance B, et al. **Ann N Y Acad Sci** 1988; 550:360-73

Generation of hydrogen peroxide by brain mitochondria: the effect of reoxygenation following postdecapitative ischemia. Cino M, et al. **Arch Biochem Biophys** 1989 Mar; 269(2):623-38

Characteristics of Ca2+ transport by Trypanosoma cruzi mitochondria in situ. Docampo R, et al. **Arch Biochem Biophys** 1989 Jul;272(1):122-9

Regulation of alternative pathway activity in plant mitochondria: nonlinear relationship between electron flux and the redox poise of the quinone pool. Dry IB, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):148-57

Selective oxidation of mitochondrial glutathione in cultured rat adrenal cells and its relation to polycyclic aromatic hydrocarbon-induced cytotoxicity. Hallberg E, et al. **Arch Biochem Biophys** 1989 May 1;270(2):662-71

Molecular aspects of the adenine nucleotide carrier from mitochondria. Klingenberg M. **Arch Biochem Biophys** 1989 Apr;270(1):1-14 (72 ref.)

Formation of tyrosine O-sulfate by mitochondria and chloroplasts of Euglena. Saidha T, et al. **Arch Biochem Biophys** 1989 Jul;272(1):237-44

Inhibition of lipid peroxidation by idebenone in brain mitochondria in the presence of succinate. Suno M, et al. **Arch Gerontol Geriatr** 1989 May;8(3):291-7

Parkinson's disease, vitamin E, and mitochondrial energy metabolism [letter] Hornsby PJ. **Arch Neurol** 1989 Aug; 46(8):840-1

Compared flow cytometric analysis of mitochondria using 10-n-nonyl acridine orange and rhodamine 123. Benel L, et al. **Basic Appl Histochem** 1989;33(2):71-80

Oxygen radicals, lipid peroxidation and DNA damage in mitochondria. Hruszkewycz AM, et al. **Basic Life Sci** 1988; 49:449-56 (70 ref.)

Lucigenin chemiluminescence and its relationship to mitochondrial respiration in phagocytic cells. Esterline RL, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):584-91

Rapid postnatal changes in F1-ATPase proteins and in the uncoupling protein in brown adipose tissue mitochondria of the newborn rat. Luis AM, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):216-22

Metabolite transport in rat kidney mitochondria: ornithine/phosphate translocator. Passarella S, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):870-9

Adrenergic regulation of the uncoupling protein expression in foetal rat brown adipocytes in primary culture. Porras A, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):541-7

Adverse effects of anti-tumor drug, cisplatin, on rat kidney mitochondria: disturbances in glutathione peroxidase activity. Sugiyama S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1121-7

Lipid peroxidation in Ehrlich ascites cell mitochondria is not determined by the polyunsaturated fatty acid content of the membrane. Tretter L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):356-62

Iron stimulation of free radical-mediated porphyrinogen oxidation by hepatic and renal mitochondria. Woods JS, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):101-8

The concentration of uncoupling protein correlates with Mg2+ activated mitochondrial binding of GDP. Henningfield MF, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2-3):108-12

Evidence that the acute unmasking of GDP-binding sites in brown adipose tissue mitochondria is not dependent on

mitochondrial swelling. Milner RE, et al. **Biochem Cell Biol** 1988 Nov;66(11):1226–30

Sequential changes in the expression of mitochondrial protein mRNA during the development of brown adipose tissue in bovine and ovine species. Sudden occurrence of uncoupling protein mRNA during embryogenesis and its disappearance after birth. Casteilla L, et al. **Biochem J** 1989 Feb 1;257(3):665–71

The specific binding of the microtubule-associated protein 2 (MAP2) to the outer membrane of rat brain mitochondria. Lindén M, et al. **Biochem J** 1989 Jul 1;261(1):167–73

Mitochondria contain a proteolytic system which can recognize and degrade oxidatively-denatured proteins. Marcillat O, et al. **Biochem J** 1988 Sep 15;254(3):677–83

The O2-dependence of respiration and H2O2 production in the parasitic nematode Ascaridia galli. Paget TA, et al. **Biochem J** 1988 Dec 1;256(2):633–9

Oxidative activities in mitochondria-like particles from Setaria digitata, a filarial parasite. Raj RK, et al. **Biochem J** 1988 Dec 1;256(2):559–64

Fourier-transform infra-red studies of the alkaline isomerization of mitochondrial cytochrome c and the ionization of carboxylic acids. Tonge P, et al. **Biochem J** 1989 Mar 1;258(2):599–605

Sites of inhibition of mitochondrial electron transport by rhein. Floridi A, et al. **Biochem Pharmacol** 1989 Mar 1; 38(5):743–51

The regulation of mitochondrial function in mammalian cells by Ca2+ ions. McCormack JG, et al. **Biochem Soc Trans** 1988 Aug;16(4):523–7 (57 ref.)

Mitochondrial protein targeting signals. Reid GA, et al. **Biochem Soc Trans** 1988 Oct;16(5):709–10

Biogenesis of mitochondrial proteins. Stuart RA, et al. **Biochem Soc Trans** 1988 Oct;16(5):701–2 (36 ref.)

Impact on energy metabolism of quantitative and functional cyclosporine-induced damage of kidney mitochondria. Aupetit B, et al. **Biochim Biophys Acta** 1988 Dec 7; 936(3):325–31

The mitochondrial respiratory chain of yeast. Structure and biosynthesis and the role in cellular metabolism. de Vries S, et al. **Biochim Biophys Acta** 1987;895(3):205–39 (252 ref.)

Mitochondrial transport of K+ and Mg2+. Diwan JJ. **Biochim Biophys Acta** 1987;895(3):155–65 (134 ref.)

Study on ATP-generating system and related hexokinase activity in mitochondria isolated from undifferentiated or differentiated HT29 adenocarcinoma cells. Gauthier T, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):231–8

Mitochondrial protein import. Hartl FU, et al. **Biochim Biophys Acta** 1989 Jan 18;988(1):1–45 (388 ref.)

Nucleotide sequence of a wheat mitochondrial lysine tRNA gene. Joyce PB, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):355–6

Electron-transfer flavoprotein from anaerobic Ascaris suum mitochondria and its role in NADH-dependent 2-methyl branched-chain enoyl-CoA reduction. Komuniecki R, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):127–31

Quantitative analyses of the uncoupling activity of substituted phenols with mitochondria from flight muscles of house flies. Miyoshi H, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):312–21

Mechanism of O2- generation in reduction and oxidation cycle of ubiquinones in a model of mitochondrial electron transport systems. Sugioka K, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):377–85

Inhibition of mitochondrial protein synthesis influences the glucocorticoid sensitivity of lymphoid cells. Van den Bogert C, et al. **Biochim Biophys Acta** 1988 Dec 9; 972(3):302–10

Cerebral metabolic response and mitochondrial activity following insulin-induced hypoglycemia in newborn lambs. Belik J, et al. **Biol Neonate** 1989;55(4–5):281–9

Calcium uptake by bovine epididymal spermatozoa is regulated by the redox state of the mitochondrial pyridine nucleotides. Vijayaraghavan S, et al. **Biol Reprod** 1989 Apr; 40(4):744–51

Different susceptibility of cortical and medullary rat kidney mitochondria to ischemic injury. Jung K, et al. **Biomed Biochim Acta** 1988;47(6):455–60

The adenine nucleotide catabolism in nonphosphorylating mitochondria of different tissues. Ziegler M, et al. **Biomed Biochim Acta** 1989;48(2–3):S48–52

Cerebral mitochondrial respiration in diabetic and chronically hypoglycemic rats. Pelligrino DA, et al. **Brain Res** 1989 Feb 13;479(2):241–6

Uncoupling protein and its mRNA in brown adipose tissue of newborn rabbits. Rozon DK, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):54–8

Covalent binding of hexachlorobutadiene metabolites to renal and hepatic mitochondrial DNA. Schrenk D, et al. **Carcinogenesis** 1989 Jun;10(6):1139–41

Termination of transcription in human mitochondria: identification and purification of a DNA binding protein factor that promotes termination. Kruse B, et al. **Cell** 1989 Jul 28;58(2):391–7

Molecular biology of plant mitochondria. Levings CS 3d, et al. **Cell** 1989 Jan 27;56(2):171–9 (113 ref.)

Molecular analysis of a cytoplasmic factor essential for pole cell formation in Drosophila embryos. Kobayashi S, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:25–9 (18 ref.)

Inhibition of oxidative phosphorylation by organotin thiocarbamates. Chandra S, et al. **Chem Biol Interact** 1989; 71(1):21–36

Submitochondrial distribution of basic drugs in the isolated perfused lung. Okumura K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1109–11

Sulfate transport in toad skin: evidence for mitochondria-rich cell pathways in common with halide ions. Larsen EH, et al. **Comp Biochem Physiol [A]** 1988;90(4):709–14

The maintenance of respiratory control at 25 degrees C by mitochondria from various animal and plant sources. Goldblatt M, et al. **Comp Biochem Physiol [B]** 1978; 61(1):189–90

Adverse effects of gossypol analogs on TM4 cell mitochondrial function. Tanphaichitr N, et al. **Contraception** 1989 Jun;39(6):677–85

Mitochondrial gene expression in male germ cells of the mouse. Alcivar AA, et al. **Dev Biol** 1989 Oct;135(2):263–71

Immunocytochemical localization of transferrin and mitochondrial malate dehydrogenase in the developing nervous system of the rat. Dion TL, et al. **Dev Neurosci** 1988;10(3):152–64

Alloxan diabetogenicity: determinants of potentiation, protection and B-cell selectivity. Boquist L. **Diabete Metab** 1989 Jan-Feb;15(1):23–9

Import of proteins into yeast mitochondria: the nuclear MAS2 gene encodes a component of the processing protease that is homologous to the MAS1-encoded subunit. Jensen RE, et al. **EMBO J** 1988 Dec 1;7(12):3863–71

Tight folding of a passenger protein can interfere with the targeting function of a mitochondrial presequence. Verner K, et al. **EMBO J** 1989 May;8(5):1491–5

Co-ordinate control of synthesis of mitochondrial and non-mitochondrial hemoproteins: a binding site for the HAP1 (CYP1) protein in the UAS region of the yeast catalase T gene (CTT1). Winkler H, et al. **EMBO J** 1988 Jun;7(6):1799–804

Cholesterol sulfate: a naturally-occurring inhibitor of cholesterol side-chain cleavage which functions at the level of intramitochondrial cholesterol translocation. Lambeth JD, et al. **Endocr Res** 1989;15(1–2):85–99 (38 ref.)

Steroidogenesis activator polypeptide may be a product of glucose regulated protein 78 (GRP78). Mertz LM, et al. **Endocr Res** 1989;15(1–2):101–15

Regulation of progesterone biosynthesis by estrogen during baboon pregnancy: placental mitochondrial cholesterol side-chain cleavage activity in antiestrogen (ethamoxytriphetol, MER-25)-treated baboons. Babischkin JS, et al. **Endocrinology** 1989 Apr;124(4):1638–45

In vitro metabolism of 25-hydroxyvitamin D3 by human trophoblastic homogenates, mitochondria, and microsomes: lack of evidence for the presence of 25-hydroxyvitamin D3-1 alpha- and 24R-hydroxylases. Hollis BW, et al. **Endocrinology** 1989 Sep;125(3):1224–30

The ATP/ADP-antiporter is involved in the uncoupling effect of fatty acids on mitochondria. Andreyev AYu, et al. **Eur J Biochem** 1989 Jul 1;182(3):585–92

Localization of the synthesis of very-long-chain fatty acid in mitochondria from Saccharomyces cerevisiae. Bessoule JJ, et al. **Eur J Biochem** 1988 Oct 15;177(1):207–11

Identification of a new pore in the mitochondrial outer membrane of a porin-deficient yeast mutant. Dihanich M, et al. **Eur J Biochem** 1989 May 15;181(3):703–8

Nucleo-mitochondrial interactions in yeast mitochondrial biogenesis. Grivell LA. **Eur J Biochem** 1989 Jul 1; 182(3):477–93 (195 ref.)

Molecular cloning of the nuclear gene for mitochondrial ribosomal protein YmL31 from Saccharomyces cerevisiae. Grohmann L, et al. **Eur J Biochem** 1989 Jul 15; 183(1):155–60

Metabolism of [U-14C]-4-hydroxybutyric acid to intermediates of the tricarboxylic acid cycle in extracts of rat liver and kidney mitochondria. Gibson KM, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan-Mar; 14(1):61–70

Direct binding of atrial natriuretic factor to adrenocortical mitochondria. Heisler S. **Eur J Pharmacol** 1989 Mar 21; 162(2):281–8

Succinate transport inhibition by valproate in rat renal mitochondria. Rumbach L, et al. **Eur J Pharmacol** 1989 May 30;164(3):577–81

The mitochondrial high-capacity low-affinity (+/-)-[3H]nitrendipine binding site is regulated by nucleotides. Zernig G, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):67–73

Thermodynamic and kinetic control of ATP synthesis in yeast mitochondria: role of delta pH. Beauvoit B, et al. **FEBS Lett** 1989 Feb 27;244(2):255–8

ATP-dependent peptide release from mitochondria of reticulocytes. Dubiel W, et al. **FEBS Lett** 1989 Jul 3; 250(2):289–92

Conformational changes of a mitochondrial precursor protein on binding to phospholipid vesicles and SDS micelles. A circular dichroism and fluorescence spectroscopy study. Endo T, et al. **FEBS Lett** 1989 Jun 5;249(2):173–7

Hypothyroidism in rats decreases mitochondrial inner membrane cation permeability. Hafner RP, et al. **FEBS Lett** 1989 May 8;248(1–2):175–8

Adenosine formation by isolated rat kidney mitochondria. Henke W, et al. **FEBS Lett** 1989 Aug 28;254(1–2):5–7

The mitochondrial outer membrane channel, VDAC, is modulated by a soluble protein. Holden MJ, et al. **FEBS Lett** 1988 Dec 5;241(1–2):105–9

Carnitine cycle in brown adipose tissue mitochondria as a tool for studying the regulatory role of fatty acids in the uncoupling protein function. Ježek P, et al. **FEBS Lett** 1989 Jan 16;243(1):37–40

Characterization of a peripheral-type benzodiazepine-binding site in the mitochondria of Chinese hamster ovary cells. Riond J, et al. **FEBS Lett** 1989 Mar 13;245(1–2):238–44

Adenine nucleotides regulate Ca2+ transport in brain mitochondria. Rottenberg H, et al. **FEBS Lett** 1989 Apr 24;247(2):483–6

Lipid peroxidation in mitochondria. Bindoli A. **Free Radic Biol Med** 1988;5(4):247–61 (203 ref.)

Mitochondrial abnormalities in migraine. Preliminary findings. Montagna P, et al. **Headache** 1988 Aug; 28(7):477–80

Effect of Bacillus sphaericus 1593 toxin on choline acetyl transferase and mitochondrial oxidative activities of the mosquito larvae. Narasu ML, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):253–6

Thyroid hormone stimulation of the perch (Anabas testudineus Bloch) ovarian mitochondrial steroidogenesis. Kaul K, et al. **Indian J Exp Biol** 1988 Jun;26(6):413–7

Temperature dependence of the atractyloside-induced mitochondrial Ca2+ release. Chávez E, et al. **Int J Biochem** 1988;20(7):731–6

Study of the N-glycoprotein biosynthesis through dolichol intermediates in the mitochondrial membranes. Levrat C, et al. **Int J Biochem** 1989;21(3):265–78

Lipid composition of brown adipose tissue mitochondria and microsomes in hyperthyroid rats. Ruggiero FM, et al. **Int J Biochem** 1989;21(3):327–32

The effects of intrauterine growth retardation on synaptogenesis and mitochondrial formation in the cerebral and cerebellar cortices of fetal sheep. Bisignano M, et al. **Int J Dev Neurosci** 1988;6(5):453–60

Protein import into mitochondria. Grivell LA. **Int Rev Cytol** 1988;111:107–41 (171 ref.)

Rotation and protein-protein interactions of cytochrome P-450 in the inner membrane of adrenocortical mitochondria. Kawato S, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):188–91

Critical region in the extension peptide for the import of cytochrome P-450(SCC) precursor into mitochondria. Kumamoto T, et al. **J Biochem (Tokyo)** 1989 Jan; 105(1):72–8

Precise determination of the mitochondrial import signal contained in a 70 kDa protein of yeast mitochondrial outer membrane. Nakai M, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):513–9

Protein sorting between the outer and inner mitochondrial membranes: submitochondrial localization of cytochrome c1 whose presequence is replaced by the amino-terminal region of a 70 kDa outer membrane protein. Nakai M, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):181–7

Extensive Ca2+ release from energized mitochondria induced by disulfiram. Chávez E, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):335–45

Mitochondrial localization of a phosphoprotein that rapidly accumulates in adrenal cortex cells exposed to adrenocorticotropic hormone or to cAMP. Alberta JA, et al. **J Biol Chem** 1989 Feb 5;264(4):2368–72

Purification and characterization of a protein associated with peripheral-type benzodiazepine binding sites. Antkiewicz-Michaluk L, et al. **J Biol Chem** 1988 Nov 25; 263(33):17317–21

Ca2+ transport by coupled Trypanosoma cruzi mitochondria in situ. Docampo R, et al. **J Biol Chem** 1989 Jan 5; 264(1):108–11

Coupling of heme attachment to import of cytochrome c into yeast mitochondria. Studies with heme lyase-deficient mitochondria and altered apocytochromes c. Dumont ME, et al. **J Biol Chem** 1988 Nov 5;263(31):15928–37

Adriamycin, a drug interacting with acidic phospholipids, blocks import of precursor proteins by isolated yeast mitochondria. Eilers M, et al. **J Biol Chem** 1989 Feb 15; 264(5):2945–50

Binding of a tightly folded artificial mitochondrial precursor protein to the mitochondrial outer membrane involves a lipid-mediated conformational change. Endo T, et al. **J Biol Chem** 1989 Feb 15;264(5):2951–6

A mitochondrial protein from Neurospora crassa detected both on ribosomes and in membrane fractions. Analysis of the gene, the message, and the protein. Kreader CA, et al. **J Biol Chem** 1989 Jan 5;264(1):317–27

Phosphorylation of ferredoxin and regulation of renal mitochondrial 25-hydroxyvitamin D-1 alpha-hydroxylase activity in vitro. Nemani R, et al. **J Biol Chem** 1989 Sep 15;264(26):15361–6

Mitochondrial protein import. Bypass of proteinaceous surface receptors can occur with low specificity and efficiency. Pfaller R, et al. **J Biol Chem** 1989 Jan 5; 264(1):34–9

Molecular cloning of a Chinese hamster mitochondrial protein related to the "chaperonin" family of bacterial and plant proteins. Picketts DJ, et al. **J Biol Chem** 1989 Jul 15;264(20):12001–8

Cyclosporin A-binding protein (cyclophilin) of Neurospora crassa. One gene codes for both the cytosolic and mitochondrial forms. Tropschug M, et al. **J Biol Chem** 1988 Oct 5;263(28):14433–40

Protein import into mitochondria in a homologous yeast in vitro system. Verner K, et al. **J Biol Chem** 1989 Mar 5; 264(7):3877–9

Substitutions engineered by chemical synthesis at three conserved sites in mitochondrial cytochrome c. Thermodynamic and functional consequences. Wallace CJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15199–209

Cholesterol sulfate is a naturally occurring inhibitor of steroidogenesis in isolated rat adrenal mitochondria. Xu XX, et al. **J Biol Chem** 1989 May 5;264(13):7222–7

Disrupted yeast mitochondria can import precursor proteins directly through their inner membrane. Hwang S, et al. **J Cell Biol** 1989 Aug;109(2):487–93

In vitro import of cytochrome c peroxidase into the intermembrane space: release of the processed form by intact mitochondria. Kaput J, et al. **J Cell Biol** 1989 Jul; 109(1):101–12

70-kD heat shock-related protein is one of at least two distinct cytosolic factors stimulating protein import into mitochondria. Murakami H, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 1):2051–7

Import pathways of precursor proteins into mitochondria: multiple receptor sites are followed by a common membrane insertion site. Pfaller R, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2483–90

Mitochondria can import artificial precursor proteins containing a branched polypeptide chain or a carboxy-terminal stilbene disulfonate. Vestweber D, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2045–9

A chimeric mitochondrial precursor protein with internal disulfide bridges blocks import of authentic precursors into mitochondria and allows quantitation of import sites. Vestweber D, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2037–43

Inhibition of glycolysis alters potassium ion transport and mitochondrial redox activity in rat brain. Raffin CN, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):857–65

Cold-induced mitochondrial degradation and cryoprotectant synthesis in freeze-tolerant arctic caterpillars. Kukal O, et al. **J Comp Physiol [B]** 1989;158(6):661–71

Characteristics of mammary mitochondria in lines of mice genetically divergent for milk production. Lindberg GL, et al. **J Dairy Sci** 1989 May;72(5):1175–81

Cholesterol increase in mitochondria: a new method of cholesterol incorporation. Martínez F, et al. **J Lipid Res** 1988 Aug;29(8):1005–11

Liposomes as cyclosporin A carriers: positively charged lecithin-cholesterol liposomes associated with cyclosporin A do not inhibit biosynthesis of mitochondrial polyglycerophosphatides and microsomal phosphatidylinositol. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Apr-Jun;6(2):177–82

Evidence that the effect of soya bean phosphatidylinositol–cholesterol–cyclosporin liposomes on the biosynthesis of acidic phospholipids in isolated subcellular membranes from rat liver and heart is attributable to the soya bean phosphatidylinositol–cholesterol liposomes. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Jan-Mar; 6(1):71–86

Nucleotide sequence of the Varkud mitochondrial plasmid of Neurospora and synthesis of a hybrid transcript with a 5' leader derived from mitochondrial RNA. Akins RA, et al. **J Mol Biol** 1988 Nov 5;204(1):1–25

Structure and function of the mitochondrial bc1 complex. A mutational analysis of the yeast Rieske iron–sulfur protein. Gatti DL, et al. **J Mol Biol** 1989 Jan 20; 205(2):421–35

Mutational analysis of the mouse mitochondrial cytochrome b gene. Howell N, et al. **J Mol Biol** 1988 Oct 5; 203(3):607–18

Mitochondrial hydrogen peroxide generation by NADH-oxidase activity following regional myocardial ischemia in the dog. Vandeplassche G, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):383–92

Evolution of the mitochondrial genetic code. I. Origin of AGR serine and stop codons in metazoan mitochondria. Osawa S, et al. **J Mol Evol** 1989 Sep;29(3):202–7

Effects of vitamin A and its analogs on nonenzymatic lipid peroxidation in rat brain mitochondria. Das NP. **J Neurochem** 1989 Feb;52(2):585–8

Allosteric activation of brain mitochondrial Ca2+ uptake by spermine and by Ca2+: developmental changes. Jensen JR, et al. **J Neurochem** 1989 Oct;53(4):1173–81

Allosteric activation of brain mitochondrial Ca2+ uptake by spermine and by Ca2+: brain regional differences. Jensen JR, et al. **J Neurochem** 1989 Oct;53(4):1182–7

Delayed neurologic deterioration following anoxia: brain mitochondrial and metabolic correlates. Wagner KR, et al. **J Neurochem** 1989 May;52(5):1407–17

Studies on the toxicity of 1-methyl-4-phenylpyridinium ion (MPP+) against mitochondria of mouse brain. Mizuno Y, et al. **J Neurol Sci** 1988 Aug;86(1):97–110

Role of arachidonic acid and other free fatty acids in mitochondrial dysfunction in brain ischemia. Hillered L, et al. **J Neurosci Res** 1988 Aug;20(4):451–6

In vitro effect of naftidrofuryl oxalate on cerebral mitochondria impaired by microsphere-induced embolism in rats. Takeo S, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):1207–14

Modulation of the effects of ascorbic acid on lipid peroxidation by tocopherol in adrenocortical mitochondria. Staats DA, et al. **J Steroid Biochem** 1989 Apr;32(4):609–11

Characterization of 19-nor-10-oxo-25-hydroxyvitamin D3 production by solubilized chick kidney mitochondria and bovine serum albumin. Tran JM, et al. **J Steroid Biochem** 1989 Sep;33(3):395–403

Replication of mitochondrial DNA in the gonadotropin-primed corpus luteum of the rat. Anderson WA, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):477–89

Mitochondrial function in Parkinson's disease [letter; comment] Bindoff LA, et al. **Lancet** 1989 Jul 1;2(8653):49 . **Comment on:** Lancet 1989 Jun 3;1(8649):1269

Ligands specific to peripheral benzodiazepine receptors for treatment of porphyrias [see comments] Katz Y, et al. **Lancet** 1989 Apr 29;1(8644):932–3. **Comment in:** Lancet 1989 Jun 3;1(8649):1264–5

Silymarin-induced mitochondrial Ca2+ release. Chávez E, et al. **Life Sci** 1988;43(12):975–81

Influence of polyphloretin phosphate on cholesterol esterifying activity in subcellular fractions from aorta, adrenal and testes of cholesterol-fed rabbits. Morin RJ, et al. **Life Sci** 1974 Oct 1;15(7):1267–75

Evidence for a mitochondrial lesion in cystic fibrosis. Shapiro BL. **Life Sci** 1989;44(19):1327–34 (51 ref.)

RNA editing—a novel RNA processing phenomenon in trypanosome mitochondria. Simpson L, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:243

Brain cellular and mitochondrial respiration in media of altered pH. Holtzman D, et al. **Metab Brain Dis** 1987 Jun; 2(2):127–37

Succinate-dependent energy generation in Ascaris suum mitochondria. Campbell T, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):1–12

Effects of warm and cold ischemia on mitochondrial functions in brain, liver and kidney. Baumann M, et al. **Mol Cell Biochem** 1989 Jun 1;87(2):137–45

The effect of adenine nucleotides on the rate and fate of glutamine utilization by incubated mitochondria isolated from rat mesenteric lymph nodes. Curi R, et al. **Mol Cell Biochem** 1989 Mar 16;86(1):71–6

Interactions between cations in modifying the binding of hexokinases I and II to mitochondria. Imai N, et al. **Mol Cell Biochem** 1988 May;81(1):37–41

Synthesis of phosphatidylcholine and phosphatidylglycerol in rat lung mitochondria. Schlame M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):115–22

Sequence and structural requirements of a mitochondrial protein import signal defined by saturation cassette mutagenesis. Bedwell DM, et al. **Mol Cell Biol** 1989 Mar; 9(3):1014–25

SSC1, an essential member of the yeast HSP70 multigene family, encodes a mitochondrial protein. Craig EA, et al. **Mol Cell Biol** 1989 Jul;9(7):3000–8

Structure and regulation of a nuclear gene in Saccharomyces cerevisiae that specifies MRP7, a protein of the large subunit of the mitochondrial ribosome. Fearon K, et al. **Mol Cell Biol** 1988 Sep;8(9):3636–46

Purification and characterization of human mitochondrial transcription factor 1. Fisher RP, et al. **Mol Cell Biol** 1988 Aug;8(8):3496–509

Effect of mitochondrial protein synthesis inhibitors on erythroid differentiation of mouse erythroleukemia (Friend) cells. Kaneko T, et al. **Mol Cell Biol** 1988 Aug;8(8):3311–5

Structure and regulation of a nuclear gene in Saccharomyces cerevisiae that specifies MRP13, a protein of the small subunit of the mitochondrial ribosome. Partaledis JA, et al. **Mol Cell Biol** 1988 Sep;8(9):3647–60

25-Hydroxyvitamin D3 metabolism in mitochondria from primary renal cultures. Kain SR, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):63–9

In vitro and in vivo studies on the mitochondrial import of CBS1, a translational activator of cytochrome b in yeast. Körte A, et al. **Mol Gen Genet** 1989 May;217(1):162–7

Mitochondrial benzodiazepine receptors mediate inhibition of mitochondrial respiratory control. Hirsch JD, et al. **Mol Pharmacol** 1989 Jan;35(1):157–63

Characterization of ligand binding to mitochondrial benzodiazepine receptors. Hirsch JD, et al. **Mol Pharmacol** 1989 Jan;35(1):164–72

Mitochondrial heat-shock protein hsp60 is essential for assembly of proteins imported into yeast mitochondria. Cheng MY, et al. **Nature** 1989 Feb 16;337(6208):620–5

Protein folding in mitochondria requires complex formation with hsp60 and ATP hydrolysis. Ostermann J, et al. **Nature** 1989 Sep 14;341(6238):125–30

Characterization of the yeast HSP60 gene coding for a mitochondrial assembly factor. Reading DS, et al. **Nature** 1989 Feb 16;337(6208):655–9

A family of mitochondrial proteins involved in bioenergetICS and biogenesis. Schulte U, et al. **Nature** 1989 May 11; 339(6220):147–9

DNA-protein conjugates can enter mitochondria via the protein import pathway. Vestweber D, et al. **Nature** 1989 Mar 9;338(6211):170–2

Study of amino acid formation during palmitate oxidation in rat brain mitochondria. Kawamura N. **Neurochem Res** 1989 Jan;14(1):9–15

Role of aspartate aminotransferase and mitochondrial dicarboxylate transport for release of endogenously and exogenously supplied neurotransmitter in glutamatergic neurons. Palaiologos G, et al. **Neurochem Res** 1989 Apr; 14(4):359–66

Age-dependent modifications of mitochondrial proteins in cerebral cortex and striatum of rat brain. Ragusa N, et al. **Neurochem Res** 1989 May;14(5):415–8

Changes of mitochondrial membrane proteins in rat cerebellum during aging. Turpeenoja L, et al. **Neurochem Res** 1988 Sep;13(9):859–65

Action of L-acetylcarnitine on age-dependent modifications of mitochondrial membrane proteins from rat cerebellum. Villa RF, et al. **Neurochem Res** 1988 Oct;13(10):909–16

Oxidative phosphorylation and activity of some chosen oxidoreductases of mitochondria of rat brain subjected to severe environmental hyperthermia. Skonieczna M, et al. **Neuropatol Pol** 1988;26(2):245–57

Inhibition of mitochondrial respiration by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) in mouse brain in vivo. Mizuno Y, et al. **Neurosci Lett** 1988 Sep 12;91(3):349–53

Mitochondrial large ribosomal RNA: an abundant polyadenylated sequence in Drosophila. Benkel BF, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9880

Chloroplast-like transfer RNA genes expressed in wheat mitochondria. Joyce PB, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5461–76

Nucleotide sequence of Chlamydomonas reinhardtii mitochondrial genes coding for tRNA(Gln) (UUG) and tRNA(Met) (CAU). Ma DP, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1256

Integrated R2 sequence in mitochondria of fertile B37N maize encodes and expresses a 130 kD polypeptide similar to that encoded by the S2 episome of S-type male sterile plants. O'Brien C, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):405–22

Nucleotide sequence of a maize mitochondrial tRNAGlu (UUC) gene. Sangare A, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5837

Substitution of an invariant nucleotide at the base of the highly conserved '530-loop' of 15S rRNA causes suppression of yeast mitochondrial ochre mutations. Shen ZH, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4535–9

Kinetoplastid mitochondria contain functional tRNAs which are encoded in nuclear DNA and also contain small minicircle and maxicircle transcripts of unknown function. Simpson AM, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5427–45

The tRNAglu (anticodon TTU) gene and its upstream sequence coding for a homolog of the E. coli large ribosome-subunit protein L14 in the Tetrahymena mitochondrial genome. Suyama Y, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):803

A point mutation in a mitochondrial tRNA gene abolishes its 3' end processing. Zennaro E, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5751–64

Intestinal maturation: characterization of mitochondrial calcium transport in the rat. Kikuchi T, et al. **Pediatr Res** 1989 Jan;25(1):107–13

Intestinal maturation: characterization of mitochondrial phosphate transport in the rat and its regulation by 1,25-(OH)2 vitamin D3. Kikuchi T, et al. **Pediatr Res** 1989 Jun;25(6):605–11

Uptake of Br in mitochondria-rich and principal cells of toad skin epithelium. Dörge A, et al. **Pflugers Arch** 1988 Aug; 412(3):305–13

The key role of the mitochondria-rich cell in Na+ and H+ transport across the frog skin epithelium. Ehrenfeld J, et al. **Pflugers Arch** 1989 May;414(1):59–67

Effect of photoperiod and acclimation temperature on nonshivering thermogenesis and GDP-binding of brown fat mitochondria in the Djungarian hamster Phodopus s. sungorus. Wiesinger H, et al. **Pflugers Arch** 1989 Apr; 413(6):667–72

Binding of basic drugs to rat lung mitochondria. Hori R, et al. **Pharm Res** 1987 Apr;4(2):142–6

Photodynamic effects of hematoporphyrin derivative on the uptake of rhodamine 123 by mitochondria of intact murine L929 fibroblasts and Chinese ovary K1 cells. Boegheim JP, et al. **Photochem Photobiol** 1988 Nov;48(5):613–20

Mutations in the maize mitochondrial T-urf13 gene eliminate sensitivity to a fungal pathotoxin. Braun CJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4435–9

Glutathione metabolism in the lung: inhibition of its synthesis leads to lamellar body and mitochondrial defects. Mårtensson J, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5296–300

Import of cytochrome c into mitochondria: reduction of heme, mediated by NADH and flavin nucleotides, is obligatory for its covalent linkage to apocytochrome c. Nicholson DW, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4340–4

Cytosolic-mitochondrial interactions (mitochondrial control of glycolysis). Brandt RB, et al. **Prog Clin Biol Res** 1989; 292:497–506

Susceptibility of mitochondrial membranes to calcium and reactive oxygen species: implications for ischemic and toxic tissue damage. Malis CD, et al. **Prog Clin Biol Res** 1988; 282:235–59 (128 ref.)

Import of proteins into mitochondria. Roise D. **Prog Clin Biol Res** 1988;282:43–53 (27 ref.)

Mitochondrial calcium metabolism during tissue reperfusion. Vlessis AA, et al. **Prog Clin Biol Res** 1989;299:63–8 (14 ref.)

Subcellular localization of glutathione and thermal sensitivity. Freeman ML, et al. **Radiat Res** 1988 Sep; 115(3):461–71

The energy requirement for protein synthesis in rat brain mitochondria purified by phase partition. Peñas M, et al. **Rev Esp Fisiol** 1988 Mar;44(1):51–6

Mitochondrial function after asphyxia in newborn lambs. Rosenberg AA, et al. **Stroke** 1989 May;20(5):674–9

Responses of renal cortical mitochondria to cyclosporine following warm ischemia and cold preservation. Khauli RB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1258–60

Comparison of the effect of cyclosporine, verapamil, and trifluoperazine on calcium–induced membrane permeability of mitochondria. Strzelecki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):182–3

How finicky is mitochondrial protein import? Pfanner N, et al. **Trends Biochem Sci** 1988 May;13(5):165–7

Trafficking in small mitochondrial RNA molecules. Nagley P. **Trends Genet** 1989 Mar;5(3):67–9 (14 ref.)

RAG1 and RAG2: nuclear genes involved in the dependence/independence on mitochondrial respiratory function for growth on sugars. Goffrini P, et al. **Yeast** 1989 Mar–Apr;5(2):99–106

Evidence of an intracellular dissipative structure. Medina MA, et al. **Z Naturforsch [C]** 1988 Sep–Oct;43(9–10):793–4

[The change of mitochondrial protein bound Ca2+ in some brain regions under the conditions of electroacupuncture or morphine analgesia and the analgesic tolerance] Xie XY, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):553–60 (Eng. Abstr.) **(Chi)**

[Mitochondrial transport of cations] Ježek P. **Cesk Fysiol** 1988;37(4):297–318 (98 ref.) **(Cze)**

[Generation of oxygen–derived radicals in mitochondria and their damages] Nishida T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2717–22 **(Jpn)**

[Mitochondria (plant leaves)] Yamaya T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):28–36 (46 ref.) **(Jpn)**

[Correlation of mitochondria metabolism and spontaneous luminescence of incubation cells] Bat'ianov AP. **Biofizika** 1988 Nov–Dec;33(6):1029–34 (Eng. Abstr.) **(Rus)**

[The effect of spermine on transport of Ca2+ ions in brain mitochondria] Karadzhov IuS, et al. **Biofizika** 1988 Nov–Dec;33(6):1001–5 (Eng. Abstr.) **(Rus)**

[Structuro–kinetic organization of the tricarboxylic acid cycle in the active functioning of mitochondria] Kondrashova MN. **Biofizika** 1989 May–Jun;34(3):450–8 (44 ref.) (Eng. Abstr.) **(Rus)**

[Mechanism of electron transport in the cholesterol–hydroxylating system of adrenal cortex mitochondria: a triple complex of adrenodoxin reductase, adrenodoxin and cytochrome P–450] Turko IV, et al. **Biokhimiia** 1988 Aug;53(8):1352–6 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation in the synaptosomal and mitochondrial fractions of separate brain structures in hypoxia] Dzhafarov AI, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):305–7 (Eng. Abstr.) **(Rus)**

[The relationship of cytoplasmic and mitochondrial protein synthesis in yeasts: the mapping of mitochondrial mutations neutralizing the exhibition of nuclear omnipotent suppressors] Mironova LN, et al. **Genetika** 1988 Jun; 24(6):1008–17 (Eng. Abstr.) **(Rus)**

[Effect of the hyperbaric oxygenation of animals and man on mitochondrial function in their tissues (based on EPR study data)] Burgova EN, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):191–7 (Eng. Abstr.) **(Rus)**

[Loss of CpG dinucleotides from DNA. VI. Methylation of mitochondrial and chloroplast genes] Mazin AL, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1688–96 (Eng. Abstr.) **(Rus)**

[Respiration of mitochondria from brown fat and the mechanism of thermogenesis] Akhmerov RN, et al. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):53–8 (Eng. Abstr.) **(Rus)**

[Mitochondrial respiratory activity of the trematode Fasciola hepatica] Savchenko AV, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):785–90 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Correlated ultrastructural damage between cerebellum cells after early anticonvulsant treatment in mice. Fishman RH, et al. **Int J Dev Neurosci** 1989;7(1):15–26

Familial myopathy with scapulohumeral distribution, rigid spine, cardiopathy and mitochondrial abnormality. Tanaka K, et al. **J Neurol** 1989 Jan;236(1):52–4

A dominantly inherited progressive disease in a black family characterised by cerebellar and retinal degeneration, external ophthalmoplegia and abnormal mitochondria. Cooles P, et al. **J Neurol Sci** 1988 Nov;87(2–3):275–88

Mitochondrial encephalomyopathy (MELAS): pathological study and successful therapy with coenzyme Q10 and idebenone. Ihara Y, et al. **J Neurol Sci** 1989 May; 90(3):263–71

Mitochondrial cytopathy and neurodegenerative diseases of old age [letter] Lennox G, et al. **Lancet** 1989 Jun 3; 1(8649):1266–7

Mitochondrial encephalomyopathies. Peterson PL, et al. **Neurol Clin** 1988 Aug;6(3):529–44 (68 ref.)

Ring 18 chromosome with mental retardation, hemidysmorphism, and mitochondrial encephalomyopathy. Amit R, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):301–4

Disproportionate deficiency of iron–sulfur clusters and subunits of complex I in mitochondrial encephalomyopathy. Ichiki T, et al. **Pediatr Res** 1989 Feb; 25(2):194–201

Mitochondrial myopathy in six patients with Marinesco–Sjøgren syndrome. Borud O, et al. **Prog Clin Biol Res** 1989;306:135–9

Unusual mitochondrial reaction in psoriatic keratinocytes. Klug H, et al. **Virchows Arch [B]** 1988;56(3):201–3

PHYSIOLOGY

Maternal inheritance and study of human mitochondrial genome. Takeshita K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):513–8

Development of mitochondrial helical sheath in the middle piece of the mouse spermatid tail: regular dispositions and synchronized changes. Otani H, et al. **Anat Rec** 1988 Sep; 222(1):26–33

Biogenesis of mitochondria. Attardi G, et al. **Annu Rev Cell Biol** 1988;4:289–333 (289 ref.)

Mitochondrial membrane potential in living cells. Chen LB. **Annu Rev Cell Biol** 1988;4:155–81 (120 ref.)

Nutrient supply and mitochondrial function. Aw TY, et al. **Annu Rev Nutr** 1989;9:229–51 (128 ref.)

Effects of changes in the mitochondrial genome on the performance of baking yeasts. Spencer JF, et al. **Antonie Van Leeuwenhoek** 1989;55(1):83–93

Enzymatic lipid peroxidation: a step in the breakdown of mitochondria during the maturation of red blood cells. Kühn H, et al. **Basic Life Sci** 1988;49:945–9

Growth defects in intramitochondrial energy depleted cells: role of mitochondrial biogenesis. Hapala L. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):612–7

Photoaffinity labeling of hamster brown adipose tissue mitochondria by an [125I] coenzyme A derivative: differential interaction with the uncoupling protein and ADP/ATP carrier. Woldegiorgis G, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):502–7

Ischemia–induced alterations of mitochondrial structure and function in brain, liver, and heart muscle of young and senescent rats. Schweiger H, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):162–85

RNA–editing in trypanosome mitochondria. Benne R. **Biochim Biophys Acta** 1989 Mar 1;1007(2):131–9 (29 ref.)

The regulation of the matrix volume of mammalian mitochondria in vivo and in vitro and its role in the control of mitochondrial metabolism. Halestrap AP. **Biochim Biophys Acta** 1989 Mar 23;973(3):355–82 (327 ref.)

Fusion of the mitochondrial outer membrane: use in forming large, two–dimensional crystals of the voltage–dependent, anion–selective channel protein. Mannella CA. **Biochim Biophys Acta** 1989 May 19;981(1):15–20

Measurement of 'in situ' mitochondrial membrane potential in Ehrlich ascites tumor cells during aerobic glycolysis. Sánchez Olavarría J, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):322–32

Mediating effect of calcium in HgCl2 cytotoxicity in sea urchin egg: role of mitochondria in Ca2+–mediated death. Walter P, et al. **Biochim Biophys Acta** 1989 Aug 15; 1012(3):219–26

Inhibition by aluminum hydroxide of the voltage–dependent closure of the mitochondrial channel, VDAC. Zhang DW, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):68–78

Kinetics of voltage–induced conductance increases in the outer mitochondrial membrane. Kinnally KW, et al. **Biophys J** 1989 Jun;55(6):1205–13

Studies of endothelial mitochondrial density in degenerating rat optic nerve. Schmidley JW. **Brain Res** 1989 Feb 27; 481(1):154–6

Mouse RNAase MRP RNA is encoded by a nuclear gene and contains a decamer sequence complementary to a conserved region of mitochondrial RNA substrate. Chang DD, et al. **Cell** 1989 Jan 13;56(1):131–9

A method for the efficient transfer of isolated mitochondria into yeast protoplasts. Sulo P, et al. **Curr Genet** 1989 Jan; 15(1):1–6

Studies on the mechanisms causing inhibition of insulin secretion in rat pancreatic islets exposed to human interleukin–1 beta indicate a perturbation in the mitochondrial function. Sandler S, et al. **Endocrinology** 1989 Mar;124(3):1492–501

Trypanosomatids: mitochondrial RNA editing. Stuart K. **Exp Parasitol** 1989 May;68(4):486–90 (21 ref.)

Organisation of the mitochondrial genome from Atlantic salmon (Salmo salar). Davidson WS, et al. **Genome** 1989 Apr;32(2):340–2

Cytoplasmic factors influence mitochondrial reorganization and resumption of cleavage during culture of early mouse embryos. Muggleton–Harris AL, et al. **Hum Reprod** 1988 Nov;3(8):1020–8

An unexpectedly labile mitochondrially encoded protein is required for Mta expression. Han AC, et al. **Immunogenetics** 1989;29(4):258–64

Interaction of bovine mitochondrial ribosomes with messenger RNA. Liao HX, et al. **J Biol Chem** 1989 May 5;264(13):7518–22

The translocation of mitochondria along insect ovarian microtubules from isolated nutritive tubes: a simple reactivated model. Stebbings H, et al. **J Cell Sci** 1987 Dec; 88 (Pt 5):641–8

Mitochondrial biogenesis during the activation of lymphocytes by mitogens: the immunosuppressive action of tetracyclines. Van den Bogert C, et al. **J Leukoc Biol** 1989 Aug;46(2):128–33

Role of mobility of redox components in the inner mitochondrial membrane. Lenaz G. **J Membr Biol** 1988 Sep;104(3):193–209 (134 ref.)

Evidence of mitochondrial involvement in scrapie infection. Aiken JM, et al. **J Virol** 1989 Apr;63(4):1686–94

Effects of MPTP, MPP+ and paraquat on mitochondrial potential and oxidative stress. Lambert CE, et al. **Life Sci** 1989;44(18):1277–84

Mitochondrial introns aI1 and/or aI2 are needed for the in vivo deletion of intervening sequences. Levra–Juillet E, et al. **Mol Gen Genet** 1989 May;217(1):168–71

A 42K outer–membrane protein is a component of the yeast mitochondrial protein import site. Vestweber D, et al. **Nature** 1989 Sep 21;341(6239):205–9

Mitochondrial diseases. Zeviani M, et al. **Neurol Clin** 1989 Feb;7(1):123–56 (118 ref.)

Bilirubin toxicity in a neuroblastoma cell line N–115: I. Effects on Na+K+ ATPase, [3H]–thymidine uptake, L–[35S]–methionine incorporation, and mitochondrial function. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):364–8

Reconstitution of purified brown adipose tissue mitochondria uncoupling protein: demonstration of separate identity of nucleotide binding and proton translocation sites by chemical probes. Katiyar SS, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2559–62

Group I introns: do they only go home? Scazzocchio C. **Trends Genet** 1989 Jun;5(6):168–72 (33 ref.)

Partial restoration of meiosis in an apomictic strain of Saccharomyces cerevisiae: a model system for investigation of nucleomitochondrial interactions during sporulation. Marmiroli N, et al. **Yeast** 1985 Sep;1(1):39–47

[Comments on anesthesia procedures in mitochondrial encephalomyopathy] Fritz T, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):265–70 (28 ref.) (Eng. Abstr.) **(Ger)**

[Mitochondrial proteins] Hase T, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):367–76 (31 ref.) **(Jpn)**

[The functioning of mammalian mitochondria injected into fish embryos] Abramova NB, et al. **Ontogenez** 1989 May–Jun;20(3):320–3 (Eng. Abstr.) **(Rus)**

[Oxygen: from the atmosphere to mitochondria] Roca J, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):17–9 (16 ref.) **(Spa)**

PHYSIOPATHOLOGY

[Functional properties of isolated kidney mitochondria of rats in food deprivation] Jung K. **Z Urol Nephrol** 1989 May; 82(5):273–6 (Eng. Abstr.) **(Ger)**

SECRETION

HCO3– secretion in mitochondria–rich cells is linked to an H+–ATPase. Fritsche C, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):F869–74

ULTRASTRUCTURE

Involvement of choroid plexus in mitochondrial encephalomyopathy (MELAS) [letter] Kepes JJ. **Acta Neuropathol (Berl)** 1988;76(4):432

Mitochondria covered with a net of parallel and latticed filaments in nigral neurons of monkeys with experimental parkinsonism. Nakamura H, et al. **Acta Neuropathol (Berl)** 1989;77(5):489–93

Ultrastructural pathology of dermal axons and Schwann cells in lysosomal diseases. Walter S, et al. **Acta Neuropathol (Berl)** 1988;76(5):489–95

Mitochondrial structure revealed by high–resolution scanning electron microscopy. Lea PJ, et al. **Am J Anat** 1989 Mar;184(3):245–57

Sedimentation field flow fractionation of mitochondrial and microsomal membranes from corn roots. Mozersky SM, et al. **Anal Biochem** 1988 Jul;172(1):113–23

Morphometric analysis of mitochondria and boutons in the dentate gyrus molecular layer of aged rats. Toussaint C, et al. **Anat Embryol (Berl)** 1989;179(4):411–4

Progesterone secretion and mitochondrial size of aging porcine corpora lutea. Adair V, et al. **Anat Rec** 1989 Mar; 223(3):252–6

The iron–sulfur protein is necessary for the complete assembly of the low–molecular–weight subunits into the cytochrome b–c1 complex of yeast mitochondria. Japa S, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):716–20

Hereditary motor and sensory neuropathy with optic atrophy. Ultrastructural and morphometric observations on nerve fibers, mitochondria, and dense–cored vesicles. Sommer C, et al. **Arch Neurol** 1989 Sep;46(9):973–7

Reliability of the centrifugal filtration method for measuring mitochondrial volumes [letter] Cohen S, et al. **Biochem J** 1988 Jul 15;253(2):621–3

Further characterization of contact sites from mitochondria of different tissues: topology of peripheral kinases. Adams V, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):213–25

Lipid topology and physical properties of the outer mitochondrial membrane of the yeast, Saccharomyces cerevisiae. Sperka–Gottlieb CD, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):227–34

Morphometric quantification of mitochondria in the two steroidogenic ovine luteal cell types. Kenny N, et al. **Biol Reprod** 1989 Jan;40(1):191–6

Approaches to characterize by density–fractionation age–dependent properties of reticulocyte mitochondria. Belkner J, et al. **Biomed Biochim Acta** 1989;48(1):3–11

Aberrant mitochondria in two human colon carcinoma cell

lines. Modica-Napolitano JS, et al. **Cancer Res** 1989 Jun 15;49(12):3369-73

Participation of mitochondrial proliferation in morphological differentiation of murine mastocytoma cells. Laeng H, et al. **Exp Cell Res** 1988 Nov;179(1):222-32

"Parallel array" of tubules with pipe-like structure in the mitochondria of glomerulosa cells of adrenal cortex. Ultrastructural and freeze-fracture replica studies. Kawai K, et al. **Exp Pathol** 1989;36(4):193-200

Mitochondrial ribosomes of yeast: isolation of individual proteins and N-terminal sequencing. Graack HR, et al. **FEBS Lett** 1988 Dec 19;242(1):4-8

Trial comparison of mitochondrial cristae craters images obtained by the freeze-fracturing and ultrathin sections method. Cieciura L, et al. **Folia Histochem Cytobiol** 1989; 27(1):35-8

Stereological studies on germ cell mitochondria of rat during spermatogenesis and spermiogenesis. Cieciura L, et al. **Folia Histochem Cytobiol** 1988;26(3):177-83

Diffusion barriers impeding the flow of solutes to the ciliary body epithelium during immersion fixation of rabbit eyes. Assessment of ultrastructural preservation quality by examination of mitochondrial profiles in the electron microscope. England C, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):384-8

Lysosomal-mitochondrial interrelationships in damage to the liver in acute experimental pancreatitis in dogs. Treatment with prostacyclin (PGI2). Długosz J, et al. **Int J Pancreatol** 1988 Jul;3(5):343-56

An investigation of mitochondrial inner membranes by rapid-freeze deep-etch techniques. Allen RD, et al. **J Cell Biol** 1989 Jun;108(6):2233-40

Mitochondrial DNA molecules and virtual number of mitochondria per cell in mammalian cells. Robin ED, et al. **J Cell Physiol** 1988 Sep;136(3):507-13

Study of mitochondrial organization in living resident and activated macrophages using the laser dye rhodamine 123. de Carvalho TU, et al. **J Leukoc Biol** 1989 Jun; 45(6):498-502

Fluorescence microscopic studies on mitochondria and mitochondrial nucleoids in a wild-type strain and respiratory mutants of Candida albicans. Ito-Kuwa S, et al. **J Med Vet Mycol** 1988;26(4):207-17

Perifascicular atrophic fibers in childhood dermatomyositis with particular reference to mitochondrial changes. Woo M, et al. **J Neurol Sci** 1988 Dec;88(1-3):133-43

Mitochondrial encephalomyopathy with associated aminoacidopathy in a male sibship. Booth FA, et al. **J Pediatr** 1989 Jul;115(1):81-8

Nodulous corpuscles and mitochondrial inclusions in Sertoli cells of deer hybrids. Hrudka F. **J Ultrastruct Mol Struct Res** 1988 Aug;100(2):107-17

Mitochondrial kinetics during mitosis in Cryptococcus neoformans—an ultrastructural study. Mochizuki T, et al. **Mycoses** 1989 Jan;32(1):7-13

Mitochondria-related encephalomyopathies. Goebel HH, et al. **Neuropathol Appl Neurobiol** 1989 Mar-Apr;15(2):97-119 (116 ref.)

Mitochondrial structure revealed by scanning electron microscopy (SEM). Lea PJ, et al. **Prog Clin Biol Res** 1989; 295:63-70

Ultrastructural study of mitochondrial damage in CHO cells exposed to hyperthermia. Cole A, et al. **Radiat Res** 1988 Sep;115(3):421-35

[Morphometry of the mitochondria and endoplasmic reticulum of the thyroid epithelium in iodine deficient fetal mice] Liu JH. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):298-300 **(Chi)**

[Abnormal mitochondria—a specific phenomenon of psoriatic keratinocytes?] Klug H, et al. **Dermatol Monatsschr** 1988;174(6):305-7 (Eng. Abstr.) **(Ger)**

[2 cases of mitochondrial encephalomyopathy] Parisi L, et al. **Riv Neurol** 1988 May-Jun;58(3):110-5 (Eng. Abstr.) **(Ita)**

[Application of high resolution scanning electron microscopy in osteopathic surgery] Tanaka K. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):370-6 **(Jpn)**

[Transformation of mitochondria in sebaceous gland cells of the hare Lepus timidus L.] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1469-71 **(Rus)**

[Changes in quantitative characteristics of mitochondria of the cortical tubules of the kidneys with compensatory hypertrophy in the blocking of autonomic mediation] Barinov EF, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):104-7 (Eng. Abstr.) **(Rus)**

[Nuclear and mitochondrial genes in the biogenesis of Saccharomyces cerevisiae mitochondria] Sudarikov AB, et al. **Genetika** 1988 Sep;24(9):1525-38 (126 ref.) (Eng. Abstr.) **(Rus)**

[Canavan's disease: apropos of a case] del Moral García T, et al. **An Esp Pediatr** 1988 Oct;29(4):327-9 (Eng. Abstr.) **(Spa)**

[A Mitochondrial mutation defect is identified in Leber's hereditary optic neuropathy] Ehinger B. **Lakartidningen** 1989 Mar 29;86(13):1161 **(Swe)**

MITOCHONDRIA, HEART

ANALYSIS

Isolation of a quinone from beef heart mitochondria. 1957 [classical article] Crane FL, et al. **Biochim Biophys Acta** 1989;1000:362-3

Cardiac mitochondrial calcium content during fatal doxorubicin toxicity. Eckenhoff RG, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):167-72

DRUG EFFECTS

Reactivity of mitochondrial sulfhydryl groups toward dithionitrobenzoic acid and bromobimanes under oligomycin-inhibited and uncoupling conditions. Freisleben HJ, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):89-97

The role of phospholipase in plasmocid-induced mitochondrial dysfunction in rat hearts. Hieda N, et al. **Arch Toxicol** 1988 Aug;62(1):45-8

Sensitivity to oxidants of mitochondrial and sarcoplasmic reticular calcium uptake in saponin-treated cardiac myocytes. Kaminishi T, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):282-90

The effect of doxorubicin on the transport of pyruvate in rat-heart mitochondria. Paradies G, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1302-7

Spermine antagonizes the binding of adriamycin to the inner membrane of heart mitochondria. Solaini G. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):791-8

Beneficial effects of trimetazidine on mitochondrial function and superoxide production in the cardiac muscle of monocrotaline-treated rats. Guarnieri C, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4685-8

Characterization of the mitochondrial Na+-H+ exchange. The effect of amiloride analogues. Kapus A, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):383-90

Cardioprotective effect of metipranolol on ischemic heart muscle. Gvozdják J, et al. **Cardiology** 1989;76(3):206-10

Prostaglandin I2 analogue and propranolol prevent ischaemia induced mitochondrial dysfunction through the stabilisation of lysosomal membranes. Hieda N, et al. **Cardiovasc Res** 1988 Mar;22(3):219-25

Acceleration of recovery of mitochondrial function after coronary reperfusion by various coronary dilating drugs in canine hearts. Hanaki Y, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):336-41

Protective effect of a prostacyclin-mimetic on the ischaemic-reperfused rabbit myocardium. Ferrari R, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1095-106

Disorders Ca2+ homeostasis in rat cardiac mitochondria affected by adriamycin. Kagiyama A, et al. **Kurume Med J** 1988;35(3):101-6

L-propionyl-carnitine protection of mitochondria in ischemic rat hearts. Di Lisa F, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):169-73

The effect of a chalcogenapyrylium dye with and without photolysis on mitochondrial function in normal and tumor cells. Walstad DL, et al. **Photochem Photobiol** 1989 Mar; 49(3):285-91

The effect of allopurinol and deferrioxamine on rat heart mitochondrial oxidative phosphorylation after normothermic ischemic cardiac arrest and of reperfusion. van Jaarsveld H, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec; 62(3):419-34

In vivo and in vitro cardiotoxicity of a gold-containing antineoplastic drug candidate in the rabbit. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):293-306

[Experimental heart hypertrophy caused by thyroxine administration] Mattfeldt T, et al. **Pathologe** 1989 Jul; 10(4):206-11 **(Ger)**

[The action of anaprilin and ketamine on fatty acid metabolism in the myocardium] Ovchinnikov IV, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):37-40 (Eng. Abstr.) **(Rus)**

[Cardioprotective effects of verapamil on mitochondrial function in the ischemic myocardium] Kucharská J, et al. **Cesk Fysiol** 1988;37(6):545-8 **(Slo)**

ENZYMOLOGY

Population and biochemical genetics of the human mitochondrial malic enzyme. Papiha SS, et al. **Ann Hum Biol** 1989 Jul-Aug;16(4):369-74

Metals of bovine heart cytochrome c oxidase. Yewey GL, et al. **Ann N Y Acad Sci** 1988;550:22-32

Subunit composition of the transmembrane parts of beef heart cytochrome c oxidase. Zhang YZ, et al. **Ann N Y Acad Sci** 1988;550:3-7

Heart mitochondrial creatine kinase revisited: the outer mitochondrial membrane is not important for coupling of phosphocreatine production to oxidative phosphorylation. Kuznetsov AV, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):176-90

Effect of citreoviridin and isocitreoviridin on beef heart mitochondrial ATPase. Sayood SF, et al. **Arch Biochem Biophys** 1989 May 1;270(2):714-21

Capsaicin and its analogs inhibit the activity of NADH-coenzyme Q oxidoreductase of the mitochondrial respiratory chain. Shimomura Y, et al. **Arch Biochem Biophys** 1989 May 1;270(2):573-7

Diffusional effects in the steady state kinetics of ubiquinol cytochrome c reductase in bovine heart submitochondrial particles. Fato R, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1145-53

Study on heart mitochondrial creatine kinase using a cross-linking bifunctional reagent. II. The binding sites for the creatine kinase octamer on mitochondrial membranes have different properties. Lipskaya TYu, et al. **Biochem Int** 1989 Jun;18(6):1149-59

Study on heart mitochondrial creatine kinase using a cross-linking bifunctional reagent. I. The binding involves the octameric form of the enzyme. Lipskaya TYu, et al. **Biochem Int** 1989 May;18(5):1029-39

The quaternary structure of bovine heart mitochondrial creatine kinase. Lipskaya TYu, et al. **Biochem Int** 1989 Jun; 18(6):1161-71

Isoelectric point heterogeneity of the two oligomeric forms of heart mitochondrial creatine kinase. Quemeneur E, et al. **Biochem Int** 1989 Feb;18(2):365-71

Oxidative and non-oxidative mechanisms in the inactivation of cardiac mitochondrial electron transport chain components by doxorubicin. Marcillat O, et al. **Biochem J** 1989 Apr 1;259(1):181-9

Transmembrane organization of mitochondrial NADH dehydrogenase as revealed by radiochemical labelling and cross-linking. Patel SD, et al. **Biochem J** 1988 Dec 1; 256(2):529-35

Structural studies on mitochondrial NADH dehydrogenase using chemical cross-linking. Patel SD, et al. **Biochem J** 1988 Dec 1;256(2):521-8

Chymotrypsin activates cardiac mitochondrial carnitine-acylcarnitine translocase. Wolkowicz PE, et al. **Biochem J** 1989 Jul 15;261(2):363-70

Comparison of the molecular structures of cytoplasmic and mitochondrial malate dehydrogenase. Birktoft JJ, et al. **Biochem Soc Trans** 1989 Apr;17(2):301-4

Orientation of the N-terminal region of the membrane-bound ADP/ATP carrier protein explored by antipeptide antibodies and an arginine-specific endoprotease. Evidence that the accessibility of the N-terminal residues depends on the conformational state of the carrier. Brandolin G, et al. **Biochemistry** 1989 Feb 7;28(3):1093-100

Cooperativity in lipid activation of 3-hydroxybutyrate dehydrogenase: role of lecithin as an essential allosteric activator. Cortese JD, et al. **Biochemistry** 1989 Apr 4; 28(7):3000-8

Effect of hydrostatic pressure on the mitochondrial ATP synthase. Dreyfus G, et al. **Biochemistry** 1988 Sep 6; 27(18):6704-10

ATP synthase from bovine mitochondria: complementary DNA sequence of the mitochondrial import precursor of the gamma-subunit and the genomic sequence of the mature protein. Dyer MR, et al. **Biochemistry** 1989 May 2;28(9):3670-80

Photolabeling of the phosphate binding site of mitochondrial F1-ATPase by [32P]azidonitrophenyl phosphate. Identification of the photolabeled amino acid residues. Garin J, et al. **Biochemistry** 1989 Feb 21;28(4):1442-8

Subunit arrangement in beef heart complex III. González-Halphen D, et al. **Biochemistry** 1988 Sep 6; 27(18):7021-31

Estimation of fre. energy barriers in the cytoplasmic and mitochondrial aspartate aminotransferase reactions probed by hydrogen-exchange kinetics of C alpha-labeled amino acids with solvent. Julin DA, et al. **Biochemistry** 1989 May 2;28(9):3815-21

Pre-steady-state studies of the adenosine triphosphatase activity of coupled submitochondrial particles. Regulation by ADP. Martins OB, et al. **Biochemistry** 1988 Sep 20; 27(19):7552-8

Fate of nucleotides bound to reconstituted Fo-F1 during adenosine 5'-triphosphate synthesis activation or hydrolysis: role of protein inhibitor and hysteretic inhibition. Penin F, et al. **Biochemistry** 1988 Dec 13; 27(25):8969-74

Coenzyme binding by 3-hydroxybutyrate dehydrogenase, a lipid-requiring enzyme: lecithin acts as an allosteric modulator to enhance the affinity for coenzyme. Rudy B, et al. **Biochemistry** 1989 Jun 27;28(13):5354-66

ATP synthase from bovine mitochondria: complementary DNA sequence of the import precursor of a heart isoform of the alpha subunit. Walker JE, et al. **Biochemistry** 1989 May 30;28(11):4702-8

Tissue-specific differences between heart and liver cytochrome c oxidase. Yanamura W, et al. **Biochemistry** 1988 Jun 28;27(13):4909-14

Temperature-induced states of isolated F1-ATPase affect catalysis, enzyme conformation and high-affinity nucleotide binding sites. Baracca A, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):77-84

Oxidation of malate by the mitochondrial succinate-ubiquinone reductase. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):1-9

Isolation and properties of oxaloacetate keto-enol-tautomerases from bovine heart mitochondria. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26; 936(1):10-9

Ultrastructural localisation of creatine kinase activity in the contact sites between inner and outer mitochondrial membranes of rat myocardium. Biermans W, et al. **Biochim Biophys Acta** 1989 Apr 17;974(1):74-80

Inhibition of the bovine-heart mitochondrial F1-ATPase by

cationic dyes and amphipathic peptides. Bullough DA, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):377–83

Effects of endurance exercise on carnitine palmitoyltransferase I from rat heart, skeletal muscle and liver mitochondria. Guzmán M, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):562–5

Azide as a probe of co-operative interactions in the mitochondrial F1-ATPase. Harris DA. **Biochim Biophys Acta** 1989 May 8;974(2):156–62

EXAFS studies of the isolated bovine heart Rieske [2Fe-2S]1+(1+,2+) cluster. Powers L, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):293–8

DCCD sensitivity of electron and proton transfer by NADH: ubiquinone oxidoreductase in bovine heart submitochondrial particles—a thermodynamic approach. Vuokila PT, et al. **Biochim Biophys Acta** 1959 May 8; 974(2):219–22

Further study on the role of Mg2+ in lipid–protein interaction in reconstituted porcine heart mitochondrial H+-ATPase. Zhang XF, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):53–62

A comparison of the malate dehydrogenase of the propionic acid bacteria with the mammalian soluble and mitochondrial isoenzymes. Allen SH, et al. **Comp Biochem Physiol [B]** 1978;60(3):287–93

Purification of cytochrome-c oxidase retaining its pulsed form. Brandt U, et al. **Eur J Biochem** 1989 Jul 1; 182(3):705–11

The effect of inorganic pyrophosphate on the activity and Pi-binding properties of mitochondrial F1-ATPase. Kalashnikova TYw, et al. **Eur J Biochem** 1988 Oct 15; 177(1):213–8

Effect of papain digestion on polypeptide subunits and electron-transfer pathways in mitochondrial b-c1 complex. Lorusso M, et al. **Eur J Biochem** 1989 Feb 15;179(3):535–40

Conformational change in beef-heart mitochondrial F1 ATPase to ATP synthesis mode induced by dimethylsulfoxide and ATP revealed by sulfhydryl group labeling. Beharry S, et al. **FEBS Lett** 1989 Aug 14; 253(1–2):276–80

Identification of the high-molecular-mass mitochondrial oxaloacetate keto-enol tautomerase as inactive aconitase. Belikova YuO, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):17–20

The role of long-chain acyl-CoA in the damage of oxidative phosphorylation in heart mitochondria. Borutaitė V, et al. **FEBS Lett** 1989 Jan 30;243(2):264–6

1H-NMR studies on nucleotide binding to the catalytic sites of bovine mitochondrial F1-ATPase [published erratum appears in FEBS Lett 1989 Feb 27;244(2):509–10] Garin J, et al. **FEBS Lett** 1988 Dec 19;242(1):178–82

Mitochondrial F0F1 H+-ATP synthase. Characterization of F0 components involved in H+ translocation [published erratum appears in FEBS Lett 1989 Jul 17;251(1–2):283] Guerrieri F, et al. **FEBS Lett** 1989 Jun 19;250(1):60–6

Spectral shifts of cytochrome c oxidase induced by complexons. Konstantinov A, et al. **FEBS Lett** 1989 Mar 13;245(1–2):39–42

Exploration of delta-subunit interactions in beef heart mitochondrial F1-ATPase by monoclonal antibodies. Lunardi J, et al. **FEBS Lett** 1989 Mar 13;245(1–2):223–8

An ATP dependence of mitochondrial F1-ATPase inactivation by the natural inhibitor protein agrees with the alternating-site binding-change mechanism. Milgrom YaM. **FEBS Lett** 1989 Mar 27;246(1–2):202–6

Modulation of cytochrome oxidase kinetics by indirect antibody action. Nicholls P, et al. **FEBS Lett** 1989 Jul 3; 250(2):453–8

Role of the carboxyl-terminal region of the PVP protein (F0I subunit) in the H+ conduction of F0F1 H+-ATP synthase of bovine heart mitochondria. Papa S, et al. **FEBS Lett** 1989 May 22;249(1):62–6

Structure of the ATP-synthase studied by electron microscopy and image processing. Tsuprun VL, et al. **FEBS Lett** 1989 Feb 27;244(2):279–82

Hysteretic interaction of NADH and Mg2+ with mammalian NADH:CoQ reductase from beef heart. Tushurashvili PR, et al. **FEBS Lett** 1989 Feb 27;244(2):268–70

Human heart cytochrome c oxidase subunit VIII. Purification and determination of the complete amino acid sequence. Van Kuilenburg AB, et al. **FEBS Lett** 1988 Nov 21; 240(1–2):127–32

Identification of nucleus-encoded F0I protein of bovine heart mitochondrial H+-ATPase as a functional part of the F0 moiety. Zanotti F, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):9–14

Kinetic studies on the binding of gostatin, a suicide substrate for aspartate aminotransferase, with the isoenzymes from porcine heart mitochondria and cytosol. Kitagishi K, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):585–8

Electron redistribution in mixed valence cytochrome oxidase following photolysis of carboxy-oxidase. Harmon HJ. **J Bioenerg Biomembr** 1988 Dec;20(6):735–48

Localization of sites modified during inactivation of the bovine heart mitochondrial F1-ATPase by quinacrine mustard using [3H]aniline as a probe. Bullough DA, et al. **J Biol Chem** 1989 Jun 5;264(16):9155–63

On the location and function of the noncatalytic sites on the bovine heart mitochondrial F1-ATPase. Bullough DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14053–60

Substrate channeling of NADH and binding of dehydrogenases to complex I. Fukushima T, et al. **J Biol Chem** 1989 Oct 5;264(28):16483–8

ATP synthase complex from bovine heart mitochondria. Passive H+ conduction through mitochondrial coupling factor 6-depleted F0 complexes. Joshi S, et al. **J Biol Chem** 1989 Sep 15;264(26):15548–51

ATP synthase complex from beef heart mitochondria. Role of the thiol group of the 25-kDa subunit of Fo in the coupling mechanism between Fo and F1. Lippe G, et al. **J Biol Chem** 1988 Dec 15;263(35):18627–34

Inhibition of mitochondrial F1-ATPase activity by an anti-alpha subunit monoclonal antibody which modifies interactions between catalytic and regulatory sites. Moradi-Améli M, et al. **J Biol Chem** 1989 Jan 25; 264(3):1361–7

Spatial organization of redox active centers in the bovine heart ubiquinol-cytochrome c oxidoreductase. Ohnishi T, et al. **J Biol Chem** 1989 Jan 15;264(2):735–44

Importance of acyl-CoA availability in interpretation of carnitine palmitoyltransferase I kinetics. Pauly DF, et al. **J Biol Chem** 1988 Dec 5;263(34):18160–7

Native mitochondrial creatine kinase forms octameric structures. I. Isolation of two interconvertible mitochondrial creatine kinase forms, dimeric and octameric mitochondrial creatine kinase: characterization, localization, and structure-function relationships. Schlegel J, et al. **J Biol Chem** 1988 Nov 15;263(32):16942–53

Mitochondrial creatine kinase from cardiac muscle and brain are two distinct isoenzymes but both form octameric molecules. Schlegel J, et al. **J Biol Chem** 1988 Nov 15; 263(32):16963–9

Native mitochondrial creatine kinase forms octameric structures. II. Characterization of dimers and octamers by ultracentrifugation, direct mass measurements by scanning transmission electron microscopy, and image analysis of single mitochondrial creatine kinase octamers. Schnyder T, et al. **J Biol Chem** 1988 Nov 15;263(32):16954–62

Complete kinetic and thermodynamic characterization of the unisite catalytic pathway of Escherichia coli F1-ATPase. Comparison with mitochondrial F1-ATPase and application to the study of mutant enzymes. Al-Shawi MK, et al. **J Biol Chem** 1988 Dec 25;263(36):19640–8

Identification of hydrophobic residues in the signal sequence of mitochondrial preornithine carbamyltransferase that enhance the rate of precursor import. Skerjanc IS, et al. **J Biol Chem** 1988 Nov 25;263(33):17233–6

Cytochrome c oxidase: organ-specific isoenzymes and deficiencies. Sinjorgo KM, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:202–4

Age-related changes in respiration coupled to phosphorylation. II. Cardiac mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):279–90

Nucleotide sequence of the cDNA encoding subunit AED (VIB) of beef heart cytochrome c oxidase. Lightowlers RN, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5845

[Effects of gossypol acetic acid on heart mitochondrial membranes ATPase] Dou SJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):233–6 (Eng. Abstr.) **(Chi)**

[Primary structure of the OSCP-protein, conferring the oligomycin sensitivity to the H+-ATPase complex. II. Hydrolysis of OSCP with proteinase from Staphylococcus aureus and reconstruction of the polypeptide chain] Grinkevich VA, et al. **Bioorg Khim** 1988 Jun;14(6):790–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Molecular basis of complement activation in ischemic myocardium: identification of specific molecules of mitochondrial origin that bind human C1q and fix complement. Kagiyama A, et al. **Circ Res** 1989 Mar; 64(3):607–15

Antimitochondrial antibodies in primary biliary cirrhosis recognize both specific peptides and shared epitopes of the M2 family of antigens. Flannery GR, et al. **Hepatology** 1989 Sep;10(3):370–4

Antimitochondrial autoantibodies in primary biliary cirrhosis recognize cross-reactive epitope(s) on protein X and dihydrolipoamide acetyltransferase of pyruvate dehydrogenase complex. Surh CD, et al. **Hepatology** 1989 Aug;10(2):127–33

METABOLISM

Oxygen diffusion through mitochondrial membranes. Koyama T, et al. **Adv Exp Med Biol** 1989;248:763–7

Hormonal regulation of intramitochondrial Ca2+ and oxidative metabolism in mammalian tissues. McCormack JG, et al. **Adv Exp Med Biol** 1988;232:249–56

Cellular compartmentation in ischemic myocardium: indirect analysis by electron probe. Walsh LG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H929–36

Estimation of matrix pH in isolated heart mitochondria using a fluorescent probe. Jung DW, et al. **Anal Biochem** 1989 May 1;178(2):348–54

Decreased activity of the pyruvate translocator and changes in the lipid composition in heart mitochondria from hypothyroid rats. Paradies G, et al. **Arch Biochem Biophys** 1989 Mar;269(2):595–602

Heart mitochondria metabolize 3-methylthiopropionate to CO2 and methanethiol. Scislowski PW, et al. **Arch Biochem Biophys** 1989 Sep;273(2):602–5

A mitochondrial chemiluminescence evoked by a novel mixed copper(II)–cyanide complex/acetaldehyde cyanohydrin chelate: a kinetic analysis suggesting a role for membrane-bound vicinal sulfhydryls. Steele RH, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):125–42

Superoxide radical release into the cytoplasm of heart cells by an NADH-driven oxygen activator. Nohl H. **Basic Life Sci** 1988;49:898–903

Effect of diazepam on the carnitine translocation in rat heart mitochondria. Sartorelli L, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):295–9

Synergistic deleterious effect of micromolar Ca ions and free radicals on respiratory function of heart mitochondria at cytochrome C and its salvage trial. Toyo-oka T, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1397–403

Inhibition of the mitochondrial phosphate carrier by a reaction with a carboxyl group reagent. Wolf G, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):212–6

Inhibition by cyclosporin A of a Ca2+-dependent pore in heart mitochondria activated by inorganic phosphate and oxidative stress. Crompton M, et al. **Biochem J** 1988 Oct 1;255(1):357–60

Dependence of cardiac mitochondrial pyruvate dehydrogenase activity on intramitochondrial free Ca2+ concentration. Moreno-Sánchez R, et al. **Biochem J** 1988 Dec 1;256(2):403–12

Calcium and proton activities in rat cardiac mitochondria. Effect of matrix environment on behaviour of fluorescent probes. Reers M, et al. **Biochem J** 1989 Jan 1;257(1):131–42

Structural dependency of the inhibitory action of benzodiazepines and related compounds on the mitochondrial Na+-Ca2+ exchanger. Chiesi M, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4399–403

Kinetic properties of the Na+/H+ antiport of heart mitochondria. Brierley GP, et al. **Biochemistry** 1989 May 16;28(10):4347–54

Mapping of the nucleotide-binding sites in the ADP/ATP carrier of beef heart mitochondria by photolabeling with 2-azido[alpha-32P]adenosine diphosphate. Dalbon P, et al. **Biochemistry** 1988 Jul 12;27(14):5141–9

Energy-induced modulation of the kinetics of oxidative phosphorylation and reverse electron transfer. Hekman C, et al. **Biochemistry** 1988 Sep 20;27(19):7559–65

The oxidation of glutamate by rat-heart sarcosomes. 1960 [classical article] Borst P, et al. **Biochim Biophys Acta** 1989; 1000:327–8

Comments on the discovery of coenzyme Q: a commentary on 'Isolation of a Quinone from Beef Heart Mitochondria'. Crane FL. **Biochim Biophys Acta** 1989;1000:358–61

Interaction of phenylisothiocyanates with the mitochondrial phosphate carrier. I. Covalent modification and inhibition of phosphate transport. Genchi G, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):413–20

Adenine nucleotide transport and adenosine production in isolated rat heart mitochondria during acetate metabolism. Kiviluoma KT, et al. **Biochim Biophys Acta** 1989 May 30; 974(3):274–81

Phosphate transport protein of rat heart mitochondria: location of its SH-groups and exploration of their environment. Ligeti E, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):170–5

Studies on mitochondrial Ca2+-transport and matrix Ca2+ using fura-2-loaded rat heart mitochondria. McCormack JG, et al. **Biochim Biophys Acta** 1989 Mar 23;973(3):420–7

Commentary on 'The Oxidation of Glutamate by Rat-Heart Sarcosomes'. Slater EC. **Biochim Biophys Acta** 1989; 1000:323–6

Duramycin effects on the structure and function of heart mitochondria. I. Structural alterations and changes in membrane permeability. Sokolove PM, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):15–22

Studies of lipid peroxidation in isolated rat heart mitochondria. Wiswedel I, et al. **Biomed Biochim Acta** 1989; 48(2–3):S73–6

Relationship between oxidative phosphorylation and adenine nucleotide translocase activity of two populations of cardiac mitochondria and mechanical recovery of ischemic hearts following reperfusion. Duan J, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):704–9

Hydrogen shuttles in air versus water breathing fishes. Hochachka PW, et al. **Comp Biochem Physiol [B]** 1979; 63(1):45–56

Species-related difference in calcium accumulation by cardiac mitochondria. Sachs HG, et al. **Comp Biochem Physiol [B]** 1978;61(1):181–3

Kinetic evidence for a heart mitochondrial pore activated by Ca2+, inorganic phosphate and oxidative stress. A potential mechanism for mitochondrial dysfunction during cellular Ca2+ overload. Crompton M, et al. **Eur J Biochem** 1988 Dec 15;178(2):489–501

Interaction of non-classical detergents with the mitochondrial porin. A new purification procedure and characterization of the pore-forming unit. De Pinto V, et al. **Eur J Biochem** 1989 Jul 15;183(1):179–87

Effect of calcium channel antagonists on calcium uptake and release by isolated rat cardiac mitochondria. Buss WC, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):247–53

Na+/H+ exchange in mitochondria as monitored by BCECF fluorescence. Kapus A, et al. **FEBS Lett** 1989 Jul 17;251(1–2):49–52

Effects of long-chain N-acylethanolamines on lipid peroxidation in cardiac mitochondria. Parinandi NL, et al. **FEBS Lett** 1988 Sep 12;237(1–2):49–52

Import of a mutant mitochondrial precursor fails to respond to stimulation by a cytosolic factor. Randall SK, et al. **FEBS Lett** 1989 Jul 3;250(2):561–4

2,3,7,8, tetrachlorodibenzo-p-dioxin induces oxygen activation associated with cell respiration. Nohl H, et al. **Free Radic Biol Med** 1989;6(4):369–74

Effect of ischemia on heart submitochondrial superoxide production. Guarnieri C, et al. **Free Radic Res Commun** 1985;1(2):123–8

Enzyme release and mitochondrial activity in reoxygenated cardiac muscle: relationship with oxygen-induced lipid peroxidation. Gauduel Y, et al. **Gen Physiol Biophys** 1989 Aug;8(4):327–40

Differing time courses between delta lactate and mitochondrial respiration during coronary occlusion and after reperfusion in canine hearts. Hanaki Y, et al. **Heart Vessels** 1988;4(3):149–52

Influence of intracellular pH on mitochondrial calcium during ischaemia of the isolated rat heart. Khandoudi N, et al. **Histochem J** 1989 Feb;21(2):99–106

Azido derivatives of dicarboxylic acids for photoaffinity labeling of mitochondrial carriers. Szewczyk A, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):125–34

Expression of the mammalian mitochondrial genome. Stability of mitochondrial translation products as a function of membrane potential. Côté C, et al. **J Biol Chem** 1989 May 25;264(15):8487–90

Fatty acid-binding protein, a potential regulator of energy production in the heart. Investigation of mechanisms by electron spin resonance. Fournier NC, et al. **J Biol Chem** 1988 Oct 5;263(28):14471–9

Regulation of mitochondrial matrix pH and adenosine 5'-triphosphatase activity during ischemia in slow heart-rate hearts. Role of Pi/H+ symport. Rouslin W, et al. **J Biol Chem** 1989 Sep 15;264(26):15224–9

Regulation of citric acid cycle by calcium. Wan B, et al. **J Biol Chem** 1989 Aug 15;264(23):13430–9

ATP hydrolysis by ischemic mitochondria. Classen JB, et al. **J Cell Physiol** 1989 Oct;141(1):53–9

Kinetics of the potential-sensitive extrinsic probe oxonol VI in beef heart submitochondrial particles. Smith JC, et al. **J Membr Biol** 1979;46(3):255–82

Energy-linked regulation of mitochondrial fatty acid oxidation in the isolated perfused rat heart. Latipää PM. **J Mol Cell Cardiol** 1989 Aug;21(8):765–71

Factors affecting the loss of mitochondrial function during zero-flow ischemia (autolysis) in slow and fast heart-rate hearts. Rouslin W. **J Mol Cell Cardiol** 1988 Nov; 20(11):999–1007

Functional state of myofibrils, mitochondria and bound creatine kinase in skinned ventricular fibers of cardiomyopathic hamsters. Veksler VI, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):329–42

Impairment of mitochondrial respiratory activity in the early ischemic myocardium—with special reference to electron transport system. Geshi E, et al. **Jpn Circ J** 1988 Jun; 52(6):535–42

Effect of lipid peroxidation on heart mitochondria oxygen consuming and calcium transporting capacities. Ceconi C, et al. **Mol Cell Biochem** 1988 Jun;81(2):131–5

Effect of trans fatty acids on the linoleic acid requirement of rats. **Nutr Rev** 1988 Nov;46(11):399–400

A rapid phosphate-induced depression of heart subsarcolemmal mitochondrial oxidative phosphorylation. Duan J, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):361–72

New 4-hydroxypyridine and 4-hydroxyquinoline derivatives as inhibitors of NADH-ubiquinone reductase in the respiratory chain. Chung KH, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7–8):609–16

[High energy phosphates and mitochondrial respiratory function after 24 hours cardiac preservation—comparison between simple hypothermic immersion and continuous hypothermic perfusion] Tago M, et al. **Kokyu To Junkan** 1989 Jan;37(1):61–3 (Eng. Abstr.) (Jpn)

[The role of adenine nucleotide translocator in the regulation of oxidative phosphorylation in heart mitochondria] Kholodenko BN, et al. **Biokhimiia** 1988 Jun;53(6):1009–12 (Eng. Abstr.) (Rus)

[Recording of the respiration of skinned cardiac fibers—a method that permits an evaluation of the functional parameters of mitochondria without their isolation from the tissue] Kuznetsov AV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):166–9 (Eng. Abstr.) (Rus)

[Functional activity of cardiac mitochondria of dogs exposed to cranio-cerebral hypothermia and cold cardioplegia] Valner EN. **Kardiologiia** 1988 Oct;28(10):99–100 (Rus)

[Mg2+ release from heart mitochondria in ischemia: is it the defense mechanism or damage?] Lemeshko VV, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):64–71 (Eng. Abstr.) (Rus)

[The state of membrane structures of heart cells during ischemia] Dagis AI, et al. **Vopr Med Khim** 1988 Sep-Oct; 34(5):80–3 (Eng. Abstr.) (Rus)

[The effect of smoking and alcohol on oxidative phosphorylation in mitochondria in the myocardium] Gvozdjáková A, et al. **Bratisl Lek Listy** 1989 Mar; 90(3):175–9 (Eng. Abstr.) (Slo)

PHYSIOLOGY

Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83–8

Carnitine deficiency, mitochondrial dysfunction and the heart. Identical defect of oxidative phosphorylation in muscle mitochondria in cardiomyopathy due to carnitine loss and in Duchenne muscular dystrophy. Scholte HR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):12–7

RADIATION EFFECTS

[Effect of irradiation on the size of the mitochondria in rat cardiomyocytes] Sirotkin VV, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):751–4 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastereologic studies on the myocardial mitochondria in experimental hypothyroidism. Bloch P, et al. **Acta Morphol Hung** 1988;36(3–4):167–75

Effects of repeated exhaustive exercise on myocardial subcellular membrane structures. Thomas DP, et al. **Int J Sports Med** 1988 Aug;9(4):257–60

Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64

An ultrastructural study of the hypertrophied human papillary muscle cell with special emphasis on specific staining patterns, mitochondrial projections and association between mitochondria and SR. Dalen H. **Virchows Arch [A]** 1989;414(3):187–98

[Morphological study on incisural ended nuclei of myocardial cells in overheated rats] Xu DY, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):133–5 (Eng. Abstr.) (Chi)

MITOCHONDRIA, LIVER

The bioenergetics of mitochondria after cryopreservation. Fuller BJ, et al. **Cryobiology** 1989 Aug;26(4):333–40

ANALYSIS

Fractionation and analysis of mitochondria with polycarbonate membrane filters. Bai C, et al. **Anal Biochem** 1989 May 15;179(1):114–9

DNA sequences homologous to mitochondrial genes in nuclei from normal rat tissues and from rat hepatoma cells. Corral M, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):258–64

Cloning and sequence analysis of a cDNA encoding the Rieske iron-sulfur protein of rat mitochondrial cytochrome bc1 complex. Nishikimi M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):19–25

Fatty acid composition of phospholipids in mitochondria and microsomes during diethylnitrosamine carcinogenesis in rat liver. Canuto RA, et al. **Cell Biochem Funct** 1989 Jan; 7(1):11–9

Purification of the mitochondrial carnitine carrier by chromatography on hydroxyapatite and celite. Indiveri C, et al. **FEBS Lett** 1989 Aug 14;253(1–2):217–20

Optimization of the ion-pair high-performance liquid chromatographic separation of purine derivatives in erythrocytes, thymocytes and liver mitochondria. Toguzov RT, et al. **J Chromatogr** 1988 Dec 30;434(2):447–53

Purification and characterization of two serine isoacceptor tRNAs from bovine mitochondria by using a hybridization assay method. Yokogawa T, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2623–38

[Nucleotide sequence of the NADH dehydrogenase gene in mitochondrial DNA from rat liver] Quagliariello C, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):211–8 (Eng. Abstr.) (Ita)

[The primary and secondary structures of the ribosomal RNAs of Rana catesbeiana mitochondrion] Nagae Y. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):417–30 (Eng. Abstr.) (Jpn)

DRUG EFFECTS

Effects of moderate chronic ethanol consumption on rat liver mitochondrial functions. Zentella de Piña M, et al. **Alcohol** 1989 Jan-Feb;6(1):3–7

Spermine, another specific allosteric activator of calcium uptake in rat liver mitochondria. Kröner H. **Arch Biochem Biophys** 1988 Nov 15;267(1):205–10

Mitochondrial damage as a mechanism of cell injury in the killing of cultured hepatocytes by tert-butyl hydroperoxide. Masaki N, et al. **Arch Biochem Biophys** 1989 May 1;270(2):672–80

Role of sulfhydryl groups in benzoquinone-induced Ca2+ release by rat liver mitochondria. Moore GA, et al. **Arch Biochem Biophys** 1988 Dec;267(2):539–50

1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine inhibits proton motive force in energized liver mitochondria. Singh Y, et al. **Arch Biochem Biophys** 1989 May 15;271(1):217–22

Changes in mitochondrial activity caused by ammonium salts and the protective effect of carnitine. Bellei M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):181–8

Cyclosporin A-sensitive and insensitive mechanisms produce the permeability transition in mitochondria. Broekemeier KM, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):561–6

Tetraphenylborate potentiates the respiratory inhibition by the dopaminergic neurotoxin MPP+ in both electron transport particles and intact mitochondria. Sayre LM, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):809–18

Hypophysectomy and adrenalectomy decrease Ca2+-induced swelling of rat liver mitochondria. Bedetti CD, et al. **Biochem Int** 1988 Jul;17(1):111–9

Reversible and irreversible inhibition of hepatic mitochondrial respiration by acetaminophen and its toxic metabolite, N-acetyl-p-benzoquinoneimine (NAPQI). Esterline RL, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2387–90

Metabolic alterations resulting from the inhibition of mitochondrial respiration by acetaminophen in vivo. Esterline RL, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2390–2

Stimulation of cation transport in mitochondria by gramicidin and truncated derivatives. Rottenberg H, et al. **Biochemistry** 1989 May 16;28(10):4361–7

Alkylthioacetic acid (3-thia fatty acids)--a new group of non-beta-oxidizable, peroxisome-inducing fatty acid analogues. I. A study on the structural requirements for proliferation of peroxisomes and mitochondria in rat liver. Berge RK, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):345–56

Mechanism of nitrofurantoin toxicity and oxidative stress in mitochondria. Carbonera D, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):139–47

Characterization of the mitochondrial Na+-H+ exchange. The effect of amiloride analogues. Kapus A, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):383–90

Chelating agents and rat liver mitochondria. Lund P, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):330–5

Interactions between a new class of eukaryotic antimicrobial agents and isolated rat liver mitochondria. Westerhoff HV, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):361–9

Enhanced oxidative phosphorylation in rat liver mitochondria following prolonged in vivo treatment with imipramine. Katyare SS, et al. **Br J Pharmacol** 1988 Nov; 95(3):914–22

Impaired mitochondrial oxidative energy metabolism following paracetamol-induced hepatotoxicity in the rat. Katyare SS, et al. **Br J Pharmacol** 1989 Jan;96(1):51–8

Cytoplasmic accumulation of ditercalinium in rat hepatocytes and induction of mitochondrial damage. Fellous R, et al. **Cancer Res** 1988 Nov 15;48(22):6542–9

Phototoxicity mechanism of a kryptocyanine dye in human red cell membranes and isolated murine mitochondria. Valdes-Aguilera O, et al. **Cancer Res** 1988 Dec 1; 48(23):6794–8

Flow cytometric analysis of the effects of high protein diet on isolated rat liver mitochondria. O'Connor JE, et al. **Cell Tissue Kinet** 1988 Sep;21(5):331–8

The effects of magnesium on state 3 respiration of liver mitochondria from control and cold-acclimated rats and hamsters. Rochelle RH, et al. **Comp Biochem Physiol [B]** 1978;60(3):267–9

Changes induced by caffeine, theophylline and theobromine on calcium uptake, respiration and ATP levels in rat-liver mitochondria. de la Cruz MJ, et al. **Comp Biochem Physiol [C]** 1988;91(2):443–7

In vitro effects of polyhalogenated hydrocarbons on liver mitochondria respiration and microsomal cytochrome P-450. Fiorucci L, et al. **Drug Chem Toxicol** 1988; 11(4):387–403

The effect of butylated hydroxytoluene, an inhibitor of lipid peroxidation, on the calcium-induced uncoupling of rat liver mitochondria. Novgorodov SA, et al. **FEBS Lett** 1989 May 8;248(1–2):179–81

Comparative effects of T-2 toxin and diacetoxyscirpenol on drug metabolizing enzymes in rat tissues. Galtier P, et al. **Food Chem Toxicol** 1989 Apr;27(4):215–20

The control of iron-induced oxidative damage in isolated rat-liver mitochondria by respiration state and ascorbate. Burkitt MJ, et al. **Free Radic Res Commun** 1989;5(6):333–44

Effect of dimethyl sulphoxide on mitochondrial biogenesis in regenerating rat liver and Saccharomyces cerevisiae. Desai SD, et al. **Indian J Biochem Biophys** 1989 Apr; 26(2):87–91

Functional state of rat liver and kidney mitochondria during sterigmatocystin toxicosis. Banu S, et al. **Indian J Exp Biol** 1988 Nov;26(11):858–9

Influence of thyroid hormones on hepatic mitochondrial enzymes of thiouracil treated teleost Anabas testudineus (Bloch). Peter MC, et al. **Indian J Exp Biol** 1988 Sep; 26(9):651–3

Valinomycin-induced chloride permeability in isolated rat liver mitochondria. Schnell FC, et al. **Int J Biochem** 1988; 20(12):1361–8

Hepatic mitochondrial membranolysis repairing by spermidine. Chandra R. **Int J Vitam Nutr Res** 1989; 59(2):113–6

Organic hydroperoxides at high concentrations cause energization and activation of ATP synthesis in mitochondria. Marshansky V. **J Biol Chem** 1989 Mar 5; 264(7):3670–3

Effect of fatty acids and their derivatives on mitochondrial structures. Singh AK, et al. **J Exp Pathol** 1989;4(1):9–15

Valproic acid therapy and mitochondrial alterations. Partin JS. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):5–7

Effect of the plasticizer di-(2-ethylhexyl)phthalate on oxidative phosphorylation in rat liver mitochondria:

modification of the function of the adenine nucleotide translocator. Kora S, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):773–8

The effect of halothane on mitochondrial permeability to NADH. Nahrwold ML, et al. **Life Sci** 1974 Oct 1; 15(7):1261–5

Effects of in vivo and in vitro exposure to rhodamine dyes on mitochondrial function of mouse embryos. Ranganathan S, et al. **Teratogenesis Carcinog Mutagen** 1989;9(1):29–37

Aroclor 1254 treatment and fasting influences on rat liver mitochondrial carbamoyl phosphate synthesis with ADP and ATP. Ebner K, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):75–84

The mechanism of acute cytotoxicity of triethylphosphine gold(I) complexes. III. Chlorotriethylphosphine gold(I)-induced alterations in isolated rat liver mitochondrial function. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):50–60

Effects of hexavalent chromium on trout mitochondria. Arillo A, et al. **Toxicol Lett** 1988 Nov;44(1–2):71–6

Effect of acetaminophen hepatotoxicity on hepatic mitochondrial and microsomal calcium contents in mice. Burcham PC, et al. **Toxicol Lett** 1988 Nov;44(1–2):91–9

Effect of chlordane on hepatic mitochondrial respiration. Ogata M, et al. **Toxicol Lett** 1989 Jul;48(1):67–74

[Mechanism of cell damage by hematoporphyrin derivative (HPD) plus light. II. Effect of HPD plus light on respiration and oxidative phosphorylation in hepatoma cells and normal liver mitochondria] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):349–52 (Eng. Abstr.) **(Chi)**

[Biochemical and pharmacologic effects of wuweizi (Schizandra chinensis (Turcz.) Baill.) and its chemical contents on animal livers] Liu GT. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):197–203 (15 ref.) **(Chi)**

[The biochemical and pharmacological effects of biphenyl dimethyl dicarboxylate (DDB) on rat liver cells] Chen L, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):881–5 (Eng. Abstr.) **(Chi)**

[Comparative effects of pentoxifylline and of HWA 285 on mitochondrial maturation and biosynthesis of proteins in rats in the perinatal period] Gautheron DC, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1056–9 (Eng. Abstr.) **(Fre)**

[The action of nicotinamide on the adenine nucleotide system as well as on mitochondrial oxidation and phosphorylation processes in the liver of db/db strain mice] Obrosova IG, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):681–3 (Eng. Abstr.) **(Rus)**

[Fluorescence dynamics of anilino naphthalenesulfonate in mitochondria exposed to corticosteroids] Vol'skiĭ GG, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):68–71 (Eng. Abstr.) **(Rus)**

[Internal mitochondrial membrane as a sensitive model for evaluating the pathobiochemical mechanisms of the effect of various chemical substances] Ellinger Kh. **Gig Sanit** 1989 Mar;(3):74–5 **(Rus)**

[Effect of bucid on oxidation-reduction processes in the microsomes and mitochondria of the animal liver] Sinitskaia TA, et al. **Gig Sanit** 1989 May;(5):87–8 **(Rus)**

[Effect of cadmium ions on the respiration, cation transport and morphology of the liver mitochondria in the rat and the lamprey] Skul'skiĭ IA, et al. **Tsitologiia** 1988 Aug; 30(8):956–62 (Eng. Abstr.) **(Rus)**

[Metabolic status of the liver mitochondria in rats drinking water containing various forms of iodine] Nikulina LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug; (4):59–62 (Eng. Abstr.) **(Rus)**

[The effect of bacterial endotoxin on the activity of liver mitochondria monoamine oxidase] Natanzon LV, et al. **Vopr Med Khim** 1989 May–Jun;35(3):58–9 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Long-term effects of thyrotropin-releasing hormone and histidyl-proline diketopiperazine on the maturation of homeothermia and mitochondrial enzyme activities in neonatal rats. Miyamori C, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):575–81

Polyamines stimulate the "in vitro" transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria. Hernández-Yago J, et al. **Adv Exp Med Biol** 1988;250:497–508

Mitochondria as the primary site of acetaldehyde metabolism in beef and pig liver slices. Cao QN, et al. **Alcoholism (NY)** 1988 Oct;12(5):720–4

The H+ -ATP synthase of mitochondria in tissue regeneration and neoplasia. Papa S, et al. **Ann N Y Acad Sci** 1988;551:168–77; discussion 177–8

How does cytochrome oxidase pump protons? A "cooperative proton pump" model. Wikström M. **Ann N Y Acad Sci** 1988;550:199–206

Inhibition of inorganic pyrophosphatase of animal mitochondria by calcium. Baykov AA, et al. **Arch Biochem Biophys** 1989 Sep;273(2):287–91

Investigation of the substrate structure and metal cofactor requirements of the rat liver mitochondrial ATP synthase/ATPase complex. Hanley-Trawick S, et al. **Arch Biochem Biophys** 1989 Jan;268(1):116–23

Hepatic mitochondrial coumarin 7-hydroxylase: comparison with the microsomal enzyme. Honkakoski P, et al. **Arch Biochem Biophys** 1988 Dec;267(2):558–67

Loading rat liver mitochondria with apocytochrome c provokes exit of cytochrome c. Miralles VJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):516–21

Dual action of 2-decynoyl coenzyme A: inhibitor of hepatic mitochondrial trans-2-enoyl coenzyme A reductase and peroxisomal bifunctional protein and substrate for the mitochondrial beta-oxidation system. Nagi MN, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):1–12

Properties of a highly purified mitochondrial deoxyguanosine kinase. Park I, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):51–60

Kinetic models for the action of cytosolic and mitochondrial inorganic pyrophosphatases of rat liver. Unguryte A, et al. **Arch Biochem Biophys** 1989 Sep;273(2):292–300

Purification and properties of ornithine carbamoyl transferase from liver of Squalus acanthias. Xiong XF, et al. **Arch Biochem Biophys** 1989 Apr;270(1):198–207

2-Ethylhexanoic acid inhibits urea synthesis and stimulates carnitine acetyltransferase activity in rat liver mitochondria. Manninen A, et al. **Arch Toxicol** 1989; 63(2):160–1

Role of cardiolipin in the functioning of mitochondrial L-glycerol-3-phosphate dehydrogenase. Beleznai Z, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):132–9

Partial amino acid sequence analysis of human placenta monoamine oxidase A and bovine liver monoamine oxidase B. Chen SA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):445–50

Characterization of the liver mitochondrial cytochrome P-450 catalyzing the 26-hydroxylation of 5 beta-cholestane-3 alpha, 7 alpha, 12 alpha-triol [published erratum appears in Biochem Biophys Res Commun 1989 Feb 28;159(370] Dahlbäck H. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):30–6

Polyamines are sufficient to drive the transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria: possible effect on mitochondrial membranes. Marcote MJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):287–93

Calcium sensitive isocitrate and 2-oxoglutarate dehydrogenase activities in rat liver and AS-30D hepatoma mitochondria. Murphy AN, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1218–25

The amino acid sequence of the 24-kDa subunit, an iron-sulfur protein, of rat liver mitochondrial NADH dehydrogenase deduced from cDNA sequence. Nishikimi M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):914–20

Mitochondria and microsomal membranes have a free radical reductase activity that prevents chromanoxyl radical accumulation. Packer L, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):229–35

Identification and characteristics of a novel mitochondrial 5'-nucleotidase in rat liver. Henke W, et al. **Biochem Int** 1989 Apr;18(4):833–44

Distribution of glycosyltransferase activities in different compartments of mitochondria. Levrat C, et al. **Biochem Int** 1989 Apr;18(4):813–23

ATP-Mg2+ reversal of the salt activation of membrane bound carnitine palmitoyltransferase activities of liver mitochondria. Pande SV, et al. **Biochem Int** 1988 Dec; 17(6):1021–8

Longer-term regulation of branched-chain-2-oxoacid dehydrogenase complex studied in rat hepatocytes in culture. Beggs M, et al. **Biochem J** 1989 Jan 1;257(1):271–5

Activity of branched-chain 2-oxo acid dehydrogenase complex in rat liver mitochondria and in rat liver. Beggs M, et al. **Biochem J** 1988 Dec 15;256(3):929–34

Co-ordinate induction of hepatic mitochondrial and peroxisomal carnitine acyltransferase synthesis by diet and drugs. Brady PS, et al. **Biochem J** 1989 May 15; 260(1):93–100

Altered enzyme activities and citrulline synthesis in liver mitochondria from ornithine carbamoyltransferase-deficient sparse-furash mice. Cohen NS, et al. **Biochem J** 1989 Jan 1;257(1):251–7

DNA sequences of a bovine gene and of two related pseudogenes for the proteolipid subunit of mitochondrial ATP synthase. Dyer MR, et al. **Biochem J** 1989 May 15; 260(1):249–58

Reaction between sheep liver mitochondrial aldehyde dehydrogenase and various thiol-modifying reagents. Loomes KM, et al. **Biochem J** 1989 Jul 1;261(1):281–4

Longer-term regulation of pyruvate dehydrogenase kinase in cultured rat hepatocytes. Marchington DR, et al. **Biochem J** 1989 Jan 15;257(2):487–91

Purification of aldehyde dehydrogenase from rat liver mitochondria by alpha-cyanocinnamate affinity chromatography. Poole RC, et al. **Biochem J** 1989 Apr 1;259(1):105–10

Mitochondrial acetyl-CoA carboxylase. Time course of mobilization/activation in liver of refed rats. Roman-Lopez CR, et al. **Biochem J** 1989 Jun 15;260(3):927–30

Nitroreductase activity of NADH dehydrogenase of the respiratory redox chain. Smyth GE, et al. **Biochem J** 1989 Feb 1;257(3):859–63

Effects of riboflavin deficiency and clofibrate treatment on the five acyl-CoA dehydrogenases in rat liver mitochondria. Veitch K, et al. **Biochem J** 1988 Sep 1; 254(2):477–81

Oxidation of 3-amino-1-phenylprop-1-enes by monoamine oxidase and their use in a continuous assay of the enzyme. Williams CH, et al. **Biochem J** 1988 Dec 15;256(3):911–5

Potentiation of benzoate toxicity by glyoxylate. Inhibition of pyruvate carboxylase and the urea cycle. Cyr DM, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2919–23

Phosphorylation of arabinosyl guanine by a mitochondrial enzyme of bovine liver. Lewis RA, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2001–6

Inactivation of low-Km rat liver mitochondrial aldehyde dehydrogenase by cyanamide in vitro. A catalase-mediated reaction. Pruñonosa J, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2099–105

Intermediates of beta-oxidation. Bartlett K, et al. **Biochem Soc Trans** 1988 Jun;16(3):410–6

Purification and properties of mitochondrial uracil-DNA glycosylase from rat liver. Domena JD, et al. **Biochemistry** 1988 Sep 6;27(18):6742–51

ATP synthase from bovine mitochondria: complementary DNA sequence of the mitochondrial import precursor of the gamma-subunit and the genomic sequence of the mature protein. Dyer MR, et al. **Biochemistry** 1989 May 2;28(9):3670–80

Inducible (class 3) aldehyde dehydrogenase from rat hepatocellular carcinoma and 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated liver: distant relationship to the class 1 and 2 enzymes from mammalian liver cytosol/mitochondria. Hempel J, et al. **Biochemistry** 1989 Feb 7;28(3):1160–7

Analysis of the kinetic mechanism of the bovine liver mitochondrial dihydroorotate dehydrogenase. Hines V, et al. **Biochemistry** 1989 Feb 7;28(3):1222–6

Mechanistic studies on the bovine liver mitochondrial dihydroorotate dehydrogenase using kinetic deuterium isotope effects. Hines V, et al. **Biochemistry** 1989 Feb 7; 28(3):1227–34

Exonucleolytic proofreading by a mammalian DNA polymerase. Kunkel TA, et al. **Biochemistry** 1989 Feb 7; 28(3):988–95

Physical location of the site for N-acetyl-L-glutamate, the allosteric activator of carbamoyl phosphate synthetase, in the 20-kilodalton COOH-terminal domain. Rodriguez-Aparicio LB, et al. **Biochemistry** 1989 Apr 4; 28(7):3070–4

Identification of the site of acetyl-S-enzyme formation on avian liver mitochondrial 3-hydroxy-3-methylglutaryl-CoA synthase. Vollmer SH, et al. **Biochemistry** 1988 Jun 14;27(12):4288–92

Tissue-specific differences between heart and liver cytochrome c oxidase. Yanamura W, et al. **Biochemistry** 1988 Jun 28;27(13):4909–14

Biosynthesis and import into the mitochondrion of L-3-glycerophosphate dehydrogenase, and the effect of thyroid hormone deficiency on gene expression. Clay VJ, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):112–8

Topological orientation of mitochondrial GDPmannose: dolichyl-monophosphate mannosyltransferase in the outer membrane. Gasnier F, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):339–47

Effects of endurance exercise on carnitine palmitoyltransferase I from rat heart, skeletal muscle and liver mitochondria. Guzmán M, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):562–5

Ethanol increases the sensitivity of carnitine palmitoyltransferase I to inhibition by malonyl-CoA in short-term hepatocyte incubations. Guzmán M, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):405–8

The functional catalytic unit involved in proton pumping by rat liver cytochrome-c reductase and by cytochrome-c oxidase. Moody AJ, et al. **Biochim Biophys Acta** 1989 Jan 26;973(1):29–34

Species pattern of phosphatidic acid, diacylglycerol, CDP-diacylglycerol and phosphatidylglycerol synthesized de novo in rat liver mitochondria. Rüstow B, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):261–3

Changes in peroxisomes and mitochondria in liver of ethionine exposed rats: a biochemical and morphological investigation. Aarsaether N, et al. **Carcinogenesis** 1989 Jun; 10(6):987–94

Choice of substrate concentration in the search for abnormal enzyme activity in human tissues [letter] Kamoun P, et al. **Clin Chem** 1989 Jun;35(6):1267

Mitochondrial alpha-glycerophosphate dehydrogenase activity in active and torpid ground squirrels, Spermophilus richardsoni. Demeneix BA, et al. **Comp Biochem Physiol [B]** 1978;59(4):333–7

Diurnal changes in succinate and D-3-hydroxybutyrate dehydrogenase activities of rat liver mitochondria after chronic alcohol consumption and withdrawal. Kaminsky YG, et al. **Comp Biochem Physiol [C]** 1988;90(1):79–82

Effects of alcohol consumption on mitochondrial aldehyde dehydrogenase isoenzymes in rat liver. Aoki Y, et al. **Enzyme** 1989;41(3):151–8

Simultaneous purification and characterization of aspartate aminotransferase isoenzymes from chicken liver. Gracia R, et al. **Enzyme** 1988;40(4):189–97

Primary structures of rat and bovine liver mitochondrial aldehyde dehydrogenases deduced from cDNA sequences. Farrés J, et al. **Eur J Biochem** 1989 Mar 1;180(1):67–74

Identification by flow cytometry of two distinct rhodamine-123-stained mitochondrial populations in rat liver. Lopez-Mediavilla C, et al. **FEBS Lett** 1989 Aug 28; 254(1–2):115–20

Effect of redox potential on rat liver F1-ATPase. López-Zabalza MJ, et al. **FEBS Lett** 1989 Jan 2; 242(2):293–6

ATP-synthase complex: the mechanism of control of ion fluxes induced by cumene hydroperoxide in mitochondria. Novgorodov SA, et al. **FEBS Lett** 1989 Apr 24; 247(2):255–8

The in vitro insertion of monoamine oxidase B into mitochondrial outer membranes. Zhuang Z, et al. **FEBS Lett** 1988 Sep 26;238(1):185–90

Modulation of hepatic ferrochelatase activity by dietary manipulation of mitochondrial phospholipid fatty acyl groups. Kools AM, et al. **Hepatology** 1989 Apr;9(4):557–61

Aminopyrine-N-demethylase activity of rat liver after administration of crude cannabis extract. Sethi N, et al. **Indian J Med Res** 1989 Feb;90:36–8

Glucosyltransferase activity in mitochondria. Biosynthesis of glucosyl-phosphoryl-dolichol in inner mitochondrial membranes. Ardail D, et al. **Int J Biochem** 1989;21(5):541–8

Galactosyltransferase activities in mitochondria outer membrane: biosynthesis of galactosylated proteins. Gasnier F, et al. **Int J Biochem** 1989;21(2):173–81

Purification of malate dehydrogenase from chicken liver mitochondria. Existence of a small quantity of cytosolic isoenzyme. Gelpí JL, et al. **Int J Biochem** 1988;20(9):989–96

Properties of membrane bound ferrochelatase purified from baboon liver mitochondria. Posnett SJ, et al. **Int J Biochem** 1988;20(8):845–55

Liver ferrochelatase from normal and hexachlorobenzene porphyric rats. Studies on their properties. Rios de Molina MC, et al. **Int J Biochem** 1989;21(2):219–25

Induction of mitochondrial serine:pyruvate aminotransferase of rat liver by glucagon and insulin through different mechanisms. Miyajima H, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):500–4

Cloning, structure, and expression of the mitochondrial cytochrome P-450 sterol 26-hydroxylase, a bile acid biosynthetic enzyme. Andersson S, et al. **J Biol Chem** 1989 May 15;264(14):8222–9

Sequence analysis, biogenesis, and mitochondrial import of the alpha-subunit of rat liver propionyl-CoA carboxylase. Browner MF, et al. **J Biol Chem** 1989 Jul 25; 264(21):12680–5

Synthetic transit peptides inhibit import and processing of mitochondrial precursor proteins. Chu TW, et al. **J Biol Chem** 1989 Jun 5;264(16):9552–8

Cell-free synthesis of a putative precursor to the rat liver mitochondrial glycerol-3-phosphate dehydrogenase. Garrib A, et al. **J Biol Chem** 1988 Dec 25;263(36):19821–6

Complementary DNA encoding core protein II of human mitochondrial cytochrome bc1 complex. Substantial diversity in deduced primary structure from its yeast counterpart. Hosokawa Y, et al. **J Biol Chem** 1989 Aug 15;264(23):13483–8

F0 "proton channel" of rat liver mitochondria. Rapid purification of a functional complex and a study of its interaction with the unique probe diethylstilbestrol. McEnery MW, et al. **J Biol Chem** 1989 Jul 15; 264(20):12029–36

The primary structure of rabbit liver mitochondrial serine hydroxymethyltransferase. Martini F, et al. **J Biol Chem** 1989 May 25;264(15):8509–19

Purification and characterization of vitamin D 25-hydroxylase from rat liver mitochondria. Masumoto O, et al. **J Biol Chem** 1988 Oct 5;263(28):14256–60

Reconstitution of mitochondrial protein transport with purified ornithine carbamoyltransferase precursor expressed in Escherichia coli. Murakami K, et al. **J Biol Chem** 1988 Dec 5;263(34):18437–42

Bovine mitochondrial rhodanese is a phosphoprotein. Ogata K, et al. **J Biol Chem** 1989 Feb 15;264(5):2718–25

Purification and characterization of 5 beta-cholestane-3 alpha,7 alpha,12 alpha-triol 27-hydroxylase from female rat liver mitochondria. Okuda K, et al. **J Biol Chem** 1988 Dec 5;263(34):18138–42

Inhibitors of sterol synthesis. Characterization of side chain oxygenated derivatives formed upon incubation of 3 beta-hydroxy-5 alpha-cholest-8(14)-en-15-one with rat liver mitochondria. Pyrek JS, et al. **J Biol Chem** 1989 Mar 15;264(8):4536–43

Rat liver mitochondrial and cytosolic fumarases with identical amino acid sequences are encoded from a single gene. Suzuki T, et al. **J Biol Chem** 1989 Feb 15; 264(5):2581–6

Response of rat liver glutaminase to pH. Mediation by phosphate and ammonium ions. Szweda LI, et al. **J Biol Chem** 1989 Sep 15;264(26):15357–60

Ubiquitin is involved in the in vitro insertion of monoamine oxidase B into mitochondrial outer membranes. Zhaung ZP, et al. **J Biol Chem** 1989 Sep 5;264(25):14594–6

An enzyme trafficking defect in two patients with primary hyperoxaluria type 1: peroxisomal alanine/glyoxylate aminotransferase rerouted to mitochondria. Danpure CJ, et al. **J Cell Biol** 1989 Apr;108(4):1345–52

Maternal inheritance of mitochondrial cytochrome c oxidase activity in mice. Mikami H, et al. **J Hered** 1989 Mar-Apr; 80(2):132–6

Autophagy of mitochondria in rat liver assessed by immunogold procedures. Knecht E, et al. **J Histochem Cytochem** 1988 Nov;36(11):1433–40

Mitochondrial storage forms of acetyl CoA carboxylase: mobilization/activation accounts for increased activity of the enzyme in liver of genetically obese Zucker rats. Allred JB, et al. **J Nutr** 1989 Mar;119(3):478–83

Succinate dehydrogenase and synthetic pathways of glucose 6-phosphate are also the markers of the toxicity of orally administered secondary autoxidation products of linoleic acid in rat liver. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):25–37

Study of hepatotoxicity in isolated perfused liver versus cultures of rat hepatocytes. Fouad FM, et al. **J Toxicol Environ Health** 1989;26(1):83–99

Effect of diethylnitrosamine on monoamine oxidase in rat liver. Obata T, et al. **Jpn J Pharmacol** 1989 Jan;49(1):151–3

Age-related changes in respiration coupled to phosphorylation. I. Hepatic mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):263–77

Effects of growth hormone on pyruvate dehydrogenase activity in intact rat liver and in isolated hepatocytes: comparison with insulin. Clot JP, et al. **Metabolism** 1988 Nov;37(11):1101–6

Isolation of branched-chain alpha-keto acid dehydrogenase as active complex from bovine liver. Danner DJ, et al. **Methods Enzymol** 1988;166:298–302

Assay of branched-chain alpha-keto acid dehydrogenase kinase in mitochondrial extracts and purified branched-chain alpha-keto acid dehydrogenase complexes. Espinal J, et al. **Methods Enzymol** 1988;166:166–75

2-methyl branched-chain acyl-CoA dehydrogenase from rat liver. Ikeda Y, et al. **Methods Enzymol** 1988;166:360–73

Isovaleryl-CoA dehydrogenase from rat liver. Ikeda Y, et al. **Methods Enzymol** 1988;166:374–89

Effect of reduction and carboxamidomethylation on immunogenicity of mitochondrial adenylate kinase (AK2). Watanabe K, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):791–6

Two mitochondrial matrix proteases act sequentially in the processing of mammalian matrix enzymes. Kalousek F, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7536–40

Different structures in the amino-terminal domain of the ornithine transcarbamylase leader peptide are involved in mitochondrial import and carboxyl-terminal cleavage. Kraus JP, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8905–9

Kinetic properties of murine liver aldehyde dehydrogenases. Algar EM, et al. **Prog Clin Biol Res** 1989;290:93–103

Precursors and post translational modification of mitochondrial aldehyde dehydrogenase. Weiner H, et al. **Prog Clin Biol Res** 1989;290:81–92

Effect of 3-(2,2,2-trimethylhydrazinium) propionate, gamma-butyrobetaine hydroxylase inhibitor, on isoproterenol-induced mitochondrial dysfunction. Hanaki Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):157–60

[Serum activity of mitochondrial aspartate aminotransferase and extrahepatic cholestasis] Hanny P, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):66–70 (Eng. Abstr.) **(Fre)**

[Hepatic CoA availability in the use of long-chain and medium-chain triglycerides] Gheith S, et al. **Monatsschr Kinderheilkd** 1988 Oct;136(10):669–72 (Eng. Abstr.) **(Ger)**

[Analysis of the amino acid sequence of a component of complex I of the respiratory chain in rat liver mitochondria] Spena A, et al. **Boll Soc Ital Biol Sper** 1988 Mar; 64(3):219–25 (Eng. Abstr.) **(Ita)**

[Activity of mitochondrial enzymes in patients with acute viral hepatitis B] Nedogoda VV, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:533–7 (Eng. Abstr.) **(Rus)**

[Properties of phospholipase A2 from inner and outer mitochondrial membranes] Rakhimov MM, et al. **Biokhimiia** 1988 Sep;53(9):1486–95 (Eng. Abstr.) **(Rus)**

[Hygienic evaluation of the biological effect of pulsed electromagnetic fields of 850-2750 mHz] Tomashevskaia LA, et al. **Gig Sanit** 1988 Sep;(9):22–4 (Eng. Abstr.) **(Rus)**

[Lysophospholipase activity in mitochondrial membranes of the rat liver] Gorbataia ON, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):23–8 (Eng. Abstr.) **(Rus)**

[Activation of succinate oxidase in the inner membrane of rat liver mitochondria] Zinich VN, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):67–72 (Eng. Abstr.) **(Rus)**

[Modification of the catalytic properties of highly purified bovine liver mitochondrial monoaminoxidase] Gorkin VZ, et al. **Vopr Med Khim** 1971 Jul-Aug;17(4):444–6 **(Rus)**

IMMUNOLOGY

Characterization of a new mitochondrial antigen-antibody system (M9/anti-M9) in patients with anti-M2 positive and anti-M2 negative primary biliary cirrhosis. Klein R, et al. **Clin Exp Immunol** 1988 Oct;74(1):68–74

Two different types of antimitochondrial antibodies (anti-M2 and anti-M4) may not differentiate primary biliary cirrhosis (PBC) with prominent piecemeal necrosis from classical PBC. Okuno T, et al. **Gastroenterol Jpn** 1989 Feb; 24(1):40–5

Molecular aspects of the M2 autoantigens in primary biliary cirrhosis: what a difference a year makes. James OF, et al. **Hepatology** 1989 Aug;10(2):247–51 (41 ref.)

Immunization of experimental animals with dihydrolipoamide acetyltransferase, as a purified recombinant polypeptide, generates mitochondrial antibodies but not primary biliary cirrhosis. Krams SM, et al. **Hepatology** 1989 Mar;9(3):411–6

Reactivity of primary biliary cirrhosis sera with a human fetal liver cDNA clone of branched-chain alpha-keto acid dehydrogenase dihydrolipoamide acyltransferase, the 52 kD mitochondrial autoantigen. Surh CD, et al. **Hepatology** 1989 Jan;9(1):63–8

Antimitochondrial antibodies of primary biliary cirrhosis recognize dihydrolipoamide acyltransferase and inhibit enzyme function of the branched chain alpha-ketoacid dehydrogenase complex. Fregeau DR, et al. **J Immunol** 1989 Jun 1;142(11):3815–20

Mitochondrial M2 autoantigens and primary biliary cirrhosis [letter] **Lancet** 1989 Feb 25;1(8635):447–8

Are antimitochondrial antibodies in primary biliary cirrhosis induced by R(rough)-mutants of enterobacteriaceae? Stemerowicz R, et al. **Lancet** 1988 Nov 19;2(8621):1166–70

M2 autoantigens in primary biliary cirrhosis [letter] Yeaman SJ, et al. **Lancet** 1989 Jan 14;1(8629):103

Identification and analysis of the major M2 autoantigens in primary biliary cirrhosis. Fussey SP, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8654–8

Identification and characterization of four M2 mitochondrial autoantigens in primary biliary cirrhosis. Bassendine MF, et al. **Semin Liver Dis** 1989 May;9(2):124–31 (71 ref.)

Nature of the mitochondrial antigens of primary biliary cirrhosis and their possible relationships to the etiology of the disease. Baum H. **Semin Liver Dis** 1989 May; 9(2):117–23 (57 ref.)

Heterogeneity of antimitochondrial antibodies. Berg PA, et al. **Semin Liver Dis** 1989 May;9(2):103–16 (62 ref.)

Molecular definitions, autoepitopes, and enzymatic activities of the mitochondrial autoantigens of primary biliary cirrhosis. Van de Water J, et al. **Semin Liver Dis** 1989 May; 9(2):132–7 (45 ref.)

[Primary biliary cirrhosis with negative antimitochondrial antibodies associated with Sjogren's syndrome (letter)] Martínez Ruiz M, et al. **Rev Clin Esp** 1989 Mar;184(4):216–7 **(Spa)**

METABOLISM

Effect of exhaustive exercise on liver mitochondrial function in the rat. Bielecki JW, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5-6):421–6

Sodium/proton antiporters in the mitochondrial inner membrane. Garlid KD. **Adv Exp Med Biol** 1988;232:37–46

Mechanisms of mitochondrial calcium transport. Gunter TE, et al. **Adv Exp Med Biol** 1988;232:1–14

The role of calcium and phospholipase A2 in glucagon-induced enhancement of mitochondrial calcium retention. Hoek JB, et al. **Adv Exp Med Biol** 1988;232:25–36

Hormonal regulation of intramitochondrial Ca2+ and oxidative metabolism in mammalian tissues. McCormack JG, et al. **Adv Exp Med Biol** 1988;232:249–56

Abnormal Ca2+ transport characteristics of hepatoma mitochondria and endoplasmic reticulum. Murphy AN, et al. **Adv Exp Med Biol** 1988;232:139–50

Permeability pathways of Ca2+ efflux from mitochondria: H+ specificity and reversibility of the permeability defect. Pfeiffer DR, et al. **Adv Exp Med Biol** 1988;232:15–23

Bidirectional transport of spermine across the inner membrane of liver mitochondria. Toninello A, et al. **Adv Exp Med Biol** 1988;250:491–6 (17 ref.)

Evidence for hexagonal II phase lipid involvement in mitochondrial Ca2+ movements. Wolkowicz P. **Adv Exp Med Biol** 1988;232:131–8

General anesthetics: interferences with some mitochondrial energy-dependent mechanisms. Branca D, et al. **Agressologie** 1989 Feb;30(2):79–83

Sensitivity of liver mitochondrial functions to various levels of ethanol intake in the rat. Quintanilla ME, et al. **Alcoholism (NY)** 1989 Apr;13(2):280–3

Mitochondrial import and processing of an in vitro synthesized human prebranched chain acyltransferase fragment. Litwer S, et al. **Am J Hum Genet** 1988 Nov; 43(5):764–9

Loose-coupled mitochondria in chronic glucagon-treated hyperthermic ducklings. Barré H, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1192–9

Stimulation of oxygen uptake by glucagon is oxygen dependent in perfused rat liver. Kizaki Z, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G369–76

Novel reconstitution and enzymatic assay of the mitochondrial tricarboxylate carrier. Lüthy R, et al. **Anal Biochem** 1989 Mar;177(2):323–6

Ca2+-transport-mediated regulation of metabolism in hepatoma mitochondria. Murphy AN, et al. **Ann N Y Acad Sci** 1988;551:253–5

Benzoyl peroxide interaction with mitochondria: inhibition of respiration and induction of rapid, large-amplitude swelling. Kennedy CH, et al. **Arch Biochem Biophys** 1989 Jun;271(2):456–70

Relationships between the NAD(P) redox state, fatty acid oxidation, and inner membrane permeability in rat liver mitochondria. Lê-Quôc D, et al. **Arch Biochem Biophys** 1989 Sep;273(2):466–78

Intracellular acidosis protects cultured hepatocytes from the toxic consequences of a loss of mitochondrial energization. Masaki N, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):152–61

Asparagine catabolism in rat liver mitochondria. Moraga-Amador DA, et al. **Arch Biochem Biophys** 1989 Jan;268(1):314–26

The response of individual polypeptides of the mammalian respiratory chain to thyroid hormone. Mutvei A, et al. **Arch Biochem Biophys** 1989 Jan;268(1):215–20

In vitro effects of acetaminophen metabolites and analogs on the respiration of mouse liver mitochondria. Ramsay RR, et al. **Arch Biochem Biophys** 1989 Sep;273(2):449–57

Liver mitochondrial aldehyde dehydrogenase: in vitro expression, in vitro import, and effect of alcohols on import. Wang TT, et al. **Arch Biochem Biophys** 1989 Aug 1; 272(2):440–9

Inhibitory effect of cholephilic organic acids on hepatobiliary transport and mitochondrial respiration. Varga F, et al. **Arch Toxicol Suppl** 1989;13:309–11

Release of mitochondrial matrix proteins through a Ca2+-requiring, cyclosporin-sensitive pathway. Igbavboa U, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):619–25

Mitochondria and xanthine oxidase both generate reactive oxygen species in isolated perfused rat liver after hypoxic injury. Jaeschke H, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):140–7

Radical production in liver mitochondria by peroxidic tumor promoters. Kennedy CH, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1067–72

Enhancement by tetraphenylboron of the interaction of the 1-methyl-4-phenylpyridinium ion (MPP+) with mitochondria. Ramsay RR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):983–90

Evidence for intra-mitochondrial degradation of the extrapeptide of ornithine aminotransferase. Ren WP, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):215–9

Iron stimulation of free radical-mediated porphyrinogen oxidation by hepatic and renal mitochondria. Woods JS, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):101–8

Calcium transport and energy coupling in diabetic rat liver mitochondria. Grinblat L, et al. **Biochem Int** 1988 Aug; 17(2):329–35

Control of respiration in non-phosphorylating mitochondria is shared between the proton leak and the respiratory chain. Brand MD, et al. **Biochem J** 1988 Oct 15;255(2):535–9

Inorganic pyrophosphate is located primarily in the mitochondria of the hepatocyte and increases in parallel with the decrease in light-scattering induced by gluconeogenic hormones, butyrate and ionophore A23187. Davidson AM, et al. **Biochem J** 1988 Sep 1;254(2):379–84

Sub-micromolar concentrations of extramitochondrial Ca2+ stimulate the rate of citrulline synthesis by rat liver mitochondria. Johnston JD, et al. **Biochem J** 1989 Jan 1; 257(1):285–8

Aberrant energy-linked reactions in mitochondria isolated from the livers of rats infected with the liver fluke Fasciola hepatica. Rule CJ, et al. **Biochem J** 1989 Jun 1; 260(2):517–23

Hypophysectomy does not alter the acinar zonation of gluconeogenesis or the mitochondrial redox state in rat liver. Tosh D, et al. **Biochem J** 1989 May 15;260(1):183–7

Energetic behaviour of mitochondria isolated from rat livers perfused with a perfluorodecalin + N,N-perfluorodiethylcyclohexylamine emulsion. Branca D, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3045–8

Mitochondrial function in carbon tetrachloride-induced cirrhosis in the rat. Qualitative and quantitative defects. Krähenbühl S, et al. **Biochem Pharmacol** 1989 May 15; 38(10):1583–8

Effect of styrene and other alkyl benzene derivatives on oxidation of FAD- and NAD-linked substrates in rat liver mitochondria. Mickiewicz W, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4439–44

Studies on the inhibition of mitochondrial DNA replication by 3'-azido-3'-deoxythymidine and other dideoxynucleoside analogs which inhibit HIV-1 replication. Simpson MV, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1033–6

31P NMR visibility and characterization of rat liver mitochondrial matrix adenine nucleotides. Hutson SM, et al. **Biochemistry** 1989 May 16;28(10):4325–32

Nature of proton cycling during gramicidin uncoupling of oxidative phosphorylation. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1100–8

Local protons and uncoupling of aerobic and artificial delta muH-driven ATP synthesis. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1109–16

Sigmoidal relation between mitochondrial respiration and log ([ATP]/[ADP])out under conditions of extramitochondrial ATP utilization. Implications for the control and thermodynamics of oxidative phosphorylation. Wanders RJ, et al. **Biochemistry** 1988 Oct 4;27(20):7832–40

Biochemical mechanism of GSH depletion induced by 1,2-dibromoethane in isolated rat liver mitochondria. Evidence of a GSH conjugation process. Botti B, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):327–32

Ca2+-mediated action of long-chain acyl-CoA on liver mitochondria energy-linked processes. Di Lisa F, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):185–8

Inhibition of mitochondrial protein synthesis in regenerating rat liver stimulates mitochondrial transcription. Kuzela S, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):372–6

Regulation of transmembrane ion transport by reaction products of phospholipase A2. I. Effects of lysophospholipids on mitochondrial Ca2+ transport. Lenzen S, et al. **Biochim Biophys Acta** 1989 Jun 26; 982(1):140–6

Regulation of transmembrane ion transport by reaction products of phospholipase A2. II. Effects of arachidonic acid and other fatty acids on mitochondrial Ca2+ transport. Rustenbeck I, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):147–55

Uncoupler-inhibitor titrations of ATP-driven reverse electron transfer in isolated rat-liver mitochondria. Sánchez Olavarría J, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):108–13

On the mechanism of the so-called uncoupling effect of medium- and short-chain fatty acids. Schönfeld P, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):280–8

Differential effects of osmotic pressure on mitochondrial respiratory chain and indices of oxidative phosphorylation. Sitaramam V, et al. **Biochim Biophys Acta** 1989 Jul 13; 975(2):252–66

Structural requirements of salicylanilides for uncoupling activity in mitochondria: quantitative analysis of structure-uncoupling relationships. Terada H, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):504–12

In vitro evidence for the involvement of mitochondrial folate metabolism in the supply of cytoplasmic one-carbon units. Barlowe CK, et al. **Biofactors** 1988 Jul;1(2):171–6

Dihydroorotate induces Ca2+ release from rat liver mitochondria: a contribution to the mechanism of alloxan-induced Ca2+ release. Eichler W, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1287–93

A minimum structured adenine nucleotide for ADP/ATP transport in mitochondria. Schlimme E, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1105–8

Flux control coefficients for Pi- and adenine nucleotide translocator in rat liver mitochondria after Fe2+/ascorbate induced oxidative stress. Trümper L, et al. **Biomed Biochim Acta** 1989;48(2-3):S44–7

Impairment of the respiratory chain in the b-c1 region as early functional event during Fe2+/ascorbate induced peroxidation in rat liver mitochondria. Trümper L, et al. **Biomed Biochim Acta** 1988;47(12):933–9

The adenine nucleotide catabolism in nonphosphorylating mitochondria of different tissues. Ziegler M, et al. **Biomed Biochim Acta** 1989;48(2-3):S48–52

Early systemic effects on the hepatic mitochondria of tumour bearing mice. Urdiales JL, et al. **Cancer Lett** 1989 Mar; 44(3):179–83

Chromium(V) is produced upon reduction of chromate by mitochondrial electron transport chain complexes. Rossi SC, et al. **Carcinogenesis** 1989 May;10(5):913–20

Methotrexate: studies on cellular metabolism. II—Effects on mitochondrial oxidative metabolism and ion transport. Yamamoto N, et al. **Cell Biochem Funct** 1989 Apr; 7(2):129–34

Inhibition of oxidative phosphorylation by organotin thiocarbamates. Chandra S, et al. **Chem Biol Interact** 1989; 71(1):21–36

Significance of hepatic mitochondrial redox potential on the concentrations of plasma amino acids following hemorrhagic shock in rats. Ikai I, et al. **Circ Shock** 1989 Jan;27(1):63–72

Mechanisms involved in the effect of M6434 on experimental hemorrhagic shock: II. Effects on energy metabolism and organ blood flow. Uemura A, et al. **Circ Shock** 1989 Mar; 27(3):183–91

Does mitochondrial compartmentation of CO2 exist in man? Fuller NJ, et al. **Clin Physiol** 1989 Aug;9(4):345–52

pH regulation of calcium efflux by turtle liver mitochondria. Arruda JA, et al. **Comp Biochem Physiol [B]** 1989; 93(3):539–42

The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647–51

The temperature dependence of State IV respiration, the calcium uptake system, and the activity of the calcium ionophore A23187 in mitochondria from endo- and ectothermic animals. Smith CL. **Comp Biochem Physiol [B]** 1978;59(3):231–7

Faithful and highly efficient RNA synthesis in isolated mitochondria from rat liver. Cantatore P, et al. **Curr Genet** 1988 Nov;14(5):477–82

Long-term ingestion of ammonium increases acetylglutamate and urea levels without affecting the amount of carbamoyl-phosphate synthase. Felipo V, et al. **Eur J Biochem** 1988 Oct 1;176(3):567–71

Altered relationship between protonmotive force and respiration rate in non-phosphorylating liver mitochondria isolated from rats of different thyroid hormone status. Hafner RP, et al. **Eur J Biochem** 1988 Dec 15;178(2):511–8

Thyroid hormone regulation of nuclear-encoded mitochondrial inner membrane polypeptides of the liver. Joste V, et al. **Eur J Biochem** 1989 Sep 1;184(1):255–60

Control of mitochondrial transcription by thyroid hormone. Mutvei A, et al. **Eur J Biochem** 1989 Mar 1;180(1):235–40

Metabolism of [U-14C]-4-hydroxybutyric acid to intermediates of the tricarboxylic acid cycle in extracts of rat liver and kidney mitochondria. Gibson KM, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan-Mar; 14(1):61–70

Sources of intramitochondrial malate. Bobyleva-Guarriero V, et al. **FASEB J** 1989 Aug;3(10):2208–11

Influence of thyroid status on the membranes of rat liver mitochondria. Unique localization of L-glycerol-3-phosphate dehydrogenase. Beleznai Z, et al. **FEBS Lett** 1989 Jan 30;243(2):247–50

Unexpected stimulation of mitochondrial ADP-ribosylation by cyanide. Masmoudi A, et al. **FEBS Lett** 1988 Sep 12; 237(1-2):150–4

The gate of mitochondrial porin channel is controlled by a number of negative and positive charges. Mirzabekov TA, et al. **FEBS Lett** 1989 Jun 5;249(2):375–8

Mitochondrial porin regulates the sensitivity of anion carriers to inhibitors. Pronevich LA, et al. **FEBS Lett** 1989 Apr 24;247(2):330–2

Mitochondrial metabolism of guanine nucleotides. Possible role of guanosine. Ziegler M, et al. **FEBS Lett** 1989 May 8;248(1-2):182–4

Vanadyl- and vanadate-induced lipid peroxidation in mitochondria and in phosphatidylcholine suspensions. Liochev S, et al. **Free Radic Res Commun** 1988;4(5):317–23

The effects of glucagon on hepatic mitochondrial metabolism in the pigeon, Columba livia. Ballantyne JS, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):130–5

Uncoupling effect of protonophoric and nonprotonophoric analogs of carbonyl cyanide phenylhydrazone on mitochondrial oxidative phosphorylation. Antalik M, et al. **Gen Physiol Biophys** 1988 Oct;7(5):517–28

Effects of vitamin E deficiency on hepatic mitochondrial lipid peroxidation and oxidative metabolism in rats with chronic dietary iron overload. Bacon BR, et al. **Hepatology** 1989 Mar;9(3):398–404

Hepatic mitochondrial oxidative metabolism and lipid peroxidation in experimental hexachlorobenzene-induced porphyria with dietary carbonyl iron overload. Feldman ES, et al. **Hepatology** 1989 May;9(5):686–92

Cytoplasmic genetic effects and growth of hybrid mice. Brown DR, et al. **J Anim Sci** 1989 Apr;67(4):887–94

Mitochondrial and microsomal lipid peroxidation in rat liver after acute acetaldehyde and ethanol intoxication. Uysal M, et al. **J Appl Toxicol** 1989 Jun;9(3):155–8

Specific binding of mitochondrial protein precursors to liposomes containing cardiolipin. Ou WJ, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):589–95

Interaction of Sr2+ with Ca2+-induced Ca2+ release in mitochondria. Saris NE, et al. **J Bioenerg Biomembr** 1988 Dec;20(6):749–57

Isolation and properties of a liver mitochondrial precursor protein to aspartate aminotransferase expressed in Escherichia coli. Altieri F, et al. **J Biol Chem** 1989 Mar 25;264(9):4782–6

The oxidation of fatty acids combined with albumin by isolated rat liver mitochondria. Björntorp P. **J Biol Chem** 1966 Apr 10;241(7):1537–43

The relative proton stoichiometries of the mitochondrial proton pumps are independent of the proton motive force. Brown GC. **J Biol Chem** 1989 Sep 5;264(25):14704–9

The multicollisional, obstructed, long-range diffusional nature of mitochondrial electron transport. Chazotte B, et al. **J Biol Chem** 1988 Oct 5;263(28):14359–67

Lateral diffusion as a rate-limiting step in ubiquinone-mediated mitochondrial electron transport. Chazotte B, et al. **J Biol Chem** 1989 Mar 25;264(9):4978–85

Tricarboxylate carrier of bovine liver mitochondria. Purification and reconstitution. Claeys D, et al. **J Biol Chem** 1989 Sep 5;264(25):14627–30

Differential interactions of apo- and holocytochrome c with acidic membrane lipids in model systems and the implications for their import into mitochondria. Demel RA, et al. **J Biol Chem** 1989 Mar 5;264(7):3988–97

Energy-linked anion transport. Cloning, sequencing, and characterization of a full length cDNA encoding the rat liver mitochondrial proton/phosphate symporter. Ferreira GC, et al. **J Biol Chem** 1989 Sep 15;264(26):15628–33

The importance of the amino terminus of the mitochondrial precursor protein apocytochrome c for translocation across model membranes. Jordi W, et al. **J Biol Chem** 1989 Feb 5;264(4):2292–301

Reconstitution of the mitochondrial non-selective Na+/H+ (K+/H+) antiporter into proteoliposomes. Kakar SS, et al. **J Biol Chem** 1989 Apr 5;264(10):5846–51

The aminoacylation of structurally variant phenylalanine tRNAs from mitochondria and various nonmitochondrial sources by bovine mitochondrial phenylalanyl-tRNA synthetase. Kumazawa Y, et al. **J Biol Chem** 1989 Aug 5;264(22):13005–11

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448–52

Import and processing of precursor to mitochondrial aspartate aminotransferase. Structure-function relationships of the presequence. Nishi T, et al. **J Biol Chem** 1989 Apr 15;264(11):6044–51

Acylation of proteins by myristic acid in isolated mitochondria. Stucki JW, et al. **J Biol Chem** 1989 Apr 15; 264(11):6376–80

Subcellular binding and effects on calcium homeostasis produced by acetaminophen and a nonhepatotoxic regioisomer, 3'-hydroxyacetanilide, in mouse liver. Tirmenstein MA, et al. **J Biol Chem** 1989 Jun 15; 264(17):9814–9

On the mechanism of spermine transport in liver mitochondria. Toninello A, et al. **J Biol Chem** 1988 Dec 25;263(36):19407–11

Intramitochondrial fatty acylation of a cytoplasmic imported protein in animal cells. Vijayasarathy C, et al. **J Biol Chem** 1989 May 15;264(14):7772–5

Reconstitution of phosphatidylserine import into rat liver mitochondria. Voelker DR. **J Biol Chem** 1989 May 15; 264(14):8019–25

Effects of chronic ethanol feeding on rat hepatocytic glutathione. Relationship of cytosolic glutathione to efflux and mitochondrial sequestration. Fernandez-Checa JC, et al. **J Clin Invest** 1989 Apr;83(4):1247–52

Cholesterol increase in mitochondria: a new method of cholesterol incorporation. Martínez F, et al. **J Lipid Res** 1988 Aug;29(8):1005–11

Statistical modelling of mitochondrial power supply. James AT, et al. **J Math Biol** 1989;27(1):29–48

Effect of treatment of isolated mitochondrial membranes with phosphatidylinositol-cholesterol liposomes on the biosynthesis and composition of polyglycerophosphatides. Stuhne-Sekalec L, et al. **J Microencapsul** 1988 Jan–Mar; 5(1):47–57

Effect of liposomes on substrate uptake by isolated guinea-pig liver mitochondrial and microsomal membranes. Stuhne-Sekalec L, et al. **J Microencapsul** 1985 Oct–Dec; 2(4):305–13

Amineptine, a tricyclic antidepressant, inhibits the mitochondrial oxidation of fatty acids and produces microvesicular steatosis of the liver in mice. Le Dinh T, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):745–50

Effects of isophenphos-I on the respiratory function of rat liver mitochondria. Liu RM, et al. **J Tongji Med Univ** 1988; 8(1):18–23

Hepatic redox state: attenuation of the acute effects of ethanol induced by chronic ethanol consumption. Domschke S, et al. **Life Sci** 1974 Oct 1;15(7):1327–34

Energy requirement of the transport of reducing equivalents from cytosol to mitochondriae in perfused rat liver. Krarup N, et al. **Life Sci** 1974 Jul 1;15(1):65–72

Changes in phospholipid composition of the mitochondrial membrane after orthotopic liver transplantation. Tatsumi Y, et al. **Life Sci** 1989;44(15):1053–8

Purification and reconstitution of the phosphate transporter from rat liver mitochondria. Kaplan RS, et al. **Methods Enzymol** 1989;173:732–45

Interactions between cations in modifying the binding of hexokinases I and II to mitochondria. Imai N, et al. **Mol Cell Biochem** 1988 May;81(1):37–41

The effect of thyroid state on respiratory activities of three rat liver mitochondrial fractions. Goglia F, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):41–6

Bovine mitochondrial tRNAPhe, tRNASer (AGY) and tRNASer (UCN): preparation using a new detection method and their properties in aminoacylation. Kumazawa Y, et al. **Nucleic Acids Symp Ser** 1988;(19):97–100

Effect of trans fatty acids on the linoleic acid requirement of rats. **Nutr Rev** 1988 Nov;46(11):399–400

Magainins and the disruption of membrane-linked free-energy transduction. Westerhoff HV, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6597–601

Thyroid status influences calcium ion accumulation and retention by rat liver mitochondria. Greif RL. **Proc Soc Exp Biol Med** 1988 Oct;189(1):39–44

Structural features of mitochondria in the in vitro uptake of 14C-methylated ornithine aminotransferase. Hayashi H, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):45–52

Mitochondrial respiratory function, adenine nucleotides and antioxygenic enzymes in pig liver transplantation. Sakurada M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1321–2

Comparison of the effect of cyclosporine, verapamil, and trifluoperazine on calcium-induced membrane permeability of mitochondria. Strzelecki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):182–3

Effects of cyclosporine on oxidative phosphorylation and adenylate energy charge of regenerating rat liver. Uemoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):924–5

New 4-hydroxypyridine and 4-hydroxyquinoline derivatives as inhibitors of NADH-ubiquinone reductase in the respiratory chain. Chung KH, et al. **Z Naturforsch [C]** 1989 Jul–Aug;44(7–8):609–16

[Inhibition of mitochondrial respiration by mepivacaine] di Jeso F, et al. **C R Soc Biol (Paris)** 1988;182(3):266–9 (Eng. Abstr.) **(Fre)**

[Early modification of the fatty acid composition of cardiolipins and other phospholipids in rat liver mitochondria during dietary deficiency of essential fatty acids followed by repletion (published erratum appears in Reprod Nutr Dev 1988;28 Suppl 1:199)] Wolff RL. **Reprod Nutr Dev** 1988;28(6A):1489–507 (Eng. Abstr.) **(Fre)**

[Metabolic intensive care based on the hepatic mitochondrial redox in hepatectomy] Shimahara Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1375–7 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect of uremic fluorescent substances on the cellular energy generation] Konobu K, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):105–9 (Eng. Abstr.) **(Jpn)**

[Intracellular oxygen concentration—oxygen gradient] Tamura M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2855–61 **(Jpn)**

[Heat production in mitochondria during oxidation of various substrates] Kondrashova MN, et al. **Biofizika** 1988 May–Jun;33(3):527–8 (Eng. Abstr.) **(Rus)**

[Quantitative determination of the rate of superoxide radical formation in mitochondrial membranes by electron paramagnetic resonance] Rashba IuE, et al. **Biofizika** 1989 Jan–Feb;34(1):57–62 (Eng. Abstr.) **(Rus)**

[A study of the mechanism of cyanide resistant oxidation of succinate from rat liver mitochondria in the presence of menadione] Kolesova GM, et al. **Biokhimiia** 1989 Jan; 54(1):103–11 (Eng. Abstr.) **(Rus)**

[5-Alkyl(C19–C25) resorcinols as regulators of succinate and NAD-dependent substrate oxidation by mitochondria] Nenashev VA, et al. **Biokhimiia** 1989 May;54(5):784–7 (Eng. Abstr.) **(Rus)**

[Cumene hydroperoxide changes the type of conductivity of the mitochondrial membrane for K+] Novgorodov SA, et al. **Biokhimiia** 1989 Feb;54(2):206–12 (Eng. Abstr.) **(Rus)**

[Oxidative phosphorylation and lipid peroxidation of the liver mitochondria in rats after acute benzene poisoning] Trifonov IuA, et al. **Gig Sanit** 1989 Mar;(3):32–4 (Eng. Abstr.) **(Rus)**

[A compensatory low-energy shift in the respiration of liver mitochondria exposed to a detergent] Zhivotnikova NV, et al. **Gig Sanit** 1988 Dec;(12):80–1 **(Rus)**

[Prediction of the course of the wound process by the inhibition of mitochondrial respiration by blood serum in an experiment] Eliseeva Sv, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):45–8 (Eng. Abstr.) **(Rus)**

[Regulation of lipid peroxidation induced by cumene hydroperoxide in the liver mitochondria of irradiated rats] Gudz' TI, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):653–6 (Eng. Abstr.) **(Rus)**

[The effect of acetoacetate on 3-hydroxybutyrate oxidation by rat liver mitochondria] Koshkin VV. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):79–82 (Eng. Abstr.) **(Rus)**

[Effect of bacterial endotoxin on the respiratory function of liver mitochondria] Natanzon LV. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):91–5 (Eng. Abstr.) **(Rus)**

[Peroxidation of lipids from liver mitochondria during pneumonia] Semenov VL. **Ukr Biokhim Zh** 1988 Sep–Oct; 60(5):85–7 (Eng. Abstr.) **(Rus)**

[Activation of electron transport at the terminal site of the respiratory chain by the submitochondrial fluid from the rat and guinea pig liver] Shmuter GM. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):46–53 (Eng. Abstr.) **(Rus)**

[Citrate transport in submitochondrial particles of the rat liver] Velikii NN, et al. **Ukr Biokhim Zh** 1988 Sep–Oct; 60(5):35–40 (Eng. Abstr.) **(Rus)**

[Characteristics of the effect of hydrocortisone on biosynthesis of mitochondrial proteins in the liver of thyroidectomized rats] Minchenko AG. **Vopr Med Khim** 1988 Sep–Oct;34(5):17–22 (Eng. Abstr.) **(Rus)**

[Distribution of proteins and enzymes in 3 submitochondrial fractions isolated from the internal mitochondrial membrane of the rat liver] Eugui J. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):137–9 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Ultrastructural identification and clinical significance of light microscopic giant mitochondria in alcoholic liver injuries. Inagaki T, et al. **Gastroenterol Jpn** 1989 Feb;24(1):46–53

The occurrence of intramitochondrial Ca2+ granules in valproate-induced liver injury. Kimura A, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):13–8

PHYSIOLOGY

Calorimetric and spectroscopic studies of lipid thermotropic phase behavior in liver inner mitochondrial membranes from a mammalian hibernator. Pehowich DJ, et al. **Biochemistry** 1988 Jun 28;27(13):4632–8

Intracellular mitochondrial membrane potential as an indicator of hepatocyte energy metabolism: further evidence for thermodynamic control of metabolism. Berry MN, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):294–306

Permeability of the mitochondrial outer membrane to organic cations. Mannella CA, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):363–6

Cyclic GMP, cyclic AMP, glucose at birth, and maturation of rat liver mitochondria. Meister R, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):67–73

Portal flow and mitochondrial function during extrahepatic cholestasis. Castro-e-Silva Júnior O, et al. **Braz J Med Biol Res** 1988;21(3):637–40

Stimulated rat liver mitochondrial biogenesis after partial hepatectomy. Nagino M, et al. **Cancer Res** 1989 Sep 1; 49(17):4913–8

Mechanism of action of thyroxine (T4) on the biogenesis of mitochondria using antibiotic-free system: a gerontological survey. Adenuga GA, et al. **Horm Metab Res** 1989 Jun; 21(6):309–12

On the role of mitochondria in cell injury caused by vanadate-induced Ca2+ overload. Richelmi P, et al. **Toxicology** 1989 Jul 3;57(1):29–44

[Applicability of the ion-sensitive DDA+ electrode for measurement of rapid changes in transmembrane electric potentials] Schild L. **Z Med Lab Diagn** 1988;29(4):201–8 (Eng. Abstr.) **(Ger)**

[Studies on the beneficial effect of levocarnitine chloride (LC-80) on organic acidemias, especially propionic acidemia and methylmalonic acidemia] Fujisawa S, et al. **Nippon Yakurigaku Zasshi** 1989 May;93(5):305–14 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Influence of hypoxia on mitochondrial function and energy status in CCl4-induced cirrhotic rat liver. Wakashiro S, et al. **Res Exp Med (Berl)** 1989;189(3):153–61

RADIATION EFFECTS

Increase in RNA and protein synthesis by mitochondria irradiated with helium-neon laser. Greco M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1428–34

Increase in the ADP/ATP exchange in rat liver mitochondria irradiated in vitro by helium-neon laser. Passarella S, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):978–86

ULTRASTRUCTURE

Biochemical characterization of mitochondrial and lysosomal particles in old rat liver. Mertens-Strijthagen J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):37–46

Radical initiated alpha-tocopherol depletion and lipid peroxidation in mitochondrial membranes. Thomas SM, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):189–97

Electric field-induced fusion of mitochondria. Reynaud JA, et al. **FEBS Lett** 1989 Apr 10;247(1):106–12

Cyclosporin A is a potent inhibitor of the inner membrane permeability transition in liver mitochondria. Broekemeier KM, et al. **J Biol Chem** 1989 May 15;264(14):7826–30

Mechanism of mRNA binding to bovine mitochondrial ribosomes. Denslow ND, et al. **J Biol Chem** 1989 May 15;264(14):8328–38

Effect of Reye's syndrome serum on the ultrastructure of isolated liver mitochondria. Tonsgard JH. **Lab Invest** 1989 Apr;60(4):568–73

Mitochondrial DNA deletion in encephalomyopathy [letter] Noer AS, et al. **Lancet** 1988 Nov 26;2(8622):1253–4

Biochemical studies on sub-fractions of rat liver mitochondria. Williams JN Jr, et al. **Life Sci** 1974 Aug 15;15(4):695–709

Mitochondrial structure revealed by scanning electron microscopy (SEM). Lea PJ, et al. **Prog Clin Biol Res** 1989; 295:63–70

[Early post-toxic defects in hepatocyte membranes revealed by electron microscopy with the aid of a lanthanum transmembrane tracer] Vakulin GM. **Biull Eksp Biol Med** 1989 Jan;107(1):99–101 (Eng. Abstr.) **(Rus)**

MITOCHONDRIA, MUSCLE

CT and MR of MELAS syndrome. Allard JC, et al. **AJNR** 1988 Nov–Dec;9(6):1234–8

Mitochondrial encephalomyopathy with corticosteroid dependence. Gubbay SS, et al. **Med J Aust** 1989 Jul 17; 151(2):100–3, 106, 108

[Mitochondrial myopathy. Encephalopathy with lactic acidosis and cerebral infarction] Destée A, et al. **Rev Neurol (Paris)** 1989;145(1):37–48 (41 ref.) (Eng. Abstr.) **(Fre)**

[Positron emission tomographic study in patients with MELAS] Watahiki Y, et al. **No To Hattatsu** 1988; 20(5):404–11 (Eng. Abstr.) **(Jpn)**

[Mitochondrial myopathies] Casademont J, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):630–5 (75 ref.) **(Spa)**

[The man behind the syndrome: Rolf Luft. He discovered the first mitochondrial disease—a milestone in clinical pathology] Löw H, et al. **Lakartidningen** 1989 Apr 12; 86(15):1389–90 **(Swe)**

ANALYSIS

Non-invasive diagnosis of mitochondrial myopathy [letter] Poulton J, et al. **Lancet** 1989 Apr 29;1(8644):961

DRUG EFFECTS

Mitochondrial myopathy in rats fed with a diet containing beta-guanidine propionic acid, an inhibitor of creatine entry in muscle cells. Gori Z, et al. **Br J Exp Pathol** 1988 Oct; 69(5):639–50

Effect of starvation and insulin in vivo on the activity of the pyruvate dehydrogenase complex in rat skeletal muscles. Denyer GS, et al. **FEBS Lett** 1989 Jul 3; 250(2):464–8

Delayed neurotoxicity of triphenyl phosphite in hens: pharmacokinetic and biochemical studies. Konno N, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):440–50

Effects of Cassia obtusifolia (sicklepod) extracts and anthraquinones on muscle mitochondrial function. Lewis DC, et al. **Toxicon** 1989;27(5):519–29

ENZYMOLOGY

Cytochrome c oxidase—deficient myogenic cell lines in mitochondrial myopathy. Shimoizumi H, et al. **Ann Neurol** 1989 Jun;25(6):615–21

Carbonic anhydrase in guinea pig skeletal muscle mitochondria. Storey BT, et al. **Arch Biochem Biophys** 1989 Apr;270(1):144–52

Biochemical defects in mitochondrial cytopathies: a new

classification. Byrne E. **Aust Paediatr J** 1988;24 Suppl 1:58–61 (14 ref.)

Human mitochondrial respiratory chain deficiencies. Morgan-Hughes JA, et al. **Aust Paediatr J** 1988;24 Suppl 1:55–7 (28 ref.)

Tissue specific defect of complex I of the mitochondrial respiratory chain. Watmough NJ, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):623–7

Effects of endurance exercise on carnitine palmitoyltransferase I from rat heart, skeletal muscle and liver mitochondria. Guzmán M, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):562–5

Influence of environmental temperature and energy intake on skeletal muscle respiratory enzymes and morphology. Dauncey MJ, et al. **Eur J Appl Physiol** 1988;58(3):239–44

Chronic stimulation of rat skeletal muscle induces coordinate increases in mitochondrial and nuclear mRNAs of cytochrome-c-oxidase subunits. Hood DA, et al. **Eur J Biochem** 1989 Feb 1;179(2):275–80

Exercise responses in patients with an enzyme deficiency in the mitochondrial respiratory chain. Bogaard JM, et al. **Eur Respir J** 1988 May;1(5):445–52

Fatal mitochondrial myopathy with cytochrome-c-oxidase deficiency and subunit-restricted reduction of enzyme protein in two siblings: an autopsy-immunocytochemical study. Müller-Höcker J, et al. **Hum Pathol** 1989 Jul; 20(7):666–72

Normal muscle mitochondrial function in Ramsay-Hunt syndrome. Sacquegna T, et al. **Ital J Neurol Sci** 1989 Feb; 10(1):73–5

Exercise intolerance, lactic acidosis, and abnormal cardiopulmonary regulation in exercise associated with adult skeletal muscle cytochrome c oxidase deficiency. Haller RG, et al. **J Clin Invest** 1989 Jul;84(1):155–61

Histochemical, ultrastructural and biochemical study of muscle mitochondria in Leber's hereditary optic atrophy. Federico A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:193–7

Clinical and molecular heterogeneity in patients with mitochondrial encephalomyopathies due to complex I deficiency. Ichiki T, et al. **J Inherited Metab Dis** 1988; 11(3):333–6

A new type of mitochondrial encephalomyopathy with stroke-like episodes due to cytochrome oxidase deficiency. Maertens P, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:186–8

Cytochrome c oxidase: organ-specific isoenzymes and deficiencies. Sinjorgo KM, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:202–4

Mitochondrial myopathy: a genetic study of 71 cases. Harding AE, et al. **J Med Genet** 1988 Aug;25(8):528–35 (74 ref.)

Partial deficiency of complexes I and IV of the mitochondrial respiratory chain in skeletal muscle of two patients with mitochondrial myopathy. Bleistein J, et al. **J Neurol** 1989 May;236(4):218–22

Familial mitochondrial myopathy associated with peripheral neuropathy: partial deficiencies of complex I and complex IV. Mizusawa H, et al. **J Neurol Sci** 1988 Sep; 86(2–3):171–84

Cytochrome oxidase deficiency: immunological studies of skeletal muscle mitochondrial fractions. Shepherd IM, et al. **J Neurol Sci** 1988 Nov;87(2–3):265–74

Effect of reduction and carboxamidomethylation on immunogenicity of mitochondrial adenylate kinase (AK2). Watanabe K, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):791–6

Impaired NADH-CoQ reductase activity in a child with moyamoya syndrome. Kotagal S, et al. **Pediatr Neurol** 1988 Jul-Aug;4(4):241–4

[A case of mitochondrial enzymopathy] Parafiniuk W, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):260–3 (Eng. Abstr.) **(Pol)**

[Octameric mitochondrial and dimeric cytoplasmic creatine kinase. The number of subunits, participating in catalysis] Fedosov SN, et al. **Biokhimiia** 1989 Jan;54(1):54–67 (Eng. Abstr.) **(Rus)**

METABOLISM

Loose-coupled mitochondria in chronic glucagon-treated hyperthermic ducklings. Barré H, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1192–9

Regulation of VO2 in red muscle: do current biochemical hypotheses fit in vivo data? Connett RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R898–906

Kearns-Sayre syndrome: biochemical studies of mitochondrial metabolism. Martens ME, et al. **Ann Neurol** 1988 Nov;24(5):630–7

Skeletal muscle mitochondrial beta-oxidation. A study of the products of oxidation of [U-14C]hexadecanoate by h.p.l.c. using continuous on-line radiochemical detection. Watmough NJ, et al. **Biochem J** 1988 Jul 15;253(2):541–7

Mitochondrial myopathies. Schapira AH. **BMJ** 1989 Apr 29; 298(6681):1127–8 (17 ref.)

The cerebral metabolism of glucose and oxygen measured with positron tomography in patients with mitochondrial diseases. Frackowiak RS, et al. **Brain** 1988 Oct;111 (Pt 5):1009–24

Loose-coupled subsarcolemmal mitochondria from muscle Rhomboideus in cold-acclimated piglets. Herpin P, et al. **Comp Biochem Physiol [B]** 1989;92(1):59–65

Disorders of the mitochondrial respiratory chain: clinical manifestations and diagnostic approach. Trijbels JM, et al. **Eur J Pediatr** 1988 Nov;148(2):92–7 (21 ref.)

Estimation of the mitochondrial redox state in human skeletal muscle during exercise. Graham TE, et al. **J Appl Physiol** 1989 Feb;66(2):561–6

Activity-induced adaptations in skeletal muscles of iron-deficient rabbits. Harlan WR, et al. **J Appl Physiol** 1988 Aug;65(2):782–7

The similarity of mitochondrial distribution in equine skeletal muscles of differing oxidative capacity. Kayar SR, et al. **J Exp Biol** 1988 Jul;137:253–63

Oxidative properties of carp red and white muscle. Moyes CD, et al. **J Exp Biol** 1989 May;143:321–31

Is there a maturation defect related to calcium in muscle mitochondria from dystrophic mice and Duchenne and Becker muscular dystrophy patients. Lucas-Héron B, et al. **J Neurol Sci** 1989 May;90(3):299–306

Protein synthesis in mitochondria isolated from human skeletal muscle. Detection of polymorphism in mitochondrial translation products. Marzuki S, et al. **J Neurol Sci** 1988 Nov;87(2–3):211–9

Decline in skeletal muscle mitochondrial respiration chain function with ageing [letter; comment] Cardellach F, et al. **Lancet** 1989 Jul 1;2(8653):44–5. **Comment on:** Lancet 1989 Mar 25;1(8639):637–9

Decline in skeletal muscle mitochondrial respiratory chain function: possible factor in ageing [see comments] Trounce I, et al. **Lancet** 1989 Mar 25;1(8639):637–9. **Comment in:** Lancet 1989 Jul 1;2(8653):44–5

In vivo muscle magnetic resonance spectroscopy in a family with mitochondrial cytopathy: a defect in fat metabolism. Narayana PA, et al. **Magn Reson Imaging** 1989 Mar-Apr; 7(2):133–9

The role of calcium in the control of respiration by muscle mitochondria. McMillin JB, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):406–10 (32 ref.)

Control of mitochondrial respiration in muscle. McMillin JB, et al. **Mol Cell Biochem** 1988 Jun;81(2):121–9 (50 ref.)

Total muscle mitochondrial volume in relation to aerobic capacity of horses and steers. Kayar SR, et al. **Pflugers Arch** 1989 Feb;413(4):343–7

Muscle coenzyme Q deficiency in familial mitochondrial encephalomyopathy. Ogasahara S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2379–82

[A case of late-onset and slowly progressive mitochondrial myopathy with abnormalities of complexes in electron-transfer system] Shibuya S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1147–51 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

MELAS, myoclonus, ataxia and deficiencies of complexes I and IV in muscle mitochondria. Yamanaka R, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):761–7

Vascular involvement in mitochondrial myopathy. Sakuta R, et al. **Ann Neurol** 1989 Jun;25(6):594–601

Chronic progressive external ophthalmoplegia. I. A quantitative histochemical study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):133–42

Abnormal mitochondria in the Rett syndrome. Eeg-Olofsson O, et al. **Brain Dev** 1988;10(4):260–2

Defects in muscle fiber growth in fatal infantile cytochrome c oxidase deficiency. Nonaka I, et al. **Brain Dev** 1988; 10(4):223–30

Mitochondrial myopathies with necrotizing encephalopathy of the Leigh type. Peiffer J, et al. **Pathol Res Pract** 1988 Nov;183(6):706–16

Massive focal brain swelling as a feature of MELAS. Breningstall GN, et al. **Pediatr Neurol** 1988 Nov-Dec; 4(6):366–70

Mitochondrial encephalomyopathies. DiMauro S, et al. **Prog Clin Biol Res** 1989;306:117–28 (21 ref.)

Mitochondrial myopathy, Fanconi syndrome with impaired glycogen and galactose metabolism. Hurvitz H, et al. **Prog Clin Biol Res** 1989;306:143–8

Maternal inheritance in a family with mitochondrial encephalomyopathy. Torbergsen T, et al. **Prog Clin Biol Res** 1989;306:129–33 (8 ref.)

[A case of mitochondrial encephalomyopathy characterized by repeated stroke-like episodes] Mizuno Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):360–6 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Hypokinesia and rigidity as clinical manifestations of mitochondrial encephalomyopathy: report of three cases. van Erven PM, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):81–91

Oxidative capacity of muscle and mitochondria: correlation of physiological, biochemical, and morphometric characteristics. Schwerzmann K, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1583–7

Carnitine deficiency, mitochondrial dysfunction and the heart. Identical defect of oxidative phosphorylation in muscle mitochondria in cardiomyopathy due to carnitine loss and in Duchenne muscular dystrophy. Scholte HR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):12–7

[Anesthesia for eye operations in mitochondrial encephalomyelopathy] Fritz T, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):174–8 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Partial deficiency of complexes I and IV of the mitochondrial respiratory chain in skeletal muscle of two patients with mitochondrial myopathy. Bleistein J, et al. **J Neurol** 1989 May;236(4):218–22

RADIOGRAPHY

[The MELAS syndrome. Computed tomographic documentation of its course and magnetic resonance tomography] Brühl K, et al. **Radiologe** 1988 Nov; 28(11):514–6 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Rett syndrome: genetic clues based on mitochondrial changes in muscle [letter] Eeg-Olofsson O, et al. **Am J Med Genet** 1989 Jan;32(1):142–4

Mitochondrial size and shape in equine skeletal muscle: a three-dimensional reconstruction study. Kayar SR, et al. **Anat Rec** 1988 Dec;222(4):333–9

Chronic progressive external ophthalmoplegia. II. A qualitative and quantitative electronmicroscopy study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):143–55

Peripheral neuropathy associated with mitochondrial myopathy. Yiannikas C, et al. **Aust Paediatr J** 1988;24 Suppl 1:62–3

Menkes kinky hair disease with 'ragged red' fibers. Morgello S, et al. **Dev Med Child Neurol** 1988 Dec;30(6):812–6

Mitochondrial oculoskeletal myopathy: case report. Colombo A, et al. **Ital J Neurol Sci** 1988 Aug;9(4):385–9

Morphometric and biochemical study of muscle mitochondria in adult chronic progressive external ophthalmoplegia. Federico A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:198–201

Endocrine involvement in mitochondrial encephalomyopathy with partial cytochrome c oxidase deficiency. Doriguzzi C, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan; 52(1):122–5

Psychiatric disturbance in mitochondrial encephalomyopathy [letter] Suzuki T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):920–2

Dyssynergia cerebellaris myoclonica (Ramsay Hunt syndrome): a condition unrelated to mitochondrial encephalomyopathies. Tassinari CA, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):262–5

Intramitochondrial inclusions caused by depletion of creatine in rat skeletal muscles. Ohira Y, et al. **Jpn J Physiol** 1988; 38(2):159–66

Pathological findings of the sural nerve in mitochondrial encephalomyopathy. Katsuragi S, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):307–13

Mitochondrial DNA deletion in encephalomyopathy [letter] Noer AS, et al. **Lancet** 1988 Nov 26;2(8622):1253–4

Duplications of mitochondrial DNA in mitochondrial myopathy. Poulton J, et al. **Lancet** 1989 Feb 4; 1(8632):236–40

Myopathy and peroxisomal disease [letter] Sarnat HB. **Pediatr Neurol** 1987 Jan-Feb;3(1):62

Myopathy in an infant with a fatal peroxisomal disorder. Wolff J, et al. **Pediatr Neurol** 1986 May-Jun;2(3):141–6

Mitochondrial damage in muscle occurs after marked depletion of glutathione and is prevented by giving glutathione monoester. Mårtensson J, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):471–5

[Clinical symptoms of retinal dystrophies in mitochondriopathies] Hammerstein W, et al. **Fortschr Ophthalmol** 1988;85(5):505–7 (Eng. Abstr.) **(Ger)**

[Mitochondrial defects] Sengers RC, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):308–11 (13 ref.) (Eng. Abstr.) **(Ger)**

[Mitochondrial myopathies and encephalomyelopathies] Zierz S, et al. **Nervenarzt** 1989 Jul;60(7):394–400 (33 ref.) **(Ger)**

[A case of mitochondrial myopathy with nemaline rods accompanied by a partial deficiency of cytochrome c oxidase] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1988 Apr; 28(4):388–95 (Eng. Abstr.) **(Jpn)**

[Morphological study of mitochondria in striated muscle cells of the rat diaphragm] Niță M. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):331–2 (Eng. Abstr.) **(Rum)**

[Structural reaction of skeletal muscle mitochondria to deep hypothermia in the experiment] Veriaskin VV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):361–3 (Eng. Abstr.) **(Rus)**

MITOCHONDRIAL SWELLING

Evidence that the acute unmasking of GDP-binding sites in brown adipose tissue mitochondria is not dependent on mitochondrial swelling. Milner RE, et al. **Biochem Cell Biol** 1988 Nov;66(11):1226–30

The regulation of the matrix volume of mammalian mitochondria in vivo and in vitro and its role in the control of mitochondrial metabolism. Halestrap AP. **Biochim Biophys Acta** 1989 Mar 23;973(3):355–82 (327 ref.)

Hypothyroidism in rats decreases mitochondrial inner membrane cation permeability. Hafner RP, et al. **FEBS Lett** 1989 May 8;248(1–2):175–8

DRUG EFFECTS

Inhibition of brain mitochondrial swelling by idebenone. Suno M, et al. **Arch Gerontol Geriatr** 1989 May; 8(3):299–305 (22 ref.)

Hypophysectomy and adrenalectomy decrease $Ca2+$–induced swelling of rat liver mitochondria. Bedetti CD, et al. **Biochem Int** 1988 Jul;17(1):111–9

Chelating agents and rat liver mitochondria. Lund P, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):330–5

Comparison of the effect of cyclosporine, verapamil, and trifluoperazine on calcium–induced membrane permeability of mitochondria. Strzelecki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):182–3

MITOGEN RECEPTORS see RECEPTORS, MITOGEN

MITOGENIC FACTORS, LYMPHOCYTE see INTERLEUKIN 2

MITOGENS

Mechanisms and significance of the mitogenic and antiviral actions of TNF. Vilcek J, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):307–11 (31 ref.)

Mitogenic stimulation of mouse lymphoid cells by Aleuria aurantia agglutinin. Pajtasz E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):133–9

Mitogenic effect of urokinase on malignant and unaffected adjacent human renal cells. Kirchheimer JC, et al. **Carcinogenesis** 1988 Nov;9(11):2121–3

A new pharmacological testing method—different effects of levamisole and the serum of mice orally treated with levamisole on mitogenic activity of lipopolysaccharide. Amagaya S, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1117–9

Transforming growth factor–alpha stimulates proto–oncogene c–jun expression and a mitogenic program in primary cultures of adult rat hepatocytes. Brenner DA, et al. **DNA** 1989 May;8(4):279–85

Correlation between ribosylation of pertussis toxin substrates and inhibition of peptidoglycan–, muramyl dipeptide– and lipopolysaccharide–induced mitogenic stimulation in B lymphocytes. Dziarski R. **Eur J Immunol** 1989 Jan; 19(1):125–30

Rat pituitary tumor cells in serum–free culture. II. Serum factor and thyroid hormone requirements for estrogen–responsive growth. Riss TL, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):136–42

Enhancement of prolactin (PRL)–stimulated mitogenesis of Nb2 rat lymphoma cell cultures by insulin–like growth factor I (IGF–I). Russell DH, et al. **Int J Immunopharmacol** 1989;11(4):359–66

Phase I trial of recombinant interleukin–2 and cyclophosphamide: augmentation of cellular immunity and T–cell mitogenic response with long–term administration of rIL–2. Kolitz JE, et al. **J Biol Response Mod** 1988 Oct; 7(5):457–72

Cerebellar granule cells contain a membrane mitogen for cultured Schwann cells. Mason PW, et al. **J Cell Biol** 1989 Feb;108(2):607–11

Both homodimeric isoforms of PDGF (AA and BB) have mitogenic and chemotactic activity and stimulate phosphoinositol turnover. Hosang M, et al. **J Cell Physiol** 1989 Sep;140(3):558–64

The mitogenic effects of corticotrophin–releasing factor on the anterior pituitary gland of the rat. McNicol AM, et al. **J Endocrinol** 1988 Aug;118(2):237–41

Pleiotropic effects of the Bcg gene. II. Genetic restriction of responses to mitogens and allogeneic targets. Denis M, et al. **J Immunol** 1988 Dec 1;141(11):3988–93

Cyclosporin A–mediated inhibition of mitogen–induced gene transcription is specific for the mitogenic stimulus and cell type. Gunter KC, et al. **J Immunol** 1989 May 1; 142(9):3286–91

Athymic nude CD4+8– T cells produce IL–2 but fail to proliferate in response to mitogenic stimuli. Kung JT, et al. **J Immunol** 1988 Dec 1;141(11):3691–6

Mitogenic stimulation of human B lymphocytes by the mannose–specific adhesin on Escherichia coli type 1 fimbriae. Ponniah S, et al. **J Immunol** 1989 Feb 1; 142(3):992–8

Restricted expression of mitogen–induced high affinity IL–2 receptors in aging mice. Proust JJ, et al. **J Immunol** 1988 Dec 15;141(12):4209–16

Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors. Zipfel PF, et al. **J Immunol** 1989 Mar 1;142(5):1582–90

Prospective partition analysis of independently assorted sets. Accessory elements supporting clonal lymphoid activation by mitogens. Kettman J, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):235–41

Phorbol esters of different biological activities may preferentially act as mitogens of human suppressor T–cells and are equi–effective mitogens of IL–2 dependent cells. Edwards MC, et al. **J Pharm Pharmacol** 1989 Mar; 41(3):164–7

A proposed mechanism of the mitogenic action of fluoride on bone cells: inhibition of the activity of an osteoblastic acid phosphatase. Lau KH, et al. **Metabolism** 1989 Sep; 38(9):858–68

Denatured proteins as chemotactic agents: mitogens as lymphocyte locomotion activators. Wilkinson PC. **Methods Enzymol** 1988;162:180–92

Effects of calcitonin gene–related peptide (CGRP), neurokinin A and neurokinin A (4–10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354–8

Dissociation of c–fos induction from protein kinase C–independent mitogenesis in Swiss 3T3 cells. Mehmet H, et al. **Oncogene Res** 1989;4(3):215–22

Rapid activation of protein kinase C in isolated rat liver nuclei by prolactin, a known hepatic mitogen. Buckley AR, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8649–53

Phospholipids containing polyunsaturated fatty acyl groups are mitogenic for normal mouse mammary epithelial cells in serum–free primary cell culture. Imagawa W, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4122–6

The effect of GTPase activating protein upon ras is inhibited by mitogenically responsive lipids. Tsai MH, et al. **Science** 1989 Jan 27;243(4890):522–6

ADMINISTRATION & DOSAGE

Evidence for early mitogenic stimulation of metabolic flux through phosphoribosyl pyrophosphate into nucleotides in Swiss 3T3 cells. Ishijima S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):570–5

ANALYSIS

Group A streptococcal pyrogenic exotoxin (scarlet fever toxin) type A and blastogen A are the same protein. Schlievert PM, et al. **Infect Immun** 1989 Jun;57(6):1865–7

Evidence that the axolemmal mitogen for cultured Schwann cells is a positively charged, heparan sulfate proteoglycan–bound, heparin–displaceable molecule. DeCoster MA, et al. **J Neurosci Res** 1989 Mar;22(3):283–8

ANTAGONISTS & INHIBITORS

Suppression of lymphocyte mitogenesis by tamoxifen. Baral E, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):57–62

Reversible inactivation by dextran sulfate of bovine thrombin in dilute solution. Oshima G. **Thromb Res** 1988 Dec 15; 52(6):631–40

BLOOD

Mitogenic activity is increased in the sera of preeclamptic women before delivery. Musci TJ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1446–51

[Detection of a mitogenic serum factor in psoriasis] Holzmann H, et al. **Hautarzt** 1989 Feb;40(2):104–5 (Eng. Abstr.) (Ger)

CHEMICAL SYNTHESIS

Effect of chemical modification at C1 of the glucosamine backbone of lipid A–subunit analog GLA–27 on manifestation of immunopharmacological activity. Kumazawa Y, et al. **FEBS Lett** 1988 Oct 24;239(1):117–20

GENETICS

cDNA clones from autocrine thymic lymphoma cells encode two mitogenic proteins, a serine protease and a truncated T–cell receptor beta–chain. Bogenberger J, et al. **Oncogene Res** 1988;3(4):301–12

IMMUNOLOGY

The role of mitogenic factors in the pathogenesis of certain features of malarial infection. Oyeyinka GO. **Afr J Med Med Sci** 1988 Dec;17(4):201–7 (68 ref.)

Transmembrane signals in the activation of T lymphocytes by mitogenic antigens. Hadden JW. **Immunol Today** 1988 Jul–Aug;9(7–8):235–9 (25 ref.)

Comparative evaluation of mitogenicity and basement–membrane–degrading activity of Pseudomonas aeruginosa slime glycolipoprotein and alginate. Anastassiou ED, et al. **J Clin Microbiol** 1989 Mar;27(3):490–4

Triggering of co–mitogenic signals in T cell proliferation by anti–LFA–1 (CD18, CD11a), LFA–3, and CD7 monoclonal antibodies. Carrera AC, et al. **J Immunol** 1988 Sep 15;141(6):1919–24

ISOLATION & PURIFICATION

A mitogenic factor from rat muscle. Rao LS, et al. **Cancer Lett** 1989 Apr;45(1):27–34

Isolation of heparin–binding growth factors from bovine, porcine and canine hearts. Quinkler W, et al. **Eur J Biochem** 1989 Apr 15;181(1):67–73

Isolation and characterization of a new immunomodulatory protein, ling zhi–8 (LZ–8), from Ganoderma lucidium. Kino K, et al. **J Biol Chem** 1989 Jan 5;264(1):472–8

Purification and characterization of streptococcal erythrogenic toxin type A produced by Streptococcus pyogenes strain NY–5 cultured in the synthetic medium NCTC–135. Comparison with the dialyzed medium (TP medium)–derived toxin. Kamezawa Y, et al. **Microbiol Immunol** 1989;33(3):183–94

Partial purification of a major type of rat prostatic growth factor: characterization as an epidermal growth factor–related mitogen. Nishi N, et al. **Prostate** 1988; 13(3):209–20

METABOLISM

Retinal pigment epithelial cells in culture produce retinal vascular mitogens. Wong HC, et al. **Arch Ophthalmol** 1988 Oct;106(10):1439–43

Bovine brain astrocytes express basic fibroblast growth factor, a neurotropic and angiogenic mitogen. Ferrara N, et al. **Brain Res** 1988 Oct 18;462(2):223–32

Modulation of mitogenic activity and cellular binding of basic fibroblast growth factor by basic proteins. Dauchel MC, et al. **J Cell Biochem** 1989 Apr;39(4):411–20

Effects of platelet–derived growth factor and fibroblast growth factor on free intracellular calcium and mitogenesis. Tucker RW, et al. **J Cell Biochem** 1989 Feb;39(2):139–51

Oncogene–related growth factors and growth factor receptors in human malignant glioma–derived cell lines. Harsh GR 4th, et al. **J Neurooncol** 1989 May;7(1):47–56

Perturbation of endothelial functions by ionizing irradiation: effects on prostaglandins, chemoattractants and mitogens. Eldor A, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):215–25

Cell genetic evidence of correlation of intracellular translocation of protein kinase C (PKC) and PKC–mediated phosphorylation of 80–kDa protein with mitogenic action of tumor promoters. Shimizu Y, et al. **Somat Cell Mol Genet** 1989 Jul;15(4):321–9

PHARMACOLOGY

Studies of the mitogenic effect of serotonin in rat renal mesangial cells. Takuwa N, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 2):F431–9

Effect of interleukin–2 and mitogen on in vitro immunoglobulin production by peripheral blood lymphocytes from patients with selective IgM deficiency. Moffitt JE, et al. **Ann Allergy** 1988 Dec;61(6):424–7

Bicarbonate abolishes intracellular alkalinization in mitogen–stimulated NIH 3T3 cells. Szwergold BS, et al. **Ann N Y Acad Sci** 1988;551:277–9

Bryostatin stimulation of human neutrophil luminol and DBA (lucigenin) chemiluminescence. Warren JT, et al. **Basic Life Sci** 1988;49:223–7

Effects of linoleic acid and mitogenic stimulation on the fatty acid composition of human lymphocytes. Shires SE, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):74–8

Mitogenic responses to and binding of insulin–like growth factor 1 and/or epidermal growth factor by bone cells. VandePol C, et al. **Bone Miner** 1989 Mar;5(3):371–82

2–deoxy–D–glucose modulation of T–lymphocyte reactivity: differential effects on lymphoid compartments. Lysle DT, et al. **Brain Behav Immun** 1988 Sep;2(3):212–21

Inescapable shock, shock controllability, and mitogen stimulated lymphocyte proliferation. Maier SF, et al. **Brain Behav Immun** 1988 Jun;2(2):87–91

Bombesin–like peptides: neuropeptides with mitogenic activity. Wiedermann CJ, et al. **Brain Behav Immun** 1988 Dec;2(4):301–10 (51 ref.)

Recombinant human interleukin–2–induced mitogenic proliferation of in vitro unstimulated bovine intestinal lymphocytes. Nagi AM, et al. **Can J Vet Res** 1989 Jan; 53(1):68–75

Tyrosine phosphorylation of a Mr 63,000 protein induced by an endogenous mitogen in human colon carcinoma cells, but not in normal colonocytes. Marian B, et al. **Cancer Res** 1989 Aug 1;49(15):4231–6

Response of cultured hepatocytes to a hepatomitogen after initiation by conditioned medium or other factors. Ove P, et al. **Cancer Res** 1989 Jan 1;49(1):98–103

Differences in responsiveness of clonally derived AXC/SSh rat prostate cancer cells to secreted or prototypic mitogens. Shain SA, et al. **Cancer Res** 1989 Jul 15;49(14):3898–903

Inhibitors of ADP–ribosyl transferase suppress the mitogenic actions exerted by tumour promoters, but not those evoked by peptide mitogens, in primary neonatal rat hepatocytes. Romano F, et al. **Carcinogenesis** 1988 Dec;9(12):2147–54

Cadmium produces a delayed mitogenic response and modulates the EGF response in quiescent NRK cells. Enger MD, et al. **Cell Biol Toxicol** 1987 Dec;3(4):407–16

Defective T–cell activation by Mycoplasma arthritidis mitogen is restored by interferon–gamma. Pischedda F, et al. **Cell Immunol** 1989 Apr 15;120(1):188–94

Full replacement of 2–mercaptoethanol by cysteine plus selenium compounds in augmenting DNA synthesis of mitogen–stimulated mouse spleen lymphocytes. Ishii T, et al. **Cell Struct Funct** 1989 Jun;14(3):287–97

Growth factors, mitogens, cytokines, and bone morphogenetic protein in induced chondrogenesis in tissue culture. Kawamura M, et al. **Dev Biol** 1988 Dec; 130(2):435–42

Beta 2–microglobulin is not a bone cell mitogen. Jennings JC, et al. **Endocrinology** 1989 Jul;125(1):404–9

Transferrin in FRTL5 cells: regulation of its receptor by mitogenic agents and its role in growth. Lombardi A, et al. **Endocrinology** 1989 Aug;125(2):652–8

G–proteins modulate prolactin– and interleukin–2–stimulated mitogenesis in rat Nb2 lymphoma cells. Too CK, et al. **Endocrinology** 1989 May;124(5):2185–92

Mitogen–responsive S6 kinase. Lawen A, et al. **Eur J Biochem** 1989 Aug 1;183(2):245–53

Processing requirements for T cell activation by Mycoplasma arthritidis–derived mitogen. Bauer A, et al. **Eur J Immunol** 1988 Dec;18(12):2109–12

Mitogenic effect of estradiol on MCF–7 human breast cancer

cells can be modulated by serum. Najid A, et al. **Exp Cell Biol** 1989;57(3):139–45

Mitogen–induced preferential synthesis of proteins during the G0 to S phase transition in human lymphocytes. Haire RN, et al. **Exp Cell Res** 1988 Nov;179(1):65–78

Carcinogenic and non–carcinogenic fluorene derivatives: induction of thymocyte stimulating serum factors by 2–acetylaminofluorene (AAF) and their synergy with lymphocyte mitogens. Danz M, et al. **Exp Pathol** 1988; 34(4):217–21

Cyclic AMP inhibits mitogen–induced DNA synthesis in hamster fibroblasts, regardless of the signalling pathway involved. Magnaldo I, et al. **FEBS Lett** 1989 Mar 13; 245(1–2):65–9

Inhibition by staurosporine of mitogen–induced calcium mobilisation in human T lymphoblasts. Ward SG, et al. **FEBS Lett** 1988 Nov 7;239(2):363–6

Stimulation of sea star Asterias rubens axial organ B–like cells by Nocardia–delipidated cell mitogen and derived fractions. Leclerc M, et al. **Folia Biol (Praha)** 1988; 34(3):182–91

Direct evidence that the insulin receptor mediates a mitogenic response in cultured human fibroblasts. Conover A, et al. **Horm Metab Res** 1989 Feb;21(2):59–63

Role of interleukin 1 in mycoplasma mitogen–induced proliferation of human T cells. Bauer A, et al. **Immunobiology** 1989 Mar;179(1):124–30

Histamine synthesis by non–mast cells through mitogen–dependent induction of histidine decarboxylase. Oh C, et al. **Immunology** 1988 Sep;65(1):143–8

Identification of functional antigenic segments of toxic shock syndrome toxin 1 by differential immunoreactivity and by differential mitogenic responses of human peripheral blood mononuclear cells, using active toxin fragments. Edwin C, et al. **Infect Immun** 1989 Jul;57(7):2230–6

Effect of chemical modification of histidine and tyrosine residues in toxic shock syndrome toxin 1 on the serologic and mitogenic activities of the toxin. Kokan–Moore NP, et al. **Infect Immun** 1989 Jul;57(7):1901–5

Cell surface molecules involved in early events in T–cell mitogenic stimulation by staphylococcal enterotoxins. Vroegop SM, et al. **Infect Immun** 1989 Jun;57(6):1816–4

Immunoglobulin secretion of mononuclear cells induced by various mitogens. Shoenfeld Y, et al. **Int J Immunopharmacol** 1988;10(4):347–52

Bicarbonate determines cytoplasmic pH and suppresses mitogen–induced alkalinization in fibroblastic cells. Bierman AJ, et al. **J Biol Chem** 1988 Oct 25; 263(30):15253–6

Molecular mechanism of basic calcium phosphate crystal–induced mitogenesis. Role of protein kinase C. Mitchell PG, et al. **J Biol Chem** 1989 Aug 25; 264(24):14071–7

Augmented mitogenesis and impaired metabolic signaling mediated by a truncated insulin receptor. Thies RS, et al. **J Biol Chem** 1989 Aug 5;264(22):12820–5

Effects of coumarin (1,2–benzopyrone) on lymphocyte, natural killer cell, and monocyte functions in vitro. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):70–85

Transforming growth factor beta 1 (TGF–beta 1) receptor expression on resting and mitogen–activated T cells. Ellingsworth L, et al. **J Cell Biochem** 1989 Apr; 39(4):489–500

Differentiation of cardiac myocytes after mitogen withdrawal exhibits three sequential states of the ventricular growth response. Ueno H, et al. **J Cell Biol** 1988 Nov;107(5):1911–8

Differential inhibitory effects of TGF–beta on EGF–, PDGF–, and HBGF–1–stimulated MG63 human osteosarcoma cell growth: possible involvement of growth factor interactions at the receptor and postreceptor levels. Mioh H, et al. **J Cell Physiol** 1989 Jun;139(3):509–16

Comparative study of the tyrosine phosphorylation of proteins in Swiss 3T3 fibroblasts stimulated by a variety of mitogenic agents. Pasquale EB, et al. **J Cell Physiol** 1988 Oct;137(1):146–56

Bicarbonate abolishes intracellular alkalinization in mitogen–stimulated 3T3 cells. Szwergold BS, et al. **J Cell Physiol** 1989 Feb;138(2):227–35

Distinct mitogens reveal different mechanisms of suppressor activity in human cord blood. Papadogiannakis N, et al. **J Clin Lab Immunol** 1988 May;26(1):37–41

Bovine vitamin A and beta–carotene intake and lactational status. 2. Responsiveness of mitogen–stimulated peripheral blood lymphocytes to vitamin A and beta–carotene challenge in vitro. Tjoelker LW, et al. **J Dairy Sci** 1988 Nov;71(11):3120–7

Suppression of mitogenic response of peripheral blood mononuclear cells by bovine mammary secretions. Torre PM, et al. **J Dairy Sci** 1989 Jan;72(1):219–27

Two peaks of interleukin 1 expression in human leukocytes cultured with tobacco glycoprotein. Francus T, et al. **J Exp Med** 1989 Jul 1;170(1):327–32

Stimulation of mouse lymphocytes by a mitogen derived from Mycoplasma arthritidis. VII. Responsiveness is associated with expression of a product(s) of the V beta 8 gene family present on the T cell receptor alpha/beta for antigen. Cole BC, et al. **J Immunol** 1989 Jun 15;142(12):4131–7

Dissociation between murine spleen cell mitogenic activity of enterotoxin contaminants and anti–tumor activity of staphylococcal protein A. Das C, et al. **J Immunol** 1989 Apr 15;142(8):2943–8

Activity of dextran sulfate and other polyanionic polysaccharides against human immunodeficiency virus. Bagasra O, et al. **J Infect Dis** 1988 Nov;158(5):1084–7

TIS gene expression in cultured rat astrocytes: induction by mitogens and stellation agents. Arenander AT, et al. **J Neurosci Res** 1989 Jul;23(3):247–56

TIS gene expression in cultured rat astrocytes: multiple pathways of induction by mitogens. Arenander AT, et al. **J Neurosci Res** 1989 Jul;23(3):257–65

Fibroblast growth factor effects on peripheral nerve regeneration in a silicone chamber model. Danielsen N, et al. **J Neurosci Res** 1988 Jul;20(3):320–30

Antitumor activity, mitogenicity, and lethal toxicity of chemically synthesized monosaccharide analogs of lipid A. Shimizu T, et al. **J Pharmacobiodyn** 1988 Jul;11(7):512–8

Arthritogenic effects of Mycoplasma arthritidis T cell mitogen in rats. Cannon GW, et al. **J Rheumatol** 1988; 15(5):735–41

Augmentation of cytotoxic activity by mitogens in rheumatic heart disease. Gray ED, et al. **J Rheumatol** 1988 Nov; 15(11):1672–6

Interleukin 2 and interleukin 2 inhibitors in human serum and synovial fluid. II. Mitogenic stimulation, interleukin 2 production and interleukin 2 receptor expression in rheumatoid arthritis, psoriatic arthritis and Reiter's syndrome. Smith MD, et al. **J Rheumatol** 1989 Jul; 16(7):897–903

Modulation of mitogenic activity of tumor necrosis factor by interferons and dexamethasone. Tsujimoto M, et al. **Lymphokine Res** 1989 Summer;8(2):99–106

Reduced proliferative response of mouse spleen cells to mitogens during infection with Salmonella typhimurium or Listeria monocytogenes. Brunner H, et al. **Microb Pathog** 1989 Apr;6(4):265–76

A simple and rapid method to evaluate lymphocyte response to mitogens. Giorgio A, et al. **Microbiologica** 1989 Apr; 12(2):151–5

Susceptibility of mitogen and non–mitogen treated pig lymphocytes to four strains of pseudorabies virus (PRV). Onyekaba C. **Microbiologica** 1988 Jul;11(3):207–11

Related proteins are phosphorylated at tyrosine in response to mitogenic stimuli and at meiosis. Cooper JA. **Mol Cell Biol** 1989 Jul;9(7):3143–7

Bovine platelet–derived factor showing mitogenic activity on bovine leukemia virus–infected lymphocytes. Tsukiyama K, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):746–53

Platelet–derived growth factor synthesis in mesangial cells: induction by multiple peptide mitogens. Silver BJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1056–60

Trypsin does not reconstitute responsiveness to lipopolysaccharide in the strain C3H/HeJ, but is a B–cell mitogen–like lipopolysaccharide, stimulating a different subpopulation. Cardell S, et al. **Scand J Immunol** 1989 Feb; 29(2):143–9

Recombinant protein A of non–staphylococcal origin is not mitogenic for human peripheral lymphocytes. Mitogenicity of natural protein A is caused by a contaminant. Persson U, et al. **Scand J Immunol** 1989 Feb;29(2):151–8

Effect of a novel immunosuppressive agent, FK506, on mitogen–induced inositol phospholipid degradation in rat thymocytes. Fujii Y, et al. **Transplantation** 1989 Jun; 47(6):1081–3

[Effects of mitogen–activated lymphocytes on glomerular polyanion (GPA) in rats] Cheng XJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):691–2, 48 (Eng. Abstr.) **(Chi)**

[Phenotypes of leukemic cells from chronic B cell leukemia and their proliferative responses to several kinds of mitogens or lymphokines: PHA or phorbol ester (TPA) induces a high responsibility to B cell growth factor (BCGF) in the leukemic cells] Takeuchi H. **Rinsho Ketsueki** 1988 Dec;29(12):2241–9 (Eng. Abstr.) **(Jpn)**

[Effect of bacterial toxins on the mitogen–induced increase of the Ca2+ concentration in the cytoplasm of rat thymocytes. The role of N proteins] Gukovskaia AS, et al. **Biull Eksp Biol Med** 1989 May;107(5):598–600 (Eng. Abstr.) **(Rus)**

[Induction of the traits of the differentiated T–cell phenotype in the blast cells of patients with acute lymphoblastic leukemia. I. The expression of T–cell markers as affected by different inducers] Kazhdan IIa, et al. **Tsitologiia** 1988 Jun;30(6):745–50 (Eng. Abstr.) **(Rus)**

[Effect of mitogenic stimulation and heat shock on protein syntheses in human T cells] Margulis BA, et al. **Tsitologiia** 1989 Mar;31(3):355–9 (Eng. Abstr.) **(Rus)**

[Induction of the traits of the T–cell differentiated phenotype in a blast cell population from patients with acute lymphoblastic leukemia. II. Parallel changes in the antigenic characteristics and functional properties of blast cells as affected by inducers] Tsvelbakh AS, et al. **Tsitologiia** 1988 Jun;30(6):751–6 (Eng. Abstr.) **(Rus)**

[Effect of the superoxide radical on lymphocyte proliferation stimulated by a mitogen] Vol'skiĭ NN, et al. **Tsitologiia** 1988 Jul;30(7):898–902 (Eng. Abstr.) **(Rus)**

[Analysis of the proliferative response to PHA, LPS, PWM, and con A in various inbred mouse strains] Rueda G, et al. **Sangre (Barc)** 1988 Aug;33(4):314–7 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Regulation of mesangial cell growth by polypeptide mitogens. Inhibitory role of transforming growth factor beta. Jaffer F, et al. **Am J Pathol** 1989 Aug;135(2):261–9

Mitogenic signals for thrombin in mesangial cells: regulation of phospholipase C and PDGF genes. Shultz PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F366–74

Mitogen–mediated protein phosphorylation in Werner's syndrome fibroblasts. Hirai M, et al. **Cell Struct Funct** 1988 Dec;13(6):471–80

Insulin–like growth factor I (IGF–I)–binding protein complex is a better mitogen than free IGF–I. Blum WF, et al. **Endocrinology** 1989 Aug;125(2):766–72

Anti–Qa–2–induced T cell activation. The parameters of activation, the definition of mitogenic and nonmitogenic antibodies, and the differential effects on CD4+ vs CD8+ T cells. Hahn AB, et al. **J Immunol** 1989 Jul 15; 143(2):407–13

The mitogenic activity of peritoneal tissue repair cells: control by growth factors. Fukasawa M, et al. **J Surg Res** 1989 Jul;47(1):45–51

SECRETION

A form of basic fibroblast growth factor is secreted into the adluminal fluid of the rat coagulating gland. Smith EP, et al. **Prostate** 1989;14(4):353–65

TOXICITY

[Effect of lipopolysaccharide toxin on lipid and protein composition of human serum low density lipoproteins] Viktorov AV, et al. **Biokhimiia** 1989 Mar;54(3):434–9 (Eng. Abstr.) **(Rus)**

MITOGENS, ENDOGENOUS see **GROWTH SUBSTANCES**

MITOGUAZONE

ADMINISTRATION & DOSAGE

Cisplatin and mitoguazone. An induction chemotherapy regimen in advanced head and neck cancer. Forastiere AA, et al. **Cancer** 1988 Dec 1;62(11):2304–8

ANALOGS & DERIVATIVES

Stabilization of ornithine decarboxylase in mouse liver and lung by methylglyoxal bis(cyclohexylamidinohydrazone). Hibasami H, et al. **Biochem Pharmacol** 1988 Nov 1; 37(21):4117–20

Antitumor effect of a new multienzyme inhibitor of polyamine synthetic pathway, methylglyoxal–bis(cyclopentylamidinohydrazone), against human and mouse leukemia cells. Hibasami H, et al. **Cancer Res** 1989 Apr 15;49(8):2065–8

Carcinogenesis and aging. VIII. Effect of host age on tumour growth, metastatic potential, and chemotherapeutic sensitivity to 1,4–benzoquinone–guanylhydrazonethiosemicarbazone (ambazone) and 5–fluorouracil in mice and rats. Baumgart J, et al. **Exp Pathol** 1988;33(4):239–48

Age–dependent antileukemic action and suppression of immune response by 1,4–benzoquinone–guanylhydrazone–thiosemicarbazone (ambazone) in mice. Baumgart J, et al. **Neoplasma** 1989; 36(4):393–400

Chemical–analytical characterization of dihydroambazone. Miosga N, et al. **Pharmazie** 1988 Aug;43(8):541–3

Biochemical and chemical characterization of trifluoromethylglyoxal bis(guanylhydrazone), a close analog of the antileukemic drug mitoguazone. Elo H, et al. **Z Naturforsch [C]** 1988 Jul–Aug;43(7–8):601–5

PHARMACOLOGY

Polyamines increase in human peripheral blood and bone marrow mononuclear cells following administration of methylglyoxal bis(guanylhydrazone). Maddox AM, et al. **Chemotherapy** 1988;34(5):419–29

THERAPEUTIC USE

ECOG phase II trials of MGBG, chlorozotocin, COM multidrug therapy in advanced measurable colorectal cancer. Douglass HO Jr, et al. **Am J Clin Oncol** 1988 Dec; 11(6):646–9

[Mitoguazone (methylglyoxal bis(guanylhydrazone))—its status and prospects] Hoffmann H, et al. **Arch Geschwulstforsch** 1989;59(2):135–48 (85 ref.) (Eng. Abstr.) **(Ger)**

MITOLACTOL

ADMINISTRATION & DOSAGE

A phase II trial of vinblastine, bleomycin, and cisplatin induction followed by dacarbazine and dibromodulcitol maintenance in the treatment of metastatic melanoma. A follow–up study of twenty–two patients. Gentile PS, et al. **Am J Clin Oncol** 1988 Dec;11(6):666–8

Dibromdulcitol containing chemotherapeutic regimen in the treatment of childhood Hodgkin's disease. Schuler D, et al. **Neoplasma** 1988;35(5):599–603

ADVERSE EFFECTS

Myelodysplastic syndrome and acute nonlymphocytic leukemia secondary to mitolactol treatment in patients with breast cancer. Falkson G, et al. **J Clin Oncol** 1989 Sep; 7(9):1252–9 (31 ref.)

MITOMYCINS

DNA cross-linking by intermediates in the mitomycin activation cascade. Cera C, et al. **Biochemistry** 1989 Jun 27;28(13):5665–9

DNA sequence specificity of mitomycin cross-linking. Teng SP, et al. **Biochemistry** 1989 May 2;28(9):3901–7

X-ray- and mitomycin C (MMC)-induced chromosome aberrations in spermiogenic germ cells and the repair capacity of mouse eggs for the X-ray and MMC damage. Matsuda Y, et al. **Mutat Res** 1989 Mar;211(1):65–75

Variable allograft responses to pretreatment with donor splenocytes treated with mitomycin C in the rat. Yamaguchi Y, et al. **Transplantation** 1989 Feb;47(2):360–3

ADMINISTRATION & DOSAGE

Mitomycin C adsorbed on activated carbon particles: is intraperitoneal chemotherapy effective for synchronous pleuritis carcinomatosa? [letter] Yokota T, et al. **Am J Gastroenterol** 1989 Sep;84(9):1124–5

Postoperative instillation of low-dose mitomycin C in the treatment of primary pterygium. Hayasaka S, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):715–8

Postoperative instillation of low-dose mitomycin C in the treatment of primary pterygium [letter] Singh G. **Am J Ophthalmol** 1989 May 15;107(5):570–1

Recurrence of superficial bladder carcinoma after intravesical instillation of mitomycin-C. Comparison of exposure times. Giesbers AA, et al. **Br J Urol** 1989 Feb;63(2):176–9

High-dose mitomycin C: activity in hepatocellular carcinoma. Cheirsilpa A, et al. **Cancer Chemother Pharmacol** 1989;24(1):50–3

Arterial chemotherapy and transcatheter arterial embolization therapy for non-resectable hepatocellular carcinoma. Hirai K, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S37–41

Treatment of hepatic cancer by hepatic arterial infusion chemotherapy. Miura T. **Cancer Chemother Pharmacol** 1989;23 Suppl:S121–2

Transcatheter arterial embolization using iodized oil (lipiodol) mixed with an anticancer drug for the treatment of hepatocellular carcinoma. Ohishi H, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S33–6

Phase II study of combination 4'-epidoxorubicin and mitomycin C in recurrent epithelial ovarian cancer. Redman C, et al. **Cancer Chemother Pharmacol** 1989; 23(1):51–3

Transcatheter arterial chemoembolization for hepatocellular carcinoma. Yang CF, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S26–8

Augmentation of the generation of lymphokine-activated killer cells after a single dose of mitomycin C in cancer patients. Nanbara S, et al. **Cancer Immunol Immunother** 1989;29(4):237–41

Liposomal sustained-release delivery systems for intravenous injection. II. Design of liposome carriers and blood disposition of lipophilic mitomycin C prodrug-bearing liposomes. Tokunaga Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3557–64

Hyperthermic peritoneal perfusion combined with anticancer chemotherapy as prophylactic treatment of peritoneal recurrence of gastric cancer. Kaibara N, et al. **Hepatogastroenterology** 1989 Apr;36(2):75–8

Antitumor effect of a baker's yeast mannan-mitomycin C conjugate against mouse hepatoma, MH134, in vivo and in vitro. Aizawa K, et al. **Int J Immunopharmacol** 1989; 11(2):191–5

Concomitant 5-fluorouracil infusion, mitomycin C and radical radiation therapy in esophageal squamous cell carcinoma. Chan A, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):59–65

Preparation and in vitro evaluation of polylactic acid–mitomycin C microcapsules. Tsai DC, et al. **J Microencapsul** 1986 Jul–Sep;3(3):181–93

Efficacy of intravesical mitomycin C in the treatment of superficial transitional cell carcinoma of the urinary bladder. Pavlotsky A, et al. **J Surg Oncol** 1989 May; 41(1):9–11

Intravesical thiotepa versus mitomycin C in patients with Ta, T1 and TIS transitional cell carcinoma of the bladder: a phase III prospective randomized study. Heney NM, et al. **J Urol** 1988 Dec;140(6):1390–3

A comparison of intraperitoneal injection and oral gavage in the micronucleus test with mitomycin C in mice. Sato S, et al. **Mutat Res** 1989 Aug;223(4):387–90

Mitomycin-C and vinblastine in advanced breast cancer. Navarro M, et al. **Oncology** 1989;46(3):137–42 (28 ref.)

Mitomycin in treating pterygium [letter] Chayakul V. **Ophthalmology** 1989 Mar;96(3):399

Intraoperative chemotherapy with carbon particles adsorbing mitomycin C for gastric cancer with peritoneal dissemination in rabbits. Hagiwara A, et al. **Surgery** 1988 Nov;104(5):874–81

Combination of hyperthermia and cytostatics in the treatment of bladder cancer. Bichler KH, et al. **Urol Int** 1989; 44(1):10–4

[Tolerance of intraoperative, intraperitoneal chemotherapy in advanced gynecologic malignancies] Werner A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):574–8 (Eng. Abstr.) (Ger)

[Intra-arterial infusion chemotherapy of liver metastases in colorectal cancer] Fujiyoshi M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2880–3 (Eng. Abstr.) (Jpn)

[A case of peritoneal malignant mesothelioma with disappearance of ascites result of intraperitoneal instillation of mitomycin C and oral administration of UFT] Hayashi T, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2449–52 (Eng. Abstr.) (Jpn)

[Chemoembolization with degradable starch microspheres for liver metastases in colorectal cancer] Itani K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2897–900 (Eng. Abstr.) (Jpn)

[Prognosis of intra-arterial chemo-embolization in metastatic liver cancer] Ito K, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 2):3041–4 (Eng. Abstr.) (Jpn)

[Intraoperative chemotherapy with intraperitoneal activated carbon particles adsorbing mitomycin C against peritoneal dissemination of gastric cancer] Iwamoto A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2748–51 (Eng. Abstr.) (Jpn)

[Chemoembolization therapy of hepatocellular carcinoma-antitumor effect and side effect] Saito Y, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3283–9 (Eng. Abstr.) (Jpn)

[Immune parameters of peripheral blood in chemoembolization with microencapsulated anticancer drugs] Sato K, et al. **Gan To Kagaku Ryoho** 1989 Jan; 16(1):73–7 (Eng. Abstr.) (Jpn)

[Present status of surgical adjuvant chemotherapy of gastric cancer] Taguchi T. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2169–72 (1 ref.) (Eng. Abstr.) (Jpn)

[Transcatheter arterial infusion therapy using lipiodol and mitomycin C for hepatocellular carcinoma with liver cirrhosis] Adachi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1710–9 (Eng. Abstr.) (Jpn)

[Dosage and its safety in intraperitoneal high dose mitomycin C administration as postoperative adjuvant therapy for gastric cancer] Hiratsuka M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1574–9 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Acute myeloblastic leukemia following treatment with mitomycin C: a case report [letter] Burde B, et al. **Cancer Chemother Pharmacol** 1989;24(1):71

Cancer-associated hemolytic-uremic syndrome: analysis of 85 cases from a national registry. Lesesne JB, et al. **J Clin Oncol** 1989 Jun;7(6):781–9 (47 ref.)

Mitomycin-C cardiotoxicity [letter] Sivanesaratnam V. **Med J Aust** 1989 Sep 4;151(5):300

Modification of DNA by mitomycin C in cancer patients detected by 32P-postlabeling analysis. Kato S, et al. **Mutat Res** 1988 Nov;202(1):85–91

Successful treatment of mitomycin C-associated hemolytic uremic syndrome by plasmapheresis. Garibotto G, et al. **Nephron** 1989;51(3):409–12

[Acute dyspnea following intravenous administration of vinblastine/mitomycin C] Lagler U, et al. **Schweiz Med Wochenschr** 1989 Mar 4;119(9):290–2 (Eng. Abstr.) (Ger)

[Protective effects of the Chinese medicine Juzentaiho-to from the adverse effects of mitomycin C and cisplatin] Iijima OT, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1525–32 (Eng. Abstr.) (Jpn)

[Protective effects of juzen-taiho-to on the adverse effects of mitomycin C] Iijima OT, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1277–82 (Eng. Abstr.) (Jpn)

[Three cases of renal failure associated with microangiopathic hemolytic anemia after mitomycin C therapy] Hayano K, et al. **Nippon Jinzo Gakkai Shi** 1988 Jul;30(7):835–42 (Eng. Abstr.) (Jpn)

[Hemolytic-uremic syndrome caused by mitomycin C (letter)] de Insausti CL, et al. **Sangre (Barc)** 1988 Aug; 33(4):319–20 (Spa)

ANALYSIS

Liposomal sustained-release delivery systems for intravenous injection. I. Physicochemical and biological properties of newly synthesized lipophilic derivatives of mitomycin C. Tokunaga Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3060–9

Chromatographic studies of mitomycin C degradation in albumin microspheres. Mehta RC, et al. **J Chromatogr** 1988 Sep 9;430(2):341–9

Liquid chromatography–thermospray mass spectrometry of DNA adducts formed with mitomycin C, porfiromycin and thiotepa. Musser SM, et al. **J Chromatogr** 1989 Jul 14; 474(1):197–207

ANTAGONISTS & INHIBITORS

Inhibition of mitomycin C-induced sister-chromatid exchanges in mouse bone marrow cells by the immunopotentiators Krestin and Lentinan. Hasegawa J, et al. **Mutat Res** 1989 May;226(1):9–12

Suppression of mitomycin C-induced micronuclei in mouse bone marrow cells by post-treatment with vanillin. Inouye T, et al. **Mutat Res** 1988 Nov;202(1):93–5

gamma-L-glutamyl-taurine (Litoralon) prevents the micronucleus formation induced by mitomycin C. Tóth S, et al. **Mutat Res** 1988 Sep-Oct;209(1-2):85–9

BLOOD

Phase-system switching as an on-line sample pretreatment in the bioanalysis of mitomycin C using supercritical fluid chromatography. Niessen WM, et al. **J Chromatogr** 1988 Nov 11;454:243–51

[Blood levels of mitomycin C in patients given by various routes of administration] Kato T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2639–44 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Synthesis and antitumor activity of a novel water soluble mitomycin analog; 7-N-[2-[[2-(gamma-L-glutamylamino)-ethyl]dithio]ethyl]mitomycin C. Kono M, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1128–30

Synthesis and in vivo antitumor activity of novel mitomycin A disulfide analogs. Vyas DM, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1199–201

New 2-substituted indoloquinone mitomycin analogues. Iyengar BS, et al. **J Med Chem** 1989 Aug;32(8):1866–72

Synthesis and evaluation of antileukemic activity of 5-thienyl- or 5-(2-furyl)-2,3-dihydro-6,7-bis(hydroxymethyl)-1H-pyrrolizine bis(alkylcarbamates) and derivatives. Ladurée D, et al. **J Med Chem** 1989 Feb;32(2):456–61

Preparation and antitumor activity of additional mitomycin A analogues. Sami SM, et al. **J Med Chem** 1989 Mar; 32(3):703–8

Mitomycin C analogues with a substituted hydrazine at position 7. Synthesis, spectral properties, and biological activity. Sawhney KN, et al. **J Med Chem** 1989 Jan; 32(1):248–52

METABOLISM

Modulation of mitomycin cross-linking by DNA bending in the Escherichia coli CAP protein-DNA complex. Cera C, et al. **Biochemistry** 1989 May 2;28(9):3908–11

Structure elucidation of mitomycin C metabolites. I. The applicability of various mass spectrometric techniques in metabolic studies on mitomycin C. Heeremans CE, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):377–82

Isolation of Chinese hamster ovary cell mutants deficient in excision repair and mitomycin C bioactivation. Dulhanty AM, et al. **Cancer Res** 1989 Jan 1;49(1):117–22

Modification of the metabolism and cytotoxicity of bioreductive alkylating agents by dicoumarol in aerobic and hypoxic murine tumor cells. Keyes SR, et al. **Cancer Res** 1989 Jun 15;49(12):3310–3

Mechanism of transport and intracellular binding of porfiromycin in HCT 116 human colon carcinoma cells. Pan SS, et al. **Cancer Res** 1989 Sep 15;49(18):5048–53

DNA sequence-specific adducts of adriamycin and mitomycin C. Phillips DR, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):233–40

PHARMACOKINETICS

Pharmacokinetics of intra-arterial mitomycin C with or without degradable starch microspheres (DSM) in the treatment of non-resectable liver cancer. Andersson M, et al. **Acta Oncol** 1989;28(2):219–22

Deficient activation by a human cell strain leads to mitomycin resistance under aerobic but not hypoxic conditions. Marshall RS, et al. **Br J Cancer** 1989 Mar;59(3):341–6

Pharmacokinetic analysis in intraperitoneal hyperthermic chemotherapy of far-advanced gastric cancer patients. Kobayashi K, et al. **Gan No Rinsho** 1989 Aug;35(9):1016–20

Chemotherapy in a pregnant rat model. 1. Mitomycin-C: pregnancy-specific kinetics and placental transfer. Boike GM, et al. **Gynecol Oncol** 1989 Aug;34(2):187–90

Disposition of a polymeric prodrug of mitomycin C, mitomycin C-dextran conjugate, in the perfused rat liver. Sato K, et al. **J Pharm Sci** 1989 Jan;78(1):11–6

Behavior and resorption of mitomycin C following multiple intravesical administrations. van Helsdingen PJ, et al. **J Pharm Sci** 1988 Oct;77(10):843–6

Pharmacokinetics and tissue uptake of mitomycin C in isolated perfusion of pancreas. Arredondo MA, et al. **J Surg Res** 1989 May;46(5):445–9

Disposition and tumor localization of mitomycin C-dextran conjugates in mice. Takakura Y, et al. **Pharm Res** 1987 Aug;4(4):293–300

[Pharmacokinetic analysis in intraperitoneal hyperthermic perfusion using mitomycin C in far-advanced gastric cancer] Fujimoto S, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2411–5 (Eng. Abstr.) (Jpn)

[Biliary pancreatic, and lymphatic excretion of mitomycin C and adriamycin on celiac arterial infusion in dogs] Sasaki Y, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3301–3 (Jpn)

PHARMACOLOGY

Mitomycin C effect on Robertsonian translocations. Frias S, et al. **Ann Genet (Paris)** 1988;31(3):162–6

Enhancement of chemical activation via radical–dependent mechanisms: an emerging concept in chemical–chemical interactions. Trush MA, et al. **Basic Life Sci** 1988;49:739–44

Effect of mitomycin C on prostacyclin synthesis by human endothelial cells. Duperray A, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4753–7

Free–radical formation by mitomycin C and its novel analogs in cardiac microsomes and the perfused rat heart. Politi PM, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):341–8

Increased sensitivity of quinone resistant cells to mitomycin C. Begleiter A, et al. **Cancer Lett** 1989 Jun;45(3):173–6

Oxygen and exposure kinetics as factors influencing the cytotoxicity of porfiromycin, a mitomycin C analogue, in Chinese hamster ovary cells. Marshall RS, et al. **Cancer Res** 1988 Oct 15;48(20):5655–9

In vitro evaluation of the new anticancer agents KT6149, MX–2, SM5887, menogaril, and liblomycin using cisplatin– or adriamycin–resistant human cancer cell lines. Ohe Y, et al. **Cancer Res** 1989 Aug 1;49(15):4098–102

DNA damage, cytotoxicity and free radical formation by mitomycin C in human cells. Dusre L, et al. **Chem Biol Interact** 1989;71(1):63–78

Liposomal sustained–release delivery systems for intravenous injection. III. Antitumor activity of lipophilic mitomycin C prodrug–bearing liposomes. Tokunaga Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3565–73

Mechanism of inhibition of erythrocyte glutathione reductase by mitomycin–C. Okuda J, et al. **Clin Chim Acta** 1989 Apr 28;181(1):37–46

Frequency and distribution of mitomycin C–induced structural chromosome aberrations in lymphocytes from non–Hodgkin lymphoma patients. Johansson B, et al. **Cytogenet Cell Genet** 1988;48(2):79–83

Monitoring the effect of an anti–cancer drug on RPMI 4788 cells by a membrane potential probe, dis–C3–(5). Iwagaki H, et al. **J Med** 1989;20(2):135–41

Tumor tissue is more sensitive to mitomycin C, carboquone, and aclacinomycin A than is adjacent normal tissue in vitro. Maehara Y, et al. **J Surg Oncol** 1989 Jan;40(1):4–7

Use of a simian virus 40–based shuttle vector to analyze enhanced mutagenesis in mitomycin C–treated monkey cells. Roilides E, et al. **Mol Cell Biol** 1988 Sep;8(9):3943–6

The identification of micronucleated chromosomes: a possible assay for aneuploidy. Thomson EJ, et al. **Mutagenesis** 1988 Sep;3(5):415–8

Use of the cytokinesis–block method for the analysis of micronuclei in V79 Chinese hamster lung cells: results with mitomycin C and cyclophosphamide. Krishna G, et al. **Mutat Res** 1989 Jan;222(1):63–9

G2 effects of DNA–repair inhibitors on chromatid–type aberrations in root–tip cells treated with maleic hydrazide and mitomycin C. Mateos S, et al. **Mutat Res** 1989 Jun; 226(2):115–20

Mitomycin C–induced postmitotic fibroblasts retain the capacity to repair pyrimidine photodimers formed after UV–irradiation. Niggli HJ, et al. **Mutat Res** 1989 Jul; 219(4):231–40

Are SCE frequencies indicative of adaptive response of plant cells? Schubert I, et al. **Mutat Res** 1989 Apr;211(2):301–6

The basal and the mutagen–induced levels of ADP–ribosyl transferase activity are not modified in Fanconi's anemia cells. Scovassi AI, et al. **Mutat Res** 1989 Jan–Feb; 225(1–2):65–9

Changes in the template activity of chromatin isolated from sarcoma–180 ascites cells treated with mitomycin C and gamma irradiation in vivo. Karuri A, et al. **Neoplasma** 1989; 36(3):321–6

Weigle–reactivation in a cyanobacterium (Synechococcus PCC7934) is induced by UV but not by mitomycin–C or nalidixic acid. Lanham PG, et al. **Photochem Photobiol** 1988 Oct;48(4):473–5

Micronucleus induction in mouse and rat fetuses treated transplacentally during histogenesis with mitomycin C and 7,12–dimethylbenz(a)anthracene. Müller L. **Teratogenesis Carcinog Mutagen** 1988;8(5):303–13

Activity of agricultural chemicals to modify mitomycin C induced growth inhibition of Bacillus subtilis in the rec assay. Yamamoto M, et al. **Tohoku J Exp Med** 1988 Aug; 155(4):385–6

[Synergism of bromodeoxyuridine and mitomycin C in the production of chromosomal aberrations in Fanconi's anemia] Frías S, et al. **Rev Invest Clin** 1989 Jan–Mar; 41(1):31–5 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Targeting chemotherapy for intrahepatic periductal lymphatic invasion by mitomycin C adsorbed to activated charcoal in hepatic hilar bile duct cancer. Koyama K, et al. **Am J Surg** 1989 Jul;158(1):8–13

Relationship between the antioxidant enzyme DT–diaphorase and tumor response to mitomycin C treatment. Pritsos CA, et al. **Basic Life Sci** 1988;49:713–6

Mitomycin C adjuvant chemotherapy after Wertheim's hysterectomy for stage IB cervical cancer. Sivanesaratnam V, et al. **Cancer** 1989 Aug 15;64(4):798–800

Mitomycin C treatment of advanced, hormone–resistant prostatic carcinoma: a phase II study. Veronesi A, et al. **Cancer Chemother Pharmacol** 1989;23(2):115–6

Difficulties in evaluating urinary specimens after local mitomycin therapy of bladder cancer. Koshikawa T, et al. **Diagn Cytopathol** 1989;5(2):117–21

Effect of artificial electron acceptors on the cytotoxicity of mitomycin C and doxorubicin in human lung tumor cells. Keizer HG, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1113–8

Intraoperative, intraperitoneal chemotherapy in advanced gynecological malignancies. A report on the acceptability of a new therapeutic regimen. Werner A, et al. **Eur J Gynaecol Oncol** 1989;10(1):13–9

Randomized clinical trial of mitomycin C as an adjunct to radiotherapy in head and neck cancer. Weissberg JB, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):3–9

Analysis of electrophoretic mobility histograms of mouse splenocytes and thymocytes during tumor growth and after combined chemotherapy and immunotherapy. Iwaguchi T, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):157–66

Mitomycin for treatment of brain parenchymal disease [letter] Hug V, et al. **J Clin Oncol** 1988 Nov;6(11):1787

The influence of antineoplastic chemotherapy on antipyrine metabolism in man. Wissel PS, et al. **J Clin Pharmacol** 1989 Mar;29(3):267–9

Definitive irradiation and chemotherapy for radiosensitization in management of anal carcinoma: interim report on Radiation Therapy Oncology Group study no. 8314. Sischy B, et al. **J Natl Cancer Inst** 1989 Jun 7; 81(11):850–6

Intravesical mitomycin C instillation as a prophylactic treatment of superficial bladder tumor. Kim HH, et al. **J Urol** 1989 Jun;141(6):1337–9; discussion 1339–40

Metaphylactic effect of mitomycin C with and without hyaluronidase after transurethral resection of bladder cancer: randomized trial. Maier U, et al. **J Urol** 1989 Mar; 141(3):529–30

Combined therapy of xenografts of human pancreatic carcinomas with rTNF–alpha and mitomycin C. Klapdor R, et al. **Onkologie** 1989 Jun;12(3):143–7

Postoperative instillation of mitomycin C in the treatment of recurrent pterygium. Hayasaka S, et al. **Ophthalmic Surg** 1989 Aug;20(8):580–3

Mitomycin eye drops as treatment for pterygium. Singh G, et al. **Ophthalmology** 1988 Jun;95(6):813–21

Intravesical mitomycin C and superficial bladder tumors. Biserte J, et al. **Prog Clin Biol Res** 1989;303:411–5 (0 ref.)

BCG–(RIVM) versus mitomycin intravesical therapy in patients with superficial bladder cancer. EORTC GU Group and the Dutch South–East Collaborative Group. Debruyne FM, et al. **Prog Clin Biol Res** 1989;303:435–46

The role of embolization/chemoembolization in the treatment of renal cell carcinoma. Kato T, et al. **Prog Clin Biol Res** 1989;303:697–705 (27 ref.)

Mitomycin–C and BCG in intravesical chemotherapy and immunotherapy of superficial bladder cancer. Finnbladder Research Group. Rintala E, et al. **Prog Clin Biol Res** 1989; 310:271–4

BCG–RIVM versus BCG–Tice versus mitomycin–C in superficial bladder cancer. Rationale and design of the trial of the Southeast Co–operative Urological Group, The Netherlands. van der Meijden PM, et al. **Prog Clin Biol Res** 1989;310:285–98

Preclinical studies of porfiromycin as an adjunct to radiotherapy. Rockwell S, et al. **Radiat Res** 1988 Oct; 116(1):100–13

New strategy for treatment of carcinoma of the hilar bile duct. Koyama K, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):523–30

Effects of donor splenocytes treated with mitomycin C on rat hepatic, cardiac, and intestinal allografts. Bollinger RB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):213–4

Study of intravesical mitomycin C in patients with multiple prior occurrences of superficial bladder cancer. Schwarzman MI, et al. **Urology** 1988 Oct;32(4):335–8

[Intravesical mitomycin for superficial tumors of the bladder: difficulties of cystoscopic monitoring] Fourcade RO, et al. **Ann Urol (Paris)** 1988;22(6):404–6 (Eng. Abstr.) **(Fre)**

[Intraoperative chemotherapy against peritoneal dissemination of gastric cancer with intraperitoneal activated carbon particles adsorbing mitomycin C] Hagiwara A, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):187–92 (Eng. Abstr.) **(Jpn)**

[Clinical study of controlled–release preparation of mitomycin C in the treatment of inoperable cancer patients] Hanyu F, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3087–93 (Eng. Abstr.) **(Jpn)**

[Comparative study of tegafur (p.o.) and mitomycin C (MMC) plus tegafur in cases of unresectable gastric cancer] Kawaura Y, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3179–84 (Eng. Abstr.) **(Jpn)**

[Potentiation of the therapeutic effect of chemotherapy and hyperthermia on experimental tumor and reduction of immunotoxicity of mitomycin C by juzen–taiho–toh, a Chinese herbal medicine] Komiyama K, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):251–7 (Eng. Abstr.) **(Jpn)**

[Anticancer activities of a new mitomycin derivative KW 2149, against human tumors xenografted into nude mice] Nishiyama M, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3133–7 (Eng. Abstr.) **(Jpn)**

[Comparative study on the anticancer activities of KW2149 and mitomycin C against human tumor xenografts using subrenal capsule assay] Takagami S, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2189–93 (Eng. Abstr.) **(Jpn)**

[Effect of mitomycin given in massive dose intraoperatively in cases of gastric cancer as assessed in terms of postoperative serum LDH isoenzyme patterns] Asaki S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1503–11 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma surviving more than five years by chemoembolization with mitomycin C microcapsules] Nakamura J, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2630–5 (Eng. Abstr.) **(Jpn)**

[The drug sensitivity of human gastric cancer implanted into the subcutis and stomach wall of nude mice] Yamashita T. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):611–6 (Eng. Abstr.) **(Jpn)**

[An experimental attempt to potentiate therapeutic effects of combined use of pulsing magnetic fields and antitumor agents] Omote Y. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1155–66 (Eng. Abstr.) **(Jpn)**

[Systemic adjuvant therapy in patients with operable breast cancer] Tashiro H, et al. **Rinsho Hoshasen** 1989 Apr; 34(4):443–7 (Eng. Abstr.) **(Jpn)**

[Preliminary results of a multicenter study with mitomycin C in superficial bladder tumors (Ta, T1)] Allona Moncada A, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):424–9 (Eng. Abstr.) **(Spa)**

TOXICITY

Mitomycin C toxicity and pharmacokinetics in mice given sulfur nucleophiles. Dorr RT, et al. **Anticancer Res** 1988 Jul–Aug;8(4):733–7

Myeloprotective effect of diethyldithiocarbamate treatment following 1,3–bis(2–chloroethyl)–1–nitrosourea, adriamycin, or mitomycin C in mice. Schmalbach TK, et al. **Cancer Res** 1989 May 15;49(10):2574–7

Absence of mutagenic interaction between microwaves and mitomycin C in mammalian cells. Meltz ML, et al. **Environ Mol Mutagen** 1989;13(4):294–303

Cardiac, renal, and pulmonary toxicity of several mitomycin derivatives in rats. Bregman CL, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):46–64

Reversible inhibition of mammalian tubulin assembly in vitro and effects in Saccharomyces cerevisiae D61.M by mitomycin C. Albertini S, et al. **Mutagenesis** 1989 Jan; 4(1):39–44

Repair analysis of mitomycin C–induced DNA crosslinking in ribosomal RNA genes in lymphoblastoid cells from Fanconi's anemia patients. Matsumoto A, et al. **Mutat Res** 1989 May;217(3):185–92

Chromosomal hypersensitivity in mutant MCN–151 mouse cells exposed to mitomycin C. Rosselli F, et al. **Mutat Res** 1989 Mar;225(3):115–9

Enhancing effect of tetrandrine on sister–chromatid exchanges induced by mitomycin C and cigarette–smoke condensate in mammalian cells. Xing SG, et al. **Mutat Res** 1989 Jun;226(2):99–102

Mitomycin–C–induced sister–chromatid exchanges and cell–cycle kinetics in lymphocytes from patients with Klinefelter syndrome. Yamagata Z, et al. **Mutat Res** 1989 Jun;212(2):263–8

Preclinical toxicity study of mitomycin C infused into the internal carotid artery of beagle dogs. Kanter PM, et al. **Sel Cancer Ther** 1989;5(1):23–31

[Mechanisms of the formation of micronuclei in human lymphocyte cultures exposed to mitomycin C] Shinkawa K, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):628–33 (Eng. Abstr.) **(Jpn)**

[Cytotoxicity of mitomycin C in rabbit eyes] Ishimaru H. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):54–64 (Eng. Abstr.) **(Jpn)**

[Methods used for evaluating mutagenic and genotoxic properties of chemical compounds. I. The micronucleus test in vivo (an abridged version)] Przybojewska B. **Med Pr** 1988;39(5):365–72 (Eng. Abstr.) **(Pol)**

[Mitomycin C induced structural changes in heterochromatic regions of human chromosomes 1, 9, 16 and Y] Malygina NA, et al. **Tsitologiia** 1988 Nov;30(11):1350–4 (Eng. Abstr.) **(Rus)**

MITOSIS

The role of arterial endothelial cell mitosis in macromolecular permeability. Chien S, et al. **Adv Exp Med Biol** 1988; 242:59–73

An electron microscopic study of mitosis in mouse duodenal crypt cells confirms that the prophasic condensation of chromatin begins during the DNA–synthesizing (S) stage of the cycle. el–Alfy M, et al. **Am J Anat** 1989 Sep; 186(1):69–84

Mitotic Langerhans cells [letter] Felten PC, et al. **Am J Dermatopathol** 1987 Apr;9(2):182–3

Mitotic activity in uterine leiomyomas during the menstrual cycle. Kawaguchi K, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):637–41

Mitogenesis by serum and PDGF is independent of PI degradation and PKC in VSMC. Kihara M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C886–92

Muscle tumor mitoses [letter] Tiltman AJ. **Am J Surg Pathol** 1988 Dec;12(12):967–8

Determination of mitoses in the human fetal pancreas—a contribution on islet cell development. Hahn von Dorsche

H, et al. **Anat Anz** 1988;167(3):239–41

Stereological study on the mode of optic cup expansion and the accumulation of mitoses in the early stages of chick embryo development. Calvente R, et al. **Anat Rec** 1988 Dec;222(4):401–7

Microtubule dynamics and kinetochore function in mitosis. Mitchison TJ. **Annu Rev Cell Biol** 1988;4:527–49 (67 ref.)

Reproducibility of mitotic counts and identification of mitotic figures in malignant glial tumors. Montironi R, et al. **Appl Pathol** 1988;6(4):258–65

The Ki–67 antigen in primary human melanomas—its relationship to mitotic rate and tumor thickness and its stability. Ostmeier H, et al. **Arch Dermatol Res** 1989; 281(3):173–7

Transendothelial transport of low density lipoprotein in association with cell mitosis in rat aorta. Lin SJ, et al. **Arterioscler Thromb** 1989 Mar–Apr;9(2):230–6

Enhanced macromolecular permeability of aortic endothelial cells in association with mitosis [published erratum appears in Atherosclerosis 1989 Jul;78(1):87] Lin SJ, et al. **Atherosclerosis** 1988 Oct;73(2–3):223–32

[Ca2+]i independent mitogenesis in cultured human fibroblasts revealed by single cell microfluorimetry. Praeger FC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):862–70

Requirement and role of arachidonic acid in the differentiation of pre–adipose cells. Gaillard D, et al. **Biochem J** 1989 Jan 15;257(2):389–97

Mitogenic signalling in murine 3T3 cells: the cyclic AMP pathway. Rozengurt E, et al. **Biochem Soc Trans** 1989 Aug; 17(4):629–32 (14 ref.)

Characterisation of the CDC7 gene product of Saccharomyces cerevisiae as a protein kinase needed for the initiation of mitotic DNA synthesis. Bahman M, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):335–43

Mitosis at St Andrews: pulling the threads together. Brooks RF. **Bioessays** 1989 Jul;11(1):35–8 (12 ref.)

Mitotic chromosome structure. Earnshaw WC. **Bioessays** 1988 Nov;9(5):147–50 (25 ref.)

Nucleologenesis: use of non–isotopic in situ hybridization and immunocytochemistry to compare the localization of rDNA and nucleolar proteins during mitosis. Jiménez–García LF, et al. **Biol Cell** 1989;65(3):239–46

Immunoelectron microscopic localization of the nucleolar protein B–36 (fibrillarin) during the cell cycle of Physarum polycephalum. Pierron G, et al. **Biol Cell** 1989;65(2):119–26

Mitotic orientation in three dimensions determined from multiple projections. Bjerknes M, et al. **Biophys J** 1989 May;55(5):1011–5

The plasma cell labeling index: a valuable tool in primary systemic amyloidosis. Gertz MA, et al. **Blood** 1989 Aug 15;74(3):1108–11

Mouse molar cell proliferation kinetics in vivo and in vitro. Ahmad N, et al. **Bull Assoc Anat (Nancy)** 1988 Mar; 72(216):3–13

Involvement of a type 1 protein phosphatase encoded by bws1+ in fission yeast mitotic control. Booher R, et al. **Cell** 1989 Jun 16;57(6):1009–16

Unraveling of mitotic control mechanisms. Dunphy WG, et al. **Cell** 1988 Dec 23;55(6):925–8 (0 ref.)

Fission yeast p13 blocks mitotic activation and tyrosine dephosphorylation of the Xenopus cdc2 protein kinase. Dunphy WG, et al. **Cell** 1989 Jul 14;58(1):181–91

Purification of MPF from starfish: identification as the H1 histone kinase p34cdc2 and a possible mechanism for its periodic activation. Labbe JC, et al. **Cell** 1989 Apr 21; 57(2):253–63

Translation of cyclin mRNA is necessary for extracts of activated xenopus eggs to enter mitosis. Minshull J, et al. **Cell** 1989 Mar 24;56(6):947–56

Regulation of p34cdc2 protein kinase during mitosis. Moreno S, et al. **Cell** 1989 Jul 28;58(2):361–72

Mitosis–specific phosphorylation of p60c–src by p34cdc2–associated protein kinase. Morgan DO, et al. **Cell** 1989 Jun 2;57(5):775–86

Reversible tyrosine phosphorylation of cdc2: dephosphorylation accompanies activation during entry into mitosis. Morla AO, et al. **Cell** 1989 Jul 14;58(1):193–203

Conservation of mitotic controls in fission and budding yeasts. Russell P, et al. **Cell** 1989 Apr 21;57(2):295–303

Purified maturation promoting factor phosphorylates pp60c–src at the sites phosphorylated during fibroblast mitosis. Shenoy S, et al. **Cell** 1989 Jun 2;57(5):763–74

Fluctuation in the intracellular concentration of Na+ and Cl– but not of K+ or Mg2+ at mitosis of the first cell cycle in fertilized sea urchin eggs. Cameron IL, et al. **Cell Biol Int Rep** 1988 Nov;12(11):951–8

Nuclear granules recognized by some monoclonal antibodies against intermediate filament protein locate on chromosomes during mitosis. Kamei H. **Cell Biol Int Rep** 1989 Mar;13(3):291–300

225–Kilodalton phosphoprotein associated with mitotic centrosomes in sea urchin eggs. Kuriyama R. **Cell Motil Cytoskeleton** 1989;12(2):90–103

Three–dimensional localization and redistribution of F–actin in higher plant mitosis and cell plate formation. Molè–Bajer J, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):217–28

Mitosis–specific monoclonal antibodies block cleavage in amphibian embryos. Davis FM, et al. **Cell Struct Funct** 1989 Apr;14(2):271–7

Intestinal crypt proliferation. II. Computer modelling of mitotic index data provides further evidence for lateral and vertical cell migration in the absence of mitotic activity. Loeffler M, et al. **Cell Tissue Kinet** 1988 Jul;21(4):247–58

The cell cycle time in intestinal crypts by simulation of FLM experiments. Meinzer HP, et al. **Cell Tissue Kinet** 1988 Nov; 21(6):429–36

Scoring mitotic activity in longitudinal sections of crypts of the small intestine. Potten CS, et al. **Cell Tissue Kinet** 1988 Jul;21(4):231–46

Proportions of mitotic and apoptotic cells in a range of untreated experimental tumours. Sarraf CE, et al. **Cell Tissue Kinet** 1988 Jan;21(1):45–9

Tension, microtubule rearrangements, and the proper distribution of chromosomes in mitosis. Ault JG, et al. **Chromosoma** 1989 Jun;98(1):33–9

Large–scale chromatin structural domains within mitotic and interphase chromosomes in vivo and in vitro. Belmont AS, et al. **Chromosoma** 1989 Aug;98(2):129–43

Centromere proteins. I. Mitosis specific centromere antigen recognized by anti–centromere autoantibodies. Hadlaczky G, et al. **Chromosoma** 1989 Jan;97(4):282–8

Indirect mitotic nondisjunction in Vicia faba and Chinese hamster cells. Rizzoni M, et al. **Chromosoma** 1989 Jan; 97(4):339–46

Ultradian mitotic rhythms in culture of human sarcomatous bone cells originating from the patient before and after chemotherapy. Petrovic A, et al. **Chronobiol Int** 1989; 6(2):173–83

Mitotic activity in cerebrospinal fluid cells. de Reuck J, et al. **Clin Neurol Neurosurg** 1988;90(2):117–9

A direct selection procedure for isolating yeast mutants with an impaired segregation of artificial minichromosomes. Larionov VL, et al. **Curr Genet** 1989 Jan;15(1):17–25

A reexamination of the role of the RAD52 gene in spontaneous mitotic recombination. Malone RE, et al. **Curr Genet** 1988 Sep;14(3):211–23

The effect of hypophysectomy on the mitotic activity of the regenerating adrenal cortex in rats. Nowakowska–Jankiewicz B, et al. **Cytobios** 1988; 56(226–227):145–8

Mitosis and protein synthesis. 2. Synthesis of protein and RNA in synchronous HeLa S–3 cell populations entering and leaving M–phase of the cell cycle. Wheatley DN, et al. **Cytobios** 1988;55(222–223):191–204

Flow cytometric detection of mitotic cells using the bromodeoxyuridine/DNA technique in combination with 90 degrees and forward scatter measurements. Nüsse M, et al. **Cytometry** 1989 May;10(3):312–9

A requirement for protein phosphorylation in regulating the meiotic and mitotic cell cycles in echinoderms. Néant I, et al. **Dev Biol** 1989 Apr;132(2):304–14

The control of DNA replication in a cell–free extract that recapitulates a basic cell cycle in vitro. Hutchison CJ, et al. **Development** 1988 Jul;103(3):553–66

Cycling cytoplasmic factors that promote mitosis in the cultured 2–cell mouse embryo. Pratt HP, et al. **Development** 1988 Sep;104(1):115–20

Involvement of cdc13+ in mitotic control in Schizosaccharomyces pombe: possible interaction of the gene product with microtubules. Booher R, et al. **EMBO J** 1988 Aug;7(8):2321–7

HER2 cytoplasmic domain generates normal mitogenic and transforming signals in a chimeric receptor. Lee J, et al. **EMBO J** 1989 Jan;8(1):167–73

Calmodulin is required for cell–cycle progression during G1 and mitosis. Rasmussen CD, et al. **EMBO J** 1989 Jan; 8(1):73–82

Induction of chromosome aberrations and mitotic arrest by cytomegalovirus in human cells. AbuBakar S, et al. **Environ Mol Mutagen** 1988;12(4):409–20

Intracellular transport in interphase and mitotic yeast cells. Nevalainen LT, et al. **Eur J Biochem** 1988 Dec 1; 178(1):39–46 (168 ref.)

The behavior of centrosomes in multinucleate cells formed after colcemid treatment. Dey R, et al. **Eur J Cell Biol** 1989 Apr;48(2):227–38

Organization of the vimentin system and its spatial relationship to the microtubule complex during the division of mammalian cells growing attached and in suspension. Paulin–Levasseur M, et al. **Eur J Cell Biol** 1989 Jun; 49(1):189–95

Immunoelectron microscopic study of nucleolar DNA during mitosis in Ehrlich tumor cells. Thiry M, et al. **Eur J Cell Biol** 1988 Dec;47(2):346–57

Prognostic significance of peripheral blood S + G2/M phase size in adult acute non–lymphoblastic leukaemia. Guerci A, et al. **Eur J Haematol** 1989 Jul;43(1):15–21

Chromatin–bound histone 1 kinase activity in synchronized HeLa S3 cells. Müller K, et al. **Exp Cell Res** 1989 Jan; 180(1):30–5

Regulation of mitosis onset and thymidine kinase activity during the cell cycle of Physarum polycephalum plasmodia: effect of hydroxyurea. Wright M, et al. **Exp Cell Res** 1988 Nov;179(1):263–72

Threonine phosphorylation is associated with mitosis in HeLa cells. Zhao JY, et al. **FEBS Lett** 1989 Jun 5;249(2):389–95

Mitotic activity in the epidermal cells of regenerating hind limbs of Xenopus laevis larvae after amputation at different levels. An autoradiographic study. Abdel–Karim AE, et al. **Folia Morphol (Praha)** 1988;36(4):357–64

A gonial mitosis–stimulating factor in cerebral ganglia and hemolymph of the marine mussel Mytilus edulis L. Mathieu M, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):257–63

cdc2 and the regulation of mitosis: six interacting mcs genes. Molz L, et al. **Genetics** 1989 Aug;122(4):773–82

Visualization of kinetochores in mammalian meiotic preparations and observations of argentophilic differences between mitotic and meiotic kinetochores. Sudman PD, et al. **Genome** 1989 Jun;32(3):380–2

Chromosome segregation from cell hybrids. VI. Centromeres of both parental chromosome sets stain with antikinetochore antibody. Zelesco PA, et al. **Genome** 1989 Apr;32(2):271–4

Differential diagnosis between T–cell lymphoma and Hodgkin's disease: the value of mitotic counts and pericapsular infiltration. Nguyen D, et al. **Hematol Pathol** 1989;3(2):63–71

Electron microscopic and time lapse studies of mitosis in cultured rat hepatocytes. Sattler CA, et al. **Hepatology** 1988 Nov–Dec;8(6):1540–9

Mitotic phase distribution in oral epithelial hyperplasia and neoplasia. Ojo MA, et al. **Histopathology** 1988 Aug; 13(2):213–9

Differential associative behaviour of mitotic and meiotic acrocentric chromosomes. Dumont MC, et al. **Hum Genet** 1989 Apr;82(1):35–9

Cellular events during memory T–cell activation in vitro: the UCHL1 (180,000 MW) determinant is newly synthesized after mitosis. Akbar AN, et al. **Immunology** 1989 Feb;66(2):213–8

Sequence of centromere separation: effect of Hoechst 33258 in marker chromosome of mouse L cells. Sahay S, et al. **Indian J Exp Biol** 1988 Jun;26(6):403–6

A fraction of labelled mitoses study on adrenal chromaffin tissue in the newborn mouse and the effect of hydrocortisone. Monkhouse WS, et al. **J Anat** 1988 Apr; 157:105–9

Ultrastructural evidence for the mitotic division of neurons in the anterior horn of the fetal rabbit in the later stages of gestation. Sturrock RR. **J Anat** 1987 Dec;155:63–75

Lipid transport during mitosis. Alternative pathways for delivery of newly synthesized lipids to the cell surface. Kobayashi T, et al. **J Biol Chem** 1989 Apr 5; 264(10):5966–73

Phosphorylation of vimentin in mitotically selected cells. In vitro cyclic AMP–independent kinase and calcium–stimulated phosphatase activities. Evans RM. **J Cell Biol** 1989 Jan;108(1):67–78

Mitotic Golgi fragments in HeLa cells and their role in the reassembly pathway. Lucocq JM, et al. **J Cell Biol** 1989 Aug;109(2):463–74

Interconversion of Drosophila nuclear lamin isoforms during oogenesis, early embryogenesis, and upon entry of cultured cells into mitosis. Smith DE, et al. **J Cell Biol** 1989 Feb; 108(2):255–65

Intracellular elevations of free calcium induced by activation of histamine H1 receptors in interphase and mitotic HeLa cells: hormone signal transduction is altered during mitosis. Volpi M, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2533–9

cAMP–mediated growth inhibition of a B–lymphoid precursor cell line Reh is associated with an early transient delay in G2/M, followed by an accumulation of cells in G1. Blomhoff HK, et al. **J Cell Physiol** 1988 Dec; 137(3):583–7

The prometaphase configuration and chromosome order in early mitosis. Chaly N, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):325–35

Developmental and mitotic behaviour of two novel groups of nuclear envelope antigens of Drosophila melanogaster. Frasch M, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):247–63

Mitosis in Drosophila. Glover DM. **J Cell Sci** 1989 Feb;92 (Pt 2):137–46 (52 ref.)

Cloning and sequencing of the cyclin–related cdc13+ gene and a cytological study of its role in fission yeast mitosis. Hagan I, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):587–95

Mitotic control by metaphase–promoting factor and cdc proteins. Lohka MJ. **J Cell Sci** 1989 Feb;92 (Pt 2):131–5 (50 ref.)

Chance encounters and precision in mitosis [editorial] Nicklas RB. **J Cell Sci** 1988 Mar;89 (Pt 3):283–5

Partition of protein (mass) to sister cell pairs at mitosis: a re–evaluation. Sennerstam R. **J Cell Sci** 1988 Jun;90 (Pt 2):301–6

Cloning of a gene encoding an antigen associated with the centrosome in Drosophila. Whitfield WG, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):467–80

Ultraviolet microbeam irradiation of chromosomal spindle fibres shears microtubules and permits study of the new free ends in vivo. Wilson PJ, et al. **J Cell Sci** 1988 Dec; 91 (Pt 4):455–68

Mitotic cell division in the extraadrenal chromaffin system of various species. Mascorro JA, et al. **J Electron Microsc Tech** 1989 Aug;12(4):323–30

Age–related variation in circadian rhythms of mitosis in the adrenal cortex of the male rat. McNicol AM, et al. **J Endocrinol** 1989 Feb;120(2):307–10

DNA synthesis and mitotic division of cortical neurons in adult rats upon intrabrain transplantation of embryonic nervous tissue. Polezhaev LV, et al. **J Hirnforsch** 1988; 29(6):673–81

Acid giemsa technique for rapid identification of mitotic cells. Dooley WC, et al. **J Histochem Cytochem** 1989 Oct; 37(10):1553–6

Thy–1+ dendritic epidermal cells undergo mitosis in vivo. Miyauchi S, et al. **J Invest Dermatol** 1989 Sep;93(3):429–31

Mitogenic effect of axolemma-enriched fraction on cultured oligodendrocytes. Chen SJ, et al. **J Neurochem** 1989 Jan; 52(1):325-7

Roles for mitotic history in the generation and degeneration of hippocampal neuroarchitecture. Mattson MP, et al. **J Neurosci** 1989 Apr;9(4):1223-32

Cytosine arabinoside kills postmitotic neurons: evidence that deoxycytidine may have a role in neuronal survival that is independent of DNA synthesis. Wallace TL, et al. **J Neurosci** 1989 Jan;9(1):115-24

Differential staining of mitoses in tissue sections and cultured cells by a modified methenamine-silver method. Busch C, et al. **Lab Invest** 1988 Dec;59(6):876-8

Sequence of centromere separation of mitotic chromosomes during human cellular aging. Mukherjee AB, et al. **Mech Ageing Dev** 1988 Oct;45(1):59-64

Mitotic recombination is responsible for the loss of heterozygosity in cultured murine cell lines. Nelson FK, et al. **Mol Cell Biol** 1989 Mar;9(3):1284-8

Microtubule dynamics determine chromosome lagging and transport of acentric fragments. Bajer AS, et al. **Mutat Res** 1988 Oct;201(2):271-81

Saccharomyces cerevisiae mutants with enhanced induced mutation and altered mitotic gene conversion. Ivanov EL, et al. **Mutat Res** 1989 Aug;213(2):105-115

Centrosomes. Organizing cytoplasmic events [news] Kellogg DR. **Nature** 1989 Jul 13;340(6229):99-100

Cell division. Kinetochores on the move [news] Mitchison T, et al. **Nature** 1988 Nov 17;336(6196):200-1

Universal and essential role of MPF/cdc2+ [letter] Niwa O, et al. **Nature** 1988 Dec 1;336(6198):430

Energy supply of the mitotic cell cycle and the Na+/H+-antiport in ascites tumors. Kazmin SD, et al. **Neoplasma** 1989;36(2):139-47

Epidermal growth factor receptor status and S-phase fractions in gastric carcinoma. Yonemura Y, et al. **Oncology** 1989;46(3):158-61

Atypical mitoses in dysplasias of the Barrett's mucosa. Rubio CA, et al. **Pathol Res Pract** 1988 Dec;184(1):1-5

Direct preparations from chorionic villi--relationship between villous morphology and mitotic index. Romagnano A, et al. **Prenat Diagn** 1989 Jun;9(6):385-91

Phosphorylation and disassembly of intermediate filaments in mitotic cells [published erratum appears in Proc Natl Acad Sci U S A 1989 May;86(9):3214] Chou YH, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1885-9

Mitotic recombination of chromosome 17 in astrocytomas. James CD, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2858-62

Mitosis-specific monoclonal antibody MPM-2 inhibits Xenopus oocyte maturation and depletes maturation-promoting activity. Kuang J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4982-6

Oocyte maturation in amphibians and the regulation of meiosis and mitosis. Maller J. **Prog Clin Biol Res** 1988; 267:259-74 (44 ref.)

Analysis of structural and numerical chromosomal aberrations at the first and second mitosis after X irradiation of two-cell mouse embryos. Weissenborn U, et al. **Radiat Res** 1989 Feb;117(2):214-20

The mitotic spindle. McIntosh JR, et al. **Sci Am** 1989 Oct; 261(4):48-56

Use of modified Fraser's stain in Promoting Activity Test (PAT). Borràs M. **Stain Technol** 1988 Sep;63(5):307-10

A method for increasing the number of mitoses available for cytogenetic analysis in rainbow trout. Lozano R, et al. **Stain Technol** 1988 Nov;63(6):335-8

Mitosis comes apart. Blow J. **Trends Genet** 1989 Jun; 5(6):166-7 (0 ref.)

Mitotic recombination in yeast. Roeder GS, et al. **Trends Genet** 1988 Sep;4(9):263-7 (31 ref.)

The effect of bilateral amygdaloid nucleus lesions on rat small bowel crypt cell kinetics. Callaghan BD. **Virchows Arch [B]** 1989;57(4):231-6

Evidence of an acquired increase in mitogenesis in streptozotocin-diabetic rats, apparently relating to some tissue factor. Druvefors P, et al. **Virchows Arch [B]** 1989; 56(5):293-8

Genetic control of chromosome stability in the yeast Saccharomyces cerevisiae. Kouprina NYu, et al. **Yeast** 1988 Dec;4(4):257-69

[Modulation, by transforming growth factor beta (TGF beta), of the mitogenic effect of fibroblast growth factor (FGF) on rat oligodendrocytes in culture] Besnard F, et al. **C R Acad Sci [III]** 1989;308(10):287-92 (Eng. Abstr.) **(Fre)**

[Immunofluorescence and immunocytochemical stain methods for simultaneous cytogenetic and phenotypic characterization of mitotic cells] Köller U, et al. **Wien Klin Wochenschr** 1989 Feb 3;101(3):111-7 (Eng. Abstr.) **(Ger)**

[Autoregressive sequences and morphometric distributions] Mitolo V, et al. **Boll Soc Ital Biol Sper** 1988 May; 64(5):403-10 (Eng. Abstr.) **(Ita)**

[Distribution of nuclear DNase in psoriasis vulgaris and its changes after several therapies--a study of immunohistochemistry] Usuba S, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):789-95 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of mitotically dividing cells with signs of neurons in the rat brain] Kleshchinov VN. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):41-4 (Eng. Abstr.) **(Rus)**

[Mitotic activity of rat bone marrow cells during injury] Red'kin IuV, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):353-5 (Eng. Abstr.) **(Rus)**

[Morphometric study of nucleolus-organizing regions of chromosomes from swine embryo kidney cells during Go-, G2-period and mitosis] Zatsepina OV, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):1015-25 (Eng. Abstr.) **(Rus)**

[Duration of the mitotic cycle at the period of synchronous cleavage division (t0) in the starfish Asterina pectinifera (Müller et Troschel)] Davydov PV, et al. **Ontogenez** 1989 Jan-Feb;20(1):58-62 (Eng. Abstr.) **(Rus)**

[Mitotic activity of different variants of heterophase homokaryons] Onishchenko GE, et al. **Tsitol Genet** 1988 Sep-Oct;22(5):29-33 (Eng. Abstr.) **(Rus)**

[Endomitosis in pigmented neoplasms of human skin] Savchenko IuIu. **Tsitol Genet** 1988 Nov-Dec;22(6):20-4 (Eng. Abstr.) **(Rus)**

[Disordered mitoses and extranuclear chromatin in the cells of normally developing embryos of Brachydanio rerio] Doronin IuK. **Tsitologiia** 1988 May;30(5):548-53 (Eng. Abstr.) **(Rus)**

[Ultrastructure of the mitotic chromosomes in pig embryonic kidney cells during their reversible artificial decondensation in vivo] Kireev II, et al. **Tsitologiia** 1988 Aug;30(8):926-32 (Eng. Abstr.) **(Rus)**

[Ultrastructure of the mitotic nuclei in Leishmania mexicana ssp. Tridimensional reconstruction of the mitotic spindle and dense plaques] Ureña F. **Rev Biol Trop** 1988 Jun; 36(1):129-37 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Changes in the mitogenic activity of platelet-derived growth factor(s) in patients with myeloproliferative disease. Caenazzo A, et al. **Acta Haematol (Basel)** 1989;81(3):131-5

Prolactin as a mammalian mitogen and tumor promoter. Buckley AR, et al. **Adv Enzyme Regul** 1988;27:371-91

Beneficial effect of 6-mercaptopurine on the mitotic index of trisomy 21 lymphocytes. Implications for future research. Peeters MA, et al. **Ann Genet** 1989;32(1):21-5

The antiproliferative effects of staurosporine are not exclusively mediated by inhibition of protein kinase C. Smith CD, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1250-6

Relationships between tumor responsiveness, vincristine pharmacokinetics and arrest of mitosis in human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3995-4000

Consensual pupillary responses to mydriatic and miotic drugs. Theofilopoulos N, et al. **Br J Clin Pharmacol** 1988 Dec; 26(6):697-702

Depolarization and insulin-like growth factor-I (IGF-I) differentially regulate the mitotic cycle in cultured rat sympathetic neuroblasts. DiCicco-Bloom E, et al. **Brain Res** 1989 Jul 10;491(2):403-6

Taxol toxicity. Epithelial necrosis in the gastrointestinal tract associated with polymerized microtubule accumulation and mitotic arrest. Hruban RH, et al. **Cancer** 1989 May 15; 63(10):1944-50

Suppression of a a carcinogen (1,2-dimethylhydrazine dihydrochloride)-induced increase in mitotic activity in the colonic crypts of rats by addition of dietary cellulose. Cameron IL, et al. **Cancer Res** 1989 Feb 15;49(4):991-5

Tubulin-dependent hydrolysis of guanosine triphosphate as a screening test to identify new antitubulin compounds with potential as antimitotic agents: application to carbamates of aromatic amines. Chi DM, et al. **Cancer Res** 1989 Mar 15;49(6):1344-8

Novobiocin, nalidixic acid, etoposide, and 4'-(9-acridinylamino)methanesulfon-m-anisidide effects on G2 and mitotic Chinese hamster ovary cell progression. Rowley R, et al. **Cancer Res** 1989 Sep 1;49(17):4752-7

Microinjection of antibodies to a 62 kd mitotic apparatus protein arrests mitosis in dividing sea urchin embryos. Dinsmore JH, et al. **Cell** 1989 Apr 7;57(1):127-34

The cdc2 kinase is a nuclear protein that is essential for mitosis in mammalian cells. Riabowol K, et al. **Cell** 1989 May 5;57(3):393-401

EGF induces biphasic S6 kinase activation: late phase is protein kinase C-dependent and contributes to mitogenicity. Suša M, et al. **Cell** 1989 Jun 2;57(5):817-24

Association of increased intracellular free Ca2+ by platelet-derived growth factor with mitogenesis but not with proteoglycan synthesis in chondrocytes--effect of suramin. Fukuo K, et al. **Cell Calcium** 1989 Jan;10(1):29-35

The labelling index is not always reliable. Discrepancies between the labelling index and the mitotic rate in the rat corneal epithelium after intraperitoneal and topical administration of tritiated thymidine and colcemid. Haaskjold E, et al. **Cell Tissue Kinet** 1988 Nov;21(6):389-94

Circadian rhythm of liver parameters (cellular structures, mitotic activity, glycogen and lipids in liver and serum) during three consecutive cycles in phenobarbital-treated rats. Kast A, et al. **Chronobiol Int** 1988;5(4):363-85

Circadian rhythm of the liver of male rats dosed with phenobarbital--I. Organ weight, cellular structures, glycogen contents and mitotic activity. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):161-73

Protein synthesis and mitosis. I. Influence of anti-tubulins on protein synthetic activity in synchronous M-phase and asynchronous populations of HeLa S-3 cells. Wheatley DN, et al. **Cytobios** 1988;55(220):41-50

Nifedipine decreases the mitotic activity of adrenocortical cells in early stage of adrenal regeneration. Zieleniewski J, et al. **Cytobios** 1989;57(230-231):185-8

Nuclear envelope breakdown and mitosis in sand dollar embryos is inhibited by microinjection of calcium buffers in a calcium-reversible fashion, and by antagonists of intracellular Ca2+ channels. Silver RB. **Dev Biol** 1989 Jan; 131(1):11-26

Effects of metal ions on cyprinid fish immune response: in vitro effects of Zn2+ and Mn2+ on the mitogenic response of carp pronephros lymphocytes. Ghanmi Z, et al. **Ecotoxicol Environ Safety** 1989 Apr;17(2):183-9

Inhibitory effect of melatonin on ear epidermis cell proliferation in mice. Rybicka I, et al. **Endokrynol Pol** 1988; 39(5):263-8

The effect of melatonin and N-acetylserotonin on mitotic activity of thyroid gland and adrenal cortex in the rat. Sewerynek E, et al. **Endokrynol Pol** 1988;39(5):269-75

Genotoxicity evaluation of the tricyclic antidepressants amitriptyline and imipramine using human lymphocyte cultures. Saxena R, et al. **Environ Mol Mutagen** 1988; 12(4):421-30

Effects of methylmercury on mitotic mouse glioma cells. Miura K, et al. **Environ Res** 1978 Dec;17(3):453-71

Inhibition of mitosis in PtK2 cells by CAPP1-calmodulin. Keith CH, et al. **Eur J Cell Biol** 1988 Oct;47(1):94-100

Fine structural studies of early mitotic stages in untreated and nocodazole-treated HeLa cells. Paweletz N, et al. **Eur J Cell Biol** 1988 Dec;47(2):334-45

PGE1-pretreatment abolishes increased mitotic activity induced by stress. Sinzinger H, et al. **Exp Pathol** 1988; 34(2):61-4

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr-Jun;1(2):73-80

Nuclear and cytoplasmic mitotic cycles continue in Drosophila embryos in which DNA synthesis is inhibited with aphidicolin. Raff JW, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2009-19

Intracellular free calcium and mitosis in mammalian cells: anaphase onset is calcium modulated, but is not triggered by a brief transient. Tombes RM, et al. **J Cell Biol** 1989 Aug;109(2):627-36

Chloral hydrate disrupts mitosis by increasing intracellular free calcium. Lee GM, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):603-612

Nitric oxide-generating vasodilators and 8-bromo-cyclic guanosine monophosphate inhibit mitogenesis and proliferation of cultured rat vascular smooth muscle cells. Garg UC, et al. **J Clin Invest** 1989 May;83(5):1774-7

Rapid proliferative response of rat thyroid gland to a single injection of TSH in vivo. Bybee A, et al. **J Endocrinol** 1989 Apr;121(1):27-30

Insulin-like growth factor (IGF)-II and insulin, but not IGF-I, are mitogenic for fetal rat adrenal cells in vitro. van Dijk JP, et al. **J Endocrinol** 1988 Dec;119(3):509-16

Interferon inhibition of bombesin-stimulated mitogenesis in Swiss 3T3 cells occurs without blocking c-fos and c-myc expression. Mehmet H, et al. **J Interferon Res** 1989 Apr; 9(2):205-13

Melatonin inhibits mitotic activity of adrenocortical cells in vivo and in organ culture. Sewerynek E, et al. **J Pineal Res** 1989;7(1):1-12

The presence of parvalbumin in a nonmuscle cell line attenuates progression through mitosis. Rasmussen CD, et al. **Mol Endocrinol** 1989 Mar;3(3):588-96

Suspect spindle poisons: analysis of c-mitotic effects in mouse bone marrow cells. Miller BM, et al. **Mutagenesis** 1989 May;4(3):208-15

Cytogenetic activities of tobacco particulate matter (TPM) derived from a low to middle tar British cigarette. Lafi A, et al. **Mutat Res** 1988 Oct;201(2):365-74

Analysis of sister-chromatid exchanges, cell kinetics and mitotic index in lymphocytes of smoking pesticide sprayers. Rupa DS, et al. **Mutat Res** 1989 Jun;223(2):253-8

2-Chlorobenzylidene malonitrile (CS) causes spindle disturbances in V79 Chinese hamster cells. Schmid E, et al. **Mutat Res** 1989 Jun;226(2):133-6

The action of carbaryl and its metabolite alpha-naphthol on mitosis in V79 Chinese hamster fibroblasts. Indications of the involvement of some cholinester in cell division. Söderpalm-Berndes C, et al. **Mutat Res** 1988 Oct; 201(2):349-63

Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae--an interlaboratory study. Whittaker SG, et al. **Mutat Res** 1989 Sep;224(1):31-78

Suppressing effect of cysteamine on the TSH-stimulated mitotic activity of the rat thyroid follicular cells in vivo. Zerek-Melen G, et al. **Neuropeptides** 1989 Apr;13(3):171-4

Modulation of mitogenic stimuli by angiogenin correlates with in vitro phosphatidylinositol bisphosphate synthesis. Heath WF Jr, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2718-22

Heterologous desensitization of bombesin-induced mitogenesis by prolonged exposure to vasopressin: a post-receptor signal transduction block. Millar JB, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3204-8

Mitotic arrest induced by fenvalerate in human lymphocyte cultures. Carbonell E, et al. **Toxicol Lett** 1989 Jul;48(1):45-8

An endogenous colon mitosis inhibitor reduces proliferation

of colon carcinoma cells (HT 29) in serum-restricted medium. Skraastad O, et al. **Virchows Arch [B]** 1989; 56(6):393–6

[Study of the cytostatic activity of a lactone fraction of Viscum album L.] Krzaczek T, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:97–104 (Eng. Abstr.) (Pol)

[Effect of tissue-specific proliferation inhibitors on the level of mitotic activity and cell adhesion in disordered innervation] Eletskii IuK, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):239–42 (Eng. Abstr.) (Rus)

[Effect of inhibitors of polyamine biosynthesis and of exogenous polyamines on the mitogenic effect of epidermal growth factor in a hepatocyte culture] Osipova LA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):339–42 (Eng. Abstr.) (Rus)

[Stimulating effect of biologically active substances from the spleen on the functional activity of hepatocytes] Korpachev VV, et al. **Fiziol Zh** 1989 May–Jun;35(3):80–3 (Eng. Abstr.) (Rus)

[Cytotoxicity of the pesticide romucide] Malysheva MV. **Gig Sanit** 1989 Jan;(1):73–4 (Rus)

[The effect of caffeine on the duration of the mitotic phase cycle in CHO–K1 Chinese hamster cells, irradiated with x-rays] Kirillova TV, et al. **Tsitologiia** 1989 Apr; 31(4):476–83 (Eng. Abstr.) (Rus)

[Ultrastructural disorders of the mitotic apparatus during cytochalasin B action] Petrashchuk OM, et al. **Tsitologiia** 1988 Dec;30(12):1418–25 (Eng. Abstr.) (Rus)

[Differential decondensation of mitotic chromosomes during the hypotonic treatment of cells as a possible cause of G-banding] Zatsepina OV, et al. **Tsitologiia** 1988 Oct; 30(10):1172–9 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Mitotic reversion in prophase of PTK1 cells induced by argon laser microirradiation. Jiang RL, et al. **Cell Biophys** 1989 Jun;14(3):271–82

In vitro holding and PLD repair. I. On the contribution of mitotic non-quiescence in plateau-phase Chinese hamster V79 cells. Stevenson AF, et al. **Radiat Environ Biophys** 1989;28(1):27–38

Chinese hamster ovary cell mitosis and its response to ionizing radiation: a morphological analysis of the living cell. Carlson JG. **Radiat Res** 1989 May;118(2):311–23

Comparison of recovery from potential mitotic abnormality in mitotically quiescent lens cells after X, neutron, and 56Fe irradiations. Riley EF, et al. **Radiat Res** 1989 Aug; 119(2):232–45

Biological dosimetry: radiation-induced mitotic delay can lead to an underestimate of the part of the body exposed after non-uniform irradiation. Poncelet E, et al. **Strahlenther Onkol** 1988 Sep;164(9):542–3

[Cytogenetic and endocrinologic changes in experimental animals exposed to high-frequency electromagnetic fields] Nikitina VN, et al. **Gig Sanit** 1989 May;(5):85–6 (Rus)

[Effect of taurine on cytogenetic disorders in murine cornea caused by 9GeV proton irradiation] Vorozhtsova SV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):86–9 (Rus)

[The distribution of chromosome aberrations after gamma and neutron irradiation among cells in various stages of the mitotic cycle in a human lymphocyte culture] Demina EA. **Radiobiologiia** 1989 Jul–Aug;29(4):485–91 (Eng. Abstr.) (Rus)

[Changes in the mitotic cycle of Chinese hamster cells and the repair of radiation damage in cells following the action of ionizing radiation] Kirillova TV, et al. **Tsitologiia** 1988 Dec;30(12):1432–41 (Eng. Abstr.) (Rus)

MITOTANE

METABOLISM

In vitro macromolecular binding of 2-(2-chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane (o,p'-DDD) in the mouse lung and liver. Lund BO, et al. **Chem Biol Interact** 1989;70(1–2):63–72

PHARMACOLOGY

[Effects of o,p'-DDD on pituitary–gonadal function in patients with Cushing's disease] Ojima M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):451–62 (Eng. Abstr.) (Jpn)

[Chloditan-induced changes in lipid peroxidation in the adrenals of dogs and guinea pigs] Chelnakova IS, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):171–4 (Eng. Abstr.) (Rus)

SUPPLY & DISTRIBUTION

Withdrawal of mitotane [letter] Macholc EJ. **Vet Rec** 1989 Feb 18;124(7):177

THERAPEUTIC USE

Late recurrence of operated adrenocortical carcinoma: atrial natriuretic factor before and after treatment with mitotane. Donckier JE, et al. **Surgery** 1989 May;105(5):690–2

TOXICITY

The protracted effect of o,p'-DDD in Cushing's disease and its impact on adrenal morphogenesis of young human embryo. Leiba S, et al. **Ann Endocrinol (Paris)** 1989; 50(1):49–53

URINE

Metabolism of o,p'-DDD in humans: a novel metabolic pathway forming methylthio-containing metabolites. Inouye M, et al. **Jpn J Med** 1989 Jan–Feb;28(1):41–4

MITOTIC INDEX see under MITOSIS

MITOTIC SPINDLE APPARATUS

Direct observation of mitotic spindle elongation in vitro. Baskin TI, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):210–6

Microtubule dynamics in the chromosomal spindle fiber: analysis by fluorescence and high-resolution polarization microscopy. Cassimeris L, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):185–96

Cell-cycle modulation of MPM-2-specific spindle pole body phosphorylation in Aspergillus nidulans. Engle DB, et al. **Cell Motil Cytoskeleton** 1988;10(3):434–7

Micromanipulation studies of the mitotic apparatus in sand dollar eggs. Hiramoto Y, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):172–84

Micromanipulation studies of the asymmetric positioning of the maturation spindle in Chaetopterus sp. oocytes: I. Anchorage of the spindle to the cortex and migration of a displaced spindle. Lutz DA, et al. **Cell Motil Cytoskeleton** 1988;11(2):83–96

Microtubule dynamics determine chromosome lagging and transport of acentric fragments. Bajer AS, et al. **Mutat Res** 1988 Oct;201(2):271–81

Kinetochores, centromeres, spindles and the induction of aneuploidy. Vig BK, et al. **Mutat Res** 1988 Oct; 201(2):259–69 (39 ref.)

ANALYSIS

Distribution of phosphorylated spindle-associated proteins in the diatom Stephanopyxis turris. Wordeman L, et al. **Cell Motil Cytoskeleton** 1989;12(1):33–41

DRUG EFFECTS

Spindle microtubule dynamics: modulation by metabolic inhibitors. Wadsworth P, et al. **Cell Motil Cytoskeleton** 1988;11(2):97–105

Effects of D2O on the movement of chromosomes and the shortening of kinetochore spindle fibers in anaphase in dividing spermatocytes of the grasshopper, Mongolotettix japonicus. Sumitro SB, et al. **Cell Struct Funct** 1989 Jun; 14(3):345–52

The effects of colchicine and dinitrophenol on the in vivo rates of anaphase A and B in the diatom Surirella. Cohn SA, et al. **Eur J Cell Biol** 1988 Aug;46(3):523–30

Induction of random microtubule polymerization in cold and drug-treated PtK1 cells following hyperosmotic shock treatment. Mullins JM, et al. **Eur J Cell Biol** 1989 Jun; 49(1):149–53

Increased spindle resistance to antimicrotubule agents in cells prone to chromosomal nondisjunction. Avivi L, et al. **Hum Genet** 1989 Sep;83(2):165–70

Suspect spindle poisons: analysis of c-mitotic effects in mouse bone marrow cells. Miller BM, et al. **Mutagenesis** 1989 May;4(3):208–15

The effects of 1,6-dinitropyrene on spindle morphology in transformed human cells. Adams K, et al. **Mutat Res** 1989 Aug;213(2):141–8

2-Chlorobenzylidene malonitrile (CS) causes spindle disturbances in V79 Chinese hamster cells. Schmid E, et al. **Mutat Res** 1989 Jun;226(2):133–6

IMMUNOLOGY

Cloning of a gene encoding an antigen associated with the centrosome in Drosophila. Whitfield WG, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):467–80

METABOLISM

Assembly of a protein sharing epitopes with sperm dynein heavy chains into meiotic spindle in the prometaphase starfish oocyte. Ogawa K, et al. **Biol Cell** 1988;64(1):57–66

Microtubules of the kinetochore fiber turn over in metaphase but not in anaphase. Gorbsky GJ, et al. **J Cell Biol** 1989 Aug;109(2):653–62

PHYSIOLOGY

Microtubule dynamics and kinetochore function in mitosis. Mitchison TJ. **Annu Rev Cell Biol** 1988;4:527–49 (67 ref.)

The regulation of mitotic spindle function. Wolniak SM. **Biochem Cell Biol** 1988 Jun;66(6):490–514 (101 ref.)

The mechanism of anaphase spindle elongation. Cande WZ, et al. **Bioessays** 1989 Jul;11(1):5–9 (32 ref.)

Effect of metabolic inhibitors on sucrose-induced metaphase spindle elongation and spindle recovery. Snyder JA. **Cell Motil Cytoskeleton** 1988;11(4):291–302

Calmodulin stabilization of kinetochore microtubule structure to the effect of nocodazole. Sweet SC, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2243–51

Use of a laser-induced optical force trap to study chromosome movement on the mitotic spindle. Berns MW, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4539–43

The mitotic spindle. McIntosh JR, et al. **Sci Am** 1989 Oct; 261(4):48–56

ULTRASTRUCTURE

Plant actin filament and microtubule interactions during anaphase—telophase transition: effects of antagonist drugs. Schmit AC, et al. **Biol Cell** 1988;64(3):309–19

Reproductive capacity of sea urchin centrosomes without centrioles. Sluder G, et al. **Cell Motil Cytoskeleton** 1989; 13(4):264–73

Higher order structure is present in the yeast nucleus: autoantibody probes demonstrate that the nucleolus lies opposite the spindle pole body. Yang CH, et al. **Chromosoma** 1989 Aug;98(2):123–8

Spindle-pole organization during early mouse development. Hiraoka L, et al. **Dev Biol** 1989 May;133(1):24–36

Acetylated alpha-tubulin in microtubules during mouse fertilization and early development. Schatten G, et al. **Dev Biol** 1988 Nov;130(1):74–86

Ultrastructural analysis of abnormalities in the morphology of the second meiotic spindle in ethanol-induced parthenogenones. O'Neill GT, et al. **Gamete Res** 1989 Mar; 22(3):285–99

The effects of ultrarapid freezing on meiotic and mitotic spindles of mouse oocytes and embryos. Sathananthan AH, et al. **Gamete Res** 1988 Dec;21(4):385–401

Polewards microtubule flux in the mitotic spindle: evidence from photoactivation of fluorescence. Mitchison TJ. **J Cell Biol** 1989 Aug;109(2):637–52

Ultraviolet microbeam irradiation of microtubules in vitro. The action spectrum for local depolymerization of marginal band microtubules in vitro matches that for reducing birefringence of chromosomal spindle fibres in vivo. Hughes K, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):469–78

Ultraviolet microbeam irradiation of chromosomal spindle fibres shears microtubules and permits study of the new free ends in vivo. Wilson PJ, et al. **J Cell Sci** 1988 Dec; 91 (Pt 4):455–68

A yeast gene essential for regulation of spindle pole duplication. Baum P, et al. **Mol Cell Biol** 1988 Dec; 8(12):5386–97

Kinetochore immunofluorescence in micronuclei: a rapid method for the in situ detection of aneuploidy and chromosome breakage in human fibroblasts. Hennig UG, et al. **Mutat Res** 1988 Dec;203(6):405–14

The spindle of mammalian oocytes: alterations in morphology and progression through meiosis with maternal age. Eichenlaub-Ritter U. **Prog Clin Biol Res** 1989;311:199–220

[Ultrastructure of the mitotic nuclei in Leishmania mexicana ssp. Tridimensional reconstruction of the mitotic spindle and dense plaques] Ureña F. **Rev Biol Trop** 1988 Jun; 36(1):129–37 (Eng. Abstr.) (Spa)

MITOXANTRONE

Photosensitization of anticancer agents—8. One-electron reduction of mitoxantrone: an EPR and spectrophotometric study. Reszka K, et al. **Photochem Photobiol** 1989 Sep; 50(3):297–304

ADMINISTRATION & DOSAGE

Antibacterial and cytotoxic effect of ceftazidime-mitoxantrone association. Falchi M, et al. **Anticancer Res** 1989 Mar–Apr;9(2):291–2

High-dose cyclophosphamide or melphalan with escalating doses of mitoxantrone and autologous bone marrow transplantation for refractory solid tumors. Mulder PO, et al. **Cancer Res** 1989 Aug 15;49(16):4654–8

Experience with combinations containing mitoxantrone in the treatment of adult acute leukemias. Samir Motawy M, et al. **J Chemother** 1989 Apr;1(2):123–7

A phase I pharmacokinetic study of 21-day continuous infusion mitoxantrone. Greidanus J, et al. **J Clin Oncol** 1989 Jun;7(6):790–7

Phase II trial of intermediate dose ARA-C (IDAC) with sequential mitoxantrone (MITOX) in acute myelogenous leukemia. Amadori S, et al. **Leukemia** 1989 Feb;3(2):112–4

Mitoxantrone and high-dose ara-C in refractory malignancies: a phase I trial. Smith WJ, et al. **Med Pediatr Oncol** 1989;17(2):159–63

[Tolerance of intraoperative, intraperitoneal chemotherapy in advanced gynecologic malignancies] Werner A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):574–8 (Eng. Abstr.) (Ger)

[Recurrence or therapeutic resistance of acute myelogenous leukemia. Effect of mitoxantrone and cytosine arabinoside] Evensen SA, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19–21):2004–6 (Eng. Abstr.) (Nor)

ADVERSE EFFECTS

Hypomagnesaemia and hypocalcaemia after treatment with mitoxantrone. Griffiths KD, et al. **BMJ** 1988 Aug 13; 297(6646):488

Mitoxantrone induced congestive heart failure in patients previously treated with anthracyclines. Janmohammed R, et al. **Br J Haematol** 1989 Feb;71(2):292–3

Cardiotoxicity of mitozantrone assessed by stress and resting nuclear ventriculography. Cassidy J, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):935–8

Mitoxantrone-induced discoloration of the nails [letter] Scheithauer W, et al. **Eur J Cancer Clin Oncol** 1989 Apr;

25(4):763–5
Warning against use of intrathecal mitoxantrone [letter] Hall C, et al. **Lancet** 1989 Apr 1;1(8640):734
Cytotoxic-drug extravasation [letter] Ketelbey JW. **Med J Aust** 1989 Jan 2;150(1):52

ANALOGS & DERIVATIVES

Interactions of the anti-tumor ametantrone and mitoxantrone with rat hepatic microsomes. al-Gailany KA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3803–6
Target cell specificity of immunosuppression in murine lymphocytes exposed to 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxy-9,10-anthracenedione dihydrochloride (AEAD). House RV, et al. **Int J Immunopharmacol** 1989;11(1):85–93
Suppression of cytolytic function in murine lymphocytes exposed to 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxy-9,10-anthracenedione dihydrochloride (AEAD): inhibition of proliferation by cytotoxic T-lymphocyte precursors. House RV, et al. **Int J Immunopharmacol** 1989;11(3):301–8
Selective immunosuppression following exposure to a novel anthraquinone, 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxy-9,10-anthracenedione dihydrochloride (AEAD). House RV, et al. **Int J Immunopharmacol** 1989;11(1):95–101

BLOOD

High-performance liquid chromatographic determination of mitoxantrone in plasma utilizing non-bonded silica gel for solid-phase isolation to reduce adsorptive losses on glass during sample preparation. Lin KT, et al. **J Chromatogr** 1989 Mar 10;465(1):75–86
Development of a sensitive monoclonal antibody-based enzyme-linked immunosorbent assay (ELISA) for mitoxantrone. Flavell SU, et al. **J Immunol Methods** 1988 Dec 9;115(2):179–85

METABOLISM

The toxicity of menadione and mitozantrone in human liver-derived Hep G2 hepatoma cells. Duthie SJ, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1247–55
Interactions of the anti-tumor ametantrone and mitoxantrone with rat hepatic microsomes. al-Gailany KA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3803–6
Multidrug resistance in mitoxantrone-selected HL-60 leukemia cells in the absence of P-glycoprotein overexpression. Harker WG, et al. **Cancer Res** 1989 Aug 15;49(16):4542–9
Enzymatic oxidative activation and transformation of the antitumor agent mitoxantrone. Kolodziejczyk P, et al. **Free Radic Biol Med** 1988;5(1):13–25
Interaction of antitumour agent mitoxantrone with poly[d(G-C)]--a circular dichroic study. Rao MV, et al. **Indian J Biochem Biophys** 1989 Feb;26(1):5–8

PHARMACOKINETICS

Excretion and metabolism of mitoxantrone in rabbits. Richard B, et al. **Cancer Res** 1989 Feb 15;49(4):833–7

PHARMACOLOGY

Comparative effectiveness of mitoxantrone and doxorubicin in overcoming experimentally induced drug resistance in murine and human tumour cell lines in vitro. Hill BT, et al. **Cancer Chemother Pharmacol** 1989;23(3):140–4
Microsomal lipid peroxidation induced by adriamycin, epirubicin, daunorubicin and mitoxantrone: a comparative study. Vile GF, et al. **Cancer Chemother Pharmacol** 1989;24(2):105–8
Modulation of mitoxantrone cytotoxicity by verapamil in human chronic myeloid leukemia cells. Satyamoorthy K, et al. **Oncology** 1989;46(2):128–31

THERAPEUTIC USE

Mitoxantrone in the treatment of advanced vulvar and vaginal carcinoma. A gynecologic oncology group study. Muss HB, et al. **Am J Clin Oncol** 1989 Apr;12(2):142–4
Mitoxantrone and amsacrine: two important agents for the treatment of acute myelogenous leukemia (AML) and acute lymphoblastic leukemia (ALL). Arlin ZA. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:57–9 (8 ref.)
Therapeutic milestones. Novantrone (mitozantrone). Cotter FE. **Br J Clin Pract** 1988 May;42(5):207–9 (10 ref.)
Phase II evaluation of mitoxantrone in advanced non anaplastic thyroid cancer. Schlumberger M, et al. **Bull Cancer (Paris)** 1989;76(4):403–6
A phase II study of mitozantrone in advanced carcinoma of the ovary. Coleman R, et al. **Cancer Chemother Pharmacol** 1989;24(3):200–2
Phase II study of mitoxantrone in unresectable primary hepatocellular carcinoma following hepatitis B infection. Lai KH, et al. **Cancer Chemother Pharmacol** 1989;23(1):54–6
Phase I clinical and pharmacokinetic study of mitoxantrone given to patients by intraperitoneal administration. Alberts DS, et al. **Cancer Res** 1988 Oct 15;48(20):5874–7
Mitoxantrone: a novel anthracycline derivative. Koeller J, et al. **Clin Pharm** 1988 Aug;7(8):574–81 (53 ref.)
Phase II trial of mitoxantrone in patients with hepatocellular carcinoma. Yoshida T, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1897–8
Intraoperative, intraperitoneal chemotherapy in advanced gynecological malignancies. A report on the acceptability of a new therapeutic regimen. Werner A, et al. **Eur J Gynaecol Oncol** 1989;10(1):13–9
Mitoxantrone & adriamycin cytotoxicity enhanced by reserpine in human chronic myeloid leukaemia cells. Chitnis MP, et al. **Indian J Med Res** 1989 Jun;90:197–202
Mitoxantrone and the new drug approval process [editorial] Abeloff MD. **J Clin Oncol** 1989 May;7(5):551–3
Randomized clinical trial comparing mitoxantrone with doxorubicin in previously treated patients with metastatic breast cancer. Henderson IC, et al. **J Clin Oncol** 1989 May;7(5):560–71
Mitoxantrone as single agent in the treatment of advanced breast cancer: clinical experience at Siriraj Hospital. Tepmongkol P, et al. **J Med Assoc Thai** 1989 Feb;72(2):82–9
Mitoxantrone therapy of advanced adenocarcinoma of the endometrium. A phase II trial. Runge HM, et al. **Onkologie** 1989 Apr;12(2):102–3
Continuous infusion of low-dose doxorubicin, epirubicin and mitoxantrone in cancer chemotherapy: a review. Greidanus J, et al. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):237–45 (74 ref.)
Mitoxantrone as first-salvage chemotherapy in relapsed breast cancer. Brambilla C, et al. **Tumori** 1989 Apr 30;75(2):145–9
A phase II study of mitoxantrone. Cartei G, et al. **Tumori** 1988 Oct 31;74(5):579–83
[Efficacy and toxicity of intrapleural mitoxantrone: apropos of 18 cases of pleural metastases of breast cancer] Feuilhade F, et al. **Bull Cancer (Paris)** 1989;76(4):361–5 (Eng. Abstr.) (Fre)

TOXICITY

SEM observations on the effect of anthracycline drugs on cultured newborn rat cardiomyocytes. Djaldetti M, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):672–7
Early and delayed neurotoxicity of mitoxantrone and doxorubicin following subarachnoid injection. Siegal T, et al. **J Neurooncol** 1988 Sep;6(2):135–40

MITOZANTRONE see MITOXANTRONE

MITRAL CLICK-MURMUR SYNDROME see MITRAL VALVE PROLAPSE

MITRAL VALVE

Familial myxomatous valvular disease. Rogan KM, et al. **Am J Cardiol** 1989 May 1;63(15):1149–51
Results of percutaneous mitral commissurotomy in 200 patients. Vahanian A, et al. **Am J Cardiol** 1989 Apr 1;63(12):847–52
Aneurysm of the mitral valve in a patient with hypertrophic cardiomyopathy. Carpenter PM, et al. **Am J Cardiovasc Pathol** 1988;2(3):273–6
Unexplained bleeding in a patient with mechanical valve prostheses. Smith RE, et al. **Am J Med** 1988 Nov;85(5):748
The flexible monocusp valve: the second and third successful mitral valve replacements. Frater RW. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S96–7 (7 ref.)
Mitral valve fibroelastoma. Gorton ME, et al. **Ann Thorac Surg** 1989 Apr;47(4):605–7 (8 ref.)
Safety and efficacy of percutaneous mitral valvuloplasty in rheumatic mitral stenosis: early results and short-term follow-up in 32 consecutive patients. Chang MS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):7–16
Bilateral retinopathy and encephalopathy. Matamoros N, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):39–41
Bias and variability of diagnostic spectral parameters extracted from closing sounds produced by bioprosthetic valves implanted in the mitral position. Cloutier G, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):815–26
The Gorlin formula validated against directly observed orifice area in porcine mitral bioprostheses. Chambers JB, et al. **J Am Coll Cardiol** 1989 Feb;13(2):348–53
Doppler color flow evaluation of prosthetic mitral valves: experimental epicardial studies. Jones M, et al. **J Am Coll Cardiol** 1989 Jan;13(1):234–40
An acquired disease component in hypertrophic cardiomyopathy: new clinical clarifications [editorial] Krasnow N. **J Am Coll Cardiol** 1989 Jan;13(1):46–7
Systemic embolism from mitral vegetation in scleroderma. Pullicino P, et al. **J R Soc Med** 1989 Aug;82(8):502–3
Subvalvular aneurysm. Two-dimensional echocardiographic features. Gupta SR, et al. **Jpn Heart J** 1988 Sep;29(5):747–51
Mitral valve and wedge pressure [letter] Stewart JT, et al. **Lancet** 1989 Sep 23;2(8665):742
Painless myocardial ischemia and atherosclerous valvulopathies—their great statistical prevalence. Moraru N, et al. **Physiologie** 1988 Oct-Dec;25(4):177–85
[Valvular cardiopathies in Conakry. Apropos of 182 hospitalized cases] Fofana M, et al. **Ann Cardiol Angeiol (Paris)** 1988 Oct;37(8):429–33 (Eng. Abstr.) (Fre)
[Embroligenic calcification of posterointernal chordae of the mitral valve. Apropos of a surgically treated case] Rochiccioli JP, et al. **Arch Mal Coeur** 1988 Jun;81(6):787–9 (Eng. Abstr.) (Fre)
[Does Swan-ganz catheter help in weaning from controlled ventilation after mitral valve replacement?] Lehot JJ, et al. **Presse Med** 1988 Nov 12;17(40):2121–4 (Eng. Abstr.) (Fre)
[Calcification of the mitral ring and semilunar valves: clinico-instrumental aspects. Sensitivity and diagnostic specificity of M-mode echocardiography versus autopsy findings] Borgioni L, et al. **G Ital Cardiol** 1988 Jun;18(6):470–8 (Eng. Abstr.) (Ita)
[A case of mitral valve prolapse simulating mitral tumor or vegetation] Oki T, et al. **J Cardiol** 1989;19 Suppl 21:109–15, discussion 116–7 (Eng. Abstr.) (Jpn)
[A case report of mitral valve aneurysm detected by transesophageal echocardiography] Nishiwaki N, et al. **Kyobu Geka** 1988 Oct;41(11):932–5 (Eng. Abstr.) (Jpn)
[The surgical treatment of tricuspid insufficiency associated with acquired valvular disease—a comparative study of tricuspid annuloplasty and tricuspid valve supra-annular imposition] Matsuura A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1075–81 (Eng. Abstr.) (Jpn)
[Current models of bicuspid artificial heart valves] Dobrova NB, et al. **Grudn Khir** 1989 Mar-Apr;(2):79–86 (57 ref.) (Rus)
[Paravalvular fistulas following mitral prosthesis] Ivanov VA, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):49–52 (Eng. Abstr.) (Rus)
[A combined mitral heart defect in a patient with Bechterew's disease] Alelnikova LI, et al. **Klin Med (Mosk)** 1988 Jun;66(6):111–2 (Rus)
[Successful fibrinolytic treatment in a patient with acute mitral prosthetic thrombosis] Cladellas M, et al. **Rev Esp Cardiol** 1989 Jun-Jul;42(6):422–4 (Eng. Abstr.) (Spa)

ABNORMALITIES

Anomalies of the mitral valve and of the left ventricular architecture in tricuspid valve atresia. Ottenkamp J, et al. **Am J Cardiol** 1989 Apr 1;63(12):880–1
Late reoperation for systemic atrioventricular valve regurgitation after repair of congenital heart defects. Lamberti JJ, et al. **Ann Thorac Surg** 1989 Apr;47(4):517–22; discussion 522–3
Sub aortic stenosis caused by an accessory mitral valve. Martínez Díaz J, et al. **Bol Asoc Med P R** 1988 Jun;80(6):198–200
Double mitral valve orifice and primary pulmonary hypertension. Mendelsohn ME, et al. **Int J Cardiol** 1989 Feb;22(2):261–4
The modified Fontan operation [letter; comment] Puga FJ. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):150–1. **Comment on:** J Thorac Cardiovasc Surg 1988 Nov;96(5):682–95
Congenital mitral valve anomalies in transposition of the great arteries. Ammirati A, et al. **Jpn Heart J** 1989 Mar;30(2):187–95
[Double mitral valve orifice. Apropos of a case discovered by echocardiography] Habib G, et al. **Arch Mal Coeur** 1989 Mar;82(3):411–5 (Eng. Abstr.) (Fre)
[Double mitral valve orifice associated with complete atrioventricular canal. Description of 2 cases] De Dominicis E, et al. **G Ital Cardiol** 1988 Mar;18(3):235–9 (Eng. Abstr.) (Ita)
[Congenital cardiopathy in a patient with Sotos syndrome. Description of a case] Di Marco G, et al. **G Ital Cardiol** 1989 May;19(5):453–5 (4 ref.) (Eng. Abstr.) (Ita)
[A case of mitral atresia with a normal aortic valve without pulmonary stenosis] Matsumura C, et al. **Kyobu Geka** 1988 Sep;41(10):850–3 (7 ref.) (Eng. Abstr.) (Jpn)
[Modified Fontan operation in a case of single right ventricle with common atrium and mitral atresia] Seki M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2478–83 (Eng. Abstr.) (Jpn)
[A case of accessory mitral valve documented by two-dimensional and pulsed Doppler echocardiography] Baba T, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):597–8 (Jpn)
[Surgical treatment of patients with duplication of the mitral valve] Bukharin VA, et al. **Grudn Khir** 1988 Nov-Dec;(6):10–6 (Eng. Abstr.) (Rus)
[A double mitral valve in combination with primary and secondary defects of the interatrial septum] Selivanenko VT, et al. **Grudn Khir** 1989 Jan-Feb;(1):86 (Rus)
[2-dimensional and Doppler echocardiography during atrioseptostomy using the Rashkind method. Alternative umbilical approach in the newborn infant] Ibarra Henríquez O, et al. **An Esp Pediatr** 1988 Sep;29(3):211–5 (23 ref.) (Eng. Abstr.) (Spa)
[Double orifice mitral valve. Study with two-dimensional echocardiography] Cabrera A, et al. **Rev Esp Cardiol** 1989 Mar;42(3):169–72 (Eng. Abstr.) (Spa)

ANALYSIS

Structural and chemical characterization of inorganic deposits in calcified human mitral valve. Bigi A, et al. **J Inorg Biochem** 1988 Oct;34(2):75–82

ANATOMY & HISTOLOGY

Doppler-estimated mitral valve area [letter; comment] **Am Heart J** 1989 Jun;117(6):1403–4. **Comment on:** Am Heart J 1988 Sep;116(3):877–9
The distribution and structure of the lymphatic system in dog atrioventricular valves. Noguchi T, et al.

Arch Histol Cytol 1988 Oct;51(4):361–70

Three–dimensional echocardiographic reconstruction of the mitral valve, with implications for the diagnosis of mitral valve prolapse. Levine RA, et al. **Circulation** 1989 Sep; 80(3):589–98

[Continuity of normal and prolapsed mitral valves: two–dimensional and color Doppler echocardiographic investigations] Tokuyama A, et al. **J Cardiol** 1988;18 Suppl 18:21–6, discussion 27–8 (Eng. Abstr.) **(Jpn)**

[Quantitative evaluation of normal mitral and tricuspid valves (comparison of the data of echocardiometric and morphometric studies)] Berishvili II, et al. **Kardiologiia** 1989 Feb;29(2):77–81 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Porcine mitral valve interstitial cells in culture. Lester W, et al. **Lab Invest** 1988 Nov;59(5):710–9

DRUG EFFECTS

Quantitative analysis of transmitral flow and a preliminary study of pulmonary vein flow. Oka Y, et al. **Int J Card Imaging** 1989;4(1):19–22

INJURIES

Mitral valve rupture during percutaneous dilation of aortic valve stenosis. de Ubago JL, et al. **Cathet Cardiovasc Diagn** 1989 Feb;16(2):115–8

Mitral and tricuspid valve rupture from blunt trauma sustained during a motor vehicle collision. Werne C, et al. **J Trauma** 1989 Jan;29(1):113–5

INNERVATION

Development of the autonomic ground plexus in the atrioventricular valves of the rat. Kálmán G. **Acta Morphol Hung** 1988;36(1–2):15–25

[Innervation of the mitral valve in normal and prolapsed mitral valves] Kawano T, et al. **J Cardiol** 1989;19 Suppl 21:43–54, discussion 55–6 (Eng. Abstr.) **(Jpn)**

METABOLISM

Autoradiographic characterization of beta–adrenoceptors in rat heart valve leaflets. Pinto JE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H821–7

MICROBIOLOGY

A case of polymicrobial infective endocarditis involving Neisseria mucosa occurring in an intravenous drug abuser. Giles MW, et al. **Aust N Z J Med** 1988 Dec;18(7):874–6

PATHOLOGY

Echocardiographic appearance of a flail bioprosthetic mitral valve leaflet mimicking vegetation. Gross CM, et al. **Am Heart J** 1989 Apr;117(4):953–7

Comparison of transthoracic and transesophageal color Doppler flow imaging in patients with mechanical prostheses in the mitral valve position. van den Brink RB, et al. **Am J Cardiol** 1989 Jun 15;63(20):1471–4

The pathology of mitral papillary muscles in mitral regurgitation associated with discrete subaortic stenosis. Allwork SP, et al. **Am J Cardiovasc Pathol** 1988 Apr; 2(1):79–85

Nonbacterial thrombotic endocarditis in autologous bone marrow transplantation. Diez–Martin JL, et al. **Am J Med** 1988 Nov;85(5):742–4

Thrombotic endocarditis and lupus anticoagulant. A pathogenetic possibility for idiopathic 'rheumatic type' valvular heart disease. Ford SE, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):350–3

Effect of lanthanum chloride on established atherosclerosis in the cholesterol–fed rabbit. Mitral valve as a site for assessment of treatment effects. Gillies PJ, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):253–60

Percutaneous balloon dilatation of the mitral valve: an analysis of echocardiographic variables related to outcome and the mechanism of dilatation. Wilkins GT, et al. **Br Heart J** 1988 Oct;60(4):299–308

Prevalence of hypertrophic cardiomyopathy and its association with mitral anular calcium in elderly patients. Aronow WS, et al. **Chest** 1988 Dec;94(6):1295–6

Influence of mitral valve morphology on double–balloon catheter balloon valvuloplasty in patients with mitral stenosis. Analysis of factors predicting immediate and 3–month results. Reid CL, et al. **Circulation** 1989 Sep; 80(3):515–24

Mitral annular calcification and coarctation of aorta. Nair CK, et al. **Clin Cardiol** 1988 Aug;11(8):578–80

Myxomatous mitral valve degeneration complicating asymptomatic cor triatriatum [published erratum appears in Clin Cardiol 1989 Mar;12(3):176] Wong CK, et al. **Clin Cardiol** 1989 Jan;12(1):48–50

Surgical pathology of disease of the mitral valve, with special reference to lesions promoting valvar incompetence. Turri M, et al. **Int J Cardiol** 1989 Feb;22(2):213–9

Mitral valve dimensions and motion and familial transmission of mitral valve prolapse with and without mitral leaflet billowing. Pini R, et al. **J Am Coll Cardiol** 1988 Dec; 12(6):1423–31

Quantitative ultrasonic characterization of the mitral valve: in vitro and in vivo findings. Lattanzi F, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):158–65

Classification of subvalvular apparatus in rheumatic mitral stenosis and correlation between the lesions and other features of the disease [letter] Tendolkar AG, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):968–9

Evidence of hypovitaminosis D in patients with mitral ring calcification. Shiraki M, et al. **Jpn Heart J** 1988 Nov; 29(6):801–8

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 18–1989. A 52–year–old woman with left–lower quadrant abdominal pain, fever, and splenic infarcts. **N Engl J Med** 1989 May 4; 320(18):1201–6

Sudden death from left atrial pressure line wedging into cardiac valve prosthesis: pathologic findings and forensic significance. Bordignon D, et al. **Z Rechtsmed** 1988; 101(2):131–5

[The pathomorphology of endocardiosis in swine] Guarda F, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):377–9 (Eng. Abstr.) **(Ger)**

[Mitral valve angle as a new diagnostic index of mitral valve prolapse] Sunami Y, et al. **J Cardiol** 1987;17 Suppl 14:159–64 **(Jpn)**

[A successful surgical treatment of acute mitral regurgitation due to cuspal perforation diagnosed by echocardiography] Koike R, et al. **Kyobu Geka** 1988 Nov;41(12):1006–10 (Eng. Abstr.) **(Jpn)**

[True aneurysm of mitral valve—report of 2 cases] Haniuda M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):986–91 (Eng. Abstr.) **(Jpn)**

[Assessment of morphological mitral valve severity on of operative procedure using two–dimensional echocardiography] Yanagiya A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2090–6 (Eng. Abstr.) **(Jpn)**

[Amyloidosis and inflammation of the calcified mitral valve in patients with chronic rheumatism] De Assis RV, et al. **Arq Bras Cardiol** 1988 Dec;51(6):433–6 (Eng. Abstr.) **(Por)**

[Prognosis of the results of closed mitral commissurotomy based on data of preoperative M–echocardiographic assessment of the state of the mitral valve] Markhasina IP. **Grudn Khir** 1989 Jan–Feb;(1):36–40 (Eng. Abstr.) **(Rus)**

[Echocardiographic examination in assessing the efficacy of valve–preserving operations] Solov'ev GM, et al. **Sov Med** 1988;(8):48–52 **(Rus)**

[Potential of noninvasive determination of the left atrioventricular aperture in mitral stenosis (according to data of ultrasound studies)] Korytnikov KI. **Ter Arkh** 1989; 61(4):88–91 (Eng. Abstr.) **(Rus)**

[Study of calcification of the mitral annulus. Importance of echocardiographic analysis] Gual Juliá JM, et al. **Arch Inst Cardiol Mex** 1989 May–Jun;59(3):251–6 (Eng. Abstr.) **(Spa)**

[Cardiovascular pathology in Marfan syndrome. Study of 11 children using two–dimensional echocardiography] Modesto C, et al. **Rev Esp Cardiol** 1989 May;42(5):318–21 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Calculation of transmitral flow by Doppler echocardiography: a comparison of methods in a canine model. Ascah KJ, et al. **Am Heart J** 1989 Feb;117(2):402–11

Mitral and aortic blood flows during spontaneous respiration in dogs. Robotham JL, et al. **Anesthesiology** 1988 Oct; 69(4):516–26

Mitral valve function after cryoablation of the posterior papillary muscle in the dog. Guiraudon GM, et al. **Ann Thorac Surg** 1989 Jun;47(6):872–6

Transmitral velocities measured by pulsed Doppler in healthy volunteers: effects of acute changes in blood pressure and heart rate. Smith SA, et al. **Br Heart J** 1989 Apr;61(4):344–7

The transmitral pressure–flow velocity relation. Effect of abrupt preload reduction. Courtois M, et al. **Circulation** 1988 Dec;78(6):1459–68

Global and regional left ventricular systolic performance in the in situ ejecting canine heart. Importance of the mitral apparatus. Sarris GE, et al. **Circulation** 1989 Sep;80(3 Pt 1):I24–42

What is the ideal orientation of a mitral disc prosthesis? An in vivo haemodynamic study based on colour flow imaging and continuous wave Doppler. Pop G, et al. **Eur Heart J** 1989 Apr;10(4):346–53

Chordal geometry determines the shape and extent of systolic anterior mitral motion: in vitro studies. Cape EG, et al. **J Am Coll Cardiol** 1989 May;13(6):1438–48

Fluid dynamics model of mitral valve flow: description with in vitro validation. Thomas JD, et al. **J Am Coll Cardiol** 1989 Jan;13(1):221–33

Effects of changes in left ventricular loading and pleural pressure on mitral flow. Robotham JL, et al. **J Appl Physiol** 1988 Oct;65(4):1662–75

Dynamics of left ventricular wall and mitral valve mechanics—a model study. Arts T, et al. **J Biomech** 1989; 22(3):261–71

A theoretical description of blood flow through the mitral orifice. Bakalyar DM, et al. **J Biomech Eng** 1989 May; 111(2):141–6

Diastolic left ventricular function in normal children: the maximal positive dD/dt compared with the E/A ratio of mitral flow pattern. Horino N, et al. **J Cardiol** 1988 Sep; 18(3):787–93

Physiologic role of the mitral apparatus in left ventricular regional mechanics, contraction synergy, and global systolic performance. Hansen DE, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):521–33

Time–resolved studies of the dynamic behavior of the tendon fibers (chordae tendineae) of the human mitral valve. Christmann D, et al. **Naturwissenschaften** 1989 Mar; 76(3):124

Effect of sample volume location on pulsed Doppler diastolic flow parameters in newborn infants. Johnson GL, et al. **Pediatr Cardiol** 1988;9(4):221–4

[Transmitral blood flow velocity patterns evaluated by pulsed Doppler echocardiography in diagnosing transient myocardial ischemia] Furukawa K, et al. **J Cardiol** 1988 Mar;18(1):43–54 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Diastolic mitral regurgitation in acute but not chronic aortic regurgitation: implications regarding the mechanism of mitral closure. Downes TR, et al. **Am Heart J** 1989 May; 117(5):1106–12

Instantaneous transmitral flow using Doppler and M–mode echocardiography: comparison with radionuclide ventriculography. Hoit BD, et al. **Am Heart J** 1989 Aug; 118(2):308–14

Mitral and pulmonary vein blood flow patterns in cor triatriatum. Mori K, et al. **Am Heart J** 1989 May; 117(5):1167–9

Left ventricular filling patterns in aortic stenosis in patients older than 65 years of age. Gallino RA, et al. **Am J Cardiol** 1989 May 1;63(15):1103–6

Influence of left atrial systolic emptying on left ventricular early filling dynamics by Doppler in patients with sequential atrioventricular pacemakers. Rokey R, et al. **Am J Cardiol** 1988 Nov 1;62(13):968–71

Transmitral flow changes during dipyridamole–induced ischemia. A Doppler–echocardiographic study. Lattanzi F, et al. **Chest** 1989 May;95(5):1037–42

Inaccuracy of mitral pressure half–time immediately after percutaneous mitral valvotomy. Dependence on transmitral gradient and left atrial and ventricular compliance. Thomas JD, et al. **Circulation** 1988 Oct;78(4):980–93

Influence of aortic regurgitation on the assessment of the pressure half–time and derived mitral–valve area in patients with mitral stenosis. Moro E, et al. **Eur Heart J** 1988 Sep; 9(9):1010–7

Flow patterns of mitral regurgitation due to different etiologies: analysis by color–coded Doppler echocardiography. Mohr–Kahaly S, et al. **Int J Cardiol** 1989 May;23(2):231–7

Concurrent aortic and mitral valve echocardiography permits measurement of systolic time intervals as an index of peripheral tissue thyroid functional status. Tseng KH, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):633–8

Systolic anterior motion of the mitral valve as a manifestation of heart transplant rejection. Johnson DE, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):289–91

Mitral valve and its ring in hypertrophic cardiomyopathy—a mechanism creating surplus mitral leaflet involved in systolic anterior motion. Mikami T, et al. **Jpn Circ J** 1988 Jul;52(7):597–603

Pulsed Doppler echocardiographic assessment of transmitral flow in pacing–induced angina pectoris. Toda C, et al. **Jpn Circ J** 1988 Oct;52(10):1132–40

Effects of lower body negative pressure and volume loading on transmitral flow velocity pattern by pulsed Doppler echocardiography. Tsukamoto T, et al. **Jpn Circ J** 1989 May;53(5):377–86

[An apex cardiographic method of determining the moment of mitral valve opening and duration of its isovolumetric relaxation] Penkov N, et al. **Vutr Boles** 1988;27(3):51–7 (Eng. Abstr.) **(Bul)**

[Immediate postoperative results following conservative surgery of rheumatic mitral valve insufficiency in children] Pansard Y, et al. **Arch Mal Coeur** 1989 Mar;82(3):347–52 (Eng. Abstr.) **(Fre)**

[Calcinosis of the mitral valve system and its effect on valve function. A Doppler echocardiography study] Punzengruber C, et al. **Z Kardiol** 1988 Sep;77(9):556–60 (Eng. Abstr.) **(Ger)**

[Changes in Doppler velocity of mitral blood flow during a spontaneous episode of angina pectoris in a patient with mitral insufficiency] Meloni L, et al. **Cardiologia** 1988 May; 33(5):537–40 (Eng. Abstr.) **(Ita)**

[Pulmonary to systemic flow ratios in patients with ventricular septal defect: estimation by transmitral flow velocity] Kurokawa S, et al. **J Cardiol** 1988 Sep; 18(3):823–36 (Eng. Abstr.) **(Jpn)**

[Evaluation of valvular function in patients with mitral stenosis. A comparison of hemodynamic studies before and after operation at tachycardia with RV pacing] Nogami A, et al. **Kyobu Geka** 1988 Sep;41(10):783–9, discussion 790–2 (Eng. Abstr.) **(Jpn)**

[Evaluation of blood flow through heart valve prostheses by the Doppler method] Gąsior Z, et al. **Kardiol Pol** 1988; 31(9):576–83 (Eng. Abstr.) **(Pol)**

[Effect of physical exertion on the transvalvular pressure gradient measured by Doppler echocardiography in patients with implanted mitral valve prosthesis] Zochowski RJ, et al. **Kardiol Pol** 1988;31(10):649–55 (Eng. Abstr.) **(Pol)**

[Remote results of the treatment of patients with various

types of mitral valve prosthesis] Zochowski RJ, et al. **Kardiol Pol** 1988;31(9):584–92 (Eng. Abstr.) (Pol)

[Late diastolic mitral regurgitation] Korytnikov KI. **Klin Med (Mosk)** 1989 Jun;67(6):66–9 (Eng. Abstr.) (Rus)

[The effect of spontaneous echo contrasting of the mitral regurgitation stream] Markhasina Ip. **Vrach Delo** 1989 Apr; (4):52–3 (Eng. Abstr.) (Rus)

RADIOGRAPHY

CT of aortic and mitral valve calcification. Woodring JH, et al. **J Ky Med Assoc** 1989 Apr;87(4):177–80

[Angiographic diagnosis of lesions of the mitral valve and its appendages] Guo DW. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):14–7 (Eng. Abstr.) (Chi)

SURGERY

Balloon dilatation of a stenotic dura mater mitral bioprosthesis. Arie S, et al. **Am Heart J** 1989 Jan; 117(1):201–2

Balloon valvuloplasty versus surgical commissurotomy [letter] Bonchek LI. **Am J Cardiol** 1988 Nov 15;62(16):1153

Closed mitral commissurotomy is not obsolete in developed countries [letter] Cheng TO. **Am J Cardiol** 1989 Mar 15; 63(11):764

Open–heart surgery in a patient with a high oxygen affinity haemoglobin variant. Francina A, et al. **Anaesthesia** 1989 Jan;44(1):31–3

Hemodynamic effects of dobutamine in patients following mitral valve replacement. Schwenzer KJ, et al. **Anesth Analg** 1989 Apr;68(4):467–72

Left ventricular rupture [letter] Aris A. **Ann Thorac Surg** 1989 Sep;48(3):455–6

Rupture of the posterior wall of the left ventricle after mitral valve replacement: etiological and technical considerations. Azariades M, et al. **Ann Thorac Surg** 1988 Nov;46(5):491–4

Technical problems in mitral valve repair and replacement. Cooley DA. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S91–2 (13 ref.)

Calcified mitral valve annulus: prosthesis insertion. Coselli JS, et al. **Ann Thorac Surg** 1988 Nov;46(5):584–6

A comparison of mitral valve reconstruction with mitral valve replacement: intermediate–term results. Galloway AC, et al. **Ann Thorac Surg** 1989 May;47(5):655–62

Rupture of left ventricle following mitral valve replacement. Karlson KJ, et al. **Ann Thorac Surg** 1988 Nov;46(5):590–7

Tricuspid regurgitation associated with mitral valve disease: repair and replacement. Kay GL, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S93–5

Clinical and hemodynamic results after mitral valve replacement in patients with obstructive hypertrophic cardiomyopathy. McIntosh CL, et al. **Ann Thorac Surg** 1989 Feb;47(2):236–46

Extrinsic obstruction of the Medtronic–Hall prosthesis [news] Pories S, et al. **Ann Thorac Surg** 1988 Nov;46(5):601–2

Mitral valve reconstruction in the elderly population. Scott ML, et al. **Ann Thorac Surg** 1989 Aug;48(2):213–7

A "designer" annuloplasty ring for patients with massive mitral annular dilatation. Shumway SJ, et al. **Ann Thorac Surg** 1988 Dec;46(6):695–6

Mitral annular calcification: a new technique for valve replacement. Vander Salm TJ. **Ann Thorac Surg** 1989 Sep; 48(3):437–9

Mitral valve replacement in the first 5 years of life. Zweng TN, et al. **Ann Thorac Surg** 1989 May;47(5):720–4

Mitral valve replacement in children. Raffa H, et al. **Aust N Z J Surg** 1988 Aug;58(8):647–9 (10 ref.)

Current concepts of mitral valve reconstruction for mitral insufficiency. Galloway AC, et al. **Circulation** 1988 Nov; 78(5 Pt 1):1087–98 (39 ref.)

Rapid reduction of plasma atrial natriuretic peptide levels during percutaneous transvenous mitral commissurotomy in patients with mitral stenosis. Ishikura F, et al. **Circulation** 1989 Jan;79(1):47–50

Risk factors for mortality after primary combined valvular and coronary artery surgery. Kirklin JK, et al. **Circulation** 1989 Jun;79(6 Pt 2):I185–90

Hyperfibrinolysis: its express diagnosis and role in the development of haemorrhagic syndrome after cardiopulmonary bypass. Sukhanov VA, et al. **Cor Vasa** 1988;30(6):442–6

Effect of age on improvement following closed mitral valvotomy. Barkataki JC, et al. **Indian Heart J** 1988 Mar–Apr;40(2):76–80

Closed versus open approach to mitral stenosis: an objective analysis. Magotra RA, et al. **Indian Heart J** 1987 Nov–Dec; 39(6):60–3

Intraoperative color Doppler assessment of mitral and tricuspid valvuloplasty. Maurer G, et al. **Int J Card Imaging** 1989;4(1):11–3

Cardiac valve replacement during pregnancy. Report of two cases. Vosa C, et al. **Ital J Surg Sci** 1988;18(2):175–7

Study of different anaesthetic techniques on pulmonary haemodynamics during mitral commissurotomy. De RK. **J Indian Med Assoc** 1989 Mar;87(3):65–7

Can the durability of mitral valve reconstruction be increased? [letter] Bonchek LI. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):477

Mitral valve surgery: the Leeds legacy [letter] Gonzalez–Lavin L. **J Thorac Cardiovasc Surg** 1989 Aug; 98(2):304–5

A new technique for repair of mitral insufficiency caused by ruptured chordae of the anterior leaflet. Gregory F Jr, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):765–8

Successful surgical management of mitral valve endocarditis in a 13–month–old child [letter] Hartyánszky IL, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):831–2

Double valve replacement for infective endocarditis in a hemodialysis patient: a case report. Kinoshita K, et al. **Jpn J Surg** 1988 Sep;18(5):576–9

A surgically–induced deformity of the anterior mitral leaflet. Levene JF, et al. **Nebr Med J** 1989 Feb;74(2):26–8

Refractory supra–ventricular tachyarrhythmias due to early posterior pericardial effusion following open–heart surgery. Angelini GD, et al. **Thorac Cardiovasc Surg** 1988 Jun; 36(3):162–3

Lysosomal enzyme activity influenced by various types of respiration during extracorporeal circulation. Müller H, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):65–71

Chylopericardium as a complication of mitral valve replacement. Bar–El Y, et al. **Thorax** 1989 Jan;44(1):74–5

[An evaluation of long–term results of closed commissurotomy of mitral stenosis] Gao SZ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):2–4, 60 (Eng. Abstr.) (Chi)

[A ten years' experience with 613 mitral valve replacements] Geng ZJ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):5–8, 60 (Eng. Abstr.) (Chi)

[Mitral valve replacement after closed mitral commissurotomy] Guo JQ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):9–12, 60 (Eng. Abstr.) (Chi)

[Replacement of the mitral valve with preservation of the posterior leaflet, papillary muscles and chordae tendineae] Černý J, et al. **Rozhl Chir** 1989 Apr;68(4):217–20 (Eng. Abstr.) (Cze)

[Artificial heart valves and intravascular hemolysis] Mezger J, et al. **Internist (Berlin)** 1988 Nov;29(11):781–3 (Ger)

[Follow–up critical evaluation of mechanical and biological heart valve prostheses] Festa M, et al. **Arch Monaldi Mal Torace** 1987 Mar–Apr;42(2):141–52 (Eng. Abstr.) (Ita)

[Transesophageal color–coded Doppler echocardiography: diagnosis of regurgitation of mitral valve prosthesis] Barletta GA, et al. **Cardiologia** 1989 Feb;34(2):135–41 (Eng. Abstr.) (Ita)

[Long–term results after combined aortic and mitral valve replacement for acquired valvular heart diseases] Hayashi J, et al. **Kyobu Geka** 1988 Aug;41(9):711–5 (Eng. Abstr.) (Jpn)

[Direct aortic reimplantation for BWG syndrome including mitral valve repair] Hiramatsu K, et al. **Kyobu Geka** 1989 Jun;42(6):434–8 (Eng. Abstr.) (Jpn)

[Successful mitral valve repair and myocardial revascularization in an infant with anomalous origin of the left coronary artery from the pulmonary artery] Okita Y, et al. **Kyobu Geka** 1989 Jan;42(1):49–52 (Eng. Abstr.) (Jpn)

[Clinical application of percutaneous trans–septal mitral commissurotomy in mitral re–stenosis after closed or open mitral commissurotomy] Sueda T, et al. **Kyobu Geka** 1988 Oct;41(11):886–9 (Eng. Abstr.) (Jpn)

[A case report of aortic, mitral and pulmonary valve endocarditis associated with ventricular septal aneurysm] Miyata Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2673–7 (Eng. Abstr.) (Jpn)

[Early and late result of reconstructive operation for congenital mitral regurgitation in pediatric age group] Okita Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2625–9 (Eng. Abstr.) (Jpn)

[Thrombosed St. Jude Medical valve prosthesis—report of two cases] Yokote Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1027–31 (Eng. Abstr.) (Jpn)

[A new model of annuloplasty ring for patients with mitral valve insufficiency. Report of 2 cases] Gregori Júnior F, et al. **Arq Bras Cardiol** 1988 Jun;50(6):417–20 (Eng. Abstr.) (Por)

[Mitral commissurotomy in children and adolescents] Kosach GA, et al. **Grudn Khir** 1989 Mar–Apr;(2):21–4 (Eng. Abstr.) (Rus)

[Changes in the pulmonary diffusing capacity and its components in patients after mitral commissurotomy] Shchelkunov VS, et al. **Grudn Khir** 1988 May–Jun;(3):35–8 (Eng. Abstr.) (Rus)

[Prosthesis of the mitral valve with full or partial preservation of the subvalvular apparatus] Shumakov VI, et al. **Grudn Khir** 1989 May–Jun;(3):5–9 (Eng. Abstr.) (Rus)

[Late results of reconstructive operations on the mitral valve] Skopin II, et al. **Grudn Khir** 1988 May–Jun;(3):30–5 (Eng. Abstr.) (Rus)

[Emergency valve–preserving operations in mitral stenosis under craniocerebral hypothermia] Valyka EN, et al. **Grudn Khir** 1988 Sep–Oct;(5):10–4 (Eng. Abstr.) (Rus)

[Emergency mitral re–commissurotomy and pneumonectomy in pulmonary hemorrhage] Ivanov SP, et al. **Kardiologiia** 1988 Oct;28(10):104–5 (Rus)

[Echocardiographic analysis of the hemodynamic effect of closed mitral commissurotomy] Markhasina IP. **Kardiologiia** 1988 Jun;28(6):106–8 (Rus)

[Radionuclide functional assessment of the heart ventricles in the immediate period after the surgical correction of the mitral valve] Miasnik BN, et al. **Klin Khir** 1988;(10):15–7 (Eng. Abstr.) (Rus)

[Indications for the surgical treatment of mitral valve stenosis] Solov'ev GM, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):28–32 (Eng. Abstr.) (Rus)

[Immediate results of closed correction of recurrent mitral valve stenosis in the late stages of the disease] Uglov FG, et al. **Vestn Khir** 1988 Jul;141(7):3–7 (Eng. Abstr.) (Rus)

[Immediate and late results of conservative mitral surgery in mitral stenosis] Meruane J, et al. **Rev Med Chil** 1988 May;116(5):420–6 (Eng. Abstr.) (Spa)

TRANSPLANTATION

Twenty–year comparison of the human allograft and porcine xenograft. Angell WW, et al. **Ann Thorac Surg** 1989 Sep; 48(3 Suppl):S89–90

[Value of Doppler echocardiography in the indications for correction of tricuspid valve insufficiency in the course of mitral valve implantation] Lengyel M, et al. **Orv Hetil** 1989 Jul 23;130(30):1583–7 (Eng. Abstr.) (Hun)

ULTRASTRUCTURE

Scanning electron microscopy of surgically excised human mitral valves in patients over 45 years of age. Riddle JM, et al. **Am J Cardiol** 1989 Feb 15;63(7):471–7

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves. Stein PD, et al. **Am J Cardiol** 1989 Aug 1;64(5):392–4

MITRAL VALVE INSUFFICIENCY

CHEMICALLY INDUCED

Transient mitral regurgitation: an adjunctive sign of myocardial ischemia during dipyridamole–thallium imaging. Lette J, et al. **J Nucl Med** 1989 Jul;30(7):1271–2

COMPLICATIONS

Cardiac valvular dysfunction associated with Crohn's disease in the absence of ankylosing spondylitis. Burdick S, et al. **Am Heart J** 1989 Jul;118(1):174–6

Detection of left atrial thrombi by two–dimensional echocardiography and surgical correlation in 148 patients with mitral valve disease. Bansal RC, et al. **Am J Cardiol** 1989 Jul 15;64(3):243–6

Mitral and tricuspid valve regurgitation in dilated cardiomyopathy. Dickerman SA, et al. **Am J Cardiol** 1989 Mar 1;63(9):629–31

Effect of left ventricular septal myectomy on concurrent mitral regurgitation. Cooper MM, et al. **Ann Thorac Surg** 1989 Aug;48(2):251–6

Severe "silent" mitral regurgitation. A potentially reversible cause of refractory heart failure. Schreiber TL, et al. **Chest** 1989 Aug;96(2):242–6

Dynamic mitral regurgitation. An important determinant of the hemodynamic response to load alterations and inotropic therapy in severe heart failure. Keren G, et al. **Circulation** 1989 Aug;80(2):306–13

Evaluation of pulmonary hypertension in chronic rheumatic mitral regurgitation. Chakraborty RN, et al. **Indian Heart J** 1989 May–Jun;41(3):168–72

Temporal resolution of mitral regurgitation in patients with mitral valve prolapse: a phonocardiographic and Doppler echocardiographic study. Akasaka T, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1053–61

Isolated chronic mitral regurgitation with preserved systolic left ventricular function and severe pulmonary hypertension. Alexopoulos D, et al. **J Am Coll Cardiol** 1989 Aug;14(2):319–22

Pulmonary edema localized in the right upper lobe accompanying mitral regurgitation. Gurney JW, et al. **Radiology** 1989 May;171(2):397–9

[Respiratory failure with cough attacks and angina pectoris during a walk through the woods] Werdan K, et al. **Internist (Berlin)** 1988 Oct;29(10):710–3 (Ger)

[Exertional dyspnea, fatigue, palpitations (clinical conference)] Geller JC, et al. **Schweiz Rundsch Med Prax** 1989 Jan 24;78(4):70–3 (Eng. Abstr.) (Ger)

[Pulmonary arteriovenous aneurysm coexisting with rheumatic mitral valvulopathy in Rendu–Osler–Weber syndrome. Image diagnosis using bidimensional and Doppler echocardiography] Rubino A, et al. **G Ital Cardiol** 1989 May;19(5):444–7 (Eng. Abstr.) (Ita)

[Tricuspid regurgitation evaluated by intraoperative epicardial pulsed Doppler echocardiography: investigation of patients with combined valvular diseases] Iida K, et al. **J Cardiol** 1987 Dec;17(4):797–806 (Eng. Abstr.) (Jpn)

[A case of unroofed coronary sinus with mitral and tricuspid valve regurgitation] Egoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):755–9 (Eng. Abstr.) (Jpn)

[A case report of aortic and mitral regurgitation combined with ankylosing spondylosis] Enomoto S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):154–8 (Eng. Abstr.) (Jpn)

[A surgical case of ventricular septal defect (Kirklin type IV) associated with mitral regurgitation] Katayama Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2473–7 (Eng. Abstr.) (Jpn)

[Evaluation of left-ventricular myocardial hypertrophy in patients with mitral valve insufficiency based on the data of electro- and echocardiography] Shurgaia AM, et al. **Kardiologiia** 1988 Dec;28(12):109–11 **(Rus)**

[Turner's syndrome associated with myxoid degeneration of the mitral and aortic valve, long Q–T and hypothyroidism] Lacambra I, et al. **Rev Esp Cardiol** 1988 Oct;41(8):501–3 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Cine MR imaging in mitral regurgitation: comparison with color Doppler flow imaging. Nishimura T, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):721–4

Prevalence of valvular regurgitation by Doppler echocardiography in patients with structurally normal hearts by two-dimensional echocardiography. Choong CY, et al. **Am Heart J** 1989 Mar;117(3):636–42

Noninvasive evaluation of mitral regurgitation by analysis of left atrial signal loss in cine magnetic resonance. Pflugfelder PW, et al. **Am Heart J** 1989 May;117(5):1113–9

Doppler-detected tricuspid, mitral or aortic regurgitation in end-stage renal disease. Bryg RJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):750–2

Doppler echocardiographic findings of mitral and aortic valvular regurgitation in children manifesting only rheumatic arthritis. Folger GM Jr, et al. **Am J Cardiol** 1989 May 15;63(17):1278–80

Functional anatomy of severe mitral regurgitation in active rheumatic carditis. Marcus RH, et al. **Am J Cardiol** 1989 Mar 1;63(9):577–84

Colour Doppler flow imaging in regurgitant valvular heart disease. Skwarok D, et al. **Can J Cardiol** 1988 Oct; 4(7):333–7

Quantifying valvular regurgitation. Limitations and inherent assumptions of Doppler techniques. Bolger AF, et al. **Circulation** 1988 Nov;78(5 Pt 1):1316–8 (12 ref.)

Quantification of mitral regurgitation with amplitude-weighted mean velocity from continuous wave Doppler spectra. Jenni R, et al. **Circulation** 1989 Jun; 79(6):1294–9

Transesophageal two-dimensional echocardiography and color Doppler flow velocity mapping in the evaluation of cardiac valve prostheses. Nellessen U, et al. **Circulation** 1988 Oct;78(4):848–55

Interobserver and echo-angio variability of two-dimensional colour Doppler evaluation of aortic and mitral regurgitation. Dall'Aglio V, et al. **Eur Heart J** 1989 Apr; 10(4):334–40

Cardiac valve disorders: growing significance in the elderly. Leibovitch ER. **Geriatrics** 1989 Mar;44(3):91–2, 95–7, 100

Intraoperative color Doppler assessment of mitral and tricuspid valvuloplasty. Maurer G, et al. **Int J Card Imaging** 1989;4(1):11–3

Flow patterns of mitral regurgitation due to different etiologies: analysis by color-coded Doppler echocardiography. Mohr-Kahaly S, et al. **Int J Cardiol** 1989 May;23(2):231–7

Semiquantitative grading of mitral regurgitation by color-coded Doppler echocardiography. Mohr-Kahaly S, et al. **Int J Cardiol** 1989 May;23(2):223–30

Pulsed and continuous wave Doppler echocardiographic assessment of valvular regurgitation in normal subjects. Berger M, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1540–5

Serial assessment of mitral regurgitation by pulsed Doppler echocardiography in patients undergoing balloon aortic valvuloplasty. Come PC, et al. **J Am Coll Cardiol** 1989 Sep;14(3):677–82

Sources of variability for Doppler color flow mapping of regurgitant jets in an animal model of mitral regurgitation. Hoit BD, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1631–6

Quantitative assessment of mitral regurgitation. Shah PM. **J Am Coll Cardiol** 1989 Mar 1;13(3):591–3

Quantitative assessment of mitral regurgitation by Doppler color flow imaging: angiographic and hemodynamic correlations. Spain MG, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):585–90

Transesophageal Doppler color flow imaging in the detection of native and Björk-Shiley mitral valve regurgitation. Taams MA, et al. **J Am Coll Cardiol** 1989 Jan;13(1):95–9

Quantitative ultrasonic characterization of the mitral valve: in vitro and in vivo findings. Lattanzi F, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):158–65

[Mitral insufficiency and Marfan syndrome in children] Krag-Olsen B, et al. **Ugeskr Laeger** 1988 Nov 14; 150(46):2825–7 (Eng. Abstr.) **(Dan)**

[Mitral, tricuspid and aortic regurgitation. Diagnosis and quantification] Dumesnil JG. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):493–7 (Eng. Abstr.) **(Fre)**

[Use of Doppler pulse in the qualitative and quantitative diagnosis of aortic, mitral and tricuspid valve insufficiency. Angiographic comparison of the results] Mouelhi E, et al. **Tunis Med** 1987 Mar;65(3):175–81 (Eng. Abstr.) **(Fre)**

[Influence of angiotensin-induced change in afterload on hemodynamics in mitral valve insufficiency. A 2-dimensional and color-coded Doppler echocardiography study] Mohr-Kahaly S, et al. **Z Kardiol** 1989 Jun; 78(6):394–401 (Eng. Abstr.) **(Ger)**

[Relationship of two-dimensional echocardiographic mitral valve prolapse to mitral regurgitation assessed by color Doppler flow imaging] Nagata S, et al. **J Cardiol** 1987;17 Suppl 14:67–71 (Eng. Abstr.) **(Jpn)**

[The suction signal detected by color Doppler echocardiography in patients with mitral regurgitation: its clinical significance] Okamoto M, et al. **J Cardiol** 1988 Sep; 18(3):739–46 (Eng. Abstr.) **(Jpn)**

[The effect of spontaneous echo contrasting of the mitral regurgitation stream] Markhasina Ip. **Vrach Delo** 1989 Apr; (4):52–3 (Eng. Abstr.) **(Rus)**

[Protosystolic mitral insufficiency detected by pulsed Doppler] Carreras F, et al. **Rev Esp Cardiol** 1988 Nov; 41(9):540–3 (Eng. Abstr.) **(Spa)**

[2-dimensional contrast echocardiography in the diagnosis and quantification of regurgitation disorders] Laynez I, et al. **Rev Esp Cardiol** 1988 Nov;41(9):534–9 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

[Positive effect of nitroglycerin in patients with combined mitral valve defects] Górski W, et al. **Kardiol Pol** 1988; 31(3):154–64 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

Color Doppler evaluation of valvular regurgitation in normal subjects. Yoshida K, et al. **Circulation** 1988 Oct;78(4):840–7

ETIOLOGY

Aortic insufficiency and mitral regurgitation in patients with systemic lupus erythematosus and the antiphospholipid syndrome. Chartash EK, et al. **Am J Med** 1989 Apr; 86(4):407–12

Mitral regurgitation secondary to mitral valve involvement in cardiac amyloidosis. Richard C, et al. **Am J Med** 1988 Oct;85(4):582–4

Reversion of mitral valve preclosure in acute aortic insufficiency secondary to infective endocarditis. Rozich JD, et al. **Chest** 1989 Aug;96(2):419–20

Mitral valve prolapse and regurgitation [letter] Cheng TO. **Circulation** 1989 Jan;79(1):205

Diastolic atrioventricular valve closure and regurgitation following atrial contraction: their relation to timing of atrial contraction. Okamoto M, et al. **Clin Cardiol** 1989 Mar; 12(3):149–53

Progression of mitral regurgitation in patients with mitral valve prolapse. Kolibash AJ. **Herz** 1988 Oct;13(5):309–17 (30 ref.)

A life-threatening gonococcal infection. Shafer RW, et al. **Hosp Pract [Off]** 1989 May 15;24(5):26, 29

Is mitral regurgitation a useful marker of left ventricular deterioration in aortic stenosis? Fox AC. **J Am Coll Cardiol** 1989 Mar 15;13(4):802–3

Mild mitral insufficiency is a marker of impaired left ventricular performance in aortic stenosis. Schulman DS, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):796–803

Behçet's disease associated with aortic and mitral regurgitation: report of two cases. Terada Y, et al. **J Cardiol** 1988 Sep;18(3):857–65

Acute mitral regurgitation secondary to blunt chest trauma: report of a case. Chang JP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):173–5

Mitral prosthetic valve regurgitation due to stent fracture of a porcine bioprosthesis. Au J, et al. **Thorax** 1989 Mar; 44(3):236–7

[Traumatic mitral insufficiency] Devanne C, et al. **Cah Anesthesiol** 1988 Nov;36(7):575–7 **(Fre)**

[Correlation of left ventricular outflow obstruction with mitral regurgitation] Hasegawa I, et al. **J Cardiol** 1988 Jun; 18(2):339–51 (Eng. Abstr.) **(Jpn)**

[Is this mitral valve prolapse? A case of mitral regurgitation with early systolic murmur due to early systolic prolapse of the posterior leaflet] Ishimitsu T, et al. **J Cardiol** 1989; 19 Suppl 21:97–105, discussion 106–8 (Eng. Abstr.) **(Jpn)**

[Experimental mitral regurgitation in ischemia-induced papillary muscle dysfunction] Matsuzaki M, et al. **J Cardiol** 1988;18 Suppl 18:121–6, discussion 127 (Eng. Abstr.) **(Jpn)**

[Surgical problems of mitral regurgitation in patients with mitral valve prolapse] Yokote Y. **J Cardiol** 1987;17 Suppl 14:107–10 **(Jpn)**

[A case of mitral regurgitation from non-penetrating chest trauma] Okazaki K, et al. **Kokyu To Junkan** 1989 Feb; 37(2):221–4 (Eng. Abstr.) **(Jpn)**

[Mitral insufficiency due to ruptured chordae tendineae—clinical features, early and late results of valve replacement and repair] Nagatsu M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):1–10 (Eng. Abstr.) **(Jpn)**

[A case of hypertrophic cardiomyopathy complicated by acute mitral regurgitation secondary to chordal rupture] Yamasaki F, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr; 78(4):557–60 **(Jpn)**

[A case of mechanical dysfunction of Björk–Shiley prosthesis implanted into the right atrioventricular outlet, detected and visualized by cinematography] Turniak W. **Kardiol Pol** 1988;31(3):186–8 (Eng. Abstr.) **(Pol)**

[Late diastolic mitral regurgitation] Korytnikov KI. **Klin Med (Mosk)** 1989 Jun;67(6):66–9 (Eng. Abstr.) **(Rus)**

HISTORY

An early approach to the repair of ruptured mitral chordae. McGoon DC. **Ann Thorac Surg** 1989 Apr;47(4):628–9

IMMUNOLOGY

Augmentation of cytotoxic activity by mitogens in rheumatic heart disease. Gray ED, et al. **J Rheumatol** 1988 Nov; 15(11):1672–6

METABOLISM

An integrated study employing histopathological, immunohistocytochemical and radioimmunoassay analyses of atrial natriuretic peptide in the right and left atria in patients with mitral valve disease. Nagata M, et al. **Jpn Circ J** 1988 Dec;52(12):1453–6

Key enzymes of myocardial energy metabolism in papillary muscle of patients with mitral valve disease—relation to left ventricular function. Sylvén C, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):63–7

[Contents and molecular forms of human atrial natriuretic peptide in right and left auricle in patients with heart disease] Akimoto K, et al. **Kokyu To Junkan** 1989 Mar; 37(3):307–11 (Eng. Abstr.) **(Jpn)**

MORTALITY

The natural history of unexpected Doppler mitral regurgitation. Kinney EL, et al. **Angiology** 1989 May; 40(5):484–8

Ischemic mitral regurgitation. Rankin JS, et al. **Circulation** 1989 Jun;79(6 Pt 2):I116–21 (21 ref.)

PATHOLOGY

Scanning electron microscopy of surgically excised human mitral valves in patients over 45 years of age. Riddle JM, et al. **Am J Cardiol** 1989 Feb 15;63(7):471–7

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves. Stein PD, et al. **Am J Cardiol** 1989 Aug 1;64(5):392–4

The pathology of mitral papillary muscles in mitral regurgitation associated with discrete subaortic stenosis. Allwork SP, et al. **Am J Cardiovasc Pathol** 1988 Apr; 2(1):79–85

Colour flow imaging in severe mitral and aortic regurgitation. Cujec B, et al. **Can J Cardiol** 1988 Oct;4(7):341–6

Surgical pathology of disease of the mitral valve, with special reference to lesions promoting valvar incompetence. Turri M, et al. **Int J Cardiol** 1989 Feb;22(2):213–9

[Ultrastructural study of left ventricular myocardium in mitral regurgitation—correlations with postoperative cardiac functions] Miyachi Y. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):297–305 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Effect of acute systemic blood pressure elevation on left ventricular filling with and without mitral regurgitation. Takenaka K, et al. **Am J Cardiol** 1989 Mar 1;63(9):623–5

Left ventricular function in experimental volume overload hypertrophy. Carabello BA, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H974–81

Differences in left ventricular adaptation to chronic mitral and aortic regurgitation. Nwasokwa O, et al. **Chest** 1989 Jan;95(1):106–10

Phase differences between left ventricular wall motion and transmitral flow in man: evidence for involvement of ventricular restoring forces in normal rapid filling. Park CH, et al. **Int J Cardiol** 1989 Sep;24(3):347–54

Myocardial beta-adrenoceptor changes in heart failure: concomitant reduction in beta 1- and beta 2-adrenoceptor function related to the degree of heart failure in patients with mitral valve disease. Brodde OE, et al. **J Am Coll Cardiol** 1989 Aug;14(2):323–31

Model to evaluate ventricular insufficiency utilizing first-pass radioventriculogram component analysis [letter; comment] Eterović D. **J Nucl Med** 1989 Mar;30(3):417–9. **Comment on:** J Nucl Med 1988 Feb;29(2):159–67

Left ventricular function in subacute and chronic mitral regurgitation. Effect on function early postoperatively. Kontos GJ Jr, et al. **J Thorac Cardiovasc Surg** 1989 Aug; 98(2):163–9

Coenzyme Q10 and key enzyme activities in papillary muscle related to left ventricle function in mitral valve disease. Karlsson J, et al. **Mol Cell Biochem** 1988 Nov;84(1):59–64

Hemodynamic changes following experimental production and correction of acute mitral regurgitation with an adjustable ring prosthesis. Ahmadi A, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):313–9

Assessment of left ventricular function in patients with mitral regurgitation: value of the forward ejection fraction. Tabayashi K, et al. **Tohoku J Exp Med** 1988 Aug; 155(4):355–61

[Immediate postoperative results following conservative surgery of rheumatic mitral valve insufficiency in children] Pansard Y, et al. **Arch Mal Coeur** 1989 Mar;82(3):347–52 (Eng. Abstr.) **(Fre)**

[Incidence and concomitant factors of tricuspid valve insufficiency in patients with aortic and mitral valve diseases] Dittmann H, et al. **Z Kardiol** 1989 Jun;78(6):380–5 (Eng. Abstr.) **(Ger)**

[Function of the right ventricle in patients with mitral valve diseases] Unterberg R, et al. **Z Kardiol** 1989 Jun; 78(6):386–93 (Eng. Abstr.) **(Ger)**

[Evaluation of the effects of acute loading changes on mitral insufficiency in patients with mitral valve prolapse. A color Doppler echocardiographic study] Iliceto S, et al. **Cardiologia** 1988 Oct;33(10):971–5 (Eng. Abstr.) **(Ita)**

[Changes in Doppler velocity of mitral blood flow during a spontaneous episode of angina pectoris in a patient with mitral insufficiency] Meloni L, et al. **Cardiologia** 1988 May; 33(5):537–40 (Eng. Abstr.) **(Ita)**

[Time analysis of mitral regurgitation in patients with mitral valve prolapse: a study by phonocardiography and Doppler techniques] Akasaka T, et al. **J Cardiol** 1988 Mar; 18(1):145–61 (Eng. Abstr.) **(Jpn)**

[Timing of mitral regurgitation in patients with mitral valve prolapse: phonocardiographic and Doppler echocardiographic analysis] Akasaka T, et al. **J Cardiol** 1987;17 Suppl 14:127–37 **(Jpn)**

[Early postoperative left ventricular function in volume overload from valvular regurgitation with reference to end-systolic pressure, volume and stress relations] Kuraoka S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2561–5 (Eng. Abstr.) **(Jpn)**

[Analysis of selected hemodynamic parameters at rest and during exercise in surgically treated combined mitral valve defect with the predominance of mitral valve stenosis] Krzyś T, et al. **Kardiol Pol** 1988;31(8):497–504 (Eng. Abstr.) **(Pol)**

[Current possibilities of bloodless quantitative evaluation of the pumping function reserve of the heart based on the study of oxygen consumption during the treadmill test] Kudriashev VE, et al. **Kardiologiia** 1989 May;29(5):48–52 (Eng. Abstr.) **(Rus)**

[Isolated mitral valve insufficiency in comparison with mitral–tricuspid insufficiency: various mechanisms of compensating for the defect and functional status of the myocardium] Petrovskiĭ PF, et al. **Kardiologiia** 1988 Sep; 28(9):27–31 (Eng. Abstr.) **(Rus)**

[Evaluation of functional reserves of the myocardium in patients with heart defects on the basis of changes in systolic time intervals during post-extrasystolic contraction] Serdiuk NG, et al. **Kardiologiia** 1988 Jul; 28(7):70–4 (Eng. Abstr.) **(Rus)**

[Study of diastolic regurgitation of the atrioventricular valves using Doppler echocardiography] Durán M, et al. **Rev Esp Cardiol** 1989 Feb;42(2):131–4 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

[Angiographic diagnosis of lesions of the mitral valve and its appendages] Guo DW. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):14–7 (Eng. Abstr.) **(Chi)**

RADIONUCLIDE IMAGING

An improved noninvasive method for measurement of cardiac output and evaluation of left-sided cardiac valve incompetence. Kelbaek H. **Angiology** 1989 May; 40(5):458–63

Exercise first-pass radionuclide assessment of left and right ventricular function and valvular regurgitation in symptomatic mitral valve prolapse. Lumia FJ, et al. **Angiology** 1989 May;40(5):443–9

Significance of gated equilibrium radionuclide ventriculography in quantification and follow up of valvular regurgitation. Voth E, et al. **Eur J Nucl Med** 1988; 14(9–10):467–71

SURGERY

Leaflet escape of a mitral Duromedics prosthesis. Case report. Deuvaert FE, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):15–8

Echocardiographic detection of abnormal attachment of a Björk–Shiley prosthesis to the interatrial septum causing an atrial septal aneurysm. Alfonso F, et al. **Am Heart J** 1989 Mar;117(3):695–7

Mitral valve annuloplasty: the effect of the type on left ventricular function. David TE, et al. **Ann Thorac Surg** 1989 Apr;47(4):524–7; discussion 527–8

Plastic surgery for cardiac valves: 15 years' experience. Konstantinov BA, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S77–8

Late reoperation for systemic atrioventricular valve regurgitation after repair of congenital heart defects. Lamberti JJ, et al. **Ann Thorac Surg** 1989 Apr;47(4):517–22; discussion 522–3

A "designer" annuloplasty ring for patients with massive mitral annular dilatation. Shumway SJ, et al. **Ann Thorac Surg** 1988 Dec;46(6):695–6

Left ventricular outflow obstruction by a mitral valve prosthesis: Doppler ultrasound and cardiac catheterization findings. Byrnes TJ, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):34–8

Current concepts of mitral valve reconstruction for mitral insufficiency. Galloway AC, et al. **Circulation** 1988 Nov; 78(5 Pt 1):1087–98 (39 ref.)

Surgery for mitral regurgitation associated with ischemic heart disease. Results and strategies. Replogle RL, et al. **Circulation** 1989 Jun;79(6 Pt 2):I122–5 (43 ref.)

Traumatic papillary muscle dysfunction: attempted mitral-valve repair and eventual prosthetic replacement. Al Kasab S, et al. **Eur Heart J** 1988 Sep;9(9):1030–3

The surgical complications of acute myocardial infarction: color Doppler evaluation. Roelandt JR, et al. **Int J Card Imaging** 1989;4(1):45–7

Surgical pathology of mitral valves—the Indian scene. Ratnakar KS, et al. **Int J Cardiol** 1989 Jul;24(1):124–6

Reduction in pulmonary varix size after mitral valve replacement. Iwasaki T, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):381–3

A new technique for repair of mitral insufficiency caused by ruptured chordae of the anterior leaflet. Gregory F Jr, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):765–8

Surgery for mitral regurgitation. Cohn LH. **JAMA** 1988 Nov 18;260(19):2883–7 (45 ref.)

Left ventricular volume characteristics of patients with pure mitral insufficiency treated medically and surgically. Altieri PI, et al. **P R Health Sci J** 1988 Dec;7(3):211–4

Sickle cell anemia and mitral valve replacement. Case report. Bomfim V, et al. **Scand J Thorac Cardiovasc Surg** 1989; 23(1):75–7

Surgical correction of congenital left coronary–pulmonary artery fistula and rheumatic mitral valve disease. Case report. Lanzillo G, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):189–91

[Doppler echography in the evaluation of mitral valve function following Carpentier's valvuloplasty] de Gevigney G, et al. **Arch Mal Coeur** 1989 Mar;82(3):315–21 (Eng. Abstr.) **(Fre)**

[Surgical mitral valvuloplasty and dynamic left ventricular obstruction syndrome] Fernandez F, et al. **Arch Mal Coeur** 1989 Feb;82(2):241–7 (Eng. Abstr.) **(Fre)**

[Value of Doppler echocardiography in the indications for correction of tricuspid valve insufficiency in the course of mitral valve implantation] Lengyel M, et al. **Orv Hetil** 1989 Jul 23;130(30):1583–7 (Eng. Abstr.) **(Hun)**

[Indications for surgical correction of chronic mitral insufficiency] Branzi A, et al. **Cardiologia** 1988 Jul; 33(7):663–8 (39 ref.) **(Ita)**

[Surgical results in mitral insufficiency: prognostic value of the indices of left ventricular function] Rubartelli P, et al. **G Ital Cardiol** 1989 Mar;19(3):221–9 (Eng. Abstr.) **(Ita)**

[Mitral insufficiency caused by floppy valve: results of conservative surgical treatment] Salati M, et al. **G Ital Cardiol** 1988 Nov;18(11):920–5 (Eng. Abstr.) **(Ita)**

[Prognostic value of indexes of left ventricular function in relation to the postoperative results in mitral insufficiency] Badano L, et al. **Medicina (Firenze)** 1988 Jan–Mar; 8(1):49–51 (Eng. Abstr.) **(Ita)**

[Optimum time for surgical intervention in pure mitral regurgitation: serial echocardiographic evaluations] Nagata S, et al. **J Cardiol** 1987;17 Suppl 14:165–9 (Eng. Abstr.) **(Jpn)**

[Two cases of valve replacement in patients with 100% cardiothoracic ratios] Iida H, et al. **Kokyu To Junkan** 1988 Nov;36(11):1261–4 (Eng. Abstr.) **(Jpn)**

[A successful surgical treatment of acute mitral regurgitation due to cuspal perforation diagnosed by echocardiography] Koike R, et al. **Kyobu Geka** 1988 Nov;41(12):1006–10 (Eng. Abstr.) **(Jpn)**

[Successful mitral valve repair and myocardial revascularization in an infant with anomalous origin of the left coronary artery from the pulmonary artery] Okita Y, et al. **Kyobu Geka** 1989 Jan;42(1):49–52 (Eng. Abstr.) **(Jpn)**

[The use of PGE1 in an elderly patient with mitral valve regurgitation during general anesthesia] Hirose M, et al. **Masui** 1989 Jan;38(1):88–91 (Eng. Abstr.) **(Jpn)**

[Valve replacement in infective endocarditis with mycotic cerebral aneurysm. Report of a case with successful operation] Aoyagi S, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1730–3 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Open-heart surgery in a patient with chronic leukemia] Sekino Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):450–3 (Eng. Abstr.) **(Jpn)**

[Graft versus host disease in a human T cell leukemia virus-I carrier] Basyuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):579–83 (Eng. Abstr.) **(Jpn)**

[Simultaneous surgery of WPW syndrome combined with acquired valvular disease] Misaki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2044–7 (Eng. Abstr.) **(Jpn)**

[A case of concomitant surgery of advanced valvular disease and lung cancer under cardiopulmonary bypass] Nakao M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):551–4 (Eng. Abstr.) **(Jpn)**

[Early and late result of reconstructive operation for congenital mitral regurgitation in pediatric age group] Okita Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2625–9 (Eng. Abstr.) **(Jpn)**

[Remote results of the treatment of patients with various types of mitral valve prosthesis] Zochowski RJ, et al. **Kardiol Pol** 1988;31(9):584–92 (Eng. Abstr.) **(Pol)**

[Evaluation of surgical treatment of the mitral valve by intraoperative echocardiography] Camarano GP, et al. **Arq Bras Cardiol** 1988 Apr;50(4):237–42 (Eng. Abstr.) **(Por)**

[A new model of annuloplasty ring for patients with mitral valve insufficiency. Report of 2 cases] Gregori Júnior F, et al. **Arq Bras Cardiol** 1988 Jun;50(6):417–20 (Eng. Abstr.) **(Por)**

[Evaluation of the general hypothermic protection of patients undergoing surgical correction of mitral insufficiency based on hemodynamic and gas exchange data] Kovchavtseva NA, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):27–31 (Eng. Abstr.) **(Rus)**

[The surfactant system and ultrastructure of the lungs after surgical correction of cardiac defects during extracorporeal circulation] Perezhogin EV, et al. **Arkh Patol** 1989; 51(1):30–7 (Eng. Abstr.) **(Rus)**

[Clinical and hemodynamic long-term result of substituting the mitral valve using a Beall prosthesis] Astolfi D, et al. **Arch Inst Cardiol Mex** 1976 May–Jun;46(3):325–31 (Eng. Abstr.) **(Spa)**

THERAPY

Mitral valvuloplasty. Cosgrove DM, et al. **Curr Probl Cardiol** 1989 Jul;14(7):359–415 (163 ref.)

VETERINARY

Effects of medetomidine in dogs with mitral regurgitation. Lombard CW, et al. **Acta Vet Scand Suppl** 1989;85:167–74

Treatment of bacterial endocarditis in a horse. Dedrick P, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):339–42

MITRAL VALVE PROLAPSE

A syndrome of primary gonadal failure, short stature, mitral valve prolapse, and mental retardation. Cantalamessa L, et al. **Am J Med Genet** 1989 May;33(1):117–20

Mitral valve prolapse: causes, clinical manifestations, and management. Devereux RB, et al. **Ann Intern Med** 1989 Aug 15;111(4):305–17 (172 ref.)

Gender differences in mitral valve prolapse. Devereux RB, et al. **Cardiovasc Clin** 1989;19(3):243–58 (79 ref.)

Follow-up observations in patients with mitral valve prolapse. Nishimura RA, et al. **Herz** 1988 Oct;13(5):326–34 (49 ref.)

The problem of echocardiographic detection of mitral valve prolapse and determination of its true prevalence. Sanfilippo AJ, et al. **Herz** 1988 Oct;13(5):284–92 (29 ref.)

The Third Conference on Mitral Valve Prolapse. Tokyo, July 31–August 1, 1987. Selected papers. **J Cardiol** 1988; 18 Suppl 18:1–127

The Fourth Conference on Mitral Valve Prolapse. Tokyo, July 30–31, 1988. **J Cardiol** 1989;19 Suppl 21:1–125

Mitral valve prolapse: an overview. Cheng TO. **J Cardiol** 1989;19 Suppl 21:3–20 (65 ref.)

Mitral valve prolapse: an overview. Jeresaty RM. **J Cardiol** 1988;18 Suppl 18:3–8 (12 ref.)

Risk groups among patients with mitral-valve prolapse [letter] **N Engl J Med** 1989 Oct 12;321(15):1051–2

Oral contraceptive use in women with chronic medical conditions. Carlone JP, et al. **Nurse Pract** 1989 Sep; 14(9):9–10, 16 (26 ref.)

Syndrome of mitral valve prolapse: current perspectives [published erratum appears in Prog Cardiovasc Dis 1989 Sep–Oct;32(2):171] Ansari A. **Prog Cardiovasc Dis** 1989 Jul–Aug;32(1):31–72 (151 ref.)

Mitral valve prolapse syndrome revisited. Schmidt SB. **W V Med J** 1989 Aug;85(8):332–5 (27 ref.)

[Mitral valve prolapse syndrome] Erbel R, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):678–87 (75 ref.) **(Ger)**

[Mitral valve prolapse and sports activity] Rusconi C, et al. **G Clin Med** 1988 Aug–Sep;69(8–9):533, 536–40 **(Ita)**

[The Second Conference on Mitral Valve Prolapse. Tokyo, August 30–31, 1986. Proceedings] **J Cardiol** 1987;17 Suppl 14:1–172 **(Jpn)**

[Clinical pictures and prognosis of mitral valve prolapse in the middle-aged and old-aged patients] Chikamori T, et al. **J Cardiol** 1988;18 Suppl 18:113–8, discussion 119–20 (Eng. Abstr.) **(Jpn)**

BLOOD

Von Willebrand factor and mitral valve prolapse. Froom P, et al. **Thromb Haemost** 1988 Oct 31;60(2):230–1

COMPLICATIONS

Response of ventricular arrhythmias to propranolol in mitral valve prolapse. Johnson MS. **Ala Med** 1988 Sep;58(3):14–6

Valvular prolapse and great vessel dilatation in multiple endocrine neoplasia type 2B. Dulaney JJ, et al. **Am Heart J** 1989 Jan;117(1):198–201

Prevalence of atrial septal aneurysm in patients with mitral valve prolapse. Abinader EG, et al. **Am J Cardiol** 1988 Nov 15;62(16):1139–40

Frequency of mitral valve prolapse in systemic lupus erythematosus, progressive systemic sclerosis and mixed connective tissue disease. Comens SM, et al. **Am J Cardiol** 1989 Feb 1;63(5):369–70

Prevalence of QTc prolongation in women with mitral valve prolapse. Cowan MD, et al. **Am J Cardiol** 1989 Jan 1; 63(1):133–4

Esophageal dysfunction and chest pain in patients with mitral valve prolapse: a prospective study utilizing provocative testing during esophageal manometry. Koch KL, et al. **Am J Med** 1989 Jan;86(1):32–8

Cohen syndrome: a connective tissue disorder? Méhes K, et al. **Am J Med Genet** 1988 Sep;31(1):131–3

Hypertrophic obstructive cardiomyopathy in combination with a prolapsing mitral valve. Anaesthesia for surgical correction with propofol. Bell MD, et al. **Anaesthesia** 1989 May;44(5):409–11

Two cardiac arrests after needle punctures in a patient with mitral valve prolapse: psychogenic? Abraham ZA, et al. **Anesth Analg** 1989 Jul;69(1):126–8

Nonbacterial thrombotic endocarditis complicating mitral valve prolapse presenting as Parinaud's syndrome—a case report. Cook DJ, et al. **Angiology** 1989 May;40(5):494–7

Neurologic aspects of mitral valve prolapse. Heck AF. **Angiology** 1989 Aug;40(8):743–51 (108 ref.)

Mitral valve prolapse and social phobia. Chaleby K, et al. **Br J Psychiatry** 1988 Feb;152:280–1

Aneurysm of the interatrial septum and mitral valve prolapse—an aetiological association? Channer KS, et al. **Bristol Med Chir J** 1988 Aug;103(3):40–1

Platelet activation in patients with mitral valve prolapse. Lin SL, et al. **Can J Cardiol** 1989 Mar;5(2):84–6

Mitral valve prolapse and regurgitation [letter] Cheng TO. **Circulation** 1989 Jan;79(1):205

Progression of mitral regurgitation in patients with mitral valve prolapse. Kolibash AJ. **Herz** 1988 Oct;13(5):309–17 (30 ref.)

Mitral valve prolapse and thromboembolic disease in pregnancy: a case report. Bergh PA, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):133–7

Lacunar infarction in a puerpera with mitral valve prolapse. Anzalone N, et al. **Ital J Neurol Sci** 1988 Oct;9(5):515–7

Temporal resolution of mitral regurgitation in patients with mitral valve prolapse: a phonocardiographic and Doppler echocardiographic study. Akasaka T, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1053–61

Historical note on hoarseness in mitral valve disease [letter] Cheng TO. **J Am Geriatr Soc** 1989 Jan;37(1):90–1

Association of mitral valve prolapse and systemic abnormalities of connective tissue. A phenotypic continuum. Glesby MJ, et al. **JAMA** 1989 Jul 28; 262(4):523–8

Mitral valve prolapse as a risk factor for infective endocarditis. Danchin N, et al. **Lancet** 1989 Apr 8; 1(8641):743–5

Mitral valve prolapse (Barlow's syndrome) and retinal emboli. Seelenfreund MH, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(3):119–21

Identification of high-risk and low-risk subgroups of patients with mitral-valve prolapse. Marks AR, et al. **N Engl J Med** 1989 Apr 20;320(16):1031–6

Transient ischemic attack: a complication of mitral valve prolapse in pregnancy [letter; comment] Cheng TO. **Obstet Gynecol** 1989 Feb;73(2):297–8. **Comment on:** Obstet Gynecol 1988 Jun;71(6 Pt 2):1028–30

Mitral valve prolapse and pregnancy: a review. Degani S, et al. **Obstet Gynecol Surv** 1989 Sep;44(9):642–9 (89 ref.)

Pain in mitral valve prolapse. Maresca M, et al. **Pain** 1989 Jan;36(1):89–92

Recurrent native-valve infective endocarditis [letter] Cheng TO. **Rev Infect Dis** 1989 May–Jun;11(3):506–7

[Endocarditis prophylaxis in idiopathic mitral valve prolapse] Düren DR. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):9–11 (25 ref.) **(Dut)**

[Mitral valve prolapse syndrome and arrhythmias] Baedeker W. **Herz** 1988 Oct;13(5):318–25 (51 ref.) (Eng. Abstr.) **(Ger)**

[Respiratory failure with cough attacks and angina pectoris during a walk through the woods] Werdan K, et al. **Internist (Berlin)** 1988 Oct;29(10):710–3 **(Ger)**

[Mitral valve prolapse as a risk factor in juvenile stroke] Kollegger H, et al. **Nervenarzt** 1988 Nov;59(11):629–35 (52 ref.) **(Ger)**

[Thoracic pain and normal coronary arteries in mitral valve prolapse syndrome] Mammi G. **Clin Ter** 1987 Oct 31; 123(2):127–31 (Eng. Abstr.) **(Ita)**

[Mitral insufficiency caused by floppy valve: results of conservative surgical treatment] Salati M, et al. **G Ital Cardiol** 1988 Nov;18(11):920–5 (Eng. Abstr.) **(Ita)**

[Mitral valve prolapse and Recklinghausen's disease. Description of a case] Scotto di Uccio V, et al. **Minerva Cardioangiol** 1988 Jun;36(6):331–3 (Eng. Abstr.) **(Ita)**

[Production of experimental infective endocarditis in rabbit mitral valve prolapse induced by vagus stimulation] Imataka K, et al. **J Cardiol** 1989;19 Suppl 21:57–63, discussion 64 (Eng. Abstr.) **(Jpn)**

[Tricuspid regurgitation in mitral valve prolapse studied by two-dimensional color flow mapping] Namiki A, et al. **J Cardiol** 1988 Sep;18(3):731–8 (Eng. Abstr.) **(Jpn)**

[Mitral valve prolapse in patients with anorexia nervosa] Oka Y. **J Cardiol** 1987;17 Suppl 14:13–20 (Eng. Abstr.) **(Jpn)**

[Antiarrhythmic action of beta-blocking agent in patients with mitral valve prolapse having premature ventricular contractions] Shioto T, et al. **J Cardiol** 1989;19 Suppl 21:65–72, discussion 73–4 (Eng. Abstr.) **(Jpn)**

[Association of sustained ventricular tachycardia and a mid-systolic click: a case report] Suzuki K, et al. **J Cardiol** 1989;19 Suppl 21:119–25, discussion 126–7 (Eng. Abstr.) **(Jpn)**

[Regression of mitral valve prolapse to a state masquerading as dilated cardiomyopathy: a case report] Takarada A, et al. **J Cardiol** 1987 Dec;17(4):915–24 (Eng. Abstr.) **(Jpn)**

[Four cases of mitral valve prolapse associated with ventricular tachycardia] Watanabe I, et al. **J Cardiol** 1988; 18 Suppl 18:55–63, discussion 64–5 (Eng. Abstr.) **(Jpn)**

[Type IV Ehlers-Danlos syndrome associated with mitral valve prolapse: a case report] Watanabe S, et al. **J Cardiol** 1988;18 Suppl 18:97–105, discussion 106 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Clinical profile and prognosis of mitral valve prolapse: influence of aging to the complications] Doi Y, et al. **Nippon Ronen Igakkai Zasshi** 1988 Sep;25(5):474–9 (Eng. Abstr.) **(Jpn)**

[Susceptibility to the development of supraventricular arrhythmia in patients with mitral valve prolapse syndrome] Grochowicz U, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1323–4 **(Pol)**

[Changes of the nervous system in mitral valve prolapse] Erokhina LG, et al. **Sov Med** 1989;(2):32–7 (76 ref.) **(Rus)**

[Intraventricular septal defect in conjunction with mitral valve prolapse in twins] Abdullaev RIa, et al. **Vrach Delo** 1989 May;(5):31–2 **(Rus)**

[Association of sick sinus syndrome and mitral valve prolapse] Lemos HN, et al. **Medicina (B Aires)** 1985; 45(1):49–53 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Echocardiographic confirmation of mitral valve prolapse: a new finding on radionuclide ventriculography—a case report. Fig LM, et al. **Angiology** 1989 Feb;40(2):138–42

Can the parasternal long axis plane replace the apical four-chamber plane in diagnosing mitral valve prolapse? Kinney EL, et al. **Angiology** 1989 Feb;40(2):101–7

Follow-up of patients with mitral valve prolapse presenting with rhythm disturbances. Piwowarska W, et al. **Ann Clin Res** 1988;20(6):389–92

Screening for mitral valve prolapse: an analysis of benefits and costs in the U.S. Air Force. Everett WD. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A80–8

Cases from the aerospace medicine residents' teaching file. Case #26. A fighter pilot with a single left frontal lobe infarction and probable mitral valve prolapse and supraventricular arrhythmias. Gray GW, et al. **Aviat Space Environ Med** 1988 Oct;59(10):994–6

Three-dimensional echocardiographic reconstruction of the mitral valve, with implications for the diagnosis of mitral valve prolapse. Levine RA, et al. **Circulation** 1989 Sep; 80(3):589–98

Mitral valve prolapse. Evolution and refinement of diagnostic techniques. Perloff JK, et al. **Circulation** 1989 Sep; 80(3):710–1 (15 ref.)

Comparison of auscultation with two-dimensional and Doppler echocardiography in patients with suspected mitral valve prolapse [letter] Barron JT, et al. **Clin Cardiol** 1988 Oct;11(10):A30

Mitral valve prolapse in Turner syndrome. Bastianon V, et al. **Eur J Pediatr** 1989 Apr;148(6):533–4

Correlation between left ventriculography, auscultation, and M-mode and two-dimensional echocardiography in mitral valve prolapse. Cohen MV, et al. **Herz** 1988 Oct; 13(5):293–308 (71 ref.)

The relationship between clinical and echocardiographic findings in mitral valve prolapse. Rueda B, et al. **Herz** 1988 Oct;13(5):277–83 (45 ref.)

Understanding mitral valve prolapse (MVP). Schatz IJ. **Herz** 1988 Aug;13(4):235–42 (4 ref.)

Mitral valve prolapse—from a normal variant to a pathologic entity [letter] Cheng TO. **J Gen Intern Med** 1988 Nov–Dec; 3(6):616

Panic disorder and misdiagnosis of mitral valve prolapse [letter] Simon GE. **J Gen Intern Med** 1989 Mar–Apr; 4(2):177–8

Mitral valve prolapse syndrome: a clinical and echocardiographic profile. Dutta AL, et al. **J Indian Med Assoc** 1988 Sep;86(9):240–4

Mitral valve prolapse:—the facts. Johnston JH. **J R Army Med Corps** 1989 Jun;135(2):76–8 (36 ref.)

Mitral valve prolapse [see comments] **Lancet** 1989 May 27; 1(8648):1173–5 (14 ref.). **Comment in:** Lancet 1989 Jul 1;2(8653):48–9

Diagnosis and prognosis of mitral-valve prolapse [editorial] Devereux RB. **N Engl J Med** 1989 Apr 20;320(16):1077–9

[Prolapse of the mitral valve—anatomic variant or disease?] Hradec J. **Cas Lek Cesk** 1988 Dec 9;127(50):1537–44 (Eng. Abstr.) **(Cze)**

[Criteria of selection of mitral valve prolapse truly pathological] Klimczak K, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul–Sep;37(7):381–5 (18 ref.) (Eng. Abstr.) **(Fre)**

[Dynamic phonocardiography in the study of mitral valve prolapse. Our experience] Filice I, et al. **Minerva Cardioangiol** 1989 Apr;37(4):169–78 (Eng. Abstr.) **(Ita)**

[Is this mitral valve prolapse? A case of mitral regurgitation with early systolic murmur due to early systolic prolapse of the posterior leaflet] Ishimitsu T, et al. **J Cardiol** 1989; 19 Suppl 21:97–105, discussion 106–8 (Eng. Abstr.) **(Jpn)**

[Transesophageal echocardiographic findings of mitral valve prolapse] Joh Y, et al. **J Cardiol** 1989;19 Suppl 21:85–91, discussion 92–5 (Eng. Abstr.) **(Jpn)**

[A new diagnostic criteria of mitral valve prolapse syndrome] Jyo Y, et al. **J Cardiol** 1988;18 Suppl 18:29–41, discussion 42–4 (Eng. Abstr.) **(Jpn)**

[Prognostic significance of arrhythmias in mitral valve prolapse] Mizuno T, et al. **J Cardiol** 1987;17 Suppl 14:95–106 **(Jpn)**

[Relationship of two-dimensional echocardiographic mitral valve prolapse to mitral regurgitation assessed by color Doppler flow imaging] Nagata S, et al. **J Cardiol** 1987;17 Suppl 14:67–71 (Eng. Abstr.) **(Jpn)**

[A case of mitral valve prolapse simulating mitral tumor or vegetation] Oki T, et al. **J Cardiol** 1989;19 Suppl 21:109–15, discussion 116–7 (Eng. Abstr.) **(Jpn)**

[A new echocardiographic diagnostic criterion of mitral valve prolapse] Oki T. **J Cardiol** 1987;17 Suppl 14:47–54 **(Jpn)**

[Mitral valve angle as a new diagnostic index of mitral valve prolapse] Sunami Y, et al. **J Cardiol** 1987;17 Suppl 14:159–64 **(Jpn)**

[Pharmacodynamic tests in patients with mitral valve prolapse] Suzuki J, et al. **J Cardiol** 1987;17 Suppl 14:149–54 **(Jpn)**

[Continuity of normal and prolapsed mitral valves: two-dimensional and color Doppler echocardiographic investigations] Tokuyama A, et al. **J Cardiol** 1988;18 Suppl 18:21–6, discussion 27–8 (Eng. Abstr.) **(Jpn)**

[Clinical picture of mitral valve prolapse syndrome] Lichodziejewska B, et al. **Pol Tyg Lek** 1988 Oct 10; 43(41):1316–9 **(Pol)**

[Left deviation of AQRS and mitral valve prolapse in childhood. Electro-echocardiographic correlation in 28 cases] Saraiva LR, et al. **Arq Bras Cardiol** 1988 Aug; 51(2):167–70 (Eng. Abstr.) **(Por)**

[Structure of diseases and signs of connective tissue dysplasia in suspected ischemic heart disease] Kalinkina OM. **Kardiologiia** 1988 Sep;28(9):52–7 (Eng. Abstr.) **(Rus)**

[Clinical significance of the problem of mitral valve prolapse in children] Belokon' NA, et al. **Pediatriia** 1989;(2):71–6 **(Rus)**

[Combined prolapse of the mitral and tricuspid valve cusps] Zadionchenko VS, et al. **Sov Med** 1988;(12):110–1 **(Rus)**

[Difficulties in diagnosing mitral valve prolapse] Bobrov VA, et al. **Vrach Delo** 1989 Feb;(2):65–6 **(Rus)**

EPIDEMIOLOGY

Mitral leaflet billowing and prolapse: its prevalence around the world. Cheng TO, et al. **Angiology** 1989 Feb; 40(2):77–87

Prevalence of mitral valve prolapse in chronic lymphocytic thyroiditis and nongoitrous hypothyroidism. Brauman A, et al. **Cardiology** 1988;75(4):269–73

Mitral valve prolapse [letter; comment] Wilcken DE. **Lancet** 1989 Jul 1;2(8653):48–9. **Comment on:** Lancet 1989 May 27;1(8648):1173–5

The prevalence of mitral valve prolapse in patients with Down's syndrome: implications for dental management. Barnett ML, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):445–7

[Prolapse of the mitral valve. Study using bidimensional echocardiography] Modesto C, et al. **Rev Esp Cardiol** 1989 Jun–Jul;42(6):384–8 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Occurrence of mitral valve prolapse in patent ductus arteriosus after surgery—comparison between pre- and post-operative conditions. Watari T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):352–8

Lack of association between acute myocardial infarction and mitral valve prolapse. Peller OG, et al. **Am J Cardiol** 1988 Dec 1;62(17):1297

Prevalence of mitral valve prolapse in primary fibromyalgia: a pilot investigation. Pellegrino MJ, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):541–3

The multifactorial etiology of mitral valve prolapse, a new entity of postinflammatory mitral valve prolapse. Tomaru T. **Herz** 1988 Oct;13(5):271–6

Mitral valve prolapse—a pervasive condition of uncertain etiology. Siebert MM, et al. **J Am Osteopath Assoc** 1988 Sep;88(9):1099–100, 1105 (25 ref.)

Mitral valve prolapse syndrome: evidence of autonomic dysfunction. Boudoulas H, et al. **J Cardiol** 1987;17 Suppl 14:3–12 (31 ref.)

Behçet's disease (silk route disease) and mitral valve prolapse [letter; comment] Cheng TO. **West J Med** 1989 Jan; 150(1):91. **Comment on:** West J Med 1988 Apr;148(4):433–7

[Mitral valve prolapse in patients with myocarditis and collagen diseases] Miki T, et al. **J Cardiol** 1988;18 Suppl 18:85–93, discussion 94–6 (Eng. Abstr.) **(Jpn)**

[Clinical features of ruptured chordae tendineae with special reference to mitral valve prolapse] Odawara H, et al. **J Cardiol** 1987;17 Suppl 14:155–8 **(Jpn)**

[Involvements of the mitral apparatus in rabbits induced by vagal stimulation: histological and biochemical investigations] Sekine I. **J Cardiol** 1987;17 Suppl 14:37–42 (Eng. Abstr.) **(Jpn)**

[Mitral valve prolapse in patients with post-operative atrial septal defect: a preliminary report] Takahashi H, et al. **J Cardiol** 1988;18 Suppl 18:107–10, discussion 111 (Eng. Abstr.) **(Jpn)**

[Mitral valve prolapse syndrome] Lichodziejewska B. **Pol Tyg Lek** 1988 Oct 10;43(41):1336–9 (70 ref.) **(Pol)**

GENETICS

Genetic evidence that mutations in the COL1A1, COL1A2, COL3A1, or COL5A2 collagen genes are not responsible for mitral valve prolapse. Henney AM, et al. **Br Heart J** 1989 Mar;61(3):292–9

Genetic segregation analysis of familial mitral valve prolapse shows no linkage to fibrillar collagen genes. Wordsworth P, et al. **Br Heart J** 1989 Mar;61(3):300–6

Mitral valve dimensions and motion and familial transmission of mitral valve prolapse with and without mitral leaflet billowing. Pini R, et al. **J Am Coll Cardiol** 1988 Dec; 12(6):1423–31

[Coexistence of mitral valve prolapse and pericentric inversion of chromosome 9] Tubek S, et al. **Przegl Lek** 1989;46(2):318–20 **(Pol)**

[HLA markers of mitral valve prolapse complicated by secondary cerebrovascular disorders] Sapronenkov PM, et al. **Klin Med (Mosk)** 1989 Jun;67(6):125–7 **(Rus)**

IMMUNOLOGY

[HLA antigens in patients with mitral valve prolapse syndrome] Pietrzak M, et al. **Kardiol Pol** 1988;31(9):593–7 (Eng. Abstr.) **(Pol)**

METABOLISM

[Disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kłoś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1325–9 (Eng. Abstr.) **(Pol)**

[Results of the compensatory treatment of disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kłoś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1330–3 (Eng. Abstr.) **(Pol)**

MORTALITY

Myxoid heart disease: a review with special emphasis on sudden cardiac death. Scheurman EH. **Forensic Sci Int** 1989 Mar;40(3):203–10 (41 ref.)

[Sudden death in mitral valve prolapse] Storozhakov GI, et al. **Ter Arkh** 1989;61(4):135–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Echocardiographic features of mitral valve prolapse in Libyan patients. Hassadi MF, et al.
Afr J Med Med Sci 1989 Jun;18(2):83–7

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves. Stein PD, et al.
Am J Cardiol 1989 Aug 1;64(5):392–4

Mitral valve billowing and prolapse: perspective at 25 years. Barlow JB, et al. **Herz** 1988 Aug;13(4):227–34 (55 ref.)

The pathology of mitral valve prolapse. Virmani R, et al. **Herz** 1988 Aug;13(4):215–26 (53 ref.)

Surgical pathology of disease of the mitral valve, with special reference to lesions promoting valvar incompetence. Turri M, et al. **Int J Cardiol** 1989 Feb;22(2):213–9

[Experimental production of mitral valve and papillary muscle lesions by cervical vagus stimulation in rabbits] Imataka K, et al. **J Cardiol** 1987;17 Suppl 14:21–36 (Eng. Abstr.) **(Jpn)**

[Innervation of the mitral valve in normal and prolapsed mitral valves] Kawano T, et al. **J Cardiol** 1989;19 Suppl 21:43–54, discussion 55–6 (Eng. Abstr.) **(Jpn)**

[Pathology of mitral valve prolapse] Sugiura M.
J Cardiol 1987;17 Suppl 14:59–65 (10 ref.) **(Jpn)**

[Deformity of the cardiac structures in patients with mitral valve prolapse: the relationship with flat chest] Sunami Y, et al. **J Cardiol** 1988;18 Suppl 18:75–83, discussion 83 (Eng. Abstr.) **(Jpn)**

[Pathoetiological aspects of mitral valve prolapse] Yutani C, et al. **J Cardiol** 1989;19 Suppl 21:21–37, discussion 38–41 (Eng. Abstr.) **(Jpn)**

[Mitral valve prolapse, a study of 50 patients] Prudêncio A, et al. **Acta Med Port** 1988 Mar–Apr;1(2):137–40 (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

Comparison of cardiovascular and skeletal features of primary mitral valve prolapse and Marfan syndrome. Roman MJ, et al. **Am J Cardiol** 1989 Feb 1;63(5):317–21

Spectrum of dysautonomia in mitral valvular prolapse. Taylor AA, et al. **Am J Med** 1989 Mar;86(3):267–74

Mitral valve prolapse. Cheng TO. **Annu Rev Med** 1989; 40:201–11 (63 ref.)

Acceleration tolerance of asymptomatic aircrew with mitral valve prolapse and significant +Gz–induced ventricular dysrhythmias. Whinnery JE, et al.
Aviat Space Environ Med 1988 Aug;59(8):711–7

Platelet activation [letter] Cheng TO. **Can J Cardiol** 1989 Jun–Aug;5(5):XV–XVI

Left ventricular dysfunction in symptomatic mitral valve prolapse. Dorn GW 2d, et al. **Chest** 1989 Feb;95(2):370–3

Mitral valve prolapse syndrome: neuro–endocrinological aspects. Boudoulas H, et al. **Herz** 1988 Aug;13(4):249–58 (15 ref.)

Exercise left ventricular performance in patients with mitral valve prolapse. Iskandrian AS. **Herz** 1988 Aug;13(4):243–8

The pain of MVP: is it functional? [letter] Miller AJ.
Hosp Pract [Off] 1989 Apr 30;24(4A):18

Aortic regurgitation and mitral valve prolapse with Down's syndrome: a case–control study. Goldhaber SZ, et al.
J Ment Defic Res 1988 Aug;32 (Pt 4):333–6

[Evaluation of the effects of acute loading changes on mitral insufficiency in patients with mitral valve prolapse. A color Doppler echocardiographic study] Iliceto S, et al.
Cardiologia 1988 Oct;33(10):971–5 (Eng. Abstr.) **(Ita)**

[Complex rhythm disorders in mitral valve prolapse] Marchese D, et al. **G Clin Med** 1988 May;69(5):379–81 (12 ref.) **(Ita)**

[Timing of mitral regurgitation in patients with mitral valve prolapse: phonocardiographic and Doppler echocardiographic analysis] Akasaka T, et al. **J Cardiol** 1987;17 Suppl 14:127–37 **(Jpn)**

[Time analysis of mitral regurgitation in patients with mitral valve prolapse: a study by phonocardiography and Doppler techniques] Akasaka T, et al. **J Cardiol** 1988 Mar; 18(1):145–61 (Eng. Abstr.) **(Jpn)**

[Systolic clicks in mitral valve prolapse: their pathophysiological relationship to the grade and causes of prolapse] Fukuda N, et al. **J Cardiol** 1988;18 Suppl 18:45–52, discussion 53–4 (Eng. Abstr.) **(Jpn)**

[Natural history of mitral valve prolapse with respect to the heart size and ventricular arrhythmias] Hayakawa M, et al. **J Cardiol** 1987;17 Suppl 14:81–7 (Eng. Abstr.) **(Jpn)**

[Autonomic dysfunction and effect of long–term administration of beta–receptor blocking agent in mitral valve prolapse] Oki T, et al. **J Cardiol** 1987;17 Suppl 14:119–26 **(Jpn)**

[Relationship between arrhythmias and autonomic dysfunction in patients with mitral valve prolapse] Oki T.
J Cardiol 1987;17 Suppl 14:89–93 **(Jpn)**

[Diurnal variation of the QT intervals in idiopathic mitral valve prolapse] Saito K, et al. **J Cardiol** 1988;18 Suppl 18:67–72, discussion 73 (Eng. Abstr.) **(Jpn)**

[Systolic time intervals in mitral valve prolapse syndrome] Yazaki N, et al. **J Cardiol** 1989;19 Suppl 21:75–80, discussion 81–3 (Eng. Abstr.) **(Jpn)**

[Exercise echocardiography and clinical features in patients with mitral valve prolapse] Yokota Y, et al. **J Cardiol** 1987; 17 Suppl 14:139–46 (Eng. Abstr.) **(Jpn)**

[Disorders of cardiac rhythm and conduction in 107 patients with mitral valve prolapse syndrome] Dłużniewska M, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1320–2 (Eng. Abstr.) **(Pol)**

[Manifestations of the QT syndrome in patients with idiopathic prolapse of the mitral valve] Petrović V.
Srp Arh Celok Lek 1988 Apr;116(4):323–9 (Eng. Abstr.) **(Scc)**

PREVENTION & CONTROL

Preventing mitral valve prolapse in anorexia nervosa [letter] Cheng TO. **Can Med Assoc J** 1989 Aug 1;141(3):192–3

[Mitral valve prolapse: two–dimensional echocardiographic screening in apparently healthy students] Fujii K, et al. **J Cardiol** 1988;18 Suppl 18:9–17, discussion 18–9 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Correlates of mitral valve prolapse among patients with panic disorder. Matuzas W, et al. **Psychiatry Res** 1989 May; 28(2):161–70

Panic disorder associated with mitral valve prolapse: psychosomatic implications. Krakowski AJ.
Psychother Psychosom 1987;47(3–4):211–8

[Psychological factors in mitral valve leaflet prolapse syndrome] Ruszczyńska B, et al. **Psychiatr Pol** 1988 Jul–Aug;22(4):296–302 (Eng. Abstr.) **(Pol)**

RADIOGRAPHY

[Angiographic diagnosis of lesions of the mitral valve and its appendages] Guo DW.
Chung Hua Fang She Hsueh Tsa Chih 1989 Feb;23(1):14–7 (Eng. Abstr.) **(Chi)**

[Left ventriculographic diagnostic criteria of mitral valve prolapse] Kozuka T, et al. **J Cardiol** 1987;17 Suppl 14:55–8 **(Jpn)**

RADIONUCLIDE IMAGING

Exercise first–pass radionuclide assessment of left and right ventricular function and valvular regurgitation in symptomatic mitral valve prolapse. Lumia FJ, et al.
Angiology 1989 May;40(5):443–9

SURGERY

Angina pectoris with encainide in dilated cardiomyopathy. Barron JT, et al. **Am Heart J** 1989 Mar;117(3):701–2

Surgery for mitral prolapse. Chavez AM, et al. **Herz** 1988 Dec;13(6):400–4

Echocardiographic decision–making for replacement surgery in mitral valve prolapse. Danielsen R, et al.
Scand J Thorac Cardiovasc Surg 1988;22(3):203–7

[Doppler echocardiographic analysis of the short–term results of surgical repair of mitral valve prolapse in myxomatous degeneration] De Gasperis C, et al.
G Ital Cardiol 1989 Jan;19(1):35–9 (Eng. Abstr.) **(Ita)**

[Prognosis and surgical problems of mitral valve prolapse] Hada Y, et al. **J Cardiol** 1987;17 Suppl 14:111–4 (13 ref.) **(Jpn)**

[Surgical problems of mitral regurgitation in patients with mitral valve prolapse] Yokote Y. **J Cardiol** 1987;17 Suppl 14:107–10 **(Jpn)**

THERAPY

Mitral valvuloplasty. Cosgrove DM, et al.
Curr Probl Cardiol 1989 Jul;14(7):359–415 (163 ref.)

URINE

Symptomatic mitral valve prolapse in children and adolescents: catecholamines, anxiety, and biofeedback. Smith MS, et al. **Pediatrics** 1989 Aug;84(2):290–5

VETERINARY

[The pathology of mitral valve prolapse in dogs] Guarda F, et al. **DTW** 1989 Apr;96(4):172–4 (Eng. Abstr.) **(Ger)**

[The pathology of mitral valve prolapse in swine] Guarda F, et al. **Schweiz Arch Tierheilkd** 1988 Oct;130(10):583–90 (Eng. Abstr.) **(Ita)**

MITRAL VALVE STENOSIS

Rheumatic heart disease in pregnancy. Brady K, et al.
Clin Obstet Gynecol 1989 Mar;32(1):21–40 (54 ref.)

Acquired mitral stenosis in children under fifteen. Pongpanich B, et al. **Jpn Heart J** 1989 Mar;30(2):181–6

CLASSIFICATION

Classification of subvalvular apparatus in rheumatic mitral stenosis and correlation between the lesions and other features of the disease [letter] Tendolkar AG, et al.
J Thorac Cardiovasc Surg 1988 Dec;96(6):968–9

COMPLICATIONS

Semiquantitative evaluation of aortic regurgitation by Doppler echocardiography: effects of associated mitral stenosis. Masuyama T, et al. **Am Heart J** 1989 Jan; 117(1):133–9

Detection of left atrial thrombi by two–dimensional echocardiography and surgical correlation in 148 patients with mitral valve disease. Bansal RC, et al.
Am J Cardiol 1989 Jul 15;64(3):243–6

Detection of coronary artery disease by dipyridamole thallium tomography in mitral valve stenosis. Huikuri HV, et al. **Am J Cardiol** 1989 Jan 1;63(1):124–6

Pelvic examination pulmonary edema [letter] Kurnik PB.
Arch Intern Med 1989 Feb;149(2):472

Influence of a single dose of captopril on pulmonary haemodynamics and right ventricular function in mitral stenosis with pulmonary hypertension. Zmudka K, et al.
Eur J Clin Pharmacol 1988;35(5):455–9

Ebstein's anomaly of the tricuspid valve associated with rheumatic mitral stenosis and aortic incompetence. Yavagal ST, et al. **Indian Heart J** 1988 Mar–Apr;40(2):138–40

New electrocardiographic criteria for diagnosing right ventricular hypertrophy in mitral stenosis—comparison with the Bonner's and Mortara's criteria. Hiroki H, et al.
Jpn Circ J 1988 Oct;52(10):1114–20

[A case of large mixed thrombus in the left heart atrium] Marinov Kh, et al. **Vutr Boles** 1988;27(3):112–6 (Eng. Abstr.) **(Bul)**

[Tricuspid regurgitation evaluated by intraoperative epicardial pulsed Doppler echocardiography: investigation of patients with combined valvular diseases] Iida K, et al.
J Cardiol 1987 Dec;17(4):797–806 (Eng. Abstr.) **(Jpn)**

[A case of mitral stenosis with left atrial thrombus arose and reduced in a short–term] Ueda M, et al.
Kokyu To Junkan 1989 May;37(5):563–7 (Eng. Abstr.) **(Jpn)**

[Preoperative evaluation of left atrial thrombi with computed tomography in mitral stenosis] Takahara Y, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Oct; 36(10):2157–62 (Eng. Abstr.) **(Jpn)**

[Consumption coagulopathy found in mitral stenosis associated with atrial thrombus] Takamatsu J, et al.
Rinsho Ketsueki 1989 Apr;30(4):525–9 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of acute embolegenic occlusion of the arteries in patients with rheumatic lesions of the mitral valve] Gusak VK, et al. **Klin Khir** 1988;(7):43–5 (Eng. Abstr.) **(Rus)**

[Postrheumatic Jaccoud's arthritis (description of a case)] Tatarkina ND, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):70–1 **(Rus)**

[Left atrial thrombosis: a coronariographic finding in mitral stenosis] Roca J, et al. **Rev Esp Cardiol** 1988 Jun–Jul; 41(6):352–4 (Eng. Abstr.) **(Spa)**

CONGENITAL

Transcatheter treatment of congenital heart disease. Beekman RH, et al. **Prog Cardiovasc Dis** 1989 Jul–Aug;32(1):1–30 (110 ref.)

DIAGNOSIS

Two–dimensional echocardiographic visualization of turbulent intracardiac blood flow across the stenotic mitral valve. Chandrasekaran K, et al. **Am Heart J** 1989 Sep; 118(3):625–7

Pulsed–wave Doppler quantitation of aortic regurgitation associated with mitral stenosis. Favuzzi A, et al.
Cardiologia 1988 May;33(5):485–91

Echo Doppler assessment of stenotic valvular areas. Iliceto S, et al. **Cardiologia** 1988 Nov;33(11):1013–6

Intra–atrial smoke–like echoes and thrombi formation. Chia BL, et al. **Chest** 1989 Apr;95(4):912–4

Inaccuracy of mitral pressure half–time immediately after percutaneous mitral valvotomy. Dependence on transmitral gradient and left atrial and ventricular compliance. Thomas

JD, et al. **Circulation** 1988 Oct;78(4):980–93

Cardiac valve disorders: growing significance in the elderly. Leibovitch ER. **Geriatrics** 1989 Mar;44(3):91–2, 95–7, 100

Aneurysm of atrial septum associated with rheumatic mitral stenosis simulating tumour of right atrium. Pena Tizon FJ, et al. **Int J Cardiol** 1989 May;23(2):264–7

The lessons of history as reflected in the pulmonary capillary wedge pressure. Alpert JS. **J Am Coll Cardiol** 1989 Mar 15;13(4):830–1

Use of pulmonary capillary wedge pressure to assess severity of mitral stenosis: is true left atrial pressure needed in this condition? Lange RA, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):825–31

Quantitative ultrasonic characterization of the mitral valve: in vitro and in vivo findings. Lattanzi F, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):158–65

Mitral valve and wedge pressure [editorial] **Lancet** 1989 Jul 15;2(8655):138–9

Magnetocardiographic diagnosis of right ventricular overloading in mitral stenosis. Fukuda Y, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):91–6

[Physical work capacity and left ventricular function assessed using an impedance cardiographic method in patients with a rheumatic mitral valve defect] Terzieva L. **Vutr Boles** 1989;28(1):36–41 (Eng. Abstr.) **(Bul)**

[Echo–Doppler diagnosis of mitral stenoses] Lesbre JP, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):485–91 (19 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of continuous wave Doppler and heart catheterization in the determination of the mean transvalvular gradient in mitral stenosis. A simultaneous beat to beat analysis (published erratum appears in G Ital Cardiol 1988 Aug;18(8):726)] Moro E, et al. **G Ital Cardiol** 1988 Apr;18(4):308–12 (Eng. Abstr.) **(Ita)**

[Potential of noninvasive determination of the left atrioventricular aperture in mitral stenosis (according to data of ultrasound studies)] Korytnikov KI. **Ter Arkh** 1989; 61(4):88–91 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Beta blockade for patients of mitral stenosis in sinus rhythm. Ahuja RC, et al. **Indian Heart J** 1989 Jan–Feb;41(1):58–61

Failure of oral atenolol and verapamil to increase the capacity and duration of exercise in patients in sinus rhythm with mitral stenosis. Misra M, et al. **Int J Cardiol** 1989 Apr; 23(1):37–41

[Maternal concentration of serum digoxin and concentration in the amniotic fluid and neonatal serum] Plotti G, et al. **Recenti Prog Med** 1989 Mar;80(3):165–9 (Eng. Abstr.) **(Ita)**

[Positive effect of nitroglycerin in patients with combined mitral valve defects] Górski W, et al. **Kardiol Pol** 1988; 31(3):154–64 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Hypereosinophilic syndrome resulting in aortic and mitral stenosis: a case requiring double valve replacement. Smith MD, et al. **Am Heart J** 1989 Feb;117(2):475–9

Hydatid cyst embolization to the left ventricle: a case report. Milei J, et al. **Arq Bras Cardiol** 1988 Mar;50(3):189–91

Calcific stenosis of a mitral valve xenograft in a patient in chronic renal failure. Raftery MJ, et al. **Br Heart J** 1989 Aug;62(2):161–2

[A case of cardiac myxoma associated with long–term lasting symptoms of mitral stenosis] Imawaki S, et al. **Kyobu Geka** 1989 Mar;42(3):218–21 (Eng. Abstr.) **(Jpn)**

METABOLISM

An integrated study employing histopathological, immunohistocytochemical and radioimmunoassay analyses of atrial natriuretic peptide in the right and left atria in patients with mitral valve disease. Nagata M, et al. **Jpn Circ J** 1988 Dec;52(12):1453–6

Key enzymes of myocardial energy metabolism in papillary muscle of patients with mitral valve disease—relation to left ventricular function. Sylvén C, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):63–7

[Contents and molecular forms of human atrial natriuretic peptide in right and left auricle in patients with heart disease] Akimoto K, et al. **Kokyu To Junkan** 1989 Mar; 37(3):307–11 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

A comparison of the assessment of mitral valve area by 2–D echo and CW Doppler. Jose VJ, et al. **Indian Heart J** 1988 Jan–Feb;40(1):17–20

Doppler echocardiographic assessment of the valve area in patients with atrioventricular valve stenosis by application of the continuity equation. Karp K, et al. **J Intern Med** 1989 Apr;225(4):261–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 19–1989. A 41–year–old woman with mitral stenosis, exertional dyspnea, and persistent hoarseness. **N Engl J Med** 1989 May 11; 320(19):1260–8

[Assessment of morphological mitral valve severity on of operative procedure using two–dimensional echocardiography] Yanagiya A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2090–6 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Effect of pregnancy on pressure gradient in mitral stenosis. Bryg RJ, et al. **Am J Cardiol** 1989 Feb 1;63(5):384–6

Left ventricular intrinsic contractility in pure rheumatic mitral stenosis. Mohan JC, et al. **Am J Cardiol** 1989 Jul 15;64(3):240–2

Effect of uterine contractions in a pregnant woman with mitral valve stenosis [letter] Buxton EJ, et al. **BMJ** 1989 Mar 4;298(6673):600–1

Effect of uterine contractions on left atrial pressure in a pregnant woman with mitral stenosis. Jakobi P, et al. **BMJ** 1989 Jan 7;298(6665):27

Partial anomalous pulmonary venous drainage and intact atrial septum with mitral stenosis: the paradox of a small shunt. Dev V, et al. **Clin Cardiol** 1988 Nov;11(11):780–4

Influence of aortic regurgitation on the assessment of the pressure half–time and derived mitral–valve area in patients with mitral stenosis. Moro E, et al. **Eur Heart J** 1988 Sep; 9(9):1010–7

Mitral stenosis: a multivariant analysis by echo cardiography (M–mode). Aneja GK, et al. **Indian Heart J** 1988 Jan–Feb; 40(1):21–8

The hemodynamic effects of severe mitral stenosis and pulmonary hypertension during labor and delivery. Ducey JP, et al. **Intensive Care Med** 1989;15(3):192–5

Myocardial beta–adrenoceptor changes in heart failure: concomitant reduction in beta 1– and beta 2–adrenoceptor function related to the degree of heart failure in patients with mitral valve disease. Brodde OE, et al. **J Am Coll Cardiol** 1989 Aug;14(2):323–31

Reassessment of valve area determinations in mitral stenosis by the pressure half–time method: impact of left ventricular stiffness and peak diastolic pressure difference. Karp K, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):594–9

Pressure recovery distal to a stenosis: potential cause of gradient "overestimation" by Doppler echocardiography. Levine RA, et al. **J Am Coll Cardiol** 1989 Mar 1; 13(3):706–15

Coenzyme Q10 and key enzyme activities in papillary muscle related to left ventricle function in mitral valve disease. Karlsson J, et al. **Mol Cell Biochem** 1988 Nov;84(1):59–64

[Complex assessment of the electrophysiological changes in patients with right–ventricular cardiac loading] Urumov G, et al. **Vutr Boles** 1989;28(2):47–53 (Eng. Abstr.) **(Bul)**

[Hemodynamic and hemorheologic changes in weak pulse in mitral stenosis patients] Jiang CW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):273–5, 261 (Eng. Abstr.) **(Chi)**

[Is examination of the post–capillary pressure reaction during physical exertion in mitral stenosis effective from the aspect of indications for surgical therapy?] Hrudová J, et al. **Sb Lek** 1988 Nov;90(11–12):323–8 (Eng. Abstr.) **(Cze)**

[Systolo–diastolic events in mitral stenosis] Grbic M, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1573–82 (Eng. Abstr.) **(Fre)**

[Incidence and concomitant factors of tricuspid valve insufficiency in patients with aortic and mitral valve diseases] Dittmann H, et al. **Z Kardiol** 1989 Jun;78(6):380–5 (Eng. Abstr.) **(Ger)**

[Function of the right ventricle in patients with mitral valve diseases] Unterberg R, et al. **Z Kardiol** 1989 Jun; 78(6):386–93 (Eng. Abstr.) **(Ger)**

[Respiratory function and mitral stenosis. Physiological aspects and clinical correlations] Mazza F, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):39–42 (Eng. Abstr.) **(Ita)**

[Value of exercise echocardiography in evaluating left ventricular systolic function in mitral stenosis] Kitamura H, et al. **J Cardiol** 1988 Jun;18(2):373–83 (Eng. Abstr.) **(Jpn)**

[Utility of digital perfusion images of the lung in mitral stenosis: the pathophysiological significance of the distribution of pulmonary perfusion] Tanaka T, et al. **J Cardiol** 1988 Mar;18(1):179–87 (Eng. Abstr.) **(Jpn)**

[Evaluation of valvular function in patients with mitral stenosis. A comparison of hemodynamic studies before and after operation at tachycardia with RV pacing] Nogami A, et al. **Kyobu Geka** 1988 Sep;41(10):783–9, discussion 790–2 (Eng. Abstr.) **(Jpn)**

[Clinical studies of the distribution of pulmonary blood flow at rest and with exercise in mitral stenosis in connection with the reversibility of the pulmonary vascular lesion] Kohno T. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):2005–15 (Eng. Abstr.) **(Jpn)**

[Heart disease and bronchial circulation] Nagai A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):347–51 (Eng. Abstr.) **(Jpn)**

[Analysis of selected hemodynamic parameters at rest and during exercise in surgically treated combined mitral valve defect with the predominance of mitral valve stenosis] Krzyś T, et al. **Kardiol Pol** 1988;31(8):497–504 (Eng. Abstr.) **(Pol)**

[Evaluation of the severity of mitral valve stenosis] Blancher C, et al. **Arq Bras Cardiol** 1988 Sep;51(3):239–44 (Eng. Abstr.) **(Por)**

[Evaluation of the pressure gradient in mitral valve stenosis with pulsed two–dimensional Doppler echocardiography] José MC, et al. **Arq Bras Cardiol** 1988 Sep;51(3):245–7 (Eng. Abstr.) **(Por)**

[Current possibilities of bloodless quantitative evaluation of the pumping function reserve of the heart based on the study of oxygen consumption during the treadmill test] Kudriashev VE, et al. **Kardiologiia** 1989 May;29(5):48–52 (Eng. Abstr.) **(Rus)**

[Evaluation of functional reserves of the myocardium in patients with heart defects on the basis of changes in systolic time intervals during post–extrasystolic contraction] Serdiuk NG, et al. **Kardiologiia** 1988 Jul; 28(7):70–4 (Eng. Abstr.) **(Rus)**

[Mitral stenosis and the problem of critical constriction in blood circulation] Solov'ev GM, et al. **Kardiologiia** 1988 Sep;28(9):10–4 (Eng. Abstr.) **(Rus)**

[Systolic stress in mitral stenosis] Rodríguez T, et al. **Arch Inst Cardiol Mex** 1989 May–Jun;59(3):233–40 (Eng. Abstr.) **(Spa)**

[Buprenorphine in heart surgery. Hemodynamic study in patients with mitral valve disease] Fraile JR, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct;35(5):245–8 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

[Psychological characteristics of patients with heart defects referred for cardiac surgery] Tylka E, et al. **Kardiol Pol** 1988;31(10):656–61 (Eng. Abstr.) **(Pol)**

SURGERY

Results of percutaneous mitral commissurotomy in 200 patients. Vahanian A, et al. **Am J Cardiol** 1989 Apr 1; 63(12):847–52

Aortic and mitral valve replacement in idiopathic hypereosinophilic syndrome. Hendren WG, et al. **Ann Thorac Surg** 1988 Nov;46(5):570–1

Plastic surgery for cardiac valves: 15 years' experience. Konstantinov BA, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S77–8

Mitral stenosis in childhood and adolescence—a study of 45 cases and their surgical management. Beg MH, et al. **Ann Trop Paediatr** 1989 Jun;9(2):98–101

Combined aortic and mitral valve replacement in an adult with Scheie's disease. Butman SM, et al. **Chest** 1989 Jul; 96(1):209–10

Rapid reduction of plasma atrial natriuretic peptide levels during percutaneous transvenous mitral commissurotomy in patients with mitral stenosis. Ishikura F, et al. **Circulation** 1989 Jan;79(1):47–50

Effect of age on improvement following closed mitral valvotomy. Barkataki JC, et al. **Indian Heart J** 1988 Mar–Apr;40(2):76–80

Simultaneous closed mitral valvotomy and caesarean section. Joshi SV, et al. **Indian Heart J** 1988 Jan–Feb;40(1):65–6

Closed versus open approach to mitral stenosis: an objective analysis. Magotra RA, et al. **Indian Heart J** 1987 Nov–Dec; 39(6):60–3

Massive mitral and myocardial calcification—technical manoeuvres for successful valve replacement. Sampathkumar A. **Int J Cardiol** 1988 Aug;20(2):279–82

Study of different anaesthetic techniques on pulmonary haemodynamics during mitral commissurotomy. De RK. **J Indian Med Assoc** 1989 Mar;87(3):65–7

Long cross–clamp time with warm heart surgery [letter] Lichtenstein SV, et al. **Lancet** 1989 Jun 24;1(8652):1443

Pulmonic valve replacement for pulmonic insufficiency one year after mitral valve replacement. Gindea AJ, et al. **N Y State J Med** 1989 Jul;89(7):422–3

Unusual manifestation of valvular vegetations. Prasad TR, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):170–1

[An evaluation of long–term results of closed commissurotomy of mitral stenosis] Gao SZ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):2–4, 60 (Eng. Abstr.) **(Chi)**

[Evaluation by two–dimensional and doppler echocardiography of the results of percutaneous mitral valvuloplasty] Cormier B, et al. **Arch Mal Coeur** 1989 Feb; 82(2):185–91 (Eng. Abstr.) **(Fre)**

[Can atrial fibrillation be reverted to sinus rhythm after open commissurotomy for mitral stenosis? Actuarial maintenance rate of sinus rhythm at ten years after surgery] Sato S, et al. **Kokyu To Junkan** 1988 Aug;36(8):869–72 (Eng. Abstr.) **(Jpn)**

[Regional left ventricular wall motion and function after mitral valve replacement with preservation of the posterior leaflets and subvalvular tissues] Onitsuka T, et al. **Kyobu Geka** 1988 Oct;41(11):865–70 (Eng. Abstr.) **(Jpn)**

[Combined aortic and mitral valve replacement with or without preservation of posterior mitral apparatus] Nakajima J, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):463–9 (Eng. Abstr.) **(Jpn)**

[A case of concomitant surgery of advanced valvular disease and lung cancer under cardiopulmonary bypass] Nakao M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):551–4 (Eng. Abstr.) **(Jpn)**

[The evaluation of the effect of surgical repair on the left ventricular function of mitral stenosis—the analysis of the left ventricular functional reserve by dynamic exercise echocardiography] Okabe M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):1985–94 (Eng. Abstr.) **(Jpn)**

[Indications for heart surgery in pregnant women with mitral valve stenosis and its remote results] Tracz W, et al. **Kardiol Pol** 1988;31 Suppl 2:56–62 (Eng. Abstr.) **(Pol)**

[Evaluation of surgical treatment of the mitral valve by intraoperative echocardiography] Camarano GP, et al.

Arq Bras Cardiol 1988 Apr;50(4):237–42 (Eng. Abstr.) (Por)
[The operated-on heart and pregnancy] Dashkevich VE, et al. Akush Ginekol (Mosk) 1988 Sep;(9):55–6 (Rus)
[Use of cardiac glycosides in the intensive therapy of heart surgery patients] Lebedeva RN, et al. Anesteziol Reanimatol 1988 Sep–Oct;(5):3–6 (Eng. Abstr.) (Rus)
[Mitral commissurotomy in children and adolescents] Kosach GA, et al. Grudn Khir 1989 Mar–Apr;(2):21–4 (Eng. Abstr.) (Rus)
[Prognosis of the results of closed mitral commissurotomy based on data of preoperative M-echocardiographic assessment of the state of the mitral valve] Markhasina IP. Grudn Khir 1989 Jan–Feb;(1):36–40 (Eng. Abstr.) (Rus)
[Mitral stenosis and pregnancy. Debatable questions of surgical tactics] Vakhidov VV, et al. Grudn Khir 1988 Jul–Aug;(4):34–8 (Eng. Abstr.) (Rus)
[Emergency valve-preserving operations in mitral stenosis under craniocerebral hypothermia] Valyka EN, et al. Grudn Khir 1988 Sep–Oct;(5):10–4 (Eng. Abstr.) (Rus)
[Emergency mitral re-commissurotomy and pneumonectomy in pulmonary hemorrhage] Ivanov SP, et al. Kardiologiia 1988 Oct;28(10):104–5 (Rus)
[Echocardiographic analysis of the hemodynamic effect of closed mitral commissurotomy] Markhasina IP. Kardiologiia 1988 Jun;28(6):106–8 (Rus)
[Indications for the surgical treatment of mitral valve stenosis] Solov'ev GM, et al. Klin Med (Mosk) 1988 Oct; 66(10):28–32 (Eng. Abstr.) (Rus)
[Immediate results of closed correction of recurrent mitral valve stenosis in the late stages of the disease] Uglov FG, et al. Vestn Khir 1988 Jul;141(7):3–7 (Eng. Abstr.) (Rus)
[Clinical and hemodynamic long-term result of substituting the mitral valve using a Beall prosthesis] Astolfi D, et al. Arch Inst Cardiol Mex 1976 May–Jun;46(3):325–31 (Eng. Abstr.) (Spa)
[Is closed mitral commissurotomy still indicated? Patient selection and postoperative problems. Analysis of 221 cases] Ochoa E, et al. Arch Inst Cardiol Mex 1976 May–Jun; 46(3):332–5 (Eng. Abstr.) (Spa)
[Closed commissurotomy of the mitral valve] Quijano Pitman F. Arch Inst Cardiol Mex 1976 May–Jun;46(3):249–52 (23 ref.) (Spa)
[Immediate and late results of conservative mitral surgery in mitral stenosis] Meruane J, et al. Rev Med Chil 1988 May;116(5):420–6 (Eng. Abstr.) (Spa)

THERAPY

Echophonocardiography in patients undergoing percutaneous mitral balloon valvotomy (PMV): the learning curve of PMV. Brandi-Pifano S, et al. Am Heart J 1989 Jan;117(1):25–31
Percutaneous mitral balloon dilatation by a new sequential single- and double-balloon technique. Chen CG, et al. Am Heart J 1988 Nov;116(5 Pt 1):1161–7
Rapid fall in elevated plasma atrial natriuretic peptide levels after successful catheter balloon valvuloplasty of mitral stenosis. Hung JS, et al. Am Heart J 1989 Feb;117(2):381–5
Balloon mitral valvuloplasty via retrograde left atrial catheterization. Orme EC, et al. Am Heart J 1989 Mar; 117(3):680–3
Endomyocardial trauma during balloon mitral valvuloplasty. Ramsdale DR, et al. Am Heart J 1989 Mar;117(3):685–7
Interatrial septal thickening preventing percutaneous mitral valve balloon valvuloplasty. Sheikh KH, et al. Am Heart J 1989 Jan;117(1):206–10
Balloon valvuloplasty versus surgical commissurotomy [letter] Bonchek LI. Am J Cardiol 1988 Nov 15;62(16):1153
Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus. Hung JS, et al. Am J Cardiol 1989 Jul 1;64(1):126–8
Comparison of results of percutaneous balloon mitral valvotomy using single and double balloon techniques. al Kasab S, et al. Am J Cardiol 1989 Jan 1;63(1):135–6
Percutaneous double balloon mitral valvuloplasty in pregnant women. Mangione JA, et al. Am J Cardiol 1989 Jul 1; 64(1):99–102
Combined percutaneous mitral and aortic balloon valvuloplasty. Medina A, et al. Am J Cardiol 1989 Sep 15;64(10):620–4
Usefulness of shock wave lithotripsy as pretreatment for balloon valvuloplasty in calcified mitral stenosis. Nowak B, et al. Am J Cardiol 1989 Apr 15;63(13):996–7
One-year follow-up after percutaneous double balloon mitral valvotomy. al Zaibag M, et al. Am J Cardiol 1989 Jan 1; 63(1):126–7
Balloon catheter therapy and cardiac valvular disease. Cribier A, et al. Annu Rev Med 1989;40:61–70 (29 ref.)
Percutaneous balloon valvuloplasty of stenosed aortic and mitral valves in adults. Hands ME, et al. Aust N Z J Med 1988 Aug;18(5):723–8 (79 ref.)
Percutaneous balloon valve dilatation [letter] Middleton SJ. BMJ 1989 May 6;298(6682):1251
Percutaneous transluminal balloon dilatation of the mitral valve in pregnancy. Smith R, et al. Br Heart J 1989 Jun; 61(6):551–3
Percutaneous balloon dilatation of the mitral valve: an analysis of echocardiographic variables related to outcome and the mechanism of dilatation. Wilkins GT, et al. Br Heart J 1988 Oct;60(4):299–308
Interventional catheterization of left heart lesions, including aortic and mitral valve stenosis and coarctation of the aorta. Perry SB, et al. Cardiol Clin 1989 May;7(2):341–9 (61 ref.)
Therapeutics and management during pregnancy. Rutherford JD, et al. Cardiovasc Clin 1989;19(3):113–25 (40 ref.)
Percutaneous balloon valvuloplasty for mitral stenosis complicated by fatal pericardial tamponade in a patient with extreme pulmonary hypertension. Berland J, et al. Cathet Cardiovasc Diagn 1989 Jun;17(2):109–11
Percutaneous balloon mitral valvuloplasty and its different approaches: a new perspective [letter] Büchler JR. Cathet Cardiovasc Diagn 1989 Feb;16(2):143
Right to left interatrial shunting following balloon mitral valvuloplasty. Goldberg N, et al. Cathet Cardiovasc Diagn 1989 Feb;16(2):133–5 (9 ref.)
Single large-balloon percutaneous mitral valvuloplasty. Herrmann HC, et al. Cathet Cardiovasc Diagn 1989 May; 17(1):59–61
Percutaneous mitral balloon valvotomy during pregnancy in a patient with severe mitral stenosis. Palacios IF, et al. Cathet Cardiovasc Diagn 1988;15(2):109–11
Percutaneous balloon mitral valvuloplasty in a pregnant woman with mitral stenosis. Safian RD, et al. Cathet Cardiovasc Diagn 1988;15(2):103–8
Mitral balloon valvuloplasty using a retrograde transventricular approach via the brachial artery. Zureikat HY, et al. Cathet Cardiovasc Diagn 1989 Jul;17(3):183–5
Catheter balloon valvuloplasty treatment of adult patients with mitral stenosis. McKay CR. Chest 1989 Feb; 95(2):410–3
Safety and efficacy of percutaneous mitral valvuloplasty in rheumatic mitral stenosis: early results and short-term follow-up in 32 consecutive patients. Chang MS, et al. Chung Hua I Hsueh Tsa Chih 1988 Jul;42(1):7–16
Cardiac conduction abnormalities during percutaneous balloon mitral or aortic valvotomy. Carlson MD, et al. Circulation 1989 Jun;79(6):1197–203
Progressive improvement in pulmonary vascular resistance after percutaneous mitral valvuloplasty. Levine MJ, et al. Circulation 1989 May;79(5):1061–7
Follow-up of patients undergoing percutaneous mitral balloon valvotomy. Analysis of factors determining restenosis. Palacios IF, et al. Circulation 1989 Mar; 79(3):573–9
Influence of mitral valve morphology on double-balloon catheter balloon valvuloplasty in patients with mitral stenosis. Analysis of factors predicting immediate and 3-month results. Reid CL, et al. Circulation 1989 Sep; 80(3):515–24
Balloon valvuloplasty 1988: a review. Hill JA, et al. Clin Cardiol 1989 Mar;12(3):113–20 (67 ref.)
Right heart failure due to an inter-atrial shunt after percutaneous mitral balloon dilatation. L'Epine Y, et al. Eur Heart J 1989 Mar;10(3):285–7
Mechanics of percutaneous balloon valvotomy for mitral valvular stenosis. Matsuura Y, et al. Heart Vessels 1988; 4(3):179–83
Closed revalvotomy for mitral restenosis. Bhosle KN, et al. Indian Heart J 1988 Nov–Dec;40(6):485–7
Single balloon valvotomy for rheumatic mitral restenosis. Natarajan D. Int J Cardiol 1989 Aug;24(2):246–8
Reliability of the Doppler pressure half-time method for assessing effects of percutaneous mitral balloon valvuloplasty. Chen CG, et al. J Am Coll Cardiol 1989 May;13(6):1309–13
Aortic and mitral valvuloplasty. Moore MR. Radiography 1988 May–Jun;54(615):93–7
[Balloon catheter mitral valvuloplasty by sequential single- and double-balloon technique] Chen CG, et al. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Aug; 16(4):197–9, 252 (Eng. Abstr.) (Chi)
[Evaluation of various types of balloon catheters and methods in dilating stenotic mitral valves] Chen CR. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Feb; 17(1):18–20 (Chi)
[Percutaneous balloon catheter mitral commissurotomy] Li HT, et al. Chung Hua Nei Ko Tsa Chih 1988 Aug; 27(8):460–2, 517 (Eng. Abstr.) (Chi)
[Treatment of rheumatic mitral stenosis in children and adolescents by a balloon catheter] Losay J, et al. Arch Fr Pediatr 1988 Aug–Sep;45(7):455–60 (Eng. Abstr.) (Fre)
[Percutaneous transluminal valvuloplasty of mitral stenosis. Apropos of 17 cases] Chaara A, et al. Arch Mal Coeur 1988 Nov;81(11):1387–92 (Eng. Abstr.) (Fre)
[Percutaneous mitral commissurotomy. Apropos of 130 cases] Vahanian A, et al. Arch Mal Coeur 1988 Jun;81(6):755–62 (Eng. Abstr.) (Fre)
[Percutaneous valvuloplasty using a balloon catheter in acquired mitral and aortic stenosis in adults] Letac B, et al. Schweiz Med Wochenschr 1988 Nov 19;118(46):1673–80 (Eng. Abstr.) (Fre)
[Current status of balloon valvuloplasty in adulthood] Eber B, et al. Acta Med Austriaca 1989;16(2):27–31 (21 ref.) (Eng. Abstr.) (Ger)
[Catheter valvuloplasty in mitral valve stenosis] Sievert H, et al. Dtsch Med Wochenschr 1989 Feb 17;114(7):248–52 (Eng. Abstr.) (Ger)
[Percutaneous transfemoral valvuloplasty in aortic and mitral valve stenoses] Klocke RK, et al. Med Klin 1989 May 15; 84(5):262–6 (47 ref.) (Ger)
[Clinical application of percutaneous trans-septal mitral commissurotomy in mitral re-stenosis after closed or open mitral commissurotomy] Sueda T, et al. Kyobu Geka 1988 Oct;41(11):886–9 (Eng. Abstr.) (Jpn)
[Therapeutic planning in mitral stenosis] Grinberg M, et al. Arq Bras Cardiol 1988 Oct;51(4):289–95 (43 ref.) (Por)
[Use of transcutaneous balloon valvuloplasty in treating heart valve stenosis] Volynskiĭ IuD, et al. Grudn Khir 1988 Sep–Oct;(5):74–80 (52 ref.) (Rus)
[Use of echocardiography in percutaneous mitral and aortic dilatation] Goicolea Ruigómez FJ, et al. Rev Esp Cardiol 1988 Oct;41(8):481–5 (Eng. Abstr.) (Spa)
[Percutaneous mitral and aortic valvuloplasty in a case of rheumatic mitral and aortic stenosis] Medina A, et al. Rev Esp Cardiol 1988 Nov;41(9):574–5 (Eng. Abstr.) (Spa)
[Use of a new double-balloon catheter in percutaneous transatrial mitral valvuloplasty] Medina A, et al. Rev Esp Cardiol 1988 Oct;41(8):477–80 (Eng. Abstr.) (Spa)

MIXED CONNECTIVE TISSUE DISEASE

Mixed connective tissue disease. Schreiner DT, et al. Clin Dermatol 1985 Jul–Sep;3(3):96–104
Mixed connective tissue disease. Adlakha A, et al. J Indian Med Assoc 1988 Jun;86(6):151–3
[Mixed connective tissue disease in childhood. Report of a case] Falcini F, et al. Pediatr Med Chir 1988 Mar–Apr; 10(2):223–5 (Eng. Abstr.) (Ita)

BLOOD

[Whole-blood and plasma viscosity in two cases of mixed connective tissue disease with Raynaud's phenomenon and cold agglutinemia] Nakazato K, et al. Rinsho Byori 1988 Oct;36(10):1201–4 (Jpn)

CHEMICALLY INDUCED

Mixed connective tissue disease after exposure to polyvinyl chloride. Kahn MF, et al. J Rheumatol 1989 Apr; 16(4):533–5

CLASSIFICATION

Is MCTD a distinct entity? Comparison of clinical and laboratory findings in MCTD, SLE, PSS, and RA patients. De Clerck LS, et al. Clin Rheumatol 1989 Mar;8(1):29–36
[Clinical observations in mixed connective tissue disease] Bodolay E, et al. Orv Hetil 1989 Mar 12;130(11):557–61 (Eng. Abstr.) (Hun)

COMPLICATIONS

Mixed connective tissue disease and renal disease. Akmal M. Adv Exp Med Biol 1989;252:53–8 (32 ref.)
Frequency of mitral valve prolapse in systemic lupus erythematosus, progressive systemic sclerosis and mixed connective tissue disease. Comens SM, et al. Am J Cardiol 1989 Feb 1;63(5):369–70
Sulindac-induced aseptic meningitis in mixed connective tissue disease. Yasuda Y, et al. Clin Neurol Neurosurg 1989; 91(3):257–60
Case of mixed connective tissue disease associated with autoimmune hepatitis. Maeda M, et al. Dig Dis Sci 1988 Nov;33(11):1487–90
Prostaglandin infusion therapy for intermittent digital ischemia in a patient with mixed connective tissue disease. Case report and review of the literature. Cohen LE, et al. J Am Acad Dermatol 1989 May;20(5 Pt 2):893–7 (31 ref.)
Protein-losing enteropathy and mixed connective-tissue disease. Terren P. Med J Aust 1988 Nov 21;149(10):558–9
Amyloidosis in mixed connective tissue disease. Piirainen HI, et al. Scand J Rheumatol 1989;18(3):165–8
[Primary biliary cirrhosis disclosed in mixed connective tissue disease (letter)] Staumont G, et al. Gastroenterol Clin Biol 1988 Dec;12(12):968 (Fre)
[An adult case of mixed connective tissue disease associated with myocardial infarction] Kato N, et al. Nippon Hifuka Gakkai Zasshi 1989 Jan;99(1):59–66 (Eng. Abstr.) (Jpn)
[An autopsy case of patient with mixed connective tissue disease with pulmonary hypertension and a remarkable thrombus in pulmonary truncus] Saito Y, et al. Nippon Naika Gakkai Zasshi 1989 Mar;78(3):440–1 (Jpn)
[A case of mixed connective tissue disease with mesenteric panniculitis] Watanabe I, et al. Nippon Naika Gakkai Zasshi 1989 Jan;78(1):93–4 (Jpn)
[A case of mixed connective tissue disease (MCTD) complicating pulmonary hypertension and portal hypertension] Sawai T, et al. Ryumachi 1988 Jun; 28(3):164–9 (Eng. Abstr.) (Jpn)
[A case of mixed connective tissue disease complicated by pneumatosis cystoides intestinalis] Yoshinaga T, et al. Ryumachi 1988 Aug;28(4):255–62 (17 ref.) (Eng. Abstr.) (Jpn)
[Clinical observation of cardiac rhythm disorder in a patient with mixed connective tissue disease] Bazhanov NN, et al. Ter Arkh 1988;60(7):123–4 (Rus)

DIAGNOSIS

Comparison between 3 diagnostic criteria for mixed connective tissue disease. Study of 593 patients. Alarcón-Segovia D, et al. **J Rheumatol** 1989 Mar; 16(3):328–34

Mixed connective tissue disease. Feldman F. **Radiol Clin North Am** 1988 Nov;26(6):1235–46 (22 ref.)

[Mixed connective tissue disease in children in the light of our observations] Wesolowska H, et al. **Pediatr Pol** 1988 Aug;63(8):473–8 (Eng. Abstr.) (Pol)

DRUG THERAPY

Failure of steroid and immunosuppressant therapy to halt progression of mixed connective tissue disease. Hendra TJ. **Br J Clin Pract** 1988 Jun;42(6):256–7

ENZYMOLOGY

[A case of MCTD with pulmonary hypertension showing elevated serum angiotensin I-converting enzyme activity] Ozawa T, et al. **Nippon Naika Gakkai Zasshi** 1989 May; 78(5):696–7 (Jpn)

ETIOLOGY

Thrombocytopenia and hemolytic anemia in a patient with mixed connective tissue disease due to thrombotic thrombocytopenic purpura. ter Borg EJ, et al. **J Rheumatol** 1988 Jul;15(7):1174–7

IMMUNOLOGY

Monocyte functions in patients with mixed connective tissue disease. Bodolay E, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb;17(1):39–43

Expression of anti-double stranded DNA idiotype in mixed connective tissue disease and progressive systemic sclerosis. Kubota T, et al. **Bull Tokyo Med Dent Univ** 1989 Jun; 36(2):13–8

Cytotoxic endothelial cell antibodies in mixed connective tissue disease. Bodolay E, et al. **Immunol Lett** 1989 Jan 31;20(2):163–7

B-cell proliferation and differentiation in systemic lupus erythematosus and mixed connective tissue disease. Kallenberg CG, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):55–61

Juvenile-onset mixed connective tissue disease: clinical, serological and follow-up data. de Rooij DJ, et al. **Scand J Rheumatol** 1989;18(3):157–60

[Characterization by immunoblotting (western blot) of anti-RNP antibodies in 36 connective tissue disease patients of whom 26 had mixed connective tissue disease. Comparison with 28 lupus patients with anti-Sm antibodies] Meyer O, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):39–44 (Fre)

[Interleukin 2 (IL-2) production in patients with mixed connective tissue disease (MCTD) and its relevance to the diagnosis and clinical features] Umehara H, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):649–55 (Jpn)

PATHOLOGY

Clinical and serologic characteristics of patients with overlap syndrome: is mixed connective tissue disease a distinct clinical entity? Lázaro MA, et al. **Medicine (Baltimore)** 1989 Jan;68(1):58–65 (79 ref.)

[Mixed connective tissue disease with severe esophageal scleroderma. An unusual form of the overlap syndrome] Dupond JL, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1015–7 (Fre)

RADIONUCLIDE IMAGING

Intra-articular apatite deposition in mixed connective tissue disease: crystallographic and technetium scanning characteristics. Hutton CW, et al. **Ann Rheum Dis** 1988 Dec;47(12):1027–30

MIXED FUNCTION OXIDASES

ANALYSIS

A continuous fluorometric assay for cytochrome P-450-dependent mixed function oxidases using 3-cyano-7-ethoxycoumarin. White IN. **Anal Biochem** 1988 Aug 1;172(2):304–10

Induction and depression of cytochrome P-450-dependent mixed-function oxidase by a cloned consensus alpha-interferon (IFN-alpha CON1) in the hamster. Moochhala SM, et al. **Biochem Pharmacol** 1989 Feb 1; 38(3):439–47

Characteristics of rat hepatocytes sorted by fluorescence-activated flow cytometry. Effects of mixed function oxidase inducers. White IN, et al. **Biochem Pharmacol** 1989 May 15;38(10):1639–45

Influence of long term treatment with 3-methylcholanthrene or carbaryl on mixed-function oxidase activity in 3T3 fibroblasts: studies by microspectrofluorimetry on single cells. Lahmy S, et al. **Cell Biochem Funct** 1988 Oct; 6(4):275–82

ANTAGONISTS & INHIBITORS

Histamine inhibition of mixed function oxidase activity in rat and human liver microsomes and in the isolated perfused rat liver. Morris CQ, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2639–44

Effect of sizofilan, an immunomodulator, on hepatic microsomal mixed-function oxidase activities in rats. Yomogida S, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):499–502

Effects of specific monooxygenase and oxidase inhibitors on the activation of 2-aminofluorene by plant cells. Wagner ED, et al. **Mutat Res** 1989 Jun;216(3):163–78

Selective destruction of cytochrome P-450d and associated monooxygenase activity by carbon tetrachloride in the rat. Sesardic D, et al. **Xenobiotica** 1989 Jul;19(7):795–811

Effects of the fungicide prochloraz on xenobiotic metabolism in rainbow trout: inhibition in vitro and time course of induction in vivo. Snegaroff J, et al. **Xenobiotica** 1989 Mar; 19(3):255–67

BIOSYNTHESIS

Induction of cytochrome P450-dependent monooxygenase activities in rat hepatoma H-4-IIE cells in culture by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds: mechanistic studies using radiolabeled congeners. Zacharewski T, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):344–55

Induction of the rat hepatic microsomal mixed-function oxidases by two aza-arenes. A comparison with their non-heterocyclic analogues. Ayrton AD, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4565–71

Mouse hepatic cytochrome P-450 isozyme induction by 1,4-bis[2-(3,5-dichloropyridyloxy)]benzene, pyrazole, and phenobarbital. Raunio H, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4141–7

Using the scoparone O-demethylase assay for categorizing types of hepatic microsomal monooxygenase inducers. Kato S, et al. **Bull Environ Contam Toxicol** 1989 Apr; 42(4):489–94

Induction of mixed function oxidase activities of protein A in rat mammary tumors. Bansal MR, et al. **Carcinogenesis** 1989 Sep;10(9):1749–51

Effects of pretreatment with inducers of hepatic mixed function oxidases on DNA repair elicited by various compounds in hepatocytes from adult and neonatal rats. Kornbrust D, et al. **Cell Biol Toxicol** 1987 Jun;3(2):143–64

Benzo[a]pyrene-DNA-adducts and monooxygenase activities in mice treated with benzo[a]pyrene, cigarette smoke or cigarette smoke condensate. Bjelogrlic N, et al. **Chem Biol Interact** 1989;70(1–2):51–61

Microsomal induction, alcohol, and lipoprotein metabolism: is there a three-way relationship? Goldberg DM, et al. **Clin Biochem** 1989 Feb;22(1):57–67 (102 ref.)

3-Methylcholanthrene does induce mixed function oxidase activity in hepatopancreas of spiny crab Maja crispata. Batel R, et al. **Comp Biochem Physiol [C]** 1988;90(2):435–8

Urinary excretion of 6 beta-hydroxycortisol and the time course measurement of enzyme induction in man. Ohnhaus EE, et al. **Eur J Clin Pharmacol** 1989;36(1):39–46

The effect of feeding brassica vegetables and intact glucosinolates on mixed-function-oxidase activity in the livers and intestines of rats. McDanell R, et al. **Food Chem Toxicol** 1989 May;27(5):289–93

Acute oral toxicity of dibenzothiophene for male CD-1 mice: LD50, lesions, and the effect of preinduction of mixed-function oxidases. Leighton FA. **Fundam Appl Toxicol** 1989 May;12(4):787–92

Comparative induction of drug-metabolizing enzymes by hypolipidaemic compounds. Boiteux-Antoine AF, et al. **Gen Pharmacol** 1989;20(4):407–12

Influence of prenatal administration of cadmium on postnatal development and inducibility of hepatic monooxygenases in rats. Jahn F, et al. **Pharmacol Toxicol** 1989 Mar; 64(3):291–2

Tissue specificity of induction of hamster monooxygenase activity by ethanol. Ueng TH, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):1–8

Ascorbic acid excretion as a noninvasive screening parameter of mixed function oxygenases status in rats. Clausing P, et al. **Z Versuchstierkd** 1988;31(6):255–62

[Effect of age on the activity of hepatic mixed function oxidases in female rats after phenobarbital induction] Plewka D, et al. **Med Pr** 1988;39(6):381–90 (Eng. Abstr.) (Pol)

[Modification of the effect of fotrin in phenobarbital-induced metabolic system] Zhurkov VS, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):458–60 (Eng. Abstr.) (Rus)

[Induction of microsomal monooxygenase by completely fluorinated organic compounds (review)] Obraztsov VV, et al. **Vopr Med Khim** 1989 May-Jun;35(3):9–18 (68 ref.) (Rus)

DEFICIENCY

An inherited defect in aldosterone biosynthesis caused by a mutation in or near the gene for steroid 11-hydroxylase. Globerman H, et al. **N Engl J Med** 1988 Nov 3; 319(18):1193–7

GENETICS

Quantitation of mRNAs specific for the mixed-function oxidase system in rat liver and extrahepatic tissues during development. Simmons DL, et al. **Arch Biochem Biophys** 1989 May 15;271(1):10–20

Expression of a human P-450IIC gene in yeast cells using galactose-inducible expression system. Yasumori T, et al. **Mol Pharmacol** 1989 Apr;35(4):443–9

ISOLATION & PURIFICATION

Separation and purification of component proteins of the cytochrome P-450-dependent microsomal monooxygenase system by high-performance liquid chromatography. Taniguchi H, et al. **J Chromatogr** 1989 Aug 4;476:299–308

[Isolation, purification and various properties of L-lysine-2-monooxygenase from Pseudomonas putida] Khachatrian GE, et al. **Biokhimiia** 1988 Aug;53(8):1256–64 (Eng. Abstr.) (Rus)

METABOLISM

Effect of vitamin A on rat hepatic mixed-function oxidases, glutathione transferase activity and generations of oxygen radicals. Ayalogu EO, et al. **Ann Nutr Metab** 1988; 32(2):75–82

MFO activity changes in single living 3T3 fibroblasts treated with adriamycin. Lahmy S, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1411–8

Distribution and induction of cytochrome P-450 and two cytochrome P-450-dependent monooxygenase activities in rat liver parenchymal cell subpopulations separated by centrifugal elutriation. Seibert B, et al. **Arch Toxicol** 1989; 63(1):18–22

Depletion of cytochrome P-450 and alterations in activities of drug metabolizing enzymes by S-(1,2-dichlorovinyl)-L-cysteine in mouse kidney cortex. Cojocel C, et al. **Arch Toxicol Suppl** 1989;13:417–21

Effect of toxogonin on the rat liver drug metabolizing enzyme systems. Dishovski C, et al. **Arch Toxicol Suppl** 1989;13:294–6

Different effects of intraperitoneally and orally administered palladium chloride on the hepatic monooxygenase system of male mice. Phielepeit T, et al. **Arch Toxicol Suppl** 1989; 13:357–62

Enzymatic detoxification using lipophilic hollow-fiber membranes: III. Oxidation reactions of sulfides. Yamamoto Y, et al. **Artif Organs** 1989 Apr;13(2):103–8

Oxidative modification of glutamine synthetase: covalent and conformational changes which control susceptibility to proteolysis. Levine RL, et al. **Basic Life Sci** 1988;49:541–4

Generation of superoxide by the microsomal mixed-function oxidase system. Morehouse LA, et al. **Basic Life Sci** 1988; 49:517–21

Oxidative modification of enzymes during aging and acute oxidative stress. Starke-Reed PE, et al. **Basic Life Sci** 1988; 49:537–40

Obesity as a risk factor for drug-induced organ injury. VI. Increased hepatic P450 concentration and microsomal ethanol oxidizing activity in the obese overfed rat. Salazar DE, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):315–20

Mixed function oxidases in response to quality and quantity of dietary protein. Singh Y, et al. **Biochem Int** 1988 Jul; 17(1):1–8

Evidence for metabolism of 3-methylindole by prostaglandin H synthase and mixed-function oxidases in goat lung and liver microsomes. Formosa PJ, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4359–66

Mixed function oxidase and UDP-glucuronyltransferase activities in the human Hep G2 hepatoma cell line. Grant MH, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4111–6

Comparison of the form(s) of cytochrome P-450 induced by ethanol and glutethimide in cultured chick hepatocytes. Sinclair JF, et al. **Biochem Pharmacol** 1989 Feb 15; 38(4):657–64

Role of ketone bodies in the diabetes-induced changes in hepatic mixed-function oxidase activities. Barnett CR, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):250–4

Seasonal variations in aldrin epoxidase (MFO) activity of yellow-legged herring gulls: the relationship to breeding and PCB residues. Fossi C, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):365–70

Effects of elevated temperature on misonidazole O-demethylation by mouse liver microsomes: kinetic and stability studies of a model mixed-function oxidase reaction. Walton MI, et al. **Cancer Chemother Pharmacol** 1989; 24(3):172–6

Effect of a Prudhoe Bay crude oil on hepatic and renal peroxisomal beta-oxidation and mixed-function oxidase activities in rats. Khan S, et al. **Carcinogenesis** 1989 Feb; 10(2):269–72

Streptozotocin-induced diabetes modulates the metabolic activation of chemical carcinogens. Ioannides C, et al. **Chem Biol Interact** 1988;68(3–4):189–202

Characterization of the microsomal mixed-function oxygenase system of the hepatopancreas and green gland of the red swamp crayfish, Procambarus clarkii. Jewell CS, et al. **Comp Biochem Physiol [B]** 1989;92(2):329–39

Effect of cadmium on pulmonary and renal microsomal drug metabolizing enzymes of the guinea-pig. Karakaya A, et al. **Comp Biochem Physiol [C]** 1988;90(1):241–4

Some characteristics of mitochondrial monoamine oxidase

activity in eggs of carp (Cyprinus carpio) and rainbow trout (Salmo gairdneri). Nicotra A, et al. **Comp Biochem Physiol [C]** 1989;92(2):401–4

Effects of energy and/or protein restriction on hepatic microsomal mixed function oxidase in male broiler chicks. Takahashi K, et al. **Comp Biochem Physiol [C]** 1988; 91(2):483–6

Efficient one-step selection of hepatoma cell variants of a variety of phenotypes by use of aflatoxin B1. Corcos L, et al. **Differentiation** 1988 Jul;38(2):134–9

The development of an assay for determination of monooxygenase of human foetal livers based on rate of decrease in substrate concentration. Akintonwa DA, et al. **Drug Des Deliv** 1988 Jul;3(1):77–83

Effect of 7,12-dimethylbenz(a)anthracene administration on hepatic drug metabolizing enzymes in female rats fed corn, primrose, and menhaden oils. Wade AE, et al. **Drug Nutr Interact** 1988;5(4):309–16

Pretreatment with mixed-function oxidase inducers increases the sensitivity of the hepatocyte/DNA repair assay. Shaddock JG, et al. **Environ Mol Mutagen** 1989;13(4):281–8

The influence of culture medium composition on drug metabolising enzyme activities of the human liver derived Hep G2 cell line. Doostdar H, et al. **FEBS Lett** 1988 Dec 5;241(1–2):15–8

The effects of perfluorodecanoic acid on hepatic stearoyl-coenzyme A desaturase and mixed function oxidase activities in rats. Van Rafelghem MJ, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):503–10

Sensitivity of selected drug biotransformation enzymes to dietary protein levels in adult F344 male rats. Butler LE, et al. **J Biochem Toxicol** 1989 Spring;4(1):71–2

Lack of inducibility of brain monooxygenase activities including parathion desulfuration. Chambers JE, et al. **J Biochem Toxicol** 1989 Spring;4(1):65–70

Alteration of liver microsomal monooxygenases and substrate competition with aniline hydroxylase from rats chronically fed low-fat and high-fat-containing alcohol diets. Winston GW, et al. **J Biochem Toxicol** 1988 Fall;3:191–212

Influence of bipyridylium compounds on microsomal mixed-function oxidation activities. Zychlinski L, et al. **J Biochem Toxicol** 1988 Fall;3:173–89

Effect of ethanol, carbon tetrachloride, and methyl ethyl ketone on butanol oxidase activity in rat lung and liver. Carlson GP. **J Toxicol Environ Health** 1989;27(2):255–61

Interactions between glycolysis and mixed function oxidation: studies with 7-ethoxycoumarin in perfused livers from beta-naphthoflavone-treated rats. Belinsky SA, et al. **Mol Pharmacol** 1989 Apr;35(4):512–8

Enantioselective N-oxygenation of verapamil by the hepatic flavin-containing monooxygenase. Cashman JR. **Mol Pharmacol** 1989 Sep;36(3):497–503

Influence of metabolic factors on the mutagenic effectiveness of cyclophosphamide in Drosophila melanogaster. Zijlstra JA, et al. **Mutat Res** 1989 Jan;210(1):79–92

Profile of drug-metabolizing enzymes in human ileum and colon. Pacifici GM, et al. **Pharmacology** 1989;38(3):137–45

Modulation of hepatic-phase I and gut-microflora xenobiotic metabolizing enzymes by dietary flavonoids. Alldrick AJ, et al. **Prog Clin Biol Res** 1988;280:139–42

Effects of N1,N3-diallyluracil and N1,N3-diallylthymine on hepatic drug-metabolizing enzymes of mice. Tateoka Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):135–43

The suitability of carbamazepine as a single-sample probe of human mixed function oxidase activity. Bachmann KA, et al. **Xenobiotica** 1989 Jul;19(7):711–9

Age- and sex-related changes in the components of the hepatic microsomal mixed function oxidase system in Sprague-Dawley rats. Chengelis CP. **Xenobiotica** 1988 Nov;18(11):1211–24

Effects of methyl ethyl ketone pretreatment on hepatic mixed-function oxidase activity and on in vivo metabolism of n-hexane. Robertson P Jr, et al. **Xenobiotica** 1989 Jul; 19(7):721–9

N-oxygenation of stobadine, a gamma-carboline antiarrhythmic and cardioprotective agent: the role of flavin-containing monooxygenase. Stefek M, et al. **Xenobiotica** 1989 Feb;19(2):143–50

Interaction of 1,1,1-trichloroethane with the mixed-function oxidation system in rat liver microsomes. Takano T, et al. **Xenobiotica** 1988 Dec;18(12):1457–64

[Cytochrome P-450-dependent renal monooxygenases] Czekaj P, et al. **Postepy Hig Med Dosw** 1988 Nov–Dec; 42(6):640–64 (52 ref.) (Eng. Abstr.) **(Pol)**

[Functional status of the cytochrome P-450-dependent monooxygenase system in multiple sclerosis and amyotrophic lateral sclerosis] Zavalishin IA, et al. **Sov Med** 1989;(5):106–8 **(Rus)**

[Comparative study of the effect of vitamin B12 coenzymes on monooxygenase system and lipid peroxidation in the liver of rabbits poisoned with phenylhydrazine] Korsova TL, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):97–102 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Protein degradation: the role of mixed-function oxidases. Daggett V. **Pharm Res** 1987 Aug;4(4):278–84 (59 ref.)

MIXED FUNCTION OXYGENASES see **MIXED FUNCTION OXIDASES**

MIXED LEUKOCYTE CULTURE TEST see **LEUKOCYTE CULTURE TEST, MIXED**

MIXED SALIVARY GLAND TUMOR

Parapharyngeal tumours: a review of 23 cases. Allison RS, et al. **Clin Otolaryngol** 1989 Jun;14(3):199–203

ANALYSIS

Coexpression of keratin and vimentin in salivary pleomorphic adenomas. Shinohara H, et al. **J Oral Pathol Med** 1989 Mar;18(3):133–9

Immunohistochemical localization of the alpha and beta subunits of S-100 protein in pleomorphic adenoma of the salivary glands. Ninomiya T, et al. **Virchows Arch [B]** 1989; 57(1):63–75

COMPLICATIONS

An unusual case of airway obstruction in a child. Baines DB, et al. **Anaesth Intensive Care** 1989 Feb;17(1):88–90

Parotid mass in a patient with von Recklinghausen's disease [clinical conference] Skouteris CA, et al. **J Oral Maxillofac Surg** 1989 May;47(5):495–501

DIAGNOSIS

Computed tomography and ultrasonography in parotid tumors. Isaza M, et al. **Acta Radiol** 1989 Jan–Feb;30(1):11–5

Diagnosis of salivary gland disease using ultrasound and sialography: a comparison. Zbaren P, et al. **Clin Otolaryngol** 1989 Jun;14(3):189–97

Discrimination of benign versus malignant mixed tumors of the salivary gland using digital image analysis. Layfield LJ, et al. **Cytometry** 1989 Mar;10(2):217–21

Glial fibrillary acid protein immunoreactivity in fine-needle aspiration of salivary gland lesions: a useful adjunct for the differential diagnosis of salivary gland neoplasms. Ostrzega N, et al. **Diagn Cytopathol** 1989;5(2):145–9

MR imaging of parotid mass lesions: attempts at histopathologic differentiation. Swartz JD, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):789–96

GENETICS

A causal relationship between chromosomal rearrangements and the genesis of salivary gland pleomorphic adenomas. Bullerdiek J, et al. **Arch Otorhinolaryngol** 1988;245(4):244–9

Pleomorphic adenoma with translocation (3;8)(p24;q13) in a child [letter] Kameyama J, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):281–2

PATHOLOGY

Capsular penetration and perforation in pleomorphic adenoma of the parotid salivary gland. Lawson HH. **Br J Surg** 1989 Jun;76(6):594–6

Synchronous unilateral parotid neoplasms of different histologic types. Schilling JA, et al. **Head Neck** 1989 Mar–Apr;11(2):179–83 (25 ref.)

A clinical-pathological study of 53 intra-oral pleomorphic adenomas. Chau MN, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):158–62

Benign metastatic mixed tumours or unrecognized salivary carcinomas? el-Naggar A, et al. **J Laryngol Otol** 1988 Sep; 102(9):810–2 (12 ref.)

Pleomorphic adenoma of the anterior tongue in a 12-year-old girl. Rogers TR, et al. **J Oral Maxillofac Surg** 1989 Jan; 47(1):89–90

Monoclonal antibody-detected vimentin distribution in pleomorphic adenomas of salivary glands. Yamada K, et al. **J Oral Pathol** 1988 Aug;17(7):348–53

[Pleomorphic adenoma of the salivary glands. Impact of the myxoid component on the prognosis] Goudot P, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):119–22 (Eng. Abstr.) **(Fre)**

[Histopathological considerations on 8 cases of mixed tumors or pleiomorphic adenomas of the salivary glands] Debernardi C, et al. **Minerva Stomatol** 1989 Feb; 38(2):277–89 (Eng. Abstr.) **(Ita)**

SURGERY

Surgical techniques of the parotid tumor. Unno T. **Acta Otolaryngol Suppl (Stockh)** 1988;458:139–43

Enucleated parotid tumours. Maynard JD. **Br J Surg** 1988 Aug;75(8):764–6

[Pleomorphic adenoma of the parotid gland. Cases contribution] Caldarola F, et al. **Minerva Stomatol** 1989 Jan;38(1):135–8 (Eng. Abstr.) **(Ita)**

[Tumors of the minor salivary glands. A clinical case and review of the literature] D'Ascanio G, et al. **Minerva Stomatol** 1989 Jan;38(1):23–6 (23 ref.) (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Crystalloids in salivary gland pleomorphic adenomas. Humphrey PA, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):390–3

Ultrastructural contributions to the study of morphological differentiation in malignant mixed (pleomorphic) tumors of salivary gland. Dardick I, et al. **Head Neck** 1989 Jan–Feb;11(1):5–21 (31 ref.)

MIYAGAWANELLA see **CHLAMYDIA**

MIYAGAWANELLA INFECTIONS see **CHLAMYDIA INFECTIONS**

MK-135 see **CHOLESTYRAMINE**

MK-421 see **ENALAPRIL**

MK-485 see **CARBIDOPA**

MK-486 see **CARBIDOPA**

MMPI

Use of the MMPI in the prediction of dangerous behavior. Sloore H. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):42–51

An application of an MMPI classification system for predicting outcome in a small clinical sample of alcoholics. Kight-Law A, et al. **Am J Drug Alcohol Abuse** 1988; 14(3):325–34

Psychopathology of opiate addiction: comparative data from the MMPI and MCMI. Marsh DT, et al. **Am J Drug Alcohol Abuse** 1988;14(1):17–27

An evaluation of the Minnesota Multiphasic Personality Inventory as a discriminator of primary organic and primary psychogenic impotence in diabetic males. Jefferson TW, et al. **Arch Sex Behav** 1989 Apr;18(2):117–26

The response styles of post-acute traumatic brain-injured patients on the MMPI. Burke JM, et al. **Brain Inj** 1989 Jan–Mar;3(1):35–40

Reliability of self report among non-oriented head-injured adults. Priddy DA, et al. **Brain Inj** 1988 Jul–Sep;2(3):249–53

Minnesota multiphasic personality profiles of the morbidly obese. Lanzisera PJ, et al. **Henry Ford Hosp Med J** 1988; 36(2):78–81

The indigent alcoholic: personality and psychopathology. Hinkin CH, et al. **Int J Addict** 1988;23(12):1271–80

A review of four MMPI indices which differentiate between organicity and schizophrenia. Batchelor ES. **Int J Neurosci** 1989 Mar;45(1–2):41–53 (39 ref.)

Subtle/obvious MMPI scales identify attention deficit disorder alcoholics. Horton AM Jr, et al. **Int J Neurosci** 1989 Jun;46(3–4):127–30

Alcoholism and attention deficit disorder: MMPI correlates. Vaeth JM, et al. **Int J Neurosci** 1989 Mar;45(1–2):75–9

Pain-patient Minnesota Multiphasic Personality Inventory (MMPI) subgroups: evaluation of long-term treatment outcome. Guck TP, et al. **J Behav Med** 1988 Apr; 11(2):159–69

Hostility, coronary heart disease, and total mortality: a 33-year follow-up study of university students. Hearn MD, et al. **J Behav Med** 1989 Apr;12(2):105–21

The Minnesota Multiphasic Personality Inventory (MMPI) Hysteria (Hy) scale: scoring bodily concern and psychological denial subscales in chronic back pain patients. Ornduff SR, et al. **J Behav Med** 1988 Apr; 11(2):131–46

Replicated item level factor structure of the MMPI: racial and sexual differences. Beck NC, et al. **J Clin Psychol** 1989 Jul;45(4):553–60

Content bias of the MacAndrew's Alcoholism Scale in seizure disorder patients. Bornstein RA, et al. **J Clin Psychol** 1989 Mar;45(2):339–41

Screening medical patients for alcoholism with the MMPI: a comparison of seven scales. Colligan RC, et al. **J Clin Psychol** 1988 Jul;44(4):582–92

An external validity study of the MMPI Personality Disorder Scales. Dubro AF, et al. **J Clin Psychol** 1989 Jul; 45(4):570–5

MMPI profiles of malingerers diagnosed in pretrial forensic evaluations. Hawk GL, et al. **J Clin Psychol** 1989 Jul; 45(4):673–8

MMPI F-K index among hospitalized Vietnam veterans. Hyer L, et al. **J Clin Psychol** 1989 Mar;45(2):250–4

Cluster analytically derived MMPI profile subgroups of incarcerated adult rapists. Kalichman SC, et al. **J Clin Psychol** 1989 Jan;45(1):149–55

Empirically derived MMPI profile subgroups of incarcerated homicide offenders. Kalichman SC. **J Clin Psychol** 1988 Sep;44(5):733–8

MMPI profile of women and men convicted of domestic homicide. Kalichman SC. **J Clin Psychol** 1988 Nov; 44(6):847–53

Psychometric detection of fabricated symptoms of combat-related post-traumatic stress disorder: a systematic replication. McCaffrey RJ, et al. **J Clin Psychol** 1989 Jan; 45(1):76–9

MMPI personality disorder scales and the MCMI: concurrent validity. McCann JT. **J Clin Psychol** 1989 May;45(3):365–9

A comparison of clinically and empirically derived MMPI groupings in low back pain patients. McCreary C, et al. **J Clin Psychol** 1989 Jul;45(4):560–70

The validity of the MMPI with multiple sclerosis patients. Meyerink LH, et al. **J Clin Psychol** 1988 Sep;44(5):764–9

Clinical meaning of the Keane PTSD Scale. Moody DR, et al. **J Clin Psychol** 1989 Jul;45(4):542–6

A comparison of MMPI profile types across standard and contemporary norms. Munley PH, et al. **J Clin Psychol** 1989 Mar;45(2):229–39

Criteria for assessing inconsistent patterns of item endorsement on the MMPI: rationale, development, and

empirical trials. Nichols DS, et al. **J Clin Psychol** 1989 Mar;45(2):239–50
The utility of MMPI subtle, obvious scales for detecting fake good and fake bad response sets. Peterson GW, et al. **J Clin Psychol** 1989 Jul;45(4):575–83
Relative efficacy of the Sc–O, P–O, P–N, and Sc MMPI scales in differentiating brain–damaged, brain–damaged schizophrenic, schizophrenic, and somatoform disorders in an outpatient setting. Puente AE, et al. **J Clin Psychol** 1989 Jan;45(1):99–105
A shortened MMPI useful for psychiatric screening of the non–institutionalized elderly. Smith LW, et al. **J Clin Psychol** 1989 May;45(3):359–65
Have MMPI MF scale correlates changed in the past 30 years? Todd AL, et al. **J Clin Psychol** 1988 Jul;44(4):505–10
Inability to predict cardiovascular disease from hostility scores or MMPI items related to type A behavior. Leon GR, et al. **J Consult Clin Psychol** 1988 Aug;56(4):597–600
Use of MMPI subtypes in predicting completion of residential alcoholism treatment program. Sheppard D, et al. **J Consult Clin Psychol** 1988 Aug;56(4):590–6
The MMPI: regional difference or normal aging? Koeppl PM, et al. **J Gerontol** 1989 Jul;44(4):P95–9
Differences between psychotic and nonpsychotic patients on content dimensions of the MMPI Sc scale. McFall ME, et al. **J Nerv Ment Dis** 1988 Dec;176(12):732–6
Duration of chronic pain and the Minnesota Multiphasic Personality Inventory: profiles of industrially injured workers. Levenson H, et al. **J Occup Med** 1988 Oct; 30(10):809–12
The relationship of MMPI and Sensation Seeking Scales to adolescent drug use. Andrucci GL, et al. **J Pers Assess** 1989 Summer;53(2):253–66
MMPI scale clinical correlates for adolescent inpatients. Archer RP, et al. **J Pers Assess** 1988 Winter;52(4):707–21
A comparative clinical investigation of the "How" and "Charlie" MMPI subtypes. DiFrancesca KR, et al. **J Pers Assess** 1989 Summer;53(2):396
The construct validity of the MMPI alexithymia scale with psychiatric inpatients. Greenberg RP, et al. **J Pers Assess** 1988 Fall;52(3):459–64
A psychometric study of stereotypes: assessment of malingering in a criminal forensic group. Grossman LS, et al. **J Pers Assess** 1988 Fall;52(3):549–63
WAIS–R and MMPI profiles of men who have sexually assaulted children: evidence of limited utility. Hall GC. **J Pers Assess** 1989 Summer;53(2):404–12
MMPI profiles of problem peace officers. Hiatt D, et al. **J Pers Assess** 1988 Winter;52(4):722–31
Vietnam veterans: overreporting versus acceptable reporting of symptoms. Hyer L, et al. **J Pers Assess** 1988 Fall; 52(3):475–86
MMPI adolescent norms: patterns and trends across 4 decades. Pancoast DL, et al. **J Pers Assess** 1988 Winter; 52(4):691–706 (30 ref.)
An MMPI description of the narcissistic personality. Raskin R, et al. **J Pers Assess** 1989 Spring;53(1):66–80
Drinking practices among black and white alcoholics and alcoholics of different personality types. Robyak JE, et al. **J Pers Assess** 1988 Fall;52(3):487–98
Assessing dissimulation and denial on the MMPI in a sample of maximum security, male inmates. Walters GD. **J Pers Assess** 1988 Fall;52(3):465–74
The MMPI: does it have a place in counseling psychology training? Watkins CE Jr, et al. **J Pers Assess** 1989 Summer; 53(2):413–7
Genetic and environmental variance in content dimensions of the MMPI. Rose RJ. **J Pers Soc Psychol** 1988 Aug; 55(2):302–11
Is the MMPI invalid for assessing psychological disturbance in pain related organic conditions? Leavitt F, et al. **J Rheumatol** 1989 Apr;16(4):521–6
MMPI subtypes for chronic phencyclidine (PCP) abusers. Herrera JM, et al. **J Subst Abuse Treat** 1988;5(3):187–93
Contemporary adolescent norms for the Minnesota Multiphasic Personality Inventory—one perspective. Archer RP. **Mayo Clin Proc** 1989 Jan;64(1):116–8
The aging MMPI: contemporary norms for contemporary teenagers. Colligan RC, et al. **Mayo Clin Proc** 1989 Jan; 64(1):3–27 (133 ref.)
Vitamin B–12: placebo or neglected therapeutic tool? Newbold HL. **Med Hypotheses** 1989 Mar;28(3):155–64
Neurotransmitter systems and personality measurements: a study in psychosomatic patients and healthy subjects. Arqué JM, et al. **Neuropsychobiology** 1988;19(3):149–57
The P–A–I–N MMPI classification system: a critical review. Robinson ME, et al. **Pain** 1989 May;37(2):211–4
Presentation of a new MMPI scale to predict outcome after first lumbar diskectomy. Sørensen LV, et al. **Pain** 1988 Aug;34(2):191–4
On the consistency of the MMPI in borderline personality disorder. Evans RW, et al. **Percept Mot Skills** 1986 Apr; 62(2):579–85
Correlations between the MMPI and the Brief Psychiatric Rating Scale in schizophrenic and schizoaffective patients. Faustman WO, et al. **Psychiatry Res** 1989 May;28(2):135–43
Psychological profile and sleep organization in young subjects with poor quality of sleep. Pailhous E, et al. **Psychiatry Res** 1988 Dec;26(3):327–36
Platelet MAO activity and personality variations in normals. Shekim WO, et al. **Psychiatry Res** 1989 Jan;27(1):81–8
Reverse responding to the MMPI. Cernovsky ZZ. **Psychol Rep** 1989 Feb;64(1):202
Validation of an MMPI short form with literate and illiterate patients. Dillon EA, et al. **Psychol Rep** 1989 Feb; 64(1):327–36
Statistical versus clinical significance in research with the MMPI. Holmes CB, et al. **Psychol Rep** 1989 Feb; 64(1):159–62
Use and misuse of the MMPI, a reconsideration. Mueller SR, et al. **Psychol Rep** 1988 Oct;63(2):483–91
MMPI correlates of college women who reported experiencing child/adult sexual contact with father, stepfather, or with other persons. Roland B, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1159–62
Selected MMPI items that identified college women who reported early sexual abuse. Roland BC, et al. **Psychol Rep** 1988 Oct;63(2):447–50
Discriminating between substance abusers with single and dual diagnoses using MMPI profiles and the Mac Andrews Alcoholism Scale: Axis I and Axis II subtypes. Rozensky RH, et al. **Psychol Rep** 1988 Dec;63(3):985–6
Relation between MacAndrew Scale scores and coping styles. Schill T, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):761–2
Kinetic Family Drawings and MMPI diagnostic indicators in adolescent psychiatric inpatients. Stawar TL, et al. **Psychol Rep** 1989 Aug;65(1):142–6
A caution on the use of the MMPI K–correction in research on psychosomatic medicine. McCrae RR, et al. **Psychosom Med** 1989 Jan–Feb;51(1):58–65
Situational determinants of cardiovascular and emotional reactivity in high and low hostile men. Suarez EC, et al. **Psychosom Med** 1989 Jul–Aug;51(4):404–18
Psychological correlates of two measures of coronary–prone hostility. Swan GE, et al. **Psychosomatics** 1989 Summer; 30(3):270–8
Distribution of alexithymic characteristics within an adult outpatient population. Feiguine RJ, et al. **Psychother Psychosom** 1988;50(2):61–7
Psychological characteristics of breast cancer patients. Kirkcaldy BD, et al. **Psychother Psychosom** 1987; 48(1–4):32–43
Psychometric features related to the acute phase and final outcome of anorexia nervosa. Gundersen JH. **Scand J Psychol** 1989;30(2):81–9
[Personality characteristics of alcoholic subjects using the Minnesota Multiphasic Personality Inventory (MMPI)] Grantaliano S, et al. **Minerva Psichiatr** 1989 Apr–Jun; 30(2):77–80 (Eng. Abstr.) **(Ita)**
[Psychopathologic aspects of hematologic neoplasms] Blanco González AL, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Nov–Dec;16(6):375–84 (Eng. Abstr.) **(Spa)**

MNSS BLOOD–GROUP SYSTEM

Exposure of T–cryptantigen on red blood cells in a patient with angiomyolipoma. Buskila D, et al. **Eur Urol** 1988; 14(4):346–7
Involvement of the MN blood group antigen in shear–enhanced hemagglutination induced by the Escherichia coli F41 adhesin. Brooks DE, et al. **Infect Immun** 1989 Feb;57(2):377–83
The relation between red cell antigens and the occurrence of filariasis and its complications. Mohamed NH, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):75–80
[Delayed hemolytic transfusion reaction caused by an anti–U] Taliano V, et al. **Rev Fr Transfus Hemobiol** 1989 Feb; 32(1):17–26 (Eng. Abstr.) **(Fre)**
[Quantitation of hemagglutinins by the planimetry of precipitated erythrocyte patterns—3. Application to MN and Rh blood group determination from dried bloodstains] Kimura H, et al. **Nippon Hoigaku Zasshi** 1988 Dec; 42(6):555–63 (Eng. Abstr.) **(Jpn)**

GENETICS

Suggestive evidence of genetic linkage between alcoholism and the MNS blood group. Hill SY, et al. **Alcoholism (NY)** 1988 Dec;12(6):811–4
A novel variety of the Dantu gene complex (DantuMD) detected in a Caucasian. Dahr W, et al. **Blut** 1989 May; 58(5):247–53
Aberrant MN bloodgroup inheritance in a German family: a 'silent' allele? Henke J, et al. **Forensic Sci Int** 1988 Dec; 39(3):279–85
A family study of multiple mutations of alpha and delta glycophorins (glycophorins A and B). Huang CH, et al. **Hum Genet** 1988 Dec;81(1):26–30
Characterization of a genomic hybrid specifying the human erythrocyte antigen Dantu: Dantu gene is duplicated and linked to a delta glycophorin gene deletion. Huang CH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9640–4
Human–type blood group activities on chimpanzee erythrocytes with special reference to M and N. Takayasu T, et al. **Z Rechtsmed** 1988;101(4):237–46

IMMUNOLOGY

A simplified method for the preparation of WGA–Sepharose 4B and its use in the purification of MN blood group antigens. Zhang SM, et al. **Biomed Chromatogr** 1989 Jan; 3(1):10–3
Anti–M antibody in pregnancy. Thompson DJ, et al. **Obstet Gynecol Surv** 1989 Sep;44(9):637–41
Co–ordinator's report on group 4: antibodies to sialoglycoproteins (glycophorins). Anstee DJ. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):359–64
Characterization of monoclonal antibodies against erythrocyte sialoglycoproteins by serological analysis, immunoblotting and flow cytometry. Anstee DJ, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):317–32
Characterization of anti–glycophorin monoclonal antibodies. Fraser RH, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):289–96
Analysis of anti–glycophorin monoclonal antibodies by flow cytometry. Jensen R, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):351–7
Monoclonal antibodies against glycophorins. Lisowska E, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):261–71
Report to the first international workshop on monoclonal antibodies against human red blood cell and related antigens. MacDonald EB, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):297–307
Investigation of monoclonal anti–glycophorin antibodies pH and temperature dependence, reactivity with enzyme treated cells and flow cytometry studies. Sonneborn HH, et al. **Rev Fr Transfus Immunohematol** 1988 Apr; 31(2):333–44
Biochemical characterization of antibodies submitted as reactive with glycophorin species. Telen MJ, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):309–15
Monoclonal anti–glycophorin antibodies. Tippett P, et al. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):281–7
Results with the group 4 antibodies. Von dem Borne AE. **Rev Fr Transfus Immunohematol** 1988 Apr;31(2):345–9
Preliminary serological studies on 31 samples of monoclonal antibodies directed against red cell glycophorins. Zelinski T, et al. **Rev Fr Transfus Immunohematol** 1988 Apr; 31(2):273–9
An application of immunoblotting in the classification of the Miltenberger series of blood group antigens. King MJ, et al. **Transfusion** 1989 Feb;29(2):106–12
Anti–U recognizing a variant of the U–blood group. Mentor J, et al. **Vox Sang** 1989;56(1):62
[Hemolytic disease of the newborn caused by rarely occurring antibodies to various blood group systems] Maszkiewicz W, et al. **Acta Haematol Pol** 1988 Jan–Jun; 19(1–2):77–80 (Eng. Abstr.) **(Pol)**
[Isolation and initial characterization of a monoclonal antibody against blood group M] Carceller Rosa A. **Sangre (Barc)** 1988 Jun;33(3):220–3 (Eng. Abstr.) **(Spa)**

MOBILE EMERGENCY UNITS see **AMBULANCES**

MOBILE GENETIC ELEMENTS see **DNA INSERTION ELEMENTS**

MOBILE HEALTH UNITS

Mobile mammography screening. Stanley RJ, et al. **Ala Med** 1989 Mar;58(9):13
Mobile mammography: the first six–months experience at Mount Sinai Hospital. Kron ES, et al. **Conn Med** 1989 Feb; 53(2):71–2
Crisis screening and diversion services. Jacobs LS. **Hawaii Med J** 1989 Mar;48(3):73–6
Antenatal testing, mobile outpatient monitoring service. Harmon JS, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Jan–Feb;18(1):21–4
Experience with a mobile extracorporeal shock wave lithotripter in The Netherlands. Hagen JH, et al. **Scand J Urol Nephrol Suppl** 1989;122:108–17
The use of mobile lithotripters in Georgia, USA. McJunkin CP. **Scand J Urol Nephrol Suppl** 1989;122:103–7
Cataract surgery in mobile eye hospital. Reddy PS. **Yen Ko Hsueh Pao** 1987 Dec;3(4):227–31
[Conditions and complications of endotracheal intubation performed outside of the hospital. A preliminary prospective study (letter)] Drouet N, et al. **Presse Med** 1988 Nov 12;17(40):2141 **(Fre)**

ECONOMICS

An evaluation of the cost–effectiveness of mobile family planning services in Tunisia. Coeytaux F, et al. **Stud Fam Plann** 1989 May–Jun;20(3):158–69

MANPOWER

Sudden cardiac arrest in Israel [letter] Putterman C. **Am J Emerg Med** 1989 May;7(3):346–7
[Work losses of medical personnel of mobile health units while conducting preventive examinations in rural populations] Bratkov OI. **Sov Zdravookhr** 1989;(1):42–6 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

Mobile technology takes radiology on the road. Powills S. **Hospitals** 1988 Nov 5;62(21):80
[Organization of emergency surgical care in mass disasters and catastrophes] Michek J, et al. **Rozhl Chir** 1988 Sep; 67(8–9):525–9 (Eng. Abstr.) **(Cze)**
[Activities of a pediatric mobile consultation–resuscitation unit] Pulatov AT, et al. **Pediatriia** 1989;(7):95–7 **(Rus)**
[Prevention and early diagnosis of tuberculosis in children living in rural regions] **Probl Tuberk** 1988;(9):62–6 **(Rus)**
[Value of complex expeditions for taking intensive

anti-tuberculosis actions among children and adolescents] Mazhitova AZh, et al. **Probl Tuberk** 1988;(9):8-11 (Eng. Abstr.) **(Rus)**

[Organization of specialized first aid and emergency medical services in Moscow] Teriaev VG, et al. **Sov Med** 1988;(10):70-3 **(Rus)**

[Mobile medical units in disasters of various origins] Teriaev VG, et al. **Sov Med** 1989;(2):29-32 (21 ref.) **(Rus)**

[Activities of regional agricultural medical teams] Novoselov VP. **Sov Zdravookhr** 1988;(11):38-41 (Eng. Abstr.) **(Rus)**

STANDARDS

Guidelines and standards for surgery at eye camps. Reddy PS. **Yen Ko Hsueh Pao** 1987 Dec;3(4):232

SUPPLY & DISTRIBUTION

A mobile surgery for single homeless people in London. Ramsden SS, et al. **BMJ** 1989 Feb 11;298(6670):372-4

[Experience in serving the child population in hard-to-reach areas of Kazakhstan] Mustafina ZhG, et al. **Vestn Oftalmol** 1988 Jul-Aug;104(4):69-70 **(Rus)**

UTILIZATION

Mobile coronary care and mortality from ischaemic heart disease in a predominantly rural community. Trouton TG, et al. **Ulster Med J** 1988 Oct;57(2):155-60

[Use of mobile coronary care unit by patients with myocardial infarction] Galimidi J, et al. **Harefuah** 1989 Feb 15;116(4):199-202 (Eng. Abstr.) **(Heb)**

MODELS, ANATOMIC

Anthropomorphic dummy neck modeling and injury considerations. Deng YC. **Accid Anal Prev** 1989 Feb; 21(1):85-100

Lung surrogates. Niederer PF, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:79-86

Personal microcomputer-aided three-dimensional reconstructions. Spaček J. **Acta Morphol Hung** 1988; 36(1-2):47-52

Computerized 3-D reconstruction of small blood vessels from high voltage electron-micrographs of thick serial cross sections. Horn L, et al. **Adv Exp Med Biol** 1988;242:35-42

Correlation of laser-Doppler-velocity measurements and endothelial cell shape in a stenosed dog aorta. Liepsch DW, et al. **Adv Exp Med Biol** 1988;242:43-50

Moment to force ratios and the center of rotation. Tanne K, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):426-31

Some additional morphological and metrical observations on Pan brain casts and their relevance to the Taung endocast. Holloway RL. **Am J Phys Anthropol** 1988 Sep;77(1):27-33

The neocortex of the dog. I. A classical cytoarchitectonic map. Salazar I, et al. **Anat Histol Embryol** 1988 Jun; 17(2):169-87

Construction of a flexible airway model for teaching. Wang PM, et al. **Anat Rec** 1988 Jul;221(3):780-1

A greengrocer's model of the epidural space [letter] Leighton BL. **Anesthesiology** 1989 Feb;70(2):368-9

A stoma jig for surgical craft workshops. Jones RT, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):311-2

Instability of external fixators: evaluation of the problem and suggestions for a solution. Leali PT, et al. **Basic Life Sci** 1988;48:407-11

Effects of collagen microstructure on the mechanics of the left ventricle. Ohayon J, et al. **Biophys J** 1988 Dec; 54(6):1077-88

A simple teaching model for mucoperiosteal flaps and suturing techniques. Anwar M, et al. **Br Dent J** 1989 Jan 21;166(2):38

An experimental model for ear reconstruction with moulded perichondrial flaps: a preliminary report. Hirasé Y, et al. **Br J Plast Surg** 1989 Mar;42(2):223-7

Evaluation of an animal model for teaching fibreoptic tracheal intubation. Forbes RB, et al. **Can J Anaesth** 1989 Mar;36(2):141-4

Teaching models for Nd:YAG laser bronchoscopy. Beamis JF Jr, et al. **Chest** 1989 Jun;95(6):1316-8

A comparison of sexually abused and nonsexually abused children's behavioral responses to anatomically correct dolls. August RL, et al. **Child Psychiatry Hum Dev** 1989 Fall;20(1):39-47

Theory and performance of an adaptive current tomography system. Gisser DG, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:35-41

Experimental fluid dynamics of aortic stenosis in a model of the human aorta. Yearwood TL, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):11-24

Recognition of organs in CT-image sequences: a model guided approach. Karssemeijer N, et al. **Comput Biomed Res** 1988 Oct;21(5):434-48

Biomechanical analysis and assessment of lumbar stress during load lifting using a dynamic 19-segment human model. Jäger M, et al. **Ergonomics** 1989 Jan;32(1):93-112

The effect of a manometer on the mean airway pressure during hand ventilation, an in vitro study. Karsdon J, et al. **Eur J Pediatr** 1989 Apr;148(6):574-6

Cardiovascular cavities cast in silicone rubber as an adjunct to post-mortem examination of the heart. Kilner PJ, et al. **Int J Cardiol** 1989 Jan;22(1):99-107

Wax models of the skin. Parish LC, et al. **Int J Dermatol** 1989 May;28(4):230

Measurement of cerebrospinal fluid movement in the spine. An experimental technique. Palmer DW, et al. **Invest Radiol** 1989 Jan;24(1):61-4

An acoustic head simulator for hearing protector evaluation. II: Measurements in steady-state and impulse noise environments. Giguère C, et al. **J Acoust Soc Am** 1989 Mar;85(3):1197-205

The application of a fractal model to the scattering of ultrasound in biological media. Javanaud C. **J Acoust Soc Am** 1989 Aug;86(2):493-6

An acoustic head simulator for hearing protector evaluation. I: Design and construction. Kunov H, et al. **J Acoust Soc Am** 1989 Mar;85(3):1191-6

Anatomically correct dolls: research vs. clinical practice [letter] Donovan DM. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):662-3

Fabrication of a teaching aid for dental soft tissue management and suturing. Meyer RD, et al. **J Am Dent Assoc** 1989 Mar;118(3):345-6

Development and construction of a fetal monitoring simulator. Evenhouse R, et al. **J Biocommun** 1989 Winter; 16(1):2-9

The envelope of passive knee joint motion. Blankevoort L, et al. **J Biomech** 1988;21(9):705-20

Biomechanical evaluation of the axial compressive responses of the human cadaveric and manikin necks. Yoganandan N, et al. **J Biomech Eng** 1989 Aug;111(3):250-5

Three-dimensional curved beam stress analysis of the human femur [letter] Romanelli EA, et al. **J Biomed Eng** 1988 Jul;10(4):373

Component wear of total knee prostheses using Ti-6Al-4V, titanium nitride coated Ti-6Al-4V, and cobalt-chromium-molybdenum femoral components. Peterson CD, et al. **J Biomed Mater Res** 1988 Oct; 22(10):887-903

The three-dimensional anatomy of the proximal femur in Perthes' disease. Howell FR, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):408-12

The response of young, non-sexually abused children to anatomically correct dolls. Glaser D, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):547-60

Computer-generated model surgery. An exacting approach to complex craniomaxillofacial disharmonies. Guyuron B, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):101-4

Modeling of jaw-head-neck dynamics during whiplash. Schneider K, et al. **J Dent Res** 1989 Sep;68(9):1360-5

Anatomic localization of a single electrical source within the boundary of the human torso. Horan LG, et al. **J Electrocardiol** 1989 Apr;22(2):105-12

Use of deer models to study larviposition by wild nasopharyngeal bot flies (Diptera: Oestridae). Anderson JR. **J Med Entomol** 1989 May;26(3):234-6

Technique for superimposing a color slide onto a facial cast to sculpt a facial prosthesis. Shimodaira K, et al. **J Prosthet Dent** 1989 Aug;62(2):212-3

Preliminary results of speech-reception tests obtained with the synthetic Tadoma system. Leotta DF, et al. **J Rehabil Res Dev** 1988 Fall;25(4):45-52

High-frequency oscillatory pressure/flow relationship in the airways of laryngo-tracheo-bronchial tree casts. Ben Jebria A, et al. **Med Biol Eng Comput** 1988 Sep;26(5):476-82

Comparison of air warming in the human airway with a thermodynamic model. Farley RD, et al. **Med Biol Eng Comput** 1988 Nov;26(6):628-32

Construction of linear resistance units for a model lung. Mecklenburgh JS. **Med Biol Eng Comput** 1988 Sep; 26(5):552-4

Acquisition and display of radiation dose distributions using microcomputer technology. Antolak J, et al. **Med Phys** 1988 Nov-Dec;15(6):924-9

Tissue-mimicking gelatin-agar gels for use in magnetic resonance imaging phantoms. Blechinger JC, et al. **Med Phys** 1988 Jul-Aug;15(4):629-36

Calculation of the dose delivered to organs outside the radiation beams. Francois P, et al. **Med Phys** 1988 Nov-Dec;15(6):879-83

Routine quality control tests for film-screen mammographic systems with automatic exposure control. Geise RA, et al. **Med Phys** 1988 Nov-Dec;15(6):904-8

Improvement of spatial resolution properties of image intensifier-TV digital systems with a multiple-narrow-slit beam imaging technique. Kume Y, et al. **Med Phys** 1988 Nov-Dec;15(6):846-52

The influence of ionization chamber and phantom design on the measurement of lung dose in photon beams. Rice RK, et al. **Med Phys** 1988 Nov-Dec;15(6):884-90

An evaluation of four methods of 111In planar image quantification. van Rensburg AJ, et al. **Med Phys** 1988 Nov-Dec;15(6):853-61

Artifacts due to residual magnetization in three-dimensional magnetic resonance imaging. Wood ML, et al. **Med Phys** 1988 Nov-Dec;15(6):825-31

Objective evaluation of the shoulder dystocia phenomenon: effect of maternal pelvic orientation on force reduction. Gonik B, et al. **Obstet Gynecol** 1989 Jul;74(1):44-8

Realistic manikins simulate patients and help teach healthcare safely. Pape M. **Occup Health Saf** 1989 Jul;58(7):38

Three-dimensional computerized reconstruction of histologic serial sections for orthopedic research. Herzenberg JE, et al. **Orthopedics** 1988 Nov;11(11):1549-55

Anthropomorphic models for checking the calibration of whole-body counters and activation analysis systems. Bewley DK. **Phys Med Biol** 1988 Jul;33(7):805-13

Experimental tissue molding for soft-tissue reconstruction: a preliminary report. Fisher J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):857-64

Ear models [letter] Rueckert F. **Plast Reconstr Surg** 1989 Aug;84(2):370

Surface-area increase in tissue expansion. van Rappard JH, et al. **Plast Reconstr Surg** 1988 Nov;82(5):833-9

Morphological characters of the absorbing peripheral lymphatic vessel by TEM, SEM and three-dimensional models. Azzali G, et al. **Prog Clin Biol Res** 1989;295:487-92

Corrosion casts in the microcirculation of skeletal muscle. Gaudio E, et al. **Prog Clin Biol Res** 1989;295:443-50

Morphological aspects of nasal blood vessels. Grevers G, et al. **Prog Clin Biol Res** 1989;295:451-6

Statistical, morphometric and stereological basics in the morphological sciences and their possible applications in corrosion cast studies. James NT. **Prog Clin Biol Res** 1989; 295:457-67 (11 ref.)

Morphometry of corrosion casts. Lametschwandtner A, et al. **Prog Clin Biol Res** 1989;295:427-33

Application of the corrosion casts method to the anuran amphibian eye and mammalian cochlea. Miodoński AJ, et al. **Prog Clin Biol Res** 1989;295:527-35

Field evaluation of polycarbonate versus conventional safety glasses. John G, et al. **South Med J** 1988 Dec;81(12):1534-6

Biomechanical comparisons of spinal fracture models and the stabilizing effects of posterior instrumentations. Ferguson RL, et al. **Spine** 1988 May;13(5):453-60

Teaching laser bronchoscopy with laboratory models. Lanzafame RJ, et al. **Surg Gynecol Obstet** 1989 Jan; 168(1):65-6

Anthropometry of the scapulohumeral articulation: construction of an articular scale-model (29.01.1988). Branquet M, et al. **Surg Radiol Anat** 1988;10(3):249-51

Recent advances in medical imaging: surgery planning and simulation. McEwan CN, et al. **World J Surg** 1989 Jul-Aug; 13(4):343-8

Cementless bony ingrowth total hip prosthesis (anatomical contact porous coated total hip prosthesis) design using computed axial tomography and computer aid design. Kim YH, et al. **Yonsei Med J** 1988;29(2):139-59

[Automatic quantitative analysis of vascular stenosis. Experimental study of a digital angiography system applied to cardiology] Boller A, et al. **Arch Mal Coeur** 1989 Mar; 82(3):381-90 (Eng. Abstr.) **(Fre)**

[Models of the geometry of the human ankle bone pulley: two series of geometric models for demonstrating the biomechanics of the ankle joint] Reimann R, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):351-80 (Eng. Abstr.) **(Ger)**

[Radiation dosage and clinical value of conventional tomography and high resolution computerized tomography of the nose and ear] Grobovschek M, et al. **HNO** 1989 Jan;37(1):23-6 (Eng. Abstr.) **(Ger)**

[Stents in current urologic practice. Critical review] Cocimano V, et al. **Minerva Urol Nefrol** 1988 Jul-Sep; 40(3):185-7 (Eng. Abstr.) **(Ita)**

[Effects of cavities in the human skull on the inverse moving dipole solutions] He B, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun;26(2):75-82 (Eng. Abstr.) **(Jpn)**

[Preparation of a series of histologic preparations in order to create reconstruction models] Krutsiak VN, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):87-8 **(Rus)**

HISTORY

[Examples of Guido Miescher's scientific work in the moulage collection of the Zurich Dermatologic University Clinic 1933-1958] Rüdlinger R, et al. **Hautarzt** 1988 Jul; 39(7):457-60 (Eng. Abstr.) **(Ger)**

MODELS, BIOLOGICAL

see related
BIONICS
DISEASE MODELS, ANIMAL

Pharmacokinetical modelling: clinical applications. Rucquoi M. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):223-5

An elementary approach to cell cycle analysis. Wiedemann C, et al. **Acta Biotheor (Leiden)** 1988;37(2):149-80

Use of statistical modelling and decision analysis to estimate financial losses due to dystocia and other diseases in Swedish cattle. Oltenacu PA, et al. **Acta Vet Scand Suppl** 1988;84:353-5

"In vitro" models for studying the malignant phenotype: chemotaxis and chemoinvasion. Allavena G, et al. **Adv Exp Med Biol** 1988;233:215-26

Exponential attenuation of light along nonlinear path through the biological model. Nomura Y, et al. **Adv Exp Med Biol** 1989;248:77-80

Breathing pattern simulation using slit/cam valve. Myojo T. **Am Ind Hyg Assoc J** 1989 May;50(5):240-4

Multicompartment analysis of the effects of plasmapheresis. Application to lipid kinetics in humans. May ME, et al. **Am J Clin Pathol** 1989 Jun;91(6):688-94

Development of the gout tophus. An hypothesis. Palmer DG, et al. **Am J Clin Pathol** 1989 Feb;91(2):190-5

The Na+/H+ antiport, cytosolic free Ca2+, and essential hypertension: a hypothesis. Aviv A, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):410-3 (69 ref.)

Hypotensive mechanisms of antihypertensives based on the water tank model. Kimura G, et al. **Am J Hypertens** 1989 Jul;2(7):532–6

Computer simulator for determining the single nephron glomerular filtration rate [letter] Bernard R. **Am J Kidney Dis** 1989 Feb;13(2):170

New perspectives on the pathogenesis of rheumatoid arthritis. Zvaifler NJ. **Am J Med** 1988 Oct 14;85(4A):12–7 (35 ref.)

Fragile X expression in Martin–Bell syndrome, intellectually normal individuals, and neoplasia, interpreted by a viral hypothesis. Shabtai F, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):697–702

Birth weight prediction from remote ultrasonographic examination. Spinnato JA, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):742–7

A control systems framework for understanding normal and abnormal posture. Lee WA. **Am J Occup Ther** 1989 May; 43(5):291–301 (38 ref.)

Stiles–Burch two–degree color mixture data. Fry GA. **Am J Optom Physiol Opt** 1988 Dec;65(12):921–36

Mathematical hazard models of mortality: an alternative to model life tables. Gage TB. **Am J Phys Anthropol** 1988 Aug;76(4):429–41

Social networks of disease spread in the lower Illinois valley: a simulation approach. McGrath JW. **Am J Phys Anthropol** 1988 Dec;77(4):483–96

Endo's stress analysis of the primate skull and the functional significance of the supraorbital region. Picq PG, et al. **Am J Phys Anthropol** 1989 Jul;79(3):393–8 (38 ref.)

Spread and maintenance of a disease in a structured population. Sattenspiel L. **Am J Phys Anthropol** 1988 Dec; 77(4):497–504

Plasma reciprocal pool specific activity predicts that of intracellular free leucine for protein synthesis. Horber FF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E385–99

Molecular mechanisms of osmosis. Kiil F. **Am J Physiol** 1989 Apr;256(4 Pt 2):R801–8

Human selenite metabolism: a kinetic model. Patterson BH, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R556–67

Theoretical effects of network structure on glomerular filtration of macromolecules. Remuzzi A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F152–8

Biophysical modeling of sensitivity and positive accuracy of detecting episodic endocrine signals. Urban RJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E88–94

A model study of the regulation of gastric acid secretion. Van Duijn B, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G157–68

Allopurinol kinetics in humans as a means to assess liver function: design of a loading test. Van Waeg G, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R237–45

Alternative method for minimal model analysis of intravenous glucose tolerance data. Weber KM, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E524–35

The effect of alveolar macrophage chemotaxis on bacterial clearance from the lung surface. Fisher ES, et al. **Am Rev Respir Dis** 1988 May;137(5):1129–34

Analysis of cell cycle subpopulations from cytometric data. Rippin JW, et al. **Anal Quant Cytol Histol** 1989 Aug; 11(4):232–7

Dermal–epidermal relationships in the skin of the bottlenose dolphin (Tursiops truncatus). Stromberg MW. **Anat Histol Embryol** 1989 Mar;18(1):1–13

CO2 control of the respiratory system: plant dynamics and stability analysis. elHefnawy A, et al. **Ann Biomed Eng** 1988;16(5):445–61

Applications of fast orthogonal search: time–series analysis and resolution of signals in noise. Korenberg MJ, et al. **Ann Biomed Eng** 1989;17(3):219–31

Factors affecting respiratory system stability. Longobardo GS, et al. **Ann Biomed Eng** 1989;17(4):377–96

Bioelectric sources arising in excitable fibers (ALZA lecture). Plonsey R. **Ann Biomed Eng** 1988;16(6):519–46 (31 ref.)

Resonance mode analysis for volume estimation of asymmetric branching structures. Raphael DT, et al. **Ann Biomed Eng** 1989;17(4):361–75

Effects of chamber shape and fiber orientation on relations between fiber dynamics and chamber dynamics. Regen DM. **Ann Biomed Eng** 1988;16(6):589–607

A parametric axisymmetric model study on the interface motions in porous–surfaced tibial implants. Shirazi–Adl A, et al. **Ann Biomed Eng** 1989;17(4):411–21

Dynamics of heat, water, and soluble gas exchange in the human airways: 1. A model study. Tsu ME, et al. **Ann Biomed Eng** 1988;16(6):547–71

A mathematical study of human intracranial hydrodynamics. Part 1—The cerebrospinal fluid pulse pressure. Ursino M. **Ann Biomed Eng** 1988;16(4):379–401

A mathematical study of human intracranial hydrodynamics. Part 2—Simulation of clinical tests. Ursino M. **Ann Biomed Eng** 1988;16(4):403–16

Mathematical modelling of bacterial growth at subinhibitory levels of aminoglycosides. Comby S, et al. **Ann Inst Pasteur Microbiol** 1988 Sep–Oct;139(5):613–29

Optimal estimator model for human spatial orientation. Borah J, et al. **Ann N Y Acad Sci** 1988;545:51–73 (45 ref.)

Studies on the mechanism of ovulation using the model of the isolated ovary. Janson PO, et al. **Ann N Y Acad Sci** 1988;541:22–9

Modeling slow phase velocity generation during off–vertical axis rotation. Raphan T, et al. **Ann N Y Acad Sci** 1988; 545:29–50

The bacterial photosynthetic reaction center as a model for membrane proteins. Rees DC, et al. **Annu Rev Biochem** 1989;58:607–33 (80 ref.)

The renal proximal tubule: a model for diversity of anion exchangers and stilbene–sensitive anion transporters. Aronson PS. **Annu Rev Physiol** 1989;51:419–41 (104 ref.)

The reaction of Octopus vulgaris hemocyanin with exogenous ligands: proposal of an allosteric model for the binding of cyanide and thiourea to the 11 S subunit. Giacometti GM, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):539–47

Models of human memory. Tiberghien G. **Arch Gerontol Geriatr Suppl** 1989;1:37–53 (27 ref.)

A contribution to mathematical modelling of immunological tolerance. Doležal J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):23–30

A clinical study of perimetric probability maps. Heijl A, et al. **Arch Ophthalmol** 1989 Feb;107(2):199–203

Visual field interpretation with empiric probability maps. Heijl A, et al. **Arch Ophthalmol** 1989 Feb;107(2):204–8

Mechanical capabilities of the human jaw muscles studied with a mathematical model. Van Eijden TM, et al. **Arch Oral Biol** 1988;33(11):819–26

Evidence for the failure of the Laplace law as a sole explanation for wall thickening of arteries in hypertensive and aging normotensive kidneys. Tracy RS, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):342–9

Evaluation of strategies for control of sheep lice (Damalinia ovis) with an epidemiological model [published erratum appears in Aust Vet J 1989 Apr;66(4):127] Brightling A. **Aust Vet J** 1989 Feb;66(2):55–8

Nonlinear curve fitting improves noise sensitivity of the single–breath method for estimation of cardiac output. Christensen P, et al. **Aviat Space Environ Med** 1989 Aug; 60(8):803–6

Mathematical modeling of thermoregulation [letter] Tipton MJ. **Aviat Space Environ Med** 1989 Jun;60(6):618

Latex beads as vehicles for the study of free radical processes in phagocytic cells. Thomas MJ, et al. **Basic Life Sci** 1988; 49:853–6

The activation of the cyclic–GMP phosphodiesterase via metarhodopsin I: a new model for vertebrate transduction. Deshpande S, et al. **Biochem Cell Biol** 1988 Sep; 66(9):979–85

Concanavalin A interacts with lysozyme: a model for understanding lectin–-glycoprotein interactions. Vaidya S, et al. **Biochem Int** 1988 Oct;17(4):647–53

Testing transport models and transport data by means of kinetic rejection criteria. Krupka RM. **Biochem J** 1989 Jun 15;260(3):885–91

In vivo characterization of the absorption and biotransformation of pteroylmonoglutamic acid in man: a model for future studies. Lucock MD, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):30–42

Structural changes in vesicle membranes and mixed micelles of various lipid compositions after binding of different bile salts. Schubert R, et al. **Biochemistry** 1988 Nov 29; 27(24):8787–94

A model of the gating of ion channels. Croxton TL. **Biochim Biophys Acta** 1988 Dec 8;946(1):19–24

Intrinsic molecules in lipid membranes change the lipid–domain interfacial area: cholesterol at domain interfaces. Cruzeiro–Hansson L, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):166–76 (44 ref.)

Modelling of chemical reactions catalysed by membrane–bound enzymes. Determination and significance of the kinetic constants. Heirwegh KP, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):151–9

Modelling the phase equilibria in two–component membranes of phospholipids with different acyl–chain lengths. Ipsen JH, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):121–34

Phosphatidylcholine–cholesterol interactions: bilayers of heteroacid lipids containing linoleate lose calorimetric transitions at low cholesterol concentration. Keough KM, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):51–5

The asymmetric dimeric polymerase hypothesis: a progress report. McHenry CS. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):240–8 (59 ref.)

Effect of macromolecular composition of microorganisms on the thermodynamic description of their growth. Mulder MM, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):406–12

Surface charge effects upon membrane transport processes: the effects of surface charge on the monensin–mediated transport of lithium ions through phospholipid bilayers studied by 7Li–NMR spectroscopy. Riddell FG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):65–72

Mechanism of O2– generation in reduction and oxidation cycle of ubiquinones in a model of mitochondrial electron transport systems. Sugioka K, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):377–85

ESR studies on the ripple phase in multilamellar phospholipid bilayers. Tsuchida K, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):73–80

The accumulation of free and phosphorylated sugars in adipocytes based on a dynamic diffusion barrier. Widdas WF, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):221–30

On the kinetic depth effect. Aloimonos J, et al. **Biol Cybern** 1989;60(6):445–55

Evaluation of a generalized model of human postural dynamics and control in the sagittal plane. Barin K. **Biol Cybern** 1989;61(1):37–50

Empirical evaluation of two–sample statistical tests for differences of stepping phase during insect walking. Cocatre–Zilgien JH, et al. **Biol Cybern** 1988;59(6):367–77

The ethology of saccades: a non–cognitive model. Harris CM. **Biol Cybern** 1989;60(6):401–10 (37 ref.)

Considerations on Listing's Law and the primary position by means of a matrix description of eye position control. Haustein W. **Biol Cybern** 1989;60(6):411–20

Activation of human arm muscles during flexion/extension and supination/pronation tasks: a theory on muscle coordination. Jongen HA, et al. **Biol Cybern** 1989;61(1):1–9

Cardiac arrhythmias modelled by Cai–inactivated Ca2+ channels. Lambert MH, et al. **Biol Cybern** 1989;61(1):21–8

Response histogram shapes and tuning curves: the predicted responses of several cortical cell types to drifting gratings stimuli. Malonek D, et al. **Biol Cybern** 1989;60(6):469–75

A two dimensional field theory for motion computation. First order approximation; translatory motion of rigid patterns. Reichardt WE, et al. **Biol Cybern** 1988;60(1):23–35

Amplification and latency in photoreceptors: integrated or separated phenomena? Schnakenberg J. **Biol Cybern** 1989; 60(6):421–30

Model investigations of the temperature dependence of demyelinated and reorganized axonal membrane. Stephanova DI. **Biol Cybern** 1989;60(6):439–43

Formation and control of optimal trajectory in human multijoint arm movement. Minimum torque–change model. Uno Y, et al. **Biol Cybern** 1989;61(2):89–101

The control of oscillatory movements of the forearm. Wallace GK. **Biol Cybern** 1989;61(3):233–40

Simulation of vascular surfaces: differential saturation with glycosaminoglycans and their quantitative analysis. Hale G, et al. **Biomaterials** 1988 Jul;9(4):376–8

Titanium–hydrogen peroxide interaction: model studies of the influence of the inflammatory response on titanium implants. Tengvall P, et al. **Biomaterials** 1989 Apr; 10(3):166–75

A linear muscle model predicts the hyperbolic force–velocity relationship. Enderle JD, et al. **Biomed Sci Instrum** 1989; 25:149–53

An optimal design problem in rhythmometry. Kitsos CP, et al. **Biometrics** 1988 Sep;44(3):657–71

Hyperparameter estimation using stochastic approximation with application to population pharmacokinetics. Mentré F, et al. **Biometrics** 1988 Sep;44(3):673–83

Noncompartmental area under the curve determinations for drugs that cycle in the bile. Colburn WA, et al. **Biopharm Drug Dispos** 1988 Sep–Oct;9(5):465–75

A comparative study of the permeation of dihexadecyl phosphate vesicles by various carboxylic acids and some of their tetrazole analogues. Pernice P, et al. **Biophys Chem** 1988 Oct;32(1):15–20

Characterization of non–linear behaviour of an animal membrane using electro–kinetic studies. Shukla PC, et al. **Biophys Chem** 1989 Mar;33(1):31–7

The friction constants of bundle–like particles in solution. Suda H. **Biophys Chem** 1988 Dec;32(2–3):239–45

A model of force production that explains the lag between crossbridge attachment and force after electrical stimulation of striated muscle fibers. Bagni MA, et al. **Biophys J** 1988 Dec;54(6):1105–14

Dielectric properties of Artemia cysts at low water contents. Evidence for a percolative transition. Bruni F, et al. **Biophys J** 1989 Feb;55(2):331–8

Theoretical study of the voltage and concentration dependence of the anomalous mole fraction effect in single calcium channels. New insights into the characterization of multi–ion channels. Campbell DL, et al. **Biophys J** 1988 Nov;54(5):945–54

Transmembrane flux and receptor desensitization measured with membrane vesicles. Homogeneity of vesicles investigated by computer simulation. Cash DJ, et al. **Biophys J** 1988 Nov;54(5):909–19

Fusion of native or reconstituted membranes to liposomes, optimized for single channel recording. Correa AM, et al. **Biophys J** 1988 Sep;54(3):569–75

delta pH–induced fluorescence quenching of 9–aminoacridine in lipid vesicles is due to excimer formation at the membrane. Grzesiek S, et al. **Biophys J** 1989 Jun; 55(6):1101–9

Open channel noise. IV. Estimation of rapid kinetics of formamide block in gramicidin A channels. Heinemann SH, et al. **Biophys J** 1988 Oct;54(4):757–64

Tl–205 nuclear magnetic resonance determination of the thermodynamic parameters for the binding of monovalent cations to gramicidins A and C. Hinton JF, et al. **Biophys J** 1988 Sep;54(3):527–33

Thermodynamic parameters for the binding of divalent cations to gramicidin A incorporated into a lipid environment by Tl–205 nuclear magnetic resonance. Hinton JF, et al. **Biophys J** 1989 Feb;55(2):327–30

Application of Brownian motion theory to the analysis of membrane channel ionic trajectories calculated by molecular dynamics. Jakobsson E, et al. **Biophys J** 1988 Oct;54(4):751–6

Statistical discrimination of fractal and Markov models of single–channel gating. Korn SJ, et al. **Biophys J** 1988 Nov; 54(5):871–7

Fractal models are inadequate for the kinetics of four different ion channels. McManus OB, et al. **Biophys J** 1988 Nov;54(5):859–70

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the

kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

Particle counting by fluorescence correlation spectroscopy. Simultaneous measurement of aggregation and diffusion of molecules in solutions and in membranes. Meyer T, et al. **Biophys J** 1988 Dec;54(6):983–93

Two-site exchange revisited: a new method for extracting exchange parameters in biological systems. Mulkern RV, et al. **Biophys J** 1989 Feb;55(2):221–32

Threshold for repetitive activity for a slow stimulus ramp: a memory effect and its dependence on fluctuations. Rinzel J, et al. **Biophys J** 1988 Sep;54(3):551–5

The effects of viscosity on gramicidin tryptophan rotational motion. Scarlata SF. **Biophys J** 1988 Dec;54(6):1149–57

Anisotropic 2H-nuclear magnetic resonance spin-lattice relaxation in cerebroside- and phospholipid-cholesterol bilayer membranes. Siminovitch DJ, et al. **Biophys J** 1988 Sep;54(3):373–81

Theoretical study of the antiparallel double-stranded helical dimer of gramicidin as an ion channel. Sung SS, et al. **Biophys J** 1988 Sep;54(3):510–26

Interfacial properties of gramicidin and gramicidin-lipid mixtures measured with static and dynamic monolayer techniques. Tournois H, et al. **Biophys J** 1989 Mar; 55(3):537–69

Cortical shell-liquid core model for passive flow of liquid-like spherical cells into micropipets. Yeung A, et al. **Biophys J** 1989 Jul;56(1):139–49

Structure and stability of the Boc(D-Pro-L-Pro)2OCH3 Na+ complex: a model of poly(D,L-proline), an alkali ion channel across membranes. De Santis P, et al. **Biopolymers** 1989 Jan;28(1):285–96

Structure of the ion channel peptide antibiotic gramicidin A. Langs DA. **Biopolymers** 1989 Jan;28(1):259–66

A lipid vesicle system for probing voltage-dependent peptide-lipid interactions: application to alamethicin channel formation. Woolley GA, et al. **Biopolymers** 1989 Jan;28(1):267–72

Theoretical and experimental study of the time dependent flow of red blood cell suspension through narrow pores. Bucherer C, et al. **Biorheology** 1988;25(4):639–49

Microrheology and constitutive equation of soft tissue. Fung YC. **Biorheology** 1988;25(1–2):261–70

A continuum theory of blood cells filtration at low flow rates. Niimi H, et al. **Biorheology** 1988;25(5):743–61

Theoretical analysis of the effects of a radial activation wave and twisting motion on the mechanics of the left ventricle. Ohayon J, et al. **Biorheology** 1988;25(3):435–47

Particle interaction effects on blood cell sedimentation and separations. Van Wie BJ, et al. **Biorheology** 1988; 25(4):651–62

Population processing—a powerful class of parallel algorithms. Banzhaf W. **Biosystems** 1989;22(2):163–72

Circuit analysis of the oscillatory state in glycolysis. Boiteux A, et al. **Biosystems** 1989;22(3):231–40

Time delays in metabolic control systems. Mizraji E, et al. **Biosystems** 1988;22(1):11–7

Interrelations between glycolysis and the hexose monophosphate shunt in erythrocytes as studied on the basis of a mathematical model. Schuster R, et al. **Biosystems** 1988;22(1):19–36

A physiological view of in vivo calcium dynamics: the regulation of a nonlinear self-organized system. Staub JF, et al. **Bone** 1989;10(2):77–86

Skin explant culture as a model for cutaneous graft-versus-host disease in humans. Dickinson AM, et al. **Bone Marrow Transplant** 1988 Jul;3(4):323–9

A model system illustrating the isolation and enrichment of a rare population of tumour cells in bone marrow. Gibson FM, et al. **Bone Marrow Transplant** 1988 Nov;3(6):567–76

Modification of the sponge allograft model to study the immune response to bone marrow cells. Moen RC, et al. **Bone Marrow Transplant** 1987 Apr;1(4):389–96

Some effects of basic multicellular unit-based remodelling on photon absorptiometry of trabecular bone. Frost HM. **Bone Miner** 1989 Aug;7(1):47–65

Controlled ventilation with a Mapleson A (Magill) breathing system: reassessment using a lung model. Tyler CK, et al. **Br J Anaesth** 1989 Apr;62(4):462–6

Growth of melanocytes in a skin equivalent model in vitro. Bertaux B, et al. **Br J Dermatol** 1988 Oct;119(4):503–12

Upper and lower time limits in the decision to recommend marrow transplantation for patients with chronic myelogenous leukaemia. Simon W, et al. **Br J Haematol** 1988 Sep;70(1):31–6

Correlation of tissue, blood, and air partition coefficients of volatile organic chemicals. Paterson S, et al. **Br J Ind Med** 1989 May;46(5):321–8

Faecal endogenous loss of calcium in young sheep. Chrisp JS, et al. **Br J Nutr** 1989 Jan;61(1):59–65

Compartment models for estimating attributes of digesta flow in cattle. Pond KR, et al. **Br J Nutr** 1988 Nov;60(3):571–95

An improved model for tissue expansion and flap research in the rabbit. Timmenga EJ, et al. **Br J Plast Surg** 1989 May;42(3):301–5

Biological equivalence between fractionated radiotherapy treatments using the linear-quadratic model [see comments] Deehan C, et al. **Br J Radiol** 1988 Dec;61(732):1187–8. **Comment in:** Br J Radiol 1989 Jun;62(738):565–6

Inadequacy of first and second order models to characterize the heart rate response induced by dynamic exercise. Silva E, et al. **Braz J Med Biol Res** 1988;21(1):61–3

Automata network theories in immunology: their utility and their underdetermination. Atlan H. **Bull Math Biol** 1989; 51(2):247–53

Subcellular distribution of compounds in biosystems. Baláž S, et al. **Bull Math Biol** 1988;50(4):367–78

Unreasonable implications of reasonable idiotypic network assumptions. De Boer RJ, et al. **Bull Math Biol** 1989; 51(3):381–408

On the incompatibility of Gompertz or Weibull survival dynamics with exponentially distributed individual lifespans. Guess F, et al. **Bull Math Biol** 1988;50(2):187–92

Mathematical studies of capillary-tissue exchange. Salathe EP. **Bull Math Biol** 1988;50(3):289–311

Periodic band pattern as a dissipative structure in ion transport systems with cylindrical shape. Toko K, et al. **Bull Math Biol** 1988;50(3):255–88

Implications of survival curve slopes on the interpretation of adjuvant therapy results. Eriguchi M, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):93–7

Analysis of burn injury by digital simulation. Roa LM, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):201–9

Modeling human calcium tracer kinetics using a minimum of assumptions. Kotler LH. **Calcif Tissue Int** 1989 Feb; 44(2):69–73

Speculations on the growth strategy of prosthecate bacteria. Koch AL. **Can J Microbiol** 1988 Apr;34(4):390–4 (35 ref.)

Mechanisms of heterogeneous distribution of monoclonal antibodies and other macromolecules in tumors: significance of elevated interstitial pressure. Jain RK, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7022–32

A Gompertzian model of human breast cancer growth. Norton L. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7067–71

A quasi-constant composition method for studying the formation of artificial caries-like lesions. Chow LC, et al. **Caries Res** 1989;23(3):129–34

A model to investigate xerostomia-related dental caries. Jansma J, et al. **Caries Res** 1988;22(6):357–61

Monobacterial and mixed bacterial plaques of Streptococcus mutans and Veillonella alcalescens in an artificial mouth: development, metabolism, and effect on human dental enamel. Noorda WD, et al. **Caries Res** 1988;22(6):342–7

Sorting and traffic in the central vacuolar system. Klausner RD. **Cell** 1989 Jun 2;57(5):703–6 (14 ref.)

A dynamical model for receptor-mediated cell adhesion to surfaces in viscous shear flow. Hammer DA, et al. **Cell Biophys** 1989 Apr;14(2):139–73

Equations for the prediction of resting energy expenditure in chronic obstructive lung disease. Moore JA, et al. **Chest** 1988 Dec;94(6):1260–3

Microvascular exchange during burn injury: II. Formulation and validation of a mathematical model. Bert JL, et al. **Circ Shock** 1989 Jul;28(3):199–219

Microvascular exchange during burn injury: III. Implications of the model. Bowen BD, et al. **Circ Shock** 1989 Jul; 28(3):221–33

Is the ex vivo rat gastric chamber model suitable for studying the gastrotoxicity of refluxed duodenal contents? Initial results using deoxycholic acid. Armstrong D, et al. **Clin Chim Acta** 1988 Dec 30;178(3):313–25

The fibroblast as a model for androgen resistant states. Hughes IA, et al. **Clin Endocrinol (Oxf)** 1988 May; 28(5):565–79 (77 ref.)

AIDS as immune system activation: a model for pathogenesis. Ascher MS, et al. **Clin Exp Immunol** 1988 Aug;73(2):165–7

Uptake and translocation of fluorescent latex particles by rabbit Peyer's patch follicle epithelium: a quantitative model for M cell uptake. Pappo J, et al. **Clin Exp Immunol** 1989 Apr;76(1):144–8

Tumor cell adhesion to frozen lymph node sections—an in vitro correlate of lymphatic metastasis. Brodt P. **Clin Exp Metastasis** 1989 May-Jun;7(3):343–52

Evolution of transport theory in CAPD. Lysaght MJ, et al. **Clin Nephrol** 1988;30 Suppl 1:S34–6

Microcomputer simulation of steady-state enzyme kinetics for educational purposes. Daron HH, et al. **Comput Appl Biosci** 1986 Sep;2(3):207–9

A rapid computer technique for analysing molecular interactions. Fielding AH, et al. **Comput Appl Biosci** 1986 Sep;2(3):195–9

Chaos: principles and implications in biology. Tsonis PA, et al. **Comput Appl Biosci** 1989 Feb;5(1):27–32

A subtractive method for decomposing muscle tension into individual twitches. Bates JH, et al. **Comput Biomed Res** 1988 Dec;21(6):570–8

A new implemented version of program MIR (MIR II): analysis and identification of mathematical models in enzyme and transport kinetic studies. Bianchi R, et al. **Comput Methods Programs Biomed** 1988 Sep-Oct; 27(2):189–96

BOOMER, a simulation and modeling program for pharmacokinetic and pharmacodynamic data analysis. Bourne DW. **Comput Methods Programs Biomed** 1989 Jul; 29(3):191–5

Nonlinear SPICE models for physiologic systems. Goldstein LJ, et al. **Comput Methods Programs Biomed** 1989 Jul; 29(3):161–72

Simulation of ionic transport mediated by membrane proteins for educational purposes. Holmgren M, et al. **Comput Methods Programs Biomed** 1989 May;29(1):43–50

Automated data acquisition and analysis in muscle physiology research. Stanley TE 3d, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):273–9

Recursive identification of lung parameters. Valcke CP, et al. **Comput Methods Programs Biomed** 1989 Jun;29(2):143–9

Quantitative analysis of the probability of intracellular ice formation during freezing of isolated protoplasts. Pitt RE, et al. **Cryobiology** 1989 Feb;26(1):44–63

Induction of leukemia by avian myeloblastosis virus: a mechanistic hypothesis. Boettiger D, et al. **Curr Top Microbiol Immunol** 1989;149:157–64

Analysis of bivariate flow karyotypes. Dean PN, et al. **Cytometry** 1989 Mar;10(2):109–23

Movement of the Dictyostelium discoideum slug: models, musings, and images. Breen EJ, et al. **Dev Genet** 1988; 9(4–5):539–48

The trigeminal system: an advantageous experimental model for studying neuronal development. Davies AM. **Development** 1988;103 Suppl:175–83 (35 ref.)

Mechanisms of vertebrate segmentation. Keynes RJ, et al. **Development** 1988 Jul;103(3):413–29 (131 ref.)

Theoretical aspects of stripe formation in relation to Drosophila segmentation. Lacalli TC, et al. **Development** 1988 Sep;104(1):105–13

The developmental specification of the vertebrate skull. Thorogood P. **Development** 1988;103 Suppl:141–53

Requirements for X-linked zygotic gene activity during cellularization of early Drosophila embryos. Wieschaus E, et al. **Development** 1988 Nov;104(3):483–93

Evaluation of three methods for determining initial vancomycin doses. Ackerman BH. **DICP** 1989 Feb; 23(2):123–8

The development of cell lineages: a sequential model. Brown G, et al. **Differentiation** 1988 Dec;39(2):83–9 (64 ref.)

Database and search techniques for two-dimensional gel protein data: a comparison of paradigms for exploratory data analysis and prospects for biological modeling. Lemkin PF, et al. **Electrophoresis** 1989 Feb;10(2):122–40

The free hormone hypothesis: a physiologically based mathematical model. Mendel CM. **Endocr Rev** 1989 Aug; 10(3):232–74 (273 ref.)

In vivo biological validation and biophysical modeling of the sensitivity and positive accuracy of endocrine peak detection. I. The LH pulse signal. Urban RJ, et al. **Endocrinology** 1989 May;124(5):2541–7

Quantitative models for lung cancer induced by cigarette smoke. Altshuler B. **Environ Health Perspect** 1989 May; 81:107–8; discussion 121–2 (14 ref.)

Multistage models for carcinogenesis. Freedman DA, et al. **Environ Health Perspect** 1989 May;81:169–88 (74 ref.)

Chromatographic modeling of the release of particle-adsorbed molecules into synthetic alveolar surfactant. Sehnert SS, et al. **Environ Health Perspect** 1988 Jun;78:185–95

Modeling estimates of the effect of acid rain on background radiation dose. Sheppard SC, et al. **Environ Health Perspect** 1988 Jun;78:197–206

Cadmium concentrations in human liver, blood, and bile: comparison with a metabolic model. Elinder CG, et al. **Environ Res** 1978 Oct;17(2):236–41

Quantifying the effects of clothing for models of human response to the thermal environment. Haslam RA, et al. **Ergonomics** 1988 Dec;31(12):1787–806

Modelling wrist-twisting strength of the elderly. Imrhan SN, et al. **Ergonomics** 1988 Dec;31(12):1807–19

Equations of simple kinetic models with Gaussian distributions in reaction constants. de Lima JJ. **Eur J Nucl Med** 1988;14(12):590–3

Mathematical models of longitudinal mandibular growth for children with normal and untreated Class II, division 1 malocclusion. Buschang PH, et al. **Eur J Orthod** 1988 Aug; 10(3):227–34

The waste-product theory of aging: transformation to unlimited growth in cell cultures. Hirsch HR, et al. **Exp Gerontol** 1989;24(2):97–112

Long-lived lines of Caenorhabditis elegans can be used to establish predictive biomarkers of aging. Johnson TE, et al. **Exp Gerontol** 1988;23(4–5):281–95

Extension of oxygen tolerance in man: philosophy and significance. Lambertsen CJ. **Exp Lung Res** 1988;14 Suppl:1035–58 (56 ref.)

Variable receptor affinity hypothesis. Bevan JA, et al. **FASEB J** 1989 Apr;3(6):1696–704 (44 ref.)

Remarks on the supramolecular organization of the glycolytic system in vivo. Batke J. **FEBS Lett** 1989 Jul 17;251(1–2):13–6

The 'molten globule' state is involved in the translocation of proteins across membranes? Bychkova VE, et al. **FEBS Lett** 1988 Oct 10;238(2):231–4

A cytolytic delta-endotoxin from Bacillus thuringiensis var. israelensis forms cation-selective channels in planar lipid bilayers. Knowles BH, et al. **FEBS Lett** 1989 Feb 27; 244(2):259–62

Recovery from polyclonal tolerance: simulation analysis. Doležal J, et al. **Folia Biol (Praha)** 1989;35(3):164–70

Simulation analysis of the mechanism of escape from immunoglobulin suppression. Doležal J, et al. **Folia Biol (Praha)** 1988;34(5):330–5

Application of mathematical model of immunological tolerance to HIV infection. Doležal J, et al. **Folia Biol (Praha)** 1988;34(5):336–41

Mathematical model of CD4+ lymphocyte depletion in HIV infection. Hraba T, et al. **Folia Biol (Praha)** 1989; 35(3):156–63

Oxidative influence on development and differentiation: an overview of a free radical theory of development. Allen RG, et al. **Free Radic Biol Med** 1989;6(6):631–61 (304 ref.)

Is the autoxidation of catecholamines involved in ischemia–reperfusion injury? Jewett SL, et al. **Free Radic Biol Med** 1989;6(2):185–8

Progress in application of the image analysing system QUANTIMET 720 in the histomorphometry of the microcirculatory system. Blödner R, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):115–20

The lateral order of dipalmitoylphosphatidylcholine model membranes in the presence of N–alkyl–N,N,N–trimethylammonium ions as studied by Raman spectroscopy. Cirák J, et al. **Gen Physiol Biophys** 1988 Dec;7(6):633–42

Changes of the energy profile of gramicidin A ionic channel dependent on the ratio of cations of different species in the flux passing through the channel. Lev AA, et al. **Gen Physiol Biophys** 1988 Oct;7(5):547–53

Mathematical modelling of the transport of low molecular weight solutes across biological membranes. The transport of Leu, His and Glu into human blood platelets. Walkowiak B, et al. **Gen Physiol Biophys** 1988 Oct;7(5):475–94

Modelling sibship environment in the regressive logistic model for familial disease. Hopper JL. **Genet Epidemiol** 1989;6(1):235–40

The guinea pig as a model for the study of the effects of milk on growth and development. Weaver LT, et al. **Growth Dev Aging** 1988 Summer;52(2):91–6

A microcomputer algorithm for solving first–order compartmental models involving recycling. Birchall A, et al. **Health Phys** 1989 Jun;56(6):857–68

Radiological health effects models for nuclear power plant accident consequence analysis. Evans JS, et al. **Health Phys** 1989 Apr;56(4):397–413

In–vitro fertilization: how many attempts before success? Bouckaert A, et al. **Hum Reprod** 1989 Apr;4(3):261–4

A fuzzy set theoretical approach to automatic analysis of nystagmic eye movements. Arzi M, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):954–63

Cardiovascular variability signals: towards the identification of a closed–loop model of the neural control mechanisms. Baselli G, et al. **IEEE Trans Biomed Eng** 1988 Dec; 35(12):1033–46

A pressure controller for estimating parameters for a nonlinear CSF model. Charlton JD, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):752–5

Analytical solution to the three–compartment pharmacokinetic model. Jacobs JR. **IEEE Trans Biomed Eng** 1988 Sep;35(9):763–5

Identification of human postural dynamics. Johansson R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):858–69

Three–dimensional finite element solution for biopotentials: erythrocyte in an applied field. Miller CE, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):712–8

A method for recovering physiological components from dynamic radionuclide images using the maximum entropy principle: a numerical investigation. Nakamura M, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):906–17

Source parameter estimation in inhomogeneous volume conductors of arbitrary shape. Oostendorp TF, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):382–91

Computer vision: a source of models for biological visual processes? Rosenfeld A. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):93–6

Comparison of finite–difference time–domain SAR calculations with measurements in a heterogeneous model of man. Spiegel RJ, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):849–55

The identification of time series models of lower extremity EMG for the control of prostheses using Box–Jenkins criteria. Triolo RJ, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):584–94

A mathematical model of cerebral blood flow chemical regulation—Part I: Diffusion processes. Ursino M, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):183–91

Vector analysis of three–dimensional evoked potentials: eccentric dipoles. Witt JC, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):291–5

A model of acoustic transmission in the respiratory system. Wodicka GR, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):925–34

Temporal clustering of ion channel openings incorporating time interval omission. Ball F, et al. **IMA J Math Appl Med Biol** 1987;4(4):333–61

Self–nonself discrimination due to immunological nonlinearities: the analysis of a series of models by numerical methods. De Boer RJ, et al. **IMA J Math Appl Med Biol** 1987;4(1):1–32

Distribution of different fibre types in human skeletal muscles: a method for the detection of neurogenic disorders. Downham DY, et al. **IMA J Math Appl Med Biol** 1987; 4(1):81–91

Analytical results on the stability of age–structured recurrent epidemic models. Greenhalgh D. **IMA J Math Appl Med Biol** 1987;4(2):109–44

Terminal distributions along a 'knight's line' for a stochastic epidemic. Griffiths JD, et al. **IMA J Math Appl Med Biol** 1987;4(1):69–79

A model for the periodic synaptic inhibition of a neuronal oscillator. Kiemel T, et al. **IMA J Math Appl Med Biol** 1987;4(2):145–69

An approach to modelling radiation damage by fast ionizing particles. Thomas GE. **IMA J Math Appl Med Biol** 1987; 4(4):363–77

Symposium on Theoretic Immunology. Utrecht, The Netherlands, May 1989. Selected papers. **Immunol Lett** 1989 Aug;22(2):79–122

Poor repertoire selection in symmetric idiotypic network models. De Boer RJ. **Immunol Lett** 1989 Aug;22(2):101–12

Local T–T cell and T–B cell interactions: a cellular automaton approach. Hogeweg P. **Immunol Lett** 1989 Aug; 22(2):113–22

On a thermodynamic model of biological growth. Chakrabarti CG. **Indian J Biochem Biophys** 1989 Feb; 26(1):61–2

The lens: a model for chromatin degradation studies in terminally differentiating cells. Counis MF, et al. **Int J Biochem** 1989;21(3):235–42 (41 ref.)

A simulation support system for solving large physiological models on microcomputers. Montani JP, et al. **Int J Biomed Comput** 1989 Mar;24(1):41–54

Modelling the risk of adult T–cell leukemia/lymphoma in persons infected with human T–lymphotropic virus type I. Murphy EL, et al. **Int J Cancer** 1989 Feb 15;43(2):250–3

Population biology of the parasitic phase of Ostertagia circumcincta. Smith G. **Int J Parasitol** 1989 Jul; 19(4):385–93

An approach to the teaching of host/parasite population modelling. Wharton DA, et al. **Int J Parasitol** 1989 Jul; 19(4):451–5

The use of in vitro models to predict the distribution of receptor binding radiotracers in vivo. Eckelman WC. **Int J Rad Appl Instrum [B]** 1989;16(3):233–45 (41 ref.)

HPLC as the archetypical animal. Nunn AD. **Int J Rad Appl Instrum [B]** 1989;16(3):187–90

Hematopoietic death of unprotected man from photon irradiations: statistical modeling from animal experiments. Morris MD, et al. **Int J Radiat Biol** 1989 Mar;55(3):445–61

Potentiation of radiation effects on multicellular tumor spheroids (MTS) of HeLa cells by Ionidamine. Kim JH, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1277–80

The effect of patient–to–patient variability on the accuracy of predictive assays of tumor response to radiotherapy: a theoretical evaluation. Tucker SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):145–57

Prediction of the range of hand positions available to a patient with movement restrictions at the joints of the upper limb—a mathematical model. Johnson GR, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):291–7

Assembly of lysosomes: perspectives from comparative molecular cell biology. Storrie B. **Int Rev Cytol** 1988; 111:53–105 (274 ref.)

Evaluation of methods for indirect calorimetry with a ventilated lung model. Braun U, et al. **Intensive Care Med** 1989;15(3):196–202

Total inspiratory work with modern demand valve devices compared to continuous flow CPAP. Samodelov LF, et al. **Intensive Care Med** 1988;14(6):632–9

Application of an auditory model to speech recognition. Cohen JR. **J Acoust Soc Am** 1989 Jun;85(6):2623–9

On the measurement of glottal flow. Cranen B, et al. **J Acoust Soc Am** 1988 Sep;84(3):888–90

Determination of the acoustic nonlinearity parameter in biological media using FAIS and ITD methods. Gong XF, et al. **J Acoust Soc Am** 1989 Jul;86(1):1–5

Realistic mechanical tuning in a micromechanical cochlear model. Kolston PJ, et al. **J Acoust Soc Am** 1989 Jul; 86(1):133–40

Comments on "Two–mass models of the vocal cords for natural sounding voice synthesis". Nudelman HB, et al. **J Acoust Soc Am** 1989 May;85(5):2220–3

Sound propagation in the ear canal and coupling to the eardrum, with measurements on model systems. Stinson MR, et al. **J Acoust Soc Am** 1989 Jun;85(6):2481–91

A model of spatiotemporal tactile sensitivity linking psychophysics to tissue mechanics. Van Doren CL. **J Acoust Soc Am** 1989 May;85(5):2065–80

Computer simulation of management strategies for Psorophora columbiae in the rice agroecosystem. Focks DA, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):399–413

A geometric model for estimating villous surface area in rat small bowel is justified by unbiased estimates obtained using vertical sections. Mayhew TM. **J Anat** 1988 Dec; 161:187–93

Integration of ovulation rate, potential embryonic viability and uterine capacity into a model of litter size in swine. Bennett GL, et al. **J Anim Sci** 1989 May;67(5):1230–41

Forage ingestion: effects of sward characteristics and body size. Demment MW, et al. **J Anim Sci** 1988 Sep; 66(9):2380–92

A simulation model of forage yield, quality and intake and growth of growing cattle grazing cornstalks. Fernandez–Rivera S, et al. **J Anim Sci** 1989 Feb;67(2):581–9

Evaluation of crossbreeding systems for small beef herds: II. Two–sire systems. Lamb MA, et al. **J Anim Sci** 1989 Jan;67(1):40–7

Selection among nonlinear models for rate of passage studies in ruminants. Quiroz RA, et al. **J Anim Sci** 1988 Nov; 66(11):2977–86

Two–cytochrome metabolic model for carotid body PtiO2 and chemosensitivity changes after hemorrhage. Buerk DG, et al. **J Appl Physiol** 1989 Jul;67(1):60–8

A minimal mathematical model of human periodic breathing. Carley DW, et al. **J Appl Physiol** 1988 Sep;65(3):1400–9

Flutter in flow–limited collapsible tubes: a mechanism for generation of wheezes. Gavriely N, et al. **J Appl Physiol** 1989 May;66(5):2251–61

Model implications of gas exchange dynamics on blood gases in incremental exercise. Lamarra N, et al. **J Appl Physiol** 1989 Apr;66(4):1539–46

Mathematical analysis of running performance and world running records. Péronnet F, et al. **J Appl Physiol** 1989 Jul;67(1):453–65

Bronchial distribution of gas mixing in a model of the upper and central airways. Simone AF, et al. **J Appl Physiol** 1988 Oct;65(4):1693–702

Model analyses of capillary growth and tissue oxygenation during hypoxia. Snyder GK. **J Appl Physiol** 1988 Nov; 65(5):2332–6

On the modeling and interpretation of oxygen uptake kinetics from ramp work rate tests. Swanson GD, et al. **J Appl Physiol** 1988 Dec;65(6):2453–8

Mechanics of compartmental models of the chest wall. Wilson TA. **J Appl Physiol** 1988 Nov;65(5):2261–4

Insects as biochemical models. Law JH, et al. **J Biol Chem** 1989 Oct 5;264(28):16335–8 (59 ref.)

A three–dimensional kinematic and dynamic model of the lower limb. Apkarian J, et al. **J Biomech** 1989;22(2):143–55

Strain rate dependence of the mechanical properties of reindeer antler and the cumulative damage model of bone fracture. Currey JD. **J Biomech** 1989;22(5):469–75

Effects of grid dimensions on finite element models of an articular surface. Galbraith PC, et al. **J Biomech** 1989; 22(4):385–93

Comments on 'A Dynamic Optimization Technique for Predicting Muscle Forces in the Swing Phase of Gait' by D.T. Davy and M.L. Audu, and general trends in contemporary muscle modelling. Hatze H. **J Biomech** 1988; 21(10):888–91

Comment on 'Biomechanical Model of the Human Shoulder—I. Elements' [letter] Hefzy MS. **J Biomech** 1988; 21(10):891–2

Bivariate optimization of pedalling rate and crank arm length in cycling. Hull ML, et al. **J Biomech** 1988;21(10):839–49

Biomechanical analyses of surgical correction techniques in idiopathic scoliosis: significance of bi–planar characteristics of scoliotic spines. Jayaraman G, et al. **J Biomech** 1989; 22(5):427–37

Validation of single–segment and three–segment spinal models used to represent lumbar flexion. Kippers V, et al. **J Biomech** 1989;22(1):67–75

The limitations of canine trabecular bone as a model for human: a biomechanical study. Kuhn JL, et al. **J Biomech** 1989;22(2):95–107

Identification of knee joint models for varus–valgus and internal–external rotations: snow skiing experiments. Mote CD Jr, et al. **J Biomech** 1989;22(3):245–59

An application of beam theory to determine the stress and deformation of long bones. Salathe EP Jr, et al. **J Biomech** 1989;22(3):189–99

On the fibre composite material models of disc annulus—comparison of predicted stresses. Shirazi–Adl A. **J Biomech** 1989;22(4):357–65

A kinematic model of the flexor tendons of the hand. Thompson DE, et al. **J Biomech** 1989;22(4):327–34

Sensitivity of temporomandibular joint force calculations to errors in muscle force measurements. Throckmorton GS. **J Biomech** 1989;22(5):455–68

Simulation of quadrupedal locomotion using a rigid body model. van den Bogert AJ, et al. **J Biomech** 1989; 22(1):33–41

A simulation of rat edl force output based on intrinsic muscle properties. van Ingen Schenau GJ, et al. **J Biomech** 1988; 21(10):815–24

Influence of physical activity on the regulation of bone density. Whalen RT, et al. **J Biomech** 1988;21(10):825–37

Comment on the paper 'Response of a human head/neck/upper–torso replica to dynamic loading—II. Analytical/numerical model' [letter] Williams JL. **J Biomech** 1988;21(8):687–8

Quantitation of human shoulder anatomy for prosthetic arm control—II. Anatomy matrices. Wood JE, et al. **J Biomech** 1989;22(4):309–25

Quantitation of human shoulder anatomy for prosthetic arm control—I. Surface modelling. Wood JE, et al. **J Biomech** 1989;22(3):273–92

A planar model of the knee joint to characterize the knee extensor mechanism. Yamaguchi GT, et al. **J Biomech** 1989; 22(1):1–10

Flow separation, an important mechanism in the formation of mean pulmonary pressure during high–frequency oscillation. Bush EH, et al. **J Biomech Eng** 1989 Feb; 111(1):17–23

Heat transfer normal to paired arterioles and venules embedded in perfused tissue during hyperthermia. Charny CK, et al. **J Biomech Eng** 1988 Nov;110(4):277–82

Parametric evaluation of forced expiration using a numerical model. Elad D, et al. **J Biomech Eng** 1989 Aug;111(3):192–9

Three–dimensional kinematic modelling of the human shoulder complex—Part I: Physical model and determination of joint sinus cones. Engin AE, et al. **J Biomech Eng** 1989 May;111(2):107–12

Finite element programs which are widely used to solve orthopaedic biomechanics problems [letter] Fyhrie DP, et al. **J Biomech Eng** 1989 Feb;111(1):92–3

Convection–diffusion interaction for oscillatory flow in a tapered tube. Godleski DA, et al. **J Biomech Eng** 1988 Nov; 110(4):283–91

Boundary conditions at the cartilage–synovial fluid interface for joint lubrication and theoretical verifications. Hou JS, et al. **J Biomech Eng** 1989 Feb;111(1):78–87

Simulation of the double limb support phase of human gait. Ju MS, et al. **J Biomech Eng** 1988 Aug;110(3):223–9

Numerical solutions for steady and unsteady flow in a model of the pulmonary airways. Kimmel E, et al. **J Biomech Eng** 1988 Nov;110(4):292–9

A new computational model for expiratory flow from nonhomogeneous human lungs. Lambert RK. **J Biomech Eng** 1989 Aug;111(3):200–5

The second stiffest axis of a beam–column: implications for cervical spine trauma. Liu YK, et al. **J Biomech Eng** 1989 May;111(2):122–7

An analytical model of traumatic diffuse brain injury. Margulies SS, et al. **J Biomech Eng** 1989 Aug;111(3):241–9

Thermal modeling of the malignant woman's breast. Osman MM, et al. **J Biomech Eng** 1988 Nov;110(4):269–76

On the flow of a non–Newtonian liquid induced by intestine–like contractions. Phan–Thien N, et al. **J Biomech Eng** 1989 Feb;111(1):1–8

A combined macro and microvascular model for whole limb heat transfer. Song WJ, et al. **J Biomech Eng** 1988 Nov; 110(4):259–68

Peristaltic transport of a particle–fluid suspension. Srivastava LM, et al. **J Biomech Eng** 1989 May;111(2):157–65

A numerical model of expired flow in a monoalveolar lung model subjected to pressure ramps. Thiriet M, et al. **J Biomech Eng** 1989 Feb;111(1):9–16

Three–dimensional kinematic modelling of the human shoulder complex—Part II: Mathematical modelling and solution via optimization. Tümer ST, et al. **J Biomech Eng** 1989 May;111(2):113–21

Yield behavior of bovine cancellous bone. Turner CH. **J Biomech Eng** 1989 Aug;111(3):256–60

One–dimensional steady continuum model of retraction of pseudopod in leukocytes. Zhu C, et al. **J Biomech Eng** 1989 Feb;111(1):69–77

Optimal pharmacokinetic delivery of infused drugs: application to the treatment of cardiac arrhythmias. Martin P, et al. **J Biomed Eng** 1988 Jul;10(4):360–4

Analytical study of three–compartment pharmacokinetic models: concentration, area under curves, mean residence time. Plusquellec Y. **J Biomed Eng** 1989 Jul;11(4):345–51

Singular value decomposition for identification of parameters in multicompartment analysis. Strackee J, et al. **J Biomed Eng** 1988 Oct;10(5):438–42

Effect of intracapillary resistance to oxygen transport on the diffusional shunting between capillaries. Varela FE, et al. **J Biomed Eng** 1988 Oct;10(5):400–5

A model for biocompatibility and its evaluation. Williams DF. **J Biomed Eng** 1989 May;11(3):185–91

A model system for assessing physicochemical factors affecting calcium absorbability from the intestinal tract. Pak CY, et al. **J Bone Miner Res** 1989 Feb;4(1):119–27

The scanning model for translation: an update. Kozak M. **J Cell Biol** 1989 Feb;108(2):229–41 (287 ref.)

Kinetic characteristics and regulation of hexose transport in a galactokinase–negative Chinese hamster fibroblast cell line: a good model for studies on sugar transport in cultured mammalian cells. Germinario RJ, et al. **J Cell Physiol** 1989 Feb;138(2):300–4

Stochastic model for multipotent hemopoietic progenitor differentiation. Tsuji K, et al. **J Cell Physiol** 1989 Jun; 139(3):647–53

The 3T3 cell cycle at low proliferation rates. Brooks RF, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):601–12

Do anaphase chromosomes chew their way to the pole or are they pulled by actin? Forer A. **J Cell Sci** 1988 Dec; 91 (Pt 4):449–53

Cultured epithelial cells derived from human foetal pancreas as a model for the study of cystic fibrosis: further analyses on the origins and nature of the cell types. Harris A, et al. **J Cell Sci** 1988 May;90 (Pt 1):73–7

Cell growth kinetics, division asymmetry and volume control at division in the marine dinoflagellate Gonyaulax polyedra: a model of circadian clock control of the cell cycle. Homma K, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):303–18

Keratinocyte cultures: an experimental model for studying how proliferation and terminal differentiation are co–ordinated in the epidermis [editorial] Watt FM. **J Cell Sci** 1988 Aug;90 (Pt 4):525–9

A unified approach to analysing cell motility. Dunn GA, et al. **J Cell Sci Suppl** 1987;8:81–102

The physics of cell motility. Oster GF, et al. **J Cell Sci Suppl** 1987;8:35–54

Refinement of the kinetic model of the 2–[14C]deoxyglucose method to incorporate effects of intracellular compartmentation in brain. Schmidt K, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):290–303

Kinetics modeling of plasma exchange: intra– and post–plasma exchange. Kellogg RM, et al. **J Clin Apheresis** 1988;4(4):183–7

Modeling percentage change: a potential linear mirage. Suissa S, et al. **J Clin Epidemiol** 1989;42(9):843–8

Elimination kinetics of circulating antigens and immune complexes. III. Elimination of intravenously injected model antigens and soluble IgG immune complexes in mice. Johansson A, et al. **J Clin Lab Immunol** 1988 Sep; 27(1):19–23

In vitro quantitative model of catheter infection during simulated parenteral nutrition. Merlino R, et al. **J Clin Microbiol** 1988 Sep;26(9):1659–64

Model for the physics and physiology of fluid administration. Philip JH. **J Clin Monit** 1989 Apr;5(2):123–34 (48 ref.)

Controversy III: To model or not to model. **J Clin Pharmacol** 1988 Oct;28(10):879–88 (33 ref.)

Physiologic pharmacokinetic modeling. Colburn WA. **J Clin Pharmacol** 1988 Aug;28(8):673–7 (22 ref.)

Combined pharmacokinetic/pharmacodynamic (PK/PD) modeling. Colburn WA. **J Clin Pharmacol** 1988 Sep; 28(9):769–71 (17 ref.)

The frog palate mucosa as a model for studying bacterial adhesion to mucus–coated respiratory epithelium. Plotkowski MC, et al. **J Comp Pathol** 1989 Jan;100(1):37–46

Genetic analysis of dystocia and calf mortality in Israeli–Holsteins by threshold and linear models. Weller JI, et al. **J Dairy Sci** 1988 Sep;71(9):2491–501

Pattern formation models and developmental constraints. Oster GF, et al. **J Exp Zool** 1989 Aug;251(2):186–202 (0 ref.)

An in vitro model of Chlamydia trachomatis infection in the regenerative phase of the human endometrial cycle. Campbell S, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2077–87

Growth of yeast colonies on solid media. Kamath RS, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):3061–9

Kinetic analysis of effector cell recycling and effector–target binding capacity in a model of cell–mediated cytotoxicity. Garcia–Peñarrubia P, et al. **J Immunol** 1989 Oct 1; 143(7):2101–11

Antibody multivalency effects in the direct binding model for vesicle immunolysis assays. Waite BA, et al. **J Immunol Methods** 1988 Dec 9;115(2):227–38 (24 ref.)

Electrical determination of water content and concentration profile in a simulation model of in vivo stratum corneum. Obata M, et al. **J Invest Dermatol** 1989 Jun;92(6):854–9

Discrimination between platelet–mediated and coagulation–mediated mechanisms in a model of complex thrombus formation in vivo. Cadroy Y, et al. **J Lab Clin Med** 1989 Apr;113(4):436–48

Numerical simulation of a stochastic model for cancerous cells submitted to chemotherapy. Abundo M, et al. **J Math Biol** 1989;27(1):81–90

Asymptotic behavior of a nonlinear functional–integral equation of cell kinetics with unequal division. Arino O, et al. **J Math Biol** 1989;27(3):341–54

A competitive exclusion principle for pathogen virulence. Bremermann HJ, et al. **J Math Biol** 1989;27(2):179–90

A singular dispersion relation arising in a caricature of a model for morphogenesis. Britton NF. **J Math Biol** 1988; 26(4):387–403

Pacemakers in aggregation fields of Dictyostelium discoideum: does a single cell suffice? DeYoung G, et al. **J Math Biol** 1988;26(5):487–517

Regulation of differentiation in a population of cells interacting through a common pool. Doi S, et al. **J Math Biol** 1988;26(4):435–54

Existence and uniqueness of solutions in general multisolute renal flow problems. Garner JB, et al. **J Math Biol** 1988; 26(4):455–64

Statistical modelling of mitochondrial power supply. James AT, et al. **J Math Biol** 1989;27(1):29–48

First and second moments and the mean Hamming distance in a stochastic replication–mutation model for biological macromolecules. Swetina J. **J Math Biol** 1989;27(4):463–83

Asymptotic stability in a generalized probabilistic/deterministic model of the cell cycle. Tyrcha J. **J Math Biol** 1988;26(4):465–75

The calculation of the osmotic volumes of distribution of hypertonic sodium bicarbonate and other hypertonic solutions: a theoretical approach. Busse MW, et al. **J Med** 1989;20(2):143–61

A proposed clinical application of a model of CO2 laser radiation induced damage craters. Canestri F. **J Med Eng Technol** 1988 May–Jun;12(3):112–7

A kinematic model of the shoulder girdle: a résumé. Pronk GM. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):119–23

Urea kinetic modelling: comparison of three methods. Vanholder R, et al. **J Med Eng Technol** 1989 Jan–Apr; 13(1–2):87–9

Computer simulation of population dynamics of the American dog tick (Acari: Ixodidae). Mount GA, et al. **J Med Entomol** 1989 Jan;26(1):60–76

Can satyrs control pests and vectors? Ribeiro JM. **J Med Entomol** 1988 Nov;25(6):431–40

Ion transport and displacement currents with membrane–bound carriers: the theory for voltage–clamp currents, charge–pulse transients and admittance for symmetrical systems. Hladky SB. **J Membr Biol** 1979; 46(3):213–37

Role of substrate binding forces in exchange–only transport systems: I. Transition–state theory. Krupka RM. **J Membr Biol** 1989 Jul;109(2):151–8

Predicting the secondary structure of globular proteins using neural network models. Qian N, et al. **J Mol Biol** 1988 Aug 20;202(4):865–84

The role of suppressor cells in maintaining tolerance to self molecules—a commentary. Flood PM. **J Mol Cell Immunol** 1985;2(3):140–2

The role of immunoglobulin and B cells in T cell ontogeny and repertoire formation—a commentary. Janeway CA Jr, et al. **J Mol Cell Immunol** 1985;2(2):118–20

Varieties of idiotype–specific helper T cells—a commentary. Janeway CA Jr. **J Mol Cell Immunol** 1986;2(5):265–7

The morphogenesis of molluscan shells: a mathematical account using biological parameters. Løvtrup S, et al. **J Morphol** 1988 Jul;197(1):53–62

An alternative pathway of actin filament elongation. The condensation of small oligomers. Grazi E. **J Muscle Res Cell Motil** 1989 Aug;10(4):275–9

Emergence of the drug–resistant phenotype in tumor subpopulations: a hybrid model. Michelson S, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1392–401

Two behavioral states studied in a single PET/FDG procedure: error analysis. Chang JY, et al. **J Nucl Med** 1989 Jan;30(1):93–105

Use of a four–parameter logistic model to evaluate the quality of the protein from three insect species when fed to rats. Finke MD, et al. **J Nutr** 1989 Jun;119(6):864–71

Finite element analysis of a mandibular model. Farah JW, et al. **J Oral Rehabil** 1988 Nov;15(6):615–24

Role of mechanical loading in the progressive ossification of a fracture callus. Blenman PR, et al. **J Orthop Res** 1989; 7(3):398–407

Motions and loads within the human pelvis: a biomechanical model study. Scholten PJ, et al. **J Orthop Res** 1988; 6(6):840–50

In vitro dynamic method for evaluating the hemolytic potential of intravenous solutions. Obeng EK, et al. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):167–73

Commentary on "Activated carbon as a biological model". Gessner PK. **J Pharm Sci** 1988 Oct;77(10):908–9

Testing for the equality of area under the curves when using destructive measurement techniques. Bailer AJ. **J Pharmacokinet Biopharm** 1988 Jun;16(3):303–9

Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? I. General considerations". Boxenbaum H. **J Pharmacokinet Biopharm** 1988 Dec;16(6):672–81

The assessment of bioavailability in the presence of nonlinear elimination. Hall SD, et al. **J Pharmacokinet Biopharm** 1988 Jun;16(3):263–78

Nonparametric maximum likelihood estimation for population pharmacokinetics, with application to cyclosporine. Mallet A, et al. **J Pharmacokinet Biopharm** 1988 Jun;16(3):311–27

Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? II. The response mapping operator (RMO) approach". Metzler CM. **J Pharmacokinet Biopharm** 1988 Dec; 16(6):682–6

Clinical applicability of current pharmacokinetic models: splanchnic elimination of 5–fluorouracil in cancer patients. Robinson PJ, et al. **J Pharmacokinet Biopharm** 1988 Jun; 16(3):229–49

The sojourn time and its prospective use in pharmacology. Segre G. **J Pharmacokinet Biopharm** 1988 Dec;16(6):657–66

Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? I. General considerations". Siegel RA. **J Pharmacokinet Biopharm** 1988 Dec;16(6):667–72

Response to commentaries to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer"? Veng–Pedersen P. **J Pharmacokinet Biopharm** 1988 Dec;16(6):686–94

Prediction of hepatic first–pass metabolism and plasma levels following intravenous and oral administration of barbiturates in the rabbit based on quantitative structure–pharmacokinetic relationships. Watari N, et al. **J Pharmacokinet Biopharm** 1988 Jun;16(3):279–301

A multicompartmental model of cholesterol metabolism in rats. Magot T. **J Physiol (Paris)** 1988–89;83(2):80–94 (94 ref.)

The effects of "matrigenin" activity from bovine bone on the glycosaminoglycans of bovine articular cartilage in culture. A model for cartilage repair by bone derived factors. Brown S, et al. **J Rheumatol** 1989 Feb;16(2):209–16

Neuroendocrine control of male reproductive function. The opioid system as a model of control at multiple sites. Fabbri A, et al. **J Steroid Biochem** 1989 Jan;32(1B):145–50 (58 ref.)

Flow/velocity characteristics of arterial bypass stenoses. Leopold PW, et al. **J Surg Res** 1989 Jan;46(1):23–8

A diffusion–adsorption model for the computation of the amount of hormone around a secreting cell, detected by the reverse hemolytic plaque assay. Allaerts W, et al. **J Theor Biol** 1988 Apr 21;131(4):441–59

Adaptation, oscillations and relay in a model for cAMP secretion in cellular slime molds. Barchilon M, et al. **J Theor Biol** 1988 Aug 22;133(4):437–46

Mistakes allow evolutionary stability in the repeated prisoner's dilemma game. Boyd R. **J Theor Biol** 1989 Jan 9;136(1):47–56

Aggregation and the competitive exclusion principle. Britton NF. **J Theor Biol** 1989 Jan 9;136(1):57–66

Mathematical modelling of intercellular regulation causing the formation of spatial structures in bacterial colonies. Budrienė EO, et al. **J Theor Biol** 1988 Dec 7;135(3):323–41

Spatial dependence of stress distribution for rod–shaped bacteria. Chatterjee AP, et al. **J Theor Biol** 1988 Dec 7; 135(3):309–21

Kinetic modeling for the channel gating process from single channel patch clamp data. Chay TR. **J Theor Biol** 1988

Jun 22;132(4):449–68
Quantization of directional properties in biological structures using the Minimal Spanning Tree. Dussert C, et al. **J Theor Biol** 1988 Dec 7;135(3):295–302
On the application of compartmental models to radioactive tracer kinetic studies of in vivo protein turnover in animals. France J, et al. **J Theor Biol** 1988 Aug 22;133(4):447–71
Estimating the production of faeces by ruminants from faecal marker concentration curves. France J, et al. **J Theor Biol** 1988 Dec 7;135(3):383–91
Sex ratio under conditional sex expression. Frank SA, et al. **J Theor Biol** 1988 Dec 7;135(3):415–8
Influence of the hypercycle on the error threshold: a stochastic approach. García-Tejedor A, et al. **J Theor Biol** 1988 Oct 21;134(4):431–43
Control analysis of biochemical pathways: a novel procedure for calculating control coefficients, and an additional theorem for branched pathways. Giersch C. **J Theor Biol** 1988 Oct 21;134(4):451–62
Movable finite automata (MFA) models for biological systems. II: Protein biosynthesis. Goel NS, et al. **J Theor Biol** 1988 Sep 9;134(1):9–49
Branching patterns, generating rules, and astogenetic trajectories in arborescent bryozoans. Goldwasser L. **J Theor Biol** 1988 May 21;132(2):179–201
A zonal model of cortical functions. Green HS, et al. **J Theor Biol** 1989 Jan 9;136(1):87–116
Surface-limited growth: a model for the synchronization of a growing bacterial culture through periodic starvation. Grover NB. **J Theor Biol** 1988 Sep 9;134(1):77–87
Comments on a model of egg development and diapause: a reply to Susan Scott. Hilbert DW, et al. **J Theor Biol** 1989 Jan 9;136(1):121–3
A model of encounters between host and parasite populations. Janovy J Jr, et al. **J Theor Biol** 1988 Oct 7; 134(3):391–401
A mathematical model of the kinetics of blood coagulation. Khanin MA, et al. **J Theor Biol** 1989 Jan 23;136(2):127–34
A minimal model of liver glycogen metabolism; feasibility for predicting flux rates. Kurland IJ, et al. **J Theor Biol** 1988 Dec 7;135(3):343–58
Pathways of water through erythrocyte membranes. Routes along defect structures. Lawaczeck R, et al. **J Theor Biol** 1988 Dec 7;135(3):401–7
The distribution of wearout over evolved reliability structures. Miller AR. **J Theor Biol** 1989 Jan 9;136(1):27–46
On the stationary state analysis of reaction-diffusion mechanisms for biological pattern formation [published erratum appears in J Theor Biol 1988 Nov 8;135(1):137] Newman SA, et al. **J Theor Biol** 1988 Sep 17;134(2):183–97
An approach to the modeling of the tolerance mechanism in the drug effect. II: On the implications of compensatory regulation. Peper A, et al. **J Theor Biol** 1988 May 7; 132(1):29–41
Ecological structures recognized by means of entropy analysis: assessment of differences between entropy values. Pineda FD, et al. **J Theor Biol** 1988 Dec 7;135(3):283–93
Comments on a model of egg development and diapause. Scott SM. **J Theor Biol** 1989 Jan 9;136(1):117–20
A method for predicting the cranio-caudal position of secondary embryonic structures. Stephens TD, et al. **J Theor Biol** 1988 Dec 19;135(4):433–44
A hypercyclic illusion [letter] Szathmáry E. **J Theor Biol** 1988 Oct 21;134(4):561–3
Kinetics of a model for zymogen activation: the case of high activating enzyme concentrations. Varón R, et al. **J Theor Biol** 1988 May 7;132(1):51–9
On the quantum physical theory of subjective antedating. Wolf FA. **J Theor Biol** 1989 Jan 9;136(1):13–9
Two-stage models of tumor incidence for historical control animals in the National Toxicology Program's carcinogenicity experiments. Portier CJ, et al. **J Toxicol Environ Health** 1989;27(1):21–45
Transgenic mice as systems for analyses of biological functions. Katsuki M. **J Toxicol Sci** 1988 Nov;13(4):287–9
An improved method for the concentration of rotaviruses from large volumes of water. Toranzos GA, et al. **J Virol Methods** 1989 Apr-May;24(1–2):131–40
Mathematical modeling of fetal limb growth. Merz E, et al. **JCU** 1989 Mar-Apr;17(3):179–85
Effect of timing of initial scan and interval between scans on Rossavik growth model specification. Stefos T, et al. **JCU** 1989 Jun;17(5):319–25
New mathematical modelling of blood lactate kinetics during ramp mode exercise in man. Fukuba Y, et al. **Jpn J Physiol** 1989;39(2):325–34
Distribution of cross-bridges in isometrically contracting muscle: its deduction from the Huxley-Simmons theory and the effect of filament elasticity. Tameyasu T. **Jpn J Physiol** 1989;39(1):191–7
Dialysate volume measurements required for determining peritoneal solute transport. Leypoldt JK, et al. **Kidney Int** 1988 Aug;34(2):254–61
A test object for assessing pulse oximeters. Munley AJ, et al. **Lancet** 1989 May 13;1(8646):1048–9
Evidence for a model of activation of central sigma systems. Iwamoto ET. **Life Sci** 1989;44(21):1547–54
Application of the Mayo primary biliary cirrhosis survival model to Mayo liver transplant patients. Grambsch PM, et al. **Mayo Clin Proc** 1989 Jun;64(6):699–704
Microscopic and macroscopic volume conduction in skeletal muscle tissue, applied to simulation of single-fibre action potentials. Albers BA, et al. **Med Biol Eng Comput** 1988 Nov;26(6):605–10
Sensitivity of the amplitude of the single muscle fibre action potential to microscopic volume conduction parameters. Albers BA, et al. **Med Biol Eng Comput** 1988 Nov; 26(6):611–6
Development of a model for point source electrical fibre bundle stimulation. Altman KW, et al. **Med Biol Eng Comput** 1988 Sep;26(5):466–75
Hydrodynamic model of the urinary bladder derived from stepwise cystometry in the rat. Anderson S, et al. **Med Biol Eng Comput** 1988 May;26(3):267–70
Optimal design of mechanical ventilator waveform using a mathematical model of the ventilatory system. Ben-Haim SA, et al. **Med Biol Eng Comput** 1988 Jul;26(4):419–24
Potential distribution in the thorax in relation to electrical field plethysmography. Bhattacharya B, et al. **Med Biol Eng Comput** 1988 May;26(3):303–9
Wave propagation and flow velocity profiles in compliant tubes. Dardel E. **Med Biol Eng Comput** 1988 Jan;26(1):46–9
Investigation and comparison of some models for removing ocular artefacts from EEG signals. Part 1. Review of models and data analysis. Ifeachor EC, et al. **Med Biol Eng Comput** 1988 Nov;26(6):584–90
Investigation and comparison of some models for removing ocular artefacts from EEG signals. Part 2. Quantitative and pictorial comparison of models. Ifeachor EC, et al. **Med Biol Eng Comput** 1988 Nov;26(6):591–8
Two-dimensional mathematical representation of joint surfaces. Kouwenhoven HJ, et al. **Med Biol Eng Comput** 1987 Nov;25(6):701–4
Relative influence of model assumptions and measurement procedures in the analysis of the MEG. Meijs JW, et al. **Med Biol Eng Comput** 1988 Mar;26(2):136–42
Impact response of periodontal tissues. Oka H, et al. **Med Biol Eng Comput** 1988 May;26(3):260–6
Motor unit power spectrum and firing rate. Pan ZS, et al. **Med Biol Eng Comput** 1989 Jan;27(1):14–8
On the magnetic field and the electrical potential generated by bioelectric sources in an anisotropic volume conductor. Peters MJ, et al. **Med Biol Eng Comput** 1988 Nov; 26(6):617–23
Foot contact timing and the effect of walking speed in normal childhood and adult gait. Shiavi R, et al. **Med Biol Eng Comput** 1988 Jul;26(4):342–8
Can NPH be caused by cerebral small vessel disease? A new look based on a mathematical model. Sorek S, et al. **Med Biol Eng Comput** 1988 May;26(3):310–3
Resonant amplification and flow/pressure characteristics in high-frequency ventilation. Spahn DR, et al. **Med Biol Eng Comput** 1988 Jul;26(4):355–9
Lumped parameter approximation for the prediction of the dynamic response of the Fleisch pneumotachograph. Turner MJ, et al. **Med Biol Eng Comput** 1988 Jul; 26(4):443–8
Numerical analysis of electromagnetic hyperthermia of the human thorax. Zheng L, et al. **Med Biol Eng Comput** 1988 Jan;26(1):50–6
Does tumor necrosis factor play a role in the pathogenesis of fulminant hepatitis? Aderka D, et al. **Med Hypotheses** 1988 Nov;27(3):193–6
Is RA27/3 rubella immunization a cause of chronic fatigue? Allen AD. **Med Hypotheses** 1988 Nov;27(3):217–20
The membrane potential theory of carcinogenesis. Beech JA. **Med Hypotheses** 1989 Jun;29(2):101–4 (12 ref.)
Neuromodulation of hematopoiesis: a hypothesis. Bhander MS. **Med Hypotheses** 1988 Dec;27(4):291–4
Susceptibility in Parkinson's disease. 'Of mice and men'. Borm PJ, et al. **Med Hypotheses** 1988 Nov;27(3):205–7
Superiority of perfusion over bolus administration in cancer chemotherapy: proposition of a compartmental model. Desoize B, et al. **Med Hypotheses** 1989 May;29(1):21–4
The Gamma Loop: a model of glomerular hemodynamics. Part II. Gatzek WJ, et al. **Med Hypotheses** 1989 May; 29(1):29–31
Pre-eclampsia: a hypothesis for its etiology. Hardy TJ, et al. **Med Hypotheses** 1988 Nov;27(3):157–62
Hypothesis: a possible role for interferon in the treatment of idiopathic myelofibrosis. Hasselbalch H. **Med Hypotheses** 1988 Dec;27(4):345–7
Internal ultraviolet luminescence—internal carcinomas. Illingworth JE. **Med Hypotheses** 1988 Dec;27(4):313–6
A common denominator in the pathogenesis of asthma. Kashalikar SJ. **Med Hypotheses** 1988 Dec;27(4):255–9
Second infections in AIDS. A new facet to the immune mechanism. Kelly TA. **Med Hypotheses** 1988 Dec; 27(4):253–4
Are there stress resistant and susceptible myocardia? Knight VA. **Med Hypotheses** 1988 Nov;27(3):201–4
The role of oxygen in toxic shock syndrome. Mahoney JR Jr. **Med Hypotheses** 1988 Nov;27(3):215–6
Stem cells: a tree model. Michalevicz R, et al. **Med Hypotheses** 1989 Apr;28(4):261–4
Immunoregulation of luteolysis. Murdoch WJ, et al. **Med Hypotheses** 1988 Nov;27(3):197–9
The adenosine hypothesis of epilepsy. O'Brien DR. **Med Hypotheses** 1988 Dec;27(4):281–4
Biochemical diagnosis of genetic disorders of the osseous skeleton. Papatheofanis FJ. **Med Hypotheses** 1988 Nov; 27(3):225–6
Interleukin 1 and rheumatoid arthritis. Rafter GW. **Med Hypotheses** 1988 Nov;27(3):221–4
Opioid peptides from milk as a possible cause of sudden infant death syndrome. Ramabadran K, et al. **Med Hypotheses** 1988 Nov;27(3):181–7 (76 ref.)
On the nature of growth and new growth based on experiments designed to reveal a structure and function for laboratory space. Part I. A synopsis of experimental results and discussion (thermodynamics aspects, transmission of cell radiations, the role of oxygen). Reid BL. **Med Hypotheses** 1989 Jun;29(2):105–26
On the nature of growth and new growth based on experiments designed to reveal a structure and function for laboratory space. Part II. An approach to the structure of space through quantum field theory with examples of possible biological relevance. Reid BL. **Med Hypotheses** 1989 Jun;29(2):127–44
The possible role of substances inhibiting protein synthesis on the treatment of the spongiform encephalopathies. Schwarz KO. **Med Hypotheses** 1988 Nov;27(3):189–91
Reflections on the pathogenesis of optic (retrobulbar) neuritis in multiple sclerosis. Schwyzer RU, et al. **Med Hypotheses** 1988 Nov;27(3):167–79
Lupus erythematosus and rheumatoid arthritis—groups of defects in microdebridement (polygenetic defects exceeding the fault tolerance threshold—a consequence of natural defense mechanisms). Stone OJ. **Med Hypotheses** 1988 Dec;27(4):327–32
Does "blood-vessel thrust' influence the growth of the body? Sutton PR. **Med Hypotheses** 1989 Apr;28(4):275–6
The functional conversion hypothesis: a contributor to exercise-induced asthma? Venugopalan CS, et al. **Med Hypotheses** 1988 Dec;27(4):295–301 (50 ref.)
Catheter colonisation: a laboratory model suitable for aetiological, therapeutic and preventive studies. Bayston R, et al. **Med Lab Sci** 1988 Jul;45(3):235–9
A two-fluid model for hematocrit distribution in microvascular networks. Hokkanen JE. **Med Phys** 1989 May-Jun;16(3):319–25
On the measurement of lactate turnover in humans. Katz J, et al. **Metabolism** 1988 Nov;37(11):1078–80
In vitro models for the study of oxidant-induced injury of cells in inflammation. Schraufstätter IU, et al. **Methods Enzymol** 1988;163:328–39
Lentiviruses of animals are biological models of the human immunodeficiency viruses. Narayan O, et al. **Microb Pathog** 1988 Sep;5(3):149–57 (47 ref.)
Vascular permeability and interstitial diffusion in superfused tissues: a two-dimensional model. Baxter LT, et al. **Microvasc Res** 1988 Jul;36(1):108–15
Cytochrome c oxidase: example of a redox-coupled proton pump. Bolli R, et al. **Mol Aspects Med** 1988;10(3):249–55 (19 ref.)
Which value of antigenic valency should be used in antibody avidity calculations with multivalent antigens? van Regenmortel MH. **Mol Immunol** 1988 Jun;25(6):565–7
Estimation of ligand binding parameters by simultaneous fitting of association and dissociation data: a Monte Carlo simulation study. Karlsson MO, et al. **Mol Pharmacol** 1989 Jan;35(1):59–66
Room for theory? [letter] Fair CM. **Nature** 1989 Jul 27; 340(6231):260
Selective action of artificial membranes [letter] [published erratum appears in Nature 1989 Feb 9;337(6207):514] Fletcher S. **Nature** 1989 Jan 19;337(6204):216–7
The hypothetical way of progress. Huszagh VA, et al. **Nature** 1989 Mar 9;338(6211):109
The perception of moving plaids reveals two motion-processing stages. Welch L. **Nature** 1989 Feb 23; 337(6209):734–6
Experimental microbial growth: reaction-mass conservation law. Boffi V, et al. **Nuovi Ann Ig Microbiol** 1988 Jan-Feb; 39(1):1–18
Model confirmation of the MS-Related Symptom Checklist. Gulick EE. **Nurs Res** 1989 May-Jun;38(3):147–53
A model to induce scattered cell damage in the corneal endothelium. Lin CP, et al. **Ophthalmic Res** 1989; 21(2):97–100
Prediction of the kinetics of disappearance of sulfur hexafluoride and perfluoropropane intraocular gas bubbles. Wong RF, et al. **Ophthalmology** 1988 May;95(5):609–13
The biogeochemical cycle of the adsorbed template. II: Selective adsorption of mononucleotides on adsorbed polynucleotide templates. Lazard D, et al. **Orig Life Evol Biosph** 1988;18(4):347–57
A general model for the African trypanosomiases. Rogers DJ. **Parasitology** 1988 Aug;97 (Pt 1):193–212
Ventricular volume regulation: a mathematical model and computer simulation. Rekate HL, et al. **Pediatr Neurosci** 1988;14(2):77–84 (29 ref.)
A computer-model analysis of the influence of the upper airway on passive flow-volume loops in infants. Sly PD. **Pediatr Pulmonol** 1989;6(2):86–90
Hodgkin-Huxley parameters of the sodium channels in human myoballs. Pröbstle T, et al. **Pflugers Arch** 1988 Aug; 412(3):264–9
Assessment and validation of animal models to evaluate topical effects of substances on gastrointestinal mucosa. Fara JW, et al. **Pharm Res** 1988 Mar;5(3):165–71
Kinetic-effect models and their applications. Grevel J. **Pharm Res** 1987 Apr;4(2):86–91 (18 ref.)
Effects of cocaine on release and uptake of dopamine in vivo: differentiation by mathematical modeling. Nicolaysen LC, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):327–35 (57

ref.)
Experimental design optimisation: theory and application to estimation of receptor model parameters using dynamic positron emission tomography. Delforge J, et al. **Phys Med Biol** 1989 Apr;34(4):419–35
Estimation of optical pathlength through tissue from direct time of flight measurement. Delpy DT, et al. **Phys Med Biol** 1988 Dec;33(12):1433–42
The calculation of induced currents and absorbed power in a realistic, heterogeneous model of the lower leg for applied electric fields from 60 Hz to 30 MHz. Dimbylow PJ. **Phys Med Biol** 1988 Dec;33(12):1453–68
Minimisation of parameter estimation errors in dynamic PET: choice of scanning schedules. Jovkar S, et al. **Phys Med Biol** 1989 Jul;34(7):895–908
Blood flow through the human arterial system in the presence of a steady magnetic field. Sud VK, et al. **Phys Med Biol** 1989 Jul;34(7):795–805
A tissue heat transfer model for relating dynamic skin temperature changes to physiological parameters. Wilson SB, et al. **Phys Med Biol** 1988 Aug;33(8):895–912
A model of orthopaedic dysfunction for clinical decision making in physical therapy practice. Harris BA, et al. **Phys Ther** 1989 Jul;69(7):548–53 (12 ref.)
A theoretical model for perceived intensity in human taste and smell. II. Temporal integration and reaction times. Overbosch P, et al. **Physiol Behav** 1989 Mar;45(3):607–13
A novel interaction between light and matter: a review. Comorosan S, et al. **Physiol Chem Phys Med NMR** 1988; 20(4):319–28
The study of asymmetric carrier transport phenomena in living systems. Vincze J, et al. **Physiologie** 1988 Jul–Sep; 25(3):133–5
Permeabilized cell models for the study of granule transport in pigment cells. Schliwa M. **Pigment Cell Res** 1987; 1(2):65–8 (44 ref.)
Precision of bioassays for apparent and true metabolizable energy adjusted to zero nitrogen balance. Wolynetz MS, et al. **Poult Sci** 1989 Jan;68(1):124–35
Surface immunoglobulin-mediated B-cell activation in the absence of detectable elevations in intracellular ionized calcium: a model for T-cell–independent B-cell activation. Brunswick M, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6724–8
Simultaneous recordings of force and sliding movement between a myosin-coated glass microneedle and actin cables in vitro. Chaen S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1510–4
Intermittent chaos, self-organization, and learning from synchronous synaptic activity in model neuron networks. Hoppensteadt FC. **Proc Natl Acad Sci U S A** 1989 May; 86(9):2991–5
Overexpression of amyloid precursor protein A4 (beta-amyloid) immunoreactivity in genetically transformed cells: implications for a cellular model of Alzheimer amyloidosis. Marotta CA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):337–41
Increased capacity for glutathione synthesis enhances resistance to radiation in Escherichia coli: a possible model for mammalian cell protection. Moore WR, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1461–4
Stability analysis of simple models for immune cells interacting with normal pathogens and immune system retroviruses [published erratum appears in Proc Natl Acad Sci U S A 1989 Aug;86(16):6382] Reibnegger G, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2026–30
Feature detection in human vision: a phase-dependent energy model. Morrone MC, et al. **Proc R Soc Lond [Biol]** 1988 Dec 22;235(1280):221–45
A mathematical model for the freezing process in biological tissue. Rubinsky B, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):343–58
Numerical approximations of sodium–calcium exchange. Hilgemann DW. **Prog Biophys Mol Biol** 1988;51(1):1–45 (90 ref.)
Posture as an organizational structure based on a dual process: a formal basis to interpret changes of posture in weightlessness. Lestienne FG, et al. **Prog Brain Res** 1988; 76:307–13 (14 ref.)
Idiotype network theory and its implications in anti-tumor immunity. Bona CA. **Prog Clin Biol Res** 1989;288:215–21
Tolerance, and Mhc-controlled nonresponsiveness: are they related to each other? Klein J. **Prog Clin Biol Res** 1989; 288:119–25
Calculation of the incidence of infertility in human populations from sperm measures using the two-distribution model. Meistrich ML. **Prog Clin Biol Res** 1989;302:275–85; discussion 286–90
Hypertonic saline resuscitation: the neural component. Rocha e Silva M, et al. **Prog Clin Biol Res** 1989;299:303–10 (12 ref.)
Alternative pathways for T lymphocyte activation. Shevach EM. **Prog Clin Biol Res** 1989;288:127–40
A multicompartment model of vitamin B6 metabolism. Coburn SP, et al. **Prog Food Nutr Sci** 1988;12(3):227–42 (16 ref.)
Development and application of a model for zinc metabolism in humans. Wastney ME, et al. **Prog Food Nutr Sci** 1988; 12(3):243–54
Environmental stress induced by the tumor bed effect leads to subpopulation exclusion within heterogeneous neoplasms: modeling studies. Michelson S, et al. **Radiat Res** 1988 Sep;115(3):533–42
A model relating cell survival to DNA fragment loss and unrepaired double-strand breaks. Ostashevsky JY. **Radiat Res** 1989 Jun;118(3):437–66
Time and disease: the fourth dimension of radiology. Dwyer AJ. **Radiology** 1989 Oct;173(1):17–21
Mathematical models in quantitative assessment of carcinogenic risk. Park CN. **Regul Toxicol Pharmacol** 1989 Jun;9(3):236–43
Markers of aging. Modeling the clocks that time us. Featherman DL, et al. **Res Aging** 1986 Sep;8(3):339–65 (43 ref.)
Central-peripheral chemoreceptor ventilatory interaction in awake goats. Daristotle L, et al. **Respir Physiol** 1989 Jun; 76(3):383–91
Significance of the Bohr effect for tissue oxygenation in a model with counter-current blood flow. Kobayashi H, et al. **Respir Physiol** 1989 Jun;76(3):277–88
The unsteady form of the Bernoulli equation for estimating pressure drop in the airways. Moslehi F, et al. **Respir Physiol** 1989 Jun;76(3):319–26
The ventilatory response to lowering potassium with dextrose and insulin in subjects with hyperkalaemia. Paterson DJ, et al. **Respir Physiol** 1989 Jun;76(3):393–8
Bird lung models show that convective inertia effects inspiratory aerodynamic valving. Wang N, et al. **Respir Physiol** 1988 Jul;73(1):111–24
Pathologic calcium phosphate deposition in model systems. Cheng PT. **Rheum Dis Clin North Am** 1988 Aug; 14(2):341–51 (51 ref.)
Calcium pyrophosphate crystal deposition in model systems. Mandel N, et al. **Rheum Dis Clin North Am** 1988 Aug; 14(2):321–40 (27 ref.)
One-hit models of carcinogenesis: conservative or not? Bailar JC 3d, et al. **Risk Anal** 1988 Dec;8(4):485–97
Linking indoor air and pharmacokinetic models to assess tetrachloroethylene risk. Bogen KT, et al. **Risk Anal** 1988 Dec;8(4):509–20
Carcinogenic risk assessment with time-dependent exposure patterns. Murdoch DJ, et al. **Risk Anal** 1988 Dec; 8(4):521–30
Ontogenesis and self-organization theory. Beloussov LV. **Riv Biol** 1988;81(2):159–83 **(Eng, Ita)**
Skull simulator for direct bone conduction hearing devices. Håkansson B, et al. **Scand Audiol** 1989;18(2):91–8
Network model for the human middle ear. Kringlebotn M. **Scand Audiol** 1988;17(2):75–85
Computer simulations of figure-ground discrimination in the visual system of the fly. Guo AK, et al. **Sci China [B]** 1989 Jan;32(1):78–87
Ocular dominance column development: analysis and simulation. Miller KD, et al. **Science** 1989 Aug 11; 245(4918):605–15
Parallel integration of vision modules. Poggio T, et al. **Science** 1988 Oct 21;242(4877):436–40
Unity in function in the absence of consensus in sequence: role of leader peptides in export. Randall LL, et al. **Science** 1989 Mar 3;243(4895):1156–9
Molecular models of tumorigenesis: application to familial and sporadic melanoma. Harnett P, et al. **Semin Oncol** 1988 Dec;15(6):549–57 (76 ref.)
A three-dimensional digitization method to measure trunk muscle lines of action. Dumas GA, et al. **Spine** 1988 May; 13(5):532–41
The contribution of the three columns of the spine to rotational stability. A biomechanical model. Haher TR, et al. **Spine** 1989 Jul;14(7):663–9
Spinal stability and intersegmental muscle forces. A biomechanical model. Panjabi M, et al. **Spine** 1989 Feb; 14(2):194–200
Biomechanical evaluation of spinal fixation devices: I. A conceptual framework. Panjabi MM. **Spine** 1988 Oct; 13(10):1129–34
Simulift: a simulation model of human trunk motion. Reilly CH, et al. **Spine** 1989 Jan;14(1):5–11
Strain in fibers of a lumbar disc. Analysis of the role of lifting in producing disc prolapse. Shirazi-Adl A. **Spine** 1989 Jan; 14(1):96–103
The molecular basis of susceptibility to rheumatoid arthritis: the conformational equivalence hypothesis. Winchester RJ, et al. **Springer Semin Immunopathol** 1988;10(2–3):119–39 (60 ref.)
Statistical comparison of ligand-binding kinetics. Cologne JB, et al. **Stat Med** 1989 Jul;8(7):871–81
A test to detect clustering applied to muscle fibres. Howel D. **Stat Med** 1988 Nov;7(11):1157–64
Comparison of the information in two lung function experiments. Lim LL, et al. **Stat Med** 1989 Jul;8(7):861–70
Statistical analysis of the stages of HIV infection using a Markov model. Longini IM Jr, et al. **Stat Med** 1989 Jul; 8(7):831–43
Homonymous hemianopsia due to posterior ischemia as a model for quantification of neurologic deficit [letter] Kölmel HW, et al. **Stroke** 1989 Apr;20(4):559
Functional properties of models for direction selectivity in the retina. Grzywacz NM, et al. **Synapse** 1987;1(5):417–34
A physiologically based pharmacokinetic model for inhaled carbon tetrachloride. Paustenbach DJ, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):191–211
Physiological pharmacokinetic models: some aspects of theory, practice and potential. D'Souza RW, et al. **Toxicol Ind Health** 1988 Jun;4(2):151–71 (77 ref.)
A predictive model for estimating rat oral LD50 values. Enslein K, et al. **Toxicol Ind Health** 1989 Mar;5(2):261–387
Cisplatin pharmacokinetics: applications of a physiological model. Farris FF, et al. **Toxicol Lett** 1988 Oct; 43(1–3):117–37 (55 ref.)
Modeling the tissue solubilities and metabolic rate constant (Vmax) of halogenated methanes, ethanes, and ethylenes. Gargas ML, et al. **Toxicol Lett** 1988 Oct;43(1–3):235–56
Biologically motivated two-stage model for cancer risk assessment. Moolgavkar SH. **Toxicol Lett** 1988 Oct; 43(1–3):139–50
A physiologically based model of skeletal growth in the rat. O'Flaherty EJ. **Toxicol Lett** 1988 Oct;43(1–3):85–95
Incorporation of in vitro enzyme data into the physiologically-based pharmacokinetic (PB-PK) model for methylene chloride: implications for risk assessment. Reitz RH, et al. **Toxicol Lett** 1988 Oct;43(1–3):97–116
A simple, working heart and lung transplant model for assessing preservation methods in the rabbit. Kaneko M, et al. **Transplantation** 1988 Oct;46(4):624–6
Multi-spanning membrane proteins: how accurate are the models? Lodish HF. **Trends Biochem Sci** 1988 Sep; 13(9):332–4 (37 ref.)
Organization of lipids in the plasma membranes of malignant and stimulated cells: a new model. Mountford CE, et al. **Trends Biochem Sci** 1988 May;13(5):172–7
The isolated retina as a model of the CNS in pharmacology. Nowak JZ. **Trends Pharmacol Sci** 1988 Mar;9(3):80–2 (29 ref.)
Circular harmonic averaging of noisy single-molecule images. Kunath W, et al. **Ultramicroscopy** 1989 Mar; 27(2):171–84
On the design and evaluation of a steady flow model for Doppler ultrasound studies. Law YF, et al. **Ultrasound Med Biol** 1989;15(5):505–16
Comparison of theoretical scattering results and ultrasonic data from clinical liver examinations. Lizzi FL, et al. **Ultrasound Med Biol** 1988;14(5):377–85
On estimating the number density of random scatterers from backscattered acoustic signals. Sleefe GE, et al. **Ultrasound Med Biol** 1988;14(8):709–27
Use of the maximum likelihood method in the analysis of chamber air dives. Tikuisis P, et al. **Undersea Biomed Res** 1988 Jul;15(4):301–13
Tissue gas exchange models and decompression computations: a review. Wienke BR. **Undersea Biomed Res** 1989 Jan;16(1):53–89 (49 ref.)
Computational veterinary parasitology with an application to chemical resistance. Gettinby G. **Vet Parasitol** 1989 Jul 1;32(1):57–72 (21 ref.)
Current models in pharmacokinetics: applications in veterinary pharmacology. Kinabo LD, et al. **Vet Res Commun** 1989;13(2):141–57 (78 ref.)
The effects of screw removal on bone strain in an idealized plated bone model. Korvick DL, et al. **Vet Surg** 1988 May–Jun;17(3):111–6
Microbial models of mammalian metabolism: production of novel alpha-diketone metabolites of warfarin and phenprocoumon using Aspergillus niger. Rizzo JD, et al. **Xenobiotica** 1988 Dec;18(12):1425–37
Cementless bony ingrowth total hip prosthesis (anatomical contact porous coated total hip prosthesis) design using computed axial tomography and computer aid design. Kim YH, et al. **Yonsei Med J** 1988;29(2):139–59
XXIVth International Symposium on Biological Models. Spindleruv Mlýn/Czechoslovakia, April 12–14, 1988. Abstracts. **Z Versuchstierkd** 1988;31(4):155–201
A modification of the rat kidney transplantation model: reduction of experimental animals. Vogt P, et al. **Z Versuchstierkd** 1989;32(3):111–7
[Research fronts in modeling in biomedicine in 1987] Spála M, et al. **Cas Lek Cesk** 1988 Dec 16;127(51):1590–4 (Eng. Abstr.) **(Cze)**
[A computer model of hemoglobin glycosylation] Svačina S, et al. **Sb Lek** 1987 May;89(5):134–40 (Eng. Abstr.) **(Cze)**
[A numeric method for the identification of parameters in models of dilution curves] Hanuš J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):489–97 (Eng. Abstr.) **(Cze)**
[Physiopathological model of sexual dysfunctions for the use of somatists] Buvat J. **Acta Urol Belg** 1989;57(1):155–62 (Eng. Abstr.) **(Fre)**
[Neutralism and adaptation in a simple model of molecular evolution] Amitrano C, et al. **C R Acad Sci [III]** 1988; 307(18):803–6 (Eng. Abstr.) **(Fre)**
[A theoretical model of the transition phase in human locomotion] Beuter A, et al. **Can J Sport Sci** 1988 Dec; 13(4):247–53 (Eng. Abstr.) **(Fre)**
[Animal models of pancreatic transplant] Duron JJ, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:115–24 (48 ref.) **(Fre)**
[A comparative approach to models of urea kinetics in hemodialysis treatment] Fellay G, et al. **Nephrologie** 1988; 9(5):233–6 (Eng. Abstr.) **(Fre)**
[Contribution of experimental models to the treatment of respiratory tract infections] Chidiac C, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):754–8 (Eng. Abstr.) **(Fre)**
[Measurement of digestive transit time in the ruminant calf: comparison and validation of models for fit of the kinetics of passage] Lalles JP, et al. **Reprod Nutr Dev** 1988;28 Suppl

1:151–2 (Eng. Abstr.) (Fre)
[Comparison of different methods of calculating the retention time of feed residues in the total digestive tract of the dairy cow] Mambrini M, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:149–50 (Eng. Abstr.) (Fre)
[Modelling of digestion in the rumen] Sauvant D. **Reprod Nutr Dev** 1988;28 Suppl 1:33–58 (79 ref.) (Eng. Abstr.) (Fre)
[Visualization of femur stresses in monopodal support using the finite elements method (with or without prosthesis)] Passuti N, et al. **Rev Chir Orthop** 1988;74 Suppl 2:212–5 (Fre)
[Conception of a decompression table] Imbert JP, et al. **Schweiz Z Sportmed** 1989 Apr;37(1):27–38 (Eng. Abstr.) (Fre)
[Stresses on the patellofemoral joint] Lengsfeld M. **Anat Anz** 1989;168(4):355–61 (Eng. Abstr.) (Ger)
[Modelling and model-free mathematical description of biological relationships] Peil J. **Gegenbaurs Morphol Jahrb** 1988;134(5):667–84 (Eng. Abstr.) (Ger)
[Quantitative analysis of chondrocyte distribution patterns in hyaline cartilage tissue—a comparison of different models] Ranke TP, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(1):125–31 (Eng. Abstr.) (Ger)
[Optimizing monofrequent oscillometry] Smith HJ, et al. **Pneumologie** 1989 Jul;43(7):331–8 (Eng. Abstr.) (Ger)
[To what extent are oscillometric data of a simple resistor-volume model physically recordable?] Vogel J, et al. **Pneumologie** 1989 Jul;43(7):324–30 (Eng. Abstr.) (Ger)
[The physiology of gas exchange in divers] Rieder HU. **Schweiz Z Sportmed** 1989 Apr;37(1):19–24 (Eng. Abstr.) (Ger)
[Residues of active substances after consumption of contaminated food: status report on the evaluation of residues with examples of two drugs] Richter O, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):130–6 (Eng. Abstr.) (Ger)
[Radioiodine administration for the production of an athyreotic animal model] Hanauer G. **Z Versuchstierkd** 1989;32(1):7–15 (Eng. Abstr.) (Ger)
[A predictive model of vascular instability in dialysis] Lonati F, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):77–8 (Ita)
[Evaluation of the effect of auditory fatigue on the human ear by auditory brain stem responses (ABR). I. Effect of auditory fatigue on temporary threshold shifts of ABR] Janczewski G, et al. **Med Pr** 1988;39(2):108–14 (Eng. Abstr.) (Pol)
[Use of biological isodoses "isobioGy-2" in evaluating the response of tumor and normal tissues to fractionated irradiation] Maciejewski B, et al. **Nowotwory** 1988 Oct–Dec;38(4):241–50 (Eng. Abstr.) (Pol)
[The mother–fetus–newborn infant system as a biological model in immunology] Janik J. **Pediatr Pol** 1974 Feb; 49(2):225–8 (14 ref.) (Pol)
[Kinetics of the changes in the proxybarbital level after its oral and intravenous administration in a monocompartmental model in humans] Lewandowska J, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):742–4 (Eng. Abstr.) (Pol)
[Low density lipoprotein (LDL) complexes with polyanion polysaccharides] Rólkowski R, et al. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):601–18 (123 ref.) (Eng. Abstr.) (Pol)
[The inflammatory response. Definitions; the evolution of a conceptual model] Dragomirescu T. **Rev Ig [Bacteriol]** 1988 Apr–Jun;33(2):97–116 (36 ref.) (Eng. Abstr.) (Rum)
[Planning rehabilitation measures in tubal pregnancy using a method of mathematical modeling] Matsuev AI, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):46–8 (Eng. Abstr.) (Rus)
[Screening of immunomodulators by using the system of mononuclear phagocytes] Freidlin IS, et al. **Antibiot Khimioter** 1988 Dec;33(12):906–9 (Eng. Abstr.) (Rus)
[Mathematical approach to modeling of the treatment of suppurative processes] Men'shikov DD, et al. **Antibiot Khimioter** 1989 Mar;34(3):205–8 (Eng. Abstr.) (Rus)
[Evolution of the concept of the mechanisms of antibiotic interaction with microbial cells] Navashin SM, et al. **Antibiot Khimioter** 1989 May;34(5):323–32 (Rus)
[Dynamics of proliferating cell populations during exposure to periodic phase-specific factors] Dibrov BF, et al. **Biofizika** 1988 Sep–Oct;33(5):895–904 (Eng. Abstr.) (Rus)
[Reflection of ultrasound from intertissue boundaries] Lipovko PO. **Biofizika** 1988 Jul–Aug;33(4):686–91 (Eng. Abstr.) (Rus)
[The nature and biological role of near-weekly rhythm] Malenkov AG, et al. **Biofizika** 1988 Jul–Aug;33(4):703–7 (Eng. Abstr.) (Rus)
[Trichromatic model of the constant perception of the color of objects] Nikolaev PP. **Biofizika** 1989 Mar–Apr; 34(2):287–94 (Eng. Abstr.) (Rus)
[Ion fluxes during propagation of depression wave] Pasechnik VI. **Biofizika** 1988 May–Jun;33(3):532–3 (Eng. Abstr.) (Rus)
[Transport of a fluid in the lung interstitial space. A model of porous medium with distributed parameters] Serikov VB. **Biofizika** 1988 Jul–Aug;33(4):681–5 (Eng. Abstr.) (Rus)
[Relation between the number of closed cross-bridges and the load during muscle contraction] Sidorenko NP. **Biofizika** 1988 May–Jun;33(3):522–3 (Eng. Abstr.) (Rus)
[Possible mechanism of specific action of pulsed UHF-fields] Tigranian RE. **Biofizika** 1988 Jul–Aug;33(4):698–702 (Eng. Abstr.) (Rus)
[Appearance of the flutter on the pulse wave] Volobuev AN, et al. **Biofizika** 1988 Jul–Aug;33(4):675–80 (Eng. Abstr.) (Rus)
[Determination of rate constants of antigen-antibody reaction. A theory] Bobrovnik SA, et al. **Biokhimiia** 1988 May;53(5):826–31 (Eng. Abstr.) (Rus)
[Stability and distribution of stationary concentrations in the Krebs cycle] Shlygin VV. **Biokhimiia** 1988 Jun; 53(6):883–90 (Eng. Abstr.) (Rus)
[Stability and distribution of stationary states in glycolysis] Shlygin VV. **Biokhimiia** 1988 Jul;53(7):1153–5 (Eng. Abstr.) (Rus)
[Receptor–enzyme interactions. Kinetic characteristics] Varfolomeev SD. **Biokhimiia** 1988 Oct;53(10):1677–83 (Eng. Abstr.) (Rus)
[Stationary kinetics of multisubstrate enzymatic reactions. Inhibition by reaction products, reversible and irreversible inhibitors] Vrzheshch PV. **Biokhimiia** 1988 Oct; 53(10):1704–11 (Eng. Abstr.) (Rus)
[Alternative animal behavior: a model and its statistical characteristics] Kaplan AIa, et al. **Biol Nauki** 1989;(3):29–32 (Eng. Abstr.) (Rus)
[Mathematical model of the stochastic interaction of a living system with the environment] Kornikov VV, et al. **Biol Nauki** 1988;(7):68–70 (Rus)
[Effector modelling of the action of ligands of the GABA-receptor complex, cooperativity of the processes and the type of modification of the complex by convulsants and their reversible agonists] Golovenko NIa, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):453–6 (Eng. Abstr.) (Rus)
[A model of the interclonal interactions in chronic myeloleukemia] Mamaev NN, et al. **Eksp Onkol** 1989; 11(3):22–5 (Eng. Abstr.) (Rus)
[Modeling of the regulation of the accommodation system of the eye] Ananin VF. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):569–76 (Rus)
[Characteristics of distribution of light in the retina] Medvedev VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):698–700 (Rus)
[Simulation model of the automatic aspects of human writing] Sakharova NG. **Fiziol Cheloveka** 1988 May–Jun; 14(3):403–9 (Rus)
[Modeling of unstable heat–mass air exchange in the lungs] Ramm MS, et al. **Fiziol Zh** 1989 May–Jun;35(3):113–9 (Eng. Abstr.) (Rus)
[Modeling of the process of oxygen transport to tissues in acute hemic hypoxia] Voloshchenko VO. **Fiziol Zh** 1988 Nov–Dec;34(6):108–11 (Eng. Abstr.) (Rus)
[The blood-perfused tail artery of the rat as a model for studying spontaneous vascular tonus] Mashina SIu, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1341–4 (Rus)
[Development of the membrane concept of the pathogenesis of primary arterial hypertension] Postnov IuV. **Fiziol Zh SSSR** 1988 Nov;74(11):1546–53 (40 ref.) (Eng. Abstr.) (Rus)
[Characteristics of the heat exchange of the body with the environment (research on a heat physics model)] Rumiantsev GV, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1321–6 (Eng. Abstr.) (Rus)
[A device for exposing small laboratory animals to electrostatic fields] Akimenko VIa, et al. **Gig Sanit** 1988 Jul;(7):37–40 (Rus)
[Plotting the dose (factor level)–time–effect relations using exponential functions] Antomonov MIu, et al. **Gig Sanit** 1988 Jun;(6):42–4 (Rus)
[Use of a method of systematic analysis for intensification of hygienic studies] Chernilovskaia FM, et al. **Gig Sanit** 1988 Nov;(11):51–4 (Rus)
[Internal mitochondrial membrane as a sensitive model for evaluating the pathobiochemical mechanisms of the effect of various chemical substances] Ellinger Kh. **Gig Sanit** 1989 Mar;(3):74–5 (Rus)
[The mother–newborn infant system as a natural biological model for the study of the effects of exogenous chemical substances and the products of their biotransformation] Goncharuk EI, et al. **Gig Sanit** 1988 Jun;(6):10–2 (Eng. Abstr.) (Rus)
[Various problems of the mathematical modeling of changes in the health status of the population in relation to atmospheric air pollution] Karelin AO, et al. **Gig Sanit** 1988 Nov;(11):65–6 (Rus)
[A method of elementary statistical analysis of distribution series of the data of medico-hygienic studies] Khvastukhov RM. **Gig Sanit** 1989 Feb;(2):56–60 (Rus)
[Formalized evaluation of the types of bioprocesses under the effect of environmental factors] Shandala MG, et al. **Gig Sanit** 1988 Dec;(12):10–3 (Eng. Abstr.) (Rus)
[Use of a chromatographic model for predicting the toxicity and hazards of non-electrolytes] Esin MS, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):25–7 (Eng. Abstr.) (Rus)
[Adsorption on receptors: a molecular statistical model of the dose-effect dependence] Bushelev SN. **Izv Akad Nauk SSSR [Biol]** 1988 Jul–Aug;(4):531–7 (Eng. Abstr.) (Rus)
[Study of excitation circulation around an unexcitable myocardial obstacle] Medvinskiĭ AB, et al. **Kardiologiia** 1989 Jan;29(1):84–8 (Eng. Abstr.) (Rus)
[Experience using clinical games in training in clinical surgery] Tsukanov IuT. **Khirurgiia (Mosk)** 1989 Jun;(6):5–8 (Eng. Abstr.) (Rus)
[Functional status of the hepatobiliary system during anti-orthostatic hypodynamia] Andriako LIa, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):48–50 (Eng. Abstr.) (Rus)
[Effect of actoprotectors on the work capacity of operators during modeling of various factors of space flight] Bobkov IuG, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):20–3 (Eng. Abstr.) (Rus)
[Changes in the maximum permissible supersaturation coefficient in altitude decompression] Chadov VI, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):58–62 (Eng. Abstr.) (Rus)
[Condition of the human skin during a stay in a hermetically closed compartment] Dubinin DM, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):68–71 (Eng. Abstr.) (Rus)
[Possibility of the development of decompression sickness during testing of G suits] Filipenkov SN. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):53–8 (Eng. Abstr.) (Rus)
[A new variant of modeling the effect of weightlessness on humans] Genin AM, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):80–5 (Rus)
[Mathematical analysis of a concept of the functioning of the cupula of semicircular canals] Kondrachuk AV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):90–2 (Rus)
[Problem of modeling the physiologic effects of weightlessness by the method of "antiorthostatic suspension" of small laboratory animals] Kuznetsov SL, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):74–6 (Rus)
[Various physiological characteristics of primary radiation reaction and its apomorphine model] Malakhovskii VN, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):77–81 (Eng. Abstr.) (Rus)
[Prevention of ultraviolet insufficiency after a long stay by humans in an isolation chamber] Panferova NE, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):59–63 (Eng. Abstr.) (Rus)
[Sensitivity of opportunistic-pathogenic microflora isolated from humans to antibiotics before and after a stay in a hermetically closed chamber] Polikarpov NA, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):62–5 (Eng. Abstr.) (Rus)
[Homeostatic reactions of the blood of experimental rats after "Kosmos-1667" flight] Popova IA, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):39–42 (Eng. Abstr.) (Rus)
[Effect of adaptive biofeedback on the severity of vestibulo-autonomic symptoms of experimental motion sickness] Smirnov SA, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):35–9 (Eng. Abstr.) (Rus)
[Mathematical modeling of cyclic kinetics of hematopoiesis] Smirnova OA. **Kosm Biol Aviakosm Med** 1989 Jan–Feb; 23(1):41–5 (Eng. Abstr.) (Rus)
[Effect of weightlessness on the functions of perception and the reproduction of gravitational vertical in response to optokinetic stimulation] Sokolov AI, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):24–7 (Eng. Abstr.) (Rus)
[Combined effects of increased levels of carbon dioxide and environmental temperature on the thermal status of humans in a hermetically closed compartment] Sosnovskiĭ AV. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):89–90 (Rus)
[Effects of carbon monoxide and ammonia on a person wearing protective clothing] Surovtsev NA, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):72–6 (Eng. Abstr.) (Rus)
[Hemodynamic reactions to modified orthostatic test in persons with different +Gz tolerance] Suvorov PM, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):27–30 (Eng. Abstr.) (Rus)
[Activity of the sympathetico-adrenal system in humans during modeling of weightlessness] Vasil'ev VN, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):34–40 (Eng. Abstr.) (Rus)
[Effect of clinostatic and anti-orthostatic hypokinesia on serum enzyme activity] Vetrova EG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):70–3 (Eng. Abstr.) (Rus)
[Characteristics of changes in cardiac output and blood gas composition in humans in modeling the effects of weightlessness] Vorob'ev VE, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):94–6 (Rus)
[Comparative evaluation of the transport of transit hepatotropic compounds based on mathematical modelling] Dzhalmukashev UK. **Med Radiol (Mosk)** 1989 Jan; 34(1):33–7 (Eng. Abstr.) (Rus)
[A complex of mathematical models in the radionuclide diagnosis of the status of the urinary system] Gabuniia RI,

et al. **Med Radiol (Mosk)** 1989 Jan;34(1):37–42 (Eng. Abstr.) (Rus)

[The use of a time–dose–fractionation model for stepwise control of radiotherapy of malignant tumors] Lisin VA, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):63–7 (Eng. Abstr.) (Rus)

[Kinetic model of the action of oligomeric enzymes using phosphofructokinase as an example. II. General formulation of the hierarchical model] Cherepanov DA. **Mol Biol (Mosk)** 1988 May–Jun;22(3):822–9 (Eng. Abstr.) (Rus)

[Simple kinetic models explaining critical phenomena in enzymatic reactions with isomerization of the enzyme and substrate] Gol'dshtein BN, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1381–92 (Eng. Abstr.) (Rus)

[Control of molecular transformations in polyenzyme systems: quantitative theory of the regulation of metabolism] Kholodenko BN. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1238–56 (Eng. Abstr.) (Rus)

[Diffusion model of the calcium–dependent mechanism of the inactivation of calcium channels] Mironov SL. **Neirofiziologiia** 1988;20(3):408–10 (Eng. Abstr.) (Rus)

[Analysis of a model of the miniature endplate current] Nigmatullin NR, et al. **Neirofiziologiia** 1988;20(3):390–8 (Eng. Abstr.) (Rus)

[Characteristics of spinal stress in modeling scoliotic deformity and the methods of its correction] Gladkov AV, et al. **Ortop Travmatol Protez** 1989 Jan;(1):43–7 (Eng. Abstr.) (Rus)

[A program of prevention of dysplastic arthrosis (general principles)] Simenach BI, et al. **Ortop Travmatol Protez** 1989 Feb;(2):1–6 (Eng. Abstr.) (Rus)

[The role of lag in mathematical models of the processes of self–regulation of the endocrine system] Shvitra DI, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):85–8 (85 ref.) (Rus)

[Elaboration of microcomputer programming for the analysis of the effect of the electric stimulation of the diaphragm on the respiratory system] Belilovskiĭ EM, et al. **Probl Tuberk** 1988;(6):50–4 (Eng. Abstr.) (Rus)

[A model of the stochastic dynamics of interphase lymphocyte death] Kosevich AM, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):147–50 (Eng. Abstr.) (Rus)

[A systems model of the reproductive death of mammalian cells. A comparison with experimental data and the biological meaning of the parameters of the model] Moiseenko VV, et al. **Radiobiologiia** 1989 May–Jun; 29(3):305–9 (Rus)

[A systemic model of reproductive death of mammalian cells. Postulates of the model and mathematical equations of survival] Obaturov GM. **Radiobiologiia** 1988 Sep–Oct; 28(5):640–3 (Eng. Abstr.) (Rus)

[Mathematical modeling of the dynamics of postradiation injury and recovery of intestinal epithelium] Smirnova OA. **Radiobiologiia** 1988 Nov–Dec;28(6):817–21 (Eng. Abstr.) (Rus)

[Nuclease–aided simulation of the action of radiation on Chinese hamster fibroblasts. The role of double–stranded DNA breaks induced by restrictases in initiating chromosomal disorders] Zaichkina SI, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):445–50 (Eng. Abstr.) (Rus)

[Structure of a model of the metabolism of alkaline earth elements] Zaĭtsev IuA. **Radiobiologiia** 1988 Nov–Dec; 28(6):852–6 (Eng. Abstr.) (Rus)

[A mathematical model of the dynamics of granulocytopoiesis in mammals] Zukhbaia TB, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):796–802 (Eng. Abstr.) (Rus)

[Possibility of modeling regional characteristics of the level and structure of morbidity and the utilization of medical services by the population] Baziian GV, et al. **Sov Zdravookhr** 1989;(4):14–8 (Eng. Abstr.) (Rus)

[Establishment of the time of death and of the time of displacement of the corpse by modelling the process of temperature change on analog computers] Novikov PI, et al. **Sud Med Ekspert** 1988 Jul–Sep;31(3):8–11 (Eng. Abstr.) (Rus)

[The causes of the nonuniform thermostability of Mg–ATPase and of the contractility of muscle models] Shelud'ko NS, et al. **Tsitologiia** 1989 Feb;31(2):195–201 (Eng. Abstr.) (Rus)

[The action of inhibitors of sugar transport phlorizin, phloretin and cytochalasin B in model systems] Vasianin SI. **Tsitologiia** 1989 Jan;31(1):57–65 (Eng. Abstr.) (Rus)

[A mathematical model of the process of obtaining human leukocyte alpha–interferon] Razorenova TS, et al. **Vestn Akad Med Nauk SSSR** 1988;(12):74–8 (Eng. Abstr.) (Rus)

[Effect of modeled nonspecific adaptive reactions on bone regeneration] Tkachenko SS, et al. **Vestn Khir** 1989 Mar; 142(3):60–2 (Rus)

[Construction of a mathematical model for predicting serous meningitis morbidity] Spynu KI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):481–5 (Rus)

[A mathematical model for predicting the efficacy of glucocorticoid therapy of glomerulonephritis] Bagdasarova IV, et al. **Vrach Delo** 1989 Apr;(4):26–9 (Eng. Abstr.) (Rus)

[Mathematical model study of the dynamics of an exploited population of the common fox (Vulpes vulpes L.)] Korytin NS, et al. **Zh Obshch Biol** 1989 Jan–Feb;50(1):60–71 (Eng. Abstr.) (Rus)

[Use of a mathematical model in researching the time of cellular maturation of the megakaryocyte line, its proliferative activity and the megakaryocyte volume] Selivanov VA, et al. **Zh Obshch Biol** 1988 Jul–Aug; 49(4):476–86 (Eng. Abstr.) (Rus)

[A mathematical model of selection, including the energy metabolism of organisms, as an instrument for researching the evolutionary process] Shugalov BS. **Zh Obshch Biol** 1989 Mar–Apr;50(2):199–206 (Eng. Abstr.) (Rus)

[A computer ethological–pharmacological analysis of the intraspecific behavior of primates] Poshivalov VP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):519–26 (Eng. Abstr.) (Rus)

[Biological reproductive models. Demography and future perspectives for mankind] Márquez Monter H. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):303–8 (34 ref.) (Eng. Abstr.) (Spa)

[An experimental pain model: the formaldehyde test] Seijo F, et al. **Arch Neurobiol (Madr)** 1989 May–Jun;52(3):134–9 (Eng. Abstr.) (Spa)

[AIDS in Spain: prediction of new cases by the use of mathematical models] Villar Alvarez F, et al. **Rev Clin Esp** 1988 Jun;183(2):86–9 (Eng. Abstr.) (Spa)

[Monitoring of respiratory mechanics during artificial ventilation. Functional analysis of the EXA 10 monitor] Belda FJ, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug; 35(4):205–9 (Eng. Abstr.) (Spa)

[Model for the analysis of child survival] Arroyo P, et al. **Salud Publica Mex** 1988 May–Jun;30(3):463–9 (Eng. Abstr.) (Spa)

STATISTICS & NUMERICAL DATA

Evaluation of the cotton fabric model for screening topical mosquito repellents. Rutledge LC, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):73–6

MODELS, CARDIOVASCULAR

The role of arterial endothelial cell mitosis in macromolecular permeability. Chien S, et al. **Adv Exp Med Biol** 1988; 242:59–73

Computerized 3–D reconstruction of small blood vessels from high voltage electron–micrographs of thick serial cross sections. Horn L, et al. **Adv Exp Med Biol** 1988;242:35–42

Correlation of laser–Doppler–velocity measurements and endothelial cell shape in a stenosed dog aorta. Liepsch DW, et al. **Adv Exp Med Biol** 1988;242:43–50

Theoretical modeling of fluid transport through endothelial junctions. Skalak R. **Adv Exp Med Biol** 1988;242:9–16 (21 ref.)

Calculation of transmitral flow by Doppler echocardiography: a comparison of methods in a canine model. Ascah KJ, et al. **Am Heart J** 1989 Feb;117(2):402–11

Assessment of Windkessel as a model of aortic input impedance. Burkhoff D, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H742–53

Pulse reflection sites and effective length of the arterial system. Campbell KB, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1684–9

Beyond pure parasystole: promises and problems in modeling complex arrhythmias. Courtemanche M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H693–706

Microvascular rarefaction and tissue vascular resistance in hypertension. Greene AS, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H126–31

Siphon mechanism in collapsible tubes: application to circulation of the giraffe head. Hicks JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R567–71

Errors in microsphere determination of cardiac output: a computer simulation in fetal sheep. Hope ID, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H302–10

Impedance of arterial system simulated by viscoelastic t tubes terminated in windkessels. Liu ZR, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1087–99

Low–frequency oscillations in arterial pressure and heart rate: a simple computer model. Madwed JB, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1573–9

Rate of oxygen loss from arterioles is an order of magnitude higher than expected. Popel AS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H921–4

Intramyocardial pressure: interaction of myocardial fluid pressure and fiber stress. Rabbany SY, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H357–64

Combining transmural left ventricular mechanics and energetics to predict oxygen demand. Carasso S, et al. **Ann Biomed Eng** 1988;16(5):495–513

Relations between hydrodynamic and mechanical properties of a sphere. Regen DM. **Ann Biomed Eng** 1988;16(6):573–88

Effects of chamber shape and fiber orientation on relations between fiber dynamics and chamber dynamics. Regen DM. **Ann Biomed Eng** 1988;16(6):589–607

The electrical potential produced by a strand of cardiac muscle: a bidomain analysis. Roth BJ. **Ann Biomed Eng** 1988;16(6):609–37

Mechanics of a thin walled collapsible microtube. Sipkema P, et al. **Ann Biomed Eng** 1989;17(3):203–17

Baroreceptor responses derived from a fundamental concept. Taher MF, et al. **Ann Biomed Eng** 1988;16(5):429–43

A biologically plausible model of thickening of arterial intima under shear. Friedman MH. **Arteriosclerosis** 1989 Jul–Aug; 9(4):511–22

A pulmonary mock circulation model for a better understanding of protamine reversal of heparin. DePaulis R, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):367–70

Response of cultured endothelial cells to mechanical stimulation. Dartsch PC, et al. **Basic Res Cardiol** 1989 May–Jun;84(3):268–81

Patch clamp analysis of recovery of sodium channels from inactivation in mammalian myocardium in terms of a Markovian state model. Benndorf K. **Biomed Biochim Acta** 1989;48(4):287–302

A computerized physiologic pulse duplicator for in–vitro hydrodynamic and ultrasonic studies of prosthetic heart valves. Arabia FA, et al. **Biomed Instrum Technol** 1989 May–Jun;23(3):205–15

Viscoelastic modeling of carotid sinus baroreceptors. Stinnett H, et al. **Biomed Sci Instrum** 1989;25:13–8

Current injection into a two–dimensional anisotropic bidomain. Sepulveda NG, et al. **Biophys J** 1989 May; 55(5):987–99

Theory for flow of Casson and Herschel–Bulkley fluids in cone–plate viscometers. Chaturani P, et al. **Biorheology** 1988;25(1–2):199–207

Model study on the strain and stress distributions in the vicinity of an arterial stenosis. Nakamura M, et al. **Biorheology** 1988;25(4):685–95

Two–layered blood flow in stenosed tubes for different diseases. Pralhad RN, et al. **Biorheology** 1988;25(5):715–26

Effect of propranolol on the QT intervals of normal individuals during exercise: a new method for studying interventions. Sarma JS, et al. **Br Heart J** 1988 Nov; 60(5):434–9

Static and dynamic computerised radioactive tracer studies, vital dye staining and theoretical mathematical calculations to ascertain the mode of survival of single cephalad channel venous island flaps. Thatte MR, et al. **Br J Plast Surg** 1989 Jul;42(4):405–13

Computer simulations of cardiac action potentials in two dimensions. Barach JP. **Brain Res Bull** 1988 Jul;21(1):55–60

A non–linear elastic model of contraction of ischaemic segments. Akaishi M, et al. **Cardiovasc Res** 1988 Dec; 22(12):889–99

Effect of flow partition on wall shear in a cast of a human coronary artery. Bargeron CB, et al. **Cardiovasc Res** 1988 May;22(5):340–4

Application of a time varying elastance model to right ventricular performance in man. Dell'Italia LJ, et al. **Cardiovasc Res** 1988 Dec;22(12):864–74

Computer simulation of myocardial fibrillation using a one dimensional model of excitation and recovery processes. Malik M, et al. **Cardiovasc Res** 1989 Feb;23(2):132–44

Computation of derived diagnostic quantities during intermittent coronary sinus occlusion in dogs. Schreiner W, et al. **Cardiovasc Res** 1988 Apr;22(4):265–76

Structure, stress and tissue repair in aortic valve leaflets [letter] Trowbridge A, et al. **Cardiovasc Res** 1988 Oct; 22(10):746

Fractal nature of regional myocardial blood flow heterogeneity. Bassingthwaighte JB, et al. **Circ Res** 1989 Sep;65(3):578–90

Slow recovery of excitability and the Wenckebach phenomenon in the single guinea pig ventricular myocyte. Delmar M, et al. **Circ Res** 1989 Sep;65(3):761–74

Ionic basis and analytical solution of the wenckebach phenomenon in guinea pig ventricular myocytes. Delmar M, et al. **Circ Res** 1989 Sep;65(3):775–88

Constitutive relations and finite deformations of passive cardiac tissue II: stress analysis in the left ventricle. Humphrey JD, et al. **Circ Res** 1989 Sep;65(3):805–17

Estimating cardiac transmembrane activation and recovery times from unipolar and bipolar extracellular electrograms: a simulation study. Steinhaus BM. **Circ Res** 1989 Mar; 64(3):449–62

Interaction of fiber orientation and direction of impulse propagation with anatomic barriers in anisotropic canine myocardium. Kadish A, et al. **Circulation** 1988 Dec; 78(6):1478–94

Limitation of the alpha–methylnorepinephrine hypothesis in the hypotensive effect of alpha–methyldopa. Tung CS, et al. **Clin Exp Hypertens [A]** 1989;11(1):45–58

A model to decrease hepatic blood flow and cardiac output with pressure breathing. Perkins MW, et al. **Clin Pharmacol Ther** 1989 May;45(5):548–52

Experimental fluid dynamics of aortic stenosis in a model of the human aorta. Yearwood TL, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):11–24

Mathematical model of cardiac mechanogram rhythmicity (based on mollusc heart). Easton DM. **Comp Biochem Physiol [C]** 1988;91(1):91–8

A one–compartment single–pore model for extracorporeal hemoperfusion. Lee CJ, et al. **Comput Biol Med** 1989; 19(2):83–94

Hemodynamics in transposition of the great arteries with comparison to ventricular septal defect. Tu C, et al. **Comput Biol Med** 1989;19(2):95–128

A computer model to study norepinephrine–induced oscillations of contraction in tail arteries of spontaneously hypertensive stroke–prone rats. Avinash G, et al. **Comput Biomed Res** 1988 Aug;21(4):324–33

Qualitative representation of behavior in the medical domain. Bylander T, et al. **Comput Biomed Res** 1988 Aug; 21(4):367–80

Stochastic Petri net modeling of wave sequences in cardiac

arrhythmias. Chin TM, et al. **Comput Biomed Res** 1989 Apr;22(2):136–59
Multivariate autoregressive modeling of autonomic cardiovascular control in neonatal lamb. Kalli S, et al. **Comput Biomed Res** 1988 Dec;21(6):512–30
Computer model of cardiac repolarization processes and of the recovery sequence. Malik M, et al. **Comput Biomed Res** 1989 Apr;22(2):160–80
A mathematical model and image analysis technique for calculating regional cerebral blood flow. Gitelman DR, et al. **Comput Methods Programs Biomed** 1989 May; 29(1):59–69
Thermodynamic network modelling of transfer across the perfused guinea-pig placenta, using SPICE. van Kreel BK, et al. **Comput Methods Programs Biomed** 1989 Feb; 28(2):137–49
Expert system reasoning about dynamic systems by semi-quantitative simulation. Widman LE. **Comput Methods Programs Biomed** 1989 Jun;29(2):95–113
The inverse problem in electrocardiography: solutions in terms of equivalent sources. Gulrajani RM, et al. **Crit Rev Biomed Eng** 1988;16(3):171–214 (112 ref.)
The inverse problem in electrocardiography: solutions in terms of epicardial potentials. Rudy Y, et al. **Crit Rev Biomed Eng** 1988;16(3):215–68 (120 ref.)
Tracking time-varying properties of the systemic vascular bed. Avanzolini G, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):373–81
Modified asymmetric T-tube model to infer arterial wave reflection at the aortic root. Burattini R, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):805–14
Optimal stroke volume in left-ventricular ejection. Hämäläinen JJ. **IEEE Trans Biomed Eng** 1989 Feb; 36(2):172–82
Origins of the impedance change in impedance cardiography by a three-dimensional finite element model. Kim DW, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):993–1000
Computer model for simulation of first transit cardiac radionuclide curves—I. Low LR, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):935–45
Optimal fitting of computer model simulations to first transit cardiac radionuclide curves—II. Low LR, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):946–53
Boundary conditions in simulations of cardiac propagating action potentials. Maglaveras N, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):755–8
The Prony spectral line estimation (PSLE) method for the analysis of vascular oscillations. Meyer JU, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):968–71
Ability of the Lapicque and Blair strength-duration curves to fit experimentally obtained data from the dog heart. Mouchawar GA, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):971–4
A mathematical model of cerebral blood flow chemical regulation—Part I: Diffusion processes. Ursino M, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):183–91
A mathematical model of cerebral blood flow chemical regulation—Part II: Reactivity of cerebral vascular bed. Ursino M, et al. **IEEE Trans Biomed Eng** 1989 Feb; 36(2):192–201
Velocity and shear stress distribution downstream of mechanical heart valves in pulsatile flow. Giersiepen M, et al. **Int J Artif Organs** 1989 Apr;12(4):261–9
Direct identification of parameters in a mathematical model describing conduction through the atrioventricular node. Dorveaux L, et al. **Int J Biomed Comput** 1988 Oct; 23(1–2):69–76
Computer graphics and computer animation of the electric heart field. Hulin I, et al. **Int J Biomed Comput** 1988 Oct; 23(1–2):77–81
A mathematical model of left ventricular function in atrial fibrillation. Rawles JM. **Int J Biomed Comput** 1988 Oct; 23(1–2):57–68
3-D visualization of arterial structures using ultrasound and Voxel modelling. Kitney RI, et al. **Int J Card Imaging** 1989; 4(2–4):135–43
Seminar on in vitro studies of cardiac flow and their applications for clinical Doppler echocardiography—I. **J Am Coll Cardiol** 1988 Nov;12(5):1343–76
Symposium on Quality and Cost-Conscious Cardiovascular Care: Role of Decision Modeling. October 1987, Spencer, Indiana. Proceedings. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):1A–76A
Research collaboration. Fisher LD, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):65A–68A
Doppler flow velocity mapping in an in vitro model of the normal pulmonary artery. Gardin JM, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1366–76
Projects and priorities in cardiovascular modeling. Hlatky MA, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):52A–56A
Pressure recovery distal to a stenosis: potential cause of gradient "overestimation" by Doppler echocardiography. Levine RA, et al. **J Am Coll Cardiol** 1989 Mar 1; 13(3):706–15
Data for cardiovascular modeling. Muhlbaier LH, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):60A–64A
Comments by the Representative of the Society for Medical Decision Making. Pauker SG. **J Am Coll Cardiol** 1989 Sep; 14(3 Suppl A):72A–73A
Barriers to the dissemination of research findings of decision modeling in the management of cardiovascular disease. Peirce JC. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):57A–59A
Lessons from in vitro models of small, irregular, multiple and tunnel-like stenoses relevant to clinical stenoses of valves and small vessels. Popp RL, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):716–22 (20 ref.)
Doppler color flow mapping of simulated in vitro regurgitant jets: evaluation of the effects of orifice size and hemodynamic variables. Simpson IA, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1195–207
Fluid dynamics model of mitral valve flow: description with in vitro validation. Thomas JD, et al. **J Am Coll Cardiol** 1989 Jan;13(1):221–33
Methodologic issues in policy modeling for cardiovascular disease. Weinstein MC. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):38A–43A
Response from the American College of Cardiology representative. Williams JF Jr. **J Am Coll Cardiol** 1989 Sep; 14(3 Suppl A):74A–75A
Review of hydrodynamic principles for the cardiologist: applications to the study of blood flow and jets by imaging techniques. Yoganathan AP, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1344–53
Some features of oscillatory flow in a model bifurcation. Jan DL, et al. **J Appl Physiol** 1989 Jul;67(1):147–59
Dynamics of left ventricular wall and mitral valve mechanics—a model study. Arts T, et al. **J Biomech** 1989; 22(3):261–71
Effect of prosthetic mitral valve geometry and orientation on flow dynamics in a model human left ventricle. Chandran KB, et al. **J Biomech** 1989;22(1):51–65
A numerical study of flow in curved tubes simulating coronary arteries. Chang LJ, et al. **J Biomech** 1988; 21(11):927–37
Turbulent stress measurements downstream of six mechanical aortic valves in a pulsatile flow model. Hasenkam JM, et al. **J Biomech** 1988;21(8):631–45
Three-dimensional visualization of velocity fields downstream of six mechanical aortic valves in a pulsatile flow model. Hasenkam JM, et al. **J Biomech** 1988; 21(8):647–61
Analysis of flow and vascular resistance in a model of the circle of Willis. Hillen B, et al. **J Biomech** 1988; 21(10):807–14
An evaluation of a micropolar model for blood flow through an idealized stenosis. Hogan HA, et al. **J Biomech** 1989; 22(3):211–8
Linear propagation of pulsatile waves in viscoelastic tubes. Horsten JB, et al. **J Biomech** 1989;22(5):477–84
Biomechanical experiments on excised myocardium: theoretical considerations. Humphrey JD, et al. **J Biomech** 1989;22(4):377–83
Role of physical properties of resistance vessel wall in regulating peripheral blood flow—II. Structural and mechanical behavior. Iida N, et al. **J Biomech** 1989; 22(2):119–27
Physical properties of resistance vessel wall in peripheral blood flow regulation—I. Mathematical model. Iida N. **J Biomech** 1989;22(2):109–17
Effects of vibration on steady flow downstream of a stenosis. Jones SA, et al. **J Biomech** 1988;21(11):903–14
Pressure drop and flow rate measurements in a human aortic bifurcation cast for steady and pulsatile flow. Klanchar M, et al. **J Biomech** 1989;22(5):491–500
Wall shear stress distribution in the human carotid siphon during pulsatile flow. Perktold K, et al. **J Biomech** 1988; 21(8):663–71
An experimental analysis of the flow field in a three-dimensional model of the human carotid artery bifurcation. Rindt CC, et al. **J Biomech** 1988;21(11):985–91
Modelling of the heart and pericardium at end-diastole. Shivakumar PN, et al. **J Biomech** 1989;22(3):201–9
A non-steady compartmental flow model of the cerebrovascular system. Sorek S, et al. **J Biomech** 1988; 21(9):695–704
Flow measurements in a human femoral artery model with reverse lumen curvature. Back LH, et al. **J Biomech Eng** 1988 Nov;110(4):300–9
Flow measurements in an atherosclerotic curved, tapered femoral artery model of man [published erratum appears in J Biomech Eng 1989 May;111(2):106] Back LH, et al. **J Biomech Eng** 1988 Nov;110(4):310–9
A theoretical description of blood flow through the mitral orifice. Bakalyar DM, et al. **J Biomech Eng** 1989 May; 111(2):141–6
Hot-film wall shear probe measurements inside a ventricular assist device. Baldwin JT, et al. **J Biomech Eng** 1988 Nov; 110(4):326–33
A preliminary theoretical study of arterial pressure perturbations under shock acceleration. Belardinelli E, et al. **J Biomech Eng** 1989 Aug;111(3):233–40
Oscillations in a collapsed-tube analog of the brachial artery under a sphygmomanometer cuff. Bertram CD, et al. **J Biomech Eng** 1989 Aug;111(3):185–91
A spherical source model for the thermal pulse decay method of measuring blood perfusion: a sensitivity analysis. Diederich CJ, et al. **J Biomech Eng** 1989 Feb;111(1):55–61
A model for the nonlinear elastic response of large arteries. Elad D, et al. **J Biomech Eng** 1988 Aug;110(3):185–9
Vortex generation in pulsatile flow through arterial bifurcation models including the human carotid artery. Fukushima T, et al. **J Biomech Eng** 1988 Aug;110(3):166–71
Structural three-dimensional constitutive law for the passive myocardium. Horowitz A, et al. **J Biomech Eng** 1988 Aug; 110(3):200–7
Motion of nonaxisymmetric red blood cells in cylindrical capillaries. Hsu R, et al. **J Biomech Eng** 1989 May; 111(2):147–51
Flow in collapsible tubes: a brief review. Kamm RD, et al. **J Biomech Eng** 1989 Aug;111(3):177–9 (40 ref.)
Model studies at mechanical aortic heart valve prostheses—Part I: Steady-state flow fields and pressure loss coefficients. Knoch M, et al. **J Biomech Eng** 1988 Nov; 110(4):334–43
On the discrimination between band-limited coherent and random apparent stresses in transitional pulsatile flow. Lieber BB, et al. **J Biomech Eng** 1989 Feb;111(1):42–6
Flow visualization studies in a mold of the normal human aorta and renal arteries. Liepsch D, et al. **J Biomech Eng** 1989 Aug;111(3):222–7
Flow in a two-dimensional collapsible channel with rigid inlet and outlet. Matsuzaki Y, et al. **J Biomech Eng** 1989 Aug;111(3):180–4
Measurement of wall shear stress distal to a tri-leaflet valve in a rigid model of the aortic arch with branch flows. Nandy S, et al. **J Biomech Eng** 1988 Aug;110(3):172–9
Velocity profiles in stenosed tube models using magnetic resonance imaging. Rittgers SE, et al. **J Biomech Eng** 1988 Aug;110(3):180–4
Finite elasticity modeling of the biaxial and uniaxial properties of compliant vascular grafts. Stewart SF, et al. **J Biomech Eng** 1988 Nov;110(4):344–8
Shear-layer detection in poststenotic flow by spectrum analysis of Doppler signals. Tamura T, et al. **J Biomech Eng** 1988 Nov;110(4):320–5
The application of a homogeneous half-space model in the analysis of endothelial cell micropipette measurements. Theret DP, et al. **J Biomech Eng** 1988 Aug;110(3):190–9
Steady flow through a double converging–diverging tube model for mild coronary stenoses. van Dreumel SC, et al. **J Biomech Eng** 1989 Aug;111(3):212–21
Effect of tilting disk, heart valve orientation on flow through a curved aortic model. Walker JD, et al. **J Biomech Eng** 1989 Aug;111(3):229–32
A model of oxygen exchange between an arteriole or venule and the surrounding tissue. Weerappuli DP, et al. **J Biomech Eng** 1989 Feb;111(1):24–31
An analytical solution countercurrent heat transfer between parallel vessels with a linear axial temperature gradient. Wissler EH. **J Biomech Eng** 1988 Aug;110(3):254–6
Persistence of asymmetry in nonaxisymmetric entry flow in a circular cylindrical tube and its relevance to arterial pulse wave diagnosis. Xue H, et al. **J Biomech Eng** 1989 Feb; 111(1):37–41
Distribution of mass transfer rate and wall shear stress behind simple rectangular stenosis in pulsating flow. Yamaguchi R. **J Biomech Eng** 1989 Feb;111(1):47–54
Sensitivity analysis of the systemic circulation with a view to computer simulation and parameter estimation. Avanzolini G, et al. **J Biomed Eng** 1989 Jan;11(1):43–7
Dynamic analysis of leaflet stresses and application to heart valve design. Laura PA, et al. **J Biomed Eng** 1988 Oct; 10(5):453–7
Physical modelling of the arterial wall [letter] Laura PA. **J Biomed Eng** 1988 Jul;10(4):373
A personal computer-based arrhythmia generator based on mathematical models of cardiac arrhythmia. Ikeda N, et al. **J Electrocardiol** 1988;21 Suppl:S122–8
Mechanisms of atypical atrioventricular Wenckebach periodicity. A theoretical model derived from the concepts of inhomogeneous excitability and electrotonically mediated conduction. Kinoshita S, et al. **J Electrocardiol** 1989 Jul;22(3):227–33
A computer model of the electrogram: what causes fractionation? Lesh MD, et al. **J Electrocardiol** 1988;21 Suppl:S69–73
A model of propagating calcium-induced calcium release mediated by calcium diffusion. Backx PH, et al. **J Gen Physiol** 1989 May;93(5):963–77
The effects of slip velocity at a membrane surface on blood flow in the microcirculation. Pal D, et al. **J Math Biol** 1988;26(6):705–12
A pressure-controlled fluid flow generator for arterial blood-flow simulation. Janssens JL, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):104–8
A realistic dynamic cardiac phantom for evaluating radionuclide ventriculography: description and initial studies with the left ventricular chamber. Simon TR, et al. **J Nucl Med** 1989 Apr;30(4):542–7
A computer simulation of the effect of heart rate on ion concentrations in the heart. Boyett MR, et al. **J Theor Biol** 1988 May 7;132(1):15–27
On the time-dependent diffusion of macromolecules through transient open junctions and their subendothelial spread. I. Short-time model for cleft exit region. Weinbaum S, et al. **J Theor Biol** 1988 Nov 8;135(1):1–30
Development of a new experimental model for total exclusion of the right heart without the aid of cardiopulmonary bypass. Nawa S, et al. **J Thorac Cardiovasc Surg** 1989 Jan; 97(1):130–4
Human left ventricular end-systolic pressure-volume relationship in a cylinder model. Takeda K, et al. **Jpn Heart J** 1988 Sep;29(5):689–707
Crossbridge model compatible with the linear relation

between left ventricular oxygen consumption and pressure-volume area. Yasumura Y, et al. **Jpn Heart J** 1988 May;29(3):335–47

Population interventions reassessed. Gunning-Schepers LJ, et al. **Lancet** 1989 Mar 4;1(8636):479–81

Genetics of coronary heart disease [letter] Price WH, et al. **Lancet** 1989 Sep 23;2(8665):741–2

A cardiovascular pulse duplicator for the in vitro assessment of artificial heart valves under physiological conditions. Farahifar D, et al. **Life Support Syst** 1983;1 Suppl 1:332–5

Measurement of steady flow characteristics of valved conduit prostheses. Gentle CR, et al. **Life Support Syst** 1983;1 Suppl 1:324–7

Unstented aortic valvular prosthesis. Luisi VS, et al. **Life Support Syst** 1983;1 Suppl 1:340–4

Thermoregulatory consequences of cardiovascular impairment during NMR imaging in warm/humid environments. Adair ER, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):25–37

A mathematical model for signal from spins flowing during the application of spin echo pulse sequences. Gullberg GT, et al. **Magn Reson Imaging** 1988 Jul–Aug;6(4):437–61

MR imaging of model fluid velocity profiles. Kraft KA, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):69–77

Influence of pleural pressure variations on cardiovascular system dynamics: a model study. Goldstein Y, et al. **Med Biol Eng Comput** 1988 May;26(3):251–9

Experimental and theoretical modelling of intra-aortic balloon pump operation. Niederer P, et al. **Med Biol Eng Comput** 1988 Mar;26(2):167–74

Wave reflection and hydraulic impedance in the healthy arterial system: a controversial subject. Papageorgiou GL, et al. **Med Biol Eng Comput** 1988 May;26(3):237–42 (75 ref.)

Extracellular (volume conductor) effect on adjoining cardiac muscle electrophysiology. Plonsey R, et al. **Med Biol Eng Comput** 1988 Mar;26(2):126–9

Role of computational fluid mechanics in the analysis of prosthetic heart valve flow. Tansley GD, et al. **Med Biol Eng Comput** 1988 Mar;26(2):175–85

Pulsating blood flow in an initially stressed, anisotropic elastic tube: linear approximation of pressure waves. Tsangaris S, et al. **Med Biol Eng Comput** 1989 Jan;27(1):82–8

Results of modelling and physiological examination of movement-related heart-rate reactions in neonates. Witte H, et al. **Med Biol Eng Comput** 1988 Nov;26(6):599–604

Effect of radial position on volume measurements using the conductance catheter. Woodard JC, et al. **Med Biol Eng Comput** 1989 Jan;27(1):25–32

The rat urinary bladder: vasoactivity and macromolecular leakage in a new model. Schuschke DA, et al. **Microvasc Res** 1989 Jul;38(1):23–35

Computer graphics interface to a complex simulation. Specht PC. **P R Health Sci J** 1988 Aug;7(2):184–8

Modern pacemakers: implantable artificial intelligence? [published erratum appears in PACE 1989 Jan;12(1 Pt 1):following Table of Contents] Dassen WR, et al. **PACE** 1988 Nov;11(11 Pt 2):2114–20

Modification of the DDD pacing mode to prevent junctional reentry tachycardia: computer modelling experiments. Malik M, et al. **PACE** 1988 Oct;11(10):1465–78

Computer modeling of cardiac rhythm disturbances and heart-pacemaker interaction. Malik M, et al. **PACE** 1988 Nov;11(11 Pt 2):2101–9

Theoretical evaluation of the Rosenblueth hypothesis. Malik M, et al. **PACE** 1988 Sep;11(9):1250–61

Diagnosis of paced electrocardiograms by inverse computer modeling of pacemaker actions. Malik M, et al. **PACE** 1988 Nov;11(11 Pt 2):2093–100

Perturbation of red blood cell flow in small tubes by white blood cells. Thompson TN, et al. **Pflugers Arch** 1989 Feb; 413(4):372–7

Mathematical analysis of transport and exchange in skeletal muscle. Salathe EP, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):303–18

A model of conduction through the N region of the AV node. Simson MB, et al. **Prog Clin Biol Res** 1988;275:97–109

Prognostic indices in stroke. Fullerton KJ, et al. **Q J Med** 1988 Feb;66(250):147–62

Computer simulation of ventricular wall motion using the finite element method. Watanabe T, et al. **Radiat Med** 1988 Jul–Aug;6(4):165–70

Theoretical and computational investigations of nonlinear wave propagations in arteries. (I)—A theoretical model of nonlinear pulse wave propagations. Wu SG, et al. **Sci China [B]** 1989 Jun;32(6):711–28

Estimation of error limits for cerebral blood flow values obtained from xenon-133 clearance curves. Ryding E. **Stroke** 1989 Feb;20(2):205–10

Modeling splanchnic hemodynamics after distal splenorenal shunt: a computer simulation and sensitivity analysis. Rypins EB, et al. **Surgery** 1989 Jan;105(1):93–9

[Venous hemodynamics. Basic equations] Ribreau C. **J Mal Vasc** 1989;14(2):100–6 (Eng. Abstr.) (Fre)

[Capillary permeability. Fundamental problems and modeling] Vicaut E, et al. **J Mal Vasc** 1989;14(3):218–25 (17 ref.) (Eng. Abstr.) (Fre)

[A stress-dependent pulsatile cardiovascular model as the basis for regulating artificial hearts] Altenhoff G, et al. **Biomed Tech (Berlin)** 1989 May;34(5):101–6 (Eng. Abstr.) (Ger)

[Theoretic calculation of the minimal acceptable diameter of the branches of the pulmonary artery] Gamba A, et al. **Cardiologia** 1988 Jun;33(6):595–9 (Eng. Abstr.) (Ita)

[Electrocardiogram simulation. A theoretical model of ischemia] Morace G, et al. **G Ital Cardiol** 1989 Feb; 19(2):97–103 (Eng. Abstr.) (Ita)

[The simulation of the cardiac excitation propagation for the analysis of arrhythmias—analysis of the mechanism of re-entrant excitation propagation induced by electric shock] Mitsui K, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun;26(2):112–9 (Eng. Abstr.) (Jpn)

[Experimental simulation study on EC-IC bypass—Part 1: Optimum conditions for bypass on the basis of hydraulic and theoretical models with autoregulation mechanism] Nagasawa S, et al. **No Shinkei Geka** 1988 Dec; 16(13):1471–8 (Eng. Abstr.) (Jpn)

[Experimental simulation study on EC-IC bypass: Part 2, Hemodynamics of superficial temporal artery and clinical application of the stenosis model] Nagasawa S, et al. **No Shinkei Geka** 1939 Feb;17(2):125–32 (Eng. Abstr.) (Jpn)

[A new experimental model for direct in vivo observation of microcirculation in microsurgery] Siemionow M. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):1–7 (Eng. Abstr.) (Pol)

[An experimental model of the mechanical heterogeneity of the myocardium] Bliakhman FA, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1191–5 (Rus)

[Problems of the effect of individual protective factors on the functional state and work capacity of an operator] Kamyshenko ID, et al. **Gig Sanit** 1988 Jun;(6):26–9 (Rus)

[Graphic analysis of spatial changes in the blood vessels in arterial hypertension] Gutson AA, et al. **Kardiologiia** 1988 Dec;28(12):48–51 (Eng. Abstr.) (Rus)

[Calculation of the effectiveness of an indirect method of evaluation of +GZ tolerance using a circulation simulation model] Palets BL, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):85–8 (Rus)

[Statistical analysis of the replacement circuit of the electrode- biological object-electrode system in electric stimulation of the heart] Grigorov SS, et al. **Med Tekh** 1989 Jan–Feb;(1):7–10 (Eng. Abstr.) (Rus)

[Characteristics of the use of the pulse system in artificial circulation units] Ulianov NA, et al. **Med Tekh** 1989 Jan–Feb;(1):26–30 (Eng. Abstr.) (Rus)

[New results in computer simulation of the spread of excitation in the myocardium] Szathmáry V. **Bratisl Lek Listy** 1989 Feb;90(2):129–34 (Eng. Abstr.) (Slo)

MODELS, CHEMICAL

Semiparametric approach to pharmacokinetic-pharmacodynamic data. Verotta D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R1005–10

A chemical kinetic model for ligand binding to identical and independent binding sites in vivo. Bond JP, et al. **Anal Biochem** 1988 Nov 15;175(1):238–51

Time-resolved detection of energy transfer: theory and application to immunoassays. Morrison LE. **Anal Biochem** 1988 Oct;174(1):101–20

A general pre-steady-state solution to complex kinetic mechanisms. Zhang XZ, et al. **Anal Biochem** 1989 Feb 1; 176(2):427–31

A theoretical study on the expression of enzymic activity in reverse micelles. Bru R, et al. **Biochem J** 1989 Apr 15; 259(2):355–61

A single-parameter family of adjustments for fitting enzyme kinetic models to progress-curve data. Duggleby RG, et al. **Biochem J** 1989 Jan 1;257(1):57–64

A model for measurement of lactate disappearance with isotopic tracers in the steady state. Stanley WC, et al. **Biochem J** 1988 Dec 15;256(3):1035–8

Study of the flux and transition time control coefficient profiles in a metabolic system in vitro and the effect of an external stimulator. Torres NV, et al. **Biochem J** 1989 Jun 15;260(3):763–9

Analysis of progress curves by simulations generated by numerical integration. Zimmerle CT, et al. **Biochem J** 1989 Mar 1;258(2):381–7

Co-solubility of saturated cholesteryl esters: a comparison of calculated and experimental binary phase diagrams. Dorset DL. **Biochim Biophys Acta** 1988 Nov 4;963(1):88–97

Brownian dynamics simulations of intramolecular energy transfer. Berger JW, et al. **Biophys Chem** 1988 Jul 15; 30(3):257–69

A model for mucus glycoprotein structure. Comparison with submaxillary mucins. Silberberg A. **Biorheology** 1988; 25(5):799–801

A mathematical model for the computation of the oxygen dissociation curve in human blood. Sharan M, et al. **Biosystems** 1989;22(3):249–60 (40 ref.)

A model linking water and protein structures. Watterson JG. **Biosystems** 1988;22(1):51–4

Optimal dosing of aminoglycosides using computerised models. Schobben F. **Br J Clin Pract Symp Suppl** 1988 Feb;57:54–7

LEHM: a convenient non-linear regression microcomputer program for fitting Michaelis-Menten and Hill models to enzyme kinetic data. Marszalek J, et al. **Comput Appl Biosci** 1989 Jul;5(3):239–40

Calcium: a program in BASIC for calculating the composition of solutions with specified free concentrations of calcium, magnesium and other divalent cations. Chang D, et al. **Comput Biol Med** 1988;18(5):351–66

Theory formation in postulating enzyme kinetic mechanisms: reasoning with constraints. Soo VW, et al. **Comput Biomed Res** 1988 Aug;21(4):381–403

A BASIC program for the estimation of Michaelis-Menten parameters by the direct linear plot. Brady JF, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):271–2

Monte Carlo simulation of DNA electrophoresis. Batoulis J, et al. **Electrophoresis** 1989 May-Jun;10(5–6):442–6 (9 ref.)

Effect of nonparallel alternating fields on the mobility of DNA in the biased reptation model of gel electrophoresis. Slater GW, et al. **Electrophoresis** 1989 May-Jun; 10(5–6):413–28

Reptation-breathing theory of pulsed electrophoresis: dynamic regimes, antiresonance and symmetry breakdown effects. Viovy JL. **Electrophoresis** 1989 May-Jun; 10(5–6):429–41 (34 ref.)

A model for gramicidin A'-phospholipid interactions in bilayers. Cornell BA, et al. **Eur Biophys J** 1988; 16(5):299–306

Model to examine pathways of carbon flux from lactate to glucose at the first branch point in gluconeogenesis. Blackard WG, et al. **J Biol Chem** 1988 Nov 15; 263(32):16725–30

Can a simple model account for the allosteric transition of aspartate transcarbamoylase? Schachman HK. **J Biol Chem** 1988 Dec 15;263(35):18583–6 (41 ref.)

A model for the corrosion behavior of dental amalgams. Lemaitre L, et al. **J Biomed Mater Res** 1989 Feb; 23(2):241–52

Enzyme kinetics for a two-step enzymic reaction with comparable initial enzyme-substrate ratios. Frenzen CL, et al. **J Math Biol** 1988;26(6):689–703

Studies on peptides CLVIII. Model experiments for the synthesis of open-chain unsymmetrical cystine-peptides. Fujii N, et al. **J Protein Chem** 1988 Apr;7(2):151–6

Dissipative pattern formation in ternary non-linear reaction-electrodiffusion systems with concentration-dependent diffusivities. Malchow H. **J Theor Biol** 1988 Dec 7;135(3):371–81

The general modifier ("allosteric") unireactant enzyme mechanism: redundant conditions for reduction of the steady state velocity equation to one that is first degree in substrate and effector. Segel IH, et al. **J Theor Biol** 1988 Dec 19;135(4):445–53

On the time course of the reversible Michaelis-Menten reaction. Sen AK. **J Theor Biol** 1988 Dec 19;135(4):483–93

Adsorption of an ionic homopolypeptide to a flat surface induced by pH change. Vila J, et al. **J Theor Biol** 1988 Oct 21;134(4):445–9

Determination of the diffusive and hydraulic permeabilities of capillary hollow fibre membranes: theoretical mathematical models. el-Kalay MA, et al. **Med Biol Eng Comput** 1988 May;26(3):243–50

Mathematical stimulation of an amperometric enzyme-substrate electrode with a pO2 basic sensor. Part 1. Mathematical model and simulation of the pO2 basic sensor. Lemke K. **Med Biol Eng Comput** 1988 Sep; 26(5):523–32

Mathematical simulation of an amperometric enzyme-substrate electrode with a pO2 basic sensor. Part 2. Mathematical simulation of the glucose oxidase glucose electrode. Lemke K. **Med Biol Eng Comput** 1988 Sep; 26(5):533–40

Phosphorylation of tyrosine enhances its electron transfer capability: a model of redox modulation as oncogene expression? Peterson DA, et al. **Med Hypotheses** 1988 Aug; 26(4):271–3

32S pre-rRNA processing: a dynamic model for interaction with U3RNA and structural rearrangements of spacer regions. Kupriyanova NS, et al. **Mol Biol Rep** 1988; 13(2):91–6

Bistability and control for ATP synthase and adenylate cyclase is obtained by the removal of substrate inhibition. Schiffmann Y. **Mol Cell Biochem** 1989 Mar 16;86(1):19–40 (102 ref.)

Kinetics of drug decomposition by heat conduction calorimetry. Hansen LD, et al. **Pharm Res** 1989 Jan; 6(1):20–7

Conserved quaternary structure of ligand-gated ion channels: the postsynaptic glycine receptor is a pentamer. Langosch D, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7394–8

Accurate simulation of protein dynamics in solution. Levitt M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7557–61 (34 ref.)

Modeling of the bryostatins to the phorbol ester pharmacophore on protein kinase C. Wender PA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7197–201

Computer-assisted modeling of receptor-ligand interaction. Theoretical aspects and applications to drug design. Proceedings of the 1988 OHOLO Conference. Eilat, Israel, April 24–28, 1988. **Prog Clin Biol Res** 1989;289:1–512

Comparison of solvent-inaccessible cores of homologous proteins: definitions useful for protein modelling. Hubbard TJ, et al. **Protein Eng** 1987 Jun;1(3):159–71

Treatment of electrostatic effects in macromolecular modeling. Harvey SC. **Proteins** 1989;5(1):78–92 (78 ref.)

MODELS, COMPUTER see **COMPUTER SIMULATION**

MODELS, GENETIC

Cytoarchitecture of muscle in a genetic model of murine diabetes. Feczko JD, et al. **Am J Anat** 1988 Jul; 182(3):224–40

Identifying pedigrees segregating at a major locus for a quantitative trait: an efficient strategy for linkage analysis. Boehnke M, et al. **Am J Hum Genet** 1989 Feb;44(2):216–24

Insulin-dependent diabetes mellitus: a model for the study of multifactorial disorders. Field LL. **Am J Hum Genet** 1988 Dec;43(6):793–8

On the possibility of pleiotropic monogenic control of hereditary polyposis and primary cancer of the colon. Ginsburg EK, et al. **Am J Hum Genet** 1989 Feb;44(2):191–7

Conditioning on subsets of the data: applications to ascertainment and other genetic problems. Hodge SE. **Am J Hum Genet** 1988 Oct;43(4):364–73

Polygenes versus one gene plus chance: what are the real differences? [letter] Hook EB. **Am J Hum Genet** 1988 Nov; 43(5):783–4

Empirical power of three preliminary methods for ordering loci. Kammerer CM, et al. **Am J Hum Genet** 1988 Dec; 43(6):964–70

Estimation of segregation and linkage parameters in simulated data. I. Segregation analyses with different ascertainment schemes. Kramer PL, et al. **Am J Hum Genet** 1989 Jul; 45(1):83–94

The appropriate threshold for declaring linkage when allowing sex-specific recombination rates. Lander ES, et al. **Am J Hum Genet** 1988 Oct;43(4):396–400

Strategies and sample-size considerations for mapping a two-locus autosomal recessive disorder. Majumder PP. **Am J Hum Genet** 1989 Sep;45(3):412–23

On the genetics of prelingual deafness. Majumder PP, et al. **Am J Hum Genet** 1989 Jan;44(1):86–99

The probability of dizygosity of phenotypically concordant twins. Meulepas E, et al. **Am J Hum Genet** 1988 Dec; 43(6):817–26

Analyzing the relationship between age at onset and risk to relatives. Neale MC, et al. **Am J Hum Genet** 1989 Aug; 45(2):226–39

A simple method to detect and estimate heterogeneity: application to Huntington disease, diabetes, and HIV seroconversion. Payami H. **Am J Hum Genet** 1989 Jan; 44(1):107–14

Estimation of segregation and linkage parameters in simulated data. II. Simultaneous estimation with one linked marker. Price RA, et al. **Am J Hum Genet** 1989 Jul;45(1):95–105

A resolution of the ascertainment sampling problem. III. Pedigrees. Shute NC, et al. **Am J Hum Genet** 1988 Oct; 43(4):387–95

A resolution of the ascertainment sampling problem. II. Generalizations and numerical results. Shute NC, et al. **Am J Hum Genet** 1988 Oct;43(4):374–86

Comparing observed average numbers of affected sibs with those expected under geometric ascertainment bias in an extended range in both simplex and multiple sibships. Sit KH. **Am J Hum Genet** 1989 Sep;45(3):388–400

Genetic heterogeneity, modes of inheritance, and risk estimates for a joint study of Caucasians with insulin-dependent diabetes mellitus. Thomson G, et al. **Am J Hum Genet** 1988 Dec;43(6):799–816 (86 ref.)

Intercalary heterochromatin of Drosophila as a potential model for human fragile sites. Laird CD, et al. **Am J Med Genet** 1988 May-Jun;30(1–2):689–91

Fragile-X mutation proposed to block complete reactivation in females of an inactive X chromosome. Laird CD. **Am J Med Genet** 1988 May-Jun;30(1–2):693–6

The ascertainment sampling problem and estimation of genetic parameters when parental haplotypes are known. Shute NC. **Am J Med Genet** 1988 Oct;31(2):281–90

Fragile X syndrome: a hypothesis regarding the molecular mechanism of the phenotype. Warren ST. **Am J Med Genet** 1988 May-Jun;30(1–2):681–8

Human dental reduction: natural selection or the probable mutation effect. Caicagno JM, et al. **Am J Phys Anthropol** 1988 Dec;77(4):505–17

Migration models of prehistoric postmarital residence. Konigsberg LW. **Am J Phys Anthropol** 1988 Dec; 77(4):471–82

Complex segregation analysis of dental morphological variants. Nichol CR. **Am J Phys Anthropol** 1989 Jan; 78(1):37–59

Three components of genetic drift in subdivided populations. Rogers AR. **Am J Phys Anthropol** 1988 Dec;77(4):435–49

Statistical analysis of the migration component of genetic drift. Rogers AR, et al. **Am J Phys Anthropol** 1988 Dec; 77(4):451–7

A new method to test genetic models in HLA associated diseases: the MASC method. Clerget-Darpoux F, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):247–58

Phylogenies from molecular sequences: inference and reliability. Felsenstein J. **Annu Rev Genet** 1988;22:521–65 (144 ref.)

Antigenic relationships between avian paramyxoviruses. III. A mathematical model of antigenic drift and a computer-assisted approach for construction of a phylogenetic tree. Lipkind M, et al. **Arch Virol** 1988; 103(1–2):83–98

The maintenance of transposable elements in natural populations. Charlesworth B. **Basic Life Sci** 1988; 47:189–212 (83 ref.)

Genetic analysis of twin and family data: structural modeling using LISREL. Papers delivered at the International Workshop on Twin Methodology. Leuven, Belgium, August 24–29, 1987. **Behav Genet** 1989 Jan;19(1):1–160

Resemblances of parents and twins in sports participation and heart rate. Boomsma DI, et al. **Behav Genet** 1989 Jan; 19(1):123–41

Factor and simplex models for repeated measures: application to two psychomotor measures of alcohol sensitivity in twins. Boomsma DI, et al. **Behav Genet** 1989 Jan; 19(1):79–96

Inference about genetic correlations. Carey G. **Behav Genet** 1988 May;18(3):329–38

LISREL analysis of twin data with structured means. Dolan CV, et al. **Behav Genet** 1989 Jan;19(1):51–62

The effects of social homogamy and cultural inheritance on the covariances of twins and their parents: a LISREL model. Eaves LJ, et al. **Behav Genet** 1989 Jan;19(1):113–22

Testing structural equation models for twin data using LISREL. Heath AC, et al. **Behav Genet** 1989 Jan;19(1):9–35

Willingness to drive when drunk and personality: a twin study. Martin NG, et al. **Behav Genet** 1989 Jan;19(1):97–111

Partitioned twin analysis: a power study. Nance WE, et al. **Behav Genet** 1989 Jan;19(1):143–50

Fitting genetic models with LISREL: hypothesis testing. Neale MC, et al. **Behav Genet** 1989 Jan;19(1):37–49

The effects of age, sex, and genotype on self-report drunkenness following a challenge dose of alcohol. Neale MC, et al. **Behav Genet** 1989 Jan;19(1):63–78

Genetic and environmental variation in the birth weight of twins. Vlietinck R, et al. **Behav Genet** 1989 Jan;19(1):151–61

Human stomach alcohol and aldehyde dehydrogenases (ALDH): a genetic model proposed for ALDH III isozymes. Yin SJ, et al. **Biochem Genet** 1988 Jun; 26(5–6):343–60

A model for the initiation of translation at the late stage after infection by adenoviruses. Murasugi A. **Biochem J** 1989 Jun 1;260(2):621–2

A model for regulation of mammalian ribosomal DNA transcription. Co-ordination of initiation and termination. Nashimoto M, et al. **Biochem J** 1988 Dec 1;256(2):329–33

Mitotic chromosome structure. Earnshaw WC. **Bioessays** 1988 Nov;9(5):147–50 (25 ref.)

X chromosome inactivation: a hypothesis. McBurney MW. **Bioessays** 1988 Aug-Sep;9(2–3):85–8 (39 ref.)

The equivalence of two tests and models for HLA data with no observed double blanks. Gart JJ, et al. **Biometrics** 1988 Sep;44(3):869–73

A disequilibrium coefficient approach to Hardy-Weinberg testing. Hernández JL, et al. **Biometrics** 1989 Mar; 45(1):53–70

A unified matrix hypothesis of DNA-directed morphogenesis, protodynamism and growth control. Scherrer K. **Biosci Rep** 1989 Apr;9(2):157–88

Simple tests implied by a genetic X-linked model. Thomas H. **Br J Math Stat Psychol** 1988 Nov;41 (Pt 2):179–91

Radiation-induced cell death by chromatin loss. A model to explain the shape of low-linear-energy-transfer cell survival curves. Campbell IR, et al. **Br J Radiol** 1989 Apr; 62(736):338–43

Stochastic models for heterogeneous DNA sequences. Churchill GA. **Bull Math Biol** 1989;51(1):79–94

Probabilistic models of genome shuffling. Sankoff D, et al. **Bull Math Biol** 1989;51(1):117–24

Codon preference and primary sequence structure in protein-coding regions. Tavaré S, et al. **Bull Math Biol** 1989;51(1):95–115

Modeling IQ change: evidence from the Texas Adoption Project. Loehlin JC, et al. **Child Dev** 1989 Aug; 60(4):993–1004

General models for the generation and suppression of malignancy. **Ciba Found Symp** 1989;142:242–7

Heterosis in the codominance model: electrophoretic studies of proteins in the chicken-quail hybrid. Lucotte G, et al. **Comp Biochem Physiol [B]** 1978;60(2):169–71

Algorithms for determining the fate of sites and domain boundaries in computer simulations of recombinant DNA procedures. Campione-Piccardo J. **Comput Appl Biosci** 1988 Apr;4(2):259–64

SDSE: a software package to simulate the evolution of a pair of DNA sequences. Oliver JL, et al. **Comput Appl Biosci** 1989 Feb;5(1):47–50

CLEAVAGE: a microcomputer program for predicting signal sequence cleavage sites. Pascarella S, et al. **Comput Appl Biosci** 1989 Feb;5(1):53–4

SIMREP: a program simulating differential DNA replication. Zacharias H, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):235–42

Cytogenetic study of silver-staining NOR in 8-cell-stage mouse blastomeres fused to 1-cell-stage embryos. Dyban AP, et al. **Development** 1988 Nov;104(3):453–63

Small eye (Sey): a mouse model for the genetic analysis of craniofacial abnormalities. Hogan BL, et al. **Development** 1988;103 Suppl:115–9

A model for the structure and functions of iron-responsive elements. Hentze MW, et al. **Gene** 1988 Dec 10; 72(1–2):201–8

Modeling the age-of-onset function in segregation analysis: a causal scheme for leprosy. Abel L, et al. **Genet Epidemiol** 1989;6(4):501–6

Robust methods for the detection of genetic linkage for quantitative data from pedigrees. Amos CI, et al. **Genet Epidemiol** 1989;6(2):349–60

Segregation and linkage analysis of nine Utah breast cancer pedigrees. Bishop DT, et al. **Genet Epidemiol** 1988; 5(3):151–69

Familial analysis of bipolar affective disorder using logistic models. Blangero J, et al. **Genet Epidemiol** 1989;6(1):221–7

Regressive logistic models for ordered and unordered polychotomous traits: application to affective disorders. Bonney GE, et al. **Genet Epidemiol** 1989;6(1):211–5

Testing genetic models for IDDM by the MASC method. Clerget-Darpoux F, et al. **Genet Epidemiol** 1989;6(1):59–64

Robustness of the unified model to shared environmental effects in the analysis of dichotomous traits. Demenais F, et al. **Genet Epidemiol** 1989;6(1):229–34

Segregation analysis of two genetic markers in IDDM families under two-locus models. Dizier MH, et al. **Genet Epidemiol** 1989;6(1):71–5

Linkage analysis and genetic models for IDDM. Easton DF. **Genet Epidemiol** 1989;6(1):83–8

Age of onset, age at examination, and other covariates in the analysis of family data. Elston RC, et al. **Genet Epidemiol** 1989;6(1):217–20

Remarks on ascertainment. Ewens WJ, et al. **Genet Epidemiol** 1989;6(1):89–93

Linkage analysis under "random" and "genetic" reduced penetrance. Greenberg DA, et al. **Genet Epidemiol** 1989; 6(1):259–64

Estimation of genetic model parameters: variables correlated with a quantitative phenotype exhibiting major locus inheritance. Hasstedt SJ, et al. **Genet Epidemiol** 1989; 6(2):319–32

The impact of varying diagnostic thresholds on affected sib pair linkage analysis. Kendler KS. **Genet Epidemiol** 1988; 5(6):407–19

Path analysis under generalized marital resemblance: evaluation of the assumptions underlying the mixed homogamy model by the Monte Carlo method. McGue M, et al. **Genet Epidemiol** 1989;6(2):373–88

Performance of linkage analysis under misclassification error when the genetic model is unknown. Martinez M, et al. **Genet Epidemiol** 1989;6(1):253–8

Estimating genetic parameters of survival distributions: a multifactorial model. Meyer JM, et al. **Genet Epidemiol** 1988;5(4):265–75

Alternative genetic models for the inheritance of the phenylthiocarbamide taste deficiency. Olson JM, et al. **Genet Epidemiol** 1989;6(3):423–34

Repeated-measures model for the investigation of temporal trends using longitudinal family studies: application to systolic blood pressure. Province MA, et al. **Genet Epidemiol** 1989;6(2):333–47

Nonrandom sampling in genetic epidemiology: an implementation of the Hanis-Chakraborty method for multifactorial analysis. Rao DC, et al. **Genet Epidemiol** 1989;6(3):461–70

Phenylthiocarbamide taste sensitivity revisited: complete sorting test supports residual family resemblance. Reddy BM, et al. **Genet Epidemiol** 1989;6(3):413–21

Affective disorders: evaluation of a three-allele model accounting for clinical heterogeneity. Sandkuyl LA, et al. **Genet Epidemiol** 1989;6(1):265–9

The incomplete, multiple ascertainment model: assumptions, applications, and alternative models. Stene J. **Genet Epidemiol** 1989;6(1):247–51

Can segregation distortion influence gametic disequilibrium? Hedrick PW. **Genet Res** 1988 Dec;52(3):237–42

Quantitative genetic variability maintained by mutation-stabilizing selection balance in finite populations. Keightley PD, et al. **Genet Res** 1988 Aug;52(1):33–43

On the role of unequal exchange in the containment of transposable element copy number. Langley CH, et al. **Genet Res** 1988 Dec;52(3):223–35

The mutational load of a multigene family with uniform members. Ohta T. **Genet Res** 1989 Apr;53(2):141–5

The coalescent in two partially isolated diffusion populations. Takahata N. **Genet Res** 1988 Dec;52(3):213–22

The effects of assortative mating and migration on cytonuclear associations in hybrid zones. Asmussen MA, et al. **Genetics** 1989 Aug;122(4):923–34

Genetic divergence in mandible form in relation to molecular divergence in inbred mouse strains. Atchley WR, et al. **Genetics** 1988 Sep;120(1):239–53

Linkage and the maintenance of heritable variation by mutation-selection balance. Bürger R. **Genetics** 1989 Jan; 121(1):175–84

Pleiotropic stabilizing selection limits the number of polymorphic loci to at most the number of characters. Hastings A, et al. **Genetics** 1989 Jun;122(2):459–63

Linkage disequilibrium and genetic variances under mutation-selection balance. Hastings A. **Genetics** 1989 Apr; 121(4):857–60

The coalescent process in models with selection and recombination. Hudson RR, et al. **Genetics** 1988 Nov; 120(3):831–40

The coalescent process in models with selection. Kaplan NL, et al. **Genetics** 1988 Nov;120(3):819–29

Models of quantitative variation of flux in metabolic pathways [published erratum appears in Genetics 1989 Jul;122(3):719] Keightley PD. **Genetics** 1989 Apr; 121(4):869–76

King's formula for the mutation load with epistasis. Kondrashov AS, et al. **Genetics** 1988 Nov;120(3):853–6

On measures of gametic disequilibrium. Lewontin RC. **Genetics** 1988 Nov;120(3):849–52

Dosage-dependent modifiers of position effect variegation in Drosophila and a mass action model that explains their effect. Locke J, et al. **Genetics** 1988 Sep;120(1):181–98

Role of recBC function in formation of chromosomal rearrangements: a two-step model for recombination. Mahan MJ, et al. **Genetics** 1989 Mar;121(3):433–43

Inference from clines stabilized by frequency-dependent selection. Mallet J, et al. **Genetics** 1989 Aug;122(4):967–76

The three-dimensional organization of polytene nuclei in male Drosophila melanogaster with compound XY or ring X chromosomes. Mathog D, et al. **Genetics** 1989 Feb; 121(2):293–311

Gene conversion, linkage, and the evolution of multigene families. Nagylaki T. **Genetics** 1988 Sep;120(1):291–301

The maintenance of genetic variability in two-locus models of stabilizing selection. Nagylaki T. **Genetics** 1989 May; 122(1):235–48

On the theory of partially inbreeding finite populations. II. Partial sib mating. Pollak E. **Genetics** 1988 Sep; 120(1):303–11

Apparent negative interference due to variation in recombination frequencies. Säll T, et al. **Genetics** 1989 Aug; 122(4):935–42

Spatial autocorrelation analysis of migration and selection. Sokal RR, et al. **Genetics** 1989 Apr;121(4):845–55

The maintenance of single-locus polymorphism. I. Numerical studies of a viability selection model. Spencer HG, et al. **Genetics** 1988 Oct;120(2):605–13

A building block model for quantitative genetics. Tachida H, et al. **Genetics** 1989 Apr;121(4):839–44

Coevolution of the major histocompatibility complex and the t-complex in the mouse. I. Generation and maintenance of high complementarity associations. Uyenoyama MK. **Genetics** 1989 Jan;121(1):139–51

Coevolution of the major histocompatibility complex and the t-complex in the mouse. II. Modification of response to sharing of histocompatibility antigens. Uyenoyama MK. **Genetics** 1989 Jan;121(1):153–61

A generalized approach for estimating effective population size from temporal changes in allele frequency. Waples RS. **Genetics** 1989 Feb;121(2):379–91

The probabilities of similarities in DNA sequence comparisons. Brooks LD, et al. **Genomics** 1988 Oct; 3(3):207–16

Hypotheses for testing deviations from random integration: evidence for nonrandom retroviral integration. Wilson AF, et al. **Genomics** 1988 Aug;3(2):137–42

Phenotypic evolution under Fisher's Fundamental Theorem of Natural Selection. Charnov EL. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):113–6

Cytosine methylation and the fate of CpG dinucleotides in vertebrate genomes. Cooper DN, et al. **Hum Genet** 1989 Sep;83(2):181–8

Epigenetic changes may contribute to the formation and spontaneous regression of retinoblastoma. Greger V, et al. **Hum Genet** 1989 Sep;83(2):155–8

The problem of our common mitochondrial mother. Krüger J, et al. **Hum Genet** 1989 Jul;82(4):308–12

Dose-response function for Painter's SCE-model. Schachtel GA, et al. **Hum Genet** 1989 Jun;82(3):275–8

Fit of isolation by distance models: curve fitting [letter] Barrai I. **Hum Hered** 1988;38(6):381–2

Resilience and variability in pathogens and hosts. Agur Z. **IMA J Math Appl Med Biol** 1987;4(4):295–307

A genetic model describing the evolution of levamisole resistance in Trichostrongylus colubriformis, a nematode parasite of sheep. Dobson RJ, et al. **IMA J Math Appl Med Biol** 1987;4(4):279–93

Drawing pedigrees. Thomas A. **IMA J Math Appl Med Biol** 1988;5(3):201–13

Two-locus and three-locus gene identity by descent in pedigrees. Thompson EA. **IMA J Math Appl Med Biol** 1988;5(4):261–79

Regulation of the mammalian cytochrome P1–450 (CYP1A1) gene. Nebert DW, et al. **Int J Biochem** 1989;21(3):243–52 (32 ref.)

PTSD and sexually abused children [letter] Huessy HR. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):298–9

Mutagenesis by transient misalignment. Kunkel TA, et al. **J Biol Chem** 1988 Oct 15;263(29):14784–9

The consequences of heterogamy and homogamy on the similarity between spouses. Tomlinson I. **J Biosoc Sci** 1989 Apr;21(2):193–206

Tubulin gene expression in the Chlamydomonas reinhardtii cell cycle: elimination of environmentally induced artifacts and the measurement of tubulin mRNA levels. Nicholl DS, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):397–403

Two forms of minority-group test bias as psychometric artifacts with an animal model (Rattus norvegicus). Harrington GM. **J Comp Psychol** 1988 Dec;102(4):400–7

An alternative model for additive and cytoplasmic genetic and maternal effects on lactation. Kirkpatrick BW, et al. **J Dairy Sci** 1988 Sep;71(9):2502–7

Inbreeding, coancestry, and covariance between relatives for X-chromosomal loci. Grossman M, et al. **J Hered** 1989 Mar–Apr;80(2):137–42

Epistasis in the multiple locus symmetric viability model. Christiansen FB. **J Math Biol** 1988;26(6):595–618

Diffusion approximations of the two-locus Wright–Fisher model. Ethier SN, et al. **J Math Biol** 1989;27(1):17–28

A quantitative genetic model for growth, shape, reaction norms, and other infinite-dimensional characters. Kirkpatrick M, et al. **J Math Biol** 1989;27(4):429–50

External stability and ESS: criteria for initial increase of new mutant allele. Liberman U. **J Math Biol** 1988;26(4):477–85

String analysis and energy minimization in the partition of DNA sequences. Ninio J, et al. **J Mol Biol** 1989 Jun 5; 207(3):585–96

Random walking. To wobble or not to wobble, that is the question. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):1–2

The evolutionary transition from RNA to DNA in early cells. Lazcano A, et al. **J Mol Evol** 1988;27(4):283–90

Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. Pedersen NL, et al. **J Pers Soc Psychol** 1988 Dec;55(6):950–7

Genetic and environmental variance in content dimensions of the MMPI. Rose RJ. **J Pers Soc Psychol** 1988 Aug; 55(2):302–11

A sex-specific quantitative genetic theory for life history and development. Abugov R. **J Theor Biol** 1988 Jun 22; 132(4):437–47

A domain model for eukaryotic DNA organization: a molecular basis for cell differentiation and chromosome evolution. Bodnar JW. **J Theor Biol** 1988 Jun 22; 132(4):479–507

Patterns of ESS's. II. Cannings C, et al. **J Theor Biol** 1988 Jun 22;132(4):409–20

A kinetic thermodynamic phenomenological approach to genetic expression of heat-shock proteins. Chela-Flores J, et al. **J Theor Biol** 1988 Oct 7;134(3):319–25

The continuum model and c-myc synthesis during the division cycle. Cooper S. **J Theor Biol** 1988 Dec 7; 135(3):393–400

Comment on Harpending's and Roger's model of intergroup selection. Gilpin ME, et al. **J Theor Biol** 1988 Nov 8; 135(1):131–5

Dependence of expected heterozygosity on locus number with stabilizing selection and drift. Hastings A. **J Theor Biol** 1988 Sep 9;134(1):103–12

Free fitness that always increases in evolution. Iwasa Y. **J Theor Biol** 1988 Dec 7;135(3):265–81

Potential memory and hysteretic effects in transcription. Job D, et al. **J Theor Biol** 1988 Oct 7;134(3):273–89

Crossover site determination and interference. Maguire MP. **J Theor Biol** 1988 Oct 21;134(4):565–70

Evolutionarily stable strategies of mutual help between relatives having unequal fertilities. Motro U. **J Theor Biol** 1988 Nov 8;135(1):31–9

A single calcium flux triggers chromosome replication, segregation and septation in bacteria: a model. Norris V, et al. **J Theor Biol** 1988 Oct 7;134(3):341–50

Analysis of mutant frequency curves and survival curves applied to the AL hybrid cell system [published erratum appears in J Theor Biol 1988 Sep 9;134(1):133] Parker R, et al. **J Theor Biol** 1988 May 7;132(1):113–7

To each genotype a separate strategy—a dynamic game theory model of a general diploid system. Rowe GW. **J Theor Biol** 1988 Sep 9;134(1):89–101

Epigenetic selection: an alternative mechanism of pattern formation. Sachs T. **J Theor Biol** 1988 Oct 21;134(4):547–59

Complex behaviour of the repressible operon. Sinha S, et al. **J Theor Biol** 1988 Jun 7;132(3):307–18

Patterns of ESS's. I. Vickers GT, et al. **J Theor Biol** 1988 Jun 22;132(4):387–408

A mathematical model of recombinational amplification of the 2 mu plasmid in the yeast Saccharomyces cerevisiae. Wittrup KD, et al. **J Theor Biol** 1988 Feb 21;130(4):481–92

The senile dementias: a new model. Edlin GJ. **Med Hypotheses** 1988 Sep;27(1):29–31

Theoretical mechanisms for synthesis of carcinogen-induced embryonic protein: XXI. Oncogenes interpreted as embryonic genes. Hancock RL. **Med Hypotheses** 1988 Oct; 27(2):93–7 (24 ref.)

Theoretical mechanisms for synthesis of carcinogen-induced embryonic proteins: XX. Embryonic gene perturbations expressed in terms of matrix algebra. Hancock RL. **Med Hypotheses** 1988 Sep;27(1):15–8

Gene regulation and DNA C-value paradox: a model based on diffusion of regulatory molecules. Kupiec JJ. **Med Hypotheses** 1989 Jan;28(1):7–10

Cancer clonality and field theory. Matioli GT. **Med Hypotheses** 1988 Oct;27(2):149–51

Origin of mutation in neoplasia. Morris SA. **Med Hypotheses** 1988 Nov;27(3):209–14

Hypothesis: Alzheimer's disease is a phylogenetic disease. Rapoport SI. **Med Hypotheses** 1989 Jul;29(3):147–50

Induced frameshifting mechanism of replication for an information-carrying scrapie prion. Wills PR. **Microb Pathog** 1989 Apr;6(4):235–49 (70 ref.)

Tandem-repetitive noncoding DNA: forms and forces. Stephan W. **Mol Biol Evol** 1989 Mar;6(2):198–212

Glycosylation and secretion of human tissue plasminogen activator in recombinant baculovirus-infected insect cells. Jarvis DL, et al. **Mol Cell Biol** 1989 Jan;9(1):214–23

finP and fisO mutations in FinP anti-sense RNA suggest a model for FinOP action in the repression of bacterial conjugation by the Flac plasmid JCFL0. Frost L, et al. **Mol Gen Genet** 1989 Jul;218(1):152–60

Statistical analysis of the micronucleus test—a modelling approach. Brodin U. **Mutat Res** 1989 Apr;211(2):259–64

Models and assumptions underlying genetic risk assessment. Sobels FH. **Mutat Res** 1989 May;212(1):77–89

A double-loop model for the replication of eukaryotic DNA. Spadari S, et al. **Mutat Res** 1989 May;219(3):147–56

Meiosis: initiation of recombination [news] Fincham JR, et al. **Nature** 1989 Mar 2;338(6210):14–5

Another alternative to directed mutation [letter] Lenski RE, et al. **Nature** 1989 Jan 12;337(6203):123–4

Cancer genetics. Genomic imprinting and embryonal tumours [news] Reik W, et al. **Nature** 1989 Mar 9;338(6211):112–3

Multiple sequence alignment with hierarchical clustering. Corpet F. **Nucleic Acids Res** 1988 Nov 25;16(22):10881–90

Genetic information could be integrated extrinsically for simplest life forms. Allen G. **Orig Life Evol Biosph** 1988; 18(3):289–98

Optimization and the genetic code. Figureau A. **Orig Life Evol Biosph** 1989;19(1):57–67

Frequency-dependent selection and competition: empirical approaches. Antonovics J, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):601–13

Molecular aspects of sex determination in mice: an alternative model for the origin of the Sxr region. Bishop CE, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):119–24

Frequency-dependent selection, metrical characters and molecular evolution. Clarke BC, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):631–40

The evolution of aggression: can selection generate variability? Maynard Smith J, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):557–70

Relative roles of mutation and selection in the maintenance of genetic variability. Nei M. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):615–29

Frequency-dependent sexual selection. O'Donald P, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):571–86

Dynamics of some simple host-parasite models with more than two genotypes in each species. Seger J. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):541–55

Admixture as a tool for finding linked genes and detecting that difference from allelic association between loci. Chakraborty R, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9119–23

Transcriptional bias: a non-Lamarckian mechanism for substrate-induced mutations. Davis BD. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5005–9

Algorithms for the restriction-site mapping of DNA molecules. Krawczak M. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7298–301

Computer-simulation methods in human linkage analysis. Ott J. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4175–8

Amplifiers and the handicap principle in sexual selection: a different emphasis. Hasson O. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):383–406

A methylation mosaic model for mammalian genome imprinting. Sapienza C, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:145–57 (35 ref.)

Stability of genetic determination from age 2 to age 9: a longitudinal twin study. Lytton H, et al. **Soc Biol** 1988 Spring–Summer;35(1–2):62–73

Pleiotropy and preadaptation in the evolution of human language capacity. Aoki K, et al. **Theor Popul Biol** 1989 Apr;35(2):181–94

Allelic frequencies given the sample's common ancestral type. Beder B. **Theor Popul Biol** 1988 Apr;33(2):126–37

Structural instability of models of sexual selection. Bulmer M. **Theor Popul Biol** 1989 Apr;35(2):195–206

Regular systems of inbreeding with mutation. Campbell RB. **Theor Popul Biol** 1988 Aug;34(1):24–37

More on recombination and selection in the modifier theory of sex-ratio distortion. Feldman MW, et al. **Theor Popul Biol** 1989 Apr;35(2):207–25

The effect of the reproductive system on mutation load. Hopf FA, et al. **Theor Popul Biol** 1988 Jun;33(3):243–65

A general asymptotic property of two-locus selection models. Lewontin RC, et al. **Theor Popul Biol** 1988 Oct; 34(2):177–93

Models of growth with density regulation in more than one life stage. Rodriguez DJ. **Theor Popul Biol** 1988 Oct; 34(2):93–117

Inclusive fitness models with two sexes. Taylor PD. **Theor Popul Biol** 1988 Oct;34(2):145–68

On the evolution of genetic incompatibility systems. III. Introduction of weak gametophytic self-incompatibility under partial inbreeding. Uyenoyama MK. **Theor Popul Biol** 1988 Aug;34(1):47–91

Allele frequencies in multigene families. II. Coalescent approach. Watterson GA. **Theor Popul Biol** 1989 Apr; 35(2):161–80

Allele frequencies in multigene families. I. Diffusion equation approach. Watterson GA. **Theor Popul Biol** 1989 Apr; 35(2):142–60

The ontogeny and phylogeny of cellular differentiation in Volvox. Kirk DL. **Trends Genet** 1988 Feb;4(2):32–6 (28 ref.)

Algorithm for construction of phylogenetic trees. Tohá J, et al. **Z Naturforsch [C]** 1989 Mar–Apr;44(3–4):312–6

[Principles of the structure and expression of eukaryotic genes] Siedlecki JA, et al. **Nowotwory** 1988 Apr–Jun; 38(2):73–9 **(Pol)**

[What sequence must have an 8-nucleotide anticodon loop so that tRNA would not shift the reading frame?] Shteinberg SV. **Biofizika** 1988 Jul–Aug;33(4):576–9 (Eng. Abstr.) **(Rus)**

[Preliminary analysis of inheritance of scoliosis] Aksenovich

TI, et al. **Genetika** 1988 Nov;24(11):2056–63 (Eng. Abstr.) **(Rus)**

[Modelling of the regulatory system of tryptophan biosynthesis using generalized threshold models] Chursev RI, et al. **Genetika** 1989 Mar;25(3):535–44 (Eng. Abstr.) **(Rus)**

[Medico-genetic study of the Kostroma Region population. IX. Interpretation of the genetic distance matrix] El'chinova GI, et al. **Genetika** 1988 Nov;24(11):2043–9 (Eng. Abstr.) **(Rus)**

[Evolutionary significance of the presence in mobile genetic elements of regulatory sites reacting to the environment. Regulatory site as a trigger] Kapitonov VV, et al. **Genetika** 1988 Sep;24(9):1696–703 (Eng. Abstr.) **(Rus)**

[Increased recombination in a multi-locus system during environmental fluctuations] Korol' AB, et al. **Genetika** 1989 May;25(5):923–31 (Eng. Abstr.) **(Rus)**

[The possibility of modern segregation analysis to discriminate monogenic and multifactorial types of the inheritance of traits. The reliability of models and the power of the analysis] Koroleva AG, et al. **Genetika** 1988 Aug;24(8):1496–500 (Eng. Abstr.) **(Rus)**

[Possibility of the current segregation analysis to discriminate between monogenic and multifactorial types of inheritance of traits. The effect of the structure of family data on model robustness and power of the analysis] Koroleva AG, et al. **Genetika** 1988 Oct;24(10):1889–93 (Eng. Abstr.) **(Rus)**

[Characteristics of the combined mutagenic effects of chromium and manganese on a model of microbial mutation] Balezin SL, et al. **Gig Sanit** 1988 Dec;(12):22–4 (Eng. Abstr.) **(Rus)**

[Physico-chemical basis of the genetic code origin: stereochemical analysis of interactions of amino acids and nucleotides based on the progene hypothesis] Al'tshtein AD, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1411–29 (Eng. Abstr.) **(Rus)**

[Genetico-mathematical analysis of manifested schizophrenia with a permanent and attack-like course] Ritsner MS. **Zh Nevropatol Psikhiatr** 1989;89(5):91–5 (Eng. Abstr.) **(Rus)**

[Convergent origin of repeats in the genes coding for globular proteins. The modelling of the convergent origin of direct repeats] Kolchanov NA, et al. **Zh Obshch Biol** 1988 Nov–Dec;49(6):723–8 (Eng. Abstr.) **(Rus)**

MODELS, MOLECULAR

Molecular modeling of the phospholipid bilayer. Gaber BP, et al. **Adv Exp Med Biol** 1988;238:1–11

Theoretically determined three-dimensional structures for amphipathic segments of the HIV-1 gp41 envelope protein. Venable RM, et al. **AIDS Res Hum Retroviruses** 1989 Feb; 5(1):7–22

Molecular modeling of protein-glycosaminoglycan interactions. Cardin AD, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):21–32

Crystallographic characterization and three-dimensional model of yeast Cu,Zn superoxide dismutase. Frigerio F, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):677–81

Dihydrofolate reductase: multiple conformations and alternative modes of substrate binding. Birdsall B, et al. **Biochemistry** 1989 Mar 7;28(5):2297–305

On the dissection of binding epitopes on carbohydrate receptors for microbes using molecular modelling. Calander N, et al. **Biochimie** 1988 Nov;70(11):1673–82

The distribution of the frequency of occurrence of nucleotide subsequences, based on their overlap capability. Gentleman JF, et al. **Biometrics** 1989 Mar;45(1):35–52

Quasi-continuum models of twist-like and accordion-like low-frequency motions in DNA. Chou KC, et al. **Biophys J** 1989 Aug;56(2):295–305

Molecular mechanics studies on poly(purine).poly(pyrimidine) sequences in DNA: polymorphism and local variability. Bansal M, et al. **Biopolymers** 1989 Feb;28(2):531–48

A model for mucus glycoprotein structure. Silberberg A. **Biorheology** 1987;24(6):605–14

Supramolecular organization of tricarboxylic acid cycle enzymes. Lyubarev AE, et al. **Biosystems** 1989;22(2):91–102

Computational experience with an algorithm for tetrangle inequality bound smoothing. Easthope PL, et al. **Bull Math Biol** 1989;51(1):173–94

A continuous analog for RNA folding. Ferretti V, et al. **Bull Math Biol** 1989;51(1):167–71

The alignment of protein structures in three dimensions. Zuker M, et al. **Bull Math Biol** 1989;51(1):55–78

Computational analysis of structural and energetic consequences of DNA methylation. Hausheer FH, et al. **Carcinogenesis** 1989 Jun;10(6):1131–7

Protein graphics: historical development, future directions and microcomputer applications. Gross E, et al. **Comput Appl Biosci** 1986 Sep;2(3):173–9 (39 ref.)

Molecular dynamics simulations of ribonuclease T1. Effect of solvent on the interaction with 2'GMP. MacKerell AD Jr, et al. **Eur Biophys J** 1988;16(5):287–97

Possible role of some groups in the structure and function of HIV-1 protease as revealed by molecular modeling studies. Pechik IV, et al. **FEBS Lett** 1989 Apr 10; 247(1):118–22

Calculating three-dimensional molecular structure from atom-atom distance information: cyclosporin A. Lautz J, et al. **Int J Pept Protein Res** 1989 Apr;33(4):281–8

Characterization of the cysJIH regions of Salmonella typhimurium and Escherichia coli B. DNA sequences of cysI and cysH and a model for the siroheme-Fe4S4 active center of sulfite reductase hemoprotein based on amino acid homology with spinach nitrite reductase. Ostrowski J, et al. **J Biol Chem** 1989 Sep 15;264(26):15726–37

Shell Conference on Computer-Aided Molecular Modelling. October 4–6, 1987, Hoenderloo, The Netherlands. **J Comput Aided Mol Des** 1988 Oct;2(3):165–258

Dynamic simulation as an essential tool in molecular modeling. Berendsen HJ. **J Comput Aided Mol Des** 1988 Oct;2(3):217–21

Towards an identification of the pyrethroid pharmacophore. A molecular modelling study of some pyrethroid esters. Byberg JR, et al. **J Comput Aided Mol Des** 1987 Oct; 1(3):181–95

Strategies for modelling of catalysts. Catlow CR. **J Comput Aided Mol Des** 1988 Oct;2(3):255–8

Computer-aided molecular modelling: research study or research tool? Dearing A. **J Comput Aided Mol Des** 1988 Oct;2(3):179–89

Crystallographic modelling. Driessen RA, et al. **J Comput Aided Mol Des** 1988 Oct;2(3):225–33

Computer graphic study on models of the molybdenum cofactor of xanthine oxidase. Folkers G, et al. **J Comput Aided Mol Des** 1987 Apr;1(1):87–94

Symposium overview. The Shell Conference on Computer-Aided Molecular Modelling. Hays GR, et al. **J Comput Aided Mol Des** 1988 Oct;2(3):165–78 (26 ref.)

Prediction of the three-dimensional structure of the enzymatic domain of t-PA. Heckel A, et al. **J Comput Aided Mol Des** 1988 Apr;2(1):7–14

A molecular modeling study on binding of drugs to calmodulin. Höltje HD, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):101–9

A molecular graphics study exploring a putative ligand binding site of the beta-adrenoceptor. IJzerman AP, et al. **J Comput Aided Mol Des** 1988 Apr;2(1):43–53

Molecular dynamics simulations of cyclosporin A: the crystal structure and dynamic modelling of a structure in apolar solution based on NMR data. Lautz J, et al. **J Comput Aided Mol Des** 1987 Oct;1(3):219–41

An investigation into the construction of molecular models by the template joining method. Leach AR, et al. **J Comput Aided Mol Des** 1988 Jul;2(2):107–23

Molecular modeling of protein structure and function: a bioinformatic approach. Liebman MN. **J Comput Aided Mol Des** 1988 Jan;1(4):323–41

Molecular modeling and dynamics of neuropeptide Y. MacKerell AD Jr. **J Comput Aided Mol Des** 1988 Apr; 2(1):55–63

Molecular modelling in design of crop protection chemicals. Odell B. **J Comput Aided Mol Des** 1988 Oct;2(3):191–216 (32 ref.)

Modelling of alpha-lactalbumin from the known structure of hen egg white lysozyme using molecular dynamics. Robson B, et al. **J Comput Aided Mol Des** 1987 Apr; 1(1):17–22

Comparative review of molecular modelling software for personal computers. Sadek M, et al. **J Comput Aided Mol Des** 1988 Jul;2(2):81–90 (27 ref.)

A method for fast energy estimation and visualization of protein-ligand interaction. Tomioka N, et al. **J Comput Aided Mol Des** 1987 Oct;1(3):197–210

Strategic approaches to drug design. I. An integrated software framework for molecular modelling. Vinter JG, et al. **J Comput Aided Mol Des** 1987 Apr;1(1):31–51

Application of semi-empirical and ab initio quantum mechanical calculations. von Ragué Schleyer P. **J Comput Aided Mol Des** 1988 Oct;2(3):223–4

The modelling of nucleophilic and electrophilic additions to organometallic complexes using molecular graphics techniques. Weber J, et al. **J Comput Aided Mol Des** 1988 Oct;2(3):235–53 (43 ref.)

Modeling of beta-adrenoceptors based on molecular electrostatic potential studies of agonists and antagonists. el Tayar N, et al. **J Med Chem** 1988 Nov;31(11):2072–81 (50 ref.)

Periodic characteristics of composite membrane permeability. Lee KB, et al. **J Microencapsul** 1989 Jan–Mar;6(1):59–70

Studies on zinc sulphate microcapsules (2): Application of factorial design. Oner L, et al. **J Microencapsul** 1988 Jul–Sep;5(3):225–9

Solution of the phase problem in the X-ray diffraction method for proteins with the nuclear magnetic resonance solution structure as initial model. Patterson search and refinement for the alpha-amylase inhibitor tendamistat. Braun W, et al. **J Mol Biol** 1989 Apr 20;206(4):669–76

Conformational differences between alpha-cyclodextrin in aqueous solution and in crystalline form. A molecular dynamics study. Koehler JE, et al. **J Mol Biol** 1988 Sep 5;203(1):241–50

Determining stereo-specific 1H nuclear magnetic resonance assignments from distance geometry calculations. Weber PL, et al. **J Mol Biol** 1988 Nov 20;204(2):483–7

On the GABAA receptor: a molecular modeling approach. Aprison MH, et al. **J Neurosci Res** 1989 Jun;23(2):129–35

Molecular modelling of the immunoglobulin-like domains of the neural cell adhesion molecule (NCAM): implications for the positioning of functionally important sugar side chains. Santoni MJ, et al. **J Neurosci Res** 1988 Jul; 20(3):304–10

Four strand recombination models. McGavin S. **J Theor Biol** 1989 Jan 23;136(2):135–50

Prediction of three-dimensional structure of Escherichia coli ribosomal RNA. Nagano K, et al. **J Theor Biol** 1988 Sep 17;134(2):199–256

Molecular modelling of DNA-antitumour drug intercalation interactions: correlation of structural and energetic features with biological properties for a series of phenylquinoline-8-carboxamide compounds. McKenna R, et al. **Mol Pharmacol** 1989 May;35(5):720–8

A peptide model of a protein folding intermediate. Oas TG, et al. **Nature** 1988 Nov 3;336(6194):42–8

Three's company for stereo viewing [letter] Wilson JH. **Nature** 1989 Jun 8;339(6224):433

Modelling basic features of specificity in the binding of a dicationic steroid diamine to double-stranded oligonucleotides. Hui XW, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4177–87

Structure of an antibody-antigen complex: crystal structure of the HyHEL-10 Fab-lysozyme complex. Padlan EA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5938–42

Computer modeling of membrane-anchored cellular and viral proteins: organization and function. Becker Y. **Prog Clin Biol Res** 1989;289:109–29

Voronoi receptor site models. Boulu L, et al. **Prog Clin Biol Res** 1989;289:267–77

Protein structure predictions: new theoretical approaches. Cohen FE, et al. **Prog Clin Biol Res** 1989;289:75–85 (50 ref.)

Comparative modeling of proteins in the complement pathway. Greer J, et al. **Prog Clin Biol Res** 1989;289:385–97

Structural models of alpha helical membrane peptides and the GABA receptor channel. Guy HR, et al. **Prog Clin Biol Res** 1989;289:231–43

A structural and dynamic model for the nicotinic acetylcholine receptor. Kosower EM. **Prog Clin Biol Res** 1989;289:279–92

A theoretical model of metal binding sites in proteins. Krauss M, et al. **Prog Clin Biol Res** 1989;289:95–107

Modelling the structure of highly constrained proteins. Levinthal C. **Prog Clin Biol Res** 1989;289:19–26

Opiate receptor heterogeneity: relative ligand affinities and molecular determinants of high affinity binding at different opiate receptors. Loew G, et al. **Prog Clin Biol Res** 1989; 289:411–32

A molecular theoretical model of recognition and activation at a 5-HT receptor. Mercier GA, et al. **Prog Clin Biol Res** 1989;289:399–410

A computer modeling study of acetylcholine receptor-ligand interactions. Shibata M, et al. **Prog Clin Biol Res** 1989; 289:39–54

Molecular dynamics as a tool for structural and functional predictions: the retinol binding protein and chloroplast C-terminal fragment of the L12 ribosomal protein cases. Tapia O, et al. **Prog Clin Biol Res** 1989;289:55–64

Can a simple function for the dielectric response model electrostatic effects in globular proteins? Fersht AR, et al. **Protein Eng** 1989 May;2(7):527–30

Model building of disulfide bonds in proteins with known three-dimensional structure. Hazes B, et al. **Protein Eng** 1988 Jul;2(2):119–25

Knowledge based modelling of homologous proteins, Part II: Rules for the conformations of substituted sidechains. Sutcliffe MJ, et al. **Protein Eng** 1987 Oct–Nov;1(5):385–92

Knowledge based modelling of homologous proteins, Part I: Three-dimensional frameworks derived from the simultaneous superposition of multiple structures. Sutcliffe MJ, et al. **Protein Eng** 1987 Oct–Nov;1(5):377–84

Pattern matching methods in protein sequence comparison and structure prediction. Taylor WR. **Protein Eng** 1988 Jul;2(2):77–86 (89 ref.)

The role of computer simulation techniques in protein engineering. van Gunsteren WF. **Protein Eng** 1988 Apr; 2(1):5–13 (62 ref.)

X-ray and model-building studies on the specificity of the active site of proteinase K. Betzel C, et al. **Proteins** 1988; 4(3):157–64

Criteria that discriminate between native proteins and incorrectly folded models. Novotný J, et al. **Proteins** 1988; 4(1):19–30

Structural analysis of the 2.8 A model of Xylose isomerase from Actinoplanes missouriensis. Rey F, et al. **Proteins** 1988;4(3):165–72

Comparison of model and nuclear magnetic resonance structures for the human inflammatory protein C5a. Zuiderweg ER, et al. **Proteins** 1988;3(3):139–45

Three-dimensional structure of human serum albumin. Carter DC, et al. **Science** 1989 Jun 9;244(4909):1195–8

Bacterial ice-nucleation proteins. Wolber P, et al. **Trends Biochem Sci** 1989 May;14(5):179–82 (24 ref.)

[Structure of the hydration envelope of the B-form of polydeoxyribonucleotides poly(dA-dC).poly(dG-dT) and poly(dA-dG).poly(dTs-dT) from the data of Monte-Carlo simulation] Eisenhaber F, et al. **Biofizika** 1988 May–Jun; 33(3):422–9 (Eng. Abstr.) **(Rus)**

[Presence of a correlation between the lengths of polypeptide chains of proteins] Demchuk ElA, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1262–4 **(Rus)**

[Modeling of the structure of a complex of ribonuclease from Bacillus intermedius 7P with guanosine-3'-phosphate]

Pavlovskiĭ AG, et al. **Dokl Akad Nauk SSSR** 1988; 301(5):1254–7 (Rus)

[The effect of side radicals on the peptide structure. Surface of potential energy of model alanine and phenylalanine dipeptides] Basharov MA, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1217–25 (Eng. Abstr.) (Rus)

[A model of tissue thromboplastin] Baĭkeev RF, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):3–9 (Eng. Abstr.) (Rus)

STANDARDS

Guidelines for publications in molecular modeling related to medicinal chemistry. Gund P, et al. **J Med Chem** 1988 Dec;31(12):2230–4

MODELS, NEUROLOGICAL

see related
KINDLING (NEUROLOGY)

Transposition of image–defined trajectories into arc–quadrant centered stereotactic systems. Zamorano L, et al. **Acta Neurochir Suppl (Wien)** 1989;46:109–11

A neuroanatomical hypothesis for panic disorder. Gorman JM, et al. **Am J Psychiatry** 1989 Feb;146(2):148–61 (133 ref.)

Analysis of the longitudinal and radial resistivity measurements of the nerve trunk. Altman KW, et al. **Ann Biomed Eng** 1989;17(4):313–24

Electrical stimulation of the motor cortex: theoretical considerations. Grandori F, et al. **Ann Biomed Eng** 1988; 16(6):639–52

Resistances and compliances of a compartmental model of the cerebrovascular system. Sorek S, et al. **Ann Biomed Eng** 1989;17(1):1–12

Solution of the Hodgkin–Huxley and cable equations on an array processor. Stockbridge N. **Ann Biomed Eng** 1989; 17(3):253–68

Learning arm kinematics and dynamics. Atkeson CG. **Annu Rev Neurosci** 1989;12:157–83 (97 ref.)

Emerging principles governing the operation of neural networks. Getting PA. **Annu Rev Neurosci** 1989;12:185–204 (86 ref.)

Integrating with neurons. Robinson DA. **Annu Rev Neurosci** 1989;12:33–45 (23 ref.)

Brain state and plasticity: an integration of the reciprocal interaction model of sleep cycle oscillation with attentional models of hippocampal function. Hobson JA, et al. **Arch Ital Biol** 1988 Oct;126(4):209–24 (60 ref.)

The distributed representation of vestibulo–oculomotor signals by brain–stem neurons. Anastasio TJ, et al. **Biol Cybern** 1989;61(2):79–88

On the ability of neural networks to perform generalization by induction. Anshelevich VV, et al. **Biol Cybern** 1989; 61(2):125–8

The adaptation ability of neuronal models subject to a current step stimulus. Awiszus F. **Biol Cybern** 1988;59(4–5):295–302

On the description of neuronal output properties using spike train data. Awiszus F. **Biol Cybern** 1989;60(5):323–33 (15 ref.)

Continuous functions for the analysis of sensory transduction. Awiszus F. **Biol Cybern** 1989;61(2):153–61

How sensory maps could enhance resolution through ordered arrangements of broadly tuned receivers. Baldi P, et al. **Biol Cybern** 1988;59(4–5):313–8

Horizontal organization of orientation–sensitive cells in primate visual cortex. Baxter WT, et al. **Biol Cybern** 1989; 61(3):171–82

Auto–association by multilayer perceptrons and singular value decomposition. Bourlard H, et al. **Biol Cybern** 1988; 59(4–5):291–4

On the behavior of some associative neural networks. Braham R, et al. **Biol Cybern** 1988;60(2):145–51

Maximum likelihood analysis of spike trains of interacting nerve cells. Brillinger DR. **Biol Cybern** 1988;59(3):189–200

Noise effects in an electronic model of a single neuron. Bulsara AR, et al. **Biol Cybern** 1989;61(3):211–22

Connection between internal representation of rigid transformation and cortical activity paths. Carlton EH. **Biol Cybern** 1988;59(6):419–29

Maximum likelihood identification of neural point process systems. Chornoboy ES, et al. **Biol Cybern** 1988; 59(4–5):265–75

A model of otolith stimulation. Dai MJ, et al. **Biol Cybern** 1989;60(3):185–94

A comparison of results from parameter estimations of impulse responses of the transient visual system. den Brinker AC. **Biol Cybern** 1989;61(2):139–51

Black box analysis of the skin senses as a multiple communication channel. Eijkman EG. **Biol Cybern** 1989; 61(3):163–70

Central adaptation models of the vestibulo–ocular and optokinetic systems. Furman JM, et al. **Biol Cybern** 1989; 61(4):255–64

A unified framework for connectionist systems. Golden RM. **Biol Cybern** 1988;59(2):109–20

A nonlinear systems approach to Fechner's paradox. Gregson RA. **Biol Cybern** 1989;61(2):129–38

Modeling the process of problem–solving by associative networks capable of improving the performance. Hirai Y, et al. **Biol Cybern** 1988;59(6):353–65

Neural–space generalization of a topological transformation. Josin G. **Biol Cybern** 1988;59(4–5):283–90

Spacetime representation of global electrocortical activity. Kamal SA, et al. **Biol Cybern** 1989;60(4):307–9

A modular analog neuron–model for research and teaching. Koch UT, et al. **Biol Cybern** 1988;59(4–5):303–12

A method of neuronal spike train study based on autoregressive analysis. Liu L. **Biol Cybern** 1989; 61(4):289–93

Insight into the transfer function, gain, and oscillation onset for the pupil light reflex using nonlinear delay–differential equations. Longtin A, et al. **Biol Cybern** 1989;61(1):51–8

Factors governing the adaptation of cells in area–17 of the cat visual cortex. Maddess T, et al. **Biol Cybern** 1988; 59(4–5):229–36

A fresh look at the temporal dynamics of binocular rivalry. Mueller TJ, et al. **Biol Cybern** 1989;61(3):223–32

Model of neural visual system with self–organizing cells. Nakano K, et al. **Biol Cybern** 1989;60(3):195–202

Solid perception mechanism by a shading pattern: spatial frequency components in a corrugated wave pattern. Nameda N. **Biol Cybern** 1988;59(2):121–30

Analysis of the activity of single neurons in stochastic settings. Nelken I. **Biol Cybern** 1988;59(3):201–15

Underlying neural computations for some visual phenomena. Oğuztöreli MN, et al. **Biol Cybern** 1988;60(2):89–106

Delayed–exponential approximation of a linear homogeneous diffusion model of neuron. Pacut A, et al. **Biol Cybern** 1988; 59(6):395–404

Symmetry breaking in neural nets. Pessa E. **Biol Cybern** 1988; 59(4–5):277–81

Can quantum–bumps in photoreceptors be reconstructed from noise–data? Schnakenberg J. **Biol Cybern** 1988; 59(2):81–90

Detection of feedback in the central nervous system using system identification techniques. Schnider SM, et al. **Biol Cybern** 1989;60(3):203–12

Neural integration by short term potentiation. Shen L. **Biol Cybern** 1989;61(4):319–25

Extracellular potentials of a single myelinated nerve fiber in an unbounded volume conductor. Stephanova D, et al. **Biol Cybern** 1989;61(3):205–10

Multinomial pulse–number distributions for neural spikes in primary auditory fibers: theory. Teich MC, et al. **Biol Cybern** 1988;59(2):91–102

Perceptual spatial frequency—orientation surface: psychophysics and line element theory. Treutwein B, et al. **Biol Cybern** 1989;60(4):285–95

A nonlinear model for collicular spatial interactions underlying the metrical properties of electrically elicited saccades. Van Opstal AJ, et al. **Biol Cybern** 1989; 60(3):171–83

A matrix analysis for a conjugate vestibulo–ocular reflex. Vilis T, et al. **Biol Cybern** 1988;59(4–5):237–45

Quadrature and the development of orientation selective cortical cells by Hebb rules. Yuille AL, et al. **Biol Cybern** 1989;61(3):183–94

Energy functions for early vision and analog networks. Yuille AL. **Biol Cybern** 1989;61(2):115–23

The silicon synapse or, neural net computing. Frenger P. **Biomed Sci Instrum** 1989;25:267–73 (52 ref.)

Identification of multifiber neural spike trains by interval prediction and morphology. Lu JP, et al. **Biomed Sci Instrum** 1989;25:23–6

Neurosignal analysis during saccadic eye movements. Weigel RB, et al. **Biomed Sci Instrum** 1989;25:135–40

Stochastic variables responsible for observed saccadic variability. Westine DM, et al. **Biomed Sci Instrum** 1989; 25:141–8

A system model for investigating passive electrical properties of neurons. D'Aguanno A, et al. **Biophys J** 1989 Jun; 55(6):1169–82

A nonlinear cascade model for action potential encoding in an insect sensory neuron. French AS, et al. **Biophys J** 1989 Apr;55(4):655–61

Associative neural network model for the generation of temporal patterns. Theory and application to central pattern generators [published erratum appears in Biophys J 1989 Mar;55(3):following 583] Kleinfeld D, et al. **Biophys J** 1988 Dec;54(6):1039–51

Sequential model to describe the nicotinic synaptic current. Parnas H, et al. **Biophys J** 1989 May;55(5):875–84

Effect of Ca2+ diffusion on the time course of neurotransmitter release. Parnas H, et al. **Biophys J** 1989 May;55(5):859–74

Fusion of synaptic vesicle membranes with planar bilayer membranes. Perin MS, et al. **Biophys J** 1989 May; 55(5):973–86

Analytical theory for extracellular electrical stimulation of nerve with focal electrodes. I. Passive unmyelinated axon. Rubinstein JT, et al. **Biophys J** 1988 Dec;54(6):975–81

Principles of odor coding and a neural network for odor discrimination. Schild D. **Biophys J** 1988 Dec; 54(6):1011–11

The brain–machine disanalogy. Conrad M. **Biosystems** 1989; 22(3):197–213 (45 ref.)

Phase conjugation model for information transfer in the nervous system. Kosugi Y, et al. **Biosystems** 1989; 22(3):215–21

Chorea and myoclonus in the monkey induced by gamma–aminobutyric acid antagonism in the lentiform complex. The site of drug action and a hypothesis for the neural mechanisms of chorea. Crossman AR, et al. **Brain** 1988 Oct;111 (Pt 5):1211–33

Generation of reaching movements: plausibility and implications of the equilibrium trajectory hypothesis. Flash T. **Brain Behav Evol** 1989;33(2–3):63–8

A model for collicular efferent mechanisms underlying the generation of saccades. van Opstal AJ, et al. **Brain Behav Evol** 1989;33(2–3):90–4

Laminar cortical interactions during epileptic spikes studied with principal component analysis and physiological modeling. Barth DS, et al. **Brain Res** 1989 Apr 10; 484(1–2):13–35

Metabolic adjustments to dynamic hypoxic hypoxemia in feline brain tissue. Dorson WJ Jr, et al. **Brain Res** 1989 May 1;486(1):108–20

The role of dendritic diameters in maximizing the effectiveness of synaptic inputs. Holmes WR. **Brain Res** 1989 Jan 23;478(1):127–37

Retinohypothalamic pathway: a breach in the law of Newton–Müller–Gudden? Magnin M, et al. **Brain Res** 1989 May 29;488(1–2):390–7

Simultaneous measurement of magnetic and electric responses of in vitro hippocampal slices. Tesche CD, et al. **Brain Res** 1988 Oct 11;462(1):190–3

A test for modulation of synaptic efficacy by induced membrane potential variance. Gardner D. **Brain Res Bull** 1988 Sep;21(3):521–8

Mathematical model of cellular mechanisms contributing to presynaptic facilitation. Gingrich KJ, et al. **Brain Res Bull** 1988 Sep;21(3):513–20

Evidence for chaos in spike trains of neurons that generate rhythmic motor patterns. Mpitsos GJ, et al. **Brain Res Bull** 1988 Sep;21(3):529–38

Connectionist networks learn to transmit chaos. Mpitsos GJ, et al. **Brain Res Bull** 1988 Sep;21(3):539–46

The role of the teacher in learning–based models of parietal area 7a. Zipser D, et al. **Brain Res Bull** 1988 Sep; 21(3):505–12

Analysis of slow–onset neurite formation in NG108–15 cells: implications for a unified model of neurite elongation. Smalheiser NR. **Brain Res Dev Brain Res** 1989 Jan 1; 45(1):49–57

Computational simulation of activity of cortical–like neural systems. Ventriglia F. **Bull Math Biol** 1988;50(2):143–85

Prediction of linear and non–linear responses of MGB neurons by system identification methods. Yeshurun Y, et al. **Bull Math Biol** 1989;51(3):337–46

A model for slow axonal transport and its application to neurofilamentous neuropathies. Blum JJ, et al. **Cell Motil Cytoskeleton** 1989;12(1):53–65

Estimating cardiac transmembrane activation and recovery times from unipolar and bipolar extracellular electrograms: a simulation study. Steinhaus BM. **Circ Res** 1989 Mar; 64(3):449–62

Computer software for development and simulation of compartmental models of neurons. De Schutter E. **Comput Biol Med** 1989;19(2):71–81

Neural modeling in electrical stimulation. Coburn B. **Crit Rev Biomed Eng** 1989;17(2):133–78 (64 ref.)

Extracellular potentials produced by a transition between an inactive and active regions of an excitable fibre. Dimitrov GV, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug; 29(5):265–71

The nature of memory. Alkon DL, et al. **Endeavour** 1989; 13(1):29–33

Protein secondary structure and homology by neural networks. The alpha–helices in rhodopsin. Bohr H, et al. **FEBS Lett** 1988 Dec 5;241(1–2):223–8

Mathematical modelling of intra– and extracellular potentials generated by active structures with short regions of increased diameter. Dimitrova N. **Gen Physiol Biophys** 1988 Aug;7(4):401–12

Model of potassium dynamics in the central nervous system. Odette LL, et al. **GLIA** 1988;1(3):198–210

Modeling of a neural pattern generator with coupled nonlinear oscillators. Bay JS, et al. **IEEE Trans Biomed Eng** 1987 Apr;34(4):297–306 (31 ref.)

Black light: how sensors filter spectral variation of the illuminant [published erratum appears in IEEE Trans Biomed Eng 1989 May;36(5):572] Brainard DH, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):140–9

Entropy reduction and decorrelation in visual coding by oriented neural receptive fields. Daugman JG. **IEEE Trans Biomed Eng** 1989 Jan;36(1):107–14

Mathematical dipoles are adequate to describe realistic generators of human brain activity. de Munck JC, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):960–6

Dynamical neural network organization of the visual pursuit system. Deno DC, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):85–92

Computation of the passive electrical parameters of neurons using a system model. Fu P, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):55–64

A neural network architecture for preattentive vision. Grossberg S, et al. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):65–84

Parametric modeling of somatosensory evoked potentials. Jacobs MH, et al. **IEEE Trans Biomed Eng** 1989 Mar; 36(3):392–403

Paraplegic standing controlled by functional neuromuscular stimulation: Part I—computer model and control–system design. Khang G, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):873–84

Paraplegic standing controlled by functional neuromuscular

stimulation: Part II—Computer simulation studies. Khang G, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):885–94

Dendritic transformations on random synaptic inputs as measured from a neuron's spike train—modeling and simulation. Kohn AF. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):44–54 (42 ref.)

Outputs of paired Gabor filters summed across the background frame of reference predict the direction of movement. Lawton TB. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):130–9 (62 ref.)

Signal transformation and coding in neural systems. Marmarelis VZ. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):15–24 (14 ref.)

Localized texture processing in vision: analysis and synthesis in the Gaborian space. Porat M, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):115–29

Analysis of models for extracellular fiber stimulation. Rattay F. **IEEE Trans Biomed Eng** 1989 Jul;36(7):676–82

The inverse problem in electroneurography—I: Conceptual basis and mathematical formulation. Schoonhoven R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):769–77

The inverse problem in electroneurography—II: Computational aspects and evaluation using simulated data. Stegeman DF, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):778–88

Neuronal activities related to higher brain functions—theoretical and experimental implications. Vaadia E, et al. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):25–35 (33 ref.)

Influences of stimulation conditions on recruitment of myelinated nerve fibers: a model study. Veltink PH, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):917–24

A modeling study of nerve fascicle stimulation. Veltink PH, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):683–92

A hexagonal orthogonal-oriented pyramid as a model of image representation in visual cortex. Watson AB, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):97–106

A totally automated system for the detection and classification of neural spikes. Yang XW, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):806–16

Membrane voltage changes in passive dendritic trees: a tapering equivalent cylinder model. Poznański RR. **IMA J Math Appl Med Biol** 1988;5(2):113–45

A comparison between different models of the relation between recorded intradental nerve impulse activity and reported pain in man. Fors UG, et al. **Int J Biomed Comput** 1989 Mar;24(1):17–28

A program for simulation of nerve equations with branching geometries. Hines M. **Int J Biomed Comput** 1989 Mar; 24(1):55–68

Detection of event related potentials. Carballo-Gonzalez JA, et al. **Int J Neurosci** 1989 Jun;46(3–4):109–22

Collective modes in neural networks. Parikh JC, et al. **Int J Neurosci** 1989 Feb;44(3–4):327–33

Current source density estimation and interpolation based on the spherical harmonic Fourier expansion. Pascual-Marqui RD, et al. **Int J Neurosci** 1988 Dec; 43(3–4):237–49

Disparity acceleration effects in stereoscopy and their importance for theoretical neurology. Shipley T, et al. **Int J Neurosci** 1988 Sep;42(1–2):63–70

Current understanding of the human visual system and its application to perception of radiologic images. Ginsburg AP. **Invest Radiol** 1988 Nov;23(11):875–8 (26 ref.)

The implementation of an autoregressive model with exogenous input in a single sweep visual evoked potential analysis. Liberati D, et al. **J Biomed Eng** 1989 Jul; 11(4):285–92 (27 ref.)

Construction of an evoked potential model expressed by parallel second order components with time lags. Nakamura M, et al. **J Biomed Eng** 1988 Oct;10(5):443–7

A comparison of nerve regeneration across a sural nerve graft and a vascularized pseudosheath. Mackinnon SE, et al. **J Hand Surg [Am]** 1988 Nov;13(6):935–42

The nucleus basalis magnocellularis Meynert (NbmM) complex—a central integrator of coded "limbic signals" linked to neocortical modular operation? A proposed (heuristic) model of function. Wenk H. **J Hirnforsch** 1989; 30(2):127–51 (175 ref.)

Compensation type algorithms for neural nets: stability and convergence. Cromme LJ, et al. **J Math Biol** 1989; 27(3):327–40

Modelling the rehabilitation of brachial plexus injuries: the plexus expert system. Jaspers RB, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):114–8

An estimation of a model explaining the mechanism causing neurotic disorders using a theory of fuzzy sets. Fujikake M, et al. **J Med Syst** 1988 Aug;12(4):211–29

Guillain-Barré syndrome: a model of random conduction block. van der Meché FG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1158–63

Dynamics of neuronal firing correlation: modulation of "effective connectivity". Aertsen AM, et al. **J Neurophysiol** 1989 May;61(5):900–17

Theory of dynamic similarity in neuronal systems. MacGregor RJ, et al. **J Neurophysiol** 1988 Aug; 60(2):751–68

Computational study of an excitable dendritic spine. Segev I, et al. **J Neurophysiol** 1988 Aug;60(2):499–523

Bifurcation analysis of nonlinear retinal horizontal cell models. I. Properties of isolated cells. Winslow RL. **J Neurophysiol** 1989 Sep;62(3):738–49

Functional role of corticoperipheral loop circuits during voluntary movements in the monkey: a preferential bias theory. Favorov O, et al. **J Neurosci** 1988 Sep;8(9):3266–77

How synaptic noise may affect cross-correlations. Midroni G, et al. **J Neurosci Methods** 1989 Feb;27(1):1–12

On the interpretation of voltage noise in small cells. Stephenson RS. **J Neurosci Methods** 1988 Dec;26(2):141–9

Statistical and graphical methods for testing the hypothesis that quanta are made up of subunits. Van der Kloot W. **J Neurosci Methods** 1989 Feb;27(1):81–9

Capacitance compensation and bridge balance adjustment in intracellular recording from dendritic neurons. Wilson CJ, et al. **J Neurosci Methods** 1989 Feb;27(1):51–75

Differentiating astroglia in nervous tissue histogenesis/regeneration: studies in a model system of regenerating peripheral nerve. Kalderon N. **J Neurosci Res** 1988 Oct–Dec;21(2–4):501–12

A normal human brain cell aggregate model for neurobiological studies. Pulliam L, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):521–30

Microvascular compression: an alternative view and hypothesis. Adams CB. **J Neurosurg** 1989 Jan;70(1):1–12 (48 ref.)

A thermodynamic model for force integration and microtubule assembly during axonal elongation. Buxbaum RE, et al. **J Theor Biol** 1988 Oct 7;134(3):379–90

Neurotransmitter release: development of a theory for total release based on kinetics. Lustig C, et al. **J Theor Biol** 1989 Jan 23;136(2):151–70

The recent excitement about neural networks. Crick F. **Nature** 1989 Jan 12;337(6203):129–32

Function of identified interneurons in the leech elucidated using neural networks trained by back-propagation. Lockery SR, et al. **Nature** 1989 Aug 10;340(6233):468–71

Analysis of participation of the hippocampus in organization of behavior in animals. Maiorov VI. **Neurosci Behav Physiol** 1988 Sep–Oct;18(5):412–9

Mathematical modeling of the reactivity of analyzer systems during the course of adaptation. Prisnyakov VF, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):474–80

Overestimation of the electrical length of neuron dendrites and synaptic electrotonic attenuation. Glenn LL. **Neurosci Lett** 1988 Aug 15;91(1):112–9

Do neurons in the motor cortex encode movement direction? An alternative hypothesis. Mussa-Ivaldi FA. **Neurosci Lett** 1988 Aug 15;91(1):106–11

A model for open-close control of cation channels in the plasma membrane of retinal rod outer segments. Ichikawa K. **Neurosci Res** 1989 Jun;6(5):377–96

Patterns of intersection among climbing fiber receptive fields. McCollum G, et al. **Neuroscience** 1988 Oct;27(1):93–105

A theoretical and experimental study of the effects of non-uniform membrane resistance on the shape of single-cell charging curves. Winslow RL, et al. **Neuroscience** 1989;29(3):761–71

Controlled pressure-volume factors in the enlargement of intracranial aneurysms. Austin GM, et al. **Neurosurgery** 1989 May;24(5):722–30

Erroneous measurement of intracranial pressure caused by simultaneous ventricular drainage: a hydrodynamic model study. Wilkinson HA, et al. **Neurosurgery** 1989 Mar; 24(3):348–54

Simulating stimulating bulges: the electrical meddling of neurons. Hentall ID. **P R Health Sci J** 1988 Aug;7(2):144–8

LPROC: a software tool for analysing single-channel data. Xiang Z, et al. **P R Health Sci J** 1988 Aug;7(2):77–8

An astable multivibrator model of binocular rivalry. Lehky SR. **Perception** 1988;17(2):215–28 (40 ref.)

A simple analogue teaching device for demonstrating visual-receptive-field properties. Moulden B, et al. **Perception** 1988;17(6):819–25

The distribution of potassium and leakage channels in rat myelinated axons. Bostock H. **Pflugers Arch** 1989;414 Suppl 1:S139

An hypothesis regarding the antipsychotic effect of neuroleptic drugs. Freed WJ. **Pharmacol Biochem Behav** 1989 Jan;32(1):337–45

A macromolecular approach to excitation phenomena: mechanical and thermal changes in nerve during excitation. Tasaki I. **Physiol Chem Phys Med NMR** 1988;20(4):251–68 (63 ref.)

The retina as a model neural tissue: comparative studies on retinal and brain aminergic mechanisms. Nowak JZ. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):451–82 (153 ref.)

Consequences of stochastic release of neurotransmitters for network computation in the central nervous system. Burnod Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):352–6

Protein secondary structure prediction with a neural network. Holley LH, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):152–6

Noise in neural networks: thresholds, hysteresis, and neuromodulation of signal-to-noise. Keeler JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1712–6

Reentrant signaling among simulated neuronal groups leads to coherency in their oscillatory activity. Sporns O, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7265–9

Functional role of spines in the retinal horizontal cell network. Winslow RL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):387–91

Growth and elimination of nerve terminals at synaptic sites during polyneuronal innervation of muscle cells: a trophic hypothesis. Bennett MR, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):299–320

The assembly of ionic currents in a thalamic neuron. I. The three-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):267–88

The assembly of ionic currents in a thalamic neuron. II. The stability and state diagrams. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):289–312

The assembly of ionic currents in a thalamic neuron. III. The seven-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):313–34

The effect of photoreceptor coupling and synapse nonlinearity on signal:noise ratio in early visual processing. Tessier-Lavigne M, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):171–97

Cellular and molecular models of neuron-matrix adhesion in nerve fiber growth. Carbonetto S, et al. **Prog Brain Res** 1988;78:347–52 (38 ref.)

Morphological features of thin sensory afferent fibers: a new interpretation of 'nociceptor' function. Kruger L. **Prog Brain Res** 1988;74:253–7

The responses of chemoreceptors with medullated and non-medullated fibres to chemical substances and the mechanical hypothesis. Paintal AS. **Prog Brain Res** 1988; 74:161–8

Tensorial aspects of the multidimensional massively parallel sensorimotor function of neuronal networks. Pellionisz A. **Prog Brain Res** 1988;76:341–54 (85 ref.)

Platelets as neuronal models in neuropsychiatric disorders. Rehavi M, et al. **Prog Clin Biol Res** 1988;283:569–83

On the evolution and geometry of the brain in mammals. Hofman MA. **Prog Neurobiol** 1989;32(2):137–58 (125 ref.)

Temperature-sensitive neurons in the hypothalamus: a new hypothesis that they act as thermostats, not as transducers. Kobayashi S. **Prog Neurobiol** 1989;32(2):103–35 (49 ref.)

Social intelligence, a neurological system? Taylor EH, et al. **Psychol Rep** 1989 Apr;64(2):423–44 (119 ref.)

Neural nets. Cowan JD, et al. **Q Rev Biophys** 1988 Aug; 21(3):365–427 (207 ref.)

A concept of neocerebellar function. Elder D. **Riv Biol** 1988; 81(2):231–43 **(Eng, Ita)**

The prefrontosensorial polarity principle. Toward a neurophenomenological theory of intentionality. Laughlin CD. **Riv Biol** 1988;81(2):244–62 **(Eng, Ita)**

Simulation of action potential propagation in terminal arborizations of cultured sensory ganglia. Braschler U, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):13–8

Model of the origin of rhythmic population oscillations in the hippocampal slice. Traub RD, et al. **Science** 1989 Mar 10;243(4896):1319–25 (45 ref.)

Modelling afferent connectivity, postsynaptic plasticity, and signal discrimination. Chover J. **Synapse** 1989;3(2):101–16

Dopamine receptors and the dopamine hypothesis of schizophrenia. Seeman P. **Synapse** 1987;1(2):133–52 (379 ref.)

The observing subject and psychophysiological research: an epistemological discourse. Ulrich G, et al. **Theor Med** 1989 Mar;10(1):59–65

Neural edelmanism. Crick F. **Trends Neurosci** 1989 Jul; 12(7):240–8 (17 ref.)

Olfactory cortex: model circuit for study of associative memory? Haberly LB, et al. **Trends Neurosci** 1989 Jul; 12(7):258–64 (55 ref.)

Pursuit of the mechanisms of kindling. McNamara JO. **Trends Neurosci** 1988 Jan;11(1):33–6 (28 ref.)

The neurotrophic theory and naturally occurring motoneuron death. Oppenheim RW. **Trends Neurosci** 1989 Jul;12(7):252–5 (37 ref.)

A model for spatiotemporal frequency responses in the X cell pathway of the cat's retina. Chen EP, et al. **Vision Res** 1989;29(3):271–91

Binocular fields with lateral-eyed vision. Holden AL, et al. **Vision Res** 1989;29(3):361–7

[The physician and the computer. 29. Learning systems and neuron networks] Kasal P, et al. **Cesk Pediatr** 1989 May; 44(5):291–5 (Eng. Abstr.) **(Cze)**

[The cortical column, a new processing unit for cortex-like networks] Alexandre F, et al. **C R Acad Sci [III]** 1989; 309(7):259–64 (Eng. Abstr.) **(Fre)**

[Thermodynamic modelling of the electrical properties of end-plate channels] Fritzsche B. **Biol Cybern** 1988; 59(2):131–5 (Eng. Abstr.) **(Ger)**

[A neurologic model of early infantile autism] Segawa M. **No To Hattatsu** 1989 Mar;21(2):170–80 (76 ref.) (Eng. Abstr.) **(Jpn)**

[Study of the mechanisms of the development of epileptic activity in neuronal networks using a simulation model] Trąbka W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):421–8 (Eng. Abstr.) **(Pol)**

[Blood–brain barrier in the model of clinical death in rats] Kapuściński A. **Neuropatol Pol** 1988;26(2):175–83 (Eng. Abstr.) **(Pol)**

[Modeling of auditory mechanisms of pitch perception] Livshits MS. **Biofizika** 1988 Jul–Aug;33(4):708–12 (Eng. Abstr.) **(Rus)**

[reflection of stimulus orientation in reactions of visual cortex neurons] Rybak IA, et al. **Biofizika** 1988 Jul–Aug; 33(4):667–71 (Eng. Abstr.) **(Rus)**

[Basic functions of the visual cortex in the cat] Glezer VD, et al. **Dokl Akad Nauk SSSR** 1988;300(3):740–4 **(Rus)**

[Interval-dependent changes in neuron excitation as a basis

of the interval-selective functional relations in the central nervous system] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;302(2):480–3 **(Rus)**

[Modeling of the regulation of the accommodation system of the eye] Ananin VF. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):569–76 **(Rus)**

[An analysis of transmission in the interneuronal synapses using a convolution of binomial distributions] Bart AG, et al. **Neirofiziologiia** 1988;20(4):487–94 (Eng. Abstr.) **(Rus)**

[Steady state-kinetic model of the regulation by autoadrenoreceptors of noradrenaline secretion] Bazian AS, et al. **Neirofiziologiia** 1988;20(3):301–10 (Eng. Abstr.) **(Rus)**

[A mathematical model of the activity of spinal generators of rhythmic movements] Degtiarenko AM. **Neirofiziologiia** 1988;20(5):586–97 (Eng. Abstr.) **(Rus)**

[The synthesis of mathematical models of the branched axons and dendrites] Korogod SM. **Neirofiziologiia** 1988; 20(4):471–9 (Eng. Abstr.) **(Rus)**

[A model of the interaction of chemical synapses] Poliakov AM. **Neirofiziologiia** 1988;20(4):503–9 (Eng. Abstr.) **(Rus)**

[Kindling as a model of the formation of epileptic activity] Kryzhanovskiĭ GN, et al. **Usp Fiziol Nauk** 1988 Oct–Dec; 19(4):12–32 (156 ref.) **(Rus)**

[Isolation of informative factors regarding the development of epilepsy by the method of image recognition] Ritsner MS, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):34–7 (Eng. Abstr.) **(Rus)**

[Substantiation of puncture perfusion of the subarachnoid space in experiments with biomanikins] Starykh VS, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):86–9 (Eng. Abstr.) **(Rus)**

[Accuracy of the spatial localization of the sources of brain bioelectrical activity in a model homogeneous unrestricted environment] Frolov AA, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):897–904 (Eng. Abstr.) **(Rus)**

MODELS, PSYCHOLOGICAL

see related
PROBABILITY LEARNING

Discrete and continuous models of human information processing: theoretical distinctions and empirical results. Miller J. **Acta Psychol (Amst)** 1988 Jun;67(3):191–257 (160 ref.)

Extending relapse prevention models to couples. McCrady BS. **Addict Behav** 1989;14(1):69–74

Responses to collective risk: appraisal and coping among workers exposed to occupational health hazards. Brody JG. **Am J Community Psychol** 1988 Oct;16(5):645–63

Social support in the workplace: tests of six theoretical models. Dignam JT, et al. **Am J Community Psychol** 1988 Oct;16(5):701–24

Documentation of students' clinical reasoning using a computer simulation. Schwartz W. **Am J Dis Child** 1989 May;143(5):575–9

Toward a model of positive health. Seeman J. **Am Psychol** 1989 Aug;44(8):1099–109 (90 ref.)

Self-care agency: conceptualizations and operationalizations. Gast HL, et al. **ANS** 1989 Oct;12(1):26–38 (33 ref.)

Processes of self-care: monitoring sensations and symptoms. Keller ML, et al. **ANS** 1989 Oct;12(1):54–66 (33 ref.)

Conceptualizations of self-care: toward health-oriented models. Woods N. **ANS** 1989 Oct;12(1):1–13 (56 ref.)

Closing the gap between grand theory and mental health practice with families. Part 2: The control-congruence model for mental health nursing of families. Friedemann ML. **Arch Psychiatr Nurs** 1989 Feb;3(1):20–8

Closing the gap between grand theory and mental health practice with families. Part 1: The framework of systemic organization for nursing of families and family members. Friedemann ML. **Arch Psychiatr Nurs** 1989 Feb;3(1):10–9

Steps toward a cognitive-behavioral model of relaxation. Smith JC. **Biofeedback Self Regul** 1988 Dec;13(4):307–29 (69 ref.)

Parameter optimization model of learning in stepping motion. Flashner H, et al. **Biol Cybern** 1989;60(4):277–84

Visual contrast detection by a single channel versus probability summation among channels. Mortensen U. **Biol Cybern** 1988;59(2):137–47

Perceptual spatial frequency—orientation surface: psychophysics and line element theory. Treutwein B, et al. **Biol Cybern** 1989;60(4):285–95

Models for the duo-trio and triangular methods. Mullen K, et al. **Biometrics** 1988 Dec;44(4):1169–75

Principles of odor coding and a neural network for odor discrimination. Schild D. **Biophys J** 1988 Dec; 54(6):1011–11

Issues of representation and limited capacity in the visuospatial sketchpad. Frick RW. **Br J Psychol** 1988 Aug; 79 (Pt 3):289–308 (50 ref.)

An informational approach to reaction times. Norwich KH, et al. **Bull Math Biol** 1989;51(3):347–58

Triangles of abuse: a model of maltreatment. Ney PG. **Child Abuse Negl** 1988;12(3):363–73 (63 ref.)

Home environment and school performance: a ten-year follow-up and examination of three models of environmental action. Bradley RH, et al. **Child Dev** 1988 Aug;59(4):852–67

Reply to Stigler, Nusbaum, and Chalip. Kail R. **Child Dev** 1988 Aug;59(4):1154–7

Family care of impaired elderly: a role theory approach. Knipscheer K, et al. **Compr Gerontol [B]** 1987 Aug; 1(2):72–9

The health belief model and attendance for prenatal care. Zweig S, et al. **Fam Pract Res J** 1988 Fall–Winter; 8(1):32–41

Sleep staging automaton based on the theory of evidence. Principe JC, et al. **IEEE Trans Biomed Eng** 1989 May; 36(5):503–9

The political implications of psychosocial work redesign: a model of the psychosocial class structure. Karasek R. **Int J Health Serv** 1989;19(3):481–508 (64 ref.)

A test of the multiple connections model of reading acquisition. Berninger VW, et al. **Int J Neurosci** 1988 Oct; 42(3–4):283–95 (70 ref.)

A model for nursing using anthropological literature. Littlewood J. **Int J Nurs Stud** 1989;26(3):221–9 (30 ref.)

Pervasive assumptions, the points of view, and models of metapsychology: review and revision. Frank A. **Int J Psychoanal** 1988;69 (Pt 4):483–94 (24 ref.)

The theoretical basis for nursing at the community level: a comparison of three models. Chalmers K, et al. **J Adv Nurs** 1989 Jul;14(7):569–74

The selection by ward managers of an appropriate nursing model for long-stay psychiatric patient care. McKenna HP. **J Adv Nurs** 1989 Sep;14(9):762–75

Modelling and role-modelling: integrating nursing theory into practice. Walsh KK, et al. **J Adv Nurs** 1989 Sep; 14(9):755–61

Transactional risk model for short and intermediate term psychiatric inpatient treatment of children. Woolston JL. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):38–41

Kernberg and Kohut: a test of competing psychoanalytic models of narcissism. Glassman M. **J Am Psychoanal Assoc** 1988;36(3):597–625

A causal model of the relationship among accidents, biodata, personality, and cognitive factors. Hansen CP. **J Appl Psychol** 1989 Feb;74(1):81–90

A comparison of the Fishbein and Ajzen and the Triandis attitudinal models for the prediction of exercise intention and behavior. Valois P, et al. **J Behav Med** 1988 Oct; 11(5):459–72

The consequences of heterogamy and homogamy on the similarity between spouses. Tomlinson I. **J Biosoc Sci** 1989 Apr;21(2):193–206

Additivity, subadditivity, and the use of visual information: a reply to Massaro (1988). Cutting JE, et al. **J Exp Psychol [Gen]** 1988 Dec;117(4):422–4

Ambiguity in perception and experimentation. Massaro DW. **J Exp Psychol [Gen]** 1988 Dec;117(4):417–21

Comparison requirements and attention in identical-nonidentical stimulus discriminations. Farell B. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):707–15

Hidden figures are ever present. Mens LH, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):561–71

Visual selection from multielement displays: measuring and modeling effects of exposure duration. Shibuya H, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):591–600

Relation between velocity and curvature in movement: equivalence and divergence between a power law and a minimum-jerk model. Wann J, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):622–37

How many memory systems? Evidence from aging. Mitchell DB. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):31–49

A componential model for mental addition. Widaman KF, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep; 15(5):898–919

Is terminal drop pervasive or specific? White N, et al. **J Gerontol** 1988 Nov;43(6):P141–4

Student models in machine-mediated learning. Odor JP. **J Ment Defic Res** 1988 Aug;32 (Pt 4):247–56 (6 ref.)

The family resemblance hypothesis applied to psychiatric classification. Blashfield RK, et al. **J Nerv Ment Dis** 1989 Aug;177(8):492–7

A hierarchical model of opiate addiction. Failures of self-regulation as a central aspect of substance abuse. Wilson A, et al. **J Nerv Ment Dis** 1989 Jul;177(7):390–9

Structure from two orthographic views of rigid motion. Bennett BM, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1052–69

Global spatiochromatic mechanism accounting for luminance variations in contrast sensitivity functions. Rohaly AM, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):312–7

Spiritual or pastoral care: two models. Wald FS. **J Palliat Care** 1988 May;4(1–2):94–7

Five robust trait dimensions: development, stability, and utility. Digman JM. **J Pers** 1989 Jun;57(2):195–214 (55 ref.)

Conceptual issues in studying continuity and discontinuity in personality development across life. Lerner RM, et al. **J Pers** 1989 Jun;57(2):343–73

Life history prototypes in the study of human individuality. Stokes GS, et al. **J Pers** 1989 Jun;57(2):509–45

Positive mood and helping behavior: a test of six hypotheses. Carlson M, et al. **J Pers Soc Psychol** 1988 Aug;55(2):211–29 (62 ref.)

Arousal, affect, and attention as components of temperament. Derryberry D, et al. **J Pers Soc Psychol** 1988 Dec; 55(6):958–66

Perceived distributions of the characteristics of in-group and out-group members: empirical evidence and a computer simulation. Linville PW, et al. **J Pers Soc Psychol** 1989 Aug;57(2):165–88

Causal models of adolescent substance use: an examination of gender differences using distribution-free estimators. Windle M, et al. **J Pers Soc Psychol** 1989 Jan;56(1):132–42

Personality and conditioning: a test of four models. Zinbarg R, et al. **J Pers Soc Psychol** 1989 Aug;57(2):301–14

Actions of buspirone in a putative model of anxiety in the mouse. Costall B, et al. **J Pharm Pharmacol** 1988 Jul; 40(7):494–500

A clinical teaching project: examination of a clinical teaching model. Infante MS, et al. **J Prof Nurs** 1989 May–Jun; 5(3):132–9

Time phases and the individual psychological crisis in sports competition: theory and research findings. Bar-Eli M, et al. **J Sports Sci** 1988 Summer;6(2):141–9

Identifying developmental paradigms leading to alcoholism. McCord J. **J Stud Alcohol** 1988 Jul;49(4):357–62

Health belief model intervention to increase compliance with emergency department patients. Jones SL, et al. **Med Care** 1988 Dec;26(12):1172–84

A unified theory of mental illness. Anderson B. **Med Hypotheses** 1989 Jul;29(3):173–5

The mechanism of the psychophysiological effects of placebo. Kojo I. **Med Hypotheses** 1988 Dec;27(4):261–4

The importance of the concept of vigilance for psychophysiological research. Ulrich G. **Med Hypotheses** 1988 Nov;27(3):227–9

Treatment validity: an approach to evaluating the quality of assessment. Hayes SC. **NIDA Res Monogr** 1988; 77:113–27

A test of two explanatory models of women's responses to battering. Campbell JC. **Nurs Res** 1989 Jan–Feb;38(1):18–24

A test of the health promotion model with blue collar workers. Weitzel MH. **Nurs Res** 1989 Mar–Apr; 38(2):99–104

Conflict resolution: applying the political model to the RCT proposal. Goodyear R, et al. **Nurse Pract** 1989 Sep;14(9):50, 53–4, 56

Temporal summation and perimetry. Krakau CE. **Ophthalmic Res** 1989;21(1):49–55

Female adolescents' compliance with contraceptive regimens. Jay MS, et al. **Pediatr Clin North Am** 1989 Jun;36(3):731–46 (77 ref.)

The evolution of aggression: can selection generate variability? Maynard Smith J, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):557–70

Risk behavior-based model of the cubic growth of acquired immunodeficiency syndrome in the United States. Colgate SA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4793–7

Attentional problems in dysfunctional mother-child interactions: an interbehavioral model. Wahler RG, et al. **Psychol Bull** 1989 Jan;105(1):116–30 (110 ref.)

Models of memory: information processing. Eysenck MW. **Psychopharmacol Ser** 1988;6:3–11 (15 ref.)

Markers of aging. Modeling the clocks that time us. Featherman DL, et al. **Res Aging** 1986 Sep;8(3):339–65 (43 ref.)

Nurses' job satisfaction: a longitudinal analysis. Blegen MA, et al. **Res Nurs Health** 1987 Aug;10(4):227–37

An explanatory model of recovery from disaster loss. Murphy SA. **Res Nurs Health** 1989 Apr;12(2):67–76

The prefrontosensorial polarity principle. Toward a neurophenomenological theory of intentionality. Laughlin CD. **Riv Biol** 1988;81(2):244–62 **(Eng, Ita)**

Parallel integration of vision modules. Poggio T, et al. **Science** 1988 Oct 21;242(4877):436–40

A graph-dynamic model of the power law of practice and the problem-solving fan-effect. Shrager J, et al. **Science** 1988 Oct 21;242(4877):414–6

Family assessment. Fleck S, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):137–44

A prospective investigation of suicidal ideation in college students: a test of a model. Bonner RL, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):245–58

The observing subject and psychophysiological research: an epistemological discourse. Ulrich G, et al. **Theor Med** 1989 Mar;10(1):59–65

Biological information processing requires quantum logic. Oi T. **Z Naturforsch [C]** 1988 Sep–Oct;43(9–10):777–81

[The Crick-Mitchison theory of sleep and psychoanalysis] Lehtonen J. **Duodecim** 1988;104(7):510–6 (22 ref.) **(Fin)**

[Physiopathological model of sexual dysfunctions for the use of somatists] Buvat J. **Acta Urol Belg** 1989;57(1):155–62 (Eng. Abstr.) **(Fre)**

[Analysis and cognitive modelling of the analogical process in psychosis] Ohayon M. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):779–814 (Eng. Abstr.) **(Fre)**

[Signal-flow diagrams as aids to describe hypnotic trance states: an impulse for our statement] Oppelt W. **Biol Cybern** 1989;60(4):247–60 (Eng. Abstr.) **(Ger)**

[Establishing the theoretical and experimental principles of a simple medical neurolinguistic test] Pasternak R, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):756–9 (Eng. Abstr.) **(Pol)**

[Brazil: the physician-patient relation and its social determinants] Nunes ED. **Educ Med Salud** 1988; 22(2):153–68 (Eng. Abstr.) **(Por)**

[Models of personality; methodologic implications] Golu M. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):663–71 (11 ref.) (Eng. Abstr.) **(Rum)**

[Understanding of psychological comfort in the interpretation of driving behavioral forces] Ovsianikov NG, et al. **Dokl Akad Nauk SSSR** 1989;306(4):1015–8 **(Rus)**

[Problems of the effect of individual protective factors on the functional state and work capacity of an operator] Kamyshenko ID, et al. **Gig Sanit** 1988 Jun;(6):26–9 (Rus)

[Psychopathologic complex symptoms in disorders of cognitive activity in mental diseases: factor structure and diagnostic informative value] Kudriavtsev IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):86–92 (Eng. Abstr.) (Rus)

[Genetico-mathematical analysis of manifested schizophrenia with a permanent and attack-like course] Ritsner MS. **Zh Nevropatol Psikhiatr** 1989;89(5):91–5 (Eng. Abstr.) (Rus)

[Psychopathology of the schizophrenic defect (creation of an integrated model of negative changes)] Smulevich AB, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):100–5 (Eng. Abstr.) (Rus)

MODELS, STATISTICAL

see related
META-ANALYSIS

Macroscopic models for traffic and traffic safety. Oppe S. **Accid Anal Prev** 1989 Jun;21(3):225–32

Time series analysis in endocrinology. Matthews DR. **Acta Paediatr Scand Suppl** 1988;347:55–62

Contemporary tools for the analysis of episodic growth hormone secretion and clearance in vivo. Veldhuis JD, et al. **Acta Paediatr Scand Suppl** 1988;347:63–82 (24 ref.)

Parameter estimation in the logistic response model. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:301–15

Empirical Bayesian estimation in the logistic model. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:317–27

Fisher information in the logistic model. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1987;117:329–36

Replacement of missing values in time series data by Kalman smoothed estimators using state-space modeling. Deluyker HA, et al. **Acta Vet Scand Suppl** 1988;84:486–9

The analysis of variance adjustment to chi-square tests when there is litter or herd correlation in surveys or field trials. Donald A, et al. **Acta Vet Scand Suppl** 1988;84:490–2

Design of trials to study variability in response: statistical aspects. Whiting B, et al. **Agents Actions Suppl** 1988; 24:107–20

Statistical methods for the analysis of HIV-1 core polypeptide antigen data in clinical studies. Makuch RW, et al. **AIDS Res Hum Retroviruses** 1988 Aug;4(4):305–16

Estimating intervention effects in longitudinal studies. Dwyer JH, et al. **Am J Epidemiol** 1989 Oct;130(4):781–95

Re: "Confounding Confounding". Greenland S, et al. **Am J Epidemiol** 1989 May;129(5):1086–91

Use of modeling in infectious disease epidemiology. King ME, et al. **Am J Epidemiol** 1988 Nov;128(5):949–61 (90 ref.)

Re: "Use of Modeling in Infectious Disease Epidemiology" [letter] Longini IM Jr, et al. **Am J Epidemiol** 1989 Sep; 130(3):619–21

Genetic and environmental influences on level of habitual physical activity and exercise participation. Pérusse L, et al. **Am J Epidemiol** 1989 May;129(5):1012–22

Estimating and correcting for confounder misclassification. Savitz DA, et al. **Am J Epidemiol** 1989 May;129(5):1062–71

Reduced fecundability in women with prenatal exposure to cigarette smoking. Weinberg CR, et al. **Am J Epidemiol** 1989 May;129(5):1072–8

Do women with childhood exposure to cigarette smoking have increased fecundability? Wilcox AJ, et al. **Am J Epidemiol** 1989 May;129(5):1079–83

Analyzing the relationship between age at onset and risk to relatives. Neale MC, et al. **Am J Hum Genet** 1989 Aug; 45(2):226–39

The use of geometric and arithmetic mean exposures in occupational epidemiology. Seixas NS, et al. **Am J Ind Med** 1988;14(4):465–77

Evaluating the uncertainty of risk prediction in genetic counseling: a Bayesian approach. Rogatko A. **Am J Med Genet** 1988 Nov;31(3):513–9

The ascertainment sampling problem and estimation of genetic parameters when parental haplotypes are known. Shute NC. **Am J Med Genet** 1988 Oct;31(2):281–90

VATER and other associations: historical perspectives and modern interpretations. Lubinsky M. **Am J Med Genet Suppl** 1986;2:9–16 (51 ref.)

Prognosis with mechanical ventilation: the influence of disease, severity of disease, age, and chronic health status on survival from an acute illness. Knaus WA. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S8–13

Phylogenies from molecular sequences: inference and reliability. Felsenstein J. **Annu Rev Genet** 1988;22:521–65 (144 ref.)

Cumulative damage models in cancer epidemiology: application to human incidence and mortality data. Becker N. **Arch Environ Health** 1989 Jul–Aug;44(4):260–6

Probability of pathology. Strike PW. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A50–4

A tumour–marker combination versus second-look surgery in ovarian cancer. II. Mathematical model. Stettner H. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):209–12

Doubts on the adequacy of the principal component varimax analysis for the identification of event-related brain potential components: a commentary on Glaser and Ruchkin, and Donchin and Heffley. Collet W. **Biol Psychol** 1989 Apr;28(2):163–72

On why Collet's doubts regarding the PCA are misplaced. Donchin E. **Biol Psychol** 1989 Apr;28(2):181–6

Doubting these doubts—a reply to Collet. Möcks J. **Biol Psychol** 1989 Apr;28(2):173–80

Simple parametric and nonparametric models for excess and relative mortality. Andersen PK, et al. **Biometrics** 1989 Jun; 45(2):523–35

2 x 2 kappa coefficients: measures of agreement or association. Bloch DA, et al. **Biometrics** 1989 Mar; 45(1):269–87

Censoring in an epidemic with an application to hemophilia-associated AIDS. Brookmeyer R, et al. **Biometrics** 1989 Mar;45(1):325–35

Confidence intervals for a normal mean following a group sequential test. Chang MN. **Biometrics** 1989 Mar; 45(1):247–54

Assessing the significance of the correlation between two spatial processes. Clifford P, et al. **Biometrics** 1989 Mar; 45(1):123–34

Estimating the power of the two-sample Wilcoxon test for location shift. Collings BJ, et al. **Biometrics** 1988 Sep; 44(3):847–60

Using latent class models to characterize and assess relative error in discrete measurements. Espeland MA, et al. **Biometrics** 1989 Jun;45(2):587–99

The use of a mixture model in the analysis of count data. Farewell VT, et al. **Biometrics** 1988 Dec;44(4):1191–4

Analysis of multiple tumor data from a rodent carcinogenicity experiment. Finkelstein DM, et al. **Biometrics** 1989 Mar;45(1):219–30

Generalized Mantel–Haenszel estimators for K 2 x J tables. Greenland S. **Biometrics** 1989 Mar;45(1):183–91

Exact inference for matched case–control studies. Hirji KF, et al. **Biometrics** 1988 Sep;44(3):803–14

Modelling paired survival data with covariates. Huster WJ, et al. **Biometrics** 1989 Mar;45(1):145–56

A lifetime asymptotic growth curve for human height. Jolicoeur P, et al. **Biometrics** 1988 Dec;44(4):995–1003

A general class of nonparametric tests for survival analysis. Jones MP, et al. **Biometrics** 1989 Mar;45(1):157–70

Hyperparameter estimation using stochastic approximation with application to population pharmacokinetics. Mentré F, et al. **Biometrics** 1988 Sep;44(3):673–83

Models for the duo–trio and triangular methods. Mullen K, et al. **Biometrics** 1988 Dec;44(4):1169–75

The prevalence of malaria in Garki, Nigeria: double sampling with a fallible expert. Nedelman J. **Biometrics** 1988 Sep; 44(3):635–55

Score tests for homogeneity of regression effect in the proportional hazards model. O'Quigley J, et al. **Biometrics** 1989 Mar;45(1):135–44

On testing departure from the binomial and multinomial assumptions. Paul SR, et al. **Biometrics** 1989 Mar; 45(1):231–6

Correlated binary regression with covariates specific to each binary observation. Prentice RL. **Biometrics** 1988 Dec; 44(4):1033–48

Maximum likelihood estimation for incomplete repeated-measures experiments under an ARMA covariance structure. Rochon J, et al. **Biometrics** 1989 Mar; 45(1):207–18

The application of the GSK method to the determination of minimum sample sizes. Rochon J. **Biometrics** 1989 Mar; 45(1):193–205

Dependent competing risks and the latent-failure model [letter] Slud EV, et al. **Biometrics** 1988 Dec;44(4):1203–5

Estimation of error rates in discriminant analysis with selection of variables. Snapinn SM, et al. **Biometrics** 1989 Mar;45(1):289–99

Growth curve models of repeated binary response. Stanek EJ 3d, et al. **Biometrics** 1988 Dec;44(4):973–83

Use and abuse of variance models in regression. van Houwelingen JC. **Biometrics** 1988 Dec;44(4):1073–81 (15 ref.)

Models for longitudinal data: a generalized estimating equation approach [published erratum appears in Biometrics 1989 Mar;45(1):347] Zeger SL, et al. **Biometrics** 1988 Dec;44(4):1049–60

Markov regression models for time series: a quasi-likelihood approach. Zeger SL, et al. **Biometrics** 1988 Dec; 44(4):1019–31

Nonlinear least-squares regression analysis by a simplex method using differential equations containing Michaelis–Menten type rate constants. Murata K, et al. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):25–34

Estimation problem due to multiple solutions in pharmacokinetic curve fitting to two-compartment model and its avoidance. Murata K, et al. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):15–24

Prognosis of aggressive lymphomas: a study of five prognostic models with patients included in the LNH-84 regimen. Coiffier B, et al. **Blood** 1989 Aug 1;74(2):558–64

How much variation in referral rates among general practitioners is due to chance? Moore AT, et al. **BMJ** 1989 Feb 25;298(6672):500–2

A model for estimating the potential costs and savings of osteoporosis prevention strategies. Ross PD, et al. **Bone** 1988;9(6):337–47

Probabilistic models of genome shuffling. Sankoff D, et al. **Bull Math Biol** 1989;51(1):117–24

AIDS testing: mathematical models [letter] Farrington CP. **Can Med Assoc J** 1989 Jan 15;140(2):111–2

Dietary fat and breast cancer: a quantitative assessment of the epidemiological literature and a discussion of methodological issues. Prentice RL, et al. **Cancer Res** 1989 Jun 15;49(12):3147–56 (43 ref.)

Relative impact of targeted versus populationwide cholesterol interventions on the incidence of coronary heart disease. Projections of the Coronary Heart Disease Policy Model. Goldman L, et al. **Circulation** 1989 Aug; 80(2):254–60

Effect of source of population data on phenytoin dosage predictions in black patients. Miller R, et al. **Clin Pharm** 1989 Jan;8(1):56–9

Exploring contingency tables with correspondence analysis. Moser EB. **Comput Appl Biosci** 1989 Jul;5(3):183–9

A comparison of the Quade and Friedman tests to the unbalanced two-way analysis of variance with biomedical data. Campbell RA. **Comput Biol Med** 1988;18(6):441–7

Statistical evaluation of agreement between two methods for measuring a quantitative variable. Lee J, et al. **Comput Biol Med** 1989;19(1):61–70

Computer prediction of congestion in the obstetric ward. Kubo T, et al. **Comput Biomed Res** 1989 Oct;22(5):454–60

Logistic regression model for the assessment of microalbuminuria and microproteinuria in insulin-dependent diabetic patients at risk. Pun KK, et al. **Comput Methods Programs Biomed** 1989 Jul;29(3):197–203

A one-sided interim analysis with binary outcomes. Bristol DR. **Controlled Clin Trials** 1988 Sep;9(3):206–11

The statistical analysis of graft patency data in a clinical trial of antiplatelet agents following coronary artery bypass grafting. Henderson WG, et al. **Controlled Clin Trials** 1988 Sep;9(3):189–205 (16 ref.)

Early termination of a phase II clinical trial. Hilsenbeck SG. **Controlled Clin Trials** 1988 Sep;9(3):177–88

Statistical methods for measuring interactions between protectors and sensitizers for freeze-thaw survival data. Chamberlin SR, et al. **Cryobiology** 1989 Aug;26(4):369–77

Multinomial and conditional logit discrete-choice models in demography. Hoffman SD, et al. **Demography** 1988 Aug; 25(3):415–27

A state-based regression model for estimating substate life expectancy. Swanson DA. **Demography** 1989 Feb; 26(1):161–70

Measuring progress on IEPs: a comparison of graphing approaches. Marston D. **Except Child** 1988 Sep;55(1):38–44

Genetic divergence in mandible form in relation to molecular divergence in inbred mouse strains. Atchley WR, et al. **Genetics** 1988 Sep;120(1):239–53

Gene conversion, linkage, and the evolution of multigene families. Nagylaki T. **Genetics** 1988 Sep;120(1):291–301

On the theory of partially inbreeding finite populations. II. Partial sib mating. Pollak E. **Genetics** 1988 Sep; 120(1):303–11

The probabilities of similarities in DNA sequence comparisons. Brooks LD, et al. **Genomics** 1988 Oct; 3(3):207–16

Hypotheses for testing deviations from random integration: evidence for nonrandom retroviral integration. Wilson AF, et al. **Genomics** 1988 Aug;3(2):137–42

Predicting cost for new HMO subscribers. Volicer BJ, et al. **Health Serv Res** 1988 Dec;23(5):669–82

On the utility of statistical modelling in reproductive studies. Walters DE. **Hum Reprod** 1989 Apr;4(3):341–5

Confidence intervals for the signal-to-noise ratio when a signal embedded in noise is observed over repeated trials. Raz J, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):646–9

Variable infectiousness in HIV transmission models. Blythe SP, et al. **IMA J Math Appl Med Biol** 1988;5(3):181–200

Heterogeneous sexual activity models of HIV transmission in male homosexual populations. Blythe SP, et al. **IMA J Math Appl Med Biol** 1988;5(4):237–60

Self-nonself discrimination due to immunological nonlinearities: the analysis of a series of models by numerical methods. De Boer RJ, et al. **IMA J Math Appl Med Biol** 1987;4(1):1–32

A genetic model describing the evolution of levamisole resistance in Trichostrongylus colubriformis, a nematode parasite of sheep. Dobson RJ, et al. **IMA J Math Appl Med Biol** 1987;4(4):279–93

Distribution of different fibre types in human skeletal muscles: a method for the detection of neurogenic disorders. Downham DY, et al. **IMA J Math Appl Med Biol** 1987; 4(1):81–91

Threshold and stability results for an epidemic model with an age-structured meeting rate. Greenhalgh D. **IMA J Math Appl Med Biol** 1988;5(2):81–100 (38 ref.)

Membrane voltage changes in passive dendritic trees: a tapering equivalent cylinder model. Poznański RR. **IMA J Math Appl Med Biol** 1988;5(2):113–45

Two-locus and three-locus gene identity by descent in pedigrees. Thompson EA. **IMA J Math Appl Med Biol** 1988;5(4):261–79

Some probability models for diagnosing neurogenic disorders. Wilson BC, et al. **IMA J Math Appl Med Biol** 1988;5(3):167–79

Order of response surfaces for representation of a Monte Carlo epidemic model. Seaholm SK, et al. **Int J Biomed Comput** 1988 Oct;23(1–2):113–23

Latin hypercube sampling and the sensitivity analysis of a

Monte Carlo epidemic model. Seaholm SK, et al. **Int J Biomed Comput** 1988 Oct;23(1-2):97-112

Estimating the potential disease rate reduction under varying conditions of combined effects. Checkoway H, et al. **Int J Epidemiol** 1988 Sep;17(3):666-72

Multistage modelling of lung cancer mortality in asbestos textile workers. Pearce N. **Int J Epidemiol** 1988 Dec; 17(4):747-52

An assessment of the use of Bayes' Theorem for forecasting in public health: the case of epidemic meningitis in China. Zeng G, et al. **Int J Epidemiol** 1988 Sep;17(3):673-9

Detection of event related potentials. Carballo-Gonzalez JA, et al. **Int J Neurosci** 1989 Jun;46(3-4):109-22

The role of mathematical models in the study of HIV transmission and the epidemiology of AIDS. Anderson RM. **J Acquir Immune Defic Syndr** 1988;1(3):241-56

Future imperfect: the limitations of clinical prediction models and the limits of clinical prediction. Diamond GA. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):12A-22A

Quantifying uncertainty in medical decisions. Dittus RS, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):23A-28A

Statistical approach for the estimation of daily physical activity levels using the probability density function of heart rate. Mita K, et al. **J Biomed Eng** 1989 Jul;11(4):315-9

Modeling percentage change: a potential linear mirage. Suissa S, et al. **J Clin Epidemiol** 1989;42(9):843-8

Mathematical model for addiction: application to multiple risk factor intervention trial data for smoking. Fan DP, et al. **J Consult Clin Psychol** 1989 Jun;57(3):456-9

Deriving relative risks from aggregate data. 1. Theory. Norström T. **J Epidemiol Community Health** 1988 Dec; 42(4):333-5

Selected topics in statistical analysis of clinical research. Baer L, et al. **J Geriatr Psychiatry Neurol** 1989 Jan-Mar; 2(1):34-40 (18 ref.)

Statistical analysis of circadian blood pressure recordings in controlled clinical trials. Streitberg B, et al. **J Hypertens Suppl** 1989 May;7(3):S11-7

On the role of long incubation periods in the dynamics of acquired immunodeficiency syndrome (AIDS). Part 1: Single population models. Castillo-Chavez C, et al. **J Math Biol** 1989;27(4):373-98

A numerical method for calculating moments of coalescent times in finite populations with selection. Darden T, et al. **J Math Biol** 1989;27(3):355-68

A quantitative genetic model for growth, shape, reaction norms, and other infinite-dimensional characters. Kirkpatrick M, et al. **J Math Biol** 1989;27(4):429-50

A renewal equation with a birth-death process as a model for parasitic infections. Kretzschmar M. **J Math Biol** 1989; 27(2):191-221

On the potential for spurious associations in epidemiologic studies [letter] Loomis DP, et al. **J Occup Med** 1988 Oct; 30(10):834-5

On the measurement of stability in over-time data. Kenny DA, et al. **J Pers** 1989 Jun;57(2):445-81

Commentary on "extended least squares (ELS) for pharmacokinetic models" [letter] Sheiner LB, et al. **J Pharm Sci** 1988 Aug;77(8):731-2

Testing for the equality of area under the curves when using destructive measurement techniques. Bailer AJ. **J Pharmacokinet Biopharm** 1988 Jun;16(3):303-9

Nonparametric maximum likelihood estimation for population pharmacokinetics, with application to cyclosporine. Mallet A, et al. **J Pharmacokinet Biopharm** 1988 Jun;16(3):311-27

Evaluation of stopping rules for audiological ascending test procedures using computer simulations. Marshall L, et al. **J Speech Hear Res** 1989 Jun;32(2):265-73

Modeling the diagnosis of stroke at two hospitals. Melski JW, et al. **MD Comput** 1989 May-Jun;6(3):157-63

Exponential equation to study the fast latency variations of evoked potential waves obtained from young children. Affinito M, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):561-4

Rapid estimation of hospital charges in patients with leukemia. Validation of a multivariate prediction model. Welch HG, et al. **Med Care** 1989 Sep;27(9):900-4

Objective criteria for in-vitro responses in human tumor colony-forming assays. Koziol JA, et al. **Med Decis Making** 1988 Oct-Dec;8(4):304-9

Relation of observer agreement to accuracy according to a two-receiver signal detection model of diagnosis. Quinn MF. **Med Decis Making** 1989 Jul-Sep;9(3):196-206

A strategy for analysing multiple risk factors with application to cervical pain syndrome. Commenges D, et al. **Methods Inf Med** 1989 Jan;28(1):14-9

The kappa coefficient and the prevalence of a diagnosis. Gjørup T. **Methods Inf Med** 1988 Oct;27(4):184-6

Some methodological issues in statistical estimation of air pollution and health. Gottinger HW. **Methods Inf Med** 1989 Apr;28(2):104-8

A statistical model for appraisal of discrimination performance in closed set tests. Köppen L, et al. **Methods Inf Med** 1988 Jul;27(3):133-4

Measuring the certainty of a decision rule with applications in electrocardiography. Lesaffre E, et al. **Methods Inf Med** 1988 Oct;27(4):155-60

Causality and validation of mathematical models. Pilz L, et al. **Methods Inf Med** 1988 Oct;27(4):153-4

The relationship between the MAXABS and the RMS error. van Oosterom A, et al. **Methods Inf Med** 1988 Oct; 27(4):161-6

Statistical analysis of the micronucleus test--a modelling approach. Brodin U. **Mutat Res** 1989 Apr;211(2):259-64

Treatment validity: an approach to evaluating the quality of assessment. Hayes SC. **NIDA Res Monogr** 1988; 77:113-27

Prediction of outcome shortly after delivery for the very low birthweight (less than or equal to 1500 g) infant. Patterson CC, et al. **Paediatr Perinat Epidemiol** 1988 Jul; 2(3):221-8

Malignant melanoma. A multivariate analysis of prognostic factors. Vollmer RT. **Pathol Annu** 1989;24 Pt 1:383-407 (70 ref.)

Reconsideration of measurement of error in human motor learning. Crabtree DA, et al. **Percept Mot Skills** 1988 Oct; 67(2):568-70

Graphing correlation coefficients: II. An alternative procedure. Silverstein AB. **Percept Mot Skills** 1988 Dec; 67(3):861-2

Gastrointestinal nematode parasites and the stability and productivity of intensive ruminant grazing systems. Grenfell BT. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):541-63 (54 ref.)

Admixture as a tool for finding linked genes and detecting that difference from allelic association between loci. Chakraborty R, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9119-23

Risk behavior-based model of the cubic growth of acquired immunodeficiency syndrome in the United States. Colgate SA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4793-7

Quantifying the infectivity of human immunodeficiency virus. Layne SP, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4644-8

Protein evolution on rugged landscapes. Macken CA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6191-5

Criteria for the validity of clinical trials of treatments of cohorts of cancer patients based on the Hardin Jones principle. Pauling L, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6835-7

Pertussis in England and Wales: an investigation of transmission dynamics and control by mass vaccination. Grenfell BT, et al. **Proc R Soc Lond [Biol]** 1989 Apr 22; 236(1284):213-52

The stability of ecosystems. Hogg T, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):43-51

Statistical, morphometric and stereological basics in the morphological sciences and their possible applications in corrosion cast studies. James NT. **Prog Clin Biol Res** 1989; 295:457-67 (11 ref.)

A QSAR study of Overton's tadpole data. Lipnick RL. **Prog Clin Biol Res** 1989;291:421-4

Tutorial on modeling ordered categorical response data. Agresti A. **Psychol Bull** 1989 Mar;105(2):290-301 (38 ref.)

Computational approaches to color constancy: adaptive and ontogenetic considerations. Dannemiller JL. **Psychol Rev** 1989 Apr;96(2):255-66

A Markov formulation of the repair-misrepair model of cell survival. Albright N. **Radiat Res** 1989 Apr;118(1):1-20

Mathematical models in quantitative assessment of carcinogenic risk. Park CN. **Regul Toxicol Pharmacol** 1989 Jun;9(3):236-43

A stochastic two-stage model for cancer risk assessment. I. The hazard function and the probability of tumor. Moolgavkar SH, et al. **Risk Anal** 1988 Sep;8(3):383-92

Underreporting of alcohol-related mortality from cirrhosis is declining in Sweden and Denmark. Prytz H, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1035-43

Is it chaos, or is it just noise? [news] Pool R. **Science** 1989 Jan 6;243(4887):25-8

Statistical and mathematical modeling of the AIDS epidemic. Papers from a conference. Baltimore, Maryland, 17-18 November, 1987. **Stat Med** 1989 Jan;8(1):1-139

Estimation of sojourn time distributions and false negative rates in screening programmes which use two modalities. Alexander FE. **Stat Med** 1989 Jun;8(6):743-55

Bootstrap investigation of the stability of a Cox regression model. Altman DG, et al. **Stat Med** 1989 Jul;8(7):771-83

Estimation of parameters and missing values under a regression model with non-normally distributed and non-randomly incomplete data. Azen SP, et al. **Stat Med** 1989 Feb;8(2):217-28

Latent variable models for the analysis of medical data with repeated measures of binary variables. Blackwood L. **Stat Med** 1988 Sep;7(9):975-81

A model of the spread of HIV infection and the demographic impact of AIDS. Bongaarts J. **Stat Med** 1989 Jan; 8(1):103-20

Policy implications of modelling of the AIDS epidemic. Brandt EN. **Stat Med** 1989 Jan;8(1):137-9

Cholesterol-based personal risk assessment in coronary heart disease. Caudill SP, et al. **Stat Med** 1989 Mar;8(3):295-309; discussion 331-2

A quantitative study of the bias in estimating the treatment effect caused by omitting a balanced covariate in survival models. Chastang C, et al. **Stat Med** 1988 Dec; 7(12):1243-55

A model-based approach to the imputation of missing data: home injury incidences. Conn JM, et al. **Stat Med** 1989 Mar;8(3):263-6; discussion 279-81

Two-process models for discrete-time serial categorical response. Dersimonian R, et al. **Stat Med** 1988 Sep; 7(9):965-74

Estimation of a common odds ratio in paired-cluster randomization designs. Donner A, et al. **Stat Med** 1989 May;8(5):599-607

Flexible regression models with cubic splines. Durrleman S, et al. **Stat Med** 1989 May;8(5):551-61

Modelling the 1985 influenza epidemic in France. Flahault A, et al. **Stat Med** 1988 Nov;7(11):1147-55

A log-linear model for ordinal data to characterize differential change among treatments. Francom SF, et al. **Stat Med** 1989 May;8(5):571-82

Disease prevention models of voluntary confidential screening for human immunodeficiency virus (HIV). Gail MH, et al. **Stat Med** 1989 Jan;8(1):59-81

The effect of non-differential exposure misclassification on estimates of the attributable and prevented fraction. Hsieh CC, et al. **Stat Med** 1988 Oct;7(10):1073-85

Empirical comparisons of proportional hazards and logistic regression models. Ingram DD, et al. **Stat Med** 1989 May; 8(5):525-38

Examining neighbourhood confounding in a survey: an example using the National Health and Nutrition Examination Survey II. Korn EL, et al. **Stat Med** 1988 Oct;7(10):1087-98

Regression models for time to seroconversion following experimental bovine leukaemia virus infection. Lassauzet ML, et al. **Stat Med** 1989 Jun;8(6):725-41

Doubling the one-sided P-value in testing independence in 2 x 2 tables against a two-sided alternative. Lloyd CJ. **Stat Med** 1988 Dec;7(12):1297-306

An application of a mathematical model to adjust for time lag in case reporting. Lui KJ, et al. **Stat Med** 1989 Mar; 8(3):259-62; discussion 279-81

A statistical assessment of clinical equivalence. Mau J. **Stat Med** 1988 Dec;7(12):1267-77

Forecasting the demand on accident and emergency departments in health districts in the Trent region. Milner PC. **Stat Med** 1988 Oct;7(10):1061-72

Identifying important results from multiple statistical tests. Parker RA, et al. **Stat Med** 1988 Oct;7(10):1031-43

Estimability and estimation of excess and etiologic fractions. Robins JM, et al. **Stat Med** 1989 Jul;8(7):845-59

Non-parametric analysis of treatment-covariate interaction in the presence of censoring. Schemper M. **Stat Med** 1988 Dec;7(12):1257-66

A comparison of estimated proportional hazards models and regression trees. Segal MR, et al. **Stat Med** 1989 May; 8(5):539-50

Cross-over trials, carry-over effects and the art of self-delusion. Senn SJ. **Stat Med** 1988 Oct;7(10):1099-101

A new method of estimation of interobserver variation and its application to the radiological assessment of osteoarthrosis in hip joints [letter] Silcocks P. **Stat Med** 1989 Jun;8(6):765-7

Application of multiple time series analysis to the estimation of pneumonia and influenza mortality by age 1962-1983. Stroup DF, et al. **Stat Med** 1988 Oct;7(10):1045-59

Some stochastic models of AIDS spread. Tan WY, et al. **Stat Med** 1989 Jan;8(1):121-36

Models for the HIV infection and AIDS epidemic in the United States. Taylor JM. **Stat Med** 1989 Jan;8(1):45-58

Application of a two-stage random effects model to longitudinal pulmonary function data from sarcoidosis patients. Vacek PM, et al. **Stat Med** 1989 Feb;8(2):189-200

A method for the estimation of chronic disease morbidity and trends from mortality data. Verdecchia A, et al. **Stat Med** 1989 Feb;8(2):201-16

Heterogeneity in the probability of HIV transmission per sexual contact: the case of male-to-female transmission in penile-vaginal intercourse. Wiley JA, et al. **Stat Med** 1989 Jan;8(1):93-102

The population dynamics of two vertically transmitted infections. Busenberg S, et al. **Theor Popul Biol** 1988 Apr; 33(2):181-98

Seasonal control for an endemic disease with seasonal fluctuations. Cromer TL. **Theor Popul Biol** 1988 Apr; 33(2):115-25

Processes of pair formation leading to assortative mating in biological populations: dynamic interaction model. Gimelfarb A. **Theor Popul Biol** 1988 Aug;34(1):1-23

Analytical threshold and stability results on age-structured epidemic models with vaccination. Greenhalgh D. **Theor Popul Biol** 1988 Jun;33(3):266-90

An uncertain life: demography in random environments. Tuljapurkar S. **Theor Popul Biol** 1989 Jun;35(3):227-94

The propagation of uncertainty in human mortality processes operating in stochastic environments. Yashin AI, et al. **Theor Popul Biol** 1989 Apr;35(2):119-41

Epidemiological models and predictions. Anderson RM. **Trop Geogr Med** 1988 Jul;40(3):S30-9 (42 ref.)

[Comparison of 2 possibilities for extracting information in the analysis of (multi-dimensional) contingency tables. Demonstrated with a medical-sociologic example] Enke H. **Z Gesamte Hyg** 1989 May;35(5):275-9 (Eng. Abstr.) **(Ger)**

[Autoregressive sequences and morphometric distributions] Mitolo V, et al. **Boll Soc Ital Biol Sper** 1988 May; 64(5):403-10 (Eng. Abstr.) **(Ita)**

[Hazard ratio estimated from a proportional hazard model including two strongly correlated prognostic factors] Hamajima N, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1015-9 (Eng. Abstr.) **(Jpn)**

[Explanatory essay for researchers who plan to analyse their

clinical data using Cox's proportional hazard model] Hamajima N, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):579–84 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Application of logistic model to clinical research] Hamajima N. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2532–8 (Eng. Abstr.) **(Jpn)**

[Alternative animal behavior: a model and its statistical characteristics] Kaplan AIa, et al. **Biol Nauki** 1989;(3):29–32 (Eng. Abstr.) **(Rus)**

[A method of elementary statistical analysis of distribution series of the data of medico–hygienic studies] Khvastukhov RM. **Gig Sanit** 1989 Feb;(2):56–60 **(Rus)**

[Possibility of modeling regional characteristics of the level and structure of morbidity and the utilization of medical services by the population] Baziian GV, et al. **Sov Zdravookhr** 1989;(4):14–8 (Eng. Abstr.) **(Rus)**

[Statistical assessment of HLA–antigen association with diseases] Pevnitskil LA. **Vestn Akad Med Nauk SSSR** 1988; (7):48–51 (Eng. Abstr.) **(Rus)**

[Bone maturation of children from 6 to 19 years of age. The wrist and hand. II. Probit analysis of isolated bones] Valenzuela C, et al. **Rev Chil Pediatr** 1988 May–Jun; 59(3):178–82 (Eng. Abstr.) **(Spa)**

MODELS, STRUCTURAL

Lung surrogates. Niederer PF, et al.
Acta Anaesthesiol Scand Suppl 1989;90:79–86

A general model for the transmembrane proteins of HIV and other retroviruses. Gallaher WR, et al.
AIDS Res Hum Retroviruses 1989 Aug;5(4):431–40

An oil–based model of inhalation anesthetic uptake and elimination. Loughlin PJ, et al. **Anesthesiology** 1989 Aug; 71(2):278–82

Illustrating the effectiveness of surface admittances (impedances) for simplifying modelling physiological (ECG/EEG) potential fields. Bones PJ, et al.
Australas Phys Eng Sci Med 1988 Jul–Sep;11(3):94–9

Outdoor measurement of SAR in a full–sized human model exposed to 29.9 MHz in the near field. Olsen RG, et al. **Bioelectromagnetics** 1989;10(2):161–71

Variations of the three–dimensional structure of the Escherichia coli ribosome in the range of overlap views. An application of the methods of multicone and local single–cone three–dimensional reconstruction. Carazo JM, et al. **Biophys J** 1989 Mar;55(3):465–77

Three–dimensional reconstruction of the ribosome from Escherichia coli. Wagenknecht T, et al. **Biophys J** 1989 Mar;55(3):455–64

Phantoms in Wrexham. Parkhouse RC. **Br Dent J** 1988 Nov 5;165(9):316

Phantoms for specifications and quality assurance of MR imaging scanners. Goodenough DJ, et al.
Comput Med Imaging Graph 1988 Jul–Aug;12(4):193–209

Aliasing artifacts in MR imaging. Pusey E, et al.
Comput Med Imaging Graph 1988 Jul–Aug;12(4):219–24

An experimental study of the penetration of polycyclic aromatic hydrocarbons through a model of the bronchial lining layer. Gerde P, et al. **Environ Res** 1989 Apr; 48(2):287–95

A breathing lung phantom for 81mKr lung ventilation studies its use in dosimetry and quality control. Camps JA, et al. **Eur J Nucl Med** 1988;14(11):529–32

Differences in the intracranial pressure caused by a 'blow' and/or a 'fall'—an experimental study using physical models of the head and neck. Yanagida Y, et al.
Forensic Sci Int 1989 Apr–May;41(1–2):135–45

Estimation of the mean organ doses and the effective dose equivalent from Rando phantom measurements. Golikov VY, et al. **Health Phys** 1989 Jan;56(1):111–5

The problem of echocardiographic detection of mitral valve prolapse and determination of its true prevalence. Sanfilippo AJ, et al. **Herz** 1988 Oct;13(5):284–92 (29 ref.)

Three–dimensional Doppler velocimetry of flow jets. Fox MD, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):834–41

SAR distributions for 915 MHz interstitial microwave antennas used in hyperthermia for cancer therapy. Jones KM, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):851–7

An in vitro tissue model for evaluating the effect of carboxyhemoglobin concentration on pulse oximetry. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1989 Jun; 36(6):625–7

An electric current tomograph. Newell JC, et al.
IEEE Trans Biomed Eng 1988 Oct;35(10):828–33

Theoretical quantification of the effects of plastic wall thickness on phantom measurements in electromagnetic hyperthermia. Ross MP, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):869–72

Evaluation of lung dose correction methods for photon irradiations of thorax phantoms. el–Khatib EE, et al.
Int J Radiat Oncol Biol Phys 1989 Oct;17(4):871–8

Physical modelling of the arterial wall [letter] Laura PA. **J Biomed Eng** 1988 Jul;10(4):373

Three–dimensional image reconstruction of insect flight muscle. I. The rigor myac layer. Taylor KA, et al.
J Cell Biol 1989 Sep;109(3):1085–102

Three–dimensional image reconstruction of insect flight muscle. II. The rigor actin layer. Taylor KA, et al.
J Cell Biol 1989 Sep;109(3):1103–23

Computed tomography of pulmonary nodule using a standard reference chest phantom. Flemming MC, et al.
J Fla Med Assoc 1988 Jul;75(7):425–31

Model for the three–dimensional folding of 16 S ribosomal RNA. Stern S, et al. **J Mol Biol** 1988 Nov 20;204(2):447–81

Effect of spatial resolution on SPECT quantification values. Kojima A, et al. **J Nucl Med** 1989 Apr;30(4):508–14

A realistic dynamic cardiac phantom for evaluating radionuclide ventriculography: description and initial studies with the left ventricular chamber. Simon TR, et al. **J Nucl Med** 1989 Apr;30(4):542–7

A rotating phantom for the study of flow effects in MR imaging. Nordell B, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):695–705

NMR relaxation of water in hydrogel polymers: a model for tissue. Gore JC, et al. **Magn Reson Med** 1989 Mar; 9(3):325–32

Quantitative flow measurements on phantoms and on blood vessels with MR. Meier D, et al. **Magn Reson Med** 1988 Sep;8(1):25–34

A slice geometry phantom for cross sectional tomographic imagers. Coffey CW, et al. **Med Phys** 1989 Mar–Apr; 16(2):273–8

Spatial light distribution in tumors: phantom measurements. Lenz P. **Med Phys** 1989 May–Jun;16(3):326–32

A water phantom controller for automated acquisition of linac beam parameters. Schmid MG, et al. **Med Phys** 1989 Jan–Feb;16(1):126–9

Studying ribosome structure by electron microscopy and computer–image processing. Frank J, et al.
Methods Enzymol 1988;164:3–35 (93 ref.)

An improved head–and–neck phantom for radiation dosimetry. Brand JW, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):338–46 (21 ref.)

Computerized tridimensional reconstruction of vegetable structures. Buffo G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:139–44

Simulation of clinical scintigrams for nuclear medicine imaging devices. Dye RE. **Phys Med Biol** 1988 Nov; 33(11):1329–34

A three–dimensional electron pencil–beam algorithm. Kooy HM, et al. **Phys Med Biol** 1989 Feb;34(2):229–43

Tissue and phantom materials characterisation by scattering for in vivo XRF and mineralometric techniques. Tartari A, et al. **Phys Med Biol** 1989 May;34(5):617–23

SPECT reconstruction by simulated annealing. Webb S.
Phys Med Biol 1989 Mar;34(3):259–81

Anthropomorphic phantoms for assessing systems used in ultrasound imaging of the compressed breast. Madsen EL, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:183–201

New contrast–detail phantoms for improved precision in lesion detection measurements. Smith SW, et al.
Ultrasound Med Biol 1989;15(4):383–93

[Experimental models of ultrasonic diagnosis of intra–ocular foreign bodies] Preisová J, et al. **Cesk Oftalmol** 1988 Nov; 44(6):400–8 (Eng. Abstr.) **(Cze)**

[A simple test phantom in the form of a staircase for running control of the image in veterinary roentgenology] Parisot M. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1; 102(4):117–23 (Eng. Abstr.) **(Ger)**

[Characterization of helical coil microwave antenna for interstitial hyperthermia] Satoh T, et al. **Gan No Rinsho** 1988 Sep;34(11):1544–9 (Eng. Abstr.) **(Jpn)**

[New determinations of the eye rotation center and criteria for the formation of its membrane in terms of the floating eye model and experimental support of the latter] Galoian VR. **Biofizika** 1988 Nov–Dec;33(6):1041–53 (23 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of the heat exchange of the body with the environment (research on a heat physics model)] Rumiantsev GV, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1321–6 (Eng. Abstr.) **(Rus)**

[Increase in the effectiveness of shaping flight habits with the use of a G–load simulation system in the trainer] Zhernavkov VF, et al. **Voen Med Zh** 1988 Jun;(6):45–8 **(Rus)**

[Development of disinfection regimens for the special clothing of miners on a test object model made from different fabrics] Mikhno IL, et al. **Vrach Delo** 1988 Jul; (7):116–8 (Eng. Abstr.) **(Rus)**

[Rusitec—fermentation equipment for the study of digestive processes in ruminants] Kriváňová M, et al.
Vet Med (Praha) 1989 Feb;34(2):89–95 (Eng. Abstr.) **(Slo)**

MODELS, THEORETICAL

Models explaining motor vehicle death rates in the United States. Zlatoper TJ. **Accid Anal Prev** 1989 Apr;21(2):125–54

Electrical phenomena at the surface of phospholipid membranes relevant to the sorption of ionic compounds. Matsumura H, et al. **Adv Colloid Interface Sci** 1989 Jul; 30(1–2):71–109 (55 ref.)

Interactions of neutral molecules with ionic micelles. Sepulveda L, et al. **Adv Colloid Interface Sci** 1986 Jun; 25(1):1–57 (263 ref.)

Capillary spatial pattern and muscle fiber geometry in three hamster striated muscles. Bennett RA, et al.
Adv Exp Med Biol 1989;248:259–70

Buffering of muscle tissue PO2 levels by the superposition of the oxygen field from many capillaries. Clark PA, et al. **Adv Exp Med Biol** 1989;248:165–74

Quantifying capillary distribution in four dimensions. Egginton S, et al. **Adv Exp Med Biol** 1989;248:271–80

Influence of muscle phenotype on local capillary supply. Egginton S, et al. **Adv Exp Med Biol** 1989;248:281–91

How phosphocreatine buffers cyclic changes in ATP demand in working muscle. Funk C, et al. **Adv Exp Med Biol** 1989; 248:687–92

Effects of red cell spacing and red cell movement upon oxygen release under conditions of maximally working skeletal muscle. Groebe K, et al. **Adv Exp Med Biol** 1989; 248:175–85

Calculation of oxygen pressures and fluxes in a flat plane perpendicular to any capillary distribution. Hoofd L, et al. **Adv Exp Med Biol** 1989;248:187–96

Structured modeling and simulation of oxygen transport to hybridoma cell in a suspension culture: theoretical analysis. Kang KA, et al. **Adv Exp Med Biol** 1989;248:197–206

Muscle fiber size and chronic exposure to hypoxia. Mathieu–Costello O, et al. **Adv Exp Med Biol** 1989; 248:305–11

Relationship between the transfer rate and the difference in partial pressure of gas molecules at a heterogeneous interface. Mochizuki M. **Adv Exp Med Biol** 1989; 248:207–14

Measurements of oxygen flux from arterioles imply high permeability of perfused tissue to oxygen. Popel AS, et al. **Adv Exp Med Biol** 1989;248:215–25

Toward absolute reflectance oximetry: I. Theoretical consideration for noninvasive tissue reflectance oximetry. Takatani S. **Adv Exp Med Biol** 1989;248:91–102

PO2 histograms in various models of tissue oxygenation in skeletal muscle. Turek Z, et al. **Adv Exp Med Biol** 1989; 248:227–37

Fractal networks explain regional myocardial flow heterogeneity. van Beek JH, et al. **Adv Exp Med Biol** 1989; 248:249–57

A model to determine the feasibility of a pediatric practice. Miller KA, et al. **Am J Dis Child** 1989 Aug;143(8):919–23

Validation of survival–predictive models in myelodysplastic syndromes [letter] Sanz MA, et al. **Am J Hematol** 1989 Jan;30(1):44

Angular homeostasis II: Pursuit of a moving target in a plane and some implications for cardiac teratology. Sagawa Y, et al. **Am J Med Genet** 1988 Oct;31(2):394–405

Models of occupational therapy service provision in the school system. Dunn W. **Am J Occup Ther** 1988 Nov; 42(11):718–23

Compartmental modeling of the hepatic transport of taurocholate in the rat in vivo. Deroubaix X, et al.
Am J Physiol 1989 Aug;257(2 Pt 1):G210–20

Mathematical model of dependence of heart rate on tissue concentration of acetylcholine. Dexter F, et al.
Am J Physiol 1989 Feb;256(2 Pt 2):H520–6

A kinetic model of superoxide production from single pulmonary alveolar macrophages. DiGregorio KA, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):C405–12

Water movement: does thermodynamic interpretation distort reality? Essig A, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C694–8

Network thermodynamic model of rat lingual epithelium: effects of hyperosmotic NaCl. Fidelman ML, et al.
Am J Physiol 1989 Sep;257(3 Pt 1):G475–87

Evaluation of pulse–detection algorithms by computer simulation of hormone secretion. Guardabasso V, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E775–84

Are relaxation oscillators an appropriate model of gastrointestinal electrical activity? Publicover NG, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):G265–74 (57 ref.)

Kinetic analysis of cerebrovascular transport based on indicator diffusion technique. Sawada Y, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H794–812

In vivo indicator dilution kinetics of PAH transport in dog kidney [published erratum appears in Am J Physiol 1989 Jul;257(1 Pt 2):following Table of Contents] Silverman M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F255–65

A novel general biophysical model for simulating episodic endocrine gland signaling. Veldhuis JD, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E749–59

Modeling and variable selection in epidemiologic analysis. Greenland S. **Am J Public Health** 1989 Mar;79(3):340–9

Spirometric prediction equations for Hispanic children and adults in New Mexico. Coultas DB, et al.
Am Rev Respir Dis 1988 Dec;138(6):1386–92

Practical aspects of coupling enzyme theory. Brooks SP, et al. **Anal Biochem** 1989 Jan;176(1):1–14 (49 ref.)

Small zone gel chromatography of interacting systems: theoretical and experimental evaluation of elution profiles for kinetically controlled macromolecule–ligand reactions. Cann JR, et al. **Anal Biochem** 1988 Dec;175(2):462–73

Analysis of ligand–receptor binding by the difference method. Melikhova EM, et al. **Anal Biochem** 1988 Dec; 175(2):507–15

DESIGN: computerized optimization of experimental design for estimating Kd and Bmax in ligand binding experiments. I. Homologous and heterologous binding to one or two classes of sites. Rovati GE, et al. **Anal Biochem** 1988 Nov 1;174(2):636–49

Evaluation of uncertainties for parameters in binding studies: the sum–of–squares profile and Monte Carlo estimation. Saroff HA. **Anal Biochem** 1989 Jan;176(1):161–9

Analysis of Ter–Ter enzyme kinetic mechanisms by computer simulation of isotope exchange at chemical equilibrium: development and application of ISOTER, a personal–computer–based program. Wedler FC, et al.

Anal Biochem 1989 Mar;177(2):268–81

The integrated inpatient management model. A new approach to clinical practice. McMahon LF Jr, et al. **Ann Intern Med** 1989 Aug 15;111(4):318–26

The kinetic mechanism(s) of cytochrome oxidase. Techniques for their analysis and criteria for their validation. Myers D, et al. **Ann N Y Acad Sci** 1988;550:85–97

Routes of cytochrome a3 reduction. The neoclassical model revisited. Nicholls P, et al. **Ann N Y Acad Sci** 1988; 550:59–67

How does cytochrome oxidase pump protons? A "cooperative proton pump" model. Wikström M. **Ann N Y Acad Sci** 1988;550:199–206

Lactose hydrolysis and oligosaccharide formation catalyzed by beta-galactosidase. Kinetics and mathematical modeling. Yang ST, et al. **Ann N Y Acad Sci** 1988; 542:417–22

Toward a measure of auditory handicap in the Army. Price GR, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May; 140:42–52

Orem's model used for health promotion: directions from research. Denyes MJ. **ANS** 1988 Oct;11(1):13–21

Effects of thermodynamic nonideality on the kinetics of ester hydrolysis by alpha-chymotrypsin: a model system with preexistence of the isomerization equilibrium. Bergman DA, et al. **Arch Biochem Biophys** 1989 Oct;274(1):55–63

Penetration and fusion of phospholipid vesicles by lysozyme. Kim J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):100–8

Monte Carlo simulation and the clinical laboratory. Connelly DP, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):750–7

Daily living and functional health status: a perspective for nursing diagnosis and treatment. Carnevali DL. **Arch Psychiatr Nurs** 1988 Dec;2(6):330–3

A guide for nursing assessment of the psychiatric inpatient. Sanger E, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):334–8

Tumormetric measurements and morphometry in cervical cancer. Haas J. **Baillieres Clin Obstet Gynaecol** 1988 Dec; 2(4):781–7

Gel state chemiluminescence: an artificial electron transport system. Kiel JL, et al. **Basic Life Sci** 1988;49:261–4

Inhibition of peroxidation of membranes. Niki E, et al. **Basic Life Sci** 1988;49:561–6

Cytochrome P-450 model systems: alkene oxidation. Traylor TG, et al. **Basic Life Sci** 1988;49:509–12

A stochastic model for high-LET response for boron neutron capture therapy (BNCT). Wheeler FJ, et al. **Basic Life Sci** 1989;50:165–78

A micellar model for investigating the chemical nature of hydrogen transfer in NAD(P)H-dependent enzymatic reactions. Rao UM. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1330–6

Dynamic properties of interaction between nucleic acid bases and models of amino acids. Yu BS, et al. **Biochem Int** 1989 Jan;18(1):189–95

The curvilinear Scatchard plot. Experimental artifact or receptor heterogeneity? Kermode JC. **Biochem Pharmacol** 1989 Jul 1;38(13):2053–60 (32 ref.)

Unfolding free energy changes determined by the linear extrapolation method. 2. Incorporation of delta G degrees N-U values in a thermodynamic cycle. Bolen DW, et al. **Biochemistry** 1988 Oct 18;27(21):8069–74

Osmoelastic coupling in biological structures: a comprehensive thermodynamic analysis of the osmotic response of phospholipid vesicles and a reevaluation of the "dehydration force" theory. Ito T, et al. **Biochemistry** 1989 Jun 27;28(13):5626–30

Time-dependent 31P saturation transfer in the phosphoglucomutase reaction. Characterization of the spin system for the Cd(II) enzyme and evaluation of rate constants for the transfer process. Post CB, et al. **Biochemistry** 1989 Jan 24;28(2):548–58

Comparison of rate constants for (PO3-) transfer by the Mg(II), Cd(II), and Li(I) forms of phosphoglucomutase. Ray WJ Jr, et al. **Biochemistry** 1989 Jan 24;28(2):559–69

Lipid chains and cholesterol in model membranes: a Monte Carlo Study. Scott HL, et al. **Biochemistry** 1989 May 2; 28(9):3687–91

A simple matrix method for determining flux control coefficients in complex pathways. Barrett J. **Biochim Biophys Acta** 1989 Sep 15;992(3):369–74

Theoretical analysis of double-titration experiments. Caplan SR, et al. **Biochim Biophys Acta** 1987;895(3):241–58 (47 ref.)

Hypothesis. The molecular 'double-pivot' mechanism for water oxidation. Christou G, et al. **Biochim Biophys Acta** 1987;895(3):259–74 (75 ref.)

Voltage dependence of partial reactions of the Na+/K+ pump: predictions from microscopic models. Läuger P, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):1–10

Metabolic compartmentation. Spivey HO, et al. **Bioessays** 1989 Apr;10(4):127–30

The chemical kinetics of molecular evolution. Woolley P. **Bioessays** 1989 Jan;10(1):25–9 (13 ref.)

A robust orthogonal algorithm for system identification and time-series analysis. Korenberg MJ. **Biol Cybern** 1989; 60(4):267–76

Covariance density estimation for autoregressive spectral modelling of point processes. Lago PJ, et al. **Biol Cybern** 1989;61(3):195–203

Flory interaction parameter chi for hydrophilic copolymers with water [published erratum appears in Biomaterials 1989 Mar;10(2):95] Mikos AG, et al. **Biomaterials** 1988 Sep; 9(5):419–23

The effect of a distribution of separations upon intramolecular distances in biopolymers, as determined by radiationless energy transfer. Albaugh S, et al. **Biophys Chem** 1989 Mar; 33(1):71–6

The elementary catalytic system model as a building unit of large enzymatic systems. General model. Borowiak MA. **Biophys Chem** 1988 Oct;32(1):21–36

The determination of equilibrium constants for heterogeneous macromolecular interactions. Systems forming 2:1 complexes. Crowl-Powers ML, et al. **Biophys Chem** 1988 Oct;32(1):131–46

A theoretical model of DNA curvature. De Santis P, et al. **Biophys Chem** 1988 Dec;32(2–3):305–17

Linkage effects in a model for cell survival after radiation. Di Cera E, et al. **Biophys Chem** 1989 Mar;33(1):91–8

A new method for the determination of equilibrium constants through binding capacity measurements. Di Cera E, et al. **Biophys Chem** 1988 Dec;32(2–3):149–52

Time-dependent ligand current into a saturating cell performing chemoreception. Geurts BJ, et al. **Biophys Chem** 1988 Sep;31(3):317–24

The distributions and diffusivities of small ions in chondroitin sulphate, hyaluronate and some proteoglycan solutions. Maroudas A, et al. **Biophys Chem** 1988 Dec;32(2–3):257–70

pH dependence of electrostatic interaction between ion-penetrable membranes. Ohshima H, et al. **Biophys Chem** 1988 Dec;32(2–3):161–6

The theoretical distributions and diffusivities of small ions in chondroitin sulphate and hyaluronate. Parker KH, et al. **Biophys Chem** 1988 Dec;32(2–3):271–82

Effect of a contaminating competitive ligand on ligand-binding curves. Inverse protein concentration dependence. Pedersen JB, et al. **Biophys Chem** 1988 Oct; 32(1):79–87

Cooperative ligand-lattice binding. Approximate Gaussian binding distribution. Reiter J, et al. **Biophys Chem** 1989 Mar;33(1):1–9

Dielectric behavior of polyelectrolytes. VI. Dynamic response of cylindrical biopolymers to electric fields. Sonnen WE, et al. **Biophys Chem** 1988 Dec;32(2–3):283–95

Electrical excitability of artificial enzyme membranes. IV. Theoretical approach of the membrane potential of synthetic proteinic films. Trubuil A, et al. **Biophys Chem** 1988 Sep;31(3):217–24

Evaluation of nonideality from gel chromatographic partition coefficients. A technique with greater versatility than equilibrium dialysis. Van Damme MP, et al. **Biophys Chem** 1989 May;33(2):115–25

Self diffusion of interacting membrane proteins. Abney JR, et al. **Biophys J** 1989 May;55(5):817–33

Mutual diffusion of interacting membrane proteins. Abney JR, et al. **Biophys J** 1989 Aug;56(2):315–26

Energetics of ion permeation through membrane channels. Solvation of Na+ by gramicidin A. Aqvist J, et al. **Biophys J** 1989 Jul;56(1):171–82

Padé-Laplace method for analysis of fluorescence intensity decay. Bajzer Z, et al. **Biophys J** 1989 Jul;56(1):79–93

Mass action kinetics of virus-cell aggregation and fusion. Bentz J, et al. **Biophys J** 1988 Sep;54(3):449–62

Mitotic orientation in three dimensions determined from multiple projections. Bjerknes M, et al. **Biophys J** 1989 May;55(5):1011–5

Determination of bilayer membrane bending stiffness by tether formation from giant, thin-walled vesicles. Bo L, et al. **Biophys J** 1989 Mar;55(3):509–17

A lyotrope gradient method for liquid crystal temperature-composition-mesomorph diagram construction using time-resolved x-ray diffraction. Caffrey M. **Biophys J** 1989 Jan;55(1):47–52

Water and polypeptide conformations in the gramicidin channel. A molecular dynamics study. Chiu SW, et al. **Biophys J** 1989 Aug;56(2):253–61

Stochastic theory of singly occupied ion channels. II. Effects of access resistance and potential gradients extending into the bath. Chiu SW, et al. **Biophys J** 1989 Jan;55(1):147–57

Calorimetric studies of the effects of cholesterol on the phase transition of C(18):C(10) phosphatidylcholine. Chong PL, et al. **Biophys J** 1989 Mar;55(3):551–6

Closed-time distribution of ionic channels. Analytical solution to a one-dimensional defect-diffusion model. Condat CA, et al. **Biophys J** 1989 May;55(5):915–25

Mechanics and control of the cytoskeleton in Amoeba proteus. Dembo M. **Biophys J** 1989 Jun;55(6):1053–80

Cell poking: quantitative analysis of indentation of thick viscoelastic layers. Duszyk M, et al. **Biophys J** 1989 Apr; 55(4):683–90

Continuous fluorescence microphotolysis of anthracene-labeled phospholipids in membranes. Theoretical approach of the simultaneous determination of their photodimerization and lateral diffusion rates. Ferrières X, et al. **Biophys J** 1989 Jun;55(6):1081–91

Energy distributions at the high-spin ferric sites in myoglobin crystals. Fiamingo FG, et al. **Biophys J** 1989 Jan; 55(1):67–77

Dynamic light scattering from polydisperse suspensions of large spheres. Characterization of isolated secretory granules. Fujime S, et al. **Biophys J** 1988 Dec;54(6):1179–84

Electromobile surface charge alters membrane potential changes induced by applied electric fields. Gross D. **Biophys J** 1988 Nov;54(5):879–84

Form birefringence of muscle. Haskell RC, et al. **Biophys J** 1989 Aug;56(2):401–13

Influence of proteins on the reorganization of phospholipid bilayers into large domains. Haverstick DM, et al. **Biophys J** 1989 Apr;55(4):677–82

Model selection: reliability and bias. Horn R, et al. **Biophys J** 1989 Feb;55(2):379–81

Simulation of concentration polarization in electrokinetic processes by network thermodynamic methods. Horno J, et al. **Biophys J** 1989 Mar;55(3):527–35

Regional stress in a noncircular cylinder. Janz RF, et al. **Biophys J** 1989 Jan;55(1):173–82

How electrolyte shielding influences the electrical potential in transmembrane ion channels. Jordan PC, et al. **Biophys J** 1989 Jun;55(6):1041–52

ATP-sensitive potassium channel and bursting in the pancreatic beta cell. A theoretical study. Keizer J, et al. **Biophys J** 1989 Aug;56(2):229–42

Two-dimensional 1H/13C heteronuclear chemical shift correlation spectroscopy of lipid bilayers. Lee CW, et al. **Biophys J** 1989 Feb;55(2):355–8

Quenching of fluorescence of pyrene-substituted lecithin by tetracyanoquinodimethane in liposomes. Lemmetyinen H, et al. **Biophys J** 1989 May;55(5):885–95

Continuum model of voltage-dependent gating. Macroscopic conductance, gating current, and single-channel behavior. Levitt DG. **Biophys J** 1989 Mar;55(3):489–98

Frequency specificity in intercellular communication. Influence of patterns of periodic signaling on target cell responsiveness. Li YX, et al. **Biophys J** 1989 Jan; 55(1):125–45

Distance dependence of the tryptophan-disulfide interaction at the triplet level from pulsed phosphorescence studies on a model system. Li Z, et al. **Biophys J** 1989 Aug; 56(2):361–7

Stability of mixed micellar bile models supersaturated with cholesterol. Lichtenberg D, et al. **Biophys J** 1988 Dec; 54(6):1013–25

Testing fractal and Markov models of ion channel kinetics. Liebovitch LS. **Biophys J** 1989 Feb;55(2):373–7

Fractal models, Markov models, and channel kinetics. McManus OB, et al. **Biophys J** 1989 Feb;55(2):383–5

Water adsorption isotherms and hydration forces for lysolipids and diacyl phospholipids. Marsh D. **Biophys J** 1989 Jun;55(6):1093–100

Osmotic fragility model for red cell populations. Massaldi HA, et al. **Biophys J** 1988 Aug;54(2):301–8

Dynamics of a tightly coupled mechanism for flagellar rotation. Bacterial motility, chemiosmotic coupling, protonmotive force. Meister M, et al. **Biophys J** 1989 May; 55(5):905–14

Rate-amplitude correlation from single-channel records. A hidden structure in ion channel gating kinetics? Millhauser GL, et al. **Biophys J** 1988 Dec;54(6):1165–8

Estimation of single channel kinetic parameters from data subject to limited time resolution. Milne RK, et al. **Biophys J** 1989 Apr;55(4):673–6

Lateral diffusion of membrane proteins in protein-rich membranes. A simple hard particle model for concentration dependence of the two-dimensional diffusion coefficient. Minton AP. **Biophys J** 1989 Apr;55(4):805–8

Relations for lipid bilayers. Connection of electron density profiles to other structural quantities. Nagle JF, et al. **Biophys J** 1989 Feb;55(2):309–13

Electro-mechanical permeabilization of lipid vesicles. Role of membrane tension and compressibility. Needham D, et al. **Biophys J** 1989 May;55(5):1001–9

Birefringence of macromolecules. Wiener's theory revisited, with applications to DNA and tobacco mosaic virus. Oldenbourg R, et al. **Biophys J** 1989 Jul;56(1):195–205

Calculation of time constants for intracellular diffusion in whole cell patch clamp configuration. Oliva C, et al. **Biophys J** 1988 Nov;54(5):791–9

Interactions of amiloride and small monovalent cations with the epithelial sodium channel. Inferences about the nature of the channel pore. Palmer LG, et al. **Biophys J** 1989 Apr;55(4):779–87

Proton flux in large unilamellar vesicles in response to membrane potentials and pH gradients. Redelmeier TE, et al. **Biophys J** 1989 Aug;56(2):385–93

Transport rates of proteins in porous materials with known microgeometry. Saltzman WM, et al. **Biophys J** 1989 Jan; 55(1):163–71

Evaluation of the thermal coefficient of the resistance to fluorophore rotation in model membranes. Scarlata SF. **Biophys J** 1989 Jun;55(6):1215–23

Analysis of steric partition behavior of molecules in membranes using statistical physics. Application to gel chromatography and electrophoresis. Schnitzer JE. **Biophys J** 1988 Dec;54(6):1065–76

An extended Monod-Wyman-Changeaux-model expressed in terms of the Herzfeld-Stanley formalism applied to oxygen and carbonmonoxide binding curves of hemoglobin trout IV. Schweitzer-Stenner R, et al. **Biophys J** 1989 Apr; 55(4):691–701

Calculation of intermolecular interaction strengths in the P beta' phase in lipid bilayers. Implications for theoretical models [published erratum appears in Biophys J 1989 Jul;56(1):following 224] Scott HL, et al. **Biophys J** 1989 Feb;55(2):339–45

Interaction between bending and tension forces in bilayer membranes. Secomb TW. **Biophys J** 1988 Oct;54(4):743–6

Dynamic imaging of lateral diffusion by electron spin resonance and study of rotational dynamics in model

membranes. Effect of cholesterol. Shin YK, et al. **Biophys J** 1989 Mar;55(3):537–50

Analysis of protein–protein interaction by simulation of small–zone size exclusion chromatography. Stochastic formulation of kinetic rate contributions to observed high–performance liquid chromatography elution characteristics. Stevens FJ. **Biophys J** 1989 Jun; 55(6):1155–67

Surface pH controls purple–to–blue transition of bacteriorhodopsin. A theoretical model of purple membrane surface. Szundi I, et al. **Biophys J** 1989 Aug; 56(2):369–83

Frequency domain studies of impedance characteristics of biological cells using micropipet technique. I. Erythrocyte. Takashima S, et al. **Biophys J** 1988 Dec;54(6):995–1000

A hybrid approach to theoretical analysis of bovine pancreatic trypsin inhibitor. Thacher T, et al. **Biophys J** 1988 Oct;54(4):695–704

Variation in crypt size and its influence on the analysis of epithelial cell proliferation in the intestinal crypt. Totafurno J, et al. **Biophys J** 1988 Nov;54(5):845–58

Theoretical and experimental studies on cross–bridge migration during cell disaggregation. Tozeren A, et al. **Biophys J** 1989 Mar;55(3):479–87

Mixed monolayers of linear gramicidins and phospholipid. Surface pressure and surface potential studies. Van Mau N, et al. **Biophys J** 1988 Sep;54(3):563–7

Role of channels in the fusion of vesicles with a planar bilayer. Woodbury DJ, et al. **Biophys J** 1988 Dec; 54(6):1053–63

Analysis of equatorial x–ray diffraction patterns from skeletal muscle. Yu LC. **Biophys J** 1989 Mar;55(3):433–40

An analytic solution to the Monod–Wyman–Changeux model and all parameters in this model. Zhou G, et al. **Biophys J** 1989 Feb;55(2):275–80

A continuum model of protrusion of pseudopod in leukocytes. Zhu C, et al. **Biophys J** 1988 Dec;54(6):1115–37

The sieving of spheres during agarose gel electrophoresis: quantitation and modeling. Griess GA, et al. **Biopolymers** 1989 Aug;28(8):1475–84

Modeling DNA supercoils and knots with B–spline functions. Hao MH, et al. **Biopolymers** 1989 Apr;28(4):873–900

Diffusion coefficients of segmentally flexible macromolecules with two subunits: a study of broken rods. Mellado P, et al. **Biopolymers** 1988 Nov;27(11):1771–86

Monte Carlo studies on equilibrium globular protein folding. II. Beta–barrel globular protein models. Skolnick J, et al. **Biopolymers** 1989 Jun;28(6):1059–95

Aggregate size and viscoelastic property of a highly concentrated suspension. Takaki R, et al. **Biorheology** 1988; 25(1–2):191–8

Time delays in metabolic control systems. Mizraji E, et al. **Biosystems** 1988;22(1):11–7

Interrelations between glycolysis and the hexose monophosphate shunt in erythrocytes as studied on the basis of a mathematical model. Schuster R, et al. **Biosystems** 1988;22(1):19–36

The oxygen hypothesis: fruitful predictor or narrow dogma? Silverman WA. **Birth Defects** 1988;24(1):203–7

A concept of hemopoietic regulation and its biomathematical realization. Wichmann HE, et al. **Blood Cells** 1988; 14(2–3):411–29

Can the distribution of symptomatic and radiographic osteoarthritis within the human body be explained? Hutton CW. **Br J Rheumatol** 1989 Apr;28(2):143

Tutorial on large deviations for the binomial distribution. Arratia R, et al. **Bull Math Biol** 1989;51(1):125–31

Algorithms for the optimal identification of segment neighborhoods. Auger IE, et al. **Bull Math Biol** 1989; 51(1):39–54

Weak hierarchies associated with similarity measures—an additive clustering technique. Bandelt HJ, et al. **Bull Math Biol** 1989;51(1):133–66

Memory but no suppression in low–dimensional symmetric idiotypic networks. De Boer RJ, et al. **Bull Math Biol** 1989; 51(2):223–46

Stability of symmetric idiotypic networks—a critique of Hoffmann's analysis. De Boer RJ, et al. **Bull Math Biol** 1989;51(2):217–22

Analysis of metabolic systems with complex slow and fast dynamics. Dvořák I, et al. **Bull Math Biol** 1989;51(2):255–74 (27 ref.)

Analysis of interaction for mixtures of agents using the linear isobole. Lam GK. **Bull Math Biol** 1989;51(3):293–309

Simulation of cellular compaction and internalization in mammalian embryo development—II. Models for spherical embryos. Lewis HW 3d, et al. **Bull Math Biol** 1988; 50(2):121–42

Persistence in discrete age–structured population models. Li J. **Bull Math Biol** 1988;50(4):351–66

The threshold of survival for systems in a fluctuating environment. Ma ZE, et al. **Bull Math Biol** 1989; 51(3):311–23

Context–dependent associations in linear distributed memories. Mizraji E. **Bull Math Biol** 1989;51(2):195–205

Approximate matching of regular expressions. Myers EW, et al. **Bull Math Biol** 1989;51(1):5–37

A couple stress model of blood flow in the microcirculation. Pal D, et al. **Bull Math Biol** 1988;50(4):329–44

Upper and lower bounds from the maximum principle. Intracellular diffusion with Michaelis–Menten kinetics. Regalbuto MC, et al. **Bull Math Biol** 1989;51(3):325–35

HIV spread in the San Francisco cohort: scaling of the effective logistic rate for seropositivity. Rosen G. **Bull Math Biol** 1988;50(4):345–9

An alternative procedure for calculating glucose consumption from 2–deoxyglucose uptake. Sperber GO. **Bull Math Biol** 1989;51(2):275–86

Statistical issues in the planning of prevention studies. Zelen M. **Cancer Invest** 1988;6(5):615–20

Model for the genetic evolution of human solid tumors. Shackney SE, et al. **Cancer Res** 1989 Jun 15;49(12):3344–54

Effect of dose, molecular size, affinity, and protein binding on tumor uptake of antibody or ligand: a biomathematical model. Thomas GD, et al. **Cancer Res** 1989 Jun 15; 49(12):3290–6

A cooperative transition theory applied to the kinetics of ionic exchanges in cells. Negendank W. **Cell Biophys** 1988 Oct;13(2):93–117

Pentachlorophenol–induced change of zeta–potential and gel–to–fluid transition temperature in model lecithin membranes. Smejtek P, et al. **Chem Biol Interact** 1989; 71(1):37–61

The theoretical requirements of shunt design as determined by biomechanical testing in pediatric hydrocephalus. Shapiro K, et al. **Childs Nerv Syst** 1988 Dec;4(6):348–53

Regression models for the estimation of circadian rhythms in the presence of effects due to masking. Spencer MB. **Chronobiol Int** 1989;6(1):77–91

Intermittent coronary sinus occlusion after coronary arterial ligation results in venous retroperfusion. Beyar R, et al. **Circ Res** 1989 Sep;65(3):695–707

Errors in reconstruction of resistivity images using a linear reconstruction technique. Barber DC, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:101–4

Data errors and reconstruction algorithms in electrical impedance tomography. Breckon WR, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:105–9

Possibilities and problems of real–time imaging of tissue resistivity. Brown BH, et al. **Clin Phys Physiol Meas** 1988; 9 Suppl A:121–5

Theory and performance of an adaptive current tomography system. Gisser DG, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:35–41

The four–electrode impedance technique: a method for investigation of compliance in luminal organs. Gregersen H, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:61–4

A regularised electrical impedance tomography reconstruction algorithm. Hua P, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:137–41

A fast approximation for the calculation of potential distributions in electrical impedance tomography. Kotre CJ. **Clin Phys Physiol Meas** 1988 Nov;9(4):353–61

Three–dimensional reconstruction in electrical impedance tomography. Liu WP, et al. **Clin Phys Physiol Meas** 1988; 9 Suppl A:131–5

Analysis and assessment of errors in a parallel data acquisition system for electrical impedance tomography. Rosell J, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:93–9

Recent North American progress in electrical impedance tomography. Webster JG, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:127–30

Physical working capacity determined by different types of bicycle exercise tests. Wallin L, et al. **Clin Physiol** 1988 Oct;8(5):529–37

A simple add–on algorithm to extend one–dimensional finite difference diffusion calculations to include charge coupling. Dibdin GH. **Comput Appl Biosci** 1989 Feb;5(1):19–26

Estimation of probabilities using the logistic model in retrospective studies. Bock JR, et al. **Comput Biomed Res** 1988 Oct;21(5):449–70

A method for determining the optimum transform for covariates of the Cox model with application to 3680 cases of intraocular melanoma. Gamel JW, et al. **Comput Biomed Res** 1988 Oct;21(5):471–7

Approximate maximum likelihood population pharmacokinetic models for the design of dosage regimens. Lago PJ. **Comput Biomed Res** 1989 Jun;22(3):282–95

Computer–assisted predictive mathematical relationship among plasma acetaminophen concentration and time and hepatotoxicity in man. Chung SJ. **Comput Methods Programs Biomed** 1989 Jan;28(1):37–43

Theory of oxygen transport to tissue. Popel AS. **Crit Rev Biomed Eng** 1989;17(3):257–321 (196 ref.)

A test of the Easterlin fertility model using income for two generations and a comparison with the Becker model. Behrman JR, et al. **Demography** 1989 Feb;26(1):117–23

Husbands' and wives' characteristics and fertility decisions: a diagonal mobility model. Sorenson AM. **Demography** 1989 Feb;26(1):125–35

U.S. births and limit cycle models. Wachter KW, et al. **Demography** 1989 Feb;26(1):99–115

How reliable are receptor models? Gualtieri F. **Drug Des Deliv** 1987 Dec;2(2):161–3 (18 ref.)

The environmental behavior of chemicals in soil: atrazine as an example. Lupi C, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):133–42

Monotonic and non–monotonic single channel open time distributions with two sequential open states. Goldman L. **Eur Biophys J** 1989;17(1):1–4

The fidelity of response by 1–[4–(trimethylammonio)phenyl]–6–phenyl–1,3,5–hexatriene in time–resolved fluorescence anisotropy measurements on lipid vesicles. Effects of unsaturation, headgroup and cholesterol on orientational order and reorientational dynamics. van Langen H, et al. **Eur Biophys J** 1989;17(1):37–48

Regulation of the cytoplasmic pH by a proton–translocating ATPase in Streptococcus faecalis (faecium). A computer simulation. Suzuki T, et al. **Eur J Biochem** 1989 Mar 15; 180(2):467–71

A unified computer program for assessment of attenuation correction and data acquisition methods in single photon emission computed tomography (SPECT). Murase K, et al. **Eur J Nucl Med** 1989;15(5):248–53

Thanks for 'call to arms' [letter] Blossom J. **Fam Med** 1989 Mar–Apr;21(2):85

Simultaneous analysis of families of curves [comment] Beck JS, et al. **FASEB J** 1989 Jul;3(9):2113–5. **Comment on: FASEB J** 1988 Mar 1;2(3):209–15

HPLC study on the 'history' dependence of gramicidin A conformation in phospholipid model membranes. Bañó MC, et al. **FEBS Lett** 1989 Jun 19;250(1):67–71

Protein secondary structure and homology by neural networks. The alpha–helices in rhodopsin. Bohr H, et al. **FEBS Lett** 1988 Dec 5;241(1–2):223–8

A model medico–legal system. Knight B. **Forensic Sci Int** 1988 Oct;39(1):1–4

Analysis of models of single–file diffusion. Aityan SK, et al. **Gen Physiol Biophys** 1988 Dec;7(6):591–611

The effect of rimantadine on the structure of model and biological membranes. Cherny VV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):23–37

Mathematical modelling of intra– and extracellular potentials generated by active structures with short regions of increased diameter. Dimitrova N. **Gen Physiol Biophys** 1988 Aug;7(4):401–12

Theoretical study of transmembrane and extracellular potentials under propagation block due to geometrical inhomogeneity. Dimitrova N. **Gen Physiol Biophys** 1988 Dec;7(6):581–9

Increase of ionic conductance of amphotericin B channels under antibody action. Kolomytkin OV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):73–8

Model of calcium channel inactivation: a qualitative analysis. Poledna J. **Gen Physiol Biophys** 1989 Feb;8(1):11–22

Effect of ion adsorption on the electrokinetic properties of erythrocytes. Tatulian SA, et al. **Gen Physiol Biophys** 1988 Dec;7(6):613–32

The steady state stability criterion of a simple model of calcium channels. Valko L, et al. **Gen Physiol Biophys** 1989 Feb;8(1):3–10

A framework for the analysis of psychiatric health facility utilization. Kanaroglou P, et al. **Geogr Med** 1989;19:115–40

Asymptotic growth and complex allometry of the brain and body in the white rat [published erratum appears in Growth Dev Aging 1988 Summer;52(5):66] Jolicoeur P, et al. **Growth Dev Aging** 1988 Spring;52(1):3–9

Changing criteria for hospital acquisitions. Wilke CL, et al. **Health Care Manage Rev** 1988 Summer;13(3):23–34

An empirical model for x–ray attenuation in Pb and mild steel. Okunade AA, et al. **Health Phys** 1989 Jun;56(6):943–6

The accuracy of some simple models for predicting particulate interception and retention in agricultural systems. Pinder JE 3d, et al. **Health Phys** 1989 Apr; 56(4):441–50

Prognosis in primary biliary cirrhosis: model for decision making. Dickson ER, et al. **Hepatology** 1989 Jul;10(1):1–7

Electrode models for electric current computed tomography. Cheng KS, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):918–24

The analysis of ventricular late potentials using orthogonal recordings. Lander P, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):629–39

A 3–D impedance method to calculate power deposition in biological bodies subjected to time varying magnetic fields. Orcutt N, et al. **IEEE Trans Biomed Eng** 1988 Aug; 35(8):577–83

Resilience and variability in pathogens and hosts. Agur Z. **IMA J Math Appl Med Biol** 1987;4(4):295–307

Temporal clustering of ion channel openings incorporating time interval omission. Ball F, et al. **IMA J Math Appl Med Biol** 1987;4(4):333–61

Variable infectiousness in HIV transmission models. Blythe SP, et al. **IMA J Math Appl Med Biol** 1988;5(3):181–200

Analytical results on the stability of age–structured recurrent epidemic models. Greenhalgh D. **IMA J Math Appl Med Biol** 1987;4(2):109–44

A model for the periodic synaptic inhibition of a neuronal oscillator. Kiemel T, et al. **IMA J Math Appl Med Biol** 1987;4(2):145–69

The process of gas exchange in systemic circulation in a hyperbaric environment: an analytical approach. Singh MP, et al. **IMA J Math Appl Med Biol** 1988;5(4):281–301

Optimal control analysis of a cancer chemotherapy problem. Swan GW. **IMA J Math Appl Med Biol** 1987;4(2):171–84

General applications of optimal control theory in cancer chemotherapy. Swan GW. **IMA J Math Appl Med Biol** 1988;5(4):303–16

An approach to modelling radiation damage by fast ionizing particles. Thomas GE. **IMA J Math Appl Med Biol** 1987; 4(4):363–77

Some probability models for diagnosing neurogenic disorders. Wilson BC, et al. **IMA J Math Appl Med Biol** 1988;5(3):167–79

A model for changes in the conformation of oxygen evolving

complex of chloroplasts during oxidation of water. Raval MK, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):341–3

An ethical model for improving the patient–physician relationship. McCullough LB. **Inquiry** 1988 Winter; 25(4):454–68

The post: pre dialysis plasma urea nitrogen ratio to estimate K.t/V and NPCR: validation. Daugirdas JT. **Int J Artif Organs** 1989 Jul;12(7):420–7

The post: pre–dialysis plasma urea nitrogen ratio to estimate K.t/V and NPCR: mathematical modeling. Daugirdas JT. **Int J Artif Organs** 1989 Jul;12(7):411–9

A mathematical model of extracorporeal antibody removal in autoimmune disease. Waniewski J, et al. **Int J Artif Organs** 1989 Jul;12(7):471–6

Computed limitations of spot scanning for therapeutic proton beams. Levin CV, et al. **Int J Biomed Comput** 1988 Oct; 23(1–2):33–41

Bacterial strain characterization using mathematical modelling of growth. Rochet MJ, et al. **Int J Med Microbiol** 1989 May;271(1):2–10

Synthesis and ionic channels of a linear gramicidin containing naphthylalanine instead of tryptophan. Ranjalahy–Rasoloarijao L, et al. **Int J Pept Protein Res** 1989 Apr;33(4):273–80

Models for leadership development. Blais KK, et al. **Int Nurs Rev** 1988 Nov–Dec;35(6):172–4

A proposed model for care of the elderly. Wagner L. **Int Nurs Rev** 1989 Mar–Apr;36(2):50–3, 60

An automated system of strabismus management. A direct approach using a "reverse" model. Kault D, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):276–87

Kinetics of corneal epithelial maintenance and graft loss. A population balance model. Sharma A, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1962–71

A utility–based model for comparing the cost–effectiveness of diagnostic studies. Patton DD, et al. **Invest Radiol** 1989 Apr;24(4):263–71

A theoretical study of cavitation generated by an extracorporeal shock wave lithotripter. Church CC. **J Acoust Soc Am** 1989 Jul;86(1):215–27

Nonlinear and active two–dimensional cochlear models: time–domain solution. Diependaal RJ, et al. **J Acoust Soc Am** 1989 Feb;85(2):803–12

Active noise control in ducts: some physical insights. Snyder SD, et al. **J Acoust Soc Am** 1989 Jul;86(1):184–94

Theory development in perspective: the role of conceptual frameworks and models in theory development. Botha ME. **J Adv Nurs** 1989 Jan;14(1):49–55

Evaluating Antonovsky's Salutogenic Model for its adaptability to nursing. Sullivan GC. **J Adv Nurs** 1989 Apr; 14(4):336–42

Implementation and evaluation of a new approach to clinical instruction. Beck SJ, et al. **J Allied Health** 1988 Nov; 17(4):331–40

Modeling for policy decisions: potential and problems. Knoebel SB. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):7A–11A

Moving forward on quality of care: role of decision modeling. Neuhauser D, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):48A–50A

Functional model of an eye protection program: guide for the clinical optometrist. Nakagawara VB. **J Am Optom Assoc** 1988 Dec;59(12):925–8

A minimal mathematical model of human periodic breathing. Carley DW, et al. **J Appl Physiol** 1988 Sep;65(3):1400–9

Flutter in collapsible tubes: a theoretical model of wheezes. Grotberg JB, et al. **J Appl Physiol** 1989 May;66(5):2262–73

ESR study of proton transport across phospholipid vesicle membranes. Khramtsov VV, et al. **J Biochem Biophys Methods** 1989 May;18(3):237–46

Universality and structure of the N–end rule. Gonda DK, et al. **J Biol Chem** 1989 Oct 5;264(28):16700–12

Folate cycle kinetics in human breast cancer cells. Morrison PF, et al. **J Biol Chem** 1989 Jun 25;264(18):10552–66

Kinetic properties of hexokinase under near–physiological conditions. Relation to metabolic arrest in Artemia embryos during anoxia. Rees BB, et al. **J Biol Chem** 1989 Sep 15; 264(26):15410–7

Appendix. Derivation and application of mathematic model for kinetics of 131I–follicle–stimulating hormone bound to receptors. Shimizu A, et al. **J Biol Chem** 1989 Aug 15; 264(23):13639–41

cAMP–dependent protein kinase. Model for an enzyme family. Taylor SS. **J Biol Chem** 1989 May 25; 264(15):8443–6 (69 ref.)

Steady–state models of glucose–perturbed Dictyostelium discoideum. Wright BE, et al. **J Biol Chem** 1988 Oct 15; 263(29):14906–12

In vitro flow measurements in ion sputtered hydrocephalus shunts. Cho YI, et al. **J Biomech** 1989;22(4):335–42

Prehepatic beta–cell secretion during the intravenous glucose tolerance test in humans: application of a combined model of insulin and C–peptide kinetics. Watanabe RM, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):790–7

The effects of low to moderate lead levels on neurobehavioral functioning in children: toward a conceptual model. Ruff HA, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):103–9 (61 ref.)

A personal computer–based arrhythmia generator based on mathematical models of cardiac arrhythmia. Ikeda N, et al. **J Electrocardiol** 1988;21 Suppl:S122–8

Kinetics of protein modification reactions: analysis of modification–induced protein unfolding. Rakitzis ET. **J Enzym Inhib** 1987;1(4):289–99

The potential impact of private long–term care financing options on Medicaid: the next thirty years. Wiener JM, et al. **J Health Polit Policy Law** 1989 Summer;14(2):327–40

A laboratory model for testing agents for hygienic hand disinfection: handwashing and chlorhexidine for the removal of klebsiella. Casewell MW, et al. **J Hosp Infect** 1988 Oct;12(3):163–75

Methods for calculating the efficiency of bacterial surface sampling techniques. Whyte W, et al. **J Hosp Infect** 1989 Jan;13(1):33–41

The system of the epidemic process. Cherkasskii BL. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):321–8

Global stability results for a generalized Lotka–Volterra system with distributed delays. Applications to predator–prey and to epidemic systems. Beretta E, et al. **J Math Biol** 1988;26(6):661–88

Epidemiological models with age structure, proportionate mixing, and cross–immunity. Castillo–Chavez C, et al. **J Math Biol** 1989;27(3):233–58

Enzyme kinetics for a two–step enzymic reaction with comparable initial enzyme–substrate ratios. Frenzen CL, et al. **J Math Biol** 1988;26(6):689–703

Models for pair formation in bisexual populations. Hadeler KP, et al. **J Math Biol** 1988;26(6):635–49

On stochastic compartmental models. Limić N. **J Math Biol** 1989;27(1):105–13

The effects of slip velocity at a membrane surface on blood flow in the microcirculation. Pal D, et al. **J Math Biol** 1988;26(6):705–12

The challenge to biomedicine: a foundations perspective. Foss L. **J Med Philos** 1989 Apr;14(2):165–91

Resource allocation in multifacility emergency medical service systems. Headrick RW, et al. **J Med Syst** 1988 Jun; 12(3):121–8

Cell proliferation kinetics and multistage cancer risk models. Bogen KT. **J Natl Cancer Inst** 1989 Feb 15;81(4):267–77

Tumor cord and growth in human brain tumors based on mathematical morphology. Yoshii Y, et al. **J Neurooncol** 1988 Sep;6(2):119–28

A nursing diagnosis based model: guiding nursing practice. Krenz M, et al. **J Nurs Adm** 1989 May;19(5):32–6

Developing new models of care, roles, and responsibilities. Strasen L. **J Nurs Adm** 1989 Jun;19(6):7–8, 24

Guided design: evaluation of a model for teaching nursing research. Selby ML, et al. **J Nurs Educ** 1988 Sep; 27(7):303–8

Conceptual models and theory development. Fawcett J. **J Obstet Gynecol Neonatal Nurs** 1988 Nov–Dec; 17(6):400–3

Discussion of primary drying during lyophilization. Jennings TA. **J Parenter Sci Technol** 1988 Jul–Aug;42(4):118–21

Light dosimetry: status and prospects. Star WM, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):149–67 (45 ref.)

Programmatic research: a collaborative model. Tomlinson PS, et al. **J Prof Nurs** 1986 Sep–Oct;2(5):309–17

Influence of ligand valency on ligand–influenced monomer–dimer equilibrium systems and biological control mechanisms. Wolfer GK Jr, et al. **J Protein Chem** 1989 Apr;8(2):289–98

Pendular model of paraplegic swing–through crutch ambulation. Rovick JS, et al. **J Rehabil Res Dev** 1988 Fall; 25(4):1–16

Preliminary evaluation of a Weibull function for fitting slow–component eye velocity over the time course of caloric–induced nystagmus. Formby C, et al. **J Speech Hear Res** 1989 Sep;32(3):681–7

A single–site allosteric model of intracellular androgen–receptor interaction. Kaufman M, et al. **J Steroid Biochem** 1989 Jan;32(1A):113–9

A clinical diagnostic model for the assessment of asbestosis: a new algorithmic approach. Schwartz A, et al. **J Thorac Imaging** 1988 Oct;3(4):29–35

Carbon monoxide in an urban environment: application of a receptor model for source apportionment. Khalil MA, et al. **JAPCA** 1988 Jul;38(7):901–6

The simulation of continuous arteriovenous hemodialysis with a mathematical model. Pallone TL, et al. **Kidney Int** 1989 Jan;35(1):125–33

Simulations of peritoneal solute transport during CAPD. Application of two–pore formalism. Rippe B, et al. **Kidney Int** 1989 May;35(5):1234–44

Revising RAWP [letter] Milner P, et al. **Lancet** 1988 Nov 19;2(8621):1195

Numerical analysis of a theoretical one–dimensional amperometric enzyme sensor. Ylilammi M, et al. **Med Biol Eng Comput** 1988 Jan;26(1):81–7

Controlling risk in capitation payment. Multivariate definitions of risk groups. Manton KG, et al. **Med Care** 1989 Mar;27(3):259–72

Use of linear models to analyze physicians' decisions. Wigton RS. **Med Decis Making** 1988 Oct–Dec;8(4):241–52 (64 ref.)

Determination of diagnostic x–ray spectra with characteristic radiation using attenuation analysis. Archer BR, et al. **Med Phys** 1988 Jul–Aug;15(4):637–41

Laplace reconstruction of experimental diagnostic x–ray spectra. Archer BR, et al. **Med Phys** 1988 Nov–Dec; 15(6):832–7

An analytical model of the scattered radiation distribution in diagnostic radiology. Boone JM, et al. **Med Phys** 1988 Sep–Oct;15(5):721–5

Nuclear magnetic resonance microscopy with 4–microns resolution: theoretical study and experimental results. Cho ZH, et al. **Med Phys** 1988 Nov–Dec;15(6):815–24

Nuclear magnetic resonance signal from flowing nuclei in rapid imaging using gradient echoes. Gao JH, et al. **Med Phys** 1988 Nov–Dec;15(6):809–14

Comparison of measured and calculated dose distributions around an iridium–192 wire. Gillin MT, et al. **Med Phys** 1988 Nov–Dec;15(6):915–8

Automatic shimming for localized spectroscopy. Holz D, et al. **Med Phys** 1988 Nov–Dec;15(6):898–903

Distance and depth measurements of radioactive objects utilizing rotating slant–hole collimators. Lancaster JL, et al. **Med Phys** 1988 Jul–Aug;15(4):642–7

Dosimetry models for radioimmunotherapy. Langmuir VK, et al. **Med Phys** 1988 Nov–Dec;15(6):867–73

Analysis of tissue–maximum ratio/scatter–maximum ratio model relative to the prediction of tissue–maximum ratio in asymmetrically collimated fields. Loshek DD. **Med Phys** 1988 Sep–Oct;15(5):672–82

Monte Carlo simulation of diagnostic x–ray scatter. Papin PJ, et al. **Med Phys** 1988 Nov–Dec;15(6):909–14

Calculation of dose profiles in homogeneous phantoms for irregular, partially attenuated, photon beams. Pla C, et al. **Med Phys** 1988 Jul–Aug;15(4):511–6

Theoretical evaluation of dose distributions in water about models 6711 and 6702 125I seeds. Williamson JF, et al. **Med Phys** 1988 Nov–Dec;15(6):891–7

A multiray model for calculating electron pencil beam distribution. Yu CX, et al. **Med Phys** 1988 Sep–Oct; 15(5):662–71

Analyzing transport kinetics with desk–top hybrid computers. Hempling HG. **Methods Enzymol** 1989; 172:262–88

Dynamic laser light scattering to determine size distributions of vesicles. Ruf H, et al. **Methods Enzymol** 1989;172:364–90

Genetic segregation and the maintenance of sexual reproduction. Kirkpatrick M, et al. **Nature** 1989 May 25; 339(6222):300–1

Ecosystem–level patterns of primary productivity and herbivory in terrestrial habitats. McNaughton SJ, et al. **Nature** 1989 Sep 14;341(6238):142–4

Chaos: detecting density dependence in imaginary worlds [news] May RM. **Nature** 1989 Mar 2;338(6210):16–7

Time–averaged concentration—time–averaged deviation: a new concept in mathematical assessment of dialysis adequacy [letter] Lopot F, et al. **Nephrol Dial Transplant** 1988;3(6):846–8

Teaching ethics in nursing curricula. Traditional and contemporary models. Fry ST. **Nurs Clin North Am** 1989 Jun;24(2):485–97 (26 ref.)

Nursing values and health care policy. Davis GC. **Nurs Outlook** 1988 Nov–Dec;36(6):289–92

Managing measurement error. Jennings BM, et al. **Nurs Res** 1989 May–Jun;38(3):186–7

Life–span developmental methods: application to nursing research. Weekes DP, et al. **Nurs Res** 1988 Nov–Dec; 37(6):380–3

An ethical model for decision–making. Bunting SM, et al. **Nurse Pract** 1988 Dec;13(12):30, 32–4

Accelerated heavy particles and the lens. V. Theoretical basis of cataract enhancement by dose fractionation. Worgul BV. **Ophthalmic Res** 1988;20(3):143–8

Primeval procreative comet pond. Clark BC. **Orig Life Evol Biosph** 1988;18(3):209–38

Chemical evolution of peroxidase—amino acid pentacyanoferrate (II) complexes as model. Kamaluddin, et al. **Orig Life Evol Biosph** 1988;18(3):267–80

The chemical logic of a minimum protocell. Morowitz HJ, et al. **Orig Life Evol Biosph** 1988;18(3):281–7

Cyclic AMP oscillations in suspensions of Dictyostelium discoideum. Monk PB, et al. **Philos Trans R Soc Lond [Biol]** 1989 Mar 15; 323(1215):185–224

A modified x–ray spectra reconstruction technique [published erratum appears in Phys Med Biol 1989 Apr;34(4):539] Archer BR, et al. **Phys Med Biol** 1988 Dec;33(12):1399–406

Analytical approximation of depth–dose curves for electron beams. Kovář I. **Phys Med Biol** 1989 Jul;34(7):939–48

An extension of the three–zone model to predict depth of tissue damage beneath Er:YAG and Ho:YAG laser excisions. McKenzie AL. **Phys Med Biol** 1989 Jan; 34(1):107–14

The influence of the single–event energy–deposition distribution on the signal–to–noise ratio in x–ray images in the presence of scattered radiation. Spanne P. **Phys Med Biol** 1988 Dec;33(12):1349–58

A test material for tissue characterisation and system calibration in MRI. Walker PM, et al. **Phys Med Biol** 1989 Jan;34(1):5–22

Effective energy resolution and scatter rejection in nuclear medicine. Wirth V. **Phys Med Biol** 1989 Jan;34(1):85–90

Studies on the physical state of water in living cells and model systems: IX. Theoretical significance of a straight line relationship between intracellular concentration of a partially excluded solute and its concentration in the bathing medium. Ling GN. **Physiol Chem Phys Med NMR** 1988;20(4):281–92

Studies on the physical state of water in living cells and model systems. X. The dependence of the equilibrium distribution coefficient of a solute in polarized water on the molecular weights of the solute: experimental confirmation of the

"size rule" in model studies. Ling GN, et al. **Physiol Chem Phys Med NMR** 1988;20(4):293–307
Studies on the physical state of water in living cells and model systems. XI. The equilibrium distribution coefficients of pentoses in muscle cell water: their dependence primarily on the molecular weights of the pentoses and lesser dependence on their stereospecificity. Ling GN, et al. **Physiol Chem Phys Med NMR** 1988;20(4):309–17
A kinetic model for plasmid curing. Sýkora P, et al. **Plasmid** 1989 Mar;21(2):85–98
The modeling of skin expanders. Duits EH, et al. **Plast Reconstr Surg** 1989 Feb;83(2):362–7
Surface–area increase in tissue expansion. van Rappard JH, et al. **Plast Reconstr Surg** 1988 Nov;82(5):833–9
Statistical effects in the absorption and optical activity of particulate suspensions. Bustamante C, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8482–6
Reaction path study of conformational transitions and helix formation in a tetrapeptide. Czerminski R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6963–7
Limit–cycle oscillations and chaos in reaction networks subject to conservation of mass. Di Cera E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):142–6
Photogating of ionic currents across a lipid bilayer. Drain CM, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6959–62
Protein secondary structure prediction with a neural network. Holley LH, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):152–6
Effects of lipid packing on polymorphic phase behavior and membrane properties. Hui SW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5825–9
A tool for multiple sequence alignment. Lipman DJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4412–5
High–order fluorescence fluctuation analysis of model protein clusters. Palmer AG 3d, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6148–52
Identifying protein–binding sites from unaligned DNA fragments. Stormo GD, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1183–7
On the dynamics of a forced reaction–diffusion model for biological pattern formation. Tsonis AA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4938–42
Enzymes work by solvation substitution rather than by desolvation. Warshel A, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5820–4
Analysis of post–perturbation gating kinetics of single ion channels. Ball FG, et al. **Proc R Soc Lond [Biol]** 1989 Feb 22;236(1282):29–52
Ion–channel gating mechanisms: model identification and parameter estimation from single channel recordings. Ball FG, et al. **Proc R Soc Lond [Biol]** 1989 May 22; 236(1285):385–416
Automated site–directed drug design: a general algorithm for knowledge acquisition about hydrogen–bonding regions at protein surfaces. Danziger DJ, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):101–13
Osmosis in leaky pores: the role of pressure. Hill AE. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):363–7
Osmotic flow equations for leaky porous membranes. Hill AE. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):369–77
The stability of ecosystems. Hogg T, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):43–51
Equivalence of aggregated Markov models of ion–channel gating. Kienker P. **Proc R Soc Lond [Biol]** 1989 Apr 22; 236(1284):269–309
Automated site–directed drug design: the formation of molecular templates in primary structure generation. Lewis RA, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22; 236(1283):141–62
Statistical inference from single channel records: two–state Markov model with limited time resolution. Yeo GF, et al. **Proc R Soc Lond [Biol]** 1988 Oct 22;235(1278):63–94
Theory for stationary state responses of drug–receptor–effector systems in the rate occupation continuum. Villarreal JE, et al. **Proc West Pharmacol Soc** 1988;31:241–3
Quantitative and explicit structure–time–activity relations. Baláž S, et al. **Prog Clin Biol Res** 1989;291:37–40
Selective screening for late stage breast cancer using a logistic model. McGregor SE, et al. **Prog Clin Biol Res** 1989; 293:175–82
Titrations in water–saturated octanol: a guide to partition coefficients of ion pairs and receptor–site interactions. Scherrer RA, et al. **Prog Clin Biol Res** 1989;291:59–62
Mathematical modeling in experimental nutrition. San Diego, California, U.S.A., June 15–16, 1987. Proceedings of the second conference. **Prog Food Nutr Sci** 1988;12(3):211–338
Modeling in nutrition and metabolism. Bergman RN. **Prog Food Nutr Sci** 1988;12(3):211–25 (39 ref.)
Application of saturation kinetics to model effects of energy restriction on protein utilization. Canolty NL. **Prog Food Nutr Sci** 1988;12(3):293–6
The effect of random measurement errors on kinetic transport parameter estimation. Collins JC, et al. **Prog Food Nutr Sci** 1988;12(3):297–314
Glucose infusion rates from various complex carbohydrates estimated from two models. Hoover–Plow J, et al. **Prog Food Nutr Sci** 1988;12(3):279–92
Population density estimation. Katz D. **Prog Food Nutr Sci** 1988;12(3):325–38
A more direct approach to compartmental modelling. Rosenblatt J. **Prog Food Nutr Sci** 1988;12(3):315–24
Conformation of alamethicin in phospholipid vesicles: implications for insertion models. Cascio M, et al. **Proteins** 1988;4(2):89–98
Theories and models supporting prevention approaches to alcohol problems among youth. Johnson EM, et al. **Public Health Rep** 1988 Nov–Dec;103(6):578–86 (41 ref.)
The coalition model of case management for care of HIV–infected persons. Ryndes T. **QRB** 1989 Jan;15(1):4–8
A stochastic two–stage model for cancer risk assessment. II. The number and size of premalignant clones. Dewanji A, et al. **Risk Anal** 1989 Jun;9(2):179–87
Mechanisms of persistent synovitis. Merry P, et al. **Scand J Rheumatol Suppl** 1988;76:85–93 (72 ref.)
Is it chaos, or is it just noise? [news] Pool R. **Science** 1989 Jan 6;243(4887):25–8
Chaos theory: how big an advance? [news] Poole R. **Science** 1989 Jul 7;245(4913):26–8
The sociological image of medicine and the patient. Gerhardt U. **Soc Sci Med** 1989;29(6):721–8 (81 ref.)
Predicting the effect of hospital closure on hospital utilization patterns. McLafferty S. **Soc Sci Med** 1988;27(3):255–62
Current concepts of the pathogenesis of optic neuritis associated with multiple sclerosis. Sergott RC, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):108–16 (72 ref.)
Meta–analysis in clinical medicine. Chalmers TC. **Trans Am Clin Climatol Assoc** 1987;99:144–50 (38 ref.)
Crossing lines in medicine. Davies NE, et al. **Trans Am Clin Climatol Assoc** 1987;99:91–9
A novel approach to experimentally estimating the number of reactive epitopes on multivalent antigens. Zeng CQ, et al. **Tumour Biol** 1989;10(1):4–11
Three–dimensional reconstruction from electron micrographs of disordered specimens. I. Method. Provencher SW, et al. **Ultramicroscopy** 1988;25(3):209–21
Modeling of Doppler signal considering sample volume and field distribution. Kim YM, et al. **Ultrason Imaging** 1989 Jul;11(3):175–96
Optimum focusing in an ultrasonic annular array imaging system using a nonspherical lens. Song TK, et al. **Ultrason Imaging** 1989 Jul;11(3):197–214
Application and evaluation of dissemination model. Funk SG, et al. **West J Nurs Res** 1989 Aug;11(4):486–91
Cross–lagged panel correlation analysis. Reed PG, et al. **West J Nurs Res** 1988 Oct;10(5):671–6
Conceptual models used in clinical practice. Wardle MG, et al. **West J Nurs Res** 1989 Feb;11(1):108–14
Glycocalyx electrostatic potential profile analysis: ion, pH, steric, and charge effects. Schnitzer JE. **Yale J Biol Med** 1988 Sep–Oct;61(5):427–46
[Possibilities of modelling of an undesirable phenomenon—non–alcoholic substance abuse in society] Fikr V, et al. **Cesk Zdrav** 1988 Oct;36(10):418–26 (Eng. Abstr.) **(Cze)**
[A numeric method for the identification of parameters in models of dilution curves] Hanuš J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):489–97 (Eng. Abstr.) **(Cze)**
[Theoretical aspects of signal processing] Berger G. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):152–7 **(Fre)**
[Interactions of detergents with phospholipid bilayers at sublytic concentrations—partition or binding?] Koelsch R, et al. **Biomed Biochim Acta** 1989;48(1):13–7 (Eng. Abstr.) **(Ger)**
[Dynamic interaction of membrane transport of cations and biosynthesis in the regulation of animal cell growth. A theoretical model] Il'in AS. **Biofizika** 1988 Sep–Oct; 33(5):821–7 (Eng. Abstr.) **(Rus)**
[A direct problem of electroencephalography using the spherical approach] Shimoliunas ACh. **Biofizika** 1988 Nov–Dec;33(6):1054–7 (Eng. Abstr.) **(Rus)**
[Limitations and inter–relation of traits in evolutionary dynamics] Vol'kenshtein MV, et al. **Dokl Akad Nauk SSSR** 1988;301(3):731–4 **(Rus)**
[Optimal organizational–production model for the blood service of a provincial region in the Ukrainian SSR] Terekhov NT, et al. **Gematol Transfuziol** 1988 Aug; 33(8):60–3 **(Rus)**
[Modelling of the regulatory system of tryptophan biosynthesis using generalized threshold models] Churaev RI, et al. **Genetika** 1989 Mar;25(3):535–44 (Eng. Abstr.) **(Rus)**
[SIMULAPOP, a computer program that simulates the dynamics of a small human population using the Monte Carlo method] Valdez–Alayón R, et al. **Acta Cient Venez** 1988;39(1):32–40 (Eng. Abstr.) **(Spa)**
[Social networks and mental disease] Di Marco G, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):157–68 (Eng. Abstr.) **(Spa)**

MODIFICATION METHYLASES see **DNA MODIFICATION METHYLASES**

MODIFICATION METHYLASES (ADENINE–SPECIFIC) see **DNA MODIFICATION METHYLASES (ADENINE–SPECIFIC)**

MODIFICATION METHYLASES (CYTOSINE–SPECIFIC) see **DNA MODIFICATION METHYLASES (CYTOSINE–SPECIFIC)**

MOHAMMEDANISM see **ISLAM**

MOLAR

Conservative technique for restoring primary molars after pulpotomy treatment. Berg JH, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):463–4
The restoration of endodontically treated teeth [letter] Cohn SA. **Aust Dent J** 1989 Jun;34(3):282
Resorption of a first permanent molar. Hall FM, et al. **Br Dent J** 1989 Jan 7;166(1):19–20
Incidence of lower second permanent molar impaction. Evans R. **Br J Orthod** 1988 Aug;15(3):199–203
Long–term comparison of two surgical flap designs for third molar surgery on the health of the periodontal tissue of the second molar tooth. Schofield ID, et al. **Can Dent Assoc J** 1988 Sep;54(9):689–91
Pain referred to teeth as the sole discomfort in undiagnosed mediastinal lymphoma: report of case. Kant KS. **J Am Dent Assoc** 1989 May;118(5):587–8
Clinical evaluations of composite resin restorations in primary molars: a 4–year follow–up study. Tonn EM, et al. **J Am Dent Assoc** 1988 Oct;117(5):603–6
Multiple external root resorption. Yusof WZ, et al. **J Am Dent Assoc** 1989 Apr;118(4):453–5
Periodontal health at first permanent molars adjacent to primary molar stainless steel crowns. Guelmann M, et al. **J Clin Periodontol** 1988 Oct;15(9):531–3
Histological evaluation of periodontal probe penetration in untreated facial molar furcations. Moriarty JD, et al. **J Clin Periodontol** 1989 Jan;16(1):21–6
A study of the interfacial shear and tensile stresses in a restored molar tooth. van Noort R, et al. **J Dent** 1988 Dec; 16(6):286–93
A criterion for the selection of artificial posterior teeth. Yoshida K, et al. **J Oral Rehabil** 1988 Jul;15(4):373–8
The effectiveness of two sonic and two ultrasonic scaler tips in furcations. Patterson M, et al. **J Periodontol** 1989 Jun; 60(6):325–9
Isolated extramedullary relapse of acute myelogenous leukemia in a tooth. Maygarden SJ, et al. **Mod Pathol** 1989 Jan;2(1):59–62
Classification of mandibular molar distal osseous lesions [published erratum appears in N Y State Dent J 1989 Jan;55(1):39] Sussman HI. **N Y State Dent J** 1988 Nov; 54(9):62, 63
Fissure sealant in permanent first molars after 10 years. Wendt LK, et al. **Swed Dent J** 1988;12(5):181–5
[Mesial movement of the arc of the mandibular molars using the Edgewise technic] Aknin JJ, et al. **Orthod Fr** 1987;58 Pt 2:723–36 (Eng. Abstr.) **(Fre)**
[Molars: amalgam or crowns in spite of everything?] Plasmans PJ. **Rev Belge Med Dent** 1988;43(1):63–71 (Eng. Abstr.) **(Fre)**
[Clinico–statistical considerations on a sample of school–age population in the Province of Trieste. I. Period of eruption of the 1st molars and change in permanent incisors] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):687–91 (Eng. Abstr.) **(Ita)**
[Clinico–statistical considerations on a sample of school–age population in the Province of Trieste. II. Period of eruption of the second molars and change of the canines and 1st and 2d permanent premolars] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):693–8 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

A maxillary fourth molar? Howe GS. **Br J Orthod** 1988 Aug; 15(3):205–6
Report on two aspects of the Maasai dentition. Hassanali J, et al. **East Afr Med J** 1988 Nov;65(11):798–803
[Malposition of the second mandibular molars. Problems with their preservation and corrective orthodontic therapy] Bertelè GP, et al. **Minerva Stomatol** 1988 Aug;37(8):583–90 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Comparative study of the upper molar occlusal table morphology among seven human populations. Kanazawa E, et al. **Am J Phys Anthropol** 1988 Oct;77(2):271–8
Deciduous teeth of the Neandertal mandible from Molare Shelter, near Scario (Salerno, Italy). Mallegni F, et al. **Am J Phys Anthropol** 1989 Aug;79(4):475–82
Three–dimensional analysis of the maxillary first molar crowns of Canadian Inuit. Mayhall JT, et al. **Am J Phys Anthropol** 1989 Jan;78(1):73–8
Tooth scaling and evolutionary dwarfism: an investigation of allometry in human pygmies. Shea BT, et al. **Am J Phys Anthropol** 1988 Sep;77(1):117–32
Ultrastructural and histochemical study on the morphogenesis of epithelial rests of Malassez. Hamamoto Y, et al. **Arch Histol Cytol** 1989 Mar;52(1):61–70
Principal component analysis of intercusp distances on the lower first molars of three human populations. Sekikawa M, et al. **Arch Oral Biol** 1988;33(8):535–41
Cusp height relationships between the upper and lower molars in Japanese subjects. Sekikawa M, et al. **J Dent Res** 1988 Dec;67(12):1515–7
Size and shape of the lingual surface of the upper molar. Numata A. **J Nihon Univ Sch Dent** 1988 Sep;30(3):201–7
The occlusal status of molars. Plasmans PJ, et al. **J Prosthet Dent** 1988 Oct;60(4):500–3
[Differences in the relief of the masticatory surfaces of intact

and carious molars] Leont'ev VK, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):4-6 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Development of the vascular supply in the dental pulp of rat molars--scanning electron microscope study of microcorrosion casts. Yoshida S, et al. **Okajimas Folia Anat Jpn** 1988 Dec;65(5):267-81

CYTOLOGY

Mouse molar cell proliferation kinetics in vivo and in vitro. Ahmad N, et al. **Bull Assoc Anat (Nancy)** 1988 Mar; 72(216):3-13

DRUG EFFECTS

Effect of systemic fluoride on rat molar morphology. Stereophotogrammetric analysis. Creath CJ, et al. **Caries Res** 1989;23(1):26-31

EMBRYOLOGY

Epithelial cytodifferentiation and extracellular matrix formation in enamel-free areas of the occlusal cusp during development of mouse molars: light and electron microscopic studies. Sakakura Y, et al. **Am J Anat** 1989 Apr;184(4):287-97

Influence of 1,25-dihydroxyvitamin D3 on cell proliferation during odontogenesis of the mouse embryonic molars in vitro. Sakakura Y, et al. **Calcif Tissue Int** 1988 Jul; 43(1):46-9

INJURIES

Sprouting of CGRP nerve fibers in response to dentin injury in rat molars. Taylor PE, et al. **Brain Res** 1988 Oct 4; 461(2):371-6

INNERVATION

Acute and chronic reactions of dental sensory nerve fibers to cavities and desiccation in rat molars. Byers MR, et al. **Anat Rec** 1988 Aug;221(4):872-83

Proportion of unmyelinated axons in rat molar and incisor tooth pulps following neonatal capsaicin treatment and/or sympathectomy. Fried K, et al. **Brain Res** 1988 Oct 25; 463(1):118-23

METABOLISM

Morphological evidence of the formation of intracellular collagen fibrils in the embryonic mouse molar odontoblasts induced by colchicine administration. Ishizeki K, et al. **Acta Anat (Basel)** 1989;134(2):133-40

Inflammation of rat molar pulp and periodontium causes increased calcitonin gene-related peptide and axonal sprouting. Kimberly CL, et al. **Anat Rec** 1988 Nov; 222(3):289-300

Localization of calcium and phosphorus in early predentin-matrix components by electron spectroscopic imaging (ESI)-analysis in rat molars. Blottner D, et al. **Cell Tissue Res** 1989 Mar;255(3):611-7

PATHOLOGY

Enlarged occlusal surfaces on first molars due to severe attrition and hypercementosis: examples from prehistoric coastal populations of Texas. Comuzzie AG, et al. **Am J Phys Anthropol** 1989 Jan;78(1):9-15

Severe infraclusion ankylosis: report of three cases. Pilo R, et al. **ASDC J Dent Child** 1989 Mar-Apr;56(2):144-6 (16 ref.)

Dental plaque and caries on occlusal surfaces of first permanent molars in relation to stage of eruption. Carvalho JC, et al. **J Dent Res** 1989 May;68(5):773-9

Caries in first permanent molars [letter] Twaddle J. **N Z Dent J** 1988 Oct;84(378):121-2

PHYSIOLOGY

Extremes in second molar eruption in two oriental patients. Lew KK. **Br Dent J** 1989 Jun 10;166(11):415-6

Cusp movement of molar teeth with composite filling materials in conventional and modified MOD cavities. Pearson GJ, et al. **Br Dent J** 1989 Mar 11;166(5):162-5

Eruption pattern of permanent molars: implications for school-based dental sealant programs. Kuthy RA, et al. **J Public Health Dent** 1989 Winter;49(1):7-14

[The effects of premature deciduous molar loss on the succeeding premolars] Hennemann K, et al. **Fortschr Kieferorthop** 1989 Feb;50(1):35-42 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

A radiographic study of interproximal alveolar bone crest between the primary molars in children. Bimstein E, et al. **ASDC J Dent Child** 1988 Sep-Oct;55(5):348-50

A comparison between xeroradiographs and conventional radiographs as an aid in root canal therapy for maxillary molars. Alexander JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):443-8

Impacted molars. Carrassi A, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):612

A simple paralleling instrument for superimposing radiographs of the molar regions. Graf JM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):502-6

Migration of an impacted mandibular second molar. Jasmin JR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):478-9

Ankylosed deciduous maxillary molar mimicking sinus pathosis. Kreutz RW. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):611-2

[Eruption disorders of the permanent molars] Piret JL, et al. **Acta Stomatol Belg** 1988 Dec;85(4):289-97 (Eng. Abstr.) **(Dut)**

SURGERY

Unerupted first permanent molar. Case report. Spratley MH, et al. **Aust Dent J** 1988 Oct;33(5):392-4

Lingual nerve damage following lower third molar surgery. Mason DA. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):290-4

Clinical and microbiological effects of root debridement in periodontal furcation pockets. Loos B, et al. **J Clin Periodontol** 1988 Aug;15(7):453-63

The relationship between loss of first permanent molar teeth and the prevalence of caries and restorations in adjacent teeth: a study of 15-16- year-old children. Oliver SJ, et al. **J Dent** 1988 Aug;16(4):155-9

Management of root-amputated maxillary molar teeth: periodontal and prosthetic considerations. Schmitt SM, et al. **J Prosthet Dent** 1989 Jun;61(6):648-52

Codeine 20 mg increases pain relief from ibuprofen 400 mg after third molar surgery. A repeat-dosing comparison of ibuprofen and an ibuprofen-codeine combination. McQuay HJ, et al. **Pain** 1989 Apr;37(1):7-13

[Prosthesis of patients after the resection of multirooted teeth] Bulanov VI. **Stomatologiia (Mosk)** 1989 Mar-Apr; 68(2):80-2 **(Rus)**

[Hemisection of the mandibular molars and their use for orthodontic purposes] Kozhokaru MP, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):58-9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Budding of small vesicles from the rough-surfaced endoplasmic reticulum in secretory ameloblasts of rat molar tooth germs. Matsuo S, et al. **Anat Rec** 1988 Dec; 222(4):317-22

MOLAR, FOURTH see TOOTH, SUPERNUMERARY

MOLAR, THIRD

The use of a visual analogue scale in observer assessment of postoperative swelling subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1989 Jun; 47(3):167-74

A migratory abscess pointing intraorally and extraorally. Case report. Ho KH. **Aust Dent J** 1989 Jun;34(3):226-7

The unerupted or impacted third molar--a critical appraisal of its pathologic potential. Stephens RG, et al. **Can Dent Assoc J** 1989 Mar;55(3):201-7 (65 ref.)

Thirty years of dental neglect. A case history. Vernice N, et al. **N Y State Dent J** 1989 May;55(5):38

[Third molars in relation to orthodontic treatment] Arrigoni C, et al. **Ann Osp Maria Vittoria Torino** 1987-88; 30(1):77-81 (25 ref.) **(Ita)**

[Nimesulide in oral surgery. Clinical experience in postoperative treatment] Bergamini M, et al. **Minerva Stomatol** 1988 Oct;37(10):793-6 (Eng. Abstr.) **(Ita)**

[Optimization of the surgical technic for extraction of the lower third molars] Garattini G, et al. **Minerva Stomatol** 1989 Apr;38(4):461-6 (31 ref.) (Eng. Abstr.) **(Ita)**

[Epidemiologic and nosological evaluation of impaction of the third molar] Luglié PF, et al. **Minerva Stomatol** 1988 Apr;37(4):323-8 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

Third molar agenesis in human prehistoric populations of the Canary Islands. Bermúdez de Castro JM. **Am J Phys Anthropol** 1989 Jun;79(2):207-15

Fusion of maxillary third and supernumerary fourth molars. Case report. Hou GL, et al. **Aust Dent J** 1989 Jun; 34(3):219-22

ANALYSIS

The relative distribution of fluoride in erupted and unerupted enamel of human third molars from a low fluoride area. Grobler SR, et al. **Arch Oral Biol** 1988;33(9):627-30

Fluoride distribution in the enamel of the mesio-lingual cusps of pairs of erupted and unerupted third molars of man with a low fluoride background. Grobler SR, et al. **J Biol Buccale** 1988 Jun;16(2):89-94

ANATOMY & HISTOLOGY

[304 lower third molars: anatomo-topographical position and root morphology] Zoccola GC, et al. **Minerva Stomatol** 1988 Nov;37(11):905-9 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Idiopathic external resorption of teeth. Owens PD, et al. **J Oral Pathol** 1988 Sep;17(8):404-8

PHYSIOLOGY

The role of the third molar in the cause of late lower arch crowding: a review. Richardson ME. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):79-83 (16 ref.)

Role of the mandibular third molar relative to lower arch crowding [letter] Riedel RA. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):25A-26A

The eruption of third molars in adults: a 10-year longitudinal study. Garcia RI, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):9-13

Mandibular third molar eruption in relation to available space as assessed on lateral cephalograms. Forsberg CM, et al. **Swed Dent J** 1989;13(1-2):23-31

RADIOGRAPHY

The necessity to adequately visualize impacted maxillary third molars: report of three cases. Mopsik ER. **J Am Dent Assoc** 1989 Jun;118(6):721-3

SURGERY

Visual analogue scale assessment of postoperative swelling. A study of clinical inflammatory variables subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1988 Aug;46(4):233-40

Impacted third molars. A team approach to surgical intervention. Steuer K, et al. **AORN J** 1989 May; 49(5):1363-9

Lingual nerve damage associated with the removal of lower third molars. Blackburn CW, et al. **Br Dent J** 1989 Aug 5;167(3):103-7

An unusual post-extraction complication [letter] Caplin RL. **Br Dent J** 1988 Aug 20;165(4):120

'Oral surgery: assessment and treatment' [letter] Cooksey MW. **Br Dent J** 1989 Apr 22;166(8):283

A comparison of ibuprofen and dihydrocodeine in relieving pain following wisdom teeth removal. Frame JW, et al. **Br Dent J** 1989 Feb 25;166(4):121-4

A gnathodynanometer as an objective means of pain assessment following wisdom tooth removal. High AS, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):284-91

Do local analgesics injected at the time of third molar removal under general anaesthesia reduce significantly post operative analgesic requirements? A double-blind controlled trial. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):27-32

Unerupted third molars [letter] **Can Dent Assoc J** 1989 Jun; 55(6):453

Long-term comparison of two surgical flap designs for third molar surgery on the health of the periodontal tissue of the second molar tooth. Schofield ID, et al. **Can Dent Assoc J** 1988 Sep;54(9):689-91

Removing the mandibular third molar: neurosensory deficits and consequent litigation. Swanson AE. **Can Dent Assoc J** 1989 May;55(5):383-6

The efficacy of benorylate in postoperative dental pain. Moore U, et al. **Eur J Clin Pharmacol** 1989;36(1):35-8

The effectiveness of flurazepam as night sedation prior to the removal of third molars. Luyk NH, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):347-51

A comparison of paracetamol and diflunisal for pain control following 3rd molar surgery. Rodrigo C, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):130-2

Periodontal damage to third molars prior to transplantation. A histometric study. Schliephake H, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):55-8

Comparison of the use of nalbuphine and fentanyl during third molar surgery. Canning HB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1048-50

Continuous infusion of methohexital and alfentanil hydrochloride for general anesthesia in outpatient third molar surgery. Dachowski MT, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):233-7

Late presentation of actinomycosis after third molar surgery. Boon LC. **Med J Malaysia** 1987 Sep;42(3):207-8

Extraction of third molars [letter] Prigoff W, et al. **N Y State Dent J** 1989 Jan;55(1):8

Third molar teeth: differing concepts of oral surgeons and other dentists. Yablon P, et al. **N Y State Dent J** 1988 Oct;54(8):27-31

Clinical implications of factor XII deficiency. McDonough RJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):264-6

The effects of two different dental local anesthetic solutions on plasma potassium levels during third molar surgery. Meechan JG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):650-3

Postoperative status after partial removal of the mandibular third molar. Knutsson K, et al. **Swed Dent J** 1989; 13(1-2):15-22

TRANSPLANTATION

Autogenic tooth transplantation: a report of ten cases. Hernandez SL, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1051-5

[Autograft of the germ of the lower third molar] Di Lauro F, et al. **Minerva Stomatol** 1988 Aug;37(8):595-601 (Eng. Abstr.) **(Ita)**

MOLASSES

ANALYSIS

Rapid determination of the glucose content of molasses using a biosensor. Bradley J, et al. **Analyst** 1989 Mar;114(3):375–9

MOLECULAR BIOLOGY

Biotechnology computing: information science for the era of molecular medicine. Masys DR. **Acad Med** 1989 Jul; 64(7):379–81

Molecular biology of hemopoiesis. Proceedings of the third annual symposium. November 6–7, 1987, Rye Brook, New York. **Adv Exp Med Biol** 1988;241:1–339

Off and running: a progress report from the AJRCMB [editorial] Brody JS, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1380–1

Molecular biological approaches to protein sorting. Roth MG. **Annu Rev Physiol** 1989;51:797–810 (48 ref.)

Molecular pathology. **Biochem Soc Symp** 1987;53:1–182

Neurons, neural networks and molecular biology. **Bioessays** 1989 Feb–Mar;10(2–3):43–93

The molecular biology of brain and mind development. Epstein HT. **Bioessays** 1989 Feb–Mar;10(2–3):44–8 (22 ref.)

Graduate education in biochemistry and molecular biology: learning by accident or by deliberate plan? Vella F. **Bioessays** 1988 Oct;9(4):132–4

Sixth International Congress of Biorheology. Symposium: Molecular biorheology. **Biorheology** 1987;24(6):643–687

Molecular biology in biorheology. Chien S. **Biorheology** 1987; 24(6):659–72 (9 ref.)

The state of plant molecular biology: is there a second chance for Ag schools? [see comments] Finer GR. **Cell** 1989 Jan 27;56(2):141–2. **Comment in:** Cell 1989 Mar 24;56(6):914–5

Papers presented at the 2nd Symposium on Cell Biology. Tokyo, 13 May 1988. Abstracts. **Cell Struct Funct** 1988 Aug;13(4):345–57

Cardiovascular molecular biology. Introduction to the series. Chien KR, et al. **Circulation** 1989 Aug;80(2):219–33 (60 ref.)

From bench to bedside—the impact of the transfer of the new biology to clinical medicine. Burrow GN. **Clin Invest Med** 1988 Aug;11(4):315–20

Selecting a processor for computations in molecular biophysics. Bourne PE, et al. **Comput Biol Med** 1988; 18(5):341–9

Recombination within a subclass of restriction fragment length polymorphisms may help link classical and molecular genetics. Meagher RB, et al. **Genetics** 1988 Nov; 120(3):809–18 (55 ref.)

Molecular aspects of endocrinology [editorial] Andreoli TE. **Hosp Pract [Off]** 1989 Aug 15;24(8):11–2

Role of molecular biology in hypertension research. State of the Art lecture. Dzau VJ, et al. **Hypertension** 1989 Jun; 13(6 Pt 2):731–40 (60 ref.)

On structural analysis of chemical mutations. Lall RS, **Indian J Biochem Biophys** 1988 Aug;25(4):364–7

18th annual UCLA symposium. Abstracts: Frontiers of NMR in molecular biology. **J Cell Biochem Suppl** 1989;13A:1–37

Abstracts of papers presented at the joint meeting of the American Society for Cell Biology and the American Society for Biochemistry and Molecular Biology. 29 January–2 February 1989, San Francisco, California. **J Cell Biol** 1988 Dec;107(6 Pt 3):1a–1007a

Abstracts of papers presented at the twenty-ninth annual meeting of the American Society for Cell Biology. 5–9 November 1989, Houston, Texas. **J Cell Biol** 1989 Oct; 109(4 Pt 2):1a–409a

The hepatitis-B viruses: molecular biology and recent tissue culture systems. Schlicht HJ, et al. **J Cell Sci Suppl** 1987; 7:197–212 (81 ref.)

Symposium overview. Minnesota Conference on Supercomputing in Biology: Proteins, Nucleic Acids, and Water. Wilcox GL, et al. **J Comput Aided Mol Des** 1988 Jan;1(4):271–81

Future in biomolecular computation. Wimmer E. **J Comput Aided Mol Des** 1988 Jan;1(4):283–90

Molecular biology and nutrition research. Hanson RW, et al. **J Nutr** 1989 Jul;119(7):957–64 (52 ref.)

Successes and limitations of molecular biology. Holliday R. **J Theor Biol** 1988 Jun 7;132(3):253–62 (14 ref.)

Homology in classical and molecular biology. Patterson C. **Mol Biol Evol** 1988 Nov;5(6):603–25 (90 ref.)

About an old problem, new approaches, a new section [editorial] Franceschi C, et al. **Mutat Res** 1988 Sep;3–5

Molecular gerontology needs coordination [editorial] Vijg J. **Mutat Res** 1989 Mar;219(2):87–8

The potential of molecular and cellular biology. Baguley BC. **N Z Med J** 1988 Oct 26;101(856 Pt 2):700–2

USA Product Review 1988. Molecular biological software for research labs. **Nature** 1988 Sep 22;SPEC NO:1–19

NIH to end support for electronic network [news] Ezzell C. **Nature** 1989 Jul 13;340(6229):87

Advances in two-dimensional electrophoresis. Hanash SM, et al. **Nature** 1989 Feb 2;337(6206):485–6

EMBO. Workshops to postdocs and publishing [news] Newmark P. **Nature** 1989 Apr 27;338(6218):725

European molecular biology laboratory in search of a director [news] Newmark P. **Nature** 1989 Feb 2; 337(6206):397

Overview of the LiMB database. Lawton JR, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5885–99

Molecular biologic approaches to prenatal defects. Sack GH Jr. **Prog Clin Biol Res** 1988;281:303–23 (73 ref.)

The impact of molecular biology in the diagnosis and management of viral hepatitis. Bonino F, et al. **Ric Clin Lab** 1988 Oct–Dec;18(4):261–71 (61 ref.)

The flow of information in biological systems. Beyond the central dogma. Wills PR. **Riv Biol** 1988;81(3):419–35 **(Eng, Ita)**

Bionet bites the dust [news] Marx JL. **Science** 1989 Jul 14; 245(4914):126

Phosphorothioates in molecular biology. Eckstein F, et al. **Trends Biochem Sci** 1989 Mar;14(3):97–100 (33 ref.)

The discovery of 'split' genes: a scientific revolution. Witkowski JA. **Trends Biochem Sci** 1988 Mar;13(3):110–3 (39 ref.)

The place of molecular biology in veterinary research and teaching. Biggs PM. **Vet Rec** 1988 Aug 13;123(7):176–9

The thirteenth International Conference on Yeast Genetics and Molecular Biology. Banff, Alberta, Canada, 31 August–5 September 1986. Abstracts. **Yeast** 1986 Dec; 2(4):S451–67

The fourteenth International Conference on Yeast Genetics and Molecular Biology. 7–13 August 1988. Book of abstracts. **Yeast** 1988 Aug;4 Spec No:S1–529

The thirteenth International Conference on Yeast Genetics and Molecular Biology. Banff, Alberta, Canada, 31 August–5 September 1986. Book of Abstracts. **Yeast** 1986 Sep;2 Spec No:S1–449

[Molecular biology of keratins and their significance in the clinical diagnosis of tumors] Jensen PK. **Ugeskr Laeger** 1989 Mar 13;151(11):680–6 (Eng. Abstr.) **(Dan)**

[Prospective biology in prevention] Siest G. **Arch Belg** 1988; 46(3–6):248–58 **(Fre)**

[Contribution of molecular biology to the study of polycystic kidney disease] Grünfeld JP, et al. **Presse Med** 1989 Jul 1;18(26):1279–80 (11 ref.) **(Fre)**

[Molecular biology of the inhibitory synapse] Betz H. **Arzneimittelforschung** 1989 Jan;39(1A):138–43 (31 ref.) (Eng. Abstr.) **(Ger)**

[Reflections on the biomolecular level of the organization of matter] Shingarov GKh, et al. **Vestn Akad Med Nauk SSSR** 1989;(4):36–45 **(Rus)**

EDUCATION

The state of plant biology: views from the other side of the fence [letter; comment] **Cell** 1989 Mar 24;56(6):914–5. **Comment on:** Cell 1989 Jan 27;56(2):141–2

Molecular biology. One of the better models of European cooperation [news] Newmark P. **Nature** 1989 Apr 27; 338(6218):724

Standards for the PhD degree in biochemistry and molecular biology. Committee on Education of the International Union of Biochemistry. **Trends Biochem Sci** 1989 Jun; 14(6):205–9 (0 ref.)

HISTORY

Recollections on the origins of molecular biology on 'Proteines de Structure de Szent-Györgyi et Thymonucléohistone'. Brachet J. **Biochim Biophys Acta** 1989;1000:1–5

A century of progress: beyond molecular immunology. Talmage DW. **J Immunol** 1988 Oct 1;141(7 Suppl):S5–16

Molecular biology in cardiology, a paradigmatic shift. Katz AM. **J Mol Cell Cardiol** 1988 Apr;20(4):355–66

[Physics and the genesis of molecular biology] Eşanu V. **Virologie** 1989 Jan–Mar;40(1):79–92 **(Fre)**

METHODS

Attempts to investigate the molecular basis of urea cycle disorders. Matsuda I, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):505–9

Application of molecular biology to forensic pathology. Zumwalt RE. **Hum Pathol** 1989 Apr;20(4):303–7

Interphotoreceptor retinoid-binding protein (IRBP): a model protein for molecular biological and clinically relevant studies. Friedenwald lecture. Chader GJ. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):7–22 (58 ref.)

Avoiding false positives with PCR [published erratum appears in Nature 1989 Jun 8;339(6224):490] Kwok S, et al. **Nature** 1989 May 18;339(6221):237–8

Primer availability [letter] Willems PJ. **Nature** 1989 Jan 5; 337(6202):10

Increased specificity of PCR-amplified products by size-fractionation of restriction enzyme-digested template genomic DNA. Beck BN, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9051

Recombinant fragment assay for gene targetting based on the polymerase chain reaction. Kim HS, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8887–903

Modified Birnboim-Doly method for rapid detection of plasmid copy number. Taylor DE, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9056

DNA diagnostics—molecular techniques and automation. Landegren U, et al. **Science** 1988 Oct 14;242(4876):229–37 (96 ref.)

[Methods of restriction analysis, hybridization and cloning of nucleic acids] Kasprzak W. **Wiad Parazytol** 1988; 34(4–6):679–82 **(Pol)**

STANDARDS

Standards for the Ph.D. degree in biochemistry and molecular biology [news] **FASEB J** 1989 Jul;3(9):2106–10

TRENDS

More on surgery and the new biology [editorial] Ludbrook J. **Aust N Z J Surg** 1988 Nov;58(11):841

Unfinished business. Paul J. **Br J Cancer Suppl** 1988 Dec; 9:5–8

Molecular endocrinology: a welcome extension to, but not a replacement for, endocrinology. Peaker M. **J Endocrinol** 1989 Mar;120(3):361–2

[Evolution of the concept of the mechanisms of antibiotic interaction with microbial cells] Navashin SM, et al. **Antibiot Khimioter** 1989 May;34(5):323–32 **(Rus)**

[Prospects of the development of studies on cellular and molecular mechanisms of the effect of chemical factors in the occupational environment] Ivanov VV. **Gig Tr Prof Zabol** 1988 Sep;(9):1–4 (Eng. Abstr.) **(Rus)**

MOLECULAR CLONING see **CLONING, MOLECULAR**

MOLECULAR CONFORMATION

The chain conformations in membranes and micelles. Dill KA. **Adv Colloid Interface Sci** 1986 Nov;26(2–4):99–110 (29 ref.)

UV resonance Raman studies of molecular structure and dynamics: applications in physical and biophysical chemistry. Asher SA. **Annu Rev Phys Chem** 1988;39:537–88 (115 ref.)

Vibrational spectroscopic studies of the structure of species derived from the chemisorption of hydrocarbons on metal single-crystal surfaces. Sheppard N. **Annu Rev Phys Chem** 1988;39:589–644 (169 ref.)

Distance estimation from NOE data in macromolecular systems: a quadratic approach. Majumdar A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):886–92

Fourier transform infrared spectroscopy of 13C = O-labeled phospholipids hydrogen bonding to carbonyl groups. Blume A, et al. **Biochemistry** 1988 Oct 18;27(21):8239–49

The effect of a distribution of separations upon intramolecular distances in biopolymers, as determined by radiationless energy transfer. Albaugh S, et al. **Biophys Chem** 1989 Mar; 33(1):71–6

Dispersion of tertiary structures for an ensemble of primary sequences at an externally induced transition of correlation regimes. Fernández A. **Biophys Chem** 1988 Dec; 32(2–3):167–71

Detection of three rotational correlation times for a rigid asymmetric molecule using frequency-domain fluorometry. Gryczynski I, et al. **Biophys Chem** 1988 Jul 15;30(3):271–7

Simultaneous determination of intramolecular distance distributions and conformational dynamics by global analysis of energy transfer measurements. Beechem JM, et al. **Biophys J** 1989 Jun;55(6):1225–36

A lyotrope gradient method for liquid crystal temperature-composition-mesomorph diagram construction using time-resolved x-ray diffraction. Caffrey M. **Biophys J** 1989 Jan;55(1):47–52

Resolution of end-to-end distance distributions of flexible molecules using quenching-induced variations of the Forster distance for fluorescence energy transfer. Gryczynski I, et al. **Biophys J** 1988 Oct;54(4):577–86

Effects of normalization errors on size distributions obtained from dynamic light scattering data. Ruf H. **Biophys J** 1989 Jul;56(1):67–78

The sieving of spheres during agarose gel electrophoresis: quantitation and modeling. Griess GA, et al. **Biopolymers** 1989 Aug;28(8):1475–84

Diffusion coefficients of segmentally flexible macromolecules with two subunits: a study of broken rods. Mellado P, et al. **Biopolymers** 1988 Nov;27(11):1771–86

The reaction mechanism of Na,K-ATPase: problems regarding the oligomeric/monomeric state and the phosphorylated intermediates of the system. Nørby JG. **Braz J Med Biol Res** 1988;21(6):1251–9 (42 ref.)

Chirality: pharmacokinetics and pharmacodynamics in 3 dimensions. Williams KM. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):465–70 (47 ref.)

FUS: a system to simulate conformational changes in biological macromolecules. Major F, et al. **Comput Appl Biosci** 1988 Nov;4(4):445–51

Periodic electric field as a biopolymer conformation switch: a possible mechanism. Vidybida AK. **Eur Biophys J** 1989; 16(6):357–61

Solution conformation of sialosylcerebroside (GM4) and its NeuAc(alpha 2——3)Gal beta sugar component. Poppe L, et al. **Eur J Biochem** 1989 Mar 15;180(2):337–42

HPLC study on the 'history' dependence of gramicidin A conformation in phospholipid model membranes. Bañó MC, et al. **FEBS Lett** 1989 Jun 19;250(1):67–71

A simple method for determination of rotational correlation times and separation of rotational and polarity effects from EPR spectra of spin-labeled biomolecules in a wide correlation time range. Steinhoff HJ. **J Biochem Biophys Methods** 1988 Dec;17(4):237–47

Use of augmented Lagrangians in the calculation of molecular conformations by distance geometry. Crippen GM, et al. **J Chem Inf Comput Sci** 1988 Aug;28(3):125–8

WIZARD: AI in conformational analysis. Dolata DP, et al.

J Comput Aided Mol Des 1987 Apr;1(1):73–85
Pattern recognition display methods for the analysis of computed molecular properties. Hudson B, et al. J Comput Aided Mol Des 1989 Mar;3(1):55–65
Highly conformationally constrained halogenated 6-spiroepoxypenicillins as probes for the bioactive side-chain conformation of benzylpenicillin. Shute RE, et al. J Comput Aided Mol Des 1989 Jun;3(2):149–64
Forces in molecular recognition: comparison of experimental data and molecular mechanics calculations. Waltho JP, et al. J Comput Aided Mol Des 1988 Apr;2(1):31–41
The use of n.m.r. spectroscopy in the structure determination of natural products: two-dimensional methods. Derome AE. Nat Prod Rep 1989 Apr;6(2):111–41 (117 ref.)
Stereopsis ambiguity in stereo images [letter] Chapuis G. Nature 1989 Jun 29;339(6227):670
Differential molecular connectivity in data-base fragment searching. Kier LB, et al. Pharm Res 1989 Jun;6(6):497–500
Statistical effects in the absorption and optical activity of particulate suspensions. Bustamante C, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8482–6
Computer-aided molecular modelling applied to the dopaminergic system. Chrétien JR, et al. Prog Clin Biol Res 1989;291:243–6
Molecular electrostatic potentials: a critical assessment in QSAR and a tryptamine binding model. Hadži D, et al. Prog Clin Biol Res 1989;291:259–63
Molecular shape analysis of structure-activity tables. Hopfinger AJ, et al. Prog Clin Biol Res 1989;291:151–9
An index of flexibility from molecular shape descriptors. Kier LB. Prog Clin Biol Res 1989;291:105–9
Conformational study of erythromycin analogues. Kim KH, et al. Prog Clin Biol Res 1989;291:325–8
Common conformational and electronic features for non-dihydropyridines calcium antagonists. Laguerre M, et al. Prog Clin Biol Res 1989;291:255–8
Strategies in drug design based on 3D-structures of ligands. Martin YC, et al. Prog Clin Biol Res 1989;291:177–81
The use of 3D modelling databases for identifying structure activity relationships. Perry NC, et al. Prog Clin Biol Res 1989;291:189–93
Quantum mechanical SCF/CI studies as probes of macromolecular structure: methodological aspects of spectral comparisons. Petke JD, et al. Prog Clin Biol Res 1989;289:373–83
Beta-adrenoceptor modeling based on MEP studies. el Tayar N, et al. Prog Clin Biol Res 1989;291:265–8
Electrostatic potential maps of enzyme inhibitors. Thomson C. Prog Clin Biol Res 1989;291:269–74

MOLECULAR GENETICS see **GENETICS, BIOCHEMICAL**

MOLECULAR MODELS see **MODELS, MOLECULAR**

MOLECULAR NEUROBIOLOGY see **NEUROBIOLOGY**

MOLECULAR PROBE TECHNICS

Affinity labeling the bovine gallbladder cholecystokinin receptor using a battery of probes. Schjoldager B, et al. Am J Physiol 1988 Nov;255(5 Pt 1):G579–86
Quantitative assays based on the use of replicatable hybridization probes. Lomeli H, et al. Clin Chem 1989 Sep; 35(9):1826–31
Use and applications of nucleic acid probes in the clinical laboratory. Mifflin TE. Clin Chem 1989 Sep;35(9):1819–25 (53 ref.)
Electron microscopic identification of hemopoietic progenitor cells by exploiting their sugar-recognizing receptors using a newly developed minibead technique. Matsuoka T, et al. Exp Hematol 1989 May;17(4):326–9
Comparison of dot-blot and Northern blot hybridizations in the determination of genetic relatedness of United States bluetongue virus serotypes. Unger RE, et al. J Virol Methods 1988 Dec;22(2–3):273–82
Stable cell membrane labelling. Horan PK, et al. Nature 1989 Jul 13;340(6229):167–8
Direct measurement of tubulin and bulk message distributions on polysomes of growing, starved and deciliated Tetrahymena using RNA gel blots of sucrose gradients containing acrylamide. Calzone FJ, et al. Nucleic Acids Res 1988 Oct 25;16(20):9597–609
Labelling oligonucleotides to high specific activity (I). Craig AG, et al. Nucleic Acids Res 1989 Jun 26;17(12):4605–10
A method for introducing random single point deletions in specific DNA target sequences using oligonucleotides. Ner SS, et al. Nucleic Acids Res 1989 Jun 12;17(11):4015–23
[Diagnosis of genetic diseases using DNA recombination technics] Jungerman M, et al. Pol Tyg Lek 1988 Sep 26; 43(39):1243–6 (Pol)

INSTRUMENTATION

Multiple uses of liquepipets in Southern, northern, and western blots. Li JK, et al. Anal Biochem 1988 Nov 1; 174(2):471–6

METHODS

Northern blot normalization with a 28S rRNA oligonucleotide probe. Barbu V, et al. Nucleic Acids Res 1989 Sep 12;17(17):7115

MOLECULAR PROBES

Thapsigargin, a novel molecular probe for studying intracellular calcium release and storage. Thastrup O, et al. Agents Actions 1989 Apr;27(1–2):17–23
The effect of potential-sensitive molecular probes on the thermal phase transition in dimyristoylphosphatidylcholine preparations. Fumero J, et al. Biochim Biophys Acta 1988 Oct 6;944(2):164–76
Antisera to synthetic peptides as probes of structural changes during aging of alpha-crystallin from the bovine lens. Takemoto L, et al. Biochim Biophys Acta 1989 May 1; 995(3):259–63
Decreased accessibility of platelet-bound fibrinogen to antibody and enzyme probes. Peerschke EI. Blood 1989 Aug 1;74(2):682–9
Frescon: a possible new pharmacological tool. Gardner DR, et al. Comp Biochem Physiol [A] 1989;93(1):69–75 (32 ref.)
Preparation and characterization of biotinylated probes for the beta-interferon receptor. Fournier A, et al. Int J Biochem 1988;20(10):1151–7
H2a-specific proteolysis as a unique probe in the analysis of the histone octamer. Eickbush TH, et al. J Biol Chem 1988 Dec 15;263(35):18972–8
A library of oligosaccharide probes (neoglycolipids) from N-glycosylated proteins reveals that conglutinin binds to certain complex-type as well as high mannose-type oligosaccharide chains. Mizuochi T, et al. J Biol Chem 1989 Aug 15;264(23):13834–9
Site-directed anti-peptide antibodies define the topography of the beta-adrenergic receptor. Wang H, et al. J Biol Chem 1989 Aug 25;264(24):14424–31
In situ hybridization for the detection of low copy numbers of c-abl oncogene mRNA in lymphoma cells: technical approach and comparison with results with anti-oncoprotein antibodies. Greil R, et al. Lab Invest 1989 Apr;60(4):574–82
Molecular probes for general testicular and specific spermatogenic function. Krawetz SA, et al. Mol Cell Probes 1989 Jun;3(2):109–15
Nucleic acids or immunoglobulins: which are the molecular probes of the future? Yolken RH. Mol Cell Probes 1988 Jun;2(2):87–96 (38 ref.)
2-Aminopurine as a probe for mismatch repair in mammalian cells and its relationship to DNA methylation. Diver WP, et al. Mutagenesis 1989 Jul;4(4):302–5
Monoclonal antibody analysis of purified and cell-associated tissue factor. Morrissey JH, et al. Thromb Res 1988 Nov 1;52(3):247–61
Prediction of chemical carcinogenicity from molecular and electronic structures: a comparison of MINDO/3 and CNDO/2 molecular orbital methods. Lewis DF, et al. Toxicol Lett 1989 Jan;45(1):1–13 (41 ref.)
[Antipeptide antibodies to the porcine lactate dehydrogenase isoenzyme M4 active center fragment as a probe for the structural analysis of active centers of human lactate dehydrogenase isoforms] Grebenshchikova OG, et al. Biokhimiia 1989 Mar;54(3):370–4 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

[Biocytin13]dynorphin A 1–13 amide: a potential probe for the kappa-opioid receptor. Hochhaus G, et al. Pharm Res 1988 Dec;5(12):790–4

MOLECULAR STRUCTURE

see related
MODELS, MOLECULAR

Molecular characterization of size and copy number of the human insulin gene in transfected rat islet tumor cell clones. Andersen LC, et al. Exp Clin Endocrinol 1989 May; 93(2–3):272–6
Chemical Abstracts Service Chemical Registry System. 10. Registration of substances from pre-1965 indexes of Chemical Abstracts. Hamill KA, et al. J Chem Inf Comput Sci 1988 Nov;28(4):175–9
Chemical Abstracts Service Chemical Registry System. 11. Substance-related statistics: update and additions. Stobaugh RE. J Chem Inf Comput Sci 1988 Nov;28(4):180–7
Upperbound procedures for the identification of similar three-dimensional chemical structures. Brint AT, et al. J Comput Aided Mol Des 1989 Jan;2(4):311–20
Forging the future. Counts RW. J Comput Aided Mol Des 1988 Apr;2(1):77–8
The veil of commercialism [editorial] Marshall GR, et al. J Comput Aided Mol Des 1988 Apr;2(1):1–2
MENTHOR, a database system for the storage and retrieval of three-dimensional molecular structures and associated data searchable by substructural, biologic, physical, or geometric properties. Martin YC, et al. J Comput Aided Mol Des 1988 Apr;2(1):15–29
Structural analysis of the 5'-flanking sequence of the mouse epidermal growth factor gene. Pascall JC, et al. J Mol Endocrinol 1988 Jul;1(1):5–11
Computer automated structure evaluation (CASE): a study of inhibitors of the thermolysin enzyme. Klopman G, et al. J Theor Biol 1989 Jan 9;136(1):67–77
Structural plasticity broadens the specificity of an engineered protease. Bone R, et al. Nature 1989 May 18; 339(6221):191–5
Structure of tumour necrosis factor. Jones EY, et al. Nature 1989 Mar 16;338(6212):225–8

MOLECULAR WEIGHT

Biochemical method for molecular weight determinations of proteins and other macromolecules. Sampietro AR, et al. J Biochem Biophys Methods 1988 Oct;17(2):127–33

MOLES see under **INSECTIVORA**

MOLESTATION, SEXUAL, CHILD see **CHILD ABUSE, SEXUAL**

MOLINDONE see under **INDOLES**

MOLLUSCA

see related
SHELLFISH

Illness due to molluscan shellfish—England and Wales. Can Dis Wkly Rep 1988 Apr 2;14(13):55–6 (Eng, Fre)
Synthetic egg-laying hormone of Aplysia: quantitative studies of induction of egg laying in Stylocheilus and of the activation of Aplysia buccal neuron B16. Ram JL, et al. Comp Biochem Physiol [C] 1989;92(1):131–4
An unusual ocular foreign body [letter] English F, et al. Med J Aust 1988 Dec 5–19;149(11–12):716, 718
Human poisoning by ingestion of a sea hare (Dolabella auricularia). Sorokin M. Toxicon 1988;26(11):1095–7
[Substitution of the dental root by aquatic invertebrate skeletons in animals and man] Camprasse G, et al. C R Acad Sci [III] 1988;307(8):485–91 (Eng. Abstr.) (Fre)
[Effect of mytilan, a polysaccharide from Crenomytilus grayanus, on the functional activity of peritoneal macrophages] Krylova NV, et al. Antibiot Khimioter 1989 Feb;34(2):133–8 (Eng. Abstr.) (Rus)
[Freshwater gastropods as eliminators of Opisthorchis felineus Riv, 1884 eggs] Krivenko VV, et al. Med Parazitol (Mosk) 1988 Nov–Dec;(6):53–6 (Eng. Abstr.) (Rus)

ANALYSIS

Quantitative HPLC analysis of acidic opines by phenylthiocarbamyl derivatization. Sato M, et al. Anal Biochem 1988 Nov 1;174(2):623–7
Trace metals in organisms from ocean disposal sites of the middle eastern United States. Greig RA, et al. Arch Environ Contam Toxicol 1977;6(4):395–409
Oxidation reaction of Scapharca inaequivalvis hemoglobins with nitrite. Spagnuolo C, et al. Biochim Biophys Acta 1988 Sep 21;956(2):119–26
Coexistence of FMRFamide, met-enkephalin and serotonin in molluscan neurons. Takayanagi H, et al. Comp Biochem Physiol [A] 1988;91(3):613–20
Immunogenicities of haemocyanins from the giant African snail (Achatina fulica) and the keyhole limpet (Megathura crenulata). Olusi SO, et al. Comp Biochem Physiol [B] 1977; 56(3):289–91
Food poisoning due to the consumption of red whelks (Neptunea antiqua). Reid TM, et al. Epidemiol Infect 1988 Oct;101(2):419–23
Environmental radioactivity levels in marine species from Malaysia and Fiji. Dougherty G. Health Phys 1989 Jul; 57(1):187–90
Preparation of subfragment-1 from abalone smooth muscle myosin. Asakawa T, et al. J Biochem (Tokyo) 1988 Apr; 103(4):667–71
Biochemical characteristics of the Mr 52,000 component of Akazara scallop troponin. Ojima T, et al. J Biochem (Tokyo) 1988 Aug;104(2):207–10
Phosphorylatable serine residues are located in a non-helical tailpiece of a catch muscle myosin. Castellani L, et al. J Muscle Res Cell Motil 1988 Dec;9(6):533–40
Sesquiterpene furans and thiosesquiterpenes from the nudibranch Ceratosoma brevicaudatum. Ksebati MB, et al. J Nat Prod 1988 Sep–Oct;51(5):857–61
Isolation and structure of a cytotoxic epoxy sterol from the marine mollusc Planaxis sulcatus. Alam M, et al. Steroids 1988 Jul–Aug;52(1–2):45–50

ANATOMY & HISTOLOGY

Substructure and accessory proteins in scallop myosin filaments. Vibert P, et al. J Cell Biol 1989 Aug; 109(2):539–47
The central nervous system of Bulla gouldiana: peptide localization. Roberts MH, et al. Peptides 1988 Nov–Dec; 9(6):1323–34
A study on the cytoplasmic granules of the pericardial gland cells of some bivalve molluscs. Khan HR, et al. Tissue Cell 1988;20(4):587–97
[Ultrastructural organization of vessels of the slug (Agriolimax agrestis)] Gurina OIu, et al. Arkh Anat Gistol Embriol 1988 Oct;95(10):51–5 (Eng. Abstr.) (Rus)
[Types of neurons in the central nervous system of the Japanese scallop Mizuhopecten yessoensis (Jay)] Motsvkin PA, et al. Arkh Anat Gistol Embriol 1988 Dec;95(12):14–20 (Eng. Abstr.) (Rus)

DRUG EFFECTS

The molluscicidal activity of Phytolacca dodecandra. I. Location of the activating esterase. Parkhurst RM, et al.

Biochem Biophys Res Commun 1989 Jan 31;158(2):436–9
Sodium nitrilotriacetate (NTA) influences the larval development and metamorphosis of marine invertebrates. Brunetti R, et al. **Bull Environ Contam Toxicol** 1989 Feb; 42(2):234–40
Heavy metal effects on cellular shape changes, cleavage, and larval development of the marine gastropod mollusk, (Ilyanassa obsoleta Say). Conrad GW.
Bull Environ Contam Toxicol 1988 Jul;41(1):79–85
Zinc treatment of the digestive gland of the slug Arion ater L. 2. Sublethal effects at the histological level. Recio A, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):865–71
[The influence of neuropeptides on the membrane of identified mollusk neurons and their modulating action on GABA-induced effects] Sologub MI, et al. **Nerv Sist** 1988; 27:135–43 **(Rus)**
[Factors affecting the cholinomimetic activity of alkyltrimethylammonium compounds in experiments on isolated neurons of the mollusk Planorbarius corneus] Skliarov AI, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun; 25(3):401–3 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Microinjection of lectins, hyaluronidase, and hyaluronate fragments interferes with cleavage delay and mesoderm induction in embryos of Patella vulgata. Kühtreiber WM, et al. **Dev Biol** 1989 Apr;132(2):436–41
Strontium is required for statolith development and thus normal swimming behaviour of hatchling cephalopods. Hanlon RT, et al. **J Exp Biol** 1989 Jan;141:187–95

ENZYMOLOGY

Determination of multiple forms of cytochrome P-450 in microsomes from the digestive gland of Cryptochiton stelleri. Schlenk D, et al.
Biochem Biophys Res Commun 1989 Aug 30;163(1):476–80
Purification and properties of the adenosine deaminase from the midgut gland of a marine bivalved mollusc, Atrina spp. Aikawa T, et al. **Comp Biochem Physiol [B]** 1977; 58(4):357–64
Selected enzyme activities in Mya arenaria hemolymph. Rodrick GE. **Comp Biochem Physiol [B]** 1979;62(4):313–6
Purification and properties of two isoenzymes of beta-N-acetylhexosaminidase from Turbo cornutus. Yeung KK, et al. **Comp Biochem Physiol [B]** 1979;63(3):329–34
Effect of K+, and other ligands on the thiol reactivity and tryptic cleavage pattern of scallop sarcoplasmic reticulum. Hardwicke PM, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):229–44
Effect of phosphorylation on scallop sarcoplasmic reticulum. Hardwicke PM, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):245–53
[Localization of 17 beta-hydroxysteroid dehydrogenase in the gonads of bivalve mollusks—the sea pecten (Patinopecten yessoensis Jay) and Gray's mussel (Crenomytilus grayanus Dunker)] Varaksina GS, et al.
Arkh Anat Gistol Embriol 1988 Nov;95(11):79–82 (Eng. Abstr.) **(Rus)**
[Characteristics of the products of thiamine degradation by molluskan thiaminase I] Puzach SS, et al.
Vopr Med Khim 1989 Mar–Apr;35(2):82–4 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Expression and function of the neurotransmitter serotonin during development of the Helisoma nervous system. Goldberg JI, et al. **Dev Biol** 1989 Feb;131(2):483–95
The morphogenesis of molluscan shells: a mathematical account using biological parameters. Løvtrup S, et al.
J Morphol 1988 Jul;197(1):53–62
Alternative diets for maintaining and rearing cephalopods in captivity. DeRusha RH, et al. **Lab Anim Sci** 1989 Jul; 39(4):306–12

IMMUNOLOGY

Immunogenic properties of mannose-containing ceramide tetrasaccharide from fresh-water bivalve, Hyriopsis schlegelii. Sugita M, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):159–65
Inhibition of dye-coupling in Patella (Mollusca) embryos by microinjection of antiserum against nephrops (Arthropoda) gap junctions. Serras F, et al. **Exp Cell Res** 1988 Nov; 179(1):282–8
Cross-reactivity of IgE antibodies to caddis fly with arthropoda and mollusca. Koshte VL, et al.
J Allergy Clin Immunol 1989 Aug;84(2):174–83

METABOLISM

Allene oxides as intermediates in biosynthesis of ketols and cyclopentenones. Brash AR, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:70–3
Sequential determination of biological and pollutant elements in marine bivalves. Zeisler R, et al. **Anal Chem** 1988 Dec 15;60(24):2760–5
Purification and characterization of an extracellular endoglucanase from the marine shipworm bacterium. Greene RV, et al. **Arch Biochem Biophys** 1988 Nov 15; 267(1):334–41
Polychlorinated biphenyl congeners in sediments, plankton, molluscs, crustaceans, and eel in a freshwater lake: implications of using reference chemicals and indicator organisms in bioaccumulation studies. van der Oost R, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):721–9
N-terminal amino acid sequence of the deep-sea tube worm haemoglobin remarkably resembles that of annelid haemoglobin. Suzuki T, et al. **Biochem J** 1988 Oct 15; 255(2):541–5
Neurochemical and immunocytochemical studies of serotonin in the Hermissenda central nervous system. Auerbach SB, et al. **Brain Res Bull** 1989 Feb;22(2):353–61
Stability of 1-naphthol in sea water solutions and its uptake by the marine prosobranch gastropod Littorina littorea (L.). Cajaraville MP, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):799–806
Heavy metals in bivalve molluscs in the Huelva estuary. López-Artíguez M, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):634–42
Zinc treatment of the digestive gland of the slug Arion ater L. 1. Cellular distribution of zinc and calcium. Recio A, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):858–64
Changes in nitrogen metabolism of penaeid prawn, Penaeus indicus, during sublethal phosphamidon and methylparathion-induced stress. Reddy MS, et al.
Bull Environ Contam Toxicol 1988 Sep;41(3):344–51
Amino acid transport in the gill epithelium of a marine bivalve. Wright SH. **Comp Biochem Physiol [A]** 1988; 90(4):635–41 (35 ref.)
Comparative levels of muscle glycolytic enzymes in mammals, fish, echinoderm and molluscs. Avelar PM, et al. **Comp Biochem Physiol [B]** 1978;60(2):143–8
Calcium binding and calcium-sensitivity of heavy meromyosin and subfragment-1 from squid (Todarodes pacificus) mantle and scallop (Patinopecten yessoensis) adductor muscles. Kamiya S, et al.
Comp Biochem Physiol [B] 1989;92(3):481–6
A gonial mitosis-stimulating factor in cerebral ganglia and hemolymph of the marine mussel Mytilus edulis L. Mathieu M, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):257–63
Separation of Akazara scallop and rabbit troponin components by a single-step chromatography on CM-Toyopearl. Ojima T, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):9–11
Regulatory light chain-a myosin kinase (aMK) catalyzes phosphorylation of smooth muscle myosin heavy chains of scallop, Patinopecten yessoensis. Sohma H, et al.
J Biochem (Tokyo) 1988 Dec;104(6):889–93
Ca2+-sensitive transition in the molecular conformation of molluscan muscle myosins. Takahashi M, et al.
J Biochem (Tokyo) 1989 Feb;105(2):149–51
Monitoring of metabolic responses of intact Haliotis (abalones) under salinity stress by 31P surface probe localized NMR. Higashi RM, et al. **J Exp Zool** 1989 Mar; 249(3):350–6
Accumulation, distribution and loss of cadmium in the marine prosobranch Littorina littorea (L.). Marigomez JA, et al. **Sci Total Environ** 1989 Jan;78:1–12

MICROBIOLOGY

[Differential concentration of microorganisms in molluscs] Mancini L, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):33–9 (Eng. Abstr.) **(Ita)**

PARASITOLOGY

Gastropod intermediate hosts of Parelaphostrongylus tenuis (Nematoda: Metastrongyloidea) from northwestern Indiana. Platt TR. **J Parasitol** 1989 Aug;75(4):519–23
Parelaphostrongylus tenuis in New Brunswick: the parasite in terrestrial gastropods. Upshall SM, et al. **J Wildl Dis** 1986 Oct;22(4):582–5
The experimental receptivity of Helicella (Helicella) itala and Cepaea nemoralis (Mollusca, Helicidae) to larvae of Muellerius sp. and Neostrongylus linearis (Nematoda, Protostrongylidae) from chamois (Rupicapra rupicapra). Diez-Baños P, et al. **Parasitol Res** 1989;75(6):488–94
[Mollusks of parasitologic and veterinary interest in Italy] Pampiglione S, et al. **Ann Ist Super Sanita** 1988;24 Suppl:1–105 (319 ref.) (Eng. Abstr.) **(Ita)**
[Detection of Centrocestus armatus (Trematoda: Heterophyidae) trematode in the southern part of the Far East USSR] Besprozvannykh VV.
Med Parazitol (Mosk) 1988 Nov–Dec;(6):86–8 (Eng. Abstr.) **(Rus)**
[Distribution and infection rate of mollusks—intermediate hosts of trematodes in the Central Amur region] Dovgalev AS. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):71–4 (Eng. Abstr.) **(Rus)**
[The distribution and ecology of Bithynia inflata mollusks, the intermediate hosts of Opisthorchis felineus, in reservoirs of the Biryusa River basin] Kolokol'tsev MM.
Med Parazitol (Mosk) 1988 May–Jun;(3):58–60 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of heavy metals on bay scallops, surf clams, and blue mussels in acute and long-term exposures. Nelson DA, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):595–600
Sequential modification of membrane currents with classical conditioning. Collin C, et al. **Biophys J** 1988 Nov; 54(5):955–60
Photoresponses of an extraocular photoreceptor associated with a decrease in membrane conductance in an opisthobranch mollusc. Gotow T. **Brain Res** 1989 Feb 6; 479(1):120–9
A light-induced decrease of cyclic GMP is involved in the photoresponse of molluscan extraocular photoreceptors. Nishi T, et al. **Brain Res** 1989 Apr 17;485(1):185–8
Serotonin modulation of Hermissenda type B photoreceptor light responses and ionic currents: implications for mechanisms underlying associative learning. Farley J, et al. **Brain Res Bull** 1989 Feb;22(2):335–51
Serotonin involvement during in vitro conditioning of Hermissenda. Grover LM, et al. **Brain Res Bull** 1989 Feb; 22(2):363–72
The biology of the FMRFamide-series of peptides in molluscs with special reference to Helix. Cottrell GA.
Comp Biochem Physiol [A] 1989;93(1):41–5 (40 ref.)
Cephalopods, memory, neurofilaments, mammalian hibernation, the vertebrate retina: an autobiographical research note for John H. Welsh in his 85th year. Boycott BB. **Comp Biochem Physiol [C]** 1988;91(1):25–9
New perspectives on catch. Cohen C, et al.
Comp Biochem Physiol [C] 1988;91(1):31–3
Mathematical model of cardiac mechanogram rhythmicity (based on mollusc heart). Easton DM.
Comp Biochem Physiol [C] 1988;91(1):91–8
Similarities between G-proteins in visual cells of Sepia and cattle. Stieve H, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):6–10
Fertilization in a chiton: acrosome-mediated sperm-egg fusion. Buckland-Nicks J, et al. **Gamete Res** 1988 Nov; 21(3):199–212
Sperm tail differentiation in the nudibranch mollusc Hypselodoris tricolor (Gastropoda, Opisthobranchia). Medina A, et al. **Gamete Res** 1988 Jun;20(2):223–32
Calcium channels mediate phase shifts of the Bulla circadian pacemaker. Khalsa SB, et al. **J Comp Physiol [A]** 1988 Dec; 164(2):195–206
Electromechanical uncoupling in a molluscan muscle examined by the sucrose gap technique. The effect of calcium antagonist and agonist agents. Huddart H, et al.
J Comp Physiol [B] 1988;158(4):501–12
Development and senescence of control of ciliary locomotion in a gastropod veliger. Arkett SA. **J Neurobiol** 1988 Oct; 19(7):612–23
The glial blood-brain barrier of crustacea and cephalopods: a review. Abbott NJ, et al. **J Physiol (Paris)** 1987; 82(4):304–13 (53 ref.)
Phase-shifts of the Bulla ocular circadian pacemaker in the presence of calmodulin antagonists. Khalsa SB, et al.
Life Sci 1988;43(19):1551–6
The influence of Physa marmorata (Mollusca; Physidae) on the oviposition of several planorbid hosts of Schistosoma mansoni. Guimarães CT, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):439–40
The involvement of opioid peptides in stress-induced analgesia in the slug Arion ater. Dalton LM, et al.
Peptides 1989 Jan–Feb;10(1):9–13
Involvement of calcium-activated K+ channels in the firing characteristics of molluscan neurones. Gola M, et al.
Pflugers Arch 1989;414 Suppl 1:S142–3
Spermatozoa of the deep-sea cephalopod Vampyroteuthis infernalis Chun: ultrastructure and possible phylogenetic significance. Healy JM. **Philos Trans R Soc Lond [Biol]** 1989 Jun 30;323(1219):589–600
Prolonged RNA changes in the Hermissenda eye induced by classical conditioning. Nelson TJ, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7800–4
Cellular and molecular analysis of associative learning and memory in Hermissenda. Crow T. **Trends Neurosci** 1988 Apr;11(4):136–47 (48 ref.)
[How can bivalves continue to close the shells?—regulation and a molecular mechanism on the economical catch contraction] Morita F. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1307–16 (42 ref.) **(Jpn)**
[Features of the interaction between polymethylene-bis-trimethylammonium compounds and h-cholinoreceptors of an isolated neuron of the mollusk Planorbarius corneus] Skliarov AI, et al. **Dokl Akad Nauk SSSR** 1988;303(3):760–3 **(Rus)**
[Independence of the increase in the number of action potentials and excitability in the response of mollusk neurons during their combined activation] Tsitolovskiĭ LE, et al. **Dokl Akad Nauk SSSR** 1988;303(4):1015–8 **(Rus)**
[Neural regulation of heart function in the Pteropod mollusc Clione limacina] Arshavskiĭ IuI, et al. **Neirofiziologiia** 1989; 21(2):185–92 (Eng. Abstr.) **(Rus)**
[Dependence of the character of EPSP summation in mollusk neurons on the level of the membrane potential] Cherkasskiĭ VL. **Neirofiziologiia** 1989;21(3):314–20 (Eng. Abstr.) **(Rus)**
[Nonlinear temporal summation of EPSP in mollusk neurons] Cherkasskiĭ VL. **Neirofiziologiia** 1989;21(2):204–10 (Eng. Abstr.) **(Rus)**
[Serotonin modulation of glycine-induced ionic currents in mollusk neurons] Diatlov VA. **Neirofiziologiia** 1989; 21(3):413–6 (Eng. Abstr.) **(Rus)**
[A single calcium channel with anomalous rectification in mollusk neurons] Kachman AN, et al. **Neirofiziologiia** 1989; 21(1):31–8 (Eng. Abstr.) **(Rus)**
[Influence of monoamines on heterosynaptic facilitation in giant neurons of Planorbis corneus] Storozhuk VM, et al.
Neirofiziologiia 1989;21(2):224–32 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Effect of Ca2+ on the dimeric structure of scallop sarcoplasmic reticulum. Castellani L, et al. **J Cell Biol** 1989 Feb;108(2):511–20

A scanning electron microscope study of granulocytes of Oncomelania hupensis (Mollusca). Morona D, et al. **J Invertebr Pathol** 1989 Jan;53(1):116–7

Kidney and hemocytes of Mya arenaria (Bivalvia): normal and pollution-related ultrastructural morphologies. Seiler GR, et al. **J Invertebr Pathol** 1988 Sep;52(2):201–14

MOLLUSCACIDES

Toxic effects of chromium on Schistosoma haematobium miracidia. Wolmarans CT, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):928–35

Screening for molluscicidal activity in crude drugs. Takeda O, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1090–1

Effect of Schistosoma mansoni infection, starvation and molluscicides on acid phosphate, transaminases and total protein in tissues and hemolymph of Biomphalaria alexandrina. el-Emam MA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):139–47

Effect of prolonged administration of sublethal concentrations of aridanin isolated from Tetrapleura tetraptera and bayluscide on the glycogen and protein content of Biomphalaria glabrata. Adewunmi CO, et al. **J Ethnopharmacol** 1988 Sep;24(1):107–14

Molluscicidal effect of ivermectin on Biomphalaria glabrata. Matha V, et al. **J Invertebr Pathol** 1988 Sep;52(2):354–5

The role of behavior in the survival of Biomphalaria glabrata in bioassays with the plant molluscicide Phytolacca dodecandra. Jurberg P, et al. **Mem Inst Oswaldo Cruz** 1988 Jan-Mar;83(1):41–6

Resistance to Millettia molluscicide in Biomphalaria glabrata: a quantitative genetical approach. Lam PK, et al. **Parasitology** 1989 Feb;98 (Pt 1):17–20

Enhanced potency of a molluscicidal glycoside isolated from Tetrapleura tetraptera on Biomphalaria glabrata. Adewunmi CO, et al. **Planta Med** 1988 Dec;54(6):550–1

Molluscicidal saponins from Sesbania sesban. Dorsaz AC, et al. **Planta Med** 1988 Jun;54(3):225–7

Knowledge, attitudes and practices among rural communities in Zimbabwe in relation to Phytolacca dodecandra—a plant molluscicide. Ndamba J, et al. **Soc Sci Med** 1989; 28(12):1249–53

Field evaluation of controlled release copper glass as a molluscicide in snail control. Chandiwana SK, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):952–5

Molluse-killing agents from Khaya grandifoliola. Makanga B, et al. **Trop Med Parasitol** 1989 Jun;40(2):117–8

Molluscicidal activity of Solanum aculeatum (family: Solanaceae) berries against Biomphalaria pfeifferi, Bulinus globosus and Lymnaea natalensis. Mkoji GM, et al. **Trop Med Parasitol** 1989 Jun;40(2):119–20

The molluscicidal properties of Ambrosia maritima L. (Compositae). 4. Temporal and spatial distribution of Biomphalaria alexandrina in Egyptian village irrigation systems with reference to schistosomiasis transmission control. el Sawy MF, et al. **Trop Med Parasitol** 1989 Jun; 40(2):103–6

Efficiency of focal molluscicide treatment against schistosomiasis reinfection in an irrigation scheme and in a small dams area in Mali. Preliminary communication. Werler C. **Trop Med Parasitol** 1989 Jun;40(2):234–6

[Molluscacidal activity of Anacardium occidentale L. (Anacardiaceae)] Laurens A, et al. **Ann Pharm Fr** 1987; 45(6):471–3 (Eng. Abstr.) **(Fre)**

[Molluscicide activity of a butanol extract from Phytolacca dodecandra (endod) on Biomphalaria glabrata] De Souza CP, et al. **Mem Inst Oswaldo Cruz** 1987 Jul-Sep;82(3):345–9 (Eng. Abstr.) **(Por)**

[Action of a molluscacide (Bayluscide-SRB) from the Dynatech R/D Company in lakes of northeastern Brazil—Sergipe, Brazil] Rosas E, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:321–9 (Eng. Abstr.) **(Por)**

ISOLATION & PURIFICATION

High-performance liquid chromatographic determination of molluscicidal saponins from Phytolacca dodecandra (Phytolaccaceae). Slacanin I, et al. **J Chromatogr** 1988 Sep 2;448(2):265–74

Determination of molluscicidal sesquiterpene lactones from Ambrosia maritima (Compositae). Slacanin I, et al. **J Chromatogr** 1988 Dec 21;457:325–31

PHARMACOLOGY

Laboratory and field assessment of molluscicidal activity of B-2 against Oncomelania hupensis, the vector snail of schistosomiasis in China. Wong MW, et al. **Jpn J Med Sci Biol** 1988 Feb;41(1):31–6

Some biological properties of traversianal, a strongly molluscicidal diterpenoid aldehyde from Cercospora traversiana. Stoessl A, et al. **Mycopathologia** 1989 Apr; 106(1):41–6

[Effects of a sublethal concentration of molluscacide (CuCl2) on the reproductive activity and movements of the molluscan host Lymnaea truncatula Müller] Rondelaud D. **Ann Rech Vet** 1988;19(4):273–8 (Eng. Abstr.) **(Fre)**

[Combined and alternate control of Lymnaea truncatula Müller: comparative study of 3 technics for spreading of the molluscacide] Rondelaud D. **Ann Rech Vet** 1988; 19(4):279–82 (Eng. Abstr.) **(Fre)**

POISONING

Metaldehyde poisoning [letter] Davies SM, et al. **Vet Rec** 1989 Jun 17;124(24):643

MOLLUSCUM CONTAGIOSUM

COMPLICATIONS

Molluscum contagiosum-induced comedo and secondary abscess formation. Brandrup F, et al. **Pediatr Dermatol** 1989 Jun;6(2):118–21

[Molluscum contagiosum in children with acquired immunodeficiency syndrome (letter)] García-Pérez A, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):317 **(Spa)**

DIAGNOSIS

Cutaneous cryptococcosis resembling molluscum contagiosum: a first manifestation of AIDS. Picon L, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):365–7

Cutaneous cryptococcosis mimicking molluscum contagiosum in a haemophiliac with AIDS. Jiménez-Acosta F, et al. **Clin Exp Dermatol** 1987 Nov; 12(6):446–50

Cutaneous cryptococcosis mimicking molluscum contagiosum in a patient with AIDS [letter] Concus AP, et al. **J Infect Dis** 1988 Oct;158(4):897–8

DRUG THERAPY

Cantharidin treatment of molluscum contagiosum [letter] Epstein E. **Acta Derm Venereol (Stockh)** 1989;69(1):91–2

Oral griseofulvin therapy in molluscum contagiosum. Mukul, et al. **Indian J Dermatol** 1987 Oct;32(4):104–6

Molluscum contagiosum in human immunodeficiency virus infection: response to zidovudine [letter] Betlloch I, et al. **Int J Dermatol** 1989 Jun;28(5):351–2

[Management of molluscum contagiosum] Suhonen R. **Duodecim** 1988;104(10):793–5 **(Fin)**

EPIDEMIOLOGY

Epidemiology of molluscum contagiosum using genetic analysis of the viral DNA. Scholz J, et al. **J Med Virol** 1989 Feb;27(2):87–90

ETIOLOGY

Giant molluscum contagiosum presenting as basal cell carcinoma in an acquired immunodeficiency syndrome patient. Fivenson DP, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):912–4

MICROBIOLOGY

Molecular epidemiology of molluscum contagiosum. Scholz J, et al. **J Infect Dis** 1988 Oct;158(4):898–900

PATHOLOGY

Lack of host cellular immune response in eruptive molluscum contagiosum. Heng MC, et al. **Am J Dermatopathol** 1989 Jun;11(3):248–54

Multiple lesions of molluscum contagiosum with metaplastic ossification. Naert F, et al. **Am J Dermatopathol** 1989 Jun; 11(3):238–41

[Molluscum contagiosum. Clinicopathologic and ultrastructural study] García J, et al. **Med Cutan Ibero Lat Am** 1988;16(6):503–6 (Eng. Abstr.) **(Spa)**

MOLLUSCUM CONTAGIOSUM VIRUS

GENETICS

Molecular epidemiology of molluscum contagiosum. Scholz J, et al. **J Infect Dis** 1988 Oct;158(4):898–900

Epidemiology of molluscum contagiosum using genetic analysis of the viral DNA. Scholz J, et al. **J Med Virol** 1989 Feb;27(2):87–90

MOLLUSK VENOMS

Peptide toxins from venomous Conus snails. Gray WR, et al. **Annu Rev Biochem** 1988;57:665–700 (158 ref.)

A molluscivorous Conus toxin: conserved frameworks in conotoxins. Hillyard DR, et al. **Biochemistry** 1989 Jan 10; 28(1):358–61

Solution structures of alpha-conotoxin G1 determined by two-dimensional NMR spectroscopy. Pardi A, et al. **Biochemistry** 1989 Jun 27;28(13):5494–501

ADMINISTRATION & DOSAGE

Intracerebroventricular injection of neosurugatoxin induces a prolonged blockade of brain nicotinic acetylcholine receptors. Yamada S, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):279–82

ANALYSIS

Solution conformation of conotoxin GI determined by 1H nuclear magnetic resonance spectroscopy and distance geometry calculations. Kobayashi Y, et al. **Biochemistry** 1989 May 30;28(11):4853–60

Autoradiographic visualization in rat brain of receptors for omega-conotoxin GVIA, a newly discovered calcium antagonist. Takemura M, et al. **Brain Res** 1988 Jun 7; 451(1-2):386–9

CHEMICAL SYNTHESIS

Synthesis of myo-inositol derivatives required for the total synthesis of surugatoxin, prosurugatoxin, and neosurugatoxin. Okada K, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):791–3

DIAGNOSTIC USE

Use of geographutoxin II (mu-conotoxin) for the study of neuromuscular transmission in mouse. Hong SJ, et al. **Br J Pharmacol** 1989 Jul;97(3):934–40

ISOLATION & PURIFICATION

A novel sodium channel inhibitor from Conus geographus: purification, structure, and pharmacological properties. Yanagawa Y, et al. **Biochemistry** 1988 Aug 23; 27(17):6256–62

METABOLISM

mu-conotoxin GIIIA, a peptide ligand for muscle sodium channels: chemical synthesis, radiolabeling, and receptor characterization. Cruz LJ, et al. **Biochemistry** 1989 Apr 18;28(8):3437–42

Phylogenetic specificity of cholinergic ligands: alpha-conotoxin SI. Zafaralla GC, et al. **Biochemistry** 1988 Sep 6;27(18):7102–5

Autoradiographic visualization of a calcium channel antagonist, [125I]omega-conotoxin GVIA, binding site in the brains of normal and cerebellar mutant mice (pcd and weaver). Maeda N, et al. **Brain Res** 1989 Jun 5;489(1):21–30

Differential effects of acute and repeated electrically and chemically induced seizures on [3H]Nimodipine and [125I]omega-conotoxin GVIA binding in rat brain. Gleiter CH, et al. **Epilepsia** 1989 Jul-Aug;30(4):487–92

Separate binding and functional sites for omega-conotoxin and nitrendipine suggest two types of calcium channels in bovine chromaffin cells. Ballesta JJ, et al. **J Neurochem** 1989 Oct;53(4):1050–6

Omega-conotoxin GVIA binding to a high-affinity receptor in brain: characterization, calcium sensitivity, and solubilization. Wagner JA, et al. **J Neurosci** 1988 Sep; 8(9):3354–9

Distribution of [125I]omega-conotoxin GVIA and [3H]isradipine binding sites in the central nervous system of rats of different ages. Dooley DJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):318–23

PHARMACOLOGY

Alpha 2-adrenoceptor agonist-mediated inhibition of [3H]noradrenaline release from rat hippocampus is reduced by 4-aminopyridine, but that caused by an adenosine analogue or omega-conotoxin is not. Hu PS, et al. **Acta Physiol Scand** 1989 Jul;136(3):347–53

The inhibitory effects of omega-conotoxins on Ca channels and synapses. Yoshikami D, et al. **Ann N Y Acad Sci** 1989; 560:230–48

The calcium channel antagonist omega-conotoxin inhibits secretion from peptidergic nerve terminals. Dayanithi G, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):255–62

The mechanism of the inotropic action of striatoxin, a novel polypeptide toxin from a marine snail, in isolated cardiac muscle. Ohizumi Y, et al. **Br J Pharmacol** 1988 Nov; 95(3):867–75

Evidence for a dihydropyridine-sensitive and conotoxin-insensitive release of noradrenaline and uptake of calcium in adrenal chromaffin cells. Owen PJ, et al. **Br J Pharmacol** 1989 May;97(1):133–8

Serotonin modulates calcium-dependent plateau of action potentials recorded from bull frog A-type sensory neurons which is omega-conotoxin GVIA-sensitive, but dihydropyridine-insensitive. Scroggs RS, et al. **Brain Res** 1989 Apr 24;485(2):391–5

Differential sensitivity of synaptosomal calcium entry and endogenous dopamine release to omega-conotoxin. Woodward JJ, et al. **Brain Res** 1988 Dec 13;475(1):141–5

Inhibition of transmitter release from sympathetic nerve endings by omega-conotoxin. Brock JA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):333–9

Evidence of omega-conotoxin GVIA-sensitive Ca2+ channels in mammalian peripheral nerve terminals. Lundy PM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):325–30

Characterization of the effects of omega-conotoxin GVIA on the responses of voltage-sensitive calcium channels. Keith RA, et al. **J Auton Pharmacol** 1989 Aug;9(4):243–52

Calcium channels that are required for secretion from intact nerve terminals of vertebrates are sensitive to omega-conotoxin and relatively insensitive to dihydropyridines. Optical studies with and without voltage-sensitive dyes. Obaid AL, et al. **J Gen Physiol** 1989 Apr;93(4):715–29

Effects of synthetic omega-conotoxin on the contractile responses of segments of rat ileum, stomach fundus and uterus and guinea pig taenia coli. Ichida S, et al.

Jpn J Pharmacol 1988 Dec;48(4):395–405

Onchidal: a naturally occurring irreversible inhibitor of acetylcholinesterase with a novel mechanism of action. Abramson SN, et al. **Mol Pharmacol** 1989 Sep;36(3):349–54

The effect of omega conotoxin GVIA, a peptide modulator of the N-type voltage sensitive calcium channels, on motor responses produced by activation of efferent and sensory nerves in mammalian smooth muscle. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):107–13

Effect of omega-conotoxin GVIA on release of 3H-gamma-aminobutyric acid from slices of rat neostriatum. Thate A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):359–61

Omega-conotoxin GVIA specifically blocks neuronal mechanisms in rat ileum. Allescher HD, et al. **Neuropeptides** 1989 May-Jun;13(4):253–8

Synthetic omega-conotoxin blocks synaptic transmission in the hippocampus in vitro. Kamiya H, et al. **Neurosci Lett** 1988 Aug 15;91(1):84–8

Voltage-sensitive calcium flux into bovine chromaffin cells occurs through dihydropyridine-sensitive and dihydropyridine- and omega-conotoxin-insensitive pathways. Rosario LM, et al. **Neuroscience** 1989; 29(3):735–47

Omega-conotoxin blockade distinguishes Ca from Na permeable states in neuronal calcium channels. Carbone E, et al. **Pflugers Arch** 1988 Nov;413(1):14–22

Localization and mobility of omega-conotoxin-sensitive Ca2+ channels in hippocampal CA1 neurons. Jones OT, et al. **Science** 1989 Jun 9;244(4909):1189–93

TOXICITY

Inhibition of noradrenaline release by omega-conotoxin GVIA in the rat tail artery. Clasbrummel B, et al. **Br J Pharmacol** 1989 Jan;96(1):101–10

MOLONEY LEUKEMIA VIRUS

ANALYSIS

Reduction-modifiable properties of Moloney murine leukemia virus gp70 as an indicator of envelope glycoprotein heterogeneity. Trauger R, et al. **Intervirology** 1989;30(3):137–47

DRUG EFFECTS

An analysis of the inhibition of replication of HIV and MuLV by some 3'-blocked pyrimidine analogs. Bazin H, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):109–19

ENZYMOLOGY

Inhibition of Moloney murine leukemia virus reverse transcriptase by alpha-anomeric oligonucleotides. Lavignon M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1184–90

Inhibition of reverse transcriptase activity by a flavonoid compound, 5,6,7-trihydroxyflavone. Ono K, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):982–7

Alpha-anomeric DNA: beta-RNA hybrids as new synthetic inhibitors of Escherichia coli RNase H, Drosophila embryo RNase H and M-MLV reverse transcriptase. Bloch E, et al. **Gene** 1988 Dec 10;72(1-2):349–60

GENETICS

Slipped DNA structures within the enhancer region of the Moloney murine leukemia virus. Gama Sosa MA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):417–23

Reconstitution of nucleosomes in vitro with a plasmid carrying the long terminal repeat of Moloney murine leukemia virus. Kimura T, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):318–24

Retrovirus-induced insertional mutation in Mov13 mice affects collagen I expression in a tissue-specific manner. Kratochwil K, et al. **Cell** 1989 Jun 2;57(5):807–16

Evidence for the involvement of pim-2, a new common proviral insertion site, in progression of lymphomas. Breuer ML, et al. **EMBO J** 1989 Mar;8(3):743–8

Expression in Escherichia coli of a Moloney murine leukemia virus reverse transcriptase whose structure closely resembles the viral enzyme. Hizi A, et al. **Gene** 1988 Jun 30;66(2):319–23

Characterization of lymphoid tumors induced by a recombinant murine retrovirus carrying the avian v-myc oncogene. Identification of novel (B-lymphoid) tumors in the thymus. Brightman BK, et al. **J Immunol** 1988 Oct 15;141(8):2844–54

Transcriptional activation of lck by retrovirus promoter insertion between two lymphoid-specific promoters. Adler HT, et al. **J Virol** 1988 Nov;62(11):4113–22

Analysis of mutant Moloney murine leukemia viruses containing linker insertion mutations in the 3' region of pol. Donehower LA. **J Virol** 1988 Nov;62(11):3958–64

Translational readthrough of the murine leukemia virus gag gene amber codon does not require virus-induced alteration of tRNA. Feng YX, et al. **J Virol** 1989 May;63(5):2405–10

Two blocks in Moloney murine leukemia virus expression in undifferentiated F9 embryonal carcinoma cells as determined by transient expression assays. Feuer G, et al. **J Virol** 1989 May;63(5):2317–24

Effect of proviral insertion on transcription of the murine B2mb gene. Frankel WN, et al. **J Virol** 1989 Jun; 63(6):2623–8

Distinct segments within the enhancer region collaborate to specify the type of leukemia induced by nondefective Friend and Moloney viruses. Golemis E, et al. **J Virol** 1989 Jan;63(1):328–37

Activation of the c-H-ras proto-oncogene by retrovirus insertion and chromosomal rearrangement in a Moloney leukemia virus-induced T-cell leukemia. Ihle JN, et al. **J Virol** 1989 Jul;63(7):2959–66

Chromatin structure of recombinant Moloney murine leukemia virus proviral DNAs that contain tax-responsive sequences from human T-cell lymphotropic virus type II in the presence and absence of tax. Kitado H, et al. **J Virol** 1989 Jul;63(7):3072–9

The Mlvi-1 locus involved in the induction of rat T-cell lymphomas and the pvt-1/Mis-1 locus are identical. Koehne CF, et al. **J Virol** 1989 May;63(5):2366–9

The palindromic LTR-LTR junction of Moloney murine leukemia virus is not an efficient substrate for proviral integration. Lobel LI, et al. **J Virol** 1989 Jun;63(6):2629–37

Characterization of Moloney murine leukemia virus mutants with single-amino-acid substitutions in the Cys-His box of the nucleocapsid protein. Méric C, et al. **J Virol** 1989 Apr;63(4):1558–68

Construction and analysis of deletion mutations in the U5 region of Moloney murine leukemia virus: effects on RNA packaging and reverse transcription. Murphy JE, et al. **J Virol** 1989 Jan;63(1):319–27

Inhibition of RNase H activity and viral replication by single mutations in the 3' region of Moloney murine leukemia virus reverse transcriptase. Repaske R, et al. **J Virol** 1989 Mar;63(3):1460–4

Deletions in a recombinant retrovirus genome associated with its expression in embryonal carcinoma cells. Taketo M, et al. **J Virol** 1989 Oct;63(10):4431–3

Identification of cellular promoters by using a retrovirus promoter trap. von Melchner H, et al. **J Virol** 1989 Aug; 63(8):3227–33

Genetic tagging of tumor cells with retrovirus vectors: clonal analysis of tumor growth and metastasis in vivo. Korczak B, et al. **Mol Cell Biol** 1988 Aug;8(8):3143–9

Construction and properties of replication-competent murine retroviral vectors encoding methotrexate resistance. Stuhlmann H, et al. **Mol Cell Biol** 1989 Jan;9(1):100–8

The effect of specific mutations at and around the gag-pol gene junction of Moloney murine leukaemia virus. Jones DS, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5933–45

Analysis of mammalian cell genetic regulation in situ by using retrovirus-derived "portable exons" carrying the Escherichia coli lacZ gene. Brenner DG, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5517–21

Integration of mini-retroviral DNA: a cell-free reaction for biochemical analysis of retroviral integration. Fujiwara T, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3065–9

Point mutants of Moloney murine leukemia virus that fail to package viral RNA: evidence for specific RNA recognition by a "zinc finger-like" protein sequence. Gorelick RJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8420–4

Activation of the Mlvi-1/mis1/pvt-1 locus in Moloney murine leukemia virus-induced T-cell lymphomas. Tsichlis PN, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5487–91

High-level recombinant gene expression in rabbit endothelial cells transduced by retroviral vectors. Zwiebel JA, et al. **Science** 1989 Jan 13;243(4888):220–2

The use of retroviral vectors to study cell transformation and malignancy. Symonds G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):61–4

Expression of the Moloney murine leukemia virus and human immunodeficiency virus integration proteins in Escherichia coli. Hizi A, et al. **Virology** 1988 Dec;167(2):634–8

An insertion mutation in the pol gene of Moloney murine leukemia virus results in temperature-sensitive pol maturation and viral replication. Tanese N, et al. **Virology** 1989 Jun;170(2):378–84

Factors affecting long-term stability of Moloney murine leukemia virus-based vectors. Xu L, et al. **Virology** 1989 Aug;171(2):331–41

Chromatin structure of hormone-responsive Moloney murine leukemia virus proviruses that contain sequences from mouse mammary tumor virus. Thompson T, et al. **Virus Genes** 1988 Oct;2(1):83–98

GROWTH & DEVELOPMENT

Unmyristylated Moloney murine leukemia virus Pr65gag is excluded from virus assembly and maturation events. Schultz AM, et al. **J Virol** 1989 May;63(5):2370–3

PATHOGENICITY

The reduced virulence of the thymotropic Moloney murine leukemia virus derivative MoMuLV-TB is mapped to 11 mutations within the U3 region of the long terminal repeat. Yuen PH, et al. **J Virol** 1989 Feb;63(2):471–80

Induction of multiple independent T-cell lymphomas in rats inoculated with MOloney murine leukemia virus. Bellacosa A, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4269–72

The role of the thymus in the pathogenesis of hind-limb paralysis induced by ts1, a mutant of Moloney murine leukemia virus-TB. Prasad G, et al. **Virology** 1989 Apr; 169(2):332–40

ts1, a mutant of Moloney murine leukemia virus-TB, causes both immunodeficiency and neurologic disorders in BALB/c mice. Wong PK, et al. **Virology** 1989 Jun; 170(2):450–9

PHYSIOLOGY

Small finger protein of avian and murine retroviruses has nucleic acid annealing activity and positions the replication primer tRNA onto genomic RNA. Prats AC, et al. **EMBO J** 1988 Jun;7(6):1777–83

N-myc is frequently activated by proviral insertion in MuLV-induced T cell lymphomas. van Lohuizen M, et al. **EMBO J** 1989 Jan;8(1):133–6

Formation of infectious hybrid virions with gibbon ape leukemia virus and human T-cell leukemia virus retroviral envelope glycoproteins and the gag and pol proteins of Moloney murine leukemia virus. Wilson C, et al. **J Virol** 1989 May;63(5):2374–8

Thermostability of human immunodeficiency virus (HIV-1) in a liquid matrix is far higher than that of an ecotropic murine leukemia virus. Yoshikura H. **Jpn J Cancer Res** 1989 Jan;80(1):1–5

MOLONEY SARCOMA VIRUS see under **MOUSE SARCOMA VIRUSES**

MOLSIDOMINE

ADMINISTRATION & DOSAGE

[Effect of molsidomine preparations on the contractile function of the myocardium and coronary circulation in patients with ischemic heart disease complicated by heart failure after isometric load] Alekperov EZ. **Kardiologiia** 1989 Apr;29(4):44–7 (Eng. Abstr.) **(Rus)**

[Effect of vasodilator agents on the effectiveness of the complex treatment of patients with ischemic heart disease and congestive heart failure] Nemirovskaia MA, et al. **Kardiologiia** 1989 Apr;29(4):37–40 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83–8

Modulation of prostacyclin/thromboxane formation by molsidomine during platelet-endothelial cell interactions. Bordet JC, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3911–4

Persistence of the response to SIN1 on isolated coronary arteries rendered tolerant to nitroglycerin in vitro or in vivo. Berkenboom G, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):345–9

PHARMACOLOGY

Pathophysiological aspects of predominant preload lowering on pulmonary circulation, gas exchange, and the biventricular function in patients with chronic obstructive lung disease. Seibold H, et al. **Clin Cardiol** 1988 Sep; 11(9):630–8

THERAPEUTIC USE

[The effect of a combination of ridazolol and molsidomine on hemodynamics and left ventricular function in dilated cardiomyopathy] Haerer W, et al. **Arzneimittelforschung** 1989 Jun;39(6):714–6 (Eng. Abstr.) **(Ger)**

[Gallopamil and molsidomine in patients with coronary heart disease. A comparative study] Zebe H. **Fortschr Med** 1989 Feb 20;107(5):134–8 (Eng. Abstr.) **(Ger)**

[Effect of corvaton on ischemic left-ventricular damage and hemodynamic indicators in patients with acute myocardial infarction] Khal'fen ESh, et al. **Kardiologiia** 1988 Oct; 28(10):101–2 **(Rus)**

[Molsidomine and isosorbide dinitrate:/their comparative effectiveness in patients with exertion-induced stenocardia] Martsevich SIu, et al. **Kardiologiia** 1988 Jul;28(7):68–70 (Eng. Abstr.) **(Rus)**

[Indications for the use of molsidomine in patients with chronic cor pulmonale] Gavrisiuk VK, et al. **Klin Med (Mosk)** 1988 Jun;66(6):56–9 (Eng. Abstr.) **(Rus)**

[Use of sidnofarm in the treatment of pulmonary-cardiac insufficiency] Zharov EI, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):36–8 **(Rus)**

[Use of sydnopharm and silabolin in patients with chronic cor pulmonale] Bondarenko IP. **Vrach Delo** 1988 Oct; (10):33–5 (Eng. Abstr.) **(Rus)**

MOLTING HORMONE see **ECDYSONE**

MOLYBDENUM

Information from e.x.a.f.s. spectroscopy on the structures of different forms of molybdenum in xanthine oxidase and the catalytic mechanism of the enzyme. Turner NA, et al. **Biochem J** 1989 Jun 1;260(2):563–71

Technetium carboxylate complexes—I. A review of Tc, Re and Mo carboxylate chemistry. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1159–65 (44 ref.)

The structure of a molybdopterin precursor. Characterization

of a stable, oxidized derivative. Johnson JL, et al. **J Biol Chem** 1989 Aug 15;264(23):13440–7

Component wear of total knee prostheses using Ti–6A1–4V, titanium nitride coated Ti–6A1–4V, and cobalt–chromium–molybdenum femoral components. Peterson CD, et al. **J Biomed Mater Res** 1988 Oct; 22(10):887–903

Improvement of the tetramethyl benzidine reaction with ammonium molybdate as a stabilizer for light and electron microscopic ligand–HRP neurohistochemistry, immunocytochemistry and double-labelling. Liang FY, et al. **J Neurosci Methods** 1989 Jun;28(3):155–62

Film–screen mammography x-ray tube anodes: molybdenum versus tungsten. Kimme-Smith C, et al. **Med Phys** 1989 Mar–Apr;16(2):279–83

[Ammonium molybdate as stabilizing agent in tetramethyl benzidine reaction of CB–HRP neurohistochemistry and its application to electron microscopy and immunocytochemistry] Liang FY, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):142–6 (Eng. Abstr.) **(Chi)**

[Morel–Fatio temporary management of the paretic eyelid] Bruck JC, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):219–22 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Effects of copper and molybdenum supplements on the copper and selenium status of pregnant ewes and lambs. White CL, et al. **J Anim Sci** 1989 Mar;67(3):803–9

Effect of molybdenum supplementation on hepatic trace elements and enzymes of female rats. Yang MT, et al. **J Nutr** 1989 Feb;119(2):221–7

ADVERSE EFFECTS

Secondary copper deficiency in cattle caused by molybdenum contamination of fodder: a case history. Sas B. **Vet Hum Toxicol** 1989 Feb;31(1):29–33

ANALYSIS

Molybdenum content of human milk [letter] Casey CE. **Am J Clin Nutr** 1989 Jun;49(6):1329–30

Structure of the active site of sulfite oxidase. X-ray absorption spectroscopy of the Mo(IV), Mo(V), and Mo(VI) oxidation states. George GN, et al. **Biochemistry** 1989 Jun 13;28(12):5075–80

On the natural enrichment of cadmium and molybdenum in the sediments of Ucluelet Inlet, British Columbia. Pedersen TF, et al. **Sci Total Environ** 1989 Mar;79(2):125–39

[Localization of the active centers in model molybdenum–sulfur and molybdenum–iron–sulfur proteins] Belonogova OV, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul–Aug;(4):613–7 (Eng. Abstr.) **(Rus)**

[Prevention of dental caries: possible effects of molybdenum and zinc] Protić M, et al. **Med Pregl** 1988;41(5–6):228–30 (Eng. Abstr.) **(Scr)**

BLOOD

Molybdenum. Normal plasma values at delivery in mothers and newborns. Bouglé D, et al. **Acta Paediatr Scand** 1989 Mar;78(2):319–20

[Blood levels of molybdenum, selenium and copper at delivery] Bouglé D, et al. **Arch Fr Pediatr** 1989 Feb; 46(2):95–8 (Eng. Abstr.) **(Fre)**

DEFICIENCY

Molybdenum cofactor deficiency in a patient previously characterized as deficient in sulfite oxidase. Johnson JL, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):86–93

Molybdenum deficiency in TPN. **Nutr Rev** 1987 Nov; 45(11):337–41

METABOLISM

Molybdenum: an essential trace element in human nutrition. Rajagopalan KV. **Annu Rev Nutr** 1988;8:401–27 (100 ref.)

The aldox-2 locus of Drosophila melanogaster also affects sulfite oxidase and molybdenum metabolism. Bentley MM, et al. **Biochem Genet** 1989 Feb;27(1–2):99–118

X-ray–absorption and electron–paramagnetic–resonance spectroscopic studies of the environment of molybdenum in high–pH and low–pH forms of Escherichia coli nitrate reductase. George GN, et al. **Biochem J** 1989 May 1; 259(3):693–700

Molybdenum and vanadium nitrogenases of Azotobacter chroococcum. Low temperature favours N2 reduction by vanadium nitrogenase. Miller RW, et al. **Biochem J** 1988 Dec 1;256(2):429–32

Molybdopterin—problems and perspectives. Rajagopalan KV. **Biofactors** 1988 Dec;1(4):273–8 (35 ref.)

Formylmethanofuran dehydrogenase from methanogenic bacteria, a molybdoenzyme. Karrasch M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):226–30

Evidence for the presence of a new NAD+–dependent formate dehydrogenase in Pseudomonas sp. 101 cells grown on a molybdenum–containing medium. Karzanov VV, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):197–200

Cupric oxide needles for grazing cattle consuming low–copper, high–molybdenum forage and high–sulfate water [published erratum appears in J Anim Sci 1989 Apr;67(4):1101] Cameron HJ, et al. **J Anim Sci** 1989 Jan; 67(1):252–61

Molybdate transport by Bradyrhizobium japonicum bacteroids. Maier RJ, et al. **J Bacteriol** 1988 Dec; 170(12):5613–9

Genetic evidence for an Azotobacter vinelandii nitrogenase lacking molybdenum and vanadium. Pau RN, et al. **J Bacteriol** 1989 Jan;171(1):124–9

Molybdenum accumulation in chlD mutants of Escherichia coli. Scott D, et al. **J Bacteriol** 1989 Mar;171(3):1284–7

Reduction of Mo6+ with elemental sulfur by Thiobacillus ferrooxidans. Sugio T, et al. **J Bacteriol** 1988 Dec; 170(12):5956–9

Molybdenum—an essential trace element. Rajagopalan KV. **Nutr Rev** 1987 Nov;45(11):321–8 (45 ref.)

The Journal of Biological Chemistry, Volume 203, 1953: Isolation and identification of the xanthine oxidase factor as molybdenum. By Dan A. Richert and W. W. Westerfeld [classical article] Richert DA, et al. **Nutr Rev** 1987 Nov; 45(11):342–3

The inorganic biochemistry of molybdoenzymes. Bray RC. **Q Rev Biophys** 1988 Aug;21(3):299–329 (121 ref.)

Nitrogenases without molybdenum. Pau RN. **Trends Biochem Sci** 1989 May;14(5):183–6 (37 ref.)

PHARMACOKINETICS

The effects of ammonium tetrathiomolybdate intake on tissue copper and molybdenum in pregnant ewes and lambs. Kincaid RL, et al. **J Anim Sci** 1988 Dec;66(12):3252–8

Effect of 67Cu and 99Mo labeled tetrathiomolybdate on the distribution of 67Cu, Cu, and 99Mo in bile fractions in sheep. Gooneratne R, et al. **J Inorg Biochem** 1989 Apr; 35(4):233–46

PHARMACOLOGY

Influence of molybdenum and sulfur on copper metabolism in sheep: comparison of elemental sulfur and sulfate. Lamand M. **Ann Rech Vet** 1989;20(1):103–6

Profiles of 67Cu in blood, bile, urine and faeces from 67Cu-primed lambs: effect of 99Mo–labelled tetrathiomolybdate on the metabolism of recently stored tissue 67Cu. Gooneratne SR, et al. **Br J Nutr** 1989 Mar; 61(2):355–71

Profiles of 67Cu in blood, bile, urine and faeces from 67Cu–primed lambs: effect of 99Mo–labelled tetrathiomolybdate on the metabolism of 67Cu after long–term storage. Gooneratne SR, et al. **Br J Nutr** 1989 Mar;61(2):373–85

Effect of tetrathiomolybdate administration on the excretion of copper, zinc, iron and molybdenum in sheep bile. Gooneratne SR, et al. **Br Vet J** 1989 Jan–Feb;145(1):62–72

The effects of supplementation of the diet of young steers with Mo and S on the intracellular distribution of copper in liver and on copper fractions in blood. Wang ZY, et al. **Br Vet J** 1988 Nov–Dec;144(6):543–51

In vivo effects of molybdate on activation of rat liver cytosol glucocorticoid receptor. Yoshida A, et al. **Horm Metab Res** 1988 Sep;20(9):566–9

The effects of ammonium tetrathiomolybdate intake on tissue copper and molybdenum in pregnant ewes and lambs. Kincaid RL, et al. **J Anim Sci** 1988 Dec;66(12):3252–8

Subcellular distribution of copper in the kidneys of normal, copper–poisoned, and thiomolybdate–treated sheep. Gooneratne SR, et al. **J Inorg Biochem** 1989 Jan;35(1):23–36

Distribution of Cu, Zn, and Fe in the soluble fraction of the kidney in normal, copper–poisoned, and thiomolybdate–treated sheep. Gooneratne SR, et al. **J Inorg Biochem** 1989 Jan;35(1):37–53

In vitro influence of molybdenum on benzo[a]pyrene metabolism in hepatic and pulmonary rat microsomes. Bompart G, et al. **J Toxicol Environ Health** 1989; 26(4):459–68

A novel effect of molybdate on the binding of [3H]aldosterone to gel–filtered type I receptors in brain cytosol. Emadian SM, et al. **Neurochem Res** 1988 Aug; 13(8):707–13

Enhancement of tetrathiomolybdate–induced biliary copper excretion in sheep by general anaesthesia and the effect on copper excretion in urine and bile. Ke Y, et al. **Res Vet Sci** 1989 May;46(3):344–8

Enhancement of tetrathiomolybdate–induced copper excretion in bile of sheep by the alpha 2–agonistic action of xylazine. Symonds HW, et al. **Res Vet Sci** 1989 May; 46(3):349–53

[Effect of sodium molybdate on the mechanism of electromechanic activity in heart muscle in guinea pigs] Zhang ST, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):110–2 **(Chi)**

[Comparative cytobiochemical study of the functional state of alveolar macrophages of rats exposed to an alumocobalt molybdenum catalyst] Merkur'eva RV, et al. **Gig Sanit** 1988 Nov;(11):88–9 **(Rus)**

PHYSIOLOGY

Oxygen, nitrate, and molybdenum regulation of dmsABC gene expression in Escherichia coli. Cotter PA, et al. **J Bacteriol** 1989 Jul;171(7):3817–23

SUPPLY & DISTRIBUTION

DOE's suspension of enriched uranium shipments at Savannah River puts Mo–99/Tc–99m supply in jeopardy [news] Tilyou SM. **J Nucl Med** 1989 Jul;30(7):1139–40, 1146

THERAPEUTIC USE

Protective effect of sodium molybdate on the acute toxicity of mercuric chloride. V. Enhancement of renal regeneration after exposure to HgCl2. Koizumi T, et al. **Chem Biol Interact** 1988;67(3–4):185–97

Can Wilson's disease patients be decoppered? [letter] Mason J, et al. **Lancet** 1989 Jun 24;1(8652):1455

TOXICITY

[Effect of a molybdenum aerosol on the respiratory passages of experimental animals] Georgiadi GA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):51–2 **(Rus)**

MOLYBDOFERREDOXIN see under **FERREDOXINS**

MONENSIN

ADVERSE EFFECTS

Skeletal muscle lesions in turkeys associated with the feeding of monensin. Wages DP, et al. **Avian Dis** 1988 Jul–Sep; 32(3):583–6

A myopathy of sheep associated with sarcocystis infection and monensin administration. Jeffrey M, et al. **Vet Rec** 1989 Apr 22;124(16):422–6

ANALOGS & DERIVATIVES

Studies on the chemical modification of monensin. I. Synthesis and crystal structures of NaBr complexes of monensylamino acids. Sakakibara J, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4776–84

BIOSYNTHESIS

Propionate and the production of monensins in Streptomyces cinnamonensis. Matěju J, et al. **Folia Microbiol (Praha)** 1988;33(6):440–6

PHARMACOLOGY

Monensin disruption of neutrophil granule genesis. Parmley RT, et al. **Am J Pathol** 1988 Dec;133(3):537–48

More monensin–sensitive, ammonia–producing bacteria from the rumen. Chen G, et al. **Appl Environ Microbiol** 1989 May;55(5):1052–7

Effects of the ionophores monensin and tetronasin on simulated development of ruminal lactic acidosis in vitro. Newbold CJ, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):2981–5

Loss of surface galactosyl receptor activity on isolated rat hepatocytes induced by monensin or chloroquine requires receptor internalization via a clathrin coated pit pathway. McAbee DD, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):261–6

The monensin–mediated transport of Na+ and K+ through phospholipid bilayers studied by 23Na– and 39K–NMR. Riddell FG, et al. **Biochim Biophys Acta** 1988 Oct 6; 944(2):279–84

Functional comparison of DCCD–sensitive Na+/H+ antiporter in Halobacterium halobium with monensin. Murakami N, et al. **Biochimie** 1988 Jun;70(6):819–26

The influence of pH on the vesicular traffic to the surface of the polarized epithelial cell, MDCK. Parczyk K, et al. **Eur J Cell Biol** 1989 Apr;48(2):353–9

Monensin and chloroquine inhibit transfer to lysosomes of endocytosed macromolecules in cultured mouse peritoneal macrophages. Stenseth K, et al. **Eur J Cell Biol** 1989 Aug; 49(2):326–33

Heterogeneity of the effects of monensin on two types of contractions evoked by inhibition of Na+–K+ ATPase in the guinea–pig vas deferens. Katsuragi T, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):147–53

Bile acids in bile after monensin treatment. Camogliano L, et al. **Exp Pathol** 1989;36(1):37–41

The effects of monensin on the transport of horseradish peroxidase into intracellular lumina in cultured rat hepatocytes. Hashich IA, et al. **Hepatology** 1989 Jul; 10(1):61–5

A nuclear magnetic resonance study of the D–[13C6]glucose metabolism of Mesocestoides corti tetrathyridia in the absence and presence of monensin. Novak M, et al. **Int J Parasitol** 1988 Dec;18(8):1029–33

Intracellular synthesis of Epstein–Barr virus membrane antigen gp350/220. Inhibitory effect of monensin on its expression. Bertoni G, et al. **Intervirology** 1989;30(2):61–73

Monensin and bile protein secretion. A tool to investigate hepatocyte intracellular vesicular polarity. Casu A, et al. **Ital J Biochem** 1988 May–Jun;37(3):139–47

Effects of time of day and monensin on the size distribution of particles in digestive tract sites of heifers fed corn silage. Deswysen AG, et al. **J Anim Sci** 1989 Jul;67(7):1773–83

Site and extent of apparent magnesium and calcium absorption in steers fed monensin. Greene LW, et al. **J Anim Sci** 1988 Nov;66(11):2987–91

Enhanced resistance of anaerobic rumen fungi to the ionophores monensin and lasalocid in the presence of methanogenic bacteria. Stewart CS, et al. **J Appl Bacteriol** 1989 Jan;66(1):85–93

Antiketogenic effects of monensin in early lactation. Sauer

FD, et al. **J Dairy Sci** 1989 Feb;72(2):436–42
Effects of monensin on ATP levels and cell functions in rat liver and lung in vitro. Mariani MF, et al. **J Membr Biol** 1989 Jun;108(3):235–46
Effect of organic and inorganic calcium channel blockers on gamma-amino-n-butyric acid release induced by monensin and veratrine in the absence of external calcium. Sitges M. **J Neurochem** 1989 Aug;53(2):436–41
Characterization of the effect of monensin on gamma-amino-n-butyric acid release from isolated nerve terminals. Sitges M. **J Neurochem** 1989 Aug;53(2):442–7
Influence of monensin on ganglioside anabolism and neurite stability in cultured chick neurons. Hogan MV, et al. **J Neurosci Res** 1988 Jul;20(3):390–4
Norepinephrine and adenosine triphosphate release in different ratio from guinea pig vas deferens by high potassium chloride, ouabain and monensin. Katsuragi T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):302–8
Visualization of glycoproteins after tunicamycin and monensin treatment of herpes simplex virus infected cells. Lopez-Iglesias C, et al. **J Ultrastruct Mol Struct Res** 1988 Oct;101(1):75–91
Biosynthesis and processing of human immunodeficiency virus type 1 envelope glycoproteins: effects of monensin on glycosylation and transport. Dewar RL, et al. **J Virol** 1989 Jun;63(6):2452–6
Sensitivity of the sodium efflux in barnacle muscle fibers to the microinjection of monensin. Walkowiak H. **Life Sci** 1974 Oct 1;15(7):1353–61
Monensin influences basal and human growth hormone-releasing hormone 44-induced release of stored and new rat growth hormone and prolactin. Farmer PK, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):253–62
Fasciola hepatica: the effect of the sodium ionophore monensin on the adult tegument. Skuce PJ, et al. **Parasitol Res** 1989;75(3):223–32
Monensin inhibition of corticotropin releasing factor mediated ACTH release. Sobel DO, et al. **Peptides** 1988 Sep-Oct;9(5):1037–42
Electron microscopic evidence for stimulation of melanosomal maturation by lysosomotropic agents and monensin in cultured B16 mouse melanoma cells. Oikawa A, et al. **Pigment Cell Res** 1987;1(1):44–50
Effects of monensin on the receptor-mediated endocytosis of 125I-labelled IgG by guinea-pig yolk sac in vitro. Douglas GC, et al. **Placenta** 1988 May-Jun;9(3):277–88
Influence of monensin and salinomycin on the performance of broiler chicks. Harms RH, et al. **Poult Sci** 1989 Jan; 68(1):86–8
Processing of the structural proteins of human immunodeficiency virus type 1 in the presence of monensin and cerulenin. Pal R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9283–6
Na+ ionophores monensin and nigericin induce a rise in platelet cytosolic [Ca2+] by means of a Na+-independent mechanism. Batka EA, et al. **Prog Clin Biol Res** 1988; 283:431–6
The effect of growth in monensin or low potassium on internal sodium, alpha sub-unit mRNA and sodium pump density in human cultured cells. Unkles S, et al. **Prog Clin Biol Res** 1988;268B:157–62
The effects of monensin on the abundance of mRNA(alpha) and of sodium pumps in human cultured cells. Cramb G, et al. **Q J Exp Physiol** 1989 Jan;74(1):53–63
[The effect of monensin Na on the protein content of cow's milk and further performance criteria] Schüler D. **Arch Tierernahr** 1988 Oct;38(10):947–54 (Eng. Abstr.) **(Ger)**
[The hormonal response in bulls to the administration of zeranol and rumensin] Brouček J, et al. **Vet Med (Praha)** 1989 May;34(5):267–73 (Eng. Abstr.) **(Slo)**

POISONING

Monensin toxicity in turkey breeder hens. Ficken MD, et al. **Avian Dis** 1989 Jan-Mar;33(1):186–90
Monensin poisoning in sheep [letter] Synge BA. **Vet Rec** 1989 Apr 15;124(15):410–1

THERAPEUTIC USE

The effect of monensin against swine dysentery. Kyriakis SC. **Br Vet J** 1989 Jul-Aug;145(4):373–7
Field experience trials comparing narasin and monensin. Jeffers TK, et al. **Poult Sci** 1988 Jul;67(7):1058–61
Sensitivity of field isolates of Eimeria species to monensin and lasalocid in the chicken. Chapman HD, et al. **Res Vet Sci** 1989 Jan;46(1):114–7
Use of monensin sodium against Toxoplasma [letter] Lawrence K. **Vet Rec** 1988 Sep 17;123(12):323
Concurrent use of the oxfendazole pulse release bolus and the monensin rumen delivery device in young grazing cattle. Rowlands DT, et al. **Vet Rec** 1989 Jul 15;125(3):55–7
Monensin and toxoplasmosis in sheep [letter] Trees AJ. **Vet Rec** 1989 Jul 29;125(5):116

TOXICITY

Effects of some calcium modulators on monensin toxicity. Mitema ES, et al. **Vet Hum Toxicol** 1988 Oct;30(5):409–13
Effects of arsanilic acid and monensin when given simultaneously in the diet of broiler chicks. VanderKop PA, et al. **Vet Hum Toxicol** 1989 Jun;31(3):209–13

MONGOLISM see **DOWN'S SYNDROME**

MONGOLOID RACE

Hemoglobin constant spring defined by specific oligonucleotide hybridization and hemoglobin D Punjab (beta 121——Gln) in a Batak Indonesian family. Kosasih EN, et al. **Am J Hematol** 1988 Sep;29(1):22–6
A cephalometric study of Korean adults. Park IC, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):54–9
Reflections on the face of Japan: a multivariate craniofacial and odontometric perspective. Brace CL, et al. **Am J Phys Anthropol** 1989 Jan;78(1):93–113
Intersex differences in craniocervical morphology and posture in southern Chinese and British Caucasians. Cooke MS, et al. **Am J Phys Anthropol** 1988 Sep;77(1):43–51
Tooth wear and the position of the mental foramen. Green RM, et al. **Am J Phys Anthropol** 1988 Sep;77(1):69–75
A longitudinal assessment of haloperidol doses and serum concentrations in Asian and Caucasian schizophrenic patients. Lin KM, et al. **Am J Psychiatry** 1989 Oct; 146(10):1307–11
A comparative study of southern Chinese and British Caucasian cephalometric standards. Cooke MS, et al. **Angle Orthod** 1989 Summer;59(2):131–8
Distribution of group-specific component (Gc) subtypes in several Mongoloid populations of East Asia. Saha N. **Ann Hum Biol** 1989 Jan-Feb;16(1):53–60
Cutaneous responses to topical methyl nicotinate in black, oriental, and caucasian subjects. Gean CJ, et al. **Arch Dermatol Res** 1989;281(2):95–8
Racial differences in antinuclear antibody patterns and clinical manifestations of scleroderma. McNeilage LJ, et al. **Arthritis Rheum** 1989 Jan;32(1):54–60
Prevalence of dental caries in Taiwan aboriginal children—Bunun, Paiwan, Rukai, Ami, and Yami Tribes. Miyazaki H, et al. **Aust Dent J** 1988 Jun;33(3):226–30
Inguinal hernia in Chinese children. Tam PK, et al. **Aust N Z J Surg** 1988 May;58(5):403–6
Molecular genetics of alcohol-metabolizing enzymes. Yoshida A, et al. **Biochem Soc Trans** 1988 Jun;16(3):230–2
Bone mineral content in Japanese [letter] Fujii Y, et al. **Bone Miner** 1988 Jul;4(3):311–2
Comparison of bone mineral content between Japan-born and US-born Japanese subjects in Hawaii. Nomura A, et al. **Bone Miner** 1989 May;6(2):213–23
Morphology of the maxillary lateral incisor in cases of unilateral impaction of the maxillary canine. Oliver RG, et al. **Br J Orthod** 1989 Feb;16(1):9–16
Pigmentary disorders in oriental skin. Jimbow M, et al. **Clin Dermatol** 1989 Apr-Jun;7(2):11–27 (42 ref.)
Findings from 1163 panelipse radiographs taken of 12-year-old children living in Hong Kong. Davis PJ. **Community Dent Health** 1988 Sep;5(3):243–9
Health of British Asians; a research review. Ahmad WI, et al. **Community Med** 1989 Feb;11(1):49–56 (70 ref.)
Apparent mendelian recessive inheritance of sparteine metabolism in an extended Japanese family [letter] Chiba K, et al. **Eur J Clin Pharmacol** 1988;34(6):661–2
Cephalometric standards for the southern Chinese. Cooke MS, et al. **Eur J Orthod** 1988 Aug;10(3):264–72 (34 ref.)
Study of restriction fragment length polymorphisms at the human phenylalanine hydroxylase locus and evaluation of its potential application in prenatal diagnosis of phenylketonuria in Chinese. Chen SH, et al. **Hum Genet** 1989 Feb;81(3):226–30
A seroepidemiological survey of HTLV-1 in the Philippines. Ishida T, et al. **Int J Epidemiol** 1988 Sep;17(3):625–8
Haemophilus influenzae type b anticapsular antibody responses to PRP-pertussis and PRP-D vaccines in Alaska native infants. Ward JI, et al. **J Infect Dis** 1988 Oct; 158(4):719–23
A quicker simpler method of pre-determination of the length of umbilical artery catheter insertion in Asian babies. Lin MS, et al. **J Singapore Paediatr Soc** 1989;31(1-2):79–81
The use of atracurium in Chinese myasthenic patients undergoing thymectomy. Yang MW, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):161–8
Race and therapeutic drug response [editorial] Kalow W. **N Engl J Med** 1989 Mar 2;320(9):588–90
Altered sensitivity to and clearance of propranolol in men of Chinese descent as compared with American whites. Zhou HH, et al. **N Engl J Med** 1989 Mar 2;320(9):565–70
Anthropometric relevance on sublabial transseptal transsphenoidal hypophysectomy in the Asiatic type of skull. Kobayashi H, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):340–4
Oriental blepharoplasty: single-stitch, nonincision technique. Baek SM, et al. **Plast Reconstr Surg** 1989 Feb;83(2):236–42
Oriental blepharoplasty [letter] Liu D. **Plast Reconstr Surg** 1989 Oct;84(4):698–9
Complications of Oriental blepharoplasty. Weng CJ, et al. **Plast Reconstr Surg** 1989 Apr;83(4):622–8
Reflex heart rate response in normal Chinese adults: its relationship to age. Tang KT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):677–85
Comments on cephalometrical configurations of the Japanese. Kanda S. **Z Morphol Anthropol** 1989;77(3):227–33
[The face radius measurement as a sagittal size of the face—a complement to the somatometric study of the Japanese] Hoshi H, et al. **Kaibogaku Zasshi** 1988 Jun;63(3):159–68 (Eng. Abstr.) **(Jpn)**
[Japanese Reference Man 1988–III. Masses of organs and tissues and other physical properties] Tanaka G. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):509–13 (Eng. Abstr.) **(Jpn)**
[Population genetics study of the functional asymmetry of the brain in native and migrant population of the north-eastern USSR] Arshavskiĭ VV, et al. **Genetika** 1989 May;25(5):910–7 (Eng. Abstr.) **(Rus)**
[Structure of the epidermis in people of various races (light and electron microscopic research)] Semkin VI, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul-Aug;(4):517–23 (Eng. Abstr.) **(Rus)**
[Plasma lipid levels in men aged 30–59 years living in rural areas of the Buriat ASSR (epidemiological study)] Nikitin IuP, et al. **Kardiologiia** 1988 Dec;28(12):77–9 (Eng. Abstr.) **(Rus)**
[Comparative analysis of the degree of dental caries susceptibility of different ethnic groups] Levchenko LT. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):26–7 (Eng. Abstr.) **(Rus)**
[Criteria of age determination of the female population of various aboriginal nationalities of Kamchatka] Pashkova VI, et al. **Sud Med Ekspert** 1989 Jan-Mar;32(1):25–7 (Eng. Abstr.) **(Rus)**
[Fatty acids of the omega-3 line in the erythrocytes of Chukchi with myocardial hypertrophy] Gerasimova EN, et al. **Ter Arkh** 1988;60(6):98–103 (Eng. Abstr.) **(Rus)**
[Evaluation of actual nutrition of reindeer breeders] Stepchuk MA. **Vopr Pitan** 1988 May-Jun;(3):73 **(Rus)**
[Neuroectodermal dysplasia in 2 Uzbek families] Dadali EL, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):58–61 (Eng. Abstr.) **(Rus)**
[Various indicators of the lipid composition of erythrocyte membranes in healthy persons and in chronic alcoholics in the northeastern part of the USSR] Lapinskiĭ AG, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):121–5 (Eng. Abstr.) **(Rus)**

GENETICS

Frequency of the atypical aldehyde dehydrogenase-2 gene (ALDH2(2)) in Japanese and Caucasians. Shibuya A, et al. **Am J Hum Genet** 1988 Nov;43(5):741–3
Genotypes of alcohol-metabolizing enzymes in Japanese with alcohol liver diseases: a strong association of the usual Caucasian-type aldehyde dehydrogenase gene (ALDH1(2)) with the disease [published erratum appears in Am J Hum Genet 1989 Apr;44(4):619] Shibuya A, et al. **Am J Hum Genet** 1988 Nov;43(5):744–8
Distribution of red cell phosphoglucomutase-1 subtypes in several Mongoloid populations of East Asia. Saha N. **Am J Phys Anthropol** 1988 Sep;77(1):91–6
Distribution and co-occurrence of MHC class I, II, and III markers in southern Chinese: implications for autoimmune disease. Hawkins BR, et al. **Dis Markers** 1988 Oct-Dec; 6(4):237–45
Characteristics of Mongoloid and neighboring populations based on the genetic markers of human immunoglobulins. Matsumoto H. **Hum Genet** 1988 Nov;80(3):207–18 (36 ref.)
Gm and Km allotypes in 74 Chinese populations: a hypothesis of the origin of the Chinese nation. Zhao TM, et al. **Hum Genet** 1989 Sep;83(2):101–10
DNA polymorphisms of the insulin receptor gene in Japanese subjects with non-insulin-dependent diabetes mellitus. Li SR, et al. **Hum Hered** 1988;38(5):273–6
Serogenetic investigations of Tibetans and Himachalis from Himachal Pradesh, India: genetic relationship between Tibetans and certain selected mongoloid populations. Papiha SS, et al. **Jinrui Idengaku Zasshi** 1989 Jun; 34(2):143–57
Genetic heterogeneity and population structure in eastern India: red cell enzyme variability in ten Assamese populations. Mukherjee BN, et al. **Z Morphol Anthropol** 1989;77(3):287–96

MONGOOSE see under **CARNIVORA**

MONILIA see **CANDIDA**

MONILIALES see **HYPHOMYCETES**

MONILIASIS see **CANDIDIASIS**

MONILIASIS, CUTANEOUS see **CANDIDIASIS, CUTANEOUS**

MONILIASIS, ORAL see **CANDIDIASIS, ORAL**

MONILIASIS, VULVOVAGINAL see **CANDIDIASIS, VULVOVAGINAL**

MONILIFORMIS see under **ACANTHOCEPHALA**

MONITORING, ENVIRONMENTAL see **ENVIRONMENTAL MONITORING**

MONITORING, FETAL see **FETAL MONITORING**

MONITORING, HOME BLOOD GLUCOSE see **BLOOD GLUCOSE SELF-MONITORING**

MONITORING, IMMUNE see **MONITORING, IMMUNOLOGIC**

MONITORING, IMMUNOLOGIC

Monitoring of cardiac transplants with beta 2-microglobulin, cytoimmunological monitoring and endmyocardial biopsy: what's their value in detecting rejection? Semik M, et al. **Bibl Cardiol** 1988;(43):133–6

Cyto-immunologic monitoring following heart transplantation. Wijngaard PL, et al. **Bibl Cardiol** 1988; (43):137–41

Ciclosporin monitoring in kidney-transplanted children: high-performance liquid chromatography versus radioimmunoassay. Khoss AE, et al. **Child Nephrol Urol** 1988–89;9(1–2):42–5

Neopterin and interferon gamma serum levels in renal allograft recipients. Khoss AE, et al. **Child Nephrol Urol** 1988–89;9(1–2):46–9

The canyon hypothesis. Hiding the host cell receptor attachment site on a viral surface from immune surveillance. Rossmann MG. **J Biol Chem** 1989 Sep 5; 264(25):14587–90 (47 ref.)

Antibodies to cyclosporine A (CsA) by a novel route and their use to monitor cyclosporine levels by radioimmunoassay (RIA). Cacalano NA, et al. **J Immunol Methods** 1989 Mar 31;118(2):257–63

Immunosurveillance and melanoma. Bystryn JC. **J Invest Dermatol** 1989 May;92(5 Suppl):318S–320S

Immunophenotype of blast cells in chronic myeloid leukemia. Valiron O, et al. **Leuk Res** 1988;12(10):861–72

Phenotyping of acute myelocytic leukemia (AML) progenitors: an approach for tracing minimal numbers of AML cells among normal bone marrow. Delwel R, et al. **Leukemia** 1988 Dec;2(12):814–9

HLA-A11 is associated with poor prognosis in childhood acute lymphoblastic leukemia (ALL). Orgad S, et al. **Leukemia** 1988 Dec;2(12 Suppl):79S–87S

TdT+/nonlymphoid antigen+ acute leukemias: immunologic and karyotypic monitoring during therapy and at relapse suggests the transformation of a bipotential stem cell. Paietta E, et al. **Leukemia** 1989 Jul;3(7):485–91

Heterogeneity of childhood acute lymphoblastic leukemia (ALL): monoclonal antibodies phenotyping and induction of differentiation in vitro. Umiel T, et al. **Leukemia** 1988 Dec;2(12 Suppl):88S–96S

Interleukin-2 assay in serum and urine as a means of monitoring pancreatic allograft rejection. Georgi BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2784–5

Cytoimmunological monitoring to detect rejection after heart transplantation. Jutte NH, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2519–20

Immunological reactivity before and after cardiac transplantation. Kašlík J, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2547

Reproducibility and reliability of cytoimmunological monitoring (CIM) of heart transplanted patients (HTP). Klanke D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2512–3

Relevance of immunological parameters to detect allograft rejection in heart transplant recipients. Renna Molajoni E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2534–6

Cytoimmunologic monitoring for the diagnosis of acute rejection after heart transplantation. Wijngaard PL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2521–2

Serial monitoring of peripheral blood lymphocyte subsets in cardiac allograft rejection in the rat. Eidelman FJ, et al. **Transplantation** 1989 Jun;47(6):1079–81

[Role of NK cells in lung metastasis immunosurveillance] Kobayashi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1233–45 (77 ref.) (Eng. Abstr.) **(Jpn)**

METHODS

Comparison of genetic probe with immunophenotype analysis in lymphoproliferative disorders: a study of 87 cases. Henni T, et al. **Blood** 1988 Dec;72(6):1937–43

Immune monitoring of blood in heart transplant recipients: application of flow cytometry. Garner RJ, et al. **Semin Diagn Pathol** 1989 Feb;6(1):83–90

MONITORING, PHYSIOLOGIC

see related
SIGNAL PROCESSING, COMPUTER-ASSISTED

Heart rate, magnitude and duration of ST-segment depression in symptomatic and asymptomatic episodes of myocardial ischemia in patients with coronary artery disease recorded by Holter. Ilić S. **Acta Med Iugosl** 1989; 43(3):205–13

Intraoperative identification of the central sulcus: a practical method. Aiba T, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:22–6

Continuous versus serial global cerebral hemometabolic monitoring: applications in acute brain trauma. Cruz J. **Acta Neurochir Suppl (Wien)** 1988;42:35–9

Monitoring of brain function by means of evoked potentials in cerebral aneurysm surgery. Ducati A, et al. **Acta Neurochir Suppl (Wien)** 1988;42:8–13

Intraoperative monitoring of the motor function: experimental and clinical study. Kaneko M, et al. **Acta Neurochir Suppl (Wien)** 1988;42:18–21

Intraoperative monitoring of the electrocochleogram and the preservation of hearing during acoustic neuroma excision. Symon L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:27–30

Assessment of reversible cerebral ischaemia in man: intraoperative monitoring of the somatosensory evoked response. Symon L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:3–7

Experimental radiofrequency (RF) coagulation with computer-based on line monitoring of temperature and power. Moringlane JR, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):126–31

Clinical application of automated whole-day blood pressure monitoring. Proceedings of a satellite symposium to the 60th annual scientific sessions of the American Heart Association. November 15, 1987, Anaheim, California. **Am Heart J** 1988 Oct;116(4):1117–60

Ambulatory (Holter) electrocardiography and myocardial ischemia. Kennedy HL, et al. **Am Heart J** 1989 Jan; 117(1):164–76 (124 ref.)

Usefulness of silent myocardial ischemia detected by ambulatory electrocardiographic monitoring in predicting new coronary events in elderly patients. Aronow WS, et al. **Am J Cardiol** 1988 Dec 1;62(17):1295–6

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic arterial hypertension. Cugini P, et al. **Am J Cardiol** 1989 Sep 15; 64(10):604–8

Correlation between the signal-averaged electrocardiogram from Holter tapes and from real-time recordings. Kelen G, et al. **Am J Cardiol** 1989 Jun 1;63(18):1321–5

Values and limitations of programmed stimulation and ambulatory monitoring in the management of ventricular tachycardia. Kim SG. **Am J Cardiol** 1988 Nov 3; 62(14):71I–12I (47 ref.)

Transient alterations of the QRS complex and ST segment during percutaneous transluminal balloon angioplasty of the left anterior descending coronary artery. Wagner NB, et al. **Am J Cardiol** 1988 Nov 15;62(16):1038–42

Usefulness of ambulatory monitoring of blood pressure in assessing antihypertensive therapy. White WB, et al. **Am J Cardiol** 1989 Jan 1;63(1):94–8

Unexpected death in infants monitored at home [editorial] Beckerman RC. **Am J Dis Child** 1988 Oct;142(10):1033–4

Sudden infant death and home monitors. Meny RG, et al. **Am J Dis Child** 1988 Oct;142(10):1037–40

Cardiorespiratory patterns during alarms in infants using apnea/bradycardia monitors. Nathanson I, et al. **Am J Dis Child** 1989 Apr;143(4):476–80

Mean and median of pH values, characterizing average intragastric acidity [letter] Mela GS, et al. **Am J Gastroenterol** 1989 Apr;84(4):444–5

Meta-analysis of research on the effect of clinical pharmacokinetics services on therapeutic drug monitoring. Ried LD, et al. **Am J Hosp Pharm** 1989 May;46(5):945–51

The accuracy of urinary luteinizing hormone testing in predicting ovulation. Lloyd R, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1370–2; discussion 1373–5

Randomized trial of home uterine activity monitoring [letter] Newman RB. **Am J Obstet Gynecol** 1988 Nov; 159(5):1308–9

Severe Takayasu's arteritis in pregnancy: the role of central hemodynamic monitoring. Winn HN, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1135–6

Identification and quantification of apneas by computer-based analysis of oxygen saturation. George CF, et al. **Am Rev Respir Dis** 1988 May;137(5):1238–40

Indications and standards for cardiopulmonary sleep studies [letter; comment] Sackner MA. **Am Rev Respir Dis** 1989 Jul;140(1):264–5. **Comment on:** Am Rev Respir Dis 1989 Feb;139(2):559–68

Respiratory monitoring in the intensive care unit. Tobin MJ. **Am Rev Respir Dis** 1988 Dec;138(6):1625–42 (173 ref.)

Monitoring perfusion in pulse oximetry [letter] Grigg KN. **Anaesth Intensive Care** 1988 Aug;16(3):377–8

Physiological changes during liver transplantation. Kalpokas M, et al. **Anaesth Intensive Care** 1989 Feb;17(1):24–30

Neurological monitoring during anaesthesia and surgery. McMeniman WJ, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):358–67 (40 ref.)

Anaesthesia and the law. Monitoring. Braham D. **Anaesthesia** 1989 Jul;44(7):606–7

Neurophysiological monitoring [editorial] Prior PF. **Anaesthesia** 1989 Jul;44(7):545–6

Intraoperative temperature monitoring sites in infants and children and the effect of inspired gas warming on esophageal temperature. Bissonnette B, et al. **Anesth Analg** 1989 Aug;69(2):192–6

Prevention of intraoperative anesthesia accidents and related severe injury through safety monitoring. Eichhorn JH. **Anesthesiology** 1989 Apr;70(4):572–7

Systolic venous waves cause spurious signs of arterial hemoglobin desaturation. Mark JB. **Anesthesiology** 1989 Jul;71(1):158–60

Comparative efficiency of a laboratory and examining room assay for therapeutic drug monitoring of theophylline in ambulatory patients. Milavetz G, et al. **Ann Allergy** 1989 May;62(5):453–6

Laboratory tests in monitoring drug administration (Document F, Stage 3, Version 1). Siest G, et al. **Ann Biol Clin (Paris)** 1988;46(9):743–50 **(Eng, Fre)**

A comparison of interposed abdominal compression CPR and standard CPR by monitoring end-tidal PCO2. Ward KR, et al. **Ann Emerg Med** 1989 Aug;18(8):831–7

Automated control of postoperative hypertension: a prospective, randomized multicenter study. Cosgrove DM 3d, et al. **Ann Thorac Surg** 1989 May;47(5):678–82; discussion 683

Holter monitoring for bifascicular block after coronary artery bypass operation [letter] Malcolm I. **Ann Thorac Surg** 1989 Apr;47(4):638–9

Processes of self-care: monitoring sensations and symptoms. Keller ML, et al. **ANS** 1989 Oct;12(1):54–66 (33 ref.)

Proposed recommended practices. Monitoring the patient receiving local anesthesia. **AORN J** 1989 Feb;49(2):623, 625–6, 628

Midazolam: saint or sinner? Eubanks JR Jr. **AORN J** 1989 Jul;50(1):155–6

Acceptance of domiciliary theophylline monitoring using dried blood spots. Rattenbury JM, et al. **Arch Dis Child** 1988 Dec;63(12):1449–52

Use of conjunctival oxygen monitoring in cardiac patients in the emergency unit. Harding S, et al. **Arch Emerg Med** 1988 Dec;5(4):233–8

Leeches. Objective monitoring of altered perfusion in congested flaps. Hayden RE, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1395–9

Monitoring of sedated pediatric dental patients. Whitehead BG, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):329–33

Noninvasive electromagnetic measurements. Lessard CS, et al. **Biotechnology** 1989;11:115–57 (91 ref.)

Monitoring during sedation for endoscopy [letter] **BMJ** 1988 Oct 15;297(6654):978

Monitoring during sedation for endoscopy [letter] Carter AS, et al. **BMJ** 1989 Jan 14;298(6666):114

Monitoring during sedation for endoscopy [letter] Tate N. **BMJ** 1988 Aug 20–27;297(6647):561

Computerized monitoring of depth of anaesthesia with isoflurane. Thomsen CE, et al. **Br J Anaesth** 1989 Jul; 63(1):36–43

The use of heart rate monitoring in the estimation of energy expenditure: a validation study using indirect whole-body calorimetry. Ceesay SM, et al. **Br J Nutr** 1989 Mar; 61(2):175–86

Clinical practice monitoring of slow-acting remission-inducing (SARI) drugs. Kay A. **Br J Rheumatol** 1989 Jun;28(3):239–41 (24 ref.)

Ambulatory monitoring of bladder pressures in patients with low compliance as a result of neurogenic bladder dysfunction. Webb RJ, et al. **Br J Urol** 1989 Aug; 64(2):150–4

The moment of intraventricular hemorrhage. Funato M, et al. **Brain Dev** 1988;10(5):325–7

Long-term recording of cerebrospinal fluid pressure in freely behaving rats. Starcevic VP, et al. **Brain Res** 1988 Oct 11;462(1):112–7

Efficacy and safety of flosequinan, given over 3 days, evaluated by continuous hemodynamic monitoring. Schneeweiss A, et al. **Cardiology** 1989;76(3):201–5

Noninvasive assessment of patients following coronary artery angioplasty. Kent KM, et al. **Cardiovasc Clin** 1988; 19(2):199–208 (23 ref.)

Electrocardiographic monitoring of cardiac transplants in mice. Mottram PL, et al. **Cardiovasc Res** 1988 May; 22(5):315–21

Continuous monitoring of mixed venous oxygen saturation as an indicator of pharmacologic intervention. Hassan E, et al. **Chest** 1989 Feb;95(2):406–9

Intracranial pressure (ICP) monitoring as a guide to prognosis in a lightning-injured, comatose child. Kandt RS, et al. **Childs Nerv Syst** 1988 Dec;4(6):370–2

The ESVEM trial. Electrophysiologic Study Versus Electrocardiographic Monitoring for selection of antiarrhythmic therapy of ventricular tachyarrhythmias. The ESVEM Investigators. **Circulation** 1989 Jun; 79(6):1354–60

Twenty-four-hour ambulatory blood pressure in shift workers. Chau NP, et al. **Circulation** 1989 Aug;80(2):341–7

Ambulatory monitoring of uterine contractions. Katz M, et al. **Clin Obstet Gynecol** 1988 Sep;31(3):616–34

The use of somatosensory evoked potential during revision or reoperation for total hip arthroplasty. Nercessian OA, et al. **Clin Orthop** 1989 Jun;(243):138–42

Aminoglycoside pharmacokinetic monitoring: an integral part of patient care? Rodvold KA, et al. **Clin Pharm** 1988 Aug;7(8):608–13 (51 ref.)

Guidelines for serum drug monitoring. Platt D, et al. **Conn Med** 1988 Sep;52(9):533–5

Intensive care monitoring. **Crit Care Clin** 1988 Jul; 4(3):411–644

Noninvasive monitoring of lung function during mechanical ventilation. Boysen PG, et al. **Crit Care Clin** 1988 Jul; 4(3):527–41 (31 ref.)

Noninvasive oxygen monitoring. Brown M, et al. **Crit Care Clin** 1988 Jul;4(3):493–509 (63 ref.)

Blood pressure monitoring. Carroll GC. **Crit Care Clin** 1988 Jul;4(3):411–34 (59 ref.)

Noninvasive cardiac monitoring. Clements FM, et al. **Crit Care Clin** 1988 Jul;4(3):435–54 (49 ref.)

Nutritional monitoring in the ICU: rational and practical application. Negro F, et al. **Crit Care Clin** 1988 Jul; 4(3):559–72 (47 ref.)

Monitoring renal function. Prough DS, et al. **Crit Care Clin** 1988 Jul;4(3):573–89 (63 ref.)

Monitoring of critically ill infants and children. Rubenstein JS, et al. **Crit Care Clin** 1988 Jul;4(3):621–39 (72 ref.)

Neurologic monitoring. Sloan TB. **Crit Care Clin** 1988 Jul; 4(3):543–57 (64 ref.)

Coagulation monitoring in the surgical intensive care unit. Spiess BD, et al. **Crit Care Clin** 1988 Jul;4(3):605–20 (39 ref.)
Noninvasive carbon dioxide monitoring. Stock MC. **Crit Care Clin** 1988 Jul;4(3):511–26 (39 ref.)
Invasive cardiac monitoring. Vender JS. **Crit Care Clin** 1988 Jul;4(3):455–77 (83 ref.)
Monitoring hepatic function. Zaloga GP, et al. **Crit Care Clin** 1988 Jul;4(3):591–603 (79 ref.)
Noninvasive monitoring of pulmonary blood flow [editorial] Bone RC. **Crit Care Med** 1989 Apr;17(4):380
Discrepancies between transcutaneous and end-tidal carbon dioxide monitoring in the critically ill neonate with respiratory distress syndrome. Hand IL, et al. **Crit Care Med** 1989 Jun;17(6):556–9
Feasibility of noninvasive physiologic monitoring in resuscitation of trauma patients in the emergency department. Lopez-Saucedo A, et al. **Crit Care Med** 1989 Jun;17(6):567–8
Blood gas monitoring: yesterday, today, and tomorrow. Shapiro BA, et al. **Crit Care Med** 1989 Jun;17(6):573–81 (84 ref.)
Quantification of changes in normal neonatal EEGs with gestation from continuous five-day recordings. Eyre JA, et al. **Dev Med Child Neurol** 1988 Oct;30(5):599–607
Accuracy of two equations in determining normalized phenytoin concentrations. Mauro LS, et al. **DICP** 1989 Jan; 23(1):64–8
Physiological gastroesophageal reflux and esophageal motor activity studied with a new system for 24-hour recording and automated analysis. Smout AJ, et al. **Dig Dis Sci** 1989 Mar;34(3):372–8
24 hour continuous tremor quantification based on EMG recording. Bacher M, et al. **Electroencephalogr Clin Neurophysiol** 1989 Feb; 72(2):176–83
Automated rule based graded analysis of ambulatory cassette EEGs. Jayakar P, et al. **Electroencephalogr Clin Neurophysiol** 1989 Feb; 72(2):165–75
Effect of a subdural air collection on the sensory evoked potential during surgery in the sitting position. Watanabe E, et al. **Electroencephalogr Clin Neurophysiol** 1989 May-Jun;74(3):194–201
Reproducibility of surface electromyogram and intra-abdominal pressure for use in ambulatory monitoring. Heinrich I, et al. **Ergonomics** 1988 Dec;31(12):1821–35
ST segment changes in healthy volunteers during Holter monitoring and exercise stress test. Eggeling T, et al. **Eur Heart J** 1988 Dec;9 Suppl N:61–4
Ambulatory electrocardiography strategies used in assessing silent myocardial ischaemia. Kennedy HL. **Eur Heart J** 1988 Dec;9 Suppl N:70–7
Silent ischaemia in asymptomatic 'healthy' individuals with coronary risk factors. Osterspey A, et al. **Eur Heart J** 1988 Dec;9 Suppl N:65–9
Continuous bed-side monitoring of the ECG for detection of silent myocardial ischaemia. von Arnim T, et al. **Eur Heart J** 1988 Dec;9 Suppl N:89–92
The design of SPALA (safety profile of antirheumatics in long-term administration). An intensive monitoring system for NSAIDs. A report from the SPALA project. **Eur J Clin Pharmacol** 1988;34(5):529–30
The use of warfarin in pregnancy complicated by circulating lupus anticoagulant; a technique for monitoring. Campbell JM, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep; 29(1):27–32
Detection of sleep associated dysfunctional pharyngeal obstruction in infants. Southall DP, et al. **Eur J Pediatr** 1989 Jan;148(4):353–9
Sleep and oxyhemoglobin desaturation patterns in chronic obstructive pulmonary diseases. Manni R, et al. **Eur Neurol** 1988;28(5):275–8
Monitoring the patient receiving conscious sedation for gastrointestinal endoscopy: issues and guidelines. Fleischer D. **Gastrointest Endosc** 1989 May-Jun;35(3):262–6 (17 ref.)
24 hour ambulatory oesophageal motility monitoring: how should motility data be analysed? Richter JE, et al. **Gut** 1989 Aug;30(8):1040–7
Intricacies of blood pressure measurement: reexamining the rituals. Henneman EA, et al. **Heart Lung** 1989 May; 18(3):263–71
Hormonal monitoring for in-vitro fertilization and related procedures. Van Steirteghem AC, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:1–9
Comparison of finger and intra-arterial blood pressure monitoring at rest and during laboratory testing. Parati G, et al. **Hypertension** 1989 Jun;13(6 Pt 1):647–55
Monitor: an expert system that validates and interprets time-dependent partial data based on a cystic fibrosis home monitoring program. Slagle JR, et al. **IEEE Trans Biomed Eng** 1989 May;36(5):552–8
Intraoperative ultrasound monitoring of banding of the pulmonary trunk: a new technique? Sutherland GR, et al. **Int J Cardiol** 1989 Mar;22(3):395–8
Cost effectiveness of ambulatory uterine activity monitoring. Morrison JC, et al. **Int J Gynaecol Obstet** 1989 Feb; 28(2):127–32
Rational monitoring of respiratory function during mechanical ventilation of infants and children. Shannon DC. **Intensive Care Med** 1989;15 Suppl 1:S13–6
Hemodynamic monitoring in childhood. Stopfkuchen H. **Intensive Care Med** 1989;15 Suppl 1:S27–31
Considerations after intraoperative monitoring of somatosensory evoked potentials during carotid endarterectomy. Carenini L, et al. **Ital J Neurol Sci** 1989 Jun;10(3):315–20
Use of electrophysiologic testing in patients with nonsustained ventricular tachycardia: prognostic and therapeutic implications. Klein RC, et al. **J Am Coll Cardiol** 1989 Jul;14(1):155–61; discussion 162–3
Surgical therapy for drug-refractory ventricular tachycardia: results with mapping-guided subendocardial resection. Manolis AS, et al. **J Am Coll Cardiol** 1989 Jul;14(1):199–208
Above- and below-lesion EMG pattern mapping for controlling electrical stimulation of paraplegics to facilitate unbraced walker-assisted walking. Graupe D, et al. **J Biomed Eng** 1988 Jul;10(4):305–11
Spinal cord monitoring. Nash CL Jr, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):627–30 (40 ref.)
Prevention of spinal cord ischemia by monitoring spinal cord perfusion pressure and somatosensory evoked potentials. Macda S, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):565–71
Extended esophageal pH monitoring. An analysis of the literature and assessment of its role in the diagnosis and management of gastroesophageal reflux. Rosen SN, et al. **J Clin Gastroenterol** 1989 Jun;11(3):260–70 (91 ref.)
Delayed carotid shunt occlusion detected by electroencephalographic monitoring. Artru AA, et al. **J Clin Monit** 1989 Apr;5(2):119–22
Interference of automated electroencephalographic processing by an endocardial pacemaker. Clark S, et al. **J Clin Monit** 1989 Jan;5(1):22–5
Intraoperative monitoring of brainstem auditory evoked potentials following emergency evacuation of a cerebellar vascular malformation. Schwartz DM, et al. **J Clin Monit** 1989 Apr;5(2):116–8
Neonatal polygraphy in full-term and premature infants: a review of normal and abnormal findings. Lombroso CT. **J Clin Neurophysiol** 1985 Apr;2(2):105–55 (96 ref.)
Continuous ambulatory ECG monitoring during fluorouracil therapy: a prospective study. Rezkalla S, et al. **J Clin Oncol** 1989 Apr;7(4):509–14
A home-monitoring program for parents of premature infants: a comparative study of the psychological effects. Leonard BJ, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):92–7
Deriving the 12-lead electrocardiogram from four (EASI) electrodes. Dower GE, et al. **J Electrocardiol** 1988;21 Suppl:S182–7
Noninvasive predictors of sudden cardiac death in patients with coronary artery disease. Lampert S, et al. **J Electrocardiol** 1988;21 Suppl:S36–9
False-positive posterior myocardial infarct criteria during left anterior descending coronary angioplasty. Selvester RH, et al. **J Electrocardiol** 1988;21 Suppl:S105–11
Low heart rate variability and sudden cardiac death. Singer DH, et al. **J Electrocardiol** 1988;21 Suppl:S46–55 (51 ref.)
The white-coat hypertension response: prevalence and predictors. Lerman CE, et al. **J Gen Intern Med** 1989 May-Jun;4(3):226–31
The antihypertensive efficacy of verapamil in the elderly evaluated by ambulatory blood pressure measurement. Cox JP, et al. **J Hum Hypertens** 1988 Jun;2(1):41–7
Efficacy of once daily nitrendipine in essential hypertension—a study using ambulatory blood pressure monitoring. Lazarus JH, et al. **J Hum Hypertens** 1988 Oct; 2(3):191–4
Twenty-four-hour blood pressure is not dependent on endogenous circadian rhythm. Baumgart P, et al. **J Hypertens** 1989 Apr;7(4):331–4
Ambulatory blood pressure measurement in the evaluation of blood pressure lowering drugs. O'Brien E, et al. **J Hypertens** 1989 Apr;7(4):243–7 (70 ref.)
Combined clomiphene citrate (CC) and human menopausal gonadotropins (hMG) in a fixed schedule for follicular recruitment during in vitro fertilization: effects on premature luteinizing hormone (LH) surges. Blankstein J, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):121–4
Twenty-four-hour tremor recordings in the evaluation of the treatment of Parkinson's disease. Scholz E, et al. **J Neurol** 1988 Nov;235(8):475–84
Subarachnoid hemorrhage and intracranial pulse waves [letter; comment] Portnoy HD. **J Neurosurg** 1989 Apr; 70(4):661–2. **Comment on:** J Neurosurg 1988 Nov;69(5):712–8
Intraoperative esophageal manometry and early postoperative esophageal pH monitoring in children. Jolley SG, et al. **J Pediatr Surg** 1989 Apr;24(4):336–40
Fetal heart rate monitoring casebook. Antepartum testing: its role in the diagnosis of premature labor. Gimovsky ML, et al. **J Perinatol** 1987 Fall;7(4):382–5
Infantile apnea, home monitoring, and SIDS: go back to go [editorial] Little GA. **J Perinatol** 1987 Spring;7(2):83–4 (6 ref.)
A program of uterine activity monitoring and its effect on neonatal morbidity. Morrison JC, et al. **J Perinatol** 1988 Summer;8(3):228–31
Appraisal of the Angelchik anti-reflux prosthesis based on clinical and manometric data and pH monitoring. de Caestecker JS, et al. **J R Coll Surg Edinb** 1989 Feb; 34(1):9–12
Fetal bradycardia during antepartum testing. Further observations. Druzin ML. **J Reprod Med** 1989 Jan; 34(1):47–51
Expectant management of persistent ectopic pregnancy. A case report. Letterie GS, et al. **J Reprod Med** 1989 Mar; 34(3):250–2
Pressure monitoring after cardiopulmonary bypass [letter] Judson JP. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):320
Ambulatory monitoring of bladder and detrusor pressure during natural filling. Griffiths CJ, et al. **J Urol** 1989 Sep; 142(3):780–4
Monitoring functional patency of in situ saphenous vein bypasses: the impact of a surveillance protocol and elective revision. Bandyk DF, et al. **J Vasc Surg** 1989 Feb; 9(2):286–96
Day-to-day variation of the frequency of ventricular premature contractions depends on variation of heart rates. Tsumabuki S, et al. **Jpn Circ J** 1988 Nov;52(11):1231–9
Intraoperative electrophysiologic monitoring of laryngeal muscle during thyroid surgery. Lipton RJ, et al. **Laryngoscope** 1988 Dec;98(12):1292–6
Evaluation of Mycobacterium leprae antigens in the serological monitoring of a clofazimine-based chemotherapeutic study of dapsone resistant lepromatous leprosy patients in Cebu, Philippines. Douglas JT, et al. **Lepr Rev** 1989 Mar;60(1):8–19
Validation of a heart rate monitor with children in laboratory and field settings. Treiber FA, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):338–42
Postoperative monitoring of microsurgical free tissue transfers for head and neck reconstruction. Jones NF. **Microsurgery** 1988;9(2):159–64 (60 ref.)
Physiologic monitoring of combat casualties. Lamiell JM, et al. **Milit Med** 1989 Apr;154(4):186–91
Is there a therapeutic range for monitoring plasma cyclosporin in renal allograft recipients? Ubhi CS, et al. **Nephrol Dial Transplant** 1988;3(6):814–9
Direct calculation of KT/V. A simplified approach to monitoring of hemodialysis. Barth RH. **Nephron** 1988; 50(3):191–5
Workshop intra-oesophageal and intragastric 24-hour measurement. 3 June 1988, Utrecht. **Neth J Med** 1989 Mar; 34 Suppl:S1–98
Use of somatosensory evoked potentials for intraoperative monitoring of cerebral and spinal cord function. Nuwer MR. **Neurol Clin** 1988 Nov;6(4):881–97 (46 ref.)
Intraoperative monitoring of auditory and brain-stem function. Radtke RA, et al. **Neurol Clin** 1988 Nov; 6(4):899–915 (38 ref.)
Monitoring of short-latency somatosensory evoked potentials during surgery for cervical cord and posterior fossa lesions—changes in subcortical components. Urasaki E, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):546–52
Assessment: intensive EEG/video monitoring for epilepsy. Report of the American Academy of Neurology, Therapeutics and Technology Assessment Subcommittee. **Neurology** 1989 Aug;39(8):1101–2
Dysautoregulation in patients with ruptured aneurysms: cerebral blood flow measurements obtained during surgery by a temperature-controlled thermoelectrical method. Tenjin H, et al. **Neurosurgery** 1988 Dec;23(6):705–9
Noninvasive motor evoked potential monitoring during neurosurgical operations on the spinal cord. Zentner J. **Neurosurgery** 1989 May;24(5):709–12
Maternal responses to home apnea monitoring of infants. Nuttall P. **Nurs Res** 1988 Nov-Dec;37(6):354–7
Ovulation prediction by monitoring salivary and vaginal electrical resistance with the PEAK Ovulation Predictor. Jacobs MH, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):817–22
Intermittent weekly contraction monitoring to predict preterm labor in low-risk women: a blinded study. Main DM, et al. **Obstet Gynecol** 1988 Nov;72(5):757–61
The influence of fetal number on antepartum uterine activity. Newman RB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):695–9
Fetal heart rate monitoring during obstetrical operations: a review. Petrikovsky BM, et al. **Obstet Gynecol Surv** 1988 Dec;43(12):721–3 (13 ref.)
Lifeline and Smart House: technology comes home. Pomidor WJ. **Ohio Med** 1988 Jun;84(6):456–62
Monitoring after retrobulbar injection [letter] Mathen MK. **Ophthalmology** 1988 May;95(5):709–10
Use of pulse oximetry for monitoring tracheostomy tube obstruction. Rao AJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):345–8
Death due to paroxysmal atrioventricular block during ambulatory electrocardiographic monitoring. Medina-Ravell V, et al. **PACE** 1989 Jan;12(1 Pt 1):65–9
Infantile apnea and home monitoring. Brooks JG. **Pediatrician** 1988;15(4):212–6
Neonatal apnea: diagnosis by nurse versus computer. Muttitt SC, et al. **Pediatrics** 1988 Nov;82(5):713–20
Plasma or serum in therapeutic drug monitoring and clinical toxicology. Uges DR. **Pharm Weekbl [Sci]** 1988 Oct 14; 10(5):185–8 (29 ref.)
Interfacing bioinstruments with computers for data collection in nursing research. Harrison LL. **Res Nurs Health** 1989 Apr;12(2):129–33
Sudden cardiac death during ambulatory ECG monitoring. A report of 2 cases. Badenhorst JC, et al. **S Afr Med J** 1989 Sep 2;76(5):223–6
Monitoring considerations in recombinant human erythropoietin therapy. Ogden DA. **Semin Nephrol** 1989

Mar;9(1 Suppl 2):12–5 (14 ref.)
Polysomnographic sleep and waking states are similar in subsequent siblings of SIDS and control infants during the first six months of life. Hoppenbrouwers T, et al. **Sleep** 1989 Jun;12(3):265–76
Transcranial magnetic motor evoked potentials (tcMMEP) for functional monitoring of motor pathways during scoliosis surgery. Edmonds HL Jr, et al. **Spine** 1989 Jul; 14(7):683–6
Compound muscle action potentials and spinal evoked potentials in experimental spine maneuver. Machida M, et al. **Spine** 1989 Jul;14(7):687–91
Effects of spinal cord lesioning on somatosensory and neurogenic–motor evoked potentials. Owen JH, et al. **Spine** 1989 Jul;14(7):673–82
Oesophageal pH–monitoring system. Groitl H. **Surg Endosc** 1987;1(2):127
Monitoring of cortical blood flow during excision of arteriovenous malformation by thermal diffusion method. Nagao S, et al. **Surg Neurol** 1989 Aug;32(2):137–43
Italian collaborative study on the utilization of therapeutic drug monitoring in hospital departments. Italian Collaborative Group on Therapeutic Drug Monitoring. **Ther Drug Monit** 1988;10(3):275–9
A rapid, simple method for monitoring fibrinolysis in vitro. Vernon SK. **Thromb Res** 1988 Nov 15;52(4):349–52
Aspects of biological monitoring of exposure to glycol ethers. Johanson G. **Toxicol Lett** 1988 Oct;43(1–3):5–21 (46 ref.)
Pulmonary function monitoring allows diagnosis of rejection in heart–lung transplant recipients. Otulana BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2583–4
[Observations on dynamic ECG in acute cerebrovascular diseases] Si ZG. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):346–8, 385 (Eng. Abstr.) (Chi)
[Holter monitoring of patients treated with cytostatic agents] Kozáková M, et al. **Cas Lek Cesk** 1989 Jan 20;128(4):105–9 (Eng. Abstr.) (Cze)
[Experience with the long–term ECG (Holter) monitoring system in children and adolescents] Janoušek J, et al. **Cesk Pediatr** 1988 Nov;43(11):671–3 (Eng. Abstr.) (Cze)
[Neurophysiological monitoring of the brain injured patient: usefulness of the electroencephalographic mapping] Barelli A, et al. **Agressologie** 1988 Apr;29(5):375–7 (Eng. Abstr.) (Fre)
[Diagnosis of brain death in craniocerebral traumatology: role the monitoring of the intracranial pressure] Demo P, et al. **Agressologie** 1988 Apr;29(5):347–50 (Eng. Abstr.) (Fre)
[Monitoring of auditory evoked potentials of the brain stem in acute changes in intracranial pressure] Garcia–Larrea L, et al. **Agressologie** 1988 Apr;29(5):329–32 (Eng. Abstr.) (Fre)
[Monitoring of evoked potentials in traumatic coma] Mauguiere F, et al. **Agressologie** 1988 Apr;29(5):351–7 (Eng. Abstr.) (Fre)
[Monitoring of the intracranial pressure in severely head–injured patients. Survey] Melon E, et al. **Agressologie** 1988 Apr;29(5):333–6 (Eng. Abstr.) (Fre)
[Monitoring of intracranial pressure in the severe brain–injured patient. 3 years' experience] Stoiber HP, et al. **Agressologie** 1988 Apr;29(5):339–41 (Eng. Abstr.) (Fre)
[4th Seminar on Anesthesia and Resuscitation in the Northeast Provinces. Nancy, 21–22 October 1988] **Ann Fr Anesth Reanim** 1989;8(3):157–266 (Fre)
[Monitoring of nitrous oxide and anesthetic gases] Deriaz H, et al. **Ann Fr Anesth Reanim** 1989;8(3):182–8 (Fre)
[Monitoring the depth of anesthesia. Common clinical and instrumental means] Otteni JC, et al. **Ann Fr Anesth Reanim** 1989;8(3):158–61 (Fre)
[The effect of ranitidine on gastric pH measured by continuous monitoring over 24 hours in healthy subjects. Comparison of 2 methods of administration: 150 mg morning and night, vs 300 mg in a single dose at night] Bonfils S, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct;24(5):221–5 (Eng. Abstr.) (Fre)
[Compared predictive value of clinical variables and 24–hour Holter monitoring on survival 1 year and 4 years after myocardial infarction] André–Fouët X, et al. **Arch Mal Coeur** 1988 Jul;81(7):855–63 (Eng. Abstr.) (Fre)
[Asymptomatic and transitory electrocardiographic changes in the 24 hours following coronary transluminal angioplasty] Quiret JC, et al. **Arch Mal Coeur** 1988 Jul; 81(7):871–7 (Eng. Abstr.) (Fre)
[Holter monitoring and silent myocardial ischemia] Vacheron A, et al. **Arch Mal Coeur** 1989 Jan;82(1):121–5 (Eng. Abstr.) (Fre)
[Monitoring of intracranial pressure during the postoperative period of aneurysms] Noterman J, et al. **Neurochirurgie** 1988;34(3):161–3 (Eng. Abstr.) (Fre)
[The use of pulse oximetry in the perioperative monitoring of pediatric patients at risk using the surgical correction of a laparoschisis as an example] Mertzlufft F, et al. **Anaesthesist** 1989 Jan;38(1):36–9 (Eng. Abstr.) (Ger)
[Laser Doppler flowmetry in vital bone transplantation. Experimental and clinical results] Kärcher H, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):266–70 (Eng. Abstr.) (Ger)
[Risk of sudden infant death: recommendation for an early detection and prevention program] Scholle S, et al. **Padiatr Grenzgeb** 1989;28(3):139–47 (Eng. Abstr.) (Ger)
[Hemodynamics in the early postoperative period after thoracotomy and lung resection] Radenbach D, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):365–9 (Eng. Abstr.) (Ger)
[Ischemic episodes during daily activities and progression of ischemic heart disease] Stern S, et al. **Harefuah** 1989 Jan 1;116(1):25–8 (Eng. Abstr.) (Heb)
[Sudden death during Holter monitoring: reconstruction of resuscitation dynamics] Bertini G, et al. **Cardiologia** 1988 Nov;33(11):1089–92 (Eng. Abstr.) (Ita)
[Ambulatory electrocardiography in Italy: 10 years' experience] **G Ital Cardiol** 1987 Dec;17(12):1050–156 (Ita)
[Ambulatory ECG in the peroperative period] Baratto MT, et al. **G Ital Cardiol** 1987 Dec;17(12):1145–50 (Eng. Abstr.) (Ita)
[Recording of signals in ambulatory electrocardiography] Benassi A, et al. **G Ital Cardiol** 1987 Dec;17(12):1071–5 (Eng. Abstr.) (Ita)
[Ambulatory electrocardiography in patients with angina pectoris] Biagini A, et al. **G Ital Cardiol** 1987 Dec; 17(12):1151–6 (Eng. Abstr.) (Ita)
[Role of ambulatory electrocardiography in the evaluation of interventions: rehabilitation of a patient who has undergone surgery] Cerri B, et al. **G Ital Cardiol** 1987 Dec; 17(12):1126–9 (Eng. Abstr.) (Ita)
[Ambulatory electrocardiography in the screening of patients with palpitations] Contini C, et al. **G Ital Cardiol** 1987 Dec; 17(12):1068–70 (Eng. Abstr.) (Ita)
[Ambulatory monitoring of blood pressure in the diagnosis of hypertension] Fariello R, et al. **G Ital Cardiol** 1988 Oct; 18(10):884–9 (Ita)
[Ambulatory electrocardiography in the evaluation of anti–ischemic therapy] Fazzini PF, et al. **G Ital Cardiol** 1987 Dec;17(12):1107–13 (Eng. Abstr.) (Ita)
[Significance of QT interval as a premonitory sign of severe ventricular arrhythmia in the early phase of myocardial infarct] Giglioli C, et al. **G Ital Cardiol** 1988 Apr; 18(4):290–5 (Eng. Abstr.) (Ita)
[Role of ambulatory ECG in the evaluation of interventions: rehabilitation] Ignone G. **G Ital Cardiol** 1987 Dec; 17(12):1121–5 (Eng. Abstr.) (Ita)
[Normal values of arterial blood pressure in ambulatory monitoring] Libretti A, et al. **G Ital Cardiol** 1988 Oct; 18(10):879–83 (Ita)
[Ambulatory monitoring of arterial blood pressure. Problems and prospects] Mancia G. **G Ital Cardiol** 1988 Oct; 18(10):865–7 (Ita)
[Methods of the elaboration of data of the cardiological importance] Marchesi C, et al. **G Ital Cardiol** 1987 Dec; 17(12):1076–83 (Eng. Abstr.) (Ita)
[Ambulatory ECG during screening phase in relation to other technics in patients with precordial pain] Marinoni G, et al. **G Ital Cardiol** 1987 Dec;17(12):1063–7 (Eng. Abstr.) (Ita)
[Role of Holter electrocardiogram in the evaluation of anti–arrhythmia therapy] Meoli P, et al. **G Ital Cardiol** 1987 Dec;17(12):1114–20 (Eng. Abstr.) (Ita)
[Ambulatory ECG in cardiomyopathies] Mestroni L, et al. **G Ital Cardiol** 1987 Dec;17(12):1139–44 (Eng. Abstr.) (Ita)
[Usefulness of ambulatory ECG in the follow–up of patients with pacemakers] Mirolo R, et al. **G Ital Cardiol** 1987 Dec; 17(12):1130–8 (Eng. Abstr.) (Ita)
[Reproducibility of ambulatory blood pressure monitoring] Palatini P, et al. **G Ital Cardiol** 1988 Nov;18(11):926–33 (Eng. Abstr.) (Ita)
[Variability of arterial blood pressure: importance, mechanisms and clinical significance] Parati G, et al. **G Ital Cardiol** 1988 Oct;18(10):868–78 (Ita)
[Role of ambulatory ECG in a cardiology department] Pesola A, et al. **G Ital Cardiol** 1987 Dec;17(12):1055–62 (Eng. Abstr.) (Ita)
[Monitoring of arterial blood pressure in the evaluation of antihypertensive treatment] Pessina AC, et al. **G Ital Cardiol** 1988 Oct;18(10):890–4 (Ita)
[Unsustainable lightness of Holter monitoring] Sanna G. **G Ital Cardiol** 1988 Oct;18(10):815–8 (Ita)
[Role of ambulatory ECG in the diagnostic work of a cardiology division] Sozzi G, et al. **G Ital Cardiol** 1987 Dec;17(12):1051–4 (Eng. Abstr.) (Ita)
[Proposal of the biological monitoring of inhalation anesthetics] Pezzagno G, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):111–8 (Eng. Abstr.) (Ita)
[Continuous monitoring of mixed venous oxygen saturation (SvO2) in anesthesia and intensive care. Physiopathological presuppositions and clinical applications] Bertolissi M, et al. **Minerva Anestesiol** 1988 Mar;54(3):89–94 (Eng. Abstr.) (Ita)
[Clinical applications of continuous monitoring of mixed venous oxygen saturation in anesthesia and intensive care] De Monte A, et al. **Minerva Anestesiol** 1988 Mar; 54(3):95–101 (Eng. Abstr.) (Ita)
[Sudden cardiac death. Description of 3 cases monitored by ambulatory ECG] Gelato D, et al. **Minerva Cardioangiol** 1988 Apr;36(4):155–8 (Eng. Abstr.) (Ita)
[Evaluation of heart rate changes in the aged. An ambulatory electrocardiography study. Arrhythmias in the aged] Predotti P, et al. **Minerva Cardioangiol** 1989 Mar; 37(3):73–80 (Eng. Abstr.) (Ita)
[Arrhythmia or artifact? Diagnosis is not always obvious in Holter's dynamic electrocardiography] Vitali A. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):371–4 (Eng. Abstr.) (Ita)
[Electrodes for long–term monitoring of esophageal and gastric pH. Comparison of intrinsic characteristics and behavior in vitro and in vivo] Merigliano S, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2041–7 (Eng. Abstr.) (Ita)
[Ambulatory electrocardiography in aged patients with syncope] Di Biase A, et al. **Minerva Med** 1989 Jun; 80(6):353–5 (Eng. Abstr.) (Ita)
[Project of a teledialysis system. Technical aspects] Appiano S. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):63–6 (Ita)
[A predictive model of vascular instability in dialysis] Lonati F, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):77–8 (Ita)
[Tele–monitoring of dialysis. General and clinical aspects] Quarello F, et al. **Minerva Urol Nefrol** 1989 Jan–Mar; 41(1):59–62 (Ita)
[Continuous computerized monitoring of hemodynamic parameters during bicarbonate dialysis (BD) and acetate–free biofiltration (AFBF)] Spongano M, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):73–4 (Ita)
[Dynamic monitoring of neonatal blood pressure using the oscillometric method] Menghetti E, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):169–75 (Eng. Abstr.) (Ita)
[Recent advances in monitoring for patients' safety] Oka Y. **Masui** 1988 Nov;37(11):1336–40 (3 ref.) (Jpn)
[Evaluation of monitoring during lung lavage] Okada K, et al. **Masui** 1988 Jun;37(6):727–30 (Eng. Abstr.) (Jpn)
[A study on the clinical significance of myocardial ischemic attack and its causative mechanism in angina pectoris. An assessment using Holter's electrocardiogram] Suzuki T. **Nippon Ika Daigaku Zasshi** 1989 Feb;56(1):59–71 (Eng. Abstr.) (Jpn)
[The results of clinical application of myocardial antimony pH monitor in 50 patients underwent open heart surgery—their evaluation by multivariate analysis] Mashiko K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2163–9 (Eng. Abstr.) (Jpn)
[Continuous lumbar subarachnoid pressure monitoring as an indicator of shunt operation for so–called normal pressure hydrocephalus] Hirai O, et al. **No Shinkei Geka** 1988 Sep; 16(10):1141–7 (Eng. Abstr.) (Jpn)
[Circadian ECG monitoring in the diagnosis of arrhythmia in children] Kupriianova OO, et al. **Pediatriia** 1988; (12):36–40 (Rus)
[The role of 24–hour ECG monitoring in the diagnosis and evaluation of the treatment of unstable stenocardia] Ioseliani DG, et al. **Sov Med** 1988;(10):9–13 (Eng. Abstr.) (Rus)
[Prognostic immunologic pretransplantation monitoring in clinical kidney allotransplantation] Sochnev AM, et al. **Vestn Akad Med Nauk SSSR** 1988;(7):63–70 (Eng. Abstr.) (Rus)
[Diagnostic possibilities of a method of EKG–monitoring of pilots under flight conditions] Kondrakov VM, et al. **Voen Med Zh** 1989 May;(5):57–9 (Rus)
[Monitoring in hepatology] Mikhailenko AA, et al. **Vrach Delo** 1989 May;(5):59–62 (Eng. Abstr.) (Rus)
[Use of 24–hour Holter ECG ambulatory monitoring in children] Cižmárová E, et al. **Bratisl Lek Listy** 1988 Oct; 89(10):758–65 (Eng. Abstr.) (Slo)
[The significance of longitudinal Holter electrocardiogram monitoring in the differential diagnosis of syncope in elderly patients] Dukát A, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):98–102 (Eng. Abstr.) (Slo)
[Pulse oximeter gives a new dimension to the monitoring of children during anesthesia] Werner O, et al. **Lakartidningen** 1988 Oct 19;85(42):3474–5 (Swe)

ADVERSE EFFECTS

Adverse events associated with 24–hour ambulatory sphygmomanometry [letter] Burris JF, et al. **JAMA** 1988 Nov 4;260(17):2508–9
Complications of intracranial pressure monitoring in trauma patients. Clark WC, et al. **Neurosurgery** 1989 Jul;25(1):20–4

ECONOMICS

A cost/benefit analysis of randomized invasive monitoring for patients undergoing cardiac surgery. Pearson KS, et al. **Anesth Analg** 1989 Sep;69(3):336–41
Bedside monitoring of the blood glucose level: the high cost of reliable results. Innanen VT, et al. **Can Med Assoc J** 1989 Apr 15;140(8):899–901
Analysis of the effects of continuous on–line monitoring of mixed venous oxygen saturation on patient outcome and cost–effectiveness. Jastremski MS, et al. **Crit Care Med** 1989 Feb;17(2):148–53
Economics and monitoring. Siegel LC, et al. **Int Anesthesiol Clin** 1989 Fall;27(3):200–4 (34 ref.)

INSTRUMENTATION

Pediatric neuroanesthesia computerized monitoring system. Sammartino M, et al. **Acta Anaesthesiol Belg** 1989; 40(1):53–7
Design of an intracranial electrode for monitoring. Garcia Marin VM, et al. **Acta Neurochir Suppl (Wien)** 1989;46:25–7
Validation of portable noninvasive blood pressure monitoring

devices: comparisons with intra-arterial and sphygmomanometer measurements. Graettinger WF, et al. **Am Heart J** 1988 Oct;116(4):1155–60

Use of right-sided heart catheters during coronary angioplasty [letter] Jacob AS. **Am J Cardiol** 1989 Jun 15; 63(20):1540

A low-budget and easy-to-operate room respirometer for measuring daily energy expenditure in man. Dulloo AG, et al. **Am J Clin Nutr** 1988 Dec;48(6):1367–74

Diagnostic utility of memory equipped transtelephonic monitors. Schmidt SB, et al. **Am J Med Sci** 1988 Nov; 296(5):299–302

A new instrument for monitored posterior transscleral drainage. Griffiths MF, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):498–9

Routine intraoperative facial nerve monitoring during otologic surgery. Silverstein H, et al. **Am J Otol** 1988 Jul; 9(4):269–75

Chronic exercise-induced compartment pressure elevation measured with a miniaturized fluid pressure monitor. A laboratory and clinical study. Awbrey BJ, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):610–5

CIG 'Pulsealert' modification [letter] Rosewarne F, et al. **Anaesth Intensive Care** 1989 May;17(2):236

An electrode montage for electrocardiographic monitoring. Wicks M, et al. **Anaesth Intensive Care** 1989 Feb;17(1):74–7

Evaluation of a multigas anaesthetic monitor: the Datex Capnomac. McPeak H, et al. **Anaesthesia** 1988 Dec; 43(12):1035–41

Not necessarily a finger on the pulse [letter] Nott MR. **Anaesthesia** 1989 Jul;44(7):619–20

Breathing-circuit stethoscope and circuit disconnection [letter] Zelcer J, et al. **Anesth Analg** 1989 Jun;68(6):824–5

Volume monitor malfunction caused by an overhead operating room light [letter] Cotter TP, et al. **Anesthesiology** 1989 Jun;70(6):1022

Effects of radial artery cannulation on the function of finger blood pressure and pulse oximeter monitors. Kurki TS, et al. **Anesthesiology** 1988 Nov;69(5):778–82

The Utah anesthesia workstation. Loeb RG, et al. **Anesthesiology** 1989 Jun;70(6):999–1007

Accuracy of two mixed venous saturation catheters during long-term use in critically ill patients. Reinhart K, et al. **Anesthesiology** 1988 Nov;69(5):769–73

Failure of low pressure alarm associated with the use of a humidifier. Slee TA, et al. **Anesthesiology** 1988 Nov; 69(5):791–3

Model of a new generation of tracheostomy and endotracheal tubes. A preliminary study of sensors to monitor obstruction. Rao AJ, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):157–9

A comparison between a conventional and a fiberoptic flow-directed thermal dilution pulmonary artery catheter in critically ill patients. Rajput MA, et al. **Arch Intern Med** 1989 Jan;149(1):83–5

Quantitative evaluation of a combined pulse oximetry and end-tidal CO2 monitor. Cheng EY, et al. **Biomed Instrum Technol** 1989 May-Jun;23(3):216–21

Design of a data-acquisition system for monitoring sleep organization in preterm infants. Drakulic BS, et al. **Biomed Instrum Technol** 1989 Jan–Feb;23(1):44–9

A testing device for capnometers. Teuber S. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):115–7

Displaying CO2 waveforms on a blood pressure monitor. Wickens CD. **Biomed Instrum Technol** 1989 May–Jun; 23(3):199–202

Computer analysis of biological signals. Guse PA, et al. **Biomed Sci Instrum** 1989;25:247–50

How the rise time of carbon dioxide analysers influences the accuracy of carbon dioxide measurements. Brunner JX, et al. **Br J Anaesth** 1988 Nov;61(5):628–38

Effect of surface electrode positioning on the compound action potential evoked by ulnar nerve stimulation in anaesthetized infants and children. Kalli I. **Br J Anaesth** 1989 Feb;62(2):188–93

A computer controlled non-invasive haemodynamic monitoring system. McMenemin IM, et al. **Br J Anaesth** 1988 Oct;61(4):492–6

End-tidal carbon dioxide (CO2) monitoring in small animals. Smith KJ, et al. **Brain Res Bull** 1989 Mar;22(3):579–82

Continuous sampling of cerebrospinal fluid in the conscious rabbit. Vistelle R, et al. **Brain Res Bull** 1989 May; 22(5):919–22

Hypoxaemia produced by an oesophageal stethoscope: a case report. Daley MD, et al. **Can J Anaesth** 1988 Sep; 35(5):500–2

End-tidal CO2 monitoring in spontaneously breathing adults [letter] Turner KE, et al. **Can J Anaesth** 1989 Mar; 36(2):248–9

Apnea monitors of little use in preventing SIDS, experts say. Gilmore A. **Can Med Assoc J** 1989 May 1;140(9):1072–6

Simultaneous measurement of velocity, diameter, flow and pressure in the ascending aorta of cats. Evaluation of an extractable Doppler ultrasound probe for continuous monitoring of aortic blood flow. Matre K, et al. **Cardiovasc Res** 1988 Dec;22(12):855–63

Ambulatory monitoring of arterial oxygen saturation. Decker MJ, et al. **Chest** 1989 Apr;95(4):717–22

Instrumentation and practice standards for electrocardiographic monitoring in special care units. A report for health professionals by a Task Force of the Council on Clinical Cardiology, American Heart Association [published erratum appears in Circulation 1989 Aug;80(2):A85] Mirvis DM, et al. **Circulation** 1989 Feb; 79(2):464–71

Evaluation of the Ames Seralyzer for therapeutic drug monitoring of phenobarbital and phenytoin. Brettfeld C, et al. **Clin Chem** 1989 Feb;35(2):324

Nonlinear SPICE models for physiologic systems. Goldstein LJ, et al. **Comput Methods Programs Biomed** 1989 Jul; 29(3):161–72

Measuring parkinsonian symptoms with a tracking device. Hacisalihzade SS, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):257–68

Skin photoplethysmography—a review. Kamal AA, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):257–69 (63 ref.)

Evaluation of pulse oximetry as a continuous monitoring technique in the neonatal intensive care unit. Barrington KJ, et al. **Crit Care Med** 1988 Nov;16(11):1147–53

Comparison of a sidestream and mainstream capnometer in infants. Pascucci RC, et al. **Crit Care Med** 1989 Jun; 17(6):560–2

Continuous hemodynamic monitoring by esophageal Doppler. Singer M, et al. **Crit Care Med** 1989 May; 17(5):447–52

The optode: next generation in blood gas measurement [editorial] Tremper KK, et al. **Crit Care Med** 1989 May; 17(5):481–2

Evaluation of a replenishment type oxygen consumption monitor. Westenskow DR, et al. **Crit Care Med** 1989 Aug; 17(8):798–802

Volume monitor for mechanical ventilation in the hyperbaric chamber. Youn BA, et al. **Crit Care Med** 1989 May; 17(5):453–4

Intelligent instrumentation in diabetic management. Albisser AM. **Crit Rev Biomed Eng** 1989;17(1):1–24 (62 ref.)

Ambulatory electrocardiographic recordings: the Holter monitor. Pratt CM, et al. **Curr Probl Cardiol** 1988 Aug; 13(8):517–86 (125 ref.)

Tracker—an ambulatory recorder for ST-segment monitoring? Tayler D, et al. **Eur Heart J** 1988 Aug; 9(8):906–12

Critical care. Critical cost. Lappa K. **Hospitals** 1989 Sep 20; 63(18):66, 69

The design and use of a microcomputerized real-time muscle fatigue monitor based on the medial frequency shift in the electromyographic signal. Seroussi R, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):284–6

Tactile sensory monitoring of clinician-applied forces during delivery of newborns. Sorab J, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1090–3

Infections of CSF shunt and intracranial pressure monitoring devices. Venes JL. **Infect Dis Clin North Am** 1989 Jun; 3(2):289–99 (36 ref.)

Efficacy of a new needleless insulin delivery system monitoring of blood glucose fluctuations and free insulin levels. Katoulis EC, et al. **Int J Artif Organs** 1989 May; 12(5):333–8

A fast differential paramagnetic O2-sensor. Meriläinen PT. **Int J Clin Monit Comput** 1988;5(3):187–95

Continuous monitoring of erythrocyte sedimentation process: a new possible mechanism of erythrocyte sedimentation. Kuo CD, et al. **J Biomech Eng** 1988 Nov;110(4):392–5

Measurement of fracture movement in patients treated with unilateral external skeletal fixation. Cunningham JL, et al. **J Biomed Eng** 1989 Mar;11(2):118–22

Developments in oxygen monitoring. Delpy DT. **J Biomed Eng** 1988 Nov;10(6):533–40 (52 ref.)

Transducer for monitoring respiration during imaging procedures. Jones KR. **J Biomed Eng** 1988 Jul;10(4):368–70

Development and clinical application of an external fixator monitoring system. Kay PR, et al. **J Biomed Eng** 1989 May; 11(3):240–4

Neurosurgical stimulation, impedance monitoring and data acquisition system. Record P, et al. **J Biomed Eng** 1989 Mar;11(2):133–6

Alarms and their limits in monitoring. Beneken JE, et al. **J Clin Monit** 1989 Jul;5(3):205–10 (23 ref.)

A carbon dioxide monitor that does not show the waveform is worthless. Block FE Jr. **J Clin Monit** 1988 Jul;4(3):213–4

Prototype ventilator and alarm algorithm for the NASA space station. Brunner JX, et al. **J Clin Monit** 1989 Apr; 5(2):90–9

Evaluation of a continuous noninvasive blood pressure monitor in obstetric patients undergoing spinal anesthesia. Epstein RH, et al. **J Clin Monit** 1989 Jul;5(3):157–63

Knowledge-based approach to intelligent alarms. Fukui Y, et al. **J Clin Monit** 1989 Jul;5(3):211–6

The precordial stethoscope can be indispensable in patient monitoring [letter] Horrow JC. **J Clin Monit** 1988 Jul; 4(3):230–1

Intravascular electrocardiography—a resurrected technique [letter] Johans TG, et al. **J Clin Monit** 1989 Jul;5(3):217

Dynamic response of the ROSE damping device. Kleinman B, et al. **J Clin Monit** 1989 Apr;5(2):111–5

Intraspinal opioids: implications for monitoring. Monitoring in the intensive care unit is essential. LaPorta RF, et al. **J Clin Monit** 1989 Jul;5(3):186–9 (26 ref.)

Monitoring in the intensive care unit is not always necessary. Mott JM, et al. **J Clin Monit** 1989 Jul;5(3):190–1

Is unified monitoring improving patient care? Nelissen RG, et al. **J Clin Monit** 1988 Jul;4(3):167–74

A carbon dioxide monitor that does not show the waveform has value. Paloheimo MP. **J Clin Monit** 1988 Jul;4(3):210–2

Overview: creating practical alarms for the future. Philip JH. **J Clin Monit** 1989 Jul;5(3):194–5 (5 ref.)

Semipractical alarms: a parable. Quinn ML. **J Clin Monit** 1989 Jul;5(3):196–200

Structured alarm systems for the operating room. Schreiber PJ, et al. **J Clin Monit** 1989 Jul;5(3):201–4

Panel on practical alarms: Fifth International Symposium on Computing in Anesthesia and Intensive Care. Introduction. Sykes MK. **J Clin Monit** 1989 Jul;5(3):192–3

Psychological impact of home apnea monitoring: temporal effects, family resources, and maternal coping style. Phipps S, et al. **J Dev Behav Pediatr** 1989 Feb;10(1):7–12

DINAMAP blood pressure monitor [letter] Maines JG. **J Fam Pract** 1988 Oct;27(4):357, 360

Technical possibilities and limits of indirect automatic twenty-four-hour blood pressure devices. Meyer-Sabellek W, et al. **J Hypertens Suppl** 1989 May;7(3):S21–4

The need for a standardized protocol for validating non-invasive ambulatory blood pressure measuring devices. O'Brien E, et al. **J Hypertens Suppl** 1989 May; 7(3):S19–20

The Internal Human Conditioning System: a multipurpose programmable biomedical system. Eychmans W, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):93–5

QUARK: a quantitative real-time analyser for kinesiology. Kleissen RF, et al. **J Med Eng Technol** 1989 Jan–Apr; 13(1–2):96–9

The use of a mobile sleep laboratory in diagnosing sleep-related breathing disorders. Penzel T, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):100–3

Long-term recordings and receptive field measurements from single units of the visual cortex of awake unrestrained kittens. Mioche L, et al. **J Neurosci Methods** 1988 Nov; 26(1):83–94

Noninvasive blood pressure patterns. Hon EH. **J Perinatol** 1987 Fall;7(4):362–7

A new compact 24-hour indirect blood-pressure recorder and its clinical application. Tochikubo O, et al. **Jpn Heart J** 1988 May;29(3):257–69

Utility of temporary atrial epicardial electrodes in postoperative pediatric cardiac patients. Humes RA, et al. **Mayo Clin Proc** 1989 May;64(5):516–21

Ambulatory monitoring device using the fan method as data-compression algorithm. Giallorenzo M, et al. **Med Biol Eng Comput** 1988 Jul;26(4):439–43

Development of a wireless stethoscope for auscultatory monitoring during anaesthesia. Hök B, et al. **Med Biol Eng Comput** 1988 May;26(3):317–20

Fibre-optics and optical sensors in medicine. Martin MJ, et al. **Med Biol Eng Comput** 1987 Nov;25(6):597–604 (56 ref.)

Remote vital-signs monitor using a dial-up telephone line. Rezazadeh M, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):557–61

Implementation of a home-based program for early detection of clinical deterioration in cystic fibrosis. Brown-Ewing LJ, et al. **Med Instrum** 1988 Oct;22(5):240–6

Human factors and design evaluation of digital blood pressure/pulse meters. Harrison DW, et al. **Med Instrum** 1988 Oct;22(5):226–9

A home-based pulmonary function monitor for cystic fibrosis. Shultz EK, et al. **Med Instrum** 1988 Oct; 22(5):234–9

Ward and laboratory assessment of two second-generation blood-glucose monitoring systems. Stuart S, et al. **Med J Aust** 1988 Oct 17;149(8):420–4

Recommendations for long-term oesophageal pH monitoring. Hopert R, et al. **Neth J Med** 1989 Mar;34 Suppl:S55–61

Twenty-four-hour ambulatory oesophageal pH monitoring: experience in The Netherlands. Klinkenberg-Knol EC, et al. **Neth J Med** 1989 Mar;34 Suppl:S40–54

Computer-aided sleep staging in clinical environment. Stanus EL, et al. **Neuropsychobiology** 1988;20(4):178–86

Rectal sphincter pressure monitoring device. Hellbusch LC, et al. **Neurosurgery** 1989 May;24(5):775–6

Intrapartum uterine activity: evaluation of an intrauterine pressure transducer [letter] Goodlin RC. **Obstet Gynecol** 1989 Aug;74(2):283–4

Intrapartum uterine activity: evaluation of an intrauterine pressure transducer. Strong TH Jr, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):432–4

Undersensing in VVI-pacemakers detected by Holter monitoring. Van Gelder LM, et al. **PACE** 1988 Nov;11(11 Pt 1):1507–11

Automated spinal cord monitoring for spinal surgery. Imai M, et al. **Paraplegia** 1989 Jun;27(3):204–11

Pneumogram recordings in infants resuscitated for apnea of infancy. Oren J, et al. **Pediatrics** 1989 Mar;83(3):364–8

Factors affecting Caltrac and Calcount accelerometer output. Balogun JA, et al. **Phys Ther** 1988 Oct;68(10):1500–4

The implantable Doppler probe [letter] Lineaweaver WC. **Plast Reconstr Surg** 1988 Dec;82(6):1099–100

A microcomputer-based respiratory heat exchange facility for use in the diagnosis of thermally induced asthma. Farley RD, et al. **Proc Inst Mech Eng [H]** 1989;203(H1):43–8

Springtime in Ayrshire': home weighing of neonates with a new direct recording scale. Goodwin RM, et al. **Public Health** 1988 Jul;102(4):335–47

Polysomnographic assessment of DIMS: empirical evaluation of its diagnostic value. Edinger JD, et al. **Sleep** 1989 Aug;

12(4):315–22
Use of a portable glucose meter in a Nigerian diabetic clinic. Udezue EO, et al. **Trop Geogr Med** 1989 Apr;41(2):141–5
[Various systems of long-term ECG (Holter) monitoring in clinical practice] Janoušek J. **Cas Lek Cesk** 1989 Mar 31; 128(14):429–32 (Eng. Abstr.) **(Cze)**
[Monitoring of intracranial pressure with an epidural fluid-filled transducer: difficulties with positioning and accuracy of measurements] Artru F, et al. **Agressologie** 1988 Apr;29(5):365–9 (Eng. Abstr.) **(Fre)**
[Monitoring of the functioning of external ventricular shunts in intensive neurologic care: presentation of a monitor] Boulard G, et al. **Agressologie** 1988 Apr;29(5):327–8 **(Fre)**
[The Datex ABM brain activity monitor] Herregods L, et al. **Ann Fr Anesth Reanim** 1989;8(3):167–70 **(Fre)**
[Minimal monitoring in the operating room] Otteni JC, et al. **Ann Fr Anesth Reanim** 1989;8(3):193–8 **(Fre)**
[Clinical trial of the Hp 47 210 A capnometer in the newborn infant] Berg E, et al. **Cah Anesthesiol** 1988 Dec; 36(8):599–605 **(Fre)**
[Holter erectometry. A new approach to erectile disorders] Pointel JP, et al. **J Mal Vasc** 1989;14(2):127–9 (Eng. Abstr.) **(Fre)**
[An unusual cause of postoperative pharyngeal obstruction] Abel M. **Anaesthesist** 1988 Sep;37(9):606–7 (Eng. Abstr.) **(Ger)**
[Alarms of medical-technical equipment in the surgical intensive care unit. A prospective study] Deller A, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):238–43 (Eng. Abstr.) **(Ger)**
[A new device for measuring blood pressure (letter)] Frucht U. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):338–40 **(Ger)**
[Noninvasive monitoring of gas exchange: methodologic prerequisites and clinical use] Kreymann G, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):43–8 (Eng. Abstr.) **(Ger)**
[Noninvasive monitoring] Pasch T. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):3–10 (37 ref.) (Eng. Abstr.) **(Ger)**
[Current possibilities and limits of transcranial Doppler sonography as a cerebral monitoring procedure] Schregel W, et al. **Anasth Intensivther Notfallmed** 1989 Feb; 24(1):11–9 (96 ref.) (Eng. Abstr.) **(Ger)**
[Noninvasive, apparatus-assisted patient monitoring: a help or a burden for the anesthesiologist?] Schulte am Esch J. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):1–2 **(Ger)**
[Instrumental monitoring in anesthesia. Results of a rapid electronic data processing survey at the time of the 1987 Central European Congress in Munich] Schwilden H, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):233–7 (Eng. Abstr.) **(Ger)**
[Instrumental monitoring of anesthesia] Stoeckel H, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):231–2 **(Ger)**
[A new mobile respiration and monitoring system for transporting critically ill patients] Vandermeersch E, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):276–8 (Eng. Abstr.) **(Ger)**
[Home-monitoring in children at risk for sudden infant death syndrome. A comparative study of 5 apnea mattresses without cables] Behrens O, et al. **Fortschr Med** 1988 Nov 10;106(32):645–50 (Eng. Abstr.) **(Ger)**
[Sleep apnea—diagnosis, clinical aspects and therapy] Peter JH, et al. **Fortschr Med** 1988 Sep 20;106(27):544–8 (47 ref.) (Eng. Abstr.) **(Ger)**
[Ambulatory continuous 24-hour blood pressure monitoring in the diagnosis and therapy of arterial hypertension and modification by the antihypertensive agents enalapril, metoprolol, mepindolol and nitrendipine] Schrader J, et al. **Klin Wochenschr** 1988 Sep 15;66(18):928–39 (Eng. Abstr.) **(Ger)**
[Measuring signal processing by analog/digital conversion using personal computers. I: General principles] Schreiner W. **Wien Klin Wochenschr** 1988 Sep 23;100(18):624–9 (Eng. Abstr.) **(Ger)**
[Description of a system for automatic analysis of ambulatory electrocardiography using a microcomputer] Petrucci E, et al. **Cardiologia** 1989 Feb;34(2):143–8 (Eng. Abstr.) **(Ita)**
[Limitations of the current instrumentation for ambulatory measurement of arterial blood pressure] Fogari R, et al. **G Ital Cardiol** 1988 Oct;18(10):895–901 **(Ita)**
[Analysis of the market and future trends of the instrumentation for ambulatory electrocardiography] Varanini M, et al. **G Ital Cardiol** 1987 Dec;17(12):1098–106 (Eng. Abstr.) **(Ita)**
[On a digitized recorder for ambulatory ECG systems] Hashiguchi S, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun; 26(2):106–11 (Eng. Abstr.) **(Jpn)**
[Development of passive telemetry system for intracranial pressure measurement with corrector of errors caused by temperature variation] Magara M, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):35–44 (Eng. Abstr.) **(Jpn)**
[A new apparatus for continuous recording of sweating rate by use of a hygrometer] Sakaguchi M, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):213–7 (Eng. Abstr.) **(Jpn)**
[The validation of an ambulatory ventricular function monitor (VEST)] Ohtake T, et al. **Kaku Igaku** 1988 Aug; 25(8):775–87 (Eng. Abstr.) **(Jpn)**
[A new neuromuscular transmission monitoring system (Accelograph)—the rationale behind the method and its clinical usefulness] Ueda N, et al. **Masui** 1988 Oct; 37(10):1265–72 (Eng. Abstr.) **(Jpn)**
[Evaluation of a measurement method for perspiration volume using newly developed equipment for continuous recording of local perspiration volume (Kenz-Perspiro) (I)] Kanno K, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Feb; 99(2):135–9 (Eng. Abstr.) **(Jpn)**
[Intracranial epidural implantation of a Gaeltec ICT/b sensor in the light of our experience] Lebkowski W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):476–8 **(Pol)**
[Use of the Multicap gas analyzer in a complex computer monitoring system during open heart surgery] Buniatian AA, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):3–7 **(Rus)**
[A system of ultrasonic guidance for use in studying the brain (studies on models)] Akhutin VM, et al. **Med Tekh** 1988 Sep–Oct;(5):3–10 (Eng. Abstr.) **(Rus)**
[The DU-1 dynamo-uterograph] Chikhetov VV, et al. **Med Tekh** 1989 Jan–Feb;(1):54 **(Rus)**
[Transmitters for autotranslation of electrocardiographic signals via telephone communication channels] Koltun VM, et al. **Med Tekh** 1988 Jul–Aug;(4):41–4 (Eng. Abstr.) **(Rus)**
[Comparison of venous pressure in the external jugular vein and the superior vena cava during anesthesia] Blanco Vargas D, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb; 36(1):12–5 (Eng. Abstr.) **(Spa)**

METHODS

Carotid endarterectomy: anesthesia and monitoring. de Rood M. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):271–3
EEG spectral power during halothane anaesthesia. A comparison of spectral bands in the monitoring of anaesthesia level. Yli-Hankala A, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):304–8
Monitoring of physiological parameters during high frequency ventilation (HFV). Jonson B, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:165–9 (13 ref.)
Computerized automatic non-invasive blood pressure monitoring system. Farsang CS, et al. **Acta Med Hung** 1988; 45(3–4):329–38
Analysis of intracranial pressure waveform during infusion test. Czosnyka M, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):140–5
Intraoperative use of laser Doppler in the study of cerebral microvascular circulation. Fasano VA, et al. **Acta Neurochir (Wien)** 1988;95(1–2):40–8
Neurophysiologic monitoring in posterior fossa surgery. I. Technical principles, applicability and limitations. Schramm J, et al. **Acta Neurochir (Wien)** 1989;98(1–2):9–18
Neurophysiologic monitoring in posterior fossa surgery. II. BAEP-waves I and V and preservation of hearing. Watanabe E, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):118–28
Obstructive sleep dyspnea. Diagnosis and treatment. Togawa K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:167–73
On-line monitoring of sequential blood flow reduction during splenic embolization. Link DP, et al. **Acta Radiol** 1989 Jan–Feb;30(1):101–3
Cardiorespiratory monitoring in the high-risk infant. Hodgman JE, et al. **Acute Care** 1986;12(3–4):165–94 (69 ref.)
Relationship between ambulatory and exercise blood pressure and cardiac structure. Devereux RB, et al. **Am Heart J** 1988 Oct;116(4):1124–33 (68 ref.)
Effect of ambulatory blood pressure monitoring on the diagnosis and cost of treatment for mild hypertension. Krakoff LR, et al. **Am Heart J** 1988 Oct;116(4):1152–4
Ambulatory blood pressure monitoring: practical considerations. Lavie CJ, et al. **Am Heart J** 1988 Oct; 116(4):1146–51 (55 ref.)
Experience with 24-hour ambulatory blood pressure monitoring in hypertension. Mancia G, et al. **Am Heart J** 1988 Oct;116(4):1134–40
The influence of daily activity on ambulatory blood pressure. Pickering TG. **Am Heart J** 1988 Oct;116(4):1141–5
Evaluating the diagnosis and prognosis of hypertension by automated blood pressure monitoring: outline of a symposium. Weber MA. **Am Heart J** 1988 Oct; 116(4):1118–23
Quantitative respirator fit testing: dynamic pressure versus aerosol measurement. Carpenter DR, et al. **Am Ind Hyg Assoc J** 1988 Oct;49(10):492–6
Noninvasive, quantitative respirator fit testing through dynamic pressure measurement. Carpenter DR, et al. **Am Ind Hyg Assoc J** 1988 Oct;49(10):485–91
Alterations in physiological and perceptual variables during exhaustive endurance work while wearing a pressure-demand respirator. Wilson JR, et al. **Am Ind Hyg Assoc J** 1989 Mar;50(3):139–46
Usefulness of ambulatory radionuclide monitoring of left ventricular function early after acute myocardial infarction for predicting residual myocardial ischemia. Breisblatt WM, et al. **Am J Cardiol** 1988 Nov 15;62(16):1005–10
A comparison of amplitude-modulated and frequency-modulated ambulatory monitoring systems. Hinderliter AL, et al. **Am J Cardiol** 1989 Jul 1;64(1):76–80
A simple method of monitoring antiarrhythmic drugs during short- and long-term therapy. McCollam PL, et al. **Am J Cardiol** 1989 May 15;63(17):1273–5
Biosensors. A new analytic technology for real-time, on-line biochemical monitoring. Hunter KW Jr. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S32–3
The correlation of biochemical monitoring versus umbilical flow velocity measurements of the human fetus. Ferrazzi E, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1081–7
Continuous monitoring of Ca2+ uptake in membrane vesicles with fura-2. Kargacin ME, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):C694–8
Controversies in pulmonary medicine. Invasive measurements are required for assessing hemodynamic status in critically ill patients. Rackow EC, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1070–2
Manual evaluation of residual curarization using double burst stimulation: a comparison with train-of-four. Drenck NE, et al. **Anesthesiology** 1989 Apr;70(4):578–81
Laboratory tests during clinical trials (Document E, Stage 3, Version 1). Guelfi JF, et al. **Ann Biol Clin (Paris)** 1988; 46(9):764–9 **(Eng, Fre)**
Clinical laboratory tests on laboratory animals during toxicity studies (Document D, Stage 3, Version 1). Nachbaur J, et al. **Ann Biol Clin (Paris)** 1988;46(9):756–62 **(Eng, Fre)**
24-hour ambulatory dual gastroduodenal pH monitoring. The role of acid in duodenal ulcer disease. Eriksen CA, et al. **Ann Surg** 1988 Dec;208(6):702–7
Monitoring of somatosensory evoked potentials in carotid surgery: results, usefulness and limitations of the method. De Vleeschauwer P, et al. **Ann Vasc Surg** 1988 Jan; 2(1):63–8
Intracranial pressure monitoring in a group of critically ill children [letter] Balakrishnan G, et al. **Arch Dis Child** 1989 Mar;64(3):427
Monitoring for central apnoea in infancy—limitations of single channel recordings [letter] Samuels MP, et al. **Arch Dis Child** 1988 Nov;63(11):1415–6
Conjunctival oxygen monitoring during cardiopulmonary resuscitation. Heyworth J. **Arch Emerg Med** 1989 Jun; 6(2):128–36 (20 ref.)
Continuous computerized monitoring of hemodynamic parameters during acetate dialysis, bicarbonate dialysis, and acetate-free biofiltration. Spongano M, et al. **Artif Organs** 1988 Dec;12(6):476–81
Further evaluation of first morning urinary oestrogen in monitoring gonadotrophin therapy. Tang GW, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):141–3
Monitoring fluid shifts in humans: application of a new method. Hinghofer-Szalkay H, et al. **Aviat Space Environ Med** 1989 Jan;60(1):23–8
Semiautomatic algorithm to remove resonance artifacts from the direct radial artery pressure. Schwid HA. **Biomed Instrum Technol** 1989 Jan–Feb;23(1):40–3
Human abdominal EHG processing for uterine contraction monitoring. Marque C, et al. **Biotechnology** 1989; 11:187–226 (92 ref.)
Monitoring during sedation and endoscopy [letter] Murray A, et al. **BMJ** 1988 Nov 19;297(6659):1337
High gain signal averaged electrocardiogram combined with 24 hour monitoring in patients early after myocardial infarction for bedside prediction of arrhythmic events. Cripps T, et al. **Br Heart J** 1988 Sep;60(3):181–7
Value of a bipolar modified inferior lead in detection of inferior myocardial ischaemia. Jespersen CM, et al. **Br Heart J** 1988 Oct;60(4):287–9
Use of the post-tetanic count to monitor recovery from intense neuromuscular blockade in children. Gwinnutt CL, et al. **Br J Anaesth** 1988 Nov;61(5):547–50
On cardiovascular monitoring. Stokes DN, et al. **Br J Hosp Med** 1989 May;41(5):481–4
Impedance monitoring for subcutaneous free flap transfers. Harrison DH, et al. **Br J Plast Surg** 1989 May;42(3):318–23
Experimental and clinical monitoring of free jejunal transfers using an implantable ultrasonic Doppler probe. Jones NF, et al. **Br J Plast Surg** 1989 May;42(3):274–80
Patient monitoring. Emmett C, et al. **Br Med Bull** 1988 Apr; 44(2):302–21 (73 ref.)
A procedure for chronic recording of diaphragmatic electromyographic activity. Chang FC, et al. **Brain Res Bull** 1989 Mar;22(3):561–3
Noninvasive cardiac output monitoring during exercise before and after coronary artery bypass surgery. Nanna M, et al. **Can J Cardiol** 1989 Jan–Feb;5(1):25–8
Instantaneous electrocardiography. A simple screening technique for cardiac exercise programs. Franklin BA, et al. **Chest** 1989 Jul;96(1):174–7
Evaluation of automatic analysis of SCSB, airflow and oxygen saturation signals in patients with sleep related apneas. Salmi T, et al. **Chest** 1989 Aug;96(2):255–61
Pulse oximetry [editorial] Tremper KK. **Chest** 1989 Apr; 95(4):713–5
Chronobiologic vs. sphygmomanometric assessment of hypertension in a hospital setting. Portaluppi F, et al. **Clin Cardiol** 1989 Jul;12(7):380–3
Temporary pacing catheter placement in patients requiring continuous external pacing. Tilkemeier P, et al. **Clin Cardiol** 1989 Mar;12(3):155–6
Implementation of a computerized patient advice system using the HELP clinical information system. Sittig DF, et al. **Comput Biomed Res** 1989 Oct;22(5):474–87
Experimental data acquisition and manipulation by microcomputer. Smith TC, et al. **Comput Methods Programs Biomed** 1989 Jul;29(3):153–60

A knowledge-based information system for monitoring drug levels. Wiener F, et al.
Comput Methods Programs Biomed 1989 Jun;29(2):115-28
Unreliability of oxygen tension-based indices in reflecting intrapulmonary shunting in critically ill patients. Cane RD, et al. **Crit Care Med** 1988 Dec;16(12):1243-5
Computer-based patient monitoring systems. Use in research and clinical practice. Zimmet P, et al. **Diabetes Care** 1988 Nov-Dec;11 Suppl 1:62-6 (21 ref.)
Combined esophageal and gastric pH-metry in healthy volunteers. Influence of cable through LES and effect of misoprostol. Emde C, et al. **Dig Dis Sci** 1989 Jan; 34(1):79-82
Reliability of 24-hour home esophageal pH monitoring in diagnosis of gastroesophageal reflux. Mattioli S, et al.
Dig Dis Sci 1989 Jan;34(1):71-8
The validation of a new ambulatory spike and wave monitor. Besag FM, et al. **Electroencephalogr Clin Neurophysiol** 1989 Aug;73(2):157-61
Profiles of instant heart rate during partial seizures. Smith PE, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):207-17
ST segment monitoring before, three weeks and six months after aortocoronary bypass surgery. Droste C, et al.
Eur Heart J 1988 Dec;9 Suppl N:169-75
The sensitivity of 24 h Holter monitoring and exercise testing for the recognition of myocardial ischaemia: a comparative study. Günther H, et al. **Eur Heart J** 1988 Dec;9 Suppl N:46-9
Silent myocardial ischaemia in Holter monitoring and exercise stress testing after a first myocardial infarction. Moczurad KW, et al. **Eur Heart J** 1988 Dec;9 Suppl N:114-8
Validation of a digitized Holter monitoring system by comparison with the Marquette case system. Oysel N, et al. **Eur Heart J** 1988 Dec;9 Suppl N:85-8
Ambulatory scintigraphic assessment of transient changes in left ventricular function: a new method for detection of silent myocardial ischaemia. Pfisterer M, et al.
Eur Heart J 1988 Dec;9 Suppl N:98-103
Comparison of different methods of ST measurement for evaluation of myocardial ischaemia in Holter monitoring. Rotman B, et al. **Eur Heart J** 1988 Dec;9 Suppl N:78-84
Assessment of anaesthetic adequacy with upper facial and abdominal wall EMG. Paloheimo M, et al.
Eur J Anaesthesiol 1989 Mar;6(2):111-9
Suxamethonium-induced facilitation of spontaneous frontal EMG activity. Tammisto T, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):361-7
SQUID arrays for simultaneous magnetic measurements: calibration and source localization performance. Costa Ribeiro P, et al. **IEEE Trans Biomed Eng** 1988 Jul; 35(7):551-60 (24 ref.)
A noninvasive electromagnetic conductivity sensor for biomedical applications. Hart LW, et al.
IEEE Trans Biomed Eng 1988 Dec;35(12):1011-22
Detection of silent myocardial ischemia by Holter monitoring and its relation to severity of coronary artery disease. Kumar P, et al. **Indian Heart J** 1989 May-Jun;41(3):150-2
Silent myocardial ischaemia in patients with angiographically proven coronary artery disease. Sharma SN, et al.
Indian Heart J 1989 May-Jun;41(3):158-61
Assessment and prediction in leg-length discrepancy. Moseley CF. **Instr Course Lect** 1989;38:325-30
Mixed venous oximetry. Kupeli IA, et al.
Int Anesthesiol Clin 1989 Fall;27(3):176-83 (34 ref.)
Capnography. Paulus DA. **Int Anesthesiol Clin** 1989 Fall; 27(3):167-75 (6 ref.)
Carotid endarterectomy. Pre- and post-operative monitoring with cerebral SPECT. D'Addato M, et al. **Int Angiol** 1988 Jul-Sep;7(3):234-7
Biological monitoring of human exposure to coal tar. Urinary excretion of total polycyclic aromatic hydrocarbons, 1-hydroxypyrene and mutagens in psoriatic patients. Clonfero E, et al. **Int Arch Occup Environ Health** 1989; 61(6):363-8
Anticoagulation clinics facilitate the close monitoring of patients on anticoagulant therapy [letter] Zatuchni J.
Int J Cardiol 1988 Nov;21(2):195-6
Parameters influencing the response time of volatile anesthetics monitors. Frei FJ, et al.
Int J Clin Monit Comput 1989 Jan;6(1):21-30
Quantification of brainstem auditory evoked responses for patient monitoring. Greenblatt E, et al.
Int J Clin Monit Comput 1988;5(3):147-53
Anesthesia and evoked potentials: overview. Koht A.
Int J Clin Monit Comput 1988;5(3):167-73 (35 ref.)
The PDMS as a focal point for distributed patient data. Leyerle BJ, et al. **Int J Clin Monit Comput** 1988;5(3):155-61
Do evoked potentials measure depth of anaesthesia? Sebel PS, et al. **Int J Clin Monit Comput** 1988;5(3):163-6
Conjunctival oxygen tension monitoring in experimental septic shock. van der Linden J, et al.
Int J Clin Monit Comput 1989 Jan;6(1):37-43
Continuous monitoring of mixed venous oxygen saturation in infants after cardiac surgery. Schranz D, et al.
Intensive Care Med 1989;15(4):228-32
Transthoracic electrical bioimpedance versus thermodilution technique for cardiac output measurement during mechanical ventilation [editorial] Tremper K.
Intensive Care Med 1989;15(4):219-20
Intracranial pressure monitoring: a study of nursing practice. Allan D. **J Adv Nurs** 1989 Feb;14(2):127-31
Peak left ventricular pressure during percutaneous aortic balloon valvuloplasty: clinical and echocardiographic correlations. Bittl JA, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):135-42
Severity of silent myocardial ischemia on ambulatory electrocardiographic monitoring in patients with stable angina pectoris: relation to prognostic determinants during exercise stress testing and coronary angiography. Mody FV, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1169-76
Variability of indexes for myocardial ischemia: a comparison of exercise treadmill test, ambulatory electrocardiographic monitoring and symptoms of myocardial ischemia. Nademanee K, et al. **J Am Coll Cardiol** 1989 Mar 1; 13(3):574-9
The value of Holter monitoring in evaluating the elderly patient who falls. Rosado JA, et al. **J Am Geriatr Soc** 1989 May;37(5):430-4
Measurement of sympathetic nerve activity in the unanesthetized rat. Flückiger JP, et al. **J Appl Physiol** 1989 Jul;67(1):250-5
Real-time patient weight monitoring system for chair based renal dialysis. Jones KR, et al. **J Biomed Eng** 1989 Jul; 11(4):300-2
Ambulatory ventricular function monitoring for serial assessments of cardiac function during exercise. Tamaki N, et al. **J Cardiol** 1987 Dec;17(4):875-85
Noninvasive blood pressure monitoring evaluation of verapamil slow-release 240-mg antihypertensive effectiveness. Novo S, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 4:S38-41
Dynamics of extracellular metabolites in the striatum after middle cerebral artery occlusion in the rat monitored by intracerebral microdialysis. Hillered L, et al.
J Cereb Blood Flow Metab 1989 Oct;9(5):607-16
Comparison of three oxygen monitors in detecting endobronchial intubation. Barker SJ, et al. **J Clin Monit** 1988 Oct;4(4):240-3
Effectiveness of theophylline monitoring by the use of serum assays. Horsley MG, et al. **J Clin Pharm Ther** 1988 Oct; 13(5):359-64
Poor performance of lead V5 in single- and dual-channel ST-segment monitoring during coronary occlusion. Krucoff MW. **J Electrocardiol** 1988;21 Suppl:S30-4
Quantitative ST-segment recovery following angiographically successful angioplasty: a useful warning of early complications. Renzi RH, et al.
J Electrocardiol 1988;21 Suppl:S27-9
Magnetic tape recordin and playback for ST-segment analysis. Schluter P. **J Electrocardiol** 1988;21 Suppl:S20-6
24-hour blood pressure monitoring: evaluation of Spacelabs 5300 monitor by comparison with intra-arterial blood pressure recording in ambulant subjects. Casadei R, et al.
J Hypertens 1988 Oct;6(10):797-803
A plea for more comprehensive blood pressure measurements when evaluating drug treatment of hypertension. Enström I, et al. **J Hypertens** 1988 Dec;6(12):959-64
Repeated measurements of ambulatory blood pressure. Van Egeren LF. **J Hypertens** 1988 Sep;6(9):753-5
Clinical evaluation of the Colin ABPM 630 at rest and during exercise: an ambulatory blood pressure monitor with gas-powered cuff inflation. White WB, et al.
J Hypertens 1989 Jun;7(6):477-83
Blood pressure self-measurement in normotensive and hypertensive patients. Bättig B, et al.
J Hypertens Suppl 1989 May;7(3):S59-63
Can secondary hypertension be identified by twenty-four-hour ambulatory pressure monitoring? Baumgart P, et al. **J Hypertens Suppl** 1989 May;7(3):S25-8
Home versus office monitoring of blood pressure: a European multicentre study of high blood pressure. Clement DL.
J Hypertens Suppl 1989 May;7(3):S49-51
Value of ambulatory blood pressure monitoring in clinical pharmacology. Conway J, et al. **J Hypertens Suppl** 1989 May;7(3):S29-32
Standardized stress testing in the cardiovascular laboratory: has it any bearing on ambulatory blood pressure values? Langewitz W, et al. **J Hypertens Suppl** 1989 May; 7(3):S41-8
Practical utility of blood pressure readings obtained by self-determination. Mejia A, et al. **J Hypertens Suppl** 1989 May;7(3):S53-7
Prognostic value of ambulatory blood pressure measurements: further analyses. Perloff D, et al.
J Hypertens Suppl 1989 May;7(3):S3-10
Some implications of the differences between home, clinic and ambulatory blood pressure in normotensive and hypertensive patients. Pickering TG, et al.
J Hypertens Suppl 1989 May;7(3):S65-72 (60 ref.)
Comparison of parameters for assessing blood pressure and heart rate variability from non-invasive twenty-four-hour blood pressure monitoring. Schächinger H, et al.
J Hypertens Suppl 1989 May;7(3):S81-4
Statistical analysis of circadian blood pressure recordings in controlled clinical trials. Streitberg B, et al.
J Hypertens Suppl 1989 May;7(3):S11-7
Ambulatory blood pressure measurement and antihypertensive therapy. Waeber B, et al.
J Hypertens Suppl 1989 May;7(3):S33-9
Computerized monitoring system in neurosurgical intensive care. Suzuki A, et al. **J Neurosci Methods** 1988 Dec; 26(2):133-9
Use of computerized electroencephalographic monitoring during aneurysm surgery. Tempelhoff R, et al.
J Neurosurg 1989 Jul;71(1):24-31
Indium-111-labeled platelets in monitoring human pancreatic transplants. Catafau AM, et al. **J Nucl Med** 1989 Sep; 30(9):1470-5
Arteriovenous pH difference—a new index of perfusion. Bergman KS, et al. **J Pediatr Surg** 1988 Dec;23(12):1190-2
Intensive care monitoring of pulmonary mechanics for preterm infants undergoing mechanical ventilation. Cunningham MD. **J Perinatol** 1989 Mar;9(1):56-9
Remote monitoring of free flaps with telephonic transmission of photoplethysmograph waveforms. Jones JW, et al.
J Reconstr Microsurg 1989 Apr;5(2):141-4
The pulse oximeter in free muscle flap surgery. "A microvascular surgeon's sleep aid". Menick FJ.
J Reconstr Microsurg 1988 Jul;4(4):331-4
On-line metabolic and ventilatory monitoring in pediatric cardiac operations [letter] Giomarelli P, et al.
J Thorac Cardiovasc Surg 1989 Jun;97(6):939-40
Silent myocardial ischemia in patients undergoing peripheral vascular surgery: incidence and association with perioperative cardiac morbidity and mortality. McCann RL, et al. **J Vasc Surg** 1989 Apr;9(4):583-7
Diagnostic and therapeutic technology assessment. Home monitoring of uterine activity. **JAMA** 1989 May 26; 261(20):3027-9
End-tidal carbon dioxide monitoring during cardiopulmonary resuscitation. A prognostic indicator for survival. Sanders AB, et al. **JAMA** 1989 Sep 8; 262(10):1347-51
Characteristics of symptomatic and asymptomatic myocardial ischemia during ambulatory electrocardiographic monitoring in patients with angina pectoris. Kishida H, et al. **Jpn Heart J** 1989 Mar;30(2):151-62
Balloon atrial septostomy using echocardiographic monitoring. Ozkutlu S, et al. **Jpn Heart J** 1988 Jul; 29(4):415-9
Monitoring the anaesthetist [letter] Riley R. **Lancet** 1989 Apr 22;1(8643):898
Microcomputer-based system for 24-hour recording of oesophageal motility and pH profile with automated analysis. Breedijk M, et al. **Med Biol Eng Comput** 1989 Jan;27(1):41-6
Nurses' attitudes toward conventional and automated vital signs measurement methods. Campbell-Heider N, et al.
Med Instrum 1988 Oct;22(5):257-62
Twenty-four-hour oesophageal pH monitoring: advances and controversies. de Caestecker JS. **Neth J Med** 1989 Mar; 34 Suppl:S20-39 (120 ref.)
Assessment of intragastric acidity in man: modern aspects and reproducibility of intragastric pH monitoring. Merki HS. **Neth J Med** 1989 Mar;34 Suppl:S74-80 (21 ref.)
Ambulatory recording of oesophageal motor activity and pH. Smout AJ, et al. **Neth J Med** 1989 Mar;34 Suppl:S81-9
Criteria in ambulatory 24-hour oesophageal pH recording. Smout AJ. **Neth J Med** 1989 Mar;34 Suppl:S10-9
PH monitoring in children. Vandenplas Y, et al.
Neth J Med 1989 Mar;34 Suppl:S62-73
Use of peripheral nerve action potentials for intraoperative monitoring. Nelson KR. **Neurol Clin** 1988 Nov;6(4):917-33 (73 ref.)
Thermovision control of neurotransplant in rats. Volovik MG, et al. **Neurosci Behav Physiol** 1988 Nov-Dec; 18(6):492-7
Effect of click-polarity on abnormality of intraoperatively monitored brainstem acoustic evoked potentials. Mokrusch T, et al. **Neurosurg Rev** 1988;11(1):33-7
Neurography for intraoperative monitoring of facial nerve function [letter] Kartush JM. **Neurosurgery** 1989 Feb; 24(2):300-1
Does intraoperative monitoring of auditory evoked potentials reduce incidence of hearing loss as a complication of microvascular decompression of cranial nerves? Møller AR, et al. **Neurosurgery** 1989 Feb;24(2):257-63
Comparison of pulmonary vascular pressures based on blood volume and ventilator status. Lookinland S. **Nurs Res** 1989 Mar-Apr;38(2):68-72
Urinary bladder and rectal temperature monitoring during clinical hypothermia. Mravinac CM, et al. **Nurs Res** 1989 Mar-Apr;38(2):73-6
Pulse oximetry: a review of the theory, accuracy, and clinical applications. Bowes WA 3d, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):541-6 (32 ref.)
Heart rate monitoring in implanted pacemakers. Begemann MJ, et al. **PACE** 1988 Nov;11(11 Pt 2):1687-92
Late ventricular potentials and spontaneous and induced ventricular arrhythmias in dilated or hypertrophic cardiomyopathies. A prospective study about 83 patients. Fauchier JP, et al. **PACE** 1988 Nov;11(11 Pt 2):1974-83
Association between stimulated QT interval and ventricular rhythm disturbances: influence of autonomic nervous system. Kocovic D, et al. **PACE** 1988 Nov;11(11 Pt 2):1722-31
Predictive value of various types of ventricular response to programmed ventricular stimulation: relation to Holter monitoring. Wnuk-Wojnar AM, et al. **PACE** 1988 Nov; 11(11 Pt 2):1954-9
Non-invasive conjunctival PCO2 and PO2 monitoring during hyper- and hypoventilation. Kram HB, et al.
Resuscitation 1988 Oct;16(4):263-9
Comparison of three methods of intraesophageal pH

recordings in the diagnosis of gastroesophageal reflux. Bianchi Porro G, et al. **Scand J Gastroenterol** 1988 Aug; 23(6):743–50

Ambulatory intraesophageal 24–hour pH–monitoring. Joelsson B. **Scand J Gastroenterol Suppl** 1988;155:89–93

Laser Doppler flowmetry estimating myocardial perfusion after internal mammary artery grafting. von Ahn HC, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):281–4

Monitoring irrigating fluid absorption during transurethral resection of the prostate (TURP); a comparison between 1 and 2% ethanol as a tracer. Hultén JO, et al. **Scand J Urol Nephrol** 1989;23(2):103–8

Colloid oncotic pressure as a guide for the anesthesiologist in directing fluid therapy. Haynes GR, et al. **South Med J** 1989 May;82(5):618–23 (64 ref.)

Monitoring of cervical spondylotic myelopathy. Cusick JF. **Spine** 1988 Jul;13(7):877–80

Variability of somatosensory cortical evoked potential monitoring during spinal surgery. Lubicky JP, et al. **Spine** 1989 Aug;14(8):790–8

Monitoring gastric pH levels. Durham RM, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):14–6

Orpitt: a computerized chart for intraoperative real time management of liver transplant data. Avolio AW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2353–6

[Home monitoring of infants: a literature review (1972–1987)] l'Hoir MP, et al. **Tijdschr Kindergeneeskd** 198^ Feb; 57(1):9–13 (256 ref.) (Eng. Abstr.) (Dut)

[Continuous indirect measurement of blood pressure] Sundberg S, et al. **Duodecim** 1988;104(9):690–9 (50 ref.) (Fin)

[Value of computerized monitoring of the intracranial pressure in neurotraumatology] Gambardella G, et al. **Agressologie** 1988 Apr;29(5):343–6 (Eng. Abstr.) (Fre)

[Peroperative thermometry] Otteni JC, et al. **Ann Fr Anesth Reanim** 1989;8(3):189–92 (Fre)

[Monitoring and management of anesthesia with EEG, evoked potentials, electromyography of the frontal muscle or monitoring esophageal contractility] Schwilden H. **Ann Fr Anesth Reanim** 1989;8(3):162–6 (Fre)

[Ambulatory monitoring and telephone transmission of uterine activity. Preliminary study on the evaluation of the TOKOS system] Pons JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1031–6 (Eng. Abstr.) (Fre)

[Intracranial pressure determination in neuro–traumatology. Indications, interpretation and complications] de Tribolet N. **Schweiz Med Wochenschr** 1989 Mar 18;119(11):340–3 (Eng. Abstr.) (Fre)

[Monitoring critically ill patients during transport by helicopter using a patient with abdomen apertum as an example] Mertzlufft FO, et al. **Anaesthesist** 1989 Feb; 38(2):89–94 (Eng. Abstr.) (Ger)

[Visual EEG analysis in controlling intravenous anesthesia using propofol] Suttmann H, et al. **Anaesthesist** 1989 Apr; 38(4):180–8 (Eng. Abstr.) (Ger)

[Long–term ambulatory EEG in pediatrics. Possibilities and limitations] Millner M, et al. **Klin Padiatr** 1988 Sep–Oct; 200(5):404–9 (Eng. Abstr.) (Ger)

[The necessity of detecting neonatal seizure activity using polygraphically supplemented electroencephalography] Eiselt M, et al. **Padiatr Grenzgeb** 1988;27(4):245–58 (24 ref.) (Eng. Abstr.) (Ger)

[Invasive monitoring: goals and hazards] Frei FJ, et al. **Schweiz Med Wochenschr** 1989 Mar 18;119(11):329–31 (Eng. Abstr.) (Ger)

[Cerebral problems in pediatric intensive care] Fanconi S. **Wien Klin Wochenschr** 1988 Aug 26;100(16):533–6 (18 ref.) (Eng. Abstr.) (Ger)

[Measurement of aortic compliance in living dogs utilizing the changes in transthoracic electrical impedance with an induced change in volume of the aorta] Terashima Y, et al. **Iyodenshi To Seitai Kogaku** 1988 Mar;26(1):15–24 (Eng. Abstr.) (Jpn)

[Cardiac response during various activities in patients with ischemic heart disease evaluated by an ambulatory ventricular monitor (VEST)] Ohtake T, et al. **Kaku Igaku** 1989 Feb;26(2):195–212 (Eng. Abstr.) (Jpn)

[Serial assessment of cardiac function during and after exercise by an ambulatory ventricular function monitor (VEST)] Tamaki N, et al. **Kaku Igaku** 1989 Mar; 26(3):399–408 (Eng. Abstr.) (Jpn)

[Convenient methods for diagnosis of sleep apnea syndrome with special reference to the respiratory and sleeping Holter's monitoring system] Shiomi T, et al. **Kokyu To Junkan** 1988 Jun;36(6):641–7 (Jpn)

[Intraoperative color flow mapping by real–time two–dimensional Doppler echocardiography in the monitoring of hemodynamics] Akamatsu S, et al. **Masui** 1988 Dec;37(12):1529–36 (Eng. Abstr.) (Jpn)

[Sick sinus syndrome diagnosed preoperatively by holter ECG in a patient with abdominal aneurysm] Masuda R, et al. **Masui** 1988 Jul;37(7):849–55 (Eng. Abstr.) (Jpn)

[Monitoring of brain and spinal cord function during surgery and intensive care] Shimoji K, et al. **Masui** 1988 Nov; 37(11):1300–13 (23 ref.) (Jpn)

[New stimulation pattern for manual evaluation of neuromuscular transmission—double burst stimulation (DBS)] Ueda N, et al. **Masui** 1988 Jun;37(6):716–21 (Eng. Abstr.) (Jpn)

[Intraoperative monitoring of brainstem auditory evoked potentials] Ohira T, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):772–8 (Eng. Abstr.) (Jpn)

[A simple method for measuring 24–hour urinary excretions of salt and potassium] Takemori K, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1036–41 (Eng. Abstr.) (Jpn)

[A clinical study on intra–operative spinal cord monitoring with spinal evoked potentials for scoliosis] Imai K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):511–21 (Eng. Abstr.) (Jpn)

[Clinical significance of serial monitoring of short–latency somatosensory evoked potential in head injury with special reference to intracranial hypertension] Kawahara N, et al. **No Shinkei Geka** 1988 Aug;16(9):1059–66 (Eng. Abstr.) (Jpn)

[Electroencephalographic changes during experimental plateau waves] Kogure Y, et al. **No Shinkei Geka** 1988 Dec;16(13):1439–43 (Eng. Abstr.) (Jpn)

[The relationship between Korotkoff and oscillometric method in the newly developed lightweight ambulatory blood pressure recording device (ABPM–630)] Imataka K, et al. **Rinsho Byori** 1988 Sep;36(9):1109–10 (Jpn)

[Ambulatory monitoring of esophageal pH] Carvalhinhos A, et al. **Acta Med Port** 1988 Jan–Feb;1(1):45–9 (Eng. Abstr.) (Por)

[Intraoperative monitoring of spontaneous ventilation of the lungs in children during general anesthesia] Inants SS. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):12–5 (Eng. Abstr.) (Rus)

[Is it practical to assess the functional state of the heart based on the shape of the Starling curves in intensive care units?] Lishchuk VA, et al. **Anesteziol Reanimatol** 1989 Mar–Apr; (2):51–6 (Eng. Abstr.) (Rus)

[Ensuring the viability of gastric transplants used in esophagoplasty using hemomotordynamic monitoring] Sigal ZM, et al. **Grudn Khir** 1989 Mar–Apr;(2):70–3 (Eng. Abstr.) (Rus)

[A computer surveillance system of the critically ill newborn infant patient] Juez G, et al. **Rev Chil Pediatr** 1987 Nov–Dec;58(6):490–6 (Eng. Abstr.) (Spa)

[Continuous ambulatory monitoring of the therapeutic effect of captopril, 50 mg/day, in mild and moderate essential arterial hypertension] Hergueta G, et al. **Rev Clin Esp** 1989 Mar;184(4):174–6 (Eng. Abstr.) (Spa)

STANDARDS

Is long–term esophageal pH monitoring of clinical value? Klauser AG, et al. **Am J Gastroenterol** 1989 Apr; 84(4):362–6

Clinical use of ambulatory blood pressure monitoring. Mancia G. **Am J Hypertens** 1989 Feb;2(2 Pt 2):50S–54S

Why monitor the ECG? [letter] Tyers M. **Anaesth Intensive Care** 1989 May;17(2):237

Practice standards: the Midas touch or the emperor's new clothes? Orkin FK. **Anesthesiology** 1989 Apr;70(4):567–71

Desirable performance standards for assays of drugs. Stewart MJ, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):220–6 (37 ref.)

Perioperative nurses must prepare themselves to monitor patients receiving local anesthesia. Petrone S. **AORN J** 1989 Aug;50(2):442, 444, 446

The value of therapeutic drug monitoring to the practising physician—an hypothesis in need of testing. McInnes GT. **Br J Clin Pharmacol** 1989 Mar;27(3):281–4

Errors in biochemical and haemodynamic data obtained using introducer lumen and proximal port of Swan Ganz catheter [letter] Böhrer H, et al. **Intensive Care Med** 1989; 15(5):330–1

Transthoracic electrical bioimpedance versus thermodilution technique for cardiac output measurement during mechanical ventilation. Preiser JC, et al. **Intensive Care Med** 1989;15(4):221–3

Sampling intervals for clinical monitoring of variables during anesthesia. Gravenstein JS, et al. **J Clin Monit** 1989 Jan; 5(1):17–21

Monitoring equipment and anaesthetic failures. Brahams D. **Lancet** 1989 Jan 14;1(8629):111–2

STATISTICS & NUMERICAL DATA

[Analysis of the spread of ambulatory electrocardiography in Italy] Biagini A, et al. **G Ital Cardiol** 1987 Dec; 17(12):1093–7 (Eng. Abstr.) (Ita)

TRENDS

Technology makes patient monitoring less costly. Souhrada L. **Hospitals** 1988 Oct 20;62(20):84

[Present status and problems of monitoring in ICU] Okuaki A. **Masui** 1988 Jul;37(7):776–85 (Jpn)

UTILIZATION

Invasive hemodynamic monitoring in the United Kingdom. Enough or too little? Singer M, et al. **Chest** 1989 Mar; 95(3):623–6

Real–time intraoperative monitoring during neurosurgical and neuroradiological procedures. John ER, et al. **J Clin Neurophysiol** 1989 Apr;6(2):125–58

VETERINARY

Noninvasive oximetry in the rat. Decker MJ, et al. **Biomed Instrum Technol** 1989 May–Jun;23(3):222–8

A method of remote physiological monitoring of a fully mobile primate in a single animal cage. Pearce PC, et al. **Lab Anim** 1989 Apr;23(2):180–7

MONITORING, RADIOIMMUNOLOGIC see **MONITORING, IMMUNOLOGIC**

MONKEY DISEASES

Endometritis and valvular endocarditis in a rhesus monkey. Cantrell C, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1221–2

Trypanosoma cruzi infection in a colony–born baboon. Gleiser CA, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1225–6

Maxillofacial abscesses in captive squirrel monkeys. Langner PH, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1218

Congestive heart failure and pneumonia in a baboon. Levin JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1226–7

Pemphigus vulgaris in a pigtail macaque. Wolff PL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1220–1

Spontaneous diabetes mellitus in a rhesus monkey: neurophysiological studies. Cornblath DR, et al. **Muscle Nerve** 1989 Mar;12(3):233–5

Measles in the cynomolgus monkey (Macaca fascicularis). Welshman MD. **Vet Rec** 1989 Feb 25;124(8):184–6

BLOOD

Elevation in plasma glucagon levels in response to stress in squirrel monkeys: comparisons of two subspecies (Saimiri sciureus boliviensis and Saimiri sciureus sciureus). Myers BA, et al. **J Med Primatol** 1988;17(4):205–14

CHEMICALLY INDUCED

Pyometra in a rhesus monkey secondary to prolonged therapy with medroxyprogesterone acetate. McCarthy TJ, et al. **Lab Anim Sci** 1989 Jan;39(1):71–2

[The induction of stomach cancer in monkeys with N–methyl–N'–nitro–N–nitrosoguanidine] Sharashidze LK, et al. **Vopr Onkol** 1989;35(3):335–8 (Eng. Abstr.) (Rus)

DIAGNOSIS

Spontaneous rhabdomyosarcoma in a rhesus monkey. Blanchard JL, et al. **J Comp Pathol** 1988 Jul;99(1):109–13

The serodiagnosis of Campylobacter infection in infant cynomolgus monkeys (Macaca fascicularis) 2 to 18 weeks old by enzyme–linked immunosorbent assay. Kohno A, et al. **Lab Anim Sci** 1988 Dec;38(6):715–21

Misleading positive tuberculin reactions in a squirrel monkey colony. Pierce DL, et al. **Lab Anim Sci** 1988 Dec; 38(6):729–30

Simian AIDS ELISA: sensitivity, specificity and predictive values based on a comparison with Western blot technique. Spinner A, et al. **Lab Anim Sci** 1988 Oct;38(5):568–72

Serological survey for viral diseases in the Cayo Santiago rhesus macaque population. Kessler MJ, et al. **P R Health Sci J** 1989 Apr;8(1):95–7

[Intestinal parasites of Anthropoidea from the Wrocław Zoo] Okulewicz A, et al. **Wiad Parazytol** 1988;34(3):301–5 (Eng. Abstr.) (Pol)

DRUG THERAPY

Coenuriasis in a spectacled langur (Presbytis obscura): praziquantel treatment and the antibody response to cyst antigens. Price TC, et al. **Am J Trop Med Hyg** 1989 May; 40(5):514–20

Efficacy of ivermectin against natural infection of Strongyloides spp. in squirrel monkeys (Saimiri sciureus). Battles AH, et al. **Lab Anim Sci** 1988 Aug;38(4):474–6

Diagnostic exercise: macaque with dyspnea [letter] Geller EH. **Lab Anim Sci** 1988 Oct;38(5):558

EPIDEMIOLOGY

Genetics of primate lymphomas in a baboon (Papio hamadryas) colony of Sukhumi, USSR. Crawford MH, et al. **Genetica** 1987 Aug 31;73(1–2):145–57

Spontaneous and experimental hepatitis A in Old World monkeys. Shevtsova ZV, et al. **J Med Primatol** 1988; 17(4):177–94

Spontaneous periodontitis in a sample group of the monkey Macaca fascicularis. Friskopp J, et al. **J Periodont Res** 1988 Jul;23(4):265–7

Occurrence of Yersinia enterocolitica in the Tokyo Tama Zoo. Sasaki Y, et al. **J Wildl Dis** 1989 Apr;25(2):287–90

An outbreak of salmonellosis in newly imported cynomolgus monkeys. Takasaka M, et al. **Jpn J Med Sci Biol** 1988 Feb; 41(1):1–13

Prevalence of Campylobacter in infant, juvenile and adult laboratory primates. Russell RG, et al. **Lab Anim Sci** 1988 Dec;38(6):711–4

Serologic evidence of Encephalitozoon cuniculi infection in a colony of squirrel monkeys (Saimiri sciureus). Shadduck JA, et al. **Lab Anim Sci** 1989 Jul;39(4):328–30

[A survey of the prevalence of Anatrichosoma sp. in nasal cavities of cynomolgus monkeys] Takenaka T, et al. **Jikken Dobutsu** 1989 Jan;38(1):93–6 (Eng. Abstr.) (Jpn)

[Spontaneous tumors in monkeys] Beniashvili DSh. **Eksp Onkol** 1989;11(4):9–15 (78 ref.) (Eng. Abstr.) (Rus)

ETIOLOGY

The parasite Trichospirura leptostoma associated with

wasting disease in a colony of common marmosets, Callithrix jacchus. Beglinger R, et al. **Folia Primatol (Basel)** 1988;51(1):45–51

Curvature of the lumbar spine as a consequence of mechanical necessities in Japanese macaques trained for bipedalism. Preuschoft H, et al. **Folia Primatol (Basel)** 1988; 50(1–2):42–58

GENETICS

Characterization of inheritance patterns of blood pressure in Macaca fascicularis. Hartley LH, et al. **J Med Primatol** 1989;18(2):125–32

Occurrence of spontaneous diabetes mellitus in a cynomolgus monkey (Macaca fascicularis) and impaired glucose tolerance in its descendants. Yasuda M, et al. **J Med Primatol** 1988;17(6):319–32

Familial infantile cortical hyperostosis (Caffey's disease) in rhesus monkeys (Macaca mulatta). Snook SS, et al. **Vet Pathol** 1989 May;26(3):274–7

IMMUNOLOGY

Virus-induced immunosuppression: infection of peripheral blood mononuclear cells and suppression of immunoglobulin synthesis during natural measles virus infection of rhesus monkeys. McChesney MB, et al. **J Infect Dis** 1989 Apr;159(4):757–60

Molecular characterization and comparison of simian immunodeficiency virus isolates from macaques, mangabeys, and African green monkeys. Benveniste RE, et al. **J Med Primatol** 1989;18(3–4):287–303

Postexposure immunotherapy of simian immunodeficiency virus (SIV) infected rhesus with an SIV immunogen. Gardner MB, et al. **J Med Primatol** 1989;18(3–4):321–8

[The immune structure and specific laboratory indices of acute hepatitis A in lower monkeys of the Sukhumi Nursery] Doroshenko NV, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):681–5 (Eng. Abstr.) (Rus)

METABOLISM

Genetically determined hypercholesterolemia in a rhesus monkey family due to a deficiency of the LDL receptor. Scanu AM, et al. **J Lipid Res** 1988 Dec;29(12):1671–81

MICROBIOLOGY

Nonhuman primate retrovirus isolates and AIDS. Gardner MB, et al. **Adv Vet Sci Comp Med** 1988;32:171–226 (231 ref.)

Campylobacter pylori isolated from the stomach of the monkey, Macaca nemestrina. Bronsdon MA, et al. **J Clin Microbiol** 1988 Sep;26(9):1725–8

Isolation of a gastric campylobacter-like organism from the stomach of four rhesus monkeys, and identification as Campylobacter pylori. Newell DG, et al. **J Med Microbiol** 1988 Sep;27(1):41–4

Molecular cloning of SIV from sooty mangabey monkeys. Hirsch VM, et al. **J Med Primatol** 1989;18(3–4):279–85

Genetic diversity among simian immunodeficiency virus isolates from African green monkeys. Johnson PR, et al. **J Med Primatol** 1989;18(3–4):271–7

Mucosal epithelial cells and Langerhans cells are targets for infection by the immunosuppressive type D retrovirus simian AIDS retrovirus serotype 1. Lackner AA, et al. **J Med Primatol** 1989;18(3–4):195–207

Rhesus macaques inoculated with molecularly cloned simian immunodeficiency virus. Marthas ML, et al. **J Med Primatol** 1989;18(3–4):311–9

Genetic analysis and infection of SIVAGM and SIVMND. Miura T, et al. **J Med Primatol** 1989;18(3–4):255–9

Serologic and virologic analysis of type D simian retrovirus infection in a colony of Celebes black macaques (Macaca nigra). Shiigi S, et al. **J Med Primatol** 1989;18(3–4):185–93

Natural infection with canine distemper virus in a Japanese monkey (Macaca fuscata). Yoshikawa Y, et al. **Vet Microbiol** 1989 Jul;20(3):193–205

Enteric coronaviruses in primates. Eichhorn W, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):709–12

Isolation of M. pneumoniae from monkeys (Presbitus cristata). Stipkovits L, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):134–8

[Microbiological development studies in a clinically healthy, closed primate colony (Macaca mulatta, Macaca arctoides) after the establishment of a Salmonella infection] Hamann HP, et al. **Z Versuchstierkd** 1989;32(3):105–9 (Eng. Abstr.) (Ger)

PARASITOLOGY

Invasive amebiasis in naturally infected New World and Old World monkeys with and without clinical disease. Beaver PC, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):343–52

Helminth parasites of the Japanese monkey, Macaca fuscata fuscata in Ehime Prefecture, Japan. Itoh K, et al. **Jpn J Vet Res** 1988 Oct;36(3–4):235–47

Studies of encephalitozoonosis in vervet monkeys (Cercopithecus pygerythrus) orally inoculated with spores of Encephalitozoon cuniculi isolated from dogs (Canis familiaris). van Dellen AF, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):1–22

Intestinal trichomonads (Tritrichomonas mobilensis) in the natural host Saimiri sciureus and Saimiri boliviensis. Scimeca JM, et al. **Vet Pathol** 1989 Mar;26(2):144–7

[Diversity of the filaria of the genus Cercopithifilaria in baboons in Kenya] Bain O, et al. **Ann Parasitol Hum Comp** 1988;63(3):224–39 (Eng. Abstr.) (Fre)

PATHOLOGY

Pseudomonas aeruginosa infection in squirrel monkeys. Lausen NC, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1216–8

Gastric trichuriasis in a black and white colobus monkey. Loomis MR, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1214–5

Bilateral posterior parietal atrophy in an infant rhesus monkey (Macaca mulatta). Brack M, et al. **J Med Primatol** 1989; 18(1):43–54

Comparative teratogenicity of triamcinolone acetonide and dexamethasone in the rhesus monkey (Macaca mulatta). Jerome CP, et al. **J Med Primatol** 1988;17(4):195–203

Multiple spontaneous lesions in an aged spider monkey. Binhazim AA, et al. **Lab Anim Sci** 1989 Jul;39(4):355–7

Maxillo-orbital lymphoma (Burkitt's-type) in an infant Macaca fascicularis. Jayo MJ, et al. **Lab Anim Sci** 1988 Dec;38(6):722–6

Focal ulcerative ileocolitis with terminal thrombocytopenic purpura in juvenile cotton top tamarins (Saguinus oedipus). Snook SS, et al. **Lab Anim Sci** 1989 Mar;39(2):109–14

Gluten-sensitive enteropathy in a cynomolgus monkey. Wagner JD, et al. **Lab Anim Sci** 1988 Oct;38(5):592–4

Necropsy findings in rhesus monkeys experimentally infected with cultured simian immunodeficiency virus (SIV)/delta. Baskin GB, et al. **Vet Pathol** 1988 Nov;25(6):456–67

Diverticulosis and colonic leiomyosarcoma in an aged rhesus macaque. Bunton TE, et al. **Vet Pathol** 1989 Jul;26(4):351–2

PHYSIOPATHOLOGY

Adult-onset macular degeneration in the Cayo Santiago macaques. Dawson WW, et al. **P R Health Sci J** 1989 Apr; 8(1):111–5

Bone mineral and osteoporosis in aging rhesus monkeys. Grynpas MD, et al. **P R Health Sci J** 1989 Apr;8(1):197–204

Rhesus macaques as an experimental model for degenerative arthritis. Pritzker KP, et al. **P R Health Sci J** 1989 Apr; 8(1):99–102

Characteristics of spontaneous obesity in the Cayo Santiago rhesus macaque: preliminary report. Schwartz SM. **P R Health Sci J** 1989 Apr;8(1):103–6

RADIOGRAPHY

Colonic stenosis in a rhesus monkey. Cantrell C, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1223–4

RADIONUCLIDE IMAGING

Validation of single photon absorptiometry in estimating bone mineral mass in rhesus monkey skeletons. Aguiló F Jr, et al. **P R Health Sci J** 1989 Apr;8(1):205–9

THERAPY

Management of an infestation of sucking lice in a colony of rhesus macaques. Mader DR, et al. **Lab Anim Sci** 1989 May;39(3):252–5

TRANSMISSION

Infection of macaque monkeys with simian immunodeficiency virus from African green monkeys: virulence and activation of latent infection. Gravell M, et al. **J Med Primatol** 1989; 18(3–4):247–54

Transmission of the simian immunodeficiency virus SIVmne in macaques and baboons. Morton WR, et al. **J Med Primatol** 1989;18(3–4):237–45

MONKEY, JAPANESE see **MACACA**

MONKEY POX VIRUS see under **POXVIRIDAE**

MONKEY RETROVIRUSES see **SIMIAN RETROVIRUSES**

MONKEY, SPIDER see **CEBIDAE**

MONKEY, TALAPOIN see **CERCOPITHECIDAE**

MONKEY, WOOLLY see **CEBIDAE**

MONKEYS see **ANTHROPOIDEA**

MONKEYS, NEW WORLD see **CEBIDAE**

MONKEYS, OLD WORLD see **CERCOPITHECIDAE**

MONOACYLGLYCEROL LIPASES see under **CARBOXYLIC ESTER HYDROLASES**

MONOACYLGLYCEROLS see **GLYCERIDES**

MONO-ADP-RIBOSYLTRANSFERASE see **NAD-ARGININE ADP-RIBOSYLTRANSFERASE**

MONOAMINE OXIDASE

Partial amino acid sequence analysis of human placenta monoamine oxidase A and bovine liver monoamine oxidase B. Chen SA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):445–50

The primary structure of bovine monoamine oxidase type A. Comparison with peptide sequences of bovine monoamine oxidase type B and other flavoenzymes. Powell JF, et al. **Biochem J** 1989 Apr 15;259(2):407–13

3rd Amine Oxidases International Workshop. Firenze, Italy, 1–3 September 1988. Proceedings. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:1–186

ANALYSIS

Further serum related alterations in the activities of some membrane marker enzymes in normal and virus transformed cells. Tenang EM, et al. **Biochem Int** 1989 Jan; 18(1):197–202

Determination of the absolute concentrations of monoamine oxidase A and B in human tissues. O'Carroll AM, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):901–5

Isoelectric focusing of monoamine oxidase subtypes as identified by MAO inhibitors. Fritze J, et al. **Eur J Pharmacol** 1989 May 11;172(2):147–54

Qualitative and quantitative changes in monoamine oxidase activity after acute third ventricle treatment of GABA, muscimol, and picrotoxin in rat. Rattan AK, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):357–65

Type B monoamine-oxidase-containing cells and fibers in the cat hypothalamus demonstrated by an improved enzyme histochemical method. Kitahama K, et al. **J Comp Neurol** 1989 Jul 8;285(2):218–30

Localization of monoamine oxidase B in human brain by autoradiographical use of 11C-labelled L-deprenyl. Jossan SS, et al. **J Neural Transm** 1989;77(1):55–64

Histochemical localisation of monoamine oxidase A and B in rat brain. Willoughby J, et al. **J Neural Transm** 1988; 74(1):29–42

Characterization and quantitation of monoamine oxidases A and B in mitochondria from human placenta. Riley LA, et al. **Mol Pharmacol** 1989 Jul;36(1):54–60

Topographic immunocytochemical mapping of monoamine oxidase-A, monoamine oxidase-B and tyrosine hydroxylase in human post mortem brain stem. Konradi C, et al. **Neuroscience** 1988 Sep;26(3):791–802

[Histochemical study of non-specific cholinesterase and monoamine oxidase activities in mouse spinal ganglia] Dubovy P, et al. **Arch Neurobiol (Madr)** 1988 Sep–Oct; 51(5):282–6 (Eng. Abstr.) (Spa)

BLOOD

Monoamine- and diamine oxidase activities in psoriasis. Ionescu G, et al. **Acta Derm Venereol (Stockh)** 1989; 69(3):264–5

Platelet MAO-B activity and the psychopathology of Parkinson's disease, senile dementia and multi-infarct dementia. Danielczyk W, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):730–6

Low B12 levels related to high activity of platelet MAO in patients with dementia disorders. A retrospective study. Regland B, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):451–7

Decreased plasma benzylamine oxidase in a subgroup of schizophrenia. Vieira R, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):83–8

Cofactor levels of mono- and diamine oxidase in atopic eczema. Ionescu G, et al. **Allergy** 1989 May;44(4):298–300

Platelet monoamine oxidase B activity in women with premenstrual syndrome. Rapkin AJ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1536–40

Mania associated with high percentage of inhibition of monoamine oxidase [letter] Bowden CL, et al. **Am J Psychiatry** 1989 Jan;146(1):121

Characterization of monoamine oxidase activity present in human granulocytes and lymphocytes. Balsa MD, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):140–4

Relation of blood serotonin and benzylamine oxidase to clinical symptoms and prognosis in Parkinson's disease. Ishizaki F, et al. **Eur Neurol** 1988;28(5):291–4

Platelet MAO activity in first degree relatives of chronic schizophrenics. Trivedi JK, et al. **Indian J Med Res** 1988 Oct;88:360–2

Platelet monoamine oxidase in unipolar & bipolar depression. Trivedi JK, et al. **Indian J Med Res** 1988 Aug;88:165–8

A kinetic analysis of platelet monoamine oxidase activity in patients with panic attacks. Norman TR, et al. **J Affective Disord** 1988 Sep–Oct;15(2):127–30

Plasma neurochemistry in juvenile offenders. Pliszka SR, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep; 27(5):588–94

Determination of platelet monoamine oxidase by new continuous spectrophotometric method. Ivanović ID, et al. **J Clin Chem Clin Biochem** 1988 Jul;26(7):447–51

Changes in amine oxidase in plasma of rats treated with hepatotoxins. Obata T, et al. **Jpn J Pharmacol** 1988 Sep; 48(1):142–4

Platelet monoamineoxidase activity in chronic schizophrenics. Gerbaldo H, et al. **Medicina (B Aires)** 1985; 45(1):22–4

Biological vulnerability to depression: replication of MAO and evoked potentials as risk factors. Haier RJ, et al. **Neuropsychobiology** 1988;20(2):62–6

EEG sleep, lithium transport, dexamethasone suppression, and monoamine oxidase activity in borderline personality

disorder. Lahmeyer HW, et al. **Psychiatry Res** 1988 Jul; 25(1):19–30

Race and platelet MAO activity in schizophrenic patients [letter] Meltzer HY. **Psychiatry Res** 1988 Dec;26(3):337

Platelet monoamine oxidase activity and tardive dyskinesia. Morgenstern H, et al. **Psychiatry Res** 1988 Aug; 25(2):163–71

Platelet tritiated imipramine binding and MAO activity in Alzheimer's disease patients with agitation and delusions. Schneider LS, et al. **Psychiatry Res** 1988 Sep;25(3):311–22

Platelet MAO activity and personality variations in normals. Shekim WO, et al. **Psychiatry Res** 1989 Jan;27(1):81–8

Tyramine sulfate excretion may be a better predictor of antidepressant response than monoamine oxidase activity. Stewart JW, et al. **Psychiatry Res** 1988 Aug;25(2):195–201

Platelet monoamine oxidase activity and life stress as predictors of psychopathology and coping in a community sample. Irving JB, et al. **Psychol Med** 1989 Feb;19(1):79–90

[The histamine–serotonin–monoamine oxidase system in patients with foot mycosis during treatment] Aliatulov RF, et al. **Vestn Dermatol Venerol** 1989;(5):10–3 (Eng. Abstr.) **(Rus)**

[Activity of amine oxidases from blood plasma and thrombocytes in sensitization and allergy] Shlelkin AG, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):52–5 (Eng. Abstr.) **(Rus)**

[Correlation of chronic idiopathic headache and decreased monoamine/oxidase activity of thrombocytes] Kalashnikova LA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(9):29–32 (Eng. Abstr.) **(Rus)**

GENETICS

Norrie disease gene is distinct from the monoamine oxidase genes. Sims KB, et al. **Am J Hum Genet** 1989 Sep; 45(3):424–34

Molecular cloning of a cDNA for rat liver monoamine oxidase B. Ito A, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):970–6

The in vitro insertion of monoamine oxidase B into mitochondrial outer membranes. Zhuang Z, et al. **FEBS Lett** 1988 Sep 26;238(1):185–90

Human monoamine oxidase A and B genes map to Xp 11.23 and are deleted in a patient with Norrie disease. Lan NC, et al. **Genomics** 1989 May;4(4):552–9

Human monoamine oxidase gene (MAOA): chromosome position (Xp21–p11) and DNA polymorphism. Ozelius L, et al. **Genomics** 1988 Jul;3(1):53–8

Molecular genetics of the monoamine oxidases. Hsu YP, et al. **J Neurochem** 1989 Jul;53(1):12–8 (78 ref.)

Expression of functional human monoamine oxidase A and B cDNAs in mammalian cells. Lan NC, et al. **J Neurochem** 1989 May;52(5):1652–4

ISOLATION & PURIFICATION

Purification of benzylamine oxidase from cultured porcine aortic smooth muscle cells. Hysmith RM, et al. **Biochem Cell Biol** 1988 Aug;66(8):821–9

Monoamine oxidase A from human placenta and monoamine oxidase B from bovine liver both have one FAD per subunit. Weyler W. **Biochem J** 1989 Jun 15;260(3):725–9

METABOLISM

Selective inactivation of MAO–B by benzyl–dimethyl–silyl–methanamines in vitro. Danzin C, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):540–4

Three types of stereospecificity and the kinetic deuterium isotope effect in the oxidative deamination of dopamine as catalyzed by different amine oxidases. Yu PH. **Biochem Cell Biol** 1988 Aug;66(8):853–61

Oxidation of 3–amino–1–phenylprop–1–enes by monoamine oxidase and their use in a continuous assay of the enzyme. Williams CH, et al. **Biochem J** 1988 Dec 15;256(3):911–5

Distribution of phenolsulphotransferase and monoamine oxidase in the common marmoset. Ueki A, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2383–5

Inactivation of monoamine oxidase A by the monoamine oxidase B inactivators 1–phenylcyclopropylamine, 1–benzylcyclopropylamine, and N–cyclopropyl–alpha–methylbenzylamine. Silverman RB, et al. **Biochemistry** 1988 Nov 1;27(22):8448–53

Monoamine oxidase activity and triiodothyronine biosynthesis in human cultured thyroid cells. Kraiem Z, et al. **Br J Pharmacol** 1989 Feb;96(2):465–9

Monoamine oxidases of the human brain and liver. Kalaria RN, et al. **Brain** 1988 Dec;111 (Pt 6):1441–51

The cholinergic neurotoxin ethylcholine mustard aziridinium (AF64A) induces an increase in MAO–B activity in the rat brain. Jossan SS, et al. **Brain Res** 1989 Jan 9;476(2):291–7

Increase in central and peripheral benzodiazepine receptors following surgery. Okun F, et al. **Brain Res** 1988 Aug 16; 458(1):31–6

Cytochemical localization of type–A and –B monoamine oxidase in the rat pineal gland. Masson–Pévet M, et al. **Cell Tissue Res** 1989 Feb;255(2):299–305

Seasonal and daily variations in hypothalamic monoamine levels and monoamine oxidase activity in the teleost Channa punctatus (Bloch). Khan IA, et al. **Chronobiol Int** 1988; 5(4):311–6

Steroid regulation of monoamine oxidase activity in the adrenal medulla. Youdim MB, et al. **FASEB J** 1989 Apr; 3(6):1753–9

Unprecedented lysyloxidase activity of Pichia pastoris benzylamine oxidase. Tur SS, et al. **FEBS Lett** 1988 Sep 26;238(1):74–6

Histochemical detection of monoamine oxidase and alcohol dehydrogenase activities in the Syrian hamster Harderian glands: existence of a sexual dimorphism. Menendez–Pelaez A, et al. **Histochem J** 1989 Mar;21(3):125–30

Monoamineoxidase activity in certain brain regions associated with xanthurenic acid excretion in rats on oral contraceptive steroids. Bandyopadhyay M, et al. **Indian J Med Res** 1989 Jun;90:191–6

Deuterium isotope effect measurements on the interactions of the neurotoxin 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine with monoamine oxidase B. Ottoboni S, et al. **J Biol Chem** 1989 Aug 15;264(23):13684–8

Lithium alters the stereoselectivity of monoamine oxidase in rat brain. Smith DF. **J Neural Transm** 1989;76(3):205–10

Monoamine oxidase–B inhibition: a comparison of in vivo and ex vivo measures of reversible effects. Turkish S, et al. **J Neural Transm** 1988;74(3):141–8

Platelet monoamine oxidase in Parkinson patients: effect of L–deprenyl therapy. Lee DH, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):189–94

Inhibition of monoamine oxidase within monoaminergic neurons in the rat brain by (E)–beta–fluoromethylene–m–tyrosine (MDL 72394). Fagervall I, et al. **J Neurochem** 1989 Feb;52(2):467–71

Mechanistic positron emission tomography studies: demonstration of a deuterium isotope effect in the monoamine oxidase–catalyzed binding of [11C]L–deprenyl in living baboon brain. Fowler JS, et al. **J Neurochem** 1988 Nov;51(5):1524–34

Oxidation of N–methyl–1,2,3,4–tetrahydroisoquinoline into the N–methyl–isoquinolinium ion by monoamine oxidase. Naoi M, et al. **J Neurochem** 1989 Feb;52(2):653–5

[3H]tryptamine binding sites are not identical to monoamine oxidase in rat brain. Perry DC, et al. **J Neurochem** 1988 Nov;51(5):1535–40

Deamination of hordenine by monoamine oxidase and its action on vasa deferentia of the rat. Barwell CJ, et al. **J Pharm Pharmacol** 1989 Jun;41(6):421–3

In–vivo effects of (E)–2–(3',4'–dimethoxyphenyl)–3–fluoroallylamine (MDL 72145) on amine oxidase activities in the rat. Selective inhibition of semicarbazide–sensitive amine oxidase in vascular and brown adipose tissues. Elliott J, et al. **J Pharm Pharmacol** 1989 Jan;41(1):37–41

Deamination of aliphatic amines of different chain lengths by rat liver monoamine oxidase A and B. Yu PH. **J Pharm Pharmacol** 1989 Mar;41(3):205–8

Potentiation of para–hydroxyamphetamine–induced head–twitch response by inhibition of monoamine oxidase type A in the brain. Tadano T, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):254–60

Structure–activity study of the mechanism of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP)–induced neurotoxicity. I. Evaluation of the biological activity of MPTP analogs. Youngster SK, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):820–8

Structure–activity study of the mechanism of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP)–induced neurotoxicity. II. Evaluation of the biological activity of the pyridinium metabolites formed from the monoamine oxidase–catalyzed oxidation of MPTP analogs. Youngster SK, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):829–35

Effect of diethylnitrosamine on monoamine oxidase in rat liver. Obata T, et al. **Jpn J Pharmacol** 1989 Jan;49(1):151–3

The depletion of rat cortical norepinephrine and the inhibition of [3H]norepinephrine uptake by xylamine does not require monoamine oxidase activity. Dudley MW. **Life Sci** 1988;43(23):1871–7

Monoamine oxidase inhibition: possible mechanism for cyproheptadine–induced alterations in insulin secretion. Feldman JM, et al. **Life Sci** 1974 Sep 15;15(6):1121–34

Interactions of monoamine oxidase with substrates and inhibitors. Dostert PL, et al. **Med Res Rev** 1989 Jan–Mar; 9(1):45–89 (312 ref.)

Interactions of tricyclic antidepressant drugs with human and rat monoamine oxidase type B. Reid AA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):678–83

Stress causes an increase in endogenous monoamine oxidase inhibitor (tribulin) in rat brain. Bhattacharya SK, et al. **Neurosci Lett** 1988 Oct 5;92(2):218–21

Effect of chronic oral nicotine on dopaminergic function in the MPTP–treated mouse. Sershen H, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):270–4

5–Hydroxytryptophan uptake and decarboxylating neurons in the cat hypothalamus. Denoyer M, et al. **Neuroscience** 1989;31(1):203–11

Interactions of the novel inhibitors of MAO–B Ro 19–6327 and Ro 16–6491 with the active site of the enzyme. Cesura AM, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:51–61

Characterization of MAO A and MAO B in human placental mitochondria by activity, immunoblotting and radioimmunoassay with monoclonal antibodies and active site labeling with 3H–pargyline. Denney RM, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:1–5

MPTP toxicity in relation to age, dopamine uptake and MAO–B activity in two rodent species. Jossan SS, et al. **Pharmacol Toxicol** 1989 Mar;64(3):314–8

Comparison of intra– and extrasynaptosomal monoamine oxidase–A and –B activities in the striatum and frontal cortex of two mice strains with different sensitivities to the neurotoxic actions of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine. Stenström A, et al. **Pharmacol Toxicol** 1989 Mar;64(3):276–81

Brain monoamine oxidase (MAO) B: a unique neurotoxin and neurotransmitter producing enzyme. Youdim MB. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):363–71 (41 ref.)

Age–dependent effects of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP): correlation with monoamine oxidase–B. Walsh SL, et al. **Synapse** 1989;3(4):308–14

Role of benzylamine oxidase in the cytotoxicity of allylamine toward aortic smooth muscle cells. Hysmith RM, et al. **Toxicology** 1988 Oct;51(2–3):133–45

[Activity of selected dehydrogenases and monoamine oxidases in the small intestine of gnotobiotic piglets infected with the coccidium Isospora suis] Kudweis M, et al. **Vet Med (Praha)** 1989 May;34(5):287–96 (Eng. Abstr.) **(Cze)**

[Catalytic biotransformation of physiologically active 1–methyl–4– aryl–1,2,3,6–tetrahydropyridines under the action of monoaminooxidase] Bachurin SO, et al. **Bioorg Khim** 1989 May;15(5):620–6 (Eng. Abstr.) **(Rus)**

[Protection of the monoamine oxidase in brain synaptosomes by fat– and water–soluble antioxidants during lipid peroxidation] Antipov AD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):169–71 (Eng. Abstr.) **(Rus)**

[Effect of adaptation to atmosphere exposure chamber hypoxia on various indicators of metabolism of biogenic amines in rats] Shatemirova KK, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):89–91 **(Rus)**

[Deamination of indolalkylamines in hyperthermia] Gureeva ZP. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):20–4 (Eng. Abstr.) **(Rus)**

[Brain monoamine oxidase and its inhibitors in gerontology (review of the literature)] Burchinbskii SG, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):2–9 (80 ref.) **(Rus)**

[Modification of the catalytic properties of highly purified bovine liver mitochondrial monoaminoxidase] Gorkin VZ, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):444–6 **(Rus)**

[The role of changes in catalytic properties of brain monoamine oxidase in the response to extreme conditions (review of the literature)] Goroshinskaia IA. **Vopr Med Khim** 1989 Mar–Apr;35(2):2–10 (68 ref.) (Eng. Abstr.) **(Rus)**

[The effect of bacterial endotoxin on the activity of liver mitochondria monoamine oxidase] Natanzon LV, et al. **Vopr Med Khim** 1989 May–Jun;35(3):58–9 (Eng. Abstr.) **(Rus)**

[Changes in catalytic properties of membrane–bound monoamine oxidases in alcoholic intoxication] Ovchinnikova LN, et al. **Vopr Med Khim** 1989 Mar–Apr; 35(2):124–8 (Eng. Abstr.) **(Rus)**

[Separate and combined action of antibiotics and vitamins on monoamine oxidase activity of the rabbit liver in staphylococcal infection] Tsyganenko AIa. **Vopr Med Khim** 1971 Jul–Aug;17(4):364–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Monoamine oxidase, brain ageing and degenerative diseases. Strolin Benedetti M, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):555–61 (62 ref.)

Ubiquitin is involved in the in vitro insertion of monoamine oxidase B into mitochondrial outer membranes. Zhaung ZP, et al. **J Biol Chem** 1989 Sep 5;264(25):14594–6

Monoamine oxidase B; a misunderstood and misjudged enzyme. Youdim MB, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:9–14 (16 ref.)

Role of endothelium–derived relaxing factor (EDRF) and monoamine oxidase (MAO) in the response of the bovine coronary artery to serotonin. Purdy RE, et al. **Proc West Pharmacol Soc** 1989;32:247

[Natural modulators of amine oxidases (review of the literature)] Ovchinnikova LN. **Vopr Med Khim** 1988 Nov–Dec;34(6):16–23 (55 ref.) **(Rus)**

RADIATION EFFECTS

[The effect of long–term exposure to gamma rays (6,7 Gy) on the activity of monoamine oxidase in the hypothalamus of sheep during the anestrus period] Pástorová B, et al. **Vet Med (Praha)** 1988 Dec;33(12):735–40 (Eng. Abstr.) **(Slo)**

MONOAMINE OXIDASE INHIBITORS

Monoamine oxidase inhibition as a sequel of hydrogen sulfide intoxication: increases in brain catecholamine and 5–hydroxytryptamine levels. Warenycia MW, et al. **Arch Toxicol** 1989;63(2):131–6

Inactivation of monoamine oxidase A by the monoamine oxidase B inactivators 1–phenylcyclopropylamine, 1–benzylcyclopropylamine, and N–cyclopropyl–alpha–methylbenzylamine. Silverman RB,

et al. **Biochemistry** 1988 Nov 1;27(22):8448–53

Inhibition of copper-containing amine oxidase by oximes. Hiraoka A, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3027–31

Isoelectric focusing of monoamine oxidase subtypes as identified by MAO inhibitors. Fritze J, et al. **Eur J Pharmacol** 1989 May 11;172(2):147–54

The effect of some tricyclic antidepressants on the inhibition of mouse brain monoamine oxidase in–vivo by phenelzine. Green AL, et al. **J Pharm Pharmacol** 1989 Jan;41(1):50–1

Monoamine oxidase inhibition: possible mechanism for cyproheptadine–induced alterations in insulin secretion. Feldman JM, et al. **Life Sci** 1974 Sep 15;15(6):1121–34

Inhibition of monoamine oxidase by analogues of amiloride. Palatý V, et al. **Mol Pharmacol** 1989 Aug;36(2):296–301

Selective inhibition by 4,alpha–dimethyl–m–tyramine (H77/77) and 4–methyl–alpha–ethyl–m–tyramine (H75/12) of the monoamine oxidase within serotonergic and noradrenergic neurons in the rat brain. Fagervall I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):143–7

[Studies on tropolone derivatives having monoamine oxidase inhibitory activity] Yamazaki M, et al. **Yakugaku Zasshi** 1988 Aug;108(8):754–7 (Eng. Abstr.) **(Jpn)**

[Unusual inhibition of monoamine oxidase activity induced by clorgyline] Pekkel' VA, et al. **Biokhimiia** 1988 Jul; 53(7):1224–9 (Eng. Abstr.) **(Rus)**

[Hypotensive effect and anti–monoaminoxidase activity of fluoronitrocarbonic acid hydrazides] Beznosko BK, et al. **Dokl Akad Nauk SSSR** 1989;304(2):461–4 **(Rus)**

ADMINISTRATION & DOSAGE

The relationship of human platelet density to platelet age: platelet population labeling by monoamine oxidase inhibition. Chamberlain KG, et al. **Blood** 1989 Apr; 73(5):1218–25

Anesthesia and monoamine oxidase inhibitors [letter] Gevirtz C. **JAMA** 1989 Jun 16;261(23):3407–8

ADVERSE EFFECTS

Monoamine oxidase inhibitor withdrawal phenomena: symptoms and pathophysiology. Dilsaver SC. **Acta Psychiatr Scand** 1988 Jul;78(1):1–7 (53 ref.)

Limitation and potential hazards of MAOI's for the treatment of depressive symptoms in abstinent alcoholics. Schottenfeld RS, et al. **Am J Drug Alcohol Abuse** 1989; 15(3):339–44

Severe daytime somnolence in patients treated with an MAOI. Teicher MH, et al. **Am J Psychiatry** 1988 Dec; 145(12):1552–6

Hypertensive crisis and broad complex bradycardia after a single dose of monoamine oxidase inhibitor. Gunn J, et al. **BMJ** 1989 Apr 8;298(6678):964

Neuroleptic malignant syndrome' without neuroleptics [letter] Brennan D, et al. **Br J Psychiatry** 1988 Apr; 152:578–9

Carbohydrate craving and increased appetite associated with antidepressant therapy. Yeragani VK, et al. **Can J Psychiatry** 1988 Oct;33(7):606–10

Monoamine oxidase inhibitors and weight gain. Cantú TG, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):755–9 (46 ref.)

Interaction between moclobemide and oral tyramine in depressed patients. Burgess CD, et al. **Fundam Clin Pharmacol** 1989;3(1):47–52

The monoamine oxidase inhibitor–tyramine interaction. Brown C, et al. **J Clin Pharmacol** 1989 Jun;29(6):529–32 (20 ref.)

MAOIs and hypertensive crises: the role of OTC drugs. Harrison WM, et al. **J Clin Psychiatry** 1989 Feb;50(2):64–5

Oral tyramine pressor test and the safety of monoamine oxidase inhibitor drugs: comparison of brofaromine and tranylcypromine in healthy subjects. Bieck PR, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):237–45

The safety of switching rapidly from tricyclic antidepressants to monoamine oxidase inhibitors. Kahn D, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):198–202

Acute cardiovascular response to monoamine oxidase inhibitors: a prospective assessment. Keck PE Jr, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):203–6

Management of monoamine oxidase inhibitor–associated insomnia with trazodone. Nierenberg AA, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):42–5

Danger of MAOI therapy after fluoxetine withdrawal [letter] Graham PM, et al. **Lancet** 1988 Nov 26;2(8622):1255–6

Food interacting with MAO inhibitors. **Med Lett Drugs Ther** 1989 Feb 10;31(785):11–2 (15 ref.)

Treatment of the cardiac–impaired depressed patient. Part I: General considerations, heterocyclic antidepressants, and monoamine oxidase inhibitors. Goldstein MG, et al. **Psychiatr Med** 1988;6(3):1–33 (163 ref.)

ANALYSIS

Identification of the phyto–oestrogen 3',7–dihydroxyisoflavan, an isomer of equol, in human urine and cow's milk. Bannwart C, et al. **Biomed Environ Mass Spectrom** 1988 Jul;17(1):1–6

[A new procedure for the determination of N–methylisoquinolinium ion, and its application] Ichinose T. **Nippon Eiken Kogaku Zasshi** 1989 Jun;56(3):218–23 (Eng. Abstr.) **(Jpn)**

BLOOD

Quantitative determination of brofaromin in human plasma after high performance liquid chromatographic separation. Horne C, et al. **Arch Pharm (Weinheim)** 1988 Jun; 321(6):359–61

CHEMICAL SYNTHESIS

Acetylenic and allenic derivatives of 2–(1–methylindolyl) methylamine as selective inhibitors of the monoamine oxidases A and B. Cruces MA, et al. **Farmaco [Sci]** 1988 Jul–Aug;43(7–8):567–73

ISOLATION & PURIFICATION

Endogenous monoamine oxidase inhibitor–like substances in monkey brain. Egashira T, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):597–602

Monoamine oxidase inhibitors from Cinchonae Cortex. Mitsui N, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):363–6

Chemistry and pharmacology of Gentiana lactea. Schaufelberger D, et al. **Planta Med** 1988 Jun;54(3):219–21

METABOLISM

Repeated (isolation) stress increases tribulin–like activity in the rat. Armando I, et al. **Cell Mol Neurobiol** 1989 Mar; 9(1):115–22

Determination of the new monoamine oxidase inhibitor brofaromine and its major metabolite in biological material by gas chromatography with electron–capture detection. Schneider W, et al. **J Chromatogr** 1989 Mar 17; 488(1):275–82

Stress causes an increase in endogenous monoamine oxidase inhibitor (tribulin) in rat brain. Bhattacharya SK, et al. **Neurosci Lett** 1988 Oct 5;92(2):218–21

Interactions of the novel inhibitors of MAO–B Ro 19–6327 and Ro 16–6491 with the active site of the enzyme. Cesura AM, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:51–61

Metabolism of monoamine oxidase inhibitors. Baker GB, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):395–403 (49 ref.)

[Brain monoamine oxidase and its inhibitors in gerontology (review of the literature)] Burchinbskiĭ SG, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):2–9 (80 ref.) **(Rus)**

[Natural modulators of amine oxidases (review of the literature)] Ovchinnikova LN. **Vopr Med Khim** 1988 Nov–Dec;34(6):16–23 (55 ref.) **(Rus)**

PHARMACOKINETICS

Disposition and metabolism of [14C]–amezinium metilsulfate in rats. Nambu K, et al. **Arzneimittelforschung** 1988 Jul; 38(7):909–18

Prediction of the in–vitro human skin permeability of nicorandil from animal data. Sato K, et al. **J Pharm Pharmacol** 1989 Jun;41(6):379–83

PHARMACOLOGY

QSAR of inhibition of monoamine oxidase by substituted phenylalkylamines in vitro and in various neurons in vivo. Mahmoudian M. **Acta Pharm Suec** 1988;25(3):151–62

Selective inactivation of MAO–B by benzyl–dimethyl–silyl–methanamines in vitro. Danzin C, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):540–4

Modification of vesicular dopamine and norepinephrine by monoamine oxidase inhibitors. Buu NT. **Biochem Pharmacol** 1989 May 15;38(10):1685–92

Comparative ex vivo inhibitory effects of (E)–2–(3,4–dimethoxyphenyl)–3–fluoroallylamine (MDL 72145) on amine oxidase activities in the rat. Lyles GA, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2937–40

Rediscovering monoamine oxidase inhibitors [letter; comment] **BMJ** 1989 Mar 11;298(6674):671. **Comment on:** BMJ 1989 Feb 11;298(6670):345–6

Inhibition of monoamine oxidase by moclobemide: effects on monoamine metabolism and secretion of anterior pituitary hormones and cortisol in healthy volunteers. Koulu M, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):243–55

The mechanism by which monoamine oxidase inhibitors give rise to a non–calcium–dependent component in the depolarization–induced release of 5–HT from rat brain synaptosomes. Evans SM, et al. **Br J Pharmacol** 1988 Nov; 95(3):950–6

The negative inotropic effect of nicorandil is independent of cyclic GMP changes: a comparison with pinacidil and cromakalim in canine atrial muscle. Yanagisawa T, et al. **Br J Pharmacol** 1988 Oct;95(2):393–8

Lesion–induced reductions in trace amine accumulation: dependence on MAO inhibitor pretreatment. Nguyen TV, et al. **Brain Res Bull** 1989 Feb;22(2):197–200

Monoamine oxidase inhibitors revisited. Wells DG, et al. **Can J Anaesth** 1989 Jan;36(1):64–74 (96 ref.)

Structure–activity relationship of a new series of tricyclic monoamine oxidase inhibitors of pentanthrene type. Kai M, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3604–8

Studies on the monoamine oxidase (MAO) inhibitory potency of TL–1, isolated from a fungus, Talaromyces luteus. Satoh Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):206–7

Monoamine oxidase inhibition by phenelzine and brofaromine in healthy volunteers. Bieck PR, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):260–9

[3H]Ro 19–6327: a reversible ligand and affinity labelling probe for monoamine oxidase–B. Cesura AM, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):457–65

Chronic MAO A and MAO B inhibition decreases the 5–HT1A receptor–mediated inhibition of forskolin–stimulated adenylate cyclase. Sleight AJ, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):255–61

Inhibition of guinea pig lordosis behavior by the phenylethanolamine N–methyltransferase (PNMT) inhibitor SKF–64139: mediation by alpha noradrenergic receptors. Feder HH, et al. **Horm Behav** 1989 Mar; 23(1):106–17

The novel neuropsychotropic agent milacemide is a specific enzyme–activated inhibitor of brain monoamine oxidase B. Janssens de Varebeke P, et al. **J Neurochem** 1989 Oct; 53(4):1109–16

In–vivo effects of (E)–2–(3',4'–dimethoxyphenyl)–3–fluoroallylamine (MDL 72145) on amine oxidase activities in the rat. Selective inhibition of semicarbazide–sensitive amine oxidase in vascular and brown adipose tissues. Elliott J, et al. **J Pharm Pharmacol** 1989 Jan;41(1):37–41

Comparative studies of the effects of RS–8359 and safrazine on monoamine oxidase in–vitro and in–vivo in mouse brain. Yokoyama T, et al. **J Pharm Pharmacol** 1989 Jan;41(1):32–6

Pharmacological profile of moclobemide, a short–acting and reversible inhibitor of monoamine oxidase type A. Burkard WP, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):391–9

Neurochemical profile of moclobemide, a short–acting and reversible inhibitor of monoamine oxidase type A. Da Prada M, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):400–14

Potentiation of para–hydroxyamphetamine–induced head–twitch response by inhibition of monoamine oxidase type A in the brain. Tadano T, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):254–60

Inhibition of monoamine oxidase by the fungicide metalaxyl. Naidu KA. **J Toxicol Environ Health** 1989;27(3):395–8

Ocular hypotensive effects of monoamine oxidase–A inhibitors in rabbit. Maeda I, et al. **Jpn J Ophthalmol** 1988; 32(2):211–8

Effect of diethylnitrosamine on monoamine oxidase in rat liver. Obata T, et al. **Jpn J Pharmacol** 1989 Jan;49(1):151–3

Monoamine oxidase inhibitory properties of milacemide in rats. Truong DD, et al. **Life Sci** 1989;44(15):1059–66

Interactions of monoamine oxidase with substrates and inhibitors. Dostert PL, et al. **Med Res Rev** 1989 Jan–Mar; 9(1):45–89 (312 ref.)

Release of 3H–5–hydroxytryptamine by amiflamine and related phenylalkylamines from rat occipital cortex slices. Ask AL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun;339(6):684–9

The effect of selective type A or type B monoamine oxidase inhibition on the intrasynaptosomal deamination of (3H)serotonin in rat spinal cord tissue. Azzaro AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):9–13

Reciprocal changes in striatal dopamine and beta–phenylethylamine induced by reserpine in the presence of monoamine oxidase inhibitors. Juorio AV, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):644–8

Effects of monoamine oxidase inhibitors on levels of catechols and homovanillic acid in striatum and plasma. Hovevey–Sion D, et al. **Neuropharmacology** 1989 Aug; 28(8):791–7

The effects of chronic treatment with amitriptyline and MDL 72394 on the control of 5–HT release in vivo. Sleight AJ, et al. **Neuropharmacology** 1989 May;28(5):477–80

Influence of some monoamine oxidase inhibitors on the sleep–wakefulness cycle of the cat. Oniani TN, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):301–6

Reversible, enzyme–activated monoamine oxidase inhibitors: new advances. Da Prada M, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:21–33

Disposition of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP) in mice before and after monoamine oxidase and catecholamine reuptake inhibition. Lydén–Sokolowski A, et al. **Pharmacol Toxicol** 1988 Aug;63(2):75–80

Protective effect of nicorandil on postischemic function and tissue adenine nucleotides following a brief period of low–flow global ischemia in the isolated perfused rat heart. Pieper GM, et al. **Pharmacology** 1989;38(4):205–13

The new generation of selective monoamine oxidase–inhibitors: biochemical, pharmacological and clinical perspectives. Riederer P, et al. **Pharmacopsychiatry** 1988 Nov;21(6):283–4

Design and early clinical evaluation of selective inhibitors of monoamine oxidase. Palfreyman MG, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):967–87

Nialamide–induced hypermotility in mice treated with inhibitors of monoamine uptake, 5–HT antagonists and lithium. Buus Lassen J. **Psychopharmacology (Berlin)** 1989; 98(2):257–61

Enhancement of 5–HT–induced anorexia: a test of the reversibility of monoamine oxidase inhibitors. Fletcher PJ, et al. **Psychopharmacology (Berlin)** 1989;98(2):265–8

Selective inhibition of MAO–A, not MAO–B, results in antidepressant–like effects on DRL 72–s behavior. Marek GJ, et al. **Psychopharmacology (Berlin)** 1988;96(2):153–60

Inhibition of monoamine oxidase by 3,4-dihydroxyphenyl l-alanine and its analogs. DeFeudis FV. **Rev Clin Basic Pharm** 1988 Jan-Dec;7(1-4):207-8

[Monoamine oxidase inhibition by pyrrole quinoline derivatives] Moskvitina TA, et al. **Biokhimiia** 1988 May; 53(5):714-20 (Eng. Abstr.) **(Rus)**

[Effect of monoamine oxidase inhibitors with a broad range of action on the structure and phase ratio of the wakefulness-sleep cycle in the cat] Akhvlediana GR, et al. **Neirofiziologiia** 1988;20(4):463-70 (Eng. Abstr.) **(Rus)**

POISONING

[Late arrhythmia after poisoning with MAO inhibitors] Launbjerg J, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):167-8 (Eng. Abstr.) **(Dut)**

THERAPEUTIC USE

MAO inhibitors: pharmacodynamic aspects and clinical implications. Larsen JK. **Acta Psychiatr Scand Suppl** 1988; 345:74-80 (19 ref.)

Rediscovering monoamine oxidase inhibitors [see comments] Bass C, et al. **BMJ** 1989 Feb 11;298(6670):345-6 (20 ref.)
. **Comment in:** BMJ 1989 Mar 11;298(6674):671

Determination and comparison of the pressor effect of tyramine during long-term moclobemide and tranylcypromine treatment in healthy volunteers. Berlin I, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):344-51

MAOIs in adolescent major depression unresponsive to tricyclic antidepressants [published erratum appears in J Am Acad Child Adolesc Psychiatry 1989 Jan;28(1):144] Ryan ND, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):755-8

Monoamine oxidase inhibitors in anxiety disorders. Tyrer P, et al. **J Psychiatr Res** 1988;22 Suppl 1:87-98 (51 ref.)

Atypical depression: is there a need for a better definition. Hardy JL. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):352-3 (17 ref.)

Tricyclic antidepressants and monoamine oxidase inhibitors in the treatment of panic disorder: brief review. Liebowitz MR. **Psychopharmacol Bull** 1989;25(1):17-20 (25 ref.)

Selective monoamine uptake inhibitors and a serotonin antagonist in the treatment of panic disorder. Westenberg HG, et al. **Psychopharmacol Bull** 1989;25(1):119-23

Big first scored with nerve diseases [news] Lewin R. **Science** 1989 Aug 4;245(4917):467-8

The effect of deprenyl (selegiline) on the natural history of Parkinson's disease. Tetrud JW, et al. **Science** 1989 Aug 4;245(4917):519-22

Panic disorder: diagnosis and treatment. O'Boyle M. **Tex Med** 1989 Aug;85(8):46-9

[Monoamine oxidase inhibitor in the treatment of attention deficit disorder of residual type. Apropos of a case] Parquet PJ, et al. **Encephale** 1988 Nov-Dec;14(6):439-41 (22 ref.) (Eng. Abstr.) **(Fre)**

[Experience using selective monoamine oxidase inhibitors in treating parkinsonism patients] Stoliarova LG, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):11-3 (Eng. Abstr.) **(Rus)**

TOXICITY

Investigations of amitraz neurotoxicity in rats. III. Effects on motor activity and inhibition of monoamine oxidase. Moser VC, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):12-22

Can disulfiram (Antabuse) be safely co-administered with the monoamine oxidase inhibitor (MAOI) antidepressants? Despite the ability of the major metabolite of disulfiram (diethyldithiocarbamate) to inhibit the enzyme dopamine beta-hydroxylase and a report of the induction in rats of central motor disturbances, convulsions, and death following the co-administration of tranylcypromine, there appears to be surprisingly little in the literature that directly addresses this question. Ciraulo DA. **J Clin Psychopharmacol** 1989 Aug;9(4):315-6

URINE

Urinary tribulin output in patients with panic attacks [letter] Norman TR, et al. **Br J Psychiatry** 1988 Feb;152:295-6

Some preliminary data about the properties of tribulin, an endogenous, benzodiazepine receptor binding inhibiting compound from human urine. Flechsenhar K, et al. **Pharmacopsychiatry** 1988 Nov;21(6):357-9

MONOAMINES, BIOGENIC see **BIOGENIC MONOAMINES**

MONOBACTAMS

CHEMICAL SYNTHESIS

Synthesis and in vitro antibacterial activity of a new series of monobactam derivatives. Valcavi U, et al. **Farmaco [Sci]** 1988 Jun;43(6):559-66

N-azamonobactams. 2. Synthesis of some N-iminoacetic acid and N-glycyl analogues. Curran WV, et al. **J Med Chem** 1989 Aug;32(8):1749-53

Synthesis of an analogue of tabtoxinine as a potential inhibitor of D-alanine:D-alanine ligase (ADP forming). Greenlee WJ, et al. **J Med Chem** 1989 Jan;32(1):165-70

METABOLISM

SHV-5, a novel SHV-type beta-lactamase that hydrolyzes broad-spectrum cephalosporins and monobactams. Gutmann L, et al. **Antimicrob Agents Chemother** 1989 Jun; 33(6):951-6

PHARMACOLOGY

New antibiotics: carbapenems, monobactams and quinolones. Amin NM. **Am Fam Physician** 1988 Oct;38(4):125-34 (24 ref.)

In-vitro activity of tigemonam, an oral monobactam, against gram-negative rods, including variants in beta-lactamase-production. Brown J, et al. **J Antimicrob Chemother** 1989 Feb;23(2):201-7

Inactivation of beta-lactamases from Enterobacter cloacae by monophosphams. Bush K, et al. **J Antimicrob Chemother** 1988 Dec;22(6):801-9

Comparative in-vitro activity of tigemonam, a new monobactam. Rylander M, et al. **J Antimicrob Chemother** 1988 Sep;22(3):307-13

[Antibacterial activities of monobactams against fresh clinical isolates] Deguchi K, et al. **Jpn J Antibiot** 1988 Nov; 41(11):1600-22 (Eng. Abstr.) **(Jpn)**

[Influence of human albumin on bactericidal or antibacterial activities of cephems and monobactams] Saionji K. **Jpn J Antibiot** 1988 Oct;41(10):1390-406 (Eng. Abstr.) **(Jpn)**

MONOBLASTIC LEUKEMIA, ACUTE see **LEUKEMIA, MONOCYTIC, ACUTE**

MONOCLONAL ANTIBODIES see **ANTIBODIES, MONOCLONAL**

MONOCLONAL GAMMOPATHIES see **PARAPROTEINEMIAS**

MONOCLONAL GAMMOPATHIES, BENIGN see under **HYPERGAMMAGLOBULINEMIA**

MONOCROTOPHOS see under **INSECTICIDES, ORGANOPHOSPHATE**

MONOCULAR VISION see **VISION, MONOCULAR**

MONOCYCLIC BETA-LACTAMS see **MONOBACTAMS**

MONOCYTES

Differential cell counting in fraction-collected milk from dairy cows. Ostensson K, et al. **Acta Vet Scand** 1988; 29(3-4):493-500

Monocytoid B-cell lymphoma: point on a spectrum [letter] Traweek ST, et al. **Am J Clin Pathol** 1988 Dec;90(6):748-9

Secretion of monocyte chemotactic activity by alveolar macrophages. Denholm EM, et al. **Am J Pathol** 1989 Sep; 135(3):571-80

Interleukin-1-beta gene expression in human monocytes and alveolar macrophages from normal subjects and patients with sarcoidosis. Kern JA, et al. **Am Rev Respir Dis** 1988 May;137(5):1180-4

Activation of tumoricidal properties in monocytes from cancer patients following intravenous administration of liposomes containing muramyl tripeptide phosphatidylethanolamine. Kleinerman ES, et al. **Cancer Res** 1989 Aug 15;49(16):4665-70

Circulating colony-forming units of granulocytes and monocytes/macrophages in systemic lupus erythematosus. López-Karpovitch X, et al. **Clin Exp Immunol** 1989 Jul; 77(1):43-6

Interleukin-1 promotes proliferation of vascular smooth muscle cells in coordination with PDGF or a monocyte derived growth factor. Bonin PD, et al. **Exp Cell Res** 1989 Apr;181(2):475-82

Monocytes in Hodgkin's disease. Sciborski R. **Folia Haematol (Leipz)** 1989;116(1):17-22 (44 ref.)

Selective proliferation of natural killer cells among monocyte-depleted peripheral blood mononuclear cells as a result of stimulation with staphylococcal enterotoxin B. Garcia-Peñarrubia P, et al. **Infect Immun** 1989 Jul; 57(7):2057-65

Human non-transformed monocyte-derived macrophage cell lines. Sechler JM, et al. **J Immunol Methods** 1989 May 12;119(2):277-85

Serum cholesterol-lowering activity of human monocytic colony-stimulating factor [letter] Motoyoshi K, et al. **Lancet** 1989 Aug 5;2(8658):326-7

Adoptive cancer immunotherapy utilizing lymphokine activated killer cells and gamma interferon activated killer monocytes. Lacerna LV Jr, et al. **Pharmacol Ther** 1988; 38(3):453-65 (89 ref.)

[Peripheral blood monocyte/macrophages among mononuclear cells and serum tumor necrosis factor in patients with Kawasaki disease] Matsubara T. **Arerugi** 1988 Jul;37(7):454-60 (Eng. Abstr.) **(Jpn)**

[Chronic myelomonocytic leukemia evolved from refractory anemia with excess of blasts, associated with karyotypic abnormality and marked monocytosis] Kadowaki N, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2145-51 (13 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

A nondenaturing vertical isoelectric focusing polyacrylamide slab gel system suitable for silver staining and electrophoretic blotting. Warlow RS, et al. **Anal Biochem** 1988 Dec;175(2):474-81

Zinc concentrations in pure populations of peripheral blood neutrophils, lymphocytes and monocytes. Goode HF, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):89-95

Monocyte antigen CD14 is a phospholipid anchored membrane protein. Simmons DL, et al. **Blood** 1989 Jan; 73(1):284-9

Differentiation-associated changes in the expression of chondroitin sulfate proteoglycan in induced U-937 cells. Kolset SO, et al. **Cancer Res** 1988 Nov 1;48(21):6103-8

Reduction in HLA-DR, HLA-DQ and HLA-DP expression by Leu-M3+ cells from the peripheral blood of patients with thermal injury. Gibbons RA, et al. **Clin Exp Immunol** 1989 Mar;75(3):371-5

Expression of functional cell surface C1-inactivator by U937 cells. Randazzo BP, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):463-77

Analysis of human lymphocyte protein expression. I. Identification of subpopulation markers by two-dimensional polyacrylamide gel electrophoresis. Willard-Gallo KE, et al. **Eur J Immunol** 1988 Sep; 18(9):1453-61

Identification of renin in resident alveolar macrophages and monocytes: HPLC and immunohistochemical study. Dezsö B, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):155-9

Four monoclonal antibodies, AMH-1, -2, -3, and -4, give varied reactivities with monocytes, alveolar macrophages, and epithelioid-cell granulomas. Akiyama J, et al. **J Clin Immunol** 1988 Sep;8(5):372-80

Purification and characterization of a novel monocyte chemotactic and activating factor produced by a human myelomonocytic cell line. Matsushima K, et al. **J Exp Med** 1989 Apr 1;169(4):1485-90

Elastase inhibitor. Characterization of the human elastase inhibitor molecule associated with monocytes, macrophages, and neutrophils. Remold-O'Donnell E, et al. **J Exp Med** 1989 Mar 1;169(3):1071-86

Evidence for the presence of angiotensins in normal, unstimulated alveolar macrophages and monocytes. Dezsö B, et al. **J Hypertens** 1989 Jan;7(1):5-11

Genomic structure of the human monocyte-derived neutrophil chemotactic factor IL-8. Mukaida N, et al. **J Immunol** 1989 Aug 15;143(4):1366-71

Alveolar macrophages differ from blood monocytes in human IL-1 beta release. Quantitation by enzyme-linked immunoassay. Wewers MD, et al. **J Immunol** 1989 Sep 1;143(5):1635-41

A rapid and quantitative method for the determination of interleukin-1 alpha and -beta mRNA expression in human monocytes and macrophages. Smith MF Jr, et al. **J Immunol Methods** 1989 Mar 31;118(2):265-72

Interferon-beta 2 (BSF-2) mRNA is expressed in human monocytes. Sanceau J, et al. **J Interferon Res** 1988 Aug; 8(4):473-81

Rat bone marrow and monocyte cultures: influence of culture time and lymphokines on the expression of macrophage differentiation antigens. Damoiseaux JG, et al. **J Leukoc Biol** 1989 Sep;46(3):246-53

Comparison of magnesium in human lymphocytes and mononuclear blood cells. Yang XY, et al. **Magnesium** 1989; 8(2):100-5

Tissue-specific expression and developmental regulation of the human fgr proto-oncogene. Ley TJ, et al. **Mol Cell Biol** 1989 Jan;9(1):92-9

The role of interstitial infiltrates in IgA nephropathy: a study with monoclonal antibodies. Alexopoulos E, et al. **Nephrol Dial Transplant** 1989;4(3):187-95

Monocyte procoagulant activity and membrane-associated D dimer after knee replacement surgery. Ollivier V, et al. **Thromb Res** 1989 Jul 15;55(2):179-85

State of hepatitis B virus DNA in peripheral blood mononuclear cells from persistently infected individuals: correlation with e antigen and viral DNA in the serum as well as with the activity of liver disease. Sugai Y, et al. **Tohoku J Exp Med** 1989 May;158(1):73-84

[Content of lysosomes and lipids in the cytoplasm of the blood monocytes in patients with ischemic heart disease] Freidlin IS, et al. **Kardiologiia** 1988 Aug;28(8):75-8 (Eng. Abstr.) **(Rus)**

[Lysosomal secretion of peripheral blood leukocytes in children with meningitis of mumps etiology] Babachenko IV, et al. **Pediatriia** 1988;(10):107 **(Rus)**

CLASSIFICATION

Plasmacytoid T cells. Immunohistochemical evidence for their monocyte/macrophage origin. Facchetti F, et al. **Am J Pathol** 1988 Oct;133(1):15-21

Glomerular T cell and monocyte populations in patients with IgA nephropathy. Tomino Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):221-6

Identification and quantification of subsets of mononuclear inflammatory cells in melanocytic and other human tumors. Nestor MS, et al. **Pigment Cell Res** 1987;1(1):22-7

Subpopulations of peripheral blood mononuclear cells are reliable for monitoring infiltrating mononuclear cells. Takahara S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1846-51

MLC and AMLR activate E-rosette negative T-CFC. Tice DG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):205-7

CYTOLOGY

Granulomonopoiesis and production of granulomonopoietic regulating factors in Hodgkin's disease and non-Hodgkin's lymphomas. López-Karpovitch X, et al. **Ann N Y Acad Sci** 1989;554:241-7

Preferential binding of monocytes and Leu 2+ T lymphocytes to interferon-gamma treated cultured skin endothelial cells and keratinocytes. Nickoloff BJ, et al. **Arch Dermatol Res** 1988;280(4):235-45

Proliferative response of peripheral blood mononuclear cells to autologous and allogeneic muscle in patients with polymyositis/dermatomyositis. Kalovidouris AE, et al. **Arthritis Rheum** 1989 Apr;32(4):446-53

Antiproliferative effects of methotrexate on peripheral blood mononuclear cells. Olsen NJ, et al. **Arthritis Rheum** 1989 Apr;32(4):378-85

Influence of probucol on early experimental atherogenesis in hypercholesterolemic rats. Shankar R, et al. **Atherosclerosis** 1989 Aug;78(2-3):91-7

Serum colony stimulating factors in patients undergoing bone marrow transplantation: enhancing effect of recombinant human GM-CSF. Geissler D, et al. **Behring Inst Mitt** 1988 Aug;(83):289-300

The role of Ca2+ and protein kinase C in the differentiation of HL-60 cells induced by 1 alpha,25(OH)2D3 and diltiazem. Taoka T, et al. **Biochem Int** 1989 Jun; 18(6):1193-201

Monocyte long-term cultivation on microvascular endothelial cell monolayers: morphologic and phenotypic characterization and comparison with monocytes cultured on tissue culture plastic. Schumann RR, et al. **Blood** 1989 Feb 15;73(3):818-26

Locomotion of white blood cells: a biophysical analysis. de Boisfleury-Chevance A, et al. **Blood Cells** 1989; 15(2):315-33

1,25-Dihydroxyvitamin D3, but not retinoic acid, induces the differentiation of U937 cells. Bhalla AK, et al. **Clin Exp Immunol** 1989 May;76(2):274-7

Origin and turnover of monocytes and macrophages. van Furth R. **Curr Top Pathol** 1989;79:125-50 (111 ref.)

Parathyroid hormone (PTH)-related protein is a potent stimulator of osteoclast-like multinucleated cell formation to the same extent as PTH in mouse marrow cultures. Akatsu T, et al. **Endocrinology** 1989 Jul;125(1):20-7

Monocytes enhance gamma-interferon-induced inhibition of myeloid progenitor cell growth through secretion of tumor necrosis factor. Cannistra SA, et al. **Exp Hematol** 1988 Nov; 16(10):865-70

Establishment and characterization of a granulocytic subclone (UM 384) from the monoblastic cell line U 937. Champelovier P, et al. **Exp Hematol** 1989 Aug;17(7):779-84

Evidence that precursor cells of monocytes and B-lymphocytes are closely related. Wong AK, et al. **Exp Hematol** 1989 Oct;17(9):968-73

Multiple effects of human recombinant interleukin 4 on human myeloid monocyte cell lines. Noma T, et al. **Immunol Lett** 1989 Jun 15;21(4):323-8

Monocyte migration into the subendothelial space of a coculture of adult human aortic endothelial and smooth muscle cells. Navab M, et al. **J Clin Invest** 1988 Dec; 82(6):1853-63

Monocyte-lymphocyte discrimination in a new microtitre-based adhesion assay. Bath PM, et al. **J Immunol Methods** 1989 Mar 10;118(1):59-65

Monocyte-to-macrophage transition in vitro. A systematic study using human cells isolated by fractionation on Percoll. Davies DE, et al. **J Immunol Methods** 1989 Mar 10;118(1):9-16

Platelet secretory products enhance LDL receptor activity and inhibit scavenger receptor activity in human monocyte derived macrophages. Aviram M. **Metabolism** 1989 May; 38(5):425-30

Identification of monocyte chemotactic activity produced by malignant cells. Graves DT, et al. **Science** 1989 Sep 29; 245(4925):1490-3

The correlation of mononuclear cell growth liver transplant biopsy cultures with histologic evidence of rejection and allograft dysfunction. Kolbeck PC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2394-6

Hyperacute allograft rejection mediated by anti-vascular endothelial cell antibodies with a negative monocyte crossmatch. Jordan SC, et al. **Transplantation** 1988 Oct; 46(4):585-7

[A method for isolation of human monocytes] Rose M, et al. **Kitasato Arch Exp Med** 1988 Sep;61(2-3):161-4 (Eng. Abstr.) **(Ger)**

[Differentiation pathways in the monocyte/macrophage system] Radzun HJ. **Verh Dtsch Ges Pathol** 1988;72:50-6 (49 ref.) (Eng. Abstr.) **(Ger)**

[In vitro granulomonocytopoiesis during and after treatment of acute lymphoblastic leukemia in children] León Moreno P, et al. **An Esp Pediatr** 1989 May;30(5):348-52 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Modulation of phenotypic and functional properties of human peripheral blood monocytes by interleukin-4 (IL-4). te Velde AA, et al. **Agents Actions** 1989 Jan;26(1-2):199-200

Nystatin stimulates prostaglandin E synthesis and formation of diacylglycerol in human monocytes. Wiegand R, et al. **Agents Actions** 1988 Jul;24(3-4):343-50

Interleukin-2-induced tumor necrosis factor-alpha (TNF-alpha) gene expression in human alveolar macrophages and blood monocytes. Strieter RM, et al. **Am Rev Respir Dis** 1989 Feb;139(2):335-42

Systemic effects of vitamin D. Reichel H, et al. **Annu Rev Med** 1989;40:71-8 (30 ref.)

Antibiotics and human monocyte function. II. Phagocytosis and oxidative metabolism. Nielsen H. **APMIS** 1989 May; 97(5):447-51

Cytokines in chronic inflammatory arthritis. III. Rheumatoid arthritis monocytes are not unusually sensitive to gamma-interferon, but have defective gamma-interferon-mediated HLA-DQ and HLA-DR induction. Bergroth V, et al. **Arthritis Rheum** 1989 Sep; 32(9):1074-9

Mechanism of cryoprotection by extracellular polymeric solutes. Takahashi T, et al. **Biophys J** 1988 Sep;54(3):509-18

Granulocyte-macrophage colony-stimulating factor (CSF) and multilineage CSF recruit human monocytes to express granulocyte CSF. Oster W, et al. **Blood** 1989 Jan;73(1):64-7

The effect of cyclosporine A on infection of susceptible cells by human immunodeficiency virus type 1. Wainberg MA, et al. **Blood** 1988 Dec;72(6):1904-10

Recombinant human granulocyte/macrophage colony-stimulating factor enhances monocyte cytotoxicity and secretion of tumor necrosis factor alpha and interferon in cancer patients. Wing EJ, et al. **Blood** 1989 Feb 15; 73(3):643-6

Differential effect of recombinant granulocyte macrophage colony-stimulating factor on human monocytes and alveolar macrophages. Thomassen MJ, et al. **Cancer Res** 1989 Aug 1;49(15):4086-9

Rapid effect of interferon-gamma on human monocyte chemiluminescence. Muto S, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1909-13

Endotoxin-induced procoagulant activity in equine peripheral blood monocytes. Henry MM, et al. **Circ Shock** 1988 Nov;26(3):297-309

Interferon-gamma treatment increases HLA-DR expression on monocytes in severely injured patients. Hershman MJ, et al. **Clin Exp Immunol** 1989 Jul;77(1):67-70

1,25-Dihydroxyvitamin D3 (calcitriol) suppresses concanavalin A-stimulated human T cell proliferation through monocytes. Haq AU. **Clin Immunol Immunopathol** 1989 Mar;50(3):364-73

Assay of pyrogenic contamination in pharmaceuticals by cytokine release from monocytes. Poole S, et al. **Dev Biol Stand** 1988;69:121-3

Glycosylation of human leukocyte locus A molecules is dependent on the cell type. Merlu B, et al. **Eur J Biochem** 1989 May 15;181(3):755-60

Effect of therapeutic concentrations of anthracyclines on monocyte phagocytosis of yeast cells. Athlin L, et al. **Eur J Clin Pharmacol** 1989;36(2):155-9

Retinoic acid regulates IgG Fc receptor expression in human myelomonocytic leukemia cells and normal peripheral monocytes. Nakamura T, et al. **Eur J Haematol** 1988 Sep; 41(3):258-66

Increased endocytosis and formation of multivesicular bodies in phorbol ester-stimulated human monoblastic U-937 cells. Nilsson M, et al. **Exp Cell Res** 1989 Apr;181(2):551-65

Interactions of formylmethionyl-leucyl-phenylalanine, adenosine, and phosphodiesterase inhibitors in human monocytes. Effects on superoxide release, inositol phosphates and cAMP. Elliott KR, et al. **FEBS Lett** 1989 Aug 28;254(1-2):94-8

Bile acids inhibit endotoxin-induced release of tumor necrosis factor by monocytes: an in vitro study. Greve JW, et al. **Hepatology** 1989 Oct;10(4):454-8

Control by IFN-gamma and PGE2 of TNF alpha and IL-1 production by human monocytes. Hart PH, et al. **Immunology** 1989 Mar;66(3):376-83

Effect of protein kinase C inhibitor (H-7) and calmodulin antagonist (W-7) on pertussis toxin-induced IL-1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL-1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210-5

Monocyte locomotion in anergic chronic brucellosis patients: the in vivo effect of ascorbic acid. Boura P, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):119-29

Effect of platelet-activating factor on monocyte activation and production of tumor necrosis factor. Bonavida B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):157-60

Modulation of lymphocyte and monocyte responses in vitro by 9-deoxy-delta 9-prostaglandin D2 and 9-deoxy-delta 9-delta 12-prostaglandin D2. Petrini B, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):388-91

Inhibition of monocyte IL-1 production by the anti-inflammatory compound, SK&F 86002. Lee JC, et al. **Int J Immunopharmacol** 1988;10(7):835-43

Opposite effects of amines on lymphocyte- and monocyte-mediated ADCC. Serebrinsky G, et al. **Int J Immunopharmacol** 1988;10(5):555-61

Modulation by suramin of NK and monocytic cell-mediated cytotoxicity in human and murine cells. Zhang HX, et al. **Int J Immunopharmacol** 1988;10(6):695-707

Differential induction of monocytic functions by dibutyryl cyclic AMP and retinoic acid in a human monoblast cell line U937. Gavison R, et al. **Isr J Med Sci** 1988 Dec; 24(12):697-701

Effects of retinoic acid and phorbol ester on lymphocytes and monocytes in B-lymphocytic leukemia. Polliack A, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9-10):522-32

Activity of ciprofloxacin against Escherichia coli phagocytosed by monocytes and macrophages [letter] Burgaleta C, et al. **J Antimicrob Chemother** 1989 Mar; 23(3):460-2

Tumor-promoting phorbol esters inhibit monocyte adherence to endothelial cells. Kamp DW, et al. **J Appl Physiol** 1989 Jan;66(1):437-42

Effects of coumarin (1,2-benzopyrone) and cimetidine on peripheral blood lymphocytes, natural killer cells, and monocytes in patients with advanced malignancies. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):62-9

Effects of coumarin (1,2-benzopyrone) on lymphocyte, natural killer cell, and monocyte functions in vitro. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):70-85

Effects of estrogen in vivo and in vitro on spontaneous interleukin-1 release by monocytes from postmenopausal women. Stock JL, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):364-8

Inhibition of interleukin-1 production by 1,25-dihydroxyvitamin D3. Tsoukas CD, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):127-33

Effect of a marine toxin on human peripheral blood monocytes. Hokama Y, et al. **J Clin Lab Anal** 1989; 3(4):215-21

Monocyte activating factor originally found in sarcoidosis sera. I. Production of a similar factor by monocytes pretreated with interleukin 1. Baba T, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):497-502

Effects of 1,25 dihydroxyvitamin D3 on leukocyte function in patients receiving chronic hemodialysis. Venezio FR, et al. **J Infect Dis** 1988 Nov;158(5):1102-5

Prostaglandin E2 and thromboxane B2 release from human monocytes treated with bacterial lipopolysaccharide. Nichols FC, et al. **J Leukoc Biol** 1988 Nov;44(5):376-84

1,25-dihydroxyvitamin D3 induces responsiveness to the chemotactic peptide f-Met-Leu-Phe in the human monocytic line U937: dissociation between calcium and oxidative metabolic responses. Polla BS, et al. **J Leukoc Biol** 1989 May;45(5):381-8

Influence of nicotine on monocyte phenotype and function. Ziegler-Heitbrock HW, et al. **Klin Wochenschr** 1988;66 Suppl 11:114-6

Effects of botulinum toxin type D on secretion of tumor necrosis factor from human monocytes. Imamura K, et al. **Mol Cell Biol** 1989 May;9(5):2239-43

Effects of calcitonin gene-related peptide (CGRP), neurokinin A and neurokinin A (4-10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354-8

Vasoactive intestinal peptide inhibits the respiratory burst in human monocytes by a cyclic AMP-mediated mechanism. Wiik P. **Regul Pept** 1989 May;25(2):187-97

Effects of D-penicillamine on mononuclear cells in vitro. Riestra JL, et al. **Rheumatol Int** 1988;8(3):119-24

Recombinant human tumour necrosis factor beta (lymphotoxin) lacks chemotactic activity for human peripheral blood neutrophils, monocytes, and T cells. Mrowietz U, et al. **Scand J Immunol** 1989 Sep;30(3):373-7

Naloxone-reversible monocyte dysfunction in patients with chronic fatigue syndrome. Prieto J, et al. **Scand J Immunol** 1989 Jul;30(1):13-20

Opioid peptides modulate the organization of vimentin filaments, phagocytic activity, and expression of surface molecules in monocytes. Prieto J, et al. **Scand J Immunol** 1989 Apr;29(4):391-8

The effect of gamma interferon on interleukin 1 release of human monocytes. Dependence on the activating agent and correlation to the mRNA levels. Sihvola M, et al. **Scand J Immunol** 1989 Jun;29(6):689-98

Immunopharmacologic effects of immunosuppressive agents explored by a new effector monocyte generation assay. Ishibashi M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1854-8

The influence of thyroid hormones on colony growth of peripheral CFU-GM from normal and leukemic subjects. Notario A, et al. **Tumori** 1988 Oct 31;74(5):507-12

[Effects of ketoconazole on the immune system: IV. In vitro effects on monocyte function] Claus R, et al. **Mycoses** 1988 Jun;31(6):303-12 (Eng. Abstr.) **(Ger)**

[Effect of anabol on the functional activity indices of mononuclear phagocytes] Khlopovskaia EI, et al. **Antibiot Khimioter** 1988 Jul;33(7):524-7 (Eng. Abstr.) **(Rus)**

[Effect of antibiotics on the secretion and percentage yield of lysozyme from human blood monocytes] Sharonov AS. **Antibiot Khimioter** 1988 Jul;33(7):515-8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

A case of acute monocytic leukemia with lysozyme-positive leukemic monocytes and normal serum lysozyme levels. Pawel B, et al. **Acta Haematol (Basel)** 1989;81(2):101-3 (9 ref.)

Cytochemical localization of arylsulfatase in guinea-pig Kurloff cells. Buat ML, et al. **Acta Histochem (Jena)** 1988;

84(2):211–5
Phospholipase A2 of human monocytes with molecular weight of 73 kD induces the production of prostaglandin derivatives and leukotriene B4 in the suspension of human neutrophil granulocytes. Sipka S, et al. **Acta Paediatr Hung** 1988–89;29(1–2):51–3
Organophosphate exposure inhibits non-specific esterase staining in human blood monocytes. Mandel JS, et al. **Am J Ind Med** 1989;15(2):207–12
Expression of prostaglandin H synthase (cyclooxygenase) in Hodgkin's mononuclear and Reed–Sternberg cells. Functional resemblance between H-RS cells and histiocytes or interdigitating reticulum cells. Hsu SM, et al. **Am J Pathol** 1988 Oct;133(1):5–12
Phorbol ester activation of phospholipase D in human monocytes but not peripheral blood lymphocytes. Kinsky SC, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):788–93
Adenosine diphosphate ribosyl transferase responses to a standardized dose of hydrogen peroxide in the mononuclear leukocytes of patients with a diagnosis of cancer. Pero RW, et al. **Carcinogenesis** 1989 Sep;10(9):1657–64
An in vitro model for the induction of angiotensin-converting enzyme in sarcoidosis: possible parallels to the immune response. Vuk-Pavlović Z, et al. **Clin Exp Immunol** 1988 Jun;72(3):499–504
Subcellular localization and kinetic properties of phosphatidylinositol 4,5-bisphosphate phospholipase C and inositol phosphate enzymes from human peripheral blood mononuclear cells. Graber R, et al. **Enzyme** 1989; 41(1):17–26
Cathepsin D-like activity in neutrophils and monocytes. Levy J, et al. **Infect Immun** 1989 May;57(5):1632–4
Human mononuclear cells and neutral proteinases. III. Neutral proteinases and rheumatoid arthritis: monocytes as a source of cathepsin G and proteinase potentiation of IgM rheumatoid factor elaboration. Panush RS. **Inflammation** 1989 Jun;13(3):359–66
Enzyme histochemistry of monocytes/macrophages: a study in a murine model of immune complex-mediated glomerulonephritis. Iskandar SS, et al. **J Histochem Cytochem** 1989 Jan;37(1):25–9
Transcellular lipoxygenase metabolism between monocytes and platelets. Bigby TD, et al. **J Immunol** 1989 Sep 15; 143(6):1948–54
Modulation of urokinase-type plasminogen activator and plasminogen activator inhibitor-2 expression by U-937 mononuclear phagocytes. Effects of 1 alpha, 25-dihydroxyvitamin D3 and phorbol ester. Gyetko MR, et al. **J Immunol** 1988 Oct 15;141(8):2693–8
Interferon-induced indoleamine 2,3-dioxygenase activity in human mononuclear phagocytes. Carlin JM, et al. **J Leukoc Biol** 1989 Jan;45(1):29–34
Characteristics of monocyte angiotensin-converting enzyme (ACE) induction by dexamethasone. Vuk-Pavlović Z, et al. **J Leukoc Biol** 1989 Jun;45(6):503–9
Regulation of monocyte/macrophage collagenase. Wahl LM, et al. **J Oral Pathol** 1988 Nov;17(9–10):452–5 (43 ref.)
Retroviruses in human breast cancer: detection of reverse transcriptase in human monocytes. al-Sumidaie AM, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):151–3
Simultaneous presence of platelet activating factor, leukotriene B4, prostaglandin F1 alpha and F2 alpha in the supernatant of human neutrophils treated with phospholipase A2 of human monocytes. Sipka S, et al. **Klin Wochenschr** 1989 Feb 1;67(3):123–5
Bezafibrate inhibits HMG-CoA reductase activity in incubated blood mononuclear cells from normal subjects and patients with heterozygous familial hypercholesterolaemia. Blasi F, et al. **Pharmacol Res** 1989 May–Jun;21(3):247–54
Identification of a monocyte specific pre-interleukin 1 beta convertase activity. Kostura MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5227–31
Human mononuclear phagocyte transglutaminase activity cross-links fibrin. Conkling PR, et al. **Thromb Res** 1989 Jul 1;55(1):57–68
[Enzymatic spectrum of the lysosomal system of granulocytes and mononuclear phagocytes in the blood of young children with acute pneumonia] Faĭziev KhN. **Pediatriia** 1989;(2):110–1 **(Rus)**
[Cholesterol esterase activity of blood monocytes and the main risk factors of ischemic heart disease in men aged 20–59] Gaponova MV, et al. **Ter Arkh** 1988;60(9):102–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Plasma and leukocytic bactericidal activity in the course of chemotherapy of Hodgkin's disease. Wysocka J, et al. **Acta Med Pol** 1987;28(1–4):99–107
The response of peripheral blood mononuclear cells of glioma-bearing patients to stimulation with microbial antigen and IL-2: proliferation and IFN-gamma production. Maleci A, et al. **Acta Neurochir Suppl (Wien)** 1988;43:130–4
Interaction between cell wall synthesis inhibitors and human granulocytes and monocytes. van den Broek PJ, et al. **Acta Paediatr Hung** 1988–89;29(1–2):163–5
Antigen presentation by monocytes of CGD-patients and by phenylbutazone treated monocytes of normal peripheral blood. Zegers BJ, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):55–7
Dysfunction of the monocyte-macrophage system in the idiopathic minimal change nephrotic syndrome. Estevez ME, et al. **Acta Paediatr Scand** 1989 Jan;78(1):87–93
Monocyte defect causes decreased autoMLR in multiple sclerosis patients. Baxevanis CN, et al. **Adv Exp Med Biol** 1988;237:839–42
HIV infection of monocytic cells: rôle of antibody-mediated virus binding to Fc-gamma receptors. Jouault T, et al. **Aids** 1989 Mar;3(3):125–33
Correlation between lymphocyte and monocyte function in patients with chronic non-A, non-B hepatitis [letter] Castilla A, et al. **Am J Gastroenterol** 1989 Aug;84(8):978
Host defense response to cytomegalovirus in the central nervous system. Predominance of the monocyte. Booss J, et al. **Am J Pathol** 1989 Jan;134(1):71–8
Neutral-red uptake and expression of monocytic antigens in amniotic-fluid mononuclear phagocytes: evaluation of a novel approach for prenatal diagnosis of neural-tube defects. Polgár K, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):81–6
Correlation between B-cell mitogenicity and immunosuppressor effects of a protein released by porcine monocytes infected with African swine fever virus. Arala-Chaves MP, et al. **Am J Vet Res** 1988 Nov; 49(11):1955–61
Fatty acids, platelets and monocytes. Something to do with atherogenesis. Osterud B, et al. **Ann Med** 1989 Feb; 21(1):47–51
Production of interleukin 1 by activated blood monocytes and alveolar macrophages from melanoma patients. Arnould R, et al. **Anticancer Res** 1988 Jul–Aug;8(4):775–9
Increased relative frequency of suppressor monocytes in peripheral blood in early pregnancy. Bjercke S, et al. **APMIS** 1989 Feb;97(2):125–30
Engulfment of the Philadelphia strain of Legionella pneumophila within pseudopod coils in human phagocytes. Comparison with other Legionella strains and species. Rechnitzer C, et al. **APMIS** 1989 Feb;97(2):105–14
Shedding of Fc receptor from mononuclear cells and their ability of binding IgG1 and IgG3 anti-Rh/D antibodies. Maślanka K, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(1):15–22
Depressed interferon gamma production and monocyte HLA-DR expression after severe injury. Livingston DH, et al. **Arch Surg** 1988 Nov;123(11):1309–12
Phagocytosis of herpes simplex virus by human granulocytes and monocytes. Van Strijp JA, et al. **Arch Virol** 1989; 104(3–4):287–98
Expression and regulation of the HLA-DR antigen on circulating monocytes isolated from patients with rheumatoid arthritis. Hassan J, et al. **Arthritis Rheum** 1989 Jun;32(6):682–90
Antibodies against monocytes and endothelial cells in the sera of patients with atherosclerotic peripheral arterial disease. D'Anastasio C, et al. **Atherosclerosis** 1988 Nov; 74(1–2):99–105
IL1/ETAF activity and undetectable IL1 beta mRNA and minimal IL1 alpha mRNA levels in normal adult heat-separated epidermis. Demczuk S. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):463–9
Secretion, cleavage and binding of complement component C3 by the human monocytic cell line U937. Maison CM, et al. **Biochem J** 1989 Jul 15;261(2):407–13
Polyclonal IgG synthesis of mononuclear cells induced by the homopolymer of 4,6-dideoxy-4-formamido-alpha-D-mannopyranosyl units isolated from Brucella melitensis. Montag T, et al. **Biomed Biochim Acta** 1988;47(6):537–42
Susceptibility of monocytes to lymphokine-activated killer cell lysis: effect of granulocyte-macrophage colony-stimulating factor and interleukin-3. Djeu JY, et al. **Blood** 1989 Apr;73(5):1264–71
Enhancement of in vitro beta-thalassemic and normal hematopoiesis by a noncytotoxic monoclonal antibody, 9.1C3: evidence for negative regulation of hematopoiesis by monocytes and natural killer cells. Kannourakis G, et al. **Blood** 1988 Oct;72(4):1124–33
Monocyte-dependent, serum-borne suppressor of induction of lymphokine-activated killer cells in lymphocytes from melanoma patients. Itoh K, et al. **Cancer Immunol Immunother** 1989;29(1):57–62
Granulocyte-monocyte-colony-stimulating factor augments the cytotoxic capacity of lymphocytes and monocytes in antibody-dependent cellular cytotoxicity. Masucci G, et al. **Cancer Immunol Immunother** 1989;29(4):288–92
Induction of human monocyte susceptibility to lymphokine-activated killer cell lysis by granulocyte-macrophage colony-stimulating factor. Blanchard DK, et al. **Cancer Res** 1989 Sep 15; 49(18):5037–43
Lymphokine-activated killer (LAK) and monocyte-mediated cytotoxicity on tumor cell lines resistant to antitumor agents. Allavena P, et al. **Cell Immunol** 1989 Apr 15; 120(1):250–8
Lysis of mycobacteria-infected monocytes by IL-2-activated killer cells: role of LFA-1. Blanchard DK, et al. **Cell Immunol** 1989 Apr 1;119(2):402–11
Surface phenotype of rat bone marrow-derived mononuclear phagocytes. Keller R, et al. **Cell Immunol** 1989 Apr 15; 120(1):277–85
Modulation of interferon-gamma-induced major histocompatibility (MHC) and CD14 antigen changes by lipophilic muramyltripeptide MTP-PE in human monocytes. Landmann R, et al. **Cell Immunol** 1988 Nov; 117(1):45–55
Macrophage colony-stimulating factor enhances monocyte and macrophage antibody-dependent cell-mediated cytotoxicity. Mufson RA, et al. **Cell Immunol** 1989 Mar; 119(1):182–92
Cell surface tumor necrosis factor (TNF) accounts for monocyte- and lymphocyte-mediated killing of TNF-resistant target cells. Peck R, et al. **Cell Immunol** 1989 Aug;122(1):1–10
Regulation of Fc epsilon receptor 2 (CD23) expression on a human eosinophilic cell line EoL3 and a human monocytic cell line U937 by transforming growth factor beta. Tanaka M, et al. **Cell Immunol** 1989 Aug; 122(1):96–107
Phenotype of blood monocytes and alveolar macrophages in interstitial lung disease. Hoogsteden HC, et al. **Chest** 1989 Mar;95(3):574–7
Chemiluminescence and antibody-dependent, cell-mediated cytotoxicity between human alveolar macrophages and peripheral blood monocytes in smokers, nonsmokers, and lung cancer patients. Lin CC, et al. **Chest** 1989 Mar; 95(3):553–7
Defective interleukin-1 production in a familial monocyte disorder with a combined abnormality of mobility and phagocytosis-killing. Komiyama A, et al. **Clin Exp Immunol** 1988 Sep;73(3):500–4
Accessory cell heterogeneity in lepromatous leprosy; dendritic cells and not monocytes support T cell responses. Mittal A, et al. **Clin Exp Immunol** 1989 May;76(2):233–9
Production of tumour necrosis factor and interleukin 1 by monocytes of patients with previous Yersinia arthritis. Repo H, et al. **Clin Exp Immunol** 1988 Jun;72(3):410–4
Accessory cell activity of monocytes in anti-DNA antibody production in systemic lupus erythematosus. Sasaki T, et al. **Clin Exp Immunol** 1989 Jul;77(1):37–42
Suppression of human monocyte interleukin 1 production by the plant alkaloid tetrandrine. Seow WK, et al. **Clin Exp Immunol** 1989 Jan;75(1):47–51
Circulating monocyte migration inhibitory factor in serum of Graves' ophthalmopathy patients: a parameter for disease activity? van der Gaag R, et al. **Clin Exp Immunol** 1989 Feb;75(2):275–9
Monocyte function in systemic lupus erythematosus. Boswell J, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):271–8
Inhibition of neutrophil and monocyte functions by the monoclonal antibody TM2. Takeuchi A, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):439–49
The chemiluminescent response of human monocytes to red cells sensitized with monoclonal anti-Rh(D) antibodies. Hadley AG, et al. **Clin Lab Haematol** 1988;10(4):377–84
Juvenile rheumatoid arthritis. Monocyte dysfunction in selected patients. Marek-Szydlowska T, et al. **Clin Pediatr (Phila)** 1988 Nov;27(11):551–6
The monoclonal antibody CVI-ChNL-68.1 recognizes cells of the monocyte-macrophage lineage in chickens. Jeurissen SH, et al. **Dev Comp Immunol** 1988 Fall;12(4):855–64
Phagocytotic activity of monocytes from diabetic patients. Katz S, et al. **Diabetes Care** 1983 Sep–Oct;6(5):479–82
Phenotypic characterization of inflammatory cells in phlyctenular eye disease. abu el-Asrar AM, et al. **Doc Ophthalmol** 1988 Dec;70(4):353–62
Monocyte C1-inhibitor synthesis in patients with C1-inhibitor deficiency. Lappin DF, et al. **Eur J Clin Invest** 1989 Feb;19(1):45–52
Contribution of granulocytes and monocytes to resistance against experimental disseminated Candida albicans infection. van 't Wout JW, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):736–41
B lymphocyte function in multiple myeloma: analysis of T cell- and monocyte-dependent antibody production. Petersen J, et al. **Eur J Haematol** 1989 Feb;42(2):193–201
Characterization of a novel myeloid antigen regulated during differentiation of monocytic cells. Cabañas C, et al. **Eur J Immunol** 1989 Aug;19(8):1373–8
Identification of a novel monocyte cell surface molecule involved in the generation of antigen-induced proliferative responses. Dougherty GJ, et al. **Eur J Immunol** 1988 Dec; 18(12):2067–71
Monoclonal antibody 5.5 reacts with p8,14, a myeloid molecule associated with some vascular endothelium. Hogg N, et al. **Eur J Immunol** 1989 Jun;19(6):1053–61
Ly-6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon-gamma. Jutila MA, et al. **Eur J Immunol** 1988 Nov;18(11):1819–26
Identification of a human monocyte antigen (Mo3e) associated with cellular activation and lymphokine responsiveness. Liu DY, et al. **Eur J Immunol** 1989 Apr; 19(4):721–7
Ciamexone suppressed anti-islet ADCC of mononuclear cells and serum from type 1 (insulin-dependent) diabetic patients. Köhler E, et al. **Exp Clin Endocrinol** 1989 May; 93(2–3):143–6
Evaluation of Fc-dependent monocyte-macrophage function in bone marrow transplant recipients. Brochu S, et al. **Exp Hematol** 1989 Oct;17(9):948–51
A multiple-staining ultrastructural procedure simultaneously detecting three membrane antigens on suspended cells by monoclonal antibodies and pre-embedding immunogold labelling. De Panfilis G, et al. **Histochem J** 1989 Mar; 21(3):136–44

Genetics of two human monocyte antigens. Jager MJ, et al. **Hum Immunol** 1988 Jul;22(3):163–70

The monoclonal antimonocyte antibody My4 stains B lymphocytes and two distinct monocyte subsets in human peripheral blood. Ziegler-Heitbrock HW, et al. **Hybridoma** 1988 Dec;7(6):521–7

Expression of the VEP13 antigen (CD16) on native human alveolar macrophages and cultured blood monocytes. Baumgartner I, et al. **Immunobiology** 1988 Jul;177(3):317–26

The effect of interleukin 2 on Fc-gamma receptor function of human monocytes requires specific intercellular interaction. Ennen J, et al. **Immunobiology** 1989 Mar; 179(1):17–32

Failure of hydrocortisone to suppress the interferon-gamma-induced augmentation of interleukin 1 secretion of aged human monocytes. Haq AU. **Immunobiology** 1988 Jul;177(3):245–53

Functional properties of a novel neutrophil chemotactic factor derived from human monocytes. Kownatzki E, et al. **Immunobiology** 1988 Sep;177(4–5):352–62

Impairment of monocyte functions in advanced head and neck cancer. Garraud O, et al. **Immunol Lett** 1988 Jul; 18(3):213–8

Detection of antibodies to the antigens involving differentiation of myeloid cells in sera from patients with systemic lupus erythematosus. Kitagawa H, et al. **Immunol Lett** 1989 Jun 1;21(3):227–35

Effects of colony stimulating factors on the interaction of monocytes and the human immunodeficiency virus. Meltzer MS, et al. **Immunol Lett** 1988 Nov;19(3):193–8

Expression of the binding molecules for factor B and its fragment, Bb, of human complement on human monocytes after in vitro cultivation. Saeki T, et al. **Immunol Lett** 1989 Jan 31;20(2):97–101

Human monocyte activation induced by an anti-CD14 monoclonal antibody. Schütt C, et al. **Immunol Lett** 1988 Dec;19(4):321–7

Immunoregulation of lymphoproliferation in vitro by monocytes and their subpopulations. I. The induction of suppressor T cells in long term cultures and the role of MHC class II determinants and preliminary characteristics. Zembala M, et al. **Immunol Lett** 1988 Aug;18(4):275–80

Suppression of monocyte functions by human cytomegalovirus. Buchmeier NA, et al. **Immunology** 1989 Feb;66(2):278–83

Acute inflammatory effects of a monocyte-derived neutrophil-activating peptide in rabbit skin. Foster SJ, et al. **Immunology** 1989 Jun;67(2):181–3

Phagocytosis of heat-killed blastospores of Candida albicans by human monocyte beta-glucan receptors. Janusz MJ, et al. **Immunology** 1988 Oct;65(2):181–5

Abnormal T-cell activation in chronic hepatitis B viral infection: a consequence of monocyte dysfunction? Nouri-Aria KT, et al. **Immunology** 1988 Aug;64(4):733–8

Enhanced human monocyte cytotoxicity by platelet-activating factor. Valone FH, et al. **Immunology** 1988 Aug;64(4):715–8

Studies on the monocyte dependence of T-cell proliferation induced by monoclonal antibodies directed against regions I and II of the CD2 antigen. van Lier R, et al. **Immunology** 1989 Jul;67(3):333–8

Differences between the activities of human monoclonal IgG1 and IgG3 anti-D antibodies of the Rh blood group system in their abilities to mediate effector functions of monocytes. Wiener E, et al. **Immunology** 1988 Oct; 65(2):159–63

The inhibitory effects of prednisone, 16-methylen-prednisolone, and ACTH on con-A induced lymphokines (interferon-γ) as measured by the chemiluminescence-activity of blood monocytes. Hammann KP, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):463–78

Phagocytic function of monocytes in murine model of Echinococcus granulosus of human origin. Wangoo A, et al. **Indian J Med Res** 1989 Jan;89:40–2

Inhibition of Chlamydia trachomatis replication in HEp-2 cells by human monocyte-derived macrophages. Manor E, et al. **Infect Immun** 1988 Dec;56(12):3280–4

Effect of immunoglobulin M from normal human serum on Leishmania donovani promastigote agglutination, complement-mediated killing, and phagocytosis by human monocytes. Navin TR, et al. **Infect Immun** 1989 Apr; 57(4):1343–6

Influence of monoclonal IgM cold agglutinins on adhesiveness, phagocytosis, and bactericidal activity on human granulocytes and monocytes. Pruzanski W, et al. **Inflammation** 1989 Apr;13(2):201–9

Monocyte/macrophage-directed antibodies Ki-M3 and Ki-M7 detect renal-cell carcinomas. Kaiser U, et al. **Int J Cancer Suppl** 1988;3:45–9

Therapeutic concentrations of melphalan do not affect yeast cell phagocytosis by monocytes. Athlin L, et al. **Int J Immunopharmacol** 1988;10(4):435–8

Techniques for assessing canine mononuclear phagocyte function as part of an immunotoxicologic evaluation. Thiem PA, et al. **Int J Immunopharmacol** 1988;10(6):765–71

Human monocytes exposed to Biostim (RU 41740) alter lymphocyte mitogenesis: mechanisms of action. Viland H, et al. **Int J Immunopharmacol** 1988;10(7):879–87

A transient monocyte defective function in idiopathic nephrotic syndrome (lipoid nephrosis). Branellec A, et al. **Int Urol Nephrol** 1988;20(4):421–8

Interleukin-1 and interleukin-2 production by peripheral blood mononuclear cells of patients with rheumatoid arthritis. Rozenbaum M, et al. **Isr J Med Sci** 1989 Jul; 25(7):372–6

Inhibition of the high affinity Fc receptor (Fc gamma RI) on human monocytes by porphyrin photosensitization is highly specific and mediated by the generation of superoxide radicals. Krutmann J, et al. **J Biol Chem** 1989 Jul 5;264(19):11407–13

Phagocytic activity and protein content of human monocytes cultivated in the presence of various homologous interferon preparations. Rollag H, et al. **J Biol Regul Homeost Agents** 1989 Jan-Mar;3(1):39–44

Use of a microtitre plate chemiluminescence reader to study surface phagocytosis by human monocytes. Cree IA, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):71–4

Human monocyte/macrophage activation and interleukin 1 generation by biomedical polymers. Miller KM, et al. **J Biomed Mater Res** 1988 Aug;22(8):713–31

Monocyte functional studies in asymptomatic, human immunodeficiency disease virus (HIV)-infected individuals. Braun DP, et al. **J Clin Immunol** 1988 Nov; 8(6):486–94

Evidence that the phagocytosis mediated by the peanut agglutinin-like activity of IgG(Fc) receptors of human monocytes is selectively modulated by estradiol and natural estrogens. Malaise MG, et al. **J Clin Immunol** 1988 Nov; 8(6):495–502

The influence of antibody sensitization on target cell selection in monocyte-mediated antibody-dependent cellular cytotoxicity. Bakács T, et al. **J Clin Lab Immunol** 1988 Oct;27(2):57–62

Interleukin 1 alpha production by peripheral blood monocytes from patients with chronic liver disease and effect of sera on interleukin 1 alpha production. Kakumu S, et al. **J Clin Lab Immunol** 1988 Jul;26(3):113–9

Interleukin-1 inducing activity of a streptococcal preparation OK-432 and its fractions by human monocytes. Katsuta S, et al. **J Clin Lab Immunol** 1989 Mar;28(3):129–36

Impaired accessory cell function of monocytes in systemic lupus erythematosus. Muryoi T, et al. **J Clin Lab Immunol** 1989 Mar;28(3):123–8

Production of tumor necrosis factor (TNF) by monocytes from cancer patients and healthy subjects induced by OK-432 in vitro, and its augmentation by human interferon gamma. Sekimoto M, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):115–20

Absence of monocyte procoagulant activity during the immune response to influenza virus. Mathies M, et al. **J Clin Microbiol** 1989 Apr;27(4):615–21

EBM/11 reactivity in malignant histiocytosis. Kelly PM, et al. **J Clin Pathol** 1988 Dec;41(12):1305–9

KP1: a new monoclonal antibody that detects a monocyte/macrophage associated antigen in routinely processed tissue sections. Pulford KA, et al. **J Clin Pathol** 1989 Apr;42(4):414–21

Cytokines in chronic inflammatory arthritis. IV. Granulocyte/macrophage colony-stimulating factor-mediated induction of class II MHC antigen on human monocytes: a possible role in rheumatoid arthritis. Alvaro-Gracia JM, et al. **J Exp Med** 1989 Sep 1; 170(3):865–75

Acquired resistance to Listeria monocytogenes is mediated by Lyt-2+ T cells independently of the influx of monocytes into granulomatous lesions. Mielke ME, et al. **J Exp Med** 1989 Aug 1;170(2):589–94

Antibody-dependent antitumor cytotoxicity by human monocytes cultured with recombinant macrophage colony-stimulating factor. Induction of efficient antibody-mediated antitumor cytotoxicity not detected by isotope release assays. Munn DH, et al. **J Exp Med** 1989 Aug 1;170(2):511–26

The recombinant 65-kD heat shock protein of Mycobacterium bovis Bacillus Calmette-Guerin/M. tuberculosis is a target molecule for CD4+ cytotoxic T lymphocytes that lyse human monocytes. Ottenhoff TH, et al. **J Exp Med** 1988 Nov 1;168(5):1947–52

Exacerbation of murine listeriosis by a monoclonal antibody specific for the type 3 complement receptor of myelomonocytic cells. Absence of monocytes at infective foci allows Listeria to multiply in nonphagocytic cells. Rosen H, et al. **J Exp Med** 1989 Jul 1;170(1):27–37

Human cytomegalovirus and monocytes: limited infection and negligible immunosuppression in normal mononuclear cells infected in vitro with mycoplasma-free virus strains. Scott DM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):685–94

Protection of cultured human monocytes from lymphokine-activated killer-mediated lysis by IFN-gamma. Blanchard DK, et al. **J Immunol** 1988 Dec 1;141(11):4067–73

Monokine regulation of human immunodeficiency virus-1 expression in a chronically infected human T cell clone. Clouse KA, et al. **J Immunol** 1989 Jan 15;142(2):431–8

Monocyte suppressor factor is plasminogen activator inhibitor inhibition of membrane bound but not soluble IL-1. Goeken NE, et al. **J Immunol** 1989 Jul 15; 143(2):603–8

Isolation of a yeast heptaglucoside that inhibits monocyte phagocytosis of zymosan particles. Janusz MJ, et al. **J Immunol** 1989 Feb 1;142(3):959–65

Enhancement of human monocyte tumoricidal activity by recombinant M-CSF. Sampson-Johannes A, et al. **J Immunol** 1988 Nov 15;141(10):3680–6

Recognition of HIV glycoprotein gp120 by T cells. Role of monocyte CD4 in the presentation of gp120. Siliciano RF, et al. **J Immunol** 1989 Mar 1;142(5):1506–11

Identification and characterization of a hamster monoclonal antibody anti-2.28 directed against a 70-kilodalton activation antigen on human monocytes. Sung SS, et al. **J Immunol** 1989 Mar 15;142(6):1903–8

HLA-restricted lysis of herpes simplex virus-infected monocytes and macrophages mediated by CD4+ and CD8+ T lymphocytes. Torpey DJ 3d, et al. **J Immunol** 1989 Feb 15;142(4):1325–32

HIV-1 and its envelope glycoprotein down-regulate chemotactic ligand receptors and chemotactic function of peripheral blood monocytes. Wahl SM, et al. **J Immunol** 1989 May 15;142(10):3553–9

Enhancement of human monocyte function against Candida albicans by the colony-stimulating factors (CSF): IL-3, granulocyte-macrophage-CSF, and macrophage-CSF. Wang M, et al. **J Immunol** 1989 Jul 15;143(2):671–7

The ability of normal human monocytes to phagocytose IgG-coated red blood cells is related to the number of accessible galactosyl and mannosyl residues in the Fc domain of the anti-red blood cell IgG antibody molecules. Malaise MG, et al. **J Immunol Methods** 1989 May 12; 119(2):231–9

Single step screening of monoclonal antibodies against interferon-gamma-induced surface molecules on human monocytes. Vance BA, et al. **J Immunol Methods** 1989 Mar 31;118(2):287–96

Production of interleukin-1 by peripheral blood mononuclear cells in patients with chronic fatigue syndrome [letter] Morte S, et al. **J Infect Dis** 1989 Feb;159(2):362

Suppression of purified protein derivative-induced interleukin-2 production by interaction of CD16 (Leu 11 reactive) lymphocytes and adherent mononuclear cells in tuberculosis. Toossi Z, et al. **J Infect Dis** 1989 Feb; 159(2):352–6

Two distinct cytolytic mechanisms of macrophages and monocytes activated by phorbol myristate acetate. Chung T, et al. **J Leukoc Biol** 1988 Nov;44(5):329–36

Inhibition by monoclonal anticomplement receptor type 1 on interactions between senescent human red blood cells and monocytic-macrophagic cells. Gattegno L, et al. **J Leukoc Biol** 1989 May;45(5):422–8

Comparison of methods for assessing chemotaxis of monocytes and polymorphonuclear leukocytes isolated from patients with AIDS or AIDS-related conditions. Martin LS, et al. **J Leukoc Biol** 1988 Nov;44(5):361–6

Expression of HLA-DR by a human monocyte cell line is under transcriptional control. Peterlin BM, et al. **J Mol Cell Immunol** 1984;1(3):191–200

Decreased expression of HLA-DR antigens on monocytes in patients with multiple sclerosis. Baxevanis CN, et al. **J Neuroimmunol** 1989 May;22(3):177–83

The significance of the inflammatory reactions for the development of clinical signs in multiple sclerosis and acute experimental autoimmune encephalomyelitis as assessed by means of the spontaneous chemiluminescence activity of peripheral blood monocytes. Hammann KP, et al. **J Neuroimmunol** 1988 Dec;20(2-3):239–41

Antigenic specificity of human alveolar macrophages and blood monocytes studied by an immunofluorescence technique. Nakstad B, et al. **J Pathol** 1989 Feb; 157(2):99–107

Lipid tolerance in children receiving long-term parenteral nutrition: a biochemical and immunologic study. Dahlström KA, et al. **J Pediatr** 1988 Dec;113(6):985–90

Experimental and clinical significance of endotoxin-dependent HLA-DR expression on monocytes. Appel SH, et al. **J Surg Res** 1989 Jul;47(1):39–44

Monocyte activation after burns and endotoxemia. Moore FD Jr, et al. **J Surg Res** 1989 Apr;46(4):350–4

Production and release of C3 by cultured monocytes/macrophages isolated from burned, trauma, and septic patients. Ogle CK, et al. **J Trauma** 1989 Feb; 29(2):189–94

Monocyte TNF production in gastrointestinal cancer [letter] Zembala M, et al. **Lancet** 1988 Nov 26;2(8622):1262

Thymosin enhances the production of IL-1 alpha by human peripheral blood monocytes. Hu SK, et al. **Lymphokine Res** 1989 Fall;8(3):203–14

Cytotoxic activity of monocytes against Toxoplasma gondii in acute, chronic and reactivated murine toxoplasmosis. Goyal M, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):339–48

Inhibition of CMV replication in human fibroblasts by human monocyte-derived macrophages: implication for CMV persistent infection. Manor E, et al. **Microb Pathog** 1988 Aug;5(2):97–107

Structural relationship between the soluble and membrane-bound forms of human monocyte surface glycoprotein CD14. Bažil V, et al. **Mol Immunol** 1989 Jul; 26(7):657–62

Molecular recognition of antibody (IgG) by cellular Fc receptor (FcRI). Burton DR, et al. **Mol Immunol** 1988 Nov; 25(11):1175–81

Interleukin-1 induction by lipopolysaccharides: structural requirements of the 3-deoxy-D-manno-2-octulosonic acid (KDO). Haeffner-Cavaillon N, et al. **Mol Immunol** 1989 May;26(5):485–94

Biosynthesis of complement factor P (properdin) by the

human pre-monocyte cell line (U-937). Minta JO. **Mol Immunol** 1988 Dec;25(12):1363-70

Involvement of tumor necrosis factor in cytotoxicity mediated by human monocytes. Nissen-Meyer J, et al. **Nat Immun Cell Growth Regul** 1988;7(5-6):266-79

Tumor necrosis factor in human monocyte-mediated antitumor cytotoxicity. Ziegler-Heitbrock HW, et al. **Nat Immun Cell Growth Regul** 1988;7(5-6):280-6

Soluble CD4 blocks the infectivity of diverse strains of HIV and SIV for T cells and monocytes but not for brain and muscle cells. Clapham PR, et al. **Nature** 1989 Jan 26; 337(6205):368-70

Altered interleukin-1 production in patients undergoing hemodialysis. Blumenstein M, et al. **Nephron** 1988; 50(4):277-81

In vivo effect of 1 alpha-hydroxyvitamin D3 on interleukin-2 production in hemodialysis patients. Tabata T, et al. **Nephron** 1988;50(4):295-8

A dialysable acid factor from human leukocyte extracts activates tumor cell lysis mediated by human monocytes and natural killer cells. Hamprecht KH, et al. **Onkologie** 1989 Jun;12(3):120-7

Cytotoxic effects in vitro of human monocytes and macrophages on schistosomula of Schistosoma mansoni. Cottrell B, et al. **Parasite Immunol** 1989 Jan;11(1):91-104

Phagocytosis-associated functions in neonatal monocyte-derived macrophages. Speer CP, et al. **Pediatr Res** 1988 Aug;24(2):213-6

Monocyte function in chickens with hereditary muscular dystrophy. Chu Y, et al. **Poult Sci** 1989 Feb;68(2):226-32

Ovarian steroid treatment blocks a postmenopausal increase in blood monocyte interleukin 1 release. Pacifici R, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2398-402

Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions. Robinson EA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1850-4

Human immunodeficiency virus-infected T cells and monocytes are killed by monoclonal human anti-gp41 antibodies coupled to ricin A chain. Till MA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1987-91

Human immunodeficiency virus glycoprotein (gp120) induction of monocyte arachidonic acid metabolites and interleukin 1. Wahl LM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):621-5

Immune system of swine: dissection of mononuclear leucocyte subpopulations by means of two-colour cytofluorometric analysis. Saalmüller A, et al. **Res Vet Sci** 1988 Nov;45(3):311-6

Role of the mononuclear phagocyte system in the immunopathogenesis of human immunodeficiency virus infection and the acquired immunodeficiency syndrome. Bender BS, et al. **Rev Infect Dis** 1988 Nov-Dec; 10(6):1142-54

Monocytes in HIV infection [letter] Murray HW. **Rev Infect Dis** 1989 Mar-Apr;11(2):357

Depressed PPD and tetanus toxoid presentation by monocytes to T lymphocytes in patients with rheumatoid arthritis: restoration by interferon gamma. Seitz M, et al. **Rheumatol Int** 1988;8(5):189-96

Synergistic growth-inhibitory activity of tumour necrosis factor and alpha interferon. Contribution to the monocyte-derived cytostatic activity towards human leukaemia K562 cells. Nissen-Meyer J, et al. **Scand J Immunol** 1988 Nov;28(5):627-37

Enhanced T-cell-activation due to combined stimulation by both endothelial cells and monocytes. Teitel JM, et al. **Scand J Immunol** 1989 Feb;29(2):165-73

Activity of two types of Fc receptors, Fc gamma RI and Fc gamma RII, in human monocyte cytotoxicity to sensitized erythrocytes. van de Winkel JG, et al. **Scand J Immunol** 1989 Jan;29(1):23-31

Binding of an anti D dimer monoclonal antibody to endotoxin-activated monocytes. Demonstration by immunogold-silver staining. Chollet-Martin S, et al. **Thromb Res** 1988 Oct 1;52(1):1-9

Del red cells sensitized with anti-D are not phagocytosed by monocytes [letter] Ogasawara K, et al. **Transfusion** 1988 Nov-Dec;28(6):603-4

Immunohistologic staining of renal transplant biopsies with monoclonal antibody WT14: a new parameter for the diagnosis of rejection. Bogman MJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1886-7

Phenotype and function of extrathymic cells invading rejecting renal allografts in the nude rat. Bolton EM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):344-5

Interleukin-2 reconstitutes natural killer activity in transplant recipients. Citterio F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):80-1

Differential effects of immunosuppressive agents on mononuclear cells infiltrating human renal allografts. Cunningham PR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):194-5

A polymorphic monocyte antigen recognized by a T-cell clone. Farrell C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):649-50

Phenotypic analysis of mononuclear cells infiltrating rat renal allografts during ongoing rejection. Hamashima T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):356-7

Cell surface phenotype of mononuclear cells infiltrating bile ducts during acute and chronic liver allograft rejection. McCaughan GW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2201-2

Incubation of T cell or monocytic cell lines with 1,25-dihydroxyvitamin D3 before mitogen stimulation potentiates IL-2 and IL-1 beta mRNA levels. Prehn JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):90-1

Stimulation of allogeneic and autologous MLR by subpopulations of human monocytes. Uren S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):208-10

Evaluation of monocyte procoagulant activity as a parameter for immunologic monitoring in renal transplantation. Zappala SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1844-5

Epstein-Barr virus (EBV). VII. Established lymphoid cell line (IVPat-88) obtained from synovial fluid of a patient with aseptic arthritis. Pătrașcu IV, et al. **Virologie** 1989 Jan-Mar;40(1):35-8

Rate of interaction of IgG1 and IgG3 sensitized red cells with monocytes in the phagocytosis assay. Brojer E, et al. **Vox Sang** 1989;56(2):101-3

Phagocytosis by human monocytes of red cells sensitized with monoclonal IgG1 and IgG3 anti-D. Hadley AG, et al. **Vox Sang** 1989;57(2):150-1

Ability of monoclonal anti-D antibodies to promote the binding of red cells to lymphocytes, granulocytes and monocytes. Merry AH, et al. **Vox Sang** 1989;56(1):48-53

[Lymphoreticular cells in the human endometrial stroma] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):845-9 (Eng. Abstr.) **(Ger)**

[HLA-haplotype-independent inheritance of monocyte-specific antigen] Rose M, et al. **Kitasato Arch Exp Med** 1988 Sep;61(2-3):165-9 (Eng. Abstr.) **(Ger)**

[Induction of chemiluminescence of human granulocytes by monocyte factors from patients with chronic polyarthritis and arthrosis] Meske S, et al. **Z Rheumatol** 1988 May-Jun; 47(3):146-50 (Eng. Abstr.) **(Ger)**

[Immunomodulating capacity of monocyte-macrophage system in cancer patients] Umesaki N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1638-44 (Eng. Abstr.) **(Jpn)**

[Technical advance in method of a routine examination of mononuclear phagocytes system] Saito H, et al. **Nippon Rinsho** 1989 Mar;47(3):681-5 **(Jpn)**

[Monoclonal antibodies against macrophages] Takeya M, et al. **Nippon Rinsho** 1989 Mar;47(3):564-70 **(Jpn)**

[Screening of immunomodulators by using the system of mononuclear phagocytes] Freidlin IS, et al. **Antibiot Khimioter** 1988 Dec;33(12):906-9 (Eng. Abstr.) **(Rus)**

[Isolation and properties of interleukin 1 from human blood monocytes] Ketlinskiĭ SA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):581-3 (Eng. Abstr.) **(Rus)**

[Antiviral cellular resistance in acute suppurative-destructive diseases of the lungs] Filev LV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):105-8 (Eng. Abstr.) **(Rus)**

[Characteristics of the functional activity of monocytes in acute suppurative-destructive lung diseases] Filev LV, et al. **Sov Med** 1988;(10):15-7 (Eng. Abstr.) **(Rus)**

METABOLISM

Human model for studying in vitro the regulating function of specific and scavenger LDL receptors. Kovács EM, et al. **Acta Med Hung** 1988;45(2):135-44

Induction of the proteinase inhibitor alpha 2-macroglobulin in rat hepatocytes by a monocyte-derived factor. Andus T, et al. **Adv Exp Med Biol** 1988;240:191-8

Endotoxin abolishes the induction of alpha 2-macroglobulin synthesis in cultured human monocytes indicating inhibition of the terminal monocyte maturation into macrophages. Bauer J, et al. **Adv Exp Med Biol** 1988; 240:425-32

Effects of bone marrow ablation on compartmental prostaglandin synthesis by mononuclear phagocytes. Volkman A, et al. **Adv Exp Med Biol** 1988;239:39-44 (19 ref.)

Interleukin-1 production by human monocytes in ageing and disease. Rudd AG, et al. **Age Ageing** 1989 Jan;18(1):43-6

Increased synthesis and production of prostaglandin E2 by monocytes from drug addicts with AIDS. Fernández-Cruz E, et al. **Aids** 1989 Feb;3(2):91-6

Lucigenin-enhanced chemiluminescence in blood is increased in cancer. Trulson A, et al. **Am J Clin Pathol** 1989 Apr; 91(4):441-5

Arachidonic acid metabolites produced by platelet-depleted human blood monocytes: a possible role in thrombogenesis. Jones CM, et al. **Am J Hematol** 1989 Jul;31(3):145-52

Production of B-cell growth factor interleukin 2 and gamma interferon by peripheral blood lymphocytes from patients with chronic lymphocytic leukemia of B-cell type. Rossi JF, et al. **Am J Hematol** 1988 Dec;29(4):183-8

Glomerular basement membrane-containing immune complexes stimulate tumor necrosis factor and interleukin-1 production by human monocytes. Vissers MC, et al. **Am J Pathol** 1989 Jan;134(1):1-6

Interleukin 1 release by human alveolar macrophages and blood monocytes. Iwamoto GK, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1012-5

1,25-Dihydroxyvitamin D3-induced alterations of lipid metabolism in human monocyte-macrophages. Roullet JB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E290-5

Spontaneous and stimulated release of tumor necrosis factor-alpha (TNF) from blood monocytes of miners with coal workers' pneumoconiosis. Borm PJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1589-94

Dyscoordinate expression of tumor necrosis factor-alpha by human blood monocytes and alveolar macrophages. Rich EA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1010-6

Activation of the inositol phospholipid signaling system by receptors for extracellular ATP in human neutrophils, monocytes, and neutrophil/monocyte progenitor cells. Dubyak GR, et al. **Ann N Y Acad Sci** 1988;551:218-37; discussion 237-8

Evidences that fibroblasts and epithelial cells produce a specific type of macrophage and granulocyte inducer, also known as colony-stimulating factor, and that monocyte-macrophages can produce another factor with proliferative inducing activity on myeloid cells and differentiative activity on macrophages. Zambrano IR, et al. **Ann N Y Acad Sci** 1989;554:141-55

Nitroblue tetrazolium reduction in monocytes and monocyte-derived macrophages. Effect of oxidative burst stimulants and interferons. Müller F, et al. **APMIS** 1989 Jun;97(6):490-6

Release of leukotriene C4 from human monocytes: defects in patients with systemic lupus erythematosus. Yamane K, et al. **Arerugi** 1988 May;37(5):301-8

Interleukin-1 induces interleukin-1 alpha and interleukin-1 beta gene expression in synovial fibroblasts and peripheral blood monocytes. Dalton BJ, et al. **Arthritis Rheum** 1989 Mar;32(3):279-87

Study of the excretion mechanism of a perfluorochemical emulsion. Tsuda Y, et al. **Artif Organs** 1989 Jun; 13(3):197-203

Peroxidative stress and in vitro ageing of endothelial cells increases the monocyte-endothelial cell adherence in a human in vitro system. Molenaar R, et al. **Atherosclerosis** 1989 Apr;76(2-3):193-202

Opposite effect of Interferon-gamma on PGE2 release from Interleukin-1-stimulated human monocytes or fibroblasts. Friteau L, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1197-204

Interleukin-4 inhibits interleukin-1 synthesis by a posttranscriptional mechanism. Hurme M, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):861-6

Molecular cloning and sequence analysis of cDNA for human hepatocyte growth factor. Miyazawa K, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):967-73

Platelet activating factor is a potent stimulant of the production of active oxygen species by human monocyte-derived macrophages. Rouis M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1293-301

Fibrinogen association with human monocytes: evidence for constitutive expression of fibrinogen receptors and for involvement of Mac-1 (CD18, CR3) in the binding. Trezzini C, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):477-84

Specific translocation of tuftsin (Thr-Lys-Pro-Arg), a natural immunomodulating peptide, into the nuclei of human monocytes. Wagle JR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1147-53

A novel cleavage product of beta-thromboglobulin formed in cultures of stimulated mononuclear cells activates human neutrophils. Walz A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):969-75

Biosynthesis of normal and low-molecular-mass complement component C1q by cultured human monocytes and macrophages. Hoekzema R, et al. **Biochem J** 1989 Jan 15; 257(2):477-86

Carnitine and acylcarnitine levels of human peripheral blood lymphocytes and mononuclear phagocytes. Cress AP, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):135-9

Role of medullasin in granulocytes in biophylaxis. Elastinolytic activity and the potentiation of cytostatic activity of human monocytes. Aoki Y, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:101-5

Regulation of interleukin-6 expression in cultured human blood monocytes and monocyte-derived macrophages. Bauer J, et al. **Blood** 1988 Oct;72(4):1134-40

Monocyte Fc gamma receptor recognition of cell-bound and aggregated IgG. Gomez F, et al. **Blood** 1989 Aug 15; 74(3):1058-65

Interleukin-4 stimulates human monocytes to produce tissue-type plasminogen activator. Hart PH, et al. **Blood** 1989 Sep;74(4):1222-5

Functional characteristics of receptor-bound urokinase on human monocytes: catalytic efficiency and susceptibility to inactivation by plasminogen activator inhibitors. Kirchheimer JC, et al. **Blood** 1989 Sep;74(4):1396-402

Heparin binds to human monocytes and modulates their procoagulant activities and secretory phenotypes. Effects of histidine-rich glycoprotein. Leung L, et al. **Blood** 1989 Jan;73(1):177-84

Endotoxin-induced production of plasminogen activator inhibitor by human monocytes is autonomous and can be inhibited by lipid X. Schwartz BS, et al. **Blood** 1989 Jun; 73(8):2188-95

Interleukin-4 induces secretion of CSF for granulocytes and CSF for macrophages by peripheral blood monocytes. Wieser M, et al. **Blood** 1989 Apr;73(5):1105-8

Regulation of gene expression of M-, G-, GM-, and multi-CSF in normal and malignant hematopoietic cells. Oster W, et al. **Blood Cells** 1988;14(2-3):443-62

Serum vitamin D metabolites and nuclear uptake of (3H)-1,25-dihydroxyvitamin D3 in monocytes from patients with autosomal dominant osteopetrosis: a study of two radiological types. Bollerslev J, et al. **Bone** 1988; 9(6):355-9

Lipid peroxidation of human granulocytes (PMN) and monocytes by iron complexes. Hoepelman IM, et al. **Br J Haematol** 1989 Aug;72(4):584-8

Tumor cytotoxicity of human monocyte membrane-bound interleukin-1 alpha induced by synergistic actions of interferon-gamma and synthetic acyltripeptide, FK-565. Inamura N, et al. **Cancer Immunol Immunother** 1989; 28(3):164-70

The effect of vitamin D3 on the production of cytotoxic factors by human peripheral blood mononuclear cells. Yousefi S, et al. **Cancer Res** 1989 Sep 15;49(18):5083-6

A flow cytometric and immunofluorescence microscopic study of tumor necrosis factor production and localization in human monocytes. Hofsli E, et al. **Cell Immunol** 1989 Sep;122(2):405-15

Cytokine activation of antibacterial activity in human pulmonary macrophages: comparison of recombinant interferon-gamma and granulocyte-macrophage colony-stimulating factor. Jensen WA, et al. **Cell Immunol** 1988 Dec;117(2):369-77

The role of lymphocytes and monocytes in hematopoietic growth factor production by peripheral blood mononuclear cells. Kaushansky K, et al. **Cell Immunol** 1989 Aug; 122(1):62-70

Monocyte-derived interleukin 1: effects on norepinephrine-stimulated aortic contraction and phosphoinositide turnover. McKenna TM, et al. **Circ Shock** 1989 Jun;28(2):131-47

A sensitive and specific chemiluminescence method for estimating the ability of human granulocytes and monocytes to generate O2-. Nishida A, et al. **Clin Chim Acta** 1989 Feb 15;179(2):177-81

Dysregulation of arachidonic acid release and metabolism by atopic mononuclear cells. Lans DM, et al. **Clin Exp Allergy** 1989 Jan;19(1):37-44

Regulation of interleukin 1 production in human monocytes. I. Effects of gamma-interferon and cycloheximide. Arend WP, et al. **Clin Exp Immunol** 1988 Dec;74(3):377-81

Allogenic induction of thromboplastin synthesis in monocytes and endothelial cells. Biphasic effect of cyclosporin A. Carlsen E, et al. **Clin Exp Immunol** 1989 Jun;76(3):428-33

Interleukin-2 and interferon-gamma recruit different subsets of human peripheral blood monocytes to secrete interleukin-1 beta and tumour necrosis factor-alpha. Herrmann F, et al. **Clin Exp Immunol** 1989 Jul;77(1):97-100

Modulation of monocyte complement synthesis by lymphocytes and lymphocyte-conditioned media. Lappin D, et al. **Clin Exp Immunol** 1989 Apr;76(1):86-91

Purified blood monocytes from HIV 1-infected patients produce high levels of TNF alpha and IL-1. Roux-Lombard P, et al. **Clin Immunol Immunopathol** 1989 Mar;50(3):374-84

Alterations in chemotactic factor-induced responses of neutrophils and monocytes from chronic dialysis patients. Lewis SL, et al. **Clin Nephrol** 1988 Aug;30(2):63-72

Decreased production of interleukin-1 by monocytes from patients with lipoid nephrosis. Matsumoto K. **Clin Nephrol** 1989 Jun;31(6):292-6

Expression of C5a anaphylatoxin receptor in monoblastic cells involves facilitation of an adenosine 3',5'-monophosphate-dependent process. Rubin J, et al. **Endocrinology** 1988 Nov;123(5):2424-31

Monocyte-derived growth factors in asbestos-induced interstitial fibrosis. Schwartz DA, et al. **Environ Res** 1989 Aug;49(2):283-94

Monocytic production and plasma bioactivities of interleukin-1 and tumour necrosis factor in human cancer. Moldawer LL, et al. **Eur J Clin Invest** 1988 Oct; 18(5):486-92

Production of macrophage-, granulocyte-, granulocyte-macrophage- and multi-colony-stimulating factor by peripheral blood cells. Oster W, et al. **Eur J Immunol** 1989 Mar;19(3):543-7

Blood mononuclear cell production of IL-1 and IL-2 following moderate surgical trauma. Grzelak I, et al. **Eur Surg Res** 1989;21(2):114-22

Fibronectin receptors of mononuclear phagocytes: binding characteristics and biochemical isolation. Garcia-Pardo A, et al. **Exp Cell Res** 1989 Apr;181(2):420-31

Low burst-promoting activity (BPA) production by cord mononuclear cells is due to functional immaturity of monocytes. Iwai Y, et al. **Exp Hematol** 1988 Dec; 16(11):912-5

Characterization of scavenger receptor activity in resident human lung macrophages. McCusker K, et al. **Exp Lung Res** 1989 Jul;15(4):651-61

Comparison of lipid accumulation and metabolism in carrageenan-induced granulomas to aorta and blood monocytes of normal and cholesterol-fed rabbits. Bell FP, et al. **Exp Mol Pathol** 1989 Jun;50(3):327-36

Regulation of interleukin-6 receptor expression in human monocytes and hepatocytes. Bauer J, et al. **FEBS Lett** 1989 May 22;249(1):27-30

O- and N-glycosylation lead to different molecular mass forms of human monocyte interleukin-6. Gross V, et al. **FEBS Lett** 1989 Apr 24;247(2):323-6

Monocyte-derived clastogenic factor in rheumatoid arthritis. Emerit I, et al. **Free Radic Biol Med** 1989;6(3):245-50

Increased procoagulant activity of peripheral blood monocytes in human and experimental obstructive jaundice. Semeraro N, et al. **Gastroenterology** 1989 Mar; 96(3):892-8

Increased tumor necrosis factor production by monocytes in alcoholic hepatitis. McClain CJ, et al. **Hepatology** 1989 Mar;9(3):349-51

Nuclear thyroid hormone receptor binding in human mononuclear blood cells after goitre resection. Kvetny J, et al. **Horm Metab Res** 1989 Mar;21(3):142-4

Synergistic effect of blending IgG1 and IgG3 monoclonal anti-D in promoting the metabolic response of monocytes to sensitized red cells. Hadley AG, et al. **Immunology** 1989 Aug;67(4):550-2

Fibronectin enhances respiratory burst of phagocytes stimulated by zymosan and immune complexes. Kuroiwa A, et al. **Immunology** 1988 Oct;65(2):177-80

Effect of protein kinase C inhibitor (H-7) and calmodulin antagonist (W-7) on pertussis toxin-induced IL-1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL-1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210-5

Binding sites for C-reactive protein on human monocytes are distinct from IgG Fc receptors. Zeller JM, et al. **Immunology** 1989 May;67(1):51-5

Oxidative modification of low density lipoprotein (LDL) by activated human monocytes and the cell lines U937 and HL60. Cathcart MK, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):1001-8

Hydrogen peroxide producing potential of alveolar macrophages & blood monocytes in pulmonary tuberculosis. Selvaraj P, et al. **Indian J Med Res** 1988 Aug; 88:124-9

Optimal induction of tumor necrosis factor production in human monocytes requires complete S-form lipopolysaccharide. Männel DN, et al. **Infect Immun** 1989 Jul;57(7):1953-8

Production of interleukin-1 but not tumor necrosis factor by human monocytes stimulated with pneumococcal cell surface components. Riesenfeld-Orn I, et al. **Infect Immun** 1989 Jul;57(7):1890-3

Chlamydia trachomatis-induced production of interleukin-1 by human monocytes. Rothermel CD, et al. **Infect Immun** 1989 Sep;57(9):2705-11

Changes in respiratory burst activity during human monocyte differentiation in suspension culture. Zeller JM, et al. **Inflammation** 1988 Dec;12(6):585-95

Quantitative rather than qualitative differences between monocytes with respect to IgE Fc receptor expression as studied by flow cytofluorometry. Hed J, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):408-11

The entry of antibiotics into human monocytes. Hand WL, et al. **J Antimicrob Chemother** 1989 May;23(5):681-9

Structures of the sugar chains of interferon-gamma produced by human myelomonocyte cell line HBL-38. Yamamoto S, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):547-55

Sequential receptor cascade for coagulation proteins on monocytes. Constitutive biosynthesis and functional prothrombinase activity of a membrane form of factor V/Va. Altieri DC, et al. **J Biol Chem** 1989 Feb 15; 264(5):2969-72

Bone marrow-derived mononuclear phagocytes autoregulate mannose receptor expression. Clohisy DR, et al. **J Biol Chem** 1989 Apr 5;264(10):5370-7

Regulation of granulocyte- and monocyte-colony stimulating factor mRNA levels in human blood monocytes is mediated primarily at a post-transcriptional level. Ernst TJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5700-3

Colony-stimulating factor 1-induced Na+ influx into human monocytes involves activation of a pertussis toxin-sensitive GTP-binding protein. Imamura K, et al. **J Biol Chem** 1988 Oct 5;263(28):14093-8

Distinct and additive effects of elastase and endotoxin on expression of alpha 1 proteinase inhibitor in mononuclear phagocytes. Perlmutter DH, et al. **J Biol Chem** 1988 Nov 5;263(31):16499-503

Monocyte synthesis of thrombospondin. The role of platelets. Schwartz BS. **J Biol Chem** 1989 May 5;264(13):7512-7

Iron up-modulates the expression of transferrin receptors during monocyte-macrophage maturation. Testa U, et al. **J Biol Chem** 1989 Aug 5;264(22):13181-7

Modulation of the expression of chondroitin sulfate proteoglycan in stimulated human monocytes. Uhlin-Hansen L, et al. **J Biol Chem** 1989 Sep 5; 264(25):14916-22

IFN-gamma is not the only mediator of suppressed myelopoiesis produced by mononuclear cells from aplastic anemia patients. Laskay T, et al. **J Biol Regul Homeost Agents** 1987 Jan-Mar;1(1):37-44

Monokines: stimulatory and inhibitory regulator molecules of myelopoiesis in vitro. Oster W, et al. **J Biol Regul Homeost Agents** 1988 Jul-Sep;2(3):134-8

Plasma protein adsorbed biomedical polymers: activation of human monocytes and induction of interleukin 1. Bonfield TL, et al. **J Biomed Mater Res** 1989 Jun;23(6):535-48

Oligospecificity of the cellular adhesion receptor Mac-1 encompasses an inducible recognition specificity for fibrinogen. Altieri DC, et al. **J Cell Biol** 1988 Nov; 107(5):1893-900

Functional tissue factor is entirely cell surface expressed on lipopolysaccharide-stimulated human blood monocytes and a constitutively tissue factor-producing neoplastic cell line. Drake TA, et al. **J Cell Biol** 1989 Jul;109(1):389-95

Regulation of urokinase receptors in monocytelike U937 cells by phorbol ester phorbol myristate acetate. Picone R, et al. **J Cell Biol** 1989 Feb;108(2):693-702

Production of transforming growth factor beta by human peripheral blood monocytes and neutrophils. Grotendorst GR, et al. **J Cell Physiol** 1989 Aug;140(2):396-402

Phenothiazines inhibit cholesteryl ester formation in J 774 monocyte-like cells. Houtia NE, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):673-8

Synthesis and expression of the fibroblast fibronectin receptor in human monocytes. Brown DL, et al. **J Clin Invest** 1989 Jul;84(1):366-70

Acylation of monocyte and glomerular mesangial cell proteins. Myristyl acylation of the interleukin 1 precursors. Bursten SL, et al. **J Clin Invest** 1988 Nov;82(5):1479-88

Modulation of the human monocyte binding site for monomeric immunoglobulin G by activated Hageman factor. Chien P, et al. **J Clin Invest** 1988 Nov;82(5):1554-9

Production of tumor necrosis factor alpha and interleukin 1 beta by monocytic cells infected with human immunodeficiency virus. Molina JM, et al. **J Clin Invest** 1989 Sep;84(3):733-7

The effect of age of cattle on the in vitro production of interferon by peripheral blood mononuclear cells. Townsend J, et al. **J Comp Pathol** 1988 Aug;99(2):169-85

Monocyte activating factor originally found in sarcoidosis sera. II. Production of a similar factor by a human acute monocytic leukemia cell line (THP-1). Baba T, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):503-7

Insulin binding to monocytes and in vivo peripheral insulin sensitivity are normal in Graves' disease. Cavallo-Perin P, et al. **J Endocrinol Invest** 1988 Dec;11(11):795-800

Mononuclear phagocytes have the potential for sustained hydroxyl radical production. Use of spin-trapping techniques to investigate mononuclear phagocyte free radical production. Britigan BE, et al. **J Exp Med** 1988 Dec 1;168(6):2367-72

Human monocytes can produce tissue-type plasminogen activator. Hart PH, et al. **J Exp Med** 1989 Apr 1; 169(4):1509-14

An IL-1 inhibitor from human monocytes. Production and characterization of biologic properties. Arend WP, et al. **J Immunol** 1989 Sep 15;143(6):1851-8

Absence of induction of IL-1 production in human monocytes by complement fragments. Arend WP, et al. **J Immunol** 1989 Jan 1;142(1):173-8

IL-1 beta production in cultured human monocytes is regulated at multiple levels. Arend WP, et al. **J Immunol** 1989 Jul 1;143(1):118-26

Specific binding of human C-reactive protein to human monocytes in vitro. Ballou SP, et al. **J Immunol** 1989 Apr 15;142(8):2708-13

Different patterns of arachidonate metabolism in autologous human blood monocytes and alveolar macrophages. Balter MS, et al. **J Immunol** 1989 Jan 15;142(2):602-8

Functional polymorphisms of Fc receptors in human monocyte-mediated cytotoxicity towards erythrocytes induced by murine isotype switch variants. Boot JH, et al. **J Immunol** 1989 Feb 15;142(4):1217-23

Molecular basis for a polymorphism involving Fc receptor II on human monocytes. Clark MR, et al. **J Immunol** 1989 Sep 1;143(5):1731-4

Viral antigen stimulation of the production of human monokines capable of regulating HIV1 expression. Clouse KA, et al. **J Immunol** 1989 Jul 15;143(2):470-5

Tumor necrosis factor induction by Candida albicans from human natural killer cells and monocytes. Djeu JY, et al. **J Immunol** 1988 Dec 1;141(11):4047-52

Binding of model immune complexes to erythrocyte CR1 facilitates immune complex uptake by U937 cells. Emlen W, et al. **J Immunol** 1989 Jun 15;142(12):4366-71

IL-4 down-regulates IL-1 and TNF gene expression in human monocytes. Essner R, et al. **J Immunol** 1989 Jun 1;142(11):3857-61

Treatment with recombinant IFN-gamma decreases cell surface CD4 levels on peripheral blood monocytes and on myelomonocyte cell lines. Faltynek CR, et al. **J Immunol** 1989 Jan 15;142(2):500-8

Characterization of a novel low affinity receptor for IFN-gamma on adherent human monocytes by radioligand binding studies and chemical cross-linking. Finbloom DS, et al. **J Immunol** 1989 Apr 1;142(7):2314-20

Functional consequences of monocyte IL-2 receptor expression. Induction of IL-1 beta secretion by IFN gamma and IL-2. Herrmann F, et al. **J Immunol** 1989 Jan 1; 142(1):139-43

IFN-gamma, tumor necrosis factor-alpha, and urokinase regulate the expression of urokinase receptors on human monocytes. Kirchheimer JC, et al. **J Immunol** 1988 Dec 15;141(12):4229-34

Interaction between hybrid mouse monoclonal antibodies and the human high-affinity IgG FcR, huFc gamma RI, on U937. Involvement of only one of the mIgG heavy chains in receptor binding. Koolwijk P, et al. **J Immunol** 1989 Sep 1;143(5):1656-62

Regulation of monocyte/macrophage C2 production and HLA-DR expression by IL-4 (BSF-1) and IFN-gamma. Littman BH, et al. **J Immunol** 1989 Jan 15;142(2):520-5

Activation of human monocytes occurs on cross-linking monocytic antigens to an Fc receptor. MacIntyre EA, et

al. **J Immunol** 1989 Apr 1;142(7):2377–83
Mechanism of human monocyte activation via the 40–kDa Fc receptor for IgG. MacIntyre EA, et al. **J Immunol** 1988 Dec 15;141(12):4333–43
Regulation of the expression of IL–6 in human monocytes. Navarro S, et al. **J Immunol** 1989 Jun 15;142(12):4339–45
Involvement of class II MHC molecules in the LPS–induction of IL–1/TNF secretions by human monocytes. Quantitative differences at the polymorphic level. Santamaria P, et al. **J Immunol** 1989 Aug 1; 143(3):913–22
IFN–gamma and LPS overcome glucocorticoid inhibition of priming for superoxide release in human monocytes. Evidence that secretion of IL–1 and tumor necrosis factor–alpha is not essential for monocyte priming. Szefler SJ, et al. **J Immunol** 1989 Jun 1;142(11):3985–92
Demonstration of a novel tumor–killing factor secreted from human macrophage–monocyte hybridomas. Taniyama T, et al. **J Immunol** 1988 Dec 1;141(11):4061–6
Identification of IL–1 receptors on human monocytes. Uhl J, et al. **J Immunol** 1989 Mar 1;142(5):1576–81
Suppression of monocyte oxidative response by phenolic glycolipid I of Mycobacterium leprae. Vachula M, et al. **J Immunol** 1989 Mar 1;142(5):1696–701
Biphasic platelet–activating factor synthesis by human monocytes stimulated with IL–1–beta, tumor necrosis factor, or IFN–gamma. Valone FH, et al. **J Immunol** 1988 Dec 1;141(11):3945–50
Proteolysis induces increased binding affinity of the monocyte type II FcR for human IgG. van de Winkel JG, et al. **J Immunol** 1989 Jul 15;143(2):571–8
Phagocytosis of serum–opsonized zymosan down–regulates the expression of CR3 and FcRI in the membrane of human monocytes. Wolf HM, et al. **J Immunol** 1988 Nov 15; 141(10):3537–43
Production of tumor necrosis factor by human monocytes in response to toxic–shock–syndrome toxin–1. Parsonnet J, et al. **J Infect Dis** 1988 Nov;158(5):1026–33
Products of stimulated monocytes enhance the activity of interferon–gamma. Gerrard TL, et al. **J Interferon Res** 1989 Feb;9(1):115–24
Production of interferon–alpha induced by dsRNA in human peripheral blood mononuclear cell cultures: role of priming by dsRNA–induced interferons–gamma and –beta. Lepe–Zuniga JL, et al. **J Interferon Res** 1989 Aug; 9(4):445–56
Induced proteins in human peripheral mononuclear cells over a range of clinically tolerable doses of interferon–gamma. Paulnock DM, et al. **J Interferon Res** 1989 Aug;9(4):457–73
Analysis of the interaction of human C5a and C5a des Arg with human monocytes and neutrophils: flow cytometric and chemotaxis studies. Yancey KB, et al.
J Invest Dermatol 1989 Feb;92(2):184–9
Contribution of monocyte–macrophage system to serum alpha 1–antitrypsin. Krivit W, et al. **J Lab Clin Med** 1988 Oct;112(4):437–42
Effect of insulin immune complexes on human blood monocyte and endothelial cell procoagulant activity. Uchman B, et al. **J Lab Clin Med** 1988 Nov;112(5):652–9
Expression of nerve growth factor receptors by human peripheral blood mononuclear cells. Morgan B, et al.
J Neurosci Res 1989 May;23(1):41–5
Thrombin and bradykinin enhance prostaglandin production in human peripheral blood monocytes. Lerner UH, et al.
J Oral Pathol Med 1989 Apr;18(4):246–50
Actinobacillus actinomycetemcomitans and Bacteroides gingivalis activate human peripheral monocytes to produce interleukin–1 and tumor necrosis factor. Lindemann RA, et al. **J Periodontol** 1988 Nov;59(11):728–30
Further characterization of interleukin–2 production by lymphocytes of patients with systemic lupus erythematosus. Linker–Israeli M, et al. **J Rheumatol** 1988 Aug; 15(8):1216–22
In vitro immunoglobulin production by lymphocytes of patients with juvenile rheumatoid arthritis: effects of Staphylococcus aureus Cowan I stimulation and monocyte depletion. Oen K, et al. **J Rheumatol** 1988 Oct; 15(10):1539–46
Cuprammonium membranes stimulate interleukin 1 release and arachidonic acid metabolism in monocytes in the absence of complement. Betz M, et al. **Kidney Int** 1988 Jul;34(1):67–73
Comparative ability of human monocytes and neutrophils to degrade glomerular basement membrane in vitro. Vissers MC, et al. **Lab Invest** 1989 Jun;60(6):831–8
Effect of strenuous exercise on blood monocytes and their relation to coagulation. Osterud B, et al.
Med Sci Sports Exerc 1989 Aug;21(4):374–8 (25 ref.)
Hepatocyte–stimulating factor. Woloski BM, et al.
Methods Enzymol 1988;163:594–602
Regulation of tissue factor gene expression in the monocyte procoagulant response to endotoxin. Gregory SA, et al. **Mol Cell Biol** 1989 Jun;9(6):2752–5
Transcriptional and posttranscriptional regulation of CSF–1 gene expression in human monocytes. Horiguchi J, et al. **Mol Cell Biol** 1988 Sep;8(9):3951–4
Differential transcription of exon 1 of the human c–fms gene in placental trophoblasts and monocytes. Visvader J, et al. **Mol Cell Biol** 1989 Mar;9(3):1336–41
Posttranscriptional stabilization of c–fms mRNA by a labile protein during human monocytic differentiation. Weber B, et al. **Mol Cell Biol** 1989 Feb;9(2):769–75
Autoradiographic quantification of vasoactive intestinal peptide binding sites in sections from human blood mononuclear cell pellets. Gutkind JS, et al.
Neuropsychopharmacology 1988 Sep;1(3):251–5
Cloning of the murine c–fgr proto–oncogene cDNA and induction of c–fgr expression by proliferation and activation factors in normal bone marrow–derived monocytic cells. Yi TL, et al. **Oncogene** 1989 Sep; 4(9):1081–7
Adhesive receptor Mac–1 coordinates the activation of factor X on stimulated cells of monocytic and myeloid differentiation: an alternative initiation of the coagulation protease cascade. Altieri DC, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7462–6
Coordinate viral induction of tumor necrosis factor alpha and interferon beta in human B cells and monocytes. Goldfeld AE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1490–4
Prostaglandin and thromboxane biosynthesis in isolated platelet–free human monocytes. III. The induction of cyclooxygenase by colony stimulating factor–1. Orlandi M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):101–6
Effect of gold salt treatment on the receptor binding activity of monocytes and macrophages isolated from rats with adjuvant arthritis. Haynes DR, et al. **Rheumatol Int** 1988; 8(4):159–64
Thyroid hormone resistance in blood monocyte cells and elevated serum T3 in patients with autosomal dominant osteopetrosis. Bollerslev J, et al.
Scand J Clin Lab Invest 1988 Dec;48(8):795–9
TSH, thyroid hormones and nuclear–binding of T3 in mononuclear blood cells from obese and non–obese women. Matzen LE, et al. **Scand J Clin Lab Invest** 1989 May;49(3):249–53
S–protein is synthesized by human monocytes and macrophages in vitro. Hetland G, et al.
Scand J Immunol 1989 Jan;29(1):15–21
Evidence that tumour necrosis factor (TNF) is not constitutively present in vivo. The association of TNF with freshly isolated monocytes reflects a rapid in vitro production. Hofsli E, et al. **Scand J Immunol** 1988 Oct; 28(4):435–41
Comparison of interleukin 1 release and interleukin 1 mRNA expression of human monocytes activated by bacterial lipopolysaccharide or synthetic lipid A. Hurme M, et al. **Scand J Immunol** 1989 Aug;30(2):259–63
The interaction of ethanol with human monocyte IgG–Fc receptors, characterized by monoclonal antibodies raised against two distinct receptor subpopulations. Mørland B, et al. **Scand J Immunol** 1989 May;29(5):573–7
Induction of interleukin 1 alpha (IL–1 alpha) and IL–1 beta mRNA expression and cellular IL–1 production by anti–HLA–DR antibodies in human monocytes. Palkama T, et al. **Scand J Immunol** 1989 May;29(5):609–15
The effects of betamethasone, methylprednisolone and hydrocortisone on lucigenin– and luminol–amplified chemiluminescence generated in human monocytes. Haar D, et al. **Scand J Rheumatol** 1988;17(6):487–90
Effect of auranofin and sodium aurothiomalate on interleukin–1 production from human monocytes in vitro. Remvig L, et al. **Scand J Rheumatol** 1988;17(4):255–62
The effect of recombinant interferons on cathepsin B activity in human monocytes. Rollag H, et al.
Scand J Rheumatol Suppl 1988;76:79–83
Interleukin–1 production from monocyte induced by urate crystals. Chang DM, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Jul;87(7):707–11
Increased thromboplastin activity in circulating monocytes and reduced in vitro sensitivity to stimuli of blood monocytes from selenium–deficient rats. Ringstad J, et al. **Thromb Res** 1988 Sep 1;51(5):557–62
[Intracellular metabolism of the insulin–receptor complex in monocytes of normal subjects and subjects with non–insulin–dependent diabetes mellitus (type II)] Trischitta V, et al. **Minerva Endocrinol** 1988 Oct–Dec; 13(4):269–73 (Eng. Abstr.) **(Ita)**
[Interleukin 1 and systemic lupus erythematosus] Sierakowski S, et al. **Przegl Lek** 1988;45(9):693–6 (44 ref.) **(Pol)**

MICROBIOLOGY

Antibody–dependent enhancement of dengue virus growth in human monocytes as a risk factor for dengue hemorrhagic fever. Kliks SC, et al.
Am J Trop Med Hyg 1989 Apr;40(4):444–51
Stimulation of plasminogen activator inhibitor activity in human monocytes infected with dengue virus. Krishnamurti C, et al. **Am J Trop Med Hyg** 1989 Jan; 40(1):102–7
Respiratory syncytial virus infection of human cord and adult blood monocytes and alveolar macrophages. Midulla F, et al. **Am Rev Respir Dis** 1989 Sep;140(3):771–7
Host–virus interaction in caprine arthritis–encephalitis. Zink MC, et al. **Ann N Y Acad Sci** 1988;540:634–5
Lack of activity of fusidic acid against human immunodeficiency virus in monocytes. Maehlen T, et al. **Antimicrob Agents Chemother** 1989 May;33(5):680–3
Pathogenicity of Mycobacterium avium for human monocytes: absence of macrophage–activating factor activity of gamma interferon. Toba H, et al.
Infect Immun 1989 Jan;57(1):239–44
AZT inhibits HIV–1 replication in monocytes [letter] Skinner MA, et al. **J Acquir Immune Defic Syndr** 1988;1(2):162–3
Optimal conditions for recovery of the human immunodeficiency virus from peripheral blood mononuclear cells. Castro BA, et al. **J Clin Microbiol** 1988 Nov;26(11):2371–6
Replication of human immunodeficiency virus in monocytes. Granulocyte/macrophage colony–stimulating factor (GM–CSF) potentiates viral production yet enhances the antiviral effect mediated by 3'–azido–2'3'–dideoxythymidine (AZT) and other dideoxynucleoside congeners of thymidine. Perno CF, et al. **J Exp Med** 1989 Mar 1;169(3):933–51
Epstein–Barr virus DNA sequences in precursor monocyte–macrophage cell lines established from the bone marrow of children with maturation defects of haematopoiesis. Revoltella RP, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1203–15
Bluetongue virus infection of bovine monocytes. Whetter LE, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1663–76
Lentivirus–induced interferon inhibits maturation and proliferation of monocytes and restricts the replication of caprine arthritis–encephalitis virus. Zink MC, et al.
J Virol 1989 Jun;63(6):2578–84
Activation of HIV gene expression during monocyte differentiation by induction of NF–kappa B. Griffin GE, et al. **Nature** 1989 May 4;339(6219):70–3
Replication of herpes simplex virus in blood monocytes and placental macrophages from human neonates. Plaeger–Marshall S, et al. **Pediatr Res** 1989 Aug; 26(2):135–9
Detection of mRNA for the tax1/rex1 gene of human T–cell leukemia virus type I in fresh peripheral blood mononuclear cells of adult T–cell leukemia patients and viral carriers by using the polymerase chain reaction. Kinoshita T, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5620–4
Effect of dengue virus on procoagulant and fibrinolytic activities of monocytes. Krishnamurti C, et al.
Rev Infect Dis 1989 May–Jun;11 Suppl 4:S843–6
Replication of hemorrhagic fever viruses in monocytic cells. Lewis RM, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 4:S736–42 (63 ref.)
Antibody–enhanced infection by HIV–1 via Fc receptor–mediated entry. Takeda A, et al. **Science** 1988 Oct 28;242(4878):580–3
Resistance of human blood monocytes to infection with herpes simplex virus. Albers I, et al. **Virology** 1989 Apr; 169(2):466–9
Restriction of HIV–1 replication in promonocytic cells: a role for IFN–alpha. Macé K, et al. **Virology** 1989 Feb; 168(2):399–405

PARASITOLOGY

Fibronectin increases Trypanosoma cruzi amastigote binding to and uptake by murine macrophages and human monocytes. Noisin EL, et al. **Infect Immun** 1989 Apr; 57(4):1030–4

PATHOLOGY

Monocyte monolayer assay: an efficient noninvasive technique for predicting the severity of hemolytic disease of the newborn. Nance SJ, et al. **Am J Clin Pathol** 1989 Jul;92(1):89–92
Enhanced monocyte progenitor cell proliferation in bone marrow of hyperlipemic swine. Averill LE, et al.
Am J Pathol 1989 Aug;135(2):369–77
Mononuclear cell types in cerebrospinal fluid and blood of patients with multiple sclerosis. Quantitation by immunoenzyme microassay with panel of monoclonal antibodies. Fredrikson S, et al. **Arch Neurol** 1989 Apr; 46(4):372–5
Essential amino acid deprivation induces monocytic differentiation of the human HL–60 myeloid leukemia cell line. Nichols KE, et al. **Blood** 1989 Apr;73(5):1298–306
Immunophenotypic and enzymatic studies do not support the concept of mixed monocytic–granulocytic differentiation in acute promyelocytic leukaemia (M3): a study of 44 cases. Scott CS, et al. **Br J Haematol** 1989 Apr;71(4):505–9
Regulation of transferrin receptor in myeloid and monocytic differentiation of HL–60 leukemia cells. Ho PT, et al.
Cancer Res 1989 Apr 15;49(8):1989–95
Changes in c–myc, c–fms, and N–ras proto–oncogene expression associated with retinoic acid–induced monocytic differentiation of human leukemia HL60/MRI cells. Imaizumi M, et al. **Cancer Res** 1988 Dec 1;48(23):6733–8
Studies of secondary transforming events in murine c–myc retrovirus–induced monocyte tumors. Eccles MR, et al.
Curr Top Microbiol Immunol 1989;149:89–98 (18 ref.)
Phenotypic and functional characteristics of mononuclear cells in ovarian carcinoma tumors. Lentz SS, et al.
Gynecol Oncol 1989 Aug;34(2):136–40
Plasmacytoid monocytes (so–called plasmacytoid T cells) in Hodgkin's disease. Facchetti F, et al. **J Pathol** 1989 May; 158(1):57–65
Lymphocyte/monocyte–ratio correlates with survival from infections and multi–organ failure following polytrauma. Holch MW, et al. **Prog Clin Biol Res** 1989;308:769–73
Report of a case with chronic myelomonocytic leukemia: demonstration of leukemic monocytes lacking nonspecific esterase by flow cytometry using monoclonal antibodies. Takahashi K, et al. **Tokai J Exp Clin Med** 1987 Dec; 12(5–6):275–81

Monocytes and macrophages in the rejection of human cardiac allografts. Gassel AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2514–6

[Esterases in the diagnosis of monocytic and myelomonocytic leukemias and the so-called atypical monocytes in myelodysplastic syndromes] Malasková V, et al. **Sb Lek** 1988 Sep;90(8–9):260–7 (Eng. Abstr.) (Cze)

[Erythroblastic islets of bone marrow and peripheral blood monocytes in patients with hematopoietic hypoplasia and erythremia] Korobkin AV, et al. **Gematol Transfuziol** 1988 Jun;33(6):52–5 (Rus)

PHYSIOLOGY

Role of immunocompetent cells in the regulation of human megakaryocytopoiesis in vitro. Detrick RA, et al. **Adv Exp Med Biol** 1988;241:199–215

Exogenous and endogenous regulations of human megakaryocytopoiesis. Gewirtz AM. **Adv Exp Med Biol** 1988;241:149–64

Regulated generation of leukotrienes in mononuclear cells. Lewis RA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:495–8

Benoxaprofen inhibits the adhesion of human monocytes to cultured vascular endothelium. Brown KA, et al. **Agents Actions** 1989 Aug;28(1–2):115–20

Stimulation of human neutrophilic granulocytes by two monocyte-derived cytokines. Kownatzki E, et al. **Agents Actions** 1989 Jan;26(1–2):180–2

Increased phagocytic cell chemiluminescence in patients with cystic fibrosis. Roberts RL, et al. **Am J Dis Child** 1989 Aug;143(8):944–50

Artefactual low lymphocyte activity caused by platelet contamination in the mononuclear cell preparations. Rueda F, et al. **Am J Hematol** 1989 Jun;31(2):126–7

Bronchial epithelial cells release chemoattractant activity for monocytes. Koyama S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L130–6

Human alveolar macrophage and blood monocyte inhibition of fibroblast proliferation. Evidence for synergy between interleukin-1 and tumor necrosis factor. Elias JA, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1595–603

Comparative oxidative microbicidal activity of human blood monocytes and alveolar macrophages and activation by recombinant gamma interferon [letter] Todisco T, et al. **Am Rev Respir Dis** 1988 May;137(5):1246

In vivo leucocyte migration in Behçet's syndrome. Efthimiou J, et al. **Ann Rheum Dis** 1989 Mar;48(3):206–10

Blood monocyte oxidative burst activity in acute P. falciparum malaria. Nielsen H, et al. **APMIS** 1989 May; 97(5):469–71

Quantitative and qualitative study of the restoration by cytokines of mononuclear cell delivery to skin test sites in anergic surgical patients. MacPhee M, et al. **Arch Surg** 1988 Dec;123(12):1470–3

Oxidative modification of beta-very low density lipoprotein. Potential role in monocyte recruitment and foam cell formation. Parthasarathy S, et al. **Arteriosclerosis** 1989 May–Jun;9(3):398–404

Enhanced procoagulatory activity (PCA) of human monocytes/macrophages after in vitro stimulation with chemically modified LDL. Schuff-Werner P, et al. **Atherosclerosis** 1989 Aug;78(2–3):109–12

Kawasaki disease, oxygen radicals and high dose gammaglobulin therapy. Kuratsuji T, et al. **Basic Life Sci** 1988;49:997–1003

Is oxidized low density lipoprotein involved in the recruitment and retention of monocyte/macrophages in the artery wall during the initiation of atherosclerosis? Parthasarathy S, et al. **Basic Life Sci** 1988;49:375–80

Expression of messenger RNA for GM-CSF by blood mononuclear cells after allogeneic bone marrow transplantation. Atkinson K, et al. **Behring Inst Mitt** 1988 Aug;(83):330–4

Role of GM-CSF in phagocyte recruitment and regulation of c-fos protooncogene expression. Wang JM, et al. **Behring Inst Mitt** 1988 Aug;(83):270–3

Transforming growth factor-beta (TGF beta) is chemotactic for human monocytes and induces their expression of angiogenic activity. Wiseman DM, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):793–800

Inhibition of cell migrations by the linoleic acid oxygenation product 9S-hydroxy 10E,12Z octadecadienoic acid (9-HODE). Pankonin G, et al. **Biomed Biochim Acta** 1988; 47(12):K17–21

Enhancement of colony-forming activity of granulocyte-macrophage colony-stimulating factor by monocytes in vitro. Namiki M, et al. **Blood** 1989 Aug 15; 74(3):918–24

Monocyte-platelet interaction in immune and nonimmune thrombocytopenia. Saleh MN, et al. **Blood** 1989 Sep; 74(4):1328–31

Downregulation of c-fms gene expression in human monocytes treated with phorbol esters and colony-stimulating factor 1. Sariban E, et al. **Blood** 1989 Jul;74(1):123–9

Dysfunction of monocytes in Hodgkin's disease by excessive production of PGE-2 in long-term remission patients. Estevez ME, et al. **Cancer** 1988 Nov 15;62(10):2128–33

Human monocytes selectively bind to cells expressing the tumorigenic phenotype. Shimizu H, et al. **Cancer Immunol Immunother** 1989;28(3):185–92

Lack of a role of monocytes in the inhibition by monoclonal antibodies to monomorphic and polymorphic determinants of HLA class I antigens of PHA-P-induced peripheral blood mononuclear cell proliferation. De Felice M, et al. **Cell Immunol** 1989 Aug;122(1):164–77

Direct action of antibiotics and immunomodulating agents on phagocytosis. Fietta A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):229–31

Pathogenic effects of monocytopenia, granulocytopenia and dexamethasone on the course of experimental Pseudomonas aeruginosa endocarditis in rabbits. Bayer AS, et al. **Chemotherapy** 1989;35(4):278–88

Abnormal monocyte chemotaxis in patients with chronic purulent rhinosinusitis: an effect of retroviral p15E-related factors in serum. van de Plassche-Boers EM, et al. **Clin Exp Immunol** 1988 Sep;73(3):348–54

Random locomotion and phagocytosis of monocytes in undiluted normal serum and in undiluted SLE serum. Rydgren L, et al. **Clin Exp Rheumatol** 1988 Oct–Dec; 6(4):355–9

C1q acts synergistically with phorbol dibutyrate to activate CR1-mediated phagocytosis by human mononuclear phagocytes. Bobak DA, et al. **Eur J Immunol** 1988 Dec; 18(12):2001–7

The tumor progression-associated human melanoma antigen P3.58 mediates monocyte-lymphocyte interactions in vitro. Johnson JP, et al. **Eur J Immunol** 1988 Dec;18(12):2097–100

The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived interleukin 8. Van Damme J, et al. **Eur J Immunol** 1989 Jul;19(7):1189–94

Human T cells and interleukin 4 inhibit the release of interleukin 1 induced by lipopolysaccharide in serum-free cultures of autologous monocytes. Weiss L, et al. **Eur J Immunol** 1989 Jul;19(7):1347–50

Platelet-derived growth factor is not chemotactic for human peripheral blood monocytes. Graves DT, et al. **Exp Cell Res** 1989 Feb;180(2):497–503

Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE. Yoshimura T, et al. **FEBS Lett** 1989 Feb 27;244(2):487–93

Distinctive features of procoagulant response of monocytes from diabetic patients. Jude B, et al. **Haemostasis** 1989; 19(2):65–73

Identification of multiple isoforms of the low-affinity human IgG Fc receptor. Seki T. **Immunogenetics** 1989;30(1):5–12

Soluble fragments of the low-affinity IgE receptor (CD23) inhibit the spontaneous migration of U937 monocytic cells: neutralization of MIF-activity by a CD23 antibody. Flores-Romo L, et al. **Immunology** 1989 Aug;67(4):547–9

A 25-kilodalton fraction from Mycobacterium tuberculosis that inhibits hexose monophosphate shunt activity, lysozyme release, and H2O2 production: reversal by gamma interferon. Wadee AA, et al. **Infect Immun** 1989 Mar;57(3):864–9

Effects of monocytic products, recombinant interleukin-1, and recombinant interleukin-6 on glycosylation of alpha 1-acid glycoprotein: studies with primary human hepatocyte cultures and rats. Pos O, et al. **Inflammation** 1989 Aug;13(4):415–27

Granulocyte/macrophage colony stimulating factor. A potent activation signal for mature macrophages and monocytes. Morrissey PJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):40–5

Effect of histamine on chemotaxis and phagocytosis of human alveolar macrophages and blood monocytes. Radermecker M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):197–9

Up-regulation by granulocyte-macrophage colony-stimulating factor (GM-CSF) of induction of lymphokine (IL-2)-activated killer (LAK) cells by human blood monocytes. Singh SM, et al. **Int J Cancer** 1989 Jul 15;44(1):170–6

IgG-, IgA-, and IgE-induced release of leukotriene C4 by monocytes isolated from patients with atopic dermatitis. Ferreri NR, et al. **J Allergy Clin Immunol** 1988 Oct; 82(4):556–67

Atopic dermatitis: influence of bacterial infections on human monocyte and neutrophil granulocyte functional activities. Mrowietz U, et al. **J Allergy Clin Immunol** 1988 Dec; 82(6):1027–36

Infiltration of carbon-labelled monocytes into the dorsal motor nucleus following an intraneural injection of ricinus communis agglutinin-60 into the vagus nerve in rats. Ling EA, et al. **J Anat** 1988 Aug;159:207–18

Effect of exercise duration on density and coupling of beta-adrenergic receptors on human mononuclear cells. Frey MJ, et al. **J Appl Physiol** 1989 Mar;66(3):1494–500

Macrophage differentiation inducing factor from human monocytic cells is equivalent to murine leukemia inhibitory factor. Abe T, et al. **J Biol Chem** 1989 May 25; 264(15):8941–5

Human pulmonary surfactant protein (SP-A), a protein structurally homologous to C1q, can enhance FcR- and CR1-mediated phagocytosis. Tenner AJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13923–8

In vitro stimulation of fibroblast activity by factors generated from human monocytes activated by biomedical polymers. Miller KM, et al. **J Biomed Mater Res** 1989 Aug; 23(8):911–30

Pulmonary alveolar macrophages from patients with active sarcoidosis express type IV collagenolytic proteinase. An enzymatic mechanism for influx of mononuclear phagocytes at sites of disease activity. Agostini C, et al. **J Clin Invest** 1989 Aug;84(2):605–12

Activation of monocytes and platelets by monoclonal antibodies or malaria-infected erythrocytes binding to the CD36 surface receptor in vitro. Ockenhouse CF, et al. **J Clin Invest** 1989 Aug;84(2):468–75

Glycoprotein IV mediates thrombospondin-dependent platelet-monocyte and platelet-U937 cell adhesion. Silverstein RL, et al. **J Clin Invest** 1989 Aug;84(2):546–52

A case of mosquito hypersensitivity showing abnormality of peripheral monocyte function. Sugihara K, et al. **J Dermatol** 1989 Apr;16(2):142–5

Monocyte-modulating activities in the sera of patients with granuloma annulare. Baba T, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):248–51

A monoclonal antibody to sialophorin (CD43) induces homotypic adhesion and activation of human monocytes. Nong YH, et al. **J Exp Med** 1989 Jul 1;170(1):259–67

The selective binding and transmigration of monocytes through the junctional complexes of human endothelium. Pawlowski NA, et al. **J Exp Med** 1988 Nov 1; 168(5):1865–82

Purification and amino acid analysis of two human glioma-derived monocyte chemoattractants. Yoshimura T, et al. **J Exp Med** 1989 Apr 1;169(4):1449–59

Superoxide anion participation in human monocyte-mediated oxidation of low-density lipoprotein and conversion of low-density lipoprotein to a cytotoxin. Cathcart MK, et al. **J Immunol** 1989 Mar 15;142(6):1963–9

Human monocyte inflammatory mediator gene expression is selectively regulated by adherence substrates. Eierman DF, et al. **J Immunol** 1989 Mar 15;142(6):1970–6

Effects of recombinant human colony stimulating factors (CSF) (granulocyte-macrophage CSF, granulocyte CSF, and CSF-1) on human monocyte/macrophage differentiation. Geissler K, et al. **J Immunol** 1989 Jul 1; 143(1):140–6

Induction of multinucleated giant cell formation from human blood-derived monocytes by phorbol myristate acetate in in vitro culture. Hassan NF, et al. **J Immunol** 1989 Oct 1;143(7):2179–84

Purification and amino acid analysis of two human monocyte chemoattractants produced by phytohemagglutinin-stimulated human blood mononuclear leukocytes. Yoshimura T, et al. **J Immunol** 1989 Mar 15; 142(6):1956–62

Transendothelial chemotaxis in vitro of human monocytes. Darby H, et al. **J Immunol Methods** 1988 Oct 26; 113(2):157–63

Evaluation of methods for isolating human peripheral blood monocytes. Studies on chemotactic locomotion and other functional characteristics. Islam LN, et al. **J Immunol Methods** 1989 Jul 6;121(1):75–84

Differences in the ability of neutrophils and monocytes to traverse epithelial occluding junctions. Migliorisi G, et al. **J Leukoc Biol** 1988 Dec;44(6):485–92

Functional analysis of monocyte-macrophages derived from nonadherent cord blood progenitor cells: correlation with the ontogeny of cell surface proteins. Santiago-Schwarz F, et al. **J Leukoc Biol** 1989 Sep;46(3):230–8

Changes in insulin receptor expression in HL60 cells induced to differentiate towards neutrophils or monocytes. Lord JM, et al. **J Mol Endocrinol** 1988 Nov;1(3):197–201

Brain neocortex influence on the mononuclear phagocyte system. Neveu PJ, et al. **J Neurosci Res** 1989 Feb; 22(2):188–93

Morphological analysis of the pathogenesis of hypertensive cerebrovascular lesions: role of monocytes and platelets in intracerebral vessel occlusions. Tagami M, et al. **Jpn Circ J** 1988 Nov;52(11):1351–6

Platelet alpha-granule protein-induced chemotaxis of inflammatory cells and fibroblasts. Senior RM, et al. **Methods Enzymol** 1989;169:233–44

Effect of fibronectin on C3b and Fc receptor-mediated phagocytosis by peripheral blood monocytes in uraemic patients. Pertosa G, et al. **Nephrol Dial Transplant** 1989; 4(1):15–20

Is complement alone capable of inducing glomerular injury in passive Heymann nephritis? Hara M, et al. **Nephron** 1989; 52(2):187–8

Dual regulatory effects of monocytes-macrophages on the proliferation of myeloma cells. Shimizu S, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1550–7

Transformation of murine myelomonocytic cells by myc: point mutations in v-myc contribute synergistically to transforming potential. Symonds G, et al. **Oncogene** 1989 Mar;4(3):285–94

Human peripheral blood monocytes secrete a unique form of PDGF. Pencev D, et al. **Oncogene Res** 1988;3(4):333–42

Further characterization of a human monocyte locomotion inhibitory factor produced by axenically grown Entamoeba histolytica. Kretschmer RR, et al. **Parasitol Res** 1989; 75(3):245–6

Defective leukocyte fungicidal activity in end-organ resistance to 1,25-dihydroxyvitamin D. Etzioni A, et al. **Pediatr Res** 1989 Mar;25(3):276–9

Chemokinetic agents for monocytes in human milk: possible role of tumor necrosis factor-alpha. Mushtaha AA, et al. **Pediatr Res** 1989 Jun;25(6):629–33

Analysis of the beta-endorphin structure-related activity on

human monocyte chemotaxis: importance of the N- and C-terminal. Sacerdote P, et al. **Peptides** 1989 May-Jun; 10(3):565-9

Regulation of human monocyte adherence by granulocyte-macrophage colony-stimulating factor. Gamble JR, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7169-73

Potential antiinflammatory effects of interleukin 4: suppression of human monocyte tumor necrosis factor alpha, interleukin 1, and prostaglandin E2. Hart PH, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3803-7

Human neutrophils and mononuclear cells inhibit platelet aggregation by releasing a nitric oxide-like factor. Salvemini D, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6328-32

The involvement of platelet-activating factor (PAF)-induced monocyte activation and tumor necrosis factor (TNF) production in shock. Bonavida B, et al. **Prog Clin Biol Res** 1989;308:485-9

Ligand-specific cross-inhibition of monocyte phagocytosis. Kávai M, et al. **Scand J Immunol** 1988 Oct;28(4):397-402

Molecular analysis of expression of parental cell properties in hybrids between monocytes and a myeloma cell line. Setoguchi M, et al. **Somat Cell Mol Genet** 1988 Sep; 14(5):427-38

Fibrinolytic activity of normal human blood monocytes. Grau E, et al. **Thromb Res** 1989 Jan 15;53(2):145-62

The effects of prednisolone and cyclosporin A on monocyte-dependent and -independent human T-cell proliferation in vitro. Bloemena E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):861-5

Fc-receptors regulate secretion of tumor necrosis factor by human monocytes. Debets IM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):84

The reversal of cyclosporin A mediated suppression of allogeneic-induced monocyte procoagulant activity by H2 antagonist in a rat small intestinal transplantation model. Kim P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2900-2

Additive inhibitory effect of cyclosporine and verapamil may occur through different mechanisms that may be dependent or independent of the slow calcium channel. Weir MR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):866-70

[The effect of peripheral blood monocytes on the proliferation of aortic smooth muscle cells in vitro] Shen LJ. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):575-7, 40 (Eng. Abstr.) **(Chi)**

[Monocyte-endothelium relations] Wautier JL. **J Mal Vasc** 1989;14 Suppl A:13-6 (22 ref.) (Eng. Abstr.) **(Fre)**

[Determination of the phagocytic activity of peripheral blood monocytes in patients with erysipelas] Frolov VM, et al. **Lab Delo** 1989;(1):59-61 **(Rus)**

[Characteristics of the functional activity of peripheral blood monocytes in patients with rheumatoid arthritis] Mikheenko TV, et al. **Revmatologiia (Moskva)** 1988 Oct-Dec;(4):43-7 (Eng. Abstr.) **(Rus)**

[Activation of monocytes during hemodialysis] Stetsiuk EA, et al. **Ter Arkh** 1988;60(6):57-60 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Monocyte induces alkaline phosphatase synthesis in neutrophils of chronic myeloid leukemia and myelofibrosis with myeloid metaplasia patients. Chikkappa G, et al. **Am J Clin Pathol** 1989 May;91(5):550-7

RADIATION EFFECTS

Effect of 89 Sr-induced monocytopenia on splenic and pulmonary alveolar macrophage populations in a normal steady state. Oghiso Y, et al. **J Radiat Res (Tokyo)** 1988 Sep;29(3):189-202

Prevention of UV irradiation induced suppression of monocyte functions by retinoids and carotenoids in vitro. Schoen DJ, et al. **Photochem Photobiol** 1988 Nov; 48(5):659-63

SECRETION

Granulocyte-activating mediators (GRAM): III. Further functional characterization of monocyte-derived GRAM. Kapp A, et al. **Arch Dermatol Res** 1988;280(6):346-53

Effects of sodium aurothiomalate on the polyclonal immunoglobulin secretion by human mononuclear cells in vitro. Riestra JL, et al. **J Rheumatol** 1988;15(5):779-84

Tumor necrosis factor/cachectin and interleukin-1 secretion by cord blood monocytes from premature and term neonates. Weatherstone KB, et al. **Pediatr Res** 1989 Apr; 25(4):342-6

ULTRASTRUCTURE

Sulfur-containing macromolecules in cultured monocyte-like cells. Kolset SO, et al. **Acta Histochem (Jena)** 1988; 84(1):67-75

Local activation of the monocyte-macrophage system in experimental contact dermatitis of the guinea pig. Vermes E, et al. **Acta Vet Hung** 1988;36(3-4):205-8

Nucleoli of blood monocytes in malignant lymphoma. A morphometric study. Sokol RJ. **Am J Clin Pathol** 1989 Jan;91(1):60-3

Endothelial cell denudation, labelling indices and monocyte attachment in advanced swine coronary artery lesions. Kim DN, et al. **Atherosclerosis** 1988 Oct;73(2-3):247-57

Immunocytochemical discovery of the 22- to 23-Kd subunit of cytochrome b558 at the surface of human peripheral phagocytes. Nakamura M, et al. **Blood** 1988 Nov; 72(5):1550-2

The two mannose 6-phosphate receptors have almost identical subcellular distributions in U937 monocytes. Bleekemolen JE, et al. **Eur J Cell Biol** 1988 Dec; 47(2):366-72

Cytoskeletal organization and functional changes in monocytes from patients with chronic hepatitis B: relationship with viral replication. Prieto J, et al. **Hepatology** 1989 May;9(5):720-5

"Urchin-like" lymphocytes and monocytes. Manolescu N, et al. **Med Interne** 1982 Apr-Jun;20(2):157-8

Ultrastructural features of acute monoblastic leukaemia cells: a multivariate morphometric analysis. James V, et al. **Virchows Arch [A]** 1988;414(1):21-7

Ultrastructure of the camel monocyte. Abdo MS, et al. **Z Mikrosk Anat Forsch** 1989;103(2):345-9

[A light and electron microscopic study of acute myelomonocytic leukemia cells in comparison with normal monocytes and acute monocytic leukemia cells] Saito N. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):146-62 (Eng. Abstr.) **(Jpn)**

[Characteristics of the interaction of blood monocytes with the arterial intima in swine exposed to catecholamines] Kondakov IK, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):482-6 (Eng. Abstr.) **(Rus)**

[Blood monocytes in type-1 diabetes mellitus: electron microscopic and ultracytochemical studies] Afanas'eva VV, et al. **Ter Arkh** 1988;60(5):95-7 **(Rus)**

MONOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, MONOCYTIC, ACUTE**

MONOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, MONOCYTIC, CHRONIC**

MONOMETHYLHYDRAZINE see under **METHYLHYDRAZINES**

MONOMYCIN

ADMINISTRATION & DOSAGE

[Value of determining the spectrum of blood serum fatty acids in evaluating increasing the effectiveness of antibiotic therapy of dysentery in children with prodigiozan and ephedrine] Vereshchagin IA, et al. **Antibiot Khimioter** 1989 Mar;34(3):218-23 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Combination therapy (monomycine and methyluracil) in leishmaniasis cutis. Hossain MZ. **Int J Dermatol** 1988 Dec; 27(10):720-2

MONONUCLEAR LEUKOCYTES see **LEUKOCYTES, MONONUCLEAR**

MONOPHOSPHATIDYLGLYCEROLS see **PHOSPHATIDYLGLYCEROLS**

MONOSACCHARIDE TRANSPORT PROTEINS

ANALYSIS

Side-specific photolabelling of the hexose transporter. Holman GD. **Biochem Soc Trans** 1989 Jun;17(3):438-40

Rat skeletal muscle, liver and brain have different fetal and adult forms of the glucose transporter. Wang C, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):11-8

Cytochalasin B-sensitive, sodium ion-dependent glucose transport in intestinal microvillous membrane. Uezato T, et al. **Biochimie** 1988 Dec;70(12):1775-9

Decrease in glucose transporter number in skeletal muscle of mildly diabetic (streptozotocin-treated) rats. Ramlal T, et al. **Endocrinology** 1989 Aug;125(2):890-7

Affinity labeling of forskolin-binding proteins. Comparison between glucose carrier and adenylate cyclase. Pfeuffer E, et al. **FEBS Lett** 1989 May 8;248(1-2):13-7

Differential regulation of two glucose transporters in adipose cells from diabetic and insulin-treated diabetic rats. Kahn BB, et al. **J Clin Invest** 1989 Aug;84(2):404-11

Glucose transporter localization in brain using light and electron immunocytochemistry. Gerhart DZ, et al. **J Neurosci Res** 1989 Apr;22(4):464-72

Localization of the pancreatic beta cell glucose transporter to specific plasma membrane domains. Orci L, et al. **Science** 1989 Jul 21;245(4915):295-7

ANTAGONISTS & INHIBITORS

Inhibition of the Na+/glucose cotransporter functional lysyl residues by 4-(4-methoxy-3-sulfophenyl)-2,6-bis(4-sulfophenyl)pyrylium. Fernandez A, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1356-63

Direct interaction of phenylarsine oxide with hexose transporters in isolated rat adipocytes. Douen AG, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):444-50

Effects of three proposed inhibitors of adipocyte glucose transport on the reconstituted transporter. Wheeler TJ. **Biochim Biophys Acta** 1989 Mar 13;979(3):331-40

Electron spin resonance investigation of the interaction of the anion and glucose transport inhibitor, p-azidobenzylphlorizin, with the human red cell membrane. Wyse JW, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):127-31

Inhibition of the serosal sugar carrier in isolated intestinal epithelial cells by saccharin. Kimmich GA, et al. **Food Chem Toxicol** 1988 Nov-Dec;26(11-12):927-34

BIOSYNTHESIS

Sodium butyrate increases glucose transporter expression in LLC-PK1 cells. Takano M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8072-5

Pretranslational suppression of an insulin-responsive glucose transporter in rats with diabetes mellitus. Garvey WT, et al. **Science** 1989 Jul 7;245(4913):60-3

BLOOD

Identification of glucose and nucleoside transport proteins in neonatal pig erythrocytes using monoclonal antibodies against band 4.5 polypeptides of adult human and pig erythrocytes. Craik JD, et al. **Biochem Cell Biol** 1988 Aug; 66(8):839-52

Selective labeling of the erythrocyte hexose carrier with a maleimide derivative of glucosamine: relationship of an exofacial sulfhydryl to carrier conformation and structure. May JM. **Biochemistry** 1989 Feb 21;28(4):1718-25

Activation energy of the slowest step in the glucose carrier cycle: break at 23 degrees C and correlation with membrane lipid fluidity. Whitesell RR, et al. **Biochemistry** 1989 Jun 27;28(13):5618-25

Immunological evidence that band 3 is the major glucose transporter of the human erythrocyte membrane. Langdon RG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):23-32

The human red cell glucose transporter in octyl glucoside. High specific activity of monomers in the presence of membrane lipids. Mascher E, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):350-9

Pre-steady-state uptake of D-glucose by the human erythrocyte is inconsistent with a circulating carrier mechanism. Naftalin RJ. **Biochim Biophys Acta** 1988 Dec 22;946(2):431-8

Effects of ATP depletion on the mechanism of hexose transport in intact human erythrocytes. May JM. **FEBS Lett** 1988 Dec 5;241(1-2):188-90

Phosphorylation of the human erythrocyte glucose transporter by protein kinase C: localization of the site of in vivo and in vitro phosphorylation. Deziel MR, et al. **Int J Biochem** 1989;21(7):807-14

GENETICS

Regulation of glucose transport activity and expression of glucose transporter mRNA by serum, growth factors and phorbol ester in quiescent mouse fibroblasts. Kitagawa T, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):100-8

cDNA cloning and sequence analysis of the glucose transporter from porcine blood-brain barrier. Weiler-Güttler H, et al. **Biol Chem Hoppe Seyler** 1989 May; 370(5):467-73

Identification of a novel gene encoding an insulin-responsive glucose transporter protein. Birnbaum MJ. **Cell** 1989 Apr 21;57(2):305-15

Cloning and functional expression in bacteria of a novel glucose transporter present in liver, intestine, kidney, and beta-pancreatic islet cells. Thorens B, et al. **Cell** 1988 Oct 21;55(2):281-90

Polymorphic human insulin-responsive glucose-transporter gene on chromosome 17p13. Bell GI, et al. **Diabetes** 1989 Aug;38(8):1072-5

Regulation of glucose-transporter gene expression by insulin in cultured human fibroblasts. Kosaki A, et al. **Diabetes** 1988 Nov;37(11):1583-6

Analysis of the HepG2/erythrocyte glucose transporter locus in a family with type 2 (non-insulin-dependent) diabetes and obesity. O'Rahilly S, et al. **Diabetologia** 1989 Apr; 32(4):266-9

Regulation of the glucose transporter in developing rat brain. Sivitz W, et al. **Endocrinology** 1989 Apr;124(4):1875-80

Regulation of rat brain/HepG2 glucose transporter gene expression by insulin and insulin-like growth factor-I in primary cultures of neuronal and glial cells. Werner H, et al. **Endocrinology** 1989 Jul;125(1):314-20

Assignment of the human intestinal Na+/glucose cotransporter gene (SGLT1) to the q11.2——qter region of chromosome 22. Hediger MA, et al. **Genomics** 1989 Apr; 4(3):297-300

Cloning and characterization of the major insulin-responsive glucose transporter expressed in human skeletal muscle and other insulin-responsive tissues. Fukumoto H, et al. **J Biol Chem** 1989 May 15;264(14):7776-9

The regulation by insulin of glucose transporter gene expression in 3T3 adipocytes. Garcia de Herreros A, et al. **J Biol Chem** 1989 Jun 15;264(17):9885-90

Evidence for a family of human glucose transporter-like proteins. Sequence and gene localization of a protein expressed in fetal skeletal muscle and other tissues. Kayano T, et al. **J Biol Chem** 1988 Oct 25;263(30):15245-8

Platelet-derived growth factor regulates glucose transporter expression. Rollins BJ, et al. **J Biol Chem** 1988 Nov 15;

263(32):16523–6
Insulin and glucose-dependent regulation of the glucose transport system in the rat L6 skeletal muscle cell line. Walker PS, et al. **J Biol Chem** 1989 Apr 15;264(11):6587–95
The rat facilitated glucose transporter gene. Transformation and serum-stimulated transcription initiate from identical sites. Williams SA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19513–8
Regulation of glucose transporter-specific mRNA levels in rat adipose cells with fasting and refeeding. Implications for in vivo control of glucose transporter number. Kahn BB, et al. **J Clin Invest** 1989 Jan;83(1):199–204
Coordinate regulation of glucose transporter function, number, and gene expression by insulin and sulfonylureas in L6 rat skeletal muscle cells. Wang PH, et al. **J Clin Invest** 1989 Jul;84(1):62–7
Increased glucose transport by human fibroblasts with a heritable defect in insulin binding. Longo N, et al. **Metabolism** 1989 Jul;38(7):690–7
Developmental regulation of rat brain/Hep G2 glucose transporter gene expression. Werner H, et al. **Mol Endocrinol** 1989 Feb;3(2):273–9
Molecular cloning and characterization of an insulin-regulatable glucose transporter. James DE, et al. **Nature** 1989 Mar 2;338(6210):83–7
Regulation of glucose transporter messenger RNA in insulin-deficient states. Sivitz WI, et al. **Nature** 1989 Jul 6;340(6228):72–4
The nucleotide sequence of cDNA for a mouse liver-type glucose transporter protein. Asano T, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6386
A KpnI polymorphism for the human insulin-responsive glucose transporter gene (GLUT4) on chromosome 17. Leysens N, et al. **Nucleic Acids Res** 1989 May 11;17(9):3621
Stu I RFLP at the human Hep G2/erythrocyte glucose transporter (GLUT) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3330
A glucose transport protein expressed predominately in insulin-responsive tissues. Charron MJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2535–9
Sequence, tissue distribution, and differential expression of mRNA for a putative insulin-responsive glucose transporter in mouse 3T3-L1 adipocytes [published erratum appears in Proc Natl Acad Sci U S A 1989 Jul;86(13):4937] Kaestner KH, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3150–4
Evidence for expression of the facilitated glucose transporter in rat hepatocytes. Rhoads DB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9042–6
Sweet success. A critical glucose transporter has been found. Rusting R. **Sci Am** 1989 Jul;261(1):28

IMMUNOLOGY

Monoclonal antibody to the human glucose transporter that differentiates between the glucose and nucleoside transporters. Tai PK, et al. **Biochemistry** 1988 Aug 9; 27(16):6062–71
A radioimmunoassay to screen for antibodies to native conformational antigens and analyse ligand-induced structural states of antigenic proteins. Bernotat-Danielowski S, et al. **J Immunol Methods** 1988 Dec 9;115(2):275–87

ISOLATION & PURIFICATION

The glucose transporter of the human brain and blood-brain barrier. Kalaria RN, et al. **Ann Neurol** 1988 Dec; 24(6):757–64

METABOLISM

Computer analysis reveals changes in renal Na+-glucose cotransporter in diabetic rats. Blank ME, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C385–96
Changes in glucose transporters in muscle in response to exercise. Fushiki T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E580–7
Alterations of glucose transporter systems in insulin-resistant uremic rats. Jacobs DB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E193–7
Discrepancy between glucose transport and transporters in human femoral adipocytes. Karnieli E, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E179–85
Na+-sugar cotransport system as a polarization marker during organization of epithelial membrane. Lasheras C, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C745–53
Emergence of Na+-glucose cotransport in an epithelial secretory cell line sensitive to cholera toxin. Nath SK, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G335–41
Phenylarsine oxide stimulates hexose transport in 3T3-L1 adipocytes by a mechanism other than an increase in surface transporters. Gould GW, et al. **Arch Biochem Biophys** 1989 Jan;268(1):264–75
Co-localization of a glucose transporter and the insulin receptor in microsomes of insulin-treated rat adipocytes. Ezaki O, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1368–74
Insulin-mediated translocation of glucose transporters from intracellular membranes to plasma membranes: sole mechanism of stimulation of glucose transport in L6 muscle cells. Ramlal T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1329–35
Thyroid hormone action on glucose transporter activity in astrocytes. Roeder LM, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):275–81
Proteolytic dissection as a probe of conformational changes in the human erythrocyte glucose transport protein. Gibbs AF, et al. **Biochem J** 1988 Dec 1;256(2):421–7
Insulin-induced translocation of glucose transporters to the plasma membrane precedes full stimulation of hexose transport. Gibbs EM, et al. **Biochemistry** 1988 Sep 6; 27(18):6681–5
ATP does not regulate the reconstituted glucose transporter. Wheeler TJ. **Biochemistry** 1989 Apr 18;28(8):3413–20
Characterization of vesicles containing insulin-responsive intracellular glucose transporters isolated from 3T3-L1 adipocytes by an improved procedure. Brown SJ, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):339–50
Photolabeling of erythrocyte and adipocyte hexose transporters using a benzophenone derivative of bis(D-mannose). Holman GD, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):75–84
Protein kinase C and membrane transport: divergent responses of Na+/K+/Cl- cotransport and sugar transport to exogenous diacylglycerol. O'Brien TG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):41–50
Characteristics of Na+-dependent hexose transport in OK, an established renal epithelial cell line. Van den Bosch L, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):91–8
Intracellular phosphoribosyl diphosphate level and glucose carrier in Ehrlich ascites tumour cells during tumour growth and diabetes in tumour-bearing mice. Choy YM, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):43–8
In vitro effects of sulfonylurea on glucose transport and translocation of glucose transporters in adipocytes from streptozocin-induced diabetic rats. Jacobs DB, et al. **Diabetes** 1989 Feb;38(2):205–11
Dysregulation of glucose transport and transporters in perfused hearts of genetically obese (fa/fa) rats. Zaninetti D, et al. **Diabetologia** 1989 Jan;32(1):56–60
Exercise-induced increase in glucose transporters in plasma membranes of rat skeletal muscle. Douen AG, et al. **Endocrinology** 1989 Jan;124(1):449–54
Acute exercise increases the number of plasma membrane glucose transporters in rat skeletal muscle. Hirshman MF, et al. **FEBS Lett** 1988 Oct 10;238(2):235–9
Beta-adrenergic receptors are not responsible for exercise stimulation of glucose transport. Sternlicht E, et al. **J Appl Physiol** 1989 May;66(5):2419–22
Role of cyclic-AMP-dependent protein kinase in catabolite inactivation of the glucose and galactose transporters in Saccharomyces cerevisiae. Ramos J, et al. **J Bacteriol** 1989 Jun;171(6):3545–8
Rabbit brain glucose transporter responds to insulin when expressed in insulin-sensitive Chinese hamster ovary cells. Asano T, et al. **J Biol Chem** 1989 Feb 25;264(6):3416–20
IIb group metal ions (Zn2+, Cd2+, Hg2+) stimulate glucose transport activity by post-insulin receptor kinase mechanism in rat adipocytes. Ezaki O. **J Biol Chem** 1989 Sep 25;264(27):16118–22
Insulin-stimulated translocation of the HepG2/erythrocyte-type glucose transporter expressed in 3T3-L1 adipocytes. Gould GW, et al. **J Biol Chem** 1989 Feb 5;264(4):2180–4
Acute effects of cycloheximide on the translocation of glucose transporters in rat adipose cells. Jones TL, et al. **J Biol Chem** 1989 May 15;264(14):7874–7
Monoclonal antibodies against the renal Na+-D-glucose cotransporter. Identification of antigenic polypeptides and demonstration of functional coupling of different Na+-cotransport systems. Koepsell H, et al. **J Biol Chem** 1988 Dec 5;263(34):18419–29
Kinetics of insulin action on protein synthesis in isolated adipocytes. Ability of glucose to selectively desensitize the glucose transport system without altering insulin stimulation of protein synthesis. Marshall S. **J Biol Chem** 1989 Feb 5;264(4):2029–36
Sulfonylurea binding to adipocyte membranes and potentiation of insulin-stimulated hexose transport. Martz A, et al. **J Biol Chem** 1989 Aug 15;264(23):13672–8
Glucose-dependent regulation of glucose transport activity, protein, and mRNA in primary cultures of rat brain glial cells. Walker PS, et al. **J Biol Chem** 1988 Oct 25; 263(30):15594–601
Translocation of glucose transporters in response to anoxia in heart. Wheeler TJ. **J Biol Chem** 1988 Dec 25; 263(36):19447–54
Insulin-regulated glucose uptake in rat adipocytes is mediated by two transporter isoforms present in at least two vesicle populations. Zorzano A, et al. **J Biol Chem** 1989 Jul 25; 264(21):12358–63
Developmentally regulated 75-kilodalton protein expressed in LLC-PK1 cultures is a component of the renal Na+/glucose cotransport system. Wu JS, et al. **J Cell Biochem** 1989 May;40(1):83–9
Localization of transferrin receptors and insulin-like growth factor II receptors in vesicles from 3T3-L1 adipocytes that contain intracellular glucose transporters. Tanner LI, et al. **J Cell Biol** 1989 Apr;108(4):1537–45
Kinetic characteristics and regulation of hexose transport in a galactokinase-negative Chinese hamster fibroblast cell line: a good model for studies on sugar transport in cultured mammalian cells. Germinario RJ, et al. **J Cell Physiol** 1989 Feb;138(2):300–4
Common pathway for the induction of hexose transport by insulin and stress. Warren AP, et al. **J Cell Physiol** 1989 Feb;138(2):323–8
Mechanism of mitogen-induced stimulation of glucose transport in human peripheral blood mononuclear cells. Evidence of an intracellular reserve pool of glucose carriers and their recruitment. Jacobs DB, et al. **J Clin Invest** 1989 Feb;83(2):437–43
Glucose transporter of the blood-brain barrier and brain in chronic hyperglycemia. Harik SI, et al. **J Neurochem** 1988 Dec;51(6):1930–4
Reduced glucose transporter at the blood-brain barrier and in cerebral cortex in Alzheimer disease. Kalaria RN, et al. **J Neurochem** 1989 Oct;53(4):1083–8
Glucose transport in primary cultured neurons. Heidenrich KA, et al. **J Neurosci Res** 1989 Apr;22(4):397–407
Cytochalasin B binding to rabbit proximal tubular basolateral membranes. Cheung PT, et al. **Kidney Int** 1989 Jun; 35(6):1290–4
Decreased expression of the insulin-responsive glucose transporter in diabetes and fasting. Berger J, et al. **Nature** 1989 Jul 6;340(6228):70–2
Activation of glucose uptake by insulin and insulin-like growth factor I in Xenopus oocytes. Janicot M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2642–6
Concerted hexose transport curb by tunicamycin is rendered irreversible by glucose or allose in medium containing L-glutamine. Ullrey DB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4350–1
The dynamics of the glucose transporter. Walmsley AR. **Trends Biochem Sci** 1988 Jun;13(6):226–31 (30 ref.)

PHARMACOLOGY

Na+ and K+ fluxes stimulated by Na+-coupled glucose transport: evidence for a Ba2+-insensitive K+ efflux pathway in rabbit proximal tubules. Avison MJ, et al. **J Membr Biol** 1988 Nov;105(3):197–205

PHYSIOLOGY

The biology and biochemistry of the glucose transporter. Baly DL, et al. **Biochim Biophys Acta** 1988 Oct 11; 947(3):571–90 (98 ref.)
The high-affinity glucose uptake system is not required for induction of the RAS-mediated cAMP signal by glucose in cells of the yeast Saccharomyces cerevisiae. Mbonyi K, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):223–6
Immunocytochemical localization of the glucose-transport protein in mammalian brain capillaries. Kasanicki MA, et al. **Histochem J** 1989 Jan;21(1):47–51
Molecular biology of the Na+-D-glucose cotransporter. Silverman M. **Hosp Pract [Off]** 1989 Feb 15;24(2):180–4, 189–93, 197 passim (7 ref.)

MONOSACCHARIDES

Hemagglutination activities of group B, C, D, and G streptococci: demonstration of novel sugar-specific cell-binding activities in Streptococcus suis. Kurl DN, et al. **Infect Immun** 1989 Feb;57(2):384–9
Interaction of vanadate with monosaccharides and nucleosides: a multinuclear NMR study. Geraldes CF, et al. **J Inorg Biochem** 1989 Feb;35(2):79–93

ADVERSE EFFECTS

Dietary origin of retained H+ in infants with acquired monosaccharide intolerance. Carrazza FR, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):181–8
Monosaccharide intolerance complicating protracted diarrhea in infants [letter] Khoshoo V, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):131–3

ANALYSIS

Simultaneous determination of reducing monosaccharides by capillary zone electrophoresis as the borate complexes of N-2-pyridylglycamines. Honda S, et al. **Anal Biochem** 1989 Jan;176(1):72–7
Determination of mono- and oligosaccharides in fermentation broths by liquid chromatographic separation and amperometric detection using immobilized enzyme reactors and a chemically modified electrode. Marko-Varga GA. **Anal Chem** 1989 Apr 15;61(8):831–8
Evaluation of the liquid chromatographic separation of monosaccharides, disaccharides, trisaccharides, tetrasaccharides, deoxysaccharides and sugar alcohols with stable cyclodextrin bonded phase columns. Armstrong DW, et al. **J Chromatogr** 1989 Jan 13;462:219–32
Determination of monosaccharides in glycoproteins by reversed-phase high-performance liquid chromatography on 2.1-mm narrowbore columns. Gisch DJ, et al. **J Chromatogr** 1988 Jun 29;443:299–308
[Derivatives of C-branched monosaccharides studied by 13C NMR] Struchkova MI, et al. **Antibiot Khimioter** 1988 Aug; 33(8):570–4 (Eng. Abstr.) **(Rus)**
[The monosaccharide composition of Erwinia carotovora subsp. carotovora cells] Gvozdiak RI, et al. **Mikrobiol Zh** 1987 Jul-Aug;49(4):3–7 (Eng. Abstr.) **(Rus)**
[The monosaccharide composition and serologic characteristics of lipopolysaccharides of nonfluorescent bacteria in the Pseudomonas fluorescens group] Zdorovenko GM, et al. **Mikrobiol Zh** 1987 Sep-Oct; 49(5):13–8 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Carbohydrate biguanides as potential hypoglycemic agents. Reitz AB, et al. **J Med Chem** 1989 Sep;32(9):2110–6

HISTORY

Commentary on 'On the Mechanism of the Intestinal Absorption of Sugars'. Crane RK. **Biochim Biophys Acta** 1989;1000:431–2

On the mechanism of the intestinal absorption of sugars. 1956 [classical article] Crane RK, et al. **Biochim Biophys Acta** 1989;1000:433–4

IMMUNOLOGY

Generation of monoclonal antibodies to the specific sugar epitopes of Mycobacterium avium complex serovars. Rivoire B, et al. **Infect Immun** 1989 Oct;57(10):3147–58

ISOLATION & PURIFICATION

[The saccharide components of wood hydrolysates—a constituent part of the fermentation media for the biosynthesis of beta-lactam antibiotics] Velvard L, et al. **Antibiot Khimioter** 1988 Jul;33(7):491–3 (Eng. Abstr.) (Rus)

METABOLISM

Effects of fusarenon-X and T-2 toxin on intestinal absorption of monosaccharide in rats. Kumagai S, et al. **Arch Toxicol** 1988;61(6):489–95

Uptake of glutamic acid by Streptococcus salivarius subsp. thermophilus CNRZ 302. Bracquart P, et al. **J Dairy Res** 1989 Feb;56(1):107–16

Disappearance of hemicellulosic monosaccharides and alkali-soluble phenolic compounds of normal and brown midrib sorghum x sudangrasses fed to heifers and sheep. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):104–11

Disappearance of hemicellulosic monosaccharides and alkali-soluble phenolic compounds of normal and brown midrib sorghum x sundangrass silages fed to Holstein steers. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):112–22

Glycation induces expansion of the molecular packing of collagen. Tanaka S, et al. **J Mol Biol** 1988 Sep 20; 203(2):495–505

Acquired monosaccharide intolerance in infants. Nichols VN, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):51–7

Accumulation of acyclic polyols and trehalose as related to growth form and carbohydrate source in the dimorphic fungi Mucor rouxii and Candida albicans. Pfyffer GE, et al. **Mycopathologia** 1989 Jan;105(1):25–33

PHARMACOLOGY

Sweet tastants stimulate adenylate cyclase coupled to GTP-binding protein in rat tongue membranes. Striem BJ, et al. **Biochem J** 1989 May 15;260(1):121–6

Glucopenia-mediated release of somatostatin from incubated rat hypothalamus: monosaccharide specificity and role of glycolytic intermediates. Berelowitz M, et al. **Endocrinology** 1989 Feb;124(2):826–30

The effect of monosaccharides on in situ hepatic trapping of Candida albicans. Sawyer RT. **Mycopathologia** 1988 Nov;104(2):81–5

[Inhibition of natural killer and interleukin 2-activated natural killer cell cytotoxicity by monosaccharides and lectins] Imir T, et al. **Mikrobiyol Bul** 1987 Oct;21(4):245–50 (Eng. Abstr.) (Tur)

MONOSIALOSYL TETRAGLYCOSYL CERAMIDE see **G(M1) GANGLIOSIDE**

MONOSOMY see under **CHROMOSOME DELETION**

MONOSOMY, PARTIAL see **CHROMOSOME DELETION**

MONOTREMATA

ANATOMY & HISTOLOGY

The lamina cribrosa of Ornithorhynchus (Monotremata, Mammalia). Zeller U. **Anat Embryol (Berl)** 1988; 178(6):513–9

Comparative anatomy of vertebrate electroreceptors. Andres KH, et al. **Prog Brain Res** 1988;74:113–31 (45 ref.)

Cutaneous electroreceptors in the platypus: a new mammalian receptor. Iggo A, et al. **Prog Brain Res** 1988;74:133–8

BLOOD

Glucocorticoids in the blood plasma of the platypus Ornithorynchus anatinus. McDonald IR, et al. **J Endocrinol** 1988 Sep;118(3):407–15

GENETICS

Differential distribution of the P1 and P2 protamine gene sequences in eutherian and marsupial mammals and a monotreme. Johnson PA, et al. **Gamete Res** 1988 Feb; 19(2):169–75

METABOLISM

Distribution of substance P in the enteric plexuses of the small intestine of the platypus, Ornithorhynchus anatinus. Osborne PB, et al. **Cell Tissue Res** 1989 Mar;255(3):663–7

The effects of ACTH on adrenal steroidogenesis and blood corticosteroid levels in the echidna (Tachyglossus aculeatus). Weiss M, et al. **Comp Biochem Physiol [B]** 1979; 64(1):65–70

PHYSIOLOGY

Hibernation in a monotreme, the echidna (Tachyglossus aculeatus). Grigg GC, et al. **Comp Biochem Physiol [A]** 1989;92(4):609–12

Responses of electroreceptors in the platypus bill to steady and alternating potentials. Gregory JE, et al. **J Physiol (Lond)** 1989;408:391–404

MONOUNSATURATED FATTY ACIDS see **FATTY ACIDS, MONOUNSATURATED**

MONSTERS

Fetus amorphus or placental teratoma? Stephens TD, et al. **Teratology** 1989 Jul;40(1):1–10 (65 ref.)

COMPLICATIONS

Diprosopus, anencephaly, and facial clefting [letter] Gorlin RJ. **Am J Med Genet** 1988 Jul;30(3):845

DIAGNOSIS

Prenatal diagnosis of a rare heteropagus. Lituania M, et al. **Prenat Diagn** 1988 Sep;8(7):547–51

[Thoracopagus fetus. Ultrasonic diagnosis at 16 weeks] Grutter F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):355–9 (Eng. Abstr.) (Fre)

HISTORY

Historical documents concerning craniopagi and conjoined twins. Schumacher GH, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):541–55

Craniopagus parasiticus. Everard Home's Two-Headed Boy of Bengal and some other cases. Bondeson J, et al. **Surg Neurol** 1989 Jun;31(6):426–34

[About sirens] Duhamel B. **J Genet Hum** 1988 Dec; 36(5):491–500 (Fre)

PATHOLOGY

[Amniotic band syndrome associated with an acardiac malformation in a twin pregnancy. Apropos of a case] Draeger A, et al. **Ann Pathol** 1988;8(4–5):317–20 (Eng. Abstr.) (Fre)

[Pygomelus] Morin A, et al. **J Genet Hum** 1988 Dec; 36(5):447–61 (Eng. Abstr.) (Fre)

[Human tails and pygomelus] Neidhardt JH, et al. **J Genet Hum** 1988 Dec;36(5):501–6 (Fre)

[Skin plicae and syndromes with pterygium] Micali GP, et al. **G Ital Dermatol Venereol** 1988 Dec;123(12):643–8 (35 ref.) (Eng. Abstr.) (Ita)

RADIOGRAPHY

[Cephalothoracopagus in the CT picture] Bruna J, et al. **Cesk Radiol** 1988 Aug;42(4):237–41 (Eng. Abstr.) (Cze)

[Radiodiagnostic methods in the postmortem study of a dicephalus masculinus] Chudáček Z Jr, et al. **Radiol Diagn (Berl)** 1989;30(1):73–7 (Eng. Abstr.) (Ger)

SURGERY

A symmetric double monstrosity. Olcay I, et al. **Z Kinderchir** 1989 Jun;44(3):174–5

VETERINARY

Vasculature and chromosomal composition in a bovine acardius amorphus. Hishinuma M, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1139–41

["If a monster..."—the omen series "summa izbu" and its significance for the history of veterinary medicine] Schäffer J. **DTW** 1988 Nov-Dec;95(10):453–8 (Eng. Abstr.) (Ger)

MONTE CARLO METHOD see under **OPERATIONS RESEARCH**

MONTEGGIA'S FRACTURE see under **ULNA FRACTURES**

MONTMORRILLONITE see **BENTONITE**

MOOD see **AFFECT**

MOOD DISORDERS, NON-PSYCHOTIC see **AFFECTIVE DISORDERS**

MOOD DISORDERS, PSYCHOTIC see **AFFECTIVE DISORDERS, PSYCHOTIC**

MOPEDS see **MOTORCYCLES**

MOPIDAMOL see under **PYRIMIDINES**

MORALE

Are junior doctors disillusioned? [editorial] Allen I. **Br J Hosp Med** 1989 Aug;42(2):95

Science, politics, and morality [letter] **Cleft Palate J** 1989 Jul;26(3):259–62

Demoralization in Soviet-Jewish immigrants in the United States and Israel. Flaherty JA, et al. **Compr Psychiatry** 1988 Nov-Dec;29(6):588–97

How do we cure low staff morale? [editorial] Martin JC. **Dimens Health Serv** 1989 Mar;66(2):5–6 (Eng, Fre)

Morale in battle—the medical and the military. Carver. **J R Army Med Corps** 1989 Feb;135(1):5–9

Morale in battle—the medical and the military. Carver. **J R Soc Med** 1989 Feb;82(2):67–71

A crisis in spirit. Meyer CR. **Minn Med** 1989 Aug;72(8):451

MORALS

A matter of integrity. Petersdorf RG. **Acad Med** 1989 Mar; 64(3):119–23

Psychic conflict and moral development. Cantor GN, et al. **Adv Child Dev Behav** 1989;21:243–68

The structure of moral reasoning in hearing-impaired students. Sam A, et al. **Am Ann Deaf** 1988 Oct;133(4):264–9

Consciousness: the most critical moral (constitutional) standard for human personhood. Cranford RE, et al. **Am J Law Med** 1987;13(2–3):233–48

Moral treatment: contexts considered. Peloquin SM. **Am J Occup Ther** 1989 Aug;43(8):537–44

Moral reasoning and ethical practice. Ketefian S. **Annu Rev Nurs Res** 1989;7:173–95 (79 ref.)

Emergence of morality: understanding [editorial] Teuscher GW. **ASDC J Dent Child** 1989 May-Jun;56(3):176

The history and present status of moral insanity. Ellard J. **Aust N Z J Psychiatry** 1988 Dec;22(4):383–9

History and present status of moral insanity [letter] Schioldan-Nielsen J. **Aust N Z J Psychiatry** 1989 Mar; 23(1):12–5

The social responsibility of scientists: moonshine and morals. Wolpert L. **BMJ** 1989 Apr 8;298(6678):941–3

'A Christian moral view of AIDS'. **Br Dent J** 1988 Nov 5;165(9):345

"Universal" moral principles [letter] **Can Med Assoc J** 1989 Jul 1;141(1):9–10

"Universal" moral principles [letter] Watters WW. **Can Med Assoc J** 1989 May 1;140(9):1016

Children's conceptions of the situational affective consequences of sociomoral events. Arsenio WF. **Child Dev** 1988 Dec;59(6):1611–22

Children's evaluations of retaliatory aggression. Ferguson TJ, et al. **Child Dev** 1988 Aug;59(4):961–8

Children's understanding of moral emotions. Nunner-Winkler G, et al. **Child Dev** 1988 Oct; 59(5):1323–38

A longitudinal study of moral reasoning. Walker LJ. **Child Dev** 1989 Feb;60(1):157–66

Interpersonal understanding and moral judgment in adolescents with emotional and cognitive disorders. Sigman M, et al. **Child Psychiatry Hum Dev** 1988 Fall;19(1):36–44

Obeying the Stanford "concept of proportionality?" [letter] Ducharme HM, et al. **Crit Care Med** 1989 Jul;17(7):711–2

Medical ethics in medical practice. Perkel RL. **Del Med J** 1988 Sep;60(9):491–5

Biomedical value conflict. Tranøy KE. **Hastings Cent Rep** 1988 Aug-Sep;18(4):suppl 8–10

No pain, no gain: a Puritan legacy [editorial] Kilwein JH. **Health Educ Q** 1989 Spring;16(1):9–12

From inquiry to judgment: age and sex differences in patterns of adult moral thinking and information-seeking. Pratt MW, et al. **Int J Aging Hum Dev** 1988;27(2):109–24

Age, education, and sex effects on adult moral reasoning. White CB. **Int J Aging Hum Dev** 1988;27(4):271–81

Shame as an impetus to the creation of conscience. Miller SB. **Int J Psychoanal** 1989;70 (Pt 2):231–43

Law, professional ethics and the problem of conflict with personal values. Johnstone MJ. **Int Nurs Rev** 1989 May-Jun;36(3):83–9 (30 ref.)

The adolescent as forgiver. Enright RD, et al. **J Adolesc** 1989 Mar;12(1):95–110

Moral dimensions of leadership. McCullough LB. **J Am Coll Dent** 1989 Spring;56(1):19, 26–8

Comparison of the general moral reasoning of small animal veterinarians vs large animal veterinarians. Self DJ, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1509–12

Disguising morals as medicine. Kilwein JH. **J Clin Pharm Ther** 1988 Jun;13(3):179–81

The moral philosophy of Maimonides. Broadie A. **J Med Ethics** 1988 Dec;14(4):200–3

Biological processes and moral events. Buckle S. **J Med Ethics** 1988 Sep;14(3):144–7

Kuhse, Singer and slippery slopes. Fairbairn GJ. **J Med Ethics** 1988 Sep;14(3):132–4, 147

Euthanasia, withholding life-prolonging treatment, and moral differences between killing and letting die. Gillon R. **J Med Ethics** 1988 Sep;14(3):115–7

Voluntarism and realism in medieval ethics. Haldane J. **J Med Ethics** 1989 Mar;15(1):39–44

Response to Confidentiality: a modified value [letter] Kottow M. **J Med Ethics** 1988 Sep;14(3):165

Surgical abortion at twenty weeks: is morality determined solely by the outcome? Lilford RJ, et al. **J Med Ethics** 1989 Jun;15(2):82–5

Love and death: existential dimensions of physicians' difficulties with moral problems. Barnard D.

J Med Philos 1988 Nov;13(4):393–409
The peaceable pluralistic society and the question of persons. Holm S. J Med Philos 1988 Nov;13(4):379–86
Ethics by committee: the moral authority of consensus. Moreno JD. J Med Philos 1988 Nov;13(4):411–32
Virtue and the practice of modern medicine. Putman DA. J Med Philos 1988 Nov;13(4):433–43
Moral reasoning in college students: implications for nursing education. Mustapha SL, et al. J Nurs Educ 1989 Mar; 28(3):107–11
Care: the moral mandate [editorial] Roy DJ. J Palliat Care 1988 Dec;4(4):3–4
Neonatal nurses' attitudes, beliefs, and feelings toward the care and management of fetal–infants. Richey DA. J Perinatol 1988 Spring;8(2):145–53
Gilligan's different voice: a perspective for nursing. Cooper MC. J Prof Nurs 1989 Jan–Feb;5(1):10–6 (32 ref.)
On being moral, ethical, and polite [editorial] Thomison JB. J Tenn Med Assoc 1988 Sep;81(9):590–1
Is altruism a vice? [letter] JAMA 1988 Nov 4;260(17):2509–10
NIH finds research on fetal tissue "acceptable". Lancet 1988 Nov 5;2(8619):1088 (0 ref.)
Relativism and the case of the Princess Louise von Coburg. Keasberry H. Med Law 1988;7(2):109–19
The religious and moral dilemmas posed by scientific developments in the field of genetics: a Catholic viewpoint. Rapinet M. Med Sci Law 1988 Jul;28(3):256–8
Sexually Transmitted Diseases in Military Dependent Adolescent Females [letter] Mauro K. Milit Med 1989 Feb; 154(2):101
Ethical dilemmas [letter] Booth FW. Nature 1989 Aug 31; 340(6236):672
Old morality study finally surfaces [news] Lindley D. Nature 1989 Jul 13;340(6229):90
Moral reasoning and ethical practice in nursing. Measurement issues. Ketefian S. Nurs Clin North Am 1989 Jun; 24(2):509–21 (48 ref.)
Values, moral reasoning, and ethics. Omery A. Nurs Clin North Am 1989 Jun;24(2):499–508 (26 ref.)
Legal, ethical, and moral issues in plastic surgery [letter] Porterfield HW. Plast Reconstr Surg 1989 Mar;83(3):577
Neglected classics: twenty–nine years after Hartmann's "Psychoanalysis and Moral Values". Spruiell V. Psychoanal Q 1989 Apr;58(2):236–40
The moral justification of suicide in suicide notes. Lester D, et al. Psychol Rep 1988 Aug;63(1):106
Treating drunk drivers with moral reconation therapy: a one–year recidivism report. Little GL, et al. Psychol Rep 1989 Jun;64(3 Pt 1):960–2
Effects of moral reconation therapy upon moral reasoning, life purpose, and recidivism among drug and alcohol offenders. Little GL, et al. Psychol Rep 1989 Feb; 64(1):83–90
Integrating values education into an allied health curriculum. Part I. McKenna A, et al. Radiol Technol 1989 Jul–Aug; 60(6):499–502
The moral validity of medical practice in South Africa and challenges for the future [editorial] Benatar SR. S Afr Med J 1989 Apr 15;75(8):362–4
Moral reflections on the new technologies: a Catholic analysis. Lawler RD. Women Health 1987;13(1–2):167–77
[Moral judgment and prediction of criminality. Comparative study of delinquents and non–delinquents] Addad M, et al. Ann Med Psychol (Paris) 1988 Oct;146(10):927–39 (Eng. Abstr.) (Fre)
[The dialectics of morals and justice] Körner U, et al. Z Arztl Fortbild (Jena) 1988;82(9):425–8 (Ger)
[Ideologic attitudes of prisoners at the Auschwitz concentration camp] Kłodziński S, et al. Przegl Lek 1989; 46(1):22–57 (Pol)
[Moral–ethical and legal aspects of resuscitation] Gurvich AM. Vestn Akad Med Nauk SSSR 1989;(4):60–7 (Rus)
[The role of moral–ethical and sex education in preventing venereal diseases among adolescents] Arkhangel'skaia EI, et al. Vestn Dermatol Venerol 1988;(8):38–41 (Eng. Abstr.) (Rus)
[The social psychological and moral–ethical characteristics of patients with venereal diseases and of healthy persons from one of the risk groups] Iatsukha MV, et al. Vestn Dermatol Venerol 1988;(5):43–6 (Eng. Abstr.) (Rus)

D-MORAMIDE see DEXTROMORAMIDE

MORANTEL see under PYRIMIDINES

MORAXELLA

ANALYSIS

Chemical composition of lipopolysaccharide from Moraxella bovis. Araujo F, et al. Vet Microbiol 1989 Jun;20(2):165–71

CLASSIFICATION

[Species–forming involution of pathogenic bacteria as a biological pattern (exemplified by bacteria of the genus Moraxella)] Kalina GP. Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):33–40 (19 ref.) (Eng. Abstr.) (Rus)
[A discussion apropos G. P. Kalina's article "Species–forming involution of pathogenic bacteria as a biological law (exemplified by bacteria of the genus Moraxella)"] Petrovskaia VG. Zh Mikrobiol Epidemiol Immunobiol 1988 Nov;(11):117–8 (Rus)

DRUG EFFECTS

Volatilization of fluorescein mercuric acetate by marine bacteria from Minamata Bay. Nakamura K. Bull Environ Contam Toxicol 1989 May;42(5):785–90

ENZYMOLOGY

Occurrence of two different forms of protocatechuate 3,4–dioxygenase in a Moraxella sp. Sterjiades R, et al. Appl Environ Microbiol 1989 Feb;55(2):340–7
Purification and properties of cytochrome P–450 from Moraxella sp. Sauret–Ignazi G, et al. Biochimie 1988 Oct; 70(10):1385–95

GENETICS

Cloning and characterization of the genes encoding the MspI restriction modification system. Lin PM, et al. Nucleic Acids Res 1989 Apr 25;17(8):3001–11

IMMUNOLOGY

Vaccination against infectious bovine keratoconjunctivitis: protective efficacy and antibody response induced by pili of homologous and heterologous strains of Moraxella bovis. Lepper AW. Aust Vet J 1988 Oct;65(10):310–6

ISOLATION & PURIFICATION

Moraxella ovis in cases of infectious bovine keratoconjunctivitis (IBK) in Israel. Elad D, et al. Zentralbl Veterinarmed [B] 1988 Jul;35(6):431–4
[Methods of detection and primary identification of bacteria of the genus Moraxella in the environment] Kalina GP, et al. Gig Sanit 1988 Aug;(8):45–9 (Rus)

PATHOGENICITY

Infectivity and virulence of Australian strains of Moraxella bovis for the murine and bovine eye in relation to pilus serogroup sub–unit size and degree of piliation. Lepper AW, et al. Aust Vet J 1988 Oct;65(10):305–9
Purification, characterization, and pathogenicity of Moraxella bovis pili. Ruehl WW, et al. J Exp Med 1988 Sep 1; 168(3):983–1002

PHYSIOLOGY

Cytopathic effects of Moraxella bovis on cultured bovine neutrophils and corneal epithelial cells. Kagonyera GM, et al. Am J Vet Res 1989 Jan;50(1):10–7
Effects of Moraxella bovis and culture filtrates on 51Cr–labeled bovine neutrophils. Kagonyera GM, et al. Am J Vet Res 1989 Jan;50(1):18–21
Attachment of Moraxella bovis to calf corneal cells and inhibition by antiserum. Moore LJ, et al. Aust Vet J 1989 Feb;66(2):39–42

MORAXELLA (BRANHAMELLA) CATARRHALIS see BRANHAMELLA CATARRHALIS

MORAXELLA CATARRHALIS see BRANHAMELLA CATARRHALIS

MORBID OBESITY see OBESITY, MORBID

MORBIDITY

Mothering problems and child morbidity amongst "mothers with emotional disturbances". Nordström UL, et al. Acta Obstet Gynecol Scand 1988;67(2):155–8
Morbidity pattern among Nigerian children from a poor urban community. Osinusi K, et al. Afr J Med Med Sci 1989 Mar;18(1):43–7
Outcome of very–low–birth–weight infants: does antepartum versus neonatal referral have a better impact on mortality, morbidity, or long–term outcome? Lubchenco LO, et al. Am J Obstet Gynecol 1989 Mar;160(3):539–45
Illness associated with child day care: a study of incidence and cost. Bell DM, et al. Am J Public Health 1989 Apr; 79(4):479–84
Mathematical models and scientific reality in occurrence rates for disease. Feinstein AR, et al. Am J Public Health 1989 Sep;79(9):1303–4
Illness and absence among wrestlers, swimmers, and gymnasts at a large university. Strauss RH, et al. Am J Sports Med 1988 Nov–Dec;16(6):653–55
Report from the British Paediatric Surveillance Unit. Hall SM, et al. Arch Dis Child 1988 Sep;63(9):1117–8
A health study of two communities near the Stringfellow Waste Disposal site. Baker DB, et al. Arch Environ Health 1988 Sep–Oct;43(5):325–34
Depressive disorders. Further evidence for increased medical morbidity and impairment of social functioning. Klerman GL. Arch Gen Psychiatry 1989 Sep;46(9):856–8
Reported illness and compliance in US travelers attending an immunization facility. Hilton E, et al. Arch Intern Med 1989 Jan;149(1):178–9
Morbidity from 5 to 10 years. Horwood LJ, et al. Aust Paediatr J 1989 Apr;25(2):72–9
Perinatal morbidity in Belgium. Lagasse R, et al. Biol Neonate 1989;55(1):19–29 (39 ref.)
Maternal mortality and morbidity in Belgium. MacGillivray I, et al. Biol Neonate 1989;55(1):30–3 (15 ref.)
An illness–death process with time–dependent covariates. Chiang YK, et al. Biometrics 1989 Jun;45(2):669–81
Significance of low birthweight for infant mortality and morbidity. McCormick MC. Birth Defects 1988;24(1):3–10
Main health problems of seafarers. Filikowski J. Bull Inst Marit Trop Med Gdynia 1987;38(3–4):157–63
Morbidity studies: are population–based data a useful benchmark for studying morbidity in special groups? Hertzman C. Can J Public Health 1988 Sep–Oct; 79(5):386–7
The health consequences of smoking among smokers in Canada. Mao Y, et al. Can J Public Health 1988 Sep–Oct; 79(5):390–1
Morbidity as a focus of preventive health care in the elderly. Fried LP, et al. Epidemiol Rev 1988;10:48–64 (79 ref.)
Infant weight in relation to nutritional intake and morbidity in northern Thailand. Jackson DA, et al. Eur J Clin Nutr 1988 Sep;42(9):725–39
Morbidity coding in general practice. Gray D, et al. Fam Pract 1989 Jun;6(2):92–7
Effect of bereavement on the health of the remaining family members. Van Eijk J, et al. Fam Pract 1988 Dec;5(4):278–82
Cyclical variation in number of visits and major diagnoses at a rural family practice clinic. Lawler FH, et al. Fam Pract Res J 1987 Winter;7(2):88–95
Medical geography and travel medicine. Votrubec C, et al. Geogr Med 1989;19:207–12
Ethnic and family factors of some common diseases in early childhood. Kobyliansky E, et al. Hum Biol 1989 Feb; 61(1):13–29
Interactions between xerophthalmia and morbidity among underfive rural children. Katiyar GP, et al. Indian Pediatr 1988 Oct;25(10):939–45
Are we trading disability for death? Wright G. Indiana Med 1988 Sep;81(9):792–3
Number of comorbidities as a predictor of nosocomial infection acquisition. Gross PA, et al. Infect Control Hosp Epidemiol 1988 Nov;9(11):497–500
Implications of the changing medical profile of a dental school patient population. Rhodus NL, et al. J Am Dent Assoc 1989 Sep;119(3):414–6
Disease—disability—mortality [letter] Rozzini R, et al. J Am Geriatr Soc 1988 Dec;36(12):1164
Medical morbidity of the homeless. Shanks NJ. J Epidemiol Community Health 1988 Jun;42(2):183–6
The twain meet: empirical explanations of sex differences in health and mortality. Verbrugge LM. J Health Soc Behav 1989 Sep;30(3):282–304
The nature of unemployment morbidity. 1. Recognition. Beale N, et al. J R Coll Gen Pract 1988 May;38(310):197–9
Morbidity and mortality associated with anesthesia—5–year survey. Wong JO. Ma Tsui Hsueh Tsa Chi 1988 Jun; 26(2):109–22
The use of network sampling for locating the seriously ill. Sudman S, et al. Med Care 1988 Oct;26(10):992–9
A morphologic study of Vietnam veterans. Irey NS, et al. Mod Pathol 1989 Jul;2(4):360–4
Children admitted to a general intensive care unit. Dawson KP, et al. N Z Med J 1989 Feb 22;102(862):75–6
Poverty and child health. Wise PH, et al. Pediatr Clin North Am 1988 Dec;35(6):1169–86 (129 ref.)
Redundancy and health. Beale N. Practitioner 1988 Oct 8; 232(1456 (Pt 1)):1103–4
Physical illness encountered in patients with eating disorders. Hall RC, et al. Psychosomatics 1989 Spring;30(2):174–91
Smoking, prevalence of disease and health service utilization among the Swiss population. Gutzwiller F, et al. Rev Epidemiol Sante Publique 1989;37(2):137–42
Disease profiles for white and black adult and geriatric patients. An analysis of 2,008 hospital medical admissions. Morris CD. S Afr Med J 1989 Feb 18;75(4):171–4
Some characteristics of the morbidity indices of the population of Budapest. Greff L, et al. Sante Publique (Bucur) 1988 Jul–Sep;31(3):231–6
A human development intervention in the Philippines: effect on child morbidity. Hill JM, et al. Soc Sci Med 1988; 27(11):1183–8
A method for the estimation of chronic disease morbidity and trends from mortality data. Verdecchia A, et al. Stat Med 1989 Feb;8(2):201–16
Estimating drug requirements using morbidity data–based method: cumulative country experience. Osore H. Trop Doct 1989 Apr;19(2):90–4
Morbidity pattern of emergencies at the Bustamante Hospital for Children (January–December, 1986). Longsworth FG, et al. West Indian Med J 1988 Sep;37(3):148–51
The global impact of noncommunicable diseases: estimates and projections. Manton KG. World Health Stat Q 1988; 41(3–4):255–66
[Minor health problems in a university population] Bayés R, et al. Gac Sanit 1987 Sep–Oct;1(2):63–8 (Eng. Abstr.) (Cat, Spa)
[A look at the health status of adolescents in Czechoslovakia] Jílek J. Cesk Pediatr 1988 Oct;43(10):615–7 (Cze)
[Analysis of morbidity in the Czech population] Mazánková V. Cesk Zdrav 1989 May;37(5):193–7 (Eng. Abstr.) (Cze)
[Overall morbidity of chronic diseases in persons over 60 years of age] Zaremba V. Cesk Zdrav 1988 Oct; 36(10):407–17 (Eng. Abstr.) (Cze)

[The status of children with a birthweight under 1500g during the 1st 5 years of life] Lichý J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):133–47 (Eng. Abstr.) (Cze)

[Early retirement among the 1914 population in Glostrup. Significance of social and health problems in choosing early retirement] Brendstrup T, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1976–80 (Eng. Abstr.) (Dan)

[Morbidity among children attending nursery schools] Hasle H, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2148–50 (Eng. Abstr.) (Dan)

[Readmitted patients at a medical ward. 1. Health conditions] Laursen E, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):943–6 (Eng. Abstr.) (Dan)

[Health and disease (editorial)] Riis P. **Ugeskr Laeger** 1989 Feb 27;151(9):543–4 (Dan)

[Organic disease among patients at an open psychiatric outpatient clinic] Solstad K, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):298–300 (Eng. Abstr.) (Dan)

[Various constant relations between morbidity and the distribution of health services] Chanut C, et al. **Cah Sociol Demogr Med** 1988 Oct–Dec;28(4):363–78 (Fre)

[Epidemiological surveillance: experience in Aquitaine from a network of sentinel physicians] Maurice S, et al. **Rev Epidemiol Sante Publique** 1988;36(6):494–5 (Fre)

[The use of large morbidity data bases in the evaluation of health services] Pineault R, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):267–72 (Eng. Abstr.) (Fre)

[The results of a study of general morbidity in the population of the People's Republic of Mongolia] Demberel B, et al. **Sante Publique (Bucur)** 1989 Apr–Jun;32(2):83–8 (Eng. Abstr.) (Fre)

[Effect of demographic changes on the case rate and days of care for hospitalized internal medicine patients] Mansky T, et al. **Dtsch Med Wochenschr** 1989 Mar 10; 114(10):368–77 (Eng. Abstr.) (Ger)

[Pediatrics in Ethiopia] Rohmann E, et al. **Kinderarztl Prax** 1988 Sep;56(9):449–52 (Eng. Abstr.) (Ger)

[The course of morbidity over 10 years in the pediatric department of a district hospital. Exemplified by the pediatric department of the Parchim district hospital 1971–1980] Ruickoldt G. **Kinderarztl Prax** 1988 Sep; 56(9):437–42 (Eng. Abstr.) (Ger)

[Inpatient morbidity and mortality of 15- to under-20-year-olds] Fiolka L. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):249–60 (Ger)

[Sex differences in health and health behavior] Zemp E, et al. **Soz Praventivmed** 1988;33(3):186–92 (23 ref.) (Eng. Abstr.) (Ger)

[What leads to urgent house calls at an emergency medical service?] Tönies H. **Wien Med Wochenschr** 1988 Nov 15; 138(21):539–45 (Eng. Abstr.) (Ger)

[Measurability of disease using indicators] Seiboth HD. **Z Arztl Fortbild (Jena)** 1988;82(19):942–3 (Ger)

[Effective utilization of the available data on disease incidence using longitudinal analysis] Sieber E. **Z Arztl Fortbild (Jena)** 1988;82(19):945 (Ger)

[Diagnostic specific values of disability duration—a contribution to the epidemiologic analysis of empirical morbidity figures] Selig R, et al. **Z Gesamte Hyg** 1989 May; 35(5):284–7 (Eng. Abstr.) (Ger)

[Aspects of the further development of ambulatory primary medical care based on a territorial analysis. 2. Characteristics of the ambulatory management process] Tomschke G, et al. **Z Gesamte Hyg** 1988 Aug;34(8):474–7 (Eng. Abstr.) (Ger)

[Aspects of the further development of ambulatory primary medical care based on a territorial analysis. 1. Management groups and management morbidity] Tomschke G, et al. **Z Gesamte Hyg** 1988 Aug;34(8):468–73 (Eng. Abstr.) (Ger)

[Morbidity profiles among Ethiopian immigrants] Rimon E, et al. **Harefuah** 1989 Jan 15;116(2):113–5 (Heb)

[Children, morbidity and drugs (editorial)] Aarbakke J. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2108 (Nor)

[Disorders and drug consumption among infants. Does breast feeding have an impact?] Matheson I, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2123–8 (Eng. Abstr.) (Nor)

[Health status of so-called children from the Zamość district] Jankowski J, et al. **Przegl Lek** 1989;46(1):13–5 (Pol)

[Comparative data of hospital morbidity in the municipality of Cubatão and in the State of São Paulo (Brazil)] Rocha LE, et al. **Rev Saude Publica** 1988 Apr;22(2):118–31 (Eng. Abstr.) (Por)

[Menstrual and reproductive functions and morbidity in women after labor] Lukashevich GA, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):52–4 (Eng. Abstr.) (Rus)

[Experiences in improving the health status of frequently ill children in preschool institutions] Grebniak NP, et al. **Gig Sanit** 1988 Sep;(9):81–2 (Rus)

[Effect of polychlorinated, polybrominated biphenyls and polychlorinated quaterphenyls on human health] Klisenko MA. **Gig Sanit** 1988 Jul;(7):56–60 (34 ref.) (Rus)

[Results and prospects of the development of the Automated State Information System "Health"] Korneev IuE. **Gig Sanit** 1988 Oct;(10):42–5 (Rus)

[Methodologic approach to determining cause-effect correlations in the environment-public health system] Shandala MG, et al. **Gig Sanit** 1989 Mar;(3):11–4 (Eng. Abstr.) (Rus)

[Study and evaluation of the health status of various population groups exposed to environmental factors] Sidorenko GI, et al. **Gig Sanit** 1989 Mar;(3):14–6 (Eng. Abstr.) (Rus)

[A method of calculation of integral health status indicators in the complex hygienic evaluation of territories of different hierarchical levels] Sokhoshko IA, et al. **Gig Sanit** 1988 Jul;(7):63–5 (Rus)

[Methodologic approaches to the study of the effect of complex environmental factors on the population's health] Vinokur IL, et al. **Gig Sanit** 1989 May;(5):4–7 (Eng. Abstr.) (Rus)

[A method for assessing reliability of different rates of morbidity with temporary disability in small contingents of workers] Stenin AN, et al. **Gig Tr Prof Zabol** 1989; (6):33–6 (Eng. Abstr.) (Rus)

[Prognosis of the risk of development of non-occupational diseases among coal miners of the Donets Basin] Zinger FKh, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):14–6 (Eng. Abstr.) (Rus)

[Tolerance of +Gz acceleration in pilots with health problems] Domashuk Iu. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):84–6 (Eng. Abstr.) (Rus)

[History and future of the scientific activities of the Division of Radiation Pathology of the Central Scientific Research Roentgenoradiology Institute of the USSR Ministry of Public Health] Komarov EI, et al. **Med Radiol (Mosk)** 1988 Nov;33(11):39–43 (Eng. Abstr.) (Rus)

[Characteristics of the development and health status of children born to mothers with systemic lupus erythematosus] Ermakova TM. **Pediatriia** 1989;(4):23–6 (Eng. Abstr.) (Rus)

[Results of a study of morbidity in children from the moment of birth to entry into school] Kalkova LV. **Pediatriia** 1988; (8):108–9 (Rus)

[Possibility of modeling regional characteristics of the level and structure of morbidity and the utilization of medical services by the population] Baziian GV, et al. **Sov Zdravookhr** 1989;(4):14–8 (Eng. Abstr.) (Rus)

[Development of groups of frequently ill children] Kalkova LV, et al. **Sov Zdravookhr** 1989;(3):28–30 (Eng. Abstr.) (Rus)

[Socio-hygienic characteristics of families with risk factors of child morbidity] Katkova IP, et al. **Sov Zdravookhr** 1989; (3):16–20 (Rus)

[Health status as a criterion in evaluating the activities of therapeutic-preventive institutions] Poliakov IV, et al. **Sov Zdravookhr** 1989;(5):21–4 (Rus)

[Moving toward general mass screening of the population of the Brest-Litovsk region] Shidlovskiĭ PR. **Sov Zdravookhr** 1989;(1):54–8 (Rus)

[Study of characteristics of the health status of medical students based on the data of preventive examinations] Zakharchenko VV, et al. **Sov Zdravookhr** 1988;(12):37–40 (Eng. Abstr.) (Rus)

[Experience with scientific and practical work in regard to studying the health status of the population of the Karelian ASSR during the transition to mass screening] Zhuravleva KI, et al. **Sov Zdravookhr** 1988;(10):33–8 (Eng. Abstr.) (Rus)

[Questions of morbidity and the medical disqualification of flight personnel (a review of the literature)] Vlasov VD, et al. **Voen Med Zh** 1988 Sep;(9):44–6 (19 ref.) (Rus)

["Morbility" or morbidity? Concerning the scientific terminology (letter)] Palomar N, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):119 (Spa)

[Morbidity in the population of 12 Chilean cities] Medina E, et al. **Rev Med Chil** 1988 May;116(5):476–81 (Eng. Abstr.) (Spa)

[Medical care in 12 Chilean cities] Medina E, et al. **Rev Med Chil** 1989 Jun;116(6):579–86 (Eng. Abstr.) (Spa)

[How do the Swedish adolescents feel?] Berg-Kelly K. **Lakartidningen** 1988 Oct 12;85(41):3361–3 (Swe)

[Bhutan—the country of the thunder-storm dragon. A thousand-year-old isolation leaves marks on the panorama of disease] Gabor K. **Lakartidningen** 1988 Oct 19; 85(42):3484–7 (Swe)

[Should society support the care of injuries caused by hazardous behavior?] Josephson U. **Lakartidningen** 1988 Nov 16;85(46):3953–5 (Swe)

[Increase in the number of severely sick and wounded at emergency health services in the inner city of Stockholm] Liljefors I. **Lakartidningen** 1989 Jan 25;86(4):201–2, 207 (Swe)

[A cross-sectional study in Sundsvall. 90-year-old persons are healthier than expected. The majority live in their own flats] Wimo A, et al. **Lakartidningen** 1988 Nov 30; 85(48):4202, 4207 (Swe)

[Social support, social network—health and disease] Ostergren PO, et al. **Nord Med** 1988;103(10):294–5 (Eng. Abstr.) (Swe)

HISTORY

[The most common diseases among the population of Prague and surrounding area in the 14th century according to the Vetularius of Albík of Uničov] Říhová M. **Cas Lek Cesk** 1988 Sep 2;127(36):1147–8 (Cze)

STATISTICS & NUMERICAL DATA

Reported illness after a CGE closure. Grayson JP. **Can J Public Health** 1989 Jan–Feb;80(1):16–9

TRENDS

[Hypothetical possibilities of the future development of individual groups of diseases in Czechoslovakia] Drbal C. **Cesk Zdrav** 1988 Jul;36(6–7):255–60 (Eng. Abstr.) (Cze)

[Major developmental trends in the health status of the population in the East Bohemia Region] Matulka R, et al. **Cesk Zdrav** 1988 Dec;36(12):497–506 (Eng. Abstr.) (Cze)

[Non-transmissible diseases in the world: a health priority problem of increasing importance] Shigan EN. **World Health Stat Q** 1988;41(3–4):104–6 (Fre)

MORBILLI VIRUS see **MEASLES VIRUS**

MORGAGNI-STEWART-MOREL SYNDROME see **HYPEROSTOSIS FRONTALIS INTERNA**

MORMYRID see **ELECTRIC FISH**

MORNING AFTER PILL see **CONTRACEPTIVES, POSTCOITAL**

MORPHEA see **SCLERODERMA, CIRCUMSCRIBED**

MORPHINANS

Blotting of proteins onto Immobilon membranes. In situ characterization and comparison with high-performance liquid chromatography. Choli T, et al. **J Chromatogr** 1989 Aug 4;476:59–72

Detomidine-butorphanol sedation in equine clinical practice. Taylor PM, et al. **Vet Rec** 1988 Oct 8;123(15):388–90

[Phosphorimetric method for the determination of dihydroetorphine and its application] Huang RH, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):298–303 (Eng. Abstr.) (Chi)

ADMINISTRATION & DOSAGE

Epidural butorphanol-bupivacaine for analgesia during labor and delivery. Hunt CO, et al. **Anesth Analg** 1989 Mar; 68(3):323–7

Butorphanol versus morphine: equally ineffective when given incorrectly [letter] **Ann Emerg Med** 1989 May;18(5):603–5

[Combined effect of intrathecal morphine and nalbuphine for postoperative analgesia] Chen CH, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):257–64 (Eng. Abstr.) (Chi)

[Optimum dose of intravenous butorphanol as a supplemental drug during regional anesthesia] Nomura T, et al. **Masui** 1989 Apr;38(4):498–504 (Eng. Abstr.) (Jpn)

ANALOGS & DERIVATIVES

Species variation in the disposition of nalbuphine and its acetylsalicylate ester analogue. Harrelson JC, et al. **Xenobiotica** 1988 Nov;18(11):1239–47

BLOOD

Internally standardized method for the determination of nalbuphine in human plasma by means of high performance liquid chromatography with electrochemical coulometric detection. Wetzelsberger N, et al. **Arzneimittelforschung** 1988 Dec;38(12):1768–71

[Determination of dextromethorphan and its major metabolite dextrorphan by gas chromatography] Kintz P, et al. **Ann Biol Clin (Paris)** 1989;47(4):193–5 (Eng. Abstr.) (Fre)

METABOLISM

Release of endogenous opioid peptides displaces [3H]diprenorphine binding in rat hippocampal slices. Neumaier JF, et al. **Brain Res** 1989 Jul 31;493(2):292–302

Decrease in delta-opioid receptor density in rat brain after chronic [D-Ala2,D-Leu5]enkephalin treatment. Tao PL, et al. **Brain Res** 1988 Oct 18;462(2):313–20

A novel series of potent and selective agonists at the opioid kappa-receptor. Costello GF, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):475–8

Distribution of opiate receptors within visual structures of the cat brain. Walker JM, et al. **Exp Brain Res** 1988; 73(3):523–32

Ascorbate inhibits specific binding of etorphine and low Km GTPase in NG108-15 hybrid cells. Bhatia M, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):699–702

A kinetic analysis of kappa-opioid agonist binding using the selective radioligand [3H]U69593. Smith JA, et al. **J Neurochem** 1989 Jul;53(1):27–36

[3H]diprenorphine binding to kappa-sites in guinea-pig and rat brain: evidence for apparent heterogeneity. Wood MS, et al. **J Neurochem** 1989 Jul;53(1):173–8

Cholecystokinin-8 suppressed 3H-etorphine binding to rat brain opiate receptors. Wang XJ, et al. **Life Sci** 1989; 45(2):117–23

Control of opiate receptor number in vivo: simultaneous kappa-receptor down-regulation and mu-receptor up-regulation following chronic agonist/antagonist treatment. Morris BJ, et al. **Neuroscience** 1989;29(2):433–42

PHARMACOKINETICS

Pharmacokinetics of nalbuphine in infants, young healthy volunteers, and elderly patients. Jaillon P, et al. **Clin Pharmacol Ther** 1989 Aug;46(2):226–33

Serum concentrations of etorphine in juvenile African elephants. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1079–81

Interaction between nalbuphine and alfentanil on intraocular pressure and pupil size of conscious rabbits. el Messiry S, et al. **Ophthalmic Res** 1989;21(2):134–40

Species variation in the disposition of nalbuphine and its acetylsalicylate ester analogue. Harrelson JC, et al. **Xenobiotica** 1988 Nov;18(11):1239–47

[Cumulative pharmacokinetics and clinical effects of nalbuphine in patients in the postoperative phase. An open multicenter study] **Arzneimittelforschung** 1989 Jun; 39(6):724–7 (Eng. Abstr.) **(Ger)**

[Elimination of nalbuphine in human milk] Wischnik A, et al. **Arzneimittelforschung** 1988 Oct;38(10):1496–8 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Antagonisation of fentanyl-induced respiratory depression by nalbuphine. Latasch L, et al. **Acta Anaesthesiol Belg** 1989;40(1):35–40

Effects of xylazine and/or butorphanol or neostigmine on myoelectric activity of the cecum and right ventral colon in female ponies. Rutkowski JA, et al. **Am J Vet Res** 1989 Jul;50(7):1096–101

Effects of butorphanol tartrate on arterial pressure, jejunal blood flow, vascular resistance, O2 extraction, and O2 uptake in halothane-anesthetized ponies. Stick JA, et al. **Am J Vet Res** 1989 Aug;50(8):1202–6

Cardiovascular effects of butorphanol administration in isoflurane-O2 anesthetized healthy dogs. Tyner CL, et al. **Am J Vet Res** 1989 Aug;50(8):1340–2

Disruption of the rhythmic activity of the medullary inspiratory neurons and phrenic nerve by fentanyl and reversal with nalbuphine. Tabatabai M, et al. **Anesthesiology** 1989 Mar;70(3):489–95

Modulation of appetitively and aversively motivated behavior by the kappa opioid antagonist MR2266. Fanselow MS, et al. **Behav Neurosci** 1989 Jun;103(3):663–72

Effect of nalbuphine hydrochloride on the ventilatory and occlusion pressure responses to carbon dioxide in volunteers. Pugh GC, et al. **Br J Anaesth** 1989 Jun; 62(6):601–9

Psychomotor, respiratory and neuroendocrinological effects of nalbuphine and haloperidol, alone and in combination, in healthy subjects. Saarialho-Kere U. **Br J Clin Pharmacol** 1988 Jul;26(1):79–87

Studies of the effects of subacute treatment with N-(cyclopropylmethyl)-19-isopentylnororvinol (M320) on timing of parturition in the rat. Evans RG, et al. **Br J Pharmacol** 1988 Nov;95(3):777–82

Sensitivity of magnocellular oxytocin neurones to opioid antagonists in rats treated chronically with intracerebroventricular (i.c.v.) morphine. Leng G, et al. **Brain Res** 1989 Apr 10;484(1-2):290–6

Agonist-antagonist opioids: theory and clinical practice. Rosow C. **Can J Anaesth** 1989 May;36(3 Pt 2):S5–8 (22 ref.)

The analgesic effect of intrathecal nalbuphine in primates. Tsai SK, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug; 40(2):211–6

Pressor effect of nalbuphine in hemorrhagic shock is dependent on the sympathoadrenal system. Muldoon SM, et al. **Circ Shock** 1988 Sep;26(1):89–98

Cardiovascular responses to kappa opioid agonists in intact and adrenal demedullated rats. Gulati A, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):247–57

Assessment of the kappa-opioid activity of a series of 6,7-benzomorphans in the rabbit vas deferens. Verlinde C, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):83–7

Opiate receptor subtypes in the regulation of thyrotropin and prolactin secretion in the rat. Rauhala P, et al. **Horm Res** 1988;29(5–6):218–22

Synthesis and biological evaluation of 14-alkoxymorphinans. 2. (-)-N-(cyclopropylmethyl)-4,14-dimethoxymorphinan-6-one, a selective mu opioid receptor antagonist. Schmidhammer H, et al. **J Med Chem** 1989 Feb; 32(2):418–21

Effects of kappa opioids on schedule-controlled behavior of squirrel monkeys. Bergman J, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1102–8

Mu- and delta-opioid receptor-mediated inhibition of adenylate cyclase activity stimulated by released endogenous dopamine in rat neostriatal slices; demonstration of potent delta-agonist activity of bremazocine. Heijna MH, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):864–8

Antagonist effects of nalbuphine in opioid-dependent human volunteers. Preston KL, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):929–37

Diuretic effect of bremazocine, a kappa-opioid with central and peripheral sites of action. Salas SP, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):992–9

Effects of the novel opiate antagonist, SDZ 210-096, on luteinizing hormone secretion in the rat. Siegel RA, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):264–70

Physiological response of gray wolves to butorphanol-xylazine immobilization and antagonism by naloxone and yohimbine. Kreeger TJ, et al. **J Wildl Dis** 1989 Jan;25(1):89–94

The effect of bombesin on basal, alpha-methyl-p-tyrosine, haloperidol, morphine, bremazocine and stress-induced prolactin secretion. Buydens P, et al. **Life Sci** 1988; 43(21):1755–60

Selective depression of N-methyl-D-aspartate-mediated responses by dextrorphan in the hippocampal slice in rat. Cole AE, et al. **Neuropharmacology** 1989 Mar;28(3):249–54

Reversal by beta-funaltrexamine and 16-methyl cyprenorphine of the antinociceptive effects of opioid agonists in the mouse and guinea-pig. Hayes AG, et al. **Neuropharmacology** 1988 Aug;27(8):813–6

The opioid antagonist, MR2266, specifically decreases saline intake in the mouse. Ukai M, et al. **Neuropharmacology** 1988 Oct;27(10):1027–31

Delta opioid antagonist, 16-Me cyprenorphine, selectively attenuates conditional fear- and DPDPE-induced analgesia on the formalin test. Fanselow MS, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):469–73

Ethylketocyclazocine and bremazocine analgesia in neonatal rats. Helmstetter FJ, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):817–21

Differential tolerance development to buprenorphine-, diprenorphine-, and heroin-induced disruption of food-maintained responding in macaque monkeys. Lukas SE, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):977–82

Multiple brain sites sensitive to feeding stimulation by opioid agonists: a cannula-mapping study. Stanley BG, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):825–32

Effect of etorphine on adrenergic neurotransmission in the rat and guinea pig heart. Semafuko WE, et al. **Pharmacology** 1988;37(3):195–202

In vitro evaluation of a novel, non-competitive opioid receptor antagonist. Davis P, et al. **Proc West Pharmacol Soc** 1989;32:163–6

RX809055AX in vivo: a long lasting opioid antagonist at mu and delta receptors. Lemcke PK, et al. **Proc West Pharmacol Soc** 1989;32:173–5

Objective assessment of opioid action by facial muscle surface electromyography (SEMG). Edmonds HL Jr, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):727–38

Physiological effects of etorphine, acepromazine and xylazine in the scimitar horned oryx (Oryx dammah). Pearce PC, et al. **Res Vet Sci** 1989 Jul;47(1):78–83

Physiological effects of etorphine, acepromazine and xylazine on the black fallow deer (Dama dama). Pearce PC, et al. **Res Vet Sci** 1989 May;46(3):380–6

Phencyclidine and psychotomimetic sigma opiates: recent insights into their biochemical and physiological sites of action. Sonders MS, et al. **Trends Neurosci** 1988 Jan; 11(1):37–40 (47 ref.)

Effect of naloxone, nalbuphine, progesterone and pregnant mare's serum gonadotrophin on the sexual behaviour of ewes. Fuentes VO. **Vet Rec** 1989 Mar 18;124(11):274–6

Haemodynamic, metabolic and physical responses to a neuroleptanalgesic-glyceryl guaiacolate combination in the horse. Gasthuys F, et al. **Vet Res Commun** 1989; 13(2):113–26

[Pharmacodynamics and pharmacokinetics of dihydroetorphine hydrochloride administered sublingually in mice and rats] Huang M, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):308–12 (Eng. Abstr.) **(Chi)**

[Immunosuppressive effects of sinomenine] Peng HM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):377–80 (Eng. Abstr.) **(Chi)**

[Oxabenzomorphanes: CNS effects of hexahydro-2,7-methano-1,5-benzoxazonines] Eiden F, et al. **Arch Pharm (Weinheim)** 1988 Jun;321(6):325–9 (Eng. Abstr.) **(Ger)**

[Effect of butorphanol and buprenorphine on cerebrospinal fluid pressure] Matsumiya N, et al. **Masui** 1988 Nov; 37(11):1346–50 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

The effect of etorphine on the secretion of endogenous catecholamines and total tritium evoked by nerve- and acetylcholine-stimulation in perfused rat adrenal glands. Chen YM, et al. **Life Sci** 1989;44(2):167–74

SUPPLY & DISTRIBUTION

Immobilon supply to holders of Home Office licensed dart guns [letter] Dalby KJ. **Vet Rec** 1989 Jan 7;124(1):22

THERAPEUTIC USE

Comparison of intramuscular nalbuphine and nicomorphine in the treatment of post-operative pain. Admiraal PV, et al. **Acta Anaesthesiol Belg** 1989;40(1):59–64

Double-blind comparison between nalbuphine and pentazocine in the control of postoperative pain after orthopedic surgery. Donadoni R, et al. **Acta Anaesthesiol Belg** 1988;39(4):251–6

Nalbuphine analgesia in the prehospital setting. Stene JK, et al. **Am J Emerg Med** 1988 Nov;6(6):634–9

A blinded study using nalbuphine for prevention of pruritus induced by epidural fentanyl. Davies GG, et al. **Anesthesiology** 1988 Nov;69(5):763–5

Oral nalbuphine for the treatment of pain after dental extractions. Kay B, et al. **Br J Anaesth** 1988 Sep;61(3):313–7

Induction reflex actions with intravenous nalbuphine as an adjunct to isoflurane. Mallon JS, et al. **Can J Anaesth** 1989 Jul;36(4):377–81

Reversal of epidural morphine-induced respiratory depression and pruritus with nalbuphine. Penning JP, et al. **Can J Anaesth** 1988 Nov;35(6):599–604

Nalbuphine reversal of respiratory depression after epidural sufentanil. Cheng EY, et al. **Crit Care Med** 1989 Apr; 17(4):378–9

High dose nalbuphine in early acute myocardial infarction. Trouton TG, et al. **Int J Cardiol** 1989 Apr;23(1):53–7

Effectiveness of nalbuphine for relief of burn debridement pain. Lee JJ, et al. **J Burn Care Rehabil** 1989 May-Jun; 10(3):241–6

Comparison of the use of nalbuphine and fentanyl during third molar surgery. Canning HB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1048–50

Management of chronic pain [letter] **JAMA** 1989 Jan 20; 261(3):381

Butorphanol and pethidine in premedication--a comparative study. Atiyat B, et al. **Middle East J Anesthesiol** 1988 Oct; 9(6):553–9

Comparison of single-dose meperidine, butorphanol, and dihydroergotamine in the treatment of vascular headache. Belgrade MJ, et al. **Neurology** 1989 Apr;39(4):590–2

Double-blind comparison of nalbuphine and meperidine in combination with diazepam for intravenous conscious sedation in oral surgery outpatients. Dolan EA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):536–9

Protective effect of N-methyl-D-aspartate antagonists after focal cerebral ischemia in rabbits. Steinberg GK, et al. **Stroke** 1989 Sep;20(9):1247–52

[Comparison of nalbuphine and pentazocine in the treatment of postoperative pain by self-administration] Pandèle G, et al. **Ann Fr Anesth Reanim** 1989;8(2):85–9 (Eng. Abstr.) **(Fre)**

URINE

Determination of dextromethorphan metabolizer phenotype in healthy volunteers. Hildebrand M, et al. **Eur J Clin Pharmacol** 1989;36(3):315–8

GC/MS confirmatory method for etorphine in horse urine. Bonnaire Y, et al. **J Anal Toxicol** 1989 Jul-Aug;13(4):193–6

MORPHINE

General anesthesia for intractable ventricular tachycardia. Bitar J, et al. **Am J Cardiol** 1988 Dec 1;62(17):1318

Influence of bupivacaine as an adjuvant to epidural morphine for analgesia after cesarean section. Douglas MJ, et al. **Anesth Analg** 1988 Dec;67(12):1138–41

Failure of proglumide, a cholecystokinin antagonist, to potentiate clinical morphine analgesia. A randomized double-blind postoperative study using patient-controlled analgesia (PCA). Lehmann KA, et al. **Anesth Analg** 1989 Jan;68(1):51–6

Effect of epidural and intrathecal morphine on the length of hospital stay after cesarean section. Stenkamp SJ, et al. **Anesth Analg** 1989 Jan;68(1):66–9

Fentanyl and alfentanil versus morphine for epidural analgesia [letter] Bledsoe SW, et al. **Anesthesiology** 1988 Dec;69(6):1024–5

Breathing patterns during postoperative analgesia in patients after lower abdominal operations. Nishino T, et al. **Anesthesiology** 1988 Dec;69(6):967–72

Caudal epidural morphine for control of pain following open heart surgery in children. Rosen KR, et al. **Anesthesiology** 1989 Mar;70(3):418–21

A randomized, double-blind comparison of the effects of interpleural bupivacaine and saline on morphine requirements and pulmonary function after cholecystectomy. VadeBoncouer TR, et al. **Anesthesiology** 1989 Sep;71(3):339–43

A crystal molecular conformation of leucine-enkephalin related to the morphine molecule. Aubry A, et al. **Biopolymers** 1989 Jan;28(1):27–40

Controlled trial of extradural bupivacaine with fentanyl, morphine or placebo for pain relief in labour. Lirzin JD, et al. **Br J Anaesth** 1989 Jun;62(6):641–4

Effects of acute central LH-RH administration of the skin temperature response in morphine dependent rats. Katovich MJ, et al. **Brain Res** 1989 Aug 7;494(1):85–94

Locus ceruleus discharge characteristics of morphine-dependent rats: effects of naltrexone. Valentino RJ, et al. **Brain Res** 1989 May 29;488(1-2):126–34

Peripheral modulation of pain in conscious guinea pigs: effect of morphine, nalorphine and clonidine. Nakamura M, et al. **Braz J Med Biol Res** 1988;21(3):577–83

A possible link between morphine and alcohol preferences in rat. Rönnbäck L. **Drug Alcohol Depend** 1988 Jul; 21(3):177–82

Pulse oximetry for monitoring during ward analgesia: epidural morphine versus parenteral narcotics. Choi HJ, et al. **J Clin Monit** 1989 Apr;5(2):87–9

ODC-polyamine system is involved in morphine analgesia. Genedani S, et al. **Life Sci** 1989;44(8):525–31

Postoperative epidural narcotics for vascular surgery. Raggi R. **N J Med** 1988 Dec;85(12):1025–31

Ultrastructural changes in neurons and interneuronal synapses of the hypothalamus in progeny of

morphine-dependent rats. Kolusheva GV. **Neurosci Behav Physiol** 1989 May-Jun;19(3):186-90

Enigmatic action of ciclosporine A on the naloxone-precipitated morphine withdrawal syndrome in mice. Berthold H, et al. **Neuroscience** 1989;31(1):97-103

Caudal epidural morphine analgesia for an infant with advanced neuroblastoma: report of a case. Berde CB, et al. **Pain** 1989 Feb;36(2):219-23

Intraspinal narcotic analgesia. A comparison of two methods of postoperative pain relief. Johnson RG, et al. **Spine** 1989 Apr;14(4):363-6

[Obstetrical analgesia in a woman allergic to ethylene oxide] Olivieri P, et al. **Ann Fr Anesth Reanim** 1988;7(4):346-8 (Eng. Abstr.) **(Fre)**

[Epidural analgesia after thoracic surgery: morphine versus buprenorphine] Petit J, et al. **Ann Fr Anesth Reanim** 1988; 7(6):464-70 (Eng. Abstr.) **(Fre)**

[Postoperative analgesia with peridural morphine. Comparative study in thoracic and abdominal surgery] Pelliccia E, et al. **Minerva Anestesiol** 1988 Dec;54(12):521-4 (Eng. Abstr.) **(Ita)**

[The newborn infant of the drug-addicted mother. Experience relative to the period 1978-1986] Fabris C, et al. **Pediatr Med Chir** 1988 Mar-Apr;10(2):177-85 (Eng. Abstr.) **(Ita)**

[The selective role of the nucleus raphe magnus in the mechanisms of analgesia in electrocutaneous pain stimulation, cold stress and the action of morphine] Bragin EO, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):561-3 (Eng. Abstr.) **(Rus)**

[Use of sacral anesthesia, prolonged by opiates, in patients with acute proctologic diseases] Koplatadze AM, et al. **Klin Khir** 1989;(2):39-41 (Eng. Abstr.) **(Rus)**

[Postoperative period upon use of epidural morphine analgesia in urological patients] Novozhilov VA, et al. **Urol Nefrol (Mosk)** 1988 Nov-Dec;(6):63-5 (Eng. Abstr.) **(Rus)**

[Postoperative analgesia using caudal morphine in pediatric surgery: randomized double-blind study compared with bupivacaine] Marco Valls J, et al. **Rev Esp Anestesiol Reanim** 1989 Mar-Apr;36(2):88-92 (22 ref.) (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

A study of epidural morphine and sufentanil anesthesia for abdominal aortic surgery. Ionescu TI, et al. **Acta Anaesthesiol Belg** 1989;40(1):65-77

Effect of acute morphine treatment on peptide levels in the peri-aqueductal grey. Rosén A, et al. **Acta Physiol Scand** 1989 Jul;136(3):493-4

Ethanol with small doses of morphine establishes a conditioned place preference. Marglin SH, et al. **Alcohol** 1988 Jul-Aug;5(4):309-13

Effects of oral morphine on breathlessness and exercise tolerance in patients with chronic obstructive pulmonary disease. Light RW, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):126-33

Patient-controlled analgesia in children. Gaukroger PB, et al. **Anaesth Intensive Care** 1989 Aug;17(3):264-8

The influence of patient characteristics on the requirements for postoperative analgesia. A reassessment using patient-controlled analgesia. Burns JW, et al. **Anaesthesia** 1989 Jan;44(1):2-6

The use of morphine in the intensive care unit [letter] Nelson D, et al. **Anaesthesia** 1989 Jan;44(1):70-1

Variables of patient-controlled analgesia. 1. Bolus size. Owen H, et al. **Anaesthesia** 1989 Jan;44(1):7-10

Variables of patient-controlled analgesia. 2. Concurrent infusion. Owen H, et al. **Anaesthesia** 1989 Jan;44(1):11-3

Epidural morphine delivered by a percutaneous epidural catheter for outpatient treatment of cancer pain. Downing JE, et al. **Anesth Analg** 1988 Dec;67(12):1159-61

A dose-response study of intrathecal morphine: efficacy, duration, optimal dose, and side effects. Jacobson L, et al. **Anesth Analg** 1988 Nov;67(11):1082-8

Spinal analgesia with morphine and clonidine. Kitahata LM. **Anesth Analg** 1989 Mar;68(3):191-3

Intrathecal narcotics for labor revisited: the combination of fentanyl and morphine intrathecally provides rapid onset of profound, prolonged analgesia. Leighton BL, et al. **Anesth Analg** 1989 Jul;69(1):122-5

Epidural morphine after anterior cruciate ligament repair: a comparison with patient-controlled intravenous morphine. Loper KA, et al. **Anesth Analg** 1989 Mar; 68(3):350-2

Antinociceptive interactions between alpha 2-adrenergic and opiate agonists at the spinal level in rodents. Ossipov MH, et al. **Anesth Analg** 1989 Mar;68(3):194-200

Epidural narcotic use for outpatient pain treatment [letter] Parker EO. **Anesth Analg** 1989 Sep;69(3):408

Intrathecal morphine--an underused combination for postoperative pain management. Stoelting RK. **Anesth Analg** 1989 Jun;68(6):707-9 (14 ref.)

Minimal effective dose of intrathecal morphine for pain relief following transabdominal hysterectomy. Yamaguchi H, et al. **Anesth Analg** 1989 Apr;68(4):537-40

Mini-dose intrathecal morphine for analgesia following cesarean section [letter] Abboud TK. **Anesthesiology** 1988 Nov;69(5):805

Oxyhemoglobin saturation following cesarean section in patients receiving epidural morphine, PCA, or im meperidine analgesia. Brose WG, et al. **Anesthesiology** 1989 Jun;70(6):948-53

Low-dose intrathecal morphine for postoperative pain control in patients undergoing transurethral resection of the prostate. Kirson LE, et al. **Anesthesiology** 1989 Aug; 71(2):192-5

The dose response of caudal morphine in children. Krane EJ, et al. **Anesthesiology** 1989 Jul;71(1):48-52

A comparison of morphine, meperidine, and oxymorphone as utilized in patient-controlled analgesia following cesarean delivery. Sinatra RS, et al. **Anesthesiology** 1989 Apr;70(4):585-90

Butorphanol versus morphine: equally ineffective when given incorrectly [letter] **Ann Emerg Med** 1989 May;18(5):603-5

Subcutaneous ketamine analgesia: postoperative analgesia using subcutaneous infusions of ketamine and morphine. Bristow A, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):64-6

Continuous intravenous morphine for pain relief after abdominal surgery. Ray DC, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):317-21

Continuous thoracic extradural 0.5% bupivacaine with or without morphine: effect on quality of blockade, lung function and the surgical stress response. Scott NB, et al. **Br J Anaesth** 1989 Mar;62(3):253-7

An investigation of premedication with morphine given by the buccal or intramuscular route. Simpson KH, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):377-80

Aversive properties of opiate receptor blockade: evidence for exclusively central mediation in naive and morphine-dependent rats. Hand TH, et al. **Brain Res** 1988 Dec 6;474(2):364-8

Sensitivity of magnocellular oxytocin neurones to opioid antagonists in rats treated chronically with intracerebroventricular (i.c.v.) morphine. Leng G, et al. **Brain Res** 1989 Apr 10;484(1-2):290-6

Electrophysiological responsiveness to isoproterenol in rat hippocampal slices correlates with changes in beta-adrenergic receptor density induced by chronic morphine treatment. Moises HC, et al. **Brain Res** 1989 Apr 17;485(1):67-78

Regulation of G proteins by chronic morphine in the rat locus coeruleus. Nestler EJ, et al. **Brain Res** 1989 Jan 9; 476(2):230-9

Endogenous oxytocin inhibits morphine tolerance through limbic forebrain oxytocin receptors. Sarnyai Z, et al. **Brain Res** 1988 Nov 1;463(2):284-8

Analgesia produced by direct injection of morphine into the mesencephalic reticular formation. Haigler HJ, et al. **Brain Res Bull** 1978 Nov-Dec;3(6):655-62

Tolerance to morphine analgesia from brief exposure to a palatable solution. Klein SP, et al. **Brain Res Bull** 1988 Dec;21(6):963-5

Patient-controlled analgesia for burn patients: a preliminary report. Kinsella J, et al. **Burns Incl Therm Inj** 1988 Dec; 14(6):500-3

Complications of continuous intraspinal narcotic analgesia [letter] Coombs DW, et al. **Can Anaesth Soc J** 1983 May; 30(3 Pt 1):315-6

Control of severe pain with sustained-release morphine tablets v. oral morphine solution. Arkinstall WW, et al. **Can Med Assoc J** 1989 Mar 15;140(6):653-7, 661

Prolonged morphine self-administration and addiction liability. Evaluation of two theories in a bone marrow transplant unit. Chapman CR, et al. **Cancer** 1989 Apr 15; 63(8):1636-44

Evaluation of a cancer pain model for the testing of long-acting analgesics. The effect of MS Contin in a double-blind, randomized crossover design. Cundiff D, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2355-9

Analgesic response to single and multiple doses of controlled-release morphine tablets and morphine oral solution in cancer patients. Goughnour BR, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2294-7

Controlled-release morphine (MST Contin) in advanced cancer. The European experience. Hanks GW. **Cancer** 1989 Jun 1;63(11 Suppl):2378-82 (31 ref.)

The United States experience with oral controlled-release morphine (MS Contin tablets). Parts I and II. Review of nine dose titration studies and clinical pharmacology of 15-mg, 30-mg, 60-mg, and 100-mg tablet strengths in normal subjects. Kaiko RF, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2348-54

Oral controlled-release morphine sulfate. Analgesic efficacy and side effects of a 100-mg tablet in cancer pain patients. Portenoy RK, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2284-8

Pharmacokinetics and clinical efficacy of oral morphine solution and controlled-release morphine tablets in cancer patients. Thirlwell MP, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2275-83

Evaluation of dosing guidelines for the use of oral controlled-release morphine (MS Contin tablets). Warfield CA. **Cancer** 1989 Jun 1;63(11 Suppl):2360-4

Guidelines for use of controlled-release oral morphine in cancer pain management. Correlation with clinical experience. Lapin J, et al. **Cancer Nurs** 1989 Aug; 12(4):202-8

Residual analgesic effects of morphine in 55 four-period crossover analgesic studies. Forrest WH Jr, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):383-8

Tolerance during long-term administration of intrathecal morphine. Ali NM, et al. **Coan Med** 1989 May;53(5):266-8

Decrease in analgesic effect of nifedipine following chronic morphine administration. Ohnishi T, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):173-5

Percutaneous epidural catheterization for intractable pain in terminal cancer patients. Ali NM, et al. **Gynecol Oncol** 1989 Jan;32(1):22-5

Analysis of the wheal-and-flare reactions that follow the intradermal injection of histamine and morphine in adults with recurrent, unexplained anaphylaxis and systemic mastocytosis. Keffer JM, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):595-601

Intrathecal morphine as analgesia for labor pain. Edwards RD, et al. **J Am Board Fam Pract** 1988 Oct-Dec; 1(4):245-50

Morphine for behavior control in dementia [letter] Sloan JP. **J Am Geriatr Soc** 1989 Jan;37(1):89

A rational approach to cancer pain management [editorial] Black DJ. **J Fam Pract** 1989 Mar;28(3):267-8

Principles of cancer pain management. Use of long-acting oral morphine. Brooks I, et al. **J Fam Pract** 1989 Mar; 28(3):275-80

The therapeutic equivalence of i.m. and p.o. administration of morphine--1:3 or 1:6? Kaiko RF. **J Palliat Care** 1988 May;4(1-2):64-6

The therapeutic equivalence of oral and subcutaneous/intramuscular morphine sulphate in cancer patients. Twycross RG. **J Palliat Care** 1988 May; 4(1-2):67-8

Changes in brain monoamine metabolism during withdrawal from chronic oral self-administration of morphine and in response to a morphine challenge in the withdrawn state. Ahtee L, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):303-10

Acute opioid physical dependence in humans: effect of varying the morphine-naloxone interval. I. Heishman SJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):485-91

Urodynamic studies after intrathecal administration of baclofen and morphine in dogs. Magora F, et al. **J Urol** 1989 Jan;141(1):143-7

Genetic differences in preferences for morphine and codeine in Lewis and Fischer 344 inbred rat strains. Suzuki T, et al. **Jpn J Pharmacol** 1988 Aug;47(4):425-31

Epidural morphine, hypertension, and aortic surgery [editorial] **Lancet** 1989 Sep 9;2(8663):598-9

Chronic, but not acute, administration of morphine alters antiopiate (Tyr-MIF-1) binding sites in rat brain. Zadina JE, et al. **Life Sci** 1989;44(8):555-61

A preliminary study of long-term epidural morphine for cancer pain via a subcutaneously implanted reservoir. Liew E, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):5-12

Comparison of analgesic requirements after liver transplantation and cholecystectomy. Eisenach JC, et al. **Mayo Clin Proc** 1989 Mar;64(3):356-9

Morphine: immediate release vs. controlled release. Homesley HD. **N C Med J** 1989 Jul;50(7):390-4

Postoperative epidural narcotics for vascular surgery. Raggi R. **N J Med** 1988 Dec;85(12):1025-31

Treatment of severe cancer pain by low-dose continuous subcutaneous morphine. Drexel H, et al. **Pain** 1989 Feb; 36(2):169-76

A double-blind comparison between epidural morphine and epidural clonidine in patients with chronic non-cancer pain. Glynn C, et al. **Pain** 1988 Aug;34(2):123-8

Patient-controlled analgesia: a randomized, prospective comparison between two commercially available PCA pumps and conventional analgesic therapy for postoperative pain. Hecker BR, et al. **Pain** 1988 Oct; 35(1):115-20

Epidural patient-controlled analgesia (PCA): an alternative to continuous epidural infusions. Marlowe S, et al. **Pain** 1989 Apr;37(1):97-101

Alternated delta and mu receptor activation: a stratagem for limiting opioid tolerance. Russell RD, et al. **Pain** 1989 Mar; 36(3):381-9

Analgesia produced by normal doses of opioid antagonists alone and in combination with morphine. Vaccarino AL, et al. **Pain** 1989 Jan;36(1):103-9

Lack of an effect of 6-hydroxydopamine lesions of the nucleus accumbens on intravenous morphine self-administration. Dworkin SI, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1051-7

High doses of morphine do not change characteristics of the cerebral catecholamine receptors in the rat. Rokosz-Kozłowska A, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):387-92

Inhaled nebulised morphine and diamorphine: useful in general practice? Masters N, et al. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):910-4

Subdural injection of local anesthetics and morphine: a complication of attempted epidural anesthesia. Miller DC, et al. **South Med J** 1989 Jan;82(1):87-9 (17 ref.)

Intrathecal morphine for spinal fusion in children. Dalens B, et al. **Spine** 1988 May;13(5):494-8

Epidural opiates for the alleviation of pain. Migály P, et al. **Ther Hung** 1988;36(3):129-31 (26 ref.)

Effect of low dose nebulised morphine on exercise endurance in patients with chronic lung disease. Young IH, et al. **Thorax** 1989 May;44(5):387-90

[Relief of stable pains of advanced primary hepatic cancer patients by an injection of morphine administered through a duct retained in the extradural cave] Chen ZD. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):463-4 **(Chi)**

[Combined effect of intrathecal morphine and nalbuphine for postoperative analgesia] Chen CH, et al.

Ma Tsui Hsueh Tsa Chi 1988 Sep;26(3):257-64 (Eng. Abstr.) (Chi)
[Relief of pain during labor with bupivacaine administered epidurally and morphine. Intrathecal administration of morphine] Hée P. Ugeskr Laeger 1988 Dec 5; 150(49):3026-9 (Eng. Abstr.) (Dan)
[Postoperative analgesia with morphine versus morphine and paracetamol. A double-blind clinically controlled study with a placebo] Jespersen TW, et al. Ugeskr Laeger 1989 Jun 19;151(25):1615-8 (Eng. Abstr.) (Dan)
[Epidural administration of morphine by a completely implantable device (Port-a-Cath)] Cosendey BA, et al. Helv Chir Acta 1989 Jun;56(1-2):125-6 (Eng. Abstr.) (Fre)
[Intracerebroventricular morphine therapy. Apropos of 79 patients] Blond S, et al. Neurochirurgie 1989;35(1):52-7 (Eng. Abstr.) (Fre)
[Prolonged-action opiates and new routes of administration] Serrie A, et al. Pathol Biol (Paris) 1989 Feb;37(2):168-9 (Fre)
[Analgesic effect and side-effects of buprenorphine in acute coronary heart disease. A randomized double-blind comparison with morphine] Weiss P, et al. Anasth Intensivther Notfallmed 1988 Dec;23(6):309-12 (Eng. Abstr.) (Ger)
[Retard morphine in the long-term therapy of severe tumor pain] Zenz M, et al. Dtsch Med Wochenschr 1989 Jan 13; 114(2):43-7 (Eng. Abstr.) (Ger)
[Continuous subcutaneous opiate infusion] Drexel H, et al. Gynakol Rundsch 1989;29(1):59-61 (Ger)
[Epidural administration of a morphine-adrenaline-bupivacaine mixture in obstetric anesthesia] Károvits J, et al. Orv Hetil 1989 Mar 5; 130(10):499-502 (21 ref.) (Eng. Abstr.) (Hun)
[Continuous intravenous infusion with patient-controlled anesthesia for postoperative analgesia in cesarean section: morphine versus buprenorphine] Capogna G, et al. Minerva Anestesiol 1989 Jan-Feb;55(1-2):33-8 (Eng. Abstr.) (Ita)
[Potentiation of morphine analgesia by nifedipine in postoperative pain] Carta F, et al. Minerva Anestesiol 1988 Apr;54(4):127-30 (Ita)
[Potentiating drugs in postoperative pain control with opiates for patient controlled analgesia] Cuocolo R, et al. Minerva Anestesiol 1988 Apr;54(4):105-14 (Ita)
[Possible potentiation of morphine analgesia by proglumide] Pagnoni B, et al. Minerva Anestesiol 1988 Apr;54(4):131-6 (Ita)
[Continuous epidural infusion of morphine with a pump to obtain postoperative analgesia after upper abdominal surgery] Murakawa T, et al. Masui 1988 Jun;37(6):745-51 (Eng. Abstr.) (Jpn)
[Effect of continuous epidural infusion of morphine for postoperative analgesia on pituitary-adrenocortical function] Murakawa T, et al. Masui 1989 May;38(5):625-31 (Eng. Abstr.) (Jpn)
[Morphine self-administration by rats using a pneumatic syringe] Akiyama Y, et al. Yakubutsu Seishin Kodo 1988 Jun;8(2):329-36 (Eng. Abstr.) (Jpn)
[A bupivacaine-morphine combination by intrathecal route: correlation between pain relief and postoperative neuroendocrine response] Adrián JR, et al. Rev Med Univ Navarra 1988 Jan-Mar;32(1):35-9 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Treatment of epidural morphine-induced pruritus with buprenorphine [letter] Keaveny JP, et al. Anaesthesia 1989 Aug;44(8):691
The incidence of pruritus after epidural morphine [letter] Thangathurai D, et al. Anaesthesia 1988 Dec;43(12):1055-6
Recurrent HSVL and the use of epidural morphine in obstetrics [letter] Gieraerts R, et al. Anesth Analg 1989 Mar; 68(3):418
Prophylactic transdermal scopolamine patches reduce nausea in postoperative patients receiving epidural morphine. Loper KA, et al. Anesth Analg 1989 Feb;68(2):144-6
Myoclonus associated with treatment with high doses of morphine: the role of supplemental drugs. Potter JM, et al. BMJ 1989 Jul 15;299(6692):150-3
Morphine and dryness of the mouth. White ID, et al. BMJ 1989 May 6;298(6682):1222-3
Comparison of the effect of cisapride and metoclopramide on morphine-induced delay in gastric emptying. Rowbotham DJ, et al. Br J Clin Pharmacol 1988 Dec; 26(6):741-6
Reversal of epidural morphine-induced respiratory depression and pruritus with nalbuphine. Penning JP, et al. Can J Anaesth 1988 Nov;35(6):599-604
Comparison of peripheral and central administration of naloxone in precipitating abstinence in morphine-dependent rats. Bell J, et al. Drug Alcohol Depend 1988 Jul;21(3):189-94
Changes in locomotor-activity patterns as a measure of spontaneous morphine withdrawal: no effect of clonidine. van der Laan JW, et al. Drug Alcohol Depend 1988 Oct; 22(1-2):133-40
Comment: dyspnea with controlled-release morphine sulfate tablets [letter] Goldenheim PD. Drug Intell Clin Pharm 1988 Dec;22(12):1005-6
Ranitidine-induced confusion with concomitant morphine [letter] Martinez-Abad M, et al. Drug Intell Clin Pharm 1988 Nov;22(11):914-5
Respiratory depression due to MST. A case report. Niazi Z, et al. Eur J Clin Pharmacol 1988;35(6):685
Differential effects of calcium channel blockers and stimulants on morphine withdrawal in vitro. Barrios M, et al. Eur J Pharmacol 1988 Jul 26;152(1-2):175-8
Intrathecal morphine in OB [letter] From RP. J Am Board Fam Pract 1989 Apr-Jun;2(2):138-9
Changes in cortical acetylcholine and gamma-aminobutyric acid outflow during morphine withdrawal involve alpha-1 and alpha-2 receptors. Beani L, et al. J Pharmacol Exp Ther 1989 Aug;250(2):682-7
Hallucinations during morphine but not during oxycodone treatment [letter] Kalso E, et al. Lancet 1988 Oct 15; 2(8616):912
Temporary motor and sensory paralysis associated with intrathecal administration of morphine. Kleiner LI, et al. Neurosurgery 1989 May;24(5):756-8
Respiratory effects of epidural morphine and sufentanil in the absence and presence of chlordiazepoxide. Van den Hoogen RH, et al. Pain 1989 Apr;37(1):103-10
Comparative study in mice of flunitrazepam vs. diazepam on morphine withdrawal syndrome. Gibert-Rahola J, et al. Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(6):927-33
Severe respiratory depression from patient-controlled analgesia in renal failure. Covington EC, et al. Psychosomatics 1989 Spring;30(2):226-8
[Inhibition of morphine hyperthermia, induced by nicotinamide] Iakimova K, et al. Eksp Med Morfol 1989; 28(1):33-7 (Eng. Abstr.) (Bul)
[Respiratory depression following controlled-release morphine sulfate tablets] Hoogslag PA, et al. Ned Tijdschr Geneeskd 1989 Mar 11;133(10):516-7 (Eng. Abstr.) (Dut)
[Late respiratory depression after intra-thecal injection of morphine. Reversal by naloxone administered by the same route] Facon A, et al. Cah Anesthesiol 1988 Jun-Jul; 36(4):327-8 (Fre)
[Induction of physical dependence on morphine and genetic analysis of morphine withdrawal signs in mice] Suzuki T, et al. Arukoru Kenkyuto Yakubutsu Ison 1988 Sep; 23(3):258-67 (Eng. Abstr.) (Jpn)

ANALYSIS

Stability of morphine sulfate in portable pump reservoirs during storage and simulated administration. Stiles ML, et al. Am J Hosp Pharm 1989 Jul;46(7):1404-7
Effect of adrenalectomy on correlation of analgesia with tissue content of morphine. Miyamoto Y, et al. Eur J Pharmacol 1989 Aug 11;167(1):11-20
Drugs in hair: a new extraction procedure. Offidani C, et al. Forensic Sci Int 1989 Apr-May;41(1-2):35-9
Liquid chromatographic determination of morphine sulfate and some contaminants in injections and bulk drug material: collaborative study. Bello AC, et al. J Assoc Off Anal Chem 1988 Sep-Oct;71(5):1046-8
An improved method for the simultaneous determination of morphine and its principal glucuronide metabolites. Joel SP, et al. J Chromatogr 1988 Sep 9;430(2):394-9
Heroin, morphine, and hydromorphone determination in postmortem material by high performance liquid chromatography. Sawyer WR, et al. J Forensic Sci 1988 Sep;33(5):1146-55
The stability of morphine in isobaric and hyperbaric solutions in a drug delivery system. Caute B, et al. J Pharm Pharmacol 1988 Sep;40(9):644-5
Stability of morphine solutions in plastic syringes determined by reversed-phase ion-pair liquid chromatography. Hung CT, et al. J Pharm Sci 1988 Aug;77(8):719-23
This and that: deception and the stuff of dreams. Max B. Trends Pharmacol Sci 1988 Jun;9(6):198-200 (14 ref.)
[Quantitative analysis of morphine in pharmaceutical preparations by high performance liquid chromatography] Pierron C, et al. Ann Pharm Fr 1987;45(6):475-84 (Eng. Abstr.) (Fre)

ANTAGONISTS & INHIBITORS

Antagonism of morphine-induced respiratory depression with nalmefene. Konieczko KM, et al. Br J Anaesth 1988 Sep;61(3):318-23
Distinctive effect of ginseng saponins on development of morphine tolerance in guinea-pig ileum and mouse vas deferens. Watanabe J, et al. J Pharmacobiodyn 1988 Nov; 11(11):744-8
Beta-endorphin-(1-27) antagonizes beta-endorphin- but not morphine-, D-Pen2-D-Pen5-enkephalin- and U50, 488H-induced analgesia in mice. Suh HH, et al. Neuropharmacology 1988 Sep;27(9):957-63
Opposing effect of apomorphine on antinociceptive activity of morphine: a dose-dependent phenomenon. Gupta YK, et al. Pain 1989 Feb;36(2):263-9
5HT3 receptor antagonists block morphine- and nicotine- but not amphetamine-induced reward. Carboni E, et al. Psychopharmacology (Berlin) 1989;97(2):175-8
Triazolam attenuates amphetamine but not morphine conditioned place preferences. Pettit HO, et al. Psychopharmacology (Berlin) 1989;98(4):483-6
[Antagonistic effects of angiotensin II and morphine on synaptosomal calcium uptake] Wang XM, et al. Sheng Li Hsueh Pao 1989 Apr;41(2):179-83 (Eng. Abstr.) (Chi)
[Stress reaction and anesthesia. The role of morphine agonists and antagonists] Simionescu R. Cah Anesthesiol 1988 Jun-Jul;36(4):289-301 (50 ref.) (Fre)

BLOOD

The influence of blood sample preparation on measured levels of morphine and its major metabolites. Hoskin PJ, et al. Ann Clin Biochem 1989 Mar;26 (Pt 2):182-4
The effect of naloxone on the blood level of morphine and histamine in morphine perfused dogs. Akkan AG, et al. Int J Clin Pharmacol Ther Toxicol 1988 Dec;26(12):594-6
Comparison of whole blood and plasma morphine. Hand CW, et al. J Anal Toxicol 1988 Jul-Aug;12(4):234-5
Preliminary evaluation of the Abbott TDx for benzoylecgonine and opiate screening in whole blood. McCord CE, et al. J Anal Toxicol 1988 Sep-Oct; 12(5):295-7
Gas chromatographic-mass spectrometric determination of morphine, codeine and 6-monoacetylmorphine in blood extracted by solid phase. Schuberth J, et al. J Chromatogr 1989 May 30;490(2):444-9
Rapid, high-sensitivity method for measurement of morphine in guinea-pig serum. Turner CA, et al. J Chromatogr 1988 Jul 15;428(2):383-7
Determination of morphine in plasma by gas chromatography using a macrobore column and thermoionic detection after Extrelut column extraction: application to follow-up morphine treatment in cancer patients. Wasels R, et al. J Chromatogr 1989 Apr 14;489(2):411-18
Improved radioreceptor assay of opiate narcotics in human serum: application to fentanyl and morphine metabolism. Levi V, et al. Pharm Res 1987 Feb;4(1):46-9
The concentration of morphine in serum of rats made dependent using a drug-admixed food method. van der Laan JW, et al. Pharmacol Biochem Behav 1988 Sep; 31(1):123-8
Plasma levels of slow release morphine in advanced cancer patients. Anzalone R, et al. Pharmacol Res 1989 Jan-Feb; 21(1):107-8

CEREBROSPINAL FLUID

Concentrations of morphine in the cerebrospinal fluid after femoral perineural morphine administration [letter] Daugaard JJ, et al. Anesth Analg 1989 Mar;68(3):413

IMMUNOLOGY

Production and characterization of high-affinity monoclonal antibodies against morphine. Sawada J, et al. Mol Immunol 1988 Sep;25(9):937-43

METABOLISM

Plasma, cardiac tissue and brain morphine concentrations in acute and chronic morphine-treated rats. Ko WW, et al. Clin Exp Pharmacol Physiol 1989 Feb;16(2):117-20
(8S)-(glutathion-S-yl)dihydromorphinone, a novel metabolite of morphine from guinea pig bile. Ishida T, et al. Drug Metab Dispos 1989 Jan-Feb;17(1):77-81
Metabolic interaction between morphine and naloxone in human liver. A common pathway of glucuronidation? Wahlström A, et al. Drug Metab Dispos 1989 Mar-Apr; 17(2):218-20
Hepatic extraction of morphine is impaired in cirrhosis. Crotty B, et al. Eur J Clin Pharmacol 1989;36(5):501-6
High-performance liquid chromatographic determination of morphine in biological samples: an overview of separation methods and detection techniques. Tagliaro F, et al. J Chromatogr 1989 Mar 17;488(1):215-28 (84 ref.)
Study with positron emission tomography of the osmotic opening of the dog blood-brain barrier for quinidine and morphine. Agon P, et al. J Pharm Pharmacol 1988 Aug; 40(8):539-43
The sensitivity to noxious heat in relation to brain and liver opioid glucuronidation in inbred strains of mice. Wahlström A, et al. Pain 1989 Jul;38(1):71-5
Human brain metabolism of morphine and naloxone. Wahlström A, et al. Pain 1988 Nov;35(2):121-7

PHARMACOKINETICS

Additive interaction of haloperidol with morphine in the guinea pig ileum. Dvořák A, et al. Act Nerv Super (Praha) 1989 Apr;31(1):42-3
Distribution of 11C-labelled morphine and pethidine after spinal administration to Rhesus monkey. Gustafsson LL, et al. Acta Anaesthesiol Scand 1989 Feb;33(2):105-11
Postoperative absorption of controlled-release morphine sulphate. A study in patients given no parenteral opioids. Lew JK, et al. Anaesthesia 1989 Feb;44(2):101-3
The influence of anaesthetic technique on metabolism of oral morphine. Shelly MP, et al. Anaesthesia 1988 Sep; 43(9):733-7
Absorption of buccal morphine [letter] Shelly MP, et al. Anaesthesia 1989 Apr;44(4):356-7
Spinal cord distribution of 3H-morphine after intrathecal administration: relationship to analgesia. Nishio Y, et al. Anesth Analg 1989 Sep;69(3):323-7
Distribution of 3H-morphine following lumbar subarachnoid injection in unanesthetized rabbits. Wang BC, et al. Anesthesiology 1989 May;70(5):817-24
Pharmacokinetics of morphine in cerebrospinal fluid and

plasma after epidural administration in man. Drost RH, et al. **Arzneimittelforschung** 1988 Nov;38(11):1632–4
Pharmacokinetics of morphine following administration by the buccal route. Manara AR, et al. **Br J Anaesth** 1989 May;62(5):498–502
Relative bioavailability of controlled release morphine tablets (MST continus) in cancer patients. Poulain P, et al. **Br J Anaesth** 1988 Nov;61(5):569–74
Studies on morphine disposition: influence of renal failure on the kinetics of morphine and its metabolites. Sear JW, et al. **Br J Anaesth** 1989 Jan;62(1):28–32
Studies on morphine disposition: influence of general anaesthesia on plasma concentrations of morphine and its metabolites. Sear JW, et al. **Br J Anaesth** 1989 Jan; 62(1):22–7
The bioavailability and pharmacokinetics of morphine after intravenous, oral and buccal administration in healthy volunteers. Hoskin PJ, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):499–505
Characteristics of the gastrointestinal absorption of morphine in rats. Tan T, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan; 37(1):168–73
Morphine concentrations in plasma, ascitic fluid, and nasogastric aspirate fluid during high-dose intravenous morphine infusion. Hutson PR, et al. **Clin Pharm** 1988 Nov; 7(11):842–5
Postmortem disposition of morphine in rats. Sawyer WR, et al. **Forensic Sci Int** 1988 Sep;38(3–4):259–73
Influence of hypo and hyperthermia on disposition of morphine. Bansinath M, et al. **J Clin Pharmacol** 1988 Sep; 28(9):860–4
Enhanced bioavailability of morphine after rectal administration in rats. Katagiri Y, et al. **J Pharm Pharmacol** 1988 Dec;40(12):879–81
Pharmacokinetics of morphine and its surrogates. IX: Discrepancies among infused buprenorphine plasma concentrations sampled from different veins. Garrett ER, et al. **J Pharm Sci** 1989 Aug;78(8):644–7
Glucuronidation of morphine in human kidney microsomes. Yue QY, et al. **Pharmacol Toxicol** 1988 Nov;63(5):337–41
[Dura mater permeability: its experimental evaluation on the model of epidural morphine analgesia in the age and segmental aspects] Vitenbek IA. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):56–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Epidural morphine delays gastric emptying and small intestinal transit in volunteers. Thorén T, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):174–80
Hyperthermia and antinociceptive activity of thyrotropin-releasing hormone and morphine following central administration in rats. Zhukov VN, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):18–23
Both the cholinergic and non-cholinergic components of airway excitation are inhibited by morphine in the guinea-pig. Johansson IG, et al. **Acta Physiol Scand** 1989 Mar;135(3):411–5
Effect of morphine on leukocyte kinetics in rabbits. Luža J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:47–58
Constant infusions of morphine and intakes of sweetened ethanol solution among rats. Hubbell CL, et al. **Alcohol** 1988 Sep–Oct;5(5):409–15
Primary astroglial cultures in alcohol and drug research. Rönnbäck L, et al. **Alcohol Alcohol** 1988;23(6):465–75
Regulation of plasma motilin by opioids in the dog. Poitras P, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G41–5
Behavioral evidence for cholecystokinin–opiate interactions in neonatal rats. Weller A, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R901–7
Scintigraphic determination of the effect of metoclopramide and morphine on small intestinal transit time. Prokop EK, et al. **Am J Physiol Imaging** 1988;3(4):201–4
Comparison of histamine release induced by morphine and oxymorphone administration in dogs. Robinson EP, et al. **Am J Vet Res** 1988 Oct;49(10):1699–701
Antinociceptive activity of pentamorphone, a 14-beta-aminomorphinone derivative, compared to fentanyl and morphine. Rudo FG, et al. **Anesth Analg** 1989 Oct;69(4):450–6
Midazolam–morphine sedative interaction in patients. Tverskoy M, et al. **Anesth Analg** 1989 Mar;68(3):282–5
Sufentanil, morphine, met-enkephalin, and kappa-agonist (U-50,488H) inhibit substance P release from primary sensory neurons: a model for presynaptic spinal opioid actions. Chang HM, et al. **Anesthesiology** 1989 Apr; 70(4):672–7
Diazepam—morphine hypnotic synergism in rats. Kissin I, et al. **Anesthesiology** 1989 Apr;70(4):689–94
Comparative ventilatory effects of intravenous versus fourth cerebroventricular infusions of morphine sulfate in the unanesthetized dog. Pellignino DA, et al. **Anesthesiology** 1989 Aug;71(2):250–9
Haemodynamic effects of morphine [letter] Chambers JA. **Arch Emerg Med** 1989 Jun;6(2):155
Cardiovascular effects of morphine during hypothermia. Alcaraz C, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb; 297:133–47
Dissociation of the effects of acute chlomipramine on morphine analgesia and plasma concentrations. Bianchi M, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:34–9
Evidence for both inhibitory and excitatory effects of morphine on gastric secretion in the rat. Del Tacca M, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:178–89
Effect of morphine on the rat gastrointestinal cholinergic enzymes. Oriaku ET, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:166–77
Effects of morphine pretreatment on cocaine cardiotoxicity in anesthetized guinea-pigs. Plunkett LM, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:60–7
Variability of Doppler flow velocity and cerebral perfusion pressure is reduced in the neonate by sedation and neuromuscular blockade. Colditz PB, et al. **Aust Paediatr J** 1989 Jun;25(3):171–3
Excitatory amino acids: role in morphine excitation in rat periaqueductal gray. Jacquet YF, et al. **Behav Brain Res** 1988 Nov 1;31(1):85–8
Associative morphine tolerance in the rat: examinations of compensatory responding and cross-tolerance with stress-induced analgesia. Maude-Griffin PM, et al. **Behav Neural Biol** 1989 Jan;51(1):11–33
Procedures that produce context-specific tolerance to morphine in rats also produce context-specific withdrawal. Falls WA, et al. **Behav Neurosci** 1989 Aug;103(4):842–9
Characterization of morphine's excitatory effects. Jorenby DE, et al. **Behav Neurosci** 1988 Dec;102(6):975–85
Inhibition of acoustic startle in the rat by a footshock prestimulus: effects of morphine and naloxone. Leitner DS. **Behav Neurosci** 1988 Aug;102(4):526–33
Tolerance to morphine in the rat: associative and nonassociative effects. Tiffany ST, et al. **Behav Neurosci** 1988 Aug;102(4):534–43
Morphine activation of c-fos expression in rat brain. Chang SL, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):698–704
Morphine enhances the phosphorylation of a 58 kDa protein in mouse brain membranes. Nagamatsu K, et al. **Biochem J** 1989 Jan 1;257(1):165–71
Stress- and morphine-induced elevations of plasma and tissue cholesterol in mice: reversal by naltrexone. Bryant HU, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3777–80
Parity-associated reductions in behavioral sensitivity to opiates. Kinsley CH, et al. **Biol Reprod** 1988 Sep; 39(2):270–8
Superoxide dismutase activity in thymus cell suspension: effects of methionine-enkephalin and morphine. Endrőczi E, et al. **Biomed Biochim Acta** 1988;47(12):1007–11
Effect of oral doxapram on morphine-induced changes in the ventilatory response to carbon dioxide. Randall NP, et al. **Br J Anaesth** 1989 Feb;62(2):159–63
Arterial catecholamine levels in morphine-treated rats subjected to sympathetic nerve stimulation. Leung CM, et al. **Br J Pharmacol** 1989 Apr;96(4):888–94
Investigation of the central sites at which morphine acts to cause hypertension in conscious rabbits. May CN, et al. **Br J Pharmacol** 1989 Jul;97(3):873–81
Chronic morphine increases mu-opiate receptor binding in rat brain: a quantitative autoradiographic study. Brady LS, et al. **Brain Res** 1989 Jan 16;477(1–2):382–6
Evidence for the involvement of a descending cholinergic pathway in systemic morphine analgesia. Chiang CY, et al. **Brain Res** 1989 Jan 30;478(2):293–300
Comparison of the antinociceptive effect of morphine and glutamate at coincidental sites in the periaqueductal gray and medial medulla in rats. Jensen TS, et al. **Brain Res** 1989 Jan 2;476(1):1–9
Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281–96
Cholecystokinin-octapeptide antagonizes morphine analgesia in periaqueductal gray of the rat. Li Y, et al. **Brain Res** 1989 Feb 20;480(1–2):105–10
Blocking of morphine-induced locomotor hyperactivity by amygdaloid lesions in C57BL/6 mice. Libri V, et al. **Brain Res** 1989 Feb 6;479(1):1–5
Hypothalamic LH-RH release after acute and chronic treatment with morphine studied in a combined in vivo/in vitro model. Mehmanesh H, et al. **Brain Res** 1988 Jun 7; 451(1–2):69–76
Restraint-induced analgesia in the CD-1 mouse: interactions with morphine and time of day. Miller DB. **Brain Res** 1988 Nov 15;473(2):327–35
Behavioural tolerance to morphine analgesia is supraspinally mediated: a quantitative analysis of dose-response relationships. Milne RJ, et al. **Brain Res** 1989 Jul 10; 491(2):316–27
Enhancement of morphine-induced analgesia after repeated injections of methylenedioxymethamphetamine. Nencini P, et al. **Brain Res** 1988 Aug 2;457(1):136–42
Prolonged exposure of human neuroblastoma SH-SY5Y cell line to morphine and oxotremorine modulates signal transduction in adenylate cyclase system. Olasmaa M, et al. **Brain Res** 1988 Dec 20;475(2):291–6
Antinociceptive effect of agonists microinjected into the anterior pretectal nucleus of the rat. Prado WA. **Brain Res** 1989 Jul 24;493(1):147–54
In vivo electrochemical detection of 5-hydroxyindole within the trigeminal nucleus caudalis of freely moving rats: the effect of morphine. Rivot JP, et al. **Brain Res** 1988 Nov 1;463(2):275–83
A comparison of the effects of morphine on 5-HT metabolism in the periaqueductal gray, ventromedial medulla and medullary dorsal horn: in vivo electrochemical studies in freely moving rats. Rivot JP, et al. **Brain Res** 1989 Aug 21;495(1):140–4
Behavioral evidence for midbrain dopamine depolarization inactivation. Rompré PP, et al. **Brain Res** 1989 Jan 16; 477(1–2):152–6
Opioid-neuroleptic interaction in brainstem self-stimulation. Rompré PP, et al. **Brain Res** 1989 Jan 16;477(1–2):144–51
A comparison of the effects of intra-accumbens injections of amphetamine and morphine on reinstatement of heroin intravenous self-administration behavior. Stewart J, et al. **Brain Res** 1988 Aug 9;457(2):287–94
Morphine alters preproenkephalin gene expression. Uhl GR, et al. **Brain Res** 1988 Sep 6;459(2):391–7
Analysis of estradiol-independent and -dependent endogenous opioid peptide suppression of pulsatile LH release between the mornings of diestrus 2 and proestrus in the rat estrous cycle. Babu GN, et al. **Brain Res Bull** 1988 Aug;21(2):277–84
Independence of aversive and pain mechanisms in the dorsal periaqueductal gray matter of the rat. Borges PC, et al. **Braz J Med Biol Res** 1988;21(5):1027–31
Morphine can stimulate prolactin release independent of a dopaminergic mechanism. Shin SH, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1381–5
Intravenous morphine infusion (IMF) to drug-naive, conscious rats evokes bradycardic, hypotensive effects, but pressor actions are elicited after IMF to rats previously given morphine. Thornhill JA, et al. **Can J Physiol Pharmacol** 1989 Mar;67(3):213–22
Modulation of astrocyte activity—one way to reinforce morphine effects? Rönnbäck L, et al. **Cell Mol Biol** 1988; 34(4):337–49 (83 ref.)
Inhibitory regulations of ohmefentanyl and morphine on postsynaptic dopamine receptors. Yao YH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):15–8
Effect of morphine on the hemodynamic and neuroendocrine responses to hemorrhage in conscious rats. Feuerstein G, et al. **Circ Shock** 1989 Mar;27(3):219–35
Delta and Mu receptor agonists correlate with greater depression of cardiac function than morphine sulfate in perfused rat hearts. Vargish T, et al. **Circ Shock** 1989 Mar; 27(3):245–51
Hypothermia enhances the effects of morphine on hormonal and histamine release. Alcaraz C, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):367–74
Two false-negative results using morphine sulfate in hepatobiliary imaging. Mack JM, et al. **Clin Nucl Med** 1989 Feb;14(2):87–8
Evidence that intravenous morphine stimulates central opiate receptors to increase sympatho-adrenal outflow and cause hypertension in conscious rabbits. May CN, et al. **Clin Sci** 1989 Apr;76(4):431–7
Further studies on the understanding of Octodon degus natural resistance to morphine: a comparative study with the Wistar rat. Pelissier T, et al. **Comp Biochem Physiol [C]** 1989;92(2):319–22
Do persistent morphine effects involve interactions with the genome? Eriksson PS, et al. **Drug Alcohol Depend** 1989 Aug;24(1):39–43
Morphine directly modulates the release of stimulated corticotrophin-releasing factor-41 from rat hypothalamus in vitro. Tsagarakis S, et al. **Endocrinology** 1989 May; 124(5):2330–5
The effects on ventilation of ketorolac in comparison with morphine. Bravo LJ, et al. **Eur J Clin Pharmacol** 1988; 35(5):491–4
Effects of morphine in rats treated chronically with U-50,488 H, a kappa opioid receptor agonist. Bhargava HN, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):257–64
Effects of systemic morphine upon A delta- and C-fibre evoked activities of subnucleus reticularis dorsalis neurones in the rat medulla. Bing Z, et al. **Eur J Pharmacol** 1989 May 2;164(1):85–92
Effects of calcitonin on morphine tolerance and withdrawal syndrome in morphine physically dependent rats. Clementi G, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):175–9
Modulation of mu-mediated antinociception by delta agonists in the mouse: selective potentiation of morphine and normorphine by [D-Pen2,D-Pen5]enkephalin. Heyman JS, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):1–10
Effect of kappa-opioid receptor agonists on morphine analgesia in morphine-naive and morphine-tolerant rats. Ramarao P, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):239–46
Vasopressin and adrenalectomy-induced sensitivity to morphine. Ratka A, et al. **Eur J Pharmacol** 1988 Aug 9; 153(1):65–71
The novel CCK antagonist L364,718 abolished caerulein- but potentiates morphine-induced antinociception. Rattray M, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):163–6
Chronic administration of morphine and naltrexone up-regulate mu-opioid binding sites labeled by [3H][D-Ala2,MePhe4,Gly-ol5]enkephalin: further evidence for two mu-binding sites. Rothman RB, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):71–82
A selective kappa-opioid agonist, U-50,488H, blocks the development of tolerance to morphine analgesia in rats. Yamamoto T, et al. **Eur J Pharmacol** 1988 Oct 26; 156(1):173–6
Changes of dipeptidyl peptidase (DP IV) activity in the T lymphocytes of rats following administration of ACTH, dexamethasone and opiates. Korányi L, et al.

Exp Clin Endocrinol 1989 Apr;93(1):61–8
Failure of opioids to affect excitation and contraction in isolated ventricular heart muscle. Nawrath H, et al. Experientia 1989 Apr 15;45(4):337–9
Analgesic action of clonixin, nifedipine and morphine using the formalin test. Bustamante D, et al. Gen Pharmacol 1989; 20(3):319–22
Mechanisms of the contractile responses to morphine of the mouse colon in vitro. Contreras E, et al. Gen Pharmacol 1988;19(5):669–72
Ultrastructural alterations in caudate nucleus, cerebral cortex and hippocampus produced by morphine. García-Estrada J, et al. Gen Pharmacol 1988;19(6):841–8
A comparison of GABAergic influences on the analgesic responses to morphine and pentazocine. Germany A, et al. Gen Pharmacol 1989;20(2):157–9
Effects of morphine on the human sphincter of Oddi. Helm JF, et al. Gut 1988 Oct;29(10):1402–7
Morphine-like activity of substituted amides & imides of [D-Ala2, Met5]-enkephalin. Raghubir R, et al. Indian J Med Res 1989 Apr;90:107–12
Opioid receptors in human neoplasms: growth hormone and prolactin response to morphine, met-enkephalin and buprenorphine in cancer patients. Lissoni P, et al. Int J Biol Markers 1989 Jan–Mar;4(1):55–6
Opioid-induced modification of granulocyte function. Marcoli M, et al. Int J Immunopharmacol 1988;10(4):425–33
Morphine: some puzzles of well-known substance. Kiyatkin EA. Int J Neurosci 1989 Apr;45(3–4):231–46
Morphine suppresses luteinizing hormone concentrations in transiently weaned sows and delays onset of estrus after weaning. Armstrong JD, et al. J Anim Sci 1988 Sep; 66(9):2216–23
Effect of morphine on serum gonadotropin concentrations in postpartum beef cows. Peck DD, et al. J Anim Sci 1988 Nov;66(11):2930–6
Evidence for endogenous opioid modulation of serum luteinizing hormone and prolactin in the steer. Peck DD, et al. J Anim Sci 1988 Dec;66(12):3197–201
Inhibition of baroreflex following microinjection of GABA or morphine into the nucleus tractus solitarii in rabbits. Wang Q, et al. J Auton Nerv Syst 1988 Dec;25(2–3):165–72
Lack of an effect of morphine or naloxone on the oestrogen-induced LH surge in anoestrous ewes. Horton RJ, et al. J Endocrinol 1988 Oct;119(1):89–93
Interruption of parturition in rats by morphine: a result of inhibition of oxytocin secretion. Russell JA, et al. J Endocrinol 1989 Jun;121(3):521–36
Effects of morphine and naloxone on plasma levels of LH, FSH, prolactin and growth hormone in the immature male pig. Trudeau VL, et al. J Endocrinol 1988 Dec;119(3):501–8
Suppression of human peripheral blood mononuclear cell function by methadone and morphine. Peterson PK, et al. J Infect Dis 1989 Mar;159(3):480–7
Preparation and in vitro activity of liposome encapsulated opioids. Reig F, et al. J Microencapsul 1989 Jul–Sep; 6(3):277–83
Alpha 1-adrenoreceptor-mediated increase in acetylcholine release in brain slices during morphine tolerance. Tanganelli S, et al. J Neurochem 1989 Oct;53(4):1072–6
Obligatory role of B cells and adherent accessory cells in the transfer of a defect in morphine-mediated antinociception in C57BL/6J-bg/bg (beige-J) mice. Kimball ES, et al. J Neuroimmunol 1989 May;22(3):185–92
Differential effects of morphine and clonidine on visceral and cutaneous spinal nociceptive transmission in the rat. Ness TJ, et al. J Neurophysiol 1989 Jul;62(1):220–30
Morphine-induced pupillary fluctuations in the rat: correlations with EEG and respiratory changes. Lynch TJ, et al. J Ocul Pharmacol 1985 Fall;1(3):255–61
The specificity of the pupillary actions of morphine and naloxone. Rabinowitz R, et al. J Ocul Pharmacol 1987 Spring;3(1):17–21
The effect of acute and chronic administration of morphine and morphine withdrawal on intestinal transit time in the rat. Brown NJ, et al. J Pharm Pharmacol 1988 Dec; 40(12):844–8
Inversion of the alpha-2 and alpha-1 noradrenergic control of the cortical release of acetylcholine and gamma-aminobutyric acid in morphine-tolerant guinea pigs. Beani L, et al. J Pharmacol Exp Ther 1988 Oct; 247(1):294–301
Intracerebroventricular morphine decreases descending inhibitions acting on lumbar dorsal horn neuronal activities related to pain in the rat. Bouhassira D, et al. J Pharmacol Exp Ther 1988 Oct;247(1):332–42
Action of naloxone on myenteric neurons removed from morphine-treated guinea pigs. Cherubini E, et al. J Pharmacol Exp Ther 1988 Dec;247(3):830–8
Age-related differences in the sensitivity to opiate-induced perturbations in reproductive endocrinology in the developing and adult male rat. Cicero TJ, et al. J Pharmacol Exp Ther 1989 Jan;248(1):256–61
Differential cross-tolerance to opioid agonists in morphine-tolerant pigeons responding under a schedule of food presentation. Craft RM, et al. J Pharmacol Exp Ther 1989 May;249(2):386–93
Pharmacokinetic patterns of repeated administration of antidepressants in animals. II. Their relevance in a study of the influence of clomipramine on morphine analgesia in mice. Fialip J, et al. J Pharmacol Exp Ther 1989 Feb; 248(2):747–51
Discriminative stimulus effects of naltrexone in morphine-treated rhesus monkeys. France CP, et al. J Pharmacol Exp Ther 1989 Sep;250(3):937–43
A role for histamine and H2-receptors in opioid antinociception. Gogas KR, et al. J Pharmacol Exp Ther 1989 Aug;250(2):476–84
Acute opioid physical dependence in postaddict humans: naloxone dose effects after brief morphine exposure. Heishman SJ, et al. J Pharmacol Exp Ther 1989 Jan; 248(1):127–34
Glucose utilization in the rat brain during chronic morphine treatment and naloxone-precipitated morphine withdrawal. Kimes AS, et al. J Pharmacol Exp Ther 1989 Feb; 248(2):538–45
Morphine blocks and naloxone enhances suppression of operant behavior by low doses of 3-isobutyl-1-methylxanthine. Kleven MS, et al. J Pharmacol Exp Ther 1989 Jan;248(1):273–7
Comparisons of descending pain inhibitory pathways activated by beta-endorphin and morphine as characterized by supraspinal and spinal antinociceptive interactions in mice. Roerig SC, et al. J Pharmacol Exp Ther 1988 Dec; 247(3):1107–13
Morphine antinociception in different strains of mice: relationship of supraspinal-spinal multiplicative interaction to tolerance. Roerig SC, et al. J Pharmacol Exp Ther 1988 Nov;247(2):603–8
Potency of infused spinal antinociceptive agents is inversely related to magnitude of tolerance after continuous infusion. Stevens CW, et al. J Pharmacol Exp Ther 1989 Jul; 250(1):1–8
Morphine, capsaicin and K+ release purines from capsaicin-sensitive primary afferent nerve terminals in the spinal cord. Sweeney MI, et al. J Pharmacol Exp Ther 1989 Jan;248(1):447–54
Morphine effects on locus ceruleus neurons are dependent on the state of arousal and availability of external stimuli: studies in anesthetized and unanesthetized rats. Valentino RJ, et al. J Pharmacol Exp Ther 1988 Mar;244(3):1178–86
Morphine-induced tachycardia in fetal lambs: a bell-shaped dose-response curve. Zhu YS, et al. J Pharmacol Exp Ther 1989 Apr;249(1):78–82
Tail immersion test for the evaluation of a nociceptive reaction in mice. Methodological considerations. Ramabadran K, et al. J Pharmacol Methods 1989 Mar; 21(1):21–31
Fluctuation in responsiveness of LH and lack of responsiveness of FSH to prolonged infusion of morphine and naloxone in the ewe. Currie WD, et al. J Reprod Fertil 1989 May;86(1):359–66
Adrenergic function and the development of analgesic tolerance to morphine. Kihara T, et al. Jpn J Pharmacol 1989 Aug;50(4):397–401
Reverse tolerance to ambulation-increasing effects of methamphetamine and morphine in 6 mouse strains. Kuribara H, et al. Jpn J Pharmacol 1989 Feb;49(2):197–203
Mode of potentiating action of cocaine in morphine analgesia. Shimada A, et al. Jpn J Pharmacol 1988 Oct;48(2):185–93
Distribution of substance P and methionine-enkephalin in salivary glands and effect of chronic morphine treatment on levels of these peptides. Yonehara N, et al. Jpn J Pharmacol 1989 Aug;50(4):503–6
Opioid inhibition of neurally mediated mucus secretion in human bronchi. Rogers DF, et al. Lancet 1989 Apr 29; 1(8644):930–2
Luteinizing hormone secretion following intracerebroventricular administration of morphine in the prepuberal gilt. Barb CR, et al. Life Sci 1989;45(8):691–6
Gonadal steroid and chronic morphine treatment do not change the posttranslational processing of beta-endorphin in the rat brain. Berglund LA, et al. Life Sci 1989; 44(9):591–601
Rebound increase of basal cAMP level in NG108-15 cells during chronic morphine treatment: effects of naloxone and chloramphenicol. Copeland RL Jr, et al. Life Sci 1989; 44(16):1107–16
Physical dependence in rats after low morphine doses. Frumkin K. Life Sci 1974 Aug 1;15(3):455–62
Binding of 3H-naloxone in the mouse brain: effect of ions and tolerance development. Hitzemann RJ, et al. Life Sci 1974 Jun 16;14(12):2393–404
Effects of morphine and naloxone on feline colonic transit. Krevsky B, et al. Life Sci 1989;44(13):873–9
Effects of intraventricular brain injections of neurotransmitters on colonic temperature in morphine-tolerant rats. Lagerspetz KY, et al. Life Sci 1974 Jul 15;15(2):281–8
Actions of acetylcholine and atropine on cerebral cortical neurons in chronically morphine-treated rats. Yarbrough GG. Life Sci 1974 Oct 15;15(8):1523–9
Upregulation of opioid receptor subtypes correlates with potency changes of morphine and DADLE. Yoburn BC, et al. Life Sci 1988;43(16):1319–24
Differential glycemic effects of morphine in diabetic and normal mice. Surwit RS, et al. Metabolism 1989 Mar; 38(3):282–5
Iloprost-induced writhing in mice and its suppression by morphine. Akarsu ES, et al. Methods Find Exp Clin Pharmacol 1989 Apr;11(4):273–5
A novel action of morphine in the rat locus coeruleus: persistent decrease in adenylate cyclase. Beitner DB, et al. Mol Pharmacol 1989 May;35(5):559–64
Effect of metergoline, fenfluramine, and 8-OHDPAT on catalepsy induced by haloperidol or morphine. Broekkamp CL, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Aug;338(2):191–5
Involvement of central histaminergic and cholinergic systems in the morphine-induced increase in blood-brain barrier permeability to sodium fluorescein in mice. Oishi R, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Jan–Feb; 339(1–2):159–65
Morphine tolerance and nonspecific subsensitivity of the longitudinal muscle myenteric plexus preparation of the guinea-pig to inhibitory agonists. Taylor DA, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Nov; 338(5):553–9
In vivo morphine decreases [3H]nimodipine receptor binding in rat brain regions. Gandhi VC, et al. Neurochem Res 1988 Dec;13(12):1175–81
Chronic morphine and testosterone treatment. Effects on sexual behavior and dopamine metabolism in male rats. Clark JT, et al. Neuroendocrinology 1988 Jul;48(1):97–104
Effect of morphine and naloxone on plasma prolactin concentrations in the fetal sheep and pregnant ewe during late gestation. McMillen IC, et al. Neuroendocrinology 1989 Mar;49(3):286–90
Role of alpha-adrenergic mechanism in effects of morphine on the hypothalamo-pituitary-adrenocortical and cardiovascular systems in the rat. Suemaru S, et al. Neuroendocrinology 1989 Feb;49(2):181–90
The paradoxical stimulatory effect of morphine on LH secretion is dose-dependent and naloxone-reversible. Van Vugt DA, et al. Neuroendocrinology 1989 Jul;50(1):109–16
Intrathecal administration of 5,6-DHT or 5,7-DHT reduces morphine and substance P-antinociceptive activity in the rat. Rodríguez FD, et al. Neuropeptides 1989 Feb–Mar; 13(2):139–46
Effect of chronic morphine administration on measured levels and chromatographic characterization of six neuropeptides in guinea-pig ileum. Shuttleworth CW, et al. Neuropeptides 1988 Nov–Dec;12(4):249–56
Effect of morphine on far-field somatosensory evoked potentials in the rat. Abdulla FA, et al. Neuropharmacology 1989 Jan;28(1):69–73
Chronic treatment with naltrexone enhances morphine-stimulated dopamine neurotransmission: neurochemical and behavioral evidence. Bardo MT, et al. Neuropharmacology 1988 Nov;27(11):1103–9
Pentobarbital attenuates the antinociceptive effect of intranigral morphine. Baumeister AA, et al. Neuropharmacology 1989 Feb;28(2):194–8
Chronic administration of morphine and naltrexone up-regulate[3H][D-Ala2,D-leu5]enkephalin binding sites by different mechanisms. Danks JA, et al. Neuropharmacology 1988 Sep;27(9):965–74
Stress-induced potentiation of morphine-induced analgesia in morphine-tolerant rats. Fleetwood SW, et al. Neuropharmacology 1989 Jun;28(6):563–7
Cerebral cortical 5-HT1 and 5-HT2 receptors of morphine tolerant-dependent rats. Gulati A, et al. Neuropharmacology 1988 Dec;27(12):1231–7
Catalepsy induced by combinations of ketamine and morphine: potentiation, antagonism, tolerance and cross-tolerance in the rat. Hance AJ, et al. Neuropharmacology 1989 Feb;28(2):109–16
Modulation of morphine-induced EEG and behavioral effects by dynorphin A-(1-13) in non-tolerant and morphine-tolerant rats. Hong O, et al. Neuropharmacology 1988 Aug;27(8):807–12
Morphine-induced analgesia in the rat paw pressure test is blocked by CCK and enhanced by the CCK antagonist MK-329. O'Neill MF, et al. Neuropharmacology 1989 Mar; 28(3):243–7
Lesions to ascending noradrenergic and serotonergic pathways modify antinociception produced by intracerebroventricular administration of morphine. Sawynok J, et al. Neuropharmacology 1989 Feb;28(2):141–7
Effects of microiontophoretically-applied morphine on the Purkinje cell in the cerebellum of the cat. Taguchi K, et al. Neuropharmacology 1989 Mar;28(3):235–42
Dose- and time-dependent action of morphine, tramadol and flupirtine as studied by radioelectroencephalography in the freely behaving rat. Dimpfel W, et al. Neuropsychobiology 1989;20(3):164–8
Effect of morphine on the electroencephalogram and other physiological and other physiological and behavioral parameters. Matejcek M, et al. Neuropsychobiology 1988; 19(4):202–11
Microinjections of glutamate or morphine at coincident midbrain sites have different effects on nociceptive dorsal horn neurons in the rat. Carstens E, et al. Neurosci Lett 1988 Dec 19;95(1–3):185–91
Enhancement by haloperidol of the locomotor response induced by naloxone in morphine-treated guinea pigs. Chahl LA, et al. Neurosci Lett 1989 Jan 16;96(2):213–7
Comparison of the oxytocin response to water-deprivation, hyperosmolarity and administration of morphine or naltrexone in lactating and virgin female rats. Evans RG, et al. Neurosci Lett 1988 Nov 22;94(1–2):177–81
Electrophysiological analysis of the neural circuitry underlying opiate effects in the nucleus accumbens septi. Hakan RL, et al. Neurosci Lett 1989 Jun 19;101(2):163–8
Ultrasonic vocalization in rat pups as a marker of behavioral development: an investigation of the effects of drugs

influencing brain opioid system. Cuomo V, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):465–9

The effects of choline on soman–induced analgesia and toxicity. Shih TM, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):287–94

Attempts to gauge the relative importance of pre– and postsynaptic effects of morphine on the transmission of noxious messages in the dorsal horn of the rat spinal cord. Lombard MC, et al. **Pain** 1989 Jun;37(3):335–45

Electrophysiological studies on the effects of opiates on dorsal horn nociceptive neurones at 51 atmospheres absolute. Smallman K, et al. **Pain** 1989 Jul;38(1):57–64

Antagonism of morphine analgesia by CCK–8–S does not extend to all assays nor all opiate analgesics. Barbaz BS, et al. **Peptides** 1988 Nov–Dec;9(6):1295–300

Supraspinal FMRFamide antagonizes morphine–induced horizontal, but not vertical, locomotor activity. Raffa RB. **Peptides** 1989 Mar–Apr;10(2):403–6

Effect of 5–hydroxytryptamine precursors on morphine analgesia in the formalin test. Abbott FV, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):855–60

Opioids and sexual behavior in the male rat. Agmo A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1021–34

Novelty–induced place preference behavior in rats: effects of opiate and dopaminergic drugs. Bardo MT, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):683–9

Differential effects of intracerebral microinjection of morphine on approach and escape responses induced by lateral hypothalamic stimulation in the mouse. Bendani T, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):397–401

Comparison of the antinociceptive effects of new [D–Arg2]–dermorphin tetrapeptide analogs and morphine in mice. Chaki K, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):439–44

Effect of morphine on self–stimulation in rats and its modification by chloramphenicol. Copeland RL Jr, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):933–5

Conditioned place preference produced by intra–hippocampal morphine. Corrigall WA, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):787–9

Chronic morphine administration in cats: effects on sleep and EEG. De Andrés I, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):519–26

Opposite effects of restraint on morphine analgesia and naloxone–induced jumping. Dymshitz J, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):905–10

The ontogeny of opiate tolerance and withdrawal in infant rats. Fanselow MS, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):431–8

Stimulation of opioid receptors suppresses penile erectile reflexes and seminal emission in rats. Gomez–Marrero J, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):393–6

Potentiation of morphine–elicited circling by dopaminergic uptake blockade. Gratton A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1077–9

Modulation by morphine of aversive–like behavior induced by GABAergic blockade in periaqueductal gray or medial hypothalamus. Jenck F, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):193–200

Prenatal stress alters morphine– and stress–induced analgesia in male and female rats. Kinsley CH, et al. **Pharmacol Biochem Behav** 1988 May;30(1):123–8

Dopamine D–1 and D–2 receptor antagonists potentiate analgesic and motor effects of morphine. Kiritsy–Roy JA, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):717–21

Dose–dependent enhancement of morphine–induced analgesia by ingestion of amniotic fluid and placenta. Kristal MB, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):351–6

The psychopharmacologic and prolactin response after large doses of naloxone in man. Kumor KM, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):967–75

Effect of morphine and naloxone on a defensive response of the crab Chasmagnathus granulatus. Lozada M, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):635–40

Morphine preexposure attenuates the aversive properties of opiates without preexposure to the aversive properties. Martin GM, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):687–92

PCP, THC, ethanol, and morphine and consumption of palatable solutions. Milano WC, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):893–7

The role of opiate mechanisms in the development of tolerance to the anorectic effects of amphetamines. Nencini P. **Pharmacol Biochem Behav** 1988 Jul;30(3):755–64

Effects of ritanserin on the rewarding properties of d–amphetamine, morphine and diazepam revealed by conditioned place preference in rats. Nomikos GG, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):853–8

Supraspinal cerebral areas involved in morphine's intestinal inhibition and analgesia. Parolaro D, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):319–24

Attenuation of morphine analgesia by the S2 antagonists, pirenperone and ketanserin. Paul D, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):641–7

Independent effects of morphine and apomorphine on stereotyped gnawing in the hamster. Schnur P, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):589–94

Tolerance and sensitization to the heart–rate effects of morphine. Schwarz KS, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):561–6

Morphine–induced place conditioning is not confounded by drug–induced alterations in locomotor activity. Shippenberg TS, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):129–32

Multiple brain sites sensitive to feeding stimulation by opioid agonists: a cannula–mapping study. Stanley BG, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):825–32

Thigmotaxis as a test for anxiolytic activity in rats. Treit D, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):959–62

Environment–specific cross–sensitization between the locomotor activating effects of morphine and amphetamine. Vezina P, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):581–4

The role of control activity levels in the reported strain differences to the behavioral effects of drugs in mice. Wenger GR. **Pharmacol Biochem Behav** 1989 Jan; 32(1):241–7

Cholecystokinin potentiates the rate–decreasing effects of morphine on schedule–controlled behavior in rats. Winsauer PJ, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):569–75

Opioid receptor upregulation and supersensitivity in mice: effect of morphine sensitivity. Yoburn BC, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):727–31

The dopamine innervation of the visceral cortex mediates the aversive effects of opiates. Zito KA, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):693–9

5–HT3 receptors antagonists block morphine– and nicotine–but not amphetamine–induced place–preference conditioning. Acquas E, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1113–4

Chronic SCH 23390 produces tolerance to morphine extrapyramidal effects. De Montis MG, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1115–6

The effect of morphine, naloxone, D– and L–aspartic acid on the brain and lung ACE in mice. Koyuncuoğlu H, et al. **Pharmacol Res Commun** 1983 Nov;15(10):969–78

Decreased response to GABA–B agonists in longitudinal smooth muscle–myenteric plexus preparations from morphine–tolerant guinea–pigs. Luzzi S, et al. **Pharmacol Res Commun** 1988 Sep;20(9):773–83

Effects of acute morphine administration on noradrenaline turnover and metabolism in various brain parts of control and handled rats. Attila LM. **Pharmacol Toxicol** 1989 Feb; 64(2):202–9

The influence of morphine and naloxone on plasma oxytocin concentration in the rat. Grell S, et al. **Pharmacol Toxicol** 1988 Oct;63(4):274–6

Effects of acute and chronic hyperglycemia on morphine–induced inhibition of gastrointestinal transit in mice. Bansinath M, et al. **Pharmacology** 1988;37(5):281–5

Effect of chronic intracerebroventricular morphine to feeding responses in male rats. Dhatt RK, et al. **Physiol Behav** 1988;43(5):553–7

The effect of methylxanthines on morphine analgesia in mice and rats. Malec D, et al. **Pol J Pharmacol Pharm** 1988 May–Jun;40(3):223–32

Selective changes in mu opioid receptor properties induced by chronic morphine exposure. Werling LL, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6393–7

Clonidine and morphine increase atrial natriuretic peptide secretion in anesthetized rats. Chen M, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):299–303

Sites of action of morphine in generation of hippocampal theta rhythm in the rat. Chinn C, et al. **Proc West Pharmacol Soc** 1988;31:215–6

Comparison of PD 117302, a kappa agonist, and morphine on colonic transit and formalin–induced pain in rats. Porreca F, et al. **Proc West Pharmacol Soc** 1989;32:185–7

Some views on the influence of morphine on brain stem pain modulating neurons and descending controls acting on the spinal cord. Dickenson A. **Prog Brain Res** 1988;77:259–62 (18 ref.)

Brain stem neuronal circuitry underlying the antinociceptive action of opiates. Fields HL, et al. **Prog Brain Res** 1988; 77:245–57 (51 ref.)

Effects of morphine given in the brain stem on the activity of dorsal horn nociceptive neurons. Gebhart GF, et al. **Prog Brain Res** 1988;77:229–43 (49 ref.)

Cingulotomy in the rat fails to block opiate withdrawal effects but elevates stress–induced plasma beta–endorphin. Smith GC, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):683–8

Morphine diminishes the constancy of spontaneous uterine contractions, antagonizes the positive inotropic effects of prostaglandin E2, but not of prostaglandin F2 alpha and inhibits prostaglandin E and F outputs from the uterus of ovariectomized rats. Faletti A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):147–51

Post–natal morphine differentially affects opiate and stress analgesia in adult rats. Arjune D, et al. **Psychopharmacology (Berlin)** 1989;98(4):512–7

Evidence for perceptual masking of the discriminative morphine stimulus. Gauvin DV, et al. **Psychopharmacology (Berlin)** 1989;98(2):212–21

Effects of prior saline–morphine discrimination by pigeons on three–way discrimination including two morphine doses. Gauvin DV, et al. **Psychopharmacology (Berlin)** 1989; 98(2):222–30

Morphine effects on maternal aggression, pup care and analgesia in mice. Haney M, et al. **Psychopharmacology (Berlin)** 1989;98(1):68–74

Effects of dose on effector mechanisms in morphine–induced hyperthermia and poikilothermia. Jorenby DE, et al. **Psychopharmacology (Berlin)** 1989;98(2):269–74

Modification of quasi–morphine withdrawal with serotonin agonists and antagonists: evidence for a role of serotonin in the expression of opiate withdrawal. Kleven MS, et al. **Psychopharmacology (Berlin)** 1989;98(2):231–5

Repeated exposures intensify rather than diminish the rewarding effects of amphetamine, morphine, and cocaine. Lett BT. **Psychopharmacology (Berlin)** 1989;98(3):357–62

Conditioned taste preference produced by pairing a taste with a low dose of morphine or sufentanil. Lett BT, et al. **Psychopharmacology (Berlin)** 1989;98(2):236–9

Kappa antagonist properties of buprenorphine in non–tolerant and morphine–tolerant rats. Negus SS, et al. **Psychopharmacology (Berlin)** 1989;98(1):141–3

Opioid receptor subtype–specific cross–tolerance to the effects of morphine on schedule–controlled behavior in mice. Solomon RE, et al. **Psychopharmacology (Berlin)** 1988;96(2):218–22

Temporal patterning of ultrasonic distress calls in the adult rat: effects of morphine and benzodiazepines. van der Poel AM, et al. **Psychopharmacology (Berlin)** 1989;97(2):147–8

The periaqueductal gray matter mediates opiate–induced immunosuppression. Weber RJ, et al. **Science** 1989 Jul 14; 245(4914):188–90

Perturbation of glutathione by a central action of morphine. Skoulis NP, et al. **Toxicology** 1989 Aug;57(3):287–302

Adenosine release may mediate spinal analgesia by morphine. Sawynok J, et al. **Trends Pharmacol Sci** 1989 May; 10(5):186–9 (32 ref.)

Respiratory depression by analgesics at 41 bar. Furset K, et al. **Undersea Biomed Res** 1989 May;16(3):219–26

[Antagonism of CaCl2 injected into periaqueductal gray on the inhibitory action of morphine on pain–evoked discharges of parafascicular nucleus in rats] Chen ZX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):504–7 (Eng. Abstr.) **(Chi)**

[Effects of intracerebroventricular and intravenous injection of morphine on the migrating myoelectric complex in dogs] Qu SY, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):395–9 (Eng. Abstr.) **(Chi)**

[Respiratory depression following administration of morphine sulfate tablets with delayed action (letter)] **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1095–6 **(Dut)**

[Toxophilic effects of morphinomimetic substances. Dopamine/enkephalin interactions in the ventral tegmental area and in the nucleus accumbens] Stinus L, et al. **Encephale** 1989 Jan–Feb;15 Spec No:95–104 **(Fre)**

[In vitro effects of morphine and opioid peptides on granulocyte migration] Pasotti D, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):53–5 (Eng. Abstr.) **(Ita)**

[Effects of morphine and diazepam pretreatment on immobilization stress–induced increase of serotonin metabolism in discrete brain areas of the rat] Oomagari K. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):81–94 (Eng. Abstr.) **(Jpn)**

[Proconvulsant effect of morphine on seizures induced by pentylenetetrazol in the mice] Fujii E, et al. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):381–7 (Eng. Abstr.) **(Jpn)**

[Pharmacological interactions between dependence–liable drugs] Kaneto H, et al. **Yakubutsu Seishin Kodo** 1988 Sep; 8(3):405–15 (Eng. Abstr.) **(Jpn)**

[Effect of diazepam on various effects of morphine use in mice and rats] Matla J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:125–33 (Eng. Abstr.) **(Pol)**

[Effect of morphine storage time on its analgesic activity and tissue tolerance in epidural administration] Vitenbek IA. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):33–8 (Eng. Abstr.) **(Rus)**

[Role of giant cell nuclei of the reticular formation in mechanisms of analgesia during auricular electroacupuncture and action of morphine] Bragin EO, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):390–2 (Eng. Abstr.) **(Rus)**

[Effect of 5,7–dihydroxytryptamine on pain sensitivity and analgesic activity of morphine] Ignatov IuD, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):311–4 (Eng. Abstr.) **(Rus)**

[Neuroanatomical dissociation of reinforcing and analgetic effects of morphine] Morozova AS, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):45–7 (Eng. Abstr.) **(Rus)**

[The role of group A5 catecholaminergic neurons in stress and morphine analgesia mechanisms in rats] Bragin EO, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):18–20 (Eng. Abstr.) **(Rus)**

[The influence of morphine on the behavioral effects of pharmacological stimulation of the cholinergic structures of the cat brain] Shugalev NP. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):137–8 **(Rus)**

[An experimental pain model: the formaldehyde test] Seijo F, et al. **Arch Neurobiol (Madr)** 1989 May–Jun;52(3):134–9 (Eng. Abstr.) **(Spa)**

POISONING

Accidental epidural injection of a large dose of morphine

[letter] Atanassoff P, et al. **Anaesthesia** 1988 Dec; 43(12):1056

Patient-controlled analgesia--the need for caution. A case report and review of adverse incidents. Thomas DW, et al. **Anaesthesia** 1988 Sep;43(9):770-2 (17 ref.)

Morphological findings in fatal drug addiction. An investigation of injection marks, endocrine organs and kidneys. Kringsholm B, et al. **Forensic Sci Int** 1989 Jan; 40(1):15-24

Fatal intoxications in Denmark following intake of morphine from opium poppies. Steentoft A, et al. **Z Rechtsmed** 1988; 101(3):197-204

[Ultrastructural changes in the thalamus in chronic morphine intoxication and abstinence] Kolusheva GV. **Zh Nevropatol Psikhiatr** 1988;88(7):67-71 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of epidural bupivacaine and epidural morphine on bowel function and pain after hysterectomy. Thorén T, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):181-5

Postoperative pain relief and gastrointestinal motility. Wattwil M. **Acta Chir Scand Suppl** 1989;550:140-5 (37 ref.)

Epidural morphine by the thoracic or lumbar routes in cholecystectomy. Effect on postoperative pain and respiratory variables. Hakanson E, et al. **Anaesth Intensive Care** 1989 May;17(2):166-9

Postoperative epidural morphine analgesia in Papua New Guinea. Oberoi GS, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):332-5

Celiac plexus block for hepatic arterial embolization: a comparison with intravenous morphine. Loper KA, et al. **Anesth Analg** 1989 Sep;69(3):398-9

Intrathecal methadone and morphine for postoperative analgesia: a comparison of the efficacy, duration, and side effects. Jacobson L, et al. **Anesthesiology** 1989 May; 70(5):742-6

Clinical differences in spinal opioid efficacy. Organowski S, et al. **Can J Anaesth** 1989 Jul;36(4):448-9

Proglumide potentiates morphine analgesia for acute postsurgical pain. Lavigne GJ, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):666-73

The use of epidural morphine in patients undergoing total knee arthroplasty. Baker MW, et al. **J Arthroplasty** 1989; 4(2):157-61

Intraspinal analgesia: a new route for an old drug. Arnold C. **J Neurosci Nurs** 1989 Feb;21(1):30-7

Epidural morphine decreases postoperative hypertension by attenuating sympathetic nervous system hyperactivity. Breslow MJ, et al. **JAMA** 1989 Jun 23-30;261(24):3577-81

Control of intractable spasticity with intrathecal morphine sulfate. Erickson DL, et al. **Neurosurgery** 1989 Feb; 24(2):236-8

Does intravenous methadone provide longer lasting analgesia than intravenous morphine? A randomized, double-blind study. Grochow L, et al. **Pain** 1989 Aug;38(2):151-7

Morphine and ibuprofen compared using the cold pressor test. Jones SF, et al. **Pain** 1988 Aug;34(2):117-22

Blockade of tolerance to morphine analgesia by cocaine. Misra AL, et al. **Pain** 1989 Jul;38(1):77-84

Epidural steroids, epidural morphine and epidural steroids combined with morphine in the treatment of post-laminectomy syndrome. Rocco AG, et al. **Pain** 1989 Mar;36(3):297-303

Advances in the use of opioids for domiciliary terminal care. Dover S. **Practitioner** 1988 Aug;232(1453):884-6

Intracerebroventricular morphinotherapy for control of chronic cancer pain. Lazorthes Y, et al. **Prog Brain Res** 1988;77:395-405 (56 ref.)

Prevention of postoperative intestinal intussusception by prophylactic morphine administration in dogs used for organ transplantation research. McAnulty JF, et al. **Surgery** 1989 Apr;105(4):494-5

[The response of plasma beta-endorphin to postoperative pain after epidural morphine] Wang JJ, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):369-74 **(Chi)**

[Management of postoperative pain using intrathecal opiate analgesia and taking into consideration different anesthetic procedures] König HJ. **Anaesthesiol Reanim** 1988; 13(6):333-7 (Eng. Abstr.) **(Ger)**

[Nefopam in postoperative analgesia. Comparison with meperidine and morphine] Novelli GP, et al. **Minerva Anestesiol** 1988 Jun;54(6):259-67 (Eng. Abstr.) **(Ita)**

[Effect of morphine in cancer pain] Nukariya N, et al. **Gan No Rinsho** 1989 Jan;35(1):51-4 (Eng. Abstr.) **(Jpn)**

[The specific analgesic action of morphine on rats in an experimental pain syndrome] Kiiatkin EA, et al. **Zh Vysh Nerv Deiat** 1989 Mar-Apr;39(2):356-61 **(Rus)**

TOXICITY

Effect of glutathione depletion on morphine toxicity in mice. McCartney MA. **Biochem Pharmacol** 1989 Jan 1; 38(1):207-9

Auricular microelectrostimulation: naloxone-reversible attenuation of opiate abstinence syndrome. Malin DH, et al. **Biol Psychiatry** 1988 Dec;24(8):886-90

Capsaicin pretreatment does not inhibit the opioid withdrawal response in guinea-pigs. Chahl LA. **Eur J Pharmacol** 1988 Dec 6;158(1-2):91-8

Studies on the mechanism of hypoglycemia induced by intrathecal morphine: dissociation from behavioral effects, effects of tolerance and depletion of liver glycogen. Lux F, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):688-93

Comparison of chronic morphine and placebo infusion in late gestation fetal lambs: effect upon survival and breathing movements [published erratum appears in J Pharmacol Exp Ther 1989 Mar;248(3):1343] Olsen GD, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):162-8

A study of morphine-induced urinary retention in anesthetized rats capable of micturition. Kontani H, et al. **Jpn J Pharmacol** 1988 Sep;48(1):31-6

Hepatotoxicity of the opioids morphine, heroin, meperidine, and methadone to cultured human hepatocytes. Gómez-Lechón MJ, et al. **Mol Toxicol** 1987-88 Fall; 1(4):453-63

Morphine treatment and intravenous glucose tolerance tests in mice. Chan MY, et al. **Pharmacol Res** 1989 Jul-Aug; 21(4):353-8

Interactive toxicity of cocaine with phenobarbital, morphine and ethanol in organ cultured human and rat liver slices. Conners S, et al. **Proc West Pharmacol Soc** 1989;32:205-8

Teratogenic and postnatal developmental studies of morphine in Sprague-Dawley rats. Fujinaga M, et al. **Teratology** 1988 Nov;38(5):401-10

URINE

Rapid thin-layer chromatographic semiquantification of morphine in urine via dabsylation: comparison with EMIT and thin-layer chromatographic-iodoplatinate methods. Wang SY, et al. **Clin Chem** 1989 Feb;35(2):329-30

Evaluation of the Keystone Diagnostics Quik Test using previously screened urine specimens. Bogema S, et al. **J Anal Toxicol** 1988 Sep-Oct;12(5):272-3

Total morphine analyses--AACC/CAP forensic urine drug testing toxicology survey [letter] Chang JY. **J Anal Toxicol** 1989 Mar-Apr;13(2):124

Excretion of morphine in urine following the ingestion of poppy seeds. Struempler RE. **Milit Med** 1988 Sep; 153(9):468-70

MORPHINE DEPENDENCE

Acute opioid physical dependence in humans: effect of varying the morphine-naloxone interval. I. Heishman SJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):485-91

Suppression of opiate withdrawal by cyclosporin A and dietary modification. McVaugh W, et al. **Life Sci** 1989; 44(14):977-83

[Induction of physical dependence on morphine and genetic analysis of morphine withdrawal signs in mice] Suzuki T, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep; 23(3):258-67 (Eng. Abstr.) **(Jpn)**

[Morphine self-administration by rats using a pneumatic syringe] Akiyama Y, et al. **Yakubutsu Seishin Kodo** 1988 Jun;8(2):329-36 (Eng. Abstr.) **(Jpn)**

BLOOD

The concentration of morphine in serum of rats made dependent using a drug-admixed food method. van der Laan JW, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):123-8

DRUG THERAPY

Cocaine and morphine withdrawal [letter] Clarke MJ. **Lancet** 1989 Aug 12;2(8659):381-2

[Pharmacologic aspects of the treatment of drug addiction due to morphine-like substances] Babaian EA, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):134-9 (69 ref.) **(Rus)**

ENZYMOLOGY

Fluctuations of succinic dehydrogenase during morphine tolerance, dependence and withdrawals in the spinal cord and medulla oblongata of mice. Josephjohn K, et al. **Acta Neurol Belg** 1988 Nov-Dec;88(5):281-9

IMMUNOLOGY

The immune system and opiate withdrawal. Dafny N, et al. **Int J Immunopharmacol** 1989;11(4):371-5

METABOLISM

Nifedipine reversal of decreased serotonin metabolite levels during morphine withdrawal. Colado MI, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:61-7

Changes in alpha 2-adrenoceptor number and function in brains of morphine-dependent rats. Smith CB, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):111-9

Substance P and [leucine]enkephalin release in guinea pig ileum during naloxone-precipitated morphine withdrawal. Wang FS, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):329-32

The effect of morphine dependence and abstinence on opioid receptors in the cerebral cortex and spinal cord of the rat. Antkiewicz-Michaluk L, et al. **Pol J Pharmacol Pharm** 1988 Jan-Feb;40(1):11-6

PATHOLOGY

Morphological findings in fatal drug addiction. An investigation of injection marks, endocrine organs and kidneys. Kringsholm B, et al. **Forensic Sci Int** 1989 Jan; 40(1):15-24

[Ultrastructural changes in the thalamus in chronic morphine intoxication and abstinence] Kolusheva GV. **Zh Nevropatol Psikhiatr** 1988;88(7):67-71 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Central haemodynamics during morphine abstinence in anaesthetized rats. Delle M, et al. **Acta Physiol Scand** 1988 Dec;134(4):493-501

Renal sympathetic nerve activity during morphine abstinence in sino-aortic baroreceptor-denervated rats. Delle M, et al. **Acta Physiol Scand** 1988 Dec;134(4):479-91

Auricular microelectrostimulation: naloxone-reversible attenuation of opiate abstinence syndrome. Malin DH, et al. **Biol Psychiatry** 1988 Dec;24(8):886-90

Antinociception and physical dependence produced by [D-Arg2] dermorphin tetrapeptide analogues and morphine in rats. Chaki K, et al. **Br J Pharmacol** 1988 Sep;95(1):15-22

Primary sensory neurones and naloxone-precipitated morphine withdrawal. Donnerer J. **Br J Pharmacol** 1989 Apr;96(4):767-72

Modulation of astrocyte activity--one way to reinforce morphine effects? Rönnbäck L, et al. **Cell Mol Biol** 1988; 34(4):337-49 (83 ref.)

Effects of calcitonin on morphine tolerance and withdrawal syndrome in morphine physically dependent rats. Clementi G, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):175-9

Comparison of selective and complete inhibitors of enkephalin-degrading enzymes on morphine withdrawal syndrome. Maldonado R, et al. **Eur J Pharmacol** 1989 Jun 20;165(2-3):199-207

The effect of acute and chronic administration of morphine and morphine withdrawal on intestinal transit time in the rat. Brown NJ, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):844-8

Dose-dependent and stereoselective antagonism by diltiazem of naloxone-precipitated morphine abstinence after acute morphine-dependence in vivo and in vitro. Caro G, et al. **Life Sci** 1988;43(19):1523-7

Physical dependence in rats after low morphine doses. Frumkin K. **Life Sci** 1974 Aug 1;15(3):455-62

A comparison of the effects of morphine withdrawal, thyroxine or thyroidectomy on the sensitivity of the anococcygeus muscle to agonists and on serum thyroxine levels in the rat. Gardiner DC, et al. **Life Sci** 1974 Jul 15;15(2):339-49

Taste aversion involving central opioid antagonism is potentiated in morphine-dependent rats. Mucha RF. **Life Sci** 1989;45(8):671-8

Dependence and cross-dependence in the guinea-pig myenteric plexus. Schulz R. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):644-8

Cerebral cortical 5-HT1 and 5-HT2 receptors of morphine tolerant-dependent rats. Gulati A, et al. **Neuropharmacology** 1988 Dec;27(12):1231-7

Behavior of monkeys during opiate withdrawal and locus coeruleus stimulation. Grant SJ, et al. **Pharmacol Biochem Behav** 1988 May;30(1):13-9

Effect of phentolamine on blood pressure, heart rate and plasma catecholamine levels in conscious, unrestrained morphine dependent rats during naloxone precipitated autonomic withdrawal responses. Dixon WR, et al. **Proc West Pharmacol Soc** 1988;31:117-9

PSYCHOLOGY

Effect of ibogaine on naloxone-precipitated withdrawal syndrome in chronic morphine-dependent rats. Dzoljic ED, et al. **Arch Int Pharmacodyn Ther** 1988 Jul-Aug; 294:64-70

Prolonged morphine self-administration and addiction liability. Evaluation of two theories in a bone marrow transplant unit. Chapman CR, et al. **Cancer** 1989 Apr 15; 63(8):1636-44

5-HT1 receptor agonists attenuate the naloxone-induced jumping behaviour in morphine-dependent mice. Berthold H, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):19-27

Opioid pseudoaddiction--an iatrogenic syndrome. Weissman DE, et al. **Pain** 1989 Mar;36(3):363-6

Hyperglycemic suppression of morphine withdrawal signs in the rat. Akunne HC, et al. **Psychopharmacology (Berlin)** 1988;96(1):1-6

Social, motor, and autonomic signs of morphine withdrawal: differential sensitivities to catecholaminergic drugs in mice. Kantak KM, et al. **Psychopharmacology (Berlin)** 1988; 96(4):468-76

Infusion of gamma 2-MSH produce a conditioned taste aversion in morphine-dependent rats. Mucha RF, et al. **Psychopharmacology (Berlin)** 1989;99(1):140-2

REHABILITATION

Effects of dapiprazole, clonidine and yohimbine on the development of dependence and withdrawal behaviour in mice. Valeri P, et al. **Drug Alcohol Depend** 1989 Jan; 23(1):73-7

["Induced detoxification treatment" of opiate dependent patients--a new therapy concept] Loimer N, et al. **Wien Klin Wochenschr** 1989 Jun 23;101(13):451-4 (Eng. Abstr.) **(Ger)**

MORPHINE DERIVATIVES

ADVERSE EFFECTS

Long lasting respiratory depression induced by morphine-6-glucuronide? Hasselström J, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):515-8

ANALYSIS

An improved method for the simultaneous determination of morphine and its principal glucuronide metabolites. Joel SP, et al. **J Chromatogr** 1988 Sep 9;430(2):394-9

BLOOD

The influence of blood sample preparation on measured levels of morphine and its major metabolites. Hoskin PJ, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):182-4

Gas chromatographic-mass spectrometric determination of morphine, codeine and 6-monoacetylmorphine in blood extracted by solid phase. Schuberth J, et al. **J Chromatogr** 1989 May 30;490(2):444-9

CHEMICAL SYNTHESIS

Design and synthesis of sulfur-containing morphine and an opioid receptor probe. Fujii I, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2282-5

Synthesis and analgesic effect of normorphine-3- and -6-glucuronides. Oguri K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):955-7

METABOLISM

14 beta-(Bromoacetamido)morphine irreversibly labels mu opioid receptors in rat brain membranes. Bidlack JM, et al. **Biochemistry** 1989 May 16;28(10):4333-9

Effects of cervical spinal hemisection on dihydromorphine binding in brainstem and spinal cord in cat. Ramberg DA, et al. **Brain Res** 1989 Mar 27;483(1):61-7

PHARMACOKINETICS

Accumulation and clearance of morphine-3-beta-D-glucuronide in fetal lambs [published erratum appears in J Pharmacol Exp Ther 1989 Mar;248(3):1343] Olsen GD, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):576-84

Influence of active and passive immunity on the disposition of dihydromorphine-H3. Berkowitz BA, et al. **Life Sci** 1974 Sep 1;15(5):1017-28

Placental permeability for morphine-3-beta-D-glucuronide in the guinea pig. Olsen GD, et al. **Placenta** 1989 Jan-Feb; 10(1):83-93

[Characteristics of drug pharmacodynamics in irradiated rats] Khakimov ZZ. **Radiobiologiia** 1989 Jul-Aug;29(4):492-4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Some pharmacological properties of a newly synthesized morphine derivative, (-)-6 beta-acetylthiomorphine. Takayanagi I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul-Aug;294:71-84

The spinal antinociceptive actions of morphine metabolites morphine-6-glucuronide and normorphine in the rat. Sullivan AF, et al. **Brain Res** 1989 Mar 20;482(2):219-24

Modulation of mu-mediated antinociception by delta agonists in the mouse: selective potentiation of morphine and normorphine by [D-Pen2,D-Pen5]enkephalin. Heyman JS, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):1-10

Morphine-6-glucuronide: analgesic effects and receptor binding profile in rats. Abbott FV, et al. **Life Sci** 1988; 43(21):1685-95

[Stereostructure-activity relation of morphinics. Topology of the mu receptor and nature of the opioid pharmacophore] Poupaert J. **J Pharm Belg** 1989 Jan-Feb; 44(1):71-83 (23 ref.) (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Comparison of intramuscular nalbuphine and nicomorphine in the treatment of post-operative pain. Admiraal PV, et al. **Acta Anaesthesiol Belg** 1989;40(1):59-64

URINE

Gas chromatography/electron impact mass fragmentometric determination of urinary 6-acetylmorphine, a metabolite of heroin. Paul BD, et al. **J Anal Toxicol** 1989 Jan-Feb; 13(1):2-7

MORPHINE RECEPTORS see **RECEPTORS, ENDORPHIN**

MORPHOCYCLINE see under **TETRACYCLINES**

MORPHOGENESIS

From egg to epithelium. Fleming TP, et al. **Annu Rev Cell Biol** 1988;4:459-85 (138 ref.)

The search for morphogens in Dictyostelium. Bloom L, et al. **Bioessays** 1988 Dec;9(6):187-91 (30 ref.)

Microtubule cytoskeleton and morphogenesis in the amoebae of the myxomycete Physarum polycephalum. Wright M, et al. **Biol Cell** 1988;63(2):239-48 (51 ref.)

Determination of axial polarity in the vertebrate embryo: homeodomain proteins and homeogenetic induction. De Robertis EM, et al. **Cell** 1989 Apr 21;57(2):189-91 (14 ref.)

The sqt-1 gene of C. elegans encodes a collagen critical for organismal morphogenesis. Kramer JM, et al. **Cell** 1988 Nov 18;55(4):555-65

Involvement of the Xenopus homeobox gene Xhox3 in pattern formation along the anterior-posterior axis. Ruiz i Altaba A, et al. **Cell** 1989 Apr 21;57(2):317-26

Regulatory mechanisms in developmental processes. Proceedings of the 3rd symposium of the International Prize for Biology. Okazaki, 27-28 November 1987. **Cell Differ Dev** 1988 Nov;25 Suppl:1-160

Symposium on Cellular Basis of Morphogenesis. Madrid, Spain, 18-20 October 1988. **Ciba Found Symp** 1989; 144:1-307

The cellular interphase. Garcia-Bellido A. **Ciba Found Symp** 1989;144:5-10; discussion 10-5, 92-8 (5 ref.)

Cadherin-mediated specific cell adhesion and animal morphogenesis. Takeichi M, et al. **Ciba Found Symp** 1989; 144:243-9; discussion 250-4, 290-5 (18 ref.)

Morphological research of the locomotor apparatus. Cihák R, et al. **Czech Med** 1989;12(1):40-52 (30 ref.)

Sea urchin morphogenesis and cell-hyalin adhesion are perturbed by a monoclonal antibody specific for hyalin. Adelson DL, et al. **Development** 1988 Nov;104(3):391-402

Determination of somite cells: independence of cell differentiation and morphogenesis. Aoyama H, et al. **Development** 1988 Sep;104(1):15-28

Corneal morphogenesis in the Mov13 mutant mouse is characterized by normal cellular organization but disordered and thin collagen. Bard JB, et al. **Development** 1987 Nov;101(3):547-55

Initial limb budding is independent of apical ectodermal ridge activity; evidence from a limbless mutant. Carrington JL, et al. **Development** 1988 Nov;104(3):361-7

Cell fate, morphogenetic movement and population kinetics of embryonic endoderm at the time of germ layer formation in the mouse. Lawson KA, et al. **Development** 1987 Nov; 101(3):627-52

The cadherins: cell-cell adhesion molecules controlling animal morphogenesis. Takeichi M. **Development** 1988 Apr; 102(4):639-55 (98 ref.)

Posterior apical ectodermal ridge removal in the chick wing bud triggers a series of events resulting in defective anterior pattern formation. Todt WL, et al. **Development** 1987 Nov; 101(3):501-15

The beginning of new evolutionary movement as a consequence of progressive developmental changes in the terminal stages of morphogenesis. Slabý O. **Folia Morphol (Praha)** 1988;36(3):296-316

Morphological aspects of neuronal development. Papers presented at the 6th International Meeting of the Society for Developmental Neuroscience. July 1986, Queretaro, Mexico. **Int J Dev Neurosci** 1988;6(1):1-102

Expression of cell adhesion molecule E-cadherin in Xenopus embryos begins at gastrulation and predominates in the ectoderm. Choi YS, et al. **J Cell Biol** 1989 Jun; 108(6):2449-58

Fluidity of the neural epithelium during forebrain formation in rat embryos. Morriss-Kay G, et al. **J Cell Sci Suppl** 1987;8:433-49

Analysis of in vivo cell movement using transparent tissue systems. Thorogood P, et al. **J Cell Sci Suppl** 1987; 8:395-413

Actin cortex and microtubular system in morphogenesis: cooperation and competition. Vasiliev JM. **J Cell Sci Suppl** 1987;8:1-18 (36 ref.)

Cell interactions in the orchestration of development. Based on papers presented at the symposium The Cellular Basis of Morphogenesis. In honor of John Philip Trinkaus. May 22-25, 1988, Woods Hole, Massachusetts. **J Exp Zool** 1989 Aug;251(2):121-264

Pattern formation models and developmental constraints. Oster GF, et al. **J Exp Zool** 1989 Aug;251(2):186-202 (0 ref.)

A method for predicting the cranio-caudal position of secondary embryonic structures. Stephens TD, et al. **J Theor Biol** 1988 Dec 19;135(4):433-44

Role of extracellular matrix in morphogenesis. Markwald RR. **Mead Johnson Symp Perinat Dev Med** 1987;(29):7-13 (44 ref.)

A community effect in animal development. Gurdon JB. **Nature** 1988 Dec 22-29;336(6201):772-4

The product of the Drosophila gene vasa is very similar to eukaryotic initiation factor-4A. Lasko PF, et al. **Nature** 1988 Oct 13;335(6191):611-7

Spatial distribution of cellular protein binding to retinoic acid in the chick limb bud. Maden M, et al. **Nature** 1988 Oct 20;335(6192):733-5

Topobiology. Edelman GM. **Sci Am** 1989 May;260(5):76-82, 84-6, 88

[Morphogenesis of neural derivates after transplantation of the rat embryo telencephalon to the testis of sexually mature animals] Dyban PA. **Biull Eksp Biol Med** 1989 Jan; 107(1):87-9 (Eng. Abstr.) **(Rus)**

[Integration mechanisms and morphogenesis (the problem of the evolution of ontogeny)] Korotkova GP. **Zh Obshch Biol** 1988 Jul-Aug;49(4):464-75 (130 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Serotonin and morphogenesis. I. Sites of serotonin uptake and -binding protein immunoreactivity in the midgestation mouse embryo. Lauder JM, et al. **Development** 1988 Apr; 102(4):709-20

Insulin reverses the growth retardation effect of phorbol ester in chicken embryos during organogenesis. Girbau M, et al. **Life Sci** 1989;44(25):1971-8

Failure of zinc to prevent dysmorphogenesis of cultured rat conceptuses by anti-yolk sac antiserum. Marlow R, et al. **Life Sci** 1989;44(13):837-46

Microinjection of cultured rat embryos: a new technique for studies in chemical dysmorphogenesis. Stark KL, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):411-6

MORPHOLINES

A new class of orally active glycol renin inhibitors containing phenyllactic acid at P3. Hanson GJ, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):1-5

Frescon: a possible new pharmacological tool. Gardner DR, et al. **Comp Biochem Physiol [A]** 1989;93(1):69-75 (32 ref.)

Studies of the reactivity of morpholine, 2-mercaptobenzothiazole and 2 of their derivatives with selected amino acids. Wang XS, et al. **Contact Dermatitis** 1988 Jul;19(1):16-21

Iron autoxidation in Mops and Hepes buffers. Tadolini B. **Free Radic Res Commun** 1987;4(3):149-60

Iron oxidation in Mops buffer. Effect of phosphorus containing compounds. Tadolini B, et al. **Free Radic Res Commun** 1987;4(3):161-72

Conformational analysis of fenpropimorph. Jensen JS, et al. **Prog Clin Biol Res** 1989;291:329-32

ADMINISTRATION & DOSAGE

Immunosuppression by a novel analgesic-opioid agonist. Hadjipetrou-Kourounakis L, et al. **Scand J Immunol** 1989 Apr;29(4):449-58

Theophylline toxicity following coadministration of viloxazine. Thomson AH, et al. **Ther Drug Monit** 1988; 10(3):359-60

ADVERSE EFFECTS

Acute vasospasm associated with anorexiant use. Kim I, et al. **J Okla State Med Assoc** 1988 Jul;81(7):395-8

[Antidiuresis syndrome caused by psychotropic drugs. A case caused by viloxazine (letter)] Vincent JP, et al. **Ann Med Interne (Paris)** 1989;140(4):322-3 **(Fre)**

ANALYSIS

A simple gas chromatographic identification and determination of 11 CNS stimulants in biological samples. Application on a fatality involving phendimetrazine. Kintz P, et al. **Forensic Sci Int** 1989 Feb;40(2):153-9

CHEMICAL SYNTHESIS

Synthesis of acylguanidine analogues: inhibitors of ADP-induced platelet aggregation. Thomas EW, et al. **J Med Chem** 1989 Jan;32(1):228-36

Uncharged stereoregular nucleic acid analogs: 2. Morpholino nucleoside oligomers with carbamate internucleoside linkages. Stirchak EP, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6129-41

Synthesis and pharmacological effect of substituted phenyl-4-(2-chloroethyl)tetrahydro-1,4-oxazine hydrochlorides. Daoud SS, et al. **Pharmazie** 1988 Jul; 43(7):470-2

IMMUNOLOGY

Comparative studies of the sensitization potential of morpholine, 2-mercaptobenzothiazole and 2 of their derivatives in guinea pigs. Wang XS, et al. **Contact Dermatitis** 1988 Jul;19(1):11-5

METABOLISM

Mechanistic aspects of DNA damage by morpholinyl and cyanomorpholinyl anthracyclines. Westendorf J, et al. **Cancer Res** 1989 Oct 1;49(19):5262-6

The inhibition of bacterially mediated N-nitrosation by vitamin C: relevance to the inhibition of endogenous N-nitrosation in the achlorhydric stomach. Mackerness CW, et al. **Carcinogenesis** 1989 Feb;10(2):397-9

Accumulation of 3-(N-morpholino)propanesulfonate by osmotically stressed Escherichia coli K-12. Cayley S, et al. **J Bacteriol** 1989 Jul;171(7):3597-602

PHARMACOKINETICS

Pharmacokinetics of pholcodine in healthy volunteers: single and chronic dosing studies. Chen ZR, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):445-53

Comparative pharmacokinetic study of conventional and sustained-release viloxazine in normal volunteers. Kergueris MF, et al. **Neuropsychobiology** 1989;20(3):136-40

The effect of anaesthetics on the uptake of brain-imaging agents in rats. Kung HF, et al. **Nucl Med Commun** 1985 Feb;6(2):75-81

PHARMACOLOGY

Mode of action of morpholine derivatives. Polak A. **Ann N Y Acad Sci** 1988;544:221–8

Enhancement of phagocytosis and intracellular killing of Candida albicans by human neutrophils in the presence of a morpholine antifungal derivative, Ro 14–4767. Richardson MD, et al. **Ann N Y Acad Sci** 1988;544:403–5

A novel nonpeptidic, orally active renin inhibitor. Morishima H, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):999–1005

Inhibition by the fungicide fenpropimorph of cholesterol biosynthesis in 3T3 fibroblasts. Corio-Costet MF, et al. **Biochem J** 1988 Dec 15;256(3):829–34

Comparison of the effects of bifemelane hydrochloride and indeloxazine hydrochloride on scopolamine hydrobromide-induced impairment in radial maze performance. Ogawa N, et al. **Clin Ther** 1988;10(6):704–11

Electrophysiological study of intravenous pinaverium bromide in cardiology. Guerot C, et al. **Curr Med Res Opin** 1988;11(2):73–9

Radiosensitizing activity of 1-alkyl-3-nitropyrrolo-(2,3-b)-pyridine derivative. Jin YZ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):357–9

Effects of indeloxazine hydrochloride on cognitive disturbance in cycloheximide-treated mice. Yamamoto M, et al. **J Pharm Pharmacol** 1989 Apr;41(4):284–6

Cardiovascular pharmacology of RS-1893, an orally active cardiotonic agent with arterial and venous vasodilator actions. Miyake S, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):273–83

Lack of differential sensitivity of normal hematopoietic stem cells and murine lymphoblastic leukemic cells to a lysosomotropic agent, N-dodecyl morpholine. Lopez M, et al. **Leukemia** 1988 Oct;2(10):697–700

Effect of some benzamide derivatives on stress-induced behavior and striatum dopamine receptors. Bondarenko NA, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):629–33

Effect of amorolfine (Ro 14-4767/002) on in vitro phagocytosis and intracellular killing of Candida albicans by human neutrophils. Richardson MD, et al. **Mycoses** 1989 May;32(5):245–9

Cerebral vasodilators potentiate the anti-anoxic activity of indeloxazine hydrochloride, a new cerebral activator. Yamamoto M, et al. **Neuropharmacology** 1989 Mar; 28(3):313–7

Effects of valpromide and viloxazine on the elimination of carbamazepine-10,11-epoxide, an active metabolite of carbamazepine. Perucca E, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):111–2

Synthesis and CVS activity of 1-(2,3, 2,5, 2,6 dichlorophenyl)-3-morpholinophenyl-5-substituted benzylidene-thiobarbituric acids (3–17). Singh A, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):59–64

Comparison of the effects of bifemelane hydrochloride, idebenone and indeloxazine hydrochloride on ischemia-induced depletion of brain acetylcholine levels in gerbils. Ogawa N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug;61(2):285–8

[Behavior analysis based on neurochemical mechanisms of action of viloxazine and mianserin] Danchev N, et al. **Eksp Med Morfol** 1989;28(1):23–8 (Eng. Abstr.) **(Bul)**

[Pharmacologic studies of a tetrahydroxazine derivative] Ilarionov I. **Eksp Med Morfol** 1988;27(3):17–22 (Eng. Abstr.) **(Bul)**

[Effect of a tetrahydroxazine derivative on conditioned and unconditioned reflexes of experimental animals] Ilarionov I, et al. **Eksp Med Morfol** 1989;28(1):5–9 (Eng. Abstr.) **(Bul)**

[Pharmacological studies on Y-8894. (VIII). Effects on learning and memory in the radial maze task in mice] Anami K, et al. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):113–8 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Effect of teomorfolin [N-(7'-theophylline acetyl)morpholine], a new drug, on dislipidaemic conditions induced in the rat. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(5):347–54

Motor effects of locally administered pinaverium bromide in the sigmoid tract of patients with irritable bowel syndrome. Passaretti S, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):47–50

Treatment of adjustment disorders: a comparative evaluation. De Leo D. **Psychol Rep** 1989 Feb;64(1):51–4

Viloxazine versus imipramine in the treatment of enuresis. Yurdakök M, et al. **Turk J Pediatr** 1987 Oct–Dec; 29(4):227–30

[Nonpsychotic involutional inhibited depressions and psycho-organic deteriorations: treatment with Viloxazine and piracetam] Borromei A, et al. **Minerva Med** 1989 May; 80(5):475–82 (Eng. Abstr.) **(Ita)**

[Ameliorating effects of idebenone and indeloxazine hydrochloride on impairment of radial maze learning in cerebral embolized rats] Kiyota Y, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):197–202 (Eng. Abstr.) **(Jpn)**

TOXICITY

Bioactivation mechanism of L-thiomorpholine-3-carboxylic acid. Webster KD, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):562–71

Chronic morpholine exposure of rats. Harbison RD, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):491–507

URINE

Identification of 1,4-thiomorpholine-3-carboxylic acid (TMA) in normal human urine. Matarese RM, et al. **FEBS Lett** 1989 Jun 19;250(1):75–7

MORSYDOMINE see **MOLSIDOMINE**

MORTALITY

Fatalities caused by nonvenomous animals: a ten-year summary from Sweden. Ornehult L, et al. **Accid Anal Prev** 1989 Aug;21(4):377–81

Survival compared to the general population and changes in health status among intensive care patients. Zarén B, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):6–12

Hyperuricaemia and risk of cardiovascular disease and overall death. A 12-year follow-up of participants in the population study of women in Gothenburg, Sweden. Bengtsson C, et al. **Acta Med Scand** 1988;224(6):549–55

Relative heart volume and subsequent mortality in old people. Takala JK, et al. **Acta Radiol** 1989 May–Jun; 30(3):269–72

A study of vital and health statistics of the Kainji Lake Area of Nigeria. Adekolu-John EO. **Afr J Med Med Sci** 1988 Sep;17(3):149–56

The association between visual impairment and mortality in elderly people. Thompson JR, et al. **Age Ageing** 1989 Mar; 18(2):83–8

Death in Anchorage in 1986. Wilson R. **Alaska Med** 1989 Mar–Apr;31(2):49–56

Predictive ability of various nutritional variables for mortality in elderly people. Agarwal N, et al. **Am J Clin Nutr** 1988 Nov;48(5):1173–8

Ten-year mortality study of the population involved in the Seveso incident in 1976. Bertazzi PA, et al. **Am J Epidemiol** 1989 Jun;129(6):1187–200

Components and modifiers of the healthy worker effect: evidence from three occupational cohorts and implications for industrial compensation. Howe GR, et al. **Am J Epidemiol** 1988 Dec;128(6):1364–75

Mortality in a northeastern Native American cohort, 1955–1984. Mahoney MC, et al. **Am J Epidemiol** 1989 Apr; 129(4):816–26

Marital status and mortality in middle-aged Swedish men. Rosengren A, et al. **Am J Epidemiol** 1989 Jan;129(1):54–64

Mathematical hazard models of mortality: an alternative to model life tables. Gage TB. **Am J Phys Anthropol** 1988 Aug;76(4):429–41

Fitness and fertility among Kalahari !Kung. Pennington R, et al. **Am J Phys Anthropol** 1988 Nov;77(3):303–19

Methodological alternatives for measuring premature mortality. Wise RP, et al. **Am J Prev Med** 1988 Sep–Oct; 4(5):268–73

Deaths, injuries, and evacuations from acute hazardous materials releases. Binder S. **Am J Public Health** 1989 Aug; 79(8):1042–4

Is early natural menopause a biologic marker of health and aging? Snowdon DA, et al. **Am J Public Health** 1989 Jun; 79(6):709–14

Neonatal survival in swine: effects of low birth weight and clinical disease. Gardner IA, et al. **Am J Vet Res** 1989 May;50(5):792–7

Mortality associated with respiratory function and symptoms in advanced age. The Framingham Study. Sorlie PD, et al. **Am Rev Respir Dis** 1989 Aug;140(2):379–84

Apache II scores [letter] Waters M, et al. **Anaesthesia** 1988 Oct;43(10):896–8

Changes in alcohol consumption and mortality in aged Finnish men. Kivelä SL, et al. **Ann Med** 1989 Jun; 21(3):245–6

Mortality among children in rural areas of the People's Democratic Republic of Yemen. Bågenholm GC, et al. **Ann Trop Paediatr** 1989 Jun;9(2):75–81

Mortality among United States Coast Guard marine inspectors. Blair A, et al. **Arch Environ Health** 1989 May–Jun;44(3):150–6

Intensive care unit patient follow-up. Mortality, functional status, and return to work at six months. Mundt DJ, et al. **Arch Intern Med** 1989 Jan;149(1):68–72

High density lipoprotein cholesterol and mortality. The Framingham Heart Study. Wilson PW, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):737–41

Alcohol consumption and subsequent mortality. Cullen K. **Aust Fam Physician** 1989 Jan;18(1):47–8, 50 (45 ref.)

Scientific criticisms of the comparison of exponential survival and disease-free survival curves. Mathé G, et al. **Biomed Pharmacother** 1988;42(3):177–86

Simple parametric and nonparametric models for excess and relative mortality. Andersen PK, et al. **Biometrics** 1989 Jun; 45(2):523–35

An illness-death process with time-dependent covariates. Chiang YK, et al. **Biometrics** 1989 Jun;45(2):669–81

Efficiency of balanced treatment allocation for survival analysis. Kalish LA, et al. **Biometrics** 1988 Sep;44(3):815–21

Weighted Kaplan-Meier statistics: a class of distance tests for censored survival data. Pepe MS, et al. **Biometrics** 1989 Jun;45(2):497–507

Excess mortality associated with alcohol consumption. Anderson P. **BMJ** 1988 Oct 1;297(6652):824–6

Relief care and risk of death in psychogeriatric patients. Selley C, et al. **BMJ** 1989 May 6;298(6682):1223

Relation between mortality and treated blood pressure in elderly patients with hypertension: report of the European Working Party on High Blood Pressure in the Elderly. Staessen J, et al. **BMJ** 1989 Jun 10;298(6687):1552–6

Adjusting survival curves for imbalances in prognostic factors. Gregory WM. **Br J Cancer** 1988 Aug;58(2):202–4

Job demands, job decision latitude, job support, and social network factors as predictors of mortality in a Swedish pulp and paper company. Astrand NE, et al. **Br J Ind Med** 1989 May;46(5):334–40

Calculating expected numbers of deaths in cohort studies [letter] Gardner MJ. **Br J Ind Med** 1989 Jan;46(1):72

The threshold of survival for systems in a fluctuating environment. Ma ZE, et al. **Bull Math Biol** 1989; 51(3):311–23

Re: Neil E. Collishaw, Walter Tostowaryk, Donald T. Wigle, "Mortality attributable to tobacco use in Canada" [letter] Adrian M. **Can J Public Health** 1988 Sep–Oct;79(5):395–6

Seasonality of mortality from various diseases in Canada 1979–83. Bako G, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):388–9

Mortality by relative weight and exercise. Garfinkel L, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1844–50

Social class as indicated by area of residence: a mortality study within an Australian industrial population. Gordon I, et al. **Community Health Stud** 1989;13(2):170–6

The north-south divide in England: implications for health care resource allocation. Leck I. **Community Med** 1989 May;11(2):102–7

Calculation of survival curves and statistical comparison of two censored populations: a computer program in BASIC. Ruijter JM. **Comput Biomed Res** 1989 Feb;22(1):11–7

GENCOV: a Fortran program that generates randomly censored survival data with covariates. Ciampi A, et al. **Comput Methods Programs Biomed** 1989 May;29(1):51–7

Cost and survival results of critical care regionalization for Medicare patients. Crippen DW, et al. **Crit Care Med** 1989 Jul;17(7):601–6

Mortality differentials in Canada, 1951–1971: French, British, and Indians. Trovato F. **Cult Med Psychiatry** 1988 Dec; 12(4):459–77

Household income and child survival in Egypt. Casterline JB, et al. **Demography** 1989 Feb;26(1):15–35

Mortality and causes of death in type 2 diabetic patients. A long-term follow-up study in Osaka District, Japan. Sasaki A, et al. **Diabetes Res Clin Pract** 1989 Jun 20; 7(1):33–40

Mortality in a cohort of diabetic patients. Causes and relative risks. Waugh NR, et al. **Diabetologia** 1989 Feb;32(2):103–4

A Gompertz age-specific mortality rate model of aging, hormesis, and toxicity: fixed-dose studies. Neafsey PJ, et al. **Drug Metab Rev** 1988;19(3–4):369–401 (51 ref.)

Deaths in winter: can Britain learn from Europe? McKee CM. **Eur J Epidemiol** 1989 Jun;5(2):178–82

Geography of mortality: problems of epidemiological approach. Ekonomov AL, et al. **Geogr Med** 1988;18:137–52

Mortality and career radiation doses for workers at a commercial nuclear power plant: feasibility study. Goldsmith R, et al. **Health Phys** 1989 Feb;56(2):139–50

Using anthropometry to identify children with a high risk of dying. Briend A. **Indian Pediatr** 1988 Oct;25(10):930–8

Are we trading disability for death? Wright G. **Indiana Med** 1988 Sep;81(9):792–3

Medicare spending and mortality rates of the elderly. Hadley J. **Inquiry** 1988 Winter;25(4):485–93

Changes in seasonal mortalities with improvement in home heating in England and Wales from 1964 to 1984. Keatinge WR, et al. **Int J Biometeorol** 1989 Jun;33(2):71–6

Short-term effects of sulphur dioxide pollution on mortality in two French cities. Derriennic F, et al. **Int J Epidemiol** 1989 Mar;18(1):186–97

Epidemiology and cause of deaths among women in rural Bangladesh. Fauveau V, et al. **Int J Epidemiol** 1989 Mar; 18(1):139–45

Social ties and survival among the elderly in Tampere, Finland. Jylhä M, et al. **Int J Epidemiol** 1989 Mar; 18(1):158–64

Linear Index of Mortality as a measure of health status [letter] Power M. **Int J Epidemiol** 1989 Mar;18(1):281–3

Mortality among farmers in Iceland. Rafnsson V, et al. **Int J Epidemiol** 1989 Mar;18(1):146–51

Isolated systolic hypertension in Dutch middle aged and all-cause mortality: a 25-year prospective study. van den Ban GC, et al. **Int J Epidemiol** 1989 Mar;18(1):95–9

Investigation of the possible effect of the Chernobyl accident on Irish mortality rates. Crowley MJ, et al. **Ir J Med Sci** 1989 May;158(5):114–6

Changing determinants of infant and child mortality: on the basis of the Korean experience, 1955–73. Kim TH. **J Biosoc Sci** 1988 Jul;20(3):345–55

Fertility and child mortality in rural Ethiopia: Gondar and Hararge regions. Mengistu G. **J Biosoc Sci** 1989 Jan; 21(1):115–21

Child mortality differentials in Ghana: a preliminary report. Tawiah EO. **J Biosoc Sci** 1989 Jul;21(3):349–55

Health interventions and mortality change in developing countries. **J Biosoc Sci Suppl** 1989;10:1–136

Assessing the effect of primary health care on mortality in

Ghana. Adjei S. **J Biosoc Sci Suppl** 1989;10:115–25
Maternal schooling and childhood mortality. Cleland J, et al. **J Biosoc Sci Suppl** 1989;10:13–34 (74 ref.)
Measuring the impact of health interventions on mortality in developing countries: why bother? Graham W. **J Biosoc Sci Suppl** 1989;10:69–78
Sample size considerations for studies comparing survival curves using historical controls. Dixon DO, et al. **J Clin Epidemiol** 1988;41(12):1209–13
Alcohol consumption and mortality in aging or aged Finnish men [published erratum appears in J Clin Epidemiol 1989;42(7):701] Kivelä SL, et al. **J Clin Epidemiol** 1989; 42(1):61–8
Serum uric acid and 11.5-year mortality of middle-aged women: findings of the Chicago Heart Association Detection Project in Industry. Levine W, et al. **J Clin Epidemiol** 1989;42(3):257–67
Weight and mortality in Finnish men. Rissanen A, et al. **J Clin Epidemiol** 1989;42(8):781–9
The association between depressive symptoms and mortality among older participants in the Epidemiologic Catchment Area–Piedmont Health Survey. Fredman L, et al. **J Gerontol** 1989 Jul;44(4):S149–56
Recent changes in mortality and labor force behavior among older Americans: consequences for nonworking life expectancy. Hayward MD, et al. **J Gerontol** 1988 Nov; 43(6):S194–9
Mortality in relation to instrumental activities of daily living: one-year follow-up in a Japanese urban community. Koyano W, et al. **J Gerontol** 1989 May;44(3):S107–9
The prediction of mortality in elderly institution residents. Stones MJ, et al. **J Gerontol** 1989 May;44(3):P72–9
Mortality decline and Chinese family structure: implications for old age support. Tu EJ, et al. **J Gerontol** 1989 Jul; 44(4):S157–68
The twain meet: empirical explanations of sex differences in health and mortality. Verbrugge LM. **J Health Soc Behav** 1989 Sep;30(3):282–304
Consanguinity related prenatal and postnatal mortality of the populations of seven Pakistani Punjab cities. Shami SA, et al. **J Med Genet** 1989 Apr;26(4):267–71
A follow-up study of workers at a dye and resin manufacturing plant. Delzell E, et al. **J Occup Med** 1989 Mar;31(3):273–8
The "hazardous" environment—a commentary. Shindell S. **J Occup Med** 1981 Mar;23(3):198–201
Risk factors for mortality after bereavement: a logistic regression analysis. Bowling A, et al. **J R Coll Gen Pract** 1987 Dec;37(305):551–4
Age of death of parents of patients with rheumatoid arthritis: data from a middle class sample. Wolfe F. **J Rheumatol** 1989 Jun;16(6):735–9
Update on efforts to reduce black premature mortality. Fricker RS. **J Tenn Med Assoc** 1989 May;82(5):259–60
Trends in the death rates of black and white youths in Tennessee, 1935 to 1985. Hogan A, et al. **J Tenn Med Assoc** 1988 Oct;81(10):615–9
Continuous monitoring of child mortality from clinic records. Pickering H, et al. **J Trop Med Hyg** 1989 Apr;92(2):71–4
Factors affecting infant and child mortality in rural Sierra Leone. Bailey M. **J Trop Pediatr** 1988 Aug;34(4):165–8
Mortality of harbor seal pups at different sites in the inland waters of Washington. Steiger GH, et al. **J Wildl Dis** 1989 Jul;25(3):319–28
Leads from the MMWR. Black/white comparisons of premature mortality for public health program planning—District of Columbia. **JAMA** 1989 Feb 17; 261(7):978, 982, 984
Leads from the MMWR. Years of potential life lost before age 65—United States, 1987. **JAMA** 1989 Feb 10; 261(6):823, 827
Flaws in mortality data. The hazards of ignoring comorbid disease. Greenfield S, et al. **JAMA** 1988 Oct 21; 260(15):2253–5
Assessing hospital-associated deaths from discharge data. The role of length of stay and comorbidities. Jencks SF, et al. **JAMA** 1988 Oct 21;260(15):2240–6
Interpreting hospital mortality data. How can we proceed? Kahn KL, et al. **JAMA** 1988 Dec 23–30;260(24):3625–8
Helicopter rescues and deaths among trekkers in Nepal. Shlim DR, et al. **JAMA** 1989 Feb 17;261(7):1017–9
Assessing hospital-associated deaths [letter] Wagner DP. **JAMA** 1989 Apr 28;261(16):2331
The impact of migration on air quality dose-response functions: a case study of Jacksonville, Florida. Erfani G, et al. **JAPCA** 1988 Jul;38(7):917–20
A mortality risk index for men in a Veterans Administration extended care facility. Rudman D, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr;13(2):189–95
Alcohol and mortality: the myth of the U-shaped curve [editorial] **Lancet** 1988 Dec 3;2(8623):1292–3
Cholesterol as risk factor for mortality in elderly women [see comments] Forette B, et al. **Lancet** 1989 Apr 22; 1(8643):868–70. **Comment in:** Lancet 1989 Jul 1;2(8653):41
Teachers, stress, and mortality [letter] Herloff B, et al. **Lancet** 1989 Jan 21;1(8630):159–60
Revising RAWP [letter] Jarman B. **Lancet** 1988 Oct 8; 2(8615):850
Cholesterol and mortality in elderly women [letter; comment] Löwik MR, et al. **Lancet** 1989 Jul 1;2(8653):41. **Comment on:** Lancet 1989 Apr 22;1(8643):868–70
Gender and survival [letter] Taylor DC, et al. **Lancet** 1989 Jun 24;1(8652):1444
Health inequalities in Britain and Sweden. Vågerö D, et al. **Lancet** 1989 Jul 1;2(8653):35–6
Integral differences among human survival distributions as a function of disease. Juckett DA, et al. **Mech Ageing Dev** 1988 Jun;43(3):239–57
A return to time, cells, systems, and aging: V. Further thoughts on Gompertzian survival dynamics—the geriatric years. Witten M. **Mech Ageing Dev** 1988 Dec; 46(1–3):175–200
The Risk-Adjusted Mortality Index. A new measure of hospital performance. DesHarnais SI, et al. **Med Care** 1988 Dec;26(12):1129–48
The condition of the literature on differences in hospital mortality. Fink A, et al. **Med Care** 1989 Apr;27(4):315–36 (46 ref.)
Mortality rates, monitoring programs, and the quality of care [editorial] Fisher ES. **Med Decis Making** 1989 Apr–Jun; 9(2):75
How well can physicians estimate mortality in a medical intensive care unit? McClish DK, et al. **Med Decis Making** 1989 Apr–Jun;9(2):125–32
Quality-adjusted life years, utility theory, and healthy-years equivalents. Mehrez A, et al. **Med Decis Making** 1989 Apr–Jun;9(2):142–9
DEALE-ing with life expectancy and mortality rates [published erratum appears in Med Decis Making 1989 Jul–Sep;9(3):219] Stalpers LJ, et al. **Med Decis Making** 1989 Apr–Jun;9(2):150–2
Postwar mortality among Australian World War II prisoners of the Japanese [see comments] Dent OF, et al. **Med J Aust** 1989 Apr 3;150(7):378–82. **Comment in:** Med J Aust 1989 Jul 17;151(2):113–4
Postwar mortality among former prisoners of war of the Japanese [letter; comment] Freed G. **Med J Aust** 1989 Jul 17;151(2):113–4. **Comment on:** Med J Aust 1989 Apr 3;150(7):378–82
A descriptive summary of active-duty deaths in the U.S. Navy in 1986. Helmkamp JC. **Milit Med** 1988 Dec; 153(12):621–5
Mortality data from the National Vital Statistics System. **MMWR** 1989 Mar 3;38(8):118–23
Years of potential life lost before age 65—United States, 1987. **MMWR** 1989 Jan 20;38(2):27–9
Black/white comparisons of premature mortality for public health program planning—District of Columbia. **MMWR** 1989 Jan 27;38(3):33–7
Effects of regulation, competition, and ownership on mortality rates among hospital inpatients [letter] **N Engl J Med** 1988 Nov 17;319(20):1354–8
Changes in the location of death after passage of Medicare's prospective payment system. A national study [see comments] Sager MA, et al. **N Engl J Med** 1989 Feb 16; 320(7):433–9. **Comment in:** N Engl J Med 1989 Jul 6;321(1):56–7
An area analysis of major causes of death among under 65 year olds in Auckland—1977–85. Marshall RJ. **N Z Med J** 1989 Feb 22;102(862):67–70
US team returns with insights into Armenian earthquake [news] Lindley D. **Nature** 1989 Jan 12;337(6203):107
Analysis of data in nephrology. III. Survival analysis and analysis of variance. Appleton DR. **Nephrol Dial Transplant** 1988;3(3):340–4
The pattern of the causes of death in children in rural swampy area of South Sumatra, Indonesia. Anwar Z, et al. **Paediatr Indones** 1987 May-Jun;27(5–6):93–8
Poverty and child health. Wise PH, et al. **Pediatr Clin North Am** 1988 Dec;35(6):1169–86 (129 ref.)
Child survival and development revolution. Grant JP. **Pediatr Rev** 1986 Dec;8(6):163
Mortality rates and health progress [editorial] Wegman ME. **Pediatrics** 1988 Oct;82(4):671–2
A voice from the past. Hill AB. **Public Health** 1988 Sep; 102(5):407
Years of potential life lost among a Native American population. Mahoney MC, et al. **Public Health Rep** 1989 May–Jun;104(3):279–85
Design of the 1986 National Mortality Followback Survey: considerations on collecting data on decedents. Seeman I, et al. **Public Health Rep** 1989 Mar–Apr;104(2):183–8
Trends in mortality from major non-communicable diseases in the middle-aged population of Malta. Tuomilehto J, et al. **Rev Epidemiol Sante Publique** 1988;36(3):216–25
Early childhood mortality in Cape Town. Molteno CD, et al. **S Afr Med J** 1989 Jun 17;75(12):570–4
The spatial variation of mortality among children under 5 years of age in South Africa [published erratum appears in S Afr Med J 1989 Aug 5;76(3):126] Rip MR, et al. **S Afr Med J** 1989 Jun 17;75(12):565–70
Under-five mortality [letter] Slabber CF. **S Afr Med J** 1989 May 20;75(10):501
Mortality among migrant tunnel workers. Une H, et al. **Sangyo Igaku** 1988 Nov;30(6):481–5
Childhood mortality in Cuba, 1959–1984. Riverón-Corteguera R. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):237–47
The population study of women in Gothenburg 1980–81—the third phase of a longitudinal study. Comparison between participants and non-participants. Bengtsson C, et al. **Scand J Soc Med** 1989;17(2):141–5
Differential mortality among semiskilled applicants of disability pension. Hasle H, et al. **Scand J Soc Med** 1988; 16(4):273–6
Mortality among criminals with suspected mental disturbance. Lidberg L, et al. **Scand J Soc Med** 1989; 17(1):59–65
Mortality and social class in Sweden—exploring a new epidemiological tool. Vågerö D, et al. **Scand J Soc Med** 1989;17(1):49–58
How the Armenian quake became a killer [news] Kerr RA. **Science** 1989 Jan 13;243(4888):170
Fifty years of Canadian Jewish mortality. Needleman L. **Soc Biol** 1988 Spring-Summer;35(1–2):110–22
Apartheid and health in the 1980s. Andersson N, et al. **Soc Sci Med** 1988;27(7):667–81 (72 ref.)
Mortality and living conditions: relative mortality levels and their relation to the physical quality of life in urban populations. Anson J. **Soc Sci Med** 1988;27(9):901–10
Sensitization to illness and the risk of death: an explanation for Sri Lanka's approach to good health for all. Caldwell J, et al. **Soc Sci Med** 1989;28(4):365–79
Cornell Medical Index responses and mortality in a Polynesian population. Crews DE, et al. **Soc Sci Med** 1988; 27(12):1433–7
The contribution of medical care to inequalities in health: differences between socio-economic groups in decline of mortality from conditions amenable to medical intervention. Mackenbach JP, et al. **Soc Sci Med** 1989; 29(3):369–76
Post-1950 mortality trends and medical care: gains in life expectancy due to declines in mortality from conditions amenable to medical intervention in The Netherlands. Mackenbach JP, et al. **Soc Sci Med** 1988;27(9):889–94
A quantitative study of the bias in estimating the treatment effect caused by omitting a balanced covariate in survival models. Chastang C, et al. **Stat Med** 1988 Dec; 7(12):1243–55
Required duration and power determinations for historically controlled studies of survival times. Emrich LJ. **Stat Med** 1989 Feb;8(2):153–60
The propagation of uncertainty in human mortality processes operating in stochastic environments. Yashin AI, et al. **Theor Popul Biol** 1989 Apr;35(2):119–41
Unnatural causes: the three leading causes of mortality in America. Proceedings of a symposium. November 20–21, 1987, Philadelphia. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):1–206
Is this the way we want to die? Maulitz RC. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):3–10
Causes of death in kidney transplant recipients: 1970 to present. Dlugosz BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2168–70
Occupational mortality of California women, 1979–1981. Doebbert G, et al. **West J Med** 1988 Dec;149(6):734–40 (63 ref.)
Maps that throw light on disease mortality. Shigematsu I, et al. **World Health Forum** 1988;9(3):444–8
The assessment of preventable infant and child deaths in developing countries: some applications of a new index. D'Souza S. **World Health Stat Q** 1989;42(1):16–25
Years of potential life lost: application of an indicator for assessing premature mortality in Spain and Portugal. Garcia Rodriguez LA, et al. **World Health Stat Q** 1989;42(1):50–6
Preventable mortality: indicator or target? Applications in developing countries. Plaut R, et al. **World Health Stat Q** 1989;42(1):4–15
Excess mortality ratio with reference to the lowest age-sex-specific death rates among countries. Uemura K. **World Health Stat Q** 1989;42(1):26–41
[The profession variable in mortality statistics] Gispert Magarolas RG. **Gac Sanit** 1989 Mar-Apr;3(11):371–6 (Eng. Abstr.) **(Cat, Spa)**
[Study of mortality under 30 years of age in families of psychotic patients] Bourguignon A, et al. **Ann Med Psychol (Paris)** 1989 Jan;147(1):1–13 (Eng. Abstr.) **(Fre)**
[Study of general mortality and of mortality related to malaria in the mountains of Kivu, Zaire] Delacollette C, et al. **Rev Epidemiol Sante Publique** 1989;37(2):161–6 (Eng. Abstr.) **(Fre)**
[Preventable deaths: general view] Lopez AD. **World Health Stat Q** 1989;42(1):2–3 **(Fre)**
[Geographical variations in mortality due to diseases amenable to medical intervention in Europe—Commission of European Communities: atlas of avoidable deaths] Paul EA, et al. **World Health Stat Q** 1989;42(1):42–9 (Eng. Abstr.) **(Fre)**
[The course of morbidity over 10 years in the pediatric department of a district hospital. Exemplified by the pediatric department of the Parchim district hospital 1971–1980] Ruickoldt G. **Kinderarztl Prax** 1988 Sep; 56(9):437–42 (Eng. Abstr.) **(Ger)**
[Coding of cause of death for mortality statistics—a comparison with results of coding by various statistical offices of West Germany and West Berlin] Giersiepen K, et al. **Off Gesundheitswes** 1989 Jan;51(1):40–7 (Eng. Abstr.) **(Ger)**
[Fatalities and danger to health caused by smog] Hompesch H. **Off Gesundheitswes** 1989 Apr;51(4):178–81 (Eng. Abstr.) **(Ger)**
[Inpatient morbidity and mortality of 15- to under-20-year-olds] Fiolka L. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):249–60 **(Ger)**
[Differential mortality of males and females, exemplified by

West Germany] Härtel U. **Soz Praventivmed** 1988; 33(3):135–9 (14 ref.) (Eng. Abstr.) (Ger)
[Sex differences in health and health behavior] Zemp E, et al. **Soz Praventivmed** 1988;33(3):186–92 (23 ref.) (Eng. Abstr.) (Ger)
[Reasons for misleadings cause in death statistics] Drescher EP. **Versicherungsmedizin** 1988 Sep 1;40(5):134–6 (Eng. Abstr.) (Ger)
[Health indicators based on general mortality conditions] Fritsche U, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):938–9 (Ger)
[Rate of survival for the evaluation of sex-specific variations in the health status of the population] Knopf H, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):939–40 (Ger)
[Some problems with sex differences in mortality] Fiolka L. **Z Gesamte Hyg** 1988 Aug;34(8):447–9 (Eng. Abstr.) (Ger)
[Concurrent diseases in cause of death statistics] Kröning C. **Z Gesamte Hyg** 1988 Aug;34(8):445–7 (Eng. Abstr.) (Ger)
[Years of potential life lost in Italy before 65 years of age] Arcà M, et al. **Epidemiol Prev** 1988 Sep;10(36):58–61 (Ita)
[Mortality and occupational status in the Turinese longitudinal study] Costa G, et al. **Epidemiol Prev** 1988 Sep;10(36):48–57 (Eng. Abstr.) (Ita)
[Use of administrative data for epidemiologic research. Consultation of the Fiscal Code Archive for ascertaining living existence in cohort studies] Costa G, et al. **Epidemiol Prev** 1988 Jun;10(35):40–6 (Eng. Abstr.) (Ita)
[A longitudinal system of mortality surveillance according to socio-economic characteristics, as shown by population censuses: description and documentation of the system] Costa G, et al. **Epidemiol Prev** 1988 Sep;10(36):37–47 (26 ref.) (Eng. Abstr.) (Ita)
[Confidence interval for standardized mortality ratio] Zocchetti C. **Med Lav** 1988 Jul–Aug;79(4):322–30 (Eng. Abstr.) (Ita)
[Death from internal diseases] Brzozowski R, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):209–13 (Pol)
[Child mortality in the developing countries of Africa] Rozov AA, et al. **Sov Zdravookhr** 1989;(3):58–63 (Rus)
[Alcohol consumption habits in a population of 40- to 59-year-old men and its prognostic value in relation to mortality] Kalinina AM, et al. **Ter Arkh** 1988;60(10):106–10 (Eng. Abstr.) (Rus)
[The age-related dynamics of mortality and the Gompertz-Makeham law] Ekonomov AL, et al. **Zh Obshch Biol** 1989 Mar–Apr;50(2):236–43 (Eng. Abstr.) (Rus)
[An ecological approach to the causes of death in 14 countries: the Shannon Index of Diversity] Ascaso Terrén C, et al. **Gac Sanit** 1988 Sep–Oct;2(8):224–9 (Eng. Abstr.) (Spa)
[The association between mortality and the cost of medications persists even controlling for per capita income] Porta Serra M, et al. **Gac Sanit** 1987 Jul–Aug;1(1):5–11 (Eng. Abstr.) (Spa)
[Review of hospital mortality in a local hospital] Sicras Mainar A, et al. **Gac Sanit** 1988 Nov–Dec;2(9):286–9 (Eng. Abstr.) (Spa)
[Prospective study on mortality in a general internal medicine department] de la Sierra A, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):121–3 (Eng. Abstr.) (Spa)
[Approach to health in Spain (published erratum appears in Med Clin (Barc) 1988 Sep 17;91(8):292)] del Llano J, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):101–4 (Spa)
[Certification of main cause of death in Barcelona, 1985] Pañella Noguera H, et al. **Med Clin (Barc)** 1989 Feb 4; 92(4):129–34 (Eng. Abstr.) (Spa)
[Analysis of response to treatment. Considerations on changing prognostic variables (time-dependent)] Rozman C, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):52–5 (Eng. Abstr.) (Spa)
[Analysis of hospital mortality as an index of efficiency (editorial)] Segura Benedicto A. **Med Clin (Barc)** 1988 Jun 18;91(4):139–41 (Spa)
[How do the Swedish adolescents feel?] Berg-Kelly K. **Lakartidningen** 1988 Oct 12;85(41):3361–3 (Swe)
[Social class and total mortality—findings from Dalby are different from findings from Gothenburg] Dehlin O, et al. **Lakartidningen** 1989 Aug 9;86(32–33):2654 (Swe)
[Should society support the care of injuries caused by hazardous behavior?] Josephson U. **Lakartidningen** 1988 Nov 16;85(46):3953–5 (Swe)
[Unnecessary deaths in the working class and decline of quality in the health services] Reizenstein P. **Nord Med** 1988;103(8–9):254–5 (Eng. Abstr.) (Swe)

HISTORY

Social implications of mortality patterns of juveniles from Poundbury Camp, Romano-British Cemetery. Molleson TI. **Anthropol Anz** 1989 Mar;47(1):27–38
[Observations on child mortality in the Middle Ages. Difficulties and possibilities of historical research] Nitschke A. **Anthropol Anz** 1989 Mar;47(1):51–5 (Eng. Abstr.) (Ger)

STATISTICS & NUMERICAL DATA

Survey of cause-of-death query criteria used by state vital statistics programs in the US and the efficacy of the criteria used by the Oregon Vital Statistics Program. Hopkins DD, et al. **Am J Public Health** 1989 May;79(5):570–4
The effect of occupational, marital and parental roles on mortality: the Alameda County Study. Kotler P, et al. **Am J Public Health** 1989 May;79(5):607–12
Improving cause-of-death statistics [editorial] Rosenberg HM. **Am J Public Health** 1989 May;79(5):563–4
Comparison of individual follow-up and computerized record linkage using the Canadian Mortality Data Base. Shannon HS, et al. **Can J Public Health** 1989 Jan–Feb; 80(1):54–7
Differences among hospitals in Medicare patient mortality. Chassin MR, et al. **Health Serv Res** 1989 Apr;24(1):1–31
Regional differences in mortality from conditions amenable to medical intervention in The Netherlands: a comparison of four time periods. Mackenbach JP, et al. **J Epidemiol Community Health** 1988 Dec;42(4):325–32
The validity of Maori mortality statistics. Graham P, et al. **N Z Med J** 1989 Mar 22;102(864):124–6

TRENDS

Historical changes in motor vehicle death rates among the elderly. Fife D, et al. **Accid Anal Prev** 1988 Oct;20(5):393–8
Social network and social support influence mortality in elderly men. The prospective population study of "Men born in 1914," Malmö, Sweden. Hanson BS, et al. **Am J Epidemiol** 1989 Jul;130(1):100–11
Mortality among children and youth. Fingerhut LA, et al. **Am J Public Health** 1989 Jul;79(7):899–901
Mortality trends in a rapidly developing economy in Taiwan. Part I: Comparison with the USA and Japan 1976–1983. Tsai SP, et al. **Asia Pac J Public Health** 1989;3(1):41–50
Trends in elderly mortality in the Nordic countries. Martelin T. **Compr Gerontol [C]** 1987 Dec;1:39–48
Measuring socioeconomic mortality differentials over time. Duleep HO. **Demography** 1989 May;26(2):345–51
Regional differences in decline of mortality from selected conditions: The Netherlands, 1969–1984. Mackenbach JP, et al. **Int J Epidemiol** 1988 Dec;17(4):821–9
A mortality analysis of Native American in New York State, 1980–86. Mahoney MC, et al. **Int J Epidemiol** 1989 Jun; 18(2):403–12
Changes in mortality among Cubans in the United States following an episode of unscreened migration. Rosenwaike I, et al. **Int J Epidemiol** 1989 Mar;18(1):152–7
An old prescription for a new era of medicine. Smith G. **J Tenn Med Assoc** 1989 Apr;82(4):200–1
Effects of state prospective reimbursement programs on hospital mortality. Gaumer GL, et al. **Med Care** 1989 Jul; 27(7):724–36
Biased selection and regression toward the mean in three Medicare HMO demonstrations: a survival analysis of enrollees and disenrollees. Riley G, et al. **Med Care** 1989 Apr;27(4):337–51
On forecasting mortality. Olshansky SJ. **Milbank Q** 1988; 66(3):482–530
Mortality trends—United States, 1986–1988. **MMWR** 1989 Mar 3;38(8):117–8
Death rates in New Jersey. Greenberg M. **N J Med** 1988 Nov;85(11):950–3
Decline in mortality among young Americans during the 20th century: prospects for reaching national mortality reduction goals for 1990. Hoekelman RA, et al. **Pediatrics** 1988 Oct;82(4):582–95
Multiple causes of death and the epidemiological transition in American Samoa. Crews DE. **Soc Biol** 1988 Fall–Winter; 35(3–4):198–213
Sociocultural determinants of infant and child mortality in Turkey. Aksit B, et al. **Soc Sci Med** 1989;28(6):571–6 (51 ref.)
The application of time series forecasting methods to an estimation problem using provisional mortality statistics. Katzoff M. **Stat Med** 1989 Mar;8(3):335–41; discussion 363
A method for the estimation of chronic disease morbidity and trends from mortality data. Verdecchia A, et al. **Stat Med** 1989 Feb;8(2):201–16
Of light bulbs and wine glasses: risk factors and mortality trends. Cole P. **Trans Stud Coll Physicians Phila** 1988 Dec; 10(1–4):95–102
[Trends in mortality and the average life span of the population of Czechoslovakia 1963–1983] Strnad L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):485–502 (Eng. Abstr.) (Cze)
[Changes in mortality of diseases which have become (partially) preventable or treatable by medical care, 1950–1984] Mackenbach JP, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1665–9 (Eng. Abstr.) (Dut)
[The high autopsy rate in Vienna] Sakr L, et al. **Wien Klin Wochenschr** 1989 Aug 4;101(15):511–4 (Eng. Abstr.) (Ger)
[Hospital mortality (letter)] Quiroga Prado L, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):318 (Spa)
[Universal history of mortality] José MV, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):3–17 (Eng. Abstr.) (Spa)

MORTUARY CUSTOMS see FUNERAL RITES

MORTUARY PRACTICE

Investigation of cremations and severely burned bodies. Eckert WG, et al. **Am J Forensic Med Pathol** 1988 Sep; 9(3):188–200
Blood exposure and protection in funeral homes. McDonald L. **Am J Infect Control** 1989 Aug;17(4):193–5
Exposure to and precautions for blood and body fluids among workers in the funeral home franchises of Fort Worth, Texas. Nwanyanwu OC, et al. **Am J Infect Control** 1989 Aug;17(4):208–12
Were Neanderthals the first humans to bury their dead? [news] Diamond JM. **Nature** 1989 Aug 3;340(6232):344
Brain sections to be buried? [news] Dickman S. **Nature** 1989 Jun 15;339(6225):498
Incremental lines in prehistoric cremated teeth. A technical note. Grosskopf B. **Z Morphol Anthropol** 1989;77(3):309–11

HISTORY

The exhumation of Mattia Preti, painter. Griffiths VG. **BMJ** 1988 Dec 24–31;297(6664):1672–4
[Physician buried in the cemetery at Lipowa Street in Lublin] Domański CW. **Arch Hist Filoz Med** 1988;51(2):221–31 (Pol)
[Ashes of cremated prisoners of concentration camps] Stefańska-Szymańska I. **Przegl Lek** 1989;46(1):86–92 (Pol)

TRENDS

Cremation patterns for patients dying of AIDS in New York City. Jacobs TA, et al. **N Y State J Med** 1988 Dec; 88(12):628–32

MORULA see under CLEAVAGE STAGE, OVUM

MOS PROTO-ONCOGENES see PROTO-ONCOGENES

MOSAIC VIRUSES

ANALYSIS

Biochemical and biophysical analysis of pseudoknot-containing RNA fragments. Melting studies and NMR spectroscopy. van Belkum A, et al. **Eur J Biochem** 1989 Aug 15;183(3):591–601
Preparation of soluble, biologically active alfalfa mosaic virus coat protein and its CaCl2-induced degradation. Hajimorad MR, et al. **J Virol Methods** 1989 Jul;25(1):49–61
Protein-RNA interactions in an icosahedral virus at 3.0 A resolution. Chen ZG, et al. **Science** 1989 Jul 14; 245(4914):154–9

CLASSIFICATION

Relationship of lychnis ringspot virus to barley stripe mosaic virus and poa semilatent virus. Hunter BG, et al. **Intervirology** 1989;30(1):18–26
Characterization of potato yellow mosaic virus as a geminivirus with a bipartite genome. Roberts EJ, et al. **Intervirology** 1988;29(3):162–9

DRUG EFFECTS

Antiviral activity of tiazofurine against barley stripe mosaic virus. Nagy PD, et al. **Antiviral Res** 1989 Feb;11(1):41–5

GENETICS

Expression of CaMV ORF IV in Escherichia coli. Albrecht H, et al. **Ann Inst Pasteur Virol** 1988 Jul–Sep;139(3):263–76
Coat protein of potyviruses. 6. Amino acid sequences suggest watermelon mosaic virus 2 and soybean mosaic virus-N are strains of the same potyvirus. Yu MH, et al. **Arch Virol** 1989;105(1–2):55–64
A centrifugation method for separation of plant viral genomic and subgenomic RNAs. Joshi S, et al. **FEBS Lett** 1988 Oct 24;239(1):45–9
Nucleotide sequence analysis of cDNA encoding the coat protein of cucumber mosaic virus: genome organization and molecular features of the protein. Hayakawa T, et al. **Gene** 1988 Nov 15;71(1):107–14
Cloning full-length cDNA of grapevine chrome mosaic nepovirus. Le Gall O, et al. **Gene** 1988 Dec 15;73(1):67–75
A novel strategy for one-step cloning of full-length cDNA and its application to the genome of barley stripe mosaic virus. Petty IT, et al. **Gene** 1988 Dec 30;74(2):423–32
High-level synthesis of cowpea mosaic virus RNA polymerase and protease in Escherichia coli. Richards OC, et al. **Gene** 1989 May 15;78(1):135–46
Effects of extra 5' non-viral bases on the infectivity of transcripts from a cDNA clone of satellite RNA (strain Y) of cucumber mosaic virus. Masuta C, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):841–6
Structure and replication of caulimovirus genomes. Hull R, et al. **J Cell Sci Suppl** 1987;7:213–29 (66 ref.)
Nucleotide sequence of the 3'-terminal region of clover yellow mosaic virus RNA. Abouhaidar MG, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1871–5
Competitive multiplication of RNA3 species of different strains of alfalfa mosaic virus. Dore JM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):777–82
The nucleotide sequence of a soybean mosaic virus coat protein-coding region and its expression in Escherichia coli, Agrobacterium tumefaciens and tobacco callus. Eggenberger AL, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1853–60

Size reversion of African cassava mosaic virus coat protein gene deletion mutants during infection of Nicotiana benthamiana. Etessami P, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):277–89

Molecular cloning, sequencing and expression in Escherichia coli of the bean yellow mosaic virus coat protein gene. Hammond J, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):1961–74

Complete nucleotide sequence of RNA 3 from cucumber mosaic virus (CMV) strain O: comparative study of nucleotide sequences and amino acid sequences among CMV strains O, Q, D and Y. Hayakawa T, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):499–504

Nucleotide sequences of the coat protein genes and flanking regions of cucumber mosaic virus strains C and WL RNA 3. Quemada H, et al. **J Gen Virol** 1989 May;70 (Pt 5):1065–73

Nucleotide sequence and evolutionary relationships of cucumber mosaic virus (CMV) strains: CMV RNA 1. Rizzo TM, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):1–11

Nucleotide sequence of papaya mosaic virus RNA. Sit TL, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2325–31

Nucleotide sequence of narcissus mosaic virus RNA. Zuidema D, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):267–76

Replication in vivo of mutant brome mosaic virus RNAs defective in aminoacylation. Dreher TW, et al. **J Mol Biol** 1989 Apr 5;206(3):425–38

A simple method for detection of viral satellite RNAs in small plant tissue samples. White JL, et al. **J Virol Methods** 1989 Feb;23(2):83–93

Nuclear proteins binding to a cauliflower mosaic virus 35S truncated promoter. Prat S, et al. **Mol Gen Genet** 1989 Jun;217(2–3):209–14

Transient expression of heterologous RNAs using tomato golden mosaic virus. Hanley-Bowdoin L, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10511–28

Infectious TYMV RNA from cloned cDNA: effects in vitro and in vivo of point substitutions in the initiation codons of two extensively overlapping ORFs. Weiland JJ, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4675–87

Telomeric function of the tRNA-like structure of brome mosaic virus RNA. Rao AL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5335–9

Cauliflower mosaic virus 35 S RNA leader region inhibits translation of downstream genes. Baughman G, et al. **Virology** 1988 Nov;167(1):125–35

The expression, localization, and effect of a human interferon in plants. De Zoeten GA, et al. **Virology** 1989 Sep; 172(1):213–22

Mechanism of synthesis of turnip yellow mosaic virus coat protein subgenomic RNA in vivo. Gargouri R, et al. **Virology** 1989 Aug;171(2):386–93

Nucleotide sequence of barley stripe mosaic virus RNA alpha: RNA alpha encodes a single polypeptide with homology to corresponding proteins from other viruses. Gustafson G, et al. **Virology** 1989 Jun;170(2):370–7

Identification of the initiation codons for translation of cowpea mosaic virus middle component RNA using site-directed mutagenesis of an infectious cDNA clone. Holness CL, et al. **Virology** 1989 Sep;172(1):311–20

Alfalfa mosaic virus temperature-sensitive mutants. V. The nucleotide sequence of TBTS 7 RNA 3 shows limited nucleotide changes and evidence for heterologous recombination. Huisman MJ, et al. **Virology** 1989 Aug; 171(2):409–16

Characterization of cucumber mosaic virus. I. Molecular heterogeneity mapping of RNA 3 in eight CMV strains. Owen J, et al. **Virology** 1988 Oct;166(2):495–502

Infectious barley stripe mosaic virus RNA transcribed in vitro from full-length genomic cDNA clones. Petty IT, et al. **Virology** 1989 Aug;171(2):342–9

Hybrid brome mosaic virus RNAs express and are packaged in tobacco mosaic virus coat protein in vivo. Sacher R, et al. **Virology** 1988 Nov;167(1):15–24

Interviral homologies of the 30K proteins of tobamoviruses. Saito T, et al. **Virology** 1988 Dec;167(2):653–6

Southern bean mosaic virus RNA remains associated with swollen virions during translation in wheat germ cell-free extracts. Shields SA, et al. **Virology** 1989 Aug;171(2):602–6

Identification of tomato golden mosaic virus-specific RNAs in infected plants. Sunter G, et al. **Virology** 1989 May; 170(1):243–50

The complete nucleotide sequence and genome organization of red clover necrotic mosaic virus RNA-1. Xiong Z, et al. **Virology** 1989 Aug;171(2):543–54

Bean mild mosaic virus: genome and its translation products. Hari V, et al. **Virus Genes** 1989 May;2(3):211–21

Potential gene products of bean golden mosaic virus have higher sequence homologies to those of tomato golden mosaic virus than to those of cassava latent virus. Ikegami M, et al. **Virus Genes** 1988 Mar;1(2):191–203

Translation products of cauliflower mosaic virus ORF V, the coding region corresponding to the retrovirus pol gene. Pietrzak M, et al. **Virus Genes** 1987 Nov;1(1):83–96

[Site-specific cleavage of RNA 3 from brome mosaic virus in the intercistron region and restoration of the internal poly(A)-track in a progeny of religated RNA] Tiul'kina LG, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1489–90 (Rus)

GROWTH & DEVELOPMENT

Cauliflower mosaic virus ORF VII is not required for aphid transmissibility. Givord L, et al. **Ann Inst Pasteur Virol** 1988 Apr–Jun;139(2):227–31

IMMUNOLOGY

Serotype specificity of monoclonal antibodies to cucumber mosaic virus. Porta C, et al. **Arch Virol** 1989; 104(3–4):271–85

Spurious cross-reactions between plant viruses and monoclonal antibodies can be overcome by saturating ELISA plates with milk proteins. Zimmermann D, et al. **Arch Virol** 1989;106(1–2):15–22

METABOLISM

Single- and double-stranded viral RNAs in plants infected with the potexviruses papaya mosaic virus and foxtail mosaic virus. Mackie GA, et al. **Intervirology** 1988; 29(3):170–7

The pattern of accumulation of cauliflower mosaic virus-specific products in infected turnips. Maule AJ, et al. **Virology** 1989 Apr;169(2):436–46

PHYSIOLOGY

Analysis of brome mosaic virus replication and aminoacylation functions by site-specific mutagenesis. Hall TC, et al. **J Cell Sci Suppl** 1987;7:287–301

MOSAICISM

see related
FREEMARTINISM
MICE, TRANSGENIC
RADIATION CHIMERA

Y chromosome specific DNA probe in the diagnosis of a patient with mos 45,X/46,XYnf. Yorifuji T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):85–9

A case of complete trisomy 2p/triploidy mosaicism. Dahl N, et al. **Acta Paediatr Scand** 1988 Nov;77(6):925–9

45,X/47,XY,+13 mosaicism and Crohn's disease. Knudtzon J, et al. **Acta Paediatr Scand** 1988 Nov;77(6):922–4

Unilateral microscopic gonadoblastoma in a prepubertal Turner mosaic with Y chromosome material identified by restriction fragment analysis [published erratum appears in Am J Clin Pathol 1989 Feb;91(2):240] Shah KD, et al. **Am J Clin Pathol** 1988 Nov;90(5):622–7

Review and hypotheses: somatic mosaicism: observations related to clinical genetics. Hall JG. **Am J Hum Genet** 1988 Oct;43(4):355–63 (79 ref.)

Placental mosaicism and intrauterine survival of trisomies 13 and 18. Kalousek DK, et al. **Am J Hum Genet** 1989 Mar; 44(3):338–43

Association of pigmentary anomalies with chromosomal and genetic mosaicism and chimerism. Thomas IT, et al. **Am J Hum Genet** 1989 Aug;45(2):193–205 (48 ref.)

Holoprosencephaly, ear abnormalities, congenital heart defect, and microphallus in a patient with 11q- mosaicism. Helmuth RA, et al. **Am J Med Genet** 1989 Feb;32(2):178–81

Two mosaic cases with nonfluorescent Y chromosome analysed with Y-specific DNA probes. Kałużewski B, et al. **Am J Med Genet** 1988 Nov;31(3):489–503

Metacarpophalangeal pattern profile analysis in a patient with ring (9)/del(9p) mosaicism [letter] Leung AK, et al. **Am J Med Genet** 1988 Oct;31(2):481–2

Confirmation of prenatal diagnosis of sex chromosome mosaicism. McFadden DE, et al. **Am J Med Genet** 1989 Apr;32(4):495–7

Evidence for autosomal recessive inheritance of progeria (Hutchinson Gilford). Maciel AT. **Am J Med Genet** 1988 Nov;31(3):483–7

Mosaic trisomy 7 confined to the placenta. McKinley MJ, et al. **Am J Med Genet** 1988 Nov;31(3):697–9

Report of a case resembling the Proteus syndrome with a chromosome abnormality. Say B, et al. **Am J Med Genet** 1988 Dec;31(4):987–9

Isochromosome 12p mosaicism (Pallister-Killian syndrome): newborn diagnosis by direct bone marrow analysis. Ward BE, et al. **Am J Med Genet** 1988 Dec;31(4):835–9

MCA/MR syndrome in a female infant with tetraploidy mosaicism: review of the human polyploid phenotype. Wilson GN, et al. **Am J Med Genet** 1989 Aug;30(4):953–61 (43 ref.)

Chromosome mosaicism in 6,000 amniocenteses. Wilson MG, et al. **Am J Med Genet** 1989 Apr;32(4):506–13

Recurrence of different mosaic structural chromosomal anomalies within a family. Smith A, et al. **Ann Genet** 1989; 32(1):36–8

Lethal presentation of mosaic tetrasomy 12p (Pallister-Killian) syndrome. Young ID, et al. **Ann Genet** 1989;32(1):62–4

Familiarity, recessivity and germline mosaicism. Edwards JH. **Ann Hum Genet** 1989 Jan;53 (Pt 1):33–47 (32 ref.)

Genetic susceptibility, somatic mosaicisms and predisposition to human cancer. Pathak S, et al. **Anticancer Res** 1989 Jan–Feb;9(1):17–9

Human H1 histone gene promoter CCAAT box binding protein HiNF-B is a mosaic factor. van Wijnen AJ, et al. **Biochemistry** 1988 Aug 23;27(17):6534–41

Mosaic evolution in the Drosophila genome. Martin CH, et al. **Bioessays** 1988 Aug–Sep;9(2–3):65–9 (33 ref.)

Mosaic pattern and lineage analysis in chimeras. Iannaccone PM, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:77–90 (104 ref.)

A 45,X/69,XXY fetus. Betts DR, et al. **Clin Genet** 1989 Apr; 35(4):285–8

Sperm chromosome analysis to assess potential germ cell mosaicism. Brandriff B, et al. **Clin Genet** 1988 Aug; 34(2):85–9

Trisomy 5 mosaicism in amniotic fluid with normal outcome. Casamassima AC, et al. **Clin Genet** 1989 Apr;35(4):282–4

Chromosomal abnormalities in amniotic fluid cell cultures: a comparison of apparent pseudomosaicism in Chang and RPMI-1640 media. Krawczun MS, et al. **Clin Genet** 1989 Feb;35(2):139–45

Four copies of 8p in a mentally retarded boy with the mosaic karyotype 47,XY, + i(8p)/46,XY. Kristoffersson U, et al. **Clin Genet** 1988 Sep;34(3):201–3

Karyotyping urine sediment cells confirms trisomy 12 mosaicism detected at amniocentesis. Leschot NJ, et al. **Clin Genet** 1988 Aug;34(2):135–9 (13 ref.)

Non-mosaic trisomy 20 in amniotic fluid cultures with minor anomalies in the fetus. Myers TL, et al. **Clin Genet** 1989 Apr;35(4):233–6

Mosaicism for ring 19: a case report. Sybert VP, et al. **Clin Genet** 1988 Dec;34(6):382–5

Risk effect of maternal age in Pallister i(12p) syndrome. Wenger SL, et al. **Clin Genet** 1988 Sep;34(3):181–4

Dermatoglyphic features of a male with diploid/tetraploid mosaicism [letter; comment] Wittwer BB, et al. **Clin Genet** 1989 Apr;35(4):310–1. **Comment on:** Clin Genet 1988 Apr;33(4):299–307

Trisomy 8 mosaicism syndrome. Two cases demonstrating variability in phenotype. Kurtyka ZE, et al. **Clin Pediatr (Phila)** 1988 Nov;27(11):557–64

Central projections of peripheral mechanosensory cells with increased excitability in Drosophila mosaics. Burg MG, et al. **Dev Biol** 1989 Feb;131(2):505–14

Towards an understanding of position effect variegation. Tartof KD, et al. **Dev Genet** 1989;10(3):162–76

Abnormally high variability in the uncrossed retinofugal pathway of mice with albino mosaicism. Guillery RW, et al. **Development** 1987 Dec;101(4):857–67

45,XO/46,X,dic(Yq) mosaicism in Turner's phenotype with endodermal sinus tumor of the ovary. Ono T, et al. **Gynecol Obstet Invest** 1989;27(1):45–7

Clonal analysis of hematologic malignancies using Mediterranean G6PD mosaicism. Canepa L, et al. **Haematologica (Pavia)** 1988 Sep–Oct;73(5):343–6

Familial ring (20) chromosomal mosaicism. Back E, et al. **Hum Genet** 1989 Sep;83(2):148–54

A mosaic 45,X/46,X,r(?) karyotype investigated with X and Y centromere-specific probes using a non-autoradiographic in situ hybridization technique. Crolla JA, et al. **Hum Genet** 1988 Dec;81(1):81–4

Tissue-specific 45,X0/47,XY,+13 mosaicism in an 18-year-old woman. Eiben B, et al. **Hum Genet** 1989 Jul; 82(4):391–2

Siblings with chromosome mosaicism, microcephaly, and growth retardation: the phenotypic expression of a human mitotic mutant? Tolmie JL, et al. **Hum Genet** 1988 Oct; 80(2):197–200

XO/XY mosaicism in delayed puberty. Aranoff GS, et al. **J Adolesc Health Care** 1988 Nov;9(6):501–4

Structure of testicular angiotensin-converting enzyme. A segmental mosaic isozyme. Kumar RS, et al. **J Biol Chem** 1989 Oct 5;264(28):16754–8

Maintenance of foreign gene expression and independent chromosome fragments in adult transgenic rainbow trout and their offspring. Disney JE, et al. **J Exp Zool** 1988 Dec; 248(3):335–44

Mosaic trisomy 9 detected by amniocentesis. Freud M, et al. **J Genet Hum** 1989 Jan;37(1):87–9

Somatic mosaicism for DNA repair capacity in fibroblasts derived from a group A xeroderma pigmentosum patient. Chang HR, et al. **J Invest Dermatol** 1989 Oct;93(4):460–5

An unusual case of mosaic Down's syndrome involving two different Robertsonian translocations. Clarke MJ, et al. **J Med Genet** 1989 Mar;26(3):198–201 (12 ref.)

Hypomelanosis of Ito: a manifestation of mosaicism or chimerism. Donnai D, et al. **J Med Genet** 1988 Dec; 25(12):809–18

Gastrointestinal abnormalities in the syndrome of mosaic trisomy 9. Levy I, et al. **J Med Genet** 1989 Apr;26(4):280–1

Prenatal diagnosis of mosaicism for del(18)(q12.2q21.1) and a normal cell line. Wilson MG, et al. **J Med Genet** 1988 Sep;25(9):635–6

Observations on mosaic parents of mongol propositi. Richards BW. **J Ment Defic Res** 1970 Dec;14(4):342–6

Mosaic Drosophila wings reveal regional heterogeneity in the guidance of ectopic axons. Blair SS, et al. **J Neurobiol** 1989 Mar;20(2):55–68

Mosaic analysis in the nematode Caenorhabditis elegans [published erratum appears in J Neurogenet 1989 May;5(2):159] Herman RK. **J Neurogenet** 1989 Jan; 5(1):1–24 (65 ref.)

Hypomelanosis of Ito: spectrum of the disease. Glover MT, et al. **J Pediatr** 1989 Jul;115(1):75–80

A case of mosaic Down's syndrome concomitant with ganglioneuroma. Hosoi H, et al. **J Pediatr Surg** 1989 Feb; 24(2):210–1

Molecular hypotheses for position-effect variegation: anti-sense transcription and promoter occlusion. Frankham R. **J Theor Biol** 1988 Nov 8;135(1):85–107

47,XXY/48,XXY,+21 chromosomal mosaicism presenting as hypospadias with scrotal transposition. Yamaguchi T, et al. **J Urol** 1989 Sep;142(3):797–8

Pallister–Killian syndrome: cytogenetic and biochemical studies. Narahara K, et al. **Jinrui Idengaku Zasshi** 1988 Sep; 33(3):339–47

Prenatally diagnosed 45,X/46,XY and normal phenotype [letter] Chang HJ, et al. **Lancet** 1989 Apr 29;1(8644):961–2

Mosaicism and sporadic haemophilia: implications for carrier determination [letter] Gitschier J, et al. **Lancet** 1989 Feb 4;1(8632):273–4

Presenile dementia associated with mosaic trisomy 21 in a patient with a Down syndrome child [letter] Hardy J, et al. **Lancet** 1989 Sep 23;2(8665):743

Presenile dementia associated with mosaic trisomy 21 in a patient with a Down syndrome child [letter] Rowe IF, et al. **Lancet** 1989 Jul 22;2(8656):229

Chromosome analyses from urinary sediment: postnatal confirmation of a prenatally diagnosed trisomy 20 mosaicism [letter] Miny P, et al. **N Engl J Med** 1989 Mar 23;320(12):809

Eye color pigment granules in Drosophila mauritiana: mosaics produced by excision of a transposable element. Stark WS, et al. **Pigment Cell Res** 1989 Mar–Apr;2(2):86–92

Prenatal diagnosis of a mosaic 46,XY/47,X,i(Xq)Y. Alliet J, et al. **Prenat Diagn** 1989 Jan;9(1):61–5

Prenatal diagnosis, fetal pathology, and cytogenetic analysis of mosaic trisomy 14. Cheung SW, et al. **Prenat Diagn** 1988 Nov;8(9):677–82

Mosaicism of 46,XX/47,XX,+9/47,XX,+?mar in the same amniotic fluid with apparent loss of one cell line after delivery. Herens C, et al. **Prenat Diagn** 1989 May;9(5):373–5

Maternal sex chromosome mosaicism diagnosed by amniocentesis and percutaneous umbilical cord sampling. Hunter AG, et al. **Prenat Diagn** 1988 Nov;8(9):673–5

Prenatal diagnosis of 45,X/46,XX mosaicism in the fetus. Should the pregnancy be terminated? Kulkarni R, et al. **Prenat Diagn** 1989 Jun;9(6):439–41

The dilemma of chromosomal mosaicism in chorionic villus sampling—'direct' versus long-term cultures. Nisani R, et al. **Prenat Diagn** 1989 Apr;9(4):223–6

Trisomy 20 mosaicism confirmed in a phenotypically normal liveborn. Park JP, et al. **Prenat Diagn** 1989 Jul;9(7):501–4

Prenatal diagnosis of a case of 46,XY,18p–/46,XY,18p+ mosaicism. Stephen GS, et al. **Prenat Diagn** 1989 Jan; 9(1):57–60

Trisomy 12 mosaicism in amniocytes and dysmorphic child despite normal chromosomes in fetal blood sample. von Koskull H, et al. **Prenat Diagn** 1989 Jun;9(6):433–7

High frequency of mosaic mutants produced by N-ethyl-N-nitrosourea exposure of mouse zygotes. Russell LB, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9167–70

Tissue specific trisomy—the significance of confined placental mosaicism. Kalousek DK. **Prog Clin Biol Res** 1989;311:153–63

A methylation mosaic model for mammalian genome imprinting. Sapienza C, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:145–57 (35 ref.)

What do chimaeras tell us about cell lineages in the mammalian CNS? Jennings CG. **Trends Neurosci** 1988 Feb; 11(2):46–50 (15 ref.)

[X maternal mosaicism and genetic counseling] Nivelon-Chevallier A, et al. **J Genet Hum** 1988 Aug; 36(4):331–6 (Eng. Abstr.) **(Fre)**

[A sex chromosome mosaic in male pseudohermaphroditism in a horse] Herzog A, et al. **Tierarztl Prax** 1989;17(2):171–5 (Eng. Abstr.) **(Ger)**

[Chromosomal mosaicism after diagnostic chorionic villi biopsy. Subsequent study of the placenta] Seidl E, et al. **Z Geburtshilfe Perinatol** 1988 Nov–Dec;192(6):253–8 (Eng. Abstr.) **(Ger)**

[Trisomy 8 mosaicism syndrome] Hummel P, et al. **Z Kinder Jugenpsychiatr** 1988 Dec;16(4):217–9 (Eng. Abstr.) **(Ger)**

[Dysgerminoma and gonadoblastoma in a phenotypic female with 45, X/47, XYY mosaicism] Tanaka S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):769–72 **(Jpn)**

[A case of diploid/tetraploid mosaicism] Watanabe M, et al. **No To Hattatsu** 1988;20(5):413–7 (Eng. Abstr.) **(Jpn)**

[Penta-X syndrome. Report of a case with 47,XXX/48,XXXX/49,XXXXX mosaicism] Gómez-Valencia L, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):417–21 (19 ref.) (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Comparative analysis of the "Meller-5" and somatic mosaicism methods with relation to the activity of standard mutagens] Belova LL, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):84–7 (Eng. Abstr.) **(Rus)**

MOSQUITO CONTROL

see related
INSECTICIDE RESISTANCE
PEST CONTROL, BIOLOGICAL

Trial of deltamethrin impregnated bed nets for the control of malaria transmitted by Anopheles sinensis and Anopheles anthropophagus. Li ZZ, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):356–9

Field tests of Bacillus thuringiensis var. israelensis against Culex mosquito larvae in Dhaka City. Ahmed TU, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):58–66

Issue dedicated to Thomas D. Mulhern.

J Am Mosq Control Assoc 1985 Dec;1(4):409–554

Field experiments on persistence of Culicinomyces clavisporus. Allen GR, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):368–71

Cholinesterase depression in California municipal and mosquito abatement district pesticide applicators. Ames RG, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):539–41

Evaluation of a sustained release formulation of Bacillus thuringiensis (H-14) for control of woodland Culex mosquitoes. Apperson CS, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):376–8

The perspective of Aedes albopictus from the administrative viewpoint. Bartnett RE. **J Am Mosq Control Assoc** 1986 Dec;2(4):418–9

Efficacy of fenoxycarb (Pictyl) against Psorophora columbiae in Arkansas ricefields. Bassi DG, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):616–8

Polycyclic aromatic compounds as phototoxic mosquito larvicides. Borovsky D, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):246–50

An inexpensive multiple boot dryer. Burt T, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):190–1

Mosquito production in a rotationally managed impoundment compared to other management techniques. Carlson DB, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):146–51

Effects of aerial thermal fog applications of fenthion on caged pink shrimp, mysids and sheepshead minnows. Clark JR, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):466–72

The residual effect of temephos (Abate 4-E) on nontarget communities. Fortin C, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):282–8

Evaluating ultra-low volume ground applications of malathion against Aedes aegypti using landing counts in Puerto Rico, 1980–84. Fox I, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):163–7

The bottom line. Fultz TO Jr. **J Am Mosq Control Assoc** 1986 Dec;2(4):413–5

Field trials of Tolypocladium cylindrosporum against larvae of Aedes polynesiensis breeding in crab holes in Fiji. Gardner JM, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):292–5

Effect of nutrient concentration in culturing three isolates of the mosquito fungal pathogen, Lagenidium giganteum (Oomycetes: Lagenidiales), on sunflower seed extract. Guzman DR, et al. **J Am Mosq Control Assoc** 1986 Jun; 2(2):196–200

Effects of sublethal exposure to Bacillus thuringiensis var. israelensis on larval development and adult size in Aedes aegypti. Hare SG, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):325–8

Efficacy of cypermethrin for the control of mosquito larvae and pupae, and impact on non-target organisms, including fish. Helson BV, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):269–75

A simple, yet efficient aircraft chemical loading system. Hudgins WE, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):359–61

The public's view of mosquito problems in an organized control district. John KH, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):1–7

Ground and aerial application of the sexual and asexual stages of Lagenidium giganteum (Oomycetes: Lagenidiales) for mosquito control. Kerwin JL, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):182–9

Mosquito host range and field activity of Bacillus sphaericus isolate 2297 (serotype 25). Lacey LA, et al. **J Am Mosq Control Assoc** 1988 Mar;4(1):51–6

Beecomist-applied Bacillus sphaericus for the control of riceland mosquitoes. Lacey LA, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):548–51

Host range and selected factors influencing the mosquito larvicidal activity of the PG-14 isolate of Bacillus thuringiensis var. morrisoni. Lacey LA, et al. **J Am Mosq Control Assoc** 1988 Mar;4(1):39–43

Attraction of Aedes triseriatus to carbon dioxide. Landry SV, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):355–7

Effect of water quality on the efficacy of water-base suspensions of Arosurf MSF against larvae of Aedes taeniorhynchus: bioassay evaluations. Levy R, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):638–41

Laboratory evaluations of formulations of Arosurf MSF and Bacillus sphaericus against larvae and pupae of Culex quinquefasciatus. Levy R, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):233–6

Studies on potential biological control agents of immature mosquitoes in sewage wastewater in southern California. Mian LS, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):329–35

Impact of fenoxycarb, a carbamate insect growth regulator, on some aquatic invertebrates abundant in mosquito breeding habitats. Miura T, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):476–80

Significant associations between mosquito control service requests and mosquito populations. Morris CD, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):36–41

Efficacy of Bacillus sphaericus 2362 formulations against floodwater mosquitoes. Mulla MS, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):172–4

Evaluation of new insect growth regulators against mosquitoes with notes on nontarget organisms. Mulla MS, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):314–20

Method for determining settling rates of Bacillus thuringiensis serotype H-14 formulations. Mullen GR, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):132–7

A laboratory study of cyromazine on Aedes aegypti and Culex quinquefasciatus and its activity on selected predators of mosquito larvae. Nelson FR, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):296–9

On assessing the benefits of public mosquito control practices. Ofiara DD, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):280–8

Laboratory evaluation of formulations of Bacillus thuringiensis var. israelensis combined with methoprene or a monomolecular surface film against Anopheles albimanus and An. stephensi. Perich MJ, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):198–9

Efficacy of Arosurf MSF and formulations of Bacillus thuringiensis var. israelensis against Anopheles albimanus: laboratory bioassay. Perich MJ, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):485–8

Aerial adulticiding for the suppression of Culex tarsalis in Kern County, California, using low volume propoxur: 2. Impact on natural populations in foothill and valley habitats. Reisen WK, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):154–63

Field trial of the insect growth regulator, Dimilin, for control of Anopheles pharoensis in Gezira, Sudan. el Safi SH, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):374–5

Swath width determination for Beecomist-applied Bacillus thuringiensis (H-14) against Anopheles quadrimaculatus larvae in rice fields. Sandoski CA, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):461–8

Recycling suitability of wash waters from mosquito abatement vehicles and equipment into spray diluent. Schaefer CH, et al. **J Am Mosq Control Assoc** 1988 Mar; 4(1):1–3

An educational campaign for mosquito control in Lexington, Massachusetts. Smith GA Jr. **J Am Mosq Control Assoc** 1986 Mar;2(1):97–8

Laboratory and field studies with 32P labeled Toxorhynchites rutilus rutilus. Smittle BJ, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):474–7

Mosquitoes and the quality of life. Sutherland DJ. **J Am Mosq Control Assoc** 1987 Sep;3(3):357–9

Toxicity in carcasses of Bacillus thuringiensis var. israelensis-killed Aedes aegypti larvae against scavenging larvae: implications to bioassay. Zaritsky A, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):555–9

Observations on feeding potential of some indigenous fishes on mosquito larvae in Nilgiri Hills, Tamil Nadu. Sharma SK, et al. **J Commun Dis** 1987 Dec;19(4):401–4

Study on the role of human behaviour on environmental modification leading to mansonioides control. Sunny PJ, et al. **J Commun Dis** 1988 Jun;20(2):127–30

Efficacy, nontarget effects, and chemical persistence of S-31183, a promising mosquito (Diptera: Culicidae) control agent. Schaefer CH, et al. **J Econ Entomol** 1988 Dec; 81(6):1648–55

Suppression of transmission of malaria through source reduction: antianopheline measures applied in Israel, the United States, and Italy. Kitron U, et al. **Rev Infect Dis** 1989 May–Jun;11(3):391–406 (120 ref.)

[Combined methods of controlling medically significant arthropods] Alekseev AN, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):3–8 **(Rus)**

[Mineral fertilizers as regulators of the Culicidae population. I. Effect of nitrophos on Aedes larvae] Fedorova VG. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):32–4 (Eng. Abstr.) **(Rus)**

[Age-related changes in the sensitivity of mosquito species to DDT] Gracheva GV, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):30–1 (Eng. Abstr.) **(Rus)**

[A method of accounting for blood-sucking mosquitos with the use of a dark bell and removable sack] Masalkina TM, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):27–30 (Eng. Abstr.) **(Rus)**

[Ineffectiveness of bacterial insecticides against egg laying by female mosquitoes] Voltsik AA, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):81–3 (Eng. Abstr.) **(Rus)**

ECONOMICS

An economic assessment of the benefits of mosquito abatement in an organized mosquito control district. John KH, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):8–14

The use of present value criterion applications in making mosquito control decisions. Ofiara DD, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):284–94

Methods for evaluation of costs associated with permanent and temporary control methods for salt marsh mosquito abatement. Shisler JK, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):164–8

HISTORY

New Jersey mechanical trap for mosquito surveys. 1942 [classical article] Mulhern TD. **J Am Mosq Control Assoc** 1985 Dec;1(4):411–8

INSTRUMENTATION

A remotely piloted vehicle (RPV) for ULV experimentation. Benzon GL, et al. **J Am Mosq Control Assoc** 1986 Mar; 2(1):86–8

A new method for applying Arosurf MSF (monomolecular

surface film formulations). Burgess JH, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):245–7

Evaluation of equipment modifications and dosage rates of ground ULV applications of naled against Aedes taeniorhynchus in a Florida citrus grove [published erratum appears in J Am Mosq Control Assoc 1988 Dec;4(4):568] Curtis GA, et al. **J Am Mosq Control Assoc** 1988 Sep; 4(3):345–50

Beecomist Servoflo variable flow pumping system: a preliminary report. Dobson N. **J Am Mosq Control Assoc** 1985 Jun;1(2):236–8

An injection method for spraying biological control agents and a monomolecular surface film for control of immature mosquitoes. Hertlein B, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):255–7

Digital spray mileage recorder. Holub RE. **J Am Mosq Control Assoc** 1987 Sep;3(3):508–11

The runnelling method of habitat modification: an environment-focused tool for salt marsh mosquito management. Hulsman K, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):226–34

A revised version of the CDC Gravid Mosquito Trap. Reiter P. **J Am Mosq Control Assoc** 1987 Jun;3(2):325–7

Aerial adulticiding for the suppression of Culex tarsalis in Kern County, California, using low-volume propoxur: 1. Selection and evaluation of the application system. Schaefer CH, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):148–53

New Jersey light trap modification to extend bulb life. West HW, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):378–9

Protecting truck beds against rust and chemicals. Zack R. **J Am Mosq Control Assoc** 1987 Sep;3(3):515

METHODS

Pyrethroid-impregnated bed nets in the malaria control strategy at community level. Robert V, et al. **Acta Trop (Basel)** 1989 Jul;46(4):267–8

The value of spraying cattlesheds in a control programme. Ansari MA, et al. **Indian J Malariol** 1988 Jun;25(1):17–22

Evaluation of integrated vector control measures on filariasis transmission in Pondicherry. Rajagopalan PK, et al. **Indian J Med Res** 1988 May;87:434–9

Susceptibility of some Anopheles mosquitoes to DDT and dieldrin in Tezpur (Assam). Das NG, et al. **Indian J Public Health** 1987 Oct–Dec;31(4):221–4

Strategies for the emergency control of arboviral epidemics in New Orleans. Andis MD, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):125–30

Analysis of mosquito control agency public education programs in the United States. Beams BF. **J Am Mosq Control Assoc** 1985 Jun;1(2):212–9

Increased toxicity of malathion diluted with heavy aromatic naphtha on adult Aedes taeniorhynchus. Bunner BL, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):87–9

The effects of two different water management regimes on flooding and mosquito production in a salt marsh impoundment. Carlson DB, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):203–11

Bio-environmental control of malaria in an industrial complex at Hardwar (U.P.), India. Dua VK, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):426–30

Effectiveness of alternative larviciding and adulticiding methods to reduce Culex populations in Marion County, Indiana. Erwin JD. **J Am Mosq Control Assoc** 1989 Mar; 5(1):98–9

Computer simulation of management strategies for Psorophora columbiae in the rice agroecosystem. Focks DA, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):399–413

Efficacy of two formulations of Bacillus thuringiensis var. israelensis (H-14) against Aedes vexans and safety to non-target macroinvertebrates. Gharib AH, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):252–5

Toxicity, localization and elimination of the phototoxin, alpha-terthienyl, in mosquito larvae. Hasspieler BM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):479–84

Open marsh water management in Massachusetts: adapting the technique to local conditions and its impact on mosquito larvae during the first season. Hruby T, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):85–8

Control of Anopheles mosquitoes by ultra-low volume applications of d-allethrin and d-phenothrin in combination with larvicidings of fenitrothion in Tanzania. Itoh T, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):563–4

Efficacy of a ULV insecticide mixture (HAN-malathion-resmethrin) against caged Culex mosquitoes. Knepper RG. **J Am Mosq Control Assoc** 1988 Dec;4(4):561–2

Control of an outbreak of mosquito-borne encephalitis along the Colorado River in 1983. Levy CE, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):100–1

Residual activity of permethrin on cattle as determined by mosquito bioassays. McLaughlin RE, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):60–3

Aedes albopictus in the United States: rapid spread of a potential disease vector. Moore CG, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):356–61 (26 ref.)

Quantification of a nuisance mosquito problem in Florida. Morris CD, et al. **J Am Mosq Control Assoc** 1988 Sep; 4(3):377–9

An evaluation of the residual lifespan of DDT in malaria control. Mpofu SM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):529–35

Laboratory and field evaluation of the IGR fenoxycarb against mosquitoes. Mulla MS, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):442–8

Evaluation of Melia volkensii extract fractions as mosquito larvicides. Mwangi RW, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):442–7

Evaluation of slow-release formulations of temephos (Abate) and Bacillus thuringiensis var. israelensis for the control of Aedes aegypti in Puerto Rico. Novak RJ, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):449–53

A comparison of alternative mosquito abatement methods using benefit-cost analysis. Ofiara DD, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):522–8

A comparison of the mortality of caged adult mosquitoes to the size, number and volume of ULV spray droplets sampled in an open and a vegetated area. Rathburn CB Jr, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):173–5

Insecticide formulations—types and uses: a review. Rathburn CB Jr. **J Am Mosq Control Assoc** 1985 Mar;1(1):80–4 (10 ref.)

A field trial of expanded polystyrene balls for the control of Culex mosquitoes breeding in pit latrines. Reiter P. **J Am Mosq Control Assoc** 1985 Dec;1(4):519–21

Use of elevated temperatures to kill Aedes albopictus and Ae. aegypti. Smith GC, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):557–8

Control of mosquito nuisance in Britain. Snow KR. **J Am Mosq Control Assoc** 1987 Jun;3(2):271–5

Field application of Romanomermis culicivorax (Mermithidae: Nematoda) to control anopheline larvae in southern Iran. Zaim M, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):351–5

Gamma irradiation effect on oogenesis in Culex quinquefasciatus Say exposed as pupa. Dey B, et al. **J Commun Dis** 1987 Dec;19(4):304–9

Anopheles malaria vector and control measures applied in Indonesia. Kirnowardoyo S. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):713–6

A trial of bed nets (mosquito nets) as a malaria control strategy in a rural area of The Gambia, West Africa. Snow RW, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):212–5

[Control of malaria using mosquito nets impregnated with pyrethroids in Burkina Faso] Carnevale P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(5):832–46 (Eng. Abstr.) (Fre)

[Current situation of the Aedes aegypti mosquito in the metropolitan area of Panama city] Dutary BE, et al. **Rev Med Panama** 1989 May;14(2):67–78 (Eng. Abstr.) (Spa)

TRENDS

Aedes aegypti and Aedes aegypti-borne disease control in the 1990s: top down or bottom up. Charles Franklin Craig Lecture. Gubler DJ. **Am J Trop Med Hyg** 1989 Jun; 40(6):571–8

Mosquito abatement in a changing world. Horsfall WR. **J Am Mosq Control Assoc** 1985 Jun;1(2):135–8

Mosquitoes, medicine and memories. McIver SB. **J Am Mosq Control Assoc** 1988 Sep;4(3):237–9

The control of malaria vectors in the context of the Health for All by the Year 2000 Global Strategy. Slooff R. **J Am Mosq Control Assoc** 1987 Dec;3(4):551–5

Malaria control in Iran—present and future. Zaim M. **J Am Mosq Control Assoc** 1987 Sep;3(3):392–6

MOSQUITO FISH see **CYPRINODONTIFORMES**

MOSQUITOES

Heightened cutaneous reactions to mosquito bites in patients with acquired immunodeficiency syndrome receiving zidovudine. Diven DG, et al. **Arch Intern Med** 1988 Oct; 148(10):2296

The effect of tolypin in Tolypocladium niveum crude extract against mosquito and blackfly larvae in the laboratory. Matha V, et al. **Folia Parasitol (Praha)** 1988;35(4):379–81

Giant gourami (Osphronemus goramy: Anabantoidei) as a potential agent for control of weeds, the breeding source for the vectors of Brugia malayi. Jayasree M, et al. **Indian J Med Res** 1989 Mar;89:110–3

Mosquitoes: how to be the perfect host. Klenerman P. **Int J Dermatol** 1989 Jul–Aug;28(6):370–2

Activity of an avermectin insecticide, Abamectin (MK-936), against mosquitoes and chironomid midges in the laboratory. Ali A, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):384–6

Laboratory toxicity of a new benzoylphenylurea insect growth regulator (UC-84572) against mosquitoes and chironomid midges. Ali A, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):309–11

Mortality and survival patterns for the immature stages of Psorophora columbiae. Andis MD, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):357–62

Suppression of larval Aedes aegypti populations in household water storage containers in Jakarta, Indonesia, through releases of first-instar Toxorhynchites splendens larvae. Annis B, et al. **J Am Mosq Control Assoc** 1989 Jun; 5(2):235–8

Efficacy of fenoxycarb (Pictyl) against Psorophora columbiae in Arkansas ricefields. Bassi DG, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):616–8

Efficacy of Duplex and Vectobac against Psorophora columbiae and Anopheles quadrimaculatus larvae in Arkansas ricefields. Bassi DG, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):264–6

Failure of mosquitoes to colonize teasel axils in Illinois. Baumgartner DL. **J Am Mosq Control Assoc** 1986 Sep; 2(3):371–3

Suburban accumulations of discarded tires in northeastern Illinois and their associated mosquitoes. Baumgartner DL. **J Am Mosq Control Assoc** 1988 Dec;4(4):500–8

Vector potential of culicine mosquitoes in Faiyum Governorate, Egypt. Beier JC, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):164–7

An electrically heated membrane blood-feeding device for mosquito colony maintenance. Benzon GL, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):322–4

Collection of Psorophora howardii in Scott County, Iowa. Berry WJ, et al. **J Am Mosq Control Assoc** 1986 Dec; 2(4):563

Selected literature references to mosquitoes and mosquito-borne diseases. Part 1. Bickley WE. **J Am Mosq Control Assoc** 1987 Mar;3(1):116–23

Selected literature references to mosquitoes and mosquito-borne diseases. Part 2. Bickley WE. **J Am Mosq Control Assoc** 1987 Jun;3(2):345–53

The measurement of adult mosquito population changes—some considerations. Bidlingmayer WL. **J Am Mosq Control Assoc** 1985 Sep;1(3):328–48 (78 ref.)

The distribution of female mosquitoes about a flight barrier. Bidlingmayer WL, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):369–77

A telescoping collection cup changer for insect traps. Bidlingmayer WL, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):33–7

An efficient method for transferring adult mosquitoes during field tests. Boobar LR, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):533–5

Oral transmission of eastern equine encephalomyelitis virus by a northern Indiana strain of Coquillettidia perturbans. Boromisa RD, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):102–4

Polycyclic aromatic compounds as phototoxic mosquito larvicides. Borovsky D, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):246–50

Use of an exterior curtain-net to evaluate insecticide/mosquito behavior in houses. Bown DN, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):99–101

Insecticide resistance in mosquitoes: a pragmatic review. Brown AW. **J Am Mosq Control Assoc** 1986 Jun; 2(2):123–40 (83 ref.)

Changes in local mosquito fauna following beaver (Castor canadensis) activity. Butts WL. **J Am Mosq Control Assoc** 1986 Sep;2(3):300–4

Production and maintenance of large numbers of Dugesia tigrina (Turbellaria: Tricladida) for the control of mosquitoes in the field. Callahan JL, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):10–4

Habitat characteristics of Coquillettidia perturbans in central Florida. Callahan JL, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):176–80

Distribution of mosquitoes in different wastewater stages of secondarily treated domestic effluent and untreated citrus washwater. Carlson DB, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):516–21

Mosquito production and hydrological capacity of southeast Florida impoundments used for wastewater retention. Carlson DB, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):74–83

Backyard mosquito larval habitat availability and use as influenced by census tract determined resident income levels. Chambers DM, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):539–44

Laboratory colonization and life cycle of Coquillettidia crassipes in Malaysia. Chiang GL, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):545–7

Observations on the effect of cyromazine on inhibition of larval mosquito development in diluted wastewater. Cohen J. **J Am Mosq Control Assoc** 1986 Sep;2(3):367–8

Importation of Aedes albopictus and other exotic mosquito species into the United States in used tires from Asia. Craven RB, et al. **J Am Mosq Control Assoc** 1988 Jun; 4(2):138–42

Habitat selection strategies of mosquitoes inhabiting citrus irrigation furrows. Curtis GA. **J Am Mosq Control Assoc** 1985 Jun;1(2):169–73

A method for dispensing planaria (Dugesia dorotocephala) for mosquito control. Darby WM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):545–6

Changing patterns in mosquito-borne arboviruses. Defoliart GR, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):437–55 (157 ref.)

Mosquito surveillance employing New Jersey light traps on Indian reservations in Iowa, Nebraska and South Dakota in 1984 and 1985. Easton ER. **J Am Mosq Control Assoc** 1987 Mar;3(1):70–3

Occurrence and seasonal incidence of mosquitoes on Indian reservations in Iowa, Nebraska and South Dakota during 1983. Easton ER, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):190–5

The susceptibility of mosquitoes to insecticides in Salamanca province, Spain. Encinas Grandes A, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):168–71

Tests of ultrasonic emissions on mosquito attraction to hosts

in a flight chamber. Foster WA, et al.
J Am Mosq Control Assoc 1985 Jun;1(2):199–202
Effectiveness of deet and permethrin, alone, and in a soap formulation as skin and clothing protectants against mosquitoes in Australia. Frances SP.
J Am Mosq Control Assoc 1987 Dec;3(4):648–50
Susceptibility of three species of mosquitoes to a Pasteur Institute preparation of Bacillus sphaericus (strain 2297). Gardner JM, et al. J Am Mosq Control Assoc 1986 Jun; 2(2):237–8
Effects of weathering on fabrics treated with permethrin for protection against mosquitoes. Gupta RK, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):176–9
Effectiveness of controlled-release personal-use arthropod repellents and permethrin-impregnated clothing in the field. Gupta RK, et al. J Am Mosq Control Assoc 1987 Dec;3(4):556–60
A dredge sampler for mosquito larvae. Hatfield LD, et al.
J Am Mosq Control Assoc 1985 Sep;1(3):372–3
Efficacy of cypermethrin for the control of mosquito larvae and pupae, and impact on non-target organisms, including fish. Helson BV, et al. J Am Mosq Control Assoc 1986 Sep;2(3):269–75
Mosquito productivity of crawfish ponds and irrigation canals in Louisiana ricelands. Holck AR, et al.
J Am Mosq Control Assoc 1988 Mar;4(1):82–4
Dose-mortality responses of crawfish and mosquitoes to selected pesticides. Holck AR, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):407–11
A computer program to calculate pesticide concentrations for mosquito larval susceptibility tests. Holck AR, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):275–6
Attractant enhanced ovitraps for the surveillance of container breeding mosquitoes. Holck AR, et al.
J Am Mosq Control Assoc 1988 Mar;4(1):97–8
Mosquitoes attacking dogs in Knox County, Tennessee. Hribar LJ, et al. J Am Mosq Control Assoc 1986 Dec; 2(4):552–3
Seasonal activity of mosquitoes in an Ockelbo disease endemic area in central Sweden. Jaenson TG, et al.
J Am Mosq Control Assoc 1986 Mar;2(1):18–28
Ground and aerial application of the asexual stage of Lagenidium giganteum for control of mosquitoes associated with rice culture in the Central Valley of California. Kerwin JL, et al. J Am Mosq Control Assoc 1987 Mar; 3(1):59–64
The effects of selected rice and soybean pesticides on the eggs of Psorophora columbiae. Klass MC, et al.
J Am Mosq Control Assoc 1985 Dec;1(4):458–62
Efficacy of Bay Sir 8514, an insect growth regulator, against Psorophora columbiae and Anopheles quadrimaculatus in small plot and field trials. Kottkamp WB, et al.
J Am Mosq Control Assoc 1985 Mar;1(1):17–9
An evaluation of Gambusia affinis and Bacillus thuringiensis var. israelensis as mosquito control agents in California wild rice fields. Kramer VL, et al.
J Am Mosq Control Assoc 1988 Dec;4(4):470–8
An evaluation of the mosquitofish, Gambusia affinis, and the inland silverside, Menidia beryllina, as mosquito control agents in California wild rice fields. Kramer VL, et al.
J Am Mosq Control Assoc 1987 Dec;3(4):626–32
A blood meal analysis of engorged mosquitoes found in Rift Valley fever epizootics area in Kenya. Linthicum KJ, et al. J Am Mosq Control Assoc 1985 Mar;1(1):93–5
Five new mosquito larvicidal strains of Bacillus sphaericus from non-mosquito origins. Lysenko O, et al.
J Am Mosq Control Assoc 1985 Sep;1(3):369–71
Effects of release rates on the range of attraction of carbon dioxide to some southwestern Ontario mosquito species. McIver SB, et al. J Am Mosq Control Assoc 1989 Mar; 5(1):6–9
A more accurate method for assessment of Psorophora columbiae larvicidal tests. McLaughlin RE, et al.
J Am Mosq Control Assoc 1986 Sep;2(3):362–3
Factors affecting distribution of Bacillus thuringiensis serotype H-14 during flooding of rice fields. McLaughlin RE, et al. J Am Mosq Control Assoc 1985 Sep;1(3):381–4
Psorophora columbiae larval density in southwestern Louisiana rice fields as a function of cattle density. McLaughlin RE, et al. J Am Mosq Control Assoc 1987 Dec;3(4):633–5
The sequential sampling of Psorophora columbiae larvae in rice fields. McLaughlin RE, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):423–8
The future of mosquito-borne diseases in the world. Maramorosch K. J Am Mosq Control Assoc 1985 Dec; 1(4):419–22
The story of Bacillus thuringiensis var. israelensis (B.t.i.). Margalit J, et al. J Am Mosq Control Assoc 1985 Mar; 1(1):1–7 (35 ref.)
The potential of mosquito-indigestible phytoplankton for mosquito control. Marten GG.
J Am Mosq Control Assoc 1987 Mar;3(1):105–6
A comparison of female Culiseta melanura captured in New Jersey and CDC light traps in southeastern Massachusetts. Matsumoto BM, et al. J Am Mosq Control Assoc 1985 Mar; 1(1):90–2
Marking adult mosquitoes using an aerially applied fluorescent pigment. Meek CL, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):400–2
Portable, battery-powered aspirators for collecting adult mosquitoes. Meek CL, et al. J Am Mosq Control Assoc 1985 Mar;1(1):102–5
Swarming and mating of the univoltine Aedes mosquitoes in the laboratory [letter] Milby MM.
J Am Mosq Control Assoc 1987 Mar;3(1):90
The use of an animal-baited net trap for collecting mosquitoes during western equine encephalitis investigations in Argentina. Mitchell CJ, et al.
J Am Mosq Control Assoc 1985 Mar;1(1):43–7
Significant associations between mosquito control service requests and mosquito populations. Morris CD, et al.
J Am Mosq Control Assoc 1989 Mar;5(1):36–41
Description of a baited trap for sampling mosquitoes. Mpofu SM, et al. J Am Mosq Control Assoc 1986 Sep;2(3):363–5
Efficacy and field evaluation of Bacillus thuringiensis (H-14) and B. sphaericus against floodwater mosquitoes in California. Mulla MS, et al. J Am Mosq Control Assoc 1985 Sep;1(3):310–5
Evaluation of new insect growth regulators against mosquitoes with notes on nontarget organisms. Mulla MS, et al. J Am Mosq Control Assoc 1986 Sep;2(3):314–20
Toxorhynchites rutilus septentrionalis feeding on tree sap. Nasci RS. J Am Mosq Control Assoc 1986 Dec;2(4):559
A self-marking device for emergent adult mosquitoes. Niebylski ML, et al. J Am Mosq Control Assoc 1989 Mar; 5(1):86–90
Presumed Dirofilaria immitis infections from field-collected mosquitoes in North Carolina. Parker BM.
J Am Mosq Control Assoc 1986 Jun;2(2):231–33
An automatic carbon dioxide delivery system for mosquito light trap surveys. Parker M, et al.
J Am Mosq Control Assoc 1986 Jun;2(2):236–7
Effects of sprinkle irrigation on the occurrence and abundance of Psorophora columbiae eggs in ricelands. Rankin SE, et al. J Am Mosq Control Assoc 1985 Dec; 1(4):454–7
Studies on the seasonality of Culiseta inornata in Kern County, California. Reisen WK, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):183–95
The used tire trade: a mechanism for the worldwide dispersal of container breeding mosquitoes. Reiter P, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):494–501
Oviposition of Toxorhynchites theobaldi in different types of artificial containers in Mexico. Reyes-Villaneuva F, et al. J Am Mosq Control Assoc 1987 Dec;3(4):651–4
Evaluation of cyfluthrin as a ULV cold aerosol against caged mosquitoes. Roberts RH. J Am Mosq Control Assoc 1985 Dec;1(4):474–6
Mathematical models of the effectiveness and persistence of mosquito repellents. Rutledge LC, et al.
J Am Mosq Control Assoc 1985 Mar;1(1):56–62
Field bioassays of permethrin-treated uniforms and a new extended duration repellent against mosquitoes in Pakistan. Sholdt LL, et al. J Am Mosq Control Assoc 1988 Sep; 4(3):233–6
Density estimation and population growth of mosquitofish (Gambusia affinis) in rice fields. Stewart RJ, et al.
J Am Mosq Control Assoc 1985 Mar;1(1):8–13
Hybridization of Aedes (protomacleaya) zoosophus with Ae. (Pro.) triseriatus group species: hybrid morphology. Taylor DB. J Am Mosq Control Assoc 1988 Mar;4(1):23–8
Vertical distribution of ovipositing Toxorhynchites moctezuma in Trinidad. Tikasingh ES, et al.
J Am Mosq Control Assoc 1987 Jun;3(2):319–21
Measurement of the effect of microsporidian pathogens on mosquito larval mortality under artificial field conditions. Undeen AH, et al. J Am Mosq Control Assoc 1987 Mar; 3(1):91–3
Determination and significance of suspended protein in wastewater. Van Handel E. J Am Mosq Control Assoc 1986 Jun;2(2):146–9
Efficacy of sustained-release formulations of Bacillus thuringiensis var. Israelensis and methoprene for control of Coquillettidia perturbans in Indiana. Walker ED.
J Am Mosq Control Assoc 1987 Mar;3(1):97–9
Development of a floating bioassay container for mosquito larvae. Walker TW, et al. J Am Mosq Control Assoc 1985 Sep;1(3):386–8
A small habitat, larval mosquito sampler. Waters BT, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):514
Activities of four insect growth regulator formulations of fenoxycarb against Psorophora columbiae larvae. Weathersbee AA 3d, et al. J Am Mosq Control Assoc 1988 Jun;4(2):143–5
Combination ground and aerial adulticide applications against mosquitoes in an Arkansas riceland community. Weathersbee AA 3d, et al. J Am Mosq Control Assoc 1986 Dec;2(4):456–60
Use of aerial color infrared photography as a survey technique for Psorophora columbiae oviposition habitats in Texas ricelands. Welch JB, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):147–60
Oviposition habitats of Psorophora columbiae in soybean fields of a Texas riceland agroecosystem. Welch JB, et al.
J Am Mosq Control Assoc 1987 Jun;3(2):251–8
Occurrence of Psorophora columbiae eggs in different field types comprising a Texas riceland agroecosystem. Welch JB, et al. J Am Mosq Control Assoc 1986 Mar;2(1):52–6
Additional collection records for mosquitoes of Michigan. Wilmot TR, et al. J Am Mosq Control Assoc 1987 Jun; 3(2):318
Trials with portable screen rooms modified for use as animal-baited net traps for mosquito collection. Wilton DP, et al. J Am Mosq Control Assoc 1985 Jun;1(2):223–6
Effectiveness of soap formulations containing deet and permethrin as personal protection against outdoor mosquitoes in Malaysia. Yap HH.
J Am Mosq Control Assoc 1986 Mar;2(1):63–7
The distribution and larval habitat characteristics of Iranian Culicinae. Zaim M. J Am Mosq Control Assoc 1987 Dec; 3(4):568–73
Human ecology related to urban mosquito-borne diseases in countries of South East Asia region. Bang YH, et al.
J Commun Dis 1988 Mar;20(1):1–17 (28 ref.)
Observations on feeding potential of some indigenous fishes on mosquito larvae in Nilgiri Hills, Tamil Nadu. Sharma SK, et al. J Commun Dis 1987 Dec;19(4):401–4
A case of mosquito hypersensitivity showing abnormality of peripheral monocyte function. Sugihara K, et al.
J Dermatol 1989 Apr;16(2):142–5
Culicidae (Diptera) mortality resulting from insecticide aerosols compared with mortality from droplets on sentinel cages. Bunner BL, et al. J Med Entomol 1989 May; 26(3):222–5
What about mosquitoes and saliva? Or, is the human immunodeficiency virus transmitted in other ways? Istre GR. J Okla State Med Assoc 1988 Jul;81(7):399–400
Nuclear magnetic resonance spectra and mosquito repellent properties of some oxazolidine derivatives of 5-methyl-4-hexenal. Taylor WG, et al. J Pharm Sci 1989 Feb;78(2):109–13
The acquired immunodeficiency syndrome and mosquitoes [letter] Yaxley RP. Med J Aust 1989 Jun 5;150(11):665–6
Specificity of action on mosquito larvae of Bacillus thuringiensis israelensis toxins encoded by two different genes. Delécluse A, et al. Mol Gen Genet 1988 Sep; 214(1):42–7
Permethrin-treated bed nets (mosquito nets) prevent malaria in Gambian children. Snow RW, et al.
Trans R Soc Trop Med Hyg 1988;82(6):838–42
[An autopsy case of malignant histiocytosis-like disorder following hypersensitive reaction to mosquito bite] Matsumoto S, et al. Sangyo Ika Daigaku Zasshi 1989 Mar 1;11(1):69–75 (Eng. Abstr.) (Jpn)
[Catalog of the entomologic collections of the Faculty of Public Health of the University of São Paulo—(2d Serie II)—Culicidae] Forattini OP, et al. Rev Saude Publica 1988 Dec;22(6):519–47 (Eng. Abstr.) (Por)
[Vectors of malaria in rice paddies] Erlikh VD.
Med Parazitol (Mosk) 1988 Jul-Aug;(4):16–9 (Eng. Abstr.) (Rus)
[Evaluation of the action of ivermectin on blood-sucking mosquitoes] Iakubovich VIa, et al.
Med Parazitol (Mosk) 1989 May-Jun;(3):60–4 (Eng. Abstr.) (Rus)
[The effect of ground water table levels on mosquitoes from the Hungry steppe in the Uzbeck SSR] Krasnonos LN, et al. Med Parazitol (Mosk) 1988 Nov-Dec;(6):37–43 (Eng. Abstr.) (Rus)
[The number of blood-sucking mosquito larvae in technogenous bodies of water in the Taimyr forest tundra] Kupriiashkin AG. Med Parazitol (Mosk) 1988 Nov-Dec; (6):74–6 (Eng. Abstr.) (Rus)
[Mass breeding of Culex pipiens molestus Fors. mosquitos and their attack on humans in houses in several towns in the Krasnoiarsk region and Chita district] Markovich NIa, et al. Med Parazitol (Mosk) 1988 Nov-Dec;(6):82–5 (Eng. Abstr.) (Rus)
[New data on the fauna of blood-sucking Culicidae mosquitoes in Ziiama forest (Forest Guinea)] Murzin SV. Med Parazitol (Mosk) 1989 Jan-Feb;(1):14–6 (Eng. Abstr.) (Rus)
[The level and nature of insecticide resistance (DDT and malathion) in laboratory-strain mosquitoes] Sergieva VP, et al. Med Parazitol (Mosk) 1989 May-Jun;(3):64–8 (Eng. Abstr.) (Rus)

ANALYSIS

Isolation and characterization of chromosomal proteins from the mosquito Anopheles albimanus Weidemann. Miller S.
Int J Biochem 1988;20(11):1247–53
Rapid determination of glycogen and sugars in mosquitoes. Van Handel E. J Am Mosq Control Assoc 1985 Sep; 1(3):299–301
Rapid determination of total lipids in mosquitoes. Van Handel E. J Am Mosq Control Assoc 1985 Sep;1(3):302–4
Gut content analysis of mosquito larvae (Diptera: Culicidae) using DAPI stain and epifluorescence microscopy. Walker ED, et al. J Med Entomol 1988 Nov;25(6):551–4

ANATOMY & HISTOLOGY

Correlation between wing length and protein content of mosquitoes. Van Handel E, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):180–2

CLASSIFICATION

New records of mosquito species (Diptera: Culicidae) in Romania. Nicolescu G, et al.
Arch Roum Pathol Exp Microbiol 1988 Jan-Mar;47(1):43–7
Bases of mosquito systematics. Barr AR.
J Am Mosq Control Assoc 1986 Sep;2(3):261–6
A revised list of the mosquitoes of North Dakota, including new additions to the fauna. Darsie RF Jr, et al.
J Am Mosq Control Assoc 1985 Mar;1(1):76–9

Mosquitoes feeding on sheep in southeastern Wyoming. Jones CJ, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):530–2
Species composition and relative abundance of anthropophilic mosquitoes in subarctic Quebec. Lewis DJ, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):521–3
Devices for sampling and sorting immature Coquillettidia perturbans. Morris CD, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):247–50
Species composition and feeding success of mosquitoes attracted to caged dogs in Indiana. Pinger RR. **J Am Mosq Control Assoc** 1985 Jun;1(2):181–5
New mosquito records for Nepal. Pradhan SP, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):21–4

CYTOLOGY

Maintaining mosquito cell lines at high temperatures: effects on the replication of flaviviruses. Kuno G, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):193–6

DRUG EFFECTS

Toxic effect of seaweed extracts on mosquito larvae. Thangam TS, et al. **Indian J Med Res** 1988 Jul;88:35–7
Evaluation of two new insect growth regulators against mosquitoes in the laboratory. Estrada JG, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):57–60
Purification and properties of a 28-kilodalton hemolytic and mosquitocidal protein toxin of Bacillus thuringiensis subsp. darmstadiensis 73-E10-2. Drobniewski FA, et al. **J Bacteriol** 1989 Jun;171(6):3060–7
Mosquito inoculation: an alternative bioassay for toxins. Turell MJ, et al. **Toxicon** 1988;26(11):1089–94
[The effect of mineral fertilizers on mosquito larvae (Culicidae)] Fedorova VG. **Parazitologiia** 1989 May–Jun; 23(3):193–9 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Effect of Bacillus sphaericus and Bacillus thuringiensis on acid-phosphatase activity of mosquito larvae, Culex pipiens and Aedes caspius. Hussein MA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):195–203

GENETICS

Inheritance of orange pupa and phosphoglucomutase in the mosquito Armigeres subalbatus. Tadano T, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):642–3
Detection of yellow fever virus nucleic acid in infected mosquitoes by RNA:RNA in situ hybridization. Ballinger ME, et al. **Mol Cell Probes** 1988 Dec;2(4):331–8

GROWTH & DEVELOPMENT

Attachment behaviour of immatures of Mansonia annulifera (Theobald), 1901. Rajendran G, et al. **Indian J Med Res** 1989 May;89:192–7
Trial of a quantified mass rearing method for Toxorhynchites splendens. Annis B, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):368–9
Mosquito larval development in container habitats: the role of rotting Scirpus californicus. Berkelhamer RC, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):258–60
Laboratory colonization of Mansonia uniformis, Ma. indiana and Ma. bonneae in Malaysia. Chiang GL, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):186–90
Impact of new insect growth regulators and their formulations on mosquito larval development in impoundment and floodwater habitats. Mulla MS, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):15–20
Growth of three mosquitoes on two larval diets measured by protein accumulation. Van Handel E. **J Am Mosq Control Assoc** 1986 Sep;2(3):289–91
Sex difference in pupation of larval Culiseta melanura. Wallis RC. **J Am Mosq Control Assoc** 1988 Jun;4(2):192–4

IMMUNOLOGY

Human IgE and IgG antibodies to mosquito proteins detected by the immunoblot technique. Shen HD, et al. **Ann Allergy** 1989 Aug;63(2):143–6
Mosquito salivary gland antigens identified by circulating human antibodies. Penneys NS, et al. **Arch Dermatol** 1989 Feb;125(2):219–22
Brugia malayi and Brugia pahangi: inherent difference in immune activation in the mosquitoes Armigeres subalbatus and Aedes aegypti. Beerntsen BT, et al. **J Parasitol** 1989 Feb;75(1):76–81

METABOLISM

Differences between the nutritional reserves of laboratory-maintained and field-collected adult mosquitoes. Day JF, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):154–7
Toxicity, localization and elimination of the phototoxin, alpha-terthienyl, in mosquito larvae. Hasspieler BM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):479–84
Variation in binding of Bacillus sphaericus toxin and wheat germ agglutinin to larval midgut cells of six species of mosquitoes. Davidson EW. **J Invertebr Pathol** 1989 Mar; 53(2):251–9
Passage of host immunoglobulin G from blood meal into hemolymph of selected mosquito species (Diptera: Culicidae). Vaughan JA, et al. **J Med Entomol** 1988 Nov; 25(6):472–4
The cell biology of mosquito vitellogenesis. Raikhel AS. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:93–101

MICROBIOLOGY

Mosquito-borne diseases in Alabama. Mullen GR, et al. **Ala J Med Sci** 1988 Jul;25(3):268–73 (43 ref.)
Brus Laguna virus, a Gamboa bunyavirus from Aedeomyia squamipennis collected in Honduras. Calisher CH, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):406–8
Transovarial transmission of Gamboa virus in a tropical mosquito, Aedeomyia squamipennis. Dutary BE, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):108–13
Experimental vertical transmission of Japanese encephalitis virus by Culex tritaeniorhynchus and other mosquitoes. Rosen L, et al. **Am J Trop Med Hyg** 1989 May;40(5):548–56
Carbohydrate metabolism in the mosquito pathogen Bacillus sphaericus 2362. Russell BL, et al. **Appl Environ Microbiol** 1989 Feb;55(2):294–7
Eastern equine encephalitis in Quebec and Connecticut, 1972: introduction by infected mosquitoes on the wind? Sellers RF. **Can J Vet Res** 1989 Jan;53(1):76–9
The compatibility of methoprene with the mosquito fungus Culicinomyces clavisporus. Allen GR, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):243–5
Isolation of California encephalitis serotype from mosquitoes collected in Manitoba, Canada. Artsob H, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):257–8
Encapsulation of the mosquito fungal pathogen Lagenidium giganteum (Oomycetes:Lagenidiales) in calcium alginate. Axtell RC, et al. **J Am Mosq Control Assoc** 1987 Sep; 3(3):450–9
Recent pathogen and mosquito host records from Penang Island, Malaysia. Chapman HC, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):306–8
Absence of eastern equine encephalitis (EEE) virus in immature Coquillettidia perturbans associated with equine cases of EEE. Clark GG, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):540–2
Preliminary field trials with the entomopathogenic hyphomycete Tolypocladium cylindrosporum in central Alberta. Goettel MS. **J Am Mosq Control Assoc** 1987 Jun; 3(2):239–45
Field incidence of mosquito pathogens and parasites in central Alberta. Goettel MS. **J Am Mosq Control Assoc** 1987 Jun;3(2):231–8
Studies on bioassay of the entomopathogenic hyphomycete fungus Tolypocladium cylindrosporum in mosquitoes. Goettel MS. **J Am Mosq Control Assoc** 1987 Dec;3(4):561–7
Vector competence tests with Rift Valley fever virus and five South African species of mosquito. Jupp PG, et al. **J Am Mosq Control Assoc** 1988 Mar;4(1):4–8
Efficacy and longevity of Bacillus sphaericus 2362 formulations for control of mosquito larvae in dairy wastewater lagoons. Mulla MS, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):448–52
Comparative studies of Metarhizium anisopliae and Tolypocladium cylindrosporum as pathogens of mosquito larvae. Riba G, et al. **J Am Mosq Control Assoc** 1986 Dec; 2(4):469–73
A prospective field evaluation of an enzyme immunoassay: detection of eastern equine encephalomyelitis virus antigen in pools of Culiseta melanura. Scott TW, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):412–7
The isolation of spiroplasmas from mosquitoes in Macon County, Alabama. Shaikh AA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):289–95
A mechanical aspirator for safe transfer of arbovirus-infected mosquitoes within containment chambers. Shroyer DA. **J Am Mosq Control Assoc** 1989 Jun;5(2):269–71
Crypticola clavulifera gen. et sp. nov. and Lagenidium giganteum: oomycetes pathogenic for dipterans infesting leaf axils in an Australian rain forest. Frances SP, et al. **J Invertebr Pathol** 1989 Jul;54(1):103–11
Epizootiology of eastern equine encephalitis virus in upstate New York, USA. VII. Virus surveillance 1978–85, description of 1983 outbreak, and series conclusions. Howard JJ, et al. **J Med Entomol** 1988 Nov;25(6):501–14
Effects of triturated Culiseta melanura (Diptera: Culicidae) on recovery of eastern equine encephalomyelitis virus. Hubbard JL, et al. **J Med Entomol** 1989 Jul;26(4):380–3
[Characteristics of newly isolated Bacillus sphaericus strains that are toxic to mosquitoes] Grigorova R, et al. **Acta Microbiol Bulg** 1988;22:87–93 (Eng. Abstr.) **(Bul)**
[Entomopathogenic mushrooms of the genus Coelomomyces in Madagascar] Rodhain F. **Arch Inst Pasteur Madagascar** 1988;54(1):243–52 **(Fre)**
[Culicidae as vectors of pathogenic agents] Ciolpan O. **Rev Ig [Bacteriol]** 1988 Jul–Sep;33(3):207–24 (45 ref.) (Eng. Abstr.) **(Rum)**
[Experimental study of densovirus infection transmission in blood-sucking mosquito populations] Lebedinets NN, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):79–83 (Eng. Abstr.) **(Rus)**
[Circulation of California encephalitis complex viruses in the northwestern Russian plain] L'vov SD, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):74–7 **(Rus)**
[Mixed infections in the pathology of blood-sucking larvae pathology. 2. Entomopathogenic properties of bacterioviral complexes] Mikhnovskaia ND, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):35–40 (Eng. Abstr.) **(Rus)**
[Effect of temperature on the infectivity of the iridovirus and densonucleosis virus of blood-sucking mosquitoes] Buchatskil LP, et al. **Vopr Virusol** 1988 Sep–Oct; 33(5):603–6 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Malaria transmission-enhancing activity in mosquitoes by mammalian host anti-sporozoite antibodies. Hollingdale MR, et al. **Exp Parasitol** 1989 Apr;68(3):365–8 (19 ref.)
Recent pathogen and mosquito host records from Penang Island, Malaysia. Chapman HC, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):306–8
Field incidence of mosquito pathogens and parasites in central Alberta. Goettel MS. **J Am Mosq Control Assoc** 1987 Jun;3(2):231–8
The use of mepacrine hydrochloride to control Vorticella on mosquito larvae. Jupp PG, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):375–6
Habitat associations of mosquito and copepod species. Nasci RS, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):593–600
Establishment and recycling of Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana ricelands. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):468–73
Relative role of different types of aquatic plants in the production of Mansonia. Chandrasekharan A, et al. **J Commun Dis** 1988 Sep;20(3):202–8
Romanomermis culicivorax: penetration of larval mosquitoes. Shamseldean MM, et al. **J Invertebr Pathol** 1989 Sep; 54(2):191–9
Haemogregarina sp. (Apicomplexa: Adeleorina) from the gecko Tarentola annularis in the Sudan: fine structure and life-cycle trials. Elwasila M. **Parasitol Res** 1989;75(6):444–8
Simulations of enhanced malaria transmission and host bias induced by modified vector blood location behaviour. Rossignol PA, et al. **Parasitology** 1988 Dec;97 (Pt 3):363–72
[Transmission of human malaria in a savanna village of South-West Burkina Faso] Robert V, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):107–21 (Eng. Abstr.) **(Fre)**
[Study of Culicidae in Firaisam-Pokontany of Ambohimanjaka in the environs of Tananarive: results of a longitudinal study, in particular on the vectorial transmission of malaria] Fontenille D, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):231–42 **(Fre)**

PHYSIOLOGY

Chemical ecology and behavioral aspects of mosquito oviposition. Bentley MD, et al. **Annu Rev Entomol** 1989; 34:401–21 (123 ref.)
Biting rhythm of the vectors of Malayan filariasis, Mansonia annulifera, M. uniformis & M. indiana in Shertallai (Kerala state), India. Kumar NP, et al. **Indian J Med Res** 1989 Jan;89:52–5
Records of man-biting mosquitoes of Tezpur (Assam)—a preliminary investigation. Das SC, et al. **Indian J Public Health** 1987 Oct–Dec;31(4):231–5
The host preferences of Culiseta inornata in southwestern Manitoba. Anderson RA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):219–21
Diurnal pattern and behavior of oviposition of Toxorhynchites theobaldi in the field. Arredondo-Bernal HC, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):25–8
Factors affecting oviposition site preference by Toxorhynchites splendens in the laboratory. Benzon GL, et al. **J Am Mosq Control Assoc** 1988 Mar;4(1):20–2
Toxorhynchites moctezuma, a potential biological control agent in Trinidad and Tobago, W. I. Chadee DD. **J Am Mosq Control Assoc** 1985 Sep;1(3):376–8
A dynamic life table model of Psorophora columbiae in the southern Louisiana rice agroecosystem with supporting hydrologic submodel. Part 1. Analysis of literature and model development. Focks DA, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):266–81 (60 ref.)
A dynamic life table model of Psorophora columbiae in the southern Louisiana rice agroecosystem with supporting hydrologic submodel. Part 2. Model validation and population dynamics. Focks DA, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):282–99
Use of an artificial bromeliad to show the importance of color value in restricting colonization of bromeliads by Aedes aegypti and Culex quinquefasciatus. Frank JH. **J Am Mosq Control Assoc** 1985 Mar;1(1):28–32
Man-mosquito contact at Kowanyama, northern Queensland, Australia. Kay BH. **J Am Mosq Control Assoc** 1985 Jun; 1(2):191–4
Mosquitoes, medicine and memories. McIver SB. **J Am Mosq Control Assoc** 1988 Sep;4(3):237–9
Quantification of a nuisance mosquito problem in Florida. Morris CD, et al. **J Am Mosq Control Assoc** 1988 Sep; 4(3):377–9
Laboratory bionomics of Tripteroides aranoides. Okazawa T, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):428–34
Effects of sound on swarming male Psorophora columbiae. Peloquin JJ, et al. **J Am Mosq Control Assoc** 1986 Dec; 2(4):507–10
Observations on male swarms of Psorophora columbiae in Texas ricelands. Peloquin JJ, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):482–8
Temporal abundance and percent insemination of newly-emerged adult female Psorophora columbiae near

the larval habitat. Robert LL Jr, et al.
J Am Mosq Control Assoc 1986 Dec;2(4):485–9
Biosystematics of larval movement of Central American mosquitoes and its use for field identification. Strickman D. **J Am Mosq Control Assoc** 1989 Jun;5(2):208–18
Timing of pupal–adult apolysis in mosquitoes. Walker ED, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):224–5
Purinergic reception by culicine mosquitoes. Galun R, et al. **J Comp Physiol [A]** 1988;163(5):665–70
Mark–recapture studies on the Culiseta (Diptera: Culicidae) vectors of eastern equine encephalitis virus. Howard JJ, et al. **J Med Entomol** 1989 May;26(3):190–9
Host–feeding patterns of mosquitoes (Diptera: Culicidae) in a rural village near Cairo, Egypt. Zimmerman JH, et al. **J Med Entomol** 1988 Sep;25(5):410–2
Maserlike nonlinear scatter from human breath, a surface–enhanced far infrared scatter effect. Callahan PS. **Med Hypotheses** 1989 Feb;28(2):99–105
The evolution of purinergic receptors involved in recognition of a blood meal by hematophagous insects. Galun R. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:5–9
Biting activity of Aedes scapularis (Rondani) and Haemagogus mosquitoes in southern Brazil (Diptera: Culicidae). Forattini OP, et al. **Rev Saude Publica** 1988 Apr;22(2):84–93
A study of dispersal, survival and gonotrophic cycle estimates of Mansonia uniformis in an open swamp ecotype. Chiang GL, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun;19(2):271–82
[Morphofunctional changes in the ovarioles of blood–sucking mosquitoes (Diptera, Culicidae) during oogenesis. I. Normal oogenesis] Lange AB, et al.
Med Parazitol (Mosk) 1989 Jan–Feb;(1):22–6 (Eng. Abstr.) **(Rus)**
[Blood–sucking mosquitoes (Diptera, Culicidae) in the northern part of Udmurtia] Mukanov SM.
Med Parazitol (Mosk) 1989 May–Jun;(3):89–91 (Eng. Abstr.) **(Rus)**
[Morphofunctional changes of the ovarioles of blood–sucking mosquitoes (Diptera, Culicidae) during oogenesis. 2. Abortive oogenesis] Sokolova MI, et al.
Med Parazitol (Mosk) 1989 May–Jun;(3):55–60 (25 ref.) (Eng. Abstr.) **(Rus)**
[Entomologic study of a possible natural focus of arbovirus] Fuentes González O, et al. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):44–50 (Eng. Abstr.) **(Spa)**

MOSSBAUER SPECTROSCOPY see **SPECTROSCOPY, MOSSBAUER**

MOTH FLIES see **PSYCHODIDAE**

MOTHER CELLS see **STEM CELLS**

MOTHER–CHILD RELATIONS

Mothering problems and child morbidity amongst "mothers with emotional disturbances". Nordström UL, et al.
Acta Obstet Gynecol Scand 1988;67(2):155–8
The interaction between the infant and the environment: the importance of mother–child contact after delivery. De Château P. **Acta Paediatr Scand Suppl** 1988;344:21–30 (19 ref.)
Mother–infant relationship in the first year of life. Lier L. **Acta Paediatr Scand Suppl** 1988;344:31–42
The impact of mother's depression on her nursing experiences and attitudes during breastfeeding. Tamminen T.
Acta Paediatr Scand Suppl 1988;344:87–94
Offspring of women with nonorganic psychosis: mother–infant interaction and fear of strangers during the first year of life. Persson–Blennow I, et al.
Acta Psychiatr Scand 1988 Sep;78(3):379–83
Offspring of women with nonorganic psychosis: antecedents of anxious attachment to the mother at one year of age. Persson–Blennow I, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):66–71
Female psychosexual development: mothers, daughters, and inner organs. Fisher SM, et al. **Adolesc Psychiatry** 1988;15:5–33
The relationship of self–esteem, maternal employment, and work–family plans to sex role orientations of late adolescents. Keith PM. **Adolescence** 1988 Winter;23(92):959–66
Distance from mother and father among alcoholics. Brown RH, et al. **Adv Alcohol Subst Abuse** 1989;8(1):75–91
Mother–infant interactive behaviors: impact of maternal deafness. Rea CA, et al. **Am Ann Deaf** 1988 Dec;133(5):317–24
Maternal language environment of children with mental retardation. Davis H, et al. **Am J Ment Retard** 1988 Sep;93(2):144–53
Family resources and stress associated with having a mentally retarded child. Minnes PM. **Am J Ment Retard** 1988 Sep;93(2):184–92
Mothers' directiveness in their interactions with their children with and without Down syndrome. Tannock R. **Am J Ment Retard** 1988 Sep;93(2):154–65
The effects of a maternal preparation program on mother–infant pairs: a pilot study. Hamilton–Dodd C, et al. **Am J Occup Ther** 1989 Aug;43(8):513–21
Maternal affect and toddlers' social–emotional competence. Denham SA. **Am J Orthopsychiatry** 1989 Jul;59(3):368–76
Marital quality, depression, and inconsistent parenting: relationship with observed mother–child conflict. Stoneman Z, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):105–17
Impact of a family support program on mothers' social support and parenting stress. Telleen S, et al.
Am J Orthopsychiatry 1989 Jul;59(3):410–9
Severity of maternal depression and three types of mother–to–child aggression. Zuravin SJ.
Am J Orthopsychiatry 1989 Jul;59(3):377–89
Psychiatric aspects of lying [letter] Aldrich CK.
Am J Psychiatry 1989 Mar;146(3):405
Observations of interactions of depressed women with their children. Gordon D, et al. **Am J Psychiatry** 1989 Jan;146(1):50–5
Infant day care. Maligned or malignant? Clarke–Stewart KA. **Am Psychol** 1989 Feb;44(2):266–73 (70 ref.)
Psychological care of survivors of a fire. Jaffa T, et al.
Arch Dis Child 1989 Aug;64(8):1187–8
Skin to skin contact for very low birthweight infants and their mothers. Whitelaw A, et al. **Arch Dis Child** 1988 Nov;63(11):1377–81
Predicting child abuse and neglect in New Zealand. Muir RC, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):255–60
Management of perinatal loss of a twin [letter] Lewis E, et al. **BMJ** 1989 Jan 21;298(6667):184
Separation of mothers and babies in prison [letter] Britten S. **Br J Hosp Med** 1988 Aug;40(2):149–50
Dementia and mental handicap: attitudes, emotional distress and caregiving. Whittick JE. **Br J Med Psychol** 1989 Jun; 62 (Pt 2):181–9
The effect of maternal psychotic illness on a child. Mander AJ, et al. **Br J Psychiatry** 1987 Dec;151:848–50
Attempted murder of a newborn: a case history. Cherland E, et al. **Can J Psychiatry** 1989 May;34(4):337–9
Teenage mothers and their children: risks and problems: a review. Hechtman L. **Can J Psychiatry** 1989 Aug; 34(6):569–75 (53 ref.)
The French connection: folie à quatre. Moss PA, et al.
Can J Psychiatry 1989 Feb;34(1):55–7
Delusional disorder in mother and daughter: case report [letter] Munro A. **Can J Psychiatry** 1988 Aug;33(6):573
The inability to name a child. Steinberg PI, et al.
Can J Psychiatry 1989 Apr;34(3):221–6
Psychiatric admission of mentally ill mothers with their infants. Stewart DE. **Can J Psychiatry** 1989 Feb;34(1):34–8
Risk factors in infant–mother attachment. Goldberg S.
Can J Psychol 1988 Jun;42(2):173–88
Adult male report of childhood sexual abuse by mothers: case descriptions, motivations and long–term consequences. Krug RS. **Child Abuse Negl** 1989;13(1):111–9
Characteristics of social interactions between mothers and their disabled infants: a review. Rogers SJ.
Child Care Health Dev 1988 Sep–Oct;14(5):301–17 (60 ref.)
Effects of formal support on mothers' adaptation to the hospital–to–home transition of high–risk infants: the benefits and costs of helping. Affleck G, et al.
Child Dev 1989 Apr;60(2):488–501
Continuity and change in intrafamilial agreement in beliefs concerning the adolescent: a follow–up study. Alessandri SM, et al. **Child Dev** 1989 Apr;60(2):335–9
Effects of craniofacial deformity in infancy on the quality of mother–infant interactions. Barden RC, et al.
Child Dev 1989 Aug;60(4):819–24
Maternal depression and motherese: temporal and intonational features. Bettes BA. **Child Dev** 1988 Aug; 59(4):1089–96
Mothers' internal models of relationships and children's behavioral and developmental status: a study of mother–child interaction. Crowell JA, et al. **Child Dev** 1988 Oct;59(5):1273–85
Maternal self–efficacy and infant attachment: integrating physiology, perceptions, and behavior. Donovan WL, et al. **Child Dev** 1989 Apr;60(2):460–72
The effect of manipulating maternal behavior during an interaction on three– and six–month–olds' affect and attention. Gusella JL, et al. **Child Dev** 1988 Aug; 59(4):1111–24
Proximate regulation by mothers: a demonstration of how differing styles affect young children's behavior. Holden GW, et al. **Child Dev** 1989 Feb;60(1):64–9
Correspondence between mothers' self–reported and observed child–rearing practices. Kochanska G, et al.
Child Dev 1989 Feb;60(1):56–63
Joint attention and infant toy exploration: effects of Down syndrome and prematurity. Landry SH, et al.
Child Dev 1989 Feb;60(1):103–18
Mother– and father–preterm infant relationship in the hospital preterm nursery. Levy–Shiff R, et al. **Child Dev** 1989 Feb; 60(1):93–102
Continuity and discontinuity in maternal sensitivity at 6, 24, and 42 months in a high–risk sample. Pianta RC, et al.
Child Dev 1989 Apr;60(2):481–7
Maternal sensitivity and patterns of infant–mother attachment. Smith PB, et al. **Child Dev** 1988 Aug; 59(4):1097–101
Infant–mother face–to–face interaction: age and gender differences in coordination and the occurrence of miscoordination. Tronick EZ, et al. **Child Dev** 1989 Feb; 60(1):85–92
Attachment behavior, attachment security, and temperament during infancy. Vaughn BE, et al. **Child Dev** 1989 Jun; 60(3):728–37
Psychopathology and economic status in mother–only and mother–father families. Swanson JW, et al.
Child Psychiatry Hum Dev 1989 Fall;20(1):15–24
Cultural variations in oral hygiene practices among infants resident in an inner city area. Williams SA, et al.
Community Dent Health 1988 Sep;5(3):265–71
Longitudinal study of dental health behaviors and other caries predictors in early childhood. Grytten J, et al.
Community Dent Oral Epidemiol 1988 Dec;16(6):356–9
Issues in the study of the quality of the elderly mother–adult daughter relationship. Noam G. **Compr Gerontol [B]** 1987 Aug;1(2):68–71 (18 ref.)
Stress in parents of children with diabetes mellitus. Hauenstein EJ, et al. **Diabetes Care** 1989 Jan;12(1):18–23
The early social environment of premature and fullterm infants. Davis DH, et al. **Early Hum Dev** 1988 Aug–Sep; 17(2–3):221–32
Responses of neonates to parents' and others' voices. Ockleford EM, et al. **Early Hum Dev** 1988 Nov;18(1):27–36
Anaesthetic induction in children: the effects of maternal presence on mood and subsequent behaviour. Hickmott KC, et al. **Eur J Anaesthesiol** 1989 Mar;6(2):145–55
Maternal–child interaction in survivors of severe malnutrition who received psychosocial stimulation.
Grantham–McGregor S, et al. **Eur J Clin Nutr** 1989 Jan; 43(1):45–52
The reliability and validity of the maternal social support index. Pascoe JM, et al. **Fam Med** 1988 Jul–Aug;20(4):271–6
Discontinuity in mother–child conversations: cleft palate child compared to normal sibling. Lynch JI, et al.
Folia Phoniatr (Basel) 1988;40(5):209–17
Prenatal, perinatal, and early childhood risk factors and drug involvement in adolescence. Brook JS, et al.
Genet Soc Gen Psychol Monogr 1989 May;115(2):221–41
Maternal handling and motor development: an intracultural study. Hopkins B, et al.
Genet Soc Gen Psychol Monogr 1988 Aug;114(3):377–408
Predicting receipt of social support: a longitudinal study of parents' reactions to their child's illness. Hobfoll SE, et al. **Health Psychol** 1989;8(1):61–77
Mothers and their innocent boys: a never ending fantasy. An exploration of the mother discourse in forensic psychiatry. Smit J. **Int J Law Psychiatry** 1988;11(3):279–87
Inconsistent parenting: is there evidence for a link with children's conduct problems? Gardner FE.
J Abnorm Child Psychol 1989 Apr;17(2):223–33
Maternal depression and child adjustment: a longitudinal analysis. Lee CM, et al. **J Abnorm Psychol** 1989 Feb; 98(1):78–85
Infants of postpartum depressed mothers: temperament and cognitive status. Whiffen VE, et al. **J Abnorm Psychol** 1989 Aug;98(3):274–9
Teen mothering. Behaviors and interventions. Panzarine S.
J Adolesc Health Care 1988 Sep;9(5):443–8 (40 ref.)
Mother–infant interactions in infantile anorexia nervosa. Chatoor I, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):535–40
Specificity of infants' response to mothers' affective behavior. Cohn JF, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):242–8
Children who witness the sexual assaults of their mothers. Pynoos RS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):567–72
Affect attunement, attachment, temperament, and zygosity: a twin study. Szajnberg NM, et al.
J Am Acad Child Adolesc Psychiatry 1989 Mar;28(2):249–53
Going beyond abuse: maladaptive patterns of interaction in abusing mother–infant pairs. Wasserman GA, et al.
J Am Acad Child Psychiatry 1983 May;22(3):245–52
Parent education project. III: Increasing affection and responsivity in developmentally handicapped mothers: component analysis, generalization, and effects on child language. Feldman MA, et al. **J Appl Behav Anal** 1989 Summer;22(2):211–22
Maternal speech to verbal and higher functioning versus nonverbal and lower functioning autistic children. Konstantareas MM, et al. **J Autism Dev Disord** 1988 Dec; 18(4):647–56
Hyperactive girls and boys: stimulant drug effects on mother–child interactions. Barkley RA.
J Child Psychol Psychiatry 1989 May;30(3):379–90
Infant day care and socioemotional development: the United States. Belsky J. **J Child Psychol Psychiatry** 1988 Jul; 29(4):397–406 (60 ref.)
Maternal adversity and recent stressful life events in anxious and depressed children. Goodyer IM, et al.
J Child Psychol Psychiatry 1988 Sep;29(5):651–67
Children who kill: a case study of matricide. Mouridsen SE, et al. **J Child Psychol Psychiatry** 1988 Jul;29(4):511–5
Maternal interaction and language development in children with and without speech–related anomalies. Wasserman GA, et al. **J Commun Disord** 1988 Aug;21(4):319–31
Behavioral correlates of maternal depressive symptomatology in conduct–disorder children. Dumas JE, et al. **J Consult Clin Psychol** 1989 Aug;57(4):516–21
Personality characteristics of the mothers of children with disruptive behavior disorders. Lahey BB, et al.
J Consult Clin Psychol 1989 Aug;57(4):512–5
Self–administered videotape therapy for families with conduct–problem children: comparison with two cost–effective treatments and a control group.

Webster-Stratton C, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):558–66

The clinical assessment of a child's social and physical environment during health visits. Casey PH, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):333–8

Effects of home-based, informal social support on child health. Dawson P, et al. **J Dev Behav Pediatr** 1989 Apr; 10(2):63–7

Chronic illness and infant-mother attachment: cystic fibrosis. Fischer-Fay A, et al. **J Dev Behav Pediatr** 1988 Oct; 9(5):266–70

Mothers' attitudes and their children's behaviors in 3-year-olds born prematurely and at term. O'Mara L, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):192–7

Psychological impact of home apnea monitoring: temporal effects, family resources, and maternal coping style. Phipps S, et al. **J Dev Behav Pediatr** 1989 Feb;10(1):7–12

Correlates of parenting on a neonatal intensive care unit: maternal characteristics and family resources. Giblin PT, et al. **J Genet Psychol** 1988 Dec;149(4):505–14

Correlates of depression according to maternal age. Reis J. **J Genet Psychol** 1988 Dec;149(4):535–45

Shared knowledge about infants among fathers and mothers. Stevens JH Jr. **J Genet Psychol** 1988 Dec;149(4):515–25

On the relationship of adult daughters to their mothers. Barnett RC. **J Geriatr Psychiatry** 1988;21(1):37–72 (13 ref.)

Nursing diagnoses in wellness childbearing settings. Stevens KA. **J Obstet Gynecol Neonatal Nurs** 1988 Sep-Oct; 17(5):329–36

Mother-child interactions involving a child with epilepsy: a comparison of immigrant and native-born Mexican Americans. Chavez JM, et al. **J Pediatr Psychol** 1988 Sep; 13(3):349–61

Method of delivery and parent-newborn interaction. Kochanevich-Wallace PM, et al. **J Pediatr Psychol** 1988 Jun;13(2):213–21

Disability parameters, chronic strain, and adaptation of physically handicapped children and their mothers. Wallander JL, et al. **J Pediatr Psychol** 1989 Mar; 14(1):23–42

Child abuse and maternal delusions [letter] **Lancet** 1988 Dec 3;2(8623):1306–7

Maidese versus motherese—is the language input of child and adult caregivers similar? Nwokah EE. **Lang Speech** 1987 Jul-Sep;30 (Pt 3):213–37

Sources of parenting education for adolescent mothers. Duggan AK, et al. **Md Med J** 1988 Dec;37(12):945–50

Mothers' verbal directives to delayed and nondelayed children. Garrard KR. **Ment Retard** 1989 Feb;27(1):11–8

Maternal emotional signals, social referencing, and infants' reactions to strangers. Boccia M, et al. **New Dir Child Dev** 1989 Summer;(44):25–49

Mothers' emotional arousal as a moderator in the socialization of children's empathy. Miller PA, et al. **New Dir Child Dev** 1989 Summer;(44):65–83

Effect of fetal movement, ultrasound scans, and amniocentesis on maternal-fetal attachment. Heidrich SM, et al. **Nurs Res** 1989 Mar-Apr;38(2):81–4

Mother-child holding therapy and autism. Welch MG, et al. **Pa Med** 1988 Oct;91(10):33–8

Quality of mother-infant attachment and pediatric health care use. Harris ES, et al. **Pediatrics** 1989 Aug;84(2):248–54

Is my child normal yet? Correlates of vulnerability [published erratum appears in Pediatrics 1989 May;83(5):678] Perrin EC, et al. **Pediatrics** 1989 Mar;83(3):355–63

Training versus nontraining of mothers as home reading tutors. Wilks RT, et al. **Percept Mot Skills** 1988 Aug; 67(1):135–42

Prevention of parenting alterations for women with low social support. Barnard KE, et al. **Psychiatry** 1988 Aug; 51(3):248–53

Intervention with disadvantaged parents of sick preterm infants. Beckwith L. **Psychiatry** 1988 Aug;51(3):242–7

Intervention challenges with adolescent mothers and their infants. Osofsky JD, et al. **Psychiatry** 1988 Aug; 51(3):236–41

Attentional problems in dysfunctional mother-child interactions: an interbehavioral model. Wahler RG, et al. **Psychol Bull** 1989 Jan;105(1):116–30 (110 ref.)

Children at risk of allergic development: the parents' dyadic relationship. Faleide AO, et al. **Psychother Psychosom** 1988; 49(3–4):223–9

Parent care and geographically distant children. Schoonover CB, et al. **Res Aging** 1988 Dec;10(4):472–92

Maternal presence, childrearing practices, and children's response to an injection. Broome ME, et al. **Res Nurs Health** 1989 Aug;12(4):229–35

Maternal attachment to handicapped infants and the relationship to social support. Capuzzi C. **Res Nurs Health** 1989 Jun;12(3):161–7

Long-term effect on mother-infant behaviour of extra contact during the first hour post partum. V. Follow-up at three years. Wiberg B, et al. **Scand J Soc Med** 1989; 17(2):181–91

First person account: on being daughter and mother. Lanquetot R. **Schizophr Bull** 1988;14(2):337–41

Maternal role competence. Flagler S. **West J Nurs Res** 1988 Jun;10(3):274–90

[A patient with psychosocial growth retardation] Geertsma A, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2022–5 (Eng. Abstr.) (Dut)

[Adolescent mothers and their babies] Jourdain C. **Ann Pediatr (Paris)** 1988 Nov;35(9):668–71 (Fre)

[Induction as defense. A case study of the problem of psychogenic psychoses] Küchenhoff J, et al. **Nervenarzt** 1989 Jun;60(6):364–6 (Ger)

[Clinical experiences with late mothers and their wished for children] Berger M. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jan;38(1):16–24 (Eng. Abstr.) (Ger)

[The mother beneath the mask—on developmental problems of children of adolescent parents] Berger M. **Prax Kinderpsychol Kinderpsychiatr** 1988 Nov;37(9):333–45 (Eng. Abstr.) (Ger)

[Significance of bond security of the child to the mother for the psychological and physical development of failure to thrive children] Brinich EB, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Mar;38(3):70–7 (Eng. Abstr.) (Ger)

[The body and food as objects in anorexia and bulimia] Hirsch M. **Prax Kinderpsychol Kinderpsychiatr** 1989 Mar; 38(3):78–82 (Eng. Abstr.) (Ger)

[Anxiety before an operation in children and their mothers] Torbahn A. **Prax Kinderpsychol Kinderpsychiatr** 1988 Sep; 37(7):247–52 (Eng. Abstr.) (Ger)

[Psychological significance of saying goodbye] Bruns G. **Psyche (Stuttg)** 1988 Jul;42(7):628–36 (Eng. Abstr.) (Ger)

[Psychogenic pain as a representation of the maternal object] Hirsch M. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):202–8 (43 ref.) (Eng. Abstr.) (Ger)

[Prevention as "extended clinical care". A working, hypothesis on the professional duties of the psychologist in the materno-infant field] Rossati A. **Minerva Psichiatr** 1989 Apr-Jun;30(2):113–23 (Eng. Abstr.) (Ita)

[Early separation of the mother and infant and psychosocial development. I. Theoretical considerations] Domenici R, et al. **Pediatr Med Chir** 1988 Sep-Oct;10(5):505–9 (40 ref.) (Eng. Abstr.) (Ita)

[Characteristics of the course of the postpartum period in puerperants remaining together with their infants] Akhmedova ZA, et al. **Akush Ginekol (Mosk)** 1988 Sep; (9):5–8 (51 ref.) (Rus)

[Psychological study of maternal attitudes towards children with cerebral palsy] Romanova OL. **Zh Nevropatol Psikhiatr** 1988;88(9):109–14 (Eng. Abstr.) (Rus)

[Emotional disorders in the mothers of children treated at a mental health center] Fernández Abeijón MD, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May-Jun;17(3):176–84 (Eng. Abstr.) (Spa)

[Nursing routines separating mother and child cause breast feeding problems] Winberg J, et al. **Lakartidningen** 1988 Nov 16;85(46):3945–6 (Swe)

MOTHERS

Mothers' attitudes towards children's three-year health examination. Nishi M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec;30(6):680–5

Maternal inheritance and study of human mitochondrial genome. Takeshita K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):513–8

Reduced fecundability in women with prenatal exposure to cigarette smoking. Weinberg CR, et al. **Am J Epidemiol** 1989 May;129(5):1072–8

Do women with childhood exposure to cigarette smoking have increased fecundability? Wilcox AJ, et al. **Am J Epidemiol** 1989 May;129(5):1079–83

Surrogacy and Shakespeare: the Merchant's contract revisited. La Puma J, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):59–62

Only an attitude away: the potential of reproductive surrogacy. Sandberg EC. **Am J Obstet Gynecol** 1989 Jun; 160(6):1441–6

Development of an instrument to measure mothers' performance of self-care activities for children. Moore JB, et al. **ANS** 1989 Oct;12(1):76–83

Do mothers of floppy babies have a firm handshake? Koh TH. **Br J Clin Pract** 1988 Jan;42(1):38–9

Maternal and paternal alcohol consumption and miscarriage. Halmesmäki E, et al. **Br J Obstet Gynaecol** 1989 Feb; 96(2):188–91

The Copenhagen high-risk project. The diagnosis of maternal schizophrenia and its relation to offspring diagnosis. Jørgensen A, et al. **Br J Psychiatry** 1987 Dec;151:753–7

Unmarried motherhood: recent trends, composition, and black—white differences. Bumpass L, et al. **Demography** 1989 May;26(2):279–86

Genetic correlations and maternal effect coefficients obtained from offspring-parent regression. Lande R, et al. **Genetics** 1989 Aug;122(4):915–22

Surrogacy revisited [letter; comment] Tomlinson T. **Hastings Cent Rep** 1989 May-Jun;19(3):44–5. **Comment on:** Hastings Cent Rep 1988 Apr-May;18(2):21–4

The surrogate triplets of Perth, Western Australia. Austin CR. **Hum Reprod** 1989 Apr;4(3):346

Surrogate human fallopian tubes for overcoming tubal infertility. Formigli L, et al. **Hum Reprod** 1989 May; 4(4):416–7

Diarrhea beliefs and practices among rural mothers of Delhi. Dhawan S, et al. **Indian Pediatr** 1988 Feb;25(2):195–7

Motor and mental development in relation to certain maternal characteristics. Katiyar GP, et al. **Indian Pediatr** 1988 Dec; 25(12):1159–64

Mothers' personal and domestic hygiene and diarrhoea incidence in young children in rural Bangladesh. Alam N, et al. **Int J Epidemiol** 1989 Mar;18(1):242–7

Baby M: surrogacy and the law. McGoldrick KE. **J Am Med Wom Assoc** 1988 Sep-Oct;43(5):131

Mothers in medical school. Mancewicz M. **J Am Med Wom Assoc** 1989 May-Jun;44(3):78–9

Maternal schooling and childhood mortality. Cleland J, et al. **J Biosoc Sci Suppl** 1989;10:13–34 (74 ref.)

Fire prevention for teenage mothers enrolled in high school. Haney A, et al. **J Burn Care Rehabil** 1988 Nov-Dec; 9(6):648–9

Factors associated with maternal rating of infant health in central Harlem. McCormick MC, et al. **J Dev Behav Pediatr** 1989 Jun;10(3):139–44

Mother-daughter in vitro fertilization triplet surrogate pregnancy [letter] Corson SL, et al. **J In Vitro Fert Embryo Transf** 1988 Dec;5(6):377–8

Sister-sister in vitro fertilization surrogate pregnancy with donor sperm: the case for surrogate gestational pregnancy. Leeton J, et al. **J In Vitro Fert Embryo Transf** 1988 Oct; 5(5):245–8

Group work with adolescent PKU girls and their mothers. Cohen BE, et al. **J Inherited Metab Dis** 1988;11(2):199–206

Maternal comprehension of growth charts in northeast Thailand. Hughson HC, et al. **J Med Assoc Thai** 1988 Dec; 71(12):666–70

Lesbian mothers. Health care experiences. Harvey SM, et al. **J Nurse Midwifery** 1989 May-Jun;34(3):115–9 (20 ref.)

Health education needs of adolescent and nonadolescent mothers. Degenhart-Leskosky SM. **J Obstet Gynecol Neonatal Nurs** 1989 May-Jun; 18(3):238–44

Identification during the postpartum period of infants who are at high risk of child maltreatment. Leventhal JM, et al. **J Pediatr** 1989 Mar;114(3):481–7

The effectiveness of a cardiopulmonary resuscitation program for mothers of newborn infants. Kaiserman K, et al. **J Perinatol** 1989 Mar;9(1):49–51

Pregnancy outcomes in short women. Parsons MT, et al. **J Reprod Med** 1989 May;34(5):357–61

Judgments of disfluency by mothers of stuttering and normally fluent children. Zebrowski PM, et al. **J Speech Hear Res** 1989 Sep;32(3):625–34

Teaching ORT to women: individually or in groups? Chowdhury AM, et al. **J Trop Med Hyg** 1988 Dec; 91(6):283–7

Mothers in an urban township in Zambia. Watts T, et al. **J Trop Pediatr** 1989 Jun;35(3):117–20

The legal dilemma of in-vitro fertilization surrogate pregnancy in Victoria [letter] Leeton J. **Med J Aust** 1988 Oct 17;149(8):446–7

Whither surrogacy? Wood EC, et al. **Med J Aust** 1988 Oct 17;149(8):426–30

No primrose path. Surrogacy and the role of the criminal law. Chalmers DR. **Med Law** 1989;7(6):595–606

The right to be born: surrogacy and the legal control of human fertility. Lupton ML. **Med Law** 1989;7(5):483–503

Children infect mothers in AIDS outbreak at a Soviet hospital [news] Belitsky V. **Nature** 1989 Feb 9; 337(6207):493

Comparison between 200 ml and 1 liter packages of oral rehydration solution prepared by mothers of patients with diarrhea in the oral rehydration room. Suryanto M, et al. **Paediatr Indones** 1988 Nov-Dec;28(11–12):231–7

Mother's and father's birthweight as predictors of infant birthweight. Little RE. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):19–31

Victimization of mothers of abused children: a controlled study. McKibben L, et al. **Pediatrics** 1989 Sep;84(3):531–5

Mother-blaming among college students. Der-Karabetian A, et al. **Percept Mot Skills** 1989 Apr;68(2):453–4

Mothers' understanding of the graphic representation of weight gain on 'Road to Health' cards [letter] Donald PR, et al. **S Afr Med J** 1988 Dec 17;74(12):644

Avidity of IgA antibody to Escherichia coli polysaccharide and diphtheria toxin in breast milk from Swedish and Pakistani mothers. Roberton DM, et al. **Scand J Immunol** 1988 Dec;28(6):783–9

Maternal education and child survival in developing countries: the search for pathways of influence. Cleland JG, et al. **Soc Sci Med** 1988;27(12):1357–68 (79 ref.)

Social inequalities in low birth weight: timing of effects and selective mobility. Joffe M. **Soc Sci Med** 1989;28(6):613–9

Mothers' benefit of a self-care booklet and a self-care educational session at child health centres. Rasmussen F. **Soc Sci Med** 1989;29(2):205–12

Protective efficacy of plasma-derived hepatitis beta vaccine in preventing perinatal transmission of HBV infection in infants of HBsAg/HBeAg positive mothers. Pojanagaroon B, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec;19(4):615–21

Beliefs and practices related to diarrhoeal diseases among mothers in Gondar region, Ethiopia. Sircar BK, et al. **Trop Geogr Med** 1988 Jul;40(3):259–63

Information priorities of new mothers in a short-stay program. Martell LK, et al. **West J Nurs Res** 1989 Jun; 11(3):320–7

Mothers' decision rules for problem solving. Pridham KF. **West J Nurs Res** 1989 Feb;11(1):60–74

Surrogate motherhood [editorial] Mullooly JP.

Wis Med J 1989 Jun;88(6):8
Problems in commercialized surrogate mothering. Charo RA. Women Health 1987;13(1–2):195–201
Reproductive technology and the commodification of life. Rothman BK. Women Health 1987;13(1–2):95–100
Mothers learn how to save the lives of children. Chowdhury AM, et al. World Health Forum 1988;9(2):239–44
[Surrogate motherhood as a question in the context of a biomedical research ethic] Louw DJ. S Afr Med J 1989 Jan 21;75(2):70–3 (Eng. Abstr.) (Afr)
[Populations at risk for low birth weight infants] Gale R, et al. Harefuah 1988 Dec 15;115(12):357–60 (Eng. Abstr.) (Heb)
[Procrastive obstinacy. Ethical and psychological aspects] Ostuni R, et al. Minerva Ginecol 1988 Jul;40(7):435–8 (Eng. Abstr.) (Ita)
[Significance of acetylation phenotype and several immunologic parameters of the mother for the health status of the newborn infants] Ivanova VV, et al. Pediatriia 1989; (6):110 (Rus)

EDUCATION

The effects of a maternal preparation program on mother–infant pairs: a pilot study. Hamilton–Dodd C, et al. Am J Occup Ther 1989 Aug;43(8):513–21
Hospital–based primary prevention strategy in child abuse: a multi–level needs addressment. Taylor DK, et al. Child Abuse Negl 1988;12(3):343–54
The influence of additional information, advice and support on the success of breast feeding in working class primiparas. Jenner S. Child Care Health Dev 1988 Sep–Oct; 14(5):319–28
Comparison of the effectiveness of videotape versus live group infant care classes. Leff EW.
J Obstet Gynecol Neonatal Nurs 1988 Sep–Oct;17(5):338–44
Sources of parenting education for adolescent mothers. Duggan AK, et al. Md Med J 1988 Dec;37(12):945–50

LEGISLATION & JURISPRUDENCE

Current medical, legal and demographic perspectives on artificial reproduction in Czechoslovakia. Heitlinger A. Am J Public Health 1989 Jan;79(1):57–61 (22 ref.)

PSYCHOLOGY

Maternal recognition of twin pregnancy. Malmstrom PE, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):187–92
Grief in multifetal death. Sainsbury MK.
Acta Genet Med Gemellol (Roma) 1988;37(2):181–5
Mothers of primary school children with Down's syndrome. How do they experience their situation? Ryde–Brandt B. Acta Psychiatr Scand 1988 Jul;78(1):102–8
Sex and the working mother: adolescent sexuality, sex role typing and family background. Fingerman KL.
Adolescence 1989 Spring;24(93):1–18
Personal relationships, personal attributes, and stress resistance: mothers' reactions to their child's illness. Hobfoll SE, et al. Am J Community Psychol 1988 Aug;16(4):565–89
Assessing support networks: stability and evidence for convergent and divergent validity. Jennings KD, et al.
Am J Community Psychol 1988 Dec;16(6):793–809
The pediatrician as mother [letter] Furman L.
Am J Dis Child 1989 Jun;143(6):638
Construct validity of the adapted Questionnaire on Resources and Stress—short form. Salisbury CL.
Am J Ment Retard 1989 Jul;94(1):74–9
Clinical status and emotional adjustment of children of depressed mothers. Lee CM, et al. Am J Psychiatry 1989 Apr;146(4):478–83
Chronic stressors and maternal depression: implications for prevention. Orr ST, et al. Am J Public Health 1989 Sep; 79(9):1295–6
Munchausen's syndrome in a 4 year old. Croft RD, et al. Arch Dis Child 1989 May;64(5):740–1
Maternal insecurity and failure to thrive in Asian children. Fenton TR, et al. Arch Dis Child 1989 Mar;64(3):369–72
Mother's choice to provide breast milk and developmental outcome [letter] Pollock JI. Arch Dis Child 1989 May; 64(5):763–4
Mothers' perceptions of incest: sustained disruption and turmoil. Hubbard GB. Arch Psychiatr Nurs 1989 Feb; 3(1):34–40
Depressed mothers and their children. Eisenbruch M.
Aust Paediatr J 1989 Jun;25(3):119–26 (98 ref.)
Pseudocyesis preceding psychosis. Mortimer A, et al.
Br J Psychiatry 1988 Apr;152:562–5
Breast–feeding among the urban poor in southern Brazil: reasons for termination in the first 6 months of life. Martines JC, et al. Bull WORLD Health Organ 1989;67(2):151–61
Factors influencing mothers' reactions to intrafamily sexual abuse. Sirles EA, et al. Child Abuse Negl 1989;13(1):131–9
Mothers' internal models of relationships and children's behavioral and developmental status: a study of mother–child interaction. Crowell JA, et al. Child Dev 1988 Oct;59(5):1273–85
Breaking the cycle of abuse. Egeland B, et al. Child Dev 1988 Aug;59(4):1080–8
The relation of family and partner support to the adjustment of adolescent mothers. Unger DG, et al. Child Dev 1988 Aug;59(4):1056–60
Maternal risk status and outcome measures: a three–stage study in Israel. Sagi A, et al.
Child Psychiatry Hum Dev 1988 Winter;19(2):145–57
Living in the war zone: mothers and young children in a public housing development. Dubrow NF, et al.
Child Welfare 1989 Jan–Feb;68(1):3–20
Perception of burden among at–risk women of raising a child with fragile–X syndrome. Meryash DL. Clin Genet 1989 Jul;36(1):15–24
Adjustment to diabetes mellitus in preschoolers and their mothers. Wysocki T, et al. Diabetes Care 1989 Sep; 12(8):524–9
Predicting receipt of social support: a longitudinal study of parents' reactions to their child's illness. Hobfoll SE, et al. Health Psychol 1989;8(1):61–77
Speeding up universal immunization programme. Kekre MM, et al. Indian Pediatr 1988 Jul;25(7):636–41
Maternal alcoholism and anorexia nervosa: a possible association? Molgaard CA, et al. Int J Addict 1989 Feb; 24(2):167–73
Mothers and their innocent boys: a never ending fantasy. An exploration of the mother discourse in forensic psychiatry. Smit J. Int J Law Psychiatry 1988;11(3):279–87
Managing chronic illness in the family: women as caretakers. Anderson JM, et al. J Adv Nurs 1989 Sep;14(9):735–43
Semantic differentials and the process of developing one to measure maternal role competence. Flagler S.
J Adv Nurs 1989 Mar;14(3):190–7
Father absence: effects on child and maternal psychopathology. Jensen PS, et al.
J Am Acad Child Adolesc Psychiatry 1989 Mar;28(2):171–5
Working status and stress of middle class women of Calcutta. Mukhopadhyay S. J Biosoc Sci 1989 Jan;21(1):109–14
Behavioral correlates of maternal depressive symptomatology in conduct–disorder children. Dumas JE, et al. J Consult Clin Psychol 1989 Aug;57(4):516–21
Personality characteristics of the mothers of children with disruptive behavior disorders. Lahey BB, et al.
J Consult Clin Psychol 1989 Aug;57(4):512–5
Mothers' and fathers' perceptions of child deviance: roles of parent and child behaviors and parent adjustment. Webster–Stratton C. J Consult Clin Psychol 1988 Dec; 56(6):909–15
Mothers' and fathers' changing perceptions of their male and female infants over the course of pregnancy. Sweeney J, et al. J Genet Psychol 1988 Sep;149(3):393–404
Social support and adaptation to the parent role in first–time adolescent mothers. Dormire SL, et al.
J Obstet Gynecol Neonatal Nurs 1989 Jul–Aug;18(4):327–37
Childbearing in prison: a behavioral analysis. Shelton BJ, et al. J Obstet Gynecol Neonatal Nurs 1989 Jul–Aug; 18(4):301–8
Psychologic functioning in 8– to 16–year–old cancer survivors and their parents. Greenberg HS, et al.
J Pediatr 1989 Mar;114(3):488–93
Prematurity stereotyping by mothers of premature infants. Stern M, et al. J Pediatr Psychol 1988 Jun;13(2):255–63
Nursing interventions: caring for parents of a newborn transferred to a regional intensive care nursery—a challenge for low risk obstetric specialists. Weingarten CT. J Perinatol 1988 Summer;8(3):271–5
Information–seeking and maternal self–definition during the transition to motherhood. Deutsch FM, et al.
J Pers Soc Psychol 1988 Sep;55(3):420–31
Variations in mothers' self–esteem in daily life. Wells AJ. J Pers Soc Psychol 1988 Oct;55(4):661–8
A comparison of young teenage, older teenage, and adult mothers on determinants of parenting. Reis J. J Psychol 1989 Mar;123(2):141–51
Mothers with impaired mobility speak out. Kopala B.
MCN 1989 Mar–Apr;14(2):115–9
Combining employment and motherhood. Tiedje LB, et al.
MCN 1989 Jan–Feb;14(1):9–10, 12, 14
Provision of respite care for children with developmental disabilities: changes in maternal coping and stress over time. Rimmerman A. Ment Retard 1989 Apr;27(2):99–103
Development of maternal–fetal attachment during pregnancy. Grace JT. Nurs Res 1989 Jul–Aug;38(4):228–32
Maternal responses to home apnea monitoring of infants. Nuttall P. Nurs Res 1988 Nov–Dec;37(6):354–7
Stress process among mothers of infants: preliminary model testing. Walker LO. Nurs Res 1989 Jan–Feb;38(1):10–6
Maternal reasons for delayed prenatal care. Young C, et al.
Nurs Res 1989 Jul–Aug;38(4):242–3
Demographic factors influencing the initiation of breast–feeding in an Israeli urban population. Birenbaum E, et al. Pediatrics 1989 Apr;83(4):519–23
Pediatrician and parent: a challenge for female physicians. Sells JM, et al. Pediatrics 1989 Aug;84(2):355–61
Babies made the American way: ethics and interests of surrogate motherhood. Schiedermayer DL. Pharos 1988 Fall;51(4):2–7
Stillbirth—a patient's perspective. Mitchell S. Practitioner 1988 Dec;232(1460):1368–71
Posttraumatic stress syndrome–like symptoms among AIDS caregivers. Trice AD. Psychol Rep 1988 Oct;63(2):656–8
Help for mothers with infant care and household tasks: perceptions of support and stress. Pridham KF, et al.
Public Health Nurs 1988 Dec;5(4):201–8
Mothers' perceptions and use of community health services during the postpartum. Rovers R, et al.
Public Health Nurs 1988 Dec;5(4):193–200
Quality and quantity of social support as correlates of psychosomatic symptoms in mothers with young children. Hall LA, et al. Res Nurs Health 1987 Aug;10(4):287–98
Influences of the social network on choice and duration of breast–feeding in mothers of preterm infants. Kaufman KJ, et al. Res Nurs Health 1989 Jun;12(3):149–59
Employed mothers' concerns about separation from the first– and second–born child. Pitzer MS, et al.
Res Nurs Health 1989 Apr;12(2):123–8
Mothers' problem–solving skill and use of help with infant–related issues: the role of importance and need for action. Pridham KF, et al. Res Nurs Health 1987 Aug; 10(4):263–75
The importance of breast–feeding support groups. Ridler J.
S Afr Med J 1988 Oct 15;74(8):384
Parents' heuristics for judging children's accident risk. Gärling A. Scand J Psychol 1989;30(2):134–45
Life experiences, response styles and mental health among mothers and children in Beirut, Lebanon. Bryce JW, et al. Soc Sci Med 1989;28(7):685–95
Adoption of oral rehydration therapy among Haitian mothers. Coreil J, et al. Soc Sci Med 1988;27(1):87–96
Concepts about infant health, growth, and weaning: a comparison between nutritional scientists and Madurese mothers. Launer LJ, et al. Soc Sci Med 1989;29(1):13–22
Mothers' concepts of childhood diarrhea in rural Pakistan: what ORT program planners should know. Mull JD, et al. Soc Sci Med 1988;27(1):53–67
Diarrhoeal diseases: perceptions and practices in Nepal. Stapleton MC. Soc Sci Med 1989;28(6):593–604
Structures of maternal information processing for infant feeding. Pridham KF. West J Nurs Res 1988 Oct; 10(5):566–75
A womb of his own. Baruch EH. Women Health 1987; 13(1–2):135–9
Mothers alone and supporting chronically mentally ill adult children: a greater vulnerability to illness. Belcher JR.
Women Health 1988;14(2):61–80
What the king can not see. Corea G. Women Health 1987; 13(1–2):77–93
[Psychological decision making with regard to motherhood by women with high–risk pregnancy and normal pregnancy] Bielawska–Batorowicz E. Pol Tyg Lek 1988 Nov 7;43(45):1430–2 (Eng. Abstr.) (Pol)
[Reasons for weaning and introduction of bottle feeding: an alternative approach to its study] Rea MF, et al.
Rev Saude Publica 1988 Jun;22(3):184–91 (Eng. Abstr.) (Por)

MOTHS see under LEPIDOPTERA

MOTILIN

ANALYSIS

Heterogeneity of motilin immunoreactivity in mammalian tissue. Nilaver G, et al. Synapse 1988;2(3):266–75
[Motilin cells in the intestinal mucosa in celiac disease before, during and after diet therapy. Immunohistochemical study] Ceccamea A, et al. Minerva Pediatr 1988 Apr;40(4):203–6 (Eng. Abstr.) (Ita)

BLOOD

Regulation of plasma motilin by opioids in the dog. Poitras P, et al. Am J Physiol 1989 Jul;257(1 Pt 1):G41–5

GENETICS

Exon–intron organization, expression, and chromosomal localization of the human motilin gene. Yano H, et al.
FEBS Lett 1989 Jun 5;249(2):248–52
Molecular heterogeneity of human motilinlike immunoreactivity explained by the processing of prepromotilin. Dea D, et al. Gastroenterology 1989 Mar; 96(3):695–703

METABOLISM

Gastrointestinal hormone receptors on isolated smooth muscle cells from gastric antrum of the rabbit. Moummi C, et al. Biochem Pharmacol 1989 Sep 1;38(17):2895–901
Comparison of motilin binding to crude homogenates of human and canine gastrointestinal smooth muscle tissue. Peeters TL, et al. Regul Pept 1988 Nov;23(2):171–82
[An experimental study on the remnant gastric motilities and gastrointestinal hormones after various types of gastrectomies] Ohira Y.
Nippon Heikatsukin Gakkai Zasshi 1988 May;24(2):79–100 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Gastrointestinal motor patterns: motilin as a coordinating factor. Tanaka M, et al. J Surg Res 1989 Oct;47(4):325–31
The role of intracellular calcium stores in motilin induced contractions of the longitudinal muscle of the rabbit duodenum. Matthijs G, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Mar; 339(3):332–9
Direct effects of motilin on isolated smooth muscle from various regions of the human stomach. Lüdtke FE, et al.
Pflugers Arch 1989 Sep;414(5):558–63
Effects of four brain–gut peptides injected into cerebroventricles on gastric motility of dogs. Song JX, et al. Proc Chin Acad Med Sci Peking Union Med Coll 1988; 3(4):218–21

PHYSIOLOGY

Do motilin and pancreatic polypeptide regulate duodenal bile acid delivery? Scott RB, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1499–504

Autotransplantation of the stomach: motility is controlled by hormonal factors. Van Lier Ribbink JA, et al. **Curr Surg** 1988 Nov–Dec;45(6):486–9

[The functional importance of motilin for the gastrointestinal tract (a review of the literature)] Troitskaia VB. **Fiziol Zh SSSR** 1988 Sep;74(9):1294–8 (38 ref.) (Eng. Abstr.) **(Rus)**

SECRETION

Xylitol vs glucose: effect on the rate of gastric emptying and motilin, insulin, and gastric inhibitory polypeptide release. Salminen EK, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1228–32

Effects of the somatostatin analog BIM 23014 on the secretion of growth hormone, thyrotropin, and digestive peptides in normal men. Sassolas G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):239–46

MOTILITY, CELL see **CELL MOVEMENT**

MOTION

see related
MOVEMENT

Of molecules, motion, man, and machines. Urry DW. **Ala J Med Sci** 1988 Oct;25(4):475–85

Extended wear contact lens movement under swimming pool conditions. Diefenbach CB, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):710–6

Flight simulator platform motion and air transport pilot training. Lee AT, et al. **Aviat Space Environ Med** 1989 Feb;60(2):136–40

Analysis of motion of the visual field by direction, expansion/contraction, and rotation cells clustered in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep;62(3):626–41

Spatial and temporal factors determining afferent fiber responses to a grating moving sinusoidally over the monkey's fingerpad. Goodwin AW, et al. **J Neurosci** 1989 Apr;9(4):1280–93

Motional phase artifacts in Fourier transform MRI. Wedeen VJ, et al. **Magn Reson Med** 1989 Jul;11(1):114–20

Characterization of transmitted motion in fetal lung: quantitative analysis. Adler R, et al. **Med Phys** 1989 May–Jun;16(3):333–7

Growth of segment principal moments of inertia between four and twenty years. Jensen RK, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):594–604 (51 ref.)

MR imaging of motion with spatial modulation of magnetization. Axel L, et al. **Radiology** 1989 Jun; 171(3):841–5

Measurement of human lumbar spine ligaments during loaded and unloaded motion. Hedtmann A, et al. **Spine** 1989 Feb; 14(2):175–85

Principles of visual motion detection. Borst A, et al. **Trends Neurosci** 1989 Aug;12(8):297–306 (73 ref.)

MOTION PERCEPTION

Space vehicle approach velocity judgments under simulated visual space conditions. Haines RF. **Aviat Space Environ Med** 1989 Feb;60(2):145–51

Visual localization of briefly presented peripheral targets. Mapp AP, et al. **Biol Cybern** 1989;60(4):261–5

Saccadic tracking of a periodic target motion in the cat. Glass I, et al. **Brain Behav Evol** 1989;33(2–3):95–8

Stereopsis impairment during smooth pursuit eye tracking. Vardi N, et al. **Brain Behav Evol** 1989;33(2–3):99–103

Infants' sensitivity to boundary flow information for depth at an edge. Craton LG, et al. **Child Dev** 1988 Dec; 59(6):1522–9

Visual control of displacement at slow speeds. Mestre D. **Hum Factors** 1988 Dec;30(6):663–75

The detection of slow stimulus movement in 2- to 5-month-olds. Dannemiller JL, et al. **J Exp Child Psychol** 1989 Jun;47(3):337–55

Perception of three-dimensional structure from optic flow without locally smooth velocity. Andersen GJ. **J Exp Psychol [Hum Percept]** 1989 May;15(2):363–71

The observer-relative velocity field as the basis for effective motion parallax. Braunstein ML, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):582–90

Movement and visual attention: the spotlight metaphor breaks down. Driver J, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):448–56

Understanding collision dynamics. Gilden DL, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):372–83

Understanding natural dynamics. Proffitt DR, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):384–93

Perception of translational heading from optical flow. Warren WH Jr, et al. **J Exp Psychol [Hum Percept]** 1988 Nov; 14(4):646–60

Structure from two orthographic views of rigid motion. Bennett BM, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1052–69

Motion interference in speed discrimination. Bowne SF, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1112–21

Direction-of-motion discrimination with complex patterns: further observations. Henning GB, et al. **J Opt Soc Am [A]** 1988 Oct;5(10):1759–66

Visual perception of moving parts. Rubin J, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2045–9

The perception of moving plaids reveals two motion-processing stages. Welch L. **Nature** 1989 Feb 23; 337(6209):734–6

Movement detectors provide sufficient information for local computation of 2-D velocity field. Reichardt W, et al. **Naturwissenschaften** 1988 Jun;75(6):313–5

Effects of moving textured background on neuronal responses in the toad's optic tectum. Tsai H, et al. **Naturwissenschaften** 1989 Jan;76(1):37–8

Peripheral apparent motion as a function of location, contrast, and direction of stimulus motion. Barfield W, et al. **Percept Mot Skills** 1989 Feb;68(1):33–4

Coincidence-anticipation performance of adolescent baseball players and nonplayers. Dunham P Jr. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1151–6

Spiral aftereffects after long-term delay. Meeker FB, et al. **Percept Mot Skills** 1988 Dec;67(3):885–6

Effects of living in the up-down inverted visual world on apparent movement. Nakajima Y. **Percept Mot Skills** 1988 Aug;67(1):39–42

Forms can be recognized from dynamic occlusion alone. Stappers PJ. **Percept Mot Skills** 1989 Feb;68(1):243–51

Perception of a throwing action from point-light demonstrations. Williams JG. **Percept Mot Skills** 1988 Aug; 67(1):273–4

Visual information and skill level in time-to-collision estimation. Cavallo V, et al. **Perception** 1988;17(5):623–32

Rotating trapezia which appear luminous and transparent during reversals. Cowie R. **Perception** 1989;18(2):173–80

Globally perceived directional flow in static images. Farell B, et al. **Perception** 1989;18(2):155–72

The perception of an optical flow projected on the ground surface. Flückiger M, et al. **Perception** 1988;17(5):633–45

Visual stimulation affects the perception of voluntary leg movements during walking. Lackner JR, et al. **Perception** 1988;17(1):71–80

The effects of target borders on dynamic visual acuity: practical and theoretical implications. Long GM, et al. **Perception** 1988;17(6):745–51

Apparent movements induced by luminance modulations: a model study. Mastebroek HA, et al. **Perception** 1988; 17(5):667–79

The role of the adjacency between background cues and objects in visual localization during ocular pursuit. Mateeff S, et al. **Perception** 1989;18(1):93–104

Temporal properties of apparent motion in subjective figures. Mather G. **Perception** 1988;17(6):729–36

A simple optical method for producing two identical stimuli moving in opposite directions. Moulden B. **Perception** 1988; 17(1):135–6

Effect of stationary objects on illusory forward self-motion induced by a looming display. Okmi M, et al. **Perception** 1988;17(1):5–11

Dynamic occlusion and motion parallax in depth perception. Ono H, et al. **Perception** 1988;17(2):255–66

Perceptions of depth elicited by occluded and shearing motions of random dots. Royden CS, et al. **Perception** 1988; 17(3):289–96

Depth discrimination from optic flow. Simpson WA. **Perception** 1988;17(4):497–512

Perceptual alternations in stereokinesis. Vallortigara G, et al. **Perception** 1988;17(1):31–4

Two-dimensional tilt illusions induced by orthogonal plaid patterns: effects of plaid motion, orientation, spatial separation, and spatial frequency. Wenderoth P, et al. **Perception** 1989;18(1):25–38

The two-process distinction in apparent motion. Petersik JT. **Psychol Bull** 1989 Jul;106(1):107–27 (105 ref.)

The height of a stereokinetic cone: a quantitative determination of a 3-D effect from 2-D moving patterns without a "rigidity assumption". Zanforlin M. **Psychol Res** 1988;50(3):162–72

Visual evoked potentials to stimuli in apparent motion. Manning ML, et al. **Vision Res** 1988;28(9):965–74

Shape similarity and distance disparity as apparent motion correspondence cues. Shechter S, et al. **Vision Res** 1988; 28(9):1013–21

Opposing the direct and the indirect theory in explaining the tunnel effect. Wagemans JP, et al. **Z Psychol** 1988; 196(3):217–31

[Contributions to the Aulhorn flicker test. II: The flicker test and the Pulfrich phenomenon in clinical diagnosis] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Oct; 193(4):382–7 (Eng. Abstr.) **(Ger)**

[Max Wertheimer in Frankfurt—on the origin and development crisis of gestalt psychology. III. Further studies of motion perception (1929–1933)] Sarris V. **Z Psychol** 1988;196(1):27–61 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

The effect of repeated occasions of alcohol intoxication on two processes involved in the visual discrimination of movement. Bates ME. **J Stud Alcohol** 1989 Mar; 50(2):143–54

The effects of alcohol on speed perception in a closed-course driving situation. Kearney SA, et al. **J Stud Alcohol** 1988 Jul;49(4):340–5

PHYSIOLOGY

Properties of visually driven neurons in cats pretectal region. Grigorian GG, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):93–104

Properties of the visually driven neurons of cat's hippocampal regions CA 1 and CA 3. Harutiunian-Kozak BA, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(1):1–11

The influence of grating contrast on the human cortical potential visually evoked by motion. Müller R, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(5):239–49

Motion detection in physical space and its peripheral and central representation. Graf W. **Ann N Y Acad Sci** 1988; 545:154–69 (50 ref.)

Responses of single neurons in the pretectum of monkeys to visual stimuli in three-dimensional space. Hoffmann KP. **Ann N Y Acad Sci** 1988;545:180–6 (23 ref.)

The accessory optic system. Analyzer of self-motion. Simpson JI, et al. **Ann N Y Acad Sci** 1988;545:170–9

Visual and eye movement functions of the posterior parietal cortex. Andersen RA. **Annu Rev Neurosci** 1989;12:377–403 (73 ref.)

Visual display lowers detection threshold of angular, but not linear, whole-body motion stimuli. Benson AJ, et al. **Aviat Space Environ Med** 1989 Jul;60(7):629–33

Movement and novelty of a square wave display affect 2-deoxyglucose uptake in the rat visual system. McIntosh AR, et al. **Behav Brain Res** 1989 Feb 1;32(1):1–9

On the kinetic depth effect. Aloimonos J, et al. **Biol Cybern** 1989;60(6):445–55

Response histogram shapes and tuning curves: the predicted responses of several cortical cell types to drifting gratings stimuli. Malonek D, et al. **Biol Cybern** 1989;60(6):469–75

A two dimensional field theory for motion computation. First order approximation; translatory motion of rigid patterns. Reichardt WE, et al. **Biol Cybern** 1988;60(1):23–35

Energy functions for early vision and analog networks. Yuille AL. **Biol Cybern** 1989;61(2):115–23

Neck muscle vibration modifies the representation of visual motion and direction in man. Biguer B, et al. **Brain** 1988 Dec;111 (Pt 6):1405–24

Applying a model of saccadic prediction to patients' saccadic eye movements. Ron S, et al. **Brain Behav Evol** 1989; 33(2–3):179–82

Influence of stationary and moving textured backgrounds on the response of visual neurons in toads (Bufo bufo L.). Tsai HJ, et al. **Brain Behav Evol** 1988;32(1):27–38

A sense of movement elicited in paralyzed distal arm by focal magnetic coil stimulation of human motor cortex. Amassian VE, et al. **Brain Res** 1989 Feb 13;479(2):355–60

Acetylcholine-induced inhibition in the cat visual cortex is mediated b7 a GABAergic mechanism. Müller CM, et al. **Brain Res** 1989 May 22;487(2):335–42

Auditory and visual neurons in the cat's superior colliculus selective for the direction of apparent motion stimuli. Rauschecker JP, et al. **Brain Res** 1989 Jun 19;490(1):56–63

Electrical coupling between secondary hair cells in the statocyst of the squid Alloteuthis subulata. Williamson R. **Brain Res** 1989 May 1;486(1):67–72

Efferent tectal cells of crucian carp: physiology and morphology. Niida A, et al. **Brain Res Bull** 1989 Feb; 22(2):389–98

Computational studies of the extraction of visual spatial information from binocular and motion cues. Hildreth EC. **Can J Physiol Pharmacol** 1988 Apr;66(4):464–77 (116 ref.)

Adaptation to movement in right and left visual fields. Calvert J. **Cortex** 1988 Dec;24(4):589–93

Motion onset-offset VEPs in children. De Vries M, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr; 74(2):81–7

Different anisotropies of movement direction in upper and lower layers of the cat's area 18 and their implications for global optic flow processing. Bauer R, et al. **Exp Brain Res** 1989;74(2):395–401

Motion perception prominence alters anticipatory slow eye movements. Boman DK, et al. **Exp Brain Res** 1989; 74(3):555–62

Neuronal activity in primate parietal cortex area 5 varies with intended movement direction during an instructed-delay period. Crammond DJ, et al. **Exp Brain Res** 1989;76(2):458–62

Motion perceptions induced by off-vertical axis rotation (OVAR) at small angles of tilt. Denise P, et al. **Exp Brain Res** 1988;73(1):106–14

Cognitive spatial-motor processes. 3. Motor cortical prediction of movement direction during an instructed delay period. Georgopoulos AP, et al. **Exp Brain Res** 1989; 75(1):183–94

Neural correlates of motion after-effects in cat striate cortical neurones: interocular transfer. Hammond P, et al. **Exp Brain Res** 1988;72(1):21–8

Neural correlates of motion after-effects in cat striate cortical neurones: monocular adaptation. Hammond P, et al. **Exp Brain Res** 1988;72(1):1–20

Object-centered encoding by face-selective neurons in the cortex in the superior temporal sulcus of the monkey. Hasselmo ME, et al. **Exp Brain Res** 1989;75(2):417–29

Observations bearing upon semi-circular canal dynamics. Hood JD, et al. **Exp Brain Res** 1989;74(3):603–8

Single-unit analysis of pattern-motion selective properties in the middle temporal visual area (MT). Rodman HR, et al. **Exp Brain Res** 1989;75(1):53–64

Directionally selective response of cells in the middle

temporal area (MT) of the macaque monkey to the movement of equiluminous opponent color stimuli. Saito H, et al. **Exp Brain Res** 1989;75(1):1–14
Postural adjustments induced by simulated motion of differently structured environments. van Asten WN, et al. **Exp Brain Res** 1988;73(2):371–83
Axis of preferred motion is a function of bar length in visual cortical receptive fields. Wörgötter F, et al. **Exp Brain Res** 1989;76(2):307–14
Outputs of paired Gabor filters summed across the background frame of reference predict the direction of movement. Lawton TB. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):130–9 (62 ref.)
Quantitative studies on ipsilateral type 2 retinotectotectal (IRTT) units in frogs: homologies with R3 ganglion cells. Garcia R, et al. **J Comp Physiol [A]** 1989 Jan;164(3):377–89
Topographic and directional organization of visual motion inputs for the initiation of horizontal and vertical smooth-pursuit eye movements in monkeys. Lisberger SG, et al. **J Neurophysiol** 1989 Jan;61(1):173–85
Underlying mechanisms of the response specificity of expansion/contraction and rotation cells in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep; 62(3):642–56
The "motion-blind" patient: low-level spatial and temporal filters. Hess RH, et al. **J Neurosci** 1989 May;9(5):1628–40
Drift-balanced random stimuli: a general basis for studying non-Fourier motion perception. Chubb C, et al. **J Opt Soc Am [A]** 1988 Nov;5(11):1986–2007
Discrimination of opposite directions measured with stroboscopically illuminated random-dot patterns. De Bruyn B, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):323–8
Computational structure of a biological motion-detection system as revealed by local detector analysis in the fly's nervous system. Egelhaaf M, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1070–87
Transient and steady-state response properties of movement detectors. Egelhaaf M, et al. **J Opt Soc Am [A]** 1989 Jan; 6(1):116–27
Motion processing by chromatic and achromatic visual pathways. Gorea A, et al. **J Opt Soc Am [A]** 1989 Apr; 6(4):590–602
Retinal inhomogeneity and motion in depth. Kelly DH. **J Opt Soc Am [A]** 1989 Jan;6(1):98–105
Factors affecting the predictability of pseudo-random motion stimuli in the pursuit reflex of man. Barnes GR, et al. **J Physiol (Lond)** 1989;408:137–65
Motion-deblurring in human vision. Morgan MJ, et al. **Nature** 1989 Aug 3;340(6232):385–6
Perceptual decision-making. Watching neurons discriminate [news] Morgan MJ. **Nature** 1989 Sep 7;341(6237):20–1
Neuronal correlates of a perceptual decision. Newsome WT, et al. **Nature** 1989 Sep 7;341(6237):52–4
Detection of moving and stationary gratings in the absence of striate cortex. Magnussen S, et al. **Neuropsychologia** 1989;27(5):725–8
Visual responses of sheep temporal cortex cells to moving and stationary human images. Kendrick KM, et al. **Neurosci Lett** 1989 May 22;100(1–3):193–7
The rat accessory optic system: effects of cortical lesions on the directional selectivity of units within the medial terminal nucleus. Natal CL, et al. **Neurosci Lett** 1988 Aug 31;91(2):154–9
Responses of motor cortex neurons to visual stimulation in the alert monkey. Wannier TM, et al. **Neurosci Lett** 1989 Mar 13;98(1):63–8
Iso- and cross-oriented columns in cat striate cortex: a study with simultaneous single- and multi-unit recordings. Bauer R, et al. **Neuroscience** 1989;30(3):733–40
Observations on the effect of an excitatory-inhibitory stimulus on the landing reaction of the fly, Calliphoridae. Negrin NS. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):823–9
Left-right visual field asymmetry in bistable motion perception. Casco C, et al. **Perception** 1988;17(6):721–7
Psychophysical evidence for an extrastriate contribution to a pattern-selective motion aftereffect. Wenderoth P, et al. **Perception** 1988;17(1):81–91
Influence of moving textured backgrounds on responses of cat area 18 cells to moving bars. Orban GA, et al. **Prog Brain Res** 1988;75:137–45 (137 ref.)
Visual function of the cat's LP/LS subsystem in global motion processing. Rauschecker JP. **Prog Brain Res** 1988; 75:95–108 (30 ref.)
Neural integration of information specifying structure from stereopsis and motion. Nawrot M, et al. **Science** 1989 May 12;244(4905):716–8
Ocular responses to linear motion are inversely proportional to viewing distance. Schwarz U, et al. **Science** 1989 Sep 22;245(4924):1394–6
Visual course control in flies relies on neuronal computation of object and background motion. Egelhaaf M, et al. **Trends Neurosci** 1988 Aug;11(8):351–8 (47 ref.)
Probing visual cortical function with discrete chemical lesions. Newsome WT, et al. **Trends Neurosci** 1988 Sep; 11(9):394–400 (28 ref.)
Apparent motion can be perceived between patterns with dissimilar spatial frequencies. Baro JA, et al. **Vision Res** 1988;28(12):1311–3
Stimulus conditions that enhance anticipatory slow eye movements. Boman DK, et al. **Vision Res** 1988; 28(10):1157–65
Human velocity and direction discrimination measured with random dot patterns. De Bruyn B, et al. **Vision Res** 1988; 28(12):1323–35
The perception of object motion during smooth pursuit eye movements: adjacency is not a factor contributing to the Filehne illusion. de Graaf B, et al. **Vision Res** 1988; 28(4):497–502
Spatial phase dependence and the role of motion detection in monocular and dichoptic forward masking. Georgeson MA. **Vision Res** 1988;28(11):1193–205
The less you see it, the faster it moves: shortening the "on-time" speeds up apparent motion. Giaschi D, et al. **Vision Res** 1989;29(3):335–47
Induced motion and optokinetic afternystagmus: parallel response dynamics with prolonged stimulation. Heckmann T, et al. **Vision Res** 1988;28(6):681–94
Motion components of VEPs to the waggon wheel effect. Manning ML, et al. **Vision Res** 1989;29(1):19–25
Perceptual latencies are shorter for motion towards the fovea than for motion away. Mateeff S, et al. **Vision Res** 1988; 28(6):711–9
The aperture problem—I. Perception of nonrigidity and motion direction in translating sinusoidal lines. Nakayama K, et al. **Vision Res** 1988;28(6):739–46
The aperture problem—II. Spatial integration of velocity information along contours. Nakayama K, et al. **Vision Res** 1988;28(6):747–53
The perception of target motion during smooth pursuit eye movements in the open-loop condition: characteristics of retinal and extraretinal signals. Pola J, et al. **Vision Res** 1989;29(4):471–83
Direction perception in complex dynamic displays: the integration of direction information. Watamaniuk SN, et al. **Vision Res** 1989;29(1):47–59
[The action of a visual food stimulus approaching at various speeds on behavioral and instrumental reactions in chimpanzees] Syrenskil VI. **Biol Nauki** 1989;(3):18–23 (Eng. Abstr.) **(Rus)**

MOTION PICTURES

see related
CINEANGIOGRAPHY
CINERADIOGRAPHY

Late adolescence: Spock and the ego-ideal. Frenkel RS. **Adolesc Psychiatry** 1988;15:46–64
Kinematic measurement from panned cinematography. Gervais P, et al. **Can J Sport Sci** 1989 Jun;14(2):107–11
Disability in full-length feature films: frequency and quality of films over an 11 year span. Byrd EK, et al. **Int J Rehabil Res** 1988;11(2):143–8
The marketing and distribution of health films and videos. Broadhurst JJ. **J Audiov Media Med** 1988 Apr;11(2):65–7
The production process of health films and videos. Cull P. **J Audiov Media Med** 1988 Apr;11(2):63–5
Wibangbe: the making of a documentary about the training and supervision of traditional birth attendants in Zaire. Vansintejan GA, et al. **J Nurse Midwifery** 1988 Nov-Dec; 33(6):280–2
Bad-guys, buccaneers, and bureaucrats: images of bioethics in film. Erde EL. **Lit Med** 1988;7:148–69
Dream doctors as healers in drama and film: a paradigm, an antecedent, and an imitation. Welsh JM. **Lit Med** 1987; 6:117–27
The physician at the movies. Crawshaw R. **Pharos** 1988 Summer;51(3):43–6
Effects on homophobia of viewing a gay-themed film. Duncan DF. **Psychol Rep** 1988 Aug;63(1):46
Rape as entertainment. Wilson W. **Psychol Rep** 1988 Oct; 63(2):607–10
[Creative venture and regression. On the films of Andrej Tarkowski] Dettmering P. **Psyche (Stuttg)** 1989 May; 43(5):445–58 (Eng. Abstr.) **(Ger)**

HISTORY

Mom and Dad (1944): venereal disease "exploitation". White S. **Bull Hist Med** 1988 Summer;62(2):252–70
Alcoholism and Alcoholics Anonymous in U.S. films, 1945–1962: the party ends for the "wet generations". Room R. **J Stud Alcohol** 1989 Jul;50(4):368–83

TRENDS

Some thoughts on the use of health films and videos. Clarke JW. **J Audiov Media Med** 1988 Apr;11(2):61–3

MOTION SICKNESS

New facets of space medicine. Igarashi M. **Acta Otolaryngol Suppl (Stockh)** 1988;458:103–7
[Motion sickness] Bodó G. **Orv Hetil** 1988 Sep 11; 129(37):1955–9 (46 ref.) (Eng. Abstr.) **(Hun)**

CEREBROSPINAL FLUID

Cerebrospinal fluid constituents of cat vary with susceptibility to motion sickness. Lucot JB, et al. **Life Sci** 1989;44(18):1239–45

CHEMICALLY INDUCED

[Permeability of the blood-brain barrier in modeling motion sickness] Drozd IuV, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):88 **(Rus)**

COMPLICATIONS

The role of motion sickness in predicting anticipatory nausea. Leventhal H, et al. **J Behav Med** 1988 Apr;11(2):117–30

DIAGNOSIS

Limitations of postural equilibrium tests for examining simulator sickness. Hamilton KM, et al. **Aviat Space Environ Med** 1989 Mar;60(3):246–51

DRUG THERAPY

Transdermal scopolamine: a review of its effects upon motion sickness, psychological performance, and physiological functioning. Parrott AC. **Aviat Space Environ Med** 1989 Jan;60(1):1–9 (66 ref.)
Effects of anti-motion sickness drugs on motion sickness in rats. Morita M, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):330–3
Blockade of 5-hydroxytryptamine3 receptors prevents cisplatin-induced but not motion- or xylazine-induced emesis in the cat. Lucot JB. **Pharmacol Biochem Behav** 1989 Jan;32(1):207–10
Pharmacology in space. Part 2. Controlling motion sickness. Lathers CM, et al. **Trends Pharmacol Sci** 1989 Jun; 10(6):243–50 (29 ref.)
[Effect of dimephosphon on the blood circulation and oxygen tension in the brain of normal waking rabbits and in motion sickness] Beketov AI, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):35–8 (Eng. Abstr.) **(Rus)**
[Effect of the drug Humex on the development of experimental motion sickness] Bodo G, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):84 **(Rus)**

EPIDEMIOLOGY

Incidence of airsickness among military parachutists. Antuñano MJ, et al. **Aviat Space Environ Med** 1989 Aug; 60(8):792–7
Simulator induced syndrome: evidence for long-term aftereffects. Ungs TJ. **Aviat Space Environ Med** 1989 Mar; 60(3):252–5

ETIOLOGY

Is the noradrenergic neuron system in the brain stem related to motion sickness in rats? Takeda N, et al. **Adv Otorhinolaryngol** 1988;42:234–7
Space motion sickness during 24 flights of the space shuttle. Davis JR, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1185–9
Simulator sickness in U.S. Navy flight simulators [published erratum appears in Aviat Space Environ Med 1989 May;60(5):473] Kennedy RS, et al. **Aviat Space Environ Med** 1989 Jan;60(1):10–6
Motion sickness and motion characteristics of vessels at sea. Lawther A, et al. **Ergonomics** 1988 Oct;31(10):1373–94
[Phase correlation of cupular and otolithic reactions and their interrelation with the development of motion sickness] Vorob'ev OA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan-Feb;(1):19–23 **(Rus)**
[Space motion sickness] Gorgiladze GI, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):4–14 (82 ref.) (Eng. Abstr.) **(Rus)**

METABOLISM

Sodium concentration in saliva along the time course of experimental Coriolis sickness. Igarashi M, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5–6):485–8
[The effect of vestibuloprotectors on the cyclic nucleotide system in experimental motion sickness] Leshchiniuk II, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):26–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Reduction of visually-induced motion sickness elicited by changes in illumination wavelength. Dobie TG, et al. **Aviat Space Environ Med** 1989 Aug;60(8):749–54
Motion sickness and gastric myoelectric activity as a function of speed of rotation of a circular vection drum. Hu S, et al. **Aviat Space Environ Med** 1989 May;60(5):411–4
Adaptation to vection-induced symptoms of motion sickness. Stern RM, et al. **Aviat Space Environ Med** 1989 Jun; 60(6):566–72
Electrogastrograms during motion sickness in fasted and fed subjects. Stewart JJ, et al. **Aviat Space Environ Med** 1989 Mar;60(3):214–7
Role of the area postrema in three putative measures of motion sickness in the rat. Sutton RL, et al. **Behav Neural Biol** 1988 Sep;50(2):133–52
Salivary changes associated with seasickness. Gordon CR, et al. **J Auton Nerv Syst** 1989 Feb;26(1):37–42
Altered sensory-motor control of the head as an etiological factor in space-motion sickness. Lackner JR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):784–6
[The role of cholinergic mechanisms in altering the functional activity of the rabbit brain during motion sickness] Maksimuk VF, et al. **Fiziol Zh SSSR** 1988 Aug; 74(8):1109–19 **(Rus)**
[The effect of motion sickness on the diurnal rhythm of the sinus node of the heart conduction system] Marchenko AM, et al. **Voen Med Zh** 1989 May;(5):59–61 **(Rus)**

PREVENTION & CONTROL

Ground-based training for the stimulus rearrangement encountered during spaceflight. Reschke MF, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:87-93

Performance and well-being under tilting conditions: the effects of visual reference and artificial horizon. Rolnick A, et al. **Aviat Space Environ Med** 1989 Aug;60(8):779-85

The effect on motion sickness and oculomotor function of GR 38032F, a 5-HT3-receptor antagonist with anti-emetic properties. Stott JR, et al. **Br J Clin Pharmacol** 1989 Feb; 27(2):147-57

[Evaluation of the effectiveness of drugs for prevention of motion sickness] Galle RR, et al. **Kosm Biol Aviakosm Med** 1988 Jul-Aug;22(4):90-4 **(Rus)**

[Effect of adaptive biofeedback on the severity of vestibulo-autonomic symptoms of experimental motion sickness] Smirnov SA, et al. **Kosm Biol Aviakosm Med** 1988 Jul-Aug;22(4):35-9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Motion sickness and anxiety. Fox S, et al. **Aviat Space Environ Med** 1988 Aug;59(8):728-33

Neuropsychiatric observations of proprioceptive sensitivity in motion sickness susceptibility. Leimann Patt HO, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1083-8

Conditioned taste aversion in humans using motion-induced sickness as the US. Arwas S, et al. **Behav Res Ther** 1989; 27(3):295-301

Psychical and adaptive mechanisms in seasickness. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1-2):39-44

THERAPY

An evaluation of cognitive-behavioral therapy for training resistance to visually-induced motion sickness. Dobie TG, et al. **Aviat Space Environ Med** 1989 Apr;60(4):307-14

MOTIVATION

see related
COGNITIVE DISSONANCE
LIBIDO

Some evidence of enhanced alimentary motivation in spontaneously hypertensive rats (SHR). Niewiadomska G, et al. **Acta Physiol Hung** 1988;72(3-4):297-305

Positive changes in the premenstrual period. Stewart DE. **Acta Psychiatr Scand** 1989 Apr;79(4):400-5

"Cravings" are ambiguous: ask about urges or desires. Kozlowski LT, et al. **Addict Behav** 1989;14(4):443-5

Motivation in the treatment of alcoholism. Krampen G. **Addict Behav** 1989;14(2):197-200

Ringing in the new year: the change processes and reported outcomes of resolutions. Norcross JC, et al. **Addict Behav** 1989;14(2):205-12

The effects of contingent payment and frequent workplace monitoring on smoking abstinence. Rand CS, et al. **Addict Behav** 1989;14(2):121-8

Substance use among high school students in relation to school characteristics. Skager R, et al. **Addict Behav** 1989; 14(2):129-38

Dynamic aspects of the creative process: overview. Baker HS. **Adolesc Psychiatry** 1988;15:217-9

Adolescent psychic entropy: a response to unacknowledged fears. Faupel KC. **Adolescence** 1989 Summer;24(94):375-9

The impact of attitudes toward the personal future on study motivation and work orientations of nonworking adolescents. Rosseel E. **Adolescence** 1989 Spring; 24(93):73-93

Dropouts speak out: qualitative data on early school departures. Tidwell R. **Adolescence** 1988 Winter; 23(92):939-54

Evaluation of a program designed to help family and significant others to motivate resistant alcoholics into recovery. Liepman MR, et al. **Am J Drug Alcohol Abuse** 1989;15(2):209-21

Recruiting survey respondents to mailed surveys: controlled trials of incentives and prompts. Spry VM, et al. **Am J Epidemiol** 1989 Jul;130(1):166-72

Automatic-effortful processing and cognitive inertia in persons with mental retardation. Ellis NR, et al. **Am J Ment Retard** 1989 Jan;93(4):412-23

An existential view of Paul Diel's Psychologie de la motivation. Gimenez R. **Am J Psychoanal** 1989 Mar; 49(1):87-9

Evaluation of a community-wide incentive program to promote safety restraint use. Foss RD. **Am J Public Health** 1989 Mar;79(3):304-6

Human agency in social cognitive theory. Bandura A. **Am Psychol** 1989 Sep;44(9):1175-84

Motivational factors in health and disease. McClelland DC. **Am Psychol** 1989 Apr;44(4):675-83

The intensity of motivation. Brehm JW, et al. **Annu Rev Psychol** 1989;40:109-31 (52 ref.)

Sexual satisfaction in marriage as a function of life meaning. McCann JT, et al. **Arch Sex Behav** 1989 Feb;18(1):59-72

Motivating patients to seek preventive care. Rose AT. **Aust Fam Physician** 1989 Jan;18(1):35

Self-monitoring and self-managed reinforcement procedures for improving work productivity of developmentally disabled workers. A review. Martin GL, et al. **Behav Modif** 1989 Jul;13(3):322-39 (42 ref.)

Some effects of combining reinforcers in operant training with mentally handicapped persons. Thomas GV, et al. **Behav Modif** 1988 Oct;12(4):525-48

Thermoregulation and performance of heat-reinforced autoshaped keypecking in chicks. Cunningham CL, et al. **Behav Neural Biol** 1989 Jan;51(1):54-72

Depression and the frequency and strength of pleasant events: exploration of the Staats-Heiby theory. Rose GD, et al. **Behav Res Ther** 1988;26(6):489-94

The experience of opioid abstinence: the relevance of motivation and history. Murphy PN, et al. **Br J Addict** 1989 Jun;84(6):673-9

The will in psychoanalytic theory and practice. Gill HS. **Br J Med Psychol** 1989 Mar;62 (Pt 1):1-11

A study of firesetters in the south-west of Ireland. O'Sullivan GH, et al. **Br J Psychiatry** 1987 Dec;151:818-23

The nature of voluntary action. Brown JW. **Brain Cogn** 1989 May;10(1):105-20

Comparing motivational systems with two non-compliant head-injured adolescents. Zencius A, et al. **Brain Inj** 1989 Jan-Mar;3(1):67-71

Incentives for breast self-examination: role of the calendar. Baines CJ, et al. **Cancer Detect Prev** 1988;13(2):109-14

Motivational factors in breast self-examination. Implications for nurses. Cretain GK. **Cancer Nurs** 1989 Aug;12(4):250-6

Adult male report of childhood sexual abuse by mothers: case descriptions, motivations and long-term consequences. Krug RS. **Child Abuse Negl** 1989;13(1):111-9

Young children's attribution of action to beliefs and desires. Bartsch K, et al. **Child Dev** 1989 Aug;60(4):946-64

The effect of personal relevance on psychological inference: a developmental analysis. Feldman NS, et al. **Child Dev** 1988 Oct;59(5):1339-52

The motivation of at-risk individuals and their partners in deciding for or against predictive testing for Huntington's disease. Evers-Kiebooms G, et al. **Clin Genet** 1989 Jan; 35(1):29-40

Dental hygienists' influence on the patients' knowledge, motivation, self-care, and perception of change. Uitenbroek DG, et al. **Community Dent Oral Epidemiol** 1989 Apr; 17(2):87-90

The role of homecage environmental stimuli in the facilitation of shock-motivated spatial discrimination learning in rat pups. Misanin JR, et al. **Dev Psychobiol** 1989 Mar; 22(2):129-40

The loneliest achievement [editorial] Clemenhagen C. **Dimens Health Serv** 1989 May;66(4):5-6 **(Eng, Fre)**

Self-regulation training in sport and work. Hardy L, et al. **Ergonomics** 1988 Nov;31(11):1573-83 (56 ref.)

Why do women have abortions? Torres A, et al. **Fam Plann Perspect** 1988 Jul-Aug;20(4):169-76

Cigarette smoking motives: factorial structure and gender differences in a longitudinal study. Livson N, et al. **Int J Addict** 1988 Jun;23(6):535-44

The experience of hypnotic suggestions. Bowers P, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):336-49

Hope and hopelessness: a technical problem? Mehler JA, et al. **Int J Psychoanal** 1989;70 (Pt 2):295-304

Action theory within the structural view. Rangell L. **Int J Psychoanal** 1989;70 (Pt 2):189-203 (85 ref.)

Self poisoning in Sri Lanka: motivational aspects. Hettiarachchi J, et al. **Int J Soc Psychiatry** 1989 Summer; 35(2):204-8

A comparison of depressed and nondepressed disturbed children on measures of attributional style, hopelessness, life stress, and temperament. Benfield CY, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):397-410

Validation of the reasons for living inventory in general and delinquent adolescent samples. Cole DA. **J Abnorm Child Psychol** 1989 Feb;17(1):13-27

The Hopelessness Scale for Children: psychometric properties with normal and emotionally disturbed adolescents. Spirito A, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):445-58

Visual conversion disorder: a case analysis of the influence of visual information. Bryant RA, et al. **J Abnorm Psychol** 1989 Aug;98(3):326-9

Psychopathology of adolescent suicide: hopelessness, coping beliefs, and depression. Cole DA. **J Abnorm Psychol** 1989 Aug;98(3):248-55

An investigation of the developmental influences on nurses' motivation for their continuing education. Mackereth P. **J Adv Nurs** 1989 Sep;14(9):776-87

Evaluation of the Pleasure Scale in the assessment of anhedonia in children. Kazdin AE. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):364-72

Motivations for treatment and outcomes of care. The relationship between motivation for seeking dental treatment and the evaluation of outcomes of care. Reisine S, et al. **J Am Coll Dent** 1989 Summer;56(2):19-25

Motivation, personality organization, and the four psychologies of psychoanalysis. Pine F. **J Am Psychoanal Assoc** 1989;37(1):31-64

Achievement strivings, scholastic aptitude, and academic performance: a follow-up to "impatience versus achievement strivings in the type A pattern". Spence JT, et al. **J Appl Psychol** 1989 Feb;74(1):176-8

Correlates of participation in a worksite stop-smoking contest. Cummings KM, et al. **J Behav Med** 1988 Jun; 11(3):267-77

Referral to child psychiatry: parent and doctor motives and expectations. Bailey D, et al. **J Child Psychol Psychiatry** 1989 May;30(3):449-58

Cross-validation of six short forms of the WAIS-R in a healthy geriatric sample. Hoffman RG, et al. **J Clin Psychol** 1988 Nov;44(6):952-7

Development of experimental mood induction procedures for testing personality-event interaction models of depression. Robins CJ. **J Clin Psychol** 1988 Nov;44(6):958-63

Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. Beck AT, et al. **J Consult Clin Psychol** 1989 Apr;57(2):309-10

Suicide, hopelessness, and social desirability: a test of an interactive model. Holden RR, et al. **J Consult Clin Psychol** 1989 Aug;57(4):500-4

Levels of hopelessness in children and adolescents: a developmental perspective. Kashani JH, et al. **J Consult Clin Psychol** 1989 Aug;57(4):496-9

Motivational effects on neuropsychological functioning: comparison of depressed versus nondepressed individuals. Richards PM, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):396-402

A cost-benefit analysis of demand for food. Hursh SR, et al. **J Exp Anal Behav** 1988 Nov;50(3):419-40

The effects of component duration on multiple-schedule performance in closed and open economies. La Fiette MH, et al. **J Exp Anal Behav** 1988 Nov;50(3):457-68

Positive behavioral contrast across food and alcohol reinforcers. McSweeney FK, et al. **J Exp Anal Behav** 1988 Nov;50(3):469-81

The merger and development of equivalence classes by unreinforced conditional selection of comparison stimuli. Saunders RR, et al. **J Exp Anal Behav** 1988 Sep; 50(2):145-62

Time horizons in rats: the effect of operant control of access to future food. Timberlake W, et al. **J Exp Anal Behav** 1988 Nov;50(3):405-17

Pigeons' choices in situations of diminishing returns: fixed- versus progressive-ratio schedules. Wanchisen BA, et al. **J Exp Anal Behav** 1988 Nov;50(3):375-94

The integration of habits maintained by food and water reinforcement through stimulus compounding. Weiss SJ, et al. **J Exp Anal Behav** 1988 Sep;50(2):237-47

Academic middle managers for baccalaureate nursing: work motivation and satisfaction. Carpenter KD. **J Nurs Educ** 1989 Jun;28(6):256-64

Motivational orientations of registered nurse baccalaureate students in rural New England. Lethbridge DJ. **J Nurs Educ** 1989 May;28(5):203-9 (18 ref.)

Assessing gender-related differences in achievement orientation using two different achievement scales. Piedmont RL, et al. **J Pers Assess** 1989 Summer; 53(2):229-38

Optimal experience in work and leisure. Csikszentmihalyi M, et al. **J Pers Soc Psychol** 1989 May;56(5):815-22

Relation of sympathy and personal distress to prosocial behavior: a multimethod study. Eisenberg N, et al. **J Pers Soc Psychol** 1989 Jul;57(1):55-66

Personal striving differentiation and affective reactivity. Emmons RA, et al. **J Pers Soc Psychol** 1989 Mar; 56(3):478-84

Influence of positive affect on the subjective utility of gains and losses: it is just not worth the risk. Isen AM, et al. **J Pers Soc Psychol** 1988 Nov;55(5):710-7

Motivational factors in nonincarcerated sexually aggressive men. Lisak D, et al. **J Pers Soc Psychol** 1988 Nov; 55(5):795-802

Processing deficits and the mediation of positive affect in persuasion. Mackie DM, et al. **J Pers Soc Psychol** 1989 Jul;57(1):27-40

Motivational basis of dissonance: the singular role of behavioral consequences. Scher SJ, et al. **J Pers Soc Psychol** 1989 Jun;56(6):899-906

Attitudes, knowledge, and beliefs as predictors of exercise intent and behavior in schoolchildren. Ferguson KJ, et al. **J Sch Health** 1989 Mar;59(3):112-5

Perceived barriers to exercise among adolescents. Tappe MK, et al. **J Sch Health** 1989 Apr;59(4):153-5

Improving response rates with incentives [letter] Rissel C. **Med J Aust** 1989 Apr 3;150(7):411

The importance of previous convictions in assessing criminal motivation—the need for detail. Prins H. **Med Sci Law** 1989 Apr;29(2):107-8

Volitional control of involuntary movements. Koller WC, et al. **Mov Disord** 1989;4(2):153-6

Salaried physicians and economic incentives [letter] **N Engl J Med** 1989 Jan 19;320(3):187-8

Performance enhancement in a semi-autonomous confined microsociety. Brady JV, et al. **Pavlov J Biol Sci** 1988 Jul-Sep;23(3):111-7

Motivation and reinforcement. Interdisciplinary dictionary. Simonov PV. **Pavlov J Biol Sci** 1989 Jan-Mar;24(1):6-10

Can response force be shaped by reinforcement? Eisenberger R. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):725-6

Effects of telic dominance and metamotivational state on squash task performance. Kerr JH, et al. **Percept Mot Skills** 1988 Aug;67(1):171-4

The effects of varying procurement costs on food intake in baboons. Foltin RW, et al. **Physiol Behav** 1988;43(4):493-9

Level searching: a new assay of sexual motivation in the male rat. Mendelson SD, et al. **Physiol Behav** 1989 Feb; 45(2):337-41

The modified forced-swim test in rats: influence of rope- or straw-suspension on climbing behavior. Nishimura H, et al. **Physiol Behav** 1988;43(5):665-8

Motivational properties of opioids. Shippenberg T, et al. **Pol J Pharmacol Pharm** 1987 Sep-Oct;39(5):577-83 (20 ref.)

A Visual Analogue Scale technique to measure global vigor and affect. Monk TH. **Psychiatry Res** 1989 Jan;27(1):89-99

Perceived goal-difficulty, locus of control, and performance ratings. Bigoness WJ, et al. **Psychol Rep** 1988 Oct; 63(2):475-82

Motivation: escape to freedom, the important ingredient in short-term psychotherapy. Blum LH. **Psychol Rep** 1988 Oct;63(2):381-2

The moral justification of suicide in suicide notes. Lester D, et al. **Psychol Rep** 1988 Aug;63(1):106

Eating motivations and bulimic behavior among college women. McCormack S, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1163-6

The police stress survey: reliability and relation to job satisfaction and organizational commitment. Martelli TA, et al. **Psychol Rep** 1989 Feb;64(1):267-73

Fear of failure and the Zeigarnik effect. Moot SA 3d, et al. **Psychol Rep** 1988 Oct;63(2):459-64

Medical students' Edwards Personal Preference Schedule norms. Thorson JA, et al. **Psychol Rep** 1988 Oct; 63(2):465-6

Palatability shift of a salt-associated incentive during sodium depletion. Berridge KC, et al. **Q J Exp Psychol [B]** 1989 May;41(2):121-38

Interactions between conditioned stimuli for food and water in the rat. Ganesan R, et al. **Q J Exp Psychol [B]** 1988 Aug;40(3):229-41

A model of fertility motivation, desires, and expectations early in women's reproductive careers. Miller WB, et al. **Soc Biol** 1988 Fall-Winter;35(3-4):236-50

Personal control and health promotion. Peterson C, et al. **Soc Sci Med** 1989;28(8):819-28 (101 ref.)

Physician motivations for nonscientific drug prescribing. Schwartz RK, et al. **Soc Sci Med** 1989;28(6):577-82

Motivation in deliberate self-harm. Loughrey G, et al. **Ulster Med J** 1989 Apr;58(1):46-50

Intergenerational transfers within the family context--motivating factors and their implications for caregiving. Cantor MH, et al. **Women Health** 1988; 14(3-4):39-51

[The criminal motive of mental patients] Tian ZE. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):175-7, 190 (Eng. Abstr.) (Chi)

[Rapid decisions in the situation of dichotic choice: an integrated approach which takes into account onset snd execution of the response] Proteau L, et al. **Can J Psychol** 1987 Dec;41(4):442-73 (Eng. Abstr.) (Fre)

[Motivations of parents taking their children to the hospital in emergencies. Results of a psychosocial survey at the Regional University Hospital Center of Grenoble] Marguet MC, et al. **Pediatrie** 1988;43(5):433-9 (Eng. Abstr.) (Fre)

["Helplessness" as a function of response deprivation] Grabitz HJ, et al. **Arch Psychol (Frankf)** 1988;140(2):111-25 (Eng. Abstr.) (Ger)

[Motivation and volition. Remarks and questions on the revival of motivational psychology] Kornadt HJ. **Arch Psychol (Frankf)** 1988;140(4):209-22 (30 ref.) (Eng. Abstr.) (Ger)

[Psychological characteristics of the "Düker task" or "what is achieved in performance?"] Krüger HP. **Arch Psychol (Frankf)** 1988;140(4):273-80 (Eng. Abstr.) (Ger)

[Heinrich Düker's action theory] Tent L. **Arch Psychol (Frankf)** 1988;140(3):169-82 (Eng. Abstr.) (Ger)

[Conditions and motivations for the desire to have children in young females] Pinther A. **Arztl Jugendkd** 1988; 79(4):215-20 (Eng. Abstr.) (Ger)

[Motivational dependence of changes in visual evoked potentials in rats during water deprivation] Kolle U, et al. **Biomed Biochim Acta** 1988;47(12):1059-64 (Eng. Abstr.) (Ger)

["Kleptomania" as a family game--on the legal responsibility in complex motivated stealing] Kröber HL. **Nervenarzt** 1988 Oct;59(10):610-5 (Ger)

[Therapy motivation in children: results of an empirical study] Mempel S. **Prax Kinderpsychol Kinderpsychiatr** 1989 May-Jun;38(5):146-51 (Eng. Abstr.) (Ger)

[Flying on one's back. Thrills with the computer] Huebner M, et al. **Psyche (Stuttg)** 1988 Dec;42(12):1096-128 (Eng. Abstr.) (Ger)

[Motivation for alcoholism in females--a study from 2 Thuringen districts] Sörgel H, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:99-100 (Ger)

[An arsonist with a sexual motivation] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun;41(6):361-6 (Eng. Abstr.) (Ger)

[Social comparison processes in health psychology and psychotherapy] Haisch J, et al. **Psychother Psychosom Med Psychol** 1989 Jan;39(1):26-32 (39 ref.) (Eng. Abstr.) (Ger)

[Long-term psychiatric patients in the workplace--a survey of employers] Hubschmid T, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):145-8 (Eng. Abstr.) (Ger)

[Difficulties in the occupational incorporation of the mentally handicapped] Junge KH, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):149-51 (Eng. Abstr.) (Ger)

[Assessment of motivation for achievement in connection with rehabilitation measures] Plaum E, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):140-4 (Eng. Abstr.) (Ger)

[Application for admission to a nursing home--personal motives and possibilities for medical intervention] Pohrt U, et al. **Z Arztl Fortbild (Jena)** 1989;83(8):409-10 (Ger)

[Can research into the needs and motives improve the management of elderly citizens?] Wolf E. **Z Arztl Fortbild (Jena)** 1989;83(8):401-4 (14 ref.) (Ger)

[Effects of lack of control and behavioral control on subsequent development of operant behavior] Hammerl M, et al. **Z Exp Angew Psychol** 1988;35(4):573-96 (Eng. Abstr.) (Ger)

[Education of the aged in a residential setting--motivation for participation of "educational novices" within the scope of a "bring" structure] Karl F. **Z Gerontol** 1988 Jul-Aug; 21(4):222-4 (Eng. Abstr.) (Ger)

[Attitude patterns of the elderly to technical innovation] Rott C. **Z Gerontol** 1988 Jul-Aug;21(4):225-31 (Eng. Abstr.) (Ger)

[The effects of psychotherapy as a result of the relation of therapeutic availability and acceptance by the client] Ambühl H, et al. **Z Klin Psychol Psychopathol Psychother** 1988;36(4):308-27 (Eng. Abstr.) (Ger)

[Motivation and emotional disorders: a cognitive science approach. II: Strategies for intervention] Leuzinger-Bohleber M, et al. **Z Klin Psychol Psychopathol Psychother** 1989; 37(2):195-217 (Eng. Abstr.) (Ger)

[Motivation and emotional disorders. A cognitive science approach. I: Principles, classification and diagnosis] Pfeifer R, et al. **Z Klin Psychol Psychopathol Psychother** 1989; 37(1):40-73 (Eng. Abstr.) (Ger)

[New results of comparative studies of motivation and social factors influencing abortion in East Germany] Henning G, et al. **Zentralbl Gynakol** 1989;111(5):287-93 (Eng. Abstr.) (Ger)

[Studies on patients with "wrist cutting syndrome"--an application of imagination theory to the three factors of the motivations of 23 wrist cutters] Kashiwada T. **Seishin Shinkeigaku Zasshi** 1988;90(6):469-96 (Eng. Abstr.) (Jpn)

[Interactive effects of job complexity and expectancy on internal motivation] Tao M. **Shinrigaku Kenkyu** 1988 Jun; 59(2):69-75 (Eng. Abstr.) (Jpn)

[Prevalence of smoking and its motivation among students of 2 institutions of higher learning in Bialystok] Fabczak J, et al. **Pneumonol Pol** 1988 Jun;56(6):273-7 (Eng. Abstr.) (Pol)

[Motivational and affective relations in infant and juvenile misbehavior states] Scripcaru G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct-Dec;92(4):681-5 (Eng. Abstr.) (Rum)

[Psychological aspects of the training of public health specialists] Andreeva VG, et al. **Gig Sanit** 1989 Apr;(4):32-4 (Rus)

[A method of determining the leading factors in professional orientation of adolescents at the inter-school educational-industrial combine] Zhizhin KS, et al. **Gig Sanit** 1988 Jul;(7):34-5 (Rus)

[Health education and motivation of the population with regard to health-related problems] Gagulin IV, et al. **Kardiologiia** 1989 Mar;29(3):74-7 (Eng. Abstr.) (Rus)

[Effect of incentives on the quality and cost of medical services] Stoddart G. **Sov Zdravookhr** 1989;(4):60-1 (Rus)

[The motives for the participation in work processes of severely mentally retarded persons at a psychoneurology boarding house] Dement'eva NF, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):97-102 (Eng. Abstr.) (Rus)

[Motivational-emotional disorders in astrocytoma of the temporal lobe] Madorskiĭ VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):82-5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Brain stimulation reward: effects of ethanol. Kornetsky C, et al. **Alcoholism (NY)** 1988 Oct;12(5):609-16 (61 ref.)

Dopamine and preparatory behavior: III. Effects of metoclopramide and thioridazine. Blackburn JR, et al. **Behav Neurosci** 1989 Aug;103(4):903-6

Modulation of appetitively and aversively motivated behavior by the kappa opioid antagonist MR2266. Fanselow MS, et al. **Behav Neurosci** 1989 Jun;103(3):663-72

Effects of intrahippocampal administration of colchicine on incentive contrast and on radial maze performance. Flaherty CF, et al. **Behav Neurosci** 1989 Apr;103(2):319-28

Effect of lysine-8-vasopressin on retention and retrieval of a discrimination reward task in the rat. Mulvey DJ, et al. **Behav Neurosci** 1988 Aug;102(4):580-5

Positive effects of captopril in the behavioral despair swim test. Giardina WJ, et al. **Biol Psychiatry** 1989 Mar 15; 25(6):697-702

Chronic flupentixol treatment potentiates the reinforcing properties of systemic heroin administration. Stinus L, et al. **Biol Psychiatry** 1989 Aug;26(4):363-71

The behavioral effects of CCK8 injected into the medial nucleus accumbens are dependent on the motivational state of the rat. Daugé V, et al. **Eur J Pharmacol** 1989 Apr 12; 163(1):25-32

Motivational effects of opioids: influence of D-1 versus D-2 receptor antagonists. Shippenberg TS, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):233-42

Self-paced learning in children with attention deficit disorder with hyperactivity. Dalby JT, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):269-75

Differential effects of pentobarbital and cocaine on punished and nonpunished responding. Dworkin SI, et al. **J Exp Anal Behav** 1989 Mar;51(2):173-84

Preference for unpredictable food rewards occurs with high proportion of reinforced trials or alcohol if rewards are not delayed. Daly HB. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):3-13

Motivational effects of opioids in an animal model of prolonged inflammatory pain: alteration in the effects of kappa- but not of mu-receptor agonists. Shippenberg TS, et al. **Pain** 1988 Nov;35(2):179-86

Anticonflict and rotarod impairing effects of alprazolam and diazepam in rat after acute and subchronic administration. Söderpalm B, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):269-83

Tolerance and selective cross-tolerance to the motivational effects of opioids. Shippenberg TS, et al. **Psychopharmacology (Berlin)** 1988;96(1):110-5

[Is ethanol a stressogenic factor for rats with a developed alcohol motivation?] Vedernikova NN, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):456-8 (Eng. Abstr.) (Rus)

[The fenazepam demand by rats depending on the degree of alcoholic motivation] Golovenko NIa, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):90-2 (Eng. Abstr.) (Rus)

[Sensitivity of the dopamine receptors of the amygdaloid neurons in rats with different alcohol motivations] Bondarenko TT. **Fiziol Zh SSSR** 1988 Oct;74(10):1373-6 (Eng. Abstr.) (Rus)

[Substance P and the ethanol-evoked changes in the independent motivated behavioral reactions of rabbits] Zilov VG, et al. **Zh Vyssh Nerv Deiat** 1989 Mar-Apr; 39(2):343-8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The neural basis of motivated behavior. Swanson LW. **Acta Morphol Neerl Scand** 1988-89;26(2-3):165-76 (32 ref.)

Central but not basolateral amygdala mediates memory for positive affective experiences. Kesner RP, et al. **Behav Brain Res** 1989 Jun 1;33(2):189-95

Intervention of the lateral and central amygdala on the association of visual stimuli with different magnitudes of reinforcement. Peinado-Manzano A. **Behav Brain Res** 1989 Apr 1;32(3):289-95

Prefrontal cortex lesions attenuate substantia nigra self-stimulation: a reward summation analysis. Silverman JA, et al. **Behav Brain Res** 1989 Feb 1;32(1):43-50

Rats (Rattus norvegicus) selectively bred to differ in avoidance behavior also differ in response to novelty stress, in glycemic conditioning, and in reward contrast. Flaherty CF, et al. **Behav Neural Biol** 1989 Mar;51(2):145-64

The effects of lateral, medial, or complete septal lesions on positive conditioned suppression in rats. Poplawsky A, et al. **Behav Neural Biol** 1989 May;51(3):377-88

Interactions between simultaneously activated behavioral systems in the rat. Lammers JH, et al. **Behav Neurosci** 1989 Aug;103(4):784-9

Disruption of the connections between the mediodorsal and sulcal prefrontal cortices alters the associability of rewarding medial cortical stimulation to place and taste stimuli in rats. Robertson A, et al. **Behav Neurosci** 1989 Aug;103(4):770-8

Information theory of emotions in heuristic learning. Konev AD, et al. **Neurosci Behav Physiol** 1988 Sep-Oct; 18(5):408-11

Holographic homologies of biological motivation in the systemic organization of behavioral acts. Sudakov KV. **Neurosci Behav Physiol** 1988 Nov-Dec;18(6):443-52

Electrical self-stimulation in the medial and lateral septum as compared to the lateral hypothalamus: differential intervention of reward and learning processes? Cazala P, et al. **Physiol Behav** 1988;44(1):53-9

Chemical and neuronal control of feeding motivation. Oomura Y. **Physiol Behav** 1988;44(4-5):555-60 (34 ref.)

Electrophysiology of taste, feeding and reward in lateral hypothalamus of rabbit. Schwartzbaum JS. **Physiol Behav** 1988;44(4-5):507-26

Weight, corticosterone and glucose: changes with time of day after food deprivation. Sommerville S, et al. **Physiol Behav** 1988;44(1):137-40

Psychophysiology and psychopathology: a motivational approach. Fowles DC. **Psychophysiology** 1988 Jul; 25(4):373-91 (117 ref.)

[Normative aspects of somatosensory evoked P300 components] Louzã Neto MR, et al. **EEG EMG** 1989 Jun; 20(2):92-8 (Eng. Abstr.) (Ger)

[Personality characteristics and event related potentials (ERP)] Dormann S, et al. **Z Psychol** 1989;197(1):79-86 (Eng. Abstr.) (Ger)

[Psychosynergetics—new perspectives for neuropsychology? Principles of the psychosynergetic theory of emotional and motivational processes] Hansch D. **Z Psychol** 1988; 196(4):421–36 (Eng. Abstr.) (Ger)

[Neuropeptides in the mechanisms of the activation of escape reactions induced by stimulation of the ventromedial hypothalamus during food motivation satiation] Sudakov SK. **Biull Eksp Biol Med** 1989 Feb;107(2):135–8 (Eng. Abstr.) (Rus)

[Psychophysiologic analysis of the achievement motivation and avoidance in work activity] Zarakovskiĭ GM, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):81–90 (Rus)

[So-called motivational–emotional dominants in the realization of behavior at different stages of the ontogenetic development of animals] Kassil' VG. **Nerv Sist** 1988; 26:148–64 (Rus)

[Reflection of dominant motivation in the neuronal activity of the brain and peripheral organs] Sudakov KV, et al. **Usp Fiziol Nauk** 1988 Jul–Sep;19(3):24–44 (56 ref.) (Rus)

[Relation of alcoholic motivation to the functional state of the emotive zones of the brain in rats] Bondarenko TT. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):72–5 (Eng. Abstr.) (Rus)

[The role of the perifornix area of the hypothalamus in forming alcoholic motivation in rats] Kelesheva LF, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):540–5 (Eng. Abstr.) (Rus)

MOTOR ACTIVITY

Affective responses to activities: a comparative study. Boyer J, et al. **Am J Occup Ther** 1989 Feb;43(2):81–8

Recording of movement-related potentials from the human cortex. Neshige R, et al. **Ann Neurol** 1988 Sep;24(3):439–45

Treating chronic hemiparesis with modified biofeedback. Wissel J, et al. **Arch Phys Med Rehabil** 1989 Aug; 70(8):612–7

Quantitative measurement of motor activity during the immobility reflex elicited by clamping in developing rats. Junquera J, et al. **Behav Brain Res** 1989 May 1;33(1):111–2

Open-field behavior of spontaneously hypertensive and Wistar-Kyoto normotensive rats: effects of reciprocal cross-fostering. Cierpial MA, et al. **Behav Neural Biol** 1989 Mar;51(2):203–10

Does directed exploration influence locomotor activity in a holeboard test? Durcan MJ, et al. **Behav Neural Biol** 1989 Jan;51(1):121–5

Effects of prenatal heat stress on postnatal growth, behavior and learning capacity in mice. Shiota K, et al. **Biol Neonate** 1989;56(1):6–14

Quantitative evaluation of foetal motor activity: longitudinal study. Todros T, et al. **Boll Soc Ital Biol Sper** 1988 Sep; 64(9):845–51

Electrically induced locomotion in the in vitro brainstem–spinal cord preparation. Atsuta Y, et al. **Brain Res** 1988 Aug 1;470(2):309–12

Behavioral correlates of self-stimulation, flight and ambivalence. St-Laurent J. **Brain Res Bull** 1988 Jul; 21(1):61–77

Effects of pregnancy and parturition on free-running circadian activity rhythms in the rat. Rosenwasser AM, et al. **Chronobiol Int** 1987;4(2):183–7

Maternal expectations of their infants' development: some cultural differences. Hopkins B, et al. **Dev Med Child Neurol** 1989 Jun;31(3):384–90

Motor training and physical fitness: possible short- and long-term influences on the development of individual differences in behavior. Bekoff M. **Dev Psychobiol** 1988 Sep;21(6):601–12 (109 ref.)

The ontogeny of exploratory behavior in the house rat (Rattus rattus): the mobility gradient. Eilam D, et al. **Dev Psychobiol** 1988 Nov;21(7):679–710

Activity states and motor activity in an infant capuchin monkey (Cebus apella) from birth through eleven weeks. Fragaszy DM. **Dev Psychobiol** 1989 Mar;22(2):141–57

Changes in ambulatory activity and dopamine turnover in streptozotocin-induced diabetic rats. Shimomura Y, et al. **Endocrinology** 1988 Dec;123(6):2621–5

Effects on load handling of restricted and unrestricted shelf opening clearances. Mital A, et al. **Ergonomics** 1989 Jan; 32(1):39–49

Involvement of retinal and extraretinal photoreceptors in the mediation of nocturnal locomotor activity rhythms in the catfish, Silurus asotus. Tabata M, et al. **Exp Biol** 1988; 47(4):219–25

Premotor and supplementary motor cortex in rhesus monkeys: neuronal activity during externally- and internally-instructed motor tasks. Kurata K, et al. **Exp Brain Res** 1988;72(2):237–48

Age-related changes in the motor response to environmental novelty in the rat. Rosenthal MJ, et al. **Exp Gerontol** 1989; 24(2):149–57

Habitat use by squirrel monkeys (Saimiri oerstedi) in Costa Rica. Boinski S. **Folia Primatol (Basel)** 1987;49(3–4):151–67

Disruption of light-dark cycle of feeding and drinking behavior, and ambulatory activity induced by development of obesity in the Zucker rat. Fukagawa K, et al. **Int J Obes** 1988;12(5):481–90

Variations in running activity and enzymatic adaptations in voluntary running rats. Rodnick KJ, et al. **J Appl Physiol** 1989 Mar;66(3):1250–7

The effectiveness of activity scheduling and relaxation training in the treatment of spasmodic dysmenorrhea. Sigmon ST, et al. **J Behav Med** 1988 Oct;11(5):483–95

A developmental–genetic analysis of aggressive behavior in mice (Mus musculus): III. Behavioral mediation by heightened reactivity or immobility? Gariépy JL, et al. **J Comp Psychol** 1988 Dec;102(4):392–9

Running-wheel avoidance learning in rats (Rattus norvegicus): effects of contingencies and comparisons of different strains. Iso H, et al. **J Comp Psychol** 1988 Dec; 102(4):350–71

Multivariate analysis of putative measures of activity, exploration, emotionality, and spatial behavior in the hooded rat (Rattus norvegicus). Maier SE, et al. **J Comp Psychol** 1988 Dec;102(4):378–87

The effects of knife cuts in the sub-paraventricular zone of the female rat hypothalamus on oestrogen-induced diurnal surges of plasma prolactin and LH, and circadian wheel-running activity. Watts AG, et al. **J Endocrinol** 1989 Aug;122(2):593–604

Rhythmic-movement facilitation of learning in working-class Afro-American children. Boykin AW, et al. **J Genet Psychol** 1988 Sep;149(3):335–47

Responses to music and movement in the development of children with Down's syndrome. Stratford B, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):13–24

Reciprocal behaviour associated with altered homeostasis and photosensitivity of Drosophila clock mutants. Konopka RJ, et al. **J Neurogenet** 1989 Sep;6(1):1–10

Behavioral and neurochemical evaluation of a transgenic mouse model of Lesch-Nyhan syndrome. Finger S, et al. **J Neurol Sci** 1988 Sep;86(2–3):203–13

Coordination and inhomogeneous activation of human arm muscles during isometric torques. van Zuylen EJ, et al. **J Neurophysiol** 1988 Nov;60(5):1523–48

Early detection of cerebral palsy: sensitivity and specificity of two motor assessment tools. Harris SR. **J Perinatol** 1987 Winter;7(1):11–5

Effects of exercise training on the amylase activity and glycogen content in rat submandibular gland. Komabayashi T, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):293–7

Behavioral characteristics in mice with brain lesions induced by hypertonic saline. Takeshita M, et al. **Jikken Dobutsu** 1988 Oct;37(4):405–12

Positive interaction between alpha-1 adrenergic and dopamine-2 receptors in locomotor activity of normo and supersensitive mice. Rubinstein M, et al. **Life Sci** 1989; 44(5):337–46

Volitional control of involuntary movements. Koller WC, et al. **Mov Disord** 1989;4(2):153–6

Circadian rhythms of activity in healthy young and elderly humans. Lieberman HR, et al. **Neurobiol Aging** 1989 May–Jun;10(3):259–65 (30 ref.)

Effect of imaging vs silently rehearsing sentences on concurrent unimanual tapping: a follow-up. Lempert H. **Neuropsychologia** 1989;27(4):575–9

Altered activity of the locus coeruleus in an animal model of depression. Simson PE, et al. **Neuropsychopharmacology** 1988 Dec;1(4):287–95

Locomotor behavior of rhesus macaques (Macaca mulatta) on Cayo Santiago. Dunbar DC. **P R Health Sci J** 1989 Apr;8(1):79–85

Effect of colour on physical strength and mood in children. Hamid PN, et al. **Percept Mot Skills** 1989 Aug;69(1):179–85

Opposite effects of restraint on morphine analgesia and naloxone-induced jumping. Dymshitz J, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):905–10

Both prenatal and postnatal factors contribute to the effects of maternal stress on offspring behavior and central 5-hydroxytryptamine receptors in the rat. Peters DA. **Pharmacol Biochem Behav** 1988 Jul;30(3):669–73

Comparison of leg movements in preterm infants at term with healthy full-term infants. Heriza CB. **Phys Ther** 1988 Nov; 68(11):1687–93

Aggression and adaptation to the light-dark cycle: role of intrinsic and extrinsic control. Benus RF, et al. **Physiol Behav** 1988;43(2):131–7

Different effects of acute and chronic stress on two dopamine-mediated behaviors in the mouse. Cabib S, et al. **Physiol Behav** 1988;43(2):223–7

Heat production and motor deficit in rats lesioned in globus pallidus, entopeduncular nucleus and lateral hypothalamus. De Luca B, et al. **Physiol Behav** 1989 Jan;45(1):119–26

Open-field behavior is not related to treadmill performance in exercising rats [published erratum appears in Physiol Behav 1988;44(1):156] Dishman RK, et al. **Physiol Behav** 1988;43(5):541–6

A microanalysis of wheel running in male and female rats. Eikelboom R, et al. **Physiol Behav** 1988;43(5):625–30

The effect of ambient temperature cycles upon circadian running and drinking activity in male and female laboratory rats. Francis AJ, et al. **Physiol Behav** 1988;43(4):471–7

Activity rhythms of hamsters in a single cage compared to a simulated burrow system. Korenman EM, et al. **Physiol Behav** 1988;43(4):459–69

Locomotor activity registration by passive infrared detection in saddle back tamarins and tree shrews. Lerchl A, et al. **Physiol Behav** 1988;44(2):281–4

Continual monitoring of reaching in rat using magnetic induction law. Mihalik V, et al. **Physiol Behav** 1989 Feb; 45(2):351–4

Automated method for measuring fighting behavior and locomotor activity of mice. Päivärinta P, et al. **Physiol Behav** 1989 Apr;45(4):857–60

Acute and repeated gestational stress affect offspring learning and activity in rats. Weller A, et al. **Physiol Behav** 1988; 43(2):139–43

Cannulation of the caudal medulla: behavioral effects of indwelling cerebellar cannulae. Martinez JL, et al. **Proc West Pharmacol Soc** 1988;31:217–9

Comparison of motor activity circadian rhythm for SHR and WKY during moderate audiogenic stress. Watanabe Y, et al. **Proc West Pharmacol Soc** 1988;31:273–6

Observed behavior as a predictor of the response to sleep deprivation in depressed patients. Bouhuys AL, et al. **Psychiatry Res** 1989 Apr;28(1):47–61

In defense of the advance specification hypothesis for motor control. Rosenbaum DA, et al. **Psychol Res** 1988; 50(1):58–62

Central nervous system actions of corticotropin-releasing factor on cardiovascular function in the absence of locomotor activity. Overton JM, et al. **Regul Pept** 1989 Jun–Jul;25(3):315–24

Generational variability in the patterns of motor activity circadian rhythm in the rats. Cambras T, et al. **Rev Esp Fisiol** 1988 Sep;44(3):243–6

Detection of changes in the mouse circadian rhythm induced by stress. Diez-Noguera A, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):247–55

Mental rotation of the neuronal population vector. Georgopoulos AP, et al. **Science** 1989 Jan 13; 243(4888):234–6

Effects of dopamine depletion on the spontaneous activity of type I striatal neurons: relation to local dopamine concentration and motor behavior. Orr WB, et al. **Synapse** 1987;1(5):461–9

The use of passive infrared detectors to measure locomotor activity of laboratory animals. Büttner D. **Z Versuchstierkd** 1988;31(3):137–41 (2 ref.)

[Open field activity of isolated calves with reference to the degree of iron deficiency] Bünger U, et al. **Arch Exp Veterinarmed** 1988 May;42(3):383–93 (Eng. Abstr.) (Ger)

[Periodic local approximation for the model free description of measurement courses of biorhythmic processes—demonstration example for the selection of smoothness parameters] Peil J, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):261–9 (Eng. Abstr.) (Ger)

[Basic motor pattern in 4 neurotic structures] Zander W. **Z Psychosom Med Psychoanal** 1988;34(4):373–88 (Eng. Abstr.) (Ger)

[Measuring the spontaneous activity of tree shrews (Tupaia belangeri) with passive infrared detectors] Kurre J, et al. **Z Versuchstierkd** 1988;31(3):105–10 (Eng. Abstr.) (Ger)

[Ontogeny of GABAergic modulation on locomotor activity and pain reactivity in mice] Laviola G. **Ann Ist Super Sanita** 1988;24(4):559–62 (Eng. Abstr.) (Ita)

[Differences of behavioral rhythms observed by flat cage and running-wheel cage in female rat] Shinoda M, et al. **Jikken Dobutsu** 1988 Oct;37(4):463–8 (Eng. Abstr.) (Jpn)

[Restoration of disrupted motor function in rats upon homotopic transplantation of the embryonal cerebral cortex] Senatorov VV, et al. **Dokl Akad Nauk SSSR** 1989; 304(2):502–5 (Rus)

[Study of arterial pressure, body weight, motor activity and prevalence of smoking in two independent samples of Moscow schoolchildren 11 and 14 years of age] Il'chenko IN, et al. **Ter Arkh** 1989;61(1):18–21 (Eng. Abstr.) (Rus)

[Intensity of gluconeogenesis in the rat liver in the recovery period after long-term hypokinesis] Ershikov SM. **Vopr Med Khim** 1989 May–Jun;35(3):55–8 (Eng. Abstr.) (Rus)

[Motion therapy in dizziness improves the function of the injured balance system] Silfverskiöld R. **Lakartidningen** 1988 Sep 7;85(36):2850–3 (Swe)

DRUG EFFECTS

Behavioural consequences of NaNO2-induced hypoxia in male rats. Hliňák Z, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):72–4

Differential recovery in measures of exploration/locomotion after a single dosage of reserpine in the rat. Geoffroy M, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(6):263–74

Chronic uridine treatment reduces the level of [3H]spiperone-labelled dopamine receptors and enhances their turnover rate in striatum of young rats: relationship to dopamine-dependent behaviours. Farabegoli C, et al. **Acta Physiol Scand** 1988 Feb;132(2):209–16

Neuroleptic-induced marching-in-place. Frost L, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):48–51

Uterine motor responses to an alpha 2-adrenergic agonist medetomidine hydrochloride in the bitches during the end of gestation and the post-partum period. Jedruch J, et al. **Acta Vet Scand Suppl** 1989;85:129–34

Function and mechanism of the interaction of GTP-binding proteins with alpha 2-adrenoceptors in the brain. Nomura Y, et al. **Adv Exp Med Biol** 1988;236:301–11

Ro15-4513 antagonizes depression of open-field horizontal activity by ethanol in rats. June HL, et al. **Alcohol** 1989 Jul–Aug;6(4):335–7

Ro15-4513 enhances and attenuates motor stimulant effects

of ethanol in rats. June HL, et al. **Alcohol** 1989 May-Jun; 6(3):245-8
Increased stimulatory effect by the combined administration of cocaine and alcohol in mice. Masur J, et al. **Alcohol** 1989 May-Jun;6(3):181-2
Influence of different concentrations of ethanol on energy expenditure, substrate utilisation, and activity in the rat. Menéndez JA, et al. **Alcohol** 1989 Jul-Aug;6(4):271-6
Effects of 3-amino-1,2,4-triazole on ethanol-induced open-field activity: evidence for brain catalase mediation of ethanol's effects. Aragon CM, et al. **Alcoholism (NY)** 1989 Feb;13(1):104-8
Neurotensin and ethanol interactions on hypothermia and locomotor activity in LS and SS mice. Erwin VG, et al. **Alcoholism (NY)** 1989 Feb;13(1):91-4
Effects of san-huang-hsieh-hsin-tang on central monoaminergic and GABAergic systems in rats. Chu CY, et al. **Am J Chin Med** 1988;16(1-2):57-66
Effects of theophylline on behavior and learning in children with asthma. Rappaport L, et al. **Am J Dis Child** 1989 Mar;143(3):368-72
Inhibitor of protein synthesis phase shifts a circadian pacemaker in mammalian SCN. Inouye ST, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1055-8
Interaction between nitrous oxide and diazepam in the mouse staircase test. Pruhs RJ, et al. **Anesth Analg** 1989 Apr; 68(4):501-5
TRH-catecholamine interactions in brain and spinal cord. Bennett GW, et al. **Ann N Y Acad Sci** 1989;553:106-20
Functional interactions between TRH and 5-hydroxytryptamine (5-HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121-34
Psychomotor stimulant properties of addictive drugs. Wise RA. **Ann N Y Acad Sci** 1988;537:228-34 (95 ref.)
Motor fluctuations in Parkinson's disease: central pathophysiological mechanisms, Part I. Fabbrini G, et al. **Ann Neurol** 1988 Sep;24(3):366-71
Motor fluctuations in Parkinson's disease: central pathophysiological mechanisms, Part II. Mouradian MM, et al. **Ann Neurol** 1988 Sep;24(3):372-8
Cysteamine and pantethine effects on passive avoidance behavior, shuttle box learning, open-field activity, striatal catecholamines and somatostatin. Vécsei L, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:14-27
Quantitative analysis of rat activity in the home cage by infrared monitoring. Application to the acute toxicity testing of acetanilide and phenylmercuric acetate. Tamborini P, et al. **Arch Toxicol** 1989;63(2):85-96
Susceptibility to sensitization. I. Sex differences in the enduring effects of chronic D-amphetamine treatment on locomotion, stereotyped behavior and brain monoamines. Camp DM, et al. **Behav Brain Res** 1988 Sep 1;30(1):55-68
Susceptibility to sensitization. II. The influence of gonadal hormones on enduring changes in brain monoamines and behavior produced by the repeated administration of D-amphetamine or restraint stress. Camp DM, et al. **Behav Brain Res** 1988 Sep 1;30(1):69-88
Evidence that apomorphine and (+)-amphetamine produce different types of circling in rats. Cools AR, et al. **Behav Brain Res** 1989 Aug 1;34(1-2):111-6
Effects of local application of 5-HT into the median and dorsal raphe nuclei on male rat sexual and motor behavior. Hillegaart V, et al. **Behav Brain Res** 1989 Jul 1;33(3):279-86
Excitatory amino acids: role in morphine excitation in rat periaqueductal gray. Jacquet YF, et al. **Behav Brain Res** 1988 Nov 1;31(1):85-8
Mild stress influences sex differences in exploratory and amphetamine-enhanced activity in rats. West CH, et al. **Behav Brain Res** 1988 Sep 1;30(1):95-8
Genotypic influences on lead-induced hyperactivity in mice. DeLuca J, et al. **Behav Genet** 1989 Mar;19(2):171-81
The hippocampus and amygdala mediate the locomotor stimulating effects of corticotropin-releasing factor in mice. Lee EH, et al. **Behav Neural Biol** 1989 May;51(3):412-23
Social factors influence haloperidol-induced catalepsy in rat. Ortiz M, et al. **Behav Neural Biol** 1988 Nov;50(3):344-8
Ontogeny of activity in inbred and random-bred strains of mice: effects of scopolamine. Bond NW. **Behav Neurosci** 1988 Dec;102(6):887-93
The role of mesolimbic dopamine in conditioned locomotion produced by amphetamine. Gold LH, et al. **Behav Neurosci** 1988 Aug;102(4):544-52
Latent sensitization to apomorphine following repeated low doses. Mattingly BA, et al. **Behav Neurosci** 1988 Aug; 102(4):553-8
Effects of GABA compounds injected into the subpallidal regions of rat brain on nucleus accumbens evoked hyperactivity. Patel S, et al. **Behav Neurosci** 1988 Aug; 102(4):596-600
Amphetamine accelerates recovery of locomotor function following bilateral frontal cortex ablation in cats. Sutton RL, et al. **Behav Neurosci** 1989 Aug;103(4):837-41
Behavioral and biochemical effects of intranigral injection of phospholipase-A2. Cadet JL, et al. **Biol Psychiatry** 1989 May;26(1):106-10
Sensitization of chronic neuroleptic behavioral effects [letter] Lynch MR, et al. **Biol Psychiatry** 1988 Dec;24(8):950-1
The effects of acute and chronic desipramine on the thermogenic and hypoactivity responses to alpha 2-agonists in reserpinized and normal mice. Bill DJ, et al. **Br J Pharmacol** 1989 Jan;96(1):144-52
Biphasic effects of intra-accumbens histamine administration on spontaneous motor activity in the rat; a role for central histamine receptors. Bristow LJ, et al. **Br J Pharmacol** 1988 Dec;95(4):1292-302
Diazepam attenuation of somatostatin-induced motor disturbances and neurotoxicity. Balaban CD, et al. **Brain Res** 1988 Aug 16;458(1):91-6
Attenuation of dark-induced hyperlocomotion by a cholecystokinin antagonist in the nucleus accumbens. Crawley JN. **Brain Res** 1988 Nov 15;473(2):398-400
D2-agonist quinpirole induces perseveration of routes and hyperactivity but no perseveration of movements. Eilam D, et al. **Brain Res** 1989 Jun 26;490(2):255-67
Heterogeneous responses of neostriatal neurons to amphetamine in freely moving rats. Gardiner TW, et al. **Brain Res** 1988 Nov 1;463(2):268-74
Amphetamine-induced excitations predominate in single neostriatal neurons showing motor-related activity. Haracz JL, et al. **Brain Res** 1989 Jun 12;489(2):365-8
Potassium advances circadian activity rhythms: interactions with lithium. Klemfuss H, et al. **Brain Res** 1989 Jul 17; 492(1-2):300-4
Repeated reserpine administration up-regulates the transduction mechanisms of D1 receptors without changing the density of [3H]SCH 23390 binding. Missale C, et al. **Brain Res** 1989 Mar 27;483(1):117-22
Plasticity of behavioural response to repeated injection of glutamate in cuneiform area of rat. Mitchell IJ, et al. **Brain Res** 1988 Sep 20;460(2):394-7
Intra-raphe neurokinin-induced hyperactivity: effects of 5,7-dihydroxytryptamine lesions. Paris JM, et al. **Brain Res** 1989 Jan 2;476(1):183-8
Persistent sensitization of dopamine neurotransmission in ventral striatum (nucleus accumbens) produced by prior experience with (+)-amphetamine: a microdialysis study in freely moving rats. Robinson TE, et al. **Brain Res** 1988 Oct 18;462(2):211-22
Behavioral and biochemical evidence for a functional role of excitatory amino acids in the median raphe nucleus. Wirtshafter D, et al. **Brain Res** 1989 Mar 20;482(2):225-34
Phencyclidine and MK-801: a behavioral and neurochemical comparison of their interactions with dihydropyridine calcium antagonists. O'Neill SK, et al. **Brain Res Bull** 1989 Apr;22(4):611-6
Enantiomer selectivity and the development of tolerance to the behavioral effects of the calcium channel activator BAY K 8644. O'Neill SK, et al. **Brain Res Bull** 1988 Dec; 21(6):865-72
An improved circular tilt-cage shows that intrahypothalamic injections of sulpiride increase locomotion. Parada MA, et al. **Brain Res Bull** 1988 Dec;21(6):873-80
Acute bromopride treatments: effects on general activity and inhibitory avoidance in rats. Nasello AG, et al. **Braz J Med Biol Res** 1988;21(4):841-3
Circadian activity rhythms in hamsters and rats treated with imipramine in the drinking water. Aschoff J. **Chronobiologia** 1989 Jan-Mar;16(1):9-20
Correlation between metabolic and behavioral effects of dexfenfluramine treatment. Even P, et al. **Clin Neuropharmacol** 1988;11 Suppl 1:S93-6
Evidence for dopaminergic and opioid involvement in the regulation of locomotor activity in the land crab Gecarcinus lateralis. Martinez EA, et al. **Comp Biochem Physiol [C]** 1988;90(1):89-93
The venom of Ampulex compressa—effects on behaviour and synaptic transmission of cockroaches. Piek T, et al. **Comp Biochem Physiol [C]** 1989;92(2):175-83
Changes in locomotor-activity patterns as a measure of spontaneous morphine withdrawal: no effect of clonidine. van der Laan JW, et al. **Drug Alcohol Depend** 1988 Oct; 22(1-2):133-40
Chronic ingestion of ethanol increases stimulation-induced voluntary activity in the rat. Ward LC, et al. **Drug Alcohol Depend** 1989 Apr;23(2):165-70
Doxofylline and theophylline are xanthines with partly different mechanisms of action in animals. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(7):479-89
Motor speed is a contaminating factor in evaluating the "cognitive" effects of phenytoin. Dodrill CB, et al. **Epilepsia** 1989 Jul-Aug;30(4):453-7
Forced swimming test in rats: effect of desipramine administration and the period of exposure to the test on struggling behavior, swimming, immobility and defecation rate. Armario A, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):207-12
Receptor mechanisms of nicotine-induced locomotor hyperactivity in chronic nicotine-treated rats. Fung YK, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):263-71
Median raphe, but not dorsal raphe, application of the 5-HT1A agonist 8-OH-DPAT stimulates rat motor activity. Hillegaart V, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):303-7
Cholinergic drug effects on antidepressant-induced behaviour in the forced swimming test. Mancinelli A, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):199-205
Opioid kappa receptors correlate with the development of conditioned suppression of motility in mice. Nabeshima T, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):129-33
The projection from superior colliculus to cuneiform area in the rat. II. Defence-like responses to stimulation with glutamate in cuneiform nucleus and surrounding structures. Mitchell IJ, et al. **Exp Brain Res** 1988;72(3):626-39
Beta-methyl carboline, a benzodiazepine inverse agonist, attenuates the effect of triazolam on the circadian rhythm of locomotor activity. Smith RD, et al. **Experientia** 1989 Apr 15;45(4):334-7
Investigations of amitraz neurotoxicity in rats. III. Effects on motor activity and inhibition of monoamine oxidase. Moser VC, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):12-22
Biphasic effect of apomorphine on rodent motility. Arunasmitha S, et al. **Indian J Physiol Pharmacol** 1989 Apr-Jun;33(2):132-3
Effect of diphenhydramine on subjective sleep parameters and on motor activity during bedtime. Borbély AA, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):392-6
Motor effects of locally administered pinaverium bromide in the sigmoid tract of patients with irritable bowel syndrome. Passaretti S, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):47-50
Maturational changes in neonatal rat motor system with early postnatal administration of nicotine. Frischer RE, et al. **Int J Dev Neurosci** 1988;6(2):149-54
Morphine: some puzzles of well-known substance. Kiyatkin EA. **Int J Neurosci** 1989 Apr;45(3-4):231-46
A longitudinal study of dentine lead levels, intelligence, school performance and behaviour. Part III. Dentine lead levels and attention/activity. Fergusson DM, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):811-24
Effects on mice locomotor activity of a narcotic-like principle from Psidium guajava leaves. Lutterodt GD, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):219-31
The NMDA antagonist MK-801 causes marked locomotor stimulation in monoamine-depleted mice. Carlsson M, et al. **J Neural Transm** 1989;75(3):221-6
Dramatic synergism between MK-801 and clonidine with respect to locomotor stimulatory effect in monoamine-depleted mice. Carlsson M, et al. **J Neural Transm** 1989;77(1):65-71
Biochemical and behavioral evidence for an interaction between ethanol and calcium channel antagonists. Engel JA, et al. **J Neural Transm** 1988;74(3):181-93
Dopamine D2 agonist-induced behavioural depression is reversed by dopamine D1 agonists. Jackson DM, et al. **J Neural Transm** 1989;75(3):213-20
The influence of repeated treatment with imipramine, (+)- and (-)-oxaprotiline on behavioural effects of dopamine D-1 and D-2 agonists. Maj J, et al. **J Neural Transm** 1989; 76(1):29-38
Monoamine oxidase-B inhibition: a comparison of in vivo and ex vivo measures of reversible effects. Turkish S, et al. **J Neural Transm** 1988;74(3):141-8
Methylmercury-induced movement and postural disorders in developing rat: high-affinity uptake of choline, glutamate, and gamma-aminobutyric acid in the cerebral cortex and caudate-putamen. O'Kusky JR, et al. **J Neurochem** 1989 Oct;53(4):999-1006
Effects of SCH23390 injection into the dorsal striatum and nucleus accumbens on methamphetamine-induced gnawing and hyperlocomotion in rats. Koshikawa N, et al. **J Nihon Univ Sch Dent** 1989 Jun;31(2):451-7
The biphasic effects of centrally and peripherally administered caffeine on ethanol-induced motor incoordination in mice. Dar MS. **J Pharm Pharmacol** 1988 Jul;40(7):482-7
Effects of beclamide on isolation-induced aggression and locomotor activity in mice. Darmani NA, et al. **J Pharm Pharmacol** 1988 Dec;40(12):891-3
Dopamine-mediated behaviour following chronic treatment with B-HT 920. Darmani NA, et al. **J Pharm Pharmacol** 1988 Jul;40(7):523-4
Postnatal behavioural effects of maternal nicotine exposure in rats. Fung YK. **J Pharm Pharmacol** 1988 Dec; 40(12):870-2
Action of a chronic arecoline administration on mouse motility and on acetylcholine concentrations in the CNS. Molinengo L, et al. **J Pharm Pharmacol** 1988 Nov; 40(11):821-2
Conditioned suppression of motility: possibility for evaluation of learning and memory in mice. Nabeshima T, et al. **J Pharmacobiodyn** 1988 Dec;11(12):779-84
Pharmacokinetic and pharmacodynamic evaluation of phencyclidine and its decadeutero variant. Cho AK, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):210-5
Preclinical studies on quinelorane, a potent and highly selective D2-dopaminergic agonist. Foreman MM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):227-35
Relationship of plasma and brain concentrations of caffeine and metabolites to benzodiazepine receptor binding and locomotor activity. Kaplan GB, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1078-83
Effect of 1-(m-chlorophenyl)piperazine and 1-(m-trifluoromethylphenyl)piperazine on locomotor activity. Lucki I, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):155-64
Differential effects of dopaminergic drugs on open-field behavior of spontaneously hypertensive rats and normotensive Wistar-Kyoto rats. van den Buuse M, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1189-96
Use of telemetry to record body temperature and activity in mice. Clement JG, et al. **J Pharmacol Methods** 1989 Apr;21(2):129-40
Arousal as an explanation for differences in rats selectively bred for differential alcohol sensitivity. Guile MN. **J Psychol** 1989 May;123(3):279-84

Modification by apomorphine of the circling behaviour in the rat due to unilateral intranigral injection of 1-methyl-4-phenylpyridine (MPP+). Lange KW. **J Toxicol Clin Exp** 1989 Jan-Feb;9(1):21-5

Effects of styrene on wheel-running and ambulatory activities in mice. Teramoto K, et al. **J Toxicol Sci** 1988 May;13(2):133-9

Effects of LHRH on copulatory behavior and locomotor activity in sexually inexperienced male rats. Saito TR. **Jikken Dobutsu** 1988 Oct;37(4):489-92

Enhancement of ambulation-increasing effect of methamphetamine by peripherally-administered 6R-L-erythro-5,6,7,8-tetrahydrobiopterin (R-THBP) in mice. Asami T, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):175-84

Blockade of enkephalinergic and GABAergic mediated locomotion in the nucleus accumbens by muscimol in the ventral pallidum. Austin MC, et al. **Jpn J Pharmacol** 1989 Aug;50(4):487-90

Reverse tolerance to ambulation-increasing effects of methamphetamine and morphine in 6 mouse strains. Kuribara H, et al. **Jpn J Pharmacol** 1989 Feb;49(2):197-203

Involvement of GABAergic systems and benzodiazepine receptors in the jumping behavior induced by harmine and apomorphine in rats. Moroi K, et al. **Jpn J Pharmacol** 1988 Aug;47(4):367-78

Alterations of accumbens neuronal activity in freely moving rats following methamphetamine. Fukuzako H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):331-5

Different effects of intracerebral and systemic administration of buspirone in the forced swimming test: involvement of a metabolite. Cervo L, et al. **Life Sci** 1988;43(25):2095-102

Attenuation of the behavioral response to quisqualic acid and glutamic acid diethyl ester by chronic haloperidol administration. Freed WJ, et al. **Life Sci** 1989;44(18):1303-8

Effects of caffeine on social behavior, exploration and locomotor activity: interactions with ethanol. Hilakivi LA, et al. **Life Sci** 1989;44(8):543-53

Alterations in amphetamine-induced locomotor activity and stereotypy after electrical stimulation of the nucleus accumbens and neostriatum. Kokkinidis L, et al. **Life Sci** 1989;44(9):633-41

Interaction between GABAergic anticonvulsants and the NMDA receptor antagonist MK 801 against MES- and picrotoxin-induced convulsions in rats. Kulkarni SK, et al. **Life Sci** 1989;44(18):1317-23

In vivo demonstration of the enhancement of MK-801 by L-glutamate. Raffa RB, et al. **Life Sci** 1989;44(21):1593-9

Systemic carbachol used in radiation-controlled focal brain pharmacology can decrease rat running. Remler MP, et al. **Life Sci** 1989;45(2):151-6

3,7-Dimethyl-1-propargylxanthine: a potent and selective in vivo antagonist of adenosine analogs. Seale TW, et al. **Life Sci** 1988;43(21):1671-84

Antagonism of ethanol-induced depression of mouse locomotor activity by hyperbaric exposure. Syapin PJ, et al. **Life Sci** 1988;43(26):2221-9

Behavioral and neurotrophic activity of ACTH-(7-16)NH2. Wolterink G, et al. **Life Sci** 1989;45(8):703-10

Exploratory behavior and the dual activity of some psychoactive drugs. Part IV. Neuroleptics. Valzelli L, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):635-7

Conditioning of nicotine effects on motility and behaviour in rats. Walter S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):208-13

Effects of reserpine on dopamine metabolite in the nucleus accumbens and locomotor activity in freely moving rats. Sugita R, et al. **Neurochem Res** 1989 Mar;14(3):267-70

A behavioural pharmacological study on intracerebroventricularly administered CCK-8 related peptides in mice. Hagino Y, et al. **Neuropeptides** 1989 Feb-Mar;13(2):107-13

The effects of intracerebroventricularly injected corticotropin-releasing factor (CRF) on the central nervous system: behavioural and biochemical studies. Matsuzaki I, et al. **Neuropeptides** 1989 Apr;13(3):147-55

MU and delta opioid receptors control differently the horizontal and vertical components of locomotor activity in mice. Michael-Titus A, et al. **Neuropeptides** 1989 May-Jun;13(4):235-42

Bestatin potentiates the antinociception but not the motor dysfunction induced by intracerebrally administered dynorphin-B in mice. Nakazawa T, et al. **Neuropeptides** 1989 May-Jun;13(4):277-83

Chronic treatment with naltrexone enhances morphine-stimulated dopamine neurotransmission: neurochemical and behavioral evidence. Bardo MT, et al. **Neuropharmacology** 1988 Nov;27(11):1103-9

The effects of anxiolytic and anxiogenic benzodiazepine receptor ligands on motor activity and levels of ascorbic acid in the nucleus accumbens and striatum of the rat. Brose N, et al. **Neuropharmacology** 1989 May;28(5):509-14

Effect of 5-HT1A agonists on stress-induced deficit in open field locomotor activity of rats: evidence that this model identifies anxiolytic-like activity. Carli M, et al. **Neuropharmacology** 1989 May;28(5):471-6

Characteristics of "reverse tolerance" to amphetamine-induced locomotor stimulation in mice. Chaudhry IA, et al. **Neuropharmacology** 1988 Aug; 27(8):777-81

Enhanced functional responsiveness of the dopaminergic system--the mechanism of anti-immobility effects of antidepressants in the behavioural despair test in the rat. Delini-Stula A, et al. **Neuropharmacology** 1988 Sep; 27(9):943-7

Effects of 8-OH-DPAT on ultrasonic vocalization and audiogenic immobility reaction in pre-weanling rats. Hård E, et al. **Neuropharmacology** 1988 Oct;27(10):981-6

Role of endogenous enkephalins in locomotion and nociception studied with peptidase inhibitors in two inbred strains of mice (C57BL/6J and DBA/2J). Michael-Titus A, et al. **Neuropharmacology** 1989 Feb;28(2):117-22

[D-TRP11]-neurotensin, unlike alpha-flupenthixol, may not block amphetamine-induced hyperactivity in rats. Sahgal A, et al. **Neuropharmacology** 1989 Mar;28(3):283-9

Effect of GABAergic transmission in the subpallidal region on the hypermotility response to the administration of excitatory amino acids and picrotoxin into the nucleus accumbens. Shreve PE, et al. **Neuropharmacology** 1988 Dec;27(12):1271-7

Effects of lithium on dopamine behavioural supersensitivity induced by rapid eye movement sleep deprivation. Arriaga F, et al. **Neuropsychobiology** 1988;20(1):23-7

Antagonization of the behavioral activation produced by direct stimulation of forebrain dopamine receptors caused by intraaccumbens injections of neurotensin. Ervin GN, et al. **Neuropsychopharmacology** 1988 Sep;1(3):243-50

Selective alterations in cerebral metabolism within the mesocorticolimbic dopaminergic system produced by acute cocaine administration in rats. Porrino LJ, et al. **Neuropsychopharmacology** 1988 May;1(2):109-18

Some mechanisms of action of vasopressin on animal behavior. Verevkina SV. **Neurosci Behav Physiol** 1988 Jul-Aug;18(4):306-10

Effect of amantadine on chlorpromazine and reserpine-induced behavioral depression in the mouse. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter; 12(3-4):219-22

Enhancement by haloperidol of the locomotor response induced by naloxone in morphine-treated guinea pigs. Chahl LA, et al. **Neurosci Lett** 1989 Jan 16;96(2):213-7

The D1 agonist SKF 38393 inhibits the antiparkinsonian activity of the D2 agonist LY 171555 in the MPTP-treated marmoset. Nomoto M, et al. **Neurosci Lett** 1988 Nov 11; 93(2-3):275-80

Microinjection of a glutamate antagonist into the nucleus accumbens reduces psychostimulant locomotion in rats. Pulvirenti L, et al. **Neurosci Lett** 1989 Aug 28;103(2):213-8

A comparison of the motor behaviours produced by the intrathecal administration of thyrotrophin-releasing hormone and thyrotrophin-releasing hormone analogues in the conscious rat. Johnson JV, et al. **Neuroscience** 1989; 29(2):463-70

Toxic exposure to ethylene dibromide and mercuric chloride: effects on laboratory-reared octopuses. Adams PM, et al. **Neurotoxicol Teratol** 1988 Nov-Dec;10(6):519-23

Behavioral effects of acute p-xylene inhalation in rats: autoshaping, motor activity, and reversal learning. Bushnell PJ. **Neurotoxicol Teratol** 1988 Nov-Dec;10(6):569-77

Toxicity of aldicarb in young chicks. Farage-Elawar M. **Neurotoxicol Teratol** 1988 Nov-Dec;10(6):549-54

Effects of aluminum ingestion on spontaneous motor activity of mice. Golub MS, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):231-5

Behavioral and autonomic thermoregulation in the rat following chlordimeform administration. Gordon CJ, et al. **Neurotoxicol Teratol** 1988 May-Jun;10(3):215-9

Interactions between anticholinesterase poisoning and opioid analgesia and locomotion in mice. Green PG, et al. **Neurotoxicol Teratol** 1988 Jul-Aug;10(4):315-9

Prenatal cocaine: maternal toxicity, fetal effects and locomotor activity in rat offspring. Hutchings DE, et al. **Neurotoxicol Teratol** 1989 Jan-Feb;11(1):65-9

The neurobehavioral effects of chronic styrene exposure in the rat. Kulig BM. **Neurotoxicol Teratol** 1988 Nov-Dec; 10(6):511-7

Behavioral effects of prenatal methoxy-ethyl-mercury chloride exposure in rat pups. Lehotzky K, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):471-4

Effects of lindane on spontaneous behavior of rats analyzed by multivariate statistics. Llorens J, et al. **Neurotoxicol Teratol** 1989 Mar-Apr;11(2):145-51

Effects of perinatal ivermectin exposure on behavioral development of rats. Poul JM. **Neurotoxicol Teratol** 1988 May-Jun;10(3):267-72

Behavioral and biochemical effects of postnatal parathion exposure in the rat. Stamper CR, et al. **Neurotoxicol Teratol** 1988 May-Jun;10(3):261-6

Deficits in spontaneous behavior and cognitive function following systemic administration of kainic acid. Milgram NW, et al. **Neurotoxicology** 1988 Winter;9(4):611-24

Psychomotor stimulant vs. local anesthetic effects of cocaine: role of behavioral sensitization and kindling. Post RM, et al. **NIDA Res Monogr** 1988;88:217-38 (41 ref.)

Multiple dopamine receptors and the behavioral effects of cocaine. Woolverton WL, et al. **NIDA Res Monogr** 1988; 88:160-84 (93 ref.)

Hindlimb paralytic effects of arginine vasopressin and related peptides following spinal subarachnoid injection in the rat. Long JB, et al. **Peptides** 1988 Nov-Dec;9(6):1335-44

Supraspinal FMRFamide antagonizes morphine-induced horizontal, but not vertical, locomotor activity. Raffa RB. **Peptides** 1989 Mar-Apr;10(2):403-6

Neonatal 6-hydroxydopamine-induced dopamine depletions: motor activity and performance in maze learning. Archer T, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):357-64

A comparison of feeding and locomotion responses to serotonin agonists in three rat strains. Aulakh CS, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):567-71

Long-term imipramine treatment differentially affects fenfluramine-induced suppression of food intake and locomotor activity. Aulakh CS, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):97-101

Does RO 15-4513 reverse the anxiolytic effects of ethanol by its intrinsic properties? Belzung C, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):867-70

Hippocampal serotonin mediates hypoactivity in dietarily obese hamsters: a possible manifestation of aging? Borer KT, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):885-92

A classical genetic analysis of two apomorphine-induced behaviors in the mouse. Cabib S, et al. **Pharmacol Biochem Behav** 1988 May;30(1):143-7

Chronic stress attenuation of alpha 2-adrenoceptor reactivity is reversed by naltrexone. Cancela LM, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):33-5

Mediation of acute ethanol-induced motor disturbances by cerebellar adenosine in rats. Clark M, et al. **Pharmacol Biochem Behav** 1988 May;30(1):155-61

Neuroleptic-induced reduction of quipazine-elicited head-twitches in rats: possible involvement of striatal dopaminergic supersensitivity. Dall'Olio R, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):941-4

NECA-induced hypomotility in mice: evidence for a predominantly central site of action. Durcan MJ, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):487-90

Withdrawal, tolerance and sensitization after a single dose of lorazepam. File SE, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):937-40

Comparative effects of progesterone and alphaxalone on aggressive, reproductive and locomotor behaviors. Fraile IG, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):729-35

A preliminary behavioral investigation of PMMA, the 4-methoxy analog of methamphetamine. Glennon RA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):9-13

Ethanol withdrawal alters apomorphine-induced motility. Gonzalez LP, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):163-8

Selective protection from the inhibition by EEDQ of D1 and D2 dopamine agonist-induced rotational behavior in mice. Goodale DB, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):457-62

Effects of 8-OH-DPAT on motor activity in the rat. Hillegaart V, et al. **Pharmacol Biochem Behav** 1989 Mar; 32(3):797-800

Cannabinol and cannabidiol in combination: temperature, open-field activity, and vocalization. Hiltunen AJ, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):675-8

Nicotine interactions with ethanol tolerance. Hjeresen DL. **Pharmacol Biochem Behav** 1988 Nov;31(3):617-22

Haloperidol blocks the response-reinstating effects of food reward: a methodology for separating neuroleptic effects on reinforcement and motor processes. Horvitz JC, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):861-5

Hippocampal rhythmic slow activity in rat lines selected for differences in ethanol-induced motor impairment. Kaheinen P, et al. **Pharmacol Biochem Behav** 1988 May; 30(1):177-81

Dopamine D-1 and D-2 receptor antagonists potentiate analgesic and motor effects of morphine. Kiritsy-Roy JA, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):717-21

The effects of Ro 15-4513 on the behavioral actions of ethanol in an operant reaction time task and a conflict test. Koob GF, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):757-60

Effects of 5-HT and alpha 1 adrenoceptor antagonists on kappa opioid-induced sedation. Leighton GE, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):899-904

Interactions of ethanol with benzodiazepine receptor ligands in tests of exploration, locomotion and anxiety. Lister RG. **Pharmacol Biochem Behav** 1988 Nov;31(3):761-5

Stereochemical effects of 11-OH-delta 8-THC-dimethylheptyl in mice and dogs. Little PJ, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):661-6

Effects of chronic amphetamine in BALB/cBy mice, a strain that is not stimulated by acute administration of amphetamine. Logan L, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):675-82

Low-dose alprazolam augments motor activity in mice. Lopez F, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):511-3

Impaired response of experimental diabetic mice to tricyclics: a possible beta-adrenergic mechanism. Massol J, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):807-12

Locomotor activity and stereotypy in rats following repeated apomorphine treatments at 1-, 3-, or 7-day intervals. Mattingly BA, et al. **Pharmacol Biochem Behav** 1988 Dec; 31(4):871-5

The dopamine D-2 agonist quinpirole produces environment-specific conditioned activity. Mazurski EJ, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):525-7

Opposite effects of diazepam and beta-CCE on immobility and straw-climbing behavior of rats in a modified forced-swim test. Nishimura H, et al. **Pharmacol Biochem Behav** 1989 May;33(1):227-31

Effects of ritanserin on the rewarding properties of d-amphetamine, morphine and diazepam revealed by conditioned place preference in rats. Nomikos GG, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):853-8

Assessment of pimozide's motor and hedonic effects on operant behavior in rats. Porter JH, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):779-86

Effect of naloxone on the locomotor stimulatory action of chlordiazepoxide in mice. Sansone M, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):371-3

A new device for monitoring early motor development: prenatal nicotine-induced changes. Schlumpf M, et al. **Pharmacol Biochem Behav** 1988 May;30(1):199-203

Morphine-induced place conditioning is not confounded by drug-induced alterations in locomotor activity. Shippenberg TS, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):129-32

Effects of scopolamine on extracellular acetylcholine and choline levels and on spontaneous motor activity in freely moving rats measured by brain dialysis. Toide K. **Pharmacol Biochem Behav** 1989 May;33(1):109-13

Motor effects of intracaudate injection of excitatory amino acids. Toth E, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):175-9

Thigmotaxis as a test for anxiolytic activity in rats. Treit D, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):959-62

Atypical antipsychotic drugs block selective components of amphetamine-induced stereotypy. Tschanz JT, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):519-22

Environment-specific cross-sensitization between the locomotor activating effects of morphine and amphetamine. Vezina P, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):581-4

The role of control activity levels in the reported strain differences to the behavioral effects of drugs in mice. Wenger GR. **Pharmacol Biochem Behav** 1989 Jan; 32(1):241-7

Is dopamine involved in the hyperactivity produced by injections of muscimol into the median raphe nucleus? Wirtshafter D, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):577-83

Comparative studies of locomotor behavior following microinjections of muscimol into various sites in the paramedian tegmentum. Wirtshafter D, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):625-8

Relationship between amphetamine-induced effects on EEG power spectra and motor activity in rats. Young GA. **Pharmacol Biochem Behav** 1988 Jun;30(2):489-92

Imidazole and yohimbine antagonize hypomotility, penile erection, stretching and yawning induced in rats by BHT 920, a selective dopamine autoreceptor agonist. Ferrari F, et al. **Pharmacol Res Commun** 1988 Sep;20(9):827-37

New methylxanthine thio-derivatives inducing marked tracheal relaxation without increasing cardiac inotropism or motor activity. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Jul;20(7):621-2

Comparative behavioral toxicity of four sulfhydryl radioprotective compounds in mice: WR-2721, cysteamine, diethyldithiocarbamate, and N-acetylcysteine. Landauer MR, et al. **Pharmacol Ther** 1988;39(1-3):97-100

Prenatal methylazoxymethanol treatment potentiates d-amphetamine- and methylphenidate-induced motor activity in male and female rats. Archer T, et al. **Pharmacol Toxicol** 1988 Oct;63(4):233-9

Increased duration of dopamine receptor antagonist-induced effects on both behaviour and striatal dopamine turnover by repeated testing in rats. Hillegaart V, et al. **Pharmacol Toxicol** 1988 Aug;63(2):114-7

Ingestion, body weight and activity of rats receiving repeated intracerebroventricular infusions of rat satietin. Bellinger LL, et al. **Physiol Behav** 1988;44(4-5):445-52

The influence of prenatal and/or postnatal exposure to lead on behavior of preweanling mice. Draski LJ, et al. **Physiol Behav** 1989 Apr;45(4):711-5

Impaired hypophagia induced by fecal anorexigenic substance in Zucker obese rats. Fujimoto K, et al. **Physiol Behav** 1989 Apr;45(4):815-7

Tonic immobility and the serotonergic system in chickens: differential blockade of receptors by cyproheptadine and cinanserin. Hennig CW, et al. **Physiol Behav** 1988; 44(1):15-20

Methamphetamine induced locomotor rhythm entrains to restricted daily feeding in SCN lesioned rats. Honma S, et al. **Physiol Behav** 1989 May;45(5):1057-65

A compact and inexpensive device using an electronic calculator for measuring ambulatory activity in mice. Masuda Y, et al. **Physiol Behav** 1988;44(3):413-5

Effects of ethanol in an open field apparatus: modification by U50488H and WIN 44441-3. Pohorecky LA, et al. **Physiol Behav** 1989 Feb;45(2):273-87

Changes in the development of spontaneous motility in chick embryos after the chronic administration of GABA. Sedláček J. **Physiol Bohemoslov** 1988;37(4):307-12

Consequences of chronic phenobarbital blockade of spontaneous motility in chick embryos for the development of central motor output activity. Sedláček J. **Physiol Bohemoslov** 1988;37(2):97-105

Effects of kappa-opioid receptor agonists on locomotor activity and memory processes in mice. Castellano C, et al. **Pol J Pharmacol Pharm** 1988 Sep-Oct;40(5):507-13

Stability and variability of locomotor responses of laboratory rodents. IV. The responses of rats and mice to apomorphine and amphetamine. Marona-Lewicka D, et al. **Pol J Pharmacol Pharm** 1988 May-Jun;40(3):281-94

Antihistaminic-opioid combination: effect on locomotor activity in mice. Sansone M. **Pol J Pharmacol Pharm** 1988 Sep-Oct;40(5):515-23

A toggle-floor box: the reliability of crossings in the evaluation of drug-induced locomotor changes in mice. Vetulani J, et al. **Pol J Pharmacol Pharm** 1988 Jan-Feb; 40(1):33-6

Effects of dopaminergic and GABAergic antagonists on methamphetamine-induced locomotor activity in mice selectively bred for their differences in locomotor activity. Masserano JM, et al. **Proc West Pharmacol Soc** 1989; 32:195-9

Behavioral and neurochemical effects of amfonelic acid on the spontaneously diabetic Wistar-BB rat: implications of impaired dopamine function. Ahmad Q, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):551-8

The chronic effects of desipramine and sertraline on platelet and synaptosomal 5HT uptake in olfactory bulbectomised rats. Butler J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):585-94

LSD and other related hallucinogens elicit myoclonic jumping behavior in the guinea pig. Carvey P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):199-210

Effect of tricyclic antidepressant drugs in the isolation-induced social behavioural deficit test. Frances H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):229-35

The effects of antidepressant treatments and lithium upon 5-HT1A receptor function. Goodwin GM. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):445-51

Activation of brain function by S-135, a benzodiazepine receptor inverse agonist. Matsushita A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):951-66

The effects of concurrent D-1 and D-2 dopamine receptor blockade with SCH 23390 and eticlopride, on bombesin-induced behaviours. Piggins H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):583-94

Hyperlocomotion induced by dopamine or cholecystokinin + dopamine in the nucleus accumbens is not modified by chronic lithium treatment. Zohar J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):775-9

Effects of the potential antidepressant dihydroergosine in rats forced to swim: influence on plasma corticosterone. Manev H, et al. **Psychoneuroendocrinology** 1988;13(6):465-9

Persistent sensitization of clonidine-induced hypokinesia following one exposure to a stressor: possible relevance to panic disorder and its treatment. Antelman SM, et al. **Psychopharmacology (Berlin)** 1989;98(1):97-101

Long-term lithium treatment in rats attenuates m-chlorophenylpiperazine-induced decreases in food intake but not locomotor activity. Aulakh CS, et al. **Psychopharmacology (Berlin)** 1989;98(4):448-52

Effects of selective monoaminergic reuptake blockade on activity rhythms in developing rats. Barber NI, et al. **Psychopharmacology (Berlin)** 1989;97(3):343-8

Effects of prenatal ethanol exposure in C57BL mice on locomotor activity and passive avoidance behavior. Becker HC, et al. **Psychopharmacology (Berlin)** 1989;97(1):40-4

Nialamide-induced hypermotility in mice treated with inhibitors of monoamine uptake, 5-HT antagonists and lithium. Buus Lassen J. **Psychopharmacology (Berlin)** 1989; 98(2):257-61

d-Ala-met-enkephalin injection into the ventral tegmental area: effect on investigatory and spontaneous motor behaviour in the rat. Cador M, et al. **Psychopharmacology (Berlin)** 1988;96(3):332-42

Anatomical analysis of the involvement cf mesolimbocortical dopamine in the locomotor stimulant actions of d-amphetamine and apomorphine. Clarke PB, et al. **Psychopharmacology (Berlin)** 1988;96(4):511-20

Evidence for monoaminergic involvement in triadimefon-induced hyperactivity. Crofton KM, et al. **Psychopharmacology (Berlin)** 1989;97(3):326-30

Alpha 1- and alpha 2-adrenoreceptor antagonists differentially influence locomotor and stereotyped behaviour induced by d-amphetamine and apomorphine in the rat. Dickinson SL, et al. **Psychopharmacology (Berlin)** 1988;96(4):521-7

Time course of ethanol's effects on locomotor activity, exploration and anxiety in mice. Durcan MJ, et al. **Psychopharmacology (Berlin)** 1988;96(1):67-72

Behavioral effects of alpha 2 adrenoceptor antagonists and their interactions with ethanol in tests of locomotion, exploration and anxiety in mice. Durcan MJ, et al. **Psychopharmacology (Berlin)** 1989;97(2):189-93

Behavioral interactions of fluoxetine and other 5-hydroxytryptamine uptake inhibitors with ethanol in tests of anxiety, locomotion and exploration. Durcan MJ, et al. **Psychopharmacology (Berlin)** 1988;96(4):528-33

The role of the benzodiazepine receptor in mediating long-lasting anticonvulsant effects and the late-appearing reductions in motor activity and exploration. File SE, et al. **Psychopharmacology (Berlin)** 1989;97(3):349-54

Additive effects of clonidine and antidepressant drugs in the mouse forced-swimming test. Malinge M, et al. **Psychopharmacology (Berlin)** 1988;96(1):104-9

Effects of cholinergic and anticholinergic drugs on ketamine-induced linguopharyngeal motor activity. Marco LA, et al. **Psychopharmacology (Berlin)** 1988;96(4):484-6

Response variability of ethanol-induced locomotor activation in mice. Masur J, et al. **Psychopharmacology (Berlin)** 1988; 96(4):547-50

Differential effects of the new antipsychotic risperidone on large and small motor movements in rats: a comparison with haloperidol. Megens AA, et al. **Psychopharmacology (Berlin)** 1988;95(4):493-6

Effects of 5HT-1A agonists on locomotor and investigatory behaviors in rats differ from those of hallucinogens. Mittman SM, et al. **Psychopharmacology (Berlin)** 1989; 98(3):321-9

Another look at amphetamine-induced stereotyped locomotor activity in rats using a new statistic to measure locomotor stereotypy. Mueller K, et al. **Psychopharmacology (Berlin)** 1989;97(1):74-9

Stereospecific actions of baclofen on sociosexual behavior, locomotor activity and motor execution. Paredes R, et al. **Psychopharmacology (Berlin)** 1989;97(3):358-64

Differential effects of the selective D2-antagonist raclopride in the nucleus accumbens of the rat on spontaneous and d-amphetamine-induced activity. van den Boss R, et al. **Psychopharmacology (Berlin)** 1988;95(4):447-51

The effects of long-term nicotine treatment on locomotion, exploration and memory in young and old rats. Welzl H, et al. **Psychopharmacology (Berlin)** 1988;96(3):317-23

Immediate and long-lasting effects of MK-801 on motor activity, spatial navigation in a swimming pool and EEG in the rat. Whishaw IQ, et al. **Psychopharmacology (Berlin)** 1989;98(4):500-7

Naltrexone blocks amphetamine-induced hyperactivity, but not disruption of social and agonistic behavior in mice and squirrel monkeys. Winslow JT, et al. **Psychopharmacology (Berlin)** 1988;96(4):493-9

Microinjection of cholecystokinin into the rat ventral tegmental area potentiates dopamine-induced hypolocomotion. Crawley JN. **Synapse** 1989;3(4):346-55

Specific antagonism of behavioral action of "uncommon" amino acids linked to motor-system diseases. Ross SM, et al. **Synapse** 1987;1(3):248-53

The effects of haloperidol and sulpiride on apomorphine-induced locomotor activity in rats. Ko WK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):845-50

Methoxychlor induces estrogen-like alterations of behavior and the reproductive tract in the female rat and hamster: effects on sex behavior, running wheel activity, and uterine morphology. Gray LE Jr, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):525-40

Effects of subacute administration of physostigmine on blood acetylcholinesterase activity, motor performance, and soman intoxication. Harris LW, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):267-71

Subchronic dosing of macaques with 2,5-hexanedione causes long-lasting motor dysfunction but reversible visual loss. Lynch JJ 3d, et al. **Toxicol Appl Pharmacol** 1989 Mar 15; 98(1):166-80

Critical assessment of motor activity as a screen for neurotoxicity. Maurissen JP, et al. **Toxicol Ind Health** 1989 Mar;5(2):195-202 (26 ref.)

Evolution of motor activity tests into a screening reality. Mullenix PJ. **Toxicol Ind Health** 1989 Mar;5(2):203-19

Quantification of motor function in toxicology [published erratum appears in Toxicol Lett 1989 Apr;47(1):107] Newland MC. **Toxicol Lett** 1988 Oct;43(1-3):295-319 (54 ref.)

[Neuropharmacologic effect of 2 newly synthesized compounds of the piperazine group. Report II. Effect on the behavior of experimental animals] Ianeva-Balabanska I, et al. **Eksp Med Morfol** 1988;27(3):22-6 (Eng. Abstr.) **(Bul)**

[Pharmacologic studies of a tetrahydroxazine derivative] Ilarionov I. **Eksp Med Morfol** 1988;27(3):17-22 (Eng. Abstr.) **(Bul)**

[Comparison studies on pharmacological properties of injectio gastrodia elata, gastrodin-free fraction and gastrodin] Huang JH. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):147-50 (Eng. Abstr.) **(Chi)**

[Circling behavior produced by the unilateral intra-accumbens injection of dopaminergic agonist and two dopaminergic antagonists in mice] Mrabet O, et al. **C R Acad Sci [III]** 1989;309(3):77-82 (Eng. Abstr.) **(Fre)**

[Neonatal effects of intravenous or peridural administration of fentanyl in cesarean section] Capogna G, et al. **Minerva Anestesiol** 1988 Dec;54(12):515-20 (Eng. Abstr.) **(Ita)**

[Acute or subacute toxicity of 2,3,4,7,8-pentachlorodibenzofuran and 1,2,3,4,7,8-hexachlorodibenzofuran to rats in non-lethal dose] Nishizumi M. **Fukuoka Igaku Zasshi** 1989 May; 80(5):235-9 (Eng. Abstr.) **(Jpn)**

[Effects of methylmercuric chloride on the ultradian rhythms of the locomotor activity in rats] Watanabe H, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):688-93 (Eng. Abstr.) **(Jpn)**

[Behavioral effects of NC-1100,

1-(3,4-dimethoxyphenyl)-2-(4-diphenylmethylpiperazinyl) ethanol dihydrochloride—on ambulatory activity, discrete lever-press response and shuttle avoidance response in mice] Kuribara H, et al. **Nippon Yakurigaku Zasshi** 1989 Apr;93(4):245-53 (Eng. Abstr.) **(Jpn)**

[Changes in monoamine metabolites in the nucleus accumbens and locomotor activity by reserpine: an in vivo microdialysis study] Sugita R, et al. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):453-62 (Eng. Abstr.) **(Jpn)**

[Synthesis and the effect of new derivatives of perhydro-1,4,6-oxadiazocine on the central nervous system] Brzezińska E, et al. **Acta Pol Pharm** 1988; 45(5):400-5 (Eng. Abstr.) **(Pol)**

[Synthesis and pharmacologic properties of s-trinzolo-1,4-diazepine derivatives] Guryn R, et al. **Acta Pol Pharm** 1988;45(6):512-6 (Eng. Abstr.) **(Pol)**

[Pharmacological studies of new derivatives of 7-amino-imidazo-[1,2-A]-pyrimidine] Jagiełło-Wójtowicz E, et al. **Acta Pol Pharm** 1988;45(5):450-4 (Eng. Abstr.) **(Pol)**

[Preliminary pharmacologic evaluation of new derivatives of 2-anilinoimidazoline and aminoimidazoline] Jagiełło-Wójtowicz E, et al. **Acta Pol Pharm** 1988; 45(4):351-8 (Eng. Abstr.) **(Pol)**

[Effect of diazepam on various effects of morphine use in mice and rats] Matla J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:125-33 (Eng. Abstr.) **(Pol)**

[Thyroliberin-induced motor asymmetry as an indicator of the individual behavioral strategy of rats in a radial labyrinth] Efimova EV, et al. **Biol Nauki** 1989;(3):23-7 (Eng. Abstr.) **(Rus)**

[Various changes in protein metabolism and integral indicators in rats after a single-dose exposure to phenol] Skvortsova RI, et al. **Gig Sanit** 1989 Mar;(3):79 **(Rus)**

[The action of L-DOPA on the structure of spontaneous motor activity in rat pups] Bursian AV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug;24(4):551-6 (Eng. Abstr.) **(Rus)**

[Effect of reserpine on the circadian dynamics of motor activity in rats] Baturin VA, et al. **Zh Vyssh Nerv Deiat** 1988 May-Jun;38(3):527-32 (Eng. Abstr.) **(Rus)**

[Changes in the dopamine sensitivity of the amygdala neurons in freely moving rats during the initiation of interspecies aggression] Gromov AI. **Zh Vyssh Nerv Deiat** 1988 Jul-Aug;38(4):762-3 **(Rus)**

PHYSIOLOGY

Motor mechanisms in the turtle spinal cord. Stein PS. **Acta Biol Hung** 1988;39(2-3):155-60 (36 ref.)

Behavioural responses to cerebellar stimulation in cerebral palsy. Galanda M, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:37-8

Metabolic costs and heart rate responses to treadmill walking in water at different depths and temperatures. Gleim GW, et al. **Am J Sports Med** 1989 Mar-Apr;17(2):248-52

Motor fluctuations in Parkinson's disease [letter] Nutt JG, et al. **Ann Neurol** 1989 Jun;25(6):633-4

Peripubertal castration of male rats, adult open field ambulation and partner preference behavior. Brand T, et al. **Behav Brain Res** 1988 Sep 15;30(2):111-7

Hemispheric differences in motor control. Goodale MA. **Behav Brain Res** 1988 Sep 15;30(2):203-14 (33 ref.)

The hopping response after two-stage cortical ablation in young and adult rabbits. Hobbelen JF, et al. **Behav Brain Res** 1988 Nov 1;31(1):97-102

The use of fetal neocortical transplants to treat the hyperactivity resulting from cortical suction lesions in adult rats. Justice A, et al. **Behav Brain Res** 1989 May 1; 33(1):97-104

Ontogeny of open field activity in rats after neonatal lesioning of the mesocortical dopaminergic projection. Kalsbeek A, et al. **Behav Brain Res** 1989 Mar 1;32(2):115-27

Role of lateral habenula in the regulation of exploratory behavior and its relationship to stress in rats. Lee EH, et al. **Behav Brain Res** 1988 Oct;30(3):265-71

Selective lesion of central dopamine or noradrenaline neuron systems in the neonatal rat: motor behavior and monoamine alterations at adult stage. Luthman J, et al. **Behav Brain Res** 1989 Jul 1;33(3):267-77

Circling behavior: ethological analysis and functional considerations. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):267-71

Head and body movements evoked electrically from the caudal superior colliculus of rats: pulse frequency effects. Tehovnik EJ. **Behav Brain Res** 1989 Aug 1;34(1-2):71-8

Blood glucose and brain function: interactions with CNS cholinergic systems. Stone WS, et al. **Behav Neural Biol** 1988 Nov;50(3):325-34

Recovery of sensorimotor function after frontal cortex damage in rats: evidence that the serial lesion effect is due to serial recovery. de Castro JM, et al. **Behav Neurosci** 1988 Dec;102(6):843-51

Nucleus accumbens cholecystokinin (CCK) can either attenuate or potentiate amphetamine-induced locomotor activity: evidence for rostral-caudal differences in accumbens CCK function. Vaccarino FJ, et al. **Behav Neurosci** 1989 Aug;103(4):831-6

Kynurenic acid protects against the neurochemical and behavioral effects of unilateral quinolinic acid injections into the nucleus basalis of rats. Wirsching BA, et al. **Behav Neurosci** 1989 Feb;103(1):90-7

Walking in the American cockroach: the timing of motor activity in the legs during straight walking. Delcomyn F. **Biol Cybern** 1989;60(5):373-84

Impairment and recovery of ipsilateral sensory-motor function following unilateral cerebral infarction. Jones RD, et al. **Brain** 1989 Feb;112 (Pt 1):113-32

Receptor characteristics and recovery of function following kainic acid lesions and fetal transplants of the striatum. II. Dopaminergic systems. Deckel AW, et al. **Brain Res** 1988 Nov 22;474(1):39-47

Role of D1 and D2 dopamine receptors in mediating locomotor activity elicited from the nucleus accumbens of rats. Dreher JK, et al. **Brain Res** 1989 May 22; 487(2):267-77

Electromyographic (EMG) amplitude patterns in the proximal and distal compartments of the cat semitendinosus during various motor tasks. Hutchison DL, et al. **Brain Res** 1989 Feb 6;479(1):56-64

Blocking of morphine-induced locomotor hyperactivity by amygdaloid lesions in C57BL/6 mice. Libri V, et al. **Brain Res** 1989 Feb 6;479(1):1-5

In vivo electrochemical detection of 5-hydroxyindole within the trigeminal nucleus caudalis of freely moving rats: the effect of morphine. Rivot JP, et al. **Brain Res** 1988 Nov 1;463(2):275-83

Hamster circadian rhythms are phase-shifted by electrical stimulation of the geniculo-hypothalamic tract. Rusak B, et al. **Brain Res** 1989 Jul 31;493(2):283-91

Developmental and hormonal factors in the sexually dimorphic, asymmetrical response to focal cortical lesions. Starkstein SE, et al. **Brain Res** 1989 Jan 23;478(1):16-23

Behavioral abnormalities induced by frontal cortical and nucleus accumbens lesions. Starkstein SE, et al. **Brain Res** 1988 Nov 8;473(1):74-80

Effects of ageing on the behavioural responses to dopamine agonists: decreased yawning and locomotion, but increased stereotypy. Stoessl AJ, et al. **Brain Res** 1989 Aug 21; 495(1):20-30

GM1 ganglioside attenuates the behavioral deficits but not the granule cell damage produced by intradentate colchicine. Walsh TJ, et al. **Brain Res** 1989 Jan 23; 478(1):24-33

Turning responses evoked by stimulation of visuomotor pathways. Yeomans JS, et al. **Brain Res** 1988 Nov; 472(3):235-59 (324 ref.)

Neocerebellar control of the motor activity: experimental analysis in the rat. Comparative aspects. Cicirata F, et al. **Brain Res Brain Res Rev** 1989 Apr-Jun;14(2):117-41

Lateral geniculate lesions alter circadian activity rhythms in the hamster. Johnson RF, et al. **Brain Res Bull** 1989 Feb; 22(2):411-22

Are sex differences in child motor activity level a function of sex differences in maturational status? Eaton WO, et al. **Child Dev** 1989 Aug;60(4):1005-11

Model for the study of plasticity of the human nervous system: features of residual spinal cord motor activity resulting from established post-traumatic injury. Dimitrijevic MR. **Ciba Found Symp** 1988;138:227-39 (10 ref.)

Sensory feedback control of upper- and lower-extremity motor prostheses. Phillips CA. **Crit Rev Biomed Eng** 1988; 16(2):105-40 (100 ref.)

Visual and neurological outcome of infants with periventricular leukomalacia. Scher MS, et al. **Dev Med Child Neurol** 1989 Jun;31(3):353-65

Evolution of skin reflexes in the first years of life. Vlach V. **Dev Med Child Neurol** 1989 Apr;31(2):196-205

Drinking behavior and motor function in rat pups depleted of brain dopamine during development. Weihmuller FB, et al. **Dev Psychobiol** 1989 Mar;22(2):101-13

Neuromotor development of preterm and full-term infants. Gorga D, et al. **Early Hum Dev** 1988 Dec;18(2-3):137-49

Fetal cardiac and motor responses to octave-band noises as a function of central frequency, intensity and heart rate variability. Lecanuet JP, et al. **Early Hum Dev** 1988 Dec; 18(2-3):81-93

Patterns of cortical activation during planning of voluntary movement. Pfurtscheller G, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar;72(3):250-8

Electromyographic analysis of movement following a maximal isometric contraction. Etnyre BR, et al. **Electromyogr Clin Neurophysiol** 1989 May-Jun;29(4):221-5

What limits equine performance? [editorial] Hillidge CJ. **Equine Vet J** 1988 Jul;20(4):238-41

Reproducibility of surface electromyogram and intra-abdominal pressure for use in ambulatory monitoring. Heinrich I, et al. **Ergonomics** 1988 Dec;31(12):1821-35

The electromyographical basis of inaccurate motor performance. Brown JM, et al. **Eur J Appl Physiol** 1988; 58(1-2):132-40

Electrophysiological analysis of dopamine cells from the substantia nigra pars compacta of circling rats. Diana M, et al. **Exp Brain Res** 1989;74(3):625-30

Cholinergically mediated reduction of locomotor activity from the basal forebrain of the rat. Brudzynski SM, et al. **Exp Neurol** 1989 Aug;105(2):197-205

Sex difference in neuronal loss induced by axotomy in the rat brain stem motor nuclei. Yu WH. **Exp Neurol** 1988 Nov;102(2):230-5

Identification of human postural dynamics. Johansson R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):858-69

Temporal characterization of myoelectric spectral moment changes: analysis of common parameters. Standridge RK, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):789-97

Ontogenetic and pharmacological dissociation of various components of locomotor activity and habituation in the rat. Laviola G, et al. **Int J Dev Neurosci** 1988;6(5):431-8

Movement-related potentials and control of associated movements. Chisholm RC, et al. **Int J Neurosci** 1988 Sep; 42(1-2):131-48

Complement and immunoglobulin levels in athletes and sedentary controls. Nieman DC, et al. **Int J Sports Med** 1989 Apr;10(2):124-8

Performance of noncountermovement jump with both knee and hip joints fully extended. Yamazaki Y, et al. **J Appl Physiol** 1989 Apr;66(4):1976-83

Sympathetic nerve fibers in peripheral sensory and motor nerves in the face of the rat. Johansson K, et al. **J Auton Nerv Syst** 1988 Jun;23(1):83-6

Mechanical output of the cat soleus during treadmill locomotion: in vivo vs in situ characteristics. Gregor RJ, et al. **J Biomech** 1988;21(9):721-32

Organization of a complex movement: fixed and variable components of the cockroach escape behavior. Camhi JM, et al. **J Comp Physiol [A]** 1988 Jul;163(3):317-28

Metamorphosis of the ecdysis motor pattern in the hawkmoth, Manduca sexta. Mesce KA, et al. **J Comp Physiol [A]** 1988 Jul;163(3):287-99

Daily hoarding opportunity entrains the pacemaker for hamster activity rhythms. Rusak B, et al. **J Comp Physiol [A]** 1988 Dec;164(2):165-71

Central administration of muscimol phase-shifts the mammalian circadian clock. Smith RD, et al. **J Comp Physiol [A]** 1989 Feb;164(6):805-14

Motor activity in the stump of an amputated leg during free walking in cockroaches. Delcomyn F. **J Exp Biol** 1988 Nov;140:465-76

Strontium is required for statolith development and thus normal swimming behaviour of hatchling cephalopods. Hanlon RT, et al. **J Exp Biol** 1989 Jan;141:187-95

Posturo-kinetic organisation during the early phase of voluntary upper limb movement. 1. Normal subjects. Zattara M, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):956-65

Interruptions of fictive scratch motor rhythms by activation of cutaneous flexion reflex afferents in the turtle. Currie SN, et al. **J Neurosci** 1989 Feb;9(2):488-96

Molecular evidence for early activity-dependent development of hamster motor neurons. Kalb RG, et al. **J Neurosci** 1988 Jul;8(7):2350-60

Motor neuronal receptive fields delimit patterns of motor activity during locomotion of the locust. Laurent G, et al. **J Neurosci** 1988 Nov;8(11):4349-66

The development of sensorimotor synaptic connections in the lumbosacral cord of the chick embryo. Lee MT, et al. **J Neurosci** 1988 Jul;8(7):2530-43

Quantitative autoradiographic measurement of local cerebral glucose utilization in freely moving rats during postnatal development. Nehlig A, et al. **J Neurosci** 1988 Jul; 8(7):2321-33

A modulatory proctolin-containing neuron (MPN). II. State-dependent modulation of rhythmic motor activity. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1600-7

Motor activity in the isolated spinal cord of the chick embryo: synaptic drive and firing pattern of single motoneurons. O'Donovan MJ. **J Neurosci** 1989 Mar; 9(3):943-58

Relationship between behavioral and motor responses of mature and old mice and cerebellar beta-adrenergic receptor density. Rosenthal MJ, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):231-7

Proposed mechanisms for cerebellar coordination, stabilization and monitoring of movements and posture. Sieb RA. **Med Hypotheses** 1989 Apr;28(4):225-32

Norepinephrine turnover in various tissues at rest and during exercise: evidence for a training effect. Mazzeo RS, et al. **Metabolism** 1989 May;38(5):479-83

Stimulated activity mediates phase shifts in the hamster circadian clock induced by dark pulses or benzodiazepines. Van Reeth O, et al. **Nature** 1989 May 4;339(6219):49-51

Cortico-hippocampal relations of electrical activity in rabbits with a polarization-induced motor dominant focus. Rusinova EV. **Neurosci Behav Physiol** 1989 May-Jun; 19(3):241-8

Neuronal activity of the supplementary motor area (SMA) during internally and externally triggered wrist movements. Thaler DE, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):264-9

Noninvasive motor evoked potential monitoring during neurosurgical operations on the spinal cord. Zentner J. **Neurosurgery** 1989 May;24(5):709-12

Movement as a signal during classical conditioning. Davydova EK. **Pavlov J Biol Sci** 1988 Jul-Sep;23(3):95-101 (51 ref.)

Stress ulcer and open-field behavior of spontaneously hypertensive, normotensive, and Wistar rats. Paré WP. **Pavlov J Biol Sci** 1989 Apr-Jun;24(2):54-7

Call for a follow-up study of experiments on long-term deprivation of human infants. Razel M. **Percept Mot Skills** 1988 Aug;67(1):147-58

Long-term effects of inescapable stress on daily running activity and antagonism by desipramine. Desan PH, et al.

Pharmacol Biochem Behav 1988 May;30(1):21–9
The role of adrenal corticosterone in schedule-induced wheel running. Lin WJ, et al. **Pharmacol Biochem Behav** 1988 May;30(1):101–6
Feeding cycles entrain circadian rhythms of locomotor activity in CS mice but not in C57BL/6J mice. Abe H, et al. **Physiol Behav** 1989 Feb;45(2):397–401
Effects of restricted feeding schedules on circadian organization in squirrel monkeys. Boulos Z, et al. **Physiol Behav** 1989 Mar;45(3):507–15
Hereditary nature of the pattern of the motor activity circadian rhythm in mice. Díez-Noguera A, et al. **Physiol Behav** 1989 Feb;45(2):307–11
Clip induced analgesia and immobility in the mouse: activation by different sensory modalities. Fleischmann A, et al. **Physiol Behav** 1988;44(1):39–45
Open field behavior and cardiovascular responses to stress in normal rats. Gomez RE, et al. **Physiol Behav** 1989 Apr; 45(4):767–9
Blood pressure during induction and termination of the dorsal immobility response. Hurwitz BE, et al. **Physiol Behav** 1989 Mar;45(3):671–5
Spontaneous bodily rotations and direction of locomotion at different times after radio frequency lesions at sites in and near the substantia nigra. Isaacson RL, et al. **Physiol Behav** 1988;44(2):199–204
Running wheel activity in hamsters with hypothalamic damage. Johnson RF, et al. **Physiol Behav** 1988; 43(6):755–63
Investigation into sex-related differences in locomotor activity, place learning and passive avoidance responding in NMRI mice. Lamberty Y, et al. **Physiol Behav** 1988; 44(6):787–90
Genetics and senescence. I. Age-related changes in activity and exploration in three inbred strains of mice. Lhotellier L, et al. **Physiol Behav** 1989 Mar;45(3):491–3
Wheel running, food intake, and body weight in male rats. Looy H, et al. **Physiol Behav** 1989 Feb;45(2):403–5
Response of circadian locomotor activity and the proestrous luteinizing hormone surge to phase shifts of the light-dark cycle in the hamster. Moline ML, et al. **Physiol Behav** 1988; 43(4):435–40
Activity of castrated male voles: rhythms of responses to testosterone replacement. Rowsemitt CN. **Physiol Behav** 1989 Jan;45(1):7–13
Effect of running wheel availability on circadian patterns of sleep and wakefulness in mice. Welsh D, et al. **Physiol Behav** 1988;43(6):771–77
Estrous correlated modulations of circadian and ultradian wheel-running activity rhythms in LEW/Ztm rats. Wollnik F, et al. **Physiol Behav** 1988;43(3):389–96
Immobilization stress modifies locomotor response to catecholamine receptor agonists in rats. Zebrowska-Lupina I, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):441–50
Rhabdomyolysis, renal failure and schizophrenia. Frankel AS, et al. **Psychiatr J Univ Ottawa** 1989 Mar;14(1):296–7
Immobility-related hippocampal theta activity in rats during reaction to novelty. Myhrer T, et al. **Scand J Psychol** 1988; 29(3–4):214–22
Spatial selectivity of rat hippocampal neurons: dependence on preparedness for movement. Foster TC, et al. **Science** 1989 Jun 30;244(4912):1580–2
Motor abnormalities during sleep in patients with childhood hereditary progressive dystonia, and their unaffected family members. Gadoth N, et al. **Sleep** 1989 Jun;12(3):233–8
Night-to-night variability in sleep apnea and sleep-related periodic leg movements in the elderly. Mosko SS, et al. **Sleep** 1988 Aug;11(4):340–8
Sensitivity and specificity of somatosensory and neurogenic-motor evoked potentials in animals and humans. Owen JH, et al. **Spine** 1988 Oct;13(10):1111–8
1988 Volvo award in biomechanics. The triaxial coupling of torque generation of trunk muscles during isometric exertions and the effect of fatiguing isoinertial movements on the motor output and movement patterns. Parnianpour M, et al. **Spine** 1988 Sep;13(9):982–92
Altitude, training and human performance. Jackson CG, et al. **Sports Med** 1988 Nov;6(5):279–84 (37 ref.)
Effect of spinal cord stimulation on motor performances in hemiplegics. Cioni B, et al. **Stereotact Funct Neurosurg** 1989;52(1):42–52
The modulation of human reflexes during functional motor tasks. Stein RB, et al. **Trends Neurosci** 1988 Jul;11(7):328–32 (26 ref.)
HPNS effects among 18 divers during compression to 360 msw on heliox. Vaernes RJ, et al. **Undersea Biomed Res** 1988 Jul;15(4):241–55
[Why do children walk when falling down while adults fall down in walking?] Brenière Y, et al. **C R Acad Sci [III]** 1988;307(11):617–22 (Eng. Abstr.) (Fre)
[Motor seizure patterns: a comparative analysis of tonic, psychomotor and psychogenic seizures] Stenzel E. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):110–8 (Eng. Abstr.) (Ger)
[Principles of maintaining dynamic stability of EEG frequency range in humans] Bekshaev SS, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):545–51 (Rus)
[Relation between static and dynamic components during exact motor activity] Mikhailova TG. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):827–34 (Rus)
[Motor activity of young children in a preschool institution] Slobodskaia ER. **Fiziol Cheloveka** 1988 Jan–Feb; 14(1):150–3 (Rus)
[Contactless coordinatiometer] Timoshenko DA, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):1035–7 (Rus)
[Age-related features of the realization of motor reactions during aging and Parkinson's disease from the results of measuring the duration of a simple motor reaction] Karaban' IN, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):92–7 (Eng. Abstr.) (Rus)
[Influence of regular muscular activity on the trace effects of cold adaptation] Sobolev VI, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):56–61 (Eng. Abstr.) (Rus)
[Autoregulation and dilatory reserves of the rat coronary arteries upon limiting their motor activity] Bozhko AP, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):522–8 (Eng. Abstr.) (Rus)
[An analysis of the importance of low-molecular peptides in regulating human motor functions in diseases of the central nervous system] Naryshkin AG, et al. **Fiziol Zh SSSR** 1989 May;75(5):697–701 (Eng. Abstr.) (Rus)
[Effects of the intersensory action of sound on the performance of a simple motor reaction to light in the cat] Polianskiĭ VB, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1102–8 (Eng. Abstr.) (Rus)
[Effect of neuroses on dopamine metabolism in the brain of rats with various activities on the "open field" test] Sau'skaia NB. **Fiziol Zh SSSR** 1989 Mar;75(3):397–400 (Rus)
[Hygienic aspects of motor activity and the quality of nutrition in 5- to 7-year-old children from children's preschool institutions] Chernova TV. **Gig Sanit** 1989 Apr; (4):14–6 (Eng. Abstr.) (Rus)
[Age-related dynamics of physical development of schoolchildren with various patterns of motor activity] Eremeev VIa, et al. **Gig Sanit** 1989 May;(5):12–5 (Eng. Abstr.) (Rus)
[Indicators of the neurological processes in schoolchildren in relation to age and sex] Netopina SA. **Gig Sanit** 1988 Jun;(6):16–8 (Eng. Abstr.) (Rus)
[Dependence of the levels of morbidity with temporary loss of work capacity on the body functional state of those working in hypokinesia] Iakovleva TP, et al. **Gig Tr Prof Zabol** 1989;(2):20–2 (Eng. Abstr.) (Rus)
[Effect of long-term hypokinesia on characteristics of phasic-tonic motor activity in monkeys] Urmancheeva TG, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):46–51 (Eng. Abstr.) (Rus)
[Role of various regions of the spinal cord in generating spontaneous motor activity in the chick embryo] Baev KV, et al. **Neirofiziologiia** 1989;21(1):124–6 (Eng. Abstr.) (Rus)
[Swimming by infants] Aleksandrovich NZh. **Pediatriia** 1989; (4):80–4 (Rus)
[Characteristics of the neuropsychological development of infants during the first year of life, engaged in swimming] Kliorin AI, et al. **Pediatriia** 1989;(2):16–8 (Eng. Abstr.) (Rus)
[The muscle activity of the forelimbs in dogs during the dynamic recovery of motor function following a focal lesion of the motor area of the brain] Malikova SN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct; (5):28–31 (Eng. Abstr.) (Rus)
[Physiological energy requirements of schoolchildren] Gallish LG, et al. **Vopr Pitan** 1988 May–Jun;(3):25–9 (Eng. Abstr.) (Rus)
[Periodic phenomenon in the ECoG of newborn rat pups and its correlation with spontaneous motor activity] Dmitrieva LE, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb; 25(1):60–6 (Eng. Abstr.) (Rus)
[Maturation of the activity of cerebellar Purkinje cells and the lift reaction] Grigor'ian RA, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun;24(3):344–9 (Eng. Abstr.) (Rus)
[The role of the dopamine and noradrenaline systems in regulating autogenic motor activity in rat pups] Timofeeva OP. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):123–5 (Eng. Abstr.) (Rus)
[Neuromuscular reactions to passive movements of the arm in patients with reactive states] Safronov VA, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):41–6 (Eng. Abstr.) (Rus)
[Motor function study in traumatic lesions of the brachial plexus] Safronov VA, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):22–5 (Eng. Abstr.) (Rus)
[New data on the correlation of the cardiac and motor components of the instrumental conditioned defensive reflex in dogs] Dolbakian EE. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):651–9 (Eng. Abstr.) (Rus)
[High-frequency components of cortical potentials and their phase-coherent characteristics during the acquisition of motor-food conditioned reflexes in dogs] Dumenko VN, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):641–50 (Eng. Abstr.) (Rus)
[The component composition of the human cortical motor potential during static muscle loading] Ivanova MP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):427–33 (Eng. Abstr.) (Rus)
[The role of genotype and environment in shaping the interindividual variability of brain potentials related to movement] Malykh SB, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1003–9 (Eng. Abstr.) (Rus)
[The role of individual characteristics and learning in the manifestation of motor asymmetry in rats] Mikliaeva EI. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):267–72 (Eng. Abstr.) (Rus)
[Cortico-hippocampal relation of electrical activity during a motor polarization dominant in rabbits] Rusinova EV. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):497–505 (Eng. Abstr.) (Rus)
[Effect of stimulation of field CA3 in the dorsal hippocampus on the motor polarization dominant in rabbits] Rusinova EV. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):301–8 (Eng. Abstr.) (Rus)
[Local blood flow in the emotiogenic structures of the brain in freely moving rats] Sarkisova KIu. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):684–92 (Eng. Abstr.) (Rus)
[A method for evaluating motor asymmetry during the free behavior of rats] Tsagareli SN, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1171–3 (Rus)
[Hemispheric participation in the shaping of spatial-motor asymmetry in visual recognition in rats] Udalova GP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):467–74 (Eng. Abstr.) (Rus)
[Low birth weight and the functioning of the central nervous system in the first years of life] Cravioto J, et al. **Bol Med Hosp Infant Mex** 1988 Nov;45(11):718–28 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

Spontaneous perseverative turning in rats with radiation-induced hippocampal damage. Mickley GA, et al. **Behav Neurosci** 1989 Aug;103(4):722–30
Comparison of functional and morphological deficits in the rat after gestational exposure to ionizing radiation. Norton S, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):363–71
Behavioral radioprotection. Bogo V. **Pharmacol Ther** 1988; 39(1–3):73–8 (31 ref.)
Adult susceptibility induced by preweaning shifts of zeitgeber in rats (I). Knaepen E, et al. **Physiol Behav** 1988;44(6):763–7
Radiation quality and rat motor performance. Bogo V, et al. **Radiat Res** 1989 May;118(2):341–52

MOTOR CORTEX

Seizures and recovery from experimental brain damage. Hernandez TD, et al. **Exp Neurol** 1988 Dec;102(3):318–24
Anterior operculum syndrome. Mao CC, et al. **Neurology** 1989 Sep;39(9):1169–72

ANATOMY & HISTOLOGY

The postnatal development of the motor speech area: a preliminary study. Simonds RJ, et al. **Brain Lang** 1989 Jul; 37(1):42–58
[Ventrolateral nucleus of the cat thalamus and its connection with field 4 of the cerebral cortex] Melik-Musian AB. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):22–7 (Eng. Abstr.) (Rus)
[Neuronal organization of field 4 of the motor cortex of the cat brain] Melik-Musian AB. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):12–7 (Eng. Abstr.) (Rus)
[Projections of fields 5 and 7 in the subdivision of the sensorimotor area of the cat cerebral cortex] Ipekchian NM, et al. **Neirofiziologiia** 1988;20(3):319–26 (Eng. Abstr.) (Rus)

CYTOLOGY

Differential projection from the motor and limbic cortical regions to the mediodorsal thalamic nucleus in the dog. Stępniewska I, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(1):23–37
Motor cortex projections to the thalamus. An autoradiographic study in the cat. Gómez-Pinilla F, et al. **Arch Ital Biol** 1989 Mar;127(2):109–14
Morphology of neurons in area 4 gamma of the cat's cortex studied with intracellular injection of HRP [corrected and issued with original paging in J Comp Neurol 1988 Nov 8;277(2)] Ghosh S, et al. **J Comp Neurol** 1988 Nov 8; 277(2):290–312
Prelabeled red nucleus and sensorimotor cortex neurons of the rat survive 10 and 20 weeks after spinal cord transection. McBride RL, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):568–76
[Quantitative histological studies of lamina V and lamina III pyramidal neurons in the motor cortex of the rat. The question of laterality] Bruch L, et al. **J Hirnforsch** 1988; 29(4):461–72 (Eng. Abstr.) (Ger)

DRUG EFFECTS

[Effects of corazol on the dynamics of membrane-bound calcium in the structures of the cerebral cortex] Samoilov MO, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):50–1 (Eng. Abstr.) (Rus)
[Effect of corazole on the dynamics of oxidative-reductive processes in cerebral cortical neurons] Sofronov GA, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):30–3 (Eng. Abstr.) (Rus)
[Effect of strychnine on the neuronal reactivity of the sensorimotor cortex and the temporary connection in rabbits] Chizhenkova RA. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):846–54 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Types and distribution of glutamic acid decarboxylase (GAD)-immunoreactive neurons in mouse motor cortex. Solberg Y, et al. **Brain Res** 1988 Aug 30;459(1):168–72

GROWTH & DEVELOPMENT

The early development of subcortical projections to presumptive somatic sensory-motor areas of neocortex in the North American opossum. Martin GF, et al. **Anat Embryol (Berl)** 1988;178(4):365–79

Deviations in brain development of F2 generation on caloric undernutrition and scope of their prevention by rehabilitation: alterations in dendritic spine production and pruning of pyramidal neurons of lower laminae of motor cortex and visual cortex. Gundappa G, et al. **Brain Res** 1988 Jul 26;456(2):205–23

Postnatal redistribution of pericruciate motor cortical projections within the kitten spinal cord. Theriault E, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):219–37

METABOLISM

Stressful environmental stimuli increase extracellular DOPAC levels in the prefrontal cortex of hypoemotional (Roman high-avoidance) but not hyperemotional (Roman low-avoidance) rats. An in vivo voltammetric study. D'Angio M, et al. **Brain Res** 1988 Jun 7;451(1-2):237–47

Increase in kynurenic acid in Huntington's disease motor cortex. Connick JH, et al. **J Neurochem** 1989 Mar; 52(3):985–7

[Effect of the neurosensitization of female rats on the functional indices of the DNA-, RNA- and protein-synthesizing neuronal apparatus of the cerebral cortex and of the immune system in their progeny] Kolomeets NS, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):80–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Electrical stimulation of the motor cortex: theoretical considerations. Grandori F, et al. **Ann Biomed Eng** 1988; 16(6):639–52

Maturation of corticospinal tracts assessed by electromagnetic stimulation of the motor cortex. Koh TH, et al. **Arch Dis Child** 1988 Nov;63(11):1347–52

The 'Kennard effect' before Kennard. The early history of age and brain lesions. Finger S, et al. **Arch Neurol** 1988 Oct;45(10):1136–42

Neuronal and glial responses to hypoxia and hypercapnia. Lehmenkühler A, et al. **Biomed Biochim Acta** 1989; 48(2-3):S155–60

Somatotopic representation in inferior area 6 of the macaque monkey. Gentilucci M, et al. **Brain Behav Evol** 1989; 33(2-3):118–21

Premotor cortex and the retrieval of movement. Passingham RE. **Brain Behav Evol** 1989;33(2-3):189–92

A sense of movement elicited in paralyzed distal arm by focal magnetic coil stimulation of human motor cortex. Amassian VE, et al. **Brain Res** 1989 Feb 13;479(2):355–60

Corticostriatal cells in comparison with pyramidal tract neurons: contrasting properties in the behaving monkey. Bauswein E, et al. **Brain Res** 1989 Jul 24;493(1):198–203

Electric vs magnetic trans-cranial stimulation of the brain in healthy humans: a comparative study of central motor tracts 'conductivity' and 'excitability'. Caramia MD, et al. **Brain Res** 1989 Feb 6;479(1):98–104

Motor cortical cell discharge during voluntary gait modification. Drew T. **Brain Res** 1988 Aug 2;457(1):181–7

Distribution of activity within the cat's peroneus longus muscle when activated in different ways via the central nervous system. Kandou TW, et al. **Brain Res** 1989 May 8;486(2):340–50

Claustral influence on ipsi- and contralateral motor cortical areas, in the cat. Crescimanno G, et al. **Brain Res Bull** 1989 May;22(5):839–43

Neuron activity in rat hippocampus and motor cortex during discrimination reversal. Disterhoft JF, et al. **Brain Res Bull** 1978 Nov-Dec;3(6):583–8

Mapping the effects of motor cortex stimulation on single neurons in the dorsal column nuclei in the rat: direct responses and afferent modulation. Shin HC, et al. **Brain Res Bull** 1989 Feb;22(2):245–52

Spatial coding of visually guided arm movements in primate motor cortex. Georgopoulos AP. **Can J Physiol Pharmacol** 1988 Apr;66(4):518–26

Modified impulse diminishes discomfort of transcranial electrical stimulation of the motor cortex. Zentner J, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):93–7

Physiologic analysis of central motor pathways—simultaneous recording from multiple relaxed muscles. Ugawa Y, et al. **Eur Neurol** 1989;29(3):135–40

Excitability of corticospinal neurons during tonic muscle contractions in man. Brouwer B, et al. **Exp Brain Res** 1989; 74(3):649–52

Cognitive spatial-motor processes. 3. Motor cortical prediction of movement direction during an instructed delay period. Georgopoulos AP, et al. **Exp Brain Res** 1989; 75(1):183–94

The functional development of input-output relationships in the rostral portion of the corpus callosum in the kitten. Guandalini P, et al. **Exp Brain Res** 1989;74(3):453–62

Segregation of lemniscal inputs and motor cortex outputs in cat ventral thalamic nuclei: application of a novel technique. Hirai T, et al. **Exp Brain Res** 1988;71(2):329–44

Premotor and supplementary motor cortex in rhesus monkeys: neuronal activity during externally- and internally-instructed motor tasks. Kurata K, et al. **Exp Brain Res** 1988;72(2):237–48

Negative cortical DC shifts preceding and accompanying simple and complex sequential movements. Lang W, et al. **Exp Brain Res** 1989;74(1):99–104

Short latency somaesthetic responses in motor cortex, transmitted through the spino-thalamic system, in the cat. Relova JL, et al. **Exp Brain Res** 1989;75(3):639–43

An ontogenic study of focal seizure induced by penicillin injection into sensorimotor area in rats. Kudo T, et al. **Exp Neurol** 1988 Nov;102(2):254–60

Neural integration of movement: role of motor cortex in reaching. Georgopoulos AP. **FASEB J** 1988 Oct; 2(13):2849–57 (43 ref.)

Thalamic input to inferior area 6 and area 4 in the macaque monkey. Matelli M, et al. **J Comp Neurol** 1989 Feb 15; 280(3):468–88

Relations of motor cortex neural discharge to kinematics of passive and active elbow movements in the monkey. Flament D, et al. **J Neurophysiol** 1988 Oct;60(4):1268–84

Input-output relationships of the primary face motor cortex in the monkey (Macaca fascicularis). Huang CS, et al. **J Neurophysiol** 1989 Feb;61(2):350–62

Monkey primary motor and premotor cortex: single-cell activity related to prior information about direction and extent of an intended movement. Riehle A, et al. **J Neurophysiol** 1989 Mar;61(3):534–49

A comparison of movement direction-related versus load direction-related activity in primate motor cortex, using a two-dimensional reaching task. Kalaska JF, et al. **J Neurosci** 1989 Jun;9(6):2080–102

A new method for relating behavior to neuronal activity in performing monkeys. Montgomery EB Jr. **J Neurosci Methods** 1989 Jun;28(3):197–204

Electrophysiological localization of the human sensorimotor cortex [letter] Schmid UD, et al. **J Neurosurg** 1989 May; 70(5):817–8

Direct and indirect sensory input pathways to the motor cortex; its structure and function in relation to learning of motor skills. Asanuma H, et al. **Jpn J Physiol** 1989; 39(1):1–19 (83 ref.)

Long-term implants of Parylene-C coated microelectrodes. Schmidt EM, et al. **Med Biol Eng Comput** 1988 Jan; 26(1):96–101

Cognitive control of movement [news] Lemon R. **Nature** 1989 Feb 2;337(6206):410–1

The anatomic and physiologic bases of motor-evoked potentials. Rossini PM. **Neurol Clin** 1988 Nov;6(4):751–69 (60 ref.)

Reach training selectively alters dendritic branching in subpopulations of layer II–III pyramids in rat motor-somatosensory forelimb cortex. Withers GS, et al. **Neuropsychologia** 1989;27(1):61–9

Effect of CSF from animals with damage to the motor cortex on compensation of motor disorders. Loseva IV, et al. **Neurosci Behav Physiol** 1989 Mar-Apr;19(2):139–45

Cortico-hippocampal relations of electrical activity in rabbits with a polarization-induced motor dominant focus. Rusinova EV. **Neurosci Behav Physiol** 1989 May-Jun; 19(3):241–8

Mesencephalic dopamine innervation of the frontoparietal (sensorimotor) cortex of the rat: a microdialysis study. Herrera-Marschitz M, et al. **Neurosci Lett** 1989 Feb 27; 97(3):266–70

Do neurons in the motor cortex encode movement direction? An alternative hypothesis. Mussa-Ivaldi FA. **Neurosci Lett** 1988 Aug 15;91(1):106–11

Significance of shape and size of the stimulating coil in magnetic stimulation of the human motor cortex. Rösler KM, et al. **Neurosci Lett** 1989 May 22;100(1-3):347–52

Changes of transcranially evoked motor responses in man by midazolam, a short acting benzodiazepine. Schönle PW, et al. **Neurosci Lett** 1989 Jul 3;101(3):321–4

Effects of synchrony between primate corticomotoneuronal cells on post-spike facilitation of muscles and motor units. Smith WS, et al. **Neurosci Lett** 1989 Jan 2;96(1):76–81

Neuronal activity of the supplementary motor area (SMA) during internally and externally triggered wrist movements. Thaler DE, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):264–9

Augmentation of glutamate responses by GABA in the rat's motorcortex in vivo. Walden J, et al. **Neurosci Lett** 1989 Jun 19;101(2):209–13

Responses of motor cortex neurons to visual stimulation in the alert monkey. Wannier TM, et al. **Neurosci Lett** 1989 Mar 13;98(1):63–8

Separation of different types of afterpotentials following penicillin-induced paroxysmal depolarization shifts of neurons in the motor cortex of the rat. Witte OW, et al. **Neurosci Lett** 1989 Jun 5;101(1):51–6

Origin of motor evoked potentials in the rat [letter] Fehlings MG, et al. **Neurosurgery** 1989 Feb;24(2):299–300

Effects of hypovolemic hypotensive shock on somatosensory and motor evoked potentials. Haghighi SS, et al. **Neurosurgery** 1989 Feb;24(2):246–52

Nitrous oxide suppresses the electromyographic response evoked by electrical stimulation of the motor cortex. Zentner J, et al. **Neurosurgery** 1989 Jan;24(1):60–2

Noninvasive motor evoked potential monitoring during neurosurgical operations on the spinal cord. Zentner J. **Neurosurgery** 1989 May;24(5):709–12

Influence of anesthetics—nitrous oxide in particular—on electromyographic response evoked by transcranial electrical stimulation of the cortex. Zentner J, et al. **Neurosurgery** 1989 Feb;24(2):253–6

Movement as a signal during classical conditioning. Davydova EK. **Pavlov J Biol Sci** 1988 Jul-Sep;23(3):95–101 (51 ref.)

Responses in human intercostal and truncal muscles to motor cortical and spinal stimulation. Gandevia SC, et al. **Respir Physiol** 1988 Sep;73(3):325–37

Thinking in circles. Appenzeller T. **Sci Am** 1989 Mar; 260(3):26–7

Mental rotation of the neuronal population vector. Georgopoulos AP, et al. **Science** 1989 Jan 13; 243(4888):234–6

Long-term potentiation in the motor cortex. Iriki A, et al. **Science** 1989 Sep 22;245(4924):1385–7

Neuronal activity preceding directional and nondirectional cues in the premotor cortex of rhesus monkeys. Vaadia E, et al. **Somatosens Mot Res** 1988;6(2):207–30

Transcranial magnetic motor evoked potentials (tcMMEP) for functional monitoring of motor pathways during scoliosis surgery. Edmonds HL Jr, et al. **Spine** 1989 Jul; 14(7):683–6

Effects of spinal cord lesioning on somatosensory and neurogenic-motor evoked potentials. Owen JH, et al. **Spine** 1989 Jul;14(7):673–82

The output map of the primate motor cortex [published erratum appears in Trends Neurosci 1989 Apr;12(4):158] Lemon R. **Trends Neurosci** 1988 Nov;11(11):501–6 (28 ref.)

[Effects of task-unrelated stimuli on frontal neuron responses in delay period of performing monkeys] Liu JL, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):452–63 (Eng. Abstr.) **(Chi)**

[Transcranial and spinal stimulation of motor pathways using conventional stimulator] Kadaňka Z, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):110–9 (Eng. Abstr.) **(Cze)**

[The supplementary motor area is implicated in the coordination between posture and movement in man] Massion J, et al. **C R Acad Sci [III]** 1989;308(15):417–23 (Eng. Abstr.) **(Fre)**

[J.M. Charcot and the discovery of the site of motor function in the human] Gasser J. **Gesnerus** 1988;45 Pt 3-4:501–20 (Eng. Abstr.) **(Fre)**

[Percutaneous electric and magnetic stimulation of the motor cortex in man. Physiological aspects and clinical applications] Maertens de Noordhout A, et al. **Rev Neurol (Paris)** 1989;145(1):1–15 (54 ref.) (Eng. Abstr.) **(Fre)**

[Transcranial cortex stimulation with magnetic field pulses: methodologic and physiologic principles] Hess CW, et al. **EEG EMG** 1988 Dec;19(4):209–15 (38 ref.) (Eng. Abstr.) **(Ger)**

[Characteristics of electrical discharges by transcranial cortex stimulation activated motor units of the hand muscles of the human] Hess CW, et al. **EEG EMG** 1988 Dec; 19(4):216–21 (Eng. Abstr.) **(Ger)**

[Spinal and muscular evoked response following single stimulation of the motor cortex of the rat] Zileli M, et al. **EEG EMG** 1989 Jun;20(2):106–11 (Eng. Abstr.) **(Ger)**

[Transcranial magnetic stimulation of the motor cortex and percutaneous magnetic stimulation of the peripheral nervous structures in the dog] Heckmann R, et al. **Schweiz Arch Tierheilkd** 1989;131(6):341–50 (Eng. Abstr.) **(Ger)**

[Effect of aging and hemispheric functional disorder on the anisotropy of the control characteristics in the two dimensional manual tracking system] Osaka K, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):179–86 (Eng. Abstr.) **(Jpn)**

[Motor and cortical sensory evoked potentials by magnetic stimulation] Tsuji S, et al. **No To Hattatsu** 1989 Mar; 21(2):145–51 (Eng. Abstr.) **(Jpn)**

[Magneto-electrical stimulation (MES)—compared with percutaneous electrical stimulation (PES)] Ugawa Y, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):8–12 (Eng. Abstr.) **(Jpn)**

[An experimental approach to research on the integrative properties of a single brain neuron] Kotliar BI, et al. **Biol Nauki** 1989;(3):56–63 (Eng. Abstr.) **(Rus)**

[Participation of beta-endorphin in the regulation of the membrane chemoreactive properties of the cortical neurons in rats] Kruglikov RI, et al. **Biol Nauki** 1988;(5):51–6 (Eng. Abstr.) **(Rus)**

[Restoration of disrupted motor function in rats upon homotopic transplantation of the embryonal cerebral cortex] Senatorov VV, et al. **Dokl Akad Nauk SSSR** 1989; 304(2):502–5 **(Rus)**

[Interzonal transcallosal connections of the sensomotor cortex] Bianki VL, et al. **Fiziol Zh SSSR** 1989 Apr; 75(4):433–40 (Eng. Abstr.) **(Rus)**

[Functional interneuronal connections in the motor cortex of waking and anesthetized cats] Bogdanov AV, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):913–9 (Eng. Abstr.) **(Rus)**

[The reaction of cat cervical spine interneurons to stimulation of the parietal zone of the cortex] Koreniuk II. **Fiziol Zh SSSR** 1989 Apr;75(4):447–56 (Eng. Abstr.) **(Rus)**

[Effect of artificial polarization of the membrane on IPSP

of neurons in the cat sensorimotor cortex] Kokaia ZG, et al. **Neirofiziologiia** 1989;21(2):264–7 (Eng. Abstr.) **(Rus)**

[Participation of calcium-dependent potassium conductance in the processes of membrane hyperpolarization of the pyramidal neurons in the sensorimotor cortex in the cat] Kokaia ZG, et al. **Neirofiziologiia** 1988;20(3):383–9 (Eng. Abstr.) **(Rus)**

[Reorganization of the synaptic inputs of the sensorimotor cortex to the red nucleus after the destruction of the cerebellar nucleus interpositus in adult cats] Sarkisian DS, et al. **Neirofiziologiia** 1988;20(4):564–7 (Eng. Abstr.) **(Rus)**

[Cortical mechanisms of auditory-motor coordination] Kulikov GA. **Nerv Sist** 1988;26:164–87 **(Rus)**

[The muscle activity of the forelimbs in dogs during the dynamic recovery of motor function following a focal lesion of the motor area of the brain] Malikova SN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct; (5):28–31 (Eng. Abstr.) **(Rus)**

[Modulation of the thalamocortical responses of the sensorimotor cortex during stimulation of the lateral hypothalamus in rabbits in ontogeny] Shimko IA. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):74–80 (Eng. Abstr.) **(Rus)**

[Changes in the peripheral somatosensory input into the motor cortex after damage to the somatosensory cortical areas in dogs] Frolov AG, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):366–9 **(Rus)**

[Activity of the cerebellar neurons of the rabbit in food procurement behavior. A comparison with the activity of motor cortex neurons] Grinchenko IuV, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1164–7 **(Rus)**

[The component composition of the human cortical motor potential during static muscle loading] Ivanova MP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):427–33 (Eng. Abstr.) **(Rus)**

[Functional interhemispheric brain asymmetry in cats] Kuraev GA, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec; 38(6):1161–3 **(Rus)**

[Changes in the parameters of locomotion following partial extirpation of the motor cortex in white rats] Lenkov DN, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):118–27 (Eng. Abstr.) **(Rus)**

[Cortico-hypothalamic interneuronal correlation during learning in cats] Merzhanova GKh, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1017–26 (Eng. Abstr.) **(Rus)**

[Restructuring of the topical organization of the rat motor cortex after damage to the opposite hemisphere] Ptitsyna IB, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):506–12 (Eng. Abstr.) **(Rus)**

[Amplitude–temporal parameters of the evoked potentials of the visual and motor areas in the visual perception and mental representation of an image] Puchinskaia LM, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):812–20 (Eng. Abstr.) **(Rus)**

[Cortico-hippocampal relation of electrical activity during a motor polarization dominant in rabbits] Rusinova EV. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):497–505 (Eng. Abstr.) **(Rus)**

[Spectral characteristics of the EEG of the visual and motor cortices in the rabbit during stimulation of the reticular formation of the brain] Vorob'ev NA, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):90–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Intraoperative monitoring of the motor function: experimental and clinical study. Kaneko M, et al. **Acta Neurochir Suppl (Wien)** 1988;42:18–21

A comparison of somatosensory evoked and motor evoked potentials in stroke. Macdonell RA, et al. **Ann Neurol** 1989 Jan;25(1):68–73

Neurophysiological assessment of the central motor pathway to the external urethral sphincter in man. Thiry AJ, et al. **Br J Urol** 1989 May;63(5):515–9

Temporal lobe and petit mal antiepileptics differentially affect ventral lateral thalamic and motor cortex excitability patterns. Shouse MN, et al. **Brain Res** 1988 Nov 15; 473(2):372–9

Properties of depolarizing plateau potentials in aminopyridine-induced ictal seizure foci of cat motor cortex. Szente MB, et al. **Brain Res** 1989 Aug 28; 495(2):261–70

Sparing of skilled forelimb reaching and corticospinal projections after neonatal motor cortex removal or hemidecortication in the rat: support for the Kennard doctrine. Whishaw IQ, et al. **Brain Res** 1988 Jun 7; 451(1–2):97–114

Changes in GABA-immunoreactive cell density during motor focal epilepsy induced by cobalt in the rat. Esclapez M, et al. **Exp Brain Res** 1989;76(2):369–85

Seizures and recovery from experimental brain damage. Hernandez TD, et al. **Exp Neurol** 1988 Dec;102(3):318–24

Investigation of unilateral facial weakness: magnetic stimulation of the proximal facial nerve and of the face-associated motor cortex. Meyer BU, et al. **J Neurol** 1989 Feb;236(2):102–7

Changes in motor cortex neural discharge associated with the development of cerebellar limb ataxia. Hore J, et al. **J Neurophysiol** 1988 Oct;60(4):1285–302

Organization of adult motor cortex representation patterns following neonatal forelimb nerve injury in rats. Donoghue JP, et al. **J Neurosci** 1988 Sep;8(9):3221–32

Alterations in the corticomotor evoked potential following spinal cord ischemia. Simpson RK Jr, et al. **J Neurosci Methods** 1989 Jun;28(3):171–8

Electrophysiology of the corticomotoneurone pathways in patients with movement disorders. Thompson PD, et al. **Mov Disord** 1986;1(2):113–7

Restructuring of the topical organization of the motor cortex of the rat following damage to the opposite hemisphere. Ptitsyna IB, et al. **Neurosci Behav Physiol** 1989 May–Jun; 19(3):249–55

Use of stimulation mapping and corticography in the excision of arteriovenous malformations in sensorimotor and language-related neocortex. Burchiel KJ, et al. **Neurosurgery** 1989 Mar;24(3):322–7

Relationship of focal epileptogenesis to hemispheric motor prevalence in human ontogenesis. Slapal R, et al. **Physiol Bohemoslov** 1989;38(1):63–9

Fetal brain tissue transplants and recovery of locomotion following damage to sensorimotor cortex in rats. Slavin MD, et al. **Prog Brain Res** 1988;78:33–8

[Fractionated determination of central motor conduction times using stimulation of the cortex, spinal tract and spinal nerve roots: possibilities and limits] Meyer BU, et al. **EEG EMG** 1988 Dec;19(4):234–40 (Eng. Abstr.) **(Ger)**

[Changes in multi-locally recorded muscle responses following cortex stimulation in patients with multiple sclerosis] Meyer BU, et al. **EEG EMG** 1988 Dec; 19(4):241–6 (Eng. Abstr.) **(Ger)**

[Central motor conduction time in multiple sclerosis: an comparison of visual and somatosensory evoked potentials in relation to the type of disease course] Witt TN, et al. **EEG EMG** 1988 Dec;19(4):247–54 (Eng. Abstr.) **(Ger)**

[Somatosensory and motor evoked potentials in the prognostic assessment of traumatic and non-traumatic comatose patients] Zentner J, et al. **EEG EMG** 1988 Dec; 19(4):267–71 (Eng. Abstr.) **(Ger)**

[Percutaneous electrical stimulation (PES) and SEP in peripheral neuropathies] Aizawa H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):447–52 (Eng. Abstr.) **(Jpn)**

[Central motor conduction time in amyotrophic lateral sclerosis and Shy–Drager syndrome] Kachi T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):616–24 (Eng. Abstr.) **(Jpn)**

[Readiness potential associated with an athetotic movement] Sonoo M, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):343–8 (Eng. Abstr.) **(Jpn)**

[Compensation of gait disorders after left-sided removal of a portion of the motor cortex in the white rat] Ptitsyna IB. **Fiziol Zh SSSR** 1989 Feb;75(2):171–6 (Eng. Abstr.) **(Rus)**

[Reactivity of rolandic rhythm in children with a general speech development disorder] Viatleva OA, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):58–63 (Eng. Abstr.) **(Rus)**

[Changes in the background impulse activity of the motor cortex neurons of waking rats in acute alcoholic intoxication] Stashkevich IS, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):556–8 **(Rus)**

RADIATION EFFECTS

[Effect of gamma-radiation of an extremely high dose on the cerebral cortex of the rat (ultrastructural aspects)] Abdrakhmanov AA. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):25–9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

The ultrastructural picture of cerebral cortex of rat after hypoxia. I. Findings after inhalation of 5% O2 and 95% N2. Remiš T, et al. **Z Mikrosk Anat Forsch** 1989; 103(2):297–308

[Changes in the ultrastructure of cortical synapses during exposure to associated neurochemical stimuli] Kotliar BI, et al. **Neirofiziologiia** 1989;21(2):270–2 (Eng. Abstr.) **(Rus)**

[Changes in the brain neurons of the recipient around an embryonic nerve tissue transplant] Kleshchinov VN. **Ontogenez** 1989 Mar–Apr;20(2):216–20 (Eng. Abstr.) **(Rus)**

[The distribution of glutamate receptors in cultures of the motor area of the rat cerebral cortex studied by an immunoelectron microscopic method] Bobryshev IuV, et al. **Tsitologiia** 1989 Feb;31(2):176–81 (Eng. Abstr.) **(Rus)**

[Changes in the ultrastructure and morphometric parameters of the cortical axospinal synapses as affected by a calcium-free medium] Pavlenko IN, et al. **Tsitologiia** 1988 May;30(5):532–8 (Eng. Abstr.) **(Rus)**

[Plasticity of the interneuronal connections of the cerebral cortex from the aspect of age] Bogolepov NN. **Vestn Akad Med Nauk SSSR** 1988;(11):35–8 (Eng. Abstr.) **(Rus)**

MOTOR ENDPLATE see under **NEUROMUSCULAR JUNCTION**

MOTOR NEURONS

Lower motor neurone paralysis due to herpes zoster. Bhattacharyya PK, et al. **Br J Clin Pract** 1988 Feb; 42(2):79–82

Motor neurone disease. Cochrane GM. **Br J Hosp Med** 1989 Mar;41(3):274–9

Rheumatoid arthritis and motor neurone disease—an association? Schady W, et al. **Br J Rheumatol** 1989 Feb; 28(1):70–3

The distribution of muscular weakness in upper motor neuron lesions affecting the arm. Colebatch JG, et al. **Brain** 1989 Jun;112 (Pt 3):749–63

Cytoskeletal abnormalities in motor neuron disease. An immunocytochemical study. Leigh PN, et al. **Brain** 1989 Apr;112 (Pt 2):521–35

Neuropsychological, electroencephalogram and brain computed tomography findings in motor neuron disease. Gallassi R, et al. **Eur Neurol** 1989;29(2):115–20

Caenorhabditis elegans mutants defective in the functioning of the motor neurons responsible for egg laying. Desai C, et al. **Genetics** 1989 Apr;121(4):703–21

The role of the physiotherapist in motor neurone disease. Burford K. **Int J Rehabil Res** 1987;10(4 Suppl 5):176–9

Post-poliomyelitis sequelae in the elderly. Ciocon JO, et al. **J Am Geriatr Soc** 1989 Mar;37(3):256–8

Monoclonal IgMs with anti-Gal(beta 1–3) GalNAc activity in lower motor neuron disease; identification of glycoprotein antigens in neural tissue and cross-reactivity with serum immunoglobulins. Thomas FP, et al. **J Neuroimmunol** 1989 Jul;23(2):167–74

Parental age and motor neuron disease. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):618–21

Familial motor neuron disease: differing penetrance in large pedigrees. Williams DB, et al. **J Neurol Sci** 1988 Sep; 86(2–3):215–30

Trends in mortality from motoneuron disease [letter; comment] **Lancet** 1989 Apr 29;1(8644):958. **Comment on:** Lancet 1989 Apr 1;1(8640):710–3

Relation between motoneuron disease and past poliomyelitis [letter] Clements GB, et al. **Lancet** 1988 Oct 29; 2(8618):1024–5

Rising mortality from motoneuron disease [letter] Flaten TP. **Lancet** 1989 May 6;1(8645):1018–9

Rising mortality from motoneuron disease in the USA, 1962–84 [see comments] Lilienfeld DE, et al. **Lancet** 1989 Apr 1;1(8640):710–3. **Comment in:** Lancet 1989 Apr 29;1(8644):958

Motoneuron disease and exposure to solvents [letter] Martyn CN. **Lancet** 1989 Feb 18;1(8634):394

Motoneuron disease and past poliomyelitis [letter] Martyn CN, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1485

Myokymia of the tongue in a case of brainstem tumour that simulated motor-neuron disease [published erratum appears in Med J Aust 1989 Apr 17;150(8):468] Adams RW, et al. **Med J Aust** 1988 Nov 7;149(9):494, 496–7

Dual virus etiology of age-dependent poliomyelitis of mice. A potential model for human motor neuron diseases. Contag CH, et al. **Microb Pathog** 1989 Jun;6(6):391–401 (58 ref.)

Altered mechanisms of muscular force generation in lower motor neuron disease. Reiners K, et al. **Muscle Nerve** 1989 Aug;12(8):647–59 (51 ref.)

Epidemiology of motor neuron disease in two Italian provinces. Analysis of secular trend and geographic distribution. Chiò A, et al. **Neuroepidemiology** 1989; 8(2):79–86

Secular trends in mortality rates from motor neuron disease in Kentucky 1964–1984. Stallones L, et al. **Neuroepidemiology** 1989;8(2):68–78

Thalamic dementia and motor neuron disease. Deymeer F, et al. **Neurology** 1989 Jan;39(1):58–61

Glutamate dehydrogenase and aspartate aminotransferase in leukocytes of patients with motor neuron disease. Hugon J, et al. **Neurology** 1989 Jul;39(7):956–8

Immunostaining of motor nerve terminals by IgM M protein with activity against gangliosides GM1 and GD1b from a patient with motor neuron disease. Schluep M, et al. **Neurology** 1988 Dec;38(12):1890–2

Single photon emission computed tomography in motor neuron disease with dementia. Sawada H, et al. **Neuroradiology** 1988;30(6):577–8

The genetics of motor neurone disease. Vassilopoulos D. **Prog Clin Biol Res** 1989;306:91–104 (33 ref.)

Research progress in motor neuron diseases. Rowland LP. **Rev Neurol (Paris)** 1988;144(11):623–9 (90 ref.)

Motor neuron disease in blacks. Epidemiological observations in Natal. Cosnett JE, et al. **S Afr Med J** 1989 Aug 19; 76(4):155–7

[Ischemia of the anterior horn of the spinal cord] Mathe JF, et al. **Rev Neurol (Paris)** 1989;145(1):60–4 (28 ref.) (Eng. Abstr.) **(Fre)**

[Genetic heterogeneity of familial motor neuron disease] Kondo K. **No To Shinkei** 1989 Mar;41(3):225–8 (11 ref.) **(Jpn)**

[Morphometrical study on muscle specimens in motor neuron disease—muscle fiber diameter, type grouping and type IIc] Kimura F, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):653–61 (Eng. Abstr.) **(Jpn)**

[Central motor conduction in cerebrovascular disease and motor neuron disease] Ugawa Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):756–64 (Eng. Abstr.) **(Jpn)**

[Possibilities of deviations in electrodiagnostic findings in lesions of the central motor neuron] Manojlović O, et al. **Srp Arh Celok Lek** 1986 Apr;114(4):421–4 (Eng. Abstr.)

(Sec)

ANALYSIS

Motor neurons contain agrin-like molecules. Magill-Solc C, et al. **J Cell Biol** 1988 Nov;107(5):1825–33

Cranial motor neurons contain either galanin- or calcitonin gene-related peptidelike immunoreactivity. Moore RY. **J Comp Neurol** 1989 Apr 22;282(4):512–22

Location of forelimb motoneurons in the Japanese toad (Bufo japonicus): a horseradish peroxidase study. Oka Y, et al. **J Comp Neurol** 1989 Aug 15;286(3):376–83

Immunohistochemical evidence for convergence of GABA-containing and glycine-containing axon terminals on single spinal motoneurons of the rat. Yoshida M, et al. **Kurume Med J** 1989;36(1):17–21

Ubiquitin deposits in anterior horn cells in motor neurone disease. Leigh PN, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):197–203

[Spinal muscular atrophy: disappearance of RNA fluorescence of degenerating motor neurons. An acridine orange study] Sarnat HB, et al. **Rev Neurol (Paris)** 1989; 145(4):305–11 (43 ref.) (Eng. Abstr.) (Fre)

ANATOMY & HISTOLOGY

Expression of nerve-muscle topography during development. Laskowski MB, et al. **J Neurosci** 1989 Jan;9(1):175–82

A cadaveric study of the anatomic variations of the recurrent motor branch of the median nerve. Siverhus SW, et al. **Orthop Rev** 1989 Mar;18(3):315–20 (25 ref.)

The somatotopy of the masticatory neurons in the rat trigeminal motor nucleus as revealed by HRP study. Chen KN, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul; 12(3):146–55

CYTOLOGY

Distribution of motoneurones innervating extraocular muscles in the brain of the marmoset (Callithrix jacchus). Clarke RJ, et al. **Acta Anat (Basel)** 1987;130(2):191–6

The facial motor nucleus of the dog. II. Morphometric analysis. Costa-Llobet C, et al. **Acta Anat (Basel)** 1988; 132(4):280–3

The facial motor nucleus of the dog. I. Cytoarchitectonic subdivisions and cytology. Prats-Galino A, et al. **Acta Anat (Basel)** 1988;132(4):276–9

Do certain spinocerebellar neurons in lamina IX at lumbosacral levels send collaterals to peripheral nerves? A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Arch Ital Biol** 1988 Jun;126(3):179–92

Lower motoneuron trophic factors and lower motoneuron death: effects and mechanisms. Raju TR, et al. **Aust Paediatr J** 1988;24 Suppl 1:48–9 (12 ref.)

Androgen increases the number of cells in fetal mouse spinal cord cultures: implications for motoneuron survival. Hauser KF, et al. **Brain Res** 1989 Apr 17;485(1):157–64

The morphology of the axons and axon collaterals of rat jaw-elevator motoneurones. Moore JA, et al. **Brain Res** 1989 Jun 12;489(2):383–6

Neuronal organization of the stapedius reflex pathways in the rat: a retrograde HRP and viral transneuronal tracing study. Rouiller EM, et al. **Brain Res** 1989 Jan 2;476(1):21–8

A hypothesis for the superior sensitivity of wheat germ agglutinin as a neuroanatomical probe. Stieber A, et al. **Brain Res** 1989 Aug 21;495(1):131–9

Plasticity of the neuromuscular system. **Ciba Found Symp** 1988;138:1–273

Early regional variations in motoneuron numbers arise by differential proliferation in the chick embryo spinal cord. Oppenheim RW, et al. **Dev Biol** 1989 Jun;133(2):468–74

Projections from the rostral mesencephalic reticular formation to the spinal cord. An HRP and autoradiographical tracing study in the cat. Holstege G, et al. **Exp Brain Res** 1989;75(2):265–79

Enhanced survival of motoneurons in the chick lateral motor column: effects of embryonic skeletal muscle extracts and myoblast-conditioned medium. Petruzzelli G, et al. **Exp Cell Biol** 1989;57(3):125–30

The formation of motor cell groups in the human embryonic spinal cord. Woźniak W, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):91–7

Location of bulbospinal neurons and of laryngeal motoneurons within the nucleus ambiguus of the rat and cat by means of retrograde fluorescent labelling. Portillo F, et al. **J Anat** 1988 Aug;159:11–8

Retrovesicular ganglion of the nematode Ascaris. Angstadt JD, et al. **J Comp Neurol** 1989 Jun 15;284(3):374–88

Compartmental and topographical distributions of axons in nerves to the amphibian (Bufo marinus) glutaeus muscle. Brown DR, et al. **J Comp Neurol** 1989 Jun 8;284(2):231–41

Gustatory innervation in the rabbit: central distribution of sensory and motor components of the chorda tympani, glossopharyngeal, and superior laryngeal nerves. Hanamori T, et al. **J Comp Neurol** 1989 Apr 1;282(1):1–14

Anatomical study of the final common pathway for vocalization in the cat. Holstege G. **J Comp Neurol** 1989 Jun 8;284(2):242–52

Motor nuclei of peroneal muscles in the cat spinal cord. Horcholle-Bossavit G, et al. **J Comp Neurol** 1988 Nov 15; 277(3):430–40

Topography and cytoarchitecture of the motor nuclei in the brainstem of salamanders. Roth G, et al. **J Comp Neurol** 1988 Dec 8;278(2):181–94

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: III. Differential effects of the androgen dihydrotestosterone. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):637–44

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: I. Testosterone-regulated death in the dorsolateral nucleus. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):622–9

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: II. Development of the spinal nucleus of the bulbocavernosus in androgen-insensitive (Tfm) rats. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):630–6

Organization of the motor nuclei in the cervical spinal cord of salamanders. Wake DB, et al. **J Comp Neurol** 1988 Dec 8;278(2):195–208

Morphological study of flight motor neurons in the cricket. Wang S, et al. **J Comp Neurol** 1989 Jan 8;279(2):272–80

A confocal laser microscope scanner for digital recording of optical serial sections. Carlsson K, et al. **J Microsc** 1989 Feb;153 (Pt 2):171–80

Regional heterogeneity in the distal motor axon: three zones with distinctive intrinsic components. Yee VC, et al. **J Neurocytol** 1988 Oct;17(5):649–56

An investigation of possible transynaptic neuronal degeneration in human spinal cord injury. Kaelan C, et al. **J Neurol Sci** 1988 Sep;86(2–3):231–7

Dendritic ramifications of trigeminal motor neurons innervating jaw-closing muscles of rats. Mong FS, et al. **J Neurol Sci** 1988 Sep;86(2–3):251–64

Differential loss of neuromuscular connections according to activity level and spinal position of neonatal rabbit soleus motor neurons. Callaway EM, et al. **J Neurosci** 1989 May; 9(5):1806–24

Identification of motoneurons and interneurons in the spinal network for escapes initiated by the mauthner cell in goldfish. Fetcho JR, et al. **J Neurosci** 1988 Nov; 8(11):4192–213

Androgenic regulation of gap junctions between motoneurons in the rat spinal cord. Matsumoto A, et al. **J Neurosci** 1988 Nov;8(11):4177–83

A silver impregnation method for motor and sensory nerves and their endings in formalin-fixed mammalian muscles. Schweizer H, et al. **J Neurosci Methods** 1988 Aug; 25(1):45–8

Peripheral motoneuron interactions with laminin and Schwann cell-derived neurite-promoting molecules: developmental regulation of laminin receptor function. Tomaselli KJ, et al. **J Neurosci Res** 1988 Oct-Dec; 21(2–4):275–85

Effects of age on the number and histochemical properties of muscle fibers and motoneurons in the rat extensor digitorum longus muscle. Ishihara A, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):213–21

Anatomical evidence for red nucleus projections to motoneuronal cell groups in the spinal cord of the monkey. Holstege G, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):97–101

Location of motoneurons innervating the musculus sphincter cloacae in the domestic fowl. Ohmori Y, et al. **Neurosci Lett** 1989 Jun 5;101(1):1–5

Central localization of the cervical esophageal motoneurons in the rabbit. Kitamura S, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2–3):141–53

[Distribution of motor nuclei of the thoracic dorsal paravertebral muscles] Sugiuchi Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1910–9 (Eng. Abstr.) (Jpn)

[Quantitative study of the reticular-motor neuronal contacts in the spinal cord of the lampern] Batueva IV, et al. **Neirofiziologiia** 1988;20(6):814–7 (Eng. Abstr.) (Rus)

[Morphological bases of motor neuron interaction in the isolated spinal cord of rat pups studied with horseradish peroxidase] Chmykhova NM, et al. **Neirofiziologiia** 1988; 20(3):340–50 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Dithiobiuret neurotoxicity: an ultrastructural investigation of the lesion in preterminal axons and motor endplates in the rat lumbrical muscle. Jones HB. **Acta Neuropathol (Berl)** 1989;78(1):72–85

Levodopa therapy and motor fluctuations in Parkinson's disease [letter] Obeso JA, et al. **Ann Neurol** 1988 Nov; 24(5):696–7

Effects of 5-hydroxytryptamine agonists and antagonists on the responses of rat spinal motoneurones to raphe obscurus stimulation. Roberts MH, et al. **Br J Pharmacol** 1988 Oct; 95(2):437–48

Pertussis toxin prevents the inhibitory effect of adenosine and unmasks adenosine-induced excitation of mammalian motor nerve endings. Silinsky EM, et al. **Br J Pharmacol** 1989 May;97(1):16–8

Synthetic egg-laying hormone of Aplysia: quantitative studies of induction of egg laying in Stylocheilus and of the activation of Aplysia buccal neuron B16. Ram JL, et al. **Comp Biochem Physiol [C]** 1989;92(1):131–4

Late onset isofenphos neurotoxicity. Catz A, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1338–40

Subacute administration of a TRH analogue (RX77368) in motorneuron disease: an open study. Modarres-Sadeghi H, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1146–57

Voltage-clamp analysis of taurine-induced suppression of excitatory postsynaptic potentials in frog spinal motoneurons. Yasunami T, et al. **J Neurophysiol** 1988 Oct; 60(4):1405–18

Central effects of the neurotropic mycotoxin fumitremorgin A in the rabbit (I). Effects on the spinal cord. Nishiyama M, et al. **Jpn J Pharmacol** 1989 Jun;50(2):167–73

Motoneuron disease: a disorder secondary to solvent exposure? Hawkes CH, et al. **Lancet** 1989 Jan 14; 1(8629):73–6

Extracts of muscle from amyotrophic lateral sclerosis: effect on cultured neuron [letter] Iwasaki Y, et al. **Muscle Nerve** 1989 May;12(5):425

Effects of the facilitatory compounds catechol, guanidine, noradrenaline and phencyclidine on presynaptic currents of mouse motor nerve terminals. Anderson AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):133–7

Influence of the organophosphorus compound DFP on inhibitory motor systems and esterase activity in the spinal cord of cats. Chemnitius JM, et al. **Neurosci Res** 1989 Feb; 6(3):257–63

Chronic administration of thyrotropin-releasing hormone enhances the sensitivity of lumbar motoneurons to 5-hydroxytryptophan in the rat. Tremblay LE, et al. **Pharmacol Biochem Behav** 1989 May;33(1):127–30

Axotomy-like electrophysiological alterations in spinal motoneurons in beta,beta'-iminodipropionitrile neuropathy. Delio DA, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):207–15

Blocking effects of tetanus toxin and its fragment [A-B] on the excitatory and inhibitory synapses of the spinal motoneurone of the cat. Takano K, et al. **Toxicon** 1989; 27(3):385–92

[Properties of the response of frog motoneurons to glutamate application] Kalinina NI, et al. **Neirofiziologiia** 1988; 20(6):776–85 (Eng. Abstr.) (Rus)

EMBRYOLOGY

The regulation of intramuscular nerve branching during normal development and following activity blockade. Dahm LM, et al. **Dev Biol** 1988 Dec;130(2):621–44

Changes in myosin and C-protein isoforms proceed independently of the conversion to singly innervated neuromuscular junctions in developing pectoral muscle. Hall JA, et al. **Dev Biol** 1988 Dec;130(2):591–8

Distinct roles for adhesion molecules during innervation of embryonic chick muscle. Landmesser L, et al. **Dev Biol** 1988 Dec;130(2):645–70

Development of postsynaptic-like specializations of the neuromuscular synapse in the absence of motor nerve. Sohal GS. **Int J Dev Neurosci** 1988;6(6):553–65

[The nervous system of Caenorhabditis elegans] Hosono R. **Tanpakushitsu Kakusan Koso** 1989 Apr;34(4):315–24 (Jpn)

ENZYMOLOGY

Peroxidase activity at CNS nodes of Ranvier and in initial axon segments of lumbosacral alpha-motoneurons after intramuscular administration of horseradish peroxidase. Berthold CH, et al. **Brain Res** 1988 Jul 26;456(2):293–301

Influence of the culture substratum on the expression of choline acetyltransferase activity in purified motoneurons from rat embryos. Martinou JC, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):251–62

Single motoneuron succinate dehydrogenase activity. Chalmers GR, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1107–14

Marked and variable inhibition by chemical fixation of cytochrome oxidase and succinate dehydrogenase in single motoneurons. Chalmers GR, et al. **J Histochem Cytochem** 1989 Jun;37(6):899–901

Choline acetyltransferase activities in single spinal motor neurons from patients with amyotrophic lateral sclerosis. Kato T. **J Neurochem** 1989 Feb;52(2):636–40

Acid phosphatase activity at nodes of Ranvier in alpha-motor and dorsal root ganglion neurons of the cat. Gatzinsky KP, et al. **J Neurocytol** 1988 Aug;17(4):531–44

Adult onset motor neuronopathy in the juvenile type of hexosaminidase A and B deficiency. Rubin M, et al. **J Neurol Sci** 1988 Oct;87(1):103–19

S-methylation in motorneuron disease and Parkinson's disease. Waring RH, et al. **Lancet** 1989 Aug 12; 2(8659):356–7

Menadione-linked alpha-glycerophosphate dehydrogenase activity of motoneurons in rat soleus and extensor digitorum longus neuron pools. Ishihara A, et al. **Neurochem Res** 1989 May;14(5):455–8

[Acetylcholinesterase activity, choline acetyltransferase and GABA immunoreactivity in the ventral horn of the spinal cord of rats during chromatolysis] Manolov S, et al. **Rev Neurol (Paris)** 1989;145(1):55–9 (21 ref.) (Eng. Abstr.) (Fre)

[Biochemical analysis of cholinergic and GABAergic single neurons] Kato T. **Yakubutsu Seishin Kodo** 1988 Dec; 8(4):475–81 (Jpn)

IMMUNOLOGY

Generation of antibodies to gangliosides GM1 and GD1b. Genetic control of fine antigenic specificity. Ito H, et al. **Ann N Y Acad Sci** 1988;540:258–60

Lambert-Eaton myasthenic syndrome IgG depletes presynaptic membrane active zone particles by antigenic modulation. Nagel A, et al. **Ann Neurol** 1988 Oct; 24(4):552–8

Peripheral nerve injury causes transient expression of MHC class I antigens in rat motor neurons and skeletal muscles. Maehlen J, et al. **Brain Res** 1989 Mar 6;481(2):368–72

Avian spinal cord chimeras. Further studies on the neurological syndrome affecting the chimeras after birth. Kinutani M, et al. **Cell Differ Dev** 1989 Mar;26(2):145–62

A new membrane antigen revealed by monoclonal antibodies is associated with motoneuron axonal pathways. Tanaka H, et al. **Dev Biol** 1989 Apr;132(2):419–35

Local enhancement of major histocompatibility complex (MHC) class I and II expression and cell infiltration in experimental allergic encephalomyelitis around axotomized motor neurons. Maehlen J, et al. **J Neuroimmunol** 1989 Jul;23(2):125–32

Localization of neural epitopes that bind to IgM monoclonal autoantibodies (M-proteins) from two patients with motor neuron disease. Thomas FP, et al. **J Neuroimmunol** 1989 Jan;21(1):31–9

Antibodies to glycoconjugates in human motor neuron disease. Latov N, et al. **Neurochem Pathol** 1988 Jun; 8(3):181–7

Axotomy induces MHC class I antigen expression on rat nerve cells. Maehlen J, et al. **Neurosci Lett** 1988 Sep 23; 92(1):8–13

Pregnancy and autoimmune neuromuscular disease. Parry GJ, et al. **Semin Neurol** 1988 Sep;8(3):197–204 (96 ref.)

METABOLISM

Antibodies to GM1 and GD1b in patients with motor neuron disease without plasma cell dyscrasia. Shy ME, et al. **Ann Neurol** 1989 May;25(5):511–3

Altered levels of calcitonin gene-related peptide (CGRP)-like immunoreactivity of cat lumbar motoneurons after chronic spinal cord transection. Arvidsson U, et al. **Brain Res** 1989 Jun 12;489(2):387–91

A comparison of the distributions of eight peptides in spinal cord from normal controls and cases of motor neurone disease with special reference to Onuf's nucleus. Gibson SJ, et al. **Brain Res** 1988 Dec 6;474(2):255–78

Is the internal calcium regulation altered in type A botulinum toxin-poisoned motor endings? Mallart A, et al. **Brain Res** 1989 Feb 6;479(1):167–71

Target regulation of the serotonin and substance P innervation of the sexually dimorphic cremaster nucleus. Newton BW, et al. **Brain Res** 1989 Apr 17;485(1):149–56

A quantitative analysis of the retrograde axonal transport of 4 different fluorescent dyes in peripheral sensory and motor neurons and lack of anterograde transport in the corticospinal system. Ogilvy CS, et al. **Brain Res** 1988 Dec 20;475(2):244–53

Convergence of serotonin-, enkephalin- and substance P-like immunoreactive afferent fibers on single pudendal motoneurons in Onuf's nucleus of the cat: a light microscope study combining the triple immunocytochemical staining technique with the retrograde HRP-tracing method. Tashiro T, et al. **Brain Res** 1989 Mar 6;481(2):392–8

Immunohistochemical demonstration of calbindin-D 28K (CABP28K) in the spinal cord motoneurons of teleost fish. Denizot JP, et al. **Cell Tissue Res** 1988;254(3):629–34

Antagonism by tubocurarine and verapamil of the regenerative acetylcholine release from mouse motor nerve. Hong SJ, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):11–7

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Infiltration of carbon-labelled monocytes into the dorsal motor nucleus following an intraneural injection of ricinus communis agglutinin-60 into the vagus nerve in rats. Ling EA, et al. **J Anat** 1988 Aug;159:207–18

Differential axonal transport of isotubulins in the motor axons of the rat sciatic nerve. Denoulet P, et al. **J Cell Biol** 1989 Mar;108(3):965–71

Effects of cadmium on quantal transmitter release and ultrastructure of frog motor nerve endings. Molgó J, et al. **J Neural Transm** 1989;77(2–3):79–91

Effects of two isomeric 1-aminoadamantanes on the membrane anisotropy and on alpha- and gamma-motoneurones excitability. Melzacka M, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):153–64

Effect of myasthenic patient sera on the number and distribution of acetylcholine receptors in muscle and nerve-muscle cultures from rat. Correlations with clinical state. Eymard B, et al. **J Neurol Sci** 1988 Aug;86(1):41–59

AMPA, kainate, and quisqualate activate a common receptor-channel complex on embryonic chick motoneurons. Zorumski CF, et al. **J Neurosci** 1988 Nov; 8(11):4277–86

Increase of transferrin receptors and iron uptake in regenerating motor neurons. Graeber MB, et al. **J Neurosci Res** 1989 Jul;23(3):342–5

Presence of alpha-melanocyte-stimulating hormone-like immunoreactivity in the innervation of amphibian skeletal muscle. Oren N, et al. **J Neurosci Res** 1989 Jun;23(2):225–33

Evidence for two types of 5-hydroxytryptamine receptor on secretomotor neurons of the guinea-pig ileum. Hendriks R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):409–14

Opioid mu and kappa receptors on axons of cholinergic excitatory motor neurons supplying the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):397–400

Uptake of plasma IgG by CNS motoneurons: comparison of antineuronal and normal IgG. Fabian RH. **Neurology** 1988 Nov;38(11):1775–80

Calcitonin gene-related peptide messenger RNA is expressed in sensory neurones of the dorsal root ganglia and also in spinal motoneurones in man and rat. Gibson SJ, et al. **Neurosci Lett** 1988 Sep 12;91(3):283–8

Proopiomelanocortin-derived peptides in mice with motoneurone disease. Hughes S, et al. **Neurosci Lett** 1989 Aug 28;103(2):169–73

Effect of nerve section on beta-endorphin and alpha-melanotropin immunoreactivity in motor nerves of normal and dystrophic mice. Hughes S, et al. **Neurosci Lett** 1988 Sep 23;92(1):1–7

Calcitonin gene-related peptide increases in rat facial motoneurons after peripheral nerve transection. Streit WJ, et al. **Neurosci Lett** 1989 Jun 19;101(2):143–8

Calcitonin gene-related peptide and chromogranin A: presence and intra-axonal transport in lumbar motor neurons in the rat, a comparison with synaptic vesicle antigens in immunohistochemical studies. Bööj S, et al. **Neuroscience** 1989;30(2):479–501

Ultrastructural investigation of substance P-, leucine-enkephalin- and 5-hydroxytryptamine-like immunoreactive terminals in the area of cremaster motoneurons of the male rat. Wang BR, et al. **Neuroscience** 1989;28(3):711–23

Monoaminergic and GABAergic terminations in phrenic nucleus of rat identified by immunohistochemical labeling. Zhan WZ, et al. **Neuroscience** 1989;31(1):105–13

Immunoglobulins from amyotrophic lateral sclerosis patients enhance spontaneous transmitter release from motor-nerve terminals. Uchitel OD, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7371–4

Allocation of newly synthesized proteins in spinal motoneurons. McIlwain DL, et al. **Rev Neurol (Paris)** 1988; 144(11):697–700

MICROBIOLOGY

Age-dependent poliomyelitis of mice: expression of endogenous retrovirus correlates with cytocidal replication of lactate dehydrogenase-elevating virus in motor neurons. Contag CH, et al. **J Virol** 1989 Oct;63(10):4362–9

Susceptibility of C58 mice to paralytic disease induced by lactate dehydrogenase-elevating virus correlates with increased expression of endogenous retrovirus in motor neurons. Contag CH, et al. **Microb Pathog** 1988 Oct; 5(4):287–96

Retrovirus induced motor neuron degeneration. Hoffman PM, et al. **Rev Neurol (Paris)** 1988;144(11):676–9

PATHOLOGY

Motor neuron disease in textile factory workers. Abarbanel JM, et al. **Acta Neurol Scand** 1989 Apr;79(4):347–9

Polyglucosan bodies in intramuscular motor nerves. Bernsen RA, et al. **Acta Neuropathol (Berl)** 1989;77(6):629–33

Low-calcium, high-aluminum diet-induced motor neuron pathology in cynomolgus monkeys. Garruto RM, et al. **Acta Neuropathol (Berl)** 1989;78(2):210–9

Lewy body-like hyaline inclusions in sporadic motor neuron disease are ubiquitinated. Kato T, et al. **Acta Neuropathol (Berl)** 1989;77(4):391–6

Swellings of proximal axons in a case of motor neuron disease. Sasaki S, et al. **Ann Neurol** 1989 May;25(5):520–2

Sensory neuron degeneration in familial Kugelberg-Welander disease [published erratum appears in Can J Neurol Sci 1989 May;16(2):223] Winder TR, et al. **Can J Neurol Sci** 1989 Feb;16(1):67–70

Peripheral neuropathy with predominantly motor manifestations in a patient with carcinoma of the uterus. Yamada M, et al. **J Neurol** 1988 Jul;235(6):368–70

Hyperestrogenemia in neuromuscular diseases. Usuki F, et al. **J Neurol Sci** 1989 Feb;89(2–3):189–97

Adrenergic innervation of the striated muscle of the intrinsic external urethral sphincter from patients with lower motor spinal cord lesion. Crowe R, et al. **J Urol** 1989 Jan; 141(1):47–9

Changes in size of motor axons in hereditary canine spinal muscular atrophy. Cork LC, et al. **Lab Invest** 1989 Sep; 61(3):333–42

Tunisian severe childhood muscular dystrophy: a normal spinal cord and anterior horn neurons [letter] Ben Hamida M, et al. **Muscle Nerve** 1989 Feb;12(2):156

Amyotrophic lateral sclerosis (ALS) in a patient with dominating dementia. Matyja E, et al. **Neuropatol Pol** 1988; 26(1):87–95

A study of infantile motor neuron disease with neurofilament and ubiquitin immunocytochemistry. Lee S, et al. **Neuropediatrics** 1989 May;20(2):107–11

A filamentous inclusion body within anterior horn neurones in motor neurone disease defined by immunocytochemical localisation of ubiquitin. Lowe J, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):203–10

The effects of long-term lead intoxication on the nervous system of the chicken. Mazliah J, et al. **Neurosci Lett** 1989 Jul 3;101(3):253–7

A hypothesis for the pathogenesis of amyotrophic lateral sclerosis. Karpati G, et al. **Rev Neurol (Paris)** 1988; 144(11):672–5

The effect of peripheral nerve injury on immature motor and sensory neurons and on muscle fibres. Possible relation to the histogenesis of Werdnig-Hoffmann disease. Schmalbruch H. **Rev Neurol (Paris)** 1988;144(11):721–9

Decreased number of alpha-motoneurons in the cervical intumescence of calves with arthrogryposis multiplex congenita of both thoracic limbs. Van Huffel X, et al. **Vet Res Commun** 1988;12(2–3):237–43

[Progressive muscular atrophy localized in the hand. Monomelic form of motor neuron disease?] Chaine P, et al. **Rev Neurol (Paris)** 1988;144(11):759–63 (Eng. Abstr.) **(Fre)**

[Familial form of bulbo-spinal amyotrophy in the adult] Mikol J, et al. **Rev Neurol (Paris)** 1988;144(11):748–55 (Eng. Abstr.) **(Fre)**

[Three-dimensional distribution of spinal anterior horn cells in amyotrophic lateral sclerosis and Shy-Drager syndrome--a study of cytoarchitectonic feature] Terao S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1178–87 (Eng. Abstr.) **(Jpn)**

[Clinical and pathological study of motor neuron disease] Tsukagoshi H. **Rinsho Shinkeigaku** 1988 Dec; 28(12):1357–66 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Synaptic connections between primary afferents and motoneurons in the spinal cord of anuran larvae. Shupliakov OV. **Acta Biol Hung** 1988;39(2–3):127–34

CNS-borreliosis selectively affecting central motor neurons. Fredrikson S, et al. **Acta Neurol Scand** 1988 Sep;78(3):181–4

Bistable firing properties of soleus motor units in unrestrained rats. Eken T, et al. **Acta Physiol Scand** 1989 Jul; 136(3):383–94

Distribution of recurrent inhibition within a motor nucleus. I. Contribution from slow and fast motor units to the excitation of Renshaw cells. Hultborn H, et al. **Acta Physiol Scand** 1988 Nov;134(3):347–61

Distribution of recurrent inhibition within a motor nucleus. II. Amount of recurrent inhibition in motoneurones to fast and slow units. Hultborn H, et al. **Acta Physiol Scand** 1988 Nov;134(3):363–74

On premotoneuronal integration in cat and man. Malmgren K. **Acta Physiol Scand Suppl** 1988;576:1–53

Fast axonal transport of labeled proteins in motoneurons of exercise-trained rats. Jasmin BJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C731–6

Coordination of electromechanical and metabolic properties of cat soleus motor units. Martin TP, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C684–93

Inhibitory effect of somatostatin on vagal motoneurons in the rat brain stem in vitro. Nabekura J, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C155–9

Electrical pacemakers of canine proximal colon are functionally innervated by inhibitory motor neurons. Smith TK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C466–77

Descending catecholaminergic modulation of spinal cord reflexes in cat and rat. Barnes CD, et al. **Ann N Y Acad Sci** 1989;563:45–58 (42 ref.)

Adaptive gain modification of the blink reflex. A model system for investigating the physiologic bases of motor learning. Evinger C, et al. **Ann N Y Acad Sci** 1989; 563:87–100

TRH and diseases of the motor system. Munsat TL, et al. **Ann N Y Acad Sci** 1989;553:388–98 (79 ref.)

Spinal cord circuits for motor pattern selection in the turtle. Stein PS. **Ann N Y Acad Sci** 1989;563:1–10 (43 ref.)

Antagonistic modulation of S-K+ channel activity by cyclic AMP and arachidonic acid metabolites. Role for two G proteins. Volterra A, et al. **Ann N Y Acad Sci** 1989; 559:219–36

Age effects on properties of motor unit action potentials: ADEMG analysis. Howard JE, et al. **Ann Neurol** 1988 Aug; 24(2):207–13

Hypoxia-sensitive hyperexcitability of the intramuscular nerve axons in Isaacs' syndrome. Oda K, et al. **Ann Neurol** 1989 Feb;25(2):140–5

Inhibition of vestibulospinal reflexes during the episodes of postural atonia induced by unilateral lesion of the locus coeruleus in the decerebrate cat. D'Ascanio P, et al. **Arch Ital Biol** 1989 Mar;127(2):81–97

Physiological accompaniments of human muscle fatigue. Gandevia SC. **Aust Paediatr J** 1988;24 Suppl 1:104–8 (44 ref.)

Nerve-muscle interactions in the embryo. Laing NG. **Aust Paediatr J** 1988;24 Suppl 1:40–2 (40 ref.)

Aspects of peripheral motor system development. Lamb AH. **Aust Paediatr J** 1988;24 Suppl 1:37–9 (40 ref.)

Association of lower motor neuron disorders with fasciculation, neuromyotonia and myoclonus. Lance JW. **Aust Paediatr J** 1988;24 Suppl 1:113–5 (13 ref.)

The role of giant axons in studies of the nerve impulse. Keynes RD. **Bioessays** 1989 Feb–Mar;10(2–3):90–3 (44 ref.)

The contribution of single motor units of the biceps brachii muscle in man to the momentum in elbow flexion. Ebert D. **Biomed Biochim Acta** 1989;48(5–6):S475–9

Coordination processes in a human motoneuronal pool. Ebert D, et al. **Biomed Biochim Acta** 1989;48(5–6):S480–8

Decrease of motoneuron excitability during stretching of the

human soleus. Guissard N, et al. **Biomed Biochim Acta** 1989; 48(5–6):S489–92

Modification of sodium and gating currents by amino group specific cross–linking and monofunctional reagents. Drews G, et al. **Biophys J** 1988 Sep;54(3):383–91

Associative neural network model for the generation of temporal patterns. Theory and application to central pattern generators [published erratum appears in Biophys J 1989 Mar;55(3):following 583] Kleinfeld D, et al. **Biophys J** 1988 Dec;54(6):1039–51

Neuro–ophthalmology. Jones SM. **Br Vet J** 1989 Mar–Apr; 145(2):99–120 (39 ref.)

Delay in the execution of voluntary movement by electrical or magnetic brain stimulation in intact man. Evidence for the storage of motor programs in the brain. Day BL, et al. **Brain** 1989 Jun;112 (Pt 3):649–63

Feeding behavior by parasitic phase lampreys, Ichthyomyzon unicuspis. Kawasaki R, et al. **Brain Behav Evol** 1988; 32(6):317–29

Maturation of peripheral nerves in preterm infants: proprioceptive and motor nerve conductions of tibial nerve. Tranier S, et al. **Brain Dev** 1989;11(4):215–20

Synaptic inhibition of phrenic motoneurones evoked by stimulation of the superior laryngeal nerve. Bellingham MC, et al. **Brain Res** 1989 May 8;486(2):391–5

Evidence for two types of potassium channel in human motor axons in vivo. Bostock H, et al. **Brain Res** 1988 Oct 18; 462(2):354–8

Morphological changes in spinal motor neurons giving rise to long–term regenerated sciatic nerve axons. Bowe CM, et al. **Brain Res** 1988 Oct 25;463(1):69–77

Electric vs magnetic trans–cranial stimulation of the brain in healthy humans: a comparative study of central motor tracts 'conductivity' and 'excitability'. Caramia MD, et al. **Brain Res** 1989 Feb 6;479(1):98–104

Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw–closer motoneurons in the guinea pig. Chandler SH. **Brain Res** 1989 Jan 16;477(1–2):252–64

Motor recovery after cross–reinnervation of a forelimb nerve by the phrenic nerve in cats. Fujito Y, et al. **Brain Res** 1989 Jul 17;492(1–2):36–44

Patterns of gamma–motoneuron activity in the external intercostal muscles of the cat during respiration. Greer JJ, et al. **Brain Res** 1989 Jan 16;477(1–2):369–72

A physiological study of the monosynaptic reflex responses of cat spinal alpha–motoneurons after partial lumbosacral deafferentation. Hellgren J, et al. **Brain Res** 1989 May 29; 488(1–2):149–62

Modulation of reflex responses during fictive locomotion in the forelimb of the cat. Hishinuma M, et al. **Brain Res** 1989 Mar 13;482(1):184–8

Organelle changes in cat thoracic alpha– and gamma–motoneurons following axotomy. Johnson IP, et al. **Brain Res** 1989 Jun 12;489(2):400–5

Distribution of activity within the cat's peroneus longus muscle when activated in different ways via the central nervous system. Kandou TW, et al. **Brain Res** 1989 May 8;486(2):340–50

Large enhancement of excitatory postsynaptic potentials and currents by thyrotropin–releasing hormone (TRH) in frog spinal motoneurones. Lacey G, et al. **Brain Res** 1989 May 29;488(1–2):80–8

The actions of two monoamines on spinal motoneurons from stimulation of the locus coeruleus in the cat. Lai YY, et al. **Brain Res** 1989 Apr 10;484(1–2):268–72

An analysis of frequency response of motor units during voluntary isometric contractions at various speeds. Oishi K, et al. **Brain Res** 1988 Aug 23;458(2):261–8

Somato–motor components of the pelvic and pudendal nerves of the female rat. Pacheco P, et al. **Brain Res** 1989 Jun 19;490(1):85–94

Seasonal changes in the normal variability in release properties of motor nerve terminals in Rana pipiens. Pawson PA, et al. **Brain Res** 1989 Aug 21;495(1):182–8

Motor nerve outgrowth: reduced capacity for sprouting in the terminals of longer axons. Pestronk A, et al. **Brain Res** 1988 Nov 1;463(2):218–22

Kappa–bungarotoxin blocks an alpha–bungarotoxin–sensitive nicotinic receptor in the insect central nervous system. Pinnock RD, et al. **Brain Res** 1988 Aug 16;458(1):45–52

Pre–movement facilitation of motor–evoked potentials in man during transcranial stimulation of the central motor pathways. Rossini PM, et al. **Brain Res** 1988 Aug 16; 458(1):20–30

Tongue–muscle–controlling motoneurons in the Japanese toad: neural inputs from the thalamus. Satou M, et al. **Brain Res** 1989 Feb 27;481(1):39–46

Physiological and morphological characteristics of cat masticatory motoneurons—intracellular injection of HRP. Shigenaga Y, et al. **Brain Res** 1988 Oct 4;461(2):238–56

Postnatal growth of medial gastrocnemius motoneurons in the kitten. Tatton WG, et al. **Brain Res** 1988 Oct 1; 471(2):191–206

Neurofilament and tubulin transport slows along the course of mature motor axons. Watson DF, et al. **Brain Res** 1989 Jan 16;477(1–2):225–32

Electrophysiological evidence for axonal branching of ambiguous laryngeal motoneurons. Yajima Y, et al. **Brain Res** 1989 Jan 30;478(2):309–14

Anticipatory changes of soleus H–reflex amplitude during execution process for heel raise from standing position. Yamashita N, et al. **Brain Res** 1989 Jun 19;490(1):148–51

Survival of motoneurons following axotomy is enhanced by lactation or by progesterone treatment. Yu WH. **Brain Res** 1989 Jul 10;491(2):379–82

NMDA antagonists and potentiation of NMDA–induced motoneuron depolarizations in the isolated frog spinal cord. Zhang DX, et al. **Brain Res** 1989 Jul 24;493(1):129–35

Intracellular injection of Ca2+ chelator does not affect spike repolarization of cat spinal motoneurons. Zhang L, et al. **Brain Res** 1988 Oct 11;462(1):174–80

Transsynaptic degeneration of motoneurones caudal to spinal cord lesions. Eidelberg E, et al. **Brain Res Bull** 1989 Jan; 22(1):39–45

Structural and functional analysis of raphe neurone implants into denervated rat spinal cord. Foster GA, et al. **Brain Res Bull** 1989 Jan;22(1):131–7

Evidence for chaos in spike trains of neurons that generate rhythmic motor patterns. Mpitsos GJ, et al. **Brain Res Bull** 1988 Sep;21(3):529–38

Amygdaloid projections to commissural interneurons for masticatory motoneurons. Takeuchi Y, et al. **Brain Res Bull** 1988 Jul;21(1):123–7

Effects of postnatal aluminum lactate exposure on neuromotor maturation in the rat. Bernuzzi V, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):451–5

The role of the posterior parietal cortex in coordinate transformations for visual–motor integration. Andersen RA, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):488–501

Calcium–dependent, slow desensitization distinguishes different types of glutamate receptors. Zorumski CF, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):95–104

Neural activity pattern is not necessary for the development of adult ultrastructure in katydid (Neoconocephalus robustus) singing muscles. Novicki A. **Cell Tissue Res** 1989 Mar;255(3):641–4

Mechanism of interaction between motoneurons and muscles. Brown MC, et al. **Ciba Found Symp** 1988;138:78–96 (31 ref.)

The role of muscle in the development and differentiation of spinal motoneurons: in vitro studies. Henderson CE. **Ciba Found Symp** 1988;138:172–91 (27 ref.)

Development of neuromuscular connections: guidance of motoneuron axons to muscles in the embryonic chick hindlimb. Lance–Jones C. **Ciba Found Symp** 1988; 138:97–115 (25 ref.)

Neurotrophic interactions in the development of spinal cord motoneurons. Oppenheim RW, et al. **Ciba Found Symp** 1988;138:152–71 (33 ref.)

In vitro analysis of specificity during nerve–muscle synaptogenesis. Sanes DH, et al. **Ciba Found Symp** 1988; 138:116–30

A biphasic excitability change in hindlimb motoneurons evoked by stimulation of the nucleus raphes magnus in the cat. Edamura M, et al. **Comp Biochem Physiol [A]** 1989; 93(4):711–6

Ionic currents in the soma of an identified cockroach motoneurone recorded under voltage–clamp. Nightingale WD, et al. **Comp Biochem Physiol [A]** 1989;93(1):85–93

Motor unit organization in developing muscle. Ridge RM. **Comp Biochem Physiol [A]** 1989;93(1):115–23 (40 ref.)

Special cellular and synaptic mechanisms in motor pattern generation. Hartline DK, et al. **Comp Biochem Physiol [C]** 1988;91(1):115–31

Postnatal development of the cutaneous flexor reflex: comparative study of preterm infants and newborn rat pups. Fitzgerald M, et al. **Dev Med Child Neurol** 1988 Aug; 30(4):520–6

Evolution of motor, IA and cutaneous nerve–fibre conduction velocities in premature and fullterm newborns. Khater–Boidin J, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):47–55

Electrophysiological assessment of maturation of regenerating motor nerve fibres in infants with brachial plexus palsy. Kwast O. **Dev Med Child Neurol** 1989 Feb; 31(1):56–65

Specific guidance of motor axons to duplicated muscles in the developing amniote limb. Stirling RV, et al. **Development** 1988 May;103(1):97–110

Intra–operative unit recordings in the human dorsal horn with a simplified floating microelectrode. Jeanmonod D, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):450–4

Muscle activity and motor nerve sprouting: an electrophysiological study in man. Casabona A, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):391–5

Ischemia and motor nerve conduction in diabetic neuropathy: some physiopathological considerations. Dellantonio R, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):385–90

The impact of paired motor unit discharges on tremor. Dengler R, et al. **Electromyogr Clin Neurophysiol** 1989 Mar; 29(2):113–7

The use of EMG in the differential diagnosis of muscle weakness in post–polio syndrome. Feldman RM. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):269–72

Velocity of spreading of the excitation along the muscle fibres of human motor units measured by superficial electrodes. Gydikov A, et al. **Electromyogr Clin Neurophysiol** 1989 Apr;29(3):131–8 (25 ref.)

The effects of caloric vestibular stimulation on the soleus alpha motoneurons reinvestigated in man. Rossi A, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):409–13

Motoneurone recurrent inhibition is enhanced by L–acetylcarnitine in humans. Schieppati M, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):73–80

Changes in human alpha–motoneurone excitability following mechanical muscle stimuli. Claus D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):140–3

Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7

Motor evoked responses recorded epidurally in a patient with Guillain–Barré syndrome. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):31–2

Muscle stretching and motoneuron excitability. Guissard N, et al. **Eur J Appl Physiol** 1988;58(1–2):47–52

The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. II. Motor unit firing rate and recruitment. Maton B, et al. **Eur J Appl Physiol** 1989;58(4):369–74

Facilitation of transmission in the pathway of non–monosynaptic Ia excitation to wrist flexor motoneurones at the onset of voluntary movement in man. Baldissera F, et al. **Exp Brain Res** 1989;74(2):437–9

Projections of group Ia afferents to motoneurons of thigh muscles in man. Bayoumi A, et al. **Exp Brain Res** 1989; 76(1):223–8

Disturbances of motor output in a cat hindlimb muscle after acute dorsal spinal hemisection. Blaschak MJ, et al. **Exp Brain Res** 1988;71(2):377–87

Facilitation of muscle responses to magnetic brain stimulation by mechanical stimuli in man. Claus D, et al. **Exp Brain Res** 1988;71(2):273–8

Control from the brainstem of synchrony of discharge between gamma motoneurones in the cat. Davey NJ, et al. **Exp Brain Res** 1988;72(2):249–63

Electrophysiological and morphological properties of rat abducens motoneurones. Durand J. **Exp Brain Res** 1989; 76(1):141–52

The functional development of input–output relationships in the rostral portion of the corpus callosum in the kitten. Guandalini P, et al. **Exp Brain Res** 1989;74(3):453–62

Inhomogeneous activation of motoneurone pools as revealed by co–contraction of antagonistic human arm muscles. Jongen HA, et al. **Exp Brain Res** 1989;75(3):555–62

Neck muscle activation patterns in humans during isometric head stabilization. Keshner EA, et al. **Exp Brain Res** 1989; 75(2):335–44

Excitatory interactions between phrenic motoneurons: intracellular study in the cat. Khatib M, et al. **Exp Brain Res** 1989;74(1):131–8

Time constants of facilitation and depression in Renshaw cell responses to random stimulation of motor axons. Laouris Y, et al. **Exp Brain Res** 1988;72(1):117–28

Influences of morphology and topography of motoneurons and muscle spindle afferents on amplitude of single fiber excitatory postsynaptic potentials in cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):493–500

Reflex inhibition in single motor units of the human lateral pterygoid muscle. McMillan AS, et al. **Exp Brain Res** 1989; 76(1):97–102

Cutaneous control of group I pathways from ankle flexors to extensors in man. Rossi A, et al. **Exp Brain Res** 1988; 73(1):8–14

The effect of DOPA and clonidine on reflex pathways from group II muscle afferents to alpha–motoneurones in the cat. Schomburg ED, et al. **Exp Brain Res** 1988;71(2):442–6

Single medullary reticulospinal neurons exert postsynaptic inhibitory effects via inhibitory interneurons upon alpha–motoneurons innervating cat hindlimb muscles. Takakusaki K, et al. **Exp Brain Res** 1989;74(1):11–23

Excitatory and inhibitory postsynaptic potentials in cat hypoglossal motoneurons during swallowing. Tomomune N, et al. **Exp Brain Res** 1988;71(2):262–72

Properties and localization of the anterior semicircular canal–activated vestibulocollic neurons in the cat. Uchino Y, et al. **Exp Brain Res** 1988;71(2):345–52

Common interneurones mediating cortical and tectal excitation of abducens motoneurones in the cat. Yamagata Y, et al. **Exp Brain Res** 1988;71(2):279–90

Sensory and motor responses of trigeminal and reticular neurons during ingestive behavior in rats. Yamamoto T, et al. **Exp Brain Res** 1989;76(2):386–400

Projections from inspiratory neurons of the nucleus retroambigualis to phrenic motoneurons in the cat. Fedorko L, et al. **Exp Neurol** 1989 Sep;105(3):306–10

Expression of Ia antigen on perivascular and microglial cells after sublethal and lethal motor neuron injury. Streit WJ, et al. **Exp Neurol** 1989 Aug;105(2):115–26

Increased glial fibrillary acidic protein synthesis in astrocytes during retrograde reaction of the rat facial nucleus. Tetzlaff W, et al. **GLIA** 1988;1(1):90–5

Innervation of regenerated spindles in muscle grafts of the rat. Walro JM, et al. **Histochemistry** 1989;92(1):1–13

Orderly stimulation of skeletal muscle motor units with tripolar nerve cuff electrode. Baratta R, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):836–43

Recurrent inhibition in human spinal spasticity. Mazzocchio R, et al. **Ital J Neurol Sci** 1989 Jun;10(3):337–47

Multi–beat clonus in a patient without an upper motor neuron lesion. A case report. Adams SE, et al.

J Am Podiatr Med Assoc 1989 Apr;79(4):194–6
Loss of neurons from the motor nucleus of the facial nerve in the ageing mouse brain. Sturrock RR. J Anat 1988 Oct; 160:189–94
Loss of neurons from the retrofacial nucleus of the mouse in extreme old age. Sturrock RR. J Anat 1988 Oct; 160:195–9
Tonic activity in inspiratory muscles and phrenic motoneurons by stimulation of vagal afferents. Badier M, et al. J Appl Physiol 1989 Apr;66(4):1613–9
Motor unit territories supplied by primary branches of the phrenic nerve. Hammond CG, et al. J Appl Physiol 1989 Jan;66(1):61–71
Influence of overload on recovery of rat plantaris from partial denervation. Michel RN, et al. J Appl Physiol 1989 Feb; 66(2):732–40
Diaphragm motor unit recruitment during ventilatory and nonventilatory behaviors. Sieck GC, et al. J Appl Physiol 1989 Jun;66(6):2539–45
A patient with progressive muscle wasting. Jose J, et al. J Assoc Physicians India 1988 Apr;36(4):277–9
Motor nerve conduction velocities and neuropathy amongst diabetics. Kumar BR, et al. J Assoc Physicians India 1988 Oct;36(10):589–93
Studies of the inhibitory non-adrenergic neuromuscular transmission in the smooth muscle of the normal human intestine and from a case of Hirschsprung's disease. Zagorodnyuk VP, et al. J Auton Nerv Syst 1989 Feb; 26(1):51–60
Method for studying muscle properties under orderly stimulated motor units with tripolar nerve cuff electrode. Baratta R, et al. J Biomed Eng 1989 Mar;11(2):141–7
Quantitative analysis of individual motor unit potentials: a proposition for standardized terminology and criteria for measurement. Stålberg E, et al. J Clin Neurophysiol 1986 Oct;3(4):313–48 (75 ref.)
Embryonic development of the chick primary trigeminal sensory-motor complex. Covell DA Jr, et al. J Comp Neurol 1989 Aug 22;286(4):488–503
Neural organization of the masseter muscle in the pig. Herring SW, et al. J Comp Neurol 1989 Feb 22; 280(4):563–76
Morphological identification of the motor neurons innervating the dorsal longitudinal flight muscle of Drosophila melanogaster. Ikeda K, et al. J Comp Neurol 1988 Jul 15;273(3):436–44
Neural control of leg movements in a metamorphic insect: persistence of larval leg motor neurons to innervate the adult legs of Manduca sexta. Kent KS, et al. J Comp Neurol 1988 Oct 1;276(1):30–43
Sensory pathways and motoneurons of the proboscis reflex in the suboesophageal ganglion of the honey bee. Rehder V. J Comp Neurol 1989 Jan 15;279(3):499–513
Lumbar lateral motor column development in triploid Xenopus laevis. Sperry DG. J Comp Neurol 1988 Dec 15; 278(3):446–52
Effects of increasing ploidy on the lumbar lateral motor column and hindlimb of newly metamorphosed Xenopus laevis: a comparison of diploid and triploid siblings. Sperry DG. J Comp Neurol 1988 Nov 22;277(4):499–508
Sex-specific neuronal respecification during the metamorphosis of the genital segments of the tobacco hornworm moth Manduca sexta. Thorn RS, et al. J Comp Neurol 1989 Jun 22;284(4):489–503
Postnatal development of cat hind limb motoneurons. II: In vivo morphology of dendritic growth cones and the maturation of dendrite morphology. Ulfhake B, et al. J Comp Neurol 1988 Dec 1;278(1):88–102
Postnatal development of cat hind limb motoneurons. III: Changes in size of motoneurons supplying the triceps surae muscle. Ulfhake B, et al. J Comp Neurol 1988 Dec 1; 278(1):103–20
Postnatal development of cat hind limb motoneurons. I: Changes in length, branching structure, and spatial distribution of dendrites of cat triceps surae motoneurons. Ulfhake B, et al. J Comp Neurol 1988 Dec 1;278(1):69–87
Factors affecting central inspiratory modulation of hypoglossal motoneuron activity in newborn pigs. Sica AL, et al. J Dev Physiol 1988 Aug;10(4):285–95
Classical conditioning alters the efficacy of identified gill motor neurones in producing gill withdrawal movements in Aplysia. Lukowiak K, et al. J Exp Biol 1988 Nov; 140:273–85
Depression of excitatory motoneurones by a single neurone in the leech central nervous system. Wadepuhl M. J Exp Biol 1989 May;143:509–27
Aminergic and peptidergic modulation of motor function at an identified neuromuscular junction in Helisoma. Zoran MJ, et al. J Exp Biol 1989 Mar;142:225–43
In vivo motor effects of substance P on the rat urinary bladder. Berggren A, et al. J Neural Transm 1988; 74(3):207–17
Absence of competitive interactions among axon terminals of regenerating motor neurons. Denburg JL, et al. J Neurobiol 1988 Oct;19(7):656–65
Regenerative specificity of motor axons when reinnervation is partially suppressed. Farel PB, et al. J Neurobiol 1989 Mar;20(2):69–80
Cell death of motoneurons in the chick embryo spinal cord. X. Synapse formation on motoneurons following the reduction of cell death by neuromuscular blockade. Okada A, et al. J Neurobiol 1989 Jun;20(4):219–33
Respecification of larval proleg motoneurons during metamorphosis of the tobacco hornworm, Manduca sexta: segmental dependence and hormonal regulation. Weeks JC, et al. J Neurobiol 1989 Sep;20(6):569–92
Common and specific inhibition in leg muscles of decapods: sharpened distinctions. Wiens TJ. J Neurobiol 1989 Jul; 20(5):458–69 (62 ref.)
Motor neuron disease and malignancies: results of a population-based study. Chiò A, et al. J Neurol 1988 Jul; 235(6):374–5
Diagnostic specificity of sensory and motor nerve conduction variables in early detection of carpal tunnel syndrome. Cioni R, et al. J Neurol 1989 May;236(4):208–13
Compressive mononeuropathy of the deep palmar branch of the ulnar nerve in cyclists. Hankey GJ, et al. J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1588–90
Myokymia in motor neuron disease [letter] Lanska DJ, et al. J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1107–8
Motor axon loop as a source of error in the measurement of motor nerve conduction velocity [letter] Shimpo T, et al. J Neurol Neurosurg Psychiatry 1988 Nov;51(11):1462–3
The non-linear relationship between nerve conduction velocity and skin temperature. Todnem K, et al. J Neurol Neurosurg Psychiatry 1989 Apr;52(4):497–501
Central motor and sensory conduction in adrenoleukomyeloneuropathy, cerebrotendinous xanthomatosis, HTLV-I-associated myelopathy and tabes dorsalis. Ugawa Y, et al. J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1069–74
Individual motor unit analysis in the diagnosis of urethral sphincter innervation [letter] Vodušek DB. J Neurol Neurosurg Psychiatry 1989 Jun;52(6):812–3
Axonal sprouting after botulinum toxin does not elicit a histological axon reaction. Pamphlett R. J Neurol Sci 1988 Nov;87(2-3):175–85
Innervation of vascular and cardiac muscle of Aplysia by multimodal motoneuron L7. Alevizos A, et al. J Neurophysiol 1989 May;61(5):1053–63
Force output of cat motor units stimulated with trains of linearly varying frequency. Binder-Macleod SA, et al. J Neurophysiol 1989 Jan;61(1):208–17
Maximum tension predicts relative endurance of fast-twitch motor units in the cat. Botterman BR, et al. J Neurophysiol 1988 Oct;60(4):1215–26
Motor-unit stimulation patterns during fatiguing contractions of constant tension. Botterman BR, et al. J Neurophysiol 1988 Oct;60(4):1198–214
Variance analysis of excitatory postsynaptic potentials in cat spinal motoneurons during posttetanic potentiation. Clamann HP, et al. J Neurophysiol 1989 Feb;61(2):403–16
Acute effects of spinal transection on EPSPs produced by single homonymous Ia-fibers in soleus alpha-motoneurons in the cat [published erratum appears in J Neurophysiol 1989 Mar;61(3):following Table of Contents] Cope TC, et al. J Neurophysiol 1988 Nov;60(5):1678–94
Cable properties of spinal cord motoneurons in adult and aged cats. Engelhardt JK, et al. J Neurophysiol 1989 Jan; 61(1):194–201
Discharge patterns and recruitment order of identified motoneurons and internuclear neurons in the monkey abducens nucleus. Fuchs AF, et al. J Neurophysiol 1988 Dec;60(6):1874–95
Analysis of effective synaptic currents generated by homonymous Ia afferent fibers in motoneurons of the cat. Heckman CJ, et al. J Neurophysiol 1988 Dec;60(6):1946–66
Repetitive firing properties of phrenic motoneurons in the cat. Jodkowski JS, et al. J Neurophysiol 1988 Aug; 60(2):687–702
Changes in properties of the medial gastrocnemius motor units in aging rats. Kanda K, et al. J Neurophysiol 1989 Apr;61(4):737–46
A differential synaptic input to the motor nuclei of triceps surae from the caudal and lateral cutaneous sural nerves. LaBella LA, et al. J Neurophysiol 1989 Feb;61(2):291–301
Impulse activity of a crayfish motoneuron regulated its neuromuscular synaptic properties. Lnenicka GA, et al. J Neurophysiol 1989 Jan;61(1):91–6
Anatomical and functional segregation in the stapedius motoneuron pool of the cat. McCue MP, et al. J Neurophysiol 1988 Sep;60(3):1160–80
Physiological responses of rat plantaris motor units to overload induced by surgical removal of its synergists. Olha AE, et al. J Neurophysiol 1988 Dec;60(6):2138–51
Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. I. Motoneuron electrical properties. Pinter MJ, et al. J Neurophysiol 1989 Aug;62(2):311–24
Properties of motor units in nerve-intact autografts of cat extensor digitorum longus muscles. Sandercock TG, et al. J Neurophysiol 1989 Jul;62(1):231–8
Inositol trisphosphate and activators of protein kinase C modulate membrane currents in tail motor neurons of Aplysia. Sawada M, et al. J Neurophysiol 1989 Feb; 61(2):302–10
Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. J Neurophysiol 1988 Aug;60(2):446–62
Intrinsic organization of the rat cutaneus trunci motor nucleus. Theriault E, et al. J Neurophysiol 1988 Aug; 60(2):463–77
Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. J Neurophysiol 1989 Aug; 62(2):325–33
Synaptic organization of the tectal-facial pathways in the cat. I. Synaptic potentials following collicular stimulation. Vidal PP, et al. J Neurophysiol 1988 Aug;60(2):769–97
Evidence that peaks in EMG averages can sometimes be caused by inhibition of motoneurons. Widmer CG, et al. J Neurophysiol 1989 Jul;62(1):212–9
Facilitation and depression in the responses of spinal Renshaw cells to random stimulation of motor axons. Windhorst U, et al. J Neurophysiol 1988 Nov;60(5):1638–52
Evidence that glycine mediates the postsynaptic potentials that inhibit lumbar motoneurons during the atonia of active sleep. Chase MH, et al. J Neurosci 1989 Mar;9(3):743–51
Passive membrane properties of motorneurons and their role in long-distance signaling in the nematode Ascaris. Davis RE, et al. J Neurosci 1989 Feb;9(2):403–14
Signaling properties of Ascaris motorneurons: graded active responses, graded synaptic transmission, and tonic transmitter release. Davis RE, et al. J Neurosci 1989 Feb; 9(2):415–25
Naturally occurring cell death and differentiation of developing spinal motoneurons following axotomy. Farel PB. J Neurosci 1989 Jun;9(6):2103–13
Molecular evidence for early activity-dependent development of hamster motor neurons. Kalb RG, et al. J Neurosci 1988 Jul;8(7):2350–60
Monosynaptic projections of single muscle spindle afferents to neck motoneurons in the cat. Keirstead SA, et al. J Neurosci 1988 Oct;8(10):3945–50
Motor neuronal receptive fields delimit patterns of motor activity during locomotion of the locust. Laurent G, et al. J Neurosci 1988 Nov;8(11):4349–66
Guidance of regenerating motor axons in larval and juvenile bullfrogs. Lee MT, et al. J Neurosci 1988 Jul;8(7):2430–7
Involvement of excitatory amino acids in neurotransmission of inspiratory drive to spinal respiratory motoneurons. McCrimmon DR, et al. J Neurosci 1989 Jun;9(6):1910–21
Disuse-induced enhancement of Ia synaptic transmission in spinal motoneurons of the rat. Manabe T, et al. J Neurosci 1989 Jul;9(7):2455–61
Androgen regulates synaptic input to motoneurons of the adult rat spinal cord. Matsumoto A, et al. J Neurosci 1988 Nov;8(11):4168–76
Quantitative lineage analysis of the origin of frog primary motor and sensory neurons from cleavage stage blastomeres. Moody SA. J Neurosci 1989 Aug;9(8):2919–30
Activation of muscle fibers in individual motor units revealed by 2-deoxyglucose-6-phosphate. Nemeth PM, et al. J Neurosci 1988 Nov;8(11):3959–66
Motor activity in the isolated spinal cord of the chick embryo: synaptic drive and firing pattern of single motoneurons. O'Donovan MJ. J Neurosci 1989 Mar; 9(3):943–58
Activation of GABAB receptors causes presynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. J Neurosci 1989 May;9(5):1502–15
Activation of GABAA receptors causes presynaptic and postsynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. J Neurosci 1989 May;9(5):1516–22
Comparison of vestibular and auditory startle responses in the rat and cat. Gruner JA. J Neurosci Methods 1989 Feb; 27(1):13–23
Electrophysiology of adult rat facial motoneurones: the effects of serotonin (5-HT) in a novel in vitro brainstem slice. Larkman PM, et al. J Neurosci Methods 1989 May; 28(1-2):133–46
Extrinsic and intrinsic neural control of pyloric sphincter pressure in the dog. Allescher HD, et al. J Physiol (Lond) 1988 Jul;401:17–38
Changes in binomial parameters of quantal release at crustacean motor axon terminals during presynaptic inhibition. Atwood HL, et al. J Physiol (Lond) 1988 Aug; 402:177–93
Plateau potentials in alpha-motoneurones induced by intravenous injection of L-dopa and clonidine in the spinal cat. Conway BA, et al. J Physiol (Lond) 1988 Nov; 405:369–84
Maintained changes in motoneuronal excitability by short-lasting synaptic inputs in the decerebrate cat. Crone C, et al. J Physiol (Lond) 1988 Nov;405:321–43
Electrical stimulation resembling normal motor-unit activity: effects on denervated fast and slow rat muscles. Eken T, et al. J Physiol (Lond) 1988 Aug;402:651–69
Role of the human fusimotor system in a motor adaptation task. Al-Falahe NA, et al. J Physiol (Lond) 1988 Jul; 401:77–95
The dependence of motoneurone membrane potential on extracellular ion concentrations studied in isolated rat spinal cord. Forsythe ID, et al. J Physiol (Lond) 1988 Oct; 404:83–99
Bistability of alpha-motoneurones in the decerebrate cat and in the acute spinal cat after intravenous 5-hydroxytryptophan. Hounsgaard J, et al. J Physiol (Lond) 1988 Nov;405:345–67
Electrophysiology of degenerating neurones in the vagal motor nucleus of the guinea-pig following axotomy. Laiwand R, et al. J Physiol (Lond) 1988 Oct;404:749–66
Function of identified motoneurones and co-ordination of primary and secondary motor systems during zebra fish swimming. Liu DW, et al. J Physiol (Lond) 1988 Sep;

403:73–89
Evidence for non-monosynaptic Ia excitation of human wrist flexor motoneurones, possibly via propriospinal neurones. Malmgren K, et al. **J Physiol (Lond)** 1988 Nov;405:747–64
Inhibition of neurones transmitting non-monosynaptic Ia excitation to human wrist flexor motoneurones. Malmgren K, et al. **J Physiol (Lond)** 1988 Nov;405:765–83
Synaptic control of hindlimb motoneurones during three forms of the fictive scratch reflex in the turtle. Robertson GA, et al. **J Physiol (Lond)** 1988 Oct;404:101–28
Direct noninvasive monitoring of spinal cord motor function during thoracic aortic occlusion [letter] Tacker WA Jr, et al. **J Vasc Surg** 1989 Jan;9(1):177–8
F response abnormality in Parkinson's disease. Naito Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):811–8
Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32
Neuron-glial relationship during regeneration of motorneurons. Kreutzberg GW, et al. **Metab Brain Dis** 1989 Mar;4(1):81–5 (35 ref.)
Effects of excessive use of remaining muscle fibers in prior polio and LV lesion. Borg K, et al. **Muscle Nerve** 1988 Dec;11(12):1219–30
Nonlinear force addition of newly recruited motor units in the cat hindlimb. Clamann HP, et al. **Muscle Nerve** 1988 Oct;11(10):1079–89
Properties of motor unit action potentials recorded with concentric and monopolar needle electrodes: ADEMG analysis. Howard JE, et al. **Muscle Nerve** 1988 Oct; 11(10):1051–5
Use of motor units in relation to muscle fiber type and size in man. Jakobsson F, et al. **Muscle Nerve** 1988 Dec; 11(12):1211–8 (35 ref.)
Simulation of myopathic motor unit action potentials. Nandedkar SD, et al. **Muscle Nerve** 1989 Mar;12(3):197–202
Effect of motor unit firing pattern on twitches obtained by spike-triggered averaging. Nordstrom MA, et al. **Muscle Nerve** 1989 Jul;12(7):556–67
Evaluation of an automatic method of measuring features of motor unit action potentials. Stewart CR, et al. **Muscle Nerve** 1989 Feb;12(2):141–8
Motor neuropathy with multifocal conduction blocks. Van den Bergh P, et al. **Muscle Nerve** 1989 Jan;12(1):26–31
A genetic pathway for the development of the Caenorhabditis elegans HSN motor neurons. Desai C, et al. **Nature** 1988 Dec 15;336(6200):638–46
Peptide YY (PYY) stimulates intrinsic enteric motor neurones in the rat small intestine. Krantis A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):287–92
Effects of L-carnitine, L-acetylcarnitine and gangliosides on the regeneration of the transected sciatic nerve in rats. Fernandez E, et al. **Neurol Res** 1989 Mar;11(1):57–62
Maximal and minimal motor nerve conduction velocities in amyotrophic lateral sclerosis. Nakanishi T, et al. **Neurology** 1989 Apr;39(4):580–3
The effects of thioctic acid on motor nerve terminals in acrylamide-poisoned rats. Kemplay S, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):275–88
5-Hydroxytryptamine depolarizes neonatal rat motorneurones through a receptor unrelated to an identified binding site. Connell LA, et al. **Neuropharmacology** 1989 Jun;28(6):625–34
Long-term survival of decentralized axons and incorporation of satellite cells in motor neurons of rock lobsters. Atwood HL, et al. **Neurosci Lett** 1989 Jun 19;101(2):121–6
Transduction mechanism involving the presynaptic adenosine receptor at mouse motor nerve terminals. Chen H, et al. **Neurosci Lett** 1989 Jan 30;96(3):318–22
Collateral nerve sprouting and twitch forces of single motor units in conditions with partial denervation in man. Dengler R, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):118–22
Sprouting of frog motor nerve terminals after long-term paralysis by botulinum type A toxin. Diaz J, et al. **Neurosci Lett** 1989 Jan 16;96(2):127–32
Raphé-produced excitation of spinal cord motoneurons in the cat. Fung SJ, et al. **Neurosci Lett** 1989 Aug 28; 103(2):185–90
Unit activity of ventral horn cells in spinal cord slices isolated from adult rats. Hirayama T, et al. **Neurosci Lett** 1988 Sep 12;91(3):343–8
Activation of Golgi tendon organs by asynchronous contractions of motor units in cat leg muscles. Horcholle-Bossavit G, et al. **Neurosci Lett** 1989 Aug 14; 103(1):44–9
Candidate interneurons mediating peripherally evoked disynaptic inhibition of masseter motoneurons of both sides. Kamogawa H, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):149–54
The effects of blocking nerve conduction on retrograde HRP labeling of rat motoneuron. Kanda K, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):153–6
An in vitro preparation for studying motor pattern generation in the cerebellorubrospinal circuit of the turtle. Keifer J, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):123–8
2-Hydroxy-saclofen: an improved antagonist at central and peripheral GABAB receptors. Kerr DI, et al. **Neurosci Lett** 1988 Sep 23;92(1):92–6
Critical period for androgenic regulation of soma size of sexually dimorphic motoneurons in rat lumbar spinal cord. Lee JH, et al. **Neurosci Lett** 1989 Mar 13;98(1):79–84
Phrenic-to-phrenic inhibition and excitation in spinal cats. Macron JM, et al. **Neurosci Lett** 1988 Aug 15;91(1):24–9
Excitatory and inhibitory effects on human spinal motoneurones from magnetic brain stimulation. Mills KR. **Neurosci Lett** 1988 Dec 5;94(3):297–302
Differential innervation of specific motor neuron pools by serotoninergic fibers in the chick spinal cord. Okado N, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):29–32
Evidence of shared, direct input to motoneurons supplying synergist muscles in humans. Powers RK, et al. **Neurosci Lett** 1989 Jul 17;102(1):76–81
Fluctuations in motor unit recruitment threshold during slow isometric contractions of wrist extensor muscles in man. Romaiguère P, et al. **Neurosci Lett** 1989 Aug 14;103(1):50–5
Trigeminal motoneurons in frogs develop a new dendritic field during metamorphosis. Rosenthal BM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):53–8
Simultaneous motor output and sensory input: cortical interference site resolved in humans via neuromagnetic measurements. Rossini PM, et al. **Neurosci Lett** 1989 Jan 30;96(3):300–5
Effects of synchrony between primate corticomotoneuronal cells on post-spike facilitation of muscles and motor units. Smith WS, et al. **Neurosci Lett** 1989 Jan 2;96(1):76–81
Modulation of an inhibitory reflex in single motor units in human masseter at different joint angles. Türker KS, et al. **Neurosci Lett** 1989 May 22;100(1–3):157–63
Dendritic spikes in normal spinal motoneurons of cats. Fujita Y. **Neurosci Res** 1989 Apr;6(4):299–308
Comments on group II excitation in hindlimb motoneurones in high and low spinal cats. Hongo T, et al. **Neurosci Res** 1988 Aug;5(6):563–6
Long-lasting afterdischarge of alpha-motoneurons after muscle vibration or electrical stimulation of group I afferent fibers in the anemically decerebrated cat. Wada N, et al. **Neurosci Res** 1989 Feb;6(3):234–47
Muscarinic inhibition of quantal transmitter release from the magnesium-paralysed frog sartorius muscle. Arenson MS. **Neuroscience** 1989;30(3):827–36
Long latency inhibition of H-reflex recovery by cutaneous tactile stimulation in man: a cutaneous transcortical reflex. Chandran AP, et al. **Neuroscience** 1988 Dec;27(3):1037–48
Motoneurons reinnervate skeletal muscle after ventral root implantation into the spinal cord of the cat. Cullheim S, et al. **Neuroscience** 1989;29(3):725–33
Intracellular study of oculomotor neurons in the rat. Durand J. **Neuroscience** 1989;30(3):639–49
Partial denervation of the rat soleus muscle at two different developmental stages. Fisher TJ, et al. **Neuroscience** 1989; 28(3):755–63
Early and late components in cat Renshaw cell responses to random stimulation of motor axons: their differential sensitivity to preceding activation. Kokkoroyiannis T, et al. **Neuroscience** 1989;30(3):651–61
The relationship between coherence and nonlinear characteristics in Renshaw cell responses to random motor axon stimulation. Laouris Y, et al. **Neuroscience** 1989; 28(3):625–33
Electrophysiological properties of hypoglossal motoneurons of guinea-pigs studied in vitro. Mosfeldt Laursen A, et al. **Neuroscience** 1989;30(3):619–37
Destabilization of junctional ACh receptors by a reinnervating frog motor nerve. Aframian D, et al. **P R Health Sci J** 1988 Aug;7(2):80–6
Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. **P R Health Sci J** 1988 Aug;7(2):155–66 (82 ref.)
Altered sensory-motor control of the head as an etiological factor in space-motion sickness. Lackner JR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):784–6
Somata of giant and inhibitor motoneurones are prevented from spiking by different outward currents. Czternasty G, et al. **Pflugers Arch** 1989;414 Suppl 1:S144
Coerulospinal influence on recurrent inhibition of spinal motonuclei innervating antagonistic hindleg muscles of the cat. Fung SJ, et al. **Pflugers Arch** 1988 Sep;412(4):346–53
Long-term sensitization in Aplysia increases the number of presynaptic contacts onto the identified gill motor neuron L7. Bailey CH, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9356–9
Descending cortical and tectal control of dorsal neck motoneurons via reticulospinal neurons in the cat. Iwamoto Y, et al. **Prog Brain Res** 1988;76:97–108 (44 ref.)
Dynamic and kinematic properties of the vestibulocollic and cervicocollic reflexes in the cat. Peterson BW, et al. **Prog Brain Res** 1988;76:163–72 (25 ref.)
Adult rat lumbrical muscle fibres are not polyneuronally innervated. Chamberlain S, et al. **Q J Exp Physiol** 1989 May;74(3):375–8
Estimation of the projection frequencies of single inhibitory interneurones to motoneurones in the cat spinal cord. Harrison PJ, et al. **Q J Exp Physiol** 1989 Jan;74(1):79–82
Myosin light chains in regenerating rat skeletal muscle following chronic, low-frequency, electrical stimulation. Rosenblatt JD, et al. **Q J Exp Physiol** 1988 Jul;73(4):619–22
Critical periods in the development of motoneurons. Harris AJ. **Rev Neurol (Paris)** 1988;144(11):643–7
Electrophysiological findings in childhood spinal muscular atrophies. Hausmanowa-Petrusewicz I. **Rev Neurol (Paris)** 1988;144(11):716–20
Neural stimulation for bladder control. Tanagho EA. **Semin Neurol** 1988 Summer;8(2):170–3 (12 ref.)
Intracellular studies in the facial nucleus illustrating a simple new method for obtaining viable motoneurons in adult rat brain slices. Aghajanian GK, et al. **Synapse** 1989;3(4):331–8
Identification of motor neurons for accessory muscles of inspiration and expiration, pectoralis, trapezius and external oblique: comparison with non-respiratory skeletal muscle. Charlton CG, et al. **Synapse** 1988;2(3):219–24
Epinephrine and norepinephrine modulate neuronal responses to excitatory amino acids and agonists in frog spinal cord. Wohlberg CJ, et al. **Synapse** 1987;1(2):202–7
The neurotrophic theory and naturally occurring motoneuron death. Oppenheim RW. **Trends Neurosci** 1989 Jul;12(7):252–5 (37 ref.)
Neuromuscular specificity: pathfinding by identified motor growth cones in a vertebrate embryo. Westerfield M, et al. **Trends Neurosci** 1988 Jan;11(1):18–22 (36 ref.)
[Electrophysiological estimation of the number of motor units in abductor digiti minimi of young adults] Chan RC. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):231–8 (Eng. Abstr.) (Chi)
[Changes in motor evoked potentials in experimental spinal cord injury] Yu CJ. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):257–9, 18 (Eng. Abstr.) (Chi)
[Studies on the origin of different discharge pattern of the two types of phrenic motoneurones by cross-correlation analysis] Hu JM, et al. **Sheng Li Hsueh Pao** 1989 Apr; 41(2):163–71 (Eng. Abstr.) (Chi)
[Effects of partial unfused contractions of the gastrocnemius medialis muscle on homonymous and synergist motor neurons in cats] Horcholle-Bossavit G, et al. **C R Acad Sci [III]** 1988;307(10):591–6 (Eng. Abstr.) (Fre)
[The anterior horn of the spinal cord and its pathology. International Neurology Meeting. Paris, 11–12 June 1987. Proceedings] **Rev Neurol (Paris)** 1988;144(11):617–763 (Fre)
[Electrophysiologic exploration of the human anterior horn. Clinical implications] Delwaide PJ. **Rev Neurol (Paris)** 1988;144(11):656–9 (37 ref.) (Eng. Abstr.) (Fre)
[Possible trophic role on the neuromuscular junction of a neuropeptide co-existing with acetylcholine in motor neurons of the spinal cord] Fontaine B, et al. **Rev Neurol (Paris)** 1989;145(3):194–200 (29 ref.) (Eng. Abstr.) (Fre)
[Findings in the peripheral motor system following stimulation of the motor nerve roots: polyradiculitis, amyotrophic lateral sclerosis and polyneuropathy] Ludolph AC, et al. **EEG EMG** 1988 Dec;19(4):255–9 (Eng. Abstr.) (Ger)
[Fractionated determination of central motor conduction times using stimulation of the cortex, spinal tract and spinal nerve roots: possibilities and limits] Meyer BU, et al. **EEG EMG** 1988 Dec;19(4):234–40 (Eng. Abstr.) (Ger)
[The cervical somatosensory evoked potential and its relation to F-wave activity] Strenge H. **EEG EMG** 1989 Jun; 20(2):99–105 (Eng. Abstr.) (Ger)
[The plasticity of motor units in change of the activity pattern by electric stimulation—electrostimulation and its possible clinical applications] Nix WA. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):94–106 (194 ref.) (Eng. Abstr.) (Ger)
[Pregnancy and labor in chronic anterior horn lesion] Dietz U, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun; 193(3):155–8 (Eng. Abstr.) (Ger)
[Long-term interaction of nerve and muscle, and trophic substance] Miyata Y. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):211–7 (23 ref.) (Jpn)
[Nerve cell dendrites: their electrical activities and functions] Fujita Y. **Nippon Seirigaku Zasshi** 1988;50(12):739–52 (91 ref.) (Jpn)
[Peripheral denervation in the various clinical forms of Chagas' disease] DeFaria CR, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):225–37 (Eng. Abstr.) (Por)
[Changes in topography of axonal components of the action potential of chick embryonal neurons during axon myelinization] Velumian AA. **Dokl Akad Nauk SSSR** 1989; 304(2):486–9 (Rus)
[Effect of temperature on the spontaneous rhythmic activity of the neurons in the spinal centers of the frog lymphatic hearts] Ruchinskaia TIu, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):212–7 (Eng. Abstr.) (Rus)
[Effect of ischemia and recirculation on the ultrastructure of the ventral horns of the rabbit spinal cord and accumulation of calcium in motoneurons] Jalč P, et al. **Neirofiziologiia** 1989;21(2):267–9 (Eng. Abstr.) (Rus)
[Effect of serotonin on the background activity of neurons in the isolated spinal cord semisegment of the rat] Khasabov SG, et al. **Neirofiziologiia** 1989;21(3):335–43 (Eng. Abstr.) (Rus)
[Reactions of tonically active motor neurons to the stimulation of different afferents] Alatyrev VI, et al. **Nerv Sist** 1988;27:3–8 (Rus)
[The afterdischarge as an index of the functional state of the nerve center] Eremeev Am, et al. **Nerv Sist** 1988; 27:30–4 (Rus)
[The role of cholinergic and GABAergic structures in the suprasegmental regulation of the tonic motoneuron in the cockroach] Lapitskiĭ VP, et al. **Nerv Sist** 1988;27:69–76 (Rus)
[A new, noninvasive method of measuring motor and sensory conductivity] Jovičić A, et al. **Vojnosanit Pregl** 1988

Nov-Dec;45(6):407-12 (Eng. Abstr.) (Ser)

PHYSIOPATHOLOGY

Nerve conduction studies in upper limbs of patients with cervical spondylosis and motor neurone disease. Thacker AK, et al. **Acta Neurol Scand** 1988 Jul;78(1):45-8

The first agonist and antagonist burst in patients with an upper motor neuron syndrome. Fagioli S, et al. **Mov Disord** 1988;3(2):126-32

Electrophysiology of the corticomotoneurone pathways in patients with movement disorders. Thompson PD, et al. **Mov Disord** 1986;1(2):113-7

[Electrophysiological evaluation of neurologic manifestations of disorders in the topography of the spinal motor segment] Gongal'skiĭ VV. **Ortop Travmatol Protez** 1988 Nov; (11):43-6 (Eng. Abstr.) (Rus)

SECRETION

Calcium channels that regulate neurosecretion. Dunlap K, et al. **Soc Gen Physiol Ser** 1989;44:239-50

SURGERY

[Experimental study of motor nerve repair: comparison of nylon suture and two component fibrin adhesive techniques] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1208-12 (Eng. Abstr.) (Jpn)

TRANSPLANTATION

Replacement of missing motoneurons by embryonic grafts in the rat spinal cord. Sieradzan K, et al. **Neuroscience** 1989; 31(1):115-30

ULTRASTRUCTURE

Ultrastructure and synaptic architecture of spinal motoneurons in the frog (Rana catesbeiana). Wang CL, et al. **Acta Anat (Basel)** 1989;134(1):1-11

Motor nerve terminal calcium channels in Lambert-Eaton myasthenic syndrome. Morphologic evidence for depletion and that the depletion is mediated by autoantibodies. Engel AG, et al. **Ann N Y Acad Sci** 1989;560:278-90 (29 ref.)

An autopsy case of atypical infantile motor neuron disease with hyaline intraneuronal inclusions. Yokochi K, et al. **Arch Neurol** 1989 Jan;46(1):103-7

Size-related differences in the branching pattern of the motor nerve terminals in triangularis sterni muscle of the mouse. Tomasi J, et al. **Biol Cell** 1989;65(3):271-80

Location of motoneurons supplying the intrinsic laryngeal muscles of rats. Horseradish peroxidase and fluorescence double-labeling study. Portillo F, et al. **Brain Behav Evol** 1988;32(4):220-5

Accommodation motor neurons in the foveate teleost Paralabrax clathratus: horseradish peroxidase labeling and axonal morphometry, with comparisons to other ciliary nerve components. Wathey JC. **Brain Behav Evol** 1988; 32(1):1-16

Gap junctions between lateral spinal motoneurons in the rat. Matsumoto A, et al. **Brain Res** 1989 Aug 28;495(2):362-6

Mixed-junction axon terminals on identified principal abducens motoneurons in the monitor lizard. Wouterlood FG, et al. **Brain Res** 1988 Oct 25;463(1):198-203

Nucleolar extrusions and location of the Golgi apparatus in the caudal neurosecretory motoneurons of anurans (Amphibia). Chapra R. **Folia Morphol (Praha)** 1988; 36(4):395-402

Cytoplasmic membrane elaborations in oligodendrocytes during myelination of spinal motoneuron axons. Waxman SG, et al. **GLIA** 1988;1(4):286-91

Ultrastructure of interneurons within motor nuclei of the thoracic region of the spinal cord of the adult cat. Johnson IP, et al. **J Anat** 1988 Dec;161:171-85

Neuronal surface changes in the dorsal vagal motor nucleus of the guinea pig in response to axotomy. Engel AK, et al. **J Comp Neurol** 1988 Sep 8;275(2):181-200

A morphometric analysis of the somata and organelles of regenerating hypoglossal motoneurons from the rat. Hall LL, et al. **J Neurocytol** 1988 Dec;17(6):835-44

Diffuse cerebrospinal gliomatosis presenting as motor neuron disease for two years. Schmidbauer M, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):275-8

Motor nerve terminal sprouting in formamide-treated inactive amphibian skeletal muscle. Wines MM, et al. **J Neurosci** 1988 Oct;8(10):3909-19

Ultrastructure of axotomized alpha and gamma motoneurons in the cat thoracic spinal cord. Johnston IP, et al. **Neuropathol Appl Neurobiol** 1989 Mar-Apr;15(2):149-63

Ultrastructural evidence for direct monosynaptic rubrospinal connections to motoneurons in Macaca mulatta. Ralston DD, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):102-6

[Changes in the motor neurons of the spinal cord after experimental procedures] Ruttkay-Nedecká E, et al. **Bratisl Lek Listy** 1988 Oct;89(10):789-92 (Eng. Abstr.) (Slo)

MOTOR NEURONS, GAMMA see under MOTOR NEURONS

MOTOR SKILLS

see related
CHILD DEVELOPMENT

Assessing movement control in children with mental retardation: a generalizability analysis of observers. Ulrich DA, et al. **Am J Ment Retard** 1989 Sep;94(2):170-6

Occupational therapy and motor control [editorial] Cohen H. **Am J Occup Ther** 1989 May;43(5):289-90

A comparison of motor performance of preschoolers enrolled in mental health programs and non-mental health programs. Kramer LA, et al. **Am J Occup Ther** 1988 Aug; 42(8):520-5

Bilateral motor coordination in 5- to 9-year-old children: a pilot study. Magalhaes LC, et al. **Am J Occup Ther** 1989 Jul;43(7):437-43

The effect of positioning on the hand function of boys with cerebral palsy. Noronha J, et al. **Am J Occup Ther** 1989 Aug;43(8):507-12

The effects of chronic otitis media on motor performance in 5- and 6-year-old children. Von T, et al. **Am J Occup Ther** 1988 Jul;42(7):421-6

Description and interobserver reliability of the Tufts Assessment of Motor Performance. Gans BM, et al. **Am J Phys Med Rehabil** 1988 Oct;67(5):202-10

Does hand proficiency determine hand preference? Bishop DV. **Br J Psychol** 1989 May;80 (Pt 2):191-9

The road to success in international rowing. Budgett RG. **Br J Sports Med** 1989 Mar;23(1):49-50

The role of physiological assessment in team selection with special reference to rowing. Koutedakis Y. **Br J Sports Med** 1989 Mar;23(1):51-2

Rate and variability of finger tapping as measures of lateralized concurrent task effects. Hiscock M, et al. **Brain Cogn** 1989 May;10(1):87-104

Intrahemispheric sex differences in the functional representation of language and praxic functions in normal individuals. Lewis RS, et al. **Brain Cogn** 1989 Mar; 9(2):238-43

The coordination of limb movements with different kinematic patterns. Swinnen S, et al. **Brain Cogn** 1988 Dec;8(3):326-47

A nontrivial motor performance difference between right-handers and left-handers: attention as intervening variable in the expression of handedness. Peters M. **Can J Psychol** 1987 Mar;41(1):91-9

Impact of gestational age on preterm motor development at 4 months chronological and adjusted ages. Piper MC, et al. **Child Care Health Dev** 1989 Mar-Apr;15(2):105-15

Correlation of manual dexterity and comprehension with oral hygiene and periodontal status in mentally handicapped adults. Shaw L, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):187-9

Locomotor strategies preceding independent walking: prospective study of neurological and language development in 424 cases. Bottos M, et al. **Dev Med Child Neurol** 1989 Feb;31(1):25-34

Body scale and the development of prehension. Newell KM, et al. **Dev Psychobiol** 1989 Jan;22(1):1-13

Effects of frequency and load to lift on endurance time. Genaidy AM, et al. **Ergonomics** 1989 Jan;32(1):51-7

Maternal handling and motor development: an intracultural study. Hopkins B, et al. **Genet Soc Gen Psychol Monogr** 1988 Aug;114(3):377-408

Tracking irregular acoustic patterns by finger tapping. Franěk M, et al. **Int J Psychophysiol** 1988 Nov;6(4):327-30

Prediction of arm and hand function recovery in stroke patients. de Weerdt W, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):110-2

Mobility training following brain trauma--results of intensive individual treatment. Dordel HJ. **Int J Rehabil Res** 1987; 10(4 Suppl 5):279-90

Functional measurements in the hands of patients with rheumatoid arthritis. Jones AR, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):62-72

Evaluation of hand movements used during hand testing and activities of daily living. Jones L, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):54-6

Restoration of grasping functions in quadriplegic patients by Functional Electrical Stimulation (FES). Mauritz KH, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):57-61

Patterns of rotary pursuit performance in clumsy and normal children. Lord R, et al. **J Child Psychol Psychiatry** 1988 Sep;29(5):691-701

Discriminant validity of lateral sensorimotor tests in children. Francis DJ, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):779-99

A theory of motor performance and its applications to preclinical dental skill acquisition. Feil PH. **J Dent Educ** 1989 Apr;53(4):226-32

Preschool motor skills of children born prematurely and not diagnosed as having cerebral palsy. Crowe TK, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):189-93

Effects of hand-arm transmitted vibration on hand manipulative dexterity. Chen B, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):87-90

Grip force adjustments evoked by load force perturbations of a grasped object. Cole KJ, et al. **J Neurophysiol** 1988 Oct;60(4):1513-22

The role of preparation in tuning anticipatory and reflex responses during catching. Lacquaniti F, et al. **J Neurosci** 1989 Jan;9(1):134-48

Adaptation to suppression of visual information during catching. Lacquaniti F, et al. **J Neurosci** 1989 Jan; 9(1):149-59

Handedness and manual specialization in the baboon. Fagot J, et al. **Neuropsychologia** 1988;26(6):795-804

Cognitive and motor differences among low birth weight infants: impact of intraventricular hemorrhage, medical risk, and social class. Lewis M, et al. **Pediatrics** 1989 Feb; 83(2):187-92

Relations of eye color to scores on Bruininks-Oseretsky Test of Motor Proficiency—Short Form. Beer J, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):859-62

Reconsideration of measurement of error in human motor learning. Crabtree DA, et al. **Percept Mot Skills** 1988 Oct; 67(2):568-70

EMG and motor performance changes with practice of a forearm movement by children. Engelhorn R. **Percept Mot Skills** 1988 Oct;67(2):523-9

Finger tapping: effects of trials and sessions. Gill DM, et al. **Percept Mot Skills** 1986 Apr;62(2):675-8

Does transfer of training help children learn juggling? Hautala RM. **Percept Mot Skills** 1988 Oct;67(2):563-7

Effect of starting position on reproduction of movement: further evidence of interference between location and distance information. Imanaka K. **Percept Mot Skills** 1989 Apr;68(2):423-34

Effects of telic dominance and metamotivational state on squash task performance. Kerr JH, et al. **Percept Mot Skills** 1988 Aug;67(1):171-4

Avoidance training using an incremental vertical jump response in rats. King CL, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):968-70

Effect of instructional units on the analysis of related and unrelated skills. Morrison C, et al. **Percept Mot Skills** 1986 Apr;62(2):563-6

Effect of concurrent visual feedback on acquisition of a weightlifting skill. Sewall LP, et al. **Percept Mot Skills** 1988 Dec;67(3):715-8

Manual behavior, lateralization of manual skills and cognitive performance of preschool children. Smirni P, et al. **Percept Mot Skills** 1989 Feb;68(1):267-72

Effects of a success-oriented reading and motor program on self-concept of children referred for learning disability. Smith TL, et al. **Percept Mot Skills** 1988 Aug;67(1):94

Prediction of fine motor skills of children having language and speech disorders. Sommers RK. **Percept Mot Skills** 1988 Aug;67(1):63-72

Infant baboons spontaneously use an object to obtain distant food. Westergaard GC. **Percept Mot Skills** 1989 Apr; 68(2):558

A multivariable approach toward predicting dental motor skill performance. Wilson SG, et al. **Percept Mot Skills** 1988 Aug;67(1):211-7

Stability of Bayley Motor Scale scores in the first year of life. Coryell J, et al. **Phys Ther** 1989 Oct;69(10):834-41

Item reliability of the Milani-Comparetti Motor Development Screening Test. Stuberg WA, et al. **Phys Ther** 1989 May;69(5):328-35

Working memory for movements. Smyth MM, et al. **Q J Exp Psychol [A]** 1989 May;41(2):235-50

Preferred tempo in the learning of a gross cyclical action. van Emmerik RE, et al. **Q J Exp Psychol [A]** 1989 May; 41(2):251-62

Evaluation of functional capacity after stroke with special emphasis on motor function and activities of daily living. Lindmark B. **Scand J Rehabil Med Suppl** 1988;21:1-40 (76 ref.)

Long-term potentiation in the motor cortex. Iriki A, et al. **Science** 1989 Sep 22;245(4924):1385-7

The function of feedback in psychomotor-skill learning. Milde FK. **West J Nurs Res** 1988 Aug;10(4):425-34

[Neuropsychological disorders in Parkinson disease. Relations to psychomotor inhibition and obsessive-compulsive disease] Lees AJ. **Nervenarzt** 1989 Feb;60(2):71-9 (64 ref.) (Ger)

[Assessment of normal values in 5- to 9-year-old children with the Kurth motometric Rostock-Oseretzky Scale] Schroeder W, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):358-62 (Eng. Abstr.) (Ger)

[Programming of structural properties of movement sequences] Ziessler M, et al. **Z Psychol** 1988;196(4):371-88 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Chronic tolerance to ethanol in the N:NIH rat. Grant KA, et al. **Alcoholism (N Y)** 1989 Jun;13(3):402-6

A double-blind crossover comparison of Sinemet CR4 and standard Sinemet 25/100 in patients with Parkinson's disease and fluctuating motor performance. Cedarbaum JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):207-12

Levodopa peripheral pharmacokinetics and duration of motor response in Parkinson's disease. Kempster PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):718-23

A neuropsychological study of children with elevated dentine lead level: assessment of the effect of lead in different socio-economic groups. Hansen ON, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):205-13

Mediation of acute ethanol-induced motor disturbances by cerebellar adenosine in rats. Clark M, et al. **Pharmacol Biochem Behav** 1988 May;30(1):155-61

Parkinson's disease, depression, and the on-off phenomenon. Friedenberg DL, et al. **Psychosomatics** 1989 Winter;

30(1):94–9

PHYSIOLOGY

Development of righting reflexes, gross motor functions and balance in infants with labyrinth hypoactivity with or without mental retardation. Kaga K, et al. **Adv Otorhinolaryngol** 1988;41:152–61

Motor skills in extremely low birthweight children at the age of 6 years. Marlow N, et al. **Arch Dis Child** 1989 Jun; 64(6):839–47

Hemispheric differences in motor control. Goodale MA. **Behav Brain Res** 1988 Sep 15;30(2):203–14 (33 ref.)

The hopping response after two-stage cortical ablation in young and adult rabbits. Hobbelen JF, et al. **Behav Brain Res** 1988 Nov 1;31(1):97–102

Voluntary movement dysfunction in schizophrenics. Vrtunski PB, et al. **Biol Psychiatry** 1989 Mar 1;25(5):529–39

Dynamic wrist motion analysis using six degree of freedom sensors. Logan SE, et al. **Biomed Sci Instrum** 1989; 25:213–20

Temporal characteristics of tapping responses in healthy subjects and in patients who sustained cerebrovascular accident. Najenson T, et al. **Brain Behav Evol** 1989; 33(2–3):175–8

Premotor cortex and the retrieval of movement. Passingham RE. **Brain Behav Evol** 1989;33(2–3):189–92

Childhood dysgraphia. Part 2. A study of hand function. O'Hare AE, et al. **Child Care Health Dev** 1989 May–Jun; 15(3):151–66

Deficits in the production of grip forces in Down syndrome. Cole KJ, et al. **Dev Med Child Neurol** 1988 Dec;30(6):752–8

Oral–motor dysfunction and failure to thrive among inner–city infants. Mathisen B, et al. **Dev Med Child Neurol** 1989 Jun;31(3):293–302

Neuromotor development of preterm and full–term infants. Gorga D, et al. **Early Hum Dev** 1988 Dec;18(2–3):137–49

Neurological outcome of twins dissimilar in size at birth. Ylitalo V, et al. **Early Hum Dev** 1988 Aug–Sep; 17(2–3):245–55

rCBF landscapes during motor performance and motor ideation of a graphic gesture. Decety J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):33–8

Predictors of subsyllabic durations in speech motor control. Keller E. **J Acoust Soc Am** 1989 Jan;85(1):322–6

A dynamic model for finger interphalangeal coordination. Buchner HJ, et al. **J Biomech** 1988;21(6):459–68

Evoked potentials, reaction time and cognitive performance in on and off phases of Parkinson's disease. Starkstein SE, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):338–40

Direct and indirect sensory input pathways to the motor cortex; its structure and function in relation to learning of motor skills. Asanuma H, et al. **Jpn J Physiol** 1989; 39(1):1–19 (83 ref.)

Hemispheric asymmetry of processing temporal aspects of repetitive movement in two patients with infarction involving the corpus callosum. Kashiwagi A, et al. **Neuropsychologia** 1989;27(6):799–809

Motor learning and ultradian sleep cycle: an electroencephalographic study of trampoliners. Buchegger J, et al. **Percept Mot Skills** 1988 Oct;67(2):635–45

Uncertainty and visual strategies in table tennis. Ripoll H. **Percept Mot Skills** 1989 Apr;68(2):507–12

Motor proficiency associated with vestibular deficits in children with hearing impairments. Crowe TK, et al. **Phys Ther** 1988 Oct;68(10):1493–9

Description of adult rolling movements and hypothesis of developmental sequences. Richter RR, et al. **Phys Ther** 1989 Jan;69(1):63–71

Heat production and motor deficit in rats lesioned in globus pallidus, entopeduncular nucleus and lateral hypothalamus. De Luca B, et al. **Physiol Behav** 1989 Jan;45(1):119–26

Early development in mice: V. Sensorimotor development of four coisogenic mutant strains. Noël M. **Physiol Behav** 1989 Jan;45(1):21–6

Comments on 'Call for a follow–up study of experiments on long–term deprivation of human infants' by Micha Razel. White BL. **Psychol Rep** 1989 Apr;64(2):397–8

Brain stem neurons in modified pathways for motor learning in the primate vestibulo–ocular reflex. Lisberger SG, et al. **Science** 1988 Nov 4;242(4879):771–3

The neural basis for learning of simple motor skills. Lisberger SG. **Science** 1988 Nov 4;242(4879):728–35 (48 ref.)

Behavioral neurophysiology: insights into seeing and grasping. Wise SP, et al. **Science** 1988 Nov 4; 242(4879):736–41

Responsiveness and somatotopic organization of anterior parietal field 3b and adjoining cortex in newborn and infant monkeys. Krubitzer LA, et al. **Somatosens Mot Res** 1988; 6(2):179–205

Evidence of cortical reorganization in hemiparetic patients. Brion JP, et al. **Stroke** 1989 Aug;20(8):1079–84

[Evaluation of motor skills of adolescents from a large city environment attending the Technical School of Mechanical Engineering and the Grammar School in Łódź] Kozłowski W, et al. **Med Pr** 1988;39(5):309–21 (Eng. Abstr.) **(Pol)**

[Development of the motor working capacity of vocational school and secondary school students in Łódź] Sobchak Z, et al. **Gig Sanit** 1988 Nov;(11):62–4 **(Rus)**

[Development of manipulative activity in vertebrate phylogeny] Deriagina MA, et al. **Zh Obshch Biol** 1988 May–Jun;49(3):304–17 (Eng. Abstr.) **(Rus)**

MOTORCYCLES

Characteristics of three– and four–wheeled all–terrain vehicle accidents in Quebec. DeLisle A, et al. **Accid Anal Prev** 1988 Oct;20(5):357–66

Helmet effectiveness in preventing motorcycle driver and passenger fatalities. Evans L, et al. **Accid Anal Prev** 1988 Dec;20(6):447–58

All terrain vehicles (ATVs). A recreational gamble. Vasilakis A, et al. **Am Surg** 1989 Mar;55(3):142–4

Noise exposure of motorcyclists. Ross BC. **Ann Occup Hyg** 1989;33(1):123–7

Neurologic eye signs following motorcycle accidents. Keane JR. **Arch Neurol** 1989 Jul;46(7):761–2

In favor of Bill 413: helmet law [letter] Morgan AS. **Conn Med** 1989 Mar;53(3):191

Survey of head, helmet and headform sizes related to motorcycle helmet design. Gilchrist A, et al. **Ergonomics** 1988 Oct;31(10):1393–412

Combined brachial root and plexus lesions—typical sequelae of motor–bike accidents. Hülser PJ. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):304–6

Fatal motorcycle accidents in the county of Funen (Denmark). Larsen CF, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):93–9

Motorcycling—a high risk activity [editorial] Bull J. **Injury** 1988 Jan;19(1):3

Missed carpometacarpal dislocation of the thumb in motorcyclists. Johnson SR, et al. **Injury** 1987 Nov; 18(6):415–6

Closed traction lesions of the brachial plexus—an epidemic among young motorcyclists. Rosson JW. **Injury** 1988 Jan; 19(1):4–6

Off–the–road motorcycling injuries 1982–1985. Wilson–MacDonald J, et al. **Injury** 1987 May;18(3):196–8

Road safety management: interviewing casualties. Saunders RA. **J R Soc Health** 1989 Apr;109(2):49–53, 56

Thoracic spine injuries in victims of motorcycle accidents. Kupferschmid JP, et al. **J Trauma** 1989 May;29(5):593–6

The public cost of motorcycle trauma [letter; comment] **JAMA** 1989 Feb 24;261(8):1149–50. **Comment on: JAMA** 1988 Jul 8;260(2):221–3

Injuries related to all–terrain vehicular accidents: a closer look at head and neck trauma. Friedman R, et al. **Laryngoscope** 1988 Nov;98(11):1251–4

Helmets for motor–cyclists: are there any medical grounds for exemption? Trinca G, et al. **Med J Aust** 1989 Feb 20; 150(4):227

Three–wheel and four–wheel all–terrain vehicle injuries in children. Dolan MA, et al. **Pediatrics** 1989 Oct;84(4):694–8

[All–terrain vehicle physical injuries: the case of 3– and 4–wheeled vehicles] Delisle A, et al. **Can J Public Health** 1988 Jul–Aug;79(4):264–7 (Eng. Abstr.) **(Fre)**

[Fatal bicycle accidents—causes and legal responsibility] Lutz FU, et al. **Z Rechtsmed** 1988;101(1):1–8 (Eng. Abstr.) **(Ger)**

[Problems with expertise in traffic accidents involving two–wheeled vehicles] Dunjić D, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):341–4 (Eng. Abstr.) **(Scc)**

CLASSIFICATION

Motorcycle design and crash injuries in California, 1985. Kraus JF, et al. **Bull N Y Acad Med** 1988 Sep–Oct; 64(7):788–803

STANDARDS

[3–wheeled and 4–wheeled all–terrain vehicles: unstable and dangerous vehicles] Delisle A, et al. **Can J Public Health** 1989 Jan–Feb;80(1):28–30 (Eng. Abstr.) **(Fre)**

MOTTLED ENAMEL

CEREBROSPINAL FLUID

Fluoride in cerebrospinal fluid of patients with fluorosis. Hu YH, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1591–3

DIAGNOSIS

Re: A review of differential diagnosis of dental fluorosis and non–fluoride enamel defects [letter] MacDonald P. **Can Dent Assoc J** 1989 Feb;55(2):106–7

A review of differential diagnosis of dental fluorosis and non–fluoride enamel defects. Osuji OO, et al. **Can Dent Assoc J** 1988 Oct;54(10):743–7 (34 ref.)

EPIDEMIOLOGY

Trends in dental fluorosis and dental caries prevalences in Newburgh and Kingston, NY. Kumar JV, et al. **Am J Public Health** 1989 May;79(5):565–9

Dental caries and fluorosis in children from high and low fluoride areas of Morocco. Haikel Y, et al. **ASDC J Dent Child** 1989 Sep–Oct;56(5):378–81

Dental fluorosis among participants in a non–supervised fluoride tablet program. Larsen MJ, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):204–6

Prevalence of mottled enamel in permanent dentition of children participating in a fluoride programme at the Amsterdam dental school. Wöltgens JH, et al. **J Biol Buccale** 1989 Mar;17(1):15–20

Risk factors for dental fluorosis in a fluoridated community. Osuji OO, et al. **J Dent Res** 1988 Dec;67(12):1488–92

Relation of sources of systemic fluoride to prevalence of dental fluorosis. Woolfolk MW, et al. **J Public Health Dent** 1989 Spring;49(2):78–82

Dental caries and dental fluorosis. **Nutr Rev** 1988 Sep; 46(9):317–9

[Fluorosis and caries of the deciduous teeth] Gnatiuk PIa. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):67–9 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Guidelines for the use of dietary fluoride supplements in Australia. Riordan PJ. **Aust Dent J** 1989 Aug;34(4):359–62

[The role of tea consumption in dental fluorosis in Jordan] Fraysse C, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):39–46 (Eng. Abstr.) **(Fre)**

METABOLISM

The status of sulphated isomers of glycosaminoglycans in fluorosed human teeth. Susheela AK, et al. **Arch Oral Biol** 1988;33(10):765–7

[The Ca and P content of various layers of human dental enamel in differing manifestations of fluorosis] Nikolishin AK, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):21–4 (Eng. Abstr.) **(Rus)**

VETERINARY

A scanning electron microscopic study on surface lesions in fluorosed enamel of roe deer (Capreolus capreolus L.). Kierdorf U, et al. **Vet Pathol** 1989 May;26(3):209–15

MOULAGES see MODELS, ANATOMIC

MOUNTAINEERING

see related

ALTITUDE

Noninvasive evaluation of cardiac structure and function in alpinists. Kiratjoglu TK, et al. **Am J Cardiol** 1989 Sep 15; 64(10):676–9

Carbon monoxide poisoning at high altitudes. Foutch RG, et al. **Am J Emerg Med** 1988 Nov;6(6):596–8

Mountaineering and rock–climbing injuries in US national parks. Addiss DG, et al. **Ann Emerg Med** 1989 Sep; 18(9):975–9

Injury prevention and the call of the wild [editorial] Geehr EC. **Ann Emerg Med** 1989 Sep;18(9):1012–3

High–altitude mountaineering and brain function: neuropsychological testing of members of a Mount Everest expedition. Jason GW, et al. **Aviat Space Environ Med** 1989 Feb;60(2):170–3

Soft tissue injury in extreme rock climbers. Bollen SR. **Br J Sports Med** 1988 Dec;22(4):145–7

Effects of altitude on atrial natriuretic peptide: the Bicentennial Mount Everest Expedition. Tunny TJ, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):287–91

Operation Everest II: maximal oxygen uptake at extreme altitude. Cymerman A, et al. **J Appl Physiol** 1989 May; 66(5):2446–53

Operation Everest II: adaptations in human skeletal muscle. Green HJ, et al. **J Appl Physiol** 1989 May;66(5):2454–61

Operation Everest. II: Nutrition and body composition. Rose MS, et al. **J Appl Physiol** 1988 Dec;65(6):2545–51

High altitude changes in mountaineers. Part B: Trace proteinuria in student mountaineers. Singh RG, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):257–9

High altitude changes in mountaineers. Part A: Over–night urinary volume and some serum values in mountaineers during active expedition. Usha, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):253–6

The safety of trekking at high altitude after coronary bypass surgery [letter] Hultgren HN. **JAMA** 1988 Oct 21; 260(15):2218–9

Will mountains trekkers have heart attacks? [editorial] Rennie D. **JAMA** 1989 Feb 17;261(7):1045–6

Helicopter rescues and deaths among trekkers in Nepal. Shlim DR, et al. **JAMA** 1989 Feb 17;261(7):1017–9

High mountains and medical emergencies. Curry C. **N Z Med J** 1989 May 10;102(867):222–3

Persistent cognitive impairment in climbers after repeated exposure to extreme altitude. Regard M, et al. **Neurology** 1989 Feb;39(2 Pt 1):210–3

Neurobehavioral and psychosocial functioning of women exposed to high altitude in mountaineering. Petiet CA, et al. **Percept Mot Skills** 1988 Oct;67(2):443–52

Rate of ventilatory acclimatization to extreme altitude. West JB. **Respir Physiol** 1988 Dec;74(3):323–33

Altitude insomnia: studies during an expedition to the Himalayas. Nicholson AN, et al. **Sleep** 1988 Aug; 11(4):354–61

Rock–climbing injuries in Yosemite National Park. Bowie WS, et al. **West J Med** 1988 Aug;149(2):172–7

[Guidelines for diabetic patients participating in Alpine sports] Berghold F, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):355–6 (Eng. Abstr.) **(Ger)**

[Changes in arterial pressure and adrenergic activity during a holiday at a mountain at low altitude] Palatini P, et al.

G Ital Cardiol 1989 May;19(5):456-61 (Eng. Abstr.) (Ita)
[Physical work capacity of Alpinists under conditions of extremely low pO2 in inspired air] Kolchinskaia AZ, et al. Fiziol Zh 1989 May-Jun;35(3):68-74 (Eng. Abstr.) (Rus)
[Characteristics of energy metabolism and the effectiveness of muscular work in humans during adaptation to altitude] Krivoshchekov SG, et al. Kosm Biol Aviakosm Med 1989 Jan-Feb;23(1):62-6 (Eng. Abstr.) (Rus)
[At the top of the world. A report from the Swedish Mount Everest expedition] Wahlund E, et al. Lakartidningen 1988 Sep 28;85(39):3161-9 (Swe)

MOURNING see GRIEF

MOUSE LEUKEMIA VIRUSES

Factor-independent erythropoietic progenitor cells in leukemia induced by the myeloproliferative leukemia virus. Wendling F, et al. Blood 1989 Apr;73(5):1161-7
Activation of multiple hemopoietic growth factor genes in Abelson virus-transformed myeloid cells. Humphries RK, et al. Exp Hematol 1988 Oct;16(9):774-81
Ordered activation of the Ig lambda locus in Abelson B cell lines. Müller B, et al. J Exp Med 1988 Dec 1;168(6):2131-7
Severe immunodeficiency disease induced by a defective murine leukaemia virus. Aziz DC, et al. Nature 1989 Apr 6;338(6215):505-8

ANALYSIS

Biochemical and immunological characterization of murine leukemia viruses that are paralysis-inducing in rats. Shibamura S, et al. Jpn J Cancer Res 1989 Jan;80(1):24-30

ENZYMOLOGY

A truncated v-abl-derived tyrosine-specific tyrosine kinase expressed in Escherichia coli. Pritchard ML, et al. Biochem J 1989 Jan 15;257(2):321-9
Functional organization of the murine leukemia virus reverse transcriptase: characterization of a bacterially expressed AKR DNA polymerase deficient in RNase H activity. Levin JG, et al. J Virol 1988 Nov;62(11):4376-80

GENETICS

The viral and cellular forms of the Abelson (abl) oncogene. Rosenberg N, et al. Adv Virus Res 1988;35:39-81 (199 ref.)
Expression of an endogenous retroviral transcript is associated with murine lupus. Krieg AM, et al. Arthritis Rheum 1989 Mar;32(3):322-9
Structure of the termini of DNA intermediates in the integration of retroviral DNA: dependence on IN function and terminal DNA sequence. Roth MJ, et al. Cell 1989 Jul 14;58(1):47-54
Molecular characterization of a transforming retrovirus involved in pre-B cell lymphomas. Langdon WY, et al. Curr Top Microbiol Immunol 1988;141:27-30
N-terminal mutations activate the leukemogenic potential of the myristoylated form of c-abl. Jackson P, et al. EMBO J 1989 Feb;8(2):449-56
Studies of the mechanism of spontaneous germline ecotropic provirus acquisition in mice. Lock LF, et al. EMBO J 1988 Dec 20;7(13):4169-77
Glycosylation of glycoproteins 52 and 65 encoded by the polycythemia-inducing strain of Friend spleen focus-forming virus. Isolation of glycopeptides containing individual glycosylation sites. Strube KH, et al. Eur J Biochem 1989 Sep 1;184(1):119-24
Molecular cloning and mapping of the ecotropic leukemia provirus Emv-23 provides molecular access to the albino-deletion complex in mouse chromosome 7. Rinchik EM, et al. Genomics 1989 Apr;4(3):251-8
The human homolog of the myeloproliferative virus maps to chromosome band 1p34. Le Coniat M, et al. Hum Genet 1989 Sep;83(2):194-6
Retrovirally induced murine B-cell tumors rarely show proviral integration in sites common in T-cell tumors. Matthews EA, et al. Int J Cancer 1989 Jun 15;43(6):1120-5
The spleen focus-forming virus envelope glycoprotein is defective in oligomerization. Kilpatrick DR, et al. J Biol Chem 1989 Jun 25;264(18):10732-7
Isolation and characterization of temperature-sensitive mutants of Abelson murine leukaemia virus that exhibit dissociation among morphological transformation, soft agar colony-forming ability and tyrosine kinase activity. Oka Y, et al. J Gen Virol 1989 Sep;70 (Pt 9):2527-32
Tumor necrosis factor-alpha affects LTR-controlled oncogene expression in transformed mouse fibroblasts at the post-transcriptional level. Seliger B, et al. J Immunol 1988 Sep 15;141(6):2138-44
Development and characterization of an Fv-1-sensitive retrovirus-packaging system: single-hit titration kinetics observed in restrictive cells. Boone LR, et al. J Virol 1989 Jun;63(6):2592-7
Identification of the SL3-3 virus enhancer core as a T-lymphoma cell-specific element. Boral AL, et al. J Virol 1989 Jan;63(1):76-84
Negative regulatory element associated with potentially functional promoter and enhancer elements in the long terminal repeats of endogenous murine leukemia virus-related proviral sequences. Ch'ang LY, et al. J Virol 1989 Jun;63(6):2746-57
Age-dependent poliomyelitis of mice: expression of endogenous retrovirus correlates with cytocidal replication of lactate dehydrogenase-elevating virus in motor neurons. Contag CH, et al. J Virol 1989 Oct;63(10):4362-9
Suppression of UAA and UGA termination codons in mutant murine leukemia viruses. Feng YX, et al. J Virol 1989 Jun; 63(6):2870-3
Genetic identification of endogenous polytropic proviruses by using recombinant inbred mice. Frankel WN, et al. J Virol 1989 Sep;63(9):3810-21
Genetic analysis of endogenous xenotropic murine leukemia viruses: association with two common mouse mutations and the viral restriction locus Fv-1. Frankel WN, et al. J Virol 1989 Apr;63(4):1763-74
Effect of proviral insertion on transcription of the murine B2mb gene. Frankel WN, et al. J Virol 1989 Jun; 63(6):2623-8
Influence of enhancer sequences on thymotropism and leukemogenicity of mink cell focus-forming viruses. Holland CA, et al. J Virol 1989 Mar;63(3):1284-92
Mapping of functional regions of murine retrovirus long terminal repeat enhancers: enhancer domains interact and are not independent in their contributions to enhancer activity. Hollon T, et al. J Virol 1989 Aug;63(8):3353-61
An amplified endogenous retroviral sequence on the murine Y chromosome related to murine leukemia viruses and viruslike 30S sequences. Hutchison KW, et al. J Virol 1989 Sep;63(9):4043-6
Pattern of expression of ecotropic murine leukemia virus in gonads of inoculated SWR/J mice. Panthier JJ, et al. J Virol 1989 May;63(5):2134-42
Ecotropic virus involvement in spontaneous B-cell lymphomas of CWD/LeAgl mice. Angel JM, et al. Leuk Res 1989;13(5):417-25
Characterization of cell markers in type B retroviral-induced thymic lymphomas—II. Surface antigen phenotype, karyotype and proviral integration pattern in cultured lymphoma cells and cloned lines. Mueller RE, et al. Leuk Res 1989;13(7):561-71
Comparison of three recombinant murine leukemia viruses carrying the v-src oncogene of avian sarcoma virus: differences in in vitro transformation and in vivo pathogenicity. Feuerman MH, et al. Mol Carcinog 1988; 1(1):57-66
Negative control region at the 5' end of murine leukemia virus long terminal repeats. Flanagan JR, et al. Mol Cell Biol 1989 Feb;9(2):739-46
Abelson murine leukemia virus induces platelet-derived growth factor-independent fibroblast growth: correlation with kinase activity and dissociation from full morphologic transformation. Rees-Jones RW, et al. Mol Cell Biol 1989 Jan;9(1):278-87
Mutant analysis of protein interactions with a nuclear factor I binding site in the SL3-3 virus enhancer. Nilsson P, et al. Nucleic Acids Res 1989 Jun 12;17(11):4061-75
The nucleotide sequence of the 3' region of the murine leukemia virus SL16c4. Pallisgaard N, et al. Nucleic Acids Res 1989 Aug 11;17(15):6413
DNase I sensitivity of immunoglobulin light chain genes in Abelson murine leukemia virus transformed pre-B cell lines. Persiani DM, et al. Nucleic Acids Res 1989 Jul 11; 17(13):5339-48
Analysis of A-MuLV transformed fibroblast lines for amplification of the c-myc, p53 and c-fos nuclear proto-oncogenes. Colledge WH, et al. Oncogene 1989 Jun; 4(6):753-7
Retroviral integration: structure of the initial covalent product and its precursor, and a role for the viral IN protein. Brown PO, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2525-9
In vitro-derived leukemic erythroid cell lines induced by a raf- and myc-containing retrovirus differentiate in response to erythropoietin. Klinken SP, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8506-10
Spontaneous germ-line ecotropic murine leukemia virus infection: implications for retroviral insertional mutagenesis and germ-line gene transfer. Copeland NG, et al. Prog Nucleic Acid Res Mol Biol 1989;36:221-34
Specific sequence deletions in two classes of murine leukemia virus-related proviruses in the mouse genome. Ch'ang LY, et al. Virology 1989 Feb;168(2):245-55
Biologic and molecular genetic characteristics of a unique MCF virus that is highly leukemogenic in ecotropic virus-negative mice. Chattopadhyay SK, et al. Virology 1989 Jan;168(1):90-100
An MuLV transmission vector system designed to permit recovery in E. coli of proviral and cellular flanking sequences. Jørgensen P, et al. Virus Genes 1988 Mar; 1(2):221-33

IMMUNOLOGY

Immunologic unresponsiveness to murine leukemia virus antigens: mechanisms and role in tumor development. Chieco-Bianchi L, et al. Adv Cancer Res 1988;51:277-306 (145 ref.)
Loss of tumorigenicity following in vitro MuLV infection is associated with induction of peritoneal natural killer cell activity. Thiel K, et al. Adv Exp Med Biol 1988;239:169-83
Regulation of IFN-gamma-induced host cell MHC antigen expression by Kirsten MSV and MLV. I. Effects on class I antigen expression. Maudsley DJ, et al. Immunology 1989 May;67(1):21-5
Regulation of IFN-gamma-induced host cell MHC antigen expression by Kirsten MSV and MLV. II. Effects on class II antigen expression. Maudsley DJ, et al. Immunology 1989 May;67(1):26-31
Primary virus-induced lymphomas evade T cell immunity by failure to express viral antigens. Vasmel WL, et al. J Exp Med 1989 Apr 1;169(4):1233-54
Evidence against expression of an endogenous murine leukemia virus causing cellular resistance to lysis by activated macrophages. Gooding LR, et al. J Immunol 1989 Jan 1;142(1):257-62
Biochemical analysis of a novel H-2 class I-like glycoprotein expressed in five AKR-(Gross virus) derived spontaneous T cell leukemias. Labeta MO, et al. J Immunol 1989 Aug 15;143(4):1245-53
Highly restricted tumor-specific antigen of radiation leukemia virus-induced murine leukemias. Meseguer A, et al. J Immunol 1989 Jun 1;142(11):4093-9
Measurement of binding specificity between T cell lymphomas and murine leukemia viruses. O'Neill HC, et al. J Immunol Methods 1989 Aug 15;122(1):79-90
CUG initiation codon used for the synthesis of a cell surface antigen coded by the murine leukemia virus. Prats AC, et al. J Mol Biol 1989 Jan 20;205(2):363-72
Receptor mediated leukemogenesis: murine leukemia virus interacts with BCL1 lymphoma cell surface IgM. McGrath MS, et al. J Mol Cell Immunol 1987;3(4):227-42

METABOLISM

Neutralization of mouse xenotropic virus by lipoproteins involves binding to the virions. Sernatinger J, et al. J Gen Virol 1988 Oct;69 (Pt 10):2657-61
Leukemogenic membrane glycoprotein encoded by Friend spleen focus-forming virus: transport to cell surfaces and shedding are controlled by disulfide-bonded dimerization and by cleavage of a hydrophobic membrane anchor. Gliniak BC, et al. J Virol 1989 Sep;63(9):3561-8
Apparent Epo-independence of erythroid cells infected with the polycythemia-inducing strain of Friend spleen focus-forming virus is not due to Epo production or change in number or affinity of Epo receptors. Ruscetti SK, et al. Leukemia 1989 Oct;3(10):703-7

PATHOGENICITY

The accelerating role of Abelson murine leukemia virus in murine plasmacytoma development: in vitro infection of spleen cells generates donor-type tumors after transfer to pristane-treated BALB/c mice. Sugiyama H, et al. Int J Cancer 1989 Aug 15;44(2):348-52
Multiple steps are required for the induction of tumors by Abelson murine leukemia virus. Green PL, et al. J Virol 1989 May;63(5):1989-94
Retrovirus-induced murine acquired immunodeficiency syndrome: natural history of infection and differing susceptibility of inbred mouse strains. Hartley JW, et al. J Virol 1989 Mar;63(3):1223-31
Distinct helper virus requirements for Abelson murine leukemia virus-induced pre-B- and T-cell lymphomas. Poirier Y, et al. J Virol 1989 May;63(5):2088-98
Prevention of T-cell lymphoma in AKR/J mice. Peled A, et al. Leukemia 1988 Dec;2(12 Suppl):125S-131S
Preleukemic cells induced by RadLV are of an oligoclonal nature. Yefenof E, et al. Leukemia 1988 Dec;2(12 Suppl):97S-101S
Dual virus etiology of age-dependent poliomyelitis of mice. A potential model for human motor neuron diseases. Contag CH, et al. Microb Pathog 1989 Jun;6(6):391-401 (58 ref.)
Defective virus is associated with induction of murine retrovirus-induced immunodeficiency syndrome. Chattopadhyay SK, et al. Proc Natl Acad Sci U S A 1989 May;86(10):3862-6
Retrovirus-induced murine motor neuron disease: mapping the determinant of spongiform degeneration within the envelope gene. Paquette Y, et al. Proc Natl Acad Sci U S A 1989 May;86(10):3896-900

PHYSIOLOGY

Retrovirus-induced cell fusion is enhanced by protease treatment. Andersen KB, et al. J Gen Virol 1989 Jul;70 (Pt 7):1921-7
Identification of a common helper provirus integration site in Abelson murine leukemia virus-induced lymphoma DNA. Poirier Y, et al. J Virol 1988 Nov;62(11):3985-92
Characterization of cell markers in type B retroviral-induced thymic lymphomas—I. Surface antigen phenotype and karyotype in developing and primary lymphomas. Mueller RE, et al. Leuk Res 1989;13(7):553-9
Myeloid progenitor cells transformed by the myeloproliferative leukemia virus proliferate and differentiate in vitro without the addition of growth factors. Wendling F, et al. Leukemia 1989 Jul;3(7):475-80
Augmentation of helper virus replication in the presence of defective retrovirus. Anand R, et al. Microbios 1989; 58(235):71-82
Identification of a novel bone marrow-derived B-cell progenitor population that coexpresses B220 and Thy-1 and is highly enriched for Abelson leukemia virus targets. Tidmarsh GF, et al. Mol Cell Biol 1989 Jun;9(6):2665-71
Virology: leukaemia virus receptor [news] Weiss RA.

Nature 1989 Jun 8;339(6224):425

[Lack of relationship between viral leukemogenesis and immunosuppression in the mouse] Ruggiero RA, et al. Rev Argent Microbiol 1983;15(2):119–30 (Eng. Abstr.) (Spa)

MOUSE MAMMARY TUMOR VIRUS see MAMMARY CANCER VIRUS

MOUSE SARCOMA VIRUSES

Protein kinase C activities are increased in rat thyroid epithelial cells expressing v-ras genes. Spina A, et al. Biochem Biophys Res Commun 1988 Dec 30; 157(3):1093–103

The identification of active forms of cysteine proteinases in Kirsten-virus-transformed mouse fibroblasts by use of a specific radiolabelled inhibitor. Mason RW, et al. Biochem J 1989 Jan 1;257(1):125–9

Sodium-n-butyrate induces secretion and substrate accumulation of p52 in Kirsten sarcoma virus-transformed rat kidney fibroblasts. Ryan MP, et al. Int J Biochem 1989; 21(1):31–7

Alteration of growth and differentiation factors response by Kirsten and Harvey sarcoma viruses in the IL-3–dependent murine hematopoietic cell line 32D C13(G). Mavilio F, et al. Oncogene 1989 Mar;4(3):301–8

[The suppression of osteogenic differentiation markers in human osteosarcoma cells transformed by Kirsten murine sarcoma virus] Katayama N. Kokubyo Gakkai Zasshi 1988 Dec;55(4):585–98 (Eng. Abstr.) (Jpn)

ANALYSIS

Secretion, glycosylation, and phosphorylation of rat-specific, transformation-associated proteins in Moloney murine sarcoma virus-transformed rat cells. Li WJ, et al. Cancer Res 1989 Apr 1;49(7):1746–51

DRUG EFFECTS

Potentiating effect of ribavirin on the anti-retrovirus activity of 3'-azido-2,6-diaminopurine-2',3'-dideoxyriboside in vitro and in vivo. Balzarini J, et al. Antiviral Res 1989 May-Jun;11(4):161–71

GENETICS

In vitro testing of a potential retroviral vector for producing transgenic livestock. Squire KR, et al. Am J Vet Res 1989 Aug;50(8):1423–7

Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al. Basic Life Sci 1988;49:457–60

Neoplastic and euplastic periosteal bone formation induced in rats by Mu-MSV inoculation. Włodarski KH. Folia Morphol (Warsz) 1987;46(1–2):1–8

2'-5'-oligoadenylate synthetase gene expression in normal and murine sarcoma virus-transformed NIH 3T3 cells. David S, et al. J Virol 1989 Mar;63(3):1116–22

Oncogenicity of human N-ras oncogene and proto-oncogene introduced into retroviral vectors. Souyri M, et al. J Virol 1989 Sep;63(9):3944–53

Harvey murine sarcoma virus: influences of coding and noncoding sequences on cell transformation in vitro and oncogenicity in vivo. Velu TJ, et al. J Virol 1989 Mar; 63(3):1384–92

The Kirsten murine sarcoma virus induces rat thyroid carcinomas in vivo. Portella G, et al. Oncogene 1989 Feb; 4(2):181–8

Transforming potential and growth stimulating activity of the v-fos and c-fos genes carried by avian retrovirus vectors. Iba H, et al. Oncogene Res 1988;2(2):121–33

In vitro-derived leukemic erythroid cell lines induced by a raf- and myc-containing retrovirus differentiate in response to erythropoietin. Klinken SP, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8506–10

IMMUNOLOGY

Immunologic unresponsiveness to murine leukemia virus antigens: mechanisms and role in tumor development. Chieco-Bianchi L, et al. Adv Cancer Res 1988;51:277–306 (145 ref.)

Regulation of IFN-gamma-induced host cell MHC antigen expression by Kirsten MSV and MLV. II. Effects on class II antigen expression. Maudsley DJ, et al. Immunology 1989 May;67(1):26–31

Regulation of IFN-gamma-induced host cell MHC antigen expression by Kirsten MSV and MLV. I. Effects on class I antigen expression. Maudsley DJ, et al. Immunology 1989 May;67(1):21–5

Induction of effective immunity to Moloney murine sarcoma virus using monoclonal anti-idiotypic antibody as immunogen. Powell TJ, et al. J Immunol 1989 Feb 15; 142(4):1318–24

PATHOGENICITY

Recombinant BALB and Harvey sarcoma viruses with normal proto-ras-coding regions transform embryo cells in culture and cause tumors in mice. Cichutek K, et al. J Virol 1989 Mar;63(3):1377–83

Susceptibility to raf and raf/myc retroviruses is governed by different genetic loci. Klinken SP, et al. J Virol 1989 May;63(5):2411–4

PHYSIOLOGY

Cytoarchitecture of Kirsten sarcoma virus-transformed rat kidney fibroblasts: butyrate-induced reorganization within the actin microfilament network. Ryan MP, et al. J Cell Physiol 1988 Oct;137(1):25–34

MOUSE TUMOR VIRUSES

GENETICS

Evidence of recombinant ecotropic provirus integration in thymic lymphomas induced by direct or indirect radiation effects. Baylac-Kalabokias H, et al. Leuk Res 1989; 13(2):131–43

Human progesterone receptor binding to mouse mammary tumor virus deoxyribonucleic acid: dependence on hormone and nonreceptor nuclear factor(s). Edwards DP, et al. Mol Endocrinol 1989 Feb;3(2):381–91

MOUTH

Monobacterial and mixed bacterial plaques of Streptococcus mutans and Veillonella alcalescens in an artificial mouth: development, metabolism, and effect on human dental enamel. Noorda WD, et al. Caries Res 1988;22(6):342–7

Toothbrush: an unusual foreign body in ENT practice. Shirali GN, et al. J Laryngol Otol 1988 Nov;102(11):1068–9

Radiographically detectable intraoral positional radiation stent. Knudson RC, et al. J Prosthet Dent 1989 Jan; 61(1):1–3

[Active irrigation of the oral cavity in the combined treatment and rehabilitation of maxillofacial patients] Slepchenko MA, et al. Voen Med Zh 1988 Oct;(10):58–9 (Rus)

ANATOMY & HISTOLOGY

A simple preparatory method for scanning electron microscopy of the mouthparts of muscoid flies (diptera). Kovács FS. Acta Biol Hung 1988;39(4):441–7

Normal CT anatomy of the tongue, floor of mouth and oropharynx. Stutley J, et al. Clin Radiol 1989 May; 40(3):248–53

Functional anatomy of the upper airway. Morris IR. Emerg Med Clin North Am 1988 Nov;6(4):639–69 (17 ref.)

A study of the utility of measuring mandibular mobility by means of the interincisal dimension. Ellis E 3d, et al. Oral Surg Oral Med Oral Pathol 1989 Feb;67(2):132–6

Intraoral application of microcolpohysteroscopy. A new technique for clinical examination of oral tissues at high magnification. L'Estrange P, et al. Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):282–5

CYTOLOGY

Radioautographic demonstration of receptors for epidermal growth factor in various cells of the oral cavity. Cho MI, et al. Anat Rec 1988 Oct;222(2):191–200

DRUG EFFECTS

[Organic function of the mouth in mercury workers] Potilko VI, et al. Gig Tr Prof Zabol 1988 Jul;(7):23–5 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Growth allometry of craniomandibular muscles, tendons, and bones in the laboratory rat (Rattus norvegicus): relationships to oromotor maturation and biomechanics of feeding. Hurov J, et al. Am J Anat 1988 Aug;182(4):381–94

The relationship of breastfeeding to oral development and dental concerns. Westover KM, et al. ASDC J Dent Child 1989 Mar-Apr;56(2):140–3 (26 ref.)

IMMUNOLOGY

Comparison of results of skin prick tests (with fresh foods and commercial food extracts) and RAST in 100 patients with oral allergy syndrome. Ortolani C, et al. J Allergy Clin Immunol 1989 Mar;83(3):683–90

[Antibacterial protection and the microbiological status of the oral cavity in Sjögren's disease] Pozharitskaia MM, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Jun;(6):11–5 (Eng. Abstr.) (Rus)

INJURIES

Prophylactic penicillin for intraoral wounds. Steele MT, et al. Ann Emerg Med 1989 Aug;18(8):847–52

Electrical burns of the oral commissure: treatment results and principles of reconstruction. Su CT, et al. Ann Plast Surg 1980 Oct;5(4):251–9

Dentofacial trauma in children. Harrington MS, et al. ASDC J Dent Child 1988 Sep-Oct;55(5):334–8

Traumatic implantation of a toothbrush: an unusual hazard of oral hygiene. MacLeod SP. ASDC J Dent Child 1989 Jan-Feb;56(1):69–70

Orofacial trauma and mouth-protector wear among high school varsity basketball players. Maestrello-deMoya MG, et al. ASDC J Dent Child 1989 Jan-Feb;56(1):36–9

Use of a gum shield for Parkinson's disease patients [letter] Hussein SB. Br Dent J 1989 May 6;166(9):320

Trauma to the oral cavity. Bakland LK, et al. Clin Sports Med 1989 Jan;8(1):25–41 (25 ref.)

Studies on improvement of pharmaceutical preparations prescribed in hospitals. IV. Dibekacin sulfate viscous solution for treatment of mouth and throat wounds. Namiki N, et al. Drug Des Deliv 1986 Nov;1(2):157–65

Appliance therapy for perioral electrical burns: a conservative approach. Sadove AM, et al. J Burn Care Rehabil 1988 Jul-Aug;9(4):391–5

Oral trauma. Emergency care of lacerations, fractures, and burns. Comer RW, et al. Postgrad Med 1989 Feb 1; 85(2):34–7, 41

[Possible oral traumatic and infectious risks in sexual relations] Piette E. Ann Otolaryngol Chir Cervicofac 1989; 106(2):97–104 (92 ref.) (Eng. Abstr.) (Fre)

INNERVATION

Effects of intraoral mechanoreceptor stimulation on reticular formation neurones, in the rabbit. Ermirio R, et al. Arch Ital Biol 1989 Feb;127(1):1–11

Changes in mechanoreceptive field properties of trigeminal somatosensory brainstem neurons induced by stimulation of nucleus raphe magnus in cats. Chiang CY, et al. Brain Res 1989 Apr 24;485(2):371–81

Response characteristics of lamb trigeminal neurons to stimulation of the oral cavity and epiglottis with different sensory modalities. Sweazey RD, et al. Brain Res Bull 1989 May;22(5):883–91

Perioral somatosensory determinants of nursing behavior in Norway rats (Rattus norvegicus). Stern JM, et al. J Comp Psychol 1989 Sep;103(3):269–80

Radiological studies of the cheiro-oral syndrome. Kawakami Y, et al. J Neurol 1989 Mar;236(3):177–81

Bilateral cheiro-oral syndrome following pontine haemorrhage. Yasuda Y, et al. J Neurol 1988 Nov; 235(8):489–90

Cheiro-oral syndrome with bilateral oral involvement: a study of pontine lesions by high-resolution magnetic resonance imaging. Matsumoto S, et al. J Neurol Neurosurg Psychiatry 1989 Jun;52(6):792–4

Organization of early forms of kitten behavior after partial oral deprivation. Lushchekin VS, et al. Neurosci Behav Physiol 1988 Nov-Dec;18(6):498–504

Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. Neurosci Res 1989 Apr; 6(4):283–98

[Peripheral control of the feeding behavior of fresh water mollusks] Iagodin SV, et al. Fiziol Zh SSSR 1989 Mar; 75(3):374–80 (Eng. Abstr.) (Rus)

METABOLISM

Retention of topical fluoride in the mouths of xerostomic subjects. Billings RJ, et al. Caries Res 1988;22(5):306–10

Human lung deposition of particles suspended in air or in helium/oxygen mixture. Svartengren M, et al. Exp Lung Res 1989 Jul;15(4):575–85

[Immunocytochemical study of the development of the oral cavity in the rat] Casasco A, et al. Bull Group Int Rech Sci Stomatol Odontol 1989 Jan; 32(1):13–7 (Eng. Abstr.) (Fre)

MICROBIOLOGY

Intergeneric coaggregation among human oral bacteria and ecology of dental plaque. Kolenbrander PE. Annu Rev Microbiol 1988;42:627–56 (159 ref.)

Susceptibility testing of Danish isolates of Capnocytophaga and CDC group DF-2 bacteria. Bremmelgaard A, et al. APMIS 1989 Jan;97(1):43–8

Coaggregation properties of human oral Veillonella spp.: relationship to colonization site and oral ecology. Hughes CV, et al. Appl Environ Microbiol 1988 Aug;54(8):1957–63

The effect of lipopolysaccharide from the oral bacterium Bacteroides gingivalis on osteoclastic resorption of sperm-whale dentine slices in vitro. Sismey-Durrant HJ, et al. Arch Oral Biol 1987;32(12):911–3

Arginolytic and ureolytic activities of pure cultures of human oral bacteria and their effects on the pH response of salivary sediment and dental plaque in vitro. Wijeyeweera RL, et al. Arch Oral Biol 1989;34(1):43–53

Usnic acid revisited, its activity on oral flora. Ghione M, et al. Chemioterapia 1988 Oct;7(5):302–5

Frequency and density of yeasts in the mouths of malnourished children. Aldred MJ, et al. Community Dent Oral Epidemiol 1989 Jun;17(3):136–8

Sink flora in a long-stay hospital is determined by the patients' oral and rectal flora. Van Saene HK, et al. Epidemiol Infect 1989 Apr;102(2):231–8

IgA1 proteases of oral streptococci: ecological aspects. Kilian M, et al. Immunol Invest 1989 Jan-May;18(1–4):161–70

Antigens released from four oral bacteria in periodontitis. Tolo K, et al. Immunol Invest 1989 Jan-May;18(1–4):171–85

Coaggregation of Fusobacterium nucleatum, Selenomonas flueggei, Selenomonas infelix, Selenomonas noxia, and Selenomonas sputigena with strains from 11 genera of oral bacteria. Kolenbrander PE, et al. Infect Immun 1989 Oct; 57(10):3194–203

The efficacy of the rubber dam as a barrier to the spread of microorganisms during dental treatment. Cochran MA, et al. J Am Dent Assoc 1989 Jul;119(1):141–4

In vitro susceptibilities and biotypes of Candida albicans isolates from the oral cavities of patients infected with

human immunodeficiency virus. Korting HC, et al. **J Clin Microbiol** 1988 Dec;26(12):2626–31

Enzyme profiles of oral spirochetes in RapID–ANA system. Syed SA, et al. **J Clin Microbiol** 1988 Oct;26(10):2226–8

Effect of oral microflora on interpreting hydrogen breath test [letter] Harboubi NY, et al. **J Clin Pathol** 1988 Nov; 41(11):1244–5

Effects of carbohydrate pulses and pH on population shifts within oral microbial communities in vitro. Bradshaw DJ, et al. **J Dent Res** 1989 Sep;68(9):1298–302

Difference in amounts between titratable acid and total carboxylic acids produced by oral streptococci during sugar metabolism. Iwami Y, et al. **J Dent Res** 1989 Jan; 68(1):16–9

Differential modulation of adherence of oral streptococci by human neutrophil myeloperoxidase. Miyasaki KT, et al. **J Dent Res** 1988 Oct;67(10):1300–6

Effect of inoculum size and frequency on the establishment of Streptococcus mutans in the oral cavities of experimental animals. Ooshima T, et al. **J Dent Res** 1988 Jun;67(6):964–8

Antibiotic resistance and production of inhibitory substances among bacterial strains isolated from the oral cavities of BALB/c mice. St-Amand L, et al. **J Dent Res** 1988 Dec; 67(12):1518–22

Serological properties and immunobiological activities of lipopolysaccharides from black-pigmented and related oral Bacteroides species. Fujiwara T, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2867–76

Eikenella corrodens in human mouth flora. Rayan GM, et al. **J Hand Surg [Am]** 1988 Nov;13(6):953–6

Coaggregation of black-pigmented Bacteroides species with other oral bacteria. Eke PI, et al. **J Med Microbiol** 1989 Jan;28(1):1–4

Penicillin tolerance among oral streptococci. Holbrook WP, et al. **J Med Microbiol** 1988 Sep;27(1):17–22

Secretor status, candidal carriage and candidal infection in patients with diabetes mellitus. Lamey PJ, et al. **J Oral Pathol** 1988 Aug;17(7):354–7

Detection and distribution of Actinobacillus actinomycetemcomitans in the primary dentition. Alaluusua S, et al. **J Periodontol** 1988 Aug;59(8):504–7

Oral hygiene and the prevalence of oral group D streptococci in medically-physically compromised and periodontal disease patients. McCrary BR, et al. **J Periodontol** 1989 May;60(5):255–8

Oral flora of mongrel and beagle dogs with periodontal disease. Isogai E, et al. **Nippon Juigaku Zasshi** 1989 Feb; 51(1):110–8

Effect of topical administration of vancomycin versus chlorhexidine on alpha-hemolytic streptococci in oral cavity. Borthen Svinhufvud L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):304–9

Effects of aging, diet restriction and microflora on oral health in humans and animals. Rosen S, et al. **Prog Clin Biol Res** 1989;287:75–85

Potentially pathogenic microorganisms in the oral cavity during febrile episodes in immunocompromised patients with haematologic malignancies. Bergmann OJ, et al. **Scand J Infect Dis** 1989;21(1):43–51

Antimicrobial resistance in oral and colonic bacteroides. Crook DW, et al. **Scand J Infect Dis Suppl** 1988;57:55–64 (66 ref.)

Bacteroides species from the oral cavity and oral-associated diseases of cats. Love DN, et al. **Vet Microbiol** 1989 Mar; 19(3):275–81

[Buccal microbiology, dental plaque and the incidence of caries in children with or without removable orthodontal appliances] Platiau R, et al. **Acta Stomatol Belg** 1988 Dec; 85(4):299–311 **(Fre)**

[Ultrastructural study of the action of concentrated solutions of chlorhexidine digluconate on cocci in salivary flora in vitro] Emmanouil-Nikoloussi E, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):11–5 (Eng. Abstr.) **(Fre)**

[In vitro antibiotic sensitivity of several species of oral spirochetes] Sbordone L, et al. **Minerva Stomatol** 1989 Feb; 38(2):227–31 (Eng. Abstr.) **(Ita)**

[Fluorine and flora of the oral cavity: relationship to dental caries] Fabio U, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):137–66 (100 ref.) (Eng. Abstr.) **(Ita)**

[The role of the mothers and newborn infant in cross infections caused by yeast-like fungi] Prosiecki R, et al. **Ginekol Pol** 1988 Mar;59(3):139–46 (Eng. Abstr.) **(Pol)**

[Ecologic aspects of Actinobacillus actinomycetemcomitans: isolation and characterization of strains] Avila-Campos MJ, et al. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):301–5 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Mermis nigrescens (Mermithidae: Nematoda) recovered from the mouth of a child. Poinar GO Jr, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):478–9

Oral protozoa in a Kenyan population. Chunge RN, et al. **East Afr Med J** 1988 Mar;65(3):203–7

PATHOLOGY

Prediction of malignant transformation in oral epithelial lesions by image cytometry. Abdel-Salam M, et al. **Cancer** 1988 Nov 1;62(9):1981–7

Epithelial dysplasia of the oral cavity and lips. Kaugars GE, et al. **Cancer** 1988 Nov 15;62(10):2166–70

Mitotic phase distribution in oral epithelial hyperplasia and neoplasia. Ojo MA, et al. **Histopathology** 1988 Aug; 13(2):213–9

Metric results of vestibuloplasty in unilateral cleft patients. Quarta M, et al. **J Craniomaxillofac Surg** 1989 May; 17(4):175–8

Idiopathic fibrosis of the upper aero-digestive tract. Violaris NS, et al. **J Laryngol Otol** 1989 Mar;103(3):333–4

Cephalometric airway analysis in obstructive sleep apnea syndrome. Strelzow VV, et al. **Laryngoscope** 1988 Nov; 98(11):1149–58

MRI of the floor of the mouth, tongue and orohypopharynx. Kassel EE, et al. **Radiol Clin North Am** 1989 Mar; 27(2):331–51 (46 ref.)

Effects of migrating Gasterophilus intestinalis larvae (Diptera: Gasterophilidae) on the mouth of the horse. Cogley TP. **Vet Parasitol** 1989 Jun;31(3–4):317–31

[Morphologic and functional changes in oral tissues in old age] Mareš V. **Cas Lek Cesk** 1988 Jul 15;127(29):901–4 (Eng. Abstr.) **(Cze)**

PHYSIOLOGY

Concurrence of mouthing movement and rapid eye movement/non-rapid eye movement phases with advance in gestation of the human fetus. Horimoto N, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):344–51

Maximal relaxation rates of esophageal, nose, and mouth pressures during a sniff reflect inspiratory muscle fatigue. Koulouris N, et al. **Am Rev Respir Dis** 1989 May; 139(5):1213–7

Effect of salicylate on upper airway dilating muscles in anesthetized dogs. Oliven A, et al. **Am Rev Respir Dis** 1989 Jan;139(1):170–5

Effects of ozone exposure: a comparison between oral and nasal breathing. Hynes B, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):357–60

Temperature changes of materials during impression taking. Jamani KD, et al. **Br Dent J** 1988 Aug 20;165(4):129–32

Fetal mouth movements during behavioural states 1F and 2F. van Woerden EE, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):97–105

The role of saliva in maintaining oral homeostasis. Mandel ID. **J Am Dent Assoc** 1989 Aug;119(2):298–304 (90 ref.)

Transmission to the chest of sound introduced at the mouth. Kraman SS, et al. **J Appl Physiol** 1989 Jan;66(1):278–81

Mouth pressure curve on abrupt interruption of airflow during forced expiration. Ohya N, et al. **J Appl Physiol** 1989 Jan;66(1):509–17

Sensory inputs from the oral region to the cerebral cortex in behaving rats: an analysis of unit responses in cortical somatosensory and taste areas during ingestive behavior. Yamamoto T, et al. **J Neurophysiol** 1988 Oct;60(4):1303–21

Oral habits in common between tension headache and non-headache populations. Moss RA, et al. **J Oral Rehabil** 1989 Jan;16(1):71–4

The effect of removable partial dentures on the oral function in shortened dental arches. Witter DJ, et al. **J Oral Rehabil** 1989 Jan;16(1):27–33

Left-sided oral asymmetries in spontaneous but not posed smiles. Wylie DR, et al. **Neuropsychologia** 1988; 26(6):823–32

Buffering effect of antacids in the mouth—a new treatment of dental erosion? Meurman JH, et al. **Scand J Dent Res** 1988 Oct;96(5):412–7

[Nonspecific compensatory-adaptive reaction in the organs of the rabbit oral cavity in the early periods after sensory denervation] Gemonov VV, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):46–9 **(Rus)**

PHYSIOPATHOLOGY

The relationship between oral sensation and drooling in persons with cerebral palsy. Weiss-Lambrou R, et al. **Am J Occup Ther** 1989 Mar;43(3):155–61

The measurement of inspiratory muscle strength by sniff esophageal, nasopharyngeal, and mouth pressures. Koulouris N, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):641–6

Oral function in the physically handicapped with or without severe mental retardation. Oreland A, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):17–25

Oral-motor dysfunction and failure to thrive among inner-city infants. Mathisen B, et al. **Dev Med Child Neurol** 1989 Jun;31(3):293–302

Cheiro-oral syndrome: does it have a specific localizing value? Ten Holter J, et al. **Eur Neurol** 1988;28(6):326–30

Common upper airway disorders in the elderly and their management. Close LG, et al. **Geriatrics** 1989 Jan; 44(1):67–8, 71–2

Analysis of vocal tract parameters in parkinsonian speech. Gath I, et al. **J Acoust Soc Am** 1988 Nov;84(5):1628–34

What is it? Case 5, 1986. **Mov Disord** 1986;1(4):309–18

Comparison of orosensory confusions of hearing and hearing-impaired adults. Lieberth AK. **Percept Mot Skills** 1988 Dec;67(3):975–80

How many manoeuvres should be done to measure maximal inspiratory mouth pressure in patients with chronic airflow obstruction? Fiz JA, et al. **Thorax** 1989 May;44(5):419–21

RADIATION EFFECTS

[Radiation damage to the organs of the oral cavity] Matiakin GG, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):33–6 (Eng. Abstr.) **(Rus)**

SURGERY

The internal oblique-iliac crest osseomyocutaneous free flap in oromandibular reconstruction. Report of 20 cases. Urken ML, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):339–49

Fate of skin element of pectoralis major flap in intraoral reconstruction. Wei WI, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):360–3

The cost benefit of routine pre-operative Hb investigations for oral surgery' [letter] Morse MH. **Br Dent J** 1989 Feb 25;166(4):112

'Oral surgery: problems' [letter] Samaranayake LP. **Br Dent J** 1989 May 20;166(10):361

The masseter muscle cross-over flap—a versatile flap for reconstruction in the oral cavity. Langdon JD. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):124–31

The pectoralis major muscle flap without skin in intra-oral reconstruction. Phillips JG, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):479–85

Surgical stents and major oral maxillofacial surgery. Small SA. **Dent Clin North Am** 1989 Jul;33(3):497–509 (19 ref.)

Intraoral and oropharyngeal reconstruction using a de-epithelialized forearm flap. Kawashima T, et al. **Head Neck** 1989 Jul–Aug;11(4):358–63

Lateral arm free flap in oral cavity reconstruction: a functional evaluation. Matloub HS, et al. **Head Neck** 1989 May–Jun;11(3):205–11

Ketoprofen in oral surgery pain: a review. Cooper SA. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S40–6 (12 ref.)

The myocutaneous platysma flap for the reconstruction of intraoral defects after radical tumour resection. Howaldt HP, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):237–40

The transoral approach to the superior cervical spine. A review of 53 cases of extradural cervicomedullary compression. Hadley MN, et al. **J Neurosurg** 1989 Jul; 71(1):16–23

Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients. Menezes AH, et al. **J Neurosurg** 1988 Dec; 69(6):895–903

Management of the oral surgery patient addicted to heroin. Cook H, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):281–5 (17 ref.)

Extubation criteria for oral and maxillofacial surgery patients. Zulian MA, et al. **J Oral Maxillofac Surg** 1989 Jun; 47(6):616–20 (21 ref.)

Dental laser applications: emerging to maturity. Willenborg GC. **Lasers Surg Med** 1989;9(4):309–13 (38 ref.)

Thin cutaneous flap for intra oral reconstruction: the dorsalis pedis free flap revisited. Banis JC Jr. **Microsurgery** 1988; 9(2):132–40

Transoral approach to extradural lesions of the lower clivus and upper cervical spine: an experience of 19 cases. Di Lorenzo N. **Neurosurgery** 1989 Jan;24(1):37–42

Transoral removal of missile fragments from the C1–C2 area: report of four cases. Mangiardi JR, et al. **Neurosurgery** 1988 Aug;23(2):254–7

Infrared thermography in oral and maxillofacial surgery. Pogrel MA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):126–31

An evaluation of the clinical applications of diagnostic ultrasonography in oral surgery. Wilson IR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):242–8 (19 ref.)

The buccinator musculomucosal flap: anatomic study and clinical application. Bozola AR, et al. **Plast Reconstr Surg** 1989 Aug;84(2):250–7

Postoperative complication rate of oral surgery outpatients: a study of cases treated during 1983–1984. Heliövaara A, et al. **Proc Finn Dent Soc** 1988;84(5–6):291–6

[Ankyloglossia superior syndrome: personal case report] Van Daele C, et al. **Acta Stomatol Belg** 1988 Sep;85(3):217–24 (Eng. Abstr.) **(Dut)**

[Secondary metastasis after excision of oral squamous cancer without local recurrence] Yamamoto E, et al. **Gan No Rinsho** 1989 Jun;35(7):815–24 (Eng. Abstr.) **(Jpn)**

[Results and postoperative function of oral cancer patients treated by surgery with immediate reconstruction] Amagasa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2591–7 (Eng. Abstr.) **(Jpn)**

MOUTH ABNORMALITIES

Oral clinicopathologic manifestations in maple syrup urine disease. Gazit D, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):694–7

DIAGNOSIS

[Biometry in the diagnosis and classification of oral and facial abnormalities] Muzj E. **Fortschr Kieferorthop** 1988 Dec; 49(6):498–512 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Clinical orodental abnormalities in Mexican children. Sedano HO, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):300–11 (59 ref.)

ETIOLOGY

Dental and oral abnormalities in selected ectodermal dysplasia syndromes. Levin LS. **Birth Defects** 1988; 24(2):205–27 (58 ref.)

Low set ears and small oral cavity with relative macroglossia in Down's syndrome: an explanation of the phenomenon. Krmpotic-Nemanic J, et al. **Chic Med Sch Q** 1970; 30(1):41–5

PATHOLOGY

[Dental abnormalities in several malformation conditions (cleft lip and/or palate, multiple malformation syndromes) in several dysostosis in children] Berio A, et al. **Minerva Pediatr** 1988 Dec;40(12):691–700 (Eng. Abstr.) **(Ita)**

MOUTH BREATHING

COMPLICATIONS

Otitis media with effusion and habitual mouth breathing in Dutch preschool children. van Bon MJ, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):119–25

DIAGNOSIS

A comparison between anamnestic, rhinomanometric and radiological methods of diagnosing mouth-breathing. Thüer U, et al. **Eur J Orthod** 1989 May;11(2):161–8

Rhinomanometry in children. Parker LP, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):127–37

ETIOLOGY

Partitioning of ventilation between nose and mouth: the role of nasal resistance. Leiter JC, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):432–8

PHYSIOPATHOLOGY

Lower anterior face height and lip incompetence do not predict nasal airway obstruction. Hartgerink DV, et al. **Angle Orthod** 1989 Spring;59(1):17–23

Mandibular form and position related to changed mode of breathing—a five-year longitudinal study. Kerr WJ, et al. **Angle Orthod** 1989 Summer;59(2):91–6

Lack of correlation between mouth-breathing and bite force. Ingervall B, et al. **Eur J Orthod** 1989 Feb;11(1):43–6

Breathing route influences upper airway muscle activity in awake normal adults. Basner RC, et al. **J Appl Physiol** 1989 Apr;66(4):1766–71

Control of extrathoracic airway dynamics. Schultz EL, et al. **J Appl Physiol** 1989 Jun;66(6):2839–43

Effect of respiratory rate, respiratory depth, and open versus closed mouth breathing on sublingual temperature. Neff J, et al. **Res Nurs Health** 1989 Jun;12(3):195–202

The effects of pentobarbitone, diazepam and alcohol on oral breathing in neonatal and mature sheep. Wood GA, et al. **Respir Physiol** 1989 Jan;75(1):89–104

MOUTH DISEASES

see related
DIAGNOSIS, ORAL
HALITOSIS
ORAL HEALTH

Xeroderma pigmentosum—report of four cases. Jain VK, et al. **Ann Dent** 1989 Summer;48(1):25–7

Oral cancer and precancer—a dilemma [letter] Nally FF, et al. **Br Dent J** 1989 Jun 10;166(11):398

The cranial computed tomographic findings in patients with cheiro-oral syndrome. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Jul-Aug;12(4):237–9

Divisional abstracts, supported by the International College of Dentists. **J Dent Res** 1989 Apr;68(4):522–743

Abstracts of papers. 18th annual session, American Association for Dental Research. March 15–19, 1989, San Francisco, California. **J Dent Res** 1989 Mar;68 Spec No:164–438

Abstracts of papers, 67th general session, International Association for Dental Research; 6th meeting, IADR Irish Division; 72nd annual meeting, Scandinavian Association for Dental Research; 26th annual meeting, Continental European Division of the IADR. June 28–July 1, 1989, Dublin, Ireland. **J Dent Res** 1989 Jun;68 Spec No:848–1052

Pediatric maxillofacial infections: a retrospective study of 113 patients. Dodson TB, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):327–30

Selected abstracts: Biennial Congress of the International Association of Oral Pathologists held in conjunction with the American Association of Oral Pathology. Philadelphia, May 1988. **J Oral Pathol** 1988 Sep;17(8):429–42

First Oral Medicine World Workshop - June 1988. Mason D. **J Oral Pathol Med** 1989 Jan;18(1):18–20

42nd annual meeting of the American Academy of Oral Pathology. Philadelphia, Pennsylvania, May 8–12, 1988. Proceedings and abstracts. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):562–75

[Infectious diseases of viral etiology of oro-dermatologic interest (I)] Ruocco V, et al. **G Clin Med** 1988 Jun-Jul; 69(6-7):449–56 (10 ref.) **(Ita)**

[Infectious diseases of stomato-dermatological interest. II] Ruocco V, et al. **G Clin Med** 1988 Aug-Sep;69(8-9):525–32 (10 ref.) **(Ita)**

BLOOD

Circulating antibodies and immune complexes in oral mucosal diseases. Viander M, et al. **Proc Finn Dent Soc** 1989; 85(2):69–79 (27 ref.)

CHEMICALLY INDUCED

Azidothymidine-induced hyperpigmentation mimicking primary adrenal insufficiency. Merenich JA, et al. **Am J Med** 1989 Apr;86(4):469–70

Propylthiouracil-induced agranulocytosis: an unusual presentation and a possible mechanism. Toth EL, et al. **Am J Med** 1988 Nov;85(5):725–7 (26 ref.)

Erythema multiforme following cardizem therapy: report of a case. Brown FH, et al. **Ann Dent** 1989 Summer; 48(1):39–40, 52

Unusual hypersensitivity reaction to stannous fluoride. Razak IA, et al. **Ann Dent** 1988 Winter;47(2):37–9

'Angina bullosa haemorrhagica: a complication of long-term steroid inhaler use' [letter] High AS, et al. **Br Dent J** 1988 Nov 19;165(10):357

Angina bullosa haemorrhagica: a complication of long-term steroid inhaler use. High AS, et al. **Br Dent J** 1988 Sep 10;165(5):176–9

Recurrent erythema multiforme: a possible role of foodstuffs. Lewis MA, et al. **Br Dent J** 1989 May 20;166(10):371–3

'Angina bullosa haemorrhagica: a complication of long-term steroid inhaler use' [letter] Porter K, et al. **Br Dent J** 1988 Oct 22;165(8):279

Burning mouth syndrome due to nicotinic acid esters and sorbic acid. Haustein UF. **Contact Dermatitis** 1988 Sep; 19(3):225–6

Oral manifestations of drug therapies in the geriatric patient. Segelman AE. **Dent Clin North Am** 1989 Jan;33(1):67–73

Angiotensin-converting enzyme inhibitors implicated in oral mucosal lichenoid reactions. Firth NA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):41–4

[Oral dyskinesia in rats after a single administration of haloperidol combined with GABA-linoleamide. A model of dyskinesia in man] Vamvakides A. **Agressologie** 1989 Feb;30(2):89–91 (Eng. Abstr.) **(Fre)**

[Clinical picture of dentition, periodontium and mouth mucosa in pharmaceutical industry workers] Nowicka J, et al. **Med Pr** 1988;39(2):130–6 (Eng. Abstr.) **(Pol)**

CLASSIFICATION

Classification of oral lesions associated with HIV infection. Pindborg JJ. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):292–5 (33 ref.)

COMPLICATIONS

Skin and oral mucosal changes in patients infected with human immunodeficiency virus. Sindrup JH, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):440–3

Submucous fibrosis [letter] Allen PW, et al. **Anaesthesia** 1988 Sep;43(9):809–10

Oral and laryngeal histoplasmosis in a patient with Addison's disease. Zain RB, et al. **Ann Dent** 1988 Winter;47(2):31–3

Combined research meeting. AIDS in America [news] **Aust Dent J** 1988 Jun;33(3):245–6

The dental implications of HIV infection. Smith CJ. **Br Dent J** 1989 Feb 25;166(4):136

Surgery for severe trismus in submucous fibrosis [letter] Kavarana NM. **Br J Plast Surg** 1988 Sep;41(5):557

Canadian hospital dental department is engaged in HIV and AIDS research [letter] Gornitsky M. **Can Dent Assoc J** 1988 Sep;54(9):659

Lichen ruber mucosae with esophageal involvement. Van Maercke P, et al. **Endoscopy** 1988 Jul;20(4):158–60

Concomitant occurrence of oral submucous fibrosis, pemphigus and squamous cell carcinoma. Dayal PK, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):334–7

Diagnosis and management of the oral manifestations of HIV infection and AIDS. Greenspan JS, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):373–85 (49 ref.)

Intraoral mass associated with trismus [clinical conference] Bottenbley A, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):970–5

Orofacial manifestations of a group of British patients infected with HIV-1. Porter SR, et al. **J Oral Pathol Med** 1989 Jan;18(1):47–8

Oral manifestations of HIV infection in 75 Dutch patients. Schulten EA, et al. **J Oral Pathol Med** 1989 Jan;18(1):42–6

Severe angioneurotic oedema causing acute airway obstruction. Self F, et al. **J R Soc Med** 1988 Sep;81(9):544–5

Mouth disorders occur in AIDS-infected patients [news] **N Y State Dent J** 1989 Jun-Jul;55(6):48, 50

Oral hyperpigmentation in HIV-infected patients. Langford A, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):301–7

Oral mucosal lesions: association with the presence of antibodies to the human immunodeficiency virus. Melnick SL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul; 68(1):37–43

Antibody testing and counseling of dental patients at risk for human immunodeficiency virus (HIV) infection and associated clinical findings. Murrah VA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):432–9

Orodental considerations in facial pain. Solberg WK, et al. **Semin Neurol** 1988 Dec;8(4):318–23 (26 ref.)

DIAGNOSIS

Visual analogue scale assessment of postoperative swelling. A study of clinical inflammatory variables subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1988 Aug;46(4):233–40

Oral surgery: the diagnosis. Caplin RL. **Br Dent J** 1989 Feb 11;166(3):91–4

Registration procedures and exchange of data in the Sjögren's syndrome research team with special reference to the oral component. Axéll T. **Clin Exp Rheumatol** 1989 Mar-Apr; 7(2):137–9

Oral evaluation of patients with chemosensory disorders. Kadi J, et al. **Ear Nose Throat J** 1989 May;68(5):373, 377–8, 380 (7 ref.)

Board and home care. Oral health. Auld EM. **Geriatr Nurs (New York)** 1988 Nov-Dec;9(6):340–1

Oral pathology and prostheses—are they related? Investigations in an elderly population. Hoad-Reddick G. **J Oral Rehabil** 1989 Jan;16(1):75–87

Oral lesions mimicking hairy leukoplakia: a diagnostic dilemma. Green TL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):422–6

Recombinant DNA techniques. Basic concepts and practical applications in oral biology. Syrjänen SM. **Proc Finn Dent Soc** 1989;85(2):81–93 (56 ref.)

[Comparison of sonography of the soft tissues of the neck with computerized tomography and magnetic resonance] Westhofen M. **Rontgenblatter** 1989 May;42(5):210–5 (Eng. Abstr.) **(Ger)**

[AIDS: its early detection in dental practice (editorial)] Venner K. **Schweiz Monatsschr Zahnmed** 1989;99(2):143, 145 **(Ger, Fre)**

[Role of direct immunofluorescence in the diagnosis of oral lichen planus] Gandolfo S, et al. **Minerva Stomatol** 1989 May;38(5):509–14 (Eng. Abstr.) **(Ita)**

[Current methods of evaluating the status of oral health] Wochna-Sobańska M. **Przegl Epidemiol** 1988;42(3):262–8 (Eng. Abstr.) **(Pol)**

[The semeiotics of psychopathological syndromes in dental patients with stomatalgia (glossalgia)] Matveev VF, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):34–6 (Eng. Abstr.) **(Rus)**

[Idiopathic lenticular pigmentation of the buccal mucosa (Laugier's disease)] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988;(6):4–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Presentation and antimicrobial treatment of acute orofacial infections in general dental practice. Lewis MA, et al. **Br Dent J** 1989 Jan 21;166(2):41–5

Effect of the local application of ciclosporine A on chronic erosive lichen planus of the oral cavity [letter] Francès C, et al. **Dermatologica** 1988;177(3):194–5

Preliminary pharmacokinetic and clinical evaluation of ofloxacin in dental and oral cavity diseases. Pappalardo G, et al. **Int J Clin Pharmacol Res** 1989;9(3):229–32

Oral submucous fibrosis—a new treatment regimen. Gupta D, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):830–3

A clinical trial of PUVA treatment in oral lichen planus. Lehtinen R, et al. **Proc Finn Dent Soc** 1989;85(1):29–33

[Macroral: clinical study for evaluating efficacy and tolerance of miocamycin in infections in odontostomatology] Moniaci D, et al. **Minerva Stomatol** 1989 May;38(5):519–22 (Eng. Abstr.) **(Ita)**

[Use of thymopentin in the therapy of recurrent oral ulcers] Robotti MP, et al. **Minerva Stomatol** 1988 Jun; 37(6):497–503 (Eng. Abstr.) **(Ita)**

[Nimesulide: multicenter clinical study for evaluation of its therapeutic effect in odontostomatology] Solimei GE, et al. **Minerva Stomatol** 1989 Feb;38(2):221–6 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of the efficacy of combined amoxicillin and clavulanic acid in acute odontostomatological pathology] Zoccola GC, et al. **Minerva Stomatol** 1988 Dec; 37(12):1005–9 (Eng. Abstr.) **(Ita)**

[Sodium hypochlorite and its use in oral medicine] Perova MD, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):84–7 (69 ref.) **(Rus)**

EPIDEMIOLOGY

Relative incidence of intraoral pemphigus vulgaris, mucus membrane pemphigoid and lichen planus. Zegarelli DJ, et al. **Ann Dent** 1989 Summer;48(1):5–7

The oral needs and demands of a geriatric population at Mt. Olivet, Brisbane, 1986. Homan BT, et al. **Aust Dent J** 1988 Oct;33(5):424–32

Oral disorders and treatment implications in people over 75 years. MacEntee MI, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):271–3

Oral health in SFR Yugoslavia in 1986. Vrbič V, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):286–8

Association between cigarette smoking and prevalence of oral mucosal lesions among Malaysian army personnel. Zain RB, et al. **Community Dent Oral Epidemiol** 1989 Jun; 17(3):148–9

Study of epidemiological features of oral lichen planus. Chattopadhyay A. **Indian J Dermatol** 1988 Jan;33(1):13–5

Taxonomy, virulence and epidemiology of black-pigmented Bacteroides species in relation to oral infections. van

Steenbergen TJ, et al. **Infection** 1989 May–Jun;17(3):194–6
Leads from the MMWR. Prevalence of oral lesions and smokeless tobacco use in Northern Plains Indians. **JAMA** 1989 Jan 6;261(1):25–6
Betel-nut chewing and submucous fibrosis in Durban. Seedat HA, et al. **S Afr Med J** 1988 Dec 3;74(11):568–71
[A survey of Entamoeba gingivalis and Trichomonas buccalis in Xian] Li Z. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep;23(5):307–9 **(Chi)**
[Stomatological morbidity among the crews of the Northern Marine Steamship Company] Opravin AS, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):68–9 **(Rus)**

ETIOLOGY

Upper aerodigestive tract manifestations of cicatricial pemphigoid. Hanson RD, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):493–9
Oral condition in children treated with bone marrow transplantation. Dahllöf G, et al. **Bone Marrow Transplant** 1988 Jan;3(1):43–51
Oral blood blisters in angina bullosa haemorrhagica secondary to trauma of eating and dental injection. Garlick JA, et al. **Br Dent J** 1988 Oct 22;165(8):286–7
Oral blood blisters in angina bullosa haemorrhagica secondary to trauma of eating and dental injection' [letter] O'Riordan BC. **Br Dent J** 1989 Jan 7;166(1):7
Smokeless tobacco and oral disease. A review. Main JH, et al. **Can Dent Assoc J** 1988 Aug;54(8):586–91 (77 ref.)
Oral complications in cancer patients. Bodey GP, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):731–3
Traumatic ulcers and pain in adults during orthodontic treatment. Kvam E, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):154–7
Oral infections and fever in immunocompromised patients with haematologic malignancies. Bergmann OJ. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):207–13
The oral clinical features of HIV infection. Greenspan D, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):535–43 (40 ref.)
Mucocutaneous manifestations in patients infected with human immunodeficiency virus. Alessi E, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):290–7
National Institutes of Health consensus development conference statement: oral complications of cancer therapies: diagnosis, prevention, and treatment. **J Am Dent Assoc** 1989 Jul;119(1):179–83 (0 ref.)
Tobacco use and oral health. McCann D. **J Am Dent Assoc** 1989 Jan;118(1):18–25
An allergic reaction to latex rubber gloves. March PJ. **J Am Dent Assoc** 1988 Oct;117(5):590–1
Pan Masala: is it really safe? A clarification [letter] Sogani RK. **J Assoc Physicians India** 1988 Sep;36(9):574
Oral infections and septicemia in immunocompromised patients with hematologic malignancies. Bergmann OJ. **J Clin Microbiol** 1988 Oct;26(10):2105–9
Occurrence of oronasal fistulas in operated cleft palate patients. Amaratunga NA. **J Oral Maxillofac Surg** 1988 Oct;46(10):834–8
Blood in the mouth [letter] Boucek CD. **N Engl J Med** 1988 Dec 15;319(24):1607
Oral epithelial dysplasia in vitamin B12 deficiency. Theaker JM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):81–3
Oral discomfort at menopause. Wardrop RW, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):535–40
Betel chewing and dietary habits of chewers without and with submucous fibrosis and with concomitant oral cancer. Seedat HA, et al. **S Afr Med J** 1988 Dec 3;74(11):572–5
Oral mucous membrane lesions in children treated with bone marrow transplantation. Dahllöf G, et al. **Scand J Dent Res** 1989 Jun;97(3):268–77
[Biermer disease disclosed by mouth and genital manifestations] Reygagne P, et al. **Ann Dermatol Venereol** 1988;115(8):821–5 **(Fre)**
[Mycoses in otorhinolaryngology. Apropos of 167 cases] Ette A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):173–7 (Eng. Abstr.) **(Fre)**
[Clinical manifestations of HIV infection in the oromaxillofacial area] Rink B. **Z Arztl Fortbild (Jena)** 1988; 82(12):557–9 (33 ref.) **(Ger)**
[HIV infection and lesions of the oral cavity: clinical and therapeutic aspects] Gaglioti D, et al. **G Clin Med** 1988 Mar;69(3):199–203 (40 ref.) **(Ita)**
[The stomato-dermatologic manifestations of some internal diseases] Gombos F, et al. **G Clin Med** 1989 Apr; 70(4):243–54 **(Ita)**
[Stomatologic pathology in HIV infection. Preliminary data] De Mercato R, et al. **Minerva Stomatol** 1989 Jan; 38(1):131–4 (Eng. Abstr.) **(Ita)**
[Scleroderma: oral manifestations] Moniaci D, et al. **Minerva Stomatol** 1989 Feb;38(2):295–8 (10 ref.) (Eng. Abstr.) **(Ita)**
[Knowing pemphigus] Valentini AF, et al. **Minerva Stomatol** 1989 Jan;38(1):107–30 (236 ref.) (Eng. Abstr.) **(Ita)**
[Stomatologic care of children with proliferative diseases with special reference to changes in the mouth mucosa] Wójciak L, et al. **Wiad Lek** 1988 May 15;41(10):681–5 (Eng. Abstr.) **(Pol)**
[Leptotrichosis of the oral mucosa] Borovskiĭ EV, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):18–20 (Eng. Abstr.) **(Rus)**

GENETICS

Familial pemphigus vulgaris with oral manifestations affecting two Greek families. Laskaris G, et al. **J Oral Pathol Med** 1989 Jan;18(1):49–53 (16 ref.)
[Leukoplakic nevus of the mouth mucosa. A contribution to diagnosis, etiopathogenesis and nosology] Raschke N, et al. **Dermatol Monatsschr** 1989;175(5):302–6 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Lymphocyte activation in oral lichen planus. Malmström M, et al. **Proc Finn Dent Soc** 1989;85(2):109–17 (19 ref.)
Oral lesions of lupus erythematosus patients in relation to other chronic inflammatory oral diseases: an immunologic study. Sanchez R, et al. **Scand J Dent Res** 1988 Dec; 96(6):569–78

METABOLISM

Pattern of oral cytokeratins. II. SDS–electrophoretic analysis of cytokeratins in reactive hyperkeratoses and Lichen ruber planus of the oral mucosa. Ermich T, et al. **Biomed Biochim Acta** 1988;47(9):831–6
[Collagen content and types in oral submucous fibrosis] Huang IY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar; 5(3):162–71 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

A review of anaerobic infections of the oral cavity in Egypt. Wasfy M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):442–4 (34 ref.)
Botryomycosis of the oral cavity. Maves MD, et al. **Head Neck** 1989 May–Jun;11(3):274–8 (19 ref.)
The microbiology and chemotherapy of odontogenic infections. Moenning JE, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):976–85 (60 ref.)
Unusual HPV types in oral warts in association with HIV infection. Greenspan D, et al. **J Oral Pathol** 1988 Nov; 17(9–10):482–8
Oral carriage of Candida species and coliforms in patients with burning mouth syndrome. Samaranayake LP, et al. **J Oral Pathol Med** 1989 Apr;18(4):233–5
Beta-lactamase producing anaerobic bacteria in the oropharynx and their clinical relevance. Nord CE, et al. **Scand J Infect Dis Suppl** 1988;57:50–4 (23 ref.)
Anaerobic infections in the head and neck region. Tabaqchali S. **Scand J Infect Dis Suppl** 1988;57:24–34 (43 ref.)
[Buccal histoplasmosis. Apropos of a case with a difficult histopathologic diagnosis] Loubière R, et al. **Ann Pathol** 1988;8(4–5):328–31 (Eng. Abstr.) **(Fre)**
[Epidemiology of infection in dentistry] Silla M, et al. **Minerva Stomatol** 1988 Sep;37(9):665–9 **(Ita)**

PATHOLOGY

Cytology of concomitant oral lesions. Kalabaka M, et al. **Ann Dent** 1988 Winter;47(2):3–7
Distribution of Langerhans cells in oral inflammatory hyperplastic lesions. Markopoulos AK, et al. **Ann Dent** 1988 Summer;47(1):9–12
Angiokeratoma corporis diffusum (Anderson–Fabry disease). A case study. Trigonides G, et al. **Ann Dent** 1988 Summer; 47(1):13–5
Exfoliative cytology of the oral cavity in the early detection of pemphigus vulgaris. A case report. Cardillo MR, et al. **Arch Anat Cytol Pathol** 1988;36(3):93–5
Blood blisters on the soft palate in angina bullosa haemorrhagica. Case reports. Daly CG. **Aust Dent J** 1988 Oct;33(5):400–3
Pictorial essay. Common oral lesions. Quail G, et al. **Aust Fam Physician** 1989 Jul;18(7):877–8
Oral nodular fasciitis. Davies HT, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):147–51 (13 ref.)
Oral Crohn's disease revisited—a 10-year-review. Field EA, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):114–23
Histomorphology of oral submucous fibrosis. Report of 24 cases. Jian XC, et al. **Chin Med J [Engl]** 1988 Jul; 101(7):505–9
Clinical picture of snuff dipper's lesion in Swedes. Mörnstad H, et al. **Community Dent Oral Epidemiol** 1989 Apr; 17(2):97–101
Oral pulse granuloma: clinical and histopathological features. A review of 62 cases. Talacko AA, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):343–6 (19 ref.)
The oral features of betel nut chewers without submucous fibrosis. Seedat HA, et al. **J Biol Buccale** 1988 Sep; 16(3):123–8
Verruciform xanthoma within carcinoma in situ. Drummond JF, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):398–400
Malignant development of lichen planus-affected oral mucosa. Holmstrup P, et al. **J Oral Pathol** 1988 May; 17(5):219–25
Submucous fibrosis (SF) in ex-betel nut chewers: a report of 14 cases. Seedat HA, et al. **J Oral Pathol** 1988 May; 17(5):226–9
Immunohistochemical analysis of cells in mucosal lesions of oral lichen planus. Takeuchi Y, et al. **J Oral Pathol** 1988 Sep;17(8):367–73
Course of various clinical forms of oral lichen planus. A prospective follow-up study of 611 patients. Thorn JJ, et al. **J Oral Pathol** 1988 May;17(5):213–8
Clinical appearance of lesions associated with the use of loose and portion-bag packed Swedish moist snuff: a comparative study. Andersson G, et al. **J Oral Pathol Med** 1989 Jan;18(1):2–7
Expression of MHC class II antigens (HLA DR, DP and DQ) by keratinocytes in oral lichen planus. Farthing PM, et al. **J Oral Pathol Med** 1989 May;18(5):305–9
Epithelial dendritic cells in pathological human oral tissues. Pitigala-Arachchi A, et al. **J Oral Pathol Med** 1989 Jan; 18(1):11–6
Granuloma annulare of the buccal mucosa in association with AIDS. Green TL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):319–21 (21 ref.)
A histopathologic study of oral mucosal lupus erythematosus. Karjalainen TK, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):547–54
Oral lichenoid dysplasia: a clinicopathologic analysis. Lovas JG, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul; 68(1):57–63
Steatocystoma simplex in the oral cavity: a previously undescribed condition. Olsen DB, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):605–7 (26 ref.)
Epidermoid cyst of the buccal mucosa. Rajayogeswaran V, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):181–4
Factor XIIIa-containing cells and fibrosis in oral and maxillofacial lesions: an immunohistochemical study. Toida M, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):293–9
A rapidly fatal palatal ulcer: rhinocerebral mucormycosis. Van der Westhuijzen AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):32–6 (24 ref.)
Basement membrane changes in oral lichen planus. Jungell P, et al. **Proc Finn Dent Soc** 1989;85(2):119–24 (27 ref.)
[Technical artifacts in biopsy of the oral cavity. I. Clinical and histopathologic aspects] Lolli R, et al. **Minerva Stomatol** 1989 Jan;38(1):37–45 (Eng. Abstr.) **(Ita)**
[Oral pemphigus. Diagnostic problems] Rengo S, et al. **Minerva Stomatol** 1988 Jun;37(6):461–4 (Eng. Abstr.) **(Ita)**
[Herpes zoster and its stomatologic aspects] Domnişoru L, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):733 (Eng. Abstr.) **(Rum)**
[Clinico-cytological correlations in true pemphigus of the oral cavity] Nikitin VA, et al. **Lab Delo** 1988;(10):38–40 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Oral erythema multiforme: clinical observations and treatment of 95 patients. Lozada-Nur F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):36–40

PREVENTION & CONTROL

Preventive dental services for the elderly. Mandel ID. **Dent Clin North Am** 1989 Jan;33(1):81–90 (33 ref.)
Effectiveness of fluoride gel [letter] **J Am Dent Assoc** 1989 Jul;119(1):10, 12, 172–4
Fluoride gels [letter] Bawden JW. **J Am Dent Assoc** 1989 Apr;118(4):410
Is 0.4% stannous fluoride gel an effective agent for the prevention of oral diseases? Hastreiter RJ. **J Am Dent Assoc** 1989 Feb;118(2):205–8 (62 ref.)
Health maintenance issues of the elderly. Oral health. Niessen LC, et al. **Md Med J** 1989 Feb;38(2):126–8
The prevention of oral complications in bone-marrow transplantations by means of oral hygiene and dental intervention. Raber-Durlacher JE, et al. **Neth J Med** 1989 Feb;34(1–2):98–108 (26 ref.)
Effects of chlorhexidine mouthrinse on oral health in patients with acute leukemia. Wahlin YB. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):279–87
[Propagandizing the breast feeding of infants—an important problem in the primary prevention of oral diseases] Obraztsov IuL. **Stomatologiia (Mosk)** 1988 Sep–Oct; 67(5):87–9 (50 ref.) **(Rus)**

PSYCHOLOGY

Burning mouth syndrome: psychological aspects. Lamb AB, et al. **Br Dent J** 1988 Oct 8;165(7):256–60
The usefulness of the HAD scale in assessing anxiety and depression in patients with burning mouth syndrome. Lamey PJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):390–2
Screening for psychiatric illness in patients with oral dysesthesia by means of the General Health Questionnaire—twenty-eight item version (GHQ-28) and the Irritability, Depression and Anxiety Scale (IDA). Zilli C, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):384–9
Clinical psychiatric assessment of patients with burning mouth syndrome resisting oral treatment. Hammarén M, et al. **Swed Dent J** 1989;13(3):77–88

RADIOTHERAPY

Soft lasers—have they a place in dentistry? Strang R, et al. **Br Dent J** 1988 Sep 24;165(6):221–5 (49 ref.)
Treatment of "idiopathic midline destructive disease" by

irradiation. A case report. Ruey-Bin C, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):375-8

The soft laser: therapeutic tool or popular placebo? [letter] Merritt R, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):271-2

The soft laser: therapeutic tool or popular placebo? Wilder-Smith P. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):654-8

REHABILITATION

A sectional complete denture for a patient with microstomia. McCord JF, et al. **J Prosthet Dent** 1989 Jun;61(6):645-7

[Muscle function therapy of the orofacial area] Clausnitzer V, et al. **Kinderarztl Prax** 1989 Feb;57(2):61-70 (16 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

The role of radiotherapy and musculocutaneous flaps in oropharyngocutaneous fistulas. Brown PF 3d, et al. **Am J Surg** 1988 Oct;156(4):256-60

Transoral carbon dioxide laser ablation for cancer, tumors, and other diseases. Panje WR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):681-8

Oral surgery: problems. Caplin RL. **Br Dent J** 1989 Mar 11;166(5):171-7

Short-term antibiotic prophylaxis in elective oral and maxillofacial surgery with mezlocillin and oxacillin. Dumbach J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):570-2

Treatment of severe microstomia caused by swallowing of caustic soda. Takato T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):20-4

The use of CO2 laser surgery for removal of multiple oral epithelial hyperplasias. Luomanen M. **Proc Finn Dent Soc** 1989;85(1):41-6

[Prolapse of the buccal fat pad in infant] Ohishi M, et al. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):139-42 (Eng. Abstr.) **(Jpn)**

THERAPY

The role of dentistry in head and neck radiation therapy. Maxymiw WG, et al. **Can Dent Assoc J** 1989 Mar; 55(3):193-8 (45 ref.)

Geriatric dentistry. **Dent Clin North Am** 1989 Jan;33(1):1-131

The Vancouver microstomia orthosis. Conine TA, et al. **J Prosthet Dent** 1989 Apr;61(4):476-83 (21 ref.)

Improvement of oral lesions associated with malignant acanthosis nigricans after treatment of lung cancer. Nomachi K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):74-9

Dental management of children with cancer. Berkowitz RJ, et al. **Pediatr Ann** 1988 Nov;17(11):715-25 (52 ref.)

Dental emergencies. Management by the primary care physician. Comer RW, et al. **Postgrad Med** 1989 Feb 15; 85(3):63-6, 69-70, 77

Management of the sore mouth. Lamey PJ, et al. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):958-63 (6 ref.)

[In vitro study on decolorization effect of argon ion laser] Suzuki J. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):38-46 (Eng. Abstr.) **(Jpn)**

[The use of a method of developing and activating artificial stable functional feedbacks of the 2d type for treating patients with paresthesia of the oral mucosa] Reznikova TN, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):21-3 (Eng. Abstr.) **(Rus)**

TRANSMISSION

[Possible oral traumatic and infectious risks in sexual relations] Piette E. **Ann Otolaryngol Chir Cervicofac** 1989; 106(2):97-104 (92 ref.) (Eng. Abstr.) **(Fre)**

VETERINARY

Squamous-cell carcinoma and oral, pharyngeal and nasal lesions caused by foreign bodies in feed. Cases from a long-term study in rats. Madsen C. **Lab Anim** 1989 Jul; 23(3):241-7

Bacteroides species from the oral cavity and oral-associated diseases of cats. Love DN, et al. **Vet Microbiol** 1989 Mar; 19(3):275-81

Effects of migrating Gasterophilus intestinalis larvae (Diptera: Gasterophilidae) on the mouth of the horse. Cogley TP. **Vet Parasitol** 1989 Jun;31(3-4):317-31

Repair of a traumatically induced oronasal fistula in a cat with a rostral tongue flap. Robertson JJ, et al. **Vet Surg** 1987 Mar-Apr;16(2):164-6

[Eosinophilic granuloma of the oral cavity in a Siberian husky] Vermond JF, et al. **Tijdschr Diergeneeskd** 1989 Jan 15;114(2):82-5 (Eng. Abstr.) **(Dut)**

MOUTH DRYNESS see **XEROSTOMIA**

MOUTH, EDENTULOUS

see related

SURGERY, ORAL, PREPROSTHETIC

Use of a miniplate to provide intermaxillary fixation in the edentulous patient. Wolfe SA, et al. **J Craniomaxillofac Surg** 1989 Jan;17(1):31-3

Evaluation of fixation of oral endotracheal tube in edenturous patients. Poon KS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep; 26(3):295-300

EPIDEMIOLOGY

The 1985 update on dental health from OPCS. **Br Dent J** 1988 Oct 22;165(8):303-9

Edentulousness in patients attending a university dental clinic. Hoover JN, et al. **Can Dent Assoc J** 1989 Feb; 55(2):139-40

Prevalence and patterns of tooth loss in U.S. employed adult and senior populations, 1985-86. Meskin LH, et al. **J Dent Educ** 1988 Dec;52(12):686-91

PATHOLOGY

A discussion of some factors of relevance to the occlusion of complete dentures. Mack PJ. **Aust Dent J** 1989 Apr; 34(2):122-9

RADIOGRAPHY

A radiographic investigation into bone resorption of mandibular alveolar bone in elderly edentulous adults. Humphries S, et al. **J Dent** 1989 Apr;17(2):94-6

[Anatomic-roentgenologic study of the mandibular canal in atrophic mandible] Ulm C. **Wien Klin Wochenschr** 1989 May 26;101(11):390-3 (Eng. Abstr.) **(Ger)**

REHABILITATION

Esthetics and the edentulous patient. Murrell GA. **J Am Dent Assoc** 1988 Sep;117(4):57E-63E

Occlusal considerations for partially or completely edentulous skeletal class II patients. Part I: Background information. Curtis TA, et al. **J Prosthet Dent** 1988 Aug; 60(2):202-11 (25 ref.)

A sectional complete denture for a patient with microstomia. McCord JF, et al. **J Prosthet Dent** 1989 Jun;61(6):645-7

[Esthetics and the complete prosthesis] Jeusette M. **Rev Belge Med Dent** 1988;43(2):84-98 (Eng. Abstr.) **(Fre)**

[Implants in total prosthetics. Anchorage of a total prosthesis in the edentulous lower jaw using 2 implants with a single attachment] Mericske-Stern R, et al. **Schweiz Monatsschr Zahnmed** 1988;98(8):870-6 **(Ger, Fre)**

SURGERY

Tooth replacement by oral endoprostheses: clinical aspects. Brånemark PI. **J Dent Educ** 1988 Dec;52(12):821-3

Implants for complete denture therapy. Zarb GA. **J Dent Educ** 1988 Dec;52(12):721-4 (33 ref.)

Collagen/hydroxylapatite implant for augmenting deficient alveolar ridges: twelve-month clinical data. Mehlisch DR, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):839-43

Collagen tube containers in alveolar ridge augmentation. Gongloff RK, et al. **J Prosthet Dent** 1989 Jun;61(6):722-6

MOUTH FLOOR

Radiotherapy after excisional biopsy of carcinoma of the oral tongue/floor of the mouth. Mendenhall WM, et al. **Head Neck** 1989 Mar-Apr;11(2):129-31

[Dermoid cysts of the floor of mouth] Verrina G, et al. **Minerva Stomatol** 1989 Jun;38(6):683-6 (Eng. Abstr.) **(Ita)**

EMBRYOLOGY

Histological evidence of fusion between the posterior palatal shelves and the floor of the mouth in Alligator mississippiensis. Shah RM, et al. **Arch Oral Biol** 1988; 33(10):769-71

PATHOLOGY

A cheek splitting approach to the posterior oral cavity: a case report. Wood GA. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):326-9

Exophytic mass of the floor of the mouth. Whitt JC, et al. **J Am Dent Assoc** 1989 Sep;119(3):425-7

Swelling of the floor of the mouth [clinical conference] Triantafillidou E, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):733-6

SURGERY

Horizontal versus vertical block resection for early floor of mouth carcinoma. Moloy PJ, et al. **Am J Otolaryngol** 1989 May-Jun;10(3):153-60

A new method of oral reconstruction using a free composite foot flap. Bell MS, et al. **Ann Plast Surg** 1980 Oct;5(4):281-7

The primary reconstruction of the anterior floor of mouth by the intraoral cheek transposition flap. Zoeller J. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):107-8

A method of closure after resection of anterior floor of mouth cancers. Weissler MC, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):315-20

Innovative surgical approach for the Pierre Robin anomalad: subperiosteal release of the floor of the mouth musculature. Delorme RP, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):960-4; discussion 965-6

[Secondary reconstruction of the mouth floor using a complete and prepared skin graft after non-interrupted pelvi-mandibulectomy] Gdoura A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):95-9 (Eng. Abstr.) **(Fre)**

MOUTH MUCOSA

Evaluation of treatment results of squamous cell carcinoma of the buccal mucosa. Pop LA, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):483-7

An intraoral drug delivery system. Seals RR Jr, et al. **J Prosthet Dent** 1989 Feb;61(2):239-42

Talisman in the orofacial region. Loh FC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):252-5

[Pigmented lesions of the oral cavity. I. Classification and etiopathogenesis] Bucci E, et al. **Minerva Stomatol** 1989 Mar;38(3):369-78 (162 ref.) (Eng. Abstr.) **(Ita)**

[Idiopathic lenticular pigmentation of the buccal mucosa (Laugier's disease)] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988;(6):4-6 (Eng. Abstr.) **(Rus)**

[Pathology of the oral mucosa in patients with type I diabetes mellitus: study of 44 cases] Bagan Sebastian JV, et al. **Med Cutan Ibero Lat Am** 1988;16(5):419-21 (Eng. Abstr.) **(Spa)**

ANALYSIS

Elemental and cytochemical localization of calcium in rat cheek epithelium. Ashrafi SH, et al. **Arch Oral Biol** 1989; 34(1):9-15

Pattern of oral cytokeratins: I. SDS-electrophoretic analysis of the frequency of cytoskeletal keratins in the normal human mucosa of mouth. Ermich T, et al. **Biomed Biochim Acta** 1988;47(8):737-42

Pattern of oral cytokeratins. II. SDS-electrophoretic analysis of cytokeratins in reactive hyperkeratoses and Lichen ruber planus of the oral mucosa. Ermich T, et al. **Biomed Biochim Acta** 1988;47(9):831-6

Expression of epidermal growth factor receptor on oral squamous cell carcinoma. Partridge M, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):381-9

Determination of alpha-tocopherol in buccal mucosal cells using an electrochemical detector. Tamai H, et al. **Int J Vitam Nutr Res** 1988;58(2):202-7

Cytokeratins in hamster cheek pouch epithelium during DMBA-induced carcinogenesis. Lin LM, et al. **J Oral Pathol Med** 1989 May;18(5):287-90

Altered keratin expression in buccal mucosal squamous cell carcinoma. Vaidya MM, et al. **J Oral Pathol Med** 1989 May;18(5):282-6

Development of a validation test for self-reported abstinence from smokeless tobacco products: preliminary results. Robertson JB, et al. **Prev Med** 1988 Jul;17(4):496-502

Immunohistological detection of cytokeratins in oral epithelia by poly- and monoclonal antibodies. Bienengräber V, et al. **Z Mikrosk Anat Forsch** 1988;102(5):708-10

[Cationic proteins of the epithelium of the oral cavity in the human and in laboratory animals] Mogil'nyi ML. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):81-5 (43 ref.) **(Rus)**

ANATOMY & HISTOLOGY

Measurement in vivo of masticatory mucosal thickness with 20 MHz B-mode ultrasonic diagnostic equipment. Uchida H, et al. **J Dent Res** 1989 Feb;68(2):95-100

Intraoral application of microcolpohysteroscopy. A new technique for clinical examination of oral tissues at high magnification. L'Estrange P, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):282-5

[Age-related morphofunctional characteristics of the oral mucosa] Panikarovskii VV, et al. **Stomatologiia (Mosk)** 1989 Jan-Feb;68(1):6-11 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Lipoxygenase inhibitors block O2 responses of hamster cheek pouch arterioles. Jackson WF. **Am J Physiol** 1988 Oct; 255(4 Pt 2):H711-6

Serious circulatory disturbance after Le Fort I osteotomy. A case report. Yeo JF, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):222-5

Age-related changes in capillaries of rat oral mucosa. A quantitative electron microscopic study. Stablein M, et al. **Mech Ageing Dev** 1988 Oct;45(1):23-40

Alteration in stereological density parameters of the mucosal vascular bed during neoplastic transformation in sublingual keratosis. Tawfik AM, et al. **Pathol Res Pract** 1989 May; 184(5):519-24

[Function and reactivity of the microvascular bed in human neuroses] Belen'kaia IM. **Zh Vyssh Nerv Deiat** 1988 Jul-Aug;38(4):725-30 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Adherence of streptococcal isolates from cattle and horses to their respective host epithelial cells. Valentin-Weigand P, et al. **Am J Vet Res** 1988 Sep;49(9):1485-8

Cell proliferation in chick oral membrane lags behind that of adjacent epithelia at the time of rupture. Miller SA, et al. **Anat Rec** 1989 Feb;223(2):204-8

Studies on cell migration, adenylate cyclase and membrane-coating granules in the buccal epithelium of the zinc-deficient rabbit, including the influence of isoproterenol. Chen SY. **Arch Oral Biol** 1988;33(9):645-51

Specific inhibition of adherence of an oral strain of Bacteroides gingivalis 381 to epithelial cells by monoclonal antibodies against the bacterial fimbriae. Isogai H, et al. **Arch Oral Biol** 1988;33(7):479-85

Age-associated changes in Langerhans cells of murine oral

epithelium and epidermis. Rittman BR, et al. **Arch Oral Biol** 1987;32(12):885–9

Effects of proprietary oral rinses containing chlorhexidine, hexetidine and benzydamine on the proliferation of human buccal epithelial cells in culture. Shakespeare V, et al. **Arch Oral Biol** 1988;33(12):881–5

Use of exfoliated cells to study tissue-specific levels of beta-carotene in humans. Cameron LM, et al. **Cancer Lett** 1989 Jun;45(3):203–7

Behavior of in vitro grown normal human mucosal epithelial cells and tumorigenic rat cells inoculated into nude mice. Holmstrup P, et al. **Exp Cell Biol** 1989;57(2):73–80

Origin of cells in human oral mucosa heterotransplants in nude mice. Holmstrup P, et al. **Exp Cell Biol** 1988; 56(1–2):108–12

Distinctive fibroblastic subpopulations in skin and oral mucosa demonstrated by differences in glycosaminoglycan content. Bronson RE, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1121–6

Hydrogels for buccal drug delivery: properties relevant for muco-adhesion. de Vries ME, et al. **J Biomed Mater Res** 1988 Nov;22(11):1023–32

Fibroblastic subpopulations in uninjured and wounded rabbit oral mucosa. Bronson RE, et al. **J Dent Res** 1989 Jan; 68(1):51–8

Synthesis of proteoglycans in rat mucosal keratinocytes. Arnlaugsson S, et al. **J Oral Pathol** 1988 Nov; 17(9–10):489–95

Sequential expression of carbohydrate antigens with precursor–product relation characterizes cellular maturation in stratified squamous epithelium. Mandel U, et al. **J Oral Pathol** 1988 Nov;17(9–10):506–11

Factor XIIIa–containing cells and fibrosis in oral and maxillofacial lesions: an immunohistochemical study. Toida M, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):293–9

The effect of 3T3 fibroblasts on the expression of anchorage independence and cornification of oral keratinocytes. Luker J, et al. **Virchows Arch [B]** 1989;57(1):19–26

[Cytologic characteristics of mixed saliva and oral washings in patients with chronic inflammatory diseases of the periodontium] Makarova OV, et al. **Lab Delo** 1988; (7):19–21 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Tissue responses in the rat to trichloracetic acid—an agent used in the treatment of invasive cervical resorption. Heithersay GS, et al. **Aust Dent J** 1988 Dec;33(6):451–61

Cytotoxic and genotoxic effects of areca nut–related compounds in cultured human buccal epithelial cells. Sundqvist K, et al. **Cancer Res** 1989 Oct 1;49(19):5294–8

Skin and mucosal lesions associated with cyclosporin A therapy: report of a case. Feldhoff CM, et al. **Clin Nephrol** 1989 Apr;31(4):210–2

Histomorphometric analysis of epithelial changes in chemically induced oral mucosal carcinogenesis in rats. Rich AM, et al. **J Oral Pathol** 1988 Nov;17(9–10):528–33

In vivo effects of Sn–1,2–dioctanoylglycerol, TPA and A23187 on hamster cheek pouch epithelium. Singh BB, et al. **J Oral Pathol** 1988 Nov;17(9–10):517–21

Effects of systemic administration of nicotine on capillaries in rat oral mucosa. Johnson GK, et al. **J Oral Pathol Med** 1989 Apr;18(4):230–2

Studies on dressings for treatment of mucous membranes of oral cavity. Part 2: Influence of hydrophilizing substances on properties of hydrogel dressings comprising Kunitz protease inhibitor. Malecka K, et al. **Pharmazie** 1988 Oct; 43(10):694–6

Gingival and mucosal reactions after intensive chlorhexidine gel treatment with or without oral hygiene measures. Almqvist H, et al. **Scand J Dent Res** 1988 Dec;96(6):557–60

[Irritation effects of medical silicone rubber on the oral mucous membrane] Sun ZL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):237–8 **(Chi)**

[Effect of iodine vapors on the oral mucosa of workers in iodine manufacture] Poliak AL. **Gig Tr Prof Zabol** 1988 Jul;(7):26–8 (Eng. Abstr.) **(Rus)**

[Experimental study of the effect of corticosteroid preparations on the adhesion of Candida genus fungi to the epitheliocytes of mucous membranes] Bykov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):115–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Scanning electron and light microscopic studies on the development of the oral mucosa of camel (Camelus dromedarius). Dougbag A el-S. **Z Mikrosk Anat Forsch** 1988;102(3):411–22

ENZYMOLOGY

Gamma-glutamyl transpeptidase activity in superficial exfoliated cells during hamster buccal pouch carcinogenesis. Zhang L, et al. **Carcinogenesis** 1989 May; 10(5):857–60

Protein kinase C activity in normal and neoplastic squamous epithelia from the upper aero-digestive tract. Rydell EL, et al. **Second Messengers Phosphoproteins** 1988;12(4):155–62

IMMUNOLOGY

Premalignant and malignant oral lesions are associated with changes in the glycosylation pattern of carbohydrates related to ABH blood group antigens. Dabelsteen E, et al. **APMIS** 1988 Sep;96(9):813–9

Quantification and distribution of lymphocyte subsets and Langerhans cells in normal human oral mucosa and skin. van Loon LA, et al. **J Oral Pathol Med** 1989 Apr; 18(4):197–201

Oral mucosal lesions: association with the presence of antibodies to the human immunodeficiency virus. Melnick SL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul; 68(1):37–43

Anti-mucosal antibodies in recurrent aphthous ulcers. Sun A, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):122–7

The relationship between epithelial Ia expression and the inflammatory cell infiltrate during experimental oral carcinogenesis. Matthews JB, et al. **Virchows Arch [A]** 1988; 413(6):521–8

[Detection of erythrocyte-bound antigen and serum albumin properties in the saliva and oral structures. Review of the literature] Schranz D. **Fogorv Sz** 1989 Feb;82(2):53–6 (41 ref.) (Eng. Abstr.) **(Hun)**

INJURIES

AIDS transmission: evidence that passionate kissing can cause microlesions of the oral mucosa. Piazza M, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):467–70

Traumatic ulcers and pain in adults during orthodontic treatment. Kvam E, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):154–7

Widespread oral papillomatosis due to chronic buccal trauma. Mosovich B, et al. **Cutis** 1989 Mar;43(3):254–7

Mucosal burn resulting from chewable aspirin: report of case. Maron FS. **J Am Dent Assoc** 1989 Aug;119(2):279–80

Treatment of caustic ingestion. Rubin MM, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):286–90 (7 ref.)

The hazards of automatic-dishwasher detergent. Kynaston JA, et al. **Med J Aust** 1989 Jul 3;151(1):5–7

[Injuries of the oral mucous membrane] van der Wal KG, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1740–3 **(Dut)**

[Injuries of the oral mucosa (letter)] van Zanten ME. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2035 **(Dut)**

INNERVATION

Substance-P-like immunoreactive subepithelial nerve plexuses in the labial mucosa of the mouse. Ichikawa H, et al. **Acta Anat (Basel)** 1989;134(4):283–5

Effects of intraoral mechanoreceptor stimulation on reticular formation neurones, in the rabbit. Ermirio R, et al. **Arch Ital Biol** 1989 Feb;127(1):1–11

Mechanoreceptor activity from the human face and oral mucosa. Johansson RS, et al. **Exp Brain Res** 1988; 72(1):204–8

Intraperineural localization of lamellated sensory corpuscles in the skin and oral mucosae of the adult cat and miniature pig. Tachibana T, et al. **J Neurocytol** 1989 Feb;18(1):61–9

Fine structure of the lamellated corpuscles in the mouse hard palatine mucosa. Watanabe I, et al. **Z Mikrosk Anat Forsch** 1988;102(5):811–6

METABOLISM

Cellular retinol-binding protein in mucosa, in benign and malignant non-squamous cell tumours of the head and neck. Wahlberg P, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):313–20

Suprabasal 40 kd keratin (K19) expression as an immunohistologic marker of premalignancy in oral epithelium. Lindberg K, et al. **Am J Pathol** 1989 Jan; 134(1):89–98

Oral transmucosal fentanyl citrate (lollipop) premedication in human volunteers. Stanley TH, et al. **Anesth Analg** 1989 Jul;69(1):21–7

Evaluation of DNA damage in the oral mucosa of tobacco users and non-users by 32P-adduct assay. Chacko M, et al. **Carcinogenesis** 1988 Dec;9(12):2309–13

Evaluation of 32P-postlabeling analysis of DNA from exfoliated oral mucosa cells as a means of monitoring exposure of the oral cavity to genotoxic agents. Foiles PG, et al. **Carcinogenesis** 1989 Aug;10(8):1429–34

The permeability of human oral mucosa and skin to water. Lesch CA, et al. **J Dent Res** 1989 Sep;68(9):1345–9

Model of mercury vapor transport from amalgam restorations in the oral cavity. Olsson S, et al. **J Dent Res** 1989 Mar; 68(3):504–8

The acute effects of smokeless tobacco on transport and barrier function of buccal mucosa. Tobey NA, et al. **J Dent Res** 1988 Nov;67(11):1414–21

Penetration pathways of different compounds through epidermis and oral epithelia. Squier CA, et al. **J Oral Pathol** 1988 Nov;17(9–10):512–6

A method to study the kinetics of oral mucosal drug absorption from solutions. Tucker IG. **J Pharm Pharmacol** 1988 Oct;40(10):679–83

Application of propranolol to the keratinized oral mucosa: avoidance of first-pass elimination and the use of 1-dodecylazacycloheptan-2-one (Azone) as an absorption enhancer of bioadhesive film-dosage form. Kurosaki Y, et al. **J Pharmacobiodyn** 1988 Dec;11(12):824–32

The effect of additives on the oral mucosal absorption of human calcitonin in rats. Nakada Y, et al. **J Pharmacobiodyn** 1988 Jun;11(6):395–401

Cultured buccal epithelium: an in vitro model derived from the hamster pouch for studying drug transport and metabolism. Tavakoli-Saberi MR, et al. **Pharm Res** 1989 Feb;6(2):160–6

Buccal absorption of insulin in the dog. Ritschel WA, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):53–67

Tissue distribution of epimucosally applied 3H DNFB: an autoradiographic study. Warfvinge G, et al. **Scand J Dent Res** 1988 Oct;96(5):435–41

[Colloid coupling and biologic availability of local anesthetics. 5. Local anesthetic action and improvement of biologic availability in the lower-lip mucosa in man] Thoma K, et al. **Pharm Acta Helv** 1988;63(4–5):98–101 (Eng. Abstr.) **(Ger)**

[The role of the degree of oral mucosal keratinization in assessing the results of the Schiller–Pisarev test] Guts IuV. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):72–3 **(Rus)**

[The distribution of cationic protein in the cells of exfoliative material from different areas of the oral mucosa] Mogil'nyĭ ML. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):12–4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Botryomycosis of the oral cavity. Maves MD, et al. **Head Neck** 1989 May–Jun;11(3):274–8 (19 ref.)

Neuraminidase-enhanced attachment of Bacteroides intermedius to human erythrocytes and buccal epithelial cells. Okuda K, et al. **Infect Immun** 1989 May;57(5):1635–7

The frog palate mucosa as a model for studying bacterial adhesion to mucus-coated respiratory epithelium. Plotkowski MC, et al. **J Comp Pathol** 1989 Jan;100(1):37–46

Bacterial adhesion to oral tissues: a model for infectious diseases. Gibbons RJ. **J Dent Res** 1989 May;68(5):750–60 (88 ref.)

Mucosal epithelial cells and Langerhans cells are targets for infection by the immunosuppressive type D retrovirus simian AIDS retrovirus serotype 1. Lackner AA, et al. **J Med Primatol** 1989;18(3–4):195–207

Detection of human papillomavirus (HPV) DNA in focal epithelial hyperplasia. Garlick JA, et al. **J Oral Pathol Med** 1989 Mar;18(3):172–7

Failure of adherence to buccal cells and surface hydrophobicity as virulence markers in Neisseria meningitidis. Criado MT, et al. **Med Microbiol Immunol (Berl)** 1989;178(1):53–9

Effect of antineoplastic agents and X-irradiation on the adherence of Candida spp. to human buccal epithelial cells in vitro. Ghannoum MA, et al. **Mycopathologia** 1988 Dec; 104(3):171–80

Variation in adhesion and cell surface hydrophobicity in Candida albicans white and opaque phenotypes. Kennedy MJ, et al. **Mycopathologia** 1988 Jun;102(3):149–56

Effect of chlorhexidine rinsing on the oropharyngeal ecology in patients with head and neck cancer who have irradiation mucositis. Spijkervet FK, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):154–61

[The disinfection of the oral mucosa] Gundermann KO. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):382–9 (7 ref.) (Eng. Abstr.) **(Ger)**

[Adherence of Pseudomonas aeruginosa to buccal epithelial cells] Sumi M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec;26(12):1249–56 (Eng. Abstr.) **(Jpn)**

[Staphylococci of human oral cavity] Krzemiński Z. **Med Dosw Mikrobiol** 1988;40(3):117–23 (Eng. Abstr.) **(Pol)**

[Effect of synthetic antifungal drugs on the adherence of Candida albicans to the mouth mucosa epithelium in vitro] Macura AB, et al. **Med Dosw Mikrobiol** 1989;41(1):67–70 (Eng. Abstr.) **(Pol)**

[Effect of antifungal polyene antibiotics on adhesion of Candida albicans to the epithelium of the oral cavity in vitro] Macura AB, et al. **Med Dosw Mikrobiol** 1988; 40(4):238–43 (Eng. Abstr.) **(Pol)**

[Adhesion of fungi of the genus Candida to the mucosal epithelium in diabetes mellitus] Velichko EV, et al. **Vestn Dermatol Venerol** 1988;(6):20–2 (Eng. Abstr.) **(Rus)**

[Hairy leukoplakia: a new disease of the oral mucosa associated with infection by the human immunodeficiency virus] Podzamczer D, et al. **Med Clin (Barc)** 1989 Apr 8; 92(13):488–91 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Extramammary Paget's disease of the oral mucosa with in situ carcinoma of minor salivary gland ducts. Theaker JM. **Am J Surg Pathol** 1988 Nov;12(11):890–5

Congenital nevocellular nevus of the oral mucosa. Takeda Y. **Ann Dent** 1988 Winter;47(2):40–2

Significance of mucosal vs salivary gland changes in lip biopsies in the diagnosis of chronic graft-vs-host disease. Nakhleh RE, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):932–4

A clinicopathological study of mucosal involvement in linear IgA disease. Kelly SE, et al. **Br J Dermatol** 1988 Aug; 119(2):161–70

A quantitative assessment of Langerhans cells in oral mucosal lichen planus and leukoplakia. Rich AM, et al. **Br J Dermatol** 1989 Feb;120(2):223–8

Epithelial dysplasia of the oral cavity and lips. Kaugars GE, et al. **Cancer** 1988 Nov 15;62(10):2166–70

Smokeless tobacco use and oral epithelial dysplasia. Kaugars GE, et al. **Cancer** 1989 Oct 1;64(7):1527–30

Papillomavirus-induced diseases of the oral mucosa. Lutzner MA. **Clin Dermatol** 1985 Oct–Dec;3(4):139–43

Multiple endocrine neoplasia (MEN) type II b: report of a case observed at autopsy with immunohistochemical study of mucosal neuromas. Lesourd A, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):238–43

White sponge nevus with epidermolytic changes. Aloi FG, et al. **Dermatologica** 1988;177(5):323–6

Action of chronic peracetic acid (wofasteril) administration on the rabbit oral mucosa, vaginal mucosa, and skin. Müller P, et al. **Exp Pathol** 1988;34(4):223–8

Low-grade papillary adenocarcinoma of buccal mucosa salivary gland origin. Fliss DM, et al. **Head Neck** 1989 May–Jun;11(3):237–41 (20 ref.)

Mucosal melanotic macule, reactive type: a simulation of melanoma. Horlick HP, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):786–91 (25 ref.)

The oral features of betel nut chewers without submucous fibrosis. Seedat HA, et al. **J Biol Buccale** 1988 Sep; 16(3):123–8

Morphometric analysis of suprabasal cells in oral white lesions. Shabana AH, et al. **J Clin Pathol** 1989 Mar; 42(3):264–70

Cowden syndrome: clinical and pathological considerations in two new cases. Bagan JV, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):291–4

Nonhealing ulceration of oral mucosa. Dodson TB, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):849–52

Differences between preneoplastic cells, neoplastic cells and their normal counterparts. Boyd NM, et al. **J Oral Pathol** 1988 Jul;17(6):257–65 (113 ref.)

Kaposi's sarcoma in AIDS: basement membrane and endothelial cell markers in late-stage lesions. Green TL, et al. **J Oral Pathol** 1988 Jul;17(6):266–72

Submucous fibrosis (SF) in ex-betel nut chewers: a report of 14 cases. Seedat HA, et al. **J Oral Pathol** 1988 May; 17(5):226–9

Effects of smokeless tobacco on the buccal mucosa of HMT rats. Chen SY. **J Oral Pathol Med** 1989 Feb;18(2):108–12

Epithelial dendritic cells in pathological human oral tissues. Pitigala-Arachchi A, et al. **J Oral Pathol Med** 1989 Jan; 18(1):11–6

Efficacy of oral sucralfate suspension in prevention and treatment of chemotherapy-induced mucositis [published erratum appears in J Pediatr 1989 May;114(5):900] Shenep JL, et al. **J Pediatr** 1988 Oct;113(4):758–63

Quantitative exfoliative cytology of abnormal oral mucosal smears. Cowpe JG, et al. **J R Soc Med** 1988 Sep; 81(9):509–13

Passionate kissing and microlesions of the oral mucosa: possible role in AIDS transmission [letter] Piazza M, et al. **JAMA** 1989 Jan 13;261(2):244–5

Reduction of cytochrome c by oral mucosa of patients with oropharyngeal cancer. Horn W, et al. **Klin Wochenschr** 1988;66 Suppl 11:105–7

The effect of hyperbaric oxygen therapy of oral mucosal carcinoma. McMillan T, et al. **Laryngoscope** 1989 Mar; 99(3):241–4

The involvement of reactive oxygen species in oral cancers of betel quid/tobacco chewers. Stich HF, et al. **Mutat Res** 1989 Sep;214(1):47–61 (99 ref.)

Hairy leukoplakia: Epstein-Barr virus receptors on oral keratinocyte plasma membranes. Corso B, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):416–21

Oral hairy leukoplakia with extensive oral mucosal involvement. Report of two cases. Kabani S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):411–5

Epithelial dysplasia produced by carcinogen pretreatment and subsequent wounding. Maeda H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):50–6

Are postmortem studies of glossal candidal infection useful? An experimental study. Peters E, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):177–80

Epidermoid cyst of the buccal mucosa. Rajayogeswaran V, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):181–4

Oral epithelial dysplasia in vitamin B12 deficiency. Theaker JM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):81–3

Oral mucous membrane lesions in children treated with bone marrow transplantation. Dahllöf G, et al. **Scand J Dent Res** 1989 Jun;97(3):268–77

Influence of pontic material on alveolar mucosal conditions. Tolboe H, et al. **Scand J Dent Res** 1988 Oct;96(5):442–7

[Clinical and histologic analysis of mucous membrane lesions associated with dental restoration] Zhu YX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):49–51, 63 (Eng. Abstr.) **(Chi)**

[Epidermolysis bullosa from the dermatologic and stomatologic viewpoint] Heise P, et al. **Dermatol Monatsschr** 1988;174(10):643–8 (Eng. Abstr.) **(Ger)**

[Differential diagnostic problems in localized skin and bone tuberculosis with tuberculous changes in the cheek mucosa. Case report] Kern A, et al. **Dermatol Monatsschr** 1988; 174(12):748–52 (Eng. Abstr.) **(Ger)**

[Comparative studies of the palatal mucosa under physiologic conditions and with removable dentures. II. The regional differentiation of epithelial layers] Mai M, et al. **Zahn Mund Kieferheilkd** 1989;77(3):262–7 (Eng. Abstr.) **(Ger)**

[A case of oral pemphigus vulgaris involving the esophagus combined with early gastric carcinoma] Ohkawa F, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1725–9 (15 ref.) **(Jpn)**

[Clinico-cytological correlations in true pemphigus of the oral cavity] Nikitin VA, et al. **Lab Delo** 1988;(10):38–40 (Eng. Abstr.) **(Rus)**

[Contribution of dermatologists and venereologists in the study of pathology of buccal mucosa diseases] Troianskiĭ GN, et al. **Vestn Dermatol Venerol** 1989;(2):73–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The soft tissue interface in dental implantology. Meffert RM. **J Dent Educ** 1988 Dec;52(12):810–1

Studies on dressings for mucosa of oral cavity. Part 1: Influence of hydrophilizing substances on xerogel properties of dressings comprising Kunitz protease inhibitor. Kubis A, et al. **Pharmazie** 1988 Jul;43(7):486–8

PHYSIOPATHOLOGY

Healing of cutaneous and mucosal wounds grafted with collagen-glycosaminoglycan/silastic bilayer membranes: a preliminary report. Bertolami CN, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):971–8

[Characteristics of the electrokinetic mobility of the cell nuclei of the buccal epithelium in psoriasis] Goncharenko MS, et al. **Vestn Dermatol Venerol** 1988;(9):11–4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Scoring irradiation mucositis in head and neck cancer patients. Spijkervet FK, et al. **J Oral Pathol Med** 1989 Mar;18(3):167–71

Prostaglandins in irradiation-induced mucositis [letter] Sinzinger H, et al. **Lancet** 1989 Mar 11;1(8637):556

Effect of continuous infusion of bleomycin on the time for completion of repair of sublethal radiation damage in mouse lip mucosa during fractionated irradiation. Vanuytsel L, et al. **Radiother Oncol** 1988 Aug;12(4):333–7

Kinetics of sublethal damage recovery in mouse lip mucosa comparing low and high-LET radiation. Scalliet P, et al. **Strahlenther Onkol** 1989 Apr;165(4):268–71

RADIOGRAPHY

A clinical, radiographic, and histological evaluation of permucosal dental implants of dense hydroxylapatite in dogs. De Lange GL, et al. **J Dent Res** 1989 Mar; 68(3):509–18

SURGERY

Myofibroblasts in healing laser wounds of rat tongue mucosa. Luomanen M, et al. **Arch Oral Biol** 1988;33(1):17–23

Excision of cheek leukoplakia and lining the defect with a pedicle buccal fat pad graft. Ho KH. **Br Dent J** 1989 Jun 24;166(12):455–6

Intraoral mucosal reconstruction with microvascular free jejunal autografts: an experimental study. Sheen R, et al. **Br J Plast Surg** 1988 Sep;41(5):521–7

Effects of Nd-YAG laser and cryosurgery on the oral mucosa in rabbits. Schmelzeisen R, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):114–6

Fabrication of a teaching aid for dental soft tissue management and suturing. Meyer RD, et al. **J Am Dent Assoc** 1989 Mar;118(3):345–6

Tattooing in maxillo-facial surgery. Müller H, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):382–4

Reconstruction of intermediate sized mucosal defects with the pectoralis major myofascial flap. Moloy PJ. **J Otolaryngol** 1989 Feb;18(1):32–5

Development of gingiva following surgical exposure of a facially positioned unerupted incisor. Lundberg M, et al. **J Periodontol** 1988 Oct;59(10):652–5

The use of CO2 laser surgery for removal of multiple oral epithelial hyperplasias. Luomanen M. **Proc Finn Dent Soc** 1989;85(1):41–6

[Use of the temporoparietal fascial island flap in cheek reconstruction] Shen C. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):87–9 **(Chi)**

[Indications and technic of microvascular small intestine transplantation in combination with the usual technics of facial soft tissue and craniofacial reconstruction] Hausamen JE, et al. **Handchir Mikrochir Plast Chir** 1988 Sep; 20(5):249–54 (Eng. Abstr.) **(Ger)**

[Reconstruction of oral mucosa with vascularized jejunum graft] Olstad OA, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2035–7 (Eng. Abstr.) **(Nor)**

TRANSPLANTATION

Transplantation of mucosal tissue model composed of rabbit oral mucosal cells. Ebata K, et al. **Artif Organs** 1988 Dec; 12(6):497–502

Eyelid reconstruction using a monopedicle flap and buccal mucosa: report of 15 cases. Whitehouse GM, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):295–301

Repair of subglottic stenosis with a free perichondrial graft. Ishikawa K, et al. **Br J Plast Surg** 1988 Nov;41(6):652–6

Treatment of a periodontal intrabony pocket in man by a mucoperiosteal free graft combined with a calcium phosphate implant. Bilbeissi MW, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):99–104

The fate of buccal mucosal flaps in primary palatal repair. Freedlander E, et al. **Cleft Palate J** 1989 Apr;26(2):110–2; discussion 112–3

Deepithelialized mucosal-submucosal flaps to correct the "whistling lip" deformity. Rodgers CM, et al. **Cleft Palate J** 1989 Apr;26(2):136–40

Treatment of teat obstruction in a cow by transfer of oral mucosa and temporary implantation of an intraluminal tube. Bristol DG. **J Am Vet Med Assoc** 1989 Aug 15;195(4):492–4

Intraoral grafting of a canine full-thickness oral mucosal equivalent produced in vitro. Feinberg SE, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):712–8; discussion 718–9

Buccal mucosal graft: maintenance of phenotype for 15 years. A case report. Checchi L, et al. **J Periodontol** 1989 Mar; 60(3):163–5

[Deep epithelial graft. Histological findings] Tazzi A, et al. **Minerva Stomatol** 1988 Jul;37(7):527–31 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Ultrastructure of cultured canine oral keratinocytes. Wilkinson JE, et al. **Am J Vet Res** 1989 Jul;50(7):1161–5

Host response to papilloma virus in focal epithelial hyperplasia. Hernández-Jáuregui P, et al. **Ann Dent** 1989 Summer;48(1):8–12, 52

Histomorphology of oral submucous fibrosis. Report of 24 cases. Jian XC, et al. **Chin Med J [Engl]** 1988 Jul; 101(7):505–9

Primary fixation of vervet monkey oral epithelium for ultrastructural investigation—SEM. Grossman ES. **J Oral Pathol Med** 1989 Apr;18(4):220–3

Ultrastructural findings in clinically uninvolved oral mucosa of patients with HIV infection. Zhang X, et al. **J Oral Pathol Med** 1989 Jan;18(1):35–41

Electron immunolocalization of type IV collagen, laminin and fibronectin synthesized by multilayered cells cultured from human oral epithelium. Poly H, et al. **J Periodont Res** 1988 Jul;23(4):252–7

[The analysis of finding X-chromatin bodies on smears from scrapings of the conjunctiva, buccal and labial mucosa] Wu SM. **Yen Ko Hsueh Pao** 1985 Sep;1(1):35–6 (Eng. Abstr.) **(Chi)**

[Cytochemical features of epitheliocyte nuclei of the oral mucosa] Mogil'nyĭ ML, et al. **Lab Delo** 1988;(12):44–7 (Eng. Abstr.) **(Rus)**

MOUTH NEOPLASMS

Ackerman's tumour (verrucous carcinoma) of the oral cavity: a clinico-epidemiologic study of 426 cases. Rajendran R, et al. **Aust Dent J** 1988 Aug;33(4):295–8

Cancer of the tongue and oral cavity in Auckland, New Zealand, 1970–86. Koea JB, et al. **Aust N Z J Surg** 1989 Jan;59(1):39–45

Oral cancer and precancer—a dilemma [letter] Feaver GP. **Br Dent J** 1989 Jul 8;167(1):10

How community pharmacy staff manage a patient with possible oral cancer. Scully C, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):16–21

Tasks and objectives of the German-Austrian-Swiss working group on tumors in the maxillo-facial region (DOSAK). Hausamen JE. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):264–6

Parotid lymph node metastases from primary intra-oral squamous carcinomas. Ord RA, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):104–6 (17 ref.)

Oral synovial sarcoma: report of a case. de Araújo VC, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):1001–3 (19 ref.)

Selected abstracts: Biennial Congress of the International Association of Oral Pathologists held in conjunction with the American Association of Oral Pathology. Philadelphia, May 1988. **J Oral Pathol** 1988 Sep;17(8):429–42

High-grade carcinoma of the oral cavity. Bansberg SF, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):41–8

Squamous cell carcinoma of the upper aero-digestive tract in women. Panis X, et al. **Radiother Oncol** 1988 Nov; 13(3):175–9

[Bronchial cancer associated with upper respiratory and digestive tract cancers] Etienne G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):219–24 (Eng. Abstr.) **(Fre)**

[Pigmented lesions of the oral cavity. II. Melanosis and melanoma] Bucci E, et al. **Minerva Stomatol** 1989 May; 38(5):533–45 (162 ref.) (Eng. Abstr.) **(Ita)**

[Tumors of the oral cavity] Ragazzi E. **Minerva Stomatol** 1988 Nov;37(11):887–94 (16 ref.) (Eng. Abstr.) **(Ita)**

[Dermoid cysts of the floor of mouth] Verrina G, et al. **Minerva Stomatol** 1989 Jun;38(6):683–6 (Eng. Abstr.) **(Ita)**

ANALYSIS

Expression of epidermal growth factor receptor on oral squamous cell carcinoma. Partridge M, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):381–9

Serum and salivary CEA and GICA levels in oral cavity

tumours. Negri L, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):107–12
Cytokeratins in hamster cheek pouch epithelium during DMBA–induced carcinogenesis. Lin LM, et al. **J Oral Pathol Med** 1989 May;18(5):287–90
Altered keratin expression in buccal mucosal squamous cell carcinoma. Vaidya MM, et al. **J Oral Pathol Med** 1989 May;18(5):282–6
[Immunohistochemical localization of laminin and its relation to the grade of histological malignancy in oral cancer] Noguchi M, et al. **Gan No Rinsho** 1989 Jul;35(8):880–5 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Comparative morphometric study of tumor vasculature in human squamous cell carcinomas and their xenotransplants in athymic nude mice. Lauk S, et al. **Cancer Res** 1989 Aug 15;49(16):4557–61

CHEMICALLY INDUCED

Transformation of oral keratinocytes in vitro by 4–nitroquinoline N–oxide. Crane IJ, et al. **Carcinogenesis** 1988 Dec;9(12):2251–6
Induction of tumors in the Zymbal gland, oral cavity, colon, skin and mammary gland of F344 rats by a mutagenic compound, 2–amino–3,4–dimethylimidazo[4,5–f]quinoline. Kato T, et al. **Carcinogenesis** 1989 Mar;10(3):601–3
The effect of citrus limonoids on hamster buccal pouch carcinogenesis. Miller EG, et al. **Carcinogenesis** 1989 Aug; 10(8):1535–7
Early neoplastic commitment of hamster buccal pouch epithelium exposed biweekly to 7,12–dimethylbenz[a]anthracene. Solt DB, et al. **Carcinogenesis** 1988 Dec;9(12):2173–7
Gamma–glutamyl transpeptidase activity in superficial exfoliated cells during hamster buccal pouch carcinogenesis. Zhang L, et al. **Carcinogenesis** 1989 May; 10(5):857–60
Histomorphometric analysis of epithelial changes in chemically induced oral mucosal carcinogenesis in rats. Rich AM, et al. **J Oral Pathol** 1988 Nov;17(9–10):528–33
The involvement of reactive oxygen species in oral cancers of betel quid/tobacco chewers. Stich HF, et al. **Mutat Res** 1989 Sep;214(1):47–61 (99 ref.)

COMPLICATIONS

Concomitant occurrence of oral submucous fibrosis, pemphigus and squamous cell carcinoma. Dayal PK, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):334–7
The association of white lesions with oral squamous cell carcinoma. A retrospective study of 212 patients. Hogewind WF, et al. **Int J Oral Maxillofac Surg** 1989 Jun; 18(3):163–4
Aicardi syndrome associated with an embryonal carcinoma. Tagawa T, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):45–7 (14 ref.)
[Pulmonary tuberculosis in patients with oral cancer] Hara H, et al. **Gan No Rinsho** 1988 Oct;34(12):1647–53 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Congenital nevocellular nevus of the oral mucosa. Takeda Y. **Ann Dent** 1988 Winter;47(2):40–2
Congenital dermoid cyst of the oral cavity with gastric choristoma. Arcand P, et al. **J Otolaryngol** 1988 Aug; 17(5):219–22
Epignathus: a report of two neonatal cases. Maeda K, et al. **J Pediatr Surg** 1989 Apr;24(4):395–7
The development during pregnancy of pyogenic granulomas superimposed upon a congenital hemangioma: a case report. Tervahartiala B, et al. **J Periodontol** 1989 Jun;60(6):358–61

DIAGNOSIS

Intrauterine diagnosis of epignathus using ultrasonic tomography. Shouno H, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):199–205
Oral cancer [letter] Pinkerton D. **Br Dent J** 1988 Nov 5; 165(9):318
Early detection, diagnosis, and management of oral and oropharyngeal cancer. Mashberg A, et al. **CA** 1989 Mar–Apr;39(2):67–88 (49 ref.)
Factors delaying the diagnosis of oral and oropharyngeal carcinomas. Guggenheimer J, et al. **Cancer** 1989 Aug 15; 64(4):932–5
Role of fine needle aspiration in the diagnosis of lesions of the oral cavity, oropharynx, and nasopharynx. Scher RL, et al. **Cancer** 1988 Dec 15;62(12):2602–6
Early diagnosis of oral cancer. Silverman S Jr. **Cancer** 1988 Oct 15;62(8 Suppl):1796–9
Compliance following referral in the early detection of oral cancer and precancer in Sri Lanka. Warnakulasuriya S, et al. **Community Dent Oral Epidemiol** 1988 Dec; 16(6):326–9
Serum pseudocholinesterase activity & protein bound fucose level in oral malignancy. Sen R, et al. **Indian J Cancer** 1987 Dec;24(4):242–50
Ancient neurilemmoma (Schwannoma) of the oral cavity. Dayan D, et al. **J Craniomaxillofac Surg** 1989 Aug; 17(6):280–2 (8 ref.)
Oral cancer. **Lancet** 1989 Aug 5;2(8658):311–2 (32 ref.)
Use of meta–analysis to evaluate tolonium chloride in oral cancer screening. Rosenberg D, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):621–7
Oral and oropharyngeal malignancies: the case for early detection. Hampshire J, et al. **Practitioner** 1988 Jul; 232(1452):766
The early diagnosis and prevention of oral precancer and cancer. Altini M. **S Afr Med J** 1989 Feb 18;Suppl:1
Diagnosis of oral precancer and cancer. Ligthelm AJ, et al. **S Afr Med J** 1989 Feb 18;Suppl:2–5 (25 ref.)
[Is earlier diagnosis of oral cancer possible?] Lindeløv B, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):15–7 (Eng. Abstr.) **(Dan)**
[Detection and assessment of cervical lymph node metastases in head–neck tumors. A comparison of methods] Heppt W, et al. **Laryngorhinootologie** 1989 Jun;68(6):327–32 (Eng. Abstr.) **(Ger)**
[Magnetic resonance tomography of the oral cavity, the oropharynx and the mouth floor: comparison with computed tomography] Lenz M, et al. **ROFO** 1989 Apr; 150(4):425–33 (Eng. Abstr.) **(Ger)**
[Diagnostic delay in neoplasms of the oral cavity and oropharynx] Squadrelli–Saraceno M, et al. **Acta Otorhinolaryngol Ital** 1988 May–Jun;8(3):281–97 (Eng. Abstr.) **(Ita)**
[Clinical–instrumental diagnosis of tumors of the tongue and oral floor] Bellioni P, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):273–92 (11 ref.) (Eng. Abstr.) **(Ita)**
[The diagnosis of precancerous diseases and cancer of the lip and oral mucosa by using contact fluorescence biomicroscopy] Filiurin MD. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):19–21 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Combined therapy for resectable head and neck cancer. A phase 3 intergroup study. Schuller DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):364–8
Regression of oral Kaposi's sarcoma in a case of AIDS on zidovudine (AZT). Langford A, et al. **Br J Dermatol** 1989 May;120(5):709–13
Tumor necrosis factor in experimental cancer regression with alphatocopherol, beta–carotene, canthaxanthin and algae extract. Shklar G, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):839–50
Neoadjuvant chemotherapy in early–stage and locally advanced small bulk squamous cell carcinoma of the oral cavity and oropharynx. Tichler T, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):539–44
Local prostaglandin E2 in patients with oral malignancies undergoing chemo– and radiotherapy. Porteder H, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):371–4
Preoperative chemotherapy in advanced resectable head and neck cancer: final report of the Southwest Oncology Group. Schuller DE, et al. **Laryngoscope** 1988 Nov; 98(11):1205–11
[Interstitial photodynamic therapy of oral squamous cancers] Wang KH. **Chung Hua Chung Liu Tsa Chih** 1988 Nov; 10(6):473–5 (Eng. Abstr.) **(Chi)**
[Randomized trial of initial chemotherapy with cisplatin alone or in combination in 241 advanced carcinomas of the upper respiratory and digestive tract] Chauvergne J, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):581–9 (Eng. Abstr.) **(Fre)**
[Induction chemotherapy with Cis DDP–5FU in cancers of the upper respiratory and digestive tract after 70 years of age] Demard F, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):197–200 (Eng. Abstr.) **(Fre)**
[Pathohistologic studies of serial sections of squamous cell cancer of the oral cavity and oropharynx following cytostatic induction therapy with bleomycin and cisplatin] Bettinger R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov; 67(11):580–5 (Eng. Abstr.) **(Ger)**
[Continuous subcutaneous infusion of peplomycin in oral squamous carcinoma] Kanazawa H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):775–80 (Eng. Abstr.) **(Jpn)**
[Long–term intravenous infusion of 5–fluorouracil combined with platidiam in local spread of squamous cell carcinoma of the oral cavity] Gorbunova VA, et al. **Sov Med** 1989; (5):92–4 **(Rus)**
[Effect of tobacco, herpes simplex virus and antioxidants on free–radical oxidation in the oral mucosa] Suleĭmanova GG, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):12–4 (Eng. Abstr.) **(Rus)**
[Toxicity of cisplatin with continuous infusion of 5–fluorouracil in neoadjuvant chemotherapy of carcinoma of the oral cavity] Poruban D, et al. **Bratisl Lek Listy** 1989 May;90(5):339–44 (Eng. Abstr.) **(Slo)**

ENZYMOLOGY

Evaluation of serum lactate dehydrogenase (LDH) in oral premalignant and malignant lesions. Muralidhar M, et al. **Ann Dent** 1988 Winter;47(2):11–5
Serum dipeptidyl peptidase activities as a possible marker of oral cancer. Urade M, et al. **Cancer** 1989 Sep 15; 64(6):1274–80
Histochemical studies on the distribution of certain dehydrogenases in squamous cell carcinoma of cheek. Banerjee S, et al. **Indian J Cancer** 1989 Mar;26(1):21–30

EPIDEMIOLOGY

Oral cancer in children under 15 years of age. A clinicopathological and virological study. Kärjä J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:145–9
Clinical profile of 2007 oral cancers in Kerala, India. Nair MK, et al. **Ann Dent** 1988 Summer;47(1):23–6
Oral cancer [letter] Nally FF. **Br Dent J** 1988 Oct 8; 165(7):240
An epidemiologic assessment of cancer risk in oral precancerous lesions in India with special reference to nodular leukoplakia. Gupta PC, et al. **Cancer** 1989 Jun 1; 63(11):2247–52
Time trends in upper alimentary tract cancer rates and alcohol and tobacco consumption in Australia. McMichael AJ, et al. **Community Health Stud** 1988;12(3):289–95
Squamous cell carcinoma of the oral cavity and oropharynx in young adults. Cusumano RJ, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):229–34
Risk factors for oral cancer in Brazil: a case–control study. Franco EL, et al. **Int J Cancer** 1989 Jun 15;43(6):992–1000
Oral condyloma acuminatum. Zunt SL, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):591–4
Incidence of oral cancer in Atlanta. Chow WH, et al. **J Med Assoc Ga** 1988 Aug;77(8):654–7
Leukoplakia and incidence of oral cancer. Gupta PC. **J Oral Pathol Med** 1989 Jan;18(1):17
Changing incidence of cancer of the tongue, oral cavity, and pharynx in Denmark. Møller H. **J Oral Pathol Med** 1989 Apr;18(4):224–9
Epidemiology of oral precancer and cancer. Maresky LS, et al. **S Afr Med J** 1989 Feb 18;Suppl:18–20 (40 ref.)
Risk of lung, larynx, pharynx and buccal cavity cancers among carbon electrode manufacturing workers. Moulin JJ, et al. **Scand J Work Environ Health** 1989 Feb;15(1):30–7
[Occupational exposure in cancer of the mouth, pharynx and larynx] Oreggia F, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):365–76 (Eng. Abstr.) **(Spa)**

ETIOLOGY

National Institutes of Health consensus statement. Health implications of smokeless tobacco use. NIH Consensus Development Panel. **Biomed Pharmacother** 1988;42(2):93–8 (0 ref.)
Aetiology of oral cancer in patients less than or equal to 30 years of age. Sankaranarayanan R, et al. **Br J Cancer** 1989 Mar;59(3):439–40
Snuff–induced carcinogenesis: effect of snuff in rats initiated with 4–nitroquinoline N–oxide. Johansson SL, et al. **Cancer Res** 1989 Jun 1;49(11):3063–9
Risk factors for oral cancer in women. Kabat GC, et al. **Cancer Res** 1989 May 15;49(10):2803–6
Role of tobacco and alcoholic beverages in the etiology of cancer of the oral cavity/oropharynx in Torino, Italy. Merletti F, et al. **Cancer Res** 1989 Sep 1;49(17):4919–24
The oral clinical features of HIV infection. Greenspan D, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):535–43 (40 ref.)
Type of alcoholic beverage and oral cancer. Kabat GC, et al. **Int J Cancer** 1989 Feb 15;43(2):190–4
Role of alcohol in cancers of the upper alimentary tract: use of models in risk assessment. Notani PN. **J Epidemiol Community Health** 1988 Jun;42(2):187–92
High prevalence of human papillomavirus infection and possible association with betel quid chewing and smoking in oral epidermoid carcinomas in Taiwan. Chang KW, et al. **J Med Virol** 1989 May;28(1):57–61
Mechanisms of carcinogenesis with particular reference to the oral mucosa. Boyd NM, et al. **J Oral Pathol** 1988 May; 17(5):193–201 (134 ref.)
Effects of smokeless tobacco on the buccal mucosa of HMT rats. Chen SY. **J Oral Pathol Med** 1989 Feb;18(2):108–12
Snuff tumorigenesis: effects of long–term snuff administration after initiation with 4–nitroquinoline–N–oxide and herpes simplex virus type 1. Larsson PA, et al. **J Oral Pathol Med** 1989 Apr;18(4):187–92
Effect of DMBA on oral cancer development in hamsters with latent HSV–1 infections in trigeminal ganglia. Cornella FA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):167–71
The causation of oral precancer and cancer. Altini M, et al. **S Afr Med J** 1989 Feb 18;Suppl:6–10 (77 ref.)
Betel chewing and dietary habits of chewers without and with submucous fibrosis and with concomitant oral cancer. Seedat HA, et al. **S Afr Med J** 1988 Dec 3;74(11):572–5
Betel quid and oral carcinogenesis. Awang MN. **Singapore Med J** 1988 Dec;29(6):589–93 (73 ref.)
[Buccopharyngeal Kaposi's sarcoma in AIDS. Apropos of 51 cases] Gehanno P, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):453–7 (Eng. Abstr.) **(Fre)**
[Clinical manifestations of HIV infection in the oromaxillofacial area] Rink B. **Z Arztl Fortbild (Jena)** 1988; 82(12):557–9 (33 ref.) **(Ger)**
[Etiology of tumors of the oral cavity] Olasz L, et al. **Fogorv Sz** 1989 Aug;82(8):233–6 (Eng. Abstr.) **(Hun)**
[Precancerous oral lesions. Diagnostic and therapeutic protocol] Berrino F, et al. **Acta Otorhinolaryngol Ital** 1989; 9 Suppl 23:1–24 (Eng. Abstr.) **(Ita)**
[Kaposi's sarcoma in patients with AIDS] Moniaci D, et al. **Minerva Stomatol** 1988 May;37(5):339–42 (Eng. Abstr.) **(Ita)**

[Non-Hodgkin's lymphoma and Kaposi's sarcoma as initial manifestations of acquired immunodeficiency syndrome with rapid fatal outcome (letter)] Torné J, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):675 **(Spa)**

GENETICS

Chromosome sensitivity to bleomycin-induced mutagenesis, an independent risk factor for upper aerodigestive tract cancers. Spitz MR, et al. **Cancer Res** 1989 Aug 15; 49(16):4626-8

Detection of Ki-ras messenger RNA in normal and chemically transformed hamster oral keratinocytes. Wong DT, et al. **Cancer Res** 1989 Aug 15;49(16):4562-7

TGF-alpha and EGF-receptor mRNAs in human oral cancers. Todd R, et al. **Carcinogenesis** 1989 Aug; 10(8):1553-6

Histone gene (H3) expression in chemically transformed oral keratinocytes. Wong DT. **Exp Mol Pathol** 1988 Oct; 49(2):206-14

Oral squamous cell carcinoma in identical twins: report of a case. Bhaskar PB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1096-8

Familial occurrence of oral cancer: report of cases. Hara H, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1098-102

Human papillomavirus (HPV) DNA sequences in oral precancerous lesions and squamous cell carcinoma demonstrated by in situ hybridization. Syrjänen SM, et al. **J Oral Pathol** 1988 Jul;17(6):273-8

Localization of H-ras mRNA in oral squamous cell carcinomas. Hoellering J, et al. **J Oral Pathol Med** 1989 Feb;18(2):74-8

Loss of Harvey ras heterozygosity in oral squamous carcinoma. Howell RE, et al. **J Oral Pathol Med** 1989 Feb; 18(2):79-83

Oncogene amplification in squamous cell carcinoma of the oral cavity. Saranath D, et al. **Jpn J Cancer Res** 1989 May; 80(5):430-7

Novel KI-ras codon 61 mutation in infiltrating leucocytes of oral squamous cell carcinoma [letter] Chang SE, et al. **Lancet** 1989 May 6;1(8645):1014

Activation of oncogenes in human oral cancer cells: a novel codon 13 mutation of c-H-ras-1 and concurrent amplifications of c-erbB-1 and c-myc. Tadokoro K, et al. **Oncogene** 1989 Apr;4(4):499-505

[Cowden's syndrome. Apropos of 2 familial cases] Barba A, et al. **G Ital Dermatol Venereol** 1988 May;123(5):233-5 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Tumor immunity in oral cancer: a clinico-pathological study. Jansa P, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:95-106

Premalignant and malignant oral lesions are associated with changes in the glycosylation pattern of carbohydrates related to ABH blood group antigens. Dabelsteen E, et al. **APMIS** 1988 Sep;96(9):813-9

Plasma levels of a squamous cell carcinoma-associated antigen in athymic nude mice bearing human squamous cell carcinoma xenografts of oral origin. With preliminary clinical data. Alajaji JT, et al. **Cancer** 1988 Dec 1; 62(11):2291-6

Epithelial dendritic cells and connective tissue macrophages in oral carcinogenesis and the effects of systemic Corynebacterium parvum. Pitigala-Arachchi A, et al. **Carcinogenesis** 1989 Mar;10(3):501-7

Lymphokine-activated killer-cell function of lymphocytes from peripheral blood, regional lymph nodes and tumor tissues of patients with oral cancer. Tatake RJ, et al. **Int J Cancer** 1989 Apr 15;43(4):560-6

Monoclonal antibodies to HSV-infection-related antigens cross-react with tumor cell lines and tumor tissue sections [letter] Scully C. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):197

The relationship between epithelial Ia expression and the inflammatory cell infiltrate during experimental oral carcinogenesis. Matthews JB, et al. **Virchows Arch [A]** 1988; 413(6):521-8

[The value of CEA in post-therapeutic monitoring of head and neck carcinoma] Fiorella R, et al. **Acta Otorhinolaryngol Ital** 1988 Mar-Apr;8(2):133-6 (Eng. Abstr.) **(Ita)**

[An expression of tumor-associated antigen which was recognized by a monoclonal antibody KM-93 in oral tumor—comparison between tissue antigen and serum antigen] Tsuji T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1645-50 (Eng. Abstr.) **(Jpn)**

METABOLISM

The expression of epidermal growth factor receptors in the oral mucosa of patients with oral cancer. Bergler W, et al. **Arch Otorhinolaryngol** 1989;246(3):121-5

Inhibited methionine incorporation in human squamous carcinomas of the oral cavity as a measure for response to 5-fluorouracil. Görögh T, et al. **J Cancer Res Clin Oncol** 1989;115(4):366-72

[Polyamines in tumors of the oral cavity] Colombatto S, et al. **Minerva Stomatol** 1989 Jan;38(1):11-4 (Eng. Abstr.) **(Ita)**

MICROBIOLOGY

Detection of human papillomavirus genes in human oral tissue biopsies and cultures by polymerase chain reaction. Maitland NJ, et al. **Br J Cancer** 1989 May;59(5):698-703

Cytomegalovirus in intraoral Kaposi's sarcoma. Newland JR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):296-300

[Ultrastructural demonstration of the human papilloma virus (HPV) in oral proliferative lesions] Broich G, et al. **Acta Otorhinolaryngol Ital** 1989 Mar-Apr;9(2):189-97 (Eng. Abstr.) **(Ita)**

MORTALITY

A multivariate analysis of determinants of survival for patients with squamous cell carcinoma of the head and neck. Ildstad ST, et al. **Ann Surg** 1989 Feb;209(2):237-41

PATHOLOGY

Stromal reaction of carcinomas after cytostatic therapy. Pastrňák A, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:85-93

Distribution of Langerhans cells in oral inflammatory hyperplastic lesions. Markopoulos AK, et al. **Ann Dent** 1988 Summer;47(1):9-12

Lung and cervical lymph-node metastasis after cortisone enhancement in hamster cheek-pouch carcinogenesis. Kage T, et al. **Arch Oral Biol** 1988;33(6):459-61

Pathologic quiz case 2. Kaposi's sarcoma (KS) of the oral cavity. Arriaga MA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):390-1, 393

Clinicopathological presentations of oral Kaposi's sarcoma in AIDS. Barrett AP, et al. **Aust Dent J** 1988 Oct; 33(5):395-9

Snuff dipping and oral cancer in Sudan: a retrospective study. Elbeshir EI, et al. **Br J Oral Maxillofac Surg** 1989 Jun; 27(3):243-8

Quantitative cytophotometric analysis as an aid to the detection of recurrent oral cancer. Ogden GR, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):224-8

Oral precancer: patterns, complexities and clinical guidelines. Lovas JG. **Can Dent Assoc J** 1989 Mar;55(3):209-14 (35 ref.)

Prognostic factors in mobile tongue and floor of mouth carcinoma. Brown B, et al. **Cancer** 1989 Sep 15; 64(6):1195-202

Appearance, site of occurrence, and physical and clinical characteristics of oral carcinoma in Torino, Italy. Mashberg A, et al. **Cancer** 1989 Jun 15;63(12):2522-7

Rhabdomyosarcoma of the oral and paraoral region. Peters E, et al. **Cancer** 1989 Mar 1;63(5):963-6 (10 ref.)

Enhanced expression of tonofilament bundles during hamster cheek pouch carcinogenesis is associated with tumour growth and the loss of high molecular weight keratins [published erratum appears in Cell Biol Int Rep 1989 Apr;13(4):315] Gijare PS, et al. **Cell Biol Int Rep** 1988 Dec; 12(12):1067-75

Papillomavirus-induced diseases of the oral mucosa. Lutzner MA. **Clin Dermatol** 1985 Oct-Dec;3(4):139-43

Widespread oral papillomatosis due to chronic buccal trauma. Mosovich B, et al. **Cutis** 1989 Mar;43(3):254-7

Low-grade papillary adenocarcinoma of buccal mucosa salivary gland origin. Fliss DM, et al. **Head Neck** 1989 May-Jun;11(3):237-41 (20 ref.)

Mitotic phase distribution in oral epithelial hyperplasia and neoplasia. Ojo MA, et al. **Histopathology** 1988 Aug; 13(2):213-9

Establishment of two cell lines from hamster buccal pouch tumors induced by topical 7,12-dimethylbenz(a)anthracene and topical DMBA in conjunction with herpes simplex virus infection. Park NH, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1173-8

Exophytic mass of the floor of the mouth. Whitt JC, et al. **J Am Dent Assoc** 1989 Sep;119(3):425-7

Rapidly expanding pigmented lesion of the buccal mucosa [published erratum appears in J Am Dent Assoc 1989 Apr;118(4):412] Whitt JC, et al. **J Am Dent Assoc** 1988 Oct;117(5):620-2

Oral leukoplakia, with emphasis on malignant transformation. A follow-up study of 46 patients. Hogewind WF, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):128-33 (29 ref.)

Spindle-cell carcinoma of the oral cavity and larynx. Immunohistochemical aspects. Slootweg PJ, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):234-6

Verruciform xanthoma within carcinoma in situ. Drummond JF, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):398-400

Intraoral Hodgkin's disease. Mathews FR, et al. **J Oral Maxillofac Surg** 1989 May;47(5):502-4

Differences between preneoplastic cells, neoplastic cells and their normal counterparts. Boyd NM, et al. **J Oral Pathol** 1988 Jul;17(6):257-65 (113 ref.)

Kaposi's sarcoma in AIDS: basement membrane and endothelial cell markers in late-stage lesions. Green TL, et al. **J Oral Pathol** 1988 Jul;17(6):266-72

Malignant development of lichen planus-affected oral mucosa. Holmstrup P, et al. **J Oral Pathol** 1988 May; 17(5):219-25

Epithelial dendritic cells in pathological human oral tissues. Pitigala-Arachchi A, et al. **J Oral Pathol Med** 1989 Jan; 18(1):11-6

Sampling of jugulo-digastric lymph nodes in oral cancer. Saka SM, et al. **J Oral Pathol Med** 1989 Feb;18(2):123-4

Primary extranodal non-Hodgkin's lymphoma of the oral region. Takahashi H, et al. **J Oral Pathol Med** 1989 Feb; 18(2):84-91

Quantitative exfoliative cytology of abnormal oral mucosal smears. Cowpe JG, et al. **J R Soc Med** 1988 Sep; 81(9):509-13

The effect of hyperbaric oxygen therapy of oral mucosal carcinoma. McMillan T, et al. **Laryngoscope** 1989 Mar; 99(3):241-4

Jaw and skull changes in neurofibromatosis. D'Ambrosio JA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):391-6

Kaposi's sarcoma of the oral cavity: a study of 134 patients with a review of the pathogenesis, epidemiology, clinical aspects, and treatment. Ficarra G, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):543-50 (48 ref.)

Oral lymphomas in HIV-infected patients: association with Epstein-Barr virus DNA. Green TL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):437-42

Atypical lymphohistiocytic infiltrate (pseudolymphoma) of the oral cavity. Kabani S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):587-92

Virus-associated dysplasia (bowenoid papulosis?) of the oral cavity. Kratochvil FJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):312-6

Evaluation of histopathologic parameters in predicting cervical lymph node metastasis of oral and oropharyngeal carcinomas. Shingaki S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):683-8

Factor XIIIa-containing cells and fibrosis in oral and maxillofacial lesions: an immunohistochemical study. Toida M, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):293-9

Heterogeneity of primary malignant melanomas in oral mucosa: an analysis of 43 cases in Japan. Umeda M, et al. **Pathology** 1988 Jul;20(3):234-41 (56 ref.)

Clinical manifestations of oral precancer and cancer. Raubenheimer EJ, et al. **S Afr Med J** 1989 Feb 18; Suppl:11-4

[Primary malignant melanoma of the oral cavity] Wang ZY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):174-6 **(Chi)**

[The immunogold-silver technic in detecting cellular nucleic acids and antigens in squamous epithelial cancers] Henke RP, et al. **Acta Histochem Suppl (Jena)** 1989;37:73-8 **(Ger)**

[Degenerated schwannoma of the oral cavity] Suba Z, et al. **Fogorv Sz** 1989 Jun;82(6):185-8 (Eng. Abstr.) **(Hun)**

[Pigmented lesions of the oral cavity. I. Classification and etiopathogenesis] Bucci E, et al. **Minerva Stomatol** 1989 Mar;38(3):369-78 (162 ref.) (Eng. Abstr.) **(Ita)**

[The most frequent sites of origin of squamous cell carcinoma of the oral cavity and oropharynx. Interpretative hypothesis] Gandolfo S, et al. **Minerva Stomatol** 1988 Oct; 37(10):751-5 (21 ref.) (Eng. Abstr.) **(Ita)**

[Secondary metastasis after excision of oral squamous cancer without local recurrence] Yamamoto E, et al. **Gan No Rinsho** 1989 Jun;35(7):815-24 (Eng. Abstr.) **(Jpn)**

[Therapeutic analysis of autopsy findings in oral cancer] Fukazawa H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1962-7 (Eng. Abstr.) **(Jpn)**

[Multiple hamartoma syndrome] Pujol RM, et al. **Med Cutan Ibero Lat Am** 1988;16(4):322-7 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Palliation of pain in advanced oral cancer. Narayanan RS, et al. **Headache** 1988 May;28(4):258-9

PREVENTION & CONTROL

Vitamins A and E do protect against oral carcinoma. Calhoun KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):484-8

Oral cancer [letter] **Br Dent J** 1988 Nov 19;165(10):357

Remuneration for oral mucosa screening [letter] Pinkerton DN. **Br Dent J** 1989 Jan 7;166(1):6

Adolescent smokeless tobacco use: relationship between epidemiologic and cognitive factors. Williams NJ, et al. **Prog Clin Biol Res** 1989;293:211-20

RADIOGRAPHY

The use of computed tomography in assessing oral cancer recurrence after flap reconstruction. Brown DH, et al. **Am J Otolaryngol** 1989 May-Jun;10(3):161-4

Clinical examination, CT and US in tongue cancer staging. Fruehwald FX. **Eur J Radiol** 1988 Nov;8(4):236-41

Computed tomographic evaluation of regional lymph node involvement in cancer of the oral cavity and oropharynx. Close LG, et al. **Head Neck** 1989 Jul-Aug;11(4):309-17

[The value of computerized tomography in stomatology] Piette E. **Rev Belge Med Dent** 1987;42(6):201-5 **(Fre)**

[Oral Kaposi's sarcoma (AIDS). X-ray findings in oral Kaposi's sarcoma (AIDS)] Langford AA, et al. **Schweiz Monatsschr Zahnmed** 1989;99(2):198-201 **(Ger)**

[Computed tomographic appearance of the recurrent patterns of oropharyngeal and oral cavity squamous cell carcinomas] Sasaki F, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1071-7 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Dysphagia after fast neutron therapy to the head and neck. Alexander MS, et al. **Br J Radiol** 1989 Aug;62(740):724–8

An afterloading technique suitable for the oral cavity and oropharynx and capable of adaptation for use with remote afterloading units. Dawes PJ, et al. **Br J Radiol** 1988 Nov; 61(731):1067–9

Radiotherapy after excisional biopsy of carcinoma of the oral tongue/floor of the mouth. Mendenhall WM, et al. **Head Neck** 1989 Mar–Apr;11(2):129–31

Dose fractionation and regeneration in radiotherapy for cancer of the oral cavity and oropharynx: tumor dose–response and repopulation. Maciejewski B, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):831–43

Afterloaded radiation carrier for carcinoma of the palate. A clinical report. Randall ME, et al. **J Prosthet Dent** 1988 Dec;60(6):655–9

Comparison between predicted and actual dose distribution in interstitial therapy of the oral cavity. van 't Riet A, et al. **Radiother Oncol** 1988 Dec;13(4):277–83

Oral cavity cancer: 234 patients treated with radiotherapy alone with curative intent. Olmi P, et al. **Rays** 1988 Sep–Dec;13(3):107–15 (37 ref.)

[The results of radiotherapy in advanced oral carcinomas. The effect of altered therapeutic strategies] Flentje M, et al. **Strahlenther Onkol** 1989 Jan;165(1):11–7 (Eng. Abstr.) (Ger)

[Simultaneous radiation– and chemotherapy (methotrexate and bleomycin) of inoperable malignant oro–facial tumors] Stasler B, et al. **Fogorv Sz** 1989 Jul;82(7):211–7 (Eng. Abstr.) (Hun)

[Taste variations after radiotherapy of neoplasms of the pharynx and oral cavity] Barbieri M, et al. **Acta Otorhinolaryngol Ital** 1988 Jul–Aug;8(4):397–404 (Eng. Abstr.) (Ita)

[Pre– and postoperative radiotherapy of oral carcinoma of a locally advanced stage. An analysis of the results and complications] Zini G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):99–103 (Eng. Abstr.) (Ita)

[The role of radiation therapy in treatment with preservation of shape and function in intraoral cancer] Masaki N, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3105–10 (Eng. Abstr.) (Jpn)

[Evaluation of the effectiveness of palliative irradiation with high fractionated doses and planned intervals in patients with advanced cancer of the oral cavity and pharynx] Skołyszewski J, et al. **Nowotwory** 1988 Oct–Dec; 38(4):251–60 (Eng. Abstr.) (Pol)

[A device for direct instrumental topometry in the radiation therapy of cancer of the oral mucosa] Volodina GI, et al. **Med Radiol (Mosk)** 1989 May;34(5):82–4 (Rus)

[Thermoradiotherapy of the late stages of cancer of the oral mucosa and oropharynx] Vorob'ev IuI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):48–52 (Eng. Abstr.) (Rus)

SECONDARY

Metastatic uterine tumor to the oral cavity: case report and 20–year review of the English literature. Tsounias B. **Ann Dent** 1988 Winter;47(2):26–7 (12 ref.)

Neoplasms metastatic to the mouth, jaws and surrounding tissues. Zachariades N. **J Craniomaxillofac Surg** 1989 Aug; 17(6):283–90 (204 ref.)

Malignant cystosarcoma phyllodes of the breast metastatic to the oral cavity: report of a case and review of the literature. Cooney BM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):599–604 (28 ref.)

SURGERY

Horizontal versus vertical block resection for early floor of mouth carcinoma. Moloy PJ, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):153–60

Critical assessment of supraomohyoid neck dissection. Spiro JD, et al. **Am J Surg** 1988 Oct;156(4):286–9

Mandibulotomy in the irradiated patient. Davidson J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):497–9

Transoral carbon dioxide laser ablation for cancer, tumors, and other diseases. Panje WR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):681–8

Side–by–side double paddle pectoralis major flap for cheek defects. Ord RA, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):177–85

The pectoralis major muscle flap without skin in intra–oral reconstruction. Phillips JG, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):479–85

The folded, bipaddled pectoralis major composite flap in oral cancer reconstruction. Bhathena HM, et al. **Br J Plast Surg** 1989 Jul;42(4):441–6

Functional implications of major surgery for intraoral cancer. Freedlander E, et al. **Br J Plast Surg** 1989 May;42(3):266–9

Immediate reconstruction following resection of oral cancer with pectoralis major myocutaneous flap. Kusama M, et al. **Bull Tokyo Med Dent Univ** 1988 Jun;35(1–2):1–9

Rationale for elective modified neck dissection. Byers RM, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):160–7

Long–term results in treating squamous cell carcinoma of the lip, oral cavity, and oropharynx. Hemprich A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):39–42

The myocutaneous platysma flap for the reconstruction of intraoral defects after radical tumour resection. Howaldt HP, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):237–40

Benign paroxysmal positional vertigo resulting from surgical trauma. Nigam A, et al. **J Laryngol Otol** 1989 Feb; 103(2):203–4

Mandibulotomy and radical radiotherapy: compatible or not? Davidson J, et al. **J Otolaryngol** 1988 Oct;17(6):279–81

The osteomusculocutaneous musculoperitoneal groin flap in head and neck reconstruction. Kärcher H, et al. **J Reconstr Microsurg** 1989 Jan;5(1):31–5

Advantages of pectoralis musculocutaneous flap pharyngeal reconstruction. Stein DW, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):691–6

Minor salivary gland tumors of the lip and buccal mucosa. Weber RS, et al. **Laryngoscope** 1989 Jan;99(1):6–9

Treatment of an oral erythroplastic squamous cell carcinoma with Mohs' micrographic surgery. Eliezri YD, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):249–54

A method of closure after resection of anterior floor of mouth cancers. Weissler MC, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):315–20

The role of combined composite resection and irradiation in the management of carcinoma of the oral cavity and oropharynx. Wazer DE, et al. **Strahlenther Onkol** 1989 Jan; 165(1):18–22

CO2 laser surgery for oral cancer. Lim RY. **W V Med J** 1988 Oct;84(10):453–4

[Radical neck dissection for cancer of the oral cavity] Jiang PJ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar; 10(2):146–8 (Eng. Abstr.) (Chi)

[Indications and safety of bilateral radical neck dissection] Liu SX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):82–4, 126 (Eng. Abstr.) (Chi)

[Reconstruction of massive oral and maxillofacial defects with free combined scapular and latissimus dorsi myocutaneous flaps with a pedicle to the subscapular artery] Tang YS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):52–4 (Chi)

[Secondary reconstruction of the mouth floor using a complete and prepared skin graft after non–interrupted pelvi–mandibulectomy] Gdoura A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):95–9 (Eng. Abstr.) (Fre)

[The free forearm flap in covering defects of the pharynx and oral cavity] Bootz F. **HNO** 1988 Nov;36(11):462–6 (Eng. Abstr.) (Ger)

[Dysontogenetic cysts of the mouth floor] Ziesmann B, et al. **HNO** 1989 Apr;37(4):182–5 (Eng. Abstr.) (Ger)

[Morphologic changes in the epithelium of myocutaneous pectoralis major islands flaps. A light and electron optic study] Beigel A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):586–9 (Eng. Abstr.) (Ger)

[A new combined therapeutic method for the management of extensive epithelial carcinoma of the oral cavity] Olasz L, et al. **Fogorv Sz** 1988 Sep;81(9):269–73 (Eng. Abstr.) (Hun)

[Results and postoperative function of oral cancer patients treated by surgery with immediate reconstruction] Amagasa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2591–7 (Eng. Abstr.) (Jpn)

[Plastic surgery of postoperative defects in patients with tumors of the maxillofacial area] Stadin GI, et al. **Vopr Onkol** 1989;35(7):853–6 (Eng. Abstr.) (Rus)

THERAPY

Lasersurgery and photodynamic therapy. Löfgren L. **Acta Otolaryngol Suppl (Stockh)** 1988;449:51–2

Squamous cell carcinoma of the oral cavity: a retrospective analysis of treatment and prognosis. Wildt J, et al. **Clin Otolaryngol** 1989 Apr;14(2):107–13

Response to preoperative concomitant radiochemotherapy with mitomycin C and 5–fluorouracil in advanced head and neck cancer. Dobrowsky W, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):845–9

Interferon administered intralesionally in skin and oral cavity lesions in heterosexual drug addicted patients with AIDS–related Kaposi's sarcoma [letter] Sulis E, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):759–61

DNA ploidy in oral cavity carcinomas, with special reference to prognosis. Tytor M, et al. **Head Neck** 1989 May–Jun; 11(3):257–63

The role of yearly chest radiography in the early detection of lung cancer following oral cancer. Stalpers LJ, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):99–103

Evaluation of treatment results of squamous cell carcinoma of the buccal mucosa. Pop LA, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):483–7

Management of intra–oral squamous cell carcinoma. McGregor AD. **J R Soc Med** 1989 Apr;82(4):187–8

Role of levamisole immunotherapy as an adjuvant to radiotherapy in oral cancer—immune responses. Balaram P, et al. **Neoplasma** 1988;35(6):617–25

An effective combined therapy for advanced squamous cell carcinoma of the oral cavity: preoperative BVMM (bleomycin, vincristine, mitolactol plus methotrexate and leucovorin) chemotherapy followed by surgery. Olasz L, et al. **Neoplasma** 1988;35(5):591–7

Management of oral squamous cell carcinoma in situ with topical 5–fluorouracil and laser surgery. Maxson BB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):44–8 (26 ref.)

The treatment and prognosis of oral precancer and cancer. Phillips VM. **S Afr Med J** 1989 Feb 18;Suppl:15–7 (31 ref.)

[Therapy of carcinoma of the oral cavity and the mesopharynx] Hamann D, et al. **Radiobiol Radiother (Berl)** 1989;30(3):221–6 (Eng. Abstr.) (Ger)

[Therapy of carcinomas of the oro–maxillo–facial region. II. Carcinomas of the floor of the mouth] Tartaro S, et al. **Minerva Stomatol** 1988 Jun;37(6):481–7 (Eng. Abstr.) (Ita)

[Clinicopathological study of advanced cancers of the oral cavity and pharynx—evaluation of the effects of chemotherapy and radiotherapy] Koieke S, et al. **Gan No Rinsho** 1989 Jun;35(7):834–9 (Eng. Abstr.) (Jpn)

[Effect of combined treatment with radiation therapy and peplomycin on carcinoma of the oral cavity] Shimizutani K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):967–71 (Eng. Abstr.) (Jpn)

[The combined use of cryosurgery and solcoseryl in treating malignant neoplasms] Mosienko VS, et al. **Eksp Onkol** 1989; 11(2):69–71 (Eng. Abstr.) (Rus)

[Hyperthermia in combined radiotherapy of cancer of the mouth mucosa] Matiakin GG, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):35–8 (Eng. Abstr.) (Rus)

[Evaluation of the efficacy of different regimens of treating patients with cancer of the organs of the oral cavity] Kitsmaniuk ZD, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug; 67(4):44–6 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

DNA grading of oral squamous carcinomas. A preliminary report. Chatelain R, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):43–6

VETERINARY

Cartilaginous metaplasia associated with a basal cell tumour in a dog. Anderson WI, et al. **J Comp Pathol** 1989 Jan; 100(1):107–9

Cisplatin toxicity in cats. Knapp DW, et al. **J Vet Intern Med** 1987 Jan–Mar;1(1):29–35

Oral neoplasia in 15 dogs and four cats. Bradley RL, et al. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):33–42

Feline oral neoplasia: a ten–year survey. Stebbins KE, et al. **Vet Pathol** 1989 Mar;26(2):121–8

MOUTH PROTECTORS

The use of a transparent mouthguard at induction [letter] Beneby G. **Anaesthesia** 1989 Aug;44(8):705

Orofacial trauma and mouth–protector wear among high school varsity basketball players. Maestrello–deMoya MG, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):36–9

Mouthguards and the role of sporting team dentists. Chapman PJ. **Aust Dent J** 1989 Feb;34(1):36–43 (26 ref.)

Mouthguards and the role of sporting team dentists [letter] Hewson N. **Aust Dent J** 1989 Aug;34(4):383

Use of a gum shield for Parkinson's disease patients [letter] Hussein SB. **Br Dent J** 1989 May 6;166(9):320

Physiological effects of a mouth–borne heat exchanger during heavy exercise in a cold environment. Eiken O, et al. **Ergonomics** 1989 Jun;32(6):645–53

Use of mouthguards during tooth preparation for patients with extreme tooth hypersensitivity. Gerrow JD, et al. **J Prosthet Dent** 1989 Mar;61(3):384–5

The use of the maxillary interocclusal splint as a mouthpiece for the mouthstick prosthesis. Hock DA. **J Prosthet Dent** 1989 Jul;62(1):56–7

STANDARDS

Comparison of two different mouthpieces for the measurement of Pimax and Pemax in normal and weak subjects. Koulouris N, et al. **Eur Respir J** 1988 Oct; 1(9):863–7

UTILIZATION

The pattern of use of mouthguards in rugby league (a study of the 1986 Australian Rugby League touring team). Chapman PJ. **Br J Sports Med** 1988 Sep;22(3):98–100

MOUTHPIECES see MOUTH PROTECTORS

MOUTHWASHES

A laboratory study of the effect of thermocycling in saline and artificial saliva on two dentine bonding agents. Pokarier M, et al. **Aust Dent J** 1989 Jun;34(3):266–71

Soft lining materials: their absorption of, and solubility in, artificial saliva. Kazanji MN, et al. **Br Dent J** 1988 Aug 6;165(3):91–4

'A double–blind cross–over trial of a mucin–containing artificial saliva' [letter] Watts KD. **Br Dent J** 1989 May 6;166(9):319–20

Comparative effects of FMR programs in fluoridated and unfluoridated communities. Brodeur JM, et al. **Can Dent Assoc J** 1988 Oct;54(10):761–5

Effect of fluoride and glycyrrhizin mouthrinses on artificial caries lesions in vivo. Deutchman M, et al. **Caries Res** 1989; 23(3):206–8

Effect of a mouthrinse containing calcium lactate on the formation and mineralization of dental plaque. van der Hoeven JS, et al. **Caries Res** 1989;23(3):146–50

Comparative effects of a 4-year fluoride mouthrinse program on high and low caries forming grade 1 children. Disney JA, et al. **Community Dent Oral Epidemiol** 1989 Jun; 17(3):139-43

Effect on approximal caries in teenagers of interrupting a school-based weekly NaF mouthrinse program for 3 years. Widenheim J, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):83-6

Studies on the effect of toothpaste rinses on plaque regrowth. (I). Influence of surfactants on chlorhexidine efficacy. Addy M, et al. **J Clin Periodontol** 1989 Jul;16(6):380-4

Effect on plaque growth and salivary micro-organisms of amine fluoride-stannous fluoride and chlorhexidine-containing mouthrinses. Etemadzadeh H, et al. **J Clin Periodontol** 1989 Mar;16(3):175-8

Studies on the effect of toothpaste rinses on plaque regrowth. (II). Triclosan with and without zinc citrate formulations. Jenkins S, et al. **J Clin Periodontol** 1989 Jul;16(6):385-7

Comparison of chlorhexidine delivery by mouthwash and spray on plaque accumulation. Kalaga A, et al. **J Periodontol** 1989 Mar;60(3):127-30

Hemostatic effect of tranexamic acid mouthwash in anticoagulant-treated patients undergoing oral surgery. Sindet-Pedersen S, et al. **N Engl J Med** 1989 Mar 30; 320(13):840-3

Effects of chlorhexidine mouthrinse on oral health in patients with acute leukemia. Wahlin YB. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):279-87

ADMINISTRATION & DOSAGE

Effect of a chemotherapeutic agent delivered by an oral irrigation device on plaque, gingivitis, and subgingival microflora. Ciancio SG, et al. **J Periodontol** 1989 Jun; 60(6):310-5

Treatment of xerostomia through use of dentures containing reservoirs of saliva substitute. Hirvikangas M, et al. **Proc Finn Dent Soc** 1989;85(1):47-50

ADVERSE EFFECTS

Mouthwash stomatitis [letter] Plosay JJ 3d, et al. **Ann Emerg Med** 1989 Jun;18(6):709-10

Atrial fibrillation induced by breath spray [letter] Ridker PM, et al. **N Engl J Med** 1989 Jan 12;320(2):124

ANALYSIS

Analysis of mucin as raw material and in a saliva substitute by isotachophoresis. Emonds AJ, et al. **Pharm Weekbl [Sci]** 1989 Apr 28;11(2):61-3

[Clinical study of the effect of toothpaste and mouthwash containing amino fluoride and stannous fluoride] Szöke J, et al. **Fogorv Sz** 1988 Nov;81(11):321-6 (30 ref.) (Eng. Abstr.) **(Hun)**

PHARMACOLOGY

Effects of proprietary oral rinses containing chlorhexidine, hexetidine and benzydamine on the proliferation of human buccal epithelial cells in culture. Shakespeare V, et al. **Arch Oral Biol** 1988;33(12):881-5

Effects of 6 months use of an antiseptic mouthrinse on supragingival dental plaque microflora. Minah GE, et al. **J Clin Periodontol** 1989 Jul;16(6):347-52

STANDARDS

Council on Dental Therapeutics accepts Listerine. **J Am Dent Assoc** 1988 Sep;117(3):515-6

Council on Dental Therapeutics accepts Peridex. **J Am Dent Assoc** 1988 Sep;117(3):516-7

THERAPEUTIC USE

Long-term clinical evaluation of toothpaste and oral rinse containing sanguinaria extract in controlling plaque, gingival inflammation, and sulcular bleeding during orthodontic treatment. Hannah JJ, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):199-207

Pre-brushing mouthrinse PLAX [letter] Addy M. **Br Dent J** 1989 Jul 8;167(1):10-11

A double-blind cross-over trial of a mucin-containing artificial saliva. Duxbury AJ, et al. **Br Dent J** 1989 Feb 25;166(4):115-20

Pre-brushing mouthrinse Plax [letter] Gallichan C. **Br Dent J** 1989 Jul 22;167(2):52

In vivo comparison of caries inhibition by a plaque mineral enriching mouthrinse and a fluoride dentifrice. Pearce EI, et al. **Caries Res** 1988;22(6):362-70

Use of mouthrinses for professional indications. Ciancio SG. **J Clin Periodontol** 1988 Sep;15(8):520-3 (22 ref.)

Chemotherapeutic inhibition of supragingival dental plaque and gingivitis development. DePaola LG, et al. **J Clin Periodontol** 1989 May;16(5):311-5

Clinical index systems used to assess the efficacy of mouthrinses on plaque and gingivitis. Fischman SL. **J Clin Periodontol** 1988 Sep;15(8):506-10 (23 ref.)

A clinical trial to assess the efficacy of sanguinarine-zinc mouthrinse (Veadent) compared with chlorhexidine mouthrinse (Corsodyl). Moran J, et al. **J Clin Periodontol** 1988 Nov;15(10):612-6

Longitudinal clinical studies with antimicrobial mouthrinses. Overholser CD Jr. **J Clin Periodontol** 1988 Sep;15(8):517-9 (10 ref.)

Microbiological effects of mouthrinses containing antimicrobials. Walker CB. **J Clin Periodontol** 1988 Sep; 15(8):499-505 (28 ref.)

Mouthrinses in "experimental gingivitis" studies. Wennström JL. **J Clin Periodontol** 1988 Sep;15(8):511-6 (61 ref.)

Comparison of the effects of two topical fluoride regimens on demineralized enamel in vivo. Clark JW, et al. **J Dent Res** 1988 Jun;67(6):954-8

The effects of 1% pyrophosphate and 0.02% sodium fluoride on artificial caries lesions in vivo. Mellberg JR, et al. **J Dent Res** 1988 Dec;67(12):1461-5

Comparison of fluoride concentrations in unstimulated whole saliva following the use of a fluoride dentifrice and a fluoride rinse. Zero DT, et al. **J Dent Res** 1988 Oct; 67(10):1257-62

The effect of an antimicrobial mouthrinse on early healing of gingival flap surgery wounds. Zambon JJ, et al. **J Periodontol** 1989 Jan;60(1):31-4

Xerostomia [editorial] **Lancet** 1989 Apr 22;1(8643):884

Treatment for irradiation-induced mucositis [letter] Abdelaal AS, et al. **Lancet** 1989 Jan 14;1(8629):97

Inhibition of plaque formation and plaque acidogenicity by zinc and chlorhexidine combinations. Giertsen E, et al. **Scand J Dent Res** 1988 Dec;96(6):541-50

Antimicrobial and antiplaque effects of a chlorhexidine and Triton X-100 combination. Giertsen E, et al. **Scand J Dent Res** 1989 Jun;97(3):233-41

One-year study of the efficacy of a dentifrice containing zinc citrate and triclosan to maintain gingival health. Svatun B, et al. **Scand J Dent Res** 1989 Jun;97(3):242-6

[Microbiologic in vitro comparison of plaque-inhibiting mouthwashes] Altenhofen E, et al. **Schweiz Monatsschr Zahnmed** 1989;99(1):13-8 (Eng. Abstr.) **(Ger)**

[Fluoride retention and clearance after rinsing with fluoridated mouthwashes] Fritzsche T, et al. **Schweiz Monatsschr Zahnmed** 1989;99(3):299-306 (Eng. Abstr.) **(Ger)**

[The effectiveness of zinc chloride mouthwashes on leukocyte activity in sulcus fluid and on the clinical parameters in experimentally induced gingivitis] Noack B, et al. **Zahn Mund Kieferheilkd** 1989;77(3):256-61 (Eng. Abstr.) **(Ger)**

[Comparative evaluation of 2 antiplaque mouthwashes containing chlorhexidine and sanguinarine] Paolantonio M, et al. **Minerva Stomatol** 1989 Apr;38(4):455-9 (Eng. Abstr.) **(Ita)**

MOVEMENT

see related
IMMOBILIZATION
MOTION

Analysis of the open-closing movement of the human temporomandibular joint. Wu JB, et al. **Acta Anat (Basel)** 1988;133(3):213-6

Avian cranio-cervical systems. Part III: Robot kinematics for cervical systems. Elshoud GC, et al. **Acta Morphol Neerl Scand** 1987;25(4):235-59

Secondary vestibular and neck position signals in the vestibular nuclei of alert rhesus monkeys performing active head movements. Khalsa SB, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3-4):269-75

Motor patterns of a fast voluntary postural task in man: trunk extension in standing. Oddsson L. **Acta Physiol Scand** 1989 May;136(1):47-58

Co-ordination of a simple voluntary multi-joint movement with postural demands: trunk extension in standing man. Oddsson L. **Acta Physiol Scand** 1988 Sep;134(1):109-18

Objective and quantitative vestibular spinal testing by means of computer-video-cranio-corpo-graphy. Claussen CF, et al. **Adv Otorhinolaryngol** 1988;42:43-9

Computation of eye-head movements in oscillopsic patients: modifications induced by reeducation. Freyss G, et al. **Adv Otorhinolaryngol** 1988;42:294-300

Analysis of vestibulo-ocular reflex using sweep frequency active head movements. O'Leary DP, et al. **Adv Otorhinolaryngol** 1988;41:179-83

Variations of biphasic head shake response: physiology and clinical significance. Spindler J, et al. **Adv Otorhinolaryngol** 1988;42:95-103

Familial head movement dependent oscillopsia. Verhagen WI, et al. **Adv Otorhinolaryngol** 1988;42:217-8

Correction of CSF motion artifact on MR images of the brain and spine by pulse sequence modification: clinical evaluation. Szeverenyi NM, et al. **AJNR** 1988 Nov-Dec; 9(6):1069-74

Movement laterality and its relationship to hemispheric specialization. Larkin D. **Am J Occup Ther** 1989 May; 43(5):308-12 (44 ref.)

A biomechanical analysis of scapular rotation during arm abduction in the scapular plane. Bagg SD, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):238-45

The forces in a knee brace as a function of hinge design and placement. Regalbuto MA, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):535-43

Kinematic analysis of the instant centers of rotation of the equine metacarpophalangeal joint. Colahan P, et al. **Am J Vet Res** 1988 Sep;49(9):1560-5

Anesthesia-paralysis and the diaphragm: in pursuit of an elusive muscle. Froese AB. **Anesthesiology** 1989 Jun; 70(6):887-90

Position and motion of the human diaphragm during anesthesia-paralysis. Krayer S, et al. **Anesthesiology** 1989 Jun;70(6):891-8

Analysis of human torso motion with muscle actuators. Katbab A. **Ann Biomed Eng** 1989;17(1):75-91

Spinal cord circuits for motor pattern selection in the turtle. Stein PS. **Ann N Y Acad Sci** 1989;563:1-10 (43 ref.)

Skeletal geometry underlying head movements. Vidal PP, et al. **Ann N Y Acad Sci** 1988;545:228-38 (37 ref.)

Peritendinous healing after early movement of repaired flexor tendon: anatomical study. Farkas LG, et al. **Ann Plast Surg** 1980 Oct;5(4):298-304

Does early movement speed the recovery of function of repaired flexor tendon? Farkas LG, et al. **Ann Plast Surg** 1980 Oct;5(4):305-8

Controlled digital motion by electrical stimulation of the flexor muscle in chickens. Herbert MA, et al. **Ann Plast Surg** 1980 Oct;5(4):309-16

Effect of intermittent stretch on immobilised muscle. Williams PE. **Ann Rheum Dis** 1988 Dec;47(12):1014-6

Learning arm kinematics and dynamics. Atkeson CG. **Annu Rev Neurosci** 1989;12:157-83 (97 ref.)

Upper extremity joint movement: comparison of two measurement devices. Greene BL, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):288-90

Normal range of motion of the cervical spine. Lind B, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):692-5

Motor hemiplegia and the cerebral organization of movement in man. II. The myth of the human extrapyramidal system. Oliveira-Souza R. **Arq Neuropsiquiatr** 1989 Mar; 47(1):16-27 (163 ref.)

Motor hemiplegia and the cerebral organization of movement in man. I. The "pyramidal concept": a restatement. Oliveira-Souza R. **Arq Neuropsiquiatr** 1989 Mar;47(1):8-15

The deviation of the body's sway center with galvanic stimulation. Ito K, et al. **Auris Nasus Larynx** 1989; 16(1):23-32

Thresholds for the perception of whole body angular movement about a vertical axis. Benson AJ, et al. **Aviat Space Environ Med** 1989 Mar;60(3):205-13

The relationship of extraneous movements to lumbar paraspinal muscle activity: implications for EMG biofeedback training applications to low back pain patients. Wolf SL, et al. **Biofeedback Self Regul** 1989 Mar; 14(1):63-74

Planning and execution of hand movements. Fleischer AG. **Biol Cybern** 1989;60(4):311-21

Coordinates transformation and learning control for visually-guided voluntary movement with iteration: a Newton-like method in a function space. Kawato M, et al. **Biol Cybern** 1988;59(3):161-77

Bi-lateral reactive force patterns in postural sway activity of normal subjects. Mizrahi J, et al. **Biol Cybern** 1989; 60(4):297-305

Kinematic networks. A distributed model for representing and regularizing motor redundancy. Mussa Ivaldi FA, et al. **Biol Cybern** 1988;60(1):1-16

Jerk-cost modulations during the practice of rapid arm movements. Schneider K, et al. **Biol Cybern** 1989; 60(3):221-30

Formation and control of optimal trajectory in human multijoint arm movement. Minimum torque-change model. Uno Y, et al. **Biol Cybern** 1989;61(2):89-101

The control of oscillatory movements of the forearm. Wallace GK. **Biol Cybern** 1989;61(3):233-40

Head position in low-risk premature infants. Impact of nursing routines. Vles JS, et al. **Biol Neonate** 1988; 54(6):307-13

Movement and stimulus preceding negativity. Brunia CH. **Biol Psychol** 1988 Jun;26(1-3):165-78 (47 ref.)

Latencies of event related potentials as a tool for studying motor processing organization. Renault B, et al. **Biol Psychol** 1988 Jun;26(1-3):217-30

Carpal tunnel syndrome (CTS) and exposure to vibration, repetitive wrist movements, and heavy manual work: a case-referent study. Wieslander G, et al. **Br J Ind Med** 1989 Jan;46(1):43-7

Delay in the execution of voluntary movement by electrical or magnetic brain stimulation in intact man. Evidence for the storage of motor programs in the brain. Day BL, et al. **Brain** 1989 Jun;112 (Pt 3):649-63

The role of cerebellar structures in the execution of serial movements. Inhoff AW, et al. **Brain** 1989 Jun;112 (Pt 3):565-81

A sense of movement elicited in paralyzed distal arm by focal magnetic coil stimulation of human motor cortex. Amassian VE, et al. **Brain Res** 1989 Feb 13;479(2):355-60

Motor recovery after cross-reinnervation of a forelimb nerve by the phrenic nerve in cats. Fujito Y, et al. **Brain Res** 1989 Jul 17;492(1-2):36-44

An analysis of mandibular movement trajectories and masticatory muscle EMG activity during drinking in the guinea pig. Gerstner GE, et al. **Brain Res** 1989 Feb 6; 479(1):6-13

Co-contractions in antagonistic hindlimb muscles during simulated step cycle rates. Hutton RS, et al. **Brain Res** 1989 Jul 17;492(1-2):230-6

Peripheral regulation of stiffness during arm movements by coactivation of the antagonist muscles. Simmons RW, et al. **Brain Res** 1988 Nov 8;473(1):134-40

Role of pontomedullary reticular formation neurons in horizontal head movements: an ibotenic acid lesion study in the cat. Suzuki SS, et al. **Brain Res** 1989 Apr 10;

484(1-2):78-93
Sparing of skilled forelimb reaching and corticospinal projections after neonatal motor cortex removal or hemidecortication in the rat: support for the Kennard doctrine. Whishaw IQ, et al. **Brain Res** 1988 Jun 7; 451(1-2):97-114
Neocerebellar control of the motor activity: experimental analysis in the rat. Comparative aspects. Cicirata F, et al. **Brain Res Brain Res Rev** 1989 Apr-Jun;14(2):117-41
Neuron activity in rat hippocampus and motor cortex during discrimination reversal. Disterhoft JF, et al. **Brain Res Bull** 1978 Nov-Dec;3(6):583-8
Spatial coding of visually guided arm movements in primate motor cortex. Georgopoulos AP. **Can J Physiol Pharmacol** 1988 Apr;66(4):518-26
Planning and execution of multijoint movements. Hogan N. **Can J Physiol Pharmacol** 1988 Apr;66(4):508-17
Effect of active head movements about the pitch, roll, and yaw axes on human optokinetic afternystagmus. Lafortune SH, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):689-96
Sensorimotor transformations underlying the organization of arm movements in three-dimensional space. Soechting JF, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):502-7
Glenohumeral movements of the involuntary inferior and multidirectional instability. Ozaki J. **Clin Orthop** 1989 Jan; (238):107-11
Reliability of articular indices and function tests in a population study of rheumatic disorders. Archenholtz B, et al. **Clin Rheumatol** 1989 Jun;8(2):215-24
Two measures of mental illness: contingent negative variation and spiral after-effect. Abraham P. **Comp Biochem Physiol [A]** 1989;93(1):291-3
The physiatric evaluation of mobility. Moskowitz E. **Conn Med** 1988 Aug;52(8):474-5
Hemispheric asymmetry in tactile forgetting induced by tactually-guided movement. Sullivan EV. **Cortex** 1989 Mar;25(1):83-92
The gross motor function measure: a means to evaluate the effects of physical therapy. Russell DJ, et al. **Dev Med Child Neurol** 1989 Jun;31(3):341-52
Reliability of goniometric measurements of children with cerebral palsy. Stuberg WA, et al. **Dev Med Child Neurol** 1988 Oct;30(5):657-66
The blood flow velocity waveform in the fetal descending aorta; its relationship to fetal heart rate pattern, eye and body movements in normal pregnancy at 27-28 weeks of gestation. van Eyck J, et al. **Early Hum Dev** 1988 Aug-Sep; 17(2-3):187-94
Centrifugal and centripetal mechanisms involved in the 'gating' of cortical SEPs during movement. Jones SJ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan-Feb; 74(1):36-45
Motor evoked responses after lumbar spinal stimulation in patients with L5 or S1 radicular involvement. Tabaraud F, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr; 72(4):334-9
Comparison among various movement tasks of cerebral motor potential preceding voluntary movement. Nishihira Y, et al. **Electromyogr Clin Neurophysiol** 1989 Apr; 29(3):179-84
The action of the medium portion of the m. deltoideus in circular movements of the arm on a shoulder wheel, as shown by electromyography. Oliveira DT, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):253-7
Electromyographic study of the upper, middle and lower portion of the trapezius muscle in the circumduction movement of the arm on a shoulder wheel apparatus. Piacentini SC, et al. **Electromyogr Clin Neurophysiol** 1989 Jul-Aug;29(5):315-9
Kinematics of the cervical spine of the adult horse. Clayton HM, et al. **Equine Vet J** 1989 May;21(3):189-92
Cervical spinal kinematics: a comparison between foals and adult horses. Clayton HM, et al. **Equine Vet J** 1989 May; 21(3):193-5
Sequential ballistic movement. Gan KC, et al. **Ergonomics** 1988 Oct;31(10):1421-36
Underwater ballistic movement. Hoffmann ER, et al. **Ergonomics** 1988 Sep;31(9):1305-16
The role of short-term visuo-spatial memory in control of rapid multi-joint prehensive movements. Kohler J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):189-95
Chest wall movements in anaesthesia. Drummond GB. **Eur J Anaesthesiol** 1989 May;6(3):161-96 (122 ref.)
Flexibility of the shoulder joint measured as range of abduction in a large representative sample of men and women over 65 years of age. Bassey EJ, et al. **Eur J Appl Physiol** 1989;58(4):353-60
The influence of initial posture on the sit-to-stand movement. Stevens C, et al. **Eur J Appl Physiol** 1989;58(7):687-92
Facilitation of transmission in the pathway of non-monosynaptic Ia excitation to wrist flexor motoneurones at the onset of voluntary movement in man. Baldissera F, et al. **Exp Brain Res** 1989;74(2):437-9
Prehension in the pigeon. I. Descriptive analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):569-76
Prehension in the pigeon. II. Kinematic analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):577-85
Modulation of lemniscal input during conditioned arm movements in the monkey. Chapman CE, et al. **Exp Brain Res** 1988;72(2):316-34
Kinematic variability of grasp movements as a function of practice and movement speed. Darling WG, et al. **Exp Brain Res** 1988;73(2):225-35
The effects of unilateral brain damage on visually guided reaching: hemispheric differences in the nature of the deficit. Fisk JD, et al. **Exp Brain Res** 1988;72(2):425-35
Practice improves even the simplest movements. Gottlieb GL, et al. **Exp Brain Res** 1988;73(2):436-40
Sensorimotor characteristics of speech motor sequences. Gracco VL, et al. **Exp Brain Res** 1989;75(3):586-98
Negative cortical DC shifts preceding and accompanying simple and complex sequential movements. Lang W, et al. **Exp Brain Res** 1989;74(1):99-104
Asymmetric velocity and acceleration profiles of human arm movements. Nagasaki H. **Exp Brain Res** 1989;74(2):319-26
Postural synergies in axial movements: short and long-term adaptation. Pedotti A, et al. **Exp Brain Res** 1989;74(1):3-10
An assessment of the existence of muscle synergies during load perturbations and intentional movements of the human arm. Soechting JF, et al. **Exp Brain Res** 1989;74(3):535-48
Differences in the activation of m. biceps brachii in the control of slow isotonic movements and isometric contractions. Tax AA, et al. **Exp Brain Res** 1989; 76(1):55-63
Environmentally-specified patterns of movement coordination in normal and split-brain subjects. Tuller B, et al. **Exp Brain Res** 1989;75(2):306-16
Relation between muscle response onset and body segmental movements during postural perturbations in humans. Woollacott MH, et al. **Exp Brain Res** 1988;72(3):593-604
Neural integration of movement: role of motor cortex in reaching. Georgopoulos AP. **FASEB J** 1988 Oct; 2(13):2849-57 (43 ref.)
Dynamic analysis of head movements by means of a three-dimensional position measurement system. Watanabe Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):418-24
Paroxysmal heart block triggered by sitting up: a usually undetected cause of cerebral ischemia. Klein HO, et al. **Heart Lung** 1988 Nov;17(6 Pt 1):648-50
Movement-related potentials and control of associated movements. Chisholm RC, et al. **Int J Neurosci** 1988 Sep; 42(1-2):131-48
Prediction of the range of hand positions available to a patient with movement restrictions at the joints of the upper limb--a mathematical model. Johnson GR, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):291-7
Visual control of arm movement in the stroke patient. Lough S. **Int J Rehabil Res** 1987;10(4 Suppl 5):113-9
Effects of speaking rate on tongue position and velocity of movement in vowel production. Flege JE. **J Acoust Soc Am** 1988 Sep;84(3):901-16
Kinematic and electromyographic responses to perturbation of the jaw. Shaiman S. **J Acoust Soc Am** 1989 Jul; 86(1):78-88
Use of kinetic support phase parameters in the prediction of knee joint movement. Knutzen KM, et al. **J Am Podiatr Med Assoc** 1988 Aug;78(8):389-95
The unique action of bi-articular muscles in complex movements. van Ingen Schenau GJ, et al. **J Anat** 1987 Dec; 155:1-5
On the biomechanics of human hip complex in vivo--I. Kinematics for determination of the maximal voluntary hip complex sinus. Engin AE, et al. **J Biomech** 1988; 21(10):785-95
On the biomechanics of human hip complex in vivo--II. Passive resistive properties beyond the hip complex sinus. Engin AE, et al. **J Biomech** 1988;21(10):797-805
Bivariate optimization of pedalling rate and crank arm length in cycling. Hull ML, et al. **J Biomech** 1988;21(10):839-49
Rotational and translational movement features of the pelvis and thorax during adult human locomotion. Stokes VP, et al. **J Biomech** 1989;22(1):43-50
Application of CPM devices with burn patients. Covey MH. **J Burn Care Rehabil** 1988 Sep-Oct;9(5):496-7
CPM devices. Diehm SL. **J Burn Care Rehabil** 1988 Sep-Oct; 9(5):498-504
Introduction to CPM. McGough CE. **J Burn Care Rehabil** 1988 Sep-Oct;9(5):494-5
Neural control of leg movements in a metamorphic insect: persistence of larval leg motor neurons to innervate the adult legs of Manduca sexta. Kent KS, et al. **J Comp Neurol** 1988 Oct 1;276(1):30-43
A population of ascending intersegmental interneurones in the locust with mechanosensory inputs from a hind leg. Laurent G, et al. **J Comp Neurol** 1988 Sep 1;275(1):1-12
Relation between velocity and curvature in movement: equivalence and divergence between a power law and a minimum-jerk model. Wann J, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):622-37
Nerve conduction and creatinine clearance in aged subjects with periodic movements in sleep. Bliwise DL, et al. **J Gerontol** 1989 Sep;44(5):M164-7
Effects of sensory and motor functioning on adult intellectual performance. Sands LP, et al. **J Gerontol** 1989 Mar; 44(2):P56-8
Age differences in perceiving the direction of self-motion from optical flow. Warren WH Jr, et al. **J Gerontol** 1989 Sep;44(5):P147-53
Variations of the flexor digitorum superficialis of the small finger. Austin GJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):262-7
Limb segment information transmission capacity. Leisman G. **J Manipulative Physiol Ther** 1989 Feb;12(1):3-9
Skin accelerometer displacement and relative bone movement of adjacent vertebrae in response to chiropractic percussion thrusts. Smith DB, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):26-37
Interexaminer reliability and concurrent validity of two instruments for the measurement of cervical ranges of motion. Zachman ZJ, et al. **J Manipulative Physiol Ther** 1989 Jun;12(3):205-10
QUARK: a quantitative real-time analyser for kinesiology. Kleissen RF, et al. **J Med Eng Technol** 1989 Jan-Apr; 13(1-2):96-9
Organizing principles for single-joint movements. II. A speed-sensitive strategy. Corcos DM, et al. **J Neurophysiol** 1989 Aug;62(2):358-68
Relations of motor cortex neural discharge to kinematics of passive and active elbow movements in the monkey. Flament D, et al. **J Neurophysiol** 1988 Oct;60(4):1268-84
Organizing principles for single-joint movements. I. A speed-insensitive strategy. Gottlieb GL, et al. **J Neurophysiol** 1989 Aug;62(2):342-57
An evaluation of the role of identified interneurons in triggering kicks and jumps in the locust. Gynther IC, et al. **J Neurophysiol** 1989 Jan;61(1):45-57
Changes in motor cortex neural discharge associated with the development of cerebellar limb ataxia. Hore J, et al. **J Neurophysiol** 1988 Oct;60(4):1285-302
Topographical distribution and functional properties of cortically induced rhythmical jaw movements in the monkey (Macaca fascicularis). Huang CS, et al. **J Neurophysiol** 1989 Mar;61(3):635-50
Muscle afferent contribution to control of paw shakes in normal cats. Prochazka A, et al. **J Neurophysiol** 1989 Mar; 61(3):550-62
Monkey primary motor and premotor cortex: single-cell activity related to prior information about direction and extent of an intended movement. Riehle A, et al. **J Neurophysiol** 1989 Mar;61(3):534-49
Deficits in reaction times and movement times as correlates of hypokinesia in monkeys with MPTP-induced striatal dopamine depletion. Schultz W, et al. **J Neurophysiol** 1989 Mar;61(3):651-68
Functional role of corticoperipheral loop circuits during voluntary movements in the monkey: a preferential bias theory. Favorov O, et al. **J Neurosci** 1988 Sep;8(9):3266-77
Timing factors in the coordination of speech movements. Gracco VL. **J Neurosci** 1988 Dec;8(12):4628-39
Induction of rhythmic jaw movements by stimulation of the mesencephalic reticular formation in the guinea pig. Hashimoto N, et al. **J Neurosci** 1989 Aug;9(8):2887-901
A comparison of movement direction-related versus load direction-related activity in primate motor cortex, using a two-dimensional reaching task. Kalaska JF, et al. **J Neurosci** 1989 Jun;9(6):2080-102
Movement therapy. Snyder M. **J Neurosci Nurs** 1988 Dec; 20(6):373-6 (21 ref.)
Lazarus sign and extensor posturing in a brain-dead patient. Case report. Heytens L, et al. **J Neurosurg** 1989 Sep; 71(3):449-51
Postural movements induced by rotations of visual scenes. van Asten WN, et al. **J Opt Soc Am [A]** 1988 Oct; 5(10):1781-9
Electromyographic study of the anterior cruciate ligament-hamstrings synergy during isometric knee extension. Grabiner MD, et al. **J Orthop Res** 1989; 7(1):152-5
Partial restoration of immobilization-induced softening of canine articular cartilage after remobilization of the knee (stifle) joint. Jurvelin J, et al. **J Orthop Res** 1989;7(3):352-8
Prevention of ligament and meniscus atrophy by active joint motion in a non-weight-bearing model. Klein L, et al. **J Orthop Res** 1989;7(1):80-5
Recovery of the dog quadriceps after 10 weeks of immobilization followed by 4 weeks of remobilization. Lieber RL, et al. **J Orthop Res** 1989;7(3):408-12
Motions and loads within the human pelvis: a biomechanical model study. Scholten PJ, et al. **J Orthop Res** 1988; 6(6):840-50
Assessment of the role of A1/A2 adenosine receptors mediating the purine antinociception, motor and autonomic function in the rat spinal cord. Sosnowski M, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):915-22
The value of the joint alignment and motion scale in rheumatoid arthritis. Parker JW, et al. **J Rheumatol** 1988 Aug;15(8):1212-5
Effects of combined modality therapy of head and neck carcinoma on shoulder and head mobility. Nowak P, et al. **J Surg Oncol** 1989 Jul;41(3):143-7
Brain mechanisms in motor control. Evarts EV. **Life Sci** 1974 Oct 15;15(8):1393-9 (17 ref.)
Procedure to automatically classify markers in biomechanical analysis of whole-body movement in different sports activities. Ferrigno G, et al. **Med Biol Eng Comput** 1988 May;26(3):321-4
The cruciate ligaments and their effect on the kinematics of the human knee. Huber H, et al. **Med Biol Eng Comput** 1988 Nov;26(6):647-54
Results of modelling and physiological examination of movement-related heart-rate reactions in neonates. Witte H, et al. **Med Biol Eng Comput** 1988 Nov;26(6):599-604
Simple and complex movements in a patient with infarction of the right supplementary motor area. Dick JP, et al. **Mov Disord** 1986;1(4):255-66

Stability of the head in pitch (neck flexion–extension): studies in normal subjects and patients with axial rigidity. Gresty M. **Mov Disord** 1989;4(3):233–48
Cognitive control of movement [news] Lemon R. **Nature** 1989 Feb 2;337(6206):410–1
Universal time constant in human short-term behavior. Schleidt M, et al. **Naturwissenschaften** 1989 Mar; 76(3):127–8
Aimed movements to visual targets in hemiplegic and normal children: is the "good" hand of children with infantile hemiplegia also normal? Brown JV, et al. **Neuropsychologia** 1989;27(3):283–302
Spontaneous recovery of precise movement and of fixation of position of a limb following extirpation of the somatosensory area of the cortex in dogs. Frolov AG. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):103–10
Kinesthetic coordination of a movement sequence in humans. Cordo PJ. **Neurosci Lett** 1988 Sep 23;92(1):40–5
Anticipatory neck muscle activity associated with rapid arm movements. Gurfinkel VS, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):104–8
The effects of movements on caudate sensory responses. Manetto C, et al. **Neurosci Lett** 1989 Jan 30;96(3):295–9
EMG activities of neck muscles underlying lateral flexion of the neck during head-turning induced by electrical stimulation of the caudate nucleus in cats. Akaike N, et al. **Neurosci Res** 1989 Jun;6(5):397–410
Maintenance tendency in co-ordinated rhythmic movements: relative fluctuations and phase. Rosenblum LD, et al. **Neuroscience** 1988 Oct;27(1):289–300
Clinical kinesiology: measurement techniques for spinal disorders. Allen ME. **Orthop Rev** 1988 Nov; 17(11):1097–104
Interventricular septal motion and left ventricular function in patients with atrial septal defect. Vincent RN, et al. **Pediatr Cardiol** 1988;9(3):143–8
EMG and motor performance changes with practice of a forearm movement by children. Engelhorn R. **Percept Mot Skills** 1988 Oct;67(2):523–9
Choice reaction time of elbow flexion and extension during passive elbow motions. Fujita M, et al. **Percept Mot Skills** 1988 Dec;67(3):905–6
Effects of force output and preparatory set on premotor time of simultaneous bilateral responses. Kawabe S. **Percept Mot Skills** 1989 Apr;68(2):619–25
Effect of educational kinesiology on static balance of learning disabled students. Morris GS, et al. **Percept Mot Skills** 1988 Aug;67(1):51–4
Modification in movement accuracy in the triphasic pattern during a rapid forearm-flexion task. Roy MA, et al. **Percept Mot Skills** 1988 Oct;67(2):455–60
Respiratory and cardiac effects of passive limb movements in man. Concu A. **Pflugers Arch** 1988 Oct;412(5):548–50
Intertester reliability and concurrent validity of fluid-based and universal goniometers for active knee flexion. Rheault W, et al. **Phys Ther** 1988 Nov;68(11):1676–8
Description of adult rolling movements and hypothesis of developmental sequences. Richter RR, et al. **Phys Ther** 1989 Jan;69(1):63–71
Reliability and validity of the WATSMART three-dimensional optoelectric motion analysis system. Scholz JP. **Phys Ther** 1989 Aug;69(8):679–89
Analysis of head movement and position using hall effect devices. Nienhuis R, et al. **Physiol Behav** 1989 Jan; 45(1):199–203
Effects of transition from supine to upright positions on central hemodynamics in patients with chest pain syndrome. Rubal BJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S33–4
Organization of leg-trunk-head equilibrium movements in normals and patients with peripheral vestibular deficits. Allum JH, et al. **Prog Brain Res** 1988;76:277–90
Immediate saccadic substitution for deficits in dynamic vestibular reflexes of frogs with selective peripheral lesions. Dieringer N. **Prog Brain Res** 1988;76:403–9 (22 ref.)
Responses of muscle spindles depend on their history of activation and movement. Gregory JE, et al. **Prog Brain Res** 1988;74:85–90
Head-trunk movement coordination in the standing posture. Nashner LM, et al. **Prog Brain Res** 1988;76:243–51
Thixotropic changes in human muscle stiffness and the effects of fatigue [published erratum appears in Q J Exp Physiol 1988 Sep;73(5):following 808] Lakie M, et al. **Q J Exp Physiol** 1988 Jul;73(4):487–500
Movement and working memory: patterns and positions in space. Smyth MM, et al. **Q J Exp Psychol [A]** 1988 Aug; 40(3):497–514
X-linked Duchenne muscular dystrophy. Motor functions and prognosis. Hinge HH, et al. **Scand J Rehabil Med** 1989; 21(1):27–31
Evaluation of functional capacity after stroke as a basis for active intervention. Presentation of a modified chart for motor capacity assessment and its reliability. Lindmark B, et al. **Scand J Rehabil Med** 1988;20(3):103–9
Evaluation of functional capacity after stroke as a basis for active intervention. Validation of a modified chart for motor capacity assessment. Lindmark B, et al. **Scand J Rehabil Med** 1988;20(3):111–5
Mental rotation of the neuronal population vector. Georgopoulos AP, et al. **Science** 1989 Jan 13; 243(4888):234–6
The lumbar spine in backward bending. Adams MA, et al. **Spine** 1988 Sep;13(9):1019–26
Variation in lumbar sagittal mobility with low-back trouble. Burton AK, et al. **Spine** 1989 Jun;14(6):584–90
Clinical and radiological evaluation of lumbosacral motion below fusion levels in idiopathic scoliosis. Hayes MA, et al. **Spine** 1988 Oct;13(10):1161–7
Networks of internal trunk-loading activities under controlled trunk-motion conditions. Marras WS, et al. **Spine** 1988 Jun;13(6):661–7
Correlations of hip mobility with degree of back pain and lumbar spinal mobility in chronic low-back pain patients. Mellin G. **Spine** 1988 Jun;13(6):668–70
Measurement of spinal sagittal configuration and mobility with Debrunner's kyphometer. Ohlén G, et al. **Spine** 1989 Jun;14(6):580–3
Three-dimensional movements of the upper cervical spine. Panjabi M, et al. **Spine** 1988 Jul;13(7):726–30
1988 Volvo award in biomechanics. The triaxial coupling of torque generation of trunk muscles during isometric exertions and the effect of fatiguing isoinertial movements on the motor output and movement patterns. Parnianpour M, et al. **Spine** 1988 Sep;13(9):982–92
Application of a stereoradiographic method for the study of intervertebral motion. Plamondon A, et al. **Spine** 1988 Sep;13(9):1027–32
Spinal mobility in adolescent girls with idiopathic scoliosis and in structurally normal controls. Poussa M, et al. **Spine** 1989 Feb;14(2):217–9
Movements of the sacroiliac joints. A roentgen stereophotogrammetric analysis. Sturesson B, et al. **Spine** 1989 Feb;14(2):162–5
Recovery of motor function after stroke. Bonita R, et al. **Stroke** 1988 Dec;19(12):1497–500
Loss of reaction time specificity for movement direction in Parkinson's disease. Nakamura R, et al. **Tohoku J Exp Med** 1989 May;158(1):9–16
Central representations of human limb movement as revealed by studies of drawing and handwriting. Lacquaniti F. **Trends Neurosci** 1989 Aug;12(8):287–91 (35 ref.)
The effects of sustained vertical gaze deviation on the resting state of the vergence system. Heuer H, et al. **Vision Res** 1988;28(12):1337–44
[Computer processing corrected the geometric divergence of the mandibular kinesiograph (MKG)] Feng HL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):18–21, 62 (Eng. Abstr.) **(Chi)**
[Movement in the rehabilitation of axial and locomotor trauma] Alaranta H, et al. **Duodecim** 1989;105(2):193–201 (54 ref.) **(Fin)**
[Therapeutic methods for continuous joint movement] Hämäläinen O, et al. **Duodecim** 1989;105(4):335–9 (34 ref.) **(Fin)**
[Range of motion in load-bearing knee injuries] Kujala U, et al. **Duodecim** 1989;105(2):137–44 (49 ref.) **(Fin)**
[Biomechanics. Proceedings of the 13th meeting of the Society of Biomechanics. Louvain, 15–16 September 1988. Abstracts] **Arch Int Physiol Biochim** 1988 Dec; 96(6):C1–107 **(Fre)**
[The supplementary motor area is implicated in the coordination between posture and movement in man] Massion J, et al. **C R Acad Sci [III]** 1989;308(15):417–23 (Eng. Abstr.) **(Fre)**
[Evolution of gross body movements during sleep in healthy infants aged from 1 to 4 months] Vecchierini-Blineau MF, et al. **Neurophysiol Clin** 1989 Jun;19(3):231–9 (Eng. Abstr.) **(Fre)**
[Transfer modulation functions in glaucoma] Nordmann JP, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):95–9 (Eng. Abstr.) **(Fre)**
[Functional and mechanical anatomy of arm elevation] Gagey O, et al. **Rev Chir Orthop** 1988;74(3):209–17 (Eng. Abstr.) **(Fre)**
[The "weaving" of horses] Sambraus HH, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):248–55 (Eng. Abstr.) **(Ger)**
[Movement patterns of psychosomatic patients in dance therapy] Lausberg H, et al. **Psychother Psychosom Med Psychol** 1988 Jul;38(7):259–64 (Eng. Abstr.) **(Ger)**
[Effects of room temperature on body movements of the aged in a special nursing home during sleep] Ohnaka T, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):622–7 (Eng. Abstr.) **(Jpn)**
[Eye-head coordination in two cases of congenital strabismus syndrome with torticollis] Ohtsuki H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2080–8 (Eng. Abstr.) **(Jpn)**
[Vocal cord movements during sniff] Mukai S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2089–95 (Eng. Abstr.) **(Jpn)**
[Analysis of the scapulohumeral rhythm] Haza T. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1105–19 (Eng. Abstr.) **(Jpn)**
[Arm rotation during abduction of the shoulder in the scapular plane] Takagi S. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):965–76 (Eng. Abstr.) **(Jpn)**
[Function of the shoulder joint after pectoralis major transfer—tracking movement and its electromyographical study] Tomonaga H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1095–104 (Eng. Abstr.) **(Jpn)**
[A cineradiographic study of normal wrist motion] Yamada J. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):1043–54 (Eng. Abstr.) **(Jpn)**
[Three cases of involuntary movements following pontine hemorrhage] Iwadate Y, et al. **No To Shinkei** 1988 Sep; 40(9):869–74 (Eng. Abstr.) **(Jpn)**
[Limitation of hand function in workers with Dupuytren's contracture] Trybus M, et al. **Med Pr** 1989;40(1):49–53 (Eng. Abstr.) **(Pol)**
[Body movements of patients during sleep in endogenous depression] Ekiert H, et al. **Psychiatr Pol** 1988 Sep–Oct; 22(5):322–9 (Eng. Abstr.) **(Pol)**
[Rapid muscle force reactions during regulation of rhythmic movement] Bogdanov VA. **Biofizika** 1989 Jan–Feb; 34(1):113–7 (Eng. Abstr.) **(Rus)**
[Reaction of the muscles to disturbance during single-joint rhythmic movement] Bogdanov VA. **Biofizika** 1989 Mar–Apr;34(2):275–9 (Eng. Abstr.) **(Rus)**
[Amplitude-frequency modulation of electroencephalogram associated with rhythmic movements] Gutman SR, et al. **Biofizika** 1988 Sep–Oct;33(5):860–2 (Eng. Abstr.) **(Rus)**
[Changes in the correlation of electroencephalograms connected with rhythmic movements] Gutman SR, et al. **Biofizika** 1989 May–Jun;34(3):496–8 (Eng. Abstr.) **(Rus)**
[Changes in the direction of vestibulomotor responses in the process of adaptation to prolonged static head turning in man] Gurfinkel' VS, et al. **Neirofiziologiia** 1989;21(2):210–7 (Eng. Abstr.) **(Rus)**
[A universal goniometer for measuring the mobility in the cervical segment of the spine] Savchenko VK, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):71–3 **(Rus)**
[Dynamics of restoration of the motor and sensory functions of the upper extremity after suturing] Kankava DM, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):26–8 (Eng. Abstr.) **(Rus)**
[Reactivity of rolandic rhythm in children with a general speech development disorder] Viatleva OA, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):58–63 (Eng. Abstr.) **(Rus)**
[Movement as a signal in the acquisition of classical conditioned reflexes] Davydova EK. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):803–11 (49 ref.) **(Rus)**
[A complex evaluation of the process of elaborating a motor-alimentary conditioned reflex in cats] Lapkin MM, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):139–41 **(Rus)**
[Characteristics of the motor potentials in disorders of the subcortical motor structures of the human brain] Troshina EM. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):37–43 (Eng. Abstr.) **(Rus)**
[Motion therapy in dizziness improves the function of the injured balance system] Silfverskiöld R. **Lakartidningen** 1988 Sep 7;85(36):2850–3 **(Swe)**

DRUG EFFECTS

Absence of differential motoric and thermic responses to clonidine in young rats exposed prenatally to alcohol. Hannigan JH, et al. **Alcohol** 1988 Nov–Dec;5(6):431–6
Angiotensin II-induced rhythmic jaw movements in the ketamine-anesthetized guinea pig. Gerstner GE, et al. **Brain Res** 1989 Jan 30;478(2):233–40
Nocturnal gamma-hydroxybutyrate. Effect on periodic leg movements and sleep organization of narcoleptic patients. Bédard MA, et al. **Clin Neuropharmacol** 1989 Feb; 12(1):29–36
Motor response following repeated apomorphine administration is reduced in Parkinson's disease. Grandas F, et al. **Clin Neuropharmacol** 1989 Feb;12(1):14–22
Occurrence, distribution and motor effects of galanin in the porcine lower esophageal sphincter. Harling H, et al. **Digestion** 1989;42(3):151–7
The neurobehavioral effects of chronic styrene exposure in the rat. Kulig BM. **Neurotoxicol Teratol** 1988 Nov–Dec; 10(6):511–7
Distinguishable effects of intrathecal dynorphins, somatostatin, neurotensin and s-calcitonin on nociception and motor function in the rat. Spampinato S, et al. **Pain** 1988 Oct;35(1):95–104

MOVEMENT, CELL see **CELL MOVEMENT**

MOVEMENT DISORDERS

see related
PSYCHOMOTOR DISORDERS

Gait disorders in the elderly. Hough JC, et al. **Am Fam Physician** 1987 Jun;35(6):191–6
Rett's syndrome. Dhand UK, et al. **Indian Pediatr** 1988 Mar; 25(3):296–9
Special supplement. A commemorative edition in honor of C. D. Marsden. **J Neurol Neurosurg Psychiatry** 1989 Jun; Suppl:1–118
Abstracts of the Symposium on High Technology in the Quantitation of Movement Disorders. Jerusalem, Israel, June 5, 1988. **Mov Disord** 1989;4(1):97–104
Tourette's syndrome and movement disorders. Proceedings of a conference. Grand Forks, ND, October 16, 1987. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):177–320
A comparison of employed caregivers of cognitively impaired and physically impaired elderly persons. Scharlach AE. **Res Aging** 1989 Jun;11(2):225–43
[Tremor-like pathological grasp phenomenon—a case report]

Motomura S, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1118–21 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

CSF choline levels in neurologically disturbed children. Flentge F, et al. **Acta Neurol Scand** 1989 Feb;79(2):160–5

Hemiballismus: changes in cerebrospinal fluid. Kostic V, et al. **Acta Neurol Scand** 1988 Aug;78(2):115–7

CHEMICALLY INDUCED

Diazepam induced long term delay in the migration of external granular layer of the cerebellum: an experimental study in the mouse. Márquez–Orozco MC, et al. **Bol Estud Med Biol** 1988;36(1–4):19–24

Camptocormia, a new side effect of sodium valproate. Kiuru S, et al. **Epilepsy Res** 1987 Jul;1(4):254–7

A comparison of the anticonvulsant effects of 1,4– and 1,5–benzodiazepines in the amygdala–kindled rat and their effects on motor function. Tietz EI, et al. **Epilepsy Res** 1989 Jan–Feb;3(1):31–40

Allylnitrile: a compound which induces long–term dyskinesia in mice following a single administration. Tanii H, et al. **Exp Neurol** 1989 Jan;103(1):64–7

Pemoline–induced abnormal involuntary movements. Sallee FR, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):125–9

Embryonic exposure to high taurine: a possible nutritional contribution to Friedreich's ataxia. van Gelder NM, et al. **J Neurosci Res** 1988 Jul;20(3):383–9

Intrathecal GABA, glycine, taurine or beta–alanine elicits dyskinetic movements in mice. Larson AA. **Pharmacol Biochem Behav** 1989 Feb;32(2):505–9

Episodic barrel rotations induced by intrastriatal injection of quinolinic acid in rats. Inhibition by anticonvulsants. Marrannes R, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):153–62

Neuroleptic–induced akathisia: a review. Adler LA, et al. **Psychopharmacology (Berlin)** 1989;97(1):1–11 (83 ref.)

Rats administered chronic neuroleptics develop oral movements which are similar in form to those in humans with tardive dyskinesia. Ellison G, et al. **Psychopharmacology (Berlin)** 1989;98(4):564–6

Neuroleptic–induced akathisia: a role for MSH peptides [letter] Sandyk R. **Psychopharmacology (Berlin)** 1989; 99(1):134–5

[Extrapyramidal movement disorders following administration of flunarizine (letter)] Jongerius AM, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):746–7 **(Dut)**

[Parkinson's disease associated with trihexyphenidyl (THP) induced dysphonia plicae ventricularis] Yamamoto K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):423–5 (Eng. Abstr.) **(Jpn)**

[Clinical picture and dynamics of neurologic complications of drug therapy in epilepsy] Boldyrev AI, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):64–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Limited joint mobility and carpal tunnel syndrome in insulin–dependent diabetes. Chaudhuri KR, et al. **Br J Rheumatol** 1989 Jun;28(3):191–4

Motor dominant neuropathy and IgM paraproteinemia: the IgM M–protein binds to specific gangliosides. Kusunoki S, et al. **J Neuroimmunol** 1989 Feb;21(2–3):177–81

Cerebral manifestations of Whipple's disease [letter] Selhorst JB, et al. **Mayo Clin Proc** 1988 Oct;63(10):1057

Hemichorea–hemiballismus associated with acquired immune deficiency syndrome and cerebral toxoplasmosis. Sanchez–Ramos JR, et al. **Mov Disord** 1989;4(3):266–73

Movement disorder of premature infants with severe bronchopulmonary dysplasia: a new syndrome. Perlman JM, et al. **Pediatrics** 1989 Aug;84(2):215–8

[A disorder with low serum copper level, dementia, dysarthria, gait disturbance and involuntary movements] Ono S, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):433–6 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

A polygraphic test for the diagnosis of amyotrophic choreo–acanthocytosis. Bramanti P, et al. **Acta Neurol (Napoli)** 1987 Apr;9(2):134–8

Bringing gait analysis out of the laboratory and into the clinic. Klenerman L, et al. **Age Ageing** 1988 Nov;17(6):397–400

Automated three dimensional movement analysis using the CODA–3 system. Mitchelson DL. **Biomed Tech (Berlin)** 1988 Jul–Aug;33(7–8):179–82

Magnetic resonance imaging and extrapyramidal movement disorders. Drayer BP. **Eur Neurol** 1989;29 Suppl 1:9–12

Prevalence of dyskinesia and related movement disorders in a developmentally disabled population. Stone RK, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):41–53

What is it? Case 5, 1986. **Mov Disord** 1986;1(4):309–18

Abnormal Involuntary Movement Scale (AIMS). **Psychopharmacol Bull** 1988;24(4):781–3

Facial dyskinesias. Kaufman DM. **Psychosomatics** 1989 Summer;30(3):263–9 (56 ref.)

[Mother was right; a misdiagnosed syndrome] Drukker J. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):195–8 **(Dut)**

[The limping child (letter)] Warmink HH. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2124–5 **(Dut)**

[Senile dyskinesias and tardive dyskinesias] Brion S, et al. **Encephale** 1988 Sep;14 Spec No:215–9 (54 ref.) (Eng. Abstr.) **(Fre)**

[Orthodontic failures following overlooked orofacial dyskinesias] Tränkmann J. **Fortschr Kieferorthop** 1988 Aug; 49(4):388–99 (Eng. Abstr.) **(Ger)**

[Rett syndrome: clinical aspects and EEG for an early diagnostic assessment] Battistella PA, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):595–601 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Cyproheptadine in movement disorders [letter] Bacher NM, et al. **Am J Psychiatry** 1989 Apr;146(4):557–8

Paroxysmal dyskinesias secondary to cerebral vascular disease—reversal with aspirin. Bennett DA, et al. **Clin Neuropharmacol** 1989 Jun;12(3):215–6

Taurine treatment of dyskinesias: an attempt. Nyland H, et al. **Eur Neurol** 1989;29(3):121–3

Effects of short–term reserpine treatment on generalized and focal dystonic–dyskinetic syndromes. Raffaele R, et al. **Funct Neurol** 1988 Jul–Sep;3(3):327–35

Pharmacological strategies for controlling motor fluctuations in Parkinson's disease. Ruggieri S, et al. **Funct Neurol** 1988 Oct–Dec;3(4):471–9 (17 ref.)

Double–blind carbidopa/levodopa and placebo study in tardive dyskinesia. Simpson GM, et al. **J Clin Psychopharmacol** 1988 Aug;8(4 Suppl):49S–51S

Modified release tizanidine in the treatment of spasticity. Chantraine A, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):459–65

Treatment of movement disorders with trihexyphenidyl. Jabbari B, et al. **Mov Disord** 1989;4(3):202–12

Effects of etybenzatropine and diazepam on levodopa–induced diphasic dyskinesias in Parkinson's disease. Pourcher E, et al. **Mov Disord** 1989;4(3):195–201

Treatment of restless legs syndrome and periodic movements during sleep with L–dopa: a double–blind, controlled study. Brodeur C, et al. **Neurology** 1988 Dec;38(12):1845–8

Administration of GM1 ganglioside eliminates neuroleptic–induced sensorimotor deficits in MPTP–treated mice. Weihmuller FB, et al. **Neurosci Lett** 1988 Oct 5;92(2):207–12

Drug treatment of hyperkinetic movement disorders. Fahn S. **Semin Neurol** 1987 Jun;7(2):192–208 (186 ref.)

[Effect of pyrogenal on dynamics of reflex–motor disorders in patients with diffuse sclerosis] Tiazhkorob AM, et al. **Vrach Delo** 1988 Nov;(11):81–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The prevalence and aetiology of long–term L–dopa side–effects in elderly parkinsonian patients. Wilson JA, et al. **Age Ageing** 1989 Jan;18(1):11–6

The nighttime problems of Parkinson's disease. Lees AJ, et al. **Clin Neuropharmacol** 1988 Dec;11(6):512–9

The association of tardive dyskinesia and pseudoparkinsonism. Yassa R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):909–14

ETIOLOGY

Initial manifestations and development of neurological dysfunctions in multiple sclerosis. Kalafatova O. **Acta Neurol (Napoli)** 1988 Feb;10(1):16–9

The alien hand syndrome. Clinical and postmortem findings. Banks G, et al. **Arch Neurol** 1989 Apr;46(4):456–9

Hemiballism–hemichorea. Clinical and pharmacologic findings in 21 patients. Dewey RB Jr, et al. **Arch Neurol** 1989 Aug;46(8):862–7

Benign hereditary chorea. A case report. Loosmore SJ, et al. **Br J Psychiatry** 1988 Jan;152:131–4

Neuropathy with onion bulb formations and pure motor manifestations. Auer RN, et al. **Can J Neurol Sci** 1989 May; 16(2):194–7

Infarct of the anterior limb of the right internal capsule causing left motor neglect: case report and cerebral blood flow study. de la Sayette V, et al. **Cortex** 1989 Mar; 25(1):147–54

Motor dysfunctions in Parkinson's disease and premotor lesions. Freund HJ. **Eur Neurol** 1989;29 Suppl 1:33–7 (23 ref.)

Bradykinesia in Parkinson's disease: disorders of onset and execution of fast movement. Yanagisawa N, et al. **Eur Neurol** 1989;29 Suppl 1:19–28 (41 ref.)

Motor response complications in advanced Parkinson's disease. Chase TN, et al. **Funct Neurol** 1988 Oct–Dec; 3(4):429–36 (43 ref.)

Continuous dopaminergic stimulation for Parkinson's disease: facts and fancy. Obeso JA, et al. **Funct Neurol** 1988 Oct–Dec;3(4):413–27 (53 ref.)

Hemispatial–limb hypometria. Meador KJ, et al. **Int J Neurosci** 1988 Sep;42(1–2):71–5

Fractionation sensitivity of a functional endpoint: impaired shoulder movement after post–mastectomy radiotherapy. Bentzen SM, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep; 17(3):531–7

Movement disorder in hypothyroidism: a case report. Chotmongkol V, et al. **J Med Assoc Thai** 1989 May; 72(5):288–90

Relationship between motor and cognitive disorders in Huntington's disease. Girotti F, et al. **J Neurol** 1988 Nov; 235(8):454–7

Choreoathetoid movements associated with a spleno–renal shunt. Yokota T, et al. **J Neurol** 1988 Nov;235(8):487–8

Hemiballismus from cerebellar metastases [letter] Reyes MG, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):684

Drug–induced dyskinesia in primates rendered hemiparkinsonian by intracarotid administration of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP). Clarke CE, et al. **J Neurol Sci** 1989 May;90(3):307–14

Pretreatment with phencyclidine, an N–methyl–D–aspartate antagonist, attenuates long–term behavioral deficits in the rat produced by traumatic brain injury. Hayes RL, et al. **J Neurotrauma** 1988;5(4):259–74

Radical neck dissection: a subjective and objective evaluation of postoperative disability. Hillel AD, et al. **J Otolaryngol** 1989 Feb;18(1):53–61

Cerebral perfusion deficits in dysbaric illness. Adkisson GH, et al. **Lancet** 1989 Jul 15;2(8655):119–22

A simple model of the interactions of dopamine, acetylcholine and GABA in movement disorders seen in psychiatry. Menza M. **Med Hypotheses** 1988 Dec; 27(4):285–8

Oculo–facio–skeletal myorhythmia as a cerebral complication of systemic Whipple's disease. Hausser–Hauw C, et al. **Mov Disord** 1988;3(2):179–84

Posttraumatic movement disorders: a review. Koller WC, et al. **Mov Disord** 1989;4(1):20–36 (92 ref.)

Focal asterixis caused by a small putaminal hemorrhage. Trejo JM, et al. **Mov Disord** 1986;1(4):271–4

Unilateral "akathisia" in a patient with AIDS and a toxoplasmosis subthalamic abscess. Carrazana E, et al. **Neurology** 1989 Mar;39(3):449–50

Limited neocortical devascularizing lesions causing deficits in memory retention and choline acetyltransferase activity—effects of the monosialoganglioside GM1. Elliott PJ, et al. **Neuroscience** 1989;31(1):63–76

Protection against 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine–induced parkinsonism by the catecholamine uptake inhibitor nomifensine: behavioral analysis in monkeys with partial striatal dopamine depletions. Schultz W, et al. **Neuroscience** 1989;31(1):219–30

Radiologic case study. Eosinophilic granuloma of the spine causing neurologic deficit. Kerr R. **Orthopedics** 1989 Feb; 12(2):309, 312–5

Progressive motor deterioration in a 2–year–old boy [clinical conference] Crosley CJ, et al. **Pediatr Neurosci** 1987; 13(6):323–30

[The limping child] Visser JD. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1644–7 **(Dut)**

[Persistence of a conjugate eye and head deviation of hemispheric origin] de Smet Y, et al. **Rev Neurol (Paris)** 1988;144(10):603–5 (Eng. Abstr.) **(Fre)**

[Dysarthria–clumsy hand syndrome caused by cerebellar infarction] Tougeron A, et al. **Rev Neurol (Paris)** 1988; 144(10):596–7 (Eng. Abstr.) **(Fre)**

[Reactivity of rolandic rhythm in children with a general speech development disorder] Viatleva OA, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):58–63 (Eng. Abstr.) **(Rus)**

[Rett syndrome. A frequent cause of progressive mental retardation in girls] Rodríguez–Núñez A, et al. **An Esp Pediatr** 1989 Mar;30(3):187–9 (Eng. Abstr.) **(Spa)**

GENETICS

Rett syndrome: genetic clues based on mitochondrial changes in muscle [letter] Eeg–Olofsson O, et al. **Am J Med Genet** 1989 Jan;32(1):142–4

Linkage analysis approach to hereditary movement disorders. Kurlan R, et al. **J Neurogenet** 1989 Jul;5(3):161–71 (70 ref.)

A familial syndrome of infantile optic atrophy, movement disorder, and spastic paraplegia. Costeff H, et al. **Neurology** 1989 Apr;39(4):595–7

METABOLISM

The protective function of beta–endorphin in movement disorders [letter] Sandyk R. **Int J Neurosci** 1989 May; 46(1–2):61–3

Changes in regional brain acetylcholine content in rats following unilateral and bilateral brainstem lesions. Yamamoto T, et al. **J Neurotrauma** 1988;5(1):69–79

Regional brain glucose metabolism in neuroacanthocytosis. Dubinsky RM, et al. **Neurology** 1989 Sep;39(9):1253–5

NURSING

The elder and critical care. Sleep and mobility issues. Davis–Sharts J. **Nurs Clin North Am** 1989 Sep;24(3):755–67 (89 ref.)

PATHOLOGY

Skeletal changes in fetal akinesia [letter] Rodríguez JI, et al. **Pediatr Radiol** 1989;19(5):347–8

PHYSIOPATHOLOGY

Brain dysfunction in primary ciliary dyskinesia? Roth Y, et al. **Acta Neurol Scand** 1988 Nov;78(5):353–7

Involvement of nigrotecto–reticulospinal pathways in the iminodipropionitrile (IDPN) model of spasmodic

dyskinesias: a 2-deoxy-D-[1-14C]glucose study in the rat. Cadet JL, et al. **Brain Res** 1989 Apr 10;484(1-2):57-64
The sigma receptor and movement disorders [letter] Jansen KL. **Clin Neuropharmacol** 1989 Apr;12(2):145
Neural mechanisms in disorders of movement. Crossman AR. **Comp Biochem Physiol [A]** 1989;93(1):141-9 (58 ref.)
The spinal cord in motor disorders [editorial] Bax M. **Dev Med Child Neurol** 1988 Dec;30(6):709-10
Kinaesthetic sensitivity of normal and clumsy children: a reply to Lord and Hulme [letter] Laszlo JI, et al. **Dev Med Child Neurol** 1988 Oct;30(5):686-90
REM sleep behavioral disorders. Sforza E, et al. **Eur Neurol** 1988;28(5):295-300
Serotonin in involuntary movement disorders. Sandyk R, et al. **Int J Neurosci** 1988 Oct;42(3-4):185-208 (325 ref.)
Cortical potentials associated with movement: a review. Tamas LB, et al. **J Clin Neurophysiol** 1985 Apr;2(2):157-71 (74 ref.)
Deficits in reaction times and movement times as correlates of hypokinesia in monkeys with MPTP-induced striatal dopamine depletion. Schultz W, et al. **J Neurophysiol** 1989 Mar;61(3):651-68
Striatal inhomogeneities and basal ganglia function. Penney JB Jr, et al. **Mov Disord** 1986;1(1):3-15 (91 ref.)
Electrophysiology of the corticomotoneurone pathways in patients with movement disorders. Thompson PD, et al. **Mov Disord** 1986;1(2):113-7
Effect of CSF from animals with damage to the motor cortex on compensation of motor disorders. Loseva IV, et al. **Neurosci Behav Physiol** 1989 Mar-Apr;19(2):139-45
Joint angle feedback and biomechanical gait analysis in stroke patients: a case report. Olney SJ, et al. **Phys Ther** 1989 Oct;69(10):863-70
Noradrenergic effects in tardive dyskinesia, akathisia and pseudoparkinsonism via the limbic system and basal ganglia. Wilbur R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):849-64 (61 ref.)
Tardive and withdrawal dyskinesia in autistic children: a prospective study. Campbell M, et al. **Psychopharmacol Bull** 1988;24(2):251-5
Disorders of movement in aging. Coffey DJ. **Semin Neurol** 1989 Mar;9(1):46-9
Connectivity patterns of thalamic nuclei implicated in dyskinesia. Carpenter MB. **Stereotact Funct Neurosurg** 1989;52(2-4):79-119 (167 ref.)
Evoked potentials from the human thalamus: correlation with microstimulation and single unit recording. Yamashiro K, et al. **Stereotact Funct Neurosurg** 1989;52(2-4):127-35
[Central dysregulations as a cause of movement disorders in performance sports? An analysis of movement in sports with reference to functional anatomic and neurophysiologic viewpoints] Sommer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):10-4 (23 ref.) (Eng. Abstr.) **(Ger)**
[A case of alien hand sign] Mukai T, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):869-73 (Eng. Abstr.) **(Jpn)**
[Compensation of gait disorders after left-sided removal of a portion of the motor cortex in the white rat] Ptitsyna IB. **Fiziol Zh SSSR** 1989 Feb;75(2):171-6 (Eng. Abstr.) **(Rus)**
[Fourier analysis. Septal "dyskinesias" and "pseudodyskinesias" in phase analysis] Moragas G, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:110-3 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Effects of 5-HT1A agonists and 5-HT2 antagonists on haloperidol-induced dyskinesias in squirrel monkeys: no evidence for reciprocal 5-HT-dopamine interaction. Liebman JM, et al. **Psychopharmacology (Berlin)** 1989; 97(4):456-61

PSYCHOLOGY

Volitional control of involuntary movements. Koller WC, et al. **Mov Disord** 1989;4(2):153-6
Hysterical gait disorders: 60 cases. Keane JR. **Neurology** 1989 Apr;39(4):586-9

RADIONUCLIDE IMAGING

PET and movement disorders. Brooks DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:68-77 (53 ref.)

REHABILITATION

A prospective trial of serial gait speed as a measure of rehabilitation in the elderly. Friedman PJ, et al. **Age Ageing** 1988 Jul;17(4):227-35
Dyspraxia: try typing [letter] Lando L. **ASHA** 1989 Sep; 31(9):3
Frozen shoulder. Part II: Treatment by manipulation under anesthesia. Parker RD, et al. **Orthopedics** 1989 Jul; 12(7):989-90
[Physiatrics of the elderly as a special group] Isohanni A. **Duodecim** 1989;105(2):208-12 **(Fin)**
[Physiatric health promotion] Junnila SY. **Duodecim** 1989; 105(2):203-6 **(Fin)**
[Rehabilitation of spinal cord injuries] Kannisto M, et al. **Duodecim** 1989;105(2):166-73 (25 ref.) **(Fin)**

SURGERY

Advances in stereotactic and functional neurosurgery 8. Proceedings of the 8th meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, 1988. **Acta Neurochir Suppl (Wien)** 1989;46:1-114
Magnetic resonance imaging stereotactic thalamotomy: report of a case with comparison to computed tomography. Lunsford LD. **Neurosurgery** 1988 Sep;23(3):363-7
Striatal symptoms. Narabayashi H. **Stereotact Funct Neurosurg** 1989;52(2-4):200-4
Electrophysiological characterization of human subcortical structures by frequency spectrum analysis of neural noise (field potential) obtained during stereotactic surgery. Preliminary presentation of frequency power spectrum of various subcortical structures. Yoshida M. **Stereotact Funct Neurosurg** 1989;52(2-4):157-63

THERAPY

EMG feedback for the treatment of upper-extremity dysfunction: can it be effective? Tries J. **Biofeedback Self Regul** 1989 Mar;14(1):21-53 (40 ref.)
Analysis of neuroelectric implant integrity. Harris GF, et al. **Stereotact Funct Neurosurg** 1989;52(1):63-71
[The effectiveness of research on the treatment of refractory axial and locomotor disorders] Saloheimo E, et al. **Duodecim** 1989;105(2):214-21 (27 ref.) **(Fin)**
[Physical therapy of patients in general practice. Role of the main groups of physical therapy methods in acute and chronic problems of the locomotor system] Oliveri M. **Schweiz Rundsch Med Prax** 1989 Mar 14;78(11):281-9 (Eng. Abstr.) **(Ger)**
[Electric stimulation of the muscles in hypokinesia in patients with osteoarticular tuberculosis] Zhukovskii LI, et al. **Probl Tuberk** 1988;(11):39-42 (Eng. Abstr.) **(Rus)**

VETERINARY

Movement disorders during sleep in cats and dogs. Hendricks JC, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):686-9
Radial and tibial nerve pathology of two lactating ewes with "kangaroo gait". O'Toole D, et al. **J Comp Pathol** 1989 Apr;100(3):245-58

MOXALACTAM

ADMINISTRATION & DOSAGE

Single-dose antibiotic prophylaxis in contaminated abdominal surgery. Hall JC, et al. **Arch Surg** 1989 Feb; 124(2):244-7

ADVERSE EFFECTS

[A case of pneumonitis due to latamoxef and tobramycin] Ishida M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):756-9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

A rapid high-performance liquid chromatography method for determining beta-lactam antibiotics in biological fluids and tissues. Condomines M, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):251-3
The solid-state decarboxylation of the diammonium salt of moxalactam. Byrn SR, et al. **Pharm Res** 1987 Apr; 4(2):137-41
Epimerization kinetics of moxalactam in frozen solution. Hashimoto N, et al. **Pharm Res** 1988 May;5(5):266-71

METABOLISM

Comparison of N-methylthiotetrazole dispositions in healthy volunteers following single intravenous doses of moxalactam, cefoperazone, and cefotetan. Welage LS, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):857-61
The application of circular dichroism (CD) to a binding study of latamoxef and beta-lactamase. Matsuyama K, et al. **J Pharm Pharmacol** 1989 Jul;41(7):501-2

PHARMACOKINETICS

Pharmacokinetics of single-dose administration of moxalactam in unweaned calves. Soback S. **Am J Vet Res** 1989 Apr;50(4):498-501
Ocular pharmacokinetics of latamoxef and cefaclor in rabbits. Penetration into aqueous humor. Kitaura T, et al. **J Pharmacobiodyn** 1988 Oct;11(10):694-9
Ocular pharmacokinetics of latamoxef and cefaclor in humans. Penetration into aqueous humor. Kitaura T, et al. **J Pharmacobiodyn** 1989 Jan;12(1):60-6

PHARMACOLOGY

Human granulocyte activity against moxalactam-induced filamentous forms of Pseudomonas aeruginosa. Hammer MC, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1565-70
Enhanced in-vitro bactericidal activity of amikacin combined with latamoxef, cefotaxime and aztreonam against multi-resistant Enterobacter cloacae. Giamarellou H, et al. **J Antimicrob Chemother** 1989 Apr;23(4):537-45
The effects of cefmetazole and latamoxef on platelet function in healthy human volunteers. Peters GR, et al. **J Antimicrob Chemother** 1989 Apr;23 Suppl D:119-23

THERAPEUTIC USE

A comparative study of latamoxef disodium and gentamicin versus piperacillin and gentamicin in febrile granulocytopenic patients. O'Brien AJ, et al. **Br J Clin Pract** 1988 Feb;42(2):56-60
Single-shot antibiotic prophylaxis in colon surgery. Mendel V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):597-600
Cephalosporin therapy in intra-abdominal infection: comparative studies of cefotetan, latamoxef and cefoxitin. Wilson SE. **Chemioterapia** 1988 Aug;7(4):213-7
Patient stratification in intra-abdominal infection. Wittmann DH, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):460-2
[Effects of prophylactically used latamoxef with tobramycin against postoperative infections on therapeutic drug monitoring and renal function in the field of obstetrics and gynecology] Chimura T, et al. **Jpn J Antibiot** 1989 Jan; 42(1):189-92 (Eng. Abstr.) **(Jpn)**

TOXICITY

Vitamin K reversible hypoprothrombinemia in rats. II. Efficacy of vitamin K on latamoxef-induced coagulopathy in rats. Matsuura M, et al. **Jpn J Pharmacol** 1988 Aug; 47(4):357-65

MOXIBUSTION

An electron microscopic study of the acupuncture or moxibustion stimulated regional skin and lymph node in experimental animals. Kimura M, et al. **Am J Chin Med** 1988;16(3-4):159-67
Organic components of moxa. Kobayashi K. **Am J Chin Med** 1988;16(3-4):179-85
Serratia marcescens infected silk suture rejected by combined acupuncture, moxibustion and low-power laser therapy from the abdominal fascia. Sternfeld M, et al. **Am J Chin Med** 1988;16(1-2):81-2
General account of traditional Chinese medicine and acupuncture-moxibustion in China. Hu XM. **Chen Tzu Yen Chiu** 1988;13(1):1-5 **(Eng, Chi)**
Applying TCM theories to improve the curative effects of acupuncture and moxibustion. Qiu ML. **Chen Tzu Yen Chiu** 1988;13(1):10-6 **(Eng, Chi)**
Acupuncture treatment of Raynaud's disease—a report of 43 cases. Bao JZ. **J Tradit Chin Med** 1988 Dec;8(4):257-9
A brief view of experimental studies on relationship between the pericardium channel and the heart. Cao QS. **J Tradit Chin Med** 1989 Mar;9(1):48-52 (37 ref.)
Acupuncture treatment for 30 cases of infantile chronic diarrhea. Feng WL. **J Tradit Chin Med** 1989 Jun;9(2):106-7
Shoulder pain. Ji XP. **J Tradit Chin Med** 1988 Dec;8(4):310-2
A report of 2 cases of type B AIDS treated with acupuncture. Lei Y. **J Tradit Chin Med** 1989 Jun;9(2):95-6
Relation between the therapeutic effect of moxibustion in treating arthralgia and SP and enkephalin in nervous tissues. Lu ZS, et al. **J Tradit Chin Med** 1989 Mar; 9(1):69-74
Clinical observations in 185 cases of ligament and tendon injuries treated by the method of dissipating blood stasis and promoting the meridian. Luo QD, et al. **J Tradit Chin Med** 1989 Mar;9(1):15-7
52 cases of external humeral epicondylitis treated by acupuncture and moxibustion. Mei ZY. **J Tradit Chin Med** 1989 Mar;9(1):3-4
On the therapeutic efficacy of electric acupuncture with moxibustion in 95 cases of chronic pelvic infectious disease (PID). Wang XM. **J Tradit Chin Med** 1989 Mar;9(1):21-4
[Study on acupuncture and moxibustion immunity and its regulation] Chen HP. **Chen Tzu Yen Chiu** 1988;13(3):167-78 (Eng. Abstr.) **(Chi)**
[Effect of moxa-cone moxibustion on temperature and microcirculation in rabbits with fever caused by colitoxin] Wang YH. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep; 8(9):541-3, 517-8 (Eng. Abstr.) **(Chi)**

HISTORY

Some medical achievements in Chinese history. Cai JF. **J Tradit Chin Med** 1988 Sep;8(3):217-20

METHODS

Immediate relief and improved pulmonary functional changes in asthma symptom-complex treated by needle warming moxibustion. He JA, et al. **J Tradit Chin Med** 1988 Sep; 8(3):164-6

MOXISYLYTE see **THYMOXAMINE**

MOYAMOYA DISEASE see under **ARTERIAL OCCLUSIVE DISEASES**

MPGN see **GLOMERULONEPHRITIS, MEMBRANOPROLIFERATIVE**

MR SPECTROSCOPY see **NUCLEAR MAGNETIC RESONANCE**

MR TOMOGRAPHY see **MAGNETIC RESONANCE IMAGING**

MSH

Microsequencing evidence for the maturation of human

proopiomelanocortin into an 18 amino acid beta-melanocyte stimulating hormone [h beta MSH(5-22)] in nonpituitary tissue. Bertagna X, et al. **Peptides** 1989 Jan-Feb;10(1):83-7

[Structural organization of alpha-melanotropin molecules] Akhmedov NA, et al. **Mol Biol (Mosk)** 1989 Jan-Feb; 23(1):249-54 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Is peptide T, an octapeptide sequence found in the external glycoprotein coat of the human immunodeficiency virus (HIV), a fragment of a retro-copy of the gamma-3-MSH neuropeptide? Dominy SS. **Med Hypotheses** 1988 Sep; 27(1):1-4

ANALYSIS

Particular processing of pro-opiomelanocortin in Xenopus laevis intermediate pituitary. Sequencing of alpha- and beta-melanocyte-stimulating hormones. Rouillé Y, et al. **FEBS Lett** 1989 Mar 13;245(1-2):215-8

Immunocytochemical demonstration of melanin-concentrating hormone and proopiomelanocortin-like products in the brain of the trout and carp. Bird DJ, et al. **Gen Comp Endocrinol** 1989 Jun; 74(3):442-50

Localisation and identification of melanocyte-stimulating hormones in the fish brain. Kishida M, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):229-42

Gamma 2-MSH immunoreactivity in the human heart. Ekman R, et al. **Life Sci** 1989;45(9):787-92

BLOOD

Gamma-melanotropin and beta-endorphin after dexamethasone [letter] Meador-Woodruff JH, et al. **Biol Psychiatry** 1989 Apr 1;25(7):975-6

Melanocyte-stimulating hormone in tardive dyskinesia [letter] Sandyk R. **Biol Psychiatry** 1989 Jun;26(2):213-4

DIAGNOSTIC USE

Application of an alpha-melanocyte stimulating hormone (alpha-MSH) radioimmunoassay to the detection of the superpotent analog, [Nle4,D-Phe7]-alpha-MSH. Kreutzfeld KL, et al. **Pigment Cell Res** 1989 Jan-Feb; 2(1):65-9

GENETICS

Absence of a gamma-melanocyte-stimulating hormone sequence in proopiomelanocortin mRNA of chum salmon Oncorhynchus keta. Kitahara N, et al. **Comp Biochem Physiol [B]** 1988;91(2):365-70

METABOLISM

In situ hybridization detection of marked differences in pre-proopiomelanocortin messenger ribonucleic acid content of individual corticotropes and melanotropes. Hatfield JM, et al. **Endocrinology** 1989 Mar;124(3):1359-64

Melanotropin structure-activity studies on melanocytes of the teleost fish, Synbranchus marmoratus. Castrucci AM, et al. **Gen Comp Endocrinol** 1989 May;74(2):209-14

Expression of melanocyte stimulating hormone receptors correlates with mammalian pigmentation, and can be modulated by interferons. Kameyama K, et al. **J Cell Physiol** 1988 Oct;137(1):35-44

Secretion of melanocyte-stimulating hormone and adrenocorticotropin from transplanted pituitary pars intermedia in stressed and nonstressed rats. Iturriza FC, et al. **Neuroendocrinology** 1989 Jun;49(6):610-6

Patch-clamp study of the ionic currents underlying action potentials in cultured frog pituitary melanotrophs. Louiset E, et al. **Neuroendocrinology** 1988 Nov;48(5):507-15

Exploring the evolutionary history of melanin-concentrating and melanin-stimulating hormone receptors on melanophores: neopterygian (holostean) and chondrostean fishes. Sherbrooke WC, et al. **Pigment Cell Res** 1988; 1(5):344-9

[Features of melanotrophic activity of the blood and hypophysis in the early postnatal development of mutant Campbell and Hunter rats with hereditary retinal dystrophy] Ershov AV, et al. **Dokl Akad Nauk SSSR** 1989; 304(4):1009-11 **(Rus)**

PHARMACOLOGY

Adenylate cyclase activity in homogenates of human melanoma cells. Effect of alpha-MSH and isoprenaline. Karg E, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):288-91

Adrenalectomy and response to corticosterone and MSH in the genetically obese yellow mouse. Shimizu H, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R494-500

Activation of supraoptic magnocellular neurons by gamma 2-melanocyte stimulating hormone (gamma 2-MSH). Mitchell LD, et al. **Brain Res** 1989 Feb 20;480(1-2):388-92

Effect of gamma 3 or gamma 2 melanocyte stimulating hormone on steroidogenesis in the fetal sheep during late gestation. McMillen IC, et al. **Life Sci** 1989;44(8):563-9

The effects of simultaneous or separate infusions of some pro-opiomelanocortin-derived peptides (beta-endorphin, melanocyte stimulating hormone, and corticotrophin-like intermediate polypeptide) and their acetylated derivatives upon sexual and ingestive behaviour of male rats. Hughes AM, et al. **Neuroscience** 1988 Nov;27(2):689-98

Effects of melanocortins on vestibular compensation. Lüneburg U, et al. **Prog Brain Res** 1988;76:421-9

Infusion of gamma 2-MSH produce a conditioned taste aversion in morphine-dependent rats. Mucha RF, et al. **Psychopharmacology (Berlin)** 1989;99(1):140-2

Regulation of tyrosinase mRNA levels in mouse melanoma cell clones by melanocyte-stimulating hormone and cyclic AMP. Hoganson GE, et al. **Somat Cell Mol Genet** 1989 May;15(3):255-63

PHYSIOLOGY

The regulation of the corticomelanotropic cell activity in aves. III—Effect of various peptides on the release of MSH from dispersed, perfused duck pituitary cells. Cosecretion of ACTH with MSH. Castro MG, et al. **Comp Biochem Physiol [C]** 1988;91(2):389-93

Melanocyte stimulating hormone (MSH) in the restless-legs syndrome. Sandyk R. **Int J Neurosci** 1989 Jun; 46(3-4):197-9

Neuroleptic-induced akathisia: a role for MSH peptides [letter] Sandyk R. **Psychopharmacology (Berlin)** 1989; 99(1):134-5

SECRETION

Dopamine inhibition of gonadotropin and alpha-melanocyte-stimulating hormone release in vitro from the pituitary of the goldfish (Carassius auratus). Omeljaniuk RJ, et al. **Gen Comp Endocrinol** 1989 Jun; 74(3):451-67

Role of calcium in thyrotrophin-releasing hormone-stimulated release of melanocyte-stimulating hormone from frog neurointermediate lobe. Lamacz M, et al. **J Mol Endocrinol** 1988 Sep;1(2):131-9

Corticotropin-releasing factor (CRF) and neurotransmitters modulate melanotropic peptide release from rat neurointermediate pituitary in vitro. Saland LC, et al. **Neuropeptides** 1988 Aug-Sep;12(2):59-66

MSH, ALPHA see **ALPHA-MSH**

MSH RELEASE INHIBITING FACTOR see **MSH RELEASE INHIBITING HORMONE**

MSH RELEASE INHIBITING HORMONE

Crystal-state structural analysis of two gamma-lactam-restricted analogs of Pro-Leu-Gly-NH2. Valle G, et al. **Int J Pept Protein Res** 1989 Mar; 33(3):181-90

ANALOGS & DERIVATIVES

Inhibition of the brain to blood transport system for enkephalins and Tyr-MIF-1 in mice addicted or genetically predisposed to drinking ethanol. Banks WA, et al. **Alcohol** 1989 Jan-Feb;6(1):53-7

Blockade of brain dopamine receptors antagonizes the anti-immobility effect of MIF-1 and Tyr-MIF-1 in rats. Pulvirenti L, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):289-92

Isolation of tyrosine-melanocyte-stimulating hormone release-inhibiting factor 1 from bovine brain tissue. Horvath A, et al. **J Biol Chem** 1989 Feb 5;264(4):2175-9

Chronic, but not acute, administration of morphine alters antiopiate (Tyr-MIF-1) binding sites in rat brain. Zadina JE, et al. **Life Sci** 1989;44(8):555-61

Differential inhibitory effects of MIF-1, Tyr-MIF-1, naloxone and beta-funaltrexamine on body rotation-induced analgesia in the meadow vole, Microtus pennsylvanicus. Lipa SM, et al. **Peptides** 1989 May-Jun; 10(3):493-7

MIF-1 and Tyr-MIF-1 fail to alter benzodiazepine-induced hypothermia. Kastin AJ, et al. **Pharmacol Biochem Behav** 1989 May;33(1):261-3

Antiamnesic effects of D-pipecolic acid and analogues of Pro-Leu-Gly-NH2 in rats. Kovács GL, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):833-7

Naloxone, but not Tyr-MIF-1, reduces volitional ethanol drinking in rats: correlation with degree of spontaneous preference. Pulvirenti L, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):129-34

Effect of neurotransmitters on the system that transports Tyr-MIF-1 and the enkephalins across the blood-brain barrier: a dominant role for serotonin. Banks WA, et al. **Psychopharmacology (Berlin)** 1989;98(3):380-5

Structural specificity of MIF-1 and Tyr-MIF-1 in augmenting GABA-stimulated benzodiazepine receptor binding. Miller LG, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):365-8

PHARMACOLOGY

Pro-Leu-Gly-NH2 serves as a conditioned stimulus in the acquisition of conditioned tolerance. McLaughlin CR, et al. **Behav Neurosci** 1989 Apr;103(2):447-51

MIF-1 attenuates apomorphine stereotypies in adult rats after neonatal 6-hydroxydopamine. Kostrzewa RM, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):33-42

Blockade of brain dopamine receptors antagonizes the anti-immobility effect of MIF-1 and Tyr-MIF-1 in rats. Pulvirenti L, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):289-92

Inhibition by MIF-I of alpha-MSH induced increase of intraocular pressure and miosis in rabbits. McCullen RK, et al. **Neuropeptides** 1988 Nov-Dec;12(4):213-7

Attenuation of SCH 23390-induced alteration of striatal dopamine D1 receptor ontogeny by prolyl-leucyl-glycinamide in the rat. Kostrzewa RM, et al. **Neuropharmacology** 1989 Aug;28(8):805-10

MIF-1 attenuates spiroperidol alteration of striatal dopamine D2 receptor ontogeny. Saleh MI, et al. **Peptides** 1989 Jan-Feb;10(1):35-9

Structural specificity of MIF-1 and Tyr-MIF-1 in augmenting GABA-stimulated benzodiazepine receptor binding. Miller LG, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):365-8

[Effect of the tripeptide melanostatin on the electrical activity of surviving slices of the olfactory cortex in the rat brain] Mokrushin AA, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1216-20 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

MIF-1 is active in a chronic stress animal model of depression. Pignatiello MF, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):737-42

[The action of hypothalamic hormone on athymic mice with transplantable strains of human tumors] Bukharova IK, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):594-6 (Eng. Abstr.) **(Rus)**

TOXICITY

Embryotoxicity of L-prolyl-L-leucyl-glycinamide, cyclo(1-amino-cyclopentanecarbonyl-alanyl) and cyclo(glycyl-leucyl), new potential neuropeptides in chick embryos. Kosař K, et al. **Pharmazie** 1988 Oct;43(10):715-6

MU IMMUNOGLOBULINS see **IMMUNOGLOBULINS, MU CHAIN**

MU 1 PHAGE see **PHAGE MU 1**

MUCINS

Deglycosylation of mucin from LS174T colon cancer cells by hydrogen fluoride treatment. Byrd JC, et al. **Biochem J** 1989 Jul 15;261(2):617-25

Effects of glycosylation on the conformation and dynamics of O-linked glycoproteins: carbon-13 NMR studies of ovine submaxillary mucin. Gerken TA, et al. **Biochemistry** 1989 Jun 27;28(13):5536-43

Subunit structure of porcine submaxillary mucin. Gupta R, et al. **Biochemistry** 1989 Jul 11;28(14):6114-21

Role of glycosylation on the conformation and chain dimensions of O-linked glycoproteins: light-scattering studies of ovine submaxillary mucin. Shogren R, et al. **Biochemistry** 1989 Jun 27;28(13):5525-36

Dynamic light scattering studies of porcine submaxillary mucin fractions in dilute solution at intermediate scattering vectors. Varma BK, et al. **Biopolymers** 1989 Apr; 28(4):785-97

Influence of phytate on the adsorption of human salivary mucins onto hydroxyapatite. Nieuw Amerongen AV, et al. **J Biol Buccale** 1988 Dec;16(4):203-8

Interaction of human salivary mucins with hydroxyapatite. Nieuw Amerongen AV, et al. **J Biol Buccale** 1989 Jun; 17(2):85-92

Structures of neutral O-linked polylactosaminoglycans on human skim milk mucins. A novel type of linearly extended poly-N-acetyllactosamine backbones with Gal beta(1-4)GlcNAc beta(1-6) repeating units. Hanisch FG, et al. **J Biol Chem** 1989 Jan 15;264(2):872-83

Coexistence of papular mucinosis and systemic amyloidosis associated with lambda-type IgD paraproteinemia. Ishibashi A, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):64-7

[Mucines: glycoproteins in search of recognition] Laboisse C, et al. **Ann Pathol** 1989;9(3):175-81 (53 ref.) (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

Examination of Tardyferon depot coated tablet in patients treated by general practitioners. Faragó E. **Ther Hung** 1988; 36(2):81-5

ANALYSIS

Distribution of mucins in the mucosa of the digestive tract of reptiles: a histochemical study. Madrid JF, et al. **Acta Histochem (Jena)** 1989;85(2):117-29

O-acetyl sialomucin and differentiation of stomach cancer: a histochemical study. Huang CB, et al. **Anticancer Res** 1988 Jul-Aug;8(4):829-32

Determination of the structure of a novel acidic oligosaccharide with blood-group activity isolated from bovine submaxillary-gland mucin. D'Arcy SM, et al. **Biochem J** 1989 Jun 1;260(2):389-93

Identification of a novel oligosaccharide backbone structure with a galactose residue monosubstituted at C-6 in human foetal gastrointestinal mucins. Hounsell EF, et al. **Biochem J** 1988 Dec 1;256(2):397-401

Analysis of cancer-associated colonic mucin by ion-exchange chromatography: evidence for a mucin

species of lower molecular charge and weight in cancer. Shimamoto C, et al. **Biochim Biophys Acta** 1989 May 31; 991(2):284–95

Mucin profiles and potential for malignancy of human colorectal adenomatous polyps. Griffioen G, et al. **Cancer** 1989 Apr 15;63(8):1587–91

Complexity of MAM–6, an epithelial sialomucin associated with carcinomas. Hilkens J, et al. **Cancer Res** 1989 Feb 15;49(4):786–93

Mucin–like carcinoma–associated antigen defined by three monoclonal antibodies against different epitopes. Stähli C, et al. **Cancer Res** 1988 Dec 1;48(23):6799–802

Monoclonal antibody against human colonic sulfomucin: immunochemical detection of its binding sites in colonic mucosa, colorectal primary carcinoma, and metastases. Yamori T, et al. **Cancer Res** 1989 Feb 15;49(4):887–94

Oxidation products of ovarian cyst mucins. Characterisation by density–gradient analysis. Creeth JM. **Carbohydr Res** 1988 Jul 15;178:314–9

Structural studies on oncofetal carbohydrate antigens (Ca 19–9, Ca 50, and Ca 125) carried by O–linked sialyloligosaccharides on human amniotic mucins. Hanisch FG, et al. **Carbohydr Res** 1988 Jul 15;178:29–47

Synthetic mucin fragments. Benzyl O–beta–D–galactopyranosyl–(1——3)–O–(2–acetamido–2–deoxy–beta–D–glucopyranosyl)–(1——6)–2–acetamido–2–deoxy–alpha–D–galactopyranoside and O–alpha–L–fucopyranosyl–(1——3)–O–(2–acetamido–2–deoxy–beta–D–glucopyranosyl)–(1——6)–2–acetamido–2–deoxy–D–galactopyranose. Thomas RL, et al. **Carbohydr Res** 1989 Jun 15;189:21–30

Pyloric gland phenotypic expression of gastric cancers developing in the rat fundic glandular stomach. Tatematsu M, et al. **Carcinogenesis** 1989 Jun;10(6):1033–9

Histological and histochemical changes in the colon mucosa after ureterosigmoidostomy or colonic conduit. Tomasino RM, et al. **Eur Urol** 1988;15(3–4):248–51

Secretions from primary hamster tracheal surface epithelial cells in culture: mucin–like glycoproteins, proteoglycans, and lipids. Kim KC, et al. **Exp Lung Res** 1989 Mar; 15(2):299–314

Histochemical changes in the composition of mucins in goblet cells during methotrexate–induced mucosal atrophy in rats. Koninkx JF, et al. **Exp Pathol** 1988;34(3):125–32

Effects of streptozotocin–diabetes on rat intestinal mucin and goblet cells. Mantle M, et al. **Gastroenterology** 1989 Jul; 97(1):68–75

Subunit interactions and physical properties of bovine gallbladder mucin. Smith BF, et al. **Gastroenterology** 1989 Jul;97(1):179–87

Mucin in gall bladder bile of gall stone patients: influence of treatment with chenodeoxycholic acid and ursodeoxycholic acid. Sahlin S, et al. **Gut** 1988 Nov; 29(11):1506–10

In situ localization of enzymes and mucin in normal rat colon embedded in plastic. Barrow BJ, et al. **Histochem J** 1989 May;21(5):289–95

Fibronectin: source of mannose in a highly purified respiratory mucin. Bhattacharyya SN, et al. **Inflammation** 1988 Oct;12(5):433–46

A core protein epitope of the polymorphic epithelial mucin detected by the monoclonal antibody SM–3 is selectively exposed in a range of primary carcinomas. Girling A, et al. **Int J Cancer** 1989 Jun 15;43(6):1072–6

Development and characterization of a syngeneic monoclonal antibody to a rat mammary tumor metastasis–associated mucin–like cell–surface antigen (gp580). North SM, et al. **Int J Cancer** 1988 Oct 15;42(4):607–14

Biochemical and immunological properties of the human carcinoma antigen CAR–5 defined by the monoclonal antibody BD–5. Prat M, et al. **Int J Cancer** 1989 Jul 15, 44(1):67–74

Analysis of mucin by isotachophoresis. Emonds AJ, et al. **J Chromatogr** 1989 Feb 3;463(2):445–51

Lysozyme and mucins in gastric adenomas. Caruso RA, et al. **J Clin Pathol** 1989 Aug;42(8):827–33

Simple procedure for assessing relative quantities of neutral and acidic sugars in mucin glycoproteins: its use in assessing cyclical changes in cervical mucins. Gilks CB, et al. **J Clin Pathol** 1988 Sep;41(9):1021–4

Influence of mucinous components on survival in colorectal adenocarcinomas: a multivariate analysis. Halvorsen TB, et al. **J Clin Pathol** 1988 Oct;41(10):1068–72

Orcein–alcian blue staining: a new technique for demonstrating acid mucins in gastrointestinal epithelium. Singh R, et al. **J Clin Pathol** 1989 Aug;42(8):881–4

Detection of mucin deposits on hydrogel contact lenses: evaluation of staining procedures and clinical significance. Klein AE. **Optom Vis Sci** 1989 Jan;66(1):56–60

Pancreatic cancer mucin from xenografts of SW1990 cells: isolation, characterization, and comparison to colon cancer mucin. Nardelli J, et al. **Pancreas** 1988;3(6):631–41

Tissue evaluation of epithelial and functional markers of cell differentiation and mucins in colonic malignancy: assessment of diagnostic and prognostic value. Lapertosa G, et al. **Pathologica** 1988 Mar–Apr;80(1066):145–57

Analysis of mucin as raw material and in a saliva substitute by isotachophoresis. Emonds AJ, et al. **Pharm Weekbl [Sci]** 1989 Apr 28;11(2):61–3

Mucin in prostatic adenocarcinoma. Ro JY, et al. **Semin Diagn Pathol** 1988 Aug;5(3):273–83 (36 ref.)

Gastric carcinoma with lymphoid stroma. Analysis using mucin histochemistry and immunohistochemistry. Lertprasertsuke N, et al. **Virchows Arch [A]** 1989; 414(3):231–41

[Diagnostic trends in the microscopic discovery of mucinous deposits] Barrut D, et al. **Ann Dermatol Venereol** 1989; 116(3):271–6 **(Fre)**

[2 cases of Johnson and Helwig cutaneous focal mucinosis] Colomb D, et al. **Ann Dermatol Venereol** 1988; 115(6–7):709–11 **(Fre)**

[Persistent papular acromucinosis] Royer P, et al. **Ann Dermatol Venereol** 1988;115(8):827–31 (8 ref.) **(Fre)**

[Histochemical analysis of digestive mucins] Gaigi SS, et al. **Tunis Med** 1988 Feb;66(2):93–7 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Hyperpigmented acral papular mucinosis, systemic lupus erythematosus and universal alopecia. Lacour JP, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):212–6 (21 ref.)

Cell–to–cell heterogeneity in the expression of carbohydrate–based epitopes of a mucin–type glycoprotein on the surface of human mammary carcinoma cells. Moss L, et al. **J Cell Physiol** 1988 Nov;137(2):310–20

Mucin–producing microcystic meningioma: a case report with histochemical and ultrastructural findings. Kasantikul V, et al. **J Med Assoc Thai** 1988 Sep;71(9):513–7

[A mucin–producing cystadenoma, borderline malignancy, of the renal pelvis and ureter: a case report] Arakawa M, et al. **Gan No Rinsho** 1989 Mar;35(4):499–504 (7 ref.) (Eng. Abstr.) **(Jpn)**

BLOOD

Circulating mucin in breast carcinoma and automated leukocyte counts. Machicao CN, et al. **Hematol Pathol** 1988;2(3):159–61

Serum mucin–associated antigen levels of cystic fibrosis patients are related to their ages and clinical statuses. Frates RC Jr, et al. **Pediatr Res** 1989 Jan;25(1):49–54

CHEMICAL SYNTHESIS

Synthesis of a mucin–type O–glycosylated amino acid, beta–Gal–(1——3)–[alpha–Neu5Ac–(2——6)]–alpha–GalNAc–(1——3)– Ser. Iijima H, et al. **Carbohydr Res** 1989 Feb 15;186(1):95–106

Synthetic mucin fragments. Synthesis of a tetra– and two penta–saccharides containing the O–beta–D–galactopyranosyl–(1——3)–O–(2–acetamido–2–deoxy–beta–D–glucopyranosyl)–(1——3)–D–galactopyranose ("lacto–N–triose 1") unit. Jain RK, et al. **Carbohydr Res** 1988 Nov 1;182(2):290–6

Synthetic mucin fragments. Benzyl O–(2–acetamido–2–deoxy–alpha–D–glucopyranosyl)–(1——3)–O–beta–D–galactopyranosyl–(1——3)–O–[(2–acetamido–2–deoxy–beta–D–glucopyran osy l)–(1——6)]–2–acetamido–2–deoxy–alpha–D–galactopyranoside and benzyl O–(2–acetamido–2–deoxy–beta–D–glucopyranosyl)–(1——3)–O–beta–D–galactopyranosyl–(1——3)–O–[beta–D–galactopyranosyl–(1——6)]–2–ac eta mido–2–deoxy–alpha–D–galactopyranoside. Thomas RL, et al. **Carbohydr Res** 1988 Dec 1;183(2):163–73

GENETICS

O–glycosylation pathway for mucin–type glycoproteins. Carraway KL, et al. **Bioessays** 1989 Apr;10(4):117–21 (30 ref.)

The breast tumour–associated epithelial mucins and the peanut lectin binding urinary mucins are coded by a single highly polymorphic gene locus 'PUM'. Griffiths B, et al. **Dis Markers** 1988 Jul–Sep;6(3):185–94

Expression of the hypervariable PUM locus in normal and malignant lung: the tumor–associated epitopes are present but masked in normal tissue. Griffiths B, et al. **Dis Markers** 1988 Jul–Sep;6(3):195–202

Duodenitis and secretion of O–acetylated sialomucin variants [letter] Lapertosa G, et al. **Histopathology** 1988 Jul; 13(1):122–3

Molecular cloning of human intestinal mucin cDNAs. Sequence analysis and evidence for genetic polymorphism. Gum JR, et al. **J Biol Chem** 1989 Apr 15;264(11):6480–7

IMMUNOLOGY

Immunochemical characterization of mucins. Polypeptide (M1) and polysaccharide (A and Leb) antigens. Bara J, et al. **Biochem J** 1988 Aug 15;254(1):185–93

Intestinal mucins from normal subjects and patients with cystic fibrosis. Variable contents of the disulphide–bound 118 kDa glycoprotein and different reactivities with an anti–(118 kDa glycoprotein) antibody. Mantle M, et al. **Biochem J** 1989 Apr 1;259(1):243–53

A B72.3 second–generation–monoclonal antibody (CC49) defines the mucin–carried carbohydrate epitope Gal beta(1–3) [NeuAc alpha(2–6)]GalNAc. Hanisch FG, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):21–6

Characterization of the antigen recognized by monoclonal antibody 1D3. Gangopadhyay A, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):107–15

Biochemical and immunological properties of the human carcinoma–associated CAR–3 epitope defined by the monoclonal antibody AR–3. Prat M, et al. **Cancer Res** 1989 Mar 15;49(6):1415–21

Monoclonal antibodies to epithelial sialomucins recognize epitopes at different cellular sites in adenolymphomas of the parotid gland. Zotter S, et al. **Int J Cancer Suppl** 1988; 3:38–44

Reactivity of anti–human milk fat globule antibodies with synthetic peptides. Xing PX, et al. **J Immunol** 1989 May 15;142(10):3503–9

Specific, major histocompatibility complex–unrestricted recognition of tumor–associated mucins by human cytotoxic T cells. Barnd DL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7159–63

DU–PAN–2, mucin type differentiation antigen of normal and malignant pancreatic ductal cells. Metzgar RS, et al. **Prog Clin Biol Res** 1989;288:53–61

Influence of antimucin antibody in kidney transplantation. Chia D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):698–9

[New diagnostic method for uterine cervical adenocarcinoma—application of monoclonal antibody to cervical mucin] Hayashi I, et al. **Rinsho Byori** 1988 Aug; 36(8):992–5 **(Jpn)**

ISOLATION & PURIFICATION

A mucus–secreting human colonic cancer cell line. Purification and partial characterization of the secreted mucins. Maoret JJ, et al. **Biochem J** 1989 Mar 15; 258(3):793–9

The putative 'link' glycopeptide associated with mucus glycoproteins. Composition and properties of preparations from the gastrointestinal tracts of several mammals. Roberton AM, et al. **Biochem J** 1989 Jul 15;261(2):637–47

Protein components of human tracheobronchial mucin: partial characterization of a closely associated 65–kilodalton protein. Ringler NJ, et al. **Biochemistry** 1988 Oct 18;27(21):8056–63

The complexity of mucins. Roussel P, et al. **Biochimie** 1988 Nov;70(11):1471–82 (131 ref.)

Isolation and characterization of colon cancer mucin from xenografts of LS174T cells. Byrd JC, et al. **Cancer Res** 1988 Dec 1;48(23):6678–85

Clinical significance of mucin–like high molecular weight glycoprotein originated from lung cancer as tumor marker. Imokawa M, et al. **Clin Chim Acta** 1989 Mar 15; 180(1):45–58

Comparison of metabolically labeled mucins of LS174T human colon cancer cells in tissue culture and xenograft. Siddiqui B, et al. **Tumour Biol** 1989;10(2):83–94

METABOLISM

Effect of ethanol on the in vitro sulfation of salivary mucin. Slomiany BL, et al. **Alcoholism (NY)** 1988 Dec;12(6):774–9

Influence of site of origin and mucin production on survival in ampullary carcinoma. Dawson PJ, et al. **Ann Surg** 1989 Aug;210(2):173–9

Use of a three–stage continuous culture system to study the effect of mucin on dissimilatory sulfate reduction and methanogenesis by mixed populations of human gut bacteria. Gibson GR, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2750–5

Only trace amounts of fatty acids are found in pure mucus glycoproteins. Hansson GC, et al. **Arch Biochem Biophys** 1988 Oct;266(1):197–200

Enzymatic sulfation of salivary mucins: structural features of 35S–labeled oligosaccharides. Slomiany BL, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):61–7

In vitro sulfation of sublingual salivary gland mucin: structures of 35S–labeled oligosaccharides. Slomiany A, et al. **Biochem Int** 1989 Mar;18(3):589–97

Submaxillary mucins. Intermolecular interactions and gel–forming potential of concentrated solutions. Sellers LA, et al. **Biochem J** 1988 Dec 1;256(2):599–607

Renewal of goblet cell mucus granules during the cell migration along the crypt–villus axis in rabbit jejunum: an immunolabeling study. Chambraud L, et al. **Biol Cell** 1989; 65(2):151–62

Appearance of acinar–cell–specific mucin in prenatal mouse submandibular glands. Denny PA, et al. **Differentiation** 1989 May;40(2):93–8

High molecular weight epithelial mucins as markers in breast cancer. Price MR. **Eur J Cancer Clin Oncol** 1988 Dec; 24(12):1799–804 (53 ref.)

Sialic acid in colonic mucin: an evaluation of modified PAS reactions in single and combination histochemical procedures. Roe R, et al. **Histochem J** 1989 Apr; 21(4):216–22

High iron diamine–alcian blue mucin profiles in benign, premalignant and malignant colorectal disease. Allen DC, et al. **Histopathology** 1988 Oct;13(4):399–411

Mucin profiles in ulcerative colitis with dysplasia and carcinoma. Allen DC, et al. **Histopathology** 1988 Oct; 13(4):413–24

Epithelial mucous glycoproteins and cystic fibrosis. Rose MC. **Horm Metab Res** 1988 Oct;20(10):601–8 (61 ref.)

Mucin histochemistry of the upper gastrointestinal tract. Shah M, et al. **Indian J Gastroenterol** 1989 Apr;8(2):83–4

Mucin histochemistry of the lower gastrointestinal tract. Shah M, et al. **Indian J Gastroenterol** 1989 Apr;8(2):87–8

Acral persistent papular mucinosis. Flowers SL, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):293–7

Influence of mucin on glycosidase, protease and arylamidase activities of human gut bacteria grown in a 3-stage continuous culture system. Macfarlane GT, et al. **J Appl Bacteriol** 1989 May;66(5):407–17

Proteolytic fragmentation and peptide mapping of human carboxyamidomethylated tracheobronchial mucin. Rose MC, et al. **J Biol Chem** 1989 May 15;264(14):8193–9

Sulfation of the tumor cell surface sialomucin of the 13762 rat mammary adenocarcinoma. Hull SR, et al. **J Cell Biochem** 1989 May;40(1):67–81

Light and electron microscopic immunolocalization of rat submandibular gland mucin glycoprotein and glutamine/glutamic acid-rich proteins. Moreira JE, et al. **J Histochem Cytochem** 1989 Apr;37(4):515–28

Use of an antiserum against deglycosylated human mucins for cellular localization of their peptide precursors: antigenic similarities between bronchial and intestinal mucins. Perini JM, et al. **J Histochem Cytochem** 1989 Jun; 37(6):869–75

Bovine gallbladder mucin promotes cholesterol crystal nucleation from cholesterol-transporting vesicles in supersaturated model bile. Lee TJ, et al. **J Lipid Res** 1989 Apr;30(4):491–8

The incidence and carbohydrate histochemistry of dystrophic goblet cells in colon. Gramlich TL, et al. **Mod Pathol** 1988 Sep;1(5):366–71

Mucin histochemistry of intestinal metaplasia in Barrett's esophagus. Jauregui HO, et al. **Mod Pathol** 1988 May; 1(3):188–92

Mucin immunohistochemistry of the columnar epithelium of the oesophagus (Barrett's oesophagus). Duchatelle V, et al. **Virchows Arch [A]** 1989;414(4):359–63

[Induction of mucin deposition in mouse skin by serum from a patient with lichen myxedematosus] Kamimura K, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1039–44 (Eng. Abstr.) **(Jpn)**

[Adherence of gram negative bacteria to human tracheobronchial mucin] Katoh O, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1182–6 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Differences in adhesion of Pseudomonas aeruginosa to mucin glycopeptides from sputa of patients with cystic fibrosis and chronic bronchitis. Ramphal R, et al. **Infect Immun** 1989 Oct;57(10):3066–71

Effect of mucin on Campylobacter jejuni association and invasion on HEp-2 cells. de Melo MA, et al. **Microb Pathog** 1988 Jul;5(1):71–6

[Trapping role of mucin] Shoji J, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2038–47 (Eng. Abstr.) **(Jpn)**

SECRETION

Effect of Yersinia enterocolitica on intestinal mucin secretion. Mantle M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G319–27

Stimulation of mucin release from rat submandibular salivary-gland cells by NaF. Shahed AR, et al. **Arch Oral Biol** 1988;33(5):347–51

Introduction of cyclic AMP phosphodiesterase into rat submandibular acini prevents isoproterenol-stimulated cyclic AMP rise without affecting mucin secretion. Bradbury NA, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):661–71

Rabbit intestinal and colonic mucins: isolation, partial characterization, and measurement of secretion using an enzyme-linked immunoassay. Mantle M, et al. **Biochem Cell Biol** 1988 Oct;66(10):1045–54

Evidence for the in vivo degradation of human respiratory mucins during Pseudomonas aeruginosa infection. Houdret N, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):96–105

Molecular mechanism of product storage and release in mucin secretion. II. The role of extracellular Ca++. Verdugo P, et al. **Biorheology** 1987;24(6):625–33

Effects of hypertonic solutions on conjunctival epithelium and mucinlike glycoprotein discharge. Huang AJ, et al. **Cornea** 1989;8(1):15–20

Altered mucin secretion at the resection margin in colorectal cancer. Sharma SC, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):257–61

The hypervitaminosis-A rat: a model for mucin hypersecretion in cystic fibrosis? Hunsinger RN, et al. **Med Hypotheses** 1989 Feb;28(2):81–4

[Plaque-formed cutaneous mucinosis with telangiectasis] Weindorf N, et al. **Hautarzt** 1988 Sep;39(9):589–92 (Eng. Abstr.) **(Ger)**

[Reticular erythematous mucinosis (REM)] Ingber A, et al. **Z Hautkr** 1988 Dec 15;63(12):986–98 (Eng. Abstr.) **(Ger)**

URINE

Mucins obtained from patients with enterocutaneous urinary diversions. Mårtensson S, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):633–40

MUCOCELE

see related
RANULA

COMPLICATIONS

Craniofacial fibrous dysplasia complicated by mucocele: the role of radionuclide scintigraphic methods in the diagnosis. Garzozi H, et al. **Ann Ophthalmol** 1989 Mar;21(3):108–10

Destructive cysts of the maxillary sinus affecting the orbit. Kaltreider SA, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1398–402

Haematuria due to mucocele of the appendix. Vale J, et al. **Br J Urol** 1989 Feb;63(2):218–9

Paranasal sinus mucocele in cystic fibrosis. Guttenplan MD, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):429–30

Volvulus of an appendiceal mucocele presenting as a small bowel obstruction. Akers DL, et al. **J La State Med Soc** 1988 Nov;140(11):29–33

Ophthalmic considerations in fronto-ethmoidal mucocoeles. Lund VJ, et al. **J Laryngol Otol** 1989 Jul;103(7):667–9

Pseudomyxoma extraperitonei. Moran CG, et al. **J R Soc Med** 1988 Nov;81(11):668–9

Non-axial proptosis without diplopia secondary to maxillary pyomucocele. Sharp JF. **J R Soc Med** 1989 Aug; 82(8):506–7

Bilateral compressive optic neuropathy secondary to bilateral sphenoethmoidal mucoceles. Newton N Jr, et al. **Ophthalmologica** 1989;198(1):13–9

Pneumatocele in a traumatic ruptured lacrimal sac mucocele. Casselman JW, et al. **ROFO** 1989 Jan;150(1):106–7

[Unilateral exophthalmos due to mucocele in the frontal or ethmoidal sinus] Xu YZ. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):209–10 (Eng. Abstr.) **(Chi)**

[Recurrent unilateral painful oculomotor nerve palsy with an ipsilateral posterior ethmoidal mucocele] Doh-ura K, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):216–8 (Eng. Abstr.) **(Jpn)**

[Exophthalmos due to ethmoidal and orbital mucocele] Ivaşcu M, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec; 32(4):303–5 (Eng. Abstr.) **(Rum)**

CONGENITAL

[Laryngostenosis in a child with congenital mucolaryngocele] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1989 May–Jun; (3):74–7 **(Rus)**

DIAGNOSIS

MR imaging of mucoceles of the sphenoid sinus. Dawson RC 3d, et al. **AJNR** 1989 May–Jun;10(3):613–4

Mucoceles of the paranasal sinuses: MR imaging with CT correlation. Van Tassel P, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):407–12

Sphenoid sinus mucocele. Stankiewicz JA. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):735–40

Nabothian cysts stimulating an adnexal mass. Janus C, et al. **Clin Imaging** 1989 Jun;13(2):157–8

Magnetic resonance imaging of sphenoethmoid mucoceles. Eisele DW, et al. **Ear Nose Throat J** 1988 Oct;67(10):713, 716–8, 720 passim

Mucocele of the anterior clinoid process: CT and MR findings. Schwaighofer BW, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):501–3

Percutaneous ultrasound-guided esophagostomy. Jones GR, et al. **J Ultrasound Med** 1988 Nov;7(11):643–5

Mucocele of the appendix presenting as an adnexal mass. Bahia JO, et al. **JCU** 1989 Jan;17(1):62–6

Paranasal sinus mucocele: unusual MR manifestations at 1.5 T. Flanders AE, et al. **Magn Reson Imaging** 1989 May–Jun; 7(3):333–7

Superficial mucoceles: pitfall in clinical and microscopic diagnosis. Eveson JW. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):318–22

A case of appendiceal mucocele diagnosed by ultrasound. Zocchi M, et al. **Rays** 1988 Sep–Dec;13(3):93–5

Radiological features of mucocele of the appendix. Skaane P. **ROFO** 1988 Dec;149(6):624–8

[Mucoceles of the sphenoid sinus] Bourjat P, et al. **J Radiol** 1989 Jan;70(1):37–42 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography in the differential diagnosis of ovarian tumor and mucocele of the appendix] Jaluvka V, et al. **Dtsch Med Wochenschr** 1989 Aug 18; 114(33):1245–7 (Eng. Abstr.) **(Ger)**

[Ultrasonography of mucoceles of paranasal sinuses—a secondary report] Shiono H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1042–8 (Eng. Abstr.) **(Jpn)**

[A case of mucocele of the appendix diagnosed by imagings before laparotomy] Negami AI, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):757–60 **(Jpn)**

[Maxillary antrum mucocele. Comments on 3 cases] Surlin C, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar; 34(1):71–8 (Eng. Abstr.) **(Rum)**

ETIOLOGY

Pathologic quiz case 2. Fibromyxoma of the ethmoidal sinus with secondary sphenoidal sinus mucocele. Alleva MD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul; 115(7):878–9, 881

Intracranial complications of sinusitis. Parker GS, et al. **South Med J** 1989 May;82(5):563–9

Giant colonic mucocele after diversion colostomy for ulcerative colitis. Witte JT, et al. **Surgery** 1989 Sep; 106(3):571–4

PATHOLOGY

Myxoglobulosis of the appendix. Gonzalez JE, et al. **Am J Surg Pathol** 1988 Dec;12(12):962–6

Mucosal hyperplasia (mucocele) of the vermiform appendix. Report of a case. Pagnozzi JA, et al. **Dis Colon Rectum** 1988 Sep;31(9):735–7

Painless swelling of the lower lip. Correll RW, et al. **J Am Dent Assoc** 1988 Nov;117(6):761–2

[Mucocele of the maxillary sinus. Apropos of 60 cases from the stomatology department of the Cardiology Hospital in Lyon] Garcia-Darennes F, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):287–9 (Eng. Abstr.) **(Fre)**

[Mucoceles of the maxillary sinus. Report of a case] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1989; 16(2):149–58 (Eng. Abstr.) **(Spa)**

[The so-called appendiceal mucocele versus mucinous cystadenoma] Pastor FA, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):481–3 (9 ref.) (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Case of the month. No way out. Guest PJ, et al. **Br J Radiol** 1989 Jul;62(739):629–30

Ethmoidal mucocoeles in children. Timon CI, et al. **J Laryngol Otol** 1989 Mar;103(3):284–6

Asymptomatic mucoid impaction in bronchial atresia: roentgenographic and CT patterns. Bighi S, et al. **Rays** 1987 Sep–Dec;12(3):23–6

[Retrocecal mucus-secreting tumors of the appendix (mucoceles). Apropos of 3 radiologically diagnosed cases] Cordoliani YS, et al. **J Radiol** 1988 Dec;69(12):741–50 (47 ref.) (Eng. Abstr.) **(Fre)**

[Computed tomography of paranasal sinus mucoceles] Tomioka K, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1067–70 (Eng. Abstr.) **(Jpn)**

[Pulmonary retention cysts] Marciniak M, et al. **Pneumonol Pol** 1988 Jun;56(6):283–7 (Eng. Abstr.) **(Pol)**

SURGERY

Cryosurgical management of myxoid cysts. Böhler-Sommeregger K, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1405–8

Endoscopic sinus surgery for mucoceles: a viable alternative. Kennedy DW, et al. **Laryngoscope** 1989 Sep;99(9):885–95

Use of the CUSA in removal of a recurrent intraorbital mucocele. Gillespie RP, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):71–2

Frontal sinus injuries: primary care and management of late complications. Wolfe SA, et al. **Plast Reconstr Surg** 1988 Nov;82(5):781–91 (41 ref.)

Obstructing mucocele of the cystic duct after transplantation of the liver. Koneru B, et al. **Surg Gynecol Obstet** 1989 May;168(5):394–6

VETERINARY

Zygomatic salivary gland mucocele in a ferret. Miller PE, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1437–8

MUCOCILIARY CLEARANCE

see related
BIOLOGICAL TRANSPORT

Mobilization of mucus by airway oscillations. Freitag L, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:93–101

Effect of formalin-fixed Hemophilus influenzae and Streptococcus pneumoniae on dye transport by the chinchilla eustachian tube. Bakaletz LO, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):235–43

Nasal mucociliary clearance in Sjögren's syndrome. Dissociation in flow between sol and gel layers. Takeuchi K, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):126–9

Rapid short-term clearance of chrysotile compared with amosite asbestos in the guinea pig. Churg A, et al. **Am Rev Respir Dis** 1989 Apr;139(4):885–90

Role of mucus and cilia in nasal mucociliary clearance in healthy subjects. Lioté H, et al. **Am Rev Respir Dis** 1989 Jul;140(1):132–6

The pulmonary clearance of smooth and rough strains of Pseudomonas aeruginosa. Martin HG, et al. **Am Rev Respir Dis** 1989 Jul;140(1):206–10

Mechanosensitive and beta-adrenergic control of the ciliary beat frequency of mammalian respiratory tract cells in culture. Sanderson MJ, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):432–40

An animal model demonstration of enhanced clearance of nontypable Haemophilus influenzae from the respiratory tract after antigen stimulation of gut-associated lymphoid tissue. Wallace FJ, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):311–6

Increased ciliary beating frequency of nasal mucosa following immunotherapy for allergy. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):350–4

Mucociliary disease of the middle ear during experimental otitis media with effusion induced by bacterial endotoxin. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Jun; 98(6):479–84

Prognosis of secretory otitis media in relation to viscoelasticity of effusions in children. Takeuchi K, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):443–6

Measurement of nasal mucociliary clearance. Corbo GM, et al. **Arch Dis Child** 1989 Apr;64(4):546–50

Relationship between tracheobronchial particle clearance rates and sites of initial deposition in man. Ilowite JS, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):267–73

The cause of nasal sinusitis in patients with cleft palate. Ishikawa Y, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):442–6

High frequency oscillations and mucociliary transport. George RJ, et al. **Biomed Pharmacother** 1989;43(1):25–30 (31 ref.)

From Fernand Widal rhinitis syndrome and chronic sinusitis to total muco–ciliary disease. Mathé G, et al. **Biomed Pharmacother** 1988;42(8):489–92

Therapeutic aspects of mucociliary clearance. Pariente R. **Biomed Pharmacother** 1988;42(8):521–4 (20 ref.)

The role of mucus viscoelasticity in cough clearance. King M. **Biorheology** 1987;24(6):589–97

Rheological properties controlling mucociliary frequency and respiratory mucus transport. Puchelle E, et al. **Biorheology** 1987;24(6):557–63

The role of the periciliary fluid in mucociliary flows: flow velocity profiles in frog palate mucus. Winet H. **Biorheology** 1987;24(6):635–42

The effect of submucous resection of the nasal septum on mucociliary transport and nasal airway. Barr GS. **Clin Otolaryngol** 1989 Apr;14(2):127–30

Biological effects of air pollution in São Paulo and Cubatão. Böhm GM, et al. **Environ Res** 1989 Aug;49(2):208–16

Variability and reproducibility in the measurement of tracheobronchial clearance in healthy subjects and patients with different obstructive lung diseases. Del Donno M, et al. **Eur Respir J** 1988 Jul;1(7):613–20

Nasal mucociliary transport in healthy subjects is slower when breathing dry air. Salah B, et al. **Eur Respir J** 1988 Oct;1(9):852–5

How important is mucociliary clearance? Camner P. **Exp Lung Res** 1988;14(4):423–9 (49 ref.)

Mucociliary transport and epithelial morphology with elongation and collapse in rat trachea. Gatto LA, et al. **Exp Lung Res** 1989 Mar;15(2):239–51

Mucociliary clearance system of lung. Hira HS, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):111–9 (29 ref.)

Nasal mucus clearance in nasal and para nasal sinus disorders. Wig U, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep; 30(3):177–82

Acute inflammatory lung injury retards pulmonary particle clearance. Slauson DO, et al. **Inflammation** 1989 Apr; 13(2):185–99

Rheological profile of nesosteine: a new mucoactive agent. Braga PC, et al. **Int J Clin Pharmacol Res** 1989;9(1):77–83

The effect of vidian neurectomy on nasal mucociliary clearance. Greenstone MA, et al. **J Laryngol Otol** 1988 Oct;102(10):894–5

Effect of chest wall oscillation on mucus clearance: comparison of two vibrators. Rubin EM, et al. **Pediatr Pulmonol** 1989;6(2):122–6

Primary mucociliary transport failure. Umeki S. **Respiration** 1988;54(4):220–5 (35 ref.)

Radioisotopic method for nasal mucociliary function evaluation. Paludetti G, et al. **Rhinology** 1988 Dec; 26(4):257–62

Imaging of the airways by bronchoscintigraphy for the study of mucociliary clearance. Groth S, et al. **Thorax** 1988 May; 43(5):360–5

Laser light scattering spectroscopy: a new method to measure tracheobronchial mucociliary activity. Svartengren K, et al. **Thorax** 1989 Jul;44(7):539–47

Normal values for quantitative parameters for evaluation of mucociliary clearance in lungs. Isawa T, et al. **Tohoku J Exp Med** 1989 Jun;158(2):119–31

[Mucociliary function of 10 patients with ankylosing spondylarthritis with normal lung radiographs] Souquet PJ, et al. **Rev Mal Respir** 1988;5(6):615–7 (8 ref.) (Eng. Abstr.) **(Fre)**

[The measurement of bronchial mucociliary clearance using 99mTc for evaluating the success of the salt water cure] Mohorn M, et al. **Z Erkr Atmungsorgane** 1989;172(1):65–7 (Eng. Abstr.) **(Ger)**

[A diagnostic program for studying mucociliary transport in patients with chronic nonspecific lung diseases] Chuchalin AG, et al. **Probl Tuberk** 1988;(8):13–6 (Eng. Abstr.) **(Rus)**

[Assessment of mucociliary clearance using the radioaerosol method in chronic lung diseases] Gerasin VA, et al. **Ter Arkh** 1989;61(3):62–5 (Eng. Abstr.) **(Rus)**

[The development of the concepts of the mucociliary transport system] Solopov VN. **Ter Arkh** 1989;61(3):58–62 (21 ref.) (Eng. Abstr.) **(Rus)**

[Pathophysiological aspects of the development of airway disorders in coal miners] Lavrenova GV, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):67–8 (Eng. Abstr.) **(Rus)**

[The effect of passive smoking on mucociliary transport in children] Kuchta M, et al. **Cesk Pediatr** 1988 Aug; 43(8):492–3 **(Slo)**

[Study of nasal ciliary mechanics in allergic and vasomotor rhinopathies] Armengot M, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):531–8 (Eng. Abstr.) **(Spa)**

[Rhinomanometry, mucociliary function and nasal cytology in the evaluation of hot air] González Díaz SN, et al. **Rev Alerg Mex** 1988 Nov–Dec;35(5):105–11 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effect of bradykinin on airway ciliary motility and its modulation by neutral endopeptidase. Tamaoki J, et al. **Am Rev Respir Dis** 1989 Aug;140(2):430–5

The effect of N–acetylneuraminic acid on the mucociliary transport impaired by cigarette smoke. Miyata T, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:202–9

Activation of mucociliary function in chronic rhinitis: a placebo–controlled study. Nuutinen J, et al. **Arch Otorhinolaryngol** 1988;245(5):284–6

Comparative toxicity of ambient air pollutants: some aspects related to lung defense. Schlesinger RB. **Environ Health Perspect** 1989 May;81:123–8

Factors affecting the response of lung clearance systems to acid aerosols: role of exposure concentration, exposure time, and relative acidity. Schlesinger RB. **Environ Health Perspect** 1989 Feb;79:121–6

Effect of concentration and cumulative exposure of inhaled sulfuric acid on tracheobronchial particle clearance in healthy humans. Spektor DM, et al. **Environ Health Perspect** 1989 Feb;79:167–72

Investigation into the effect of Fenoterol on mucociliary clearance in patients with chronic bronchitis. Weich DJ, et al. **Eur J Nucl Med** 1988;14(11):533–7

Response of the tracheobronchial mucociliary clearance system to repeated irritant exposure: effect of sulfuric acid mist on function and structure. Gearhart JM, et al. **Exp Lung Res** 1988;14(5):587–605

Effects of aerosol exposures to cadmium chloride on the clearance of titanium dioxide from the lungs of rats. Greenspan BJ, et al. **Exp Lung Res** 1988;14(4):491–9

Effects of soman and its antidotes on tracheal mucociliary transport of ferrets. Marin MG, et al. **J Appl Physiol** 1989 Mar;66(3):1390–6

Effect of pyocyanin and 1–hydroxyphenazine on in vivo tracheal mucus velocity. Munro NC, et al. **J Appl Physiol** 1989 Jul;67(1):316–23

Lung mucociliary transport in asymptomatic asthma: effects of inhaled histamine. Garrard CS, et al. **J Lab Clin Med** 1989 Feb;113(2):190–5

The effects of a beta 2–agonist (clenbuterol), and anti–bacterial drugs (trimethoprim with sulphadiazine; oxytetracycline) on calf mucociliary clearance. Davies CP, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):217–24

VIP potentiates cholinergic effects on the mucociliary system in the maxillary sinus. Lindberg S, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):401–7

Effect of four–week treatment with oxitropium bromide on lung mucociliary clearance in patients with chronic bronchitis or asthma. Pavia D, et al. **Respiration** 1989; 55(1):33–43

Stimulation of ciliary activity by indomethacin in rabbit tracheal epithelial organ culture. Tamaoki J, et al. **Respiration** 1988;54(2):127–31

[Microbiologic studies of the lung clearance of rats after aerogenous long term exposure to ammonia] Kastner P, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):191–8 (Eng. Abstr.) **(Ger)**

[Modification of mucociliary clearance by a combination of theophylline with ambroxol and of ambroxol in monotherapy] Dorow P, et al. **Arzneimittelforschung** 1988 Jun;38(6):828–30 (Eng. Abstr.) **(Ger)**

[Additive action of theophylline and ambroxol on bronchial clearance?] Würtemberger G, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:300–3 (Eng. Abstr.) **(Ger)**

[Influence of hyperoxia and hypoxia on bronchial mucociliary clearance] Tashiro N. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):597–606 (Eng. Abstr.) **(Jpn)**

[Effects of tachykinins on respiratory epithelial functions] Tamaoki J. **Kokyu To Junkan** 1989 May;37(5):487–92 **(Jpn)**

[The effect of S–carboxymethylcysteine on ciliary beat frequency of nasal mucosa] Amesara R, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1413–8 (Eng. Abstr.) **(Jpn)**

[Effect of mukodin on indices of mucociliary transport] Solopov VN, et al. **Ter Arkh** 1988;60(12):55–7 (Eng. Abstr.) **(Rus)**

[Activation of damaged nasal mucociliary function in children] Jakubíková J, et al. **Cesk Otolaryngol** 1989 Jan; 38(1):45–7 (Eng. Abstr.) **(Slo)**

RADIATION EFFECTS

Functional and morphological pathology of the nasal mucosa after x–ray irradiation. Ohashi Y, et al. **Clin Otolaryngol** 1988 Dec;13(6):435–46

MUCOCILIARY TRANSPORT see **MUCOCILIARY CLEARANCE**

MUCOCUTANEOUS LYMPH NODE SYNDROME

Kawasaki syndrome. Lohr JA, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):559–74 (43 ref.)

Kawasaki disease in Papua New Guinea. Spooner V, et al. **P N G Med J** 1989 Mar;32(1):61–2

[The mucocutaneous lymph node syndrome in children] Navrátil J, et al. **Cesk Otolaryngol** 1988 Dec;37(6):349–51 (Eng. Abstr.) **(Cze)**

[Kawasaki syndrome] Frank M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):91–9 (Eng. Abstr.) **(Cze)**

[Kawasaki syndrome] Bourrillon A, et al. **Presse Med** 1989 May 6;18(18):933–6 (40 ref.) (Eng. Abstr.) **(Fre)**

[Kawasaki disease: recent findings in etiology, pathogenesis and therapy] Di Piero G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):209–17 (50 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

Fatty acid composition of platelet phospholipids and plasma total lipids in Kawasaki disease. Hidaka T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):294–8

Kawasaki disease, oxygen radicals and high dose gammaglobulin therapy. Kuratsuji T, et al. **Basic Life Sci** 1988;49:997–1003

Elevated circulating tumor necrosis factor–alpha in patients with Kawasaki disease. Maury CP, et al. **J Lab Clin Med** 1989 May;113(5):651–4

Effect of intravenous immune globulin on the coagulopathy of Kawasaki syndrome. Glode MP, et al. **J Pediatr** 1989 Sep;115(3):469–73

Circulating interleukin–1 beta in patients with Kawasaki disease [letter] Maury CP, et al. **N Engl J Med** 1988 Dec 22;319(25):1670–1

Serum interferon concentrations and retroviral serology in Kawasaki syndrome. Rowley AH, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):663–6

[Peripheral blood monocyte/macrophages among mononuclear cells and serum tumor necrosis factor in patients with Kawasaki disease] Matsubara T. **Arerugi** 1988 Jul;37(7):454–60 (Eng. Abstr.) **(Jpn)**

[Plasma PGE2, TXB2 and 6–keto PGF1 alpha levels in patients with Kawasaki disease] Sasai K. **Arerugi** 1988 Sep; 37(9):952–8 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Guideline for treatment and management of cardiovascular sequelae in Kawasaki disease. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):109–14

Prognostic significance of the size of coronary artery aneurysms in Kawasaki disease. Akiba T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):7–11

MR imaging of coronary artery aneurysms in a child with Kawasaki disease. Bisset GS 3d, et al. **AJR** 1989 Apr; 152(4):805–7

Myocarditis in Kawasaki disease [letter] Ino T, et al. **Am Heart J** 1989 Jun;117(6):1400–1

ECG findings after myocardial infarction in children after Kawasaki disease. Nakanishi T, et al. **Am Heart J** 1988 Oct;116(4):1028–33

Kawasaki disease with an exanthem limited to the diaper area [letter] Krowchuk DP, et al. **Am J Dis Child** 1988 Nov;142(11):1136–7

Kawasaki disease with thrombocytosis followed by thrombocytopenia purpura in the same patient [letter] Lipnick RN, et al. **Am J Dis Child** 1989 Feb;143(2):139–40

Kawasaki disease and perineal rash. Urbach AH, et al. **Am J Dis Child** 1988 Nov;142(11):1174–6

Aseptic meningitis complicating adult Kawasaki disease: case report and review of the literature. McIlroy MA, et al. **Am J Med** 1989 Jul;87(1):106–10 (20 ref.)

Surgical management of coronary insufficiency in a child with Kawasaki's disease: use of bilateral internal mammary arteries. Myers JL, et al. **Ann Thorac Surg** 1988 Oct; 46(4):459–61

Sudden death in incomplete Kawasaki disease [letter] Loubser MD, et al. **Arch Dis Child** 1989 Apr;64(4):637–8

Sudden death in incomplete Kawasaki's disease. McCowen C, et al. **Arch Dis Child** 1988 Oct;63(10):1254–6

Kawasaki disease and cervical adenopathy. April MM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):512–4

Myocarditis in Kawasaki syndrome. A minor villain? Takahashi M. **Circulation** 1989 Jun;79(6):1398–400

Neutropenia in Kawasaki disease [letter] Hara T, et al. **Eur J Pediatr** 1989 Apr;148(6):580

Kawasaki disease associated with idiopathic thrombocytopenic purpura [letter] Ishiguro N, et al. **Eur J Pediatr** 1989 Jan;148(4):379

Mucocutaneous lymph node syndrome (Kawasaki syndrome) mimicking a suppurative parapharyngeal space infection. Case report and review of the literature. Ruef C. **Helv Paediatr Acta** 1989 Feb;43(4):307–12 (25 ref.)

Kawasaki syndrome with multiple arterial aneurysms. Nitsure MY, et al. **Indian Pediatr** 1988 Sep;25(9):881–8

Lipodystrophia centrifugalis abdominalis infantilis. A possible sequel to Kawasaki disease. Furukawa F. **Int J Dermatol** 1989 Jun;28(5):338–9

Intravenous gamma globulin to prevent giant coronary artery aneurysm in Kawasaki disease [letter] Coe JY, et al.

J Pediatr 1989 Jun;114(6):1065–6
Bilirubinuria: an early indicator of gallbladder hydrops associated with Kawasaki disease. Friesen CA, et al. J Pediatr Gastroenterol Nutr 1989 Apr;8(3):384–6
Hydrops of the gall bladder associated with Kawasaki syndrome. Gururaj AK, et al. J Singapore Paediatr Soc 1989;31(1–2):93–6
Priapism in Kawasaki disease [letter] Waring NP, et al. JAMA 1989 Mar 24–31;261(12):1730–1
Coronary aneurysms in a young adult: report of a case suspected of Kawasaki disease. Murai T, et al. Med Sci Law 1989 Jan;29(1):59–63
Increased prevalence of atopic dermatitis in Kawasaki disease. Brosius CL, et al. Pediatr Infect Dis J 1988 Dec; 7(12):863–6
Kawasaki disease: cardiac problems and management. Kato H, et al. Pediatr Rev 1988 Jan;9(7):209–17
Myocardial infarction in Kawasaki disease. Gilbert RD, et al. S Afr Med J 1989 May 20;75(10):494–6
Gallbladder hydrops in mucocutaneous lymph node syndrome. Choi YS, et al. South Med J 1989 Mar; 82(3):397–8 (27 ref.)
A case of Kawasaki syndrome associated with preseptal cellulitis in orbita. Demirsoy S, et al. Turk J Pediatr 1988 Jan–Mar;30(1):55–9
[Multiplane 2D-echocardiograms of the coronary arteries in Kawasaki disease] Zhu Q, et al. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Oct; 16(5):289–90, 318 (Eng. Abstr.) (Chi)
[Kawasaki syndrome associated with ornithosis] Pajerek J, et al. Cas Lek Cesk 1989 May 12;128(20):631–3 (Eng. Abstr.) (Cze)
[Increasing stress dyspnea in a 31-year-old patient with enlarged heart shadow] Hettich R, et al. Internist (Berlin) 1989 Jan;30(1):64–7 (Ger)
[Kawasaki disease in a subject with G6PD deficiency] Cattaneo G, et al. Pediatr Med Chir 1989 Mar–Apr; 11(2):219–21 (Eng. Abstr.) (Ita)
[Follow-up study of coronary artery bypass grafting after Kawasaki disease—early and late postoperative evaluation] Ohara K, et al. Nippon Kyobu Geka Gakkai Zasshi 1989 Jan;37(1):103–9 (Eng. Abstr.) (Jpn)
[The risk factors in Kawasaki disease] Kato H, et al. Ryumachi 1988 Aug;28(4):274–80 (30 ref.) (Jpn)
[Coronary complications in Kawasaki syndrome] Norgård G, et al. Tidsskr Nor Laegeforen 1988 Oct 20; 108(29):2488–9 (Eng. Abstr.) (Nor)
[Cardiac complications in Kawasaki disease] Mares Bermúdez J, et al. An Esp Pediatr 1989 Feb;30(2):127–30 (Eng. Abstr.) (Spa)
[Diagnosis by two-dimensional and Doppler echocardiography of coronary aneurysm in a Mexican boy with Kawasaki disease] Vargas-Barrón J, et al. Arch Inst Cardiol Mex 1988 May–Jun;58(3):227–9 (Eng. Abstr.) (Spa)

DIAGNOSIS

Kawasaki disease—the Singapore experience. Ng MP, et al. Ann Acad Med Singapore 1989 Jan;18(1):15–8
Kawasaki syndrome. Newburger JW, et al. Cardiol Clin 1989 May;7(2):453–65 (87 ref.)
Bacterial endocarditis and lymphadenopathy mimicking Kawasaki disease. Cullen S, et al. Ir Med J 1989 Feb; 82(1):32–3
Atypical presentation of Kawasaki disease with early development of giant coronary artery aneurysms. Avner JR, et al. J Pediatr 1989 Apr;114(4 Pt 1):605–6
Kawasaki disease presenting in an adult as inflammatory diarrhea. Postelwait GL, et al. Mo Med 1987 Feb; 84(2):71–2
Kawasaki syndrome and the eye. Smith LB, et al. Pediatr Infect Dis J 1989 Feb;8(2):116–8
Kawasaki disease in an adult Trinidadian male. Patrick AL, et al. Trop Geogr Med 1988 Jul;40(3):254–6
Mucocutaneous lymph node syndrome (Kawasaki syndrome): a case report. Gültekin A, et al. Turk J Pediatr 1988 Jan–Mar;30(1):51–4 (12 ref.)
[Aseptic purulent meningitis in Kawasaki syndrome in an adult (letter] Lucht F, et al. Presse Med 1988 Oct 8; 17(34):1763–4 (Fre)
[Kawasaki disease: a disease that is not always easy to identify] Zecca G, et al. Minerva Pediatr 1988 Aug; 40(8):489–92 (Eng. Abstr.) (Ita)
[Clinical cases of the mucocutaneous syndrome (Kawasaki syndrome)] Kalamkarian AA, et al. Vestn Dermatol Venerol 1988;(11):64–6 (9 ref.) (Eng. Abstr.) (Rus)
[Kawasaki disease] Avilés C, et al. Rev Chil Pediatr 1987 Nov–Dec;58(6):462–7 (Eng. Abstr.) (Spa)
[Kawasaki syndrome in young adults: presentation of a case and review of the literature (letter)] Manzano L, et al. Rev Clin Esp 1988 Sep;183(4):218–9 (Spa)

DRUG THERAPY

Studies on the effect of long-term use of low dose aspirin in Kawasaki disease. Hamasaki Y, et al. Acta Paediatr Jpn Overseas Ed 1988 Feb;30(1):63–7
Dipyridamole-thallium-201 tomography documenting improved myocardial perfusion with therapy in Kawasaki disease. Nienaber CA, et al. Am Heart J 1988 Dec;116(6 Pt 1):1575–9
Effect of liposomal-encapsulated superoxide dismutase on active oxygen-related human disorders. A preliminary study. Niwa Y, et al. Free Radic Res Commun 1985; 1(2):137–53
Varicella-zoster immunoglobulin for patients with Kawasaki syndrome receiving daily aspirin. Siegel J. Pediatr Infect Dis J 1988 Oct;7(10):745

ENZYMOLOGY

Immunoreactive polymorphonuclear leukocyte elastase in complex with alpha 1-antitrypsin in Kawasaki disease. Inamo Y, et al. Acta Paediatr Jpn Overseas Ed 1987 Apr; 29(2):202–5
Absence of significant RNA-dependent DNA polymerase activity in lymphocytes from patients with Kawasaki syndrome. Melish ME, et al. Nature 1989 Jan 19; 337(6204):288–90

EPIDEMIOLOGY

Kawasaki syndrome in Chinese children. Lee BW, et al. Ann Trop Paediatr 1989 Sep;9(3):147–51
A nationwide incidence survey of Kawasaki disease in 1985–1986 in Japan. Yanagawa H, et al. J Infect Dis 1988 Dec;158(6):1296–301
Rug shampoo and Kawasaki disease. Fatica NS, et al. Pediatrics 1989 Aug;84(2):231–4
Epidemiologic aspects of Kawasaki disease in a Manhattan hospital. Ichida F, et al. Pediatrics 1989 Aug;84(2):235–41

ETIOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VI. Heightened cellular reactivity to streptolysin-O in mice infected with S. pyogenes and in MCLS patients. Akiyama T, et al. Acta Paediatr Jpn Overseas Ed 1988 Feb;30(1):68–72
Kawasaki syndrome: issues in etiology and treatment. Rauch AM. Adv Pediatr Infect Dis 1989;4:163–82 (91 ref.)
The acute phase nature of interleukin 6: studies in Kawasaki disease and other febrile illnesses. Ueno Y, et al. Clin Exp Immunol 1989 Jun;76(3):337–42
Animal models of vasculitis. Lessons we can learn to improve our understanding of Kawasaki disease. Lehman TJ, et al. Rheum Dis Clin North Am 1988 Aug;14(2):479–87 (19 ref.)
[Relapse of Kawasaki disease: a case report] Chen CY, et al. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Mar; 5(3):189–93 (Eng. Abstr.) (Chi)
[Kawasaki disease (mucocotaneous lymph node syndrome)] Chmielnicka J, et al. Wiad Lek 1988 Aug 15;41(16):1091–3 (20 ref.) (Pol)

GENETICS

Kawasaki disease in siblings. Hewitt M, et al. Arch Dis Child 1989 Mar;64(3):398–9
Kawasaki disease in families. Fujita Y, et al. Pediatrics 1989 Oct;84(4):666–9

IMMUNOLOGY

Antineutrophil cytoplasm antibodies in Kawasaki disease. Savage CO, et al. Arch Dis Child 1989 Mar;64(3):360–3
[Serum interleukin-2 receptor in patients with Kawasaki disease] Matsubara T. Arerugi 1989 Jan;38(1):49–56 (Eng. Abstr.) (Jpn)

MICROBIOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VII. A weak response to Epstein-Barr viral capsid antigen in mice infected neonatally with S. pyogenes. Akiyama T, et al. Acta Paediatr Jpn Overseas Ed 1988 Dec;30(6):654–61
Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. V. Further electron microscopic observations on group A beta-hemolytic streptococci inoculated into immune mice. Akiyama T, et al. Acta Paediatr Jpn Overseas Ed 1987 Oct;29(5):721–6
Aetiology of Kawasaki disease. Bannister BA, et al. Arch Dis Child 1989 Mar;64(3):397–8

PATHOLOGY

Pathological features of Kawasaki disease (mucocutaneous lymph node syndrome). Landing BH, et al. Am J Cardiovasc Pathol 1987;1(2):218–29 (46 ref.)
Small pustules in Kawasaki disease. A clinicopathological study of four patients. Kimura T, et al. Am J Dermatopathol 1988 Jun;10(3):218–23
The perineal eruption of Kawasaki syndrome. Friter BS, et al. Arch Dermatol 1988 Dec;124(12):1805–10
Kawasaki syndrome. Ogden GR, et al. Br Dent J 1988 Nov 5;165(9):327–8
'Kawasaki syndrome' [letter] Thornhill MH. Br Dent J 1989 Mar 25;166(6):198
Kawasaki's syndrome accompanied by bone marrow suppression. Cohen I, et al. J La State Med Soc 1988 Jul; 140(7):31–4
Mucocutaneous lymph node syndrome (Kawasaki disease). Ogden GR, et al. Oral Surg Oral Med Oral Pathol 1989 May;67(5):569–72
[Kawasaki syndrome in Tunisia. Apropos of 2 new cases] Hedoui MM, et al. Tunis Med 1987 May;65(5):343–7 (19 ref.) (Eng. Abstr.) (Fre)
[Histopathological studies of endomyocardial biopsy on the children with Kawasaki disease] Yonesaka S, et al. Kokyu To Junkan 1989 Apr;37(4):429–33 (Eng. Abstr.) (Jpn)
[Kawasaki syndrome] Betlloch Mas I, et al. Med Cutan Ibero Lat Am 1988;16(3):211–2 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. III Electron microscopic observations on group A hemolytic streptococci inoculated into mice. Akiyama T, et al. Acta Paediatr Jpn Overseas Ed 1987 Jun;29(3):417–25
Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. IV. Immunological tolerance following exposure of neonatal mice to live attenuated strains of Streptococcus pyogenes. Akiyama T, et al. Acta Paediatr Jpn Overseas Ed 1987 Jun;29(3):426–32
Left ventricular contractility and function in Kawasaki syndrome. Effect of intravenous gamma-globulin. Newburger JW, et al. Circulation 1989 Jun;79(6):1237–46
Effect of heart rate on the end-systolic wall stress-mean velocity of circumferential fiber shortening relation. Watanabe K, et al. J Cardiol 1988 Jun;18(2):451–6
Abnormalities of immunoregulation in Kawasaki syndrome. Barron K, et al. J Rheumatol 1988 Aug;15(8):1243–9
Facial nerve paralysis associated with Kawasaki syndrome [letter] Nigro G, et al. Pediatr Infect Dis J 1988 Dec; 7(12):889–90

RADIOGRAPHY

Comparison of ionic and nonionic low-osmolar contrast media in coronary arteriography. A crossover study in children. Saito H, et al. Invest Radiol 1988 Dec; 23(12):910–3
Coronary angiographic abnormalities in mucocutaneous lymph node syndrome: acute findings and long-term follow-up. Kuribayashi S, et al. Radiology 1989 Sep; 172(3):629–33
[Coronary aneurysm in Kawasaki syndrome: incidence and prognosis] Beitzke A, et al. Klin Padiatr 1989 Jan–Feb; 201(1):33–9 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Detection of coronary artery stenosis in children with Kawasaki disease. Usefulness of pharmacologic stress 201Tl myocardial tomography. Kondo C, et al. Circulation 1989 Sep;80(3):615–24
[Disorders of myocardial perfusion in Kawasaki syndrome: noninvasive detection by 201 thallium tomography] Nienaber CA, et al. Z Kardiol 1988 Aug;77(8):503–7 (Eng. Abstr.) (Ger)

THERAPY

Management of Kawasaki disease [letter] Shulman ST. J Pediatr 1988 Dec;113(6):1116–7
Intravenous gammaglobulin and reduction of coronary artery abnormalities in children with Kawasaki Disease [letter] Nishihara S, et al. Lancet 1988 Oct 22;2(8617):973
[Pediatric use of intravenous immunoglobulins in immunomodulation. Apropos of 34 cases. Current data] Rapin F, et al. Ann Pediatr (Paris) 1988 Sep;35(7):481–8 (Eng. Abstr.) (Fre)
[Kawasaki disease. Treatment with intravenous gammaglobulins] Lebranchu Y. Presse Med 1989 Jun 10; 18(23):1147–50 (Eng. Abstr.) (Fre)

MUCOLIPIDOSIS

CLASSIFICATION

[Three cases of mucolipidosis III with significant differences in clinical pictures—reevaluation of the classification of mucolipidosis II and III] Nishimoto J, et al. No To Hattatsu 1989 Jan;21(1):49–55 (Eng. Abstr.) (Jpn)

COMPLICATIONS

[Mucolipidosis I: a disease of lysosomal accumulation of orthopedic value. Presentation of 4 cases] Frediani P, et al. Chir Organi Mov 1988 Oct–Dec;73(4):369–77 (Eng. Abstr.) (Ita)

DIAGNOSIS

Prenatal diagnosis of I-cell disease in the first and second trimesters. Parvathy MR, et al. Am J Med Sci 1989 Jun; 297(6):361–4
Culture conditions found to minimize false positive diagnosis of lysosomal storage disorders. Arnon J, et al. In Vitro Cell Dev Biol 1988 Dec;24(12):1159–64
[Fetal ascites as a manifestation of atypical mucolipidosis] Choulot JJ, et al. Ann Pediatr (Paris) 1988 Dec; 35(10):757–8 (Eng. Abstr.) (Fre)
[Prenatal diagnosis of sialidosis, a defect of the lysosomal enzyme neuraminidase] Heyes H, et al. Geburtshilfe Frauenheilkd 1988 Nov;48(11):814–5 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Biochemical studies on lymphoblastoid cells with inherited N-acetyl-glucosamine 1-phosphotransferase deficiency (I-cell disease). Okada S, et al. **Biochem Int** 1988 Aug; 17(2):375–83

Ganglioside GM3 sialidase activity in fibroblasts of normal individuals and of patients with sialidosis and mucolipidosis IV. Subcellular distribution and and some properties. Lieser M, et al. **Biochem J** 1989 May 15;260(1):69–74

I-cell disease: evidence for a mannose 6-phosphate independent pathway for translocation of lysosomal enzymes in lymphoblastoid cells. Tsuji A, et al. **Clin Chim Acta** 1988 Aug 15;176(1):115–21

Improvement of tear lysosomal enzyme levels after treatment with bone marrow transplantation in a patient with I-cell disease. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):226–9

GENETICS

[Familial mucolipidosis type II (I-cell disease)] Stopyrowa J, et al. **Pol Tyg Lek** 1988 Sep 26;43(39):1256–9 (Eng. Abstr.) **(Pol)**

METABOLISM

Lysosomal integral membrane glycoproteins are expressed at high levels in the inclusion bodies of I-cell disease fibroblasts. Sandoval IV, et al. **Arch Biochem Biophys** 1989 May 15;271(1):157–67

Impaired cholesterol esterification in cultured skin fibroblasts from patients with I-cell disease and pseudo-Hurler polydystrophy. Inui K, et al. **Biochem Int** 1989 Jun; 18(6):1129–35

Phosphatidylcholine storage in mucolipidosis IV. Bargal R, et al. **Clin Chim Acta** 1989 May 15;181(2):167–74

Lysosomal accumulation of phospholipids in mucolipidosis IV cultured fibroblasts. Bach G, et al. **Enzyme** 1988; 40(1):40–4

Phospholipids accumulation in mucolipidosis IV cultured fibroblasts. Bargal R, et al. **J Inherited Metab Dis** 1988; 11(2):144–50

PATHOLOGY

Study of the bone pathology in early mucolipidosis II (I-cell disease). Pazzaglia UE, et al. **Eur J Pediatr** 1989 Apr; 148(6):553–7

RADIOGRAPHY

Mucolipidosis II: correlation between radiological features and histopathology of the bones. Pazzaglia UE, et al. **Pediatr Radiol** 1989;19(6–7):406–13

MUCOLYTIC AGENTS see **EXPECTORANTS**

MUCOPOLYSACCHARIDES

The disaccharide composition of heparins and heparan sulfates. Guo YC, et al. **Anal Biochem** 1989 Jan; 176(1):96–104

Structure of heparan sulfate and dermatan sulfate. Conrad HE. **Ann N Y Acad Sci** 1989;556:18–28 (35 ref.)

Location of specific units in heparin and heparan sulfate. Danishefsky I, et al. **Ann N Y Acad Sci** 1989;556:29–35

A differential scanning calorimetric study of the conformational transitions of schizophyllan in mixtures of water and dimethylsulfoxide. Kitamura S, et al. **Biopolymers** 1989 Feb;28(2):639–54

ADMINISTRATION & DOSAGE

[Action of oral mesoglycan in dermatology] Scarsella A, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):XXIX–XXXII (Eng. Abstr.) **(Ita)**

ANALYSIS

Permanent metachromatic effect of 1,9-dimethyl-methylene blue on acidic mucopolysaccharides of mastocytes. Pokorny E, et al. **Acta Morphol Hung** 1988;36(3–4):143–6

The presence of heparan sulfate proteoglycans in the neuritic plaques and congophilic angiopathy in Alzheimer's disease. Snow AD, et al. **Am J Pathol** 1988 Dec;133(3):456–63

Heparitinases facilitate separation of disaccharides of heparan sulfate isomers in human arteries using high-performance liquid chromatography. Murata K, et al. **Biochem Int** 1989 Jul;19(1):155–62

Immunocytochemical localization of heparan sulfate proteoglycan in human decidual cell secretory bodies and placental fibrinoid. Kisalus LL, et al. **Biol Reprod** 1988 Sep; 39(2):419–30

Altered expression and distribution of heparan sulfate proteoglycans in human gliomas. Steck PA, et al. **Cancer Res** 1989 Apr 15;49(8):2096–103

Characterization of a heparan sulfate proteoglycan that copurifies with the neural cell adhesion molecule. Cole GJ, et al. **Exp Cell Res** 1989 May;182(1):44–60

Isolation of Swiss 3T3 cell variants with altered heparan sulfate. Keller KM, et al. **Exp Cell Res** 1988 Nov; 179(1):137–58

Lack of keratan sulphate in the human notochord. Salisbury JR, et al. **J Anat** 1988 Apr;157:175–9

Keratan sulphate and the ultrastructure of cornea and cartilage: a 'stand-in' for chondroitin sulphate in conditions of oxygen lack? Scott JE, et al. **J Anat** 1988 Jun;158:95–108

The keratan sulfate-enriched region of bovine cartilage proteoglycan consists of a consecutively repeated hexapeptide motif. Antonsson P, et al. **J Biol Chem** 1989 Sep 25;264(27):16170–3

Multiple distinct membrane heparan sulfate proteoglycans in human lung fibroblasts. Lories V, et al. **J Biol Chem** 1989 Apr 25;264(12):7009–16

Analysis of the proteoglycans synthesized by corneal explants from embryonic chicken. II. Structural characterization of the keratan sulfate and dermatan sulfate proteoglycans from corneal stroma. Midura RJ, et al. **J Biol Chem** 1989 Jan 25;264(3):1423–30

Characterization of the major heparan sulfate proteoglycan secreted by bovine aortic endothelial cells in culture. Homology to the large molecular weight molecule of basement membranes. Saku T, et al. **J Biol Chem** 1989 Feb 25;264(6):3514–23

New method for detecting slime production by coagulase negative staphylococci. Freeman DJ, et al. **J Clin Pathol** 1989 Aug;42(8):872–4

Laminin and heparan sulphate proteoglycan in the lesioned adult mammalian central nervous system and their possible relationship to axonal sprouting. Giftochristos N, et al. **J Neurocytol** 1988 Jun;17(3):385–97

Ultrastructural localization of sulphate glycoconjugates in the human glomerular capillary wall using the high iron diamine method. Barsotti P, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):549–56

Clinico-histochemical studies on type 4 carcinoma of the stomach—with special reference to mucopolysaccharides and sialic acid in tumor tissue. Sowa M, et al. **Jpn J Surg** 1989 Mar;19(2):153–62 (32 ref.)

Characterization and localization of basement membrane-associated heparan sulfate proteoglycan in human tissues. Schleicher ED, et al. **Lab Invest** 1989 Sep; 61(3):323–32

Heparan sulfate proteoglycan of murine glomerular basement membrane: relationship between localization of the core protein and localization of fixed negative charges. Hiramatsu T, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb; 31(2):125–34

[Histochemical and electron microscopic studies of the trabecular meshwork in primary open-angle glaucoma] Li Y, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):17–22 (Eng. Abstr.) **(Chi)**

[Histochemical and electron microscopic studies of the trabecular meshwork in normal human eyes] Yi YZ, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):9–16 (Eng. Abstr.) **(Chi)**

[Potentiometry applied to the characterization and analysis of polysaccharides for pharmaceutical use] Mascellani G, et al. **Farmaco [Prat]** 1988 May;43(5):165–75 (Eng. Abstr.) **(Ita)**

BIOSYNTHESIS

Biosynthesis of heparin and heparan sulfate. Lindahl U, et al. **Ann N Y Acad Sci** 1989;556:36–50 (43 ref.)

Synthesis of heparan sulfate proteoglycans by the isolated glomerulus. Templeton DM, et al. **Biochem Cell Biol** 1988 Oct;66(10):1078–85

Presence of unsulfated heparan chains on the heparan sulfate proteoglycan of human colon carcinoma cells. Implications for heparan sulfate proteoglycan biosynthesis. Iozzo RV. **J Biol Chem** 1989 Feb 15;264(5):2690–9

Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin(J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. Gatchalian CL, et al. **J Cell Biol** 1989 May; 108(5):1873–90

Keratan sulphate: a functional substitute for chondroitin sulphate in O2 deficient tissues? Scott JE, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):742–5

BLOOD

The effect of chemonucleolysis on serum keratan sulfate levels in humans. Block JA, et al. **Arthritis Rheum** 1989 Jan;32(1):100–4

Lack of association between serum keratan sulfate concentrations and cartilage changes of osteoarthritis after transection of the anterior cruciate ligament in the dog. Brandt KD, et al. **Arthritis Rheum** 1989 May;32(5):647–51

Canine serum keratan sulfate and hyaluronate concentrations. Relationship to age and osteoarthritis. Leipold HR, et al. **Arthritis Rheum** 1989 Mar;32(3):312–21

Levels of keratan sulfate-bearing fragments rise predictably following chemonucleolysis of dog intervertebral discs with chymopapain. Oegema TR Jr, et al. **Spine** 1988 Jun; 13(6):707–11

[Acid mucopolysaccharide content of the blood in patients with diffuse toxic goiter and ophthalmopathy] Olelnik VA, et al. **Vrach Delo** 1988 Jul;(7):70–2 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

[Structure and function of proteoglycans] Tomaszewski JJ, et al. **Postepy Biochem** 1988;34(3):209–28 (157 ref.) **(Pol)**

GENETICS

Maintenance of heparan sulfate structure throughout evolution: chemical and enzymic degradation, and 13C-n.m.r.-spectral evidence. Nader HB, et al. **Carbohydr Res** 1988 Dec 31;184:292–300

Partial primary structure of the 48- and 90-kilodalton core proteins of cell surface-associated heparan sulfate proteoglycans of lung fibroblasts. Prediction of an integral membrane domain and evidence for multiple distinct core proteins at the cell surface of human lung fibroblasts. Marynen P, et al. **J Biol Chem** 1989 Apr 25;264(12):7017–24

Identification of cDNA clones encoding different domains of the basement membrane heparan sulfate proteoglycan. Noonan DM, et al. **J Biol Chem** 1988 Nov 5; 263(31):16379–87

IMMUNOLOGY

Studies of a monoclonal antibody to skeletal keratan sulphate. Importance of antibody valency. Poole AR, et al. **Biochem J** 1989 Jun 15;260(3):849–56

Structural and immunological studies of keratan sulphates from mature bovine articular cartilage. Thornton DJ, et al. **Biochem J** 1989 May 15;260(1):277–82

Analysis of negatively charged dye-binding antibodies reactive with double-stranded DNA and heparan sulfate in serum from patients with rheumatic diseases. Aotsuka S, et al. **Clin Exp Immunol** 1988 Sep;73(3):436–42

Characterization of a polyreactive monoclonal antibody to dsDNA, F x 1A, and heparan sulfate generated from BALB/c mice immunized with rat renal homogenates. Chen XM, et al. **Clin Immunol Immunopathol** 1989 Jun; 51(3):326–37

Monoclonal antibodies to heparan sulfate proteoglycan: development and application to the study of normal tissue and pathologic human kidney biopsies. Kemeny E, et al. **Connect Tissue Res** 1988;18(1):9–25

Cross-reactivity of anti-ssDNA antibodies with heparan sulfate in patients with type I diabetes mellitus. Triolo G, et al. **Diabetes** 1989 Jun;38(6):718–22

The specificity of a mouse monoclonal antibody to human aorta proteoglycans. Baker J, et al. **Matrix** 1989 Mar; 9(2):92–8

Glomerular injury induced by antibodies against heparan sulfate proteoglycan (HSPG) derived from PYS 2 cells. Yoshida F, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb; 31(2):135–43

ISOLATION & PURIFICATION

Identification of the precursor protein for the heparan sulfate proteoglycan of human colon carcinoma cells and its post-translational modifications. Iozzo RV, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):239–49

Cell-surface heparan sulfate and heparan-sulfate/chondroitin-sulfate hybrid proteoglycans of mouse mammary epithelial cells. David G, et al. **Eur J Biochem** 1989 Jan 2;178(3):609–17

Cell-associated proteoheparan sulfate from bovine arterial smooth muscle cells. Schmidt A, et al. **Exp Cell Res** 1988 Oct;178(2):242–53

Heparan sulfate proteoglycan from human and equine glomeruli and tubules. van den Heuvel LP, et al. **Int J Biochem** 1988;20(12):1391–400

Presence of unsulfated heparan chains on the heparan sulfate proteoglycan of human colon carcinoma cells. Implications for heparan sulfate proteoglycan biosynthesis. Iozzo RV. **J Biol Chem** 1989 Feb 15;264(5):2690–9

Glycosaminoglycan free chains. External plasma membrane components distinct from the membrane proteoglycans. Piepkorn M, et al. **J Biol Chem** 1989 May 25;264(15):8662–9

Heparan sulfate-mediated binding of epithelial cell surface proteoglycan to thrombospondin. Sun X, et al. **J Biol Chem** 1989 Feb 15;264(5):2885–9

Structural properties of the heparan sulfate proteoglycans of brain. Ripellino JA, et al. **J Neurochem** 1989 Mar; 52(3):807–12

METABOLISM

Heparan sulfate degradation in tumor cell invasion and angiogenesis. Vlodavsky I, et al. **Adv Exp Med Biol** 1988; 233:201–10 (24 ref.)

Differences in the solubility and susceptibility to proteolytic degradation of basement-membrane components in adult and embryonic mouse tissues. Dziadek M, et al. **Am J Anat** 1989 Apr;184(4):298–310

Effect of puromycin aminonucleoside on HSPG core protein content of glomerular epithelial cells. Kasinath BS, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F590–6

In vivo turnover of the basement membrane and other heparan sulfate proteoglycans of rat glomerulus. Beavan LA, et al. **Arch Biochem Biophys** 1989 Mar;269(2):576–85

The Engelbreth-Holm-Swarm mouse tumor produces undersulfated heparan sulfate and oversulfated galactosaminoglycans. Sugahara K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):189–97

Identification of specific binding sites for keratan sulphate proteoglycans and chondroitin-dermatan sulphate proteoglycans on collagen fibrils in cornea by the use of cupromeronic blue in 'critical-electrolyte-concentration' techniques [published erratum appears in Biochem J 1988 Nov 1;255(3):following 1061] Scott JE, et al. **Biochem J** 1988 Jul 15;253(2):607–10

Matrix heparan sulphate, but not endothelial cell surface heparan sulphate, is degraded by highly metastatic mouse

lymphoma cells. Hennes R, et al. **Br J Cancer** 1988 Aug; 58(2):186–8

Enhanced axonal transport of glycosaminoglycans in regenerating goldfish optic nerve. Coughlin C, et al. **Brain Res** 1989 Jul 31;493(2):326–30

Glomerular basement membrane heparan sulfate glycosaminoglycan in aminonucleoside of puromycin nephrosis. Garin EH, et al. **Child Nephrol Urol** 1988–89; 9(3):121–6

Hyaluronic acid and other glycosaminoglycans of the human palatal tonsils. Wardas M, et al. **Connect Tissue Res** 1988; 18(2):79–81

Undersulfated heparan sulfate in a Chinese hamster ovary cell mutant defective in heparan sulfate N-sulfotransferase. Bame KJ, et al. **J Biol Chem** 1989 May 15;264(14):8059–65

Differential association of rat liver heparan sulfate proteoglycans in membranes of the Golgi apparatus and the plasma membrane. Brandan E, et al. **J Biol Chem** 1989 Jun 25;264(18):10520–6

Secretion and degradation of lipoprotein lipase in cultured adipocytes. Binding of lipoprotein lipase to membrane heparan sulfate proteoglycans is necessary for degradation. Cisar LA, et al. **J Biol Chem** 1989 Jan 25;264(3):1767–74

Identification of a cell surface-binding protein for the core protein of the basement membrane proteoglycan. Clément B, et al. **J Biol Chem** 1989 Jul 25;264(21):12467–71

Chondroitin sulfate and heparan sulfate proteoglycans of PC12 pheochromocytoma cells. Gowda DC, et al. **J Biol Chem** 1989 Jul 5;264(19):11436–43

Binding of heparan sulfate to type V collagen. A mechanism of cell-substrate adhesion. LeBaron RG, et al. **J Biol Chem** 1989 May 15;264(14):7950–6

Synthesis of small proteoglycans substituted with keratan sulfate by rabbit articular chondrocytes. Plaas AH, et al. **J Biol Chem** 1989 Aug 25;264(24):14447–54

Membrane anchoring of heparan sulfate proteoglycans by phosphatidylinositol and kinetics of synthesis of peripheral and detergent-solubilized proteoglycans in Schwann cells. Carey DJ, et al. **J Cell Biol** 1989 May;108(5):1891–7

The incubation of laminin, collagen IV, and heparan sulfate proteoglycan at 35 degrees C yields basement membrane-like structures. Grant DS, et al. **J Cell Biol** 1989 Apr;108(4):1567–74

Correlations between heparan sulfate metabolism and hepatoma growth. Ishihara M, et al. **J Cell Physiol** 1989 Mar;138(3):467–76

Specific binding of basic fibroblast growth factor to basement membrane-like structures and to purified heparan sulfate proteoglycan of the EHS tumor. Vigny M, et al. **J Cell Physiol** 1988 Nov;137(2):321–8

Heparan sulfate proteoglycan is present in basement membrane as a double-tracked structure. Inoue S, et al. **J Histochem Cytochem** 1989 May;37(5):597–602

Chondroitin 6-sulfate proteoglycan but not heparan sulfate proteoglycan is abnormally expressed in skin basement membrane from patients with dominant and recessive dystrophic epidermolysis bullosa. Fine JD, et al. **J Invest Dermatol** 1989 Apr;92(4):611–6

Evidence that the axolemmal mitogen for cultured Schwann cells is a positively charged, heparan sulfate proteoglycan-bound, heparin-displaceable molecule. DeCoster MA, et al. **J Neurosci Res** 1989 Mar;22(3):283–8

Initial interaction of herpes simplex virus with cells is binding to heparan sulfate. WuDunn D, et al. **J Virol** 1989 Jan; 63(1):52–8

Pathobiochemical aspects of diabetic nephropathy. Schleicher E, et al. **Klin Wochenschr** 1988 Sep 15; 66(18):873–82 (48 ref.)

Differentiating human leukemia cells express heparanase that degrades heparan sulfate in subendothelial extracellular matrix. Yahalom J, et al. **Leuk Res** 1988;12(9):711–7

Association of axonally transported heparan sulfate with isolated synaptic plasma membrane. Elam JS, et al. **Neurochem Res** 1988 Aug;13(8):715–20

Neutralization of thrombin by antithrombin III in the presence of cultured human fibroblasts. Brandt JT, et al. **Thromb Res** 1988 Jul 15;51(2):187–96

[Pathophysiology of polysaccharide sulfates in the connective tissue] Skop B, et al. **Wiad Lek** 1988 May 15;41(10):655–9 (34 ref.) (Eng. Abstr.) **(Pol)**

[Reactions of the connective-tissue components of the skin of rats to electrostatic fields] Portnov FG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):81–4 (Eng. Abstr.) **(Rus)**

[Myxomatous degeneration in cardiovascular diseases] Storozhakov GI, et al. **Sov Med** 1988;(10):46–50 (56 ref.) **(Rus)**

[A patient with Calvé-Legg-Perthes syndrome, elevated levels of creatine phosphokinase and positive screening for mucopolysaccharides] Velisavljev MD, et al. **Med Pregl** 1988;41(3–4):129–31 (Eng. Abstr.) **(Scr)**

[Changes in acid mucopolysaccharide levels in the central nervous system of rats during convulsions induced by penicillin] Dragić S. **Vojnosanit Pregl** 1989 Jan–Feb; 46(1):3–6 (Eng. Abstr.) **(Scr)**

PHARMACOKINETICS

[Studies on metabolism and disposition of sizofiran (SPG), an anti-tumor polysaccharide. I. Excretion and tissue distribution of 14C-SPG] Horiba M, et al. **Yakugaku Zasshi** 1988 Aug;108(8):763–71 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Heparin, heparan sulfate, smooth muscle cells, and atherosclerosis. Karnovsky MJ, et al. **Ann N Y Acad Sci** 1989;556:268–81 (34 ref.)

Plasma anticoagulant mechanisms of heparin, heparan sulfate, and dermatan sulfate. Ofosu FA, et al. **Ann N Y Acad Sci** 1989;556:123–31

Inhibition of passive allergic encephalomyelitis by sulfated polysaccharides. Willenborg DO, et al. **Ann N Y Acad Sci** 1988;540:543–5

Tumor cell invasion of three-dimensional matrices of defined composition: evidence for a specific role for heparan sulfate in rodent cell lines. Robertson NP, et al. **Cancer Res** 1989 Apr 1;49(7):1816–23

Inhibition of polymorphonuclear leukocyte chemotaxis by the mucoid exopolysaccharide of Pseudomonas aeruginosa. Stiver HG, et al. **Clin Invest Med** 1988 Aug;11(4):247–52

Heparan sulphate with no affinity for antithrombin III and the control of haemostasis. Scully MF, et al. **FEBS Lett** 1988 Dec 5;241(1–2):11–4

Calcium oxalate crystal growth studies in polyacrylamide gels: Part II—Influence of synthetic polypeptides and natural macromolecules on crystal aggregation. Rao MV, et al. **Indian J Exp Biol** 1988 Jul;26(7):553–7

Effect of a single dose of mesoglycan on the human fibrinolytic system, and the profibrinolytic action of nine daily doses. Vittoria A, et al. **Int J Tissue React** 1988; 10(4):261–6

Heparin and heparan sulfate partially inhibit induction of acetylcholine receptor accumulation by nerve in Xenopus culture. Hirano Y, et al. **J Neurosci** 1989 May;9(5):1555–61

Effect of sizofilan, an immunomodulator, on hepatic microsomal mixed-function oxidase activities in rats. Yomogida S, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):499–502

Pharmacological profile of ateroid. Prino G. **Mod Probl Pharmacopsychiatry** 1989;23:68–75 (22 ref.)

Mechanism of rabbit platelet agglutination induced by acidic mucopolysaccharide extracted from Stichopus japonicus Selenka. Li JZ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):432–4

Aggregation of human platelets by acidic mucopolysaccharide extracted from Stichopus japonicus Selenka. Li JZ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):435–9

PHYSIOLOGY

Heparan sulfate proteoglycans of Ras-transformed 3T3 or neuroblastoma cells. Differing functions in adhesion on fibronectin. Culp LA, et al. **Ann N Y Acad Sci** 1989; 556:194–216 (48 ref.)

Cell-surface proteoheparan sulfate structure-function relationships. Silbert JE, et al. **Ann N Y Acad Sci** 1989; 556:51–60

Cell surface heparan sulphate implicated in haemopoietic growth factor signalling. Burgess AW. **Immunol Today** 1988 Sep;9(9):267–8 (6 ref.)

In vitro evidence for a neurite growth-promoting activity in Trembler mouse serum. Koenig J, et al. **Int J Dev Neurosci** 1989;7(3):281–94

High resolution immunoelectron microscopic localization of functional domains of laminin, nidogen, and heparan sulfate proteoglycan in epithelial basement membrane of mouse cornea reveals different topological orientations. Schittny JC, et al. **J Cell Biol** 1988 Oct;107(4):1599–610

Extracellular matrix heparan sulfate proteoglycans modulate the mitogenic capacity of acidic fibroblast growth factor. Gordon PB, et al. **J Cell Physiol** 1989 Sep;140(3):584–92

Chinese hamster ovary cell adhesion to human platelet thrombospondin is dependent on cell surface heparan sulfate proteoglycan. Kaesberg PR, et al. **J Clin Invest** 1989 Mar;83(3):994–1001

Heparan sulfate is necessary for adhesive interactions between human early hemopoietic progenitor cells and the extracellular matrix of the marrow microenvironment. Gordon MY, et al. **Leukemia** 1988 Dec;2(12):804–9

[Pathologic response of the retinal pigment epithelium. The effect of mucopolysaccharide in the subretinal space to phagocytosis. Part 5] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):187–95 (Eng. Abstr.) **(Jpn)**

SECRETION

Release of glomerular heparan-35SO4 proteoglycan by heparin from glomeruli of streptozocin-induced diabetic rats. Klein DJ, et al. **Diabetes** 1989 Jan;38(1):130–9

THERAPEUTIC USE

Adjuvant immunotherapy: two randomized controlled studies of patients with cervical cancer. Okamura K, et al. **Biomed Pharmacother** 1989;43(3):177–81

Ateroid in the treatment of dementia: results of a clinical trial. Conti L, et al. **Mod Probl Pharmacopsychiatry** 1989; 23:76–84

Ateroid in the clinical treatment of multi-infarct dementia. Passeri M, et al. **Mod Probl Pharmacopsychiatry** 1989; 23:85–94

A general practice trial of Ateroid 200 in 8,776 patients with chronic senile cerebral insufficiency. Santini V. **Mod Probl Pharmacopsychiatry** 1989;23:95–100

[A double-blind controlled clinical study on the use of mucopolysaccharides in the treatment of patients with cerebral vasculopathy. Comparison with a placebo] Bardin P, et al. **Clin Ter** 1987 Jan 31;120(2):111–8 (Eng. Abstr.) **(Ita)**

[Treatment with mesoglycan of chronic obliterative atherosclerotic arteriopathies of the legs. Hematochemical and flowmetric changes] di Giovanna VN. **Clin Ter** 1988 Jun 30;125(6):431–4 (Eng. Abstr.) **(Ita)**

[Mesoglycan in acute and chronic venous insufficiency of the legs] Sangrigoli V, et al. **Clin Ter** 1989 May 15; 129(3):207–9 (Eng. Abstr.) **(Ita)**

[Mesoglycan in the treatment of chronic obstructive arteriopathies of the legs] Scolari EA. **Clin Ter** 1988 Jul 15;126(1):43–7 (Eng. Abstr.) **(Ita)**

TOXICITY

Nephritogenicity of proteoglycans. II. A model of immune complex nephritis. Makino H, et al. **Kidney Int** 1988 Aug; 34(2):195–208

Nephritogenicity of proteoglycans. III. Mechanism of immune deposit formation. Makino H, et al. **Kidney Int** 1988 Aug;34(2):209–19

MUCOPOLYSACCHARIDOSIS

Suxamethonium in mucopolysaccharidosis [letter] Baines D. **Anaesth Intensive Care** 1989 Aug;17(3):382

Mucopolysaccharidoses and anaesthesia [letter] Baines D, et al. **Can J Anaesth** 1988 Sep;35(5):540–1

CHEMICALLY INDUCED

Mucopolysaccharidosis-like cellular alterations in chondrocytes of rats treated with tilorone. Lüllmann-Rauch R, et al. **Exp Mol Pathol** 1988 Oct; 49(2):279–89

COMPLICATIONS

A patient with Sanfilippo syndrome and pseudocholinesterase deficiency, further complicated by post-tonsillectomy haemorrhage. Myles PS, et al. **Anaesth Intensive Care** 1989 Feb;17(1):86–8

Acquired Brown's syndrome associated with Hurler-Scheie's syndrome. Bradbury JA, et al. **Br J Ophthalmol** 1989 Apr; 73(4):305–8

Ocular symptoms and histopathology in mucopolysaccharidoses. Süveges I. **Bull Soc Belge Ophtalmol** 1987;224:23–5

Atlantoaxial instability in mucopolysaccharidosis type VII. Pizzutillo PD, et al. **J Pediatr Orthop** 1989 Jan–Feb; 9(1):76–8

Ocular changes in the mucopolysaccharidoses after bone marrow transplantation. A preliminary report. Summers CG, et al. **Ophthalmology** 1989 Jul;96(7):977–84; discussion 984–5

DIAGNOSIS

Sanfilippo D syndrome: estimation of N-acetylglucosamine-6-sulfatase activity with a radiolabeled monosulfated disaccharide substrate. Freeman C, et al. **Anal Biochem** 1989 Feb 1;176(2):244–8

Heparin and suspected Sanfillipo syndrome [letter] Henderson MJ, et al. **Arch Dis Child** 1989 Apr;64(4):633–4

The mucopolysaccharidoses: a study of 48 cases. Kagalwala TY, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):919–25

Mucopolysaccharide disorders in India: a commentary. Verma IC. **Indian J Pediatr** 1988 Nov–Dec;55(6):999–1002

[Ruling out fetal Sanfilippo's syndrome (mucopolysaccharidosis IIIA) in the first trimester of pregnancy] Bolodár A, et al. **Orv Hetil** 1989 Jan 29; 130(5):233–4 (Eng. Abstr.) **(Hun)**

[Differential diagnosis of Scheie's syndrome (MPS I S) and Hurler-Scheie syndrome (MPS I H-S). Presentation of a case of probable Scheie's syndrome] Fasce L, et al. **Minerva Pediatr** 1988 Apr;40(4):247–51 (Eng. Abstr.) **(Ita)**

[Magnetic resonance imaging in mucopolysaccharidosis] Nakajima S, et al. **No To Hattatsu** 1988 Nov;20(6):468–73 (Eng. Abstr.) **(Jpn)**

[Glycosaminoglycans in the serum and urine and their significance in clinical diagnosis] Wlad H. **Pol Tyg Lek** 1988 Aug 22;43(34):1075–8 **(Pol)**

GENETICS

Mucopolysaccharidosis type IIIC (Sanfilippo): early clinical presentation in a large Turkish pedigree. Sewell AC, et al. **Clin Genet** 1988 Aug;34(2):116–21

Carrier detection in Sanfilippo A syndrome. Toone JR, et al. **Clin Genet** 1988 Jun;33(6):401–3

Murine mucopolysaccharidosis type VII. Characterization of a mouse with beta-glucuronidase deficiency. Birkenmeier EH, et al. **J Clin Invest** 1989 Apr;83(4):1258–6

Carrier detection for Sanfilippo A syndrome. Matalon R, et al. **J Inherited Metab Dis** 1988;11(2):158–60

Sanfilippo disease, type C: three cases in the same family. Turki I, et al. **Neuropediatrics** 1989 May;20(2):90–2

[Mucopolysaccharidosis VII: familial study] Moreno JA, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):147–53 (Eng. Abstr.) **(Spa)**

METABOLISM

Autofluorescence emission spectra of neuronal lipopigment in mucopolysaccharidosis (Sanfilippo's syndrome). Dowson JH, et al. **Acta Neuropathol (Berl)** 1989;77(4):426–9

PATHOLOGY

MR imaging of cavitary lesions in the brain with Hurler/Scheie. Rauch RA, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S1–3

Focal dendritic swellings in Purkinje cells in mucopolysaccharidoses types I, II and III. A Golgi and ultrastructural study. Ferrer I, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):315–23

Multiple sulfatase deficiency: bridge between neuronal storage diseases and leukodystrophies [published erratum appears in Pathology 1988 Oct;20(4):following 411] Kepes JJ, et al. **Pathology** 1988 Jul;20(3):285–91

[Type VI–A mucopolysaccharidosis (Maroteaux–Lamy disease). Clinico–pathologic case report] Stürmer J. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):273–81 (Eng. Abstr.) **(Ger)**

[Type VII mucopolysaccharidosis (SLY disease)] Woessner S, et al. **Sangre (Barc)** 1989 Apr;34(2):153–5 **(Spa)**

RADIOGRAPHY

Atypical radiological features of beta–glucuronidase deficiency (mucopolysaccharidosis VII) occurring in an elderly patient from an inbred kindred. Chapman S, et al. **Br J Radiol** 1989 May;62(737):491–4

SURGERY

Combined aortic and mitral valve replacement in an adult with Scheie's disease. Butman SM, et al. **Chest** 1989 Jul; 96(1):209–10

URINE

Dimethylmethylene blue–based spectrophotometry of glycosaminoglycans in untreated urine: a rapid screening procedure for mucopolysaccharidoses. de Jong JG, et al. **Clin Chem** 1989 Jul;35(7):1472–7

Diagnostic test for mucopolysaccharidosis. I. Direct method for quantifying excessive urinary glycosaminoglycan excretion. Whitley CB, et al. **Clin Chem** 1989 Mar; 35(3):374–9

VETERINARY

Morphology of leukocytes from cats affected with alpha–mannosidosis and mucopolysaccharidosis VI (MPS VI). Alroy J, et al. **Vet Pathol** 1989 Jul;26(4):294–302

MUCOPOLYSACCHARIDOSIS 1 see **LIPOCHONDRODYSTROPHY**

MUCOPOLYSACCHARIDOSIS 2 see **LIPOCHONDRODYSTROPHY**

MUCOPOLYSACCHARIDOSIS 3 see under **MUCOPOLYSACCHARIDOSIS**

MUCOPOLYSACCHARIDOSIS 5 see under **MUCOPOLYSACCHARIDOSIS**

MUCOPOLYSACCHARIDOSIS 6 see under **MUCOPOLYSACCHARIDOSIS**

MUCOPROTEINS

Formation of cholesterol gall stones in vitro by Eddy current. Yu CS, et al. **J Tongji Med Univ** 1988;8(4):202–7

ANALYSIS

Hemorrhagic fever with renal syndrome and Tamm–Horsfall protein [letter] Fievet P, et al. **Ann Intern Med** 1989 Feb 15;110(4):325

Structural analysis of the preponderant high–mannose oligosaccharide of human Tamm–Horsfall glycoprotein. Dall'Olio F, et al. **Carbohydr Res** 1988 Jul 15;178:327–32

Classification, inhibition, and specificity studies of the vitelline coat lysin from toad sperm. Yamasaki H, et al. **Gamete Res** 1988 Jul;20(3):287–300

Mucosubstances in medullary carcinoma of the thyroid [letter; comment] Rigaud C, et al. **Histopathology** 1989 Feb; 14(2):228–9, **Comment on:** Histopathology 1988 Jul;13(1):55–66

Interstitial cystitis is associated with intraurothelial Tamm–Horsfall protein. Fowler JE Jr, et al. **J Urol** 1988 Dec;140(6):1385–9

Distribution of rabbit mucosal glycoprotein throughout urinary tract. Walker SR, et al. **Urology** 1989 Feb; 33(2):127–30

BLOOD

Serum Tamm–Horsfall protein levels in childhood: relationship with age and glomerular filtration rate. Alfaham M, et al. **Nephron** 1989;52(3):216–21

GENETICS

Cloning and DNA sequence analysis of a Lactococcus bacteriophage lysin gene. Shearman C, et al. **Mol Gen Genet** 1989 Aug;218(2):214–21

IMMUNOLOGY

Regression of bovine lymphosarcoma by treatment with cell–wall skeleton of Nocardia rubra. Onuma M, et al. **Vaccine** 1989 Apr;7(2):121–4

METABOLISM

Tamm–Horsfall protein accumulation in glomeruli during acetazolamide–induced acute renal failure. Rossert J, et al. **Am J Nephrol** 1989;9(1):56–7

Biochemical studies on lysin, a cell wall degrading enzyme released during fertilization in Chlamydomonas. Buchanan MJ, et al. **Exp Cell Res** 1988 Nov;179(1):181–93

[Clinical regularities of myocardial infarction repair] Movshovich BL, et al. **Ter Arkh** 1989;61(4):39–42 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Inhibition of calcium oxalate monohydrate crystal aggregation by urine proteins. Hess B, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F99–106

Calcium oxalate crystal growth studies in polyacrylamide gels: Part II—Influence of synthetic polypeptides and natural macromolecules on crystal aggregation. Rao MV, et al. **Indian J Exp Biol** 1988 Jul;26(7):553–7

Differential effect of Tamm–Horsfall protein on adherence of Escherichia coli to transitional epithelial cells. Duncan JL. **J Infect Dis** 1988 Dec;158(6):1379–82

PHYSIOLOGY

Crystal adsorption and growth slowing by nephrocalcin, albumin, and Tamm–Horsfall protein. Worcester EM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1197–205

[Tamm–Horsfall protein] Ronco P, et al. **Presse Med** 1988 Sep 24;17(32):1641–6 (27 ref.) (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Scanning electron microscopy of human urine and purified Tamm–Horsfall's glycoprotein. Bjugn R, et al. **Scand J Urol Nephrol** 1988;22(4):313–5

URINE

A new ELISA method for the rapid quantification of Tamm–Horsfall protein in urine. Reinhart HH, et al. **Am J Clin Pathol** 1989 Aug;92(2):199–205

Rabbit urinary tamm–horsfall glycoprotein. Chemical composition and tentative carbohydrate structure. Fabricius T, et al. **Biol Chem Hoppe Seyler** 1989 Feb; 370(2):151–8

Rapid isolation of Tamm–Horsfall glycoprotein (uromodulin) from human urine. Serafini–Cessi F, et al. **J Immunol Methods** 1989 Jun 21;120(2):185–9

Tamm–Horsfall protein determination in Balkan endemic nephropathy. Radonić M, et al. **Urol Res** 1988;16(5):377–80

[Changes in Tamm–Horsfall protein excretion in the urine of patients with hypertension in pregnancy] Nesselhut T, et al. **Klin Wochenschr** 1989;67 Suppl 17:11–3 (Eng. Abstr.) **(Ger)**

[Development of enzyme immunoassay for urinary Tamm–Horsfall glycoprotein using microtiter plates] Takedachi S, et al. **Rinsho Byori** 1988 Nov;36(11):1352–5 **(Jpn)**

MUCOR

DRUG EFFECTS

Antibiotics from basidiomycetes. XXXI. Aleurodiscal: an antifungal sesterterpenoid from Aleurodiscus mirabilis (Berk. & Curt.) Höhn. Lauer U, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):875–82

[The effect of cytochalasin A on the composition of subcellular fractions of hyphae in the growth of Mucor mucedo L. I. Composition of the plasmalemma] el Mougith AA, et al. **Can J Microbiol** 1988 Nov;34(11):1256–65 (Eng. Abstr.) **(Fre)**

[The effect of cytochalasin A on the composition of subcellular fractions of hyphae in the growth of Mucor mucedo. II. Composition of the cell wall] el Mougith AA, et al. **Can J Microbiol** 1988 Nov;34(11):1266–70 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Two different intrachain cAMP sites in the cAMP–dependent protein kinase of the dimorphic fungus Mucor rouxii. Paveto C, et al. **Eur J Biochem** 1989 Feb 1;179(2):429–34

Purification and some properties of two forms of chitinase from mycelial cells of Mucor rouxii. Pedraza–Reyes M, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):211–8

Characterization of two casein kinase activities in the fungus Mucor rouxii. Pardo P, et al. **Second Messengers Phosphoproteins** 1988;12(4):183–96

[Production and properties of the milk–clotting enzyme] Bernardinelli SE, et al. **Rev Argent Microbiol** 1983; 15(2):95–104 (Eng. Abstr.) **(Spa)**

GENETICS

Secretion by yeast of the zymogen form of Mucor rennin, an aspartic proteinase of Mucor pusillus, and its conversion to the mature form. Hiramatsu R, et al. **J Biol Chem** 1989 Oct 5;264(28):16862–6

GROWTH & DEVELOPMENT

DNA methylation and polyamines in regulation of development of the fungus Mucor rouxii. Cano C, et al. **J Bacteriol** 1988 Dec;170(12):5946–8

METABOLISM

Actin in Mucor rouxii. Sabanero M, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):227–31

Accumulation of acyclic polyols and trehalose as related to growth form and carbohydrate source in the dimorphic fungi Mucor rouxii and Candida albicans. Pfyffer GE, et al. **Mycopathologia** 1989 Jan;105(1):25–33

PHYSIOLOGY

Cultures of separated mating types of Blakeslea trispora make D and E forms of trisporic acids. Sutter RP, et al. **Biochemistry** 1989 May 2;28(9):4060–6

MUCORALES

Subliminal light control of dark adaptation kinetics in Phycomyces phototropism. Galland P, et al. **Photochem Photobiol** 1989 Apr;49(4):485–91

Light–controlled adaptation kinetics in Phycomyces: evidence for a novel yellow–light absorbing pigment. Galland P, et al. **Photochem Photobiol** 1989 Apr;49(4):493–9

DRUG EFFECTS

Inhibition of the yeast–mycelial transition and the phorogenesis of Mucorales by diamino butanone. Martinez–Pacheco M, et al. **Arch Microbiol** 1989 ; 151(1):10–4

ENZYMOLOGY

Purification of geranylgeranyl diphosphate synthase from Phycomyces blakesleanus. Brinkhaus FL, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):607–12

Induction of intracellular and extracellular beta–galactosidase activity in Phycomyces blakesleeanus. Montero S, et al. **Biochem Int** 1989 Mar;18(3):637–45

Partial characterization of intracellular protease activity which participates in the inactivation of carbamyl phosphate synthase in Phycomyces blakesleeanus. Alonso MJ, et al. **J Enzym Inhib** 1988;2(2):143–50

Purification and properties of NAD–dependent glutamate dehydrogenase from Phycomyces spores. Van Laere AJ. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1597–601

Some properties of chitinase from Phycomyces blakesleeanus. Cohen RJ. **Life Sci** 1974 Jul 15;15(2):289–300

Penicillin amidohydrolases in fungal autolysis. Alfonso C, et al. **Microbiol Immunol** 1989;33(1):69–74

GENETICS

Altered expression of chitin synthetase activity and biochemical changes in the cell wall in a developmental mutant of Phycomyces. Ruiz–Flores E, et al. **Biochem Genet** 1988 Dec;26(11–12):717–32

System analysis of Phycomyces light–growth response: madC, madG, and madH mutants. Palit A, et al. **Biophys J** 1989 Mar;55(3):519–26

Structural organization of the TRP1 gene of Phycomyces blakesleeanus: implications for evolutionary gene fusion in fungi. Choi HT, et al. **Gene** 1988 Nov 15;71(1):85–95

IMMUNOLOGY

Indirect enzyme–linked immunosorbent assay for zygomycosis. Kaufman L, et al. **J Clin Microbiol** 1989 Sep; 27(9):1979–82

ISOLATION & PURIFICATION

Meningitis caused by Absidia corymbifera. Mackenzie DW, et al. **J Infect** 1988 Nov;17(3):241–8

Exoantigen tests for the rapid and specific identification of Apophysomyces elegans and Saksenaea vasiformis. Lombardi G, et al. **J Med Vet Mycol** 1989;27(2):113–20

Isolation of Pilobolus spp. from the northern elk herd in Yellowstone National Park. Foos KM. **J Wildl Dis** 1989 Apr;25(2):302–4

METABOLISM

Microbial models of mammalian metabolism: conversion of warfarin to 4'–hydroxywarfarin using Cunninghamella bainieri. Rizzo JD, et al. **J Pharm Sci** 1989 Mar;78(3):183–9

Microbial transformation of steroids—II. Transformations of progesterone, testosterone and androstenedione by Phycomyces blakesleeanus. Smith KE, et al. **J Steroid Biochem** 1989 Mar;32(3):445–51

Production of patulin by Micromycetes. Steiman R, et al. **Mycopathologia** 1989 Mar;105(3):129–33

Effect of sparteine and quinidine on the metabolism of methoxyphenamine by Cunninghamella bainieri. Foster BC, et al. **Xenobiotica** 1989 Apr;19(4):445–52

Biotransformation of aryl alkylamines by Cunninghamella bainieri. Foster BC, et al. **Xenobiotica** 1989 May;19(5):531–8
Propranolol metabolism by Cunninghamella bainieri. Foster BC, et al. **Xenobiotica** 1989 May;19(5):539–46

PHYSIOLOGY

System analysis of Phycomyces light-growth response in single and double night-blind mutants. Palit A, et al. **Biol Cybern** 1989;60(5):385–93
12-O-tetradecanoyl phorbol-13-acetate interferes with germination of Phycomyces blakesleeanus sporangiospores. Carrillo-Rayas T, et al. **FEBS Lett** 1988 Oct 10; 238(2):441–4
Storage temperature and viability of sporangiospores of potentially human pathogenic species of Rhizomucor from Nigerian tobacco. Ogundero VW, et al. **J Basic Microbiol** 1989;29(3):171–5
Simple method of inducing sporulation by Apophysomyces elegans and Saksenaea vasiformis. Padhye AA, et al. **J Clin Microbiol** 1988 Sep;26(9):1861–3

RADIATION EFFECTS

[Effect of light on lipid formation and sporulation in the mucoraceous fungus Cunninghamella japonica] Polotebnova MV, et al. **Mikrobiologiia** 1988 May–Jun; 57(3):379–84 **(Rus)**

MUCORMYCOSIS

Cerebral mucormycosis: a case report. Narang AK, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):259–62
Zygomycosis. Rinaldi MG. **Infect Dis Clin North Am** 1989 Mar;3(1):19–41 (131 ref.)
Mucormycosis of the head and neck. Duplechain JK, et al. **J La State Med Soc** 1989 Mar;141(3):9–13 (11 ref.)
Postoperative zygomycetes endophthalmitis. Orgel IK, et al. **Ophthalmic Surg** 1989 Aug;20(8):584–7
[Mucormycosis in paranasal sinuses] Ishida M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan;92(1):21–7 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Orbital mucormycosis with retinal and ciliary artery occlusions. Luo QL, et al. **Br J Ophthalmol** 1989 Aug; 73(8):680–3
Acute Pancoast's syndrome caused by fungal infection. Shamji FM, et al. **Can J Surg** 1988 Nov;31(6):441–3 (3 ref.)
Chronic sinusitis caused by zygomycosis and aspergillosis [letter] Severo LC, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):317–8
Orbital cellulitis due to mucormycosis. A case report. Kotzamanoglou K, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):539–41
Acute proptosis and blindness in a patient with orbital phycomycosis. Humphry RC, et al. **J R Soc Med** 1989 May;82(5):304–5
Cauda equina syndrome secondary to disseminated zygomycosis. Rozich J, et al. **JAMA** 1988 Dec 23–30; 260(24):3638–40
Zygomycosis (absidiomycosis) in an AIDS patient. Absidiomycosis in AIDS. Smith AG, et al. **Mycopathologia** 1989 Jan;105(1):7–10
Rhinocerebral mucormycosis with extension to the posterior fossa: case report. Soloniuk DS, et al. **Neurosurgery** 1988 Nov;23(5):641–3
[Pseudotumor exophthalmos caused by mucorales granuloma] Awad-Michel A, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):691–4, 696 (29 ref.) (Eng. Abstr.) **(Fre)**
[A case of disseminated mucormycosis] Teggi A, et al. **Recenti Prog Med** 1989 Jun;80(6):308–13 (20 ref.) (Eng. Abstr.) **(Ita)**
[Palatine mucormycosis and thrombosis of the cavernous sinus] Ermocilla R, et al. **Rev Med Panama** 1988 May; 13(2):107–10 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Pulmonary zygomycosis. A cause of positive lung scan diagnosed by bronchoalveolar lavage. Rozich J, et al. **Chest** 1989 Jan;95(1):238–40
Mucormycosis of the paranasal sinuses. Finn DG. **Ear Nose Throat J** 1988 Nov;67(11):813, 816–8, 821–2 (11 ref.)
Indirect enzyme-linked immunosorbent assay for zygomycosis. Kaufman L, et al. **J Clin Microbiol** 1989 Sep; 27(9):1979–82
MR findings in rhinocerebral mucormycosis. Yousem DM, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):878–82
Fatal rhinocerebral mucormycosis and diabetic ketoacidosis. Gans RO, et al. **Neth J Med** 1989 Feb;34(1–2):29–34

DRUG THERAPY

Phycomycotic abscesses in a preterm infant. Ng PC, et al. **Arch Dis Child** 1989 Jun;64(6):862–4
Treatment of experimental zygomycosis in guinea pigs with azoles and with amphotericin B. Van Cutsem J, et al. **Chemotherapy** 1989;35(4):267–72
Fluconazole therapy for pulmonary mucormycosis complicating acute leukemia. Funada H, et al. **Jpn J Med** 1989 Mar–Apr;28(2):228–31

ETIOLOGY

Peritoneal mucormycosis in a patient receiving continuous ambulatory peritoneal dialysis. Polo JR, et al. **Am J Kidney Dis** 1989 Mar;13(3):237–9
Cutaneous Rhizopus and Aspergillus infections in five patients with cancer. Khardori N, et al. **Arch Dermatol** 1989 Jul;125(7):952–6 (31 ref.)
Bronchocentric mycosis occurring in transplant recipients. Tazelaar HD, et al. **Chest** 1989 Jul;96(1):92–5
Post-traumatic cutaneous mucormycosis in diabetes mellitus. Short-term antifungal therapy. Ryan-Poirier K, et al. **Clin Pediatr (Phila)** 1988 Dec;27(12):609–12
Cunninghamella bertholletiae and Pneumocystis carinii pneumonia as a fatal complication of chronic lymphocytic leukemia. Reed AE, et al. **Hum Pathol** 1988 Dec; 19(12):1470–2
Noncandidal, fungal infections of the burn wound. Burdge JJ, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):599–601
Deferoxamine treatment as a risk factor for zygomycete infection [letter] Sane A, et al. **J Infect Dis** 1989 Jan; 159(1):151–2
Pulmonary complications in diabetes mellitus. Hansen LA, et al. **Mayo Clin Proc** 1989 Jul;64(7):791–9 (57 ref.)
Rhizopus oligosporus as a cause of mucormycosis in man. Tintelnot K, et al. **Mycoses** 1989 Mar;32(3):115–8
Mucormycosis among patients on dialysis [letter] Boelaert JR, et al. **N Engl J Med** 1989 Jul 20;321(3):190–1
Cutaneoarticular mucormycosis due to Cunninghamella bertholletiae in a patient with AIDS. Mostaza JM, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):316–8
Cunninghamella bertholletiae infection associated with deferoxamine therapy. Rex JH, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1187–94 (36 ref.)
[A case report of rhinocerebral mucormycosis in hemodialysis patient receiving deferoxamine] Arizono K, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):99–103 (Eng. Abstr.) **(Jpn)**
[Mucormycosis in a hemodialysis patient with iron overload] Arimura Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec; 77(12):1884–7 (15 ref.) **(Jpn)**
[Pulmonary mucormycosis caused by Absidia coerulea in a patient with lung cancer] Halweg H, et al. **Pneumonol Pol** 1988 Jul;56(7):329–35 (Eng. Abstr.) **(Pol)**
[Mucormycosis of nasal sinuses in a patient after kidney transplantation] Koziołowa H, et al. **Pol Arch Med Wewn** 1985 May;73(5):321–8 (Eng. Abstr.) **(Pol)**
[Prosthetic fungal endocarditis] Zorin AB, et al. **Vestn Khir** 1988 Jul;141(7):70–1 **(Rus)**
[Intestinal mucormycosis in acute leukemia] López A, et al. **Med Clin (Barc)** 1988 Nov 26;91(18):704–6 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Cryptococcal antigen survey among racing pigeon workers and patients with cryptococcosis, pythiosis, histoplasmosis and penicilliosis. Tanphaichitra D, et al. **Int J Clin Pharmacol Res** 1988;8(6):433–9

MICROBIOLOGY

Rhizopus arrhizus in Italy as the causative agent of primary cerebral zygomycosis in a drug addict. Oliveri S, et al. **Eur J Epidemiol** 1988 Sep;4(3):284–8
Meningitis caused by Absidia corymbifera. Mackenzie DW, et al. **J Infect** 1988 Nov;17(3):241–8
Experimental zygomycosis due to Rhizopus spp. infection by various routes in guinea-pigs, rats and mice. Van Cutsem J, et al. **Mycoses** 1988 Nov;31(11):563–78
[Disseminated mucormycosis in a premature infant] Dunker H, et al. **Mycoses** 1988 Aug;31(8):404–10 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Zygomycosis of the basal ganglia in intravenous drug users. Stave GM, et al. **Am J Med** 1989 Jan;86(1):115–7 (19 ref.)
Pulmonary consolidation with an air crescent sign in an immunocompromised woman [clinical conference] Silver SF, et al. **Can Assoc Radiol J** 1989 Jun;40(3):167–9
Cutaneous mucormycosis in a heart transplant patient. Hall JC, et al. **Cutis** 1988 Sep;42(3):183–6
Rhinocerebral mucormycosis: MR manifestations. Press GA, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):744–9
A rapidly fatal palatal ulcer: rhinocerebral mucormycosis. Van der Westhuijzen AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):32–6 (24 ref.)
[Mucormycosis—clinical analysis of 12 cases] Tung SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):477–83 (Eng. Abstr.) **(Chi)**
[Generalized mucormycosis. Apropos of a case caused by Absidia corymbifera] Jimenez C, et al. **Ann Pathol** 1988; 8(3):234–8 (Eng. Abstr.) **(Fre)**
[A 64-year-old female patient with icterus and posterior development of a picture of right ocular disease (clinical conference)] Fernández-Guerrero M, et al. **Rev Clin Esp** 1989 May;184(9):485–92 **(Spa)**

SURGERY

Survival of a recipient of renal transplantation after pulmonary phycomycosis. Hsu J, et al. **Ann Thorac Surg** 1989 Apr;47(4):617–9
Rhinocerebral mucormycosis: results of aggressive surgical debridement and amphotericin B. Ochi JW, et al. **Laryngoscope** 1988 Dec;98(12):1339–42
[A case of pulmonary mucormycosis accompanied by lymphocytic leukemia successfully treated by pulmonary lobectomy] Kondoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):734–7 (14 ref.) (Eng. Abstr.) **(Jpn)**

THERAPY

Survival after isolated cerebral mucormycosis. Cook BA, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):330–3

VETERINARY

Fungal meningoencephalitis in a laboratory rat. Moody KD, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1152–3
Isolation of Pilobolus spp. from the northern elk herd in Yellowstone National Park. Foos KM. **J Wildl Dis** 1989 Apr;25(2):302–4

MUCOUS MEMBRANE

Natural history and treatment of mucosal melanoma. McKinnon JG, et al. **J Surg Oncol** 1989 Aug;41(4):222–5

CYTOLOGY

Structural and ultrastructural patterns of the human preovulatory endometrium following clomiphene citrate treatment. Fedele L, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):631–7
The globule leucocyte: morphology, origin, function and fate, a review. Akpavie SO, et al. **Anat Histol Embryol** 1989 Mar;18(1):87–95 (43 ref.)

DRUG EFFECTS

Leucovorin calcium enhancement of mucositis after continuous infusion fluorouracil and short infusion cisplatin. Figoli F, et al. **J Clin Oncol** 1989 May;7(5):680–1

IMMUNOLOGY

The poly-Ig receptor—functional aspects of secretory component expression. Brandtzaeg P, et al. **Adv Exp Med Biol** 1988;237:9–20 (71 ref.)
The IgA mucosal immune system. Lamm ME. **Am J Kidney Dis** 1988 Nov;12(5):384–7 (23 ref.)
Host defence mechanisms in the bladder. II. Disruption of the layer of mucus. Cornish J, et al. **Br J Exp Pathol** 1988 Dec;69(6):759–70
Overview of the mucosal immune system. Brandtzaeg P. **Curr Top Microbiol Immunol** 1989;146:13–25 (48 ref.)
Induction of the mucosal immune response. Dahlgren U, et al. **Curr Top Microbiol Immunol** 1989;146:155–60 (28 ref.)
Mucosal homeostasis: role of interleukins, isotype-specific factors and contrasuppression in the IgA response. Beagley KW, et al. **Immunol Invest** 1989 Jan–May;18(1–4):77–89 (32 ref.)
Neuroendocrine regulation of mucosal immunity. Bienenstock J, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):69–76 (22 ref.)
Regulation of the mucosal IGA response—an overview. Tomasi TB. **Immunol Invest** 1989 Jan–May;18(1–4):1–15 (28 ref.)
Difference between bacterial and food antigens in mucosal immunogenicity. Wold AE, et al. **Infect Immun** 1989 Sep; 57(9):2666–73
Induction of the mucosal immune response. Russell MW, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S440–6 (60 ref.)
[The mucosal immune system: the concept of generality and the mechanism of its functioning] Sergeev VA, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):393–402 (66 ref.) **(Rus)**

METABOLISM

Measurement of the effective thickness of the mucosal unstirred layer in Necturus gallbladder epithelium. Cotton CU, et al. **J Gen Physiol** 1989 Apr;93(4):631–47
Epithelial binding of 1,2-dichloroethane in mice. Brittebo EB, et al. **Toxicology** 1989 May 31;56(1):35–45

MICROBIOLOGY

Detection of papillomavirus common antigens in lesions of skin and mucosa. Jenson AB, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):56–63
Normal flora and mucosal immunity of the head and neck. Roscoe DL, et al. **Infect Dis Clin North Am** 1988 Mar; 2(1):1–19 (50 ref.)

PATHOLOGY

Mucous membrane manifestations of pemphigus vulgaris. A 25-year survey of 185 patients treated with corticosteroids or with combination of corticosteroids with methotrexate or heparin. Mashkilleyson N, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):413–21

PHYSIOLOGY

Mucosal inhibition of cholinergic contractions in ferret trachea can be transferred between organ baths. Ullman

A, et al. **Eur Respir J** 1988 Dec;1(10):908–12
Mucosal regeneration of the maxillary sinus after surgery. Benninger MS, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):33–7

MUCOVISCIDOSIS see **CYSTIC FIBROSIS**

MUCUS

Morphology of the subepithelial mucous glands in the adult human larynx. Nielsen KO.
Acta Otolaryngol Suppl (Stockh) 1988;449:109–14
Factors influencing the goblet cell density in paranasal sinuses. Tos M. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:17–21
Reversible acute unilateral diminished pulmonary ventilation and perfusion caused by a mucous plug. Velchik MG, et al. **Am J Physiol Imaging** 1989;4(2):66–9
Dynamic light scattering methods for biorhelogy. Nossal R. **Biorheology** 1987;24(6):577–84 (29 ref.)
Removal of bronchial secretions by two–phase gas–liquid transport. Benjamin RG, et al. **Chest** 1989 Mar;95(3):658–63
Acetylcholine–stimulated chloride flux in tracheal submucosal gland cells. Yang CM, et al. **J Appl Physiol** 1988 Oct;65(4):1891–4
The computed tomography mucous bronchogram sign. Woodring JH. **J Comput Tomogr** 1988 Apr;12(2):165–8
Ventilatory management casebook. Plugged endotracheal tube. Sharp MJ, et al. **J Perinatol** 1987 Spring;7(2):153–5
Benign bile duct stricture associated with intraductal mucous substance: report of a non–jaundiced case. Kasahara Y, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):443–50 (23 ref.)
Natural allergen exposure does not influence the density of goblet cells in the nasal mucosa of patients with seasonal allergic rhinitis. Karlsson G, et al.
ORL J Otorhinolaryngol Relat Spec 1989;51(3):171–4

ANALYSIS

Histochemical demonstration of 7,9–disubstituted sialic acids: strong periodate oxidation of sialic acid mixtures on the biochemical and histochemical level. Veh RW, et al.
Acta Histochem Suppl (Jena) 1989;37:185–6
Purification and characterization of an agglutinin from mucus of the snail Achatina fulica. Mitra D, et al. **Biochimie** 1988 Dec;70(12):1821–9
Evidence for the tight binding of human mucus proteinase inhibitor to highly glycosylated macromolecules in sputum. Van–Seuningen I, et al. **Biol Chem Hoppe Seyler** 1989 Jul; 370(7):749–55
Mucus glycoprotein gels. Role of glycoprotein polymeric structure and carbohydrate side–chains in gel–formation. Sellers LA, et al. **Carbohydr Res** 1988 Jul 15;178:93–110
Isolation and structural characterization of low–molecular–mass monosialyl oligosaccharides derived from respiratory–mucus glycoproteins of a patient suffering from bronchiectasis. Van Halbeek H, et al.
Eur J Biochem 1988 Nov 1;177(2):443–60
Ultrastructure of the mucus–negative vacuolated cells in the metaplastic pyloric gland of the human stomach. Torikata C, et al. **Hum Pathol** 1989 May;20(5):437–40
Electrolyte and other chemical concentrations in tracheal airway surface liquid and mucus. Robinson NP, et al.
J Appl Physiol 1989 May;66(5):2129–35
Carcinoembryonic antigen measurement in gastric juice. Discovery and elimination of an inhibitory interference. Soletormos G. **J Biochem Biophys Methods** 1988 Dec; 17(4):297–301
Two types of rat gastric mucus glycoprotein subunits. Ohara S, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1050–3
Mucus glycoprotein and mucosal protection. Ishihara K, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S24–7
Clinical significance of atrial natriuretic peptide in different diseases of the nose. Yue WL. **J Otolaryngol** 1989 Jun; 18(4):181–3
Tear mucus crystallization in children with cystic fibrosis. Rolando M, et al. **Ophthalmologica** 1988;197(4):202–6
Characterization of airway mucus from a fatal case of status asthmaticus. Bhaskar KR, et al. **Pediatr Pulmonol** 1988; 5(3):176–82
Gastric mucus gel layer thickness measured by direct light microscopy. An experimental study in the rat. Sandzén B, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1160–4
[Analysis of gastric mucosal hexosamines for the determination of gastric mucus content] Ishihara K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):111 **(Jpn)**

DRUG EFFECTS

The dissolution of urinary mucus after cystoplasty. Gillon G, et al. **Br J Urol** 1989 Apr;63(4):372–4
Effects of inhaled acids on airway mucus and its consequences for health. Holma B.
Environ Health Perspect 1989 Feb;79:109–13 (55 ref.)
Cimetidine, carbenoxolone and gastric mucus [letter] Guslandi M. **Gut** 1988 Sep;29(9):1293–4
VIP augments cholinergic–induced glycoconjugate secretion in tracheal submucosal glands. Shimura S, et al.
J Appl Physiol 1988 Dec;65(6):2537–44

ENZYMOLOGY

Enzymatic sulphation of mucus glycoprotein in rat sublingual salivary gland. Slomiany A, et al. **Arch Oral Biol** 1988; 33(9):669–76
Mucus proteinase inhibitor: a fast–acting inhibitor of leucocyte elastase. Boudier C, et al.
Biochim Biophys Acta 1989 Mar 16;995(1):36–41

IMMUNOLOGY

IgD in nasopharyngeal secretions and tonsils from otitis–prone children. Sørensen CH, et al.
Clin Exp Immunol 1988 Jul;73(1):149–54
[Antibacterial activity of cervical mucus in pregnant or non–pregnant women] Chimura T, et al. **Jpn J Antibiot** 1989 Apr;42(4):948–52 (Eng. Abstr.) **(Jpn)**
[Ability of cell–mediated immune production in systemic immunization of guinea pigs with mucous polysaccharides of human colonic goblet cells (PS antigen)] Kitamura K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1501–7 (Eng. Abstr.) **(Jpn)**
[Measles antibodies in exocrine secretions] Redechkina ZP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct; (10):67–70 (Eng. Abstr.) **(Rus)**
[Immunologic study of mucus in patients with allergic rhinopathy and bronchial asthma] Basterra J, et al.
An Otorrinolaringol Ibero Am 1988;15(5):557–60 (Eng. Abstr.) **(Spa)**
[Immunologic study of the nasal mucus and secretion in chronic otitis media with closed tympanum] Basterra J, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):615–9 (Eng. Abstr.) **(Spa)**
[Comparison between immunofluorescence and immunoenzymatic assay for the rapid diagnosis of the respiratory syncytial virus in nasopharyngeal secretions] Chiparelli H, et al. **Rev Argent Microbiol** 1988 Oct–Dec; 20(4):201–4 (Eng. Abstr.) **(Spa)**

METABOLISM

Effect of water vapor–saturated air therapy on bronchoalveolar lavage and tracheal mucus transport rate in clinically normal horses. Sweeney CR, et al.
Am J Vet Res 1989 Feb;50(2):276–9
Diffusion of charged ions in mucus gel: effect of net charge. Lee SP, et al. **Biorheology** 1987;24(6):565–9
Role of intestinal mucus in crystal biogenesis: an electron–microscopical, diffraction and X–ray microanalytical study. Humbert W, et al.
Cell Tissue Res 1989 Mar;255(3):575–83
Sialic acid: ambiguous marker of pepsin–degraded mucus [letter] Guslandi M. **Dig Dis Sci** 1989 Sep;34(9):1477–8
Enzymatic sulfation of mucus glycoprotein in rat submandibular salivary gland. Slomiany BL, et al.
Int J Biochem 1989;21(2):165–71
Stimulation of mucus production and prevention of aspirin induced ulcerogenesis by enprostil in the rat. Waterbury LD, et al. **Proc West Pharmacol Soc** 1988;31:21–3
Binding and diffusion characteristics of 14C EDTA and 99mTc DTPA in respiratory tract mucus glycoprotein from patients with chronic bronchitis. Cheema MS, et al.
Thorax 1988 Sep;43(9):669–73

PARASITOLOGY

Movement of Entamoeba histolytica trophozoites in rat cecum and colon intact mucus blankets and harvested mucus gels. Leitch GJ, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):282–7

PHYSIOLOGY

Sucralfate interactions with gastric mucus. Tasman–Jones C, et al. **Am J Med** 1989 Jun 9;86(6A):5–9
Role of mucus and cilia in nasal mucociliary clearance in healthy subjects. Lioté H, et al. **Am Rev Respir Dis** 1989 Jul;140(1):132–6
The effect of inhaled histamine on human tracheal mucus velocity and bronchial mucociliary clearance. Mussatto DJ, et al. **Am Rev Respir Dis** 1988 Oct;138(4):775–9
Rheologic studies on middle ear effusions and their mucus glycoproteins. FitzGerald JE, et al.
Arch Otolaryngol Head Neck Surg 1989 Apr;115(4):462–8
Effect of vagal stimulation on gastric mucosal barrier in albino rats. Somasundaram K, et al. **Arq Gastroenterol** 1987 Apr–Jun;24(2):75–9
The role of mucus viscoelasticity in cough clearance. King M. **Biorheology** 1987;24(6):589–97
Mechanical characterization and properties of gastrointestinal mucus gel. Sellers LA, et al. **Biorheology** 1987;24(6):615–23
An assessment of the mucous component in carcinoma of the colon and rectum. Sadahiro S, et al. **Cancer** 1989 Sep 1;64(5):113–6
Factors regulating mammalian sperm migration through the female reproductive tract and oocyte vestments. Katz DF, et al. **Gamete Res** 1989 Apr;22(4):443–69 (150 ref.)
Mucus transport by high–frequency nonsymmetrical oscillatory airflow. Chang HK, et al. **J Appl Physiol** 1988 Sep;65(3):1203–9
Airway responsiveness to inhaled and intravenous carbachol in sheep: effect of airway mucus. Kim CS, et al.
J Appl Physiol 1988 Dec;65(6):2744–51
The mucus barrier. Its role in gastroduodenal mucosal protection. Allen A, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S93–8 (53 ref.)
Gastric mucosal blood flow and mucosal protection. Holm L. **J Clin Gastroenterol** 1988;10 Suppl 1:S114–9
The effect of low mucosal pH on sodium and chloride movement across the isolated rumen mucosa of sheep. Gaebel G, et al. **Q J Exp Physiol** 1989 Jan;74(1):35–44
Gastroduodenal mucus and bicarbonate: the defensive zone. Crampton JR. **Q J Med** 1988 Apr;67(252):269–72 (35 ref.)
Pepsins and the mucus barrier in peptic ulcer disease. Allen A, et al. **Scand J Gastroenterol Suppl** 1988;146:50–7 (49 ref.)
[Methodology of studying the rheological properties of the gastric mucus and its diagnostic informativeness] Fisher AA, et al. **Lab Delo** 1989;(5):29–32 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Mucolytic agents and otitis media with effusion. Fitzgerald JE, et al. **Biomed Pharmacother** 1988;42(8):505–11 (26 ref.)
Identification of subpopulations of bronchitic patients for suitable therapy by a dynamic rheological test. Braga PC, et al. **Int J Clin Pharmacol Res** 1989;9(3):175–82

SECRETION

Bronchial impaction in lobar collapse: CT demonstration and pathologic correlation. Glazer HS, et al.
AJR Am J Roentgenol 1989 Sep;153(3):485–8
Asphyxiation by glottic impaction of nasal secretions. Leadbeatter S, et al. **Am J Forensic Med Pathol** 1989 Sep; 10(3):235–8
Vaginal mucus? [letter] Fribourg S. **Am J Obstet Gynecol** 1989 Apr;160(4):1023
Functional VIP receptors in the human mucus–secreting colonic epithelial cell line CL.16E. Laburthe M, et al.
Am J Physiol 1989 Mar;256(3 Pt 1):G443–50
Morphometric analysis of intraluminal mucus in airways in chronic obstructive pulmonary disease. Aikawa T, et al.
Am Rev Respir Dis 1989 Aug;140(2):477–82
Mucus–producing adenopapillary carcinoma of minor salivary gland origin with signet ring cells and intracytoplasmic lumina. A light and electron microscopic study. de Araújo VC, et al. **Arch Otorhinolaryngol** 1988; 245(3):145–50
Evidence for the in vivo degradation of human respiratory mucins during Pseudomonas aeruginosa infection. Houdret N, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):96–105
Cholinergic responsiveness of goblet cells during intestinal maturation. Phillips TE, et al. **Biol Neonate** 1989; 55(4–5):197–203
Sixth International Congress of Biorheology. Symposium on Cellular and Molecular Basis of Mucus Rheology. Vancouver, B.C. **Biorheology** 1987;24(6):537–642
Processes in formation of mucus by the body wall of Ariolimax columbianus. Deyrup–Olsen I, et al.
Biorheology 1987;24(6):571–6
Secretion and ion transport in airways during inflammation. Nadel JA, et al. **Biorheology** 1987;24(6):541–9 (33 ref.)
Rheological properties controlling mucociliary frequency and respiratory mucus transport. Puchelle E, et al.
Biorheology 1987;24(6):557–63
The role of the periciliary fluid in mucociliary flows: flow velocity profiles in frog palate mucus. Winet H.
Biorheology 1987;24(6):635–42
The effects of peptide histidine isoleucine and neuropeptide Y on mucus volume output from the ferret trachea. Webber SE. **Br J Pharmacol** 1988 Sep;95(1):49–54
Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. **Cephalalgia** 1989 Jun;9(2):147–56
Effect of erdosteine and its metabolites on tracheobronchial mucus production and transport. Scuri R, et al.
Drugs Exp Clin Res 1988;14(11):693–8
Airway mucus. Widdicombe JG. **Eur Respir J** 1989 Feb; 2(2):107–15
Mucus hypersecretion and viscoelasticity changes in cigarette–smoking dogs. King M, et al. **Exp Lung Res** 1989 May;15(3):375–89
Histochemical changes in cervical mucus–secreting epithelium during the normal menstrual cycle. Gilks CB, et al. **Fertil Steril** 1989 Feb;51(2):286–91
Airway secretion: a cell–specific analysis. Basbaum CB, et al. **Horm Metab Res** 1988 Nov;20(11):661–7 (51 ref.)
Conjunctival mucus ferning in hypovitaminosis A. Edward DP, et al. **Indian J Ophthalmol** 1988 Jan–Mar;36(1):27–8
Cholera enterotoxin–induced mucus secretion and increase in the mucus blanket of the rabbit ileum in vivo. Leitch GJ. **Infect Immun** 1988 Nov;56(11):2871–5
Effect of antihistamines on antigen–induced increase of rat tracheal mucous gel layer thickness. Yanni JM, et al.
Int Arch Allergy Appl Immunol 1988;87(4):430–4
Rheological profile of nesosteine: a new mucoactive agent. Braga PC, et al. **Int J Clin Pharmacol Res** 1989;9(1):77–83
Effect of epithelium on mucus secretion from feline tracheal submucosal glands. Sasaki T, et al. **J Appl Physiol** 1989 Feb;66(2):764–70
Cell kinetics and secretion of mucus in the gastrointestinal mucosa, and their diurnal rhythm. Hattori T, et al.
J Clin Gastroenterol 1988;10 Suppl 1:S1–6
The functional significance of the sympathetic innervation of mucous glands in the bronchi of man. Pack RJ, et al.
J Physiol (Lond) 1988 Sep;403:211–9
Stimulation of submucosal glands by nicotine applied locally to the airway mucosa. Hümmer B, et al.
Klin Wochenschr 1988;66 Suppl 11:161–9

Effect of systemic nicotine on mucus secretion from tracheal submucosal glands and on cardiovascular, pulmonary, and hematologic variables. Lang M, et al. **Klin Wochenschr** 1988;66 Suppl 11:170–9

Opioid inhibition of neurally mediated mucus secretion in human bronchi. Rogers DF, et al. **Lancet** 1989 Apr 29; 1(8644):930–2

Lipoxygenase metabolites of arachidonic acid do not induce mucus secretion from rabbit intestinal goblet cells in vitro. Phillips TE, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Jul; 37(1):51–5

Distribution and chemical composition of the toxic skin secretions from trunkfish (family Ostraciidae). Goldberg AS, et al. **Toxicon** 1988;26(7):651–63

[Chronic bronchitis with bronchorrhea] Gans SJ, et al.
Ned Tijdschr Geneeskd 1988 Nov 26;132(48):2195–8 (29 ref.) **(Dut)**

[Clinically relevant mechanisms of mucus gland hypertrophy] Hahn HL. **Prax Klin Pneumol** 1988 Jul;42(7):504–9 (Eng. Abstr.) **(Ger)**

[Airway mucus secretion and neuropeptides] Shimura S.
Kokyu To Junkan 1989 May;37(5):505–10 **(Jpn)**

[Mucus formation in epithelial derivations of Müller's canal as exemplified by mucinous cancer of the endometrium] Karseladze AI. **Arkh Patol** 1988;50(10):33–7 (Eng. Abstr.) **(Rus)**

[Morphological assessment of the activity of mucus-producing structures of the rat duodenum after administration of varying-dispersion wheat germ rations] Iatskovskii AN, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):104–6 (Eng. Abstr.) **(Rus)**

[New aspects of studying the morphofunctional insufficiency of bronchial epithelium in chronic bronchitis] Gomoliako IV. **Ter Arkh** 1989;61(2):84–8 (Eng. Abstr.) **(Rus)**

MUD BATHS see **MUD THERAPY**

MUD THERAPY

[Study of bacterial contamination of peloid in the process of its use and in its formation site] Zotova VI, et al.
Gig Sanit 1988 Aug;(8):86–7 **(Rus)**

[Experience in the multi-modal therapy of acne, including volcano mud applications and cosmetic procedures] Israfilova FG. **Vestn Dermatol Venerol** 1989;(2):56–7 (Eng. Abstr.) **(Rus)**

[Effect of combined health resort treatment including peloid therapy on disordered immune homeostasis in patients with duodenal peptic ulcer] Bondarchuk GF.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 Jul–Aug;(4):25–8 (Eng. Abstr.) **(Rus)**

[Effect of mud therapy on the links in the pathogenesis of rheumatoid arthritis in children and adolescents] Drinevskii NP, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr;(2):38–42 (Eng. Abstr.) **(Rus)**

[The thrombocytic component of hemostasis in children with rheumatoid arthritis and its changes after mud therapy] Drinevskii NP, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 May–Jun; (3):26–9 (Eng. Abstr.) **(Rus)**

[Many years of experience with a team method of work at a mud therapy clinic of the Saki health resort] Karpovets IP. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):71 **(Rus)**

[Changes in the level of the mediators of inflammation and of the contractile activity of the uterine tubes in infertile patients being treated with a native mud solution] Perfil'eva IF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):36–40 (Eng. Abstr.) **(Rus)**

[Experience with mud treatment of children with mucoviscidosis in a sanatorium] Rachinskii SV, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 May–Jun; (3):58–9 **(Rus)**

[Diluted baths with volcanic mud in the therapy of patients with rheumatoid arthritis] Shakhbazova SSh.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 Sep–Oct;(5):31–3 (Eng. Abstr.) **(Rus)**

[Liver-protective properties of lipids in sludge] Vengerovskii AI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):46–8 **(Rus)**

[The positive effect of mud applications in the treatment of myotonic dystrophy] Strelkova NI, et al.
Zh Nevropatol Psikhiatr 1988;88(11):49–51 (Eng. Abstr.) **(Rus)**

METHODS

[Therapeutic possibilities with moor components] Zimmerman W. **Fortschr Med** 1989 Aug 10;107(23):24–5 **(Ger)**

[Sulfide ooze mud and sodium chloride baths in treating osteoarthrosis patients] Novikova NV.
Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar–Apr; (2):35–7 (Eng. Abstr.) **(Rus)**

[Combined treatment using brine in acute inflammatory diseases of the internal female genitalia] Radionchenko AA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):47–51 (Eng. Abstr.) **(Rus)**

STANDARDS

[Study of bacterial contamination of peloid in the process of its use and in its formation site] Zotova VI, et al.
Gig Sanit 1988 Aug;(8):86–7 **(Rus)**

[Development of a tablet technology for dried standardized preparations based on brine and the native liquid phase of therapeutic mud] Sibileva LA, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 Jul–Aug;(4):66–8 (Eng. Abstr.) **(Rus)**

MUDMINNOWS see **SALMONIDAE**

MUDPUPPY see **NECTURUS**

MULLERIAN DUCTS

Pregnancies in septate uteri: outcome in relation to site of uterine implantation as determined by sonography. Fedele L, et al. **AJR** 1989 Apr;152(4):781–4

A monoclonal antibody against human testicular anti-müllerian hormone. Legeai L, et al.
Am J Reprod Immunol Microbiol 1988 Oct;18(2):39–43

Müllerian duct cyst—a case report. Yu TJ, et al.
Chang Keng I Hsueh 1988 Jun;11(2):134–8

Classification of müllerian anomalies [letter] Daya S.
Fertil Steril 1989 Mar;51(3):551–2

The persistent Müllerian duct syndrome: a molecular approach. Guerrier D, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):46–52

Chronic hemospermia due to müllerian duct cyst: diagnosis by magnetic resonance imaging. Neustein P, et al.
J Urol 1989 Sep;142(3):828

[Reduction of germ cell number induced in vitro by the testis in fetal rat ovary may be caused by factors other than anti-Müllerian hormone] Charpentier G, et al.
C R Acad Sci [III] 1989;309(1):35–42 (Eng. Abstr.) **(Fre)**

[Cyst of the prostatic utricle or remnant of the Mullerian duct?] López López C, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):210–2 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Congenital absence of vagina and uterus. Kvint S, et al.
Acta Obstet Gynecol Scand 1988;67(4):367–8

Estimated prevalence of müllerian anomalies. Stampe Sørensen S. **Acta Obstet Gynecol Scand** 1988;67(5):441–5

ANATOMY & HISTOLOGY

Origin of müllerian duct and its later developmental changes in relation to wolffian duct in bovine fetuses. Inomata T, et al. **Zentralbl Veterinarmed [A]** 1989 Mar;36(3):166–74

PATHOLOGY

Müllerian adenosarcomas of the uterus with sex cord–like elements. A clinicopathologic analysis of eight cases. Clement PB, et al. **Am J Clin Pathol** 1989 Jun;91(6):664–72

Bilateral renal agenesis and Mullerian anomalies in a 47,XXX fetus. Hogge WA, et al. **Am J Med Genet** 1989 Jun; 33(2):242–3

Minor müllerian anomalies and oligomenorrhea in infertile women. A syndrome. Gynecologic and obstetric implications. Stampe Sørensen S. **Dan Med Bull** 1989 Jun; 36(3):248–63 (155 ref.)

PHYSIOLOGY

Cellular localization of müllerian inhibiting substance in the developing rat ovary. Ueno S, et al. **Endocrinology** 1989 Feb;124(2):1000–6

Congenital anomalies of the müllerian system. Golan A, et al. **Fertil Steril** 1989 May;51(5):747–55 (56 ref.)

Mullerian inhibiting substance in the ovary. Donahoe PK, et al. **Prog Clin Biol Res** 1988;267:153–75 (62 ref.)

Anti-müllerian hormone in sheep follicles. Bézard J, et al.
Reprod Nutr Dev 1988;28(4B):1105–12

Anti-müllerian hormone and freemartinism: inhibition of germ cell development and induction of seminiferous cord–like structures in rat fetal ovaries exposed in vitro to purified bovine AMH [published erratum appears in Reprod Nutr Dev 1988;28 Suppl 1:199] Vigier B, et al.
Reprod Nutr Dev 1988;28(4B):1113–28

[Regression of mullerian ducts in the female chick embryo treated by norethindrone and gonadotropins] Stoll R, et al. **C R Soc Biol (Paris)** 1988;182(6):579–83 (Eng. Abstr.) **(Fre)**

SECRETION

[Mucus formation in epithelial derivations of Müller's canal as exemplified by mucinous cancer of the endometrium] Karseladze AI. **Arkh Patol** 1988;50(10):33–7 (Eng. Abstr.) **(Rus)**

SURGERY

Pregnancy outcome after metroplasty in women with müllerian anomalies. Helm P, et al.
Acta Obstet Gynecol Scand 1988;67(3):215–8

MULLETS see **PERCIFORMES**

MULTICENTER STUDIES

Cooperative clinical research in otology. Bailey BJ.
Am J Otol 1989 May;10(3):248–51

Multicenter clinical trials: an optimistic view of their worth [editorial] Conti CR. **Clin Cardiol** 1989 May;12(5):239

Multicenter cooperative studies in pediatric nephrology. Brodehl J. **Contrib Nephrol** 1988;67:206–18

Termination of early human pregnancy with RU 486 (mifepristone) and the prostaglandin analogue sulprostone: a multi-centre, randomized comparison between two treatment regimens. Bahzad C, et al. **Hum Reprod** 1989 Aug;4(6):718–25

Conflict-of-interest guidelines for a multicenter clinical trial of treatment after coronary-artery bypass-graft surgery. Healy B, et al. **N Engl J Med** 1989 Apr 6;320(14):949–51

Reports from W.H.O. Collaborating Centres. Multicentre psychopharmacological trials some guidelines on methodological and ethical issues. Maj M.
Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(1–2):ix–xiii

[Treatment of infection in granulopenic patients. Lessons from international studies] Beytout J, et al. **Presse Med** 1988 Oct 26;17(37):1950–3 (30 ref.) (Eng. Abstr.) **(Fre)**

[Clinical research: multicenter studies (editorial)] Rozlosnik JA. **Medicina (B Aires)** 1988;48(1):104–6 **(Spa)**

[Multicenter clinical trial on the prevention of sudden death after myocardial infarction by the use of anti-arrhythmia agents. Investigator Group of the Spanish Study on Sudden Death] **Rev Esp Cardiol** 1989 Feb;42(2):77–83 (Eng. Abstr.) **(Spa)**

TRENDS

Multicenter investigator-initiated trials [letter] Lenfant C, et al. **Controlled Clin Trials** 1989 Jun;10(2):228–30

MULTIENZYME COMPLEXES

Acyl-CoA dehydrogenases, electron transfer flavoprotein and electron transfer flavoprotein dehydrogenase. Frerman FE. **Biochem Soc Trans** 1988 Jun;16(3):416–8 (43 ref.)

Structural organization of the multienzyme complex of mammalian aminoacyl-tRNA synthetases. Godar DE, et al. **Biochemistry** 1988 Sep 6;27(18):6921–8

Allosteric transition of aspartokinase I-homoserine dehydrogenase I studied by time-resolved fluorescence. Jullien M, et al. **Biochimie** 1988 Dec;70(12):1807–14

Supramolecular organization of tricarboxylic acid cycle enzymes. Lyubarev AE, et al. **Biosystems** 1989;22(2):91–102

Electron microscopy and image analysis of the multicatalytic proteinase. Baumeister W, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):239–45

5' end labeling of RNA with capping and methylating enzymes. Moss B. **Gene Amplif Anal** 1981;2:253–66 (74 ref.)

Novel O-linked carbohydrate chains in the cellulase complex (cellulosome) of Clostridium thermocellum.
3-O-Methyl-N-acetylglucosamine as a constituent of a glycoprotein. Gerwig GJ, et al. **J Biol Chem** 1989 Jan 15; 264(2):1027–35

[Control of molecular transformations in polyenzyme systems: quantitative theory of the regulation of metabolism] Kholodenko BN. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1238–56 (Eng. Abstr.) **(Rus)**

ANALYSIS

The H+ -ATP synthase of mitochondria in tissue regeneration and neoplasia. Papa S, et al.
Ann N Y Acad Sci 1988;551:168–77; discussion 177–8

Complete primary structure of human and rabbit lactase-phlorizin hydrolase: implications for biosynthesis, membrane anchoring and evolution of the enzyme. Mantei N, et al. **EMBO J** 1988 Sep;7(9):2705–13

The Drosophila proteasome undergoes changes in its subunit pattern during development. Haass C, et al.
Exp Cell Res 1989 Jan;180(1):243–52

Intracellular location of the multidomain protein CAD in mammalian cells. Chaparian MG, et al. **FASEB J** 1988 Nov; 2(14):2982–9

Sucrase-isomaltase expression and enterocytic ultrastructure of human colorectal tumors. Czernichow B, et al.
Int J Cancer 1989 Aug 15;44(2):238–44

Identification and characterization of three different subpopulations of the Drosophila multicatalytic proteinase (proteasome). Falkenburg PE, et al. **J Biol Chem** 1989 Apr 25;264(12):6660–6

Assays for E1 and E2 components of the branched-chain keto acid dehydrogenase complex. Chuang DT.
Methods Enzymol 1988;166:146–54

Determination of activity and activity state of branched-chain alpha-keto acid dehydrogenase in rat tissues. Goodwin GW, et al. **Methods Enzymol** 1988; 166:189–201

Assay of total complex and activity state of branched-chain alpha-keto acid dehydrogenase complex and of activator protein in mitochondria, cells, and tissues. Patston PA, et al. **Methods Enzymol** 1988;166:175–89

Size determination of multienzyme complexes using two-dimensional agarose gel electrophoresis. Easom RA, et al. **Proteins** 1989;5(3):224–32

ANTAGONISTS & INHIBITORS

Dual action of 2-decynoyl coenzyme A: inhibitor of hepatic mitochondrial trans-2-enoyl coenzyme A reductase and peroxisomal bifunctional protein and substrate for the mitochondrial beta-oxidation system. Nagi MN, et al.

Arch Biochem Biophys 1988 Nov 15;267(1):1–12

Lytic response of Escherichia coli cells to inhibitors of penicillin–binding proteins 1a and 1b as a timed event related to cell division. García del Portillo F, et al. **J Bacteriol** 1989 Aug;171(8):4217–21

Antimitochondrial antibodies of primary biliary cirrhosis recognize dihydrolipoamide acyltransferase and inhibit enzyme function of the branched chain alpha–ketoacid dehydrogenase complex. Fregeau DR, et al. **J Immunol** 1989 Jun 1;142(11):3815–20

Inhibition of human adrenal steroidogenic enzymes in vitro by imidazole drugs including ketoconazole. Ayub M, et al. **J Steroid Biochem** 1989 Apr;32(4):515–24

BIOSYNTHESIS

Differential effects of thyroxine and cortisone on jejunal sucrase expression in suckling rats. Yeh KY, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G604–12

Anti–mitochondrial autoantibodies of primary biliary cirrhosis as a novel probe in the study of the biosynthetic regulation of the yeast 2–oxo acid dehydrogenase complexes. Sudoyo H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):220–7

[Regulation of the activity and synthesis of enzymes participating in the formation of 6,7–dimethyl–8–ribityllumazine, a riboflavin precursor in yeast] Logvinenko EM, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):28–32 (Eng. Abstr.) **(Rus)**

BLOOD

Ca2+ effect on ATP–independent lysophospholipid transacylases is indissociable from Ca2+ effect on phospholipase A2 activity in rat platelet sonicates. Breton M, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):127–30

Inhibition and complexation of activated protein C by two major inhibitors in plasma. Heeb MJ, et al. **Blood** 1989 Feb; 73(2):446–54

Activation and complexation of protein C and cleavage and decrease of protein S in plasma of patients with intravascular coagulation. Heeb MJ, et al. **Blood** 1989 Feb; 73(2):455–61

Formation of C1s–C1–inhibitor, kallikrein–C1–inhibitor, and plasmin–alpha 2–plasmin–inhibitor complexes during cardiopulmonary bypass. Wachtfogel YT, et al. **Blood** 1989 Feb;73(2):468–71

Assessment of effects of amino acids and branched chain keto acids on leucine oxidation in human lymphocytes. Schäfer G, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):531–6

CHEMICAL SYNTHESIS

A conjugate of trypsin and chymotrypsin. Rajput YS, et al. **Appl Biochem Biotechnol** 1987 Sep–Dec;16:201–10

CLASSIFICATION

Fatty acid synthase, a proficient multifunctional enzyme. Wakil SJ. **Biochemistry** 1989 May 30;28(11):4523–30 (68 ref.)

DEFICIENCY

Glutaric aciduria type II: review of the phenotype and report of an unusual glomerulopathy. Wilson GN, et al. **Am J Med Genet** 1989 Mar;32(3):395–401 (19 ref.)

Multiple defects of the respiratory chain including complex II in a family with myopathy and encephalopathy. Desnuelle C, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):695–700

Intestinal disaccharidases assessed in congenital asucrasia by differential urinary disaccharide excretion. Maxton DG, et al. **Dig Dis Sci** 1989 Jan;34(1):129–31

Peroxisomal bifunctional enzyme deficiency. Watkins PA, et al. **J Clin Invest** 1989 Mar;83(3):771–7

The importance of recognizing secondary carnitine deficiency in organic acidaemias: case report in glutaric acidaemia type II. Mandel H, et al. **J Inherited Metab Dis** 1988;11(4):397–402

Uridine–responsive hypogammaglobulinemia and congenital heart disease in a patient with hereditary orotic aciduria. Alvarado CS, et al. **J Pediatr** 1988 Nov;113(5):867–71

Kearns–Sayre syndrome and complex II deficiency. Rivner MH, et al. **Neurology** 1989 May;39(5):693–6

DIAGNOSTIC USE

Bioluminescent microassay of various metabolites using bacterial luciferase co–immobilized with multienzyme systems. Ugarova NN, et al. **Anal Biochem** 1988 Sep; 173(2):221–7

Simultaneous assay for individual sulphated 3 alpha– and beta–hydroxysteroids in serum using high–performance liquid chromatography combined with 3 alpha– and beta–hydroxysteroid dehydrogenases immobilized on one column. Takagi K, et al. **J Chromatogr** 1988 Nov 18; 432:47–56

GENETICS

Chromosomal localization of the gene for the human trifunctional enzyme, methylenetetrahydrofolate dehydrogenase–methenyltetrahydrofolate cyclohydrolase–formyltetrahydrofolate synthetase. Rozen R, et al. **Am J Hum Genet** 1989 Jun;44(6):781–6

Regional assignment of the gene coding for human sucrase–isomaltase (SI) to chromosome 3q25–26. West LF, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):57–61

Molecular analysis of peroxisomal beta–oxidation enzymes in infants with peroxisomal disorders indicates heterogeneity of the primary defect. Guerroui S, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):242–51

Complete primary structure of the transacylase (E2b) subunit of the human branched chain alpha–keto acid dehydrogenase complex. Nobukuni Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1035–41

DNA sequences of a bovine gene and of two related pseudogenes for the proteolipid subunit of mitochondrial ATP synthase. Dyer MR, et al. **Biochem J** 1989 May 15; 260(1):249–58

The gene for intestinal sucrase–isomaltase as member of a gene family. Freund JN, et al. **Cell Mol Biol** 1989; 35(3):313–24

Assignment of the gene for the E1 alpha subunit of branched chain alpha–ketoacid dehydrogenase to chromosome 19. Crabb DW, et al. **Cytogenet Cell Genet** 1989;50(1):40–1

CAD gene expression in serum–starved and serum–stimulated hamster cells. Rao GN, et al. **DNA** 1988 Jul–Aug; 7(6):423–32

The Escherichia coli lov gene product connects peptidoglycan synthesis, ribosomes and growth rate [published erratum appears in EMBO J 1989 Apr;8(4):1290] Bouloc P, et al. **EMBO J** 1989 Jan;8(1):317–23

Sequence analysis of the lpdV gene for lipoamide dehydrogenase of branched–chain–oxoacid dehydrogenase of Pseudomonas putida. Burns G, et al. **Eur J Biochem** 1989 Jan 15;179(1):61–9

Molecular characterization of a Dictyostelium discoideum gene encoding a multifunctional enzyme of the pyrimidine pathway. Faure M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):345–58

Regulation of CAD gene expression in mouse fibroblasts during the transition from the resting to the growing state. Rao GN, et al. **Exp Cell Res** 1988 Oct;178(2):449–56

The Saccharomyces cerevisiae ARO1 gene. An example of the co–ordinate regulation of five enzymes on a single biosynthetic pathway. Duncan K, et al. **FEBS Lett** 1988 Dec 5;241(1–2):83–8

Cloning, nucleotide sequence and characterization of genes encoding naphthalene dioxygenase of Pseudomonas putida strain NCIB9816. Kurkela S, et al. **Gene** 1988 Dec 20; 73(2):355–62

cDNA cloning and primary structure determination of the peroxisomal trifunctional enzyme hydratase–dehydrogenase–epimerase from the yeast Candida tropicalis pK233. Nuttley WM, et al. **Gene** 1988 Sep 30;69(2):171–80

Organization of the yeast URA2 gene: identification of a defective dihydroorotase–like domain in the multifunctional carbamoylphosphate synthetase–aspartate transcarbamylase complex. Souciet JL, et al. **Gene** 1989 Jun 30;79(1):59–70

Nucleotide and deduced amino acid sequence of the E1 alpha subunit of human liver branched–chain alpha–ketoacid dehydrogenase. Zhang B, et al. **Gene** 1988 Sep 15; 69(1):159–64

Localization of the gene for uridine monophosphate synthase to human chromosome region 3q13 by in situ hybridization. Qumsiyeh MB, et al. **Genomics** 1989 Jul;5(1):160–2

Mapping of the gene encoding the multifunctional protein carrying out the first three steps of pyrimidine biosynthesis to human chromosome 2. Chen KC, et al. **Hum Genet** 1989 Apr;82(1):40–4

Lipid modification of Escherichia coli penicillin–binding protein 3. Hayashi S, et al. **J Bacteriol** 1988 Nov; 170(11):5392–5

Molecular cloning and expression in Escherichia coli of the Bacillus licheniformis bacitracin synthetase 2 gene. Ishihara H, et al. **J Bacteriol** 1989 Mar;171(3):1705–11

Organization of the biosynthesis genes for the peptide antibiotic gramicidin S. Krause M, et al. **J Bacteriol** 1988 Oct;170(10):4669–74

Gene–product relationships of fhlA and fdv genes of Escherichia coli. Sankar P, et al. **J Bacteriol** 1988 Dec; 170(12):5440–5

Identification of the penicillin–binding active site of penicillin–binding protein 2 of Escherichia coli. Takasuga A, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):822–6

Isolation and characterization of cDNA clones encoding the murine NAD–dependent methylenetetrahydrofolate dehydrogenase–methenyltetrahydrofolate cyclohydrolase. Bélanger C, et al. **J Biol Chem** 1989 Mar 25;264(9):4837–43

Post–translational suppression of expression of intestinal brush border enzymes by fructose. Danielsen EM. **J Biol Chem** 1989 Aug 15;264(23):13726–9

Construction and nucleotide sequence of a cDNA encoding the full–length preprotein for human branched chain acyltransferase. Danner DJ, et al. **J Biol Chem** 1989 May 5;264(13):7742–6

Molecular phenotypes in cultured maple syrup urine disease cells. Complete E1 alpha cDNA sequence and mRNA and subunit contents of the human branched chain alpha–keto acid dehydrogenase complex. Fisher CW, et al. **J Biol Chem** 1989 Feb 25;264(6):3448–53

Characterization and conservation of the inner E2 core domain structure of branched–chain alpha–keto acid dehydrogenase complex from bovine liver. Construction of a cDNA encoding the entire transacylase (E2b) precursor. Griffin TA, et al. **J Biol Chem** 1988 Oct 5; 263(28):14008–14

Primary structure of a human trifunctional enzyme. Isolation of a cDNA encoding methylenetetrahydrofolate dehydrogenase–methenyltetrahydrofolate cyclohydrolase–formyltetrahydrofolate synthetase. Hum DW, et al. **J Biol Chem** 1988 Nov 5;263(31):15946–50

Reversion of the maple syrup urine disease phenotype of impaired branched chain alpha–ketoacid dehydrogenase complex activity in fibroblasts from an affected child. Litwer S, et al. **J Biol Chem** 1989 Sep 5;264(25):14597–600

Cloning and nucleotide sequence of the Bacillus subtilis hom gene coding for homoserine dehydrogenase. Structural and evolutionary relationships with Escherichia coli aspartokinases–homoserine dehydrogenases I and II. Parsot C, et al. **J Biol Chem** 1988 Oct 15;263(29):14654–60

Orotic aciduria fibroblasts express a labile form of UMP synthase. Perry ME, et al. **J Biol Chem** 1989 Sep 15; 264(26):15522–8

cDNA sequence and predicted primary structure of the gamma subunit from the ATP synthase from Chlamydomonas reinhardtii. Yu LM, et al. **J Biol Chem** 1988 Dec 25;263(36):19342–5

Evidence for both a regulatory mutation and a structural mutation in a family with maple syrup urine disease. Zhang B, et al. **J Clin Invest** 1989 Apr;83(4):1425–9

Antibodies against branched–chain alpha–keto acid dehydrogenase proteins for use in defining human mutations and gene isolation. Danner DJ, et al. **Methods Enzymol** 1988;166:108–14

Cloning of genes for branched–chain keto acid dehydrogenase in Pseudomonas putida. Sykes PJ, et al. **Methods Enzymol** 1988;166:350–9

Structure, genomic organization and transcription of the bifunctional dihydrofolate reductase–thymidylate synthase gene from Crithidia fasciculata. Hughes DE, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):155–66

Evolution and stability of chromosomal DNA coamplified with the CAD gene. Saito I, et al. **Mol Cell Biol** 1989 Jun; 9(6):2445–52

The aspartate transcarbamylase domain of a mammalian multifunctional protein expressed as an independent enzyme in Escherichia coli. Maley JA, et al. **Mol Gen Genet** 1988 Aug;213(2–3):278–84

Overexpression, solubilization and refolding of a genetically engineered derivative of the penicillin–binding protein 3 of Escherichia coli K12. Belder JB, et al. **Mol Microbiol** 1988 Jul;2(4):519–25

Penicillin–binding protein 2 genes of non–beta–lactamase–producing, penicillin–resistant strains of Neisseria gonorrhoeae. Dowson CG, et al. **Mol Microbiol** 1989 Jan;3(1):35–41

Extensive re–modelling of the transpeptidase domain of penicillin–binding protein 2B of a penicillin–resistant South African isolate of Streptococcus pneumoniae. Dowson CG, et al. **Mol Microbiol** 1989 Jan;3(1):95–102

Induction of CAD gene amplification by restriction endonucleases in V79,B7 Chinese hamster cells. Cavolina P, et al. **Mutat Res** 1989 Jan–Feb;225(1–2):61–4

Nucleotide sequence of the penicillin–binding protein 2 gene of Neisseria meningitidis. Zhang QY, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5383

Comparison of phage T4 denV endonuclease V and M. luteus UV–DNA endonuclease by serology and DNA hybridization. Yarosh DB, et al. **Photochem Photobiol** 1989 Jan;49(1):53–7

Amino acid changes linked to pyrimethamine resistance in the dihydrofolate reductase–thymidylate synthase gene of Plasmodium falciparum. Cowman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9109–13

Evidence that a point mutation in dihydrofolate reductase–thymidylate synthase confers resistance to pyrimethamine in falciparum malaria. Peterson DS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9114–8

Human endomembrane H+ pump strongly resembles the ATP–synthetase of Archaebacteria. Südhof TC, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6067–71

Studies of Plasmodium falciparum dihydrofolate–reductase thymidylate synthase: potential advantages. Inselburg J, et al. **Prog Clin Biol Res** 1989;313:29–43 (26 ref.)

A reversible selection system for UMP synthase gene amplification and deamplification. Suttle DP. **Somat Cell Mol Genet** 1989 Sep;15(5):435–43

Eukaryote membrane genetics: the Fo sector of mitochondrial ATP synthase. Nagley P. **Trends Genet** 1988 Feb;4(2):46–51 (35 ref.)

HISTORY

Tryptophan synthetase of E. coli: a multifunctional, multicomponent enzyme; a commentary on 'A Second Reaction Catalyzed by the Tryptophan Synthetase of Escherichia coli'. Yanofsky C. **Biochim Biophys Acta** 1989; 1000:133–7

IMMUNOLOGY

Common epitopes of bovine lens multicatalytic–proteinase–complex subunits. Wagner BJ, et al. **Biochem J** 1989 Jan 1;257(1):265–9

Immunological detection of penicillin–binding protein 2' in clinical isolates of methicillin–resistant Staphylococcus

aureus and Staphylococcus epidermidis [published erratum appears in FEMS Michrobiol Lett 1989 Jul 15;51(1):246] O'Hara DM, et al. **FEMS Microbiol Lett** 1989 Jan 1; 48(1):97–103

Detection of autoantibodies to recombinant mitochondrial proteins in patients with primary biliary cirrhosis. Van de Water J, et al. **N Engl J Med** 1989 May 25;320(21):1377–80

ISOLATION & PURIFICATION

Partial purification of the acyl–CoA elongase of Allium porrum leaves. Bessoule JJ, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):475–84

Purification, immunoassay, and tissue distribution of rat C1–tetrahydrofolate synthase. Cheek WD, et al. **Arch Biochem Biophys** 1989 May 1;270(2):504–12

Multicatalytic proteinase in fish muscle. Folco EJ, et al. **Arch Biochem Biophys** 1988 Dec;267(2):599–605

Evidence that the enoyl–CoA hydratase bifunctional protein of mouse liver peroxisomes is identical with the 70,000 dalton peroxisomal membrane protein. Crane DI, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):503–8

Neutral maltase/glucoamylase from rabbit renal cortex. Pereira B, et al. **Biochem J** 1989 Jul 1;261(1):43–7

Purification of the rabbit small intestinal sucrase–isomaltase complex: separation from other maltases. Vasseur M. **Biosci Rep** 1989 Jun;9(3):341–6

Methyl–coenzyme–M reductase from Methanobacterium thermoautotrophicum (strain Marburg). Purity, activity and novel inhibitors. Ellermann J, et al. **Eur J Biochem** 1989 Sep 1;184(1):63–8

Alpha 3 beta 3 complex of thermophilic ATP synthase. Catalysis without the gamma–subunit. Kagawa Y, et al. **FEBS Lett** 1989 May 22;249(1):67–9

Isolation of an atypically small lipoamide dehydrogenase involved in the glycine decarboxylase complex from Eubacterium acidaminophilum. Freudenberg W, et al. **J Bacteriol** 1989 Mar;171(3):1346–54

Purification and partial characterization of the glycine decarboxylase multienzyme complex from Eubacterium acidaminophilum. Freudenberg W, et al. **J Bacteriol** 1989 Apr;171(4):2209–15

Purification and characterization of ATP:citrate lyase from Hydrogenobacter thermophilus TK–6. Ishii M, et al. **J Bacteriol** 1989 Apr;171(4):1788–92

A new beta–lactam–binding protein derived from penicillin–binding protein 3 of Escherichia coli. Prats R, et al. **J Bacteriol** 1989 Sep;171(9):5194–8

Component A3 of the methylcoenzyme M methylreductase system of Methanobacterium thermoautotrophicum delta H: resolution into two components. Rouvière PE, et al. **J Bacteriol** 1989 Sep;171(9):4556–62

Methane monooxygenase from Methylosinus trichosporium OB3b. Purification and properties of a three–component system with high specific activity from a type II methanotroph. Fox BG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10023–33

One–step purification from Escherichia coli of complex II (succinate: ubiquinone oxidoreductase) associated with succinate–reducible cytochrome b556. Kita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2672–7

Purification and characterization of rat skeletal muscle fructose–6–phosphate,2–kinase:fructose–2,6–bisphosphatase. Kitamura K, et al. **J Biol Chem** 1989 Jun 15;264(17):9799–806

Isolation and electron microscopic characterization of the high molecular mass aminoacyl–tRNA synthetase complex from murine erythroleukemia cells. Norcum MT. **J Biol Chem** 1989 Sep 5;264(25):15043–51

Proteasomes (multi–protease complexes) as 20 S ring–shaped particles in a variety of eukaryotic cells. Tanaka K, et al. **J Biol Chem** 1988 Nov 5;263(31):16209–17

The sea urchin multicatalytic protease: purification, biochemical analysis, subcellular distribution, and relationship to snRNPs. Grainger JL, et al. **J Cell Biol** 1989 Aug;109(2):675–83

Purification, resolution, and reconstitution of branched–chain 2–keto acid dehydrogenase complex from bovine kidney. Cook KG, et al. **Methods Enzymol** 1988;166:303–8

Isolation of branched–chain alpha–keto acid dehydrogenase as active complex from bovine liver. Danner DJ, et al. **Methods Enzymol** 1988;166:298–302

Assay of branched–chain alpha–keto acid dehydrogenase kinase in mitochondrial extracts and purified branched–chain alpha–keto acid dehydrogenase complexes. Espinal J, et al. **Methods Enzymol** 1988;166:166–75

Branched–chain alpha–keto acid dehydrogenase and its kinase from rabbit liver and heart. Paxton R. **Methods Enzymol** 1988;166:313–20

Isolation and properties of the branched–chain 2–keto acid and pyruvate dehydrogenase multienzyme complex from Bacillus subtilis. Perham RN, et al. **Methods Enzymol** 1988; 166:330–42

Branched–chain alpha–keto acid dehydrogenase complex from bovine kidney. Pettit FH, et al. **Methods Enzymol** 1988;166:309–12

Purification of branched–chain keto acid dehydrogenase and lipoamide dehydrogenase–valine from Pseudomonas. Sokatch JR. **Methods Enzymol** 1988;166:342–50

Herpes simplex virus 1 helicase–primase: a complex of three herpes–encoded gene products. Crute JJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2186–9

[Creation of a polyenzyme composition of proteases from Streptomyces griseus and Acremonium chrysogenum] Mishunin IF, et al. **Ukr Biokhim Zh** 1988 Jul–Aug; 60(4):78–81 (Eng. Abstr.) **(Rus)**

METABOLISM

Regulation of branched–chain 2–oxo acid dehydrogenase activity during exercise. Kasperek GJ. **Am J Physiol** 1989 Jan;256(1 Pt 1):E186–90

Penicillin–binding protein 2 is required for induction of the Citrobacter freundii class I chromosomal beta–lactamase in Escherichia coli. Oliva B, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1115–7

The multicatalytic proteinase of mammalian cells. Rivett AJ. **Arch Biochem Biophys** 1989 Jan;268(1):1–8 (66 ref.)

Monovalent cations and inorganic phosphate alter branched–chain alpha–ketoacid dehydrogenase–kinase activity and inhibitor sensitivity. Shimomura Y, et al. **Arch Biochem Biophys** 1988 Oct;266(1):210–8

Uridine–5'–phosphate synthase: evidence for substrate cycling involving this bifunctional protein. Traut TW. **Arch Biochem Biophys** 1989 Jan;268(1):108–15

Nitrous oxide exposure reduces hepatic C1–tetrahydrofolate synthase expression in rats. Barlowe CK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):245–9

Sodium dodecyl sulfate–induced conformational and enzymatic changes of multicatalytic proteinase. Saitoh Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):334–9

Autodegradation of rat liver proteasomes (large multicatalytic proteinase complexes). Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):548–54

Half–life of proteasomes (multiprotease complexes) in rat liver. Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1309–15

Synthesis and hydrolysis of ATP by the mitochondrial ATP synthase. Tuena Gómez–Puyou MT, et al. **Biochem Cell Biol** 1988 Jul;66(7):677–82 (54 ref.)

The multicatalytic proteinase: a high–Mr endopeptidase [letter] **Biochem J** 1988 Oct 15;255(2):750–1

Bacteriophage–T4 and Micrococcus luteus UV endonucleases are not endonucleases but beta–elimination and sometimes beta delta–elimination catalysts. Bailly V, et al. **Biochem J** 1989 May 1;259(3):751–9

Activity of branched–chain 2–oxo acid dehydrogenase complex in rat liver mitochondria and in rat liver. Beggs M, et al. **Biochem J** 1988 Dec 15;256(3):929–34

Longer–term regulation of branched–chain–2–oxoacid dehydrogenase complex studied in rat hepatocytes in culture. Beggs M, et al. **Biochem J** 1989 Jan 1;257(1):271–5

Insulin regulation of the activity and phosphorylation of branched–chain 2–oxo acid dehydrogenase in adipose tissue. Frick GP, et al. **Biochem J** 1989 Feb 15; 258(1):229–35

Transient–time analysis of substrate–channelling in interacting enzyme systems. Ovádi J, et al. **Biochem J** 1989 Jan 1;257(1):187–90

Cross–linking of the electron–transfer flavoprotein to electron–transfer flavoprotein–ubiquinone oxidoreductase with heterobifunctional reagents. Steenkamp DJ. **Biochem J** 1988 Nov 1;255(3):869–76

The 2–oxo acid dehydrogenase complexes: recent advances. Yeaman SJ. **Biochem J** 1989 Feb 1;257(3):625–32 (116 ref.)

Enzyme–enzyme interactions as modulators of the metabolic flux through the citric acid cycle. Beeckmans S, et al. **Biochem Soc Symp** 1987;54:163–172 (36 ref.)

2–Oxo acid dehydrogenase multi–enzyme complexes: in the beginning and halfway there. Perham RN, et al. **Biochem Soc Symp** 1987;54:67–81 (63 ref.)

Site–directed mutagenesis of yeast C1–tetrahydrofolate synthase: analysis of an overlapping active site in a multifunctional enzyme. Barlowe CK, et al. **Biochemistry** 1989 Mar 7;28(5):2099–106

Kinetics and specificity of reductive acylation of lipoyl domains from 2–oxo acid dehydrogenase multienzyme complexes. Graham LD, et al. **Biochemistry** 1989 Feb 21; 28(4):1574–81

Cytosine photoproduct–DNA glycosylase in Escherichia coli and cultured human cells. Weiss RB, et al. **Biochemistry** 1989 Feb 21;28(4):1488–92

Oxidation of malate by the mitochondrial succinate–ubiquinone reductase. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):1–9

An enzyme related to the high molecular weight multicatalytic proteinase, macropain, participates in a ubiquitin–mediated, ATP–stimulated proteolytic pathway in soluble extracts of BHK 21/C13 fibroblasts. McGuire MJ, et al. **Biochim Biophys Acta** 1988 Nov 17; 967(2):195–203

The high molecular weight multicatalytic proteinase, macropain, exists in a latent form in human erythrocytes. McGuire MJ, et al. **Biochim Biophys Acta** 1989 Apr 6; 995(2):181–6

The bovine pro–carboxypeptidase A–S6 ternary complex: a rare case of a secreted protein complex. Chapus C, et al. **Biochimie** 1988 Sep;70(9):1143–51 (41 ref.)

Selenium–dependent glycine reductase: differences in physicochemical properties and biological activities of selenoprotein A components isolated from Clostridium sticklandii and Clostridium purinolyticum. Sliwkowski MX, et al. **Biofactors** 1988 Dec;1(4):293–6

Induction of rat jejunal epithelial cell expression of sucrase–isomaltase by glucocorticoids in primary cell culture and in vivo. Yeh KY, et al. **Biol Cell** 1989; 65(2):139–50

Impact of nutrition on postnatal development of serine–threonine dehydratase and branched–chain keto acid dehydrogenase in the rat. Grogan CK, et al. **Biol Neonate** 1988;54(4):224–31

Two nuclearly inherited loci conferring increased diuron resistance to NADH oxidase in Saccharomyces cerevisiae. Meunier B, et al. **Curr Genet** 1989 Jan;15(1):31–8

Mevinolin (lovastatin) inhibits androstenedione production by porcine ovarian theca cells at the level of the 17 alpha–hydroxylase:C–17,20–lyase complex. Engelhardt H, et al. **Endocrinology** 1989 May;124(5):2297–304

The effect of thyroid hormones on lipid composition and activities of lipid–synthesizing enzymes in the rat heart sarcolemma. Szymański PT, et al. **Endokrynol Pol** 1989; 40(1):43–9

Morphology of the procarboxypeptidase A–S6 complex. A solution X–ray scattering study. Kerfelec B, et al. **Eur Biophys J** 1988;16(2):95–100

Substrate–modulated reactions of putidamonooxin. The nature of the active oxygen species formed and its reaction mechanism. Wende P, et al. **Eur J Biochem** 1989 Apr 15; 181(1):189–97

Association of 3'——5' exodeoxyribonuclease activity with DNA replitase complex from S–phase Chinese hamster embryo fibroblast cells. Hammond RA, et al. **Exp Cell Res** 1989 Aug;183(2):284–93

Formation of an ion transport supercomplex in Escherichia coli. An experimental model of direct transduction of energy. Bagramyan KA, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):149–52

A methyl–CoM methylreductase system from methanogenic bacterium strain Gö 1 not requiring ATP for activity. Deppenmeier U, et al. **FEBS Lett** 1988 Dec 5;241(1–2):60–4

Amino acid substitutions in mitochondrial ATP synthase subunit 9 of Saccharomyces cerevisiae leading to venturicidin or ossamycin resistance. Galanis M, et al. **FEBS Lett** 1989 Jun 5;249(2):333–6

ESR studies on iron–sulfur clusters of complex II in Ascaris suum mitochondria which exhibits strong fumarate reductase activity. Hata–Tanaka A, et al. **FEBS Lett** 1988 Dec 19;242(1):183–6

Association of rabbit muscle glyceraldehyde–3–phosphate dehydrogenase and 3–phosphoglycerate kinase. The biochemical and electron–microscopic evidence. Sukhodolets MV, et al. **FEBS Lett** 1988 Sep 26; 238(1):161–6

Reconstitution and properties of a coenzyme F420–mediated formate hydrogenlyase system in Methanobacterium formicicum [published erratum appears in J Bacteriol 1989 Sep;171(9):5237] Baron SF, et al. **J Bacteriol** 1989 Jul; 171(7):3854–9

Role of menaquinone in inactivation and activation of the Bacillus cereus forespore respiratory system. Escamilla JE, et al. **J Bacteriol** 1988 Dec;170(12):5908–12

Kinetic advantages of hetero–enzyme complexes with glutamate dehydrogenase and the alpha–ketoglutarate dehydrogenase complex. Fahien LA, et al. **J Biol Chem** 1989 Jul 25;264(21):12303–12

Biosynthesis of branched–chain fatty acids in Bacillus subtilis. A decarboxylase is essential for branched–chain fatty acid synthetase. Oku H, et al. **J Biol Chem** 1988 Dec 5; 263(34):18386–96

The multicatalytic proteinase. Multiple proteolytic activities. Rivett AJ. **J Biol Chem** 1989 Jul 25;264(21):12215–9

Essential role of T4 phage deoxycytidylate hydroxymethylase in a multienzyme complex for deoxyribonucleotide synthesis. Thylén C, et al. **J Biol Chem** 1989 Sep 15;264(26):15169–72

Uridine monophosphate synthase of Jersey bulls. Shanks RD, et al. **J Dairy Sci** 1989 Mar;72(3):722–5

Mitochondrial hydrogen peroxide generation by NADH–oxidase activity following regional myocardial ischemia in the dog. Vandeplassche G, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):383–92

Purified rat brain myelin contains measurable acyl–CoA:lysophospholipid acyltransferase(s) but little, if any, glycerol–3–phosphate acyltransferase. Vaswani KK, et al. **J Neurochem** 1989 Jan;52(1):69–74

Activities of branched–chain amino acid—degrading enzymes in liver from rats fed different dietary levels of protein. Soemitro S, et al. **J Nutr** 1989 Aug;119(8):1203–12

Estimation of branched–chain alpha–keto acid dehydrogenase activation in mammalian tissues. Block KP, et al. **Methods Enzymol** 1988;166:201–13

Enzyme assays with mutant cell lines of maple syrup urine disease. Chuang DT, et al. **Methods Enzymol** 1988; 166:135–46

Measurement of branched–chain alpha–keto acid dehydrogenase flux rates in perfused heart and liver. Lapointe DS, et al. **Methods Enzymol** 1988;166:484–97

Analysis of phosphorylation sites on branched–chain 2–keto acid dehydrogenase complex. Yeaman SJ, et al. **Methods Enzymol** 1988;166:10–4

Bistability and control for ATP synthase and adenylate cyclase is obtained by the removal of substrate inhibition. Schiffmann Y. **Mol Cell Biochem** 1989 Mar 16;86(1):19–40 (102 ref.)

A possible origin of RNA catalysis in multienzyme complexes. Edwards MR. **Orig Life Evol Biosph** 1989; 19(1):69–72

Wavelength dependence of DNA incision by a human ultraviolet endonuclease. Gallagher PE, et al. **Photochem Photobiol** 1989 Mar;49(3):363–7

Skeletal muscle proteasome can degrade proteins in an ATP-dependent process that does not require ubiquitin. Driscoll J, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):787–91

Bacterial active-site serine penicillin-interactive proteins and domains: mechanism, structure, and evolution. Ghuysen JM. **Rev Infect Dis** 1988 Jul–Aug;10(4):726–32 (19 ref.)

Intracellular organization of DNA precursor biosynthetic enzymes. Mathews CK, et al. **Trends Biochem Sci** 1988 Oct;13(10):394–7 (23 ref.)

[Principles of the organization and functioning of the metabolon microcompartment] Kurganov BI, et al. **Biokhimiia** 1989 May;54(5):716–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Penicillin-binding protein 2 is essential in wild-type Escherichia coli but not in lov or cya mutants. Ogura T, et al. **J Bacteriol** 1989 Jun;171(6):3025–30

An amino acid substitution in penicillin-binding protein 3 creates pointed polar caps in Escherichia coli. Taschner PE, et al. **J Bacteriol** 1988 Oct;170(10):4828–37

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690–5

Involvement of the proteasome in various degradative processes in mammalian cells [published erratum appears in Proc Natl Acad Sci U S A 1989 Jul;86(14):5350] Matthews W, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2597–601

MULTIFUNCTIONAL ENZYMES see **MULTIENZYME COMPLEXES**

MULTIGENE FAMILY see **GENES, REITERATED**

MULTI-HOSPITAL INFORMATION SYSTEMS see **HOSPITAL INFORMATION SYSTEMS**

MULTI-HOSPITAL SYSTEMS see **MULTI-INSTITUTIONAL SYSTEMS**

MULTI-INFARCT DEMENTIA see **DEMENTIA, MULTI-INFARCT**

MULTI-INSTITUTIONAL SYSTEMS

[The experience of creative cooperation of the official military- physician commission and scientists] Adamenko AM, et al. **Voen Med Zh** 1989 May;(5):21–2 **(Rus)**

[Multi-hospital systems] Alfonso Sánchez JL. **Med Clin (Barc)** 1989 Feb 18;92(6):229–31 (14 ref.) **(Spa)**

ECONOMICS

Materials management in investor-owned, nonprofit government, and other general hospitals. Young ST. **Health Care Manage Rev** 1989 Spring;14(2):57–62

HCA asset sales may be better than they appear. Larkin H. **Hospitals** 1989 Aug 5;63(15):28

Hospitals seek role as venture capitalists. Solovy A. **Hospitals** 1989 Feb 20;63(4):26–7

Tough strategies boost multis' profits. Solovy A. **Hospitals** 1988 Nov 5;62(21):113

"How might a low-cost hospital system look?" Lessons from the Rochester experience. Hartman SE, et al. **Med Care** 1989 Mar;27(3):234–43

MANPOWER

Downsizing: how one hospital responded to decreasing demand. Mullaney AD. **Health Care Manage Rev** 1989 Summer;14(3):41–8

ORGANIZATION & ADMINISTRATION

Planning a maternal-fetal medicine program. Joint university and private hospital models. Sokol RJ. **Am J Perinatol** 1989 Apr;6 Suppl:24–7

MUMS: can they grow in rural areas? Elliott P. **Dimens Health Serv** 1989 Apr;66(3):21–2

Joint initiatives offer institutional options. Freedman TJ, et al. **Dimens Health Serv** 1989 Apr;66(3):18–20, 32–3

Multifacility management and the MIS Guidelines. MacLeod JD. **Dimens Health Serv** 1989 Apr;66(3):12–3

HCMR interview: Rodney Wolford. Wolford R. **Health Care Manage Rev** 1989 Summer;14(3):89–94

A resource-dependence model of hospital contract management. Alexander JA, et al. **Health Serv Res** 1989 Jun;24(2):259–84

Strategic orientations of small multihospital systems. Luke RD, et al. **Health Serv Res** 1988 Dec;23(5):597–618

Multihospital executives continue to earn more. Droste T. **Hospitals** 1989 Aug 5;63(15):74

Catholic systems unite to take on managed care. Larkin H. **Hospitals** 1989 Aug 20;63(16):50

Integrating information systems with HL7. Walker JM. **Hospitals** 1989 Jul 5;63(13):FB60, FB62

Organizational and decision unit characteristics and board influence in independent versus multihospital system-affiliated hospitals. Provan KG. **J Health Soc Behav** 1988 Sep;29(3):239–52

[Experience in organizing and preliminary results of the work of the Educational-Scientific-Practical Association (Research Institute-High Medical School-Hospital) with respect to problems of preventive cardiology] Britov AN, et al. **Ter Arkh** 1989;61(1):55–7 **(Rus)**

STANDARDS

Integrating QA into housekeeping services operations. Franchetto TM, et al. **Dimens Health Serv** 1989 Feb; 66(1):17–9

STATISTICS & NUMERICAL DATA

System membership up; for-profits consolidate. Solovy A. **Hospitals** 1988 Nov 5;62(21):112–3

TRENDS

Market overview. Mieling TM. **Top Health Care Financ** 1989 Summer;15(4):1–8 (9 ref.)

MULTIMODAL TREATMENT see **COMBINED MODALITY THERAPY**

MULTIPHASIC SCREENING

Evaluation of laboratory tests used in screening ambulatory patients. Hale DC. **Clin Obstet Gynecol** 1988 Dec; 31(4):893–901

[Characteristics of participants in multiphasic health examination, II] Ozasa K. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1004–12 (Eng. Abstr.) **(Jpn)**

[Characteristics of participants in multiphasic health examination, I] Ozasa K. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):995–1003 (Eng. Abstr.) **(Jpn)**

METHODS

Comprehensive health assessments. Bailey A. **Practitioner** 1987 Dec;231(1440):1647–9

STANDARDS

Preventive procedures and screening: balancing the benefits. Lawrence M. **Practitioner** 1987 Dec;231(1440):1651–4

MULTIPLE CARBOXYLASE DEFICIENCY

DIAGNOSIS

What is it? Case 2, 1986. **Mov Disord** 1986;1(4):281–7

METABOLISM

Biotin-responsive multiple carboxylase deficiency in an 8-year-old boy with normal serum biotinidase and fibroblast holocarboxylase-synthetase activities. Holme E, et al. **J Inherited Metab Dis** 1988;11(3):270–6

MULTIPLE EPIPHYSEAL DYSPLASIA see **OSTEOCHONDRODYSPLASIAS**

MULTIPLE MYELOMA

see related

MYELOMA PROTEINS

Plasmacytoma of the uvea in a case of multiple myeloma. Sandberg HO, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):329–32

Seventeen-year survival in multiple myeloma. Suyehira LA, et al. **Am J Hematol** 1989 Mar;30(3):192–3

Monoclonal immunoglobulin deposition disease in a renal allograft: probable recurrent disease in a patient without myeloma. Alpers CE, et al. **Am J Kidney Dis** 1989 May; 13(5):418–23

Plasma cell myeloma—new biological insights and advances in therapy. Barlogie B, et al. **Blood** 1989 Mar;73(4):865–79 (172 ref.)

Thoracic complications of multiple myeloma. Srinivasulu T, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar; 30(1):56–60

Improvement of human myeloma stem cell growth in a liquid culture system supplemented with phytohemagglutinin. Visani G, et al. **Int J Cell Cloning** 1988 Sep;6(5):313–23

Emergence of activated lymphocytes in CD4 and CD8 subpopulations of multiple myeloma: correlation with the expansion of suppressor T-cells (CD8+ OKM1+) and ecto-5'nucleotidase deficiency. Massaia M, et al. **J Clin Lab Immunol** 1988 Jun;26(2):89–95

[Juvenile multiple myeloma. A Nigerian case] Cénac A, et al. **Presse Med** 1988 Oct 22;17(36):1849–50 (7 ref.) (Eng. Abstr.) **(Fre)**

[Prognostic significance of skeletal lesions in multiple myeloma] Bettini R, et al. **Recenti Prog Med** 1989 Jun; 80(6):300–3 (13 ref.) (Eng. Abstr.) **(Ita)**

[Multiple myeloma] Imamura Y. **Gan No Rinsho** 1989 Jan; Spec No:605–15 **(Jpn)**

[IgD-type multiple myeloma associated with tumor of the pancreas] Kanno M, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2312–6 (Eng. Abstr.) **(Jpn)**

[Prognostic factors in myeloma (letter)] López Pascual J, et al. **Rev Clin Esp** 1988 Apr;182(7):396 **(Spa)**

[Comparative study of radiology and bone scintigraphy in multiple myeloma] González P, et al. **Rev Med Chil** 1988 Feb;116(2):148–52 (Eng. Abstr.) **(Spa)**

ANALYSIS

Dual parameter analysis of myeloma cells by flow cytometry. DNA content of cells containing monotypic cytoplasmic immunoglobulin. Chan CS, et al. **Am J Clin Pathol** 1989 Jan;91(1):12–7

Restrictive cardiomyopathy with kappa light chain deposits in myocardium as a complication of multiple myeloma. Histochemical and electron microscopic observations. McAllister HA Jr, et al. **Arch Pathol Lab Med** 1988 Nov; 112(11):1151–4

P-glycoprotein expression in plasma-cell myeloma is associated with resistance to VAD. Epstein J, et al. **Blood** 1989 Aug 15;74(3):913–7

Sialic acid content in mouse myeloma cells and derived B-cell hybridomas with different metastatic potentials. Friedman J, et al. **Cancer Lett** 1988 Dec 1;43(1–2):79–84

[An attempt at identification of osteoclastic activation factors implicated in myeloma] Bataille R, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):539–40 **(Fre)**

[Beta 2 microglobulin in some hematologic neoplasms] Rodríguez MA, et al. **Rev Med Chil** 1989 Jun;116(6):538–42 (Eng. Abstr.) **(Spa)**

BLOOD

Altered cytokine activities are related to the suppression of synthesis of normal immunoglobulin in multiple myeloma. Kawano M, et al. **Am J Hematol** 1989 Feb;30(2):91–6

Hyperviscosity syndrome in association with kappa light chain myeloma. Carter PW, et al. **Am J Med** 1989 May; 86(5):591–5

Idiopathic hyperammonemia after high-dose chemotherapy [letter] Fine P, et al. **Am J Med** 1989 May;86(5):629

Serum fructosamine in uraemia, myeloma and acute inflammatory disorders—relationship to serum glucose and albumin levels. McCance DR, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):63–8

Evidence for qualitative abnormalities in high-density lipoproteins from myeloma patients: the presence of amyloid A protein could explain HDL modifications. Hachem H, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):271–7

Tumor cell heterogeneity in multiple myeloma: antigenic, morphologic, and functional studies of cells from blood and bone marrow. King MA, et al. **Blood** 1989 May 15; 73(7):1925–35

A new prognostic system for multiple myeloma based on easily available parameters. Bladé J, et al. **Br J Haematol** 1989 Aug;72(4):507–11

Circulating monoclonal B lymphocytes in multiple myeloma. Chiu EK, et al. **Br J Haematol** 1989 May;72(1):28–31

Increase in the suppressor-inducer T cell subset in multiple myeloma and monoclonal gammopathy of undetermined significance. Shapira R, et al. **Br J Haematol** 1989 Feb; 71(2):223–5

Hyperviscosity syndrome (HVS) in African myelomatosis. Mukiibi JM, et al. **East Afr Med J** 1988 Jul;65(7):453–8

Minimal peripheral blood cells carrying clonal markers of B cell disorders: evidence for monoclonality of circulating lymphocytes in patients with multiple myeloma. Oster W, et al. **Int J Cell Cloning** 1989 Mar;7(2):111–9

Prognostic significance of plasma cell morphology in multiple myeloma. Paule B, et al. **Nouv Rev Fr Hematol** 1988; 30(4):209–12

Phenotypical and functional characterization of the idiotype-positive blood B cells in multiple myeloma. Bloem AC, et al. **Scand J Immunol** 1988 Dec;28(6):791–9

[False hyperphosphoremia in multiple myeloma (letter)] Puechal X, et al. **Presse Med** 1989 Mar 4;18(9):494 **(Fre)**

[IgM myeloma without depression in serum IgG and IgA—a case report] Murase T, et al. **Rinsho Ketsueki** 1989 Apr; 30(4):471–6 (Eng. Abstr.) **(Jpn)**

[ATP and ADP of platelets in chronic myeloproliferative disorders and multiple myeloma] Terada H, et al. **Rinsho Ketsueki** 1989 Jan;30(1):22–8 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Tubulovenous communication in myeloma kidney. Tubular prolapse and tubular transformation of renal vein. Kawaguchi K, et al. **Arch Pathol Lab Med** 1989 May; 113(5):512–6

CHEMICALLY INDUCED

Deaths and tumors among workers grinding stainless steel. Svensson BG, et al. **Am J Ind Med** 1989;15(1):51–9

CLASSIFICATION

Phenotypic analysis of human myeloma cell lines. Duperray C, et al. **Blood** 1989 Feb;73(2):566–72

COMPLICATIONS

Acute leukemia in multiple myeloma [letter] Feliu J, et al. **Acta Oncol** 1988;27(6b):864

A unique case of kappa light-chain disease associated with cryoglobulinemia, pyroglobulinemia, and hyperviscosity syndrome. Bachrach HJ, et al. **Am J Med** 1989 May;

86(5):596–602
Bronchial mucosal infiltration and unilateral lung collapse: an unusual complication of multiple myeloma. Gilchrist D, et al. **Am J Med** 1988 Nov;85(5):740–1
IgG myeloma with hyperviscosity presenting as malignant arterial hypertension. Rubio-Garcia R, et al. **Am J Med** 1989 Jul;87(1):119
Pathogenesis of ciliary-body cysts associated with multiple myeloma. Bowman Z, et al. **Ann Ophthalmol** 1988 Aug; 20(8):292–5
Disseminated echovirus infection in a patient with multiple myeloma and a functional defect in complement. Treatment with intravenous immunoglobulin. Smith JK, et al. **Arch Intern Med** 1989 Jun;149(6):1455–7
Chlamydia trachomatis pneumonia in a patient with multiple myeloma [letter] Vlasveld LT, et al. **Arch Intern Med** 1988 Oct;148(10):2302–3
Sweet's syndrome and malignancy: a case associated with multiple myeloma and review of the literature. Berth-Jones J, et al. **Br J Dermatol** 1989 Jul;121(1):123–7 (48 ref.)
Heavy- and free light-chain myeloma associated with peripheral polyneuropathy. Cotariu D, et al. **Clin Chem** 1988 Dec;34(12):2594–5
Scleredema adultorum associated with IgG-kappa multiple myeloma—a case report and review of the literature. Hodak E, et al. **Clin Exp Dermatol** 1988 Jul;13(4):271–4 (20 ref.)
Scleredema of Buschke associated with multiple myeloma. Salisbury JA, et al. **Clin Exp Dermatol** 1988 Jul; 13(4):269–70
Immunoglobulin synthesis in primary and myeloma amyloidosis. Preud'homme JL, et al. **Clin Exp Immunol** 1988 Sep;73(3):389–94
Cytologic detection of amyloid in duodenal and ureteral brushings. Korat O, et al. **Diagn Cytopathol** 1988;4(2):133–6
Spinal cord compression in myelomatosis: response to chemotherapy alone. Sinoff CL, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):197–200
Successful treatment of hemorrhagic syndrome due to an acquired, combined deficiency of factors VII and X in a patient with multiple myeloma and amyloidosis [letter] Elezović I, et al. **Eur J Haematol** 1989 Jan;42(1):105–6
CT findings in coexistent Paget's disease and multiple myeloma. Chua GT, et al. **Indiana Med** 1988 Jul; 81(7):616–7
Cutaneous xanthoma in association with paraproteinemia in the absence of hyperlipidemia. Feingold KR, et al. **J Clin Invest** 1989 Mar;83(3):796–802
Multiple myeloma and amyloidosis of the tongue. Raubenheimer EJ, et al. **J Oral Pathol** 1988 Nov; 17(9–10):554–9
Acute cardiac failure in multiple myeloma [clinical conference] Clarke SJ, et al. **Med J Aust** 1989 Sep 4; 151(5):288, 291–4
Immunoglobulin A myeloma presenting with laryngeal obstruction. Georghiou PA, et al. **Med J Aust** 1988 Oct 17;149(8):447–9
High-output cardiac failure in multiple myeloma [letter] **N Engl J Med** 1989 May 25;320(21):1419–20
High-output cardiac failure in patients with multiple myeloma. McBride W, et al. **N Engl J Med** 1988 Dec 22; 319(25):1651–3
Multiple myeloma complicated by Haemophilus parainfluenzae endocarditis. Menacker M, et al. **N J Med** 1988 Dec;85(12):1033–4
Hypocomplementemic proliferative glomerulonephritis with C3 nephritic-factor-like activity in multiple myeloma. Bourke E, et al. **Nephron** 1989;52(3):231–7 (36 ref.)
Acute renal failure in multiple myeloma after the ingestion of a contrast agent for cholecystography [letter] Schreiber ZA, et al. **Nephron** 1989;51(3):439–40
Massive systemic amyloidosis associated with light-chain deposition disease. Troussard X, et al. **Nephron** 1989; 52(2):139–43
Hypercalcaemia in a patient with non-secretory myeloma. Chew D, et al. **Postgrad Med J** 1988 Jun;64(752):438–40
Massive macroglossia, amyloidosis and myeloma. Jacobs P, et al. **Postgrad Med J** 1988 Sep;64(755):696–8
Renal involvement in IgD myeloma. Bergesio F, et al. **Scand J Urol Nephrol** 1988;22(4):309–12
A case of eosinophilic pleural effusion complicating multiple myeloma. Lipworth BJ, et al. **Scott Med J** 1988 Jun; 33(3):278
Differential diagnosis of severe back pain using MRI. Abram SR, et al. **South Med J** 1988 Dec;81(12):1487–92
Multiple myeloma in alcoholic liver cirrhosis. Ito M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):39–44 (15 ref.)
[Amyloidosis in plasmacytic myeloma with dominant manifestations of joint involvement] Janoušek J, et al. **Cas Lek Cesk** 1989 May 5;128(19):599–601 (Eng. Abstr.) (Cze)
[Myeloma complicated by amyloidosis of the temporal artery simulating Horton's disease (letter)] Taillan B, et al. **Ann Med Interne (Paris)** 1989;140(4):335 (Fre)
[Myelomatous ascites: apropos of a case (letter)] Vinti H, et al. **Ann Med Interne (Paris)** 1989;140(3):224–5 (10 ref.) (Fre)
[Synovial amyloidosis disclosing myeloma. Clinical, arthroscopic and immunochemical aspects] Krause E, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):689–92 (20 ref.) (Fre)
[Hypercalcemia in coexistent parathyroid adenoma and multiple myeloma. Problems of differential diagnosis] Schneider W, et al. **Dtsch Med Wochenschr** 1989 Aug 4; 114(31–32):1199–202 (Eng. Abstr.) (Ger)
[Simultaneous occurrence of hyperparathyroidism and multiple myeloma] Peters KM, et al. **Internist (Berlin)** 1989 Feb;30(2):117–9 (Ger)
[Multiple myeloma complicating rheumatoid arthritis] Buskila D, et al. **Harefuah** 1988 Dec 1;115(11):319–21 (Eng. Abstr.) (Heb)
[Use of diphosphonates in the treatment of hypercalcemia in multiple myeloma: efficacy of 4-amino-hydroxybutylidene-1,1-bisphosphonate (AHButBP)] Attardo-Parrinello G, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):75–6 (Eng. Abstr.) (Ita)
[Epidermolysis bullosa acquisita with negative direct immunofluorescence in a patient with myeloma] Patrizi A, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):170–2 (Eng. Abstr.) (Ita)
[Spontaneous association of a chronic lympho- and myeloproliferative disease in the same patient. Description of 2 cases] Guzzini F, et al. **Recenti Prog Med** 1988 Sep; 79(9):365–9 (Eng. Abstr.) (Ita)
[Systemic lupus erythematosus with multiple myeloma] Umemura T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Dec; 98(14):1495–503 (22 ref.) (Eng. Abstr.) (Jpn)
[Periorbital ecchymoses without evidence of amyloid deposition as the initial sign in multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov; 76(11):1740–1 (Jpn)
[A case of lambda light-chain multiple myeloma with bilateral ophthalmoplegia following long-term asymptomatic period] Naitoh M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):367–73 (Jpn)
[Multiple myeloma (IgA-kappa type) with scleroderma-like skin lesion] Saburi Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):888–9 (Jpn)
[Coma, hyperviscosity syndrome, hyperammonemia and myelofibrosis in a patient with IgG, lambda type multiple myeloma] Tsunoda S, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):361–5 (Eng. Abstr.) (Jpn)
[Clinical picture and diagnosis of pyelonephritis in patients with multiple myeloma] Tofilo AP, et al. **Klin Med (Mosk)** 1989 Apr;67(4):96–8 (Rus)
[Treatment of spinal cord compression in multiple myeloma] Golenkov AK, et al. **Sov Med** 1988;(10):107–9 (Rus)
[Plasmacytoma of the testis: report of a case] Abad Hernández MM, et al. **Arch Esp Urol** 1989 May; 42(4):369–71 (Eng. Abstr.) (Spa)
[Leukocytoclastic vasculitis and multiple myeloma. Presentation of 2 cases] Benet A, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):420–3 (Eng. Abstr.) (Spa)
[Myeloma type IgAk, hyperlipidemia and hyperviscosity syndrome] Dieuzeide G, et al. **Medicina (B Aires)** 1988; 48(1):54–8 (Eng. Abstr.) (Spa)
[Fever and adenopathy in a patient with myeloma (clinical conference)] **Rev Clin Esp** 1988 Oct;183(6):318–25 (Spa)
[Fibrositis as the presenting form of non-secreting myeloma (letter)] Povedano Gómez J, et al. **Rev Clin Esp** 1989 Jun; 185(2):107–8 (Spa)
[Pseudohyponatremia and anion gap changes in multiple myeloma] Valdivieso A, et al. **Rev Med Chil** 1989 Jun; 116(6):559–62 (Eng. Abstr.) (Spa)

DIAGNOSIS

Myeloma-like cast nephropathy associated with acinar cell carcinoma of the pancreas. Reducka K, et al. **Am J Nephrol** 1988;8(5):421–4
Audit of investigation and follow-up of patients with raised monoclonal proteins. Young B, et al. **Aust Clin Rev** 1989 Mar;8(32):217–20
Serum thymidine kinase as a marker of disease activity in patients with multiple myeloma. Brown RD, et al. **Aust N Z J Med** 1989 Jun;19(3):226–32
Plasmacytoma of the breast. Unusual initial presentation of myeloma: report of two cases and review of the literature. Ben-Yehuda A, et al. **Blut** 1989 Mar;58(3):169–70 (12 ref.)
An integrated approach to multiple and solitary plasmacytoma. Waldman JD. **Chic Med Sch Q** 1970; 29(4):190–202 (39 ref.)
Gastric involvement with excavated plasmacytoma: case report and review of endoscopic criteria. Sloyer A, et al. **Endoscopy** 1988 Sep;20(5):267–9 (17 ref.)
Recent advances in the biology of plasma cell myeloma. Alexanian R, et al. **Hematol Pathol** 1987;1(3):143–5 (13 ref.)
Comparison of the usefulness of bone marrow sections and smears in diagnosis of multiple myeloma. Buss DH, et al. **Hematol Pathol** 1987;1(1):35–43
Intracranial plasmacytoma. Kumar L, et al. **J Assoc Physicians India** 1988 Mar;36(3):226–8
Problems of myeloma in a community. Flanagan NG, et al. **Postgrad Med J** 1988 Oct;64(756):747–51
[Light-chain myeloma and non-secretory myeloma—problems in di- agnosis and associated paraproteins] Leinonen P, et al. **Duodecim** 1988; 104(18):1466–70 (21 ref.) (Fin)
[Identification by electrophoretic immunofixation of an immunoglobulin D myeloma with serum and urine free light chains (letter)] Iron A, et al. **Presse Med** 1989 Feb 18;18(7):358–9 (Fre)
[Non-secreting, hyposecreting multiple myeloma, simulating cancer of the base of skull (letter)] Moalla M, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):720–1 (Fre)
[Multiple myeloma. Clinical hematological manifestations and anomalies of the hemogram. A retrospective study of 113 cases] Ben Abdeladhim A, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):521–6 (Eng. Abstr.) (Fre)
[Prognostic factors in multiple myeloma. Critical analysis based on a multicenter study of 53 cases] Zakraoui L, et al. **Tunis Med** 1988 Oct;66(10):663–72 (41 ref.) (Eng. Abstr.) (Fre)
[A case of extramedullary plasmacytoma of the spleen] Sonobe T, et al. **Rinsho Hoshasen** 1989 Mar;34(3):375–8 (Eng. Abstr.) (Jpn)
[Differential diagnosis of systemic osteoporosis and multiple myeloma] Zatsepin ST, et al. **Ortop Travmatol Protez** 1988 Nov;(11):46–50 (Eng. Abstr.) (Rus)
[Myeloma-related nephropathy] Sidorova LD, et al. **Ter Arkh** 1988;60(6):103–6 (Rus)

DRUG THERAPY

Acute myelomonoblastic leukemia in a patient with multiple myeloma. Colović M, et al. **Acta Med Iugosl** 1989; 43(1):77–82
Recombinant interferon gamma in hairy cell leukemia, multiple myeloma, and Waldenstrom's macroglobulinemia. Quesada JR, et al. **Am J Hematol** 1988 Sep;29(1):1–4
Prognostic factors with high-dose melphalan for refractory multiple myeloma. Barlogie B, et al. **Blood** 1988 Dec; 72(6):2015–9
Treatment of aggressive multiple myeloma by high-dose chemotherapy and total body irradiation followed by blood stem cells autologous graft. Fermand JP, et al. **Blood** 1989 Jan;73(1):20–3
Intermediate-dose melphalan for refractory myeloma [letter] Maniatis A, et al. **Blood** 1989 Aug 15;74(3):1177
Infused vincristine and adriamycin with high dose methylprednisolone (VAMP) in advanced previously treated multiple myeloma patients. Forgeson GV, et al. **Br J Cancer** 1988 Oct;58(4):469–73
VAD chemotherapy for refractory multiple myeloma. Lokhorst HM, et al. **Br J Haematol** 1989 Jan;71(1):25–30
In vitro studies of ways to overcome resistance to VAMP—high dose melphalan in the treatment of multiple myeloma. Millar BC, et al. **Br J Haematol** 1989 Feb; 71(2):213–22
Relevance of the hydrolysis and protein binding of melphalan to the treatment of multiple myeloma. Gera S, et al. **Cancer Chemother Pharmacol** 1989;23(2):76–80
Phase I–II study of epirubicin in multiple myeloma. Case DC Jr, et al. **Cancer Res** 1988 Nov 1;48(21):6246–8
Early plasma cell recruitment in multiple myeloma following chemotherapy. Ucci G, et al. **Cell Tissue Kinet** 1988 Nov; 21(6):405–9
Combination chemotherapy versus melphalan and prednisone in multiple myeloma. Gruber A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):725–6
Chemotherapy of resistant multiple myeloma with vincristine, adriamycin and dexamethasone (VAD). Maniatis A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):727–8
Is aggressive chemotherapy more effective in the treatment of plasma cell myeloma? Bergsagel DE. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):159–61 (18 ref.)
Interferon exerts a cytotoxic effect on primary human myeloma cells. Einhorn S, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1505–10
The pharmacokinetics of melphalan during intermittent therapy of multiple myeloma. Loos U, et al. **Eur J Clin Pharmacol** 1988;35(2):187–93
Treatment of multiple myeloma with carboquone-prednisolone. Akashi M, et al. **Eur J Haematol** 1989 Mar;42(3):265–9
Enhancement of amyloidosis by high-dose prednisolone therapy in multiple myeloma [letter] Kanoh T, et al. **Eur J Haematol** 1989 Jul;43(1):83
Fatal paralytic ileus following vindesine chemotherapy in a patient with myeloma-associated amyloidosis [letter] Kanoh T. **Eur J Haematol** 1989 Jan;42(1):108
Alternating combination chemotherapy (VMCP/VBAP) is not superior to melphalan/prednisone in the treatment of multiple myeloma patients stage III—a randomized study from MGCS. Osterborg A, et al. **Eur J Haematol** 1989 Jul;43(1):54–62
Intermediate-dose (25 mg/m2) intravenous melphalan for patients with multiple myeloma in relapse or refractory to standard treatment. Petrucci MT, et al. **Eur J Haematol** 1989 Mar;42(3):233–7
Resistant multiple myeloma treated with mitozantrone in combination with vincristine and dexamethasone (MOD) [letter] Phillips JK. **Eur J Haematol** 1989 Jan;42(1):109–10
Etoposide plus idarubicin and prednisone in refractory or relapsed multiple myeloma. A phase II study [letter] Capnist G, et al. **Haematologica (Pavia)** 1988 Sep–Oct; 73(5):431–2
Intrapleural adriamycin in treatment of myelomatous pleural effusion: a case report [letter] Iannitto E, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):325–6
The treatment of poor prognosis myelomatosis with a cytosine arabinoside containing combination. Dodwell DJ, et al. **Hematol Oncol** 1989 Jul–Aug;7(4):295–6
Pulsed high dose oral prednisolone in relapsed or refractory

multiple myeloma. Norfolk DR, et al. **Hematol Oncol** 1989 Jan-Feb;7(1):61-8

Etoposide, dexamethasone, cytarabine, and cisplatin in vincristine, doxorubicin, and dexamethasone-refractory myeloma. Barlogie B, et al. **J Clin Oncol** 1989 Oct; 7(10):1514-7

Early responder myeloma: kinetic studies identify a patient subgroup characterized by very poor prognosis. Boccadoro M, et al. **J Clin Oncol** 1989 Jan;7(1):119-25

Drug-resistance in multiple myeloma and non-Hodgkin's lymphoma: detection of P-glycoprotein and potential circumvention by addition of verapamil to chemotherapy. Dalton WS, et al. **J Clin Oncol** 1989 Apr;7(4):415-24

Treatment of multiple myeloma: an Argentine Group for the Treatment of Acute Leukemia Study [letter] Dhingra K. **J Clin Oncol** 1988 Nov;6(11):1784-5

Clinical trials of agents that reverse multidrug-resistance. Gottesman MM, et al. **J Clin Oncol** 1989 Apr;7(4):409-11

Addition of verapamil to overcome drug resistance in multiple myeloma: preliminary clinical observations in 10 patients [letter] Trümper LH, et al. **J Clin Oncol** 1989 Oct; 7(10):1578-9

Prednisone mood disorder with associated catatonia. Grigg JR. **J Geriatr Psychiatry Neurol** 1989 Jan-Mar;2(1):41-4

Stabilisation of a severe case of P.O.E.M.S. syndrome after tamoxifen administration [letter] Barrier JH, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):286

Increase in clonogenic tumour cells in bone marrow of patients with multiple myeloma treated with vincristine, doxorubicin, and methylprednisolone. Bell JB, et al. **Lancet** 1988 Oct 22;2(8617):931-3

Management of multiple myeloma. Reizenstein P. **Leuk Res** 1989;13(3):199-201 (17 ref.)

Phase II trial of amsacrine in patients with multiple myeloma. Greipp PR, et al. **Med Pediatr Oncol** 1989;17(1):76-8

Multiple myeloma: a case of a cure? Robert JL, et al. **Nouv Rev Fr Hematol** 1989;31(1):35-7 (8 ref.)

Clinical experience of K18 (IgG-melphalan) for five cases of refractory multiple myeloma. Kanamaru R, et al. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec; 35(1-4):35-40

[Myelomatosis. A study of 138 patients treated with melphalan, prednisone and vincristine with particular attention to the prognostic value of a stage subdivision] Johnsen HE, et al. **Ugeskr Laeger** 1989 Mar 27; 151(13):816-21 (Eng. Abstr.) **(Dan)**

[Quantitative-kinetic aspects of granulocytic resistance to infection in hematologic systemic diseases with reference to antineoplastic chemotherapy] Sommer S. **Z Arztl Fortbild (Jena)** 1988;82(11):513-5 **(Ger)**

[Combined treatment, polychemotherapy and amino-hydroxybutylidene-diphosphonate, of a patient with multiple myeloma: remission and long survival] Attardo-Parrinello G, et al. **Medicina (Firenze)** 1988 Jul-Sep;8(3):318-20 (Eng. Abstr.) **(Ita)**

[Interferon as a sensitizing agent toward chemotherapy in a case of multiple myeloma refractory to treatment] Seminara P, et al. **Recenti Prog Med** 1988 Oct;79(10):415-6 (Eng. Abstr.) **(Ita)**

[Combination chemotherapy of MCNU, melphalan, procarbazine, and prednisolone (MMPP) in multiple myeloma; disappearance of M-peak on serum electrophoretic pattern] Kamiya O, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):863-5 **(Jpn)**

[Current results of chemotherapy in multiple myeloma] Sezaki T. **Gan To Kagaku Ryoho** 1989 May;16(5):1997-2003 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of multiple myeloma--BCNU.cyclophosphamide.procarbazine.prednisolone and MCNU.cyclophosphamide.procarbazine.prednisolone therapy] Uzuka Y, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2269-73 (Eng. Abstr.) **(Jpn)**

[Treatment of multiple myeloma: renal function in relation to its prognosis] Akashi M, et al. **Rinsho Ketsueki** 1988 Nov;29(11):1991-7 (Eng. Abstr.) **(Jpn)**

[Bladder carcinoma in a case of multiple myeloma IgG (kappa) treated with cyclophosphamide: review of literature] Iwabuchi A, et al. **Rinsho Ketsueki** 1988 Aug; 29(8):1272-6 (18 ref.) (Eng. Abstr.) **(Jpn)**

[The pattern of response to chemotherapy and prognosis in patients with multiple myeloma] Murakami H, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2004-10 (Eng. Abstr.) **(Jpn)**

[Chromosome 21 rearrangement in a case of therapy-related myelodysplastic syndrome in multiple myeloma] Nakamura H, et al. **Rinsho Ketsueki** 1989 Feb;30(2):216-21 (Eng. Abstr.) **(Jpn)**

[Possibility of using interferon in the treatment of multiple myeloma] Piątkowska-Jakubas B, et al. **Przegl Lek** 1988; 45(10):747-50 (19 ref.) **(Pol)**

[Clinical recovery from multiple myeloma. A report on 3 cases] Golenkov AK, et al. **Gematol Transfuziol** 1988 Aug; 33(8):51-3 **(Rus)**

[Chemotherapy of multiple myeloma] Golenkov AK. **Gematol Transfuziol** 1989 Apr;34(4):11-5 (Eng. Abstr.) **(Rus)**

[Main results and problems of multiple myeloma chemotherapy] Mokeeva RA. **Gematol Transfuziol** 1989 Apr;34(4):3-10 **(Rus)**

[Polychemotherapy of multiple myeloma using pafencil (COPPaf protocol)] Tsykalov VA, et al. **Gematol Transfuziol** 1989 Apr;34(4):56-8 **(Rus)**

[Thymostimulin as an adjuvant to antineoplastic chemotherapy. Experience with patients with myeloma and lymphoma] Cánovas Fernández A, et al. **Rev Clin Esp** 1988 Nov;183(7):340-3 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

High serum levels of lactic dehydrogenase identify a high-grade lymphoma-like myeloma. Barlogie B, et al. **Ann Intern Med** 1989 Apr 1;110(7):521-5

Amylase producing multiple myeloma [letter] Matsuzaki H, et al. **Blood** 1989 Aug 1;74(2):889

Ectopic production of salivary-type amylase by a IgA-lambda-type multiple myeloma. Hata H, et al. **Cancer** 1988 Oct 15;62(8):1511-5

Effects of a triazine antifolate (NSC 127755) on serine hydroxymethyltransferase in myeloma cells in culture. Snell K, et al. **Cancer Lett** 1989 Mar;44(3):217-20

Lactate dehydrogenase and its isoenzymes in serum from patients with multiple myeloma. Copur S, et al. **Clin Chem** 1989 Sep;35(9):1968-70

Leukocyte alkaline phosphatase (LAP) scores in African myelomatosis. Mukiibi JM, et al. **East Afr Med J** 1988 Mar; 65(3):179-82

Sialyltransferase activity and sialic acid levels in multiple myeloma and monoclonal gammopathy. Cohen AM, et al. **Eur J Haematol** 1989 Mar;42(3):289-92

EPIDEMIOLOGY

Incidence and outcome of multiple myeloma in Western Australia, 1960 to 1984. Nandakumar A, et al. **Aust N Z J Med** 1988 Oct;18(6):774-9

Trends in the incidence of multiple myeloma in Denmark 1943-1982: a study of 5500 patients. Hansen NE, et al. **Eur J Haematol** 1989 Jan;42(1):72-6

A case-control study of multiple myeloma nested in the American Cancer Society prospective study. Boffetta P, et al. **Int J Cancer** 1989 Apr 15;43(4):554-9

Multiple myeloma: epidemiological features in a well-defined population in Burgundy, France. Carli PM, et al. **Int J Epidemiol** 1989 Jun;18(2):330-3

Autoimmune disorders and multiple myeloma [letter] Cuzick J, et al. **Int J Epidemiol** 1989 Mar;18(1):283

[Immunoglobulin D multiple myeloma. A retrospective study in the Languedoc region] Le Quellec A, et al. **Presse Med** 1989 Jun 3;18(22):1110-3 (Eng. Abstr.) **(Fre)**

ETIOLOGY

B cell neoplasms and occupational asbestos exposure. Schwartz DA, et al. **Am J Ind Med** 1988;14(6):661-71

Infectious and noninfectious exposures in the etiology of light chain myeloma: a case-control study. Williams AR, et al. **Cancer Res** 1989 Jul 15;49(14):4038-41

Multiple myeloma in spouses [letter] Kanoh T. **Eur J Haematol** 1988 Oct;41(4):397 (7 ref.)

Secondary polycythemia associated with multiple myeloma. Inase N, et al. **Jpn J Med** 1989 May-Jun;28(3):396-8

[Occurrence of multiple myeloma 5 years after renal transplantation (letter)] Berthelemy C, et al. **Presse Med** 1988 Oct 1;17(33):1706 **(Fre)**

[Monoclonal gammopathy in HIV infection] Löhr HF, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1069-72 (Eng. Abstr.) **(Ger)**

[Radiation injuries] Hohenberg JK. **Strahlenschutz Forsch Prax** 1988;30:151-67 **(Ger)**

GENETICS

Plasma cell malignancy in the acquired immune deficiency syndrome. Association with Epstein-Barr virus. Voelkerding KV, et al. **Am J Clin Pathol** 1989 Aug; 92(2):222-8

Detection of hypodiploidy using multi-parameter flow cytometric analysis: a prognostic indicator in multiple myeloma. Morgan RJ Jr, et al. **Am J Hematol** 1989 Apr; 30(4):195-200

Identification of a second transforming gene, rasn, in a human multiple myeloma line with a rearranged c-myc allele. Ernst TJ, et al. **Blood** 1988 Oct;72(4):1163-7

Independent clonal origin of coexisting chronic lymphocytic leukaemia and multiple myeloma. Browett PJ, et al. **Br J Haematol** 1988 Sep;70(1):126-7

No detectable malignant B cells in the peripheral blood of patients with multiple myeloma. Clofent G, et al. **Br J Haematol** 1989 Mar;71(3):357-61

Chromosome rearrangement, t(6;14) (p21.1;q32.3), in multiple myeloma. Nishida K, et al. **Br J Haematol** 1989 Feb; 71(2):295-6

Simultaneous cell type identification and premature chromosome condensation analysis in a case of multiple myeloma. Petkovic I, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):203-17

Double i(9p) in hematology. Smadja N, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):217-9

Nonrandom rearrangement of chromosome 14 at band q32.33 in human lymphoid malignancies with mature B-cell phenotype. Nishida K, et al. **Cancer Res** 1989 Mar 1; 49(5):1275-81

Altered expression of growth-regulated protooncogenes in human malignant plasma cells. Palumbo AP, et al. **Cancer Res** 1989 Sep 1;49(17):4701-4

Aberrant expression of the K-ras proto-oncogene in B-cell malignancies. Lee J, et al. **Hematol Pathol** 1988;2(4):229-37

Extinction of expression of the translocated myc gene in somatic cell hybrids between mouse myeloma and L-cells. Greenberg A, et al. **Int J Cancer** 1989 Jan 15;43(1):87-92

Family history of autoimmune disorders and cancer in multiple myeloma. Linet MS, et al. **Int J Epidemiol** 1988 Sep;17(3):512-3

Familial aggregation of multiple myeloma and central nervous system diseases. Grufferman S, et al. **J Am Geriatr Soc** 1989 Apr;37(4):303-9

IgD/lambda plasmocytoma with immunoglobulin kappa light-chain genes in the germ-line configuration. Hauke G, et al. **J Clin Immunol** 1988 Sep;8(5):407-13

Clonal rearrangement of the beta-T cell receptor gene in multiple myeloma. Berenson J, et al. **Leukemia** 1989 Feb; 3(2):133-6

Nucleotide sequence of an unequal sister chromatid exchange site in a mouse myeloma cell line. Katzenberg DR, et al. **Mol Cell Biol** 1989 Mar;9(3):1324-6

Altered myc gene transcription and intron-induced stabilization of myc RNAs in two mouse plasmacytomas. Bauer SR, et al. **Oncogene** 1989 May;4(5):615-23

[Familial multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):740-1 **(Jpn)**

HISTORY

[Otto Kahler and multiple myeloma] Berkessy S. **Orv Hetil** 1988 Sep 4;129(36):1933-5 **(Hun)**

IMMUNOLOGY

Cell-mediated toxicity of interleukin-2-activated lymphocytes against autologous and allogeneic human myeloma cells. Shimazaki C, et al. **Acta Haematol (Basel)** 1988;80(4):203-9

Clinical and laboratory analysis of cases of light chain disease. Kraj M, et al. **Acta Med Pol** 1987;28(1-4):73-98

Multiple myeloma: relationship between light chain isotype suppression, labelling index of plasma cells, and CD38 expression on peripheral blood lymphocytes. Joshua DE, et al. **Am J Hematol** 1988 Sep;29(1):5-11

IgG subclass distribution in patients with multiple myeloma or with monoclonal gammopathy of undetermined significance. Papadea C, et al. **Ann Clin Lab Sci** 1989 Jan-Feb;19(1):27-37

Myelomonocytic antigen positive multiple myeloma. Grogan TM, et al. **Blood** 1989 Feb 15;73(3):763-9

The human myeloma cell line LP-1: a versatile model in which to study early plasma-cell differentiation and c-myc activation. Pegoraro L, et al. **Blood** 1989 Mar;73(4):1020-7

Clinical features of common acute lymphoblastic leukemia antigen (CALLA)-positive myeloma: report of four cases. Tamura J, et al. **Blut** 1989 May;58(5):229-33

Subepithelial corneal deposits in IgG lambda myeloma. Hill JC, et al. **Br J Ophthalmol** 1989 Jul;73(7):552-4

Natural killer cell activity in patients with multiple myeloma. Ogmundsdóttir HM. **Cancer Detect Prev** 1988; 12(1-6):133-43

IgG heavy-chain subclass typing of myeloma paraproteins by isoelectric focusing immunoblot analysis. Fasullo FJ Jr, et al. **Clin Chem** 1989 Mar;35(3):364-8

Demonstration of monoclonal IgE by isoelectric focusing: first reported case of IgE myeloma in Australia. McLachlan R, et al. **Clin Chem** 1988 Oct;34(10):2168-71

IgE pyroglobulinemia in multiple myeloma. Gallango ML, et al. **Clin Chim Acta** 1988 Aug 31;176(2):151-6

Serum monoclonal antibodies derived from patients with multiple myeloma react with mycobacterial phosphoinositides and nuclear antigens. Buskila D, et al. **Clin Exp Immunol** 1989 Jun;76(3):378-83

An analysis of myeloma plasma cell phenotype using antibodies defined at the IIIrd International Workshop on Human Leucocyte Differentiation Antigens. Jackson N, et al. **Clin Exp Immunol** 1988 Jun;72(3):351-6

Defective generation of alloreactive cytotoxic T lymphocytes (CTL) in human monoclonal gammopathies. Massaia M, et al. **Clin Exp Immunol** 1988 Aug;73(2):214-8

Suppression of polyclonal B cell proliferation mediated by supernatants from human myeloma bone marrow cell cultures. Peest D, et al. **Clin Exp Immunol** 1989 Feb; 75(2):252-7

Antigen stimulated IgM secretion by circulating B lymphocytes in patients with benign and malignant IgG gammopathy. Relationship to stage of disease. Pollack S, et al. **Clin Exp Immunol** 1989 Jan;75(1):12-7

Chemiluminescence response of polymorphonuclear leucocytes to serum-opsonized zymosan--a predictive parameter for infections and prognosis in multiple myeloma patients. Nagler A, et al. **Clin Lab Haematol** 1988; 10(4):365-75

B lymphocyte function in multiple myeloma: analysis of T cell- and monocyte-dependent antibody production. Petersen J, et al. **Eur J Haematol** 1989 Feb;42(2):193-201

Limiting dilution cloning of B cells from patients with multiple myeloma: emergence of non-malignant B-cell lines. Clofent G, et al. **Int J Cancer** 1989 Apr 15; 43(4):578-86

Low circulating T-helper cells in relapsing multiple myeloma. Hicks MJ, et al. **J Clin Lab Anal** 1989;3(4):202-8

Non-secretory lambda multiple myeloma [letter] Soriono G,

et al. **J Clin Pathol** 1989 May;42(5):556–7

Detection of intracytoplasmic immunoglobulin by flow cytometry in B-cell malignancies. Bardales RH, et al. **J Histochem Cytochem** 1989 Jan;37(1):83–9

Studies on the Fc receptors and masking substances on mouse and rat myeloma cells. Teshima H, et al. **Jpn J Exp Med** 1988 Aug;58(4):189–96

Simultaneous production of IgG lambda and IgA lambda in a clone of myeloma cells. Maruyama Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):86–92

Comparative analysis of immunodeficiency in patients with monoclonal gammopathy of undetermined significance and patients with untreated multiple myeloma. Pilarski LM, et al. **Scand J Immunol** 1989 Feb;29(2):217–28

Polyneuropathies associated with plasma cell dyscrasias. Kelly JJ Jr. **Semin Neurol** 1987 Mar;7(1):30–9 (24 ref.)

Non-excretory IgM-kappa myeloma: report of a case. Wang CR, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov; 87(11):1108–11

Monoclonal immunoglobulin gene rearrangement in peripheral lymphocytes of a patient with multiple myeloma. Palumbo AP, et al. **Tumori** 1989 Feb 28;75(1):1–3

[Light chain myeloma or the pitfalls of myeloma diagnosis] Zufferey P, et al. **Schweiz Med Wochenschr** 1989 Jun 3; 119(22):791–5 (Eng. Abstr.) (Fre)

[Multiple myeloma exhibiting 2 monoclonal immunoglobulins. Apropos of a case] Ben Abdeladhim A, et al. **Tunis Med** 1987 Oct;65(10):631–3 (Eng. Abstr.) (Fre)

[Two Bence Jones proteins of different immunologic types in multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1890–1 (10 ref.) (Jpn)

[Serum immunoglobulin types and their levels in patients with proliferative and autoimmune diseases of the hematopoietic system] Szmigiel Z. **Przegl Lek** 1989;46(4):404–9 (Eng. Abstr.) (Pol)

[Effect of BCG and cyclophosphamide on the antitumor activity of mouse peritoneal macrophages] Gromov SA, et al. **Eksp Onkol** 1989;11(3):63–6 (Eng. Abstr.) (Rus)

[Lymphocyte subpopulations of the peripheral blood in multiple myeloma patients studied by the immunocytochemical PAP method using monoclonal antibodies] Abramenko IV, et al. **Gematol Transfuziol** 1988 Aug;33(8):38–41 (Eng. Abstr.) (Rus)

[Characteristics of monoclonal B-lymphocytes in multiple myeloma in various phases of the disease] Golenkov AK, et al. **Gematol Transfuziol** 1988 Oct;33(10):16–9 (Eng. Abstr.) (Rus)

[Immunologic disorders in multiple myeloma] Golenkov AK, et al. **Sov Med** 1988;(11):18–9 (Eng. Abstr.) (Rus)

[Study of immunoglobulin synthesis using the hemolytic plaque technic in lymphoproliferative syndromes of B-cell lineage] González Echeverría FJ, et al. **Sangre (Barc)** 1988 Aug;33(4):269–76 (Eng. Abstr.) (Spa)

METABOLISM

M-protein kinetics in multiple myeloma treated with melphalan, ifosfamide, prednisolone, nitrosourea and vincristine in combination. Ishii H. **Acta Med Okayama** 1988 Oct;42(5):279–86

Tetramer Bence Jones protein in the immunoproliferative diseases. Angioimmunoblastic lymphadenopathy, primary amyloidosis, and multiple myeloma. Kosaka M, et al. **Am J Clin Pathol** 1989 Jun;91(6):639–46 (47 ref.)

IgD multiple myeloma: a cure at 21 years. Kyle RA. **Am J Hematol** 1988 Sep;29(1):41–3

Production of interleukin-1 by bone marrow myeloma cells. Cozzolino F, et al. **Blood** 1989 Jul;74(1):380–7

Production of cytokines by bone marrow cells obtained from patients with multiple myeloma. Lichtenstein A, et al. **Blood** 1989 Sep;74(4):1266–73

Peanut agglutinin shows specificity for bone marrow plasma cells. Rhodes EG, et al. **Br J Haematol** 1989 Feb; 71(2):183–7

In vitro production of beta 2 microglobulin by human myeloma cells. Bataille R, et al. **Cancer Invest** 1988; 6(3):271–7

Direct relation of DNA lesions in multidrug-resistant human myeloma cells to intracellular doxorubicin concentration. Bellamy WT, et al. **Cancer Res** 1988 Nov 15;48(22):6360–4

Verapamil reversal of doxorubicin resistance in multidrug-resistant human myeloma cells and association with drug accumulation and DNA damage. Bellamy WT, et al. **Cancer Res** 1988 Nov 15;48(22):6365–70

Production of interleukin 1 beta, a potent bone resorbing cytokine, by cultured human myeloma cells. Yamamoto I, et al. **Cancer Res** 1989 Aug 1;49(15):4242–6

Double-stranded RNA excess in hematologic diseases: clinical implications. Musso M, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):5–9

Immunoreactive cytokeratins in plasmacytomas. Wotherspoon AC, et al. **Histopathology** 1989 Feb; 14(2):141–50

The defect in peripheral blood B-cell activation in patients with multiple myeloma is not due to a deficiency in the production of B-cell growth and differentiation factors. Commes T, et al. **J Clin Immunol** 1989 Jan;9(1):65–73

High-affinity receptors for vasoactive intestinal peptide on human myeloma cells. Finch RJ, et al. **J Immunol** 1989 Mar 15;142(6):1977–81

Complete Clq deficiency associated with IgG multiple myeloma. Tokumitsu S, et al. **Jpn J Med** 1989 Mar–Apr; 28(2):216–8

Oral melphalan pharmacokinetics—relation to dose in patients with multiple myeloma. Ehrsson H, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):151–4

Amylase-producing multiple myeloma. Cytochemical, immunohistochemical and immunoelectron microscopic studies. Takeya M, et al. **Virchows Arch [A]** 1989; 415(3):219–24

[A case report of IgD myeloma with acute renal failure and deposition of lambda light chain along the tubular basement membrane] Takeda A, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):259–66 (Eng. Abstr.) (Jpn)

MICROBIOLOGY

Elimination of mycoplasmas from mouse myeloma cells by intraperitoneal passage in mice and by antibiotic treatment. Hirschberg L, et al. **Hybridoma** 1989 Apr;8(2):249–57

MORTALITY

Age as a prognostic factor in multiple myeloma [letter] Cohen HJ. **Blood** 1989 Jan;73(1):353

Reassessment of the relationship between M-protein decrement and survival in multiple myeloma. Palmer M, et al. **Br J Cancer** 1989 Jan;59(1):110–2

Prognostic factors and classification in multiple myeloma. San Miguel JF, et al. **Br J Cancer** 1989 Jan;59(1):113–8

PATHOLOGY

Cytology of plasma cell myeloma in bronchial washing. Riazmontazer N, et al. **Acta Cytol** 1989 Jul–Aug; 33(4):519–22

Multiple myeloma—transformation to high-grade malignant lymphoma. Wahlin A, et al. **Acta Oncol** 1988;27(4):411–3

Bone marrow fibrosis in multiple myeloma [letter] Riccardi A, et al. **Am J Clin Pathol** 1988 Dec;90(6):753–4

Abnormalities in lymphocyte profile and specificity repertoire of patients with Waldenstrom's macroglobulinemia, multiple myeloma, and IgM monoclonal gammopathy of undetermined significance. Pilarski LM, et al. **Am J Hematol** 1989 Feb;30(2):53–60

BSF-2/IL-6 does not augment Ig secretion but stimulates proliferation in myeloma cells. Tanabe O, et al. **Am J Hematol** 1989 Aug;31(4):258–62

Cytoplasmic crystals in multiple myeloma-associated Fanconi's syndrome. A morphological study including immunoelectron microscopy. Truong LD, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):781–5

Response patterns of purified myeloma cells to hematopoietic growth factors. Anderson KC, et al. **Blood** 1989 May 15; 73(7):1915–24

Myelomonocytic myeloma cell line (LB 84-1). Durie BG, et al. **Blood** 1989 Feb 15;73(3):770–6

Interleukin-1 accelerates autocrine growth of myeloma cells through interleukin-6 in human myeloma. Kawano M, et al. **Blood** 1989 Jun;73(8):2145–8

Paracrine rather than autocrine regulation of myeloma-cell growth and differentiation by interleukin-6. Klein B, et al. **Blood** 1989 Feb;73(2):517–26

Elimination of myeloma cells from bone marrow by using monoclonal antibodies and magnetic immunobeads. Shimazaki C, et al. **Blood** 1988 Oct;72(4):1248–54

Interleukin-6 is a potent myeloma-cell growth factor in patients with aggressive multiple myeloma. Zhang XG, et al. **Blood** 1989 Jul;74(1):11–3

Osteosclerotic myeloma with polyneuropathy and hypocalcemia. Ludescher C, et al. **Blut** 1989 Apr; 58(4):207–10 (22 ref.)

Normal myeloid progenitors (CFU-GM) in multiple myeloma: a preliminary study in view of autologous BMT. Lemoli RM, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):373–7

Cell kinetics and therapy in multiple myeloma: an update of the M83 protocol. Pileri A, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:168–9

Circulating monotypic B-cells in multiple myeloma: association with lambda paraproteins. Bagg A, et al. **Br J Haematol** 1989 Jun;72(2):167–72

Selective depletion of human myeloma clonogenic stem cells from bone marrow cell preparations by a plasma-cell reactive antibody and complement. Stone MJ, et al. **Cancer Detect Prev** 1988;12(1–6):621–35

Amyloid neuropathy in light chain multiple myeloma. Schenone A, et al. **Clin Neuropathol** 1989 May–Jun; 8(3):156–7

Atypical scleroderma associated with multiple myeloma. Nakanishi H, et al. **Dermatologica** 1989;178(3):176–8

Biochemical, kinetic and cytochemical approaches resolve Golgi subcompartments of IgM-secreting rat myeloma cells. Gupta DK, et al. **Eur J Cell Biol** 1989 Feb;48(1):52–63

A novel lectin-gold density perturbation eliminates plasma membrane contaminants from Golgi-enriched subcellular fractions. Gupta DK, et al. **Eur J Cell Biol** 1989 Feb; 48(1):64–70

Appearance of a second malignant clone associated with extramedullary spread in a case of 'smouldering' multiple myeloma [letter] Majumdar G. **Eur J Haematol** 1989 Apr; 42(4):412–3

Plasma cell dyscrasias. Buss DH, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):603–15 (33 ref.)

Cell kinetics of multiple myeloma. Boccadoro M, et al. **Hematol Pathol** 1987;1(3):137–42 (40 ref.)

An alternative method for the isolation of NS-1 hybridomas using cholesterol auxotrophy of NS-1 mouse myeloma cells. Myoken Y, et al. **In Vitro Cell Dev Biol** 1989 May; 25(5):477–80

Establishment of five human myeloma cell lines. Namba M, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):723–9

Effects of proximate cholesterol precursors and steroid hormones on mouse myeloma growth in serum-free medium. Sato JD, et al. **In Vitro Cell Dev Biol** 1988 Dec; 24(12):1223–8

Multiple myeloma presenting as localized expansile jaw tumour. Raubenheimer EJ, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):382–5

Bulky extramedullary plasmacytomata: rare mode of relapse in myelomatosis. Davies SV, et al. **J Clin Pathol** 1989 Mar; 42(3):246–9

Establishment of two interleukin 6 (B cell stimulatory factor 2/interferon beta 2)-dependent human bone marrow-derived myeloma cell lines. Shimizu S, et al. **J Exp Med** 1989 Jan 1;169(1):339–44

Multiple myeloma with two rate complications. Chugh SN, et al. **J Indian Med Assoc** 1988 Sep;86(9):246–8

Characterization of a novel myeloma cell line, MM.1. Goldman-Leikin RE, et al. **J Lab Clin Med** 1989 Mar; 113(3):335–45

Prediction of doxorubicin resistance in vitro in myeloma, lymphoma, and breast cancer by P-glycoprotein staining. Salmon SE, et al. **J Natl Cancer Inst** 1989 May 3; 81(9):696–701

Clonogenic myeloma cells and chemotherapy [letter] [published erratum appears in Lancet 1989 Feb 4;1(8632):288] Peest D, et al. **Lancet** 1989 Jan 7;1(8628):51

Human long-term bone marrow cultures (HLTBMCs) in myelomatous disorders. Berneman ZN, et al. **Leukemia** 1989 Feb;3(2):151–4

Establishment and characterization of two human myeloma cell lines secreting kappa light chains. Eton O, et al. **Leukemia** 1989 Oct;3(10):729–35

Cell growth kinetics of cultured human myeloma cell lines, KMM-1 and KMS-5. Ohtsuki T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1052–8

Dual regulatory effects of monocytes-macrophages on the proliferation of myeloma cells. Shimizu S, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1550–7

Studies of regulatory effect of rabbit reticulocyte cytoplasmic factors on malignancy of mouse myeloma cells. Xue SP, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988;3(4):191–8

Cytotoxic activity of an interleukin 6-Pseudomonas exotoxin fusion protein on human myeloma cells. Siegall CB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9738–42

In vivo induction of malignant transformation of nude mouse B lymphocytes by a human multiple myeloma. Gao TX, et al. **Sci Sin [B]** 1988 Aug;31(8):953–61

Bone marrow purging for multiple myeloma by avidin-biotin immunoadsorption. Lemoli RM, et al. **Transplantation** 1989 Feb;47(2):385–7

[The percentage of bone marrow plasmacytes and prognosis in multiple myeloma] Paule B, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):969–72 (Eng. Abstr.) (Fre)

[Lymphoma of the conjunctiva—clinical and histopathologic course over 10 years] de la Fuente PF, et al. **Fortschr Ophthalmol** 1988;85(6):651–3 (Eng. Abstr.) (Ger)

[Acquired hyalinosis cutis et mucosae in plasmacytoma with monoclonal IgG-lambda gammopathy] von der Helm D, et al. **Hautarzt** 1989 Mar;40(3):153–7 (Eng. Abstr.) (Ger)

[Angiofollicular lymphatic hyperplasia with plasmacytoma and polyneuropathy: a case report with immunohistochemical study] Dworák O, et al. **Klin Wochenschr** 1988 Jul 1;66(13):591–5 (Eng. Abstr.) (Ger)

[Hypercalcemic crisis and multiple osteolyses in an elderly patient (clinical conference)] Pohl C, et al. **Med Klin** 1989 Feb 15;84(2):90–7 (Ger)

[Cardiomyopathy in plasmacytoma-associated light-chain deposition disease] von Herbay A, et al. **Pathologe** 1989 Jul;10(4):257–60 (Ger)

[Extramedullary plasmacytoma] Berkessy S, et al. **Orv Hetil** 1988 Aug 21;129(34):1817–9 (Eng. Abstr.) (Hun)

[Clinical staging of multiple myeloma. Comparison of 7 different systems] Pasqualetti P, et al. **G Clin Med** 1988 Dec;69(12):741–50 (Eng. Abstr.) (Ita)

[Multiple myeloma and retroperitoneal fibrosis] Beccari G. **Minerva Med** 1989 Jan;80(1):79–80 (Ita)

[A case of corneal crystalline deposits associated with multiple myeloma] Kawamura H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1473–8 (18 ref.) (Eng. Abstr.) (Jpn)

[A case of non-secretory multiple myeloma showing definite bone healing] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):697–700 (Jpn)

[Cutaneous plasmacytoma with eventual development into multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1706–9 (Jpn)

[Nuclear lobulation in the plasma cells of a patient with

multiple myeloma (Bence Jones type)] Fujii H, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2086–90 (Eng. Abstr.) **(Jpn)**

[CALLA–positive leukemic multiple myeloma of IgA–kappa type] Matsumura I, et al. **Rinsho Ketsueki** 1989 Apr; 30(4):491–6 (Eng. Abstr.) **(Jpn)**

[Kinetic characteristics of tumor growth in multiple myeloma] Golenkov AK, et al. **Gematol Transfuziol** 1988 Dec;33(12):34–6 (Eng. Abstr.) **(Rus)**

[Effectiveness of formation of murine B–hybridomas by using various polyethylene glycols] Paniutich AV. **Gematol Transfuziol** 1988 Dec;33(12):47–51 **(Rus)**

[Clinical importance of studying the proliferative activity of plasma cells in multiple myeloma] Tsykalov VA, et al. **Gematol Transfuziol** 1988 Jul;33(7):36–40 (Eng. Abstr.) **(Rus)**

[Atypical picture of lambda and kappa light chain multiple myeloma with lymphoplasmocytic infiltration of the bone marrow] Gotić M, et al. **Srp Arh Celok Lek** 1988 Nov–Dec; 116(11–12):1041–9 (Eng. Abstr.) **(Scc)**

[Prognosis factors in multiple myeloma (letter)] Bladé J, et al. **Rev Clin Esp** 1988 Sep;183(4):215 **(Spa)**

[Adult T–cell lymphoblastic lymphoma associated with quiescent multiple myeloma] Obeso Fernández G, et al. **Rev Clin Esp** 1989 Apr;184(7):367–70 (Eng. Abstr.) **(Spa)**

[Multiple myeloma. Clinical experience of 15 years in the 10th region] Cristoffanini AP, et al. **Rev Med Chil** 1987 Nov;115(11):1061–5 (Eng. Abstr.) **(Spa)**

[Cell types in multiple myeloma: analysis of the correlation of bone marrow aspirates and biopsies according to 2 classifications (letter)] de la Rosa Alcaide MA, et al. **Sangre (Barc)** 1989 Aug;34(4):313–4 **(Spa)**

[Immunoblastic lymphoma as the terminal phase of an IgG myeloma (letter) (published erratum appears in Sangre (Barc) 1989 Feb;34(1):79)] Romero MS, et al. **Sangre (Barc)** 1988 Jun;33(3):240–1 **(Spa)**

PHYSIOPATHOLOGY

Interleukin–1 beta rather than lymphotoxin as the major bone resorbing activity in human multiple myeloma. Kawano M, et al. **Blood** 1989 May 1;73(6):1646–9

Pharmacokinetics of oral melphalan in relation to renal function in multiple myeloma patients. Osterborg A, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):899–903

Interleukin 3 and interleukin 6 synergistically promote the proliferation and differentiation of malignant plasma cell precursors in multiple myeloma. Bergui L, et al. **J Exp Med** 1989 Aug 1;170(2):613–8

RADIOGRAPHY

Pancreatic plasmacytoma: CT findings. Wilson TE, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1227–8

The value of computed tomography in radiation treatment for multiple myeloma. North CJ, et al. **Australas Radiol** 1988 Nov;32(4):468–72

[Idiopathic osteoporosis?] Montag M, et al. **Radiologe** 1989 Mar;29(3):151–2 **(Ger)**

[Diagnostic value of CT in an unusual case of multiple myeloma] Gozzi G, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):221–3 **(Ita)**

[Isolated involvement of the fibula as a diagnostic finding in multiple myeloma (letter)] López Gómez LA, et al. **Sangre (Barc)** 1989 Apr;34(2):159 **(Spa)**

RADIONUCLIDE IMAGING

Non–osseous bone scan abnormalities in multiple myeloma associated with hypercalcemia. Eagel BA, et al. **Clin Nucl Med** 1988 Dec;13(12):869–73

[Bone marrow scintigraphy in multiple myeloma. A comparison with bone scintigraphy and skeletal radiology] Feggi LM, et al. **Radiol Med (Torino)** 1988 Oct;76(4):311–5 (Eng. Abstr.) **(Ita)**

RADIOTHERAPY

Hemibody irradiation. An effective second–line therapy in drug–resistance multiple myeloma. Singer CR, et al. **Cancer** 1989 Jun 15;63(12):2446–51

Radiotherapy in the treatment of multiple myeloma. Bosch A, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1363–9

Controlling multiple myeloma [letter] Ellwanger FR. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):909

Hemibody irradiation in stage III multiple myeloma: results of 20 patients. Troussard X, et al. **Nouv Rev Fr Hematol** 1988;30(4):213–8

SECONDARY

Cutaneous involvement of multiple myeloma and extramedullary plasmacytoma. Patterson JW, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):879–90 (46 ref.)

SECRETION

Spontaneous secretion of tumor necrosis factor–beta by human myeloma cell lines. Bataille R, et al. **Cancer** 1989 Mar 1;63(5):877–80

Does myeloma secrete an osteoblast inhibiting factor? Evans CE, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):288–90

Plasmablastic immunoglobulin–secreting lymphoma. Report of a case and a glimpse at the prognosis. Köchling G, et al. **Klin Wochenschr** 1988 Oct 3;66(19):990–4 (34 ref.)

SURGERY

Controversies in management of sternal tumors. Gabbay S, et al. **Ann Thorac Surg** 1989 Sep;48(3):428–31

Marrow transplantation following busulfan and cyclophosphamide in multiple myeloma. Copelan EA, et al. **Bone Marrow Transplant** 1988 Jul;3(4):363–5

[Bone marrow transplantation—a promising new treatment for myeloma] Koskela K, et al. **Duodecim** 1988; 104(4):247–50 **(Fin)**

THERAPY

In vivo induction of gamma interferon and tumor necrosis factor by interleukin–2 infusion following intensive chemotherapy or autologous marrow transplantation. Heslop HE, et al. **Blood** 1989 Sep;74(4):1374–80

Allogeneic bone marrow transplantation in multiple myeloma: a report of four cases. Nikoskelainen J, et al. **Bone Marrow Transplant** 1988 Sep;3(5):495–500

Bone marrow transplantation in multiple myeloma: current status and future perspectives. Tura S. **Bone Marrow Transplant** 1986 May;1(1):17–20 (26 ref.)

Circulating stem cell autografts in high–risk myeloma [letter] Bell AJ, et al. **Br J Haematol** 1989 Jan;71(1):162–3

Autograft using peripheral blood stem cells collected after high dose melphalan in high risk multiple myeloma [letter] Henon P, et al. **Br J Haematol** 1988 Oct;70(2):254–5

Autologous blood stem cell transplantation in high–risk multiple myeloma [letter] Reiffers J, et al. **Br J Haematol** 1989 Jun;72(2):296–7

Immunosuppressive effects of recombinant interferon–alpha during long–term treatment of cancer patients. Teichmann JV, et al. **Cancer** 1989 May 15;63(10):1990–3

The effect of hematoporphyrin derivative and human erythrocyte ghost encapsulated hematoporphyrin derivative on a mouse myeloma cell line. McHale AP, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):157–64

Elimination of chemoresistant multiple myeloma clonogenic colony–forming cells by combined treatment with a plasma cell–reactive monoclonal antibody and a P–glycoprotein–reactive monoclonal antibody. Tong AW, et al. **Cancer Res** 1989 Sep 1;49(17):4829–34

Melphalan and prednisone plus total bone marrow irradiation as initial treatment for multiple myeloma. McIntyre OR, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1007–12

Combined alpha–2C–interferon/VMCP polychemotherapy versus VMCP polychemotherapy as induction therapy in multiple myeloma: a prospective randomized trial. Scheithauer W, et al. **J Biol Response Mod** 1989 Apr; 8(2):109–15

Plasma exchange therapy in acute renal failure due to multiple myeloma. Cagnoli L, et al. **Life Support Syst** 1983; 1 Suppl 1:102–5

Quality of life and care in leukemia, myeloma and non–malignant disease. Opinions of patients and relatives, and effects of geography and time. Osby E, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):133–41

Treatment of multiple myeloma by high dose chemotherapy, total body irradiation and autologous blood stem cell autograft. Fermand JP, et al. **Nouv Rev Fr Hematol** 1989; 31(2):85–7

VMCP chemotherapy with or without interferon–alpha–2 in newly diagnosed patients with multiple myeloma. Preis P, et al. **Onkologie** 1989 Feb;12(1):27–9

Recombinant alpha–interferon as salvage therapy in multiple myeloma. A pilot study. Jacobs P, et al. **S Afr Med J** 1989 Aug 5;76(3):100–2

The role of interferons in the treatment of hematologic malignancies. Gutterman JU. **Semin Hematol** 1988 Jul;25(3 Suppl 3):3–8 (15 ref.)

Interferons in the management of multiple myeloma. Cooper MR. **Semin Oncol** 1988 Oct;15(5 Suppl 5):21–5 (22 ref.)

[Myeloma and Waldenström's macroglobulinemia] Palva I. **Duodecim** 1989;105(11):1088–94 (41 ref.) **(Fin)**

[New therapeutic approaches in multiple myeloma] Harousseau JL. **Ann Med Interne (Paris)** 1989;140(1):45–9 (49 ref.) **(Fre)**

[Treatment of hematologic diseases with alpha interferon] Castaigne S. **Bull Cancer (Paris)** 1988;75(9):859–62 (Eng. Abstr.) **(Fre)**

[Collection and transplantation of hematopoietic stem cells of circulating blood] Körbling M, et al. **Beitr Infusionther** 1988;21:322–34 **(Ger)**

[Interferon therapy in multiple myeloma] Ludwig H, et al. **Onkologie** 1988 Aug;11(4):192–6 (Eng. Abstr.) **(Ger)**

[Significance of priming of hosts with virus in the tumor–specific immunotherapy model utilizing virus–reactive helper T cell activity] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1007–14 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Ultrastructure of multinucleated giant myeloma cells: report of one case. Kurabayashi H, et al. **Am J Hematol** 1989 Aug;31(4):284–5

Crystalline glomerular inclusions in multiple myeloma. Carstens PH, et al. **Am J Kidney Dis** 1989 Jul;14(1):56–60

Ultrastructure of myeloma cells in patients with common acute lymphoblastic leukemia antigen (CALLA)–positive myeloma. Kurabayashi H, et al. **Cancer Res** 1988 Nov 1; 48(21):6234–7

URINE

Renal impairment in myeloma: negative association with isoelectric point of excreted Bence–Jones protein. Norden AG, et al. **J Clin Pathol** 1989 Jan;42(1):59–62

VETERINARY

Hemorrhagic diathesis caused by multiple myeloma in a three–month–old foal. Henry M, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):392–4

Blindness in a dog with IgA–forming myeloma. Kirschner SE, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):349–50

MULTIPLE ORGAN FAILURE

Plasma levels of elastase 1 protease inhibitor complex in the monitoring of ARDS and multi–organ failure—a summary of three clinical trials. Redl H, et al. **Adv Exp Med Biol** 1988;240:457–64

Intensive care unit survival of patients with systemic illness. Raffin TA. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S28–35 (49 ref.)

Analysis of multiple organ system failure in trauma and nontrauma patients. Crump JM, et al. **Am Surg** 1988 Dec; 54(12):702–8

The pathogenesis of multiple organ failure [editorial] Pruitt BA Jr. **Arch Surg** 1988 Dec;123(12):1518

Inflammation and trauma. Trunkey DD. **Arch Surg** 1988 Dec; 123(12):1517 (1 ref.)

Impact of a comprehensive supportive care team on management of hopelessly ill patients with multiple organ failure. Field BE, et al. **Chest** 1989 Aug;96(2):353–6

Energy expenditure in postoperative multiple organ failure with acute renal failure. Soop M, et al. **Clin Nephrol** 1989 Mar;31(3):139–45

Multiple systems organ failure. **Crit Care Clin** 1989 Apr; 5(2):195–413

Relationship between neopterin and granulocyte elastase plasma levels and the severity of multiple organ failure. Pacher R, et al. **Crit Care Med** 1989 Mar;17(3):221–6

The septic multiple–trauma patient. Stillwell M, et al. **Infect Dis Clin North Am** 1989 Mar;3(1):155–83 (232 ref.)

Sequential hemofiltration in MOF associated with paracetamol intoxication and gram–negative sepsis [letter] Fudin R, et al. **Intensive Care Med** 1989;15(5):328

Predicting the outcome of exploratory laparotomy in ICU patients with sepsis or organ failure. Sutherland FR, et al. **J Trauma** 1989 Feb;29(2):152–7

Loss of the will to live in multisystem organ failure [letter] Tempereau CE, et al. **JAMA** 1988 Dec 16;260(23):3437–8

Multiple organ failure without sepsis following surgical treatment of advanced gastric carcinoma. Miyashita M, et al. **Jpn J Surg** 1988 Nov;18(6):705–8

Multiple organ system failure in an infant with Legionella infection. Hervás JA, et al. **Pediatr Infect Dis J** 1988 Sep; 7(9):671–3

Prophylaxis and therapy of the multiple organ failure syndrome (MOFS): early ventilatory support. Benzer H, et al. **Prog Clin Biol Res** 1989;308:783–90 (8 ref.)

Leukocyte induced pulmonary damage using intraperitoneal zymosan. Chiara O, et al. **Prog Clin Biol Res** 1989;308:73–6

The trigger for posttraumatic multiple organ failure: surgical sepsis or inflammation? Nerlich ML. **Prog Clin Biol Res** 1989;308:413–7

Lung in shock—posttraumatic lung failure (organ failure)—MOFS. Schlag G, et al. **Prog Clin Biol Res** 1989; 308:3–16 (15 ref.)

Tissue oxygen debt as a determinant of postoperative organ failure. Shoemaker WC, et al. **Prog Clin Biol Res** 1989; 308:133–6

Endotoxin does not play a key role in the pathogenesis of multiple organ failure. An experimental study. van Bebber IP, et al. **Prog Clin Biol Res** 1989;308:419–23

Decontamination of the gastrointestinal tract and prevention of multiple organ failure. An experimental study. van Bebber IP, et al. **Prog Clin Biol Res** 1989;308:827–33

Septic adult respiratory distress syndrome and multiple system organ failure. Villar J, et al. **Prog Clin Biol Res** 1989;308:57–60

Cellular interactions in sepsis induced organ failure. Zeck–Kapp G, et al. **Prog Clin Biol Res** 1989;308:113–8 (9 ref.)

Viscerotropic Rocky Mountain spotted fever in southeastern Texas: report of a survivor with atypical manifestations and multiple organ failure. Lee SM. **South Med J** 1989 May;82(5):640–2

[Multiple organ failure: a new syndrome in the clinical course of critical patients] Brienza A. **Ann Ital Chir** 1988; 60(1):39–41 **(Ita)**

[Retrospective evaluation of multiple organ failure while using assisted circulation] Orime Y, et al. **Kyobu Geka** 1988 Jul;41(8):619–26 (Eng. Abstr.) **(Jpn)**

[The management of multiple organ failure (MOF) due to sepsis—a retrospective study of 198 patients] Imanaka H, et al. **Masui** 1988 Aug;37(8):904–9 (Eng. Abstr.) **(Jpn)**

[A review of post–operative multiple organ failure in peripheral arterial diseases] Kurihara H, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1908–13 (Eng. Abstr.) **(Jpn)**

[The consideration of multiple organ failure following

open-heart surgery to valvular disease] Hisatomi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2106–11 (Eng. Abstr.) **(Jpn)**

[Predisposing factors and prognosis in multiple organ failure after surgery of acquired cardiac disease] Mori A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2425–30 (Eng. Abstr.) **(Jpn)**

[Value of amikacin in multiple organ failure] Rykowski H, et al. **Wiad Lek** 1988 Aug 15;41(16):1049–52 (Eng. Abstr.) **(Pol)**

[Methods and means of controlling endogenous toxemia and multiple organ failure in peritonitis] Bachev II. **Klin Med (Mosk)** 1989 May;67(5):28–32 (35 ref.) **(Rus)**

[Multiple organ failure syndrome in infection] Konychev AV. **Vestn Khir** 1988 May;140(5):139–44 (56 ref.) **(Rus)**

BLOOD

Prognostic value of serum osmolality gap in patients with multiple organ failure treated with hemopurification. Hirasawa H, et al. **Artif Organs** 1988 Oct;12(5):382–7

CHEMICALLY INDUCED

Multiple organ failure during interleukin-2 administration and LAK cells infusion. Sculier JP, et al. **Intensive Care Med** 1988;14(6):666–7

[Possible association between etiology of multiple organ failure and ingestion of non-steroidal anti-inflammatory drugs: description of a case] Berlot G, et al. **G Clin Med** 1988 Nov;69(11):671–3 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Continuous arteriovenous hemodialysis: an alternative therapy for acute renal failure associated with critical illness. Gibney RT, et al. **Can Med Assoc J** 1988 Nov 1; 139(9):861–6

Etiologic factors of jaundice in severely ill patients. A retrospective study in patients admitted to an intensive care unit with severe trauma or with septic intra-abdominal complications following surgery and without evidence of bile duct obstruction. te Boekhorst T, et al. **J Hepatol** 1988 Aug;7(1):111–7

DRUG THERAPY

[Multiple system organ failure] He R. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):246–9 (16 ref.) **(Chi)**

[Protective effects of anti-oxidants in hepatic and pulmonary injuries subsequent to bowel ischemia] Sheng ZY. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):183–6, 14 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Role of phospholipase A in multiorgan failure with special reference to ARDS and acute renal failure (ARF). Baur M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):196–202

ETIOLOGY

Splanchnic perfusion and sepsis. Fry DE. **Prog Clin Biol Res** 1989;299:9–17 (29 ref.)

The role of the complement system in the pathogenesis of multiple organ failure in shock. Zimmermann T, et al. **Prog Clin Biol Res** 1989;308:291–7

[Postburn multiple organ failure] Yang ZC, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):31–3 (Eng. Abstr.) **(Chi)**

[Role of the liver in multiple organ failure] Meng XJ. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):191–3, 14 (Eng. Abstr.) **(Chi)**

[Clinical features of multiple organ failure in the aged] Wang SW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr; 68(4):187–90, 14 (Eng. Abstr.) **(Chi)**

[An autopsied case of rheumatoid arthritis with multiple organ failure following intractable hemorrhage from the urinary bladder due to amyloid A deposition] Sato K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1726–30 **(Jpn)**

METABOLISM

Hepatic drug disposition in multiple organ failure. Schregel W, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):638–42

Metabolic manifestations of multiple systems organ failure. Cerra FB. **Crit Care Clin** 1989 Jan;5(1):119–31 (72 ref.)

Hypermetabolism-organ failure syndrome: a metabolic response to injury. Cerra FB. **Crit Care Clin** 1989 Apr; 5(2):289–302 (50 ref.)

Cellular oxygen utilization during multiple organ failure. Gutierrez G, et al. **Crit Care Clin** 1989 Apr;5(2):271–87 (101 ref.)

Tissue oxygen debt as a determinant of lethal and nonlethal postoperative organ failure. Shoemaker WC, et al. **Crit Care Med** 1988 Nov;16(11):1117–20

Invited comment: hypermetabolic states and organ failure. Andrassy RJ. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6 Suppl):69S–77S

Sepsis and exogenous lipid modulation. Cerra FB, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6 Suppl):63S–68S (23 ref.)

MORTALITY

[Burn mortality and multiple organ failures] Zhang HS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):128–9 **(Chi)**

[Multiple organ failure syndrome: correlation of mortality and the Modified Criteria for Multiple Organ Failure] García-González ER, et al. **Bol Med Hosp Infant Mex** 1989 Jul;46(7):470–6 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Neutrophil accumulation and structural changes in nonpulmonary organs after acute lung injury induced by phorbol myristate acetate. Mizer LA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1017–26

Whole-body inflammation in trauma patients. An autopsy study. Nuytinck HK, et al. **Arch Surg** 1988 Dec; 123(12):1519–24 (20 ref.)

Multi-organ damage resulting from experimental faecal peritonitis. Tighe D, et al. **Clin Sci** 1989 Mar;76(3):269–76

Musculoskeletal debility and multiorgan dysfunction. Schreiner RD, et al. **J Tenn Med Assoc** 1988 Nov; 81(11):697–8

Neutrophil-mediated vascular injury in shock and multiple organ failure. Vedder NB, et al. **Prog Clin Biol Res** 1989; 299:181–91 (48 ref.)

[Types of death: the thanatologic bridge between principle disease and cause of death] Thieke C, et al. **Pathologe** 1988 Jul;9(4):240–4 **(Ger)**

PHYSIOPATHOLOGY

Multiorgan failure and its management in the intensive therapy unit. Stoddart JC. **Br Med Bull** 1988 Apr; 44(2):475–98 (145 ref.)

Multiple organ damage caused by tumor necrosis factor and prevented by prior neutrophil depletion. Mallick AA, et al. **Chest** 1989 May;95(5):1114–20

Hepatic dysfunction in the adult respiratory distress syndrome. Schwartz DB, et al. **Chest** 1989 Apr;95(4):871–5

Circulatory disturbances in multiple systems organ failure. Bersten A, et al. **Crit Care Clin** 1989 Apr;5(2):233–54 (132 ref.)

Multiple systems organ failure (MSOF): lessons learned from the adult respiratory distress syndrome (ARDS). Hudson LD. **Crit Care Clin** 1989 Jul;5(3):697–705 (30 ref.)

Multiple systems organ failure: epidemiology and prognosis. Knaus WA, et al. **Crit Care Clin** 1989 Apr;5(2):221–32 (11 ref.)

Induction of tissue injury and altered cardiovascular performance by platelet-activating factor: relevance to multiple systems organ failure. Lefer AM. **Crit Care Clin** 1989 Apr;5(2):331–52 (146 ref.)

Prostaglandins, cyclo-oxygenase inhibitors, and thromboxane synthetase inhibitors in the pathogenesis of multiple systems organ failure. Petrak RA, et al. **Crit Care Clin** 1989 Apr; 5(2):303–14 (77 ref.)

Multiple systems organ failure: malignant intravascular inflammation. Pinsky MR. **Crit Care Clin** 1989 Apr; 5(2):195–8

Multiple systems organ failure: failure of host defense homeostasis. Pinsky MR, et al. **Crit Care Clin** 1989 Apr; 5(2):199–220 (83 ref.)

Oxygen delivery and uptake by peripheral tissues: physiology and pathophysiology. Schumacker PT, et al. **Crit Care Clin** 1989 Apr;5(2):255–69 (63 ref.)

Proposed role for leukotrienes in the pathophysiology of multiple systems organ failure. Sprague RS, et al. **Crit Care Clin** 1989 Apr;5(2):315–29 (88 ref.)

Postoperative multiple organ failure. Waxman K. **Crit Care Clin** 1987 Apr;3(2):429–40 (40 ref.)

The therapeutic value of vasodilator prostaglandins in multiple organ failure associated with sepsis. Bihari DJ, et al. **Intensive Care Med** 1988;15(1):2–7 (41 ref.)

Predicting outcome among intensive care unit patients using computerised trend analysis of daily Apache II scores corrected for organ system failure. Chang RW, et al. **Intensive Care Med** 1988;14(5):558–66

Plasma endotoxin as a predictor of multiple organ failure and death in systemic meningococcal disease. Brandtzaeg P, et al. **J Infect Dis** 1989 Feb;159(2):195–204

Multiple organ failure (MOF) and nutritional support. Mizote H, et al. **Kurume Med J** 1988;35(3):139–45

Role of endotoxin and proteases in multiple organ failure (MOF). Aasen AO, et al. **Prog Clin Biol Res** 1989; 308:315–22

Is skeletal muscle PO2 related to the severity of multiple organ failure and survival in critically ill patients? A preliminary study. Beerthuizen GI, et al. **Prog Clin Biol Res** 1989;308:137–42

Hepatic dysfunction in multiple systems organ failure as a manifestation of altered cell-cell interaction. Cerra FB, et al. **Prog Clin Biol Res** 1989;308:563–73 (21 ref.)

Changes of ceruloplasmin activity in patients with multiple organ failure. Dauberschmidt R, et al. **Prog Clin Biol Res** 1989;308:331–8

Lymphocyte/monocyte-ratio correlates with survival from infections and multi-organ failure following polytrauma. Holch MW, et al. **Prog Clin Biol Res** 1989;308:769–73

Posttraumatic plasma levels of mediators of organ failure. Jochum M, et al. **Prog Clin Biol Res** 1989;308:673–81

Risk factors of the multiple organ failure. Lehmkuhl P, et al. **Prog Clin Biol Res** 1989;308:643–8

The trigger for posttraumatic multiple organ failure: surgical sepsis or inflammation? Nerlich ML. **Prog Clin Biol Res** 1989;308:413–7

Plasma levels of granulocyte elastase and neopterin in patients with MOF. Pacher R, et al. **Prog Clin Biol Res** 1989; 308:683–8

Biochemical analysis in posttraumatic and postoperative organ failure. Redl H, et al. **Prog Clin Biol Res** 1989; 308:649–72 (74 ref.)

A prospective study to evaluate posttraumatic liver function by scintigraphy as a possible predictor of organ failure. Regel G, et al. **Prog Clin Biol Res** 1989;308:775–80

Anaphylatoxin generation and multisystem organ failure in acute pancreatitis. Roxvall L, et al. **Prog Clin Biol Res** 1989;308:265–9

Abnormal metabolic control in the septic multiple organ failure syndrome: pharmacotherapy for altered fuel control mechanisms. Siegel JH, et al. **Prog Clin Biol Res** 1989; 308:535–43 (13 ref.)

Multiple organ failure: whole body inflammation? Goris RJ. **Schweiz Med Wochenschr** 1989 Mar 18;119(11):347–53 (65 ref.)

Sepsis model with reproducible manifestations of multiple organ failure (MOF) and disseminated intravascular coagulation (DIC). Tanaka T, et al. **Thromb Res** 1989 Apr 1;54(1):53–61

[Role of the liver in the pathogenesis of multiple organ failure] Meng XJ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):13–5, 59 (Eng. Abstr.) **(Chi)**

[Oxygen radicals in septic shock] Schoenberg MH, et al. **Chirurg** 1988 Dec;59(12):836–41 (24 ref.) (Eng. Abstr.) **(Ger)**

[Cardiac arrhythmia caused by intracellular electrolyte imbalance in severe multiple organ insufficiency] Cavaliere F, et al. **Recenti Prog Med** 1988 Oct;79(10):410–2 (Eng. Abstr.) **(Ita)**

[Hemodynamic changes on the course of septic multiorgan failure patients] Anzai T, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):181–6 (Eng. Abstr.) **(Jpn)**

[Metabolic abnormalities and nutritional management in postoperative multiple organ failure] Hirasawa H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1351–4 (Eng. Abstr.) **(Jpn)**

[Polymorphonuclear leukocyte elastase (PMNE) levels in sepsis; the effect of PMNE on multiple organ failure (MOF)] Tanaka H, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):334–42 (Eng. Abstr.) **(Jpn)**

[Physiopathology and treatment of multiple major organ failure developing after thoracic surgery] **Nippon Kyobu Geka Gakkai Zasshi** 1987 May;35(5):663–75 **(Jpn)**

PREVENTION & CONTROL

Initial management of circulatory shock as prevention of MSOF. Vincent JL, et al. **Crit Care Clin** 1989 Apr; 5(2):369–78 (57 ref.)

Enteral nutrition does not prevent multiple organ failure syndrome (MOFS) after sepsis. Cerra FB, et al. **Surgery** 1988 Oct;104(4):727–33

THERAPY

Prognostic value of serum osmolality gap in patients with multiple organ failure treated with hemopurification. Hirasawa H, et al. **Artif Organs** 1988 Oct;12(5):382–7

Rational approach to the management of multiple systems organ failure. Macho JR, et al. **Crit Care Clin** 1989 Apr; 5(2):379–92 (82 ref.)

Mechanism-oriented therapy for multiple systems organ failure. Sheagren JN. **Crit Care Clin** 1989 Apr;5(2):393–409 (40 ref.)

Use of extracorporeal supportive techniques as additional treatment for septic-induced multiple organ failure patients. Barzilay E, et al. **Crit Care Med** 1989 Jul;17(7):634–7

Combined use of artificial lung and kidney in the treatment of terminal acute respiratory distress syndrome. Gattinoni L, et al. **Life Support Syst** 1983;1 Suppl 1:365–7

MULTIPLE-PERSONALITY DISORDER

DIAGNOSIS

Asking patients about symptoms of multiple personality disorder [letter] Nakdimen KA. **Am J Psychiatry** 1989 May; 146(5):682–3

The diagnosis of multiple personality disorder. A critical review. Fahy TA. **Br J Psychiatry** 1988 Nov;153:597–606 (92 ref.)

Differentiating multiple personality disorder and complex partial seizures. Ross CA, et al. **Gen Hosp Psychiatry** 1989 Jan;11(1):54–8

Differences between multiple personality disorder and other diagnostic groups on structured interview. Ross CA, et al. **J Nerv Ment Dis** 1989 Aug;177(8):487–91

HISTORY

The work of Antoine Despine: the first scientific report on the diagnosis and treatment of a child with multiple personality disorder. Fine CG. **Am J Clin Hypn** 1988 Jul; 31(1):33–9

S. Weir Mitchell's early fictional description of multiple personality [letter] Schneck JM. **Am J Psychiatry** 1989 Feb; 146(2):284

Multiple personality disorder: an historical perspective. Drew BL. **Arch Psychiatr Nurs** 1988 Aug;2(4):227–30

NURSING

Multiple personality disorder: an interpersonal approach to etiology, treatment, and nursing care. Lego S. **Arch Psychiatr Nurs** 1988 Aug;2(4):231–5

PHYSIOPATHOLOGY

Optical differences in cases of multiple personality disorder. Miller SD. **J Nerv Ment Dis** 1989 Aug;177(8):480–6

PSYCHOLOGY

Splitting and dissociation, borderline personality and multiple personality [letter] Nakdimen KA. **Am J Psychiatry** 1989 Sep;146(9):1236

Multiple personality. A symptom of psychiatric disorder. Fahy TA, et al. **Br J Psychiatry** 1989 Jan;154:99–101

Memory and awareness in a patient with multiple personality disorder. Nissen MJ, et al. **Brain Cogn** 1988 Aug; 8(1):117–34

Multiple personality disorder: an analysis of 236 cases. Ross CA, et al. **Can J Psychiatry** 1989 Jun;34(5):413–8

Multiple personality disorder in childhood. Vincent M, et al. **Can J Psychiatry** 1988 Aug;33(6):524–9

Differences between men and women with multiple personality disorder. Ross CA, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):186–8

Looking for answers: understanding multiple personality disorder. Steele K. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):4–10 (15 ref.)

Suicide and parasuicide in multiple personality disorder. Ross CA, et al. **Psychiatry** 1989 Aug;52(3):365–71

Somatic symptoms in multiple personality disorder. Ross CA, et al. **Psychosomatics** 1989 Spring;30(2):154–60

[Personal identity and multiple personality] de Bonis M, et al. **Ann Med Psychol (Paris)** 1988 May–Jun;146(7):593–607 (Eng. Abstr.) **(Fre)**

THERAPY

Autohypnotic resolution of an incipient relapse in an integrated multiple personality disorder patient: a clinical note. Kluft RP. **Am J Clin Hypn** 1988 Oct;31(2):91–6

Strategies for working with a patient who has multiple personality disorder. Anderson G, et al. **Arch Psychiatr Nurs** 1988 Aug;2(4):236–43

Post-traumatic aspects of the treatment of victims of sexual abuse and incest. Coons PM, et al. **Psychiatr Clin North Am** 1989 Jun;12(2):325–35

MULTIPLE SCLEROSIS

Interleukin-2 receptor levels indicating relapse in multiple sclerosis [letter] Adachi K, et al. **Lancet** 1989 Mar 11; 1(8637):559–60

Multiple sclerosis: basic concepts and hypothesis. Rodriguez M. **Mayo Clin Proc** 1989 May;64(5):570–6 (70 ref.)

Current concepts about multiple sclerosis. Tourtellotte WW, et al. **Mayo Clin Proc** 1989 May;64(5):592–6 (49 ref.)

Meeting on research in multiple sclerosis. Zurich, October 29, 1988. Proceedings. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):1–50

Multiple sclerosis. Lange LS. **Trans Med Soc Lond** 1986–87; 103:46–9

[Pregnancy and disseminated sclerosis. A retrospective study] Stenager EN, et al. **Ugeskr Laeger** 1989 Jul 3; 151(27):1744–6 (Eng. Abstr.) **(Dan)**

[The Minimal Record of Disability and multiple sclerosis. Results of the evaluation of 200 patients] Roullet E, et al. **Rev Neurol (Paris)** 1988;144(12):805–16 (30 ref.) (Eng. Abstr.) **(Fre)**

[Multiple sclerosis: an update] Duquette P. **Union Med Can** 1988 Aug;118(3):231–5 (26 ref.) **(Fre)**

[141st meeting of the Swiss Neurology Society. 30 June–2 July 1988, Lausanne, Switzerland. Abstracts] **Schweiz Arch Neurol Psychiatr** 1989;140(2):159–87 **(Ger)**

[Multiple sclerosis. Its permanent identity crisis (editorial)] Varela de Seijas E. **Rev Clin Esp** 1988 Apr;182(7):345–6 **(Spa)**

BLOOD

Zinc, copper and magnesium concentration in serum and CSF of patients with neurological disorders. Kapaki E, et al. **Acta Neurol Scand** 1989 May;79(5):373–8

Red blood cell fatty acids in multiple sclerosis. Navarro X, et al. **Acta Neurol Scand** 1989 Jan;79(1):32–7

Plasma lipids and their fatty acid composition in multiple sclerosis. Navarro X, et al. **Acta Neurol Scand** 1988 Aug; 78(2):152–7

Abnormalities in iron metabolism in multiple sclerosis. Valberg LS, et al. **Can J Neurol Sci** 1989 May;16(2):184–6

Low plasma cyclic nucleotides in multiple sclerosis. Markianos M, et al. **Eur Neurol** 1988;28(5):252–4

A search for protein abnormalities in erythrocyte membranes and platelets from patients with multiple sclerosis using double-label two-dimensional electrophoresis. Wheeler TT, et al. **J Neurol Sci** 1988 Dec;88(1–3):151–9

Deficiencies of polyunsaturated fatty acids and replacement by nonessential fatty acids in plasma lipids in multiple sclerosis. Holman RT, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4720–4

[Decreased capacity of the peripheral blood lymphocytes for excisional DNA repair in disseminated sclerosis] Moskaleva EIu, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):87–8 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Increased level of cerebrospinal fluid beta 2-microglobulin is related to neurologic impairment in multiple sclerosis. Bjerrum OW, et al. **Acta Neurol Scand** 1988 Jul;78(1):72–5

Terminal complement complexes (SC5b–9) in cerebrospinal fluid in autoimmune nervous system diseases. Sanders ME, et al. **Ann N Y Acad Sci** 1988;540:387–8

Intrathecal antimeasles immunity in 140 patients with multiple sclerosis. Schuller E, et al. **Ann N Y Acad Sci** 1988;540:286–9

Cerebrospinal fluid immunoglobulins and multiple sclerosis. Correspondence with magnetic resonance imaging and visually evoked potential changes. Müller FA, et al. **Arch Neurol** 1989 Apr;46(4):367–71

Increased proportion of CD4+CDw29+CD45R-UCHL-1+ lymphocytes in the cerebrospinal fluid of both multiple sclerosis patients and healthy individuals. Hedlund G, et al. **Cell Immunol** 1989 Feb;118(2):406–12

More on oligoclonal bands and diagnosis of multiple sclerosis [letter] Franciotta DM, et al. **Clin Chem** 1989 Feb; 35(2):337–8

Cystatin C quantification in CSF. George PM, et al. **Clin Chem** 1989 Jan;35(1):179–80

Sensitive, specific detection of oligoclonal banding in cerebrospinal fluid by agarose gel electrophoresis. Pearson SD, et al. **Clin Chem** 1989 Sep;35(9):1997–8

Comparison of oligoclonal immunoglobulin G bands in multiple sclerosis cerebrospinal fluid by immunoblotting and immunofixation. Mehta PD, et al. **Electrophoresis** 1988 Mar;9(3):126–8

Tumor necrosis factor alpha (TNF alpha) and neurological diseases. Failure in detecting TNF alpha in the cerebrospinal fluid from patients with multiple sclerosis, AIDS dementia complex, and brain tumours. Gallo P, et al. **J Neuroimmunol** 1989 Jun;23(1):41–4

T-cell subsets in the cerebrospinal fluid and blood of patients with multiple sclerosis. Kölmel HW, et al. **J Neuroimmunol** 1988 Dec;20(2–3):229–32

T cell lines established from multiple sclerosis cerebrospinal fluid T cells using human retroviruses. Merrill JE, et al. **J Neuroimmunol** 1989 Feb;21(2–3):213–26

Antibodies to myelin-associated glycoprotein (MAG) in the cerebrospinal fluid of multiple sclerosis patients. Möller JR, et al. **J Neuroimmunol** 1989 Mar;22(1):55–61

T-cell subsets in the cerebrospinal fluid in the course of inflammatory neurological diseases. Stark E. **J Neuroimmunol** 1988 Dec;20(2–3):259–60

The long march of the cerebrospinal fluid profile indicative of clinical definite multiple sclerosis; and still marching. Tourtellotte WW, et al. **J Neuroimmunol** 1988 Dec; 20(2–3):217–27

Protein gradients in the cerebrospinal fluid and the calculation of intracerebral IgG synthesis. Wurster U. **J Neuroimmunol** 1988 Dec;20(2–3):233–5

Intrathecal synthesis of immunosuppressive acidic protein (IAP) in patients with multiple sclerosis and other inflammatory neurological diseases. Seki H, et al. **J Neurol Sci** 1988 Jul;85(3):259–66

Cerebrospinal fluid autoantibodies to myelin basic protein in multiple sclerosis patients. Detection during first exacerbations and kinetics of acute relapses and subsequent convalescent phases. Warren KG, et al. **J Neurol Sci** 1989 Jun;91(1–2):143–51

Neutralization of anti-myelin basic protein by cerebrospinal fluid of multiple sclerosis patients in clinical remission. Warren KG, et al. **J Neurol Sci** 1988 Dec;88(1–3):185–94

Multiple sclerosis: problems in the evaluation of intrathecal IgG synthesis. Sheat JM, et al. **N Z Med J** 1988 Nov 23; 101(858):790–2

Multiple sclerosis and paramyxovirus [letter; comment] Russell WC, et al. **Nature** 1989 Jul 13;340(6229):104. **Comment on:** Nature 1989 Apr 27;338(6218):769–71

Relative diagnostic value of cerebrospinal fluid kappa chains in MS: comparison with other immunoglobulin tests. Rudick RA, et al. **Neurology** 1989 Jul;39(7):964–8

[Biochemical analysis of the cerebrospinal fluid in multiple sclerosis: study of various formulas] Rumbach L, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1217–20 (Eng. Abstr.) **(Fre)**

[A case of multiple sclerosis with high CSF antibody titer to HTLV-I] Kaji M, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):219–21 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Primary biliary cirrhosis in a patient with multiple sclerosis. Taub WH, et al. **Am J Gastroenterol** 1989 Apr;84(4):415–7

Complete hemidiaphragmatic paralysis in a patient with multiple sclerosis [letter] LaBan MM. **Am J Phys Med Rehabil** 1988 Dec;67(6):277

The prevalence of primary Sjögren's syndrome in a multiple sclerosis population. Noseworthy JH, et al. **Ann Neurol** 1989 Jan;25(1):95–8

Downbeat nystagmus secondary to multiple sclerosis. Masucci EF, et al. **Ann Ophthalmol** 1988 Sep;20(9):347–8

Systemic sclerosis associated with multiple sclerosis [letter] Igarashi A, et al. **Arch Dermatol** 1989 Aug;125(8):1145

Amantadine treatment of fatigue associated with multiple sclerosis. Cohen RA, et al. **Arch Neurol** 1989 Jun; 46(6):676–80

Cognitive loss in multiple sclerosis. Case reports and review of the literature. Franklin GM, et al. **Arch Neurol** 1989 Feb;46(2):162–7 (40 ref.)

Amantadine, fatigue, and multiple sclerosis. Rosenberg GA, et al. **Arch Neurol** 1988 Oct;45(10):1104–6

Does neuroretinitis rule out multiple sclerosis? [letter] Wilson WB, et al. **Arch Neurol** 1989 Apr;46(4):358

Sudden sensorineural hearing loss as a presentation of multiple sclerosis. Franklin DJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):41–5

A paroxysmal ocular motility disorder in multiple sclerosis. Todman DH. **Aust N Z J Med** 1988 Oct;18(6):785–7

Internuclear ophthalmoplegia in pernicious anemia [letter] Reynolds EH. **BMJ** 1989 Feb 18;298(6671):460–1

Cognitive impairment in patients with clinically isolated lesions of the type seen in multiple sclerosis. A psychometric and MRI study. Callanan MM, et al. **Brain** 1989 Apr;112 (Pt 2):361–74

Relative afferent pupillary defects in multiple sclerosis. Cox TA. **Can J Ophthalmol** 1989 Aug;24(5):207–10

Are patients with multiple sclerosis protected from thrombophlebitis and pulmonary embolism? Kaufman J, et al. **Chest** 1988 Nov;94(5):998–1001

Anterior uveitis and multiple sclerosis. Meisler DM, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):535–8

Hypothermia in three patients with multiple sclerosis. Lammens M, et al. **Clin Neurol Neurosurg** 1989; 91(2):117–21

Lupus erythematosus in a patient with long-standing multiple sclerosis. Berk MA, et al. **J Am Acad Dermatol** 1988 Nov; 19(5 Pt 2):969–72

Bullous pemphigoid and multiple sclerosis: more than a coincidence? Report of three cases. Masouyé I, et al. **J Am Acad Dermatol** 1989 Jul;21(1):63–8

Obsessive-compulsive symptoms in a patient with multiple sclerosis. George MS, et al. **J Nerv Ment Dis** 1989 May; 177(5):304–5

Prognostic relevance of initial clinical and paraclinical parameters for the course of multiple sclerosis. Hartard C, et al. **J Neuroimmunol** 1988 Dec;20(2–3):247–50

Structural brain correlates of anterograde memory deficits in multiple sclerosis. Brainin M, et al. **J Neurol** 1988 Jul; 235(6):362–5

Korsakoff's psychosis in the presence of multiple sclerosis: an unusual cognitive state [letter] Feinstein A, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):540–1

Myasthenia gravis associated with multiple sclerosis. Epidemiological survey and immunological findings. Somer H, et al. **J Neurol Sci** 1989 Jan;89(1):37–48

Acute ventilatory failure in multiple sclerosis. Yamamoto T, et al. **J Neurol Sci** 1989 Feb;89(2–3):313–24

Sexual dysfunction in multiple sclerosis. Dewis ME, et al. **J Neurosci Nurs** 1989 Jun;21(3):175–9

Intermittent clean self-catheterization in clients with neurogenic bladder resulting from multiple sclerosis. Henderson JS. **J Neurosci Nurs** 1989 Jun;21(3):160–4

Terodiline treatment of detrusor hyperreflexia in sclerosis multiplex. Jensen D Jr. **J Oslo City Hosp** 1989 Jun–Jul; 39(6–7):67–73

Ankylosing spondylitis and multiple sclerosis: an apparent association? Hanrahan PS, et al. **J Rheumatol** 1988 Oct; 15(10):1512–4

Syndrome of inappropriate secretion of antidiuretic hormone (SIADH) in a patient with multiple sclerosis. Ishikawa E, et al. **Jpn J Med** 1989 Jan–Feb;28(1):75–9

Multiple sclerosis presenting as an intramedullary cervical cord tumor. Lammoglia FJ, et al. **Kans Med** 1989 Jul; 90(7):219–21, 228

Beneficial effects of maprotiline on irritative urinary symptoms in multiple sclerosis [letter] Feuerstein TJ. **Lancet** 1988 Dec 10;2(8624):1369

Cognitive and psychiatric abnormalities in multiple sclerosis. Petersen RC, et al. **Mayo Clin Proc** 1989 Jun;64(6):657–63 (50 ref.)

Multiple sclerosis presenting as adult onset dystonia. Coleman RJ, et al. **Mov Disord** 1988;3(4):329–32

Movement disorders in multiple sclerosis. Mao CC, et al. **Mov Disord** 1988;3(2):109–16 (21 ref.)

Hemiballism in multiple sclerosis. Riley D, et al. **Mov Disord** 1988;3(1):88–94 (25 ref.)

Concurrence of multiple sclerosis and inflammatory bowel disease [letter] Sadovnick AD, et al. **N Engl J Med** 1989 Sep 14;321(11):762–3

Pain in multiple sclerosis. Moulin DE. **Neurol Clin** 1989 May; 7(2):321–31

Pain syndromes in multiple sclerosis [see comments] Moulin DE, et al. **Neurology** 1988 Dec;38(12):1830–4. **Comment in:** Neurology 1989 Jul;39(7):1000–1

A case-control study of multiple sclerosis. Operskalski EA, et al. **Neurology** 1989 Jun;39(6):825–9

Sudden hearing loss: an uncommon manifestation of multiple sclerosis. Schweitzer VG, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):327–32 (22 ref.)

The site of the lesion causing deafness in multiple sclerosis. Barratt HJ, et al. **Scand Audiol** 1988;17(2):67–71
The effects on auditory function of damage to the pontine olivo–cochlear bundle in man. Cohen M, et al. **Scand Audiol** 1988;17(3):185–9
The investigation of unilateral sensori–neural hearing loss. Kumar A, et al. **Scand Audiol Suppl** 1988;30:225–8
Pregnancy and multiple sclerosis. Birk K, et al. **Semin Neurol** 1988 Sep;8(3):205–13 (45 ref.)
Urologic dysfunction in patients with multiple sclerosis. Blaivas JG, et al. **Semin Neurol** 1988 Summer;8(2):159–65 (50 ref.)
Current concepts of the pathogenesis of optic neuritis associated with multiple sclerosis. Sergott RC, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):108–16 (72 ref.)
[Peripheral neuropathy in multiple sclerosis. I. Preliminary electrophysiologic studies] Bednařík J. **Cesk Neurol Neurochir** 1988 Sep;51(5):301–6 (Eng. Abstr.) (Cze)
[Acute pseudovascular multiple sclerosis: an uncommon neurologic emergency (letter)] Tison F, et al. **Ann Med Interne (Paris)** 1989;140(3):235 (Fre)
[Retrochiasmatic lesions in multiple sclerosis. Demonstration by visual evoked potentials. Correlation with magnetic resonance imaging] Rigolet MH, et al. **Rev Neurol (Paris)** 1989;145(5):378–83 (20 ref.) (Eng. Abstr.) (Fre)
[Sleep disorder in multiple sclerosis] Poser S. **Dtsch Med Wochenschr** 1989 Jul 28;114(30):1175 (Ger)
[The problem of femoral neck fracture in multiple sclerosis] Kiessling WR, et al. **Fortschr Neurol Psychiatr** 1989 Mar; 57(3):107–9 (Eng. Abstr.) (Ger)
[Multiple sclerosis and epilepsy. An analysis of 14 case histories] Büttner T, et al. **Nervenarzt** 1989 May;60(5):262–7 (Eng. Abstr.) (Ger)
[Eales disease and multiple sclerosis. Case report] Opala G, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):340–2 (Eng. Abstr.) (Pol)
[Secondary erythromelalgia in multiple sclerosis] Cendrowski W. **Wiad Lek** 1988 Nov 1;41(21):1477–9 (Eng. Abstr.) (Pol)
[Menstrual and reproductive functions in women with diseases of the central nervous system] Kucherova IV. **Akush Ginekol (Mosk)** 1989 Feb;(2):58–61 (Eng. Abstr.) (Rus)
[Retinal periphlebitis in multiple sclerosis] Krstić L, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):340–2 (Eng. Abstr.) (Ser)
[Cluster headache and multiple sclerosis. Is it coincidence or a causal relation?] Ara JR, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):39 (Spa)
[Posterolateral lesion syndrome of the spinal cord observed in multiple sclerosis] Hernández–Peniche J, et al. **Rev Invest Clin** 1969 Apr–Jun;21(2):185–93 (32 ref.) (Spa)

CONGENITAL

MS or AIDS? [letter] Coker SB. **J Child Neurol** 1988 Jul; 3(3):225–6

DIAGNOSIS

A clinico–pathoanatomical study of multiple sclerosis diagnosis. Engell T. **Acta Neurol Scand** 1988 Jul;78(1):39–44
Cytoproteic CSF findings in 33 MS patients: usefulness for diagnosis. Pereira S, et al. **Acta Neurol Scand** 1989 Feb; 79(2):170–2
Otoneurological and ultra low field MRI findings in multiple sclerosis patients. Grenman R, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:77–83
The ovoid lesion: a new MR observation in patients with multiple sclerosis. Horowitz AL, et al. **AJNR** 1989 Mar–Apr;10(2):303–5
High–signal periventricular lesions in patients with sarcoidosis: neurosarcoidosis or multiple sclerosis? Smith AS, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):147–52
Concerning a disorder of the central nervous system clinically resembling multiple sclerosis with remarkable anatomic findings (spastic pseudosclerosis). Report of a fourth case.[classical article] Jakob A. **Alzheimer Dis Assoc Disord** 1989 Spring–Summer; 3(1–2):26–45 (Eng, Ger)
Chronic progressive multiple sclerosis: serial magnetic resonance brain imaging over six months. Koopmans RA, et al. **Ann Neurol** 1989 Aug;26(2):248–56
Cerebral magnetic resonance imaging findings in multiple sclerosis. Relation to disturbance of affect, drive, and cognition. Reischies FM, et al. **Arch Neurol** 1988 Oct; 45(10):1114–6
Interobserver agreement in the diagnosis of multiple sclerosis. Solari A, et al. **Arch Neurol** 1989 Mar;46(3):289–92
Multiple sclerosis with early childhood onset. A case report. Vergani MI, et al. **Arq Neuropsiquiatr** 1988 Jun;46(2):195–7
Prognosis of patients who present with an episode of myelopathy of unknown origin in Malaysia: a retrospective study of 52 patients. Tan CT. **Aust N Z J Med** 1989 Aug; 19(4):297–302
Vascular headache: a presenting symptom of multiple sclerosis. Freedman MS, et al. **Can J Neurol Sci** 1989 Feb; 16(1):63–6
Magnetic resonance imaging in the assessment of disease activity in multiple sclerosis. Paty DW. **Can J Neurol Sci** 1988 Aug;15(3):266–72
Which test for multiple sclerosis? [editorial] Rudick RA. **Cleve Clin J Med** 1988 Sep–Oct;55(5):408–9
Oligoclonal bands in serum of patients with multiple sclerosis [letter] Madiedo G, et al. **Clin Chem** 1988 Oct;34(10):2183–4
The contribution of saccadic eye movements analysis, visual and auditory evoked responses to the diagnosis of multiple sclerosis. Tedeschi G, et al. **Clin Neurol Neurosurg** 1989; 91(2):123–8
Neurobrucellosis mimicking multiple sclerosis: a case report. Bussone G, et al. **Eur Neurol** 1989;29(4):238–40
Acute demyelination mimicking vascular hemicrania. Nager BJ, et al. **Headache** 1989 Jul;29(7):423–4
Brainstem impairment in multiple sclerosis: an assessment by multimodal evoked potentials. Cosi V, et al. **Ital J Neurol Sci** 1989 Apr;10(2):157–61
Multiple sclerosis and brain tumor: a diagnostic challenge. Paley RJ, et al. **J Emerg Med** 1989 May–Jun;7(3):241–4 (23 ref.)
Multiple sclerosis following optic neuritis in Chile. Alvarez G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan; 52(1):115–7
Contrast sensitivity in multiple sclerosis measured by Cambridge Low Contrast Gratings: a useful clinical test? Fahy J, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):786–7
CT ring sign imitating tumour, disclosed as multiple sclerosis by MRI: a case report. Gütling E, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):903–6
Magnetic resonance imaging of spinal cord lesions in multiple sclerosis. Honig LS, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):459–66
The early risk of multiple sclerosis after optic neuritis. Miller DH, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1569–71
Optic neuritis, confirmed by visual evoked response, and the risk for multiple sclerosis: a prospective survey [letter] Sanders EA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):799–800
Magnetic resonance imaging and clinical correlations in multiple sclerosis. Huber SJ, et al. **J Neurol Sci** 1988 Aug; 86(1):1–12
MRI approach of multiple sclerosis. 449 cases examined at 0.15 Tesla. Appel B, et al. **J Neuroradiol** 1988;15(2):108–36 (Eng, Fre)
Use of a special binaural hearing test to detect multiple sclerosis. Cranford JL, et al. **Kans Med** 1989 Jul;90(7):222–4
Magnetic resonance imaging and early diagnosis of multiple sclerosis [letter] Heun R, et al. **Lancet** 1988 Nov 19; 2(8621):1202–3
Improved sensitivity of MRI in multiple sclerosis by use of extensive standardized procedures. Van de Vyver FL, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):241–9
Multiple sclerosis: update in diagnosis and review of prognostic factors. Swanson JW. **Mayo Clin Proc** 1989 May;64(5):577–86 (48 ref.)
Clinically definite multiple sclerosis in a young Malay female. A case report. Muthusamy E, et al. **Med J Malaysia** 1988 Jun;43(2):170–2
Late onset multiple sclerosis: clinical pattern of optic nerve involvement. Safran AB. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):58–60 (27 ref.)
Criteria for an increased specificity of MRI interpretation in elderly subjects with suspected multiple sclerosis. Fazekas F, et al. **Neurology** 1988 Dec;38(12):1822–5
Correlation of neuropsychological and MRI findings in chronic/progressive multiple sclerosis. Franklin GM, et al. **Neurology** 1988 Dec;38(12):1826–9
The lesion of multiple sclerosis: imaging of acute and chronic stages. Koopmans RA, et al. **Neurology** 1989 Jul; 39(7):959–63
Biologic versus clinical MS [letter] Paty DW, et al. **Neurology** 1989 Jan;39(1):151–3
Correlation of magnetic resonance imaging with neuropsychological testing in multiple sclerosis. Rao SM, et al. **Neurology** 1989 Feb;39(2 Pt 1):161–6
Diagnostic and therapeutic trials in multiple sclerosis: a new look. Summary of Jekyll Island workshop. Weiner HL, et al. **Neurology** 1989 Jul;39(7):972–6
Multiple sclerosis and corpus callosum atrophy: relationship of MRI findings to clinical data. Dietemann JL, et al. **Neuroradiology** 1988;30(6):478–80
Magnetic resonance imaging in the evaluation of treatment in multiple sclerosis. Kappos L, et al. **Neuroradiology** 1988; 30(4):299–302
The value of T1–weighted images in the differentiation between MS, white matter lesions, and subcortical arteriosclerotic encephalopathy (SAE). Uhlenbrock D, et al. **Neuroradiology** 1989;31(3):203–12 (35 ref.)
Cranial magnetic resonance imaging in multiple sclerosis—indicated only in exceptional cases? Haupts M, et al. **Neurosurg Rev** 1987;10(4):287–9
Multiple sclerosis and family therapy [letter] Field EJ. **Practitioner** 1988 May 9;232(1448):503
Exercise–induced weakness as a presentation of multiple sclerosis. Motto S, et al. **Practitioner** 1988 Apr 8; 232(1446):374, 377
How often is multiple sclerosis mistaken for a psychiatric disorder? Skegg K, et al. **Psychol Med** 1988 Aug; 18(3):733–6
Antibody to HTLV–I in a black South African with a neurological disorder resembling multiple sclerosis [letter] Gledhill RF, et al. **S Afr Med J** 1989 Feb 4;75(3):147–8
Auditory evoked potentials test battery related to magnetic resonance imaging for multiple sclerosis patients. Antonelli AR, et al. **Scand Audiol Suppl** 1988;30:191–6
Quantitative analysis of slow eye movements with an IBM/AT compatible personal computer in the diagnosis of multiple sclerosis. Müri RM, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):44–6
Impact of nuclear magnetic resonance imaging on the assessment of multiple sclerosis patients. Jacobs L, et al. **Semin Neurol** 1986 Mar;6(1):24–32
[Diagnosis of multiple sclerosis] Filouš A. **Cesk Neurol Neurochir** 1989 Mar;52(2):89–94 (Eng. Abstr.) (Cze)
[Pseudotumoral spinal cord dilatation during multiple sclerosis. 2 cases with magnetic resonance imaging] Lubetzki C, et al. **Rev Neurol (Paris)** 1989;145(3):239–42 (13 ref.) (Eng. Abstr.) (Fre)
[Diagnostic measures in suspected multiple sclerosis] Kunze K, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):424–6 (17 ref.) (Ger)
[Multiple sclerosis: atrophy of the corpus callosum and psychosyndrome] Weihe W, et al. **Nervenarzt** 1989 Jul; 60(7):414–9 (Eng. Abstr.) (Ger)
[The diagnostic significance of auditory evoked brain stem potentials in multiple sclerosis] Fritsche F, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):38–43 (Eng. Abstr.) (Ger)
[Forms of disease progression and prognostic factors in multiple sclerosis] Meyer–Rienecker HJ, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Oct; 40(10):588–97 (Eng. Abstr.) (Ger)
[The prognosis of multiple sclerosis: a contribution] Di Giovanni M, et al. **Minerva Med** 1989 Jan;80(1):11–3 (Eng. Abstr.) (Ita)
[Magnetic resonance study of lesions of the cervical spinal cord in multiple sclerosis] Dal Pozzo G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):23–9 (Eng. Abstr.) (Ita)
[Clinical significance of CSF guanase activity in patient with multiple sclerosis] Chiba S, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):625–9 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging in multiple sclerosis: investigation of brain and spinal cord lesions] Kojima S, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):147–53 (Eng. Abstr.) (Jpn)
[Value of polyacrylamide gel electrophoresis of non–concentrated cerebrospinal fluid in the diagnosis of multiple sclerosis] Grzybowski G, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):273–80 (Eng. Abstr.) (Pol)
[Characteristics of the ophthalmological disorders in the initial stages of disseminated sclerosis in young and older patients] Matiushko NG. **Vrach Delo** 1988 Jul;(7):86–7 (Eng. Abstr.) (Rus)
[Disease activity in multiple sclerosis—is it possible to measure?] Fredrikson S. **Lakartidningen** 1989 Apr 26; 86(17):1601–2 (Swe)

DIET THERAPY

Effects of dietary linoleic acid and gamma linolenic acid on platelets of patients with multiple sclerosis. Mcgregor L, et al. **Acta Neurol Scand** 1989 Jul;80(1):23–7
Lipids and multiple sclerosis. Bates D. **Biochem Soc Trans** 1989 Apr;17(2):289–91

DRUG THERAPY

Long–lasting effects of cyclophosphamide on lymphocytes in peripheral blood and spinal fluid. Uitdehaag BM, et al. **Acta Neurol Scand** 1989 Jan;79(1):12–7
Cumulative experience with high–dose intravenous cyclophosphamide and ACTH therapy in chronic progressive multiple sclerosis. Carter JL, et al. **Ann N Y Acad Sci** 1988;540:535–6
Is steroid therapy in multiple sclerosis superior to corticotropin therapy? [letter] Davis FA, et al. **Arch Neurol** 1988 Nov;45(11):1180
Consensus and controversy in neurologic practice. The case of steroid treatment in multiple sclerosis. Menken M. **Arch Neurol** 1989 Mar;46(3):322
Corticotropin is superior to corticosteroids in the treatment of MS [letter] Poser CM. **Arch Neurol** 1989 Sep;46(9):946
Safety of intrathecal steroids in multiple sclerosis [letter] Rivera VM. **Arch Neurol** 1989 Jul;46(7):718–9
Is steroid therapy in multiple sclerosis superior to corticotropin therapy? [letter] Troiano R, et al. **Arch Neurol** 1989 Apr;46(4):362
Systemic interferon alfa in multiple sclerosis [letter] Weinshenker BG, et al. **Arch Neurol** 1989 Mar;46(3):251–2
The use of cyclophosphamide to treat multiple sclerosis. Myers LW. **Clin Neuropharmacol** 1987 Apr;10(2):155–61 (32 ref.)
Copolymer–I therapy for multiple sclerosis. Rolak LA. **Clin Neuropharmacol** 1987 Oct;10(5):389–96 (40 ref.)
Dexamethasone–induced schizoaffective–like state in multiple sclerosis: prophylaxis and treatment with carbamazepine. Sechi GP, et al. **Clin Neuropharmacol** 1987 Oct;10(5):453–7
Effects of high–to–mega–dose synthetic corticosteroids on multiple sclerosis patients with special reference to cerebrospinal fluid antibodies to myelin basic protein.

Warren KG, et al. **Clin Neuropharmacol** 1987 Oct; 10(5):397–411 (48 ref.)

Glucose homeostasis and insulin secretion during chronic treatment with cyclosporin in nondiabetic humans. Robertson RP, et al. **Diabetes** 1989 Jan;38 Suppl 1:99–100

Effective treatment of chronically progressive multiple sclerosis with low-dose cyclophosphamide with minor side-effects. Mauch E, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):115–7

Double-blind randomized trial of ACTH versus dexamethasone versus methylprednisolone in multiple sclerosis bouts. Clinical, cerebrospinal fluid and neurophysiological results. Milanese C, et al. **Eur Neurol** 1989;29(1):10–4

Clinical trials of immunosuppression and immunomodulation in multiple sclerosis. Kappos L. **J Neuroimmunol** 1988 Dec; 20(2–3):261–8

Natural killer (NK) cells in chronic progressive multiple sclerosis patients treated with lymphoblastoid interferon. Kastrukoff LF, et al. **J Neuroimmunol** 1988 Nov; 20(1):15–23

The need for a new strategy for the treatment of multiple sclerosis. Davison AN. **J Neurol** 1988 Jul;235(6):327–9

Effect of cannabinoids on spasticity and ataxia in multiple sclerosis. Meinck HM, et al. **J Neurol** 1989 Feb; 236(2):120–2

A double-blind controlled trial of long chain n-3 polyunsaturated fatty acids in the treatment of multiple sclerosis. Bates D, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):18–22

Methylprednisolone in multiple sclerosis: a comparative dose study [letter] Bindoff L, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1108–9

Quantitative magnetic resonance imaging in multiple sclerosis: the effect of high dose intravenous methylprednisolone. Kesselring J, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):14–7

The short-term effect of an immunosuppressive treatment on CSF myelin basic protein in chronic progressive multiple sclerosis. Lamers KJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1334–7

Cyclosporin A curtails the progression of free light chain synthesis in the CSF of patients with multiple sclerosis. McLean BN, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):529–31

Randomised double blind controlled trial of cyclosporin in multiple sclerosis [published erratum appears in J Neurol Neurosurg Psychiatry 1989 Jul;52(7):932] Rudge P, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):559–65

Immunological treatment for multiple sclerosis [letter] **Lancet** 1989 Jul 8;2(8654):100–1

Immunosuppressive treatment of multiple sclerosis. Carter JL, et al. **Mayo Clin Proc** 1989 Jun;64(6):664–9 (47 ref.)

A placebo-controlled, randomized, double-masked, variable dosage, clinical trial of azathioprine with and without methylprednisolone in multiple sclerosis. Ellison GW, et al. **Neurology** 1989 Aug;39(8):1018–26

Pain in multiple sclerosis [letter; comment] Nelson DA. **Neurology** 1989 Jul;39(7):1000–1. **Comment on:** Neurology 1988 Dec;38(12):1830–4

Relative efficacy of intravenous methylprednisolone and ACTH in the treatment of acute relapse in MS. Thompson AJ, et al. **Neurology** 1989 Jul;39(7):969–71

One-year MR imaging follow-up of patients with multiple sclerosis under cortisone therapy. Uhlenbrock D, et al. **Neuroradiology** 1989;31(1):3–7

Drug treatment of multiple sclerosis. Rudick RA, et al. **Semin Neurol** 1987 Jun;7(2):150–9 (38 ref.)

[Current studies of the effects of immunosuppressive agents on multiple sclerosis] Minderhoud JM. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):99–100 **(Dut)**

[Treatment of patients in an acute stage of multiple sclerosis using high-dose methylprednisolone] Sanders EA. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2143–6 (28 ref.) **(Dut)**

[Pathogenesis and treatment of multiple sclerosis. Review and personal results] Gérard JM, et al. **Rev Med Brux** 1988 Sep;9(6):334–9 (Eng. Abstr.) **(Fre)**

[Quantifying functional deficits in patients with multiple sclerosis using a computer-assisted visuomotor tracking procedure] Bräu H, et al. **EEG EMG** 1989 Jun;20(2):84–7 (Eng. Abstr.) **(Ger)**

[Evoked potentials with intrathecal and systemic corticosteroid therapy in multiple sclerosis] Heun R, et al. **EEG EMG** 1989 Jun;20(2):88–91 (Eng. Abstr.) **(Ger)**

[Comparative double-blind study of the effectiveness and tolerance of baclofen, tetrazepam and tizanidine in spastic movement disorders of the lower extremities] Pellkofer M, et al. **Med Klin** 1989 Jan 15;84(1):5–8 (Eng. Abstr.) **(Ger)**

[Initial experiences with the Reiber 1979 determination of autochthonous IgG production within the scope of clinical and immunologic follow-up studies in multiple sclerosis treated with immunosuppressive therapy] Dachsel R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jul; 41(7):420–5 (Eng. Abstr.) **(Ger)**

[Use of neuropeptides in acute neurologic diseases] Akimow GA. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):410–2 (Eng. Abstr.) **(Pol)**

[Our observations regarding the treatment of multiple sclerosis with TFX "Polfa" (letter)] Fryze W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):475 **(Pol)**

[Prospective evaluation of the effectiveness of high doses of methylprednisolone in multiple sclerosis] Wajgt A, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):188–94 (Eng. Abstr.) **(Pol)**

[Early results of the treatment of chronic progressive forms of multiple sclerosis with cyclophosphamide and ACTH] Wender M, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):399–403 (Eng. Abstr.) **(Pol)**

[Effect of treatment with Encorton (Polfa), Solu-Medrol and Encorton and Cyclophosphamide and Encorton on the production of immunoglobulin G in the central nervous system in multiple sclerosis] Ochudło S. **Wiad Lek** 1989 Dec 1;41(23):1579–83 (Eng. Abstr.) **(Pol)**

[Effect of pyrogenal on dynamics of reflex-motor disorders in patients with diffuse sclerosis] Tiazhkorob AM, et al. **Vrach Delo** 1988 Nov;(11):81–3 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Enzyme immunoassay of medullasin in peripheral blood. Aoki Y, et al. **Clin Chim Acta** 1988 Dec 15;178(2):193–204

[Studies of alanine and aspartate transaminases, lactate dehydrogenase and phosphocreatine kinase levels in the cerebrospinal fluid and serum in multiple sclerosis] Kos-Lis K. **Neurol Neurochir Pol** 1988 May–Jun;22(3):184–7 (Eng. Abstr.) **(Pol)**

[A new highly active proteolytic myelin enzyme and its possible role in the mechanism of the demyelinating process] Savchenko IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):49–53 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Epidemiology of multiple sclerosis: incidence and prevalence rates in Denmark 1948–64 based on the Danish Multiple Sclerosis Registry. Koch-Henriksen N, et al. **Acta Neurol Scand** 1988 Nov;78(5):369–80

Multiple sclerosis in the Faroe Islands. IV. The lack of a relationship between canine distemper and the epidemics of MS. Kurtzke JF, et al. **Acta Neurol Scand** 1988 Dec; 78(6):484–500

Clustering of multiple sclerosis in Galion, Ohio, 1982–1985. Ingalls TH. **Am J Forensic Med Pathol** 1989 Sep; 10(3):213–5

Schizophrenia and multiple sclerosis. Distribution in Italy. Templer DI, et al. **Br J Psychiatry** 1988 Sep;153:389–90

The natural history of multiple sclerosis: a geographically based study. I. Clinical course and disability. Weinshenker BG, et al. **Brain** 1989 Feb;112 (Pt 1):133–46

A prevalence study of multiple sclerosis in L'Aquila, central Italy. Salerni E, et al. **Clin Neurol Neurosurg** 1988; 90(2):112–6

The prevalence of multiple sclerosis in south east Wales. Swingler RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1520–4

Update on the epidemiology of multiple sclerosis. Wynn DR, et al. **Mayo Clin Proc** 1989 Jul;64(7):808–17 (126 ref.)

Was there an epidemic of multiple sclerosis in the Faroe Islands? Dean G. **Neuroepidemiology** 1988;7(4):165–7

Validity of the epidemics of multiple sclerosis in the Faroe Islands. Kurtzke JF, et al. **Neuroepidemiology** 1988; 7(4):190–227

Risk of multiple sclerosis in relation to industrial activities: an ecological study in four European countries. Lauer K. **Neuroepidemiology** 1989;8(1):38–42

Dietary changes in temporal relation to multiple sclerosis in the Faroe Islands: an evaluation of literary sources. Lauer K. **Neuroepidemiology** 1989;8(4):200–6

Multiple sclerosis in relation to industrial and commercial activities in the Faroe Islands. Lauer K. **Neuroepidemiology** 1988;7(4):228–33

Analysis of the 'epidemic' of multiple sclerosis in the Faroe Islands. I. Clinical and epidemiological aspects. Poser CM, et al. **Neuroepidemiology** 1988;7(4):168–80

Analysis of the 'epidemic' of multiple sclerosis in the Faroe Islands. II. Biostatistical aspects. Poser CM, et al. **Neuroepidemiology** 1988;7(4):181–9

Increasing incidence of multiple sclerosis in South Lower Saxony, Germany. Poser S, et al. **Neuroepidemiology** 1989; 8(4):207–13

Prevalence of multiple sclerosis in Lanzarote (Canary Islands). Garcia JR, et al. **Neurology** 1989 Feb;39(2 Pt 1):265–7

MS in Saudi Arabia [letter] al-Rajeh S, et al. **Neurology** 1989 Feb;39(2 Pt 1):308–9

Geotoxicology of multiple sclerosis: the Henribourg, Saskatchewan, Cluster Focus. I. The water. Irvine DG, et al. **Sci Total Environ** 1989 Aug;84:45–59

Climate, diffused solar radiation and multiple sclerosis. Laborde JM, et al. **Soc Sci Med** 1988;27(3):231–8 (33 ref.)

[Multiple sclerosis in the Bern canton (Switzerland). An epidemiologic study] Beer S, et al. **Fortschr Neurol Psychiatr** 1988 Dec;56(12):394–401 (Eng. Abstr.) **(Ger)**

[The prevalence of disseminated sclerosis in the Carpathian region] Iarosh AA, et al. **Vrach Delo** 1989 Apr;(4):89–91 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

Clinically definite multiple sclerosis in a Zaïrian woman of mixed race [letter] Boucquey D, et al. **J Neurol** 1989 Mar; 236(3):187–8

Class II HLA antigens in multiple sclerosis. Miller DH, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):575–7

ETIOLOGY

Multiple sclerosis and birth order. Zilber N, et al. **Acta Neurol Scand** 1988 Oct;78(4):313–7

Uncomplicated retrobulbar neuritis and the development of multiple sclerosis. Anmarkrud N, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):306–9

HTLV-I-associated myelopathy: oligoclonal immunoglobulin G bands contain anti-HTLV-I p24 antibody. Grimaldi LM, et al. **Ann Neurol** 1988 Dec; 24(6):727–31

A role for the interferon system in the pathogenesis of multiple sclerosis? Billiau A, et al. **J Biol Regul Homeost Agents** 1987 Jan-Mar;1(1):9–22 (123 ref.)

Multiple sclerosis from late exposure to childhood infections: is the Alvord hypothesis correct? [letter] Herndon RM. **J Child Neurol** 1989 Apr;4(2):150

The role of environmental factors and pollutants in combination with genetic predisposition in the etiology of multiple sclerosis: possibilities for prevention? [letter] Morselt AF. **J Child Neurol** 1989 Jul;4(3):228–9

What's new in the pathogenesis of multiple sclerosis? A review. Chataway SJ. **J R Soc Med** 1989 Mar;82(3):159–62 (33 ref.)

Multiple sclerosis or blood–brain barrier disease [letter; comment] Field EJ. **Lancet** 1989 Feb 11;1(8633):338. **Comment on:** Lancet 1989 Jan 7;1(8628):46

Pathogenesis of progressive multiple sclerosis [letter] Thompson AJ, et al. **Lancet** 1989 Jun 10;1(8650):1322–3

Multiple sclerosis and the evolution of growth hormone mechanisms in man. Fischer K. **Med Hypotheses** 1988 Oct; 27(2):99–106 (62 ref.)

Reflections on the pathogenesis of optic (retrobulbar) neuritis in multiple sclerosis. Schwyzer RU, et al. **Med Hypotheses** 1988 Nov;27(3):167–79

Primary CNS lymphoma presenting as multiple sclerosis. A case study. Bender GP, et al. **Minn Med** 1989 Mar; 72(3):157–60

Multiple sclerosis-like illness occurring with human immunodeficiency virus infection. Berger JR, et al. **Neurology** 1989 Mar;39(3):324–9

Clues to the mystery of multiple sclerosis. Gorelick PB. **Postgrad Med** 1989 Mar;85(4):125–8, 131–4 (28 ref.)

Multiple sclerosis as a viral disease. Brahic M, et al. **Res Immunol** 1989 Feb;140(2):176–81; discussion 245–8 (31 ref.)

Schizophrenia and multiple sclerosis. Stevens JR. **Schizophr Bull** 1988;14(2):231–41 (104 ref.)

Geotoxicology of multiple sclerosis: the Henribourg, Saskatchewan, cluster focus. II. The soil. Irvine DG, et al. **Sci Total Environ** 1988 Dec;77(2–3):175–88

[Multiple sclerosis: current problems] Julien J, et al. **Ann Med Interne (Paris)** 1988;139(3):206–12 (64 ref.) **(Fre)**

[Myasthenia-multiple sclerosis: a possible pathogenetic relationship?] De Meyer F, et al. **Rev Med Brux** 1988 Sep; 9(6):321–5 (19 ref.) (Eng. Abstr.) **(Fre)**

[The pathogenesis of multiple sclerosis. Basal membrane injury by persisting viral infection] Simon J. **Fortschr Med** 1989 Jan 15;107(1):53 **(Ger)**

[Etiology and pathogenesis of multiple sclerosis: current aspects of causative factors in the disease course] Meyer-Rienecker HJ. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Oct; 40(10):577–87 (35 ref.) (Eng. Abstr.) **(Ger)**

[HTLV-I and multiple sclerosis (news)] **Medicina (Firenze)** 1989 Jan-Mar;9(1):97–8 **(Ita)**

[Experimental models of multiple sclerosis] Sierakowski SJ, et al. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):619–40 (91 ref.) (Eng. Abstr.) **(Pol)**

[Viruses in multiple sclerosis] Maciejek Z. **Wiad Lek** 1988 Apr 1;41(7):447–53 (60 ref.) **(Pol)**

GENETICS

MS and the group-specific component. Høllsberg P, et al. **Acta Neurol Scand** 1988 Aug;78(2):158–60

Molecular genotypes of the T-cell receptor beta chain in families with multiple sclerosis. Ciulla TA, et al. **Ann N Y Acad Sci** 1988;540:271–6

Determination of RFLPs linked to multiple sclerosis susceptibility. Cohn VH, et al. **Ann N Y Acad Sci** 1988; 540:269–70

Complement allotyping explains MHC associations in multiple sclerosis. Zhang WJ, et al. **Ann N Y Acad Sci** 1988;540:372–3

Genetic susceptibility to multiple sclerosis. A co-twin study of a nationwide series. Kinnunen E, et al. **Arch Neurol** 1988 Oct;45(10):1108–11

Multiple sclerosis and affective disorder. Family history, sex, and HLA-DR antigens. Schiffer RB, et al. **Arch Neurol** 1988 Dec;45(12):1345–8

A susceptibility locus for multiple sclerosis is linked to the T cell receptor beta chain complex. Seboun E, et al. **Cell** 1989 Jun 30;57(7):1095–100

HLA associations with multiple sclerosis in Sicily and Malta. Elian M, et al. **Dis Markers** 1987 Jun;5(2):89–99

An allelic cluster of DQ alpha restriction fragments is associated with multiple sclerosis: evidence that a second haplotype may influence disease susceptibility. Heard RN,

et al. Hum Immunol 1989 Jun;25(2):111–23
Patients with multiple sclerosis carry DQB1 genes which encode shared polymorphic amino acid sequences. Vartdal F, et al. Hum Immunol 1989 Jun;25(2):103–10
Alpha–1–antitrypsin (Pi) types in multiple sclerosis and lack of interaction with immunoglobulin (Gm) markers. Francis DA, et al. J Immunogenet 1988 Oct–Dec;15(5–6):251–5
The germline repertoire of T cell receptor beta–chain genes in patients with chronic progressive multiple sclerosis. Beall SS, et al. J Neuroimmunol 1989 Jan;21(1):59–66
HLA typing and T–cell subpopulations in multiple sclerosis [letter] Zaffaroni M, et al.
J Neurol Neurosurg Psychiatry 1988 Nov;51(11):1465
From the National Institutes of Health. Raub W. JAMA 1989 Sep 1;262(9):1158
Multiple sclerosis in mothers of children with acute lymphoblastic leukemia. Buckley JD, et al. Leukemia 1989 Oct;3(10):736–9
A possible new genetic marker associated with a severe course of multiple sclerosis, located on chromosome 2: Km [letter] Berr C, et al. N Engl J Med 1989 Feb 16;320(7):467
MS in twins [letter] James WH. Neurology 1989 Apr; 39(4):612
Sardinian multiple sclerosis is associated with HLA–DR4: a serologic and molecular analysis. Marrosu MG, et al. Neurology 1988 Nov;38(11):1749–53
T–cell receptor V alpha and C alpha alleles associated with multiple and myasthenia gravis. Oksenberg JR, et al.
Proc Natl Acad Sci U S A 1989 Feb;86(3):988–92
Amplification and Molecular Cloning of HTLV–I Sequences from DNA of Multiple Sclerosis Patients. Correction [letter] Reddy EP. Science 1989 Oct 6;246(4926):10–1
[Immunogenetic markers of disseminated sclerosis in western Siberia] Prokof'ev VF, et al. Zh Nevropatol Psikhiatr 1988; 88(12):49–52 (Eng. Abstr.) (Rus)

HISTORY

The 150th anniversary of the first depiction of the lesions of multiple sclerosis. Compston A.
J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1249–52
The 150–year anniversary of multiple sclerosis: does its early history give an etiological clue? Fredrikson S, et al.
Perspect Biol Med 1989 Winter;32(2):237–43

IMMUNOLOGY

HLA and multiple sclerosis in Italy. Two population studies in northern and insular Italy. Granieri E, et al.
Acta Neurol (Napoli) 1987 Apr;9(2):124–33
Risk factors in multiple sclerosis: a population–based case–control study in Hautes–Pyrénées, France. Berr C, et al. Acta Neurol Scand 1989 Jul;80(1):46–50
Immunological studies of the pathogenesis of multiple sclerosis. Cell–mediated cytotoxicity by peripheral blood lymphocytes against basic protein of myelin, encephalitogenic peptide, cerebrosides and gangliosides. Frick E. Acta Neurol Scand 1989 Jan;79(1):1–11
Estradiol potentiates poke–weed mitogen–induced B cell stimulation in multiple sclerosis and healthy subjects. Kalman B, et al. Acta Neurol Scand 1989 Apr;79(4):340–6
Absence of antibodies to HTLV–1 in sera from Hungarian MS patients. Koike F, et al. Acta Neurol Scand 1988 Sep; 78(3):177–80
Distribution of group–specific component subtypes in multiple sclerosis. Lindblom B, et al.
Acta Neurol Scand 1988 Nov;78(5):443–4
Lymphocytes subclasses and function in patients with optic neuritis in childhood with special reference to multiple sclerosis. Riikonen R, et al. Acta Neurol Scand 1988 Jul; 78(1):58–64
Monocyte defect causes decreased autoMLR in multiple sclerosis patients. Baxevanis CN, et al.
Adv Exp Med Biol 1988;237:839–42
Oligoclonal bands and the IgG index in multiple sclerosis: uses and limitations. Giles PD, et al. Ann Clin Biochem 1989 Jul;26 (Pt 4):1317–23
Immunoregulation in rapidly progressive multiple sclerosis. Arnason BG, et al. Ann N Y Acad Sci 1988;540:4–12 (25 ref.)
Autoantibodies in serum and CSF of patients with multiple sclerosis. Blancher A, et al. Ann N Y Acad Sci 1988; 540:290–2
Isolation of human lymphocyte cell lines reactive with whole human myelin. Burns J, et al. Ann N Y Acad Sci 1988; 540:367–8
Loss of functional suppression is linked to decreases in circulating suppressor–inducer (CD4+ 2H4+) T cells in multiple sclerosis. Chofflon M, et al.
Ann N Y Acad Sci 1988;540:330–2
Expression and cellular localization of major histocompatibility complex antigens in active multiple sclerosis lesions. Hayashi T, et al. Ann N Y Acad Sci 1988; 540:301–5
Microglia express MHC class II in normal and demyelinating human white matter. Hayes GM, et al.
Ann N Y Acad Sci 1988;540:501–3
Virus–specific cytotoxic T cells in multiple sclerosis. McFarland HF, et al. Ann N Y Acad Sci 1988;532:273–9
Immunology of multiple sclerosis. McFarland HF.
Ann N Y Acad Sci 1988;540:99–105 (30 ref.)
Quantitation of IgG subclasses in cerebrospinal fluid of patients with multiple sclerosis. Mehta PD.
Ann N Y Acad Sci 1988;540:261–3
Identification of myelin basic protein–specific oligoclonal bands in multiple sclerosis. Morimoto K, et al.
Ann N Y Acad Sci 1988;540:592–3
Changes in immune function in relapsing multiple sclerosis correlate with disease activity as assessed by magnetic resonance imaging. Oger J, et al. Ann N Y Acad Sci 1988; 540:597–601
Sera from patients with multiple sclerosis react with human T–cell lymphotropic virus–I GAG proteins: Western blotting and solid–phase radioimmunoassay analyses. Ohta M, et al. Ann N Y Acad Sci 1988;540:639–41
Fine specificities of myelin basic protein–specific human T–cell clones. Richert JR, et al. Ann N Y Acad Sci 1988; 540:345–8
Immunohistochemical analysis of suppressor–inducer and helper–inducer T cells in multiple sclerosis brain tissue. Sobel RA, et al. Ann N Y Acad Sci 1988;540:306–8
Human T–cell response to human and heterologous myelin basic proteins. Tournier–Lasserve E, et al.
Ann N Y Acad Sci 1988;540:594–6
Demonstration of alpha, beta, and gamma interferon in active chronic multiple sclerosis lesions. Traugott U, et al.
Ann N Y Acad Sci 1988;540:309–11
Changes in T–cell subpopulations in multiple sclerosis [letter] Achiron A, et al. Ann Neurol 1989 Aug;26(2):291–2
Activated suppressor cell function in severely disabled patients with multiple sclerosis. Antel JP, et al.
Ann Neurol 1989 Feb;25(2):204–7
Decrease of suppressor inducer (CD4+2H4+) T cells in multiple sclerosis cerebrospinal fluid. Chofflon M, et al. Ann Neurol 1989 May;25(5):494–9
Loss of functional suppression is linked to decreases in circulating suppressor inducer (CD4+ 2H4+) T cells in multiple sclerosis. Chofflon M, et al. Ann Neurol 1988 Aug; 24(2):185–91
Immunoregulatory circuits in multiple sclerosis: is there a "short"? [editorial] Freedman MS, et al. Ann Neurol 1988 Aug;24(2):183–4
Dual–label immunocytochemistry of the active multiple sclerosis lesion: major histocompatibility complex and activation antigens. Hayashi T, et al. Ann Neurol 1988 Oct; 24(4):523–31
The lymphocyte saga continues [editorial] McFarlin DE.
Ann Neurol 1989 May;25(5):503–5
Fluctuations of CD4+ T–cell subsets in remitting–relapsing multiple sclerosis. Rose LM, et al. Ann Neurol 1988 Aug; 24(2):192–9
Lymphocyte subsets in the cerebrospinal fluid in active multiple sclerosis. Salonen R, et al. Ann Neurol 1989 May; 25(5):500–2
Multiple sclerosis: involvement of interferons in lesion pathogenesis. Traugott U, et al. Ann Neurol 1988 Aug; 24(2):243–51
Correlation of immunological studies and disease progression in chronic progressive multiple sclerosis. Trotter JL, et al. Ann Neurol 1989 Feb;25(2):172–8
Serum antibodies to HTLV–I in Thai patients with chronic progressive myelopathy, multiple sclerosis, myopathy and in HIV–seropositive intravenous drug abusers.
Hemachudha T, et al. Asian Pac J Allergy Immunol 1989 Jun;7(1):33–5
Nervous and immune system disorders in multiple sclerosis. Davison AN, et al. Brain Behav Immun 1988 Dec; 2(4):335–40 (22 ref.)
Human myelin basic protein–specific cytolytic T lymphocyte clones are functionally restricted by HLA class II gene products. Weber WE, et al. Cell Immunol 1989 Apr 15; 120(1):145–53
Four formulas for calculating cerebrospinal fluid immunoglobulin G abnormalities in multiple sclerosis. A comparison. Goren H, et al. Cleve Clin J Med 1988 Sep–Oct;55(5):433–8
Multiple sclerosis: effect of myelin basic protein on interleukin 1, interleukin 2 production and interleukin 2 receptor expression in vitro. Selmaj K, et al.
Clin Exp Immunol 1988 Jun;72(3):428–33
Multiple sclerosis: possible immunological mechanisms. McFarland HF, et al. Clin Immunol Immunopathol 1989 Jan;50(1 Pt 2):S96–105 (46 ref.)
T–lymphocyte subpopulations in multiple sclerosis—do they help to judge immunosuppressive therapy? Henneberg A, et al. Eur Arch Psychiatry Neurol Sci 1988;238(2):94–6
An inhibitor of cellular cytotoxicity is present in multiple sclerosis. Fizet D, et al. Eur Neurol 1989;29(4):208–10
MS: a localized immune disease of the central nervous system. Calder V, et al. Immunol Today 1989 Mar;10(3):99–103 (53 ref.)
MS: a CNS and systemic autoimmune disease. Hafler DA, et al. Immunol Today 1989 Mar;10(3):104–7 (48 ref.)
The role of the thymus in multiple sclerosis. D'Andrea V, et al. Ital J Neurol Sci 1989 Feb;10(1):43–8
Immunoglobulin G subclass antibodies to measles virus in patients with subacute sclerosing panencephalitis or multiple sclerosis. Mehta PD, et al. J Clin Microbiol 1989 Jan;27(1):62–5
Tumor necrosis factor identified in multiple sclerosis brain. Hofman FM, et al. J Exp Med 1989 Aug 1;170(2):607–12
Peptides of myelin basic protein stimulate T lymphocytes from patients with multiple sclerosis. Baxevanis CN, et al. J Neuroimmunol 1989 Mar;22(1):23–30
Decreased expression of HLA–DR antigens on monocytes in patients with multiple sclerosis. Baxevanis CN, et al. J Neuroimmunol 1989 May;22(3):177–83
Absence of a correlation between T lymphocyte subsets and clinical activity in relapsing–remitting multiple sclerosis. Capra R, et al. J Neuroimmunol 1989 Mar;22(1):41–5
Identification and characterization of anti–conjugated azelaic acid antibodies in multiple sclerosis. Daverat P, et al.
J Neuroimmunol 1989 Apr;22(2):129–34
Measles virus–polypeptide specificity of the cytotoxic T–lymphocyte response in multiple sclerosis. Dhib–Jalbut S, et al. J Neuroimmunol 1989 Feb;21(2–3):205–12
Virus–specific cytotoxic T lymphocytes in multiple sclerosis: a normal mumps virus response adds support for a distinct impairment in the measles virus response. Goodman AD, et al. J Neuroimmunol 1989 May;22(3):201–9
The significance of the inflammatory reactions for the development of clinical signs in multiple sclerosis and acute experimental autoimmune encephalomyelitis as assessed by means of the spontaneous chemiluminescence activity of peripheral blood monocytes. Hammann KP, et al.
J Neuroimmunol 1988 Dec;20(2–3):239–41
Myelin–specific T lymphocytes in multiple sclerosis patients and healthy individuals. Kitze B, et al. J Neuroimmunol 1988 Dec;20(2–3):237
Effect of cyclosporine on rubella virus–specific immune responses in chronic progressive multiple sclerosis. Nath A, et al. J Neuroimmunol 1989 Apr;22(2):143–8
Extended repertoire of specific antibodies in CSF of patients with subacute sclerosing panencephalitis compared to those with multiple sclerosis: anti–bacterial antibodies are also increased. Persson MA, et al. J Neuroimmunol 1989 Apr; 22(2):135–42
On the immunopathology of plaque development and repair in multiple sclerosis. Raine CS, et al. J Neuroimmunol 1988 Dec;20(2–3):189–201
Multiple sclerosis, sleep latencies and HLA antigens. Rumbach L, et al. J Neurol 1989 Jul;236(5):309–10
Peripheral blood lymphocyte phenotype and function in multiple sclerosis. Hughes PJ, et al.
J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1187–92
Dual labelling of circulating CD8 cells in patients with multiple sclerosis. Hughes PJ, et al.
J Neurol Neurosurg Psychiatry 1989 Jan;52(1):118–21
Borrelia burgdorferi antibodies in patients with relapsing/remitting form and chronic progressive form of multiple sclerosis. Schmutzhard E, et al.
J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1215–8
Antibodies to simian virus 5 in patients with multiple sclerosis and other neurological disorders. Brankin B, et al.
J Neurol Sci 1989 Feb;89(2–3):181–7
Immune activation in multiple sclerosis: study of IL–2, sIL–2R, and gamma–IFN levels in serum and cerebrospinal fluid. Gallo P, et al. J Neurol Sci 1989 Aug;92(1):9–15
Immunological studies on patients with optic neuritis without evidence of multiple sclerosis. Kinnunen E, et al.
J Neurol Sci 1989 Mar;90(1):43–52
Antibody response to different antigenic sites on measles virus surface polypeptides in patients with multiple sclerosis. Mäkelä MJ. J Neurol Sci 1989 Apr;90(2):239–46
Production of viral antibodies in vitro by CSF cells from mumps meningitis and multiple sclerosis patients. Salmi AA, et al. J Neurol Sci 1989 May;90(3):315–24
Immunocytochemical analysis of immunoglobulin–containing cells in CSF and blood in inflammatory disorders of the central nervous system. Weber T, et al. J Neurol Sci 1988 Aug;86(1):61–72
Response of human T lymphocyte lines to myelin basic protein: association of dominant epitopes with HLA class II restriction molecules. Chou YK, et al.
J Neurosci Res 1989 Jun;23(2):207–16
HLA–DR beta, –DQ alpha, and –DQ beta restriction fragment length polymorphisms in multiple sclerosis. Haegert DG, et al. J Neurosci Res 1989 May;23(1):46–54
Oligoclonal bands staining for IgG, IgA, IgM, and kappa and lambda light chains in cerebrospinal fluid of patients with multiple sclerosis. Araga S, et al.
Jpn J Psychiatry Neurol 1988 Dec;42(4):805–9
Immunogold localization and analysis of IgG during immune–mediated demyelination. Moore GR, et al.
Lab Invest 1988 Nov;59(5):641–8
HTLV–I and neurological disease in South India [letter] Richardson JH, et al. Lancet 1989 May 13;1(8646):1079
Alterations in T cell subsets in multiple sclerosis and other autoimmune diseases [letter] Sanders ME, et al. Lancet 1988 Oct 29;2(8618):1021
Immunoglobulin G in multiple sclerosis brain. Hosokawa T, et al. Metab Brain Dis 1988 Sep;3(3):179–84
Lack of cross–reaction between myelin basic proteins and putative demyelinating virus envelope proteins. Rubio N, et al. Mol Immunol 1989 Jul;26(7):663–8
Paramyxovirus SV5 and multiple sclerosis [see comments] Vandvik B, et al. Nature 1989 Apr 27;338(6218):769–71. Comment in: Nature 1989 Jul 13;340(6229):104
Borrelia burgdorferi antibodies in multiple sclerosis patients. Coyle PK. Neurology 1989 Jun;39(6):760–1
Extended major histocompatibility complex haplotypes in patients with multiple sclerosis. Hauser SL, et al.
Neurology 1989 Feb;39(2 Pt 1):275–7
Multiple sclerosis: in relapsing patients, immune functions vary with disease activity as assessed by MRI. Oger J, et al. Neurology 1988 Nov;38(11):1739–44
Immunocytochemical localization of the terminal

complement complex in multiple sclerosis. Compston DA, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug; 15(4):307–16

Primarily chronic progressive and relapsing/remitting multiple sclerosis: two immunogenetically distinct disease entities. Olerup O, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7113–7

Psychoimmunological dysregulation in multiple sclerosis. Foley FW, et al. **Psychosomatics** 1988 Fall;29(4):398–403

25th forum in immunology. Immunological aspects of multiple sclerosis. **Res Immunol** 1989 Feb;140(2):173–248

T-cell specificity and clonality in multiple sclerosis. Bach MA. **Res Immunol** 1989 Feb;140(2):216–9; discussion 245–8 (24 ref.)

The germline repertoire of T-cell receptor beta-chain genes in patients with multiple sclerosis. Biddison WE, et al. **Res Immunol** 1989 Feb;140(2):212–5; discussion 245–8 (23 ref.)

MS as autoimmune disease: myelin antigens. Fierz W. **Res Immunol** 1989 Feb;140(2):181–7; discussion 245–8 (37 ref.)

Immunoregulation in multiple sclerosis. Hafler DA, et al. **Res Immunol** 1989 Feb;140(2):233–9; discussion 245–8 (26 ref.)

Non-specific mechanisms of inflammation and tissue damage in MS. Hartung HP, et al. **Res Immunol** 1989 Feb; 140(2):226–33; discussion 245–8 (59 ref.)

B cells and antibodies in MS. Link H, et al. **Res Immunol** 1989 Feb;140(2):219–26; discussion 245–8 (30 ref.)

Regulation of class II major histocompatibility complex genes: relation to multiple sclerosis. Ransohoff RM. **Res Immunol** 1989 Feb;140(2):202–7; discussion 245–8 (44 ref.)

Neuroendocrine regulation and the immune response in MS. Reder AT. **Res Immunol** 1989 Feb;140(2):239–45; discussion 245–8 (59 ref.)

T-lymphocyte subsets in the multiple sclerosis lesion. Sobel RA. **Res Immunol** 1989 Feb;140(2):208–11; discussion 245–8 (19 ref.)

Multiple sclerosis as autoimmune disease: vascular antigens. Sternberger NH. **Res Immunol** 1989 Feb;140(2):187–92; discussion 245–8 (19 ref.)

HLA associations in multiple sclerosis: implications for immunopathogenesis. Vartdal F. **Res Immunol** 1989 Feb; 140(2):192–6; discussion 245–8 (21 ref.)

Patterns of the morbillivirus immunity in some residents from high-risk areas for multiple sclerosis. Mititelu G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):707–10

Biochemical detection of interesting cerebrospinal fluid proteins and autoantigens in MS-patients. Wiederkehr F. **Schweiz Arch Neurol Psychiatr** 1989;140(1):41–3

[Adherence of mononuclear leukocytes in multiple sclerosis: the effect of the calcium ionophore A 23187 and leukotrienes B4 and C4] Mayer M. **Cesk Neurol Neurochir** 1989 Mar;52(2):69–74 (Eng. Abstr.) **(Cze)**

[Serum antibodies against brain tissue in patients with multiple sclerosis] Ryšková O, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):407–11 (Eng. Abstr.) **(Cze)**

[Phagocytic reactivity of granulocytes in the peripheral blood of patients with multiple sclerosis and normal probands] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):50–3 (Eng. Abstr.) **(Ger)**

[Intrathecal synthesis of immunoglobulins of the A, M, D classes in multiple sclerosis and in other inflammatory pathologies of the nervous system] Lolli F, et al. **Ann Ist Super Sanita** 1988;24(4):579–81 (Eng. Abstr.) **(Ita)**

[Lymphocyte subpopulations in multiple sclerosis (MS). A contribution] Nuccetelli F, et al. **Minerva Med** 1989 Mar; 80(3):189–93 (Eng. Abstr.) **(Ita)**

[Lymphotropic retrovirus in multiple sclerosis] Nuccetelli F, et al. **Minerva Med** 1989 Apr;80(4):381–2 (Eng. Abstr.) **(Ita)**

[Interferon production and natural killer activity of peripheral blood lymphocytes obtained from patients with multiple sclerosis] Maruo Y. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):521–33 (Eng. Abstr.) **(Jpn)**

[Surface phenotypes of peripheral blood mononuclear cells in multiple sclerosis] Wender M, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):177–83 (Eng. Abstr.) **(Pol)**

[The level of antibodies against the canine morbilli virus—a possible "marker" for areas with an increased risk of multiple sclerosis] Mititelu G, et al. **Rev Ig [Bacteriol]** 1988 Jul–Sep;33(3):245–50 (Eng. Abstr.) **(Rum)**

[Excessive neutralizing activity against the canine morbilli virus in an area at increased risk for multiple sclerosis] Mititelu G, et al. **Rev Med Interna [Neurol Psihiatr]** 1988 Jul–Sep;33(3):199–202 (Eng. Abstr.) **(Rum)**

[Indices of cellular and humoral immunity in patients with disseminated sclerosis being treated with immunomodulators] Zapadniuk BV, et al. **Vrach Delo** 1988 Aug;(8):84–6 (Eng. Abstr.) **(Rus)**

[Characteristics of cellular immunity in multiple sclerosis] Demina TL, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):35–41 (Eng. Abstr.) **(Rus)**

[Clinico-immunologic parallels in multiple sclerosis] Prokof'ev VF, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):31–4 (Eng. Abstr.) **(Rus)**

[Histocompatibility antigens in retrobulbar neuritis and multiple sclerosis] Zavalishin IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):55–8 (Eng. Abstr.) **(Rus)**

[HLA, A, B and DR in 20 patients with multiple sclerosis] Burguera JA, et al. **Arch Neurobiol (Madr)** 1988 Sep–Oct; 51(5):278–81 (Eng. Abstr.) **(Spa)**

METABOLISM

Increased production of interferon gamma and tumor necrosis factor precedes clinical manifestation in multiple sclerosis: do cytokines trigger off exacerbations? Beck J, et al. **Acta Neurol Scand** 1988 Oct;78(4):318–23

Trace element status in multiple sclerosis. Smith DK, et al. **Am J Clin Nutr** 1989 Jul;50(1):136–40

Multiple sclerosis: the lipid relationship. Swank RL, et al. **Am J Clin Nutr** 1988 Dec;48(6):1387–93

Fibronectin in multiple sclerosis lesions. Sobel RA, et al. **Am J Pathol** 1989 Jul;135(1):161–8

Interleukin-2 levels in serum and cerebrospinal fluid of multiple sclerosis patients. Gallo P, et al. **Ann Neurol** 1988 Dec;24(6):795–7

Increased energy cost of walking in multiple sclerosis: effect of spasticity, ataxia, and weakness. Olgiati R, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):846–9

Immunological and cytological studies of autoimmune demyelination and multiple sclerosis. Colover J. **Brain Behav Immun** 1988 Dec;2(4):341–5 (15 ref.)

Multiple sclerosis intra-blood-brain-barrier IgG synthesis: effect of pulse intravenous and intrathecal corticosteroids. Baumhefner RW, et al. **Ital J Neurol Sci** 1989 Feb; 10(1):19–32

Quantitation of free amino acids in biological samples by high-performance liquid chromatography. Application of the method in evaluating amino acid levels in cerebrospinal fluid and plasma of patients with multiple sclerosis. Qureshi GA, et al. **J Chromatogr** 1988 Dec 28;459:237–44

In vitro study of mediators of inflammation in multiple sclerosis. Merrill JE, et al. **J Clin Immunol** 1989 Mar; 9(2):84–96

Multiple sclerosis brain immunoglobulins stimulate myelin basic protein degradation in human myelin: a new cause of demyelination. de Rosbo NK, et al. **J Neurochem** 1989 Aug;53(2):513–8

Molecular analysis of IgA in multiple sclerosis. Coyle PK. **J Neuroimmunol** 1989 Apr;22(2):83–92

Serum selenium concentration, glutathione peroxidase activity and lipid peroxides in a co-twin control study on multiple sclerosis. Korpela H, et al. **J Neurol Sci** 1989 Jun; 91(1–2):79–84

Novel astrocytic protein in multiple sclerosis plaques. Malhotra SK, et al. **J Neurosci Res** 1989 Jan;22(1):36–49

[Analysis of the composition of the microelements in the hair of normal subjects and in disseminated sclerosis] Mzhel'skaia TI, et al. **Lab Delo** 1989;(1):20–4 (Eng. Abstr.) **(Rus)**

[Functional status of the cytochrome P-450-dependent monooxygenase system in multiple sclerosis and amyotrophic lateral sclerosis] Zavalishin IA, et al. **Sov Med** 1989;(5):106–8 **(Rus)**

[Disorders of formaldehyde metabolism and its metabolic precursors in patients with multiple sclerosis] Khokhlov AP, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):45–8 (Eng. Abstr.) **(Rus)**

[Proteins and lipids in focal demyelinization in multiple sclerosis and chronic experimental allergic encephalomyelitis] Bukovský V, et al. **Bratisl Lek Listy** 1988 Oct;89(10):725–32 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Failure to detect antibodies to HTLV-I in serum and CSF of 50 multiple sclerosis patients. Franciotta DM, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):331–4

Isolation of herpes simplex virus type 1 during first attack of multiple sclerosis. Bergström T, et al. **Ann Neurol** 1989 Aug;26(2):283–5

Examination of eight cases of multiple sclerosis and 56 neurological and non-neurological controls for genomic sequences of measles virus, canine distemper virus, simian virus 5 and rubella virus. Cosby SL, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2027–36

Multiple sclerosis. Relationship to a retrovirus? [news] Waksman BH. **Nature** 1989 Feb 16;337(6208):599

Detection of sequences homologous to human retroviral DNA in multiple sclerosis by gene amplification. Greenberg SJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2878–82

Multiple choice. Viral fingerprints are found in the blood of MS patients. Beardsley TM. **Sci Am** 1989 Apr; 260(4):34–5

Amplification and molecular cloning of HTLV-I sequences from DNA of multiple sclerosis patients. Reddy EP, et al. **Science** 1989 Jan 27;243(4890):529–33

MORTALITY

Survival in multiple sclerosis. Poser S, et al. **J Clin Epidemiol** 1989;42(2):159–68

Prognostic factors for life expectancy in multiple sclerosis analysed by Cox-models. Riise T, et al. **J Clin Epidemiol** 1988;41(10):1031–6

The contribution of mortality statistics to the study of multiple sclerosis in Australia. Hammond SR, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):1–7

Deaths after total lymphoid irradiation for multiple sclerosis [letter] Cook SD, et al. **Lancet** 1989 Jul 29;2(8657):277–8

World-wide trends in multiple sclerosis mortality. Lai SM, et al. **Neuroepidemiology** 1989;8(2):56–67

PATHOLOGY

A clinical patho-anatomical study of clinically silent multiple sclerosis. Engell T. **Acta Neurol Scand** 1989 May; 79(5):428–30

Positive autoradiographic findings in brains of four MS patients. Najbauer J, et al. **Acta Neurol Scand** 1989 Jun; 79(6):476–81

Gd-DTPA-enhanced MR of suspected spinal multiple sclerosis. Larsson EM, et al. **AJNR** 1989 Sep–Oct; 10(5):1071–6

Imaging of human brain lesions with an omega 3 site radioligand. Benavides J, et al. **Ann Neurol** 1988 Dec; 24(6):708–12

Benign versus chronic progressive multiple sclerosis: magnetic resonance imaging features. Koopmans RA, et al. **Ann Neurol** 1989 Jan;25(1):74–81

Serial magnetic resonance scanning in multiple sclerosis: a second prospective study in relapsing patients. Willoughby EW, et al. **Ann Neurol** 1989 Jan;25(1):43–9

Mononuclear cell types in cerebrospinal fluid and blood of patients with multiple sclerosis. Quantitation by immunoenzyme microassay with panel of monoclonal antibodies. Fredrikson S, et al. **Arch Neurol** 1989 Apr; 46(4):372–5

Solitary asymptomatic plaque of demyelination in the medulla oblongata. Auer RN, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):225–7

Optic neuritis and multiple sclerosis: what is the relationship? [letter] Weintraub MI. **Dev Med Child Neurol** 1989 Feb; 31(1):118–9

DNA repair, sensitivity to gamma radiation and to heat shock in lymphocytes from acute, untreated multiple sclerosis patients. Sola P, et al. **J Neuroimmunol** 1989 Jan;21(1):23–9

Early lesion of multiple sclerosis [letter] Kermode AG, et al. **Lancet** 1988 Nov 19;2(8621):1203–4

Assessment of demyelination, edema, and gliosis by in vivo determination of T1 and T2 in the brain of patients with acute attack of multiple sclerosis. Larsson HB, et al. **Magn Reson Med** 1989 Sep;11(3):337–48

Precise relaxation time measurements of normal-appearing white matter in inflammatory central nervous system disease. Miller DH, et al. **Magn Reson Med** 1989 Sep; 11(3):331–6

Immune-reactive cells in multiple sclerosis mucosal secretions. Coyle PK, et al. **Neurology** 1989 Mar; 39(3):378–80

Increased diameter of demyelinated axons in chronic multiple sclerosis of the spinal cord. Shintaku M, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):505–10

On modification of the histopathological picture of multiple sclerosis in advanced age. Rafałowska J, et al. **Neuropatol Pol** 1988;26(2):211–23

Medullary lesion revealed by MRI in a case of MS with respiratory arrest. Mochizuki A, et al. **Neuroradiology** 1988; 30(6):574–6

Bone marrow derived cells express human T-cell lymphotropic virus type I (HTLV-I)-related antigens in patients with multiple sclerosis. Sandberg-Wollheim M, et al. **Scand J Immunol** 1988 Dec;28(6):801–6

Ion channels in MS-plaques. Moll C, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):27–9

[Involvement of apparently normal white brain substance in the disease process of multiple sclerosis] Brainin M, et al. **Nervenarzt** 1989 Mar;60(3):159–62 (Eng. Abstr.) **(Ger)**

[Multiple sclerosis at an early age] Perniola T, et al. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):143–6 **(Ita)**

[Usefulness of a standardized method for collecting anamnestic data in multiple sclerosis (MS)] Trojano M, et al. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):147–64 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Initial manifestations and development of neurological dysfunctions in multiple sclerosis. Kalafatova O. **Acta Neurol (Napoli)** 1988 Feb;10(1):16–9

Critical fusion frequency in MS during mild induced hyperthermia. Accornero N, et al. **Acta Neurol Scand** 1989 Jun;79(6):510–4

Course and prognosis of chronic progressive multiple sclerosis. Results of an epidemiological study. Minderhoud JM, et al. **Acta Neurol Scand** 1988 Jul;78(1):10–5

Colonic and anorectal dysfunction associated with multiple sclerosis. Hinds JP, et al. **Am J Gastroenterol** 1989 Jun; 84(6):587–95 (71 ref.)

The acoustic reflex in patients with asymptomatic multiple sclerosis. Wiegand DA, et al. **Am J Otolaryngol** 1988 Sep–Oct;9(5):210–6

Blood lymphocyte beta-adrenergic receptors in multiple sclerosis. Arnason BG, et al. **Ann N Y Acad Sci** 1988; 540:585–8

Bone marrow cells in multiple sclerosis. A functional and phenotypic study. Kam-Hansen S, et al. **Ann N Y Acad Sci** 1988;540:282–5

Effect of digitalis on central demyelinative conduction block in vivo. Kaji R, et al. **Ann Neurol** 1989 Feb;25(2):159–65

Seasonal variation of multiple sclerosis exacerbations in North Dakota. Goodkin DE, et al. **Arch Neurol** 1989 Sep; 46(9):1015–8

Cerebral disconnection in multiple sclerosis. Relationship to atrophy of the corpus callosum. Rao SM, et al. **Arch Neurol** 1989 Aug;46(8):918–20

Fatigue in multiple sclerosis [letter] Rosse RB. **Arch Neurol** 1989 Aug;46(8):841–2

Pulmonary function and dysfunction in multiple sclerosis. Smeltzer SC, et al. **Arch Neurol** 1988 Nov;45(11):1245–9

Upper extremity function in multiple sclerosis: improving assessment sensitivity with box–and–block and nine–hole peg tests. Goodkin DE, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):850–4

Carbon dioxide cytometry and postural changes in patients with multiple sclerosis. Weinstein MS, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):923–7

Spatiotemporal contrast sensitivity and colour vision in multiple sclerosis. Travis D, et al. **Brain** 1989 Apr;112 (Pt 2):283–303

Sound lateralization, brainstem auditory evoked potentials and magnetic resonance imaging in multiple sclerosis. van der Poel JC, et al. **Brain** 1988 Dec;111 (Pt 6):1453–74

Evolution of visual evoked potentials in optic neuritis. Heinrichs IH, et al. **Can J Neurol Sci** 1988 Nov;15(4):394–6

Abnormal visual adaptation to flicker in multiple sclerosis. Raymond JE. **Can J Neurol Sci** 1988 Aug;13(3):286–91

Intravenous glucose tolerance and pancreatic islet beta–cell function in patients with multiple sclerosis during 2–yr treatment with cyclosporin. Robertson RP, et al. **Diabetes** 1989 Jan;38(1):58–64

Absence of rate–dependent BAEP P5 latency changes in patients with definite multiple sclerosis: possible physiological mechanisms. Jacobson GP, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):19–23

The electroretinogram in multiple sclerosis and demyelinating optic neuritis. Papakostopoulos D, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):1–10

Comparative study of evoked potentials in multiple sclerosis and neuro–Behçet's syndrome. Nakamura Y, et al. **Electromyogr Clin Neurophysiol** 1989 Jan–Feb;29(1):59–64

Sensory (VEP, BAEP, SEP) and motor–evoked potentials, liquoral and magnetic resonance findings in multiple sclerosis. Rossini PM, et al. **Eur Neurol** 1989;29(1):41–7

Frequency of blood–retina and blood–brain barrier changes in multiple sclerosis. Annunziata P, et al. **Ital J Neurol Sci** 1988 Aug;9(4):345–9

Cardiovascular autonomic function in multiple sclerosis. Nordenbo AM, et al. **J Auton Nerv Syst** 1989 Feb; 26(1):77–84

The nature of inflammatory components during demyelination in multiple sclerosis. Cuzner ML, et al. **J Neuroimmunol** 1988 Dec;20(2–3):203–9 (21 ref.)

Correlation between multimodal evoked potentials and magnetic resonance imaging in multiple sclerosis. Comi G, et al. **J Neurol** 1989 Jan;236(1):4–8

Interhemispheric disconnection effects in multiple sclerosis. Lindeboom J, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1445–7

McArdle's sign in multiple sclerosis [letter] McArdle MJ. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1110

Anesthesia and multiple sclerosis [letter] Birnbach DJ, et al. **JAMA** 1988 Nov 18;260(19):2838

Exacerbation of multiple sclerosis after the administration of recombinant human interferon alfa [letter] Larrey D, et al. **JAMA** 1989 Apr 14;261(14):2065

Induction of oligodendrocyte proliferation and remyelination after chronic demyelination. Relevance to multiple sclerosis. Raine CS, et al. **Lab Invest** 1988 Oct;59(4):467–76

Multiple sclerosis or blood–brain barrier disease [letter] [see comments] James PB. **Lancet** 1989 Jan 7;1(8628):46. **Comment in:** Lancet 1989 Feb 11;1(8633):338

Use of evoked potentials for diagnosis of multiple sclerosis. Chiappa KH. **Neurol Clin** 1988 Nov;6(4):861–80 (120 ref.)

Retention of orienting reaction habituation in multiple sclerosis. Rogozea R, et al. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec;26(4):223–35

The Disability Status Scale for multiple sclerosis: apologia pro DSS sua. Kurtzke JF. **Neurology** 1989 Feb;39(2 Pt 1):291–302

Patterns of neurologic involvement in multiple sclerosis. Kurtzke JF. **Neurology** 1989 Sep;39(9):1235–8

Scales for rating impairment in multiple sclerosis: a critique. Willoughby EW, et al. **Neurology** 1988 Nov;38(11):1793–8

Multiple sclerosis in children: report of clinical and paraclinical features of 19 cases. Boutin B, et al. **Neuropediatrics** 1988 Aug;19(3):118–23

Model confirmation of the MS–Related Symptom Checklist. Gulick EE. **Nurs Res** 1989 May–Jun;38(3):147–53

An increase in the ratio of thromboxane A2 to prostacyclin in association with increased blood pressure in patients on cyclosporine A. Förstermann U, et al. **Prostaglandins** 1989 May;37(5):567–75

Pharmacologically induced erection in patients with multiple sclerosis. Kirkeby HJ, et al. **Scand J Urol Nephrol** 1988; 22(4):241–4

[Peripheral neuropathy in multiple sclerosis. II. Determination of single fiber jitter] Bednařík J. **Cesk Neurol Neurochir** 1988 Sep;51(5):307–12 (Eng. Abstr.) **(Cze)**

[Spectrum analysis of occipital EEG during visual evoked potential in multiple sclerosis (preliminary results)] Franck H, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):459–61 (Eng. Abstr.) **(Fre)**

[Comparative statistical study of the visual evoked potentials in subjects suspected of having multiple sclerosis with and without ophthalmic signs] Le Gargasson JF, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):161–6 (Eng. Abstr.) **(Fre)**

[Changes in multi–locally recorded muscle responses following cortex stimulation in patients with multiple sclerosis] Meyer BU, et al. **EEG EMG** 1988 Dec; 19(4):241–6 (Eng. Abstr.) **(Ger)**

[Central motor conduction time in multiple sclerosis: an comparison of visual and somatosensory evoked potentials in relation to the type of disease course] Witt TN, et al. **EEG EMG** 1988 Dec;19(4):247–54 (Eng. Abstr.) **(Ger)**

[Combined urodynamic–electromyography study in patients with multiple sclerosis and bladder disorders] Venetz U, et al. **Nervenarzt** 1989 Mar;60(3):163–7 **(Ger)**

[The stapedial reflex in multiple sclerosis] De Benedetto M, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):505–13 (Eng. Abstr.) **(Ita)**

[Auditory evoked potentials of the encephalic trunk in patients with multiple sclerosis. A comparative analysis of the results obtained with various methods of tracing registration] Motta G Jr, et al. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 13:1–19 (40 ref.) (Eng. Abstr.) **(Ita)**

[Quantitative abnormalities in nystagmus induced by caloric stimulation in multiple sclerosis] Prosser S, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb;9(1):67–77 (Eng. Abstr.) **(Ita)**

[Electric response audiometry (ERA) in patients with multiple sclerosis] Pruszewicz A, et al. **Otolaryngol Pol** 1988;42(1–2):113–20 (Eng. Abstr.) **(Pol)**

[Evoked potentials and the oculofacial reflex in otoneurological pathology] Pascu A, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep;33(3):179–83 (Eng. Abstr.) **(Rum)**

[Comparative electrooculographic study of normal subjects and patients with demyelinating disease] Manuel Zaragosi J, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):547–55 (Eng. Abstr.) **(Spa)**

[Saccades study and sinusoid rotatory tests in subjects with multiple sclerosis] Palop JM, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):621–7 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

A comparison of dementia in Alzheimer's disease and multiple sclerosis. Filley CM, et al. **Arch Neurol** 1989 Feb; 46(2):157–61

Depression and neuroticism in multiple sclerosis. Colombo G, et al. **Ital J Neurol Sci** 1988 Dec;9(6):551–7

Information processing speed in patients with multiple sclerosis. Rao SM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):471–7

Cognitive dysfunction and change in multiple sclerosis. Halligan FR, et al. **J Clin Psychol** 1988 Jul;44(4):540–8

The validity of the MMPI with multiple sclerosis patients. Meyerink LH, et al. **J Clin Psychol** 1988 Sep;44(5):764–9

Severely threatening events and marked life difficulties preceding onset or exacerbation of multiple sclerosis. Grant I, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):8–13

Visuospatial problem solving, conceptual reasoning and sorting behaviour in multiple sclerosis out–patients. Jennekens–Schinkel A, et al. **J Neurol Sci** 1989 Apr; 90(2):187–201

Sexuality and multiple sclerosis. Csesko PA. **J Neurosci Nurs** 1988 Dec;20(6):353–5

Perceptions of body image in subjects with multiple sclerosis: a pilot study. Samonds RJ, et al. **J Neurosci Nurs** 1989 Jun;21(3):190–4

Acceptance of placebo–control trial design by progressive multiple sclerosis patients. The Canadian Cooperative Multiple Sclerosis Study Group. Noseworthy JH, et al. **Neurology** 1989 Apr;39(4):606–7

Use and misuse of the MMPI, a reconsideration. Mueller SR, et al. **Psychol Rep** 1988 Oct;63(2):483–91

Affective disorder and stress in multiple sclerosis [letter] Stip E. **Psychosomatics** 1988 Fall;29(4):454

Outpatient management of multiple sclerosis patients. Thompson HG, et al. **Semin Neurol** 1987 Dec;7(4):365–71 (6 ref.)

[Suicide in patients with disseminated sclerosis. 5 case reports (letter)] Stenager EN, et al. **Ugeskr Laeger** 1989 Aug 28; 151(35):2216–7 **(Dan)**

[Paranoid–hallucinatory psychosis as a manifestation of multiple sclerosis] Piesiur–Strehlow B, et al. **Nervenarzt** 1988 Oct;59(10):621–3 **(Ger)**

[Illness and threat. Forms of psychosocial coping in multiple sclerosis] Görres HJ, et al. **Z Psychosom Med Psychoanal** 1988;34(3):274–90 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Orbital phlebography for differentiation between multiple sclerosis and venous vasculitis in subacute blindness. Hannerz J, et al. **Acta Radiol** 1988 Sep–Oct;29(5):505–7

Multiple sclerosis simulating brain tumor on computed tomography. Otsuka S, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):674–8

Management of cerebral mass effect lesions in multiple sclerosis. Isla A, et al. **Neurochirurgia (Stuttg)** 1989 Jul; 32(4):125–7

Computed tomography in cases of multiple sclerosis: problems of differential diagnosis in cases with atypical findings. Mohadjer M, et al. **Neurosurg Rev** 1988;11(1):15–8

Multiple sclerosis: diagnostic value of computerized tomography with delayed scanning after a double–dose of contrast medium in comparison with other diagnostic tests. Weitze C, et al. **Neurosurg Rev** 1988;11(1):53–8

Acute multiple sclerosis simulating a cerebral tumor: a case report. Longo M, et al. **Rays** 1987 Sep–Dec;12(3):45–8

RADIONUCLIDE IMAGING

Quantitative assessment of blood–brain barrier permeability in multiple sclerosis using 68–Ga–EDTA and positron emission tomography. Pozzilli C, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1058–62

RADIOTHERAPY

Effect of lymphoid irradiation on clinical course, lymphocyte count, and T–cell subsets in chronic progressive multiple sclerosis. Cook SD, et al. **Ann N Y Acad Sci** 1988;540:533–4

T cell subsets and disease progression after total lymphoid irradiation in chronic progressive multiple sclerosis. Troiano R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):980–3

[Effect of ultraviolet irradiation of autologous blood on cell volumes, cell adhesion and phagocytosis in normal probands and patients with multiple sclerosis] Mix E, et al. **Folia Haematol (Leipz)** 1988;115(5):669–87 (Eng. Abstr.) **(Ger)**

REHABILITATION

Rehabilitation in multiple sclerosis. Erickson RP, et al. **Mayo Clin Proc** 1989 Jul;64(7):818–28 (50 ref.)

Respiratory muscle training in multiple sclerosis: a pilot study. Olgiati R, et al. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):46–50

THERAPY

Effect of hyperbaric oxygen treatment on immunological parameters in multiple sclerosis. Nyland H, et al. **Acta Neurol Scand** 1989 Apr;79(4):306–10

Anti–CD4 and anti–CD2 monoclonal antibody infusions in subjects with multiple sclerosis. Immunosuppressive effects and human antimouse responses. Hafler DA, et al. **Ann N Y Acad Sci** 1988;540:557–9

Evoked potentials during multiple sclerosis therapeutic trials [letter] Nuwer MR, et al. **Arch Neurol** 1989 Jan;46(1):11–3

Multiple sclerosis: new concepts of pathogenesis, diagnosis, and treatment. Ransohoff RM. **Compr Ther** 1989 Mar; 15(3):39–44 (13 ref.)

Relapse of multiple sclerosis following acute allergic reactions to plasma during plasmapheresis. Wirguin I, et al. **J Neurol** 1989 Jan;236(1):62–3

Interferon–alpha and transfer factor in the treatment of multiple sclerosis: a double–blind, placebo–controlled trial. AUSTIMS Research Group. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):566–74

Interpretation of subjective measures in a clinical trial of hyperbaric oxygen therapy for multiple sclerosis. Monks J. **J Psychosom Res** 1988;32(4–5):365–72

Therapy of multiple sclerosis. Soll RW. **Kans Med** 1989 Jul; 90(7):214, 216

Immunological treatment for multiple sclerosis [letter] **Lancet** 1989 Jun 3;1(8649):1272–3

Immunological treatment for multiple sclerosis. **Lancet** 1989 Apr 1;1(8640):699–701 (23 ref.)

Long–term results of hyperbaric oxygen therapy in multiple sclerosis [letter] James PB, et al. **Lancet** 1989 Aug 5; 2(8658):327

Hyperbaric oxygen and multiple sclerosis—a review. Aita JF. **Nebr Med J** 1988 Aug;73(8):266–8 (12 ref.)

A referendum on clinical trial research in multiple sclerosis: the opinion of the participants at the Jekyll Island workshop. Noseworthy JH, et al. **Neurology** 1989 Jul; 39(7):977–81

Double–blind study of true vs. sham plasma exchange in patients treated with immunosuppression for acute attacks of multiple sclerosis. Weiner HL, et al. **Neurology** 1989 Sep;39(9):1143–9

Long–term use of antecubital veins for plasma exchange. The Canadian Cooperative Multiple Sclerosis Study Group. Noseworthy JH, et al. **Transfusion** 1989 Sep;29(7):610–3

[Intensive immunosuppression in progressive multiple sclerosis. An open study comparing 3 groups: cyclophosphamide, cyclophosphamide–plasmapheresis and control subjects. Results after 3 years] Trouillas P, et al. **Rev Neurol (Paris)** 1989;145(5):369–77 (37 ref.) (Eng. Abstr.) **(Fre)**

[The therapy of multiple sclerosis] Hartard C, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):427–30 (36 ref.) **(Ger)**

[Interferon therapy in multiple sclerosis. Mechanism of action, side effects, results] Huber M. **Nervenarzt** 1988 Sep;

59(9):514–20 (66 ref.) (Eng. Abstr.) (Ger)
[Recent therapeutic concepts in multiple sclerosis] Lauer K, et al. **Nervenarzt** 1988 Sep;59(9):495–503 (85 ref.) (Ger)
[The problem and value of therapy in multiple sclerosis] Hitzschke B, et al.
Psychiatr Neurol Med Psychol (Leipz) 1988 Oct; 40(10):598–608 (Eng. Abstr.) (Ger)
[Therapy of multiple sclerosis] Livrea P.
Acta Neurol (Napoli) 1989 Apr–Jun;11(2–3):165–85 (90 ref.) (Eng. Abstr.) (Ita)
[Hyperbaric oxygen therapy in multiple sclerosis. Clinical and electrophysiologic study] Sartucci F, et al.
Minerva Anestesiol 1988 Jun;54(6):285–9 (Eng. Abstr.) (Ita)
[The staged treatment and outpatient care of patients with disseminated sclerosis] Leonovich AL, et al.
Klin Med (Mosk) 1988 Sep;66(9):65–7 (Rus)

URINE

Bence Jones immunoglobulins in the urine of patients with multiple sclerosis [letter] Costello R, et al. **Clin Chem** 1989 Jan;35(1):186–7
Bence Jones proteins in the urine of patients with multiple sclerosis [letter] Pascali E, et al. **Clin Chem** 1989 Jul; 35(7):1550–1
[Urinary excretion of free amino acids in patients with multiple sclerosis] Karneev AN.
Zh Nevropatol Psikhiatr 1989;89(2):41–5 (Eng. Abstr.) (Rus)

MULTIPLE TRAUMA

Fracture consolidation in burned patients. Ivanova NP, et al. **Acta Chir Plast** 1988;30(3):129–37
Dorsal dislocation of four metacarpophalangeal joints. Ferguson DB, et al. **Ann Emerg Med** 1989 Feb;18(2):204–6
The septic multiple-trauma patient. Stillwell M, et al.
Infect Dis Clin North Am 1989 Mar;3(1):155–83 (232 ref.)
Pelvic fracture in multiple trauma: classification by mechanism is key to pattern of organ injury, resuscitative requirements, and outcome. Dalal SA, et al. **J Trauma** 1989 Jul;29(7):981–1000; discussion 1000–2
Transection of the inferior vena cava from blunt thoracic trauma: case reports. Peitzman AB, et al. **J Trauma** 1989 Apr;29(4):534–6
[The diagnostic and therapeutic strategy on admission of a patient with multiple injuries] Diraison Y.
Cah Anesthesiol 1989 Mar–Apr;37(2):117–24 (Fre)
[Fractures and pseudarthroses of the carpal scaphoid. Results concerning type II, III and IV fractures combined with ligament lesions (luxation or peri-lunate trans-scaphoid subluxation)] Herzberg G. **Rev Chir Orthop** 1988; 74(8):711–3 (Fre)
[Flexion-distraction injuries of the thoracolumbar spine with complete pancreatic rupture. Description of a case] Rommens P, et al. **Unfallchirurg** 1989 Jan;92(1):26–8 (Eng. Abstr.) (Ger)
[Ethmoidal involvement in craniofacial injuries] Merlo R, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct;8(5):503–11 (Eng. Abstr.) (Ita)
[Use of external fixators in fractures associated with vascular injuries of the limbs] De Majo A, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2069–74 (Eng. Abstr.) (Ita)
[Outcome of severe head injury with and without multiple trauma] Yano M, et al. **Neurol Med Chir (Tokyo)** 1988 Sep; 28(9):891–7 (Eng. Abstr.) (Jpn)
[A combined rupture of the interventricular septum and the tricuspid valve in closed chest injury] Babliak DE, et al. **Grudn Khir** 1989 Jan–Feb;(1):88–9 (Rus)
[Simultaneous wounds of the common carotid artery, the internal jugular vein and the cervical region of the esophagus] Lysenko VA, et al. **Khirurgiia (Mosk)** 1989 Feb; (2):129 (Rus)
[Combined injuries of the inferior vena cava, transverse colon and the gallbladder] Kudinskiĭ IuG, et al. **Klin Khir** 1988; (9):62–3 (Rus)
[The left recurrent nerve compression syndrome during injury to the aorta in a patient with multiple trauma] Mikhelson MO, et al. **Klin Khir** 1988;(7):62–3 (Rus)
[Difficulties in the diagnosis and treatment of injuries of the abdominal organs in a child with combined trauma] Shish AA, et al. **Klin Khir** 1989;(6):67–8 (Rus)
[Characteristics of multiple fractures of the long bones of the upper limbs and their treatment] Levitskiĭ FA, et al. **Ortop Travmatol Protez** 1989 Apr;(4):42–5 (Eng. Abstr.) (Rus)
[Favorable outcome of the treatment of severe traffic injuries in a pregnant woman] Li VM. **Ortop Travmatol Protez** 1989 Mar;(3):59–60 (Rus)
[Classification and pathogenesis of cranio-thoracic injuries] Kalashnik AF, et al. **Sov Med** 1988;(11):35–9 (60 ref.) (Rus)
[Neurotization with autoplasty of the ulnar nerve in simultaneous injuries of the brachial plexus and ulnar nerve] Stashkevich A. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):56–7 (Rus)
[Injuries of the pelvis associated with injuries to other organs] Dizdarević S, et al. **Acta Chir Iugosl** 1989;36(1):91–100 (Eng. Abstr.) (Scr)

BLOOD

Biochemical and hormonal parameters in patients with multiple trauma. Brandl M, et al. **Prog Clin Biol Res** 1989; 308:743–9
Posttraumatic plasma levels of mediators of organ failure. Jochum M, et al. **Prog Clin Biol Res** 1989;308:673–81
The PFI-index according to Aasen for prognosis and course of polytraumatized patients. Nast-Kolb D, et al.
Prog Clin Biol Res 1989;308:731–6
[The equilibrium of nitrogen, potassium and phosphate and renal excretion of creatinine and creatinine over the course of 3 weeks following severe trauma] Finsterer U, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):316–24 (Eng. Abstr.) (Ger)
[Enlarging of intracranial hemorrhagic lesions and coagulative-fibrinolytic abnormalities in multiple-injury patients] Kurokawa Y, et al. **No Shinkei Geka** 1989 Apr; 17(4):335–41 (Eng. Abstr.) (Jpn)

CLASSIFICATION

[Treatment of the patient with multiple trauma and prognostic assessment of the follow-up course] Arnold K. **Zentralbl Chir** 1989;114(12):766–70 (Eng. Abstr.) (Ger)

COMPLICATIONS

Acute acalculous cholecystitis in critically injured patients. Preoperative diagnostic imaging. Cornwell EE 3d, et al. **Ann Surg** 1989 Jul;210(1):52–5
Splenectomy for trauma: morbidity, mortality and associated abdominal injuries. Pitcher ME, et al. **Aust N Z J Surg** 1989 Jun;59(6):461–3
The septic multiple-trauma patient. Stillwell M, et al.
Crit Care Clin 1988 Apr;4(2):345–73 (232 ref.)
Use of labetalol in trauma. Harrier HD. **Crit Care Med** 1988 Nov;16(11):1159–60
Early complications in patients with multiple injuries and polytraumatism with special regard to traumatic fat embolism. Kroupa J, et al. **Czech Med** 1988;11(4):217–40
Ileocoecal augmentation and orthotopic bladder replacement in the management of urinary bladder injury following multiple trauma. Mráz Z, et al. **Czech Med** 1989;12(1):22–9
Mycoplasma hominis septic thrombophlebitis in a patient with multiple trauma: a case report and literature review. Martinez OV, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):193–6 (18 ref.)
Thiamine status after major trauma. McConachie I, et al. **Intensive Care Med** 1988;14(6):628–31
Pulmonary problems following multiple trauma in children. Pfenninger J. **Intensive Care Med** 1989;15 Suppl 1:S50–2
Distribution and function of alveolar cells in multiply injured patients with trauma-induced ARDS. Pison U, et al.
Intensive Care Med 1988;14(6):602–9
Neuroleptic malignant syndrome in the multiple trauma patient. Quinn DE, et al. **J Orthop Trauma** 1989;3(1):68–70
Successful limb reperfusion by temporary arterial shunt during a 950-mile air transfer: case report. Johansen K, et al. **J Trauma** 1989 Sep;29(9):1289–91
Saccharomyces cerevisiae fungemia in a multiply traumatized patient. Manzella JP, et al. **J Trauma** 1989 Jan;29(1):129–30
Components of the kallikrein-kinin-system in patients with ARDS. Fuhrer G, et al. **Prog Clin Biol Res** 1989;308:737–42
Lymphocyte/monocyte-ratio correlates with survival from infections and multi-organ failure following polytrauma. Holch MW, et al. **Prog Clin Biol Res** 1989;308:769–73
Use of the kinetic treatment table to prevent the pulmonary complications of multiple trauma. Demarest GB, et al.
West J Med 1989 Jan;150(1):35–8
[Early diagnosis and treatment of fat embolism syndrome after multiple fractures] Fu QZ.
Chung Hua Wai Ko Tsa Chih 1988 Dec;26(12):739–41, 782 (Eng. Abstr.) (Chi)
[Post-traumatic cerebral fat embolism] Thicoïpe M, et al. **Ann Fr Anesth Reanim** 1988;7(5):418–21 (Eng. Abstr.) (Fre)
[Life-threatening hemorrhage in pelvic fractures of polytraumatized patients. Diagnostic issues and embolization treatment] Hölting T, et al. **Chirurg** 1988 Aug; 59(8):547–51 (Eng. Abstr.) (Ger)
[Risk of lung embolism following preventive intravenous use of heparin in polytraumatized patients] Bosch U, et al.
Langenbecks Arch Chir 1988;373(4):214–6 (Eng. Abstr.) (Ger)
[Traumatic occlusion of the internal carotid artery] Göhring GR, et al. **ROFO** 1988 Dec;149(6):667–8 (Ger)
[Digital subtraction angiography in traumatology—visualization of an arteriovenous fistula in the neck] Pedersen PR, et al. **Rontgenblatter** 1988 Sep; 41(9):369–70 (Eng. Abstr.) (Ger)
[Clinical case. Severe hyponatremia associated with inappropriate ADH syndrome] Franco V, et al.
G Clin Med 1988 Apr;69(4):303–8 (Ita)
[Acute cerebral edema, an aggravating factor in multiple trauma in children] Ciurea AV, et al.
Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir 1988 Oct–Dec;33(4):267–76 (Eng. Abstr.) (Rum)
[Use of UV-spectrometry in the diagnosis of septic complications in multiple trauma] Gabriélian NI, et al.
Anesteziol Reanimatol 1988 Jul–Aug;(4):59–61 (Eng. Abstr.) (Rus)
[Treatment of pneumo- and hemothorax in multiple rib fractures and combined trauma] Sokolov VA, et al.
Grudn Khir 1988 May–Jun;(3):55–8 (Rus)
[Posttraumatic cholecystitis] Tsoĭ OG, et al.
Khirurgiia (Mosk) 1989 Jan;(1):111–2 (Rus)
[The effect of pain caused by multiple trauma on gamma-aminobutyric acid metabolism and the functional condition of animals] Ignatov IuD, et al.
Patol Fiziol Eksp Ter 1989 Jan–Feb;(1):11–4 (Eng. Abstr.) (Rus)
[Characteristics of traumatic disease in IgE-hyperimmunoglobulinemia] Arapova OA, et al.
Vestn Khir 1988 Jun;140(6):65–6 (Rus)
[A foreign body of the nasal cavity and both ethmoid labyrinths with injury of the eyeball and optic nerves] Pogosian MG. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):73–4 (Rus)
[Diagnosis and treatment of acute respiratory insufficiency in cases of multiple trauma] Kirillov MM.
Voen Med Zh 1989 May;(5):24–6 (Rus)
[Mechanisms of the development and clinical prodromes of secondary pneumonia in explosive mine trauma (2)] Viazitskiĭ PO, et al. **Voen Med Zh** 1989 Mar;(3):21–4 (Rus)
[Atelectasis in severe trauma] Cisneros Alonso C, et al.
Rev Clin Esp 1988 Apr;182(7):350–5 (Eng. Abstr.) (Spa)

DIAGNOSIS

Intra-abdominal injury following blunt trauma. Identifying the high-risk patient using objective risk factors. Mackersie RC, et al. **Arch Surg** 1989 Jul;124(7):809–13
Diagnostic and therapeutic strategy in severe abdominal trauma in children with multiple trauma. Nihoul-Fekete C, et al. **Intensive Care Med** 1989;15 Suppl 1:S57–60
Four cases of injury involving soda vending machines. Champa JR, et al. **J Orthop Trauma** 1989;3(1):64–7
Scapulothoracic dissociation (closed avulsion of the scapula, subclavian artery, and brachial plexus): a newly recognized variant, a new classification, and a review of the literature and treatment options. Ebraheim NA, et al.
J Orthop Trauma 1987;1(1):18–23 (24 ref.)
Children with multiple injuries. Bushore M. **Pediatr Rev** 1988 Aug;10(2):49–57 (27 ref.)
[Diagnosis and therapy of multiple injuries in the abdominal and retroperitoneal region in polytrauma] Procházka M, et al. **Rozhl Chir** 1988 Sep;67(8–9):595–600 (Eng. Abstr.) (Cze)
[An analysis of diagnostic methods in fractures of the lateral portion of the midface with damage to the eye and its appendages] Stuchilov VA, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):40–3 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Lysosomal enzymes and granulocyte elastase in synovial fluid after multiple traumatic injuries. Hörl M, et al.
Adv Exp Med Biol 1988;240:519–22
Urinary proteinase activity in patients with acute renal failure after trauma and kidney transplantation. Wanner C, et al.
Adv Exp Med Biol 1988;240:309–14
Plasma concentrations of granulocytic elastase-alpha 1-proteinase inhibitor complex in patients with severe head injury, multiple trauma or cerebral bleeding. Harm K, et al. **Clin Biochem** 1989 Apr;22(2):149–53
Serum phospholipase A2 in intensive care patients with peritonitis, multiple injury, and necrotizing pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):217–21
Serum activities of phospholipase A in acute posttraumatic pulmonary insufficiency. Koeniger R, et al.
Klin Wochenschr 1989 Feb 1;67(3):212–6
Prognostic value of serum phospholipase A in the multitraumatized patient. Waydhas C, et al.
Klin Wochenschr 1989 Feb 1;67(3):203–6
The clinical significance of serum phospholipase A in patients with multiple trauma. Waydhas C, et al.
Prog Clin Biol Res 1989;308:763–8

EPIDEMIOLOGY

Multiple-level noncontiguous spinal fractures. Powell JN, et al. **J Trauma** 1989 Aug;29(8):1146–50; discussion 1150–1

ETIOLOGY

Motor vehicle accident associated with minimal maternal trauma but subsequent fetal demise. Fries MH, et al.
Ann Emerg Med 1989 Mar;18(3):301–4
Primary blast injury after a bomb explosion in a civilian bus. Katz E, et al. **Ann Surg** 1989 Apr;209(4):484–8
Tiger mauling: fatal spinal injury. Kohout MP, et al.
Aust N Z J Surg 1989 Jun;59(6):505–6
Investigation of incidents of terrorism involving commercial aircraft. Clark MA, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A55–9
Relationship of cumulative trauma disorders of the upper extremity to degree of hand preference. Kucera JD, et al.
J Occup Med 1989 Jan;31(1):17–22
Tire explosion injuries. Teasdall RD, et al. **Orthopedics** 1989 Jan;12(1):123–8
[Traumatology in hang-gliding accidents. Studies based on 100 cases] Reymond MA, et al. **Chirurg** 1988 Nov; 59(11):777–81 (Eng. Abstr.) (Ger)
[Accidental falls using ladders leaning against a wall. A study of 266 cases in relation to the cause of the accident, sequelae

and prevention] Wolf M, et al. **Zentralbl Chir** 1989; 114(4):238–40 (Eng. Abstr.) (Ger)

[Grade III open fracture of the femoral diaphysis in a polytraumatized child] Hargitai E, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):55–61 (Eng. Abstr.) (Hun)

[Foreign body penetrating to the ethmoid sinus] Maj J. **Wiad Lek** 1988 May 15;41(10):678–80 (Eng. Abstr.) (Pol)

[Polytrauma as a result of a fall from a height] Beresnev SA, et al. **Klin Khir** 1989;(4):67 (Rus)

[Rupture of the common bile duct and duodenum in closed abdominal trauma] Budarin VN. **Klin Khir** 1989;(4):67–8 (Rus)

[Multiple injuries among sailors on ships] Shapovalov KA. **Ortop Travmatol Protez** 1988 Dec;(12):44–5 (Rus)

[Injuries of an infant's corpse caused by birds' beaks] Mamatkulov UM. **Sud Med Ekspert** 1989 Jan–Mar; 32(1):50–1 (Rus)

[Characteristics of injuries of the respiratory tract caused by steam and boiling water] Boenko SK. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):34–7 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Depressed interferon gamma production and monocyte HLA–DR expression after severe injury. Livingston DH, et al. **Arch Surg** 1988 Nov;123(11):1309–12

Alterations in T-helper and T-suppressor lymphocyte populations after multiple injuries. Fosse E, et al. **Injury** 1987 May;18(3):199–202

Terminal B-cell maturation and immunoglobulin (Ig) synthesis in vitro in pat.ents with major injury. Faist E, et al. **J Trauma** 1989 Jan;29(1):2–9

The T lymphocyte–mediated immune reaction in polytrauma. Cebulla M, et al. **Prog Clin Biol Res** 1989;308:517–21

Monocyte dependent suppression of immunoglobulin synthesis in patients with major trauma. Ertel W, et al. **Prog Clin Biol Res** 1989;308:513–6

Early deterioration of the immune system following multiple trauma. Maghsudi M, et al. **Prog Clin Biol Res** 1989; 308:507–11

[Humoral and cellular changes of non-specific immune response following severe trauma] Regel G, et al. **Unfallchirurg** 1989 Jul;92(7):314–20 (Eng. Abstr.) (Ger)

METABOLISM

Measured energy expenditure in pediatric intensive care patients. Tilden SJ, et al. **Am J Dis Child** 1989 Apr; 143(4):490–2

Aminoglycoside pharmacokinetics: dosage requirements and nephrotoxicity in trauma patients. Townsend PL, et al. **Crit Care Med** 1989 Feb;17(2):154–7

MORTALITY

The 1986 terrorist bombing experience in Paris. Rignault DP, et al. **Ann Surg** 1989 Mar;209(3):368–73

Mortality and morbidity amongst sedated intensive care patients. Ledingham IM, et al. **Resuscitation** 1988;16 Suppl:S69–77

[Early mortality following multiple trauma: a retrospective study] Rommens PM, et al. **Acta Chir Belg** 1988 Nov–Dec; 88(6):375–9 (Eng. Abstr.) (Dut)

[Who survives a serious accident?] de Boer HH. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1561–3 (Dut)

[Delayed death following pedestrian accident—multidimensional study of injury severity and cause of death] Mittmeyer HJ, et al. **Beitr Gerichtl Med** 1988;46:81–7 (Eng. Abstr.) (Ger)

[Polytrauma in childhood from the forensic medicine viewpoint] Leopold D. **Beitr Orthop Traumatol** 1989 Apr; 36(4):142–6 (Eng. Abstr.) (Ger)

NURSING

[Emergency care of multiple traumatic injuries] Jiang AL, et al. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):198–200 (Chi)

PATHOLOGY

Two six-shot suicides in close geographic and temporal proximity. Marsh TO, et al. **J Forensic Sci** 1989 Mar; 34(2):491–4

The value of the Glasgow Coma Scale and Injury Severity Score: predicting outcome in multiple trauma patients with head injury. Pal J, et al. **J Trauma** 1989 Jun;29(6):746–8

[An unusual grazing gunshot] Marty W. **Arch Kriminol** 1989 May–Jun;183(5–6):168–72 (Eng. Abstr.) (Ger)

[Dragging the pedestrian for kilometers by an automobile] Hochmeister M, et al. **Beitr Gerichtl Med** 1988;46:71–80 (Eng. Abstr.) (Ger)

[Occlusions of the arteries of the head and neck in relation to external events] Maxeiner H. **Beitr Gerichtl Med** 1988; 46:409–15 (Eng. Abstr.) (Ger)

[Intestinal necroses in severely injured patients without abdominal trauma] Frick T, et al. **Helv Chir Acta** 1989 Jun;56(1–2):59–62 (Eng. Abstr.) (Ger)

[Traumatic cerebral infarct in multistage dissection of the extracranial internal carotid artery] Maxeiner H, et al. **Unfallchirurg** 1989 Jul;92(7):321–7 (Eng. Abstr.) (Ger)

[Forensic medical establishment of the time of occurrence of multiple trauma] Indiaminov S. **Sud Med Ekspert** 1988 Jul–Sep;31(3):14–7 (Eng. Abstr.) (Rus)

[The "birth" of a living infant after compression of the pregnant uterus in automobile trauma] Kononenko VI, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):48–9 (Rus)

[Determining direction in cases of bodies run over by automobile wheels] Vinokurova SE. **Sud Med Ekspert** 1989 Jan–Mar;32(1):20–3 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Assessment of the survivors of major trauma accidents. Horne G, et al. **Aust N Z J Surg** 1989 Jun;59(6):465–70

Accelerated fracture union in association with severe head injury. Newman RJ, et al. **Injury** 1987 Jul;18(4):241–6

A recent review of the anesthetic records of 14 multisystem trauma patients and six others with coincidental respiratory failure undergoing urgent laparotomy [letter] Haenel JB, et al. **J Trauma** 1989 May;29(5):703

[Changes in liver function during the dynamics of traumatic disease with various methods of resuscitation] Magomedov AG. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):45–7 (Eng. Abstr.) (Rus)

[Pathophysiologic characteristics of the course of combined trauma acquired in the state of alcoholic intoxication] Vogulkin SE. **Ortop Travmatol Protez** 1988 Aug;(8):39–41 (Eng. Abstr.) (Rus)

[Ability for active actions in the case of multiple cuts and stab wounds to the body] Petrov GP. **Sud Med Ekspert** 1989 Apr–Jun;32(2):51 (Rus)

RADIOGRAPHY

Accurate radiographic evaluation of mandibular fractures. Reiner SA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1083–5

Trauma angiography of the extremity: the impact of injury mechanism on triage decisions. Rose SC, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):136–9

Imaging the child with multiple trauma. Stacy TM. **Indian J Pediatr** 1988 Sep–Oct;55(5):733–4

Analysis of 429 fractures in 189 battered children. King J, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):585–9

The frequency and significance of thoracic injuries detected on abdominal CT scans of multiple trauma patients. Rhea JT, et al. **J Trauma** 1989 Apr;29(4):502–5

Traumatic lesions of the optic, oculomotor, trochlear, and abducens nerves—computer tomographic findings. Adam T, et al. **Neurosurg Rev** 1988;11(3–4):231–7

Multiple fractures of the cervical and upper thoracic spine without neurological deficit: case report. Cybulski GR, et al. **Neurosurgery** 1989 May;24(5):768–71

Computerized tomography in diagnosis of bladder rupture. Lowe FC, et al. **Urology** 1989 Apr;33(4):341–3

[Radiology of multiple thoracic trauma] Partanen K, et al. **Duodecim** 1988;104(16):1264–74 (32 ref.) (Fin)

[Fractures and pseudarthroses of the carpal scaphoid. Combined bone and ligament lesions in fresh fractures. An anatomo-radiologic analysis] Herzberg G, et al. **Rev Chir Orthop** 1988;74(8):695–7 (Fre)

[Results and assessment of computerized tomography in the initial diagnosis in polytrauma] Neubert M, et al. **Chirurg** 1988 Nov;59(11):763–6 (Eng. Abstr.) (Ger)

REHABILITATION

Ender nail fixation in long bone fractures: experience in a level I trauma center. DeLong WG Jr, et al. **J Trauma** 1989 May;29(5):571–6

Massive centrifugal multitrauma resulting in paralysis and limb loss. A report of 4 cases and discussion of the special problems in rehabilitation. Heim M, et al. **Orthop Rev** 1988 Mar;17(3):289–91

[Rehabilitation in severe cranio-cerebral trauma and closed diaphyseal fractures of the femur] Prokop'ev NIa. **Sov Med** 1989;(4):103–6 (Rus)

[Means of limiting disability in multiple trauma of the wrist] Rozovskaia TP, et al. **Sov Med** 1988;(9):102–4 (Rus)

SURGERY

Long bone fractures in the polytrauma patient. The role of early operative fixation. Beckman SB, et al. **Am Surg** 1989 Jun;55(6):356–8

Commission on the Provision of Surgical Services. The management of patients with major injuries [letter] Saleh M. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):58

Cardiac contusion. The effect on operative management of the patient with trauma injuries. Ross P Jr, et al. **Arch Surg** 1989 Apr;124(4):506–7

The importance of early internal fixation in multiply injured patients to prevent late death due to sepsis. Broos PL, et al. **Injury** 1987 Jul;18(4):235–7

Orthopaedic treatment of paediatric multiple trauma patients. A new technique. Verstreken L, et al. **Int Surg** 1988 Jul–Sep;73(3):177–9

In vitro preservation of traumatic human skin autografts in a massive degloving injury. Hoogeboom JE, et al. **J Am Osteopath Assoc** 1989 Aug;89(8):1066–8

Open pelvic fracture with vaginal laceration and diaphragmatic rupture in a child. Heinrich SD, et al. **J Orthop Trauma** 1988;2(3):257–61

Mauling by pit bull terriers: case report. Baack BR, et al. **J Trauma** 1989 Apr;29(4):517–20

Trauma care the Mayo way [interview by Richard L. Reece] Mucha P Jr. **Minn Med** 1988 Nov;71(11):661–7

Polytrauma care: the current role of the orthopedic surgeon. Templeman DC, et al. **Minn Med** 1988 Nov;71(11):703–6

A patient with two chronic posttraumatic aneurysms of the thoracic aorta. Caes F, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):105–6

[Surgical treatment of severe pancreatic trauma] Qian GX. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):717–20, 780–1 (Eng. Abstr.) (Chi)

[Terrorism and surgery] Pailler JL, et al. **Ann Chir** 1988; 42(7):505–11 (22 ref.) (Eng. Abstr.) (Fre)

[Vein ligation in cavosuprahepatic disinsertion] Hoda J, et al. **J Chir (Paris)** 1989 Mar;126(3):183–4 (Eng. Abstr.) (Fre)

[Management strategy of multiple fractures of long tubular bones within the scope of polytrauma] Wentzensen A, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:2–6 (Eng. Abstr.) (Ger)

[A successful procedure in mitral valve rupture accompanied by rupture of the papillary muscle and the chordae tendinae following multiple injuries and blunt thoracic trauma] Sold M, et al. **Anaesthesist** 1989 May;38(5):262–5 (Eng. Abstr.) (Ger)

[The fate of the polytraumatized patient with a "minor injury" of the hand] Mark G. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):51–4 (Eng. Abstr.) (Ger)

[Timing of surgical intervention in traumatic aortic rupture of the descending aorta] Leupi F, et al. **Helv Chir Acta** 1988 Nov;55(4):499–501 (Eng. Abstr.) (Ger)

[Diagnosis and therapy of liver injuries in the polytraumatized patient] Schweizer W, et al. **Helv Chir Acta** 1989 Jan;55(5):597–612 (Eng. Abstr.) (Ger)

[Changes and progress in fracture treatment in polytrauma] Schweiberer L, et al. **Orthopade** 1989 Jun;18(3):225–31 (45 ref.) (Eng. Abstr.) (Ger)

[Maxillofacial injuries in polytrauma. Results of a follow-up study] Fischer-Brandies E, et al. **Unfallchirurg** 1989 May; 92(5):209–15 (Eng. Abstr.) (Ger)

[The incidence, therapy and results of combined ankle joint and tibial shaft fractures] Habernek H, et al. **Unfallchirurg** 1989 Jun;92(6):287–90 (Eng. Abstr.) (Ger)

[Use of unilateral external fixation in pediatric femur shaft fracture within the scope of polytrauma] Klein W, et al. **Unfallchirurg** 1989 Jun;92(6):282–6 (Eng. Abstr.) (Ger)

[The significance of thoracic trauma as single or concomitant injuries in polytrauma] Roscheck H, et al. **Unfallchirurg** 1988 Sep;91(9):422–7 (Eng. Abstr.) (Ger)

[Diagnosis and treatment of atlanto-occipital ruptures] Hummel A, et al. **Unfallchirurgie** 1988 Dec;14(6):311–9 (Eng. Abstr.) (Ger)

[Spontaneous bridging of an extensive post-traumatic bone defect] Horch R, et al. **Zentralbl Chir** 1989;114(4):257–62 (Ger)

[Medical documentation on the accident unit at the Wels Hospital—13 years' experience] Povacz F. **Zentralbl Chir** 1989;114(12):771–6 (Eng. Abstr.) (Ger)

[Intraoperative recovery of blood using a cell separator (Autotrans BT795/A) in vascular surgery and emergency traumatology] Preseglio I, et al. **Minerva Anestesiol** 1988 Jan–Feb;54(1–2):5–8 (Eng. Abstr.) (Ita)

[Computerized program for rapid evaluation of the critical surgical patient with multiple trauma] Benedetto G, et al. **Minerva Chir** 1988 Jun 30;43(12):1041–4 (Eng. Abstr.) (Ita)

[Multiple trauma with injury of the heart, lung, liver, abdominal wall, face and right arm] Szaroszyk J, et al. **Wiad Lek** 1988 Jun 1;41(11):733–5 (Eng. Abstr.) (Pol)

[Rendering aid to the victims of abdominal trauma at a district hospital] Guzeev AI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):77–80 (Eng. Abstr.) (Rus)

[Successful replantation of the hand in a combined wound] Nikolenko VK, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):129–30 (Rus)

[Organization of services at a central regional hospital after mass admission of patients with multiple trauma] Borovyi EM, et al. **Klin Khir** 1988;(9):38–40 (Rus)

[A case of successful treatment of severe combined injuries of the spine and spinal cord] Polishchuk NE, et al. **Ortop Travmatol Protez** 1989 May;(5):50–1 (Rus)

[Reparative osteogenesis after the treatment of multiple fractures of the crural bones using the Ilizarov method] Sveshnikov AA, et al. **Sov Med** 1989;(2):5–8 (Eng. Abstr.) (Rus)

[Treatment of facial bone fractures in victims with combined trauma] Zuev VP, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):29–31 (Eng. Abstr.) (Rus)

[Surgical tactics in thoraco-abdominal injuries] Kutushev FKh, et al. **Vestn Khir** 1989 Jan;142(1):57–9 (Rus)

[Multiple trauma of the abdominal organs and extremities] Muradian RA. **Vestn Khir** 1988 Oct;141(10):74 (Rus)

[The organizational aspects of rendering medical care to wounded patients with explosive mine trauma] Khabibi V, et al. **Voen Med Zh** 1989 Apr;(4):35–7 (Rus)

[Use of rod apparatuses for treating multiple unilateral diaphyseal fractures of the long bones] Kostiuk AN, et al. **Voen Med Zh** 1988 Aug;(8):58–9 (Rus)

THERAPY

Priorities in the management of polytraumatised patients with head injury: partially resolved problems. Martens F, et al. **Acta Neurochir (Wien)** 1988;94(1–2):70–3

Trauma in pregnancy [letter] Greenspoon JS, et al. **Ann Emerg Med** 1989 Mar;18(3):332–3

The child with multiple injuries: resuscitation priorities. Young GM, et al. **Indian J Pediatr** 1988 Sep–Oct; 55(5):705–13 (31 ref.)

Fractures of the metatarsals: management of complicated injuries with a simple traction system. Ahmed A, et al. **Injury** 1988 Sep;19(5):345–9

Bladder and urethral injuries associated with fractures of the pelvis in Zaria, Nigeria. Muhammad I, et al. **Injury** 1988 Sep;19(5):357–9

Outcome of closed injuries exceeding 20-unit blood transfusion need. Riska EB, et al. **Injury** 1988 Jul; 19(4):273–6

Reflection of differential pulmonary perfusion in polytrauma patients on differential lung ventilation (DLV). A comparison of two CO2-derived methods. Zandstra DF, et al. **Intensive Care Med** 1989;15(3):151–4

Isolated fractures of the sternum due to road accidents. Tatò FB, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):121–5

The effectiveness of the advanced trauma life support system in a mass casualty situation by non-trauma-experienced physicians: Grenada 1983. Walsh DP, et al. **J Emerg Med** 1989 Mar–Apr;7(2):175–80

Pediatric polytrauma: orthopaedic care and hospital course. Loder RT. **J Orthop Trauma** 1987;1(1):48–54

The selective management of penetrating wounds of the back. Whalen G, et al. **J Trauma** 1989 Apr;29(4):509–11

Clinical use of differential lung ventilation in the treatment of asymmetric lung injury: report of a case. Talbot AR, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):67–73

Pride in St. Paul [interview by Richard L. Reece] Cicero J. **Minn Med** 1988 Nov;71(11):660, 710–3

A traumatic week for Minnesota. Reece RL. **Minn Med** 1988 Nov;71(11):659, 668

The multiply-injured patient and the GP. Skinner D, et al. **Practitioner** 1988 Aug;232(1453):870–3

[Basic requirements of care in polytrauma] Lom P, et al. **Acta Chir Orthop Traumatol Cech** 1989 Feb;56(1):39–44 (Eng. Abstr.) **(Cze)**

[Parenteral nutrition in multiple injuries. I] Palyza V, et al. **Rozhl Chir** 1988 Sep;67(8–9):530–5 (Eng. Abstr.) **(Cze)**

[Parenteral nutrition in multiple injuries. II] Palyza V, et al. **Rozhl Chir** 1988 Sep;67(8–9):536–41 (Eng. Abstr.) **(Cze)**

[The treatment of a multiple trauma patient with severe injuries of the arms and legs] van der Werken C, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1587–91 (Eng. Abstr.) **(Dut)**

[Ventilatory strategies in the multiple-injured patient] Chiolero R. **Schweiz Med Wochenschr** 1989 Mar 18; 119(11):368–70 (Eng. Abstr.) **(Fre)**

[Infusions of amino acid solutions in the therapy concept of trauma patients. Comparative studies in the early phase of polytrauma] Sefrin P, et al. **Aktuel Traumatol** 1988 Dec; 18(6):240–8 (Eng. Abstr.) **(Ger)**

[Preventive use of Pentaglobin in intensive care treatment of trauma patients] Rommelsheim K. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):162–6 (Eng. Abstr.) **(Ger)**

[Polytrauma and its tactical therapeutic problems in children] Hargital E, et al. **Beitr Orthop Traumatol** 1989 Apr; 36(4):146–8 (Eng. Abstr.) **(Ger)**

[Pediatric polytrauma] Macik I, et al. **Beitr Orthop Traumatol** 1989 Apr;36(4):138–41 (Eng. Abstr.) **(Ger)**

[Treatment strategy in pediatric polytrauma] Popp W. **Beitr Orthop Traumatol** 1989 Apr;36(4):129–37 (Eng. Abstr.) **(Ger)**

[Significance of lung contusion in mortality following polytrauma. Possibilities for therapeutic influence] Regel G, et al. **Chirurg** 1988 Nov;59(11):771–6 (Eng. Abstr.) **(Ger)**

[Differentiated enteral feeding in the post-aggression phase in polytrauma patients. Comparison of a high calorie nutritionally defined diet (whole protein high calorie diet) with a peptide diet] Balogh D, et al. **Infusionstherapie** 1989 Apr;16(2):52–9 (Eng. Abstr.) **(Ger)**

[Experiences with a new fat emulsion in surgical intensive care medicine] Mertes N, et al. **Infusionstherapie** 1989 Jun; 16(3):114–7 (Eng. Abstr.) **(Ger)**

[Distribution and elimination of medium- and long-chain fatty acids of a fat emulsion in lipoproteins of severely injured patients following bolus injection] Wolfram G, et al. **Z Ernahrungswiss** 1989 Jun;28(2):173–80 (Eng. Abstr.) **(Ger)**

[Treatment of brain injuries in a peripheral intensive care unit. Results of the cooperation with the specialists at the nearest regional hospital] Corbanese U, et al. **Minerva Anestesiol** 1988 Mar;54(3):77–9 (Eng. Abstr.) **(Ita)**

[Correlation of the outcome of treatment of patients with combined injuries and the type of therapeutic tactics in the acute period of trauma] Akhmed-Zade AIa. **Ortop Travmatol Protez** 1988 Aug;(8):41–5 **(Rus)**

[Treatment of injuries of the locomotor systems in patients with multiple and combined trauma caused by traffic accidents] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Aug;(8):35–8 **(Rus)**

[Treatment of severe combined trauma] Pshenisnov KP, et al. **Vestn Khir** 1988 Oct;141(10):75–6 **(Rus)**

[Personal experience and dilemmas in the treatment of multiple injuries due to traffic accidents] Rajković M, et al. **Acta Chir Iugosl** 1988;35(1):93–9 (Eng. Abstr.) **(See)**

URINE

Aminoaciduria of severe trauma. Jeevanandam M, et al. **Am J Clin Nutr** 1989 May;49(5):814–22

VETERINARY

Treatment priorities in cases of multiple trauma. Wingfield WE, et al. **Semin Vet Med Surg (Small Anim)** 1988 Aug; 3(3):193–201 (25 ref.)

MULTIPOTENTIAL COLONY-STIMULATING FACTOR see **INTERLEUKIN 3**

MUMMIES

First stereoscopic images from CT reconstructions of mummies [letter] Lewin PK. **AJR** 1988 Dec;151(6):1249

Maternal mortality in pre-Columbian Indians of Arica, Chile. Arriaza B, et al. **Am J Phys Anthropol** 1988 Sep;77(1):35–41

Syphilis in a Renaissance Italian mummy [letter] Fornaciari G, et al. **Lancet** 1989 Sep 9;2(8663):614

Mummy DNA fragment identified [letter] Del Pozzo G, et al. **Nature** 1989 Jun 8;339(6224):431–2

Dead Sea asphalt in Egyptian mummies: molecular evidence. Rullkötter J, et al. **Naturwissenschaften** 1988 Dec; 75(12):618–21

A condylar tumor from pre-Columbian Chile: a case report. Sawyer DR, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):400–3

Ancient DNA: extraction, characterization, molecular cloning, and enzymatic amplification. Pääbo S. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1939–43

Dr. Leidy's soap lady: imaging the past. Conlogue G, et al. **Radiol Technol** 1989 May–Jun;60(5):411–5

Paleoradiologic evaluation of the Egyptian royal mummies. Braunstein EM, et al. **Skeletal Radiol** 1988;17(5):348–52

[Methods and instrumentation for the histological study of mummified tissues] Terribile Wiel Marin V. **Pathologica** 1987 Nov–Dec;79(1064):781–5 (Eng. Abstr.) **(Ita)**

MUMPS

Fatal mumps myocarditis. Ozkutlu S, et al. **Jpn Heart J** 1989 Jan;30(1):109–14

Measles, mumps, rubella and chickenpox in the adult population. Boodley CA, et al. **Nurse Pract** 1989 Feb; 14(2):12, 14, 16 passim (17 ref.)

[Debatable issues of epidemic parotitis] Zhamerichev SS. **Pediatriia** 1988;(12):71–4 (26 ref.) **(Rus)**

BLOOD

[The functional and metabolic activity of the leukocytes in epidemic parotitis] Nagoev BS. **Lab Delo** 1988;(9):74–5 **(Rus)**

[Lysosomal secretion of peripheral blood leukocytes in children with meningitis of mumps etiology] Babachenko IV, et al. **Pediatriia** 1988;(10):107 **(Rus)**

COMPLICATIONS

Sudden deafness and asymptomatic mumps. Nomura Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:9–11

Experimental mumps labyrinthitis in monkeys (Macaca irus)—immunohistochemical and ultrastructural studies. Tanaka K, et al. **Auris Nasus Larynx** 1988;15(2):89–96

Mumps meningitis, possibly vaccine-related—Ontario. Hockin JC, et al. **Can Dis Wkly Rep** 1988 Nov 19; 14(46):209–11 **(Eng, Fre)**

Mumps infections in the etiology of type 1 (insulin-dependent) diabetes. Hyöty H, et al. **Diabetes Res** 1988 Nov;9(3):111–6

Mumps with laboratory signs of subclinical pancreatitis may cause a disturbed beta-cell function. Ludvigsson J, et al. **Diabetes Res** 1988 Dec;9(4):193–5

Mild course of mumps in patients with acute lymphoblastic leukaemia. de Boer AW, et al. **Eur J Pediatr** 1989 Jun; 148(7):618–9

Production of viral antibodies in vitro by CSF cells from mumps meningitis and multiple sclerosis patients. Salmi AA, et al. **J Neurol Sci** 1989 May;90(3):315–24

Mumps meningitis following measles, mumps, and rubella immunisation [letter] **Lancet** 1989 Aug 12;2(8659):394–5

Simultaneous occurrence of mumps meningoencephalitis and tuberculosis meningitis. Kalis NN, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):476–7

Mumps-induced opsoclonus-myoclonus and ataxia. Ichiba N, et al. **Pediatr Neurol** 1988 Jul–Aug;4(4):224–7

Still's disease and myocarditis associated with recent mumps infection. Ward SC, et al. **Postgrad Med J** 1988 Sep; 64(755):693–5

[Epidemic parotitis and Reiter's syndrome (letter)] Vallina Alvarez E, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):358 **(Spa)**

DIAGNOSIS

Diagnostic criteria for sudden deafness, mumps deafness and perilymphatic fistula. Nomura Y. **Acta Otolaryngol Suppl (Stockh)** 1988;456:7–8

Contribution to laboratory diagnosis of mumps and parainfluenza. Fraňková V, et al. **Acta Virol (Praha)** 1988 Nov;32(6):503–14

Fulminant mumps myocarditis. Chaudary S, et al. **Ann Intern Med** 1989 Apr 1;110(7):569–70

The diagnostic value of amylase isoenzymes. Tsai LY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):655–9

[Prepartal mumps infection, a risk for the newborn infant?] Rosen A, et al. **Z Geburtshilfe Perinatol** 1989 Mar–Apr; 193(2):100–1 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Perspectives on the relative resurgence of mumps in the United States [letter] Bader M. **Am J Dis Child** 1988 Oct; 142(10):1021–2

Cases of mumps following previous vaccinations [letter] Davis J. **Am J Dis Child** 1988 Oct;142(10):1022

The epidemiology of mumps in southern Alberta 1980–1982. Falk WA, et al. **Am J Epidemiol** 1989 Oct;130(4):736–49

Vaccine-preventable diseases on college campuses: the emergence of mumps. Williams WW, et al. **J Am Coll Health** 1989 Mar;37(5):197–203

A large outbreak of mumps in the postvaccine era. Wharton M, et al. **J Infect Dis** 1988 Dec;158(6):1253–60

Seroepidemiology of mumps, measles, and subacute sclerosing panencephalitis in Saudi Arabia. Bakir TM, et al. **J Trop Pediatr** 1988 Oct;34(5):254–6

Leads from the MMWR. Mumps—United States, 1985–1988. **JAMA** 1989 Mar 24–31;261(12):1702, 1707–8

Mumps—United States, 1985–1988 [published erratum appears in MMWR 1989 Mar 10;38(9):151] **MMWR** 1989 Feb 24;38(7):101–5

[Epidemic parotitis—1987] Zabicka J. **Przegl Epidemiol** 1989; 43(1):25–9 **(Pol)**

ETIOLOGY

Mumps meningitis following measles, mumps, and rubella immunisation [letter] Gray JA, et al. **Lancet** 1989 Jul 8; 2(8654):98

IMMUNOLOGY

Immunological study on association between mumps and infantile unilateral deafness. Koga K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:55–60

Serum IgG and IgM responses in mumps infection as measured by ELISA using a guinea pig capture antibody raised by intranasal immunization [letter] Juto P, et al. **J Infect Dis** 1989 May;159(5):998–9

Efficacy and safety of vaccination of marrow transplant recipients with a live attenuated measles, mumps, and rubella vaccine. Ljungman P, et al. **J Infect Dis** 1989 Apr; 159(4):610–5

[Epitope analysis of mumps virus proteins in a persistent cell culture infection: changes in the hemagglutinin-neuraminidase polypeptide] Boriskin IuS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):595–600 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Isolation of mumps virus from vaginal secretions in association with oophoritis. Taparelli F, et al. **J Infect** 1988 Nov;17(3):255–8

PATHOLOGY

Experimental mumps virus-induced labyrinthitis. Immunohistochemical and ultrastructural studies. Tanaka K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:98–105

[Morphologic characteristics of the parotid glands in monkeys in the late period following mumps] Rybakova MG, et al. **Biull Eksp Biol Med** 1989 May;107(5):624–7 (Eng. Abstr.) **(Rus)**

[Comparative clinico-morphological research on measles and mumps infections in an experiment on guinea pigs] Rozina EE, et al. **Vopr Virusol** 1988 May–Jun;33(3):342–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Exocrine pancreatic function in children with mumps pancreatitis. Kobayashi A, et al. **Acta Paediatr Scand** 1989 Jan;78(1):129–30

Loss of functional voltage-gated sodium channels in persistent mumps virus-infected PC12 cells. Stauffer EK, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):749–54

PREVENTION & CONTROL

Mumps in the US Army 1980–86: should recruits be immunized? Arday DR, et al. **Am J Public Health** 1989 Apr;79(4):471–4

Notification of mumps [letter] Hill A. **BMJ** 1988 Nov 19; 297(6659):1337

Measles, mumps, and rubella vaccine coverage [letter] **Lancet** 1989 Feb 4;1(8632):271–2

Measles/mumps/rubella vaccine [news] **Lancet** 1988 Oct 8; 2(8615):860

Measles, mumps, and rubella vaccine: what coverage to block transmission? [letter] Nokes DJ, et al. **Lancet** 1988 Dec

10;2(8624):1374
Measles, mumps, and rubella immunisation [letter] Walker D. **Lancet** 1989 Jan 21;1(8630):167
Mumps prevention. **MMWR** 1989 Jun 9;38(22):388–92, 397–400
Measles, mumps and rubella: present and future immunisation policy. Miller E. **Public Health** 1988 Jul;102(4):317–21
Two doses of MMR vaccine—sufficient to eradicate measles, mumps and rubella? Fahlgren K. **Scand J Soc Med** 1988; 16(3):129–35 (41 ref.)
[Rubella, measles, mumps—epidemiologic, occupational medicine significance and efficacy of adult vaccination] Hofmann F, et al. **Off Gesundheitswes** 1989 Jun; 51(6):299–302 (Eng. Abstr.) **(Ger)**
[Clinico–immunologic evaluation of a trivalent vaccine against measles, rubella and mumps] Schettini F, et al. **Minerva Pediatr** 1989 Mar;41(3):117–22 (Eng. Abstr.) **(Ita)**
[Conjugated vaccine against measles, rubella and mumps] **Vopr Virusol** 1989 Jan–Feb;34(1):117–9 **(Rus)**

THERAPY

1000 cases of mumps treated with ear needling on Pingjian point (MA–T2). Song GY. **J Tradit Chin Med** 1989 Mar; 9(1):14

TRANSMISSION

Seroepidemiological study of the transmission of the mumps virus in St. Lucia, West Indies. Cox MJ, et al. **Epidemiol Infect** 1989 Feb;102(1):147–60

MUMPS VACCINE

Measles mumps rubella (MMR) vaccine in Japan. Kuno–Sakai H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):167–74
Mumps in the US Army 1980–86: should recruits be immunized? Arday DR, et al. **Am J Public Health** 1989 Apr;79(4):471–4
Measles, mumps, and rubella vaccine. **BMJ** 1988 Sep 24; 297(6651):780–1
Big bang for vaccination [editorial] Badenoch J. **BMJ** 1988 Sep 24;297(6651):750–1
Contraindications to live–viral immunization [letter] Legler JD. **J Fam Pract** 1989 Mar;28(3):333–4
Effect of measles, mumps, rubella vaccination on pattern of encephalitis in children. Koskiniemi M, et al. **Lancet** 1989 Jan 7;1(8628):31–4
Measles, mumps, rubella and the GP [editorial] Kerrigan P. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1121
[Response to Dr. Gaillet's letter: An open question to those responsible for the MMR vaccination program (letter)] Suter S. **Rev Med Suisse Romande** 1988 Nov;108(11):1001–2 **(Fre)**

ADMINISTRATION & DOSAGE

Cases of mumps following previous vaccinations [letter] Davis J. **Am J Dis Child** 1988 Oct;142(10):1022
Immunizing HIV–positive children [news] **Int Nurs Rev** 1989 May–Jun;36(3):72
Updated guidelines for vaccinations in HIV–infected children [letter] Lindquist CM. **J Am Osteopath Assoc** 1988 Sep; 88(9):1064
Interference between strains in live virus vaccines, I: Combined vaccination with measles, mumps and rubella vaccine. Berger R, et al. **J Biol Stand** 1988 Oct;16(4):269–73
Interference between strains in live virus vaccines. II: Combined vaccination with varicella and measles–mumps–rubella vaccine. Berger R, et al. **J Biol Stand** 1988 Oct;16(4):275–9
Placebo–controlled trial of varicella vaccine given with or after measles–mumps–rubella vaccine. Englund JA, et al. **J Pediatr** 1989 Jan;114(1):37–44
Two doses of MMR vaccine—sufficient to eradicate measles, mumps and rubella? Fahlgren K. **Scand J Soc Med** 1988; 16(3):129–35 (41 ref.)
[Conjugated vaccine against measles, rubella and mumps] **Vopr Virusol** 1989 Jan–Feb;34(1):117–9 **(Rus)**

ADVERSE EFFECTS

Sister chromatid exchanges in peripheral lymphocytes of children vaccinated against rubella and measles–mumps–rubella. Kitsiou S, et al. **Acta Paediatr Scand** 1988 Nov;77(6):879–84
Unilateral deafness as a complication of the mumps, measles, and rubella vaccination. Nabe–Nielsen J, et al. **BMJ** 1988 Aug 13;297(6646):489
New vaccination—measles, mumps, rubella [letter] Libbey MA. **Br Dent J** 1988 Sep 10;165(5):160
Mumps meningitis, possibly vaccine–related—Ontario. Hockin JC, et al. **Can Dis Wkly Rep** 1988 Nov 19; 14(46):209–11 **(Eng, Fre)**
Administration of measles–mumps–rubella vaccine to children allergic to eggs [letter] Peter G. **J Pediatr** 1989 Jun;114(6):1067
Mumps meningitis following measles, mumps, and rubella immunisation [letter] **Lancet** 1989 Aug 12;2(8659):394–5
Mumps vaccine and meningitis [letter] Ehrengut W. **Lancet** 1989 Sep 23;2(8665):751
Mumps meningitis following measles, mumps, and rubella immunisation [letter] Gray JA, et al. **Lancet** 1989 Jul 8; 2(8654):98
Mumps meningitis after measles, mumps, and rubella vaccination [letter] Murray MW, et al. **Lancet** 1989 Sep 16;2(8664):677
Measles revaccination—an additional note. **Med Lett Drugs Ther** 1989 Sep 22;31(801):88
Aseptic meningitis after vaccination against measles and mumps. Cižman M, et al. **Pediatr Infect Dis J** 1989 May; 8(5):302–8
Unilateral total deafness as a complication of the measles–mumps–rubella vaccination. Nabe–Nielsen J, et al. **Scand Audiol Suppl** 1988;30:69–70

IMMUNOLOGY

Efficacy and safety of vaccination of marrow transplant recipients with a live attenuated measles, mumps, and rubella vaccine. Ljungman P, et al. **J Infect Dis** 1989 Apr; 159(4):610–5
Evaluation of mumps antibodies after measles–mumps–rubella (MMR) vaccines. Ozaki K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):305–11
Complement–mediated neutralization test for determination of mumps vaccine–induced antibody. Hishiyama M, et al. **Vaccine** 1988 Oct;6(5):423–7
[Clinico–immunologic evaluation of a trivalent vaccine against measles, rubella and mumps] Schettini F, et al. **Minerva Pediatr** 1989 Mar;41(3):117–22 (Eng. Abstr.) **(Ita)**
[The development and duration of immunity in children vaccinated against measles with the Edmonston–Zagreb vaccine] Borčić B, et al. **Lijec Vjesn** 1989 Apr–May; 111(4–5):131–4 (Eng. Abstr.) **(Scr)**

ISOLATION & PURIFICATION

Mumps vaccine L–Zagreb, prepared in chick fibroblasts. I. Production and field trials. Beck M, et al. **J Biol Stand** 1989 Jan;17(1):85–90

SUPPLY & DISTRIBUTION

Measles, mumps and rubella vaccine [editorial] Miller E. **Br J Hosp Med** 1988 Oct;40(4):247, 249

THERAPEUTIC USE

Measles, mumps and rubella. The new MMR. Golding AM. **Public Health** 1988 Nov;102(6):517–8
[Open question to those responsible for the measles–mumps–rubella vaccination program] Gaillet RP. **Rev Med Suisse Romande** 1988 Aug;108(8):711–6 **(Fre)**
[Response to: "Open question to those responsible for the MMR vaccination program" by Dr. R. Ph. Gaillet (letter)] Méan F. **Rev Med Suisse Romande** 1988 Oct;108(10):907–10 **(Fre)**

MUMPS VIRUS

ENZYMOLOGY

Identification of amino acids involved in the sialidase activity of the mumps virus hemagglutinin–neuraminadase protein. Waxham MN, et al. **Virology** 1988 Nov;167(1):226–32

GENETICS

Inclusion body myositis: the mumps virus hypothesis. Nishino H, et al. **Ann Neurol** 1989 Mar;25(3):260–4
Molecular cloning and characterization of six genes, determination of gene order and intergenic sequences and leader sequence of mumps virus. Elango N, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2893–900
The mumps virus fusion protein mRNA sequence and homology among the paramyxoviridae proteins. Elango N, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):801–7
mRNA sequence and deduced amino acid sequence of the mumps virus small hydrophobic protein gene. Elango N, et al. **J Virol** 1989 Mar;63(3):1413–5
Selection of mutants of mumps virus with altered structure and pathogenicity by passage in vivo. Löve A, et al. **Microb Pathog** 1986 Apr;1(2):149–58
Cloning and sequencing of the fusion protein gene of mumps virus (Miyahara strain). Takeuchi K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5839
Cloning and sequencing of the haemagglutinin–neuraminidase gene of mumps virus (Miyahara strain). Takeuchi K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5840
Sequence analysis of the mumps virus mRNA encoding the P protein. Elango N, et al. **Virology** 1989 Mar;169(1):62–7
Complete nucleotide sequence of the matrix protein mRNA of mumps virus. Elango N. **Virology** 1989 Feb;168(2):426–8
Sequence variation of the P gene among mumps virus strains. Yamada A, et al. **Virology** 1989 Sep;172(1):374–6
The mumps virus nucleocapsid mRNA sequence and homology among the Paramyxoviridae proteins. Elango N. **Virus Res** 1989 Jan;12(1):77–86
Nucleotide sequence of the matrix, fusion and putative SH protein genes of mumps virus and their deduced amino acid sequences. Elliott GD, et al. **Virus Res** 1989 Jan; 12(1):61–75
Complete nucleotide sequence of the hemagglutinin–neuraminidase (HN) mRNA of mumps virus and comparison of paramyxovirus HN proteins. Kövamees J, et al. **Virus Res** 1989 Jan;12(1):87–96

IMMUNOLOGY

Immunological study on association between mumps and infantile unilateral deafness. Koga K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:55–60
Contribution to laboratory diagnosis of mumps and parainfluenza. Fraňková V, et al. **Acta Virol (Praha)** 1988 Nov;32(6):503–14
Surveillance of antibody to measles, mumps, and rubella by age. Morgan–Capner P, et al. **BMJ** 1988 Sep 24; 297(6651):770–2
Immunotherapy of advanced gynecologic cancer patients utilizing mumps virus. Shimizu Y, et al. **Cancer Detect Prev** 1988;12(1–6):487–95
Competition binding assay in cell culture for identification of epitopes on enveloped and naked viruses. Oosterlaken TA, et al. **Int J Med Microbiol** 1989 Jul;271(2):237–43
Serum IgG and IgM responses in mumps infection as measured by ELISA using a guinea pig capture antibody raised by intranasal immunization [letter] Juto P, et al. **J Infect Dis** 1989 May;159(5):998–9
Virus–specific cytotoxic T lymphocytes in multiple sclerosis: a normal mumps virus response adds support for a distinct impairment in the measles virus response. Goodman AD, et al. **J Neuroimmunol** 1989 May;22(3):201–9
Persistent synovial lymphocyte responses to mumps and adenovirus antigens. Ford DK, et al. **J Rheumatol** 1988 Nov;15(11):1717–9
Enzyme immunoassay of mumps virus in cell culture with peroxidase–labelled virus specific monoclonal antibodies and its application for determination of antibodies. van Tiel FH, et al. **J Virol Methods** 1988 Oct;22(1):99–108
Evaluation of mumps antibodies after measles–mumps–rubella (MMR) vaccines. Ozaki K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):305–11
Laboratory markers for over–attenuation of mumps vaccine virus. Boriskin YuS, et al. **Vaccine** 1988 Dec;6(6):483–8
[Epitope analysis of mumps virus proteins in a persistent cell culture infection: changes in the hemagglutinin–neuraminidase polypeptide] Boriskin IuS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):595–600 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation of mumps virus from vaginal secretions in association with oophoritis. Taparelli F, et al. **J Infect** 1988 Nov;17(3):255–8
Mumps meningitis after measles, mumps, and rubella vaccination [letter] Murray MW, et al. **Lancet** 1989 Sep 16;2(8664):677

ULTRASTRUCTURE

Experimental mumps virus–induced labyrinthitis. Immunohistochemical and ultrastructural studies. Tanaka K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:98–105

MUNCHAUSEN SYNDROME

The family systems of Munchausen syndrome by proxy. Griffith JL. **Fam Process** 1988 Dec;27(4):423–37
[Munchausen syndrome. Apropos of a case] Schiraldi O, et al. **Recenti Prog Med** 1989 Mar;80(3):133–6 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

[A patient with ocular Munchausen's syndrome] Voutilainen R, et al. **Duodecim** 1988;104(9):722–5 **(Fin)**

DIAGNOSIS

Munchausen syndrome by proxy. Atoynatan TH, et al. **Child Psychiatry Hum Dev** 1988 Fall;19(1):3–13
Munchausen syndrome by proxy. Sheridan MS. **Health Soc Work** 1989 Feb;14(1):53–8
Factitious diabetes mellitus as part of Munchausen's syndrome [letter] Sho HN. **Neth J Med** 1989 Aug; 35(1–2):59–60
Factitious diabetes mellitus as part of Munchausen's syndrome. van der Poel MF, et al. **Neth J Med** 1989 Feb; 34(1–2):35–9
Münchausen syndrome presenting with chronic pain: case report. Fishbain DA, et al. **Pain** 1988 Oct;35(1):91–4
Sneed [corrected] or meadow?—Munchausen or Münchhausen? [letter] [published erratum appears in Pediatrics 1989 Sep;84(3):582] Sneed RC. **Pediatrics** 1989 Jun;83(6):1078
Factitious disorder with physical manifestations: pitfalls of diagnosis and management. Schlesinger RD, et al. **South Med J** 1989 Feb;82(2):210–4
[The child abuse syndrome as a diagnosis] Marten J. **Cesk Pediatr** 1989 May;44(5):279–82 **(Cze)**
[Fraud in medicine with the child as victim. Munchausen syndrome by proxy. A review of the literature] Koopman HM, et al. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):141–8 (27 ref.) (Eng. Abstr.) **(Dut)**
[Munchausen's syndrome by proxy and chronic intestinal pseudo–obstruction] Ginies JL, et al. **Arch Fr Pediatr** 1989 Apr;46(4):267–9 (Eng. Abstr.) **(Fre)**
[Munchausen syndrome by proxy] Pozo Román J, et al. **An Esp Pediatr** 1989 Mar;30(3):229–30 **(Spa)**

ETIOLOGY

Ocular Münchhausen syndrome induced by incest. Voutilainen R, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):319–21

HISTORY

Historical note on pseudoseizures [letter] Pankratz L. **Neurology** 1989 May;39(5):750

Munchausen's syndrome: a disorder by any other name? Lazarus A. **Pharos** 1989 Summer;52(3):34–6

PSYCHOLOGY

Munchausen's syndrome in a 4 year old. Croft RD, et al. **Arch Dis Child** 1989 May;64(5):740–1

ABC of child abuse. Munchausen syndrome by proxy. Meadow R. **BMJ** 1989 Jul 22;299(6693):248–50 (0 ref.)

Feigned alcohol abuse. A unique case report. Caradoc-Davies G. **Br J Psychiatry** 1988 Mar;152:418–20

Munchausen syndrome. Motives and the relation to deliberate self-harm. Humphries SR. **Br J Psychiatry** 1988 Mar; 152:416–7

Psychiatric Munchausen's syndrome: a college register [letter] Markantonakis A, et al. **Br J Psychiatry** 1988 Jun; 152:867

Munchausen syndrome/bulimia by proxy: ipecac as a toxin in child abuse. Feldman KW, et al. **Child Abuse Negl** 1989; 13(2):257–61

Munchausen syndrome by proxy: a survey of professionals' knowledge. Kaufman KL, et al. **Child Abuse Negl** 1989; 13(1):141–7

Pseudoadolescent Munchausen syndrome. Shaner A, et al. **Compr Psychiatry** 1988 Nov-Dec;29(6):561–5

Munchausen's syndrome: a case report. Kiire CF. **East Afr Med J** 1986 Dec;63(12):826–8

The effects of a suspected case of Munchausen's syndrome by proxy on a pediatric nursing staff. Blix S, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):402–9

Munchausen syndrome: new cause for concern [letter] Connelly PJ, et al. **J Clin Psychiatry** 1989 Feb;50(2):73

Fever of unknown origin for six years: Munchausen syndrome by proxy [clinical conference] Wood PR, et al. **J Fam Pract** 1989 Apr;28(4):391–5

Munchausen Zollinger-Ellison syndrome [letter] Daly MJ, et al. **Lancet** 1989 Apr 15;1(8642):853

Munchausen AIDS [letter] Kavalier FC. **Lancet** 1989 Apr 15;1(8642):852

Psychologic morbidity of children subjected to Munchausen syndrome by proxy. McGuire TL, et al. **Pediatrics** 1989 Feb;83(2):289–92

Münchausen syndrome by proxy and sleep disorders medicine. Griffith JL, et al. **Sleep** 1989 Apr;12(2):178–83

[A case of Munchausen syndrome by proxy] Feenstra J, et al. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):148–53 (Eng. Abstr.) **(Dut)**

MUNICIPAL GOVERNMENT

Tuberculosis control policies in major metropolitan health departments in the United States. IV. Standards in 1988. Leff DR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1350–5

[Evaluation of adult health program conducted by local municipalities] Nagai M, et al. **Gan No Rinsho** 1989 Jan; 35(2):248–52 (Eng. Abstr.) **(Jpn)**

[Task to mental health by the local government] Yoshizumi A, et al. **Seishin Shinkeigaku Zasshi** 1988;90(7):519–58 **(Jpn)**

MUR-NAC-L-ALA-D-ISOGLN see **ACETYLMURAMYL-ALANYL-ISOGLUTAMINE**

MURAMIC ACIDS see under **SUGAR ACIDS**

MURAMIDASE

Protein adsorption to hydroxyapatite and to calcium fluoride in vitro and amino acid analyses of pellicle formed on normal enamel and on calcium-fluoride-covered enamel in vivo. Rykke M, et al. **Acta Odontol Scand** 1989 Aug; 47(4):245–51

Oxygen-17 and deuterium nuclear magnetic relaxation studies of lysozyme hydration in solution: field dispersion, concentration, pH/pD, and protein activity dependences. Kakalis LT, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):829–41

An infrared spectroscopic study of the interactions of carbohydrates with dried proteins. Carpenter JF, et al. **Biochemistry** 1989 May 2;28(9):3916–22

Optically detected magnetic resonance study of tyrosine residues in point-mutated bacteriophage T4 lysozyme. Ghosh S, et al. **Biochemistry** 1988 Oct 4;27(20):7816–20

High-resolution structure of the temperature-sensitive mutant of phage lysozyme, Arg 96——His. Weaver LH, et al. **Biochemistry** 1989 May 2;28(9):3793–7

Comparative triplet-state properties of the three tryptophan residues in bacteriophage T4 lysozyme and in the enzyme complex with methylmercury(II). Zang LH, et al. **Biochemistry** 1988 Oct 4;27(20):7820–5

Conformational properties of a polyglycine chain with secondary and tertiary structures of lysozyme. Dolcet C, et al. **Biophys Chem** 1988 Dec;32(2–3):247–55

Investigation of protein structure by means of 19F-NMR. A study of hen egg-white lysozyme. Adriaensens P, et al. **Eur J Biochem** 1988 Nov 1;177(2):383–94

Homogeneous enzyme immunoassay of estriol using lysozyme. Samanta AK, et al. **Indian J Med Res** 1988 Jun; 87:615–9

Relative effectiveness of various ions on the solubility and crystal growth of lysozyme. Ries-Kautt MM, et al. **J Biol Chem** 1989 Jan 15;264(2):745–8

Modelling of alpha-lactalbumin from the known structure of hen egg white lysozyme using molecular dynamics. Robson B, et al. **J Comput Aided Mol Des** 1987 Apr; 1(1):17–22

Preliminary X-ray crystallographic study of lysozyme produced by Streptomyces globisporus. Harada S, et al. **J Mol Biol** 1989 Jun 20;207(4):851–2

Photointeraction of benzophenone triplet with lysozyme. Encinas MV, et al. **Photochem Photobiol** 1989 May; 49(5):557–63

Structure of an antibody-antigen complex: crystal structure of the HyHEL-10 Fab-lysozyme complex. Padlan EA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5938–42

Highly controlled carbodiimide reaction for the modification of lysozyme. Modification of Leu129 or Asp119. Ueda T, et al. **Protein Eng** 1987 Jun;1(3):189–93

[Lysozyme in nephrology and hematology] Tischendorf FW. **Ric Clin Lab** 1976 Jan-Mar;6 Suppl 1:15–29 (45 ref.) **(Ita)**

[Calorimetric study of the formation and melting of thermotropic gel in solutions of globular proteins] Belopol'skaia TV, et al. **Biofizika** 1989 May-Jun; 34(3):520–1 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[Preparation of lysozyme immobilized on textile carriers and its use in treating suppurative wounds] Vlasov LG, et al. **Antibiot Khimioter** 1988 Nov;33(11):848–50 (Eng. Abstr.) **(Rus)**

[A method of treating suppurative wounds] Opanashchenko GA, et al. **Klin Khir** 1989;(1):63 **(Rus)**

[Successive use of ultrasonics and lysozyme electrophoresis in the treatment of patients with chronic bronchitis] Vashkevich DL, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May-Jun; (3):18–22 (Eng. Abstr.) **(Rus)**

ANALYSIS

Evaluation of ligand induced relative change in the bimolecular quenching constant of protein fluorescence: applications to lysozyme and adenosine deaminase. Somogyi B, et al. **Acta Biochim Biophys Hung** 1988; 23(2):135–48

Pulmonary lysozyme—a secretory protein of type II pneumocytes in the rat. Singh G, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1261–7

Mucoepidermoid carcinomas: immunohistochemical studies on keratin, S-100 protein, lactoferrin, lysozyme and amylase. Kumasa S, et al. **Basic Appl Histochem** 1988; 32(4):429–41

Stimulation by sulfated glycans of proteolysis of lysozyme by chymotrypsin. Oshima G. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3675–7

Tear lysozyme and lactoferrin levels in giant papillary conjunctivitis and vernal conjunctivitis. Rapacz P, et al. **CLAO J** 1988 Oct-Dec;14(4):207–9

Detection of lysozyme and alpha 2-macroglobulin—lysozyme complexes by immunoblotting. Mörsky P. **Clin Chim Acta** 1988 Dec 30; 178(3):327–36

Comparison of the amino acid sequence of the lytic enzyme from broad-host-range bacteriophage PRD1 with sequences of other cell-wall-peptidoglycan lytic enzymes. Pakula TM, et al. **Eur J Biochem** 1989 Mar 1;180(1):149–52

Combination of diaminobenzidine staining and immunogold labeling: a novel technical approach to identify lysozyme in human neutrophil cells. Mutasa HC. **Eur J Cell Biol** 1989 Aug;49(2):319–25

A rapid fluorimetric test for lysozyme with purified fluorescamine-labelled peptidoglycan. Moser I, et al. **J Biochem Biophys Methods** 1988 Dec;17(4):249–52

p-nitrophenyl penta-N-acetyl-beta-chitopentaoside as a novel synthetic substrate for the colorimetric assay of lysozyme. Nanjo F, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):255–8

Immunological-chromatographic analysis of lysozyme variants. Janis LJ, et al. **J Chromatogr** 1989 Aug 4; 476:235–44

Ion-exchange equilibria of lysozyme, myoglobin and bovine serum albumin. Effective valence and exchanger capacity. Whitley RD, et al. **J Chromatogr** 1989 Mar 31; 465(2):137–56

Lysozyme and mucins in gastric adenomas. Caruso RA, et al. **J Clin Pathol** 1989 Aug;42(8):827–33

Histochemical blockade of the antigen-antibody reaction using immunoperoxidase demonstration of lysozyme in paneth cells and lamina propria mononucleocytes of human small intestine as a model system. Montero C, et al. **J Histochem Cytochem** 1989 Jul;37(7):1063–8

Salivary immunoglobulins, lysozyme, pH, and microbial counts in children receiving anti-neoplastic therapy. Pajari U, et al. **Scand J Dent Res** 1989 Apr;97(2):171–7

Immunohistochemical demonstration of lysozyme and lactoferrin in salivary pleomorphic adenomas. Mitani H, et al. **Virchows Arch [B]** 1989;57(4):257–65

Determination of lysozyme content in eggs and egg products using SDS-gel electrophoresis. Weth F, et al. **Z Lebensm Unters Forsch** 1988 Dec;187(6):541–5

Immunohistochemical localization of S-100 protein and lysozyme in canine lymph nodes and lymphomas. Fondevila D, et al. **Zentralbl Veterinarmed [A]** 1989 Jan; 36(1):71–7

[Investigations on the standardization of the lysoplate technique for assay of lysozyme] Stelzner A, et al. **Allerg Immunol (Leipz)** 1989;35(1):51–8 (Eng. Abstr.) **(Ger)**

[Fecal inflammatory markers in Crohn disease] Singe CC. **Z Gastroenterol [Verh]** 1989 Jul;24:35–7 (14 ref.) **(Ger)**

[Immunohistochemical detection of lysozyme and alpha-1-antichymotrypsin in fibrohistiocytic tumors] Knolle R, et al. **Zentralbl Allg Pathol** 1988;134(4–5):383–92 (Eng. Abstr.) **(Ger)**

[Salivary lysozyme in pregnancy] Moggian G, et al. **Minerva Ginecol** 1988 Jul;40(7):411–6 (Eng. Abstr.) **(Ita)**

[Lysozyme-positive cells and ultrastructural findings in granulomatous and histiocyte-proliferative skin diseases] Shimada K. **Nippon Hifuka Gakkai Zasshi** 1989 Feb; 99(2):101–10 (Eng. Abstr.) **(Jpn)**

[Changes in lysozyme activity as a factor of natural immunity] Paran'ko NM, et al. **Gig Tr Prof Zabol** 1989;(6):53–5 **(Rus)**

ANTAGONISTS & INHIBITORS

The inhibition of goose lysozyme by oligosaccharides from the cell wall of Micrococcus lysodeikticus. Allen AK, et al. **Biochim Biophys Acta** 1971 Jun 16;235(3):539–41

Selective inhibition of cytokine-induced lysozyme activity by tetanus toxin in the GG2EE macrophage cell line. Pitzurra L, et al. **Infect Immun** 1989 Aug;57(8):2452–6

The role of cysteine oxidation in the thermal inactivation of T4 lysozyme. Perry LJ, et al. **Protein Eng** 1987 Feb-Mar; 1(2):101–5

Increased (L+)-lactic acid production in lysozyme-inactivated suspensions of human dental plaque. Twetman S, et al. **Swed Dent J** 1988;12(5):213–6

[Isolation and characteristics of Klebsiella pneumoniae lysozyme factor] Iablochkov AL. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):11–4 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

A structural requirement in the subsite F of lysozyme. The role of arginine 115 in human lysozyme revealed by site-directed mutagenesis. Muraki M, et al. **Eur J Biochem** 1989 Feb 15;179(3):573–9

BLOOD

A case of acute monocytic leukemia with lysozyme-positive leukemic monocytes and normal serum lysozyme levels. Pawel B, et al. **Acta Haematol (Basel)** 1989;81(2):101–3 (9 ref.)

Platelet-dependent induction and amplification of polymorphonuclear leucocyte lysosomal enzyme release. Del Maschio A, et al. **Br J Haematol** 1989 Jul;72(3):329–35

Immunoassay of serum muramidase (lysozyme) in ocular diseases. Sen DK, et al. **Indian J Ophthalmol** 1987; 35(5–6):103–7

Non-identity of human plasma lysozyme and 4-methylumbelliferyl-tetra-N-acetyl-beta-D-chitotetraoside hydrolase. Den Tandt WR, et al. **Int J Biochem** 1988;20(7):713–9

Serum lysozyme and phosphatases in children with Schistosoma haematobium infections. Kassim OO. **J Trop Pediatr** 1988 Oct;34(5):248–50

[Immunoenzyme assay of lysozyme secretion from activated human neutrophils] Erben K, et al. **Z Med Lab Diagn** 1988; 29(4):188–95 (Eng. Abstr.) **(Ger)**

[The evaluation of automated analysis on plasma lysozyme biological activity by turbidimetric assay: relation to neutrophils in the peripheral blood] Kabutomori O, et al. **Rinsho Byori** 1988 Dec;36(12):1426–30 **(Jpn)**

[Lysozyme activities in plasma and neutrophilic granulocytes] Kabutomori O, et al. **Rinsho Byori** 1989 Apr; 37(4):445–6 **(Jpn)**

[Serum lysozyme activity in patients with hypothyroidism] Hrycek A, et al. **Endokrynol Pol** 1988;39(4):207–12 (Eng. Abstr.) **(Pol)**

[Serum lysozyme activity in patients with diabetes mellitus] Sroczyński J, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):977–8 (Eng. Abstr.) **(Pol)**

[Serum lysozyme activity in patients after the acute phase of trichinosis] Prokopowicz D. **Wiad Parazytol** 1988; 34(4–6):625–30 (33 ref.) **(Pol)**

[Secretion of lysozyme by blood neutrophils during physical exertion] Morozov VI, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):334–7 (Eng. Abstr.) **(Rus)**

[Radioimmunological assay of human lysozyme and effect of exertion on its blood level] Priiatkin SA, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):74–8 (Eng. Abstr.) **(Rus)**

[Indices of lysozyme activity and of liver metabolic function in staphylococcal and Pseudomonas aeruginosa infection] Pavlenko VA, et al. **Vrach Delo** 1989 Mar;(3):111–3 (Eng. Abstr.) **(Rus)**

[Circadian variations in the production of superoxide and liberation of lysosomal enzymes of neutrophils in peripheral blood] Muniain MA, et al. **Rev Clin Esp** 1989 Jan; 184(1):20–3 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

[Cerebrospinal fluid lysozyme activity in the diagnosis of tuberculous meningitis] Wang J. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):30–1, 63 (Eng. Abstr.) **(Chi)**

[Cerebrospinal fluid lysozyme in meningitis in children. Value in establishing the etiologic diagnosis] Gerbaut L, et al. **Arch Fr Pediatr** 1988 Dec;45(10):799–803 (Eng. Abstr.) **(Fre)**

GENETICS

Construction of a lactococcal expression vector: expression of hen egg white lysozyme in Lactococcus lactis subsp. lactis. van de Guchte M, et al. **Appl Environ Microbiol** 1989 Jan;55(1):224–8

50 residues coded by exon 2 of chicken lysozyme carry residual catalytic activity. Kuchinke W. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):927–32

Important role of the proline residue in the signal sequence that directs the secretion of human lysozyme in Saccharomyces cerevisiae. Yamamoto Y, et al. **Biochemistry** 1989 Mar 21;28(6):2728–32

Perturbation of tryptophan residues by point mutations in bacteriophage T4 lysozyme studied by optical detection of triplet-state magnetic resonance spectroscopy. Zang LH, et al. **Biochemistry** 1989 Mar 7;28(5):2245–51

The evolution of lysozyme and alpha-lactalbumin. Nitta K, et al. **Eur J Biochem** 1989 Jun 1;182(1):111–8

The human lysozyme gene. Sequence organization and chromosomal localization. Peters CW, et al. **Eur J Biochem** 1989 Jul 1;182(3):507–16

Synthesis, processing and degradation in yeast of precursor human lysozyme with newly designed signal sequences. Yamamoto Y, et al. **Eur J Biochem** 1989 Sep 1;184(1):233–6

Cloning of human lysozyme gene and expression in the yeast Saccharomyces cerevisiae. Castañón MJ, et al. **Gene** 1988 Jun 30;66(2):223–34

Expression of transferred chicken lysozyme gene in homologous and heterologous cells: steroid control in oviduct cells and SV40 DNA dependence in human cells. Renkawitz R, et al. **Gene Amplif Anal** 1983;3:261–80

Multiple cDNA sequences and the evolution of bovine stomach lysozyme. Irwin DM, et al. **J Biol Chem** 1989 Jul 5;264(19):11387–93

Structural studies of mutants of T4 lysozyme that alter hydrophobic stabilization. Matsumura M, et al. **J Biol Chem** 1989 Sep 25;264(27):16059–66

Episodic evolution in the stomach lysozymes of ruminants. Jollès J, et al. **J Mol Evol** 1989 Jun;28(6):528–35

Ancient origin of lactalbumin from lysozyme: analysis of DNA and amino acid sequences. Prager EM, et al. **J Mol Evol** 1988;27(4):326–35

Cooperative interaction of chicken lysozyme enhancer sub-domains partially overlapping with a steroid receptor binding site. Altschmied J, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):4975–91

Secretion in yeast of human lysozymes with different specific activities created by replacing valine-110 with proline by site-directed mutagenesis. Kikuchi M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9411–5

Site-directed mutagenesis of the catalytic residues Asp-52 and Glu-35 of chicken egg white lysozyme. Malcolm BA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):133–7

Stabilization of phage T4 lysozyme by engineered disulfide bonds. Matsumura M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6562–6

Point mutation of alanine (31) to valine prohibits the folding of reduced lysozyme by sulfhydryl–disulfide interchange. Imoto T, et al. **Protein Eng** 1987 Aug–Sep;1(4):333–8

Construction of a plasmid vector for the regulatable high level expression of eukaryotic genes in Escherichia coli: an application to overproduction of chicken lysozyme. Miki T, et al. **Protein Eng** 1987 Aug–Sep;1(4):327–32

Engineering of human lysozyme as a polyelectrolyte by the alteration of molecular surface charge. Muraki M, et al. **Protein Eng** 1988 Apr;2(1):49–54

Hierarchical strategy for protein folding and design: synthesis and expression of T4 lysozyme gene and two putative folding mutants. Narang SA, et al. **Protein Eng** 1987 Dec; 1(6):481–5

Crystal structure of T4-lysozyme generated from synthetic coding DNA expressed in Escherichia coli. Rose DR, et al. **Protein Eng** 1988 Oct;2(4):277–82

Use of site-directed mutagenesis to obtain isomorphous heavy-atom derivatives for protein crystallography: cysteine-containing mutants of phage T4 lysozyme. Sun DP, et al. **Protein Eng** 1987 Feb-Mar;1(2):115–23

Increase in gene expression by respiratory-deficient mutation. Kaisho Y, et al. **Yeast** 1989 Mar–Apr;5(2):91–8

IMMUNOLOGY

Conformation-dependent recognition of a protein by T cells requires presentation without processing. Atassi MZ, et al. **Biochem J** 1989 May 1;259(3):731–5

On the attribution of binding energy in antigen–antibody complexes McPC 603, D1.3, and HyHEL-5. Novotny J, et al. **Biochemistry** 1989 May 30;28(11):4735–49

Primary response to lysozyme (HEL) and HEL–LPS in neonatal A/J mice: presence of characteristic adult pattern of regulatory idiotype and fine specificity restriction. Keller MA, et al. **Cell Immunol** 1989 Mar;119(1):143–52

A predominant idiotype independent of specificity, or Ig and H-2 allotypes, is found in the primary but not the secondary murine antibody response to lysozyme. Kaplan MA, et al. **Eur J Immunol** 1988 Oct;18(10):1567–74

Mechanisms influencing the immunodominance of T cell determinants. Adorini L, et al. **J Exp Med** 1988 Dec 1; 168(6):2091–104

Binding to Ia protects an immunogenic peptide from proteolytic degradation. Donermeyer DL, et al. **J Immunol** 1989 Feb 15;142(4):1063–8

Stable association of processed antigen with antigen-presenting cell membranes. Jensen PE. **J Immunol** 1989 Jul 15;143(2):420–5

T cell receptor gene segment usage in a panel of hen–egg white lysozyme specific, I-Ak-restricted T helper hybridomas. Johnson NA, et al. **J Immunol** 1989 May 1; 142(9):3298–304

Analysis of the interaction of peptide hen egg white lysozyme (34–45) with the I-Ak molecule. Lambert LE, et al. **J Immunol** 1989 Aug 1;143(3):802–7

I-Ak polymorphisms define a functionally dominant region for the presentation of hen egg lysozyme peptides. Rosloniec EF, et al. **J Immunol** 1989 Jul 1;143(1):50–8

Epitopic analysis by anti-I-Ak monoclonal antibodies of I-Ak-restricted presentation of lysozyme peptides. Rosloniec EF, et al. **J Immunol** 1989 Jun 15; 142(12):4176–83

Efficiency of antigen presentation after antigen targeting to surface IgD, IgM, MHC, Fc gamma RII, and B220 molecules on murine splenic B cells. Snider DP, et al. **J Immunol** 1989 Jul 1;143(1):59–65

[The role of lysozyme in dermatology] Gąsior-Chrzan B. **Przegl Dermatol** 1988 May–Jun;75(3):228–31 (20 ref.) **(Pol)**

ISOLATION & PURIFICATION

Lysozyme activity in animal extracts after sodium dodecyl sulfate–polyacrylamide gel electrophoresis. Audy P, et al. **Comp Biochem Physiol [B]** 1989;92(3):523–7

Purification of camel milk lysozyme and its lytic effect on Escherichia coli and Micrococcus lysodeikticus. Duhaiman AS. **Comp Biochem Physiol [B]** 1988;91(4):793–6

Chromatographic resolution of lysozyme variants. Fausnaugh-Pollitt J, et al. **J Chromatogr** 1988 Jun 29; 443:221–8

METABOLISM

Action of myeloperoxidase–hydrogen peroxide–chloride system on the egg white lysozyme. Drożdż R, et al. **Acta Biochim Pol** 1988;35(4):277–86

Cytological investigations on the cerebellar cortex of sudden infant death victims. Oehmichen M, et al. **Acta Neuropathol (Berl)** 1989;78(4):404–9

Ultrastructural immunolocalization of lysozyme in paneth-like cells in undifferentiated (gastric)-type carcinoma of the stomach. Ohtani H, et al. **Acta Pathol Jpn** 1988 Jul;38(7):861–71

Alpha-1-antitrypsin and lysozyme. Their limited significance in fibrohistiocytic tumors. Soini Y, et al. **Am J Clin Pathol** 1989 May;91(5):515–21

Degradation of bacterial cell walls by immobilized lysozyme. Moser I, et al. **Appl Biochem Biotechnol** 1988 Dec; 19(3):243–9

Penetration and fusion of phospholipid vesicles by lysozyme. Kim J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):100–8

Stopped-flow chemical modification with N-bromosuccinimide: a good probe for changes in the microenvironment of the Trp 62 residue of chicken egg white lysozyme. Ohnishi M, et al. **Arch Biochem Biophys** 1989 Jul;272(1):46–51

Concanavalin A interacts with lysozyme: a model for understanding lectin–glycoprotein interactions. Vaidya S, et al. **Biochem Int** 1988 Oct;17(4):647–53

Low-temperature unfolding of a mutant of phage T4 lysozyme. 2. Kinetic investigations. Chen BL, et al. **Biochemistry** 1989 Jan 24;28(2):691–9

Low-temperature unfolding of a mutant of phage T4 lysozyme. 1. Equilibrium studies. Chen BL, et al. **Biochemistry** 1989 Jan 24;28(2):685–91

A scanning calorimetric study of the thermal denaturation of the lysozyme of phage T4 and the Arg 96——His mutant form thereof. Kitamura S, et al. **Biochemistry** 1989 May 2;28(9):3788–92

The primary structure of donkey (Equus asinus) lysozyme contains the Ca(II) binding site of alpha-lactalbumin. Godovac-Zimmermann J, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1109–15

Calcium-binding lysozymes. Nitta K, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):671–5

Viscosity and transient solvent accessibility of Trp-63 in the native conformation of lysozyme. Somogyi B, et al. **Biophys Chem** 1988 Oct;32(1):1–13

The influence of glycerol on hydrogen isotope exchange in lysozyme. Gregory RB. **Biopolymers** 1988 Nov; 27(11):1699–709

Calorimetric study of the effect of intrachain cross-linking on lysozyme unfolding. Segawa S, et al. **Biopolymers** 1989 Jun;28(6):1033–41

Immunohistochemical identification of lysozyme and vimentin in an experimental malignant fibrous histiocytoma. Ribeiro RA, et al. **Braz J Med Biol Res** 1988;21(5):995–7

Sjögren's syndrome and tear function parameters. van Bijsterveld OP, et al. **Clin Exp Rheumatol** 1989 Mar–Apr; 7(2):151–4

Calcium-dependent binding between calmodulin and lysozyme. Fierro JF, et al. **FEBS Lett** 1989 Apr 10; 247(1):22–4

Alterations in the cleavage site of the signal sequence for the secretion of human lysozyme by Saccharomyces cerevisiae. Nagahora H, et al. **FEBS Lett** 1988 Oct 10; 238(2):329–32

Association of a myristoylated protein with a biological membrane and its increased phosphorylation by protein kinase C. Utsumi T, et al. **FEBS Lett** 1988 Sep 26; 238(1):13–6

Differentiating the effects of microwave and heat on tissue proteins and their crosslinking by formaldehyde. Hopwood D, et al. **Histochem J** 1988 Jun–Jul;20(6–7):341–6

The second peptidoglycan hydrolase of Streptococcus faecium ATCC 9790 covalently binds penicillin. Dolinger DL, et al. **J Bacteriol** 1989 Aug;171(8):4355–61

Lipopolysaccharide interaction with lysozyme. Binding of lipopolysaccharide to lysozyme and inhibition of lysozyme enzymatic activity. Ohno N, et al. **J Biol Chem** 1989 Mar 15;264(8):4434–41

Enzymatic extraction and spectral analysis of the chromophore from cell walls of nutritionally deficient streptococci. Stein DS, et al. **J Clin Microbiol** 1989 Jan; 27(1):207–9

Kupffer cell number is normal, but their lysozyme content is reduced in alcoholic liver disease. Kelly PM, et al. **J Hepatol** 1989 Mar;8(2):173–80

Tissue distribution of antileukoprotease and lysozyme in humans. Franken C, et al. **J Histochem Cytochem** 1989 Apr; 37(4):493–8

Ultrastructural localization of lysozyme in human colon eosinophils using the protein A–gold technique: effects of processing on probe distribution. Stirling JW. **J Histochem Cytochem** 1989 May;37(5):709–14

Solvent effects on protein motion and protein effects on solvent motion. Dynamics of the active site region of lysozyme. Brooks CL 3d, et al. **J Mol Biol** 1989 Jul 5; 208(1):159–81

Enhanced protein thermostability from designed mutations that interact with alpha-helix dipoles. Nicholson H, et al. **Nature** 1988 Dec 15;336(6200):651–6

Clinical relevance of lysozyme in the faeces. Hemrika MH, et al. **Neth J Med** 1989 Apr;34(3–4):174–81

Design and creation of a Ca2+ binding site in human lysozyme to enhance structural stability. Kuroki R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6903–7

Electrostatic fields in the active sites of lysozymes. Sun DP, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5361–5

Renal disposition of amylase, lipase, and lysozyme in the dog. Jacobs RM. **Vet Pathol** 1988 Nov;25(6):443–9

[The low molecular weight proteins ribonuclease, beta 2 microglobulin and lysozyme in the serum and urine of patients with chronic kidney diseases] Jung K, et al. **Z Urol Nephrol** 1988 Sep;81(9):589–93 (Eng. Abstr.) **(Ger)**

[Lysozyme content and activity in the healty skin of normal subjects and diabetics] Papini M, et al. **Recenti Prog Med** 1988 Oct;79(10):407–9 (Eng. Abstr.) **(Ita)**

[Diagnostic value of determination of pleural and serum lysozyme activity in patients with pleural effusion of various causes] Moriwaki Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1274–8 (Eng. Abstr.) **(Jpn)**

[Non-enzymatic deamidation and autofragmentation of lysozyme and albumin under physiological conditions] Pushkina NV. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):9–14 (Eng. Abstr.) **(Rus)**

[Status of humoral defense mechanisms of the middle ear in young children with acute suppurative otitis media] Merkulova EP, et al. **Vestn Otorinolaringol** 1989 Mar–Apr; (2):51–4 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

[Kinetics of lysozyme absorption by the material in therapeutic contact lenses] Mannucci LL. **Ophtalmologie** 1988 Apr–Jun;2(2):141–3 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Lysozyme and cancer: role of exogenous lysozyme as anticancer agent (review). Sava G, et al. **Anticancer Res** 1989 May–Jun;9(3):583–91 (84 ref.)

Antibacterial activity of hen egg white lysozyme against Listeria monocytogenes Scott A in foods. Hughey VL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):631–8

Antinociceptive properties of lysozyme fragments. Bruzzese T, et al. **Boll Chim Farm** 1989 Jan;128(1):33–7

A lysozyme isolated from rainbow trout acts on mastitis pathogens. Grinde B. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):179–82

Enhanced bacteriolytic activity of hen egg-white lysozyme due to conversion of Trp62 to other aromatic amino acid

residues. Kumagai I, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):946–8

Effects of lysozyme on spleen and lungs in mice with Lewis lung carcinoma. Ceschia V, et al. **Pharmacol Res Commun** 1988 Jul;20(7):615–6

[The antimicrobial effect of lysozyme on nasal mucosa] Glück U. **HNO** 1989 May;37(5):207–10 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Lysozyme-induced inhibition of the lymphocyte response to mitogenic lectins. Varaldo PE, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):54–62

Control of enzyme activity by an engineered disulfide bond. Matsumura M, et al. **Science** 1989 Feb 10;243(4892):792–4

RADIATION EFFECTS

ESR and spin-trapping study of free radicals in gamma-irradiated solid lysozyme. Inanami O, et al. **Free Radic Res Commun** 1988;5(1):43–9

Photooxidative changes of lysozyme with 337.1 nm laser radiation. VanderMeulen DL, et al. **Radiat Environ Biophys** 1988;27(4):307–16

SECRETION

The influence of pH on the vesicular traffic to the surface of the polarized epithelial cell, MDCK. Parczyk K, et al. **Eur J Cell Biol** 1989 Apr;48(2):353–9

A 25-kilodalton fraction from Mycobacterium tuberculosis that inhibits hexose monophosphate shunt activity, lysozyme release, and H2O2 production: reversal by gamma interferon. Wadee AA, et al. **Infect Immun** 1989 Mar;57(3):864–9

[Effect of antibiotics on the secretion and percentage yield of lysozyme from human blood monocytes] Sharonov AS. **Antibiot Khimioter** 1988 Jul;33(7):515–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Evidence for host-mediated antitumor effects of lysozyme in mice bearing the MCa mammary carcinoma. Sava G, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1737–43

[Effectiveness of combined therapy including lysozymes in chronic viral hepatitis in children] Shabunina EI, et al. **Pediatriia** 1988;(6):23–6 (Eng. Abstr.) **(Rus)**

[The use of lysozyme in surgical practice] Briskin BS, et al. **Vestn Khir** 1988 Oct;141(10):118–21 **(Rus)**

URINE

Urinalysis for detection of chemically induced renal damage (3)—Establishment and application of radioimmunoassay for lysozyme of rat urine. Ohata H, et al. **Arch Toxicol** 1988 Aug;62(1):60–5

Detection of the early steps of cadmium nephropathy—comparison of light- and electron-microscopical patterns with the urinary enzymes excretion. An experimental study. Gatta A, et al. **Nephron** 1989;51(1):20–4

Human milk feeding enhances the urinary excretion of immunologic factors in low birth weight infants. Goldblum RM, et al. **Pediatr Res** 1989 Feb;25(2):184–8

Diuresis-dependent excretions of low-molecular mass proteins in urine: beta 2-microglobulin, lysozyme, and ribonuclease. Jung K, et al. **Scand J Clin Lab Invest** 1988 Feb;48(1):33–7

Impact of percutaneous renal stone removal on renal function: assessment by urinary lysozyme activity. Urivetsky M, et al. **Urology** 1989 Apr;33(4):305–8

[An attempt to optimize the diagnosis of rejection after allogeneic kidney transplantation using urinary enzymes and multivariate statistics] Pantscheva-Haschen R, et al. **Z Med Lab Diagn** 1988;29(4):179–87 (Eng. Abstr.) **(Ger)**

[The electrophoretic mobility of urinary lysozyme in patients with chronic nephritis] Tofilo AP, et al. **Lab Delo** 1988; (8):27–9 (Eng. Abstr.) **(Rus)**

[Study of electrophoretic mobility of urinary lysozyme in the differential diagnosis of chronic glomerulonephritis and chronic pyelonephritis] Tofilo AP, et al. **Ter Arkh** 1988; 60(6):40–2 (Eng. Abstr.) **(Rus)**

MURAMOYLPENTAPEPTIDE CARBOXYPEPTIDASE see **CARBOXYPEPTIDASE TRANSPEPTIDASE**

MURAMYL DIPEPTIDE see **ACETYLMURAMYL-ALANYL-ISOGLUTAMINE**

MURDER see **HOMICIDE**

MUREIN see **PEPTIDOGLYCAN**

MUREXIDE see under **BARBITURATES**

MURIDAE

Rat bite injury to the eyelids in a 3-month-old child. Wykes WN. **Br J Ophthalmol** 1989 Mar;73(3):202–4

Histopathological changes in liver and kidney of Mus booduga following oral benzenehexachloride (BHC) feeding. Philip GH, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):499–502

Laboratory strains of hamster, gerbil and mastomys maintained at the Institute of Medical Science, University of Tokyo. Tanaka S, et al. **Jpn J Exp Med** 1988 Dec; 58(6):273–8

Papillomas and carcinomas associated with a papillomavirus in European harvest mice (Micromys minutus). Sundberg JP, et al. **Vet Pathol** 1988 Sep;25(5):356–61

19s and 7s antibody response of Mastomys natalensis in experimental filarial (Litomosoides carinii, Acanthocheilonema viteae, Brugia malayi, B. pahangi) infections. Sangvaranond A, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):374–84

ANATOMY & HISTOLOGY

Ultrastructural features of the ventral prostate epithelial cells in the Australian plains rat, Pseudomys australis. Wong YC, et al. **Acta Anat (Basel)** 1988;133(4):289–96

Sperm head structure of a murid rodent from southern Africa: the red veld rat Aethomys chrysophilus. Breed WG, et al. **Gamete Res** 1988 Feb;19(2):191–202

Structure of the zona pellucida and cumulus oophorus in three species of native Australian rodents. McGregor L, et al. **Gamete Res** 1989 Jul;23(3):279–87

The structure of the epididymis of the giant rat (Cricetomys gambianus, Waterhouse): histological, histochemical and microstereological studies. Oke BO, et al. **J Anat** 1988 Oct; 160:9–19

Cochlea in old world mice and rats (Muridae). Burda H, et al. **J Morphol** 1988 Dec;198(3):269–85

Ovarian interstitial tissue of the wood mouse, Apodemus sylvaticus. Brook FA, et al. **J Reprod Fertil** 1989 Jan; 85(1):251–60

BLOOD

Protein variation and systematics in Malayan rats of the subgenus Lenothrix (Rodentia: Muridae, genus Rattus Fischer). Chan KL, et al. **Comp Biochem Physiol [B]** 1978; 59(4):345–51

Blood leucocytes in Mastomys natalensis with filarial infections. Mukherjee M, et al. **Indian J Med Res** 1988 Sep;88:222–4

GENETICS

Kin discrimination and reproductive behavior in muroid rodents. Dewsbury DA. **Behav Genet** 1988 Jul;18(4):525–36 (68 ref.)

The ontogeny of sibling recognition in rodents: superfamily Muroidea. Porter RH. **Behav Genet** 1988 Jul;18(4):483–94 (48 ref.)

Specificity of androgen resistance in Mus caroli kidney. Wilson CM, et al. **Biochem Genet** 1988 Dec; 26(11–12):705–16

Metacentric sex-chromosomes in a rodent species, Rattus (Millardia) meltada pallidior (Ryley). Gill TK, et al. **Cytobios** 1988;55(222–223):185–90

Synaptonemal complex analysis of B-chromosome behavior in meiotic prophase I in the East-Asiatic mouse Apodemus peninsulae (Muridae, Rodentia). Kolomiets OL, et al. **Cytogenet Cell Genet** 1988;48(3):183–7

Molecular cloning of a cDNA encoding the nerve growth factor precursor from Mastomys natalensis. Fahnestock M, et al. **Gene** 1988 Sep 30;69(2):257–64

Evolutionary characterization of a Y chromosomal sequence conserved in the genus Mus. Nishioka Y. **Genet Res** 1988 Oct;52(2):145–50

Variable evolutionary stability of Y chromosomal repeated sequences in the genus Mus. Platt TH, et al. **Genet Res** 1989 Apr;53(2):87–93

Evidence for eight tandem and five centric fusions in the evolution of the karyotype of Aethomys namaquensis A. Smith (Rodentia: Muridae). Baker RJ, et al. **Genetica** 1988 Jun 30;76(3):161–9

Cytological studies of certain desert mammals of Saudi Arabia. 6. First report on chromosome number and karyotype of Acomys dimidiatus. al-Saleh AA. **Genetica** 1988 Feb 29;76(1):3–5

Recombinant inbred strain and interspecific backcross analysis of molecular markers flanking the murine agouti coat color locus. Siracusa LD, et al. **Genetics** 1989 Jul; 122(3):669–79

Y chromosome evolution in the subgenus Mus (genus Mus). Tucker PK, et al. **Genetics** 1989 May;122(1):169–79

Multilocus molecular mapping of the mouse X chromosome. Mullins LJ, et al. **Genomics** 1988 Oct;3(3):187–94

Comparison of linkage maps of mouse chromosome 12 derived from laboratory strain intraspecific and Mus spretus interspecific backcrosses. Seldin MF, et al. **Genomics** 1989 Jul;5(1):24–8

Mapping of Abll within a conserved linkage group on distal mouse chromosome 1 syntenic with human chromosome 1 using an interspecific cross. Seldin MF, et al. **Genomics** 1989 Feb;4(2):221–3

Restriction fragment length polymorphisms of the mouse T-cell receptor gene families. Klotz JL, et al. **Immunogenetics** 1989;29(3):191–201

Distinct patterns of conservation of exons and introns of T-cell receptor beta chain constant region genes in subspecies of Mus. Mami-Chouaib F, et al. **Immunogenetics** 1989;30(1):42–5

The D17Tu5 locus in the t complex: implications for the origin of t haplotypes and inbred strains. Mizuno K, et al. **Immunogenetics** 1989;30(2):105–11

New evidence for trans-species evolution of the H-2 class I polymorphism. Sagai T, et al. **Immunogenetics** 1989; 30(2):89–98

Tissue- and species-specific regulation of murine alpha 1-antitrypsin gene transcription. Rheaume C, et al. **J Biol Chem** 1988 Oct 15;263(29):15118–21

Relationships of the chromosomal species in the Eurasian mole rats of the Spalax ehrenbergi group as determined by DNA-DNA hybridization, and an estimate of the spalacid-murid divergence time. Catzeflis FM, et al. **J Mol Evol** 1989 Sep;29(3):223–32

The muridae glyceraldehyde-3-phosphate dehydrogenase family. Riad-el Sabrouty S, et al. **J Mol Evol** 1989 Sep; 29(3):212–22

Rapid evolution of variants in a rodent multigene family encoding salivary proteins. Dickinson DP, et al. **Mol Biol Evol** 1989 Jan;6(1):80–102

Modern evolution of a single-copy gene: the immunoglobulin C kappa locus in wild mice. Jouvin-Marche E, et al. **Mol Biol Evol** 1988 Sep;5(5):500–11

Extensive movement of LINES ONE sequences in beta-globin loci of Mus caroli and Mus domesticus. Casavant NC, et al. **Mol Cell Biol** 1988 Nov;8(11):4669–74

Avoidance and brightness discrimination conditioning in genetically different lines of rats. Becker A, et al. **Physiol Behav** 1989 Feb;45(2):347–50

Evolution of mouse chromosome 17 and the origin of inversions associated with t haplotypes. Hammer MF, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3261–5

Allelic variation linked to adenine phosphoribosyltransferase locus in mouse teratocarcinoma cell line and feral-derived mouse strains. Turker MS, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):159–66

Genetic analysis of the mouse using interspecific crosses. Avner P, et al. **Trends Genet** 1988 Jan;4(1):18–23 (39 ref.)

[Genetic divergence of Mus musculus musculus and M. m. hortulanus] Mezhzherin SV. **Genetika** 1988 Dec; 24(12):2197–201 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

A comparative study of myelination in precocial and altricial murid rodents. Tessitore C, et al. **Brain Res** 1988 Sep 1; 471(1):139–47

Mammary gland growth and response to hormones in mastomys compared with mice. Nagasawa H, et al. **Lab Anim Sci** 1989 Jul;39(4):313–7

IMMUNOLOGY

Serological investigations in Q-fever and listeriosis of wild-living small mammals on the Cape Verde Islands. Brosch R, et al. **Geogr Med** 1988;Suppl 1:65–70

Serological survey of complement factor H in common laboratory and wild mice: a new third allotype. Harada Y, et al. **Immunogenetics** 1989;29(3):148–54

"New" allotypes of the murine gamma 1 immunoglobulins. Masmoudi H, et al. **Mol Immunol** 1989 Jun;26(6):551–5

Role of hepatocytes in the uptake of IgA and IgA-containing immune complexes in mice. Phillips JO, et al. **Mol Immunol** 1988 Sep;25(9):873–9

METABOLISM

Histochemical localization of prostaglandin-synthetase in the salivary glands of Praomys (Mastomys) natalensis. Sirigu P, et al. **Basic Appl Histochem** 1988;32(3):321–5

The high molecular weight nerve growth factor complex from Mastomys natalensis differs from the murine nerve growth factor complex. Darling TL, et al. **Biochemistry** 1988 Sep 6;27(18):6686–92

Protein variation and systematics of three subgenera of Malayan rats (Rodentia: Muridae, genus Rattus Fischer). Chan KL, et al. **Comp Biochem Physiol [B]** 1979; 64(4):329–37

The effects of denervation on protein turnover of the soleus and extensor digitorum longus muscles of adult mice. Goldspink DF. **Comp Biochem Physiol [B]** 1978;61(1):37–41

Species-related difference in calcium accumulation by cardiac mitochondria. Sachs HG, et al. **Comp Biochem Physiol [B]** 1978;61(1):181–3

MICROBIOLOGY

Observations on commensal rats and their status to plague in Bombay. Renapurkar DM. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):407–13

Antibiotic-resistance patterns of enteric bacteria of wild mammals on the Krakatau islands and west Java, Indonesia. Graves SR, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 19;322(1211):339–53

Epidemiological aspects of leptospirosis in a slum area in the city of Rio de Janeiro, Brazil. Search for leptospires and specific antibodies in rodents. Pereira MM, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):768–70

Specific sequence deletions in two classes of murine leukemia virus-related proviruses in the mouse genome. Ch'ang LY, et al. **Virology** 1989 Feb;168(2):245–55

[Preliminary study on the virulent difference between viral strains isolated from Rattus norvegicus and Apodemus agrarius in Fujian Province] Li XF. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Feb; 10(1):14–7 (Eng. Abstr.) **(Chi)**

[Analysis on distribution of epidemic hemorrhagic fever in

different area] Lin FX.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1989 Feb; 10(1):18–20 (Eng. Abstr.) (Chi)
[Preliminary study on epidemic hemorrhagic fever (EHF) in Guizhou Province] Wang ZX.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1989 Feb; 10(1):1–5 (Eng. Abstr.) (Chi)
[An auxotrophic (Glu–) mutant, qionglei strain, of genus Salmonella] Song YT, et al. **Wei Sheng Wu Hsueh Pao** 1988 Jun;28(2):161–6 (Eng. Abstr.) (Chi)
[Ecological survey on Rickettsia tsutsugamushi in wild rodents in a rural area, Tama, in Tokyo] Ito T, et al.
Kansenshogaku Zasshi 1988 Sep;62(9):811–7 (Eng. Abstr.) (Jpn)
[The noncorrespondence of the geographic ranges of the host and the causative agent] Chernukha IuG, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Dec;(12):70–2 (Eng. Abstr.) (Rus)

PARASITOLOGY

A general survey of blood and tissue parasites of some rodents in Arbil province, Iraq. Molan AL, et al.
APMIS Suppl 1988;3:47–9
Status of biogenic amines in lungs of Mastomys natalensis during development of Brugia malayi infection. Saxena JK, et al. **Indian J Med Res** 1988 Jul;88:26–8
Aspects of the life history of Cercopithifilaria johnstoni (Nematoda:Filarioidea). Spratt DM, et al.
Int J Parasitol 1988 Dec;18(8):1087–92
Rodent–ectoparasite association in selected biotopes of Mirzapur and Varanasi Districts of Uttar Pradesh. Saxena VK. **J Commun Dis** 1987 Dec;19(4):310–6
Trypanosoma acomys (Wenyon, 1909): reproductive forms and course of parasitemia in the natural host Acomys cahirinus (Desmarest, 1819). Abdallah MA, et al.
Parasitol Res 1989;75(6):439–43
Studies on cross–immunity in Herpetosoma trypanosomes of Microtus, Clethrionomys and Apodemus. Maraghi S, et al. **Parasitol Res** 1989;75(3):175–7
Laboratory studies with clones of Eimeria hungaryensis, a parasite of the wood mouse Apodemus sylvaticus. Higgs S, et al. **Parasitology** 1988 Oct;97 (Pt 2):213–20
Models to assess the potential of Capillaria hepatica to control population outbreaks of house mice. McCallum HI, et al.
Parasitology 1989 Jun;98 Pt 3:425–37
Spatial and temporal variation in the infracommunity structure of helminths of Apodemus sylvaticus (Rodentia: Muridae). Montgomery SS, et al. **Parasitology** 1989 Feb; 98 (Pt 1):145–50
Eimeria species infecting wood mice (genus Apodemus) and the transfer of two species to Mus musculus. Nowell F, et al. **Parasitology** 1989 Jun;98 Pt 3:329–36
[2 trichostrongyloid nematode parasites in an African murid. IV. Migration in the vertebrate] Durette–Desset MC, et al. **Ann Parasitol Hum Comp** 1989;64(2):120–33 (Eng. Abstr.) (Fre)
[Faunal–ecological relations forming the populations of ectoparasites of Apodemus agrarius (Pall.) and A. flavicollis (Melch.) in the forest regions of Gdansk] Pruszyńska I.
Wiad Parazytol 1988;34(2):151–9 (Eng. Abstr.) (Pol)
[Stimulation of the development of chloroquine–sensitive and –resistant strains of Plasmodium falciparum by cocultivation with Mastomys natalensis cells]
Allakhverdiev AM, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):70–2 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Presence–absence cycles of the mother and not light–darkness are the zeitgeber for the circadian rhythm of newborn mice. Viswanathan N. **Experientia** 1989 Apr 15;45(4):383–5
Effect of vasectomy on spermatogenesis in the albino rat Mus norvegicus. Singh RP, et al. **Folia Morphol (Praha)** 1988; 36(3):260–3
Formation of the ventral hooks on the sperm head of the plains mouse, Pseudomys australis. Flaherty SP, et al.
Gamete Res 1987 Jun;17(2):115–29
Properties of follicle–stimulating hormone receptors and changes during annual breeding cycle in the testis of short–tailed bandicoot rat, Nesokia indica. Tsutsui K, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):442–51
Seasonal acclimation of bank voles and wood mice: nonshivering thermogenesis and thermogenic properties of brown adipose tissue mitochondria. Klaus S, et al.
J Comp Physiol [B] 1988;158(2):157–64
Social environment and reproduction in female pouched mice, Saccostomus campestris. Westlin–van Aarde LM.
J Reprod Fertil 1989 May;86(1):367–72
Aversiveness of denatonium saccharide and quinine in grasshopper mice Onychomys leukogaster. Langley WM, et al. **Percept Mot Skills** 1989 Apr;68(2):551–7
Effect of insulin and 2–deoxy–D–glucose on feeding and plasma glucose levels in the spiny mouse. Czech DA.
Physiol Behav 1988;43(6):765–9
Electrophysiological effects of dopamine receptor stimulation in the hippocampus of Acomys cahirinus. Bijak M, et al.
Pol J Pharmacol Pharm 1988 Sep–Oct;40(5):535–41
The Acomys cahirinus (spiny mouse) as a new model for biological and neurobehavioural studies. D'Udine B, et al.
Pol J Pharmacol Pharm 1988 Sep–Oct;40(5):525–34 (11 ref.)
[Marking activity, morphometric analysis of steroid–dependent organs and species specificity of the sexual activity of male house and mount–building mice] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1988; 300(5):1270–3 (Rus)

MURIDS see **MURIDAE**

MURRAY VALLEY ENCEPHALITIS VIRUS see **FLAVIVIRUSES**

MUS see **MURIDAE**

MUS MUSCULUS see **MICE**

MUSCA AUTUMNALIS see **MUSCIDAE**

MUSCA DOMESTICA see **HOUSEFLIES**

MUSCARINE

ANTAGONISTS & INHIBITORS

Muscarinic antagonist enhances one–trial food–aversion learning in the mollusc Pleurobranchaea. Mpitsos GJ, et al. **Brain Res Bull** 1988 Aug;21(2):169–79
Muscarinic antagonist action of clinical doses of chloroquine in healthy volunteers. Mubagwa K, et al.
J Auton Nerv Syst 1988 Sep;24(1–2):147–55
Regional differences in the binding of selective muscarinic receptor antagonists in rat brain: comparison with minimum–energy conformations. Messer WS Jr, et al.
J Med Chem 1989 Jun;32(6):1164–72
Serotonergic/cholinergic muscle receptor cells in the crab stomatogastric nervous system. II. Rapid nicotinic and prolonged modulatory effects on neurons in the stomatogastric ganglion. Katz PS, et al. **J Neurophysiol** 1989 Aug;62(2):571–81
The relative potencies of cholinomimetics and muscarinic antagonists on the rat iris in vivo: effects of pH on potency of pirenzepine and telenzepine. Hagan JJ, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Nov; 338(5):476–83

PHARMACOLOGY

Muscarinic suppression of Ca2+–dependent K current in colonic smooth muscle. Cole WC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C481–7
A comparison of bradykinin, angiotensin II and muscarinic stimulation of cultured bovine adrenal chromaffin cells. O'Sullivan AJ, et al. **Biosci Rep** 1989 Apr;9(2):243–52
Bicuculline blocks the response to acetylcholine and nicotine but not to muscarine or GABA in isolated insect neuronal somata. Benson JA. **Brain Res** 1988 Aug 16;458(1):65–71
Biphasic dose–response curve to muscarine on the rat superior cervical ganglion. Newberry NR, et al.
Eur J Pharmacol 1989 Apr 25;163(2–3):237–44
A neuroglial cooperativity is required for the potentiation by 2–chloroadenosine of the muscarinic–sensitive phospholipase C in the striatum. el–Etr M, et al.
J Neurosci 1989 May;9(5):1473–80
Muscarine and t–LHRH suppress M–current by activating an IAP–insensitive G–protein. Pfaffinger P. **J Neurosci** 1988 Sep;8(9):3343–53
Muscarinic pharmacology of the spinal cord of the neonatal rat in vitro. Newberry NR, et al. **Neuropharmacology** 1989 Feb;28(2):149–52
Action of acetylcholine, muscarine, nicotine and antagonists on the membrane potential of astrocytes in cultured rat brainstem and spinal cord. Hösli L, et al. **Neurosci Lett** 1988 Oct 5;92(2):165–70
Muscarinic depression of long–term potentiation in CA3 hippocampal neurons. Williams S, et al. **Science** 1988 Oct 7;242(4875):84–7
Tracheal gland mucous cells stimulated in vitro with adrenergic and cholinergic drugs. Gashi AA, et al.
Tissue Cell 1989;21(1):59–67
[Ionic mechanisms evoked by acetylcholine–, nicotine–, and muscarine–induced depolarization of Helix lucorum RPa4 neurons] Pivovarov AS, et al. **Neirofiziologiia** 1989; 21(3):305–14 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Muscarinic cholinergic inhibition of cyclic AMP accumulation in airway smooth muscle. Role of a pertussis toxin–sensitive protein. Sankary RM, et al.
Am Rev Respir Dis 1988 Jul;138(1):145–50
Secondary late components of the muscarinic postsynaptic potentials, in rabbit superior cervical ganglion. Mochida S, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):41–9
Effects of muscarinic, alpha–adrenergic, and substance P agonists and ionomycin on ion transport mechanisms in the rat parotid acinar cell. The dependence of ion transport on intracellular calcium. Soltoff SP, et al.
J Gen Physiol 1989 Feb;93(2):285–319
Muscarinic agonists cause calcium influx and calcium mobilization in forebrain neurons in vitro. Reynolds IJ, et al. **J Neurochem** 1989 Jul;53(1):226–33
Classification of muscarinic responses in hippocampus in terms of receptor subtypes and second–messenger systems: electrophysiological studies in vitro. Dutar P, et al.
J Neurosci 1988 Nov;8(11):4214–24
Nicotinic and muscarinic agonists stimulate rapid protein kinase C translocation in PC12 cells. Messing RO, et al.
J Neurosci 1989 Feb;9(2):507–12

MUSCARINIC AGENTS see **PARASYMPATHOMIMETICS**

MUSCARINIC RECEPTORS see **RECEPTORS, MUSCARINIC**

MUSCIDAE

Organophosphorus insecticides for the control of pyrethroid–resistant horn flies (Diptera: Muscidae). Byford RL, et al. **J Econ Entomol** 1988 Dec;81(6):1562–6
Walk–through trap for control of horn flies (Diptera: Muscidae) on pastured cattle. Hall RD, et al.
J Econ Entomol 1989 Apr;82(2):530–4
Costs of existing and recommended manure management practices for house fly and stable fly (Diptera: Muscidae) control on dairy farms. Lazarus WF, et al.
J Econ Entomol 1989 Aug;82(4):1145–51
Relative attractiveness of paired BL and BLB fluorescent bulbs for house and stable flies (Diptera: Muscidae). Pickens LG. **J Econ Entomol** 1989 Apr;82(2):535–8
Pyrethroid–synergist mixtures: toxicity, resistance and field efficacy toward pyrethroid–resistant horn flies (Diptera: Muscidae). Sparks TC, et al. **J Econ Entomol** 1988 Dec; 81(6):1567–74
An improved Alsynite trap for stable flies, Stomoxys calcitrans (Diptera: Muscidae). Broce AB.
J Med Entomol 1988 Sep;25(5):406–9
Control of horn flies on cattle with insecticide pellets fired from a CO2–operated pistol. Harvey TL, et al.
Vet Parasitol 1988 Jul;29(1):65–71

CLASSIFICATION

Taxonomic studies of subfamily Phaoniinae (Muscidae, Diptera) in Egypt. Shaumar NF, et al.
J Egypt Soc Parasitol 1989 Jun;19(1):263–78

ENZYMOLOGY

The intracellular pathway and kinetics of digestive enzyme secretion in an insect midgut cell. Lehane MJ.
Tissue Cell 1989;21(1):101–11

GROWTH & DEVELOPMENT

Effect of experimental bedding treatments on the density of immature Musca domestica and Stomoxys calcitrans (Diptera: Muscidae) in outdoor calf hutches. Schmidtmann ET, et al. **J Econ Entomol** 1989 Aug;82(4):1134–9
Seasonal abundance of Musca vitripennis (Diptera: Muscidae) on Terceira, Azores. Lang JT, et al. **J Med Entomol** 1989 May;26(3):226–7
Seasonal abundance of Muscidae (Diptera) associated with cattle on a northern Transvaal farm. Rechav Y.
J Med Entomol 1989 Jul;26(4):368–9

ISOLATION & PURIFICATION

Exploitation of bedding in dairy outdoor calf hutches by immature house and stable flies (Diptera: Muscidae). Schmidtmann ET. **J Med Entomol** 1988 Nov;25(6):484–8

METABOLISM

Intense non–quantal release of glutamate in an insect neuromuscular junction. Antonov SM, et al.
Neurosci Lett 1988 Nov 11;93(2–3):204–8

MICROBIOLOGY

Uptake and excretion of Brucella abortus in tissues of the face fly (Musca autumnalis). Cheville NF, et al.
Am J Vet Res 1989 Aug;50(8):1302–6
Evaluation of the stable fly (Stomoxys calcitrans) as a vector of enzootic bovine leukosis. Weber AF, et al.
Am J Vet Res 1988 Sep;49(9):1543–9

PARASITOLOGY

An attempt to evaluate the spreading of Taenia saginata eggs in the environment. Kyvsgaard NC, et al.
Acta Vet Scand 1988;29(3–4):511–3
Parasites that attack stable fly and house fly (Diptera: Muscidae) puparia during the winter on dairies in northwestern Florida. Greene GL, et al.
J Econ Entomol 1989 Apr;82(2):412–5
Thelazia callipaeda (Nematoda: Spirurida): transmission by flies from dogs to children in Hubei, China. Shi YE, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):627

PATHOGENICITY

Myiasis caused by Wohlfahrtia magnifica (Schiner, 1862) in the Arabian camel (Camelus dromedarius) in the Peninsula of Sinai. Hadani A, et al. **Rev Elev Med Vet Pays Trop** 1989;42(1):33–8
Observations on Sudanese camel nasal myiasis caused by the larvae of Cephalopina titillator. Musa MT, et al.
Rev Elev Med Vet Pays Trop 1989;42(1):27–31

PHYSIOLOGY

[The distribution of Stomoxys calcitrans (Diptera, Muscidae) in stables] Steinbrink H. **Angew Parasitol** 1989 Feb; 30(1):57–61 (Eng. Abstr.) **(Ger)**

MUSCIMOL

ANALYSIS

Autoradiographic visualization of the GABA-A receptor agonist, 3H-muscimol in the rat uterus. Amenta F, et al. **Pharmacol Res Commun** 1988 Oct;20(10):863–8

DIAGNOSTIC USE

GABAA receptor sites modulating catecholamine secretion in the rat adrenal gland: evidence from 3H-muscimol autoradiography and in vivo functional studies. Amenta F, et al. **Pharmacology** 1988;37(6):394–402

METABOLISM

Kinetics of [3H]muscimol binding to the GABAA receptor in bovine brain membranes. Agey MW, et al. **Biochemistry** 1989 May 16;28(10):4200–8

Binding of [3H]-muscimol to GABAA sites in the guinea-pig urinary bladder: biochemical assay and autoradiography. Erdö SL, et al. **Br J Pharmacol** 1989 Feb;96(2):313–8

Pregnancy-induced alterations of GABAA receptor sensitivity in maternal brain: an antecedent of post-partum 'blues'? Majewska MD, et al. **Brain Res** 1989 Mar 20; 482(2):397–401

Quantitative autoradiographic analysis of the distribution of [3H]muscimol binding to GABA receptors in chick brain. Stewart MG, et al. **Brain Res** 1988 Jul 26;456(2):387–91

Age-related changes of muscimol binding in the substantia nigra. Wurpel JN, et al. **Brain Res** 1988 Oct 1;471(2):305–8

Comparison of the biological activity of sodium valproate and L-lysine valproate on brain GABA levels by (3H) muscimol radioreceptor assay. Brunet C, et al. **Farmaco [Prat]** 1988 Sep;43(9):291–6

The effect of Triton X-100 on bovine brain synaptic membranes. O'Neill C, et al. **Neurochem Res** 1988 Sep; 13(9):871–7

Colocalization of [3H]muscimol uptake and choline acetyltransferase immunoreactivity in amacrine cells of the cat retina. Chun MH, et al. **Neurosci Lett** 1988 Dec 5; 94(3):259–63

3H-muscimol binding sites within the rat choroid plexus: pharmacological characterization and autoradiographic localization. Amenta F, et al. **Pharmacol Res** 1989 Jul-Aug; 21(4):369–73

[Peculiarities of H3-muscimol binding to neocortex membranes of rats exposed to the effects of ethanol in the prenatal period] Zhulin VV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):460–2 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of muscimol, cetyl-GABA, pentetrazol and picrotoxin on timidity during intraspecies conflict in mice. Kršiak M. **Act Nerv Super (Praha)** 1989 Apr;31(1):64–6

Injection of muscimol into posterior hypothalamus blocks stress-induced tachycardia. Lisa M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R246–51

Elicitation of feeding, drinking, and gnawing following microinjections of muscimol into the median raphe nucleus of rats. Klitenick MA, et al. **Behav Neural Biol** 1989 May; 51(3):436–41

Modulation of the GABAA receptor complex by steroids in slices of rat cuneate nucleus. Turner JP, et al. **Br J Pharmacol** 1989 Feb;96(2):409–17

Substance P and GABAergic effects on adrenal and autonomic function evoked by microinjections into trigeminal subnucleus caudalis in the cat. Bereiter DA, et al. **Brain Res** 1989 Jun 26;490(2):307–19

Interaction between GABAergic neurotransmission and rat hypothalamic corticotropin-releasing hormone secretion in vitro. Calogero AE, et al. **Brain Res** 1988 Oct 25; 463(1):28–36

Microinjection of muscimol into entopeduncular nucleus suppresses pilocarpine but not maximal electroshock seizures in rats. Hosford DA, et al. **Brain Res** 1988 Oct 18;462(2):205–10

Anticonvulsant effect of muscimol injected into the thalamus of spontaneously epileptic Mongolian gerbils. Lee RJ, et al. **Brain Res** 1989 May 22;487(2):363–7

A critical role of the posterior hypothalamus in the mechanisms of wakefulness determined by microinjection of muscimol in freely moving cats. Lin JS, et al. **Brain Res** 1989 Feb 13;479(2):225–40

The role of the nigrotegmental GABAergic pathway in the propagation of pentylenetetrazol-induced seizures. Okada R, et al. **Brain Res** 1989 Feb 20;480(1-2):383–7

Behavioral evidence for midbrain dopamine depolarization inactivation. Rompré PP, et al. **Brain Res** 1989 Jan 16; 477(1-2):152–6

Evidence for the involvement of nigral GABAA receptors in seizures of adult rats. Sperber EF, et al. **Brain Res** 1989 Feb 20;480(1-2):378–82

Injection of benzodiazepines but not GABA or muscimol into pars reticulata substantia nigra suppresses pentylenetetrazol seizures. Zhang H, et al. **Brain Res** 1989 May 29;488(1-2):73–9

Comparison between pentobarbital- and muscimol-induced feeding in satiated sheep. Seoane JR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):703–6

Effects of intrahypothalamic injections of GABA, muscimol, pentobarbital, and L-glutamic acid on feed intake of satiated sheep. Wandji SA, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):5–9

Effect of intraventricular injection of muscimol on appetite in rats kept at high and temperate ambient temperatures. Kurose Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):163–6

Growth hormone-releasing factor secretion from fetal hypothalamic cell cultures is modulated by forskolin, phorbol esters, and muscimol. Baes M, et al. **Endocrinology** 1989 Jan;124(1):104–10

Fluidization of brain membranes by A2C does not produce anesthesia and does not augment muscimol-stimulated 36Cl- influx. Buck KJ, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):359–67

Qualitative and quantitative changes in monoamine oxidase activity after acute third ventricle treatment of GABA, muscimol, and picrotoxin in rat. Rattan AK, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):357–65

Central administration of muscimol phase-shifts the mammalian circadian clock. Smith RD, et al. **J Comp Physiol [A]** 1989 Feb;164(6):805–14

Analysis of vertebrate eye movements following intravitreal drug injections. III. Spontaneous nystagmus is modulated by the GABAa receptor. Ariel M. **J Neurophysiol** 1989 Aug;62(2):469–80

GABAA and GABAB receptors are functionally active in the regulation of catecholamine secretion by bovine chromaffin cells. Castro E, et al. **J Neurosci Res** 1989 Jul; 23(3):290–6

Muscimol, gamma-aminobutyric acidA receptors and excitatory amino acids in the mouse spinal cord. Aanonsen LM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1034–8

Blockade of enkephalinergic and GABAergic mediated locomotion in the nucleus accumbens by muscimol in the ventral pallidum. Austin MC, et al. **Jpn J Pharmacol** 1989 Aug;50(4):487–90

Effects of muscimol and baclofen on levels of monoamines and their metabolites in the El mouse brain. Kabuto H, et al. **Neurochem Res** 1988 Dec;13(12):1157–61

Effect of GABAergic transmission in the subpallidal region on the hypermotility response to the administration of excitatory amino acids and picrotoxin into the nucleus accumbens. Shreve PE, et al. **Neuropharmacology** 1988 Dec;27(12):1271–7

Biochemical evidence for the GABA regulation of vasopressin levels in microdissected brain structures after servo-controlled hypotension. Magnusson A, et al. **Neurosci Lett** 1989 Jul 3;101(3):281–7

Eye movements induced by microinjection of GABA agonist in the rat substantia nigra pars reticulata. Sakamoto M, et al. **Neurosci Res** 1989 Feb;6(3):216–33

Is dopamine involved in the hyperactivity produced by injections of muscimol into the median raphe nucleus? Wirtshafter D, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):577–83

Comparative studies of locomotor behavior following microinjections of muscimol into various sites in the paramedian tegmentum. Wirtshafter D, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):625–8

[Effect of baclofen and muscimol on the evoked potentials of the tectum mesencephali in the carp in response to stimulation of the visual and somatosensory afferent inputs] Garina NS, et al. **Neirofiziologiia** 1988;20(6):809–11 (Eng. Abstr.) **(Rus)**

MUSCLE CONTRACTION

Muscle architecture and fibre characteristics of rat gastrocnemius and semimembranosus muscles during isometric contractions. Huijing PA, et al. **Acta Anat (Basel)** 1989;135(1):46–52

Length-force characteristics of aponeurosis in passive muscle and during isometric and slow dynamic contractions of rat gastrocnemius muscle. Huijing PA, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):51–62

Effect of hypoxia on endothelium-dependent relaxation of canine and rabbit basilar arteries. Nakagomi T, et al. **Acta Neurochir (Wien)** 1989;97(1-2):77–82

Evoked muscular potentials in laryngeal muscles. Dejonckere PH, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):494–501

Wall mechanics of the rat bladder. I. Hydrodynamic studies in the time domain. Andersson S, et al. **Acta Physiol Scand** 1988 Dec;134(4):457–61

Wall mechanics of the rat bladder. II. Hydrodynamic studies in the frequency domain. Andersson S, et al. **Acta Physiol Scand** 1988 Dec;134(4):463–6

Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. Björnberg J, et al. **Acta Physiol Scand** 1989 Feb; 135(2):83–94

Enzyme activities in type I and II muscle fibres of human skeletal muscle in relation to age and torque development. Borges O, et al. **Acta Physiol Scand** 1989 May;136(1):29–36

Bistable firing properties of soleus motor units in unrestrained rats. Eken T, et al. **Acta Physiol Scand** 1989 Jul; 136(3):383–94

Shortening velocity, myosin light chain phosphorylation and Ca2+ dependence of force during metabolic inhibition in smooth muscle of rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1989 Jul;136(3):367–76

Selective innervation of neonatal fast and slow muscle fibres before net loss of synaptic terminals in the mouse soleus muscle. Fladby T, et al. **Acta Physiol Scand** 1988 Dec; 134(4):561–2

Do the fibre-type proportion and the angular velocity influence the mean power frequency of the electromyogram? Gerdle B, et al. **Acta Physiol Scand** 1988 Nov;134(3):341–6

Electric muscle stimulation in the hind leg of the spontaneously hypertensive rat induces a long-lasting fall in blood pressure. Hoffmann P, et al. **Acta Physiol Scand** 1988 Jun;133(2):211–9

Marked regional heterogeneity in blood flow within a single skeletal muscle at rest and during exercise hyperaemia in the rabbit. Iversen PO, et al. **Acta Physiol Scand** 1989 May; 136(1):17–28

Short-term effects of stimulus interval changes in guinea-pig and rat atrial muscle. Jóhannsson M, et al. **Acta Physiol Scand** 1989 Feb;135(2):73–81

Peak torque and OBLA running capacity in male orienteers. Johansson C, et al. **Acta Physiol Scand** 1988 Apr; 132(4):525–30

The consequences of fibre heterogeneity on the force-velocity relation of skeletal muscle. Josephson RK, et al. **Acta Physiol Scand** 1988 Mar;132(3):341–52

Effect of hypoxia on glucose metabolism in human skeletal muscle during exercise. Katz A, et al. **Acta Physiol Scand** 1989 Jul;136(3):377–82

Temporal relationship between blood flow changes and release of ions and metabolites from muscles upon single weak contractions. Kiens B, et al. **Acta Physiol Scand** 1989 Aug;136(4):551–9

The effect of temperature and stimulation scheme on fatigue and recovery in Xenopus muscle fibres. Lännergren J, et al. **Acta Physiol Scand** 1988 May;133(1):73–82

Acute and chronic effects of strenuous exercise on glucose metabolism in isolated, incubated soleus muscle of exercise-trained rats. Leighton B, et al. **Acta Physiol Scand** 1989 Jun;136(2):177–84

Selective damage of fast glycolytic muscle fibres with eccentric contraction of the rabbit tibialis anterior. Lieber RL, et al. **Acta Physiol Scand** 1988 Aug;133(4):587–8

Fatigue during dynamic muscle contractions in male sprinters and marathon runners: relationships between performance, electromyographic activity, muscle cross-sectional area and morphology. Lorentzon R, et al. **Acta Physiol Scand** 1988 Apr;132(4):531–6

Contractile properties during development of hypertrophy of the smooth muscle in the rat portal vein. Malmqvist U, et al. **Acta Physiol Scand** 1988 May;133(1):49–61

The effects of tonicity on tension and stiffness of tetanized skeletal muscle fibres of the frog. Månsson A. **Acta Physiol Scand** 1989 Jun;136(2):205–16

In-vitro stimulation of the rat epitrochlearis muscle. I. Contractile activity per se affects myofibrillar protein degradation and amino acid metabolism. Nie ZT, et al. **Acta Physiol Scand** 1989 Apr;135(4):513–21

Effects of adrenaline and prior exercise on the release of alanine, glutamine and glutamate from incubated rat skeletal muscle. Nie ZT, et al. **Acta Physiol Scand** 1989 Jul;136(3):395–401

Skeletal muscle glucolysis, glycogenolysis and glycogen phosphorylase during electrical stimulation in man. Ren JM, et al. **Acta Physiol Scand** 1988 May;133(1):101–7

Fatigue during continuous 20 Hz stimulation of the rat phrenic nerve diaphragm preparation. Røed A. **Acta Physiol Scand** 1988 Oct;134(2):217–21

Hypoxaemia increases the accumulation of inosine monophosphate (IMP) in human skeletal muscle during submaximal exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun;136(2):199–203

Formation of inosine monophosphate (IMP) in human skeletal muscle during incremental dynamic exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun;136(2):193–8

Release of K+ from muscle during prolonged dynamic exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun; 136(2):293–4

Maximal voluntary force of bilateral and unilateral leg extension. Schantz PG, et al. **Acta Physiol Scand** 1989 Jun; 136(2):185–92

Strength of two- and one-leg extension in man. Secher NH, et al. **Acta Physiol Scand** 1988 Nov;134(3):333–9

Muscle energy metabolism and electrolyte shifts during low-level prolonged static contraction in man. Sjøgaard G. **Acta Physiol Scand** 1988 Oct;134(2):181–7

The relation between force and intracellular pH in fatigued, single Xenopus muscle fibres. Westerblad H, et al. **Acta Physiol Scand** 1988 May;133(1):83–9

Effects of ageing and physical training on rat skeletal muscle. An experimental study on the properties of collagen, laminin, and fibre types in muscles serving different functions. Kovanen V. **Acta Physiol Scand Suppl** 1989; 577:1–56

Maximal O2 uptake limitation in contracting skeletal muscle during carbon monoxide hypoxia. King CE. **Adv Exp Med Biol** 1989;248:705–12

Muscle fiber size and chronic exposure to hypoxia. Mathieu-Costello O, et al. **Adv Exp Med Biol** 1989; 248:305–11

Spatial and temporal variability of blood flow in stimulated

dog gastrocnemius muscle. Piiper J, et al. **Adv Exp Med Biol** 1989;248:719–28

Localized heterogeneity of red cell velocity in skeletal muscle at rest and after contraction. Tyml K, et al. **Adv Exp Med Biol** 1989;248:735–43

Influence of the vestibular stimulation on the activity of muscles of the lower limb in man. Electromyographic evidence. Marcellini S, et al. **Adv Otorhinolaryngol** 1988; 41:184–9

Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension. Grossman E, et al. **Am J Cardiol** 1989 Jul 1;64(1):42–4

Strength, flexibility, and maturity in adolescent athletes. Pratt M. **Am J Dis Child** 1989 May;143(5):560–3

Calcium control of smooth muscle contractility. Stull JT, et al. **Am J Med Sci** 1988 Oct;296(4):241–5 (29 ref.)

Electromyography of masticatory muscles in three jaw registration positions. Jiménez ID. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):282–8

The myth of skeletal muscle spasm [editorial] Johnson EW. **Am J Phys Med Rehabil** 1989 Feb;68(1):1

Relationship of muscle strength of back and upper extremity with level of physical activity in healthy women. Sinaki M. **Am J Phys Med Rehabil** 1989 Jun;68(3):134–8

Assessing sincerity of effort in maximal grip strength tests. Smith GA, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):73–80

Characteristics of canine lower esophageal sphincter: a new electrophysiological tool. Allescher HD, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G441–53

Different mechanisms of contraction generation in circular muscle of canine colon. Barajas-López C, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G570–80

Individual correlation of morphology, muscle mechanics, and locomotion in a salamander. Bennett AF, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1200–8

Muscle transplantation between young and old rats: age of host determines recovery. Carlson BM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1262–6

On-line computer analysis of human lower esophageal sphincter relaxation. Castell JA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G794–9

Bioenergetic changes during contraction and recovery in diabetic rat skeletal muscle. Challiss RA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E129–37

Myosin dephosphorylation during rapid relaxation of hog carotid artery smooth muscle. Driska SP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C315–21

Cross-bridge dephosphorylation and relaxation of vascular smooth muscle. Hai CM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C282–7

Polymyxin B inhibits stimulation of glucose transport in muscle by hypoxia or contractions. Henriksen EJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E662–7

Ascending enteric reflex: multiple neurotransmitter systems and interactions. Holzer P. **Am J Physiol** 1989 Mar;256(3 Pt 1):G540–5

Interactions between sustained contractile activity and beta-adrenergic receptors in regulation of gene expression in skeletal muscles. Kraus WE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C506–14

Length-tension relationship of striated muscle of cat external anal sphincter. Krier J, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G773–8

Sphincteric action of the diaphragm during a relaxed lower esophageal sphincter in humans. Mittal RK, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G139–44

Dependence of stress on cross-bridge phosphorylation in vascular smooth muscle. Ratz PH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C96–100

Spatial and temporal patterns of human jejunal contractions. Sarna SK, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G423–32

Changes of tracheal smooth muscle stiffness during an isotonic contraction. Seow CY, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C341–50

Control mechanisms of sphincter of Oddi contraction rate in the opossum. Suzuki T, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):G619–26

Skeletal muscle growth is stimulated by intermittent stretch-relaxation in tissue culture. Vandenburgh HH, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C674–82

Antigen-induced contraction of jejunal smooth muscle in the sensitized rat. Vermillion DL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G701–8

Muscular contraction stimulates posterior hypothalamic neurons. Waldrop TG, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R348–56

Heat production of rat anococcygeus muscle during isometric contraction. Walker JS, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C536–42

Sympathetic outflow to resting muscles during static handgrip and postcontraction muscle ischemia. Wallin BG, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H105–10

Effect of ileal infusion of lipid on jejunal motor patterns after a nutrient and nonnutrient meal. Welch IM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G800–6

Viral infections and respiratory muscle contractility [editorial] Altose MD. **Am Rev Respir Dis** 1988 Jul; 138(1):1–2

Effect of hypoxia on diaphragm blood flow, oxygen uptake, and contractility. Bark H, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1535–41

The effects of epithelial cell supernatant on contractions of isolated canine tracheal smooth muscle. Barnett K, et al. **Am Rev Respir Dis** 1988 Oct;138(4):780–3

Prolonged relaxation rate of inspiratory muscles in patients with sleep apnea. Griggs GA, et al. **Am Rev Respir Dis** 1989 Sep;140(3):706–10

Transdiaphragmatic twitch pressure. Effects of lung volume and chest wall shape. Hubmayr RD, et al. **Am Rev Respir Dis** 1989 Mar;139(3):647–52

The use of the internal perimeter to compare airway size and to calculate smooth muscle shortening. James AL, et al. **Am Rev Respir Dis** 1988 Jul;138(1):136–9

Maximal relaxation rates of esophageal, nose, and mouth pressures during a sniff reflect inspiratory muscle fatigue. Koulouris N, et al. **Am Rev Respir Dis** 1989 May; 139(5):1213–7

Translation of contractile force to constriction in major diameter canine airways in vivo. Shioya T, et al. **Am Rev Respir Dis** 1989 Sep;140(3):687–94

Structure of the guinea-pig trachea at rest and in contraction. Amiri MH, et al. **Anat Embryol (Berl)** 1988;178(5):389–97

Standardization of the caffeine halothane muscle contracture test. North American Malignant Hyperthermia Group. Larach MG. **Anesth Analg** 1989 Oct;69(4):511–5 (4 ref.)

Standards for halothane/caffeine contracture test [editorial] Rosenberg H. **Anesth Analg** 1989 Oct;69(4):429–30

Coupling between cardiac and locomotor rhythms: the phase lag between heart beats and pedal thrusts. Kirby RL, et al. **Angiology** 1989 Jul;40(7):620–5

Analysis of human torso motion with muscle actuators. Katbab A. **Ann Biomed Eng** 1989;17(1):75–91

Role of the ryanodine receptor of skeletal muscle in excitation-contraction coupling. Fill M, et al. **Ann N Y Acad Sci** 1989;560:155–62 (26 ref.)

Age effects on properties of motor unit action potentials: ADEMG analysis. Howard JE, et al. **Ann Neurol** 1988 Aug; 24(2):207–13

Contractile properties of canine thyroarytenoid muscle reinnervated from the ansa cervicalis. Rice DH, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):153–6

Effects of cricothyroid muscle contraction on laryngeal resistance and glottic area. Woodson GE, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):119–24

An evaluation of the dynamic qualities of isometric grip strength. Helliwell PS, et al. **Ann Rheum Dis** 1988 Nov; 47(11):934–9

Biochemistry and biophysics of excitation-contraction coupling. Fleischer S, et al. **Annu Rev Biophys Biophys Chem** 1989;18:333–64 (292 ref.)

Ca2+, crossbridge phosphorylation, and contraction. Hai CM, et al. **Annu Rev Physiol** 1989;51:285–98 (96 ref.)

Regulation of smooth muscle contractile elements by second messengers. Kamm KE, et al. **Annu Rev Physiol** 1989; 51:299–313 (90 ref.)

Contraction in smooth muscle cells. Murphy RA. **Annu Rev Physiol** 1989;51:275–83 (50 ref.)

The spinal accessory nerve in childhood hemiplegia. Marcus JC. **Arch Neurol** 1989 Jan;46(1):60–1

McArdle's disease aggravates nuchal and cranial muscle contraction pains [letter] Yamut BI, et al. **Arch Neurol** 1989 Apr;46(4):361–2

Analysis of electromyographic signals in human jaw closing muscles at various isometric force levels. Clark GT, et al. **Arch Oral Biol** 1988;33(11):833–7

Isometric muscle tension generated by masseter stimulation after prolonged alteration of the consistency of the diet fed to growing rats. Kiliaridis S, et al. **Arch Oral Biol** 1988; 33(7):467–72

Estimation of blood flow by 133Xe clearance in human masseter muscle during rest, endurance of isometric contraction, and recovery. Monteiro AA, et al. **Arch Oral Biol** 1988;33(8):561–5

Concomitant changes in the acoustic impedance and the cochlear microphonic potentials during twitch contractions of the middle ear muscles in cats. Freeman S, et al. **Arch Otorhinolaryngol** 1988;245(5):311–5

Knee flexor and extensor strength ratios with deficiency of the lateral collateral ligament. Kannus P. **Arch Phys Med Rehabil** 1988 Nov;69(11):928–31

Increased muscular fatigue in patients with neurogenic muscle weakness: quantification and pathophysiology. Milner-Brown HS, et al. **Arch Phys Med Rehabil** 1989 May; 70(5):361–6

Isokinetic testing in young nonathletic able-bodied subjects. Nicholas JJ, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):210–3 (21 ref.)

Strength in an elderly population. Rice CL, et al. **Arch Phys Med Rehabil** 1989 May;70(5):391–7

Isometric and isokinetic hip abductor strength in persons with above-knee amputations. Ryser DK, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):840–5

Effect of normolipemic and hyperlipemic serum on biosynthetic response to cyclic stretching of aortic smooth muscle cells. Grande JP, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):446–52

The effect of plasma from patients with essential hypertension on the contractility of human arteries. Cappuccio FP, et al. **Artery** 1988;15(6):346–52

Physiological accompaniments of human muscle fatigue. Gandevia SC. **Aust Paediatr J** 1988;24 Suppl 1:104–8 (44 ref.)

A preliminary report on a new anti-G maneuver. Guo HZ, et al. **Aviat Space Environ Med** 1988 Oct;59(10):968–72

Predictable and unpredictable shock stimulates gastric contractility and causes mucosal injury in rats. Garrick T, et al. **Behav Neurosci** 1989 Feb;103(1):124–30

Performance of a weight-lifting task by normal and deafferented monkeys. Wylie RM, et al. **Behav Neurosci** 1989 Apr;103(2):273–82

Observation of fatigue unrelated to gross energy reserve of skeletal muscle during tetanic contraction—an application of 31P-MRS. Takata S, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):225–31

A gated 31P-n.m.r. study of bioenergetic recovery in rat skeletal muscle after tetanic contraction. Challiss RA, et al. **Biochem J** 1989 Apr 15;259(2):589–92

Contraction-mediated inactivation of glycogen synthase is accompanied by inactivation of glycogen synthase phosphatase in human skeletal muscle. Kida Y, et al. **Biochem J** 1989 May 1;259(3):901–4

Transient increase in glucose 1,6-bisphosphate in human skeletal muscle during isometric contraction. Lee AD, et al. **Biochem J** 1989 Mar 15;258(3):915–8

A 31P-NMR study of the acute effects of altered beta-adrenoceptor stimulation on the bioenergetics of skeletal muscle during contraction. Challiss RA, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4653–9

Mechanism of cyclic-GMP-dependent relaxation in vascular smooth muscle. Lincoln TM, et al. **Biochem Soc Trans** 1988 Aug;16(4):497–9

Measurements of intracellular calcium concentration in mammalian vascular smooth muscle cells during agonist-induced contractions. Morgan KG, et al. **Biochem Soc Trans** 1988 Aug;16(4):493

31P NMR magnetization-transfer measurements of ATP turnover during steady-state isometric muscle contraction in the rat hind limb in vivo. Brindle KM, et al. **Biochemistry** 1989 May 30;28(11):4887–93

Effects of ATP reduction on the pattern of force development and myosin light chain phosphorylation in intact arterial smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):278–82

Effects of altering carbohydrate metabolism on energy status and contractile function of vascular smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):42–52

Smooth operators. The molecular mechanics of smooth muscle contraction. Cross RA. **Bioessays** 1989 Jul; 11(1):18–21 (26 ref.)

The effect of changes in facial muscle tension on respiratory resistance. Kotses H, et al. **Biol Psychol** 1987 Dec; 25(3):211–9

Temperature effects on isometric contractions of slow and fast twitch muscles of various rodents—dependence on fibre type composition: a comparative study. Asmussen G, et al. **Biomed Biochim Acta** 1989;48(5–6):S536–41

Information transfer in the regulation of striated muscle contraction. Grabarek Z, et al. **Biomed Biochim Acta** 1989; 48(5–6):S297–305 (48 ref.)

Temperature influence on phases of the tension response to sudden reduction of muscle length. Küchler G, et al. **Biomed Biochim Acta** 1989;48(5–6):S403–7

Regulation mechanisms of muscle contraction at subcellular level. Poledna J. **Biomed Biochim Acta** 1989;48(5–6):S341–4

Temperature effects on mammalian muscle contraction. Ranatunga KW, et al. **Biomed Biochim Acta** 1989; 48(5–6):S530–5

Force, endurance time, and cardiovascular responses in voluntary isometric contractions of different muscle groups. Rehfeldt H, et al. **Biomed Biochim Acta** 1989; 48(5–6):S509–14

Nuclear magnetic resonance studies on the mechanism of regulation of glycogenolysis in contracting skeletal muscle. Sugi H, et al. **Biomed Biochim Acta** 1989;48(5–6):S335–40

Interindividual variability of isometric endurance with regard to the endurance performance limit for static work. Ulmer HV, et al. **Biomed Biochim Acta** 1989;48(5–6):S504–8

A linear muscle model predicts the hyperbolic force-velocity relationship. Enderle JD, et al. **Biomed Sci Instrum** 1989; 25:149–53

Agonist and antagonist muscle tension during horizontal saccadic eye movements. Enderle JD, et al. **Biomed Sci Instrum** 1989;25:155–61

A model of force production that explains the lag between crossbridge attachment and force after electrical stimulation of striated muscle fibers. Bagni MA, et al. **Biophys J** 1988 Dec;54(6):1105–14

Heat changes during transient tension responses to small releases in active frog muscle. Gilbert SH, et al. **Biophys J** 1988 Oct;54(4):611–7

Sarcomere length dependence of the force-velocity relation in single frog muscle fibers. Granzier HL, et al. **Biophys J** 1989 Mar;55(3):499–507

Weakly attached cross-bridges in relaxed frog muscle fibers. Jung DW, et al. **Biophys J** 1989 Apr;55(4):605–19

Elastic properties of relaxed, activated, and rigor muscle fibers measured with microsecond resolution. Jung DW, et al. **Biophys J** 1988 Nov;54(5):897–908

Changes in force and stiffness during stretch of skeletal muscle fibers, effects of hypertonicity. Månsson A. **Biophys J** 1989 Aug;56(2):429–33

Filament lattice of frog striated muscle. Radial forces, lattice stability, and filament compression in the A-band of relaxed and rigor muscle. Millman BM, et al. **Biophys J** 1988 Sep; 54(3):437–47

The kinetics relating calcium and force in skeletal muscle. Stein RB, et al. **Biophys J** 1988 Oct;54(4):705–17

Structures of actomyosin crossbridges in relaxed and rigor muscle fibers. Yu LC, et al. **Biophys J** 1989 Mar; 55(3):441–53

A logistic-type curve fits pressure-diameter relationship for relaxed and contracted dog renal arteries. Fukushima T, et al. **Biorheology** 1988;25(1–2):37–48

Flow-dependent contraction observed in a myograph-mounted resistance artery. Bevan JA, et al. **Blood Vessels** 1988;25(5):261–4

Grip strength: a measure of the proportion of protein loss in surgical patients. Windsor JA, et al. **Br J Surg** 1988 Sep;75(9):880–2

Characterisation of human prostatic adrenoceptors using pharmacology receptor binding and localisation. Chapple CR, et al. **Br J Urol** 1989 May;63(5):487–96

Neurophysiological assessment of the central motor pathway to the external urethral sphincter in man. Thiry AJ, et al. **Br J Urol** 1989 May;63(5):515–9

The effects of voluntary contraction on the H reflex of human limb muscles. Burke D, et al. **Brain** 1989 Apr;112 (Pt 2):417–33

Control of isometric finger force in patients with cerebellar disease. Mai N, et al. **Brain** 1988 Oct;111 (Pt 5):973–98

Changes in contingent-negative variation and reaction time related to precueing of direction and force of a forearm movement. Bonnet M, et al. **Brain Behav Evol** 1989; 33(2–3):147–52

Generation of reaching movements: plausibility and implications of the equilibrium trajectory hypothesis. Flash T. **Brain Behav Evol** 1989;33(2–3):63–8

Subjective pain sensation is linearly correlated with the flexion reflex in man. Chan CW, et al. **Brain Res** 1989 Feb 6;479(1):145–50

Co-contractions in antagonistic hindlimb muscles during simulated step cycle rates. Hutton RS, et al. **Brain Res** 1989 Jul 17;492(1–2):230–6

Measurements of muscle stiffness, the electromyogram and activity in single muscle spindles of human flexor muscles following conditioning by passive stretch or contraction. Jahnke MT, et al. **Brain Res** 1989 Jul 24;493(1):103–12

Unusual motor unit firing behavior in older adults. Kamen G, et al. **Brain Res** 1989 Mar 13;482(1):136–40

Distribution of activity within the cat's peroneus longus muscle when activated in different ways via the central nervous system. Kandou TW, et al. **Brain Res** 1989 May 8;486(2):340–50

Nucleus raphe obscurus (nRO) influences vagal control of gastric motility in rats. McCann MJ, et al. **Brain Res** 1989 May 1;486(1):181–4

Central motor program for relaxation of periesophageal diaphragm during the expulsive phase of vomiting. Miller AD, et al. **Brain Res** 1988 Jul 26;456(2):367–70

An analysis of frequency response of motor units during voluntary isometric contractions at various speeds. Oishi K, et al. **Brain Res** 1988 Aug 23;458(2):261–8

Electromyographic activity of cat hindlimb flexors and extensors during locomotion at varying speeds and inclines. Pierotti DJ, et al. **Brain Res** 1989 Feb 27;481(1):57–66

Occlusion of pressor responses to posterior diencephalic stimulation and muscular contraction. Rybicki KJ, et al. **Brain Res Bull** 1989 Feb;22(2):305–12

Right ventricular contractility depression in chronically infarcted rats. Mill JG, et al. **Braz J Med Biol Res** 1988; 21(3):621–4

Effect of knee joint angle on a heteronymous Ib reflex in the human lower limb. Brooke JD, et al. **Can J Neurol Sci** 1989 Feb;16(1):58–62

Characterization of ion movements and their relationship to muscarinic receptor binding and excitation-contraction coupling in guinea pig ileal longitudinal smooth muscle. Bolger GT, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):331–43

Relationship between transmural potential difference and smooth muscle slow waves and contractility in the rabbit small intestine in vitro. Greenwood B, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1161–5

Absence of staircase following disuse in rat gastrocnemius muscle. MacIntosh BR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):707–13

Role of cGMP in relaxation of vascular and other smooth muscle. Nakatsu K, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):251–62 (62 ref.)

Electro-mechanical response times and muscle strength after sleep deprivation. Symons JD, et al. **Can J Sport Sci** 1988 Dec;13(4):225–30

Muscle contraction headache and migraine. Platelet activation and plasma norepinephrine during the cold pressor test. Takeshima T, et al. **Cephalalgia** 1989 Mar; 9(1):7–13

Diaphragmatic contraction during assisted mechanical ventilation. Flick GR, et al. **Chest** 1989 Jul;96(1):130–5

Longitudinal propagation of contraction in the isolated conduit coronary arteries of humans and pigs. Araki H, et al. **Circ Res** 1989 Apr;64(4):734–41

Effects of activation on distribution of Ca2+ in single arterial smooth muscle cells. Determination with fura-2 digital imaging microscopy. Goldman WF, et al. **Circ Res** 1989 May;64(5):1019–29

Pressure-dependent contraction of rat juxtamedullary afferent arterioles. Sanchez-Ferrer CF, et al. **Circ Res** 1989 Apr;64(4):790–8

Stimulation of renal sympathetic activity by static contraction: evidence for mechanoreceptor-induced reflexes from skeletal muscle. Victor RG, et al. **Circ Res** 1989 Mar;64(3):592–9

Handgrip strength after the Blalock-Taussig shunt: 14 to 34 year follow-up. Zahka KG, et al. **Clin Cardiol** 1988 Sep; 11(9):627–9

Sympatho-adrenal and cardiovascular responses during hand-grip in human hypertension. Gonzalez M, et al. **Clin Invest Med** 1989 Apr;12(2):115–20

Quantitative measurements of hip strength in different age groups. Cahalan TD, et al. **Clin Orthop** 1989 Sep; (246):136–45

Further observations on the isometricity of the anterior cruciate ligament. An anatomical study using a 6-mm diameter replacement. Schutzer SF, et al. **Clin Orthop** 1989 May;(242):247–55

Skeletal muscle characteristics in children 9–15 years old: force, relaxation rate and contraction time. Bäckman E, et al. **Clin Physiol** 1988 Oct;8(5):521–7

Influence of vibration on endurance of maximal isometric contraction. Samuelson B, et al. **Clin Physiol** 1989 Feb; 9(1):21–25

Effect of subnutrition on normalized muscle force and relaxation rate in human subjects using voluntary contractions. Bruce SA, et al. **Clin Sci** 1989 Jun; 76(6):637–41

Vitamin D deficiency and muscle strength in male alcoholics. Hickish T, et al. **Clin Sci** 1989 Aug;77(2):171–6

Effect of passive muscle stretching in osteoarthritis of the hip. Leivseth G, et al. **Clin Sci** 1989 Jan;76(1):113–7

Skinned muscle fibers of Aplysia: potentiation of contraction by "background" calcium and lack of effect of cyclic AMP. Ram JL, et al. **Comp Biochem Physiol [A]** 1989;93(4):745–9

A subtractive method for decomposing muscle tension into individual twitches. Bates JH, et al. **Comput Biomed Res** 1988 Dec;21(6):570–8

Automated data acquisition and analysis in muscle physiology research. Stanley TE 3d, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):273–9

Hypothermic effects on action potential and force production of hedgehog and guinea pig papillary muscles. Svensson OL, et al. **Cryobiology** 1988 Oct;25(5):445–50

Deficits in the production of grip forces in Down syndrome. Cole KJ, et al. **Dev Med Child Neurol** 1988 Dec;30(6):752–8

Effects of diabetes and diuresis on contraction and relaxation mechanisms in rat urinary bladder. Kudlacz EM, et al. **Diabetes** 1989 Mar;38(3):278–84

Voluntary relaxation of the external anal sphincter. Brodén G, et al. **Dis Colon Rectum** 1989 May;32(5):376–8

IEMG/force relationships in rapidly contracting human hand muscles. Bronks R, et al. **Electromyogr Clin Neurophysiol** 1987 Dec;27(8):509–15

Electromyographic analysis of movement following a maximal isometric contraction. Etnyre BR, et al. **Electromyogr Clin Neurophysiol** 1989 May–Jun;29(4):221–5

Daily changes in neural activation, force-time and relaxation-time characteristics in athletes during very intense training for one week. Häkkinen K, et al. **Electromyogr Clin Neurophysiol** 1989 May–Jun;29(4):243–9

Effect of filter setting on the electromyographic parameters of muscles contracting to fatigue. Shochina M, et al. **Electromyogr Clin Neurophysiol** 1989 Jan–Feb;29(1):3–8

Electrophysiological pattern of development of fatigue during isometric contraction in sportsmen. Vatine JJ, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):7–14

A functional subdivision of the lumbar extensor musculature. Recruitment patterns and force-RA-EMG relationships under isometric conditions. Vink P, et al. **Electromyogr Clin Neurophysiol** 1987 Dec;27(8):517–25

A comparison of power outputs on the Wingate test and on a test using an isokinetic device. Baltzopoulos V, et al. **Ergonomics** 1988 Nov;31(11):1693–9

Variation of the maximum maintenance time of an isometric contraction in the presence of a second contraction. Kahn JF, et al. **Ergonomics** 1988 Sep;31(9):1287–98

Occupational lifting by nursing aides and warehouse workers. Ljungberg AS, et al. **Ergonomics** 1989 Jan;32(1):59–78

Strength and cross-sectional area of the dorsal neck muscles. Mayoux-Benhamou MA, et al. **Ergonomics** 1989 May; 32(5):513–8

Muscle fibre conduction velocity, mean power frequency, mean EMG voltage and force during submaximal fatiguing contractions of human quadriceps. Arendt-Nielsen L, et al. **Eur J Appl Physiol** 1988;58(1–2):20–5

Contractile properties of human skeletal muscle in childhood and adolescence. Belanger AY, et al. **Eur J Appl Physiol** 1989;58(6):563–7

Skeletal muscle fiber type composition and performance during repeated bouts of maximal, concentric contractions. Colliander EB, et al. **Eur J Appl Physiol** 1988;58(1–2):81–6

The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. I. Assessment of muscular fatigue by means of surface EMG. Gamet D, et al. **Eur J Appl Physiol** 1989;58(4):361–8

Muscular fatigue during repeated isokinetic shoulder forward flexions in young females. Gerdle B, et al. **Eur J Appl Physiol** 1989;58(6):666–73

Relationship between work and electromyographic activity during repeated leg muscle contractions in orienteers. Gerdle B, et al. **Eur J Appl Physiol** 1988;58(1–2):8–12

Surface EMG amplitude and frequency dependence on exerted force for the upper trapezius muscle: a comparison between right and left sides. Hagberg C, et al. **Eur J Appl Physiol** 1989;58(6):641–5

Interrelationships among various measures of upper body strength assessed by different contraction modes. Evidence for a general strength component. Hortobagyi T, et al. **Eur J Appl Physiol** 1989;58(7):749–55

Glycogen degradation during isometric exercise at low contraction force. Hultman E, et al. **Eur J Appl Physiol** 1988;58(3):225–7

Intramuscular pressure and muscle blood flow in supraspinatus. Järvholm U, et al. **Eur J Appl Physiol** 1988; 58(3):219–24

Recovery following exhaustive dynamic exercise in the human biceps muscle. Kroon GW, et al. **Eur J Appl Physiol** 1988;58(3):228–32

The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. II. Motor unit firing rate and recruitment. Maton B, et al. **Eur J Appl Physiol** 1989;58(4):369–74

Plasma vasopressin, growth hormone and ACTH responses to static handgrip in healthy subjects. Nazar K, et al. **Eur J Appl Physiol** 1989;58(4):400–4

Muscular sound and force relationship during isometric contraction in man. Orizio C, et al. **Eur J Appl Physiol** 1989;58(5):528–33

Comparison of twitch potentiation in the gastrocnemius of young and elderly men. Petrella RJ, et al. **Eur J Appl Physiol** 1989;58(4):395–9

Comparison of the histochemical and contractile properties of human triceps surae. Rice CL, et al. **Eur J Appl Physiol** 1988;58(1–2):165–70

Isometric and isokinetic muscle strength, anthropometry and physical activity in 8 and 13 year old Swedish children. Sunnegårdh J, et al. **Eur J Appl Physiol** 1988;58(3):291–7

Electrically evoked isometric and isokinetic properties of the triceps surae in young male subjects. Thomas DO, et al. **Eur J Appl Physiol** 1988;58(3):321–6

Plantarflexor muscle function in young and elderly women. Vandervoort AA, et al. **Eur J Appl Physiol** 1989; 58(4):389–94

Comparison between a 30-s all-out test and a time-work test on a cycle ergometer. Vandewalle H, et al. **Eur J Appl Physiol** 1989;58(4):375–81

The influence of force and circulation on average muscle fibre conduction velocity during local muscle fatigue. Zwarts MJ, et al. **Eur J Appl Physiol** 1988;58(3):278–83

The multiplicity of troponin T isoforms. Distribution in normal rabbit muscles and effects of chronic stimulation. Härtner KT, et al. **Eur J Biochem** 1989 Jan 15;179(1):31–8

Chronic stimulation-induced changes of myosin light chains at the mRNA and protein levels in rat fast-twitch muscle. Kirschbaum BJ, et al. **Eur J Biochem** 1989 Jan 15; 179(1):23–9

Intracellular localization of inositol-phospholipid-metabolizing enzymes in rabbit fast-twitch skeletal muscle. Can D-myo-inositol 1,4,5-trisphosphate play a role in excitation-contraction coupling? Varsányi M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):473–9

Left ventricular dimensions during isometric exercise in aortic valve incompetence assessed by M-mode echocardiography and gated equilibrium radionuclide angiography. Groundstroem K, et al. **Eur J Nucl Med** 1989; 15(4):204–6

Characterisation of receptors mediating the contractile effects of prostanoids in guinea-pig and human airways. McKenniff M, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):149–59

Facilitation of transmission in the pathway of non-monosynaptic Ia excitation to wrist flexor motoneurones at the onset of voluntary movement in man. Baldissera F, et al. **Exp Brain Res** 1989;74(2):437–9

Disturbances of motor output in a cat hindlimb muscle after acute dorsal spinal hemisection. Blaschak MJ, et al. **Exp Brain Res** 1988;71(2):377–87

Excitability of corticospinal neurons during tonic muscle contractions in man. Brouwer B, et al. **Exp Brain Res** 1989; 74(3):649–52

Trajectory control in targeted force impulses. VI. Independent specification of response amplitude and direction. Favilla M, et al. **Exp Brain Res** 1989;75(2):280–94

Inhomogeneous activation of motoneurone pools as revealed by co-contraction of antagonistic human arm muscles. Jongen HA, et al. **Exp Brain Res** 1989;75(3):555–62

Neck muscle activation patterns in humans during isometric head stabilization. Keshner EA, et al. **Exp Brain Res** 1989; 75(2):335–44

Ia afferents of the antagonist are inhibited presynaptically before the onset of a ballistic muscle contraction in man. Ruegg DG. **Exp Brain Res** 1989;74(3):663–6

Force production characteristics in Parkinson's disease. Stelmach GE, et al. **Exp Brain Res** 1989;76(1):165–72

Differences in the activation of m. biceps brachii in the control of slow isotonic movements and isometric contractions. Tax AA, et al. **Exp Brain Res** 1989; 76(1):55–63

Mechanical and electromyographic responses to stretch of the human anterior tibial muscle at different levels of contraction. Toft E, et al. **Exp Brain Res** 1989;74(1):213–9

Functional innervation and contractile properties of the

human iris sphincter muscle. Yoshitomi T, et al. **Exp Eye Res** 1988 Jun;46(6):979–86

Preservation of skeletal muscle hyperemic response to contraction with aging in female rats. Irion GL, et al. **Exp Gerontol** 1988;23(3):183–8

Prolongation of twitch potentiating mechanism throughout muscle fatigue and recovery. Garner SH, et al. **Exp Neurol** 1989 Mar;103(3):277–81

Contractile activity enhances the synthesis of hexokinase II in rat skeletal muscle. Weber FE, et al. **FEBS Lett** 1988 Sep 26;238(1):71–3

Physiology of esophageal motor function. Diamant NE. **Gastroenterol Clin North Am** 1989 Jun;18(2):179–94 (74 ref.)

Peptide histidine isoleucine and vasoactive intestinal polypeptide cause relaxation of opossum internal anal sphincter via two distinct receptors. Nurko S, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):403–13

Seasonal variations in oviductal activity, extensibility, and tensile strength in Chrysemys picta. Motz VA, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):453–60

The activation of contraction and extracellular calcium in striated muscle of the lamprey. Györke S, et al. **Gen Physiol Biophys** 1988 Aug;7(4):427–32

Relation of muscle cell contraction and calcium distribution in sarcomere. **Poledna J. Gen Physiol Biophys** 1989 Apr; 8(2):81–90

Left ventricular and hemodynamic responses during upright isometric exercise in normal young and elderly men. Sagiv M, et al. **Gerontology** 1988;34(4):165–70

Estriol reduces the reactivity of the human umbilical artery to mechanical stimuli. Silva de Sá MF, et al. **Gynecol Obstet Invest** 1989;27(4):188–92

Childhood muscle contraction headache: current issues in assessment and treatment. Labbé EE. **Headache** 1988 Jul; 28(6):430–4 (22 ref.)

The relationship between muscle contraction headache and migraine: a multivariate analysis study. Takeshima T, et al. **Headache** 1988 May;28(4):272–7

Spouse and parent–offspring similarities in cardiovascular response to mental arithmetic and isometric hand–grip. Ditto B, et al. **Health Psychol** 1989;8(2):159–73

The effects of preview and task symmetry on trunk muscle response to sudden loading. Lavender SA, et al. **Hum Factors** 1989 Feb;31(1):101–15

Tetanic responses of electrically stimulated paralyzed muscle at varying interpulse intervals. Carroll SG, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):644–53

Robust closed–loop control of isometric muscle force using pulsewidth modulation. Chizeck HJ, et al. **IEEE Trans Biomed Eng** 1988 Jul;35(7):510–7

Task–based methods for evaluating electrically stimulated antagonist muscle controllers. Durfee WK. **IEEE Trans Biomed Eng** 1989 Mar;36(3):309–21

Methods for estimating isometric recruitment curves of electrically stimulated muscle. Durfee WK, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):654–67

Temporal characterization of myoelectric spectral moment changes: analysis of common parameters. Standridge RK, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):789–97

Clonal derivation of a rat muscle cell strain that forms contraction–competent myotubes. Merrill GF. **In Vitro Cell Dev Biol** 1989 May;25(5):471–6

Nature of PGE2 induced inhibition of acetylcholine contracture of rectus abdominis muscle of toad. Koley J, et al. **Indian J Exp Biol** 1988 Jul;26(7):528–31

Effect of smoking on anthropometric somatotype & grip strength. Parkash M, et al. **Indian J Med Res** 1988 May; 87:494–9

Spectral analysis of muscular sound at low and high contraction level. Diemont B, et al. **Int J Biomed Comput** 1988 Dec;23(3–4):161–75

An electrostatic mechanism of muscular contraction. Iwazumi T, et al. **Int J Cardiol** 1989 Sep;24(3):267–75 (44 ref.)

Hypnosis, cerebral laterality and relaxation. Pagano RR, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):350–8

The effects of the transcendental mediation technique and progressive muscle relaxation on EEG coherence, stress reactivity, and mental health in black adults. Gaylord C, et al. **Int J Neurosci** 1989 May;46(1–2):77–86

Somatosensory evoked potential changes during muscle testing. Leisman G, et al. **Int J Neurosci** 1989 Mar; 45(1–2):143–51

Mechanical output and iEMG of single and repeated isokinetic plantar flexions: a study of untrained and endurance–trained women. Johansson C, et al. **Int J Sports Med** 1988 Oct;9(5):330–3

Relationship between peak torque and total work in an isokinetic contraction of the medial collateral ligament insufficient knee. Kannus P. **Int J Sports Med** 1988 Aug; 9(4):294–6

Influence of different experimental recreation treatments on sympathoadrenergic and metabolic regulation mechanisms in repeated exercises. Litschka–Schimpf G, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S146–50

Nutritional status, grip strength, and immune function in institutionalized elderly. Subotičanec K, et al. **Int J Vitam Nutr Res** 1989;59(1):20–8

Epithelium–derived relaxing factor(s) and bronchial reactivity. Vanhoutte PM. **J Allergy Clin Immunol** 1989 May;83(5):855–61 (51 ref.)

The importance of stretch and contractile activity in the prevention of connective tissue accumulation in muscle. Williams PE, et al. **J Anat** 1988 Jun;158:109–14

Contractile adaptations in the human triceps surae after isometric exercise. Alway SE, et al. **J Appl Physiol** 1989 Jun;66(6):2725–32

Impedance of the chest wall during sustained respiratory muscle contraction. Barnas GM, et al. **J Appl Physiol** 1989 Jan;66(1):360–9

Energy cost and fatigue during intermittent electrical stimulation of human skeletal muscle. Bergström M, et al. **J Appl Physiol** 1988 Oct;65(4):1500–5

Force deficit of vascularized skeletal muscle grafts in rabbits. Burton HW, et al. **J Appl Physiol** 1989 Feb;66(2):675–9

Effects of progressive hypoxia on parasternal, costal, and crural diaphragm activation. Darian GB, et al. **J Appl Physiol** 1989 Jun;66(6):2579–84

Passive shortening of canine parasternal intercostals during breathing. De Troyer A, et al. **J Appl Physiol** 1989 Mar; 66(3):1414–20

Inspiratory muscle interaction in the generation of changes in airway pressure. DiMarco AF, et al. **J Appl Physiol** 1989 Jun;66(6):2573–8

Absence of nonadrenergic noncholinergic relaxation in the cat cervical trachea. Don H, et al. **J Appl Physiol** 1988 Dec;65(6):2524–30

Vascular responses in forearm and calf to contralateral static exercises. Duprez DA, et al. **J Appl Physiol** 1989 Feb; 66(2):669–74

Functional characteristics of canine costal and crural diaphragm. Farkas GA, et al. **J Appl Physiol** 1988 Nov; 65(5):2253–60

Muscle plasticity: comparison of a 30–Hz burst with 10–Hz continuous stimulation. Ferguson AS, et al. **J Appl Physiol** 1989 Mar;66(3):1143–51

Contractile function of single muscle fibers after hindlimb suspension. Gardetto PR, et al. **J Appl Physiol** 1989 Jun; 66(6):2739–49

Effects of ischemia on VO2, tension, and vascular resistance in contracting canine skeletal muscle. Gorman MW, et al. **J Appl Physiol** 1988 Sep;65(3):1075–81

Preferential fatigue of the rib cage muscles during inspiratory resistive loaded ventilation. Hershenson MB, et al. **J Appl Physiol** 1989 Feb;66(2):750–4

M wave potentiation during and after muscle activity. Hicks A, et al. **J Appl Physiol** 1989 Jun;66(6):2606–10

Dissociation of maximal O2 uptake from O2 delivery in canine gastrocnemius in situ. Hogan MC, et al. **J Appl Physiol** 1989 Mar;66(3):1219–26

Activation of masseter muscles with inspiratory resistance loading. Hollowell DE, et al. **J Appl Physiol** 1989 Jul; 67(1):270–5

Relationship among EMG and contractile responses of the diaphragm elicited by hypotension. Hussain SN, et al. **J Appl Physiol** 1988 Aug;65(2):649–56

Effects of tension, duty cycle, and arterial pressure on diaphragmatic blood flow in dogs. Hussain SN, et al. **J Appl Physiol** 1989 Feb;66(2):968–76

Comparison of diaphragmatic fatigue in newborn and older rabbits. Le Souëf PN, et al. **J Appl Physiol** 1988 Sep; 65(3):1040–4

Mechanical and metabolic alterations in rat diaphragm during electrical stimulation. Massarelli PS, et al. **J Appl Physiol** 1989 Jul;67(1):210–20

Capillary tortuosity in skeletal muscles of mammals depends on muscle contraction. Mathieu–Costello O, et al. **J Appl Physiol** 1989 Mar;66(3):1436–42

Forearm metabolic asymmetry detected by 31P–NMR during submaximal exercise. Minotti JR, et al. **J Appl Physiol** 1989 Jul;67(1):324–9

Intravenous papain–induced cartilage softening decreases preload of tracheal smooth muscle. Moreno RH, et al. **J Appl Physiol** 1989 Apr;66(4):1694–8

Electromechanical coupling of ferret airway smooth muscle in response to leukotriene C4. Murlas CG, et al. **J Appl Physiol** 1989 Jun;66(6):2533–8

Expression of airway contractile properties and acetylcholinesterase activity in swine. Murphy TM, et al. **J Appl Physiol** 1989 Jul;67(1):174–80

Relationship of diaphragmatic contractility to diaphragmatic blood flow in newborn lambs. Nichols DG, et al. **J Appl Physiol** 1989 Jan;66(1):120–7

Organ culture of frog muscle: maintenance of mass, enzyme levels, and contractile force. Ohira Y, et al. **J Appl Physiol** 1989 Jul;67(1):466–71

Effect of hypercapnia and PEEP on expiratory muscle EMG and shortening. Oliven A, et al. **J Appl Physiol** 1989 Mar; 66(3):1408–13

Changes of muscular sound during sustained isometric contraction up to exhaustion. Orizio C, et al. **J Appl Physiol** 1989 Apr;66(4):1593–8

Role of platelets in contraction of canine tracheal muscle elicited by PAF in vitro. Popovich KJ, et al. **J Appl Physiol** 1988 Aug;65(2):914–20

Coexistence of twitch potentiation and tetanic force decline in rat hindlimb muscle. Rankin LL, et al. **J Appl Physiol** 1988 Dec;65(6):2687–95

Static contraction increases arachidonic acid levels in gastrocnemius muscles of cats. Rotto DM, et al. **J Appl Physiol** 1989 Jun;66(6):2721–4

Mechanisms of protein kinase C regulation of airway contractility. Schramm CM, et al. **J Appl Physiol** 1989 Apr; 66(4):1935–41

Sympathetic neural discharge and vascular resistance during exercise in humans. Seals DR. **J Appl Physiol** 1989 May; 66(5):2472–8

Effects of undernutrition on diaphragm fiber size, SDH activity, and fatigue resistance. Sieck GC, et al. **J Appl Physiol** 1989 May;66(5):2196–205

Roles of CO2, O2, and acid in arteriovenous [H+] difference during muscle contractions. Stainsby WN, et al. **J Appl Physiol** 1988 Oct;65(4):1803–10

Potentiation of the exercise pressor reflex by muscle ischemia. Stebbins CL, et al. **J Appl Physiol** 1989 Mar;66(3):1046–53

Airway epithelium modulates the responsiveness of porcine bronchial smooth muscle. Stuart–Smith K, et al. **J Appl Physiol** 1988 Aug;65(2):721–7

Enzyme activities of FT and ST muscle fibers in heavy–resistance trained athletes. Tesch PA, et al. **J Appl Physiol** 1989 Jul;67(1):83–7

Diaphragmatic relaxation rate after voluntary contractions and uni– and bilateral phrenic stimulation. Wilcox PG, et al. **J Appl Physiol** 1988 Aug;65(2):675–82

Adrenergic and VIP–ergic relaxatory mechanisms of the feline extrahepatic biliary tree. Dahlstrand C, et al. **J Auton Nerv Syst** 1989 Mar;26(2):97–106

Adrenergic nerve function and contractile activity of the caudal artery of the streptozotocin diabetic rat. Hart JL, et al. **J Auton Nerv Syst** 1988 Nov;25(1):49–57

In vitro motor activity of intestinal segments of streptozotocin diabetic rats. Karakida T, et al. **J Auton Nerv Syst** 1989 Feb;26(1):43–50

Adrenergic modulation of 'non–adrenergic' twitches in the rat vas deferens. Amobi NI, et al. **J Auton Pharmacol** 1988 Jun;8(2):141–52

Two alpha–adrenergic contractions with different Ca2+ activation mechanisms in response to field nerve stimulation in the circular smooth muscle of guinea–pig vas deferens. Fukushi Y, et al. **J Auton Pharmacol** 1988 Jun;8(2):119–25

The steady state intermediate of scallop smooth muscle myosin ATPase and effect of light chain phosphorylation. A molecular mechanism for catch contraction. Takahashi M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):102–7

Inositol trisphosphate and excitation–contraction coupling in skeletal muscle. Hidalgo C, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):267–81 (52 ref.)

Kinetic analysis of excitation–contraction coupling. Ikemoto N, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):247–66 (95 ref.)

Phosphorylation of caldesmon in arterial smooth muscle. Adam LP, et al. **J Biol Chem** 1989 May 5;264(13):7698–703

Sites phosphorylated in myosin light chain in contracting smooth muscle. Colburn JC, et al. **J Biol Chem** 1988 Dec 15;263(35):19166–73

Receptor–coupled, permeabilized smooth muscle. Role of the phosphatidylinositol cascade, G–proteins, and modulation of the contractile response to Ca2+. Kitazawa T, et al. **J Biol Chem** 1989 Apr 5;264(10):5339–42

Specific absence of the alpha 1 subunit of the dihydropyridine receptor in mice with muscular dysgenesis. Knudson CM, et al. **J Biol Chem** 1989 Jan 25;264(3):1345–8

Biochemical events associated with activation of smooth muscle contraction. Miller–Hance WC, et al. **J Biol Chem** 1988 Oct 5;263(28):13979–82

Regulation of metabolism and contraction by cytoplasmic calcium in the intestinal smooth muscle. Ozaki H, et al. **J Biol Chem** 1988 Oct 5;263(28):14074–9

A simulation of rat edl force output based on intrinsic muscle properties. van Ingen Schenau GJ, et al. **J Biomech** 1988; 21(10):815–24

Dynamic electromyographic analysis of the throwing shoulder with glenohumeral instability [letter] Pearl ML. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1428–9

Maximal isometric patellofemoral contact force in patients with anterior knee pain. Macdonald DA, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):296–9

Computerized analysis of isokinetic torque curves for muscle strengthening. Williamson SC, et al. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):160–6 (32 ref.)

Are there interactions between S2–serotonergic and alpha 1–adrenergic receptors in isolated canine arteries? Lüscher TF, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S16–21

Periodic organization of the contractile apparatus in smooth muscle revealed by the motion of dense bodies in single cells. Kargacin GJ, et al. **J Cell Biol** 1989 Apr; 108(4):1465–75

Jaw pain and stiffness levels after repeated maximum voluntary clenching. Clark GT, et al. **J Dent Res** 1989 Jan;68(1):69–71

Electron microscopic studies on the stretch–induced disordering of the myofilament lattice in tetanized frog skeletal muscle fibers. Suzuki S, et al. **J Electron Microsc (Tokyo)** 1989;38(1):60–3

Length–tension relationships of masseter and digastric muscles of miniature swine during ontogeny. Anapol F, et al. **J Exp Biol** 1989 May;143:1–16

Muscle forces during locomotion in kangaroo rats: force platform and tendon buckle measurements compared. Biewener AA, et al. **J Exp Biol** 1988 Jul;137:191–205

Efficiency of rat medial gastrocnemius muscle in contractions with and without an active prestretch. De Haan A, et al. **J Exp Biol** 1989 Jan;141:327–41

Ontogenesis of contractile properties of skeletal muscle and sprint performance in the lizard Dipsosaurus dorsalis. Marsh RL. **J Exp Biol** 1988 Jul;137:119–39

Structural states in the Z band of skeletal muscle correlate with states of active and passive tension. Goldstein MA, et al. **J Gen Physiol** 1988 Jul;92(1):113–9

Cytoplasmic free calcium, myosin light chain phosphorylation, and force in phasic and tonic smooth muscle. Himpens B, et al. **J Gen Physiol** 1988 Dec; 92(6):713–29

Variations in cross-bridge attachment rate and tension with phosphorylation of myosin in mammalian skinned skeletal muscle fibers. Implications for twitch potentiation in intact muscle. Metzger JM, et al. **J Gen Physiol** 1989 May; 93(5):855–83

Visual, vestibular and somatosensory contributions to balance control in the older adult. Manchester D, et al. **J Gerontol** 1989 Jul;44(4):M118–27

Variations of the flexor digitorum superficialis of the small finger. Austin GJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):262–7

Detection of submaximal effort by use of the rapid exchange grip. Hildreth DH, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):742–5

Fluctuation in grip and pinch strength among normal subjects. Young VL, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):125–9

Chronic compartment syndrome of the flexor muscles in the forearm: a case report. Allen MJ, et al. **J Hand Surg [Br]** 1989 Feb;14(1):47–8

The influence of wrist position on the minimum force required for active movement of the interphalangeal joints. Savage R. **J Hand Surg [Br]** 1988 Aug;13(3):262–8

Alpha-smooth muscle actin, a differentiation marker of smooth muscle cells, is present in microfilamentous bundles of pericytes. Skalli O, et al. **J Histochem Cytochem** 1989 Mar;37(3):315–21

Comparison of dynamic, static, and psychophysical evaluations of human strength capabilities. Atuahene F, et al. **J Hum Ergol (Tokyo)** 1987 Dec;16(2):179–91

Antihypertensive therapy and cardiovascular reactivity during isometric stress. Garavaglia GE, et al. **J Hum Hypertens** 1988 Dec;2(4):247–51

Potassium conductance and oscillatory contractions in tail arteries from genetically hypertensive rats. Lamb FS, et al. **J Hypertens** 1989 Jun;7(6):457–63

A novel troponin T-like protein (calponin) in vascular smooth muscle: interaction with tropomyosin paracrystals. Takahashi K, et al. **J Hypertens Suppl** 1988 Dec;6(4):S40–3

Cybernetic model of psychophysiologic pathways: III. Clinical impairment of tension and kinesthesia. Leisman G. **J Manipulative Physiol Ther** 1989 Aug;12(4):275–80

Feet, bridges, and pillars in triad junctions of mammalian skeletal muscle: their possible relationship to calcium buffers in terminal cisternae and T-tubules and to excitation-contraction coupling. Dulhunty AF. **J Membr Biol** 1989 Jul;109(1):73–83

A method for quick-freezing live muscles at known instants during contraction with simultaneous recording of mechanical tension. Padrón R, et al. **J Microsc** 1988 Aug; 151 (Pt 2):81–102

Cross-bridge theory: do not disturb! Pollack GH. **J Mol Cell Cardiol** 1988 Jun;20(6):563–70

The Seventeenth European Conference on Muscle and Motility. Abano Terme (Padova), Italy, 17–19 October 1988. Abstracts. **J Muscle Res Cell Motil** 1989 Apr; 10(2):143–80

Sarcomere length behaviour along single frog muscle fibres at different lengths during isometric tetani. Burton K, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):67–84

What is latch? New ideas about tonic contraction in smooth muscle. Marston SB. **J Muscle Res Cell Motil** 1989 Apr; 10(2):97–100 (42 ref.)

A model of crossbridge action: the effects of ATP, ADP and Pi. Pate E, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):181–96

Effect of pH and stimulus phase on work done by isolated frog sartorius muscle during cyclical contraction. Stevens ED. **J Muscle Res Cell Motil** 1988 Aug;9(4):329–33

Physiological characterisation of the "warm up" effect of activity in patients with myotonic dystrophy. Cooper RG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1134–41

Muscle strength, endurance and recovery in the post-infection fatigue syndrome. Lloyd AR, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1316–22

McArdle's sign in multiple sclerosis [letter] McArdle MJ. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1110

Constipation and paradoxical puborectalis contraction in anismus and Parkinson's disease: a dystonic phenomenon? Mathers SE, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1503–7

Response of dystrophic muscles to reduced load. Dangain J, et al. **J Neurol Sci** 1988 Dec;88(1–3):277–85

Influence of contractile force on properties of motor unit action potentials: ADEMG analysis. Dorfman LJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):125–36

Contractile properties and fatiguability of the human adductor pollicis and first dorsal interosseus: a comparison of the effects of two chronic stimulation patterns. Rutherford OM, et al. **J Neurol Sci** 1988 Jul;85(3):319–31

Maximum tension predicts relative endurance of fast-twitch motor units in the cat. Botterman BR, et al. **J Neurophysiol** 1988 Oct;60(4):1215–26

Motor-unit stimulation patterns during fatiguing contractions of constant tension. Botterman BR, et al. **J Neurophysiol** 1988 Oct;60(4):1198–214

Variance analysis of excitatory postsynaptic potentials in cat spinal motoneurons during posttetanic potentiation. Clamann HP, et al. **J Neurophysiol** 1989 Feb;61(2):403–16

Components of responses of a population of DSCT neurons to muscle stretch and contraction. Osborn CE, et al. **J Neurophysiol** 1989 Feb;61(2):456–65

Muscle stiffness in human ankle dorsiflexors: intrinsic and reflex components. Sinkjaer T, et al. **J Neurophysiol** 1988 Sep;60(3):1110–21

Intrinsic organization of the rat cutaneus trunci motor nucleus. Theriault E, et al. **J Neurophysiol** 1988 Aug; 60(2):463–77

Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. **J Neurophysiol** 1988 Aug;60(2):446–62

Coordination and inhomogeneous activation of human arm muscles during isometric torques. van Zuylen EJ, et al. **J Neurophysiol** 1988 Nov;60(5):1523–48

Control of contractile properties within adaptive ranges by patterns of impulse activity in the rat. Westgaard RH, et al. **J Neurosci** 1988 Dec;8(12):4415–26

Assessment of maximal voluntary contraction with twitch interpolation: an instrument to measure twitch responses. Hales JP, et al. **J Neurosci Methods** 1988 Sep;25(2):97–102

A method for studying the control of three-dimensional isometric forces using dynamic stereogram. Massey JT, et al. **J Neurosci Methods** 1988 Dec;26(2):123–7

Electromyographic activity of the human masticatory muscles during submaximal clenching in the inter-cuspal position. Naeije M, et al. **J Oral Rehabil** 1989 Jan; 16(1):63–70

Electromyographic biofeedback and sustained masseter muscle contraction in man. Watkinson AC. **J Oral Rehabil** 1988 Jul;15(4):353–9

Blood indices of muscle injury associated with eccentric muscle contractions. Fridén J, et al. **J Orthop Res** 1989; 7(1):142–5

Analysis of the presence of postjunctional alpha-2 adrenoceptors in the rat anococcygeus muscle. Ramagopal MV, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):492–9

Influence of electrical field stimulation on antigen-induced contraction and mediator release in the guinea pig isolated superfused trachea and bronchus. Undem BJ, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):23–30

Calcium concentration in the myoplasm of skinned ferret ventricular muscle following changes in muscle length. Allen DG, et al. **J Physiol (Lond)** 1988 Dec;407:489–503

Plateau and descending limb of the sarcomere length-tension relation in short length-clamped segments of frog muscle fibres. Bagni MA, et al. **J Physiol (Lond)** 1988 Jul; 401:581–95

Contractile properties of skeletal muscles from young, adult and aged mice. Brooks SV, et al. **J Physiol (Lond)** 1988 Oct;404:71–82

Double-hyperbolic force-velocity relation in frog muscle fibres. Edman KA. **J Physiol (Lond)** 1988 Oct;404:301–21

Activation of human muscles at short muscle lengths during maximal static efforts. Gandevia SC, et al. **J Physiol (Lond)** 1988 Dec;407:599–613

Variations in contractile properties of rabbit single muscle fibres in relation to troponin T isoforms and myosin light chains. Greaser ML, et al. **J Physiol (Lond)** 1988 Dec; 406:85–98

Stiffness changes in frog skeletal muscle during contraction recorded using ultrasonic waves. Hatta I, et al. **J Physiol (Lond)** 1988 Sep;403:193–209

Spontaneous electrical and contractile activity correlated to 86Rb+ efflux in smooth muscle of guinea-pig mesotubarium. Hellstrand P, et al. **J Physiol (Lond)** 1988 Dec;407:587–97

Phosphorus nuclear magnetic resonance studies on the effect of duration of contraction in bull-frog skeletal muscles. Kawano Y, et al. **J Physiol (Lond)** 1988 Dec;407:243–61

Parasympathetic depression of vas deferens contraction in the guinea-pig involves adenosine receptors. Kurokawa M, et al. **J Physiol (Lond)** 1988 Dec;407:135–53

Stiffness changes during enhancement and deficit of isometric force by slow length changes in frog skeletal muscle fibres. Sugi H, et al. **J Physiol (Lond)** 1988 Dec;407:215–29

Entropic elastic processes in protein mechanisms. II. Simple (passive) and coupled (active) development of elastic forces. Urry DW. **J Protein Chem** 1988 Apr;7(2):81–114 (100 ref.)

About osteoporosis [letter] Kiveloff BI. **J R Soc Health** 1988 Aug;108(4):152

Muscle contraction headache: the importance of depression and anxiety [letter] Marcer D. **J R Soc Med** 1988 Nov; 81(11):677

Pharmacologic enhancement of functional recovery in free muscle transfers. Klein HW, et al. **J Reconstr Microsurg** 1988 Jul;4(4):277–81, 283–4

Relaxation-induced contraction of smooth muscle surrounding hamster ovarian follicles. Self DA, et al. **J Reprod Fertil** 1989 Mar;85(2):593–603

Abnormalities in quadriceps-hamstring strength. Relationships in polymyositis and dermatomyositis. Kroll MA, et al. **J Rheumatol** 1988 Dec;15(12):1782–8

Tetanic contraction in vocal fold muscle. Alipour-Haghighi F, et al. **J Speech Hear Res** 1989 Jun;32(2):226–31

Task-specific organization of activity in human jaw muscles. Moore CA, et al. **J Speech Hear Res** 1988 Dec;31(4):670–80

Long and mid-term assessment of the evolution of muscular strength and power, after meniscectomy. Felicetti G, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):381–6

Assessment of left ventricular function during dynamic and isometric exercise in normal subjects and myocardial infarct patients. Jetté M, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):124–31

Lactate elimination from the blood during active recovery. Rontoyannis GP. **J Sports Med Phys Fitness** 1988 Jun; 28(2):115–23

Isometric contractile function recovery following tourniquet ischemia. Fish JS, et al. **J Surg Res** 1989 Oct;47(4):365–70

Effects of collateral blood vessel ligation and electrical conditioning on blood flow in dog latissimus dorsi muscle. Mannion JD, et al. **J Surg Res** 1989 Oct;47(4):332–40

Muscle contraction and movement of cellular organelles: are there two different types of mechanisms for their generation? Morel JE, et al. **J Theor Biol** 1988 May 7; 132(1):83–96

Manual test for differential diagnosis between weakness of the trapezius and serratus anterior muscles [letter] Tesio L. **J Trauma** 1989 Mar;29(3):410

Hypercholesterolemia impairs endothelium-dependent relaxations to aggregating platelets in porcine iliac arteries. Komori K, et al. **J Vasc Surg** 1989 Sep;10(3):318–25

Effect of afterload on the left ventricular pressure fall during isovolumic relaxation period in man. Katayama K, et al. **Jpn Circ J** 1988 Jun;52(6):518–24

Release of prostaglandins during the contraction of rat aorta induced by ouabain and K+-free solution. Satoh T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):249–55

Possible involvement of sodium pump in the relaxation of rat aorta induced by alpha-human atrial natriuretic polypeptide. Sato K, et al. **Jpn J Physiol** 1988;38(2):187–98

Distribution of cross-bridges in isometrically contracting muscle: its deduction from the Huxley-Simmons theory and the effect of filament elasticity. Tameyasu T. **Jpn J Physiol** 1989;39(1):191–7

Contractile cells in normal and fibrotic lung. Adler KB, et al. **Lab Invest** 1989 Apr;60(4):473–85 (163 ref.)

Abnormal jejunal potential difference in cystic fibrosis. Baxter PS, et al. **Lancet** 1989 Mar 4;1(8636):464–6

Simultaneous pressure and 19F NMR pH measurements of smooth muscle cells of intact hog carotid arteries at rest and during contractions with norepinephrine. Grieder TA, et al. **Life Sci** 1988;43(12):999–1003

Endothelium-dependent basilar and aortic vascular responses in normotensive and coarctation hypertensive rats. Lai FM, et al. **Life Sci** 1989;45(7):607–14

Effect of early malnutrition on muscle function and metabolism in rats. Raju NV. **Life Sci** 1974 Sep 1; 15(5):949–60

Chronic electrostimulation of muscles--a future way of energy production for implants. Stöhr H, et al. **Life Support Syst** 1983;1 Suppl 1:417–20

Central fatigue of the rabbit diaphragm. Aldrich TK. **Lung** 1988;166(4):233–41

Age-related changes in gallbladder contractility and gallbladder cholecystokinin receptor population in the guinea pig. Poston GJ, et al. **Mech Ageing Dev** 1988 Dec; 46(1–3):225–36

Contractile and histochemical properties of young and old medial gastrocnemius muscle after suspension hypokinesia/hypodynamia. Simard C, et al. **Mech Ageing Dev** 1988 Aug;44(2):103–14

Surface EMG spectral changes with muscle length. Inbar GF, et al. **Med Biol Eng Comput** 1987 Nov;25(6):683–9

Programmable dynamic muscle load for animal experiments. Veltink PH, et al. **Med Biol Eng Comput** 1988 Mar; 26(2):234–6

Physiological determinants of Qmax in contracting canine skeletal muscle in situ. Barclay JK. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S113–8 (35 ref.)

Contraction-induced potentiation of human motor unit discharge and surface EMG activity. Suzuki S, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):391–5

Blood flow to different rat skeletal muscle fiber type sections during isometric contractions in situ. Terjung RL, et al. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S124–30

Quantitative muscle strength testing: a comparison of job strength requirements and actual worker strength among military technicians. Pedersen DM, et al. **Milit Med** 1989 Jan;154(1):14–8

Blepharoclonus provoked by voluntary eye closure. Behrman S, et al. **Mov Disord** 1988;3(4):326–8

Changes in muscle fiber conduction velocity, mean power frequency, and mean EMG voltage during prolonged submaximal contractions. Arendt-Nielsen L, et al. **Muscle Nerve** 1989 Jun;12(6):493–7

Comparison of force and stiffness in normal and dystrophic mouse muscles. Gordon T, et al. **Muscle Nerve** 1988 Aug; 11(8):819–27

Muscle fatigue, effects of training and disuse. Hainaut K, et al. **Muscle Nerve** 1989 Aug;12(8):660–9 (78 ref.)

Structural and functional analysis of murine skeletal muscle after castration. Jiang B, et al. **Muscle Nerve** 1989 Jan; 12(1):67–77

Ankle dorsiflexor twitch properties in malignant hyperthermia. Quinlan JG, et al. **Muscle Nerve** 1989 Feb; 12(2):119–25

Impaired neurogenic and endothelium-mediated relaxation

of penile smooth muscle from diabetic men with impotence. Saenz de Tejada I, et al. **N Engl J Med** 1989 Apr 20; 320(16):1025–30

Excitation–contraction coupling. Cloning of the SR foot [news] Agnew WS. **Nature** 1989 Jun 8;339(6224):422–3

Muscle contraction. Invisible actin makes its debut [news] Squire J. **Nature** 1988 Oct 13;335(6191):590–1

Restoration of excitation–contraction coupling and slow calcium current in dysgenic muscle by dihydropyridine receptor complementary DNA. Tanabe T, et al. **Nature** 1988 Nov 10;336(6195):134–9

The mdx mouse skeletal muscle myopathy: II. Contractile properties. Coulton GR, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):299–314

Movement initiation and control: abduction, adduction and locus of limb. Bradshaw JL, et al. **Neuropsychologia** 1988; 26(5):701–9

Inducing emotion by unilateral contraction of facial muscles: a new look at hemispheric specialization and the experience of emotion. Schiff BB, et al. **Neuropsychologia** 1989; 27(7):923–35

Collateral nerve sprouting and twitch forces of single motor units in conditions with partial denervation in man. Dengler R, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):118–22

Activation of Golgi tendon organs by asynchronous contractions of motor units in cat leg muscles. Horcholle-Bossavit G, et al. **Neurosci Lett** 1989 Aug 14; 103(1):44–9

Residual control of isometric finger forces in hemiparetic patients. Evidence for dissociation of performance deficits. Mai N. **Neurosci Lett** 1989 Jul 3;101(3):347–51

On the role of feedback in maintaining constant grip force in patients with cerebellar disease. Mai N, et al. **Neurosci Lett** 1989 May 8;99(3):340–4

Modulation of spontaneous motility by GABAA receptor antagonism in the guinea pig isolated ileum. Ong J, et al. **Neurosci Lett** 1989 Jun 19;101(2):203–8

Evidence of shared, direct input to motoneurons supplying synergist muscles in humans. Powers RK, et al. **Neurosci Lett** 1989 Jul 17;102(1):76–81

Fluctuations in motor unit recruitment threshold during slow isometric contractions of wrist extensor muscles in man. Romaiguère P, et al. **Neurosci Lett** 1989 Aug 14;103(1):50–5

Simultaneous motor output and sensory input: cortical interference site resolved in humans via neuromagnetic measurements. Rossini PM, et al. **Neurosci Lett** 1989 Jan 30;96(3):300–5

Relation between electromyogram and torque of isometric reflex contractions in man. Ruegg DG, et al. **Neurosci Lett** 1989 Aug 28;103(2):174–8

Memory traces in spinal cord produced by H-reflex conditioning: effects of post-tetanic potentiation. Wolpaw JR, et al. **Neurosci Lett** 1989 Aug 14;103(1):113–9

Digital measurement of pelvic muscle strength in childbearing women. Sampselle CM, et al. **Nurs Res** 1989 May–Jun;38(3):134–8

Dorsal fin and myotome muscle of the sea horse, Hippocampus. Smith DS, et al. **P R Health Sci J** 1988 Aug;7(2):183–4

The superfast atrial recharge pulse: a cause of pectoral muscle stimulation in patients equipped with a unipolar DDD pacemaker. Stroobandt R, et al. **PACE** 1989 Mar; 12(3):451–5

Regional variation of postjunctional alpha-adrenoceptor responses in the developing renal vascular bed of sheep. Matherne GP, et al. **Pediatr Res** 1989 May;25(5):461–5

How accurately can elbow flexion force be estimated? Bohannon RW, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1159–62

A possible proximity effect on human grip strength: an attempted replication. Braud WG. **Percept Mot Skills** 1989 Feb;68(1):157–8

Effect of colour on physical strength and mood in children. Hamid PN, et al. **Percept Mot Skills** 1989 Aug;69(1):179–85

Acquisition of self-control of a novel muscular activity with EMG and video feedback. Koga S. **Percept Mot Skills** 1989 Aug;69(1):19–26

Laterality and force of handgrip during the first two years at school. Krombholz H. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):955–62

Effects of frontalis tension level on discrimination task accuracy and reaction time. Moran CC, et al. **Percept Mot Skills** 1988 Aug;67(1):131–4

Calcium sensitivity and energetics of contraction in skinned smooth muscle of the guinea pig taenia coli at altered pH. Arheden H, et al. **Pflugers Arch** 1989 Mar;413(5):476–81

High energy phosphate utilization for work production and tension maintenance in frog muscle. Cerretelli P, et al. **Pflugers Arch** 1988 Aug;412(3):270–6

The recovery of tension in transients during steady lengthening of frog muscle fibres. Colomo F, et al. **Pflugers Arch** 1989 Jun;414(2):245–7

Changes in velocity of shortening, power output and relaxation rate during fatigue of rat medial gastrocnemius muscle. de Haan A, et al. **Pflugers Arch** 1989 Feb; 413(4):422–8

Age-related changes in power output during repetitive contractions of rat medial gastrocnemius muscle. de Haan A, et al. **Pflugers Arch** 1988 Oct;412(6):665–7

Efficiency of work performance and contraction velocity in isotonic tetani of frog sartorius. di Prampero PE, et al. **Pflugers Arch** 1988 Oct;412(5):455–61

Skeletal muscle excitation–contraction coupling. I. Transverse tubule control of peeled fiber Ca2+-induced Ca2+ release in normal and malignant hyperthermic muscles. Donaldson SK, et al. **Pflugers Arch** 1989 May; 414(1):15–23

Skeletal muscle excitation–contraction coupling. II. Plasmalemma voltage control of intact bundle contractile properties in normal and malignant hyperthermic muscles. Gallant EM, et al. **Pflugers Arch** 1989 May;414(1):24–30

Influence of pH on isometric force development and relaxation in skinned vascular smooth muscle. Gardner JP, et al. **Pflugers Arch** 1988 Aug;412(3):231–9

The effects of temperature on relaxation in frog skeletal muscle: the role of parvalbumin. Iaizzo PA. **Pflugers Arch** 1988 Jul;412(1–2):195–202

Stretch-activated ion channels in smooth muscle: a mechanism for the initiation of stretch-induced contraction. Kirber MT, et al. **Pflugers Arch** 1988 Sep;412(4):339–45

Ca-induced Ca release from the sarcoplasmic reticulum of isolated myofibrillar bundles of barnacle muscle fibres. Lea TJ, et al. **Pflugers Arch** 1989 Feb;413(4):401–6

Okadaic acid, a phosphatase inhibitor, produces a Ca2+ and calmodulin-independent contraction of smooth muscle. Obara K, et al. **Pflugers Arch** 1989 Jun;414(2):134–8

The slow inward calcium current is responsible for a part of the contraction of patch-clamped rat myoballs. Rivet M, et al. **Pflugers Arch** 1989 Jan;413(3):316–8

Species-specific responses of muscle lactate dehydrogenase isozymes to increased contractile activity. Simoneau JA, et al. **Pflugers Arch** 1989 Apr;413(6):679–81

The contractile properties and movement dynamics of pigeon eye muscle. Stelling J, et al. **Pflugers Arch** 1988 Aug; 412(3):314–21

Central vasomotor control of the rabbit portal vein. Takeuchi T, et al. **Pflugers Arch** 1989 Feb;413(4):348–53

Anaerobic chemical changes and mechanical output during isometric tetani of rat skeletal muscle in situ. Westra HG, et al. **Pflugers Arch** 1988 Jul;412(1–2):121–7

Pharmacological block of chloride channels during development affects contractile and electrical properties of rat skeletal muscle. De Luca A, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1079–80

Inositol trisphosphate, calcium and muscle contraction. Somlyo AP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26;320(1199):399–414 (123 ref.)

Is the measurement of muscle strength appropriate in patients with brain lesions? A special communication. Bohannon RW. **Phys Ther** 1989 Mar;69(3):225–36 (85 ref.)

Influence of head–neck rotation on static elbow flexion force of paretic side in patients with hemiparesis. Bohannon RW, et al. **Phys Ther** 1989 Feb;69(2):135–7

Peak torque–to–body weight ratios in the trunk: a critical analysis [published erratum appears in Phys Ther 1989 Apr;69(4):301] Delitto A, et al. **Phys Ther** 1989 Feb; 69(2):138–43

Effect of breathing instruction on blood pressure responses during isometric exercise. O'Connor P, et al. **Phys Ther** 1989 Sep;69(9):757–61

Intrasession and intersession reliability of hand-held dynamometer measurements taken on brain-damaged patients. Riddle DL, et al. **Phys Ther** 1989 Mar;69(3):182–94

Effects of upper limb immobilization on isometric muscle strength, movement time, and triphasic electromyographic characteristics. Vaughan VG. **Phys Ther** 1989 Feb; 69(2):119–29

Intramembrane charge movements in skeletal muscle. Huang CL. **Physiol Rev** 1988 Oct;68(4):1197–47 (275 ref.)

Changes of muscle function and size with bedrest. Dudley GA, et al. **Physiologist** 1989 Feb;32(1 Suppl):S65–6

Twitch interpolation: application to patients. Brophy CJ, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:814–6

Electromyography of the respiratory muscles. Worth H. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:817–9 (18 ref.)

Simultaneous recordings of force and sliding movement between a myosin-coated glass microneedle and actin cables in vitro. Chaen S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1510–4

Energy metabolism of the untrained muscle of elite runners as observed by 31P magnetic resonance spectroscopy: evidence suggesting a genetic endowment for endurance exercise. Park JH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8780–4

Ontogenesis and localization of Ca2+ channels in mammalian skeletal muscle in culture and role in excitation–contraction coupling. Romey G, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2933–7

Restoration of fast muscle characteristics following cessation of chronic stimulation: physiological, histochemical and metabolic changes during slow-to-fast transformation. Brown JM, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23; 235(1281):321–46

Is the Na,K-pump capacity in skeletal muscle inadequate during sustained work? Clausen T, et al. **Prog Clin Biol Res** 1988;268B:239–44

Isometric contraction, isotonic contraction and passive contraction in smooth muscles. Gabella G. **Prog Clin Biol Res** 1989;295:133–8

Stability of myoelectric slow waves and contractions recorded from the distal colon. Enck P, et al. **Psychophysiology** 1989 Jan;26(1):62–9

The effect of repeated tense–release sequences on EMG and self-report of muscle tension: an evaluation of Jacobsonian and post-Jacobsonian assumptions about progressive relaxation. Lehrer PM, et al. **Psychophysiology** 1988 Sep; 25(5):562–9

Aerobic exercise or strength and flexibility training was associated with both reduced overt behavioral manifestations of the type A behavior pattern and self-reported type A traits [letter; comment] Abbott AV, et al. **Psychosom Med** 1989 Mar–Apr;51(2):218–21. **Comment on:** Psychosom Med 1988 Jul–Aug;50(4):418–33

The influence of blood flow rate on adenosine release from contracting dog skeletal muscle. Ballard HJ, et al. **Q J Exp Physiol** 1989 Mar;74(2):97–107

Sarcomere 'give' during stretch of frog single muscle fibres with added series compliance. Bottinelli R, et al. **Q J Exp Physiol** 1989 Mar;74(2):215–7

Effect of age on voluntary force and cross-sectional area of human adductor pollicis muscle. Bruce SA, et al. **Q J Exp Physiol** 1989 May;74(3):359–62

Effects of long-term streptozotocin diabetes on the contractile and histochemical properties of rat muscles. Cotter M, et al. **Q J Exp Physiol** 1989 Jan;74(1):65–74

Mechanisms resisting fatigue in isometrically contracting human skeletal muscle. Gibson H, et al. **Q J Exp Physiol** 1988 Nov;73(6):903–14

Physiological changes in skeletal muscle as a result of strength training. Jones DA, et al. **Q J Exp Physiol** 1989 May;74(3):233–56 (114 ref.)

Thixotropic changes in human muscle stiffness and the effects of fatigue [published erratum appears in Q J Exp Physiol 1988 Sep;73(5):following 808] Lakie M, et al. **Q J Exp Physiol** 1988 Jul;73(4):487–500

Thixotropy: the effect of stimulation in frog muscle. Lakie M, et al. **Q J Exp Physiol** 1988 Jul;73(4):627–30

In vitro motility of non-pregnant rat uterine horns. Mancinelli R, et al. **Q J Exp Physiol** 1988 Jul;73(4):459–69

Fractionated reaction time and the rate of force development. Siegel D. **Q J Exp Psychol [A]** 1988 Aug;40(3):545–60

Technique for physiological examination of canine skeletal muscle in vivo. Stokes MJ, et al. **Res Vet Sci** 1988 Jul; 45(1):127–9

Relationship between diaphragmatic activation and twitch tension to superimposed electrical stimulation in the cat. Dick TE, et al. **Respir Physiol** 1989 Jun;76(3):337–45

Surface EMG frequency dependence on force in the masseter and the anterior temporal muscles. Hagberg C, et al. **Scand J Dent Res** 1988 Oct;96(5):451–6

Spontaneous anorectal pressure activity. Evidence of internal anal sphincter contractions in response to rectal pressure waves. Sørensen SM, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):115–200

Isometric muscle force and anthropometric values in normal children aged between 3.5 and 15 years. Bäckman E, et al. **Scand J Rehabil Med** 1989;21(2):105–14

Isometric and isokinetic knee extension and flexion torque in men and women aged 20–70. Borges O. **Scand J Rehabil Med** 1989;21(1):45–53

Muscle adaptive changes in post-polio subjects. Grimby G, et al. **Scand J Rehabil Med** 1989;21(1):19–26

Activity levels during isometric test contractions of neck and shoulder muscles. Schüldt K, et al. **Scand J Rehabil Med** 1988;20(3):117–27

Urinary peristalsis investigated by radionuclide and X-ray methods: a comparison. Müller-Suur R, et al. **Scand J Urol Nephrol Suppl** 1988;110:285–90

Free calcium at rest during "catch" in single smooth muscle cells. Ishii N, et al. **Science** 1989 Mar 10;243(4896):1367–8

A chemical link in excitation–contraction coupling in skeletal muscle. Vergara J, et al. **Soc Gen Physiol Ser** 1987; 42:133–51

Isometric lifting strength as a predictor of industrial back pain reports. Battié MC, et al. **Spine** 1989 Aug;14(8):851–6

A review of the literature related to trunk muscle performance. Beimborn DS, et al. **Spine** 1988 Jun; 13(6):655–60 (37 ref.)

The importance of pelvic tilt in reducing compressive stress in the spine during flexion–extension exercises. Gracovetsky S, et al. **Spine** 1989 Apr;14(4):412–6

Long-term strength assessment of postoperative diskectomy patients. Kahanovitz N, et al. **Spine** 1989 Apr;14(4):402–3

1989 Volvo Award in biomechanics. Mechanical recruitment of low-back muscles. Theoretical predictions and experimental validation. Ladin Z, et al. **Spine** 1989 Sep; 14(9):927–38

Comparison of CT scan muscle measurements and isokinetic trunk strength in postoperative patients. Mayer TG, et al. **Spine** 1989 Jan;14(1):33–6

Lumbar myoelectric spectral analysis for endurance assessment. A comparison of normals with deconditioned patients. Mayer TG, et al. **Spine** 1989 Sep;14(9):986–91

1988 Volvo award in biomechanics. The triaxial coupling of torque generation of trunk muscles during isometric exertions and the effect of fatiguing isoinertial movements on the motor output and movement patterns. Parnianpour M, et al. **Spine** 1988 Sep;13(9):982–92

A database of isoinertial trunk strength tests against three resistance levels in sagittal, frontal, and transverse planes in normal male subjects. Parnianpour M, et al. **Spine** 1989 Apr;14(4):409–11

Lumbar muscle fatigue and chronic lower back pain. Roy SH, et al. **Spine** 1989 Sep;14(9):992–1001

Exploration of mechanical and electromyographic responses of trunk muscles to high-intensity resistive exercise. Smidt

GL, et al. **Spine** 1989 Aug;14(8):815–30

EMG to torque relationship in rectus abdominis muscle. Results with repeated testing. Stokes IA, et al. **Spine** 1989 Aug;14(8):857–61

Dynamic EMG analysis of torque transfer in professional baseball pitchers. Watkins RG, et al. **Spine** 1989 Apr; 14(4):404–8

Isokinetic dynamometry. Applications and limitations. Baltzopoulos V, et al. **Sports Med** 1989 Aug;8(2):101–16 (91 ref.)

Muscle strength and its development. New perspectives. Enoka RM. **Sports Med** 1988 Sep;6(3):146–68 (191 ref.)

Comparison of intraluminal and extraluminal inhibitory effects of hemoglobin on endothelium-dependent relaxation of rabbit basilar artery. Hongo K, et al. **Stroke** 1988 Dec;19(12):1550–5

Comparison of five methods of assessment of intestinal viability. Brolin RE, et al. **Surg Gynecol Obstet** 1989 Jan; 168(1):6–12

Effects of vagal cryo-interruption on colon contractions in monkeys. Esser MJ, et al. **Surgery** 1989 Aug;106(2):139–45; discussion 145–6

Experimental teeth clenching in man. Christensen LV. **Swed Dent J Suppl** 1989;60:1–66 (152 ref.)

Effect of duration of vagal stimulation on shortening velocity of in vivo canine trachealis muscle. Okayama H, et al. **Tohoku J Exp Med** 1989 May;158(1):37–46

Time course of tension development of knee extensor muscle on twitch, tetanic, and fast voluntary contraction in normal subjects. Tsuji I, et al. **Tohoku J Exp Med** 1988 Jul; 155(3):225–32

Bladder wall relaxation and its dependency on transmural pressure and infusion rate during cystometry—in vivo studies in the rat. Andersson S, et al. **Urol Int** 1988; 43(3):157–9

Comparison of long-term and short-term stretch on rat urinary bladder in vitro. Tammela T, et al. **Urol Res** 1988; 16(4):277–80

[Effects of substance P on the contractile response of longitudinal muscle of rat ileum to 5-HT] Xiao QA, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):313–7 (Eng. Abstr.) **(Chi)**

[Relation between the burst activity of oviductal isthmic smooth muscle and ovarian hormones in the rabbit] Yang LZ, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):174–9 (Eng. Abstr.) **(Chi)**

[Recent advances in the study of the length-tension relation in striated muscle] Chen XL.
Sheng Li Ko Hsueh Chin Chan 1988 Oct;19(4):351–6 (44 ref.) **(Chi)**

[The effect isometric exertion on left ventricular function in patients after myocardial infarct] Kozák P, et al.
Cas Lek Cesk 1989 Feb 3;128(6):165–7 (Eng. Abstr.) **(Cze)**

[The dipyridamole echocardiography test combined with isometric loading in the diagnosis of ischemic heart disease] Mandysová E, et al. **Cas Lek Cesk** 1989 May 19; 128(21):652–6 (Eng. Abstr.) **(Cze)**

[Stretching in relation to sports and prevention of injuries] Jensen SK, et al. **Ugeskr Laeger** 1989 Mar 13;151(11):672–3 (Eng. Abstr.) **(Dan)**

[Electromyographic study of contractions irradiating from the level of the cervical muscles] Urbin-Choffray D, et al. **Acta Belg Med Phys** 1988 Jul-Sep;11(3):125–8 **(Fre)**

[Echographic study of gallbladder contraction: normal and pathologic aspects. Apropos of 115 patients] Legmann P, et al. **Ann Radiol (Paris)** 1989;32(2):103–6 (Eng. Abstr.) **(Fre)**

[Effects of partial unfused contractions of the gastrocnemius medialis muscle on homonymous and synergist motor neurons in cats] Horcholle-Bossavit G, et al.
C R Acad Sci [III] 1988;307(10):591–6 (Eng. Abstr.) **(Fre)**

[Continuous muscular activity. Clinical aspects and neurophysiological differences from Isaacs' syndrome] De Grandis D, et al. **Rev Neurol (Paris)** 1988;144(6-7):447–51 (Eng. Abstr.) **(Fre)**

[Clinical experiences with a new NS-3 nerve stimulator for relaxation measurement] Benad G, et al.
Anaesthesiol Reanim 1988;13(6):363–6 (Eng. Abstr.) **(Ger)**

[Histochemical ATPase detection in arterial myocytes with regard to their contractile differentiation] Nikolov S, et al. **Anat Anz** 1988;167(5):383–8 (Eng. Abstr.) **(Ger)**

[Objective assessment of morphofunctional lateral differences in the musculature of the extensor knee system in internal knee damage] Ullmann P, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):268–75 (Eng. Abstr.) **(Ger)**

[Increased tetanic excitability in children with functional (psychosomatic) disorders. Clinical studies with the von Bonsdorff test] Ratzmann GW, et al. **Kinderarztl Prax** 1988 Oct;56(10):487–94 (Eng. Abstr.) **(Ger)**

[The fixation theory of middle ear muscle function] Hüttenbrink KB. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):404–11 (Eng. Abstr.) **(Ger)**

[The importance of isokinetic measurement of force in sports and rehabilitation] Scharf HP, et al.
Sportverletz Sportschaden 1987 Sep;1(3):142–9 (Eng. Abstr.) **(Ger)**

[Molecular mechanisms of muscle contraction] Fazekas S, et al. **Orv Hetil** 1989 Aug 6;130(32):1707–10, 1713 (32 ref.) (Eng. Abstr.) **(Hun)**

[Evaluation of the adrenergic and pressor response to the hand-grip test in young athletes] Nami R, et al.
Minerva Med 1988 Nov;79(11):937–42 (Eng. Abstr.) **(Ita)**

[Evaluation of the clinical effectiveness of biofeedback EMG on muscular relaxation and painful symptomatology] Paradiso M, et al. **Minerva Stomatol** 1989 Jan;38(1):19–22 (Eng. Abstr.) **(Ita)**

[Electromyographic evaluation of muscular tension in dysfunctional subjects in relation to normal subjects] Scotti R, et al. **Minerva Stomatol** 1989 Feb;38(2):205–10 (Eng. Abstr.) **(Ita)**

[Airway contraction and anti-asthmatic agents] Hakoda H, et al. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):77–80 (0 ref.) **(Jpn)**

[Estimation method of mechanochemical constants of skeletal muscle in man] Akazawa K, et al.
Iyodenshi To Seitai Kogaku 1988 Dec;26(4):196–204 (Eng. Abstr.) **(Jpn)**

[Inflammation and airway response] Aizawa H.
Kokyu To Junkan 1989 May;37(5):511–6 **(Jpn)**

[Airway hyperreactivity and airway epithelial function] Munakata M. **Kokyu To Junkan** 1989 May;37(5):499–503 **(Jpn)**

[Malignant hyperthermia; two cases of MH in the presence of general anesthesia and performing caffeine contracture test] Tateishi M, et al. **Masui** 1989 Apr;38(4):546–51 (Eng. Abstr.) **(Jpn)**

[New stimulation pattern for manual evaluation of neuromuscular transmission—double burst stimulation (DBS)] Ueda N, et al. **Masui** 1988 Jun;37(6):716–21 (Eng. Abstr.) **(Jpn)**

[Effect of partial nephrectomy on calyceal and pelvic peristalsis in the isolated pig kidney] Ichikawa S.
Nippon Hinyokika Gakkai Zasshi 1989 Mar;80(3):329–36 (Eng. Abstr.) **(Jpn)**

[An analysis of quadriceps muscle force in boys with Osgood-Schlatter disease] Katoh K.
Nippon Seikeigeka Gakkai Zasshi 1988 May;62(5):523–33 (Eng. Abstr.) **(Jpn)**

[A study of trunk muscle in idiopathic scoliosis] Shimada Y. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):33–44 (Eng. Abstr.) **(Jpn)**

[Muscle contraction] Natori R. **Nippon Seirigaku Zasshi** 1988; 50(7):229–38 **(Jpn)**

[Unsolved problems on the voltage-dependent and receptor-activated contractions in smooth muscles] Kuriyama H. **Nippon Yakurigaku Zasshi** 1989 Mar; 93(3):89–101 (152 ref.) (Eng. Abstr.) **(Jpn)**

[A family study of the caffeine contracture tests on skinned muscle fibers with the propositus affected by exercise-induced hyper-CK-emia] Shintani S, et al.
Rinsho Shinkeigaku 1988 Aug;28(8):928–36 (Eng. Abstr.) **(Jpn)**

[Clinical implications of enhanced caffeine contracture in malignant hyperthermia (MH) and Duchenne muscular dystrophy (DMD)] Takagi A, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):301–5 (Eng. Abstr.) **(Jpn)**

[Contractile abnormalities of myasthenic muscle prior to neuromuscular transmission block] Takamori M, et al.
Rinsho Shinkeigaku 1975 Feb;15(2):65–74 (Eng. Abstr.) **(Jpn)**

[Acquisition of the control of a novel muscular activity by electromyograph biofeedback] Koga S.
Shinrigaku Kenkyu 1988 Aug;59(3):172–5 (Eng. Abstr.) **(Jpn)**

[How can bivalves continue to close the shells?—regulation and a molecular mechanism on the economical catch contraction] Morita F. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1307–16 (42 ref.) **(Jpn)**

[A stand for measuring hand grip power and manipulation strength during simultaneous and symmetrical work of both hands] Nadolski Z. **Chir Narzadow Ruchu Ortop Pol** 1989; 54(1):69–72 (Eng. Abstr.) **(Pol)**

[Results of sphincterocystometric examination before and after surgical treatment of stress-induced urinary incontinence in women] Lotocki W, et al. **Ginekol Pol** 1988 Jul;59(7):440–5 (Eng. Abstr.) **(Pol)**

[Inhibition of QRS-guided pacemakers of the VVI type by skeletal muscle potentials] Zerbe F, et al. **Kardiol Pol** 1988; 31(11):727–32 (Eng. Abstr.) **(Pol)**

[Rapid muscle force reactions during regulation of rhythmic movement] Bogdanov VA. **Biofizika** 1989 Jan-Feb; 34(1):113–7 (Eng. Abstr.) **(Rus)**

[Maximum rigor tension developed in a single rabbit glycerinated skeletal muscle fiber] Khromov AS.
Biofizika 1988 Sep-Oct;33(5):881–3 (Eng. Abstr.) **(Rus)**

[The structure of thick filaments on longitudinal sections of rabbit psoas muscle] Podlubnaia ZA, et al. **Biofizika** 1989 Jan-Feb;34(1):91–6 (Eng. Abstr.) **(Rus)**

[Aggregation of isolated myofibrils stimulated by their contraction. I. Origin of the second phase of optical changes during myofibril contraction] Shelud'ko NS, et al. **Biofizika** 1989 May-Jun;34(3):473–7 (Eng. Abstr.) **(Rus)**

[Relation between the number of closed cross-bridges and the load during muscle contraction] Sidorenko NP.
Biofizika 1988 May-Jun;33(3):522–3 (Eng. Abstr.) **(Rus)**

[Contractile function of the anterior tibial muscle of man at different stages of the denervation-reinnervation process] Bogdanov EI, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):395–7 (Eng. Abstr.) **(Rus)**

[Restoration of muscle contractile properties after partial and complete denervation] Khamitov KhS, et al.
Biull Eksp Biol Med 1988 Nov;106(11):536–9 (Eng. Abstr.) **(Rus)**

[Cellular mechanisms of transitory smooth muscle contraction of the coronary arteries during hypoxia: role of intracellular Ca2+] Solov'ev AI, et al.
Biull Eksp Biol Med 1989 Jan;107(1):5–7 (Eng. Abstr.) **(Rus)**

[Changes in the mechanical parameters of single contractions of human skeletal muscles during various regimens of activation] Gurfinkel's VS, et al. **Fiziol Cheloveka** 1988 Nov-Dec;14(6):1001–7 **(Rus)**

[The "silent period" during relaxation and induced contraction of functionally different muscles] Kozhina GV.
Fiziol Cheloveka 1988 Jul-Aug;14(4):592–8 **(Rus)**

[Control of muscular activity in the final position of the joint during performing simple rapid movements by man] Litvintsev AI, et al. **Fiziol Cheloveka** 1988 Jul-Aug; 14(4):599–605 **(Rus)**

[Physiological characteristics of muscle contractile activity in long-distance runners and sprinters] Zimkin NV, et al.
Fiziol Cheloveka 1988 Jan-Feb;14(1):129–37 **(Rus)**

[The role of osmotic factors in the effect of mineral water Naftusia on smooth muscles of the portal vein] Zagorodniuk VP, et al. **Fiziol Zh** 1989 May-Jun; 35(3):26–32 (Eng. Abstr.) **(Rus)**

[The electrical and contractile activity of denervated smooth muscle] Akhmedzianov RKh, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1126–33 (Eng. Abstr.) **(Rus)**

[The participation of met-enkephalin in the display of contractile reactions of the large intestine and ileocecal sphincter] Grishina OIu, et al. **Fiziol Zh SSSR** 1989 May; 75(5):715–24 (Eng. Abstr.) **(Rus)**

[Lympho- and hemodynamic reactions during the contraction of the skeletal musculature of the hindlimb in dogs] Kim TD, et al. **Fiziol Zh SSSR** 1988 Aug; 74(8):1158–62 (Eng. Abstr.) **(Rus)**

[Simultaneous recording of the electrical and mechanical activities of the striated muscles in a chronic experiment] Kromin AA, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1496–9 **(Rus)**

[Effect of an increase in the blood flow through the vessels of skeletal muscle on its functional indices and oxygen demand] Shustova NIa, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1776–85 **(Rus)**

[The role of a neurogenic factor in regulating the spontaneous contractile activity of the frog bladder] Stepanova TP, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1020–9 **(Rus)**

[Characteristics of lengthy spiked tetanus of rat skeletal muscle] Uspenskiĭ AN, et al. **Fiziol Zh SSSR** 1989 Apr; 75(4):478–85 (Eng. Abstr.) **(Rus)**

[A method of quantitative evaluation of left-ventricular functional reserve in patients with heart aneurysm] Labutskiĭ AK, et al. **Kardiologiia** 1988 Jul;28(7):48–52 (Eng. Abstr.) **(Rus)**

[Characteristics of functional tests with isometric loads used in the diagnosis of ischemic heart disease] Shimelis IV, et al. **Kardiologiia** 1989 Feb;29(2):67–70 (Eng. Abstr.) **(Rus)**

[Changes in local blood flow and energy metabolism in patients with hypertension with different degrees of tolerance of isometric load (hand grip)] Vitols AV, et al.
Kardiologiia 1988 Jun;28(6):48–51 (Eng. Abstr.) **(Rus)**

[Rheocardiographic evaluation of left-ventricular contractility in the measured isometric pedal test] Zubarev MA, et al. **Kardiologiia** 1989 Feb;29(2):70–4 (Eng. Abstr.) **(Rus)**

[Various mechanisms of disorders of bronchial patency] Ado AD. **Klin Med (Mosk)** 1989 Feb;67(2):23–8 **(Rus)**

[Effect of short-term space flights on physiological properties and composition of myofibrillar proteins of the skeletal muscles of rats] Oganov VS, et al.
Kosm Biol Aviakosm Med 1988 Jul-Aug;22(4):50–4 (Eng. Abstr.) **(Rus)**

[Effect of long-term hypokinesia on characteristics of phasic-tonic motor activity in monkeys] Urmancheeva TG, et al. **Kosm Biol Aviakosm Med** 1988 Sep-Oct;22(5):46–51 (Eng. Abstr.) **(Rus)**

[Immediate and remote postactivation effects in the human motor system] Gurfinkel' VS, et al. **Neirofiziologiia** 1989; 21(3):343–51 (Eng. Abstr.) **(Rus)**

[Quantitative analysis of the change in length of active muscle under conditions of varying external load] Kostiukov AI.
Neirofiziologiia 1988;20(5):694–702 (Eng. Abstr.) **(Rus)**

[Electrophysiological and morphological changes in muscle-flexors of the fingers after injuries of the tendons in children] Danilov AA, et al. **Ortop Travmatol Protez** 1989 Jan;(1):24–8 (Eng. Abstr.) **(Rus)**

[Late results of correction of flatfoot in children using an electro-myostimulation method] Vartanian VE, et al.
Ortop Travmatol Protez 1989 Feb;(2):26–9 (Eng. Abstr.) **(Rus)**

[The causes of the nonuniform thermostability of Mg-ATPase and of the contractility of muscle models] Shelud'ko NS, et al. **Tsitologiia** 1989 Feb;31(2):195–201 (Eng. Abstr.) **(Rus)**

[The portal vein and its contractile function under normal and pathologic conditions] Manukhina EB.
Usp Fiziol Nauk 1988 Jul-Sep;19(3):45–66 (179 ref.) **(Rus)**

[A method for research on the tonus and contractile capacity of the anal sphincter] Timofeev VK, et al.

Voen Med Zh 1988 Jun;(6):64–5 (Rus)
[Myofascicular hypertonia as a generator of peripheral determinant structure] Ivanichev GA.
Zh Nevropatol Psikhiatr 1989;89(4):58–60 (Eng. Abstr.) (Rus)
[Contractile properties of crural muscles in patients with post-stroke movement disorders] Popelianskiĭ Ialu, et al. Zh Nevropatol Psikhiatr 1989;89(6):68–71 (Eng. Abstr.) (Rus)
[Long-term posttetanic changes in the neuronal impulse reactions of the somatosensory cortex in the cat] Veber NV, et al. Zh Vyssh Nerv Deiat 1988 Nov-Dec; 38(6):1158–60 (Rus)
[The ion-dependent effect of hormones in the excitation-contraction process in the smooth musculature] Vojvodić J, et al. Srp Arh Celok Lek 1988 May; 116(5):461–8 (26 ref.) (Eng. Abstr.) (See)
[A method for quick freezing of muscles in tetanic contraction] Alamo L, et al. Acta Cient Venez 1987; 38(4):513–4 (Spa)
[X-ray diffraction study of the structural changes that follow phosphorylation of thick muscle filaments in tarantulas] Panté N, et al. Acta Cient Venez 1988;39(3):230–6 (Eng. Abstr.) (Spa)
[Analysis of the equatorial section of X-ray diffraction patterns of striated muscles of tarantulas under various experimental conditions] Sosa H, et al.
Acta Cient Venez 1988;39(1):51–9 (Eng. Abstr.) (Spa)
[Muscular training in neck and shoulder problems is an effective therapeutic method of pain relief] Dyrssen T, et al. Lakartidningen 1989 May 31;86(22):2116, 2118–20 (Swe)

DRUG EFFECTS

Additive interaction of haloperidol with morphine in the guinea pig ileum. Dvořák A, et al.
Act Nerv Super (Praha) 1989 Apr;31(1):42–3
Relaxant action of androgens, progestins and corticosteroids on the isolated ileum of the guinea pig. Kubli-Garfias C, et al. Acta Physiol Pharmacol Latinoam 1987;37(3):357–64
Effects of sodium nitroprusside on potassium induced contracture in isolated vascular smooth muscle. Rubiales de Barioglio S, et al. Acta Physiol Pharmacol Latinoam 1988;38(1):69–75
Age-related variations in the relative importance of noradrenaline and ATP as mediators of the contractile response of rat tail artery to sympathetic nerve stimulation. Bao JX, et al. Acta Physiol Scand 1989 Jun;136(2):287–8
Neurogenic contractions in the tail artery of normotensive rats are mediated by noradrenaline and ATP via post-junctional alpha 1- and alpha 2-adrenoceptors and P2x-purinoceptors. Bao JX, et al. Acta Physiol Scand 1989 May;136(1):139–40
Neurogenic contractions in caudal artery from young rats: receptor-receptor interaction and regional differences in effects of noradrenaline and ATP via alpha 1-, alpha 2- and P2x-receptors. Bao JX, et al. Acta Physiol Scand 1989 Aug;136(4):619–20
Vagally induced hexamethonium-resistant jejunal contractions in the cat. Delbro D, et al.
Acta Physiol Scand 1989 May;136(1):143–4
Contractile and metabolic characteristics of creatine-depleted vascular smooth muscle of the rat portal vein. Ekmehag BL, et al. Acta Physiol Scand 1988 Aug;133(4):525–33
Tetrodotoxin-resistant contractions induced by electrical stimulation of bladder muscle from man, rabbit and rat. Fovaeus M, et al. Acta Physiol Scand 1988 Feb;132(2):233–9
Influence of renal denervation on vascular responsiveness of isolated rat intrarenal arteries. Högestätt ED, et al.
Acta Physiol Scand 1988 Jan;132(1):59–66
Intraluminal prostaglandin E2 affects gallbladder function by activation of intramural nerves in the anaesthetized cat. Jivegård L, et al. Acta Physiol Scand 1988 Apr; 132(4):549–55
A heterogeneous population of alpha 1-adrenoceptors mediates contraction of the isolated follicle wall from the bovine ovary. Kannisto P, et al. Acta Physiol Scand 1988 Aug;133(4):563–71
Effects of chronic nicotine exposure on contractile enzyme-histochemical and biochemical properties of fast- and slow-twitch skeletal muscles in the rat. Larsson L, et al. Acta Physiol Scand 1988 Dec;134(4):519–27
Effects of amrinone on twitch, tetanus and shortening kinetics in mammalian skeletal muscle. Månsson A, et al.
Acta Physiol Scand 1989 May;136(1):37–45
In-vitro stimulation on the rat epitrochlearis muscle. II. Effects of catecholamines and nutrients on protein degradation and amino acid metabolism. Nie ZT, et al.
Acta Physiol Scand 1989 Apr;135(4):523–9
Neuropeptide Y induces potent contraction of arterial vascular smooth muscle via an endothelium-independent mechanism. Pernow J, et al. Acta Physiol Scand 1988 Sep; 134(1):157–8
Regional and species differences in vascular reactivity to extracellular potassium. Ryman T, et al.
Acta Physiol Scand 1989 Jun;136(2):151–9
Comparative effects of the alpha-adrenoceptor agonists noradrenaline, phenylephrine and clonidine in the human saphenous vein in vivo and in vitro. Sjöberg T, et al.
Acta Physiol Scand 1989 Jul;136(3):463–71
The strong contractile effect of the thromboxane receptor agonist U-46619 in isolated human pulmonary arteries and its competitive antagonism by BM-13.505. Sjöberg T, et al. Acta Physiol Scand 1989 Jun;136(2):161–5
Vasomotor changes in isolated coronary arteries from diabetic rats. Sjögren A, et al. Acta Physiol Scand 1988 Nov;134(3):429–36
Different effects of neuropeptide Y on electrically induced contractions in the longitudinal and circular smooth muscle layers of the female rabbit urethra. Sjögren C, et al.
Acta Physiol Scand 1988 Jun;133(2):177–81
Further characterization of the contraction-mediating prostanoid receptors in feline cerebral arteries. Effects of the thromboxane-receptor antagonist AH 23848. Uski TK.
Acta Physiol Scand 1988 Aug;133(4):519–24
Effects of reduced oxygen tension on endothelium-dependent relaxation induced by acetylcholine differ in rabbit femoral artery and jugular vein. Vedernikov YP, et al.
Acta Physiol Scand 1989 Mar;135(3):343–8
Inhibition of adrenergic neuroeffector transmission by endothelin in the guinea-pig femoral artery. Wiklund NP, et al. Acta Physiol Scand 1988 Oct;134(2):311–2
Agonist and antagonist characterization of the P2-purinoceptors in the guinea pig ileum. Wiklund NP, et al. Acta Physiol Scand 1988 Jan;132(1):15–21
Responses to histamine and selective H2-receptor agonists in lung parenchymal strips from normal and sensitized guinea-pigs. Cortijo J, et al. Agents Actions 1989 Aug; 28(1–2):45–52
Pharmacological properties of the hydroxylated histamine, (+/-)-4(5)-(2-amino-1-hydroxyethyl)-imidazole.
Ishikawa T, et al. Agents Actions 1989 Mar;26(3–4):261–6
Histamine relaxation of aortic rings from diabetic rats. Tanz RD, et al. Agents Actions 1989 Aug;28(1–2):1–8
Effect of ethanol on neuromuscular function in the rat diaphragm preparation. Wali FA, et al. Alcohol Alcohol 1988;23(4):299–303
Catecholamine-associated smooth muscle contraction bands in the media of coronary arteries of brain-dead baboons. Rose AG, et al. Am J Cardiovasc Pathol 1988 Apr;2(1):63–7
1,25 (OH)2 vitamin D3 modifies growth and contractile function of vascular smooth muscle of spontaneously hypertensive rats. Bukoski RD, et al. Am J Hypertens 1989 Jul;2(7):553–6
Abnormal contractile response of aortas from spontaneously hypertensive rats to Ca2+ after depletion of Ca2+ in Ca2+-free medium. Guan YY, et al. Am J Hypertens 1989 Aug;2(8):643–6
Inhibitory function of VIP-PHI and galanin in canine pylorus. Allescher HD, et al. Am J Physiol 1989 Apr;256(4 Pt 1):G789–97
Neutral endopeptidase inhibitors potentiate substance P-induced contraction in gut smooth muscle. Djokic TD, et al. Am J Physiol 1989 Jan;256(1 Pt 1):G39–43
Contractile properties of isolated vascular smooth muscle after photoradiation. Freas W, et al. Am J Physiol 1989 Mar;256(3 Pt 2):H655–64
Contractile force and intracellular Ca2+ during relaxation of canine tracheal smooth muscle. Gunst SJ, et al.
Am J Physiol 1989 Aug;257(2 Pt 1):C355–64
Calcitonin gene-related peptide action on intestinal circular muscle. Holzer P, et al. Am J Physiol 1989 Mar;256(3 Pt 1):G546–52
ANP relaxes bovine tracheal smooth muscle and increases cGMP. Ishii K, et al. Am J Physiol 1989 Mar;256(3 Pt 1):C495–500
Effect of prostaglandin E2 on rabbit colonic smooth muscle cell contraction. Kao HW, et al. Am J Physiol 1988 Dec; 255(6 Pt 1):G807–12
Influence of fiber type and muscle source on Ca2+ sensitivity of rat fibers. Laszewski-Williams B, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):C420–7
Calcium sources utilized by cholecystokinin and acetylcholine in the cat gallbladder muscle. Lee KY, et al. Am J Physiol 1989 Apr;256(4 Pt 1):G785–8
Properties of receptors for gastrin and CCK on gastric smooth muscle cells. Menozzi D, et al. Am J Physiol 1989 Jul;257(1 Pt 1):G73–9
Neuropeptide responses and mechanics of the proximal and distal feline colon in vitro. Merlo A, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):G787–93
Dependence of stress on length, Ca2+, and myosin phosphorylation in skinned smooth muscle. Moreland RS, et al. Am J Physiol 1988 Oct;255(4 Pt 1):C473–8
Effect of methylene blue and N-ethylmaleimide on internal anal sphincter relaxation. Moummi C, et al.
Am J Physiol 1988 Nov;255(5 Pt 1):G571–8
Adrenergic control of intrarenal arteries of rabbits. Owen MP, et al. Am J Physiol 1989 Mar;256(3 Pt 2):H607–12
Neuropeptide Y augments adrenergic contractions at feline lower esophageal sphincter. Parkman HP, et al.
Am J Physiol 1989 Mar;256(3 Pt 1):G589–97
Role of magnesium in activation of smooth muscle. Paul RJ, et al. Am J Physiol 1988 Oct;255(4 Pt 1):C465–72
[Ca2+]-dependent myosin phosphorylation in phorbol diester stimulated smooth muscle contraction. Rembold CM, et al. Am J Physiol 1988 Dec;255(6 Pt 1):C719–23
Potassium-induced relaxation of arteries in hypertension: modulation by extracellular calcium. Rinaldi G, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H707–12
[Ca2+]i and contraction of ear artery in response to rapid stimulation by NE: measurements with quin2 and fura-2. Vonderlage M, et al. Am J Physiol 1989 Aug;257(2 Pt 2):H649–57
Effects of substrate and hypoxia on smooth muscle metabolism and contraction. Wendt IR. Am J Physiol 1989 Apr;256(4 Pt 1):C719–27
Effect of phenytoin on the clinical signs and in vitro muscle twitch characteristics in horses with chronic intermittent rhabdomyolysis and myotonia [published erratum appears in Am J Vet Res 1989 Mar;50(3):432] Beech J, et al.
Am J Vet Res 1988 Dec;49(12):2130–3
Theophylline and diaphragmatic contractility. Investigation of a dose-response relationship. Foxworth JW, et al.
Am Rev Respir Dis 1988 Dec;138(6):1532–4
Comparison of relaxation induced by glyceryl trinitrate, isosorbide dinitrate, and sodium nitroprusside in bovine airways. Gruetter CA, et al. Am Rev Respir Dis 1989 May; 139(5):1192–7
Diltiazem, verapamil, and nifedipine inhibit theophylline-enhanced diaphragmatic contractility.
Kolbeck RC, et al. Am Rev Respir Dis 1989 Jan; 139(1):139–45
Tannin induces endothelium-dependent contraction and relaxation of rabbit pulmonary artery. Russell JA, et al.
Am Rev Respir Dis 1989 Feb;139(2):498–503
The effect of digoxin on contractility and fatigue of isolated guinea pig and rat hemidiaphragms. Sherman MS, et al.
Am Rev Respir Dis 1988 Nov;138(5):1180–4
Effect of nipradilol, a new beta-blocker, on leukotriene D4-induced contraction in guinea pig tracheal smooth muscle. Sugiyama S, et al. Am Rev Respir Dis 1988 May; 137(5):1045–7
Tetanic fade following administration of nondepolarizing neuromuscular blocking drugs. Gibson FM, et al.
Anesth Analg 1989 Jun;68(6):759–62
Effects of enflurane on contractile response of canine trachealis muscle. Kochi T, et al. Anesth Analg 1989 Jul; 69(1):60–8
Malignant hyperthermia in humans--standardization of contracture testing protocol. Melton AT, et al.
Anesth Analg 1989 Oct;69(4):437–43
Smooth muscle contraction and local anesthetics: calmodulin-dependent myosin light-chain kinase. Nosaka S, et al. Anesth Analg 1989 Oct;69(4):504–10
Effects of succinylcholine at the masseter and adductor pollicis muscles in adults. Smith CE, et al.
Anesth Analg 1989 Aug;69(2):158–62
Differing effect of agonist and antagonist muscle relaxants on cat jaw muscles. Van der Spek AF, et al.
Anesth Analg 1989 Jul;69(1):76–80
Clinical recovery and train-of-four ratio measured mechanically and electromyographically following atracurium. Engbaek J, et al. Anesthesiology 1989 Sep; 71(3):391–5
The relationship between adductor pollicis twitch tension and core, skin, and muscle temperature during nitrous oxide-isoflurane anesthesia in humans. Heier T, et al.
Anesthesiology 1989 Sep;71(3):381–4
The effect of resting muscle tension on the dose-effect relationship of d-tubocurarine: does preload influence the evoked EMG? Kopman AF. Anesthesiology 1988 Dec; 69(6):1003–5
Resistance to atracurium in thermally injured rats. The roles of time, activity, and pharmacodynamics. Pavlin EG, et al. Anesthesiology 1988 Nov;69(5):696–701
Differential effects of pancuronium on masseter and adductor pollicis muscles in humans. Smith CE, et al.
Anesthesiology 1989 Jul;71(1):57–61
Effects of isoflurane on contractile properties of diaphragm. Veber B, et al. Anesthesiology 1989 Apr;70(4):684–8
Mechanisms involved in the action of prostaglandins as modulators of neurotransmission. Gustafsson LE.
Ann N Y Acad Sci 1989;559:178–91
Gastric relaxation evoked by captopril (SQ 14,225) in anaesthetized rats. Rani R, et al.
Arch Int Pharmacodyn Ther 1988 Sep-Oct;295:257–69
Antigen, histamine and serotonin-induced contractions of single smooth muscle cells of guinea pig taenia coli. Shonai K, et al. Arerugi 1988 May;37(5):283–93
Effect of sarcomere length and filament lattice spacing on force development in skinned cardiac and skeletal muscle preparations from the rabbit. de Beer EL, et al.
Basic Res Cardiol 1988 Jul-Aug;83(4):410–23
Increased calcium sensitivity of chemically skinned human atria by myosin light chain kinase. Morano I, et al.
Basic Res Cardiol 1988 Jul-Aug;83(4):350–9
Relaxing action of okadaic acid, a black sponge toxin on the arterial smooth muscle. Ashizawa N, et al.
Biochem Biophys Res Commun 1989 Aug 15;162(3):971–6
Atrial natriuretic factor increases the magnitude of duodenal spontaneous phasic contractions. Baeyens DA, et al.
Biochem Biophys Res Commun 1988 Sep 30;155(3):1437–43
Endothelin-induced Ca-independent contraction of the porcine coronary artery. Kodama M, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):1302–8
Isolation, primary structure and bioactivity of schistoflrf-amide, a FMRF-amide-like neuropeptide from the locust, Schistocerca gregaria. Robb S, et al.
Biochem Biophys Res Commun 1989 Apr 28;160(2):850–6
Targets for calcium channel blockers in mammalian skeletal muscle and their respective functions in excitation-contraction coupling. Romey G, et al.
Biochem Biophys Res Commun 1988 Nov 15;156(3):1324–32
N-acylated pentapeptides antagonists of substance P on guinea-pig ileum. Schmitt P, et al.

Biochem Biophys Res Commun 1988 Oct 14;156(1):323–7

Phosphatase inhibition with okadaic acid does not alter the relationship between force and myosin light chain phosphorylation in permeabilized smooth muscle. Siegman MJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):838–42

The effect of acetylcholinesterase-inhibition on the tonus of guinea-pig bronchial smooth muscle. Aas P, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4211–6

Direct inhibition of contractile apparatus by analogues of amiloride in the smooth muscle of guinea-pig taenia caecum and chicken gizzard. Ozaki H, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):915–22

Fatty acid alters glycogen metabolism in contracting vascular smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):69–73

Synthesis and biological activity of new leukotriene antagonists (racemates and enantiomerically pure compounds). Anagnostopulos C, et al. **Biomed Biochim Acta** 1988;47(10–11):S190–3

Vasomotor tone of isolated porcine coronary veins in response to acetylcholine, noradrenaline, and histamine. Bergner M, et al. **Biomed Biochim Acta** 1988;47(8):775–9

The feeding with unsaturated fatty acids modifies the course of the isometric contraction of rabbit papillary muscle in hypoxia. Guenther J, et al. **Biomed Biochim Acta** 1989; 48(5–6):S569–72

Relaxation by prostacyclin (PGI2) of human, dog and rabbit femoral artery strips. Interspecies difference. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988;47(10–11):S125–8

Long-term effects of substance P on the isolated guinea pig trachea. Schreiber J, et al. **Biomed Biochim Acta** 1988; 47(8):799–803

Effects of cobalt, magnesium, and cadmium on contraction of rat soleus muscle. Dulhunty AF, et al. **Biophys J** 1989 Jul;56(1):1–14

Role of MgATP and MgADP in the cross-bridge kinetics in chemically skinned rabbit psoas fibers. Study of a fast exponential process (C). Kawai M, et al. **Biophys J** 1989 Apr;55(4):595–603

Depression of Ca2+ insensitive tension due to reduced pH in partially troponin-extracted skinned skeletal muscle fibers. Metzger JM, et al. **Biophys J** 1988 Dec;54(6):1169–73

Effect of adenosine triphosphate analogues on skeletal muscle fibers in rigor. Schoenberg M. **Biophys J** 1989 Jul; 56(1):33–41

Structure-activity relationship of tetrapeptides related to dermorphin: a 500-MHz 1H-nmr study. Castiglione-Morelli MA, et al. **Biopolymers** 1988 Sep; 27(9):1353–61

Glucose dependence of sequential norepinephrine contractions of vascular smooth muscle. Adams GR, et al. **Blood Vessels** 1989;26(2):77–83

Inhibition of norepinephrine-induced contractile responses of canine mesenteric artery by plant total saponins. Guan YY, et al. **Blood Vessels** 1988;25(6):312–5

Effect of diltiazem and dantrolene on the contractility of isolated malignant hyperpyrexia-susceptible porcine skeletal muscle. Foster PS, et al. **Br J Anaesth** 1989 May; 62(5):566–72

Inhibitory effects of procaine on contraction and calcium movement in vascular and intestinal smooth muscles. Ahn HY, et al. **Br J Pharmacol** 1988 Jul;94(3):789–96

Effect of calcium and calmodulin antagonists on contractile responses of the human uterine artery. Kostrzewska A, et al. **Br J Pharmacol** 1988 Aug;94(4):1037–42

Interactions of calcium antagonists and the calcium channel agonist Bay K 8644 on neurotransmission of the mouse isolated vas deferens. Rae GA, et al. **Br J Pharmacol** 1989 Feb;96(2):333–40

Dietary omega 3 polyunsaturated fatty acids augment endothelium-dependent relaxation to bradykinin in coronary microvessels of the pig. Shimokawa H, et al. **Br J Pharmacol** 1988 Dec;95(4):1191–6

The effects of cromakalim on the detrusor muscle of human and pig urinary bladder. Foster CD, et al. **Br J Urol** 1989 Mar;63(3):284–94

The role of adenylate cyclase in relaxation of brain arteries: studies with forskolin. Suzuki Y, et al. **Brain Res** 1988 Aug 9;457(2):241–5

Possible involvement of calcitonin gene-related peptide (CGRP) in non-cholinergic non-adrenergic relaxation induced by mesenteric nerve stimulation in guinea pig ileum. Takaki M, et al. **Brain Res** 1989 Jan 23; 478(1):199–203

The effects of intrathecal galanin and C-fiber stimulation on the flexor reflex in the rat. Wiesenfeld-Hallin Z, et al. **Brain Res** 1989 May 8;486(2):205–13

Blockade of the bradykinin-evoked diphasic response of isolated rat duodenum by the crude extract of and compounds obtained from Mandevilla velutina. Calixto JB, et al. **Braz J Med Biol Res** 1988;21(5):1015–8

The onset of ablation of the evoked adductor pollicis muscle twitch in children: a clinical perspective. Reynolds PI, et al. **Can J Anaesth** 1988 Nov;35(6):576–80

Nitrendipine blocks high potassium contractures but not twitches in rat skeletal muscle. Frank GB, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1210–3

Neural control of canine colon motor function: studies in vivo. Gonda T, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):350–8

Neural control of canine colon motor function: studies in vitro. Gonda T, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):359–68

The effects of EGTA on vascular smooth muscle contractility in calcium-free medium. Guan YY, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1053–6

The action and metabolism of peptide leukotrienes in the isolated bullfrog lung. Heller RS, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):309–14

Contraction of guinea pig trachea by epidermal growth factor—urogastrone. Patel P, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1308–12

Influence of platelet-activating factor on leukotriene D4-induced contractions of the guinea pig parenchymal strip. Yaghi A, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):315–21

GR43175 does not share the complex pharmacology of the ergots. Feniuk W, et al. **Cephalalgia** 1989;9 Suppl 9:35–9

Characterization of the 5-hydroxytryptamine receptor which mediates contraction of the human isolated basilar artery. Parsons AA, et al. **Cephalalgia** 1989;9 Suppl 9:47–51

Interaction of aminoglycoside antibiotics with calcium channel blockers at the smooth muscles of the isolated tracheal rings of the rat. Paradelis A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):321

Indices of severity of obstructive sleep apnea syndrome do not change during medroxyprogesterone acetate therapy. Cook WR, et al. **Chest** 1989 Aug;96(2):262–6

Effect of glucagon on the motility of esophageal smooth muscle. Lin SZ, et al. **Chin Med J [Engl]** 1989 Mar; 102(3):193–9

Effects of melittin on endothelium-dependent relaxation and cyclic GMP levels in rat aorta. Rapoport RM, et al. **Circ Res** 1989 Mar;64(3):463–73

Contractile function of aortic smooth muscle in guinea pig endotoxin shock. Kutsky P, et al. **Circ Shock** 1988 Jul; 25(3):197–207

Monocyte-derived interleukin 1: effects on norepinephrine-stimulated aortic contraction and phosphoinositide turnover. McKenna TM, et al. **Circ Shock** 1989 Jun;28(2):131–47

Macrophage-conditioned medium and interleukin 1 suppress vascular contractility. McKenna TM, et al. **Circ Shock** 1988 Jul;25(3):187–96

Train-of-four fade during neuromuscular blockade induced by tubocurarine, succinylcholine or alpha-bungarotoxin in the rat isolated hemidiaphragm. Cheah LS, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):937–43

Caffeine- and potassium-induced contractures of mouse isolated soleus muscle: effects of verapamil, manganese, EGTA and calcium withdrawal. Savage AO, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):901–11

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K+-induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

Endothelium-dependent relaxation to acetylcholine in the aorta of streptozotocin induced diabetic-rat and the BB-diabetic rat. Kappagoda T, et al. **Clin Invest Med** 1989 Jun;12(3):187–93

Vasopressin-mediated contractions in mesenteric arteries from spontaneously hypertensive rats: differences in response compared with Wistar-Kyoto animals. Bund SJ, et al. **Clin Sci** 1988 Nov;75(5):449–53

Twitch potentiation of frog (Rana japonica) skeletal muscle by antipyrine. Fujishiro N, et al. **Comp Biochem Physiol [C]** 1989;92(1):61–5

Influence of prostaglandins on electrical and mechanical activities of gastric muscles of Bufo marinus. Shonnard P, et al. **Comp Biochem Physiol [C]** 1988;90(2):325–33

A computer model to study norepinephrine-induced oscillations of contraction in tail arteries of spontaneously hypertensive stroke-prone rats. Avinash G, et al. **Comput Biomed Res** 1988 Aug;21(4):324–33

Nifedipine inhibits cholecystokinin-induced gallbladder contraction. Clas D, et al. **Curr Surg** 1988 Sep–Oct; 45(5):374–6

Effect of low extracellular calcium on gallbladder contraction in vitro. Brotschi EA, et al. **Dig Dis Sci** 1989 Mar;34(3):360–6

Desensitization of the isolated bovine iris sphincter muscles by pilocarpine. Suzuki R, et al. **Doc Ophthalmol** 1988 May; 69(1):73–81

Synthesis and calcium channel antagonist activity of nifedipine analogues containing 1,2-dihydropyridyl in place of the 1,4-dihydropyridyl moiety. Soboleski DA, et al. **Drug Des Deliv** 1988 Feb;2(3):177–89

Doxofylline and theophylline are xanthines with partly different mechanisms of action in animals. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(7):479–89

Effects of lead on vascular reactivity. Chai SS, et al. **Environ Health Perspect** 1988 Jun;78:85–9 (28 ref.)

A comparison of the anticonvulsant effects of 1,4- and 1,5-benzodiazepines in the amygdala-kindled rat and their effects on motor function. Tietz EI, et al. **Epilepsy Res** 1989 Jan–Feb;3(1):31–40

Effect of paf-acether on isoprenaline-induced relaxation in isolated tracheal segments of rats and guinea pigs. Chand N, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):135–7

Involvement of postjunctional purinergic mechanisms in the facilitatory action of bradykinin in neurotransmission in the rat vas deferens. Donoso MV, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):263–73

Presynaptic muscarinic receptors mediating inhibition of neurogenic contractions in rabbit vas deferens are of the ganglionic M1-type. Eltz M, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):233–42

Parasympathetic denervation abolishes acetylcholine-induced relaxation in the rat iris dilator. Hasegawa N, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):291–4

Effects of sodium nitroprusside on cytosolic calcium level in vascular smooth muscle. Karaki H, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):259–66

Neurotensin and prostaglandin interactions in smooth muscle of the guinea pig stomach. Katsoulis S, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):251–6

Heterogeneity of the effects of monensin on two types of contractions evoked by inhibition of Na+-K+ ATPase in the guinea-pig vas deferens. Katsuragi T, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):147–53

Different effects of R 56865 and calcium entry blockers on K+- and noradrenaline-induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183–90

Studies on the contracture of the mouse diaphragm induced by sodium selenite. Lin-Shiau SY, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):137–46

Evidence for a direct relationship between phosphoinositide metabolism and airway smooth muscle contraction induced by muscarinic agonists. Meurs H, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):271–4

The spasmogenic effect of caffeine in trachealis isolated from control and actively sensitized guinea-pigs. Ortiz JL, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):243–9

Effect of aclarubicin on contractile response of rat aorta. Wakabayashi I, et al. **Eur J Pharmacol** 1989 Aug 11; 167(1):177–80

The effect of aminophylline on respiratory and limb muscle contractility in man. Brophy C, et al. **Eur Respir J** 1989 Jul;2(7):652–5

Spontaneous rhythmic contractions of human saphenous veins isolated from old subjects are sensitive to cyclooxygenase inhibitors. Schoeffter P, et al. **Experientia** 1989 May 15;45(5):459–61

Dopamine-induced relaxation in human pulmonary arteries. Yamauchi M, et al. **Experientia** 1989 Feb 15;45(2):150–2

Differential activities of two distinct endothelin family peptides on ileum and coronary artery. Ishida N, et al. **FEBS Lett** 1989 Apr 24;247(2):337–40

The effects of vascular smooth muscle caldesmon on force production by 'desensitised' skeletal muscle fibres. Taggart MJ, et al. **FEBS Lett** 1988 Dec 19;242(1):171–4

Thrombin induces endothelium-dependent relaxation of pig coronary arteries. Glusa E. **Folia Haematol (Leipz)** 1988; 115(1–2):101–5

The contractile response of vascular smooth muscle to thrombin and its inhibition by thrombin inhibitors. Glusa E, et al. **Folia Haematol (Leipz)** 1988;115(1–2):94–100

Phenyl-t-butylnitrone, a free radical spin-trapping agent, inhibits acetylcholine-induced relaxation and cyclic GMP accumulation in rat thoracic aorta. Sata T, et al. **Fukuoka Igaku Zasshi** 1988 Sep;79(9):674–82

Onset of action of ibuprofen in the treatment of muscle-contraction headache. Schachtel BP, et al. **Headache** 1988 Aug;28(7):471–4

Tetraethylammonium-induced contraction of rabbit coronary artery. Iwaki M, et al. **Heart Vessels** 1988; 4(3):141–8

Extra- and intracellular calcium in vanadate-induced contraction of vascular smooth muscle. Sunano S, et al. **Heart Vessels** 1988;4(1):6–13

Potential mechanism of cyclosporine A-induced vascular smooth muscle contraction. Meyer-Lehnert H, et al. **Hypertension** 1989 Apr;13(4):352–60

Fatigue and contractile responses of rat hindlimb muscles following excessive dexamethasone administration. Mandal MB, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar; 33(1):21–7

Antigenic contraction of guinea pig tracheal preparations passively sensitized with monoclonal IgE: pharmacological modulation. Haye-Legrand I, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):342–8

In vivo effects of theophylline on diaphragm, bicep, and quadricep strength and fatigability. DeGarmo C, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1041–6

Effect of PAF on parasympathetic contraction of canine airways. Bethel RA, et al. **J Appl Physiol** 1989 Jun; 66(6):2629–34

Epithelial augmentation of trachealis contraction caused by major basic protein of eosinophils. Brofman JD, et al. **J Appl Physiol** 1989 Apr;66(4):1867–73

Neutral endopeptidase modulates neurotensin-induced airway contraction. Djokic TD, et al. **J Appl Physiol** 1989 May;66(5):2338–43

Slowing of relaxation in the fatiguing hamster diaphragm is enhanced by theophylline. Esau SA. **J Appl Physiol** 1988 Sep;65(3):1307–13

Relaxation of the diaphragm muscle: influence of ryanodine and fatigue. Herve P, et al. **J Appl Physiol** 1988 Nov; 65(5):1950–6

Beta-adrenergic relaxation of dog trachealis: contractile agonist-specific interaction. Koenig SM, et al. **J Appl Physiol** 1989 Jul;67(1):181–5

Differential effects of prostaglandin E2 on contractions of

airway smooth muscle. Madison JM, et al. **J Appl Physiol** 1989 Mar;66(3):1397–407

Perfused bronchial segment and bronchial strip: narrowing vs. isometric force by mediators. Mitchell HW, et al. **J Appl Physiol** 1989 Jun;66(6):2704–9

Ca2+-dependent facilitated shortening in isotonic contraction of trachealis muscle. Mitchell RW, et al. **J Appl Physiol** 1989 Feb;66(2):632–7

PAF-induced contraction of canine trachea mediated by 5-hydroxytryptamine in vivo. Murphy TM, et al. **J Appl Physiol** 1989 Feb;66(2):638–43

Isoproterenol attenuates myosin phosphorylation and contraction of tracheal muscle. Obara K, et al. **J Appl Physiol** 1989 May;66(5):2017–22

Effect of theophylline on the velocity of diaphragmatic muscle shortening. Supinski GS, et al. **J Appl Physiol** 1988 Sep;65(3):1410–5

Involvement of P1-purinoreceptors in the relaxing effect of adenosine in rat duodenum. Gaion RM, et al. **J Auton Pharmacol** 1988 Jun;8(2):135–40

Contractile responses of tracheal smooth muscle in organophosphate-treated swine: 2. Effects of antagonists. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):107–17

Contractile responses of tracheal smooth muscle in organophosphate-treated swine: 1. Agonist changes. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):93–106

Modification of the contractile properties of rabbit skeletal muscle by ethylene glycol. Maruyama T, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):1009–13

Restoration of Ca2+-activated tension of CDTA-treated single skeletal muscle fibers by troponin C. Morimoto S, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):873–4

Regulation of acetylcholinesterase synthesis and assembly by muscle activity. Effects of tetrodotoxin. Fernandez-Valle C, et al. **J Biol Chem** 1989 Aug 25;264(24):14043–9

The role of potassium channels in vascular relaxation. Proceedings of a symposium on pinacidil. Indianapolis, Indiana, June 25, 1987. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S1–47

Smooth muscle gelsolin and a Ca2+-sensitive contractile cell model. Kanno K, et al. **J Cell Physiol** 1989 Apr; 139(1):58–67

Interaction of atriopeptin III and vasopressin on calcium kinetics and contraction of aortic smooth muscle cells. Meyer-Lehnert H, et al. **J Clin Invest** 1988 Oct; 82(4):1407–14

A dose-response evaluation of pipecuronium bromide in elderly patients under balanced anesthesia. Azad SS, et al. **J Clin Pharmacol** 1989 Jul;29(7):657–9

Differential effects of tetracaine on charge movements and Ca2+ signals in frog skeletal muscle. Csernoch L, et al. **J Gen Physiol** 1988 Nov;92(5):601–12

Block of contracture in skinned frog skeletal muscle fibers by calcium antagonists. Fill MD, et al. **J Gen Physiol** 1989 Mar;93(3):429–49

Calcium and contractile responses to ouabain and potassium-free solution in aortae from spontaneously hypertensive rats. Lamb FS, et al. **J Hypertens** 1988 Oct; 6(10):821–8

Biologic activity of a C2-derived peptide. Demonstration of a specific interaction with guinea pig lung tissues. Cholin S, et al. **J Immunol** 1989 Apr 1;142(7):2401–4

Effects of chronic atenolol therapy on cardiovascular response to isometric exercise in essential hypertension. Kobayashi Y, et al. **J Int Med Res** 1989 Mar-Apr; 17(2):125–31

Darmstoff analogues. 3. Actions of choline esters of acetal phosphatidic acids on visceral smooth muscle. Marx MH, et al. **J Med Chem** 1989 Jun;32(6):1319–22

Effects of guanidinium on EC coupling and tension generation in frog skeletal muscle. Feldmeyer D, et al. **J Muscle Res Cell Motil** 1988 Dec;9(6):541–51

Pressure sensitivity of active tension in glycerinated rabbit psoas muscle fibres: effects of ADP and phosphate. Fortune NS, et al. **J Muscle Res Cell Motil** 1989 Apr;10(2):113–23

Okadaic acid. Protein phosphatase inhibition and muscle contractile effects. Takai A. **J Muscle Res Cell Motil** 1988 Dec;9(6):563–5

In vivo motor effects of substance P on the rat urinary bladder. Berggren A, et al. **J Neural Transm** 1988; 74(3):207–17

Noradrenergic, purinergic, and cholinergic transmission in the mouse vas deferens: influence of field-stimulation parameters, reserpinization, 6-hydroxydopamine and 4-aminopyridine. Kaschube M, et al. **J Neural Transm** 1989; 76(1):39–53

Improvement of muscle strength in familial hypokalaemic periodic paralysis with acetazolamide. Links TP, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1142–5

Effect of fiber types, fascicle size and halothane on caffeine contractures in rat muscles. Shah AJ, et al. **J Neurol Sci** 1988 Dec;88(1-3):247–60

Effect of calcitonin gene-related peptide on skeletal muscle via specific binding site and G protein. Takamori M, et al. **J Neurol Sci** 1989 Mar;90(1):99–109

Use of formamide increases the number of detectable inputs to polyneuronally innervated mammalian skeletal muscle. Donahue SP, et al. **J Neurosci Methods** 1989 Jun; 28(3):239–44

Cianergoline lowers intraocular pressure in rabbits and monkeys and inhibits contraction of the cat nictitans by suppressing sympathetic neuronal function. Potter DE, et al. **J Ocul Pharmacol** 1987 Winter;3(4):309–21

Actions of amrinone and milrinone on the guinea-pig ileum. Stone TW, et al. **J Pharm Pharmacol** 1988 Jul;40(7):521–3

Effect of forskolin on cytosolic Ca++ level and contraction in vascular smooth muscle. Abe A, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):895–900

Antagonism of acetylcholine-mediated relaxation of rabbit pulmonary arteries by phorbol myristate acetate. Cherry PD, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):542–6

Contractile responses in bladder body, bladder neck and prostate from rat, guinea pig and cat. Cohen ML, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1063–8

C3a-induced contraction of guinea pig ileum consists of two components: fast histamine-mediated and slow prostanoid-mediated. del Balzo U, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1003–9

Inhibitors of neutral endopeptidase potentiate electrically and capsaicin-induced noncholinergic contraction in guinea pig bronchi. Djokic TD, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):7–11

Mast cell tryptase and chymase reverse airway smooth muscle relaxation induced by vasoactive intestinal peptide in the ferret. Franconi GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):947–51

Evidence for two populations of 5-hydroxytryptamine receptors in dog basilar artery. Frenken M. **J Pharmacol Exp Ther** 1989 Jul;250(1):379–87

Pharmacological properties of the receptor(s) involved in the 5-hydroxytryptamine-induced contraction of the feline middle cerebral artery. Hamel E, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):879–89

Contractile actions of epidermal growth factor-urogastrone in isolated smooth muscle preparations from guinea pig stomach: structure-activity relationships and comparison with the effects of human transforming growth factor-alpha. Hollenberg MD, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):384–90

Calcium-independent activation of contractile apparatus in smooth muscle by calyculin-A. Ishihara H, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):388–96

Involvement of endothelial cells in relaxation and contraction responses of the aorta to isoproterenol in naive and streptozotocin-induced diabetic rats. Kamata K, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):890–4

Effect of contractile activity on muscarinic receptor density and the response to muscarinic agonists. Levin RM, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):624–9

Mechanisms of endothelin-mediated bronchoconstriction in the guinea pig. Macquin-Mavier I, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):740–5

Modified smooth muscle responses of jejunum in streptozotocin-diabetic rats. Mathison R, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1045–50

Interactions between phorbol esters and agents which increase cytosolic calcium in the guinea pig parenchymal strip: direct and indirect effects on the contractile response. Obianime AW, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):262–70

Effect of thiorphan on tachykinin-induced potentiation of nerve-mediated contractions of the rat isolated vas deferens. Patacchini R, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):678–81

Influence of stimulators and inhibitors of cyclic nucleotides on lower esophageal sphincter. Rattan S, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):703–9

Phorbol dibutyrate inhibits release and action of endothelium-derived relaxing factor(s) in canine blood vessels. Rubanyi GM, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):858–63

Gradient in the effects of ethyl alcohol on canine gastric antral circular muscles. Sanders KM, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):202–7

Differential modulation by [D-Pen2, D-Pen5]enkephalin and dynorphin A-(1-17) of the inhibitory bladder motility effects of selected mu agonists in vivo. Sheldon RJ, et al. **J Pharmacol Exp Ther** 1989 May;249(2):462–9

Species differences in the effects of prostaglandins on inositol trisphosphate accumulation, phosphatidic acid formation, myosin light chain phosphorylation and contraction in iris sphincter of the mammalian eye: interaction with the cyclic AMP system. Yousufzai SY, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1064–72

Novel and versatile superfusion system. Its use in the evaluation of some spasmogenic and spasmolytic agents using guinea-pig isolated tracheal smooth muscle. Coleman RA, et al. **J Pharmacol Methods** 1989 Mar;21(1):71–86

Cross-bridge behaviour in skinned smooth muscle of the guinea-pig taenia coli at altered ionic strength. Arheden H, et al. **J Physiol (Lond)** 1988 Sep;403:539–58

Effects of intracellular ruthenium red on excitation-contraction coupling in intact frog skeletal muscle fibres. Baylor SM, et al. **J Physiol (Lond)** 1989; 408:617–35

Pertussis toxin inhibits endothelium-dependent relaxations to certain agonists in porcine coronary arteries. Flavahan NA, et al. **J Physiol (Lond)** 1989;408:549–60

Effects of 2,3-butanedione monoxime on the contractile activation properties of fast- and slow-twitch rat muscle fibres. Fryer MW, et al. **J Physiol (Lond)** 1988 Dec; 407:53–75

Fall in intracellular pH and increase in resting tension induced by a mitochondrial uncoupling agent in crayfish muscle. Kaila K, et al. **J Physiol (Lond)** 1989;408:271–93

Positive modulators of muscle acetylcholine receptor. Eterovic VA, et al. **J Recept Res** 1989;9(2):107–25

Nifedipine inhibits cholecystokinin-induced gallbladder contraction. Clas D, et al. **J Surg Res** 1989 May; 46(5):479–83

Stimulation of voltage-dependent contractions by calcium channel activator Bay K 8644 in the human upper urinary tract in vitro. Hertle L, et al. **J Urol** 1989 Apr;141(4):1014–8

Pharmacological responses of rabbit urinary bladder after subtotal cystectomy. Lin AT, et al. **J Urol** 1989 Aug;142(2):409–12

Depressant effect of propranolol on the isolated diaphragmatic tissue of rat. Nawaz S, et al. **JPMA** 1988 Jul;38(7):183–5

Species differences in inhibitory effect of Li+ on high K+-induced contraction in the ileal longitudinal smooth muscle. Hori M, et al. **Jpn J Pharmacol** 1988 Sep; 48(1):113–9

A comparative study on the contraction induced by high K+/Na+ deficient solution in rat uterus or urinary bladder. Kamizaki J, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):179–88

A study on the hypotensive mechanism of pinacidil: relationship between its vasodilating effect and intracellular Ca2+ levels. Nakajima S, et al. **Jpn J Pharmacol** 1989 Feb; 49(2):205–13

Effects of calcium-entry modulators on the biphasic neurogenic contractions in the circular muscle of guinea pig vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1989 Jan;49(1):59–65

The effect of lithium and nitrate on potassium contractures in a glycerol-treated slow-twitch muscle of the rat. Bruton JD. **Jpn J Physiol** 1988;38(5):735–9

Characteristics of contractile response of isolated portal veins from chronic portal hypertensive rats under altered levels of external K+, Ca2+, and norepinephrine concentrations: a comparison with normal Wistar rats. Yoshimura T, et al. **Jpn J Physiol** 1988;38(4):459–78

Neuromuscular blockers in patients with burns. **Lancet** 1988 Oct 29;2(8618):1003–4 (16 ref.)

Glyceryl trinitrate inhibits phosphatidylinositol hydrolysis and protein kinase C activity in bovine mesenteric artery. Ahlner J, et al. **Life Sci** 1988;43(15):1241–8

Increased vascular contractile sensitivity to serotonin in spontaneously hypertensive rats is linked with increased turnover of phosphoinositide. Huzoor-Akbar, et al. **Life Sci** 1989;45(7):577–83

Some observations on caffeine-induced contracture of barnacle muscle fibers. Lin W, et al. **Life Sci** 1974 Nov 1;15(9):1611–9

Cholinergic responsiveness of intestinal muscle in the pregnant guinea pig. Scott LD, et al. **Life Sci** 1989; 44(7):503–8

Effect of inhibitors of enkephalin degradation in the isolated guinea-pig ileum. van Amsterdam JG, et al. **Life Sci** 1988; 43(19):1529–36

Desensitization of alpha-1 adrenergic receptor mediated smooth muscle contraction in aorta from endotoxic rats. Wakabayashi I, et al. **Life Sci** 1989;45(6):509–15

Contractile action of heat-labile toxin of Bordetella parapertussis on aortic smooth muscles of pigs. Endoh M, et al. **Microbiol Immunol** 1988;32(8):755–67

Thyroid hormones directly interact with vascular smooth muscle strips. Ishikawa T, et al. **Mol Pharmacol** 1989 Jun; 35(6):760–5

Porcine malignant hyperthermia: halothane effects on force generation in skeletal muscles. Gallant EM, et al. **Muscle Nerve** 1989 Jan;12(1):56–63

Effect of diltiazem on 2,4-D-induced myotonia in rats. al-Rajeh S, et al. **Muscle Nerve** 1989 Jun;12(6):470–2

Phorbol 12,13-dibutyrate, an activator of protein kinase C, stimulates both contraction and Ca2+ fluxes in dog saphenous vein. Chiu PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):114–20

The effect of omega conotoxin GVIA, a peptide modulator of the N-type voltage sensitive calcium channels, on motor responses produced by activation of efferent and sensory nerves in mammalian smooth muscle. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):107–13

Intracellular mechanisms of verapamil and diltiazem action on striated muscle of the rabbit. Su JY. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):297–302

Omega-conotoxin GVIA specifically blocks neuronal mechanisms in rat ileum. Allescher HD, et al. **Neuropeptides** 1989 May-Jun;13(4):253–8

Bronchoconstrictor action of neuropeptide Y (NPY) in isolated guinea pig airways. Cadieux A, et al. **Neuropeptides** 1989 May-Jun;13(4):215–9

Structure-activity studies of neurokinin A. Rovero P, et al. **Neuropeptides** 1989 May-Jun;13(4):263–70

Naloxone-precipitated contractions of the guinea pig ileum made tolerant to a synthetic opioid peptide: evidence against the involvement of capsaicin-sensitive neurones. Barthó L. **Neurosci Lett** 1988 Dec 19;95(1-3):198–202

Myorelaxant effect after intrathecal injection of antispastic drugs in rats. Klockgether T, et al. **Neurosci Lett** 1989 Feb

13;97(1–2):221–6
Adrenergic neuromodulation by endothelin in guinea pig pulmonary artery. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3;101(3):269–73
Pharmacological characteristics of the smooth muscle of retractor phalli cranialis isolated from cock. Karaki H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):797–802
Effects of digoxin on diaphragmatic contractility in the piglet. Mayock DE, et al. **Pediatr Res** 1989 Mar;25(3):271–3
Maturation-related changes in dopamine-induced relaxation of isolated rabbit pulmonary artery. Mori M, et al. **Pediatr Res** 1988 Aug;24(2):160–5
FMRFamide enhances acetylcholine-induced contractions of guinea pig ileum. Raffa RB, et al. **Peptides** 1989 May–Jun; 10(3):693–5
A potent and selective agonist for NK-2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May–Jun;10(3):593–5
Prostaglandins and neurotransmission at the guinea pig and rabbit urinary bladder. Creed KE, et al. **Pflugers Arch** 1989 Jan;413(3):299–302
Effects of lanthanum on contractile inactivation and D600-induced paralysis in twitch muscle fibres of the frog. Feldmeyer D. **Pflugers Arch** 1989 Jul;414(3):373–5
Ryanodine: its possible mechanism of action in the caffeine-sensitive calcium store of smooth muscle. Hisayama T, et al. **Pflugers Arch** 1988 Sep;412(4):376–81
Agonist-specific myosin phosphorylation and intracellular calcium during isometric contractions of arterial smooth muscle. Jiang MJ, et al. **Pflugers Arch** 1989 Apr; 413(6):637–43
Addition of phosphate to active muscle fibers probes actomyosin states within the powerstroke. Pate E, et al. **Pflugers Arch** 1989 May;414(1):73–81
The effect of D600 on potassium contractures of slow muscle fibres of Rana temporaria. Schmidt H, et al. **Pflugers Arch** 1988 Sep;412(4):390–6
A succinylcholine-like action of an Ipomoea carnea Jacq subsp. fistulosa (Mart. ex choisy) extract. Abdelhadi AA, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):431–7
Agonists at presynaptic receptors on sympathetic nerves differentially affect two phases of the contractile response in the rat vas deferens. Mottram DR. **Pharmacol Res Commun** 1988 Nov;20(11):963–73
Diverse effects of estradiol-17 beta: concurrent suppression of appetite, blood pressure and vascular reactivity in conscious, unrestrained animals. McCaffrey TA, et al. **Physiol Behav** 1989 Mar;45(3):649–57
Effects of 5,7,2',5'-tetraacetoxy-4-phenylcoumarin in guinea pig tracheal preparations. Araújo CC, et al. **Planta Med** 1988 Dec;54(6):494–7
The effect of aminophylline on respiratory muscle contractility. Brophy CJ, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:839–41
Parathyroid hormone and parathyroid hormone-related protein inhibit phasic contraction of pig duodenal smooth muscle. Mok LL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):337–40
Alpha-melanocyte stimulating hormone inhibits the contractile action of a mu opioid agonist in the isolated colon of the rat. Kramer TH, et al. **Proc West Pharmacol Soc** 1988;31:17–9
Temperature dependence of the effect of tachykinins on whole guinea-pig ileum in vitro. Landis GC, et al. **Proc West Pharmacol Soc** 1988;31:29–32
Effects of a human urine derived sodium-potassium pump inhibitor on isolated rabbit femoral artery and atria. Prins BA, et al. **Proc West Pharmacol Soc** 1988;31:301–3
Potassium dependent relaxation of isolated pulmonary artery segments following ingestion of monocrotaline. Shubat PJ, et al. **Proc West Pharmacol Soc** 1988;31:313–5
Relaxant effects of atrial natriuretic polypeptide on guinea pig tracheal smooth muscle. Watanabe H, et al. **Prog Biochem Pharmacol** 1988;23:136–41
Activation of brain function by S-135, a benzodiazepine receptor inverse agonist. Matsushita A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):951–66
Human isolated bronchial muscle preparations from asthmatic patients: effects of indomethacin and contractile agonists. Cerrina J, et al. **Prostaglandins** 1989 Apr; 37(4):457–69
Relaxant actions of viprostol and prostaglandin E2 on tracheal muscle and their effects on calcium influx. Lai FM, et al. **Prostaglandins** 1988 Jul;36(1):115–23
Synthesis and contractile activity of new acetylenic and allenic analogues of leukotrienes C4 and D4: importance of the Z-11,12 double bond. Lellouche JP, et al. **Prostaglandins** 1989 Jan;37(1):93–103
Inhibition of the oxygen-induced contraction of the isolated human umbilical artery by indomethacin, flurbiprofen, aspirin and drugs modifying Ca2+ disposition. MacLennan SJ, et al. **Prostaglandins** 1988 Nov;36(5):711–29
Specific enhancement of LTD4-induced contractions of isolated guinea pig trachea by 5-hydroxyeicosatetraenoic acid (5-HETE). Malo PE. **Prostaglandins** 1989 May; 37(5):539–51
Effects of autonomic blockade on heart rate responses to reaction time and sustained handgrip tasks. Pollak MH, et al. **Psychophysiology** 1988 Nov;25(6):689–95
Comparison of the effects of oxygen, 5-hydroxytryptamine, bradykinin and adrenaline in isolated human umbilical artery smooth muscle. McGrath JC, et al. **Q J Exp Physiol** 1988 Jul;73(4):547–59
Sodium-depletion-induced contractures in isolated rat vas deferens: possible role of endogenous catecholamines. Mishra SK, et al. **Q J Exp Physiol** 1988 Sep;73(5):747–54
Influence of halothane on contraction at positive membrane potentials in single cells isolated from guinea-pig ventricular muscle. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):141–51
Neuropeptide Y: prejunctional inhibition of vagally induced contractions in the guinea pig trachea. Grundemar L, et al. **Regul Pept** 1988 Dec;23(3):309–13
Effects of verapamil and nifedipine on human uterine artery "in vitro". García de Boto MJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):361–4
Sources of calcium for the contraction induced by various agonists in trachealis muscle from normal and sensitized guinea pigs. Perpiña M, et al. **Respiration** 1989;55(2):105–12
Fenspiride and relaxation of tracheobronchial musculature. Mechanism of action. Advenier C. **Rhinology** 1988;Suppl 4:67–74
Endothelium-dependent relaxation of human basilar arteries. Kanamaru K, et al. **Stroke** 1989 Sep;20(9):1208–11
Effect of three weeks' treatment with budesonide on in vitro contractile and relaxant airway effects in the rat. Gustafsson B, et al. **Thorax** 1989 Jan;44(1):24–7
Effects of verapamil and BAY K 8644 on the hypoxic contraction of the isolated human pulmonary artery. Ohe M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):81–2
D-600 sensitive and insensitive spontaneous contractions in the guinea-pig hepatic duct. Suzuki H, et al. **Tohoku J Exp Med** 1988 Sep;156(1):13–21
Analysis of the in vitro pharmacologic response of renal pelvis and detrusor smooth muscle to thiphenamil, oxybutynin and verapamil. Levounis P, et al. **Urol Int** 1988; 43(4):211–8
Relaxation of isolated corpus cavernosum induced by smooth-muscle relaxant drugs. A comparative study. Barbanti G, et al. **Urol Res** 1988;16(4):299–302
In-vitro contractility of human seminiferous tubules in response to testosterone, dihydrotestosterone and estradiol. Yamamoto M, et al. **Urol Res** 1989;17(4):265–8
In vivo effects of nifedipine and BAY 1 8201 on ceruletide induced gallbladder contraction. Porschen R, et al. **Z Gastroenterol** 1988 Dec;26(12):755–61
[The experimental study on the motility of Oddi sphincter] Liu YF. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):425–8, 446–7 (Eng. Abstr.) (Chi)
[Effects of rhubarb on electrical and contractive activities of the isolated intestine in rats] Jin BL, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr;14(4):239–41, 256 (Eng. Abstr.) (Chi)
[Calcium antagonism of allitridi] Chen SH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):533–5 (Eng. Abstr.) (Chi)
[Comparison of effects of four vasodilators on contractions induced by norepinephrine, KCl, and CaCl2 in isolated rabbit aortic strips] Liu Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):237–9 (Eng. Abstr.) (Chi)
[Depressant actions of Panax notoginseng saponins on vascular smooth muscles] Wu JX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):147–52 (Eng. Abstr.) (Chi)
[Relaxation effect of bovine parathyroid hormone 1–34 on rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):330–3 (Eng. Abstr.) (Chi)
[Effects of dl-tetrahydropalmatine on contractions of rabbit aorta strips] Zhao DK, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):153–5 (Eng. Abstr.) (Chi)
[Pharmacological actions of lignum Aquilariae Resinatum (Aquilaria agallocha Roxb.) on the smooth muscle of intestines] Zhou YB. **Chung Yao Tung Pao** 1988 Jun; 13(6):40–2, 64 (Eng. Abstr.) (Chi)
[Mechanomyography and electromyography—2 competing methods of relaxometry using vecuronium] Mellinghoff H, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):57–9 (Eng. Abstr.) (Ger)
[Effects of anti-tissue immune sera on the contractile response of cells isolated from smooth muscle of the pyloric antrum] Ammor S, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):726–8 (Eng. Abstr.) (Ger)
[Inhibitory effect of bronchodilators on cholinergic and peptidergic contractions of guinea-pig isolated bronchial muscle] Kamikawa Y. **Arerugi** 1989 Jan;38(1):23–30 (Eng. Abstr.) (Jpn)
[Synergistic interaction between anti-allergic drugs and beta 2-stimulants on neurogenic contractions of guinea-pig isolated bronchial muscle] Kamikawa Y. **Arerugi** 1989 Feb; 38(2):86–92 (Eng. Abstr.) (Jpn)
[Bronchoconstriction and neuropeptides] Uchida Y, et al. **Kokyu To Junkan** 1989 May;37(5):493–7 (Jpn)
[Effects of electrolyte composition and temperature of extra-cellular fluid on coronary artery contraction] Yoshida K. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):291–7 (Eng. Abstr.) (Jpn)
[Effect of vasoactive intestinal peptide on the motility of guinea-pig colon in vitro] Ishizawa M. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):185–92 (Eng. Abstr.) (Jpn)
[Vanadate and smooth muscles] Sunano S. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):147–58 (68 ref.) (Eng. Abstr.) (Jpn)
[Contractile effect of bombesin and GRP (gastrin releasing peptide) related peptides on bladder smooth muscle] Gotoh M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):700–4 (Eng. Abstr.) (Jpn)
[Experimental studies on urinary incontinence. I. Effects of beta-adrenoceptor agonists on the contractile activities and intracellular cAMP levels of rabbit, canine and human urinary bladder smooth muscle] Morita T. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):407–15 (Eng. Abstr.) (Jpn)
[Experimental studies on urinary incontinence. II. Function and distribution of alpha 1- and alpha 2-adrenoceptors in male and female rabbit urethral smooth muscle] Morita T. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):416–23 (Eng. Abstr.) (Jpn)
[Mechanisms of bronchoconstriction induced by anaphylaxis in sensitized guinea pigs] Kobayashi J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):29–34 (Eng. Abstr.) (Jpn)
[Effects of platelet activating factor on the bronchial musculature and vasculature in dogs] Misawa M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):737–44 (Eng. Abstr.) (Jpn)
[Lower esophageal sphincter relaxation in achalasia patients—effect of caerulein] Ujiie H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2351–8 (Eng. Abstr.) (Jpn)
[Actions of vanadate on muscles] Sunano S. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):103–12 (123 ref.) (Eng. Abstr.) (Jpn)
[Changes in Mg++ concentration of CSF after subarachnoid hemorrhage and Mg++—effects on the contractions of bovine cerebral artery] Miura K. **No Shinkei Geka** 1988 Oct;16(11):1251–9 (Eng. Abstr.) (Jpn)
[The effect of pyrophosphate on the rigor fibers of rabbit m. psoas fibers] Kreslavskaia NB, et al. **Biofizika** 1988 Sep–Oct;33(5):883–4 (Eng. Abstr.) (Rus)
[Effect of phosphorylation of light chain myosin and Ca2+ on the conformation of F-actin during skeletal muscle contraction] Borovikov IuS, et al. **Biokhimiia** 1989 Jan; 54(1):162–6 (Eng. Abstr.) (Rus)
[The peptide activator of cyclic nucleotide phosphodiesterases: its effect on muscle contractile activity] Shchelkovnikov SA, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):648–50 (Eng. Abstr.) (Rus)
[Changes in the cyclic nucleotide levels during the contraction of smooth muscles exposed to muscarinic cholinomimetics] Danilov AF, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):938–43 (Eng. Abstr.) (Rus)
[Kinetics of tissue sodium metabolism and the vascular reactivity to vasopressor agents in healthy persons with different degree of risk of developing arterial hypertension] Merzhievskaia VM, et al. **Kardiologiia** 1988 Dec; 28(12):30–3 (Eng. Abstr.) (Rus)
[Effect of Rhopalurus lauticauda venom on the isolated rectus abdominis muscle of Bufo marinus] González NA, et al. **Acta Cient Venez** 1988;39(2):155–9 (Eng. Abstr.) (Spa)
[Experimental diaphragmatic muscle fatigue caused by elastic charge. Effect of aminophylline] De Vito EL, et al. **Medicina (B Aires)** 1988;48(4):371–80 (Eng. Abstr.) (Spa)
[Contraction of various zones of the rat testicular capsule in vitro induced by noradrenaline] Martínez L, et al. **Rev Esp Fisiol** 1989 Mar;45(1):79–88 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Regional differences in the motor response to capsaicin in the guinea-pig urinary bladder: relative role of pre- and postjunctional factors related to neuropeptide-containing sensory nerves. Maggi CA, et al. **Neuroscience** 1988 Nov; 27(2):675–88

RADIATION EFFECTS

Effects of fractionated doses of ionizing radiation on small intestinal motor activity. Otterson MF, et al. **Gastroenterology** 1988 Nov;95(5):1249–57

MUSCLE CRAMP

Rest cramps in the elderly. Young JB, et al. **J R Coll Physicians Lond** 1989 Apr;23(2):103–6 (42 ref.)
Is this really a muscle cramp? Eaton JM. **Postgrad Med** 1989 Sep 1;86(3):227–32 (28 ref.)

CHEMICALLY INDUCED

Carbimazole-induced cramps [letter] O'Malley B. **Lancet** 1989 Jun 24;1(8652):1456–7

DIAGNOSIS

Focal dystonia (occupational cramp) masquerading as nerve entrapment or hysteria. Fry H, et al. **Plast Reconstr Surg** 1988 Nov;82(5):908–10

DRUG THERAPY

Phenytoin-induced improvement in muscle cramping and insulin action in three patients with the syndrome of insulin resistance, acanthosis nigricans, and acral hypertrophy.

Minaker KL, et al. **Arch Neurol** 1989 Sep;46(9):981–5
Treatment of focal dystonias of the hand with botulinum toxin injections. Cohen LG, et al.
J Neurol Neurosurg Psychiatry 1989 Mar;52(3):355–63
Acute back pain and spasm. A controlled multicenter trial of combined analgesic and antispasm agents. Basmajian JV. **Spine** 1989 Apr;14(4):438–9
Placebo-controlled trial of quinine therapy for nocturnal leg cramps. Fung MC, et al. **West J Med** 1989 Jul;151(1):42–4

ENZYMOLOGY

Ca2+-ATPase deficiency in a patient with an exertional muscle pain syndrome. Taylor DJ, et al.
J Neurol Neurosurg Psychiatry 1988 Nov;51(11):1425–33
Myoadenylate deaminase deficiency in children. Ashwal S, et al. **Pediatr Neurol** 1985 May-Jun;1(3):185–91 (25 ref.)

ETIOLOGY

Cramps following exercise. Bye AM, et al.
Aust Paediatr J 1988 Aug;24(4):258–9
Muscle cramps in cancer patients. Steiner I, et al. **Cancer** 1989 Feb 1;63(3):574–7
Reciprocal inhibition in patients with hand cramps. Panizza ME, et al. **Neurology** 1989 Jan;39(1):85–9

GENETICS

A single family with writer's cramp, essential tremor, and primary writing tremor [published erratum appears in Mov Disord 1987;2(3):224] Cohen LG, et al. **Mov Disord** 1987; 2(2):109–16
[A case of familial occurrence of writer's cramp] Schulze A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 May; 40(5):289–91 (Eng. Abstr.) **(Ger)**

PATHOLOGY

[The injured and the immobilized muscle cell: ultrastructural observations] Lüthi JM, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):58–61 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Reciprocal inhibition between forearm muscles in patients with writer's cramp and other occupational cramps, symptomatic hemidystonia and hemiparesis due to stroke. Nakashima K, et al. **Brain** 1989 Jun;112 (Pt 3):681–97

PSYCHOLOGY

Writer's cramp in a deaf 12-year-old girl. A conversion reaction? Georgui MM. **Br J Psychiatry** 1988 Mar; 152:414–6
Writer's cramp: not associated with anxiety. Harrington RC, et al. **Mov Disord** 1988;3(3):195–200

REHABILITATION

Usefulness of a writing aid in writer's cramp. Koller WC, et al. **Neurology** 1989 Jan;39(1):149–50

THERAPY

Daseinsanalytic therapy with a patient suffering from compulsion neurosis and writer's cramp. Condrau G.
Am J Psychoanal 1988 Fall;48(3):211–34
Management of facial spasm with Clostridium botulinum toxin [letter; comment] Sanders DB, et al.
Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):882, **Comment on:** Arch Otolaryngol Head Neck Surg 1988 Dec;114(12):1407–12
Night cramps [letter] Black JS. **Aust Fam Physician** 1988 Nov;17(11):941
Writer's cramp: a controlled trial of habit reversal treatment. Wieck A, et al. **Br J Psychiatry** 1988 Jul;153:111–5
[Treatment of writer's cramp (letter)] Firnhaber W.
Dtsch Med Wochenschr 1988 Nov 25;113(47):1861 **(Ger)**

MUSCLE DENERVATION

Adrenalectomy eliminates both fiber-type differences and starvation effects on denervated muscle. Almon RR, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E850–6
Selective in vitro reversal of the insulin resistance of glucose transport in denervated rat skeletal muscle. Sowell MO, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E418–25
Terminal cisternae of denervated rabbit skeletal muscle: alterations of functional properties of Ca2+ release channels. Zorzato F, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C504–11
Induction of carbonic anhydrase III mRNA and protein by denervation of rat muscle. Carter ND, et al. **Biochem J** 1988 Nov 15;256(1):147–52
Resistance of protein and glucose metabolism to insulin in denervated rat muscle. Davis TA, et al. **Biochem J** 1988 Sep 15;254(3):667–75
Changes in the properties of synaptic channels opened by acetylcholine in denervated frog muscle. Reiser G, et al. **Brain Res** 1989 Feb 6;479(1):83–97
Responses of cat muscle spindle afferents after short periods of denervation and reinnervation. Scott JJ. **Brain Res** 1988 Oct 4;461(2):381–3
Cholesterol conservation in skeletal muscle associated with age- and denervation-related atrophy. Williams KD, et al. **Brain Res** 1989 Jul 24;493(1):14–22
Formation of functional endplates by spinal axons regenerating through a peripheral nerve graft. A study in the adult rat. Horvat JC, et al. **Brain Res Bull** 1989 Jan; 22(1):103–14
Sustained cell proliferation in denervated skeletal muscle of mice. McGeachie JK. **Cell Tissue Res** 1989 Aug; 257(2):455–7
Neural activity pattern is not necessary for the development of adult ultrastructure in katydid (Neoconocephalus robustus) singing muscles. Novicki A. **Cell Tissue Res** 1989 Mar;255(3):641–4
Comparison of injury and development in the neuromuscular system. Gordon T, et al. **Ciba Found Symp** 1988;138:210–26 (47 ref.)
The effects of denervation on protein turnover of the soleus and extensor digitorum longus muscles of adult mice. Goldspink DF. **Comp Biochem Physiol [B]** 1978;61(1):37–41
Function and structure of atypical muscle spindles after neonatal nerve crush in rats. Paleček J, et al.
Exp Brain Res 1989;74(2):417–20
Reinnervation of long-term denervated rat muscle freely grafted into an innervated limb. Carlson BM, et al.
Exp Neurol 1988 Oct;102(1):50–6
Effect of neonatal denervation-reinnervation on the functional capacity of a 129ReJ dy/dy murine dystrophic muscle. Hermanson JW, et al. **Exp Neurol** 1988 Nov; 102(2):210–6
Expression of RNA transcripts for the postsynaptic 43 kDa protein in innervated and denervated rat skeletal muscle. Froehner SC. **FEBS Lett** 1989 Jun 5;249(2):229–33
The effect of neonatal deafferentation or defferentation on myosin heavy chain expression in intrafusal muscle fibers of the rat. Kucera J, et al. **Histochemistry** 1988;90(2):151–60
Influence of overload on recovery of rat plantaris from partial denervation. Michel RN, et al. **J Appl Physiol** 1989 Feb; 66(2):732–40
Glycogen synthesis from lactate in a chronically active muscle. Talmadge RJ, et al. **J Appl Physiol** 1989 May; 66(5):2231–8
Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin(J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. Gatchalian CL, et al. **J Cell Biol** 1989 May; 108(5):1873–90
Degradation rate of acetylcholine receptors inserted into denervated vertebrate neuromuscular junctions. Shyng SL, et al. **J Cell Biol** 1989 Feb;108(2):647–51
Skeletal muscle denervation activates acetylcholine receptor genes. Tsay HJ, et al. **J Cell Biol** 1989 Apr;108(4):1523–6
Regeneration of muscle axons in the frog is directed by diffusible factors from denervated muscle and nerve tubes. Kuffler DP. **J Comp Neurol** 1989 Mar 15;281(3):416–25
Reorganization of motor units in reinnervated muscles of the rat. Albani M, et al. **J Neurol Sci** 1988 Dec;88(1-3):195–206
Phosphorylase kinase activities in damaged mouse skeletal muscles. Morgan JE. **J Neurol Sci** 1988 Sep;86(2-3):149–58
Nerve regulation of class I and class II-asymmetric forms of acetylcholinesterase in rat skeletal muscles. Fadić R, et al. **J Neurosci Res** 1989 Apr;22(4):449–55
Experimental study of vascularized muscle: multifactorial analysis of muscle regeneration following denervation. Koshima I, et al. **J Reconstr Microsurg** 1989 Jul;5(3):225–30
Effects of denervation and deafferentation on mass and enzyme activity in rat skeletal muscles. Ohira Y.
Jpn J Physiol 1989;39(1):21–31
Increase in the amount of adenylate cyclase in rat gastrocnemius muscle after denervation. Hashimoto K, et al. **Life Sci** 1989;44(24):1887–95
Metabolic changes in human muscle denervation: topical 31P NMR spectroscopy studies. Zochodne DW, et al.
Magn Reson Med 1988 Aug;7(4):373–83
Anisotropic and biomechanical properties of tendons modified by exercise and denervation: aggregation and macromolecular order in collagen bundles. Vilarta R, et al. **Matrix** 1989 Jan;9(1):55–61
Fibrillatory activity and other membrane changes in partially denervated muscles. Arancio O, et al. **Muscle Nerve** 1989 Feb;12(2):149–53
Isomyosin changes after functional electrostimulation of denervated sheep muscle. Carraro U, et al.
Muscle Nerve 1988 Oct;11(10):1016–28
Denervation-induced proliferative changes of triads in rabbit skeletal muscle. Salvatori S, et al. **Muscle Nerve** 1988 Dec; 11(12):1246–59
Activity dependent characteristics of fast and slow muscle: biochemical and histochemical considerations. Gupta RC, et al. **Neurochem Res** 1989 Jul;14(7):647–55
Temporal relationship between nerve-stump-length-dependent changes in the autophosphorylation of a cyclic AMP-dependent protein kinase and the acetylcholine receptor content in skeletal muscle. Sayers ST, et al. **Neurochem Res** 1988 Dec; 13(12):1125–31
Collateral nerve sprouting and twitch forces of single motor units in conditions with partial denervation in man. Dengler R, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):118–22
The effect of neonatal deafferentation or deefferentation on the immunocytochemistry of muscle spindles in the rat. Kucera J, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):88–92
Localization of neural cell adhesion molecule in denervated muscle to both the plasma membrane and extracellular compartments by immuno-electron microscopy. Booth CM, et al. **Neuroscience** 1988 Nov;27(2):699–709
Partial denervation of the rat soleus muscle at two different developmental stages. Fisher TJ, et al. **Neuroscience** 1989; 28(3):755–63
The onset of myogenesis in denervated mouse skeletal muscle regenerating after injury. McGeachie JK, et al.
Neuroscience 1989;28(2):509–14
Membrane ionic conductances in normal and denervated skeletal muscle of the rat during development. Conte Camerino D, et al. **Pflugers Arch** 1989 Mar;413(5):568–70
Golgi apparatus in chick skeletal muscle: changes in its distribution during end plate development and after denervation. Jasmin BJ, et al.
Proc Natl Acad Sci U S A 1989 Sep;86(18):7218–22
Functional reinnervation of a denervated skeletal muscle of the adult rat by axons regenerating from the spinal cord through a peripheral nervous system graft. Horvat JC, et al. **Prog Brain Res** 1988;78:219–24
The effect of sodium pump blockade and denervation on the steady-state sodium permeability of mouse skeletal muscle fibres. Seabrooke SR, et al. **Q J Exp Physiol** 1988 Jul;73(4):561–72
The effect of peripheral nerve injury on immature motor and sensory neurons and on muscle fibres. Possible relation to the histogenesis of Werdnig-Hoffmann disease. Schmalbruch H. **Rev Neurol (Paris)** 1988;144(11):721–9
The morphological sequences in man of de- and reinnervation in free muscle transfer with microneurovascular anastomoses. Oldfors A, et al.
Scand J Plast Reconstr Surg Hand Surg 1989;23(1):35–42
[Action potential of inactivated mammalian muscle fibres] Zhao GM, et al. **Sheng Li Hsueh Pao** 1988 Aug; 40(4):315–25 (Eng. Abstr.) **(Chi)**
[An experimental study on denervated muscle atrophy—effect of electrostimulation and comparison with immobilization muscle atrophy] Kanaya F.
Nippon Seikeigeka Gakkai Zasshi 1988 Jun;62(6):635–51 (Eng. Abstr.) **(Jpn)**
[Electrophysiological characteristics of muscle fibers during denervation] Kapusta NV, et al. **Biofizika** 1989 Jan-Feb; 34(1):97–101 (Eng. Abstr.) **(Rus)**
[Analysis of changes in the membrane potential of denervated muscle] Kapusta NV, et al. **Biofizika** 1989 Jan-Feb; 34(1):102–6 (Eng. Abstr.) **(Rus)**
[The study of actin in denervated skeletal muscles by microcalorimetry] Moskalenko IE, et al. **Biofizika** 1988 Jul-Aug;33(4):722–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Calcium binding protein changes of sarcoplasmic reticulum from rat denervated skeletal muscle. Loirat MJ, et al.
Biosci Rep 1988 Aug;8(4):369–78
Absence of staircase following disuse in rat gastrocnemius muscle. MacIntosh BR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):707–13
Hyperplasia of jejunal smooth muscle in the myenterically denervated rat. See NA, et al. **Cell Tissue Res** 1988 Sep; 253(3):609–17
Effect of denervation on muscle maturation in rats. Finowicka J, et al. **Neuropatol Pol** 1988;26(3):283–301

MUSCLE DYSTONIA see **DYSTONIA**

MUSCLE FLACCIDITY see **MUSCLE HYPOTONIA**

MUSCLE HYPERTONIA

COMPLICATIONS

[A cause of terminal constipation: hypertonia of the striated pelvic muscle. Value of complementary studies] Veyrac M, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):931–4 (22 ref.) (Eng. Abstr.) **(Fre)**
[Prevention of hemorrhage caused by disorders of uterine contractility] Levashova II, et al.
Akush Ginekol (Mosk) 1988 Dec;(12):49–51 **(Rus)**
[Myogenic facial pain] Karlov VA.
Zh Nevropatol Psikhiatr 1989;89(4):60–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Beta-adrenergic hypertonia in psychosomatic manifestations of anxiety and the therapeutic effect of a cardioselective beta-blockader: betaxolol] Le Van D, et al. **Therapie** 1988 Oct-Dec;43(6):451–6 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Acquired double depressor palsy following acute haemorrhagic conjunctivitis. Prakash P, et al.
Indian J Ophthalmol 1988 Jan-Mar;36(1):35–6

PHYSIOPATHOLOGY

Interrater reliability of a clinical scale of rigidity. Van Dillen LR, et al. **Phys Ther** 1988 Nov;68(11):1679–81
[Myofascicular hypertonia as a generator of peripheral determinant structure] Ivanichev GA.
Zh Nevropatol Psikhiatr 1989;89(4):58–60 (Eng. Abstr.) **(Rus)**

MUSCLE HYPOTONIA

[Central infantile hypotonia syndrome] Lesný I, et al. **Cas Lek Cesk** 1989 Apr 14;128(16):491–3 (Eng. Abstr.) **(Cze)**

[Hypotonic newborn infants] Villa-Elizaga I, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:19–23 (17 ref.) **(Spa)**

BLOOD

Carnitine and weakness in haemodialysis patients. Rogerson ME, et al. **Nephrol Dial Transplant** 1989;4(5):366–71

CHEMICALLY INDUCED

Toluene embryopathy: two new cases. Hersh JH. **J Med Genet** 1989 May;26(5):333–7

[Acute poisoning with a narcotic (Tramadol) in an infant of five weeks] Bianchetti MG, et al. **Helv Paediatr Acta** 1988 Nov;43(3):241–4 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

[Various cases of infantile hypotonia] Carboni P, et al. **Riv Neurol** 1988 Mar–Apr;58(2):93–6 **(Ita)**

COMPLICATIONS

Danger of central pontine myelinolysis in hypotonic dehydration and recommendation for treatment. Oh MS, et al. **Am J Med Sci** 1989 Jul;298(1):41–3

Muscle–eye–brain disease (MEB). Santavuori P, et al. **Brain Dev** 1989;11(3):147–53

Mevalonate kinase deficiency in a child with cerebellar ataxia, hypotonia and mevalonic aciduria. Gibson KM, et al. **Eur J Pediatr** 1988 Dec;148(3):250–2

Residual developmental disabilities in children with transient hypertonicity in infancy. PeBenito R, et al. **Pediatr Neurol** 1989 May–Jun;5(3):154–60

Arthrogryposis multiplex congenita and hypotonia in a male neonate [clinical conference] Miller A, et al. **Pediatr Neurosci** 1987;13(5):272–7

[Opso-myoclonic syndrome and Coxsackie B3 (letter)] Hervé F, et al. **Arch Fr Pediatr** 1988 Oct;45(8):597–8 **(Fre)**

[A method of surgical treatment of talipes equinus in injuries of the peroneal nerve in children and adolescents] Merkulov VN. **Ortop Travmatol Protez** 1989 Feb;(2):53–5 **(Rus)**

[Functional disorders of the respiratory muscles in chronic obstructive lung diseases] Chuchalin AG, et al. **Ter Arkh** 1988;60(8):126–32 (102 ref.) **(Rus)**

CONGENITAL

Dysmaturation neuromyopathy [letter] Sarnat HB. **J Child Neurol** 1989 Jul;4(3):230

Infantile myositis: a case diagnosed in the neonatal period. Roddy SM, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):241–4

DIAGNOSIS

A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1989 Jul;18(7):401–2

Differential diagnosis of diseases producing hypotonia. Vannucci RC. **Pediatr Ann** 1989 Jul;18(7):404–10 (6 ref.)

Hypotonia of rickets: a sequential study by P-31 magnetic resonance spectroscopy. Mize CE, et al. **Pediatr Res** 1988 Dec;24(6):713–6

Atonic seizures. Duchowny MS. **Pediatr Rev** 1987 Aug; 9(2):43–9 (0 ref.)

[Systemic lupus erythematosus with changes of the nervous system and eyes in a 16-year-old girl] Romicka AM, et al. **Pediatr Pol** 1988 Jul;63(7):446–9 **(Pol)**

[Isaacs syndrome: report of a case] Teive HG, et al. **Arq Neuropsiquiatr** 1988 Jun;46(2):182–6 (Eng. Abstr.) **(Por)**

[Value of electromyographic examination in elaborating the program of rehabilitation of patients with movement disorders in the recovery period after ischemic stroke] Karaseva LA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(9):43–5 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Hypotonia at six years in prematurely-born or small-for-gestational-age children. Touwen BC, et al. **Early Hum Dev** 1988 May;17(1):79–88

Central nervous system disorders producing hypotonia. Wasiewski WW. **Pediatr Ann** 1989 Jul;18(7):412–20 (10 ref.)

[A patient with alcoholic, hypokalemic myopathy] Lieverse RJ, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17; 132(38):1758–60 (Eng. Abstr.) **(Dut)**

[Intra-axonal polyglucosan bodies and relapsing generalized weakness: a case report] Kiuchi T, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1122–30 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Gastric atony after vagotomy] de la Cuadra R, et al. **Rev Med Chil** 1988 Feb;116(2):169–73 (Eng. Abstr.) **(Spa)**

GENETICS

Terminal deletion of the long arm of chromosome 2 in a mildly dysmorphic hypotonic infant with karyotype 46,XY,del(2)(q37). Gorski JL, et al. **Am J Med Genet** 1989 Mar;32(3):350–2

A case of interstitial deletion of 10q25.2——q26.1. Rooney DE, et al. **J Med Genet** 1989 Jan;26(1):58–60

MICROBIOLOGY

Leg weakness associated with Powassan virus infection—Ontario. Jackson AC. **Can Dis Wkly Rep** 1989 Jun 17;15(24):123–4 **(Eng, Fre)**

PATHOLOGY

Congenital hypomyelination with axonopathy. Vital A, et al. **Eur J Pediatr** 1989 Feb;148(5):470–2

Marshall-Smith syndrome: new aspects. Roodhooft AM, et al. **Neuropediatrics** 1988 Nov;19(4):179–82

Familial dysautonomia manifesting as neonatal nemaline myopathy. Amir N, et al. **Pediatr Neurol** 1985 Jul–Aug; 1(4):249–51

Life-threatening congestive heart failure as the presentation of centronuclear myopathy. Gospe SM Jr, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):117–20

Myopathy in an infant with a fatal peroxisomal disorder. Wolff J, et al. **Pediatr Neurol** 1986 May–Jun;2(3):141–6

PHYSIOPATHOLOGY

Muscular strength at 5 years of children with a birthweight under 1500 g. Ford GW, et al. **Aust Paediatr J** 1988 Oct; 24(5):295–6

Coma associated with flaccidity produced by fluid-percussion concussion in the cat. I: Is it due to depression of activity within the brainstem reticular formation? Hayes RL, et al. **Brain Inj** 1988 Jan–Mar; 2(1):31–49

Coma associated with flaccidity produced by fluid-percussion concussion in the cat. II: Contribution of activity in the pontine inhibitory system. Katayama Y, et al. **Brain Inj** 1988 Jan–Mar;2(1):51–66

Muscle weakness in infants with rickets: distribution, course, and recovery. Torres CF, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):95–8

MUSCLE PROTEINS

Dystrophin: what is in the name? [letter] Hurlbut TA 3d, et al. **Am J Hum Genet** 1989 Apr;44(4):585–6

Parvalbumins for calibrating acidic isoelectric focusing gels. Whitmore DH. **Anal Biochem** 1989 Apr;178(1):121–4

Avian thymic hormone (ATH) is a parvalbumin. Brewer JM, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1155–61

Amino acid sequence of a 15 kilodalton actin-binding fragment of turkey gizzard caldesmon: similarity with dystrophin, tropomyosin and the tropomyosin-binding region of troponin T. Leszyk J, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):210–6

Primary sequence and domain structure of chicken vinculin. Price GJ, et al. **Biochem J** 1989 Apr 15;259(2):453–61

Fluorescence lifetime and solute quenching studies with the single tryptophan containing protein parvalbumin from codfish. Eftink MR, et al. **Biochemistry** 1989 Jan 10; 28(1):382–91

Identification and subcellular location of talin in various cell types and tissues by means of [125I]vinculin overlay, immunoblotting and immunocytochemistry. Drenckhahn D, et al. **Eur J Cell Biol** 1988 Aug;46(3):513–22

Structural model of vinculin: correlation of amino acid sequence with electron-microscopical shape. Beck K. **FEBS Lett** 1989 May 22;249(1):1–4

Crystal structure determination and refinement of pike 4.10 parvalbumin (minor component from Esox lucius). Declercq JP, et al. **J Mol Biol** 1988 Jul 20;202(2):349–53

Two-dimensional 1H nuclear magnetic resonance study of pike pI 5.0 parvalbumin (Esox lucius). Sequential resonance assignments and folding of the polypeptide chain. Padilla A, et al. **J Mol Biol** 1988 Dec 20;204(4):995–1017

Dystrophin digest [letter] Arahata K, et al. **Nature** 1989 Feb 16;337(6208):606

ANALYSIS

Dystrophin immunocytochemistry in muscle culture: detection of a carrier of Duchenne muscular dystrophy. Miranda AF, et al. **Am J Med Genet** 1989 Feb;32(2):268–73

Actin-associated proteins and fibronectin in the fetal human inner ear. Anniko M, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):99–109

Normal and dystrophin-deficient muscle fibers in carriers of the gene for Duchenne muscular dystrophy. Bonilla E, et al. **Am J Pathol** 1988 Dec;133(3):440–5

Isoelectric focusing under dissociating conditions for analysis of muscle protein from clinically normal dogs and Labrador retrievers with hereditary myopathy. Mehta JR, et al. **Am J Vet Res** 1989 May;50(5):633–9

Demonstration of atrial natriuretic peptide/cardiodilatin (ANP/CDD)-immunoreactivity in the salt gland of the Pekin duck. Lange W, et al. **Anat Embryol (Berl)** 1989; 179(5):465–9

Characterization of the phenotype of smooth muscle cells in human fetal aorta on the basis of ultrastructure, immunofluorescence, and the composition of cytoskeletal and cytocontractile proteins. Nikkari ST, et al. **Atherosclerosis** 1988 Nov;74(1–2):33–40

Detection of dystrophin on two-dimensional gel electrophoresis. Hori S, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):726–31

Cell fractionation studies indicate that dystrophin is a protein of surface membranes of skeletal muscle. Salviati G, et al. **Biochem J** 1989 Mar 15;258(3):837–41

Myofibril assembly is linked with vinculin, alpha-actinin, and cell-substrate contacts in embryonic cardiac myocytes in vitro. Terai M, et al. **Cell Motil Cytoskeleton** 1989; 12(4):185–94

The sarcoplasmic proteins of white muscle of an antarctic hemoglobin-free fish, Champsocephalus gunnari. Hamoir G, et al. **Comp Biochem Physiol [B]** 1979;64(1):17–23

The amino acid sequence of the major parvalbumin of the whiting (Gadus merlangus). Joassin L, et al. **Comp Biochem Physiol [B]** 1977;57(2):159–61

Cardiac muscle protein analysis by high-resolution and microscale two-dimensional gel electrophoresis. Tanaka T, et al. **Electrophoresis** 1988 Feb;9(2):94–100

Porcine vinculin and metavinculin differ by a 68-residue insert located close to the carboxy-terminal part of the molecule. Gimona M, et al. **EMBO J** 1988 Aug; 7(8):2329–34

Immunocytochemical study of GABAergic neurons containing the calcium-binding protein parvalbumin in the rat hippocampus. Katsumaru H, et al. **Exp Brain Res** 1988; 72(2):347–62

Gap junctions on GABAergic neurons containing the calcium-binding protein parvalbumin in the rat hippocampus (CA1 region). Katsumaru H, et al. **Exp Brain Res** 1988;72(2):363–70

Immunocytochemical distribution of extracellular matrix receptors in human osteoclasts: a beta 3 integrin is colocalized with vinculin and talin in the podosomes of osteoclastoma giant cells. Zambonin-Zallone A, et al. **Exp Cell Res** 1989 Jun;182(2):645–52

Na+-Ca2+ exchanger in the soluble fraction of crayfish striated muscle. Ruščák M, et al. **Gen Physiol Biophys** 1989 Jun;8(3):203–12

DNA, RNA and total protein content of leg and breast muscles of White Rock chickens selected for 56-day body weight. Anthony NB, et al. **Growth Dev Aging** 1988 Winter; 52(4):177–84

A silver-reducing component in rat striated muscle. I. Selective localization at the level of the terminal cistern/transverse tubule system. Light and electron microscope studies with a new histochemical procedure. Tandler CJ, et al. **Histochemistry** 1989;92(1):15–22

A silver-reducing component in rat striated muscle. II. Isolated sarcoplasmic reticulum vesicles. Tandler CJ, et al. **Histochemistry** 1989;92(1):23–7

Z-protein, a component of the skeletal muscle Z-line, is located at the apical tips of microvilli of chicken intestinal epithelial cells. Ohashi K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):115–8

Plant cells contain calsequestrin. Krause KH, et al. **J Biol Chem** 1989 Mar 15;264(8):4269–72

Cytochemical, histological, and phylogenetic distribution of a 38,000-dalton protein associated with transverse tubules. Tidball JG, et al. **J Cell Biochem** 1988 Oct;38(2):99–112

Immunocytochemistry of calciosomes in liver and pancreas. Hashimoto S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2523–31

Detection of a specific isoform of alpha-actinin with antisera directed against dystrophin. Hoffman EP, et al. **J Cell Biol** 1989 Feb;108(2):503–10

Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate. Lin ZX, et al. **J Cell Biol** 1989 Mar;108(3):1079–91

The Dictyostelium gelation factor shares a putative actin binding site with alpha-actinins and dystrophin and also has a rod domain containing six 100-residue motifs that appear to have a cross-beta conformation. Noegel AA, et al. **J Cell Biol** 1989 Aug;109(2):607–18

Separation of synthetic cardiodilatin/atrial natriuretic factor and related peptides by reversed-phase high-performance liquid chromatography. Dörner T, et al. **J Chromatogr** 1989 May 30;490(2):411–7

Fiber type-specific distribution of M-band proteins in chicken muscle. Grove BK, et al. **J Histochem Cytochem** 1989 Apr;37(4):447–54

Localization by immunoelectron microscopy of spanning protein of triad junction in terminal cisternae/triad vesicles. Kawamoto RM, et al. **J Muscle Res Cell Motil** 1988 Aug; 9(4):334–43

Dystrophin immunostaining and freeze-fracture studies of muscles of patients with early stage amyotrophic lateral sclerosis and Duchenne muscular dystrophy. Wakayama Y, et al. **J Neurol Sci** 1989 Jun;91(1–2):191–205

Absence of dystrophin in Becker muscular dystrophy [letter] Patel K, et al. **Lancet** 1989 Jan 7;1(8628):47

Localization of dystrophin in cultures of human muscle. Ecob-Prince MS, et al. **Muscle Nerve** 1989 Jul;12(7):594–7 (25 ref.)

Mosaic expression of dystrophin in symptomatic carriers of Duchenne's muscular dystrophy. Arahata K, et al. **N Engl J Med** 1989 Jan 19;320(3):138–42

Dystrophin and Duchenne's muscular dystrophy [letter] Hurko O, et al. **N Engl J Med** 1989 Aug 10;321(6):398–9

Improved diagnosis of Becker muscular dystrophy by dystrophin testing. Hoffman EP, et al. **Neurology** 1989 Aug; 39(8):1011–7

Comparison of the amino acid composition of the

intracellular and extracellular matrix protein fractions isolated from avian skeletal muscles. Karatzas CN, et al. **Poult Sci** 1989 Jun;68(6):811–24

Dystrophin diagnosis: comparison of dystrophin abnormalities by immunofluorescence and immunoblot analyses. Arahata K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7154–8

Visualization of chandelier cell axons by parvalbumin immunoreactivity in monkey cerebral cortex. DeFelipe J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2093–7

Modulation of human aorta smooth muscle cell phenotype: a study of muscle-specific variants of vinculin, caldesmon, and actin expression. Glukhova MA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9542–6

[Membrane changes in Duchenne/Becker muscular dystrophy: lectin binding and localization of dystrophin] Voit T, et al. **Monatsschr Kinderheilkd** 1989 Jan;137(1):20–7 (Eng. Abstr.) **(Ger)**

[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. **Z Ernahrungswiss** 1988 Jun;27(2):109–18 (Eng. Abstr.) **(Ger)**

[Connectin, muscle elastic protein] Maruyama K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(15):2579–84 **(Jpn)**

[Human heart muscle proteins: two-dimensional electrophoretic analysis in embryos] Kovalev LI, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):28–32 (Eng. Abstr.) **(Rus)**

[Changes in human skeletal muscle proteins during autolysis studied by two-dimensional electrophoresis] Lisakovskiĭ SV, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):117–22 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Enzymatic capacity and protein synthesis in human muscle postoperatively. Wernerman J, et al. **Acta Chir Scand** 1988 Sep;154(9):489–94

Addition of glutamine to total parenteral nutrition after elective abdominal surgery spares free glutamine in muscle, counteracts the fall in muscle protein synthesis, and improves nitrogen balance. Hammarqvist F, et al. **Ann Surg** 1989 Apr;209(4):455–61

Effects of gamma-ray irradiation in utero on developing hearts of rat embryos: inhibition of accumulation of a 27-kDa protein. Higo H, et al. **Biochem Int** 1989 Apr; 18(4):695–700

Respective influences of age and weaning on skeletal and visceral muscle protein synthesis in the lamb. Attaix D, et al. **Biochem J** 1988 Dec 15;256(3):791–5

Induction of carbonic anhydrase III mRNA and protein by denervation of rat muscle. Carter ND, et al. **Biochem J** 1988 Nov 15;256(1):147–52

Amino acid infusion increases the sensitivity of muscle protein synthesis in vivo to insulin. Effect of branched-chain amino acids. Garlick PJ, et al. **Biochem J** 1988 Sep 1;254(2):579–84

Effects of ischaemia, blood loss and reperfusion on rat muscle protein synthesis, metabolite concentrations and polyribosome profiles in vivo. MacLennan PA, et al. **Biochem J** 1989 May 15;260(1):195–200

Induction of specific proteins in cultured skeletal muscle cells by 1,25-dihydroxyvitamin D-3. Drittanti LN, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):16–23

In vitro Na+,K+-ATPase (EC 3.6.1.3)-dependent respiration and protein synthesis in skeletal muscle of pigs fed at three dietary protein levels. Adeola O, et al. **Br J Nutr** 1989 May;61(3):453–65

Protein synthesis assessed by ribosome analysis in human papillary muscle in relation to oxidative capacity: a comparison with skeletal muscle. Wernerman J, et al. **Cardiovasc Res** 1988 Aug;22(8):562–5

Load responsiveness of protein synthesis in adult mammalian myocardium: role of cardiac deformation linked to sodium influx. Kent RL, et al. **Circ Res** 1989 Jan;64(1):74–85

Contraction modulates the capacity for protein synthesis during growth of neonatal heart cells in culture. McDermott PJ, et al. **Circ Res** 1989 Mar;64(3):542–53

Increase in anterior tibialis muscle protein synthesis in healthy man during mixed amino acid infusion: studies of incorporation of [1-13C]leucine. Bennet WM, et al. **Clin Sci** 1989 Apr;76(4):447–54

Failure of insulin infusion to stimulate fractional muscle protein synthesis in type I diabetic patients. Anabolic effect of insulin and decreased proteolysis. Pacy PJ, et al. **Diabetes** 1989 May;38(5):618–24

Effects of zeranol on protein turnover in L6 myotubes. Roeder RA, et al. **Domest Anim Endocrinol** 1987 Jan; 4(1):61–7

Programmed cell death: dying cells synthesize a co-ordinated, unique set of proteins in two different episodes of cell death. Wadewitz AG, et al. **FEBS Lett** 1988 Dec 5;241(1-2):19–23

Acute ethanol dosage reduces the synthesis of smooth muscle contractile proteins in the small intestine of the rat. Preedy VR, et al. **Gut** 1988 Sep;29(9):1244–8

Dietary protein-induced changes in porcine muscle respiration, protein synthesis and adipose tissue metabolism. Adeola O, et al. **J Anim Sci** 1989 Mar;67(3):664–73

Effect of testosterone on muscle mass and muscle protein synthesis. Griggs RC, et al. **J Appl Physiol** 1989 Jan; 66(1):498–503

The mammalian 43-kD acetylcholine receptor-associated protein (RAPsyn) is expressed in some nonmuscle cells. Musil LS, et al. **J Cell Biol** 1989 May;108(5):1833–40

The influence of plasma concentrations of tri-iodothyronine on the acute increases in insulin and muscle protein synthesis in the refed fasted rat. Millward DJ, et al. **J Endocrinol** 1988 Sep;118(3):417–22

Elevated aortic pressure, calcium uptake, and protein synthesis in rat heart. Haneda T, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:131–8

Muscle glutamine concentration and protein turnover in vivo in malnutrition and in endotoxemia. Millward DJ, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):6–13

Muscle protein synthesis in steroid-induced proximal myopathy: a case report. Pacy PJ, et al. **Muscle Nerve** 1989 May;12(5):378–81

Conversion of mdx myofibres from dystrophin-negative to -positive by injection of normal myoblasts. Partridge TA, et al. **Nature** 1989 Jan 12;337(6203):176–9

Measuring human muscle protein synthesis. **Nutr Rev** 1989 Mar;47(3):77–9 (16 ref.)

Indomethacin inhibits the insulin-induced increases in RNA and protein synthesis in L6 skeletal muscle myoblasts. Palmer RM, et al. **Prostaglandins** 1989 Feb;37(2):193–203

[The action of methandrostenolone and ecdysterone on the physical endurance of animals and on protein metabolism in the skeletal muscles] Chermnykh NS, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):57–60 (Eng. Abstr.) **(Rus)**

BLOOD

The effect of chronic ethanol feeding on body and plasma composition and rates of skeletal muscle protein turnover in the rat. Preedy VR, et al. **Alcohol Alcohol** 1988; 23(3):217–24

CLASSIFICATION

Molecular basis of the phenotypic characteristics of mammalian muscle fibres. Pette D, et al. **Ciba Found Symp** 1988;138:22–34 (37 ref.)

DEFICIENCY

Dystrophin analysis in clonal myoblasts derived from a Duchenne muscular dystrophy carrier. Hurko O, et al. **Am J Hum Genet** 1989 Jun;44(6):820–6

Electrophoretic studies of muscle proteins in Duchenne muscular dystrophy and other neuromuscular disorders—with special reference to the change of dystrophin. Uchino M, et al. **Jpn J Med** 1989 Mar-Apr; 28(2):170–4

GENETICS

Dystrophin analysis in duchenne muscular dystrophy: use in fetal diagnosis and in genetic counseling. Bieber FR, et al. **Am J Hum Genet** 1989 Sep;45(3):362–7

Intragenic deletions in 21 Duchenne muscular dystrophy (DMD)/Becker muscular dystrophy (BMD) families studied with the dystrophin cDNA: location of breakpoints on HindIII and BglII exon-containing fragment maps, meiotic and mitotic origin of the mutations. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):620–9

Normal human genomic restriction-fragment patterns and polymorphisms revealed by hybridization with the entire dystrophin cDNA. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):612–9

Prenatal diagnosis of Duchenne muscular dystrophy: prospective linkage analysis and retrospective dystrophin cDNA analysis. Ward PA, et al. **Am J Hum Genet** 1989 Feb;44(2):270–81

Hypothesis: the existence of embryonic and adult isoforms of mRNA dystrophin provides an explanation for unusual clinical findings. Zatz M, et al. **Am J Med Genet** 1989 Mar; 32(3):438–41

Dystrophin is expressed in mdx skeletal muscle fibers after normal myoblast implantation. Karpati G, et al. **Am J Pathol** 1989 Jul;135(1):27–32

Immunoprecipitation of the in vitro translation product of rabbit muscle protein phosphatase C-I mRNA. Zheng SY, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1398–402

Positive autoregulation of the myogenic determination gene MyoD1. Thayer MJ, et al. **Cell** 1989 Jul 28;58(2):241–8

Myogenin, a factor regulating myogenesis, has a domain homologous to MyoD. Wright WE, et al. **Cell** 1989 Feb 24;56(4):607–17

Molecular genetics of Duchenne and Becker muscular dystrophy: emphasis on improved diagnosis. Kunkel LM, et al. **Clin Chem** 1989 Jul;35(7 Suppl):B21–4 (29 ref.)

The muscular dysgenesis mutation in mice leads to arrest of the genetic program for muscle differentiation. Chaudhari N, et al. **Dev Biol** 1989 Jun;133(2):456–67

Temporal resolution and sequential expression of muscle-specific genes revealed by in situ hybridization. Lawrence JB, et al. **Dev Biol** 1989 May;133(1):235–46

A novel human muscle factor related to but distinct from MyoD1 induces myogenic conversion in 10T1/2 fibroblasts. Braun T, et al. **EMBO J** 1989 Mar;8(3):701–9

The chicken dystrophin cDNA: striking conservation of the C-terminal coding and 3' untranslated regions between man and chicken. Lemaire C, et al. **EMBO J** 1988 Dec 20; 7(13):4157–62

Localization of the mdx mutation within the mouse dystrophin gene. Ryder-Cook AS, et al. **EMBO J** 1988 Oct;7(10):3017–21

Distinct dystrophin mRNA species are expressed in embryonic and adult mouse skeletal muscle. Dickson G, et al. **FEBS Lett** 1988 Dec 19;242(1):47–52

Transcription of the dystrophin gene in Duchenne muscular dystrophy muscle. Muntoni F, et al. **FEBS Lett** 1989 Jul 31;252(1-2):95–8

The basal component of the nematode dense-body is vinculin. Barstead RJ, et al. **J Biol Chem** 1989 Jun 15; 264(17):10177–85

Identification of the mouse muscle 43,000-dalton acetylcholine receptor-associated protein (RAPsyn) by cDNA cloning. Frail DE, et al. **J Biol Chem** 1988 Oct 25;263(30):15602–7

Characterization of the gene for mp20: a Drosophila muscle protein that is not found in asynchronous oscillatory flight muscle. Ayme-Southgate A, et al. **J Cell Biol** 1989 Feb; 108(2):521–31

The expression of sarcomeric muscle-specific contractile protein genes in BC3H1 cells: BC3H1 cells resemble skeletal myoblasts that are defective for commitment to terminal differentiation. Taubman MB, et al. **J Cell Biol** 1989 May;108(5):1799–806

Distinction of Becker from limb-girdle muscular dystrophy by means of dystrophin cDNA probes. Norman A, et al. **Lancet** 1989 Mar 4;1(8636):466–8

Unraveling the mysteries of Duchenne and Becker muscular dystrophy. Hyser CL. **Mol Chem Neuropathol** 1989 Feb; 10(1):15–20 (25 ref.)

Alternative splicing of human dystrophin mRNA generates isoforms at the carboxy terminus. Feener CA, et al. **Nature** 1989 Apr 6;338(6215):509–11

Proteolytic fragment or new gene product? [letter] Hoffman EP, et al. **Nature** 1988 Nov 17;336(6196):210

An autosomal transcript in skeletal muscle with homology to dystrophin. Love DR, et al. **Nature** 1989 May 4; 339(6219):55–8

Dystrophin. The gene and its product. Mandel JL. **Nature** 1989 Jun 22;339(6226):584–6 (25 ref.)

Localization of muscle gene products in nuclear domains. Pavlath GK, et al. **Nature** 1989 Feb 9;337(6207):570–3

Nucleotide sequence of human muscle acetylcholine receptor beta-subunit. Beeson D, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4391

Nucleotide sequence of chicken dystrophin cDNA. Lemaire C, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11815–6

An MspI polymorphism for the dystrophin intragenic probe J-47. Meng G, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6756

Detection of novel genetic markers by mismatch analysis. Roberts RG, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):5961–71

A new polymorphism for the dystrophin intragenic probe P20 [DXS269] using BstX1. Robertson ME, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3327

MspI RFLP for Duchenne muscular dystrophy cDNA subclone 9. Wagner M, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3328

cDNA-derived sequence of chicken embryo vinculin. Coutu MD, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8535–9

Clinical and molecular studies in Duchenne muscular dystrophy. Emery AE. **Prog Clin Biol Res** 1989;306:15–28 (40 ref.)

Frame-shift deletions in patients with Duchenne and Becker muscular dystrophy. Malhotra SB, et al. **Science** 1988 Nov 4;242(4879):755–9

Transfer of a protein encoded by a single nucleus to nearby nuclei in multinucleated myotubes. Ralston E, et al. **Science** 1989 Jun 2;244(4908):1066–9

The molecular basis of muscular dystrophy in the mdx mouse: a point mutation. Sicinski P, et al. **Science** 1989 Jun 30; 244(4912):1578–80

5-bromo-2'-deoxyuridine blocks myogenesis by extinguishing expression of MyoD1. Tapscott SJ, et al. **Science** 1989 Aug 4;245(4917):532–6

In vivo aging of human fibroblasts does not alter nuclear plasticity in heterokaryons. Pavlath GK, et al. **Somat Cell Mol Genet** 1989 May;15(3):191–202

Tissue-specific isoforms of dystrophin. Walsh FS, et al. **Trends Neurosci** 1989 Jul;12(7):235–8 (31 ref.)

[Phenotype changes in myocardial proteins in hemodynamic overloads] Mercadier JJ, et al. **Arch Mal Coeur** 1988 Oct; 81 Spec No:23–7 (Eng. Abstr.) **(Fre)**

[Molecular strategies involved in the control of gene expression during differentiation of muscle cells] Fiszman MY. **Reprod Nutr Dev** 1988;28(3B):703–13 (38 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Endomysial antibodies in the diagnosis of celiac disease and the effect of gluten on antibody titers. Kumar V, et al. **Immunol Invest** 1989 Jan-May;18(1-4):533–44

The immunological homology between two filamentous cross-linker phosphoproteins, connectin and cross-bridge region of neurofilament-H, is not affected by the phosphorylation state. Matsumura K, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):226–30

Immunohistochemical localization in normal tissues of

different epitopes in the multidrug transport protein P170: evidence for localization in brain capillaries and crossreactivity of one antibody with a muscle protein. Thiebaut F, et al. **J Histochem Cytochem** 1989 Feb; 37(2):159–64

Antibodies against fetal muscle proteins in serum from patients with amyotrophic lateral sclerosis. Ordoñez G, et al. **Neurology** 1989 May;39(5):683–6

ISOLATION & PURIFICATION

Characterization of calcium channel subunit. Burgess AJ, et al. **Biochem Soc Trans** 1988 Aug;16(4):452–4

Partial structure and hormonal regulation of rabbit liver inhibitor-1; distribution of inhibitor-1 and inhibitor-2 in rabbit and rat tissues. MacDougall LK, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):218–26

The amino acid sequence of the parvalbumin from the very fast swimbladder muscle of the toadfish (Opsanus tau). Gerday C, et al. **Comp Biochem Physiol [B]** 1989; 93(1):49–55

The use of electrophoresis of the water-soluble (sarcoplasmic) proteins of fish muscle to differentiate the closely related species of hake (Merluccius sp.). Mackie IM, et al. **Comp Biochem Physiol [B]** 1978;59(2):95–8

Structural and functional studies on rabbit liver glycogenin. Smythe C, et al. **Eur J Biochem** 1989 Jul 15;183(1):205–9

Detection of metavinculin in human platelets using a modified talin overlay assay. Turner CE, et al. **Eur J Cell Biol** 1989 Jun;49(1):202–6

Refined purification and characterization of Z-protein. Ohashi K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):110–4

Identification in turkey gizzard of an acidic protein related to the C-terminal portion of smooth muscle myosin light chain kinase. Ito M, et al. **J Biol Chem** 1989 Aug 25; 264(24):13971–4

Purification and properties of a protein inhibitor that inhibits phosphatase 2A activity when hydroxymethylglutaryl coenzyme A reductase is the substrate. Serra D, et al. **J Biol Chem** 1989 Sep 5;264(25):14681–5

F-actin affinity chromatography: technique for isolating previously unidentified actin-binding proteins. Miller KG, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4808–12

METABOLISM

Role of factors derived from activated macrophages in regulation of muscle protein turnover. Baracos VE. **Adv Exp Med Biol** 1988;240:225–34

Hormonal regulation of muscle protein catabolism in acutely uremic rats: effect of adrenalectomy and parathyroidectomy. Schaefer RM, et al. **Adv Exp Med Biol** 1988;240:257–66

Total and myofibrillar protein degradation in isolated soleus muscles after exercise. Kasperek GJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E1–5

Insect hemolymph factor promotes muscle histolysis in Solenopsis. Davis WL, et al. **Anat Rec** 1989 Aug; 224(4):473–8

Research on the chemical composition of the vascular wall. XXI. The influence of atherogenic diet and hypothyroidism on the content of collagen, elastin, supporting proteins and glycosaminoglycans in the aorta wall of rabbits. Tomaszewski J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:113–24

Determinants of urea nitrogen production in sepsis. Muscle catabolism, total parenteral nutrition, and hepatic clearance of amino acids. Pittiruti M, et al. **Arch Surg** 1989 Mar; 124(3):362–72

Cytodifferentiation and expression of alpha-smooth muscle actin mRNA and protein during primary culture of aortic smooth muscle cells. Correlation with cell density and proliferative state. Campbell JH, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):633–43

Regulation of muscle protein turnover: possible implications for modifying the responses to trauma and nutrient intake. Garlick PJ, et al. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):915–40 (160 ref.)

Enzymic and nonenzymic mono ADP-ribosylation of proteins in skeletal muscle. Tanaka Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1063–70

Heterosis in body weight and muscle protein turnover rate in the coturnix quail. Maeda Y, et al. **Biochem Genet** 1988 Jun;26(5–6):395–9

Compartmentalized protein phosphorylation/dephosphorylation in glycogen particles from rabbit skeletal muscle. Gruppuso PA, et al. **Biochem Int** 1988 Jun;16(6):1027–32

Resistance of protein and glucose metabolism to insulin in denervated rat muscle. Davis TA, et al. **Biochem J** 1988 Sep 15;254(3):667–75

Regulation of protein synthesis and degradation in L8 myotubes. Effects of serum, insulin and insulin-like growth factors. Gulve EA, et al. **Biochem J** 1989 Jun 1; 260(2):377–87

Prostaglandin production in myotube cultures. Influence on protein turnover. McElligott MA, et al. **Biochem J** 1988 Aug 1;253(3):745–9

Oxidation state of tissue thiol groups and content of protein carbonyl groups in chickens with inherited muscular dystrophy. Murphy ME, et al. **Biochem J** 1989 Jun 1; 260(2):359–64

The effect of chronic ethanol ingestion on protein metabolism in type-I- and type-II-fibre-rich skeletal muscles of the rat. Preedy VR, et al. **Biochem J** 1988 Sep 15;254(3):631–9

The effect of chronic ethanol ingestion on synthesis and degradation of soluble, contractile and stromal protein fractions of skeletal muscles from immature and mature rats. Preedy VR, et al. **Biochem J** 1989 Apr 1;259(1):261–6

G-proteins in skeletal muscle. Evidence for a 40 kDa pertussis-toxin substrate in purified transverse tubules. Toutant M, et al. **Biochem J** 1988 Sep 1;254(2):405–9

The synthesis in vivo of proteins in various tissues in chickens adapted to intermittent feeding. Pinchasov Y, et al. **Br J Nutr** 1988 Nov;60(3):517–23

Postnatal development of parvalbumin-, calbindin- and adult GABA-immunoreactivity in two visual nuclei of zebra finches. Braun K, et al. **Brain Res** 1988 Dec 20; 475(2):205–17

GABAergic septohippocampal neurons contain parvalbumin. Freund TF. **Brain Res** 1989 Jan 30;478(2):375–81

Kindling induced changes in parvalbumin immunoreactivity in rat hippocampus and its relation to long-term decrease in GABA-immunoreactivity. Kamphuis W, et al. **Brain Res** 1989 Feb 6;479(1):23–34

Selective staining of a population of parvalbumin-containing GABAergic neurons in the rat cerebral cortex by lectins with specific affinity for terminal N-acetylgalactosamine. Kosaka T, et al. **Brain Res** 1989 Mar 27;483(1):158–63

Entorhinal fibers form synaptic contacts on parvalbumin-immunoreactive neurons in the rat fascia dentata. Zipp F, et al. **Brain Res** 1989 Aug 21;495(1):161–6

Studies on muscle structural protein in motor neuron disease. Kimura F, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):76–86

Interactions of parvalbumins with model phospholipid vesicles. Permyakov EA, et al. **Cell Calcium** 1989 Feb–Mar; 10(2):71–9

Atrial myoendocrine cells (cardiodilatin/atrial natriuretic polypeptide-containing myocardiocytes) are target cells for estradiol. Back H, et al. **Cell Tissue Res** 1989 Mar; 255(3):673–4

Protein and collagen content of rat skeletal muscle following space flight. Martin TP. **Cell Tissue Res** 1988 Oct; 254(1):251–3

Inotropic responses to isoproterenol and phosphodiesterase inhibitors in intact guinea pig hearts: comparison of cyclic AMP levels and phosphorylation of sarcoplasmic reticulum and myofibrillar proteins. Rapundalo ST, et al. **Circ Res** 1989 Jan;64(1):104–11

Muscle wasting in emphysema. Morrison WL, et al. **Clin Sci** 1988 Oct;75(4):415–20

An in vitro preparation of the extensor digitorum communis muscle from the chick (Gallus domesticus) for studies of protein turnover. Baracos VE, et al. **Comp Biochem Physiol [A]** 1989;92(4):555–63

The change in the rate of muscle protein metabolism of rats from weaning to 90 days of age. Siebrits FK, et al. **Comp Biochem Physiol [A]** 1989;92(4):485–8

Perch muscle parvalbumin: general characterization and magnesium-binding properties. Lehky P, et al. **Comp Biochem Physiol [B]** 1979;63(2):253–9

Cancer plasma effects on skeletal muscle metabolism. Mitchell LA, et al. **Curr Surg** 1988 Nov–Dec;45(6):469–70

Endocrine regulation of protein breakdown in skeletal muscle. Kettelhut IC, et al. **Diabetes Metab Rev** 1988 Dec; 4(8):751–72 (162 ref.)

Parvalbumin in mouse muscle in vivo and in vitro. Ecob-Prince MS, et al. **Differentiation** 1989 Mar;40(1):10–6

Isolation and structural analysis of a peptide containing the novel tyrosyl-glucose linkage in glycogenin. Smythe C, et al. **EMBO J** 1988 Sep;7(9):2681–6

Characterization of an inhibitor of actin polymerization in vinculin-rich fraction of turkey gizzard smooth muscle. Miron T, et al. **Eur J Biochem** 1988 Dec 15;178(2):543–53

Two classes of cortical GABA neurons defined by differential calcium binding protein immunoreactivities. Hendry SH, et al. **Exp Brain Res** 1989;76(2):467–72

Localization of parvalbumin mRNA in rat brain by in situ hybridization histochemistry. Seto-Ohshima A, et al. **Exp Brain Res** 1989;75(3):653–8

Synaptic localization of a 66-kDa soluble protein from skeletal muscle: evidence for its developmental and neural regulation. Comella JX, et al. **Exp Neurol** 1989 Aug; 105(2):211–8

Calpain proteolysis of free and bound forms of calponin, a troponin T-like protein in smooth muscle. Tsunekawa S, et al. **FEBS Lett** 1989 Jul 3;250(2):493–6

Protein turnover and growth of L8 muscle cultures in serum from rats fed clenbuterol. McElligott MA, et al. **Growth Dev Aging** 1988 Winter;52(4):185–91

Protein changes in skeletal muscle of toad, Bufo melanostictus under cathode polarity treatment. Ravindran K, et al. **Indian J Exp Biol** 1988 Jul;26(7):560–1

Acceleration of postmortem tenderization in ovine carcasses through infusion of calcium chloride: effect of concentration and ionic strength. Koohmaraie M, et al. **J Anim Sci** 1989 Apr;67(4):934–42

Binding of connectin to myosin filaments. Murayama T, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):323–6

Restrained least squares refinement of native (calcium) and cadmium-substituted carp parvalbumin using X-ray crystallographic data at 1.6-A resolution. Swain AL, et al. **J Biol Chem** 1989 Oct 5;264(28):16620–8

Newly synthesized calsequestrin, destined for the sarcoplasmic reticulum, is contained in early/intermediate Golgi-derived clathrin-coated vesicles. Thomas K, et al. **J Biol Chem** 1989 Feb 25;264(6):3140–5

Myogenesis in the mouse embryo: differential onset of expression of myogenic proteins and the involvement of titin in myofibril assembly. Fürst DO, et al. **J Cell Biol** 1989 Aug;109(2):517–27

A calsequestrin-like protein in the endoplasmic reticulum of the sea urchin: localization and dynamics in the egg and first cell cycle embryo. Henson JH, et al. **J Cell Biol** 1989 Jul;109(1):149–61

Calcium-binding protein (calbindin-D28k) and parvalbumin immunocytochemistry: localization in the rat hippocampus with specific reference to the selective vulnerability of hippocampal neurons to seizure activity. Sloviter RS. **J Comp Neurol** 1989 Feb 8;280(2):183–96

Protein metabolism in ovine primary muscle cultures derived from satellite cells—effects of selected peptide hormones and growth factors. Roe JA, et al. **J Endocrinol** 1989 Aug; 122(2):565–71

High-molecular-weight serine proteinase from lobster muscle that degrades myofibrillar proteins. Mykles DL. **J Exp Zool** 1989 Jun;250(3):244–52

Soluble factor from the hypertrophied left ventricle of dogs in experimental hypertension: ability to stimulate protein metabolism of cultured heart cells. Honda M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S125–7

Does titin regulate the length of muscle thick filaments? Whiting A, et al. **J Mol Biol** 1989 Jan 5;205(1):263–8

Identification and immunolocalization of a new component of human cardiac muscle intercalated disc. Koteliansky VE, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:23–9

Dystrophin and nebulin in the muscular dystrophies. Patel K, et al. **J Neurol Sci** 1988 Nov;87(2–3):315–26

Distribution of dystrophin, nebulin and Ricinus communis I (RCA-I)-binding glycoprotein in tissues of normal and mdx mice. Voit T, et al. **J Neurol Sci** 1989 Feb; 89(2–3):199–211

Differential regulation of the degradation of myofibrillar and total proteins in skeletal muscle of rats: effects of streptozotocin-induced diabetes, dietary protein and starvation. Kadowaki M, et al. **J Nutr** 1989 Mar; 119(3):471–7

Comparisons of urinary creatinine, skeletal muscle mass, and indices of muscle protein catabolism in rats fed ad libitum, with restricted food intake, and deprived of food. Rikimaru T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Jun; 35(3):199–209

Muscle protein metabolism of rats in surgical trauma. Lee VM, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct; 12(5):445–51

Postsurgical muscle protein turnover in perfused hindquarters of the rat. Lee VM, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):452–6

Total and myofibrillar protein breakdown in different types of rat skeletal muscle: effects of sepsis and regulation by insulin. Hasselgren PO, et al. **Metabolism** 1989 Jul; 38(7):634–40

Skeletal muscle glutamine transport, intramuscular glutamine concentration, and muscle-protein turnover. Rennie MJ, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):47–51 (30 ref.)

Insulin inhibits protein degradation in skeletal muscles of eviscerated fasted rats. Smith OL. **Metabolism** 1988 Oct; 37(10):976–81

Reduction of muscle protein degradation by leupeptin in acutely uremic rats. Schaefer RM, et al. **Miner Electrolyte Metab** 1988;14(5):308–12

Influence of exercise on cardiac and skeletal muscle myofibrillar proteins. Belcastro AN, et al. **Mol Cell Biochem** 1988 Sep;83(1):27–36

Protein phosphorylation changes in bovine carotid artery smooth muscle during contraction and relaxation. Takuwa Y, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):71–86

Proteins of muscle subcellular fractions in Duchenne progressive muscular dystrophy stained with "stains-all" cationic carbocyanine dye and with Coomassie Blue. Niebroj-Dobosz I, et al. **Muscle Nerve** 1989 Apr; 12(4):273–80

Association of dystrophin and an integral membrane glycoprotein. Campbell KP, et al. **Nature** 1989 Mar 16; 338(6212):259–62

Increased protein degradation results from elevated free calcium levels found in muscle from mdx mice. Turner PR, et al. **Nature** 1988 Oct 20;335(6192):735–8

Calbindin D-28K and parvalbumin immunoreactivity is confined to two separate neuronal subpopulations in the cat visual cortex, whereas partial coexistence is shown in the dorsal lateral geniculate nucleus. Demeulemeester H, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):6–11

Two distinct phases and mechanisms of axonal growth shown by primary vestibular fibres in the brain, demonstrated by parvalbumin immunohistochemistry. Morris RJ, et al. **Neuroscience** 1988 Nov;27(2):571–96

Glutamine transport in muscle protein economy. **Nutr Rev** 1989 Jul;47(7):215–7 (8 ref.)

Serum carbonic anhydrase III, an enzyme of type I muscle fibres, and the intensity of physical exercise. Takala TE, et al. **Pflugers Arch** 1989 Mar;413(5):447–50

Parvalbumin increases in the caudate putamen of rats with vitamin D hypervitaminosis. de Viragh PA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3887–90

Effect of sepsis on calcium uptake and content in skeletal muscle and regulation in vitro by calcium of total and

myofibrillar protein breakdown in control and septic muscle: results from a preliminary study. Benson DW, et al. **Surgery** 1989 Jul;106(1):87–93

Molecular biology of Duchenne muscular dystrophy. Brown RH Jr, et al. **Trends Neurosci** 1988 Nov;11(11):480–4 (32 ref.)

[Preliminary study of muscle protein breakdown in burned patients] Zhang XJ, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):284–7 (Eng. Abstr.) (Chi)

[The effect of calcium and magnesium ions on the interaction of calcium–binding proteins parvalbumin and alpha–lactalbumin with dipalmitoylphosphatidylcholine vesicles] Permiakov EA, et al. **Biofizika** 1988 May–Jun; 33(3):465–70 (Eng. Abstr.) (Rus)

[Effect of the synthetic Leu enkephalin dalargin on the protein and nucleic acid content of the muscles in the rainbow trout] Lapteva TI, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):473–5 (Eng. Abstr.) (Rus)

[Effect of cardiac glycosides on myocardial contractile proteins] Shevchenko AI. **Farmakol Toksikol** 1989 Jan–Feb;52(1):40–2 (Eng. Abstr.) (Rus)

[Ca–inhibited binding of melittin with parvalbumin. A new role for parvalbumins?] Permiakov EA, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):693–8 (Eng. Abstr.) (Rus)

[Formation of muscle proteins during freezing] Stoiachenko IA, et al. **Prikl Biokhim Mikrobiol** 1988 Sep–Oct; 24(5):712–9 (Eng. Abstr.) (Rus)

[Quantitative and qualitative disorders of energy transformation in the myocardial contractile protein system—a pivotal process in the development of heart failure] Karsanov NV, et al. **Vestn Akad Med Nauk SSSR** 1988;(12):60–8 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Electrophysiological study of the effects of cardiodilatin 1–16 on the frog spinal cord in vitro. de Santis A, et al. **J Exp Zool** 1988 Jul;247(1):109–12

The presence of parvalbumin in a nonmuscle cell line attenuates progression through mitosis. Rasmussen CD, et al. **Mol Endocrinol** 1989 Mar;3(3):588–96

PHYSIOLOGY

A cytosolic protein activator of cardiac sarcolemmal phosphoinositide phospholipase C. Quist EE, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):567–73

Involvement of the 60 kDa phosphoprotein in the regulation of Ca2+ release from sarcoplasmic reticulum of normal and malignant hyperthermia susceptible pig muscles. Kim DH, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):246–52

Adaptation of contractile proteins in human heart and skeletal muscles. Schaub MC, et al. **Biomed Biochim Acta** 1989; 48(5–6):S306–12

Regulation of gap junctional channels. Campos–de–Carvalho AC. **Braz J Med Biol Res** 1988;21(2):177–88 (91 ref.)

MyoD is a sequence–specific DNA binding protein requiring a region of myc homology to bind to the muscle creatine kinase enhancer. Lassar AB, et al. **Cell** 1989 Sep 8; 58(5):823–31

Skeletal muscle myofibrillogenesis as revealed with a monoclonal antibody to titin in combination with detection of the alpha– and gamma–isoforms of actin. Handel SE, et al. **Dev Biol** 1989 Mar;132(1):35–44

Dystrophin and the integrity of the sarcolemma in Duchenne muscular dystrophy. Duncan CJ. **Experientia** 1989 Feb 15; 45(2):175–7 (66 ref.)

The fast–twitch muscle calsequestrin isoform predominates in rabbit slow–twitch soleus muscle. Fliegel L, et al. **FEBS Lett** 1989 Jan 2;242(2):297–300

Regulation of skeletal muscle myofibrillar protein degradation: relationships to fatigue and exercise. Parkhouse WS. **Int J Biochem** 1988;20(8):769–75 (87 ref.)

I–protein forms cage–like aggregates of myosin in vitro. Ohashi K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):104–9

Triadic proteins of skeletal muscle. Caswell AH, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):149–62 (56 ref.)

Architecture of the sarcomere matrix of skeletal muscle: immunoelectron microscopic evidence that suggests a set of parallel inextensible nebulin filaments anchored at the Z line. Wang K, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2199–212

Distribution of cross–bridges in isometrically contracting muscle: its deduction from the Huxley–Simmons theory and the effect of filament elasticity. Tameyasu T. **Jpn J Physiol** 1989;39(1):191–7

Regulation of the ATP–dependent calcium uptake activity of heart sarcolemmal vesicles by endogenous cytosolic proteins. Narayanan N, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):143–53

Intracellular mechanisms of verapamil and diltiazem action on striated muscle of the rabbit. Su JY. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):297–302

The effects of temperature on relaxation in frog skeletal muscle: the role of parvalbumin. Iaizzo PA. **Pflugers Arch** 1988 Jul;412(1–2):195–202

[Calcium: the entering pathways and mechanisms of vasoconstriction] Miao JP. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):49–52 (39 ref.) (Chi)

[Effect of short–term space flights on physiological properties and composition of myofibrillar proteins of the skeletal muscles of rats] Oganov VS, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):50–4 (Eng. Abstr.) (Rus)

SECRETION

Heparin modulates the secretion of a major excreted protein–like molecule by vascular smooth muscle cells. Cochran DL, et al. **Biochim Biophys Acta** 1988 Nov 17; 967(2):289–95

Release of different relaxing factors by cultured porcine endothelial cells. Boulanger C, et al. **Circ Res** 1989 Jun; 64(6):1070–8

ULTRASTRUCTURE

Extensible and less–extensible domains of connectin filaments in stretched vertebrate skeletal muscle sarcomeres as detected by immunofluorescence and immunoelectron microscopy using monoclonal antibodies. Itoh Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):504–8

Identification of two distinct functional domains on vinculin involved in its association with focal contacts. Bendori R, et al. **J Cell Biol** 1989 Jun;108(6):2383–93

MUSCLE RELAXANTS, CENTRAL

ADVERSE EFFECTS

Rapid pre–operative immunotherapy in a patient allergic to muscle relaxants. Thomas H, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):385–9

PHARMACOKINETICS

Time–dependent absorption of phenprobamate following multiple dosing in rats. Sun JX, et al. **Pharm Res** 1988 Jun; 5(6):387–90

PHARMACOLOGY

Species variation in the site and mechanism of the neuromuscular effects of diadonium in rodents. Foldes FF, et al. **Anesth Analg** 1989 May;68(5):638–44

Comparative study in mice of tetrazepam and other centrally active skeletal muscle relaxants. Simiand J, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:272–85

In vitro comparison of the neuromuscular antinicotinic and intestinal antimuscarinic effects of different nondepolarizing muscle relaxants. Töröcsik A, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:247–53

Inhibitory effects of a new, potent, centrally acting muscle relaxant, (4S,5R)–4–(2–methylpropyl)–3–[3–(perhydroazepin–1–yl)propyl]–5– phenyl–1,3–oxazolidin–2–one (NC–1200) on micturition contractions of the bladder in rats. Kimura A, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):55–62

Effects of centrally acting muscle relaxants on post–rotatory nystagmus in the rabbit. Ishikawa M, et al. **Gen Pharmacol** 1989;20(1):47–51

A dose–response evaluation of pipecuronium bromide in elderly patients under balanced anesthesia. Azad SS, et al. **J Clin Pharmacol** 1989 Jul;29(7):657–9

Effects of afloqualone on vestibular nystagmus and the lateral vestibular nucleus. Kudo Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):515–9

Effects of some centrally acting muscle relaxants on spinal root potentials: a comparative study. Farkas S, et al. **Neuropharmacology** 1989 Feb;28(2):161–73

2–Chloroadenosine prevents kainic acid–induced toxicity in rat striatum. Arvin B, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):336–40

[Effect of muscle relaxants on intraocular pressure] Jantzen JP, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):1–7 (67 ref.) (Eng. Abstr.) (Ger)

[Effects of (+/–)–4'–ethyl–2–methyl–3–(l–pyrrolidinyl) propiophenone hydrochloride (HY–770) on the bladder function] Morikawa K, et al. **Nippon Yakurigaku Zasshi** 1988 Nov;92(5):311–24 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

A comparison of cyclobenzaprine and placebo in the management of fibrositis. A double–blind controlled study. Bennett RM, et al. **Arthritis Rheum** 1988 Dec; 31(12):1535–42

A double–blind, long–term study of tizanidine ('Sirdalud') in spasticity due to cerebrovascular lesions. Medici M, et al. **Curr Med Res Opin** 1989;11(6):398–407

Modified release tizanidine in the treatment of spasticity. Chantraine A, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):459–65

Acute back pain and spasm. A controlled multicenter trial of combined analgesic and antispasm agents. Basmajian JV. **Spine** 1989 Apr;14(4):438–9

Effect of benzazole–related centrally acting muscle relaxants on HPNS. Bowser–Riley F, et al. **Undersea Biomed Res** 1988 Sep;15(5):331–6

[Pain attacks caused by lumbo–ischialgia. Changes in the intervertebral disk tissue—muscle relaxation and/or operation] Albert HH. **Fortschr Med** 1989 Jun 10; 107(17):24–5 (Ger)

MUSCLE RELAXANTS, DEPOLARIZING see **NEUROMUSCULAR DEPOLARIZING AGENTS**

MUSCLE RELAXANTS, NON–DEPOLARIZING see **CURARE–LIKE AGENTS**

MUSCLE RELAXANTS, POLARIZING see **CURARE–LIKE AGENTS**

MUSCLE RELAXATION see under **MUSCLE CONTRACTION**

MUSCLE RIGIDITY

Drug effects on active immobility responses: what they tell us about neurotransmitter systems and motor functions. Klemm WR. **Prog Neurobiol** 1989;32(5):403–22 (137 ref.)

[Rigid spine syndrome: report of three cases] Kameda K, et al. **No To Hattatsu** 1988 Nov;20(6):474–9 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Chest wall rigidity during fentanyl– and midazolam–fentanyl induction: ventilatory and haemodynamic effects. Neidhart P, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):1–5

Fentanyl–induced muscle rigidity in unanesthetized and ketamine– or thiopental–anesthetized rats. Lui PW, et al. **Anesthesiology** 1989 Jun;70(6):984–90

A new syndrome of axial muscle rigidity associated with etretinate therapy. Albin RL, et al. **Mov Disord** 1988; 3(1):70–6

Involvement of locus coeruleus and noradrenergic neurotransmission in fentanyl–induced muscular rigidity in the rat. Lui PW, et al. **Neurosci Lett** 1989 Jan 2;96(1):114–9

[Fentanyl versus sufentanil basic anesthesia. Hypnotic effect, muscle rigidity and efficacy of competitive muscle relaxants] Eberle B, et al. **Anaesthesist** 1989 Jul;38(7):341–7 (Eng. Abstr.) (Ger)

[Unusual responses of muscular rigidity and hypothermia to halothane and succinylcholine; a case report of Smith–Lemli–Opitz (SLO) syndrome] Mizushima A, et al. **Masui** 1988 Sep;37(9):1118–23 (Eng. Abstr.) (Jpn)

COMPLICATIONS

[Raynaud's phenomena in stiff man syndrome (letter)] Trèves R, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):631 (Fre)

DIAGNOSIS

Delayed and prolonged rigidity greater than 24 h following high–dose fentanyl anesthesia. Mirenda J, et al. **Anesthesiology** 1988 Oct;69(4):24–5

Cerebral sarcoidosis presenting as supranuclear gaze palsy with hypokinetic rigid syndrome. Schlegel U, et al. **Mov Disord** 1989;4(3):274–7

DRUG THERAPY

Effect of L–dopa on dementia–related rigidity. Duret M, et al. **Acta Neurol Scand** 1989 Jul;80(1):64–7

Steroid–responsive and dependent stiff–man syndrome: a clinical and electrophysiological study of two cases. Piccolo G, et al. **Ital J Neurol Sci** 1988 Dec;9(6):559–66

ETIOLOGY

Respiratory effects of pain in a child after thoracotomy. Tyler DC. **Anesthesiology** 1989 May;70(5):873–4

Pathophysiology of rigidity and akinesia in Parkinson's disease. Lee RG. **Eur Neurol** 1989;29 Suppl 1:13–8 (23 ref.)

[Stiff–man syndrome: new light on the etiology (editorial)] Braham J. **Harefuah** 1989 Apr 2;116(7):391–2 (Heb)

[A case of squamous cell carcinoma of the lung associated with muscular stiffness] Kinoshita I, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):372–5 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Optimal indices for testing parkinsonian rigidity. Teräväinen H, et al. **Can J Neurol Sci** 1989 May;16(2):180–3

The association of gegenhalten in the upper limbs with dyspraxia. Tyrrell P, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):995–7

Stability of the head in pitch (neck flexion–extension): studies in normal subjects and patients with axial rigidity. Gresty M. **Mov Disord** 1989;4(3):233–48

Depression of decerebrate rigidity in the rat by antagonists of excitatory amino acids. Shinozaki H, et al. **Neuropharmacology** 1989 Jun;28(6):593–8

[Hip–lumbar extensor tightness—equivalent of a nerve root irritation syndrome in the adolescent] Hähnel H, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):296–305 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Dexmedetomidine, acting through central alpha–2 adrenoceptors, prevents opiate–induced muscle rigidity in the rat. Weinger MB, et al. **Anesthesiology** 1989 Aug; 71(2):242–9

THERAPY

Plasmapheresis in the treatment of stiff-man syndrome [letter] Vicari AM, et al. **N Engl J Med** 1989 Jun 1;320(22):1499

MUSCLE, SMOOTH

Congenital smooth muscle hamartoma. A report of six cases and a review of the literature. Johnson MD, et al. **Arch Dermatol** 1989 Jun;125(6):820–2 (22 ref.)

Leiomyoma of the uterus with multiple extrauterine smooth muscle tumors: a case report suggesting multifocal origin. Cho KR, et al. **Hum Pathol** 1989 Jan;20(1):80–3

Abstracts of the European Symposium on Smooth Muscle. London, April 13–15, 1988. **J Muscle Res Cell Motil** 1988 Oct;9(5):456–74

[Airway contraction and anti-asthmatic agents] Hakoda H, et al. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):77–80 (0 ref.) **(Jpn)**

[Abstracts. 30th annual meeting of the Japan Society of Smooth Muscle Research (I). Nagya, Japan, 15–16 July 1988] **Nippon Heikatsukin Gakkai Zasshi** 1988 Aug; 24(4):205–71 **(Jpn)**

[Abstracts. 30th annual meeting of the Japan Society of Smooth Muscle Research (II). Nagya, Japan, 15–16 July 1988] **Nippon Heikatsukin Gakkai Zasshi** 1988 Oct; 24(5):277–339 **(Jpn)**

[Influence of electric stimulation of the medulla oblongata on the smooth muscle tone of the airway in cats] Taivan IL, et al. **Neirofiziologiia** 1989;21(3):320–7 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

[Congenital defects of the intestinal wall: surgical complications] Núñez Núñez R, et al. **An Esp Pediatr** 1988 Oct;29(4):335–6 **(Spa)**

ANALYSIS

Bulk isolation of the 20,000-Da light chain of smooth muscle myosin: separation of the unphosphorylated and phosphorylated species. Sobieszek A. **Anal Biochem** 1988 Jul;172(1):43–50

The distribution of heavy-chain isoforms of myosin in airways smooth muscle from adult and neonate humans. Mohammad MA, et al. **Biochem J** 1989 Jun 1;260(2):421–6

35 kDa proteins are not components of vertebrate smooth muscle thin filaments. Lehman W. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):57–61

Pig brain homogenates contain smooth muscle myosin and cytoplasmic myosin isoforms. Gröschel-Stewart U, et al. **Cell Tissue Res** 1989 Jul;257(1):137–9

Characterization of autonomic receptors in neonatal urinary tract smooth muscle. Latifpour J, et al. **Dev Pharmacol Ther** 1989;13(1):1–10

Two isoforms of smooth muscle myosin regulatory light chain in chicken gizzard. Inoue A, et al. **Eur J Biochem** 1989 Aug 15;183(3):645–51

Myosin heavy-chain isoforms in human smooth muscle. Sartore S, et al. **Eur J Biochem** 1989 Jan 15;179(1):79–85

Tissue specific distribution of calcyclin—10.5 kDa Ca2+-binding protein. Kuźnicki J, et al. **FEBS Lett** 1989 Aug 28;254(1–2):141–4

Transepithelial prostacyclin gradient in isolated canine trachea. Eidelman DH, et al. **J Appl Physiol** 1989 Jul; 67(1):276–81

Preparation of subfragment-1 from abalone smooth muscle myosin. Asakawa T, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):667–71

Molecular and cellular analysis of histamine H1 receptors on cultured smooth muscle cells. Mitsuchashi M, et al. **J Cell Biochem** 1989 Jun;40(2):183–92 (81 ref.)

Lanthanide chelates as new fluorochrome labels for cytochemistry. Soini EJ, et al. **J Histochem Cytochem** 1988 Nov;36(11):1449–51

Caldesmon, acidic amino acids and molecular weight determinations. Bryan J. **J Muscle Res Cell Motil** 1989 Apr; 10(2):95–6 (13 ref.)

Alpha-smooth muscle actin in parenchymal cells of bleomycin-injured rat lung. Mitchell J, et al. **Lab Invest** 1989 May;60(5):643–50

Myofibroblasts from diverse pathologic settings are heterogeneous in their content of actin isoforms and intermediate filament proteins. Skalli O, et al. **Lab Invest** 1989 Feb;60(2):275–85

AFDX-116 discriminates between muscarinic M2 receptors of the heart and the iris smooth muscle. Honkanen RE, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):131–5

Method for simultaneous determination of creatine phosphate and adenine nucleotides in the intestinal smooth muscle of guinea-pig taenia caeci using high-performance liquid chromatography. Endo I, et al. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):127–30

Immunochemical identification of desmin in Torpedo postsynaptic membranes and at the rat neuromuscular junction. Sealock R, et al. **Synapse** 1989;3(4):315–24

Alpha smooth muscle actin (alpha-SM actin) in normal human ovaries, in ovarian stromal hyperplasia and in ovarian neoplasms. Czernobilsky B, et al. **Virchows Arch [B]** 1989;57(1):55–61

[A study on the characterization of beta-adrenoceptor populations in mice uteri] Xu DZ, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):265–70 (Eng. Abstr.) **(Chi)**

[Tropomyosin from smooth and skeletal muscles initiates various conformational changes in skeletal F-actin] Borovikov IuS, et al. **Biokhimiia** 1988 Nov;53(11):1817–20 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Effects of muscle length and load on intracellular Ca2+ in tracheal smooth muscle. Gunst SJ. **Am J Physiol** 1989 Apr; 256(4 Pt 1):C807–12

Morphological study of M. anococcygeus in male and female rats. Elišková M. **Anat Anz** 1989;168(2):181–7

Musculus sphincter ani externus in the rat. Elišková M. **Anat Anz** 1989;168(2):189–95

Detection of surface movements on single smooth muscle cells: digital video microscopy. Work SS, et al. **Comput Biol Med** 1988;18(6):385–93

Easy peroperative classification of perianal muscle as external or internal sphincter by means of diathermy. Svenberg T, et al. **Dis Colon Rectum** 1988 Dec;31(12):979–80

[The sphincter muscle of the iris in conditions of altered development of the eye] Pignocchino P. **Arch Ital Anat Embriol** 1988 Oct–Dec;93(4):269–76 (Eng. Abstr.) **(Ita)**

[Stereo-morphometric study on the muscular architecture of normal ureteral wall at the ureteropelvic junction] Kaneto H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1040–8 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Ca2+-activated K channels of canine colonic myocytes. Carl A, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C470–80

Characterization of macroscopic outward currents of canine colonic myocytes. Cole WC, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 1):C461–9

Muscarinic suppression of Ca2+-dependent K current in colonic smooth muscle. Cole WC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C481–7

G proteins mediate suppression of Ca2+-activated K current by acetylcholine in smooth muscle cells. Cole WC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C596–600

Differentiated properties of rabbit tracheal epithelial cells in primary culture. Liedtke CM. **Am J Physiol** 1988 Dec;255(6 Pt 1):C760–70

Culture behavior of healthy bovine gallbladder muscularis smooth muscle cells. Sas D, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):G653–9

Neurotensin stimulates growth of small intestine in rats. Wood JG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G813–7

Differentiation of smooth muscle in the genital tract of the female mouse and its temporal relation with the development of the Wolffian nerve. Brauer MM, et al. **Anat Embryol (Berl)** 1989;179(4):403–10

Mitotic orientation in three dimensions determined from multiple projections. Bjerknes M, et al. **Biophys J** 1989 May;55(5):1011–5

Transdifferentiation from striated muscle of medusae in vitro. Schmid V, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:137–46 (29 ref.)

Fat-storing cells and myofibroblasts: one cell or two? Maher JJ. **Hepatology** 1989 Jun;9(6):903–4

Heparin prevents vascular smooth muscle cell progression through the G1 phase of the cell cycle. Reilly CF, et al. **J Biol Chem** 1989 Apr 25;264(12):6990–5

Three-dimensional molecular distribution in single cells analysed using the digital imaging microscope. Fay FS, et al. **J Microsc** 1989 Feb;153 (Pt 2):133–49

Contractile cells in normal and fibrotic lung. Adler KB, et al. **Lab Invest** 1989 Apr;60(4):473–85 (163 ref.)

On the formation and degradation of melanosomes in smooth muscle cells: electron microscopic investigation on the m. sphincter pupillae of the rat. Stanka P, et al. **Pigment Cell Res** 1988;1(5):358–60

Isolated smooth muscle cells preparation. Odaibo SK. **Scand J Gastroenterol Suppl** 1986;124:223–5

Human airway smooth muscle in culture. Twort C, et al. **Tissue Cell** 1988;20(3):339–44

[A study on the histologic basis of human bile duct peristalsis] Lu SC. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):116–7, 127 (Eng. Abstr.) **(Chi)**

[Ca2+ and the regulation of cell function] Xue YN, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):328–33 (41 ref.) **(Chi)**

DRUG EFFECTS

Electromechanical coupling in cat stomach smooth muscle in Ca2+-free EGTA-containing solutions. Bayginov O, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):31–8

Relaxant action of androgens, progestins and corticosteroids on the isolated ileum of the guinea pig. Kubli-Garfias C, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):357–64

Different effects of neuropeptide Y on electrically induced contractions in the longitudinal and circular smooth muscle layers of the female rabbit urethra. Sjögren C, et al. **Acta Physiol Scand** 1988 Jun;133(2):177–81

Analysis of the beta-adrenoceptor mediated inhibition of IgG1 and IgE dependent guinea-pig anaphylactic tracheal smooth muscle contraction. van Amsterdam RG, et al. **Agents Actions** 1989 Jan;26(1–2):48–51

Effect of methylene blue and N-ethylmaleimide on internal anal sphincter relaxation. Moummi C, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G571–8

Human eosinophil major basic protein causes hyperreactivity of respiratory smooth muscle. Role of the epithelium. Flavahan NA, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):685–8

Comparison of relaxation induced by glyceryl trinitrate, isosorbide dinitrate, and sodium nitroprusside in bovine airways. Gruetter CA, et al. **Am Rev Respir Dis** 1989 May; 139(5):1192–7

Smooth muscle contraction and local anesthetics: calmodulin-dependent myosin light-chain kinase. Nosaka S, et al. **Anesth Analg** 1989 Oct;69(4):504–10

Approaches to the mechanism of relaxing effect of vitamin K3 on smooth muscle. Altinkurt O, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:232–40

Antioquine: a new bisbenzylisoquinoleine alkaloid with calcium antagonist activity. D'Ocon MP, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:205–16

Antispasmodic effect of amiodarone on gastrointestinal smooth muscle: possible involvement of calcium. Gaion RM, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug; 294:112–24

Epithelium-dependent relaxation of guinea-pig tracheal smooth muscle by histamine: evidence for non-H1- and non-H2-histamine receptors. Guc MO, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:57–65

Epithelium-dependent relaxation of guinea-pig tracheal smooth muscle by carbachol. Guc MO, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:241–7

Biphasic response of circular muscle to prostaglandin E2 in guinea-pig colon. Ishizawa M. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:282–90

Comparison of beta-adrenoceptors in single smooth muscle cells and in isolated smooth muscle preparations from the guinea-pig taenia caecum. Koike K, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:184–91

Lack of effect of gold salts on acetylcholine or histamine contraction of canine tracheal and bronchial smooth muscle. Ledford DK, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:237–46

Effect of nicardipine on the isolated uterus and other smooth muscles of the rat. Milovanović SR, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:291–304

Barium-induced contraction of rat vas deferens in calcium-free solution. Mishra SK, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:85–98

Some aspects of the pharmacology and physiology of the Ascaris suum muscle. Onuaguluchi G. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:264–75

Propylbenzilylcholine mustard discriminates between two subtypes of muscarinic cholinoceptors in guinea-pig taenia caecum. Takayanagi I, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:210–9

Cholinergic contractions induced by GABA-A receptor activation in the guinea-pig ileum are inhibited by alpha-chymotrypsin and potentiated by diazepam. Tonini M, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:173–83

Muscarinic receptor sensitivity in airway smooth muscle of patients with obstructive airway disease. Van Koppen CJ, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:238–44

Antigen, histamine and serotonin-induced contractions of single smooth muscle cells of guinea pig taenia coli. Shonai K, et al. **Arerugi** 1988 May;37(5):283–93

Effects of new 4-aminopyridine derivatives on neuromuscular transmission and on smooth muscle contractility. Berger SG, et al. **Arzneimittelforschung** 1989 Jul;39(7):762–5

Pharmacological actions of benidipine hydrochloride in several isolated smooth muscles and myocardium. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1722–30

The effect of acetylcholinesterase-inhibition on the tonus of guinea-pig bronchial smooth muscle. Aas P, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4211–6

Direct inhibition of contractile apparatus by analogues of amiloride in the smooth muscle of guinea-pig taenia caecum and chicken gizzard. Ozaki H, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):915–22

Relationship between neuropeptides and gastrointestinal smooth muscle activity. Nieber K, et al. **Biomed Biochim Acta** 1989;48(5–6):S565–8

Inhibitory effects of procaine on contraction and calcium movement in vascular and intestinal smooth muscles. Ahn HY, et al. **Br J Pharmacol** 1988 Jul;94(3):789–96

Inhibition of field stimulation-evoked relaxations in rat oesophageal smooth muscle by the calcium antagonist PN 200-110. Akbarali HI, et al. **Br J Pharmacol** 1988 Oct; 95(2):512–8

Similarity of relaxations evoked by BRL 34915, pinacidil and field-stimulation in rat oesophageal tunica muscularis mucosae. Akbarali HI, et al. **Br J Pharmacol** 1988 Oct; 95(2):519–25

The effect of glucocorticosteroids on in vitro motility of the ureter of the sheep. Angelo-Khattar M, et al. **Br J Pharmacol** 1989 Mar;96(3):527–30

Alpha 1-adrenoceptor antagonist activity of novel pyrimidine derivatives (SHI437 and IK29) in rabbit aorta and trigone of the bladder. Azuma H, et al. **Br J Pharmacol** 1989 Apr; 96(4):1000–6

Evidence that the histamine sensitivity and responsiveness of guinea-pig isolated trachea are modulated by epithelial

prostaglandin E2 production. Braunstein G, et al. **Br J Pharmacol** 1988 Sep;95(1):300–8

The competitive antagonistic effect of compounds from Mandevilla velutina on kinin-induced contractions of rat uterus and guinea-pig ileum in vitro. Calixto JB, et al. **Br J Pharmacol** 1988 Aug;94(4):1133–42

Prostanoid-induced contraction of human bronchial smooth muscle is mediated by TP-receptors. Coleman RA, et al. **Br J Pharmacol** 1989 Mar;96(3):688–92

A comparison of the differential effects of vasoactive intestinal peptide and peptide histidine isoleucine on the vascular and capsular smooth muscle of the dog spleen. Corder R, et al. **Br J Pharmacol** 1988 Oct;95(2):664–70

The mechanism of action of AMP-induced inhibition of sympathetic neurotransmission in the isolated vas deferens of the rat and guinea-pig. Dalziel HH, et al. **Br J Pharmacol** 1988 Jul;94(3):961–7

Vasoactive intestinal polypeptide and non-adrenergic, non-cholinergic inhibition in lower oesophageal sphincter of opossum. Daniel EE, et al. **Br J Pharmacol** 1989 Mar; 96(3):746–52

Effects of peptidases on non-adrenergic, non-cholinergic inhibitory responses of tracheal smooth muscle: a comparison with effects on VIP- and PHI-induced relaxation. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):521–6

Adenosine receptor-mediated contraction and relaxation of guinea-pig isolated tracheal smooth muscle: effects of adenosine antagonists. Farmer SG, et al. **Br J Pharmacol** 1988 Oct;95(2):371–8

Endotoxin-induced hyperreactivity of the guinea-pig isolated trachea coincides with decreased prostaglandin E2 production by the epithelial layer. Folkerts G, et al. **Br J Pharmacol** 1989 Feb;96(2):388–94

Pharmacological analysis of the effects of Bay K 8644 and organic calcium antagonists on the mouse isolated distal colon. Fontaine J, et al. **Br J Pharmacol** 1988 Aug; 94(4):1198–205

Contractile effects of substance P and other tachykinins on the mouse isolated distal colon. Fontaine J, et al. **Br J Pharmacol** 1989 Mar;96(3):583–90

The effect of cromakalim on the smooth muscle of the guinea-pig urinary bladder. Foster CD, et al. **Br J Pharmacol** 1989 May;97(1):281–91

N-methylhydroxylamine inhibits and M&B 22948 potentiates relaxations of the mouse anococcygeus to non-adrenergic, non-cholinergic field stimulation and to nitrovasodilator drugs. Gibson A, et al. **Br J Pharmacol** 1989 Mar; 96(3):637–44

The lack of involvement of cyclic nucleotides in the smooth muscle relaxant action of BRL 34915. Gillespie JS, et al. **Br J Pharmacol** 1988 Aug;94(4):1189–97

Influence of haemoglobin and erythrocytes on the effects of EDRF, a smooth muscle inhibitory factor, and nitric oxide on vascular and non-vascular smooth muscle. Gillespie JS, et al. **Br J Pharmacol** 1988 Dec;95(4):1151–6

Effects of the bradykinin antagonist B4310 on smooth muscles and blood pressure in the rat, and its enzymatic degradation. Griesbacher T, et al. **Br J Pharmacol** 1989 Mar;96(3):531–8

Mechanism of action of nicotine in isolated urinary bladder of guinea-pig. Hisayama T, et al. **Br J Pharmacol** 1988 Oct;95(2):465–72

Short-term desensitization of guinea-pig taenia caecum induced by carbachol occurs at intracellular Ca stores and that by histamine at H1-receptors. Hishinuma S, et al. **Br J Pharmacol** 1988 Jul;94(3):882–9

Pre- and postjunctional actions of purine and xanthine compounds in the guinea-pig caecum circular muscle. Hoyle CH, et al. **Br J Pharmacol** 1988 Oct;95(2):653–63

Pre- and post-junctional actions of procaterol, a beta 2-adrenoceptor stimulant, on dog tracheal tissue. Ito Y. **Br J Pharmacol** 1988 Sep;95(1):268–74

Inhibition by anti-inflammatory agents of contraction induced by epidermal growth factor-urogastrone in isolated longitudinal smooth muscle strips from guinea-pig stomach. Itoh H, et al. **Br J Pharmacol** 1988 Nov; 95(3):821–9

The contractile activities of lipoxin A4 and lipoxin B4 for guinea-pig airway tissues. Jacques CA, et al. **Br J Pharmacol** 1988 Oct;95(2):562–8

Paf-induced release of spasmogens from guinea-pig lungs. Jancar S, et al. **Br J Pharmacol** 1989 Jan;96(1):153–62

Antigen-induced contraction of guinea-pig isolated trachea: studies with novel inhibitors and antagonists of arachidonic acid metabolites [published erratum appears in Br J Pharmacol 1989 Jan;96(1):folowing 250] Jones TR, et al. **Br J Pharmacol** 1988 Sep;95(1):309–21

Effects of tetrodotoxin on relaxation of pig duodenal circular muscle induced by C-terminal fragments of cholecystokinin. Kimura I, et al. **Br J Pharmacol** 1989 Mar; 96(3):739–45

Prostaglandins involved in contractions by angiotensin II and bradykinin of isolated dog sphincter pupillae. Lu W, et al. **Br J Pharmacol** 1988 Oct;95(2):544–50

GR32191, a highly potent and specific thromboxane A2 receptor blocking drug on platelets and vascular and airways smooth muscle in vitro. Lumley P, et al. **Br J Pharmacol** 1989 Jul;97(3):783–94

Comparative study of the actions of AP5A and alpha,beta-methylene ATP on nonadrenergic, noncholinergic neurogenic excitation in the guinea-pig vas deferens. MacKenzie I, et al. **Br J Pharmacol** 1988 Jul; 94(3):699–706

Potent contractile activity of endothelin on the human isolated urinary bladder. Maggi CA, et al. **Br J Pharmacol** 1989 Apr;96(4):755–7

Mechanism of xanthine-induced relaxation of guinea-pig isolated trachealis muscle. Ogawa K, et al. **Br J Pharmacol** 1989 Jun;97(2):542–6

Alfaxalone potentiates and mimics GABA-induced contractile responses in the guinea-pig isolated ileum. Ong J, et al. **Br J Pharmacol** 1988 Sep;95(1):33–8

Interactions of calcium antagonists and the calcium channel agonist Bay K 8644 on neurotransmission of the mouse isolated vas deferens. Rae GA, et al. **Br J Pharmacol** 1989 Feb;96(2):333–40

Ryanodine inhibits the Ca-dependent K current after depletion of Ca stored in smooth muscle cells of the rabbit ileal longitudinal muscle. Sakai T, et al. **Br J Pharmacol** 1988 Dec;95(4):1089–100

Antagonism of calcium by zinc in guinea-pig isolated taenia caeci and trachealis muscle. Sarriá B, et al. **Br J Pharmacol** 1989 May;97(1):19–26

The relaxant and spasmogenic effects of some xanthine derivatives acting on guinea-pig isolated trachealis muscle. Small RC, et al. **Br J Pharmacol** 1988 Aug;94(4):1091–100

The role of GABAA receptor function in peristaltic activity of the guinea-pig ileum: a comparative study with bicuculline, SR 95531 and picrotoxinin. Tonini M, et al. **Br J Pharmacol** 1989 Jun;97(2):556–62

The relaxant properties of human calcitonin gene-related peptide on vascular and extravascular capsular) smooth muscle of the isolated blood-perfused spleen of the anaesthetized dog. Withrington PG. **Br J Pharmacol** 1989 Apr;96(4):823–8

Characterization of the effects of AHN 086, an irreversible ligand of "peripheral" benzodiazepine receptors, on contraction in guinea-pig atrial and ileal longitudinal smooth muscle. Bolger GT, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):126–34

Responses of the isolated rectum of the rainbow lizard (Agama agama) to sympathomimetics. Inyang AL, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):68–71

Azelastine inhibits agonist-induced electromechanical activity in canine tracheal muscle. Lee HK, et al. **Chest** 1989 Sep;96(3):665–9

Effect of glucagon on the motility of esophageal smooth muscle. Lin SZ, et al. **Chin Med J [Engl]** 1989 Mar; 102(3):193–9

Antagonist like action of synthetic alpha 2-adrenoceptor agonists on contractile response to catecholamines in smooth muscle strips isolated from rainbow trout stomach (Salmo gairdneri). Kitazawa T, et al. **Comp Biochem Physiol [C]** 1988;91(2):585–8

Tonic and rhythmic contractions induced by dopamine and related amines in rat vasa deferentia are pharmacologically separable. Lafi MA, et al. **Comp Biochem Physiol [C]** 1988; 90(1):183–8

The relaxation induced by indole and nonindole 5-HT agonists in the molluscan smooth muscle. Murakami H, et al. **Comp Biochem Physiol [C]** 1988;90(1):249–55

Actions of cholecystokinin-related peptides on the gallbladder of bony fishes in vitro. Rajjo IM, et al. **Comp Biochem Physiol [C]** 1988;90(1):267–73

A comparison of the actions of 4-aminopyridine, caffeine and quinine on the toad isolated rectus abdominis muscle. Savage AO. **Comp Biochem Physiol [C]** 1989;92(1):27–33

Vasoactive intestinal peptide. An inhibitor of feline gastric smooth muscle in vitro. Merlo A, et al. **Dig Dis Sci** 1989 Sep;34(9):1365–8

Effects of pinacidil on bladder muscle. Andersson KE, et al. **Drugs** 1988;36 Suppl 7:41–9 (48 ref.)

In vitro studies on the mode of action of pinacidil. Weston AH, et al. **Drugs** 1988;36 Suppl 7:10–28

Pharmacodynamic profile of fenoverine, a novel modulator of smooth muscle motility. De Santis D, et al. **Drugs Exp Clin Res** 1989;15(1):37–42

Characterization of contractile prostanoid receptors on human airway smooth muscle. Armour CL, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):215–22

Sources of calcium for ATP-induced contractions in rat urinary bladder smooth muscle. Bhat MB, et al. **Eur J Pharmacol** 1989 May 2;164(1):163–6

M2 muscarinic receptors on the iris sphincter muscle differ from those on iris noradrenergic nerves. Bognar IT, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):263–74

Endothelium-derived nitric oxide relaxes nonvascular smooth muscle. Buga GM, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):61–72

Modification by indomethacin of airway contractile responses in normal and sensitized guinea-pigs. Cortijo J, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):467–73

Comparison of the effect of vasoactive intestinal polypeptide and non-adrenergic non-cholinergic neurone stimulation in the cat gastric fundus. D'Amato M, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):71–82

The multiple action of bradykinin on smooth muscle of guinea-pig taenia caeci. Den Hertog A, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):357–63

Involvement of postjunctional purinergic mechanisms in the facilitatory action of bradykinin in neurotransmission in the rat vas deferens. Donoso MV, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):263–73

Competitive antagonism by glibenclamide of cromakalim inhibition of twitch contractions in rabbit vas deferens. Eltze M. **Eur J Pharmacol** 1989 Feb 14;161(1):103–6

Galanin: Ca2+-dependent contractile effects on the isolated mouse distal colon. Fontaine J, et al. **Eur J Pharmacol** 1989 May 30;164(3):583–6

Effect of capsaicin on gastric corpus smooth muscle of the rat in vitro. Holzer-Petsche U, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):29–36

Inhibitory effect of lithium on muscle contractions caused by various stimulants in guinea-pig ileum. Hori M, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):63–70

Contractions of the guinea-pig ileum evoked by stimulation of the submucous plexus. Jin JG, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):73–8

Neurotensin and prostaglandin interactions in smooth muscle of the guinea pig stomach. Katsoulis S, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):251–6

Calcitonin gene-related peptides relax guinea pig and rat gastric smooth muscle. Katsoulis S, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):129–34

Inhibitory effects of a new, potent, centrally acting muscle relaxant, (4S,5R)-4-(2-methylpropyl)-3-[3-(perhydroazepin-1-yl)propyl]-5- phenyl-1,3-oxazolidin-2-one (NC-1200) on micturition contractions of the bladder in rats. Kimura A, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):55–62

Galanin suppresses neurally evoked contractions of circular muscle in the guinea-pig ileum. Kuwahara A, et al. **Eur J Pharmacol** 1989 May 2;164(1):175–8

The diacylglycerol kinase inhibitor, R 59022, suppresses contractility of intestinal smooth muscle. Lippe IT, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):1–8

Trachealis responses induced by vincamine and vinpocetine; inhibition by indomethacin and Ca2+ dependence. Machová J, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):387–95

Potent contractile effect of endothelin in isolated guinea-pig airways. Maggi CA, et al. **Eur J Pharmacol** 1989 Jan 24; 160(1):179–82

Effect of thiorphan on response of the guinea-pig gallbladder to tachykinins. Maggi CA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):51–61

Inhibition of cholinergic and non-adrenergic, non-cholinergic bronchoconstriction in the guinea pig mediated by neuropeptide Y and alpha 2-adrenoceptors and opiate receptors. Matran R, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):15–23

Evidence for a direct relationship between phosphoinositide metabolism and airway smooth muscle contraction induced by muscarinic agonists. Meurs H, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):271–4

Low calcium and calcium antagonists potentiate the contraction of guinea-pig vas deferens induced by ATP: a permissive role for P2-purinoceptors. Morishita H, et al. **Eur J Pharmacol** 1989 May 30;164(3):507–13

Effects of pinacidil on guinea-pig airway smooth muscle contracted by asthma mediators. Nielsen-Kudsk JE, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):221–6

The spasmogenic effect of caffeine in trachealis isolated from control and actively sensitized guinea-pigs. Ortiz JL, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):243–9

Inhibition of antigen-induced contraction of guinea pig trachea by ICI 198,615. Redkar-Brown DG, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):113–21

Ethanol-induced bronchodilatation in TEA-treated canine tracheal smooth muscle is mediated by a beta-adrenoceptor-dependent mechanism. Richards IS, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):155–60

Allosteric interactions of three muscarine antagonists at bovine tracheal smooth muscle and cardiac M2 receptors. Roffel AF, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):61–70

Muscarinic M2 receptors in bovine tracheal smooth muscle: discrepancies between binding and function. Roffel AF, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):73–82

Role of phosphoinositide metabolism in functional antagonism of airway smooth muscle contraction by beta-adrenoceptor agonists. Van Amsterdam RG, et al. **Eur J Pharmacol** 1989 May 11;172(2):175–83

In vitro desensitization of beta-adrenoceptors in guinea pig trachea: interactions between beta-adrenoceptor agonists and influence of adenosine and other drugs. Matran R, et al. **Fundam Clin Pharmacol** 1989;3(2):103–13

Insulin action on different smooth muscle preparations. Altan VM, et al. **Gen Pharmacol** 1989;20(4):529–35

Mechanisms of the contractile responses to morphine of the mouse colon in vitro. Contreras E, et al. **Gen Pharmacol** 1988;19(5):669–72

Contractile responses of the guinea-pig vas deferens to the combination of vanadium ions with ouabain. Garcia AG, et al. **Gen Pharmacol** 1989;20(4):457–62

The relaxing response of the isolated rat duodenum to nicotine. Guimaraes CR, et al. **Gen Pharmacol** 1988; 19(5):655–9

Involvement of threshold level in the contractile responses for some alpha 1-andrenoceptor agonists in the rabbit iris dilators. Konno F, et al. **Gen Pharmacol** 1989;20(1):71–6

The effect of calcium free medium and nifedipine on the release of substance P-like immunoreactivity and contractions induced by capsaicin in the isolated guinea-pig and rat bladder. Maggi CA, et al. **Gen Pharmacol** 1989; 20(4):445–56

Effect of oxodipine and nifedipine on guinea-pig ileum. Martin M, et al. **Gen Pharmacol** 1988;19(6):771–4

Methods for analyzing and interpreting cooperativity in dose-response curves—II. Partial agonists acting on muscarinic receptors in smooth muscle. Moore GJ. **Gen Pharmacol** 1989;20(2):199–203

Actions of some drugs on skinned smooth muscle preparations. Nasu T. **Gen Pharmacol** 1989;20(2):123–31 (121 ref.)

Pharmacological properties of tiropramide, an antispasmodic drug. Takayanagi I, et al. **Gen Pharmacol** 1989;20(3):335–9

"Ca reversal": inhibition by submicromolar Ca2+ concentrations of contraction of smooth muscle and its use for assay of Ca channel blockers. Uchida MK, et al. **Gen Pharmacol** 1989;20(2):117–21 (26 ref.)

Acute ethanol dosage reduces the synthesis of smooth muscle contractile proteins in the small intestine of the rat. Preedy VR, et al. **Gut** 1988 Sep;29(9):1244–8

Evidence of muscarinic receptor subtypes in airway smooth muscle of normal volunteers and of chronic obstructive pulmonary disease patients. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):65–70

Effect of PAF on parasympathetic contraction of canine airways. Bethel RA, et al. **J Appl Physiol** 1989 Jun; 66(6):2629–34

Epithelial augmentation of trachealis contraction caused by major basic protein of eosinophils. Brofman JD, et al. **J Appl Physiol** 1989 Apr;66(4):1867–73

Influence of respiratory drive on airway responses to excitation of lung C-fibers. Haxhiu MA, et al. **J Appl Physiol** 1989 Jul;67(1):203–9

Beta-adrenergic relaxation of dog trachealis: contractile agonist-specific interaction. Koenig SM, et al. **J Appl Physiol** 1989 Jul;67(1):181–5

Perfused bronchial segment and bronchial strip: narrowing vs. isometric force by mediators. Mitchell HW, et al. **J Appl Physiol** 1989 Jun;66(6):2704–9

Electromechanical coupling of ferret airway smooth muscle in response to leukotriene C4. Murlas CG, et al. **J Appl Physiol** 1989 Jun;66(6):2533–8

Influence of GABA and ethylenediamine in the guinea-pig duodenum. Barbier AJ, et al. **J Auton Pharmacol** 1989 Aug; 9(4):279–91

Angiotensin II stimulates human gastric smooth muscle in vitro. Lüdtke FE, et al. **J Auton Pharmacol** 1989 Apr; 9(2):139–47

Parathyroid hormone-related protein relaxes rat gastric smooth muscle and shows cross-desensitization with parathyroid hormone. Mok LL, et al. **J Bone Miner Res** 1989 Jun;4(3):433–9

Endothelin-1 from pulmonary artery and microvessels acts on vascular and airway smooth muscle. Ryan US, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S57–62 discussion S74

Endothelin-1-induced contractions of vascular and tracheal smooth muscle: effects of nicardipine and BRL 34915. Turner NC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S180–2

Mast cell tryptase causes airway smooth muscle hyperresponsiveness in dogs. Sekizawa K, et al. **J Clin Invest** 1989 Jan;83(1):175–9

Responses of gastrointestinal smooth muscle preparations to a muscarinic principle present in Sida veronicaefolia. Lutterodt GD. **J Ethnopharmacol** 1988 Jul–Aug; 23(2–3):313–22

The field-stimulated vas deferens of the streptozotocin-diabetic mouse: effects of prazosin, alpha, beta-methylene ATP, and variation of stimulation parameters. Kaschube M, et al. **J Neural Transm** 1989; 77(2–3):171–80

Effects of 3,3'-di-O-methylquercetin on guinea-pig isolated smooth muscle. Abdalla S, et al. **J Pharm Pharmacol** 1989 Feb;41(2):138–41

Some pharmacological properties of the circular smooth muscle layer of the rat vas deferens. Brito AR, et al. **J Pharm Pharmacol** 1988 Nov;40(11):781–6

Vasoactive intestinal polypeptide as possible mediator of relaxation in the rat gastric fundus. De Beurme FA, et al. **J Pharm Pharmacol** 1988 Oct;40(10):711–5

Hypothermia induces supersensitivity of mouse vas deferens to adrenergic agonists: evidence for postjunctional alpha 2-adrenoceptors. Goncalves J, et al. **J Pharm Pharmacol** 1989 Jan;41(1):52–4

Alphaxalone reveals GABAA receptor-mediated inhibition in guinea-pig ileum. Healing C, et al. **J Pharm Pharmacol** 1989 Jun;41(6):410–1

Distribution of dissociation constant values of muscarinic agonists. Lucchelli A, et al. **J Pharm Pharmacol** 1989 Feb; 41(2):134–5

Evidence for a postsynaptic action of neostigmine on muscarinic receptors in the anococcygeus muscle of the rat. Smith JA, et al. **J Pharm Pharmacol** 1989 Apr; 41(4):231–5

Enhancement of adenosine-induced relaxant responses of the guinea-pig isolated taenia coli and aortae by a novel nootropic agent BY-1949: comparison with dipyridamole. Tanabe S, et al. **J Pharm Pharmacol** 1988 Aug;40(8):582–4

Synthesis of some substituted quinazolinediones as potential inhibitors of smooth muscle contraction. Akgün H, et al. **J Pharm Sci** 1988 Sep;77(9):735–9

Inositol 1,4,5-trisphosphate-induced contraction in skinned single smooth muscle cells from guinea-pig taenia coli. Ohata H, et al. **J Pharmacobiodyn** 1988 Jul;11(7):479–82

A non-opioid mechanism in the inhibitory effect of ginseng saponins on electrically evoked contractions of guinea-pig ileum and mouse vas deferens. Watanabe J, et al. **J Pharmacobiodyn** 1988 Jun;11(6):453–8

C3a-induced contraction of guinea pig ileum consists of two components: fast histamine-mediated and slow prostanoid-mediated. del Balzo U, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1003–9

Epinephrine enantiomers: affinity, efficacy and potency relationships in rat smooth muscle tissues. Rice PJ, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):242–8

Measurement of human small airway smooth muscle function in vitro. Comparison of bronchiolar strips and segments. Jongejan RC, et al. **J Pharmacol Methods** 1988 Sep; 20(2):135–42

An ATP-sensitive conductance in single smooth muscle cells from the rat vas deferens. Friel DD. **J Physiol (Lond)** 1988 Jul;401:361–80

The action of pinacidil in the isolated human bladder. Fovaeus M, et al. **J Urol** 1989 Mar;141(3):637–40

Stimulation of voltage-dependent contractions by calcium channel activator Bay K 8644 in the human upper urinary tract in vitro. Hertle L, et al. **J Urol** 1989 Apr;141(4):1014–8

Denervation supersensitivity of the rabbit urinary bladder to calcium ion. Saito M, et al. **J Urol** 1989 Aug;142(2):418–21

The effect of raveron on the detrusor muscle. Susset JG, et al. **J Urol** 1989 Feb;141(2):408–13

Dependency of histamine induced phasic and tonic contractions on intracellular and extracellular calcium in guinea pig tracheal smooth muscle. Fukui H, et al. **Jpn J Pharmacol** 1989 Jun;50(2):125–30

The effect of trifluoperazine on muscle tension and cytoplasmic Ca2+ level in guinea pig ileum. Hori M, et al. **Jpn J Pharmacol** 1989 Apr;49(4):540–3

Relaxation of airway smooth muscle induced by potassium in the presence of Ca-antagonists. Koga Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):387–96

Effect of oxitropium bromide (Ba253) on isolated respiratory smooth muscle and release of chemical mediators from passively sensitized lung fragments. Kohno SW, et al. **Jpn J Pharmacol** 1989 Jun;50(2):207–16

Tetrodotoxin sensitivity of high K+-induced 86Rb efflux in the duodenal circular muscle of pigs. Kondoh T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):294–8

Effects of central nervous system-acting drugs on urinary bladder contraction in unanesthetized rats. Kontani H, et al. **Jpn J Pharmacol** 1989 Jul;50(3):327–32

Effect of progesterone on the stimulation of phosphatidylinositol turnover by epinephrine in guinea pig ductus deferens. Morishita S, et al. **Jpn J Pharmacol** 1989 Jan;49(1):95–9

Effects of calcium-entry modulators on the biphasic neurogenic contractions in the circular muscle of guinea pig vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1989 Jan;49(1):59–65

Role of bicarbonate ion in the postjunctional action of cocaine in the smooth muscle of the rat vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1989 Apr;49(4):531–4

Acetylcholine and substance P responsiveness of intestinal smooth muscles in streptozotocin diabetic rats. Liu HS, et al. **Jpn J Physiol** 1988;38(6):787–97

Effects of cytochalasins on the mechanical and membrane responses in the isolated longitudinal myometrium of pregnant rat with reference to the EGTA-resistant contraction. Osa T, et al. **Jpn J Physiol** 1988;38(6):869–96

Pharmacological action of the phospholipase A2 from the venom of Trimeresurus flavoviridis on the smooth muscle of the rat stomach. Kamata K, et al. **Life Sci** 1989; 44(2):137–42

31P NMR study of insulin effects on the isolated perfused rabbit urinary bladder. Fisher MJ, et al. **Magn Reson Med** 1989 Jan;9(1):53–65

Responses of guinea-pig gastric, ileal and gall bladder smooth muscle to desamino-cholecystokinin-octapeptide (CCK 7). Nieber K, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):513–20

A study of the mechanism of action of aminoglycoside antibiotics on the guinea pig vas deferens. Papaioannidou PG, et al. **Methods Find Exp Clin Pharmacol** 1988 Sep; 10(9):589–94

Effect of cimetropium bromide and other antispasmodic compounds on in vitro guinea-pig gallbladder. Scarpignato C, et al. **Methods Find Exp Clin Pharmacol** 1989 May; 11(5):323–9

Smooth-muscle effects of substance P. Zamfirova R, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov;10(11):683–6

Smooth-muscle effects of C-terminal tripeptide of substance P. Zamfirova R, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct;10(10):609–12

Ca2+ release and contraction induced by IP3 and contractile agonists in mammalian gastric smooth muscle. Makhlouf GM. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):137–43

Pre- and postsynaptic effects of p-tyramine and p-octopamine in the prostatic portion of the rat vas deferens. Celuch SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):39–46

Octopamine relaxes rabbit jejunal smooth muscle by selective activation of dopamine D1 receptors. Cheng JT, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):373–8

Platelet-activating factor-induced contraction of guinea-pig lung parenchymal strips: possible involvement of arachidonate metabolites. Del Monte M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):417–21

Pharmacologic and radioligand binding analysis of the actions of 1,4-dihydropyridine activators related to Bay K 8644 in smooth muscle, cardiac muscle and neuronal preparations. Kwon YW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):19–30

Interaction of agonists and selective antagonists with gastric smooth muscle muscarinic receptors. Lucchesi PA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):145–51

The effect of omega conotoxin GVIA, a peptide modulator of the N-type voltage sensitive calcium channels, on motor responses produced by activation of efferent and sensory nerves in mammalian smooth muscle. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):107–13

The role of intracellular calcium stores in motilin induced contractions of the longitudinal muscle of the rabbit duodenum. Matthijs G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):332–9

Effects of cromakalim on acetylcholine release and smooth muscle contraction in guinea-pig small intestine. Schwörer H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):706–8

Morphine tolerance and nonspecific subsensitivity of the longitudinal muscle myenteric plexus preparation of the guinea-pig to inhibitory agonists. Taylor DA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):553–9

Omega-conotoxin GVIA specifically blocks neuronal mechanisms in rat ileum. Allescher HD, et al. **Neuropeptides** 1989 May-Jun;13(4):253–8

The effect of crotoxin on the longitudinal muscle-myenteric plexus preparation of the guinea pig ileum. Muniz ZM, et al. **Neuropharmacology** 1989 Jul;28(7):741–7

Pharmacological characteristics of the smooth muscle of retractor phalli cranialis isolated from cock. Karaki H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):797–802

Comparison of the effects of RP 49356, cromakalim and nifedipine on guinea-pig trachea in vitro. Brown TJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S188–9

Ryanodine: its possible mechanism of action in the caffeine-sensitive calcium store of smooth muscle. Hisayama T, et al. **Pflugers Arch** 1988 Sep;412(4):376–81

Modulation produced by nifedipine of the unitary Ba current of dispersed smooth muscle cells of the rabbit ileum. Inoue Y, et al. **Pflugers Arch** 1989 Sep;414(5):534–42

Direct effects of motilin on isolated smooth muscle from various regions of the human stomach. Lüdtke FE, et al. **Pflugers Arch** 1989 Sep;414(5):558–63

Okadaic acid, a phosphatase inhibitor, produces a Ca2+ and calmodulin-independent contraction of smooth muscle. Obara K, et al. **Pflugers Arch** 1989 Jun;414(2):134–8

The effect of 2,3-butanedione monoxime (BDM) on smooth muscle mechanical properties. Packer CS, et al. **Pflugers Arch** 1988 Oct;412(6):659–64

A calmodulin-binding peptide relaxes skinned muscle from guinea-pig taenia coli. Rüegg JC, et al. **Pflugers Arch** 1989 Jul;414(3):282–5

Effects of esculetin (6,7-dihydroxycoumarin) on guinea-pig tracheal chains in vitro. Ragazzi E, et al. **Pharmacol Res** 1989 Mar-Apr;21(2):183–92

Action of papaverine and verapamil on norepinephrine and calcium evoked contraction of vascular and non vascular smooth muscle. D'Agostino G, et al. **Pharmacol Res Commun** 1983 Nov;15(10):937–49

Decreased response to GABA-B agonists in longitudinal smooth muscle-myenteric plexus preparations from morphine-tolerant guinea-pigs. Luzzi S, et al. **Pharmacol Res Commun** 1988 Sep;20(9):773–83

Pharmacology of natural compounds. I. Smooth muscle relaxant activity induced by a Ginkgo biloba L. extract on guinea-pig trachea. Puglisi L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):573–89

Platelet activating factor and airway smooth muscle. Morley J, et al. **Pharmacol Ther** 1989;40(3):373–82 (53 ref.)

Functional effects of imipramine on the rabbit urinary bladder: an in-vitro study. Grover R, et al. **Pharmacology** 1988;37(3):148–53

Dopamine induced contraction of human prostate in vitro. Kester RR, et al. **Proc West Pharmacol Soc** 1989;32:85–90

On the mechanism of action of sarmesin and sarilesin at angiotensin receptors in smooth muscle. Koziarz P, et al. **Proc West Pharmacol Soc** 1989;32:79–84

Pharmacological properties of endothelin in vitro. Swank SR, et al. **Proc West Pharmacol Soc** 1989;32:275

Clearance of xenon-133 from the lung as an index of bronchomotor tone. Wong A, et al. **Proc West Pharmacol Soc** 1989;32:37–9

Potentiation of contraction of rabbit airway smooth muscle by some cyclooxygenase products. Armour CL, et al. **Prostaglandins** 1988 Jun;35(6):959–68

The influence of xanthines on the contractile responses of PGF2 alpha and PGD2 in human parenchymal strips. Napier FE, et al. **Prostaglandins** 1989 Aug;38(2):227–35

Wy-48,252 (1,1,1-trifluoro-N-[3-(2-quinolinylmethoxy)= phenyl]methane sulfonamide) an orally active leukotriene D4 antagonist: pharmacological characterization in vitro and in vivo in the guinea pig. Hand JM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):97-106

Neuropeptide Y: prejunctional inhibition of vagally induced contractions in the guinea pig trachea. Grundemar L, et al. **Regul Pept** 1988 Dec;23(3):309-13

Histological and pharmacological changes in vas deferens of rats exposed to hexachlorocyclohexane. Gautam AK, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):463-6

Effect of PAF on selected smooth muscle preparations. Jancar S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):157-60

Mode of action of calcium antagonists on responses to spasmogens and antigen challenge in human airway smooth muscle. Kannan MS, et al. **Respir Physiol** 1988 Oct; 74(1):15-23

Relationship between in vivo airway reactivity and in vitro responsiveness of tracheal smooth muscle in inbred rats. Di Maria GU, et al. **Respiration** 1988;54 Suppl 1:108-13

Interleukin-1 mitogenic activity for fibroblasts and smooth muscle cells is due to PDGF-AA. Raines EW, et al. **Science** 1989 Jan 20;243(4889):393-6

Effect of three weeks' treatment with budesonide on in vitro contractile and relaxant airway effects in the rat. Gustafsson B, et al. **Thorax** 1989 Jan;44(1):24-7

Beta adrenoceptor binding and induced relaxation in airway smooth muscle from patients with chronic airflow obstruction. van Koppen CJ, et al. **Thorax** 1989 Jan; 44(1):28-35

Comparison of ovine and rat muscle-derived satellite cells: response to insulin. Dodson MV, et al. **Tissue Cell** 1988; 20(6):909-18

Effect of bombesin and substance P on the smooth muscle of the chicken crop. Denac M, et al. **Vet Res Commun** 1988;12(6):447-52

[Pharmacological actions of lignum Aquilariae Resinatum (Aquilaria agallocha Roxb.) on the smooth muscle of intestines] Zhou YB. **Chung Yao Tung Pao** 1988 Jun; 13(6):40-2, 64 (Eng. Abstr.) **(Chi)**

[Double-blind study of the effect of cyclotropium bromide on the smooth musculature of the esophagus. Description of a test of spasmolytic action] Lepsien G, et al. **Arzneimittelforschung** 1988 Jul;38(7):927-31 (Eng. Abstr.) **(Ger)**

[Effects of anti-tissue immune sera on the contractile response of cells isolated from smooth muscle of the pyloric antrum] Ammor S, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):726-8 (Eng. Abstr.) **(Ger)**

[The effect of beta-stimulation and beta-1-blockade on the motility of the upper urinary tract] Hettenbach A, et al. **Z Geburtshilfe Perinatol** 1988 Nov-Dec;192(6):273-7 (Eng. Abstr.) **(Ger)**

[The effect of various Ca++ antagonist on smooth muscles from different areas] Fossati A, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):111-8 (Eng. Abstr.) **(Ita)**

[Effect of vasoactive intestinal peptide on the motility of guinea-pig colon in vitro] Ishizawa M. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):185-92 (Eng. Abstr.) **(Jpn)**

[Vanadate and smooth muscles] Sunano S. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):147-58 (68 ref.) (Eng. Abstr.) **(Jpn)**

[Contractile effect of bombesin and GRP (gastrin releasing peptide) related peptides on bladder smooth muscle] Gotoh M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):700-4 (Eng. Abstr.) **(Jpn)**

[Effects of platelet activating factor on the bronchial musculature and vasculature in dogs] Misawa M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):737-44 (Eng. Abstr.) **(Jpn)**

[Actions of vanadate on muscles] Sunano S. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):103-12 (123 ref.) (Eng. Abstr.) **(Jpn)**

[Bronchodilating effect of Berodual in smokers and non-smokers with chronic bronchitis] Frank-Piskorska A, et al. **Pneumonol Pol** 1988 Aug;56(8):356-60 (Eng. Abstr.) **(Pol)**

[Use of biological methods in the analysis of the purinergic activity of etimizol] Migas EA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):462-4 (Eng. Abstr.) **(Rus)**

[Changes in the cyclic nucleotide levels during the contraction of smooth muscles exposed to muscarinic cholinomimetics] Danilov AF, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):938-43 (Eng. Abstr.) **(Rus)**

[Effect of serotonin on the myoelectrical activity of the body of the stomach, the pyloric sphincter and duodenum] Shemerovskiĭ KA. **Fiziol Zh SSSR** 1988 Aug;74(8):1178-85 (Eng. Abstr.) **(Rus)**

[The role of the beta-adrenoreceptors in the smooth-muscle reactions of the stomach, pyloric sphincter and duodenum to serotonin administration] Shemerovskiĭ KA, et al. **Fiziol Zh SSSR** 1988 Dec;74(12):1786-93 (Eng. Abstr.) **(Rus)**

[Modulation of the phases of ureteral slow-wave activity by physiologically active substances] Vantsian VTs, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1489-92 **(Rus)**

[Features of the effect of leukotriene LTC4 and the blocker of its biosynthesis BW755C on the contractile capability of smooth muscles and the functioning of potential-dependent calcium channels of the nerve cell] Skryma RN, et al. **Neirofiziologiia** 1989;21(1):24-31 (Eng. Abstr.) **(Rus)**

[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. **Tsitologiia** 1988 Aug;30(8):1014-7 (Eng. Abstr.) **(Rus)**

[The effect of prostaglandin F2 alpha and indomethacin on the musculature of the human appendix] Frković A, et al. **Lijec Vjesn** 1989 Jan-Feb;111(1-2):14-7 (Eng. Abstr.) **(Scr)**

[The effect of histamine and histamine H1 and H2 receptor blockers on the tone of the longitudinal muscles in the human appendix] Frković A, et al. **Lijec Vjesn** 1989 Apr-May;111(4-5):124-6 (Eng. Abstr.) **(Scr)**

[The effect of histamine and histamine receptor blockers on smooth muscle tone of the human appendix, oviduct and uterus] Frković A, et al. **Med Pregl** 1988;41(1-2):34-7 (Eng. Abstr.) **(Scr)**

[The effect of Ca2+ blockers on the response of respiratory tract smooth muscle to bronchoconstrictor and bronchodilator agents] Haxhiu MA, et al. **Plucne Bolesti** 1988 Jan-Jun;40(1-2):3-8 (Eng. Abstr.) **(Scr)**

[Contraction of various zones of the rat testicular capsule in vitro induced by noradrenaline] Martínez L, et al. **Rev Esp Fisiol** 1989 Mar;45(1):79-88 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Evidence for two isoforms of the endoplasmic-reticulum Ca2+ pump in pig smooth muscle. Eggermont JA, et al. **Biochem J** 1989 Jun 15;260(3):757-61

Purification and characterization of protein kinase C from rabbit iris smooth muscle. Myosin light-chain phosphorylation in vitro and in intact muscle. Howe PH, et al. **Biochem J** 1988 Oct 15;255(2):423-9

Minimum requirements for inhibition of smooth-muscle myosin light-chain kinase by synthetic peptides. Hunt JT, et al. **Biochem J** 1989 Jan 1;257(1):73-8

Smooth muscle expresses a cardiac/slow muscle isoform of the Ca2+-transport ATPase in its endoplasmic reticulum. Wuytack F, et al. **Biochem J** 1989 Jan 1;257(1):117-23

Effect of monoclonal antibodies on the properties of smooth muscle myosin. Ito M, et al. **Biochemistry** 1989 Jun 27; 28(13):5567-72

Phospholipid and guanine nucleotides sensitive properties of the smooth muscle adenylate cyclase catalytic unit. Krall JF, et al. **Biochemistry** 1988 Jul 12;27(14):5323-8

Characterization and differential expression of human vascular smooth muscle myosin light chain 2 isoform in nonmuscle cells. Kumar CC, et al. **Biochemistry** 1989 May 2;28(9):4027-35

Measurement of microsomal ATPase activities: a comparison between the inorganic phosphate-release assay and the NADH-coupled enzyme assay. Missiaen L, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):40-4

Evidence for the direct interaction of chicken gizzard 5'-nucleotidase with laminin and fibronectin. Stochaj U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):385-92

Secretion of acetylcholinesterase and butyrylcholinesterase from the guinea-pig isolated ileum. Appleyard ME, et al. **Br J Pharmacol** 1989 Jun;97(2):490-8

Muscarinic agents modify kinetics properties of membrane-bound guanylyl cyclase activity. Lippo de Becemberg I, et al. **FEBS Lett** 1989 Aug 14;253(1-2):16-22

The steady state intermediate of scallop smooth muscle myosin ATPase and effect of light chain phosphorylation. A molecular mechanism for catch contraction. Takahashi M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):102-7

Myosin light chain kinase structure function analysis using bacterial expression. Bagchi IC, et al. **J Biol Chem** 1989 Sep 25;264(27):15843-9

Distribution of isoelectric variants of the 17,000-dalton myosin light chain in mammalian smooth muscle [published erratum appears in J Biol Chem 1989 Feb 5;264(4):2391] Helper DJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15748-53

Location of the inhibitory region of smooth muscle myosin light chain kinase. Ikebe M, et al. **J Biol Chem** 1989 Apr 25;264(12):6967-71

Molecular cloning of the mammalian smooth muscle sarco(endo)plasmic reticulum Ca2+-ATPase. Lytton J, et al. **J Biol Chem** 1989 Apr 25;264(12):7059-65

Phosphorylation of caldesmon prevents its interaction with smooth muscle myosin. Sutherland C, et al. **J Biol Chem** 1989 Jan 5;264(1):578-83

Calcium dependence of myosin light chain phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14456-62

Effect of multiple phosphorylations of smooth muscle and cytoplasmic myosins on movement in an in vitro motility assay. Umemoto S, et al. **J Biol Chem** 1989 Jan 25; 264(3):1431-6

Calmodulin regulation of smooth-muscle myosin light-chain kinase. Means AR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S25-9 (28 ref.)

Mg-ATPase activity and motility of native thick filaments isolated from the anterior byssus retractor muscle of Mytilus edulis. Yamada A, et al. **J Muscle Res Cell Motil** 1989 Apr;10(2):124-34

Effects of modulators of myosin light-chain kinase activity in single smooth muscle cells. Itoh T, et al. **Nature** 1989 Mar 9;338(6211):164-7

[Localization of segments, phosphorylated by Ca-phospolipid-dependent protein kinase in smooth muscle caldesmon] Vorotnikov AV, et al. **Biokhimiia** 1989 Jan; 54(1):157-62 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Differential stimulation of growth related metabolism in cultured smooth muscle cells from SHR and WKY rats by combinations of EGF and LDL. Scott-Burden T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):624-32

Role of uterine epithelium in the development of myometrial smooth muscle cells. Cunha GR, et al. **Biol Reprod** 1989 Apr;40(4):861-71

Effect of age on calcium uptake in isolated duodenum cells: role of 1,25-dihydroxyvitamin D3. Liang CT, et al. **Endocrinology** 1989 Jun;124(6):2830-6

Spontaneous rhythmic contractions of human saphenous veins isolated from old subjects are sensitive to cyclooxygenase inhibitors. Schoeffter P, et al. **Experientia** 1989 May 15;45(5):459-61

Effects of nitrendipine on growth activity in cultured vascular smooth muscle cells. Absher MP, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S104-6

The development expression of the rat alpha-vascular and gamma-enteric smooth muscle isoactins: isolation and characterization of a rat gamma-enteric actin cDNA. McHugh KM, et al. **Mol Cell Biol** 1988 Dec;8(12):5224-31

IMMUNOLOGY

A 90-kd surface antigen from a subpopulation of smooth muscle cells from human atherosclerotic lesions. Printseva OJ, et al. **Am J Pathol** 1989 Feb;134(2):305-13

The effects of vasoactive intestinal peptide (VIP) antagonists, and VIP and peptide histidine isoleucine antisera on non-adrenergic, non-cholinergic relaxations of tracheal smooth muscle. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):513-20

Anaphylactic contraction of guinea pig smooth muscle passively sensitized with chicken antiserum. García X, et al. **Gen Pharmacol** 1988;19(6):829-33

The secretory characteristics of mast cells isolated from the human large intestinal mucosa and muscle. Rees PH, et al. **Immunology** 1988 Nov;65(3):437-42

Inhibition of conformational change in smooth muscle myosin by a monoclonal antibody against the 17-kDa light chain. Highashihara M, et al. **J Biol Chem** 1989 Mar 25; 264(9):5218-25

Detection of smooth muscle antibodies in patients with cryptosporidiosis. Boonpucknavig S, et al. **J Clin Lab Immunol** 1988 Nov;27(3):153

Relationship of endomysial antibodies to jejunal mucosal pathology: specificity towards both symptomatic and asymptomatic celiacs. Rossi TM, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec;7(6):858-63

[Diagnostic use of immunofluorescent detection of antibodies to smooth muscle] Nožička Z. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(5):587-600 (Eng. Abstr.) **(Cze)**

[Detection of a specific marker of gluten-dependent enteropathy by the immunoenzyme method. Comparison of the immunoperoxidase and immunofluorescence methods] Kraińska T, et al. **Przegl Dermatol** 1988 Mar-Apr; 75(2):123-8 (Eng. Abstr.) **(Pol)**

[Antibodies against smooth muscle in the detection and follow-up of the celiac disease patient] Cueto Rúa E, et al. **Acta Gastroenterol Latinoam** 1987;17(3):227-34 (Eng. Abstr.) **(Spa)**

INNERVATION

[3H]saxitoxin as a marker for canine deep muscular plexus neurons. Ahmad S, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G462-9

Inhibitory effect of anti-allergic drugs on cholinergic and non-cholinergic neurotransmissions of guinea pig bronchial muscle in vitro. Kamikawa Y. **Ann Allergy** 1989 Jul; 63(1):59-63

Role of polyamines and intracellular pH change in the hypertrophy of the denervated rat hemidiaphragm. Marais A, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):314-7

Differential susceptibility of cholinergic and noncholinergic neurogenic responses to calcium channel blockers and low Ca2+ medium in rat urinary bladder. Bhat MB, et al. **Br J Pharmacol** 1989 Apr;96(4):837-42

Contribution of galanin to non-cholinergic, non-adrenergic transmission in rat ileum. Muramatsu I, et al. **Br J Pharmacol** 1988 Aug;94(4):1241-9

Characterization of inhibitory innervation in porcine colonic circular muscle. Jager LP, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1386-97

Innervation and gap junctions of intestinal striated and smooth muscle cells in the loach. Thin section and freeze-fracture study. Hara M, et al. **Cell Tissue Res** 1989 Jul;257(1):53-9

Effects of reserpine pretreatment on neuroeffector transmission in the vas deferens. Cunnane TC, et al. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):451-5

Modulation of smooth muscle activity by excitatory and inhibitory nerves in the guinea-pig stomach. Komori K, et al. **Comp Biochem Physiol [C]** 1988;91(2):311–9

Do differences in innervation result in different post-synaptic responses to exogenous agonists? Brito AR, et al. **Gen Pharmacol** 1989;20(1):65–9

Effects of clonixin, a non-steroidal analgesic, on the neurotransmission of the vas deferens of the rat. Bustamante D, et al. **Gen Pharmacol** 1988;19(6):755–8

Nonadrenergic inhibitory innervation to the airways of the newborn cat. Waldron MA, et al. **J Appl Physiol** 1989 Apr; 66(4):1995–2000

Autonomic innervation of human airways: its clinical significance. Hira HS, et al. **J Assoc Physicians India** 1988 Mar;36(3):216–8 (20 ref.)

Spontaneous junction potentials and slow waves in the circular muscle of isolated segments of guinea-pig ileum. Smith TK. **J Auton Nerv Syst** 1989 Jul;27(2):147–54

Studies of the inhibitory non-adrenergic neuromuscular transmission in the smooth muscle of the normal human intestine and from a case of Hirschsprung's disease. Zagorodnyuk VP, et al. **J Auton Nerv Syst** 1989 Feb; 26(1):51–60

The electrical and mechanical basis of co-transmission in some vascular and non-vascular smooth muscles. Muir TC, et al. **J Auton Pharmacol** 1988 Sep;8(3):203–18

Characteristics of vagal esophageal tension-sensitive afferent fibers in the opossum. Sengupta JN, et al. **J Neurophysiol** 1989 May;61(5):1001–10

Effect of l-ephedrine on cholinergic neurotransmission in the isolated guinea pig ileum. Yamamoto R, et al. **Jpn J Pharmacol** 1989 Aug;50(4):511–4

Evidence for two types of 5-hydroxytryptamine receptor on secretomotor neurons of the guinea-pig ileum. Hendriks R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):409–14

Opioid dependence in myenteric neurons innervating the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):166–72

Galanin-like immunoreactive nerve elements in the small intestine of the rat. An electron microscopic immunocytochemical study. Fehér E, et al. **Neurosci Lett** 1988 Oct 5;92(2):137–42

Direct contacts between Auerbach's ganglia and smooth muscle cells in the small intestine of the rat. Komuro T. **Neurosci Lett** 1988 Sep 23;92(1):27–9

Simultaneous intracellular and focal extracellular recording of junction potentials and currents, and the time course of quantal transmitter action in rodent vas deferens. Cunnane TC, et al. **Neuroscience** 1989;30(3):563–75

Heterogeneity of presynaptic muscarinic receptors involved in modulation of transmitter release. Vizi ES, et al. **Neuroscience** 1989;31(1):259–67

Nerve terminals associated with the central lacteal endothelial cells. Ichikawa S, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):57–9

Ultrastructural identification of axons supplying the M. retractor phalli cranialis in chickens. Ohsawa K, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):23–37

Neurotransmitter and hormonal effects on ionic currents in uterine smooth muscle. Erulkar SD, et al. **P R Health Sci J** 1988 Aug;7(2):87–8

Pre- and post-synaptic muscarinic receptors of the rat vas deferens: an update. Silva WI, et al. **P R Health Sci J** 1988 Aug;7(2):105–10

Agonists at presynaptic receptors on sympathetic nerves differentially affect two phases of the contractile response in the rat vas deferens. Mottram DR. **Pharmacol Res Commun** 1988 Nov;20(11):963–73

Cyclic GMP affecting the tracheal nonadrenergic noncholinergic inhibitory system. Ko WC, et al. **Respir Physiol** 1988 Sep;73(3):351–62

[Muscarinic receptor subtypes of the lung: classification and clinical significance] Ukena D, et al. **Prax Klin Pneumol** 1988 Oct;42(10):742–4 (29 ref.) **(Ger)**

[Do surgical interventions in bronchial asthma promise success?] Engelmann C. **Z Arztl Fortbild (Jena)** 1989; 83(12):605–8 (20 ref.) **(Ger)**

[Summary of the dissertation: studies of impulse transmission in the inferior mesenteric ganglion] Wesselmann U. **Z Gastroenterol [Verh]** 1989 Jul;24:5–6 **(Ger)**

[The role of a neurogenic factor in regulating the spontaneous contractile activity of the frog bladder] Stepanova TP, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1020–9 **(Rus)**

[Various mechanisms of disorders of bronchial patency] Ado AD. **Klin Med (Mosk)** 1989 Feb;67(2):23–8 **(Rus)**

METABOLISM

Prostacyclin biosynthesis by cultured human myometrial smooth muscle cells: dependency on arachidonic or linoleic acid in the culture medium. MacKenzie LW, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1365–72

Gelsolin modulation in epithelial and stromal cells of mammary carcinoma. Chaponnier C, et al. **Am J Pathol** 1989 Mar;134(3):597–603

Distribution of opioid receptors in canine small intestine: implications for function. Allescher HD, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G966–74

Inositol lipid turnover and compartmentation in canine trachealis smooth muscle. Baron CB, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C375–83

K-independent Na-Cl cotransport in bovine tracheal epithelial cells. Musch MW, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):C658–65

Cholecystokinin receptors on gallbladder muscle and pancreatic acinar cells: a comparative study. von Schrenck T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G512–21

Effects of substrate and hypoxia on smooth muscle metabolism and contraction. Wendt IR. **Am J Physiol** 1989 Apr;256(4 Pt 1):C719–27

Muscarinic cholinergic inhibition of cyclic AMP accumulation in airway smooth muscle. Role of a pertussis toxin-sensitive protein. Sankary RM, et al. **Am Rev Respir Dis** 1988 Jul;138(1):145–50

Smooth muscle energetics. Paul RJ. **Annu Rev Physiol** 1989; 51:331–49 (98 ref.)

Cellular mechanisms regulating [Ca2+]i smooth muscle. van Breemen C, et al. **Annu Rev Physiol** 1989;51:315–29 (93 ref.)

Dopamine receptors in the mouse vas deferens. Smith CF, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun; 299:144–54

Effect of metoclopramide and ranitidine on acetylcholine release from isolated rat stomach. Yoshida N, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:245–56

Calcium channel binding in nerves and muscle of canine small intestine. Ahmad S, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):119–25

Effects of heparin on inositol 1,4,5-trisphosphate and guanosine 5'-O-(3-thio triphosphate) induced calcium release in cultured smooth muscle cells from rabbit trachea. Chopra LC, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):262–8

Differential effects of norepinephrine and phorbol ester on alpha-1 adrenergic receptor number and surface-accessibility in DDT1 MF-2 cells. Colucci WS, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):924–30

Short-term desensitization of phosphatidylinositol turnover via muscarinic acetylcholine receptors and histamine H1-receptors in smooth muscle. Hishinuma S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):733–9

Study of the phosphorylatable light chains of skeletal and gizzard myosins by nuclear magnetic resonance spectroscopy. Levine BA, et al. **Biochem J** 1988 Aug 15; 254(1):277–86

Early events in inositol phosphate metabolism in longitudinal smooth muscle from guinea-pig intestine stimulated with carbachol. Salmon DM, et al. **Biochem J** 1988 Sep 1; 254(2):553–7

Characterization of the autophosphorylation of chicken gizzard caldesmon. Scott-Woo GC, et al. **Biochem J** 1988 Nov 1;255(3):817–24

Cyclic GMP-dependent protein kinase stimulates the plasmalemmal Ca2+ pump of smooth muscle via phosphorylation of phosphatidylinositol. Vrolix M, et al. **Biochem J** 1988 Nov 1;255(3):855–63

Muscarinic receptor coupling to inositol phospholipid metabolism in guinea-pig cerebral cortex, parotid gland and ileal smooth muscle. Ek B, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4461–7

Gastrointestinal hormone receptors on isolated smooth muscle cells from gastric antrum of the rabbit. Moummi C, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2895–901

In-register homodimers of smooth muscle tropomyosin. Graceffa P. **Biochemistry** 1989 Feb 7;28(3):1282–7

Interaction of smooth muscle tropomyosin and smooth muscle myosin. Effect on the properties of myosin. Merkel L, et al. **Biochemistry** 1989 Mar 7;28(5):2215–20

Effects of bradykinin on prostaglandin synthesis and cytosolic calcium in rabbit subcultured renal cortical smooth muscle cells. Dussaule JC, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):34–44

Regulation of intracellular pH in rat uterine smooth muscle, studied by 31P NMR spectroscopy. Wray S. **Biochim Biophys Acta** 1988 Dec 9;972(3):299–301

Ca2+-transport by smooth muscle membranes and its regulation. Eggermont JA, et al. **Biomed Biochim Acta** 1989;48(5-6):S370–81

Activations of the Ca dependent K channel by Ca released from the sarcoplasmic reticulum of mammalian smooth muscles. Kitamura K, et al. **Biomed Biochim Acta** 1989; 48(5-6):S364–9 (51 ref.)

Inhibition of histamine-stimulated inositol phospholipid hydrolysis by agents which increase cyclic AMP levels in bovine tracheal smooth muscle. Hall IP, et al. **Br J Pharmacol** 1989 Jun;97(2):603–13

Dicyclomine discriminates between M1- and M2-muscarinic receptors in the guinea-pig ileum. Kilbinger H, et al. **Br J Pharmacol** 1988 Aug;94(4):1270–4

Estimation of affinities and efficacies for kappa-receptor agonists in guinea-pig ileum. Leff P, et al. **Br J Pharmacol** 1989 Mar;96(3):702–6

Smooth muscle cells transiently express NCAM. Akeson RA, et al. **Brain Res** 1988 Sep;464(2):107–20

Characterization of binding and receptors for epidermal growth factor in smooth muscle. Nanney LB, et al. **Cell Tissue Res** 1988 Oct;254(1):125–32

Movement of acid equivalents across the mammalian smooth muscle cell membrane. Aickin CC. **Ciba Found Symp** 1988; 139:3–22

Effect of Na+ pump suppression on reactivity of rat trachealis to cooling. Chen WY. **Clin Exp Pharmacol Physiol** 1989 May;16(5):375–81

Immunocytochemical characterization of cells in rat glomerular culture. Hegele RG, et al. **Clin Invest Med** 1989 Jun;12(3):181–6

The effect of oral L-carnitine supplementation on the muscle and plasma concentrations in the Thoroughbred horse. Foster CV, et al. **Comp Biochem Physiol [A]** 1988; 91(4):827–35

Changes in the metabolic profile of the equine gluteus medius as a function of sampling depth. Kline KH, et al. **Comp Biochem Physiol [A]** 1988;91(4):815–9

Changes of nucleotide contents and of energy charge induced by contraction, catch and relaxation in smooth molluscan muscle fibres. An analysis using reversed-phase ion-pair high-performance liquid chromatography. Gies A. **Comp Biochem Physiol [B]** 1988;91(3):483–7

Alpha-smooth muscle actin is transiently expressed in embryonic rat cardiac and skeletal muscles. Woodcock-Mitchell J, et al. **Differentiation** 1988 Dec; 39(3):161–6

Characterization of an inhibitor of actin polymerization in vinculin-rich fraction of turkey gizzard smooth muscle. Miron T, et al. **Eur J Biochem** 1988 Dec 15;178(2):543–53

Mass changes of inositol(1,4,5)trisphosphate in trachealis muscle following agonist stimulation. Chilvers ER, et al. **Eur J Pharmacol** 1989 May 30;164(3):587–90

Muscarinic stimulation of prostanoid synthesis by the isolated rat trachea: calcium dependency and effect of cortisol and cigarette smoke. Jeremy JY, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):107–15

Muscarinic receptors in human airway smooth muscle are coupled to phosphoinositide metabolism. Meurs H, et al. **Eur J Pharmacol** 1989 May 19;164(2):369–71

Calcium mobilization and phosphatidylinositol turnover in vas deferens smooth muscle of diabetic rats. Sakai Y, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):475–81

GABA receptors are involved in the modulation of the release of 5-hydroxytryptamine from the vascularly perfused small intestine of the guinea-pig. Schwörer H, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):29–37

Indirect evidence for separate vesicular neuronal origins of norepinephrine and ATP in the rabbit vas deferens. Trachte GJ, et al. **Eur J Pharmacol** 1989 May 30;164(3):425–33

Assessment of the kappa-opioid activity of a series of 6,7-benzomorphans in the rabbit vas deferens. Verlinde C, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):83–7

The use of ryanodine and calcium channel blockers to characterize intra- and extracellular calcium pools mobilized by noradrenaline in the rat vas deferens. Vesperinas G, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):309–13

Evidence for non-adrenergic binding sites for [3H]idazoxan in the smooth muscle of rabbit urethra. Yablonsky F, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):209–12

Smooth muscle isoactin and elastin in fetal bovine lung. Noguchi A, et al. **Exp Lung Res** 1989 Jul;15(4):537–52

Calpain proteolysis of free and bound forms of calponin, a troponin T-like protein in smooth muscle. Tsunekawa S, et al. **FEBS Lett** 1989 Jul 3;250(2):493–6

Possible binding sites for inositol 1,4,5-trisphosphate in canine tracheal smooth muscle cells and rat liver cells. Ishimatsu T. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):102–13

Cyclic nucleotides regulate collagen production by human intestinal smooth muscle cells. Perr HA, et al. **Gastroenterology** 1989 Jun;96(6):1521–8

The effects of some possible inhibitors of ectonucleotidases on the breakdown and pharmacological effects of ATP in the guinea-pig urinary bladder. Hourani SM, et al. **Gen Pharmacol** 1989;20(4):413–6

Methods for analyzing and interpreting cooperativity in dose-response curves—I. Antagonist effects on angiotensin receptors in smooth muscle. Moore GJ, et al. **Gen Pharmacol** 1989;20(2):193–8

Possible subtypes of ATP receptor producing contraction of rat vas deferens, revealed by cross-desensitisation. Stone TW, et al. **Gen Pharmacol** 1989;20(1):61–4

Effects of zinc and EDTA on tissue cadmium in various smooth muscles in rabbit and guinea-pig. Ueda F, et al. **Gen Pharmacol** 1988;19(5):661–4

Effects of Na+ on the process of filling and depletion of carbachol released Ca2+ store in the guinea-pig taenia coli smooth muscle. Burdyga ThV, et al. **Gen Physiol Biophys** 1988 Oct;7(5):543–6

Regulation of beta-adrenergic receptors and calcium channel agonist binding sites in cultured human embryonal smooth muscle cells. Dfmal J. **Gen Physiol Biophys** 1989 Aug; 8(4):341–50

Conserved and unique sequences in the 3'-untranslated region of rat smooth-muscle alpha-actin mRNA. Hsu CY, et al. **Gene** 1988 Sep 30;69(2):345–8

Smooth muscle releases an epithelial cell scatter factor which binds to heparin. Rosen EM, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):163–73

Muscarinic M-1 receptors mediate the bronchial hyperresponsiveness during methacholine inhalation. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):71–6

Interactions of the ulcerogen cysteamine with enteric inhibitory nerves and putative transmitters in the rat small intestine. Krantis A, et al. **J Auton Pharmacol** 1989 Jun; 9(3):219–29

Tropomyosin isoforms in developing chicken gizzard smooth muscle. Hosoya M, et al. **J Biochem (Tokyo)** 1989 May;

105(5):712–7
Cloning and expression of a smooth muscle caldesmon. Bryan J, et al. **J Biol Chem** 1989 Aug 15;264(23):13873–9
Sites phosphorylated in myosin light chain in contracting smooth muscle. Colburn JC, et al. **J Biol Chem** 1988 Dec 15;263(35):19166–73
Regulation of cytosolic calcium by cAMP and cGMP in freshly isolated smooth muscle cells from bovine trachea. Felbel J, et al. **J Biol Chem** 1988 Nov 15;263(32):16764–71
The alkali light chains of human smooth and nonmuscle myosins are encoded by a single gene. Tissue-specific expression by alternative splicing pathways. Lenz S, et al. **J Biol Chem** 1989 May 25;264(15):9009–15
A single gene codes for the beta subunits of smooth and skeletal muscle tropomyosin in the chicken. Libri D, et al. **J Biol Chem** 1989 Feb 15;264(5):2935–44
Identification of two types of smooth muscle myosin heavy chain isoforms by cDNA cloning and immunoblot analysis. Nagai R, et al. **J Biol Chem** 1989 Jun 15;264(17):9734–7
The calmodulin and F-actin binding sites of smooth muscle caldesmon lie in the carboxyl-terminal domain whereas the molecular weight heterogeneity lies in the middle of the molecule. Riseman VM, et al. **J Biol Chem** 1989 Feb 15; 264(5):2869–75
Sequential expression of smooth muscle and sarcomeric alpha-actin isoforms during BC3H1 cell differentiation. Strauch AR, et al. **J Biol Chem** 1989 May 15; 264(14):8345–55
Cytoplasmic Ca2+ is a primary determinant for myosin phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1989 Apr 15;264(11):6207–13
The regulatory light chain is required for folding of smooth muscle myosin. Trybus KM, et al. **J Biol Chem** 1988 Nov 5;263(31):16485–92
Nitrendipine block of calcium channel currents in vascular smooth muscle and adrenal glomerulosa cells. McCarthy RT, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S98–101
Potential-dependent interactions of nitrendipine and related 1,4-dihydropyridines in functional smooth muscle preparations. Triggle DJ, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S91–3
Neoplastic modulation of extracellular matrix: stimulation of chondroitin sulfate proteoglycan and hyaluronic acid synthesis in co-cultures of human colon carcinoma and smooth muscle cells. Iozzo RV, et al. **J Cell Biochem** 1989 Apr;39(4):355–78
Spatial pattern of myosin phosphorylation in contracting smooth muscle cells: evidence for contractile zones. Bennett JP, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2623–9
Induction of platelet-derived growth factor receptor expression in smooth muscle cells and fibroblasts upon tissue culturing. Terracio L, et al. **J Cell Biol** 1988 Nov; 107(5):1947–57
Protamine selectively inhibits collagen synthesis by human intestinal smooth muscle cells and other mesenchymal cells. Perr HA, et al. **J Cell Physiol** 1989 Sep;140(3):463–70
Differential inhibitory effects of forskolin, isoproterenol, and dibutyryl cyclic adenosine monophosphate on phosphoinositide hydrolysis in canine tracheal smooth muscle. Madison JM, et al. **J Clin Invest** 1988 Oct; 82(4):1462–5
Cytoplasmic free calcium, myosin light chain phosphorylation, and force in phasic and tonic smooth muscle. Himpens B, et al. **J Gen Physiol** 1988 Dec; 92(6):713–29
Active site trapping of nucleotide by smooth and non-muscle myosins. Cross RA, et al. **J Mol Biol** 1988 Sep 5; 203(1):173–81
Deamination of hordenine by monoamine oxidase and its action on vasa deferentia of the rat. Barwell CJ, et al. **J Pharm Pharmacol** 1989 Jun;41(6):421–3
Effect of [D-Ala2,MePhe4,Gly-ol5]enkephalin and [D-Ala2,D-Leu5]enkephalin on ion and amino acid transport in rabbit ileum. Meyer G, et al. **J Pharm Pharmacol** 1989 Jul;41(7):494–5
Regulation of phosphorylase A formation and calcium content in aortic smooth muscle and smooth muscle cells: effects of atrial natriuretic peptide II. Cornwell TL, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):524–30
Classification of angiotensin receptors in rat isolated uterus, portal vein, and aorta using a slowly dissociating antagonist [Sar1,Ile8]ANG II for receptor blockade. Scanlon MN, et al. **J Pharmacol Methods** 1988 Nov;20(3):207–24
Phosphorous compounds studied by 31P nuclear magnetic resonance spectroscopy in the taenia of guinea-pig caecum. Nakayama S, et al. **J Physiol (Lond)** 1988 Aug;402:565–78
Decrease in neuronal uptake of noradrenaline simply explains the supersensitivity after sympathectomy in the rat iris dilator. Shibata K, et al. **Jpn J Pharmacol** 1989 May; 50(1):19–29
Effects of neurotransmitters and other pharmacological agents on 32Pi incorporation into phospholipids of the iris muscle of the rabbit. Abdel-Latif AA. **Life Sci** 1974 Sep 1;15(5):961–73
Effects of streptozotocin-induced hyperglycemia on agonist-stimulated phosphatidylinositol turnover in rat aorta. Legan E. **Life Sci** 1989;45(5):371–8
Absence of alpha-2 adrenergic effects on cAMP production in a genital tract smooth muscle cell line. Phillippe M, et al. **Life Sci** 1989;44(21):1555–62
Comparative analysis of cytokine induction in human vascular endothelial and smooth muscle cells. Loppnow H, et al. **Lymphokine Res** 1989 Fall;8(3):293–9
Age-related changes in gallbladder contractility and gallbladder cholecystokinin receptor population in the guinea pig. Poston GJ, et al. **Mech Ageing Dev** 1988 Dec; 46(1-3):225–36
Purification of calmodulin and preparation of immobilized calmodulin. Lukas TJ, et al. **Methods Enzymol** 1988; 157:328–39
Polyphosphoinositides, generation of second messengers, myosin light chain phosphorylation and contraction in rabbit iris sphincter smooth muscle. Abdel-Latif AA. **Mol Cell Biochem** 1988 Jul-Aug;82(1-2):125–30
Solubilization and characterization of the pyrilamine-binding protein from cultured smooth muscle cells. Mitsuhashi M, et al. **Mol Pharmacol** 1989 Jun;35(6):751–9
Receptor glycosylation regulates the affinity of histamine H1 receptors during smooth muscle cell differentiation. Mitsuhashi M, et al. **Mol Pharmacol** 1989 Mar;35(3):311–8
Subcellular localization of leukotriene D4 receptors in sheep tracheal smooth muscle. Mong S, et al. **Mol Pharmacol** 1988 Oct;34(4):590–6
Smooth-muscle involvement in Duchenne's muscular dystrophy [letter] Palmieri GM, et al. **N Engl J Med** 1988 Nov 24;319(21):1418–9
Changes in extracellular calcium within the physiological range influence receptor-mediated inositol phosphate responses in brain and tracheal smooth muscle slices. Baird JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):247–51
Uptake inhibitors do not change the effect of imidazoline alpha 2-adrenoceptor agonists on transmitter release evoked by single pulse stimulation in mouse vas deferens. Gonçalves J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):288–92
Opioid mu and kappa receptors on axons of cholinergic excitatory motor neurons supplying the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):397–400
Effect of vasoactive intestinal polypeptide on the release of serotonin from the in vitro vascularly perfused small intestine of guinea pig. Schwörer H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):540–5
Chloride-dependence of the potency of inhibitors of the neuronal noradrenaline carrier in the rat vas deferens. Ungell AL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):65–70
Effects of cortisol on GABAA receptor-mediated responses compared in guinea-pig ileum and rat cuneate nucleus. Andres-Trelles F, et al. **Neuropharmacology** 1989 Jul; 28(7):705–8
Vasoactive intestinal peptide (VIP) receptors in the canine gastrointestinal tract. Zimmerman RP, et al. **Peptides** 1988 Nov-Dec;9(6):1241–53
Effects of 5-hydroxytryptamine (serotonin) and forskolin on intracellular free calcium in isolated and fura-2 loaded smooth-muscle cells from the anterior byssus retractor (catch) muscle of Mytilus edulis. Ishii N, et al. **Pflugers Arch** 1989 Jun;414(2):162–70
Myosin composition and functional properties of smooth muscle from the uterus of pregnant and non-pregnant rats. Sparrow MP, et al. **Pflugers Arch** 1988 Oct;412(6):624–33
Classification of angiotensin receptors in rat isolated uterus, portal vein, and aorta with the novel competitive antagonist sarmesin. Scanlon MN, et al. **Pharmacology** 1988; 37(3):137–47
Effects of allopurinol on the glutathione status and thiobarbituric acid reactive substances (TBA-RS) in ischaemic rat intestine. Siems W, et al. **Pharmazie** 1988 Jun; 43(6):438–9
Excitatory receptor-prostanoid synthesis coupling in smooth muscle: mediation by calcium, protein kinase C and G proteins. Jeremy JY, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988;34(3):215–27 (149 ref.)
Comparison of motilin binding to crude homogenates of human and canine gastrointestinal smooth muscle tissue. Peeters TL, et al. **Regul Pept** 1988 Nov;23(2):171–82
Interaction of thrombin and factor Xa with bovine vascular endothelial cells, smooth muscle cells and rat hepatoma cells. Dryjski M, et al. **Thromb Haemost** 1988 Oct 31; 60(2):148–52
Muscarinic receptor heterogeneity in smooth muscle: binding and functional studies with AF-DX 116. Ladinsky H, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:44–8 (17 ref.)
[How can bivalves continue to close the shells?—regulation and a molecular mechanism on the economical catch contraction] Morita F. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1307–16 (42 ref.) **(Jpn)**
[Intracellular Ca2+ homeostasis in the smooth muscle and functional role of calcium pump in the sarcolemma] Kosterin SA, et al. **Biofizika** 1988 Sep-Oct;33(5):850–4 (Eng. Abstr.) **(Rus)**
[Local expression of cytokeratins 8, 17 and 18 in the mesenchyme and smooth muscles in the early stages of human organogenesis] Bozhok IuM, et al. **Ontogenez** 1989 May-Jun;20(3):250–7 (Eng. Abstr.) **(Rus)**
[The role of sarcolemma calcium pump in regulating tonic smooth muscle contraction] Kosterin SA, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):69–75 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Congenital smooth muscle hamartoma. Huffman DW, et al. **Am Fam Physician** 1989 Jun;39(6):117–20
The myofibroblast. Possible derivation from macrophages in xanthogranuloma. Bhawan J, et al. **Am J Dermatopathol** 1989 Jun;11(3):255–8
Hyperplasia of jejunal smooth muscle in the myenterically denervated rat. See NA, et al. **Cell Tissue Res** 1988 Sep; 253(3):609–17
Severe pulmonary hypertension with diffuse smooth muscle proliferation of the lungs. Pulmonary tuberous sclerosis? Wagener OE, et al. **Chest** 1989 Jan;95(1):234–7
[Changes in the bronchial musculature in chronic obstructive respiratory tract diseases] Morgenroth K, et al. **Pneumologie** 1989 Mar;43(3):159–63 (Eng. Abstr.) **(Ger)**
[Sonographic structure of the intestinal wall—significance for the diagnosis of inflammatory intestinal diseases] Meckler U, et al. **Ultraschall Med** 1989 Jun;10(3):152–7 (15 ref.) (Eng. Abstr.) **(Ger)**
[Urinary continence in the female—a morphologic study] Dorschner W, et al. **Z Urol Nephrol** 1989 Apr;82(4):201–8 (Eng. Abstr.) **(Ger)**
[A morphometric study of hypertrophy of the bronchial smooth muscles and its distribution in bronchial asthma] Ebina M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):727–36 (Eng. Abstr.) **(Jpn)**
[Pathogenetic basis of the diagnosis and treatment of lymphedema of the lower extremities] Potashov LV, et al. **Kardiologiia** 1989 Mar;29(3):63–6 (Eng. Abstr.) **(Rus)**
[Smooth muscle hamartoma or nevus of Becker? Apropos of 4 cases] Civatte J, et al. **Med Cutan Ibero Lat Am** 1988; 16(2):145–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Longitudinally and circularly measured EMG activity in the human uterine cervix during labour. Pajntar M, et al. **Acta Physiol Hung** 1988;71(4):497–502
Colloid osmotic pressure of interstitial fluid in rat subcutis and skeletal muscle: comparison of various wick sampling techniques. Wiig H, et al. **Acta Physiol Scand** 1988 Jun; 133(2):167–75
Pharmacological activities of lipoxins and related compounds. Dahlén SE. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:122–7 (16 ref.)
Beta adrenoceptor desensitization in lung: a role for prostaglandins. Omini C, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:524–7
Responses to histamine and selective H2-receptor agonists in lung parenchymal strips from normal and sensitized guinea-pigs. Cortijo J, et al. **Agents Actions** 1989 Aug; 28(1-2):45–52
Calcium control of smooth muscle contractility. Stull JT, et al. **Am J Med Sci** 1988 Oct;296(4):241–5 (29 ref.)
Uncoupling of excitation from contraction in uterine smooth muscle in near-term ewes. Reid DL, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):229–33
Different mechanisms of contraction generation in circular muscle of canine colon. Barajas-López C, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G570–80
VIP and acetylcholine: neurotransmitters in esophageal circular smooth muscle. Behar J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G380–5
On-line computer analysis of human lower esophageal sphincter relaxation. Castell JA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G794–9
Effect of purified Clostridium difficile toxins on intestinal smooth muscle. I. Toxin A. Gilbert RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G759–66
Effect of purified Clostridium difficile toxins on intestinal smooth muscle. II. Toxin B. Gilbert RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G767–72
Contractile force and intracellular Ca2+ during relaxation of canine tracheal smooth muscle. Gunst SJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C355–64
Calcitonin gene-related peptide action on intestinal circular muscle. Holzer P, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G546–52
Ascending enteric reflex: multiple neurotransmitter systems and interactions. Holzer P. **Am J Physiol** 1989 Mar;256(3 Pt 1):G540–5
An ATP-sensitive conductance in cultured smooth muscle cells from pregnant rat myometrium. Honoré E, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C297–305
Local effect of substance P on colonic motor activity in different experimental states. Hou JY, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G997–1004
Electrical coupling and pacemaker activity in colonic smooth muscle. Huizinga JD, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C653–60
Measurement and simulation of noninactivating Ca current in smooth muscle cells. Imaizumi Y, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C880–5
ANP relaxes bovine tracheal smooth muscle and increases cGMP. Ishii K, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C495–500
Effect of prostaglandin E2 on rabbit colonic smooth muscle

cell contraction. Kao HW, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 1):G807–12

Characterization of the effects of neurokinins on canine antral muscle. Koelbel CB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G779–86

Physiological, morphological, and histochemical properties of cat external anal sphincter. Krier J, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G772–8

Properties of receptors for gastrin and CCK on gastric smooth muscle cells. Menozzi D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G73–9

Neuropeptide responses and mechanics of the proximal and distal feline colon in vitro. Merlo A, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G787–93

A human airway smooth muscle cell line that retains physiological responsiveness. Panettieri RA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C329–35

Neuropeptide Y augments adrenergic contractions at feline lower esophageal sphincter. Parkman HP, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G589–97

Role of magnesium in activation of smooth muscle. Paul RJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C465–72

Changes of tracheal smooth muscle stiffness during an isotonic contraction. Seow CY, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C341–50

Functional gradients in muscle cells isolated from gallbladder, cystic duct, and common bile duct. Severi C, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G647–52

Effects of membrane potential on electrical slow waves of canine proximal colon. Smith TK, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C828–34

Electrical pacemakers of canine proximal colon are functionally innervated by inhibitory motor neurons. Smith TK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C466–77

Control mechanisms of sphincter of Oddi contraction rate in the opossum. Suzuki T, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):G619–26

Ketocyclazocine, a kappa-opioid receptor agonist, and control of intestinal myoelectric activity in dogs. Telford GL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G566–70

Antigen-induced contraction of jejunal smooth muscle in the sensitized rat. Vermillion DL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G701–8

Heat production of rat anococcygeus muscle during isometric contraction. Walker JS, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C536–42

Effect of ileal infusion of lipid on jejunal motor patterns after a nutrient and nonnutrient meal. Welch IM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G800–6

Effect of leukotriene C4 on electromechanical activity and Ca2+ uptake in taenia coli. Zschauer A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C433–41

The effects of epithelial cell supernatant on contractions of isolated canine tracheal smooth muscle. Barnett K, et al. **Am Rev Respir Dis** 1988 Oct;138(4):780–3

Comparison of maximal bronchoconstriction in vivo and airway smooth muscle responses in vitro in nonasthmatic humans. de Jongste JC, et al. **Am Rev Respir Dis** 1988 Aug;138(2):321–6

The use of the internal perimeter to compare airway size and to calculate smooth muscle shortening. James AL, et al. **Am Rev Respir Dis** 1988 Jul;138(1):136–9

Endogenous regulation of bronchomotor tone. Leff AR. **Am Rev Respir Dis** 1988 May;137(5):1198–216 (210 ref.)

Some epithelial metabolic factors affecting airway smooth muscle. Nadel JA. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S22–3

Sodium and calcium influx induced by phorbol esters in airway smooth muscle cells. Souhrada M, et al. **Am Rev Respir Dis** 1989 Apr;139(4):927–32

The in vivo effects of autonomic drugs and electroejaculation on prostate gland contractility in the rat. Hib J. **Andrologia** 1988 Jul–Aug;20(4):289–94

Mechanisms involved in the action of prostaglandins as modulators of neurotransmission. Gustafsson LE. **Ann N Y Acad Sci** 1989;559:178–91

Calcium channels in smooth muscle. Properties and regulation. Triggle DJ, et al. **Ann N Y Acad Sci** 1989; 560:215–29 (63 ref.)

Regulation of smooth muscle contractile elements by second messengers. Kamm KE, et al. **Annu Rev Physiol** 1989; 51:299–313 (90 ref.)

Contraction in smooth muscle cells. Murphy RA. **Annu Rev Physiol** 1989;51:275–83 (50 ref.)

Smooth muscle and the surgeon. Catchpole BN. **Aust N Z J Surg** 1989 Mar;59(3):199–208

Direct regulation of smooth muscle contractile elements by second messengers. Nishimura J, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):929–35

N-acylated pentapeptides antagonists of substance P on guinea-pig ileum. Schmitt P, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):323–7

Calcium channels in smooth muscle cells. Bolton TB, et al. **Biochem Soc Trans** 1988 Aug;16(4):492–3 (17 ref.)

Ca2+ regulation of the thin filaments: biochemical mechanism and physiological role. Marston S, et al. **Biochem Soc Trans** 1988 Aug;16(4):494–7

Smooth operators. The molecular mechanics of smooth muscle contraction. Cross RA. **Bioessays** 1989 Jul; 11(1):18–21 (26 ref.)

Characterization of cyclic nucleotide and inositol 1,4,5-trisphosphate-sensitive calcium-exchange activity of smooth muscle cells cultured from the human corpora cavernosa. Krall JF, et al. **Biol Reprod** 1988 Nov; 39(4):913–22

Smooth muscle effects of hydroxylated docosahexaenoates produced from human platelet. Karanian JW, et al. **Biomed Biochim Acta** 1988;47(10–11):S79–82

Streaming potential measurements in Ca2+-activated K+ channels from skeletal and smooth muscle. Coupling of ion and water fluxes. Alcayaga C, et al. **Biophys J** 1989 Feb;55(2):367–71

Structure-activity relationship of tetrapeptides related to dermorphin: a 500-MHz 1H-nmr study. Castiglione-Morelli MA, et al. **Biopolymers** 1988 Sep; 27(9):1353–61

A calcium-dependent rather than a G-protein mechanism is involved in the inward current evoked by muscarinic receptor stimulation in dialysed single smooth muscle cells of small intestine. Lim SP, et al. **Br J Pharmacol** 1988 Oct; 95(2):325–7

Characterization of ion movements and their relationship to muscarinic receptor binding and excitation-contraction coupling in guinea pig ileal longitudinal smooth muscle. Bolger GT, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):331–43

The action and metabolism of peptide leukotrienes in the isolated bullfrog lung. Heller RS, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):309–14

Role of cGMP in relaxation of vascular and other smooth muscle. Nakatsu K, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):251–62 (62 ref.)

Contraction of guinea pig trachea by epidermal growth factor—urogastrone. Patel P, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1308–12

Influence of platelet-activating factor on leukotriene D4-induced contractions of the guinea pig parenchymal strip. Yaghi A, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):315–21

Interaction of aminoglycoside antibiotics with calcium channel blockers at the smooth muscles of the isolated tracheal rings of the rat. Paradelis A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):321

Mechanisms of adaptive supersensitivity in smooth muscles vs cardiac muscle: a brief review. Fleming WW. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):447–50 (13 ref.)

Determinants of smooth muscle sensitivity. Head RJ. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):441–5 (15 ref.)

New perspectives on catch. Cohen C, et al. **Comp Biochem Physiol** [C] 1988;91(1):31–3

Proceedings of a workshop entitled "Neuromuscular function and dysfunction of the gastrointestinal tract in aging". Szurszewski JH, et al. **Dig Dis Sci** 1989 Jul;34(7):1135–46

Synthesis and calcium channel antagonist activity of alkyl t-butyl esters of nifedipine analogues containing pyridinyl substituents. Ramesh M, et al. **Drug Des Deliv** 1987 Dec; 2(2):79–89

Synthesis and calcium channel antagonist activity of nifedipine analogues containing 1,2-dihydropyridyl in place of the 1,4-dihydropyridyl moiety. Soboleski DA, et al. **Drug Des Deliv** 1988 Feb;2(3):177–89

Quinidine and quinine effects on the slow wave activity of colonic circular muscle. Barajas-López C, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):137–40

Effect of noradrenaline on current- and voltage-clamped muscle cells of the guinea-pig vas deferens in normal Krebs solution. Mimata T, et al. **Eur J Pharmacol** 1989 Apr 12; 163(1):181–5

Characterization of the UV-induced electrophysiological response in smooth muscle. Nelemans A, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):283–90

Preferential support of Ca2+ uptake in smooth muscle plasma membrane vesicles by an endogenous glycolytic cascade. Paul RJ, et al. **FASEB J** 1989 Sep;3(11):2298–301

Cell calcium and its regulation in smooth muscle. Somlyo AP, et al. **FASEB J** 1989 Sep;3(11):2266–76 (108 ref.)

Voltage and time dependency of calcium mediated phasic and tonic responses in rat vas deferens smooth muscle—the effect of some calcium agonist and antagonist agents. Langton PD, et al. **Gen Pharmacol** 1988;19(6):775–87

Interactions of neurogenic responses of longitudinal and circular muscle in the guinea-pig ileum. Kadlec O, et al. **Gen Physiol Biophys** 1989 Aug;8(4):351–69

Properties of the inward ionic currents and their regulating agents in smooth muscle cells. Kitamura K, et al. **Gen Physiol Biophys** 1989 Aug;8(4):289–312 (134 ref.)

Angiotensin II induces c-fos expression in smooth muscle via transcriptional control. Naftilan AJ, et al. **Hypertension** 1989 Jun;13(6 Pt 2):706–11

Reflex regulation of the sphincter of Oddi by intrapancreatic ductal pressure in the Japanese monkey. Okazaki K, et al. **Int J Pancreatol** 1989 May;4(4):407–18

Epithelium-derived relaxing factor(s) and bronchial reactivity. Vanhoutte PM. **J Allergy Clin Immunol** 1989 May;83(5):855–61 (51 ref.)

Cold and hyperosmolar fluids in canine trachea: vascular and smooth muscle tone and albumin flux. Deffebach ME, et al. **J Appl Physiol** 1989 Mar;66(3):1309–15

Adenosine selectively inhibits noncholinergic transmission in guinea pig bronchi. Kamikawa Y, et al. **J Appl Physiol** 1989 May;66(5):2084–91

Differential effects of prostaglandin E2 on contractions of airway smooth muscle. Madison JM, et al. **J Appl Physiol** 1989 Mar;66(3):1397–407

Calcium channel currents in isolated smooth muscle cells from human bronchus. Marthan R, et al. **J Appl Physiol** 1989 Apr;66(4):1706–14

Intravenous papain-induced cartilage softening decreases preload of tracheal smooth muscle. Moreno RH, et al. **J Appl Physiol** 1989 Apr;66(4):1694–8

Expression of airway contractile properties and acetylcholinesterase activity in swine. Murphy TM, et al. **J Appl Physiol** 1989 Jul;67(1):174–80

Isoproterenol attenuates myosin phosphorylation and contraction of tracheal muscle. Obara K, et al. **J Appl Physiol** 1989 May;66(5):2017–22

A comparison of preterm and adult airway smooth muscle mechanics. Panitch HB, et al. **J Appl Physiol** 1989 Apr; 66(4):1760–5

Effect of tracheal smooth muscle tone on collapsibility of immature airways. Penn RB, et al. **J Appl Physiol** 1988 Aug;65(2):863–9

Role of platelets in contraction of canine tracheal muscle elicited by PAF in vitro. Popovich KJ, et al. **J Appl Physiol** 1988 Aug;65(2):914–20

Mechanisms of protein kinase C regulation of airway contractility. Schramm CM, et al. **J Appl Physiol** 1989 Apr; 66(4):1935–41

Specific reaginic antibody IgG1-induced changes of airway smooth muscle cells. Souhrada M, et al. **J Appl Physiol** 1988 Aug;65(2):767–75

Airway epithelium modulates the responsiveness of porcine bronchial smooth muscle. Stuart-Smith K, et al. **J Appl Physiol** 1988 Aug;65(2):721–7

Excitatory effects of opiates on the spontaneous EMG activity in pigeon oesophagus. Mulè F, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):127–33

Reflex changes in circular muscle activity elicited by stroking the mucosa: an electrophysiological analysis in the isolated guinea-pig ileum. Smith TK, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):205–18

Role of tropoelastin fragmentation in elastogenesis in rat smooth muscle cells. Franzblau C, et al. **J Biol Chem** 1989 Sep 5;264(25):15115–9

Receptor-coupled, permeabilized smooth muscle. Role of the phosphatidylinositol cascade, G-proteins, and modulation of the contractile response to Ca2+. Kitazawa T, et al. **J Biol Chem** 1989 Apr 5;264(10):5339–42

Biochemical events associated with activation of smooth muscle contraction. Miller-Hance WC, et al. **J Biol Chem** 1988 Oct 5;263(28):13979–82

Regulation of metabolism and contraction by cytoplasmic calcium in the intestinal smooth muscle. Ozaki H, et al. **J Biol Chem** 1988 Oct 5;263(28):14074–9

Voltage-dependent calcium channels in smooth muscle cells. Bolton TB, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S3–7 (41 ref.)

Periodic organization of the contractile apparatus in smooth muscle revealed by the motion of dense bodies in single cells. Kargacin GJ, et al. **J Cell Biol** 1989 Apr; 108(4):1465–75

Motor unit regulation of mammalian pharyngeal dilator muscle activity. van Lunteren E, et al. **J Clin Invest** 1989 Aug;84(2):577–85

Inward current in single smooth muscle cells of the guinea pig taenia coli. Yamamoto Y, et al. **J Gen Physiol** 1989 Mar;93(3):521–50

Outward current in single smooth muscle cells of the guinea pig taenia coli. Yamamoto Y, et al. **J Gen Physiol** 1989 Mar;93(3):551–64

Prostaglandins influence myofibroblast contractility in Dupuytren's disease. Badalamente MA, et al. **J Hand Surg [Am]** 1988 Nov;13(6):867–71

Expression of c-myc proto-oncogene in hearts and cultured smooth muscle cells of spontaneously hypertensive rats. Negoro N, et al. **J Hypertens Suppl** 1988 Dec;6(4):S128–30

Biologic activity of a C2-derived peptide. Demonstration of a specific interaction with guinea pig lung tissues. Cholin S, et al. **J Immunol** 1989 Apr 1;142(7):2401–4

Darmstoff analogues. 3. Actions of choline esters of acetal phosphatidic acids on visceral smooth muscle. Marx MH, et al. **J Med Chem** 1989 Jun;32(6):1319–22

What is latch? New ideas about tonic contraction in smooth muscle. Marston SB. **J Muscle Res Cell Motil** 1989 Apr; 10(2):97–100 (42 ref.)

The length dependence of the series elasticity of pig bladder smooth muscle. Van Mastrigt R. **J Muscle Res Cell Motil** 1988 Dec;9(6):525–32

Noradrenergic, purinergic, and cholinergic transmission in the mouse vas deferens: influence of field-stimulation parameters, reserpinization, 6-hydroxydopamine and 4-aminopyridine. Kaschube M, et al. **J Neural Transm** 1989; 76(1):39–53

Function of smooth muscle and nerve after small intestinal transplantation in the rat: effect of storing donor bowel in Eurocollins. Taguchi T, et al. **J Pediatr Surg** 1989 Jul; 24(7):634–8

Actions of amrinone and milrinone on the guinea-pig ileum. Stone TW, et al. **J Pharm Pharmacol** 1988 Jul;40(7):521–3

Calcium-independent activation of contractile apparatus in smooth muscle by calyculin-A. Ishihara H, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):388–96

Novel and versatile superfusion system. Its use in the evaluation of some spasmogenic and spasmolytic agents using guinea-pig isolated tracheal smooth muscle. Coleman RA, et al. **J Pharmacol Methods** 1989 Mar;21(1):71–86

Loading of fura-2/AM with an aid of DFP on single smooth muscle cells prepared from guinea pig taenia coli. Maruyama I, et al. **J Pharmacol Methods** 1989 Mar; 21(1):1-12

Cross-bridge behaviour in skinned smooth muscle of the guinea-pig taenia coli at altered ionic strength. Arheden H, et al. **J Physiol (Lond)** 1988 Sep;403:539-58

Time course of transmitter action at the sympathetic neuroeffector junction in rodent vascular and non-vascular smooth muscle. Astrand P, et al. **J Physiol (Lond)** 1988 Jul;401:657-70

Electrophysiological analysis of the inactivation of sympathetic transmitter in the guinea-pig vas deferens. Cunnane TC, et al. **J Physiol (Lond)** 1988 Oct;404:349-64

Spontaneous electrical and contractile activity correlated to 86Rb+ efflux in smooth muscle of guinea-pig mesotubarium. Hellstrand P, et al. **J Physiol (Lond)** 1988 Dec;407:587-97

Pacemaker activity in the proximal lower oesophageal sphincter of the dog. Huizinga JD, et al. **J Physiol (Lond)** 1989;408:19-30

Calcium transients evoked by electrical stimulation of smooth muscle from guinea-pig ileum recorded by the use of Fura-2. Ito Y, et al. **J Physiol (Lond)** 1988 Dec;407:117-34

Some membrane properties of the circular muscle of chicken rectum and its non-adrenergic non-cholinergic innervation. Komori S, et al. **J Physiol (Lond)** 1988 Jul; 401:417-35

Human rectosigmoid electromyography: a new approach and some pitfalls. Wegman EA, et al. **J R Soc Med** 1989 Feb; 82(2):88-90

Relaxation-induced contraction of smooth muscle surrounding hamster ovarian follicles. Self DA, et al. **J Reprod Fertil** 1989 Mar;85(2):593-603

Pharmacological responses of rabbit urinary bladder after subtotal cystectomy. Lin AT, et al. **J Urol** 1989 Aug;142(2):409-12

Urodynamic studies after intrathecal administration of baclofen and morphine in dogs. Magora F, et al. **J Urol** 1989 Jan;141(1):143-7

Economic force maintenance in a phasic smooth muscle of mollusca. Iwamoto H, et al. **Jpn J Physiol** 1988; 38(6):887-95

Postpartum changes in the mechanical responses of the circular muscle of rat uterus. Osa T, et al. **Jpn J Physiol** 1988;38(3):329-44

Calcium-mobilizing receptors, polyphosphoinositides, generation of second messengers and contraction in the mammalian iris smooth muscle: historical perspectives and current status. Abdel-Latif AA. **Life Sci** 1989;45(9):757-86 (91 ref.)

Effect of inhibitors of enkephalin degradation in the isolated guinea-pig ileum. van Amsterdam JG, et al. **Life Sci** 1988; 43(19):1529-36

Electromechanical effects of leukotriene D4 on ferret tracheal muscle and its muscarinic responsiveness. Lee HK, et al. **Lung** 1989;167(3):173-85

Whole-cell voltage clamp and intracellular perfusion technique on single smooth muscle cells. Ohya Y, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):79-86

Relaxation of vascular and tracheal smooth muscle by cyclic nucleotide analogs that preferentially activate purified cGMP-dependent protein kinase. Francis SH, et al. **Mol Pharmacol** 1988 Oct;34(4):506-17

Regulation of Ca2+-dependent K+-channel activity in tracheal myocytes by phosphorylation. Kume H, et al. **Nature** 1989 Sep 14;341(6238):152-4

Protein kinase C may regulate the tonic component of intestinal smooth muscle contraction in response to substance P. Holzer P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):214-20

Neuronally released (-)-noradrenaline relaxes smooth muscle of calf trachea mainly through beta 1-adrenoceptors: comparison with (-)-adrenaline and relation to adenylate cyclase stimulation. Lemonine H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):85-98

Human isolated small intestine: motor responses of the longitudinal muscle to field stimulation and exogenous neuropeptides. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):415-23

Role of sodium ions in angiotensin tachyphylaxis in the guinea-pig ileum and taenia coli. Paiva TB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):656-60

Failure of non-adrenergic transmission in the rat vas deferens. Ebong OO, et al. **Neuropharmacology** 1989 Apr; 28(4):335-41

Naloxone-precipitated contractions of the guinea pig ileum made tolerant to a synthetic opioid peptide: evidence against the involvement of capsaicin-sensitive neurones. Barthó L. **Neurosci Lett** 1988 Dec 19;95(1-3):198-202

Influence of smooth muscle tone and longitudinal tension on the collapsibility of immature airways. Penn RB, et al. **Pediatr Pulmonol** 1988;5(3):132-8

Development of calcium channels in gastric smooth muscle. Hyman PE, et al. **Pediatr Res** 1989 Jun;25(6):600-4

The actions of neurokinins and substance P in canine pylorus, antrum and duodenum. Allescher HD, et al. **Peptides** 1989 May-Jun;10(3):671-9

In vitro response of rat gastrointestinal segments to cholecystokinin and bombesin. Margolis RL, et al. **Peptides** 1989 Jan-Feb;10(1):157-61

FMRFamide enhances acetylcholine-induced contractions of guinea pig ileum. Raffa RB, et al. **Peptides** 1989 May-Jun; 10(3):693-5

Local application of neurotensin to abdominal organs triggers cardiovascular reflexes in guinea pigs: possible mechanisms. Rioux F, et al. **Peptides** 1989 May-Jun;10(3):647-55

A potent and selective agonist for NK-2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May-Jun;10(3):593-5

Calcium sensitivity and energetics of contraction in skinned smooth muscle of the guinea pig taenia coli at altered pH. Arheden H, et al. **Pflugers Arch** 1989 Mar;413(5):476-81

Heterogeneity in spontaneous and tetraethylammonium induced intracellular electrical activity in colonic circular muscle. Barajas-López C, et al. **Pflugers Arch** 1988 Jul; 412(1-2):203-10

Substance P, like acetylcholine, augments one type of Ca2+ current in isolated smooth muscle cells. Clapp LH, et al. **Pflugers Arch** 1989 Mar;413(5):565-7

Mn2+ activates skinned smooth muscle cells in the absence of myosin light chain phosphorylation. Hoar PE, et al. **Pflugers Arch** 1988 Aug;412(3):225-30

Stretch-activated ion channels in smooth muscle: a mechanism for the initiation of stretch-induced contraction. Kirber MT, et al. **Pflugers Arch** 1988 Sep;412(4):339-45

Afferent pathways involved in reflex regulation of airway smooth muscle. Coleridge HM, et al. **Pharmacol Ther** 1989; 42(1):1-63 (275 ref.)

Myoelectrical activity changes in the uterus and vagina during oviposition in the conscious domestic hen. Wechsung E, et al. **Poult Sci** 1988 Nov;67(11):1615-8

Spontaneous electrical activity of interstitial cells of Cajal isolated from canine proximal colon. Langton P, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7280-4

Parathyroid hormone and parathyroid hormone-related protein inhibit phasic contraction of pig duodenal smooth muscle. Mok LL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):337-40

Effects of ryanodine on the smooth muscle of the rat vas deferens. Khoyi MA, et al. **Proc West Pharmacol Soc** 1988; 31:91-3

Alpha-melanocyte stimulating hormone inhibits the contractile action of a mu opioid agonist in the isolated colon of the rat. Kramer TH, et al. **Proc West Pharmacol Soc** 1988;31:17-9

Temperature dependence of the effect of tachykinins on whole guinea-pig ileum in vitro. Landis GC, et al. **Proc West Pharmacol Soc** 1988;31:29-32

Smooth muscle component in the developing ovarian follicle of the sheep and other mammals. Muglia U, et al. **Prog Clin Biol Res** 1989;296:103-9

Leukotriene generation and small airway smooth muscle responsiveness in human lung. de Jongste JC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):31-6

Sodium-depletion-induced contractures in isolated rat vas deferens: possible role of endogenous catecholamines. Mishra SK, et al. **Q J Exp Physiol** 1988 Sep;73(5):747-54

In vitro spontaneous motility of gastric smooth muscles of the sheep. Wong MH, et al. **Q J Exp Physiol** 1988 Jul; 73(4):521-31

Sources of calcium for the contraction induced by various agonists in trachealis muscle from normal and sensitized guinea pigs. Perpiña M, et al. **Respiration** 1989;55(2):105-12

Regulation of calcium concentration in voltage-clamped smooth muscle cells. Becker PL, et al. **Science** 1989 Apr 14;244(4901):211-4

Free calcium at rest during "catch" in single smooth muscle cells. Ishii N, et al. **Science** 1989 Mar 10;243(4896):1367-8

Arachidonic acid and other fatty acids directly activate potassium channels in smooth muscle cells. Ordway RW, et al. **Science** 1989 Jun 9;244(4909):1176-9

D-600 sensitive and insensitive spontaneous contractions in the guinea-pig hepatic duct. Suzuki H, et al. **Tohoku J Exp Med** 1988 Sep;156(1):13-21

Application of a loose patch clamp to isolated vascular smooth muscle cells. Nakaya Y, et al. **Tokushima J Exp Med** 1988 Dec;35(3-4):63-8

M-currents: an update. Brown D. **Trends Neurosci** 1988 Jul; 11(7):294-9 (58 ref.)

The effects of urine on mast cells and smooth muscle of the human ureter. Ugaily-Thulesius L, et al. **Urol Res** 1988; 16(6):441-7

[Effects of human chorionic gonadotrophin and progesterone on small intestinal migrating myoelectric complex in rats] Wan Y, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):203-8 (Eng. Abstr.) **(Chi)**

[Relation between the burst activity of oviductal isthmic smooth muscle and ovarian hormones in the rabbit] Yang LZ, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):174-9 (Eng. Abstr.) **(Chi)**

[Measurement of changes in parietal tonus of the abomasum in sheep] Malbert CH, et al. **Reprod Nutr Dev** 1989; 29(2):147-59 (Eng. Abstr.) **(Fre)**

[New aspects of the physiology of milking with special reference to the teat smooth musculature in teat rubber-free extraction] Mayntz M, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):39-50 (Eng. Abstr.) **(Ger)**

[Canine intestinal myoelectric activity after total gastrectomy with jejunal interposition] Matsuo H. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):504-12 (Eng. Abstr.) **(Jpn)**

[Abstracts of papers presented at the 30th annual meeting of the Japan Society of Smooth Muscle Research (II)] **Nippon Heikatsukin Gakkai Zasshi** 1988 Dec;24(6):341-481 **(Jpn)**

[Unsolved problems on the voltage-dependent and receptor-activated contractions in smooth muscles] Kuriyama H. **Nippon Yakurigaku Zasshi** 1989 Mar; 93(3):89-101 (152 ref.) (Eng. Abstr.) **(Jpn)**

[Activation of the fast calcium input in the denervated smooth muscle of the cat nictitating membrane] Sibaev AK, et al. **Biull Eksp Biol Med** 1989 May;107(5):579-80 (Eng. Abstr.) **(Rus)**

[Evaluation of the biological activity of "Naftusia" mineral water] Iaremenko MS, et al. **Fiziol Zh** 1988 Nov-Dec; 34(6):80-5 (Eng. Abstr.) **(Rus)**

[Features of the excitatory action of histamine on the smooth muscle of the cecum of the guinea pig] Pavlova LI, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):55-9 (Eng. Abstr.) **(Rus)**

[Electrical and contractile activity of smooth muscles in the human antrum] Vovk EV, et al. **Fiziol Zh** 1988 Nov-Dec; 34(6):49-55 (Eng. Abstr.) **(Rus)**

[The electrical and contractile activity of denervated smooth muscle] Akhmedzianov RKh, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1126-33 (Eng. Abstr.) **(Rus)**

[Regulation of the phases of slow-wave ureteral activity by sodium and calcium ions] Kazarian KV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):391-6 (Eng. Abstr.) **(Rus)**

[A differential inductive transformer for measuring the strength characteristics of isolated smooth muscle preparations] Marinchenko EI, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1337-40 **(Rus)**

[Seasonal changes in adrenergic regulation of the contractile ability of the frog bladder] Stepanova TP, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):578-81 **(Rus)**

[The alpha-adrenergic sensitivity of smooth muscle following sympathectomy] Telina EN, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1287-93 (Eng. Abstr.) **(Rus)**

[Effect of endothelial and smooth muscle cells and the extracellular matrix produced by them on hematopoiesis] Sadovnikova ElIu, et al. **Gematol Transfuziol** 1989 Jan; 34(1):24-9 (Eng. Abstr.) **(Rus)**

[Action of the leukotriene LTC4 on the calcium channels of the somatic membrane of the nerve cell and tone of smooth muscle organs] Skryma RN, et al. **Neirofiziologiia** 1989;21(2):262-4 (Eng. Abstr.) **(Rus)**

[The mechanism coupling adrenergic and cholinergic influences on the smooth musculature of the small intestine] Ovsiannikov VI, et al. **Vestn Akad Med Nauk SSSR** 1989; (1):45-53 (Eng. Abstr.) **(Rus)**

[The ion-dependent effect of hormones in the excitation-contraction process in the smooth musculature] Vojvodić J, et al. **Srp Arh Celok Lek** 1988 May; 116(5):461-8 (26 ref.) (Eng. Abstr.) **(Scc)**

PHYSIOPATHOLOGY

Changes in the contractile activity of the male genital tract as a consequence of vasectomy. Hib J. **Acta Physiol Pharmacol Latinoam** 1988;38(2):159-65

Predictable and unpredictable shock stimulates gastric contractility and causes mucosal injury in rats. Garrick T, et al. **Behav Neurosci** 1989 Feb;103(1):124-30

Myoelectric activity of the small bowel in mechanical obstruction and intra-abdominal bacterial contamination. Lausen M, et al. **Eur Surg Res** 1988;20(5-6):304-9

Effects of fractionated doses of ionizing radiation on small intestinal motor activity. Otterson MF, et al. **Gastroenterology** 1988 Nov;95(5):1249-57

Regional differences in the pattern of neurogenic responses in the aganglionic colon from congenitally aganglionic rats. Kubota M, et al. **J Pediatr Surg** 1989 Sep;24(9):911-9

Muscarinic cholinergic receptors in normal pediatric and myelodysplastic bladders. Gup DI, et al. **J Urol** 1989 Aug; 142(2 Pt 2):595-9; discussion 603-5

Effects of castration and diabetes mellitus on cholinergic responsiveness and muscarinic receptors in the rat vas deferens. Longhurst PA, et al. **J Urol** 1989 May; 141(5):1225-9

Anaphylactic reaction in smooth muscle from the duck. Gijon E, et al. **P R Health Sci J** 1988 Aug;7(2):195-8

Comparison of the effects of castration and streptozotocin-induced diabetes mellitus on contractile responses of the rat vas deferens. Longhurst PA, et al. **Pharmacology** 1989;38(4):253-62

Human isolated bronchial muscle preparations from asthmatic patients: effects of indomethacin and contractile agonists. Cerrina J, et al. **Prostaglandins** 1989 Apr; 37(4):457-69

In-vitro motility of normal and pathological smooth muscle of colon. Tutta P, et al. **Z Kinderchir** 1989 Feb;44(1):30-2

[Bronchomotor tonus] Mazzarella G. **Arch Monaldi Mal Torace** 1988 Jan-Feb;43(1):3-27 (57 ref.) **(Ita)**

[Results of sphincterocystometric examination before and after surgical treatment of stress-induced urinary incontinence in women] Lotocki W, et al. **Ginekol Pol** 1988 Jul;59(7):440-5 (Eng. Abstr.) **(Pol)**

[Nonadrenergic inhibition in smooth muscles of the large intestines of patients with Hirschsprung disease]

Zagorodniuk VP, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):50-5 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of stimulant cystotonometry in children] Salov PP, et al. **Pediatriia** 1989;(2):95-6 **(Rus)**

RADIATION EFFECTS

Irradiation increases superoxide dismutase in rat intestinal smooth muscle. Summers RW, et al.
Free Radic Biol Med 1989;6(3):261-70

SECRETION

Differential action of somatostatin on peptide-induced release of acetylcholine. Kowal V, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):G221-5

SURGERY

Method of creation of a smooth-muscle cuff at the site of the perineal colostomy after extirpation of the rectum. Federov VD, et al. **Dis Colon Rectum** 1989 Jul;32(7):562-6

[Our experience in diverticular disease of the colon. Resection and myotomy intervention] Cagliani P, et al. **Minerva Chir** 1989 Feb 28;44(4):613-8 (22 ref.) **(Ita)**

TRANSPLANTATION

[Double-exposure defecography following perineal sphincteroplasty] Helzel MV. **ROFO** 1988 Dec; 149(6):629-35 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Arrangement of desmin intermediate filaments in smooth muscle cells as shown by high-resolution immunocytochemistry. Stromer MH, et al.
Cell Motil Cytoskeleton 1988;11(2):117-25

Alpha-smooth muscle actin, a differentiation marker of smooth muscle cells, is present in microfilamentous bundles of pericytes. Skalli O, et al. **J Histochem Cytochem** 1989 Mar;37(3):315-21

Myosin filaments isolated from skinned amphibian smooth muscle cells are side-polar. Cooke PH, et al.
J Muscle Res Cell Motil 1989 Jun;10(3):206-20

Terminal sprouting in partially denervated muscle of the mouse: a scanning electron microscopic study. Torigoe K. **J Neurocytol** 1988 Aug;17(4):563-71

Spindle cell sarcoma of the heart in childhood: light microscopic, ultrastructural, and immunohistochemical evidence for smooth muscle, endothelial, and fibroblastic differentiation. Faught PR, et al. **Pediatr Pathol** 1988; 8(6):649-56

The muscle coat of the mouse oviduct during estrous cycle. An ultrastructural study. Faussone-Pellegrini MS, et al. **Prog Clin Biol Res** 1989;296:405-10

Isometric contraction, isotonic contraction and passive contraction in smooth muscles. Gabella G.
Prog Clin Biol Res 1989;295:133-8

Smooth muscle differentiation at endometrio-myometrial junction. An ultrastructural study. Fujii S, et al.
Virchows Arch [A] 1989;414(2):105-12

[Observation of the ultrastructure of smooth-muscle cells in the narrow segment of the ureter in children with congenital hydronephrosis] Zhao GG.
Chung Hua Wai Ko Tsa Chih 1989 Feb;27(2):112-3, 126-7 (Eng. Abstr.) **(Chi)**

[Smooth muscle cells (current issues of ultrastructural organization] Klishov AA, et al.
Arkh Anat Gistol Embriol 1989 Mar;96(3):82-92 (130 ref.) **(Rus)**

[Ultrastructure of intercellular contacts of smooth myocytes of the respiratory tract] Zashikhin AL.
Arkh Anat Gistol Embriol 1988 Dec;95(12):49-54 (Eng. Abstr.) **(Rus)**

MUSCLE, SMOOTH, VASCULAR

Modulation of coronary tone in acute myocardial infarction by endothelin [letter] Salminen K, et al. **Lancet** 1989 Sep 23;2(8665):747

ANALYSIS

Spontaneous oscillations in cytoplasmic calcium concentration in vascular smooth muscle. Weissberg PL, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C951-7

Aortic intimal lipid content and serum lipoproteins in patients undergoing coronary by-pass surgery as related to clinical prognosis. Bondjers G, et al. **Atherosclerosis** 1988 Aug; 72(2-3):231-9

Effect of repeated endotoxin treatment and hypercholesterolemia on preatherosclerotic lesions in weaned pigs. Part II. Lipid and glycosaminoglycan analysis of intima and inner media. Ylä-Herttuala S, et al.
Atherosclerosis 1988 Aug;72(2-3):173-81

Preproenkephalin mRNA expression in developing rat heart and in cultured ventricular cardiac muscle cells. Springhorn JP, et al. **Biochem J** 1989 Feb 15;258(1):73-8

Biochemical characterization and comparison of rat thromboxane A2/prostaglandin H2 receptors in platelets and cultured aortic smooth muscle cells. Hanasaki K, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):2967-76

Expression of the alloantigen Zwa (or P1A1) on human vascular smooth muscle cells and foreskin fibroblasts: a study on normal individuals and a patient with Glanzmann's thrombasthenia. Giltay JC, et al. **Blood** 1989 Aug 15; 74(3):965-70

Correlation between the distribution of smooth muscle or non muscle myosins and alpha-smooth muscle actin in normal and pathological soft tissues. Benzonana G, et al. **Cell Motil Cytoskeleton** 1988;11(4):260-74

Evidence for extracellular localization of activator calcium in dog coronary artery smooth muscle as studied by the pyroantimonate method. Suzuki S, et al.
Cell Tissue Res 1989 Aug;257(2):237-46

Biochemical and theoretical approach to localization of metal-ion-binding sites in the actin primary structure. Strzelecka-Gołaszewska H, et al. **Eur J Biochem** 1989 Jun 15;182(2):299-305

Cell-associated proteoheparan sulfate from bovine arterial smooth muscle cells. Schmidt A, et al. **Exp Cell Res** 1988 Oct;178(2):242-53

The effects of vascular smooth muscle caldesmon on force production by 'desensitised' skeletal muscle fibres. Taggart MJ, et al. **FEBS Lett** 1988 Dec 19;242(1):171-4

Intracellular vascular muscle Ca2+ modulation in genetic hypertension. Erne P, et al. **Hypertension** 1989 Aug; 14(2):145-51

Presence of insulinlike growth factor receptors and lack of insulin receptors on fetal bovine smooth muscle cells. Lee PD, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):921-6

Sequential activation of alpha-actin genes during avian cardiogenesis: vascular smooth muscle alpha-actin gene transcripts mark the onset of cardiomyocyte differentiation. Ruzicka DL, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2575-86

Decay-accelerating factor is expressed on vascular smooth muscle cells in human atherosclerotic lesions. Seifert PS, et al. **J Clin Invest** 1989 Aug;84(2):597-604

Identification of a high-affinity peripheral-type benzodiazepine binding site in rat aortic smooth muscle membranes. French JF, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):23-8

Potassium depletion and regulation of angiotensin II receptors in vascular smooth muscle cells. Paller MS.
J Recept Res 1989;9(1):95-106

Composition of proteoglycans in the aortas of copper-deficient rats. Radhakrishnamurthy B, et al.
Proc Soc Exp Biol Med 1989 Jan;190(1):98-104

Ultrastructural autoradiographic localization of exogenous arachidonic acid in cultured endothelial and smooth muscle cells. Tasca SI, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Sep; 33(3):165-71

ANATOMY & HISTOLOGY

Structural features of the human testicular veins walls. Piffer CR, et al. **Anat Anz** 1988;166(1-5):257-66

A new photoelectric device for contact-free recording of diameters of short blood vessel segments in vitro. Tutschke U. **Biomed Tech (Berlin)** 1988 Jul-Aug;33(7-8):166-72

The anatomy of the extensor mechanism. Terry GC.
Clin Sports Med 1989 Apr;8(2):163-77

[Biomechanics of the spiral arrangement of muscle elements in the vessels and mechanism of its regulation during hemodynamics] Kupriianov VV, et al.
Arkh Anat Gistol Embriol 1988 Dec;95(12):27-35 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

[Mechanisms of the regulation of the blood supply of the aortic wall] Azin AL, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):353-8 (Eng. Abstr.) **(Rus)**

CYTOLOGY

The internal elastic membrane and intimal folds in arteries: important but neglected structures? Svendsen E, et al.
Acta Physiol Scand Suppl 1988;572:1-71

Endothelial stimulation of intimal cell proliferation in a porcine aortic organ culture. Koo EW, et al.
Am J Pathol 1989 Mar;134(3):497-503

Phorbol esters and arginine vasopressin in vascular smooth muscle cell activation. Caramelo C, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F875-81

Mitogenesis by serum and PDGF is independent of PI degradation and PKC in VSMC. Kihara M, et al.
Am J Physiol 1989 Apr;256(4 Pt 1):C886-92

Vascular myosin expression during cytokinesis, attachment, and hypertrophy. Seidel CL, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):C793-8

Heparin and growth control of vascular cells. Thompson RW, et al. **Ann N Y Acad Sci** 1989;556:255-67

Enhanced collagen production by smooth muscle cells during repetitive mechanical stretching. Sumpio BE, et al.
Arch Surg 1988 Oct;123(10):1233-6

A biologically plausible model of thickening of arterial intima under shear. Friedman MH. **Arteriosclerosis** 1989 Jul-Aug; 9(4):511-22

In vitro and ex vivo regulation of vascular smooth muscle cell growth and phenotypic modulation by sulphated polysaccharides. Herbert JM, et al. **Artery** 1988;16(1):1-14

Growth response of endothelial and smooth muscle cells to a collagen matrix throughout development. Arciniegas E, et al. **Atherosclerosis** 1988 Sep;73(1):71-80

Effects of protein kinase inhibitors on growth factor-stimulated DNA synthesis in cultured rat vascular smooth muscle cells. Takagi Y, et al. **Atherosclerosis** 1988 Dec;74(3):227-30

Atrial natriuretic factor inhibits proliferation of vascular smooth muscle cells stimulated by platelet-derived growth factor. Abell TJ, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1392-6

Independent inhibition of DNA synthesis by protein kinase C, cyclic AMP and interferon alpha/beta in rabbit aortic smooth muscle cells. Fukumoto Y, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):337-45

Staurosporine, a protein kinase C inhibitor interferes with proliferation of arterial smooth muscle cells. Matsumoto H, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):105-9

Inhibitory effect of transforming growth factor-beta on epidermal growth factor-induced proliferation of cultured rat aortic smooth muscle cells. Ouchi Y, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):301-7

Actions of guanine nucleotides and cyclic nucleotides on calcium stores in single patch-clamped smooth muscle cells from rabbit portal vein. Komori S, et al.
Br J Pharmacol 1989 Jul;97(3):973-82

PDGF-dependent tyrosine phosphorylation stimulates production of novel polyphosphoinositides in intact cells. Auger KR, et al. **Cell** 1989 Apr 7;57(1):167-75

Gamma-interferon regulates vascular smooth muscle proliferation and Ia antigen expression in vivo and in vitro. Hansson GK, et al. **Circ Res** 1988 Oct;63(4):712-9

Mechanism of calcium channel block by D600 in single smooth muscle cells from rabbit ear artery. Hering S, et al. **Circ Res** 1989 May;64(5):928-36

Effects of co-culture with vascular endothelial cells on the renin-like enzyme production in vascular smooth muscle cells. Iwai N, et al. **Clin Exp Hypertens [A]** 1989; 11(3):447-57

A substrate of the cell-attachment sequence of fibronectin (Arg-Gly-Asp-Ser) is sufficient to promote transition of arterial smooth muscle cells from a contractile to a synthetic phenotype. Hedin U, et al. **Dev Biol** 1989 Jun; 133(2):489-501

Low level expression of cytokeratins 8, 18 and 19 in vascular smooth muscle cells of human umbilical cord and in cultured cells derived therefrom, with an analysis of the chromosomal locus containing the cytokeratin 19 gene. Bader BL, et al. **Eur J Cell Biol** 1988 Dec;47(2):300-19

Cell-free translation of mRNA encoding an arterial smooth muscle cell proteoglycan core protein. Sandell LJ, et al.
Eur J Cell Biol 1988 Jun;46(2):253-8

Seeding of arterial prostheses with living cells. Clarke JM, et al. **Eur J Vasc Surg** 1988 Dec;2(6):353-5 (38 ref.)

Interleukin-1 promotes proliferation of vascular smooth muscle cells in coordination with PDGF or a monocyte derived growth factor. Bonin PD, et al. **Exp Cell Res** 1989 Apr;181(2):475-82

Chemotactic response of vascular smooth muscle cells to acetoacetylated low-density lipoprotein. Naito M, et al.
Heart Vessels 1988;4(2):100-3

Enhanced growth rate of cultured smooth muscle cells from spontaneously hypertensive rats. Yamori Y, et al.
Heart Vessels 1988;4(2):94-9

1,25-Dihydroxyvitamin D3 and rat vascular smooth muscle cell growth. Carthy EP, et al. **Hypertension** 1989 Jun;13(6 Pt 2):954-9

Ploidy in mesenteric vessels of aged spontaneously hypertensive and Wistar-Kyoto rats. Lombardi DM, et al.
Hypertension 1989 May;13(5):475-9

Protein kinase C as both positive and negative regulator for proliferation of vascular smooth muscle cells. Kawahara Y, et al. **IARC Sci Publ** 1988;(92):102-17 (62 ref.)

Characterization of vascular smooth muscle cell phenotype in long-term culture. Absher M, et al.
In Vitro Cell Dev Biol 1989 Feb;25(2):183-92

Human arterial smooth muscle cells in culture: inverse relationship between proliferation and expression of contractile proteins. Fager G, et al.
In Vitro Cell Dev Biol 1989 Jun;25(6):511-20

Distinction between vascular smooth muscle cells and myoepithelial cells in primary monolayer cultures of human breast tissue. Petersen OW, et al.
In Vitro Cell Dev Biol 1989 Mar;25(3 Pt 1):259-66

Effects of forskolin on growth and morphology of cultured glial and cerebrovascular endothelial and smooth muscle cells. Kempski O, et al. **Int J Dev Neurosci** 1987; 5(5-6):435-45

Induction of growth-related metabolism in human vascular smooth muscle cells by low density lipoprotein. Scott-Burden T, et al. **J Biol Chem** 1989 Jul 25; 264(21):12582-9

Cardiovascular drugs and atherosclerosis: effects of calcium antagonists, beta-blockers, and nitrates on atherosclerotic characteristics of human aortic cells. Orekhov AN, et al.
J Cardiovasc Pharmacol 1988;12 Suppl 6:S66-8

Arterial smooth muscle cells in vivo: relationship between actin isoform expression and mitogenesis and their modulation by heparin. Clowes AW, et al. **J Cell Biol** 1988 Nov;107(5):1939-45

Inhibition of proteoglycan synthesis alters extracellular matrix deposition, proliferation, and cytoskeletal organization of rat aortic smooth muscle cells in culture. Hamati HF, et al. **J Cell Biol** 1989 Jun;108(6):2495-505

Inhibition of endothelial cell movement by pericytes and smooth muscle cells: activation of a latent transforming growth factor-beta 1-like molecule by plasmin during

co-culture. Sato Y, et al. **J Cell Biol** 1989 Jul;109(1):309–15
Effects of glucocorticoids on Na+/H+ exchange and growth in cultured vascular smooth muscle cells. Berk BC, et al. **J Cell Physiol** 1988 Dec;137(3):391–401
Interaction of platelet-activating factor with endothelial and vascular smooth muscle cells in coculture. Stoll LL, et al. **J Cell Physiol** 1989 May;139(2):253–61
Monocyte migration into the subendothelial space of a coculture of adult human aortic endothelial and smooth muscle cells. Navab M, et al. **J Clin Invest** 1988 Dec; 82(6):1853–63
The effects of alterations in membrane sodium transport on rat aortic smooth muscle proliferation. Bobik A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S219–21
The effects of vasoactive agents on the proliferation of vascular smooth muscle cells grown in vitro. Kuriyama S, et al. **J Hypertens Suppl** 1988 Dec;6(4):S154–6
Angiotensin II activates Na+–H+ exchange and stimulates growth in cultured vascular smooth muscle cells. Lyall F, et al. **J Hypertens Suppl** 1988 Dec;6(4):S438–41
Modulation of single slow (L-type) calcium channels by intracellular ATP in vascular smooth muscle cells. Ohya Y, et al. **Pflugers Arch** 1989 Jul;414(3):257–64
Rat heart-derived endothelial and smooth muscle cell cultures: isolation, cloning and characterization. Diglio CA, et al. **Tissue Cell** 1988;20(4):477–92
Inhibition of smooth muscle cell proliferation by heparin molecules. Clowes AW, et al. **Transplant Proc** 1989 Aug; 21(4):3700–1
Immunologic control of vascular cell growth in arterial response to injury and atherosclerosis. Stemme S, et al. **Transplant Proc** 1989 Aug;21(4):3697–9
[Morphologic study on proteoglycans by cultivated fetal aortic smooth muscle cells] Guo M. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):239–41 (Chi)
[LDL receptor binding and endocytosis in rabbit aortic smooth muscle under different levels of lipids in the culture media] Wang L. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):41–4 (Chi)
[The effect of peripheral blood monocytes on the proliferation of aortic smooth muscle cells in vitro] Shen LJ. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):575–7, 40 (Eng. Abstr.) (Chi)
[Effects of lipid peroxidation on cultured bovine smooth muscle cells] Zhen EZ. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):391–2 (Chi)
[Phenotype modulation of smooth muscle cells and its significance in atherogenesis] Qiu HM, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):115–7 (Eng. Abstr.) (Chi)
[Culture of arterial myocytes and fibroblasts of genetically hypertensive rats: demonstration of intrinsic abnormalities] Meyer P, et al. **Bull Acad Natl Med (Paris)** 1988 Nov; 172(8):1135–40 (Eng. Abstr.) (Fre)
[Establishment of a transformed line of arterial smooth muscle cells] Blaes N, et al. **C R Acad Sci [III]** 1988; 307(8):499–503 (Eng. Abstr.) (Fre)
[Smooth muscle cells express in culture a surface antigen identified by a polyclonal anti-actin antibody] Desmouliere A, et al. **C R Soc Biol (Paris)** 1988;182(4):391–9 (Eng. Abstr.) (Fre)
[Blood vessel wall cells of the human in culture] Dartsch PC, et al. **Vasa Suppl** 1988;23:18–22 (Ger)

DRUG EFFECTS

Effects of VIP and PHM in human intracervical arteries. Hansen V, et al. **Acta Obstet Gynecol Scand** 1988; 67(8):699–701
Comparative studies on the effects of the nootropic drug adafenoxate and of the cerebral vasodilator flunarizine on arterial smooth muscles. Todorov S, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):10–6
Effects of sodium nitroprusside on potassium induced contracture in isolated vascular smooth muscle. Rubiales de Barioglio S, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):69–75
Neurogenic contractions in caudal artery from young rats: receptor–receptor interaction and regional differences in effects of noradrenaline and ATP via alpha 1–, alpha 2– and P2x–receptors. Bao JX, et al. **Acta Physiol Scand** 1989 Aug;136(4):619–20
Neurogenic contractions in the tail artery of normotensive rats are mediated by noradrenaline and ATP via post–junctional alpha 1– and alpha 2–adrenoceptors and P2x–purinoceptors. Bao JX, et al. **Acta Physiol Scand** 1989 May;136(1):139–40
Age–related variations in the relative importance of noradrenaline and ATP as mediators of the contractile response of rat tail artery to sympathetic nerve stimulation. Bao JX, et al. **Acta Physiol Scand** 1989 Jun;136(2):287–8
Cerebrovascular serotonergic receptors mediating vasoconstriction: further evidence for the existence of 5–HT2 receptors in rat and 5–HT1–like receptors in guinea–pig basilar arteries. Chang JY, et al. **Acta Physiol Scand** 1989 May;136(1):59–67
Capsaicin–induced vasodilatation of human coronary arteries in vitro is mediated by calcitonin gene–related peptide rather than substance P or neurokinin A. Franco–Cereceda A, et al. **Acta Physiol Scand** 1989 Aug;136(4):575–80
Vasodilator responses to alpha–human–atrial natriuretic peptide in isolated omental and pulmonary arteries from rabbit and man. Lindberg F, et al. **Acta Physiol Scand** 1988 Nov;134(3):391–7
Neuropeptide Y induces potent contraction of arterial vascular smooth muscle via an endothelium–independent mechanism. Pernow J, et al. **Acta Physiol Scand** 1988 Sep; 134(1):157–8
Regional and species differences in vascular reactivity to extracellular potassium. Ryman T, et al. **Acta Physiol Scand** 1989 Jun;136(2):151–9
Comparative effects of the alpha–adrenoceptor agonists noradrenaline, phenylephrine and clonidine in the human saphenous vein in vivo and in vitro. Sjöberg T, et al. **Acta Physiol Scand** 1988 Jul;136(3):463–71
The strong contractile effect of the thromboxane receptor agonist U–46619 in isolated human pulmonary arteries and its competitive antagonism by BM–13.505. Sjöberg T, et al. **Acta Physiol Scand** 1989 Jun;136(2):161–5
Vasomotor changes in isolated coronary arteries from diabetic rats. Sjögren A, et al. **Acta Physiol Scand** 1988 Nov;134(3):429–36
Further characterization of the contraction–mediating prostanoid receptors in feline cerebral arteries. Effects of the thromboxane–receptor antagonist AH 23848. Uski TK. **Acta Physiol Scand** 1988 Aug;133(4):519–24
Inhibition of adrenergic neuroeffector transmission by endothelin in the guinea–pig femoral artery. Wiklund NP, et al. **Acta Physiol Scand** 1988 Oct;134(2):311–2
Synthesis and in vitro effects on platelets and vascular smooth muscle of S–145, a novel thromboxane receptor antagonist. Narisada M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:659–62
Low dose alcohol contracts the human umbilical artery in vitro. Savoy–Moore RT, et al. **Alcoholism (NY)** 1989 Feb; 13(1):40–2
1,25 (OH)2 vitamin D3 modifies growth and contractile function of vascular smooth muscle of spontaneously hypertensive rats. Bukoski RD, et al. **Am J Hypertens** 1989 Jul;2(7):553–6
Angiotensin II stimulation of vascular smooth muscle cells. Secondary signalling mechanisms. Griendling KK, et al. **Am J Hypertens** 1989 Aug;2(8):659–65 (44 ref.)
Abnormal contractile response of aortas from spontaneously hypertensive rats to Ca2+ after depletion of Ca2+ in Ca2+–free medium. Guan YY, et al. **Am J Hypertens** 1989 Aug;2(8):643–6
Cholesterol–induced changes in rabbit arterial smooth muscle sensitivity to adrenergic stimulation. Broderick R, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H170–8
Arteriolar smooth muscle responses are modulated by an intramural diffusion barrier. Lew MJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H10–6
Blunted cGMP response to ANF in vascular smooth muscle cells of SHR. Nakamura M, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):C573–80
Intracellular mechanisms of halothane's effect on isolated aortic strips of the rabbit. Su JY, et al. **Anesthesiology** 1989 Sep;71(3):409–17
Effects of chronic treatment with verapamil on adrenoceptor–mediated contraction of rabbit aorta. Aceto JF, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:125–38
Study of the strontium response in isolated rat aorta. Barreda A, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun; 299:210–20
In vitro effects of S.3341 on the spontaneous contractile activity of the rat portal vein: interference with the alpha–adrenergic stimulation. Bourreau JP, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:29–44
Propranolol enhances acetylcholine–induced relaxation in the various arterial segments of rabbit. Ercan ZS, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:815–93
Different inhibition by vasodilators of coronary artery contraction. Inoue S, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:181–93
Factors mediating a regional difference in vasorelaxing effects of human natriuretic polypeptide in dogs. Kawanishi M, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:198–209
Vasodilatory properties in vascular smooth muscle of the calcium antagonist NB–818 compared to nicardipine and nimodipine. Nishikibe M, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:98–111
Comparative vasodilator effects of magnesium salts on rat mesenteric arterioles and venules. Nishio A, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:139–63
Antagonism of adenosine–induced relaxation by methylxanthines in coronary artery. Ramagopal MV, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:174–80
A regional difference in alpha 1–adrenoceptors in canine arteries. Takayanagi I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:175–84
Responses to dopamine of isolated human gastroepiploic arteries. Toda N, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:86–97
Differential sensitivity to calcium entry blockade of angiotensin II–induced contractions of rat and guinea–pig aorta. van Heiningen PN, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:118–30
Effect of heparin on adaptation of vein grafts to arterial circulation. Kohler TR, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):523–8
Eicosanoids in regulation of arterial smooth muscle cell phenotype, proliferative capacity, and cholesterol metabolism. Pomerantz KB, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):413–29 (292 ref.)
Cultured bovine aortic endothelial cells secrete factor(s) chemotactic for aortic smooth muscle cells. Autio I, et al. **Artery** 1989;16(2):72–83
Pharmacological modulation of calcium and potassium channels in isolated vascular smooth muscle cells. Klöckner U, et al. **Arzneimittelforschung** 1989 Jan;39(1A):120–6
Assessment in pig coronary artery of long–lasting and potent calcium antagonistic actions of the novel dihydropyridine derivative mepirodipine hydrochloride. Nakayama K, et al. **Arzneimittelforschung** 1989 Jan;39(1):50–5
Selective blockade of alpha 1–adrenoceptors of porcine vascular smooth muscle cells by bunazosin. Nishimura J, et al. **Arzneimittelforschung** 1989 Jun;39(6):668–9
Endothelin is a potent mitogen for rat vascular smooth muscle cells. Hirata Y, et al. **Atherosclerosis** 1989 Aug; 78(2–3):225–8
Effects of smooth muscle cell derived growth factor (SDGF) in combination with other growth factors on smooth muscle cells. Morisaki N, et al. **Atherosclerosis** 1989 Jul; 78(1):61–7
Differential effect of nicotinic acid derivatives on smooth muscle and endothelial cell proliferation. Wülfroth P, et al. **Basic Res Cardiol** 1989 May–Jun;84(3):291–7
Relaxing action of okadaic acid, a black sponge toxin on the arterial smooth muscle. Ashizawa N, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):971–6
Blockade of endothelin–induced contractions by dichlorobenzamil: mechanism of action. Criscione L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):247–54
L–arginine causes whereas L–argininosuccinic acid inhibits endothelium–dependent vascular smooth muscle relaxation. Gold ME, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):536–43
Structure–activity relationship of endothelin: importance of charged groups. Nakajima K, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):424–9
Norepinephrine and GTP–gamma–S increase myofilament Ca2+ sensitivity in alpha–toxin permeabilized arterial smooth muscle. Nishimura J, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):677–83
Vasoconstriction: a novel activity for low density lipoprotein. Sachinidis A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):315–20
Endothelin action: Inhibition by a protein kinase C inhibitor and involvement of phosphoinositols. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):170–6
Vascular activity of polycations and basic amino acids: L–arginine does not specifically elicit endothelium–dependent relaxation. Thomas G, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):177–80
Angiogenin depresses aortic smooth muscle cell cAMP by a pertussis toxin sensitive mechanism. Xiao Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):902–7
Effects of angiotensin II and of phorbol ester on protein kinase C activity and on prostacyclin production in cultured rat aortic smooth–muscle cells. Lang U, et al. **Biochem J** 1989 Apr 15;259(2):477–83
Potassium efflux enhancement by cromakalim (BRL 34915) in rabbit mesenteric artery: an indirect effect independent of calcium? Coldwell MC, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4105–10
Modulation of cyclic guanosine monophosphate levels in cultured aortic smooth muscle cells by carbon monoxide. Ramos KS, et al. **Biochem Pharmacol** 1989 Apr 15; 38(8):1368–70
Endothelium–dependent relaxing factors do not affect the smooth muscle of portal–mesenteric veins. Feletou M, et al. **Blood Vessels** 1989;26(1):21–32
Alpha 1–adrenoceptor antagonist activity of novel pyrimidine derivatives (SHI437 and IK29) in rabbit aorta and trigone of the bladder. Azuma H, et al. **Br J Pharmacol** 1989 Apr; 96(4):1000–6
The effect of arginine and nitric oxide on resistance blood vessels of the perfused rat kidney. Bhardwaj R, et al. **Br J Pharmacol** 1989 Jul;97(3):739–44
Inhibition by glibenclamide of the vasorelaxant action of cromakalim in the rat. Buckingham RE, et al. **Br J Pharmacol** 1989 May;97(1):57–64
Vascular smooth muscle sensitivity to endothelium–derived relaxing factor is different in different arteries. Christie MI, et al. **Br J Pharmacol** 1988 Oct;95(2):630–6
The actions of neuropeptide Y and peptide YY on the hepatic arterial and portal vascular beds of the anaesthetized dog. Corder R, et al. **Br J Pharmacol** 1988 Aug;94(4):1149–56
A comparison of the differential effects of vasoactive intestinal peptide and peptide histidine isoleucine on the vascular and capsular smooth muscle of the dog spleen. Corder R, et al. **Br J Pharmacol** 1988 Oct;95(2):664–70
Pharmacological analysis of postjunctional alpha–adrenoceptors mediating contractions to (–)–noradrenaline in the rabbit isolated lateral saphenous vein can be explained by interacting responses to simultaneous activation of alpha 1– and alpha 2–adrenoceptors. Daly CJ, et al. **Br J Pharmacol** 1988 Oct; 95(2):485–500
An attempt at selective protection from phenoxybenzamine of postjunctional alpha–adrenoceptor subtypes mediating

contractions to noradrenaline in the rabbit isolated saphenous vein. Daly CJ, et al. **Br J Pharmacol** 1988 Oct; 95(2):501–11

Noradrenaline (gamma) and ATP responses of innervated and non–innervated rat cerebral arteries. Edwards FR, et al. **Br J Pharmacol** 1989 Apr;96(4):785–8

Endothelin– and neuropeptide Y–induced vasoconstriction of human epicardial coronary arteries in vitro. Franco–Cereceda A. **Br J Pharmacol** 1989 Jul;97(3):968–72

Contraction of the rat isolated aorta caused by Clostridium perfringens alpha toxin (phospholipase C): evidence for the involvement of arachidonic acid metabolism. Fujii Y, et al. **Br J Pharmacol** 1989 May;97(1):119–24

Depression of maximum rate of depolarization of guinea–pig ventricular action potentials by metabolites of encainide. Hemsworth PD, et al. **Br J Pharmacol** 1989 Jun; 97(2):619–25

The action of dopamine and vascular dopamine (DA1) receptor agonists on human isolated subcutaneous and omental small arteries. Hughes AD, et al. **Br J Pharmacol** 1989 Jul;97(3):950–6

GR43175, a selective agonist for the 5–HT1–like receptor in dog isolated saphenous vein. Humphrey PP, et al. **Br J Pharmacol** 1988 Aug;94(4):1123–32

Flunarizine inhibits endothelium–dependent hypoxic facilitation in canine coronary arteries through an action on vascular smooth muscle. Iqbal A, et al. **Br J Pharmacol** 1988 Nov;95(3):789–94

Effects of ryanodine on tension development in rat aorta and mesenteric resistance vessels. Julou–Schaeffer G, et al. **Br J Pharmacol** 1988 Oct;95(2):605–13

Ketamine–induced relaxation in intact and skinned smooth muscles of the rabbit ear artery. Kanmura Y, et al. **Br J Pharmacol** 1989 Jun;97(2):591–7

Palytoxin–induced contraction and release of endogenous noradrenaline in rat tail artery. Karaki H, et al. **Br J Pharmacol** 1988 Sep;95(1):183–8

Effect of calcium and calmodulin antagonists on contractile responses of the human uterine artery. Kostrzewska A, et al. **Br J Pharmacol** 1988 Aug;94(4):1037–42

Effects of hypoxia on the pharmacological responsiveness of isolated coronary artery rings from the sheep. Kwan YW, et al. **Br J Pharmacol** 1989 Apr;96(4):849–56

Hypoxia– and endothelium–mediated changes in the pharmacological responsiveness of circumflex coronary artery rings from the sheep. Kwan YW, et al. **Br J Pharmacol** 1989 Apr;96(4):857–63

Differences in agonist dissociation constant estimates for 5–HT at 5–HT2–receptors: a problem of acute desensitization? Leff P, et al. **Br J Pharmacol** 1988 Oct; 95(2):569–77

GR32191, a highly potent and specific thromboxane A2 receptor blocking drug on platelets and vascular and airways smooth muscle in vitro. Lumley P, et al. **Br J Pharmacol** 1989 Jul;97(3):783–94

A comparison of the effects of the calcium entry blockers, verapamil, diltiazem and flunarizine against contractions of the rat isolated aorta and portal vein. Marriott JF. **Br J Pharmacol** 1988 Sep;95(1):145–54

Vasoactive actions of local anaesthetics on human isolated umbilical veins and arteries. Monuszko E, et al. **Br J Pharmacol** 1989 Jun;97(2):319–28

Characteristics of cromakalim–induced relaxations in the smooth muscle cells of guinea–pig mesenteric artery and vein. Nakao K, et al. **Br J Pharmacol** 1988 Nov; 95(3):795–804

The effect of relaxants working through different transduction mechanisms on the tonic contraction produced in rat aorta by 4 beta–phorbol dibutyrate. Obianime AW, et al. **Br J Pharmacol** 1989 Jul;97(3):647–56

5–HT1–like receptors mediate 5–hydroxytryptamine–induced contraction of human isolated basilar artery. Parsons AA, et al. **Br J Pharmacol** 1989 Feb;96(2):434–40

Actions of constrictor (NPY and endothelin) and dilator (substance P, CGRP and VIP) peptides on pig splenic and human skeletal muscle arteries: involvement of the endothelium. Pernow J. **Br J Pharmacol** 1989 Jul; 97(3):983–9

Endothelium–dependent modulation of the pressor activity of arginine vasopressin in the isolated superior mesenteric arterial bed of the rat. Randall MD, et al. **Br J Pharmacol** 1988 Oct;95(2):646–52

Effects of 5–hydroxytryptamine on human isolated placental chorionic arteries and veins. Reviriego J, et al. **Br J Pharmacol** 1989 Apr;96(4):961–9

Involvement of the protein kinase C system in calcium–force relationships in ferret aorta. Ruzycky AL, et al. **Br J Pharmacol** 1989 Jun;97(2):391–400

Effects of oxodipine on 45Ca movements and contractile responses in vascular smooth muscle. Tamargo J, et al. **Br J Pharmacol** 1989 Jun;97(2):339–46

Evidence for prazosin–resistant, rauwolscine–sensitive alpha–adrenoceptors mediating contractions in the isolated vascular bed of the rat tail. Templeton AG, et al. **Br J Pharmacol** 1989 Jun;97(2):563–71

Pinacidil opens K+–selective channels causing hyperpolarization and relaxation of noradrenaline contractions in rat mesenteric resistance vessels. Videbaek LM, et al. **Br J Pharmacol** 1988 Sep;95(1):103–8

The relaxant properties of human calcitonin gene–related peptide on vascular and extravascular capsular) smooth muscle of the isolated blood–perfused spleen of the anaesthetized dog. Withrington PG. **Br J Pharmacol** 1989 Apr;96(4):823–8

Alpha 2–adrenoceptor agonists enhance responses to certain other vasoconstrictor agonists in the rat tail artery. Xiao XH, et al. **Br J Pharmacol** 1989 Mar;96(3):539–46

Methylflavonolamine hydrochloride inhibits contractions induced by noradrenaline, calcium and potassium in rabbit isolated aortic strips. Zhang MS, et al. **Br J Pharmacol** 1988 Aug;94(4):1184–8

The role of adenylate cyclase in relaxation of brain arteries: studies with forskolin. Suzuki Y, et al. **Brain Res** 1988 Aug 9;457(2):241–5

Bethanidine increases one type of potassium current and relaxes aortic muscle. Bkaily G, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):731–6

The effects of EGTA on vascular smooth muscle contractility in calcium–free medium. Guan YY, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1053–6

Evidence for regionally selective changes in response to potassium chloride but not vasopressin or methoxamine in vasculature from diabetic rats. Hebden RA, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1464–7

Bay K 8644–like contractile effects of a peptide isolated from spontaneously hypertensive rats. Huang BS, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):332–6

Small fibronectin fragments induce endothelium–dependent vascular relaxations. Laplante C, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):745–8

Manganese can inhibit or potentiate contractile responses in mesenteric portal vein. Sutter MC, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):737–44

Pharmacological actions of the calcium antagonist propyl–methylenedioxyindene in skinned vascular smooth muscle. Wong WS, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1041–7

Halothane induced vasomotion of coronary, renal and iliac arterial rings in malignant hyperthermia susceptible swine. DeRoth L, et al. **Can J Vet Res** 1988 Oct;52(4):407–10

Effects of doxorubicin and ruthenium red on intracellular Ca2+ stores in skinned rabbit mesenteric smooth–muscle fibres. Kanmura Y, et al. **Cell Calcium** 1989 Aug–Sep; 10(6):433–9

Cyclic AMP– and cytochalasin B–induced arborization in cultured aortic smooth muscle cells: its cytopharmacological characterization. Chaldakov GN, et al. **Cell Tissue Res** 1989 Feb;255(2):435–42

The pharmacology of the novel 5–HT1–like receptor agonist, GR43175. Humphrey PP, et al. **Cephalalgia** 1989;9 Suppl 9:23–33

Effect of in vitro organic nitrate tolerance on relaxation, cyclic GMP accumulation, and guanylate cyclase activation by glyceryl trinitrate and the enantiomers of isoidide dinitrate. Bennett BM, et al. **Circ Res** 1988 Oct; 63(4):693–701

Effects of melittin on endothelium–dependent relaxation and cyclic GMP levels in rat aorta. Rapoport RM, et al. **Circ Res** 1989 Mar;64(3):463–73

Independent change of plasma and tissue renin in response to anesthetics. Barrett JD, et al. **Clin Exp Hypertens [A]** 1988;10(5):757–65

Vasopressin–mediated contractions in mesenteric arteries from spontaneously hypertensive rats: differences in response compared with Wistar–Kyoto animals. Bund SJ, et al. **Clin Sci** 1988 Nov;75(5):449–53

Effects of angiotensin II on isolated toad (Bufo arenarum) aortic rings. Peral de Bruno M, et al. **Comp Biochem Physiol [C]** 1988;90(1):195–201

Ca2+ dependence of inositol 1,4,5–trisphosphate 3–kinase activity in the cytosol fraction of pig coronary artery. Yamaguchi K, et al. **Comp Biochem Physiol [C]** 1989; 92(1):163–6

Characterization of induction of protooncogene c–myc and cellular growth in human vascular smooth muscle cells by insulin and IGF–I. Banskota NK, et al. **Diabetes** 1989 Jan; 38(1):123–9

Vasodilating effects of carbon monoxide. Lin H, et al. **Drug Chem Toxicol** 1988;11(4):371–85

Vasodilatation with pinacidil. Mode of action in rat resistance vessels. Videbaek LM, et al. **Drugs** 1988;36 Suppl 7:33–40

In vitro studies on the mode of action of pinacidil. Weston AH, et al. **Drugs** 1988;36 Suppl 7:10–28

Effects of lead on vascular reactivity. Chai SS, et al. **Environ Health Perspect** 1988 Jun;78:85–9 (28 ref.)

Mechanism of action of calcium antagonists in heart and vascular smooth muscle. Fleckenstein A, et al. **Eur Heart J** 1988 Jun;9 Suppl H:95–9 (15 ref.)

Intracellular mechanism of action of vasodilators. Walter U, et al. **Eur Heart J** 1988 Jun;9 Suppl H:1–6 (21 ref.)

Effects of BRL 34915, a putative K channel opener, on transmembrane 45Ca movements in rabbit aortic smooth muscle. Chiu PJ, et al. **Eur J Pharmacol** 1988 Oct 18; 155(3):229–37

5–Hydroxytryptamine contracts human coronary arteries predominantly via 5–HT2 receptor activation. Connor HE, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):91–4

Ergotamine enhances acetylcholine–induced relaxation in various vascular segments of rabbits. Demirel E, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):195–8

Stimulation of prostacyclin release from aortic smooth muscle cells by purine and pyrimidine nucleotides. Demolle D, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):339–43

Endothelin–1 contracts isolated vessels independently of dihydropyridine–sensitive Ca2+ channel activation. D'Orleans–Juste P, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2–3):289–95

Effects of vasodilator drugs on venous tone in conscious rats. D'Oyley HM, et al. **Eur J Pharmacol** 1989 Mar 21; 162(2):337–44

Effects of sodium nitroprusside on cytosolic calcium level in vascular smooth muscle. Karaki H, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):259–66

Different effects of norepinephrine and KCl on the cytosolic Ca2+–tension relationship in vascular smooth muscle of rat aorta. Karaki H, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):325–8

Different effects of R 56865 and calcium entry blockers on K+– and noradrenaline–induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183–90

Vasorelaxant effects of atriopeptins in human internal mammary artery. McMahon EG, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):155–8

Modulation of vascular tone by 12(R)–, but not 12(S)–, hydroxyeicosatetraenoic acid. Masferrer J, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):487–90

Ouabain–induced contraction of vascular smooth muscle in spontaneously hypertensive rats and the effect of hydralazine. Morita S, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):409–18

Analogues of vasoactive intestinal peptide (VIP) contract the guinea–pig uterine artery but do not antagonize VIP–induced relaxations. Morris JL, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):375–9

Desensitization of guanylate cyclase in nitrate tolerance does not impair endothelium–dependent responses. Mülsch A, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):191–8

Relaxing effects of adenosine in coronary artery in calcium–free medium. Ramagopal MV, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):33–40

Comparative pharmacology of rat and porcine endothelin in rat aorta and pulmonary artery. Rodman DM, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):297–300

Effect of acute and chronic ethanol on the agonist responses of vascular smooth muscle. Strickland JA, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):83–91

The electrogenic Na–K pump does not contribute to endothelium–dependent hyperpolarization in the rabbit ear artery. Suzuki H. **Eur J Pharmacol** 1988 Nov 1;156(2):295–7

The effects of adenosine triphosphate and related purines on arterial resistance vessels in vitro and in vivo. Taylor EM, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):121–33

Asymmetry of responses to norepinephrine in perfused resistance arteries. Tesfamariam B, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):167–70

Streptozotocin: a nitric oxide carrying molecule and its effect on vasodilation. Thomas G, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):279–80

Effects of endothelin on the renal artery from spontaneously hypertensive and Wistar Kyoto rats. Tomobe Y, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):373–4

Effect of aclarubicin on contractile response of rat aorta. Wakabayashi I, et al. **Eur J Pharmacol** 1989 Aug 11; 167(1):177–80

Comparison of vasorelaxants in human basilar arteries and umbilical arteries. White RP. **Eur J Pharmacol** 1988 Oct 11;155(1–2):109–15

Comparative effects of K+ channel blockade on the vasorelaxant activity of cromakalim, pinacidil and nicorandil. Wilson C, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):331–9

Modulation of pulmonary artery contraction by endothelium–derived relaxing factor. Yamaguchi T, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):259–62

The vasorelaxant effect of evocarpine in isolated aortic strips: mode of action. Yamahara J, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):139–43

Phorbol 12–myristate 13–acetate prevents isoproterenol–induced morphological change in cultured vascular smooth muscle cells. Nabika T, et al. **Exp Cell Res** 1988 Oct;178(2):358–68

The contractile response of vascular smooth muscle to thrombin and its inhibition by thrombin inhibitors. Glusa E, et al. **Folia Haematol (Leipz)** 1988;115(1–2):94–100

Phenyl–t–butylnitrone, a free radical spin–trapping agent, inhibits acetylcholine–induced relaxation and cyclic GMP accumulation in rat thoracic aorta. Sata T, et al. **Fukuoka Igaku Zasshi** 1988 Sep;79(9):674–82

Contractile responses to hypoxia of isolated rings from the left branch of rabbit pulmonary artery. Bonnet P, et al. **Fundam Clin Pharmacol** 1989;3(2):115–26

Effects of cicletanine on histamine–induced contractions of isolated rabbit mesenteric arteries. Ebeigbe AB, et al. **Fundam Clin Pharmacol** 1989;3(3):223–35

Beta–blocking actions of betaxolol on the isolated rat portal vein. Vidal–Beretervide K. **Fundam Clin Pharmacol** 1988; 2(4):277–81

Endothelium modulates the effects of alpha–adrenoceptor agonists in vascular smooth muscle. Demirel E, et al. **Gen Pharmacol** 1989;20(1):89–93

Bay K 8644–induced potentiation of the contractile response of rabbit iliac artery to caffeine in a Ca2+–free medium. Ito M, et al. **Gen Pharmacol** 1989;20(1):95–8

Effects of alpha, beta–methylene ATP on electrical responses produced by ATP and nerve stimulation in smooth muscle

cells of the guinea-pig mesenteric artery. Nagao T, et al. **Gen Pharmacol** 1988;19(6):799–805

Selective potentiation of extracellular Ca2+-dependent contraction by neuropeptide Y in rabbit mesenteric arteries. Oshita M, et al. **Gen Pharmacol** 1989;20(3):363–7

Inhibitory actions of amiodarone on the isolated rabbit heart and aorta. Raddino R, et al. **Gen Pharmacol** 1989; 20(3):313–7

Inhibitory effects of TYB 3823, a new antiarrhythmic agent, on mechanical responses in the vascular smooth muscles. Shibata S, et al. **Gen Pharmacol** 1989;20(3):303–7

Tetraethylammonium-induced contraction of rabbit coronary artery. Iwaki M, et al. **Heart Vessels** 1988; 4(3):141–8

Extra- and intracellular calcium in vanadate-induced contraction of vascular smooth muscle. Sunano S, et al. **Heart Vessels** 1988;4(1):6–13

Angiotensin II-stimulated protein synthesis in cultured vascular smooth muscle cells. Berk BC, et al. **Hypertension** 1989 Apr;13(4):305–14

Glucocorticoid modulation of beta-adrenergic receptors of cultured rat arterial smooth muscle cells. Jazayeri A, et al. **Hypertension** 1988 Oct;12(4):393–8

Potential mechanism of cyclosporine A-induced vascular smooth muscle contraction. Meyer-Lehnert H, et al. **Hypertension** 1989 Apr;13(4):352–60

Enhanced responsiveness to angiotensin II in vascular smooth muscle cells from spontaneously hypertensive rats is not associated with alterations in protein kinase C. Resink TJ, et al. **Hypertension** 1989 Sep;14(3):293–303

Epidermal growth factor responsiveness in smooth muscle cells from hypertensive and normotensive rats. Scott-Burden T, et al. **Hypertension** 1989 Apr; 13(4):295–304

Effects of atrial natriuretic factor (ANF) on phenylephrine-triggered intra- and extracellular calcium dependent contraction in rat aorta. Delaflotte S, et al. **J Auton Pharmacol** 1989 Jun;9(3):211–8

Effects of endothelial cell removal on constrictor and dilator responses of aortae of pregnant rats. Jansakul C, et al. **J Auton Pharmacol** 1989 Apr;9(2):93–101

The role of potassium channels in vascular relaxation. Proceedings of a symposium on pinacidil. Indianapolis, Indiana, June 25, 1987. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S1–47

Effects of neuropeptide Y on contraction, relaxation, and membrane potential of rabbit cerebral arteries. Abel PW, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):52–63

Discrimination between phenylephrine-triggered contractile events by atrial natriuretic factor in rat aorta. Auguet M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S17–9

Role of serotonin, histamine, and thromboxane A2 in platelet-induced contractions of coronary arteries and aortae from rabbits. Awano K, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):781–92

Persistence of the response to SIN1 on isolated coronary arteries rendered tolerant to nitroglycerin in vitro or in vivo. Berkenboom G, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):345–9

Epinephrine facilitates neurogenic responses in isolated segments of dog mesenteric arteries. Borkowski KR, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):760–6

Vascular mechanism of action of endothelin-1: effect of Ca2+ antagonists. Chabrier PE, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S32–5; discussion S45

5-HT2-receptor antagonists: alpha 1- vs. 5-HT2-receptor blocking properties in blood vessels. Cohen ML, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S25–9

Pinacidil-induced vascular relaxation: comparison to other vasodilators and to classical mechanisms of vasodilation. Cohen ML, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S5–9

Effect of some potassium channel blockers on contractile responses of the rabbit aorta. Cook NS. **J Cardiovasc Pharmacol** 1989 Feb;13(2):299–306

Endothelin-1: contractile responses and autoradiographic localization of receptors in rabbit blood vessels. Dashwood M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S183–5

Differential effects of verapamil and flunarizine on epinephrine-induced vasoconstriction and on spontaneous vasomotion of arterioles in skeletal muscle in the rat in vivo. De Clerck F, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):76–83

Pharmacology of endothelin-1 in isolated vessels: effect of nicardipine, methylene blue, hemoglobin, and gossypol. D'Orleans-Juste P, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S19–22; discussion S45

Effect of KT-362, a putative intracellular calcium antagonist, on norepinephrine-induced contractions and inositol monophosphate accumulation in canine femoral artery. Eskinder H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):502–7

Effect of endothelin-1 on arterioles and venules in vivo. Fortes ZB, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S200–1

Possible mechanism of benzodiazepine-induced relaxation of vascular smooth muscle. French JF, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):405–11

Stimulation of the Na+, K+ pump and the (Na+, K+, Cl-) cotransport system by endothelin-1 in cultured vascular smooth muscle cells: involvement of cyclo-oxygenase products. Garay R, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S213–5

Differential vasorelaxant effects of milrinone and amrinone on contractile responses of canine coronary, cerebral, and renal arteries. Harris AL, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):238–44

Vascular effects of carvedilol, a new beta-adrenoceptor antagonist with vasodilating properties, in isolated canine coronary artery. Hattori Y, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):572–9

Endothelial cell-derived vasoconstrictors: mechanisms of action in vascular smooth muscle. Highsmith RF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S36–44; discussion S45

Actions of a novel thromboxane A2-receptor antagonist, S-145, on isolated monkey and cat arteries. Nakajima M, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):502–9

Differential vascular sensitivity to luminally and adventitially applied endothelin-1. Pohl U, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S188–90

Endothelin-1 from pulmonary artery and microvessels acts on vascular and airway smooth muscle. Ryan US, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S57–62 discussion S74

Ca2+ antagonists and inhibitory effects of dopamine on isolated rabbit ear artery. Scriabine A, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S107–12

Differential inhibitory effects of nitroglycerin on contractile responses to the alpha-adrenoceptor agonists, methoxamine and clonidine, in rabbit aorta. Shibata S, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):245–52

Endothelin-1 acts in cerebral arteries from the adventitial but not from the luminal side. Shigeno T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S174–6

Endothelin-1-induced vascular contractions: interactions with drugs affecting the calcium channel. Stasch JP, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S63–6; discussion S74

The relation between vascular relaxant and cardiac electrophysiological effects of pinacidil. Steinberg MI, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S30–40

Endothelin-1-induced contractions of vascular and tracheal smooth muscle: effects of nicardipine and BRL 34915. Turner NC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S180–2

Effect of pinacidil on norepinephrine- and potassium-induced contractions and membrane potential in rat and human resistance vessels and in rat aorta. Videbaek LM, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S23–9

Effects of calcium antagonists on mean circulatory filling pressure in the conscious rat. Waite RP, et al. **J Cardiovasc Pharmacol** 1988;12(5):499–504

The mechanism of action of endothelin-1 as compared with other agonists in vascular smooth muscle. Wallnöfer A, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S23–31; discussion S45

Age influences responses of rat isolated aorta and pulmonary artery to the calcium channel agonist, Bay K 8664, and to potassium and calcium. Wanstall JC, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):709–14

The mode of action of pinacidil and its analogs P1060 and P1368: results of studies in rat blood vessels. Weston AH, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S10–6

Different effects of endothelin-1 on cAMP- and cGMP-mediated vascular relaxation in human arteries and veins: comparison with norepinephrine. Yang ZH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S129–31; discussion S142

Coupling between inositol phosphate formation and DNA synthesis in smooth muscle cells stimulated with neurokinin A. Hultgårdh-Nilsson A, et al. **J Cell Physiol** 1988 Oct; 137(1):141–5

Decreased susceptibility of cultured smooth muscle cells from SHR rats to growth inhibition by heparin. Resink TJ, et al. **J Cell Physiol** 1989 Jan;138(1):137–44

Interleukin 1 inhibits contraction of vascular smooth muscle. Beasley D, et al. **J Clin Invest** 1989 Jan;83(1):331–5

Nitric oxide-generating vasodilators and 8-bromo-cyclic guanosine monophosphate inhibit mitogenesis and proliferation of cultured rat vascular smooth muscle cells. Garg UC, et al. **J Clin Invest** 1989 May;83(5):1774–7

Interaction of atriopeptin III and vasopressin on calcium kinetics and contraction of aortic smooth muscle cells. Meyer-Lehnert H, et al. **J Clin Invest** 1988 Oct; 82(4):1407–14

Endothelin-induced increases in vascular smooth muscle Ca2+ do not depend on dihydropyridine-sensitive Ca2+ channels. Mitsuhashi T, et al. **J Clin Invest** 1989 Aug; 84(2):635–9

Immune interferon inhibits proliferation and induces 2'-5'-oligoadenylate synthetase gene expression in human vascular smooth muscle cells. Warner SJ, et al. **J Clin Invest** 1989 Apr;83(4):1174–82

Effects of sophoramine, an alkaloid from Sophora alopecuroides on isolated dog blood vessels. Bian K, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):167–78

Comparison of age-related changes in prostaglandin E1 and beta-adrenergic responsiveness of vascular smooth muscle in adult males. Hiremath AN, et al. **J Gerontol** 1989 Jan; 44(1):M13–7

Calcium and contractile responses to ouabain and potassium-free solution in aortae from spontaneously hypertensive rats. Lamb FS, et al. **J Hypertens** 1988 Oct; 6(10):821–8

Effects of thiazide diuretic on vascular eicosanoid system of spontaneously hypertensive rats. Numabe A, et al. **J Hypertens** 1989 Jun;7(6):493–9

A dihydropyridine calcium channel blocker with phosphodiesterase inhibitory activity: effects on cultured vascular smooth muscle and cultured heart cells. Marsh JD, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1141–50

Relaxant and beta 2-adrenoceptor blocking activities of labetalol, dilevalol, amosulalol and KF-4317 on the rat isolated aorta. Doggrell SA. **J Pharm Pharmacol** 1988 Nov; 40(11):812–5

Effects of proenkephalin products on rat cardiac and vascular tissue in-vitro. Douglas H, et al. **J Pharm Pharmacol** 1988 Sep;40(9):648–50

Effects of BN 52063 and other agents inhibiting platelet-activating factor-induced contractile responses in rat portal vein. Hellegouarch A, et al. **J Pharm Pharmacol** 1988 Aug;40(8):589–91

A comparison of the effects of oxodipine and nifedipine on rat vas deferens. Martin I, et al. **J Pharm Pharmacol** 1988 Sep;40(9):657–9

Cardiovascular effects of fibrinopeptide B. Moore PK, et al. **J Pharm Pharmacol** 1988 Aug;40(8):558–61

Non-specific hyperreactivity to pharmacological stimuli in tracheal and lung parenchymal strips of actively sensitized guinea-pigs. Ortiz JL, et al. **J Pharm Pharmacol** 1989 May; 41(5):316–21

Effects of methylene blue on the uptake, release and metabolism of noradrenaline in mesenteric arterial vessels. Soares-da-Silva P, et al. **J Pharm Pharmacol** 1988 Aug; 40(8):534–8

Relaxant actions of khellin on vascular smooth muscle. Ubeda A, et al. **J Pharm Pharmacol** 1989 Apr;41(4):236–41

Effect of forskolin on cytosolic Ca++ level and contraction in vascular smooth muscle. Abe A, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):895–900

Pharmacological properties of the receptor(s) involved in the 5-hydroxytryptamine-induced contraction of the feline middle cerebral artery. Hamel E, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):879–89

Phosphodiesterase isozyme inhibition and the potentiation by zaprinast of endothelium-derived relaxing factor and guanylate cyclase stimulating agents in vascular smooth muscle. Harris AL, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):394–400

Para-bromophenacyl bromide inhibits endothelium-dependent arterial relaxation and cyclic GMP accumulation by effects produced exclusively in the smooth muscle. Johns RA, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):859–65

Involvement of endothelial cells in relaxation and contraction responses of the aorta to isoproterenol in naive and streptozotocin-induced diabetic rats. Kamata K, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):890–4

Terbinafine inhibits the mitogenic response to platelet-derived growth factor in vitro and neointimal proliferation in vivo. Nemecek GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1167–74

Phorbol dibutyrate inhibits release and action of endothelium-derived relaxing factor(s) in canine blood vessels. Rubanyi GM, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):858–63

Inhibition of the low Km cyclic AMP phosphodiesterase and activation of the cyclic AMP system in vascular smooth muscle by milrinone. Silver PJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):34–42

Glyburide blocks the relaxation response to BRL 34915 (cromakalim), minoxidil sulfate and diazoxide in vascular smooth muscle. Winquist RJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):149–56

Pertussis toxin inhibits endothelium-dependent relaxations to certain agonists in porcine coronary arteries. Flavahan NA, et al. **J Physiol (Lond)** 1989;408:549–60

Effects of guanosine nucleotides on skinned smooth muscle tissue of the rabbit mesenteric artery. Fujiwara T, et al. **J Physiol (Lond)** 1989;408:535–47

Guanine nucleotide- and inositol 1,4,5-trisphosphate-induced calcium release in rabbit main pulmonary artery. Kobayashi S, et al. **J Physiol (Lond)** 1988 Sep;403:601–19

Molecular mechanism of action by atrial natriuretic peptide in rat vascular smooth muscle cells. Hirata Y, et al. **Jpn Circ J** 1988 Dec;52(12):1430–5

Pharmacological actions of synthetic atrial natriuretic factor on coronary vascular smooth muscle. Yanagisawa A, et al. **Jpn Circ J** 1988 Dec;52(12):1436–40

Suppression of spontaneous calcium spikes and contraction in isolated portal veins of mice by gingerols and chemically related compounds. Kimura I, et al. **Jpn J Pharmacol** 1988 Oct;48(2):257–62

Modulation of eicosanoid-induced contraction of mouse and rat blood vessels by gingerols. Kimura I, et al. **Jpn J Pharmacol** 1989 Jul;50(3):253–61

Characterization of a novel alpha 1-adrenoceptor antagonist, SGB-1534, in contractile response of isolated canine arterial and venous smooth muscle to exogenous noradrenaline: comparison with prazosin, phentolamine and yohimbine. Koga T, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):185–93

A study on the hypotensive mechanism of pinacidil: relationship between its vasodilating effect and intracellular Ca2+ levels. Nakajima S, et al. **Jpn J Pharmacol** 1989 Feb; 49(2):205–13

Role of endothelium in the response to prostaglandin H2 in isolated dog arteries. Okamura T, et al. **Jpn J Pharmacol** 1989 Apr;49(4):511–21

Endothelin dissociates muscle tension from cytosolic Ca2+ in vascular smooth muscle of rat carotid artery. Ozaki H, et al. **Jpn J Pharmacol** 1989 Aug;50(4):521–4

Reversed effects between crude and processed ginger extracts on PGF2 alpha-induced contraction in mouse mesenteric veins. Pancho LR, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):243–6

Changes in plasma level of alpha-atrial natriuretic polypeptide (alpha-ANP) and responsiveness of the aorta to exogenous alpha-ANP subsequent to myocardial infarction in rats. Wang YT, et al. **Jpn J Pharmacol** 1989 Apr;49(4):463–9

Direct and indirect actions of acetylcholine and histamine on intrapulmonary artery and vein muscles of the rat. Chen GF, et al. **Jpn J Physiol** 1989;39(1):51–65

Extrarenal effects of aldosterone and antimineralocorticoid compounds. Moura AM, et al. **Kidney Int Suppl** 1988 Oct; 26:S8–11

Increased vascular contractile sensitivity to serotonin in spontaneously hypertensive rats is linked with increased turnover of phosphoinositide. Huzoor-Akbar, et al. **Life Sci** 1989;45(7):577–83

What is the relationship between the endothelium derived relaxant factor and nitric oxide? Long CJ, et al. **Life Sci** 1989;45(1):1–14 (64 ref.)

Calcium uptake studies of 1,4-dihydropyridine agonists into rabbit aortic smooth muscle cells in culture. Papaioannou S, et al. **Life Sci** 1989;44(23):1751–8

Contractile action of heat-labile toxin of Bordetella parapertussis on aortic smooth muscles of pigs. Endoh M, et al. **Microbiol Immunol** 1988;32(8):755–67

Active tone and arteriolar responses to increased oxygen availability in the mesoappendix of spontaneously hypertensive rats. Lombard JH, et al. **Microcirc Endothelium Lymphatics** 1988 Oct;4(5):339–53

Microcirculatory effects of leukotrienes, LTC4 and LTD4, in rat cremaster muscle. Messina EJ, et al. **Microcirc Endothelium Lymphatics** 1988 Oct;4(5):355–76

Subtype-selective up-regulation of human saphenous vein beta 2-adrenoceptors by chronic beta-adrenoceptor antagonist treatment. Brodde OE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):479–82

Phorbol 12,13-dibutyrate, an activator of protein kinase C, stimulates both contraction and Ca2+ fluxes in dog saphenous vein. Chiu PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):114–20

A comparison of the actions of noradrenaline and UK-14,304 in the longitudinal smooth muscle of the rat isolated portal vein--no evidence for a population of post-junctional alpha 2-adrenoceptors. Downing OA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):239–45

Effects of calcium entry blocking agents on 5-hydroxytryptamine- and noradrenaline-induced contractions of rat isolated jugular vein and aorta. Gouw MA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May;339(5):533–9

The inhibition of alpha 1-adrenoceptor-mediated contractions of rabbit pulmonary artery by Ca2+-withdrawal, pertussis toxin and N-ethylmaleimide is dependent on agonist intrinsic efficacy. Liebau S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):496–502

Biphasic relaxant curves to glyceryl trinitrate in rat aortic rings. Evidence for two mechanisms of action. Malta E. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):236–43

Changes in the venous compliance by bradykinin and angiotensin II and its significance for the vascular effects of cyclosporine-A. Müller-Schweinitzer E. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):699–703

The actions of 5-hydroxytryptamine receptor agonists and antagonists at pre- and postjunctional level on the canine saphenous vein. Paiva MQ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):616–22

Comparison of the effluxes of 42K+ and 86Rb+ elicited by cromakalim (BRL 34915) in tonic and phasic vascular tissue. Quast U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):319–26

The potassium channel opening action of pinacidil; studies using biochemical, ion flux and microelectrode techniques. Southerton JS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):310–8

Pertussis toxin and N-ethylmaleimide inhibit histamine- but not calcium ionophore-induced endothelium-dependent relaxation. Weinheimer G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):14–8

Increases in coronary vascular resistance initiated by blockade of CNS GABAergic tone occurs in the hindbrain. Segal SA, et al. **Neuropharmacology** 1989 Apr;28(4):367–72

Maturation-related changes in dopamine-induced relaxation of isolated rabbit pulmonary artery. Mori M, et al. **Pediatr Res** 1988 Aug;24(2):160–5

Angiotensin II increases Isi and blocks IK in single aortic cell of rabbit. Bkaily G, et al. **Pflugers Arch** 1988 Sep; 412(4):448–50

A comparison of the effects and interactions of cromakalim and glibenclamide in cardiac and vascular tissues. BoSmith RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S190

Characterization of a novel K+ channel activator, EMD 52962, in electrophysiological and pharmacological experiments. De Peyer JE, et al. **Pflugers Arch** 1989;414 Suppl 1:S191

Ryanodine reduces the amount of calcium in intracellular stores of smooth-muscle cells of the rabbit ear artery. Kanmura Y, et al. **Pflugers Arch** 1988 Dec;413(2):153–9

Modulation of the spontaneous transient outward currents by histamine in single vascular smooth muscle cells. Neliat G, et al. **Pflugers Arch** 1989;414 Suppl 1:S186–7

Effects of inositol phosphates on the membrane activity of smooth muscle cells of the rabbit portal vein. Ohya Y, et al. **Pflugers Arch** 1988 Sep;412(4):382–9

Effects of quinine and of calmodulin inhibitors on calcium-dependent potassium channels of human aorta. Serebryakov VN, et al. **Pflugers Arch** 1989;414 Suppl 1:S185

Ca2+-activated K+ channels contribute to the resting potential of vascular myocytes. Ca2+-sensitivity is increased by intracellular Mg2+-ions. Trieschmann U, et al. **Pflugers Arch** 1989;414 Suppl 1:S183–4

Inhibitory action of norepinephrine on sodium transport in vascular smooth muscle cells in culture. Tuck M, et al. **Pflugers Arch** 1989 Mar;413(5):493–7

Smooth muscle K+ channel openers; their pharmacology and clinical potential. Weston AH. **Pflugers Arch** 1989;414 Suppl 1:S99–105 (79 ref.)

Effects of Ginkgo biloba extract on glucose transport and glycogen synthesis of cultured smooth muscle cells from pig aorta. Bruel A, et al. **Pharmacol Res** 1989 Jul-Aug; 21(4):421–9

Action of papaverine and verapamil on norepinephrine and calcium evoked contraction of vascular and non vascular smooth muscle. D'Agostino G, et al. **Pharmacol Res Commun** 1983 Nov;15(10):937–49

The effect of furosemide on vascular smooth muscle is influenced by plasma protein. Andreasen F, et al. **Pharmacol Toxicol** 1988 Nov;63(5):324–6

Effects of a competitive inhibitor (mevinolin) of 3-hydroxy-3-methylglutaryl coenzyme A reductase on human and bovine endothelial cells, fibroblasts and smooth muscle cells in vitro. Falke P, et al. **Pharmacol Toxicol** 1989 Feb;64(2):173–6

Relaxant effects of the selective phosphodiesterase inhibitors milrinone and OPC 3911 on isolated human mesenteric vessels. Lindgren S, et al. **Pharmacol Toxicol** 1989 May; 64(5):440–5

Histamine receptors in the smooth muscle of human internal mammary artery and saphenous vein. Schoeffter P, et al. **Pharmacol Toxicol** 1989 Jan;64(1):64–71

Effect of endothelium on phenylephrine-induced contraction in the rat isolated aortic strips. Demirel E, et al. **Pharmacology** 1989;38(1):34–9

Different sensitivities for four calcium entry blockers of serotonin-, but not K+-induced contractions of isolated jugular vein and aorta of the rat. Gouw MA, et al. **Pharmacology** 1989;38(5):289–97

Relaxing effects of dilazep and lidoflazine in dog cerebral and renal arteries independent of adenosine. Mustafa SJ, et al. **Pharmacology** 1988;37(2):75–84

Endothelium-dependent and -independent mechanisms of action of acetylcholine in monkey and dog isolated arteries. Okamura T, et al. **Pharmacology** 1989;38(5):279–88

Effect of ouabain on norepinephrine-induced contractions of isolated rabbit aorta. Oktay S, et al. **Pharmacology** 1988; 37(2):69–74

Effect of nisoldipine on large coronary arteries in situ: inhibition of vasoconstriction induced by vasopressin. Saito T, et al. **Pharmacology** 1988;37(2):85–93

Time-dependent effects of extraluminally-applied oxyhemoglobin and endothelial removal on vasodilator responses in isolated, perfused canine basilar arteries. Tsuji T, et al. **Pharmacology** 1989;38(2):101–12

Diverse effects of estradiol-17 beta: concurrent suppression of appetite, blood pressure and vascular reactivity in conscious, unrestrained animals. McCaffrey TA, et al. **Physiol Behav** 1989 Mar;45(3):649–57

Modulation of human aorta smooth muscle cell phenotype: a study of muscle-specific variants of vinculin, caldesmon, and actin expression. Glukhova MA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9542–6

Lysolecithins as endothelium-dependent vascular smooth muscle relaxants that differ from endothelium-derived relaxing factor (nitric oxide) [published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4725] Saito T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8246–50

Epidermal growth factor-urogastrone (EGF-URO) causes contraction of porcine coronary arterial strips: inhibition by indomethacin. Gan BS, et al. **Proc West Pharmacol Soc** 1989;32:269–71

Potentiation of norepinephrine-induced vasoconstrictions by neuropeptide Y in isolated canine carotid artery. Gintautas J, et al. **Proc West Pharmacol Soc** 1989;32:327–8

Interaction between several S1A and alpha 1 agonists on rabbit aortic rings. Hong E, et al. **Proc West Pharmacol Soc** 1989;32:235–7

AK-2-38, a nifedipine analogue with potent smooth muscle calcium antagonist action and partial agonist effects on isolated guinea pig left atrium. Matowe WC, et al. **Proc West Pharmacol Soc** 1989;32:305–7

Role of endothelial relaxing and contracting factors in rabbit cranial artery responses to hypoxia. Pearce WJ. **Proc West Pharmacol Soc** 1989;32:239–45

The degree of atrial natriuretic peptide (ANP)-induced contraction inhibition is dependent on spare receptors. Prins BA, et al. **Proc West Pharmacol Soc** 1989;32:263

Role of endothelium-derived relaxing factor (EDRF) and monoamine oxidase (MAO) in the response of the bovine coronary artery to serotonin. Purdy RE, et al. **Proc West Pharmacol Soc** 1989;32:247

Pharmacological properties of endothelin in vitro. Swank SR, et al. **Proc West Pharmacol Soc** 1989;32:275

Regulatory effects of eicosanoids on thymidine uptake by vascular smooth muscle cells of rats. Uehara Y, et al. **Prostaglandins** 1988 Dec;36(6):847–57

Effects of verapamil and nifedipine on human uterine artery "in vitro". García de Boto MJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):361–4

Inhibitors of angiotensin-converting enzyme prevent myointimal proliferation after vascular injury. Powell JS, et al. **Science** 1989 Jul 14;245(4914):186–8

Comparison of intraluminally versus extraluminally administered nimodipine on serotonin-induced cerebral vascular responses in vitro and in situ. Vinall PE, et al. **Stroke** 1989 Aug;20(8):1065–70

Pharmacological features of vascular responses of isolated rat common carotid arteries to vasoactive substances revealed by the cannula inserting method. Chiba S, et al. **Tohoku J Exp Med** 1989 Mar;157(3):199–204

Effects of calcium antagonists on low density lipoprotein metabolism in human arterial smooth muscle cells. Mori S, et al. **Tohoku J Exp Med** 1988 Apr;154(4):329–33

Cyclic GMP accumulation by atriopeptins in cultured rat renal and vascular smooth muscle cells. Sato M, et al. **Tohoku J Exp Med** 1988 Apr;154(4):399–411

Role of benzylamine oxidase in the cytotoxicity of allylamine toward aortic smooth muscle cells. Hysmith RM, et al. **Toxicology** 1988 Oct;51(2-3):133–45

Regulation of smooth muscle proliferative phenotype by heparinoid--matrix interactions. Scott-Burden T, et al. **Trends Pharmacol Sci** 1988 Mar;9(3):94–8 (27 ref.)

Effects of caffeine on the vascular smooth muscles isolated from two-kidney, one-clip renovascular hypertension in rabbits. Yoshida M, et al. **Urol Int** 1989;44(3):147–51

[Effect of sex hormones on the synthesis-secretion function of venous myocytes] Khristova M, et al. **Akush Ginekol (Sofiia)** 1988;27(5):30–4 (Eng. Abstr.) **(Bul)**

[Calcium antagonism of allitridi] Chen SH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):533–5 (Eng. Abstr.) **(Chi)**

[Comparison of effects of four vasodilators on contractions induced by norepinephrine, KCl, and CaCl2 in isolated rabbit aortic strips] Liu Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):237–9 (Eng. Abstr.) **(Chi)**

[Depressant actions of Panax notoginseng saponins on vascular smooth muscles] Wu JX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):147–52 (Eng. Abstr.) **(Chi)**

[Relaxation effect of bovine parathyroid hormone 1-34 on rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):330–3 (Eng. Abstr.) **(Chi)**

[Effects of dl-tetrahydropalmatine on contractions of rabbit aorta strips] Zhao DK, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):153–5 (Eng. Abstr.) **(Chi)**

[Effect of Rabdosia eriocalyx (Dunn) Hara on blood pressure and vascular smooth muscle] Li HL, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):46–9, 64 (Eng. Abstr.) **(Chi)**

[Is isoflurane a calcium antagonist?] Blaise GA, et al. **Ann Fr Anesth Reanim** 1989;8(1):42–5 (Eng. Abstr.) **(Fre)**

[Effect of procyanidolic oligomers on cultured mesenchymal cells. I. Effect on attachment, proliferation and detachment of cells] Gavignet C, et al. **Pathol Biol (Paris)** 1989 Jun; 37(6):746–53 (Eng. Abstr.) **(Fre)**

[Tolerance of nitrate derivatives: pharmacologic and clinical aspects] Unger P, et al. **Rev Med Brux** 1989 Mar;10(3):82–8 (56 ref.) (Eng. Abstr.) **(Fre)**

[Improving venous tone and capillary sealing. Effect of a combination of Ruscus extract and hesperidine methyl chalcone in healthy probands in heat stress] Rudofsky G. **Fortschr Med** 1989 Jun 30;107(19):52, 55–8 (Eng. Abstr.) **(Ger)**

[Testing of proliferation modifying substances on cultivated blood vessel wall cells of the human] Roth D, et al. **Vasa Suppl** 1988;23:27–30 **(Ger)**

[Beta adrenergic receptor-induced stimulation of the vascular renin-angiotensin system: significance for noradrenaline liberation and the mechanism of action of

angiotensin-converting enzyme inhibitors] Göthert M. **Z Kardiol** 1988;77 Suppl 3:35–7 **(Ger)**

[Studies on the mechanisms of the antiatherogenic effect of Ca-antagonists] Birou S. **Igaku Kenkyu** 1988 Apr; 58(2):77–84 (Eng. Abstr.) **(Jpn)**

[Effects of electrolyte composition and temperature of extra-cellular fluid on coronary artery contraction] Yoshida K. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):291–7 (Eng. Abstr.) **(Jpn)**

[Effects of thiazide diuretics on the vascular eicosanoid system of spontaneously hypertensive rats and their mechanisms] Numabe A, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1339–47 (Eng. Abstr.) **(Jpn)**

[Changes in Mg++ concentration of CSF after subarachnoid hemorrhage and Mg++—effects on the contractions of bovine cerebral artery] Miura K. **No Shinkei Geka** 1988 Oct;16(11):1251–9 (Eng. Abstr.) **(Jpn)**

[Use of calcium channel blockers in neurology] Ryglewicz D, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):240–5 (28 ref.) **(Pol)**

[Effect of atriopeptin on the adrenergic mechanism regulating blood vessel tonus] Azin AL, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):390–2 (Eng. Abstr.) **(Rus)**

[Mechanism of the action of baclofen on the contractile activity of the myocardium and blood vessels] Darinskii IuA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):436–8 (Eng. Abstr.) **(Rus)**

[Mechanism of action of voltaren on the smooth muscles of the blood vessels] Gurkovskaia AV, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):69–72 (Eng. Abstr.) **(Rus)**

[Recurrent spasm of the coronary arteries during the ergometrine test] Kuleshova EV, et al. **Kardiologiia** 1988 Dec;28(12):120–3 **(Rus)**

EMBRYOLOGY

Characterization of the phenotype of smooth muscle cells in human fetal aorta on the basis of ultrastructure, immunofluorescence, and the composition of cytoskeletal and cytocontractile proteins. Nikkari ST, et al. **Atherosclerosis** 1988 Nov;74(1–2):33–40

ENZYMOLOGY

Further studies with 5E and 5Z analogues of PGI2 in platelets and vasculature. Oliva D, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:172–5

Biochemical aspects of inhibition of cardiovascular low (Km) cyclic adenosine monophosphate phosphodiesterase. Silver PJ. **Am J Cardiol** 1989 Jan 3;63(2):2A–8A (49 ref.)

Diacylglycerol metabolism in isolated aortic smooth muscle cells. Severson DL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C11–7

Modulation of glycogen synthase kinase activity of skeletal and smooth muscle casein kinase I by spermine. Hegazy MG, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):653–9

Two types of protein kinase C with different functions in cultured rabbit aortic smooth muscle cells. Kariya K, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1020–7

Platelet-derived growth factor (PDGF)-induced phospholipase C-mediated hydrolysis of phosphoinositides in vascular smooth muscle cells—different sensitivity of PDGF- and angiotensin II-induced phospholipase C reactions to protein kinase C-activating phorbol esters. Kawahara Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):846–54

Endothelin stimulates phospholipase C in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1360–8

Activation of phospholipase A2 by endothelin in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):279–86

Endothelin-induced biphasic formation of 1,2-diacylglycerol in cultured rabbit vascular smooth muscle cells—mass analysis with a radioenzymatic assay. Sunako M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):744–50

Purification of benzylamine oxidase from cultured porcine aortic smooth muscle cells. Hysmith RM, et al. **Biochem Cell Biol** 1988 Aug;66(8):821–9

Characterization of bovine aortic protein kinase C with histone and platelet protein P47 as substrates. Dell KR, et al. **Biochem J** 1988 Sep 1;254(2):455–62

Metabolism of vasoactive peptides by vascular endothelium and smooth muscle aminopeptidase M. Palmieri FE, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):173–80

Characterization and differential expression of human vascular smooth muscle myosin light chain 2 isoform in nonmuscle cells. Kumar CC, et al. **Biochemistry** 1989 May 2;28(9):4027–35

Dephosphorylation of distinct sites in myosin light chain by two types of phosphatase in aortic smooth muscle. Erdödi F, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):67–74

Relative specificities of inhibition of acid cholesteryl ester hydrolase and neutral cholesteryl ester hydrolase in cultured rabbit aortic smooth muscle cells by esterastin and cholesteryl oleyl ether. Morin RJ, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):139–42

Captopril inhibits ouabain-sensitive Na+/K+-ATPase. Accetto R, et al. **Clin Physiol Biochem** 1989;7(2):101–8

Release of phospholipase A2 activity from rat vascular smooth muscle cells mediated by cAMP. Pfeilschifter J, et al. **Eur J Biochem** 1989 Apr 15;181(1):237–42

ATP- and polyphosphate-mediated stimulation of pp60c-src kinase activity in extracts from vascular smooth muscle. Di Salvo J, et al. **J Biol Chem** 1989 Jun 25;264(18):10773–8

Protein kinase C activation stimulates plasma membrane Ca2+ pump in cultured vascular smooth muscle cells. Furukawa K, et al. **J Biol Chem** 1989 Mar 25;264(9):4844–9

Purification and characterization of two forms of cyclic GMP-dependent protein kinase from bovine aorta. Lincoln TM, et al. **J Biol Chem** 1988 Nov 25;263(33):17632–7

Angiotensin II stimulates vimentin phosphorylation via a Ca2+-dependent, protein kinase C-independent mechanism in cultured vascular smooth muscle cells. Tsuda T, et al. **J Biol Chem** 1988 Dec 25;263(36):19758–63

Characterization of a novel isozyme of cGMP-dependent protein kinase from bovine aorta. Wolfe L, et al. **J Biol Chem** 1989 May 5;264(13):7734–41

The (Ca2+-Mg2+)-ATPases of the plasma membrane and of the endoplasmic reticulum in smooth muscle cells and their regulation. Eggermont JA, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S51–5 (40 ref.)

Desensitization of alpha 1 adrenoceptor-stimulated glycogen phosphorylase activity in vascular smooth muscle. Munoz E, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):278–84

Inhibition of cyclic adenosine-3',5'-monophosphate phosphodiesterase from vascular smooth muscle by rolipram analogues. Marivet MC, et al. **J Med Chem** 1989 Jul;32(7):1450–7

Properties of a semicarbazide-sensitive amine oxidase in human umbilical artery. Precious E, et al. **J Pharm Pharmacol** 1988 Sep;40(9):627–33

Role of the calcium-calmodulin system in the adenylate cyclase activity of vascular smooth muscle. Fukuda N, et al. **Jpn Circ J** 1989 Mar;53(3):270–7

Regulation of renin-like enzyme in cultured human vascular smooth muscle cells. Iwai N, et al. **Jpn Circ J** 1988 Nov; 52(11):1338–45

Prolactin stimulation of protein kinase C activity in rat aortic smooth muscle. Sauro MD, et al. **Life Sci** 1989; 44(23):1787–92

Effects of cholesterol oxidation derivatives on cholesterol esterifying and cholesteryl ester hydrolytic enzyme activity of cultured rabbit aortic smooth muscle cells. Morin RJ, et al. **Lipids** 1989 Mar;24(3):217–20

Differential recovery of prostacyclin synthesis in cultured vascular endothelial vs. smooth muscle cells after inactivation of cyclooxygenase with aspirin. Hla TT, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):175–84

[Histochemical ATPase detection in arterial myocytes with regard to their contractile differentiation] Nikolov S, et al. **Anat Anz** 1988;167(5):383–8 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

Cardiac adaptations to aortic constriction in adult and aged rats. Boluyt MO, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H643–8

Effects of aging on agonist-activated 86Rb efflux in arteries of Fischer 344 rats. Cox RH, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H494–501

Age-related anisotropic changes in the fiber orientation of the human blood vessel. An attempt at the application of the molecular orientation analyser for the measurement of human tissue. Yamamoto K, et al. **Cell Mol Biol** 1988; 34(5):571–9

Myosin heavy-chain isoforms in adult and developing rabbit vascular smooth muscle. Borrione AC, et al. **Eur J Biochem** 1989 Aug 1;183(2):413–7

Abnormalities in growth characteristics of aortic smooth muscle cells in spontaneously hypertensive rats. Hadrava V, et al. **Hypertension** 1989 Jun;13(6 Pt 1):589–97

Growth regulation in smooth muscle cells from normal and hypertensive rats. Scott-Burden T, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S124–7

The development expression of the rat alpha-vascular and gamma-enteric smooth muscle isoactins: isolation and characterization of a rat gamma-enteric actin cDNA. McHugh KM, et al. **Mol Cell Biol** 1988 Dec;8(12):5224–31

IMMUNOLOGY

Regulation of major histocompatibility gene expression in human vascular smooth muscle cells. Warner SJ, et al. **Arteriosclerosis** 1989 May–Jun;9(3):279–88

Detection of atherosclerotic plaque with two monoclonal antibodies. 2P1A2 monoclonal antibody is specific for smooth muscle cells in atherosclerotic plaque. Lamaziere JM, et al. **Atherosclerosis** 1988 Nov;74(1–2):115–26

Human brain microvascular DR-antigen. Pardridge WM, et al. **J Neurosci Res** 1989 Jul;23(3):337–41

INJURIES

[Surgically relevant complications in percutaneous transluminal angioplasty] Stierli P, et al. **Helv Chir Acta** 1989 Jun;56(1–2):29–33 (Eng. Abstr.) **(Ger)**

INNERVATION

Sympathetic transmission in small mesenteric arteries from the rat: highly calcium-dependent at low stimulation rates. Sjöblom-Widfeldt N, et al. **Acta Physiol Scand** 1989 Apr; 135(4):505–11

Pertussis toxin effects on transmitter release from perivascular nerve terminals. Nozaki M, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):H455–9

Adrenergic control of intrarenal arteries of rabbits. Owen MP, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H607–12

Enhanced vascular alpha-adrenergic neuroeffector system in diabetes: importance of calcium. White RE, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1036–42

Frequency of neuromuscular junctions on arteries of different dimensions in the rabbit, guinea pig and rat. Luff SE, et al. **Blood Vessels** 1989;26(2):95–106

Experimental evaluation of radiographic contrast media in perivascular pain receptors in the perfused isolated rabbit ear. Hagen B, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:46–53

Adrenergic nerve function and contractile activity of the caudal artery of the streptozotocin diabetic rat. Hart JL, et al. **J Auton Nerv Syst** 1988 Nov;25(1):49–57

Enhanced presynaptic facilitation of vascular adrenergic neurotransmission in spontaneously hypertensive rats. Draper AJ, et al. **J Auton Pharmacol** 1989 Apr;9(2):103–11

Effects of calcium antagonists on myogenic and neurogenic control of resistance and capacitance vessels in cat skeletal muscle. Gustafsson D, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):413–22

Thromboxane mimetics enhance adrenergic neurotransmission in the rabbit-isolated portal vein. Stein EA, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):469–74

Innervation of vascular and cardiac muscle of Aplysia by multimodal motoneuron L7. Alevizos A, et al. **J Neurophysiol** 1989 May;61(5):1053–63

Mechanisms of inhibitory noradrenergic transmission in the rabbit facial vein. Komori K, et al. **Pflugers Arch** 1989 Feb; 413(4):359–64

[Summary of the dissertation: studies of impulse transmission in the inferior mesenteric ganglion] Wesselmann U. **Z Gastroenterol [Verh]** 1989 Jul;24:5–6 **(Ger)**

[Disorders of the endothelial pavement of the vascular bed caused by denervation] Govyrin VA, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):953–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Immunohistochemical localization of atrial natriuretic peptide binding sites in juxtaglomerular cells and vascular walls of rat kidney. Naruse M, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):235–9

Altered synthesis of collagen types in cultured arterial smooth muscle cells during phenotypic modulation by dimethyl sulfoxide. Okada Y, et al. **Acta Pathol Jpn** 1989 Jan;39(1):15–22

Contractile and metabolic characteristics of creatine-depleted vascular smooth muscle of the rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1988 Aug;133(4):525–33

Effects of plasma lipoproteins on eicosanoid metabolism by cultured vascular smooth muscle cells. Larrue J. **Adv Exp Med Biol** 1988;243:47–54

Role of TXA2 in the pathogenesis of severe angiotensin II-salt hypertension. Mistry M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:207–10

Mechanisms of the vascular effect of pressor hormones. Caramelo C, et al. **Am J Cardiol** 1988 Oct 5; 62(11):47G–53G (53 ref.)

Altered agonist-activated 86Rb+ efflux from arteries in canine renal hypertension. Cox RH, et al. **Am J Hypertens** 1989 Jul;2(7):567–9

Effects of spontaneously hypertensive rat plasma on blood pressure and tail artery calcium uptake in normotensive rats. Lewanczuk RZ, et al. **Am J Hypertens** 1989 Jan; 2(1):26–31

Atrial natriuretic peptide: binding and cyclic GMP response in cultured vascular smooth muscle cells from spontaneously hypertensive rats. Resink TJ, et al. **Am J Hypertens** 1989 Jan;2(1):32–9

Intracellular Na+ regulation of Na+ pump sites in cultured vascular smooth muscle cells. Allen JC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C786–92

ADP release from myosin in permeabilized smooth muscle. Butler TM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C59–66

Epidermal growth factor-mediated effects on equine vascular smooth muscle cells. Grosenbaugh DA, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C447–51

Intracellular pathways of insulin transport across vascular endothelial cells. Hachiya HL, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C459–64

Vascular vasopressin receptors in renal hypertensive rats. Larivière R, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H693–8

Histamine-induced calcium transients in vascular smooth muscle cells: effects of verapamil and diltiazem. Matsumoto T, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H563–70

Effect of adenosine and its analogues on calcium influx in coronary artery. Ramagopal MV, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1492–8

Histamine concentration and Ca2+ mobilization in arterial

smooth muscle. Rembold CM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C122–8

Regulation of intracellular calcium by cell pH in vascular smooth muscle cells. Siskind MS, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C234–40

Relationship between cytosolic free Ca2+ and Na+–Ca2+ exchange in aortic muscle cells. Smith JB, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C147–54

Low-density lipoprotein transport in blood vessel walls of squirrel monkeys. Tompkins RG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H452–64

Subtype switching of ANP receptors during in vitro culture of vascular cells. Uchida K, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H311–4

Two types of calcium channels in isolated smooth muscle cells from rat tail artery. Wang R, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1361–8

Endothelial cell inhibition of hypoxia-induced stimulation of serotonin uptake by vascular smooth muscle cells. Yu FS, et al. **Am Rev Respir Dis** 1989 May;139(5):1144–8

Effects of exercise training on biochemical and biomechanical properties of rat aorta. Matsuda M, et al. **Angiology** 1989 Jan;40(1):51–8

Research on the chemical composition of the vascular wall. XXI. The influence of atherogenic diet and hypothyroidism on the content of collagen, elastin, supporting proteins and glycosaminoglycans in the aorta wall of rabbits. Tomaszewski J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:113–24

Phosphorylation of the 20,000-Da myosin light chain isoforms of arterial smooth muscle by myosin light chain kinase and protein kinase C. Erdödi F, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):583–91

Facilitation of noradrenaline release by isoprenaline is not mediated by angiotensin II in mouse atria and rat tail artery. Rajanayagam MA, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:185–99

Cytodifferentiation and expression of alpha-smooth muscle actin mRNA and protein during primary culture of aortic smooth muscle cells. Correlation with cell density and proliferative state. Campbell JH, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):633–43

Effect of normolipemic and hyperlipemic serum on biosynthetic response to cyclic stretching of aortic smooth muscle cells. Grande JP, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):446–52

Cholesterol accumulation in aortic smooth muscle cells exposed to low density lipoproteins. Contribution of free cholesterol transfer. Slotte JP, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):750–8

Beta-very low density lipoprotein uptake in cultured fibroblasts and smooth muscle cells from Watanabe heritable hyperlipidemic rabbits. Wernette-Hammond ME, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):501–10

Intimal permeability evaluated in a short-term organ culture of diabetic guinea pig aorta. Schlosser MJ, et al. **Artery** 1988;15(6):304–15

Some factors influencing the interactions of plasma lipoproteins with arterial elastin. Winlove CP, et al. **Artery** 1988;15(6):292–303

Stable analogues of prostacyclin and thromboxane A2 display contradictory influences on atherosclerotic properties of cells cultured from human aorta. The effect of calcium antagonists. Akopov SE, et al. **Atherosclerosis** 1988 Aug; 72(2–3):245–8

Macrophages modify beta-VLDL by proteolysis and enhance subsequent lipid accumulation in arterial smooth muscle cells. Davis JB, et al. **Atherosclerosis** 1989 Jun; 77(2–3):203–8

Atherosclerotic vascular disease and metabolism–permeability coupling in the rabbit. Doebler JA, et al. **Atherosclerosis** 1989 Apr;76(2–3):273–4

Aortic 125I-albumin transport in patients with Marfan's syndrome and annuloaortic ectasia. Kennedy JH, et al. **Atherosclerosis** 1988 Sep;73(1):33–7

Lack of inhibition of DNA synthesis by prostaglandin I2 in cultured intimal smooth muscle cells from rabbits. Morisaki N, et al. **Atherosclerosis** 1988 Sep;73(1):67–9

Hematoporphyrin binding to cultured aortic smooth muscle cells from spontaneously atherosclerotic turkey. Scannapieco G, et al. **Atherosclerosis** 1988 Aug; 72(2–3):241–4

Low density lipoprotein binding affinity of arterial wall isomeric chondroitin sulfate proteoglycans. Srinivasan SR, et al. **Atherosclerosis** 1988 Jul;72(1):1–9

Stimulation of phospholipase C–mediated hydrolysis of phosphoinositides by endothelin in cultured rabbit aortic smooth muscle cells. Araki S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1072–9

Insulin-like growth factor I stimulates elastin synthesis by bovine pulmonary arterial smooth muscle cells. Badesch DB, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):382–7

Corticosteroids suppress cyclooxygenase messenger RNA levels and prostanoid synthesis in cultured vascular cells. Bailey JM, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1159–63

Receptor binding activity and cytosolic free calcium response by synthetic endothelin analogs in cultured rat vascular smooth muscle cells. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):228–34

Endothelin-sensitive intracellular Ca2+ store overlaps with caffeine-sensitive one in rat aortic smooth muscle cells in primary cultures. Kai H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):235–43

Identification of a major GTP-binding protein in bovine aortic smooth muscle membranes as smg p21, a GTP-binding protein having the same effector domain as ras p21s. Kawata M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1418–27

Ca2+ influx stimulated by vasopressin is mediated by phosphoinositide hydrolysis in rat smooth muscle cells. Kondo K, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):677–82

Endothelin stimulates a sustained 1,2-diacylglycerol increase and protein kinase C activation in bovine aortic smooth muscle cells. Lee TS, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):381–6

Does endothelin mobilize calcium from intracellular store sites in rat aortic vascular smooth muscle cells in primary culture? Miasiro N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):312–7

Endothelin-mediated stimulation of DNA synthesis in vascular smooth muscle cells. Nakaki T, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):880–3

Norepinephrine stimulates the production of inositol trisphosphate and inositol tetrakisphosphate in rat aorta. Pijuan V, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):240–5

Differential effects of PDGF and PDGF-BB on vascular smooth muscle cells. Reilly CF, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1047–54

Phorbol ester dissociates endothelin-stimulated phosphoinositide hydrolysis and arachidonic acid release in vascular smooth muscle cells. Reynolds EE, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):868–73

Endothelin evoked Ca2+ transients and oscillations in A10 vascular smooth muscle cells. Simpson AW, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1223–9

Heparin and endothelial cell growth factor modulate collagen and proteoglycan production in human smooth muscle cells. Tan EM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):84–92

Low density lipoprotein and apoprotein B induce increases in inositol trisphosphate and cytosolic free Ca2+ via pertussis toxin-sensitive GTP-binding protein in vascular smooth muscle cells. Morita R, et al. **Biochem Int** 1989 Mar;18(3):647–53

Effect of the reducing environment on the accumulation of elastin and collagen in cultured smooth-muscle cells [published erratum appears in Biochem J 1989 May 1;259(3):preceding back cover] Bergethon PR, et al. **Biochem J** 1989 Feb 15;258(1):279–84

Mechanism of cellular effect of phorbol esters on action of arginine vasopressin and angiotensin II on rat vascular smooth muscle cells in culture. Caramelo C, et al. **Biochem J** 1988 Sep 15;254(3):625–9

Atrial-natriuretic-factor mRNA is developmentally regulated in heart ventricles and actively expressed in cultured ventricular cardiac muscle cells of rat and human. Claycomb WC. **Biochem J** 1988 Oct 15;255(2):617–20

Characterization of an antibody directed against a 128 kDa glycoprotein involved in the thrombogenicity of the elastin-associated microfibrils. Fauvel-Lafeve F, et al. **Biochem J** 1988 Oct 1;255(1):251–8

Phospholamban is a good substrate for cyclic GMP-dependent protein kinase in vitro, but not in intact cardiac or smooth muscle. Huggins JP, et al. **Biochem J** 1989 Jun 15;260(3):829–35

The plasma-membrane component is the primary site of action of alloxan on ATP-driven Ca2+ transport in vascular-muscle microsomal fractions. Kwan CY. **Biochem J** 1988 Aug 15;254(1):293–6

A tight-binding interaction between smooth-muscle native thin filaments and heavy meromyosin in the presence of MgATP. Marston SB. **Biochem J** 1989 Apr 1;259(1):303–6

Inhibition of formation of cyclic AMP and cyclic GMP by vasopressin in smooth-muscle cells is insensitive to pertussis toxin. Nambi P, et al. **Biochem J** 1988 Sep 1;254(2):449–53

Alpha adrenoceptor sites in vascular smooth muscle. Differentiation by selective antagonist binding. Cheung YD, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4055–61

Endothelium-derived relaxing factor, calcium and inositol phosphates. Lewis MJ, et al. **Biochem Soc Trans** 1988 Aug; 16(4):486–8

Proteoglycan–protein interaction in arterial tissue. Schmidt A. **Biochem Soc Trans** 1989 Feb;17(1):19–20 (8 ref.)

High levels of sodium–calcium exchange in vascular smooth muscle sarcolemmal membrane vesicles. Slaughter RS, et al. **Biochemistry** 1989 May 2;28(9):3995–4002

Fatty acid alters glycogen metabolism in contracting vascular smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):69–73

Stimulatory effects of atrial natriuretic factor on phosphoinositide hydrolysis in cultured bovine aortic smooth muscle cells. Hirata M, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):346–51

Alterations of elastin and elastase-like activities in aortae of diabetic rats. Kwan CY, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):322–5

Fish oil affects phosphoinositide turnover and thromboxane A metabolism in cultured vascular muscle cells. Locher R, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):279–83

Effect of chronic hypoxia on 45Ca and 86Rb uptake in aortic smooth muscle from spontaneously hypertensive rats (SHR). Behm R, et al. **Biomed Biochim Acta** 1989; 48(2–3):S269–73

(5Z)-carbacyclin displays agonist-antagonist properties on prostacyclin-receptors in platelets and vascular myocytes. Corsini A, et al. **Biomed Biochim Acta** 1988; 47(10–11):S104–7

Influence of pentoxifylline administered in vivo on the synthesis of PGI2 in human varicose veins. Fahr A, et al. **Biomed Biochim Acta** 1988;47(10–11):S238–40

Superoxide dismutase does not improve penetration of endothelium-derived relaxing factor (EDRF) through the vessel wall. Gräser T, et al. **Biomed Biochim Acta** 1989; 48(4):351–3

The effects of eicozanoids and lipoxygenase inhibitors on the lipid metabolism of aortic cells. Tertov VV, et al. **Biomed Biochim Acta** 1988;47(10–11):S286–8

Effects of pH and anion substitution on magnesium accumulation in rabbit aortic smooth muscle. Shetty SS, et al. **Blood Vessels** 1989;26(2):65–76

The modulatory role of vascular endothelium in the interaction of agonists and antagonists with alpha-adrenoceptors in the rat aorta. Alosachie I, et al. **Br J Pharmacol** 1988 Oct;95(2):619–29

Role of stimulatory GTP-binding protein (Gs) in reduced beta-adrenoceptor coupling in the femoral artery of spontaneously hypertensive rats. Asano M, et al. **Br J Pharmacol** 1988 Sep;95(1):241–51

Possible mechanism of acetaldehyde-induced noradrenaline release from sympathetic nerve terminals in isolated blood vessels. Chiba S, et al. **Br J Pharmacol** 1988 Sep; 95(1):177–82

Amiloride analogues cause endothelium-dependent relaxation in the canine coronary artery in vitro: possible role of Na+/Ca2+ exchange. Cocks TM, et al. **Br J Pharmacol** 1988 Sep;95(1):67–76

(+)-[3H]-PN 200-110 binding to cell membranes and intact strips of portal vein smooth muscle: characterization and modulation by membrane potential and divalent cations. Dacquet C, et al. **Br J Pharmacol** 1989 May;97(1):256–62

Evidence that the population of postjunctional-adrenoceptors mediating contraction of smooth muscle in the rabbit isolated ear vein is predominantly alpha 2. Daly CJ, et al. **Br J Pharmacol** 1988 Aug;94(4):1085–90

An examination of the postjunctional alpha-adrenoceptor subtypes for (-)-noradrenaline in several isolated blood vessels from the rabbit. Daly CJ, et al. **Br J Pharmacol** 1988 Oct;95(2):473–84

The dihydropyridine niguldipine modulates calcium and potassium currents in vascular smooth muscle cells. Klöckner U, et al. **Br J Pharmacol** 1989 Jul;97(3):957–67

Autoradiographic localization and function of beta-adrenoceptors on the human internal mammary artery and saphenous vein. Molenaar P, et al. **Br J Pharmacol** 1988 Sep;95(1):225–33

Selective modulation by membrane potential of the interaction of some calcium entry blockers with calcium channels in rat mesenteric artery. Morel N, et al. **Br J Pharmacol** 1988 Sep;95(1):252–8

Noradrenaline activates a calcium-activated chloride conductance and increases the voltage-dependent calcium current in cultured single cells of rat portal vein. Pacaud P, et al. **Br J Pharmacol** 1989 May;97(1):139–46

Presynaptic muscarinic receptors inhibiting endogenous noradrenaline release in the portal vein of the freely moving rat. Remie R, et al. **Br J Pharmacol** 1989 Jun;97(2):586–90

Effect of endothelium on basal and on stimulated accumulation and efflux of cyclic GMP in rat isolated aorta. Schini V, et al. **Br J Pharmacol** 1989 Jul;97(3):853–65

Further characterization of the 5-HT receptor mediating vascular relaxation and elevation of cyclic AMP in porcine isolated vena cava. Sumner MJ, et al. **Br J Pharmacol** 1989 May;97(1):292–300

Comparison of the survival of endothelium-derived relaxing factor and nitric oxide within the isolated perfused mesenteric arterial bed of the rat. Warner TD, et al. **Br J Pharmacol** 1989 Jul;97(3):777–82

A comparison of vasodilator activity of agents activating cyclic nucleotides with those inhibiting their metabolism in rabbit isolated ear artery. Wood LM, et al. **Br J Pharmacol** 1989 Mar;96(3):718–24

Increased calcium uptake in vascular tissue by plasma of salt induced hypertensive Dahl rats. Vasdev S, et al. **Can J Cardiol** 1989 Jan–Feb;5(1):51–4

Alpha 1-adrenoceptor activity in arterial smooth muscle following congestive heart failure. Forster C, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):110–5

Differential biotransformation of glyceryl trinitrate by red blood cell-supernatant fraction and pulmonary vein homogenate. Marks GS, et al. **Can J Physiol Pharmacol** 1989 May;67(5):417–22

Vasorelaxant effects of and receptors for atrial natriuretic peptides in the mesenteric artery and aorta of the rat. St-Louis J, et al. **Can J Physiol Pharmacol** 1988 Jul; 66(7):951–6

Atrial natriuretic peptide interferes with calcium requirements in vascular tissues of the rat. St-Louis J, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):963–6

Ionomycin releases calcium from the sarcoplasmic reticulum and activates Na+/Ca2+ exchange in vascular smooth muscle cells. Smith JB, et al. **Cell Calcium** 1989 Apr;

10(3):125–34
Biochemical studies of soluble atrial natriuretic peptide (ANP) receptors from rat olfactory bulb and vascular smooth muscle cells. Glembotski CC, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):57–73
Suramin inhibits binding and degradation of platelet-derived growth factor in arterial smooth muscle cells but does not interfere with autocrine stimulation of DNA synthesis. Sjölund M, et al. **Cell Tissue Res** 1989 Apr;256(1):35–43
Characterization of the 5-hydroxytryptamine receptor which mediates contraction of the human isolated basilar artery. Parsons AA, et al. **Cephalalgia** 1989;9 Suppl 9:47–51
Effects of ketanserin and 3-[2-[4-(o-methoxyphenyl)-1-piperazinyl]ethyl]-2,4=(1H,3H)- quinazolinedione monohydrochloride (SGB-1534), anti-hypertensive agents, on 3H-serotonin and 3H-ketanserin bindings to serotonergic (5HT1 and 5HT2) receptors in dog brain and aorta. Nagatomo T, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3113–8
Vascular dilatory action of the Chinese crude drug. II. Effects of scoparone on calcium mobilization. Yamahara J, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):485–9
Role of LDL receptors in the in vitro uptake and degradation of LDL in the media of rabbit thoracic aorta. Curmi PA, et al. **Circ Res** 1989 May;64(5):957–67
Effects of activation on distribution of Ca2+ in single arterial smooth muscle cells. Determination with fura-2 digital imaging microscopy. Goldman WF, et al. **Circ Res** 1989 May;64(5):1019–29
Sodium-lithium exchange and sodium-proton exchange are mediated by the same transport system in sarcolemmal vesicles from bovine superior mesenteric artery. Kahn AM, et al. **Circ Res** 1989 Sep;65(3):818–28
ATP regulation of the slow calcium channels in vascular smooth muscle cells of guinea pig mesenteric artery. Ohya Y, et al. **Circ Res** 1989 Jan;64(1):145–54
Noradrenaline diffusion, metabolism and vascular response in the rabbit ear artery. de la Lande IS. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):461–4 (11 ref.)
Arterial receptors for adrenal steroids and transport of electrolytes in vascular smooth muscle. Kornel L, et al. **Clin Physiol Biochem** 1988;6(3–4):188–200
Voltage-dependent anion-selective channels in cultured smooth muscle cells of the rat aorta. Sadoshima J, et al. **Comp Biochem Physiol [A]** 1989;92(1):61–3
Changes in the connective tissue components of the aorta in thymectomized rats. Prodanov K, et al. **Cor Vasa** 1988; 30(4):309–16
Qualitative and quantitative differences in protein synthesis comparing fetal lamb ductus arteriosus endothelium and smooth muscle with cells from adjacent vascular sites. Rabinovitch M, et al. **Dev Biol** 1988 Nov;130(1):250–8
Relationship between vascular adrenergic receptors and prostaglandin biosyntheses in canine diabetic coronary arteries. Koltai MZ, et al. **Diabetologia** 1988 Sep; 31(9):681–6
High frequency of cytokeratin-producing smooth muscle cells in human atherosclerotic plaques. Jahn L, et al. **Differentiation** 1989 Mar;40(1):55–62
Ion channel effects of pinacidil in vascular muscle. Hermsmeyer K. **Drugs** 1988;36 Suppl 7:29–32
Concomitant increase in cytosolic free calcium and phosphorylation of myosin light chain by vasoconstrictive hormones in cultured rat vascular smooth muscle cells. Takata S, et al. **Endocrinol Jpn** 1988 Aug;35(4):577–84
Angiotensin II and atrial natriuretic factor–binding sites in various tissues in hypertension: comparative receptor localization and changes in different hypertension models in the rat. Wilson SK, et al. **Endocrinology** 1989 Jun; 124(6):2799–808
Cholesterol efflux from and high-density-lipoproteins binding to cultured bovine vascular endothelial cells are higher than with vascular smooth muscle cells. Savion N, et al. **Eur J Biochem** 1989 Aug 1;183(2):363–70
Retention of haematoporphyrin in the aorta of hypertensive rats: in-vivo and in-vitro studies. Scannapieco G, et al. **Eur J Clin Invest** 1988 Dec;18(6):614–8
Cultured mesenteric vascular smooth muscle cells express dopamine DA1-receptors. Balmforth AJ, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):305–8
Modulation of the accumulation of inositol phosphates and the mobilization of calcium in aortic myocytes. Berta P, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):123–9
Characterization of kappa opioid receptors in the rabbit ear artery. Berzetei IP, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):449–55
Heterologous regulation of EGF receptor function in cultured aortic smooth muscle cells. Blay J, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):1–7
Ciclosporin A inhibits endothelium-dependent vasodilatation and vascular prostacyclin production. Bossaller C, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):165–9
Atrial natriuretic peptide inhibits the release of endothelium-derived relaxing factor from blood vessels of the rabbit. Hogan JC, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):129–34
Bunazosin, an alpha 1-adrenoceptor blocker, differentially releases co-transmitters in dog mesenteric vessels. Komori K, et al. **Eur J Pharmacol** 1989 May 2;164(1):111–20
Inhibition of noradrenaline release in the pig coronary artery via a novel serotonin receptor. Molderings GJ, et al. **Eur J Pharmacol** 1989 May 19;164(2):213–22
Evidence for an A2 adenosine receptor in human coronary arteries. Ramagopal MV, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):483–6
Receptors for kinins in isolated arterial vessels of dogs. Rhaleb NE, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):419–27
Vasoconstrictor response of large cerebral arteries of cats to endothelin, an endothelium-derived vasoactive peptide. Saito A, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):353–8
Endothelial muscarinic receptors in the rabbit aorta. Sim MK, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):399–400
Increases in vascular alpha 1-adrenoceptor affinity and PI turnover in DOCA-salt hypertensive rats. Takata Y, et al. **Eur J Pharmacol** 1989 May 19;164(2):365–8
Characterization of calcium channel antagonist binding sites labeled by [3H]nitrendipine in porcine coronary artery and aorta. Yamada S, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):203–8
Expression of smooth muscle myosin in relation to growth kinetics of cultured aortic smooth muscle cells. Hämmerle H, et al. **Exp Cell Res** 1988 Oct;178(2):390–400
Cholesteryl ester accumulation in smooth muscle cells after uptake of necrotic products from atherosclerotic lesions. Hashimoto S, et al. **Exp Mol Pathol** 1988 Oct;49(2):196–205
Low-density lipoproteins isolated from the blood of patients with coronary heart disease induce the accumulation of lipids in human aortic cells. Tertov VV, et al. **Exp Mol Pathol** 1989 Jun;50(3):337–47
Serotonin-stimulated protein phosphorylation in aortic smooth muscle cells. Nakaki T, et al. **Experientia** 1989 Sep 15;45(9):879–81
Brain natriuretic peptide interacts with atrial natriuretic peptide receptor in cultured rat vascular smooth muscle cells. Hirata Y, et al. **FEBS Lett** 1988 Oct 10;238(2):415–8
Binding and receptor down-regulation of a novel vasoconstrictor endothelin in cultured rat vascular smooth muscle cells. Hirata Y, et al. **FEBS Lett** 1988 Oct 24; 239(1):13–7
A dicarba analog of beta-atrial natriuretic peptide (beta-ANP) inhibits guanosine 3',5'-cyclic monophosphate production induced by alpha-ANP in cultured rat vascular smooth muscle cells. Kambayashi Y, et al. **FEBS Lett** 1989 May 8;248(1–2):28–34
Endothelin stimulates c-fos and c-myc expression and proliferation of vascular smooth muscle cells [published erratum appears in FEBS Lett 1989 Feb 27;244(2):509] Komuro I, et al. **FEBS Lett** 1988 Oct 10;238(2):249–52
Aorta caldesmon inhibits actin activation of thiophosphorylated heavy meromyosin Mg2+-ATPase activity by slowing the rate of product release. Marston S. **FEBS Lett** 1988 Sep 26;238(1):147–50
Induction of c-fos protein by activation of vasopressin receptors in smooth muscle cells. Nambi P, et al. **FEBS Lett** 1989 Mar 13;245(1–2):61–4
Modulation of noradrenaline release from cat cerebral arteries by presynaptic alpha 2-adrenoceptors. Effect of chronic treatment with desipramine and cocaine. Balfagón G, et al. **Gen Pharmacol** 1989;20(3):289–94
The occurrence of dopamine and related metabolites in the coronary and some other arteries. Juorio AV, et al. **Gen Pharmacol** 1989;20(3):359–61
A-23187 evoked transmitter release from rabbit pulmonary artery and its inhibition by reactivation of sodium-pump. Török TL, et al. **Gen Pharmacol** 1989;20(4):421–5
Agonist-induced polyphosphoinositide breakdown in cultured human endothelial and vascular smooth muscle cells. Shirinsky VP, et al. **Health Psychol** 1988;7 Suppl:61–74
Immunolocalization of collagen types I and III in the arterial wall of the rat. Farquharson C, et al. **Histochem J** 1989 Mar;21(3):172–8
Increased sodium-calcium exchange in arterial smooth muscle of spontaneously hypertensive rats. Ashida T, et al. **Hypertension** 1989 Jun;13(6 Pt 2):890–5
Effect of 8-bromo-cyclic guanosine monophosphate on intracellular pH and calcium in vascular smooth muscle. Lockette W, et al. **Hypertension** 1989 Jun;13(6 Pt 2):865–9
Regulation of cytosolic free Ca2+ concentration in vascular smooth muscle cells by A- and C-kinases. Sharma RV, et al. **Hypertension** 1989 Jun;13(6 Pt 2):845–50
Cyclic AMP enhances inositol trisphosphate-induced mobilization of intracellular Ca2+ in cultured aortic smooth muscle cells. Tawada Y, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):795–800
Mechanism of inhibition by alloxan of ATP-driven calcium transport by vascular smooth muscle microsomes. Kwan CY, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):517–31
Phosphorylation of caldesmon in arterial smooth muscle. Adam LP, et al. **J Biol Chem** 1989 May 5;264(13):7698–703
The elastin associated glycoprotein gp115. Synthesis and secretion by chick cells in culture. Colombatti A, et al. **J Biol Chem** 1988 Nov 25;263(33):17534–40
Differential effect of platelet-derived growth factor- versus serum-induced growth on smooth muscle alpha-actin and nonmuscle beta-actin mRNA expression in cultured rat aortic smooth muscle cells. Corjay MH, et al. **J Biol Chem** 1989 Jun 25;264(18):10501–6
Regulation of intracellular Ca2+ levels in cultured vascular smooth muscle cells. Reduction of Ca2+ by atriopeptin and 8-bromo-cyclic GMP is mediated by cyclic GMP-dependent protein kinase. Cornwell TL, et al. **J Biol Chem** 1989 Jan 15;264(2):1146–55
Vascular smooth muscle cells express distinct transforming growth factor-beta receptor phenotypes as a function of cell density in culture. Goodman LV, et al. **J Biol Chem** 1989 Mar 25;264(9):5241–4
Endothelin stimulates diacylglycerol accumulation and activates protein kinase C in cultured vascular smooth muscle cells. Griendling KK, et al. **J Biol Chem** 1989 May 15;264(14):8237–40
Molecular mechanisms of homologous and heterologous desensitization mediated by vasopressin in smooth muscle cells. Grier CE 3d, et al. **J Biol Chem** 1989 Apr 5; 264(10):5384–91
Atrial natriuretic factor-induced egression of cyclic guanosine 3',5'-monophosphate in cultured vascular smooth muscle and endothelial cells. Hamet P, et al. **J Biol Chem** 1989 Jul 25;264(21):12364–9
Guanosine 5'-O-(3-thiotrisphosphate) potentiates both thrombin- and platelet-derived growth factor-induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signaling mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391–7
Metabolism of 125I-atrial natriuretic factor by vascular smooth muscle cells. Evidence for a peptidase that specifically removes the COOH-terminal tripeptide. Johnson GR, et al. **J Biol Chem** 1989 Jul 15; 264(20):11637–42
Regulation of extracellular matrix RNA levels in cultured smooth muscle cells. Relationship to cellular quiescence. Liau G, et al. **J Biol Chem** 1989 Jun 15;264(17):10315–20
Dependence of Na+/H+ antiport activation in cultured rat aortic smooth muscle on calmodulin, calcium, and ATP. Evidence for the involvement of calmodulin-dependent kinases. Little PJ, et al. **J Biol Chem** 1988 Nov 15; 263(32):16780–6
Stimulation of phosphatidylinositol hydrolysis, diacylglycerol release, and gene expression in response to endothelin, a potent new agonist for fibroblasts and smooth muscle cells. Muldoon LL, et al. **J Biol Chem** 1989 May 25; 264(15):8529–36
Prolonged incubation with phorbol esters enhanced vasopressin-induced calcium mobilization and polyphosphatidylinositol hydrolysis of vascular smooth muscle cells. Stassen FL, et al. **J Biol Chem** 1989 Mar 25; 264(9):4916–23
Angiotensin II induces c-fos mRNA in aortic smooth muscle. Role of Ca2+ mobilization and protein kinase C activation. Taubman MB, et al. **J Biol Chem** 1989 Jan 5;264(1):526–30
Dual control of the intracellular pH in aortic smooth muscle cells by a cAMP-sensitive HCO3-/Cl- antiporter and a protein kinase C-sensitive Na+/H+ antiporter. Vigne P, et al. **J Biol Chem** 1988 Dec 5;263(34):18023–9
Agonist-mediated changes in intracellular pH: role in vascular smooth muscle cell function. Berk BC, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S104–14
Calcium channels and calcium-mediated effects in smooth muscle cells. Bolton TB, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S96–9 (31 ref.)
Production of inositol trisphosphate isomers and release of intracellular calcium in cultured aortic vascular smooth muscle cells. Capponi AM, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S92–5
Cilazapril and enalapril inhibit local angiotensin I conversion in human veins but lack direct venodilating properties. Eichler HG, et al. **J Cardiovasc Pharmacol** 1989 Aug; 14(2):248–52
Intracellular Ca2+ release in vascular muscle cells by caffeine, ryanodine, norepinephrine, and neuropeptide Y. Erne P, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S85–91
Effect of endothelin-1 on calcium channel gating by agonists in vascular smooth muscle. Godfraind T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S112–7; discussion S123
Stimulation-induced regional alteration of Ca2+ levels in single arterial smooth muscle cells. Goldman WF, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S13–9
Nitrendipine inhibition of calcium current in rat vascular muscle cells. Hermsmeyer K, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S100–3
Pinacidil actions on ion channels in vascular muscle. Hermsmeyer RK. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S17–22
Endothelin-1 receptors in cultured vascular smooth muscle cells and cardiocytes of rats. Hirata Y. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S157–8
On the existence of a Na+-Ca2+ exchange system in the cell membrane of vascular smooth muscle. Matlib MA. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S60–2
Endothelin-1 stimulates phosphatidylinositol hydrolysis and calcium uptake in isolated canine coronary arteries. Pang DC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S75–9; discussion S84
Myoplasmic [Ca2+] determines myosin phosphorylation and isometric stress in agonist-stimulated swine arterial smooth muscle. Rembold CM, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S38–42
The specific GTP requirement for inositol 1,4,5-trisphosphate-induced Ca2+ release from skinned vascular smooth muscle. Saida K, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S47–50
Difference between the effects of atrial natriuretic peptide

and calcium antagonist on cytosolic free calcium in cultured vascular smooth muscle cells. Takeuchi K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S13–6

Endothelin-1 and endothelin-3 release EDRF from isolated perfused arterial vessels of the rat and rabbit. Warner TD, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S85–8; discussion S102

Effect of endothelial-cell-conditioned medium on proteoglycan synthesis in cultured smooth muscle cells from pig aorta. Berrou E, et al. **J Cell Physiol** 1988 Dec; 137(3):430–8

Epidermal growth factor stimulation of prostacyclin production by cultured aortic smooth muscle cells: requirement for increased cellular calcium levels. Blay J, et al. **J Cell Physiol** 1989 Jun;139(3):524–30

Heparin interactions with cultured human vascular endothelial and smooth muscle cells: incidence on vascular smooth muscle cell proliferation. Herbert JM, et al. **J Cell Physiol** 1989 Feb;138(2):424–32

Serotonin uptake and configurational change of bovine pulmonary artery smooth muscle cells in culture. Lee SL, et al. **J Cell Physiol** 1989 Jan;138(1):145–53

Platelet-derived growth factor and angiotensin II cause increases in cytosolic free calcium by different mechanisms in vascular smooth muscle cells. Roe MW, et al. **J Cell Physiol** 1989 Apr;139(1):100–8

Cultured primate aortic smooth muscle cells express both the PDGF-A and PDGF-B genes but do not secrete mitogenic activity or dimeric platelet-derived growth factor protein. Valente AJ, et al. **J Cell Physiol** 1988 Sep; 136(3):479–85

Specific binding of endothelin on human vascular smooth muscle cells in culture. Clozel M, et al. **J Clin Invest** 1989 May;83(5):1758–61

Induction of platelet-derived growth factor A-chain and c-myc gene expressions by angiotensin II in cultured rat vascular smooth muscle cells. Naftilan AJ, et al. **J Clin Invest** 1989 Apr;83(4):1419–24

Repair of protease-damaged elastin in neonatal rat aortic smooth muscle cell cultures. Stone PJ, et al. **J Clin Invest** 1988 Nov;82(5):1644–54

Role of receptor cycling in the regulation of angiotensin II surface receptor number and angiotensin II uptake in rat vascular smooth muscle cells. Ullian ME, et al. **J Clin Invest** 1989 Sep;84(3):840–6

Cytoplasmic free calcium, myosin light chain phosphorylation, and force in phasic and tonic smooth muscle. Himpens B, et al. **J Gen Physiol** 1988 Dec; 92(6):713–29

Altered chloride transport in arteries from aldosterone salt-hypertensive rats. McMahon EG, et al. **J Hypertens** 1988 Jul;6(7):593–9

Effect of glucocorticoid on prostaglandin E1 mediated cyclic AMP formation by vascular smooth muscle cells. Yasunari K, et al. **J Hypertens** 1988 Dec;6(12):1023–8

Interaction between atrial natriuretic factor and angiotensin II receptors in the regulation of blood pressure. Chabrier PE, et al. **J Hypertens Suppl** 1988 Dec;6(4):S290–1

Calcium efflux in cultured vascular smooth muscle cells from genetically hypertensive rats: effect of angiotensin II and vasopressin. Harris EL, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S234–5

The phosphoinositide turnover of vascular smooth muscle cells is influenced by fish oil. Locher R, et al. **J Hypertens Suppl** 1988 Dec;6(4):S222–4

Angiotensin II activates Na+-H+ exchange and stimulates growth in cultured vascular smooth muscle cells. Lyall F, et al. **J Hypertens Suppl** 1988 Dec;6(4):S438–41

Kidney tubular epithelium cells and vascular smooth muscle cells contain different types of atrial natriuretic factor receptors. Pandey KN, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S292–4

Lipoprotein binding to cultured aortic smooth muscle cells from normotensive and hypertensive rats. Scannapieco G, et al. **J Hypertens Suppl** 1988 Dec;6(4):S269–71

Cellular mechanisms of hypertension and atherosclerosis: hypoxia-induced lipid accumulation in cultured vascular smooth muscle cells from the stroke-prone spontaneously hypertensive rat. Shimizu S, et al. **J Hypertens Suppl** 1988 Dec;6(4):S163–5

Sodium-calcium exchange in vascular smooth muscle of Wistar-Kyoto and stroke-prone spontaneously hypertensive rats. Thompson LE, et al. **J Hypertens Suppl** 1988 Dec;6(4):S160–2

Triglyceride and cholesteryl ester hydrolysis in a cell culture model of smooth muscle foam cells. Minor LK, et al. **J Lipid Res** 1989 Feb;30(2):189–97

Eicosanoid metabolism in cholesterol-enriched arterial smooth muscle cells: reduced arachidonate release with concomitant decrease in cyclooxygenase products. Pomerantz KB, et al. **J Lipid Res** 1989 Aug;30(8):1219–31

Regulation of calcium uptake in bovine aortic sarcoplasmic reticulum by cyclic AMP-dependent protein kinase. Watras J. **J Mol Cell Cardiol** 1988 Aug;20(8):711–23

Interaction between propranolol and calcium channel blockers in cardiac and vascular smooth muscle. Weishaar RE, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):897–903

The influence of urotensin II on calcium flux in rat aorta. Gibson A, et al. **J Pharm Pharmacol** 1988 Dec;40(12):893–5

Regulation of phosphorylase A formation and calcium content in aortic smooth muscle and smooth muscle cells: effects of atrial natriuretic peptide II. Cornwell TL, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):524–30

Distribution of vasoactive intestinal peptide and its receptors in the arteries of the rabbit. Sidawy AN, et al. **J Surg Res** 1989 Aug;47(2):105–11

Stimulation of phospholipase C-mediated hydrolysis of phosphoinositides by adenosine 5'-triphosphate via P2-purinoceptors in cultured rat aortic vascular smooth muscle cells. Tsuda T, et al. **Jpn Circ J** 1988 Jun;52(6):570–9

Response of intracellular Ca2+ transients in cultured vascular smooth muscle cells to angiotensin II, vasopressin, acetylcholine and atrionatriuretic peptide. Shin WS, et al. **Jpn Heart J** 1989 Jan;30(1):77–83

Atrial natriuretic peptide-induced inhibition of amiloride-sensitive 22Na+ uptake into cerebral capillaries of spontaneously hypertensive rats. Ibaragi M, et al. **Jpn J Pharmacol** 1989 May;50(1):82–5

A comparison of cyclic AMP signaling system in rat aortic myocytes in primary culture and aorta. Schoeffter P, et al. **Lab Invest** 1989 Aug;61(2):177–82

Identification and characterization of (3H)-rauwolscine binding to alpha 2-adrenoceptors in the canine saphenous vein. Gout B. **Life Sci** 1988;43(24):1961–71

Carbon monoxide effects on calcium levels in vascular smooth muscle. Lin H, et al. **Life Sci** 1988;43(22):1813–6

High-affinity binding sites for PK 11195, but not for RO5-4864, in porcine aortic smooth muscle. Mihara S, et al. **Life Sci** 1989;44(22):1713–20

Effects of omega-3 fatty acids on vascular smooth muscle cells: reduction in arachidonic acid incorporation into inositol phospholipids. Yerram NR, et al. **Lipids** 1989 Jul; 24(7):594–602

Altered fatty acid composition in the plasma, platelets, and aorta of the streptozotocin-induced diabetic rat. Dang AQ, et al. **Metabolism** 1988 Nov;37(11):1065–72

Presynaptic action of adrenaline on adrenoceptors modulating stimulation-evoked 3H-noradrenaline release from rabbit isolated aorta. Abrahamsen J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):281–7

Dopamine inhibits prostaglandin F2 alpha-induced depolarization of rabbit jejunal arteries via activation of DA1-receptors. Illes P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):483–5

Effects of hypoxia on noradrenaline release and neuronal reuptake in isolated rabbit thoracic aortic strips. Lee K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):503–8

Endothelium- and sydnonimine-induced responses of native and cultured aortic smooth muscle cells are not impaired by nitroglycerin tolerance. Mülsch A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):568–74

Action of methylene blue and haemoglobin in rabbit aorta in relation to the surface of drug entry. Pascual R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):340–7

Multiple effects of caffeine on contraction and cytosolic free Ca2+ levels in vascular smooth muscle of rat aorta. Sato K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):443–8

Comparison of the muscarinic receptors in the coronary artery, cerebral artery and atrium of the pig. van Charldorp KJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):403–8

Nucleotide sequence of a mouse vascular smooth muscle alpha-actin cDNA. Min BH, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10374

Estimation of high K- and noradrenaline-induced 45Ca uptakes in isolated rat aorta: effects of washing in icecold solutions. Aaronson PI. **Pflugers Arch** 1989 Sep; 414(5):579–83

Comparison of Ca2+-dependent K+ channels in the membrane of smooth muscle cells isolated from adult and foetal human aorta. Bregestovski PD, et al. **Pflugers Arch** 1988 Nov;413(1):8–13

Evidence for Na/H exchange and Cl/HCO3 exchange in A10 vascular smooth muscle cells. Korbmacher C, et al. **Pflugers Arch** 1988 Jul;412(1-2):29–36

Calcium-activated chloride current in rat vascular smooth muscle cells in short-term primary culture. Pacaud P, et al. **Pflugers Arch** 1989 Apr;413(6):629–36

Classification of angiotensin receptors in rat isolated uterus, portal vein, and aorta with the novel competitive antagonist sarmesin. Scanlon MN, et al. **Pharmacology** 1988; 37(3):137–47

Histamine-mediated vasoconstriction and cAMP levels in coronary arteries of the isolated rabbit heart. Schuschke DA, et al. **Pharmacology** 1989;38(1):23–33

Plasmenylethanolamine is the major storage depot for arachidonic acid in rabbit vascular smooth muscle and is rapidly hydrolyzed after angiotensin II stimulation. Ford DA, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3479–83

Decreased messenger RNA translation in herpesvirus-infected arterial cells: effects on cholesteryl ester hydrolase. Hajjar DP, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3366–70

Further characterization of vascular muscarinic receptors using dicyclomine. Duckles SP. **Proc West Pharmacol Soc** 1989;32:261

Receptors mediating vasoconstrictor response in rabbit femoral artery. Grandaw PP, et al. **Proc West Pharmacol Soc** 1989;32:259

Effects of ifenprodil tartrate on calcium flux in arteries and brain synaptosomes. Honda H, et al. **Proc West Pharmacol Soc** 1989;32:155–8

Mechanisms influencing sodium entry to cultured vascular smooth muscle. Little PJ, et al. **Prog Biochem Pharmacol** 1988;23:142–9

Alterations in hepatic and aortic phospholipase-C coupled receptors and signal transduction in rat intraperitoneal sepsis. Roth BL, et al. **Prog Clin Biol Res** 1989;286:41–59

Increased production of prostacyclin (PGI2) by vascular intimal smooth muscle cells from atherosclerotic rabbit aorta. Kanemaru Y, et al. **Prostaglandins** 1988 Dec; 36(6):881–90

The effects of sex hormones on the synthesis of prostacyclin (PGI2) by vascular tissues. Wakasugi M, et al. **Prostaglandins** 1989 Apr;37(4):401–10

Effect of insulin on the production of prostacyclin and cell proliferation in cultured smooth muscle cells. Kazama Y, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):129–34

Age-dependent increase in arterial smooth muscle calcium in spontaneously hypertensive rats. Spieker C, et al. **Res Exp Med (Berl)** 1988;188(6):397–403

Identification of monocyte chemotactic activity produced by malignant cells. Graves DT, et al. **Science** 1989 Sep 29; 245(4925):1490–3

Hyperpolarizing vasodilators activate ATP-sensitive K+ channels in arterial smooth muscle. Standen NB, et al. **Science** 1989 Jul 14;245(4914):177–80

Organ-specific regulation of hormone efflux from tissue capillaries: a physiological role for hormone binding proteins? Ekins R, et al. **Steroids** 1988 Oct;52(4):369–70

Purification and partial characterization of a bioactive substance from rat's vessel wall independent of prostacyclin production. Kempfer AC, et al. **Thromb Res** 1988 Oct 15; 52(2):127–35

Effects of growth factors on cytosolic free calcium concentration and DNA synthesis in cultured rat aortic smooth muscle cells. Hirosumi J, et al. **Tohoku J Exp Med** 1989 Apr;157(4):289–300

The effect of atrial natriuretic peptide on cytosolic free calcium in cultured vascular smooth muscle cells. Takeuchi K, et al. **Tohoku J Exp Med** 1989 May;158(1):47–56

[Regulation of cytosolic calcium concentrations in vascular smooth muscle cells] Kanaide H. **Fukuoka Igaku Zasshi** 1989 Jan;80(1):22–7 **(Jpn)**

[The effects of ketanserin on vascular eicosanoid system in spontaneously hypertensive rats and their implications] Uehara Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan; 31(1):31–7 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Contractile properties during development of hypertrophy of the smooth muscle in the rat portal vein. Malmqvist U, et al. **Acta Physiol Scand** 1988 May;133(1):49–61

Determination and comparison of the aortic polyploid smooth muscle content of human hypertensive subjects and normotensive controls. Reilly DF, et al. **Acta Physiol Scand Suppl** 1988;571:181–8

Smooth muscle cell proliferation in atherosclerosis. Faggiotto A. **Agents Actions Suppl** 1988;26:201–21

Enhanced proliferating activity of cultured smooth muscle cells from SHR. Paquet JL, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):108–10

Heparin, heparan sulfate, smooth muscle cells, and atherosclerosis. Karnovsky MJ, et al. **Ann N Y Acad Sci** 1989;556:268–81 (34 ref.)

Morphology and increased growth rate of atherosclerotic intimal smooth-muscle cells. Yoshida Y, et al. **Arch Pathol Lab Med** 1988 Oct;112(10):987–96

Balloon catheter injury to rabbit carotid artery. I. Changes in smooth muscle phenotype. Manderson JA, et al. **Arteriosclerosis** 1989 May-Jun;9(3):289–98

Studies on intimal smooth muscle cells in rabbits: decreased growth response to the tumor promoter. Nishida K, et al. **Artery** 1989;16(5):272–85

Vein-to-artery grafts: the long-term development of neo-intimal hyperplasia and its relationship to vasa vasorum and sympathetic innervation. McGeachie JK, et al. **Aust N Z J Surg** 1989 Jan;59(1):59–65

Selective percutaneous "biopsy" of atheromatous plaque tissue for cell culture. Bauriedel G, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):326–31

Morphological and smooth muscle cell phenotypic changes in fetal rabbit aorta during early development. Cayatte AJ, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):259–67

Decreased membrane fluidity of erythrocytes and cultured vascular smooth muscle cells in spontaneously hypertensive rats: an electron spin resonance study. Tsuda K, et al. **Clin Sci** 1988 Nov;75(5):477–80

Autoradiographic study of smooth muscle cell proliferation in spontaneously hypertensive rats. Yang H, et al. **Clin Sci** 1989 May;76(5):475–8

Rhythmic structures of the aorta in children and young adults. Vikhert AM. **Cor Vasa** 1988;30(4):298–304

Idiopathic infantile arterial calcification with cardiac, renal and central nervous system involvement. Van Dyck M, et al. **Eur J Pediatr** 1989 Jan;148(4):374–7

The pulmonary vasculature in meconium aspiration. Perlman EJ, et al. **Hum Pathol** 1989 Jul;20(7):701–6

Primary pulmonary hypertension in India (autopsy study of 26 cases). Kinare SG, et al. **Indian Heart J** 1987 Nov-Dec; 39(6):9-16

Optimized ultrasound imaging catheters for use in the vascular system. Crowley RJ, et al. **Int J Card Imaging** 1989;4(2-4):145-51

Intravascular echographic assessment of vessel wall characteristics: a correlation with histology. Gussenhoven WJ, et al. **Int J Card Imaging** 1989;4(2-4):105-16

Intravascular real-time, two-dimensional echocardiography. Roelandt JR, et al. **Int J Card Imaging** 1989;4(1):63-7

Imaging artifacts in mechanically driven ultrasound catheters. ten Hoff H, et al. **Int J Card Imaging** 1989;4(2-4):195-9

Clinical applications of intravascular ultrasound imaging in atherectomy. Yock PG, et al. **Int J Card Imaging** 1989; 4(2-4):117-25

Regional and genotypic differences in stromal-vascular cells from obese and lean Zucker rats. Turkenkopf IJ, et al. **Int J Obes** 1988;12(6):515-24

Spontaneously hypertensive rat vascular smooth muscle cells in culture exhibit increased growth and Na+/H+ exchange. Berk BC, et al. **J Clin Invest** 1989 Mar; 83(3):822-9

Abnormal structure and function of isolated subcutaneous resistance vessels from essential hypertensive patients despite antihypertensive treatment. Aalkjaer C, et al. **J Hypertens** 1989 Apr;7(4):305-10

Growth rate and phospholipase C activity in cardiac and aortic spontaneously hypertensive rat cells. Millanvoye E, et al. **J Hypertens Suppl** 1988 Dec;6(4):S369-71

A new approach to the prevention of hypertensive cardiovascular diseases by controlling the proliferation of vascular smooth muscle cells. Nara Y, et al. **J Hypertens Suppl** 1988 Dec;6(4):S246-7

Late-onset acid maltase deficiency associated with intracranial aneurysm. Matsuoka Y, et al. **J Neurol** 1988 Jul;235(6):371-3

In vitro proliferation of aortic smooth muscle cells from spontaneously hypertensive and normotensive rats. Pang SC. **J Pathol** 1989 Jun;158(2):167-73

Observations on human smooth muscle cell cultures from hyperplastic lesions of prosthetic bypass grafts: production of a platelet-derived growth factor-like mitogen and expression of a gene for a platelet-derived growth factor receptor--a preliminary study. Birinyi LK, et al. **J Vasc Surg** 1989 Aug;10(2):157-65

Kinetics of cellular proliferation after arterial injury. V. Role of acute distension in the induction of smooth muscle proliferation. Clowes AW, et al. **Lab Invest** 1989 Mar; 60(3):360-4

Participation of dendritic cells in vascular lesions of chronic rejection of human allografts. Oguma S, et al. **Lancet** 1988 Oct 22;2(8617):933-6

Effect of parathyroidectomy on arterial hypertrophy, vascular lesions, and aortic calcium content in deoxycorticosterone-induced hypertension. Yang F, et al. **Res Exp Med (Berl)** 1988;188(4):289-97

Peptide inhibition of myointimal proliferation following angioplasty in rabbits. Conte JV, et al. **Transplant Proc** 1989 Aug;21(4):3686-8

[Further studies of diabetic microangiopathy in children with insulin-dependent diabetes mellitus. Electron microscopy studies] Cislo M, et al. **Kinderarztl Prax** 1989 Jan;57(1):23-7 (Eng. Abstr.) (Ger)

[Intravascular bronchioloalveolar tumor following interstitial giant cell pneumonia] Hackl H. **Pathologe** 1989 Jan; 10(1):57-60 (Ger)

[Histologic and clinical markers of inflammatory infrarenal aneurysm of the abdominal aorta] Hofmann W, et al. **Pathologe** 1989 Jul;10(4):219-27 (Ger)

[Idiopathic arterial calcinosis in children. A case with arterial hypertension, heart infarct and cerebral massive hemorrhage] Hofmann WJ, et al. **Pathologe** 1989 Jul; 10(4):212-8 (Ger)

[Unusual band-like degeneration of the aortic media as a cause of multiple aneurysms of the thoracic and abdominal aorta] Leu AJ, et al. **Pathologe** 1988 Nov;9(6):366-9 (Ger)

[Medial necrosis of the pulmonary artery in ruptured aneurysm] Gsell O, et al. **Schweiz Med Wochenschr** 1989 May 6;119(18):561-5 (45 ref.) (Eng. Abstr.) (Ger)

[Selective biopsy of plaque material for cell cultivation] Bauriedel G, et al. **Vasa Suppl** 1988;23:23-6 (Ger)

[The value of high resolution ultrasound in the assessment of tumorous vascular infiltrations of the large cervical vessels] Helmer M, et al. **Vasa Suppl** 1988;26:22-4 (Ger)

[The dynamics of blood vessel wall changes in the pathogenesis of arteriosclerosis] Kling D, et al. **Vasa Suppl** 1988;23:11-4 (Ger)

[The microcirculatory system and smooth muscle cells of major arteries in various rheumatic diseases] Kaminskii IuV, et al. **Arkh Patol** 1989;51(4):9-15 (Eng. Abstr.) (Rus)

[Intravenous leiomyomatosis] Parkhomenko IuG, et al. **Arkh Patol** 1988;50(12):54-8 (Eng. Abstr.) (Rus)

[Graphic analysis of spatial changes in the blood vessels in arterial hypertension] Gutson AA, et al. **Kardiologiia** 1988 Dec;28(12):48-51 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Effect of hypoxia on endothelium-dependent relaxation of canine and rabbit basilar arteries. Nakagomi T, et al. **Acta Neurochir (Wien)** 1989;97(1-2):77-82

Control of vascular permeability and vascular smooth muscle in the respiratory tract by multiple neuropeptides. Saria A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:25-8 (29 ref.)

Shortening velocity, myosin light chain phosphorylation and Ca2+ dependence of force during metabolic inhibition in smooth muscle of rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1989 Jul;136(3):367-76

Myogenic mechanisms in local vascular control. Mellander S. **Acta Physiol Scand Suppl** 1988;571:25-42 (32 ref.)

The interaction between oxygen and vascular wall. Grote J, et al. **Adv Exp Med Biol** 1989;248:575-81

Regional differences in the regulation of contraction-relaxation machinery of vascular smooth muscle. Kovach AG, et al. **Adv Exp Med Biol** 1989; 248:601-9

Prostacyclin, endothelium-derived relaxing factor and vasodilatation. Siegel G, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:267-70

Differential effects of 17 alpha and 17 beta estradiol on PGF2 alpha mediated contraction of the porcine coronary artery. Vargas R, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:277-80

Potential mechanism of pulmonary arterial relaxation and guanylate cyclase activation by 15-hydroperoxyeicosatetraenoic acid. Wolin MS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:285-8

Histamine H1-receptors mediate phosphoinositide and calcium response in cultured smooth muscle cells--interaction with cicletanine (CIC). Lonchampt MO, et al. **Agents Actions** 1988 Jul;24(3-4):255-60

Histamine relaxation of aortic rings from diabetic rats. Tanz RD, et al. **Agents Actions** 1989 Aug;28(1-2):1-8

Pathophysiologic role of calcium in the development of vascular smooth muscle tone. Morgan KG, et al. **Am J Cardiol** 1989 Sep 19;64(11):35F-40F (39 ref.)

Catecholamine-associated smooth muscle contraction bands in the media of coronary arteries of brain-dead baboons. Rose AG, et al. **Am J Cardiovasc Pathol** 1988 Apr;2(1):63-7

Cellular calcium regulation in hypertension. Hermsmeyer K, et al. **Am J Hypertens** 1989 Aug;2(8):655-8 (25 ref.)

Cytosolic Ca2+ regulation attenuates ANP-induced cGMP response in vascular smooth muscle cells of the SHR. Nakamura M, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):111-3

Alterations in vascular smooth muscle contractility during ovine pregnancy. Annibale DJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1282-8

Decreased vascular contraction and elastic stiffening after intramural lymphostasis. Bérczi V, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1289-94

Excess membrane cholesterol alters calcium channels in arterial smooth muscle. Bialecki RA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C306-14

Density-dependent hyperpolarization in cultured aortic smooth muscle cells. Blennerhassett MG, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C644-51

Glomerular and vascular atrial natriuretic factor receptors in adrenalectomized rats. Cachofeiro V, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1250-7

Pressure-flow characteristics and nutritional capacity of coronary veins in dogs. Cohen MV, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H834-46

Effects of intracellular alkalinization on resting and agonist-induced vascular tone. Danthuluri NR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H867-75

Acetate causes endothelium-independent increases in cyclic AMP in rat caudal artery. Daugirdas JT, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1378-83

Length-tension relationship of vascular smooth muscle in single arterioles. Davis MJ, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 2):H630-40

Myosin dephosphorylation during rapid relaxation of hog carotid artery smooth muscle. Driska SP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C315-21

Protection of Ca pump of coronary artery against inactivation by superoxide radical. Grover AK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C666-73

Cross-bridge dephosphorylation and relaxation of vascular smooth muscle. Hai CM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C282-7

Proximal and distal dog coronary arteries respond differently to basal EDRF but not to NO. Hoeffner U, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H828-31

Continuous membrane voltage recordings in A10 vascular smooth muscle cells: effect of AVP. Korbmacher C, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C323-32

Myogenic activity in isolated subepicardial and subendocardial coronary arterioles. Kuo L, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1558-62

Pulse-synchronized contractions: and addendum to Windkessel [letter] Mangel AW. **Am J Physiol** 1989 Mar; 256(3 Pt 2):H928

Effect of long-term tilt on mechanical and electrical properties of rat saphenous vein. Monos E, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1185-91

Dependence of stress on length, Ca2+, and myosin phosphorylation in skinned smooth muscle. Moreland RS, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C473-8

Characteristics of canine coronary resistance arteries: importance of endothelium. Myers PR, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H603-10

Effect of inosine on pial arterioles: potentiation of adenosine-induced vasodilation. Ngai AC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H603-6

Dependence of stress on cross-bridge phosphorylation in vascular smooth muscle. Ratz PH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C96-100

[Ca2+]-dependent myosin phosphorylation in phorbol diester stimulated smooth muscle contraction. Rembold CM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C719-23

Endothelium-dependent pressure-induced contraction of isolated canine carotid arteries. Rubanyi GM. **Am J Physiol** 1988 Oct;255(4 Pt 2):H783-8

Cyclic AMP modulates Ca-activated K channel in cultured smooth muscle cells of rat aortas. Sadoshima J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H754-9

Phosphocreatine and oxidative metabolism-contraction coupling in rabbit aorta. Scott DP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H597-602

Dietary omega 3 fatty acids and endothelium-dependent relaxations in porcine coronary arteries. Shimokawa H, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H968-73

Single potassium channels recorded from vascular smooth muscle cells. Stuenkel EL. **Am J Physiol** 1989 Sep;257(3 Pt 2):H760-9

[Ca2+]i and contraction of ear artery in response to rapid stimulation by NE: measurements with quin2 and fura-2. Vonderlage M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H649-57

Antiserum to angiotensin-binding protein inhibits vascular responses to angiotensin II. Webb RC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1542-4

Angiotensin II-induced relaxation of fowl aorta. Yamaguchi K, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R591-9

Effect of diltiazem on aortic pressure-diameter relationship in dogs. Yano M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1580-7

Role of arachidonic acid metabolites in ethanol vasoaction in rat gastric submucosa. Yonei Y, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G731-7

Arterial smooth muscle. A multifunctional mesenchymal cell. Campbell GR, et al. **Arch Pathol Lab Med** 1988 Oct; 112(10):977-86 (93 ref.)

Effects of porcine aortic smooth muscle cell conditioned medium on endothelial cell replication. Hoover GA, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1):76-83

The effect of plasma from patients with essential hypertension on the contractility of human arteries. Cappuccio FP, et al. **Artery** 1988;15(6):346-52

Smooth muscle cell migration induced by inflammatory cell products and its inhibition by a potent calcium antagonist, nilvadipine. Nomoto A, et al. **Atherosclerosis** 1988 Aug; 72(2-3):213-9

Lipoproteins as factors in vessel tone and reactivity modulation. Vedernikov YuP, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):590-6

The role of endothelial cells in the maintenance of arterial wall integrity and their potential role in the pathogenesis of arteriosclerosis. Habenicht AJ, et al. **Beitr Infusionther** 1988;23:18-25

Endothelin and the production of cerebral vasospasm in dogs. Asano T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1345-51

Endothelin and Ca++ agonist Bay K 8644: different vasoconstrictive properties. Auguet M, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):186-92

Inhibition of atrial natriuretic peptide secretion by forskolin in noncontracting cultured atrial myocytes. Iida H, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):330-6

Endothelin-1 induces vasoconstriction through two functionally distinct pathways in porcine coronary artery: contribution of phosphoinositide turnover. Kasuya Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1049-55

Effects of valinomycin on calcium mobilization in vascular smooth muscle cells induced by angiotensin II. Koh E, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):491-7

Staurosporine, a protein kinase C inhibitor, attenuates Ca2+-dependent stretch-induced vascular tone. Laher I, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):58-62

Heparin increases mRNA levels of thrombospondin but not fibronectin in human vascular smooth muscle cells. Lyons-Giordano B, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1100-4

Endothelin action on vascular smooth muscle involves inositol trisphosphate and calcium mobilization. Marsden PA, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):86-93

Effects of endothelin on sodium transport mechanisms: potential role in cellular Ca2+ mobilization. Meyer-Lehnert H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):458-65

Phosphatase inhibition with okadaic acid does not alter the relationship between force and myosin light chain phosphorylation in permeabilized smooth muscle. Siegman MJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):838-42

Endothelin enhances adrenergic vasoconstriction in perfused rat mesenteric arteries. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1304–8

Inhibition by nicardipine of endothelin–mediated inositol phosphate formation and Ca2+ mobilization in smooth muscle cell. Xuan YT, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):758–64

A comparison of the regulation of vascular and cardiac muscle. England PJ. **Biochem Soc Trans** 1988 Aug; 16(4):503–5 (31 ref.)

Myosin light chain and heavy chain phosphorylation in smooth muscle: potential regulatory roles for calcium, phospholipids and cyclic nucleotides. Hathaway DR, et al. **Biochem Soc Trans** 1988 Aug;16(4):499–501

Roles of myo–inositol 1,4,5–trisphosphate and myo–diacylglycerol in vascular smooth muscles as second messengers: in relation to actions of acetylcholine. Itoh T, et al. **Biochem Soc Trans** 1988 Aug;16(4):488–9

Mechanism of cyclic–GMP–dependent relaxation in vascular smooth muscle. Lincoln TM, et al. **Biochem Soc Trans** 1988 Aug;16(4):497–9

Measurements of intracellular calcium concentration in mammalian vascular smooth muscle cells during agonist–induced contractions. Morgan KG, et al. **Biochem Soc Trans** 1988 Aug;16(4):493

Role of cyclic GMP in the mechanism of action of nitrovasodilators, endothelium–dependent agents and atrial natriuretic peptide. Murad F. **Biochem Soc Trans** 1988 Aug; 16(4):490–2 (36 ref.)

Purine nucleotides as regulators of vessel tone. Pearson JD. **Biochem Soc Trans** 1988 Aug;16(4):480–2 (41 ref.)

Effects of altering carbohydrate metabolism on energy status and contractile function of vascular smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):42–52

Effects of ATP reduction on the pattern of force development and myosin light chain phosphorylation in intact arterial smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):278–82

Vasomotor tone of isolated porcine coronary veins in response to acetylcholine, noradrenaline, and histamine. Bergner M, et al. **Biomed Biochim Acta** 1988;47(8):775–9

Endothelium–dependent relaxant effect of thrombin on isolated pig coronary arteries. Glusa E. **Biomed Biochim Acta** 1988;47(10–11):S67–70

Endothelium–derived relaxing factor (EDRF) from cultured and fresh endothelial cells. Gryglewski RJ, et al. **Biomed Biochim Acta** 1988;47(10–11):S61–6

Smooth muscle effects of hydroxylated docosahexaenoates produced from human platelet. Karanian JW, et al. **Biomed Biochim Acta** 1988;47(10–11):S79–82

Relaxation by prostacyclin (PGI2) of human, dog and rabbit femoral artery strips. Interspecies difference. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988;47(10–11):S125–8

Actions of PGE2 and indomethacin on adrenergic neuroeffector transmission in the rabbit coeliac artery. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988; 47(10–11):S129–32

Prediction of arterial compliance from pressure and flow waveforms. Drues ME, et al. **Biomed Sci Instrum** 1989; 25:233–8

A logistic–type curve fits pressure–diameter relationship for relaxed and contracted dog renal arteries. Fukushima T, et al. **Biorheology** 1988;25(1–2):37–48

Glucose dependence of sequential norepinephrine contractions of vascular smooth muscle. Adams GR, et al. **Blood Vessels** 1989;26(2):77–83

Flow–dependent contraction observed in a myograph–mounted resistance artery. Bevan JA, et al. **Blood Vessels** 1988;25(5):261–4

Physiological effects of portal ligation on the longitudinal and circular muscles of the dog portal tree. Fujii K, et al. **Blood Vessels** 1988;25(5):240–9

Vasoactive responses of a human cystic artery: adrenoceptor characterization. Wyse DG. **Br J Clin Pharmacol** 1988 Jun; 25(6):741–9

Role of endothelium in hypoxic contraction of canine basilar artery. Elliott DA, et al. **Br J Pharmacol** 1989 Apr; 96(4):949–55

The distribution of gamma–adrenoceptors and P2 purinoceptors in mesenteric arteries and veins of the guinea–pig. Hirst GD, et al. **Br J Pharmacol** 1989 Apr; 96(4):993–9

Impairment of endothelium–dependent relaxation and changes in levels of cyclic GMP in aorta from streptozotocin–induced diabetic rats. Kamata K, et al. **Br J Pharmacol** 1989 Jun;97(2):614–8

5–HT1–like receptors requiring functional cyclo–oxygenase and 5–HT2 receptors independent of cyclo–oxygenase mediate contraction of the human umbilical artery. MacLennan SJ, et al. **Br J Pharmacol** 1989 Jul;97(3):921–33

Actions mediated by P2–purinoceptorsubtypes in the isolated perfused mesenteric bed of the rat. Ralevic V, et al. **Br J Pharmacol** 1988 Oct;95(2):637–45

Evidence for dopaminergic co–transmission in dog mesenteric arterial vessels. Soares–da–Silva P. **Br J Pharmacol** 1988 Sep;95(1):218–24

Vasoconstrictor effect of the Ca2+ agonist Bay K 8644 on human cerebral arteries. Salaices M, et al. **Brain Res** 1989 Jun 19;490(1):133–40

Some pharmacological activities of novel adenine–related compounds isolated from a marine sponge Agelas mauritiana. Fathi–Afshar R, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):276–81

Heterogeneity in responses of isolated monkey arteries and veins to atrial natriuretic peptide. Kawai Y, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):326–30

Role of cGMP in relaxation of vascular and other smooth muscle. Nakatsu K, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):251–62 (62 ref.)

Studies of arterial smooth muscle relaxation in younger (16–18 week) and older (28–31 week) spontaneously hypertensive rats. Packer CS, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1513–7

Nitric oxide–induced vasodilation of organic nitrate–tolerant rabbit aorta. Slack CJ, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1344–6

Longitudinal propagation of contraction in the isolated conduit coronary arteries of humans and pigs. Araki H, et al. **Circ Res** 1989 Apr;64(4):734–41

Current fluctuations and oscillations in smooth muscle cells from hog carotid artery. Role of the sarcoplasmic reticulum. Désilets M, et al. **Circ Res** 1989 Sep;65(3):708–22

Calcium currents are altered in the vascular muscle cell membrane of spontaneously hypertensive rats. Rusch NJ, et al. **Circ Res** 1988 Dec;63(6):997–1002

Pressure–dependent contraction of rat juxtamedullary afferent arterioles. Sanchez–Ferrer CF, et al. **Circ Res** 1989 Apr;64(4):790–8

Natural course of the impairment of endothelium–dependent relaxations after balloon endothelium removal in porcine coronary arteries. Possible dysfunction of a pertussis toxin–sensitive G protein. Shimokawa H, et al. **Circ Res** 1989 Sep;65(3):740–53

Monocyte–derived interleukin 1: effects on norepinephrine–stimulated aortic contraction and phosphoinositide turnover. McKenna TM, et al. **Circ Shock** 1989 Jun;28(2):131–47

Endothelium–dependent relaxation in response to aggregating platelets in porcine femoral veins and its modulation by diet. Komori K, et al. **Circulation** 1989 Aug; 80(2):401–9

Effects of cooling on alpha–1–adrenoceptor mechanisms in rat aorta. Takayanagi I, et al. **Comp Biochem Physiol [C]** 1988;90(1):95–9

A computer model to study norepinephrine–induced oscillations of contraction in tail arteries of spontaneously hypertensive stroke–prone rats. Avinash G, et al. **Comput Biomed Res** 1988 Aug;21(4):324–33

Mechanical stimulation induces Ca2+i transients and membrane depolarization in cultured endothelial cells. Effects on Ca2+i in co–perfused smooth muscle cells. Goligorsky MS. **FEBS Lett** 1988 Nov 21;240(1–2):59–64

Fibrinogen is chemotactic for vascular smooth muscle cells. Naito M, et al. **FEBS Lett** 1989 Apr 24;247(2):358–60

Endothelin increases single–channel calcium currents in coronary arterial smooth muscle cells. Silberberg SD, et al. **FEBS Lett** 1989 Apr 10;247(1):68–72

The inability of the rat aorta to relax to acetylcholine does not imply lack of a functional endothelium only. Doggrell SA. **Gen Pharmacol** 1989;20(4):395–8

Estriol reduces the reactivity of the human umbilical artery to mechanical stimuli. Silva de Sá MF, et al. **Gynecol Obstet Invest** 1989;27(4):188–92

Agonist–induced vascular tone. Nishimura J, et al. **Hypertension** 1989 Jun;13(6 Pt 2):835–44 (70 ref.)

Hypercholesterolemia causes generalized impairment of endothelium–dependent relaxation to aggregating platelets in porcine arteries. Shimokawa H, et al. **J Am Coll Cardiol** 1989 May;13(6):1402–8

Cold and hyperosmolar fluids in canine trachea: vascular and smooth muscle tone and albumin flux. Deffebach ME, et al. **J Appl Physiol** 1989 Mar;66(3):1309–15

Vascular smooth muscle responses in normo– and hypertensive rats to sympathetic nerve stimulation and putative transmitters. Muir TC, et al. **J Auton Pharmacol** 1989 Feb;9(1):23–34

Receptor–coupled, permeabilized smooth muscle. Role of the phosphatidylinositol cascade, G–proteins, and modulation of the contractile response to Ca2+. Kitazawa T, et al. **J Biol Chem** 1989 Apr 5;264(10):5339–42

Isotropy and anisotropy of the arterial wall. Weizsacker HW, et al. **J Biomech** 1988;21(6):477–87

Circumferential and longitudinal viscoelasticity of human iliac arterial segments in vitro [letter] Laura PA. **J Biomed Eng** 1989 Mar;11(2):175–6

Sodium/calcium exchange and the control of contractility in cardiac muscle and vascular smooth muscle. Blaustein MP. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S56–68 (128 ref.)

Modifications of the arterial mechanical properties of normotensive and hypertensive rats without arterial pressure changes. Levy BI, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):253–9

Are there interactions between S2–serotonergic and alpha 1–adrenergic receptors in isolated canine arteries? Lüscher TF, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S16–21

Interaction between S2–serotonergic and alpha 1–adrenergic receptor activities at vascular sites. Van Nueten JM, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S10–5 (57 ref.)

Biochemical mechanisms underlying vascular smooth muscle relaxation: the guanylate cyclase–cyclic GMP system. Waldman SA, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S115–8 (17 ref.)

Expression of extra domain A fibronectin sequence in vascular smooth muscle cells is phenotype dependent. Glukhova MA, et al. **J Cell Biol** 1989 Jul;109(1):357–66

Smooth muscle gelsolin and a Ca2+–sensitive contractile cell model. Kanno K, et al. **J Cell Physiol** 1989 Apr; 139(1):58–67

Beta 1– and beta 2–adrenoceptor–mediated relaxation responses in peripheral arteries from spontaneously hypertensive rats at pre–hypertensive and early hypertensive stages. Fujimoto S, et al. **J Hypertens** 1988 Jul;6(7):543–50

Potassium conductance and oscillatory contractions in tail arteries from genetically hypertensive rats. Lamb FS, et al. **J Hypertens** 1989 Jun;7(6):457–63

Stimulation of the phosphoinositide signalling system as a possible mechanism for glucocorticoid action in blood pressure control. Steiner A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S366–8

A novel troponin T–like protein (calponin) in vascular smooth muscle: interaction with tropomyosin paracrystals. Takahashi K, et al. **J Hypertens Suppl** 1988 Dec;6(4):S40–3

A novel peptide vasoconstrictor, endothelin, is produced by vascular endothelium and modulates smooth muscle Ca2+ channels. Yanagisawa M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S188–91

What is latch? New ideas about tonic contraction in smooth muscle. Marston SB. **J Muscle Res Cell Motil** 1989 Apr; 10(2):97–100 (42 ref.)

Role of cyclic AMP–dependent protein kinase in the diminished beta adrenergic responsiveness of vascular smooth muscle with increasing age. Deisher TA, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):812–9

Evidence for two populations of 5–hydroxytryptamine receptors in dog basilar artery. Frenken M. **J Pharmacol Exp Ther** 1989 Jul;250(1):379–87

Evidence that prostaglandins can contract the rat aorta via a novel protein kinase C–dependent mechanism. Heaslip RJ, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):44–51

In vitro and in vivo comparison of two K+ channel openers, diazoxide and cromakalim, and their inhibition by glibenclamide. Quast U, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):261–71

Guanine nucleotide binding proteins may modulate gating of calcium channels in vascular smooth muscle. I. Studies with fluoride. Zeng YY, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):343–51

Guanine nucleotide binding proteins may modulate gating of calcium channels in vascular smooth muscle. II. Studies with guanosine 5'-(gamma)triphosphate. Zeng YY, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):352–7

Intracellular pH regulation in resting and contracting segments of rat mesenteric resistance vessels. Aalkjaer C, et al. **J Physiol (Lond)** 1988 Aug;402:391–410

Calcium currents in single isolated smooth muscle cells from the rabbit ear artery in normal–calcium and high–barium solutions. Aaroson PI, et al. **J Physiol (Lond)** 1988 Nov; 405:57–75

Role of alpha–adrenoceptors in constrictor responses of rat, guinea–pig and rabbit small arteries to neural activation. Angus JA, et al. **J Physiol (Lond)** 1988 Sep;403:495–510

Noradrenaline modulation of calcium channels in single smooth muscle cells from rabbit ear artery. Benham CD, et al. **J Physiol (Lond)** 1988 Oct;404:767–84

Membrane ionic mechanisms activated by noradrenaline in cells isolated from the rabbit portal vein. Byrne NG, et al. **J Physiol (Lond)** 1988 Oct;404:557–73

Electrophysiology of neuromuscular transmission in guinea–pig mesenteric veins. Van Helden DF. **J Physiol (Lond)** 1988 Jul;401:469–88

An alpha–adrenoceptor–mediated chloride conductance in mesenteric veins of the guinea–pig. Van Helden DF. **J Physiol (Lond)** 1988 Jul;401:489–501

Different sensitivity changes of canine and simian femoral arterial and venous constrictions by cooling. Kawai K, et al. **Jpn J Pharmacol** 1989 Apr;49(4):544–8

Influence of carotid chemoreceptors on the vagal reflex–induced tracheal constriction. Tsuchiya Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):403–10

Possible involvement of sodium pump in the relaxation of rat aorta induced by alpha–human atrial natriuretic polypeptide. Sato K, et al. **Jpn J Physiol** 1988;38(2):187–98

Ionic control of vascular smooth muscle cells. Haddy FJ. **Kidney Int Suppl** 1988 Sep;25:S2–8 (35 ref.)

Origin, metabolism and function of extracellular adenine nucleotides in the blood [published erratum appears in Klin Wochenschr 1989 May 15;67(10):558] Lüthje J. **Klin Wochenschr** 1989 Mar 15;67(6):317–27 (129 ref.)

Simultaneous pressure and 19F NMR pH measurements of smooth muscle cells of intact hog carotid arteries at rest and during contractions with norepinephrine. Grieder TA, et al. **Life Sci** 1988;43(12):999–1003

Antihypertensive compounds with potent protein kinases inhibitory activity. Hachisu M, et al. **Life Sci** 1989; 44(19):1351–62

Effect of intermittent exposure and drug–free intervals on the in vitro vascular tolerance to nitroglycerin. Kowaluk E, et al. **Life Sci** 1989;44(17):1157–63

Effect of vasodilator prostaglandins on the vascular renin–angiotensin system. Saito H, et al. **Life Sci** 1988; 43(19):1557–63

Desensitization of alpha–1 adrenergic receptor mediated smooth muscle contraction in aorta from endotoxic rats. Wakabayashi I, et al. **Life Sci** 1989;45(6):509–15

Demonstration of beta 1-adrenoceptor mediating relaxation of porcine coronary artery by radioligand binding and pharmacological methods. Yamada S, et al. **Life Sci** 1988; 43(24):1999–2006

Macroscopic Ca2+ -Na+ and K+ currents in single heart and aortic cells. Bkaily G, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):59–72

A whole-cell patch clamp technique which minimizes cell dialysis. Hume JR, et al. **Mol Cell Biochem** 1988 Mar-Apr; 80(1-2):49–57

Bay K 8644 induce enhancement of K+ current in both single heart cell and smooth muscle cell. Renaud JF, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):73–8

Measurement of whole-cell calcium current in voltage-clamped vascular muscle cells. Rusch NJ, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):87–93 (19 ref.)

Desensitization of the stimulatory A2 adenosine receptor-adenylate cyclase system in vascular smooth muscle cells from rat aorta. Anand-Srivastava MB, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):273–9

Protein phosphorylation changes in bovine carotid artery smooth muscle during contraction and relaxation. Takuwa Y, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):71–86

Insulin, insulin-like growth factor I and platelet-derived growth factor interact additively in the induction of the protooncogene c-myc and cellular proliferation in cultured bovine aortic smooth muscle cells. Banskota NK, et al. **Mol Endocrinol** 1989 Aug;3(8):1183–90

Relaxation of vascular and tracheal smooth muscle by cyclic nucleotide analogs that preferentially activate purified cGMP-dependent protein kinase. Francis SH, et al. **Mol Pharmacol** 1988 Oct;34(4):506–17

Thyroid hormones directly interact with vascular smooth muscle strips. Ishikawa T, et al. **Mol Pharmacol** 1989 Jun; 35(6):760–5

Inositol 1,4,5-trisphosphate activates a channel from smooth muscle sarcoplasmic reticulum. Ehrlich BE, et al. **Nature** 1988 Dec 8;336(6199):583–6

Noradrenaline contracts arteries by activating voltage-dependent calcium channels. Nelson MT, et al. **Nature** 1988 Nov 24;336(6197):382–5

Endothelium-dependent hyperpolarization of smooth muscle cells in rabbit femoral arteries is not mediated by EDRF (nitric oxide). Huang AH, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):438–42

Regional variation of postjunctional alpha-adrenoceptor responses in the developing renal vascular bed of sheep. Matherne GP, et al. **Pediatr Res** 1989 May;25(5):461–5

The effects of various peptides on the isolated pulmonary artery. Obara H, et al. **Peptides** 1989 Jan-Feb;10(1):241–3

Vasoactive intestinal peptide evokes endothelium-dependent relaxation and cyclic AMP accumulation in rat aorta. Sata T, et al. **Peptides** 1988 Jul-Aug;9(4):853–8

Influence of pH on isometric force development and relaxation in skinned vascular smooth muscle. Gardner JP, et al. **Pflugers Arch** 1988 Aug;412(3):231–9

Electrical and mechanical properties of spontaneous contraction in hypertensive rat portal vein. Shimamura K, et al. **Pflugers Arch** 1989 May;414(1):37–43

Endothelium-dependent relaxation of the rat renal artery caused by activation of histamine H1-receptors. Krstić MK, et al. **Pharmacology** 1989;38(2):113–20

Ca2+-channel blockers inhibit the action of recombinant platelet-derived growth factor in vascular smooth muscle cells. Block LH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2388–92

Endothelin activates the dihydropyridine-sensitive, voltage-dependent Ca2+ channel in vascular smooth muscle. Goto K, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3915–8

Difluorothromboxane A2 and stereoisomers: stable derivatives of thromboxane A2 with differential effects on platelets and blood vessels. Morinelli TA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5600–4

Vasopressin modulates the spontaneous electrical activity in aortic cells (line A7r5) by acting on three different types of ionic channels. Van Renterghem C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9365–9

Guanosine 5'-monophosphate modulates gating of high-conductance Ca2+-activated K+ channels in vascular smooth muscle cells. Williams DL Jr, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9360–4

Fatty acid modifies Ca2+-dependent potassium channel activity in smooth muscle cells from the human aorta. Bregestovski PD, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):259–66

Potassium dependent relaxation of isolated pulmonary artery segments following ingestion of monocrotaline. Shubat PJ, et al. **Proc West Pharmacol Soc** 1988;31:313–5

Differential vasoconstrictor and vasodilator responses in the proximal and distal human coronary arteries. Stupecky GL, et al. **Proc West Pharmacol Soc** 1988;31:319–21

Is 2-bromo-D-lysergic acid diethylamide (BOL) an allosteric antagonist of serotonergic receptors in rabbit atria? Xu Z, et al. **Proc West Pharmacol Soc** 1988;31:181–3

Vascular alpha adrenergic receptors and signal transduction. Matthews WD, et al. **Prog Clin Biol Res** 1989;286:11–32 (56 ref.)

Role of the endothelium in modulating vascular adrenergic receptor actions. Miller VM, et al. **Prog Clin Biol Res** 1989; 286:33–9 (27 ref.)

Inhibition of the oxygen-induced contraction of the isolated human umbilical artery by indomethacin, flurbiprofen, aspirin and drugs modifying Ca2+ disposition. MacLennan SJ, et al. **Prostaglandins** 1988 Nov;36(5):711–29

Meclofenamate blocks the pulmonary arterial vasopressor effects of leukotriene B4 in awake sheep. Miller RF, et al. **Prostaglandins** 1988 Nov;36(5):601–6

Comparison of the effects of oxygen, 5-hydroxytryptamine, bradykinin and adrenaline in isolated human umbilical artery smooth muscle. McGrath JC, et al. **Q J Exp Physiol** 1988 Jul;73(4):547–59

A novel vasodilatory peptide from the salivary glands of the sand fly Lutzomyia longipalpis. Ribeiro JM, et al. **Science** 1989 Jan 13;243(4888):212–4

Comparison of intraluminal and extraluminal inhibitory effects of hemoglobin on endothelium-dependent relaxation of rabbit basilar artery. Hongo K, et al. **Stroke** 1988 Dec;19(12):1550–5

Effects of verapamil and BAY K 8644 on the hypoxic contraction of the isolated human pulmonary artery. Ohe M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):81–2

[The pulmonary endothelium and its modulation by vascular smooth muscles] Qiao RL, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):315–8 (39 ref.) **(Chi)**

[The role of calcium in striated cardiac and vascular smooth muscle cells] D'Agostino F. **Clin Ter** 1988 Feb 29; 124(4):303–13 (35 ref.) (Eng. Abstr.) **(Ita)**

[The role of intra- and extracellular Ca in the activation of contraction of pulmonary artery smooth muscles induced by serotonin] Buryi VA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):261–4 (Eng. Abstr.) **(Rus)**

[Cellular mechanisms of transitory smooth muscle contraction of the coronary arteries during hypoxia: role of intracellular Ca2+] Solov'ev AI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):5–7 (Eng. Abstr.) **(Rus)**

[Changes in the volume of blood vessel wall in the contractile process] Govyrin VA, et al. **Dokl Akad Nauk SSSR** 1988; 300(3):745–7 **(Rus)**

[Sources of calcium ions participating in the activation of the contraction of smooth muscles of the basilar artery under the action of serotonin] Gokina NI, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):74–9 (Eng. Abstr.) **(Rus)**

[The role of calcium and potassium conductance in electrogenesis of smooth-muscle cells of the basilar artery] Gurkovskaia AV, et al. **Fiziol Zh** 1989 May-Jun; 35(3):17–21 (Eng. Abstr.) **(Rus)**

[The role of osmotic factors in the effect of mineral water Naftusia on smooth muscles of the portal vein] Zagorodniuk VP, et al. **Fiziol Zh** 1989 May-Jun; 35(3):26–32 (Eng. Abstr.) **(Rus)**

[The role of the endothelium in the reactions of the vascular wall to mechanical stretching and the action of neuromediators] Azin AL, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):205–11 (Eng. Abstr.) **(Rus)**

[Functional effects of subthreshold stimulation of smooth muscle cells of the blood vessel] Govyrin VA, et al. **Fiziol Zh SSSR** 1988 Nov;74(11):1622–7 (Eng. Abstr.) **(Rus)**

[The role of circular and tangential smooth-muscle fibers in arteriole constriction and closure] Kostromina EIu, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1438–46 (Eng. Abstr.) **(Rus)**

[Kinetics of tissue sodium metabolism and the vascular reactivity to vasopressor agents in healthy persons with different degree of risk of developing arterial hypertension] Merzhievskaia VM, et al. **Kardiologiia** 1988 Dec; 28(12):30–3 (Eng. Abstr.) **(Rus)**

[Evolution of the effector mechanisms of the vascular wall] Azin AL. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug; 24(4):582–92 (27 ref.) **(Rus)**

PHYSIOPATHOLOGY

Physiology of vascular smooth muscle in relation to hypertension. Bohr DF, et al. **Acta Physiol Scand Suppl** 1988;571:15–24 (25 ref.)

Cell biology of vascular hypertrophy in systemic hypertension. Dzau VJ, et al. **Am J Cardiol** 1988 Oct 5; 62(11):30G–35G (57 ref.)

Enhanced responsiveness of smooth muscle, impaired endothelium-dependent relaxation and the genesis of coronary spasm. Tomoike H, et al. **Am J Cardiol** 1989 Mar 7;63(10):33E–39E

Greater calmodulin-dependent regulation of neurotransmitter release and vascular responsiveness in chronic Doca-salt hypertension. Tsuda K, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):93–8

Lipid peroxidation and altered vascular function in vitamin E-deficient rats. Hubel CA, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1539–45

Lack of endothelium-dependent relaxation in coronary resistance arteries of cholesterol-fed rabbits. Osborne JA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C591–7

Potassium-induced relaxation of arteries in hypertension: modulation by extracellular calcium. Rinaldi G, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H707–12

Aortic impedance and compliance in hypertensive rats. Zuckerman BD, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H553–62

Diabetes enhances vasoreactivity to calcium entry blockers. Pieper GM, et al. **Artery** 1989;16(5):263–71

Prostacyclin, thromboxane A2 and calcium antagonists: effects on atherosclerotic characteristics of vascular cells. Baldenkov GN, et al. **Biomed Biochim Acta** 1988; 47(10-11):S324–7

Calcium and abnormal reactivity of vascular smooth muscle in hypertension. Sharma RV, et al. **Cell Calcium** 1988 Dec; 9(5-6):267–74 (54 ref.)

Vascular reactivity following thermal injury. Cioffi WG, et al. **Circ Shock** 1988 Aug;25(4):309–17

Contractile function of aortic smooth muscle in guinea pig endotoxin shock. Kutsky P, et al. **Circ Shock** 1988 Jul; 25(3):197–207

Macrophage-conditioned medium and interleukin 1 suppress vascular contractility. McKenna TM, et al. **Circ Shock** 1988 Jul;25(3):187–96

Endothelium-dependent relaxation to acetylcholine in the aorta of streptozotocin induced diabetic-rat and the BB-diabetic rat. Kappagoda T, et al. **Clin Invest Med** 1989 Jun;12(3):187–93

Putative determinants of arterial wall compliance in NIDDM. Wahlqvist ML, et al. **Diabetes Care** 1988 Nov-Dec;11(10):787–90

Reduced endothelium-dependent relaxation of cystic fibrosis pulmonary arteries. Dinh Xuan AT, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):401–3

Dirofilaria immitis: alteration of endothelium-dependent relaxation in the in vivo canine femoral artery. Kaiser L, et al. **Exp Parasitol** 1989 Jul;69(1):9–15

Blood flow and vascular reactivity during attacks of classic migraine--limitations of the Xe-133 intraarterial technique. Skyhøj Olsen T, et al. **Headache** 1989 Jan;29(1):15–20

Pathophysiology of obstructive arterial disease. Coffman JD. **Herz** 1988 Dec;13(6):343–50 (32 ref.)

Isolation and characterization of single vascular smooth muscle cells from spontaneously hypertensive rats. Bolzon BJ, et al. **Hypertension** 1989 Aug;14(2):137–44

Cytosolic Ca2+ attenuates ANF-induced cyclic GMP response in vascular smooth muscle cells. Nakamura M, et al. **J Hypertens** 1989 Jan;7(1):51–6

Early arterial modifications in young patients with borderline hypertension. Girerd X, et al. **J Hypertens Suppl** 1989 Feb; 7(1):S45–7

Vascular smooth muscle cell hyper-responsiveness to growth factors in hypertension. Hamet P, et al. **J Hypertens Suppl** 1988 Dec;6(4):S36–9

Hypercholesterolemia impairs endothelium-dependent relaxations to aggregating platelets in porcine iliac arteries. Komori K, et al. **J Vasc Surg** 1989 Sep;10(3):318–25

Characteristics of contractile response of isolated portal veins from chronic portal hypertensive rats under altered levels of external K+, Ca2+, and norepinephrine concentrations: a comparison with normal Wistar rats. Yoshimura T, et al. **Jpn J Physiol** 1988;38(4):459–78

Endothelium-dependent basilar and aortic vascular responses in normotensive and coarctation hypertensive rats. Lai FM, et al. **Life Sci** 1989;45(7):607–14

Effects of hypoxia on contractile responses of rabbit aortic strips to transmural electrical stimulation. Lee K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):275–81

A model of bacterially induced umbilical vein spasm, relevant to fetal hypoperfusion. Hyde S, et al. **Obstet Gynecol** 1989 Jun;73(6):966–70

Reactivity of the saphenous vein in diabetics. Topper R, et al. **Proc West Pharmacol Soc** 1988;31:203–4

Role of monokines in altering receptor and non-receptor mediated vascular contraction in sepsis. McKenna TM, et al. **Prog Clin Biol Res** 1989;286:279–303

Hemodynamic effects on atherosclerosis and thrombosis. Eskin SG, et al. **Semin Thromb Hemost** 1988 Apr; 14(2):170–4

[Cellular electrolyte metabolism and regulation of vascular tonus. Clinical aspects] Zidek W. **Arzneimittelforschung** 1989 Jan;39(1A):135–8 (Eng. Abstr.) **(Ger)**

[Studies of the isolated pulmonary artery of rabbits as a contribution to research on the pathogenesis of constrictive reactions of lung vessels] Schulz KT, et al. **Prax Klin Pneumol** 1988 Oct;42(10):745–8 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Contractile properties of isolated vascular smooth muscle after photoradiation. Freas W, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H655–64

Effect of argon laser irradiation on rabbit aortic smooth muscle: evidence for endothelium independent contraction and relaxation. Steg PG, et al. **Cardiovasc Res** 1988 Nov; 22(11):747–53

Pulsed ultraviolet laser irradiation produces endothelium-independent relaxation of vascular smooth muscle. Steg PG, et al. **Circulation** 1989 Jul;80(1):189–97

[Effect of pulsed excimer laser on arterial smooth muscle] Steg PG, et al. **Arch Mal Coeur** 1989 Feb;82(2):269–74 (Eng. Abstr.) **(Fre)**

[Arterial obstructions following therapeutic radiation therapy] Bertuch H, et al. **Vasa Suppl** 1988;26:185–8 (Eng. Abstr.) **(Ger)**

SECRETION

Hypoxia stimulates release of endothelium-derived relaxant factor. Pohl U, et al. **Am J Physiol** 1989 Jun;256(6 Pt

2):H1595–600
Heparin modulates the secretion of a major excreted protein–like molecule by vascular smooth muscle cells. Cochran DL, et al. **Biochim Biophys Acta** 1988 Nov 17; 967(2):289–95
Stimulation of aortic smooth muscle prostacyclin by serotonin: role of distinct receptors in contractile and synthetic states. Demolle D, et al. **Circ Res** 1989 Apr; 64(4):806–13

SURGERY

Laser balloon angioplasty: effect of exposure duration on shear strength of welded layers of postmortem human aorta. Jenkins RD, et al. **Lasers Surg Med** 1988;8(4):392–6
[Initial results following implantation of resorbable micro–patches of polydioxanone in the rat aorta] Schumann U. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(3):153–8 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Freeze–fracture study of the intramembrane particle density in the aortic smooth muscle cell plasmalemma of rabbits fed an atherogenic diet. Gendre PM, et al. **Atherosclerosis** 1989 Mar;76(1):1–7
A new view of the arterial smooth muscle cells and autonomic nerve plexus by scanning electron microscopy in spontaneously hypertensive rats. Chaldakov GN, et al. **Exp Pathol** 1989;36(3):181–4
Improved method for electron microscopy immunocytochemistry of muscle. McGuffee LJ, et al. **J Electron Microsc Tech** 1989 Aug;12(4):419–21
Alpha–smooth muscle actin, a differentiation marker of smooth muscle cells, is present in microfilamentous bundles of pericytes. Skalli O, et al. **J Histochem Cytochem** 1989 Mar;37(3):315–21
Nexus junctions between vascular smooth muscle cells in the media of the thoracic aorta in normal and hypertensive rats. A freeze–fracture study. Berry CL, et al. **J Hypertens** 1989 Jun;7(6):507–13
Cytoskeletal features of immature pulmonary vascular smooth muscle cells: the influence of pulmonary hypertension on normal development. Allen KM, et al. **J Pathol** 1989 Aug;158(4):311–7
Contact relationships between vascular smooth muscle cells: an in vivo and in vitro study. Sosa–Melgarejo JA, et al. **J Pathol** 1989 Mar;157(3):213–7
Cell–to–cell herniae in the media of coronary arterioles. Diculescu M, et al. **Morphol Embryol (Bucur)** 1988 Jul–Sep; 34(3):161–4
Photodynamic therapy induced ultrastructural alterations in microvasculature of the rat cremaster muscle. Tseng MT, et al. **Photochem Photobiol** 1988 Nov;48(5):675–81
Scanning electron microscopy of microvessels and perivascular cells in different organs after KOH digestion. Maggioni A, et al. **Prog Clin Biol Res** 1989;295:469–74
Techniques for determining morphological characteristics of smooth muscle cells using computer assisted reconstructions. Todd ME, et al. **Prog Clin Biol Res** 1989; 295:139–44
Cadmium toxicity on the aortic media of pregnant rats: transmission and scanning electron microscopic study. Yoshizuka M, et al. **Prog Clin Biol Res** 1989;295:481–5
Calcium–permeable channels in vascular smooth muscle: voltage–activated, receptor–operated, and leak channels. Benham CD, et al. **Soc Gen Physiol Ser** 1987;42:45–64
Intercellular contacts in tumours of the vascular smooth muscle cells in man. Sosa–Melgarejo JA, et al. **Virchows Arch [A]** 1988;413(5):373–80
[Effect of hyperlipemic serum on the isolated culture of the aortic smooth muscle and atheroma plaque cell of rabbits] Liu Q, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):103–6 (Chi)
[Nuclear changes in cells parasitized by Trypanosoma cruzi in chronic Chagas disease patients] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):147–51 (Eng. Abstr.) (Por)
[Smooth muscle cells (current issues of ultrastructural organization] Klishov AA, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):82–92 (130 ref.) (Rus)
[Characteristics of the ultrastructural organization of the vascular wall in disordered neuromuscular interactions] Gurko NS, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):41–5 (Eng. Abstr.) (Rus)

MUSCLE SPASTICITY

see related
SPASM

Spastic hypertonia: mechanisms and measurement. Katz RT, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):144–55 (125 ref.)

COMPLICATIONS

Posterior tibial tendon transfer in spastic equinovarus. Lagast J, et al. **Arch Orthop Trauma Surg** 1989;108(2):100–3
Stiff–man syndrome updated. Lorish TR, et al. **Mayo Clin Proc** 1989 Jun;64(6):629–36 (26 ref.)

DIAGNOSIS

Electromyographic assessment of spasticity. Pinelli P, et al. **Ital J Neurol Sci** 1989 Apr;10(2):137–44 (26 ref.)
[Electrophysiologic assessment of the spastic syndrome in patients with a traumatic lesion of the spinal cord] Beliaev VI. **Zh Nevropatol Psikhiatr** 1988;88(6):91–3 (Eng. Abstr.) (Rus)

DRUG THERAPY

Use of intrathecal baclofen administered by programmable infusion pumps in resistent spasticity. Broseta J, et al. **Acta Neurochir Suppl (Wien)** 1989;46:39–45
Implanted pump systems for treatment of spasticity. Zierski J, et al. **Acta Neurochir Suppl (Wien)** 1988;43:94–9
Motor point blocks in children. A technique to relieve spasticity using phenol injections. Morrison JE Jr, et al. **AORN J** 1989 May;49(5):1346–7, 1349–51, 1354 (6 ref.)
Functional outcome after delivery of intrathecal baclofen. Parke B, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):30–2
Topical anesthetics: effects on the Achilles tendon and H–reflexes. II. Stroke patients. Wolf SL, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):673–7
Oxcarbazepine and spasticity: further observations. Bittencourt PR. **Arq Neuropsiquiatr** 1988 Dec;46(4):382–4
A double–blind, long–term study of tizanidine ('Sirdalud') in spasticity due to cerebrovascular lesions. Medici M, et al. **Curr Med Res Opin** 1989;11(6):398–407
Short–term effects of intrathecal baclofen in spasticity. Latash ML, et al. **Exp Neurol** 1989 Feb;103(2):165–72
Effect of cannabinoids on spasticity and ataxia in multiple sclerosis. Meinck HM, et al. **J Neurol** 1989 Feb; 236(2):120–2
Effect of intrathecal baclofen on bladder and sphincter function. Nanninga JB, et al. **J Urol** 1989 Jul;142(1):101–5
Intrathecal baclofen for intractable spasticity due to severe brain injury [letter] Saltuari L, et al. **Lancet** 1989 Aug 26; 2(8661):503–4
Control of intractable spasticity with intrathecal morphine sulfate. Erickson DL, et al. **Neurosurgery** 1989 Feb; 24(2):236–8
Reflex changes induced by clonidine in spinal cord injured patients. Nance PW, et al. **Paraplegia** 1989 Aug; 27(4):296–301
[Spinal mechanism of the antispastic action of TRH in patients with amyotrophic lateral sclerosis] Morin C, et al. **Rev Neurol (Paris)** 1988;144(11):701–3 (Eng. Abstr.) (Fre)
[Comparative double–blind study of the effectiveness and tolerance of baclofen, tetrazepam and tizanidine in spastic movement disorders of the lower extremities] Pellkofer M, et al. **Med Klin** 1989 Jan 15;84(1):5–8 (Eng. Abstr.) (Ger)

MICROBIOLOGY

Inflammatory lesions of peripheral nerve in a patient with human T–lymphotropic virus type I—associated myelopathy. Said G, et al. **Ann Neurol** 1988 Aug; 24(2):275–7

NURSING

Management of spasticity in spinal cord injury: nursing concerns. Petuibone KA. **J Neurosci Nurs** 1988 Aug; 20(4):217–22 (14 ref.)

PATHOLOGY

[Histologic changes of the nutatory muscles in spastic torticollis] Volobuev IuM. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):58–9 (Rus)

PHYSIOPATHOLOGY

Lower extremity manifestations of spasticity in chronic spinal cord injury. Little JW, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):32–6
Stretch reflex dynamics in spastic elbow flexor muscles. Powers RK, et al. **Ann Neurol** 1989 Jan;25(1):32–42
Spasticity: quantitative measurements as a basis for assessing effectiveness of therapeutic intervention. Lehmann JF, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):6–15
Spasticity in spinal cord injured patients: 2. Initial measures and long–term effects of surface electrical stimulation. Robinson CJ, et al. **Arch Phys Med Rehabil** 1988 Oct; 69(10):862–8
The use of dynamic electromyography to evaluate motor control in the hands of adults who have spasticity caused by brain injury. Keenan MA, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):120–6
Short–latency autogenic inhibition (IB inhibition) in human spasticity. Delwaide PJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1546–50

SURGERY

Intra–operative spinal cord evoked potentials during cervical and lumbo–sacral microsurgical DREZ–tomy (MDT) for chronic pain and spasticity (preliminary data). Jeanmonod D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:58–61
Transposition of the posterior tibial tendon. Johnson WL, et al. **Clin Orthop** 1989 Aug;(245):223–7
Hamstring release for knee flexion contracture in spastic adults. Keenan MA, et al. **Clin Orthop** 1988 Nov; (236):221–6
Surgical management of spastic thumb–in–palm deformity in adults with brain injury. Botte MJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):174–82
Selective neurotomy of the tibial nerve for treatment of the spastic foot. Sindou M, et al. **Neurosurgery** 1988 Dec; 23(6):738–44
Microsurgical DREZ–otomy for the treatment of spasticity and pain in the lower limbs. Sindou M, et al. **Neurosurgery** 1989 May;24(5):655–70
Femoral obturator and sciatic neurectomy with iliacus and psoas muscle section for spasticity following spinal cord injury. Benzel EC, et al. **Spine** 1988 Aug;13(8):905–8

THERAPY

Electrical localization of spinal roots for the treatment of spasticity by intrathecal alcohol injection. Chabal C, et al. **Anesth Analg** 1989 Apr;68(4):527–9
Implantation of a recurrent laryngeal nerve stimulator for the treatment of spastic dysphonia. Friedman M, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):130–4
Phenol block of the tibial nerve for spasticity: a long–term follow–up study. Petrillo CR, et al. **Int Disabil Stud** 1988; 10(3):97–100
Approaches to senior care #3. Orthopaedic management of the stroke patient. Part II: Treating deformities of the upper and lower extremities. Botte MJ, et al. **Orthop Rev** 1988 Sep;17(9):891–910 (29 ref.)
[The use of physical agents in the treatment of spasticity] Frischknecht R, et al. **Ther Umsch** 1988 Jul;45(7):437–47 (49 ref.) (Eng. Abstr.) (Fre)

MUSCLE TONUS

The effects of tonicity on tension and stiffness of tetanized skeletal muscle fibres of the frog. Månsson A. **Acta Physiol Scand** 1989 Jun;136(2):205–16
Pathophysiologic role of calcium in the development of vascular smooth muscle tone. Morgan KG, et al. **Am J Cardiol** 1989 Sep 19;64(11):35F–40F (39 ref.)
Wrist muscle tone and self–care skill in persons with hemiparesis. Spaulding SJ, et al. **Am J Occup Ther** 1989 Jan;43(1):11–6
Effects of intracellular alkalinization on resting and agonist–induced vascular tone. Danthuluri NR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H867–75
Endogenous regulation of bronchomotor tone. Leff AR. **Am Rev Respir Dis** 1988 May;137(5):1198–216 (210 ref.)
Paradoxical sleep without atonia. Morrison AR. **Arch Ital Biol** 1988 Oct;126(4):275–89 (52 ref.)
Lipoproteins as factors in vessel tone and reactivity modulation. Vedernikov YuP, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):590–6
Agonist and antagonist muscle tension during horizontal saccadic eye movements. Enderle JD, et al. **Biomed Sci Instrum** 1989;25:155–61
Parallel suppression of extensor muscle tone and respiration by stimulation of pontine dorsal tegmentum in decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Nov 8;473(1):81–90
Neuronal origin of parallel suppression of postural tone and respiration elicited by stimulation of midpontine dorsal tegmentum in the decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Dec 6;474(2):403–6
Peripheral regulation of stiffness during arm movements by coactivation of the antagonist muscles. Simmons RW, et al. **Brain Res** 1988 Nov 8;473(1):134–40
Flow–mediated and reflex changes in large peripheral artery tone in humans. Anderson EA, et al. **Circulation** 1989 Jan; 79(1):93–100
Posture of low–risk preterm infants between 32 and 36 weeks postmenstrual age. Vles JS, et al. **Dev Med Child Neurol** 1989 Apr;31(2):191–5
Upper esophageal sphincter tone and reactivity to stress in patients with a history of globus sensation. Cook IJ, et al. **Dig Dis Sci** 1989 May;34(5):672–6
Agonist–induced vascular tone. Nishimura J, et al. **Hypertension** 1989 Jun;13(6 Pt 2):835–44 (70 ref.)
Significance of coronary artery tone in patients with vasospastic angina. Hoshio A, et al. **J Am Coll Cardiol** 1989 Sep;14(3):604–9; discussion 610–2
Cold and hyperosmolar fluids in canine trachea: vascular and smooth muscle tone and albumin flux. Deffebach ME, et al. **J Appl Physiol** 1989 Mar;66(3):1309–15
Effects of altered afferent articular input on sensation, proprioception, muscle tone and sympathetic reflex responses. Slosberg M. **J Manipulative Physiol Ther** 1988 Oct;11(5):400–8 (78 ref.)
Observations on the applicability of the Wartenberg pendulum test to healthy, elderly subjects. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1171–7
Does the Wartenberg pendulum test differentiate quantitatively between spasticity and rigidity? A study in elderly stroke and Parkinsonian patients. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1178–86
Extensor tone disinhibition from an infarction within the midline anterior cerebellar lobe [letter] Ringel RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1597–9
The association of gegenhalten in the upper limbs with dyspraxia. Tyrrell P, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):995–7
Evidence that glycine mediates the postsynaptic potentials that inhibit lumbar motoneurons during the atonia of active

sleep. Chase MH, et al. **J Neurosci** 1989 Mar;9(3):743–51
Modulation of coronary tone in acute myocardial infarction by endothelin [letter] Salminen K, et al. **Lancet** 1989 Sep 23;2(8665):747
REM sleep without atonia after lesions of the medial medulla. Schenkel E, et al. **Neurosci Lett** 1989 Mar 27;98(2):159–65
The influence of extracellular calcium on microvascular tone in the rat cremaster muscle. Joshua IG, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):344–52
Stereoencephalotomy and control of skeletal muscle tone. Struppler A. **Stereotact Funct Neurosurg** 1989; 52(2–4):205–18
[Recent advances in the study of the length–tension relation in striated muscle] Chen XL. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):351–6 (44 ref.) (Chi)
[Measurement of changes in parietal tonus of the abomasum in sheep] Malbert CH, et al. **Reprod Nutr Dev** 1989; 29(2):147–59 (Eng. Abstr.) (Fre)
[Objective assessment of the reactive effectiveness of middle frequency electromyostimulation using mechanical muscle diagnosis (myomechanography)] Ullmann P, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):91–6 (Eng. Abstr.) (Ger)
[Bronchomotor tonus] Mazzarella G. **Arch Monaldi Mal Torace** 1988 Jan–Feb;43(1):3–27 (57 ref.) (Ita)
[Evaluation of the bronchial tonus, basal and following bronchodilators, in subjects with allergic rhinitis] Vignale L, et al. **Minerva Med** 1989 May;80(5):469–74 (Eng. Abstr.) (Ita)
[The influence of increased uterine resting tonus on renal sympathetic nerve activity in pregnant rabbit] Kitanaka T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):639–46 (Eng. Abstr.) (Jpn)
[Quantitative evaluation of muscle tonus examined by tensometric methods in children with neurogenic dysfunction of the locomotor system] Zarzycki D. **Przegl Lek** 1988;45(11):776–80 (Eng. Abstr.) (Pol)
[Relation of the frequency of cardiac contraction and subjectively perceptible tension in the body during muscular work] Alekseev VM. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):69–74 (Rus)
[Influence of electric stimulation of the medulla oblongata on the smooth muscle tone of the airway in cats] Talvan IL, et al. **Neirofiziologiia** 1989;21(3):320–7 (Eng. Abstr.) (Rus)
[Reactions of tonically active motor neurons to the stimulation of different afferents] Alatyrev VI, et al. **Nerv Sist** 1988;27:3–8 (Rus)
[Comparative characteristics of stimulant cystotonometry in children] Salov PP, et al. **Pediatriia** 1989;(2):95–6 (Rus)
[Comparative characteristics of masticatory muscle tonus in children with orthognathic and prognathic deep bites before and after orthodontic treatment] Anikienko AA, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):53–6 (Eng. Abstr.) (Rus)
[A method for research on the tonus and contractile capacity of the anal sphincter] Timofeev VK, et al. **Voen Med Zh** 1988 Jun;(6):64–5 (Rus)

DRUG EFFECTS

Does terbutaline cause uterine atony and increase intraoperative blood loss? [letter] Brown MS. **Am J Obstet Gynecol** 1989 Jul;161(1):259
Effects of vasodilator drugs on venous tone in conscious rats. D'Oyley HM, et al. **Eur J Pharmacol** 1989 Mar 21; 162(2):337–44
Medullary regions mediating atonia. Lai YY, et al. **J Neurosci** 1988 Dec;8(12):4790–6
[The effect of atropine, fentanyl and alfentanyl on cardiocirculatory parameters and thoracic rigidity in the induction phase of intubation anesthesia] Janik R, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):260–4 (Eng. Abstr.) (Ger)
[Effect of atriopeptin on the adrenergic mechanism regulating blood vessel tonus] Azin AL, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):390–2 (Eng. Abstr.) (Rus)
[The structural specificity of factors in the chemical regulation of muscle tonus at the spinal cord level] Vartanian GA, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):268–71 (Eng. Abstr.) (Rus)
[The effect of histamine and histamine H1 and H2 receptor biockers on the tone of the longitudinal muscles in the human appendix] Frković A, et al. **Lijec Vjesn** 1989 Apr–May;111(4–5):124–6 (Eng. Abstr.) (Scr)
[The effect of histamine and histamine receptor blockers on amooth muscle tone of the human appendix, oviduct and uterus] Frković A, et al. **Med Pregl** 1988;41(1–2):34–7 (Eng. Abstr.) (Scr)

MUSCLES

see related
SARCOLEMMA
SARCOPLASMIC RETICULUM

Variability of fiber size, capillary density and capillary length related to horse muscle fixation procedures. Mermod L, et al. **Acta Anat (Basel)** 1988;133(2):89–95
Fat-free mass in children and young adults predicted from bioelectric impedance and anthropometric variables. Guo SM, et al. **Am J Clin Nutr** 1989 Sep;50(3):435–43
"Statistical power" and interpretation of small studies: does atracurium pretreatment reduce the incidence of succinylcholine fasciculations? [letter] Burton P, et al. **Anesth Analg** 1989 Aug;69(2):263
Focal leptomeningeal rhabdomyomatosis of the posterior fossa. Fix SE, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):872–3
The convergence projection theory [letter] Garrison D. **Arch Phys Med Rehabil** 1989 Aug;70(8):648
Biomechanical circulatory assistance. Importance of aerobic capacity of normal and conditioned skeletal muscles. Leirner AA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):716–20
An intracranial arteriovenous malformation and palatal myoclonus related to pseudoxanthoma elasticum. Chalk JB, et al. **Aust N Z J Med** 1989 Apr;19(2):141–3
Ice recrystallization in a model system and in frozen muscle tissue. Martino MN, et al. **Cryobiology** 1989 Apr; 26(2):138–48
Intracranial trigeminal nerve rhabdomyoma/choristoma in a child: a case report and discussion of possible histogenesis. Zwick DL, et al. **Hum Pathol** 1989 Apr;20(4):390–2
Organ culture of frog muscle: maintenance of mass, enzyme levels, and contractile force. Ohira Y, et al. **J Appl Physiol** 1989 Jul;67(1):466–71
Muscular dystrophy with particular oculopharyngeal involvement. Eksantivongs S, et al. **J Med Assoc Thai** 1989 Apr;72(4):234–8
Resection of a tumor of the psoas muscle. Shamberger RC, et al. **J Pediatr Surg** 1989 Sep;24(9):933–5
Antecollis in parkinsonism [letter] Jorens PG, et al. **Lancet** 1989 Jun 10;1(8650):1320–1
Case 1, 1988. Head tilt in a young girl associated with neck pain and limitation of neck movement. Shale H, et al. **Mov Disord** 1988;3(4):347–51
Psoas abscess in the neonate. Vasquez LA, et al. **N Y State J Med** 1989 Jul;89(7):421–2
Myalgic encephalomyelitis [letter] **N Z Med J** 1988 Nov 23; 101(858):800–1
Palatal myoclonus in children [letter] Fox GN. **Neurology** 1989 Jun;39(6):877
Nuclear inclusions in innervated cultured muscle fibers from patients with oculopharyngeal muscular dystrophy. Tomé FM, et al. **Neurology** 1989 Jul;39(7):926–32
Bursitis: a factor in the differential diagnosis of orofacial neuralgias and myofascial pain dysfunction syndrome. Salins PC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):154–7
Squamous cell carcinoma of the soft palate, uvula, and anterior faucial pillar. Weber RS, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):16–23
Neck breathing: a form of voluntary respiration for the spine-injured ventilator-dependent quadriplegic child. Gilgoff IS, et al. **Pediatrics** 1988 Nov;82(5):741–5
Relationship of femoral intramedullary pins to the sciatic nerve and gluteal muscles after retrograde and normograde insertion. Palmer RH, et al. **Vet Surg** 1988 Mar–Apr; 17(2):65–70
[The effect of immobilization on muscles] Savolainen J, et al. **Duodecim** 1989;105(2):187–91 (35 ref.) (Fin)
[Value of the stapedial reflex in the diagnosis of a retrocochlear lesion] Dauman R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):409–13 (20 ref.) (Eng. Abstr.) (Fre)
[Effects of carbon dioxide (hypocapnia and hypercapnia) on tissue blood flow and oxygenation of liver, kidney and skeletal muscle in the dog] Okazaki K, et al. **Masui** 1989 Apr;38(4):457–64 (Eng. Abstr.) (Jpn)
[Palatal myoclonus and hypertrophy of the olivary nucleus. Case report] Olejniczak P. **Neuropatol Pol** 1988; 26(3):377–83 (Eng. Abstr.) (Pol)
[Treatment of cervical myositis in children] Bagdasarian SM. **Pediatriia** 1988;(4):94–5 (Rus)

ABNORMALITIES

Peroneus brevis rupture in the absence of the peroneus longus muscle and tendon in a classical ballet dancer. A case report. Cross MJ, et al. **Am J Sports Med** 1988 Nov–Dec; 16(6):677–8
Extensor digitorum brevis manus. An unusual cause of exercise-induced wrist pain. Kuschner SH, et al. **Am J Sports Med** 1989 May–Jun;17(3):440–1
Anomalous fascicle and high origin of latissimus dorsi compensating for absence of serratus anterior. Bergman RA, et al. **Anat Anz** 1988;167(2):161–4
Chronic peroneal tendon subluxation produced by an anomalous peroneus brevis: case report and literature review. Hammerschlag WA, et al. **Foot Ankle** 1989 Aug; 10(1):45–7 (17 ref.)
Specific absence of the alpha 1 subunit of the dihydropyridine receptor in mice with muscular dysgenesis. Knudson CM, et al. **J Biol Chem** 1989 Jan 25;264(3):1345–8
Ulnar compression neuropathy secondary to the anconeus epitrochlearis muscle. Masear VR, et al. **J Hand Surg [Am]** 1988 Sep;13(5):720–4
Anomalous muscles of the first dorsal compartment of the wrist. Patel MR, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):829–31
Painful extensor digitorum brevis manus muscle. Patel MR, et al. **J Hand Surg [Am]** 1989 Jul;14(4):674–8
Anomalous abductor pollicis longus insertion in the thenar muscles. Rayan GM, et al. **J Hand Surg [Am]** 1989 May; 14(3):550–2
Ulnar nerve compression caused by a reversed palmaris longus muscle. Regan PJ, et al. **J Hand Surg [Br]** 1988 Nov;13(4):406–7
Ulnar tunnel syndrome caused by an accessory palmaris muscle. Robinson D, et al. **Orthop Rev** 1989 Mar; 18(3):345–7
Extensor digitorum brevis manus muscle. A clinical reminder. Shaw JA, et al. **Orthop Rev** 1988 Sep;17(9):867–9
Comments on "Amyoplasia Congenita-Like Condition and Maternal Malathion Exposure": Is all Amyoplasia Amyoplasia? [letter] Hall JG. **Teratology** 1988 Nov; 38(5):493–5

ANALYSIS

Normal and dystrophin-deficient muscle fibers in carriers of the gene for Duchenne muscular dystrophy. Bonilla E, et al. **Am J Pathol** 1988 Dec;133(3):440–5
Rapid isolation of total RNA from small mammal and human skeletal muscle. Hood DA, et al. **Am J Physiol** 1989 May; 256(5 Pt 1):C1092–6
Tissue sulfonamide concentration and correlation in turkeys. Epstein RL, et al. **Am J Vet Res** 1989 Jun;50(6):926–8
Analysis of muscle elements, water, and total lipids from healthy dogs and Labrador retrievers with hereditary muscular dystrophy. Mehta JR, et al. **Am J Vet Res** 1989 May;50(5):640–4
Identification and quantitation of arsenic species in a dogfish muscle reference material for trace elements. Beauchemin D, et al. **Anal Chem** 1988 Oct 15;60(20):2209–12
Intracellular magnesium ion selective microelectrode based on a neutral carrier. Hu ZM, et al. **Anal Chem** 1989 Mar 15;61(6):574–6
Histochemical fiber type composition in 12 skeletal muscles of miniature pigs. Horák V. **Anat Anz** 1988;167(3):231–8
Structure, function, and regulation of the skeletal muscle dihydropyridine receptor. Beam KG, et al. **Ann N Y Acad Sci** 1989;560:127–37 (34 ref.)
32,000-Dalton subunit of the 1,4-dihydropyridine receptor. Campbell KP, et al. **Ann N Y Acad Sci** 1989;560:251–7
L-type calcium channels in cardiac and skeletal muscle. Purification and phosphorylation. Hosey MM, et al. **Ann N Y Acad Sci** 1989;560:27–38 (29 ref.)
Expression of voltage-dependent Ca channels from skeletal muscle in Xenopus oocytes. Lotan I, et al. **Ann N Y Acad Sci** 1989;560:183–4 (4 ref.)
Nile red simultaneous staining of intracellular lipids and membrane network in human muscle cultures. Santilli I, et al. **Basic Appl Histochem** 1989;33(1):49–52
Multiple populations of deleted mitochondrial DNA detected by a novel gene amplification method. Sato W, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):664–72
Lipid analysis of skeletal muscle from pigs susceptible to malignant hyperthermia. Fletcher JE, et al. **Biochem Cell Biol** 1988 Aug;66(8):917–21
The oligosaccharide component of alpha 1-adrenergic receptors from BC3H1 and DDT1 muscle cells. Studies with glycosidases and photoaffinity labelling of intact cells. Terman BI, et al. **Biochem J** 1988 Jul 15;253(2):363–70
Bay K8644 like activity of an antibody against a 60 kDa tubular membrane protein. Chatterjee D, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):104–8
Detection, characterisation, and quantification of carnosine and other histidyl derivatives in cardiac and skeletal muscle. O'Dowd JJ, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):241–9
Structural comparison of the 68 kDa laminin-binding protein and 5'-nucleotidase from chicken muscular sources: evidence against a gross structural similarity of both proteins. Risse G, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):258–63
A lectin from the thigh muscle of Rana tigerina. Shet MS, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):465–9
Rat skeletal muscle, liver and brain have different fetal and adult forms of the glucose transporter. Wang C, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):11–8
The relationships between glycogen stores and muscle ultimate pH in commercially slaughtered pigs. Warriss PD, et al. **Br Vet J** 1989 Jul–Aug;145(4):378–83
Volatile pollutants in the environment and human tissues. Kroneld R. **Bull Environ Contam Toxicol** 1989 Jun; 42(6):873–7
1,25 Dihydroxyvitamin D3 affects calmodulin distribution among subcellular fractions of skeletal muscle. de Boland AR, et al. **Calcif Tissue Int** 1988 Dec;43(6):370–5
A mitogenic factor from rat muscle. Rao LS, et al. **Cancer Lett** 1989 Apr;45(1):27–34
A comparative study of chicken ventricular and slow skeletal myosin light chains. Libera LD. **Cell Biol Int Rep** 1988 Dec;12(12):1089–98
Quantitation of intracellular free calcium in single myocytes by Fura-2 fluorescence microscopy [letter] Haworth RA. **Cell Calcium** 1989 May–Jun;10(4):263–4
Expression of muscle actin genes in early differentiation stages of tail regeneration of the urodele amphibian Pleurodeles waltlii. Khrestchatisky M, et al. **Cell Differ Dev** 1988 Dec;25(3):203–12
Correlation between concentrations of magnesium, zinc, and potassium in plasma, erythrocytes and muscles. Ladefoged K, et al. **Clin Chim Acta** 1988 Oct 14;177(2):157–66
Tissue specific differences in the fatty acid composition of the marmoset monkey (Callithrix jacchus). Charnock JS,

et al. **Comp Biochem Physiol [A]** 1989;92(3):299–304
Carnosine content of the middle gluteal muscle in thoroughbred horses with relation to age, sex and training. Marlin DJ, et al. **Comp Biochem Physiol [A]** 1989; 93(3):629–32
Myosin light chains of guinea-pig striated muscles. Similarities and differences with rat myosin light chains. d'Albis A, et al. **Comp Biochem Physiol [B]** 1989; 93(2):355–8
Ubiquinone analyses in fish tissues and in some marine invertebrates. Farbu T, et al.
Comp Biochem Physiol [B] 1979;63(3):395–7
The use of electrophoresis of the water-soluble (sarcoplasmic) proteins of fish muscle to differentiate the closely related species of hake (Merluccius sp.). Mackie IM, et al. **Comp Biochem Physiol [B]** 1978;59(2):95–8
Generation of multiple troponin T isoforms is a common feature of the muscles in various chordate animals. Ohshima S, et al. **Comp Biochem Physiol [B]** 1988;90(4):779–84
Lobster (Homarus americanus) striated muscle myosin. Regenstein JM. **Comp Biochem Physiol [B]** 1977; 56(3):239–44
The effects of starvation on the sodium, potassium, water and free amino acid content of parietal muscle from Agonus cataphractus. Soutter AM, et al.
Comp Biochem Physiol [B] 1977;58(1):57–61
Glycosaminoglycan variants in the C2 muscle cell line. Gordon H, et al. **Dev Biol** 1989 Sep;135(1):1–11
Histochemical localization of IGF-I and IGF-II mRNA in the rat between birth and adulthood. Beck F, et al.
Development 1988 Sep;104(1):29–39
Muscle magnesium and capillary basement membrane thickness in diabetes mellitus. Dyckner T, et al.
Diabete Metab 1988 Sep–Oct;14(5):619–22
Evidence for the presence of a distinct embryonic isoform of myosin heavy chain in chicken skeletal muscle. Dhoot GK. **Differentiation** 1989 Jun;40(3):176–83
Dual-label autoradiographic analysis of human skin fibroblast and myoblast proteins by two-dimensional polyacrylamide gel electrophoresis using immobilised pH gradients in the first dimension. Patel K, et al. **Electrophoresis** 1988 Sep; 9(9):547–54
Decrease in glucose transporter number in skeletal muscle of mildly diabetic (streptozotocin-treated) rats. Ramlal T, et al. **Endocrinology** 1989 Aug;125(2):890–7
Muscular adaptation of horses during intensive training and detraining. Essén-Gustavsson B, et al. **Equine Vet J** 1989 Jan;21(1):27–33
Functional characterization of skeletal F-actin labeled on the NH2-terminal segment of residues 1–28. Bertrand R, et al. **Eur J Biochem** 1989 May 15;181(3):747–54
The effect of myosin light chain phosphorylation and Mg2+ on the conformation of myosin in thick filaments of glycerinated fibers of rabbit skeletal muscle. Borovikov YS, et al. **Eur J Biochem** 1989 Jul 15;183(1):83–8
Biochemical and theoretical approach to localization of metal-ion-binding sites in the actin primary structure. Strzelecka-Gogaszewska H, et al. **Eur J Biochem** 1989 Jun 15;182(2):299–305
Identification and subcellular location of talin in various cell types and tissues by means of [125I]vinculin overlay, immunoblotting and immunocytochemistry. Drenckhahn D, et al. **Eur J Cell Biol** 1988 Aug;46(3):513–22
Effect of salbutamol on digoxin concentration in serum and skeletal muscle. Edner M, et al. **Eur J Clin Pharmacol** 1989; 36(3):235–8
Intramuscular comparison of myosin isozymes and light chains in rat extensor digitorum longus muscle. Rosenblatt JD, et al. **Experientia** 1989 Apr 15;45(4):339–41
Tissue specific distribution of calcyclin—10.5 kDa Ca2+-binding protein. Kuźnicki J, et al. **FEBS Lett** 1989 Aug 28;254(1-2):141–4
Caldesmon150, caldesmon77 and skeletal muscle troponin T share a common antigenic determinant. Shirinsky VP, et al. **FEBS Lett** 1989 Jul 17;251(1-2):65–8
Removal of troponin C from natural actomyosin of rabbit skeletal muscle by CDTA. Shiraishi F, et al.
Fukuoka Igaku Zasshi 1989 Apr;80(4):167–9
DNA, RNA and total protein content of leg and breast muscles of White Rock chickens selected for 56-day body weight. Anthony NB, et al. **Growth Dev Aging** 1988 Winter; 52(4):177–84
Diversity in expression of myosin heavy chain isoforms and M-band proteins in rat muscle spindles. Pedrosa F, et al. **Histochemistry** 1989;92(3):185–94
A silver-reducing component in rat striated muscle. I. Selective localization at the level of the terminal cistern/transverse tubule system. Light and electron microscope studies with a new histochemical procedure. Tandler CJ, et al. **Histochemistry** 1989;92(1):15–22
A silver-reducing component in rat striated muscle. II. Isolated sarcoplasmic reticulum vesicles. Tandler CJ, et al. **Histochemistry** 1989;92(1):23–7
Rat skeletal muscle lysosomes contain glycogen. Calder PC, et al. **Int J Biochem** 1989;21(5):561–7
Calpain and calpastatin levels in dystrophic hamster skeletal muscles. Johnson P, et al. **Int J Biochem** 1988; 20(11):1227–30
Androgen and estrogen receptors in bovine skeletal muscle: relation to steroid-induced allometric muscle growth. Sauerwein H, et al. **J Anim Sci** 1989 Jan;67(1):206–12
Anesthetic effects on liver and muscle glycogen concentrations: rest and postexercise. Musch TI, et al.
J Appl Physiol 1989 Jun;66(6):2895–900
Creatine phosphate in fiber types of skeletal muscle before and after exhaustive exercise. Tesch PA, et al.
J Appl Physiol 1989 Apr;66(4):1756–9
Competitive direct enzyme-linked immunosorbent assay for detection of sulfamethazine residues in swine urine and muscle tissue. Dixon-Holland DE, et al.
J Assoc Off Anal Chem 1988 Nov-Dec;71(6):1137–40
An actin-depolymerizing protein in embryonic chicken skeletal muscle: purification and characterization. Abe H, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):172–80
Isolation of profilin from embryonic chicken skeletal muscle and evaluation of its interaction with different actin isoforms. Ohshima S, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):855–7
Alpha-actinin is a component of the Z-filament, a structural backbone of skeletal muscle Z-disks. Takahashi K, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):529–36
Identification of calcium binding proteins in two-dimensional gel electrophoretic pattern of Drosophila thorax and their distribution in two types of muscles. Tanaka Y, et al.
J Biochem (Tokyo) 1988 Oct;104(4):489–91
Conformational change of skeletal muscle troponin. Yamakita Y, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):870–4
Identification of the mouse muscle 43,000-dalton acetylcholine receptor-associated protein (RAPsyn) by cDNA cloning. Frail DE, et al. **J Biol Chem** 1988 Oct 25;263(30):15602–7
Cloning and characterization of the major insulin-responsive glucose transporter expressed in human skeletal muscle and other insulin-responsive tissues. Fukumoto H, et al.
J Biol Chem 1989 May 15;264(14):7776–9
Purification of a sarcoplasmic reticulum protein that binds Ca2+ and plasma lipoproteins. Hofmann SL, et al.
J Biol Chem 1989 May 15;264(14):8260–70
Albumin is a major protein component of transverse tubule vesicles isolated from skeletal muscle. Knudson CM, et al. **J Biol Chem** 1989 Jun 25;264(18):10795–8
cDNA clone and expression analysis of rodent fast and slow skeletal muscle troponin I mRNAs. Koppe RI, et al.
J Biol Chem 1989 Aug 25;264(24):14327–33
Sequences of complete cDNAs encoding four variants of chicken skeletal muscle troponin T. Smillie LB, et al.
J Biol Chem 1988 Dec 15;263(35):18816–20
Detection of a specific isoform of alpha-actinin with antisera directed against dystrophin. Hoffman EP, et al.
J Cell Biol 1989 Feb;108(2):503–10
Isolation of drug residues from tissues by solid phase dispersion. Barker SA, et al. **J Chromatogr** 1989 Jul 28; 475:353–61
Determination of melengestrol acetate in bovine tissues by automated coupled-column normal-phase high-performance liquid chromatography. Chichila TM, et al. **J Chromatogr** 1989 Mar 24;488(2):389–406
Determination of amino acids in rat muscle by gas chromatography. Labadarios D, et al. **J Chromatogr** 1989 Feb 24;487(2):428–33
Application of sorbent extraction chromatography to the purification of diethylstilboestrol extracted from muscle tissue and determined by radioimmunoassay. O'Keeffe M, et al. **J Chromatogr** 1989 Apr 7;489(1):199–204
Chemiluminescence immunoassay for the detection and quantification of methyltestosterone residues in muscle tissue. van Peteghem C, et al. **J Chromatogr** 1989 Apr 7; 489(1):219–23
Reversed-phase liquid chromatographic determination of chloroaluminum phthalocyanine tetrasulfonate in canine tissues and fluids. Zuk MM, et al. **J Chromatogr** 1988 Dec 9;433:367–72
Intracellular calcium in canine muscle biopsies. Valentine BA, et al. **J Comp Pathol** 1989 Apr;100(3):223–30
Is the myosin type altered in the aging platysma? Oudet C, et al. **J Craniomaxillofac Surg** 1989 May;17(4):190–4
Expression of endogenous receptors for neoglycoproteins, especially lectins, that allow fiber typing on formaldehyde-fixed, paraffin-embedded muscle biopsy specimens. A glycohistochemical, immunohistochemical, and glycobiochemical study. Bardosi A, et al.
J Histochem Cytochem 1989 Jul;37(7):989–98
In situ hybridization and immunocytochemistry in serial sections of rabbit skeletal muscle to detect myosin expression. Dix DJ, et al. **J Histochem Cytochem** 1988 Dec; 36(12):1519–26
Fiber type-specific distribution of M-band proteins in chicken muscle. Grove BK, et al.
J Histochem Cytochem 1989 Apr;37(4):447–54
Formaldehyde-amine fixatives for immunocytochemistry of cultured Xenopus myocytes. Luther PW, et al.
J Histochem Cytochem 1989 Jan;37(1):75–82
N-terminal amino acid sequences of three functionally different troponin T isoforms from rabbit fast skeletal muscle. Briggs MM, et al. **J Mol Biol** 1989 Mar 5; 206(1):245–9
Phosphorylatable serine residues are located in a non-helical tailpiece of a catch muscle myosin. Castellani L, et al.
J Muscle Res Cell Motil 1988 Dec;9(6):533–40
Identification and distribution of the fast class of troponin T in the adult and developing avian skeletal muscle. Dhoot GK. **J Muscle Res Cell Motil** 1988 Oct;9(5):446–55
Localization by immunoelectron microscopy of spanning protein of triad junction in terminal cisternae/triad vesicles. Kawamoto RM, et al. **J Muscle Res Cell Motil** 1988 Aug; 9(4):334–43
Identification and distribution of some developmental isoforms of myosin heavy chains in avian muscle fibres. Kilby K, et al. **J Muscle Res Cell Motil** 1988 Dec; 9(6):516–24
Histochemistry and isomyosins of tail musculature in Xenopus. Kordylewski L, et al.
J Muscle Res Cell Motil 1989 Aug;10(4):290–6
Complexity of myosin species in the avian posterior latissimus dorsi muscle. Rushbrook JI, et al.
J Muscle Res Cell Motil 1988 Dec;9(6):552–62
Three myosin heavy chain isoforms in type 2 skeletal muscle fibres. Schiaffino S, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):197–205
Paracrystals of myosin rod. Ward R, et al.
J Muscle Res Cell Motil 1989 Feb;10(1):34–52
The distribution of intracellular acetylcholine receptors and nuclei in developing avian fast-twitch muscle fibres during synapse elimination. Phillips WD, et al. **J Neurocytol** 1989 Apr;18(2):241–55
Skeletal muscle Na,K-pump concentration in children and its relationship to cardiac glycoside distribution. Kjeldsen K, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):721–5
Plasma and muscle free amino acids during continuous ambulatory peritoneal dialysis. Lindholm B, et al.
Kidney Int 1989 May;35(5):1219–26
Identical mitochondrial DNA deletion in blood and muscle [letter] Johns DR, et al. **Lancet** 1989 Feb 18;1(8634):393–4
HPLC method for quantitation of cholesterol and four of its major oxidation products in muscle and liver tissues. Csallany AS, et al. **Lipids** 1989 Jul;24(7):645–51
In vivo T1 characterization of genetically induced muscle atrophy. Misra LK, et al. **Magn Reson Imaging** 1989 May-Jun;7(3):277–82
Two-dimensional correlated spectroscopy (COSY) of intact frog muscle: spectral pattern characterization and lactate quantitation. Alonso J, et al. **Magn Reson Med** 1989 Sep; 11(3):316–30
Quantitative and qualitative fat analysis in human leg muscle of neuromuscular diseases by 1H MR spectroscopy in vivo. Bárány M, et al. **Magn Reson Med** 1989 May;10(2):210–26
Immunophenotypic diagnosis of leiomyosarcomas and rhabdomyosarcomas with monoclonal antibodies to muscle-specific actin and desmin in formalin-fixed tissue. Azumi N, et al. **Mod Pathol** 1988 Nov;1(6):469–74
Biochemical characterization of the Ca2+ release channel of skeletal and cardiac sarcoplasmic reticulum. Meissner G, et al. **Mol Cell Biochem** 1988 Jul-Aug;82(1-2):59–65
Isolation and characterization of related cDNA clones encoding skeletal muscle beta-tropomyosin and a low-molecular-weight nonmuscle tropomyosin isoform. Bradac JA, et al. **Mol Cell Biol** 1989 Jan;9(1):185–92
Myosin heavy chain composition of muscle fibers in spinal muscular atrophy. Biral D, et al. **Muscle Nerve** 1989 Jan; 12(1):43–51
Localization of dystrophin in cultures of human muscle. Ecob-Prince MS, et al. **Muscle Nerve** 1989 Jul;12(7):594–7 (25 ref.)
Dystrophin and Duchenne's muscular dystrophy [letter] Hurko O, et al. **N Engl J Med** 1989 Aug 10;321(6):398–9
An autosomal transcript in skeletal muscle with homology to dystrophin. Love DR, et al. **Nature** 1989 May 4; 339(6219):55–8
Duchenne muscular dystrophy gene product is not identical in muscle and brain. Nudel U, et al. **Nature** 1989 Jan 5; 337(6202):76–8
Inducing effect of skeletal muscle extracts on the appearance of calbindin-immunoreactive dorsal root ganglion cells in culture. Barakat I, et al. **Neuroscience** 1989;28(1):39–47
Activation of the trk oncogene by alternatively spliced muscle and non-muscle tropomyosin sequences. Barnes D, et al. **Oncogene** 1989 Feb;4(2):259–62
Expression of CSF-1-receptor-related proteins in muscular stem cells. Leibovitch SA, et al. **Oncogene Res** 1989; 4(2):157–62
Biochemical and histochemical observations of vastus medialis from rats flown in Cosmos 1887 (experiment K608). Musacchia XJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S21–2
Comparison of the amino acid composition of the intracellular and extracellular matrix protein fractions isolated from avian skeletal muscles. Karatzas CN, et al. **Poult Sci** 1989 Jun;68(6):811–24
Determination of myofibrillar and connective tissue protein contents of young and adult avian (Gallus domesticus) skeletal muscles and the N tau-methylhistidine content of avian actins. Khalili AD, et al. **Poult Sci** 1988 Nov; 67(11):1593–614
Four exons encode a 93-base-pair insert in three neural cell adhesion molecule mRNAs specific for chicken heart and skeletal muscle. Prediger EA, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(24):9616–20
Fatty acid binding proteins in the three types of rat skeletal muscle. Miller WC, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):183–8
Structure of nicotinic acetylcholine receptors from muscle and neurons. Lindstrom J, et al. **Prog Clin Biol Res** 1989; 289:245–66 (82 ref.)
Intracellular electrolytes and water analysis in dystrophic canine muscles. Mehta JR, et al. **Res Vet Sci** 1989 Jul; 47(1):17–22

Phospholipids and their fatty acid composition in the muscle of trout fed on diets supplemented with olive oil bagasse or technical rendered fat. de la Hoz L, et al. **Rev Esp Fisiol** 1989 Jun;45(2):187–93

Isolation and characterization of chicken muscle ferritin. Martín-Mateo MC, et al. **Rev Esp Fisiol** 1988 Jun; 44(2):137–40

Mercury content of some marine fish from the southern Caribbean Sea. Shrestha KP, et al. **Sci Total Environ** 1988 Jul 15;73(3):181–7

Primary structure of the beta subunit of the DHP-sensitive calcium channel from skeletal muscle. Ruth P, et al. **Science** 1989 Sep 8;245(4922):1115–8

Changes in free amino acids content in albacore (Thunnus alalunga) muscle during thermal processing. Perez-Martin RI, et al. **Z Lebensm Unters Forsch** 1988 Nov;187(5):432–5

The vitamin E concentration in pig muscle biopsy specimens. A methodological study. Jensen M. **Zentralbl Veterinarmed** [A] 1989 May;36(5):354–60

[Phospholipid content of subcellular structures in skeletal muscles after halothane loading in Landrace swine in relation to mating variants and genotype] Adam H, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):293–9 (Eng. Abstr.) (Ger)

[Dynamics of amino acid and protein metabolism in laying hens after the administration of 15N-labeled wheat protein. 11. Incorporation of 15N in the tissues and the amino acids of the muscles] Gruhn K, et al. **Arch Tierernahr** 1989 Mar; 39(3):321–32 (Eng. Abstr.) (Ger)

[Foxes as bioindicators of the occurrence of polychlorinated biphenyls (PCB) in the environment—studies of section material from the years 1983 and 1987] Brunn H, et al. **DTW** 1988 Nov–Dec;95(10):465–8 (Eng. Abstr.) (Ger)

[Biochemical analysis of human external urethral sphincter] Tokunaka S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):539–46 (Eng. Abstr.) (Jpn)

[Determination of age- and exercise-dependent changes in myoglobin contents in murine skeletal and cardiac muscles] Nakatani A. **Nippon Seirigaku Zasshi** 1988;50(11):709–18 (Eng. Abstr.) (Jpn)

[Measurement of creatine and phosphocreatine in muscle tissue using HPLC] Haruki K, et al. **Rinsho Byori** 1989 Apr;37(4):447–9 (Jpn)

[Cation concentrations in myocardium and skeletal muscle of normal and hypertensive rats, young and adults] Haebisch EM, et al. **Arq Bras Cardiol** 1987 Sep;49(3):133–8 (Eng. Abstr.) (Por)

[The study of actin in denervated skeletal muscles by microcalorimetry] Moskalenko IE, et al. **Biofizika** 1988 Jul–Aug;33(4):722–3 (Eng. Abstr.) (Rus)

[Tropomyosin from smooth and skeletal muscles initiates various conformational changes in skeletal F-actin] Borovikov IuS, et al. **Biokhimiia** 1988 Nov;53(11):1817–20 (Eng. Abstr.) (Rus)

[Domain organization of alpha-actinin from the rabbit skeletal muscle] Kuridze KSh, et al. **Biokhimiia** 1988 Jun; 53(6):899–904 (Eng. Abstr.) (Rus)

[Isolation and characteristics of dihydropyridine calcium antagonist receptor from rabbit skeletal muscles] Soldatov NM. **Biokhimiia** 1988 Oct;53(10):1600–11 (Eng. Abstr.) (Rus)

[Solubilization and isolation of dihydropyridine calcium channel blocker receptor from the rabbit skeletal muscle] Soldatov NM. **Biokhimiia** 1988 Sep;53(9):1418–26 (Eng. Abstr.) (Rus)

[Photoactivated radioactive analogs of calcium antagonists of 1,4-dihydropyridine series: synthesis and covalent labeling of the receptor in rabbit skeletal muscle] Soldatov NM. **Biokhimiia** 1988 Aug;53(8):1247–55 (Eng. Abstr.) (Rus)

[Comparative evaluation of chemical methods for determining diethylstilbestrol in tissues of animal origin] Perevoshchikova KA, et al. **Vopr Med Khim** 1971 Jul–Aug; 17(4):439–43 (Eng. Abstr.) (Rus)

[Rapid method for isolation and purification of myosin from muscle of tarantulas] Martelo MJ, et al. **Acta Cient Venez** 1987;38(3):394–5 (Spa)

ANATOMY & HISTOLOGY

Quantitative morphometric analyses of the exercised extensor digitorum longus muscle of the mouse. el-Rimawi AS, et al. **Acta Anat (Basel)** 1989;134(3):191–8

Quantitative enzyme histochemistry in muscle fibres. Reichmann H. **Acta Histochem Suppl (Jena)** 1989;37:45–51

The interosseous and lumbrical muscles in the human hand, with special reference to the insertions of the interosseous muscles. Ikebuchi Y, et al. **Acta Med Okayama** 1988 Dec; 42(6):327–34

Homology of the adductor pollicis and contrahentes muscles: a study of monkey hands. Yamamoto C, et al. **Acta Med Okayama** 1988 Aug;42(4):215–26

Do the fibre-type proportion and the angular velocity influence the mean power frequency of the electromyogram? Gerdle B, et al. **Acta Physiol Scand** 1988 Nov;134(3):341–6

Fatigue during dynamic muscle contractions in male sprinters and marathon runners: relationships between performance, electromyographic activity, muscle cross-sectional area and morphology. Lorentzon R, et al. **Acta Physiol Scand** 1988 Apr;132(4):531–6

The effect of different food types and rations on the liver and muscle of cod (Gadus morhua L.). Buchmann K, et al. **Acta Vet Scand** 1988;29(1):57–9

Muscle fiber size and chronic exposure to hypoxia. Mathieu-Costello O, et al. **Adv Exp Med Biol** 1989; 248:305–11

1989 ARRS Executive Council Award. Exercise-enhanced MR imaging of variations in forearm muscle anatomy and use: importance in MR spectroscopy. Fleckenstein JL, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):693–8

Individual correlation of morphology, muscle mechanics, and locomotion in a salamander. Bennett AF, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1200–8

Length–tension relationship of striated muscle of cat external anal sphincter. Krier J, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G773–8

Fiber type, fiber size, and capillary geometric features of the semitendinosus muscle in three types of dogs. Rosenblatt JD, et al. **Am J Vet Res** 1988 Sep;49(9):1573–6

Occurrence of three supernumerary muscles in adult human hand supporting recent developmental concept of muscle layers in the autopodium. Haninec P, et al. **Anat Anz** 1988; 167(3):225–30

Descriptive and functional morphology of the locomotory apparatus of the spotted hyaena (Crocuta crocuta, Erxleben, 1777). Spoor CF, et al. **Anat Anz** 1989; 168(3):261–6

Descriptive and functional myology of the back and hindlimb of the striped hyena (Hyaena hyaena, L. 1758). Spoor CF, et al. **Anat Anz** 1988;167(4):313–21

Tendon and myo-tendinous junction in an overloaded skeletal muscle of the rat. Zamora AJ, et al. **Anat Embryol (Berl)** 1988;179(1):89–96

Anatomical and radiological observations of the sesamoid bone of the popliteus muscle in the adult dog and cat. McCarthy PH, et al. **Anat Histol Embryol** 1989 Mar; 18(1):58–65

Efficiency of phenoxyethanol at removing formaldehyde from immersion fixed muscle tissue. Rumph PF, et al. **Anat Histol Embryol** 1988 Sep;17(3):226–31

The M. soleus in the domestic dog (Canis familiaris). Spoor CF, et al. **Anat Histol Embryol** 1989 Mar;18(1):27–31

Variations of the extensor digitorum brevis muscle in the dog. Wakuri H, et al. **Anat Histol Embryol** 1988 Jun; 17(2):164–8

Muscle fibre composition of the bovine tail: a pilot study. Young OA, et al. **Anat Histol Embryol** 1989 Mar;18(1):52–7

Regional distribution of fiber types in developing baboon diaphragm muscles. Maxwell LC, et al. **Anat Rec** 1989 May; 224(1):66–78

Human abductor pollicis brevis muscle "divisions" and the nerve hila. Simard T, et al. **Anat Rec** 1988 Dec; 222(4):426–36

Potential anatomic sphincters of anorectal malformations in females. Peña A. **Birth Defects** 1988;24(4):163–75

Potential anatomic sphincters of anorectal malformations in males. Stephens FD. **Birth Defects** 1988;24(4):155–61 (15 ref.)

Sex differences in the histochemical characteristics of the sternotrachealis muscle of the duck. Scapolo PA, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):831–4

A comparative histochemical and morphometric study of canine skeletal muscle. Kuzon WM Jr, et al. **Can J Vet Res** 1989 Apr;53(2):125–32

Effects of gonadectomy and estrogen administration on rat skeletal muscle. Kobori M, et al. **Clin Orthop** 1989 Jun; (243):306–11

Fiber type composition of the plantarflexors of giraffes (Giraffa camelopardalis) at different postnatal stages of development. Roy RR, et al. **Comp Biochem Physiol [A]** 1988;91(2):347–52

Muscle structure and function in the goose, quail, pheasant, guinea hen, and chicken. Kiessling KH. **Comp Biochem Physiol [B]** 1977;57(4):287–92

Muscle metabolic profiles and fiber-type composition in some marine mammals. Ponganis PJ, et al. **Comp Biochem Physiol [B]** 1978;59(2):99–102

Easy peroperative classification of perianal muscle as external or internal sphincter by means of diathermy. Svenberg T, et al. **Dis Colon Rectum** 1988 Dec;31(12):979–80

Mechanical measures during maximal velocity knee extension exercise and their relation to fibre composition of the human vastus lateralis muscle. Houston ME, et al. **Eur J Appl Physiol** 1988;58(1–2):1–7

Morphology of the gastrocnemius muscle of the calf in men representing the white and black races. Klimek W, et al. **Folia Morphol (Warsz)** 1987;46(1–2):31–7

Fully automated measurements by light microscopy of tissue sections using a cellular array computer. Claeys A, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):83–90

Histochemical study of the forelimb muscles in Rana temporaria L. Faber J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(6):877–84

A doubled flexor carpi radialis muscle. Saadeh FA, et al. **Gegenbaurs Morphol Jahrb** 1988;134(6):957–60

Multivariate classification of histochemically stained human skeletal muscle fibres by the SIMCA method. Bye E, et al. **Histochem J** 1989 Jan;21(1):15–22

Distribution of different fibre types in human skeletal muscles: a method for the detection of neurogenic disorders. Downham DY, et al. **IMA J Math Appl Med Biol** 1987; 4(1):81–91

Frequency dependence of tissue attenuation measured by acoustic microscopy. Daft CM, et al. **J Acoust Soc Am** 1989 May;85(5):2194–201

Effects of ageing and chronic dietary restriction on the morphology of fast and slow muscles of the rat. Boreham CA, et al. **J Anat** 1988 Apr;157:111–25

The site of the tendinous interruption in semitendinosus in man. Lee TC, et al. **J Anat** 1988 Apr;157:229–31

Distribution of fibre types and fibre sizes in the tibialis cranialis muscle of beagle dogs. Newsholme SJ, et al. **J Anat** 1988 Oct;160:1–8

Influences of gender, time of castration, genotype, birthtype and feeding regimen on lamb longissimus fiber type proportions. Arnold AM, et al. **J Anim Sci** 1988 Oct; 66(10):2476–83

Heterosis, maternal and direct effects in double-muscled and normal cattle: I. Reproduction and growth traits. Arthur PF, et al. **J Anim Sci** 1989 Apr;67(4):902–10

Heterosis, maternal and direct effects in double-muscled and normal cattle: II. Carcass traits of young bulls. Arthur PF, et al. **J Anim Sci** 1989 Apr;67(4):911–9

Effect of feed intake and exogenous porcine somatotropin on longissimus muscle fiber characteristics of pigs weighing 55 kilograms live weight. Solomon MB, et al. **J Anim Sci** 1988 Dec;66(12):3279–84

Using ultrasound technology to predict pork carcass composition. Terry CA, et al. **J Anim Sci** 1989 May; 67(5):1279–84

Contrasts in muscle and myofibers of elite male and female bodybuilders. Alway SE, et al. **J Appl Physiol** 1989 Jul; 67(1):24–31

Changes in size and compliance of the calf after 30 days of simulated microgravity. Convertino VA, et al. **J Appl Physiol** 1989 Mar;66(3):1509–12

Role of muscle loss in the age-associated reduction in VO2 max. Fleg JL, et al. **J Appl Physiol** 1988 Sep;65(3):1147–51

Exercise-induced focal skeletal muscle fiber degeneration and capillary morphology. Peeze Binkhorst FM, et al. **J Appl Physiol** 1989 Jun;66(6):2857–65

Effects of undernutrition on diaphragm fiber size, SDH activity, and fatigue resistance. Sieck GC, et al. **J Appl Physiol** 1989 May;66(5):2196–205

Skeletal muscle enlargement with weight-lifting exercise by rats. Wong TS, et al. **J Appl Physiol** 1988 Aug;65(2):950–4

An historical account of studies on muscle [published erratum appears in J Comp Pathol 1988 Nov;99(4):following 454] Bradley R. **J Comp Pathol** 1988 Oct;99(3):259–97

Tendon excursions of the interossei and superficial hypothenar muscles: an anatomical study. Woodburn KR, et al. **J Hand Surg [Br]** 1988 Nov;13(4):415–20

Thin filaments of rabbit skeletal muscle are in helical register. Hirose K, et al. **J Mol Biol** 1988 Dec 5;204(3):797–801

Architecture and consequent physiological properties of the semitendinosus muscle in domestic goats. Gans C, et al. **J Morphol** 1989 Mar;199(3):287–97

Skeletal muscle architecture of the rabbit hindlimb: functional implications of muscle design. Lieber RL, et al. **J Morphol** 1989 Jan;199(1):93–101

Expression of nerve-muscle topography during development. Laskowski MB, et al. **J Neurosci** 1989 Jan;9(1):175–82

Sex difference in muscle cross-sectional area of athletes and non-athletes. Bishop P, et al. **J Sports Sci** 1989 Spring; 7(1):31–9

Measurement of quadriceps muscle thickness and subcutaneous tissue thickness in normal children by real-time ultrasound imaging. Heckmatt JZ, et al. **J Clin Ultrasound** 1988 Mar–Apr;16(3):171–6

Effects of denervation and deafferentation on mass and enzyme activity in rat skeletal muscles. Ohira Y. **Jpn J Physiol** 1989;39(1):21–31

In vivo 1H spectroscopic studies of human gastrocnemius muscle at 1.5 T. Narayana PA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):481–5

Mass and fiber cross-sectional area of soleus muscle grafts following training. Clark KI, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):432–6 (27 ref.)

Muscle hypertrophy in men and women. Cureton KJ, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):338–44

Electromyographic evaluation of an accessory hand muscle. McManis PG, et al. **Muscle Nerve** 1989 Jun;12(6):460–3

Longitudinal structure and innervation of two mammalian hindlimb muscles. Manzano G, et al. **Muscle Nerve** 1988 Nov;11(11):1115–22

Spatial distribution of fiber types in skeletal muscle: test for a random distribution [letter] Pernuš F. **Muscle Nerve** 1989 Aug;12(8):696–8

Gantzer's muscle-like variation inserted into the forearm flexor retinaculum. Kida M, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):1–11

Functional anatomy of the larynx. Sasaki CT, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):595–612 (30 ref.)

Changes of muscle function and size with bedrest. Dudley GA, et al. **Physiologist** 1989 Feb;32(1 Suppl):S65–6

Estimates of genetic parameters in turkeys. 1. Body weight and skeletal characteristics. Havenstein GB, et al. **Poult Sci** 1988 Oct;67(10):1378–87

Estimates of genetic parameters in turkeys. 2. Body weight and carcass characteristics. Havenstein GB, et al. **Poult Sci** 1988 Oct;67(10):1388–99

Relationship between MR relaxation time and muscle fiber composition. Kuno S, et al. **Radiology** 1988 Nov; 169(2):567–8

The geometry of the muscles of the lumbar spine determined

by magnetic resonance imaging. Tracy MF, et al. **Spine** 1989 Feb;14(2):186–93

Anatomic basis of serratus anterior muscle flap transposition. Vu P, et al. **Surg Radiol Anat** 1988;10(3):173–85

The extensor apparatus of the knee joint and its peripheral vasti: anatomic investigation and clinical relevance. Weinstabl R, et al. **Surg Radiol Anat** 1989;11(1):17–22

[Bone and muscle density of the lumbar spine (letter)] Vico L, et al. **Presse Med** 1989 Jun 24;18(25):1254 **(Fre)**

[The attachment and function of the infrahyoid muscles] Fischer C, et al. **Anat Anz** 1989;168(3):237–43 (Eng. Abstr.) **(Ger)**

[An accessory muscle of the shank] Korn S. **Anat Anz** 1988; 167(5):409–11 (Eng. Abstr.) **(Ger)**

[The M. sartorius bicaudatus (Gruber)] Prescher A. **Anat Anz** 1989;168(3):275–7 (10 ref.) (Eng. Abstr.) **(Ger)**

[The characteristic musculature of the pelvic limbs of Pudu pudu (Molina 1782)] Butendieck E, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):601–13 (Eng. Abstr.) **(Ger)**

[Studies on the tendinous compartments of the extensor muscles on the back of the human hand and their tendon sheaths. II] Schmidt HM, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):309–27 **(Ger)**

[The individual muscles of the shoulder limb of Pudu pudu (Molina 1782)] Wissdorf H, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):441–58 (Eng. Abstr.) **(Ger)**

[Morphology of human skeletal muscle and its adaptability to different training conditions] Hoppeler H. **Sportverletz Sportschaden** 1987 Jun;1(2):71–5 (44 ref.) (Eng. Abstr.) **(Ger)**

[The effect of age on the number, distribution and length of the muscle spindles and their capsules in the soleus muscle of the rat] Hartung V, et al. **Z Mikrosk Anat Forsch** 1988;102(4):655–76 (Eng. Abstr.) **(Ger)**

[The effect of age on the extra- and intrafusal muscle fibers in the soleus muscle of the rat] Hartung V, et al. **Z Mikrosk Anat Forsch** 1988;102(4):677–93 (Eng. Abstr.) **(Ger)**

[Genetic parameters of body weight, muscle weight and skeletal characteristics in Japanese quail] Sato K, et al. **Jikken Dobutsu** 1989 Jan;38(1):47–54 (Eng. Abstr.) **(Jpn)**

[A study of the accessory head of the biceps brachii in man] Higashi N, et al. **Kaibogaku Zasshi** 1988 Apr;63(2):78–88 (32 ref.) (Eng. Abstr.) **(Jpn)**

[The morphology of Gantzer's muscle, with special reference to the morphogenesis of the flexor digitorum superficialis] Kida M. **Kaibogaku Zasshi** 1988 Dec;63(6):539–46 (Eng. Abstr.) **(Jpn)**

[Nuclear magnetic resonance studies of skeletal muscle] Kuwabara T, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1298–303 (Eng. Abstr.) **(Jpn)**

[Composition of skeletal muscle fibers in athletes, performing work varying in duration and power] Iazvikov VV. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):49–55 (Eng. Abstr.) **(Rus)**

[Connective tissue structures of human skeletal muscle and their significance in the biomechanics of the body] Khoroshkov IuA, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):41–8 (Eng. Abstr.) **(Rus)**

[Topographic anatomical interrelation of the lumbar triangles with the organs and adipose tissue formations of the retroperitoneal space] Krutsiak VN, et al. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):86–8 (Eng. Abstr.) **(Rus)**

[Principle of spiral arrangement of the skeletal muscles of humans and animals] Shaparenko PF, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):55–9 (Eng. Abstr.) **(Rus)**

[Anatomical basis for a technic of cutting flaps out of the musculus rectus femoris for creating a rectal sphincter apparatus] Tatianchenko VK. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):81–6 (Eng. Abstr.) **(Rus)**

[A modified method of differential staining of semi-thin skeletal muscle sections with Regaud hematoxylin] Chikorina NK. **Arkh Patol** 1988;50(12):69–70 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Vascular innervation in human skeletal muscle with and without neuromuscular disease. A quantitative ultrastructural study with references to the effects of age and different blood pressure. Case CP, et al. **Acta Neuropathol (Berl)** 1988;76(5):511–21

Site of autoregulatory reactions in the vascular bed of cat skeletal muscle as determined with a new technique for segmental vascular resistance recordings. Björnberg J, et al. **Acta Physiol Scand** 1988 Jun;133(2):199–210

Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. Björnberg J, et al. **Acta Physiol Scand** 1989 Feb; 135(2):83–94

Transcapillary clearance of albumin in rat skeletal muscle monitored by external detection. Effects of alterations in capillary surface area. Haraldsson B, et al. **Acta Physiol Scand** 1988 Apr;132(4):495–504

Marked regional heterogeneity in blood flow within a single skeletal muscle at rest and during exercise hyperaemia in the rabbit. Iversen PO, et al. **Acta Physiol Scand** 1989 May; 136(1):17–28

Morphology of the isolated rat hindquarter preparation: tissue preservation, perfusion heterogeneity and a note on the effect of fixative osmolality. Johansson BR, et al. **Acta Physiol Scand** 1988 Mar;132(3):391–400

Muscle capillary permeability for [14C]inulin and [51Cr]EDTA in human forearm. Keiding S, et al. **Acta Physiol Scand** 1988 Jul;133(3):335–42

Temporal relationship between blood flow changes and release of ions and metabolites from muscles upon single weak contractions. Kiens B, et al. **Acta Physiol Scand** 1989 Aug;136(4):551–9

Very rapid net transcapillary fluid absorption from skeletal muscle and skin in man during pronounced hypovolaemic circulatory stress. Länne T, et al. **Acta Physiol Scand** 1989 May;136(1):1–6

Haematocrit distribution in rabbit tenuissimus muscle. Ley K, et al. **Acta Physiol Scand** 1988 Mar;132(3):373–83

Increase in capillary blood flow and relative haematocrit in rabbit skeletal muscle following acute normovolaemic anaemia. Lindbom L, et al. **Acta Physiol Scand** 1988 Dec; 134(4):503–12

Large transcapillary hydraulic conductance in skeletal muscle and skin of man revealed by a new technique. Lundvall J, et al. **Acta Physiol Scand** 1989 Mar;135(3):417–8

Much larger transcapillary hydrodynamic conductivity in skeletal muscle and skin of man than previously believed. Lundvall J, et al. **Acta Physiol Scand** 1989 May;136(1):7–16

Possible involvement of neuropeptide Y in sympathetic vascular control of canine skeletal muscle. Pernow J, et al. **Acta Physiol Scand** 1988 Jan;132(1):43–50

Capillary spatial pattern and muscle fiber geometry in three hamster striated muscles. Bennett RA, et al. **Adv Exp Med Biol** 1989;248:259–70

Quantifying capillary distribution in four dimensions. Egginton S, et al. **Adv Exp Med Biol** 1989;248:271–80

Influence of muscle phenotype on local capillary supply. Egginton S, et al. **Adv Exp Med Biol** 1989;248:281–91

Variation in axial velocity profile of red cells passing through a single capillary. Ellis CG, et al. **Adv Exp Med Biol** 1989; 248:543–50

Regulation of capillary blood flow: a new concept. Harrison DK, et al. **Adv Exp Med Biol** 1989;248:583–9

Capillary blood flow and local oxygen supply in skeletal muscle during acute haemodilution with hydroxyethyl starch. Harrison DK, et al. **Adv Exp Med Biol** 1989; 248:693–8

Tissue oxygenation after prolonged ischemia in skeletal muscle: therapeutic effect of prophylactic isovolemic hemodilution. Menger MD, et al. **Adv Exp Med Biol** 1989; 248:387–95

White cell–endothelium interaction during postischemic reperfusion of skin and skeletal muscle. Messmer K, et al. **Adv Exp Med Biol** 1988;242:95–8

Spatial and temporal variability of blood flow in stimulated dog gastrocnemius muscle. Piiper J, et al. **Adv Exp Med Biol** 1989;248:719–28

Capillary lengths and anastomoses in rat hindlimb muscles, studied by Aquablak perfusion during rest versus exercise. Potter RF, et al. **Adv Exp Med Biol** 1989;248:313–22

Muscle O2 uptake while perfused at constant pressure with normoxic blood during global hypoxia. Reinhart K, et al. **Adv Exp Med Biol** 1989;248:729–34

Localized heterogeneity of red cell velocity in skeletal muscle at rest and after contraction. Tyml K, et al. **Adv Exp Med Biol** 1989;248:735–43

Distribution of microspheres in plantaris muscles of resting and exercising rats as a function of fiber type. Ong TC, et al. **Am J Anat** 1988 Aug;182(4):318–24

Effects of phosphodiesterase inhibition on skeletal muscle vasculature. LeJemtel TH, et al. **Am J Cardiol** 1989 Jan 3;63(2):27A–30A

Vascular catecholamine sensitivity during pregnancy in the ewe. McLaughlin MK, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):47–53

Blood flow in normal and denervated muscle during exercise in conscious rats. Delp MD, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1509–15

Vascular sensitivity and reactivity to norepinephrine in diabetes mellitus. Friedman JJ. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1134–8

Postnatal changes in capillary density of rat sternomastoid muscle. Hansen-Smith FM, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 2):H344–7

Endothelium-associated vasodilators in rat skeletal muscle microcirculation. Kaley G, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 2):H720–5

Shunting of leukocytes in rabbit tenuissimus muscle. Ley K, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H85–93

Adipose tissue and skeletal muscle blood flow during mental stress. Linde B, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E12–8

Substrate exchange in human limb muscle during exercise at reduced blood flow. Lundgren F, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1156–64

Relation of blood flow to VO2, PO2, and PCO2 in dog gastrocnemius muscle. Mohrman DE, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1004–10

Capillary tortuosity in rat soleus muscle is not affected by endurance training. Poole DC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1110–6

Effective diameter as a determinant of local vascular resistance in presence of vasomotion. Slaaf DW, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1240–3

Free radical defense mechanisms and neutrophil infiltration in postischemic skeletal muscle. Smith JK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H789–93

Oxygen exchange in the microcirculation of hamster retractor muscle. Swain DP, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H247–55

Oxygen-derived free radical scavengers and skeletal muscle ischemic/reperfusion injury. Faust KB, et al. **Am Surg** 1988 Dec;54(12):709–19

Time-resolved spectroscopy of hemoglobin and myoglobin in resting and ischemic muscle. Chance B, et al. **Anal Biochem** 1988 Nov 1;174(2):698–707

Vascular involvement in mitochondrial myopathy. Sakuta R, et al. **Ann Neurol** 1989 Jun;25(6):594–601

Latissimus dorsi musculocutaneous flap model in the rabbit: a hemodynamic and anatomical study. Forrest CR, et al. **Ann Plast Surg** 1988 Oct;21(4):335–41

Magnesium salts exert direct vasodilator effects on rat cremaster muscle microcirculation. Nagai I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:194–214

Laser Doppler velocimetry in the measurement of neurovascular function. Westerman RA, et al. **Australas Phys Eng Sci Med** 1988 Apr–Jun;11(2):53–66

Effects of ischaemia, blood loss and reperfusion on rat muscle protein synthesis, metabolite concentrations and polyribosome profiles in vivo. MacLennan PA, et al. **Biochem J** 1989 May 15;260(1):195–200

The effect of rejuvenation of aged erythrocytes on biochemical parameters in the perfused hind limb muscle preparation. Preedy VR, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):275–81

Inflammation-induced vasodepression detected ex vivo in the isolated perfused hindlegs in mice. Bekemeier H, et al. **Biomed Biochim Acta** 1988;47(9):855–60

Antivasodepressor action of antihistaminics determined ex vivo in the leg blood vessels of anaphylactic mice and rats. Bekemeier H, et al. **Biomed Biochim Acta** 1988;47(9):861–4

Can growth of capillaries in the heart and skeletal muscle be explained by the presence of an angiogenic factor? Hudlicka O, et al. **Br J Exp Pathol** 1989 Jun;70(3):237–46

Calcitonin gene-related peptide desensitizes skeletal muscle arterioles to substance P in vivo. Ohlén A, et al. **Br J Pharmacol** 1988 Nov;95(3):673–4

Neuropeptide Y and reserpine-resistant vasoconstriction evoked by sympathetic nerve stimulation in the dog skeletal muscle. Pernow J, et al. **Br J Pharmacol** 1988 Jul; 94(3):952–60

Actions of constrictor (NPY and endothelin) and dilator (substance P, CGRP and VIP) peptides on pig splenic and human skeletal muscle arteries: involvement of the endothelium. Pernow J. **Br J Pharmacol** 1989 Jul; 97(3):983–9

Anomalous blood supply to the serratus anterior/rib composite flap. Percival NJ, et al. **Br J Plast Surg** 1989 Jan;42(1):98–100

The venous territories of muscles: anatomical study and clinical implications. Watterson PA, et al. **Br J Plast Surg** 1988 Nov;41(6):569–85

Hindlimb skeletal muscle blood flow during sympathetic nerve block before and during acute anemia. Kubes P, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1148–53

The peripheral circulation. Sinoway LI, et al. **Cardiol Clin** 1989 Feb;7(1):63–71 (35 ref.)

Skeletal muscle blood flow and venous capacitance in patients with severe sepsis and systemic hypoperfusion. Astiz ME, et al. **Chest** 1989 Aug;96(2):363–6

Arteriolar control of capillary cell flow in striated muscle. Sweeney TE, et al. **Circ Res** 1989 Jan;64(1):112–20

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K+-induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

Blood supply of the upper extremity muscles as related to functional tendon transfers. Parry SW, et al. **Clin Plast Surg** 1989 Jul;16(3):531–6 (14 ref.)

Effect of chronic ethanol ingestion on tissue RNA and blood flow in skeletal muscle with comparative reference to bone and tissues of the gastrointestinal tract of the rat. Preedy VR, et al. **Clin Sci** 1989 Mar;76(3):243–7

Capillary basement membrane thickness and capillary density in sedentary and trained obese Zucker rats. Lash JM, et al. **Diabetes** 1989 Jul;38(7):854–60

Microangiopathy in human diabetic neuropathy: relationship between capillary abnormalities and the severity of neuropathy. Malik RA, et al. **Diabetologia** 1989 Feb; 32(2):92–102

Intramuscular pressure and muscle blood flow in supraspinatus. Järvholm U, et al. **Eur J Appl Physiol** 1988; 58(3):219–24

Habituation of vasodilatation in the calf elicited by repeated sensory stimulation in man. Zbrożyna AW, et al. **Eur J Appl Physiol** 1988;58(3):284–90

Muscle blood flow changes during sleep as a function of fibre type composition. Lenzi P, et al. **Exp Brain Res** 1989; 74(3):549–54

Effect of exercise on the leg distribution of C15O2 and 15O2 in normals and in patients with peripheral ischemia: a study using positron tomography. Depairon M, et al. **Int Angiol** 1988 Jul–Sep;7(3):254–7

The effect of long-term activity on the microvasculature of rat glycolytic skeletal muscle. Dawson JM, et al.

Int J Microcirc Clin Exp 1989 Feb;8(1):53–69
Response of the arteriolar network in rat cremaster muscle to intraarterial infusion of nicotine. Fleming BP, et al. **Int J Microcirc Clin Exp** 1989 Jul;8(3):275–92
The dilation of arterioles in frog submaxillaris muscle caused by visible light. Sonina RS, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):143–58
Heterogeneity of microvascular response to ischemia in skeletal muscle. Tyml K, et al. **Int J Microcirc Clin Exp** 1988 Aug;7(3):205–21
Blood flow and plasma extravasation in skeletal muscle during endotoxemia. A study in rats. van Lambalgen AA, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):217–32
The effect of amino acid administration on skeletal muscle blood flow. Blake S, et al. **Ir J Med Sci** 1988 May; 157(5):150–3
Patent muscular vessels in atheromatous obstruction of tibial arteries: a support of more peripheral revascularization procedures? Casula G, et al. **Ital J Surg Sci** 1988; 18(2):163–6
Histochemical studies of muscle development in decapitated and hypophysectomized pig fetuses: blood vessel development. Hausman GJ. **J Anim Sci** 1989 May; 67(5):1367–74
Cytochemistry for lectins, actin, nucleotide tetrazolium reductases and several phosphatases in the porcine semitendinosus muscle: vascular development in young pigs. Hausman GJ. **J Anim Sci** 1989 May;67(5):1375–86
Critical O2 delivery to skeletal muscle at high and low PO2 in endotoxemic dogs. Bredle DL, et al. **J Appl Physiol** 1989 Jun;66(6):2553–8
Effects of ischemia on VO2, tension, and vascular resistance in contracting canine skeletal muscle. Gorman MW, et al. **J Appl Physiol** 1988 Sep;65(3):1075–81
Estimation of blood flow distribution in skeletal muscle from inert gas washout. Grønlund J, et al. **J Appl Physiol** 1989 Apr;66(4):1942–55
Venous occlusion plethysmography reduces arterial diameter and flow velocity. Hiatt WR, et al. **J Appl Physiol** 1989 May;66(5):2239–44
Plateau in muscle blood flow during prolonged exercise in miniature swine. McKirnan MD, et al. **J Appl Physiol** 1989 May;66(5):2101–8
Capillary tortuosity in skeletal muscles of mammals depends on muscle contraction. Mathieu-Costello O, et al. **J Appl Physiol** 1989 Mar;66(3):1436–42
Muscle acidosis during static exercise is associated with calf vasoconstriction. Sinoway L, et al. **J Appl Physiol** 1989 Jan;66(1):429–36
Roles of CO2, O2, and acid in arteriovenous [H+] difference during muscle contractions. Stainsby WN, et al. **J Appl Physiol** 1988 Oct;65(4):1803–10
Potentiation of the exercise pressor reflex by muscle ischemia. Stebbins CL, et al. **J Appl Physiol** 1989 Mar;66(3):1046–53
Regional hemodynamic responses to hypoxia and hypermetabolism in polycythemic dogs. Stork RL, et al. **J Appl Physiol** 1989 Jul;67(1):96–102
Microneurographic analysis of thyrotropin-releasing hormone effects on sympathetic outflow in human muscle nerves. Tsunoda S, et al. **J Auton Nerv Syst** 1988 Sep; 23(3):207–11
Differential effects of verapamil and flunarizine on epinephrine-induced vasoconstriction and on spontaneous vasomotion of arterioles in skeletal muscle in the rat in vivo. De Clerck F, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):76–83
Prospective studies of muscle capillary basement membrane width in prediabetics. Feingold KR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):784–9
Oxygen binding properties, capillary densities and heart weights in high altitude camelids. Jürgens KD, et al. **J Comp Physiol [B]** 1988;158(4):469–77
No relationship between progressive muscle hyperaemia and temperature in exercising rats. Delp MD, et al. **J Exp Biol** 1989 Jan;141:87–95
Bandeiraea simplicifolia lectin demonstrates significantly more capillaries in rat skeletal muscle than enzyme methods [letter] Christie KN, et al. **J Histochem Cytochem** 1989 Aug;37(8):1303–4
Treatment of hypertension with captopril: preservation of regional blood flow and reduced platelet aggregation. James IM, et al. **J Hum Hypertens** 1988 Jun;2(1):21–5
Microcirculatory changes in cremaster muscle during early spontaneous hypertension in the rat. Struyker-Boudier HA, et al. **J Hypertens Suppl** 1988 Dec;6(4):S185–7
Vascularized muscle fibers: etiopathogenesis and clinical significance. Sulaiman AR, et al. **J Neurol Sci** 1989 Aug; 92(1):37–54
Time course and magnitude of blood flow changes in the human quadriceps muscles during and following rhythmic exercise. Walløe L, et al. **J Physiol (Lond)** 1988 Nov; 405:257–73
The importance of venous drainage in rat flaps: an experimental study. Fukui A, et al. **J Reconstr Microsurg** 1989 Jan;5(1):19–30
Differential recovery of skeletal muscle and peripheral nerve function after ischemia and reperfusion. Chervu A, et al. **J Surg Res** 1989 Jul;47(1):12–9
Isometric contractile function recovery following tourniquet ischemia. Fish JS, et al. **J Surg Res** 1989 Oct;47(4):365–70
A demonstration of vascular proliferation in response to arteriovenous reversal in the ischemic canine hind limb. Graham AM, et al. **J Surg Res** 1989 Oct;47(4):341–7
Effects of collateral blood vessel ligation and electrical conditioning on blood flow in dog latissimus dorsi muscle. Mannion JD, et al. **J Surg Res** 1989 Oct;47(4):332–40
Intraarterial urokinase increases skeletal muscle viability after acute ischemia. Belkin M, et al. **J Vasc Surg** 1989 Jan; 9(1):161–8
The role of leukocytes in the pathophysiology of skeletal muscle ischemic injury. Belkin M, et al. **J Vasc Surg** 1989 Jul;10(1):14–8; discussion 18–9
The rate and distribution of muscle blood flow after prolonged ischemia. Forrest I, et al. **J Vasc Surg** 1989 Jul; 10(1):83–8
Are free radical scavengers beneficial in the treatment of compartment syndrome after acute arterial ischemia? Ricci MA, et al. **J Vasc Surg** 1989 Feb;9(2):244–50
Reactive hyperemia monitored on rat muscle using perfluorocarbons and 19F NMR. Authier B. **Magn Reson Med** 1988 Sep;8(1):80–3
Magnitude and distribution of muscle blood flow in conscious animals during locomotory exercise. Armstrong RB. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S119–23 (41 ref.)
Naloxone does not affect muscle blood flow during low intensity exercise in rats. Mohrman SJ, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):34–9
Skeletal muscle blood flow in exercising dogs. Musch TI. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S104–8
Muscle blood flow in humans: how high can it go? Rowell LB. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S97–103 (35 ref.)
Maximal blood flow and power output of dog muscle in situ. Stainsby WN, et al. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S109–12
Blood flow to different rat skeletal muscle fiber type sections during isometric contractions in situ. Terjung RL, et al. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S124–30
Microcirculatory effects of leukotrienes, LTC4 and LTD4, in rat cremaster muscle. Messina EJ, et al. **Microcirc Endothelium Lymphatics** 1988 Oct;4(5):355–76
Vascular isolation of the rat cremaster muscle. Anderson GL, et al. **Microvasc Res** 1988 Jul;36(1):56–63
A study of the functional elements regulating capillary perfusion in striated muscle. Delashaw JB, et al. **Microvasc Res** 1988 Sep;36(2):162–71
Griffonia simplicifolia I: fluorescent tracer for microcirculatory vessels in nonperfused thin muscles and sectioned muscle. Hansen-Smith FM, et al. **Microvasc Res** 1988 Nov;36(3):199–215
Arteriovenous distribution of transit times in cremaster muscle of the rat. McKay CB, et al. **Microvasc Res** 1988 Jul;36(1):75–91
Capillary configuration and fiber shortening in muscles of the rat hindlimb: correlation between corrosion casts and stereological measurements. Mathieu-Costello O, et al. **Microvasc Res** 1988 Jul;36(1):40–55
Contribution of capillary recruitment to regulation of tissue oxygenation in rat cremaster muscle. Morff RJ. **Microvasc Res** 1988 Sep;36(2):150–61
Substance P and NPY innervation of microvessels in the rabbit tenuissimus muscle. Ohlén A, et al. **Microvasc Res** 1988 Sep;36(2):117–29
Evidence of collateral circulation in rat cremaster muscle. Vicaut E, et al. **Microvasc Res** 1988 Sep;36(2):187–90
Induction of capillary neoformation in the heart and skeletal muscle. Ljungqvist A, et al. **Morphol Embryol (Bucur)** 1988 Oct-Dec;34(4):291–5
Internalized myofiber capillaries: observations on their origin and clinical features. Gutmann L, et al. **Muscle Nerve** 1989 Mar;12(3):191–6
Changes in adenosine release and blood flow in the contracting dog gracilis muscle. Karim F, et al. **Pflugers Arch** 1988 Jul;412(1–2):106–12
Changes in vasomotion pattern and local arteriolar resistance during stepwise pressure reduction. Oude Vrielink HH, et al. **Pflugers Arch** 1989 Sep;414(5):571–8
Photodynamic therapy induced ultrastructural alterations in microvasculature of the rat cremaster muscle. Tseng MT, et al. **Photochem Photobiol** 1988 Nov;48(5):675–81
The effect of dopamine on blood flow in skeletal muscles. Krawczak J, et al. **Pol J Pharmacol Pharm** 1988 Mar–Apr; 40(2):145–54
Mathematical analysis of transport and exchange in skeletal muscle. Salathe EP, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):303–18
The influence of extracellular calcium on microvascular tone in the rat cremaster muscle. Joshua IG, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):344–52
Functional sympatholysis in the microcirculation of the cat sartorius muscle. Dodd LR, et al. **Proc West Pharmacol Soc** 1988;31:121–3
Role of the microcirculation to skeletal muscle during shock. Garrison RN, et al. **Prog Clin Biol Res** 1989;299:43–52
Corrosion casts in the microcirculation of skeletal muscle. Gaudio E, et al. **Prog Clin Biol Res** 1989;295:443–50
Design of microvasculature and gas exchange. Weibel ER. **Prog Clin Biol Res** 1989;295:147–55
Neuropeptide Y and control of vascular resistance in skeletal muscle. Revington M, et al. **Regul Pept** 1988 Dec; 23(3):331–42
Inosine and adenosine formation in ischemic and non-ischemic contracting muscles of rats: difference between fast and slow muscles. Hara N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):309–21
Differing patterns of capillary distribution in fish and mammalian skeletal muscle. Egginton S, et al. **Respir Physiol** 1988 Dec;74(3):383–96
Blood flow distribution and its temporal variability in stimulated dog gastrocnemius muscle. Marconi C, et al. **Respir Physiol** 1988 Oct;74(1):1–13
Muscle capillary tortuosity in high altitude mice depends on sarcomere length. Mathieu-Costello O. **Respir Physiol** 1989 Jun;76(3):289–302
Subcutaneous and muscle blood flow during dopamine infusion in man. Eliasen P, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):43–7
Anatomic basis of a pedicled extensor digitorum brevis muscle flap. Massin P, et al. **Surg Radiol Anat** 1988; 10(4):267–72
The principal artery of the psoas major muscle. Pillet J, et al. **Surg Radiol Anat** 1989;11(1):33–6
Effect of cyclosporine administration on vascular reactivity in the rabbit. Schnabel FR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):918–21
Caudal sartorius muscle flap in the dog. Weinstein MJ, et al. **Vet Surg** 1988 Jul–Aug;17(4):203–10
[Arterial applied anatomy for the platysma myocutaneous flap] Song FJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):24–6 (Chi)
[Lateral musculocutaneous flap of the trapezius muscle. Anatomic study of the venous drainage] Bessede JP, et al. **Ann Chir Plast Esthet** 1989;34(2):119–22 (Eng. Abstr.) (Fre)
[Abnormalities of the peripheral circulation and tolerance to exertion of patients with heart failure] Cohen-Solal A, et al. **Arch Mal Coeur** 1989 Apr;82(4):593–8 (49 ref.) (Eng. Abstr.) (Fre)
[Ischemic postural intraoperative rhabdomyolysis] Cohendy R, et al. **Cah Anesthesiol** 1988 Sep;36(5):375–7 (12 ref.) (Fre)
[Objective assessment of the regional muscle blood flow promoting effect of electrostimulation in paraplegic patients (studies with 201 thallium and 133 xenon)] Kainz A, et al. **Vasa Suppl** 1988;26:209–13 (Ger)
[Modification of the autonomic vascular reaction and peripheral circulation in the handgrip and orthostasis test by beta-blockage in patients with and without peripheral arterial occlusive disease] Valentin A, et al. **Vasa Suppl** 1988;26:220–2 (Ger)
[Traumatic, ischemic and toxic rhabdomyolysis] Saukko P, et al. **Z Rechtsmed** 1989;102(2–3):117–26 (Eng. Abstr.) (Ger)
[A new experimental model for direct in vivo observation of microcirculation in microsurgery] Siemionow M. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):1–7 (Eng. Abstr.) (Pol)
[Effect of cryotherapy with extremely cold air on blood flow in the leg muscles] Jonderko G, et al. **Przegl Lek** 1988; 45(7):559–61 (Eng. Abstr.) (Pol)
[Comparative characteristics of the changes in resistance in the vessels of the skeletal muscle and small intestine after the destruction of the structures in the ventral portions of the medulla oblongata] Tkachenko BI, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):161–4 (Eng. Abstr.) (Rus)
[Lympho- and hemodynamic reactions during the contraction of the skeletal musculature of the hindlimb in dogs] Kim TD, et al. **Fiziol Zh SSSR** 1988 Aug; 74(8):1158–62 (Eng. Abstr.) (Rus)
[A method of recording the dynamic changes in postcapillary resistance and capillary pressure in skeletal muscle] Kudriashov IuA. **Fiziol Zh SSSR** 1988 Jun;74(6):881–5 (Rus)
[Joint functions of the gastrocnemius muscle's blood vessels in lesions of the ventral structures of the medulla oblongata] Kuĭchitskiĭ VA, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):345–52 (Eng. Abstr.) (Rus)
[The effect of amplitude and frequency of pulse oscillations of blood flow on resistive and metabolic function of skeletal muscle vessels in cats] Poiasov IZ, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):548–54 (Eng. Abstr.) (Rus)
[Effect of an increase in the blood flow through the vessels of skeletal muscle on its functional indices and oxygen demand] Shustova NIa, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1776–85 (Rus)
[Blood supply of skeletal muscles in reactive hyperemia] Shustova NIa, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):493–507 (Eng. Abstr.) (Rus)
[The nature of the reactions of organ arterial and venous vessels in the combined action of catecholamines] Tkachenko BI, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1278–86 (Eng. Abstr.) (Rus)
[Changes in local blood flow and energy metabolism in patients with hypertension with different degrees of tolerance of isometric load (hand grip)] Vitols AV, et al. **Kardiologiia** 1988 Jun;28(6):48–51 (Eng. Abstr.) (Rus)
[State of carbohydrate metabolism and the microcirculation in ischemic muscles of the extremities in embolism of the aorta and the magistral arteries] Kosnikova IV, et al. **Klin Khir** 1988;(7):25–6 (Eng. Abstr.) (Rus)
[Characteristics of the regional muscular blood flow and the activity of mineralization processes in the callus as affected

by different methods of fixation of fractures of the lower jaw] Zuev VP, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug; 67(4):37-9 (Eng. Abstr.) (Rus)

[Prognostic value of indicators of muscular blood flow in the legs after lumbar sympathectomy] Polous IuM, et al. **Vestn Khir** 1989 Feb;142(2):55-6 (Rus)

[Spontaneous muscle infarction in diabetes mellitus (letter)] Grau A, et al. **Med Clin (Barc)** 1988 May 28;91(1):37 (Spa)

CYTOLOGY

Muscle architecture and fibre characteristics of rat gastrocnemius and semimembranosus muscles during isometric contractions. Huijing PA, et al. **Acta Anat (Basel)** 1989;135(1):46-52

Postnatal development of the Sertoli cell barrier, tubular lumen, and cytoskeleton of Sertoli and myoid cells in the rat, and their relationship to tubular fluid secretion and flow. Russell LD, et al. **Am J Anat** 1989 Mar;184(3):179-89

Dystrophin analysis in clonal myoblasts derived from a Duchenne muscular dystrophy carrier. Hurko O, et al. **Am J Hum Genet** 1989 Jun;44(6):820-6

Effects of growth factors on myogenic differentiation. Florini JR, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C701-11 (86 ref.)

Skeletal muscle growth is stimulated by intermittent stretch-relaxation in tissue culture. Vandenburgh HH, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C674-82

Morphologic and morphometric studies of the intrinsic laryngeal muscles in clinically normal adult dogs. Braund KG, et al. **Am J Vet Res** 1988 Dec;49(12):2105-10

On the origin of cells determined to form skeletal muscle in avian embryos. Krenn V, et al. **Anat Embryol (Berl)** 1988; 179(1):49-54

The capacity of normal and talpid3 mutant fowl myogenic cells to migrate in quail limb buds. Lee KK, et al. **Anat Embryol (Berl)** 1989;179(4):395-402

Perisynaptic satellite cells in human external intercostal muscle: a quantitative and qualitative study. Wokke JH, et al. **Anat Rec** 1989 Feb;223(2):174-80

Mitogenic activity in ovine uterine fluids: characterization of a growth factor activity which specifically stimulates myoblast proliferation. Bird RC, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):108-15

Phorbol esters inhibit the synthesis of acetylcholine receptors in cultured muscle cells. Bursztajn S, et al. **Biol Cell** 1988; 63(1):57-65

Effects of high intensity canoeing training on fibre area and fibre type in the latissimus dorsi muscle. Baker SJ, et al. **Br J Sports Med** 1989 Mar;23(1):23-6

Identification of the two cell groups in the longitudinal muscle layer of the earthworm Amynthas hawayanus by a single microelectrode with lucifer yellow-CH. Chang YC, et al. **Braz J Med Biol Res** 1988;21(2):385-7

Myogenic differentiation of human rhabdomyosarcoma cells induced in vitro by antineoplastic drugs. Lollini PL, et al. **Cancer Res** 1989 Jul 1;49(13):3631-6

Positive autoregulation of the myogenic determination gene MyoD1. Thayer MJ, et al. **Cell** 1989 Jul 28;58(2):241-8

Transdifferentiation from striated muscle of medusae in vitro. Schmid V, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:137-46 (29 ref.)

Muscle differentiation and the origin of muscle fiber diversity. Grove BK. **Crit Rev Neurobiol** 1989;4(3):201-34 (174 ref.)

Adrenocorticotropin is a specific mitogen for mammalian myogenic cells. Cossu G, et al. **Dev Biol** 1989 Feb; 131(2):331-6

Growth factor control of myoepithelial-cell differentiation in cultures of human mammary gland. Petersen OW, et al. **Differentiation** 1988 Dec;39(3):197-215

Control of myogenesis in the mouse myogenic C2 cell line by medium composition and by insulin: characterization of permissive and inducible C2 myoblasts. Pinset C, et al. **Differentiation** 1988 Jun;38(1):28-34

Antagonistic effects of laminin and fibronectin on the expression of the myogenic phenotype. von der Mark K, et al. **Differentiation** 1989 May;40(2):150-7

Evidence for inhibitory activity against cell proliferation in bovine liver. Campion DR, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):299-306

Characterization of thyroid hormone effects on Na channel synthesis in cultured skeletal myotubes: role of Ca2+. Brodie C, et al. **Endocrinology** 1989 Aug;125(2):842-9

Trenbolone alters the responsiveness of skeletal muscle satellite cells to fibroblast growth factor and insulin-like growth factor I. Thompson SH, et al. **Endocrinology** 1989 May;124(5):2110-7

Control of differentiation in BC3H1 muscle cells. Glaser L, et al. **Environ Health Perspect** 1989 Mar;80:143-8

Gelsolin sensitivity of microfilaments as a marker for muscle differentiation. Huckriede A, et al. **Eur J Cell Biol** 1988 Aug;46(3):506-12

Enhanced survival of motoneurons in the chick lateral motor column: effects of embryonic skeletal muscle extracts and myoblast-conditioned medium. Petruzzelli G, et al. **Exp Cell Biol** 1989;57(3):125-30

Microfilaments and actin-associated proteins at sites of membrane-substrate attachment within acetylcholine receptor clusters. Bloch RJ, et al. **Exp Cell Res** 1989 Jun; 182(2):583-96

Glycoprotein glycans may not be necessary for the differentiation of skeletal myoblasts. Clarke E, et al. **Exp Cell Res** 1989 Jan;180(1):178-88

Analysis of PC12 cell adhesion to muscle and non-muscle cells and components of the extracellular matrix. Doherty P, et al. **Exp Cell Res** 1988 Nov;179(1):233-42

Protein kinase C mediates the hormonally regulated plasma membrane fusion of avian embryonic skeletal muscle. Farzaneh F, et al. **Exp Cell Res** 1989 Mar;181(1):298-304

Relation between the rate of cell movement under agarose and the positioning of cells in heterotypic aggregates. Jones BM, et al. **Exp Cell Res** 1989 Jan;180(1):287-96

Purothionin from wheat endosperm reversibly blocks myogenic differentiation of chick embryonic muscle cells in culture. Kwak KB, et al. **Exp Cell Res** 1989 Aug; 183(2):501-7

A collagen-binding protein involved in the differentiation of myoblasts recognizes the Arg-Gly-Asp sequence. Nandan D, et al. **Exp Cell Res** 1988 Nov;179(1):289-97

In vivo crosslinking of nuclear proteins to DNA by cis-diamminedichloroplatinum (II) in differentiating rat myoblasts. Wedrychowski A, et al. **Exp Cell Res** 1989 Aug; 183(2):376-87

The fibroblast-like nature of myofibroblasts. Oda D, et al. **Exp Mol Pathol** 1988 Dec;49(3):316-29

The formation of myotubes in cultures of chick embryo myogenic cells in serum-free medium is induced by the insulin pulse treatment. Reiss K, et al. **Folia Histochem Cytobiol** 1988;26(3):133-41

A muscle-specific enhancer is located at the 3' end of the myosin light-chain 1/3 gene locus. Donoghue M, et al. **Genes Dev** 1988 Dec;2(12B):1779-90

Alternative splicing of the neural cell adhesion molecule gene generates variant extracellular domain structure in skeletal muscle and brain. Thompson J, et al. **Genes Dev** 1989 Mar; 3(3):348-57

Further purification of a fibroblast growth factor-like factor from chick embryo extract by heparin-affinity chromatography. Kimura I, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):236-42

Clonal derivation of a rat muscle cell strain that forms contraction-competent myotubes. Merrill GF. **In Vitro Cell Dev Biol** 1989 May;25(5):471-6

Maintenance of dihydrofolate reductase enzyme after disappearance of DHFR mRNA during muscle cell differentiation. Schmidt EE, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):697-704

Longitudinal growth of skeletal myotubes in vitro in a new horizontal mechanical cell stimulator. Vandenburgh HH, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):607-16

Calcium-dependent regulation of phospholipase A2 and its inhibitors, including tetracaine, for acetylcholine receptor cluster formation in mouse myotubes co-cultured with spinal cord explant. Kimura M, et al. **Int J Dev Neurosci** 1987;5(2):127-33

Regulation of differentiation of the BC3H1 muscle cell line through cAMP-dependent and -independent pathways. Hu JS, et al. **J Biol Chem** 1988 Dec 25;263(36):19670-7

Insulin-like growth factors (IGF) in muscle development. Expression of IGF-I, the IGF-I receptor, and an IGF binding protein during myoblast differentiation. Tollefsen SE, et al. **J Biol Chem** 1989 Aug 15;264(23):13810-7

Activity and regulation of calcium-, phospholipid-dependent protein kinase in differentiating chick myogenic cells. Adamo S, et al. **J Cell Biol** 1989 Jan;108(1):153-8

The E8 subfragment of laminin promotes locomotion of myoblasts over extracellular matrix. Goodman SL, et al. **J Cell Biol** 1989 Aug;109(2):799-809

Acetylcholine receptor in a C2 muscle cell variant is retained in the endoplasmic reticulum. Gu Y, et al. **J Cell Biol** 1989 Aug;109(2):729-38

Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. I. A pertussis toxin-sensitive pathway is involved. Kelvin DJ, et al. **J Cell Biol** 1989 Jan;108(1):159-67

Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. II. Two signaling pathways distinguished by pertussis toxin and a potential role for the ras oncogene. Kelvin DJ, et al. **J Cell Biol** 1989 Jan;108(1):169-76

Expression of nuclear lamin A and muscle-specific proteins in differentiating muscle cells in ovo and in vitro. Lourim D, et al. **J Cell Biol** 1989 Aug;109(2):495-504

Requirements for the Ca2+-independent component in the initial intercellular adhesion of C2 myoblasts. Pizzey JA, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2307-17

Acetylcholine receptor clusters of rat myotubes have at least three domains with distinctive cytoskeletal and membranous components. Pumplin DW. **J Cell Biol** 1989 Aug;109(2):739-53

Regulation of skeletal muscle satellite cell proliferation and differentiation by transforming growth factor-beta, insulin-like growth factor I, and fibroblast growth factor. Allen RE, et al. **J Cell Physiol** 1989 Feb;138(2):311-5

Regulation of hexose transport in rat myoblasts during growth and differentiation. Chen SR, et al. **J Cell Physiol** 1989 Feb;138(2):338-48

Insulin-like growth factor binding protein secretion by muscle cells: effect of cellular differentiation and proliferation. McCusker RH, et al. **J Cell Physiol** 1988 Dec; 137(3):505-12

Elevated c-fos expression inhibits differentiation of L6 rat myoblasts. Rahm M, et al. **J Cell Physiol** 1989 May; 139(2):237-44

Possible role of prostaglandins in the regulation of mouse myoblasts. Rossi MJ, et al. **J Cell Physiol** 1989 Oct; 141(1):142-7

Muscle cell differentiation is associated with increased insulin receptor biosynthesis and messenger RNA levels. Brunetti A, et al. **J Clin Invest** 1989 Jan;83(1):192-8

Species specificity of transferrin binding, endocytosis and iron internalization by cultured chick myogenic cells. Sorokin LM, et al. **J Comp Physiol [B]** 1988;158(5):559-66

Consecutive expression of carbonic anhydrase isoenzymes during development of rat liver and skeletal muscle differentiation. Laurila AL, et al. **J Histochem Cytochem** 1989 Sep;37(9):1375-82

Discrimination between fast- and slow-twitch fibres of guinea pig skeletal muscle using the relative surface density of junctional transverse tubule membrane. Franzini-Armstrong C, et al. **J Muscle Res Cell Motil** 1988 Oct;9(5):403-14

Myosin heavy chain expression in human muscle cocultured with mouse spinal cord. Ecob-Prince M, et al. **J Neurol Sci** 1989 Apr;90(2):167-77

Effects of age on the number and histochemical properties of muscle fibers and motoneurons in the rat extensor digitorum longus muscle. Ishihara A, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):213-21

Fibroblasts and myofibroblasts. Harris AK. **Methods Enzymol** 1988;163:623-42

Glycosphingolipid biosynthesis during myogenesis of rat L6 cells in vitro. Leskawa KC, et al. **Mol Cell Biochem** 1988 Sep;83(1):47-54

Identification of a myocyte nuclear factor that binds to the muscle-specific enhancer of the mouse muscle creatine kinase gene. Buskin JN, et al. **Mol Cell Biol** 1989 Jun; 9(6):2627-40

Effect of cellular determination on oncogenic transformation by chemicals and oncogenes. Harrington MA, et al. **Mol Cell Biol** 1988 Oct;8(10):4322-7

Regulated expression of nuclear protein(s) in myogenic cells that binds to a conserved 3' untranslated region in pro alpha 1 (I) collagen cDNA. Herget T, et al. **Mol Cell Biol** 1989 Jul;9(7):2828-36

Participation of multiple factors, including proliferin, in the inhibition of myogenic differentiation. Wilder EL, et al. **Mol Cell Biol** 1989 Feb;9(2):430-41

Proportions and sizes of muscle fiber types in the hamster diaphragm. Reid WD, et al. **Muscle Nerve** 1989 Feb; 12(2):108-18

The quadriceps femoris muscle in 20-70-year-old subjects: relationship between knee extension torque, electrophysiological parameters, and muscle fiber characteristics. Stålberg E, et al. **Muscle Nerve** 1989 May; 12(5):382-9

Synapse-competence of LA-N-2 human neuroblastoma cells in coculture with rat striated muscle cells. Yeh HH, et al. **Neuroscience** 1988 Oct;27(1):309-15

Voltage- and time-dependent chloride currents in chick skeletal muscle cells grown in tissue culture. Steele JA. **Pflugers Arch** 1989 Jul;414(3):265-72

Neural cell adhesion molecule (N-CAM) is elevated in adult avian slow muscle fibers with multiple terminals. Bleisch W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6403-7

Replicating myoblasts express a muscle-specific phenotype. Kaufman SJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9606-10

Activation of muscle-specific genes in pigment, nerve, fat, liver, and fibroblast cell lines by forced expression of MyoD. Weintraub H, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5434-8

5-bromo-2'-deoxyuridine blocks myogenesis by extinguishing expression of MyoD1. Tapscott SJ, et al. **Science** 1989 Aug 4;245(4917):532-6

Cytotoxic action of the lysosomotropic agent L-leucine methyl ester on mammalian skeletal muscle. The role of the sarcoplasmic reticulum in producing myofilament damage. Shamsadeen N, et al. **Virchows Arch [B]** 1989; 57(5):315-21

[Comparison of promoting the proliferation and fusion of myoblast between conditioned media from fibroblasts of chick embryo and fetal mouse] Gu JF, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):191-5 (Eng. Abstr.) (Chi)

[Comparison of the development between the satellite cells of ALD and PLD muscles of adult chicken in vitro] Hou XE, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):76-80 (Eng. Abstr.) (Chi)

[Endocytosis inducers markedly enhance fusion of myoblasts] Ritter VG, et al. **Dokl Akad Nauk SSSR** 1988 Nov-Dec; 303(1):239-40 (Rus)

DRUG EFFECTS

Influence of age on the dose-response relationship of atracurium in paediatric patients. Meretoja OA, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):614-8

Experimental paralysis of tensor veli palatini muscle. Casselbrant ML, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3-4):178-85

Effects of adrenaline on excitation-induced stimulation of the sodium-potassium pump in rat skeletal muscle. Everts ME, et al. **Acta Physiol Scand** 1988 Oct;134(2):189-98

The effect of beta 2-adrenoceptor activation on ion-shifts and fatigue in mouse soleus muscles stimulated in vitro. Juel C. **Acta Physiol Scand** 1988 Oct;134(2):209-16

Effects of growth hormone on skeletal muscle. I. Studies on normal adult rats. Ullman M, et al. **Acta Physiol Scand** 1989 Apr;135(4):531–6

Effects of growth hormone on skeletal muscle. II. Studies on regeneration and denervation in adult rats. Ullman M, et al. **Acta Physiol Scand** 1989 Apr;135(4):537–43

A comparison of body and organ weights, physiologic parameters, and pathologic changes in target organs of rats given combinations of exercise, anabolic hormone, and protein supplementation. Bauman DH, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):397–402

Effect of salicylate on upper airway dilating muscles in anesthetized dogs. Oliven A, et al. **Am Rev Respir Dis** 1989 Jan;139(1):170–5

Muscle strength following anaesthesia with atracurium and pancuronium. O'Connor M, et al. **Anaesth Intensive Care** 1988 Aug;16(3):255–9

Neostigmine after spontaneous recovery from neuromuscular blockade. Effect on depth of blockade monitored with train-of-four and tetanic stimuli. Goldhill DR, et al. **Anaesthesia** 1989 Apr;44(4):293–9

A comparison of the response of hand and facial muscles to non-depolarising relaxants. Pathak D, et al. **Anaesthesia** 1988 Sep;43(9):747–8

Annulate lamellae-soleplate nuclei associations in skeletal muscle fibers of rats during chronic high-dose exposure to neostigmine. Kawabuchi M, et al. **Anat Rec** 1989 Sep; 225(1):1–10

Effects of succinylcholine at the masseter and adductor pollicis muscles in adults. Smith CE, et al. **Anesth Analg** 1989 Aug;69(2):158–62

Exercise produces sensitivity to metocurine. Gronert GA, et al. **Anesthesiology** 1989 Jun;70(6):973–7

The relationship between adductor pollicis twitch tension and core, skin, and muscle temperature during nitrous oxide–isoflurane anesthesia in humans. Heier T, et al. **Anesthesiology** 1989 Sep;71(3):381–4

Cerebral function and muscle afferent activity following intravenous succinylcholine in dogs anesthetized with halothane: the effects of pretreatment with a defasciculating dose of pancuronium [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Lanier WL, et al. **Anesthesiology** 1989 Jul;71(1):87–95

Effects of varying concentrations of halothane on the activity of the genioglossus, intercostals, and diaphragm in cats: an electromyographic study. Ochiai R, et al. **Anesthesiology** 1989 May;70(5):812–6

Myonecrosis and cocaine abuse [letter] Singhal PC, et al. **Ann Intern Med** 1988 Nov 15;109(10):843

Activation of the Ca2+ release channel of skeletal muscle sarcoplasmic reticulum by caffeine and related compounds. Rousseau E, et al. **Arch Biochem Biophys** 1988 Nov 15; 267(1):75–86

Changes of glycogen metabolism in phosphorylcreatine-depleted muscles taken from rats fed with beta-guanidine propionate. De Tata V, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):123–32

Changes in phospholipid metabolism dependent on calcium-regulated myoblast fusion. Sauro VS, et al. **Biochem Cell Biol** 1988 Oct;66(10):1110–8

Inhibition of myoblast fusion by bromoconduritol. Trudel GC, et al. **Biochem Cell Biol** 1988 Oct;66(10):1119–25

Effect of recombinant human tumour necrosis factor alpha on protein synthesis in liver, skeletal muscle and skin of rats. Charters Y, et al. **Biochem J** 1989 Mar 1;258(2):493–7

Effects of hypothyroidism on the sensitivity of glycolysis and glycogen synthesis to insulin in the soleus muscle of the rat. Dimitriadis GD, et al. **Biochem J** 1989 Jan 15; 257(2):369–73

Inhibition of Ca2+-induced cytosolic enzyme efflux from skeletal muscle by vitamin E and related compounds. Phoenix J, et al. **Biochem J** 1989 Jan 1;257(1):207–13

Multiple actions of beta-adrenergic agonists on skeletal muscle and adipose tissue. Yang YT, et al. **Biochem J** 1989 Jul 1;261(1):1–10 (123 ref.)

A 31P-NMR study of the acute effects of altered beta-adrenoceptor stimulation on the bioenergetics of skeletal muscle during contraction. Challiss RA, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4653–9

Failure of fenfluramine to affect basal and insulin-stimulated hexose transport in rat skeletal muscle. Sasson S, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2655–61

Effect of the beta-agonist cimaterol on growth and composition of neonatal rats selected for large and small body size. Chromiak JA, et al. **Biol Neonate** 1989; 55(2):111–8

Effects of channel-forming antibiotics on the membrane of skeletal muscle fibre. Caffier G, et al. **Biomed Biochim Acta** 1989;48(5–6):S552–7

Response of human skeletal muscle to the anabolic steroid stanozolol. Hosegood JL, et al. **BMJ** 1988 Oct 22; 297(6655):1028–9

Comparison of neuromuscular blockade in the diaphragm and the hand. Derrington MC, et al. **Br J Anaesth** 1988 Sep; 61(3):279–85

Influence of thiopentone on upper airway muscles. Drummond GB. **Br J Anaesth** 1989 Jul;63(1):12–21

Potency of atracurium and vecuronium at the diaphragm and the adductor pollicis muscle. Laycock JR, et al. **Br J Anaesth** 1988 Sep;61(3):286–91

Early induction by crotoxin of biphasic frequency changes and giant miniature endplate potentials in frog muscle. Hawgood BJ, et al. **Br J Pharmacol** 1988 Jul;94(3):765–72

The action of GABA receptor agonists and antagonists on muscle membrane conductance in Schistocerca gregaria. Murphy VF, et al. **Br J Pharmacol** 1988 Nov;95(3):713–22

Effects of perinatal high dose dexamethasone on skeletal muscle development in rats. Steiss JE, et al. **Can J Vet Res** 1989 Jan;53(1):17–22

Indices of severity of obstructive sleep apnea syndrome do not change during medroxyprogesterone acetate therapy. Cook WR, et al. **Chest** 1989 Aug;96(2):262–6

Twitch potentiation of frog (Rana japonica) skeletal muscle by antipyrine. Fujishiro N, et al. **Comp Biochem Physiol [C]** 1989;92(1):61–5

Effect of continuous and intermittent clenbuterol feeding on rat growth rate and muscle. McElligott MA, et al. **Comp Biochem Physiol [C]** 1989;92(1):135–8

Indirect effect of catecholamines on development of insulin resistance in skeletal muscle from diabetic rats. Boström M, et al. **Diabetes** 1989 Jul;38(7):906–10

Effects of postnatal administration of ethanol on the M. gastrocnemius of the albino mouse. González-Hernández TH, et al. **Drug Alcohol Depend** 1989 Apr;23(2):137–42

Regulation of beta-adrenoceptors by catecholamines in the rabbit skeletal muscle. Elfellah MS, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):215–20

Effects of endothelin on regional hemodynamics in conscious rats. Han SP, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):303–5

Evidence for a myotropic effect of substance P in Periplaneta americana L. Penzlin H, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):88–95

Excitatory action of the native neuropeptide antho-rfamide on muscles in the pennatulid Renilla köllikeri. Anctil M, et al. **Gen Pharmacol** 1989;20(3):381–4

Cimaterol-induced growth in rats: growth pattern and biochemical characteristics. Kim YS, et al. **Growth Dev Aging** 1988 Spring;52(1):41–5

Protein turnover and growth of L8 muscle cultures in serum from rats fed clenbuterol. McElligott MA, et al. **Growth Dev Aging** 1988 Winter;52(4):185–91

Effect of triiodothyronine and thyroxine on malic enzyme activity and protein and nucleic acid contents of liver and muscle of toad, Bufo melanostictus. Dey SS, et al. **Horm Metab Res** 1989 Jan;21(1):49–50

Regulation of protein turnover by recombinant human insulin-like growth factor-I in L6 myotube cultures. Roeder RA, et al. **Horm Metab Res** 1988 Nov; 20(11):698–700

Effects of oestrogen on gastrocnemius muscle of immature mice. al-Azzawi MJ, et al. **Indian J Exp Biol** 1988 Dec; 26(12):1007–8

Neuromuscular blocking activity of 6-phenylphenanthridine-3,8-bis-(tri-methylammonium) iodide (compound 76-805). Mukherjee KC, et al. **Indian J Exp Biol** 1988 Jul;26(7):535–7

Fatigue and contractile responses of rat hindlimb muscles following excessive dexamethasone administration. Mandal MB, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar; 33(1):21–7

Effect of buflomedil on cell metabolism in ischemic muscle. Skau T, et al. **Int Angiol** 1988 Oct–Dec;7(4):337–43

Effects of dexamethasone on glucose transport by skeletal muscles of obese (ob/ob) mice. Ohshima K, et al. **Int J Obes** 1989 Apr;13(2):155–63

Doxorubicin chemomyectomy: injection of monkey orbicularis oculi results in selective muscle injury. McLoon LK, et al. **Invest Ophthalmol Vis Sci** 1988 Dec; 29(12):1854–9

Propranolol enhances adenine nucleotide degradation in human muscle during exercise. Broberg S, et al. **J Appl Physiol** 1988 Dec;65(6):2478–83

Effects of beta 1- vs. beta 1 + beta 2-blockade on exercise endurance and muscle metabolism in humans. Cleroux J, et al. **J Appl Physiol** 1989 Feb;66(2):548–54

Effect of testosterone on muscle mass and muscle protein synthesis. Griggs RC, et al. **J Appl Physiol** 1989 Jan; 66(1):498–503

Insulin action in human thighs after one-legged immobilization. Richter EA, et al. **J Appl Physiol** 1989 Jul; 67(1):19–23

Effect of exercise on insulin action in human skeletal muscle. Richter EA, et al. **J Appl Physiol** 1989 Feb;66(2):876–85

Reflex cardiovascular and ventilatory responses to increasing H+ activity in cat hindlimb muscle. Rotto DM, et al. **J Appl Physiol** 1989 Jul;67(1):256–63

Effect of endotoxin on systemic and skeletal muscle O2 extraction. Samsel RW, et al. **J Appl Physiol** 1988 Sep; 65(3):1377–82

The diagnostic usefulness of isocitrate dehydrogenase (ICDH) in the marmoset (Callithrix jacchus). Davy CW, et al. **J. Appl Toxicol** 1989 Feb;9(1):33–7

Butanedione monoxime suppresses contraction and ATPase activity of rabbit skeletal muscle. Higuchi H, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):638–43

Modification of the contractile properties of rabbit skeletal muscle by ethylene glycol. Maruyama T, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):1009–13

Mechanism of anthraquinone-induced calcium release from skeletal muscle sarcoplasmic reticulum. Abramson JJ, et al. **J Biol Chem** 1988 Dec 15;263(35):18750–8

Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate. Lin ZX, et al. **J Cell Biol** 1989 Mar;108(3):1079–91

FGF and EGF act synergistically to induce proliferation in BC3H1 myoblasts. Kelvin DJ, et al. **J Cell Physiol** 1989 Feb;138(2):267–72

Comparison of neuromuscular blockade in upper facial and hypothenar muscles. Paloheimo MP, et al. **J Clin Monit** 1988 Oct;4(4):256–60

Manometric study of the activity of alizapride on the motor function of the human sphincter of Oddi. Warzee PL, et al. **J Clin Pharm Ther** 1988 Aug;13(4):281–4

In vitro effect of profenofos, fenvalerate and dimilin on protein and RNA biosynthesis by rabbit liver and muscle tissues. el-Sebae AH, et al. **J Environ Sci Health [B]** 1988 Oct;23(5):439–51

Effects of guanidinium on EC coupling and tension generation in frog skeletal muscle. Feldmeyer D, et al. **J Muscle Res Cell Motil** 1988 Dec;9(6):541–51

Physicochemical properties of binary organic cosolvent-water mixtures and their relationships to muscle damage following intramuscular injection. Brazeau GA, et al. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):144–9

Use of an in vitro haemolysis test to predict tissue irritancy in an intramuscular formulation. Brown S, et al. **J Parenter Sci Technol** 1989 May–Jun;43(3):117–20

The effect of Ca deprivation and of Ca-blocking drugs on oxytocin-induced contractions of the male mouse anococcygeus. Gibson A, et al. **J Pharm Pharmacol** 1989 Jun;41(6):412–5

Multiple actions of adenosine 5'-triphosphate on chick skeletal muscle. Hume RI, et al. **J Physiol (Lond)** 1988 Dec; 406:503–24

Increase by trifluoperazine in calcium sensitivity of myofibrils in a skinned fibre from frog skeletal muscle. Kurebayashi N, et al. **J Physiol (Lond)** 1988 Sep;403:407–24

Effects of arginine and ornithine on strength, lean body mass and urinary hydroxyproline in adult males. Elam RP, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):52–6

The influence of ubiquinone (Co Q10) on the metabolic response to work. Zuliani U, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):57–62 (42 ref.)

Comparison of the effects of MCI-154, a new cardiotonic agent, and some Ca2+-sensitizing agents on the response of the contractile system to Ca2+ in skinned cardiac muscle. Kitada Y, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):411–9

Contraction of rat skeletal muscle after glycerol treatments. Bruton JD. **Jpn J Physiol** 1988;38(6):897–903

Dependence of cell pH and buffer capacity on the extracellular acid–base change in the skeletal muscle of bullfrog. Fujimoto M, et al. **Jpn J Physiol** 1988; 38(6):799–818

Effects of extracellular calcium and other divalent cations on mechanical response of frog skeletal muscle. Hatae J, et al. **Jpn J Physiol** 1988;38(6):905–15

Tetrodotoxin-unaffected depolarization of frog muscles induced by the venom of jellyfish (Genus aurelia). Kihara H, et al. **Jpn J Physiol** 1988;38(6):839–49

A comparison of the effects of morphine withdrawal, thyroxine or thyroidectomy on the sensitivity of the anococcygeus muscle to agonists and on serum thyroxine levels in the rat. Gardiner DC, et al. **Life Sci** 1974 Jul 15;15(2):339–49

The effect of dietary fish oil on muscle and adipose tissue lipoprotein lipase. Herzberg GR, et al. **Lipids** 1989 Apr; 24(4):351–3

The correlation between suxamethonium injection and post-operative muscle pain in Chinese. Chu HY, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):411–6

The effect of gadolinium DTPA on tissue water compartments in slow- and fast-twitch rabbit muscles. Adzamli IK, et al. **Magn Reson Med** 1989 Aug;11(2):172–81

Effects of parenteral testosterone administration on insulin action in perfused hindlimb muscle of female rats. Hager SR, et al. **Metabolism** 1989 May;38(5):431–4

Effect of phosphoenolpyruvate and adenosine triphosphate on rabbit skeletal muscle after ischaemia: preliminary biochemical study. Khazanchi RK, et al. **Microsurgery** 1989;10(1):8–14

Spontaneous channel activity induced by tumor promoter TPA in chick myotubes. Ciccarelli C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):121–4

Influence of cooling on the responsiveness of rat isolated anococcygeus muscle to noradrenaline. Ishii T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):660–8

Cromakalim (BRL 34915) restores in vitro the membrane potential of depolarized human skeletal muscle fibres. Spuler A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):327–31

Sensitivity of rodent skeletal muscles to dicholines: dependence on innervation and age. Lorković H. **Neuropharmacology** 1989 Apr;28(4):373–7

Sugar proximity and human grip strength. Quintanar AF, et al. **Percept Mot Skills** 1988 Dec;67(3):853–4

Enantiomers of clofibric acid analogs have opposite actions on rat skeletal muscle chloride channels. Conte-Camerino D, et al. **Pflugers Arch** 1988 Nov;413(1):105–7

Skeletal muscle excitation-contraction coupling. I. Transverse tubule control of peeled fiber Ca2+-induced Ca2+ release in normal and malignant hyperthermic muscles. Donaldson SK, et al. **Pflugers Arch** 1989 May;

414(1):15–23

Alteration of calcium sensitivity of skinned frog skeletal muscle fibres by inositol triphosphate and calmodulin antagonists. Isac M, et al. **Pflugers Arch** 1988 Aug; 412(3):253–7

Paradox response of frog muscle membrane to changes in external potassium. Nánási PP, et al. **Pflugers Arch** 1989 Jun;414(2):157–61

Blockers and inhibitors of ATP-sensitive K+ channels in adult mouse skeletal muscle. Neumcke B, et al. **Pflugers Arch** 1989;414 Suppl 1:S181–2

Cromakalim, pinacidil and RP 49356 activate a tolbutamide-sensitive K+ conductance in human skeletal muscle fibres. Quasthoff S, et al. **Pflugers Arch** 1989;414 Suppl 1:S179–80

Differential effects of halothane on adult and juvenile sodium channels in human muscle. Ruppersberg JP, et al. **Pflugers Arch** 1988 Jul;412(1–2):17–21

Probing a Ca2+-activated K+ channel with quaternary ammonium ions. Villarroel A, et al. **Pflugers Arch** 1988 Dec;413(2):118–26

An in vitro model to evaluate muscle damage following intramuscular injections. Brazeau GA, et al. **Pharm Res** 1989 Feb;6(2):167–70

Substance P as a transmitter in the human ciliary muscle. Lograno MD, et al. **Pharmacol Res Commun** 1988 Oct; 20(10):901–5

Screening for drugs blocking acetylcholine-activated ion channels and local anaesthetics with the isolated chick biventer cervicis preparation. MacDonald E. **Pharmacol Toxicol** 1988 Sep;63(3):193–8

Indomethacin inhibits the insulin-induced increases in RNA and protein synthesis in L6 skeletal muscle myoblasts. Palmer RM, et al. **Prostaglandins** 1989 Feb;37(2):193–203

Stannous ion-induced tetanic contraction of the frog sartorius muscle. Hattori T, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):343–6

Muscle necrosis by N-methylated p-phenylenediamines in rats: structure-activity relationships and correlation with free-radical production in vitro. Munday R, et al. **Toxicology** 1989 Aug;57(3):303–14

Purification and characterization of a myotoxic phospholipase A2 from Indian cobra (Naja naja naja) venom. Bhat MK, et al. **Toxicon** 1989;27(8):861–73

Fractionation of Bothrops jararacussu snake venom: partial chemical characterization and biological activity of bothropstoxin. Homsi-Brandeburgo MI, et al. **Toxicon** 1988;26(7):615–27

A new muscle damaging toxin, myotoxin II, from the venom of the snake Bothrops asper (terciopelo). Lomonte B, et al. **Toxicon** 1989;27(7):725–33

Production and partial characterization of monoclonal antibodies to Bothrops asper (terciopelo) myotoxin. Lomonte B, et al. **Toxicon** 1988;26(7):675–89

Prostaglandins and clostridial vaccines [letter] McNally JR. **Vet Rec** 1989 Jul 1;125(1):26

Cytotoxicity of phenazine methosulphate on skeletal muscle. The role of the sarcoplasmic reticulum in initiating myofilament damage. Duncan CJ. **Virchows Arch [B]** 1989; 56(4):271–6

Cytotoxic effect of oxygen on the skeletal muscle of mouse diaphragm. Shamsadeen N, et al. **Virchows Arch [B]** 1989; 57(2):123–9

[The effect of anabolic androgenic steroids on muscle strength, body weight and lean body mass in body-building men] Søe M, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):610–3 (Eng. Abstr.) **(Dan)**

[Intracellular microelectrode study of the electrophysiological effects of contrast media] Fillette F, et al. **Arch Mal Coeur** 1988 Jun;81(6):801–7 (Eng. Abstr.) **(Fre)**

[Properties of skeletal muscle fibers. II. Hormonal influences] Vigneron P, et al. **Reprod Nutr Dev** 1989;29(1):27–53 (176 ref.) (Eng. Abstr.) **(Fre)**

[Effect of calcium ions on the interaction of troponin C with rabbit skeletal muscle troponin I and troponin T immobilized on polyvinyl chloride] Feoktistov IA, et al. **Biokhimiia** 1989 Feb;54(2):265–72 (Eng. Abstr.) **(Rus)**

[The effect of multiple intramuscular administration of difencin on the anti-coagulant system and angioarchitectonics of skeletal muscle] Kudriashov BA, et al. **Dokl Akad Nauk SSSR** 1989;304(2):494–8 **(Rus)**

[The action of obzidan and oktadin on muscle blood flow during head-down tilt hypokinesia] Makoeva LD, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):44–6 (Eng. Abstr.) **(Rus)**

[Alpha-tocopherol modulation of the resting membrane potential of the fast muscle fiber in the rat adapted to cold] Belousova GP. **Fiziol Zh SSSR** 1988 Oct;74(10):1476–9 **(Rus)**

[Effect of dihydropyridines on cation transport across the skeletal muscle membrane in the frog] Shvinka NE, et al. **Tsitologiia** 1988 Oct;30(10):1254–60 (Eng. Abstr.) **(Rus)**

[Effect of amines on insulin-stimulated processes: the transport of sugars and synthesis of glycogen in frog sartorius muscles] Vinogradova NA, et al. **Tsitologiia** 1989 Jan;31(1):49–56 (Eng. Abstr.) **(Rus)**

[Furosemide-sensitive cation transport in frog skeletal muscle fibers] Vinogradova TA, et al. **Tsitologiia** 1988 Oct; 30(10):1200–7 (Eng. Abstr.) **(Rus)**

[The effect of zeranol on muscle structure and the development of the testes in bulls] Uhrín V, et al. **Vet Med (Praha)** 1989 Apr;34(4):203–12 (Eng. Abstr.) **(Slo)**

EMBRYOLOGY

Contractile properties of chick embryo muscles in development. Kalamkarova M, et al. **Acta Biochim Biophys Hung** 1988;23(2):181–6

Early expression of muscle-specific molecules in avian embryos. Goossens N, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):33–41

Ontogeny of architectural complexity in embryonic quail visceral arch muscles. McClearn D, et al. **Am J Anat** 1988 Dec;183(4):277–93

Microwave effects on acetylcholine-induced channels in cultured chick myotubes. D'Inzeo G, et al. **Bioelectromagnetics** 1988;9(4):363–72

Developmental changes in the open time and conductance of acetylcholine receptors in aneural cultured Xenopus myocytes treated with cycloheximide or tunicamycin. Carlson CG, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):61–8

Scanning electron microscopy of human prenatal muscle development. Barbet JP, et al. **Bull Assoc Anat (Nancy)** 1987 Sep;71(214):15–21

Structural changes at the myogenic cell surface during the formation of myotendinous junctions. Tidball JG, et al. **Cell Tissue Res** 1989 Jul;257(1):77–84

Development of neuromuscular connections: guidance of motoneuron axons to muscles in the embryonic chick hindlimb. Lance-Jones C. **Ciba Found Symp** 1988; 138:97–115 (25 ref.)

In vitro analysis of specificity during nerve-muscle synaptogenesis. Sanes DH, et al. **Ciba Found Symp** 1988; 138:116–30

The muscular dysgenesis mutation in mice leads to arrest of the genetic program for muscle differentiation. Chaudhari N, et al. **Dev Biol** 1989 Jun;133(2):456–67

The regulation of intramuscular nerve branching during normal development and following activity blockade. Dahm LM, et al. **Dev Biol** 1988 Dec;130(2):621–44

Basal lamina components are concentrated in premuscle masses and at early acetylcholine receptor clusters in chick embryo hindlimb muscles. Godfrey EW, et al. **Dev Biol** 1988 Dec;130(2):471–86

Changes in myosin and C-protein isoforms proceed independently of the conversion to singly innervated neuromuscular junctions in developing pectoral muscle. Hall JA, et al. **Dev Biol** 1988 Dec;130(2):591–8

Reorganization and stabilization of acetylcholine receptor aggregates on rat myotubes. Krikorian JG, et al. **Dev Biol** 1989 Feb;131(2):524–38

Developmental and muscle-specific changes in methylation of the myosin light chain LC1f and LC3f promoters during avian myogenesis. Lamson G, et al. **Dev Biol** 1989 Mar; 132(1):62–8

Temporal resolution and sequential expression of muscle-specific genes revealed by in situ hybridization. Lawrence JB, et al. **Dev Biol** 1989 May;133(1):235–46

Amphibian (urodele) myotomes display transitory anterior/posterior and medial/lateral differentiation patterns. Neff AW, et al. **Dev Biol** 1989 Apr;132(2):529–43

Expression of nicotinic acetylcholine receptors in aneural Xenopus embryos. Owens JL, et al. **Dev Biol** 1989 Sep; 135(1):12–9

The role of lateral migration in the formation of acetylcholine receptor clusters induced by basic polypeptide-coated latex beads. Peng HB, et al. **Dev Biol** 1989 Jan;131(1):197–206

Evidence for expression of a common myosin heavy chain phenotype in future fast and slow skeletal muscle during initial stages of avian embryogenesis. Sweeney LJ, et al. **Dev Biol** 1989 Jun;133(2):361–74

Fast myosin heavy chain expression during the early and late embryonic stages of chicken skeletal muscle development. Van Horn R, et al. **Dev Biol** 1989 Aug; 134(2):279–88

Multinucleation during myogenesis of the myotome of Xenopus laevis: a qualitative study. Boudjelida H, et al. **Development** 1987 Nov;101(3):583–90

Myoblast migration specifically inhibited in the chick embryo by grafted CSAT hybridoma cells secreting an anti-integrin antibody. Jaffredo T, et al. **Development** 1988 Jul; 103(3):431–46

Patterns of N-CAM expression during myogenesis in Xenopus laevis. Kay BK, et al. **Development** 1988 Jul; 103(3):463–71

Nerve-dependent accumulation of myosin light chain 3 in developing limb musculature. Merrifield PA, et al. **Development** 1987 Dec;101(4):673–84

Transcripts of alpha-cardiac and alpha-skeletal actins are early markers for myogenesis in the mouse embryo. Sassoon DA, et al. **Development** 1988 Sep;104(1):155–64

The accumulation of basement membrane components during the onset of chondrogenesis and myogenesis in the chick wing bud. Solursh M, et al. **Development** 1988 Sep; 104(1):41–9

Specific guidance of motor axons to duplicated muscles in the developing amniote limb. Stirling RV, et al. **Development** 1988 May;103(1):97–110

A critical period for formation of secondary myotubes defined by prenatal undernourishment in rats. Wilson SJ, et al. **Development** 1988 Apr;102(4):815–21

Differential effects of physiological concentrations of retinoic acid in vitro on chondrogenesis and myogenesis in chick craniofacial mesenchyme. Langille RM, et al. **Differentiation** 1989 May;40(2):84–92

Alpha-smooth muscle actin is transiently expressed in embryonic rat cardiac and skeletal muscles. Woodcock-Mitchell J, et al. **Differentiation** 1988 Dec; 39(3):161–6

Carnitine concentration during the development of human tissues. Nakano C, et al. **Early Hum Dev** 1989 Apr; 19(1):21–7

Morphology of the rhomboid muscle in human fetuses. Marecki B, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):227–33

Development of the stapedius muscle in human fetuses. Olszewski J, et al. **Folia Morphol (Warsz)** 1987;46(1–2):25–9

Human desmin-coding gene: complete nucleotide sequence, characterization and regulation of expression during myogenesis and development. Li ZL, et al. **Gene** 1989 May 30;78(2):243–54

Down-regulation of vimentin gene expression during myogenesis is controlled by a 5'-flanking sequence. Sax CM, et al. **Gene** 1989 May 30;78(2):235–42

Ascorbic acid facilitates chicken myoblast fusion in vitro. MacBride RG. **In Vitro Cell Dev Biol** 1989 Jul;25(7):617–20

Development of postsynaptic-like specializations of the neuromuscular synapse in the absence of motor nerve. Sohal GS. **Int J Dev Neurosci** 1988;6(6):553–65

Differentiation of musculoskeletal tissues. Nathanson MA. **Int Rev Cytol** 1989;116:89–164 (444 ref.)

Agrin-related molecules are concentrated at acetylcholine receptor clusters in normal and aneural developing muscle. Fallon JR, et al. **J Cell Biol** 1989 Apr;108(4):1527–35

Localization of nicotinic acetylcholine receptor alpha-subunit transcripts during myogenesis and motor endplate development in the chick. Fontaine B, et al. **J Cell Biol** 1989 Mar;108(3):1025–37

Basic fibroblast growth factor in the chick embryo: immunolocalization to striated muscle cells and their precursors. Joseph-Silverstein J, et al. **J Cell Biol** 1989 Jun; 108(6):2459–66

The expression of slow myosin during mammalian somitogenesis and limb bud differentiation. Vivarelli E, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2191–7

Effects of strenuous maternal exercise on fetal organ weights and skeletal muscle development in rats. Mottola MF, et al. **J Dev Physiol** 1989 Feb;11(2):111–5

Autonomous death of amphibian (Xenopus laevis) cranial myotomes. Chung HM, et al. **J Exp Zool** 1989 Sep; 251(3):290–9

Monoclonal antibody ALD 180: a reagent specific for a human prenatal skeletal muscle myosin isoform. Sawchak JA, et al. **J Histochem Cytochem** 1989 Oct;37(10):1539–43

A third striated muscle actin gene is expressed during early development in the amphibian Xenopus laevis. Mohun T, et al. **J Mol Biol** 1988 Jul 5;202(1):67–76

Histochemical analysis of newly synthesized and accumulated sulfated glycosaminoglycans during musculogenesis in the embryonic chick leg. Young HE, et al. **J Morphol** 1989 Jul;201(1):85–103

Embryonic assembly of a complex muscle is directed by a single identified cell in the medicinal leech. Jellies J, et al. **J Neurosci** 1988 Sep;8(9):3317–26

A modified roller tube technique for organotypic cocultures of embryonic rat spinal cord, sensory ganglia and skeletal muscle. Braschler UF, et al. **J Neurosci Methods** 1989 Aug; 29(2):121–9

Physiological relevance of the changing subunit composition and regulatory properties of the 6-phosphofructo-1-kinase isozyme pools during heart and muscle development. Dunaway GA, et al. **Mol Cell Biochem** 1989 May 4; 87(1):71–7

A community effect in animal development. Gurdon JB. **Nature** 1988 Dec 22–29;336(6201):772–4

Expression and DNA sequence analysis of a human embryonic skeletal muscle myosin heavy chain gene. Karsch-Mizrachi I, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6167–79

Origin and development of avian skeletal musculature. Kieny M, et al. **Reprod Nutr Dev** 1988;28(3B):673–86 (39 ref.)

Expression of asymmetric forms of acetylcholinesterase during myogenesis in vitro. Toutant JP. **Reprod Nutr Dev** 1988;28(3B):693–702

Embryonic induction and muscle gene activation. Gurdon JB, et al. **Trends Genet** 1989 Feb;5(2):51–6 (38 ref.)

Neuromuscular specificity: pathfinding by identified motor growth cones in a vertebrate embryo. Westerfield M, et al. **Trends Neurosci** 1988 Jan;11(1):18–22 (36 ref.)

[Molecular strategies involved in the control of gene expression during differentiation of muscle cells] Fiszman MY. **Reprod Nutr Dev** 1988;28(3B):703–13 (38 ref.) (Eng. Abstr.) **(Fre)**

[Several classes of myoblasts participate in the formation of skeletal muscles in birds] Mouly V, et al. **Reprod Nutr Dev** 1988;28(3B):687–92 (Eng. Abstr.) **(Fre)**

[Morphogenesis of muscles attached to the anal canal] Borghi F. **Medicina (Firenze)** 1988 Jan-Mar;8(1):56–8 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Succinic dehydrogenase and cholinesterase activities in the skeletal muscles of the desert rat and the albino rat.

Moustafa FA. **Acta Anat (Basel)** 1989;135(1):31–40
Contractile properties of chick embryo muscles in development. Kalamkarova M, et al. **Acta Biochim Biophys Hung** 1988;23(2):181–6
Molecular forms of pigeon skeletal muscle AMP deaminase. Kaletha K. **Acta Biochim Pol** 1988;35(4):405–14
Purification and some properties of glyceraldehyde-3-phosphate dehydrogenase from carp muscle. Marcinkowska A, et al. **Acta Biochim Pol** 1988; 35(2):83–94
Properties of 5'-deiodinase of 3,3',5'-triiodothyronine in rat skeletal muscle. Tsukahara F, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):69–74
Comparative investigation on the extractibility of acetylcholinesterase from normal and dystrophic muscles. Katona G, et al. **Acta Physiol Hung** 1989;73(1):15–27
Enzyme activities in type I and II muscle fibres of human skeletal muscle in relation to age and torque development. Borges O, et al. **Acta Physiol Scand** 1989 May;136(1):29–36
Indication of in vivo xanthine oxidase activity in human skeletal muscle during exercise. Hellsten Y, et al. **Acta Physiol Scand** 1988 Sep;134(1):159–60
Effects of chronic nicotine exposure on contractile enzyme-histochemical and biochemical properties of fast- and slow-twitch skeletal muscles in the rat. Larsson L, et al. **Acta Physiol Scand** 1988 Dec;134(4):519–27
Phosphorylase activity in needle biopsy samples--factors influencing transformation. Ren JM, et al. **Acta Physiol Scand** 1988 May;133(1):109–14
Kinetic parameters of cytochrome c oxidase in rat skeletal muscle: effect of endurance training. Soussi B, et al. **Acta Physiol Scand** 1989 Mar;135(3):373–9
The rat epitrochlearis muscle: metabolic characteristics. Zetan N, et al. **Acta Physiol Scand** 1988 Sep;134(1):155–6
Non-lysosomal, high-molecular-mass cysteine proteinases from rat skeletal muscle. Dahlmann B, et al. **Adv Exp Med Biol** 1988;240:215–23
Cathepsin B and D activity in human skeletal muscle in disease states. Guarnieri G, et al. **Adv Exp Med Biol** 1988; 240:243–56
The effect of chronic ethanol feeding on body and plasma composition and rates of skeletal muscle protein turnover in the rat. Preedy VR, et al. **Alcohol Alcohol** 1988; 23(3):217–24
Contours and distribution of sites that react with antiacetylcholinesterase in chicken intrafusal fibers. Maier A. **Am J Anat** 1989 May;185(1):33–41
Reciprocal changes of muscle oxidases and liver enzymes with recovery from iron deficiency. Azevedo JL Jr, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E401–5
Single muscle fiber enzyme shifts with hindlimb suspension and immobilization. Fitts RH, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1082–91
Selective induction of high-ouabain-affinity isoform of Na+-K+-ATPase by thyroid hormone. Haber RS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E912–9
Molecular characterization of rat skeletal muscle myosin light chain kinase. Herring BP, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):C399–404
Binding of adenylosuccinate synthetase to contractile proteins of muscle. Manfredi JP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C29–35
Effect of sepsis on activity of pyruvate dehydrogenase complex in skeletal muscle and liver [letter] Vary TC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E445
Micromethods in single muscle fibers. 1. Determination of catalase and superoxide dismutase. Austin L, et al. **Anal Biochem** 1988 Nov 1;174(2):568–74
Micromethods in single muscle fibers. 2. Determination of glutathione reductase and glutathione peroxidase. Austin L, et al. **Anal Biochem** 1988 Nov 1;174(2):575–9
Developmental transitions of myosin isoforms and organisation of the lateral muscle in the teleost Dicentrarchus labrax (L.). Scapolo PA, et al. **Anat Embryol (Berl)** 1988;178(4):287–95
Inhibition of carnitine palmitoyltransferase by malonyl-CoA in human muscle is influenced by anesthesia [letter; comment] Zierz S, et al. **Anesthesiology** 1989 Feb;70(2):373
Comment on: Anesthesiology 1988 Jun;68(6):945–8
Actomyosin adenosine triphosphatase activities of the cat infrahyoid muscles. Hisa Y, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):202–8
Reevaluation of the "glycolytic complex" in muscle: a multitechnique approach using trout white muscle. Brooks SP, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):13–22
Inhibition of glyceraldehyde-3-phosphate dehydrogenase by pentalenolactone: kinetic and mechanistic studies. Cane DE, et al. **Arch Biochem Biophys** 1989 Apr;270(1):50–61
Multicatalytic proteinase in fish muscle. Folco EJ, et al. **Arch Biochem Biophys** 1988 Dec;267(2):599–605
Amino-terminal sequence analysis of rat heart and muscle glycogen synthase: homology to the rabbit enzyme and the implications for hormonal control. Jaspers SR, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):630–6
Phosphorylase a formation in protein-glycogen particles isolated from fast-twitch muscle of euthyroid and hypothyroid rats. Leijendekker WJ, et al. **Arch Biochem Biophys** 1989 Oct;274(1):120–9
Purification and characterization of a multicatalytic proteinase from crustacean muscle: comparison of latent and heat-activated forms. Mykles DL. **Arch Biochem Biophys** 1989 Oct;274(1):216–28
Inhibition of rabbit muscle glycogen phosphorylase by D-gluconohydroximo-1,5-lactone-N-phenylurethane. Papageorgiou AC, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):376–85
Carbonic anhydrase in guinea pig skeletal muscle mitochondria. Storey BT, et al. **Arch Biochem Biophys** 1989 Apr;270(1):144–52
Purification and characterization of Pz-peptidase from rabbit muscle. Tisljar U, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):138–44
Polyclonal antibodies to rabbit skeletal muscle protein phosphatases C-I and C-II. Wei Q, et al. **Arch Biochem Biophys** 1989 Jul;272(1):69–75
Alkaline phosphatase activity in striated muscle: the effect of aging and long-term training in female mice. Reznick AZ, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):59–65
Changes in the modulations of kinetics and allosteric properties of muscle phosphofructokinase of young and old rats. Trigun SK, et al. **Arch Gerontol Geriatr** 1988 Dec; 7(4):239–47
Mechanism of action of HI-6 on soman inhibition of acetylcholinesterase in preparations of rat and human skeletal muscle; comparison to SAD-128 and PAM-2. Grubič Z, et al. **Arch Toxicol** 1989;63(1):68–71
Modulation of glycogen synthase kinase activity of skeletal and smooth muscle casein kinase I by spermine. Hegazy MG, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):653–9
Sequence of the 5'-flanking region of the rat 6-phosphofructo-2-kinase/fructose 2,6-bisphosphatase gene: regulation by glucocorticoids. Lange AJ, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):753–60
Human testicular lactate dehydrogenase-C gene is interrupted by six introns at positions homologous to those of LDH-A (muscle) and LDH-B (heart) genes. Takano T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):579–83
Isozymes of fructose 6-phosphate,2-kinase:fructose-2,6-bisphosphatase in rat and bovine heart, liver, and skeletal muscle. Taniyama M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):949–54
Glycogen-bound type-1 phosphatase: isolation and dissociation of a complex containing undegraded G-subunit. Villa-Moruzzi E, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1465–71
Tissue specific defect of complex I of the mitochondrial respiratory chain. Watmough NJ, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):623–7
Autolysis of the millimolar Ca2+-requiring form of the Ca2+-dependent proteinase from chicken skeletal muscle. Nagainis PA, et al. **Biochem Cell Biol** 1988 Oct; 66(10):1023–31
Zinc can activate cellular acidic alpha-D-glucosidase activity. Lin CY, et al. **Biochem Genet** 1988 Jun; 26(5–6):323–9
Modulation of phosphorylase kinase activity by sphingolipids. Baltas LG, et al. **Biochem Int** 1989 Jul;19(1):99–106
Structural and functional peculiarities of alpha-ketoglutarate dehydrogenase with non-interacting active sites. Bunik VI, et al. **Biochem Int** 1989 Mar;18(3):561–71
Dimeric structure of rat skeletal muscle AMP-deaminase subunit. Haroutunian AV, et al. **Biochem Int** 1988 Aug; 17(2):279–86
Polarized electric field effects on the regulation of succinate dehydrogenase activity in amphibian muscle and liver: kinetic study. Subrahamanyam K, et al. **Biochem Int** 1989 Apr;18(4):851–63
Interferences with assay of creatine kinase activity in vitro [letter] Brazeau GA, et al. **Biochem J** 1989 Jan 15; 257(2):619–21
Contraction-mediated inactivation of glycogen synthase is accompanied by inactivation of glycogen synthase phosphatase in human skeletal muscle. Kida Y, et al. **Biochem J** 1989 May 1;259(3):901–4
Inositol 1,4-bisphosphate is an allosteric activator of muscle-type 6-phosphofructo-1-kinase. Mayr GW. **Biochem J** 1989 Apr 15;259(2):463–70
D-myo-inositol 1,4,5-trisphosphate phosphatase in skeletal muscle. Milani D, et al. **Biochem J** 1988 Sep 1;254(2):525–9
Study of the flux and transition time control coefficient profiles in a metabolic system in vitro and the effect of an external stimulator. Torres NV, et al. **Biochem J** 1989 Jun 15;260(3):763–9
Lactate dehydrogenase isoenzymes A (muscle), B (heart) and C (testis) of mammals and the genes coding for these enzymes. Li SS. **Biochem Soc Trans** 1989 Apr;17(2):304–7
Drosophila insulin degrading enzyme and rat skeletal muscle insulin protease cleave insulin at similar sites. Duckworth WC, et al. **Biochemistry** 1989 Mar 21;28(6):2471–7
Abnormal response to calmodulin in vitro of dystrophic chicken muscle membrane Ca2+-ATPase activity. Galindo J Jr, et al. **Biochemistry** 1988 Sep 20; 27(19):7519–24
Resonance energy transfer between the active sites of rabbit muscle creatine kinase: analysis by steady-state and time-resolved fluorescence. Grossman SH. **Biochemistry** 1989 May 30;28(11):4894–902
Mechanism-based inactivation of rabbit muscle phosphoglucomutase by nojirimycin 6-phosphate. Kim SC, et al. **Biochemistry** 1988 Sep 20;27(19):7328–32
Fragmentation of an endogenous inhibitor upon complex formation with high- and low-Ca2+-requiring forms of calcium-activated neutral proteases. Nakamura M, et al. **Biochemistry** 1989 Jan 24;28(2):449–55
31P NMR studies of the structure of cation-nucleotide complexes bound to porcine muscle adenylate kinase. Ray BD, et al. **Biochemistry** 1988 Nov 15;27(23):8669–76
Structural characterization of the interactions between calmodulin and skeletal muscle myosin light chain kinase: effect of peptide (576–594)G binding on the Ca2+-binding domains. Seeholzer SH, et al. **Biochemistry** 1989 May 2; 28(9):4011–20
Modification of the (Ca2+ + Mg2+)-ATPase protein of sarcoplasmic reticulum with 7-chloro-4-nitrobenzo-2-oxa-1,3-diazole. Bailin G, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):122–32
The myosin-bound form of protein phosphatase 1 (PP-1M) is the enzyme that dephosphorylates native myosin in skeletal and cardiac muscles. Chisholm AA, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):163–9
The major type-1 protein phosphatase catalytic subunits are the same gene products in rabbit skeletal muscle and rabbit liver. Cohen PT, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):125–8
Interaction of bovine skeletal muscle lactate dehydrogenase with liposomes. Comparison with the data for the heart enzyme. Dąbrowska A, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):357–60
ATP-activated, high-molecular-mass proteinase-I from rat skeletal muscle is a cysteine proteinase-alpha 1-macroglobulin complex. Dahlmann B, et al. **Biochim Biophys Acta** 1989 May 31;991(2):253–62
Response of skeletal muscle RNA polymerases I and II to tumour growth. Goodlad GA, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):296–302
Some kinetic differences between the M isoenzymes of pyruvate kinase from liver and muscle. Jiménez de Asúa L, et al. **Biochim Biophys Acta** 1971 May 12;235(2):326–34
The phosphorylase b to a converting enzyme of rabbit skeletal muscle. 1956 [classical article] Krebs EG, et al. **Biochim Biophys Acta** 1989;1000:302–9
Rationalization of aminopeptidase activities in human skeletal muscle soluble extract. Lauffart B, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):300–6
Porcine muscle prolyl endopeptidase: limited proteolysis of tryptic peptides from hemoglobin beta-chains at prolyl and alanyl bonds. Moriyama A, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):151–5
Insulin-mediated effect on the activity of UDPG-glycogen transglucosylase of muscle. 1960 [classical article] Villar-Palasí C, et al. **Biochim Biophys Acta** 1989; 1000:314–6
Stabilization of detergent-solubilized Ca2+-ATPase by poly(ethylene glycol). Welte W, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):193–9
Acyl-CoA dehydrogenase enzymes during early postnatal development in the rat. Carroll JE, et al. **Biol Neonate** 1989; 55(3):185–90
Force-velocity relation and myosin isozymes of rat muscles. Beckers-Bleukx G, et al. **Biomed Biochim Acta** 1989; 48(5–6):S412–6
Subunit composition of native myosin isoenzymes of some striated mammalian muscles. Marechal G, et al. **Biomed Biochim Acta** 1989;48(5–6):S417–21
Proteolytic enzyme activities in skeletal muscle of high jumping rats. Sohár I, et al. **Biomed Biochim Acta** 1989; 48(5–6):S422–5
Characterisation of cDNA clones for rat muscle carbonic anhydrase III. Kelly CD, et al. **Biosci Rep** 1988 Oct; 8(5):401–6
Purification of two muscle enzymes by chromatography on immobilized ferric ions. Chaga G, et al. **Biotechnol Appl Biochem** 1989 Aug;11(4):424–31
Release of creatine kinase from skeletal muscles by Bothrops venoms: heparin potentiation of inhibition by antivenin. Melo PA, et al. **Braz J Med Biol Res** 1988;21(3):545–8
Early and late influences of testosterone on acetylcholinesterase activity of skeletal muscles from developing rats. Souccar C, et al. **Braz J Med Biol Res** 1988;21(2):263–71
Inhibition of carbonic anhydrases in type I muscle fibers influences contractility. Côté C, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):645–9
Na+,K+-ATPase concentration in rodent and human heart and skeletal muscle: apparent relation to muscle performance. Kjeldsen K, et al. **Cardiovasc Res** 1988 Feb; 22(2):95–100
Age- and exercise-related changes in the activities of thiol proteinases in rat skeletal muscle. Shikimi T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4182–6
Cathepsin B, D and H activities in muscles of chicks of fast and slow growing strains: effect of age and diet. Saunderson CL, et al. **Comp Biochem Physiol [A]** 1989;92(3):305–11
Comparative levels of muscle glycolytic enzymes in mammals, fish, echinoderm and molluscs. Avelar PM, et al. **Comp Biochem Physiol [B]** 1978;60(2):143–8
Comparative aspects of adenylic acid deaminase and aspartate-2-oxoglutarate aminotransferase. Chandrasena SI, et al. **Comp Biochem Physiol [B]** 1978;61(2):191–4
The distribution of lipoprotein lipase (clearing factor lipase) activity in the adipose, muscular and lung tissues of ten animal species. Cryer A, et al. **Comp Biochem Physiol [B]** 1979;63(4):501–5

Lipid peroxidation enzyme system in rainbow trout (Salmo gairdnerii) skeletal muscle microsomes. Han TJ, et al. **Comp Biochem Physiol [B]** 1989;93(2):485–91

Muscle esterases of the mosquitofish, Gambusia affinis. Hodges DH Jr, et al. **Comp Biochem Physiol [B]** 1977; 58(4):401–7

A comparative electrophoretic analysis of mammalian carbonic anhydrase isozymes: evidence for a third isozyme in red skeletal muscles. Holmes RS. **Comp Biochem Physiol [B]** 1977;57(2):117–20

Effects of temperature, salinity, and feeding on aminotransferase activity in the liver and white muscle of rainbow trout (Salmo gairdneri Richardson). Jürss K. **Comp Biochem Physiol [B]** 1979;64(2):213–8

Electrophoretic variation in muscle lactate dehydrogenase in Snake Valley cutthroat trout, Salmo clarki subsp. Klar GT, et al. **Comp Biochem Physiol [B]** 1979;64(4):391–4

Enzymatic properties of glyceraldehyde-3-phosphate dehydrogenase from fish muscle. Nakagawa T, et al. **Comp Biochem Physiol [B]** 1989;93(2):379–84

Enzymatic properties of fish muscle aldolase. Nakagawa T, et al. **Comp Biochem Physiol [B]** 1989;92(2):405–10

Carp (Cyprinus carpio) muscle fructose 1,6-bisphosphatase: purification and some properties. Rosenmann E, et al. **Comp Biochem Physiol [B]** 1977;58(3):291–5

Comparative studies on muscle AMP-deaminase—I. Purification, molecular weight, subunit structure and metal content of the enzymes from rat, rabbit, hen, frog and pikeperch. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):363–9

Comparative studies on muscle AMP-deaminase—II. Regulation by monovalent cations, ATP and orthophosphate of the enzyme from hen, frog and pikeperch muscle. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):371–4

Comparison of calpain I and calpain II from carp muscle. Toyohara H, et al. **Comp Biochem Physiol [B]** 1989; 92(3):577–81

Alternative promoter usage by aldolase A during in vitro myogenesis. Colbert MC, et al. **Dev Biol** 1988 Nov; 130(1):392–6

Expression of a transfected mouse muscle-creatine kinase gene is induced upon growth factor deprivation of myogenic but not of nonmyogenic cells. Johnson JE, et al. **Dev Biol** 1989 Jul;134(1):258–62

Complete sequence and in vitro expression of a tissue-specific phosphatidylinositol-linked N-CAM isoform from skeletal muscle. Barton CH, et al. **Development** 1988 Sep; 104(1):165–73

Calmodulin as substrate for insulin-receptor kinase. Phosphorylation by receptors from rat skeletal muscle. Sacks DB, et al. **Diabetes** 1989 Jan;38(1):84–90

Skeletal muscle proteolysis in rats with acute streptozocin-induced diabetes. Smith OL, et al. **Diabetes** 1989 Sep;38(9):1117–22

Regulation of skeletal muscle pyruvate dehydrogenase and glycogen synthase in man. Mandarino LJ. **Diabetes Metab Rev** 1989 Sep;5(6):475–86 (17 ref.)

Activity of enzymes of glucose and triglyceride metabolism in adipose and muscle tissue from normal pregnant women at term. Anderson O, et al. **Diabetic Med** 1989 Mar; 6(2):131–6

Posthatching changes in levels and molecular forms of acetylcholinesterase in slow and fast muscles of the chicken: effects of denervation and direct electrical stimulation. Khaskiye A, et al. **Differentiation** 1988 Nov;39(1):28–33

Synaptic acetylcholinesterase of chicken muscle changes during development from a hybrid to a homogeneous enzyme. Tsim KW, et al. **EMBO J** 1988 Aug;7(8):2451–6

The effect of insulin on glucose-6-phosphate dehydrogenase activity in liver, heart and skeletal muscle of rat during hypothermia. Torlińska T, et al. **Endokrynol Pol** 1988; 39(2):111–8

Biochemical studies of canine muscle phosphofructokinase deficiency. Giger U, et al. **Enzyme** 1988;40(1):25–9

Carbonic anhydrase isoenzymes—enigmatic variations. Harris RC. **Equine Vet J** 1987 Nov;19(6):489–91 (28 ref.)

Immunocytochemical localisation of carbonic anhydrase isozyme III in equine skeletal muscle. Nishita T, et al. **Equine Vet J** 1987 Nov;19(6):509–13

Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7

Influence of environmental temperature and energy intake on skeletal muscle respiratory enzymes and morphology. Dauncey MJ, et al. **Eur J Appl Physiol** 1988;58(3):239–44

Myosin isoenzymes and their subunits in urodelan amphibian fast skeletal muscle. Coexistence of larval and adult heavy chains in neotenic individuals. Chanoine C, et al. **Eur J Biochem** 1989 Apr 15;181(1):125–8

Glycogen synthesis in the obliquely striated muscle of Ascaris suum. Ghosh P, et al. **Eur J Biochem** 1989 Aug 15; 183(3):679–85

Chronic stimulation of rat skeletal muscle induces coordinate increases in mitochondrial and nuclear mRNAs of cytochrome-c-oxidase subunits. Hood DA, et al. **Eur J Biochem** 1989 Feb 1;179(2):275–80

The glycogen-binding subunit of protein phosphatase-1G from rabbit skeletal muscle. Further characterisation of its structure and glycogen-binding properties. Hubbard MJ, et al. **Eur J Biochem** 1989 Mar 15;180(2):457–65

The sequence-specific assignment of the 1H-NMR spectrum of an enzyme, horse-muscle acylphosphatase. Saudek V, et al. **Eur J Biochem** 1989 Jun 1;182(1):85–93

Correlation between enzyme activity and hinge-bending domain displacement in 3-phosphoglycerate kinase. Sinev MA, et al. **Eur J Biochem** 1989 Mar 1;180(1):61–6

Cholinesterases from flounder muscle. Purification and characterization of glycosyl-phosphatidylinositol-anchored and collagen-tailed forms differing in substrate specificity. Stieger S, et al. **Eur J Biochem** 1989 May 15;181(3):633–42

Intracellular localization of inositol-phospholipid-metabolizing enzymes in rabbit fast-twitch skeletal muscle. Can D-myo-inositol 1,4,5-trisphosphate play a role in excitation-contraction coupling? Varsányi M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):473–9

Isoforms of creatine kinase: MM in the study of skeletal muscle damage. Page S, et al. **Eur J Clin Invest** 1989 Apr; 19(2):185–91

Frequent derepression of G6PD and HPRT on the marsupial inactive X chromosome associated with cell proliferation in vitro. Migeon BR, et al. **Exp Cell Res** 1989 Jun; 182(2):597–609

Antioxidant enzyme activities in heart and skeletal muscle of rats of different ages. Vertechy M, et al. **Exp Gerontol** 1989;24(3):211–8

Molecular cloning of a cDNA for the catalytic subunit of rabbit muscle phosphorylase phosphatase. Bai G, et al. **FASEB J** 1988 Nov;2(14):3010–6

Immunological evidence that insulin activates protein kinase C in BC3H-1 myocytes. Acevedo-Duncan M, et al. **FEBS Lett** 1989 Feb 13;244(1):174–6

S-100b protein regulates the activity of skeletal muscle adenylate cyclase in vitro. Fanò G, et al. **FEBS Lett** 1988 Nov 21;240(1-2):177–80

S-100a0 protein stimulates the basal (Mg2+-activated) adenylate cyclase activity associated with skeletal muscle membranes. Fanò G, et al. **FEBS Lett** 1989 May 8; 248(1-2):9–12

Chronic long-term electrostimulation creates a unique metabolic enzyme profile in rabbit fast-twitch muscle. Hood DA, et al. **FEBS Lett** 1989 Apr 24;247(2):471–4

Insulin-induced decrease in 5'-nucleotidase activity in skeletal muscle membranes. Klip A, et al. **FEBS Lett** 1988 Oct 10;238(2):419–23

cDNA cloning and nucleotide sequence of rat muscle-specific enolase (beta beta enolase). Ohshima Y, et al. **FEBS Lett** 1989 Jan 2;242(2):425–30

A cAMP-triggered release of a hormone-like peptide. Riven-Kreitman R, et al. **FEBS Lett** 1988 Nov 7; 239(2):245–50

A case of carnitine palmitoyltransferase II deficiency in human skeletal muscle. Singh R, et al. **FEBS Lett** 1988 Dec 5;241(1-2):126–30

Association of rabbit muscle glyceraldehyde-3-phosphate dehydrogenase and 3-phosphoglycerate kinase. The biochemical and electron-microscopic evidence. Sukhodolets MV, et al. **FEBS Lett** 1988 Sep 26; 238(1):161–6

Conformational modification of muscle phosphofructokinase from Jaculus orientalis upon ligand binding. Tijane M, et al. **FEBS Lett** 1989 Mar 13;245(1-2):30–4

Studies of in vivo phosphorylated proteins in BC3H-1 myocytes suggest that protein kinase C is involved in insulin action. Vila MC, et al. **FEBS Lett** 1989 Feb 13; 244(1):177–80

Contractile activity enhances the synthesis of hexokinase II in rat skeletal muscle. Weber FE, et al. **FEBS Lett** 1988 Sep 26;238(1):71–3

A non-methylated CpG-rich island associated with the human muscle-specific carbonic anhydrase III gene. Edwards YH, et al. **Gene** 1988 Nov 30;71(2):473–81

Cloning and expression of a human muscle phosphofructokinase cDNA. Sharma PM, et al. **Gene** 1989 Apr 15;77(1):177–83

Human 6-phosphofructo-1-kinase gene has an additional intron upstream of start codon. Valdez BC, et al. **Gene** 1989 Mar 15;76(1):167–9

Quantitative histochemical determination of succinic dehydrogenase activity in skeletal muscle fibres. Blanco CE, et al. **Histochem J** 1988 Apr;20(4):230–43

Quantitative histochemistry of creatine kinase in rat myocardium and skeletal muscle. Frederiks WM, et al. **Histochem J** 1988 Nov;20(11):624–8

Method of quenching of muscle fibres affects apparent succinate dehydrogenase activity. Van der Laarse WJ, et al. **Histochem J** 1988 Nov;20(11):642–4

Histochemical localization of octopamine- and proctolin-sensitive adenylate cyclase activity in a locust skeletal muscle. Swales LS, et al. **Histochemistry** 1988; 90(3):233–9

Influence of age on conformation of rat muscle phosphofructokinase: analysis of pH dependent kinetics and limited proteolysis of enzyme. Trigun SK, et al. **Indian J Exp Biol** 1988 Jul;26(7):532–4

Acetazolamide-sensitive and resistant carbonic anhydrase activity in rat and rabbit skeletal muscles of different fiber type composition. Frémont P, et al. **Int J Biochem** 1989; 21(2):143–7

Purification and properties of cytosolic malic enzyme from human skeletal muscle. Taroni F, et al. **Int J Biochem** 1988; 20(8):857–66

Cytochrome c oxidase during human fetal development. Moggio M, et al. **Int J Dev Neurosci** 1989;7(1):5–14

Innervation is required to stabilize and amplify creatine kinase activity in regenerated extensor digitorum longus muscles of rats. Rossi AM, et al. **Int J Dev Neurosci** 1987; 5(5–6):429–33

Variability in creatine kinase: methodological, exercise, and clinically related factors. Hortobágyi T, et al. **Int J Sports Med** 1989 Apr;10(2):69–80 (91 ref.)

Muscle glycogen phosphorylase deficiency. Moses SW. **Isr J Med Sci** 1989 Feb;25(2):61–3

Reduced calcium-dependent proteinase activity in cimaterol-induced muscle hypertrophy in lambs. Wang SY, et al. **J Anim Sci** 1988 Oct;66(10):2545–50

CK and LD isozymes in human single muscle fibers in trained athletes. Apple FS, et al. **J Appl Physiol** 1989 Jun; 66(6):2717–20

Exercise selectively increases G4 AChe activity in fast-twitch muscle. Fernandez HL, et al. **J Appl Physiol** 1988 Nov;65(5):2245–52

NADH shuttle enzymes and cytochrome b5 reductase in human skeletal muscle: effect of strength training. Schantz PG, et al. **J Appl Physiol** 1989 Jul;67(1):123–7

Enzyme activities of FT and ST muscle fibers in heavy-resistance trained athletes. Tesch PA, et al. **J Appl Physiol** 1989 Jul;67(1):83–7

Porcine muscle prolyl endopeptidase and its endogenous substrates. Moriyama A, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):112–7

Ontogenic expression of the two isozymes, Ch1 and Ch2, of chicken muscle acylphosphatase. Ohba Y, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):173–7

Modification of essential carboxyl group in rabbit muscle phosphorylase by water-soluble carbodiimide. Takagi S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):933–8

Oxygen exchange during the acto-subfragment-1 ATPase reaction: evidence for the two-route mechanism of the actomyosin ATPase reaction. Yasui M, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):550–6

A novel fetal insulin-like growth factor (IGF) I receptor. Mechanism for increased IGF I- and insulin-stimulated tyrosine kinase activity in fetal muscle. Alexandrides TK, et al. **J Biol Chem** 1989 Aug 5;264(22):12922–30

The role of autolysis in activity of the Ca2+-dependent proteinases (mu-calpain and m-calpain). Cong J, et al. **J Biol Chem** 1989 Jun 15;264(17):10096–103

Direct chemical evidence that serine 180 in the glycine-rich loop of myosin binds to ATP. Cremo CR, et al. **J Biol Chem** 1989 Apr 25;264(12):6608–11

2-[(4-Bromo-2,3-dioxobutyl)thio]-1,N6-ethenoadenosine 5'-diphosphate. A new fluorescent affinity label of a tyrosyl residue in the active site of rabbit muscle pyruvate kinase. DeCamp DL, et al. **J Biol Chem** 1989 May 15; 264(14):8430–41

Regulation of acetylcholinesterase synthesis and assembly by muscle activity. Effects of tetrodotoxin. Fernandez-Valle C, et al. **J Biol Chem** 1989 Aug 25;264(24):14043–9

Synergistic phosphorylation of rabbit muscle glycogen synthase by cyclic AMP-dependent protein kinase and casein kinase I. Implications for hormonal regulation of glycogen synthase. Flotow H, et al. **J Biol Chem** 1989 Jun 5;264(16):9126–8

Phosphofructokinase isozyme expression during myoblast differentiation. Gekakis N, et al. **J Biol Chem** 1989 Mar 5;264(7):3658–61

Purification and characterization of rat skeletal muscle fructose-6-phosphate,2-kinase:fructose-2,6-bisphosphatase. Kitamura K, et al. **J Biol Chem** 1989 Jun 15;264(17):9799–806

Phosphofructokinase from bumblebee flight muscle. Molecular and catalytic properties and role of the enzyme in regulation of the fructose 6-phosphate/fructose 1,6-bisphosphate cycle. Leite A, et al. **J Biol Chem** 1988 Nov 25;263(33):17527–33

A human muscle adenine nucleotide translocator gene has four exons, is located on chromosome 4, and is differentially expressed. Li K, et al. **J Biol Chem** 1989 Aug 25; 264(24):13998–4004

Aldose reductase from human psoas muscle. Purification, substrate specificity, immunological characterization, and effect of drugs and inhibitors. Morjana NA, et al. **J Biol Chem** 1989 Feb 15;264(5):2906–11

Aldose reductase from human psoas muscle. Affinity labeling of an active site lysine by pyridoxal 5'-phosphate and pyridoxal 5'-diphospho-5'-adenosine. Morjana NA, et al. **J Biol Chem** 1989 Feb 15;264(5):2912–9

Purification and characterization of an N-acylaminoacyl-peptide hydrolase from rabbit muscle. Radhakrishna G, et al. **J Biol Chem** 1989 Jul 5; 264(19):11076–81

A gene specifying subunit VIII of human cytochrome c oxidase is localized to chromosome 11 and is expressed in both muscle and non-muscle tissues. Rizzuto R, et al. **J Biol Chem** 1989 Jun 25;264(18):10595–600

Biogenesis of acetylcholinesterase molecular forms in muscle. Evidence for a rapidly turning over, catalytically inactive precursor pool. Rotundo RL. **J Biol Chem** 1988 Dec 25; 263(36):19398–406

Inositol polyphosphate-mediated repartitioning of aldolase in skeletal muscle triads and myofibrils. Thieleczek R, et al. **J Biol Chem** 1989 May 5;264(13):7349–56

Developmental regulation and tissue-specific expression of the human muscle creatine kinase gene. Trask RV, et al. **J Biol Chem** 1988 Nov 15;263(32):17142-9

Structure of the gene encoding the muscle-specific subunit of human phosphoglycerate mutase. Tsujino S, et al. **J Biol Chem** 1989 Sep 15;264(26):15334-7

Isolation and characterization of cDNA clones encoding rat skeletal muscle peptidylarginine deiminase. Watanabe K, et al. **J Biol Chem** 1989 Sep 15;264(26):15255-60

Purification of human muscle phosphoglycerate mutase by fast protein liquid chromatography based on hydrophobic interactions. Edwards RJ, et al. **J Chromatogr** 1989 May 30;490(2):424-31

Insulin receptor function and glycogen synthase activity in skeletal muscle biopsies from patients with insulin-dependent diabetes mellitus: effects of physical training. Bak JF, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):158-64

Adenosine 3',5'-monophosphate-dependent protein kinase activity decreases in human muscle after insulin infusion. Okubo M, et al. **J Clin Endocrinol Metab** 1989 Oct; 69(4):798-803

Impaired insulin-stimulated muscle glycogen synthase activation in vivo in man is related to low fasting glycogen synthase phosphatase activity. Freymond D, et al. **J Clin Invest** 1988 Nov;82(5):1503-9

Skeletal muscle fiber types and myosin ATPase activity do not change with age or growth hormone administration. Florini JR, et al. **J Gerontol** 1989 Sep;44(5):B110-7

Effect of tumor necrosis factor administration in vivo on lipoprotein lipase activity in various tissues of the rat. Grunfeld C, et al. **J Lipid Res** 1989 Apr;30(4):579-85

Identification and description of beta-structure in horse muscle acylphosphatase by nuclear magnetic resonance spectroscopy. Saudek V, et al. **J Mol Biol** 1989 May 20; 207(2):405-15

Histochemical classification of neck and limb muscle fibers in a turtle, Pseudemys scripta: a study using microphotometry and cluster analysis techniques. Callister RJ, et al. **J Morphol** 1989 Mar;199(3):269-86

Muscle glucose-6-phosphate dehydrogenase deficiency. Bresolin N, et al. **J Neurol** 1989 May;236(4):193-8

Prospect for enzyme therapy in glycogenosis II variants: a study on cultured muscle cells. van der Ploeg AT, et al. **J Neurol** 1988 Sep;235(7):392-6

Skeletal muscle CK-B activity in neurogenic muscular atrophies. Vretou-Jockers E, et al. **J Neurol** 1989 Jul; 236(5):284-7

Coenzyme Q in serum and muscle of 5 patients with Kearns-Sayre syndrome and 12 patients with ophthalmoplegia plus. Zierz S, et al. **J Neurol** 1989 Feb; 236(2):97-101

Inhibition of carnitine palmitoyltransferase (CPT) by chlorpromazine in muscle of patients with CPT deficiency [letter] Zierz S, et al. **J Neurol** 1989 May;236(4):251-2

Polyamine biosynthetic decarboxylases in muscles of rats with different experimental myopathies. Lorenzini EC, et al. **J Neurol Sci** 1989 Jan;89(1):27-35

Histochemical features of tubular aggregates in diseased human skeletal muscle fibres. Meijer AE. **J Neurol Sci** 1988 Aug;86(1):73-82

Phosphorylase kinase activities in damaged mouse skeletal muscles. Morgan JE. **J Neurol Sci** 1988 Sep;86(2-3):149-58

Focal cytochrome c oxidase deficiency in various neuromuscular diseases. Yamamoto M, et al. **J Neurol Sci** 1989 Jun;91(1-2):207-13

Metabolic specialization in fast and slow muscle fibers of the developing rat. Nemeth PM, et al. **J Neurosci** 1989 Jul;9(7):2336-43

The influence of temperature on the distribution and intensity of the reaction product in rat muscle fibers obtained with the histochemical method for myosin ATPase. Kirkeby S, et al. **J Neurosci Methods** 1989 Jan;26(3):189-94

Nerve regulation of class I and class II-asymmetric forms of acetylcholinesterase in rat skeletal muscles. Fadić R, et al. **J Neurosci Res** 1989 Apr;22(4):449-55

Localization of ingensin in rat central nervous system and skeletal muscle. Kamakura K, et al. **J Neurosci Res** 1988 Aug;20(4):473-8

Subcellular distribution of branched-chain aminotransferase activity in rat tissues. Hutson SM. **J Nutr** 1988 Dec; 118(12):1475-81

Dietary biotin requirements of young rainbow trout (Salmo gairdneri) determined by weight gain, hepatic biotin concentration and maximal biotin-dependent enzyme activities in liver and white muscle. Woodward B, et al. **J Nutr** 1989 Jan;119(1):54-60

Histochemical properties of intrafusal fibers in the soleus muscle of the aged rat. Ishihara A. **Jpn J Physiol** 1988; 38(5):747-51

Effects of denervation and deafferentation on mass and enzyme activity in rat skeletal muscles. Ohira Y. **Jpn J Physiol** 1989;39(1):21-31

Increase in the amount of adenylate cyclase in rat gastrocnemius muscle after denervation. Hashimoto K, et al. **Life Sci** 1989;44(24):1887-95

Glutathione peroxidase, glutathione reductase, and thiobarbituric acid-reactive products in muscles of chickens and mice with genetic muscular dystrophy. Omaye ST, et al. **Life Sci** 1974 Jul 1;15(1):137-45

Sialylation of lacto-N-neotetraosyl ceramide by a solubilized sialyltransferase(s) from chicken skeletal muscle: effect of phosphatidylcholine and sphingomyelin. Dasgupta S, et al. **Lipids** 1989 Jun;24(6):550-4

Effect of marginal zinc deficiency on lipoprotein lipase activities in postheparin plasma, skeletal muscle and adipose tissues in the rat. Koo SI, et al. **Lipids** 1989 Feb;24(2):132-6

In vivo functioning of creatine phosphokinase in human forearm muscle, studied by 31P NMR saturation transfer. Rees D, et al. **Magn Reson Med** 1989 Jan;9(1):39-52

Glucose-6-phosphate stimulation of human muscle glycogen synthase phosphatase. Okubo M, et al. **Metabolism** 1988 Dec;37(12):1171-6

Chemical derivatization of Ca2+-pump protein from skeletal muscle with N-substituted maleimides and 5-(2-iodoacetamidoethyl)aminonaphthalene 1-sulfonate. Kawakita M, et al. **Methods Enzymol** 1988;157:251-61

Use of detergents to solubilize the Ca2+-pump protein as monomers and defined oligomers. Møller JV, et al. **Methods Enzymol** 1988;157:261-70

Measurement of Na+-K+ pump in muscle. Sjodin RA. **Methods Enzymol** 1989;173:695-714

Chemical modification of the actin binding site of rabbit muscle aldolase by diethylpyrocarbonate. Don M, et al. **Mol Cell Biochem** 1988 Jun;81(2):145-53

Identification and partial characterization of a latent ATP, Mg-dependent protein phosphatase in rabbit skeletal muscle cytosol. Vandenheede JR, et al. **Mol Cell Biochem** 1989 May 4;87(1):31-9

The upstream muscle-specific enhancer of the rat muscle creatine kinase gene is composed of multiple elements. Horlick RA, et al. **Mol Cell Biol** 1989 Jun;9(6):2396-413

Expression of three stage-specific transcripts of AMP deaminase during myogenesis. Sabina RL, et al. **Mol Cell Biol** 1989 May;9(5):2244-6

Metabolic myopathy in canine muscle-type phosphofructokinase deficiency. Giger U, et al. **Muscle Nerve** 1988 Dec;11(12):1260-5

Muscle glycerol kinase in Duchenne dystrophy and glycerol kinase deficiency. Seltzer WK, et al. **Muscle Nerve** 1989 Apr;12(4):307-13

Chronic ethanol ingestion enhances catabolism and muscle protease activity in acutely uremic rats. Teschner M, et al. **Nephron** 1988;50(4):338-44

Proteolytic stimulation and solubilization of membrane-bound acetylcholinesterase from muscle sarcotubular system. Campoy FJ, et al. **Neurochem Res** 1989 Feb;14(2):197-204

Disorders of glycogen metabolism of muscle. Servidei S, et al. **Neurol Clin** 1989 Feb;7(1):159-78 (113 ref.)

Regulation of thymidine kinase protein levels during myogenic withdrawal from the cell cycle is independent of mRNA regulation. Gross MK, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11625-43

Myoadenylate deaminase deficiency in children. Ashwal S, et al. **Pediatr Neurol** 1985 May-Jun;1(3):185-91 (25 ref.)

Hepatic and muscular presentations of carnitine palmitoyl transferase deficiency: two distinct entities. Demaugre F, et al. **Pediatr Res** 1988 Sep;24(3):308-11

Extensive defects of mitochondrial electron-transfer chain in muscular cytochrome c oxidase deficiency. Tanaka M, et al. **Pediatr Res** 1988 Oct;24(4):447-54

Species-specific responses of muscle lactate dehydrogenase isozymes to increased contractile activity. Simoneau JA, et al. **Pflugers Arch** 1989 Apr;413(6):679-81

Skeletal muscle antioxidant enzyme levels in rats after simulated weightlessness, exercise and dobutamine. Girten B, et al. **Physiologist** 1989 Feb;32(1 Suppl):S59-60

Method for isolation of MMP-7-ase isoenzymes from rat muscle tissue extract. Guoth JG, et al. **Prep Biochem** 1988; 18(3):361-74

Human muscle glycogen synthase cDNA sequence: a negatively charged protein with an asymmetric charge distribution. Browner MF, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1443-7

Skeletal muscle proteasome can degrade proteins in an ATP-dependent process that does not require ubiquitin. Driscoll J, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):787-91

Thymidine kinase synthesis is repressed in nonreplicating muscle cells by a translational mechanism that does not affect the polysomal distribution of thymidine kinase mRNA. Gross MK, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4987-91

Effect of glycyl-L-glutamine on the rate of regeneration of acetylcholinesterase in the rat gastrocnemius muscle after diisopropyl phosphorofluoridate administration. Koelle GB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4331-3

Murine muscle-specific enolase: cDNA cloning, sequence, and developmental expression. Lamandé N, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4445-9

Allelic variants of acetylcholinesterase: genetic evidence that all acetylcholinesterase forms in avian nerves and muscles are encoded by a single gene. Rotundo RL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7805-9

mRNAs for plasma membrane calcium pump isoforms differing in their regulatory domain are generated by alternative splicing that involves two internal donor sites in a single exon. Strehler EE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6908-12

Na,K-ATPase concentration in skeletal muscle: quantification, regulation, and significance. Kjeldsen K, et al. **Prog Clin Biol Res** 1988;268B:251-6

Genetic aspects of muscle glycogenosis. Moses SW, et al. **Prog Clin Biol Res** 1989;306:149-61 (27 ref.)

Synthetic genes for human muscle-type adenylate kinase in Escherichia coli. Kim HJ, et al. **Protein Eng** 1989 Jan; 2(5):379-86

Amino acid sequence and three-dimensional structure of cytosolic adenylate kinase from carp muscle. Reuner C, et al. **Protein Seq Data Anal** 1988;1(5):335-43

Inhibition of lactate-dehydrogenase by cisplatin and other platinum-compounds: enzyme leakage of LDH is not a suitable method to measure platinum-compound-induced kidney cell damage in vitro. Hannemann J, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun;60(3):371-9

Metabolic regulation of glycolysis in sea bass (Dicentrarchus labrax L.) muscle. I. Kinetic study and characteristic modulators of pyruvate kinase. Fideu MD, et al. **Rev Esp Fisiol** 1988 Dec;44(4):381-6

Muscle lipolysis during exercise. An update. Oscai LB, et al. **Sports Med** 1988 Jul;6(1):23-8 (47 ref.)

Enzymatic activities in heart and skeletal muscle of children with cyanotic and noncyanotic congenital heart disease. Dernevik L, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):310-2

Increased muscle enzyme activity after yoga breathing during an exacerbation of asthma [published erratum appears in Thorax 1988 Dec;43(12):1028] Tamarin FM, et al. **Thorax** 1988 Sep;43(9):731-2

Histochemical localization of rhodanese activity in rat liver and skeletal muscle. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):247-55

[Typing of muscle fibers using the metachromatic reaction for the detection of adenosine triphosphatase] Adamcová J, et al. **Cesk Patol** 1988 Nov;24(4):225-9 (Eng. Abstr.) **(Cze)**

[Determination of blood level of muscle enzymes in glycogenoses with liver involvement: a diagnostic criterion] Labrune P, et al. **Ann Pediatr (Paris)** 1989 May; 36(5):299-301 (Eng. Abstr.) **(Fre)**

[Calpain II of rabbit skeletal muscle. Regulation of enzymatic activity: influence of the presence of membrane phospholipids on enzymatic autolysis in the presence or not of substrate] Cottin P, et al. **Reprod Nutr Dev** 1988; 28(3B):831-7 (Eng. Abstr.) **(Fre)**

[Action of muscular proteinases on fast and slow myosins. Relation with post-mortem proteolysis in muscles of variable contractility] Ouali A, et al. **Reprod Nutr Dev** 1988; 28(3B):839-44 (Eng. Abstr.) **(Fre)**

[Changes in phospholipid metabolism in the skeletal muscle cell in induced malignant hyperthermia in the domestic pig] Adam H, et al. **Anaesthesiol Reanim** 1988;13(3):149-55 (Eng. Abstr.) **(Ger)**

[The determination of creatine kinase isoenzyme subunits CK-M and CK-B with the help of precipitating antibodies] Wiedemann G, et al. **Z Med Lab Diagn** 1989;30(2):104-8 (Eng. Abstr.) **(Ger)**

[Determination of muscle enzyme activity in rheumatoid polyarthritis] Ciurea T, et al. **Rev Med Interna [Med Interna]** 1988 Sep-Oct;40(5):475-8 (Eng. Abstr.) **(Rum)**

[Antigenic activity of porcine muscle lactate dehydrogenase fragment 180-214 containing the histidine residue of the isoenzyme active center] Grebenshchikova OG, et al. **Biokhimiia** 1989 Mar;54(3):361-9 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of the regulation of phosphorylase kinase from skeletal muscles of mammals and birds] Livanova NB, et al. **Biokhimiia** 1989 May;54(5):730-3 (Eng. Abstr.) **(Rus)**

[Purification, quaternary structure and regulatory properties of phosphorylase kinase from pigeon skeletal muscle] Morozov VE, et al. **Biokhimiia** 1989 Mar;54(3):448-55 (Eng. Abstr.) **(Rus)**

[Effect of pH on conformation and kinetic properties of phosphorylase from bovine skeletal muscles] Skolysheva LK, et al. **Biokhimiia** 1988 Sep;53(9):1496-504 (Eng. Abstr.) **(Rus)**

[Regulation of the activity of rabbit skeletal muscle phosphorylase kinase by glycogen] Zemskova MA, et al. **Biokhimiia** 1989 Apr;54(4):662-8 (Eng. Abstr.) **(Rus)**

[Interaction of muscle glycogen phosphorylase b with riboflavin, its tetraacetyl derivative and their analogs] Klinov SV, et al. **Bioorg Khim** 1988 Aug;14(8):1027-33 (Eng. Abstr.) **(Rus)**

[Inhibition of muscle glycogen phosphorylase b by 5-methyltetrahydrofolic acid, 3'-chloro- and 3',6'-dichloromethotrexates] Klinov SV, et al. **Bioorg Khim** 1988 Sep;14(9):1162-5 (Eng. Abstr.) **(Rus)**

[Inhibition of muscle glycogen phosphorylase b by heterocyclic vitamins and coenzymes] Klinova NI, et al. **Bioorg Khim** 1988 Nov;14(11):1520-3 (Eng. Abstr.) **(Rus)**

[Interaction of immobilized dimer form of D-glyceraldehyde-3-phosphate dehydrogenase from rabbit muscles with coenzyme] Duzhenkova IV, et al. **Dokl Akad Nauk SSSR** 1988;301(3):738-42 **(Rus)**

[Changes in the activity of a number of enzymes of skeletal muscle fibers in rats after a single physical load] Kuznetsov SL, et al. **Gig Sanit** 1988 Jul;(7):78-9 **(Rus)**

[Myosin isoforms of the developing skeletal muscles in the loach] Nareĭko VG. **Ontogenez** 1988 Nov-Dec;19(6):601-5 (Eng. Abstr.) **(Rus)**

[Thermal inactivation kinetics of cathepsin D from porcine muscle tissue in the presence of sodium chloride] Kudriashov LS, et al. **Prikl Biokhim Mikrobiol** 1989

Mar-Apr;25(2):188-91 (Eng. Abstr.) **(Rus)**

[Retention of specific activity of muscle aldolase after its immobilization on odigos and odifil (ethylsulfo-activated agarose)] Kuzovleva OV, et al.
Prikl Biokhim Mikrobiol 1989 Mar-Apr;25(2):179-83 (Eng. Abstr.) **(Rus)**

[Interaction of the enzymes of cellular energy support with the F-actin of the thin filaments of muscle fiber. I. The binding of lactate dehydrogenase with F-actin induces changes in the structural state of the components of the complex] Kirillina VP, et al. **Tsitologiia** 1988 Jul; 30(7):841-8 (Eng. Abstr.) **(Rus)**

[The causes of the nonuniform thermostability of Mg-ATPase and of the contractility of muscle models] Shelud'ko NS, et al. **Tsitologiia** 1989 Feb;31(2):195-201 (Eng. Abstr.) **(Rus)**

[The nature of changes in the activity of water-soluble enzymes during the action of injurious agents on the muscles. V. A study of the extractability of lactate dehydrogenase from intact and altered muscles] Stabrovskaia VI. **Tsitologiia** 1989 Mar;31(3):294-9 (Eng. Abstr.) **(Rus)**

[Subunit structure of AMP-deaminase from skeletal muscles] Airapetian RL, et al. **Ukr Biokhim Zh** 1988 Sep-Oct; 60(5):9-14 (Eng. Abstr.) **(Rus)**

[Structuro-functional characteristics of aldolase from rabbit muscles in diabetes] Chumachenko IuV, et al.
Ukr Biokhim Zh 1988 Jul-Aug;60(4):40-6 (Eng. Abstr.) **(Rus)**

[Isolation and properties of lysyl-tRNA-synthetase from rabbit skeletal muscles] Litvinenko LT, et al.
Ukr Biokhim Zh 1988 Jul-Aug;60(4):29-34 (Eng. Abstr.) **(Rus)**

[Isolation and immunochemical properties of LDG-5 from swine muscle] Rashkovetskiĭ LG, et al. **Vopr Med Khim** 1989 May-Jun;35(3):60-3 (Eng. Abstr.) **(Rus)**

[Effect of vincristine on Mg2+-ATPase activity of actomyosin-like protein from sarcoma-45 and actomyosin from rat skeletal muscle] Senchuk VV, et al.
Vopr Med Khim 1989 Jan-Feb;35(1):18-22 (Eng. Abstr.) **(Rus)**

[Comparative enzymologic analysis of the creatine kinases from the skeletal muscles of the cod, frog and rabbit] Petrova TA, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug; 24(4):489-96 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Influence of testosterone on the development of the ischiocavernosus muscle of the rat. Vercelli A, et al.
Acta Anat (Basel) 1989;134(3):177-83

The effects of tenotomy and overload on the postnatal development of muscle fibre histochemistry in the cat triceps surae. Gollvik L, et al. **Acta Physiol Scand** 1988 Mar;132(3):353-62

Capillary and size interrelationships in developing rat diaphragm, EDL, and soleus muscle fiber types. Smith D, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C50-8

Initiation and duration of myogenic precursor cell replication in transplants of intact skeletal muscles: an autoradiographic study in mice. Roberts P, et al.
Anat Rec 1989 May;224(1):1-6

Appearance and function of voltage-dependent Ca2+ channels during pre- and postnatal development of cardiac and skeletal muscles. Renaud JF, et al.
Ann N Y Acad Sci 1989;560:418-25 (34 ref.)

Developmental regulation of contractile protein genes. Wade R, et al. **Annu Rev Physiol** 1989;51:179-88 (44 ref.)

Postlarval muscle growth in fish: a DNA flow cytometric and morphometric analysis. Alfei L, et al.
Basic Appl Histochem 1989;33(2):147-58

Aspects of linear growth of muscles in the indigenous Nigerian pig. Essien AI, et al.
Beitr Trop Landwirtsch Veterinarmed 1988;26(4):413-23

Age-dependent decrease of carnitine content in muscle of mice and humans. Costell M, et al.
Biochem Biophys Res Commun 1989 Jun 30;161(3):1135-43

Developmentally regulated slow troponin C messenger RNA in chicken skeletal and cardiac muscles. Berezowsky C, et al. **Biochem Cell Biol** 1988 Aug;66(8):880-8

Heterosis in body weight and muscle protein turnover rate in the coturnix quail. Maeda Y, et al. **Biochem Genet** 1988 Jun;26(5-6):395-9

Effects of a beta-adrenergic agonist on protein turnover in muscle cells in culture. McElligott MA, et al.
Biochem Pharmacol 1989 Jul 1;38(13):2199-205

Developing skeletal muscle: the importance of the physical properties of water. Hazlewood CF.
Biomed Biochim Acta 1989;48(5-6):S548-51

The relation between dietary restriction or clenbuterol (a selective beta 2 agonist) treatment on muscle growth and calpain proteinase (EC 3.4.22.17) and calpastatin activities in lambs. Higgins JA, et al. **Br J Nutr** 1988 Nov; 60(3):645-52

Effects of dietary-fish-oil feeding on muscle growth and damage in the rat. Jackson MJ, et al. **Br J Nutr** 1988 Sep; 60(2):217-24

Muscle growth and composition in heavy and light breed chickens adapted to intermittent feeding. Pinchasov Y, et al. **Br J Nutr** 1989 Mar;61(2):245-56

Plasma insulin, 3,5,3'-triiodothyronine concentrations and muscle growth in the rat [letter] Symonds ME.
Br J Nutr 1989 Mar;61(2):425-7

Evidence that the hypertrophic action of clenbuterol on denervated rat muscle is not propranolol-sensitive. Maltin CA, et al. **Br J Pharmacol** 1989 Apr;96(4):817-22

Defects in muscle fiber growth in fatal infantile cytochrome c oxidase deficiency. Nonaka I, et al. **Brain Dev** 1988; 10(4):223-30

Neural activity pattern is not necessary for the development of adult ultrastructure in katydid (Neoconocephalus robustus) singing muscles. Novicki A. **Cell Tissue Res** 1989 Mar;255(3):641-4

Studies of acetylcholine receptor subunit gene expression: chromatin structural changes during myogenesis. Crowder CM, et al. **Ciba Found Symp** 1988;138:52-70 (26 ref.)

Physiological factors influencing the growth of skeletal muscle. Eisenberg BR, et al. **Ciba Found Symp** 1988; 138:3-21

Hormonal control of myosin heavy chain genes during development of skeletal muscles. Rubinstein NA, et al.
Ciba Found Symp 1988;138:35-51 (20 ref.)

The change in the rate of muscle protein metabolism of rats from weaning to 90 days of age. Siebrits FK, et al.
Comp Biochem Physiol [A] 1989;92(4):485-8

Morphological research of the locomotor apparatus. Cihák R, et al. **Czech Med** 1989;12(1):40-52 (30 ref.)

Nerve and muscle development in paralysé mutant mice. Blondet B, et al. **Dev Biol** 1989 Mar;132(1):153-66

Myosin isoform transitions in regeneration of fast and slow muscles during postnatal development of the rat. d'Albis A, et al. **Dev Biol** 1989 Oct;135(2):320-5

Genetic analysis of muscle development in Drosophila melanogaster. de la Pompa JL, et al. **Dev Biol** 1989 Feb; 131(2):439-54

Tissue-specific transcriptional control of alpha- and beta-tropomyosins in chicken muscle development. Meinnel T, et al. **Dev Biol** 1989 Feb;131(2):430-8

Coordinate accumulation of troponin subunits in chicken breast muscle. Nakamura M, et al. **Dev Biol** 1989 Apr; 132(2):389-97

A novel human muscle factor related to but distinct from MyoD1 induces myogenic conversion in 10T1/2 fibroblasts. Braun T, et al. **EMBO J** 1989 Mar;8(3):701-9

Developmental expression of receptors for insulin, insulin-like growth factor I (IGF-I), and IGF-II in rat skeletal muscle. Alexandrides T, et al. **Endocrinology** 1989 Feb;124(2):1064-76

The postnatal development of sarcoplasmic reticulum Ca2+ transport activity in skeletal muscle of the rat is critically dependent on thyroid hormone. Simonides WS, et al.
Endocrinology 1989 Mar;124(3):1145-52

Contractile properties of human skeletal muscle in childhood and adolescence. Belanger AY, et al.
Eur J Appl Physiol 1989;58(6):563-7

Relationship between the tyrosination state of tubulin and the activities of tubulin:tyrosine ligase and tubulin carboxypeptidase in rat muscle during development. Alonso AC, et al. **Eur J Biochem** 1988 Nov 15; 177(3):517-22

Specific programs of myosin expression in the postnatal development of rat muscles. d'Albis A, et al.
Eur J Biochem 1989 Aug 15;183(3):583-90

Preservation of skeletal muscle hyperemic response to contraction with aging in female rats. Irion GL, et al.
Exp Gerontol 1988;23(3):183-8

Distinct dystrophin mRNA species are expressed in embryonic and adult mouse skeletal muscle. Dickson G, et al. **FEBS Lett** 1988 Dec 19;242(1):47-52

Six myosin heavy chain isoforms are expressed during chick breast muscle development. Hofmann S, et al.
FEBS Lett 1988 Oct 10;238(2):245-8

Developmental regulation of five subunit specific mRNAs encoding acetylcholine receptor subtypes in rat muscle. Witzemann V, et al. **FEBS Lett** 1989 Jan 2;242(2):419-24

A gene with homology to the myc similarity region of MyoD1 is expressed during myogenesis and is sufficient to activate the muscle differentiation program. Edmondson DG, et al. **Genes Dev** 1989 May;3(5):628-40

Regionalized adaptations and muscle fiber proliferation in stretch-induced enlargement. Alway SE, et al.
J Appl Physiol 1989 Feb;66(2):771-81

Developmental and muscle-specific regulation of avian fast skeletal troponin T isoform expression by mRNA splicing. Bucher EA, et al. **J Biol Chem** 1989 Jul 25;264(21):12482-91

Protection of phosphoglycerate kinase against in vitro aging by selective cysteine methylation. Cook LL, et al.
J Biol Chem 1988 Oct 5;263(28):13991-3

Molecular genetic characterization of a developmentally regulated human perinatal myosin heavy chain. Feghali R, et al. **J Cell Biol** 1989 May;108(5):1791-7

Distribution of fast myosin heavy chain isoforms in thick filaments of developing chicken pectoral muscle. Taylor LD, et al. **J Cell Biol** 1989 Feb;108(2):533-42

Sex-specific neuronal respecification during the metamorphosis of the genital segments of the tobacco hornworm moth Manduca sexta. Thorn RS, et al.
J Comp Neurol 1989 Jun 22;284(4):489-503

Ontogenesis of contractile properties of skeletal muscle and sprint performance in the lizard Dipsosaurus dorsalis. Marsh RL. **J Exp Biol** 1988 Jul;137:119-39

Evidence for tissue specific alterations in Zn2+-induced conformational changes in fructose-bisphosphatase of senescent rats. Trigun SK, et al. **J Inorg Biochem** 1989 Apr;35(4):255-66

Androgens modulate endplate size and ACh receptor density at synapses in rat levator ani muscle. Bleisch WV, et al.
J Neurobiol 1989 Jun;20(4):189-202

Morphometric analysis of normal skeletal muscles in infancy, childhood and adolescence. An autopsy study. Oertel G.
J Neurol Sci 1988 Dec;88(1-3):303-13

Basis for the assay of myogenic cell growth in vitro using creatine kinase activity as an index, with special reference to measurement of power ratio of transferrins in growth promotion. Hagiwara Y, et al. **Jpn J Pharmacol** 1989 Jan; 49(1):53-8

Myosin ATPase activity during avian cardiac and skeletal muscle development. Breckler JL, et al.
Mech Ageing Dev 1988 Dec;46(1-3):47-58

Inhibition of myogenic differentiation by the H-ras oncogene is associated with the down regulation of the MyoD1 gene. Konieczny SF, et al. **Oncogene** 1989 Apr;4(4):473-81

Growth characteristics of selected broiler muscles as affected by age and experimental pen design. Sandusky CL, et al.
Poult Sci 1988 Nov;67(11):1557-67

Effect of age, sex, and barriers in experimental pens on muscle growth. Sandusky CL, et al. **Poult Sci** 1988 Dec; 67(12):1708-16

Decrease in plasminogen activator correlates with synapse elimination during neonatal development of mouse skeletal muscle. Hantaï D, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):362-6

Effect of age on voluntary force and cross-sectional area of human adductor pollicis muscle. Bruce SA, et al.
Q J Exp Physiol 1989 May;74(3):359-62

Differential regulation of muscle and liver insulin receptors by energy restriction in growing rats. Balage M, et al.
Reprod Nutr Dev 1988;28(3B):819-20

Integration of carbohydrate and lipid metabolism in skeletal muscle during postnatal development. Chaliiss RA, et al.
Reprod Nutr Dev 1988;28(3B):805-15 (76 ref.)

Mammalian neuromuscular development accelerated with early but slowed with late gestational administration of ACTH peptide. Rose KJ, et al. **Synapse** 1988;2(3):200-4

[Polymorphism of acetylcholinesterase and myosin during development of fast and slow muscles denervated in the newborn rabbit] Bacou F, et al. **Reprod Nutr Dev** 1988; 28(3B):757-68 (Eng. Abstr.) **(Fre)**

[Hormonal determination of the differentiation of striated skeletal muscle in urodele amphibians] Chanoine C, et al.
Reprod Nutr Dev 1988;28(3B):721-31 (Eng. Abstr.) **(Fre)**

[Innervation, activity rhythm and accumulation of myosin light chains in a fast muscle of chickens] Gardahaut MF, et al. **Reprod Nutr Dev** 1988;28(3B):773-80 (Eng. Abstr.) **(Fre)**

[Regulation of the expression of alpha and beta tropomyosin genes during development of the pectoral muscle in the chicken] Meinnel T, et al. **Reprod Nutr Dev** 1988; 28(3B):715-20 (Eng. Abstr.) **(Fre)**

[Calpains, protein kinase c and development of muscle tissue] Savart M, et al. **Reprod Nutr Dev** 1988;28(3B):825-9 (28 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Electrophoretic immunoblotting analysis of anti-thymus microsome antibodies in patients with myasthenia gravis. Hazama T, et al. **Acta Neurol Scand** 1989 Feb;79(2):88-96

IgM paraprotein reactive with muscle antigens associated with autonomic and peripheral neuropathy. Green AR, et al. **Br J Haematol** 1989 May;72(1):108-9

T and B cell reactivity to extraocular and skeletal muscle in Graves' ophthalmopathy. Weetman AP, et al.
Br J Ophthalmol 1989 May;73(5):323-7

Peripheral nerve injury causes transient expression of MHC class I antigens in rat motor neurons and skeletal muscles. Maehlen J, et al. **Brain Res** 1989 Mar 6;481(2):368-72

Two monoclonal antibodies to actin: one muscle selective and one generally reactive. Lessard JL.
Cell Motil Cytoskeleton 1988;10(3):349-62

Non-desensitizing in vitro anaphylactic reaction of chicken visceral muscle. Garcia X, et al.
Comp Biochem Physiol [C] 1988;91(2):287-92

Eye muscle antibodies in endocrine exophthalmos. Clinical and serological observations. Kahaly G, et al.
Horm Metab Res 1989 Mar;21(3):137-41

Major histocompatibility complex class I antigen expression, immunolocalization of interferon subtypes, and T cell-mediated cytotoxicity in myopathies. Emslie-Smith AM, et al. **Hum Pathol** 1989 Mar;20(3):224-31

Structural and immunological characterization of the myosin-like 110-kD subunit of the intestinal microvillar 110K-calmodulin complex: evidence for discrete myosin head and calmodulin-binding domains. Carboni JM, et al.
J Cell Biol 1988 Nov;107(5):1749-57

Comparative study of invertebrate actins: antigenic cross-reactivity versus sequence variability. Hue HK, et al. **J Muscle Res Cell Motil** 1989 Apr;10(2):135-42

Differences between ocular and generalized myasthenia gravis: binding characteristics of anti-acetylcholine receptor antibody against bovine muscles. Hayashi M, et al. **J Neuroimmunol** 1989 Feb;21(2-3):227-33

Lambert-Eaton myasthenic syndrome: the lack of short-term in vitro effects of serum factors on neuromuscular transmission. Kim YI, et al. **J Neurol Sci** 1988 Oct; 87(1):1-13

IgG endomysial antibodies in IgA-deficient patient with coeliac disease [letter] Beutner EH, et al. **Lancet** 1989 Jun

3;1(8649):1261–2
Non-receptor striated muscle antibodies in sera from patients with myasthenia gravis. Aarli JA, et al. **Monogr Allergy** 1988;25:128–34 (23 ref.)
Soluble CD4 blocks the infectivity of diverse strains of HIV and SIV for T cells and monocytes but not for brain and muscle cells. Clapham PR, et al. **Nature** 1989 Jan 26; 337(6205):368–70
Expression of major histocompatibility complex class I antigens in rat muscle cultures: the possible developmental role in myogenesis. Honda H, et al.
Proc Natl Acad Sci U S A 1989 Sep;86(18):7007–11

INJURIES

The cricothyroid muscle after cricothyroidotomy. A porcine experimental study. Holst M, et al.
Acta Otolaryngol (Stockh) 1989 Jan–Feb;107(1–2):136–40
Improvement of the local tolerance of a potassium penicillin G formulation for injection. Dall V, et al.
Acta Vet Scand 1988;29(1):101–7
Investigative study of radiopharmaceuticals useful for imaging skeletal muscle injury in experimental animals. Owunwanne A, et al. **Am J Physiol Imaging** 1989;4(2):62–5
A rupture of the serratus anterior [letter] Burdett-Smith P, et al. **Arch Emerg Med** 1988 Sep;5(3):191
Neck sprains after car accidents. Porter KM. **BMJ** 1989 Apr 15;298(6679):973–4 (12 ref.)
Rupture of the gastrocnemius muscle in a camel. Purohit NR, et al. **Br Vet J** 1989 May–Jun;145(3):293
A comparison of muscle precursor replication in crush-injured skeletal muscle of Swiss and BALBc mice. Grounds MD, et al. **Cell Tissue Res** 1989 Feb;255(2):385–91
Diagnosis of acute myocardial infarction when skeletal muscle damage is present: a caveat regarding use of creatine kinase isoenzymes [letter] Burns DE. **Clin Chem** 1989 Apr; 35(4):705
Postural angles as an indicator of postural load and muscular injury in occupational work situations. Aarås A, et al.
Ergonomics 1988 Jun;31(6):915–33
Serum and urinary markers of skeletal muscle tissue damage after weight lifting exercise. Paul GL, et al.
Eur J Appl Physiol 1989;58(7):786–90
Muscular injury in a child diagnosed by 99mTc-MDP bone scan. Tondeur M, et al. **Eur J Nucl Med** 1989;15(6):328–9
Shoulder pain and repetition strain injury to the supraspinatus muscle: etiology and manipulative treatment. Jacobson EC, et al. **J Am Osteopath Assoc** 1989 Aug;89(8):1037–40, 1043–5
Enzymatic estimation of skeletal muscle damage by analysis of changes in serum creatine kinase. Apple FS, et al.
J Appl Physiol 1988 Dec;65(6):2598–600
Biomechanical assessment of the effects of significant hamstring injury: an isokinetic study. Paton RW, et al.
J Biomed Eng 1989 May;11(3):229–30
Segmental necrosis and its demarcation in experimental micropuncture injury of skeletal muscle fibers. Carpenter S, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):154–70
Blood indices of muscle injury associated with eccentric muscle contractions. Fridén J, et al. **J Orthop Res** 1989; 7(1):142–5
AAOS/NIH/ORS workshop. Injury and repair of the musculoskeletal soft tissues. Savannah, Georgia, June 18–20, 1987. Woo SL, et al. **J Orthop Res** 1988;6(6):907–31
Observations on clinical therapeutic effect in treating soft tissue injuries by acupuncture, with pain threshold and electromyography as parameters. Yuan CX, et al.
J Tradit Chin Med 1989 Mar;9(1):40–4
Characterization of muscles injured by forced lengthening. II. Proteoglycans. Fritz VK, et al.
Med Sci Sports Exerc 1988 Aug;20(4):354–61
Characterization of muscles injured by forced lengthening. I. Cellular infiltrates. Stauber WT, et al.
Med Sci Sports Exerc 1988 Aug;20(4):345–53
Neuronal control of extrajunctional acetylcholine receptor-channels induced by injury in frog skeletal muscle fibres. Reiser G, et al. **Pflugers Arch** 1989 Jun;414(2):113–7
Musculoskeletal trauma. **Radiol Clin North Am** 1989 Sep; 27(5):839–1057
Magnetic resonance imaging of musculoskeletal injuries. Deutsch AL, et al. **Radiol Clin North Am** 1989 Sep; 27(5):983–1002 (79 ref.)
Conventional tomography in musculoskeletal trauma. Ho C, et al. **Radiol Clin North Am** 1989 Sep;27(5):929–32
Ultrasonography of post-traumatic soft-tissue lesions. Kaplan PA, et al. **Radiol Clin North Am** 1989 Sep;27(5):973–82
Scintigraphic techniques in musculoskeletal trauma. McDougall IR, et al. **Radiol Clin North Am** 1989 Sep; 27(5):1003–11 (49 ref.)
Sports-related muscle injuries: evaluation with MR imaging. Fleckenstein JL, et al. **Radiology** 1989 Sep;172(3):793–8
Diagnosis and treatment of musculoskeletal running injuries. Paty JG Jr. **Semin Arthritis Rheum** 1988 Aug;18(1):48–60 (45 ref.)
Management of open musculoskeletal injuries. Aron DN.
Semin Vet Med Surg (Small Anim) 1988 Nov;3(4):290–301 (222 ref.)
The incidence and prognostic significance of radiological abnormalities in soft tissue injuries to the cervical spine. Miles KA, et al. **Skeletal Radiol** 1988;17(7):493–6
Limited sensitivity of ultrasound for the detection of rotator cuff tears. Miller CL, et al. **Skeletal Radiol** 1989; 18(3):179–83
Sarcolemma blebs and cell damage in mammalian skeletal muscle. Duncan CJ, et al. **Tissue Cell** 1989;21(2):211–7
[Injuries and damage of the muscles and their insertions] Puhl W. **Chirurg** 1988 Nov;59(11):697–700 (16 ref.) **(Ger)**
[High resolution real time sonography in sports specific muscle injuries. Sonomorphologic-anatomic correlation and diagnostic criteria] Hannesschläger G, et al.
Sportverletz Sportschaden 1988 Jun;2(2):45–54 (Eng. Abstr.) **(Ger)**
[The injured and the immobilized muscle cell: ultrastructural observations] Lüthi JM, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):58–61 (Eng. Abstr.) **(Ger)**
[Osseous avulsion of the opponens pollicis muscle. Case report of a rare injury in skiing] Pechlaner S, et al.
Sportverletz Sportschaden 1989 Mar;3(1):41–2 (Eng. Abstr.) **(Ger)**
[Ultrasound diagnosis of soft tissue injuries of the locomotor system] Pfister A, et al. **Sportverletz Sportschaden** 1987 Jun; 1(2):91–5 (Eng. Abstr.) **(Ger)**
[Bilateral rupture of two head flexors with synchondrolysis of the base of the skull in a horse] Durchfeld B, et al. **Tierarztl Prax** 1989;17(1):71–2 (Eng. Abstr.) **(Ger)**
[Injuries of the biceps brachii muscle with special reference to surgical therapy] Freiherr von Salis-Soglio G, et al.
Z Orthop 1988 Dec;126(6):683–7 (Eng. Abstr.) **(Ger)**
[Spontaneous rupture of the tendon of the musculus extensor hallucis longus] Langenberg R. **Zentralbl Chir** 1989; 114(6):400–3 **(Ger)**
[A heparin-glucuronylglucosaminoglycan combination for topical use. An evaluation of the therapeutic effects in induced experimental muscle damage and in minor sports injuries] Dragani L, et al. **Minerva Med** 1989 Apr; 80(4):397–403 (Eng. Abstr.) **(Ita)**
[Distension of the mucous bursa of the iliopsoas muscle: a rare expansive process of the pelvic cavity] Bagnolesi P, et al. **Radiol Med (Torino)** 1989 May;77(5):559–61 **(Ita)**
[Treatment of rupture of the supraspinous muscle] Anisimov VN. **Ortop Travmatol Protez** 1988 Aug;(8):30–2 (Eng. Abstr.) **(Rus)**
[A method of treating wounds of skeletal muscles] D'iachkov AN. **Ortop Travmatol Protez** 1988 Nov;(11):63–4 **(Rus)**
[Cervical rib syndrome] Greida BP. **Vestn Khir** 1988 Jun; 140(6):45–6 **(Rus)**

INNERVATION

Fine structural localization of non-specific cholinesterase activity in rat tendon organs. Dubový P, et al.
Acta Histochem (Jena) 1989;85(2):195–202
Some basic features of the pathological and normal motor system studied by chronic deep electrodes. Tóth S, et al.
Acta Neurochir Suppl (Wien) 1989;46:31–6
Polyglucosan bodies in intramuscular motor nerves. Bernsen RA, et al. **Acta Neuropathol (Berl)** 1989;77(6):629–33
Selective innervation of neonatal fast and slow muscle fibres before net loss of synaptic terminals in the mouse soleus muscle. Fladby T, et al. **Acta Physiol Scand** 1988 Dec; 134(4):561–2
Electric muscle stimulation in the hind leg of the spontaneously hypertensive rat induces a long-lasting fall in blood pressure. Hoffmann P, et al.
Acta Physiol Scand 1988 Jun;133(2):211–9
The role of cervical inputs in compensation of unilateral labyrinthectomized patients. Kobayashi Y, et al.
Adv Otorhinolaryngol 1988;42:185–9
Histological and neurophysiological changes induced by carrageenan in skeletal muscle of cat and rat. Diehl B, et al. **Agents Actions** 1988 Dec;25(3–4):210–3
Innervation of developing intrafusal muscle fibers in the rat. Kucera J, et al. **Am J Anat** 1988 Dec;183(4):344–58
Lower extremity manifestations of spasticity in chronic spinal cord injury. Little JW, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):32–6
Adrenalectomy eliminates both fiber-type differences and starvation effects on denervated muscle. Almon RR, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):E850–6
Hormonal and metabolic responses to exercise in humans: effect of sensory nervous blockade. Kjaer M, et al.
Am J Physiol 1989 Jul;257(1 Pt 1):E95–101
Sympathetic outflow to resting muscles during static handgrip and postcontraction muscle ischemia. Wallin BG, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H105–10
Innervation of the scapular muscles and its morphological significance in man. Kato K. **Anat Anz** 1989;168(2):155–68
Localization of proprioceptive neurons innervating the muscle spindles of pig extraocular muscles studied by horseradish peroxidase labelling. Kubota K, et al.
Anat Anz 1988;166(1–5):117–31
Postnatal development of the annulospiral endings of Ia fibers in muscle spindles of the mouse temporal muscle. Osawa K, et al. **Anat Anz** 1988;167(4):253–7
Muscle receptors: content of some of the extrinsic and intrinsic muscles of the larynx in the bonnet monkey (Macaca radiata). Raman R, et al. **Anat Rec** 1989 Apr; 223(4):433–6
Musculotopic innervation of the primary flight muscles, the pectoralis (Pars thoracicus) and supracoracoideus, of the pigeon (Columba livia): a WGA-HRP Study. Sokoloff A, et al. **Anat Rec** 1989 Sep;225(1):35–40
Changes in muscle sympathetic nerve activity, venous plasma catecholamines, and calf vascular resistance during mechanical ventilation with PEEP in humans. Sellden H, et al. **Anesthesiology** 1989 Feb;70(2):243–50
Structural basis for three-dimensional coding in the vestibulospinal reflex. Morphology of single vestibulospinal axons in the cervical cord. Shinoda Y, et al.
Ann N Y Acad Sci 1988;545:216–27 (28 ref.)
Contamination of trigeminal evoked potentials by muscular artifacts [letter] Leandri M, et al. **Ann Neurol** 1989 May; 25(5):527–8
Hypoxia-sensitive hyperexcitability of the intramuscular nerve axons in Isaacs' syndrome. Oda K, et al.
Ann Neurol 1989 Feb;25(2):140–5
Selective reinnervation of the abductor and adductor muscles of the canine larynx after recurrent nerve paralysis. Marie JP, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):530–6
The spinal accessory nerve plexus, the trapezius muscle, and shoulder stabilization after radical neck cancer surgery. Brown H, et al. **Ann Surg** 1988 Nov;208(5):654–61 (13 ref.)
A further observation of multiaxonal nerve endings innervating intrafusal muscle fibers of the Chinese hamster. Desaki J, et al. **Arch Histol Jpn** 1988 Dec;51(5):453–7
Structure of motor endplates in the different fiber types of vertebrate skeletal muscles. Ogata T. **Arch Histol Jpn** 1988 Dec;51(5):385–424 (137 ref.)
Inhibition of vestibulospinal reflexes during the episodes of postural atonia induced by unilateral lesion of the locus coeruleus in the decerebrate cat. D'Ascanio P, et al.
Arch Ital Biol 1989 Mar;127(2):81–97
The spinal accessory nerve in childhood hemiplegia. Marcus JC. **Arch Neurol** 1989 Jan;46(1):60–1
The premotor potential. Dumitru D, et al.
Arch Phys Med Rehabil 1989 Jul;70(7):537–40
Neuroprostheses, lessons to be learned [editorial] Nosé Y.
Artif Organs 1989 Jun;13(3):181–2
Muscle afferent activity and its central projection in man. Burke D. **Aust Paediatr J** 1988;24 Suppl 1:109–12 (27 ref.)
Physiological accompaniments of human muscle fatigue. Gandevia SC. **Aust Paediatr J** 1988;24 Suppl 1:104–8 (44 ref.)
Nerve-muscle interactions in the embryo. Laing NG.
Aust Paediatr J 1988;24 Suppl 1:40–2 (40 ref.)
Aspects of peripheral motor system development. Lamb AH.
Aust Paediatr J 1988;24 Suppl 1:37–9 (40 ref.)
Association of lower motor neuron disorders with fasciculation, neuromyotonia and myoclonus. Lance JW.
Aust Paediatr J 1988;24 Suppl 1:113–5 (13 ref.)
Inhibition and excitation of neck and shoulder muscles during unilateral electrical stimulation of the rat neostriatum. Kelland MD, et al. **Behav Brain Res** 1988 Sep 1;30(1):1–13
Optokinetic eye and head movements in the unrestrained cat. Schweigart G, et al. **Behav Brain Res** 1988 Dec 1; 31(2):121–30
Head and body movements evoked electrically from the caudal superior colliculus of rats: pulse frequency effects. Tehovnik EJ. **Behav Brain Res** 1989 Aug 1;34(1–2):71–8
Performance of a weight-lifting task by normal and deafferented monkeys. Wylie RM, et al. **Behav Neurosci** 1989 Apr;103(2):273–82
Size-related differences in the branching pattern of the motor nerve terminals in triangularis sterni muscle of the mouse. Tomasi J, et al. **Biol Cell** 1989;65(3):271–80
Decrease of motoneuron excitability during stretching of the human soleus. Guissard N, et al. **Biomed Biochim Acta** 1989; 48(5–6):S489–92
Changes of the conduction velocity of isolated muscles induced by altered external potassium concentration. Kössler F, et al. **Biomed Biochim Acta** 1989;48(5–6):S465–70
Muscle afferents and the neural dynamics of limb position and velocity sensations. Ewert DL, et al.
Biomed Sci Instrum 1989;25:7–12
The role of partial denervation of the pelvic floor in the aetiology of genitourinary prolapse and stress incontinence of urine. A neurophysiological study. Smith AR, et al.
Br J Obstet Gynaecol 1989 Jan;96(1):24–8
Accidental reinnervation as a complication of latissimus dorsi free flap to the face and scalp. Stranc MF, et al.
Br J Plast Surg 1989 May;42(3):341–3
Spastic dysphonia and denervation signs in a young man with tardive dyskinesia. Lieberman JA, et al.
Br J Psychiatry 1989 Jan;154:105–9
Evolution of vertebrate motor systems for acoustic and electric communication: peripheral and central elements. Bass AH. **Brain Behav Evol** 1989;33(4):237–47 (74 ref.)
Generation of reaching movements: plausibility and implications of the equilibrium trajectory hypothesis. Flash T. **Brain Behav Evol** 1989;33(2–3):63–8
Head tilt produced by hemilabyrinthectomy does not depend on the direct vestibulospinal tracts. Fukushima K, et al.
Brain Behav Evol 1988;32(3):181–6
Somatotopic representation in inferior area 6 of the macaque monkey. Gentilucci M, et al. **Brain Behav Evol** 1989; 33(2–3):118–21
Location of motoneurons supplying the intrinsic laryngeal muscles of rats. Horseradish peroxidase and fluorescence double-labeling study. Portillo F, et al.
Brain Behav Evol 1988;32(4):220–5
Sensory and motor functions of the superior parietal cortex of the monkey as revealed by single-neuron recordings. Seal J. **Brain Behav Evol** 1989;33(2–3):113–7
Peripheral nerve involvement in Werdnig-Hoffmann disease. Chien YY, et al. **Brain Dev** 1989;11(4):221–9
Re-afferent effects of individual static and dynamic gamma-stimuli during maintained fusimotor stimulation.

Awiszus F, et al. **Brain Res** 1989 Jun 5;489(1):41–8

Electric vs magnetic trans-cranial stimulation of the brain in healthy humans: a comparative study of central motor tracts 'conductivity' and 'excitability'. Caramia MD, et al. **Brain Res** 1989 Feb 6;479(1):98–104

The effects of NH3 and CO2 on the sensory ending of mammalian muscle spindles: intracellular pH as a possible mechanism. Fukami Y. **Brain Res** 1988 Oct 25;463(1):140–3

Modulation of reflex responses during fictive locomotion in the forelimb of the cat. Hishinuma M, et al. **Brain Res** 1989 Mar 13;482(1):184–8

Distribution of activity within the cat's peroneus longus muscle when activated in different ways via the central nervous system. Kandou TW, et al. **Brain Res** 1989 May 8;486(2):340–50

Neuronal origin of parallel suppression of postural tone and respiration elicited by stimulation of midpontine dorsal tegmentum in the decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Dec 6;474(2):403–6

Parallel suppression of extensor muscle tone and respiration by stimulation of pontine dorsal tegmentum in decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Nov 8;473(1):81–90

An analysis of frequency response of motor units during voluntary isometric contractions at various speeds. Oishi K, et al. **Brain Res** 1988 Aug 23;458(2):261–8

Seasonal changes in the normal variability in release properties of motor nerve terminals in Rana pipiens. Pawson PA, et al. **Brain Res** 1989 Aug 21;495(1):182–8

Changes in the properties of synaptic channels opened by acetylcholine in denervated frog muscle. Reiser G, et al. **Brain Res** 1989 Feb 6;479(1):83–97

Neuronal organization of the stapedius reflex pathways in the rat: a retrograde HRP and viral transneuronal tracing study. Rouiller EM, et al. **Brain Res** 1989 Jan 2;476(1):21–8

Peripheral regulation of stiffness during arm movements by coactivation of the antagonist muscles. Simmons RW, et al. **Brain Res** 1988 Nov 8;473(1):134–40

Fusimotor neurones can be reflexly influenced by activity in receptor afferents from the posterior cruciate ligament. Sojka P, et al. **Brain Res** 1989 Mar 27;483(1):177–83

Carbonic anhydrase activity in the peripheral nervous system of rat: the enzyme as a marker for muscle afferents. Szabolcs MJ, et al. **Brain Res** 1989 Jul 17;492(1–2):129–38

Postnatal growth of medial gastrocnemius motoneurons in the kitten. Tatton WG, et al. **Brain Res** 1988 Oct 1; 471(2):191–206

Mixed-junction axon terminals on identified principal abducens motoneurons in the monitor lizard. Wouterlood FG, et al. **Brain Res** 1988 Oct 25;463(1):198–203

Late flexion reflex in paraplegic patients. Evidence for a spinal stepping generator. Bussel B, et al. **Brain Res Bull** 1989 Jan;22(1):53–6 (22 ref.)

Do the corticospinal and corticobulbar tracts mediate functions in the human newborn? Sarnat HB. **Can J Neurol Sci** 1989 May;16(2):157–60

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. II. Nerve implantation (pilot study). Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):210–5

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. III. Nerve anastomosis. Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):216–23

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. I. Nerve-muscle pedicle transplants. Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):202–9

An attempt to prevent or delay denervation changes in rat muscles. Schwartz J, et al. **Cell Mol Biol** 1989;35(2):129–36

Quantitative investigation of the neuromuscular junction of rat skeletal muscle fibres after double innervation. Huang SK, et al. **Cell Tissue Res** 1989 Jan;255(1):209–13

Plasticity of the neuromuscular system. **Ciba Found Symp** 1988;138:1–273

Mechanism of interaction between motoneurons and muscles. Brown MC, et al. **Ciba Found Symp** 1988;138:78–96 (31 ref.)

Model for the study of plasticity of the human nervous system: features of residual spinal cord motor activity resulting from established post-traumatic injury. Dimitrijevic MR. **Ciba Found Symp** 1988;138:227–39 (10 ref.)

The role of muscle in the development and differentiation of spinal motoneurons: in vitro studies. Henderson CE. **Ciba Found Symp** 1988;138:172–91 (27 ref.)

Reorganization of synaptic inputs to developing skeletal muscle fibres. Vrbová G, et al. **Ciba Found Symp** 1988; 138:131–51

Beta-adrenergic receptor distribution among muscle fiber types and resistance arterioles of white, red, and intermediate skeletal muscle. Martin WH 3d, et al. **Circ Res** 1989 Jun;64(6):1096–105

Effects of partial neuromuscular blockade on sympathetic nerve responses to static exercise in humans. Victor RG, et al. **Circ Res** 1989 Aug;65(2):468–76

Nifedipine potentiates cardiopulmonary baroreflex control of sympathetic nerve activity in healthy humans. Direct evidence from microneurographic studies. Ferguson DW, et al. **Circulation** 1989 Aug;80(2):285–98

A rare case of recurrent vasodepressive attacks of 2-hours duration: analysis of the mechanism by muscle sympathetic nerve activity recording. Yatomi A, et al. **Clin Cardiol** 1989 Mar;12(3):164–8

Motor unit organization in developing muscle. Ridge RM. **Comp Biochem Physiol [A]** 1989;93(1):115–23 (40 ref.)

Slowing of synapse elimination by alpha-bungarotoxin superfusion of the neonatal rabbit soleus muscle. Callaway EM, et al. **Dev Biol** 1989 Feb;131(2):356–65

Distinct roles for adhesion molecules during innervation of embryonic chick muscle. Landmesser L, et al. **Dev Biol** 1988 Dec;130(2):645–70

Lack of fiber type selectivity during reinnervation of neonatal rabbit soleus muscle. Soha JM, et al. **Dev Biol** 1989 Feb; 131(2):401–14

The cortical distribution of muscle and cutaneous afferent projections from the human foot. Macefield G, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):518–28

Extracellular potentials produced by a transition between an inactive and active regions of an excitable fibre. Dimitrov GV, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug; 29(5):265–71

Electrophysiologic study of the Riche-Cannieu anomaly. Dumitru D, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):27–31

A noninvasive EMG technique for investigating the excitation propagation in single motor units. Schneider J, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug; 29(5):273–80

Where is the ideal reference site for recording the thenar compound muscle action potential. Wee AS, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):249–52

Changes in human alpha-motoneurone excitability following mechanical muscle stimuli. Claus D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):140–3

Motor evoked responses recorded epidurally in a patient with Guillain-Barré syndrome. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):31–2

Projections of group Ia afferents to motoneurons of thigh muscles in man. Bayoumi A, et al. **Exp Brain Res** 1989; 76(1):223–8

Disturbances of motor output in a cat hindlimb muscle after acute dorsal spinal hemisection. Blaschak MJ, et al. **Exp Brain Res** 1988;71(2):377–87

Comparison of effects of monoamines on transmission in spinal pathways from group I and II muscle afferents in the cat. Bras H, et al. **Exp Brain Res** 1989;76(1):27–37

Modulation of lemniscal input during conditioned arm movements in the monkey. Chapman CE, et al. **Exp Brain Res** 1988;72(2):316–34

Control from the brainstem of synchrony of discharge between gamma motoneurones in the cat. Davey NJ, et al. **Exp Brain Res** 1988;72(2):249–63

The nucleus accumbens and forelimb muscular rigidity in rats. Ellenbroek BA, et al. **Exp Brain Res** 1988; 72(2):299–304

Peripheral effects on the amplitude of monopolar and bipolar H-reflex potentials from the soleus muscle. Gerilovsky L, et al. **Exp Brain Res** 1989;76(1):173–81

The responses of muscle spindles in the kitten to stretch and vibration. Gregory JE, et al. **Exp Brain Res** 1988; 73(3):606–14

Post-tetanic influences on primary afferent depolarization in the cat spinal cord. Gynther BD, et al. **Exp Brain Res** 1989; 74(2):365–74

Projections from the rostral mesencephalic reticular formation to the spinal cord. An HRP and autoradiographical tracing study in the cat. Holstege G, et al. **Exp Brain Res** 1989;75(2):265–79

Inhomogeneous activation of motoneurone pools as revealed by co-contraction of antagonistic human arm muscles. Jongen HA, et al. **Exp Brain Res** 1989;75(3):555–62

A comparison of homonymous and heteronymous connectivity in the spinal monosynaptic reflex arc of the cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):480–92

Influences of morphology and topography of motoneurons and muscle spindle afferents on amplitude of single fiber excitatory postsynaptic potentials in cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):493–500

Reflex inhibition in single motor units of the human lateral pterygoid muscle. McMillan AS, et al. **Exp Brain Res** 1989; 76(1):97–102

Function and structure of atypical muscle spindles after neonatal nerve crush in rats. Paleček J, et al. **Exp Brain Res** 1989;74(2):417–20

Do muscle afferents contribute to the cervical response evoked by electrical stimulation of the median nerve in man? Reni L, et al. **Exp Brain Res** 1988;72(2):305–15

Alteration of proprioceptive messages induced by tendon vibration in man: a microneurographic study. Roll JP, et al. **Exp Brain Res** 1989;76(1):213–22

Cutaneous control of group I pathways from ankle flexors to extensors in man. Rossi A, et al. **Exp Brain Res** 1988; 73(1):8–14

Single medullary reticulospinal neurons exert postsynaptic inhibitory effects via inhibitory interneurons upon alpha-motoneurons innervating cat hindlimb muscles. Takakusaki K, et al. **Exp Brain Res** 1989;74(1):11–23

Properties and localization of the anterior semicircular canal-activated vestibulocollic neurons in the cat. Uchino Y, et al. **Exp Brain Res** 1988;71(2):345–52

Operant conditioning of primate triceps surae H-reflex produces reflex asymmetry. Wolpaw JR, et al. **Exp Brain Res** 1989;75(1):35–9

Relation between muscle response onset and body segmental movements during postural perturbations in humans. Woollacott MH, et al. **Exp Brain Res** 1988;72(3):593–604

Functional innervation and contractile properties of the human iris sphincter muscle. Yoshitomi T, et al. **Exp Eye Res** 1988 Jun;46(6):979–86

Coexistent Hoffmann reflexes in human leg muscles are commonly due to volume conduction [letter] Myklebust BM, et al. **Exp Neurol** 1989 Apr;104(1):91

Expression of RNA transcripts for the postsynaptic 43 kDa protein in innervated and denervated rat skeletal muscle. Froehner SC. **FEBS Lett** 1989 Jun 5;249(2):229–33

The effect of neonatal deafferentation or defferentation on myosin heavy chain expression in intrafusal muscle fibers of the rat. Kucera J, et al. **Histochemistry** 1988;90(2):151–60

Age-related changes in muscle sympathetic nerve activity in essential hypertension. Yamada Y, et al. **Hypertension** 1989 Jun;13(6 Pt 2):870–7

Orderly stimulation of skeletal muscle motor units with tripolar nerve cuff electrode. Baratta R, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):836–43

Topographical map of innervation zones within single motor units measured with a grid surface electrode. Masuda T, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):623–8

Somatosensory evoked potential changes during muscle testing. Leisman G, et al. **Int J Neurosci** 1989 Mar; 45(1–2):143–51

Anomalous intrinsic hand muscle innervation in median and ulnar nerve lesions: an electrophysiological study. Uncini A, et al. **Ital J Neurol Sci** 1988 Oct;9(5):497–503

Burn injury to trunk of rat causes denervation-like responses in the gastrocnemius muscle. Kim C, et al. **J Appl Physiol** 1988 Oct;65(4):1745–51

Sympathetic nerve activity in arm and leg muscles during lower body negative pressure in humans. Rea RF, et al. **J Appl Physiol** 1989 Jun;66(6):2778–81

Hypoxemia raises muscle sympathetic activity but not norepinephrine in resting humans. Rowell LB, et al. **J Appl Physiol** 1989 Apr;66(4):1736–43

Responses in muscle sympathetic activity to acute hypoxia in humans. Saito M, et al. **J Appl Physiol** 1988 Oct; 65(4):1548–52

Plasma norepinephrine and muscle sympathetic discharge during rhythmic exercise in humans. Seals DR, et al. **J Appl Physiol** 1988 Aug;65(2):940–4

A comparison of the effects of intrathecally administered 5-hydroxytryptamine and thyrotropin-releasing hormone on renal and muscle sympathetic nerve activity. Yusof AP, et al. **J Auton Nerv Syst** 1988 Sep;23(3):181–7

Sympathetic nerve discharge is coupled to muscle cell pH during exercise in humans [published erratum appears in J Clin Invest 1988 Dec;82(6):following 2181] Victor RG, et al. **J Clin Invest** 1988 Oct;82(4):1301–5

Isolated phasic discharges in anterior tibial muscle: a stable feature of paradoxical sleep. Askenasy JJ, et al. **J Clin Neurophysiol** 1988 Apr;5(2):175–81

Quantitative analysis of individual motor unit potentials: a proposition for standardized terminology and criteria for measurement. Stålberg E, et al. **J Clin Neurophysiol** 1986 Oct;3(4):313–48 (75 ref.)

Compartmental and topographical distributions of axons in nerves to the amphibian (Bufo marinus) glutaeus muscle. Brown DR, et al. **J Comp Neurol** 1989 Jun 8;284(2):231–41

Kinesthetic cortical area anterior to primary somatic sensory cortex in the raccoon (Procyon lotor). Feldman SH, et al. **J Comp Neurol** 1988 Nov 1;277(1):80–95

Motor nuclei of peroneal muscles in the cat spinal cord. Horcholle-Bossavit G, et al. **J Comp Neurol** 1988 Nov 15; 277(3):430–40

Morphological identification of the motor neurons innervating the dorsal longitudinal flight muscle of Drosophila melanogaster. Ikeda K, et al. **J Comp Neurol** 1988 Jul 15;273(3):436–44

Neural control of leg movements in a metamorphic insect: persistence of larval leg motor neurons to innervate the adult legs of Manduca sexta. Kent KS, et al. **J Comp Neurol** 1988 Oct 1;276(1):30–43

Migration of Schwann cells and axons into developing chick forelimb muscles following removal of either the neural tube or the neural crest. Noakes PG, et al. **J Comp Neurol** 1988 Nov 8;277(2):214–33

Location of forelimb motoneurons in the Japanese toad (Bufo japonicus): a horseradish peroxidase study. Oka Y, et al. **J Comp Neurol** 1989 Aug 15;286(3):376–83

Calbindin-immunoreactive sensory neurons of dorsal root ganglion project to skeletal muscle in the chick. Philippe E, et al. **J Comp Neurol** 1989 May 1;283(1):153–60

Target dependence of hypoglossal motor neurons during development in maturity. Snider WD, et al. **J Comp Neurol** 1989 Jan 15;279(3):489–98

Effects of increasing ploidy on the lumbar lateral motor column and hindlimb of newly metamorphosed Xenopus laevis: a comparison of diploid and triploid siblings. Sperry DG. **J Comp Neurol** 1988 Nov 22;277(4):499–508

Postnatal development of cat hind limb motoneurons. III: Changes in size of motoneurons supplying the triceps surae muscle. Ulfhake B, et al. **J Comp Neurol** 1988 Dec 1; 278(1):103–20

Postnatal development of cat hind limb motoneurons. I: Changes in length, branching structure, and spatial distribution of dendrites of cat triceps surae motoneurons. Ulfhake B, et al. **J Comp Neurol** 1988 Dec 1;278(1):69–87

Postnatal development of cat hind limb motoneurons. II: In vivo morphology of dendritic growth cones and the maturation of dendrite morphology. Ulfhake B, et al.

J Comp Neurol 1988 Dec 1;278(1):88–102
Different subsets of axonal guidance cues are essential for sensory neurite outgrowth to cutaneous and muscle targets in the dorsal ramus of the embryonic chick. Tosney KW, et al. **J Exp Zool** 1989 Aug;251(2):232–44
Aberrant reinervation of the stapedius muscle following facial palsy. McFerran DJ, et al. **J Laryngol Otol** 1989 Feb; 103(2):205–6
Cybernetic model of psychophysiologic pathways: III. Clinical impairment of tension and kinesthesia. Leisman G. **J Manipulative Physiol Ther** 1989 Aug;12(4):275–80
Growth of inhibitory innervation in a lobster muscle. Govind CK, et al. **J Morphol** 1989 Feb;199(2):197–205
Proctolin: a review with emphasis on insects. Orchard I, et al. **J Neurobiol** 1989 Jul;20(5):470–96 (125 ref.)
Anatomical specificity of regenerated muscle sensory afferents in the spinal cord of the bullfrog. Peng YY, et al. **J Neurobiol** 1988 Dec;19(8):727–42
Common and specific inhibition in leg muscles of decapods: sharpened distinctions. Wiens TJ. **J Neurobiol** 1989 Jul; 20(5):458–69 (62 ref.)
Short-latency autogenic inhibition (IB inhibition) in human spasticity. Delwaide PJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1546–50
Hand muscle reflexes following electrical stimulation in choreatic movement disorders. Deuschl G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):755–62
Afferents contributing to the exaggerated long latency reflex response to electrical stimulation in Parkinson's disease. Hunter JP, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1405–10
Vestibular hyperreactivity in patients with idiopathic spasmodic torticollis. Huygen PL, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):782–5
Finger tremor in Parkinson's disease. Lakie M, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):392–4
Reorganization of motor units in reinnervated muscles of the rat. Albani M, et al. **J Neurol Sci** 1988 Dec;88(1–3):195–206
A light and electron microscopical study of B-50 (GAP-43) in human intramuscular nerve and neuromuscular junctions during development. Hesselmans LF, et al. **J Neurol Sci** 1989 Feb;89(2–3):301–11
Changes in tetrodotoxin-resistant action potentials after passive transfer of myasthenia gravis patient sera. Losavio A, et al. **J Neurol Sci** 1989 Jul;91(3):345–51
Acute effects of spinal transection on EPSPs produced by single homonymous Ia-fibers in soleus alpha-motoneurons in the cat [published erratum appears in J Neurophysiol 1989 Mar;61(3):following Table of Contents] Cope TC, et al. **J Neurophysiol** 1988 Nov;60(5):1678–94
Electrical activation of the pocket scratch central pattern generator in the turtle. Currie SN, et al. **J Neurophysiol** 1988 Dec;60(6):2122–37
A differential synaptic input to the motor nuclei of triceps surae from the caudal and lateral cutaneous sural nerves. LaBella LA, et al. **J Neurophysiol** 1989 Feb;61(2):291–301
Physiological responses of rat plantaris motor units to overload induced by surgical removal of its synergists. Olha AE, et al. **J Neurophysiol** 1988 Dec;60(6):2138–51
Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. I. Motoneuron electrical properties. Pinter MJ, et al. **J Neurophysiol** 1989 Aug;62(2):311–24
Muscle afferent contribution to control of paw shakes in normal cats. Prochazka A, et al. **J Neurophysiol** 1989 Mar; 61(3):550–62
Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. **J Neurophysiol** 1988 Aug;60(2):446–62
Intrinsic organization of the rat cutaneus trunci motor nucleus. Theriault E, et al. **J Neurophysiol** 1988 Aug; 60(2):463–77
Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. **J Neurophysiol** 1989 Aug; 62(2):325–33
Differential loss of neuromuscular connections according to activity level and spinal position of neonatal rabbit soleus motor neurons. Callaway EM, et al. **J Neurosci** 1989 May; 9(5):1806–24
Selective elimination of cross-compartmental innervation in rat lateral gastrocnemius muscle. Donahue SP, et al. **J Neurosci** 1989 May;9(5):1621–7
Stereotypic morphology of glutamatergic synapses on identified muscle cells of Drosophila larvae. Johansen J, et al. **J Neurosci** 1989 Feb;9(2):710–25
The role of gonadal hormones in neuromuscular synapse elimination in rats. I. Androgen delays the loss of multiple innervation in the levator ani muscle. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):229–38
The role of gonadal hormones in neuromuscular synapse elimination in rats. II. Multiple innervation persists in the adult levator ani muscle after juvenile androgen treatment. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):239–47
Monosynaptic projections of single muscle spindle afferents to neck motoneurons in the cat. Keirstead SA, et al. **J Neurosci** 1988 Oct;8(10):3945–50
Structure of the intraspinal projections of single, identified muscle spindle afferents from neck muscles of the cat. Keirstead SA, et al. **J Neurosci** 1988 Sep;8(9):3413–26
In vivo visualization of pre- and postsynaptic changes during synapse elimination in reinnervated mouse muscle. Rich MM, et al. **J Neurosci** 1989 May;9(5):1781–805
Remodeling of neuromuscular junctions in adult mouse soleus. Wigston DJ. **J Neurosci** 1989 Feb;9(2):639–47
The location of cues promoting selective reinnervation of axolotl muscles. Wigston DJ, et al. **J Neurosci** 1988 Sep; 8(9):3451–8
Motor nerve terminal sprouting in formamide-treated inactive amphibian skeletal muscle. Wines MM, et al. **J Neurosci** 1988 Oct;8(10):3909–19
Use of formamide increases the number of detectable inputs to polyneuronally innervated mammalian skeletal muscle. Donahue SP, et al. **J Neurosci Methods** 1989 Jun; 28(3):239–44
Morphometry of peptide-containing nerves in gut muscle layers: a quantitative approach to the study of autonomic neuro-muscular junctions. Ferri GL, et al. **J Neurosci Methods** 1989 Apr;27(3):211–8
Comparison of vestibular and auditory startle responses in the rat and cat. Gruner JA. **J Neurosci Methods** 1989 Feb; 27(1):13–23
A silver impregnation method for motor and sensory nerves and their endings in formalin-fixed mammalian muscles. Schweizer H, et al. **J Neurosci Methods** 1988 Aug; 25(1):45–8
Presence of alpha-melanocyte-stimulating hormone-like immunoreactivity in the innervation of amphibian skeletal muscle. Oren N, et al. **J Neurosci Res** 1989 Jun;23(2):225–33
Quantal secretion at release sites of nerve terminals in toad (Bufo marinus) muscle during formation of topographical maps. Bennett MR, et al. **J Physiol (Lond)** 1988 Jul; 401:567–79
The dorsal column projection of muscle afferent fibres from the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Jul; 401:97–113
Activity-dependent and -independent synaptic interactions during reinnervation of partially denervated rat muscle. Ribchester RR. **J Physiol (Lond)** 1988 Jul;401:53–75
The effects of electrical stimulation on denervated muscle using implantable electrodes. Nemoto K, et al. **J Reconstr Microsurg** 1988 Jul;4(4):251–5, 257
Neurotization of the remaining latissimus dorsi muscle following muscle flap transplant. Serra JM, et al. **J Reconstr Microsurg** 1988 Oct;4(5):415–20
Nonlinear muscle recruitment during intramuscular and nerve stimulation. Gruner JA, et al. **J Rehabil Res Dev** 1989 Spring;26(2):1–16
Neural drive to muscles in stuttering. Smith A. **J Speech Hear Res** 1989 Jun;32(2):252–64
Adrenergic innervation of the striated muscle of the intrinsic external urethral sphincter from patients with lower motor spinal cord lesion. Crowe R, et al. **J Urol** 1989 Jan; 141(1):47–9
Ultrasonography of the peroneal nerve muscle group in normal subjects and patients with peroneal paresis. Boonstra AM, et al. **JCU** 1988 Jan;16(1):17–24
F response abnormality in Parkinson's disease. Naito Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):811–8
Topographical displays of somatosensory evoked potentials. Nakashima K, et al. **Jpn J Psychiatry Neurol** 1988 Jun; 42(2):297–306
Chronic electrostimulation of muscles—a future way of energy production for implants. Stöhr H, et al. **Life Support Syst** 1983;1 Suppl 1:417–20
Slowness of movement in Parkinson's disease. Marsden CD. **Mov Disord** 1989;4 Suppl 1:S26–37 (54 ref.)
The dopamine motor system. Wooten GF, et al. **Mov Disord** 1989;4 Suppl 1:S38–47 (16 ref.)
Maturation of transmission in reinnervated mouse soleus muscle. Badke A, et al. **Muscle Nerve** 1989 Jul;12(7):580–6 (22 ref.)
Myosin ATPase intermediate density fibers for diagnosis of reinnervation. Griffin JL, et al. **Muscle Nerve** 1988 Sep; 11(9):915–21
Single-fiber EMG study of the flexor carpi radialis H reflex. Jabre JF, et al. **Muscle Nerve** 1989 Jul;12(7):523–7
The human cervical myotomes: an anatomical correlation between electromyography and CT/myelography. Katirji MB, et al. **Muscle Nerve** 1988 Oct;11(10):1070–3
Examination of the palmaris brevis [letter] Saadeh PB. **Muscle Nerve** 1989 May;12(5):425–6
Evaluation of an automatic method of measuring features of motor unit action potentials. Stewart CR, et al. **Muscle Nerve** 1989 Feb;12(2):141–8
Menadione-linked alpha-glycerophosphate dehydrogenase activity of motoneurons in rat soleus and extensor digitorum longus neuron pools. Ishihara A, et al. **Neurochem Res** 1989 May;14(5):455–8
Physiological variation in the innervation of flexor carpi ulnaris muscle. Brzović Z, et al. **Neurologija** 1987; 36(1–4):77–84
Effect of denervation on muscle maturation in rats. Finowicka J, et al. **Neuropatol Pol** 1988;26(3):283–301
Involvement of different receptors in the regulation of human posture. Dietz V, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):82–7
Effect of nerve section on beta-endorphin and alpha-melanotropin immunoreactivity in motor nerves of normal and dystrophic mice. Hughes S, et al. **Neurosci Lett** 1988 Sep 23;92(1):1–7
Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):67–72
Location of motoneurons innervating the musculus sphincter cloacae in the domestic fowl. Ohmori Y, et al. **Neurosci Lett** 1989 Jun 5;101(1):1–5
Evidence of shared, direct input to motoneurons supplying synergist muscles in humans. Powers RK, et al. **Neurosci Lett** 1989 Jul 17;102(1):76–81
Trigeminal motoneurons in frogs develop a new dendritic field during metamorphosis. Rosenthal BM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):53–8
Significance of shape and size of the stimulating coil in magnetic stimulation of the human motor cortex. Rösler KM, et al. **Neurosci Lett** 1989 May 22;100(1–3):347–52
Changes of transcranially evoked motor responses in man by midazolam, a short acting benzodiazepine. Schönle PW, et al. **Neurosci Lett** 1989 Jul 3;101(3):321–4
Effects of synchrony between primate corticomotoneuronal cells on post-spike facilitation of muscles and motor units. Smith WS, et al. **Neurosci Lett** 1989 Jan 2;96(1):76–81
Morphometrical study of the cat thoracic dorsal root ganglion cells in relation to muscular and cutaneous afferent innervation. Larnicol N, et al. **Neurosci Res** 1988 Dec; 6(2):149–61
Muscarinic inhibition of quantal transmitter release from the magnesium-paralysed frog sartorius muscle. Arenson MS. **Neuroscience** 1989;30(3):827–36
Motoneurons reinnervate skeletal muscle after ventral root implantation into the spinal cord of the cat. Cullheim S, et al. **Neuroscience** 1989;29(3):725–33
Partial denervation of the rat soleus muscle at two different developmental stages. Fisher TJ, et al. **Neuroscience** 1989; 28(3):755–63
Spinal and supraspinal terminations of primary afferent fibers from the gastrocnemius-soleus muscle in the cat. Mense S, et al. **Neuroscience** 1988 Sep;26(3):1023–35
Influence of anesthetics—nitrous oxide in particular—on electromyographic response evoked by transcranial electrical stimulation of the cortex. Zentner J, et al. **Neurosurgery** 1989 Feb;24(2):253–6
Direct nerve implantation vs. nerve-muscle pedicle: a comparative study of reinnervation in the rabbit. Broniatowski M, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):126–33
Excitation thresholds for nerve pedicles: a preliminary report. Broniatowski M, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):578–82
Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. **P R Health Sci J** 1988 Aug;7(2):155–66 (82 ref.)
Long-term neurostimulation of skeletal muscle: its potential for a tether-free biologic cardiac assist device. Anderson WA, et al. **PACE** 1988 Nov;11(11 Pt 2):2128–34
Altered sensory-motor control of the head as an etiological factor in space-motion sickness. Lackner JR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):784–6
Coerulospinal influence on recurrent inhibition of spinal motonuclei innervating antagonistic hindleg muscles of the cat. Fung SJ, et al. **Pflugers Arch** 1988 Sep;412(4):346–53
Species-specific effects of chronic nerve stimulation upon tibialis anterior muscle in mouse, rat, guinea pig, and rabbit. Simoneau JA, et al. **Pflugers Arch** 1988 Jul;412(1–2):86–92
Is the measurement of muscle strength appropriate in patients with brain lesions? A special communication. Bohannon RW. **Phys Ther** 1989 Mar;69(3):225–36 (85 ref.)
The Lesion Game: a special communication. Guiteras DJ. **Phys Ther** 1989 Oct;69(10):858–62
Growth and elimination of nerve terminals at synaptic sites during polyneuronal innervation of muscle cells: a trophic hypothesis. Bennett MR, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):299–320
Specialization of sensorimotor organization in the neck muscle system. Abrahams VC, et al. **Prog Brain Res** 1988; 76:125–35 (41 ref.)
Interaction between vestibulocollic and cervicocollic reflexes: automatic compensation of reflex gain by muscle afferents. Dutia MB. **Prog Brain Res** 1988;76:173–80 (12 ref.)
Integration of vestibular and neck afferent signals in the central cervical nucleus. Hongo T, et al. **Prog Brain Res** 1988;76:155–62 (35 ref.)
Functional reinnervation of a denervated skeletal muscle of the adult rat by axons regenerating from the spinal cord through a peripheral nervous system graft. Horvat JC, et al. **Prog Brain Res** 1988;78:219–24
Descending cortical and tectal control of dorsal neck motoneurons via reticulospinal neurons in the cat. Iwamoto Y, et al. **Prog Brain Res** 1988;76:97–108 (44 ref.)
Motor control strategies underlying head stabilization and voluntary head movements in humans and cats. Keshner EA, et al. **Prog Brain Res** 1988;76:329–39 (30 ref.)
Convergence of macular vestibular and neck inputs on vestibulospinal and reticulospinal neurons projecting to the lumbosacral cord. Manzoni D. **Prog Brain Res** 1988; 76:145–54 (42 ref.)
Dynamic and kinematic properties of the vestibulocollic and cervicocollic reflexes in the cat. Peterson BW, et al. **Prog Brain Res** 1988;76:163–72 (25 ref.)
The role of Renshaw cells in the dynamic control of posture during vestibulospinal reflexes. Pompeiano O. **Prog Brain Res** 1988;76:83–95 (65 ref.)
Reinnervation of denervated skeletal muscle by central nerve fibers regenerating along replanted ventral roots. Smith KJ, et al. **Prog Brain Res** 1988;78:193–8
Convergence of neck and vestibular signals on spinal

interneurons. Wilson VJ. **Prog Brain Res** 1988;76:137–43 (39 ref.)

Adult rat lumbrical muscle fibres are not polyneuronally innervated. Chamberlain S, et al. **Q J Exp Physiol** 1989 May;74(3):375–8

Neurochemical transmission in the dorsal column nuclei. Banna NR, et al. **Somatosens Mot Res** 1989;6(3):237–51 (120 ref.)

Muscle spindles in the paraspinal musculature of patients with adolescent idiopathic scoliosis. Ford DM, et al. **Spine** 1988 May;13(5):461–5

Compound muscle action potentials and spinal evoked potentials in experimental spine maneuver. Machida M, et al. **Spine** 1989 Jul;14(7):687–91

Stereoencephalotomy and control of skeletal muscle tone. Struppler A. **Stereotact Funct Neurosurg** 1989; 52(2–4):205–18

[Peripheral neuropathy in multiple sclerosis. II. Determination of single fiber jitter] Bednařik J. **Cesk Neurol Neurochir** 1988 Sep;51(5):307–12 (Eng. Abstr.) **(Cze)**

[Distribution of motor endplates in the muscles of the hindlimb in minipigs] Kubišová I. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):45–51 (Eng. Abstr.) **(Cze)**

[Functional properties of the Golgi tendon organs] Jami L. **Arch Int Physiol Biochim** 1988 Sep;96(4):A363–78 (40 ref.) (Eng. Abstr.) **(Fre)**

[Properties of skeletal muscle fibers. Influence of motor innervation] Bacou F, et al. **Reprod Nutr Dev** 1988; 28(6A):1387–453 (604 ref.) **(Fre)**

[Myosin isoforms synthesized during regeneration of fast contraction skeletal muscle regeneration, in the presence of motor nerve and after denervation. Study in adult rats and mice] d'Albis A, et al. **Reprod Nutr Dev** 1988; 28(3B):753–6 (Eng. Abstr.) **(Fre)**

[Functional reinnervation of a skeletal muscle by means of a peripheral nerve autograft to the spinal cord by dorsal approach. Study in the adult rat] Horvat JC, et al. **Reprod Nutr Dev** 1988;28(3B):769–71 (Eng. Abstr.) **(Fre)**

[Regulation of synaptogenesis in the adult skeletal muscle] Sanes JR, et al. **Reprod Nutr Dev** 1988;28(3B):733–52 (72 ref.) (Eng. Abstr.) **(Fre)**

[The cricoarytenoid posterior muscle and its innervation] Ucelay I, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(5):481–3 (14 ref.) (Eng. Abstr.) **(Fre)**

[Hip–lumbar extensor tightness—equivalent of a nerve root irritation syndrome in the adolescent] Hähnel H, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):296–305 (Eng. Abstr.) **(Ger)**

[Interaction of transcranial magnetic stimulation and mechanical stimuli] Claus D, et al. **EEG EMG** 1988 Dec; 19(4):222–7 (Eng. Abstr.) **(Ger)**

[Characteristics of electrical discharges by transcranial cortex stimulation activated motor units of the hand muscles of the human] Hess CW, et al. **EEG EMG** 1988 Dec; 19(4):216–21 (Eng. Abstr.) **(Ger)**

[Function of the long spinal cord pathways in cervical spinal stenosis—an electrophysiologic study] Masur H, et al. **EEG EMG** 1988 Dec;19(4):264–6 (Eng. Abstr.) **(Ger)**

[Changes in multi-locally recorded muscle responses following cortex stimulation in patients with multiple sclerosis] Meyer BU, et al. **EEG EMG** 1988 Dec; 19(4):241–6 (Eng. Abstr.) **(Ger)**

[Model studies of muscle postural control in children with spastic hemiparesis: pathophysiologic and clinical relevance] Scholle HC, et al. **EEG EMG** 1989 Mar; 20(1):34–8 (Eng. Abstr.) **(Ger)**

[The cervical somatosensory evoked potential and its relation to F-wave activity] Strenge H. **EEG EMG** 1989 Jun; 20(2):99–105 (Eng. Abstr.) **(Ger)**

[Somatosensory and motor evoked potentials in the prognostic assessment of traumatic and non-traumatic comatose patients] Zentner J, et al. **EEG EMG** 1988 Dec; 19(4):267–71 (Eng. Abstr.) **(Ger)**

[Spinal and muscular evoked response following single stimulation of the motor cortex of the rat] Zileli M, et al. **EEG EMG** 1989 Jun;20(2):106–11 (Eng. Abstr.) **(Ger)**

[The plasticity of motor units in change of the activity pattern by electric stimulation—electrostimulation and its possible clinical applications] Nix WA. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):94–106 (194 ref.) (Eng. Abstr.) **(Ger)**

[Cervical afferent fibers and their relation to the regulation of equilibrium] Holtmann S, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):72–7 (74 ref.) (Eng. Abstr.) **(Ger)**

[Animal experiment studies of collateral reinnervation of denervated laryngeal musculature] Martin F. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):57–61 (Eng. Abstr.) **(Ger)**

[Idiopathic spasmodic torticollis: a focal dystonia] Deuschl G. **Nervenarzt** 1989 Jul;60(7):377–85 (81 ref.) **(Ger)**

[Botulinum toxin in therapy of craniocervical dystonia] Dressler D, et al. **Nervenarzt** 1989 Jul;60(7):386–93 (49 ref.) (Eng. Abstr.) **(Ger)**

[Selective paralysis of the infraspinatus muscle, caused by compression of the infraspinatus branch of the supraspinatus muscle] Jerosch J, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):231–3 (Eng. Abstr.) **(Ger)**

[Central dysregulations as a cause of movement disorders in performance sports? An analysis of movement in sports with reference to functional anatomic and neurophysiologic viewpoints] Sommer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):10–4 (23 ref.) (Eng. Abstr.) **(Ger)**

[Clinical and radiologic comparison of "idiopathic" and "neurogenic" pes cavus] Windhager R, et al. **Z Orthop** 1989 Mar–Apr;127(2):169–73 (Eng. Abstr.) **(Ger)**

[Role of vitamin E in muscle reinnervation after nerve injury: effect of its deficiency on multiple innervation] Bruno C, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):865–8 (Eng. Abstr.) **(Ita)**

[Activation of the respiratory motor unit by stimulation of skeletal muscle afferent nerves] Orani GP, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):647–53 (Eng. Abstr.) **(Ita)**

[Stimulation of large afferent fibers of skeletal muscles provokes an increase in systemic arterial pressure] Orani GP, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):769–74 (Eng. Abstr.) **(Ita)**

[Cardiocirculatory and respiratory reflex control by the activation of chemosensitive neural receptors in the muscle] Tallarida G, et al. **Cardiologia** 1989 Apr;34(4):305–16 (105 ref.) **(Ita)**

[Distribution of motor nuclei of the thoracic dorsal paravertebral muscles] Sugiuchi Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1910–9 (Eng. Abstr.) **(Jpn)**

[Changes in muscular reactivity in long-term afferent stimulation] Klukowska-Siczek L. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:319–24 (Eng. Abstr.) **(Pol)**

[Impedance audiometry and the sonomotor reflex in post-traumatic lesions of the facial nerve] Pawelczyk M. **Otolaryngol Pol** 1988;42(1–2):131–5 (Eng. Abstr.) **(Pol)**

[Detection of the neuromuscular synapses in isolated muscle fibers] Danilov RK, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):81–3 **(Rus)**

[Effects of acetylcholinesterase inhibitors on the process of reinnervation of the mouse skeletal muscle] Balezina OP, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):490–2 (Eng. Abstr.) **(Rus)**

[Restoration of muscle contractile properties after partial and complete denervation] Khamitov KhS, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):536–9 (Eng. Abstr.) **(Rus)**

[Dependence of hypoxic changes in macro- and micro-hemodynamics on the activity of adrenoreceptors in the skeletal muscle in hypothermia] Nurmatov AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):16–9 (Eng. Abstr.) **(Rus)**

[Asymmetry of time distribution of simple sensory motor reaction] Lupandin VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):700–2 **(Rus)**

[Decreased thresholds of pain sensation and defense flexor reflex in patients with ischemic heart disease] Kosmachev AA, et al. **Kardiologiia** 1989 Jun;29(6):57–9 (Eng. Abstr.) **(Rus)**

[Algodystrophy of skeletal muscles] Lautsevichus LZ, et al. **Klin Med (Mosk)** 1988 Oct;66(10):91–6 (Eng. Abstr.) **(Rus)**

[Phenomenology and chronology of a neurotrophic deficit] Pushkarev IuP, et al. **Nerv Sist** 1988;27:103–11 **(Rus)**

[Effect of the innervation on the structural state of F-actin in rat fast muscles] Borovikov IuS, et al. **Tsitologiia** 1989 Jan;31(1):80–4 (Eng. Abstr.) **(Rus)**

[Nonuniformity of the fine structure of various portions of the nerve terminal in frog somatic muscles as the basis for the variation in its efficiency] Kashapova LA, et al. **Tsitologiia** 1988 Jul;30(7):802–9 (Eng. Abstr.) **(Rus)**

[The ultrastructure of the individual nerve endings of the tonic fibers in the frog] Kashapova LA, et al. **Tsitologiia** 1989 Jan;31(1):103–8 (Eng. Abstr.) **(Rus)**

[Comparative organization of the neuromuscular synapses of the phasic skeletal muscles in vertebrates] Balezina OP. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):68–89 (81 ref.) **(Rus)**

[Factors of neurotrophic control of acetylcholine reception of skeletal muscles] Volkov EM. **Usp Fiziol Nauk** 1989 Apr–Jun;20(2):26–45 (151 ref.) **(Rus)**

[Laryngostenosis caused by neurogenic tetany] Karpova OIu. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):76–7 **(Rus)**

[Unusual pyramidal pathology syndrome] Baliasnyĭ MM, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):45–6 (Eng. Abstr.) **(Rus)**

[Value of electromyographic examination in elaborating the program of rehabilitation of patients with movement disorders in the recovery period after ischemic stroke] Karaseva LA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(9):43–5 (Eng. Abstr.) **(Rus)**

[Laryngeal reinnervation in the dog] Capellá G, et al. **An Otorrinolaringol Ibero Am** 1989;16(2):187–214 (Eng. Abstr.) **(Spa)**

[Study of the termination of cervical nerves innervating the rhomboideus, serratus ventralis and trapezius muscles.II: Equus and Ruminantia] Arias M, et al. **Anat Histol Embryol** 1988 Sep;17(3):276–82 (Eng. Abstr.) **(Spa)**

METABOLISM

Macromolecular composition of the sarcolemma and endomysium in the rat. Lehto M, et al. **Acta Anat (Basel)** 1988;133(4):297–302

Activation/dephosphorylation of rabbit muscle glycogen synthase by the catalytic subunits of protein phosphatase-1 and 2A. Farkas I, et al. **Acta Biochim Biophys Hung** 1988; 23(3–4):231–46

Effects of pentoxifylline and papaverine on tissue perfusion during arterial surgery. Niinikoski J, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):641–5

Enzymatic capacity and protein synthesis in human muscle postoperatively. Wernerman J, et al. **Acta Chir Scand** 1988 Sep;154(9):489–94

Skeletal muscle potassium increases after diet and weight reduction in obese subjects with normal and impaired glucose tolerance. Landin K, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):21–6

Lectin histochemistry of experimental murine rhabdomyosarcomas. Langbein L, et al. **Acta Histochem (Jena)** 1989;86(1):93–9

The effect of hemiplegia on bone mass and soft tissue body composition. Iversen E, et al. **Acta Neurol Scand** 1989 Feb; 79(2):155–9

Comparative histochemistry of human and sheep laryngeal muscles. Happak W, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):283–8

Fluostigmine effect on glycogen level in the skeletal muscle. Faff J, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):300–6

Metabolic response to starvation in late pregnant rats. I. Maternal response. Nowacka M, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):427–34

Topographical localization of muscle glycogen: an ultrahistochemical study in the human vastus lateralis. Fridén J, et al. **Acta Physiol Scand** 1989 Mar;135(3):381–91

Diffusional transport of albumin from interstitium to blood across small pores in the capillary walls of rat skeletal muscle. Haraldsson B. **Acta Physiol Scand** 1988 May; 133(1):63–71

Increase in myoglobin content and decrease in oxidative enzyme activities by leg muscle immobilization in man. Jansson E, et al. **Acta Physiol Scand** 1988 Apr;132(4):515–7

Adrenaline-mediated glycogenolysis in different skeletal muscle fibre types in the anaesthetized rat. Jensen J, et al. **Acta Physiol Scand** 1989 Jun;136(2):229–33

Effect of hypoxia on glucose metabolism in human skeletal muscle during exercise. Katz A, et al. **Acta Physiol Scand** 1989 Jul;136(3):377–82

Acute and chronic effects of strenuous exercise on glucose metabolism in isolated, incubated soleus muscle of exercise-trained rats. Leighton B, et al. **Acta Physiol Scand** 1989 Jun;136(2):177–84

In-vitro stimulation on the rat epitrochlearis muscle. II. Effects of catecholamines and nutrients on protein degradation and amino acid metabolism. Nie ZT, et al. **Acta Physiol Scand** 1989 Apr;135(4):523–9

In-vitro stimulation of the rat epitrochlearis muscle. I. Contractile activity per se affects myofibrillar protein degradation and amino acid metabolism. Nie ZT, et al. **Acta Physiol Scand** 1989 Apr;135(4):513–21

Increased IMP content in glycogen-depleted muscle fibres during submaximal exercise in man. Norman B, et al. **Acta Physiol Scand** 1988 May;133(1):97–100

Skeletal muscle glucolysis, glycogenolysis and glycogen phosphorylase during electrical stimulation in man. Ren JM, et al. **Acta Physiol Scand** 1988 May;133(1):101–7

Hypoxaemia increases the accumulation of inosine monophosphate (IMP) in human skeletal muscle during submaximal exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun;136(2):199–203

Formation of inosine monophosphate (IMP) in human skeletal muscle during incremental dynamic exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun;136(2):193–8

Myosin heavy chain isoforms and velocity of shortening of type 2 skeletal muscle fibres. Schiaffino S, et al. **Acta Physiol Scand** 1988 Dec;134(4):575–6

Muscle energy metabolism and electrolyte shifts during low-level prolonged static contraction in man. Sjøgaard G. **Acta Physiol Scand** 1988 Oct;134(2):181–7

In vitro reversal of insulin resistance in diabetic skeletal muscle is independent of extracellular $Ca2+$ and $Mg2+$. Wallberg-Henriksson H, et al. **Acta Physiol Scand** 1988 May;133(1):125–6

The rat epitrochlearis muscle: metabolic characteristics. Zetan N, et al. **Acta Physiol Scand** 1989 Feb;135(2):197–8

Effects of ageing and physical training on rat skeletal muscle. An experimental study on the properties of collagen, laminin, and fibre types in muscles serving different functions. Kovanen V. **Acta Physiol Scand Suppl** 1989; 577:1–56

Central reflex effects of hypoxia on muscle oxygenation. Bredle DL, et al. **Adv Exp Med Biol** 1989;248:681–5

Time resolved spectroscopic (TRS) and continuous wave spectroscopic (CWS) studies of photon migration in human arms and limbs. Chance B. **Adv Exp Med Biol** 1989; 248:21–31

Buffering of muscle tissue PO2 levels by the superposition of the oxygen field from many capillaries. Clark PA, et al. **Adv Exp Med Biol** 1989;248:165–74

Influence of prostaglandin E1 on muscular tissue-PO2 in patients with diabetic gangrene. Heinrich R, et al. **Adv Exp Med Biol** 1989;248:699–704

Responses of lysosomal and non-lysosomal proteases to unloading of the soleus. Henriksen EJ, et al. **Adv Exp Med Biol** 1988;240:235–42

Development of muscular tissue PO2 after vascular reconstructive surgery. Krawzak HW, et al. **Adv Exp Med Biol** 1989;248:713–8

Measurements of oxygen flux from arterioles imply high permeability of perfused tissue to oxygen. Popel AS, et al. **Adv Exp Med Biol** 1989;248:215–25

PO2 histograms in various models of tissue oxygenation in skeletal muscle. Turek Z, et al. **Adv Exp Med Biol** 1989; 248:227–37

Positron emission tomography studies using [11C]ester of prostaglandin D2. Watanabe Y, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:398–401

Myofiber turnover is used to retrofit frog jaw muscles during metamorphosis. Alley KE. **Am J Anat** 1989 Jan;184(1):1–12

Detection of abnormal calf muscle metabolism in patients with heart failure using phosphorus-31 nuclear magnetic resonance. Mancini DM, et al. **Am J Cardiol** 1988 Dec 1;62(17):1234–40

Amino acid metabolism in muscle and in the whole body of man before and after ingestion of a single mixed meal. Elia M, et al. **Am J Clin Nutr** 1989 Jun;49(6):1203–10

Microcalorimetric study of muscle and platelet thermogenesis in anorexia nervosa and bulimia. Fagher B, et al. **Am J Clin Nutr** 1989 Mar;49(3):476–81

Hypophosphatemia and respiratory failure: prolonged abnormal energy metabolism demonstrated by nuclear magnetic resonance spectroscopy. Lewis JF, et al. **Am J Med** 1987 Dec;83(6):1139–43

Hemodialysis for acute renal failure in a patient with life-long myalgias after exercise [clinical conference] Zawada ET Jr, et al. **Am J Nephrol** 1988;8(6):490–7

Dystrophin is expressed in mdx skeletal muscle fibers after normal myoblast implantation. Karpati G, et al. **Am J Pathol** 1989 Jul;135(1):27–32

Epinephrine mediates facultative carbohydrate-induced thermogenesis in human skeletal muscle. Astrup A, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E340–5

Measurement of forearm oxygen consumption: role of heating the contralateral hand. Astrup A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E572–8

Effects of hypercortisolemia and diabetes on skeletal muscle insulin receptor function in vitro and in vivo. Block NE, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E39–48

Prolonged increase in insulin-stimulated glucose transport in muscle after exercise. Cartee GD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E494–9

Bioenergetic changes during contraction and recovery in diabetic rat skeletal muscle. Challiss RA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E129–37

Regulation of VO2 in red muscle: do current biochemical hypotheses fit in vivo data? Connett RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R898–906

DOPA, norepinephrine, and dopamine in rat tissues: no effect of sympathectomy on muscle DOPA. Eldrup E, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E284–7

Independent stimulation of glucose metabolism and Na+–K+ exchange by insulin in the human forearm. Ferrannini E, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E953–8

Utility of AICAr for metabolic studies is diminished by systemic effects in situ. Foley JM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C488–94

Glucose uptake and flux through phosphofructokinase in wounded rat skeletal muscle. Forster J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E788–97

Changes in glucose transporters in muscle in response to exercise. Fushiki T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E580–7

Metabolic alterations induced in cultured skeletal muscle by stretch–relaxation activity. Hatfaludy S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C175–81

Polymyxin B inhibits stimulation of glucose transport in muscle by hypoxia or contractions. Henriksen EJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E662–7

L-glutamate transport in internally dialyzed barnacle muscle fibers. Horn LW. **Am J Physiol** 1989 Sep;257(3 Pt 1):C442–50

Total and myofibrillar protein degradation in isolated soleus muscles after exercise. Kasperek GJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E1–5

No accumulation of glucose in human skeletal muscle during euglycemic hyperinsulinemia. Katz A, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E942–5

Ca-induced Ca release in malignant hyperthermia-susceptible pig skeletal muscle. Ohta T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C358–67

Mechanisms limiting glycogen storage in muscle during prolonged insulin stimulation. Richter EA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E621–8

Selective in vitro reversal of the insulin resistance of glucose transport in denervated rat skeletal muscle. Sowell MO, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E418–25

Exercise and insulin stimulate skeletal muscle glucose transport through different mechanisms. Sternlicht E, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E227–30

Effects of systemic inhibition of prostaglandin production on protein metabolism in tumor-bearing rats. Strelkov AB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C261–9

Protein metabolism and beta-myosin heavy-chain mRNA in unweighted soleus muscle. Thomason DB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R300–5

Rapid measurement of whole body and forearm protein turnover using a [2H5]phenylalanine model. Thompson GN, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E631–9

Effect of exercise on insulin receptor binding and kinase activity in skeletal muscle. Treadway JL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E138–44

Fish muscle energy metabolism measured by in vivo 31P-NMR during anoxia and recovery. van den Thillart G, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R922–9

Exercise-induced fall in insulin and hepatic carbohydrate metabolism during muscular work. Wasserman DH, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E500–9

Effect of diltiazem on skeletal muscle 3-O-methylglucose transport in bacteremic rats. Westfall MV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R716–21

Skeletal muscle calcium uptake in bacteremic rats. Westfall MV, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R201–6

Metabolic fiber types of snake transversus abdominis muscle. Wilkinson RS, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1176–83

Insect hemolymph factor promotes muscle histolysis in Solenopsis. Davis WL, et al. **Anat Rec** 1989 Aug; 224(4):473–8

Immunocytochemical analysis of potential neurotransmitters present in the myenteric plexus and muscular layers of the corpus of the guinea pig stomach. Mawe GM, et al. **Anat Rec** 1989 Jul;224(3):431–42

Histochemical, immunohistochemical, and ultrastructural observations on the iris muscles of Gallus gallus. Scapolo PA, et al. **Anat Rec** 1988 Jul;221(3):687–99

Acetylcholine receptor density and acetylcholinesterase activity in skeletal muscle of rats following thermal injury. Marathe PH, et al. **Anesthesiology** 1989 Apr;70(4):654–9

McArdle's disease: biochemical and molecular genetic studies. Servidei S, et al. **Ann Neurol** 1988 Dec;24(6):774–81

Addition of glutamine to total parenteral nutrition after elective abdominal surgery spares free glutamine in muscle, counteracts the fall in muscle protein synthesis, and improves nitrogen balance. Hammarqvist F, et al. **Ann Surg** 1989 Apr;209(4):455–61

Oxygen as an isolated variable influences resistance to infection. Jönsson K, et al. **Ann Surg** 1988 Dec;208(6):783–7

Structural and functional diversity in vertebrate skeletal muscle nicotinic acetylcholine receptors. Steinbach JH. **Annu Rev Physiol** 1989;51:353–65 (61 ref.)

Transport of oxygen in muscle. Wittenberg BA, et al. **Annu Rev Physiol** 1989;51:857–78 (136 ref.)

Redox cycling of myoglobin and ascorbate: a potential protective mechanism against oxidative reperfusion injury in muscle. Galaris D, et al. **Arch Biochem Biophys** 1989 Sep;273(2):497–504

Studies on asparagine-linked protein glycosylation in differentiating skeletal muscle cells. Miller KR, et al. **Arch Biochem Biophys** 1989 Apr;270(1):242–54

Alkaline phosphatase activities in normal and denervated, slow and fast rat muscles. Bearing on the possible participation of the enzyme in the transmembrane transport of phosphate ions. Dictus-Vermeulen C, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):13–23

Collagen synthesis and proteolytic activities in rat skeletal muscles: effect of cast-immobilization in the lengthened and shortened positions. Savolainen J, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):964–9

The effect of endotoxin on glucose metabolism in skeletal muscle requires the presence of plasma. Amaral JF, et al. **Arch Surg** 1989 Jun;124(6):727–32

Early detection of shock in critically ill patients by skeletal muscle PO2 assessment. Beerthuizen GI, et al. **Arch Surg** 1989 Jul;124(7):853–5

Metabolic interaction between skeletal muscle and liver during bacteremia. Harkema JM, et al. **Arch Surg** 1988 Nov; 123(11):1415–9

In vivo phosphorus 31 magnetic resonance spectroscopy of rat hind limb skeletal muscle during sepsis. Jacobs DO, et al. **Arch Surg** 1988 Nov;123(11):1425–8

Exercise-induced increase in glandular kallikrein activity in human plasma and its significance in peripheral glucose metabolism. Koh H, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1181–4

Lipid peroxidation dependent on oxygen and catalytic free iron ions in situ storage muscle foods. Harel S, et al. **Basic Life Sci** 1988;49:301–6

Increased oxidation of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Basic Life Sci** 1988; 49:611–4

Epidermal growth factor and insulin-like growth factor I stimulate the hydrolysis of the insulin-sensitive phosphatidylinositol-glycan in BC3H-1 myocytes. Farese RV, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1346–52

Effect of diabetes on guanine nucleotide exchange factor activity in skeletal muscle and heart. Kimball SR, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):706–11

Phosphatidylinositol 4,5-bisphosphate enhances calcium release from sarcoplasmic reticulum of skeletal muscle. Kobayashi M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1487–91

Heteronuclear 15N/1H spin echo NMR: an in vitro quantitative analysis of leucine transamination in rat skeletal muscle. Meynial-Denis D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1033–9

Insulin-mediated translocation of glucose transporters from intracellular membranes to plasma membranes: sole mechanism of stimulation of glucose transport in L6 muscle cells. Ramlal T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1329–35

Observation of fatigue unrelated to gross energy reserve of skeletal muscle during tetanic contraction--an application of 31P-MRS. Takata S, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):225–31

Enzymic and nonenzymic mono ADP-ribosylation of proteins in skeletal muscle. Tanaka Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1063–70

Effects of vanadate and insulin on glucose 1,6-P2 and fructose 2,6-P2 levels in rat skeletal muscle. Carreras M, et al. **Biochem Int** 1988 Aug;17(2):359–66

Compartmentalized protein phosphorylation/dephosphorylation in glycogen particles from rabbit skeletal muscle. Gruppuso PA, et al. **Biochem Int** 1988 Jun;16(6):1027–32

Enzymic and metabolic adaptations in the gastrocnemius, plantaris and soleus muscles of hypocaloric rats. Ardawi MS, et al. **Biochem J** 1989 Jul 1;261(1):219–25

A gated 31P-n.m.r. study of bioenergetic recovery in rat skeletal muscle after tetanic contraction. Challiss RA, et al. **Biochem J** 1989 Apr 15;259(2):589–92

Resistance of protein and glucose metabolism to insulin in denervated rat muscle. Davis TA, et al. **Biochem J** 1988 Sep 15;254(3):667–75

Mechanisms whereby insulin increases diacylglycerol in BC3H-1 myocytes. Farese RV, et al. **Biochem J** 1988 Nov 15;256(1):175–84

Insulin provokes co-ordinated increases in the synthesis of phosphatidylinositol, phosphatidylinositol phosphates and the phosphatidylinositol-glycan in BC3H-1 myocytes. Farese RV, et al. **Biochem J** 1988 Nov 15;256(1):185–8

Insulin-stimulated alpha-(methyl)aminoisobutyric acid uptake in skeletal muscle. Evidence for a short-term activation of uptake independent of Na+ electrochemical gradient and protein synthesis. Gumà A, et al. **Biochem J** 1988 Aug 1;253(3):625–9

Skeletal-muscle glycogen synthesis during the starved-to-fed transition in the rat. Holness MJ, et al. **Biochem J** 1988 Sep 15;254(3):855–9

Structural and functional variations in skeletal-muscle and scallop muscle actins. Hue HK, et al. **Biochem J** 1988 Dec 15;256(3):853–9

Use of inhibitors in studies of the processes of cytosolic enzyme release from skeletal muscle [letter] Jackson MJ. **Biochem J** 1989 Jan 15;257(2):621

Inhibition by forskolin of insulin-stimulated glucose transport in L6 muscle cells. Klip A, et al. **Biochem J** 1988 Nov 1;255(3):1023–9

Transient increase in glucose 1,6-bisphosphate in human skeletal muscle during isometric contraction. Lee AD, et al. **Biochem J** 1989 Mar 15;258(3):915–8

Effects of aging on the responsiveness and sensitivity of glucose metabolism to insulin in the incubated soleus muscle isolated from Sprague-Dawley and Wistar rats. Leighton B, et al. **Biochem J** 1989 Jul 15;261(2):383–7

Prostaglandin production in myotube cultures. Influence on protein turnover. McElligott MA, et al. **Biochem J** 1988 Aug 1;253(3):745–9

The effects of fasting or hypoxia on rates of protein synthesis in vivo in subcellular fractions of rat heart and gastrocnemius muscle. Preedy VR, et al. **Biochem J** 1989 Jan 15;257(2):519–27

Ca2+-calmodulin binding to caldesmon and the caldesmon-actin-tropomyosin complex. Its role in Ca2+ regulation of the activity of synthetic smooth-muscle thin filaments. Pritchard K, et al. **Biochem J** 1989 Feb 1; 257(3):839–43

Glucose formation in human skeletal muscle. Influence of glycogen content. Sahlin K, et al. **Biochem J** 1989 Mar 15;258(3):911–3

Insulin-stimulated glucose transport in muscle. Evidence for a protein-kinase-C-dependent component which is unaltered in insulin-resistant mice. Tanti JF, et al. **Biochem J** 1989 Feb 15;258(1):141–6

G-proteins in skeletal muscle. Evidence for a 40 kDa pertussis-toxin substrate in purified transverse tubules. Toutant M, et al. **Biochem J** 1988 Sep 1;254(2):405–9

The effect of ketone bodies on alanine and glutamine metabolism in isolated skeletal muscle from the fasted chick. Wu GY, et al. **Biochem J** 1988 Oct 1;255(1):139–44

Is methionine transaminated in skeletal muscle? Wu GY, et al. **Biochem J** 1989 Jan 1;257(1):281–4

The polysome as a terminal for the creatine phosphate energy shuttle. Savabi F, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):291–8

Structure and expression of neural cell adhesion molecule complementary DNA clones in skeletal muscle. Barton CH, et al. **Biochem Soc Trans** 1988 Aug;16(4):457–60

31P NMR magnetization-transfer measurements of ATP turnover during steady-state isometric muscle contraction in the rat hind limb in vivo. Brindle KM, et al. **Biochemistry** 1989 May 30;28(11):4887–93

Interaction of rabbit skeletal muscle troponin T and F-actin at physiological ionic strength. Heeley DH, et al. **Biochemistry** 1988 Oct 18;27(21):8227–32

Comparison of the calcium release channel of cardiac and skeletal muscle sarcoplasmic reticulum by target inactivation analysis. McGrew SG, et al. **Biochemistry** 1989 Feb 7;28(3):1319–23

Positive cooperativity of ryanodine binding to the calcium release channel of sarcoplasmic reticulum from heart and skeletal muscle. McGrew SG, et al. **Biochemistry** 1989 Feb 21;28(4):1686–91

Differential behavior of two cysteine residues on the myosin head in muscle fibers. Miyanishi T, et al. **Biochemistry** 1989 Feb 7;28(3):1287–94

cAMP binds with high affinity and specificity to the androgen receptor from murine skeletal muscle. Ofenloch-Hähnle B, et al. **Biochemistry** 1988 Nov 15; 27(23):8592–8

The myosin filament. XIII. The sensitivity of LMM assembly to Mg.ATP. Chowrashi PK, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):182–7

Induction of specific proteins in cultured skeletal muscle cells by 1,25-dihydroxyvitamin D-3. Drittanti LN, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):16–23

Quantitative analyses of the uncoupling activity of substituted phenols with mitochondria from flight muscles of house flies. Miyoshi H, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):312–21

Expression of the human cardiac actin gene in differentiating rat skeletal myoblasts. Ruben MM, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):374–84

Transamination and oxidative decarboxylation of L-isoleucine, L-alloisoleucine and related 2-oxo acids in perfused rat hind limb muscle. Schadewaldt P, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):115–23

L(+)-lactate transport in perfused rat skeletal muscle: kinetic characteristics and sensitivity to pH and transport inhibitors. Watt PW, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):213–22

Lysosomal proteinase-sensitive regions in fast and slow skeletal muscle myosins. Dufour E, et al. **Biochimie** 1989 May;71(5):625–32

Changes in proteinase/proteinase inhibitor levels in rat skeletal muscle tissue during diabetes and fasting. Kuehn L, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:299–305

Utilization of medium-chain triglycerides and octanoic acid by cultured human fibroblasts and lymphoblasts. Lemmen C, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1267–73

Local generation of kinins in working skeletal muscle tissue in man. Rett K, et al. **Biol Chem Hoppe Seyler** 1989 May; 370(5):445–9

Calcium channels in skeletal muscle fibres of the frog. Henček M, et al. **Biomed Biochim Acta** 1989;48(5–6):S345–9

In vitro selective glycogen depletion of frog twitch and slow muscle fibres. Kiessling A, et al. **Biomed Biochim Acta** 1989; 48(5–6):S455–8

Energetical considerations related to calcium release from the sarcoplasmic reticulum in skeletal muscle. Oetliker H. **Biomed Biochim Acta** 1989;48(5–6):S313–8

Nuclear magnetic resonance studies on the mechanism of regulation of glycogenolysis in contracting skeletal muscle. Sugi H, et al. **Biomed Biochim Acta** 1989;48(5–6):S335–40

Rates of de novo fatty acid synthesis in liver, muscle and adipose tissue in non-pregnant and pregnant rats in vivo. Zimmermann T, et al. **Biomed Biochim Acta** 1989; 48(4):227–31

Calcium binding protein changes of sarcoplasmic reticulum from rat denervated skeletal muscle. Loirat MJ, et al. **Biosci Rep** 1988 Aug;8(4):369–78

Beta-adrenoceptors and human skeletal muscle characterisation of receptor subtype and effect of age. Elfellah MS, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):31–8

In vitro Na+,K+-ATPase (EC 3.6.1.3)-dependent respiration and protein synthesis in skeletal muscle of pigs fed at three dietary protein levels. Adeola O, et al. **Br J Nutr** 1989 May;61(3):453–65

ZAPA, (Z)-3-[(aminoiminomethyl)thio]-2-propenoic acid hydrochloride, a potent agonist at GABA-receptors on the Ascaris muscle cell. Holden-Dye L, et al. **Br J Pharmacol** 1988 Sep;95(1):3–5

Facilitation of noradrenaline release from sympathetic nerves in rat anococcygeus muscle by activation of prejunctional beta-adrenoceptors and angiotensin receptors. Li CG, et al. **Br J Pharmacol** 1988 Oct;95(2):385–92

Muscle histochemistry in myotubular (centronuclear) myopathy. Sasaki T, et al. **Brain Dev** 1989;11(1):26–32

Effect of potassium propionate on free and bound acetylcholine in frog muscle. Molenaar PC, et al. **Brain Res** 1989 Jan 16;477(1–2):109–17

G proteins in Aplysia: biochemical characterization and regional and subcellular distribution. Vogel SS, et al. **Brain Res** 1989 Jan 30;478(2):281–92

Cholesterol conservation in skeletal muscle associated with age- and denervation-related atrophy. Williams KD, et al. **Brain Res** 1989 Jul 24;493(1):14–22

Depressing effects of calcium antagonists on oxygen consumption in isolated skeletal muscle during potassium depolarization. Barnes WS. **Can J Physiol Pharmacol** 1988 Jun;66(6):836–40

Effect of colchicine on alkaline triglyceride lipase activity and triglyceride content in rat skeletal muscle. Gorski J, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1555–9

Blockade of K+ contractures in skeletal muscle by opioid drugs: a nonstereospecific effect. Kokate TG, et al. **Can J Physiol Pharmacol** 1989 May;67(5):435–41

Activation by curare of acetylcholine receptor channels in a murine skeletal muscle cell line. Morris CE, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):152–8

The 1987 Borden Award lecture. Protein metabolism in premature human infants. Pencharz PB. **Can J Physiol Pharmacol** 1988 Oct;66(10):1247–52 (47 ref.)

Metabolic and endocrine responses to prolonged exercise in rats under beta 2-adrenergic blockade. Trudeau F, et al. **Can J Physiol Pharmacol** 1989 Mar;67(3):192–6

Regulation of skeletal muscle glycogenolysis during exercise. Hargreaves M, et al. **Can J Sport Sci** 1988 Dec; 13(4):197–203 (79 ref.)

Effect of glucose polymer ingestion on glycogen depletion during a soccer match. Leatt PB, et al. **Can J Sport Sci** 1989 Jun;14(2):112–6

Effect of cancer on the in vivo energy state of rat liver and skeletal muscle. Schneeberger AL, et al. **Cancer Res** 1989 Mar 1;49(5):1160–4

Transformation-induced changes in transferrin and iron metabolism in myogenic cells. Sorokin LM, et al. **Cancer Res** 1989 Apr 15;49(8):1941–7

Alternative splicing generates a secreted form of N-CAM in muscle and brain. Gower HJ, et al. **Cell** 1988 Dec 23; 55(6):955–64

The use of Fura-2 to estimate myoplasmic [Ca2+] in human skeletal muscle. Iaizzo PA, et al. **Cell Calcium** 1989 Apr; 10(3):151–8

Expression of alpha and beta tropomyosin subunits during early myogenesis in somites and limb buds of chick embryos. Delezoide AL, et al. **Cell Tissue Res** 1989 Jun; 256(3):631–4

A combined histochemical and immunohistochemical study on the dynamics of fast-to-slow fiber transformation in chronically stimulated rabbit muscle. Maier A, et al. **Cell Tissue Res** 1988 Oct;254(1):59–68

Protein and collagen content of rat skeletal muscle following space flight. Martin TP. **Cell Tissue Res** 1988 Oct; 254(1):251–3

Oxidative stress and muscular dystrophy. Murphy ME, et al. **Chem Biol Interact** 1989;69(2-3):101–73 (349 ref.)

Study on hypoglycemic effects of muscles of pig (Sus scrofa), chicken (Gallus domesticus) and mackerel (Scomber japonicus). Matsuda R, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2615–23

Effect of 2,4-dinitrophenol on transport of cefmetazole and diclofenac from thigh muscle tissue and from intestinal connective tissue into blood circulation in rats. Nishihata T, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3683–8

Penetration activities of ciprofloxacin into muscle, skin and fat following oral administration. Dalhoff A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):294–5

Molecular basis of the phenotypic characteristics of mammalian muscle fibres. Pette D, et al. **Ciba Found Symp** 1988;138:22–34 (37 ref.)

Calmodulin modulation of single sarcoplasmic reticulum Ca2+-release channels from cardiac and skeletal muscle. Smith JS, et al. **Circ Res** 1989 Feb;64(2):352–9

Metabolic and ionic changes in muscle during hemorrhagic shock. Blum H, et al. **Circ Shock** 1988 Dec;26(4):341–51

Glucose metabolism of injured skeletal muscle: the contribution of inflammatory cells. Shearer JD, et al. **Circ Shock** 1988 Jul;25(3):131–8

Effect of bacteremia on skeletal muscle glucose transport in fed rats. Westfall MV, et al. **Circ Shock** 1988 Oct; 26(2):127–37

Magnesium content of serum, circulating mononuclear cells, skeletal muscle, and myocardium in congestive heart failure. Ralston MA, et al. **Circulation** 1989 Sep; 80(3):573–80

Carnitine: metabolism and clinical chemistry. Siliprandi N, et al. **Clin Chim Acta** 1989 Jul 31;183(1):3–11 (45 ref.)

Effect of magnesium depletion and potassium depletion and chlorothiazide on intracellular pH in the rat, studied by 31P NMR. Adam WR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):33–40

NMR monitoring of the energy status of skeletal muscle during hemodialysis using acetate. Cardoso M, et al. **Clin Invest Med** 1988 Aug;11(4):292–6

Free and total carnitine and acylcarnitine content of plasma, urine, liver and muscle of alcoholics. de Sousa C, et al. **Clin Sci** 1988 Oct;75(4):437–40

Effect of the cyclo-oxygenase inhibitor fenbufen on muscle and liver protein metabolism, muscle glutamine and plasma insulin in endotoxaemic rats. Jepson MM, et al. **Clin Sci** 1989 Jul;77(1):13–20

Effects of insulin on glucose metabolism in skeletal muscle from septic and endotoxaemic rats. Leighton B, et al. **Clin Sci** 1989 Jul;77(1):61–7

Muscle and bone in paraplegic patients, and the effect of functional electrical stimulation. Pacy PJ, et al. **Clin Sci** 1988 Nov;75(5):481–7

Alanylglutamine reduces muscle loss of alanine and glutamine in post-operative anaesthetized dogs. Roth E, et al. **Clin Sci** 1988 Dec;75(6):641–8

Bone induction in intramuscular implants by demineralized bone matrix: sequential changes of collagen synthesis. Guterman IA, et al. **Coll Relat Res** 1988 Sep;8(5):419–31

An in vitro preparation of the extensor digitorum communis muscle from the chick (Gallus domesticus) for studies of protein turnover. Baracos VE, et al. **Comp Biochem Physiol [A]** 1989;92(4):555–63

Regulation of glucose uptake in rat slow and fast skeletal muscles. Shoji S. **Comp Biochem Physiol [A]** 1988; 91(2):363–5

Effect of the androgenic status on the phenotype of the plantaris muscle of the rat. Boissonneault G, et al. **Comp Biochem Physiol [B]** 1989;93(1):157–62

Metabolism of glucose 1,6-P2—III. Partial purification and characterization of glucose 1,6-P2 synthase from pig skeletal muscle. Carreras M, et al. **Comp Biochem Physiol [B]** 1988;90(4):739–44

The effects of denervation on protein turnover of the soleus and extensor digitorum longus muscles of adult mice. Goldspink DF. **Comp Biochem Physiol [B]** 1978;61(1):37–41

Changes in myoglobin and lactate dehydrogenase in muscle tissues of a diving bird, the Pigeon Guillemot, during maturation. Haggblom L, et al. **Comp Biochem Physiol [B]** 1988;91(2):273–7

Influence of dietary amino acid patterns on the free amino acid contents of blood and muscle of rainbow trout (Salmo gairdnerii R.). Kaushik SJ, et al. **Comp Biochem Physiol [B]** 1979;64(2):175–80

Perch muscle parvalbumin: general characterization and magnesium-binding properties. Lehky P, et al. **Comp Biochem Physiol [B]** 1979;63(2):253–9

Influence of dietary lipids on microsomal membranes from chick breast muscle. Soler F, et al. **Comp Biochem Physiol [B]** 1988;90(4):767–71

Kidney and liver carnosinase activity and carnosine level in goose. Wolos A, et al. **Comp Biochem Physiol [B]** 1979; 62(4):515–9

Formation of alanine and glutamine in chick (Gallus domesticus) skeletal muscle. Wu G, et al. **Comp Biochem Physiol [B]** 1989;93(3):609–13

The nuclear binding of dexamethasone-receptor complex from fast and slow skeletal muscle in rats. Shoji S, et al. **Comp Biochem Physiol [C]** 1988;91(2):395–7

Cancer plasma effects on skeletal muscle metabolism. Mitchell LA, et al. **Curr Surg** 1988 Nov-Dec;45(6):469–70

A developmental study of the abnormal expression of alpha-cardiac and alpha-skeletal actins in the striated muscle of a mutant mouse. Garner I, et al. **Dev Biol** 1989 Jul;134(1):236–45

Effect of d-fenfluramine on basal glucose turnover and fat-feeding-induced insulin resistance in rats. Storlien LH, et al. **Diabetes** 1989 Apr;38(4):499–503

The in vivo study of cardiac and skeletal muscle protein turnover. Barrett EJ, et al. **Diabetes Metab Rev** 1989 Mar; 5(2):133–48 (146 ref.)

Endocrine regulation of protein breakdown in skeletal muscle. Kettelhut IC, et al. **Diabetes Metab Rev** 1988 Dec; 4(8):751–72 (162 ref.)

Impaired insulin-like growth factor I-mediated stimulation of glucose incorporation into glycogen in vivo in the ob/ob mouse. Cascieri MA, et al. **Diabetologia** 1989 Jun; 32(6):342–7

Characterisation of insulin-like growth factor I receptor in skeletal muscles of normal and insulin resistant subjects. Livingston N, et al. **Diabetologia** 1988 Dec;31(12):871–7

Intracellular localisation and expression of mammalian CDC2 protein during myogenic differentiation. Akhurst RJ, et al. **Differentiation** 1989 Mar;40(1):36–41

Parvalbumin in mouse muscle in vivo and in vitro. Ecob-Prince MS, et al. **Differentiation** 1989 Mar;40(1):10–6

Expression of the 31-kD stress protein in rat myoblasts and hepatocytes. Shuman J, et al. **DNA** 1988 Sep;7(7):475–82

Insulin-like growth factor I receptor analysis of satellite cell-derived myotube membranes established from two lines of Targhee rams selected for growth rate. Mathison BD, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):191–201

Muscle cell potassium, RNA and hydration in pregnancy and pre-eclampsia. Cheek DB, et al. **Early Hum Dev** 1989 Jun; 19(3):191–8

Interaction of nuclear factors with the upstream region of the alpha-subunit gene of chicken muscle acetylcholine receptor: variations with muscle differentiation and denervation. Piette J, et al. **EMBO J** 1989 Mar;8(3):687–94

Differentiation-dependent phosphorylation of a 175,000 molecular weight protein in response to insulin and insulin-like growth factor-I in L6 skeletal muscle cells. Beguinot F, et al. **Endocrinology** 1989 Sep;125(3):1599–605

Exercise-induced increase in glucose transporters in plasma membranes of rat skeletal muscle. Douen AG, et al. **Endocrinology** 1989 Jan;124(1):449–54

Pulsatile intravenous growth hormone (GH) infusion to hypophysectomized rats increases insulin-like growth factor I messenger ribonucleic acid in skeletal tissues more effectively than continuous GH infusion. Isgaard J, et al. **Endocrinology** 1988 Dec;123(6):2605–10

Insulin-stimulated phosphorylation of a 195K protein from muscle and liver in the presence of poly-L-lysine. Komori K, et al. **Endocrinology** 1989 Sep;125(3):1438–50

Different intracellular and intranuclear transport of triiodothyronine enantiomers in rat skeletal myoblasts. Pontecorvi A, et al. **Endocrinology** 1988 Dec;123(6):2922–9

A rapid, extranuclear effect of 3,5,3'-triiodothyronine on sugar uptake by several tissues in the rat in vivo. Evidence for a physiological role for the thyroid hormone action at the level of the plasma membrane. Segal J. **Endocrinology** 1989 Jun;124(6):2755–64

The insulin-mimetic effect of vanadate is not correlated with insulin receptor tyrosine kinase activity nor phosphorylation in mouse diaphragm in vivo. Strout HV, et al. **Endocrinology** 1989 Apr;124(4):1918–24

Muscle glycogen depletion patterns during draught work in Standardbred horses. Gottlieb M. **Equine Vet J** 1989 Mar; 21(2):110–5

Circulatory and muscle metabolic responses to draught work compared to increasing trotting velocities. Gottlieb M, et al. **Equine Vet J** 1988 Nov;20(6):430–4
Effect of freeze-drying on measurements of pH in biopsy samples of the middle gluteal muscle of the horse: comparison of muscle pH to the pyruvate and lactate content. Harris RC, et al. **Equine Vet J** 1989 Jan;21(1):45–7
Oxidative capacity of skeletal muscle fibres in racehorses: histochemical versus biochemical analysis. Valberg S, et al. **Equine Vet J** 1988 Jul;20(4):291–5
Blood chemistry and skeletal muscle metabolic responses during and after different speeds and durations of trotting. Valberg S, et al. **Equine Vet J** 1989 Mar;21(2):91–5
Muscle bio-energetics in acute glycolytic block: in vivo phosphorus-nuclear magnetic resonance study of iodo-acetate injected rats. Argov Z, et al. **Eur J Appl Physiol** 1989;58(8):808–15
The effect of one-legged sprint training on intramuscular pH and nonbicarbonate buffering capacity. Bell GJ, et al. **Eur J Appl Physiol** 1988;58(1–2):158–64
Glycogen degradation during isometric exercise at low contraction force. Hultman E, et al. **Eur J Appl Physiol** 1988;58(3):225–7
Age- and training-related changes in the collagen metabolism of rat skeletal muscle. Kovanen V, et al. **Eur J Appl Physiol** 1989;58(7):765–71
Effects of long-term feeding of high-protein or high-fat diets on the response to exercise in the rat. Satabin P, et al. **Eur J Appl Physiol** 1989;58(6):583–90
Effect of hypoxia on arterial and venous blood levels of oxygen, carbon dioxide, hydrogen ions and lactate during incremental forearm exercise. Yoshida T, et al. **Eur J Appl Physiol** 1989;58(7):772–7
Primary structure of chicken skeletal muscle and fibroblast alpha-actinins deduced from cDNA sequences. Arimura C, et al. **Eur J Biochem** 1988 Nov 15;177(3):649–55
A novel human myosin alkali light chain is developmentally regulated. Expression in fetal cardiac and skeletal muscle and in adult atria. Arnold HH, et al. **Eur J Biochem** 1988 Dec 1;178(1):53–60
The large glycoprotein subunit of the skeletal muscle voltage-sensitive calcium channel. Deglycosylation and development. Burgess AJ, et al. **Eur J Biochem** 1988 Dec 15;178(2):527–33
The complete sequence of a chicken-muscle cDNA encoding the acidic ribosomal protein P1. Ferro JA, et al. **Eur J Biochem** 1988 Nov 15;177(3):513–6
The multiplicity of troponin T isoforms. Distribution in normal rabbit muscles and effects of chronic stimulation. Härtner KT, et al. **Eur J Biochem** 1989 Jan 15;179(1):31–8
Binding Ca2+ to intracellular or to extracellular sites of dihydropyridine receptor of rabbit skeletal muscle discriminates between in vitro binding of Ca2+-channel agonist and antagonist. Kanngiesser U, et al. **Eur J Biochem** 1989 May 1;181(2):467–73
Chronic stimulation-induced changes of myosin light chains at the mRNA and protein levels in rat fast-twitch muscle. Kirschbaum BJ, et al. **Eur J Biochem** 1989 Jan 15; 179(1):23–9
Post-transcriptional regulation of 5S rRNA synthesis following myoblast differentiation. Zahradka P, et al. **Eur J Biochem** 1989 Sep 1;184(1):261–6
Dolichos biflorus agglutinin receptors in mouse muscle. I. Developmental expression in relation to synaptic acetylcholinesterase and to neuromuscular disease. Kaupmann K, et al. **Eur J Cell Biol** 1988 Aug;46(3):411–8
Dolichos biflorus agglutinin receptors in mouse muscle. II. Biochemical properties in relation to molecular forms of acetylcholinesterase. Kaupmann K, et al. **Eur J Cell Biol** 1988 Aug;46(3):419–24
Decreased insulin sensitivity and muscle enzyme activity in elderly subjects. Kruszynska YT, et al. **Eur J Clin Invest** 1988 Oct;18(5):493–8
Skeletal muscle and whole body protein turnover in cardiac cachexia: influence of branched-chain amino acid administration. Morrison WL, et al. **Eur J Clin Invest** 1988 Dec;18(6):648–54
Muscle energy stores in relation to clinical findings and outcome in acute arterial ischaemia of the lower leg. Aldman A, et al. **Eur J Vasc Surg** 1987 Dec;1(6):415–20
Effects of hydrostatic pressure (HP = 101 ATA) on nucleotides and pyridine dinucleotides tissue contents in trout. Cann-Moisan C, et al. **Exp Biol** 1988;47(4):239–42
Integrin on developing and adult skeletal muscle. Bozyczko D, et al. **Exp Cell Res** 1989 Jul;183(1):72–91
Protein kinase C activity and phorbol ester binding to rat myogenic cells during growth and differentiation. Martelly I, et al. **Exp Cell Res** 1989 Jul;183(1):92–100
Synaptic localization of a 66-kDa soluble protein from skeletal muscle: evidence for its developmental and neural regulation. Comella JX, et al. **Exp Neurol** 1989 Aug; 105(2):211–8
9-Methyl-7-bromoeudistomin D, a potent inducer of calcium release from sarcoplasmic reticulum of skeletal muscle. Kobayashi J, et al. **Experientia** 1989 Aug 15;45(8):782–3
Rp-diastereomer of adenosine cyclic 3',5'-phosphorothioate as an antagonist of the stimulatory action of cyclic AMP on the ouabain-insensitive Na efflux in single barnacle muscle fibers. Nwoga J, et al. **Experientia** 1989 Feb 15; 45(2):142–3
Increased susceptibility to lipid peroxidation in skeletal muscles of dystrophic hamsters. Salminen A, et al. **Experientia** 1989 Aug 15;45(8):747–9
Effect of hypoxia, aging and pharmacological treatment on muscular metabolites and enzyme activities. Pastoris O, et al. **Farmaco [Sci]** 1988 Jul-Aug;43(7–8):627–42
The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle-specific transcription. Braun T, et al. **FEBS Lett** 1988 Nov 7;239(2):309–12
Regulation of polypeptide-chain initiation in rat skeletal muscle. Starvation does not alter the activity or phosphorylation state of initiation factor eIF-2. Cox S, et al. **FEBS Lett** 1988 Nov 7;239(2):333–8
Synthesis and assembly of native myosin on muscle polyribosomes. Gagnon J, et al. **FEBS Lett** 1989 Jul 3; 250(2):549–55
A G-protein of sarcoplasmic reticulum of skeletal muscle is activated by caffeine or inositol trisphosphate. Hasegawa T, et al. **FEBS Lett** 1989 Feb 27;244(2):283–6
Acute exercise increases the number of plasma membrane glucose transporters in rat skeletal muscle. Hirshman MF, et al. **FEBS Lett** 1988 Oct 10;238(2):235–9
Electrostimulation-induced increases in fatty acid-binding protein and myoglobin in rat fast-twitch muscle and comparison with tissue levels in heart. Kaufmann M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):181–4
Electrostimulation-induced fast-to-slow transitions of myosin light and heavy chains in rabbit fast-twitch muscle at the mRNA level. Kirschbaum BJ, et al. **FEBS Lett** 1989 Jan 30;243(2):123–6
Calcitonin gene-related peptide-1 (CGRP-1) is a potent regulator of glycogen metabolism in rat skeletal muscle. Leighton B, et al. **FEBS Lett** 1989 Jun 5;249(2):357–61
Inhibition of protein breakdown by glutamine in perfused rat skeletal muscle. MacLennan PA, et al. **FEBS Lett** 1988 Sep 12;237(1–2):133–6
Pathways of calcium release from heavy sarcoplasmic reticulum vesicles isolated from rabbit skeletal muscle. Rubtsov AM, et al. **FEBS Lett** 1988 Oct 10;238(2):240–4
An analysis of Trichinella pseudospiralis excretions and study of their effect on striated muscles of mouse. Zenka J, et al. **Folia Parasitol (Praha)** 1989;36(2):177–83
Glutathione-dependent reduction of peroxides during ferryl- and met-myoglobin interconversion: a potential protective mechanism in muscle. Galaris D, et al. **Free Radic Biol Med** 1989;6(5):473–8
The activation of contraction and extracellular calcium in striated muscle of the lamprey. Györke S, et al. **Gen Physiol Biophys** 1988 Aug;7(4):427–32
Intracellular site of Sr2+ and Ba2+ accumulation in frog twitch muscle fibres as determined by electron probe X-ray microanalysis. Uhrík B, et al. **Gen Physiol Biophys** 1988 Dec;7(6):569–79
An avian muscle factor related to MyoD1 activates muscle-specific promoters in nonmuscle cells of different germ-layer origin and in BrdU-treated myoblasts. Lin ZY, et al. **Genes Dev** 1989 Jul;3(7):986–96
Nucleotide sequence and expression of the human skeletal alpha-actin gene: evolution of functional regulatory domains. Taylor A, et al. **Genomics** 1988 Nov;3(4):323–36
Pyloric gastrin-producing cells and pyloric sphincter muscle cells are nuclear targets for 3H 1,25(OH)2 vitamin D3. Studied by autoradiography and immunohistochemistry. Stumpf WE, et al. **Histochemistry** 1988;89(5):447–50
Heterogeneity of fast-oxidative muscle fibers of chicken demonstrated by anti-myosin monoclonal antibodies. Zhang Y, et al. **Histochemistry** 1989;91(2):143–9
Dissociation between insulin binding and glucose utilization after intense exercise in mouse skeletal muscles. Bonen A, et al. **Horm Metab Res** 1989 Apr;21(4):172–8
Thyroid hormones and muscle metabolism in dogs. Kruk B, et al. **Horm Metab Res** 1988 Oct;20(10):620–3
Distribution of glucose carbons to metabolic products in the perfused rat hindlimb over a range of glucose concentrations. Kubo K, et al. **Horm Metab Res** 1989 Jul; 21(7):347–50
Inhibition of muscular ketone extraction by lipid infusion in man. Rett K, et al. **Horm Metab Res** 1988 Aug;20(8):502–5
Kinins are not liberated by working skeletal muscle in the majority of patients with essential hypertension. Wicklmayr M, et al. **Horm Metab Res** 1989 May;21(5):292–3
Bradykinin is not liberated by working skeletal muscle in diabetes type II. Wicklmayr M, et al. **Horm Metab Res** 1989 Apr;21(4):222–3
Local liberation of kinins by working skeletal muscle tissue in man. Wicklmayr M, et al. **Horm Metab Res** 1988 Aug; 20(8):535
Beta-receptor properties in soleus muscles from spontaneously hypertensive rats. Atrakchi A, et al. **Hypertension** 1989 Jul;14(1):54–60
Protein changes in skeletal muscle of toad, Bufo melanostictus under cathode polarity treatment. Ravindran K, et al. **Indian J Exp Biol** 1988 Jul;26(7):560–1
Skeletal muscle glutamine metabolism during sepsis in the rat. Parry-Billings M, et al. **Int J Biochem** 1989; 21(4):419–23
In vitro buffering capacity of cardiac and skeletal muscle tissue in normotensive and hypertensive rats. Assessment using PCO2 equilibration of homogenates. Oldershaw PJ, et al. **Int J Cardiol** 1989 Apr;23(1):27–32
Correlation of clustering peak density and total amount of acetylcholine receptor on cultured mouse myotubes. Shikada K, et al. **Int J Dev Neurosci** 1987;5(1):53–61
Serotonin as a modulator of skeletal muscle oxygenation: effects of ketanserin and ritanserin on oxygen pressure distributions. Thorborg P, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):191–203
Site-specific and sex differences in the rates of fatty acid/triacylglycerol substrate cycling in adipose, tissue and muscle of sedentary and exercised dwarf hamsters (Phodopus sungorus). Mattacks CA, et al. **Int J Obes** 1988; 12(6):585–97
A comparison of the rate of clearance of xenon (133Xe) and pertechnetate ion (99mTcO4-) in murine tumors and normal leg muscles. Brown SL, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):381–90
An approach to noninvasive fiber type determination by NMR. Boicelli CA, et al. **Int J Sports Med** 1989 Feb; 10(1):53–4
Dietary protein-induced changes in porcine muscle respiration, protein synthesis and adipose tissue metabolism. Adeola O, et al. **J Anim Sci** 1989 Mar;67(3):664–73
Acceleration of postmortem tenderization in ovine carcasses through infusion of calcium chloride: effect of concentration and ionic strength. Koohmaraie M, et al. **J Anim Sci** 1989 Apr;67(4):934–42
Relationships among intramuscular collagen, serum hydroxyproline and serum testosterone in growing rams and wethers. Miller LF, et al. **J Anim Sci** 1989 Mar; 67(3):698–703
Hindlimb suspension increases insulin binding and glucose metabolism. Bonen A, et al. **J Appl Physiol** 1988 Oct; 65(4):1833–9
Muscle perfusion and oxygenation during local hyperoxia. Bredle DL, et al. **J Appl Physiol** 1988 Nov;65(5):2057–62
Metabolic and circulatory responses of normoxic skeletal muscle to whole-body hypoxia. Bredle DL, et al. **J Appl Physiol** 1988 Nov;65(5):2063–8
Adenine nucleotide degradation in human skeletal muscle during prolonged exercise. Broberg S, et al. **J Appl Physiol** 1989 Jul;67(1):116–22
Is resting muscle oxygen uptake controlled by oxygen availability to cells? Chinet AE, et al. **J Appl Physiol** 1989 Jan;66(1):253–60
Threshold for muscle lactate accumulation during progressive exercise. Chwalbinska-Moneta J, et al. **J Appl Physiol** 1989 Jun;66(6):2710–6
Intensity and duration of exercise effects on skeletal muscle cAMP, phosphorylase, and glycogen. Goldfarb AH, et al. **J Appl Physiol** 1989 Jan;66(1):190–4
Muscle energetics during prolonged cycling after exercise hypervolemia. Green HJ, et al. **J Appl Physiol** 1989 Feb; 66(2):622–31
Operation Everest II: muscle energetics during maximal exhaustive exercise. Green HJ, et al. **J Appl Physiol** 1989 Jan;66(1):142–50
Effect of flow on O2 consumption during progressive hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1988 Aug; 65(2):601–7
Skeletal muscle O2 consumption and energy metabolism during hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1989 May;66(5):2117–23
Bioenergetics of rabbit skeletal muscle during hypoxemia and ischemia. Gutierrez G, et al. **J Appl Physiol** 1988 Aug; 65(2):608–16
Effect of carbohydrate ingestion on exercise metabolism. Hargreaves M, et al. **J Appl Physiol** 1988 Oct;65(4):1553–5
Glycogen supercompensation in rat soleus muscle during recovery from nonweight bearing. Henriksen EJ, et al. **J Appl Physiol** 1989 Jun;66(6):2782–7
Limitation of maximal O2 uptake and performance by acute hypoxia in dog muscle in situ. Hogan MC, et al. **J Appl Physiol** 1988 Aug;65(2):815–21
Glycogenesis in muscle and liver during exercise. Hutber CA, et al. **J Appl Physiol** 1989 Jun;66(6):2811–7
Muscle glycogen storage after different amounts of carbohydrate ingestion. Ivy JL, et al. **J Appl Physiol** 1988 Nov;65(5):2018–23
Skeletal muscle glucose transport in obese Zucker rats after exercise training. Ivy JL, et al. **J Appl Physiol** 1989 Jun; 66(6):2635–41
Regulation of lactic acid production during exercise. Katz A, et al. **J Appl Physiol** 1988 Aug;65(2):509–18 (94 ref.)
Carbohydrate balance in competitive runners during successive days of intense training. Kirwan JP, et al. **J Appl Physiol** 1988 Dec;65(6):2601–6
Factors influencing hydrogen ion concentration in muscle after intense exercise. Kowalchuk JM, et al. **J Appl Physiol** 1988 Nov;65(5):2080–9
Role of lungs and inactive muscle in acid-base control after maximal exercise. Kowalchuk JM, et al. **J Appl Physiol** 1988 Nov;65(5):2090–6
Dissociation of changes in VO2 max, muscle QO2, and performance with training in rats. Lambert MI, et al. **J Appl Physiol** 1989 Apr;66(4):1620–5
Effect of hepatic vagotomy on postexercise substrate levels in food-restricted rats. Lavoie JM, et al. **J Appl Physiol** 1989 Apr;66(4):1965–9
Muscle glycogen availability and temperature regulation in humans. Martineau L, et al. **J Appl Physiol** 1989 Jan; 66(1):72–8
Muscle glycogen utilization during shivering thermogenesis in humans. Martineau L, et al. **J Appl Physiol** 1988 Nov; 65(5):2046–50
Peripheral effects of endurance training in young and old

subjects. Meredith CN, et al. **J Appl Physiol** 1989 Jun; 66(6):2844–9
Forearm metabolic asymmetry detected by 31P–NMR during submaximal exercise. Minotti JR, et al. **J Appl Physiol** 1989 Jul;67(1):324–9
Influence of skeletal muscle glycogen on passive rewarming after hypothermia. Neufer PD, et al. **J Appl Physiol** 1988 Aug;65(2):805–10
Muscle glycogen storage postexercise: effect of mode of carbohydrate administration. Reed MJ, et al. **J Appl Physiol** 1989 Feb;66(2):720–6
Evidence for tissue diffusion limitation of VO2max in normal humans. Roca J, et al. **J Appl Physiol** 1989 Jul;67(1):291–9
Static contraction increases arachidonic acid levels in gastrocnemius muscles of cats. Rotto DM, et al. **J Appl Physiol** 1989 Jun;66(6):2721–4
Muscle glycogenolysis and H+ concentration during maximal intermittent cycling. Spriet LL, et al. **J Appl Physiol** 1989 Jan;66(1):8–13
Skeletal muscle lipid peroxidation in exercised and food-restricted rats during aging. Starnes JW, et al. **J Appl Physiol** 1989 Jul;67(1):69–75
Glucose transport into rat skeletal muscle: interaction between exercise and insulin. Wallberg-Henriksson H, et al. **J Appl Physiol** 1988 Aug;65(2):909–13
Thermoregulation during cold water immersion is unimpaired by low muscle glycogen levels. Young AJ, et al. **J Appl Physiol** 1989 Apr;66(4):1809–16
Skeletal muscle beta 2-adrenoreceptors and the effect of adrenergic drugs on plasma potassium in perinephritis hypertension in rabbits. Elfellah MS, et al. **J Auton Pharmacol** 1989 Apr;9(2):113–8
In vivo magnetic resonance spectroscopy of muscle metabolism. Achten R, et al. **J Belge Radiol** 1988; 71(2):255–7
Photoaffinity labeling with dihydropyridine derivatives of crude membranes from rat skeletal, cardiac, ileal, and uterine muscles and whole brain. Ichida S, et al. **J Biochem (Tokyo)** 1989 May;105(5):767–74
Amino acid sequence of horseshoe crab, Tachypleus tridentatus, striated muscle troponin C. Kobayashi T, et al. **J Biochem (Tokyo)** 1989 May;105(5):823–8
Ca2+ binding to skeletal muscle troponin C in skeletal and cardiac myofibrils. Morimoto S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):435–9
Separation of Akazara scallop and rabbit troponin components by a single-step chromatography on CM-Toyopearl. Ojima T, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):9–11
Oxygen exchange reaction during ATP hydrolysis by glycerinated muscle fibers, myofibrils, and synthetic actomyosin filaments. Yasui M, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):644–7
Biochemical properties of isolated transverse tubular membranes. Sabbadini RA, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):163–213 (218 ref.)
Binding of ADP and 5'-adenylyl imidodiphosphate to rabbit muscle myofibrils. Biosca JA, et al. **J Biol Chem** 1988 Oct 5;263(28):14231–5
cDNAs encoding the beta subunit of cap Z, the actin-capping protein of the Z line of muscle. Caldwell JE, et al. **J Biol Chem** 1989 Jul 25;264(21):12648–52
Dihydropyridine and phenylalkylamine receptors associated with cardiac and skeletal muscle calcium channels are structurally different. Chang FC, et al. **J Biol Chem** 1988 Dec 15;263(35):18929–37
Muscle-specific regulation of a transfected rabbit myosin heavy chain beta gene promoter. Cribbs LL, et al. **J Biol Chem** 1989 Jun 25;264(18):10672–8
Crystallization of a synthetic analog of calcium-binding site III of rabbit skeletal troponin C. Delbaere LT, et al. **J Biol Chem** 1989 Jun 15;264(17):10261–3
Identification of a muscle-specific enhancer within the 5'-flanking region of the human myoglobin gene. Devlin BH, et al. **J Biol Chem** 1989 Aug 15;264(23):13896–901
Voltage-dependent calcium channels in skeletal muscle transverse tubules. Measurements of calcium efflux in membrane vesicles. Dunn SM. **J Biol Chem** 1989 Jul 5; 264(19):11053–60
Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711–7
Degradation of intracellular protein in muscle. Lysosomal response to modified proteins and chloroquine. Gerard KW, et al. **J Biol Chem** 1988 Dec 15;263(35):18886–90
A C2 muscle cell variant defective in transport of the acetylcholine receptor to the cell surface. Gu Y, et al. **J Biol Chem** 1989 Jul 15;264(20):11952–7
Metalloendoprotease inhibitors which block the differentiation of L6 myoblasts inhibit insulin degradation by the endogenous insulin-degrading enzyme. Kayalar C, et al. **J Biol Chem** 1989 May 25;264(15):8928–34
Structural inferences for the native skeletal muscle sodium channel as derived from patterns of endogenous proteolysis. Kraner S, et al. **J Biol Chem** 1989 Aug 5;264(22):13273–80
The ryanodine receptor-Ca2+ release channel complex of skeletal muscle sarcoplasmic reticulum. Evidence for a cooperatively coupled, negatively charged homotetramer. Lai FA, et al. **J Biol Chem** 1989 Oct 5;264(28):16776–85
Calcitonin gene-related peptide and cyclic AMP stimulate phosphoinositide turnover in skeletal muscle cells. Interaction between two second messenger systems. Laufer R, et al. **J Biol Chem** 1989 Feb 15;264(5):2683–9
A single gene codes for the beta subunits of smooth and skeletal muscle tropomyosin in the chicken. Libri D, et al. **J Biol Chem** 1989 Feb 15;264(5):2935–44
Structural and functional correlation of the trypsin-digested Ca2+ release channel of skeletal muscle sarcoplasmic reticulum. Meissner G, et al. **J Biol Chem** 1989 Jan 25; 264(3):1715–22
A defective intramolecular autoactivation cascade may cause the reduced kinase activity of the skeletal muscle insulin receptor from patients with non-insulin-dependent diabetes mellitus. Obermaier-Kusser B, et al. **J Biol Chem** 1989 Jun 5;264(16):9497–504
Phosphorylation of the 165-kDa dihydropyridine/phenylalkylamine receptor from skeletal muscle by protein kinase C. O'Callahan CM, et al. **J Biol Chem** 1988 Nov 25;263(33):17342–9
Removal of tropomyosin overlap modifies cooperative binding of myosin S-1 to reconstituted thin filaments of rabbit striated muscle. Pan BS, et al. **J Biol Chem** 1989 May 25;264(15):8495–8
Identification of the functional promoter regions in the human gene encoding the myosin alkali light chains MLC1 and MLC3 of fast skeletal muscle. Seidel U, et al. **J Biol Chem** 1989 Sep 25;264(27):16109–17
Functional properties of human skeletal muscle acetylcholine receptors expressed by the TE671 cell line. Sine SM. **J Biol Chem** 1988 Dec 5;263(34):18052–62
Ca2+-dependent and cAMP-dependent control of nicotinic acetylcholine receptor phosphorylation in muscle cells. Smith MM, et al. **J Biol Chem** 1989 Aug 5;264(22):12813–9
Differences in transferrin receptor function between normal developing and transformed myogenic cells as revealed by differential effects of phorbol ester on receptor distribution and rates of iron uptake. Sorokin LM, et al. **J Biol Chem** 1988 Oct 5;263(28):14128–33
Temporal integration of alpha 1-adrenergic responses in BC3H-1 muscle cells. Regulation of glycogen phosphorylase activity. Toranji S, et al. **J Biol Chem** 1989 Jul 15;264(20):11558–64
Insulin and glucose-dependent regulation of the glucose transport system in the rat L6 skeletal muscle cell line. Walker PS, et al. **J Biol Chem** 1989 Apr 15;264(11):6587–95
The bioenergetics of preservation of limbs before replantation. The rationale for intermediate hypothermia. Sapega AA, et al. **J Bone Joint Surg [Am]** 1988 Dec; 70(10):1500–13
An unusual beta-spectrin associated with clustered acetylcholine receptors. Bloch RJ, et al. **J Cell Biol** 1989 Feb;108(2):481–93
Myogenesis in the mouse embryo: differential onset of expression of myogenic proteins and the involvement of titin in myofibril assembly. Fürst DO, et al. **J Cell Biol** 1989 Aug;109(2):517–27
Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin(J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. Gatchalian CL, et al. **J Cell Biol** 1989 May; 108(5):1873–90
Acetylcholine receptor alpha-subunit mRNA is increased by ascorbic acid in cloned L5 muscle cells: Northern blot analysis and in situ hybridization. Horovitz O, et al. **J Cell Biol** 1989 May;108(5):1823–32
Regulation of acetylcholine receptor synthesis at the level of translation in rat primary muscle cells. Horovitz O, et al. **J Cell Biol** 1989 May;108(5):1817–22
Subcellular distribution of the 1,4-dihydropyridine receptor in rabbit skeletal muscle in situ: an immunofluorescence and immunocolloidal gold-labeling study. Jorgensen AO, et al. **J Cell Biol** 1989 Jul;109(1):135–47
The expression of sarcomeric muscle-specific contractile protein genes in BC3H1 cells: BC3H1 cells resemble skeletal myoblasts that are defective for commitment to terminal differentiation. Taubman MB, et al. **J Cell Biol** 1989 May;108(5):1799–806
Regulation of the sodium-potassium pump in cultured rat skeletal myotubes by intracellular sodium ions. Brodie C, et al. **J Cell Physiol** 1989 Jul;140(1):131–7
HSP70-related proteins in bovine skeletal muscle. Guerriero V Jr, et al. **J Cell Physiol** 1989 Sep;140(3):471–7
Nonesterified fatty acid accumulation and release during heart muscle-cell (myocyte) injury: modulation by extracellular "acceptor". Janero DR, et al. **J Cell Physiol** 1989 Jul;140(1):150–60
Transferrin endocytosis and iron uptake in developing myogenic cells in culture: effects of microtubular and metabolic inhibitors, sulphydryl reagents and lysosomotrophic agents. Sorokin LM, et al. **J Cell Physiol** 1988 Dec;137(3):483–9
Dexamethasone effects on creatine kinase activity and insulin-like growth factor receptors in cultured muscle cells. Whitson PA, et al. **J Cell Physiol** 1989 Jul;140(1):8–17
Effects of 2-(3-methyl-cinnamyl-hydrazono)-propionate on fatty acid and glucose oxidation in the isolated rat diaphragm using 14C-labelled substrates. Hydrazonopropionic acids, a new class of hypoglycaemic substances, VIII. Binder L, et al. **J Clin Chem Clin Biochem** 1988 Dec;26(12):815–9
Muscle and adipose tissue morphology and metabolism in Cushing's syndrome. Rebuffé-Scrive M, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1122–8
Infusion of tumor necrosis factor/cachectin promotes muscle catabolism in the rat. A synergistic effect with interleukin 1. Flores EA, et al. **J Clin Invest** 1989 May;83(5):1614–22
Lipoprotein metabolism influenced by training-induced changes in human skeletal muscle. Kiens B, et al. **J Clin Invest** 1989 Feb;83(2):558–64
Increased fat and skeletal muscle beta-adrenergic receptors but unaltered metabolic and hemodynamic sensitivity to epinephrine in vivo in experimental human thyrotoxicosis. Liggett SB, et al. **J Clin Invest** 1989 Mar;83(3):803–9
Correction of chronic hyperglycemia with vanadate, but not with phlorizin, normalizes in vivo glycogen repletion and in vitro glycogen synthase activity in diabetic skeletal muscle. Rossetti L, et al. **J Clin Invest** 1989 Sep;84(3):892–9
Coordinate regulation of glucose transporter function, number, and gene expression by insulin and sulfonylureas in L6 rat skeletal muscle cells. Wang PH, et al. **J Clin Invest** 1989 Jul;84(1):62–7
Oxidative capacity of tissues contributing to thermogenesis in eider (Somateria mollissima) ducklings: changes associated with hatching. Grav HJ, et al. **J Comp Physiol [B]** 1988;158(5):513–8
Phosphocreatine represents a thermodynamic and functional improvement over other muscle phosphagens. Ellington WR. **J Exp Biol** 1989 May;143:177–94
Simultaneous monitoring of changes in magnesium and calcium concentrations in frog cut twitch fibers containing antipyrylazo III. Irving M, et al. **J Gen Physiol** 1989 Apr; 93(4):585–608
Activation by divalent cations of a Ca2+-activated K+ channel from skeletal muscle membrane. Oberhauser A, et al. **J Gen Physiol** 1988 Jul;92(1):67–86
Kinetics and stoichiometry of coupled Na efflux and Ca influx (Na/Ca exchange) in barnacle muscle cells. Rasgado-Flores H, et al. **J Gen Physiol** 1989 Jun; 93(6):1219–41
Limitations of interpretation of age-related changes in hormone levels: illustration by effects of thyroid hormones on cardiac and skeletal muscle. Florini JR. **J Gerontol** 1989 Sep;44(5):B107–9 (33 ref.)
Evidence for inhibition of exodus of small neutral amino acids from non-brain tissues in hyperphenylalaninaemic rats. de Cespedes C, et al. **J Inherited Metab Dis** 1989;12(2):166–80
Increased skeletal muscle Na/K-ratio in obese men, but not in women, with glucose intolerance. Landin K, et al. **J Intern Med** 1989 Feb;225(2):89–94
Lung and muscle water after crystalloid and colloid infusion in septic rats: effect on oxygen delivery and metabolism. Rackow EC, et al. **J Lab Clin Med** 1989 Feb;113(2):184–9
Plasma lipoproteins, tissue cholesterol overload, and skeletal muscle apolipoprotein A-I synthesis in the developing chick. Tarugi P, et al. **J Lipid Res** 1989 Jan;30(1):9–22
Troponin of asynchronous flight muscle. Bullard B, et al. **J Mol Biol** 1988 Dec 5;204(3):621–37
Refined crystal structure of troponin C from turkey skeletal muscle at 2.0 A resolution. Herzberg O, et al. **J Mol Biol** 1988 Oct 5;203(3):761–79
Does titin regulate the length of muscle thick filaments? Whiting A, et al. **J Mol Biol** 1989 Jan 5;205(1):263–8
Structural changes in the thin filament during activation studied by X-ray diffraction of highly stretched skeletal muscle. Yagi N, et al. **J Mol Biol** 1989 Jul 20;208(2):359–63
Maximum rate of oxygen consumption and quantitative histochemistry of succinate dehydrogenase in single muscle fibres of Xenopus laevis. van der Laarse WJ, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):221–8
Effects of microdialysis-perfusion with anisoosmotic media on extracellular amino acids in the rat hippocampus and skeletal muscle. Lehmann A. **J Neurochem** 1989 Aug; 53(2):525–35
L-[3H]glutamate binding to a membrane preparation from crayfish muscle. Syvertsen C, et al. **J Neurochem** 1989 Mar; 52(3):755–60
In vivo phosphorus nuclear magnetic resonance (31P-NMR) study of dystrophic hamster muscle. Argov Z, et al. **J Neurol Sci** 1988 Sep;86(2–3):185–93
Immunocytochemical demonstration of myosin heavy chain expression in human muscle. Ecob-Prince M, et al. **J Neurol Sci** 1989 Jun;91(1–2):71–8
Effect of myasthenic patient sera on the number and distribution of acetylcholine receptors in muscle and nerve-muscle cultures from rat. Correlations with clinical state. Eymard B, et al. **J Neurol Sci** 1988 Aug;86(1):41–59
An autopsy case of mitochondrial encephalomyopathy: biochemical and electron microscopic studies of the brain. Kishi M, et al. **J Neurol Sci** 1988 Aug;86(1):31–40
Dystrophin immunostaining and freeze-fracture studies of muscles of patients with early stage amyotrophic lateral sclerosis and Duchenne muscular dystrophy. Wakayama Y, et al. **J Neurol Sci** 1989 Jun;91(1–2):191–205
Nicotinic receptors of frog ganglia resemble pharmacologically those of skeletal muscle. Lipscombe D, et al. **J Neurosci** 1988 Sep;8(9):3258–65
A muscle acetylcholine receptor is expressed in the human cerebellar medulloblastoma cell line TE671. Luther MA, et al. **J Neurosci** 1989 Mar;9(3):1082–96
Desensitization of acetylcholine receptors in rat myotubes is enhanced by agents that elevate intracellular cAMP. Middleton P, et al. **J Neurosci** 1988 Sep;8(9):3405–12
Three conductance classes of nicotinic acetylcholine receptors are expressed in developing amphibian skeletal muscle. Owens JL, et al. **J Neurosci** 1989 Jul;9(7):2575–80
In vivo development of nicotinic acetylcholine receptor

channels in Xenopus myotomal muscle. Owens JL, et al. **J Neurosci** 1989 Mar;9(3):1018–28

Single–channel analysis of four distinct classes of potassium channels in Drosophila muscle. Zagotta WN, et al. **J Neurosci** 1988 Dec;8(12):4765–79

Comparisons of urinary creatinine, skeletal muscle mass, and indices of muscle protein catabolism in rats fed ad libitum, with restricted food intake, and deprived of food. Rikimaru T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Jun; 35(3):199–209

The effect of diphenylamine–2–carboxylate on Cl– channel conductance and on excitability characteristics of rat skeletal muscle. Camerino DC, et al. **J Pharm Pharmacol** 1989 Jan;41(1):42–5

Activities of octopamine and synephrine stereoisomers on octopaminergic receptor subtypes in locust skeletal muscle. Evans PD, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):855–61

Ultrastructural disposition of adriamycin–associated magnetic albumin microspheres in rats. Gupta PK, et al. **J Pharm Sci** 1989 Apr;78(4):290–4

Radioligand binding to muscle homogenates to quantify receptor and ion channel numbers. Bambrick LL, et al. **J Pharmacol Methods** 1988 Dec;20(4):313–21

Measurement of myoglobin diffusivity in the myoplasm of frog skeletal muscle fibres. Baylor SM, et al. **J Physiol (Lond)** 1988 Dec;406:247–75

Effect of training on maximal oxygen uptake and aerobic capacity of locomotory muscles in tufted ducks, Aythya fuligula. Butler PJ, et al. **J Physiol (Lond)** 1988 Jul; 401:347–59

The effect of anions on bound acetylcholine in frog sartorius muscle. Ceccarelli B, et al. **J Physiol (Lond)** 1989; 408:233–49

Magnetic resonance muscle studies [letter] Rosen SD, et al. **J R Soc Med** 1988 Nov;81(11):676–7

Neuromuscular and hormonal adaptations during strength and power training. A review. Häkkinen K. **J Sports Med Phys Fitness** 1989 Mar;29(1):9–26 (60 ref.)

Depressed translational activity in the androgen sensitive levator ani muscle of the rat. Boissonneault G, et al. **J Steroid Biochem** 1989 Apr;32(4):507–13

Inhibited amino acid uptake in skeletal muscle during starvation. Warner BW, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):344–8

Intramitochondrial inclusions caused by depletion of creatine in rat skeletal muscles. Ohira Y, et al. **Jpn J Physiol** 1988; 38(2):159–66

Acute exhaustive exercise changes the metabolic profiles in slow and fast muscles of rat. Takekura H, et al. **Jpn J Physiol** 1988;38(5):689–97

Regulation of the Na,K–pump in skeletal muscle. Clausen T, et al. **Kidney Int** 1989 Jan;35(1):1–13 (170 ref.)

Verapamil reverses PTH– or CRF–induced abnormal fatty acid oxidation in muscle. Perna AF, et al. **Kidney Int** 1988 Dec;34(6):774–8

Influence of peripheral arterial occlusive disease on muscular metabolism. Part 1: Changes in lactate, ammonia, and hypoxanthine concentration in femoral blood. Rexroth W, et al. **Klin Wochenschr** 1989 Jun 1;67(11):576–82

Influence of peripheral arterial occlusive disease on muscular metabolism. Part 2: Changes in pyruvate, alanine, and urea concentration in femoral blood. Rexroth W, et al. **Klin Wochenschr** 1989 Jun 15;67(12):616–20

Effect of parenteral glutamine peptide supplements on muscle glutamine loss and nitrogen balance after major surgery. Stehle P, et al. **Lancet** 1989 Feb 4;1(8632):231–3

Validation of transport measurements in skeletal muscle with N–13 amino acids using a rabbit isolated hindlimb model. Conlon KC, et al. **Life Sci** 1989;44(13):847–59

Effects of oxygen deprivation on incubated rat soleus muscle. Fagan JM, et al. **Life Sci** 1989;44(10):677–81

Sensitivity of the sodium efflux in barnacle muscle fibers to the microinjection of monensin. Walkowiak H. **Life Sci** 1974 Oct 1;15(7):1353–61

Effect of dietary fat on individual long–chain fatty acyl–CoA esters in rat liver and skeletal muscle. Ney DM, et al. **Lipids** 1989 Mar;24(3):233–5

In vivo measurements of T1 relaxation times of 31P–metabolites in human skeletal muscle. Thomsen C, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):231–4

Interleaved 31P NMR with transcutaneous nerve stimulation (TNS): a method of monitoring compliance–independent skeletal muscle metabolic response to exercise. Helpern JA, et al. **Magn Reson Med** 1989 Apr;10(1):50–6

In vivo localized proton spectroscopic studies of human gastrocnemius muscle [published erratum appears in Magn Reson Med 1989 Jul;11(1):134] Narayana PA, et al. **Magn Reson Med** 1988 Oct;8(2):151–9

Metabolic changes in human muscle denervation: topical 31P NMR spectroscopy studies. Zochodne DW, et al. **Magn Reson Med** 1988 Aug;7(4):373–83

Effect of caffeine on glycogenolysis during exercise in endurance trained rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):173–7

Effect of intravenous caffeine on muscle glycogenolysis in fasted exercising rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):167–72

Role of cyclic AMP and inorganic phosphate in the regulation of muscle glycogenolysis during exercise. Chasiotis D. **Med Sci Sports Exerc** 1988 Dec;20(6):545–50

Role of the alkaline TG lipase in regulating intramuscular TG content. Oscai LB, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):539–44 (53 ref.)

The regulatory role of calcium in striated muscle. Tate CA, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):393–8 (40 ref.)

Ca2+ transport across the plasma membrane of striated muscle. Tibbits GF, et al. **Med Sci Sports Exerc** 1989 Aug; 21(4):399–405 (56 ref.)

Decreased glucose uptake in the fetus after maternal exercise. Treadway JL, et al. **Med Sci Sports Exerc** 1989 Apr; 21(2):140–5

Determinations of serum and muscle magnesium in Cebus monkeys infected with different T. cruzi strains. Falasca CA, et al. **Medicina (B Aires)** 1988;48(2):156–60

Effect of hypomagnesemia and exercise on slowly exchanging pools of magnesium. Brilla LR, et al. **Metabolism** 1989 Aug;38(8):797–800

Total and myofibrillar protein breakdown in different types of rat skeletal muscle: effects of sepsis and regulation by insulin. Hasselgren PO, et al. **Metabolism** 1989 Jul; 38(7):634–40

The effect of sepsis in rats on skeletal muscle protein synthesis in vivo and in periphery and central core of incubated muscle preparations in vitro. Hummel RP 3d, et al. **Metabolism** 1988 Dec;37(12):1120–7

Metabolism of branched–chain amino acids in leg muscles from tail–cast suspended intact and adrenalectomized rats. Jaspers SR, et al. **Metabolism** 1989 Feb;38(2):109–14

Effects of stretching and disuse on amino acids in muscles of rat hind limbs. Jaspers SR, et al. **Metabolism** 1989 Apr; 38(4):303–10

Contribution of plasma proteins to muscular de novo synthesis of glutamine. Komjati M, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):52–5

Muscle glutamine concentration and protein turnover in vivo in malnutrition and in endotoxemia. Millward DJ, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):6–13

Skeletal muscle glutamine transport, intramuscular glutamine concentration, and muscle–protein turnover. Rennie MJ, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):47–51 (30 ref.)

Effects of exercise training on the relationship between insulin binding and insulin–stimulated tyrosine kinase activity in rat skeletal muscle. Santos RF, et al. **Metabolism** 1989 Apr;38(4):376–86

Insulin inhibits protein degradation in skeletal muscles of eviscerated fasted rats. Smith OL. **Metabolism** 1988 Oct; 37(10):976–81

Glutamine and ornithine–alpha–ketoglutarate but not branched–chain amino acids reduce the loss of muscle glutamine after surgical trauma. Wernerman J, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):63–6

Use of rat hindquarter preparations in studies o branched–chain amino acid metabolism. Davis EJ, et al. **Methods Enzymol** 1988;166:476–83

Measurement of Ca2+ release in skinned fibers from skeletal muscle. Endo M, et al. **Methods Enzymol** 1988;157:12–26

Purification of Ca2+ release channel (ryanodine receptor) from heart and skeletal muscle sarcoplasmic reticulum. Inui M, et al. **Methods Enzymol** 1988;157:490–505

Purification and crystallization of calcium–binding protein from skeletal muscle sarcoplasmic reticulum. Maurer A, et al. **Methods Enzymol** 1988;157:321–8

Ionic permeability of isolated muscle sarcoplasmic reticulum and liver endoplasmic reticulum vesicles. Meissner G. **Methods Enzymol** 1988;157:417–37

Techniques for observing calcium channels from skeletal muscle sarcoplasmic reticulum in planar lipid biiayers. Smith JS, et al. **Methods Enzymol** 1988;157:480–9

Consequences of chronic K+ depletion for the ionic composition of brain, heart, skeletal muscle and cerebrospinal fluid. Schröck H, et al. **Miner Electrolyte Metab** 1989;15(3):171–7

Influence of exercise on cardiac and skeletal muscle myofibrillar proteins. Belcastro AN, et al. **Mol Cell Biochem** 1988 Sep;83(1):27–36

The genes for beta–myosin heavy chain and glycogen phosphorylase are discoordinately regulated during compensatory growth of plantaris muscle in the adult rat. Crerar MM, et al. **Mol Cell Biochem** 1989 Apr 11; 86(2):115–23

The purified Ca2+ antagonist receptor from skeletal muscle: subunit structure, photoaffinity labeling and endogenous protein kinase activity. Tuana BS, et al. **Mol Cell Biochem** 1988 Mar–Apr;80(1–2):133–43

Promoter upstream elements of the chicken cardiac myosin light–chain 2–A gene interact with trans–acting regulatory factors for muscle–specific transcription. Braun T, et al. **Mol Cell Biol** 1989 Jun;9(6):2513–25

Functional domains of the Drosophila melanogaster muscle myosin heavy–chain gene are encoded by alternatively spliced exons. George EL, et al. **Mol Cell Biol** 1989 Jul; 9(7):2957–74

Fast skeletal muscle–specific expression of a quail troponin I gene in transgenic mice. Hallauer PL, et al. **Mol Cell Biol** 1988 Dec;8(12):5072–9

Release of nonmitochondrial sequestered Ca2+ from permeabilized muscle cells in culture. Ambler SK, et al. **Mol Pharmacol** 1989 Mar;35(3):369–74

The effect of carbidopa on plasma and muscle levels of L–dopa, dopamine, and their metabolites following L–dopa administration to rats. Rose S, et al. **Mov Disord** 1988; 3(2):117–25

Muscle carnitine deficiency in neurogenic atrophy [letter] Amit R, et al. **Muscle Nerve** 1989 Mar;12(3):245–6

Changes in skeletal muscle gene transcription induced by chronic stimulation. Brownson C, et al. **Muscle Nerve** 1988 Nov;11(11):1183–9

Isomyosin changes after functional electrostimulation of denervated sheep muscle. Carraro U, et al. **Muscle Nerve** 1988 Oct;11(10):1016–28

Biochemical characteristics of free and junctional sarcoplasmic reticulum and of transverse tubules in human skeletal muscle. Damiani E, et al. **Muscle Nerve** 1989 Apr; 12(4):323–31

Increased resistance of the collagen in avian dystrophic muscle to collagenolytic attack: evidence for increased crosslinking. Feit H, et al. **Muscle Nerve** 1989 Jun; 12(6):476–85

31P–NMR spectroscopy: the metabolic profile of malignant hyperpyrexic porcine skeletal muscle. Foster PS, et al. **Muscle Nerve** 1989 May;12(5):390–6

Serum CK, calcium, magnesium, and oxidative phosphorylation in mdx mouse muscular dystrophy. Glesby MJ, et al. **Muscle Nerve** 1988 Aug;11(8):852–6

The binding of lipoproteins to human muscle cells: binding and uptake of LDL, HDL, and alpha–tocopherol. Gurusinghe A, et al. **Muscle Nerve** 1988 Dec;11(12):1231–9

Immunocytochemical localization of alpha–actinin in frog muscle treated with the ionophore A23187. Llados FT, et al. **Muscle Nerve** 1988 Sep;11(9):953–6

The distribution of slow myosin in rat muscles after neonatal nerve crush. Lowrie MB, et al. **Muscle Nerve** 1988 Oct; 11(10):1043–50

Accumulation of collagen and altered fiber–type ratios as indicators of abnormal muscle gene expression in the mdx dystrophic mouse. Marshall PA, et al. **Muscle Nerve** 1989 Jul;12(7):528–37

Delayed–onset muscle damage and lipid peroxidation in man after a downhill run. Maughan RJ, et al. **Muscle Nerve** 1989 Apr;12(4):332–6

Protease nexin I, a serpin, inhibits plasminogen–dependent degradation of muscle extracellular matrix. Rao JS, et al. **Muscle Nerve** 1989 Aug;12(8):640–6 (49 ref.)

Coexpression of myosin isoforms in muscle of patients with neurogenic disease. Sawchak JA, et al. **Muscle Nerve** 1989 Aug;12(8):679–89 (23 ref.)

Immunofluorescent evidence for presence of interleukin–1 in normal and diseased human skeletal muscle [letter] Schubert W, et al. **Muscle Nerve** 1988 Aug;11(8):890–2

Myopathy and cystine storage in muscles in a patient with nephropathic cystinosis. Gahl WA, et al. **N Engl J Med** 1988 Dec 1;319(22):1461–4

Primary carnitine deficiency due to a failure of carnitine transport in kidney, muscle, and fibroblasts. Treem WR, et al. **N Engl J Med** 1988 Nov 17;319(20):1331–6

Differential activation of myotube nuclei following exposure to an acetylcholine receptor–inducing factor. Harris DA, et al. **Nature** 1989 Jan 12;337(6203):173–6

Pancreatic amylin and calcitonin gene–related peptide cause resistance to insulin in skeletal muscle in vitro. Leighton B, et al. **Nature** 1988 Oct 13;335(6191):632–5

Localization of muscle gene products in nuclear domains. Pavlath GK, et al. **Nature** 1989 Feb 9;337(6207):570–3

Primary structure and expression from complementary DNA of skeletal muscle ryanodine receptor. Takeshima H, et al. **Nature** 1989 Jun 8;339(6224):439–45

Increased protein degradation results from elevated free calcium levels found in muscle from mdx mice. Turner PR, et al. **Nature** 1988 Oct 20;335(6192):735–8

L–carnitine addition to dialysis fluid. A therapeutic alternative for hemodialysis patients. Vacha GM, et al. **Nephron** 1989;51(2):237–42

Activity dependent characteristics of fast and slow muscle: biochemical and histochemical considerations. Gupta RC, et al. **Neurochem Res** 1989 Jul;14(7):647–55

Temporal relationship between nerve–stump–length–dependent changes in the autophosphorylation of a cyclic AMP–dependent protein kinase and the acetylcholine receptor content in skeletal muscle. Sayers ST, et al. **Neurochem Res** 1988 Dec; 13(12):1125–31

Phosphorus nuclear magnetic resonance evidence of abnormal skeletal muscle metabolism in chronic alcoholics. Bollaert PE, et al. **Neurology** 1989 Jun;39(6):821–4

Potassium uptake in muscle during paramyotonic weakness. Moxley RT 3d, et al. **Neurology** 1989 Jul;39(7):952–5

Maintenance of neuronal expression of calbindin by a muscular extract in cultures of chick dorsal root ganglion cells. Barakat I, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):1–5

The re–expression of two myosin heavy chains in regenerated rat muscle spindles. Fei C, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):75–9

The use of auto–anti–idiotypes for the visualization of acetylcholine receptors in an invertebrate skeletal muscle. Grandier–Vazeille X, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):30–4

Differential expression of glutamate receptors in Xenopus oocytes injected with messenger RNA from lobster muscle. Kawai N, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):203–7

The effect of neonatal deafferentation or deefferentation on the immunocytochemistry of muscle spindles in the rat. Kucera J, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):88–92

Localization of neural cell adhesion molecule in denervated muscle to both the plasma membrane and extracellular compartments by immuno–electron microscopy. Booth

CM, et al. **Neuroscience** 1988 Nov;27(2):699–709

Promoter analysis of myosin alkali light chain genes expressed in mouse striated muscle. Cohen A, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10037–52

Nucleotide sequence of the rat muscle acetylcholine receptor epsilon-subunit. Criado M, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10920

Deletions of muscle mitochondrial DNA in mitochondrial myopathies: sequence analysis and possible mechanisms. Holt IJ, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4465–9

Effect of euglycemic hyperinsulinemia on neonatal canine hepatic and muscle metabolism. Kliegman R, et al. **Pediatr Res** 1989 Feb;25(2):124–9

Metabolic studies of carnitine in a child with propionic acidemia. Kurczynski TW, et al. **Pediatr Res** 1989 Jul; 26(1):63–6

Hypotonia of rickets: a sequential study by P-31 magnetic resonance spectroscopy. Mize CE, et al. **Pediatr Res** 1988 Dec;24(6):713–6

3H-ouabain binding sites in porcine skeletal muscle as influenced by environmental temperature and energy intake. Dauncey MJ, et al. **Pflugers Arch** 1989 Jul; 414(3):317–23

Thyroid hormone deficiency and muscle metabolism during light and heavy exercise in dogs. Kaciuba-Uścilko H, et al. **Pflugers Arch** 1988 Aug;412(3):336–7

Total muscle mitochondrial volume in relation to aerobic capacity of horses and steers. Kayar SR, et al. **Pflugers Arch** 1989 Feb;413(4):343–7

Ca-induced Ca release from the sarcoplasmic reticulum of isolated myofibrillar bundles of barnacle muscle fibres. Lea TJ, et al. **Pflugers Arch** 1989 Feb;413(4):401–6

Dynamics of metabolic responses to prolonged elevation of circulating adrenaline in resting and exercising rats. Nazar K, et al. **Pflugers Arch** 1989 Feb;413(4):429–34

Hodgkin-Huxley parameters of the sodium channels in human myoballs. Pröbstle T, et al. **Pflugers Arch** 1988 Aug; 412(3):264–9

Anaerobic chemical changes and mechanical output during isometric tetani of rat skeletal muscle in situ. Westra HG, et al. **Pflugers Arch** 1988 Jul;412(1–2):121–7

Transitory L-carnitine depletion in rat skeletal muscle by D-carnitine. Arancio O, et al. **Pharmacol Res** 1989 Mar-Apr;21(2):163–8

A stereospecific binding site regulates the C1- ion channel in rat skeletal muscle. Conte Camerino D, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1077–8

Studies on the physical state of water in living cells and model systems: IX. Theoretical significance of a straight line relationship between intracellular concentration of a partially excluded solute and its concentration in the bathing medium. Ling GN. **Physiol Chem Phys Med NMR** 1988;20(4):281–92

Studies on the physical state of water in living cells and model systems. X. The dependence of the equilibrium distribution coefficient of a solute in polarized water on the molecular weights of the solute: experimental confirmation of the "size rule" in model studies. Ling GN, et al. **Physiol Chem Phys Med NMR** 1988;20(4):293–307

Studies on the physical state of water in living cells and model systems. XI. The equilibrium distribution coefficients of pentoses in muscle cell water: their dependence primarily on the molecular weights of the pentoses and lesser dependence on their stereospecificity. Ling GN, et al. **Physiol Chem Phys Med NMR** 1988;20(4):309–17

Treadmill exercise training increases the oxidative capacity of chicken iliotibialis muscle. Brackenbury JH, et al. **Poult Sci** 1989 Apr;68(4):577–81

Early post-mortem metabolism and muscle shortening in the Pectoralis major muscle of broiler chickens. McGinnis JP, et al. **Poult Sci** 1989 Mar;68(3):386–92

Isolation and characterization of cDNA encoding the alpha subunit of Cap Z(36/32), an actin-capping protein from the Z line of skeletal muscle. Casella JF, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5800–4

Amylin found in amyloid deposits in human type 2 diabetes mellitus may be a hormone that regulates glycogen metabolism in skeletal muscle. Cooper GJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7763–6

Recombinant growth hormone enhances muscle myosin heavy-chain mRNA accumulation and amino acid accrual in humans. Fong Y, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3371–4

Direct observation of glycogen synthesis in human muscle with 13C NMR. Jue T, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4489–91

Natural-abundance 13C NMR study of glycogen repletion in human liver and muscle. Jue T, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1439–42

Molecular cloning and expression of cDNA encoding a lumenal calcium binding glycoprotein from sarcoplasmic reticulum. Leberer E, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6047–51

Intracellular pH in human skeletal muscle by 1H NMR. Pan JW, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7836–9

Coordinate expression of insulin-like growth factor II and its receptor during muscle differentiation. Tollefsen SE, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1543–7

The use of conventional and unconventional supplements in the Thoroughbred horse. Snow DH, et al. **Proc Nutr Soc** 1989 Jan;48(1):135–9 (27 ref.)

Oxidative stress leads to inhibition of calcium transport by sarcoplasmic reticulum in skeletal muscle. Kagan VE, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):365–8

Is skeletal muscle PO2 related to the severity of multiple organ failure and survival in critically ill patients? A preliminary study. Beerthuizen GI, et al. **Prog Clin Biol Res** 1989;308:137–42

Time course of changes in Na,K-pump concentration and passive Na,K-fluxes in skeletal muscle after administration of thyroid hormone. Everts ME, et al. **Prog Clin Biol Res** 1988;268B:371–6

Age-related molecular changes in skeletal muscle. Gafni A, et al. **Prog Clin Biol Res** 1989;287:277–82

Maintenance of Na,K-homeostasis by Na,K-pumps in striated muscle. Sejersted OM. **Prog Clin Biol Res** 1988; 268B:195–206 (34 ref.)

The influence of blood flow rate on adenosine release from contracting dog skeletal muscle. Ballard HJ, et al. **Q J Exp Physiol** 1989 Mar;74(2):97–107

Optical measurements of intracellular pH in intact isolated muscle fibres and muscle growth cones in culture. Gillespie JI, et al. **Q J Exp Physiol** 1988 Nov;73(6):995–1000

Na+-Ca2+ exchange in limb muscles of dystrophic (C57 BL/6J dy2J/dy2J) mice. Noireaud J, et al. **Q J Exp Physiol** 1989 Jan;74(1):75–7

The effect of sodium pump blockade and denervation on the steady-state sodium permeability of mouse skeletal muscle fibres. Seabrooke SR, et al. **Q J Exp Physiol** 1988 Jul;73(4):561–72

Glucose utilization by fetal muscles during maternal fasting. Hauguel S, et al. **Reprod Nutr Dev** 1988;28(3B):817–8

Postnatal changes in insulin binding in slow and fast-twitch rabbit skeletal muscles. Lefaucheur L, et al. **Reprod Nutr Dev** 1988;28(3B):821–2

Blood and muscle metabolic responses to draught work of varying intensity and duration in horses. Gottlieb M, et al. **Res Vet Sci** 1989 Jul;47(1):102–9

Muscle and liver protein synthesis and degradation in growing rats fed a raw field bean (Vicia faba L.) diet. Goena M, et al. **Rev Esp Fisiol** 1988 Dec;44(4):345–51

Differential metabolic pattern of muscle and liver after the administration of a beta-adrenergic agonist. Portillo MP, et al. **Rev Esp Fisiol** 1988 Jun;44(2):227–9

Muscle protein synthesis of rats fed a kidney bean (Phaseolus vulgaris L.) diet [letter] Santidrián S, et al. **Rev Esp Fisiol** 1988 Mar;44(1):109–10

Glucose and lactate balances in heart and leg after coronary surgery: influence of insulin infusion. Svensson S, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):145–50

A chemical link in excitation-contraction coupling in skeletal muscle. Vergara J, et al. **Soc Gen Physiol Ser** 1987; 42:133–51

Connective tissue changes of the multifidus muscle in patients with lumbar disc herniation. An immunohistologic study of collagen types I and III and fibronectin. Lehto M, et al. **Spine** 1989 Mar;14(3):302–9

Biochemical aspects of peripheral muscle fatigue. A review. Roberts D, et al. **Sports Med** 1989 Feb;7(2):125–38 (97 ref.)

Influence of compensatory overload on glucocorticoid receptors in rat skeletal muscle. Tanaka H, et al. **Steroids** 1988 Jan-Feb;51(1–2):115–22

Effect of sepsis on calcium uptake and content in skeletal muscle and regulation in vitro by calcium of total and myofibrillar protein breakdown in control and septic muscle: results from a preliminary study. Benson DW, et al. **Surgery** 1989 Jul;106(1):87–93

Cyanide release from nitroprusside in the isolated, perfused, bloodless liver and hindlimbs of the rat. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):354–6

Cyanide metabolism in the isolated, perfused, bloodless hindlimbs or liver of the rat. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):338–49

Does muscle activation occur by direct mechanical coupling of transverse tubules to sarcoplasmic reticulum? Caswell AH, et al. **Trends Biochem Sci** 1989 May;14(5):161–5 (32 ref.)

Regulating the number and function of neuronal acetylcholine receptors. Berg DK, et al. **Trends Neurosci** 1989 Jan;12(1):16–21 (40 ref.)

Resolving the structural basis for developmental changes in muscle ACh receptor function: it takes nerve. Brehm P. **Trends Neurosci** 1989 May;12(5):174–7 (29 ref.)

Application of diethylstilbestrol dipropionate in bulls. II. Residues in bile, liver, kidney, muscle tissues and application site. Jansen EH, et al. **Vet Q** 1989 Apr; 11(2):87–93

Determination of beta-adrenoceptors and cAMP in muscle from normal and splayleg Belgian Landrace pigs. Roets E, et al. **Vet Res Commun** 1989;13(4):273–86

Posttraumatic skeletal muscle proteolysis: the role of the hormonal environment. Bessey PQ, et al. **World J Surg** 1989 Jul-Aug;13(4):465–70; discussion 471

Intra- and extracellular amino acid concentrations in portacaval-shunted rabbits. Role of hyperammonemia and effects of branched-chain amino acid-enriched parenteral nutrition. Leweling H, et al. **Z Ernahrungswiss** 1989 Jun; 28(2):149–72

The effect of a diet with a high or low content of vitamin E on different skeletal muscles and myocardium in pigs. Jensen M, et al. **Zentralbl Veterinarmed [A]** 1988 Aug; 35(7):487–97

[Observation on muscular glycogen in spleen-deficient rats treated with a jian pi yi qi decoction] Xiong H, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):96–7, 70 (Eng. Abstr.) **(Chi)**

[Metabolic response in laboratory rats after 3 days and 14 days of the physical stress of swimming] Holečková J, et al. **Cesk Fysiol** 1988;37(5):469–76 **(Cze)**

[Postmortem formation of inorganic phosphorus in the skeletal muscles of pigs in relation to the detection of PSE in meat] Novotná B, et al. **Vet Med (Praha)** 1988 Oct; 33(10):617–23 **(Cze)**

[Possibilities in the use of muscle biopsies for metabolic research] Vondra K. **Vnitr Lek** 1988 Jul;34(7):714–9 (Eng. Abstr.) **(Cze)**

[Blocking calcium-dependent potassium in permeability of skeletal muscle fibers in the frog by a sodium-free medium] Nasri-Sebdani M, et al. **C R Acad Sci [III]** 1988; 307(6):357–62 (Eng. Abstr.) **(Fre)**

[Is muscular acetylcholinesterase activity correlated with the intracellular concentration of free calcium?] de la Porte S, et al. **Reprod Nutr Dev** 1988;28(3B):785–93 (Eng. Abstr.) **(Fre)**

[Insulin resistance of muscles in the Zucker rat during obesity] Doré E, et al. **Reprod Nutr Dev** 1988;28(3B):823–4 **(Fre)**

[The effect of the nutritional status of rats on the protein biosynthetic activity in a cell-free system] Schröder A, et al. **Arch Tierernahr** 1988 Sep;38(9):727–34 (Eng. Abstr.) **(Ger)**

[Calcium channels: structure and function of receptors for calcium channel blockers in skeletal muscle] Hofmann F, et al. **Arzneimittelforschung** 1989 Jan;39(1A):164–8 (59 ref.) (Eng. Abstr.) **(Ger)**

[Visualizing muscular phosphorus metabolites in peripheral arterial occlusive disease] Rexroth W, et al. **Vasa Suppl** 1988;23:115–20 **(Ger)**

[Glycogen metabolism disorders in tenotomized muscles] Józsa L, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul; 28(3):170–4 (Eng. Abstr.) **(Hun)**

[Molecular mechanisms of muscle contraction] Fazekas S, et al. **Orv Hetil** 1989 Aug 6;130(32):1707–10, 1713 (32 ref.) (Eng. Abstr.) **(Hun)**

[Metabolic changes in the skeletal muscle of non-insulin-dependent diabetics] Capaldo B, et al. **Minerva Endocrinol** 1988 Jul-Sep;13(3):181–6 (Eng. Abstr.) **(Ita)**

[Comparative study of in vitro diagnosis by the skinned fiber test and clinical diagnosis of malignant hyperthermia] Matsui K, et al. **Masui** 1989 Feb;38(2):195–201 (Eng. Abstr.) **(Jpn)**

[Muscle carnitine deficiency associated with myalgia and rhabdomyolysis following exercise] Miyajima H, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):93–7 (Eng. Abstr.) **(Jpn)**

[Effect of phosphorylation of light chain myosin and Ca2+ on the conformation of F-actin during skeletal muscle contraction] Borovikov IuS, et al. **Biokhimiia** 1989 Jan; 54(1):162–6 (Eng. Abstr.) **(Rus)**

[Calcium transport in proteoliposomes incorporating membranes of skeletal muscle T-system] Rozhmanova OM, et al. **Biokhimiia** 1988 Oct;53(10):1612–8 (Eng. Abstr.) **(Rus)**

[The role of Ca2+-ATpase and its hydrophobic component in the release of Ca2+ from skeletal muscle sarcoplasmic reticulum] Voitsitskiĭ VM, et al. **Biokhimiia** 1988 Sep; 53(9):1427–32 (Eng. Abstr.) **(Rus)**

[Metabolic characteristics of the myocardium and muscle tissue of the thigh in rats] Mardashko AA, et al. **Fiziol Zh** 1989 May-Jun;35(3):21–6 (Eng. Abstr.) **(Rus)**

[Effect of a 30-day period of hypokinesia on various physiologic and biochemical indicators during maximal physical load] Buzulina VP, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):40–4 (Eng. Abstr.) **(Rus)**

[Problem of modeling the physiologic effects of weightlessness by the method of "antiorthostatic suspension" of small laboratory animals] Kuznetsov SL, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):74–6 **(Rus)**

[Interaction of aldolase with thin filaments within I-disks, isolated from skeletal muscles] Podlubnaia ZA, et al. **Tsitologiia** 1989 Apr;31(4):460–4 (Eng. Abstr.) **(Rus)**

[Methylglyoxal shunt of glycolysis in animal muscles] Alekseev VS, et al. **Ukr Biokhim Zh** 1988 Jul-Aug; 60(4):86–8 (Eng. Abstr.) **(Rus)**

[A study of passive Ca2+ flow through the sarcoplasmic reticulum of skeletal muscles. II. Stimulation of passive Ca2+ influx with monovalent cations and anions] Diadiusha GN, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):80–5 (Eng. Abstr.) **(Rus)**

[Entry of cyclic nucleotides into frog muscles in vivo and in vitro] Kudriavtseva NV, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):40–6 (Eng. Abstr.) **(Rus)**

[Characteristics of carbohydrate metabolism in skeletal muscles of the sea carp Diplodus annularis L.] Silkin IuA, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):89–91 (Eng. Abstr.) **(Rus)**

[Calcium release from vesicles of heavy sarcoplasmic reticulum of rabbit skeletal muscles] Smirnova MB, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):57–64 (Eng. Abstr.) **(Rus)**

[A study of passive Ca2+ flow through the sarcoplasmic reticulum of skeletal muscles. I. Passive Ca2+ efflux from

vesicle membranes] Tugai VA, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):75–9 (Eng. Abstr.) **(Rus)**

[Trophic disorders of tissue in afferent and efferent denervation] Zalko NN, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):14–9 (Eng. Abstr.) **(Rus)**

[Activity of the pentosephosphate pathway of glucose metabolism in ischemized skeletal muscles in humans and animals] Kosnikova IV. **Vopr Med Khim** 1989 May–Jun; 35(3):28–30 (Eng. Abstr.) **(Rus)**

[Change in the glycogen level in the liver, heart and skeletal muscles of rodents during exposure to plague toxin] Kratinov AG, et al. **Vopr Med Khim** 1971 Jul–Aug; 17(4):373–9 (Eng. Abstr.) **(Rus)**

[Changes in human skeletal muscle proteins during autolysis studied by two-dimensional electrophoresis] Lisakovskiĭ SV, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):117–22 (Eng. Abstr.) **(Rus)**

[Structural and functional changes in myosin from rat skeletal muscles during postmortem autolysis] Nikitina ZK, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):76–81 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

A method for infection of cultured myogenic cells with Rous sarcoma virus using polybrene. Sorokin LM, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):63–8

Pyomyositis--an under-reported disease in temperate climates. Farrag N, et al. **J Infect** 1988 Nov;17(3):259–63

Comparative antibiotic dose-effect relations at several dosing intervals in murine pneumonitis and thigh-infection models. Leggett JE, et al. **J Infect Dis** 1989 Feb;159(2):281–92

Rabies virus infection of myotubes and neurons as elements of the neuromuscular junction. Tsiang H. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S733–8

PARASITOLOGY

Trypanosoma cruzi: explant organ cultures from mice with chronic Chagas' disease. McCabe RE, et al. **Exp Parasitol** 1989 May;68(4):462–9

Survival of Trichinella muscle larvae in frozen wolf tissue in Italy. Pozio E, et al. **J Parasitol** 1989 Jun;75(3):472–3

Pathogenesis of Sarcocystis falcatula (Apicomplexa: Sarcocystidae) in the budgerigar (Melopsittacus undulatus). IV. Ultrastructure of developing, mature and degenerating sarcocysts. Neill PJ, et al. **J Protozool** 1989 Jul–Aug; 36(4):430–7

Complementary surface epitopes, myotropic adhesion and active grip in Trypanosoma cruzi-host cell recognition. von Kreuter BF, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):197–208

Histochemical study of Sarcocystis sp. intramuscular cysts in gastrocnemius and soleus of the cat. Fiori MG, et al. **Parasitol Res** 1988;75(2):123–31

The morphology of Trichinella spiralis: ultrastructural study of the mid- and hindgut of the muscle larvae. Takahashi Y, et al. **Parasitol Res** 1988;75(1):19–27

A rapid method for detecting Trichinella spiralis larvae in pork using a monoclonal antibody-latex conjugate. Choy WF, et al. **Vet Parasitol** 1989 Aug 1;32(4):301–10

Biochemistry of the various fractions of sarcocysts of Sarcocystis fusiformis of buffalo (Bubalus bubalis). Khulbe DC, et al. **Vet Parasitol** 1989 Apr;31(1):1–5

[Frost resistance of Trichinella larvae in the muscles of the European brown bear] Kolokol'tsev MM. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):62–3 (Eng. Abstr.) **(Rus)**

[The final stage of division of the intermediate cell in a Sarcocystis muris muscle cyst] Radchenko AI. **Tsitologiia** 1988 Aug;30(8):1010–3 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Biopsy findings (cerebral cortex, muscle, skin) in Lafora disease. Barbieri F, et al. **Acta Neurol (Napoli)** 1987 Apr; 9(2):81–94

Syndrome of deltoid and/or gluteal fibrotic contracture: an injection myopathy. Chen SS, et al. **Acta Neurol Scand** 1988 Sep;78(3):167–76

Screening for neurotrophic disturbances in amyotrophic lateral sclerosis. Ebendal T, et al. **Acta Neurol Scand** 1989 Mar;79(3):188–93

Congenital fiber type disproportion in an adult: a morphometric and microchemical study. Haltia M, et al. **Acta Neurol Scand** 1988 Jul;78(1):65–71

Muscle pathology in cytochrome c oxidase deficiency. Nonaka I, et al. **Acta Neuropathol (Berl)** 1988;77(2):152–60

Skeletal muscle pathology in ovine congenital progressive muscular dystrophy. I. Histopathology and histochemistry. Richards RB, et al. **Acta Neuropathol (Berl)** 1988; 77(2):161–7

Membrane abnormality in malignant hyperthermia. Shah A, et al. **Acta Neuropathol (Berl)** 1989;78(1):86–9

Magnetic resonance imaging and spectroscopy of thigh muscles in cruciate ligament insufficiency. Kariya Y, et al. **Acta Orthop Scand** 1989 Jun;60(3):322–5

Muscle changes in work-related chronic myalgia. Larsson SE, et al. **Acta Orthop Scand** 1988 Oct;59(5):552–6

Histopathological study of the biopsied muscles from juvenile patients with congenital myotonic dystrophy. Wakai S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):7–12

Variability in muscle fibre areas in whole human quadriceps muscle. How much and why? Lexell J, et al. **Acta Physiol Scand** 1989 Aug;136(4):561–8

Selective damage of fast glycolytic muscle fibres with eccentric contraction of the rabbit tibialis anterior. Lieber RL, et al. **Acta Physiol Scand** 1988 Aug;133(4):587–8

Muscle pathomorphology in m. quadriceps of marathon runners. Early signs of strain disease or functional adaptation? Sjöström M, et al. **Acta Physiol Scand** 1988 Apr;132(4):537–41

Cytoarchitecture of muscle in a genetic model of murine diabetes. Feczko JD, et al. **Am J Anat** 1988 Jul; 182(3):224–40

Lesions in the rat soleus muscle following eccentrically biased exercise. Ogilvie RW, et al. **Am J Anat** 1988 Aug; 182(4):335–46

Hematoxylin-stained bodies and tissue LE cells in a skeletal muscle biopsy. McMullan DT, et al. **Am J Clin Pathol** 1988 Dec;90(6):731–3

Late onset scleroatonic familial myopathy (Ullrich disease): a study of two sibs. Ricci E, et al. **Am J Med Genet** 1988 Dec;31(4):933–42

Induction of mRNA for IGF-I and -II during growth hormone-stimulated muscle hypertrophy. Turner JD, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E513–7

Isolated infraspinatus atrophy. A common cause of posterior shoulder pain and weakness in throwing athletes? Bryan WJ, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):130–1

The effect of intravenous nutrition on muscle mass and exercise capacity in perioperative patients. Wood CD, et al. **Am J Surg** 1989 Jul;158(1):63–7

Skeletal muscle in the diabetic mouse: histochemical and morphometric analysis. Klueber KM, et al. **Anat Rec** 1989 Sep;225(1):41–5

Findings in muscle in complex I (NADH coenzyme Q reductase) deficiency. Koga Y, et al. **Ann Neurol** 1988 Dec; 24(6):749–56

Evidence for a novel picornavirus in human dermatomyositis. Rosenberg NL, et al. **Ann Neurol** 1989 Aug;26(2):204–9

Characterization of nicked myotoxin a and its effect on the sarcoplasmic reticulum calcium pump. Mori N, et al. **Arch Biochem Biophys** 1988 Oct;266(1):171–80

Solitary spindle cell tumor with myoid differentiation of the lymph node. Lee JY, et al. **Arch Pathol Lab Med** 1989 May;113(5):547–50

Electron-microscopic study of systemic myonecrosis due to poisoning by tropical rattlesnake (Crotalus durissus terrificus) in humans. Rossi MA, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):169–73

Chronic progressive external ophthalmoplegia. I. A quantitative histochemical study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):133–42

Muscle biopsy correlated with electromyography. Study of 100 cases. Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Jun; 46(2):156–65

Proliferative response of peripheral blood mononuclear cells to autologous and allogeneic muscle in patients with polymyositis/dermatomyositis. Kalovidouris AE, et al. **Arthritis Rheum** 1989 Apr;32(4):446–53

Becker and Duchenne muscular dystrophy: a comparative morphological study. Dennett X, et al. **Aust Paediatr J** 1988;24 Suppl 1:15–20

Skeletal muscle lesions in turkeys associated with the feeding of monensin. Wages DP, et al. **Avian Dis** 1988 Jul–Sep; 32(3):583–6

Congenital muscle fibre type disproportion: clinical, morphological and biochemical findings in children. Pastoris O, et al. **Basic Appl Histochem** 1989;33(2):159–68

Heteroplasmy of mitochondrial genomes in clonal cultures from patients with Kearns-Sayre syndrome. Moraes CT, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):765–71

Regulation of myosin heavy-chain gene expression during skeletal-muscle hypertrophy. Periasamy M, et al. **Biochem J** 1989 Feb 1;257(3):691–8

Clinical and experimental skeletal muscle alcoholic myopathy. Peters TJ, et al. **Biochem Soc Trans** 1988 Jun; 16(3):250–1

Reactions in rat gluteal muscle to titanium implants. Lindberg LR, et al. **Biomaterials** 1988 Nov;9(6):547–9

Biocompatibility of carbon-carbon materials: in vivo study of their erosion using 14carbon labelled samples. More N, et al. **Biomaterials** 1988 Jul;9(4):328–34

The Aberdeen Impedance Imaging System. Kulkarni V, et al. **Biomed Sci Instrum** 1989;25:47–58

Location predilection of intramuscularly transplanted Yoshida ascites tumor cells. Roveta G. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):189–94

Adrenal cortical reserve in patients undergoing muscle biopsy for malignant hyperthermia screening. Fairbrass MJ, et al. **Br J Anaesth** 1989 Jan;62(1):66–9

Evaluation of "3 in 1" lumbar plexus block in patients having muscle biopsy. Madej TH, et al. **Br J Anaesth** 1989 May; 62(5):515–7

Clostridial myonecrosis: a presenting feature in carcinoma of the colon. Das TK, et al. **Br J Clin Pract** 1988 Jul; 42(7):304–6

Muscle fibre necrosis induced by intramuscular injection of drugs. Manor D, et al. **Br J Exp Pathol** 1989 Aug; 70(4):457–62

The pathogenesis of genitourinary prolapse and stress incontinence of urine. A histological and histochemical study. Gilpin SA, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):15–23

Should pT1 transitional cell cancers of the bladder still be classified as superficial? Abel PD, et al. **Br J Urol** 1988 Sep;62(3):235–9

Incidence of microscopically detectable degenerative characteristics in skeletal muscle of turkey. Sosnicki A, et al. **Br Poult Sci** 1989 Mar;30(1):69–80

Abnormal mitochondria in the Rett syndrome. Eeg-Olofsson O, et al. **Brain Dev** 1988;10(4):260–2

Identification of clinically significant skeletal muscle necrosis by single photon emission computed tomography. Forrest I, et al. **Can J Surg** 1989 Mar;32(2):109–12

Effectiveness of two methods of parenteral nutrition support in improving muscle mass of children with neuroblastoma or Wilms' tumor. A randomized study. Rickard KA, et al. **Cancer** 1989 Jul 1;64(1):116–25

Biomechanical destruction of cancer cells in skeletal muscle: a rate-regulator for hematogenous metastasis. Weiss L. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):483–91

X-linked myotubular myopathy: clinical and pathological findings in a family. Oldfors A, et al. **Clin Genet** 1989 Jul; 36(1):5–14 (26 ref.)

Variability in muscle fibre areas in whole human quadriceps muscle: how to reduce sampling errors in biopsy techniques. Lexell J, et al. **Clin Physiol** 1989 Aug; 9(4):333–43

Musculo-skeletal magnetic resonance imaging using inversion recovery pulse sequences at 0.08 T. Smith FW. **Clin Radiol** 1988 Jul;39(4):412–7

Ultrasonic imaging of soft tissues. Wilson DJ. **Clin Radiol** 1989 Jul;40(4):341–2 (16 ref.)

Satellite cells from dystrophic (mdx) mouse muscle are stimulated by fibroblast growth factor in vitro. DiMario J, et al. **Differentiation** 1988 Nov;39(1):42–9

Quantitative alterations in intramuscular connective tissue following immobilization: an experimental study in the rat calf muscles. Jozsa L, et al. **Exp Mol Pathol** 1988 Oct; 49(2):267–78

Changes in the orbital tissues and muscles dysthyroid ophthalmopathy. Bleeker GM. **Eye** 1988;2 (Pt 2):193–7 (8 ref.)

Postnatal response of liver and skeletal muscle in pigs from gestationally fasted gilts. Ezekwe MO, et al. **Growth Dev Aging** 1988 Spring;52(1):47–51

The 'acute compartment syndrome' in snakebite [letter] Baird JS. **Hosp Pract [Off]** 1988 Oct 15;23(10):17

Some probability models for diagnosing neurogenic disorders. Wilson BC, et al. **IMA J Math Appl Med Biol** 1988;5(3):167–79

Kocher Debre Semelaigne syndrome in a neonate [letter] Ghosh JB. **Indian Pediatr** 1988 Oct;25(10):1018–9

Hydroxylysine excretion does not indicate collagen damage with downhill running in young men. Wheat MR, et al. **Int J Sports Med** 1989 Jun;10(3):155–60

Mitochondrial oculoskeletal myopathy: case report. Colombo A, et al. **Ital J Neurol Sci** 1988 Aug;9(4):385–9

Histological and morphological aspects of muscle in infantile cerebral palsy. Romanini L, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):87–93

Changes in fiber composition of soleus muscle during rat hindlimb suspension. Templeton GH, et al. **J Appl Physiol** 1988 Sep;65(3):1191–5

Muscular dystrophy-like disease in a thoroughbred foal. Shirakawa T, et al. **J Comp Pathol** 1989 Apr;100(3):287–94

Idiopathic muscular hypertrophy of the esophagus: CT features. Agostini S, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1041–3

Intramuscular myxoma: MR features. Kransdorf MJ, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):836–9

Sternocleidomastoid fibrosis in congenital muscular torticollis: MR appearance. Whyte AM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):163–4

Computed tomography in acute alcoholic myopathy. Grau A, et al. **J Comput Tomogr** 1988 Apr;12(2):161–4

Aberrant expression of class II MHC antigens by skeletal muscle endothelial cells in experimental autoimmune myositis. Rosenberg NL, et al. **J Immunol** 1989 Jun 15; 142(12):4289–94

Biochemical evidence of muscle injury in African children with severe malaria. Miller KD, et al. **J Infect Dis** 1989 Jan;159(1):139–42

Muscle hypertrophy in Duchenne muscular dystrophy. A pathological and morphometric study. Cros D, et al. **J Neurol** 1989 Jan;236(1):43–7

Neurogenic muscle hypertrophy. Report of two cases. Pareyson D, et al. **J Neurol** 1989 Jul;236(5):292–5

Diphtheritic neuropathy, an analysis based on muscle and nerve biopsy and repeated neurophysiological and autonomic function tests. Solders G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):876–80

Neurogenic involvement in distal myopathy (Welander). Histochemical and morphological observations on muscle and nerve biopsies. Borg K, et al. **J Neurol Sci** 1989 Jun; 91(1-2):53–70

Muscle pathology in Marinesco-Sjögren syndrome. Komiyama A, et al. **J Neurol Sci** 1989 Jan;89(1):103–13

Myositis caused by Borrelia burgdorferi: report of four cases. Reimers CD, et al. **J Neurol Sci** 1989 Jun;91(1-2):215–26

Recovery of the dog quadriceps after 10 weeks of immobilization followed by 4 weeks of remobilization. Lieber RL, et al. **J Orthop Res** 1989;7(3):408–12

Intestinal pseudoobstruction in a neonate caused by idiopathic

muscular hypertrophy of the entire small intestine. Yamagiwa I, et al. **J Pediatr Surg** 1988 Sep;23(9):866–9
Relationships between clinical features and distribution of mononuclear cells in muscle of patients with polymyositis. Kalovidouris AE, et al. **J Rheumatol** 1988 Sep;15(9):1401–6
Skeletal muscle changes in protein energy malnutrition. Faridi MM, et al. **J Trop Pediatr** 1988 Oct;34(5):238–43
High-frequency ultrasonography of skeletal muscle in children with neuromuscular disease. Lamminen A, et al. **J Ultrasound Med** 1988 Sep;7(9):505–9
Assessment of quadriceps femoris muscle atrophy and hypertrophy in neuromuscular disease in children. Heckmatt JZ, et al. **JCU** 1988 Mar–Apr;16(3):177–81
Congenital torticollis: evaluation by fine-needle aspiration biopsy. Gonzales J, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):651–4
31P-MR spectroscopy of skeletal muscle in a lymphedematous arm. Kiricuta IC, et al. **Lymphology** 1989 Jun;22(2):93–6
Satellite cells derived from streptozotocin-diabetic rats display altered fusion parameters in vitro. Brannon MA, et al. **Metabolism** 1989 Apr;38(4):348–52
Sternomastoid tumor of infancy (fibromatosis colli): diagnosis by aspiration cytology. Wakely PE Jr, et al. **Mod Pathol** 1989 Jul;2(4):378–81
Asymptomatic hyper-CK-emia: an electrophysiologic and histopathologic study. Joy JL, et al. **Muscle Nerve** 1989 Mar;12(3):206–9
Small-caliber skeletal muscle fibers do not suffer necrosis in mdx mouse dystrophy. Karpati G, et al. **Muscle Nerve** 1988 Aug;11(8):795–803
Muscle and nerve involvement in AIDS patient with disseminated Mycobacterium avium intracellulare infection [letter] Wrzolek MA, et al. **Muscle Nerve** 1989 Mar; 12(3):247–9
The effects of alcoholism on muscle [letter] **N Engl J Med** 1989 Oct 12;321(15):1048–50
The effects of alcoholism on skeletal and cardiac muscle. Urbano-Marquez A, et al. **N Engl J Med** 1989 Feb 16; 320(7):409–15
Progressive myopathy in trisomy 21. Mielke U, et al. **Neuropediatrics** 1988 Aug;19(3):132–4
Marshall-Smith syndrome: new aspects. Roodhooft AM, et al. **Neuropediatrics** 1988 Nov;19(4):179–82
Morphological studies on the erector spinae muscle in sixty consecutive scoliotic patients. Chiu JC. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1163–75
Fibroblast and myofibroblast participation in malignant fibrous histiocytoma (MFH) of bone. Ultrastructural study of eight cases with immunohistochemical support. Martorell M, et al. **Pathol Res Pract** 1989 Jun;184(6):582–90
Familial dysautonomia manifesting as neonatal nemaline myopathy. Amir N, et al. **Pediatr Neurol** 1985 Jul–Aug; 1(4):249–51
Glycogen storage disease with normal acid maltase: skeletal and cardiac muscles. Tachi N, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):60–3
Arthrogryposis multiplex congenita: histochemical study of biopsied muscles. Uchida T, et al. **Pediatr Neurol** 1985 May–Jun;1(3):169–73
Skeletal muscle involvement in mucopolysaccharidosis type IIA: severe type of Hunter syndrome. Wakai S, et al. **Pediatr Neurol** 1988 May–Jun;4(3):178–80
Neurogenic arthrogryposis multiplex congenita: clinical and muscle biopsy findings. Adams C, et al. **Pediatr Neurosci** 1988;14(2):97–102
Muscle biopsy testing for malignant hyperthermia [letter] Allen G, et al. **Plast Reconstr Surg** 1989 Aug;84(2):373–4
Isolated necrosis of deep tissue as a complication of rapid tissue expansion [letter] Lawrence WT. **Plast Reconstr Surg** 1989 Jul;84(1):172
Bilateral pelvic masses in a long-distance cyclist [letter] Manoharan A, et al. **Postgrad Med J** 1988 Dec; 64(758):977–8
Dystrophin diagnosis: comparison of dystrophin abnormalities by immunofluorescence and immunoblot analyses. Arahata K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7154–8
Striated muscle in the biopsy specimen of the prostate. Hasui Y, et al. **Prostate** 1989;14(1):65–9
Recovery from immobilization-induced atrophy of rabbit soleus muscles can be accelerated by chronic low-frequency stimulation. Cotter M, et al. **Q J Exp Physiol** 1988 Sep;73(5):797–800
The effect of peripheral nerve injury on immature motor and sensory neurons and on muscle fibres. Possible relation to the histogenesis of Werdnig-Hoffmann disease. Schmalbruch H. **Rev Neurol (Paris)** 1988;144(11):721–9
Muscle biopsy findings in primary fibromyalgia and other forms of nonarticular rheumatism. Yunus MB, et al. **Rheum Dis Clin North Am** 1989 Feb;15(1):115–34 (38 ref.)
Histochemistry and morphology of erector spinae muscle in lumbar disc herniation. Zhu XZ, et al. **Spine** 1989 Apr; 14(4):391–7
A test to detect clustering applied to muscle fibres. Howel D. **Stat Med** 1988 Nov;7(11):1157–64
Classification of myonecrosis induced by snake venoms: venoms from the prairie rattlesnake (Crotalus viridis viridis), western diamondback rattlesnake (Crotalus atrox) and the Indian cobra (Naja naja naja). Ownby CL, et al. **Toxicon** 1988;26(5):459–74
Histologic evaluation of response to implantation of polyvinilidine plates in dogs and rats. Swain CA, et al. **Vet Surg** 1988 Sep–Oct;17(5):278–81
[Relation between pathology and strength of post-poliomyelitic muscle] Gu JN. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):235–6, 256 (Eng. Abstr.) **(Chi)**
[A study on the prevalence and risk factors of muscular fibrotic contracture in Jia-Dong Township, Pingtung County, Taiwan] Chung DC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Feb;5(2):91–5 (Eng. Abstr.) **(Chi)**
[Proof value of congested hemorrhages in the area of the head of newborn infants] Eidam J, et al. **Beitr Gerichtl Med** 1988;46:339–44 (Eng. Abstr.) **(Ger)**
[Forensic proof value of atraumatic posticus hemorrhage] Weiler G, et al. **Beitr Gerichtl Med** 1988;46:237–40 (Eng. Abstr.) **(Ger)**
[Rhizarthrosis and thenar muscles. A clinico-anatomic study] Schöneberger M, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):182–8 (Eng. Abstr.) **(Ger)**
[Membrane changes in Duchenne/Becker muscular dystrophy: lectin binding and localization of dystrophin] Voit T, et al. **Monatsschr Kinderheilkd** 1989 Jan;137(1):20–7 (Eng. Abstr.) **(Ger)**
[Possibility of the transformation of muscle fibers by training and the significance of muscle biopsies for recognizing talent in sports] Appell HJ. **Sportverletz Sportschaden** 1988 Mar;2(1):4–9 (44 ref.) (Eng. Abstr.) **(Ger)**
[Spontaneous degeneration of the posticus muscle] Maxeiner H. **Z Rechtsmed** 1989;102(2–3):161–9 (Eng. Abstr.) **(Ger)**
[Urinary continence in the female--a morphologic study] Dorschner W, et al. **Z Urol Nephrol** 1989 Apr;82(4):201–8 (Eng. Abstr.) **(Ger)**
[Role of anterior scalene muscle hypertrophy in thoracic outlet syndrome] Bortolani E, et al. **Minerva Chir** 1989 Apr 30;44(8):1305–9 (Eng. Abstr.) **(Ita)**
[Muscle biopsy in neurogenic lesions] Vaccario ML. **Riv Neurol** 1988 Mar–Apr;58(2):84–8 (8 ref.) **(Ita)**
[A histological study of striated muscle and nerve fiber in the human caused by a high voltage electric current] Morita M, et al. **Nippon Hoigaku Zasshi** 1989 Feb; 43(1):40–5 (Eng. Abstr.) **(Jpn)**
[Cytophagic histiocytic panniculitis (CHP) with muscle involvement and disseminated intravascular coagulation (DIC)] Togami S, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1561–5 **(Jpn)**
[Rigid spine syndrome: report of three cases] Kameda K, et al. **No To Hattatsu** 1988 Nov;20(6):474–9 (Eng. Abstr.) **(Jpn)**
[Ultrasound imaging of the muscle in muscular dystrophy] Nishimura M, et al. **No To Hattatsu** 1989 May;21(3):234–8 (Eng. Abstr.) **(Jpn)**
[Ultrasound imaging of muscles in Duchenne muscular dystrophy] Aizawa H, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):49–53 (Eng. Abstr.) **(Jpn)**
[Co-existence of clinical and immunohistochemical features of polymyositis and myasthenia gravis] Iwatsubo T, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):913–8 (Eng. Abstr.) **(Jpn)**
[A case of distal muscular dystrophy (Miyoshi), characterized by early involvement in paravertebral muscle and atypical changes in muscle biopsy specimen] Kamakura K, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):665–9 (Eng. Abstr.) **(Jpn)**
[31P-NMR spectroscopy of mitochondrial myopathies: the relation between abnormal energy metabolism and muscle biopsy findings] Kawai M, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):167–71 (Eng. Abstr.) **(Jpn)**
[Morphometrical study on muscle specimens in motor neuron disease--muscle fiber diameter, type grouping and type IIc] Kimura F, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):653–61 (Eng. Abstr.) **(Jpn)**
[Two cases of acute rhabdomyolysis--pathogenesis, muscle biopsy, EMG, X-CT and MRI] Kitamura J, et al. **Rinsho Shinkeigaku** 1988 May;28(5):485–8 (Eng. Abstr.) **(Jpn)**
[A case of syringomyelia with atypical neurological signs and myopathic changes in muscle morphology] Kunimoto M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1054–7 (Eng. Abstr.) **(Jpn)**
[Clinicopathological study of muscular ball ("boule musculaire")] Nakano Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):775–80 (Eng. Abstr.) **(Jpn)**
[Skeletal muscle MRI findings in autosomal recessive distal muscular dystrophy (Miyoshi)] Ohsuga H, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1304–11 (Eng. Abstr.) **(Jpn)**
[A case of myokymia-hyperhidrosis syndrome with muscle involvement] Ono S, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):63–7 (Eng. Abstr.) **(Jpn)**
[Studies on the clinical feature of 5 patients with long-standing muscular atrophy limited to unilateral lower leg] Saito T, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):643–52 (Eng. Abstr.) **(Jpn)**
[A case of myoclonus epilepsy associated with ragged-red fibers (MERRF) with cytochrome c oxidase deficiency] Taniwaki T, et al. **Rinsho Shinkeigaku** 1988 Aug; 28(8):902–9 (Eng. Abstr.) **(Jpn)**
[Congenital absence of the thyroid gland as a cause of Debré-Semelaigne syndrome] Kansy J, et al. **Pediatr Pol** 1974 Feb;49(2):213–6 **(Pol)**
[Selected pathologic problems of trichinosis] Gabryel P, et al. **Wiad Parazytol** 1988;34(4–6):617–9 (Eng. Abstr.) **(Pol)**
[Histochemical study of the skeletal muscle in malnourished patients] Lancellotti CL, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):190–6 (Eng. Abstr.) **(Por)**
[Morphologic changes in limb muscles under conditions of acute experimental ischemia and recirculation] Gonchar' MG, et al. **Arkh Patol** 1989;51(3):64–70 (Eng. Abstr.) **(Rus)**
[Structural reaction of skeletal muscle mitochondria to deep hypothermia in the experiment] Veriaskin VV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):361–3 (Eng. Abstr.) **(Rus)**
[An apparatus for diagnosing necrotic areas of the skeletal musculature of man and animals] Dubrovskiĭ IA, et al. **Med Tekh** 1988 Jul–Aug;(4):25–7 (Eng. Abstr.) **(Rus)**
[Pseudohypertrophic progressive muscular dystrophy with a malignant course in young girls] Badalian LO, et al. **Pediatriia** 1988;(7):29–34 (Eng. Abstr.) **(Rus)**
[Pseudohypertrophic proximal progressive muscular dystrophy with a malignant course manifesting itself in adolescence] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):113–20 (Eng. Abstr.) **(Rus)**
[Histologic changes of the nutatory muscles in spastic torticollis] Volobuev IuM. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):58–9 **(Rus)**
[Cell growth of skeletal muscle as an indicator of protein requirements of the adult rat] Muñoz-Martínez E, et al. **Rev Esp Fisiol** 1989 Jun;45(2):137–43 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Evaluation of motor blockade by isometric force measurement and electromyographic recording during epidural anaesthesia--a methodological study. Nydahl PA, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):477–84
Changes of calcium compartmentalization of skeletal muscle under ionic and drug influence. Jóna I, et al. **Acta Biochim Biophys Hung** 1988;23(2):149–58
Length-force characteristics of aponeurosis in passive muscle and during isometric and slow dynamic contractions of rat gastrocnemius muscle. Huijing PA, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):51–62
Muscle regeneration. The effect of hypophysectomy on cell proliferation and expression of insulin-like growth factor-I. Sommerland H, et al. **Acta Neuropathol (Berl)** 1989; 78(3):264–9
Association of functional state of stomatognathic system with mobility of cervical spine and neck muscle tenderness. Kirveskari P, et al. **Acta Odontol Scand** 1988 Oct; 46(5):281–6
Effect of crossed stapedius reflex on vibration of mallear handle in man. Svane-Knudsen V, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):219–24
Vestibular disturbances after neck muscle sectioning in rat. Niklasson M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 449:85–8
Evoked muscular potentials in laryngeal muscles. Dejonckere PH, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):494–501
Dependence between intra- and extracellular action potentials of isolated frog muscle fibres at different temperatures. Gerilovsky L, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):12–9
A method for calculation the extracellular potentials from experimentally recorded intracellular potentials of a single muscle fibers. Trayanova N. **Acta Physiol Pharmacol Bulg** 1988;14(2):83–91
Lumbar back muscle activity during locomotion: effects of voluntary modifications of normal trunk movements. Carlson H, et al. **Acta Physiol Scand** 1988 Jul;133(3):343–53
The consequences of fibre heterogeneity on the force-velocity relation of skeletal muscle. Josephson RK, et al. **Acta Physiol Scand** 1988 Mar;132(3):341–52
Intracellular pH recovery and lactate efflux in mouse soleus muscles stimulated in vitro: the involvement of sodium/proton exchange and a lactate carrier. Juel C. **Acta Physiol Scand** 1988 Mar;132(3):363–71
Motor patterns of a fast voluntary postural task in man: trunk extension in standing. Oddsson L. **Acta Physiol Scand** 1989 May;136(1):47–58
Colloid osmotic pressure of interstitial fluid in rat subcutis and skeletal muscle: comparison of various wick sampling techniques. Wiig H, et al. **Acta Physiol Scand** 1988 Jun; 133(2):167–75
Peristalsis in pharyngeal constrictor musculature in relation to positioning and gravity. Borgström PS, et al. **Acta Radiol** 1989 Mar–Apr;30(2):183–5
How phosphocreatine buffers cyclic changes in ATP demand in working muscle. Funk C, et al. **Adv Exp Med Biol** 1989; 248:687–92
Effects of red cell spacing and red cell movement upon oxygen release under conditions of maximally working skeletal muscle. Groebe K, et al. **Adv Exp Med Biol** 1989; 248:175–85
Maximal O2 uptake limitation in contracting skeletal muscle during carbon monoxide hypoxia. King CE. **Adv Exp Med Biol** 1989;248:705–12
Influence of the vestibular stimulation on the activity of muscles of the lower limb in man. Electromyographic evidence. Marcellini S, et al. **Adv Otorhinolaryngol** 1988; 41:184–9

Muscle strength, activity, housing and the risk of falls in elderly people. Wickham C, et al. **Age Ageing** 1989 Jan; 18(1):47–51

Implication in the mechanogram and electrophysiology of the esophageal pouch. Watanabe H. **Agressologie** 1988 Mar; 29(3):165–8

Functional analysis of the biceps femoris muscle during locomotor behavior in some primates. Kumakura H. **Am J Phys Anthropol** 1989 Jul;79(3):379–91

Gluteus maximus muscle function and the origin of hominid bipedality. Marzke MW, et al. **Am J Phys Anthropol** 1988 Dec;77(4):519–28

Back muscle function during bipedal walking in chimpanzee and gibbon: implications for the evolution of human locomotion. Shapiro LJ, et al. **Am J Phys Anthropol** 1988 Oct;77(2):201–12

MDA content increases in fast- and slow-twitch skeletal muscle with intensity of exercise in a rat. Alessio HM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C874–7

Increased interleukin 1 beta in human skeletal muscle after exercise. Cannon JG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R451–5

Thermal acclimation induces adaptive changes in subcellular structure of fish skeletal muscle. Egginton S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R1–9

Effects of thyroid hormone on Na+-K+ transport in resting and stimulated rat skeletal muscle. Everts ME, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E604–12

Abnormal expression of glycogen phosphorylase genes in regenerated muscle. Gorin F, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C495–503

Chronic stimulation of mammalian muscle: changes in metabolite concentrations in individual fibers. Henriksson J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C543–51

Insulin-induced hyperpolarization in mammalian skeletal muscle. Iannaccone ST, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C368–74

Interactions between sustained contractile activity and beta-adrenergic receptors in regulation of gene expression in skeletal muscles. Kraus WE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C506–14

Influence of fiber type and muscle source on Ca2+ sensitivity of rat fibers. Laszewski-Williams B, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C420–7

Spatial and temporal patterns of human jejunal contractions. Sarna SK, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G423–32

Hemin increases aerobic capacity of cultured regenerating skeletal myotubes. Schroedl NA, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C519–25

Patch clamp of sarcolemmal spheres from stretched skeletal muscle fibers. Stein P, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C434–40

Effect of prior immobilization on muscular glucose clearance in resting and running rats. Vissing J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E456–62

Tissue-type plasminogen activator release in response to epinephrine in perfused rat hindlegs. Zhu GJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H404–10

Terminal cisternae of denervated rabbit skeletal muscle: alterations of functional properties of Ca2+ release channels. Zorzato F, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C504–11

The effect of tourniquet pressure on muscle function. Gersoff WK, et al. **Am J Sports Med** 1989 Jan-Feb;17(1):123–7

Isokinetic muscular performance of the quadriceps in elite ice hockey players. Johansson C, et al. **Am J Sports Med** 1989 Jan-Feb;17(1):30–4

Electromyographic analysis of elbow function in tennis players. Morris M, et al. **Am J Sports Med** 1989 Mar-Apr; 17(2):241–7

High frequency electrical stimulation in muscle strengthening. A review and discussion. Selkowitz DM. **Am J Sports Med** 1989 Jan-Feb;17(1):103–11 (50 ref.)

Electromyographic activity of cubital joint muscles in horses during locomotion. Tokuriki M, et al. **Am J Vet Res** 1989 Jun;50(6):950–7

Effect of salicylate on upper airway dilating muscles in anesthetized dogs. Oliven A, et al. **Am Rev Respir Dis** 1989 Jan;139(1):170–5

Low back muscle activity and pelvic rotation during walking. Vink P, et al. **Anat Embryol (Berl)** 1988;178(5):455–60

Elastic strain energy in the low back muscles during human walking. Vink P, et al. **Anat Embryol (Berl)** 1989; 180(1):99–101

Delayed muscle fiber transformation after foreign-reinnervation of excessive muscle tissue. Käser L, et al. **Anat Rec** 1989 Mar;223(3):347–55

Lumbrical muscle function as revealed by a new and physiological approach. Ranney D, et al. **Anat Rec** 1988 Sep;222(1):110–4

Analysis of human torso motion with muscle actuators. Katbab A. **Ann Biomed Eng** 1989;17(1):75–91

Comparison of spatial transformation in vestibulo-ocular and vestibulocollic reflexes. Baker JF, et al. **Ann N Y Acad Sci** 1988;545:203–15 (35 ref.)

Role of the ryanodine receptor of skeletal muscle in excitation-contraction coupling. Fill M, et al. **Ann N Y Acad Sci** 1989;560:155–62 (26 ref.)

Electromechanical analogs of human reflexes. Littman MG, et al. **Ann N Y Acad Sci** 1989;563:184–94

Calcium channels reconstituted from the skeletal muscle dihydropyridine receptor protein complex and its alpha 1 peptide subunit in lipid bilayers. Pelzer D, et al. **Ann N Y Acad Sci** 1989;560:138–54

Age effects on properties of motor unit action potentials: ADEMG analysis. Howard JE, et al. **Ann Neurol** 1988 Aug; 24(2):207–13

Contractile properties of canine thyroarytenoid muscle reinnervated from the ansa cervicalis. Rice DH, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):153–6

Transmucosal electrical stimulation of laryngeal muscles. Sanders I, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):339–45

Effects of cricothyroid muscle contraction on laryngeal resistance and glottic area. Woodson GE, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):119–24

Effects of recurrent laryngeal nerve transection and vagotomy on respiratory contraction of the cricothyroid muscle. Woodson GE. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):373–8

Comparative response of muscle and subcutaneous tissue pH during arterial and venous occlusion in musculocutaneous flaps. Warner KG, et al. **Ann Plast Surg** 1989 Feb; 22(2):108–16

Biochemistry and biophysics of excitation-contraction coupling. Fleischer S, et al. **Annu Rev Biophys Biophys Chem** 1989;18:333–64 (292 ref.)

Lipid peroxidation inhibitory factors in liver and muscle of rat, mouse, and chicken. Murphy ME, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):585–93

The effect of infrahyoid-muscle tenotomy on orofacial motor activity in the rat. Jüch PJ, et al. **Arch Oral Biol** 1988; 33(7):511–7

Concomitant changes in the acoustic impedance and the cochlear microphonic potentials during twitch contractions of the middle ear muscles in cats. Freeman S, et al. **Arch Otorhinolaryngol** 1988;245(5):311–5

Electromyography of the pharyngeal musculature: technical considerations. Palmer JB, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):283–7

Isometric and isokinetic hip abductor strength in persons with above-knee amputations. Ryser DK, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):840–5

Back strengthening exercises: quantitative evaluation of their efficacy for women aged 40 to 65 years. Sinaki M, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):16–20

Biomechanical circulatory assistance. Importance of aerobic capacity of normal and conditioned skeletal muscles. Leirner AA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):716–20

Local fluid losses enhance heart rate drives in light to moderate exercise. Essfeld D, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1055–60

To predict the body's strength. Von Gierke HE. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A107–15

Effect of sarcomere length and filament lattice spacing on force development in skinned cardiac and skeletal muscle preparations from the rabbit. de Beer EL, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):410–23

Extracellularly applied ATP alters the calcium flux through dihydropyridine-sensitive channels in cultured chick myotubes. Eriksson H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):878–85

Effect of inhibitors of glycoprotein processing on integrin and the adhesion of myoblasts to extracellular matrix proteins. Trudel GC, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1338–43

Developmental regulation of cell-surface glycoproteins in clonal cultures of human skeletal muscle satellite cells. Champaneria S, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2-3):128–36

Intracellular calcium receptor mechanisms in muscle and nerve. Grand RJ. **Biochem Soc Trans** 1988 Aug;16(4):520–3 (22 ref.)

Cesium ions delay membrane fusion of chick embryo myoblasts in vitro: a conductivity study. Santini MT, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):56–64

Low-conductance states of K+ channels in adult mouse skeletal muscle. Weik R, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):127–34

Effects of skin preparation on data collected using an EMG muscle-scanning procedure. Cram JR, et al. **Biofeedback Self Regul** 1989 Mar;14(1):75–82

Generalization of EMG biofeedback training. Poppen R, et al. **Biofeedback Self Regul** 1988 Sep;13(3):235–43

EMG muscle scanning: stability of hand-held surface electrodes. Thompson JM, et al. **Biofeedback Self Regul** 1989 Mar;14(1):55–62

The relationship of extraneous movements to lumbar paraspinal muscle activity: implications for EMG biofeedback training applications to low back pain patients. Wolf SL, et al. **Biofeedback Self Regul** 1989 Mar; 14(1):63–74

Empirical evaluation of two-sample statistical tests for differences of stepping phase during insect walking. Cocatre-Zilgien JH, et al. **Biol Cybern** 1988;59(6):367–77

Individual differences and variability in the timing of motor activity during walking in insects. Delcomyn F, et al. **Biol Cybern** 1988;59(6):379–84

Planning and execution of hand movements. Fleischer AG. **Biol Cybern** 1989;60(4):311–21

Activation of human arm muscles during flexion/extension and supination/pronation tasks: a theory on muscle coordination. Jongen HA, et al. **Biol Cybern** 1989;61(1):1–9

Superimposing noise linearizes the responses of primary muscle spindle afferents to sinusoidal muscle stretch. Kröller J, et al. **Biol Cybern** 1988;60(2):131–7

The control of oscillatory movements of the forearm. Wallace GK. **Biol Cybern** 1989;61(3):233–40

Hamster thecal cells express muscle characteristics. Self DA, et al. **Biol Reprod** 1988 Aug;39(1):119–30

The influence of suspension hypokinesia on contractile properties of slow and fast twitch muscles of young growing and adult rats. Asmussen G, et al. **Biomed Biochim Acta** 1989;48(5-6):S426–31

Temperature effects on isometric contractions of slow and fast twitch muscles of various rodents—dependence on fibre type composition: a comparative study. Asmussen G, et al. **Biomed Biochim Acta** 1989;48(5-6):S536–41

The contribution of single motor units of the biceps brachii muscle in man to the momentum in elbow flexion. Ebert D. **Biomed Biochim Acta** 1989;48(5-6):S475–9

Coordination processes in a human motoneuronal pool. Ebert D, et al. **Biomed Biochim Acta** 1989;48(5-6):S480–8

Muscle force sensation changes during sustained voluntary contraction. Gantchev GN, et al. **Biomed Biochim Acta** 1989;48(5-6):S515–20

Information transfer in the regulation of striated muscle contraction. Grabarek Z, et al. **Biomed Biochim Acta** 1989; 48(5-6):S297–305 (48 ref.)

Peripheral changes during muscle fatigue and their adaptation to training and disuse. Hainaut K, et al. **Biomed Biochim Acta** 1989;48(5-6):S525–9

Chronic stimulation of mammalian muscle: enzyme and metabolic changes in individual fibres. Henriksson J, et al. **Biomed Biochim Acta** 1989;48(5-6):S445–54

Twitch and tetanic contraction of lamprey muscle exposed to fatty acid at different temperatures. Kössler F, et al. **Biomed Biochim Acta** 1989;48(5-6):S542–7

Temperature influence on phases of the tension response to sudden reduction of muscle length. Küchler G, et al. **Biomed Biochim Acta** 1989;48(5-6):S403–7

Long-term effects of altered activity on skeletal muscle. Lømo T. **Biomed Biochim Acta** 1989;48(5-6):S432–44

Perhexiline increases calcium-activated force in skinned psoas fibres by raising calcium affinity of troponin-C. Morano I, et al. **Biomed Biochim Acta** 1989;48(5-6):S329–34

Behaviour of EMG-parameters and conduction velocity in contractions with different muscle temperatures. Mucke R, et al. **Biomed Biochim Acta** 1989;48(5-6):S459–64

Regulation mechanisms of muscle contraction at subcellular level. Poledna J. **Biomed Biochim Acta** 1989;48(5-6):S341–4

Temperature effects on mammalian muscle contraction. Ranatunga KW, et al. **Biomed Biochim Acta** 1989; 48(5-6):S530–5

Force, endurance time, and cardiovascular responses in voluntary isometric contractions of different muscle groups. Rehfeldt H, et al. **Biomed Biochim Acta** 1989; 48(5-6):S509–14

Adaptation of contractile proteins in human heart and skeletal muscles. Schaub MC, et al. **Biomed Biochim Acta** 1989; 48(5-6):S306–12

Selectivity for cations in potassium and gramicidin channels of the muscle fibre membrane. Shvinka NE, et al. **Biomed Biochim Acta** 1988;47(6):481–7

The computer-vibromyography as a biometric progress in studying muscle function. Keidel M, et al. **Biomed Tech (Berlin)** 1989 May;34(5):107–16

Streaming potential measurements in Ca2+-activated K+ channels from skeletal and smooth muscle. Coupling of ion and water fluxes. Alcayaga C, et al. **Biophys J** 1989 Feb;55(2):367–71

A model of force production that explains the lag between crossbridge attachment and force after electrical stimulation of striated muscle fibers. Bagni MA, et al. **Biophys J** 1988 Dec;54(6):1105–14

Effects of cobalt, magnesium, and cadmium on contraction of rat soleus muscle. Dulhunty AF, et al. **Biophys J** 1989 Jul;56(1):1–14

Analysis of diffusion delay in a layered medium. Application to heat measurements from muscle. Gilbert SH, et al. **Biophys J** 1988 Oct;54(4):603–10

Heat changes during transient tension responses to small releases in active frog muscle. Gilbert SH, et al. **Biophys J** 1988 Oct;54(4):611–7

Sarcomere length dependence of the force-velocity relation in single frog muscle fibers. Granzier HL, et al. **Biophys J** 1989 Mar;55(3):499–507

Form birefringence of muscle. Haskell RC, et al. **Biophys J** 1989 Aug;56(2):401–13

Weakly attached cross-bridges in relaxed frog muscle fibers. Jung DW, et al. **Biophys J** 1989 Apr;55(4):605–19

Elastic properties of relaxed, activated, and rigor muscle fibers measured with microsecond resolution. Jung DW, et al. **Biophys J** 1988 Nov;54(5):897–908

Role of MgATP and MgADP in the cross-bridge kinetics in chemically skinned rabbit psoas fibers. Study of a fast exponential process (C). Kawai M, et al. **Biophys J** 1989 Apr;55(4):595–603

Myoplasmic binding of fura-2 investigated by steady-state fluorescence and absorbance measurements. Konishi M, et al. **Biophys J** 1988 Dec;54(6):1089–104

Multiple conductance states of the purified calcium release channel complex from skeletal sarcoplasmic reticulum. Liu QY, et al. **Biophys J** 1989 Mar;55(3):415–24

Changes in force and stiffness during stretch of skeletal muscle fibers, effects of hypertonicity. Månsson A.

Biophys J 1989 Aug;56(2):429–33
Depression of Ca2+ insensitive tension due to reduced pH in partially troponin-extracted skinned skeletal muscle fibers. Metzger JM, et al. **Biophys J** 1988 Dec;54(6):1169–73
Filament lattice of frog striated muscle. Radial forces, lattice stability, and filament compression in the A-band of relaxed and rigor muscle. Millman BM, et al. **Biophys J** 1988 Sep; 54(3):437–47
Effect of adenosine triphosphate analogues on skeletal muscle fibers in rigor. Schoenberg M. **Biophys J** 1989 Jul; 56(1):33–41
Caffeine slows turn-off of calcium release in voltage clamped skeletal muscle fibers. Simon BJ, et al. **Biophys J** 1989 Apr; 55(4):793–7
Time course of activation of calcium release from sarcoplasmic reticulum in skeletal muscle. Simon BJ, et al. **Biophys J** 1988 Dec;54(6):1159–63
Sarcoballs: direct access to sarcoplasmic reticulum Ca2+-channels in skinned frog muscle fibers. Stein P, et al. **Biophys J** 1988 Aug;54(2):357–63
The kinetics relating calcium and force in skeletal muscle. Stein RB, et al. **Biophys J** 1988 Oct;54(4):705–17
Interactions between actin and myosin filaments in skeletal muscle visualized in frozen-hydrated thin sections. Trus BL, et al. **Biophys J** 1989 Apr;55(4):713–24
Theory of optical ellipsometric measurements from muscle diffraction studies. Yeh Y, et al. **Biophys J** 1988 Aug; 54(2):205–18
Structures of actomyosin crossbridges in relaxed and rigor muscle fibers. Yu LC, et al. **Biophys J** 1989 Mar; 55(3):441–53
Cell motility: an interplay between local and non-local measurement. Matsuno K. **Biosystems** 1989;22(2):117–26
Train-of-four fade during onset and recovery of neuromuscular block: a study in non-anaesthetized subjects. Turner GA, et al. **Br J Anaesth** 1989 Mar; 62(3):279–86
Effect of soluble factors from nerve and muscle on alpha-bungarotoxin binding sites in isolated sarcolemmal membranes of the rat. Harborne AJ, et al. **Br J Pharmacol** 1988 Jul;94(3):968–76
Neck muscle vibration modifies the representation of visual motion and direction in man. Biguer B, et al. **Brain** 1988 Dec;111 (Pt 6):1405–24
Characterization of the relation between sodium channels and electrical activity in cultured rat skeletal myotubes: regulatory aspects. Brodie C, et al. **Brain Res** 1989 May 29;488(1-2):186–94
Chloride channels gated by extrajunctional glutamate receptors (H-receptors) on locust leg muscle. Dudel J, et al. **Brain Res** 1989 Mar 6;481(2):215–20
Vocalization and stapedius muscle activity evoked by local electrical stimulation of midbrain in the chicken (Gallus gallus). Grassi S, et al. **Brain Res** 1989 Jun 26;490(2):345–9
Electromyographic (EMG) amplitude patterns in the proximal and distal compartments of the cat semitendinosus during various motor tasks. Hutchison DL, et al. **Brain Res** 1989 Feb 6;479(1):56–64
Co-contractions in antagonistic hindlimb muscles during simulated step cycle rates. Hutton RS, et al. **Brain Res** 1989 Jul 17;492(1-2):230–6
Measurements of muscle stiffness, the electromyogram and activity in single muscle spindles of human flexor muscles following conditioning by passive stretch or contraction. Jahnke MT, et al. **Brain Res** 1989 Jul 24;493(1):103–12
Observations on static and dynamic responses of muscle stretch receptors in kittens. Jami L, et al. **Brain Res** 1989 Jan 23;478(1):34–40
Unusual motor unit firing behavior in older adults. Kamen G, et al. **Brain Res** 1989 Mar 13;482(1):136–40
Single channel studies of non-competitive antagonism of a quisqualate-sensitive glutamate receptor by argiotoxin636—a fraction isolated from orb-web spider venom. Kerry CJ, et al. **Brain Res** 1988 Sep 6;459(2):312–27
Electromyographic activity of cat hindlimb flexors and extensors during locomotion at varying speeds and inclines. Pierotti DJ, et al. **Brain Res** 1989 Feb 27;481(1):57–66
Effect of load perturbations on EMG activity and trajectories of pointing movements. Soechting JF. **Brain Res** 1988 Jun 7;451(1-2):390–6
Prolonged running does not improve muscle coordination after cross-union of tibial and peroneal nerves in mice. Wernig A, et al. **Brain Res** 1989 Jun 12;489(2):352–4
Anticipatory changes of soleus H-reflex amplitude during execution process for heel raise from standing position. Yamashita N, et al. **Brain Res** 1989 Jun 19;490(1):148–51
Two components of calcium channel current in embryonic chick skeletal muscle cells developing in culture. Kano M, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):101–12
A device designed for investigations into localized muscles fatigue on muscles statically loaded. Droszcz J. **Bull Inst Marit Trop Med Gdynia** 1988;39(1-2):71–80
Relationship between transmural potential difference and smooth muscle slow waves and contractility in the rabbit small intestine in vitro. Greenwood B, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1161–5
Sequencing of endurance and high-velocity strength training. Bell GJ, et al. **Can J Sport Sci** 1988 Dec;13(4):214–9
Fatigue-induced changes in myoelectric signal characteristics and perceived exertion. Hasson SM, et al. **Can J Sport Sci** 1989 Jun;14(2):99–102
Electro-mechanical response times and muscle strength after sleep deprivation. Symons JD, et al. **Can J Sport Sci** 1988 Dec;13(4):225–30
MyoD is a sequence-specific DNA binding protein requiring a region of myc homology to bind to the muscle creatine kinase enhancer. Lassar AB, et al. **Cell** 1989 Sep 8; 58(5):823–31
Transformation by activated ras or fos prevents myogenesis by inhibiting expression of MyoD1. Lassar AB, et al. **Cell** 1989 Aug 25;58(4):659–67
Myogenin, a factor regulating myogenesis, has a domain homologous to MyoD. Wright WE, et al. **Cell** 1989 Feb 24;56(4):607–17
Effects of carbamylcholine on membrane potential and Na-K pump activity of cultured rat skeletal myotubes. Brodie C, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):393–410
Dynamics of the endoplasmic reticulum in living non-muscle and muscle cells. Sanger JM, et al. **Cell Motil Cytoskeleton** 1989;13(4):301–19
The roles of haemocytes during degeneration and regeneration of crayfish muscle fibres. Uhrík B, et al. **Cell Tissue Res** 1989 Feb;255(2):443–9
Inhibitory effect of extracts of muscles of mackerel (Scomber japonicus Houttuyn) on hepatic glycogenolysis in rats. Matsuda R, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):490–2
Increased muscle efficiency and sustained benefits in an outpatient community hospital-based pulmonary rehabilitation program. Holle RH, et al. **Chest** 1988 Dec; 94(6):1161–8 (35 ref.)
An electromyographic study of the musculus uvulae. Kuehn DP, et al. **Cleft Palate J** 1988 Oct;25(4):348–55
The San Venero Roselli pharyngoplasty: an electromyographic study of the palatopharyngeus muscle. Trigos I, et al. **Cleft Palate J** 1988 Oct;25(4):385–8
Handgrip strength after the Blalock-Taussig shunt: 14 to 34 year follow-up. Zahka KG, et al. **Clin Cardiol** 1988 Sep; 11(9):627–9
Mechanisms of adaptive supersensitivity in smooth muscles vs cardiac muscle: a brief review. Fleming WW. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):447–50 (13 ref.)
Quantitative measurements of hip strength in different age groups. Cahalan TD, et al. **Clin Orthop** 1989 Sep; (246):136–45
Intramuscular pressure and electromyography in the supraspinatus muscle at shoulder abduction. Järvholm U, et al. **Clin Orthop** 1989 Aug;(245):102–9
The role and techniques of laryngeal electromyography. Bevan K, et al. **Clin Otolaryngol** 1988 Aug;13(4):299–305 (32 ref.)
The location of the upper oesophageal sphincter and its behaviour during bolus propagation—a simultaneous cineradiographic and manometric investigation. Nilsson ME, et al. **Clin Otolaryngol** 1989 Feb;14(1):61–5
Skeletal muscle characteristics in children 9–15 years old: force, relaxation rate and contraction time. Bäckman E, et al. **Clin Physiol** 1988 Oct;8(5):521–7
Neuromuscular electrophysiology of the filarial helminth Dipetalonema viteae. Rohrer WH, et al. **Comp Biochem Physiol [C]** 1988;91(2):517–23
Effects of age and life-long endurance training on the passive mechanical properties of rat skeletal muscle. Kovanen V, et al. **Compr Gerontol [A]** 1988 Feb;2(1):18–23
Opposing effects of calcium entry and phorbol esters on fusion of chick muscle cells. Rapuano M, et al. **Dev Biol** 1989 Aug;134(2):271–8
A myosin isoform repressed in hypertrophied ALD muscle of the chicken reappears during regeneration following cold injury. Stewart AF, et al. **Dev Biol** 1989 Oct; 135(2):367–75
Visual head extension: transitional head coordination in the pigeon squab (Columbia livia). Davies MN, et al. **Dev Psychobiol** 1989 Jul;22(5):477–88
Reinitiation of chondroitin sulphate proteoglycan synthesis in regenerating skeletal muscle. Carrino DA, et al. **Development** 1988 Aug;103(4):641–56
Reformation of specific neuromuscular connections during axolotl limb regeneration: evidence that the first contacts are correct. Wilson S, et al. **Development** 1988 Jun; 103(2):365–77
Exercise-induced fall in insulin and increase in fat metabolism during prolonged muscular work. Wasserman DH, et al. **Diabetes** 1989 Apr;38(4):484–90
Exercise-induced rise in glucagon and ketogenesis during prolonged muscular work. Wasserman DH, et al. **Diabetes** 1989 Jun;38(6):799–807
Insulin depolarization of skeletal muscle in absence of external Na+. Wu FS, et al. **Diabetes** 1989 Mar;38(3):333–7
A composite probe for acoustic and electromyographic recording of muscular activity. Accornero N, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun;72(6):548–9
Quantitative analysis of single muscle fibre action potentials recorded at known distances. Albers BA, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep; 73(3):245–53
Lability of the postauricular and inion microreflexes, studied in the normal human subject. Fox JE, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):48–58
Reproducibility and adaptation of the EMG responses of the lower leg following perturbations of upright stance. Horstmann GA, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov; 70(5):447–52
Muscle fiber conduction velocity related to stimulation rate. Nishizono H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):529–34
Bilateral electromyographical analysis of the lower limbs during walking in normal adults. Ounpuu S, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):429–38
Changes in the myoelectric signal (MES) power spectra during dynamic contractions. Shankar S, et al. **Electroencephalogr Clin Neurophysiol** 1989 Aug; 73(2):142–50
Cutaneomuscular reflex in a peripheral nerve lesion. Brezinova V. **Electromyogr Clin Neurophysiol** 1988 May; 28(4):183–9
Sequential estimation of power spectra for non stationary myoelectric signals. Capponi M, et al. **Electromyogr Clin Neurophysiol** 1988 Nov-Dec; 28(7-8):427–32
Muscle activity and motor nerve sprouting: an electrophysiological study in man. Casabona A, et al. **Electromyogr Clin Neurophysiol** 1988 Nov-Dec; 28(7-8):391–5
Enlarged leading-off area of the monopolar needle: effects on motor-unit action potentials in normal, neurogenic, and myopathic muscles. Chu J, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):263–7
Coordination of the thigh muscles in static leg extension. Eloranta V. **Electromyogr Clin Neurophysiol** 1989 May-Jun;29(4):227–33
Daily changes in neural activation, force-time and relaxation-time characteristics in athletes during very intense training for one week. Häkkinen K, et al. **Electromyogr Clin Neurophysiol** 1989 May-Jun;29(4):243–9
Maximal H- and M-responses of the right and left gastrocnemius lateralis and soleus muscles. Nadeau M, et al. **Electromyogr Clin Neurophysiol** 1988 Aug-Oct; 28(6):307–11
The action of the medium portion of the m. deltoideus in circular movements of the arm on a shoulder wheel, as shown by electromyography. Oliveira DT, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):253–7
Electromyographic study of the upper, middle and lower portion of the trapezius muscle in the circumduction movement of the arm on a shoulder wheel apparatus. Piacentini SC, et al. **Electromyogr Clin Neurophysiol** 1989 Jul-Aug;29(5):315–9
Comparison of the distal motor latency of the first dorsal interosseous with abductor pollicis brevis. Report of 200 cases. Seror P. **Electromyogr Clin Neurophysiol** 1988 Aug-Oct;28(6):341–5
Different changing patterns of soleus potentials due to repetitive stimulation in young and old rats. Uramoto I, et al. **Electromyogr Clin Neurophysiol** 1989 Jan-Feb; 29(1):21–7
A functional subdivision of the lumbar extensor musculature. Recruitment patterns and force-RA-EMG relationships under isometric conditions. Vink P, et al. **Electromyogr Clin Neurophysiol** 1987 Dec;27(8):517–25
Effect of thumb position on thenar compound muscle action potential field. Wee AS, et al. **Electromyogr Clin Neurophysiol** 1988 May;28(4):163–6
Induction of insulin-like growth factor I messenger ribonucleic acid during regeneration of rat skeletal muscle. Edwall D, et al. **Endocrinology** 1989 Feb;124(2):820–5
A comparison of power outputs on the Wingate test and on a test using an isokinetic device. Baltzopoulos V, et al. **Ergonomics** 1988 Nov;31(11):1693–9
The role of the biceps and triceps brachii during tennis serving. Buckley JP, et al. **Ergonomics** 1988 Nov; 31(11):1621–9
Symmetric and asymmetric manual materials handling. Part 1: Physiology and psychophysics. Drury CG, et al. **Ergonomics** 1989 May;32(5):467–89
Reproducibility of surface electromyogram and intra-abdominal pressure for use in ambulatory monitoring. Heinrich I, et al. **Ergonomics** 1988 Dec;31(12):1821–35
Modelling wrist-twisting strength of the elderly. Imrhan SN, et al. **Ergonomics** 1988 Dec;31(12):1807–19
Variation of the maximum maintenance time of an isometric contraction in the presence of a second contraction. Kahn JF, et al. **Ergonomics** 1988 Sep;31(9):1287–98
Strength and cross-sectional area of the dorsal neck muscles. Mayoux-Benhamou MA, et al. **Ergonomics** 1989 May; 32(5):513–8
Muscle response to pneumatic hand tool torque reaction forces. Radwin RG, et al. **Ergonomics** 1989 Jun; 32(6):655–74
Shoulder posture and localized muscle fatigue and discomfort. Wiker SF, et al. **Ergonomics** 1989 Feb; 32(2):211–37
Observation of Brillouin scattering from single muscle fibres. Berovic N, et al. **Eur Biophys J** 1989;17(2):69–74
Saturation effects and rectifier properties of sodium channels in human skeletal muscle. Fahlke C, et al. **Eur Biophys J** 1988;16(5):307–12
Effects of pre-motion electromyographic silent period on dynamic force exertion during a rapid ballistic movement in man. Aoki H, et al. **Eur J Appl Physiol** 1989;58(4):426–32
Muscle fibre conduction velocity, mean power frequency, mean EMG voltage and force during submaximal fatiguing contractions of human quadriceps. Arendt-Nielsen L, et

al. **Eur J Appl Physiol** 1988;58(1-2):20-5
The electromyographical basis of inaccurate motor performance. Brown JM, et al. **Eur J Appl Physiol** 1988; 58(1-2):132-40
Skeletal muscle fiber type composition and performance during repeated bouts of maximal, concentric contractions. Colliander EB, et al. **Eur J Appl Physiol** 1988;58(1-2):81-6
Gender difference in the relationship of performance in the handgrip and standing long jump tests to lean limb volume in young adults. Davies BN, et al. **Eur J Appl Physiol** 1988; 58(3):315-20
Effect of exercise duration on lactate kinetics after short muscular exercise. Freund H, et al. **Eur J Appl Physiol** 1989;58(5):534-42
The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. I. Assessment of muscular fatigue by means of surface EMG. Gamet D, et al. **Eur J Appl Physiol** 1989;58(4):361-8
Muscular fatigue during repeated isokinetic shoulder forward flexions in young females. Gerdle B, et al. **Eur J Appl Physiol** 1989;58(6):666-73
Relationship between work and electromyographic activity during repeated leg muscle contractions in orienteers. Gerdle B, et al. **Eur J Appl Physiol** 1988;58(1-2):8-12
Pattern of reflex responses in lower limb muscles to a resistance in walking man. Ghori GM, et al. **Eur J Appl Physiol** 1989;58(8):852-7
Muscle stretching and motoneuron excitability. Guissard N, et al. **Eur J Appl Physiol** 1988;58(1-2):47-52
Surface EMG amplitude and frequency dependence on exerted force for the upper trapezius muscle: a comparison between right and left sides. Hagberg C, et al. **Eur J Appl Physiol** 1989;58(6):641-5
Forearm oxygen uptake during maximal forearm dynamic exercise. Hartling OJ, et al. **Eur J Appl Physiol** 1989; 58(5):466-70
Recovery following exhaustive dynamic exercise in the human biceps muscle. Kroon GW, et al. **Eur J Appl Physiol** 1988;58(3):228-32
The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. II. Motor unit firing rate and recruitment. Maton B, et al. **Eur J Appl Physiol** 1989;58(4):369-74
Effects of musculoskeletal work load and muscle strength on strain at work in women and men aged 44 to 58 years. Nygård CH, et al. **Eur J Appl Physiol** 1988;58(1-2):13-9
Muscular sound and force relationship during isometric contraction in man. Orizio C, et al. **Eur J Appl Physiol** 1989;58(5):528-33
Comparison of the histochemical and contractile properties of human triceps surae. Rice CL, et al. **Eur J Appl Physiol** 1988;58(1-2):165-70
Benefits of short-term muscular training in reducing the effects of muscular over-exertion. Seaman R, et al. **Eur J Appl Physiol** 1988;58(3):257-61
Anaerobic threshold, muscle volume and hypoxia. Shephard RJ, et al. **Eur J Appl Physiol** 1989;58(8):826-32
White blood cell response to uphill walking and downhill jogging at similar metabolic loads. Smith LL, et al. **Eur J Appl Physiol** 1989;58(8):833-7
Isometric and isokinetic muscle strength, anthropometry and physical activity in 8 and 13 year old Swedish children. Sunnegårdh J, et al. **Eur J Appl Physiol** 1988;58(3):291-7
Cardiovascular adjustments to rhythmic handgrip exercise: relationship to electromyographic activity and post-exercise hyperemia. Taylor JA, et al. **Eur J Appl Physiol** 1988;58(1-2):32-8
The electromyographic DC potential as a correlate of muscular activity. Trimmel M, et al. **Eur J Appl Physiol** 1989;58(5):459-65
Eccentric and concentric torque-velocity characteristics of the quadriceps femoris in man. Westing SH, et al. **Eur J Appl Physiol** 1988;58(1-2):100-4
EMG activities in mono- and bi-articular thigh muscles in combined hip and knee extension. Yamashita N. **Eur J Appl Physiol** 1988;58(3):274-7
The influence of force and circulation on average muscle fibre conduction velocity during local muscle fatigue. Zwarts MJ, et al. **Eur J Appl Physiol** 1988;58(3):278-83
Altered expression of myosin light-chain isoforms in chronically stimulated fast-twitch muscle of the rat. Bär A, et al. **Eur J Biochem** 1989 Jan 2;178(3):591-4
Facilitation of muscle responses to magnetic brain stimulation by mechanical stimuli in man. Claus D, et al. **Exp Brain Res** 1988;71(2):273-8
Vestibulospinal and reticulospinal interactions in the activation of back muscle EMG in the rat. Cottingham SL, et al. **Exp Brain Res** 1988;73(1):198-208
Postural responses to changing task conditions. Hansen PD, et al. **Exp Brain Res** 1988;73(3):627-36
Neck muscle activation patterns in humans during isometric head stabilization. Keshner EA, et al. **Exp Brain Res** 1989; 75(2):335-44
Human automatic postural responses: responses to horizontal perturbations of stance in multiple directions. Moore SP, et al. **Exp Brain Res** 1988;73(3):648-58
Postural synergies in axial movements: short and long-term adaptation. Pedotti A, et al. **Exp Brain Res** 1989;74(1):3-10
An assessment of the existence of muscle synergies during load perturbations and intentional movements of the human arm. Soechting JF, et al. **Exp Brain Res** 1989;74(3):535-48
Myogenic cells of regenerating adult chicken muscle can fuse into myotubes after a single cell division in vivo. Grounds MD, et al. **Exp Cell Res** 1989 Feb;180(2):429-39
Prolongation of twitch potentiating mechanism throughout muscle fatigue and recovery. Garner SH, et al. **Exp Neurol** 1989 Mar;103(3):277-81
Effect of hind-limb suspension on young and adult skeletal muscle. I. Normal mice. Haida N, et al. **Exp Neurol** 1989 Jan;103(1):68-76
Influence of one-week hindlimb suspension and intermittent high load exercise on rat muscles. Herbert ME, et al. **Exp Neurol** 1988 Nov;102(2):190-8
The fast-twitch muscle calsequestrin isoform predominates in rabbit slow-twitch soleus muscle. Fliegel L, et al. **FEBS Lett** 1989 Jan 2;242(2):297-300
The effects of vascular smooth muscle caldesmon on force production by 'desensitised' skeletal muscle fibres. Taggart MJ, et al. **FEBS Lett** 1988 Dec 19;242(1):171-4
Electromyographic study of emphatic consonants in standard Jordanian Arabic. Kuriyagawa F, et al. **Folia Phoniatr (Basel)** 1988;40(3):117-22
Differences in the response of proximal and distal rabbit colonic muscle after electrical field stimulation. Snape WJ Jr, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):321-6
Fast calcium currents in cut skeletal muscle fibres of the frogs Rana temporaria and Xenopus laevis. Henček M, et al. **Gen Physiol Biophys** 1988 Dec;7(6):651-6
Low calcium treatment provokes persistent spiking in tonic crayfish muscle. Laszczyca P, et al. **Gen Physiol Biophys** 1989 Apr;8(2):171-6
Evoked electromyography of the eleventh nerve and trapezius muscle. Hillel AD, et al. **Head Neck Surg** 1988 Jul-Aug;10(6):387-95
Mechanics of a single-ossicle ear: I. The extra-stapedius of the pigeon. Gummer AW, et al. **Hear Res** 1989 May; 39(1-2):1-13
The effects of preview and task symmetry on trunk muscle response to sudden loading. Lavender SA, et al. **Hum Factors** 1989 Feb;31(1):101-15
Methods for estimating isometric recruitment curves of electrically stimulated muscle. Durfee WK, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):654-67
Functional electrical stimulation of the latissimus dorsi muscle for use in cardiac assist. Malek AM, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):781-8
The design and use of a microcomputerized real-time muscle fatigue monitor based on the medial frequency shift in the electromyographic signal. Seroussi R, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):284-6
Temporal characterization of myoelectric spectral moment changes: analysis of common parameters. Standridge RK, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):789-97
Nature of PGE2 induced inhibition of acetylcholine contracture of rectus abdominis muscle of toad. Koley J, et al. **Indian J Exp Biol** 1988 Jul;26(7):528-31
The standardized distal motor latencies and the peak to peak amplitudes of evoked muscle action potentials in the extremities of humans. Krishnamurthy N, et al. **Indian J Physiol Pharmacol** 1988 Jan-Mar;32(1):51-5
Neck-shoulder loading in wordprocessor use. Effect of learning, gymnastics and armsupports. Sihvonen T, et al. **Int Arch Occup Environ Health** 1989;61(4):229-33
Characterization of resting membrane potential and its electrogenic pump component in cultured chick myotubes. Brodie C, et al. **Int J Dev Neurosci** 1989;7(2):165-72
Presynaptic modulation of sympathetic nerve transmission--an element in vasomotor control. Fuglsang A, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):71-84
Satellite cell activation in human skeletal muscle after training: evidence for muscle fiber neoformation. Appell HJ, et al. **Int J Sports Med** 1988 Aug;9(4):297-9
Electrical stimulation of quadriceps femoris in an elite weight lifter: a single subject experiment. Delitto A, et al. **Int J Sports Med** 1989 Jun;10(3):187-91 (22 ref.)
Effect of reduced training frequency on muscular strength. Graves JE, et al. **Int J Sports Med** 1988 Oct;9(5):316-9
Daily hormonal and neuromuscular responses to intensive strength training in 1 week. Häkkinen K, et al. **Int J Sports Med** 1988 Dec;9(6):422-8
Prospective study of concentric and eccentric leg muscle torques, flexibility, physical conditioning, and variation of injury rates during one season of amateur ice hockey. Posch E, et al. **Int J Sports Med** 1989 Apr;10(2):113-7
Isokinetic investigation of knee extensors and knee flexors in young French soccer players. Rochcongar P, et al. **Int J Sports Med** 1988 Dec;9(6):448-50
Macronutrient content of a hypoenergy diet affects nitrogen retention and muscle function in weight lifters. Walberg JL, et al. **Int J Sports Med** 1988 Aug;9(4):261-6
Eccentric and concentric torque-velocity characteristics, torque output comparisons, and gravity effect torque corrections for the quadriceps and hamstring muscles in females. Westing SH, et al. **Int J Sports Med** 1989 Jun; 10(3):175-80
The cricothyroid muscle in voicing control. Löfqvist A, et al. **J Acoust Soc Am** 1989 Mar;85(3):1314-21
Electromyographic abnormalities in patients undergoing long-term therapy with etretinate. David M, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):273-5
Applied kinesiology--what does the term mean? [letter] **J Am Diet Assoc** 1989 Apr;89(4):476, 478
Growth changes in the skull and upper cervical skeleton after partial detachment of neck muscles. An experimental study in the rat. Kylämarkula S. **J Anat** 1988 Aug;159:197-205
The unique action of bi-articular muscles in complex movements. van Ingen Schenau GJ, et al. **J Anat** 1987 Dec; 155:1-5
The importance of stretch and contractile activity in the prevention of connective tissue accumulation in muscle. Williams PE, et al. **J Anat** 1988 Jun;158:109-14
Upper airway and respiratory muscle responses to continuous negative airway pressure. Aronson RM, et al. **J Appl Physiol** 1989 Mar;66(3):1373-82
Breathing route influences upper airway muscle activity in awake normal adults. Basner RC, et al. **J Appl Physiol** 1989 Apr;66(4):1766-71
O2 metabolism of the sheep diaphragm during flow resistive loaded breathing. Bazzy AR, et al. **J Appl Physiol** 1989 May;66(5):2305-11
Energy cost and fatigue during intermittent electrical stimulation of human skeletal muscle. Bergström M, et al. **J Appl Physiol** 1988 Oct;65(4):1500-5
Effects of exercise of varying duration on sarcoplasmic reticulum function. Byrd SK, et al. **J Appl Physiol** 1989 Mar;66(3):1383-9
Characteristics and functional significance of canine abdominal muscles. Farkas GA, et al. **J Appl Physiol** 1988 Dec;65(6):2427-33
Muscle plasticity: comparison of a 30-Hz burst with 10-Hz continuous stimulation. Ferguson AS, et al. **J Appl Physiol** 1989 Mar;66(3):1143-51
Effect of swim exercise training on human muscle fiber function. Fitts RH, et al. **J Appl Physiol** 1989 Jan; 66(1):465-75
Operation Everest II: adaptations in human skeletal muscle. Green HJ, et al. **J Appl Physiol** 1989 May;66(5):2454-61
M wave potentiation during and after muscle activity. Hicks A, et al. **J Appl Physiol** 1989 Jun;66(6):2606-10
Dissociation of maximal O2 uptake from O2 delivery in canine gastrocnemius in situ. Hogan MC, et al. **J Appl Physiol** 1989 Mar;66(3):1219-26
Abdominal muscle activity during speech production. Hoit JD, et al. **J Appl Physiol** 1988 Dec;65(6):2656-64
Transcriptional regulation of decreased protein synthesis during skeletal muscle unloading. Howard G, et al. **J Appl Physiol** 1989 Mar;66(3):1093-8
Specificity of esophageal electrode recordings of posterior cricoarytenoid muscle activity. Insalaco G, et al. **J Appl Physiol** 1989 Mar;66(3):1501-5
Synchronized slow-amplitude modulations in the electromyograms of shivering muscles. Israel DJ, et al. **J Appl Physiol** 1989 May;66(5):2358-63
Coupling between respiratory and stepping rhythms during locomotion in decerebrate cats. Kawahara K, et al. **J Appl Physiol** 1989 Jul;67(1):110-5
Changes of muscular sound during sustained isometric contraction up to exhaustion. Orizio C, et al. **J Appl Physiol** 1989 Apr;66(4):1593-8
Patterns of neural and muscular electrical activity in costal and crural portions of the diaphragm. Oyer LM, et al. **J Appl Physiol** 1989 May;66(5):2092-100
Variations in running activity and enzymatic adaptations in voluntary running rats. Rodnick KJ, et al. **J Appl Physiol** 1989 Mar;66(3):1250-7
Sympathetic activation is associated with increases in EMG during fatiguing exercise. Seals DR, et al. **J Appl Physiol** 1989 Jan;66(1):88-95
Sympathetic neural discharge and vascular resistance during exercise in humans. Seals DR. **J Appl Physiol** 1989 May; 66(5):2472-8
Reflex effect of skeletal muscle mechanoreceptor stimulation on the cardiovascular system. Stebbins CL, et al. **J Appl Physiol** 1988 Oct;65(4):1539-47
Beta-adrenergic receptors are not responsible for exercise stimulation of glucose transport. Sternlicht E, et al. **J Appl Physiol** 1989 May;66(5):2419-22
Glycogen synthesis from lactate in a chronically active muscle. Talmadge RJ, et al. **J Appl Physiol** 1989 May; 66(5):2231-8
Collapsibility of the human upper airway during normal sleep. Wiegand L, et al. **J Appl Physiol** 1989 Apr; 66(4):1800-8
Performance of noncountermovement jump with both knee and hip joints fully extended. Yamazaki Y, et al. **J Appl Physiol** 1989 Apr;66(4):1976-83
Ca2+-sensitive transition in the molecular conformation of molluscan muscle myosins. Takahashi M, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):149-51
Triadic proteins of skeletal muscle. Caswell AH, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):149-62 (56 ref.)
Inositol trisphosphate and excitation-contraction coupling in skeletal muscle. Hidalgo C, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):267-81 (52 ref.)
Kinetic analysis of excitation-contraction coupling. Ikemoto N, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):247-66 (95 ref.)
The muscle ryanodine receptor and its intrinsic Ca2+ channel activity. Lai FA, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):227-46 (88 ref.)
Calmodulin supports the force-generating function in desensitized muscle fibers. Babu A, et al. **J Biol Chem** 1988 Oct 25;263(30):15485-91
Characterization of rabbit lactate dehydrogenase-M and lactate dehydrogenase-H cDNAs. Control of lactate dehydrogenase expression in rabbit muscle. Sass C, et al.

J Biol Chem 1989 Mar 5;264(7):4076–81
Coordinate changes in fast thin filament and Z-line protein expression in the early response to chronic stimulation. Schachat F, et al. J Biol Chem 1988 Oct 5;263(28):13975–8
Mechanical output of the cat soleus during treadmill locomotion: in vivo vs in situ characteristics. Gregor RJ, et al. J Biomech 1988;21(9):721–32
Buckle muscle tension transducer: what does it measure? Hahs DW, et al. J Biomech 1989;22(2):165–6
Comments on 'A Dynamic Optimization Technique for Predicting Muscle Forces in the Swing Phase of Gait' by D.T. Davy and M.L. Audu, and general trends in contemporary muscle modelling. Hatze H. J Biomech 1988; 21(10):888–91
An integrated biomechanical analysis of normal stair ascent and descent. McFadyen BJ, et al. J Biomech 1988; 21(9):733–44
Strain-induced reorientation of an intramuscular connective tissue network: implications for passive muscle elasticity. Purslow PP. J Biomech 1989;22(1):21–31
Trunk muscle electromyography and whole body vibration. Seroussi RE, et al. J Biomech 1989;22(3):219–29
A simulation of rat edl force output based on intrinsic muscle properties. van Ingen Schenau GJ, et al. J Biomech 1988; 21(10):815–24
Mechanical energy costs of human movement: an approach to evaluating the transfer possibilities of two-joint muscles. Wells RP. J Biomech 1988;21(11):955–64
Method for studying muscle properties under orderly stimulated motor units with tripolar nerve cuff electrode. Baratta R, et al. J Biomed Eng 1989 Mar;11(2):141–7
Simple three-program implantable muscle stimulator with optical control. Cooper JP, et al. J Biomed Eng 1988 Oct; 10(5):467–9
Fast on-line polarity correlation algorithms for muscle fibre conduction velocity measurement. Harba MI, et al. J Biomed Eng 1988 Oct;10(5):411–6
Portable stimulator for direct electrical stimulation of denervated muscles in laboratory animals. Sébille A, et al. J Biomed Eng 1988 Jul;10(4):371–2
Coactivation of the hamstrings and quadriceps during extension of the knee. Draganich LF, et al. J Bone Joint Surg [Am] 1989 Aug;71(7):1075–81
The effects of muscle-building exercise on vitamin D and mineral metabolism. Bell NH, et al. J Bone Miner Res 1988 Aug;3(4):369–73
Relationship of body composition, muscle strength, and aerobic capacity to bone mineral density in older men and women. Bevier WC, et al. J Bone Miner Res 1989 Jun; 4(3):421–32
Muscle strength, physical fitness, and weight but not age predict femoral neck bone mass. Pocock N, et al. J Bone Miner Res 1989 Jun;4(3):441–8
Isolation and characterization of the mouse acetylcholine receptor delta subunit gene: identification of a 148-bp cis-acting region that confers myotube-specific expression. Baldwin TJ, et al. J Cell Biol 1988 Dec;107(6 Pt 1):2271–9
Acetylcholine receptors and concanavalin A–binding sites on cultured Xenopus muscle cells: electrophoresis, diffusion, and aggregation [corrected and republished article originally printed in J Cell Biol 1988 May;106(5):1723–34] Stollberg J, et al. J Cell Biol 1988 Oct;107(4):1397–408
Ca-dependent slow action potentials in human skeletal muscle. Siri LN, et al. J Cell Physiol 1988 Dec; 137(3):448–54
Histones synthesized at different stages of myogenesis are differentially degraded in myotube cells. Wunsch AM, et al. J Cell Physiol 1989 Oct;141(1):97–102
Shedding of cytoplasmic actins by developing muscle cells. Denning GM, et al. J Cell Sci 1988 Feb;89 (Pt 2):273–82
Measurement of muscle fiber conduction velocity in humans: techniques and applications. Arendt-Nielsen L, et al. J Clin Neurophysiol 1989 Apr;6(2):173–90
Electrogenic responses elicited by transmembrane depolarizing current in aerated body wall muscles of Drosophila melanogaster larvae. Yamaoka K, et al. J Comp Physiol [A] 1988 Oct;163(6):705–14
Evolutionary adaptation of a reflex system: sensory hysteresis counters muscle 'catch' tension. Zill SN, et al. J Comp Physiol [A] 1988 Nov;164(1):43–8
Threshold for shivering in aerobic and anaerobic muscles in bantam cocks and incubating hens. Aulie A, et al. J Comp Physiol [B] 1988;158(4):431–5
Muscle forces during locomotion in kangaroo rats: force platform and tendon buckle measurements compared. Biewener AA, et al. J Exp Biol 1988 Jul;137:191–205
Efficiency of rat medial gastrocnemius muscle in contractions with and without an active prestretch. De Haan A, et al. J Exp Biol 1989 Jan;141:327–41
Electromyography of the fin musculature of the cuttlefish Sepia officinalis. Kier WM, et al. J Exp Biol 1989 May; 143:17–31
Preferred speeds in terrestrial vertebrates: are they equivalent? Perry AK, et al. J Exp Biol 1988 Jul;137:207–19
Regulation of binding of phosphofructokinase to myofibrils in the red and white muscle of the barred sand bass, Paralabrax nebulifer (Serranidae). Roberts SJ, et al. J Exp Biol 1988 Jul;137:13–27
Anatomical distribution of voltage-dependent membrane capacitance in frog skeletal muscle fibers. Huang CL, et al. J Gen Physiol 1989 Mar;93(3):565–84
Variations in cross-bridge attachment rate and tension with phosphorylation of myosin in mammalian skinned skeletal muscle fibers. Implications for twitch potentiation in intact muscle. Metzger JM, et al. J Gen Physiol 1989 May; 93(5):855–83
Excitation of skinned muscle fibers by imposed ion gradients. III. Distribution of permeant ions in unstimulated and stimulated fibers. Stephenson EW. J Gen Physiol 1989 Jan; 93(1):151–71
Excitation of skinned muscle fibers by imposed ion gradients. IV. Effects of stretch and perchlorate ion. Stephenson EW. J Gen Physiol 1989 Jan;93(1):173–92
Cocaine-induced closures of single batrachotoxin-activated Na+ channels in planar lipid bilayers. Wang GK. J Gen Physiol 1988 Dec;92(6):747–65
Long-latency enhancement of quadriceps excitability from stimulation of skin afferents in young and old adults. Burke JR, et al. J Gerontol 1989 Sep;44(5):M158–63
Variations of the flexor digitorum superficialis of the small finger. Austin GJ, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):262–7
Some aspects of lumbrical function [letter] Ranney DA. J Hand Surg [Br] 1988 Nov;13(4):483–4
The First Purdue Conference on Cardiac Assistance with Skeletal Muscle. October 25–26, 1988, West Lafayette, Indiana. Abstracts. J Heart Transplant 1988 Jul–Aug; 7(4):316–21
Involvement of neuropeptide Y in sympathetic vascular control of skeletal muscle in vivo. Kahan T, et al. J Hypertens Suppl 1988 Dec;6(4):S532–4
Impaired baroreflex changes in muscle sympathetic nerve activity in adolescents who have a family history of essential hypertension. Yamada Y, et al. J Hypertens Suppl 1988 Dec;6(4):S525–8
Changes in electrical activity in muscles resulting from chiropractic adjustment: a pilot study [letter] Brewer G. J Manipulative Physiol Ther 1988 Oct;11(5):445–6
Bicarbonate and fast-twitch muscle: evidence for a major role in pH regulation. Grossie J, et al. J Membr Biol 1988 Nov;105(3):265–72
Muscular mechanisms of snake locomotion: an electromyographic study of lateral undulation of the Florida banded water snake (Nerodia fasciata) and the yellow rat snake (Elaphe obsoleta). Jayne BC. J Morphol 1988 Aug;197(2):159–81
Abstracts of the 1988 annual meeting on muscle and cell motility physiology. Tokyo, November 28–29, 1988. J Muscle Res Cell Motil 1989 Jun;10(3):255–71
The Seventeenth European Conference on Muscle and Motility. Abano Terme (Padova), Italy, 17–19 October 1988. Abstracts. J Muscle Res Cell Motil 1989 Apr; 10(2):143–80
Functional regeneration in the hindlimb skeletal muscle of the mdx mouse. Anderson JE, et al. J Muscle Res Cell Motil 1988 Dec;9(6):499–515
Sarcomere length behaviour along single frog muscle fibres at different lengths during isometric tetani. Burton K, et al. J Muscle Res Cell Motil 1989 Feb;10(1):67–84
Na/Ca exchange and excitation—contraction coupling in frog fast fibres. Curtis BA. J Muscle Res Cell Motil 1988 Oct;9(5):415–27
Pressure sensitivity of active tension in glycerinated rabbit psoas muscle fibres: effects of ADP and phosphate. Fortune NS, et al. J Muscle Res Cell Motil 1989 Apr;10(2):113–23
Positioning of actin filaments and tension generation in skinned muscle fibres released after stretch beyond overlap of the actin and myosin filaments. Higuchi H, et al. J Muscle Res Cell Motil 1988 Dec;9(6):491–8
A model of crossbridge action: the effects of ATP, ADP and Pi. Pate E, et al. J Muscle Res Cell Motil 1989 Jun; 10(3):181–96
Actin filament organization and myosin head labelling patterns in vertebrate skeletal muscles in the rigor and weak binding states. Squire JM, et al. J Muscle Res Cell Motil 1988 Aug;9(4):344–58 (51 ref.)
Effect of pH and stimulus phase on work done by isolated frog sartorius muscle during cyclical contraction. Stevens ED. J Muscle Res Cell Motil 1988 Aug;9(4):329–33
Disruption of muscle reorganization by lesions of the peripheral nerve in transforming claws of snapping shrimps. Mellon D Jr, et al. J Neurobiol 1988 Sep;19(6):532–51
Some mutations affecting neural or muscular tissues alter the physiological components of the electroretinogram in Drosophila. Homyk T Jr, et al. J Neurogenet 1989 Jan; 5(1):37–48
Drosophila mutants with progressive atrophy in dorsal longitudinal muscles. Wang D, et al. J Neurogenet 1989 Sep;6(1):27–39
Influence of contractile force on properties of motor unit action potentials: ADEMG analysis. Dorfman LJ, et al. J Neurol Sci 1988 Sep;86(2–3):125–36
Contractile properties and fatiguability of the human adductor pollicis and first dorsal interosseus: a comparison of the effects of two chronic stimulation patterns. Rutherford OM, et al. J Neurol Sci 1988 Jul;85(3):319–31
Effects of aging on skeletal muscle regeneration. Sadeh M. J Neurol Sci 1988 Oct;87(1):67–74
Effect of fiber types, fascicle size and halothane on caffeine contractures in rat muscles. Shah AJ, et al. J Neurol Sci 1988 Dec;88(1–3):247–60
Organizing principles for single-joint movements. II. A speed-sensitive strategy. Corcos DM, et al. J Neurophysiol 1989 Aug;62(2):358–68
Interlimb coordination of leg-muscle activation during perturbation of stance in humans. Dietz V, et al. J Neurophysiol 1989 Sep;62(3):680–93
Organizing principles for single-joint movements. I. A speed-insensitive strategy. Gottlieb GL, et al. J Neurophysiol 1989 Aug;62(2):342–57
Changes in properties of the medial gastrocnemius motor units in aging rats. Kanda K, et al. J Neurophysiol 1989 Apr;61(4):737–46
Anatomical and functional segregation in the stapedius motoneuron pool of the cat. McCue MP, et al. J Neurophysiol 1988 Sep;60(3):1160–80
Components of responses of a population of DSCT neurons to muscle stretch and contraction. Osborn CE, et al. J Neurophysiol 1989 Feb;61(2):456–65
Coordination and inhomogeneous activation of human arm muscles during isometric torques. van Zuylen EJ, et al. J Neurophysiol 1988 Nov;60(5):1523–48
The role of preparation in tuning anticipatory and reflex responses during catching. Lacquaniti F, et al. J Neurosci 1989 Jan;9(1):134–48
Activation of muscle fibers in individual motor units revealed by 2-deoxyglucose-6-phosphate. Nemeth PM, et al. J Neurosci 1988 Nov;8(11):3959–66
Electrophysiology and dye-coupling are sexually dimorphic characteristics of individual laryngeal muscle fibers in Xenopus laevis. Tobias ML, et al. J Neurosci 1988 Jul; 8(7):2422–9
The voltage-clamp apparatus assisted by a 'current pump'. Kordaš M, et al. J Neurosci Methods 1989 Jan;26(3):229–32
Identification of basic fibroblast growth factor as a cholinergic growth factor from human muscle. Vaca K, et al. J Neurosci Res 1989 May;23(1):55–63
The effect of exercise on the circumvaginal muscles in postpartum women. Dougherty MC, et al. J Nurse Midwifery 1989 Jan–Feb;34(1):8–14
Time-resolved X-ray diffraction studies on the effect of slow length changes on tetanized frog skeletal muscle. Amemiya Y, et al. J Physiol (Lond) 1988 Dec;407:231–41
Plateau and descending limb of the sarcomere length-tension relation in short length-clamped segments of frog muscle fibres. Bagni MA, et al. J Physiol (Lond) 1988 Jul; 401:581–95
Neural regulation of [3H]saxitoxin binding site numbers in rat neonatal muscle. Bambrick LL, et al. J Physiol (Lond) 1988 Dec;407:263–74
Fura-2 calcium transients in frog skeletal muscle fibres [published erratum appears in J Physiol (Lond) 1988 Dec;407:616] Baylor SM, et al. J Physiol (Lond) 1988 Sep; 403:151–92
Sodium channel distribution in normal and denervated rodent and snake skeletal muscle. Caldwell JH, et al. J Physiol (Lond) 1988 Jul;401:145–61
Muscarinic control of the hyperpolarization-activated current (if) in rabbit sino-atrial node myocytes. DiFrancesco D, et al. J Physiol (Lond) 1988 Nov; 405:493–510
Inhibition of the hyperpolarization-activated current (if) induced by acetylcholine in rabbit sino-atrial node myocytes. DiFrancesco D, et al. J Physiol (Lond) 1988 Nov;405:477–91
Electrical stimulation resembling normal motor-unit activity: effects on denervated fast and slow rat muscles. Eken T, et al. J Physiol (Lond) 1988 Aug;402:651–69
Fatigability of rat hindlimb muscle: associations between electromyogram and force during a fatigue test. Enoka RM, et al. J Physiol (Lond) 1989;408:251–70
Use-dependent reduction and facilitation of Ca2+ current in guinea-pig myocytes. Fedida D, et al. J Physiol (Lond) 1988 Nov;405:439–60
Mechanism of the use dependence of Ca2+ current in guinea-pig myocytes. Fedida D, et al. J Physiol (Lond) 1988 Nov;405:461–75
Activation of human muscles at short muscle lengths during maximal static efforts. Gandevia SC, et al. J Physiol (Lond) 1988 Dec;407:599–613
Reduced voluntary electromyographic activity after fatiguing stimulation of human muscle. Garland SJ, et al. J Physiol (Lond) 1988 Jul;401:547–56
Long-latency stretch reflexes as co-ordinated functional responses in man. Gielen CC, et al. J Physiol (Lond) 1988 Dec;407:275–92
Post-natal disappearance of transient calcium channels in mouse skeletal muscle: effects of denervation and culture. Gonoi T, et al. J Physiol (Lond) 1988 Jul;401:617–37
Slow-to-fast transformation of denervated soleus muscles by chronic high-frequency stimulation in the rat. Gorza L, et al. J Physiol (Lond) 1988 Aug;402:627–49
Variations in contractile properties of rabbit single muscle fibres in relation to troponin T isoforms and myosin light chains. Greaser ML, et al. J Physiol (Lond) 1988 Dec; 406:85–98
Stiffness changes in frog skeletal muscle during contraction recorded using ultrasonic waves. Hatta I, et al. J Physiol (Lond) 1988 Sep;403:193–209
Adenosine 5'-triphosphate activates acetylcholine receptor channels in cultured Xenopus myotomal muscle cells. Igusa Y. J Physiol (Lond) 1988 Nov;405:169–85
Spontaneous release of multiquantal miniature excitatory junction potentials induced by a Drosophila mutant. Ikeda K, et al. J Physiol (Lond) 1988 Dec;406:215–23

Instability in human forearm movements studied with feed-back-controlled electrical stimulation of muscles. Jacks A, et al. **J Physiol (Lond)** 1988 Aug;402:443-61

Fall in intracellular pH and increase in resting tension induced by a mitochondrial uncoupling agent in crayfish muscle. Kaila K, et al. **J Physiol (Lond)** 1989;408:271-93

Phosphorus nuclear magnetic resonance studies on the effect of duration of contraction in bull-frog skeletal muscles. Kawano Y, et al. **J Physiol (Lond)** 1988 Dec;407:243-61

Kinetic states and modes of single large-conductance calcium-activated potassium channels in cultured rat skeletal muscle. McManus OB, et al. **J Physiol (Lond)** 1988 Aug;402:79-120

On the long-latency reflex responses of the human flexor digitorum profundus. Matthews PB, et al. **J Physiol (Lond)** 1988 Oct;404:515-34

Instability in human forearm movements studied with feed-back-controlled muscle vibration. Prochazka A, et al. **J Physiol (Lond)** 1988 Aug;402:421-42

Transmitter release at mouse motor nerve terminals mediated by temporary accumulation of intracellular barium. Quastel DM, et al. **J Physiol (Lond)** 1988 Dec;406:55-73

The voltage-dependent block of ATP-sensitive potassium channels of frog skeletal muscle by caesium and barium ions. Quayle JM, et al. **J Physiol (Lond)** 1988 Nov; 405:677-97

Stiffness changes during enhancement and deficit of isometric force by slow length changes in frog skeletal muscle fibres. Sugi H, et al. **J Physiol (Lond)** 1988 Dec;407:215-29

Experimental study of vascularized muscle: multifactorial analysis of muscle regeneration following denervation. Koshima I, et al. **J Reconstr Microsurg** 1989 Jul;5(3):225-30

Comparison of male and female functional capacity in pull-ups. Ricci B, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):168-75

Relationship of estrogen to strength, percent body fat and oxygen uptake in women. Rice PL. **J Sports Med Phys Fitness** 1988 Jun;28(2):145-50

The muscle activity paradox during circular rhythmic leg movements. Clarys JP, et al. **J Sports Sci** 1988 Winter; 6(3):229-37

Comparison of forearm muscle dynamometry with nutritional prognostic index, as a preoperative indicator in cancer patients. Kalfarentzos F, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):34-6

Hand grip dynamometry as a predictor of postoperative complications reappraisal using age standardized grip strengths. Webb AR, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):30-3

Calcium action potential and prolonged afterhyperpolarization in developing myotubes of a mouse clonal myogenic cell line. Amagai Y, et al. **Jpn J Physiol** 1989;39(1):33-42

Effects of mechanical stretch on the membrane potential of guinea pig ventricular muscles. Nakagawa A, et al. **Jpn J Physiol** 1988;38(6):819-38

A basic study on the vocal fold vibration from the viewpoint of the layer system of the vocal fold. Tsuzuki T, et al. **Keio J Med** 1988 Jun;37(2):144-54

A simple method for the concurrent stimulation of skeletal muscle in several animals. Rosenblatt JD, et al. **Lab Anim Sci** 1989 Jul;39(4):347-8

Intraoperative electrophysiologic monitoring of laryngeal muscle during thyroid surgery. Lipton RJ, et al. **Laryngoscope** 1988 Dec;98(12):1292-6

The response of chelonian muscle spindles to mechanical stimulation. Naeije M, et al. **Life Sci** 1974 Jul 1;15(1):131-6

Human autoantibody to vasoactive intestinal peptide: increased incidence in muscular exercise. Paul S, et al. **Life Sci** 1988;43(13):1079-84

Contractile and histochemical properties of young and old medial gastrocnemius muscle after suspension hypokinesia/hypodynamia. Simard C, et al. **Mech Ageing Dev** 1988 Aug;44(2):103-14

Microscopic and macroscopic volume conduction in skeletal muscle tissue, applied to simulation of single-fibre action potentials. Albers BA, et al. **Med Biol Eng Comput** 1988 Nov;26(6):605-10

Sensitivity of the amplitude of the single muscle fibre action potential to microscopic volume conduction parameters. Albers BA, et al. **Med Biol Eng Comput** 1988 Nov; 26(6):611-6

Development of a model for point source electrical fibre bundle stimulation. Altman KW, et al. **Med Biol Eng Comput** 1988 Sep;26(5):466-75

Microcomputer analysis and display of canine small intestinal electrical activity. Barnett TG, et al. **Med Biol Eng Comput** 1987 Nov;25(6):672-6

Real-time measurement of muscle fatigue related changes in surface EMG. Kramer CG, et al. **Med Biol Eng Comput** 1987 Nov;25(6):627-30

Motor unit power spectrum and firing rate. Pan ZS, et al. **Med Biol Eng Comput** 1989 Jan;27(1):14-8

Coactivation of antagonistic muscle pairs during voluntary agonist contraction-induced stretch of the antagonist [letter] **Med Sci Sports Exerc** 1989 Feb;21(1):115-8

Trunk muscle strength in athletes. Andersson E, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):587-93

Physiological determinants of Qmax in contracting canine skeletal muscle in situ. Barclay JK. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S113-8 (35 ref.)

Muscle genetic variants and relationship with performance and trainability. Bouchard C, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):71-7

Mechanisms of excitation-contraction coupling in skinned muscle fibers. Donaldson SK. **Med Sci Sports Exerc** 1989 Aug;21(4):411-7 (33 ref.)

Isokinetic strength and body composition of high school wrestlers across age. Housh TJ, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):105-9

Prediction of torque acceleration energy and power of thigh muscles from peak torque. Kannus P, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):304-7

Skeletal muscle adaptations consequent to long-term heavy resistance exercise. Tesch PA. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S132-4 (39 ref.)

A device to evoke acetylcholine release electrically in the guinea pig myenteric plexus/longitudinal muscle preparation through mass electrodes. Silverman RW, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):673-6

Expression of the troponin complex genes: transcriptional coactivation during myoblast differentiation and independent control in heart and skeletal muscles. Bucher EA, et al. **Mol Cell Biol** 1988 Oct;8(10):4134-42

A common factor regulates skeletal and cardiac alpha-actin gene transcription in muscle. Muscat GE, et al. **Mol Cell Biol** 1988 Oct;8(10):4120-33

A monoclonal antibody specifically modulates dihydropyridine-sensitive calcium current in BC3H1 myocytes. Caffrey JM, et al. **Mol Pharmacol** 1988 Oct; 34(4):518-26

Relationship of manual muscle testing to objective strength measurements. Aitkens S, et al. **Muscle Nerve** 1989 Mar; 12(3):173-7

Regeneration of skeletal muscle fibers from autologous satellite cells multiplied in vitro. An experimental model for testing cultured cell myogenicity. Alameddine HS, et al. **Muscle Nerve** 1989 Jul;12(7):544-55 (55 ref.)

Changes in muscle fiber conduction velocity, mean power frequency, and mean EMG voltage during prolonged submaximal contractions. Arendt-Nielsen L, et al. **Muscle Nerve** 1989 Jun;12(6):493-7

Recording sound from human skeletal muscle: technical and physiological aspects. Bolton CF, et al. **Muscle Nerve** 1989 Feb;12(2):126-34

Nonlinear force addition of newly recruited motor units in the cat hindlimb. Clamann HP, et al. **Muscle Nerve** 1988 Oct;11(10):1079-89

Muscle fatigue, effects of training and disuse. Hainaut K, et al. **Muscle Nerve** 1989 Aug;12(8):660-9 (78 ref.)

Properties of motor unit action potentials recorded with concentric and monopolar needle electrodes: ADEMG analysis. Howard JE, et al. **Muscle Nerve** 1988 Oct; 11(10):1051-5

Use of motor units in relation to muscle fiber type and size in man. Jakobsson F, et al. **Muscle Nerve** 1988 Dec; 11(12):1211-8 (35 ref.)

Preferential activation of muscle fibers with peripheral magnetic stimulation of the limb. Lotz BP, et al. **Muscle Nerve** 1989 Aug;12(8):636-9

Principal component analysis of the features of concentric needle EMG motor unit action potentials. Nandedkar SD, et al. **Muscle Nerve** 1989 Apr;12(4):288-93

Calcium sensitivity of fast- and slow-twitch human muscle fibers. Ruff RL. **Muscle Nerve** 1989 Jan;12(1):32-7

Inositol 1,4,5-trisphosphate activates a channel from smooth muscle sarcoplasmic reticulum. Ehrlich BE, et al. **Nature** 1988 Dec 8;336(6199):583-6

Muscle function in locomotion [news] Johnston I, et al. **Nature** 1988 Oct 27;335(6193):767-8

Formation of reverse rigor chevrons by myosin heads. Reedy MC, et al. **Nature** 1989 Jun 8;339(6224):481-3

Why animals have different muscle fibre types. Rome LC, et al. **Nature** 1988 Oct 27;335(6193):824-7

Opening of dihydropyridine calcium channels in skeletal muscle membranes by inositol trisphosphate. Vilven J, et al. **Nature** 1988 Dec 8;336(6199):587-9

Kinematics of arm movements in elderly humans. Cooke JD, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):159-65

Control of simple arm movements in elderly humans. Darling WG, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):149-57

Comparison of monosynaptic and polysynaptic Ia reflexes in the evaluation of hyporeflexia. Deuschl G, et al. **Neurology** 1988 Nov;38(11):1810-1

Nonmetabolic fatigue in exercising human muscle. Moussavi RS, et al. **Neurology** 1989 Sep;39(9):1222-6

H-reflex in nonhomonymous muscles in the human forearm. Panizza M, et al. **Neurology** 1989 Jun;39(6):785-8

Artefacts in recording glutamate-activated single channel currents from crayfish muscle. Dudel J, et al. **Neurosci Lett** 1989 Feb 27;97(3):350-3

Prolonged time course of glutamate-operated single channel currents in neuromuscular preparations of small crayfish and a membrane current triggered by glutamate channel gating. Finger W, et al. **Neurosci Lett** 1988 Aug 31; 91(2):183-8

Anticipatory neck muscle activity associated with rapid arm movements. Gurfinkel VS, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):104-8

Fluctuations in motor unit recruitment threshold during slow isometric contractions of wrist extensor muscles in man. Romaiguère P, et al. **Neurosci Lett** 1989 Aug 14;103(1):50-5

EMG activities of neck muscles underlying lateral flexion of the neck during head-turning induced by electrical stimulation of the caudate nucleus in cats. Akaike N, et al. **Neurosci Res** 1989 Jun;6(5):397-410

Comments on group II excitation in hindlimb motoneurones in high and low spinal cats. Hongo T, et al. **Neurosci Res** 1988 Aug;5(6):563-6

The onset of myogenesis in denervated mouse skeletal muscle regenerating after injury. McGeachie JK, et al. **Neuroscience** 1989;28(2):509-14

Nitrous oxide suppresses the electromyographic response evoked by electrical stimulation of the motor cortex. Zentner J, et al. **Neurosurgery** 1989 Jan;24(1):60-2

Coordinate regulation of RNAs encoding two isoforms of the rat muscle nicotinic acetylcholine receptor beta-subunit. Goldman D, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3049-56

Developmental regulation of intermediate filament and actin mRNAs during myogenesis is disrupted by oncogenic ras genes. Olson EN, et al. **Oncogene** 1989 Jul;4(7):907-13

Overcoming laryngospasm by electrical stimulation of the posterior cricoarytenoid muscle. Aviv JE, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):110-8

Dorsal fin and myotome muscle of the sea horse, Hippocampus. Smith DS, et al. **P R Health Sci J** 1988 Aug;7(2):183-4

Myopotential interference in unipolar rate responsive pacemakers. Lau CP, et al. **PACE** 1989 Aug;12(8):1324-30

Choice reaction time of elbow flexion and extension during passive elbow motions. Fujita M, et al. **Percept Mot Skills** 1988 Dec;67(3):905-6

Effect of reaction time condition on EMG activities of the biceps brachii muscle in elbow flexion and forearm supination. Mojica JA, et al. **Percept Mot Skills** 1988 Dec; 67(3):807-13

Modification in movement accuracy in the triphasic pattern during a rapid forearm-flexion task. Roy MA, et al. **Percept Mot Skills** 1988 Oct;67(2):455-60

Potassium channels: function, regulation and pharmacology in neuronal, muscular, secretory and immune systems. Proceedings of the Rhône-Polenc Santé Foundation, 6th international round table. Paris, 23rd January 1989. **Pflugers Arch** 1989;414 Suppl 1:S71-193

The mechanical properties of polyneuronally innervated, myotomal muscle fibres isolated from a teleost fish (Myoxocephalus scorpius). Altringham JD, et al. **Pflugers Arch** 1988 Oct;412(5):524-9

High energy phosphate utilization for work production and tension maintenance in frog muscle. Cerretelli P, et al. **Pflugers Arch** 1988 Aug;412(3):270-6

The recovery of tension in transients during steady lengthening of frog muscle fibres. Colomo F, et al. **Pflugers Arch** 1989 Jun;414(2):245-7

Membrane ionic conductances in normal and denervated skeletal muscle of the rat during development. Conte Camerino D, et al. **Pflugers Arch** 1989 Mar;413(5):568-70

Changes in velocity of shortening, power output and relaxation rate during fatigue of rat medial gastrocnemius muscle. de Haan A, et al. **Pflugers Arch** 1989 Feb; 413(4):422-8

Efficiency of work performance and contraction velocity in isotonic tetani of frog sartorius. di Prampero PE, et al. **Pflugers Arch** 1988 Oct;412(5):455-61

Skeletal muscle excitation-contraction coupling. II. Plasmalemma voltage control of intact bundle contractile properties in normal and malignant hyperthermic muscles. Gallant EM, et al. **Pflugers Arch** 1989 May;414(1):24-30

Intracellular Na+, K+ and Cl- activity in tonic and phasic muscle fibers of the crab Eriphia. Hammelsbeck M, et al. **Pflugers Arch** 1989 Mar;413(5):487-92

Initial charge distribution and capacity transients in frog skeletal muscle. Huang CL. **Pflugers Arch** 1988 Sep; 412(4):445-7

Effect of various types of acute exercise and exercise training on the insulin sensitivity of rat soleus muscle measured in vitro. Langfort J, et al. **Pflugers Arch** 1988 Jul; 412(1-2):101-5

Permeability to Ca2+ of the acetylcholine receptor channel of denervated mouse muscles in the presence of Na+ and of some other cations. Lorković H. **Pflugers Arch** 1988 Jul;412(1-2):211-5

Characteristics of Schwann-cell miniature end-plate currents in denervated frog muscle. Reiser G, et al. **Pflugers Arch** 1988 Jul;412(1-2):22-8

Electrical properties of normal, denervated and organ-cultured slow fibres of toad cruralis muscles. Szczupak L, et al. **Pflugers Arch** 1989 Sep;414(5):584-8

Cardiorespiratory reflex responses to static contraction of vascularly isolated hindleg muscles of the rat. Thimm F, et al. **Pflugers Arch** 1988 Jul;412(1-2):113-20

Pharmacological block of chloride channels during development affects contractile and electrical properties of rat skeletal muscle. De Luca A, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1079-80

Inositol trisphosphate, calcium and muscle contraction. Somlyo AP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26;320(1199):399-414 (123 ref.)

Palatoglossus activity during nasal/nonnasal vowels of Hindi. Dixit RP, et al. **Phonetica** 1987;44(4):210-26

An electrodeless measuring technique for determining conductivity of biological tissues at radio frequencies. Li L, et al. **Phys Med Biol** 1988 Dec;33(12):1443-52

Resistance exercise effects on aging skeletal muscle in rats.

Brown M. **Phys Ther** 1989 Jan;69(1):46–53

Electromyographic analysis of hip abductor musculature in healthy right-handed persons. Neumann DA, et al. **Phys Ther** 1989 Jun;69(6):431–40

Effects of upper limb immobilization on isometric muscle strength, movement time, and triphasic electromyographic characteristics. Vaughan VG. **Phys Ther** 1989 Feb; 69(2):119–29

Role of the bulbospongiosus muscles in sexual behavior and fertility in the house mouse. Elmore LA, et al. **Physiol Behav** 1988;44(1):125–9

Analysis of head movement and position using hall effect devices. Nienhuis R, et al. **Physiol Behav** 1989 Jan; 45(1):199–203

The kinetics of swelling in muscle exposed to hypertonic glycerol solution. Hummel Z. **Physiol Chem Phys Med NMR** 1988;20(3):241–7

Intramembrane charge movements in skeletal muscle. Huang CL. **Physiol Rev** 1988 Oct;68(4):1197–47 (275 ref.)

Responses to changed perfusion pressure in working muscles—factors to be considered in exercise testing in space flights? Eiken O. **Physiologist** 1989 Feb;32(1 Suppl):S12–5

Effect of antemortem electrical stunning on functional properties of turkey muscle. Murphy BD, et al. **Poult Sci** 1988 Jul;67(7):1062–8

Effect of negative mechanical stress on the orientation of myosin cross-bridges in muscle fibers. Burghardt TP, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5366–70

Differential expression of acetylcholine receptor mRNA in nuclei of cultured muscle cells. Bursztajn S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2928–32

A glucose transport protein expressed predominately in insulin-responsive tissues. Charron MJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2535–9

Relationship of insulin-like growth factor II gene expression in muscle to synaptogenesis. Ishii DN. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2898–902

Activation of purified calcium channels by stoichiometric protein phosphorylation. Nunoki K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6816–20

Energy metabolism of the untrained muscle of elite runners as observed by 31P magnetic resonance spectroscopy: evidence suggesting a genetic endowment for endurance exercise. Park JH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8780–4

Ontogenesis and localization of Ca2+ channels in mammalian skeletal muscle in culture and role in excitation-contraction coupling. Romey G, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2933–7

Lymphocyte antigen Leu-19 as a molecular marker of regeneration in human skeletal muscle. Schubert W, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):307–11

Oxidative capacity of muscle and mitochondria: correlation of physiological, biochemical, and morphometric characteristics. Schwerzmann K, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1583–7

Gating of single Shaker potassium channels in Drosophila muscle and in Xenopus oocytes injected with Shaker mRNA. Zagotta WN, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7243–7

Restoration of fast muscle characteristics following cessation of chronic stimulation: physiological, histochemical and metabolic changes during slow-to-fast transformation. Brown JM, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23; 235(1281):321–46

Effects of calcitonin gene-related peptide on synaptic acetylcholine receptor-channels in rat muscle fibres. Eusebi F, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23; 234(1276):333–42

Phasic modulation of postural activation patterns during human walking. Forssberg H, et al. **Prog Brain Res** 1988; 76:221–7 (26 ref.)

Neck influences on posturokinetic responses to cortical stimulation. Gahery Y, et al. **Prog Brain Res** 1988;76:181–92 (67 ref.)

Influence of adrenaline and hypoxia on rat muscle receptors in vitro. Kieschke J, et al. **Prog Brain Res** 1988;74:91–7

Is the Na,K-pump capacity in skeletal muscle inadequate during sustained work? Clausen T, et al. **Prog Clin Biol Res** 1988;268B:239–44

Effect of Apamin on the Na,K pump and Na,K-ATPase. Zemková H, et al. **Prog Clin Biol Res** 1988;268B:477–84

Fast to slow phenotypic changes in rabbit muscle can be induced without increases in neural activity. Cotter M, et al. **Q J Exp Physiol** 1988 Sep;73(5):793–6

Physiological changes in skeletal muscle as a result of strength training. Jones DA, et al. **Q J Exp Physiol** 1989 May;74(3):233–56 (114 ref.)

Thixotropy: the effect of stimulation in frog muscle. Lakie M, et al. **Q J Exp Physiol** 1988 Jul;73(4):627–30

Thixotropic changes in human muscle stiffness and the effects of fatigue [published erratum appears in Q J Exp Physiol 1988 Sep;73(5):following 808] Lakie M, et al. **Q J Exp Physiol** 1988 Jul;73(4):487–500

Myosin light chains in regenerating rat skeletal muscle following chronic, low-frequency, electrical stimulation. Rosenblatt JD, et al. **Q J Exp Physiol** 1988 Jul;73(4):619–22

Mechanisms and significance of calcium entry at positive membrane potentials in guinea-pig ventricular muscle cells. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):121–39

Influence of halothane on contraction at positive membrane potentials in single cells isolated from guinea-pig ventricular muscle. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):141–51

Specific effects of low-frequency stimulation upon energy metabolism in tibialis anterior muscles of mouse, rat, guinea pig and rabbit. Simoneau JA, et al. **Reprod Nutr Dev** 1988; 28(3B):781–4

Muscle physiology and cold reactivity in the fibromyalgia syndrome. Bennett RM. **Rheum Dis Clin North Am** 1989 Feb;15(1):135–47 (28 ref.)

Isokinetic muscle torque in the dorsiflexors of the ankle in children 6–15 years of age. Normal values and evaluation of the method. Bäckman E, et al. **Scand J Rehabil Med** 1989;21(2):97–103

Isometric and isokinetic knee extension and flexion torque in men and women aged 20–70. Borges O. **Scand J Rehabil Med** 1989;21(1):45–53

Activity levels during isometric test contractions of neck and shoulder muscles. Schüldt K, et al. **Scand J Rehabil Med** 1988;20(3):117–27

The effect of voluntary diaphragmatic activation on back lifting. Wedin S, et al. **Scand J Rehabil Med** 1988; 20(3):129–32

Methods for measurement of muscle function. Methodological aspects, reference values for children, and clinical applications. Bäckman E. **Scand J Rehabil Med Suppl** 1988;20:9–95 (94 ref.)

Scaling body support in mammals: limb posture and muscle mechanics. Biewener AA. **Science** 1989 Jul 7; 245(4913):45–8

Ryanodine receptor of skeletal muscle is a gap junction-type channel. Ma J, et al. **Science** 1988 Oct 7;242(4875):99–102

Calcium and magnesium movements in cells and the role of inositol trisphosphate in muscle. Somlyo AP, et al. **Soc Gen Physiol Ser** 1987;42:77–92 (62 ref.)

A review of the literature related to trunk muscle performance. Beimborn DS, et al. **Spine** 1988 Jun; 13(6):655–60 (37 ref.)

A three-dimensional digitization method to measure trunk muscle lines of action. Dumas GA, et al. **Spine** 1988 May; 13(5):532–41

The importance of pelvic tilt in reducing compressive stress in the spine during flexion-extension exercises. Gracovetsky S, et al. **Spine** 1989 Apr;14(4):412–6

Long-term strength assessment of postoperative diskectomy patients. Kahanovitz N, et al. **Spine** 1989 Apr;14(4):402–3

1989 Volvo Award in biomechanics. Mechanical recruitment of low-back muscles. Theoretical predictions and experimental validation. Ladin Z, et al. **Spine** 1989 Sep; 14(9):927–38

Networks of internal trunk-loading activities under controlled trunk-motion conditions. Marras WS, et al. **Spine** 1988 Jun;13(6):661–7

Comparison of CT scan muscle measurements and isokinetic trunk strength in postoperative patients. Mayer TG, et al. **Spine** 1989 Jan;14(1):33–6

Lumbar myoelectric spectral analysis for endurance assessment. A comparison of normals with deconditioned patients. Mayer TG, et al. **Spine** 1989 Sep;14(9):986–91

1988 Volvo award in biomechanics. The triaxial coupling of torque generation of trunk muscles during isometric exertions and the effect of fatiguing isoinertial movements on the motor output and movement patterns. Parnianpour M, et al. **Spine** 1988 Sep;13(9):982–92

A database of isoinertial trunk strength tests against three resistance levels in sagittal, frontal, and transverse planes in normal male subjects. Parnianpour M, et al. **Spine** 1989 Apr;14(4):409–11

Simulift: a simulation model of human trunk motion. Reilly CH, et al. **Spine** 1989 Jan;14(1):5–11

Exploration of mechanical and electromyographic responses of trunk muscles to high-intensity resistive exercise. Smidt GL, et al. **Spine** 1989 Aug;14(8):815–30

Dynamic EMG analysis of torque transfer in professional baseball pitchers. Watkins RG, et al. **Spine** 1989 Apr; 14(4):404–8

Exercise-induced muscle damage and adaptation. Ebbeling CB, et al. **Sports Med** 1989 Apr;7(4):207–34 (166 ref.)

Muscle strength and its development. New perspectives. Enoka RM. **Sports Med** 1988 Sep;6(3):146–68 (191 ref.)

The role of the hamstrings in the rehabilitation of the anterior cruciate ligament-deficient knee in athletes. Solomonow M, et al. **Sports Med** 1989 Jan;7(1):42–8 (34 ref.)

Skeletal muscle ventricles: improved performance at physiologic preloads. Bridges CR Jr, et al. **Surgery** 1989 Aug;106(2):275–81; discussion 282

Identification of motor neurons for accessory muscles of inspiration and expiration, pectoralis, trapezius and external oblique: comparison with non-respiratory skeletal muscle. Charlton CG, et al. **Synapse** 1988;2(3):219–24

Cholinergic transmission at newly formed synapses made by retinal neurons in culture. Stockbridge N, et al. **Synapse** 1987;1(2):214–20

Effect of warning signal on reaction time and EMG activity of the biceps brachii muscle in elbow flexion and forearm supination. Mojica JA, et al. **Tohoku J Exp Med** 1988 Apr; 154(4):375–80

Effect of duration of vagal stimulation on shortening velocity of in vivo canine trachealis muscle. Okayama H, et al. **Tohoku J Exp Med** 1989 May;158(1):37–46

A test for muscle lesions and their regeneration following intramuscular drug application. Grim M, et al. **Toxicol Pathol** 1988;16(4):432–42

The role of muscle spindles: a functional–morphological view [letter] Dubbeldam JL. **Trends Neurosci** 1989 Mar; 12(3):93–4 (4 ref.)

New insights into the molecular structure of the dihydropyridine-sensitive calcium channel [news] Froehner SC. **Trends Neurosci** 1988 Mar;11(3):90–2 (23 ref.)

May the force be with you [letter] Miller DJ. **Trends Pharmacol Sci** 1988 Apr;9(4):124–5

Interstitial pH and pressure in the dependent biceps femoris muscle of laterally recumbent anesthetized horses. Norman WM, et al. **Vet Surg** 1988 Jul–Aug;17(4):234–9

[Electrophysiological estimation of the number of motor units in abductor digiti minimi of young adults] Chan RC. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):231–8 (Eng. Abstr.) **(Chi)**

[Action potential of inactivated mammalian muscle fibres] Zhao GM, et al. **Sheng Li Hsueh Pao** 1988 Aug; 40(4):315–25 (Eng. Abstr.) **(Chi)**

[Recent advances in the study of the length-tension relation in striated muscle] Chen XL. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):351–6 (44 ref.) **(Chi)**

[Electromyography of normal and pathologic vocal muscles] Knoops P, et al. **Acta Belg Med Phys** 1988 Jul–Sep; 11(3):119–23 **(Fre)**

[Study of the central and peripheral motor pathways of the periurethral striated muscles using motor evoked potentials] Opsomer RJ, et al. **Acta Urol Belg** 1988;56(3):443–6 (Eng. Abstr.) **(Fre)**

[Direct electric stimulation of the denervated posterior cricoarytenoid muscle triggered by subglottic temperature in the cat. Preliminary to a laryngeal pacemaker] Lacau St. Guily J, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(2):123–6 (Eng. Abstr.) **(Fre)**

[Muscular energetics studied by nuclear magnetic resonance spectroscopy of phosphorus (cardiac and skeletal muscles)] Rossi A. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A393–409 (80 ref.) **(Fre)**

[Sexual differentiation of the adipose tissue–muscle ratio. Its metabolic impact] Vague J, et al. **Bull Acad Natl Med** 1989 Mar;173(3):309–18; discussion 318–9 (Eng. Abstr.) **(Fre)**

[Stability in shooting: the effect of expertise in the biathlon and in rifle shooting] Larue J, et al. **Can J Sport Sci** 1989 Mar;14(1):38–45 (Eng. Abstr.) **(Fre)**

[Development of functional stability of the musculoskeletal system in athletes in childhood and adolescence] Neumann G, et al. **Arztl Jugendkd** 1989;80(2):73–9 (Eng. Abstr.) **(Ger)**

[Macro–EMG: methodology and problems of determining normal values using the common extensor muscle of the fingers as an example] Pfeifer B, et al. **EEG EMG** 1988 Sep;19(3):165–71 (Eng. Abstr.) **(Ger)**

[Functional importance of the m. extensor carpi ulnaris for distal radioulnar articulation] Lengsfeld M, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):275–8 (Eng. Abstr.) **(Ger)**

[The fixation theory of middle ear muscle function] Hüttenbrink KB. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):404–11 (Eng. Abstr.) **(Ger)**

[Physiologically optimal arrangement of hand control elements of the operating system of mobile machines] Weber H, et al. **Z Gesamte Hyg** 1988 May;34(5):326–9 (Eng. Abstr.) **(Ger)**

[A graphic study of levers in the human body] Basso M, et al. **Minerva Med** 1989 Feb;80(2):157–62 (Eng. Abstr.) **(Ita)**

[Estimation method of mechanochemical constants of skeletal muscle in man] Akazawa K, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):196–204 (Eng. Abstr.) **(Jpn)**

[A method for improving the accuracy of IEMG] Yoshida M, et al. **Iyodenshi To Seitai Kogaku** 1988 Mar;26(1):25–31 (Eng. Abstr.) **(Jpn)**

[Long-term interaction of nerve and muscle, and trophic substance] Miyata Y. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):211–7 (23 ref.) **(Jpn)**

[Variations of stapedial reflex threshold in normal hearing subjects] Kon Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2011–23 (Eng. Abstr.) **(Jpn)**

[Muscle contraction] Natori R. **Nippon Seirigaku Zasshi** 1988; 50(7):229–38 **(Jpn)**

[Motor and cortical sensory evoked potentials by magnetic stimulation] Tsuji S, et al. **No To Hattatsu** 1989 Mar; 21(2):145–51 (Eng. Abstr.) **(Jpn)**

[The role of magnesium in the body] Kittel M, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):822–4 (58 ref.) **(Pol)**

[Arms of the forces and elongation of the muscles of the lower extremities at various values of the joint angles] Aruin AS, et al. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):52–5 (Eng. Abstr.) **(Rus)**

[Rapid muscle force reactions during regulation of rhythmic movement] Bogdanov VA. **Biofizika** 1989 Jan–Feb; 34(1):113–7 (Eng. Abstr.) **(Rus)**

[Reaction of the muscles to disturbance during single-joint rhythmic movement] Bogdanov VA. **Biofizika** 1989 Mar–Apr;34(2):275–9 (Eng. Abstr.) **(Rus)**

[Relation between inter- and intracellular action potentials of frog isolates muscle fiber at various temperatures] Gerilovski L, et al. **Biofizika** 1988 Sep–Oct;33(5):855–9 (Eng. Abstr.) **(Rus)**

[Dissipative processes in human passive skeletal muscle]

Gurfinkel' VS, et al. **Biofizika** 1989 May-Jun;34(3):499–503 (Eng. Abstr.) **(Rus)**

[Analysis of changes in the membrane potential of denervated muscle] Kapusta NV, et al. **Biofizika** 1989 Jan–Feb; 34(1):102–6 (Eng. Abstr.) **(Rus)**

[Electrophysiological characteristics of muscle fibers during denervation] Kapusta NV, et al. **Biofizika** 1989 Jan–Feb; 34(1):97–101 (Eng. Abstr.) **(Rus)**

[Maximum rigor tension developed in a single rabbit glycerinated skeletal muscle fiber] Khromov AS. **Biofizika** 1988 Sep–Oct;33(5):881–3 (Eng. Abstr.) **(Rus)**

[The effect of pyrophosphate on the rigor fibers of rabbit m. psoas fibers] Kreslavskaia NB, et al. **Biofizika** 1988 Sep–Oct;33(5):883–4 (Eng. Abstr.) **(Rus)**

[Tension response in skinned Ca-activated skeletal muscle fibers of the frog to temperature jump following stepwise changes in the fiber length] Tsaturian AK, et al. **Biofizika** 1988 May–Jun;33(3):505–7 (Eng. Abstr.) **(Rus)**

[Reaction of human skeletal muscle fiber to a one-time physical load] Afanas'ev IuI, et al. **Biol Nauki** 1988;(8):53–6 (Eng. Abstr.) **(Rus)**

[Contractile function of the anterior tibial muscle of man at different stages of the denervation–reinnervation process] Bogdanov EI, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):395–7 (Eng. Abstr.) **(Rus)**

[Mechanisms of stimulating effects of regenerating muscle tissue on the recovery of irradiated skeletal muscle] Popova MF, et al. **Dokl Akad Nauk SSSR** 1988;300(4):977–80 **(Rus)**

[The effect of regenerating gastrocnemius muscle on the radiosensitivity of spleen cells of C57Bl mice] Samokhvalova NS, et al. **Dokl Akad Nauk SSSR** 1988; 300(4):995–8 **(Rus)**

[The H-reflex and resistance to static loads] Berchanskiĭ GL, et al. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):105–7 **(Rus)**

[Effect of stretching tension on the biomechanical properties of the muscles, their blood supply and the growth of the leg] Ilizarov GA, et al. **Fiziol Cheloveka** 1988 Jan–Feb; 14(1):26–32 **(Rus)**

[Mechanisms of diaphoresis during muscular work] Ioffe LA, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):1008–11 **(Rus)**

[The "silent period" during relaxation and induced contraction of functionally different muscles] Kozhina GV. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):592–8 **(Rus)**

[Control of muscular activity in the final position of the joint during performing simple rapid movements by man] Litvintsev AI, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):599–605 **(Rus)**

[Functional reserves of the brain in adolescents during muscle activity] Tsoneva TN, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):517–9 **(Rus)**

[Simultaneous recording of the electrical and mechanical activities of the striated muscles in a chronic experiment] Kromin AA, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1496–9 **(Rus)**

[Use of a quantitative method for optimizing a muscle training regimen in experimental research] Nazarov SB, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1041–3 **(Rus)**

[The mechanisms of the development of erythrocytosis during adaptation to dynamic muscle loads] Nazarov SB, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1399–403 (Eng. Abstr.) **(Rus)**

[The mechanism of plasma protein release from skeletal muscles] Potapov IA, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):944–7 (Eng. Abstr.) **(Rus)**

[Post-denervation changes in the membrane potentials of muscle fibers in cold-adapted rats] Pshedetskaia AD, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1134–9 (Eng. Abstr.) **(Rus)**

[The role of the adrenal and thyroid glands in changes in the blood amino acid composition during adaptation to muscle loads] Rusin VIa, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1479–83 **(Rus)**

[The nature of local hyperpolarization of the subsynaptic membrane in rat muscle fibers] Surovtsev VA, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1327–30 **(Rus)**

[Characteristics of lengthy spiked tetanus of rat skeletal muscle] Uspenskiĭ AN, et al. **Fiziol Zh SSSR** 1989 Apr; 75(4):478–85 (Eng. Abstr.) **(Rus)**

[Effect of immersion hypokinesia on the motor unit potentials of human muscles] Khristova LG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):39–43 (Eng. Abstr.) **(Rus)**

[Characteristics of energy metabolism and the effectiveness of muscular work in humans during adaptation to altitude] Krivoshchekov SG, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):62–6 (Eng. Abstr.) **(Rus)**

[Effect of short-term space flights on physiological properties and composition of myofibrillar proteins of the skeletal muscles of rats] Oganov VS, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):50–4 (Eng. Abstr.) **(Rus)**

[Effect of long-term hypokinesia on characteristics of phasic-tonic motor activity in monkeys] Urmancheeva TG, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):46–51 (Eng. Abstr.) **(Rus)**

[The nonlinear properties of changes in length of an active muscle] Kostiukov AI. **Neirofiziologiia** 1988;20(6):736–43 (Eng. Abstr.) **(Rus)**

[Effect of adequate stimulation of the vestibular apparatus on the locomotor activity of the fore- and hindlimb muscles in guinea pigs. Movements relative to the vertical axis] Marlinskiĭ VV, et al. **Neirofiziologiia** 1989;21(2):192–7 (Eng. Abstr.) **(Rus)**

[Results of studying impedance of rabbit skeletal muscle during its electric stimulation] Babinkov VI, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):28–31 (Eng. Abstr.) **(Rus)**

[Electrical properties of limb muscular tissue in acute ischemia] Nasonkin OS, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):63–5 (Eng. Abstr.) **(Rus)**

[Clinical importance of a functional test with local physical loading in children] Oskolkova MK, et al. **Pediatriia** 1988; (6):57–61 **(Rus)**

[The cation specificity of the potassium and gramicidin channels of muscle fiber membrane] Shvinka NE, et al. **Tsitologiia** 1988 Sep;30(9):1101–7 (Eng. Abstr.) **(Rus)**

[Age-related circulatory reactions to local muscle work of static and dynamic character] Alferova TV. **Usp Fiziol Nauk** 1988 Oct–Dec;19(4):54–73 (135 ref.) **(Rus)**

[The muscle activity of the forelimbs in dogs during the dynamic recovery of motor function following a focal lesion of the motor area of the brain] Malikova SN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct; (5):28–31 (Eng. Abstr.) **(Rus)**

[The component composition of the human cortical motor potential during static muscle loading] Ivanova MP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):427–33 (Eng. Abstr.) **(Rus)**

[Dynamics of the reactions of nonspecific and somatic activation while learning adaptive biocontrol] Smirnov SA, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):20–7 (Eng. Abstr.) **(Rus)**

[Reflex responses in the trapezius muscle after percussion of various parts of the body] Lisý L. **Cesk Neurol Neurochir** 1989 Jan;52(1):22–7 (Eng. Abstr.) **(Slo)**

[Analysis of the equatorial section of X-ray diffraction patterns of striated muscles of tarantulas under various experimental conditions] Sosa H, et al. **Acta Cient Venez** 1988;39(1):51–9 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Muscle function and morphology in myotonic dystrophy. Grimby G, et al. **Acta Med Scand** 1988;224(4):349–56

Lumbar back muscle activity during walking with a leg inequality. Vink P, et al. **Acta Morphol Neerl Scand** 1987; 25(4):261–71

Selenium and vitamin E treatment of Duchenne muscular dystrophy: no effect on muscle function. Bäckman E, et al. **Acta Neurol Scand** 1988 Nov;78(5):429–35

Orthostatic tremor: report of two cases and an electrophysiological study. Uncini A, et al. **Acta Neurol Scand** 1989 Feb;79(2):119–22

Implications of muscular defense in testing for the anterior drawer sign in the knee. A stress radiographic investigation. Iversen BF, et al. **Am J Sports Med** 1989 May–Jun; 17(3):409–13

Calf muscle area and strength changes after five weeks of horizontal bed rest. LeBlanc A, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):624–9

Thigh musculature in relation to chronic anterior cruciate ligament tear: muscle size, morphology, and mechanical output before reconstruction. Lorentzon R, et al. **Am J Sports Med** 1989 May–Jun;17(3):423–9

Effect of standard and Aircast tennis elbow bands on integrated electromyography of forearm extensor musculature proximal to the bands. Snyder-Mackler L, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):278–81

Genioglossal and diaphragmatic EMG responses to hypoxia during sleep. Parisi RA, et al. **Am Rev Respir Dis** 1988 Sep;138(3):610–6

An evaluation of the dynamic qualities of isometric grip strength. Helliwell PS, et al. **Ann Rheum Dis** 1988 Nov; 47(11):934–9

Effect of intermittent stretch on immobilised muscle. Williams PE. **Ann Rheum Dis** 1988 Dec;47(12):1014–6

A syndrome of REM and non-REM sleep reduction and lateral gaze paresis after medial tegmental pontine stroke. Computed tomographic scans and anatomical correlations in four patients. Autret A, et al. **Arch Neurol** 1988 Nov; 45(11):1236–42

Intramuscular deltoid pressure during shoulder arthroscopy. Lee YF, et al. **Arthroscopy** 1989;5(3):209–12

Stapedius reflex threshold in cochlear implant patients. Stephan K, et al. **Audiology** 1988;27(4):227–33

Incontinence. The pelvic floor function. Chiarelli PE. **Aust Fam Physician** 1989 Aug;18(8):949, 953–4, 956–7 (2 ref.)

Membrane channels and muscle disease. Bretag AH. **Aust Paediatr J** 1988;24 Suppl 1:50–4

Alterations of the in vivo torque–velocity relationship of human skeletal muscle following 30 days exposure to simulated microgravity. Dudley GA, et al. **Aviat Space Environ Med** 1989 Jul;60(7):659–63

Characteristics and preliminary observations of the influence of electromyostimulation on the size and function of human skeletal muscle during 30 days of simulated microgravity. Duvoisin MR, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):671–8

Exercise effects on the size and metabolic properties of soleus fibers in hindlimb-suspended rats. Graham SC, et al. **Aviat Space Environ Med** 1989 Mar;60(3):226–34

Electrogastrograms during motion sickness in fasted and fed subjects. Stewart JJ, et al. **Aviat Space Environ Med** 1989 Mar;60(3):214–7

Involvement of the 60 kDa phosphoprotein in the regulation of Ca2+ release from sarcoplasmic reticulum of normal and malignant hyperthermia susceptible pig muscles. Kim DH, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):246–52

Calcium regulation in muscle diseases; the influence of innervation and activity. Martonosi A. **Biochim Biophys Acta** 1989 May 31;991(2):155–242 (1479 ref.)

Function of the sphincters in anorectal malformations and postoperative evaluation. Holschneider AM. **Birth Defects** 1988;24(4):425–45 (48 ref.)

Physical activity, muscle strength, and calcium intake in fracture of the proximal femur in Britain. Cooper C, et al. **BMJ** 1988 Dec 3;297(6661):1443–6

Normal muscle strength and fatigability in patients with effort syndromes [letter] Hughson AV. **BMJ** 1988 Dec 17; 297(6663):1610–1

Normal muscle strength and fatigability in patients with effort syndromes. Stokes MJ, et al. **BMJ** 1988 Oct 22; 297(6655):1014–7

Abnormal spatial patterns of elbow muscle activation in hemiparetic human subjects. Bourbonnais D, et al. **Brain** 1989 Feb;112 (Pt 1):85–102

The distribution of muscular weakness in upper motor neuron lesions affecting the arm. Colebatch JG, et al. **Brain** 1989 Jun;112 (Pt 3):749–63

Reciprocal inhibition between forearm muscles in patients with writer's cramp and other occupational cramps, symptomatic hemidystonia and hemiparesis due to stroke. Nakashima K, et al. **Brain** 1989 Jun;112 (Pt 3):681–97

Systemic effects of single hindlimb burn injury on skeletal muscle function and cyclic nucleotide levels in the murine model. Tomera JF, et al. **Burns Incl Therm Inj** 1988 Jun; 14(3):210–9

Intracellular pH recovery from lactic acidosis of single skeletal muscle fibers. Allard YE. **Can J Physiol Pharmacol** 1988 Dec;66(12):1560–4

Absence of staircase following disuse in rat gastrocnemius muscle. MacIntosh BR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):707–13

Torque acceleration energy, power and peak torque in thigh muscles after a previous knee sprain. Kannus VP, et al. **Can J Sport Sci** 1989 Jun;14(2):103–6

Isokinetic peak torque and work relationship in the laterally unstable knee. Kannus VP. **Can J Sport Sci** 1989 Mar; 14(1):17–20

EMG in common migraine: changes in absolute and proportional EMG levels during real-life stress. Goudswaard P, et al. **Cephalalgia** 1988 Sep;8(3):163–74

Chronic cough as the presenting symptom of oculopharyngeal muscular dystrophy. Buckler RA, et al. **Chest** 1989 Apr;95(4):921–2

Responses of diseased muscle to electrical and mechanical intervention. Dubowitz V. **Ciba Found Symp** 1988; 138:240–55 (24 ref.)

The effect of physical training on patients with rheumatoid arthritis: changes in disease activity, muscle strength and aerobic capacity. A clinically controlled minimized cross-over study. Lyngberg K, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):253–60

Accessory nerve palsy following thoracotomy. Morrell S, et al. **Clin Orthop** 1989 Jan;(238):237–40

Insulin resistance in skeletal muscles of patients with diabetes mellitus. Beck-Nielsen H. **Diabetes Metab Rev** 1989 Sep; 5(6):487–93 (33 ref.)

Does insulin resistance primarily affect skeletal muscle? Bogardus C. **Diabetes Metab Rev** 1989 Sep;5(6):527–8 (12 ref.)

Increase in median power frequency of the myoelectric signal in pathological fatigue. Braakhekke JP, et al. **Electroencephalogr Clin Neurophysiol** 1989 Aug;73(2):151–6

Motor evoked responses after lumbar spinal stimulation in patients with L5 or S1 radicular involvement. Tabaraud F, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr; 72(4):334–9

The use of EMG in the differential diagnosis of muscle weakness in post-polio syndrome. Feldman RM. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):269–72

Electromyographic responses in leg muscles after electrical stimulation in myelopathy patients with tonic seizures. Nakashima K, et al. **Electromyogr Clin Neurophysiol** 1989 May–Jun;29(4):203–11

The H-reflex of the medial vastus muscle: a study in controls and patients with radiculopathy. Verhagen WI, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):421–5

The effects of different pause types on neck and shoulder EMG activity during VDU work. Sundelin G, et al. **Ergonomics** 1989 May;32(5):527–37

Does a torn anterior cruciate ligament lead to change in the central nervous drive of the knee extensors? Elmqvist LG, et al. **Eur J Appl Physiol** 1988;58(1–2):203–7

Skeletal muscle adaptation to physical training and beta-adrenergic blockade in spontaneously hypertensive rats. Favier RJ, et al. **Eur J Appl Physiol** 1989;58(6):652–60

Effect of hind-limb suspension on young and adult skeletal muscle. II. Dystrophic mice. Fowler WM Jr, et al.

Exp Neurol 1989 Jan;103(1):77–82
Effect of neonatal denervation–reinnervation on the functional capacity of a 129ReJ dy/dy murine dystrophic muscle. Hermanson JW, et al. **Exp Neurol** 1988 Nov; 102(2):210–6
Regeneration in mouse skeletal muscle injured by Trichinella larvae. Hulínská D, et al. **Folia Parasitol (Praha)** 1989; 36(2):185–90
Rectosigmoid motility and myoelectric activity in progressive systemic sclerosis. Whitehead WE, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):428–32
EMG cranial muscle levels in headache sufferers before and during headache. Pritchard DW. **Headache** 1989 Feb; 29(2):103–8
A comparative study of the extensor force of the quadriceps between subjects with a normal patella and those with patella alta of neurological pathogenesis. Villani C, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):401–6
Activity–induced adaptations in skeletal muscles of iron–deficient rabbits. Harlan WR, et al. **J Appl Physiol** 1988 Aug;65(2):782–7
Electrical muscle stimulation in combination with a reciprocating gait orthosis for ambulation by paraplegics. Phillips CA. **J Biomed Eng** 1989 Jul;11(4):338–44 (35 ref.)
Abductor function after total hip replacement. An electromyographic and clinical review. Baker AS, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):47–50
Intraoperative assessment of wrist extensor muscle force. Mendelson LS, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):832–6
Chronic compartment syndrome of the flexor muscles in the forearm: a case report. Allen MJ, et al. **J Hand Surg [Br]** 1989 Feb;14(1):47–8
Is high and fluctuating muscle nerve sympathetic activity in the sleep apnoea syndrome of pathogenetic importance for the development of hypertension? Hedner J, et al. **J Hypertens Suppl** 1988 Dec;6(4):S529–31
Complex repetitive discharges in the iliopsoas muscle. Meyer BU, et al. **J Neurol** 1988 Sep;235(7):411–4
Sparing of the perineal muscles in muscular dystrophies [letter] Ohtake T, et al. **J Neurol** 1989 May;236(4):252
Progression from MERRF to MELAS phenotype in a patient with combined respiratory complex I and IV deficiencies. Byrne E, et al. **J Neurol Sci** 1988 Dec;88(1–3):327–37
Early immobilization of hindleg muscles of dystrophic mice: short–term and long–term effects. Wirtz P, et al. **J Neurol Sci** 1988 Jul;85(3):293–307
Muscle stiffness in human ankle dorsiflexors: intrinsic and reflex components. Sinkjaer T, et al. **J Neurophysiol** 1988 Sep;60(3):1110–21
Pain in the sternocleidomastoid muscle and occlusal interferences. Kohno S, et al. **J Oral Rehabil** 1988 Jul; 15(4):385–92
Lectin binding and desmin staining during bupivicaine–induced necrosis and regeneration in rat skeletal muscle. Helliwell TR. **J Pathol** 1988 Aug; 155(4):317–26
Intraperitoneal endotoxin but not protein malnutrition shifts d–tubocurarine dose–response curves in mouse gastrocnemius muscle. Tomera JF, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):216–20
Abnormalities in quadriceps–hamstring strength. Relationships in polymyositis and dermatomyositis. Kroll MA, et al. **J Rheumatol** 1988 Dec;15(12):1782–8
The "repetitive strain injury syndrome" is referred pain from the neck. Smythe H. **J Rheumatol** 1988 Nov;15(11):1604–8
Assessment of the early cellular membrane response to live Escherichia coli bacteremia. Shiono S, et al. **J Surg Res** 1989 Jan;46(1):9–15
Manual test for differential diagnosis between weakness of the trapezius and serratus anterior muscles [letter] Tesio L. **J Trauma** 1989 Mar;29(3):410
Rhoads lecture––1988. Bulk or bounce––the object of nutritional support. Jeejeebhoy KN. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):539–49 (67 ref.)
Alloxan–diabetic state–induced suppression of Ca2+–dependent slow action potentials in mouse diaphragm muscle. Kimura I, et al. **Jpn J Pharmacol** 1988 Jun;47(2):197–9
Artificial agonist/antagonist coupling in paralyzed muscles: electronic balance of reinnervated straps from facial activity in the rabbit. Broniatowski M, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):647–50
A new surface electrode for recording from the posterior cricoarytenoid muscle. Fujita M, et al. **Laryngoscope** 1989 Mar;99(3):316–20
Effect of early malnutrition on muscle function and metabolism in rats. Raju NV. **Life Sci** 1974 Sep 1; 15(5):949–60
Early responses of skeletal muscle in recovery from hypothyroidism. Moussavi R, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):285–97
Acute alcoholic myopathy and ruptured popliteal cysts. The pseudothrombophlebitis syndrome revisited. Lyon MG, et al. **Mo Med** 1986 Dec;83(12):797–800
Stability of the head: studies in normal subjects and in patients with labyrinthine disease, head tremor, and dystonia. Gresty M. **Mov Disord** 1987;2(3):165–85
Oculo–facio–skeletal myorhythmia as a cerebral complication of systemic Whipple's disease. Hausser–Hauw C, et al. **Mov Disord** 1988;3(2):179–84
Muscle action potential precipitated complex repetitive discharge [letter] Besser R, et al. **Muscle Nerve** 1988 Nov; 11(11):1190–1
Effects of excessive use of remaining muscle fibers in prior polio and LV lesion. Borg K, et al. **Muscle Nerve** 1988 Dec;11(12):1219–30
The role of collagen crosslinking in the increased stiffness of avian dystrophic muscle. Feit H, et al. **Muscle Nerve** 1989 Jun;12(6):486–92
Porcine malignant hyperthermia: halothane effects on force generation in skeletal muscles. Gallant EM, et al. **Muscle Nerve** 1989 Jan;12(1):56–63
Comparison of force and stiffness in normal and dystrophic mouse muscles. Gordon T, et al. **Muscle Nerve** 1988 Aug; 11(8):819–27
Malignant hyperthermia: effects of halothane on the surface membrane. Iaizzo PA, et al. **Muscle Nerve** 1989 Mar; 12(3):178–83
Muscle function in patients with primary hyperparathyroidism. Joborn C, et al. **Muscle Nerve** 1989 Feb;12(2):87–94
Hereditary increased muscle mechanical irritability and progressive contracture with stretch–induced electromyographic activity. Jušić A. **Muscle Nerve** 1989 Feb;12(2):103–7
Calcium currents and asymmetric charge movement in malignant hyperpyrexia. Lamb GD, et al. **Muscle Nerve** 1989 Feb;12(2):135–40
Altered mechanisms of muscular force generation in lower motor neuron disease. Reiners K, et al. **Muscle Nerve** 1989 Aug;12(8):647–59 (51 ref.)
Abnormalities of the fast sodium current in myotonic dystrophy, recessive generalized myotonia, and adynamia episodica. Rüdel R, et al. **Muscle Nerve** 1989 Apr; 12(4):281–7
Patterns of selective involvement of thigh muscles in neuromuscular disease. Schwartz MS, et al. **Muscle Nerve** 1988 Dec;11(12):1240–5
AAEE minimonograph #30: electrophysiologic studies of myoclonus [see comments] Shibasaki H. **Muscle Nerve** 1988 Sep;11(9):899–907 (32 ref.). **Comment in:** Muscle Nerve 1989 Jun;12(6):514–5
Distinction between neoplastic and radiation–induced brachial plexopathy, with emphasis on the role of EMG. Harper CM Jr, et al. **Neurology** 1989 Apr;39(4):502–6
The mdx mouse skeletal muscle myopathy: II. Contractile properties. Coulton GR, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):299–314
A digital test for pelvic muscle strength in older women with urinary incontinence. Brink CA, et al. **Nurs Res** 1989 Jul–Aug;38(4):196–9
Electromyographic recordings of 5 types of low back pain subjects and non–pain controls in different positions. Arena JG, et al. **Pain** 1989 Apr;37(1):57–65
Pericranial muscle tenderness and pressure–pain threshold in the temporal region during common migraine. Jensen K, et al. **Pain** 1988 Oct;35(1):65–70
Pressure pain thresholds in normal muscles: reliability, measurement effects, and topographic differences. Ohrbach R, et al. **Pain** 1989 Jun;37(3):257–63
Physical findings in patients with chronic intractable benign pain of the neck and/or back. Rosomoff HL, et al. **Pain** 1989 Jun;37(3):279–87
Hybrid paraplegic locomotion with the ParaWalker using intramuscular stimulation: a single subject study. Nene AV, et al. **Paraplegia** 1989 Apr;27(2):125–32
Effects of lanthanum on contractile inactivation and D600–induced paralysis in twitch muscle fibres of the frog. Feldmeyer D. **Pflugers Arch** 1989 Jul;414(3):373–5
Electromyographic responses of distal ankle musculature of standing hemiplegic patients to continuous anterior–posterior perturbations during imposed weight transfer over the affected leg. Dickstein R, et al. **Phys Ther** 1989 Jun;69(6):484–91
A gait training suggestion for lengthening gastrocnemius–soleus muscles: suggestion from the field. Duncan CE. **Phys Ther** 1989 Sep;69(9):773–6
Exercise programs for patients with post–polio syndrome: a case report [published erratum appears in Phys Ther 1989 Apr;69(4):301] Gross MT, et al. **Phys Ther** 1989 Jan; 69(1):72–6
Properties of acetylcholine–receptor activation in human Duchenne muscular dystrophy myotubes. Mancinelli E, et al. **Proc R Soc Lond [Biol]** 1989 Jul 22;237(1287):247–57
Effects of long–term streptozotocin diabetes on the contractile and histochemical properties of rat muscles. Cotter M, et al. **Q J Exp Physiol** 1989 Jan;74(1):65–74
Muscle adaptive changes in post–polio subjects. Grimby G, et al. **Scand J Rehabil Med** 1989;21(1):19–26
Neck and shoulder pain and disability. Evaluation by repetitive gripping test. Viikari–Juntura E, et al. **Scand J Rehabil Med** 1988;20(4):167–73
Muscle function in women with rheumatoid arthritis––the influence of glucocorticosteroids. A clinical and morphological investigation. Danneskiold–Samsøe B. **Scand J Rheumatol** 1988;17(4):305–6
Fibroblast growth factor in the extracellular matrix of dystrophic (mdx) mouse muscle. DiMario J, et al. **Science** 1989 May 12;244(4905):688–90
The aging neuromuscular system. Baker PC. **Semin Neurol** 1989 Mar;9(1):50–9
Electro–spinal stimulation in children with adolescent and juvenile scoliosis. Goldberg C, et al. **Spine** 1988 May; 13(5):482–4
Dissociation of muscle action potentials and spinal somatosensory evoked potentials after ischemic damage of spinal cord. Machida M, et al. **Spine** 1988 Oct; 13(10):1119–24
Spinal stability and intersegmental muscle forces. A biomechanical model. Panjabi M, et al. **Spine** 1989 Feb; 14(2):194–200
Lumbar muscle fatigue and chronic lower back pain. Roy SH, et al. **Spine** 1989 Sep;14(9):992–1001
Lumbar degenerative kyphosis. Clinical, radiological and epidemiological studies. Takemitsu Y, et al. **Spine** 1988 Nov;13(11):1317–26
Computerized electromyographic assessment of anterior tibial muscles for late sequelae of poliomyelitis. Chang CW, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1093–7
Characteristics of the fastest isometric knee extension in patients with spinocerebellar degenerations. Fujita M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):13–7
Loss of reaction time specificity for movement direction in Parkinson's disease. Nakamura R, et al. **Tohoku J Exp Med** 1989 May;158(1):9–16
Prolonged tension lag time of knee extensor muscle on twitch contraction in patients with spastic hemiparesis. Tsuji I, et al. **Tohoku J Exp Med** 1988 Sep;156(1):33–7
Effects of toxin isolated from the sea anemone Bolocera tuediae on electrical properties of isolated rat skeletal muscle and cultured myotubes. Tesseraux I, et al. **Toxicon** 1989;27(2):201–10
Tightness of hamstring– and psoas major muscles. A prospective study of back pain in young men during their military service. Hellsing AL. **Ups J Med Sci** 1988; 93(3):267–76
[Functional and immunologic involvement in human African trypanosomiasis caused by Trypanosoma gambiense] Tsala Mbala P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):490–501 (Eng. Abstr.) **(Fre)**
[Muscular imbalance in elite swimmers and the resulting sports damage of the lumbar spine and knee joints] Pieper HG, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):29–31 (Eng. Abstr.) **(Ger)**
[The "exposure–specific" stress–strain concept in relation to the effect of partial body vibration on the hand–arm system] Oeser R. **Z Arztl Fortbild (Jena)** 1989;83(12):617–9 (29 ref.) **(Ger)**
[Piriformis syndrome. A contribution to the differential diagnosis of lumbago and coccygodynia] Reichel G, et al. **Zentralbl Neurochir** 1988;49(3):178–84 (Eng. Abstr.) **(Ger)**
[An analysis of quadriceps muscle force in boys with Osgood–Schlatter disease] Katoh K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):523–33 (Eng. Abstr.) **(Jpn)**
[A study of trunk muscle in idiopathic scoliosis] Shimada Y. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):33–44 (Eng. Abstr.) **(Jpn)**
[Electric excitability of the peroneal muscles in congenital equinovarus deformity] Tokarowski A, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):59–62 (Eng. Abstr.) **(Pol)**
[Pathomechanism of myotonia and its treatment] Kwieciński H. **Pol Tyg Lek** 1988 Nov 14;43(46):1482–5 **(Pol)**
[Neuromuscular excitation and pain sensitivity of rats with various levels of arterial pressure] Bachmanov AA. **Fiziol Zh SSSR** 1989 Apr;75(4):486–92 (Eng. Abstr.) **(Rus)**
[Characteristics of functional tests with isometric loads used in the diagnosis of ischemic heart disease] Shimelis IV, et al. **Kardiologiia** 1989 Feb;29(2):67–70 (Eng. Abstr.) **(Rus)**
[Electrophysiological and morphological changes in muscle–flexors of the fingers after injuries of the tendons in children] Danilov AA, et al. **Ortop Travmatol Protez** 1989 Jan;(1):24–8 (Eng. Abstr.) **(Rus)**
[Morphofunctional characteristics of the muscles of the amputation stump in different methods of plastic repair of the extremity] Shchevchuk VI. **Ortop Travmatol Protez** 1988 May;(5):42–4 (Eng. Abstr.) **(Rus)**
[Modeling of scoliosis in animal experiments and the concepts of its etiology and pathogenesis] Shevtsova OA. **Ortop Travmatol Protez** 1988 Jun;(6):72–5 **(Rus)**
[Diminution of the hypoxic effect of conjugate functions in skeletal muscles under the action of gamma–oxybutyric acid] Ibragimov Iul, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):31–5 (Eng. Abstr.) **(Rus)**
[Function of the neuromuscular apparatus in children with rheumatoid arthritis and congenital hip dislocation] Iakovleva TA, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):63–7 (Eng. Abstr.) **(Rus)**
[Bioelectric activity of the muscles of the shoulder girdle after radical mastectomy] Pronin VI, et al. **Sov Med** 1989; (2):114 **(Rus)**
[Function of fatty and muscle tissues in women with alimentary obesity] Belinskii VP. **Vrach Delo** 1988 Sep; (9):75–7 (Eng. Abstr.) **(Rus)**
[Disorders of the functional relations of the caudate nucleus and putamen as a possible cause of torsion muscular dystonia] Arushanian EB, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):107–10 (Eng. Abstr.) **(Rus)**
[Myofascicular hypertonia as a generator of peripheral determinant structure] Ivanichev GA. **Zh Nevropatol Psikhiatr** 1989;89(4):58–60 (Eng. Abstr.) **(Rus)**

[Clinico-electromyographic indicators in patients with ischemic myelopathy] Sheludchenko FI, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):51-5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Electromagnetic pulse propagation in dispersive planar dielectrics. Moten K, et al. **Bioelectromagnetics** 1989; 10(1):35-49

Comparison of finite-difference time-domain SAR calculations with measurements in a heterogeneous model of man. Spiegel RJ, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):849-55

Radiation-induced increase in the release of amino acids by isolated, perfused skeletal muscle. Schwenen M, et al. **Int J Radiat Biol** 1989 Feb;55(2):257-69

Torticollis following radiation therapy. Landan I, et al. **Mov Disord** 1987;2(4):317-9

[Tissue interactions of regenerating muscle tissue with skeletal muscle under the effect of ionizing radiation] Popova MF, et al. **Arkh Anat Gistol Embriol** 1988 Dec; 95(12):35-40 (Eng. Abstr.) **(Rus)**

[Effect of helium-neon laser rays on the processes of postradiation recovery in the skeletal muscles of old rats] Buliakova NV. **Biull Eksp Biol Med** 1989 Mar;107(3):345-7 (Eng. Abstr.) **(Rus)**

[The effect of irradiation with a helium-neon laser on the structuro-metabolic properties of skeletal muscles subjected to the action of ionizing radiation] Popova MF, et al. **Dokl Akad Nauk SSSR** 1989;306(2):482-5 **(Rus)**

[The action of radiation on the differentiation process of myogenic cells in culture] Lavrenchuk GI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):79-81 **(Rus)**

RADIOGRAPHY

Computerised tomographic scan appearances after lumbar epidural [letter] Wood PR, et al. **Anaesthesia** 1988 Sep; 43(9):800

Regional distribution of muscle and fat mass in men--new insight into the risk of abdominal obesity using computed tomography. Seidell JC, et al. **Int J Obes** 1989 Jun; 13(3):289-303

Electrically-stimulated muscle hypertrophy in paraplegia: assessment by quantitative CT. Block JE, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):852-4

CT in established Volkmann's contracture in forearm muscles. Landi A, et al. **J Hand Surg [Br]** 1989 Feb; 14(1):49-52

CT muscle scanning in the evaluation of patients with spinal muscular atrophy (SMA). Sambrook P, et al. **Neuroradiology** 1988;30(6):487-95

Pitfalls in diagnosis: pediatric musculoskeletal tumors. Conrad EU 3d. **Pediatr Ann** 1989 Jan;18(1):45-7, 50-2 (5 ref.)

[Introduction of a new method of study in legal medicine: high grade direct roentgen magnification with a 1 micron roentgen focus tube] Hüttenbrink KB, et al. **Arch Kriminol** 1989 Jan-Feb;183(1-2):1-10 (Eng. Abstr.) **(Ger)**

[Asymmetrical patchy muscle involvement in manifesting carriers of Duchenne muscular dystrophy--computed tomographical and histological study] Kawai M, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):23-9 (Eng. Abstr.) **(Jpn)**

[Study of the muscles by artificial contrasting in patients with orthopedic diseases] D'iachkova GV. **Ortop Travmatol Protez** 1989 Jan;(1):55-6 **(Rus)**

[Diagnostic possibilities of x-ray contrast studies of the muscles] D'iachkova GV. **Vestn Rentgenol Radiol** 1988 Nov-Dec;(6):59-62 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Diffuse muscle uptake of technetium-99M MDP in a patient with lung cancer. Krasnow AZ, et al. **Clin Nucl Med** 1988 Jul;13(7):538-40

Extensive soft tissue uptake of bone tracer in amyloidosis. Lee KJ, et al. **Clin Nucl Med** 1988 Sep;13(9):675-6

Quantification of leg muscle perfusion using thallium-201 single photon emission computed tomography. Oshima M, et al. **J Nucl Med** 1989 Apr;30(4):458-65

SECRETION

Effects of adrenaline and prior exercise on the release of alanine, glutamine and glutamate from incubated rat skeletal muscle. Nie ZT, et al. **Acta Physiol Scand** 1989 Jul;136(3):395-401

Release of K+ from muscle during prolonged dynamic exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun; 136(2):293-4

Identification of the types of insulin-like growth factor-binding proteins that are secreted by muscle cells in vitro. McCusker RH, et al. **J Biol Chem** 1989 May 15; 264(14):7795-800

SURGERY

A wrap-around procedure using the gluteus maximus muscle for the functional reconstruction of the sphincter in a case of anal incontinence. Onishi K, et al. **Acta Chir Plast** 1989; 31(1):56-63

Healing of experimental laser wound in striated muscle and adipose tissue. Tichý M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:179-86

The hamstring syndrome. A new diagnosis of gluteal sciatic pain. Puranen J, et al. **Am J Sports Med** 1988 Sep-Oct; 16(5):517-21

Contractile properties of canine thyroarytenoid muscle reinnervated from the ansa cervicalis. Rice DH, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):153-6

Latissimus dorsi free flap for restoration of facial contour defects. de la Fuente A, et al. **Ann Plast Surg** 1989 Jan; 22(1):1-8

External longitudinal splitting of the biceps brachii muscle for coverage of repaired brachial vessels: an anatomical study and clinical application. Har-Shai Y, et al. **Ann Plast Surg** 1988 Aug;21(2):158-64

Latissimus dorsi dynamic cardiomyoplasty. Chachques JC, et al. **Ann Thorac Surg** 1989 Apr;47(4):600-4

Bilateral anterior transposition of the inferior obliques. Mims JL 3d, et al. **Arch Ophthalmol** 1989 Jan;107(1):41-4

Importance of the iliopsoas muscle in soft-tissue surgery of hip deformities in cerebral palsy children. Feldkamp M, et al. **Arch Orthop Trauma Surg** 1989;108(4):225-30

Gracilis muscle repair of rectovaginal fistula after restorative proctocolectomy. Report of two cases. Gorenstein L, et al. **Dis Colon Rectum** 1988 Sep;31(9):730-4

Transposition of the sartorius muscle in the treatment of infected vascular grafts in the groin. Laustsen J, et al. **Eur J Vasc Surg** 1988 Apr;2(2):111-3

Eyelid surgery in dysthyroid ophthalmopathy. Hedin A. **Eye** 1988;2 (Pt 2):201-6 (18 ref.)

Transposition of the levator muscle and its reinnervation. Lemagne JM. **Eye** 1988;2 (Pt 2):189-92

Independent effects of denervating the cricothyroid muscle and stenting on the anterior cricoid split: canine model. Senders CW, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):213-24

Arthromyolysis of the elbow in arthrogryposis. Andrisano A, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):239-42

Gastrocnemius recession in the treatment of nonspastic ankle equinus. A retrospective study. Downey MS, et al. **J Am Podiatr Med Assoc** 1989 Apr;79(4):159-74

Sternothyrohyoideus myectomy in horses: 17 cases (1984-1985). Harrison IW, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1299-302

Tenodesis of the long head of the biceps brachii for chronic bicipital tendinitis. Long-term results. Becker DA, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):376-81

Muscle transposition in the management of chronic osteomyelitis and ulceration of the heel. Graziano TA, et al. **J Foot Surg** 1989 Jan-Feb;28(1):68-71

A fixation technique for the Steindler flexorplasty. A technique for fixation of the flexor pronator group to the anterior surface of the humerus is described. Atkinson RE. **J Hand Surg [Am]** 1989 Jul;14(4):749-51 (5 ref.)

Osteogenesis in composite grafts of allogenic demineralized bone powder and porous hydroxylapatite. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):50-6

Inferior mandibular osteotomy and hyoid myotomy suspension for obstructive sleep apnea: a review of 55 patients. Riley RW, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):159-64

Myotomy for reflux-induced cricopharyngeal dysphagia. Five-year review. Henderson RD, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):428-33

Surgical treatment of pharyngoesophageal spasm. Baugh RF, et al. **Laryngoscope** 1988 Oct;98(10):1124-6

Biological response to a musculo-tendinous prosthesis in the rabbit. Vesce G, et al. **Life Support Syst** 1983;1 Suppl 1:424-7

Treatment of congenital unilateral upper eyelid retraction with a marginal myotomy procedure. Rovit AJ, et al. **Ophthalmic Surg** 1988 Dec;19(12):872-5

A functional approach to lateral fixation in bilateral abductor cord paralysis. Amedee RG, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):542-5

Calf implantation. Aiache AE. **Plast Reconstr Surg** 1989 Mar; 83(3):488-93

Innovative surgical approach for the Pierre Robin anomalad: subperiosteal release of the floor of the mouth musculature. Delorme RP, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):960-4; discussion 965-6

Repair of the orbicularis oris in horn players [letter] Fry HJ. **Plast Reconstr Surg** 1988 Dec;82(6):1103

Salvage of jeopardized total-knee prosthesis: the role of the gastrocnemius muscle flap. Greenberg B, et al. **Plast Reconstr Surg** 1989 Jan;83(1):85-9, 97-9

Levator repositioning and palatal lengthening for submucous clefts. Pensler JM, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):765-9

Torticollis. Wolfort FG, et al. **Plast Reconstr Surg** 1989 Oct; 84(4):682-92 (45 ref.)

Femoral obturator and sciatic neurectomy with iliacus and psoas muscle section for spasticity following spinal cord injury. Benzel EC, et al. **Spine** 1988 Aug;13(8):905-8

Postoperative examination of the biceps femoris muscle sling used in excision of the femoral head and neck in dogs. Lewis DD, et al. **Vet Surg** 1988 Sep-Oct;17(5):269-77

A comparison of the cutaneous trunci myocutaneous flap and latissimus dorsi myocutaneous flap in the dog. Pavletic MM, et al. **Vet Surg** 1987 Jul-Aug;16(4):283-93

Cranial sartorius muscle flap in the dog. Weinstein MJ, et al. **Vet Surg** 1989 Jul-Aug;18(4):286-91

Myocutaneous flap models in the rat. Anatomy, histology and operative technique of the latissimus dorsi myocutaneous flap. Tilgner A, et al. **Z Versuchstierkd** 1988; 31(5):225-32

[Combined transposition of the latissimus dorsi and serratus anterior muscles in cervical and thoracic reconstructive surgery. Results of 40 anatomical dissections and clinical applications in 21 cases] Guédon C, et al. **Ann Chir Plast Esthet** 1988;33(4):321-8 (Eng. Abstr.) **(Fre)**

[Snoring: physiopathology, surgical treatment and a modified uvulo-palato-pharyngoplasty] Piché J, et al. **J Otolaryngol** 1989 Feb;18(1):36-43 (Eng. Abstr.) **(Fre)**

[Surgical anatomy of the bladder neck sphincter and its significance for vaginal surgery of stress incontinence] Richter K. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):541-50 (47 ref.) (Eng. Abstr.) **(Ger)**

[Endoscopic cricopharyngeal myotomy, an alternative in surgical treatment of Zenker's diverticula] Laubert A, et al. **HNO** 1989 May;37(5):211-5 (Eng. Abstr.) **(Ger)**

[Morphology of the adductor hallux muscle and its significance for the surgical treatment of hallux valgus] Appel M, et al. **Z Orthop** 1989 May-Jun;127(3):326-30 (Eng. Abstr.) **(Ger)**

[Surgical interventions in the rehabilitation of the tetraplegic arm caused by vertebro-spinal cord injuries: general principles and critical review of various clinical cases] Costa P, et al. **Chir Organi Mov** 1988 Oct-Dec;73(4):351-5 (Eng. Abstr.) **(Ita)**

[The psoas bladder] Manganelli A, et al. **Minerva Chir** 1988 Jul 31;43(13-14):1155-60 (Eng. Abstr.) **(Ita)**

[Correction of the muscles of the external rotators of the hip in the surgical treatment of congenital dislocation in children] Gafarov KhZ, et al. **Ortop Travmatol Protez** 1988 Oct;(10):45-6 **(Rus)**

[Myoplasty in total prosthesis of the hip joint] Shersher IaI, et al. **Ortop Travmatol Protez** 1989 Mar;(3):33-5 (Eng. Abstr.) **(Rus)**

[Modification of amputation of the hip in patients with gangrene of the leg of vascular origin] Zakhov I, et al. **Ortop Travmatol Protez** 1989 Feb;(2):55-6 **(Rus)**

TRANSPLANTATION

Total and regional blood flows in vascularized skeletal muscle grafts in rabbits. Burton HW, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1043-9

Muscle transplantation between young and old rats: age of host determines recovery. Carlson BM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1262-6

Neuromuscular pedicle graft for restoration of arytenoid abductor function in dogs with experimentally induced laryngeal hemiplegia. Greenfield CL, et al. **Am J Vet Res** 1988 Aug;49(8):1360-6

Sartorius transposition to protect vascular grafts in the groin. Scher KS. **Am Surg** 1989 Mar;55(3):158-61

Survival of satellite cells in whole muscle transplants. Schultz E, et al. **Anat Rec** 1988 Sep;222(1):12-7

Denervated palmaris longus tendon as a skeletal muscle transplant in circumferential pharyngoplasty. Ramakrishnan KM, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):392-3

Functioning free muscle transplantation: making it work? What is known? McKee NH, et al. **Ann Plast Surg** 1989 Sep;23(3):249-54 (54 ref.)

The principles of functioning muscle transplantation: applications to the upper arm. Manktelow RT, et al. **Ann Plast Surg** 1989 Apr;22(4):275-82

Microvascular free tissue transfer after arterial revascularization in the elderly: an alternative to amputation. Verga MP, et al. **Ann Plast Surg** 1988 Oct; 21(4):348-53

A smile for the Möbius' syndrome patient. Zuker RM, et al. **Ann Plast Surg** 1989 Mar;22(3):188-94

Skeletal muscle ventricles as a potential right heart assist or substitute. Anderson WA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):241-6

Shrinkage of muscle flaps [letter] Irvine GH. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):173

A comparison of immediate and delayed repair of peripheral nerves using freeze-thawed autologous skeletal muscle grafts--in the rat. Gattuso JM, et al. **Br J Plast Surg** 1989 May;42(3):306-13

Free serratus anterior muscle transplantation for hand reconstruction. Logan SE, et al. **Br J Plast Surg** 1988 Nov; 41(6):639-43

Use of a free temporoparietal flap in hand reconstruction: a case report. Kuschner SH, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):191-6

Intramuscular substrate depletion and fatigability of soleus grafts in rats. Côté C, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):829-32

Skeletal muscle grafts applied to the heart. A word of caution. Anderson WA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III180-90

Effect of latissimus dorsi dynamic cardiomyoplasty on ventricular function. Chachques JC, et al. **Circulation** 1988 Nov;78(5 Pt 2):III203-16

Flexorplasty of the elbow. Botte MJ, et al. **Clin Orthop** 1989 Aug;(245):110-6

Clinical and manometric assessment of gracilis muscle transplant for fecal incontinence. Yoshioka K, et al. **Dis Colon Rectum** 1988 Oct;31(10):767-9

Free functional musculocutaneous transfer: electrophysiological studies. Ugawa Y, et al. **Eur Neurol** 1988;28(5):241–5

Reinnervation of long-term denervated rat muscle freely grafted into an innervated limb. Carlson BM, et al. **Exp Neurol** 1988 Oct;102(1):50–6

Glycogen accumulation in normal and irradiated minced muscle autografts on frog gastrocnemius. Malhotra RK, et al. **Exp Pathol** 1989;36(3):177–80

Force deficit of vascularized skeletal muscle grafts in rabbits. Burton HW, et al. **J Appl Physiol** 1989 Feb;66(2):675–9

The extensor hallucis brevis muscle flap. Crocker AD, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):532

Pronator quadratus pedicled bone graft for old scaphoid fractures. Kawai H, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):829–31

The myocutaneous platysma flap for the reconstruction of intraoral defects after radical tumour resection. Howaldt HP, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):237–40

The use of the latissimus dorsi muscle as an active motor unit for digital flexion. Govila A. **J Hand Surg [Br]** 1989 Feb;14(1):70–1

Partial correction of an inherited biochemical defect of skeletal muscle by grafts of normal muscle precursor cells. Morgan JE, et al. **J Neurol Sci** 1988 Sep;86(2–3):137–47

Properties of motor units in nerve-intact autografts of cat extensor digitorum longus muscles. Sandercock TG, et al. **J Neurophysiol** 1989 Jul;62(1):231–8

Experimental studies on masseter muscle grafts in rats: comparison of donor muscles. Mong FS. **J Oral Rehabil** 1989 May;16(3):315–21

Effect of muscle flap coverage on bone blood flow following devascularization of a segment of tibia: an experimental investigation in the dog. Richards RR, et al. **J Orthop Res** 1989;7(4):550–8

Segmentally innervated latissimus dorsi muscle. Microsurgical transfer for facial reanimation. Dellon AL, et al. **J Reconstr Microsurg** 1985 Oct;2(1):7–12

Time course of alterations in muscle transfers with microneurovascular anastomoses. An experimental study in the rectus femoris muscle of the rabbit. Frey M, et al. **J Reconstr Microsurg** 1985 Oct;2(1):33–43

Pharmacologic enhancement of functional recovery in free muscle transfers. Klein HW, et al. **J Reconstr Microsurg** 1988 Jul;4(4):277–81, 283–4

Epidural anesthesia during lower extremity free tissue transfer. Strecker WB, et al. **J Reconstr Microsurg** 1988 Jul;4(4):327–9

A skeletal muscle ventricle made from rectus abdominis muscle in the dog. Stevens L, et al. **J Surg Res** 1989 Jan; 46(1):84–9

Synchronously stimulated skeletal muscle graft for left ventricular assistance. Case report. Molteni L, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):439–46

Reconstruction of the lower extremity with microvascular free flaps: a 10-year experience with 304 consecutive cases. Khouri RK, et al. **J Trauma** 1989 Aug;29(8):1086–94

Post-trauma reconstruction with free tissue transfer--analysis of 442 consecutive cases. Melissinos EG, et al. **J Trauma** 1989 Aug;29(8):1095–102; discussion 1102–3

Cardiomyoplasty adds muscle to efforts to alleviate end-stage heart failure [news] Raymond C. **JAMA** 1989 Jan 27; 261(4):503–4

Neurolized nerve padding in actinic lesions: omentum versus muscle use. An experimental study. Brunelli GA, et al. **Microsurgery** 1988;9(3):177–80

Refined microneurovascular free muscle transplantation for reanimation of paralyzed face. Harii K. **Microsurgery** 1988; 9(3):169–76

Growth of human muscle in athymic rodents [letter] Gulati AK, et al. **Muscle Nerve** 1989 Mar;12(3):249–50

Nondystrophic myoblast transplantation into dystrophic muscle [letter] Karpati G. **Muscle Nerve** 1989 Apr; 12(4):337–9

Mdx muscle grafts retain the mdx phenotype in normal hosts. Morgan JE, et al. **Muscle Nerve** 1989 May;12(5):401–9

Conversion of mdx myofibres from dystrophin-negative to -positive by injection of normal myoblasts. Partridge TA, et al. **Nature** 1989 Jan 12;337(6203):176–9

Schwann cells support extensive axonal growth into skeletal muscle implants in adult mouse brain. Anderson PN, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):127–31

Replacement of missing motoneurons by embryonic grafts in the rat spinal cord. Sieradzan K, et al. **Neuroscience** 1989; 31(1):115–30

The morbidity and benefits of concurrent gracilis myocutaneous graft with pelvic exenteration. Cain JM, et al. **Obstet Gynecol** 1989 Aug;74(2):185–9

Difficult reconstruction of an extensive injury in the lower extremity with a large cross-leg microvascular composite-tissue flap containing fibula. Chen HC, et al. **Plast Reconstr Surg** 1989 Apr;83(4):723–7

Extensor digitorum brevis as an island flap in the reconstruction of soft-tissue defects in the lower limb. Giordano PA, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):100–9

The questionable value of free muscle grafts [letter; comment] Gormley DE. **Plast Reconstr Surg** 1989 May;83(5):923. **Comment on:** Plast Reconstr Surg 1988 Oct;82(4):725

Free-flap coverage of the exposed Achilles tendon. Hallock GG. **Plast Reconstr Surg** 1989 Apr;83(4):710–6

Muscle-flap coverage of exposed endoprostheses. Lesavoy MA, et al. **Plast Reconstr Surg** 1989 Jan;83(1):90–9

Transplantation and transposition of skeletal muscles into the faces of monkeys. Markley JM Jr, et al. **Plast Reconstr Surg** 1989 Sep;84(3):424–31; discussion 432–3

Medial gastrocnemius myocutaneous flap [letter] Podlewski J. **Plast Reconstr Surg** 1989 Mar;83(3):578–9

Late results of free-muscle flaps and delayed bone grafting in the secondary treatment of open distal tibial fractures. Seyfer AE, et al. **Plast Reconstr Surg** 1989 Jan;83(1):77–84

Pseudocyst formation after rectus flap breast reconstruction: diagnosis and treatment. Slavin SA, et al. **Plast Reconstr Surg** 1989 Apr;83(4):670–5

The morphological sequences in man of de- and reinnervation in free muscle transfer with microneurovascular anastomoses. Oldfors A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):35–42

Anatomic and surgical basis of a technique for total replacement of the trachea by a heterotopically transplanted reinforced pedicled musculocutaneous flap. Riquet M, et al. **Surg Radiol Anat** 1988;10(4):333–4

Reconstruction of a functional hemidiaphragm with use of omentum and latissimus dorsi flaps. Edington HD, et al. **Surgery** 1989 Mar;105(3):442–5

Use of a vascular skeletal muscle graft for canine esophageal reconstruction. Straw RC, et al. **Vet Surg** 1987 Mar–Apr; 16(2):155–63

[Analysis of 163 latissimus dorsi muscle flaps] Duchateau J, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):275–81 (Eng. Abstr.) **(Fre)**

[Anatomical basis of the transposition of the serratus anterior muscle. Study of 40 dissections] Vu P, et al. **J Chir (Paris)** 1989 Jan;126(1):45–53 (Eng. Abstr.) **(Fre)**

[The latissimus dorsi flap: anatomic value and clinical application. Apropos of 15 cases] Guiga M, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):411–3 (Eng. Abstr.) **(Fre)**

[The parascapular cutaneous latissimus dorsi osteomycutaneous double flap. Free monobloc transfer in facial reconstruction] Nassif TM, et al. **Chirurg** 1988 Nov; 59(11):793–6 **(Ger)**

[What results can be expected following the biceps replacement operation? An analysis of retrospective data] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1988 Jul; 20(4):211–7 (34 ref.) (Eng. Abstr.) **(Ger)**

[Free functional muscle transplantation with microneurovascular anastomosis: development of a standardized surgical procedure] Frey M. **Wien Klin Wochenschr** 1989 Jan 20;101(2):57–62 (Eng. Abstr.) **(Ger)**

[Surgical treatment of skin loss on the lower extremities] Moscati F, et al. **Minerva Chir** 1988 Oct 15;43(19):1601–4 (Eng. Abstr.) **(Ita)**

[Experimental study on artificial esophagus created by a latissimus dorsi muscle flap with grafted jejunal mucosa] Negoto Y. **Nippon Geka Gakkai Zasshi** 1989 Jan; 90(1):34–43 (Eng. Abstr.) **(Jpn)**

[Reconstruction of the breast after mastectomy using an island flap from the latissimus dorsi muscle without endoprosthesis] Towpik E. **Pol Tyg Lek** 1988 Aug 15; 43(33):1060–2 (Eng. Abstr.) **(Pol)**

[Anatomo-experimental parallels in the elaboration of methods of increasing the viability of non-free muscle flaps used for sphincteroplasty] Tat'ianchenko VK, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):60–3 (Eng. Abstr.) **(Rus)**

[Cardiomyoplasty] Krakovskiĭ AA, et al. **Grudn Khir** 1989 Jan–Feb;(1):67–71 (50 ref.) **(Rus)**

[Reoperation in vascular complications after transplantation of thoracodorsal flaps] Milanov NO, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):104–7 **(Rus)**

[Primary emergency and delayed autotransplantation of free vascularized tissues in the reconstructive microsurgery of severe injuries and traumatic amputation of the extremities] Stepanov GA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):126–31 **(Rus)**

[Surgical anatomy of the neurovascular elements of the thigh muscles used in sphincteroplasty] Tat'ianchenko VK, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):97–104 **(Rus)**

[Development of a technic and methodology of myoventriculoplasty using programmable cardio-synchronized electro-neurostimulation] Dumchius AS, et al. **Med Tekh** 1988 Jul–Aug;(4):11–5 (Eng. Abstr.) **(Rus)**

[Radioautographic and electron microscopic research on the structure and dynamic proliferative activity of muscle satellite cells during limb muscle transplantation in axolotls] Tuchkova SIa. **Ontogenez** 1988 Nov–Dec;19(6):652–7 **(Rus)**

[Characteristics of rehabilitation treatment after tendon and muscle plastic surgery in children with sequelae of injuries of the peripheral nerves] Kaptelin AF, et al. **Ortop Travmatol Protez** 1989 Feb;(2):29–34 (Eng. Abstr.) **(Rus)**

[A method of surgical treatment of talipes equinus in injuries of the peroneal nerve in children and adolescents] Merkulov VN. **Ortop Travmatol Protez** 1989 Feb;(2):53–5 **(Rus)**

[Correction of a defect of the tongue after its subtotal resection using a skin and muscle flap including the sternohyoid muscle] Matiakin EG. **Vestn Khir** 1988 Aug; 141(8):88–90 (Eng. Abstr.) **(Rus)**

[Results of the transplantation of free composite flaps to the foot] Milanov NO, et al. **Vestn Khir** 1988 Sep;141(9):89–91 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Ultrastructural features of skeletal muscle in mice after physical exercise: its relation to the pathogenesis of leucocyte invasion. Michna H. **Acta Anat (Basel)** 1989; 134(4):276–82

Longitudinal and vertical ultrastructural lesion of crural muscle in post-thrombotic syndrome. Szmolenszky T, et al. **Acta Chir Hung** 1989;30(2):145–55

Visualization of anionic sites using polyethyleneimine–metal complexes. Pfüller U, et al. **Acta Histochem (Jena)** 1989; 85(2):203–11

Ultrastructure of the skeletal muscle in the X chromosome-linked dystrophic (mdx) mouse. Comparison with Duchenne muscular dystrophy. Cullen MJ, et al. **Acta Neuropathol (Berl)** 1988;77(1):69–81

Capillary and mitochondrial unit in muscles of a large lizard. Conley KE, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R982–8

Three-dimensional reconstruction of the myofiber pattern in the fetal and neonatal mouse heart. McLean M, et al. **Anat Rec** 1989 Jul;224(3):392–406

A quantitative study of myonuclear and satellite cell nuclear size in Duchenne's muscular dystrophy, polymyositis and normal human skeletal muscle. Watkins SC, et al. **Anat Rec** 1988 Sep;222(1):6–11

Fish muscle cytoskeletal network: its spatial organization and its degradation by an endogenous serine proteinase. Busconi L, et al. **Arch Biochem Biophys** 1989 Jan;268(1):203–8

Chronic progressive external ophthalmoplegia. II. A qualitative and quantitative electronmicroscopy study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):143–55

Structural and metabolic characteristics of human skeletal muscle following 30 days of simulated microgravity. Hikida RS, et al. **Aviat Space Environ Med** 1989 Jul;60(7):664–70

Characterization of sarcoplasmic reticulum in skinned muscle cultures. Brik H, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):273–80

LC2 involvement in the assembly of skeletal myosin filaments. Chowrashi PK, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):216–23

Sodium–calcium exchange in transverse tubules isolated from frog skeletal muscle. Donoso P, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):8–16

Coccygeus and levator ani muscles in the rabbit: morphology and proprioceptive innervation. Palmieri G, et al. **Biol Struct Morphog** 1988;1(4):142–6

Analysis of equatorial x-ray diffraction patterns from skeletal muscle. Yu LC. **Biophys J** 1989 Mar;55(3):433–40

The spectrum of cytoplasmic body myopathy: report of a congenital severe case. Mizuno Y, et al. **Brain Dev** 1989; 11(1):20–5

Abnormal neuromuscular junctions in the lateral rectus muscle of wobbler mice. La Vail JH, et al. **Brain Res** 1988 Oct 25;463(1):78–89

Ultrastructural investigations on the anterior adductor muscle of a brachiopoda, Lingula unguis. Kuga H, et al. **Cell Struct Funct** 1988 Aug;13(4):271–9

Sustained cell proliferation in denervated skeletal muscle of mice. McGeachie JK. **Cell Tissue Res** 1989 Aug; 257(2):455–7

Satellite cell proliferation and increase in the number of myonuclei induced by testosterone in the levator ani muscle of the adult female rat. Joubert Y, et al. **Dev Biol** 1989 Feb;131(2):550–7

Clusters of 43-kDa protein are absent from genetic variants of C2 muscle cells with reduced acetylcholine receptor expression. LaRochelle WJ, et al. **Dev Biol** 1989 Mar; 132(1):130–8

Correlation of development stage and gap junction formation between chick embryo neurons and cloned skeletal muscle myoblasts. Bonner PH. **Exp Cell Res** 1989 Mar; 181(1):205–16

Membrane-cytoskeleton associations during myogenesis deviate from traditional definitions. Lowrey AA, et al. **Exp Cell Res** 1989 Jul;183(1):1–23

Ethanol induced skeletal muscle degeneration--role of calcium. Baruah JK, et al. **Exp Pathol** 1988;33(4):207–12

Ultrastructure of the contractile apparatus of rat skeletal muscle embedded in an aqueous medium. Jakubiec-Puka A, et al. **Gen Physiol Biophys** 1989 Jun;8(3):185–202

Fibre typing using sarcoplasmic reticulum Ca2+-ATPase and myoglobin immunohistochemistry in rat gastrocnemius muscle. Krenács T, et al. **Histochem J** 1989 Mar; 21(3):145–55

Lysosomes in denervation atrophy of frog Rana cyanophlictis (Schn.) muscle. Somasekhar T, et al. **Indian J Exp Biol** 1988 Dec;26(12):979–83

Development of myotomal cells in Xenopus laevis larvae. Huang CL, et al. **J Anat** 1988 Aug;159:129–36

Changes in the size and synthetic activity of nuclear populations in chronically stimulated rabbit skeletal muscle. Joplin RE, et al. **J Anat** 1987 Dec;155:39–50

The arrangement of the muscle at the ileo-caeco-rectal junction of the domestic duck (Anas platyrhynchos) and the presence of anatomical sphincters. Mahdi AH, et al. **J Anat** 1988 Dec;161:133–42

Structural evidence for direct interaction between the

molecular components of the transverse tubule/sarcoplasmic reticulum junction in skeletal muscle. Block BA, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2587–600

Three-dimensional reconstruction of the Z disk of sectioned bee flight muscle. Cheng NQ, et al. **J Cell Biol** 1989 May; 108(5):1761–74

Ifm(2)2 is a myosin heavy chain allele that disrupts myofibrillar assembly only in the indirect flight muscle of Drosophila melanogaster. Chun M, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2613–21

Arrangement of filaments and cross-links in the bee flight muscle Z disk by image analysis of oblique sections. Deatherage JF, et al. **J Cell Biol** 1989 May;108(5):1775–82

Association of microinjected myosin and its subfragments with myofibrils in living muscle cells. Johnson CS, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2213–21

Molecular and ultrastructural defects in a Drosophila myosin heavy chain mutant: differential effects on muscle function produced by similar thick filament abnormalities. O'Donnell PT, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2601–12

Three-dimensional image reconstruction of insect flight muscle. I. The rigor myac layer. Taylor KA, et al. **J Cell Biol** 1989 Sep;109(3):1085–102

Three-dimensional image reconstruction of insect flight muscle. II. The rigor actin layer. Taylor KA, et al. **J Cell Biol** 1989 Sep;109(3):1103–23

Architecture of the sarcomere matrix of skeletal muscle: immunoelectron microscopic evidence that suggests a set of parallel inextensible nebulin filaments anchored at the Z line. Wang K, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2199–212

Fixation and EM visualization of single peeled mammalian skeletal muscle fibers. Kasper CE, et al. **J Electron Microsc Tech** 1989 Jun;12(2):176–7

Electron microscopic studies on the stretch-induced disordering of the myofilament lattice in tetanized frog skeletal muscle fibers. Suzuki S, et al. **J Electron Microsc (Tokyo)** 1989;38(1):60–3

Structural states in the Z band of skeletal muscle correlate with states of active and passive tension. Goldstein MA, et al. **J Gen Physiol** 1988 Jul;92(1):113–9

Feet, bridges, and pillars in triad junctions of mammalian skeletal muscle: their possible relationship to calcium buffers in terminal cisternae and T-tubules and to excitation-contraction coupling. Dulhunty AF. **J Membr Biol** 1989 Jul;109(1):73–83

A method for quick-freezing live muscles at known instants during contraction with simultaneous recording of mechanical tension. Padrón R, et al. **J Microsc** 1988 Aug; 151 (Pt 2):81–102

Reconstruction from stereo and multiple tilt electron microscope images of thick sections of embedded biological specimens using computer graphic methods. Peachey LD, et al. **J Microsc** 1989 Feb;153 (Pt 2):193–204

Cryo-electron microscopy of insect flight muscle thick filaments. An approach to dynamic electron microscope studies. Menetret JF, et al. **J Mol Biol** 1988 Jul 5; 202(1):175–8

Two attached non-rigor crossbridge forms in insect flight muscle. Reedy MC, et al. **J Mol Biol** 1988 Nov 20; 204(2):357–83

The 'catch' mechanism in molluscan muscle: an electron microscopy study of freeze-substituted anterior byssus retractor muscle of Mytilus edulis. Bennett PM, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):297–311

Fibre types in Limulus telson muscles: morphology and histochemistry. Levine RJ, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):53–66

Length and myofilament spacing-dependent changes in calcium sensitivity of skeletal fibres: effects of pH and ionic strength. Martyn DA, et al. **J Muscle Res Cell Motil** 1988 Oct;9(5):428–45

Myopathy associated with desmin type intermediate filaments. An immunoelectron microscopic study. Pellissier JF, et al. **J Neurol Sci** 1989 Jan;89(1):49–61

Vacuolation of muscle fibers near sarcolemmal breaks represents T-tubule dilatation secondary to enhanced sodium pump activity. Casademont J, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):618–28

Electron microscopic studies of muscle biopsy in primary fibromyalgia syndrome: a controlled and blinded study. Yunus MB, et al. **J Rheumatol** 1989 Jan;16(1):97–101

Functional significance of intermediate filament meshwork in annelid helical muscles. De Eguileor M, et al. **J Ultrastruct Mol Struct Res** 1988 Aug;100(2):183–93

Fine structure of the A-band in cryo-sections. Diversity of M-band structure in chicken breast muscle. Edman AC, et al. **J Ultrastruct Mol Struct Res** 1988 Jul;100(1):1–12

I-bands of striated muscle contain lateral struts. Trombitás K, et al. **J Ultrastruct Mol Struct Res** 1988 Jul;100(1):13–30

Measurement of capillary basement membrane thickness by magnification on a rear opaque projection screen. Sheikholislam BM, et al. **Life Sci** 1974 Oct 1;15(7):1317–25

Isolation of transverse tubule membranes from skeletal muscle: ion transport activity, reformation of triad junctions, and isolation of junctional spanning protein of triads. Caswell AH, et al. **Methods Enzymol** 1988;157:68–84

Isolation of sarcoplasmic reticulum fractions referable to longitudinal tubules and junctional terminal cisternae from rabbit skeletal muscle. Chu A, et al. **Methods Enzymol** 1988; 157:36–46

Reconstitution of skeletal muscle sarcoplasmic reticulum membranes: strategies for varying the lipid/protein ratio. Hymel L, et al. **Methods Enzymol** 1988;157:302–14

Isolation of triads from skeletal muscle. Mitchell RD, et al. **Methods Enzymol** 1988;157:51–68

Isolation and characterization of sarcolemmal vesicles from rabbit fast skeletal muscle. Seiler S, et al. **Methods Enzymol** 1988;157:26–36

Morphological, immunological and biochemical characterization of purified transverse tubule membranes isolated from rabbit skeletal muscle. Rosemblatt MS, et al. **Mol Cell Biochem** 1989 May 4;87(1):57–69

Muscle pain associated with tubular aggregates and structures resembling cylindrical spirals. Danon MJ, et al. **Muscle Nerve** 1989 Apr;12(4):265–72

Structural and functional analysis of murine skeletal muscle after castration. Jiang B, et al. **Muscle Nerve** 1989 Jan; 12(1):67–77

Denervation-induced proliferative changes of triads in rabbit skeletal muscle. Salvatori S, et al. **Muscle Nerve** 1988 Dec; 11(12):1246–59

Proximodistal gradients of the postjunctional folds at the frog neuromuscular junction: a scanning electron microscopic study. Tremblay JP, et al. **Neuroscience** 1989;30(2):535–50

Ultrastructural observations on the transectioned end of frog skeletal muscle cells. Cameron IL. **Physiol Chem Phys Med NMR** 1988;20(3):221–5

Golgi apparatus in chick skeletal muscle: changes in its distribution during end plate development and after denervation. Jasmin BJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7218–22

Transfer of a protein encoded by a single nucleus to nearby nuclei in multinucleated myotubes. Ralston E, et al. **Science** 1989 Jun 2;244(4908):1066–9

Nucleolar organizer regions in normal skeletal muscle and benign and malignant rhabdomyoblastic tumors. Eusebi V, et al. **Tumori** 1989 Feb 28;75(1):4–7

Multilammelated structures in muscle external lamina [letter] Benning TL, et al. **Ultrastruct Pathol** 1989 Jan–Feb; 13(1):83–8

[Skeletal muscle histochemistry in the diagnosis of muscular diseases] Chen BF. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):234–5 (9 ref.) **(Chi)**

[Characterization of striated muscle fiber types by Ca2+-ATPase and myoglobin immunohistochemistry of the sarcoplasmic reticulum] Krenács T, et al. **Morphol Igazsagugyi Orv Sz** 1989 Apr;29(2):106–18 (31 ref.) (Eng. Abstr.) **(Hun)**

[A case of mitochondrial myopathy with nemaline rods accompanied by a partial deficiency of cytochrome c oxidase] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1988 Apr; 28(4):388–95 (Eng. Abstr.) **(Jpn)**

[Electron microscopic study on nemaline bodies] Suzuki Y, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):156–63 (Eng. Abstr.) **(Jpn)**

[Ultrastructural analysis of the phenomenon of splitting of muscle fibers] Sawicka E. **Patol Pol** 1988 Jul–Sep; 39(3):153–63 (Eng. Abstr.) **(Pol)**

[Isaacs syndrome: report of a case] Teive HG, et al. **Arq Neuropsiquiatr** 1988 Jun;46(2):182–6 (Eng. Abstr.) **(Por)**

[Ultrastructural aspects of the skeletal striated muscle, macrophages and fibroblasts during the regression of tadpole tails] Mora OA, et al. **Rev Bras Biol** 1989 Feb; 49(1):285–90 (Eng. Abstr.) **(Por)**

[The structure of thick filaments on longitudinal sections of rabbit psoas muscle] Podlubnaia ZA, et al. **Biofizika** 1989 Jan–Feb;34(1):91–6 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in transverse striated muscles under the influence of space flight factors] Pozdniakov OM, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):746–9 (Eng. Abstr.) **(Rus)**

[Structure of the sensitive zone of the rat muscle spindle after dexamethasone administration] Studitskiĭ AN, et al. **Dokl Akad Nauk SSSR** 1988 Jul–Aug;301(1):222–5 **(Rus)**

[Radioautographic and electron microscopic research on the structure and dynamic proliferative activity of muscle satellite cells during limb muscle transplantation in axolotls] Tuchkova SIa. **Ontogenez** 1988 Nov–Dec;19(6):652–7 **(Rus)**

[Ultrastructural characteristics of the pentalaminar contact and its role in myoblast fusion] Samosudova NV, et al. **Tsitologiia** 1988 Sep;30(9):1073–7 (Eng. Abstr.) **(Rus)**

[Morphofunctional characteristics of myotomic muscle fibers in the tail of the Rana temporaria tadpole] Lebedinskaia II, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):330–6 (Eng. Abstr.) **(Rus)**

[X-ray diffraction study of the structural changes that follow phosphorylation of thick muscle filaments in tarantulas] Panté N, et al. **Acta Cient Venez** 1988;39(3):230–6 (Eng. Abstr.) **(Spa)**

MUSCULAR ATROPHY

COMPLICATIONS

Hemiparkinsonism and hemiatrophy [letter] Jankovic J. **Neurology** 1988 Nov;38(11):1815–6

[A family of spino-cerebellar degeneration with disturbance of ocular movement, choreoathetosis, amyotrophy and dementia—a consideration in clinical features] Usui S, et al. **No To Shinkei** 1988 Oct;40(10):953–61 (Eng. Abstr.) **(Jpn)**

[Spinal muscular atrophy with features of myasthenia gravis and Eaton-Lambert syndrome. A case report] Ono S, et al. **Rinsho Shinkeigaku** 1988 May;28(5):497–500 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Ultrasonography of the peroneal nerve muscle group in normal subjects and patients with peroneal paresis. Boonstra AM, et al. **JCU** 1988 Jan;16(1):17–24

DNA probes in differential diagnosis of Becker muscular dystrophy and spinal muscular atrophy [letter] Lunt PW, et al. **Lancet** 1989 Jan 7;1(8628):46–7

[Ultrasonography of muscle atrophy with fatty degeneration—a case report] Kang WM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):265–70 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Responses of lysosomal and non-lysosomal proteases to unloading of the soleus. Henriksen EJ, et al. **Adv Exp Med Biol** 1988;240:235–42

Skeletal muscle CK-B activity in neurogenic muscular atrophies. Vretou-Jockers E, et al. **J Neurol** 1989 Jul; 236(5):284–7

Carnitine palmityltransferase deficiency with permanent weakness. Gieron MA, et al. **Pediatr Neurol** 1987 Jan–Feb; 3(1):51–3

ETIOLOGY

Thigh muscle atrophy and postoperative osteoarthrosis after knee ligament tears. Kannus P, et al. **Acta Chir Hung** 1988; 29(2):151–61

Nutritional status in alcoholics with and without chronic skeletal muscle myopathy. Duane P, et al. **Alcohol Alcohol** 1988;23(4):271–7

Postpolio muscular atrophy. Diagnostic utility of macroelectromyography. Lange DJ, et al. **Arch Neurol** 1989 May;46(5):502–6

Bed rest effect on extremity muscle torque in healthy men. Gogia P, et al. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1030–2

Isolated lateral pectoral nerve injury: trauma from a seat belt. Marrero JL, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):239–40

A study of the effects of prolonged simulated microgravity on the musculature of the lower extremities in man: an introduction. Buchanan P, et al. **Aviat Space Environ Med** 1989 Jul;60(7):649–52

Late onset of pectoralis major wasting after Patey mastectomy [letter] Wedgwood KR, et al. **Eur J Surg Oncol** 1989 Feb;15(1):90–1

An unusual case of myasthenia gravis in an elderly patient with severe muscular atrophy. Vellodi C, et al. **Gerontology** 1988;34(4):209–11

Influence of spaceflight on rat skeletal muscle. Martin TP, et al. **J Appl Physiol** 1988 Nov;65(5):2318–25

Changes in fiber composition of soleus muscle during rat hindlimb suspension. Templeton GH, et al. **J Appl Physiol** 1988 Sep;65(3):1191–5

Sternocleidomastoid and trapezius dissociation [letter] **Neurology** 1989 Mar;39(3):454–6

Femoral nerve injury following inguinal hernia repair. van Hoff J, et al. **Pediatr Neurol** 1985 May-Jun;1(3):195–6

Myelopathy hand characterized by muscle wasting. A different type of myelopathy hand in patients with cervical spondylosis. Ebara S, et al. **Spine** 1988 Jul;13(7):785–91

[Does the pseudomyopathic form of ankylosing spondylitis exist? (letter)] Jorgensen C, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):341–2 **(Fre)**

[Electrophysiological study on the atrophied pectoralis major muscle after modified radical mastectomy] Tashiro K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):429–33 (Eng. Abstr.) **(Jpn)**

[Neuropathies and myopathies associated with alcoholism] Shimpo T. **Nippon Rinsho** 1988 Aug;46(8):1696–700 **(Jpn)**

[Alcoholic myopathy (review of the literature)] Britvan IIa. **Zh Nevropatol Psikhiatr** 1989;89(3):141–4 (41 ref.) **(Rus)**

[Crural amyotrophy. A sign indicative of a pelvic tumor (letter)] Iriarte García-Baquero LM, et al. **Rev Clin Esp** 1988 Jun;183(1):49–50 **(Spa)**

GENETICS

The Emery-Dreifuss disease. Hausmanowa-Petrusewicz I. **Neuropatol Pol** 1988;26(3):265–81

[Emery-Dreifuss disease. A discussion of 2 new cases] Serratrice G, et al. **Rev Med Interne** 1988 Sep–Oct; 9(4):365–8 (17 ref.) (Eng. Abstr.) **(Fre)**

[Familial scapuloperoneal-type myopathy associated with a marked elevation of serum creatine kinase and hepatomegaly] Maruoka A, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):325–31 (Eng. Abstr.) **(Jpn)**

METABOLISM

Cholesterol conservation in skeletal muscle associated with age- and denervation-related atrophy. Williams KD, et al. **Brain Res** 1989 Jul 24;493(1):14–22

Histochemical study on the atrophy of the quadriceps femoris

muscle caused by knee joint injuries of rats. Okada Y. **Hiroshima J Med Sci** 1989 Mar;38(1):13-21

In vivo T1 characterization of genetically induced muscle atrophy. Misra LK, et al. **Magn Reson Imaging** 1989 May-Jun;7(3):277-82

PATHOLOGY

Inclusion body myositis in post-poliomyelitis muscular atrophy. Abarbanel JM, et al. **Acta Neurol Scand** 1988 Aug; 78(2):81-4

Muscle biopsy correlated with electromyography. Study of 100 cases. Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Jun; 46(2):156-65

Type II fiber myolysis in a patient with hypocarnitinemia. Kimura S, et al. **Brain Dev** 1989;11(4):263-5

Fibre loss and distribution in skeletal muscle from patients with severe peripheral arterial insufficiency. Hedberg B, et al. **Eur J Vasc Surg** 1989 Aug;3(4):315-22

Quantitative alterations in intramuscular connective tissue following immobilization: an experimental study in the rat calf muscles. Jozsa L, et al. **Exp Mol Pathol** 1988 Oct; 49(2):267-78

Syringomyelia associated with developmental anomalies and clinically pure motor presentation. Siriaungkul S, et al. **J Med Assoc Thai** 1988 Jun;71(6):345-9

Pathological findings of the sural nerve in mitochondrial encephalomyopathy. Katsuragi S, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):307-13

[Ultrastructural study of thyrotoxic myopathy] Tang GY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):116-7, 128 (Eng. Abstr.) **(Chi)**

[The injured and the immobilized muscle cell: ultrastructural observations] Lüthi JM, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):58-61 (Eng. Abstr.) **(Ger)**

[An experimental study on denervated muscle atrophy--effect of electrostimulation and comparison with immobilization muscle atrophy] Kanaya F. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun;62(6):635-51 (Eng. Abstr.) **(Jpn)**

[Clinicopathological study of muscular ball ("boule musculaire")] Nakano Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):775-80 (Eng. Abstr.) **(Jpn)**

[Electron microscopic study on nemaline bodies] Suzuki Y, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):156-63 (Eng. Abstr.) **(Jpn)**

[A case of mitochondrial enzymopathy] Parafiniuk W, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):260-3 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Central motor conduction in cerebrovascular disease and motor neuron disease. Ugawa Y, et al. **Acta Neurol Scand** 1988 Oct;78(4):297-306

Neurophysiological evaluation of the muscular hypotrophy after immobilization. Serra G, et al. **Electromyogr Clin Neurophysiol** 1989 Jan-Feb;29(1):29-31

Contractile function of single muscle fibers after hindlimb suspension. Gardetto PR, et al. **J Appl Physiol** 1989 Jun; 66(6):2739-49

A patient with progressive muscle wasting. Jose J, et al. **J Assoc Physicians India** 1988 Apr;36(4):277-9

Diphtheritic neuropathy, an analysis based on muscle and nerve biopsy and repeated neurophysiological and autonomic function tests. Solders G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):876-80

Recovery of the dog quadriceps after 10 weeks of immobilization followed by 4 weeks of remobilization. Lieber RL, et al. **J Orthop Res** 1989;7(3):408-12

[Objective assessment of morphofunctional lateral differences in the musculature of the extensor knee system in internal knee damage] Ullmann P, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):268-75 (Eng. Abstr.) **(Ger)**

[Studies on the clinical feature of 5 patients with long-standing muscular atrophy limited to unilateral lower leg] Saito T, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):643-52 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Periodic weight support effects on rat soleus fibers after hindlimb suspension. Hauschka EO, et al. **J Appl Physiol** 1988 Sep;65(3):1231-7

RADIOGRAPHY

Comparison of CT scan muscle measurements and isokinetic trunk strength in postoperative patients. Mayer TG, et al. **Spine** 1989 Jan;14(1):33-6

THERAPY

Effects of therapeutic percutaneous electrical stimulation of atrophic human quadriceps on muscle composition, protein synthesis and contractile properties. Gibson JN, et al. **Eur J Clin Invest** 1989 Apr;19(2):206-12

Electrical stimulation for disuse muscle atrophy [letter] Kidd GL. **Lancet** 1988 Oct 29;2(8618):1025

MUSCULAR ATROPHY, SPINAL

[Infantile spinal muscular atrophy] Barois A, et al. **Rev Neurol (Paris)** 1989;145(4):299-304 (Eng. Abstr.) **(Fre)**

[Spinal muscular atrophy] Porro G, et al. **Riv Neurol** 1988 Mar-Apr;58(2):45-9 (13 ref.) **(Ita)**

BLOOD

Erythrocyte insulin binding in a family with hereditary motor sensory neuropathy (Charcot-Marie-Tooth) with superimposed insulin-dependent type I diabetes mellitus. Ivarsson SA, et al. **Diabetes Res** 1989 Jan;10(1):49-51

CLASSIFICATION

Classification and genetics of proximal spinal muscular atrophies. Zerres K. **Prog Clin Biol Res** 1989;306:85-9 (16 ref.)

COMPLICATIONS

Charcot-Marie-Tooth disease and cardiac arrhythmias. Battistella PA, et al. **Brain Dev** 1988;10(4):262-3

Assessment and management of pes cavus in Charcot-Marie-tooth disease. Alexander IJ, et al. **Clin Orthop** 1989 Sep;(246):273-81

Electrocardiographic abnormalities in childhood spinal muscular atrophy. Coletta C, et al. **Int J Cardiol** 1989 Sep; 24(3):283-8

Soft tissue surgery in Charcot-Marie-Tooth disease. Roper BA, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):17-20

Scoliosis in spinal muscular atrophy: review of 63 cases. Rodillo E, et al. **J Child Neurol** 1989 Apr;4(2):118-23

Compression syndromes due to hypertrophic nerve roots in hereditary motor sensory neuropathy type I. Rosen SA, et al. **Neurology** 1989 Sep;39(9):1173-7

Neuropathic ankle joint in Charcot-Marie-Tooth disease after triple arthrodesis of the foot. Medhat MA, et al. **Orthop Rev** 1988 Sep;17(9):873-80

Audiologic evaluation in Charcot-Marie-Tooth disease. Pérez H, et al. **Scand Audiol Suppl** 1988;30:211-3

Surgical and functional results of spine fusion in spinal muscular atrophy. Brown JC, et al. **Spine** 1989 Jul; 14(7):763-70

Functional activities in spinal muscular atrophy patients after spinal fusion. Furumasu J, et al. **Spine** 1989 Jul;14(7):771-5

Spinal muscular atrophy: natural history and orthopaedic treatment of scoliosis. Granata C, et al. **Spine** 1989 Jul; 14(7):760-2

[Progressive muscular atrophy localized in the hand. Monomelic form of motor neuron disease?] Chaine P, et al. **Rev Neurol (Paris)** 1988;144(11):759-63 (Eng. Abstr.) **(Fre)**

[Ulcero-mutilating acro-osteopathy in hereditary neuropathies. Differential diagnosis and pathogenesis] Garbe C, et al. **Dtsch Med Wochenschr** 1989 Apr 21; 114(16):628-32 (Eng. Abstr.) **(Ger)**

[Unusual complications at birth in a stillborn with spinal muscular atrophy] Lüders H, et al. **Zentralbl Allg Pathol** 1988;134(6):567-74 (Eng. Abstr.) **(Ger)**

[Epidural anesthesia for a patient with Charcot-Marie-Tooth disease, bronchial asthma and hypothyroidism] Sugai K, et al. **Masui** 1989 May;38(5):688-91 (Eng. Abstr.) **(Jpn)**

[A case of Kennedy-Alter-Sung syndrome associated with external ophthalmoplegia--therapeutic efficacy of fluoxymesterone] Harada T, et al. **No To Shinkei** 1989 Feb; 41(2):143-8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Hexosaminidase A deficiency manifesting as spinal muscular atrophy of late onset. Karni A, et al. **Ann Neurol** 1988 Sep; 24(3):451-3

Differential diagnosis between amyotrophic lateral sclerosis and spinal muscular atrophy by skin involvement. Ono S, et al. **J Neurol Sci** 1989 Jul;91(3):301-10

[Usefulness of ECG in the early diagnosis of infantile spinal muscular dystrophy] Carboni P, et al. **Minerva Pediatr** 1988 Jun;40(6):321-5 (Eng. Abstr.) **(Ita)**

[A case presenting manifestations of bulbospinal muscular atrophy with senile onset, rapid progression and marked asymmetry] Imai T, et al. **Rinsho Shinkeigaku** 1989 Mar; 29(3):379-81 (Eng. Abstr.) **(Jpn)**

[Spinal muscular atrophy in adults] Mozolevskiĭ IuV, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):10-4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Treatment of patients with Charcot-Marie-Tooth neural amyotrophy] Lobzin VS, et al. **Vrach Delo** 1988 Dec; (12):73-4 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Nerve-muscle interactions in the embryo. Laing NG. **Aust Paediatr J** 1988;24 Suppl 1:40-2 (40 ref.)

Aspects of peripheral motor system development. Lamb AH. **Aust Paediatr J** 1988;24 Suppl 1:37-9 (40 ref.)

EPIDEMIOLOGY

A clinical, epidemiological and genetic study of hereditary motor neuropathies in Benghazi, Libya. Radhakrishnan K, et al. **J Neurol** 1988 Sep;235(7):422-4

[Chronic proximal spinal amyotrophies in Tunisia. Clinical, genetic, epidemiologic and histopathologic study] Ben Hamida M, et al. **Rev Neurol (Paris)** 1988;144(11):737-47 (Eng. Abstr.) **(Fre)**

ETIOLOGY

The effect of peripheral nerve injury on immature motor and sensory neurons and on muscle fibres. Possible relation to the histogenesis of Werdnig-Hoffmann disease. Schmalbruch H. **Rev Neurol (Paris)** 1988;144(11):721-9

[Progressive spinal muscular atrophy and parathyroid adenoma. Clinico-pathologic study of a case] Dubas F, et al. **Rev Neurol (Paris)** 1989;145(1):65-8 (8 ref.) (Eng. Abstr.) **(Fre)**

[Nerve growth factors: a hypothesis on their role in the pathogenesis of infantile spinal amyotrophies] Henderson CE, et al. **Rev Neurol (Paris)** 1988;144(11):730-6 (Eng. Abstr.) **(Fre)**

[Hereditary sensory motor neuropathy: degenerative disease or a disease with an immune-mediated pathogenesis?] Cadoni A, et al. **Boll Soc Ital Biol Sper** 1989 May; 65(5):399-404 (Eng. Abstr.) **(Ita)**

GENETICS

DNA probes in Charcot-Marie-Tooth neuropathy. Nicholson GA, et al. **Aust Paediatr J** 1988;24 Suppl 1:90-1

A linkage study of the locus for X-linked Charcot-Marie-Tooth disease. Goonewardena P, et al. **Clin Genet** 1988 Jun;33(6):435-40

Linkage in a family with X-linked Charcot-Marie-Tooth disease. Haites N, et al. **Clin Genet** 1989 Jun;35(6):399-403

Exclusion analysis of Charcot-Marie-Tooth neuropathy (CMT1) with chromosome 1p markers. Raeymaekers P, et al. **Cytogenet Cell Genet** 1989;50(2-3):178-80

Linkage of Charcot-Marie-Tooth neuropathy type 1a to chromosome 17. Vance JM, et al. **Exp Neurol** 1989 May; 104(2):186-9

Linkage analysis of the Duffy blood group marker with several chromosome 1 genes in an extended pedigree with Charcot-Marie-Tooth disease. Raeymaekers P, et al. **Hum Genet** 1989 Feb;81(3):231-3

Linkage analysis in the spinal muscular atrophy type of facioscapulohumeral disease. Siddique T, et al. **J Med Genet** 1989 Aug;26(8):487-9

Absence of linkage with the Duffy blood group in a family with Charcot-Marie-Tooth neuropathy. Raeymaekers P, et al. **J Neurol Sci** 1988 Dec;88(1-3):145-50

Xp21 DNA probe in diagnosis of muscular dystrophy and spinal muscular atrophy [letter] Clarke A, et al. **Lancet** 1989 Feb 25;1(8635):443

Muscular dystrophy or spinal muscular atrophy? [letter] Topaloglu H, et al. **Lancet** 1989 Apr 29;1(8644):960-1

X-linked dominant Charcot-Marie-Tooth neuropathy with 15 cases in a family genetic linkage study. Ionasescu VV, et al. **Muscle Nerve** 1988 Nov;11(11):1154-6

Hereditary motor-sensory neuropathies. Charcot-Marie-Tooth syndrome. Bird TD. **Neurol Clin** 1989 Feb;7(1):9-23 (43 ref.)

Heterogeneity evidence and linkage studies on Charcot-Marie-Tooth disease. Griffiths LR, et al. **Neurology** 1989 Feb;39(2 Pt 1):280-1

Absence of genetic linkage of Charcot-Marie-Tooth disease (HMSN Ia) with chromosome 1 gene markers. Raeymaekers P, et al. **Neurology** 1989 Jun;39(6):844-6

The genetics of the spinal muscular atrophies. Baraitser M. **Prog Clin Biol Res** 1989;306:75-84 (20 ref.)

[Sensory nerve involvement in X-linked bulbospinal amyotrophy (Kennedy syndrome). Contributions of electrophysiologic and histologic data] Penisson-Besnier I, et al. **Neurophysiol Clin** 1989 May;19(2):163-70 (Eng. Abstr.) **(Fre)**

[Familial form of bulbo-spinal amyotrophy in the adult] Mikol J, et al. **Rev Neurol (Paris)** 1988;144(11):748-55 (Eng. Abstr.) **(Fre)**

[Spinal muscular atrophy: disappearance of RNA fluorescence of degenerating motor neurons. An acridine orange study] Sarnat HB, et al. **Rev Neurol (Paris)** 1989; 145(4):305-11 (43 ref.) (Eng. Abstr.) **(Fre)**

[X-linked bulbo-spinal neuronopathy. Kennedy's syndrome] Serratrice G, et al. **Rev Neurol (Paris)** 1988;144(11):756-8 (Eng. Abstr.) **(Fre)**

[An autopsy case of X-linked recessive bulbar-spinal muscular atrophy] Hirayama M, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1131-6 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Autosomal-dominant motor-sensory neuropathy type I: intrafamilial polymorphism in the Roussy-Lévy syndrome] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988; 88(11):45-9 (Eng. Abstr.) **(Rus)**

[Familial spinal muscular atrophy of the Kugelberg-Welander type] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):131-2 (Eng. Abstr.) **(Rus)**

[X chromosome-linked bulbospinal neuronopathy in adults] Mozolevskiĭ IuV. **Zh Nevropatol Psikhiatr** 1989;89(3):121-3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Serum antibodies to HTLV-I in Thai patients with chronic progressive myelopathy, multiple sclerosis, myopathy and in HIV-seropositive intravenous drug abusers. Hemachudha T, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):33-5

Class II antigen expression on human cultured Schwann cells

from patients with Charcot-Marie-Tooth disease. De Martini I, et al. **Neurosci Lett** 1989 May 22;100(1-3):331-4

METABOLISM

Studies on muscle structural protein in motor neuron disease. Kimura F, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):76-86

Myosin heavy chain composition of muscle fibers in spinal muscular atrophy. Biral D, et al. **Muscle Nerve** 1989 Jan; 12(1):43-51

PATHOLOGY

Chromatolytic neurons in Werdnig-Hoffmann disease contain phosphorylated neurofilaments. Lippa CF, et al. **Acta Neuropathol (Berl)** 1988;77(1):91-4

Peripheral nerve involvement in Werdnig-Hoffmann disease. Chien YY, et al. **Brain Dev** 1989;11(4):221-9

Assessment of quadriceps femoris muscle atrophy and hypertrophy in neuromuscular disease in children. Heckmatt JZ, et al. **JCU** 1988 Mar-Apr;16(3):177-81

Changes in size of motor axons in hereditary canine spinal muscular atrophy. Cork LC, et al. **Lab Invest** 1989 Sep; 61(3):333-42

A study of infantile motor neuron disease with neurofilament and ubiquitin immunocytochemistry. Lee S, et al. **Neuropediatrics** 1989 May;20(2):107-11

Plastic bowing of the ribs in children. Caro PA, et al. **Skeletal Radiol** 1988;17(4):255-8

[Chronic spinal amyotrophy involving the upper limbs in young adults (O'Sullivan and McLeod syndrome). MRI study of the cervical spinal cord] Gaio JM, et al. **Rev Neurol (Paris)** 1989;145(2):163-8 (Eng. Abstr.) **(Fre)**

[Sonographic detection of fasciculations] Reimers CD, et al. **Ultraschall Med** 1988 Oct;9(5):237-9 (Eng. Abstr.) **(Ger)**

[An autopsy case of juvenile muscular atrophy of unilateral upper extremity (Hirayama's disease)] Araki K, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):674-5 **(Jpn)**

[Familial bulbo-spinal muscular atrophy with sensory involvement--morphological studies of biopsied sural nerve in two patients] Saito T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):695-704 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Bulbar and spinal muscular atrophy of late onset. A sporadic (?) case. Gemignani F, et al. **Acta Neurol (Napoli)** 1988 Feb;10(1):1-6

Respiratory muscle dysfunction in hereditary motor and sensory neuropathy [letter] Chan CK, et al. **Arch Intern Med** 1989 Apr;149(4):972-3

Respiratory muscle weakness in Charcot-Marie-Tooth disease. A field study. Nathanson BN, et al. **Arch Intern Med** 1989 Jun;149(6):1389-91

Association of lower motor neuron disorders with fasciculation, neuromyotonia and myoclonus. Lance JW. **Aust Paediatr J** 1988;24 Suppl 1:113-5 (13 ref.)

Somatosensory evoked potentials in spinal muscular atrophies and hereditary motor neuropathies. Egerházi A, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):285-8

Motor unit recruitment order in neuropathic disease. Herdmann J, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):53-60

Electrophysiological study (EEG, VEPs, BAEPs) in patients with Charcot Marie Tooth (type HMSN I) disease. Triantafyllou N, et al. **Electromyogr Clin Neurophysiol** 1989 Jul-Aug;29(5):259-63

Non familial juvenile distal spinal muscular atrophy of upper extremity. Peiris JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):314-9

Animal models of amyotrophic lateral sclerosis and the spinal muscular atrophies. Sillevis Smitt PA, et al. **J Neurol Sci** 1989 Jul;91(3):231-58 (187 ref.)

Spinal muscular atrophy. Wessel HB. **Pediatr Ann** 1989 Jul; 18(7):421-7 (21 ref.)

Electrophysiological findings in childhood spinal muscular atrophies. Hausmanowa-Petrusewicz I. **Rev Neurol (Paris)** 1988;144(11):716-20

[Infantile spinal amyotrophy with myotonia. Electromyographic study] Renault F. **Neurophysiol Clin** 1989 May;19(2):155-61 (Eng. Abstr.) **(Fre)**

[Pregnancy and labor in chronic anterior horn lesion] Dietz U, et al. **Z Geburtshilfe Perinatol** 1989 May-Jun; 193(3):155-8 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Downward shift in IQ in persons with Duchenne muscular dystrophy compared to those with spinal muscular atrophy. Ogasawara A. **Am J Ment Retard** 1989 Mar;93(5):544-7

RADIOGRAPHY

CT muscle scanning in the evaluation of patients with spinal muscular atrophy (SMA). Sambrook P, et al. **Neuroradiology** 1988;30(6):487-95

REHABILITATION

The effects of strength training in patients with selected neuromuscular disorders. McCartney N, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):362-8

SURGERY

Long-term results of triple arthrodesis in Charcot-Marie-Tooth disease. Wetmore RS, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):417-22

A long-term study of triple arthrodesis for correction of pes cavovarus in Charcot-Marie-Tooth disease. Wukich DK, et al. **J Pediatr Orthop** 1989 Jul-Aug;9(4):433-7

Neuropathic ankle in CMT disease [letter] Siegel IM. **Orthop Rev** 1989 Feb;18(2):267

[Anesthetic management of spinal progressive muscle atrophy (SPMA)] Takeshita K, et al. **Masui** 1989 Apr; 38(4):557-9 (Eng. Abstr.) **(Jpn)**

VETERINARY

Changes in neuronal size and neurotransmitter marker in hereditary canine spinal muscular atrophy. Cork LC, et al. **Lab Invest** 1989 Jul;61(1):69-76

MUSCULAR DISEASES

Aggressive infantile fibromatosis. Pulmonary metastases documented by plain film and computed tomography. Shankwiler RA, et al. **Clin Imaging** 1989 Jun;13(2):127-9

Beware of psoas abscess [letter] Narasimharao KL, et al. **Indian Pediatr** 1988 Jan;25(1):103-4

Melioidosis, the great mimicker: a report of 10 cases from Malaysia. Yee KC, et al. **J Trop Med Hyg** 1988 Oct; 91(5):249-54

Muscle diseases. **Neurol Clin** 1988 Aug;6(3):429-648

Post-infectious disease syndrome. Bannister BA. **Postgrad Med J** 1988 Jul;64(753):559-67 (67 ref.)

[Simultaneous bilateral spontaneous rupture of the quadriceps tendons compared with unilateral traumatic rupture] Kleintz R, et al. **Unfallchirurg** 1989 Jan;92(1):29-31 (Eng. Abstr.) **(Ger)**

[Mitochondrial myopathies] Casademont J, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):630-5 (75 ref.) **(Spa)**

BLOOD

Choreo-acanthocytosis with myopathy. Report of a case. Lupo I, et al. **Acta Neurol (Napoli)** 1987 Oct-Dec; 9(5-6):334-8

Hypercortisolism and skeletal muscle injury in chronic alcoholics [letter] De Marchi S, et al. **Clin Sci** 1988 Oct; 75(4):445-7

CHEMICALLY INDUCED

Efficacy and long-term adverse effect pattern of lovastatin. Tobert JA. **Am J Cardiol** 1988 Nov 1;62(15):28J-34J (36 ref.)

Nicotinic acid-associated myopathy [letter] Goldstein MR. **Am J Med** 1989 Aug;87(2):248

Myonecrosis as a complication of the use of epsilon amino-caproic acid: a case report and review of the literature. Kane MJ, et al. **Am J Med** 1988 Dec;85(6):861-3 (10 ref.)

Nicotinic acid-associated myopathy: a report of three cases. Litin SC, et al. **Am J Med** 1989 Apr;86(4):481-3

Muscle pain occurs after outpatient laparoscopy despite the substitution of vecuronium for succinylcholine. Zahl K, et al. **Anesthesiology** 1989 Mar;70(3):408-11

Polymyositislike syndromes in acquired immunodeficiency syndrome [letter] Curtis M, et al. **Arch Neurol** 1989 Aug; 46(8):841

Acute painful proximal myopathy associated with nalidixic acid. Carmichael AJ, et al. **BMJ** 1988 Sep 17;297(6650):742

Experimental chloroquine myopathy: morphological and biochemical studies. Kumamoto T, et al. **Eur Neurol** 1989; 29(4):202-7

Muscle spasms and creatine phosphokinase elevation following salbutamol administration. Lisi DM. **Eur Respir J** 1989 Jan;2(1):98

Myopathic changes in diaphragm of rats fed pyridostigmine bromide subchronically. Bowman PD, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):110-7

Neuromuscular effects of chronic exposure to fenthion in dogs and predictive value of electromyography. Tuler SM, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):155-68

Suxamethonium myalgia [editorial] **Lancet** 1988 Oct 22; 2(8617):944-5 (18 ref.)

Myopathy as possible side-effect of cyclosporin [letter] Goy JJ, et al. **Lancet** 1989 Jun 24;1(8652):1446-7

Myopathy and accumulation of amiodarone [letter] Carella F. **Muscle Nerve** 1989 Jun;12(6):514

Muscle protein synthesis in steroid-induced proximal myopathy: a case report. Pacy PJ, et al. **Muscle Nerve** 1989 May;12(5):378-81

Toxic myopathies. Kuncl RW, et al. **Neurol Clin** 1988 Aug; 6(3):593-619 (141 ref.)

The biventer cervicis nerve-muscle preparation of adult hens: effects of phenyl saligenin phosphate administration. el-Fawal HA, et al. **Neurotoxicology** 1988 Winter; 9(4):625-36

The reversible carbamate, (-)physostigmine, reduces the size of synaptic end plate lesions induced by sarin, an irreversible organophosphate. Kawabuchi M, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):98-106

[An unusual complication of therapy with Pelentan--hemorrhage into the iliopsoas muscle] Monhart V, et al. **Vnitr Lek** 1988 Dec;34(12):1189-93 (Eng. Abstr.) **(Cze)**

[Atypical muscular syndrome with myolysis during long-term treatment with fibrates] Chauvin M, et al. **Arch Mal Coeur** 1988 Jul;81(7):921-3 (Eng. Abstr.) **(Fre)**

[Muscular toxicity caused by fenofibrate (letter)] Muller JP, et al. **Presse Med** 1989 May 20;18(20):1033 **(Fre)**

[Muscular diseases in relation to drug consumption] Uldry PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 6; 78(23):671-3 (20 ref.) (Eng. Abstr.) **(Fre)**

[Frequency of severe abdominal wall hemorrhage with subcutaneous anticoagulation using calcium-heparin] Brugger HP, et al. **Schweiz Med Wochenschr** 1989 Jan 7; 119(1):16-8 (Eng. Abstr.) **(Ger)**

[Spontaneous hematoma during anticoagulant therapy. Usefulness of CT] Lutman M, et al. **Radiol Med (Torino)** 1988 Dec;76(6):644-6 **(Ita)**

[A case of Sjögren's syndrome associated with hypokalemic myopathy due to glycyrrhizin] Okada K, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):744-5 **(Jpn)**

[Pseudoaldosteronism with hypokalemic myopathy due to Neo-Umor (glycyrrhizin)] Taira K, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1284-5 **(Jpn)**

[Musculoskeletal syndrome in heroin addicts (letter)] Cogolludo Campillo V, et al. **Med Clin (Barc)** 1989 May 6;92(17):677-8 **(Spa)**

[Ginseng--muscle damage?] **Lakartidningen** 1988 Sep 7; 85(36):2875 **(Swe)**

CLASSIFICATION

Myopathies of infancy and childhood. Miller G. **Pediatr Ann** 1989 Jul;18(7):439-53 (8 ref.)

COMPLICATIONS

MELAS, myoclonus, ataxia and deficiencies of complexes I and IV in muscle mitochondria. Yamanaka R, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):761-7

Macroreentrant ventricular tachycardia and coronary artery disease in cerebrotendinous xanthomatosis. Chen PS, et al. **Am J Cardiol** 1989 Sep 15;64(10):680-2

Dilated cardiomyopathy in multicore myopathy. Magliocco AM, et al. **Am J Cardiol** 1989 Jan 1;63(1):150-1

Myalgias in human immunodeficiency virus-infected patients [letter] Buskila D, et al. **Am J Med** 1989 Apr;86(4):510-1

"Sciatic radicular pain" or piriformis muscle syndrome? [letter] Durrani Z. **Anesth Analg** 1989 Aug;69(2):260

Pseudosciatica [letter] Ogin GA. **Anesth Analg** 1989 Aug; 69(2):261

Chronic myopathy with a partial deficiency of the carnitine palmityltransferase enzyme. Kieval RI, et al. **Arch Neurol** 1989 May;46(5):575-6

Iliopsoas myofascial dysfunction: a treatable cause of "failed" low back syndrome. Ingber RS. **Arch Phys Med Rehabil** 1989 May;70(5):382-6

Gluteal abscess causing sciatica in a patient with systemic lupus erythematosus. Shames JL, et al. **Arch Phys Med Rehabil** 1989 May;70(5):410-1

Scleromyxedema myopathy: case report and review of the literature. Helfrich DJ, et al. **Arthritis Rheum** 1988 Nov; 31(11):1437-41 (15 ref.)

Myopathies associated with hypothyroidism: a review based upon 13 cases. Mastaglia FL, et al. **Aust N Z J Med** 1988 Oct;18(6):799-806 (47 ref.)

Association of post-anaesthetic hyperthermia with abnormal muscle characteristics: a case report. Kripke BJ, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):290-4

Dermatomyositis and granulomatous myopathy associated with sarcoidosis. Lipton JH, et al. **Can J Neurol Sci** 1988 Nov;15(4):426-9

Lumbosacral hyperlordosis due to fibrosis of the paravertebral muscles. Case report. Budassi R, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):395-9

Flexion contracture of the thumb: a malignant etiology. McGraw JM, et al. **J Hand Surg [Am]** 1989 Jul;14(4):736-8

Transient simultaneous sciatic and femoral nerve palsy secondary to iliacus and gluteal hematomas following heparinization for pulmonary embolus in a patient with posterior hip dislocation. An HS, et al. **J Orthop Trauma** 1987;1(2):174-6

Post-viral syndrome [letter] Murdoch JC. **J R Coll Gen Pract** 1987 Nov;37(304):512

Large schwannoma of the psoas: a rare but treatable cause of chronic low back pain. Downey DB, et al. **J R Soc Med** 1989 Aug;82(8):504

Musculoskeletal symptoms related to arthropathy in patients receiving dialysis. Menerey K, et al. **J Rheumatol** 1988 Dec; 15(12):1848-54

Patellar tendon rupture in systemic lupus erythematosus. Pritchard CH, et al. **J Rheumatol** 1989 Jun;16(6):786-8

Myalgic encephalomyelitis [letter] **N Z Med J** 1988 Oct 26; 101(856 Pt 1):672

Myalgic encephalomyelitis [letter] Snow P. **N Z Med J** 1989 Aug 23;102(874):449

Mitochondrial encephalomyopathies. Peterson PL, et al. **Neurol Clin** 1988 Aug;6(3):529-44 (68 ref.)

Anterior operculum syndrome. Mao CC, et al. **Neurology** 1989 Sep;39(9):1169-72

Möbius syndrome and transposition of the great vessels. Raroque HG Jr, et al. **Neurology** 1988 Dec;38(12):1894-5

Acute febrile neutrophilic dermatosis (Sweet syndrome): a review of the literature with emphasis on musculoskeletal manifestations. Moreland LW, et al. **Semin Arthritis Rheum** 1988 Feb;17(3):143–53 (97 ref.)

Neuro–myopathic flexion deformities of the cervical spine. Simmons EH, et al. **Spine** 1988 Jul;13(7):756–62

Recurrent lobar pneumonia associated with idiopathic Eaton–Lambert syndrome. Wathen CG, et al. **Thorax** 1988 Jul;43(7):574–5

Psoas abscess due to retroperitoneal tuberculous lymphadenopathy. Perros P, et al. **Tubercle** 1988 Dec; 69(4):299–301

[Disorders of posture in childhood] Bülow B, et al. **Arztl Jugendkd** 1988;79(4):189–94 (12 ref.) (Eng. Abstr.) **(Ger)**

[Femoral compression neuropathy caused by spontaneous hematoma during heparin therapy: description of a case] Papi L, et al. **G Ital Cardiol** 1988 Jul;18(7):622–3 (Eng. Abstr.) **(Ita)**

[Association of myopathies and alcoholic cardiomyopathy: clinical, electroneuromyographic and histopathologic study of the skeletal muscle in 10 cases of alcoholic cardiomyopathy] de Freitas MR, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):339–50 (Eng. Abstr.) **(Por)**

[Diabetic amyotrophy (letter)] Narberhaus Donner B, et al. **Rev Clin Esp** 1989 Jun;185(1):45 **(Spa)**

CONGENITAL

A case of congenital myopathy without specific features. Tachi N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun; 29(3):455–60

Congenital smooth muscle hamartoma. A report of six cases and a review of the literature. Johnson MD, et al. **Arch Dermatol** 1989 Jun;125(6):820–2 (22 ref.)

The spectrum of cytoplasmic body myopathy: report of a congenital severe case. Mizuno Y, et al. **Brain Dev** 1989; 11(1):20–5

Congenital myopathy with myasthenic features and congenital cataract in two siblings. Nishida Y, et al. **J Neurol** 1989 Mar;236(3):161–3

Congenital nemaline myopathy. A clinical follow-up of twelve patients. Wallgren–Pettersson C. **J Neurol Sci** 1989 Jan;89(1):1–14

Congenital myopathies. Bodensteiner J. **Neurol Clin** 1988 Aug;6(3):499–518 (78 ref.)

Congenital myopathy with cleft palate and increased susceptibility to malignant hyperthermia: King syndrome? Stewart CR, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):371–4

Comments on "Amyoplasia Congenita–Like Condition and Maternal Malathion Exposure": Is all Amyoplasia Amyoplasia? [letter] Hall JG. **Teratology** 1988 Nov; 38(5):493–5

[Malignant hyperthermia in paramyotonia congenita] Thomas A, et al. **Anaesthesiol Reanim** 1988;13(5):295–300 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Detection of psoas abscess by gallium–67 scintigraphy, sonography, and CT [letter] Kida T, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):430–1

The measurement of inspiratory muscle strength by sniff esophageal, nasopharyngeal, and mouth pressures. Koulouris N, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):641–6

Pitfalls in orthopaedics [published erratum appears in Aust Fam Physician 1989 Aug;18(8):1024] Young D, et al. **Aust Fam Physician** 1989 Jun;18(6):645–6, 648, 650–61

Iliopsoas abscess in an immunocompromised patient. Larson DC, et al. **Clin Nucl Med** 1988 Sep;13(9):682–3

Magnetic resonance imaging of the musculoskeletal system. **Clin Orthop** 1989 Jul;(244):1–130

Magnetic resonance imaging of musculoskeletal neoplasms. Berquist TH. **Clin Orthop** 1989 Jul;(244):101–18 (49 ref.)

Magnetic resonance imaging in the diagnosis of anterior tibialis muscle herniation. Zeiss J, et al. **Clin Orthop** 1989 Jul;(244):249–53

Preexisting musculoskeletal conditions presenting as school sports injuries. Pritchett JW. **J Adolesc Health Care** 1989 May;10(3):212–6

Cutaneous changes of dermatomyositis precede muscle weakness. Rockerbie NR, et al. **J Am Acad Dermatol** 1989 Apr;20(4):629–32

Magnetic resonance imaging of bones and soft tissues. A review of the current literature. De Schepper A, et al. **J Belge Radiol** 1988;71(2):231–9 (26 ref.)

Intramuscular myxoma: MR features. Kransdorf MJ, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):836–9

Delayed diagnosis of a primary psoas abscess mimicking septic arthritis of the hip. Toren A, et al. **J Pediatr Surg** 1989 Feb;24(2):227–8

Diaphragmatic and paradiaphragmatic tumors and pseudotumors. Schwartz EE, et al. **J Thorac Imaging** 1989 Jan;4(1):19–28 (21 ref.)

Sonographic appearances of hemangiomas of skeletal muscle. Derchi LE, et al. **J Ultrasound Med** 1989 May;8(5):263–7

Metabolic myopathies: evaluation by graded exercise testing. Elliot DL, et al. **Medicine (Baltimore)** 1989 May; 68(3):163–72

The treacherous biopsy. Berrey BH Jr. **Milit Med** 1989 Apr; 154(4):171–4

Asymptomatic hyper–CK–emia: an electrophysiologic and histopathologic study. Joy JL, et al. **Muscle Nerve** 1989 Mar;12(3):206–9

Myalgic encephalomyelitis [letter] Cant BR. **N Z Med J** 1989 Feb 8;102(861):52

Ehlers Danlos syndrome—masquerading as primary muscle disease. Banerjee G, et al. **Postgrad Med J** 1988 Feb; 64(748):126–7

Orthopaedic problems in children. Rooker G. **Practitioner** 1988 Nov 22;232(1459):1295–300

Giant rheumatoid cyst of the calf simulating a soft tissue tumour. Kristiansen B, et al. **Scand J Rheumatol** 1988; 17(4):297–9

Adenocarcinoma of unknown primary site (ACUPS) presenting as a psoas abscess. Stewart IC, et al. **Scott Med J** 1989 Jun;34(3):470

Case report 557: Solitary intramuscular myxoma in a patient with polyostotic fibrous dysplasia. Glass–Royal MC, et al. **Skeletal Radiol** 1989;18(5):392–8

Extrapelvic endometriosis presenting as a hernia: clinical reports and review of the literature. Sataloff DM, et al. **Surgery** 1989 Jan;105(1):109–12 (21 ref.)

[Myositis or non–inflammatory myopathy: an EMG diagnosis?] Heistercamp F, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):115–8 (Eng. Abstr.) **(Dut)**

[Echography of the musculo–tendinous system] de Gautard R, et al. **Ther Umsch** 1989 Mar;46(3):152–7 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography of the locomotor system with rapid image sequences] Glückert K, et al. **Orthopade** 1989 Feb;18(1):53–65 (Eng. Abstr.) **(Ger)**

[Sonography of the locomotor system. Indications, possibilities, limits and perspectives] Graf R. **Orthopade** 1989 Feb;18(1):2–11 (55 ref.) (Eng. Abstr.) **(Ger)**

[Primary diaphragmatic tumor? Cavernous liver hemangioma] Blum U, et al. **Radiologe** 1989 Apr; 29(4):201–2 **(Ger)**

[Magnetic resonance tomography of the musculoskeletal system] Nägele M, et al. **Rontgenpraxis** 1988 Nov; 41(11):377–83 (14 ref.) **(Ger)**

[Intramuscular hemangioma: problems of differential diagnosis from angiosarcoma] Valanzano R, et al. **Minerva Chir** 1989 Mar 15;44(5):901–6 (29 ref.) (Eng. Abstr.) **(Ita)**

[Magnetic resonance in neoplasms of the adipose, fibrous and muscular tissues] Balzarini L, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):87–93 (Eng. Abstr.) **(Ita)**

[Diagnosis and treatment of echinococcosis in an unusual location] Usmanov NU, et al. **Khirurgiia (Mosk)** 1989 Jun; (6):86–90 (Eng. Abstr.) **(Rus)**

[A false symptom of acute abdomen in spontaneous hematoma of the anterior abdominal wall] Ponomarev AP, et al. **Klin Khir** 1989;(4):59 **(Rus)**

[Diseases of the motor system—a review] Edström L, et al. **Lakartidningen** 1989 Feb 15;86(7):531–4 **(Swe)**

[Fibromyalgia—a musculoskeletal disease?] Fagerlund I. **Lakartidningen** 1989 Jun 28;86(26–27):2439 **(Swe)**

DRUG THERAPY

Quinine for neuroleptic–induced dystonia and muscle stiffness [letter] Leven L. **Am J Psychiatry** 1989 Jun;146(6):801

Lid retraction therapy with a guanethidine solution [letter] Haddad HM. **Arch Ophthalmol** 1989 Feb;107(2):169

Botulinum toxin: a new ally of an old adversary [editorial] Humphry RC. **BMJ** 1989 Jan 21;298(6667):136–7

A clinical evaluation of piroxicam gel: an open comparative trial with diclofenac gel in the treatment of acute musculoskeletal disorders. Kroll MP, et al. **Clin Ther** 1989 May–Jun;11(3):382–91

Long–term coenzyme Q10 therapy for a mitochondrial encephalomyopathy with cytochrome c oxidase deficiency: a 31P NMR study. Nishikawa Y, et al. **Neurology** 1989 Mar;39(3):399–403

[Antagonistic effects of 6 drugs on myopathy induced by soman intoxication] Yuan BL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):111–5 (Eng. Abstr.) **(Chi)**

[Fibromatosis in children: regression with prolonged chemotherapy. Apropos of 2 cases] Mitrofanoff P, et al. **Chir Pediatr** 1988;29(6):325–9 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Clinical and biochemical studies on cytochrome oxidase deficiencies. Schon EA, et al. **Ann N Y Acad Sci** 1988; 550:348–59

Normalization of short–chain acylcoenzyme A dehydrogenase after riboflavin treatment in a girl with multiple acylcoenzyme A dehydrogenase–deficient myopathy. DiDonato S, et al. **Ann Neurol** 1989 May; 25(5):479–84

Myoclonic epilepsy and ragged–red fibers with cytochrome oxidase deficiency: neuropathology, biochemistry, and molecular genetics. Lombes A, et al. **Ann Neurol** 1989 Jul; 26(1):20–33

Biochemical defects in mitochondrial cytopathies: a new classification. Byrne E. **Aust Paediatr J** 1988;24 Suppl 1:58–61 (14 ref.)

Human mitochondrial respiratory chain deficiencies. Morgan–Hughes JA, et al. **Aust Paediatr J** 1988;24 Suppl 1:55–7 (28 ref.)

Activities of creatine kinase and its isoenzymes in serum in various skeletal muscle disorders. Arenas J, et al. **Clin Chem** 1988 Dec;34(12):2460–2

The metabolic consequences of reduced habitual activities in patients with muscle pain and disease. Wagenmakers AJ, et al. **Ergonomics** 1988 Nov;31(11):1519–27

Metabolic myopathy produced by dinitrofluorobenzene inhibition of creatine phosphokinase. Feeback DL, et al. **J Neurol Sci** 1988 Dec;88(1–3):219–28

Immunocytochemical studies of cytochrome oxidase subunits in skeletal muscle of patients with partial cytochrome oxidase deficiencies. Johnson MA, et al. **J Neurol Sci** 1988 Oct;87(1):75–90

Effects of a high–protein diet in acid maltase deficiency. Padberg GW, et al. **J Neurol Sci** 1989 Mar;90(1):111–7

EPIDEMIOLOGY

Persistence of musculoskeletal symptoms: a longitudinal study. Berg M, et al. **Ergonomics** 1988 Sep;31(9):1281–5

Musculoskeletal brucellosis in Saudia Arabia. Shaheen MA. **J R Coll Surg Edinb** 1988 Oct;33(5):257–60

Estimates of the prevalence of selected arthritic and musculoskeletal diseases in the United States. Lawrence RC, et al. **J Rheumatol** 1989 Apr;16(4):427–41

Musculoskeletal disorders in shipyard workers. Torell G, et al. **J Soc Occup Med** 1988 Winter;38(4):109–12

[Musculoskeletal disorders in the Icelandic population] Rafnsson V, et al. **Nord Med** 1989;104(4):104–7 (Eng. Abstr.) **(Swe)**

ETIOLOGY

Development of local morphological changes after intradermal inoculation of Q–fever chemovaccine. Reil M, et al. **Acta Virol (Praha)** 1989 Mar;33(2):167–71

Intramuscular myxoma: a rare but important association with fibrous dysplasia of bone. Sundaram M, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):107–8

Self–reported musculoskeletal complaints among garment workers. Sokas RK, et al. **Am J Ind Med** 1989; 15(2):197–206

Heterotopic ossification pseudophlebitis. Yarkony GM, et al. **Am J Med** 1989 Sep;87(3):342–4

Myopathy associated with human immunodeficiency virus (HIV) but not with zidovudine [letter] Simpson DM. **Ann Intern Med** 1988 Nov 15;109(10):842

Locomotor problems of supersonic aviation and astronautics. Remes P. **Baillieres Clin Rheumatol** 1989 Apr;3(1):111–9 (40 ref.)

Myalgic encephalomyelitis and muscle fatigue [letter] Coakley JH. **BMJ** 1989 Jun 24;298(6689):1711–2

Occupational class, physical workload, and musculoskeletal morbidity in the engineering industry. Leino P, et al. **Br J Ind Med** 1988 Oct;45(10):672–81

Effect of sodium dichloroacetate on human pyruvate metabolism. Naito E, et al. **Brain Dev** 1989;11(3):195–7

Prevalence and coincidence of degenerative changes of the hands and feet in middle age and their relationship to occupational work load, intelligence, and social background. Bergenudd H, et al. **Clin Orthop** 1989 Feb; (239):306–10

Reactive fibromatosis in pustulotic arthro–osteitis. Wagener P, et al. **Clin Rheumatol** 1989 Jun;8(2):274–6

Effect of chronic ethanol ingestion on tissue RNA and blood flow in skeletal muscle with comparative reference to bone and tissues of the gastrointestinal tract of the rat. Preedy VR, et al. **Clin Sci** 1989 Mar;76(3):243–7

The prevalence of musculo–skeletal symptoms in supermarket workers. Ryan GA. **Ergonomics** 1989 Apr; 32(4):359–71

Postradiation segmental myoclonus selectively inhibited by REM sleep (sleep–wake myoclonus). Askenasy JJ, et al. **Eur Neurol** 1988;28(6):317–20

Proximal myopathy as a presenting feature in hyperparathyroidism. Moonis M, et al. **Indian Pediatr** 1988 Jul;25(7):694–8

Muscle weakness associated with prolonged continuous high flux haemofiltration [letter] Davenport A. **Intensive Care Med** 1989;15(5):328–9

Muscle acidosis during static exercise is associated with calf vasoconstriction. Sinoway L, et al. **J Appl Physiol** 1989 Jan;66(1):429–36

Scapuloperoneal neuropathy: a distinct clinicopathologic entity. Hyser CL, et al. **J Neurol Sci** 1988 Oct;87(1):91–102

Ptosis of the chin and lip incompetence: consequences of lost mentalis muscle support. Rubens BC, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):359–66 (39 ref.)

Severe reversible myopathy due to typhoid. Mody GM, et al. **J Trop Med Hyg** 1989 Apr;92(2):102–3

Psoas abscess. Yowler CJ, et al. **Milit Med** 1988 Dec; 153(12):641–2 (8 ref.)

Alcoholic myopathy and cardiomyopathy [editorial] Diamond I. **N Engl J Med** 1989 Feb 16;320(7):458–60

Myopathy and cystine storage in muscles in a patient with nephropathic cystinosis. Gahl WA, et al. **N Engl J Med** 1988 Dec 1;319(22):1461–4

Myopathies caused by disorders of lipid metabolism. Carroll JE. **Neurol Clin** 1988 Aug;6(3):563–74 (74 ref.)

Myalgia. Roy EP 3d, et al. **Neurol Clin** 1988 Aug;6(3):621–36 (99 ref.)

Endocrine myopathies. Ruff RL, et al. **Neurol Clin** 1988 Aug; 6(3):575–92 (77 ref.)

Pyriformis syndrome in a 10–year–old boy as a complication

of operation with the patient in the sitting position. Brown JA, et al. **Neurosurgery** 1988 Jul;23(1):117–9
Computed tomographic features of nonthyroid extraocular muscle enlargement. Patrinely JR, et al. **Ophthalmology** 1989 Jul;96(7):1038–47
Pediatric update #7. The orthopaedic manifestations of head injury in children. Blasier D, et al. **Orthop Rev** 1989 Mar; 18(3):350–8
Mitochondrial myopathy and cardiomyopathy in siblings. Tulinius MH, et al. **Pediatr Neurol** 1989 May–Jun; 5(3):182–8
Extensive defects of mitochondrial electron-transfer chain in muscular cytochrome c oxidase deficiency. Tanaka M, et al. **Pediatr Res** 1988 Oct;24(4):447–54
Myalgias and muscle contractures as the presenting signs of Addison's disease. Shapiro MS, et al. **Postgrad Med J** 1988 Mar;64(749):222–3
Aeromonas hydrophila septicaemia and muscle abscesses associated with immunosuppression. Slevin NJ, et al. **Postgrad Med J** 1988 Sep;64(755):701–2
Self-reported symptoms in the neck and upper limbs of female assembly workers. Impact of length of employment, work pace, and selection. Ohlsson K, et al. **Scand J Work Environ Health** 1989 Feb;15(1):75–80
Arboviral causes of non-specific fever and myalgia in a fever hospital patient population in Cairo, Egypt. Darwish MA, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):1001–3
Small cell carcinoma of prostate associated with myasthenic (Eaton–Lambert) syndrome. Têtu B, et al. **Urology** 1989 Feb;33(2):148–52
[A clinical study of chronic thyrotoxic myopathy] Chen QT, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):535–8, 586 (Eng. Abstr.) **(Chi)**
[Osteo-muscular lesions in students of a ballet school] Lamata Iturria M, et al. **Acta Orthop Belg** 1988;54(4):418–23 (Eng. Abstr.) **(Fre)**
[Orthopedic problems in children with spina bifida] Berard J. **Neurochirurgie** 1988;34 Suppl 1:67–75 (20 ref.) **(Fre)**
[Orbital disease and hyperthyroidism. Means syndrome. Apropos of 2 cases] Maurin JF, et al. **Ophtalmologie** 1988 Oct;2(4):369–71 (Eng. Abstr.) **(Fre)**
[A 54-year-old patient with muscle weakness, hypokalemia and arterial hypertension] Arnold G, et al. **Internist (Berlin)** 1988 Oct;29(10):697–9 **(Ger)**
[A 39-year-old patient with acute onset of fever, myalgia and diarrhea and followed by jaundice] Kühl M, et al. **Internist (Berlin)** 1989 Mar;30(3):208–10 **(Ger)**
[Status determination of group V occupational diseases: "Diseases caused by progressive mechanical stress on the locomotor system"] Höhndorf H, et al. **Z Arztl Fortbild (Jena)** 1988;82(21):1071–5 **(Ger)**
[A new surgical method for the management of a herniated muscle caused by venous leg ulcer] Hrabovszky T. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):225–8 (Eng. Abstr.) **(Hun)**
[Abscess of the psoas muscle in Crohn's disease] Revetria P. **Minerva Chir** 1988 Dec 31;43(23–24):2111–5 (Eng. Abstr.) **(Ita)**
[Muscular fatigue in chronic respiratory insufficiency. Physiopathologic considerations and therapeutic strategies] De Luca L, et al. **Pediatr Med Chir** 1988 Nov–Dec; 10(6):609–13 (15 ref.) (Eng. Abstr.) **(Ita)**
[A case of pseudo-Bartter's syndrome associated with hypokalemic myopathy] Imai T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):582–92 (Eng. Abstr.) **(Jpn)**
[Tiring induced by viruses--postviral fatigue syndrome (letter)] Scott A. **Ned Tijdschr Geneeskd** 1988 Aug 20; 132(34):1595 **(Mul)**
[A method for creating an experimental model of abscess] Mamedov LA, et al. **Arkh Patol** 1988;50(8):82–4 (Eng. Abstr.) **(Rus)**
[Diseases of the locomotor system in workers in the timber-processing industry] Druz' RA, et al. **Ortop Travmatol Protez** 1989 Feb;(2):61–4 **(Rus)**
[Acute febrile myopathy in intravenous drug users: clinical and morphological study] Fernández-Solá J, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):128–30 (Eng. Abstr.) **(Spa)**
[Can the occupational environment at community care facilities be accepted? Load injuries among the nursing staff caused by lifting] Nord K, et al. **Lakartidningen** 1988 Dec 14;85(50):4435–7 **(Swe)**

GENETICS

Quadriceps myopathy. Study of a case with autosomic dominant transmission. Marolda M, et al. **Acta Neurol (Napoli)** 1987 Oct–Dec;9(5–6):320–7
Problems in genetic counseling in a family with an "atypical" centronuclear myopathy. Müller B, et al. **Am J Med Genet** 1989 Mar;32(3):417–9
Rippling muscle disease. Ricker K, et al. **Arch Neurol** 1989 Apr;46(4):405–8
Familial myopathy with changes resembling inclusion body myositis and periventricular leucoencephalopathy. A new syndrome. Cole AJ, et al. **Brain** 1988 Oct;111 (Pt 5):1025–37
Distal myopathy with rimmed vacuole formation. A follow-up study. Sunohara N, et al. **Brain** 1989 Feb;112 (Pt 1):65–83 (56 ref.)
X-linked myotubular myopathy: clinical and pathological findings in a family. Oldfors A, et al. **Clin Genet** 1989 Jul; 36(1):5–14 (26 ref.)
The muscular dysgenesis mutation in mice leads to arrest of the genetic program for muscle differentiation. Chaudhari N, et al. **Dev Biol** 1989 Jun;133(2):456–67
HTLV-I-associated myelopathy and adult T-cell leukemia cases in a family. Shoji H, et al. **Eur Neurol** 1989;29(1):33–5
Fatal mitochondrial myopathy with cytochrome-c-oxidase deficiency and subunit-restricted reduction of enzyme protein in two siblings: an autopsy-immunocytochemical study. Müller-Höcker J, et al. **Hum Pathol** 1989 Jul; 20(7):666–72
Mitochondrial myopathy: a genetic study of 71 cases. Harding AE, et al. **J Med Genet** 1988 Aug;25(8):528–35 (74 ref.)
Restriction enzyme analysis of the mitochondrial genome in mitochondrial myopathy. Poulton J, et al. **J Med Genet** 1988 Sep;25(9):600–5
Familial myopathy associated with thrombocytopenia: a clinical and histomorphometric study. Mahon M, et al. **J Neurol Sci** 1988 Dec;88(1–3):55–67
Familial bulbo-spinal muscular atrophy associated with testicular atrophy and sensory neuropathy (Kennedy-Alter-Sung syndrome). Autopsy case report of two brothers. Nagashima T, et al. **J Neurol Sci** 1988 Nov; 87(2–3):141–52
Mitochondrial DNA and genetic disease. **Lancet** 1989 Feb 4;1(8632):250–1 (13 ref.)
Mitochondrial DNA mutations as an important contributor to ageing and degenerative diseases. Linnane AW, et al. **Lancet** 1989 Mar 25;1(8639):642–5
Non-invasive diagnosis of mitochondrial myopathy [letter] Poulton J, et al. **Lancet** 1989 Apr 29;1(8644):961
Duplications of mitochondrial DNA in mitochondrial myopathy. Poulton J, et al. **Lancet** 1989 Feb 4; 1(8632):236–40
In vivo muscle magnetic resonance spectroscopy in a family with mitochondrial cytopathy: a defect in fat metabolism. Narayana PA, et al. **Magn Reson Imaging** 1989 Mar–Apr; 7(2):133–9
Muscle disease and molecular cloning [news] Reuter H, et al. **Nature** 1988 Nov 10;336(6195):113
An autosomal dominant disorder with multiple deletions of mitochondrial DNA starting at the D-loop region. Zeviani M, et al. **Nature** 1989 May 25;339(6222):309–11
Autosomal dominant scapuloperoneal syndrome with sensorineural hearing loss. Ansher M, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):242–4
Ring 18 chromosome with mental retardation, hemidysmorphism, and mitochondrial encephalomyopathy. Amit R, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):301–4
Nemaline myopathy associated with hypertrophic cardiomyopathy. Van Antwerpen CL, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):306–8
Familial myalgic myopathy. Roy EP 3d, et al. **W V Med J** 1988 Oct;84(10):456–9

HISTORY

An historical account of studies on muscle [published erratum appears in J Comp Pathol 1988 Nov;99(4):following 454] Bradley R. **J Comp Pathol** 1988 Oct;99(3):259–97
[The man behind the syndrome: Rolf Luft. He discovered the first mitochondrial disease--a milestone in clinical pathology] Löw H, et al. **Lakartidningen** 1989 Apr 12; 86(15):1389–90 **(Swe)**

IMMUNOLOGY

Increases in helper inducer T cells and activated T cells in HTLV-I-associated myelopathy. Itoyama Y, et al. **Ann Neurol** 1989 Aug;26(2):257–62
Stiff-man syndrome, dysimmune disorder, and cancer [letter] Piccolo G, et al. **Ann Neurol** 1989 Jul;26(1):105
Major histocompatibility complex class I antigen expression, immunolocalization of interferon subtypes, and T cell-mediated cytotoxicity in myopathies. Emslie-Smith AM, et al. **Hum Pathol** 1989 Mar;20(3):224–31
Cell mediated immunity in ME syndrome [letter] Kljakovic M, et al. **N Z Med J** 1988 Sep 28;101(854):612
Myalgic encephalomyelitis [letter] Willoughby EW. **N Z Med J** 1988 Nov 9;101(857):773
Neuronal antinuclear antibodies in a patient with Lambert-Eaton myasthenic syndrome and small-cell lung carcinoma. Dropcho EJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):249–51

METABOLISM

Nile red simultaneous staining of intracellular lipids and membrane network in human muscle cultures. Santilli I, et al. **Basic Appl Histochem** 1989;33(1):49–52
Metabolism of pyrenedecanoic acid in Epstein-Barr virus-transformed lymphoid cell lines from normal subjects and from a patient with multisystemic lipid storage myopathy. Radom J, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):130–6
Mitochondrial myopathies. Schapira AH. **BMJ** 1989 Apr 29; 298(6681):1127–8 (17 ref.)
Muscle histochemistry in myotubular (centronuclear) myopathy. Sasaki T, et al. **Brain Dev** 1989;11(1):26–32
The use of Fura-2 to estimate myoplasmic [Ca2+] in human skeletal muscle. Iaizzo PA, et al. **Cell Calcium** 1989 Apr; 10(3):151–8
Adult polyglucosan body myopathy with subclinical peripheral neuropathy: case report and review of diseases associated with polyglucosan body accumulation. Weis J, et al. **Clin Neuropathol** 1988 Nov–Dec;7(6):271–9 (32 ref.)
Lipid storage myopathy due to glutaric aciduria type II: treatment of a potentially fatal myopathy. Turnbull DM, et al. **Dev Med Child Neurol** 1988 Oct;30(5):667–72
Disorders of the mitochondrial respiratory chain: clinical manifestations and diagnostic approach. Trijbels JM, et al. **Eur J Pediatr** 1988 Nov;148(2):92–7 (21 ref.)
Independence of triacylglycerol-containing compartments in cultured fibroblasts from Wolman disease and multisystemic lipid storage myopathy. Salvayre R, et al. **FEBS Lett** 1989 Jun 19;250(1):35–9
Intracellular free [Ca2+] in human skeletal muscle with myopathic carnitine deficiency. López JR, et al. **Gen Physiol Biophys** 1989 Apr;8(2):91–8
Immunofluorescent evidence for presence of interleukin-1 in normal and diseased human skeletal muscle [letter] Schubert W, et al. **Muscle Nerve** 1988 Aug;11(8):890–2
Restoration of excitation-contraction coupling and slow calcium current in dysgenic muscle by dihydropyridine receptor complementary DNA. Tanabe T, et al. **Nature** 1988 Nov 10;336(6195):134–9
Mitochondria-related encephalomyopathies. Goebel HH, et al. **Neuropathol Appl Neurobiol** 1989 Mar–Apr;15(2):97–119 (116 ref.)
Effect of sepsis on calcium uptake and content in skeletal muscle and regulation in vitro by calcium of total and myofibrillar protein breakdown in control and septic muscle: results from a preliminary study. Benson DW, et al. **Surgery** 1989 Jul;106(1):87–93
[31P-NMR spectroscopy of mitochondrial myopathies: the relation between abnormal energy metabolism and muscle biopsy findings] Kawai M, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):167–71 (Eng. Abstr.) **(Jpn)**
[A case of late-onset and slowly progressive mitochondrial myopathy with abnormalities of complexes in electron-transfer system] Shibuya S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1147–51 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Polymyositis and HTLV-I antibodies [letter] Francis DA, et al. **Ann Neurol** 1989 Mar;25(3):311
Infective sacroiliac arthritis and psoas abscess caused by Streptococcus milleri [letter] Humphreys H, et al. **J Infect** 1989 Jul;19(1):77–8
Leukoencephalopathy in HTLV-I-associated myelopathy: MRI and EEG data. Kira J, et al. **J Neurol Sci** 1988 Nov; 87(2–3):221–32
Clinical picture of HTLV-I associated myelopathy. Shibasaki H, et al. **J Neurol Sci** 1988 Oct;87(1):15–24
Detection of human T-cell leukemia/lymphoma virus type I in a transfusion recipient with chronic myelopathy. Saxton EH, et al. **Neurology** 1989 Jun;39(6):841–4
Pyomyositis in spinal cord injury patients. Midha M, et al. **Paraplegia** 1989 Aug;27(4):302–6
[Abscess of the psoas muscle and pyomyositis caused by Staphylococcus aureus (letter)] Alfaro MJ, et al. **Rev Clin Esp** 1989 Apr;184(6):342–3 **(Spa)**

PATHOLOGY

Muscle pathology in cytochrome c oxidase deficiency. Nonaka I, et al. **Acta Neuropathol (Berl)** 1988;77(2):152–60
Skeletal muscle pathology in chronic progressive external ophthalmoplegia with ragged-red fibers. Yamamoto M, et al. **Acta Neuropathol (Berl)** 1988;76(6):558–63
Hematoxylin-stained bodies and tissue LE cells in a skeletal muscle biopsy. McMullan DT, et al. **Am J Clin Pathol** 1988 Dec;90(6):731–3
Malignant peripheral nerve sheath tumor (MPNST) showing perineurial cell differentiation. Hirose T, et al. **Am J Surg Pathol** 1989 Jul;13(7):613–20
Intramuscular myxoma. Jaser NA, et al. **Ann Chir Gynaecol** 1988;77(2):78–80 (11 ref.)
Findings in muscle in complex I (NADH coenzyme Q reductase) deficiency. Koga Y, et al. **Ann Neurol** 1988 Dec; 24(6):749–56
Myopathy with unique ultrastructural feature in Marinesco-Sjögren syndrome. Sewry CA, et al. **Ann Neurol** 1988 Oct;24(4):576–80
Congenital muscle fibre type disproportion: clinical, morphological and biochemical findings in children. Pastoris O, et al. **Basic Appl Histochem** 1989;33(2):159–68
Defects in muscle fiber growth in fatal infantile cytochrome c oxidase deficiency. Nonaka I, et al. **Brain Dev** 1988; 10(4):223–30
Myopathy in primary systemic amyloidosis. Roke ME, et al. **Can J Neurol Sci** 1988 Aug;15(3):314–6 (19 ref.)
Extramedullary plasmacytoma of skeletal muscle. A case report with immunocytochemistry and ultrastructural study. Akosa AB, et al. **Cancer** 1989 Oct 1;64(7):1504–7
Autoimmune thyroiditis and myopathy. Reversibility of myopathic alterations under thyroxine therapy. Frank B, et al. **Clin Neurol Neurosurg** 1989;91(3):251–5
Distal myopathy with focal granular degenerative change in vacuolated type 2 fibers. Swash M, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):249–53
Acquired gluteal myospherulosis secondary to intramuscular injections of petrolatum-based hormones: a case report diagnosed by fine-needle aspiration cytology. Vuong PN.

Diagn Cytopathol 1988;4(2):137–9
Primary striated muscle lymphoma presenting in an amputation stump. Shpilberg O, et al. **Isr J Med Sci** 1989 Feb;25(2):116–7
Rare submandibular swelling (capillary haemangioma). Slack RW, et al. **J Laryngol Otol** 1989 Jun;103(6):632–3
Neurogenic muscle hypertrophy. Report of two cases. Pareyson D, et al. **J Neurol** 1989 Jul;236(5):292–5
Adult-onset rod disease with abundant intranuclear rods. Paulus W, et al. **J Neurol** 1988 Jul;235(6):343–7
Myopathy associated with desmin type intermediate filaments. An immunoelectron microscopic study. Pellissier JF, et al. **J Neurol Sci** 1989 Jan;89(1):49–61
Histological investigations of muscle atrophy and end plates in two critically ill patients with generalized weakness. Wokke JH, et al. **J Neurol Sci** 1988 Dec;88(1–3):95–106
Embryonal rhabdomyosarcoma arising in the masseter muscle as a second malignant neoplasm. Chemello PD, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):899–905 (17 ref.)
Intramuscular myxoma. Busuttil A, et al.
J R Coll Surg Edinb 1988 Aug;33(4):225–6
Alterations in dry mass content of collagen fibers in degenerative tendinopathy and tendon-rupture. Józsa L, et al. **Matrix** 1989 Mar;9(2):140–6
Muscle pain associated with tubular aggregates and structures resembling cylindrical spirals. Danon MJ, et al.
Muscle Nerve 1989 Apr;12(4):265–72
Myosin ATPase intermediate density fibers for diagnosis of reinnervation. Griffin JL, et al. **Muscle Nerve** 1988 Sep; 11(9):915–21
Internalized myofiber capillaries: observations on their origin and clinical features. Gutmann L, et al. **Muscle Nerve** 1989 Mar;12(3):191–6
Central core disease: ultrastructure of the sarcoplasmic reticulum and T-tubules. Hayashi K, et al.
Muscle Nerve 1989 Feb;12(2):95–102
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 12–1989. A 24-year-old Haitian man with right flank pain and recent fever.
N Engl J Med 1989 Mar 23;320(12):790–9
Massive focal brain swelling as a feature of MELAS. Breningstall GN, et al. **Pediatr Neurol** 1988 Nov–Dec; 4(6):366–70
Nemaline myopathy: comparative muscle histochemistry in the severe neonatal, moderate congenital, and adult-onset forms. Shimomura C, et al. **Pediatr Neurol** 1989 Jan–Feb; 5(1):25–31
Mitochondrial damage in muscle occurs after marked depletion of glutathione and is prevented by giving glutathione monoester. Mårtensson J, et al.
Proc Natl Acad Sci U S A 1989 Jan;86(2):471–5
Haemangiopericytoma of the diaphragm. el-Jabbour JN, et al. **Scott Med J** 1988 Dec;33(6):375–6
Musculoskeletal manifestations of Werner's syndrome. Escalante A, et al. **Semin Arthritis Rheum** 1989 Aug; 19(1):1–8 (33 ref.)
Inflammatory myopathy in F1 hybrid mice with acute graft-versus-host reactions. Gartner JG, et al.
Transplantation 1989 Aug;48(2):328–31
Neural crest origin of clear cell sarcoma of tendons and aponeuroses. Ultrastructural and enzyme cytochemical study of human and nude mouse-transplanted tumours. Mii Y, et al. **Virchows Arch [A]** 1989;415(1):51–60
[Skeletal muscle histochemistry in the diagnosis of muscular diseases] Chen BF. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):234–5 (9 ref.) **(Chi)**
[Immunocytochemical study of the inflammatory forms of facioscapulohumeral myopathies and correlation with other types of myositis] Figarella-Branger D, et al.
Ann Pathol 1989;9(2):100–8 (Eng. Abstr.) **(Fre)**
[Tumor of the psoas muscle; an anatomo-clinical entity. 3 cases and review of the literature] Pelissier E, et al.
Chirurgie 1988;114(4):319–26 (23 ref.) (Eng. Abstr.) **(Fre)**
[Cutaneous, muscular and cerebral cysticercosis] Cespa M, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):45–7 (Eng. Abstr.) **(Ita)**
[A case of mitochondrial myopathy with nemaline rods accompanied by a partial deficiency of cytochrome c oxidase] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1988 Apr; 28(4):388–95 (Eng. Abstr.) **(Jpn)**
[Adult onset nemaline myopathy—a case report] Wakayama Y, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1142–6 (10 ref.) (Eng. Abstr.) **(Jpn)**
[Cerebellar atrophy and myasthenic syndrome of the Lambert-Eaton type] Sanadze AG, et al.
Klin Med (Mosk) 1988 Sep;66(9):118–21 **(Rus)**
[Unusual onset of a pyogenic abscess of the psoas muscle (letter)] Cuadrado Gómez LM, et al. **Rev Clin Esp** 1988 Jul;183(3):155–6 **(Spa)**

PHYSIOPATHOLOGY

Pudendal nerve SEPs in myelopathies. D'Alpa F, et al.
Acta Neurol (Napoli) 1987 Apr;9(2):139–46
Factors associated with severity of symptoms in patients with chronic unexplained muscular aching. Kolar E, et al.
Ann Rheum Dis 1989 Apr;48(4):317–21
Calcium regulation in muscle diseases; the influence of innervation and activity. Martonosi A.
Biochim Biophys Acta 1989 May 31;991(2):155–242 (1479 ref.)
Pattern- and flash-evoked potentials in patients with dissociated vertical deviation. Kriss A, et al.
Doc Ophthalmol 1988 Jul;69(3):283–91
Enlarged leading-off area of the monopolar needle: effects on motor-unit action potentials in normal, neurogenic, and myopathic muscles. Chu J, et al.
Electromyogr Clin Neurophysiol 1988 Jun–Jul;28(5):263–7
An electrophysiological investigation of the "stiff-man" syndrome. Correale J, et al.
Electromyogr Clin Neurophysiol 1988 May;28(4):215–21
The pathophysiology, evaluation and management of motility disorders of the biliary tract. Summers RW, et al.
Gastroenterol Clin North Am 1989 Jun;18(2):425–35 (30 ref.)
Abnormal postcibal antral and small bowel motility due to neuropathy or myopathy in systemic sclerosis. Greydanus MP, et al. **Gastroenterology** 1989 Jan;96(1):110–5
Single fibre and quantitative EMG study in acute stage of human trichinosis [letter] Cruz Martínez A, et al.
J Neurol Neurosurg Psychiatry 1989 May;52(5):681–3
Transient Lambert-Eaton myasthenic syndrome associated with systemic lupus erythematosus. Bromberg MB, et al. **Muscle Nerve** 1989 Jan;12(1):15–9
Hereditary increased muscle mechanical irritability and progressive contracture with stretch-induced electromyographic activity. Jušić A. **Muscle Nerve** 1989 Feb;12(2):103–7
Simulation of myopathic motor unit action potentials. Nandedkar SD, et al. **Muscle Nerve** 1989 Mar;12(3):197–202
Evaluation of an automatic method of measuring features of motor unit action potentials. Stewart CR, et al.
Muscle Nerve 1989 Feb;12(2):141–8
Electromyography in congenital nemaline myopathy. Wallgren-Pettersson C, et al. **Muscle Nerve** 1989 Jul; 12(7):587–93 (53 ref.)
Sequential studies of a childhood myopathy: a clinical, histochemical and morphometric investigation. Mahon M, et al. **Neuropathol Appl Neurobiol** 1989 Jan–Feb;15(1):3–12
Progressive myopathy in trisomy 21. Mielke U, et al.
Neuropediatrics 1988 Aug;19(3):132–4
Collateral nerve sprouting and twitch forces of single motor units in conditions with partial denervation in man. Dengler R, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):118–22
Mitochondrial myopathies and respiratory chain proteins. Capaldi RA. **Trends Biochem Sci** 1988 Apr;13(4):144–8 (30 ref.)
[Pain in muscles and joints as the initial symptom of Parkinson disease] Roos RA, et al. **Ned Tijdschr Geneeskd** 1989 May 13;133(19):961–2 **(Dut)**
[Impairments of the locomotor system for the purposes of the new pension for disability (law 222 of 12-6-84). Diagnostic methodology and evaluation guidelines] Serao F. **Arch Monaldi Mal Torace** 1987 Sep-Oct;42(5):427–43 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Inhibitory effect of zinc on nickel subsulfide carcinogenesis in Fischer rats. Kasprzak KS, et al. **Toxicology** 1988 Nov 30;52(3):253–62
[The degree of morbidity of pathologic conditions of the musculoskeletal system detected by child and adolescent preventive health services and requiring follow-up monitoring] Nitzschmann L, et al. **Arztl Jugendkd** 1988; 79(4):195–8 (Eng. Abstr.) **(Ger)**
[More studies on strength training should be done] Hagberg M, et al. **Lakartidningen** 1989 Aug 9;86(32–33):2655 **(Swe)**
[Microbreaks preventing musculoskeletal disorders] Karlsson GB, et al. **Lakartidningen** 1988 Oct 19;85(42):3463–4 **(Swe)**

PSYCHOLOGY

Myalgic encephalomyelitis [letter] **BMJ** 1989 Jun 10; 298(6687):1577–8

RADIOGRAPHY

Metastatic adenocarcinoma of the paraspinal muscles. O'Keeffe D, et al. **Br J Radiol** 1988 Sep;61(729):849–51
Primary extranodal lymphoma in muscle. Scally J, et al.
Br J Radiol 1989 Jan;62(733):81
Fibromatosis of the brachial plexus and shoulder girdle. Chui M. **Can Assoc Radiol J** 1989 Feb;40(1):28–31
Computed tomography of calcified metastases to skeletal muscle from adenocarcinoma of the colon. Caskey CI, et al. **J Comput Tomogr** 1988 Jul;12(3):199–202
Computed tomography demonstration of unusual diffuse metastatic calcification secondary to renal failure. Varma DG, et al. **J Comput Tomogr** 1988 Oct;12(4):282–6
Cryptococcal infection of the lumbar spine. Lie KW, et al.
J R Soc Med 1989 Mar;82(3):172–3
Radiological investigation of the musculoskeletal system and trauma. Bury R. **Practitioner** 1988 Mar 8;232(1444):271–4
Left-sided perinephric hematoma associated with rupture of the left hemidiaphragm: a marker for renal artery injury. Peitzman AB, et al. **Surgery** 1989 Jul;106(1):33–6
[Paralysis of the serratus anterior muscle. A misleading trap in pulmonary radiology] Maarek H, et al.
Ann Radiol (Paris) 1989;32(3):223–6 (20 ref.) (Eng. Abstr.) **(Fre)**
[Value of x-ray computed tomography in muscular pathology. Personal cases and review of the literature] Laroche M, et al. **Rev Rhum Mal Osteoartic** 1989 May; 56(6):433–9 (11 ref.) (Eng. Abstr.) **(Fre)**
[Clinico-roentgenologic characteristics of calcinosis and ossification of postoperative scars of the white line of the abdominal wall] Skotnikov VI, et al. **Vestn Khir** 1988 Sep; 141(9):64–5 **(Rus)**
[Arteriography, lymphography, gammagraphy and computer tomography in the diagnosis of musculoskeletal tumors] Makai F, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):201–6 (Eng. Abstr.) **(Slo)**

RADIONUCLIDE IMAGING

[Positron emission tomographic study in patients with MELAS] Watahiki Y, et al. **No To Hattatsu** 1988; 20(5):404–11 (Eng. Abstr.) **(Jpn)**

REHABILITATION

Description and interobserver reliability of the Tufts Assessment of Motor Performance. Gans BM, et al.
Am J Phys Med Rehabil 1988 Oct;67(5):202–10
Pediatric rehabilitation. 6. Musculoskeletal and soft tissue disorders. Perrin JC, et al. **Arch Phys Med Rehabil** 1989 May;70(5-S):S183–9
Akureyri disease (myalgic encephalomyelitis), forty years later [letter] Hyde B, et al. **Lancet** 1988 Nov 19; 2(8621):1191–2
Obstetrical physical therapy. Review of the literature. Gleeson PB, et al. **Phys Ther** 1988 Nov;68(11):1699–702 (41 ref.)

SURGERY

Primary stress urinary incontinence and pelvic relaxation: prospective randomized comparison of three different operations. Bergman A, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):97–101
Ceftriaxone as short-term antimicrobial chemoprophylaxis in orthopedic surgery: a 1-year multicenter follow-up. Preliminary results of a controlled multicentre study. Periti P, et al. **Eur Surg Res** 1989;21 Suppl 1:25–32
Percutaneous drainage of tuberculous abscess of the psoas muscle. Clementsen P, et al. **Tubercle** 1988 Mar;69(1):63–5
[Myoblastic myoma of the tendon of long flexor of the thumb] Urban K, et al.
Acta Chir Orthop Traumatol Cech 1989 Apr;56(2):129–33 (Eng. Abstr.) **(Cze)**
[Primary non-parasitic cyst of the diaphragm. Review of the literature. Apropos of a case] Bugnon PY, et al.
J Chir (Paris) 1988 Oct;125(10):582–4 (16 ref.) (Eng. Abstr.) **(Fre)**
[The so-called spontaneous hematoma of the anterior rectus abdominis reproducing syndromes of acute surgical abdomen] Podestà A, et al. **Minerva Chir** 1989 Jun 15; 44(11):1579–92 (66 ref.) (Eng. Abstr.) **(Ita)**
[Evaluation method of surgical margin in musculoskeletal sarcoma] Kawaguchi N, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1802–10 (Eng. Abstr.) **(Jpn)**
[Neurofibroma of the diaphragm] Al'perovich BI, et al.
Grudn Khir 1988 Sep-Oct;(5):89–91 **(Rus)**

THERAPY

Ear acupuncture using semi-permanent needles: acceptability, prospects and problems in Nigeria. Umeh B.
Am J Chin Med 1988;16(1–2):67–70
A chairside method for treating external pterygoid muscle dysfunction in the edentulous patient. Lieberman J, et al.
J Prosthet Dent 1989 Jun;61(6):752–3
Laugh if this is a joke [letter] Ljungdahl L. **JAMA** 1989 Jan 27;261(4):558
Approaches to senior care [editorial] Sculco T.
Orthop Rev 1988 Mar;17(3):239–40
[The task of health education in patients with chronic diseases of the locomotor system and its specifics in health spas] Ježek J. **Cesk Zdrav** 1988 Jul;36(6–7):308–13 (Eng. Abstr.) **(Cze)**
[Effect of LDL-apheresis on a case of Cerebrotendinous Xanthomatosis] Fukuo Y, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):196–201 (Eng. Abstr.) **(Jpn)**
[The combined treatment of calcareous bursitis of the subdeltoid muscle and tendinitis of the supraspinous muscle] Mikhailovich D, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar–Apr; (2):31–3 **(Rus)**
[Muscular training in neck and shoulder problems is an effective therapeutic method of pain relief] Dyrssen T, et al. **Lakartidningen** 1989 May 31;86(22):2116, 2118–20 **(Swe)**

VETERINARY

Isoelectric focusing under dissociating conditions for analysis of muscle protein from clinically normal dogs and Labrador retrievers with hereditary myopathy. Mehta JR, et al.
Am J Vet Res 1989 May;50(5):633–9
Skeletal muscle lesions in turkeys associated with the feeding of monensin. Wages DP, et al. **Avian Dis** 1988 Jul–Sep; 32(3):583–6
An epidemic of fatal posterior paralysis and sudden death in goats: a case report. Maselle RM, et al.
Beitr Trop Landwirtsch Veterinarmed 1989;27(2):211–5
Incidence of microscopically detectable degenerative characteristics in skeletal muscle of turkey. Sosnicki A, et al. **Br Poult Sci** 1989 Mar;30(1):69–80
Morphometric evaluation of myofibrillar hypoplasia in

splayleg piglets. Curvers P, et al. **DTW** 1989 Apr; 96(4):189–91

Thermopsis montana–induced myopathy in calves. Baker DC, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1269–72

Recurring tetraparesis attributable to a heartworm in the epidural space of a dog. Blass CE, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):787–8

Abortion, stillbirth, neonatal death, and nutritional myodegeneration in a rabbit breeding colony. Yamini B, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):561–2

Pathophysiologic basis of canine muscle disorders. Shelton GD, et al. **J Vet Intern Med** 1987 Jan–Mar;1(1):36–44 (57 ref.)

Histological aspects of natural eustrongyloid infections of the northern water snake, Nerodia sipedon. Bursey CR. **J Wildl Dis** 1986 Oct;22(4):527–32

Schistosomiasis and nutritional myopathy in a Brazilian tapir (Tapirus terrestris). Yamini B, et al. **J Wildl Dis** 1988 Oct; 24(4):703–7

Metabolic myopathy in canine muscle–type phosphofructokinase deficiency. Giger U, et al. **Muscle Nerve** 1988 Dec;11(12):1260–5

Experimental induction of splayleg in piglets by pyrimethamine. Ohnishi M, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):146–50

Sporadic feline hypokalaemic polymyopathy. Hopkins AL. **Vet Rec** 1989 Jul 1;125(1):17

A myopathy of sheep associated with sarcocystis infection and monensin administration. Jeffrey M, et al. **Vet Rec** 1989 Apr 22;124(16):422–6

Skeletal myopathy in rainbow trout fry/fingerlings [letter] McLoughlin MF, et al. **Vet Rec** 1989 Jun 10;124(23):619

Determination of beta–adrenoceptors and cAMP in muscle from normal and splayleg Belgian Landrace pigs. Roets E, et al. **Vet Res Commun** 1989;13(4):273–86

MUSCULAR DYSTROPHY

Dystrophin: what is in the name? [letter] Hurlbut TA 3d, et al. **Am J Hum Genet** 1989 Apr;44(4):585–6

Muscular dystrophy and related diseases. Proceedings of the Second Australian Rotary Health Research Fund Conference. Sydney, 26–28 November 1986. **Aust Paediatr J** 1988;24 Suppl 1:1–115

Update on Duchenne muscular dystrophy. Siegel IM. **Compr Ther** 1989 Mar;15(3):45–52 (15 ref.)

Myoglobinuria and elevated serum enzymes associated with partial glossectomy under enflurane anesthesia in a patient with muscular dystrophy. Umino M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):71–5

Myotonic muscular dystrophy in the military. Tuttle PV 3d, et al. **Milit Med** 1988 Oct;153(10):505–9

[Rigid spine syndrome: report of three cases] Kameda K, et al. **No To Hattatsu** 1988 Nov;20(6):474–9 (Eng. Abstr.) **(Jpn)**

[Muscular dystrophy of the Becker type] Carbajal–Rodríguez L, et al. **Bol Med Hosp Infant Mex** 1988 Sep;45(9):605–9 (Eng. Abstr.) **(Spa)**

BLOOD

Effect of mazindol on growth hormone levels in patients with Duchenne muscular dystrophy. Zatz M, et al. **Am J Med Genet** 1988 Dec;31(4):821–33

Intracellular free calcium concentration in lymphocytes of patients with muscular dystrophies. Mechler F, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):227–30

Platelet intracellular calcium in patients with Duchenne muscular dystrophy [letter] Lechi C, et al. **Clin Chim Acta** 1988 Sep 30;177(1):119–21

Hereditary progressive muscular dystrophies: serum myoglobin pattern in patients with different types of muscular dystrophies. Pöche H, et al. **Clin Physiol Biochem** 1989;7(1):40–6

Elevated plasma levels of haptoglobin in Duchenne muscular dystrophy:electrophoretic variants in patients with a severe form of the disease. John HA, et al. **Electrophoresis** 1989 Jul;10(7):489–93

Hyperestrogenemia in neuromuscular diseases. Usuki F, et al. **J Neurol Sci** 1989 Feb;89(2–3):189–97

Studies of water permeability and proteins of erythrocyte membranes in patients with Duchenne muscular dystrophy. Benga G, et al. **Muscle Nerve** 1989 Apr;12(4):294–301

A membrane fluidizing factor in sera from Duchenne muscular dystrophy patients: effect on lymphocyte membranes of incubation in patient and control lipoproteins. Hübner C, et al. **Pediatr Res** 1989 Jun; 25(6):656–9

[A study of sialic acid of erythrocyte membranes in Duchenne muscular dystrophy] Shen DG. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):349–51, 385 (Eng. Abstr.) **(Chi)**

[Plasma level of hemopexin (Hpx) in families with progressive muscular dystrophy (PMD)] Diotallevi P, et al. **Boll Soc Ital Biol Sper** 1988 Jun;64(6):531–8 (Eng. Abstr.) **(Ita)**

[Duchenne muscular dystrophy: classification of the respiratory failure and study on the prognosis in the terminal stage based on arterial CO2 pressure] Motomura M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):992–5 (Eng. Abstr.) **(Jpn)**

[Erythrocyte 2,3–diphosphoglycerate in muscular dystrophy] Yanagimoto S, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):222–5 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Congenital muscular dystrophy of a non–Fukuyama type [letter] Echenne B. **Brain Dev** 1988;10(6):397

The difference between Duchenne and Becker dystrophies [editorial] Fischbeck KH. **Neurology** 1989 Apr;39(4):584–5

Myopathies of infancy and childhood. Miller G. **Pediatr Ann** 1989 Jul;18(7):439–53 (8 ref.)

COMPLICATIONS

Cerebral embolization in two young patients with fascioscapulohumeral muscular dystrophy and atrial dysrhythmias. Woelfel A, et al. **Am Heart J** 1989 Sep; 118(3):632–3

Fatal air embolism in an adolescent with Duchenne muscular dystrophy during Harrington instrumentation. Lang SA, et al. **Anesth Analg** 1989 Jul;69(1):132–4

Autosomal recessive epidermolysis bullosa simplex. Generalized phenotypic features suggestive of junctional or dystrophic epidermolysis bullosa, and association with neuromuscular diseases. Fine JD, et al. **Arch Dermatol** 1989 Jul;125(7):931–8 (18 ref.)

Cardiac transplantation in a patient with muscular dystrophy and cardiomyopathy. Donofrio PD, et al. **Arch Neurol** 1989 Jun;46(6):705–7

Concurrence of limb girdle muscular dystrophy and myasthenia gravis. Husain F, et al. **Arch Neurol** 1989 Jan; 46(1):101–2

Quadriplegia from spinal cord injury in muscular dystrophy. Bloom KK, et al. **Arch Phys Med Rehabil** 1989 Aug; 70(8):642–3

Hypoglycemia in a child with congenital muscular dystrophy. Shu S, et al. **Brain Dev** 1989;11(1):62–5

Facioscapulohumeral dystrophy associated with sensorineural hearing loss, tortuosity of retinal arterioles, and an early onset and rapid progression of respiratory failure. Yasukohchi S, et al. **Brain Dev** 1988;10(5):319–24

Complications during anaesthesia in patients with Duchenne's muscular dystrophy (a retrospective study). Larsen UT, et al. **Can J Anaesth** 1989 Jul;36(4):418–22

Chronic cough as the presenting symptom of oculopharyngeal muscular dystrophy. Buckler RA, et al. **Chest** 1989 Apr;95(4):921–2

Patient and family participation in the management of respiratory failure in Duchenne's muscular dystrophy. Gilgoff I, et al. **Chest** 1989 Mar;95(3):519–24

Velopharyngeal incompetence as the presenting symptom of myotonic dystrophy. Salomonson J, et al. **Cleft Palate J** 1988 Jul;25(3):296–300

Dilated cardiomyopathy and successful cardiac transplantation in Becker's muscular distrophy. Follow–up after two years. Casazza F, et al. **G Ital Cardiol** 1988 Sep; 18(9):753–7

Prevention of rapidly progressive scoliosis in Duchenne muscular dystrophy by prolongation of walking with orthoses. Rodillo EB, et al. **J Child Neurol** 1988 Oct; 3(4):269–74

Muscular dystrophy with particular oculopharyngeal involvement. Eksantivongs S, et al. **J Med Assoc Thai** 1989 Apr;72(4):234–8

Becker muscular dystrophy (BMD) and Klinefelter's syndrome: a possible cause of variable expression of BMD within a pedigree. Suthers GK, et al. **J Med Genet** 1989 Apr;26(4):251–4

Cardiac transplantation in Becker muscular dystrophy. Casazza F, et al. **J Neurol** 1988 Nov;235(8):496–8

Prognostic evaluation of congestive heart failure in patients with Duchenne muscular dystrophy—retrospective study using non–invasive cardiac function tests. Nagai T. **Jpn Circ J** 1989 May;53(5):406–15

Epidural anesthesia for major abdominal surgery complicated by muscular dystrophy—a case report. Tung HC, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):75–8

Acute gastric dilatation as a manifestation of Duchenne's muscular dystrophy. Stark P, et al. **ROFO** 1988 Nov; 149(5):554

[A case of carrier of Duchenne's muscular dystrophy complicated with myocardial disease] Kurahashi M, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):655–60 **(Jpn)**

[A case of progressive muscular dystrophy with hypertrophic cardiomyopathy] Umeyama S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):534–7 **(Jpn)**

[A case of liver injury complicated with progressive muscular dystrophy (limb–girdle type)—a histological investigation of orcein negative ground glass inclusions in many of the hepatocytes] Uehara M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):95–9 **(Jpn)**

CONGENITAL

Lissencephaly with congenital muscular dystrophy and ocular abnormalities: cerebro–oculo–muscular syndrome. Sasaki M, et al. **Childs Nerv Syst** 1989 Feb;5(1):35–7

A new case of Ullrich's disease. Santoro L, et al. **Clin Neuropathol** 1989 Mar–Apr;8(2):69–71

Muscle and brain disease. Gordon N. **Dev Med Child Neurol** 1988 Aug;30(4):546–9 (17 ref.)

Congenital muscular dystrophy with leukoencephalopathy. Streib EW, et al. **Eur Neurol** 1989;29(4):211–5

Muscle, eye and brain syndrome—a distinct type of congenital muscular dystrophy? Shuper A, et al. **Isr J Med Sci** 1989 Mar;25(3):160–2

Ullrich's congenital atonic sclerotic muscular dystrophy. A case report. De Paillette L, et al. **J Neurol** 1989 Feb; 236(2):108–10 (15 ref.)

Congenital muscular dystrophy and epidermolysis bullosa simplex. Kletter G, et al. **J Pediatr** 1989 Jan;114(1):104–7

Congenital muscular dystrophy. Leyten QH, et al. **J Pediatr** 1989 Aug;115(2):214–21

Congenital muscular dystrophies. Fenichel GM. **Neurol Clin** 1988 Aug;6(3):519–28 (30 ref.)

Congenital dystrophy and myasthenia gravis [letter] Robinson RO, et al. **Neuropediatrics** 1988 Aug;19(3):168

A variant of Fukuyama congenital muscular dystrophy in a non–Japanese child. Kohrman MH, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):290–3

[Neonatal Steinert's disease. Comments on a case and determination of the pregnancy aspects which are predictive of neonatal death] Ferreira O, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):349–54 (62 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Dystrophin analysis in duchenne muscular dystrophy: use in fetal diagnosis and in genetic counseling. Bieber FR, et al. **Am J Hum Genet** 1989 Sep;45(3):362–7

Prenatal diagnosis of Duchenne muscular dystrophy: prospective linkage analysis and retrospective dystrophin cDNA analysis. Ward PA, et al. **Am J Hum Genet** 1989 Feb;44(2):270–81

Echinogenic action of L–alpha–lysophosphatidylcholine in Duchenne muscular dystrophy: a study on carrier detection. Tangorra A, et al. **Am J Med Genet** 1989 Apr; 32(4):540–4

Early diagnosis and secondary prevention of Duchenne muscular dystrophy. Smith RA, et al. **Arch Dis Child** 1989 Jun;64(6):787–90

New techniques in diagnosis, assessment of progression and research in muscular dystrophy. Stern L. **Aust Paediatr J** 1988;24 Suppl 1:34–6 (10 ref.)

Susceptibility of erythrocyte membranes to treatment with L–alpha–lysophosphatidylcholine in Duchenne muscular dystrophy. Tangorra A, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):477–84

A survey of manifesting carriers of Duchenne and Becker muscular dystrophy in Wales. Norman A, et al. **Clin Genet** 1989 Jul;36(1):31–7

MR imaging of myopathy. Kuriyama M, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):329–33

Dystrophin immunostaining and freeze–fracture studies of muscles of patients with early stage amyotrophic lateral sclerosis and Duchenne muscular dystrophy. Wakayama Y, et al. **J Neurol Sci** 1989 Jun;91(1–2):191–205

DNA probes in differential diagnosis of Becker muscular dystrophy and spinal muscular atrophy [letter] Lunt PW, et al. **Lancet** 1989 Jan 7;1(8628):46–7

Distinction of Becker from limb–girdle muscular dystrophy by means of dystrophin cDNA probes. Norman A, et al. **Lancet** 1989 Mar 4;1(8636):466–8

Improved diagnosis of Becker muscular dystrophy by dystrophin testing. Hoffman EP, et al. **Neurology** 1989 Aug; 39(8):1011–7

Electroretinography in the evaluation of childhood myotonic dystrophy. Breningstall GN, et al. **Pediatr Neurol** 1985 Jul–Aug;1(4):238–41

Prenatal diagnosis using deletion studies in Duchenne muscular dystrophy. Speer MC, et al. **Prenat Diagn** 1988 Jul;8(6):427–37

Dystrophin diagnosis: comparison of dystrophin abnormalities by immunofluorescence and immunoblot analyses. Arahata K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7154–8

[Prenatal diagnosis of Duchenne muscular dystrophy using DNA RFLP analysis] Zeng YT. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):565–7, 38 (Eng. Abstr.) **(Chi)**

[DNA diagnosis of muscular dystrophies] Lindlöf M, et al. **Duodecim** 1988;104(22):1787–95 (25 ref.) **(Fin)**

[Enzyme diagnosis in progressive muscular dystrophies, especially in the Duchenne type] Pernice W, et al. **Klin Pädiatr** 1989 May–Jun;201(3):167–76 (Eng. Abstr.) **(Ger)**

[Ultrasound imaging of the muscle in muscular dystrophy] Nishimura M, et al. **No To Hattatsu** 1989 May;21(3):234–8 (Eng. Abstr.) **(Jpn)**

[Ultrasound imaging of muscles in Duchenne muscular dystrophy] Aizawa H, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):49–53 (Eng. Abstr.) **(Jpn)**

[Clinical implications of enhanced caffeine contracture in malignant hyperthermia (MH) and Duchenne muscular dystrophy (DMD)] Takagi A, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):301–5 (Eng. Abstr.) **(Jpn)**

[Pseudohypertrophic progressive muscular dystrophy with a malignant course in young girls] Badalian LO, et al. **Pediatriia** 1988;(7):29–34 (Eng. Abstr.) **(Rus)**

[Echoscopic diagnosis of the heterozygote carrier state in Duchenne's muscular dystrophy] Krasil'nikov VV, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):18–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the diagnosis of progressive Duchenne muscular dystrophy] Temin PA, et al.

Zh Nevropatol Psikhiatr 1989;89(3):93–6 (Eng. Abstr.) (Rus)

DRUG THERAPY

Selenium and vitamin E treatment of Duchenne muscular dystrophy: no effect on muscle function. Bäckman E, et al. **Acta Neurol Scand** 1988 Nov;78(5):429–35

A pilot trial of plasma infusions in Duchenne muscular dystrophy. Arthur H, et al. **Aust Paediatr J** 1988;24 Suppl 1:24–30

Treatment of muscular dystrophies. Kingston WJ, et al. **Gen Pharmacol** 1989;20(3):263–8 (63 ref.)

The effect of mazindol on growth hormone secretion in boys with Duchenne muscular dystrophy. Coakley JH, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1551–7

A double-blind placebo controlled trial of diltiazem in Duchenne dystrophy. Pernice W, et al. **Klin Wochenschr** 1988 Jul 1;66(13):565–70

Clinical investigation in Duchenne muscular dystrophy: penicillamine and vitamin E. Fenichel GM, et al. **Muscle Nerve** 1988 Nov;11(11):1164–8

Therapeutic trial of isaxonine in Duchenne muscular dystrophy. Heckmatt JZ, et al. **Muscle Nerve** 1988 Aug; 11(8):836–47

Prednisone therapy for Duchenne's muscular dystrophy [editorial] Brown RH Jr. **N Engl J Med** 1989 Jun 15; 320(24):1621–3

Randomized, double-blind six-month trial of prednisone in Duchenne's muscular dystrophy. Mendell JR, et al. **N Engl J Med** 1989 Jun 15;320(24):1592–7

[Effect of a growth hormone inhibitor on the course of Duchenne's myopathy (letter)] Serratrice G, et al. **Presse Med** 1988 Nov 19;17(41):2201 (Fre)

ECONOMICS

Fund-raising advertisements [letter] Walton J. **Lancet** 1989 Jan 14;1(8629):104

ENZYMOLOGY

Cysteine and metalloproteinase activities in serum of Duchenne muscular dystrophic genotypes. Sohar I, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:277–9

Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7

Isoforms of creatine kinase: MM in the study of skeletal muscle damage. Page S, et al. **Eur J Clin Invest** 1989 Apr; 19(2):185–91

Allosteric transition of erythrocyte alkaline phosphatase from Duchenne muscular dystrophy (DMD) patients and Duchenne muscular dystrophy carriers (Homo sapiens). Goldemberg AL, et al. **Int J Biochem** 1988;20(7):703–6

Muscle glycerol kinase in Duchenne dystrophy and glycerol kinase deficiency. Seltzer WK, et al. **Muscle Nerve** 1989 Apr;12(4):307–13

[Aminopeptidases in sera from patients with Duchenne muscular dystrophy] Yamamoto M, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):735–41 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Epidemiology of muscular dystrophies in northeast Tuscany. Pizzi A, et al. **Acta Neurol (Napoli)** 1988 Feb;10(1):7–15

Child neuromuscular disease in southern Norway. The prevalence and incidence of Duchenne muscular dystrophy. Tangsrud SE, et al. **Acta Paediatr Scand** 1989 Jan;78(1):100–3

Some studies of the Duchenne and autosomal recessive types of muscular dystrophy. Gardner-Medwin D, et al. **Brain Dev** 1989;11(2):91–7 (28 ref.)

[Clinico-epidemiologic study of Duchenne muscular dystrophy] Giacanelli M, et al. **Nuovi Ann Ig Microbiol** 1988 Mar-Apr;39(2):129–35 (Eng. Abstr.) (Ita)

ETIOLOGY

The pathological damage in Duchenne muscular dystrophy may be due to increased intracellular OXY-radical generation caused by the absence of dystrophin and subsequent alterations in Ca2+ metabolism. Baker MS, et al. **Med Hypotheses** 1989 Jul;29(3):187–93

[Paraneoplastic neurological manifestations of pulmonary neoplasms. Apropos of 2 case reports] Buysschaert M, et al. **Rev Med Brux** 1988 Sep;9(6):313–6 (Eng. Abstr.) (Fre)

GENETICS

Manifesting carrier of Becker muscular dystrophy (BMD): clinical and recombinant DNA studies. Ionasescu VV, et al. **Acta Neurol Scand** 1989 Jun;79(6):500–3

Cloning of the Duchenne/Becker muscular dystrophy locus. Monaco AP, et al. **Adv Hum Genet** 1988;17:61–98 (100 ref.)

Normal human genomic restriction-fragment patterns and polymorphisms revealed by hybridization with the entire dystrophin cDNA. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):612–9

Intragenic deletions in 21 Duchenne muscular dystrophy (DMD)/Becker muscular dystrophy (BMD) families studied with the dystrophin cDNA: location of breakpoints on HindIII and BglII exon-containing fragment maps, meiotic and mitotic origin of the mutations. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):620–9

Brother/sister pairs affected with early-onset, progressive muscular dystrophy: molecular studies reveal etiologic heterogeneity. Francke U, et al. **Am J Hum Genet** 1989 Jul;45(1):63–72

Hot spot of recombination within DXS164 in the Duchenne muscular dystrophy gene. Grimm T, et al. **Am J Hum Genet** 1989 Sep;45(3):368–72

A male carrier for Duchenne muscular dystrophy [letter] Hennekam RC, et al. **Am J Hum Genet** 1989 Apr;44(4):591

Evidence for mutation by unequal sister chromatid exchange in the Duchenne muscular dystrophy gene. Hu XY, et al. **Am J Hum Genet** 1989 Jun;44(6):855–63

Dystrophin analysis in clonal myoblasts derived from a Duchenne muscular dystrophy carrier. Hurko O, et al. **Am J Hum Genet** 1989 Jun;44(6):820–6

Gene deletions in X-linked muscular dystrophy. Lindlöf M, et al. **Am J Hum Genet** 1989 Apr;44(4):496–503

Diagnostic criteria for Walker-Warburg syndrome. Dobyns WB, et al. **Am J Med Genet** 1989 Feb;32(2):195–210

Theoretical expectations for deletional mutations in Duchenne muscular dystrophy [letter] Giannelli F. **Am J Med Genet** 1988 Dec;31(4):991–4

Pathogenic and nonpathogenic deletions in two families with Duchenne muscular dystrophy. Hart KA, et al. **Am J Med Genet** 1989 May;33(1):142–5

Duchenne muscular dystrophy in monozygotic twins: deletion of 5' fragments of the gene. Ionasescu VV, et al. **Am J Med Genet** 1989 May;33(1):113–6

Identification of carriers of Duchenne muscular dystrophy: value of molecular analysis. LeRoy BS, et al. **Am J Med Genet** 1988 Nov;31(3):709–21

Dystrophin immunocytochemistry in muscle culture: detection of a carrier of Duchenne muscular dystrophy. Miranda AF, et al. **Am J Med Genet** 1989 Feb;32(2):268–73

Late onset scleroatonic familial myopathy (Ullrich disease): a study of two sibs. Ricci E, et al. **Am J Med Genet** 1988 Dec;31(4):933–42

Estimate of the proportion of Duchenne muscular dystrophy with autosomal recessive inheritance. Zatz M, et al. **Am J Med Genet** 1989 Mar;32(3):407–10

Hypothesis: the existence of embryonic and adult isoforms of mRNA dystrophin provides an explanation for unusual clinical findings. Zatz M, et al. **Am J Med Genet** 1989 Mar; 32(3):438–41

Normal and dystrophin-deficient muscle fibers in carriers of the gene for Duchenne muscular dystrophy. Bonilla E, et al. **Am J Pathol** 1988 Dec;133(3):440–5

Molecular biology of Duchenne and Becker's muscular dystrophy: clinical applications. Gutmann DH, et al. **Ann Neurol** 1989 Aug;26(2):189–94 (46 ref.)

Genetics of Duchenne muscular dystrophy. Worton RG, et al. **Annu Rev Genet** 1988;22:601–29 (138 ref.)

Duchenne muscular dystrophy manifesting carriers. Barkhaus PE, et al. **Arch Neurol** 1989 Jun;46(6):673–5

Prenatal diagnosis and carrier detection by DNA studies in a Duchenne muscular dystrophy family with no living affected male. Chen JD, et al. **Aust Paediatr J** 1988 Dec; 24(6):351–3

Observations on the pathogenesis of Duchenne muscular dystrophy in the light of recent progress in molecular genetics. Kakulas BA. **Aust Paediatr J** 1988;24 Suppl 1:4–8 (25 ref.)

Experience with DNA analysis in Duchenne and Becker muscular dystrophy families in NSW. Morgan G, et al. **Aust Paediatr J** 1988;24 Suppl 1:98–9

Application of DNA probes to carrier detection and prenatal diagnosis of Duchenne (and Becker) muscular dystrophy. Mulley JC, et al. **Aust Paediatr J** 1988;24 Suppl 1:92–7

Update on the molecular genetics of Duchenne muscular dystrophy. Siddique T, et al. **Aust Paediatr J** 1988;24 Suppl 1:9–14 (56 ref.)

Nucleotide and corresponding amino acid sequence of human adult and fetal cDNA coding for portions of the Duchenne muscular dystrophy (DMD) gene. Rosenthal A, et al. **Biomed Biochim Acta** 1988;47(2):K13–5

Molecular genetics of Duchenne and Becker muscular dystrophy: emphasis on improved diagnosis. Kunkel LM, et al. **Clin Chem** 1989 Jul;35(7 Suppl):B21–4 (29 ref.)

Detection of Duchenne/Becker muscular dystrophy carriers by densitometric scanning. Prior TW, et al. **Clin Chem** 1989 Jun;35(6):1256–7

Use of DNA probes in detecting carriers of Duchenne muscular dystrophy: selected case studies. Prior TW, et al. **Clin Chem** 1989 Apr;35(4):679–83

DNA probes for carrier identification in Duchenne muscular dystrophy. Worton RG. **Clin Chem** 1989 Apr;35(4):519–20 (16 ref.)

Racial effect on serum creatine-kinase: implications for estimation of heterozygosity risks for females at-risk for Duchenne dystrophy. Passos-Bueno MR, et al. **Clin Chim Acta** 1989 Feb 15;179(2):163–8

Emery-Dreifuss syndrome and X-linked muscular dystrophy with contractures: evidence for homogeneity. Goldblatt J, et al. **Clin Genet** 1989 Jan;35(1):1–4

A new type of muscular dystrophy in two brothers: analysis by use of DNA probes suggests autosomal recessive inheritance. Goonewardena P, et al. **Clin Genet** 1988 Nov; 34(5):299–305

Molecular deletions in the Duchenne/Becker muscular dystrophy gene. Hart KA, et al. **Clin Genet** 1989 Apr; 35(4):251–60 (31 ref.)

Duchenne muscular dystrophy: detection of deletion carriers by spectrophotometric densitometry. Laing NG, et al. **Clin Genet** 1989 Jun;35(6):393–8

Molecular analysis of the Duchenne muscular dystrophy locus. Honeycombe J, et al. **Comp Biochem Physiol [A]** 1989;93(1):125–31

Update: Duchenne muscular dystrophy. Fenichel GM, et al. **Compr Ther** 1988 Jul;14(7):29–32 (10 ref.)

Mapping of 12 translocation breakpoints in the Xp21 region with respect to the locus for Duchenne muscular dystrophy. Boyd Y, et al. **Cytogenet Cell Genet** 1988; 48(1):28–34

Significant progress in Duchenne muscular dystrophy. Davies KE. **Dis Markers** 1987 Mar;5(1):55–6

Autosomal dominant Emery-Dreifuss syndrome: evidence of a neurogenic variant of the disease. Witt TN, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):230–6

Transcription of the dystrophin gene in Duchenne muscular dystrophy muscle. Muntoni F, et al. **FEBS Lett** 1989 Jul 31;252(1-2):95–8

Clones from an 840-kb fragment containing the 5' region of the DMD locus enriched by pulsed field gel electrophoresis. Anand R, et al. **Genomics** 1988 Oct; 3(3):177–86

Identification of a 220-kb insertion into the Duchenne gene in a family with an atypical course of muscular dystrophy. Bettecken T, et al. **Genomics** 1989 May;4(4):592–6

Mapping of four translocation breakpoints within the Duchenne muscular dystrophy gene. Bodrug SE, et al. **Genomics** 1989 Jan;4(1):101–4

A genetic linkage map of five marker loci in and around the Duchenne muscular dystrophy locus. Chen JD, et al. **Genomics** 1989 Jan;4(1):105–9

A chromosome 19 clone from a translocation breakpoint shows close linkage and linkage disequilibrium with myotonic dystrophy. Korneluk RG, et al. **Genomics** 1989 Feb;4(2):146–51

Molecular deletion patterns in Duchenne and Becker type muscular dystrophy. Liechti-Gallati S, et al. **Hum Genet** 1989 Mar;81(4):343–8

Detection of Duchenne muscular dystrophy carriers by dosage analysis using the DMD cDNA clone 8. Mao YP, et al. **Hum Genet** 1989 Jan;81(2):193–5

Patterns of exon deletions in Duchenne and Becker muscular dystrophy. Read AP, et al. **Hum Genet** 1988 Oct; 80(2):152–6

Characterization of patients with glycerol kinase deficiency utilizing cDNA probes for the Duchenne muscular dystrophy locus. Towbin JA, et al. **Hum Genet** 1989 Sep; 83(2):122–6

Dilated cardiomyopathy with regional myocardial hypoperfusion in Becker's muscular dystrophy. Lazzeroni E, et al. **Int J Cardiol** 1989 Jan;22(1):126–9

Oculopharyngeal muscular dystrophy in an Irish family. Eustace S, et al. **Ir J Med Sci** 1989 May;158(5):120

Congenital muscular dystrophy and cerebellar vermis agenesis in two brothers. Arancio O, et al. **Ital J Neurol Sci** 1988 Oct;9(5):485–9

Carrier detection of Duchenne dystrophy by frequency analysis of the electromyogram. Preising BM, et al. **J Biomed Eng** 1988 Oct;10(5):417–25

Complementary DNA probes for the Duchenne muscular dystrophy locus demonstrate a previously undetectable deletion in a patient with dystrophic myopathy, glycerol kinase deficiency, and congenital adrenal hypoplasia. McCabe ER, et al. **J Clin Invest** 1989 Jan;83(1):95–9

DNA deletions and recombinations in the gene locus of X-linked muscular dystrophies. Shimmoto M, et al. **J Inherited Metab Dis** 1988;11(3):324–8

Hereditary distal muscular atrophy with vocal cord paralysis and sensorineural hearing loss: a dominant form of spinal muscular atrophy? Boltshauser E, et al. **J Med Genet** 1989 Feb;26(2):105–8

Linkage analysis of French families with facioscapulohumeral muscular dystrophy. Lucotte G, et al. **J Med Genet** 1989 Aug;26(8):485–6

A workshop on facioscapulohumeral (Landouzy-Déjérine) disease, Manchester, 16 to 17 November 1988. Lunt PW. **J Med Genet** 1989 Aug;26(8):535–7 (0 ref.)

Population frequencies of three DNA alleles linked to the Duchenne muscular dystrophy gene. Papiha SS, et al. **J Med Genet** 1989 Jun;26(6):390–2

X linked or autosomal recessive? A new approach to an old problem. Read AP. **J Med Genet** 1989 May;26(5):305–8

An exclusion map for facioscapulohumeral (Landouzy-Déjérine) disease. Sarfarazi M, et al. **J Med Genet** 1989 Aug;26(8):481–4

Linkage analysis in the spinal muscular atrophy type of facioscapulohumeral disease. Siddique T, et al. **J Med Genet** 1989 Aug;26(8):487–9

Possibilities and limitation of prenatal diagnosis and carrier determination for Duchenne and Becker muscular dystrophy using cDNA probes. Speer A, et al. **J Med Genet** 1989 Jan;26(1):1–5

A genetic linkage study of facioscapulohumeral (Landouzy-Déjérine) disease with 24 polymorphic DNA probes. Upadhyaya M, et al. **J Med Genet** 1989 Aug; 26(8):490–3

Benign muscular dystrophy: risk calculation in families with consanguinity. Wolff G, et al. **J Med Genet** 1989 May; 26(5):299–304

Familial myopathy with scapulohumeral distribution, rigid spine, cardiopathy and mitochondrial abnormality. Tanaka K, et al. **J Neurol** 1989 Jan;236(1):52–4

Evidence against location of the gene for facioscapulohumeral muscular dystrophy on the distal long arm of chromosome 14. Lunt PW, et al. **J Neurol Sci** 1988 Dec;88(1–3):287–92

Inherited deletion at Duchenne dystrophy locus in normal male [letter] Bartlett RJ, et al. **Lancet** 1989 Mar 4; 1(8636):496–7

Xp21 DNA probe in diagnosis of muscular dystrophy and spinal muscular atrophy [letter] Clarke A, et al. **Lancet** 1989 Feb 25;1(8635):443

New mutations in Duchenne muscular dystrophy [letter] Lane RJ, et al. **Lancet** 1988 Oct 22;2(8617):971–2

Muscular dystrophy or spinal muscular atrophy? [letter] Topaloglu H, et al. **Lancet** 1989 Apr 29;1(8644):960–1

Duchenne muscular dystrophy: the gene and the protein. Love DR, et al. **Mol Biol Med** 1989 Feb;6(1):7–17 (90 ref.)

On the nature of the Duchenne muscular dystrophy locus: a portion of a complex of related gene clusters of recent pseudoautosomal origin? Infante JP, et al. **Mol Cell Biochem** 1988 Jun;81(2):103–19 (116 ref.)

Unraveling the mysteries of Duchenne and Becker muscular dystrophy. Hyser CL. **Mol Chem Neuropathol** 1989 Feb; 10(1):15–20 (25 ref.)

Linkage studies in facioscapulohumeral muscular dystrophy. Padberg GW, et al. **Muscle Nerve** 1988 Aug;11(8):833–5

Mosaic expression of dystrophin in symptomatic carriers of Duchenne's muscular dystrophy. Arahata K, et al. **N Engl J Med** 1989 Jan 19;320(3):138–42

Dystrophin and Duchenne's muscular dystrophy [letter] Hurko O, et al. **N Engl J Med** 1989 Aug 10;321(6):398–9

Myotonic muscular dystrophy. Alberts MJ, et al. **Neurol Clin** 1989 Feb;7(1):1–8 (28 ref.)

Molecular and clinical correlations of deletions leading to Duchenne and Becker muscular dystrophies. Baumbach LL, et al. **Neurology** 1989 Apr;39(4):465–74

Genetic abnormalities in Duchenne and Becker dystrophies: clinical correlations. Medori R, et al. **Neurology** 1989 Apr; 39(4):461–5

High resolution deletion breakpoint mapping in the DMD gene by whole cosmid hybridization. Blonden LA, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5611–21

Deletion screening of the Duchenne muscular dystrophy locus via multiplex DNA amplification. Chamberlain JS, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11141–56

RFLP for HindIII at the Duchenne muscular dystrophy gene. Prior TW, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2370

Detection of novel genetic markers by mismatch analysis. Roberts RG, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):5961–71

Rapid carrier and prenatal diagnosis of Duchenne and Becker muscular dystrophy. Roberts RG, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):811

A new polymorphism for the dystrophin intragenic probe P20 [DXS269] using BstX1. Robertson ME, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3327

Two human cDNA molecules coding for the Duchenne muscular dystrophy (DMD) locus are highly homologous. Rosenthal A, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5391

DNA amplification of a further exon of Duchenne muscular dystrophy locus increase possibilities for deletion screening [published erratum appears in Nucleic Acids Res 1989 Aug 25;17(16):6774] Speer A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4892

MspI RFLP for Duchenne muscular dystrophy cDNA subclone 9. Wagner M, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3328

RFLP for Duchenne muscular dystrophy cDNA clone 30–2. Walker AP, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9072

Malignant hyperthermia susceptibility in X-linked muscle dystrophies. Heiman-Patterson TD, et al. **Pediatr Neurol** 1986 Nov-Dec;2(6):356–8

Cystinuria with congenital myotonic dystrophy. Kimura S, et al. **Pediatr Neurol** 1987 Jul-Aug;3(4):233–4

The Wellcome lecture, 1988. Muscular dystrophy: a time of hope. Kunkel LM. **Proc R Soc Lond [Biol]** 1989 Jun 22; 237(1286):1–9 (33 ref.)

Carrier detection and prenatal diagnosis of Duchenne/Becker muscular dystrophy (D/BMD) by DNA-analysis. Bakker E, et al. **Prog Clin Biol Res** 1989;306:51–67 (27 ref.)

Clinical and molecular studies in Duchenne muscular dystrophy. Emery AE. **Prog Clin Biol Res** 1989;306:15–28 (40 ref.)

Gene mapping and the muscular dystrophies. Harper PS. **Prog Clin Biol Res** 1989;306:29–49 (41 ref.)

X-linked Duchenne muscular dystrophy. Motor functions and prognosis. Hinge HH, et al. **Scand J Rehabil Med** 1989; 21(1):27–31

Frame-shift deletions in patients with Duchenne and Becker muscular dystrophy. Malhotra SB, et al. **Science** 1988 Nov 4;242(4879):755–9

The molecular genetics of Duchenne muscular dystrophy: the beginning of the end? Witkowski JA. **Trends Genet** 1988 Feb;4(2):27–30

Molecular biology of Duchenne muscular dystrophy. Brown RH Jr, et al. **Trends Neurosci** 1988 Nov;11(11):480–4 (32 ref.)

Tissue-specific isoforms of dystrophin. Walsh FS, et al. **Trends Neurosci** 1989 Jul;12(7):235–8 (31 ref.)

[Molecular cytogenetics of progressive muscular dystrophy] Zhang SZ. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 68(8):473–6 (21 ref.) **(Chi)**

[Detection of the cause of genetic fault in Duchenne's dystrophy] Palotie L, et al. **Duodecim** 1988;104(20):1588–96 (26 ref.) **(Fin)**

[Linkage studies in Emery-Dreifuss muscular dystrophy] Paquis V, et al. **J Genet Hum** 1989 Jun;37(2):127–32 (Eng. Abstr.) **(Fre)**

[The molecular principles of Duchenne and Becker muscular dystrophy and their genetic diagnosis] Speer A, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):117–20 (15 ref.) **(Ger)**

[New aspects of carrier diagnosis and human genetic counseling in Duchenne and Becker muscular dystrophy] Spiegler AW, et al. **Z Arztl Fortbild (Jena)** 1988; 82(22):1139–42 **(Ger)**

[Present-day clinico-genetic framework of Duchenne's muscular dystrophy] Meola G. **Riv Neurol** 1989 Jan-Feb; 59(1):8–14 (52 ref.) (Eng. Abstr.) **(Ita)**

[Genetic epidemiology of Duchenne muscular dystrophy in Japan] Kanamori M. **Hokkaido Igaku Zasshi** 1988 Nov; 63(6):851–8 (Eng. Abstr.) **(Jpn)**

[Two cases (brother and sister) of distal myopathy with rimmed vacuole type—with special reference to histocompatibility antigens (HLA) typing] Furukawa S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1091–2 **(Jpn)**

[Duchenne muscular dystrophy in a girl with chromosomal translocation] Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):401–5 (Eng. Abstr.) **(Por)**

[Mechanisms of DNA repair disorders in human cells. Genome instability in lymphocytes of patients with myopathy related to DNA repair disorders] Chekova VV, et al. **Genetika** 1988 Dec;24(12):2202–7 (Eng. Abstr.) **(Rus)**

[A combination of Duchenne's progressive muscular dystrophy with congenital ichthyosis—a deletion or 2 independent gene mutations at Xp21—Xp22?] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):48–51 (Eng. Abstr.) **(Rus)**

[Pseudohypertrophic proximal progressive muscular dystrophy with a malignant course manifesting itself in adolescence] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):113–20 (Eng. Abstr.) **(Rus)**

[Discriminant analysis of methods for detecting the heterozygote carrier state for the Duchenne muscular dystrophy gene] Khrennikov VIu, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):14–8 (Eng. Abstr.) **(Rus)**

[Clinical polymorphism and genetic heterogeneity in Duchenne's progressive muscular dystrophy in girls (a review)] Zavadenko NN, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):123–6 (47 ref.) **(Rus)**

[Use of DNA analysis in the prevention of progressive muscular dystrophies] Kádasi L, et al. **Bratisl Lek Listy** 1988 Nov;89(11):828–34 (Eng. Abstr.) **(Slo)**

[Progressive muscular dystrophy in a child with a symptomatic carrier mother] Tosao Sánchez A, et al. **An Esp Pediatr** 1988 Aug;29(2):172–4 **(Spa)**

IMMUNOLOGY

Autoantibodies to brain endothelial cells in the sera of patients with human T-lymphotropic virus type I associated myelopathy and other demyelinating disorders. Tsukada N, et al. **J Neurol Sci** 1989 Mar;90(1):33–42

[Immunoglobulin, complement and hemopexin in patients with progressive muscular dystrophy and in their parents] Diotallevi P, et al. **Boll Soc Ital Biol Sper** 1988 Jul; 64(7):639–45 (Eng. Abstr.) **(Ita)**

METABOLISM

Myoplasmic (Ca2+) in Duchenne muscular dystrophy patients. López JR, et al. **Acta Cient Venez** 1987;38(4):503–4

Oxidative stress and muscular dystrophy. Murphy ME, et al. **Chem Biol Interact** 1989;69(2–3):101–73 (349 ref.)

Growth hormone evaluation in Duchenne muscular dystrophy. Merlini L, et al. **Ital J Neurol Sci** 1988 Oct; 9(5):471–5

Is there a maturation defect related to calcium in muscle mitochondria from dystrophic mice and Duchenne and Becker muscular dystrophy patients. Lucas-Héron B, et al. **J Neurol Sci** 1989 May;90(3):299–306

Dystrophin and nebulin in the muscular dystrophies. Patel K, et al. **J Neurol Sci** 1988 Nov;87(2–3):315–26

Environmental influence on altered receptor function in a genetic disease: insulin and glucose affect insulin receptors in myotonic dystrophy. Perurena OH, et al. **J Neurol Sci** 1989 Jan;89(1):15–25

Electrophoretic studies of muscle proteins in Duchenne muscular dystrophy and other neuromuscular disorders—with special reference to the change of dystrophin. Uchino M, et al. **Jpn J Med** 1989 Mar-Apr; 28(2):170–4

Absence of dystrophin in Becker muscular dystrophy [letter] Patel K, et al. **Lancet** 1989 Jan 7;1(8628):47

Proteins of muscle subcellular fractions in Duchenne progressive muscular dystrophy stained with "stains-all" cationic carbocyanine dye and with Coomassie Blue. Niebroj-Dobosz I, et al. **Muscle Nerve** 1989 Apr; 12(4):273–80

Smooth-muscle involvement in Duchenne's muscular dystrophy [letter] Palmieri GM, et al. **N Engl J Med** 1988 Nov 24;319(21):1418–9

Proteolytic fragment or new gene product? [letter] Hoffman EP, et al. **Nature** 1988 Nov 17;336(6196):210

Selenium metabolism and supplementation in patients with muscular dystrophy. Jackson MJ, et al. **Neurology** 1989 May;39(5):655–9

Hypothalamo-pituitary dopaminergic system in patients with myotonic dystrophy. Sakuma H, et al. **Tohoku J Exp Med** 1988 Nov;156(3):291–8

PATHOLOGY

A quantitative study of myonuclear and satellite cell nuclear size in Duchenne's muscular dystrophy, polymyositis and normal human skeletal muscle. Watkins SC, et al. **Anat Rec** 1988 Sep;222(1):6–11

Muscle biopsy correlated with electromyography. Study of 100 cases. Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Jun; 46(2):156–65

Becker and Duchenne muscular dystrophy: a comparative morphological study. Dennett X, et al. **Aust Paediatr J** 1988;24 Suppl 1:15–20

Ultrastructural muscle pathology in infantile neuroaxonal dystrophy. Kimura S, et al. **Brain Dev** 1988;10(5):327–9

The kinetics of cell-substratum detachment mediated by trypsin: a comparison of normal and Duchenne fibroblasts. Simon LV, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):257–62

Muscle hypertrophy in Duchenne muscular dystrophy. A pathological and morphometric study. Cros D, et al. **J Neurol** 1989 Jan;236(1):43–7

Assessment of quadriceps femoris muscle atrophy and hypertrophy in neuromuscular disease in children. Heckmatt JZ, et al. **JCU** 1988 Mar-Apr;16(3):177–81

Tunisian severe childhood muscular dystrophy: a normal spinal cord and anterior horn neurons [letter] Ben Hamida M, et al. **Muscle Nerve** 1989 Feb;12(2):156

Recent advances in Duchenne and Becker muscular dystrophy. Hyser CL, et al. **Neurol Clin** 1988 Aug; 6(3):429–53 (148 ref.)

Nuclear inclusions in innervated cultured muscle fibers from patients with oculopharyngeal muscular dystrophy. Tomé FM, et al. **Neurology** 1989 Jul;39(7):926–32

Brain morphology in Duchenne muscular dystrophy: a Golgi study. Jagadha V, et al. **Pediatr Neurol** 1988 Mar-Apr; 4(2):87–92

Adult onset limb-girdle muscular dystrophy with autosomal dominant inheritance. Somer H, et al. **Prog Clin Biol Res** 1989;306:69–71

[Clinical and pathologic analysis of progressive muscular dystrophy] Han XY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):93–4, 127 (Eng. Abstr.) **(Chi)**

[Histochemical study of distal myopathy] Shen DG. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):113–5, 128 (Eng. Abstr.) **(Chi)**

[Scanning electron microscopy of the normal and pathologic cervix uteri (dystrophy, dysplasia and cancer)] Chomette G, et al. **Arch Anat Cytol Pathol** 1988;36(4):133–42 (Eng. Abstr.) **(Fre)**

[Membrane changes in Duchenne/Becker muscular dystrophy: lectin binding and localization of dystrophin] Voit T, et al. **Monatsschr Kinderheilkd** 1989 Jan;137(1):20–7 (Eng. Abstr.) **(Ger)**

[Characterization of striated muscle fiber types by Ca2+-ATPase and myoglobin immunohistochemistry of the sarcoplasmic reticulum] Krenács T, et al. **Morphol Igazsagugyi Orv Sz** 1989 Apr;29(2):106–18 (31 ref.) (Eng. Abstr.) **(Hun)**

[Pilot study on intramembrane particles using freeze-fracturing in muscular dystrophy patients and their families] Milani-Comparetti M, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):631–8 (Eng. Abstr.) **(Ita)**

[A case of distal muscular dystrophy (Miyoshi), characterized by early involvement in paravertebral muscle and atypical changes in muscle biopsy specimen] Kamakura K, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):665–9 (Eng. Abstr.) **(Jpn)**

[Skeletal muscle MRI findings in autosomal recessive distal muscular dystrophy (Miyoshi)] Ohsuga H, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1304–11 (Eng. Abstr.) **(Jpn)**

[Ultrastructural analysis of the phenomenon of splitting of muscle fibers] Sawicka E. **Patol Pol** 1988 Jul-Sep; 39(3):153–63 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Regional anesthesia in myopathic children. Hody JL. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):209–13

Height and clinical course of Duchenne muscular dystrophy [letter] Coakley JH, et al. **Am J Med Genet** 1989 Apr; 32(4):552–4

A new chart for weight control in Duchenne muscular dystrophy. Griffiths RD, et al. **Arch Dis Child** 1988 Oct; 63(10):1256–8

Follow up study of cardiac involvement in Emery-Dreifuss muscular dystrophy. Yoshioka M, et al. **Arch Dis Child** 1989 May;64(5):713–5

Characterization of a myopathy caused by prostaglandin dysfunction. McLennan IS. **Aust Paediatr J** 1988;24 Suppl 1:21–3

A case of oculopharyngeal muscular dystrophy. Sinclair AJ, et al. **Br J Hosp Med** 1989 Jul;42(1):77–8

Autonomic function and the sinus tachycardia of Duchenne muscular dystrophy. Miller G, et al. **Brain Dev** 1989; 11(4):247–50

Gated radionuclide ventriculography in the evaluation of cardiac function in Duchenne's muscular dystrophy. Stewart CA, et al. **Chest** 1988 Dec;94(6):1245–8

Cough capacity in patients with muscular dystrophy. Szeinberg A, et al. **Chest** 1988 Dec;94(6):1232–5

Responses of diseased muscle to electrical and mechanical intervention. Dubowitz V. **Ciba Found Symp** 1988; 138:240–55 (24 ref.)

Electrophysiologic evaluation of Emery–Dreifuss muscular dystrophy. A single fiber and quantitative EMG study. Cruz Martínez A, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):99–103

Short stature: a common feature in Duchenne muscular dystrophy. Eiholzer U, et al. **Eur J Pediatr** 1988 Aug; 147(6):602–5

Dystrophin and the integrity of the sarcolemma in Duchenne muscular dystrophy. Duncan CJ. **Experientia** 1989 Feb 15; 45(2):175–7 (66 ref.)

Palpitation and abnormal ECG in muscular dystrophy. Hancock EW. **Hosp Pract [Off]** 1989 Jul 15;24(7):21, 24

Progression of scoliosis in Duchenne muscular dystrophy. Smith AD, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):1066–74

Sparing of the perineal muscles in muscular dystrophies [letter] Ohtake T, et al. **J Neurol** 1989 May;236(4):252

Facioscapulohumeral dystrophy: jitter in facial muscles. Tronteij JV, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):950–5

Long-term electrocardiographic studies of patients with Duchenne's muscular dystrophy. Matsuoka S, et al. **Jpn Heart J** 1988 May;29(3):295–300

Reversible limb-girdle muscular dystrophy [letter] Sørensen PS, et al. **Lancet** 1988 Oct 15;2(8616):913

Reversible limb-girdle muscular dystrophy [letter] Steiger MJ, et al. **Lancet** 1988 Dec 10;2(8624):1364–5

Changes in center of gravity in boys with Duchenne muscular dystrophy. Barrett R, et al. **Muscle Nerve** 1988 Nov; 11(11):1157–63

Duchenne muscular dystrophy: a study of wrist and hand function. Wagner MB, et al. **Muscle Nerve** 1989 Mar; 12(3):236–44

Duchenne muscular dystrophy: patterns of clinical progression and effects of supportive therapy. Brooke MH, et al. **Neurology** 1989 Apr;39(4):475–81

Cardiomyopathy of Duchenne muscular dystrophy. D'Orsogna L, et al. **Pediatr Cardiol** 1988;9(4):205–13

Hypercapnia in relation to pulmonary function in Duchenne muscular dystrophy. Canny GJ, et al. **Pediatr Pulmonol** 1989;6(3):169–71

Lymphocyte antigen Leu-19 as a molecular marker of regeneration in human skeletal muscle. Schubert W, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):307–11

Properties of acetylcholine-receptor activation in human Duchenne muscular dystrophy myotubes. Mancinelli E, et al. **Proc R Soc Lond [Biol]** 1989 Jul 22;237(1287):247–57

Carnitine deficiency, mitochondrial dysfunction and the heart. Identical defect of oxidative phosphorylation in muscle mitochondria in cardiomyopathy due to carnitine loss and in Duchenne muscular dystrophy. Scholte HR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):12–7

[Progressive muscular dystrophy: CPK, LDH, ALD (aldolase)—EMG, ECG in patients and their families] Diotallevi P, et al. **Boll Soc Ital Biol Sper** 1988 Jun; 64(6):523–30 (Eng. Abstr.) **(Ita)**

[Secretion and clinical significance of atrial natriuretic peptide in patients with muscular dystrophy] Kimura C, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):290–5 (Eng. Abstr.) **(Jpn)**

[Electrophysiological study of respiratory function in various types of muscular dystrophy] Yanagimoto S, et al. **Rinsho Shinkeigaku** 1988 May;28(5):543–51 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Duchenne muscular dystrophy: neonatal screening and prenatal diagnosis [letter] Plauchu H, et al. **Lancet** 1989 Mar 25;1(8639):669

PSYCHOLOGY

Downward shift in IQ in persons with Duchenne muscular dystrophy compared to those with spinal muscular atrophy. Ogasawara A. **Am J Ment Retard** 1989 Mar;93(5):544–7

Similarity of IQs of siblings with Duchenne progressive muscular dystrophy. Ogasawara A. **Am J Ment Retard** 1989 Mar;93(5):548–50

[Psychological implications of family studies by molecular biology. An example—muscular dystrophy] Hayez JY, et al. **J Genet Hum** 1989 Jan;37(1):29–38 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

[The usefulness of computed tomography in studying Becker's muscular dystrophy. Apropos of a case] Campanile S, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):418–9 **(Ita)**

[A case of Fukuyama type congenital muscular dystrophy with progressive changes in brain CT scanning] Mori K, et al. **No To Hattatsu** 1988;20(5):418–22 (Eng. Abstr.) **(Jpn)**

[Asymmetrical patchy muscle involvement in manifesting carriers of Duchenne muscular dystrophy—computed tomographical and histological study] Kawai M, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):23–9 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

[Sequential changes of the cardiomyopathy in Duchenne muscular dystrophy by 201Tl myocardial SPECT] Ono S, et al. **Radioisotopes** 1989 Mar;38(3):130–5 (Eng. Abstr.) **(Jpn)**

REHABILITATION

The effects of strength training in patients with selected neuromuscular disorders. McCartney N, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):362–8

[Muscular dystrophy and exercise (letter)] Andersen R, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1483–4 **(Dan)**

[Muscular dystrophy and exercise—benefit of harm?] Schmalbruch H. **Ugeskr Laeger** 1989 Jan 16;151(3):179–80 **(Dan)**

SURGERY

Anaesthetic management of a patient with facioscapulohumeral muscular dystrophy. Dresner DL, et al. **Br J Anaesth** 1989 Mar;62(3):331–4

Correction of facial-skeletal deformities in two patients with facio-scapulo-humeral muscular dystrophy. Goldberg MH, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):996–9

[Orthopedic surgery to prolong walking in Duchenne muscular dystrophy] Granata C, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):237–48 (Eng. Abstr.) **(Ita)**

THERAPY

Respiratory muscle training in Duchenne muscular dystrophy. Rodillo E, et al. **Arch Dis Child** 1989 May; 64(5):736–8

Ventilator management in Duchenne muscular dystrophy and postpoliomyelitis syndrome: twelve years' experience. Curran FJ, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):180–5

URINE

Myoglobinuria in hereditary progressive muscular dystrophies. Pöche H, et al. **Clin Physiol Biochem** 1988; 6(6):334–9

MUSCULAR DYSTROPHY, ANIMAL

BLOOD

Studies on serum selenium and tocopherol in white muscle disease of foal. Higuchi T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):52–9

DRUG THERAPY

Effect of mazindol on dystrophic mice and on growth in young rats. Coakley JH, et al. **Comp Biochem Physiol [C]** 1989;92(2):385–9

Corticosteroid therapy in avian muscular dystrophy: evaluation by magnetic resonance relaxation times. Misra LK, et al. **Exp Neurol** 1988 Nov;102(2):217–20

Treatment of muscular dystrophies. Kingston WJ, et al. **Gen Pharmacol** 1989;20(3):263–8 (63 ref.)

ENZYMOLOGY

Comparative investigation on the extractibility of acetylcholinesterase from normal and dystrophic muscles. Katona G, et al. **Acta Physiol Hung** 1989;73(1):15–27

Abnormal response to calmodulin in vitro of dystrophic chicken muscle membrane Ca2+-ATPase activity. Galindo J Jr, et al. **Biochemistry** 1988 Sep 20; 27(19):7519–24

Polyamine biosynthetic decarboxylases in muscles of rats with different experimental myopathies. Lorenzini EC, et al. **J Neurol Sci** 1989 Jan;89(1):27–35

Glutathione peroxidase, glutathione reductase, and thiobarbituric acid-reactive products in muscles of chickens and mice with genetic muscular dystrophy. Omaye ST, et al. **Life Sci** 1974 Jul 1;15(1):137–45

Non-specific esterases and esterproteases in masticatory muscles from the muscular dystrophic mouse. Kirkeby S, et al. **Neurochem Res** 1989 Mar;14(3):211–5

GENETICS

Ultrastructure of the skeletal muscle in the X chromosome-linked dystrophic (mdx) mouse. Comparison with Duchenne muscular dystrophy. Cullen MJ, et al. **Acta Neuropathol (Berl)** 1988;77(1):69–81

Analysis of muscle elements, water, and total lipids from healthy dogs and Labrador retrievers with hereditary muscular dystrophy. Mehta JR, et al. **Am J Vet Res** 1989 May;50(5):640–4

Localization of the mdx mutation within the mouse dystrophin gene. Ryder-Cook AS, et al. **EMBO J** 1988 Oct;7(10):3017–21

Distinct dystrophin mRNA species are expressed in embryonic and adult mouse skeletal muscle. Dickson G, et al. **FEBS Lett** 1988 Dec 19;242(1):47–52

The localization of G6pd, glucose-6-phosphate dehydrogenase, and mdx, muscular dystrophy in the mouse X chromosome. Peters J, et al. **Genet Res** 1988 Dec; 52(3):195–201

Molecular and genetic mapping of the mouse mdx locus. Cavanna JS, et al. **Genomics** 1988 Nov;3(4):337–41

Canine muscular dystrophy: confirmation of X-linked inheritance. Cooper BJ, et al. **J Hered** 1988 Nov–Dec; 79(6):405–8

Canine X-linked muscular dystrophy. An animal model of Duchenne muscular dystrophy: clinical studies. Valentine BA, et al. **J Neurol Sci** 1988 Dec;88(1–3):69–81

Muscular dystrophy in a litter of golden retriever dogs. Kornegay JN, et al. **Muscle Nerve** 1988 Oct;11(10):1056–64

Mdx muscle grafts retain the mdx phenotype in normal hosts. Morgan JE, et al. **Muscle Nerve** 1989 May;12(5):401–9

Duchenne muscular dystrophy gene product is not identical in muscle and brain. Nudel U, et al. **Nature** 1989 Jan 5; 337(6202):76–8

Conversion of mdx myofibres from dystrophin-negative to -positive by injection of normal myoblasts. Partridge TA, et al. **Nature** 1989 Jan 12;337(6203):176–9

Recovery of induced mutations for X chromosome-linked muscular dystrophy in mice. Chapman VM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1292–6

The molecular basis of muscular dystrophy in the mdx mouse: a point mutation. Sicinski P, et al. **Science** 1989 Jun 30; 244(4912):1578–80

X-linked muscular dystrophy in the dog [letter] Cooper BJ, et al. **Trends Genet** 1988 Feb;4(2):30

IMMUNOLOGY

Monocyte function in chickens with hereditary muscular dystrophy. Chu Y, et al. **Poult Sci** 1989 Feb;68(2):226–32

METABOLISM

Increased oxidation of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Basic Life Sci** 1988; 49:611–4

Oxidation state of tissue thiol groups and content of protein carbonyl groups in chickens with inherited muscular dystrophy. Murphy ME, et al. **Biochem J** 1989 Jun 1; 260(2):359–64

Altered contents of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):234–45

Oxidative stress and muscular dystrophy. Murphy ME, et al. **Chem Biol Interact** 1989;69(2–3):101–73 (349 ref.)

Diversity of fast myosin heavy chain expression during development of gastrocnemius, bicep brachii, and posterior latissimus dorsi muscles in normal and dystrophic chickens. Bandman E, et al. **Dev Biol** 1988 Nov;130(1):220–31

Satellite cells from dystrophic (mdx) mouse muscle are stimulated by fibroblast growth factor in vitro. DiMario J, et al. **Differentiation** 1988 Nov;39(1):42–9

Increased susceptibility to lipid peroxidation in skeletal muscles of dystrophic hamsters. Salminen A, et al. **Experientia** 1989 Aug 15;45(8):747–9

Calpain and calpastatin levels in dystrophic hamster skeletal muscles. Johnson P, et al. **Int J Biochem** 1988; 20(11):1227–30

Intracellular calcium in canine muscle biopsies. Valentine BA, et al. **J Comp Pathol** 1989 Apr;100(3):223–30

In vivo phosphorus nuclear magnetic resonance (31P-NMR) study of dystrophic hamster muscle. Argov Z, et al. **J Neurol Sci** 1988 Sep;86(2–3):185–93

Fatty acid composition of lipids in tongue and hindleg muscles of muscular dystrophic mice. Futo T, et al. **J Neurol Sci** 1989 Jul;91(3):337–44

Is there a maturation defect related to calcium in muscle mitochondria from dystrophic mice and Duchenne and Becker muscular dystrophy patients. Lucas-Héron B, et al. **J Neurol Sci** 1989 May;90(3):299–306

Distribution of dystrophin, nebulin and Ricinus communis I (RCA-I)-binding glycoprotein in tissues of normal and mdx mice. Voit T, et al. **J Neurol Sci** 1989 Feb; 89(2–3):199–211

In vivo T1 characterization of genetically induced muscle atrophy. Misra LK, et al. **Magn Reson Imaging** 1989 May–Jun;7(3):277–82

Increased resistance of the collagen in avian dystrophic muscle to collagenolytic attack: evidence for increased crosslinking. Feit H, et al. **Muscle Nerve** 1989 Jun; 12(6):476–85

Serum CK, calcium, magnesium, and oxidative phosphorylation in mdx mouse muscular dystrophy. Glesby MJ, et al. **Muscle Nerve** 1988 Aug;11(8):852–6

Increased protein degradation results from elevated free calcium levels found in muscle from mdx mice. Turner PR, et al. **Nature** 1988 Oct 20;335(6192):735–8

Effect of nerve section on beta-endorphin and alpha-melanotropin immunoreactivity in motor nerves of normal and dystrophic mice. Hughes S, et al. **Neurosci Lett** 1988 Sep 23;92(1):1–7

Na+-Ca2+ exchange in limb muscles of dystrophic (C57

BL/6J dy2J/dy2J) mice. Noireaud J, et al. **Q J Exp Physiol** 1989 Jan;74(1):75–7

Blood and liver biochemical indices of the dystrophic chicken model. Brazeau GA, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):439–50

Intracellular electrolytes and water analysis in dystrophic canine muscles. Mehta JR, et al. **Res Vet Sci** 1989 Jul; 47(1):17–22

High molecular weight kininogen, the extracellular inhibitor of thiol proteases, is deficient in hamsters with muscular dystrophy. Colman RW, et al. **Thromb Res** 1989 Apr 15; 54(2):115–23

PATHOLOGY

Skeletal muscle pathology in ovine congenital progressive muscular dystrophy. 1. Histopathology and histochemistry. Richards RB, et al. **Acta Neuropathol (Berl)** 1988; 77(2):161–7

Skeletal muscle pathology in ovine congenital progressive muscular dystrophy. 2. Myofiber morphometry. Richards RB, et al. **Acta Neuropathol (Berl)** 1988;77(1):95–99

Condylar cartilage in the muscular dystrophic mouse. Ghafari J, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):107–14

Macrophages and mast cells in dystrophic masseter muscle: a light and electron microscopic study. Kirkeby S, et al. **Br J Exp Pathol** 1988 Aug;69(4):597–603

Muscular dystrophy–like disease in a thoroughbred foal. Shirakawa T, et al. **J Comp Pathol** 1989 Apr;100(3):287–94

Small–caliber skeletal muscle fibers do not suffer necrosis in mdx mouse dystrophy. Karpati G, et al. **Muscle Nerve** 1988 Aug;11(8):795–803

Accumulation of collagen and altered fiber–type ratios as indicators of abnormal muscle gene expression in the mdx dystrophic mouse. Marshall PA, et al. **Muscle Nerve** 1989 Jul;12(7):528–37

[Nuclear magnetic resonance studies of skeletal muscle] Kuwabara T, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1298–303 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Muscular dystrophy in the chicken [letter] Feit H. **Arch Neurol** 1989 May;46(5):484

Characterization of a myopathy caused by prostaglandin dysfunction. McLennan IS. **Aust Paediatr J** 1988;24 Suppl 1:21–3

Effect of hind–limb suspension on young and adult skeletal muscle. II. Dystrophic mice. Fowler WM Jr, et al. **Exp Neurol** 1989 Jan;103(1):77–82

Effect of neonatal denervation–reinnervation on the functional capacity of a 129ReJ dy/dy murine dystrophic muscle. Hermanson JW, et al. **Exp Neurol** 1988 Nov; 102(2):210–6

Responsiveness of normal and dystrophic avian muscle to acetylcholine, carbamylcholine and d–tubocurarine. Howlett SE, et al. **Gen Pharmacol** 1988;19(5):697–701

Response of dystrophic muscles to reduced load. Dangain J, et al. **J Neurol Sci** 1988 Dec;88(1–3):277–85

Early immobilization of hindleg muscles of dystrophic mice: short–term and long–term effects. Wirtz P, et al. **J Neurol Sci** 1988 Jul;85(3):293–307

The role of collagen crosslinking in the increased stiffness of avian dystrophic muscle. Feit H, et al. **Muscle Nerve** 1989 Jun;12(6):486–92

Comparison of force and stiffness in normal and dystrophic mouse muscles. Gordon T, et al. **Muscle Nerve** 1988 Aug; 11(8):819–27

The mdx mouse skeletal muscle myopathy: II. Contractile properties. Coulton GR, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):299–314

Contractile activation and the effects of 2,3–butanedione monoxime (BDM) in skinned cardiac preparations from normal and dystrophic mice (129/ReJ). West JM, et al. **Pflugers Arch** 1989 Mar;413(5):546–52

Fibroblast growth factor in the extracellular matrix of dystrophic (mdx) mouse muscle. DiMario J, et al. **Science** 1989 May 12;244(4905):688–90

THERAPY

Beneficial effects of anti–growth hormone antiserum in avian muscular dystrophy. Kurtenbach E, et al. **FASEB J** 1989 Aug;3(10):2189–93

Nondystrophic myoblast transplantation into dystrophic muscle [letter] Karpati G. **Muscle Nerve** 1989 Apr; 12(4):337–9

MUSCULOCUTANEOUS NERVE

[Musculo–cutaneous nerve syndrome in the foot. Apropos of 10 cases] Enjalbert M, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):889–93 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

An anatomic study of the musculocutaneous nerve and its relationship to the coracoid process. Flatow EL, et al. **Clin Orthop** 1989 Jul;(244):166–71

[Fascicles of the musculocutaneous nerve during postnatal life of man] Stelmasiak M. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:217–26 (Eng. Abstr.) **(Pol)**

[Correlations of various elements of the internal structure of the musculocutaneous nerve and the age, height and body weight of the persons studied] Zaluska S, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:233–40 (Eng. Abstr.) **(Pol)**

CYTOLOGY

[Changes in muscular reactivity in long–term afferent stimulation] Klukowska–Siczek L. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:319–24 (Eng. Abstr.) **(Pol)**

[Myelin fibers of the musculocutaneous nerve during the postnatal life of man] Zaluska S, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:227–32 (Eng. Abstr.) **(Pol)**

MUSCULOSKELETAL SYSTEM

Musculoskeletal pain syndromes. **Prim Care** 1988 Dec; 15(4):689–847

Approach to musculoskeletal chest wall pain. Fam AG. **Prim Care** 1988 Dec;15(4):767–82 (16 ref.)

ABNORMALITIES

Congenital musculoskeletal malformations in neonates. Bahadur RA, et al. **J Indian Med Assoc** 1989 Feb;87(2):27–9

GROWTH & DEVELOPMENT

[Developmental anatomy of the locomotor system and its clinical application] Doskočil M, et al. **Cas Lek Cesk** 1988 Oct 28;127(44):1356–61 (Eng. Abstr.) **(Cze)**

IMMUNOLOGY

An overview of neuroimmunomodulation and a possible correlation with musculoskeletal system function. Fidelibus JC. **J Manipulative Physiol Ther** 1989 Aug;12(4):289–92 (26 ref.)

INJURIES

Epidemiological studies of musculoskeletal racing and training injuries in Thoroughbred horses, Minnesota, U.S.A. Robinson RA, et al. **Acta Vet Scand Suppl** 1988; 84:340–3

Musculoskeletal injuries demand new treatment model. Tramposh A. **Occup Health Saf** 1989 Apr;58(4):20–4, 38

PATHOLOGY

Magnetic resonance imaging of the musculoskeletal system. An overview. Bassett LW, et al. **Clin Orthop** 1989 Jul; (244):17–28 (75 ref.)

Magnetic resonance imaging of the musculoskeletal system in children. Hall TR, et al. **Clin Orthop** 1989 Jul; (244):119–30 (29 ref.)

Musculoskeletal debility and multiorgan dysfunction. Schreiner RD, et al. **J Tenn Med Assoc** 1988 Nov; 81(11):697–8

[Magnetic resonance tomography of the musculoskeletal system] Nägele M, et al. **Rontgenpraxis** 1988 Nov; 41(11):377–83 (14 ref.) **(Ger)**

PHYSIOLOGY

A musculoskeletal approach to the preparticipation physical examination. Preventing injury and improving performance. Kibler WB, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):525–31

Catching up the orthopods [editorial] Evans G, et al. **BMJ** 1988 Oct 15;297(6654):936

Effects of musculoskeletal work load and muscle strength on strain at work in women and men aged 44 to 58 years. Nygård CH, et al. **Eur J Appl Physiol** 1988;58(1–2):13–9

[Indicators of physical fitness of the musculoskeletal system] Fröhner G, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):975–6 **(Ger)**

SURGERY

[Problems in introducing microsurgical technology into surgery of the locomotor system] Tkachenko SS, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):6–10 (Eng. Abstr.) **(Rus)**

MUSEUMS

South African gem of medical history. Rhodes P. **BMJ** 1988 Dec 24–31;297(6664):1649–50

Ophthalmic heritage at the Foundation of the American Academy of Ophthalmology. Cronenwett SE. **Caduceus** 1989 Spring;5(1):52–67

On the poor legibility of the captions in musea. Henkes HE, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):277–82

Oxidative damage and the preservation of organic artefacts. Daniels V. **Free Radic Res Commun** 1989;5(4–5):213–20

Roles for a small museum. The case of the Country Doctor Museum. Crellin PI. **N C Med J** 1988 Nov;49(11):606–8

Current status of the Caribbean Primate Research Center Museum. Turnquist JE, et al. **P R Health Sci J** 1989 Apr; 8(1):187–9

[The Museum of Veterinary Medicine in Ciechanowiec (Poland)] TropiŁo VJ, et al. **DTW** 1988 Nov–Dec; 95(10):464–5 (Eng. Abstr.) **(Ger)**

[The role of museums and exhibits in teaching the history of medicine] Troianskiĭ GN. **Sov Zdravookhr** 1989;(5):66–7 **(Rus)**

HISTORY

The Weaver Reading Room and Dental Museum, University of Liverpool. Cooper J. **Br Dent J** 1988 Sep 10;165(5):193

The history of the health sciences at the National Museum of American History. Davis AB. **Caduceus** 1988 Summer; 4(2):58–72

The U.S. Army Medical Museum. McMasters TO. **Caduceus** 1989 Summer;5(2):85–91

The Bakken: a library and museum of electricity in life. Senior JE. **Caduceus** 1988 Fall–Winter;4(3–4):74–89

An early twentieth–century skeleton collection. Gindhart PS. **J Forensic Sci** 1989 Jul;34(4):887–93

AFIP: pathology laboratory to the world [news] Merz B. **JAMA** 1989 May 19;261(19):2807, 2809–10

Dr. Leidy's soap lady: imaging the past. Conlogue G, et al. **Radiol Technol** 1989 May–Jun;60(5):411–5

Philadelphia seen: two centuries of ophthalmology. Worden G. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):51–66

[Gustav Adolf Wehrli: a passionate collector. On the 100th anniversary of the founder of the Museum of Medical History in Zürich] Mörgeli C. **Schweiz Rundsch Med Prax** 1988 Dec 20;77(51):1400–6 (Eng. Abstr.) **(Ger)**

[The residence of the German Public Health Museum before 1930] Hrdlička P. **Z Gesamte Hyg** 1988 Dec;34(12):701–4 (Eng. Abstr.) **(Ger)**

[History of the Halle Ars Medica Judaica. I. Dedication of the Gröbzig Synagogue Museum] Kaiser W, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):583–9 (Eng. Abstr.) **(Ger)**

[The medical center of Dr. A.P. Chekhov in Kriukov] Belov AV. **Klin Med (Mosk)** 1989 Apr;67(4):155–7 **(Rus)**

[The museum and its role in the training of physicians] Losev GS, et al. **Sov Zdravookhr** 1988;(11):45–8 **(Rus)**

[A visit by I.I. Grekov to the grave and home of N.I. Pirogov in Vishnia] Klantsa PA, et al. **Vestn Khir** 1989 Feb; 142(2):135–9 **(Rus)**

MUSHROOM POISONING

see related

MYCOTOXINS

Amanita poisoning: treatment and role of liver transplantation [letter] Duffy TJ, et al. **Am J Med** 1989 Aug;87(2):244

[Disulfiram–like reaction caused by mushroom ingestion (letter)] Oteo Revuelta JA, et al. **Rev Clin Esp** 1989 Apr; 184(7):394–5 **(Spa)**

CLASSIFICATION

[Classification of poisonous mushrooms according to their biochemical effects in mice] Yamaura Y. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):669–78 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Extrinsic allergic alveolitis caused by spores of the oyster mushroom Pleurotus ostreatus. Cox A, et al. **Eur Respir J** 1988 May;1(5):466–8

[Fulminans hepatitis caused by Amanita phalloides poisoning. An indication for hepatic allotransplantation (letter)] Boudjema K, et al. **Presse Med** 1989 May 6;18(18):937 **(Fre)**

DIAGNOSIS

Food–borne botulism: an uncommon disorder. Bernasconi C, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):515–9

Muscarinic poisoning from medications and mushrooms. A puzzling symptom complex. Stallard D, et al. **Postgrad Med** 1989 Jan;85(1):341–5

ETIOLOGY

Mushroom toxicity. Stallard DJ Jr. **Mo Med** 1988 Oct; 85(10):674–7

Mushroom poisoning: identification, diagnosis, and treatment. Hall AH, et al. **Pediatr Rev** 1987 Apr;8(10):291–8 (11 ref.)

[A report of 25 cases of deteriorated tremella poisoning] Si YJ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Sep; 22(5):293–4 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Rubratoxin B mycotoxicosis in the Syrian hamster: ultrastructural alterations. Engelhardt JA, et al. **Exp Mol Pathol** 1989 Apr;50(2):193–204

Amanita phalloides mushroom poisoning: a cluster of four fatalities. McClain JL, et al. **J Forensic Sci** 1989 Jan; 34(1):83–7

PHYSIOPATHOLOGY

A private inquiry into the circumstances surrounding the 1972 death of John Gomilla, Jr., who died after allegedly consuming ten hallucinogenic mushrooms while residing in Hawaii. Allen JW. **J Psychoactive Drugs** 1988 Oct–Dec; 20(4):451–4

PREVENTION & CONTROL

Amanita poisoning [letter] **Am J Med** 1989 Jun;86(6 Pt 1):641

THERAPY

Amanita poisoning: treatment and the role of liver transplantation. Klein AS, et al. **Am J Med** 1989 Feb; 86(2):187–93 (32 ref.)

Hepatotoxic mushroom poisoning: diagnosis and management. Piqueras J. **Mycopathologia** 1989 Feb; 105(2):99–110 (43 ref.)

[Mushroom poisoning: its sequelae and current therapy] Prokopowicz D. **Wiad Lek** 1988 Aug 15;41(16):1094–100 (26 ref.) (Eng. Abstr.) **(Pol)**

MUSHROOMS see **BASIDIOMYCETES**

MUSIC

Dominant functions of right versus the left hemisphere. Mostafa M, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):479–84

Portrait of the artist as adolescent prodigy: Mozart and the Magic Flute. Gedo JE. **Adolesc Psychiatry** 1988;15:288–99

The creative moment: improvising in jazz and psychotherapy. Phillips RE. **Adolesc Psychiatry** 1988;15:182–93

Simple music/audio system for patients having MR imaging [letter] Miyamoto AT, et al. **AJR** 1988 Nov;151(5):1060

Allergic rhinitis jeopardizing the careers of professional singers, justifies intense therapy. McGrath KG, et al. **Allergy Proc** 1988 Nov–Dec;9(6):665–7

Incidence of upper extremity discomfort among piano students. Revak JM. **Am J Occup Ther** 1989 Mar; 43(3):149–54

How is a trumpet known? The "basic object level" concept and perception of musical instruments. Palmer CF, et al. **Am J Psychol** 1989 Spring;102(1):17–37

On the unique impact of Richard Strauss's Elektra. Chessick RD. **Am J Psychother** 1988 Oct;42(4):585–96

Genetic and environmental determinants of musical ability in twins. Coon H, et al. **Behav Genet** 1989 Mar;19(2):183–93

Selective attention in the presence of music: an event-related potentials (ERP) study. Dalbokova D, et al. **Biol Psychol** 1988 Jun;26(1–3):307–19

Overuse injuries in musicians [letter] **BMJ** 1989 Jun 3; 298(6686):1517

Overuse injuries in musicians. Bird H. **BMJ** 1989 Apr 29; 298(6681):1129–30 (21 ref.)

Music and disability [editorial] Gloag D. **BMJ** 1989 Feb 18; 298(6671):402–3

Overuse injuries in musicians [letter] Parry CB. **BMJ** 1989 Jul 1;299(6690):55

An unusual dental problem associated with wind instrument playing. Bow P. **Br Dent J** 1988 Nov 5;165(9):332–3

Myofascial pain dysfunction and viola playing. Bryant GW. **Br Dent J** 1989 May 6;166(9):335–6

Mode of processing and hemisphere differences in the judgement of musical stimuli. Burton A, et al. **Br J Psychol** 1989 May;80 (Pt 2):169–80

Regional cerebral blood flow for singers and nonsingers while speaking, singing, and humming a rote passage. Formby C, et al. **Brain Lang** 1989 May;36(4):690–8

Charles Bonnet syndrome [letter] Signer SF. **Can J Psychiatry** 1988 Aug;33(6):570, 573

Dichotic listening performance, cognitive ability, and cerebral organization. Bryden MP. **Can J Psychol** 1986 Dec;40(4):445–56

Infants' perception of musical relations in short transposed tone sequences. Cohen AJ, et al. **Can J Psychol** 1987 Mar; 41(1):33–47

Medicine and music [editorial] Basnayake V. **Ceylon Med J** 1988 Jun;33(2):35–7

Processing of timbre and rhythm in musicians and non–musicians. Prior M, et al. **Cortex** 1988 Sep;24(3):451–6

Effect of musical modelling on late auditory evoked potentials. Paulus W. **Eur Arch Psychiatry Neurol Sci** 1988; 237(5):307–11

Dentofacial morphology in children playing musical wind instruments: a longitudinal study. Brattström V, et al. **Eur J Orthod** 1989 May;11(2):179–85

Aerodynamic investigation of sources of vibrato. Rothenberg M, et al. **Folia Phoniatr (Basel)** 1988;40(5):244–60

Effects of music on patient anxiety in coronary care units [letter] Philip YT. **Heart Lung** 1989 May;18(3):322

The great symphony orchestra—a relatively good place to grow old. Smith DW. **Int J Aging Hum Dev** 1988; 27(4):233–47

Music absorption and hypnotizability. Snodgrass M, et al. **Int J Clin Exp Hypn** 1989 Jan;37(1):41–54

Calculation of a "narrowed" autocorrelation function. Brown JC, et al. **J Acoust Soc Am** 1989 Apr;85(4):1595–601

Vocal tract shapes of a flautist in performance. Thomas L, et al. **J Acoust Soc Am** 1988 Oct;84(4):1549–50

Musical hallucinations. The sounds of silence? Wengel SP, et al. **J Am Geriatr Soc** 1989 Feb;37(2):163–6

Visual conditions of symphony musicians. Harris P. **J Am Optom Assoc** 1988 Dec;59(12):952–9

Measuring musical responsiveness in autistic children: a comparative analysis of improvised musical tone sequences of autistic, normal, and mentally retarded individuals. Thaut MH. **J Autism Dev Disord** 1988 Dec;18(4):561–71

Postural kinematics of trumpet playing. Bejjani FJ, et al. **J Biomech** 1989;22(5):439–46

Mapping musical thought to musical performance. Palmer C. **J Exp Psychol [Hum Percept]** 1989 May;15(2):331–46

Effects of metric and harmonic rhythm on the detection of pitch alterations in melodic sequences. Smith KC, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):457–71

Precision and accuracy in the reproduction of simple tone sequences. Vos PG, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):179–87

Musical imagery: generation of tones and chords. Hubbard TL, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):656–67

Rhythmic–movement facilitation of learning in working–class Afro–American children. Boykin AW, et al. **J Genet Psychol** 1988 Sep;149(3):335–47

The E–flat hand. McGregor IA, et al. **J Hand Surg [Am]** 1988 Sep;13(5):692–3

Responses to music and movement in the development of children with Down's syndrome. Stratford B, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):13–24

Musical stimulation in the developmentally delayed child: a pilot study. Jones NL, et al. **J Natl Med Assoc** 1987 Aug; 79(8):825–9

Musical hallucinations following removal of a right frontal meningioma [letter] Keshavan MS, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1235–6

Literature and music: an educational strategy in psychiatric mental health nursing. Peterson LC, et al. **J Nurs Educ** 1988 Oct;27(8):374–7

Health and occupational correlates of perceived occupational stress in symphony orchestra musicians. Middlestadt SE, et al. **J Occup Med** 1988 Sep;30(9):687–92

The treatment of overuse syndrome in musicians. Results in 175 patients. Fry HJ. **J R Soc Med** 1988 Oct;81(10):572–5

Spectral correlates of glottal voice source waveform characteristics. Gauffin J, et al. **J Speech Hear Res** 1989 Sep;32(3):556–65

Adolescents and their music. Insights into the health of adolescents. Brown EF, et al. **JAMA** 1989 Sep 22–29; 262(12):1659–63 (36 ref.)

A piece of my mind. Message from Mahler. Gehlbach D. **JAMA** 1989 Jan 6;261(1):104

Cholera and contagion [letter] Puntis JW. **Lancet** 1989 Apr 29;1(8644):969

Lung function and health attitudes and habits in professional wind musicians and vocalists. Schorr–Lesnick B. **Mt Sinai J Med (NY)** 1988 Sep;55(4):346–52

Musicians' maladies [letter; comment] **N Engl J Med** 1989 Jul 6;321(1):51–3. **Comment on:** N Engl J Med 1989 Jan 26;320(4);221–7

Medicine in music [letter] Graham JR. **N Engl J Med** 1989 Mar 23;320(12):812

Performing arts medicine [editorial] Lederman RJ. **N Engl J Med** 1989 Jan 26;320(4):246–8

Medical problems of musicians [see comments] Lockwood AH. **N Engl J Med** 1989 Jan 26;320(4):221–7 (71 ref.). **Comment in:** N Engl J Med 1989 Jul 6;321(1):51–3

The labial shield prosthesis. Herman GL. **N Y State Dent J** 1988 Oct;54(8):23

Hemispheric specialization for speech and non–verbal stimuli in Chinese and French Canadian subjects. Cohen H, et al. **Neuropsychologia** 1989;27(2):241–5

Cerebral lateralization of music perception in the dual task paradigm: unfamiliar melody recognition in sinistrals. LaBarba RC, et al. **Neuropsychologia** 1989;27(2):247–50

American Academy of Pediatrics Committee on Communications: Impact of rock lyrics and music videos on children and youth. **Pediatrics** 1989 Feb;83(2):314–5

Relation between musical aptitude and intelligence among mentally retarded, advantaged, and disadvantaged subjects. Braswell C, et al. **Percept Mot Skills** 1988 Oct;67(2):359–64

Music preferences and perception of loudness. Cullari S, et al. **Percept Mot Skills** 1989 Feb;68(1):186

Handedness affects emotional valence asymmetry. McFarland RA, et al. **Percept Mot Skills** 1989 Apr; 68(2):435–41

Teaching specific motor skills for conducting to young music students. Neiman Z. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):847–58

Association of preference for modality to learning of rhythm patterns in music. Persellin DC, et al. **Percept Mot Skills** 1988 Dec;67(3):825–6

Recognition of emotions in music by children and adults. Terwogt MM, et al. **Percept Mot Skills** 1988 Dec; 67(3):697–8

Repair of the orbicularis oris in horn players [letter] Fry HJ. **Plast Reconstr Surg** 1988 Dec;82(6):1103

Repair of ruptured orbicularis oris in trumpet players [letter] Sullivan WG. **Plast Reconstr Surg** 1989 Mar;83(3):578

Intelligence and musical improvisation. Hermelin B, et al. **Psychol Med** 1989 May;19(2):447–57

Influence of rock videos on attitudes of violence against women. Peterson DL, et al. **Psychol Rep** 1989 Feb; 64(1):319–22

Second Workshop on Rhythm Perception and Production. Marburg, September 29–October 2, 1987. Selection of papers. **Psychol Res** 1989;51(1):1–42

The perception of expressive timing in music. Clarke EF. **Psychol Res** 1989;51(1):2–9

Dynamic attending and responses to time. Jones MR, et al. **Psychol Rev** 1989 Jul;96(3):459–91

AIDS song contest in Guinea–Bissau [letter] Ribeiro M. **World Health Forum** 1989;10(1):107–8

[Use of subconscious and conscious suggestions combined with music as a relaxation technic] Chaloult L, et al. **Can J Psychiatry** 1988 Nov;33(8):734–40 (Eng. Abstr.) **(Fre)**

[The vocal body of the lyric singer] Castelli C. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):383–6 (Eng. Abstr.) **(Fre)**

[Diphonic singing] de la Bretèque BA. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):387–8 (Eng. Abstr.) **(Fre)**

[The timbres and technics of the voice in the rural tradition of Southern France] de la Bretèque BA. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):389–91 (Eng. Abstr.) **(Fre)**

[The brain and music. From Theophile Alajouanine to Norman Geschwind] Assal G. **Rev Med Suisse Romande** 1989 Apr;109(4):259–65 **(Fre)**

[The assessment of quantitative speaking voice production. The speaking voice field in the singing voice field] Hacki T. **Folia Phoniatr (Basel)** 1988;40(4):190–6 (Eng. Abstr.) **(Ger)**

[Resonance spectrum of the singing voice relative to supra– and sub–glottal pressure changes; consequences for the theory of voice production] Schutte HK, et al. **Folia Phoniatr (Basel)** 1988;40(2):65–73 (Eng. Abstr.) **(Ger)**

[Listening to music in hearing loss with and without a hearing aid] Feldmann H, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):489–97 (Eng. Abstr.) **(Ger)**

[The voice of the singer in the phonetogram] Klingholz F. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):62–6 (Eng. Abstr.) **(Ger)**

[Pop music, puberty and narcissism] Hoffmann J. **Psyche (Stuttg)** 1988 Nov;42(11):961–80 (Eng. Abstr.) **(Ger)**

[The "euphoria" effect of music videos—a study of the reception of music with visual images] Wallbott HG. **Z Exp Angew Psychol** 1989;36(1):138–61 (Eng. Abstr.) **(Ger)**

[Laryngeal movements during wind instruments play] Mukai S. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):260–70 (Eng. Abstr.) **(Jpn)**

[Recent trends in the psychology of music perception: the perceptual processes of melody and musical pitch] Tsuzaki M. **Shinrigaku Kenkyu** 1988 Aug;59(3):176–90 (79 ref.) (Eng. Abstr.) **(Jpn)**

[2 cases of limited cutaneo–muscular atrophy of occupational origin] Kieć–Swierczyńska M, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):290–2 (Eng. Abstr.) **(Pol)**

[Music in medicine: a double participation (editorial)] Décourt LV. **Rev Paul Med** 1988 Mar–Apr;106(2):59–61 **(Por)**

[Effect of physical factors on the alteration of the intensity level of the human voice (singers)] Loshchilov VN, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):477–81 **(Rus)**

[Subjective evaluation of the volume of musical sounds] Savel'ev ON, et al. **Gig Sanit** 1989 Apr;(4):92–3 **(Rus)**

[Significance of reflexogenic areas of the larynx in the treatment of professional singers] Charkhalashvili GE. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):59 **(Rus)**

HISTORY

Beethoven's creative illness. Bower H. **Aust N Z J Psychiatry** 1989 Mar;23(1):111–6

Identification of the cranium of W.A. Mozart. Puech PF, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):101–10

Craniofacial dysmorphism in Mozart's skull. Puech B, et al. **J Forensic Sci** 1989 Mar;34(2):487–90

The effects of deafness on musical composition. Harrison P. **J R Soc Med** 1988 Oct;81(10):598–601

...aber Sonntag ist immer ein Feiertag [Sunday is always a feast–day]: Alexander Borodin, MD, 1833–1887. O'Neill D. **J R Soc Med** 1988 Oct;81(10):591–3

Was Paganini poisoned with mercury? O'Shea JG. **J R Soc Med** 1988 Oct;81(10):594–7

A piece of my mind. Message from Mahler. Gehlbach D. **JAMA** 1989 Jan 6;261(1):104

Dementia and trauma. Shafer N. **Leg Med** 1987;:165–78

Beethoven's deafness: a new theory. Davies PJ. **Med J Aust** 1988 Dec 5–19;149(11–12):644–9

The "case" of George Frideric Handel. Frosch WA. **N Engl J Med** 1989 Sep 14;321(11):765–9

This and that: sound and silence. Max B. **Trends Pharmacol Sci** 1989 Jun;10(6):220–3

[The Marfan hands of Niccolò Paganini] Mantero R. **Ann Chir Main** 1988;7(4):335–40 **(Fre)**

[The life and death of Josef Haydn] Gojković A. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):1113–8 **(Scc)**

[Ludwig van Beethoven in the mirror of medicine] Teplý I. **Bratisl Lek Listy** 1988 Nov;89(11):854–60 (Eng. Abstr.) **(Slo)**

MUSIC THERAPY

The effect of music on anxiety. A research study. Kaempf G, et al. **AORN J** 1989 Jul;50(1):112–8

Affect modification through evaluative conditioning with music. Eifert GH, et al. **Behav Res Ther** 1988;26(4):321–30

Medicine and music [editorial] Basnayake V. **Ceylon Med J** 1988 Jun;33(2):35–7

Effects of music in patients who had chronic cancer pain. Zimmerman L, et al. **West J Nurs Res** 1989 Jun; 11(3):298–309

[Reduction of preoperative anxiety. A study comparing music, Thalamonal and no premedication] Daub D, et al. **Anaesthesist** 1988 Sep;37(9):594–7 (Eng. Abstr.) **(Ger)**

[Music in medicine: a double participation (editorial)] Décourt LV. **Rev Paul Med** 1988 Mar–Apr;106(2):59–61 **(Por)**

HISTORY

[Music therapy in the treatment of commander-in-chief Stefan Czarniecki's illness in 1659] Jonécko A. **Wiad Lek** 1988 Oct 1;41(19):1330–5 (Eng. Abstr.) **(Pol)**

[Music and medicine] Gojković A. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):1103–12 **(Scc)**

INSTRUMENTATION

Simpler music/audio system for patients having MR imaging [letter] Axel L. **AJR** 1989 Mar;152(3):653

METHODS

Music therapy in support of cancer patients. Porchet-Munro S. **Recent Results Cancer Res** 1988;108:289–94

MUSKRATS see **CRICETIDAE**

MUSLIMS see **ISLAM**

MUSSELS

Toxic mussels and okadaic acid induce rapid hypersecretion in the rat small intestine. Edebo L, et al. **APMIS** 1988 Nov; 96(11):1029–35

Intoxication following mussel ingestion. **Can Dis Wkly Rep** 1988 Jan 16;14(2):7 **(Eng, Fre)**

Transmission of hemic neoplasia in the bay mussel, Mytilus edulis, using whole cells and cell homogenate. Elston RA, et al. **Dev Comp Immunol** 1988 Fall;12(4):719–27

Impaired defense mechanisms in bay mussels, Mytilus edulis, with hemic neoplasia. Kent ML, et al. **J Invertebr Pathol** 1989 May;53(3):378–86

Toxicology of mussels contaminated by neuroexcitant domoic acid [letter] Glavin G, et al. **Lancet** 1989 Mar 4; 1(8636):506–7

Kynurenic acid protects against neurotoxicity and lethality of toxic extracts from contaminated Atlantic coast mussels. Pinsky C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):595–8

ANALYSIS

Animal carotenoids. 32. Carotenoids of Mytilus edulis (edible mussel). Hertzberg S, et al. **Acta Chem Scand [B]** 1988 Sep; 42(8):495–503

Seasonal, geographic and individual variation of okadaic acid content in cultivated mussels in Sweden. Edebo L, et al. **APMIS** 1988 Nov;96(11):1036–42

Multivariate data analysis of sea waters and mussels in relation to pollution sources of trace elements. Favretto L, et al. **Z Lebensm Unters Forsch** 1988 Jul;187(1):8–14

[Occurrence and determination of okadaic acids in mussels from the German North Sea coast] Luckas B, et al. **Z Lebensm Unters Forsch** 1988 Nov;187(5):421–4 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Frequencies of micronuclei detected on Mytilus galloprovincialis by different staining techniques after treatment with zinc chloride. Majone F, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):131–4

[Metabolic processes in the tissues of mussels during adaptation to hydrocarbon intoxication and changes in the environmental conditions of their habitat] Divavin IA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):204–11 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

In vivo and in vitro studies on the pathway of modification of mussel pyruvate kinase. Holwerda DA, et al. **Comp Biochem Physiol [B]** 1989;92(2):375–80

ATPase stimulated by Na+ or K+ in gills of the freshwater mussel Anodonta. Lagerspetz KY, et al. **Comp Biochem Physiol [B]** 1979;62(3):291–3

Arylsulphatase and acid phosphatase activity associated with developing and ripe spermatozoa of the mussel Mytilus edulis. Pipe RK, et al. **Histochem J** 1989 Jan;21(1):23–32

IMMUNOLOGY

High affinity dopamine binding to mouse thymocytes and Mytilus edulis (Bivalvia) hemocytes. Stefano GB, et al. **J Neuroimmunol** 1989 Jan;21(1):67–74

METABOLISM

Mechanisms of integumental amino acid transport in marine bivalves. Wright SH, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R473–83 (39 ref.)

Mercury and cadmium content in green mussel, Mytilus viridis L. from Onrust waters, Jakarta Bay. Hutagalung HP. **Bull Environ Contam Toxicol** 1989 Jun;42(6):814–20

Bioaccumulation and depuration of some trace metals in the mussel, Perna viridis (Linnaeus). Lakshmanan PT, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):131–8

Levels and interactions of selenium with group IIB metals in mussels from Swansea Bay, South Wales, U.K. Micallef S, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):344–51

Effect of heavy metals ions on enzyme activity in the Mediterranean mussel, Donax trunculus. Mizrahi L, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):854–9

Changes of nucleotide contents and of energy charge induced by contraction, catch and relaxation in smooth molluscan muscle fibres. An analysis using reversed-phase ion-pair high-performance liquid chromatography. Gies A. **Comp Biochem Physiol [B]** 1988;91(3):483–7

Sequence and characterization of the sperm-specific protein phi 3 from Mytilus californianus. Ausio J, et al. **Eur J Biochem** 1989 Jul 1;182(3):569–76

Comparative monolayer investigations of surface properties of negatively charged glycosphingolipids from vertebrates (gangliosides) and invertebrates (SGL–II, lipid IV). Beitinger H, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):664–9

Intracellular Na+ and the control of amino acid fluxes in the integumental epithelium of a marine bivalve. Wright SH, et al. **J Exp Biol** 1989 Mar;142:293–310

Sodium D-glucose cotransport in the gill of marine mussels: studies with intact tissue and brush-border membrane vesicles. Pajor AM, et al. **J Membr Biol** 1989 Jan; 107(1):77–88

Uptake of lysine and proline via separate alpha-neutral amino acid transport pathways in Mytilus gill brush border membranes. Pajor AM, et al. **J Membr Biol** 1989 Mar; 107(3):237–47

Distribution and elimination of [14C]octachlorostyrene in cod (Gadus morhua), rainbow trout (Salmo gairdneri, and blue mussel (Mytilus edulis). Ingebrigtsen K, et al. **J Toxicol Environ Health** 1988;25(3):361–72

Effects of 5-hydroxytryptamine (serotonin) and forskolin on intracellular free calcium in isolated and fura-2 loaded smooth-muscle cells from the anterior byssus retractor (catch) muscle of Mytilus edulis. Ishii N, et al. **Pflugers Arch** 1989 Jun;414(2):162–70

[Zonal variability and seasonal changes of the content of glycogen and glucose in the Mytilus mantle] Crespo CA, et al. **Rev Esp Fisiol** 1989 Jun;45(2):117–21 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Differential depuration of poliovirus, Escherichia coli, and a coliphage by the common mussel, Mytilus edulis. Power UF, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1386–90

[Problems related to the presence of enterovirus in edible lamellibranch molluscs] Toti L, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):183–9 (Eng. Abstr.) **(Ita)**

[Sanitary and bacteriologic evaluation of Black Sea mussels] Govorin IA, et al. **Gig Sanit** 1989 Apr;(4):81–3 **(Rus)**

PHYSIOLOGY

Effect of heavy metals on bay scallops, surf clams, and blue mussels in acute and long-term exposures. Nelson DA, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):595–600

EGTA induces prolonged summed depolarizations in Mytilus gill coupled ciliated epithelial cells: implications for the control of ciliary motility. Stommel EW, et al. **Cell Motil Cytoskeleton** 1988;10(4):464–70

The relaxation induced by indole and nonindole 5-HT agonists in the molluscan smooth muscle. Murakami H, et al. **Comp Biochem Physiol [C]** 1988;90(1):249–55

The 'catch' mechanism in molluscan muscle: an electron microscopy study of freeze-substituted anterior byssus retractor muscle of Mytilus edulis. Bennett PM, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):297–311

Economic force maintenance in a phasic smooth muscle of mollusca. Iwamoto H, et al. **Jpn J Physiol** 1988; 38(6):887–95

Do selenium and glutathione inhibit the toxic effects of mercury in marine lamellibranchs? Patel B, et al. **Sci Total Environ** 1988 Oct 15;76(2–3):147–65

MUSTARD see under **BRASSICA**

MUSTARD COMPOUNDS

Proteases released in organ culture by acute dermal inflammatory lesions produced in vivo in rabbit skin by sulfur mustard: hydrolysis of synthetic peptide substrates for trypsin-like and chymotrypsin-like enzymes. Higuchi K, et al. **Inflammation** 1988 Aug;12(4):311–34

Epidemiological studies of lung cancer in Japanese mustard gas workers. Nishimoto Y, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:95–101

[Recent perspectives in the protection of the skin from mustard gas] Darre E. **Ugeskr Laeger** 1988 Oct 3; 150(40):2389–91 (Eng. Abstr.) **(Dan)**

ADVERSE EFFECTS

Chemical warfare. Cutaneous lesions from mustard gas. Requena L, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):529–36

[Cutaneous burns caused by Yperite. Apropos of 2 new cases] Lacotte B, et al. **J Chir (Paris)** 1989 May;126(5):315–8 (Eng. Abstr.) **(Fre)**

[A case of generalized pustular psoriasis arising following the use of psoriazin] Khalemin IaA, et al. **Vestn Dermatol Venerol** 1989;(3):60–2 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Release of chloroethyl ethyl sulfide-modified DNA bases by bacterial 3-methyladenine-DNA glycosylases I and II. Habraken Y, et al. **Carcinogenesis** 1989 Mar;10(3):489–92

Identification of degradation products of 2-chloroethyl ethyl sulfide by gas chromatography-mass spectrometry. Rohrbaugh DK, et al. **J Chromatogr** 1988 Aug 5; 447(1):165–9

CHEMICAL SYNTHESIS

Cytotoxic estrogens: anilin mustard linked 1,1,2-triphenylbut-1-enes with mammary tumor inhibiting activity. Schneider MR, et al. **Arch Pharm (Weinheim)** 1989 Jan;322(1):59–62

PHARMACOKINETICS

[Substances with antineoplastic effects. XCVI. Separation of (35S) cloturin in tissue, blood and the digestive system and its excretion in rats] Francová V, et al. **Cesk Farm** 1988 Jul;37(6):246–50 (Eng. Abstr.) **(Cze)**

PHARMACOLOGY

Inhibition of biosynthetic processes in P388 and Ehrlich ascites cells by cloturin. Miko M, et al. **Drugs Exp Clin Res** 1988;14(9):575–80

Pretreatment of primary rat cutaneous epidermal keratinocyte culture with a low concentration of MNNG: effect on DNA cross-linking measured in situ after challenge with bis-2-chloroethyl sulfide. Sorscher DH, et al. **J Toxicol Environ Health** 1989;27(3):367–79

Influence of glutathione on the mutagenicity of 2-chloroethylnitrosoureas. Mutagenic potential of glutathione derivatives formed from 2-chloroethylnitrosoureas and glutathione. Stahl W, et al. **Mutat Res** 1988 Dec;206(4):459–65

bis-(beta-chloroethyl)sulfide (BCES)-induced changes in epidermal cell homeostasis in vitro. Ku WW, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):397–411

[The deleterious effects of vesicant war gases] Piérard GE, et al. **Rev Med Liege** 1989 Feb 15;44(4):133–7 **(Fre)**

POISONING

Somatic mutation in peripheral lymphocytes of former workers at the Okunojima poison gas factory. Yanagida J, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1276–83

THERAPEUTIC USE

Anticancer efficacy of 2-chloroethylnitrosocarbamoyl derivatives of L-alanine, glycine, their di- and tripeptide homologues and the respective amides in methylnitrosourea-induced rat mammary carcinoma. Klenner T, et al. **Br J Cancer** 1989 Mar;59(3):335–40

Substances with antineoplastic activity. XCVI. Some pharmacological properties and therapeutic synergism of 6-purinyl-N-(2-chloroethyl)thiocarbamate with cytosine arabinoside. Mělka M, et al. **Neoplasma** 1989;36(4):419–25

TOXICITY

Cancers of the respiratory tract in mustard gas workers. Easton DF, et al. **Br J Ind Med** 1988 Oct;45(10):652–9

Chemical warfare [letter] Weigand DA. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):324–5

Sulfur mustard as a carcinogen: application of relative potency analysis to the chemical warfare agents H, HD, and HT. Watson AP, et al. **Regul Toxicol Pharmacol** 1989 Aug;10(1):1–25 (68 ref.)

NAD+ levels and glucose uptake of cultured human epidermal cells exposed to sulfur mustard. Mol MA, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):159–65

[Diastereomers of nonionic analogs of nucleic acids. V. Alkylation of nucleic acids in the living cells by ethylated derivatives of oligonucleotides containing the residue of nitrous yperite. The effect of the phosphotriester fragment configuration] Abramova TV, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1285–92 (Eng. Abstr.) **(Rus)**

MUSTARD GAS see under **MUSTARD COMPOUNDS**

MUSTINE see **MECHLORETHAMINE**

MUTAGEN SCREENING see **MUTAGENICITY TESTS**

MUTAGENICITY TESTS

see related
CARCINOGENICITY TESTS

Methods for evaluating chemical genotoxicity. Williams GM. **Annu Rev Pharmacol Toxicol** 1989;29:189–211 (172 ref.)

Mutagenicity and cytotoxicity of 2-chlorobenzylidene

malonitrile (CS) and metabolites in V79 Chinese hamster cells. Ziegler-Skylakakis K, et al. **Arch Toxicol** 1989; 63(4):314–9

Introduction of cytochrome P-450 genes into V79 Chinese hamster cells to generate new mutagenicity test systems. Doehmer J, et al. **Arch Toxicol Suppl** 1989;13:164–8 (7 ref.)

Use of an established human hepatoma cell line with endogenous bioactivation for gene mutation studies. Chang G, et al. **Cell Biol Toxicol** 1988 Sep;4(3):267–79

Mouse germ cell mutation tests in genetic risk evaluation of chemical mutagens. Generoso WM. **Cell Biol Toxicol** 1988 Dec;4(4):507–10

Sister chromatid exchange frequency, cellular replication and relative cloning efficiency in human teratocarcinoma-derived cells. Morris SM, et al. **Cell Biol Toxicol** 1988 Sep;4(3):281–94

Mutagenicity tests with a permeable mutant of yeast on carcinogens showing false-negative in Salmonella assay. Morita T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):407–9

Mutagenesis and carcinogenesis: endogenous and exogenous factors. Ames BN. **Environ Mol Mutagen** 1989;14 Suppl 16:66–77 (123 ref.)

Origins of current uncertainties in carcinogen/mutagen screening. Ashby J. **Environ Mol Mutagen** 1989;14 Suppl 16:51–9 (50 ref.)

Role of metabolism in short-term test development. Brusick D. **Environ Mol Mutagen** 1989;14 Suppl 16:60–5 (36 ref.)

A view of the relation between carcinogenesis and mutagenesis. Lijinsky W. **Environ Mol Mutagen** 1989;14 Suppl 16:78–84 (29 ref.)

Chromosome aberration and sister chromatid exchange tests in Chinese hamster ovary cells in vitro: II. Results with 20 chemicals [published erratum appears in Environ Mol Mutagen 1989;13(2):195] Loveday KS, et al. **Environ Mol Mutagen** 1989;13(1):60–94

Reevaluation of the mutagenicity and carcinogenicity of chemicals previously identified as "false positives" in the Salmonella typhimurium mutagenicity assay. Prival MJ, et al. **Environ Mol Mutagen** 1989;13(1):1–24 (36 ref.)

Pretreatment with mixed-function oxidase inducers increases the sensitivity of the hepatocyte/DNA repair assay. Shaddock JG, et al. **Environ Mol Mutagen** 1989;13(4):281–8

Mutagenicity of merocyanine 540–mediated photosensitization. O'Brien JM, et al. **Exp Hematol** 1989 Feb;17(2):166–70

Genetic and related effects: An updating of selected IARC monographs from Volumes 1 to 42. **IARC Monogr Eval Carcinog Risks Hum Suppl** 1987; 6:1–729

A combined testing protocol for assessing genotoxicity in individual animals: application to environmental toxicology. Harper BL, et al. **J Appl Toxicol** 1989 Apr; 9(2):97–102

Influence of bacterial growth of the overnight culture on the captan- and folpet-induced reversion in the Ames test. Barrueco C, et al. **Mutagenesis** 1989 Jan;4(1):1–5

The role of mammalian cell mutation assays in mutagenicity and carcinogenicity testing: reply to C.F. Arlett and J. Cole [letter] Bolcsfoldi G. **Mutagenesis** 1989 Jul;4(4):325

Bayes' Theorem for predicting human carcinogenicity [letter] Ennever FK, et al. **Mutagenesis** 1989 May;4(3):241–3

Prediction of chemical carcinogenicity from in vitro genetic toxicity. Heddle JA. **Mutagenesis** 1988 Jul;3(4):287–91

Mutagenicity testing of rutacridone epoxide and rutacridone, alkaloids in Ruta graveolens L., using the Salmonella/microsome assay. Paulini H, et al. **Mutagenesis** 1989 Jan;4(1):45–50

Use of shuttle vectors for the analysis of DNA damage processing in mammalian cells. **Mutat Res** 1989 Mar–May; 220(2–3):49–278

Genetic toxicology testing and biomonitoring or environmental or occupational exposure. **Mutat Res** 1989 May;223(1):1–72

Comparison of the AS52/XPRT and the CHO/HPRT assays: evaluation of 6 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):121–8

Evaluation of drug candidates in a battery of short-term genetic toxicology assays: overview. Aaron CS. **Mutat Res** 1989 Jun;223(2):105–9 (8 ref.)

Screening for possible human carcinogens and mutagens: a symposium report. Adler ID, et al. **Mutat Res** 1989 Jul; 213(1):27–39 (45 ref.)

Clastogenic effects of acrylamide in mouse bone marrow cells. Adler ID, et al. **Mutat Res** 1988 Nov;206(3):379–85

Urinary mutagenicity tests in lead-exposed workers. Apostoli P, et al. **Mutat Res** 1989 Mar;222(3):245–51

Classification according to chemical structure, mutagenicity to Salmonella and level of carcinogenicity of a further 42 chemicals tested for carcinogenicity by the U.S. National Toxicology Program. Ashby J, et al. **Mutat Res** 1989 Jun; 223(2):73–103

A bootstrap analysis of four in vitro short-term test performances. Benigni R. **Mutat Res** 1989 Apr; 216(2):127–35

4-Quinolone antibiotics: positive genotoxic screening tests despite an apparent lack of mutation induction. Bredberg A, et al. **Mutat Res** 1989 Mar;211(1):171–80

Human urine mutagenicity study comparing cigarettes which burn or only heat tobacco. Doolittle DJ, et al. **Mutat Res** 1989 Jun;223(2):221–32

Genotoxicity of monofunctional methanesulphonates in the SOS chromotest as a function of alkylation mechanisms. A comparison with the mutagenicity in S. typhimurium TA100. Eder E, et al. **Mutat Res** 1989 Mar;211(1):51–64

The TX; Y test for the detection of nondisjunction and chromosome breakage in Drosophila melanogaster. I. Analysis of spontaneous events and results of male exposure. Foureman PA. **Mutat Res** 1988 Dec; 203(6):427–44

Mutagenicity of nitrofurantoin and furazolidone in Chinese hamster ovary cell strains. Gao N, et al. **Mutat Res** 1989 Apr;225(4):181–7

1,3-Butadiene: induction of micronucleated erythrocytes in the peripheral blood of B6C3F1 mice exposed by inhalation for 13 weeks. Jauhar PP, et al. **Mutat Res** 1988 Nov–Dec; 209(3–4):171–6

Cytogenetic investigation of chemically-induced aneuploidy in mouse spermatocytes. Liang JC, et al. **Mutat Res** 1988 Oct;201(2):325–35

Induction of sister-chromatid exchanges by direct and indirect mutagens in human lymphocytes, co-cultured with intact rat liver cells. Effect of enzyme induction and preservation of the liver cells by freezing in liquid nitrogen. Lindahl-Kiessling K, et al. **Mutat Res** 1989 Mar; 211(1):77–87

Screening for possible human carcinogens and mutagens. False positives, false negatives: statistical implications. Lovell DP. **Mutat Res** 1989 Jul;213(1):43–60

Induction of sister-chromatid exchanges by direct and indirect agents in a human teratoma cell line. Murison GL. **Mutat Res** 1988 Oct;203(5):347–54

Mutagenic and teratogenic effects of acrylamide in the mammalian spot test. Neuhäuser-Klaus A, et al. **Mutat Res** 1989 Jul;226(3):157–62

Metabolic activation of polycyclic aromatic hydrocarbons to mutagens in the Ames test by various animal species including man. Phillipson CE, et al. **Mutat Res** 1989 Mar; 211(1):147–51

Aneuploidy detection with a short-term hexaploid wheat assay. Rédei GP, et al. **Mutat Res** 1988 Oct;201(2):337–48

Evaluation of the genotoxicity of domoic acid in a hepatocyte-mediated assay with V79 Chinese hamster lung cells. Rogers CG, et al. **Mutat Res** 1989 Jul;226(3):191–5

Simple method for precise determination of chemical lethality in the L-arabinose resistance test of Salmonella typhimurium. Roldán-Arjona T, et al. **Mutat Res** 1989 Jul; 226(3):175–80

The evaluation of genotoxic activities of disinfectants and their metabolites by umu test. Sakagami Y, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):155–60

Acentric chromosomal fragments and micronuclei: the time–displacement factor. Savage JR. **Mutat Res** 1989 Apr; 225(4):171–3

The development of transient SV40 based shuttle vectors for mutagenesis studies: problems and solutions. Seidman M. **Mutat Res** 1989 Mar–May;220(2–3):55–60

Use of cryopreserved hepatocytes for unscheduled DNA synthesis assays. Swierenga SH, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):167–70

The involvement of dimethyl sulfoxide in a bacteriotoxic response of the Ames assay tester strains TA98 and TA100. Vaughan DJ, et al. **Mutat Res** 1989 May;226(1):39–42

Genotoxicity and genotoxic enhancing effect of tetrandrine in Salmonella typhimurium. Whong WZ, et al. **Mutat Res** 1989 Mar;222(3):237–44

Detecting mutations in human genes [news] Marx JL. **Science** 1989 Feb 10;243(4892):737–8

Human embryonic cell growth assay for teratogens with or without metabolic activation system using microplate. Tsuchiya T, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(5):265–72

An overview of structure-activity relationships as an alternative to testing in animals for carcinogenicity, mutagenicity, dermal and eye irritation, and acute oral toxicity. Enslein K. **Toxicol Ind Health** 1988 Dec; 4(4):479–98

Mutagenicity of antiviral substances of nucleobase analogue type in Salmonella typhimurium employing metabolic activation by mouse liver homogenate or cell-free plant extracts. el-Tarras A, et al. **Zentralbl Mikrobiol** 1989; 144(3):191–6

Mutagenicity assay with Salmonella typhimurium revealing biotransformation of antiphytoviral substances by cell-free plant extract. el-Tarras A, et al. **Zentralbl Mikrobiol** 1989; 144(3):197–202

[Study of the biotransformation of various antineoplastic agents using the Ames test] Oblapenko NG, et al. **Eksp Onkol** 1988;10(5):52–5 (Eng. Abstr.) **(Rus)**

HISTORY

Concern for environmental mutagens: some personal reminiscences. Crow JF. **Environ Mol Mutagen** 1989;14 Suppl 16:7–10

Mechanisms of mutagenesis. Drake JW. **Environ Mol Mutagen** 1989;14 Suppl 16:11–5

Concepts and models for DNA repair: from Escherichia coli to mammalian cells. Hanawalt PC. **Environ Mol Mutagen** 1989;14 Suppl 16:90–8

Early years of the Salmonella mutagen tester strains: lessons from hycanthone. Hartman PE. **Environ Mol Mutagen** 1989;14 Suppl 16:39–45

Development of bacterial mutagenicity tests: a view from afar. MacPhee DG. **Environ Mol Mutagen** 1989;14 Suppl 16:35–8

Evolution of social concerns and environmental policies for chemical mutagens. Prival MJ, et al. **Environ Mol Mutagen** 1989;14 Suppl 16:46–50

Reciprocal relationship between mouse germ-cell mutagenesis and basic genetics: from early beginnings to future opportunities. Russell LB. **Environ Mol Mutagen** 1989;14 Suppl 16:23–9

Reminiscences of a mouse specific-locus test addict. Russell WL. **Environ Mol Mutagen** 1989;14 Suppl 16:16–22

Origins of genetic toxicology and the Environmental Mutagen Society. Wassom JS. **Environ Mol Mutagen** 1989; 14 Suppl 16:1–6

Ultraviolet mutagenesis and the SOS response in Escherichia coli: a personal perspective. Witkin EM. **Environ Mol Mutagen** 1989;14 Suppl 16:30–4

INSTRUMENTATION

The Computerized Laboratory Notebook concept for genetic toxicology experimentation and testing. Strauss GH, et al. **Mutat Res** 1989 Mar;222(3):171–89

METHODS

Mutagenicity assessment of airborne particles from three polyurethane foam manufacturing facilities [letter] Ader AW. **Am J Ind Med** 1988;14(4):489–92

Molecular dosimetry as a tool in genetic risk assessment. Aaron CS. **Birth Defects** 1988;24(5):53–78 (164 ref.)

Environmental monitoring for genotoxicity: in vivo sister chromatid exchange in the house mouse (Mus musculus). Nayak BN, et al. **Can J Genet Cytol** 1985 Jun;27(3):351–6

Transfection of a human cytochrome P-450 gene into the human lymphoblastoid cell line, AHH-1, and use of the recombinant cell line in gene mutation assays. Crespi CL, et al. **Carcinogenesis** 1989 Feb;10(2):295–301

Improvement of short-term tests for mutagenicity: on the optimal pH for the liver microsomal assay. Paolini M, et al. **Carcinogenesis** 1988 Dec;9(12):2265–70

Utility of short-term tests for genetic toxicity. DeMarini DM, et al. **Cell Biol Toxicol** 1989 Jun;5(2):189–200 (70 ref.)

Computer assisted short-term test battery design: some answers (reply to John Ashby's commentary in Environmental and Molecular Mutagenesis). Ennever FK, et al. **Environ Mol Mutagen** 1988;12(4):349–52

Intralitter variation in murine fetal sister chromatid exchange responses to the transplacental carcinogen ethyl carbamate. Neeper-Bradley TL, et al. **Environ Mol Mutagen** 1989; 14(2):90–7

Lack of genotoxicity with acrylate polymers in five short-term mutagenicity assays. Thompson ED, et al. **Environ Mol Mutagen** 1989;14(2):98–106

Spontaneous mutagenesis of herpesvirus in human cells depends on cell monolayer density. Lytle CD, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):963–4

Monitoring of mutagenicity in cutting fluids during their recycled use. Kira S, et al. **Ind Health** 1989;27(1):17–21

The role of mammalian cell mutation assays in mutagenicity and carcinogenicity testing. Arlett CF, et al. **Mutagenesis** 1988 Nov;3(6):455–8 (37 ref.)

An opinion on the significance of the 19 non-clastogenic gene-mutagens reported by Tennant et al. (1987). Ashby J. **Mutagenesis** 1988 Nov;3(6):463–5

A study of the heterogeneity of bacterial fluctuation-test data and the effects of auxotrophic-growth enhancement. Bosworth D, et al. **Mutagenesis** 1989 Mar;4(2):126–32

The case for retention of mammalian cell mutagenicity assays. Fox M. **Mutagenesis** 1988 Nov;3(6):459–61

The use of flow cytometry in the detection of radiation- and chemically induced nuclear damage in human mononuclear cells. Gordon DJ, et al. **Mutagenesis** 1989 Jan;4(1):35–8

Short-term tests and the myth of the non-clastogenic mutagen. Green MH. **Mutagenesis** 1988 Sep;3(5):369–71 (7 ref.)

Induction of SCE by indirect mutagens in cultured rat hepatoma cells and in Chinese hamster V79 cells co-cultivated with hepatocyte primary cultures. Kasper P, et al. **Mutagenesis** 1988 Nov;3(6):521–5

Studies of an S9-based metabolic activation system used in the mouse lymphoma L5178Y cell mutation assay. McGregor DB, et al. **Mutagenesis** 1988 Nov;3(6):485–90

Comparisons between in vivo and in vitro systems: the in vivo equivalent dose concept. Paolini M, et al. **Mutagenesis** 1988 Nov;3(6):527–31

Definition of a negative response in mutagenicity assays: implications for battery selection [editorial] Parry JM, et al. **Mutagenesis** 1988 Nov;3(6):453–4

Utilization of rat lymphocytes for the in vitro chromosomal aberration assay. Sinha AK, et al. **Mutagenesis** 1989 Mar; 4(2):147–53

Use of shuttle vectors for the analysis of DNA damage processing in mammalian cells. **Mutat Res** 1989 Mar–May; 220(2–3):49–278

Retroviral shuttle vectors as [illegible]l for the study of mutational specificity (base substitution/deletion/mutational hotspot). Ashman CR. **Mutat Res** 1989 Mar–May;220(2–3):143–9

From simian virus 40 to transient shuttle vectors in mutagenesis studies. Bourre F, et al. **Mutat Res** 1989 Mar–May;220(2–3):107–13 (43 ref.)

Repair of DNA damage in shuttle vectors, virus, and chromosomal DNAs may depend on their biological

imprinting—a 'Pygmalion' effect. Cleaver JE, et al. **Mutat Res** 1989 Mar-May;220(2-3):161-8

A genetic analysis of the adenine phosphoribosyl transferase locus in Chinese hamster V79-AP4 cells: relevance to mutagenesis studies. Colella CM, et al. **Mutat Res** 1988 Nov;202(1):185-92

Studies on direct and indirect effects of DNA damage on mutagenesis in monkey cells using an SV40-based shuttle vector. Dixon K, et al. **Mutat Res** 1989 Mar-May; 220(2-3):73-82

Perspectives on the use of an endogenous gene target in studies of mutational specificity. Drobetsky EA, et al. **Mutat Res** 1989 Mar-May;220(2-3):235-40

Construction of a shuttle vector containing a single O6-methylguanine: a probe for mutagenesis in mammalian cells. Ellison KS, et al. **Mutat Res** 1989 Mar-May; 220(2-3):93-100

New tester strains with improved bioactivation capacity for the Drosophila wing-spot test. Frölich A, et al. **Mutat Res** 1989 Jun;216(3):179-87

Spontaneous revertants in modified S. typhimurium mutagenicity tests employing elevated numbers of the tester strain. Georghiou PE, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):33-9

Thirty compounds tested in the Drosophila wing spot test. Graf U, et al. **Mutat Res** 1989 Apr;222(4):359-73

A genetic method to quantitate induced chromosome breaks using a mouse/human monochromosomal hybrid cell line: identification of potential clastogenic agents. Gudi R, et al. **Mutat Res** 1989 Apr;225(4):149-56

Improved EBV shuttle vectors. Haase SB, et al. **Mutat Res** 1989 Mar-May;220(2-3):125-32

Simultaneous detection of DNA strand breaks and unscheduled DNA synthesis in mutagen-treated human lymphocytes in the absence of hydroxyurea. Holmberg M, et al. **Mutat Res** 1988 Nov;202(1):111-8

Development and validation of the spiral Salmonella assay: an automated approach to bacterial mutagenicity testing. Houk VS, et al. **Mutat Res** 1989 May;223(1):49-64

Shuttle vector system for the analysis of mutational events in mammalian chromosomal DNA. Ikehata H, et al. **Mutat Res** 1989 Feb;210(2):237-47

Mutational specificities of 1'-acetoxysafrole, N-benzoyloxy-N-methyl-4-aminoazobenzene, and ethyl methanesulfonate in human cells. Ingle CA, et al. **Mutat Res** 1989 Mar-May;220(2-3):133-42

Investigations on the use of EDTA-permeabilized E. coli cells in liquid suspension and animal-mediated genotoxicity assays. Knasmüller S, et al. **Mutat Res** 1989 Aug; 216(4):189-96

Use of supF, an Escherichia coli tyrosine suppressor tRNA gene, as a mutagenic target in shuttle-vector plasmids. Kraemer KH, et al. **Mutat Res** 1989 Mar-May; 220(2-3):61-72

Mutagenic treatments result in inactivation of expression of a transfected bacterial gene integrated into a human cell line. Lehmann AR, et al. **Mutat Res** 1989 Mar-May; 220(2-3):255-62

Effect of processing time on the quality of mouse bone-marrow metaphase preparations. Luke CA, et al. **Mutat Res** 1989 Sep;227(1):59-62

The HLA-A mutation assay: improved technique and normal results. McCarron MA, et al. **Mutat Res** 1989 Apr; 225(4):189-93

Comparing the frequency and spectra of mutations induced when an SV-40 based shuttle vector containing covalently bound residues of structurally-related carcinogens replicates in human cells. Maher VM, et al. **Mutat Res** 1989 Mar-May;220(2-3):83-92

Induced hepatocytes as a metabolic activation system for the mouse-lymphoma assay. Oglesby LA, et al. **Mutat Res** 1989 Jul;223(3):295-302

A statistical model to estimate variance in long term-low dose mutation assays: testing of the model in a human lymphoblastoid mutation assay. Oller AR, et al. **Mutat Res** 1989 Jun;216(3):149-61

Lambda phage shuttle vectors for analysis of mutations in mammalian cells in culture and in transgenic mice. Summers WC, et al. **Mutat Res** 1989 Mar-May; 220(2-3):263-8

The E. coli multitest: a set of strains to characterize diverse genotoxic effects. Tenenbaum L, et al. **Mutat Res** 1988 Dec;203(6):415-26

Molecular analysis of spontaneous mutations at the gpt locus in Chinese hamster ovary (AS52) cells. Tindall KR, et al. **Mutat Res** 1989 Mar-May;220(2-3):241-53

Dose-response relationship for ethyl nitrosourea-induced sex-linked recessive lethals in germ cells of the female Drosophila melanogaster at relatively low doses. Zimmering S, et al. **Mutat Res** 1989 Jun;226(2):81-5

Correlations between validation and definitive study results for genotoxic compounds. Schaeffer DJ. **Regul Toxicol Pharmacol** 1988 Jun;8(2):239-50 (27 ref.)

Use of modified Fraser's stain in Promoting Activity Test (PAT). Borràs M. **Stain Technol** 1988 Sep;63(5):307-10

Development of a metabolic activation system for the frog embryo teratogenesis assay: Xenopus (FETAX). Fort DJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):251-63

Detection of chemically induced aneuploidy by the Vicia faba root tip assay. Sandhu SS, et al. **Toxicol Ind Health** 1988 Jun;4(2):257-67

[A microbiological test for characterizing dental materials with a mutagenic risk] Tenti FV, et al. **Minerva Stomatol** 1988 Aug;37(8):579-81 (Eng. Abstr.) **(Ita)**

[Rat bladder S9-mediated mutagenesis of fluctuation test] Hayashi K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct; 43(4):934-9 (Eng. Abstr.) **(Jpn)**

[Methods used in evaluating mutagenic and genotoxic properties of chemical compounds. II. The Ames test (an abridged version)] Janik-Spiechowicz E. **Med Pr** 1989; 40(1):28-37 (Eng. Abstr.) **(Pol)**

[Selected bacterial tests used for detection of genotoxic properties of chemical compounds] Jenek J. **Rocz Panstw Zakl Hig** 1988;39(6):475-84 (Eng. Abstr.) **(Pol)**

STANDARDS

Mutagenicity of benzo(a)pyrene in uninduced tissues from BALB/c mice and Sprague-Dawley rats as an index of possible health risks using the Salmonella mutagenicity assay. Ampy FR, et al. **Cytobios** 1988;56(225):81-7

An improved standardized procedure for urine mutagenicity testing. Rannug A, et al. **IARC Sci Publ** 1988;(89):396-400

Somatic recombination and mutation assays in Drosophila: a comparison of the response of two different strains to four mutagens. Clements J, et al. **Mutat Res** 1988 Sep-Oct; 209(1-2):1-5

Comments on the proposed use of Salmonella and structural alerts for the prediction of rodent carcinogens. McGregor D. **Mutat Res** 1989 Apr;222(4):300-6

Quantitative methods for assessing a synergistic or potentiated genotoxic response. Piegorsch WW, et al. **Mutat Res** 1989 Feb;216(1):1-8

MUTAGENS

The distribution patterns of sister chromatid exchanges in V79 Chinese hamster cells: relevance to genotoxicity studies. Rainaldi G, et al. **Ann Ist Super Sanita** 1989; 25(1):33-9

Antimutagenic action of methionine in Chinese hamster fibroblasts: an opposite of methionine mutagenicity. Hill M, et al. **Anticancer Res** 1988 Jul-Aug;8(4):701-5

Induction of petite yeast mutants by membrane-active agents. Jiménez J, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3126-32

Cytogenetic effects of methylmercury in embryos of the killifish, Fundulus heteroclitus. Perry DM, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):569-74

Lack of teratogenic and mutagenic effects of nitrite on mouse fetuses. Shimada T. **Arch Environ Health** 1989 Jan-Feb; 44(1):59-63

Trenbolone growth promotant: covalent DNA binding in rat liver and in Salmonella typhimurium, and mutagenicity in the Ames test. Lutz WK, et al. **Arch Toxicol** 1988; 62(2-3):103-9

Mutagenic and antimutagenic effects of 5-substituted 2'-deoxyuridines depending on the nature of the 5-substituent. Marquardt H, et al. **Arzneimittelforschung** 1988 Dec;38(12):1820-4

Mutagenicity studies of muroctasin. Shimada H, et al. **Arzneimittelforschung** 1988 Jul;38(7A):1031-3

Investigation of the ability of newer beta-lactam antibiotics to select resistant mutants from serratia marcescens after mutagenesis with nitrosoguanidine. Vuye A, et al. **Arzneimittelforschung** 1989 Apr;39(4):424-7

Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al. **Basic Life Sci** 1988;49:457-60

Formation of directly mutagenic alpha-hydroxy-N-nitrosopiperidine phosphate ester by near-ultraviolet irradiation of N-nitrosopiperidine in phosphate buffer. Arimoto S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1140-6

A specific inhibition of induction of adaptive response by o-vanillin, a potent comutagen. Takahashi K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1376-81

Methylation of thymine and uracil with free methyl cations formed due to beta-decay of tritiated methane: possible implication in mutagenesis and carcinogenesis. Korsakov MV, et al. **Biochimie** 1989 May;71(5):633-7

Genetic susceptibility to environmental mutagens and carcinogens. **Birth Defects** 1989;25(2):1-93

Genotoxic effects in peripheral blood and urine of workers exposed to low level benzene. Yardley-Jones A, et al. **Br J Ind Med** 1988 Oct;45(10):694-700

Mutagenicity of monocrotophos in mice. Kumar DV, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):189-94

Growth inhibition of Bacillus subtilis upon interaction between basic dyes and DNA. Ogawa T, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):402-8

Lack of correlation between DNA-methylating activity and appearance of the immunogenic phenotype in clones of a murine lymphoma treated with mutagens. Fuschiotti P, et al. **Cancer Immunol Immunother** 1989;29(2):139-43

Effects of diesel exhaust particles on chromosome aberration, sister chromatid exchange and morphological transformation in cultured mammalian cells. Hasegawa MM, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):61-6

Inactivity of fecapentaene-12 as a rodent carcinogen or tumor initiator. Ward JM, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):49-59

Influence of the alkyl substituent on mutagenicity and covalent DNA binding of bay region diol-epoxides of 7-methyl- and 7-ethylbenz(a)anthracene in Salmonella and V79 Chinese hamster cells. Glatt H, et al. **Cancer Res** 1989 Apr 1;49(7):1778-82

Mutagenicity and tumorigenicity of dihydrodiols, diol epoxides, and other derivatives of benzo(f)quinoline and benzo(h)quinoline. Kumar S, et al. **Cancer Res** 1989 Jan 1;49(1):20-4

Study of the ability of phenacetin, acetaminophen, and aspirin to induce cytotoxicity, mutation, and morphological transformation in C3H/10T1/2 clone 8 mouse embryo cells. Patierno SR, et al. **Cancer Res** 1989 Feb 15;49(4):1038-44

Effect of heterocyclic amines and beef extract on chromosome aberrations and sister chromatid exchanges in cultured human lymphocytes. Aeschbacher HU, et al. **Carcinogenesis** 1989 Mar;10(3):429-33

Effect of dimethyl sulfoxide on the genotoxicity and metabolism of benzene in vivo. Anwar WA, et al. **Carcinogenesis** 1989 Mar;10(3):441-5

Superoxide dismutase-mediated reversible conversion of 3-hydroxyamino-1-methyl-5H-pyrido[4,3-b]indole, the N-hydroxy derivative of Trp-P-2, into its nitroso derivative. Hiramoto K, et al. **Carcinogenesis** 1988 Nov; 9(11):2003-8

A rationale for the non-mutagenicity of 2- and 3-aminobiphenyls. Ioannides C, et al. **Carcinogenesis** 1989 Aug;10(8):1403-7

Induction of tumors in the Zymbal gland, oral cavity, colon, skin and mammary gland of F344 rats by a mutagenic compound, 2-amino-3,4-dimethylimidazo[4,5-f]quinoline. Kato T, et al. **Carcinogenesis** 1989 Mar;10(3):601-3

Activation of the food-derived mutagen 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine by rabbit and human liver microsomes and purified forms of cytochrome P-450. McManus ME, et al. **Carcinogenesis** 1989 Feb;10(2):357-63

The mouse-skin carcinogenicity of a mutagenic fraction from beech wood dusts. Mohtashamipur E, et al. **Carcinogenesis** 1989 Mar;10(3):483-7

Mutagenicity and carcinogenicity of smoked meat from Nagaland, a region of India prone to a high incidence of nasopharyngeal cancer. Sarkar S, et al. **Carcinogenesis** 1989 Apr;10(4):733-6

Chromosomal alterations in peripheral blood lymphocytes, urinary mutagenicity and excretion of polycyclic aromatic hydrocarbons in six psoriatic patients undergoing coal tar therapy. Sarto F, et al. **Carcinogenesis** 1989 Feb; 10(2):329-34

Photolysis of arylazides and generation of highly electrophilic DNA-binding and mutagenic intermediates. Wild D, et al. **Carcinogenesis** 1989 Feb;10(2):335-41

Genetic toxicology of lead compounds. Zelikoff JT, et al. **Carcinogenesis** 1988 Oct;9(10):1727-32

DNA binding by [2,5-14C]N-nitrosopyrrolidine in excision-repair proficient and deficient strains of Salmonella. Evidence for a major premutagenic adduct. Zielenska M, et al. **Carcinogenesis** 1988 Oct;9(10):1901-4

Induction by chemical clastogens of aberrations in prematurely condensed interphase chromatin of Chinese hamster ovary cells. Abkari F, et al. **Cell Biol Toxicol** 1987 Sep;3(3):285-301

Mutagenicity, sister chromatid exchange inducibility and in vitro cell transforming ability of particulates from Athens air. Athanasiou K, et al. **Cell Biol Toxicol** 1987 Sep; 3(3):251-61

Prevalence of genotoxic chemicals among animal and human carcinogens evaluated in the IARC Monograph Series. Bartsch H, et al. **Cell Biol Toxicol** 1989 Jun;5(2):115-27

Genotoxic effects of heavy metals in rat hepatocytes. Denizeau F, et al. **Cell Biol Toxicol** 1989 Jan;5(1):15-25

Mouse germ cell mutation tests in genetic risk evaluation of chemical mutagens. Generoso WM. **Cell Biol Toxicol** 1988 Dec;4(4):507-10

Use of scintillometric quantitation of unscheduled DNA synthesis in isolated rat hepatocytes for the screening of genotoxic agents. Hsia MT. **Cell Biol Toxicol** 1987 Jun; 3(2):127-42

The genetic toxicity of 1,2-dibromo-3-chloropropane, 1,2-dibromo-3-chloro-2-methylpropane, and 1,2,3-tribromo-2-methylpropane. McKee RH, et al. **Cell Biol Toxicol** 1987 Dec;3(4):391-406

The mutagenic potential of high flash aromatic naphtha. Schreiner CA, et al. **Cell Biol Toxicol** 1989 Jun;5(2):169-88

Genetic toxicology--an introduction. Sharma AK. **Cell Biol Toxicol** 1988 Dec;4(4):451-2

The cytogenetic evaluation of in vivo genotoxic and cytotoxic activity using rodent somatic cells. Tice RR. **Cell Biol Toxicol** 1988 Dec;4(4):475-86

The activity of bleomycin and modifiers of its clastogenic effect on the interphase chromatin of Indian muntjak fibroblasts. Tittelbach H, et al. **Cell Biol Toxicol** 1989 Jan; 5(1):39-50

Metabolism of selectively methylated and deuterated analogs of 1,2-dibromo-3-chloropropane: role in organ toxicity and mutagenicity. Låg M, et al. **Chem Biol Interact** 1989; 69(1):33-44

Effect of methanol on the frequency of respiration-deficient mutation induced by ethidium bromide in yeast under growing and non-growing conditions. Hamada H, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4865-70

Mutagenicity tests with a permeable mutant of yeast on carcinogens showing false-negative in Salmonella assay.

Morita T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):407–9

Mutagenic principles in Sinomeni Caulis et Rhizoma. II. The mutagenicity of liriodenine in the basic fraction of the methanol extract. Nozaka T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2259–62

Effect of several metal compounds on the mutagenicity and deoxyribonucleic acid binding of 1–nitropyrene in Salmonella typhimurium TA 100. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4900–7

Formation of mutagens by photochemical reaction of 2–naphthol in aqueous nitrite solution. Suzuki J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2204–11

Estradiol and catecholestradiols as possible genotoxic carcinogens. van Aswegen CH, et al. **Clin Physiol Biochem** 1989;7(1):34–9

Metabolic activation of chemical carcinogens by hepatic preparations from streptozotocin–treated rats. Flatt PR, et al. **Diabetologia** 1989 Feb;32(2):135–9

Mutagenicity of enantiomers of penbutolol. Hussain SS, et al. **Drug Chem Toxicol** 1989 Mar;12(1):77–83

The toxicity and mutagenicity of S–3–iodo–N–(1–ethyl–2–pyrrolidinyl)methyl–2–hydroxy–6–methoxybenzamide (IBZM), a new CNS D–2 dopamine receptor imaging agent. Kostyniak PJ, et al. **Drug Chem Toxicol** 1988;11(4):433–42

Environmental Mutagen Society. 20th anniversary issue: Perspectives on genetic toxicology. **Environ Mol Mutagen** 1989;14 Suppl 16:1–113

Abstracts of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10–15, 1989. **Environ Mol Mutagen** 1989;14 Suppl 15:1–251

Mutagenesis and carcinogenesis: endogenous and exogenous factors. Ames BN. **Environ Mol Mutagen** 1989;14 Suppl 16:66–77 (123 ref.)

Origins of current uncertainties in carcinogen/mutagen screening. Ashby J. **Environ Mol Mutagen** 1989;14 Suppl 16:51–9 (50 ref.)

In vitro genotoxicity of dyes present in colored smoke munitions. Brooks AL, et al. **Environ Mol Mutagen** 1989; 13(4):304–13

In vivo mammalian mutagenesis: in transition to DNA molecules. Burkhart JG, et al. **Environ Mol Mutagen** 1989; 14 Suppl 16:85–9 (22 ref.)

Concern for environmental mutagens: some personal reminiscences. Crow JF. **Environ Mol Mutagen** 1989;14 Suppl 16:7–10

Mechanisms of mutagenesis. Drake JW. **Environ Mol Mutagen** 1989;14 Suppl 16:11–5

Identification of aneuploidy–inducing agents using cytokinesis–blocked human lymphocytes and an antikinetochore antibody. Eastmond DA, et al. **Environ Mol Mutagen** 1989;13(1):34–43

Early years of the Salmonella mutagen tester strains: lessons from hycanthone. Hartman PE. **Environ Mol Mutagen** 1989;14 Suppl 16:39–45

Cooked–Food Mutagen Reference List and Index. Hatch FT, et al. **Environ Mol Mutagen** 1988;12 Suppl 14:1–85

Studies on the antimutagenic activities of garlic extract. Knasmüller S, et al. **Environ Mol Mutagen** 1989; 13(4):357–65

A view of the relation between carcinogenesis and mutagenesis. Lijinsky W. **Environ Mol Mutagen** 1989;14 Suppl 16:78–84 (29 ref.)

Genotoxic potency of three quinoline compounds evaluated in vivo in mouse marrow cells. McFee AF. **Environ Mol Mutagen** 1989;13(4):325–31

Absence of mutagenic interaction between microwaves and mitomycin C in mammalian cells. Meltz ML, et al. **Environ Mol Mutagen** 1989;13(4):294–303

Evolution of social concerns and environmental policies for chemical mutagens. Prival MJ, et al. **Environ Mol Mutagen** 1989;14 Suppl 16:46–50

Reciprocal relationship between mouse germ–cell mutagenesis and basic genetics: from early beginnings to future opportunities. Russell LB. **Environ Mol Mutagen** 1989;14 Suppl 16:23–9

Effect of erythropoietin on the micronucleus test. Suzuki Y, et al. **Environ Mol Mutagen** 1989;13(4):314–8

Origins of genetic toxicology and the Environmental Mutagen Society. Wassom JS. **Environ Mol Mutagen** 1989; 14 Suppl 16:1–6

Ultraviolet mutagenesis and the SOS response in Escherichia coli: a personal perspective. Witkin EM. **Environ Mol Mutagen** 1989;14 Suppl 16:30–4

Mutagenicity of the human carcinogen treosulphan in Salmonella. Zeiger E, et al. **Environ Mol Mutagen** 1989; 13(4):343–6

Lack of sister chromatid exchange induction in phenytoin–treated patients with epilepsy. Schaumann BA, et al. **Epilepsia** 1989 Mar–Apr;30(2):240–5

Effects of the nitrosopeptide N–(N–acetyl–L–prolyl)–N–nitrosoglycine on Salmonella typhimurium TA100 in the host–mediated assay in mice. Blowers SD, et al. **Food Chem Toxicol** 1988 Nov–Dec; 26(11–12):917–9

The in vivo genotoxic properties of the nitrosopeptide N–(N–acetyl–L–prolyl)–N–nitrosoglycine. Blowers SD, et al. **Food Chem Toxicol** 1988 Sep;26(9):785–90

N,N–diethylphenylacetamide, an insect repellent: absence of mutagenic response in the in vitro Ames test and in vivo mouse micronucleus test. Meshram GP, et al. **Food Chem Toxicol** 1988 Sep;26(9):791–6

Non–mutagenicity of capsaicin in albino mice. Muralidhara, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):955–8

Reduction of mutagenicity and toxicity of aflatoxin B1 by chlorine gas treatment. Sen AC, et al. **Food Chem Toxicol** 1988 Sep;26(9):745–52

Evaluation of propanil and its N–oxidized derivatives for genotoxicity in the Salmonella typhimurium reversion, Chinese hamster ovary/hypoxanthine guanine phosphoribosyl transferase, and rat hepatocyte/DNA repair assays. McMillan DC, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):429–39

Genetic analysis of mouse t haplotypes using mutations induced by ethylnitrosourea mutagenesis: the order of T and qk is inverted in t mutants. Justice MJ, et al. **Genetics** 1988 Oct;120(2):533–43

The mutagenic effect of five oil dispersants and of ethyleneglycolmonobutylether in bacteriophage T4D. Kvelland I. **Hereditas** 1988;109(1):149–50

Methods for detecting DNA damaging agents in humans: applications in cancer epidemiology and prevention. Proceedings of a symposium. Espoo, Finland, 2–4 September 1987. **IARC Sci Publ** 1988;(89):1–518

Estimation of the cancer risk of genotoxic chemicals by the rad–equivalence approach. Kolman A, et al. **IARC Sci Publ** 1988;(89):258–64

Mutagenic potential of modified DNA precursors in vivo: fate of O6–methyldeoxyguanosine triphosphate in Chinese hamster ovary cells. Foote RS, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):472–7

Chlorinated drinking water XAD isolates do not affect the sister chromatid exchange frequency. Varga C. **Int Arch Occup Environ Health** 1988;61(1–2):147–9

In vivo and in vitro investigations on biological effects of aromatic bis–(2–chloroethyl)amino–bisphosphonic acids, new agents proposed for chemotherapy of bone tumors: cytostatic activity in rat osteosarcoma; toxicity and genotoxicity in liver and bone marrow; mutagenicity in S. typhimurium. Pool BL, et al. **Invest New Drugs** 1988 Jun;6(2):67–78

Mutagenic activity of acetonitrile and fumaronitrile in three short term assays with special reference to autoinduction. Schlegelmilch R, et al. **J Appl Toxicol** 1988 Jun;8(3):201–9

Role of activated oxygen species on the mutagenicity of benzo[a]pyrene. Wei CE, et al. **J Appl Toxicol** 1989 Jun; 9(3):169–73

Mutagenicity of tetrachloroethene in the Ames test—metabolic activation by conjugation with glutathione. Vamvakas S, et al. **J Biochem Toxicol** 1989 Spring;4(1):21–7

Detection of genotoxicity of metallic compounds by the bacterial bioluminescence test. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr–Jun;2(2):95–9

Cytogenetic effects of N–nitrosodiethanolamine (NDELA) and NDELA–monoacetate in human lymphocytes. Dittberner U, et al. **J Cancer Res Clin Oncol** 1988; 114(6):575–8

Mutant monoclonal antibodies with select alteration in complement activation ability. Impact on immune complex functions in vivo. Nose M, et al. **J Immunol** 1988 Oct 1; 141(7):2367–73

Role of neighbouring bases and assessment of strand specificity in ethylmethanesulphonate and N–methyl–N'–nitro–N–nitrosoguanidine mutagenesis in the SUP4–o gene of Saccharomyces cerevisiae. Kohalmi SE, et al. **J Mol Biol** 1988 Dec 5;204(3):561–8

Potential metabolic mutagens of caffeine and various methylxanthines. Lander N, et al. **J Pharm Sci** 1988 Nov; 77(11):955–8

Comparative studies on the metabolism and mutagenicity of vinyl ethers. Sone T, et al. **J Pharmacobiodyn** 1989 Jun; 12(6):345–51

Cytotoxic, DNA–damaging and mutagenic properties of 2,6–dimethoxy–1,4–benzoquinone, formed by dimethophrine–nitrite interaction. Brambilla G, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1011–5

Interrelationships among carcinogenicity, mutagenicity, acute toxicity, and chemical structure in a genotoxicity data base. Benigni R, et al. **J Toxicol Environ Health** 1989; 27(1):1–20

Covalent binding of 1,1,1,2–tetrachloroethane to nucleic acids as evidence of genotoxic activity. Colacci A, et al. **J Toxicol Environ Health** 1989;26(4):485–95

Mutagenicity tests on propiverine hydrochloride. Ohuchida A, et al. **J Toxicol Sci** 1989 May;14(2):131–41

Genetic risk assessment. Brusick DJ. **JAPCA** 1987 Jul; 37(7):795

The effects of thymidine on deoxyribonucleotide pool levels, cytotoxicity and mutation induction in Friend mouse erythroleukaemia cells. Wilkinson YA, et al. **Leuk Res** 1989;13(7):615–20

Inosine induced mutations. Nordmann PL, et al. **Mol Gen Genet** 1988 Sep;214(1):62–7

Abstracts of papers presented at the 12th annual meeting of the United Kingdom Environmental Mutagen Society. York, March 22–24, 1988. **Mutagenesis** 1988 Sep; 3(5):441–52

The evaluation of volatile chemicals for mutagenicity [letter] Ashby J. **Mutagenesis** 1989 Mar;4(2):160–2

An opinion on the significance of the 19 non–clastogenic gene–mutagens reported by Tennant et al. (1987). Ashby J. **Mutagenesis** 1988 Nov;3(6):463–5

Response of Lactococcus (Streptococcus) lactis to N–methyl–N'–nitro–N–nitrosoguanidine: absence of adaptive response. Auffray Y, et al. **Mutagenesis** 1989 Jul; 4(4):280–2

The food pyrolysis product IQ enhances its own activation. Ayrton AD, et al. **Mutagenesis** 1989 May;4(3):205–7

The mutagenic and carcinogenic effects of gene transfer. Bardwell L. **Mutagenesis** 1989 Jul;4(4):245–53 (145 ref.)

Mutagenic evaluation of the pesticides captan, folpet, captafol, dichlofluanid and related compounds with the mutants TA102 and TA104 of Salmonella typhimurium. Barrueco C, et al. **Mutagenesis** 1988 Nov;3(6):467–80

Mutagenicity, metabolism and DNA adduct formation of 6–nitrochrysene in Salmonella typhimurium. el–Bayoumy K, et al. **Mutagenesis** 1989 May;4(3):235–40

Mutagenicity in V79 Chinese hamster cells of n–alkanals produced by lipid peroxidation. Brambilla G, et al. **Mutagenesis** 1989 Jul;4(4):277–9

The mutagenicity of sodium fluoride to L5178Y [wild–type and TK+/– (3.7.2c)] mouse lymphoma cells. Cole J, et al. **Mutagenesis** 1986 Mar;1(2):157–67

Mutagenicity of red wine in the L–arabinose resistance test with Salmonella typhimurium. Dorado G, et al. **Mutagenesis** 1988 Nov;3(6):497–502

Induction of SOS repair by monofunctional methanesulphonates in various Escherichia coli strains. Structure–activity relationships in comparison with mutagenicity in Salmonella typhimurium. Eder E, et al. **Mutagenesis** 1989 May;4(3):179–86

Predicting the carcinogenicity of the aromatic amine derivatives tested in the second UKEMS Collaborative Study. Ennever FK, et al. **Mutagenesis** 1986 Mar; 1(2):119–23

Evaluation of the clastogenicity of water treated with sodium hypochlorite or monochloramine using a micronucleus test in newt larvae (Pleurodeles waltl). Gauthier L, et al. **Mutagenesis** 1989 May;4(3):170–3

Mutagenicity spectra in Salmonella typhimurium strains of glutathione, L–cysteine and active oxygen species. Glatt H. **Mutagenesis** 1989 May;4(3):221–7

Short–term tests and the myth of the non–clastogenic mutagen. Green MH. **Mutagenesis** 1988 Sep;3(5):369–71 (7 ref.)

Prediction of chemical carcinogenicity from in vitro genetic toxicity. Heddle JA. **Mutagenesis** 1988 Jul;3(4):287–91

Mutagenic activity in synthetic pyrethroids in Salmonella typhimurium. Herrera A, et al. **Mutagenesis** 1988 Nov; 3(6):509–14

Co–administration of ascorbic acid with cyclophosphamide (CPA) to pregnant mice inhibits the clastogenic activity of CPA in preimplantation murine blastocysts. Kola I, et al. **Mutagenesis** 1989 Jul;4(4):297–301

Structure–activity relationship studies on the mutagenicity of some azo dyes in the Salmonella/microsome assay. Lin GH, et al. **Mutagenesis** 1988 Jul;3(4):311–5

Specificity of melphalan–induced rearrangements and their transmission through cell divisions. Mamuris Z, et al. **Mutagenesis** 1989 Mar;4(2):133–9

Evaluation of the DNA–damaging and mutagenic activity of oxolinic and pipemidic acids by the granuloma pouch assay. Maura A, et al. **Mutagenesis** 1988 Sep;3(5):397–401

Suspect spindle poisons: analysis of c–mitotic effects in mouse bone marrow cells. Miller BM, et al. **Mutagenesis** 1989 May;4(3):208–15

Activity of the human carcinogens benzidine and 2–naphthylamine in male mouse bone marrow micronucleus assays. Mirkova E, et al. **Mutagenesis** 1988 Sep;3(5):437–9

Genotoxicity testing of antiparasitic nitrofurans in the Drosophila wing somatic mutation and recombination test. Moraga AA, et al. **Mutagenesis** 1989 Mar;4(2):105–10

Induction of kinetochore positive and negative micronuclei in V79 cells by the alkylating agent diethylsulphate. Nüsse M, et al. **Mutagenesis** 1989 May;4(3):174–8

Antimutagenic effects of betel leaf extract against the mutagenicity of two tobacco–specific N–nitrosamines. Padma PR, et al. **Mutagenesis** 1989 Mar;4(2):154–6

Genetic effects of chronic treatment with cathinone in mice. Qureshi S, et al. **Mutagenesis** 1988 Nov;3(6):481–3

Temperature and time effects on mutagen production in cooked lamb meat. Sflomos C, et al. **Mutagenesis** 1989 May; 4(3):228–9

Evaluation of the mutagenicity of azo dyes in Salmonella typhimurium: a study of structure–activity relationships. Shahin MM. **Mutagenesis** 1989 Mar;4(2):115–25

Genotoxicity of the anti–juvenile hormone agent precocene II as revealed by the Drosophila wing spot test. Socha R, et al. **Mutagenesis** 1989 May;4(3):216–20

Quantification of the genotoxic effects of alkylating agents in bacterial assays. Tenenbaum L, et al. **Mutagenesis** 1988 Jul;3(4):317–22

DNA adduct formation by 7–methoxy–2–nitro–naphtho[2,1–b]furan (R7000), an extremely potent mutagen. Touati E, et al. **Mutagenesis** 1989 Jul;4(4):254–8

Uptake and DNA photodamage induced in plant cells in vivo by two cationic porphyrins. Villanueva A, et al. **Mutagenesis** 1989 Mar;4(2):157–9

The dissimilar mutational consequences of SN1 and SN2 DNA alkylation pathways: clues from the mutational specificity of dimethylsulphate in the lacI gene of Escherichia coli. Zielenska M, et al. **Mutagenesis** 1989 May; 4(3):230–4

Fundamentals and molecular mechanisms of mutagenesis. **Mutat Res** 1988 Nov;202(1):1–276

Developments in genetic toxicology. **Mutat Res** 1989 Jul; 213(1):1–104

Environmental tobacco smoke and passive smoking. Papers from a symposium. Helsinki, June 9–12, 1987. **Mutat Res** 1989 Feb;222(2):71–140

Fundamental and molecular mechanisms of mutagenesis. **Mutat Res** 1989 Aug;213(2):105–255

Comparison of the AS52/XPRT and the CHO/HPRT assays: evaluation of 6 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):121–8

The mouse bone marrow micronucleus test: evaluation of 21 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun; 223(2):129–40

The in vitro unscheduled DNA synthesis (UDS) assay in rat primary hepatocytes: evaluation of 24 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):141–51

The CHO/HPRT assay: evaluation of 19 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):153–61

The in vitro unscheduled DNA synthesis (UDS) assay in rat primary hepatocytes: evaluation of 2-furoic acid and 7 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun; 223(2):163–9

The Salmonella mutagenicity test: evaluation of 29 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun; 223(2):171–82

Evaluation of drug candidates in a battery of short-term genetic toxicology assays: overview. Aaron CS. **Mutat Res** 1989 Jun;223(2):105–9 (8 ref.)

The clastogenic activity of 1,6-dinitropyrene in peripheral human lymphocytes. Adams K, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):135–40

Clastogenic effects of cis-diamminedichloroplatinum. I. Induction of chromosomal aberrations in somatic and germinal cells of mice. Adler ID, et al. **Mutat Res** 1989 Mar;211(1):131–7

Screening for possible human carcinogens and mutagens: a symposium report. Adler ID, et al. **Mutat Res** 1989 Jul; 213(1):27–39 (45 ref.)

Transplacental genotoxicity of a tobacco-specific N-nitrosamine, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, in Syrian golden hamster. Alaoui-Jamali MA, et al. **Mutat Res** 1989 May;223(1):65–72

Study on the mutagenicity of nifurtimox and eight derivatives with the L-arabinose resistance test of Salmonella typhimurium. Alejandre-Durán E, et al. **Mutat Res** 1988 Oct;206(2):193–200

Sister-chromatid exchanges and chromosomal aberrations in chick embryos after treatment with the fungicide maneb. Arias E. **Mutat Res** 1988 Oct;206(2):271–3

Role of hemin in the inhibition of mutagenic activity of 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2) and other aminoazaarenes. Arimoto S, et al. **Mutat Res** 1989 Aug;213(2):217–26

Review on the genotoxic activity of thioacetamide. Arni P. **Mutat Res** 1989 Sep;221(2):153–62 (64 ref.)

The toxicological effects of saccharin in short-term genotoxicity assays. Arnold DL, et al. **Mutat Res** 1989 Sep; 221(2):69–132 (226 ref.)

Tobacco smoke-induced clastogenicity in mouse fetuses and in newborn mice. Balansky RM, et al. **Mutat Res** 1989 May; 223(1):1–6

Hyperthermia-induced modulation of killing and mutation by UV and N-methyl-N'-nitro-N-nitrosoguanidine in V79 cells. Banerjee S, et al. **Mutat Res** 1989 May;226(1):69–73

Cytogenetic effects of 3,4-dichloroaniline in human lymphocytes and V79 Chinese hamster cells. Bauchinger M, et al. **Mutat Res** 1989 Jul;226(3):197–202

Is dichlorvos a carcinogenic risk for humans? Bremmer JN, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):39–44 (23 ref.)

Effect of the uvs-2 allele of Neurospora crassa on the mutagenic potency of two N-hydroxylaminopurines and 2-aminopurine in the ad-3 forward-mutation test. Brockman HE, et al. **Mutat Res** 1989 Jul;218(1):1–11

Conversion of IQ, a dietary pyrolysis carcinogen to a direct-acting mutagen by normal intestinal bacteria of humans. Carman RJ, et al. **Mutat Res** 1988 Nov; 206(3):335–42

DNA damage and repair induced in vitro by nitrilotriacetic acid (NTA) in human lymphocytes. Celotti L, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):149–54

International Commission for Protection Against Environmental Mutagens and Carcinogens. ICPEMC publication No. 17. Can a mechanistic rationale be provided for non-genotoxic carcinogens identified in rodent bioassays? Clayson DB. **Mutat Res** 1989 Jul;221(1):53–67 (91 ref.)

Release of mutagens from finished leather. Clonfero E, et al. **Mutat Res** 1989 Aug;226(4):229–33

Genetic toxicology of 1,1,2-trichloroethylene. Crebelli R, et al. **Mutat Res** 1989 Jul;221(1):11–37 (143 ref.)

Mutagenicity of active oxygen species in bacteria and its enzymatic or chemical inhibition. De Flora S, et al. **Mutat Res** 1989 Sep;214(1):153–8

Mechanisms of inhibitors of mutagenesis and carcinogenesis. Classification and overview. De Flora S, et al. **Mutat Res** 1988 Dec;202(2):285–306 (175 ref.)

Differential metabolism of sodium azide in maize callus and germinating embryos. Dotson SB, et al. **Mutat Res** 1989 Aug;213(2):157–63

Methyl methanesulphonate (MMS) is clearly mutagenic in S. typhimurium strain TA1535; a comparison with strain TA100. Eder E, et al. **Mutat Res** 1989 Jul;226(3):145–9

Germ-cell mutations in mice: standards for protecting the human genome. Ehling UH. **Mutat Res** 1989 May; 212(1):43–53

Mutagenic effects of TPA-induced clastogenic factor in Chinese hamster cells. Emerit I, et al. **Mutat Res** 1989 Sep; 214(1):97–104

Influence of the Uvr repair system on the mutagenicity of antiparasitic drugs. Espinosa-Aguirre JJ, et al. **Mutat Res** 1989 Mar;222(3):161–6

Relationships between structure, toxicity and genetic effects in Salmonella typhimurium and Saccharomyces cerevisiae for substituted aniline mustards. Ferguson LR, et al. **Mutat Res** 1989 Sep;224(1):95–104

Nitroreduction of 6-nitrobenzo[a]pyrene: a potential activation pathway in humans. Fu PP, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):123–9

Alkaline elution of DNA from stomach pyloric mucosa of rats treated with glyoxal. Furihata C, et al. **Mutat Res** 1989 Aug;213(2):227–31

A restudy of the efficacy of adriamycin in inducing dominant lethals in mouse spermatogonia stems cells. Generoso WM, et al. **Mutat Res** 1989 May;226(1):61–4

Mechanisms of inhibition of N-nitroso compounds-induced mutagenicity. Gichner T, et al. **Mutat Res** 1988 Dec; 202(2):325–34 (85 ref.)

Effects of prototypic PCBs on benzo[a]pyrene mutagenic activity related to vitamin A intake. Grolier P, et al. **Mutat Res** 1989 Mar;211(1):139–45

A genetic method to quantitate induced chromosome breaks using a mouse/human monochromosomal hybrid cell line: identification of potential clastogenic agents. Gudi R, et al. **Mutat Res** 1989 Apr;225(4):149–56

Comparative study of sister-chromatid exchanges and chromosomal aberrations induced by airborne particulates from an urban and a highly industrialized location in human lymphocyte cultures. Hadnagy W, et al. **Mutat Res** 1989 Jan-Feb;225(1–2):27–32

Mutagenicity studies on fenitrothion in bacteria and mammalian cells. Hara M, et al. **Mutat Res** 1989 Jan; 222(1):53–61

Relationships between structure of nitrated arenes and their mutagenicity in Salmonella typhimurium; 2- and 2,7-nitro substituted fluorene, phenanthrene and pyrene. Hirayama T, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):67–74

7-Amino-2,4,6-trimethylquinoline as a mutagenic pyrolysate compound of polyurethane foam. Hirayama T, et al. **Mutat Res** 1989 Jul;226(3):169–74

Mutagenicity of the reaction products of carbazole in the presence of nitrogen dioxide and nitrocarbazole. Hisamatsu Y, et al. **Mutat Res** 1989 May;226(1):55–9

Genetic toxicology of oxygen. Joenje H. **Mutat Res** 1989 Jul;219(4):193–208 (151 ref.)

Characterization of aminoalkylimidazol-4-one mutagens from liquid-reflux models. Jones RC, et al. **Mutat Res** 1989 Jan;222(1):43–51

Modulating effects of naturally occurring indoles on SCE induction depend largely on the type of mutagen. Jongen WM, et al. **Mutat Res** 1989 Mar;222(3):263–9

Increased frequency of spontaneous and X-ray-induced chromosomal aberrations in lymphocytes from neonates and the influence of caffeine--an in vitro study. Karsdon J, et al. **Mutat Res** 1989 May;226(1):13–9

Methylreductic acid and hydroxymethylreductic acid: oxygen radical-forming agents in heated starch. Kasai H, et al. **Mutat Res** 1989 Sep;214(1):159–64

The structure-function relationships of nitrofluorenes and nitrofluorenones in the Salmonella mutagenicity and CHO sister-chromatid exchange assays. Kitchin RM, et al. **Mutat Res** 1988 Nov;206(3):367–77

Genetic effects of chlorinated ethylenes in the yeast Saccharomyces cerevisiae. Koch R, et al. **Mutat Res** 1988 Oct;206(2):209–16

Mutagenicity studies on paracetamol in human volunteers. I. Cytogenetic analysis of peripheral lymphocytes and lipid peroxidation in plasma. Kočišová J, et al. **Mutat Res** 1988 Nov-Dec;209(3–4):161–5

Use of the cytokinesis-block method for the analysis of micronuclei in V79 Chinese hamster lung cells: results with mitomycin C and cyclophosphamide. Krishna G, et al. **Mutat Res** 1989 Jan;222(1):63–9

Genotoxicity of aniline derivatives in various short-term tests. Kugler-Steigmeier ME, et al. **Mutat Res** 1989 Apr; 211(2):279–89

Testing of genotoxic effects of 2,4-dichlorophenoxyacetic acid (2,4-D) using multiple genetic assay systems of plants. Kumari TS, et al. **Mutat Res** 1989 Aug;226(4):235–8

Erythrosine, a permitted food dye, is mutagenic in the Bacillus subtilis multigene sporulation assay. Lakdawalla AA, et al. **Mutat Res** 1988 Oct;206(2):171–6

Mutagens as carcinogens: development of current concepts. Lawley PD. **Mutat Res** 1989 Jul;213(1):3–25 (145 ref.)

Mutagenicity, carcinogenicity and teratogenicity of aluminium. Léonard A, et al. **Mutat Res** 1988 Nov; 196(3):247–57 (140 ref.)

Formaldehyde-induced and spontaneous alterations in human hprt DNA sequence and mRNA expression. Liber HL, et al. **Mutat Res** 1989 May;226(1):31–7

Ethanol and acetaldehyde potentiate the clastogenicity of ultraviolet light, methyl methanesulfonate, mitomycin C and bleomycin in Chinese hamster ovary cells. Lin YC, et al. **Mutat Res** 1989 Apr;216(2):93–9

Seasonal variations in mutagenic activity of air pollutants at an industrial district of Silesia. Motykiewicz G, et al. **Mutat Res** 1989 Jun;223(2):243–51

Relative efficacy of short-term tests in detecting genotoxic effects of cadmium chloride in mice in vivo. Mukherjee A, et al. **Mutat Res** 1988 Oct;206(2):285–95

Mutagenic and teratogenic effects of acrylamide in the mammalian spot test. Neuhäuser-Klaus A, et al. **Mutat Res** 1989 Jul;226(3):157–62

Antimutagenesis by shift in monooxygenase isoenzymes and induction of epoxide hydrolase. Oesch F. **Mutat Res** 1988 Dec;202(2):335–42 (39 ref.)

Formation of a diazoquinone-type mutagen from acetaminophen treated with nitrite under acidic conditions. Ohta T, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):95–8

Cytogenetic effects of fenvalerate in mammalian in vivo test system. Pati PC, et al. **Mutat Res** 1989 Mar;222(3):149–54

Antimutagenic effects of several subfractions of extract from wheat sprout toward benzo[a]pyrene-induced mutagenicity in strain TA98 of Salmonella typhimurium. Peryt B, et al. **Mutat Res** 1988 Oct;206(2):221–5

Mutagenic characterization of cholesterol epoxides in Chinese hamster V79 cells. Peterson AR, et al. **Mutat Res** 1988 Oct;203(5):355–66

DNA damage in stomach, kidney, liver and lung of rats treated with atrazine. Pino A, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):145–7

DNA amplification in genetic toxicology. Pool BL, et al. **Mutat Res** 1989 Jul;213(1):61–72

Oxidized apurinic/apyrimidinic sites formed in DNA by oxidative mutagens. Povirk LF, et al. **Mutat Res** 1989 Sep; 214(1):13–22 (50 ref.)

Evaluation of azo food dyes for mutagenicity and inhibition of mutagenicity by methods using Salmonella typhimurium. Prival MJ, et al. **Mutat Res** 1988 Oct;206(2):247–59

Testing of hydralazine in in vivo–in vitro hepatocyte assays for UDS and stimulation of replicative DNA synthesis. Puri EC, et al. **Mutat Res** 1989 Jul;218(1):13–9

Mutagenicity of acrylonitrile and its metabolite 2-cyanoethylene oxide in human lymphoblasts in vitro. Recio L, et al. **Mutat Res** 1988 Oct;206(2):297–305

Heat shock protection against induction of chromatid aberrations is dependent on the time span between heat shock and clastogen treatment of Vicia faba root tip meristem cells. Rieger R, et al. **Mutat Res** 1988 Nov–Dec; 209(3–4):141–4

Evaluation of the genotoxicity of domoic acid in a hepatocyte-mediated assay with V79 Chinese hamster lung cells. Rogers CG, et al. **Mutat Res** 1989 Jul;226(3):191–5

Simple method for precise determination of chemical lethality in the L-arabinose resistance test of Salmonella typhimurium. Roldán-Arjona T, et al. **Mutat Res** 1989 Jul; 226(3):175–80

Polychlorinated biphenyls (PCBs): mutagenicity and carcinogenicity. Safe S. **Mutat Res** 1989 Jan;220(1):31–47 (139 ref.)

The evaluation of genotoxic activities of disinfectants and their metabolites by umu test. Sakagami Y, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):155–60

Suppressing effect of tannic acid on the frequencies of mutagen-induced sister-chromatid exchanges in mammalian cells. Sasaki YuF, et al. **Mutat Res** 1989 Aug; 213(2):195–203

Mutagenicity of 2,6-dinitrotoluene and its metabolites, and their related compounds in Salmonella typhimurium. Sayama M, et al. **Mutat Res** 1989 Jul;226(3):181–4

Mutagenicity on chlorination of products formed by ozonation of naphthoresorcinol in water. Sayato Y, et al. **Mutat Res** 1989 Jul;226(3):151–5

The mutagenic potencies of plant extracts containing quercetin in Salmonella typhimurium TA98 and TA100. Schimmer O, et al. **Mutat Res** 1988 Oct;206(2):201–8

Are SCE frequencies indicative of adaptive response of plant cells? Schubert I, et al. **Mutat Res** 1989 Apr;211(2):301–6

Monofunctional alkylating agent-induced S-phase-dependent DNA damage. Schwartz JL. **Mutat Res** 1989 Apr;216(2):111–8

Inhalation exposure-rate of ethylene oxide affects the level of DNA breakage and unscheduled DNA synthesis in spermiogenic stages of the mouse. Sega GA, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):177–80

Activation of two environmental mixtures by plant S9. Shane BS, et al. **Mutat Res** 1989 Jan;222(1):9–18

Effect of pH on mutagenesis by thiols in Salmonella typhimurium TA102. Stark AA, et al. **Mutat Res** 1989 Sep; 224(1):89–94

Effects of heat shock on the induction of mutations by chemical mutagens in Neurospora crassa. Tanaka S, et al. **Mutat Res** 1989 Jun;223(2):233–42

Evaluation of the mutagenic activity of some phenanthroisoquinolines in Salmonella typhimurium. Tanga MJ, et al. **Mutat Res** 1988 Oct;206(2):235–8

Synergism of mutant frequencies in the mouse lymphoma cell mutagenicity assay by binary mixtures of methyl methanesulfonate and ethyl methanesulfonate [pubiished erratum appears in Mutat Res 1989 Apr;222(4):415] Tarlo KS, et al. **Mutat Res** 1988 Oct;206(2):239–46

Genetic toxicology of 1,2-dibromo-3-chloropropane (DBCP). Teramoto S, et al. **Mutat Res** 1989 Jul;221(1):1–9 (51 ref.)

In vivo cytogenetic effects of cooked food mutagens. Tucker JD, et al. **Mutat Res** 1989 Sep;224(1):105–13

Somatic cell mutagenesis in Drosophila: recovery of genetic damage in relation to the types of DNA lesions induced in mutationally unstable and stable X-chromosomes. Vogel EW. **Mutat Res** 1989 Mar;211(1):153–70

Azathioprine, a genotoxic agent to be considered non-genotoxic in man. Voogd CE. **Mutat Res** 1989 Sep; 221(2):133–52 (141 ref.)

Studies on the oxidation products from 2,4-diaminotoluene by hydrogen peroxide and their mutagenicities. II. Watanabe T, et al. **Mutat Res** 1989 Jan–Feb;225(1–2):15–9

Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae—an interlaboratory study. Whittaker SG, et al. **Mutat Res** 1989 Sep;224(1):31–78

The genotoxicity of a variety of aniline derivatives in a DNA repair test with primary cultured rat hepatocytes. Yoshimi N, et al. **Mutat Res** 1988 Oct;206(2):183–91

Mutagenic activities of selected nitrofluoranthene derivatives in Salmonella typhimurium strains TA98, TA98NR and TA98/1,8–DNP6. Zielinska B, et al. **Mutat Res** 1988 Oct; 206(2):131–40

Nonmutagenic carcinogens induce intrachromosomal recombination in yeast. Schiestl RH. **Nature** 1989 Jan 19; 337(6204):285–8

Genotoxicological study of the local anaesthetic pentacaine in vitro micronucleus test. Ujházy E, et al. **Pharmazie** 1988 Aug;43(8):560

Mutagenic activity of Mintostachys mollis in AHH1 lymphoblast cells. Carvajal G, et al.
Plant Foods Hum Nutr 1988;38(2):105–14

Genotoxic effects of aristolochic acid in the mouse micronucleus test. Mengs U, et al. **Planta Med** 1988 Dec; 54(6):502–3

Mutagenicity of dipyridyls and their methylated derivatives in Salmonella typhimurium/rat liver microsome system. Lin JK, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):56–63

Calcium, lanthanum, pyrophosphate, and hydroxyapatite: a comparative study in fibroblast mitogenicity. Praeger FC, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):28–34

Genotoxicity testing of Maillard reaction products. Shibamoto T. **Prog Clin Biol Res** 1989;304:359–76 (46 ref.)

Mutagen, carcinogen and tumor promoter in daily life. Sugimura T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:346–52 (7 ref.)

Mutagenicity and alkylating activity of the aqueous chlorination products of humic acid and their molecular weight fractions. Agarwal SC, et al. **Sci Total Environ** 1989 Feb;79(1):69–83

A review of physical, chemical, and biological properties of fly ash and effects on agricultural ecosystems. el–Mogazi D, et al. **Sci Total Environ** 1988 Aug 1;74:1–37 (126 ref.)

Impact of bleached kraft mill effluents on drinking water quality. Wigilius B, et al. **Sci Total Environ** 1988 Aug 1; 74:75–96

Ethyl methane sulfonate- and bleomycin-generated deletion mutations at HPRT locus in xeroderma pigmentosum complementation group D fibroblasts. Wood CM, et al. **Somat Cell Mol Genet** 1989 Jul;15(4):345–57

Effects of quinoline and 8–hydroxyquinoline on mouse bone marrow erythrocytes as measured by the micronucleus assay. Hamoud MA, et al.
Teratogenesis Carcinog Mutagen 1989;9(2):111–8

Genotoxic effects of estrogens in epithelial cells from the neonatal mouse uterine cervix: modifications by metabolic modifiers. Hillbertz–Nilsson K, et al.
Teratogenesis Carcinog Mutagen 1989;9(2):97–110

Mutagenic lipid peroxides from edible oils. Kensese SM, et al. **Teratogenesis Carcinog Mutagen** 1989;9(3):133–45

Effect of duration of exposure to benzo(a)pyrene diol–epoxide on neoplastic transformation, mutagenesis, cytotoxicity, and total covalent binding to DNA of rodent cells. Krolewski B, et al.
Teratogenesis Carcinog Mutagen 1988;8(3):127–36

Toxic and DNA–damaging activities of the fungicides mancozeb and thiram (TMTD) on human lymphocytes in vitro. Perocco P, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):75–81

Transplacental teratogenesis and mutagenesis in mouse fetuses treated with cyclophosphamide. Porter AJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):191–203

Fetal pathology produced by ethylene oxide treatment of the murine zygote. Rutledge JC, et al. **Teratology** 1989 Jun; 39(6):563–72

Rec–assay of human bile for mutagenicity and co–mutagenicity. Magara J, et al. **Tohoku J Exp Med** 1989 Feb;157(2):177–82

In vivo cytogenetic studies on mice exposed to Orange G, a food colourant. Giri AK, et al. **Toxicol Lett** 1988 Dec; 44(3):253–61

Effect of norharman on the mutagenicity of toluidine metabolites. Gupta RL, et al. **Toxicol Lett** 1989 Jul; 48(1):75–81

Genotoxic potential of diethylcarbamazine, an antifilarial drug. Roy B, et al. **Toxicol Lett** 1988 Nov;44(1–2):7–12

Effect of nitroxazepine on bone marrow cells of mice. Shaheen S, et al. **Toxicol Lett** 1988 Nov;44(1–2):215–7

Genotoxic effects of MeCCNU on human peripheral blood lymphocytes. Vyas RC, et al. **Toxicol Lett** 1988 Nov; 44(1–2):153–9

Mutagenicity of cisplatin and carboplatin used alone and in combination with four other anticancer drugs. Hannan MA, et al. **Toxicology** 1989 Apr;55(1–2):183–91

Chlorinated drinking water is mutagenic and causes 3–methylcholanthrene type induction of hepatic monooxygenase. Liimatainen A, et al. **Toxicology** 1988 Oct; 51(2–3):281–9

In vitro and in vivo evaluation of the genotoxic potential of 2–ethyl–1,3–hexanediol. Slesinski RS, et al.
Toxicology 1988 Dec 30;53(2–3):179–98

SOS chromotest, a quantitative short–term bacterial assay for the detection of genotoxic compounds in an automated version adapted to Bioscreen Analyzer System. Janz S, et al. **Zentralbl Mikrobiol** 1988;143(8):645–9

[Preliminary study on mutagenicity of MeIQ and extracts of fried fish and antimutagenicity of some dietary factors] Liu XL.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Apr; 11(2):97–101 (Eng. Abstr.) **(Chi)**

[Quantification of chemical genetic risk] Ehling UH.
Naturwissenschaften 1989 May;76(5):194–9 (27 ref.) (Eng. Abstr.) **(Ger)**

[Nitrated polycyclic aromatic hydrocarbons (nitro–PAH) in the suspended substances of the atmosphere. 2. Comparison of the mutagenicity of nitro–PAH and dust extracts of the air in the Ames, SOS repair induction and SCE test] Schleibinger H, et al. **Zentralbl Hyg Umweltmed** 1989 Aug; 188(5):421–38 (Eng. Abstr.) **(Ger)**

[Carcinogens in food–pyrolysates, and active oxygens] Hiramoto K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2869–74 **(Jpn)**

[Reparative excision of opposite chemical lesions of two DNA strands causes a double–stranded break] Sinitsina OI, et al. **Dokl Akad Nauk SSSR** 1989 May–Jun;306(1):214–7 **(Rus)**

[Distribution, formation, carcinogenic and mutagenic activities of nitro derivatives of polycyclic aromatic hydrocarbons] Khesina AIa, et al. **Eksp Onkol** 1989; 11(2):3–8 (50 ref.) (Eng. Abstr.) **(Rus)**

[Frequency of chromosome aberrations induced by mutagens of various functions in cells of the first division at various times of fixation] Chebotarev AN, et al. **Genetika** 1989 Mar; 25(3):548–51 (Eng. Abstr.) **(Rus)**

[Incidence of dominant lethals in the progeny of young male house mice (Mus musculus L.) after exposure to excretory products of mature males of the same species] Daev EV, et al. **Genetika** 1988 Nov;24(11):2015–21 (Eng. Abstr.) **(Rus)**

[Mutagenic and cytotoxic effects of acrylates] Fediukovich LV, et al. **Genetika** 1988 Jun;24(6):1132–4 (Eng. Abstr.) **(Rus)**

[Sensitivity of individual Drosophila to the mutagenic action of ethyl methanesulfonate] Goncharova RI, et al.
Genetika 1988 Dec;24(12):2141–8 (Eng. Abstr.) **(Rus)**

[Mutagenic action of the dimethyl ester of terephthalic acid on murine somatic cells in vivo] Goncharova RI, et al. **Genetika** 1988 Jul;24(7):1226–33 (Eng. Abstr.) **(Rus)**

[Mutagenic effects of direct electric current] Grigor'eva NN, et al. **Genetika** 1989 Jan;25(1):158–60 (Eng. Abstr.) **(Rus)**

[Natural and recombinant interferons provide different protection of human cells with impaired repair system (Marfan syndrome) against mutagens] Iakubovskaia EL, et al. **Genetika** 1988 Nov;24(11):2050–5 (Eng. Abstr.) **(Rus)**

[Comparative study of the genetic effect of various tritium compounds in male mice] Pomerantseva MD, et al.
Genetika 1989 Feb;25(2):277–82 (Eng. Abstr.) **(Rus)**

[Specificity of mutagenic effect of N–nitroso–N–methylurea and relation between its mutagenic activity and carbamoylating properties] Serebrianyi AM, et al.
Genetika 1988 Oct;24(10):1786–94 (Eng. Abstr.) **(Rus)**

[Mutagenic properties of phosphotriester analogs of oligodeoxyribonucleotides] Petrenko VA, et al.
Mol Biol (Mosk) 1988 Sep–Oct;22(5):1226–37 (Eng. Abstr.) **(Rus)**

[Study of the phenomenon and substantiation of the mechanism of antimutagenesis under conditions of action of sodium fluoride] Aliev AA, et al. **Tsitol Genet** 1988 Sep–Oct;22(5):22–5 (Eng. Abstr.) **(Rus)**

[Genotoxic effects of heavy metals and their salts in an experiment on Drosophila and mammals] Chopikashvili LV, et al. **Tsitol Genet** 1989 May–Jun;23(3):35–8 (Eng. Abstr.) **(Rus)**

[Comparative study of the mutagenic activity of dicurin on five test–objects] Kurinnyi AI, et al. **Tsitol Genet** 1989 Jan–Feb;23(1):9–13 (Eng. Abstr.) **(Rus)**

[Comparative studies of the recombinogenic action of some pesticides on yeasts in the absence and presence of metabolic activation] L'vova TS. **Tsitol Genet** 1989 May–Jun;23(3):68–70 (Eng. Abstr.) **(Rus)**

[Estimation of the total mutagenic activity of the industrial environment at ferrous metallurgy enterprises] Sedova KS. **Tsitol Genet** 1989 Mar–Apr;23(2):16–20 (Eng. Abstr.) **(Rus)**

[Quantitative estimation of the modification of mutagenic effect in experiments on mammals using a regression modification index] Sycheva LP, et al. **Tsitol Genet** 1989 Mar–Apr;23(2):45–9 (Eng. Abstr.) **(Rus)**

[Genetic effects of the new pesticide rovicurt] Tashkhodzhaev PI, et al. **Tsitol Genet** 1988 Sep–Oct; 22(5):52–5 (Eng. Abstr.) **(Rus)**

[Cytogenetic activity of the butylcaptax defoliant transformation product] Vesmanova OIa, et al.
Tsitol Genet 1989 May–Jun;23(3):70–2 (Eng. Abstr.) **(Rus)**

[The safety of a vaccinal preparation made of bacteria of the genus Proteus: the absence of a mutagenic effect] Volgareva GM, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):70–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Genetic toxicology testing and biomonitoring of environmental or occupational exposure. **Mutat Res** 1989 Aug;223(4):329–414

Micronucleus test with colchicine given by intraperitoneal injection and oral gavage. Asano N, et al. **Mutat Res** 1989 Aug;223(4):391–4

Micronucleus test with benzo[a]pyrene using a single peroral administration and intraperitoneal injection in males of the MS/Ae and CD–1 mouse strains. Awogi T, et al.
Mutat Res 1989 Aug;223(4):353–6

Verapamil as a co–mutagen in the Salmonella/mammalian microsome mutagenicity test. Ferguson LR, et al.
Mutat Res 1988 Sep–Oct;209(1–2):57–62

Micronucleus induction in mouse bone marrow by phenacetin administered intraperitoneally or orally. Hachiya N, et al. **Mutat Res** 1989 Aug;223(4):365–8

Micronucleus test with 6–mercaptopurine monohydrate administered intraperitoneally and orally. Hara T, et al. **Mutat Res** 1989 Aug;223(4):349–52

Micronucleus test with 1–beta–D–arabinofuranosylcytosine administered by intraperitoneal injection and oral gavage. Hayashi M, et al. **Mutat Res** 1989 Aug;223(4):345–8

Difference between intraperitoneal and oral gavage application in the micronucleus test. The 3rd collaborative study by CSGMT/JEMS.MMS. Collaborative Study Group for the Micronucleus Test/Mammalian Mutagenesis Study Group of the Environmental Mutagen Society of Japan. Hayashi M, et al. **Mutat Res** 1989 Aug;223(4):329–44

Micronucleus test with procarbazine hydrochloride administered by intraperitoneal injection and oral gavage. Inouye T, et al. **Mutat Res** 1989 Aug;223(4):411–4

Micronucleus test with ethyl methanesulfonate administered by intraperitoneal injection and oral gavage. Kondo K, et al. **Mutat Res** 1989 Aug;223(4):373–5

Administration–route–related difference in the micronucleus test with 7,12–dimethylbenz[a]anthracene. Mizuhashi F, et al. **Mutat Res** 1989 Aug;223(4):357–60

Effect of route of administration in the micronucleus test with potassium bromate. Nakajima M, et al. **Mutat Res** 1989 Aug;223(4):399–402

Micronucleus test with vincristine administered by intraperitoneal injection and oral gavage. Ohuchida A, et al. **Mutat Res** 1989 Aug;223(4):395–8

A comparison of intraperitoneal injection and oral gavage in the micronucleus test with mitomycin C in mice. Sato S, et al. **Mutat Res** 1989 Aug;223(4):387–90

Micronucleus test with potassium chromate(VI) administered intraperitoneally and orally to mice. Shindo Y, et al.
Mutat Res 1989 Aug;223(4):403–6

Micronucleus test with 2–acetylaminofluorene by intraperitoneal injection and oral administration. Sugiyama C, et al. **Mutat Res** 1989 Aug;223(4):361–4

Administration–route–related differences in the micronucleus test with N–ethyl–N–nitrosourea. Sutou S, et al.
Mutat Res 1989 Aug;223(4):377–81

Administration–route–related differences in the micronucleus test with benzene. Suzuki S, et al. **Mutat Res** 1989 Aug; 223(4):407–10

Micronucleus test with methyl methanesulfonate administered by intraperitoneal injection and oral gavage. Tsuyoshi T, et al. **Mutat Res** 1989 Aug;223(4):383–6

Micronucleus test with cyclophosphamide administered by intraperitoneal injection and oral gavage. Wakata A, et al.
Mutat Res 1989 Aug;223(4):369–72

[Comparative evaluation of the antitumor, cytogenetic and immunodepressive effects of dimetinur when used perorally and parenterally] Osatrovskaia LA, et al. **Eksp Onkol** 1988; 10(6):44–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Molecular dosimetry as a tool in genetic risk assessment. Aaron CS. **Birth Defects** 1988;24(5):53–78 (164 ref.)

Mutagen–induced chromosome fragility within peripheral blood lymphocytes of head and neck cancer patients. Schantz SP, et al. **Head Neck** 1989 Jul–Aug;11(4):337–42

Sensitivity to genotoxic effects of bleomycin in humans: possible relationship to environmental carcinogenesis. Hsu TC, et al. **Int J Cancer** 1989 Mar 15;43(3):403–9

Isothiazolinone sensitivity [letter] Fransway AF. **Lancet** 1989 Apr 22;1(8643):910

Assessment of cytogenetic damage in chagasic children treated with benznidazole. Gorla NB, et al. **Mutat Res** 1988 Oct;206(2):217–20

Different clinical presentations in photosensitivity to musk ambrette. Sánchez–Pedreño P, et al. **Photodermatol** 1989 Apr;6(2):103–5

[The study of immunotoxicity of butyl glycidyl ether] Xue B, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan; 22(1):11–3 (Eng. Abstr.) **(Chi)**

[Selected bacterial tests used for detection of genotoxic properties of chemical compounds] Jenek J.

Rocz Panstw Zakl Hig 1988;39(6):475–84 (Eng. Abstr.) (Pol)

ANALYSIS

Chemistry of Maillard reactions: recent studies on the browning reaction mechanism and the development of antioxidants and mutagens. Namiki M. Adv Food Res 1988; 32:115–84 (295 ref.)

Rapid characterization of mutagenic aromatic amines in energy-related materials by short column liquid chromatography with electrochemical detection. Lee RF, et al. Arch Environ Contam Toxicol 1988 Sep;17(5):651–6

Mutagens, toxicants, and other constituents in small city sludges in New York State. Mumma RO, et al. Arch Environ Contam Toxicol 1988 Sep;17(5):657–63

Molecular dosimetry of genotoxic damage. Baan RA, et al. Arch Toxicol Suppl 1989;13:66–82 (65 ref.)

The DNA-adducts of the food mutagen and carcinogen IQ (2-amino-3-methylimidazo [4,5-f]quinoline). Dirr A, et al. Arch Toxicol Suppl 1989;13:224–6

Determination of 7-(2-hydroxyethyl)guanine with gas chromatography/mass spectrometry as a parameter for genotoxicity of ethylene oxide. Föst U, et al. Arch Toxicol Suppl 1989;13:250–3

An assay for 2-amino-3,8-dimethylimidazo[4,5-f]-quinoxaline and 2-amino-3,4,8-trimethylimidazo-[4,5-f]quinoxaline in fried beef using capillary column gas chromatography electron capture negative ion chemical ionization mass spectrometry. Murray S, et al. Biomed Environ Mass Spectrom 1988 Oct;16(1-12):221–4

Stabilization and quantitative analysis of fecapentaenes in human feces, using synthetic fecapentaene-12. Kleinjans JC, et al. Cancer Lett 1989 Jan;44(1):33–7

Biochemical epidemiology of colon cancer: effect of types of dietary fiber on fecal mutagens, acid, and neutral sterols in healthy subjects. Reddy B, et al. Cancer Res 1989 Aug 15;49(16):4629–35

Case-control study of colorectal cancer and fecapentaene excretion. Schiffman MH, et al. Cancer Res 1989 Mar 1; 49(5):1322–6

Case-control study of colorectal cancer and fecal mutagenicity. Schiffman MH, et al. Cancer Res 1989 Jun 15;49(12):3420–4

Levels of mutagens in the urine of smokers of black and blond tobacco correlate with their risk of bladder cancer. Malaveille C, et al. Carcinogenesis 1989 Mar;10(3):577–86

Carcinogenic glutamic acid pyrolysis product in the dialysate of uremic patients treated by continuous ambulatory peritoneal dialysis. Yanagisawa H, et al. Clin Nephrol 1988 Aug;30(2):73–8

Exposure level monitor of 3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole, a dietary carcinogen, in rabbits. Manabe S, et al. Environ Mol Mutagen 1989;14(1):34–41

Influence of water activity and reaction temperature of ribose-lysine and glucose-lysine Maillard systems on mutagenicity, absorbance and content of furfurals. Cuzzoni MT, et al. Food Chem Toxicol 1988 Oct;26(10):815–22

Formation of mutagenic N-nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. Food Chem Toxicol 1988 Nov-Dec;26(11-12):947–54

Problems in monitoring mutagenicity of human urine. Hayatsu H, et al. IARC Sci Publ 1988;(89):401–4

An improved standardized procedure for urine mutagenicity testing. Rannug A, et al. IARC Sci Publ 1988;(89):396–400

Influence of particulate trap oxidizers on emission of mutagenic compounds by diesel automobiles. Rasmussen RE, et al. J Appl Toxicol 1989 Jun;9(3):159–68

Thermal desorption-capillary gas chromatography for the quantitative analysis of dimethyl sulphate, diethyl sulphate and ethylene oxide in the workplace. Düblin T, et al. J Chromatogr 1988 Dec 2;456(1):233–9

Determination of 5-nitrofurylacrylic acid in wines by high-performance liquid chromatography. Farré R, et al. J Chromatogr 1988 Jul 8;445(1):264–7

A comparison of mutagen production in fried ground chicken and beef: effect of supplemental creatine. Knize MG, et al. Mutagenesis 1988 Nov;3(6):503–8

Evaluation of serum-associated embryotoxicity/mutagenicity in females with reproductive dysfunctions using preimplantation mouse embryos in vitro. Porter AJ, et al. Mutagenecis 1988 Sep;3(5):403–8

The micronucleus test in Xenopus: a new and simple 'in vivo' technique for detection of mutagens in fresh water. Van Hummelen P, et al. Mutagenesis 1989 Jan;4(1):12–6

Genetic toxicology testing and biomonitoring or environmental or occupational exposure. Mutat Res 1989 May;223(1):1–72

A genotoxic assessment of environmental tobacco smoke using bacterial bioassays. Claxton LD, et al. Mutat Res 1989 Feb;222(2):81–99 (61 ref.)

Public exposure to environmental tobacco smoke. Löfroth G, et al. Mutat Res 1988 Nov;202(1):103–10

Environmental tobacco smoke: overview of chemical composition and genotoxic components. Löfroth G. Mutat Res 1989 Feb;222(2):73–80 (49 ref.)

Genotoxic activity of organic chemicals in drinking water. Meier JR. Mutat Res 1988 Nov;196(3):211–45 (173 ref.)

The distribution of mutagenic activity in red, rose and white wines. Nguyen T, et al. Mutat Res 1989 Jun;223(2):205–12

Water hyacinth (Eichhornia crassipes) to biomonitor genotoxicity of low levels of mercury in aquatic environment. Panda BB, et al. Mutat Res 1988 Oct; 206(2):275–9

Evidence from Ames assays of laboratory pulse-flame combustor samples that direct-acting mutagens are not an inevitable consequence of hydrocarbon fuel combustion. Salmeen IT, et al. Mutat Res 1989 Sep;227(1):7–11

Fecapentaene concentration and mutagenicity in 718 North American stool samples. Schiffman MH, et al. Mutat Res 1989 Apr;222(4):351–7

Ames test: mutagenic activity of airborne particles collected on airconditioner filters during the fire at a Sandoz storehouse in Schweizerhalle on November 1, 1986. Suter W. Mutat Res 1988 Nov;206(3):411–27

Identification of mutagens in Japanese pickles. Takenaka S, et al. Mutat Res 1989 May;223(1):35–40

The release of mutagens from airborne particles in the presence of physiological fluids. van Houdt JJ, et al. Mutat Res 1989 Mar;222(3):155–60

A sensitive method for the detection of mutagenic nitroarenes: construction of nitroreductase-overproducing derivatives of Salmonella typhimurium strains TA98 and TA100. Watanabe M, et al. Mutat Res 1989 Aug; 216(4):211–20

Urinary and faecal mutagenicity in car mechanics exposed to diesel exhaust and in unexposed office workers. Willems MI, et al. Mutat Res 1989 Apr;222(4):375–91

Presence of nitrosable mutagen precursors in cooked meat and fish. Yano M, et al. Mutat Res 1988 Nov;202(1):119–23

Comparative analysis of the clastogenicity and cytotoxicity of airborne particulate matter generated during the fire at Schweizerhalle on November 1, 1986. Zwanenburg TS. Mutat Res 1988 Nov;206(3):395–409

Mutagenic activity and presence of the strong mutagen 3-chloro-4-(dichloromethyl)-5-hydroxy-2-(5H)-furanone (MX) in chlorinated raw and drinking waters in The Netherlands. Backlund P, et al. Sci Total Environ 1989 Aug; 84:273–82

The mutagenicity of refuse leachate from a municipal incinerator. Kamiya A, et al. Sci Total Environ 1989 Jan; 78:131–45

Mutagenic activity in groundwater in relation to mobilization of organic mutagens in soil. Kool HJ, et al. Sci Total Environ 1989 Aug;84:185–99

Mutagenic activity in drinking water prepared from groundwater: a survey of ten cities in The Netherlands. Kool HJ, et al. Sci Total Environ 1988 Nov 1;77(1):51–60

Chemistry of mutagenic by-products of water chlorination. Kronberg L, et al. Sci Total Environ 1989 Jun;81–82:219–30

Method for evaluating mutagenicity of water. I. A new method of preparing samples for mutagenicity test. Urano K, et al. Sci Total Environ 1988 Aug 1;74:177–89

Method for evaluating mutagenicity of water. II. Conditions for applying new sample preparation method to the Ames test. Urano K, et al. Sci Total Environ 1988 Aug 1;74:191–8

In situ assessment of genotoxic hazards of environmental pollution. Sandhu SS, et al. Toxicol Ind Health 1989 Jan; 5(1):73–83 (51 ref.)

Analysis of mutagenic activity in human urine after concentration on different resins and high-performance liquid chromatography. Salvadori M, et al. Toxicol Lett 1989 Feb;45(2-3):241–9

HPLC profiles of mutagens in lean ground pork fried at different temperatures. Nielsen PA, et al. Z Lebensm Unters Forsch 1988 Nov;187(5):451–6

[Indicators in human biological materials for assessing exposure to and/or biological effects of genotoxic chemical substances] Med Lav 1988 May-Jun;79(3):241–9 (Ita)

ANTAGONISTS & INHIBITORS

Inactivation of mutagenic heterocyclic and aryl amines by linoleic acid 13-monohydroperoxide and methemoglobin. Kikugawa K, et al. Chem Pharm Bull (Tokyo) 1988 Dec; 36(12):4963–70

Protective effect of hydroxychavicol, a phenolic component of betel leaf, against the tobacco-specific carcinogens. Amonkar AJ, et al. Mutat Res 1989 Feb;210(2):249–53

Antimutagenic activity of green tea polyphenols. Wang ZY, et al. Mutat Res 1989 Jul;223(3):273–85

BLOOD

Significant increase of IQ-type heterocyclic amines, dietary carcinogens in the plasma of patients with uremia just before induction of hemodialysis treatment. Yanagisawa H, et al. Nephron 1989;52(1):6–10

CHEMICAL SYNTHESIS

Synthesis and mutagenicity of 5-alkyl-substituted chrysene-1,2-diol-3,4-epoxides. Amin S, et al. Carcinogenesis 1988 Dec;9(12):2305–8

Formation of a direct mutagen, diazo-N-nitrosoetilefrin, by interaction of etilefrin with nitrite. Kikugawa K, et al. Chem Pharm Bull (Tokyo) 1989 Jun;37(6):1600–3

Roles of oxygen in photochemical reaction of naphthols in aqueous nitrite solution and mutagen formation. Suzuki J, et al. Chem Pharm Bull (Tokyo) 1988 Nov;36(11):4567–75

Formation of 2,6-dimethoxy-1,4-benzoquinone, a highly genotoxic compound, from the reaction of sodium nitrite with the sympathomimetic drug dimethophrine in acidic aqueous solution. Mazzei M, et al. Farmaco [Sci] 1988 Jun; 43(6):523–38

Synthesis and mutagenicity of a ring-A-aromatized bile acid, 3-hydroxy-19-nor-1,3,5(10)-cholatrien-24-oic acid. Namba T, et al. J Lipid Res 1988 Jun;29(6):809–14

CLASSIFICATION

Classification according to chemical structure, mutagenicity to Salmonella and level of carcinogenicity of a further 42 chemicals tested for carcinogenicity by the U.S. National Toxicology Program. Ashby J, et al. Mutat Res 1989 Jun; 223(2):73–103

Screening for possible human carcinogens and mutagens. False positives, false negatives: statistical implications. Lovell DP. Mutat Res 1989 Jul;213(1):43–60

ISOLATION & PURIFICATION

An efficient and convenient method for the purification of mutagenic heterocyclic amines in heated meat products. Gross GA, et al. Carcinogenesis 1989 Jul;10(7):1175–82

Purification of the food-borne carcinogens 2-amino-3-methylimidazo [4,5-f]quinoline and 2-amino-3,8-dimethylimidazo[4,5-f]quinoxaline in heated meat products by immunoaffinity chromatography. Turesky RJ, et al. Carcinogenesis 1989 Jan;10(1):151–6

Structure of a mutagen from roasted seeds of Moringa oleifera. Villasenor IM, et al. Carcinogenesis 1989 Jun; 10(6):1085–7

Comparative yields of mutagens from cigarette smokers' urine obtained by using solid-phase extraction techniques. Williams RW, et al. Environ Mol Mutagen 1989;14(1):20–6

Testing human faecal extracts for genotoxic activity with the SOS Chromotest: the importance of controlling for faecal enzyme activity. Bosworth D, et al. Mutagenesis 1986 Mar;1(2):143–9

Mutagenic and antimutagenic factor(s) extracted from a desert mushroom using different solvents. Hannan MA, et al. Mutagenesis 1989 Mar;4(2):111–4

The use of rat urine extracted on XAD-2 resin and assayed in a microsuspension-modified Ames test as an in vivo indicator of genotoxic exposure. Doolittle DJ, et al. Mutat Res 1988 Oct;206(2):141–8

The mutagenicity of ambient air particles from local traffic and distant sources during episodes with moderate photochemical air pollution. de Raat WK, et al. Sci Total Environ 1988 Jul 15;73(3):159–79

Class separation of mutagenic polycyclic organic material in grilled and smoked foods. Larsson BK, et al. Z Lebensm Unters Forsch 1988 Dec;187(6):546–51

[Chemical and biological characterization of electrofilter dusts of a waste incinerator. 1. Comparison of different extraction methods for organic dust contents and their mutagenicity] Nogueira M, et al. Zentralbl Hyg Umweltmed 1989 Aug;188(5):404–20 (Eng. Abstr.) (Ger)

METABOLISM

Carcinogen metabolism studies in human bronchial and lung parenchymal tissues. Petruzzelli S, et al. Am Rev Respir Dis 1989 Aug;140(2):417–22

Biliary excretion of mutagenic forms of nitroimidazoles in rats. Cantelli-Forti G, et al. Arch Toxicol Suppl 1989; 13:333–9

In vitro genotoxicity of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone activated by hamster maternal and fetal tissues. Alaoui-Jamali M, et al. Carcinogenesis 1988 Dec; 9(12):2319–24

4-(2-amino-1-methylimidazo[4,5-b]pyrid-6-yl)phenyl sulfate—a major metabolite of the food mutagen 2-amino-1-methyl-6- phenylimidazo[4,5-b]pyridine (PhIP) in the rat. Alexander J, et al. Carcinogenesis 1989 Aug;10(8):1543–7

Covalent binding of [2-14C]2-amino-3,8-dimethylimidazo[4,5-f]-quinoxaline (MeIQx) to mouse DNA in vivo. Alldrick AJ, et al. Carcinogenesis 1989 Aug;10(8):1419–23

Enhanced metabolic activation of chemical hepatocarcinogens in woodchucks infected with hepatitis B virus. De Flora S, et al. Carcinogenesis 1989 Jun; 10(6):1099–106

Non-random alkylation of DNA sequences induced in vivo by chemical mutagens. Durante M, et al. Carcinogenesis 1989 Aug;10(8):1357–61

In vitro and in vivo N-acetylation of carcinogenic glutamic acid pyrolysis products in humans. Kanai Y, et al. Carcinogenesis 1988 Dec;9(12):2179–84

The metabolism of 4,8-DiMeIQx in conventional and germ-free rats. Knize MG, et al. Carcinogenesis 1989 Aug; 10(8):1479–84

Comparison of the in vitro metabolisms and mutagenicities of dibenzo[a,c]anthracene, dibenzo[a,h]anthracene and dibenzo[a,j]anthracene: influence of norharman. Lecoq S, et al. Carcinogenesis 1989 Mar;10(3):461–9

Improvement of short-term tests for mutagenicity: on the optimal pH for the liver microsomal assay. Paolini M, et al. Carcinogenesis 1988 Dec;9(12):2265–70

Metabolic activation of cyclopenteno[c,d]pyrene by peroxyl radicals. Reed GA, et al. Carcinogenesis 1988 Dec; 9(12):2291–5

Use of the 32P-postlabeling method to detect DNA adducts of 2-amino-3-methylimidazolo[4,5-f]quinoline (IQ) in

monkeys fed IQ: identification of the N-(deoxyguanosin-8-yl)-IQ adduct. Snyderwine EG, et al. **Carcinogenesis** 1988 Oct;9(10):1739-43

The chemistry and biology of 7H-dibenzo[c,g]carbazole: synthesis and characterization of selected derivatives, metabolism in rat liver preparations and mutagenesis mediated by cultured rat hepatocytes. Stong DB, et al. **Carcinogenesis** 1989 Mar;10(3):419-27

32P-postlabeling analysis of DNA adducts in rat stomach with 1-nitrosoindole-3-acetonitrile, a direct-acting mutagenic indole compound formed by nitrosation. Yamashita K, et al. **Carcinogenesis** 1988 Oct;9(10):1905-7

Deprivation of the mutagenic property of quinoline: inhibition of mutagenic metabolism by fluorine substitution. Takahashi K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov; 36(11):4630-3

Bioactivation of nephrotoxic haloalkenes by glutathione conjugation: formation of toxic and mutagenic intermediates by cysteine conjugate beta-lyase. Dekant W, et al. **Drug Metab Rev** 1989;20(1):43-83 (181 ref.)

Mutagenic metabolites of benzene detected in the Microscreen assay. Rossman RG, et al. **Environ Health Perspect** 1989 May;81:77-9

Mutagenicity of urine from mice exposed orally to nitrite and various aminated antiparasitic drugs. Arriaga Alba M, et al. **Environ Mol Mutagen** 1989;14(1):13-9

Promutagen activation by freshly isolated and cryopreserved rat hepatocytes. Loretz LJ, et al. **Environ Mol Mutagen** 1988;12(3):335-41

Monocyte-derived clastogenic factor in rheumatoid arthritis. Emerit I, et al. **Free Radic Biol Med** 1989;6(3):245-50

A model system for studying covalent binding of food carcinogens MeIQx, MeIQ and IQ to DNA and protein. Wallin H, et al. **IARC Sci Publ** 1988;(89):113-7

Vitamin C lowers mutagenic and toxic effect of hexavalent chromium in guinea pigs. Ginter E, et al. **Int J Vitam Nutr Res** 1989;59(2):161-6

Mutagenic nucleoside analog N4-aminocytidine: metabolism, incorporation into DNA, and mutagenesis in Escherichia coli. Negishi K, et al. **J Bacteriol** 1988 Nov;170(11):5257-62

Augmenting effect of a nonmutagenic fraction in soy sauce on mutagenicity of 3-diazotyramine produced in the nitrite-treated sauce. Higashimoto M, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1284-92

Metabolic activation of pyrolysate arylamines by human liver microsomes; possible involvement of a P-488-H type cytochrome P-450. Yamazoe Y, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1159-67

Caffeine inhibits hepatic-microsomal activation of some dietary genotoxins. Alldrick AJ, et al. **Mutagenesis** 1988 Sep;3(5):423-7

Studies of an S9-based metabolic activation system used in the mouse lymphoma L5178Y cell mutation assay. McGregor DB, et al. **Mutagenesis** 1988 Nov;3(6):485-90

In vitro reaction of hydroxyamino derivatives of MeIQx, Glu-P-1 and Trp-P-1 with DNA: 32P-postlabelling analysis of DNA adducts formed in vivo by the parent amines and in vitro by their hydroxyamino derivatives. Yamashita K, et al. **Mutagenesis** 1988 Nov;3(6):515-20

Mutagenicity of the phenolic microsomal metabolites of 3-nitrofluoranthene and 1-nitropyrene in strains of Salmonella typhimurium. Consolo MC, et al. **Mutat Res** 1989 Feb;210(2):263-9

In vitro DNA binding of 2-amino-3-methylimidazo(4,5-f)[5-3H]quinoline (IQ) is modulated by sulfotransferase and sulfate levels. Lodovici M, et al. **Mutat Res** 1989 Jul;223(3):321-4

Induced hepatocytes as a metabolic activation system for the mouse-lymphoma assay. Oglesby LA, et al. **Mutat Res** 1989 Jul;223(3):295-302

Acrylamide binding to the DNA and protamine of spermiogenic stages in the mouse and its relationship to genetic damage. Sega GA, et al. **Mutat Res** 1989 Aug; 216(4):221-30

Uptake of heterocyclic amines, Trp-P-1 and Trp-P-2, into clonal rat pheochromocytoma PC12h cells by dopamine uptake system. Naoi M, et al. **Neurosci Lett** 1989 May 8; 99(3):317-22

Metabolic activation and covalent binding to nucleic acids of pentachloroethane as short-term test of genotoxicity. Turina MP, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):81-91

Host-mediated bacterial mutagenesis and enterohepatic circulation of benzidine-derived mutagenic metabolites in rodents. Chipman JK, et al. **Xenobiotica** 1989 Jan; 19(1):43-50

Investigations on the spectral interactions of fusarin C with rat liver microsomal cytochrome P-450. Gelderblom WC, et al. **Xenobiotica** 1988 Sep;18(9):1005-14

PHARMACOKINETICS

Tissue localization of the carcinogenic glutamic acid pyrolysis product Glu-P-1 in control and beta-naphthoflavone-treated mice and rats. Brandt I, et al. **Carcinogenesis** 1989 Aug;10(8):1529-33

Disposition and metabolism of the food mutagen 2-amino-3,8-dimethylimidazo[4,5-f]quinoxaline (MeIQx) in rats. Sjödin P, et al. **Carcinogenesis** 1989 Jul; 10(7):1269-75

Some pharmacokinetic data on miocamycin. I: Serum, urinary and prostatic levels. Furneri PM, et al. **Drugs Exp Clin Res** 1988;14(12):755-62

Hepatic monooxygenase induction and promutagen activation in channel catfish from a contaminated river basin. Winston GW, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):258-71

Interspecies homology of cytochrome P-450: toxicological significance of cytochrome P-450 cross-reactive with anti-rat P-448-H antibodies in liver microsomes from dogs, monkeys and humans. Ohta K, et al. **Mutat Res** 1989 Jul; 226(3):163-7

[Study of the biotransformation of various antineoplastic agents using the Ames test] Oblapenko NG, et al. **Eksp Onkol** 1988;10(5):52-5 (Eng. Abstr.) **(Rus)**

[Ames test study of the effect of 2nd-phase biotransformation reactions on the level of mutagenic action of a number of chemical compounds] Loknitskaia NN, et al. **Tsitol Genet** 1988 May-Jun;22(3):43-6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Mutation induced in vitro on a C-8 guanine aminofluorene containing template by a modified T7 DNA polymerase. Sahm J, et al. **Biochemistry** 1989 Apr 4;28(7):2836-43

Mutagen sensitivity and cancer susceptibility. Report of a cancer-prone family. Liang JC, et al. **Cancer** 1989 Oct 1; 64(7):1474-9

The effects of bay-region methyl substitution on 6-nitrochrysene mutagenicity in Salmonella typhimurium and tumorigenicity in newborn mice. el-Bayoumy K, et al. **Carcinogenesis** 1989 Sep;10(9):1685-9

The mutagenicity of dibenz[a,j]acridine, some metabolites and other derivatives in bacteria and mammalian cells. Bonin AM, et al. **Carcinogenesis** 1989 Jun;10(6):1079-84

Genotoxicity of the food mutagen 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP): formation of 2-hydroxamino-PhIP, a directly acting genotoxic metabolite. Holme JA, et al. **Carcinogenesis** 1989 Aug;10(8):1389-96

Detection of DNA adducts by high-performance liquid chromatography with electrochemical detection. Park JW, et al. **Carcinogenesis** 1989 May;10(5):827-32

Mutagenicity in Salmonella and sister chromatid exchange in mice for the bay-region syn- and anti-diol epoxides of 1,4-dimethylphenanthrene. Sinsheimer JE, et al. **Carcinogenesis** 1989 Jun;10(6):1123-6

The complexity of nitrosoguanidine mutagenesis increases with size: observations of the mutational specificity of N-propyl-N'-nitro-N-nitrosoguanidine. van der Vliet GM, et al. **Carcinogenesis** 1989 May;10(5):949-52

A quantitative analysis of alterations in the shape of cultured fibroblasts induced by tumour-promoting phorbol ester. Brown AF, et al. **Cell Biol Int Rep** 1989 Apr;13(4):357-66

Mutagenic potency at the Na+/K+ ATPase locus correlates with cycle-dependent killing of 10T1/2 cells. Smith GJ, et al. **Environ Mol Mutagen** 1988;12(3):299-309

Mutagenic activity of ultraviolet-irradiated mixtures of nitrogen dioxide and propene or butadiene. Victorin K, et al. **Environ Res** 1989 Aug;49(2):271-82

Genetic susceptibility to toxic insults. Phillipson M. **Food Chem Toxicol** 1988 Jun;26(6):573-4

Mechanisms of mutagenesis by a bulky DNA lesion at the guanine N7 position. Sambamurti K, et al. **Genetics** 1988 Dec;120(4):863-73

Spectrum of N4-aminocytidine mutagenesis. Bessho T, et al. **J Mol Biol** 1989 Feb 20;205(4):659-64

The induction of enhanced antitumor effect against a nonimmunogenic tumor by highly immunogenic variants obtained by mutagen treatment. Sainouchi R, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1247-53

Erythromycin, miocamycin and clindamycin towards adhesivity and phagocytosis of gram-positive bacteria. Mascellino MT, et al. **Microbiologica** 1988 Jul;11(3):231-41

Molecular analysis of mutations induced in human cells by N-ethyl-N-nitrosourea. Eckert KA, et al. **Mol Carcinog** 1988;1(1):50-6

Mutagenesis by aflatoxin in M13 DNA: base-substitution mechanisms and the origin of strand bias. Sahasrabudhe S, et al. **Mol Gen Genet** 1989 May;217(1):20-5

Ribonucleotide reductase: a determinant of 5-bromodeoxyuridine mutagenesis in phage T4. Sargent RG, et al. **Mol Gen Genet** 1989 May;217(1):13-9

Potent mutagenicity to Salmonella of an equimolar mixture of 52 chemicals used in five collaborative studies. Ashby J, et al. **Mutagenesis** 1988 Jul;3(4):345-7

Cytogenetic effects induced by alkylated guanine in mammalian cells. Bonatti S, et al. **Mutagenesis** 1986 Mar; 1(2):99-105

Organic solvents inhibit the mutagenicity of promutagens dimethylnitrosamine and methylbutylnitrosamine in a higher plant Arabidopsis thaliana. Gichner T, et al. **Mutagenesis** 1986 Mar;1(2):107-9

Mutagenicity of furoquinoline alkaloids in the Salmonella/microsome assay. Mutagenicity of dictamnine is modified by various enzyme inducers and inhibitors. Häfele F, et al. **Mutagenesis** 1988 Jul;3(4):349-53

Induction of SCE by indirect mutagens in cultured rat hepatoma cells and in Chinese hamster V79 cells co-cultivated with hepatocyte primary cultures. Kasper P, et al. **Mutagenesis** 1988 Nov;3(6):521-5

Use of the orthogonal design method to study the synergistic effects of asbestos fibres and 12-O-tetradecanoylphorbol-13-acetate (TPA) in the BALB/3T3 cell transformation system. Lu YP, et al. **Mutagenesis** 1988 Jul;3(4):355-62

Anti-mutagenicity of catechin against environmental mutagens. Nagabhushan M, et al. **Mutagenesis** 1988 Jul; 3(4):293-6

'A failed paradigm: carcinogenesis is more than mutagenesis' [letter] Trosko JE. **Mutagenesis** 1988 Jul;3(4):363-6

Concentrated drinking water extracts, which cause bacterial mutation and chromosome damage in CHO cells, do not induce sex-linked recessive lethal mutations in Drosophila. Wilcox P, et al. **Mutagenesis** 1988 Sep;3(5):381-7

The present lack of evidence for unique rodent germ-cell mutagens. Adler ID, et al. **Mutat Res** 1989 May; 212(1):55-66

Synaptonemal complex damage induced by clastogenic and anti-mitotic chemicals: implications for non-disjunction and aneuploidy. Allen JW, et al. **Mutat Res** 1988 Oct; 201(2):313-24

Variable sister-chromatid exchange response in human lymphocytes exposed in vitro to gossypol acetic acid. Best RG, et al. **Mutat Res** 1988 Oct;206(2):227-33

Activity of 1,1,1- and 1,1,3-trichloroacetones in a chromosomal aberration assay in CHO cells and the micronucleus and spermhead abnormality assays in mice. Blazak WF, et al. **Mutat Res** 1988 Dec;206(4):431-8

Somatic recombination and mutation assays in Drosophila: a comparison of the response of two different strains to four mutagens. Clements J, et al. **Mutat Res** 1988 Sep-Oct; 209(1-2):1-5

Cytotoxic and genotoxic effects of extracellular generated singlet oxygen in human lymphocytes in vitro. Decuyper-Debergh D, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):11-4

Spontaneous revertants in modified S. typhimurium mutagenicity tests employing elevated numbers of the tester strain. Georghiou PE, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):33-9

Mutagen-induced recombination between stably integrated neo gene fragments in CHO and EM9 cells. Hellgren D, et al. **Mutat Res** 1989 May;226(1):1-8

PSO4: a novel gene involved in error-prone repair in Saccharomyces cerevisiae. Henriques JA, et al. **Mutat Res** 1989 Sep;218(2):111-24

Epistasis, photoreactivation and mutagen sensitivity of DNA repair mutants upr-1 and mus-26 in Neurospora crassa. Ishii C, et al. **Mutat Res** 1989 Sep;218(2):95-103

Ames mutagenicity and concentration of the strong mutagen 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone and of its geometric isomer E-2-chloro-3-(dichloromethyl)-4-oxo-butenoic acid in chlorine-treated tap waters. Kronberg L, et al. **Mutat Res** 1988 Oct;206(2):177-82

Cytogenetic investigation of chemically-induced aneuploidy in mouse spermatocytes. Liang JC, et al. **Mutat Res** 1988 Oct;201(2):325-35

Comment on the non-additivity of the mutagenic response of mixtures of nitrobenzo[a]pyrenes. Löfroth G. **Mutat Res** 1989 Jan-Feb;225(1-2):41-2

Mutagenicity studies on ketone solvents: methyl ethyl ketone, methyl isobutyl ketone, and isophorone. O'Donoghue JL, et al. **Mutat Res** 1988 Oct;206(2):149-61

Comparative antimutagenicity of 5 compounds against 5 mutagenic complex mixtures in Salmonella typhimurium strain TA98. Ong T, et al. **Mutat Res** 1989 Jan;222(1):19-25

Induction of micronuclei in pre-implantation rat embryos in vivo. Ornaghi F, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):71-4

The in vivo effect of 2,6-xylidine on induction of micronuclei in mouse bone marrow cells. Parton JW, et al. **Mutat Res** 1988 Oct;206(2):281-3

The basal and the mutagen-induced levels of ADP-ribosyl transferase activity are not modified in Fanconi's anemia cells. Scovassi AI, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):65-9

The involvement of dimethyl sulfoxide in a bacteriotoxic response of the Ames assay tester strains TA98 and TA100. Vaughan DJ, et al. **Mutat Res** 1989 May;226(1):39-42

Enhancement and inhibition of mutation by o-vanillin in Escherichia coli. Watanabe K, et al. **Mutat Res** 1989 Sep; 218(2):105-9

In vitro mutagenesis by incorporation of N4-aminodeoxycytidine 5'-triphosphate. Negishi K, et al. **Nucleic Acids Symp Ser** 1988;(19):33-6

Mutagenic specificity of a potent carcinogen, benzo[c]phenanthrene (4R,3S)-dihydrodiol (2S,1R)-epoxide, which reacts with adenine and guanine in DNA. Bigger CA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2291-5

C-banding as a simple tool to discriminate between micronuclei induced by clastogens and aneugens. Verschaeve L, et al. **Stain Technol** 1988 Nov;63(6):351-4

Effect of heat shock on the mutagenicity of mutagens and carcinogens in Euglena gracilis. Chreño O, et al. **Teratogenesis Carcinog Mutagen** 1988;8(3):161-8

Somatic mutation induced by heliotrine in Drosophila. Sivlingham R, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(4):205-13

[In vitro antibacterial activity of a new macrolide, miokamycin. Results of a multicenter study] Soussy CJ, et al. **Pathol Biol (Paris)** 1989 May;37(5):358-63 (Eng. Abstr.) **(Fre)**

[In vitro activity of miocamycin compared with four other macrolides and with pristinamycin against Branhamella

catarrhalis] Suermondt G, et al. **Pathol Biol (Paris)** 1989 May;37(5):386–9 (Eng. Abstr.) (Fre)

[Modification of the effect of fotrin in phenobarbital-induced metabolic system] Zhurkov VS, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):458–60 (Eng. Abstr.) (Rus)

[Mechanism of stimulation by mutagens] Khvoles AG, et al. **Dokl Akad Nauk SSSR** 1988;301(4):985–8 (Rus)

[Mutagenic activity of the pesticide hexachlorobutadiene] German IV. **Tsitol Genet** 1988 Jul–Aug;22(4):40–2 (Eng. Abstr.) (Rus)

[Manifestation of the mutagenic effect of acemidophen depending on its metabolism in various mammalian species (acemidophen—a promutagen)] Zolotareva GN, et al. **Tsitol Genet** 1988 Jul–Aug;22(4):52–5 (Eng. Abstr.) (Rus)

[Effect of interferon on the number of cytogenetic disorders occurring in human cultured lymphocytes treated with thio-TEPA and fotrin] Sarkisian TF, et al. **Tsitologiia** 1988 Dec;30(12):1491–4 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Photoactivation of mutagens. De Flora S, et al. **Carcinogenesis** 1989 Jun;10(6):1089–97

TOXICITY

Methods for evaluating chemical genotoxicity. Williams GM. **Annu Rev Pharmacol Toxicol** 1989;29:189–211 (172 ref.)

Modification of the mutagenicity of aflatoxin B1 and N-methyl-N'-nitro-N-nitrosoguanidine by certain phenolic compounds. Francis AR, et al. **Cancer Lett** 1989 Jun;45(3):177–82

The food-mutagens 2-amino-1-methyl-6-phenylimidazo-[4,5-b]-pyridine (PhIP) and 2-amino-3,8-dimethylimidazo[4,5-f]-quinoxaline (MeIQx) initiate enzyme-altered hepatic foci in the resistant hepatocyte model. Kleman M, et al. **Carcinogenesis** 1989 Sep;10(9):1697–700

In-vivo carcinogenicity of 2-nitro-oxaphenalenes. Salmon RJ, et al. **Carcinogenesis** 1989 May;10(5):803–5

Chromosome aberration and sister chromatid exchange tests in Chinese hamster ovary cells in vitro. III. Results with 27 chemicals. Gulati DK, et al. **Environ Mol Mutagen** 1989; 13(2):133–93

The mutagenic and carcinogenic properties of three second generation antitumour platinum compounds: a comparison with cisplatin. Chibber R, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):27–33

A combined testing protocol for assessing genotoxicity in individual animals: application to environmental toxicology. Harper BL, et al. **J Appl Toxicol** 1989 Apr; 9(2):97–102

Hemoglobin adducts in animals exposed to gasoline and diesel exhausts. 1. Alkenes. Törnqvist M, et al. **J Appl Toxicol** 1988 Jun;8(3):159–70

Genotoxic activity of the N-acetylated metabolites of the food mutagens 2-amino-3-methylimidazo[4,5-f]quinoline (IQ) and 2-amino-3,4-dimethylimidazo[4,5-f]quinoline (MeIQ). Brunborg G, et al. **Mutagenesis** 1988 Jul;3(4):303–9

Antimutagenic specificity against spontaneous and nitrofurazone-induced mutations in Escherichia coli K12ND160. Clarke CH, et al. **Mutagenesis** 1989 Jan; 4(1):31–4

Use of newt larvae for in vivo genotoxicity testing of water: results on 19 compounds evaluated by the micronucleus test. Fernandez M, et al. **Mutagenesis** 1989 Jan;4(1):17–26

Possible tumour-initiating and -promoting activities of 3-diazo-N-nitrosobamethan in rat stomach mucosa. Furihata C, et al. **Mutagenesis** 1988 Jul;3(4):299–301

Comparative bone marrow clastogenicity of cigarette sidestream, mainstream and recombined smoke condensates in mice. Mohtashamipur E, et al. **Mutagenesis** 1988 Sep; 3(5):419–22

Genotoxicity and bioaccumulation of methyl mercury and mercuric chloride in vivo in the newt Pleurodeles waltl. Zoll C, et al. **Mutagenesis** 1988 Jul;3(4):337–43

Detection of 6-thioguanine resistance in human peripheral blood lymphocytes (PBL) of industrial workers and lung cancer patients. Tompa A, et al. **Mutat Res** 1989 Feb; 210(2):345–51

FDA procedures and policies to estimate risks of injury to the male reproductive system. Flamm WG, et al. **Prog Clin Biol Res** 1989;302:21–9; discussion 30–2

[Mutagenic activity of browning in model systems with three components] Gazzani G, et al. **Farmaco [Prat]** 1988 Apr; 43(4):149–56 (Eng. Abstr.) (Ita)

[Comparative analysis of the "Meller-5" and somatic mosaicism methods with relation to the activity of standard mutagens] Belova LL, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):84–7 (Eng. Abstr.) (Rus)

[Mutagenic activity of chloxyl] Lychko ND, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) (Rus)

URINE

Detection and measurement of MeIQx in human urine after ingestion of a cooked meat meal. Murray S, et al. **Carcinogenesis** 1989 Apr;10(4):763–5

Biological monitoring of human exposure to coal tar. Urinary excretion of total polycyclic aromatic hydrocarbons, 1-hydroxypyrene and mutagens in psoriatic patients. Clonfero E, et al. **Int Arch Occup Environ Health** 1989; 61(6):363–8

Urinary excretion of mutagens, thioethers and D-glucaric acid in workers exposed to bitumen fumes. Pasquini R, et al. **Int Arch Occup Environ Health** 1989;61(5):335–40

Handling of cytostatic drugs and urine mutagenesis. Poyen D, et al. **Int Arch Occup Environ Health** 1988;61(3):183–8

Induction of SOS response in Escherichia coli strain PQ37 by 16 chemical compounds and human urine extracts. Venier P, et al. **Mutagenesis** 1989 Jan;4(1):51–7

Mutagens in urine of non-smoking and smoking workers in an aircraft tyre retreading plant. Skin exposure as a causal factor? Bos RP, et al. **Mutat Res** 1989 May;223(1):41–8

MUTATION

Sex ratio polymorphism: the impact of mutation and drift on evolution. Poethke HJ. **Acta Biotheor (Leiden)** 1988; 37(2):121–47

Molecular heterogeneity of beta-thalassemia intermedia in Turkey. Gurgey A, et al. **Acta Haematol (Basel)** 1989; 81(1):22–7

Liquid holding recovery in yeast rad3 mutant after treatment with diepoxybutane: effect on mutations, recombinations and molecular weight of DNA. Lęcka-Czernik B, et al. **Acta Microbiol Pol** 1988;37(3–4):249–59

Somatic mutations in the Ig VH genes of human B cell lymphoma. Levy S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):561–5

Analysis of functional domains in the epidermal growth factor receptor using site-directed mutagenesis. Gill GN, et al. **Adv Exp Med Biol** 1988;234:91–103 (69 ref.)

A mutation in Salmonella typhimurium that enhances resistance to oxygen-independent antimicrobal neutrophil protein. Spitznagel JK. **Adv Exp Med Biol** 1988;239:79–88 (20 ref.)

Molecular characterization of HIV-1 isolated from a serum collected in 1976: nucleotide sequence comparison to recent isolates and generation of hybrid HIV. Srinivasan A, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):121–9

Radiation as a mutagen. Finley WH. **Ala J Med Sci** 1988 Oct;25(4):456–9

Mutations in the apolipoprotein B-100 gene: an important underlying cause of familially transmitted hypercholesterolemia and premature arteriosclerosis? Chan L. **Am J Cardiol** 1989 Mar 15;63(11):740–2

Hemoglobin Southampton (Casper): characterization of the base mutation. Heintz NH, et al. **Am J Hematol** 1989 Jan; 30(1):1–3

Severe hemolysis and red cell fragmentation caused by the combination of a spectrin mutation with a thrombotic microangiopathy. Jarolim P, et al. **Am J Hematol** 1989 Sep; 32(1):50–6

Evidence for an elevated frequency of in vivo somatic cell mutations in ataxia telangiectasia. Bigbee WL, et al. **Am J Hum Genet** 1989 Mar;44(3):402–8

Prolidase deficiency: biochemical classification of alleles. Boright AP, et al. **Am J Hum Genet** 1989 May;44(5):731–40

A new TATA box mutation detected at prenatal diagnosis for beta-thalassemia. Cai SP, et al. **Am J Hum Genet** 1989 Jul;45(1):112–4

Analysis of DNA polymorphism haplotypes linked to the cystic fibrosis locus in North American black and Caucasian families supports the existence of multiple mutations of the cystic fibrosis gene. Cutting GR, et al. **Am J Hum Genet** 1989 Mar;44(3):307–18

Intragenic deletions in 21 Duchenne muscular dystrophy (DMD)/Becker muscular dystrophy (BMD) families studied with the dystrophin cDNA: location of breakpoints on HindIII and BglII exon-containing fragment maps, meiotic and mitotic origin of the mutations. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):620–9

Two point mutations are responsible for G6PD polymorphism in Sardinia. De Vita G, et al. **Am J Hum Genet** 1989 Feb;44(2):233–40

Defective gene in lactic acidosis: abnormal pyruvate dehydrogenase E1 alpha-subunit caused by a frame shift. Endo H, et al. **Am J Hum Genet** 1989 Mar;44(3):358–64

Pelizaeus-Merzbacher disease: an X-linked neurologic disorder of myelin metabolism with a novel mutation in the gene encoding proteolipid protein. Gencic S, et al. **Am J Hum Genet** 1989 Sep;45(3):435–42

Ornithine transcarbamylase deficiency resulting from a C-to-T substitution in exon 5 of the ornithine transcarbamylase gene. Hata A, et al. **Am J Hum Genet** 1989 Jul;45(1):123–7

Evidence for mutation by unequal sister chromatid exchange in the Duchenne muscular dystrophy gene. Hu XY, et al. **Am J Hum Genet** 1989 Jun;44(6):855–63

Detection of an amino acid substitution in the mutant enzyme for a special type of adenine phosphoribosyltransferase (APRT) deficiency by sequence-specific protein cleavage. Kamatani N, et al. **Am J Hum Genet** 1989 Aug;45(2):325–31

Gyrate atrophy of the choroid and retina: characterization of mutant ornithine aminotransferase and mechanism of response to vitamin B6. Kennaway NG, et al. **Am J Hum Genet** 1989 Mar;44(3):344–52

Functionally important regions of the factor IX gene have a low rate of polymorphism and a high rate of mutation in the dinucleotide CpG. Koeberl DD, et al. **Am J Hum Genet** 1989 Sep;45(3):448–57

Polymorphic DNA haplotypes at the LDL receptor locus. Leitersdorf E, et al. **Am J Hum Genet** 1989 Mar; 44(3):409–21

Identification of a single nucleotide C-to-T transition and five different deletions in patients with severe hemophilia B. Ludwig M, et al. **Am J Hum Genet** 1989 Jul;45(1):115–22

A high proportion of ADA point mutations associated with a specific alanine-to-valine substitution. Markert ML, et al. **Am J Hum Genet** 1989 Sep;45(3):354–61

Cancer in relatives of leukemic patients with chromosomal rearrangements at rare (heritable) fragile-site locations in their malignant cells. Mules EH, et al. **Am J Hum Genet** 1989 Jun;44(6):811–9

Localization of the genetic defect in multiple endocrine neoplasia type 1 within a small region of chromosome 11. Nakamura Y, et al. **Am J Hum Genet** 1989 May;44(5):751–5

Linkage analysis of families with hereditary retinoblastoma: nonpenetrance of mutation, revealed by combined use of markers within and flanking the RB1 gene. Scheffer H, et al. **Am J Hum Genet** 1989 Aug;45(2):252–60

Fanconi anemia mutation causes cellular susceptibility to ambient oxygen. Schindler D, et al. **Am J Hum Genet** 1988 Oct;43(4):429–35

Haplotype distribution of the human phenylalanine hydroxylase locus in Scotland and Switzerland. Sullivan SE, et al. **Am J Hum Genet** 1989 May;44(5):652–9

Tracing the mutations in cystic fibrosis by means of closely linked DNA markers. Tsui LC. **Am J Hum Genet** 1989 Mar;44(3):303–6

Characterization of mutations in Gaucher patients by cDNA cloning. Wigderson M, et al. **Am J Hum Genet** 1989 Mar; 44(3):365–77

Identification of a mutation in the structural alpha-L-fucosidase gene in fucosidosis. Willems PJ, et al. **Am J Hum Genet** 1988 Nov;43(5):756–63

Mild sickle cell anemia associated with alpha globin mutant alpha Montgomery. Prchal JT, et al. **Am J Med** 1989 Feb; 86(2):232–6

Theoretical expectations for deletional mutations in Duchenne muscular dystrophy [letter] Giannelli F. **Am J Med Genet** 1988 Dec;31(4):991–4

"Acadian" and "classical" forms of Friedreich ataxia are most probably caused by mutations at the same locus. Keats BJ, et al. **Am J Med Genet** 1989 Jun;33(2):266–8

Prevalence of dominant mutations in Spain: effect of changes in maternal age distribution. Martínez-Frías ML, et al. **Am J Med Genet** 1988 Dec;31(4):845–52

Exclusion of allelism and close linkage between neurofibromatosis and multiple cartilaginous exostoses [letter] Pai GS, et al. **Am J Med Genet** 1989 Jan;32(1):145

Impaired spermatogenesis is not an obligate expression of receptor-defective androgen resistance. Pinsky L, et al. **Am J Med Genet** 1989 Jan;32(1):100–4

Mutation rate estimates are not compatible with autosomal dominant inheritance of the dysplastic nevus "syndrome". Traupe H, et al. **Am J Med Genet** 1989 Feb;32(2):155–7

Prometaphase chromosomes in the tricho-rhino-phalangeal syndrome type I. Yamamoto Y, et al. **Am J Med Genet** 1989 Apr;32(4):524–7

Studies of human germinal mutations by deoxyribonucleic acid hybridization. Kovacs BW, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):798–803; discussion 803–4

Human dental reduction: natural selection or the probable mutation effect. Calcagno JM, et al. **Am J Phys Anthropol** 1988 Dec;77(4):505–17

LLC-PK1 mutant with increased Na+-H+ exchange and decreased sensitivity to amiloride. Haggerty JG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C495–501

Oligonucleotide-directed mutagenesis: a sequence-based screening. Duilio A, et al. **Anal Biochem** 1988 Nov 1; 174(2):618–22

An efficiently mutagenizable recombinant plasmid for in vitro transcription of the Escherichia coli 16 S RNA gene. Krzyzosiak WJ, et al. **Anal Biochem** 1988 Dec; 175(2):373–85

A simple and efficient method for the oligonucleotide-directed mutagenesis using plasmid DNA template and phosphorothioate-modified nucleotide. Sugimoto M, et al. **Anal Biochem** 1989 Jun;179(2):309–11

Oligodeoxynucleotide-directed cleavage and repair of a single-stranded vector: a method of site-specific mutagenesis. Zhu DL. **Anal Biochem** 1989 Feb 15; 177(1):120–4

The pR plasmid: a tool for studying DNA repair and mutagenesis in prokaryotic and eukaryotic cells. Battaglia PA, et al. **Ann Ist Super Sanita** 1989;25(1):145–8

The nature of X-ray and chemically induced mutations in Drosophila in relation with DNA repair. Eeken JC, et al. **Ann Ist Super Sanita** 1989;25(1):213–8

Mutagenic specificity of alkylated and oxidized DNA bases as determined by site-specific mutagenesis. Essigmann JM, et al. **Ann Ist Super Sanita** 1989;25(1):155–61

Molecular analysis of mutagenesis in E. coli. Fuchs RP. **Ann Ist Super Sanita** 1989;25(1):163–9

Carcinogen-induced mutagenesis in the simian virus 40 genome. Gentil A, et al. **Ann Ist Super Sanita** 1989; 25(1):171–6

Towards development of techniques to observe mutational spectra in human tissue samples. Keohavong P, et al. **Ann Ist Super Sanita** 1989;25(1):219–22

The role of thiols in lethal and mutational radiation damage.

Sapora O, et al. **Ann Ist Super Sanita** 1989;25(1):115–22
Cellular and genetic characterization of UV sensitive Chinese hamster mutants. Stefanini M, et al. **Ann Ist Super Sanita** 1989;25(1):123–9
In vitro mutagenesis and SOS repair. Strauss BS. **Ann Ist Super Sanita** 1989;25(1):177–89
Relationship between DNA–adduct formation, DNA repair, mutation frequency and mutation spectra. Van Zeeland AA, et al. **Ann Ist Super Sanita** 1989;25(1):223–8
Biochemical heterogeneity of type I collagen mutations in osteogenesis imperfecta. Bateman JF, et al. **Ann N Y Acad Sci** 1988;543:95–105
Osteogenesis imperfecta: the molecular basis of clinical heterogeneity. Byers PH, et al. **Ann N Y Acad Sci** 1988; 543:117–28 (44 ref.)
Mitochondrial function in normal and genetically altered cells and tissues. Chance B, et al. **Ann N Y Acad Sci** 1988; 550:360–73
General strategies for isolating the genes encoding type I collagen and for characterizing mutations which produce osteogenesis imperfecta. Cohn DH, et al. **Ann N Y Acad Sci** 1988;543:129–35 (41 ref.)
Isolation and characterization of fluoropyrimidine–resistant mutants in two Candida species. Fasoli M, et al. **Ann N Y Acad Sci** 1988;544:260–3
Normal thermal stability of an overmodified type I collagen despite a structural mutation within the triple helical region in a case of osteogenesis imperfecta type IVB. Royce PM, et al. **Ann N Y Acad Sci** 1988;543:83–4
Defining structural defects in type I collagen by protein analysis? van der Rest M, et al. **Ann N Y Acad Sci** 1988; 543:93–4
Mutational effects on protein stability. Alber T. **Annu Rev Biochem** 1989;58:765–98 (218 ref.)
Antimutagenic action of methionine in Chinese hamster fibroblasts: an opposite of methionine mutagenicity. Hill M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):701–5
Glucokinase–deficient mutant of Penicillium chrysogenum is derepressed in glucose catabolite regulation of both beta–galactosidase and penicillin biosynthesis. Barredo JL, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1061–7
Characterization of Aeromonas salmonicida mutants with low–level resistance to multiple antibiotics. Griffiths SG, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):19–26
Mutants of Methylobacterium organophilum unable to synthesize PQQ. Biville F, et al. **Antonie Van Leeuwenhoek** 1989 May;56(1):103–7
Cloning, expression and release of native and mutant cloacin DF13 immunity protein. Verschoor EJ, et al. **Antonie Van Leeuwenhoek** 1989;55(4):325–40
Successive mutation of E. coli for improved thiophene degradation. Scientific note. Clark DP, et al. **Appl Biochem Biotechnol** 1988 Aug;18:393–401
Polyamine stimulation of ribosomal synthesis and activity in a polyamine–dependent mutant of Escherichia coli. Kashiwagi K, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):379–87
Mutations in three of the putative transmembrane helices of subunit a of the Escherichia coli F1F0–ATPase disrupt ATP–driven proton translocation. Paule CR, et al. **Arch Biochem Biophys** 1989 Oct;274(1):270–84
The role of 16S RNA in ribosome function: single base alterations and their effect on in vitro protein synthesis. Cunningham PR, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):393–401
Animal models of androgen–dependent disorders of the pilosebaceous apparatus. 1. The androchronogenetic alopecia (AGA) mouse as a model for male–pattern baldness. Matias JR, et al. **Arch Dermatol Res** 1989; 281(4):247–53
Mutations in trans which affect the anaerobic expression of a formate dehydrogenase (fdhF) structural gene. Schlensog V, et al. **Arch Microbiol** 1989;152(1):83–9
Mutant fibronectin gene in skin fibroblasts of sclerotic lesions from patients with progressive systemic sclerosis. Deguchi Y, et al. **Arthritis Rheum** 1989 Mar;32(3):247–50
Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al. **Basic Life Sci** 1988;49:457–60
Birth prevalence and mutation rate of achondroplasia in the Italian Multicentre Monitoring System for Birth Defects. Camera G, et al. **Basic Life Sci** 1988;48:11–5 (16 ref.)
Premutation in achondroplasia. Opitz JM. **Basic Life Sci** 1988;48:17–25
A cSOD–null mutant of Drosophila confers sensitivity to paraquat and reduced longevity. Phillips JP. **Basic Life Sci** 1988;49:689–93
Regulation of mutator activities in maize. Walbot V, et al. **Basic Life Sci** 1988;47:121–35 (41 ref.)
Courtship behavior of Drosophila genetically or surgically deprived of basiconic sensilla. Stocker RF, et al. **Behav Genet** 1989 May;19(3):371–85
Genetics of familial hypercholesterolemia. Chan L. **Beitr Infusionther** 1988;23:8–17 (42 ref.)
On the effect on specificity of Thr246——Gly mutation in L–lactate dehydrogenase of Bacillus sterothermophilus. Bur D, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):59–63
Pro——leu change at position 102 of prion protein is the most common but not the sole mutation related to Gerstmann–Sträussler syndrome. Doh–ura K, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):974–9
Detection of ras point mutations by polymerase chain reaction using mutation–specific, inosine–containing oligonucleotide primers. Ehlen T, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):441–7
Mutation affecting peptide bond formation in nikkomycin biosynthesis. Engel P, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):695–700
Active site chemical mutagenesis of Ecballium elaterium trypsin inhibitor II: new microproteins inhibiting elastase and chymotrypsin. Favel A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):79–82
Mutations at the distal and proximal sites of cytochrome P–450d changed regio–specificity of acetanilide hydroxylations. Furuya H, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):669–76
Point mutations at threonine–301 modify substrate specificity of rabbit liver microsomal cytochromes P–450 (laurate (omega–1)–hydroxylase and testosterone 16 alpha–hydroxylase). Imai Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):717–22
Induction of differentiation of human monoblastic and myeloblastic leukemia cell lines by TNF muteins [published erratum appears in Biochem Biophys Res Commun 1989 Jun 30;161(3):1348] Kamijo R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):820–7
Mutagenesis of human granulocyte colony stimulating factor. Kuga T, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):103–11
Molecular basis of mouse Himalayan mutation. Kwon BS, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):252–60
Titration of variant DNA sequences differing by a single point–mutation by selective dot–blot hybridization with synthetic oligonucleotides. Nicoloso M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1233–41
Transformation of NIH 3T3 cells by herpes simplex type 2 BglII n fragment and sub–fragments is independent from induction of mutation at the HPRT locus. Pilon L, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1249–55
Distal His——Arg mutation in bovine myoglobin results in a ligand binding site similar to the abnormal beta site of hemoglobin Zurich (beta 63 His——Arg). Shimada H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):110–4
Deoxyribonucleoside triphosphate pools in mutagen sensitive mutants of Neurospora crassa. Srivastava VK, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):583–90
Properties of revertants of lys2 and lys5 mutants as well as alpha–aminoadipate–semialdehyde dehydrogenase from Saccharomyces cerevisiae. Storts DR, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):182–6
Site–directed mutagenesis at the regulatory site of fructose 6–phosphate–1–kinase from Bacillus stearothermophilus. Valdez BC, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):537–42
Mutation of amino acids thought to polarize the oxaloacetate carbonyl in citrate synthase severely reduces but does not abolish activity of the enzyme. Anderson DH, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):98–102
DNA rearrangement causes multiple changes in gene expression at the amylase locus in Drosophila melanogaster. Hickey DA, et al. **Biochem Genet** 1988 Dec; 26(11–12):757–68
Altered expression of chitin synthetase activity and biochemical changes in the cell wall in a developmental mutant of Phycomyces. Ruiz–Flores E, et al. **Biochem Genet** 1988 Dec;26(11–12):717–32
Overexpression and mutagenesis of the lipoamide dehydrogenase of Escherichia coli. Allison N, et al. **Biochem J** 1988 Dec 15;256(3):741–9
Changes in collagen stability and folding in lethal perinatal osteogenesis imperfecta. The effect of alpha 1 (I)–chain glycine–to–arginine substitutions. Baker AT, et al. **Biochem J** 1989 Jul 1;261(1):253–7
Overexpression and site–directed mutagenesis of the succinyl–CoA synthetase of Escherichia coli and nucleotide sequence of a gene (g30) that is adjacent to the suc operon. Buck D, et al. **Biochem J** 1989 Jun 15; 260(3):737–47
Purification of a class C A–type beta–lactamase from a derepressed strain of Enterobacter cloacae. Comparison of the wild–type and mutant enzyme with those from strains P99, 208 and GN7471. Graham MN, et al. **Biochem J** 1989 Jun 15;260(3):705–10
Random mutagenesis of the gene for the beta–subunit of F1–ATPase from Escherichia coli. Kironde FA, et al. **Biochem J** 1989 Apr 15;259(2):421–6
Decreased–activity mutants of phosphoglucose isomerase in the cytosol and chloroplast of Clarkia xantiana. Impact on mass–action ratios and fluxes to sucrose and starch, and estimation of Flux Control Coefficients and Elasticity Coefficients. Kruckeberg AL, et al. **Biochem J** 1989 Jul 15;261(2):457–67
The catalytic consequences of experimental evolution. Transition–state structure during catalysis by the evolved beta–galactosidases of Escherichia coli (ebg enzymes) changed by a single mutational event. Li BF, et al. **Biochem J** 1989 May 15;260(1):109–14
Pairing properties of bromouracil and repair of bromouracil–containing DNA. Possible utilization of bromodeoxyuridine triphosphate for site–directed mutagenesis. Muller M, et al. **Biochem J** 1988 Aug 1; 253(3):637–43
Development of a specific assay for cardiac glycoside–like compounds based on cross–resistance of human cell mutants. Gupta RS, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2159–68
Site–directed mutagenesis of lysine 58 in a putative ATP–binding domain of the calmodulin–sensitive adenylate cyclase from Bordetella pertussis abolishes catalytic activity. Au DC, et al. **Biochemistry** 1989 Apr 4; 28(7):2772–6
Switching kinetic mechanism and putative proton donor by directed mutagenesis of glutathione reductase. Berry A, et al. **Biochemistry** 1989 Feb 7;28(3):1264–9
NMR studies of differences in the conformations and dynamics of ligand complexes formed with mutant dihydrofolate reductases. Birdsall B, et al. **Biochemistry** 1989 Feb 7;28(3):1353–62
The single–chain form of tissue–type plasminogen activator has catalytic activity: studies with a mutant enzyme that lacks the cleavage site. Boose JA, et al. **Biochemistry** 1989 Jan 24;28(2):635–43
Vibrational spectroscopy of bacteriorhodopsin mutants: light–driven proton transport involves protonation changes of aspartic acid residues 85, 96, and 212. Braiman MS, et al. **Biochemistry** 1988 Nov 15;27(23):8516–20
Use of site–directed mutagenesis to investigate the basis for the specificity of hirudin. Braun PJ, et al. **Biochemistry** 1988 Aug 23;27(17):6517–22
Characterization of site–directed mutants in the lac permease of Escherichia coli. 2. Glutamate–325 replacements. Carrasco N, et al. **Biochemistry** 1989 Mar 21;28(6):2533–9
Random and site–directed mutagenesis of bacterial luciferase: investigation of the aldehyde binding site. Chen LH, et al. **Biochemistry** 1989 Mar 21;28(6):2684–9
Role of arginine–292 in the substrate specificity of aspartate aminotransferase as examined by site–directed mutagenesis. Cronin CN, et al. **Biochemistry** 1988 Jun 14;27(12):4572–9
Effect of point mutations in the decoding site (C1400) region of 16S ribosomal RNA on the ability of ribosomes to carry out individual steps of protein synthesis. Denman R, et al. **Biochemistry** 1989 Feb 7;28(3):1012–9
Mutagenesis of the redox–active disulfide in mercuric ion reductase: catalysis by mutant enzymes restricted to flavin redox chemistry. Distefano MD, et al. **Biochemistry** 1989 Feb 7;28(3):1168–83
Solution structure of recombinant hirudin and the Lys–47——Glu mutant: a nuclear magnetic resonance and hybrid distance geometry–dynamical simulated annealing study. Folkers PJ, et al. **Biochemistry** 1989 Mar 21; 28(6):2601–17
Genetic engineering of EcoRI mutants with altered amino acid residues in the DNA binding site: physicochemical investigations give evidence for an altered monomer/dimer equilibrium for the Gln144Lys145 and Gln144Lys145Lys200 mutants. Geiger R, et al. **Biochemistry** 1989 Mar 21;28(6):2667–77
Metabolism of D–glucose in a wall–less mutant of Neurospora crassa examined by 13C and 31P nuclear magnetic resonances: effects of insulin. Greenfield NJ, et al. **Biochemistry** 1988 Nov 15;27(23):8526–33
A type II DNA–binding protein genetically engineered for fluorescence spectroscopy: the "arm" of transcription factor 1 binds in the DNA grooves. Härd T, et al. **Biochemistry** 1989 Apr 4;28(7):2813–9
A covalent angiogenin/ribonuclease hybrid with a fourth disulfide bond generated by regional mutagenesis. Harper JW, et al. **Biochemistry** 1989 Feb 21;28(4):1875–84
Effects of conversion of an invariant tryptophan residue to phenylalanine on the function of human dihydrofolate reductase. Huang SM, et al. **Biochemistry** 1989 Jan 24; 28(2):471–8
A scanning calorimetric study of the thermal denaturation of the lysozyme of phage T4 and the Arg 96——His mutant form thereof. Kitamura S, et al. **Biochemistry** 1989 May 2;28(9):3788–92
Site–directed mutagenesis of Escherichia coli ornithine transcarbamoylase: role of arginine–57 in substrate binding and catalysis [published erratum appears in Biochemistry 1989 May 16;28(10):4522] Kuo LC, et al. **Biochemistry** 1988 Nov 29;27(24):8823–32
Activity and spectroscopic properties of bacterial D–amino acid transaminase after multiple site–directed mutagenesis of a single tryptophan residue. Martínez del Pozo A, et al. **Biochemistry** 1989 Jan 24;28(2):510–6
Tryptophan–191——phenylalanine, a proximal–side mutation in yeast cytochrome c peroxidase that strongly affects the kinetics of ferrocytochrome c oxidation. Mauro JM, et al. **Biochemistry** 1988 Aug 23;27(17):6243–56
Site–directed mutagenesis of the cysteinyl residues and the active–site serine residue of bacterial D–amino acid transaminase. Merola M, et al. **Biochemistry** 1989 Jan 24; 28(2):505–9
Mutagenesis of the N– and C–terminal cysteine pairs of Tn501 mercuric ion reductase: consequences for bacterial detoxification of mercurials. Moore MJ, et al. **Biochemistry** 1989 Feb 7;28(3):1183–94
Hydrophobic interactions via mutants of Escherichia coli dihydrofolate reductase: separation of binding and catalysis. Murphy DJ, et al. **Biochemistry** 1989 Apr 4;28(7):3025–31
High–resolution NMR studies of fibrinogen–like peptides in solution: structural basis for the bleeding disorder caused by a single mutation of Gly(12) to Val(12) in the A alpha chain of human fibrinogen Rouen. Ni F, et al.

Biochemistry 1989 Apr 4;28(7):3106–19

Characterization of site-directed mutants in the lac permease of Escherichia coli. 1. Replacement of histidine residues. Püttner IB, et al. **Biochemistry** 1989 Mar 21;28(6):2525–33

Mutations in the nucleotide binding loop of adenylate kinase of Escherichia coli. Reinstein J, et al. **Biochemistry** 1988 Jun 28;27(13):4712–20

Alterations of the glutamine residues of human apolipoprotein AI propeptide by in vitro mutagenesis. Characterization of the normal and mutant protein forms. Roghani A, et al. **Biochemistry** 1988 Sep 20;27(19):7428–35

Site-directed mutagenesis and high-resolution NMR spectroscopy of the active site of porphobilinogen deaminase. Scott AI, et al. **Biochemistry** 1988 Oct 18; 27(21):7984–90

Kinetic and magnetic resonance studies of the glutamate–43 to serine mutant of staphylococcal nuclease. Serpersu EH, et al. **Biochemistry** 1989 Feb 21;28(4):1539–48

Role of lysines in human angiogenin: chemical modification and site-directed mutagenesis. Shapiro R, et al. **Biochemistry** 1989 Feb 21;28(4):1726–32

Transcriptional switching by the metalloregulatory MerR protein: initial characterization of DNA and mercury (II) binding activities. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2331–9

Stability mutants of staphylococcal nuclease: large compensating enthalpy–entropy changes for the reversible denaturation reaction. Shortle D, et al. **Biochemistry** 1988 Jun 28;27(13):4761–8

Characterization of four herbicide-resistant mutants of Rhodopseudomonas viridis by genetic analysis, electron paramagnetic resonance, and optical spectroscopy. Sinning I, et al. **Biochemistry** 1989 Jun 27;28(13):5544–53

Role of the histidine 176 residue in glyceraldehyde-3-phosphate dehydrogenase as probed by site-directed mutagenesis. Soukri A, et al. **Biochemistry** 1989 Mar 21;28(6):2586–92

Selection and characterization of a mutant of the cloned gene for mandelate racemase that confers resistance to an affinity label by greatly enhanced production of enzyme. Tsou AY, et al. **Biochemistry** 1989 Feb 7;28(3):969–75

Electrostatic interactions in wild-type and mutant recombinant human myoglobins. Varadarajan R, et al. **Biochemistry** 1989 May 2;28(9):3771–81

High-resolution structure of the temperature-sensitive mutant of phage lysozyme, Arg 96——His. Weaver LH, et al. **Biochemistry** 1989 May 2;28(9):3793–7

Construction and characterization of mutant iso-2-cytochromes c with replacement of conserved prolines. Wood LC, et al. **Biochemistry** 1988 Nov 15; 27(23):8554–61

In vitro replication and mutagenesis of ColE1 plasmid DNA in extracts from repair deficient Escherichia coli mutants. Casaregola S, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):45–51

Purification from a yeast mutant of mitochondrial F1 with modified beta-subunit. High affinity for nucleotides and high negative cooperativity of ATPase activity. Falson P, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):119–26

Effect of temperature upon the conformations of carboxypeptidase A (Anson), A gamma Leu, A gamma Val, AND A alpha + beta. Fretto L, et al. **Biochim Biophys Acta** 1971 Jun 16;235(3):473–88

Transient chloramphenicol acetyltransferase expression of the G gamma globin gene 5'-flanking regions containing substitutions of C——T at position −158, G——A at position −161, and T——A at position −175 in K562 cells. Lanclos KD, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):109–12

Mitochondrial H+-ATPase in mutants of Saccharomyces cerevisiae with defective subunit 8 of the enzyme complex. Marzuki S, et al. **Biochim Biophys Acta** 1989 Jul 13; 975(2):222–30

Expression of lipoprotein lipase gene in combined lipase deficiency. Oka K, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):351–4

A respiratory-driven and an artificially driven ATP synthesis in mutants of Vibrio parahaemolyticus lacking H+-translocating ATPase. Sakai Y, et al. **Biochim Biophys Acta** 1989 Mar 23;973(3):450–6

Bindings of axial ligands to cytochrome P-450d mutants: a difference absorption spectral study. Shimizu T, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):116–21

Effect of phosphonoformic acid, dietary phosphate and the Hyp mutation on kinetically distinct phosphate transport processes in mouse kidney. Tenenhouse HS, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):207–13

Structure-function analysis of Ia molecules: in-phase insertion mutagenesis of the amino-terminal domain of the E beta k polypeptide chain. Rebaï N, et al. **Biochimie** 1988 Jul;70(7):927–35

Studies on the structures of the normal and abnormal goat thyroglobulin genes. Van Ommen GJ, et al. **Biochimie** 1989 Feb;71(2):211–21

Mutations, epimutations, and the developmental programming of the maize Suppressor-mutator transposable element. Fedoroff N, et al. **Bioessays** 1989 May;10(5):139–44 (46 ref.)

In vitro growth properties and PCR ras gene analysis of a murine embryonal carcinoma cell line harboring an amplified c-Ki-ras gene. Vilette D, et al. **Biol Cell** 1989; 65(3):215–9

Expression of normal and mutagenized apolipoprotein CII in procaryotic cells. Structure-function relationship. Holtfreter C, et al. **Biol Chem Hoppe Seyler** 1988 Sep; 369(9):1045–54

Structural requirements of human preproapolipoprotein AI for translocation and processing studied by site-directed mutagenesis in vitro. Stoffel W, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1055–63

Mutagenesis and gene transfer define site-specific roles of the gonadotropin oligosaccharides. Matzuk MM, et al. **Biol Reprod** 1989 Jan;40(1):48–53 (70 ref.)

Fluorescence lifetime studies with staphylococcal nuclease and its site-directed mutant. Test of the hypothesis that proline isomerism is the basis for nonexponential decays. Eftink MR, et al. **Biophys J** 1989 Mar;55(3):575–9

Adduct-induced base-shifts: a mechanism by which the adducts of bulky carcinogens might induce mutations. Loechler EL. **Biopolymers** 1989 May;28(5):909–27

Use of cloned htpR gene of Escherichia coli to introduce htpR mutation into the chromosome. Kiselev VI. **Biotechnol Appl Biochem** 1988 Oct;10(5):397–401

Genetic risk assessment. **Birth Defects** 1988;24(5):1–100

Molecular dosimetry as a tool in genetic risk assessment. Aaron CS. **Birth Defects** 1988;24(5):53–78 (164 ref.)

Experimental approaches to the assessment of genetic risk: mammalian germline mutagenesis and related studies. Russell LB. **Birth Defects** 1988;24(5):25–43 (80 ref.)

Locus assignment of two alpha-globin structural mutants from the Caribbean basin: alpha Fort de France (alpha 45 Arg) and alpha Spanish Town (alpha 27 Val). Cash FE, et al. **Blood** 1989 Aug 1;74(2):833–5

A novel beta-thalassemia frameshift mutation (codon 14/15), detectable by direct visualization of abnormal restriction fragment in amplified genomic DNA. Chan V, et al. **Blood** 1988 Oct;72(4):1420–3

Characterization of a spontaneous mutation in beta-thalassemia associated with advanced paternal age. Chenhab FF, et al. **Blood** 1989 Aug 1;74(2):852–4

A codon 338 nonsense mutation in the factor IX gene in unrelated hemophilia B patients: factor IX338 New York. Driscoll MC, et al. **Blood** 1989 Aug 1;74(2):737–42

One form of inclusion body beta-thalassemia is due to a GAA——TAA mutation at codon 121 of the beta chain [letter] Fei YJ, et al. **Blood** 1989 Mar;73(4):1075–7

Molecular analysis of beta zero-thalassemia intermedia in Sardinia. Galanello R, et al. **Blood** 1989 Aug 1;74(2):823–7

A point mutation in the coding region of uroporphyrinogen decarboxylase associated with familial porphyria cutanea tarda. Garey JR, et al. **Blood** 1989 Mar;73(4):892–5

Characterization of antithrombins produced by active site mutagenesis of human alpha 1-antitrypsin expressed in yeast. George PM, et al. **Blood** 1989 Feb;73(2):490–6

Sp alpha I/78: a mutation of the alpha I spectrin domain in a white kindred with HE and HPP phenotypes. Lecomte MC, et al. **Blood** 1989 Aug 15;74(3):1126–33

Spectrin Tunis (Sp alpha I/78), an elliptocytogenic variant, is due to the CGG——TGG codon change (Arg——Trp) at position 35 of the alpha I domain. Morlé L, et al. **Blood** 1989 Aug 1;74(2):828–32

Purification and characterization of factor VIII 1,689-Cys: a nonfunctional cofactor occurring in a patient with severe hemophilia A. O'Brien DP, et al. **Blood** 1989 Jun; 73(8):2117–22

Thalassemia intermedia resulting from a mild beta-thalassemia mutation. Rosatelli MC, et al. **Blood** 1989 Feb;73(2):601–5

Mutations in ras genes in myelocytic leukemias and myelodysplastic syndromes. Bartram CR. **Blood Cells** 1988; 14(2-3):533–8 (21 ref.)

Hereditary elliptocytosis, spherocytosis and related disorders: consequences of a deficiency or a mutation of membrane skeletal proteins. Palek J. **Blood Rev** 1987 Sep;1(3):147–68 (124 ref.)

Osteoclastic acid ATPase: biochemical and histochemical studies of the osteopetrotic mutations in the rat. Ek-Rylander B, et al. **Bone Miner** 1989 Mar;5(3):309–21

Impaired osteoclast differentiation in subcutaneous implants of bone particles in osteopetrotic mutants. Glowacki J, et al. **Bone Miner** 1989 Mar;5(3):271–8

A recurrent missense mutation (Arg——Gln) and a partial deletion in factor VIII gene causing severe haemophilia A. Bernardi F, et al. **Br J Haematol** 1989 Feb;71(2):271–6

Hb S(C)-beta+-thalassaemia: different mutations are associated with different levels of normal Hb A. Gonzalez-Redondo JM, et al. **Br J Haematol** 1988 Sep; 70(1):85–9

Severe Hb S-beta zero-thalassaemia with a T——C substitution in the donor splice site of the first intron of the beta-globin gene. Gonzalez-Redondo JM, et al. **Br J Haematol** 1989 Jan;71(1):113–7

Identification of a CpG mutation in the coagulation factor-IX gene by analysis of amplified DNA sequences. Siguret V, et al. **Br J Haematol** 1988 Dec;70(4):411–6

Recessive mutations and chromosome deletions leading to cancer. Berne J, et al. **Br J Surg** 1989 Apr;76(4):327–30 (46 ref.)

Recessive mutation, chromosome deletion and cancer [letter] Thompson AM, et al. **Br J Surg** 1989 Jul;76(7):765

Absence of mutation in the beta-amyloid cDNAs cloned from the brains of three patients with sporadic Alzheimer's disease. Vitek MP, et al. **Brain Res** 1988 Sep;464(2):121–31

A Dactylium dendroides morphological mutant defective in D-galactose metabolism. Kubicki D, et al. **Braz J Med Biol Res** 1988;21(5):895–902

Stationary mutant distributions and evolutionary optimization. Schuster P, et al. **Bull Math Biol** 1988; 50(6):635–60

Hereditary cancers disclose a class of cancer genes. Knudson AG Jr. **Cancer** 1989 May 15;63(10):1888–91

Human bladder and colon carcinomas contain activated ras p21. Specific detection of twelfth codon mutants. Meyers FJ, et al. **Cancer** 1989 Jun 1;63(11):2177–81

Induction of sister chromatid exchange and dominant lethal mutation by 'Katha' (catechu) in male mice [corrected and republished article originally printed in Cancer Lett 1987 Aug;36(2):189–96] Giri AK, et al. **Cancer Lett** 1988 Jan; 38(3):357–64

Workshop report from the Division of Research Grants, National Institutes of Health. Site-specific mutagenesis—a Chemical Pathology Study Section Workshop. **Cancer Res** 1989 Feb 1;49(3):758–63

Relationship between the formation of promutagenic adducts and the activation of the K-ras protooncogene in lung tumors from A/J mice treated with nitrosamines. Belinsky SA, et al. **Cancer Res** 1989 Oct 1;49(19):5305–11

Analysis of c-Ki-ras mutations in human colon carcinoma by cell sorting, polymerase chain reaction, and DNA sequencing. Burmer GC, et al. **Cancer Res** 1989 Apr 15; 49(8):2141–6

Mutational analysis of the mouse glucocorticoid receptor. Danielsen M, et al. **Cancer Res** 1989 Apr 15;49(8 Suppl):2286s–2291s

Isolation of two Chinese hamster ovary cell mutants hypersensitive to topoisomerase II inhibitors and cross-resistant to peroxides. Davies SM, et al. **Cancer Res** 1989 Aug 15;49(16):4526–30

Flow cytometric enumeration of drug-resistant tumor cells. deFazio A, et al. **Cancer Res** 1988 Nov 1;48(21):6037–43

Prostaglandin H synthase-dependent mutagenic activation of benzidine in a Salmonella typhimurium Ames tester strain possessing elevated N-acetyltransferase levels. Josephy PD, et al. **Cancer Res** 1989 Feb 15;49(4):853–6

Spontaneous mutation rates of tumorigenic and nontumorigenic Chinese hamster embryo fibroblast cell lines. Kaden D, et al. **Cancer Res** 1989 Jun 15;49(12):3374–9

Molecular analysis of spontaneous hypoxanthine phosphoribosyltransferase mutations in thioguanine-resistant HL-60 human leukemia cells. Monnat RJ Jr. **Cancer Res** 1989 Jan 1;49(1):81–7

Study of the ability of phenacetin, acetaminophen, and aspirin to induce cytotoxicity, mutation, and morphological transformation in C3H/10T1/2 clone 8 mouse embryo cells. Patierno SR, et al. **Cancer Res** 1989 Feb 15;49(4):1038–44

Mutation rates and mutational spectra in tumorigenic cell lines. Sager R. **Cancer Surv** 1988;7(2):325–33 (32 ref.)

The mutagenicity of dibenz[a,j]acridine, some metabolites and other derivatives in bacteria and mammalian cells. Bonin AM, et al. **Carcinogenesis** 1989 Jun;10(6):1079–84

Sequence specificity of mutation induced by the anti-tumor drug cisplatin in the CHO aprt gene. de Boer JG, et al. **Carcinogenesis** 1989 Aug;10(8):1363–7

A rationale for the non-mutagenicity of 2- and 3-aminobiphenyls. Ioannides C, et al. **Carcinogenesis** 1989 Aug;10(8):1403–7

O6-methylguanine-DNA methyltransferase-defective human cell mutant: O6-methylguanine, DNA strand breaks and cytotoxicity. Kalamegham R, et al. **Carcinogenesis** 1988 Oct;9(10):1749–53

o-phenanthroline protects mammalian cells from hydrogen peroxide-induced gene mutation and morphological transformation. Nassi-Calò L, et al. **Carcinogenesis** 1989 Jun;10(6):1055–7

Effects of glutathione transferase activity on benzo[a]pyrene 7,8-dihydrodiol metabolism and mutagenesis studied in a mammalian cell co-cultivation assay. Romert L, et al. **Carcinogenesis** 1989 Sep;10(9):1701–7

Excision repair of O6-methylguanine synthesized at the rat H-ras N-methyl-N-nitrosourea activation site and introduced into Escherichia coli. Rossi SC, et al. **Carcinogenesis** 1989 Feb;10(2):373–7

The role of specific DNA adducts in the induction of micronuclei by N-hydroxy-2-acetylaminofluorene in rat liver in vivo. van de Poll ML, et al. **Carcinogenesis** 1989 Apr;10(4):717–22

The complexity of nitrosoguanidine mutagenesis increases with size: observations of the mutational specificity of N-propyl-N'-nitro-N-nitrosoguanidine. van der Vliet GM, et al. **Carcinogenesis** 1989 May;10(5):949–52

Enzymatic acetylation and sulfation of N-hydroxyarylamines in bacteria and rat livers. Yamazoe Y, et al. **Carcinogenesis** 1989 Sep;10(9):1675–9

DNA binding by [2,5-14C]N-nitrosopyrrolidine in excision-repair proficient and deficient strains of Salmonella. Evidence for a major premutagenic adduct. Zielenska M, et al. **Carcinogenesis** 1988 Oct;9(10):1901–4

Chemical modifications of a cysteinyl residue introduced in the binding site of carboxypeptidase Y by site-directed mutagenesis. Bech LM, et al. **Carlsberg Res Commun** 1988; 53(6):381–93

In vivo analysis of the mechanisms responsible for strong transcriptional polarity in a "sense" mutant within an intercistronic region. Alifano P, et al. **Cell** 1988 Oct 21; 55(2):351–60

undulated, a mutation affecting the development of the mouse

skeleton, has a point mutation in the paired box of Pax 1. Balling R, et al. **Cell** 1988 Nov 4;55(3):531–5

Biased hypermutation of viral RNA genomes could be due to unwinding/modification of double-stranded RNA [letter] Bass BL, et al. **Cell** 1989 Feb 10;56(3):331

Constitutive mutants in the yeast pheromone response: ordered function of the gene products. Blinder D, et al. **Cell** 1989 Feb 10;56(3):479–86

Biased hypermutation and other genetic changes in defective measles viruses in human brain infections. Cattaneo R, et al. **Cell** 1988 Oct 21;55(2):255–65

A putative protein kinase overcomes pheromone-induced arrest of cell cycling in S. cerevisiae. Courchesne WE, et al. **Cell** 1989 Sep 22;58(6):1107–19

A single point mutation in the v-ets oncogene affects both erythroid and myelomonocytic cell differentiation. Golay J, et al. **Cell** 1988 Dec 23;55(6):1147–58

Retrovirus-induced insertional mutation in Mov13 mice affects collagen I expression in a tissue-specific manner. Kratochwil K, et al. **Cell** 1989 Jun 2;57(5):807–16

Some cis- and trans-acting mutants for splicing target pre-mRNA to the cytoplasm. Legrain P, et al. **Cell** 1989 May 19;57(4):573–83

Mutations in the cytoplasmic domain of the 275 kd mannose 6-phosphate receptor differentially alter lysosomal enzyme sorting and endocytosis. Lobel P, et al. **Cell** 1989 Jun 2; 57(5):787–96

A mutant with a defect in telomere elongation leads to senescence in yeast. Lundblad V, et al. **Cell** 1989 May 19; 57(4):633–43

A hyper-recombination mutation in S. cerevisiae identifies a novel eukaryotic topoisomerase. Wallis JW, et al. **Cell** 1989 Jul 28;58(2):409–19

Analysis of Aprt deficient mutants of Friend erythroleukaemia cells. O'Neill R, et al. **Cell Biol Int Rep** 1989 Jun;13(6):493–8

Pharmacological characterization of sodium channels in the primary culture of individual Drosophila embryos: neurons of a mutant deficient in a putative sodium channel gene. Sakai K, et al. **Cell Differ Dev** 1989 Mar;26(2):107–18

Polytene chromosomes from ovarian pseudonurse cells of the Drosophila melanogaster otu mutant. I. Photographic map of chromosome 3. Heino TI. **Chromosoma** 1989 Mar; 97(5):363–73

Isolation and characterization of temperature-sensitive mutants of Hansenula. Yang SS, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):23–39

Transgenic mice and host cell mutants resistant to transformation as model systems for identifying multiple components in oncogenesis. Varmus H. **Ciba Found Symp** 1989;142:20–6; discussion 26–35 (23 ref.)

Tissue-type plasminogen activator mutants. Theoretical and clinical considerations. Bang NU. **Circulation** 1989 Jun; 79(6):1391–2

Anti-IgM treatment of C57BL/6-1pr/1pr mice: depletion of B cells reduces 1pr gene-induced lymphoproliferation and mononuclear cell vasculitis. Cerny A, et al. **Clin Exp Immunol** 1989 Jul;77(1):124–9

Non-allelic mutations in X-linked retinitis pigmentosa. Chen JD, et al. **Clin Genet** 1989 May;35(5):338–42

The mutation mechanism causing juvenile-onset Tay-Sachs disease among Lebanese. Hechtman P, et al. **Clin Genet** 1989 May;35(5):364–75

Mutations probe structure and function of G-protein alpha chains. Bourne HR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:221–8 (30 ref.)

Cooperative and positional independent trans-activation domains of the human glucocorticoid receptor. Evans RM, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:813–8

Expression of wild-type and mutant subunits of the cAMP-dependent protein kinase. McKnight GS, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:111–9

A computer program to display codon changes caused by mutagenesis. Sirotkin K. **Comput Appl Biosci** 1988 Apr; 4(2):243–7

Engineering thermostability in subtilisin BPN' by in vitro mutagenesis. Rollence ML, et al. **Crit Rev Biotechnol** 1988; 8(3):217–24

A controversy concerning the structure of the mitochondrial genome of a yeast petite mutant: resolution by sequence analysis. Bergantino E, et al. **Curr Genet** 1989 Apr; 15(4):291–3; discussion 293–4

Enhanced canavanine uptake is associated with nucleotide permeability in a thymidylate auxotroph of Saccharomyces cerevisiae. Kohalmi SE, et al. **Curr Genet** 1989 Feb; 15(2):129–34

Increased diuron resistance in the joint expression of mutations located at the DIU2, DIU3 and DIU4 loci of Saccharomyces cerevisiae. Meunier B, et al. **Curr Genet** 1989 Feb;15(2):121–7

A galactose-dependent cmd1 mutant of Saccharomyces cerevisiae: involvement of calmodulin in nuclear division. Ohya Y, et al. **Curr Genet** 1989 Feb;15(2):113–20

A deletion of the PDC1 gene for pyruvate decarboxylase of yeast causes a different phenotype than previously isolated point mutations. Schaaff I, et al. **Curr Genet** 1989 Feb;15(2):75–81

A system for deriving revertants of oncogene-transformed human cells. Talbot N, et al. **Cytogenet Cell Genet** 1988; 48(2):112–6

Experimental phenocopy of a minute maternal-effect mutation alters blastoderm determination in embryos of Drosophila melanogaster. Boring LF, et al. **Dev Biol** 1989 Apr;132(2):343–54

Timing in the regulation of neural crest cell migration: retarded "maturation" of regional extracellular matrix inhibits pigment cell migration in embryos of the white axolotl mutant. Löfberg J, et al. **Dev Biol** 1989 Jan; 131(1):168–81

An embryo-lethal mutant of Arabidopsis thaliana is a biotin auxotroph. Schneider T, et al. **Dev Biol** 1989 Jan; 131(1):161–7

Mutations that disrupt the morphogenesis and localization of a sperm-specific organelle in Caenorhabditis elegans. Shakes DC, et al. **Dev Biol** 1989 Aug;134(2):307–16

Human interleukin-3 and granulocyte-macrophage colony stimulating factor: site-specific mutagenesis and expression in yeast. Cosman D, et al. **Dev Biol Stand** 1988;69:9–13

Defective intercellular cohesion in glycosylation mutants of Dictyostelium discoideum. Boose JA, et al. **Dev Genet** 1988; 9(4–5):569–78

A mutant strain of Polysphondylium with defects in many genes. Francis D, et al. **Dev Genet** 1988;9(4–5):629–38

Genetic analysis of chorion formation in Drosophila melanogaster: I. The effects of one somatic-specific and seven germ-line-specific mutations. Galanopoulos VK, et al. **Dev Genet** 1989;10(2):87–97

Set of proteins shows abnormal posttranslational modification in embryos homozygous for dominant T-mutations. Park CH, et al. **Dev Genet** 1989;10(1):53–62

The use of specific DNA probes to analyse the Sxr mutation in the mouse. Bishop CE, et al. **Development** 1987;101 Suppl:167–75

Significant progress in Duchenne muscular dystrophy. Davies KE. **Dis Markers** 1987 Mar;5(1):55–6

Modulation of the phenotypic expression of a human serine tRNA gene by 5'-flanking sequences. Capone JP. **DNA** 1988 Sep;7(7):459–68

An efficiently transcribed human tRNA(Val) gene variant produces a stable pre-tRNA: repair of the processing defect by in vitro mutations. Kahnt B, et al. **DNA** 1989 Jan–Feb; 8(1):51–8

Detection of single-base mutations in DNA molecules using the solution melting method. Latham T, et al. **DNA** 1989 Apr;8(3):223–31

Generation of multiple independent substitution mutants by M13 in vitro mutagenesis using a single mutagenic oligonucleotide. Reyes AA, et al. **DNA** 1988 Oct; 7(8):579–84

Use of the polymerase chain reaction technique to create base-specific ras oncogene mutations. Rochlitz CF, et al. **DNA** 1988 Sep;7(7):515–9

Mutations at the cysteine codons of the recA gene of Escherichia coli. Weisemann JM, et al. **DNA** 1988 Jul–Aug; 7(6):389–98

Identification of group specific component/vitamin D-binding protein (GC/DBP) mutants by isoelectric focusing in immobilized pH gradients. Constans J, et al. **Electrophoresis** 1988 Sep;9(9):599–602

Somatic mutation studies in human lymphoid cells: the detectability of quantitative genetic variants in two-dimensional gels. Kuick RD, et al. **Electrophoresis** 1988 Apr;9(4):192–8

Clinical and genetic characterization of nonclassic 21-hydroxylase deficiency. Speiser PW, et al. **Endocr Res** 1989;15(1–2):257–76

Analysis of mutations causing steroid 21-hydroxylase deficiency. White PC. **Endocr Res** 1989;15(1–2):239–56

Recovery of responsiveness to ACTH and cAMP in a protein kinase-defective adrenal cell mutant following transfection with a protein kinase gene. Wong M, et al. **Endocr Res** 1989;15(1–2):49–65

The influence of genetic background on the expression of mutations at the diabetes locus in the mouse. V. Interaction between the db gene and hepatic sex steroid sulfotransferases correlates with gender-dependent susceptibility to hyperglycemia. Leiter EH, et al. **Endocrinology** 1989 Feb;124(2):912–22

The androgen receptor of the testicular-feminized (Tfm) mutant mouse is smaller than the wild-type receptor. Young CY, et al. **Endocrinology** 1989 Feb;124(2):771–5

Chemical induction of oncogene mutations and growth factor activity in mouse skin carcinogenesis. Bailleul B, et al. **Environ Health Perspect** 1989 May;81:23–7 (36 ref.)

In vitro models of carcinogenesis: expression of recessive genes by chromosomal mutations. Little JB. **Environ Health Perspect** 1989 May;81:63–6

Abstracts of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10–15, 1989. **Environ Mol Mutagen** 1989;14 Suppl 15:1–251

Plasmid copy number and mutant frequencies in S. typhimurium TA102. Albertini S, et al. **Environ Mol Mutagen** 1988;12(4):353–63

Mutagenicity to bacteria, cultured cells, and rodents of the human carcinogen chlornaphazine. Ashby J, et al. **Environ Mol Mutagen** 1988;12(4):365–74

Mutagenicity and induction of sister chromatid exchange by optically active enantiomers of secondary butyl methanesulfonate. Ball JC, et al. **Environ Mol Mutagen** 1989;13(2):100–6

Mutagenicity of airborne particles from a nonindustrial town in Italy. Barale R, et al. **Environ Mol Mutagen** 1989; 13(3):227–33

In vivo mammalian mutagenesis: in transition to DNA molecules. Burkhart JG, et al. **Environ Mol Mutagen** 1989; 14 Suppl 16:85–9 (22 ref.)

Mutagenicity of nitro compounds in Salmonella typhimurium in the presence of flavin mononucleotide in a preincubation assay. Dellarco VL, et al. **Environ Mol Mutagen** 1989; 13(2):116–27

Mechanisms of mutagenesis. Drake JW. **Environ Mol Mutagen** 1989;14 Suppl 16:11–5

Molecular analyses of in vivo hprt mutant T cells from atomic bomb survivors. Hakoda M, et al. **Environ Mol Mutagen** 1989;13(1):25–33

Early years of the Salmonella mutagen tester strains: lessons from hycanthone. Hartman PE. **Environ Mol Mutagen** 1989;14 Suppl 16:39–45

Sodium thiosulfate inhibits cisplatin-induced mutagenesis in somatic tissue of Drosophila. Katz AJ. **Environ Mol Mutagen** 1989;13(2):97–9

A view of the relation between carcinogenesis and mutagenesis. Lijinsky W. **Environ Mol Mutagen** 1989;14 Suppl 16:78–84 (29 ref.)

Conditions affecting the mutagenicity of trichloroethylene in Salmonella. McGregor DB, et al. **Environ Mol Mutagen** 1989;13(3):197–202

Development of bacterial mutagenicity tests: a view from afar. MacPhee DG. **Environ Mol Mutagen** 1989;14 Suppl 16:35–8

The past and the future in the study of radiation-induced mutation in the germ-line of mice and humans. Neel JV. **Environ Mol Mutagen** 1989;14(1):55–60 (24 ref.)

Molecular analyses of in vivo hypoxanthine-guanine phosphoribosyltransferase mutations in human T-lymphocytes: II. Demonstration of a clonal amplification of hprt mutant T-lymphocytes in vivo. Nicklas JA, et al. **Environ Mol Mutagen** 1988;12(3):271–84

Longitudinal study of the in vivo hprt mutant frequency in human T-lymphocytes as determined by a cell cloning assay. O'Neill JP, et al. **Environ Mol Mutagen** 1989; 13(4):289–93

Absence of cinoxacin-induced DNA fragmentation and mutations in the rat granuloma pouch. Pino A, et al. **Environ Mol Mutagen** 1989;13(2):112–5

Reciprocal relationship between mouse germ-cell mutagenesis and basic genetics: from early beginnings to future opportunities. Russell LB. **Environ Mol Mutagen** 1989;14 Suppl 16:23–9

Reminiscences of a mouse specific-locus test addict. Russell WL. **Environ Mol Mutagen** 1989;14 Suppl 16:16–22

Mutagenic potency at the Na+/K+ ATPase locus correlates with cycle-dependent killing of 10T1/2 cells. Smith GJ, et al. **Environ Mol Mutagen** 1988;12(3):299–309

Ultraviolet mutagenesis and the SOS response in Escherichia coli: a personal perspective. Witkin EM. **Environ Mol Mutagen** 1989;14 Suppl 16:30–4

Regulation of gene expression at the translational level. The rescue factor reverses thermosensitive protein synthesis in N4316, a conditionally-lethal mutant of Escherichia coli defective in translation. Ganoza MC, et al. **Eur J Biochem** 1989 Jan 2;178(3):663–74

Functional complementation of catalase-defective peroxisomes in a methylotrophic yeast by import of the catalase A from Saccharomyces cerevisiae. Hansen H, et al. **Eur J Biochem** 1989 Sep 1;184(1):173–9

Inactivation of the Escherichia coli heat-labile enterotoxin by in vitro mutagenesis of the A-subunit gene. Harford S, et al. **Eur J Biochem** 1989 Aug 1;183(2):311–6

Isolation of a mutant from Salmonella typhimurium producing acyl-deficient lipopolysaccharides. Lehmann V, et al. **Eur J Biochem** 1988 Dec 15;178(2):459–64

Structural and functional characterization of mutants of recombinant single-chain urokinase-type plasminogen activator obtained by site-specific mutagenesis of Lys158, Ile159 and Ile160. Lijnen HR, et al. **Eur J Biochem** 1988 Nov 15;177(3):575–82

The production of normal and variant human glucose-6-phosphate dehydrogenase in cos cells. Mason PJ, et al. **Eur J Biochem** 1988 Dec 1;178(1):109–13

A structural requirement in the subsite F of lysozyme. The role of arginine 115 in human lysozyme revealed by site-directed mutagenesis. Muraki M, et al. **Eur J Biochem** 1989 Feb 15;179(3):573–9

Study of the arrangement of the functional domains along the yeast cytoplasmic aspartyl-tRNA synthetase. Prevost G, et al. **Eur J Biochem** 1989 Mar 15;180(2):351–8

Structural requirements for protein N-glycosylation. Influence of acceptor peptides on cotranslational glycosylation of yeast invertase and site-directed mutagenesis around a sequon sequence. Roitsch T, et al. **Eur J Biochem** 1989 May 1;181(2):525–9

Mutant proteins of human interleukin 2. Renaturation yield, proliferative activity and receptor binding. Weigel U, et al. **Eur J Biochem** 1989 Mar 15;180(2):295–300

Selection of constitutively resistant mutants of inducible clindamycin-resistant Bacteroides vulgatus. Reig M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):711–5

The molecular basis of mutations induced by deoxyribonucleoside triphosphate pool imbalances in mammalian cells. Meuth M. **Exp Cell Res** 1989 Apr; 181(2):305–16 (54 ref.)

A cell cycle G0-ts mutant, tsJT60, becomes lethal at the nonpermissive temperature after transformation with

adenovirus 12 E1B 19K mutant. Tai YY, et al. **Exp Cell Res** 1988 Nov;179(1):50–7
New carbohydrate site in mutant antithrombin (7 Ile——Asn) with decreased heparin affinity. Brennan SO, et al. **FEBS Lett** 1988 Sep 12;237(1–2):118–22
Two ionic forms of exoglucanase in yeast secretory mutants. Larriba G, et al. **FEBS Lett** 1988 Sep 12;237(1–2):53–6
Mutagenesis directed by phosphotriester analogues of oligonucleotides: a way to site-specific mutagenesis in vivo. Petrenko VA, et al. **FEBS Lett** 1988 Sep 26;238(1):109–12
Import of a mutant mitochondrial precursor fails to respond to stimulation by a cytosolic factor. Randall SK, et al. **FEBS Lett** 1989 Jul 3;250(2):561–4
Engineering of an intersubunit disulphide bridge in glutathione reductase from Escherichia coli. Scrutton NS, et al. **FEBS Lett** 1988 Dec 5;241(1–2):46–50
Salmonella typhimurium metC operator-constitutive mutations. Park YM, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):137–41
Fructose-bisphosphatase-deficient mutants of mucoid Pseudomonas aeruginosa. Banerjee PC. **Folia Microbiol (Praha)** 1989;34(2):81–6
New mutation causing sterility in the mouse. Handel MA, et al. **Gamete Res** 1988 Dec;21(4):409–23
A rapid and versatile site-directed method of mutagenesis for double-stranded plasmid DNA. Bellini AV, et al. **Gene** 1988 Sep 30;69(2):325–30
Directed mutagenesis of the bacteriophage P2 ogr gene defines an essential function. Birkeland NK, et al. **Gene** 1988 Dec 20;73(2):327–35
Substitution of serine for arginine in position 162 of TEM-type beta-lactamases extends the substrate profile of mutant enzymes, TEM-7 and TEM-101, to ceftazidime and aztreonam. Collatz E, et al. **Gene** 1989 May 30; 78(2):349–54
Human hypoxanthine-guanine phosphoribosyltransferase: a single nucleotide substitution in cDNA clones isolated from a patient with Lesch-Nyhan syndrome (HPRTMidland). Davidson BL, et al. **Gene** 1988 Aug 15;68(1):85–91
A family of versatile centromeric vectors designed for use in the sectoring-shuffle mutagenesis assay in Saccharomyces cerevisiae. Elledge SJ, et al. **Gene** 1988 Oct 30;70(2):303–12
Omegon-Km: a transposable element designed for in vivo insertional mutagenesis and cloning of genes in gram-negative bacteria. Fellay R, et al. **Gene** 1989; 76(2):215–26
New yeast-Escherichia coli shuttle vectors constructed with in vitro mutagenized yeast genes lacking six-base pair restriction sites. Gietz RD, et al. **Gene** 1988 Dec 30; 74(2):527–34
Site-directed mutagenesis by overlap extension using the polymerase chain reaction. Ho SN, et al. **Gene** 1989 Apr 15;77(1):51–9
Random mutagenesis using degenerate oligodeoxyribonucleotides. Hübner P, et al. **Gene** 1988 Dec 20;73(2):319–25
Use of polymerase chain reaction catalyzed by Taq DNA polymerase for site-specific mutagenesis. Kadowaki H, et al. **Gene** 1989 Mar 15;76(1):161–6
Expression and excretion of human pancreatic secretory trypsin inhibitor in lipoprotein-deletion mutant of Escherichia coli. Kanamori T, et al. **Gene** 1988 Jun 30; 66(2):295–300
A simple and rapid method to obtain substitution mutations in Escherichia coli: isolation of a dam deletion/insertion mutation. Parker B, et al. **Gene** 1988 Dec 20;73(2):531–5
Salmonella typhimurium metE operator-constitutive mutations. Plamann LS, et al. **Gene** 1988 Dec 15; 73(1):201–8
Point mutations that affect translation initiation of the transposon Tn10 tetA gene. Schneider K, et al. **Gene** 1988 Dec 30;74(2):559–63
A novel method for generating a nested set of unidirectional deletion mutants using mixed oligodeoxynucleotides. Shen WY, et al. **Gene** 1988 Oct 15;70(1):205–11
A multisite-directed mutagenesis using T7 DNA polymerase: application for reconstructing a mammalian gene. Su TZ, et al. **Gene** 1988 Sep 15;69(1):81–9
Simple and highly efficient site-specific mutagenesis, by ligation of an oligodeoxyribonucleotide into gapped heteroduplex DNA in which the template strand contains deoxyuridine. Terwilliger TC. **Gene** 1988 Sep 30; 69(2):317–24
Induction of multiple replacement mutations by oligonucleotide-directed mutagenesis with extended mismatch primers. Lichtler A, et al. **Gene Anal Tech** 1987 Nov-Dec;4(6):111–8
Simple and efficient oligonucleotide-directed mutagenesis using one primer and circular plasmid DNA template. Marotti KR, et al. **Gene Anal Tech** 1989 Jul-Aug;6(4):67–70
Myosin heavy-chain mutations that disrupt Caenorhabditis elegans thick filament assembly. Bejsovec A, et al. **Genes Dev** 1988 Oct;2(10):1307–17
Analysis of the lethal interaction between the prune and Killer of prune mutations of Drosophila. Biggs J, et al. **Genes Dev** 1988 Oct;2(10):1333–43
Gene activities and segmental patterning in Drosophila: analysis of odd-skipped and pair-rule double mutants. Coulter DE, et al. **Genes Dev** 1988 Dec;2(12B):1812–23
Alteration of hsp82 gene expression by the gypsy transposon and suppressor genes in Drosophila melanogaster. Dorsett D, et al. **Genes Dev** 1989 Apr;3(4):454–68
Molecular analysis of even-skipped mutants in Drosophila development. Frasch M, et al. **Genes Dev** 1988 Dec; 2(12B):1824–38
Genes controlling essential cell-cycle functions in Drosophila melanogaster. Gatti M, et al. **Genes Dev** 1989 Apr; 3(4):438–53
Escherichia coli heat shock gene mutants are defective in proteolysis. Straus DB, et al. **Genes Dev** 1988 Dec; 2(12B):1851–8
Genetic analysis of the role of human U1 snRNA in mRNA splicing: I. Effect of mutations in the highly conserved stem-loop I of U1. Yuo CY, et al. **Genes Dev** 1989 May; 3(5):697–707
Quantitative genetic variability maintained by mutation-stabilizing selection balance in finite populations. Keightley PD, et al. **Genet Res** 1988 Aug;52(1):33–43
Phenotypic characterization and genetic analysis of twenty dominant cataract mutations detected in offspring of irradiated male mice. Kratochvilova J, et al. **Genet Res** 1988 Oct;52(2):125–34
The mutational load of a multigene family with uniform members. Ohta T. **Genet Res** 1989 Apr;53(2):141–5
Codon usage as a reason for unsuccessful search for amber-suppressor mutants in Streptomyces lividans? Schmieger H, et al. **Genet Res** 1988 Dec;52(3):163–7
Recessive mutation in a standard recombinant-inbred line of mice affects seminal vesicle shape. Shukri NM, et al. **Genet Res** 1988 Aug;52(1):27–32
Stable polymorphism for mutant eye colour genes in populations of Drosophila melanogaster in two different media. Nájera C, et al. **Genetica** 1988 Sep 30;77(2):123–31
Linkage studies of wavy in the Norway rat, Rattus norvegicus. Robinson R. **Genetica** 1988 Jul 31;77(1):79–80
Dominant suppressors of yeast actin mutations that are reciprocally suppressed. Adams AE, et al. **Genetics** 1989 Apr;121(4):675–83
Organelle gene diversity under migration, mutation, and drift: equilibrium expectations, approach to equilibrium, effects of heteroplasmic cells, and comparison to nuclear genes. Birky CW Jr, et al. **Genetics** 1989 Mar;121(3):613–27
Genetic analysis of two mutations affecting thymidine metabolism in Dictyostelium discoideum. Bronner CE, et al. **Genetics** 1988 Dec;120(4):959–64
Fine-structure genetics of ama-1, an essential gene encoding the amanitin-binding subunit of RNA polymerase II in Caenorhabditis elegans. Bullerjahn AM, et al. **Genetics** 1988 Oct;120(2):423–34
Linkage and the maintenance of heritable variation by mutation-selection balance. Bürger R. **Genetics** 1989 Jan; 121(1):175–84
The naturally occurring alleles of MAL1 in Saccharomyces species evolved by various mutagenic processes including chromosomal rearrangement. Charron MJ, et al. **Genetics** 1988 Sep;120(1):83–93
Effects of amino acid substitutions at the active site in Escherichia coli beta-galactosidase. Cupples CG, et al. **Genetics** 1988 Nov;120(3):637–44
A highly revertible cyc1 mutant of yeast contains a small tandem duplication. Das G, et al. **Genetics** 1988 Sep; 120(1):57–62
Caenorhabditis elegans mutants defective in the functioning of the motor neurons responsible for egg laying. Desai C, et al. **Genetics** 1989 Apr;121(4):703–21
Yeast mer1 mutants display reduced levels of meiotic recombination. Engebrecht J, et al. **Genetics** 1989 Feb; 121(2):237–47
Isolation and characterization of dominant female sterile mutations of Drosophila melanogaster. I. Mutations on the third chromosome. Erdélyi M, et al. **Genetics** 1989 May; 122(1):111–27
New mutants of Paramecium tetraurelia defective in a calcium control mechanism: genetic and behavioral characterizations. Evans TC, et al. **Genetics** 1989 Mar; 121(3):491–500
The heritable activation of cryptic Suppressor-mutator elements by an active element. Fedoroff N. **Genetics** 1989 Mar;121(3):591–608
Is the Suppressor-mutator element controlled by a basic developmental regulatory mechanism? Fedoroff NV, et al. **Genetics** 1988 Oct;120(2):559–77
Behavior and cytogenetics of fruitless in Drosophila melanogaster: different courtship defects caused by separate, closely linked lesions [published erratum appears in Genetics 1989 Jun;122(2):465] Gailey DA, et al. **Genetics** 1989 Apr;121(4):773–85
There's a whole lot of shaking going on. Ganetzky B. **Genetics** 1989 Feb;121(2):201–4
Transposon tagging using Ty elements in yeast. Garfinkel DJ, et al. **Genetics** 1988 Sep;120(1):95–108
Mutations in CEN3 cause aberrant chromosome segregation during meiosis in Saccharomyces cerevisiae. Gaudet A, et al. **Genetics** 1989 Mar;121(3):477–89
The effects of mutations in the ant promoter of phage P22 depend on context. Graña D, et al. **Genetics** 1988 Oct; 120(2):319–27
Phage genetic sites involved in lambda growth inhibition by the Escherichia coli rap mutant. Guzmán P, et al. **Genetics** 1989 Mar;121(3):401–9
Adaptive evolution that requires multiple spontaneous mutations. I. Mutations involving an insertion sequence. Hall BG. **Genetics** 1988 Dec;120(4):887–97
Linkage disequilibrium and genetic variances under mutation-selection balance. Hastings A. **Genetics** 1989 Apr; 121(4):857–60
Mechanisms of mutagenesis by chloroacetaldehyde. Jacobsen JS, et al. **Genetics** 1989 Feb;121(2):213–22
Mutational analysis of the open reading frames in the transposable element IS1 [published erratum appears in Genetics 1989 Feb;121(2):393] Jakowec M, et al. **Genetics** 1988 Sep;120(1):47–55
Mutational analysis of the GAL4-encoded transcriptional activator protein of Saccharomyces cerevisiae. Johnston M, et al. **Genetics** 1988 Sep;120(1):63–74
Genetic analysis of mouse t haplotypes using mutations induced by ethylnitrosourea mutagenesis: the order of T and qk is inverted in t mutants. Justice MJ, et al. **Genetics** 1988 Oct;120(2):533–43
Maternal-effect lethal mutations on linkage group II of Caenorhabditis elegans. Kemphues KJ, et al. **Genetics** 1988 Dec;120(4):977–86
The mutation bronze-mutable 4 derivative 6856 in maize is caused by the insertion of a novel 6.7-kilobase pair transposon in the untranslated leader region of the bronze-1 gene. Klein AS, et al. **Genetics** 1988 Nov;120(3):779–90
King's formula for the mutation load with epistasis. Kondrashov AS, et al. **Genetics** 1988 Nov;120(3):853–6
Replica plating and indirect selection of bacterial mutants: isolation of preadaptive mutants in bacteria by sib selection. Lederberg J. **Genetics** 1989 Mar;121(3):395–9
Developmental genetics of chromosome I spermatogenesis-defective mutants in the nematode Caenorhabditis elegans. L'Hernault SW, et al. **Genetics** 1988 Oct;120(2):435–52
The genetic dependence of recombination in recD mutants of Escherichia coli. Lovett ST, et al. **Genetics** 1988 Sep; 120(1):37–45
Analysis of a mutator activity necessary for germline transposition and excision of Tc1 transposable elements in Caenorhabditis elegans. Mori I, et al. **Genetics** 1988 Oct; 120(2):397–407
Suppressors of yeast actin mutations. Novick P, et al. **Genetics** 1989 Apr;121(4):659–74
A cytogenetic analysis of the Punch-tudor region of chromosome 2R in Drosophila melanogaster. O'Donnell J, et al. **Genetics** 1989 Feb;121(2):273–80
Evolution by gene duplication and compensatory advantageous mutations. Ohta T. **Genetics** 1988 Nov; 120(3):841–7
Comparison of non-mutant and mutant waxy genes in rice and maize. Okagaki RJ, et al. **Genetics** 1988 Dec; 120(4):1137–43
A female sterile screen of the Drosophila melanogaster X chromosome using hybrid dysgenesis: identification and characterization of egg morphology mutants. Orr WC, et al. **Genetics** 1989 Aug;122(4):847–58
A conditional mutant having paralyzed cilia and a block in cytokinesis is rescued by cytoplasmic exchange in Tetrahymena thermophila. Pennock DG, et al. **Genetics** 1988 Nov;120(3):697–705
Evidence for frameshift mutations in the hisH gene of Escherichia coli causing synthesis of a partially active glutamine amidotransferase. Pons FW, et al. **Genetics** 1988 Nov;120(3):657–65
Chromosome breakage undetectable in active Mu lines of maize. Rowland LJ, et al. **Genetics** 1989 May;122(1):205–9
Two mutations in a maize bronze-1 allele caused by transposable elements of the Ac-Ds family alter the quantity and quality of the gene product. Schiefelbein JW, et al. **Genetics** 1988 Nov;120(3):767–77
Genetic and molecular characterization of suppressors of SIR4 mutations in Saccharomyces cerevisiae. Schnell R, et al. **Genetics** 1989 May;122(1):29–46
Female sterile mutations on the second chromosome of Drosophila melanogaster. I. Maternal effect mutations. Schüpbach T, et al. **Genetics** 1989 Jan;121(1):101–17
The isolation and sequence of missense and nonsense mutations in the cloned bacteriophage P22 tailspike protein gene. Schwarz JJ, et al. **Genetics** 1989 Apr;121(4):635–49
Identification and characterization of mutations affecting sporulation in Saccharomyces cerevisiae. Smith LM, et al. **Genetics** 1988 Dec;120(4):899–907
In praise of complexity. Waelsch SG. **Genetics** 1989 Aug; 122(4):721–5
Multivariate mutation-selection balance with constrained pleiotropic effects. Wagner GP. **Genetics** 1989 May; 122(1):223–34
Effects of mutation on selection limits in finite populations with multiple alleles. Zeng ZB, et al. **Genetics** 1989 Aug; 122(4):977–84
The genetic analysis of distributive segregation in Drosophila melanogaster. I. Isolation and characterization of Aberrant X segregation (Axs), a mutation defective in chromosome partner choice. Zitron AE, et al. **Genetics** 1989 Aug; 122(4):801–21
Production and characterization of radiation-sensitive meiotic mutants of Coprinus cinereus. Zolan ME, et al. **Genetics** 1988 Oct;120(2):379–87
Novel method of detecting single base substitutions in RNA molecules by differential melting behavior in solution. Smith FI, et al. **Genomics** 1988 Oct;3(3):217–23
Hemoglobin Saverne: a new variant with elongated beta chains: structural and functional properties. Delanoe-Garin J, et al. **Hemoglobin** 1988;12(4):337–52

A beta+-thalassemia (codon 24, GGT——GGA) found in a Japanese. Hattori Y, et al. **Hemoglobin** 1988; 12(5–6):655–60

Beta-thalassemia in China: a systematic molecular characterization of beta-thalassemia mutations. Huang S, et al. **Hemoglobin** 1988;12(5–6):621–8

Type of beta-thalassemia mutations found in the Chinese identified by synthetic oligonucleotides. Huang SZ, et al. **Hemoglobin** 1988;12(5–6):577

Cases of abnormal human hemoglobin produced by de novo mutation. Nute PE, et al. **Hemoglobin** 1988;12(4):429–39 (74 ref.)

Homozygous beta zero-39 mutation with thalassemia intermedia in northern Sardinia: clinical, hematological and molecular analysis. Oggiano L, et al. **Hemoglobin** 1988; 12(5–6):673–80

Success of mutant Drosophila at different sex ratios. Just J, et al. **Hereditas** 1989;110(1):51–3

No effects of high intake of nitrate in drinking-water on urinary mutagenicity and cytogenetic tests in pigs. Persson L, et al. **Hereditas** 1988;108(2):223–6

Relative fertility and mutation rate in neurofibromatosis. Samuelsson B, et al. **Hereditas** 1988;108(2):169–71

The human cystatin C gene (CST3), mutated in hereditary cystatin C amyloid angiopathy, is located on chromosome 20. Abrahamson M, et al. **Hum Genet** 1989 Jun;82(3):223–6

A frequent factor XII gene mutation in Hageman trait. Bernardi F, et al. **Hum Genet** 1988 Oct;80(2):149–51

Hungarian surveillance of germinal mutations. Lack of detectable increase in indicator conditions caused by germinal mutations following the Chernobyl accident. Czeizel A. **Hum Genet** 1989 Jul;82(4):359–66

Multiple mutations underlying familial hypercholesterolemia in the South African population. Henderson HE, et al. **Hum Genet** 1989 Aug;83(1):67–70

A new LDL receptor gene deletion mutation in the South African population. Henderson HE, et al. **Hum Genet** 1988 Dec;80(4):371–4

A Pro——Leu substitution in codon 369 of the alpha-1-antitrypsin deficiency variant PI MHeerlen. Hofker MH, et al. **Hum Genet** 1989 Feb;81(3):264–8

A family study of multiple mutations of alpha and delta glycophorins (glycophorins A and B). Huang CH, et al. **Hum Genet** 1988 Dec;81(1):26–30

Mild hemophilia A resulting from Arg-to-Leu substitution in exon 26 of the factor VIII gene. Inaba H, et al. **Hum Genet** 1989 Mar;81(4):335–8

The frequency and origin of the sickle cell mutation in the district of Coruche/Portugal. Monteiro C, et al. **Hum Genet** 1989 Jun;82(3):255–8

Inheritance of mitochondrial aldehyde dehydrogenase: genotyping in Chinese, Japanese and South Korean families reveals dominance of the mutant allele. Singh S, et al. **Hum Genet** 1989 Sep;83(2):119–21

Mapping the mutation causing the X-linked lymphoproliferative syndrome in relation to restriction fragment length polymorphisms on Xq. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):349–53

Lysinuric protein intolerance mutation is not expressed in the plasma membrane of erythrocytes. Smith DW, et al. **Hum Genet** 1988 Dec;80(4):395–6

Siblings with chromosome mosaicism, microcephaly, and growth retardation: the phenotypic expression of a human mitotic mutant? Tolmie JL, et al. **Hum Genet** 1988 Oct; 80(2):197–200

Apolipoprotein B amino acid 3611 substitution from arginine to glutamine creates the Ag (h/i) epitope: the polymorphism is not associated with differences in serum cholesterol and apolipoprotein B levels. Xu CF, et al. **Hum Genet** 1989 Jul;82(4):322–6

Genetic effects of benzene, toluene and xylene. Fishbein L. **IARC Sci Publ** 1988;(85):19–46 (167 ref.)

Looking ahead: algebraic thinking about genetics, cell kinetics and cancer. Thilly WG. **IARC Sci Publ** 1988; (89):486–92

The mouse mutation severe combined immune deficiency (scid) is on chromosome 16 [published erratum appears in Immunogenetics 1989;29(3):224] Bosma GC, et al. **Immunogenetics** 1989;29(1):54–7

An altered splice site is found in the DRB4 gene that is not expressed in HLA-DR7,Dw11 individuals. Sutton VR, et al. **Immunogenetics** 1989;29(5):317–22

The origin of mutants [letter] **Immunol Cell Biol** 1989 Apr; 67 (Pt 2):151–2

Somatic mutations in B lymphocytes: new perspectives in tolerance research? Nossal GJ. **Immunol Cell Biol** 1988 Apr; 66 (Pt 2):105–10 (30 ref.)

Spontaneous mutagenesis of herpesvirus in human cells depends on cell monolayer density. Lytle CD, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):963–4

On structural analysis of chemical mutations. Lall RS. **Indian J Biochem Biophys** 1988 Aug;25(4):364–7

Reduced virulence of a defined pneumolysin-negative mutant of Streptococcus pneumoniae. Berry AM, et al. **Infect Immun** 1989 Jul;57(7):2037–42

General method for site-directed mutagenesis in Escherichia coli O18ac:K1:H7: deletion of the inducible superoxide dismutase gene, sodA, does not diminish bacteremia in neonatal rats. Bloch CA, et al. **Infect Immun** 1989 Jul; 57(7):2141–8

Virulence, persistence, and immunogenicity of Yersinia enterocolitica O:8 aroA mutants. Bowe F, et al. **Infect Immun** 1989 Oct;57(10):3234–6

Characterization of porin and ompR mutants of a virulent strain of Salmonella typhimurium: ompR mutants are attenuated in vivo. Dorman CJ, et al. **Infect Immun** 1989 Jul;57(7):2136–40

Reduced adherence to traumatized rat heart valves by a low-fibronectin-binding mutant of Staphylococcus aureus. Kuypers JM, et al. **Infect Immun** 1989 Aug;57(8):2306–12

Loss of catalase activity in Tn1545-induced mutants does not reduce growth of Listeria monocytogenes in vivo. Leblond-Francillard M, et al. **Infect Immun** 1989 Aug; 57(8):2569–73

Isolation of orally attenuated Salmonella typhimurium following TnphoA mutagenesis. Miller I, et al. **Infect Immun** 1989 Sep;57(9):2758–63

Analysis of mannans of two relatively avirulent mutant strains of Candida albicans. Saxena A, et al. **Infect Immun** 1989 Feb;57(2):413–9

Effect of a purA mutation on efficacy of Salmonella live-vaccine vectors. Sigwart DF, et al. **Infect Immun** 1989 Jun;57(6):1858–61

Spontaneous mutation results in loss of the cytadhesin (P1) of Mycoplasma pneumoniae. Su CJ, et al. **Infect Immun** 1989 Oct;57(10):3237–9

Use of the promoter fusion transposon Tn5 lac to identify mutations in Bordetella pertussis vir-regulated genes. Weiss AA, et al. **Infect Immun** 1989 Sep;57(9):2674–82

High frequency of Ki-ras codon 12 mutations in pancreatic adenocarcinomas. Grünewald K, et al. **Int J Cancer** 1989 Jun 15;43(6):1037–41

Modulation of antibody binding affinity by somatic mutation. Allen D, et al. **Int J Cancer Suppl** 1988;3:1–8

Defect in the development of thermotolerance and enhanced heat shock protein synthesis in the mouse temperature-sensitive mutant ts85 cells upon moderate hyperthermia. Mizuno S, et al. **Int J Hyperthermia** 1989 Jan-Feb;5(1):105–13

Determination of the contributions of individual aromatic residues to the CD spectrum of IL-1 beta using site directed mutagenesis. Craig S, et al. **Int J Pept Protein Res** 1989 Apr;33(4):256–62

Lethal mutations attributable to misrepair of Q-lesions. Alper T, et al. **Int J Radiat Biol** 1988 Oct;54(4):525–30

Expression of lethal mutations in progeny of irradiated mammalian cells. Gorgojo L, et al. **Int J Radiat Biol** 1989 Apr;55(4):619–30

Lack of dose-rate effect for mutation induction by gamma-rays in human TK6 cells. König F, et al. **Int J Radiat Biol** 1988 Dec;54(6):891–7

Locus specificity for mutation induction in human cells exposed to accelerated heavy ions. Kronenberg A, et al. **Int J Radiat Biol** 1989 Jun;55(6):913–24

Lethal mutations in cultured mammalian cells [letter] Mothersill C, et al. **Int J Radiat Biol** 1989 Jan;55(1):155–6

Genetic analysis of a linkage group III mutant in Anopheles stephensi. Akhtar K, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):95–7

Partly colored larva, an autosomal recessive lethal mutation in the floodwater mosquito Aedes vexans. Friederich PA. **J Am Mosq Control Assoc** 1985 Mar;1(1):20–2

Recessive lethal mutations in Anopheles albimanus. Seawright JA, et al. **J Am Mosq Control Assoc** 1985 Jun; 1(2):227–32

Comparative susceptibilities of Anopheles quadrimaculatus mutants to Plasmodium yoelii. Wing SR, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):511–3

Genetically defined mouse models of male infertility. Chubb C. **J Androl** 1989 Mar-Apr;10(2):77–88 (75 ref.)

Interaction between piperacillin and pefloxacin or amikacin on the selection of resistant mutants of Pseudomonas aeruginosa. Boisivon A, et al. **J Antimicrob Chemother** 1988 Nov;22(5):651–7

Deoxyglucose-resistant mutants of Neurospora crassa: isolation, mapping, and biochemical characterization. Allen KE, et al. **J Bacteriol** 1989 Jan;171(1):53–8

Induction of cat-86 by chloramphenicol and amino acid starvation in relaxed mutants of Bacillus subtilis. Ambulos NP Jr, et al. **J Bacteriol** 1988 Dec;170(12):5642–6

Isolation and characterization of Pseudomonas aeruginosa mutants requiring salicylic acid for pyochelin biosynthesis. Ankenbauer RG, et al. **J Bacteriol** 1988 Nov;170(11):5364–7

Characterization of two mutant metJ proteins with reduced, temperature-dependent capacity to regulate Escherichia coli K-12 met regulon elements. Bala GA, et al. **J Bacteriol** 1989 Jul;171(7):4095–9

Regulation of the galactose-inducible lac operon and the histidine utilization operons in pts mutants of Klebsiella aerogenes. Baldauf SL, et al. **J Bacteriol** 1988 Dec; 170(12):5588–93

Transformation-deficient mutants of piliated Neisseria gonorrhoeae. Biswas GD, et al. **J Bacteriol** 1989 Feb; 171(2):657–64

Reduced leu operon expression in a miaA mutant of Salmonella typhimurium. Blum PH. **J Bacteriol** 1988 Nov; 170(11):5125–33

Analysis of the diphtheria tox promoter by site-directed mutagenesis. Boyd J, et al. **J Bacteriol** 1988 Dec; 170(12):5949–52

Molecular characterization of phycobilisome regulatory mutants of Fremyella diplosiphon. Bruns BU, et al. **J Bacteriol** 1989 Feb;171(2):901–8

mutM, a second mutator locus in Escherichia coli that generates G.C——T.A transversions. Cabrera M, et al. **J Bacteriol** 1988 Nov;170(11):5405–7

Mutation of Bacillus firmus OF4 to duramycin resistance results in substantial replacement of membrane lipid phosphatidylethanolamine by its plasmalogen form. Clejan S, et al. **J Bacteriol** 1989 Mar;171(3):1744–6

Lipopolysaccharide mutants of Rhizobium meliloti are not defective in symbiosis. Clover RH, et al. **J Bacteriol** 1989 Jul;171(7):3961–7

marA locus causes decreased expression of OmpF porin in multiple-antibiotic-resistant (Mar) mutants of Escherichia coli. Cohen SP, et al. **J Bacteriol** 1988 Dec;170(12):5416–22

Mutations that improve export of maltose-binding protein in SecB- cells of Escherichia coli. Collier DN, et al. **J Bacteriol** 1989 Sep;171(9):4640–7

An Escherichia coli mutant resistant to phleomycin, bleomycin, and heat inactivation is defective in ubiquinone synthesis. Collis CM, et al. **J Bacteriol** 1989 Sep; 171(9):4792–8

Genetic and physiological relationships among the miaA gene, 2-methylthio-N6-(delta 2-isopentenyl)-adenosine tRNA modification, and spontaneous mutagenesis in Escherichia coli K-12. Connolly DM, et al. **J Bacteriol** 1989 Jun;171(6):3233–46

Separation of the SOS-dependent and SOS-independent components of alkylating-agent mutagenesis. Couto LB, et al. **J Bacteriol** 1989 Aug;171(8):4170–7

Specific amino acid residues in both the PstB and PstC proteins are required for phosphate transport by the Escherichia coli Pst system. Cox GB, et al. **J Bacteriol** 1989 Mar;171(3):1531–4

Saturation of mismatch repair-in the mutD5 mutator strain of Escherichia coli. Damagnez V, et al. **J Bacteriol** 1989 Aug;171(8):4494–7

Isolation and characterization of mutants of Rhizobium leguminosarum bv. viciae 248 with altered lipopolysaccharides: possible role of surface charge or hydrophobicity in bacterial release from the infection thread. de Maagd RA, et al. **J Bacteriol** 1989 Feb; 171(2):1143–50

Genetic and biochemical characterization of a mutation (fatA) that allows trans unsaturated fatty acids to replace the essential cis unsaturated fatty acids of Escherichia coli. DeVeaux LC, et al. **J Bacteriol** 1989 Mar;171(3):1562–8

Mutations that affect production of branched RNA-linked msDNA in Myxococcus xanthus. Dhundale A, et al. **J Bacteriol** 1988 Dec;170(12):5620–4

Identification of promoter mutants defective in growth-rate-dependent regulation of rRNA transcription in Escherichia coli. Dickson RR, et al. **J Bacteriol** 1989 Sep;171(9):4862–70

Rhizobium leguminosarum exopolysaccharide mutants: biochemical and genetic analyses and symbiotic behavior on three hosts. Diebold R, et al. **J Bacteriol** 1989 Sep; 171(9):4821–30

Regulation of luminescence by cyclic AMP in cya-like and crp-like mutants of Vibrio fischeri. Dunlap PV. **J Bacteriol** 1989 Feb;171(2):1199–202

Genetic separation of Escherichia coli recA functions for SOS mutagenesis and repressor cleavage. Ennis DG, et al. **J Bacteriol** 1989 May;171(5):2533–41

Channel architecture in maltoporin: dominance studies with lamB mutations influencing maltodextrin binding provide evidence for independent selectivity filters in each subunit. Ferenci T, et al. **J Bacteriol** 1989 Feb;171(2):855–61

Involvement of ExbB and TonB in transport across the outer membrane of Escherichia coli: phenotypic complementation of exb mutants by overexpressed tonB and physical stabilization of TonB by ExbB. Fischer E, et al. **J Bacteriol** 1989 Sep;171(9):5127–34

Chemotaxis mutants of Spirochaeta aurantia. Fosnaugh K, et al. **J Bacteriol** 1989 Jan;171(1):606–11

Presence of the dnaQ-rnh divergent transcriptional unit on a multicopy plasmid inhibits induced mutagenesis in Escherichia coli. Foster PL, et al. **J Bacteriol** 1989 Jun; 171(6):3144–51

Mutations in the Escherichia coli fnr and tgt genes: control of molybdate reductase activity and the cytochrome d complex by fnr. Frey B, et al. **J Bacteriol** 1989 Mar; 171(3):1524–30

Effect of mutations causing gluconate kinase or gluconate permease deficiency on expression of the Bacillus subtilis gnt operon. Fujita Y, et al. **J Bacteriol** 1989 Mar; 171(3):1751–4

Saturation mutagenesis of an Escherichia coli rRNA promoter and initial characterization of promoter variants. Gaal T, et al. **J Bacteriol** 1989 Sep;171(9):4852–61

Identification and characterization of the Myxococcus xanthus bsgA gene product. Gill RE, et al. **J Bacteriol** 1988 Nov;170(11):5289–97

Molecular characterization of two cya mutations, cya-854 and cyaR1. Glaser P, et al. **J Bacteriol** 1989 Sep; 171(9):5176–8

Mutagenesis of the Tra1 core region of RK2 by using Tn5: identification of plasmid-specific transfer genes. Guiney DG, et al. **J Bacteriol** 1989 Jul;171(7):4100–3

Multiple pathways for repair of hydrogen peroxide-induced DNA damage in Escherichia coli. Hagensee ME, et al. **J Bacteriol** 1989 Feb;171(2):991–5

Localization of Bacillus subtilis sacU(Hy) mutations to two linked genes with similarities to the conserved procaryotic family of two-component signalling systems. Henner DJ,

et al. J Bacteriol 1988 Nov;170(11):5102–9
Chromosome partitioning in Escherichia coli: novel mutants producing anucleate cells. Hiraga S, et al. J Bacteriol 1989 Mar;171(3):1496–505
Genetic characterization of frameshift suppressors with new decoding properties. Hughes D, et al. J Bacteriol 1989 Feb; 171(2):1028–34
Multiple defects in Escherichia coli mutants lacking HU protein. Huisman O, et al. J Bacteriol 1989 Jul; 171(7):3704–12
Conditionally lethal amber mutations in the leader peptidase gene of Escherichia coli. Inada T, et al. J Bacteriol 1989 Jan;171(1):585–7
Temperature-sensitive lethal mutant of era, a G protein in Escherichia coli. Inada T, et al. J Bacteriol 1989 Sep; 171(9):5017–24
Staphylococcus aureus chromosomal mutations that decrease efficiency of Rep utilization in replication of pT181 and related plasmids. Iordanescu S, et al. J Bacteriol 1989 Aug; 171(8):4501–3
Staphylococcus aureus chromosomal mutation plaC1 amplifies plasmid pT181 by depressing synthesis of its negative-effector countertranscripts. Iordanescu S. J Bacteriol 1989 Sep;171(9):4831–5
Temperature-sensitive sec mutants of Escherichia coli: inhibition of protein export at the permissive temperature. Ito K, et al. J Bacteriol 1989 Mar;171(3):1742–3
Isolation of an ammonium or methylammonium ion transport mutant of Escherichia coli and complementation by the cloned gene. Jayakumar A, et al. J Bacteriol 1989 Feb; 171(2):996–1001
Characterization of the pleiotropic phenotypes of rifampin-resistant rpoB mutants of Escherichia coli. Jin DJ, et al. J Bacteriol 1989 Sep;171(9):5229–31
Nucleotide sequence and mutational analysis of the structural genes (anfHDGK) for the second alternative nitrogenase from Azotobacter vinelandii. Joerger RD, et al. J Bacteriol 1989 Feb;171(2):1075–86
Influence of spo mutations on sigma E synthesis in Bacillus subtilis. Jonas RM, et al. J Bacteriol 1989 Sep;171(9):5226–8
Purification and characterization of the wild-type and mutant carboxy-terminal domains of the Escherichia coli Tar chemoreceptor. Kaplan N, et al. J Bacteriol 1988 Nov; 170(11):5134–40
Genetic suppression of a dnaG mutation in Escherichia coli. Katayama T, et al. J Bacteriol 1989 Mar;171(3):1485–91
Conditionally lethal and recessive UGA-suppressor mutations in the prfB gene encoding peptide chain release factor 2 of Escherichia coli. Kawakami K, et al. J Bacteriol 1988 Nov;170(11):5378–81
Genetic analysis of bacteriophage N4 adsorption. Kiino DR, et al. J Bacteriol 1989 Sep;171(9):4595–602
Isolation of mutants and genes involved in cytochromes c biosynthesis in Rhodobacter capsulatus. Kranz RG. J Bacteriol 1989 Jan;171(1):456–64
Isolation and mapping of Escherichia coli mutations conferring resistance to division inhibition protein DicB. Labie C, et al. J Bacteriol 1989 Aug;171(8):4315–9
The REV1 gene of Saccharomyces cerevisiae: isolation, sequence, and functional analysis. Larimer FW, et al. J Bacteriol 1989 Jan;171(1):230–7
Point mutations in the regulatory region of the ilvGMEDA operon of Escherichia coli K-12. Lawther RP. J Bacteriol 1989 Feb;171(2):1188–91
Hypervariability, a new phenomenon of genetic instability, related to DNA amplification in Streptomyces ambofaciens. Leblond P, et al. J Bacteriol 1989 Jan; 171(1):419–23
Reversible ADP-ribosylation of dinitrogenase reductase in a nifD- mutant of Rhodospirillum rubrum. Ludden PW, et al. J Bacteriol 1989 Sep;171(9):5210–1
Altered cobalamin metabolism in Escherichia coli btuR mutants affects btuB gene regulation. Lundrigan MD, et al. J Bacteriol 1989 Jan;171(1):154–61
Glucose uptake in Saccharomyces cerevisiae grown under anaerobic conditions: effect of null mutations in the hexokinase and glucokinase structural genes. McClellan CJ, et al. J Bacteriol 1988 Nov;170(11):5396–400
Stabilization of the 3'one-third of Escherichia coli ribosomal protein S20 mRNA in mutants lacking polynucleotide phosphorylase. Mackie GA. J Bacteriol 1989 Aug; 171(8):4112–20
Identification and characterization of catA, a mutation causing catalase deficiency in Dictyostelium discoideum. Madigan SJ, et al. J Bacteriol 1989 Mar;171(3):1492–5
Suppression of dnaE nonsense mutations by pcbA1. Maki H, et al. J Bacteriol 1989 Jun;171(6):3139–43
Molecular characterization and protein analysis of the cap region, which is essential for encapsulation in Bacillus anthracis. Makino S, et al. J Bacteriol 1989 Feb; 171(2):722–30
Effects of variation of inverted-repeat sequences on reactions mediated by the transposase of Tn21. Martin C, et al. J Bacteriol 1989 Jul;171(7):3996–4001
Mutants of Escherichia coli deficient in the fermentative lactate dehydrogenase. Mat-Jan F, et al. J Bacteriol 1989 Jan;171(1):342–8
Isolation and characterization of Azospirillum brasilense loci that correct Rhizobium meliloti exoB and exoC mutations. Michiels KW, et al. J Bacteriol 1988 Nov;170(11):5401–4
A novel mutation, cog, which results in production of a new porin protein (OmpG) of Escherichia coli K-12. Misra R, et al. J Bacteriol 1989 Aug;171(8):4105–11
Construction of TnphoA gene fusions in Rhodobacter sphaeroides: isolation and characterization of a respiratory mutant unable to utilize dimethyl sulfoxide as a terminal electron acceptor during anaerobic growth in the dark on glucose. Moore MD, et al. J Bacteriol 1989 Aug; 171(8):4385–94
Actively replicating nucleoids influence positioning of division sites in Escherichia coli filaments forming cells lacking DNA. Mulder E, et al. J Bacteriol 1989 Aug; 171(8):4303–14
Evidence for unique DNA repair activity encoded by a cloned Serratia marcescens gene: suppression of Escherichia coli mutations that reduce repair of alkylated DNA. Murphy KE, et al. J Bacteriol 1989 Sep; 171(9):5179–82
Mutagenic nucleoside analog N4-aminocytidine: metabolism, incorporation into DNA, and mutagenesis in Escherichia coli. Negishi K, et al. J Bacteriol 1988 Nov;170(11):5257–62
In vivo control of gluconeogenesis in wild-type Neurospora crassa and in the adenylate cyclase-deficient cr-1 (crisp) mutant. Neves MJ, et al. J Bacteriol 1989 Mar; 171(3):1767–71
Transformation of a conditionally peptidoglycan-deficient mutant of Staphylococcus aureus with plasmid DNA. Nieuwlandt DT, et al. J Bacteriol 1989 Sep;171(9):4906–13
Proline carrier mutant of Escherichia coli K-12 with altered cation sensitivity of substrate-binding activity: cloning, biochemical characterization, and identification of the mutation. Ohsawa M, et al. J Bacteriol 1988 Nov; 170(11):5185–91
Suppression of a -1 frameshift mutation by a recessive tRNA suppressor which causes doublet decoding. O'Mahony DJ, et al. J Bacteriol 1989 Jul;171(7):3824–30
Role of cell wall in Saccharomyces cerevisiae mutants resistant to Hg2+. Ono B, et al. J Bacteriol 1988 Dec; 170(12):5877–82
Mutations in uvrD induce the SOS response in Escherichia coli. Ossanna N, et al. J Bacteriol 1989 Jan;171(1):303–7
Increase of ornithine amino lipid content in a sulfonolipid-deficient mutant of Cytophaga johnsonae. Pitta TP, et al. J Bacteriol 1989 Feb;171(2):952–7
Mutational analysis of the catalytic and feedback sites of the tryptophan-sensitive 3-deoxy-D-arabino-heptulosonate-7-phosphate synthase of Escherichia coli. Ray JM, et al. J Bacteriol 1988 Dec; 170(12):5500–6
Enhanced acetohydroxy acid synthase III activity in an ilvH mutant of Escherichia coli K-12. Ricca E, et al. J Bacteriol 1988 Nov;170(11):5197–9
Autocide AMI rescues development in dsg mutants of Myxococcus xanthus. Rosenbluh A, et al. J Bacteriol 1989 Mar;171(3):1513–8
An in vivo complex with DNA photolyase blocks UV mutagenesis targeted at a thymine-cytosine dimer in Escherichia coli. Ruiz-Rubio M, et al. J Bacteriol 1988 Nov;170(11):5371–4
Distinct mutation sites in prlA suppressor mutant strains of Escherichia coli respond either to suppression of signal peptide mutations or to blockage of staphylokinase processing. Sako T, et al. J Bacteriol 1988 Nov; 170(11):5389–91
Demonstration, characterization, and mutational analysis of NahR protein binding to nah and sal promoters. Schell MA, et al. J Bacteriol 1989 Feb;171(2):837–46
A single point mutation results in a constitutively activated and feedback-resistant chorismate mutase of Saccharomyces cerevisiae. Schmidheini T, et al. J Bacteriol 1989 Mar;171(3):1245–53
Characterization of strains containing mutations in the contiguous flaF, flbT, or flbA-flaG transcription unit and identification of a novel fla phenotype in Caulobacter crescentus. Schoenlein PV, et al. J Bacteriol 1989 Mar; 171(3):1554–61
Molybdenum accumulation in chlD mutants of Escherichia coli. Scott D, et al. J Bacteriol 1989 Mar;171(3):1284–7
Isolation and characterization of isoprene mutants of Escherichia coli. Sherman MM, et al. J Bacteriol 1989 Jul; 171(7):3619–28
A mutation in the amino terminus of a hybrid TrpC-TonB protein relieves overproduction lethality and results in cytoplasmic accumulation. Skare JT, et al. J Bacteriol 1989 Aug;171(8):4442–7
Isolation of a Rhizobium phaseoli cytochrome mutant with enhanced respiration and symbiotic nitrogen fixation. Soberón M, et al. J Bacteriol 1989 Jan;171(1):465–72
Isolation, characterization, and complementation of Rhizobium meliloti 104A14 mutants that lack glutamine synthetase II activity. Somerville JE, et al. J Bacteriol 1989 Sep;171(9):5079–86
Gliding motility in Myxococcus xanthus: mgl locus, RNA, and predicted protein products. Stephens K, et al. J Bacteriol 1989 Feb;171(2):819–30
Impaired expression of certain prereplicative bacteriophage T4 genes explains impaired T4 DNA synthesis in Escherichia coli rho (nusD) mutants. Stitt BL, et al. J Bacteriol 1989 Jul;171(7):3872–80
Randomly induced Escherichia coli K-12 Tn5 insertion mutants defective in hydrogenase activity. Stoker K, et al. J Bacteriol 1989 Feb;171(2):831–6
Effect of mutations in the cyclic AMP receptor protein-binding site on araBAD and araC expression. Stoltzfus L, et al. J Bacteriol 1989 Feb;171(2):1178–84
Site-directed mutation of the Escherichia coli ada gene: effects of substitution of methyl acceptor cysteine-321 by histidine in Ada protein. Tano K, et al. J Bacteriol 1989 Mar;171(3):1535–43
Transposon mutagenesis, characterization, and cloning of transformation genes of Haemophilus influenzae Rd. Tomb JF, et al. J Bacteriol 1989 Jul;171(7):3796–802
Thermosensitive omsA mutation of Escherichia coli that causes thermoregulated release of periplasmic proteins. Tsuruoka T, et al. J Bacteriol 1988 Nov;170(11):5229–35
Genetic analysis of chromosomal mutations in the polysialic acid gene cluster of Escherichia coli K1. Vimr ER, et al. J Bacteriol 1989 Feb;171(2):1106–17
Altered induction of the adaptive response to alkylation damage in Escherichia coli recF mutants. Volkert MR. J Bacteriol 1989 Jan;171(1):99–103
Mutations in the glnG gene of Escherichia coli that result in increased activity of nitrogen regulator I. Weglenski P, et al. J Bacteriol 1989 Aug;171(8):4479–85
Determination of the amino acid change responsible for the nontoxic, cross-reactive exotoxin A protein (CRM 66) of Pseudomonas aeruginosa PAO-PR1. Wick MJ, et al. J Bacteriol 1988 Nov;170(11):5385–8
Suppression of the Escherichia coli rpoH opal mutation by ribosomes lacking S15 protein. Yano R, et al. J Bacteriol 1989 Mar;171(3):1712–7
Isolation and characterization of Mycoplasma mycoides subsp. mycoides mutants deficient in nucleoside monophosphate transport. Youil R, et al. J Bacteriol 1988 Dec;170(12):5922–4
Genetic control of Yarrowia lipolytica fatty acid synthetase biosynthesis and function. Schweizer E, et al. J Basic Microbiol 1988;28(5):283–92
Genetic control of methanol utilization in yeasts. Sibirny AA, et al. J Basic Microbiol 1988;28(5):293–319 (64 ref.)
Molecular analysis by deletion and site-directed mutagenesis of the cis-acting upstream sequence involved in activation of the ompF promoter in Escherichia coli. Kato M, et al. J Biochem (Tokyo) 1989 Mar;105(3):341–7
Site-directed mutagenesis of human aldolase isozymes: the role of Cys-72 and Cys-338 residues of aldolase A and of the carboxy-terminal Tyr residues of aldolases A and B. Takahashi I, et al. J Biochem (Tokyo) 1989 Feb; 105(2):281–6
Site-specific mutagenesis of lysine-204, tyrosine-224, tyrosine-228, and histidine-307 of porcine kidney D-amino acid oxidase and the implications as to its catalytic function. Watanabe F, et al. J Biochem (Tokyo) 1989 Jun; 105(6):1024–9
Mutant human adenosine deaminase alleles and their expression by transfection into fibroblasts. Akeson AL, et al. J Biol Chem 1988 Nov 5;263(31):16291–6
Site-directed mutagenesis of the tryptophan residues in yeast eukaryotic initiation factor 4E. Effects on cap binding activity. Altmann M, et al. J Biol Chem 1988 Nov 25; 263(33):17229–32
A single base mutation that converts glycine 907 of the alpha 2(I) chain of type I procollagen to aspartate in a lethal variant of osteogenesis imperfecta. The single amino acid substitution near the carboxyl terminus destabilizes the whole triple helix. Baldwin CT, et al. J Biol Chem 1989 Feb 15;264(5):3002–6
Protein glycosylation defects in the Saccharomyces cerevisiae mnn7 mutant class. Support for the stop signal proposed for regulation of outer chain elongation. Ballou L, et al. J Biol Chem 1989 Jul 15;264(20):11857–64
A frameshift mutation results in a truncated nonfunctional carboxyl-terminal pro alpha 1(I) propeptide of type I collagen in osteogenesis imperfecta. Bateman JF, et al. J Biol Chem 1989 Jul 5;264(19):10960–4
Fumarate reductase mutants of Escherichia coli that lack covalently bound flavin. Blaut M, et al. J Biol Chem 1989 Aug 15;264(23):13599–604
Heparin cofactor IIOslo. Mutation of Arg-189 to His decreases the affinity for dermatan sulfate. Blinder MA, et al. J Biol Chem 1989 Mar 25;264(9):5128–33
Mutations affecting assembly of beta-tubulin localize to a region near the carboxyl terminus. Boggs BA, et al. J Biol Chem 1988 Oct 5;263(28):14566–73
Kinetic analysis of base substitution mutagenesis by transient misalignment of DNA and by miscoding. Boosalis MS, et al. J Biol Chem 1989 Jul 5;264(19):11360–6
Induction of the manganese-containing superoxide dismutase in Escherichia coli is independent of the oxidative stress (oxyR-controlled) regulon. Bowen SW, et al. J Biol Chem 1988 Oct 15;263(29):1480–11
Characterization of the Escherichia coli prsA1-encoded mutant phosphoribosylpyrophosphate synthetase identifies a divalent cation-nucleotide binding site. Bower SG, et al. J Biol Chem 1989 Jun 15;264(17):10287–91
Transforming growth factor-beta inhibition of epithelial cell proliferation linked to the expression of a 53-kDa membrane receptor. Boyd FT, et al. J Biol Chem 1989 Feb 5;264(4):2272–8
A polarized epithelial cell mutant deficient in translocation of UDP-galactose into the Golgi complex. Brändli AW, et al. J Biol Chem 1988 Nov 5;263(31):16283–90
Site-directed mutagenesis of cysteine residues in the pro region of the transforming growth factor beta 1 precursor. Expression and characterization of mutant proteins. Brunner AM, et al. J Biol Chem 1989 Aug 15;

264(23):13660–4
Isolation and characterization of a yeast strain carrying a mutation in the mitochondrial promoter for COX2. Cameron VL, et al. J Biol Chem 1989 Aug 15; 264(23):13391–4
A dipeptide insertion in domain I of exotoxin A that impairs receptor binding. Chaudry GJ, et al. J Biol Chem 1989 Sep 5;264(25):15151–6
Mutations of the yeast plasma membrane H+–ATPase which cause thermosensitivity and altered regulation of the enzyme. Cid A, et al. J Biol Chem 1988 Oct 5; 263(28):14134–9
Substitution of cysteine for glycine within the carboxyl-terminal telopeptide of the alpha 1 chain of type I collagen produces mild osteogenesis imperfecta. Cohn DH, et al. J Biol Chem 1988 Oct 15;263(29):14605–7
Isolation and characterization of Chinese hamster ovary cell mutants defective in amino acid transport System L. Collarini EJ, et al. J Biol Chem 1989 Sep 25; 264(27):15856–62
Isolation and characterization of lactose permease mutants with an enhanced recognition of maltose and diminished recognition of cellobiose. Collins JC, et al. J Biol Chem 1989 Sep 5;264(25):14698–703
Functional characterization of cAMP-binding mutations in type I protein kinase. Correll LA, et al. J Biol Chem 1989 Oct 5;264(28):16672–8
Assembly of the mitochondrial membrane system. Analysis of structural mutants of the yeast coenzyme QH2–cytochrome c reductase complex. Crivellone MD, et al. J Biol Chem 1988 Oct 5;263(28):14323–33
Serum alpha 1–antitrypsin deficiency associated with the common S–type (Glu264——Val) mutation results from intracellular degradation of alpha 1–antitrypsin prior to secretion. Curiel DT, et al. J Biol Chem 1989 Jun 25; 264(18):10477–86
The intrinsic topological information of the wild–type and of up–promoter mutations of the Saccharomyces cerevisiae alcohol dehydrogenase II regulatory region. Della Seta F, et al. J Biol Chem 1988 Nov 5;263(31):15888–96
Structural determinants for transcriptional activation by cAMP–responsive DNA elements. Deutsch PJ, et al. J Biol Chem 1988 Dec 5;263(34):18466–72
Wild–type and drug–resistant Leishmania major hydrolyze methotrexate to N–10–methyl–4–deoxy–4–aminopteroate without accumulation of methotrexate polyglutamates. Ellenberger TE, et al. J Biol Chem 1989 Sep 25; 264(27):15960–6
Mutants of translational components that alter reading frame by two steps forward or one step back. Falahee MB, et al. J Biol Chem 1988 Dec 5;263(34):18099–103
Structure of a bacterial sensory receptor. A site–directed sulfhydryl study. Falke JJ, et al. J Biol Chem 1988 Oct 15;263(29):14850–8
Properties of Escherichia coli mutants lacking membrane–derived oligosaccharides. Fiedler W, et al. J Biol Chem 1988 Oct 15;263(29):14684–9
A deletion mutation in the ApoC–II gene (ApoC–II Nijmegen) of a patient with a deficiency of apolipoprotein C–II. Fojo SS, et al. J Biol Chem 1988 Dec 5; 263(34):17913–6
Studies of the regulatory mechanism of Ca2+/calmodulin–dependent protein kinase II. Mutation of threonine 286 to alanine and aspartate. Fong YL, et al. J Biol Chem 1989 Oct 5;264(28):16759–63
Two different carriers transport both ammonium and methylammonium in Chlamydomonas reinhardtii. Franco AR, et al. J Biol Chem 1988 Oct 5;263(28):14039–43
Isolation and characterization of thiodigalactoside–resistant mutants of the lactose permease which possess an enhanced recognition for maltose. Franco PJ, et al. J Biol Chem 1989 Sep 25;264(27):15988–92
Site–directed mutagenesis of beta–adrenergic receptors. Identification of conserved cysteine residues that independently affect ligand binding and receptor activation. Fraser CM. J Biol Chem 1989 Jun 5;264(16):9266–70
Two mutants of Dictyostelium discoideum that lack a sulfated carbohydrate antigenic determinant synthesize a truncated lipid–linked precursor of N–linked oligosaccharides. Freeze HH, et al. J Biol Chem 1989 Apr 5;264(10):5653–9
A novel ochre mutation in the beta–thalassemia gene of a Thai. Identification by direct cloning of the entire beta–globin gene amplified using polymerase chain reactions. Fucharoen S, et al. J Biol Chem 1989 May 15; 264(14):7780–3
Expression and site–specific mutagenesis of phospholamban. Studies of residues involved in phosphorylation and pentamer formation. Fujii J, et al. J Biol Chem 1989 Aug 5;264(22):12950–5
A moderate form of hemophilia B is caused by a novel mutation in the protease domain of factor IXVancouver. Geddes VA, et al. J Biol Chem 1989 Mar 15;264(8):4689–97
Detection of mutations in human type I collagen mRNA in osteogenesis imperfecta by indirect RNase protection. Genovese C, et al. J Biol Chem 1989 Jun 5;264(16):9632–7
Studies on the role of the phi X174 gene A protein in phi X viral strand synthesis. II. Effects of DNA replication of mutations in the 30–nucleotide icosahedral bacteriophage origin. Goetz GS, et al. J Biol Chem 1988 Nov 5; 263(31):16433–42
Expression of rat liver S–adenosylhomocysteinase cDNA in Escherichia coli and mutagenesis at the putative NAD binding site. Gomi T, et al. J Biol Chem 1989 Sep 25; 264(27):16138–42
Synthesis in Escherichia coli of GTPase–deficient mutants of Gs alpha. Graziano MP, et al. J Biol Chem 1989 Sep 15;264(26):15475–82
Expression in Escherichia coli of full–length and mutant rat brain calbindin D28. Comparison with the purified native protein. Gross MD, et al. J Biol Chem 1988 Oct 5; 263(28):14426–32
A C2 muscle cell variant defective in transport of the acetylcholine receptor to the cell surface. Gu Y, et al. J Biol Chem 1989 Jul 15;264(20):11952–7
Altered binding and transport of vitamin B12 resulting from insertion mutations in the Escherichia coli btuB gene. Gudmundsdottir A, et al. J Biol Chem 1988 Oct 5; 263(28):14224–30
Agonist regulation of beta–adrenergic receptor mRNA. Analysis in S49 mouse lymphoma mutants. Hadcock JR, et al. J Biol Chem 1989 Aug 15;264(23):13956–61
A new Saccharomyces cerevisiae mnn mutant N–linked oligosaccharide structure. Hernández LM, et al. J Biol Chem 1989 Jul 15;264(20):11849–56
Structure of the phosphorylated N–linked oligosaccharides from the mnn9 and mnn10 mutants of Saccharomyces cerevisiae. Hernandez LM, et al. J Biol Chem 1989 Aug 15;264(23):13648–59
Altered expression of the bacteriophage T4 gene 41 (primase–helicase) in an Escherichia coli rho mutant. Hinton DM. J Biol Chem 1989 Aug 25;264(24):14440–6
The sn–1,2–diacylglycerol ethanolaminephosphotransferase activity of Saccharomyces cerevisiae. Isolation of mutants and cloning of the EPT1 gene. Hjelmstad RH, et al. J Biol Chem 1988 Dec 25;263(36):19748–57
A single amino acid substitution in B subunit of Escherichia coli enterotoxin affects its oligomer formation. Iida T, et al. J Biol Chem 1989 Aug 25;264(24):14065–70
Inhibition and resumption of processing of the staphylokinase in some Escherichia coli prlA suppressor mutants. Iino T, et al. J Biol Chem 1988 Dec 15;263(35):19077–82
Diacylglycerol kinase defect in a Drosophila retinal degeneration mutant rdgA. Inoue H, et al. J Biol Chem 1989 Apr 5;264(10):5996–6000
Substitution of a lysyl residue for arginine 386 of Escherichia coli aspartate aminotransferase. Inoue Y, et al. J Biol Chem 1989 Jun 5;264(16):9673–81
NMR study of human mutant hemoglobins synthesized in Escherichia coli. Consequences of tyrosine alpha 42 substitutions. Ishimori K, et al. J Biol Chem 1989 Sep 5; 264(25):14624–6
Purification and characterization of glycosphingolipid–specific endoglycosidases (endoglycoceramidases) from a mutant strain of Rhodococcus sp. Evidence for three molecular species of endoglycoceramidase with different specificities. Ito M, et al. J Biol Chem 1989 Jun 5;264(16):9510–9
Domain II mutants of Pseudomonas exotoxin deficient in translocation. Jinno Y, et al. J Biol Chem 1989 Sep 25; 264(27):15953–9
C–terminal truncation of p21H preserves crucial kinetic and structural properties. John J, et al. J Biol Chem 1989 Aug 5;264(22):13086–92
The two–component, ATP–dependent Clp protease of Escherichia coli. Purification, cloning, and mutational analysis of the ATP–binding component. Katayama Y, et al. J Biol Chem 1988 Oct 15;263(29):15226–36
Amino acid substitutions and alteration in cation specificity in the melibiose carrier of Escherichia coli. Kawakami T, et al. J Biol Chem 1988 Oct 5;263(28):14276–80
Glu–111 is required for activation of the DNA cleavage center of EcoRI endonuclease. King K, et al. J Biol Chem 1989 Jul 15;264(20):11807–15
Biosynthesis of bacterial glycogen. Determination of the amino acid changes that alter the regulatory properties of a mutant Escherichia coli ADP–glucose synthetase. Kumar A, et al. J Biol Chem 1989 Jun 25;264(18):10464–71
Biosynthesis of bacterial glycogen. Use of site–directed mutagenesis to probe the role of tyrosine 114 in the catalytic mechanism of ADP–glucose synthetase from Escherichia coli. Kumar A, et al. J Biol Chem 1988 Oct 15;263(29):14634–9
Mutagenesis by transient misalignment. Kunkel TA, et al. J Biol Chem 1988 Oct 15;263(29):14784–9
Characterization of point mutations in the collagen COL1A1 and COL1A2 genes causing lethal perinatal osteogenesis imperfecta. Lamande SR, et al. J Biol Chem 1989 Sep 25; 264(27):15809–12
A novel amino acid substitution in the reactive site of a congenital variant antithrombin. Antithrombin pescara, ARG393 to pro, caused by a CGT to CCT mutation. Lane DA, et al. J Biol Chem 1989 Jun 15;264(17):10200–4
The fatty liver dystrophy (fld) mutation. A new mutant mouse with a developmental abnormality in triglyceride metabolism and associated tissue–specific defects in lipoprotein lipase and hepatic lipase activities. Langner CA, et al. J Biol Chem 1989 May 15;264(14):7994–8003
The chloroplast ATP synthase in Chiamydomonas reinhardtii. II. Biochemical studies on its biogenesis using mutants defective in photophosphorylation. Lemaire C, et al. J Biol Chem 1989 Jun 15;264(17):10235–42
Mechanism of ferritin iron uptake: activity of the H–chain and deletion mapping of the ferro–oxidase site. A study of iron uptake and ferro–oxidase activity of human liver, recombinant H–chain ferritins, and of two H–chain deletion mutants. Levi S, et al. J Biol Chem 1988 Dec 5; 263(34):18086–92
Mutations affecting the catalytic activity of Bacillus cereus 5/B/6 beta–lactamase II. Lim HM, et al. J Biol Chem 1989 Jul 15;264(20):11682–7
Synthesis, purification, and active site mutagenesis of recombinant porcine pepsinogen. Lin XL, et al. J Biol Chem 1989 Mar 15;264(8):4482–9
Retardation of folding as a possible means of suppression of a mutation in the leader sequence of an exported protein. Liu GP, et al. J Biol Chem 1988 Oct 15;263(29):14790–3
Crystallization and preliminary X–ray analysis of a quadruple mutant of staphylococcal nuclease. Loll PJ, et al. J Biol Chem 1988 Dec 5;263(34):18190–2
Circular dichroism and fluorescence studies on protein synthesis initiation factor eIF–4E and two mutant forms from the yeast Saccharomyces cerevisiae. McCubbin WD, et al. J Biol Chem 1988 Nov 25;263(33):17663–71
Contribution of a conserved arginine near the active site of Escherichia coli D–serine dehydratase to cofactor affinity and catalytic activity. Marceau M, et al. J Biol Chem 1989 Feb 15;264(5):2753–7
All autophosphorylation sites of epidermal growth factor (EGF) receptor and HER2/neu are located in their carboxyl–terminal tails. Identification of a novel site in EGF receptor. Margolis BL, et al. J Biol Chem 1989 Jun 25;264(18):10667–71
Osteogenesis imperfecta type IV. Detection of a point mutation in one alpha 1(I) collagen allele (COL1A1) by RNA/RNA hybrid analysis. Marini JC, et al. J Biol Chem 1989 Jul 15;264(20):11893–900
Mutations in the GTP–binding site of GS alpha alter stimulation of adenylyl cyclase. Masters SB, et al. J Biol Chem 1989 Sep 15;264(26):15467–74
The effects of E7 and E11 mutations on the kinetics of ligand binding to R state human hemoglobin. Mathews AJ, et al. J Biol Chem 1989 Oct 5;264(28):16573–83
Loss of transcriptional repression of three sterol–regulated genes in mutant hamster cells. Metherall JE, et al. J Biol Chem 1989 Sep 15;264(26):15634–41
Mutations in the conserved proline 43 residue of the uncE protein (subunit c) of Escherichia coli F1F0–ATPase alter the coupling of F1 to F0. Miller MJ, et al. J Biol Chem 1989 Jan 5;264(1):305–11
Analysis of a recycling–impaired mutant of low density lipoprotein receptor in familial hypercholesterolemia. Miyake Y, et al. J Biol Chem 1989 Oct 5;264(28):16584–90
Characterization of interaction of active–site serine mutants of tissue–type plasminogen activator with plasminogen activator inhibitor–1. Monge JC, et al. J Biol Chem 1989 Jun 25;264(18):10922–5
A mutation altering the kinetic responses of the yeast mitochondrial F1–ATPase. Mueller DM. J Biol Chem 1989 Oct 5;264(28):16552–6
Genetic cause of a juvenile form of Sandhoff disease. Abnormal splicing of beta–hexosaminidase beta chain gene transcript due to a point mutation within intron 12. Nakano T, et al. J Biol Chem 1989 Mar 25;264(9):5155–8
Evidence from extended X–ray absorption fine structure and site–specific mutagenesis for zinc fingers in UvrA protein of Escherichia coli. Navaratnam S, et al. J Biol Chem 1989 Sep 25;264(27):16067–71
Enhancement of immunotoxin efficacy by acid–cleavable cross–linking agents utilizing diphtheria toxin and toxin mutants. Neville DM Jr, et al. J Biol Chem 1989 Sep 5; 264(25):14653–61
Site–directed mutagenesis of the cytoplasmic domains of the human beta 2–adrenergic receptor. Localization of regions involved in G protein–receptor coupling. O'Dowd BF, et al. J Biol Chem 1988 Nov 5;263(31):15985–92
Mutations that prevent cyclic nucleotide binding to binding sites A or B of type I cyclic AMP–dependent protein kinase. Ogreid D, et al. J Biol Chem 1988 Nov 25; 263(33):17397–404
Formation of active diphtheria toxin in vitro based on ligated fragments of cloned mutant genes. Olsnes S, et al. J Biol Chem 1989 Aug 5;264(22):12747–51
RNA sequence analysis of a perinatal lethal osteogenesis imperfecta mutation. Patterson E, et al. J Biol Chem 1989 Jun 15;264(17):10083–7
Membrane potential defect in hygromycin B–resistant pma1 mutants of Saccharomyces cerevisiae. Perlin DS, et al. J Biol Chem 1988 Dec 5;263(34):18118–22
Evidence that cysteine 298 is in the active site of tryptophan indole–lyase. Phillips RS, et al. J Biol Chem 1989 Jun 25; 264(18):10627–32
A glycerol–3–phosphate dehydrogenase null mutant in BALB/cHeA mice. Prochazka M, et al. J Biol Chem 1989 Mar 15;264(8):4679–83
Characterization of two active site mutations of thioredoxin reductase from Escherichia coli [published erratum appears in J Biol Chem 1989 Jul 15;264(20):12113] Prongay AJ, et al. J Biol Chem 1989 Feb 15;264(5):2656–64
Site–directed mutation of the trigger calcium–binding sites in cardiac troponin C. Putkey JA, et al. J Biol Chem 1989 Jul 25;264(21):12370–8
Mutation of the high cysteine region of the human insulin receptor alpha–subunit increases insulin receptor binding affinity and transmembrane signaling. Rafaeloff R, et al. J Biol Chem 1989 Sep 25;264(27):15900–4

Directed mutagenesis of the strongly conserved lysine 175 in the proposed nucleotide-binding domain of alpha-subunit from Escherichia coli F1-ATPase. Rao R, et al. **J Biol Chem** 1988 Nov 5;263(31):15957-63

Hamster fibroblasts defective in thrombin-induced mitogenesis. A selection for mutants in phosphatidylinositol metabolism and other functions. Rath HM, et al. **J Biol Chem** 1989 Aug 15;264(23):13387-90

Rationale for engineering an enzyme by introducing a mutation that compensates for a deletion. Regan L, et al. **J Biol Chem** 1988 Dec 15;263(35):18598-600

Formation of O6-methyldeoxyguanosine at specific sites in a synthetic oligonucleotide designed to resemble a known mutagenic hotspot. Richardson FC, et al. **J Biol Chem** 1989 Jan 15;264(2):838-41

Molecular characterization of two point mutants in the chloroplast atpB gene of the green alga Chlamydomonas reinhardtii defective in assembly of the ATP synthase complex. Robertson D, et al. **J Biol Chem** 1989 Feb 5; 264(4):2331-7

Mutagenesis of the glycosylation site of human ApoCIII. O-linked glycosylation is not required for ApoCIII secretion and lipid binding. Roghani A, et al. **J Biol Chem** 1988 Dec 5;263(34):17925-32

Isolation, characterization, and structure of a mutant 89 Arg——Cys bisphosphoglycerate mutase. Implication of the active site in the mutation. Rosa R, et al. **J Biol Chem** 1989 May 15;264(14):7837-43

Deletion mutants as probes for localizing regions of subunit interaction in cAMP-dependent protein kinase. Saraswat LD, et al. **J Biol Chem** 1988 Dec 5;263(34):18241-6

Membrane protein changes in an L1210 leukemia cell line with a translocation defect in the methotrexate-tetrahydrofolate cofactor transport carrier. Schuetz JD, et al. **J Biol Chem** 1989 Sep 25;264(27):16261-7

Kinetic characterization of the unisite catalytic pathway of seven beta-subunit mutant F1-ATPases from Escherichia coli. al-Shawi MK, et al. **J Biol Chem** 1989 Sep 15; 264(26):15376-83

Directed mutagenesis of the strongly conserved aspartate 242 in the beta-subunit of Escherichia coli proton-ATPase. Al-Shawi MK, et al. **J Biol Chem** 1988 Dec 25; 263(36):19633-9

Complete kinetic and thermodynamic characterization of the unisite catalytic pathway of Escherichia coli F1-ATPase. Comparison with mitochondrial F1-ATPase and application to the study of mutant enzymes. Al-Shawi MK, et al. **J Biol Chem** 1988 Dec 25;263(36):19640-8

Decrease of anion selectivity caused by mutation of Thr501 and Gly502 to Glu in the hydrophobic domain of the colicin E1 channel. Shirabe K, et al. **J Biol Chem** 1989 Feb 5;264(4):1951-7

Conformational stability and activity of ribonuclease T1 and mutants. Gln25——Lys, Glu58——Ala, and the double mutant. Shirley BA, et al. **J Biol Chem** 1989 Jul 15; 264(20):11621-5

A new class mutation of low density lipoprotein receptor with altered carbohydrate chains. Shite S, et al. **J Biol Chem** 1988 Dec 25;263(36):19286-9

The role of exonucleolytic processing and polymerase-DNA association in bypass of lesions during replication in vitro. Significance for SOS-targeted mutagenesis. Shwartz H, et al. **J Biol Chem** 1988 Dec 5;263(34):18277-85

Studies on the role of actin's aspartic acid 3 and aspartic acid 11 using oligodeoxynucleotide-directed site-specific mutagenesis. Solomon TL, et al. **J Biol Chem** 1988 Dec 25;263(36):19662-9

Bacteriorhodopsin mutants of Halobacterium sp. GRB. I. The 5-bromo-2'-deoxyuridine selection as a method to isolate point mutants in halobacteria. Soppa J, et al. **J Biol Chem** 1989 Aug 5;264(22):13043-8

Bacteriorhodopsin mutants of Halobacterium sp. GRB. II. Characterization of mutants. Soppa J, et al. **J Biol Chem** 1989 Aug 5;264(22):13049-56

Structural domains of human tissue-type plasminogen activator that confer stimulation by heparin. Stein PL, et al. **J Biol Chem** 1989 Sep 15;264(26):15441-4

Site-directed mutagenesis of the reactive center (serine 394) of antithrombin III. Stephens AW, et al. **J Biol Chem** 1988 Nov 5;263(31):15849-52

A single amino acid substitution in the beta-adrenergic receptor promotes partial agonist activity from antagonists. Strader CD, et al. **J Biol Chem** 1989 Oct 5;264(28):16470-7

Mutation of the predicted ATP binding site inactivates both activities of isocitrate dehydrogenase kinase/phosphatase. Stueland CS, et al. **J Biol Chem** 1989 Aug 15; 264(23):13775-9

Thermostability of temperature-sensitive folding mutants of the P22 tailspike protein. Sturtevant JM, et al. **J Biol Chem** 1989 Jun 25;264(18):10693-8

Site-directed mutagenesis of Pro-17 located in the glycine-rich region of adenylate kinase. Tagaya M, et al. **J Biol Chem** 1989 Jan 15;264(2):990-4

Mutant subtilisin E with enhanced protease activity obtained by site-directed mutagenesis. Takagi H, et al. **J Biol Chem** 1988 Dec 25;263(36):19592-6

Site-directed mutagenesis in Bacillus stearothermophilus fructose-6-phosphate 1-kinase. Mutation at the substrate-binding site affects allosteric behavior. Valdez BC, et al. **J Biol Chem** 1989 Jan 5;264(1):131-5

Translational frameshifts induced by mutant species of the polypeptide chain elongation factor Tu of Escherichia coli. Vijgenboom E, et al. **J Biol Chem** 1989 Aug 5; 264(22):13012-17

Substitutions engineered by chemical synthesis at three conserved sites in mitochondrial cytochrome c. Thermodynamic and functional consequences. Wallace CJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15199-209

Defective post-translational modification of collagen IV in a mutant F9 teratocarcinoma cell line is associated with delayed differentiation and growth arrest in response to retinoic acid. Wang SY, et al. **J Biol Chem** 1989 Sep 15; 264(26):15556-64

Molecular defects in Drosophila rhodopsin mutants. Washburn T, et al. **J Biol Chem** 1989 Sep 15; 264(26):15464-6

Temperature-dependent expression of a collagen splicing defect in the fibroblasts of a patient with Ehlers-Danlos syndrome type VII. Weil D, et al. **J Biol Chem** 1989 Oct 5;264(28):16804-9

Expression and characterization of mutant forms of the type I regulatory subunit of cAMP-dependent protein kinase. The effect of defective cAMP binding on holoenzyme activation. Woodford TA, et al. **J Biol Chem** 1989 Aug 5;264(22):13321-8

The negative charge of Glu-111 is required to activate the cleavage center of EcoRI endonuclease. Wright DJ, et al. **J Biol Chem** 1989 Jul 15;264(20):11816-21

Site-specific alteration of cysteine 281, cysteine 344, and cysteine 349 in the proline carrier of Escherichia coli. Yamato I, et al. **J Biol Chem** 1988 Nov 5;263(31):16055-7

Evidence for the essential function of 2,4-dienoyl-coenzyme A reductase in the beta-oxidation of unsaturated fatty acids in vivo. Isolation and characterization of an Escherichia coli mutant with a defective 2,4-dienoyl-coenzyme A reductase. You SY, et al. **J Biol Chem** 1989 Oct 5; 264(28):16489-95

Expression of ApoE gene in Chinese hamster cells with a reversible defect in O-glycosylation. Glycosylation is not required for apoE secretion. Zanni EE, et al. **J Biol Chem** 1989 Jun 5;264(16):9137-40

Normal and mutant human adenosine deaminase genes. Akeson AL, et al. **J Cell Biochem** 1989 Mar;39(3):217-28 (40 ref.)

Higher order chromosome structure is affected by cold-sensitive mutations in a Schizosaccharomyces pombe gene crm1+ which encodes a 115-kD protein preferentially localized in the nucleus and its periphery. Adachi Y, et al. **J Cell Biol** 1989 Apr;108(4):1195-207

Expression of mutant keratin cDNAs in epithelial cells reveals possible mechanisms for initiation and assembly of intermediate filaments. Albers K, et al. **J Cell Biol** 1989 Apr;108(4):1477-93

The GTP-binding protein Ypt1 is required for transport in vitro: the Golgi apparatus is defective in ypt1 mutants. Bacon RA, et al. **J Cell Biol** 1989 Sep;109(3):1015-22

Posttranslational events leading to the assembly of photosystem II protein complex: a study using photosynthesis mutants from Chlamydomonas reinhardtii. de Vitry C, et al. **J Cell Biol** 1989 Sep;109(3):991-1006

Isolation of Chinese hamster ovary cell lines temperature conditional for the cell-surface expression of integral membrane glycoproteins. Hearing J, et al. **J Cell Biol** 1989 Feb;108(2):339-53

Induction and characterization of mitochondrial DNA mutants in Chlamydomonas reinhardtii. Matagne RF, et al. **J Cell Biol** 1989 Apr;108(4):1221-6

Involvement of LFA-1 in lymphoma invasion and metastasis demonstrated with LFA-1-deficient mutants. Roossien FF, et al. **J Cell Biol** 1989 May;108(5):1979-85

Acidification of endosome subpopulations in wild-type Chinese hamster ovary cells and temperature-sensitive acidification-defective mutants. Schmid S, et al. **J Cell Biol** 1989 Apr;108(4):1291-300

Expression of normal and mutant avian integrin subunits in rodent cells. Solowska J, et al. **J Cell Biol** 1989 Aug; 109(2):853-61

Expression of human plasma gelsolin in Escherichia coli and dissection of actin binding sites by segmental deletion mutagenesis. Way M, et al. **J Cell Biol** 1989 Aug; 109(2):593-605

HeLa cell mutants resistant to epidermal growth factor ricin A-chain conjugate. Banker D, et al. **J Cell Physiol** 1989 Apr;139(1):42-50

An epidermal growth factor-ricin A chain (EGF-RTA)-resistant mutant and an epidermal growth factor-Pseudomonas endotoxin (EGF-PE)-resistant mutant have distinct phenotypes. Banker DE, et al. **J Cell Physiol** 1989 Apr;139(1):51-7

Characterization of mutant human fibroblast cultures transformed with simian virus 40. Miranda AF, et al. **J Cell Sci** 1988 Apr;89 (Pt 4):481-93

Analysis of a Dictyostelium chemotaxis mutant with altered chemoattractant binding. Segall JE, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):479-89

Analysis of brome mosaic virus replication and aminoacylation functions by site-specific mutagenesis. Hall TC, et al. **J Cell Sci Suppl** 1987;7:287-301

Fabry disease: six gene rearrangements and an exonic point mutation in the alpha-galactosidase gene. Bernstein HS, et al. **J Clin Invest** 1989 Apr;83(4):1390-9

Three point mutations in the factor IX genes of five hemophilia B patients. Identification strategy using localization by altered epitopes in their hemophilic proteins. Chen SH, et al. **J Clin Invest** 1989 Jul;84(1):113-8

Alpha 1-antitrypsin deficiency caused by the alpha 1-antitrypsin Nullmattawa gene. An insertion mutation rendering the alpha 1-antitrypsin gene incapable of producing alpha 1-antitrypsin [published erratum appears in J Clin Invest 1989 Sep;84(3):following 1041] Curiel D, et al. **J Clin Invest** 1989 Apr;83(4):1144-52

Molecular basis of hypoxanthine-guanine phosphoribosyltransferase deficiency in ten subjects determined by direct sequencing of amplified transcripts. Davidson BL, et al. **J Clin Invest** 1989 Jul;84(1):342-6

Fibrinogen Stony Brook, a heterozygous A alpha 16Arg——Cys dysfibrinogenemia. Evaluation of diminished platelet aggregation support and of enhanced inhibition of fibrin assembly. Galanakis DK, et al. **J Clin Invest** 1989 Jul;84(1):295-304

Identification of a point mutation resulting in a heat-labile adenosine deaminase (ADA) in two unrelated children with partial ADA deficiency. Hirschhorn R, et al. **J Clin Invest** 1989 Feb;83(2):497-501

Two common low density lipoprotein receptor gene mutations cause familial hypercholesterolemia in Afrikaners. Leitersdorf E, et al. **J Clin Invest** 1989 Sep; 84(3):954-61

Characterization of point mutations in the same arginine codon in three unrelated patients with ornithine transcarbamylase deficiency. Maddalena A, et al. **J Clin Invest** 1988 Oct;82(4):1353-8

Molecular basis for congenital deficiency of alpha 2-plasmin inhibitor. A frameshift mutation leading to elongation of the deduced amino acid sequence. Miura O, et al. **J Clin Invest** 1989 May;83(5):1598-604

Evidence for both a regulatory mutation and a structural mutation in a family with maple syrup urine disease. Zhang B, et al. **J Clin Invest** 1989 Apr;83(4):1425-9

Immunocytochemical study of a temperature-sensitive choline acetyltransferase mutant of Drosophila melanogaster. Ikeda K, et al. **J Comp Neurol** 1989 Feb 8; 280(2):283-90

Growth hormone-deficient dwarfism in the rat: a new mutation. Charlton HM, et al. **J Endocrinol** 1988 Oct; 119(1):51-8

The contribution of mutant amino acids to alloantigenicity. Bill J, et al. **J Exp Med** 1989 Sep 1;170(3):739-50

Early onset of somatic mutation in immunoglobulin VH genes during the primary immune response. Levy NS, et al. **J Exp Med** 1989 Jun 1;169(6):2007-19

Levels of tyrosinase and its mRNA in coat-color mutants of C57BL/10J congenic mice: effects of genic substitution at the agouti, brown, albino, dilute, and pink-eyed dilution loci. Tamate HB, et al. **J Exp Zool** 1989 Jun;250(3):304-11

Reduced expression of outer-membrane proteins in beta-lactam-resistant mutants of Enterobacter cloacae. Aggeler R, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3383-92

Biochemical analysis of spontaneous fepA mutants of Escherichia coli. Elish ME, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1355-64

Phenotypic and genetic characterization of mutations in the spoIVC locus of Bacillus subtilis. Farquhar R, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):9-17

Inhibition of DNA repair by neighbouring mismatched bases in Streptococcus pneumoniae. Gasc AM, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):3019-24

Chromosomal mutations that increase the production of a plasmid-encoded haemolysin in Escherichia coli. Godessart N, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2779-87

Characterization of B278, a phage different from Mu that also produces auxotrophic mutations in Escherichia coli K12. Grinberg DR, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1333-8

Light reduces the excitation efficiency in the nss mutant of the sheep blowfly Lucilia. Barash S, et al. **J Gen Physiol** 1988 Sep;92(3):307-30

Mutational analysis of the virion-sense genes of maize streak virus. Boulton MI, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2309-23

A herpes simplex virus type 1 mutant containing a deletion within immediate early gene 1 is latency-competent in mice. Clements GB, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2501-6

Isolation and characterization of temperature-sensitive mutants of Abelson murine leukaemia virus that exhibit dissociation among morphological transformation, soft agar colony-forming ability and tyrosine kinase activity. Oka Y, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2527-32

Isolation and preliminary characterization of temperature-sensitive mutants of mouse cytomegalovirus of differing virulence for 1-week-old mice. Sammons CC, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2373-81

Mutant allele frequencies of domestic cats of western Illinois and eastern Iowa. Dunn TB, et al. **J Hered** 1989 Jul-Aug; 80(4):332-5

Heritable susceptibility to environmentally induced glaucoma in several mutants of Japanese quail. Lauber JK, et al. **J Hered** 1989 Jul-Aug;80(4):268-71

Anaerobic tolerant null: a mutant that allows Adh1 nulls to survive anaerobic treatment. Lemke-Keyes CA, et al. **J Hered** 1989 Jul-Aug;80(4):316-9

EMS-induced mutations in Anopheles quadrimaculatus (Say), species A. Mitchell SE, et al. **J Hered** 1989 Jan-Feb; 80(1):58-61

Microphthalmia: a new recessive mutation in the Norway rat. Moutier R, et al. **J Hered** 1989 Jan-Feb;80(1):76–8
Two recessive rex coat mutants in the guinea pig. Whiteway CE, et al. **J Hered** 1989 Mar-Apr;80(2):163–5
Restriction fragment length polymorphisms for the renin gene in Dahl rats. Dene H, et al. **J Hypertens** 1989 Feb; 7(2):121–6
Influence of complement C5 and V beta T cell receptor mutations on susceptibility to collagen-induced arthritis in mice. Banerjee S, et al. **J Immunol** 1989 Apr 1; 142(7):2237–43
Analysis of human IL-6 mutants expressed in Escherichia coli. Biologic activities are not affected by deletion of amino acids 1–28. Brakenhoff JP, et al. **J Immunol** 1989 Aug 15;143(4):1175–82
Genetics of the phosphocholine-specific antibody response to Streptococcus pneumoniae. Germ-line but not mutated T15 antibodies are dominantly selected. Claflin JL, et al. **J Immunol** 1988 Dec 1;141(11):4012–9
Mutations of the mouse mu H chain which prevent polymer assembly. Davis AC, et al. **J Immunol** 1989 Aug 15; 143(4):1352–7
The xid mutation affects hemopoiesis in long term cultures of murine bone marrow. Hayashi S, et al. **J Immunol** 1989 Jan 15;142(2):444–51
Mutation of 3' splice sites in two different class I genes results in different usage of cryptic splice sites. Hedley ML, et al. **J Immunol** 1989 Aug 1;143(3):1018–25
Expression of mutant H-2d proteins encoded by class I genes which alternatively process the 5' end of their transcripts. Hedley ML, et al. **J Immunol** 1989 Aug 1;143(3):1026–31
Identification by site-directed mutagenesis of amino acid residues contributing to serologic and CTL-defined epitope differences between HLA-A2.1 and HLA-A2.3. Hogan KT, et al. **J Immunol** 1988 Oct 1;141(7):2519–25
A panel of unique HLA-A2 mutant molecules define epitopes recognized by HLA-A2-specific antibodies and cytotoxic T lymphocytes. Hogan KT, et al. **J Immunol** 1989 Mar 15;142(6):2097–104
Derivation of a T cell line that is highly responsive to IL-4 and IL-2 (CT.4R) and of an IL-2 hyporesponsive mutant of that line (CT.4S). Hu-Li J, et al. **J Immunol** 1989 Feb 1;142(3):800–7
Diminished antigen processing by endosomal acidification mutant antigen-presenting cells. McCoy KL, et al. **J Immunol** 1989 Jul 1;143(1):29–38
Lack of detectable somatic hypermutation in the V region of the Ig H chain gene of a human chronic B lymphocytic leukemia. Meeker TC, et al. **J Immunol** 1988 Dec 1; 141(11):3994–8
Antigen presentation abrogated in cells expressing truncated Ia molecules. Nabavi N, et al. **J Immunol** 1989 Mar 1; 142(5):1444–7
Arsonate-specific murine T cell clones. V. Antigen presentation by L cells transfected with normal and mutant class II genes. Norton FL, et al. **J Immunol** 1989 Jul 15; 143(2):446–51
Ig V region gene expression in small lymphocytic lymphoma with little or no somatic hypermutation. Pratt LF, et al. **J Immunol** 1989 Jul 15;143(2):699–705
Fine mapping of an H-2Kk restricted cytotoxic T lymphocyte epitope in SV40 T antigen by using in-frame deletion mutants and a synthetic peptide. Rawle FC, et al. **J Immunol** 1988 Oct 15;141(8):2734–9
V gene rearrangement is required to fully activate the hypermutation mechanism in B cells. Roes J, et al. **J Immunol** 1989 Feb 1;142(3):1022–6
Recurrent somatic mutations in mouse antibodies to p-azophenylarsonate increase affinity for hapten. Sharon J, et al. **J Immunol** 1989 Jan 15;142(2):596–601
Mutation of the E1 alpha subunit of the pyruvate dehydrogenase complex, in relation to heterogeneity. Kitano A, et al. **J Inherited Metab Dis** 1989;12(2):97–107
Melanoma and other skin cancers in xeroderma pigmentosum patients and mutation in their cells. Takebe H, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):236S–238S
External stability and ESS: criteria for initial increase of new mutant allele. Liberman U. **J Math Biol** 1988;26(4):477–85
First and second moments and the mean Hamming distance in a stochastic replication-mutation model for biological macromolecules. Swetina J. **J Math Biol** 1989;27(4):463–83
Single base pair alterations as the predominant category of mutation in type I osteogenesis imperfecta [letter] Brookes AJ, et al. **J Med Genet** 1989 Jun;26(6):410
Exclusion of the COL2A1 gene as the mutation site in diastrophic dysplasia. Elima K, et al. **J Med Genet** 1989 May;26(5):314–9
Differential expression of the ICF (immunodeficiency, centromeric heterochromatin, facial anomalies) mutation in lymphocytes and fibroblasts. Maraschio P, et al. **J Med Genet** 1989 Jul;26(7):452–6
Beta thalassaemia mutations in Turkish Cypriots. Sozuoz A, et al. **J Med Genet** 1988 Nov;25(11):766–8
Clinical variability of osteogenesis imperfecta linked to COL1A2 and associated with a structural defect in the type I collagen molecule. Superti-Furga A, et al. **J Med Genet** 1989 Jun;26(6):358–62
New mutation to Huntington's disease. Wolff G, et al. **J Med Genet** 1989 Jan;26(1):18–27
Isolation and analysis of ketoconazole resistant mutants of Saccharomyces cerevisiae. Watson PF, et al. **J Med Vet Mycol** 1988 Jun;26(3):153–62
Properties of a mutant Cre protein that alters the topological linkage of recombination products. Abremski K, et al. **J Mol Biol** 1988 Jul 5;202(1):59–66
Two distinct mechanisms for deletion in mitochondrial DNA of Schizosaccharomyces pombe mutator strains. Slipped mispairing mediated by direct repeats and erroneous intron splicing. Ahne A, et al. **J Mol Biol** 1988 Aug 20; 202(4):725–34
Mutations that alter the pore function of the OmpF porin of Escherichia coli K12. Benson SA, et al. **J Mol Biol** 1988 Oct 20;203(4):961–70
Clone size distributions of mutations induced by ethyl methanesulfonate in bacteriophage T4. Drake JW. **J Mol Biol** 1988 Jul 5;202(1):11–6
Comparison of ultraviolet irradiation-induced mutagenesis of the lacI gene in Escherichia coli and in human 293 cells. Hsia HC, et al. **J Mol Biol** 1989 Jan 5;205(1):103–13
Effect of photoreactivation on mutagenesis of lambda phage by ultraviolet light. Hutchinson F, et al. **J Mol Biol** 1988 Aug 5;202(3):593–601
Mapping and sequencing of mutations in the Escherichia coli rpoB gene that lead to rifampicin resistance. Jin DJ, et al. **J Mol Biol** 1988 Jul 5;202(1):45–58
Selection and characterization of randomly produced mutants in the gene coding for M1 RNA. Lumelsky N, et al. **J Mol Biol** 1988 Aug 5;202(3):443–54
Amino acid changes coded by bacteriophage T4 DNA polymerase mutator mutants. Relating structure to function. Reha-Krantz LJ. **J Mol Biol** 1988 Aug 20; 202(4):711–24
Estimation of in-vivo miscoding rates. Ripley LS. **J Mol Biol** 1988 Jul 5;202(1):17–34
Deletion formation in bacteriophage T4. Singer BS, et al. **J Mol Biol** 1988 Jul 20;202(2):233–43
Allele-specific malE mutations that restore interactions between maltose-binding protein and the inner-membrane components of the maltose transport system. Treptow NA, et al. **J Mol Biol** 1988 Aug 20;202(4):809–22
Single amino acid changes in the Bacillus thuringiensis var. israelensis delta-endotoxin affect the toxicity and expression of the protein. Ward ES, et al. **J Mol Biol** 1988 Aug 5;202(3):527–35
Saturation mutagenesis of the Tn10-encoded tet operator O1. Identification of base-pairs involved in Tet repressor recognition. Wissmann A, et al. **J Mol Biol** 1988 Aug 5; 202(3):397–406
A major C-peptide deletion prevents secretion of a mutant human proinsulin from transfected monkey kidney cells. Shakur Y, et al. **J Mol Endocrinol** 1989 Sep;3(2):155–62
Analysis of the endocardium and cardiac jelly in truncal development in the cardiac lethal mutant axolotl Ambystoma mexicanum. Lemanski LF, et al. **J Morphol** 1989 May;200(2):123–30
Plant antimutagenic agents, 1. General bioassay and isolation procedures. Wall ME, et al. **J Nat Prod** 1988 Sep-Oct; 51(5):866–73
Generation of metastatic variants in populations of mutator and amplificator mutants. Damen JE, et al. **J Natl Cancer Inst** 1989 Apr 19;81(8):628–31
Protein kinase C in larval brain of wild-type and dunce memory-mutant Drosophila. Dévay P, et al. **J Neurogenet** 1989 May;5(2):119–26
Some mutations affecting neural or muscular tissues alter the physiological components of the electroretinogram in Drosophila. Homyk T Jr, et al. **J Neurogenet** 1989 Jan; 5(1):37–48
Reciprocal behaviour associated with altered homeostasis and photosensitivity of Drosophila clock mutants. Konopka RJ, et al. **J Neurogenet** 1989 Sep;6(1):1–10
Differentiation in vitro of neural precursor cells from normal and Pecanex mutant Drosophila embryos. LaBonne SG, et al. **J Neurogenet** 1989 May;5(2):99–104
Persistent hypersynchronization of neocortical neurons in the mocha mutant of mouse. Noebels JL, et al. **J Neurogenet** 1989 Sep;6(1):53–6
Morphological defects in oraJK84 photoreceptors caused by mutation in R1–6 opsin gene of Drosophila. O'Tousa JE, et al. **J Neurogenet** 1989 Sep;6(1):41–52
Habituation of the landing response of Drosophila wild-type and mutants defective in olfactory learning. Rees CT, et al. **J Neurogenet** 1989 May;5(2):105–18
Photoreceptor maintenance and degeneration in the norpA (no receptor potential-A) mutant of Drosophila melanogaster. Stark WS, et al. **J Neurogenet** 1989 Jan; 5(1):49–59
Ultrastructure of the ocellar visual system in normal and mutant Drosophila melanogaster. Stark WS, et al. **J Neurogenet** 1989 May;5(2):127–53
Drosophila mutants with progressive atrophy in dorsal longitudinal muscles. Wang D, et al. **J Neurogenet** 1989 Sep;6(1):27–39
Altered neurovirulence of temperature-sensitive vesicular stomatitis virus mutants in a murine model by inoculation of bombesin: a neuropeptide. I. Clinical, virological and pathological observations. Huprikar J, et al. **J Neurol Sci** 1989 Feb;89(2–3):279–88
Alterations in the neuroepithelial basal lamina in a neurological mutant with prenatal hydrocephalus. O'Shea KS, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):507–15
Vitamin B12-responsive megaloblastic anemia, homocystinuria, and transient methylmalonic aciduria in cb1E disease. Tuchman M, et al. **J Pediatr** 1988 Dec; 113(6):1052–6
Blue light induces circadian rhythms in the bd mutant of Neurospora: double mutants bd,wc-1 and bd,wc-2 are blind. Russo VE. **J Photochem Photobiol -B-** 1988 Jul; 2(1):59–65
Shuttle vectors for studying mutagenesis in mammalian cells. Sarasin A. **J Photochem Photobiol [B]** 1989 Apr;3(2):143–55 (49 ref.)
Photoreactivation in phr mutants of Escherichia coli K-12: cloning from the gal-att lambda interval increases the photoreactivable response in phrA strains. Smith AW, et al. **J Photochem Photobiol -B-** 1988 Jul;2(1):21–32
Conformational effects of the substitution of Arg for Gly 13 in the ras oncogene-encoded P21 protein. Brandt-Rauf PW, et al. **J Protein Chem** 1988 Aug;7(4):349–54
Examination of subunit interactions at the active site of ribulose 1,5-bisphosphate carboxylase/oxygenase from Rhodospirillum rubrum by hybridization of site-directed mutants. Soper TS, et al. **J Protein Chem** 1989 Apr; 8(2):239–49
Use of the averaged mutation rate in pieces of protein sequences to predict the location of antigenic determinants. Frömmel C. **J Theor Biol** 1988 May 21;132(2):171–7
Sensory discrimination and the incipient advantage of mutations. Genoni GP. **J Theor Biol** 1988 Oct 7; 134(3):327–9
Deleterious mutations as an evolutionary factor. III. Mating preference and some general remarks. Kondrashov AS. **J Theor Biol** 1988 Apr 21;131(4):487–96
Analysis of mutant frequency curves and survival curves applied to the AL hybrid cell system [published erratum appears in J Theor Biol 1988 Sep 9;134(1):133] Parker R, et al. **J Theor Biol** 1988 May 7;132(1):113–7
Mutagenicity test of cefodizime sodium. Ohuchida A, et al. **J Toxicol Sci** 1988 Jun;13 Suppl 1:245–56
Congenital progressive hydronephrosis in mice: a new recessive mutation. Horton CE Jr, et al. **J Urol** 1988 Nov; 140(5 Pt 2):1310–5
Neutralization epitopes of the F glycoprotein of respiratory syncytial virus: effect of mutation upon fusion function. Beeler JA, et al. **J Virol** 1989 Jul;63(7):2941–50
Analysis of mutant Moloney murine leukemia viruses containing linker insertion mutations in the 3' region of pol. Donehower LA. **J Virol** 1988 Nov;62(11):3958–64
Mapping of RNA- temperature-sensitive mutants of Sindbis virus: assignment of complementation groups A, B, and G to nonstructural proteins. Hahn YS, et al. **J Virol** 1989 Jul;63(7):3142–50
A deletion mutant of the latency-associated transcript of herpes simplex virus type 1 reactivates from the latent state with reduced frequency. Leib DA, et al. **J Virol** 1989 Jul; 63(7):2893–900
Effects of long terminal repeat mutations on human immunodeficiency virus type 1 replication. Lu Y, et al. **J Virol** 1989 Sep;63(9):4115–9
Mutational analysis of the human immunodeficiency virus vpr open reading frame. Ogawa K, et al. **J Virol** 1989 Sep; 63(9):4110–4
Characterization of temperature-sensitive mutants of Pichinde virus. Shivaprakash M, et al. **J Virol** 1988 Nov; 62(11):4037–43
Phenotypic hiding: the carryover of mutations in RNA viruses as shown by detection of mar mutants in influenza virus. Valcárcel J, et al. **J Virol** 1989 Sep;63(9):4107–9
Scientists ponder when, why of emerging viruses [news] Marwick C. **JAMA** 1989 Jul 7;262(1):16
Nonsense mutation in factor VIII gene of a severe haemophiliac patient with anti-factor VIII antibody. Mikami S, et al. **Jinrui Idengaku Zasshi** 1988 Dec; 33(4):409–15 (23 ref.)
Mutation and cancer in relation to the atomic-bomb radiation effects. Kondo S. **Jpn J Cancer Res** 1988 Jul;79(7):785–99 (68 ref.)
Mutations of N-ras oncogene in myelodysplastic syndromes and leukemias detected by polymerase chain reaction. Mano H, et al. **Jpn J Cancer Res** 1989 Feb;80(2):102–6
Low incidence of point mutation of c-Ki-ras and N-ras oncogenes in human hepatocellular carcinoma. Tsuda H, et al. **Jpn J Cancer Res** 1989 Mar;80(3):196–9
Somatic mutation in peripheral lymphocytes of former workers at the Okunojima poison gas factory. Yanagida J, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1276–83
Micronucleus test in mice fed on an irradiated diet. Endoh D, et al. **Jpn J Vet Res** 1989 Apr;37(2):41–7
Comparative analysis of herpes simplex virus type 1 mutants that are defective in fusion function by using restriction endonuclease. Yamamoto S, et al. **Kurume Med J** 1989; 36(1):7–16
Molecular mechanisms of oncogenesis. Seemayer TA, et al. **Lab Invest** 1989 May;60(5):585–99 (199 ref.)
Altered c-H-ras gene in non-neoplastic tissue [letter] **Lancet** 1989 Mar 25;1(8639):668–9
Direct carrier testing in 14 families with haemophilia B. Bottema CD, et al. **Lancet** 1989 Sep 2;2(8662):526–9
Mutation preventing formation of hepatitis B e antigen in patients with chronic hepatitis B infection. Carman WF, et al. **Lancet** 1989 Sep 9;2(8663):588–91
Novel KI-ras codon 61 mutation in infiltrating leucocytes of oral squamous cell carcinoma [letter] Chang SE, et al. **Lancet** 1989 May 6;1(8645):1014
Unusual case of haemophilia B [letter] Crossley PM, et al. **Lancet** 1989 Apr 29;1(8644):960

Multiple genetic alterations in distal and proximal colorectal cancer. Delattre O, et al. **Lancet** 1989 Aug 12;2(8659):353–6

Mosaicism and sporadic haemophilia: implications for carrier determination [letter] Gitschier J, et al. **Lancet** 1989 Feb 4;1(8632):273–4

Diagnosis of beta-thalassaemia by DNA amplification in single blastomeres from mouse preimplantation embryos. Holding C, et al. **Lancet** 1989 Sep 2;2(8662):532–5

Molecular screening for haemoglobin constant spring. Hsia YE, et al. **Lancet** 1989 May 6;1(8645):988–91

Mitochondrial DNA mutations as an important contributor to ageing and degenerative diseases. Linnane AW, et al. **Lancet** 1989 Mar 25;1(8639):642–5

Criticism of IPPNW [letter] Mole RH. **Lancet** 1989 Feb 4; 1(8632):278

Point mutation in c-HA-ras oncogene in normal and abnormal cells [letter] Nag A, et al. **Lancet** 1989 Feb 4; 1(8632):274–6

Mitochondrial DNA mutation in family with Leber's hereditary optic neuropathy [letter] Yoneda M, et al. **Lancet** 1989 May 13;1(8646):1076–7

Prediction of severity of Gaucher's disease by identification of mutations at DNA level. Zimran A, et al. **Lancet** 1989 Aug 12;2(8659):349–52

The effects of thymidine on deoxyribonucleotide pool levels, cytotoxicity and mutation induction in Friend mouse erythroleukaemia cells. Wilkinson YA, et al. **Leuk Res** 1989;13(7):615–20

Acute myeloid leukemia: analysis of ras gene mutations and clonality defined by polymorphic X-linked loci. Bartram CR, et al. **Leukemia** 1989 Apr;3(4):247–56

Silent mutation at codon 15 interferes with the detection of a mutated N-ras codon 12 allele by oligonucleotide hybridization. Janssen JW, et al. **Leukemia** 1989 Mar; 3(3):235

c-myc amplification coexistent with activating N-ras point mutation in the biphenotypic leukemic cell line RED-3. Mallet MK, et al. **Leukemia** 1989 Jul;3(7):511–5

Cellular concentration of magnesium and other ions in relation to protein synthesis, cell proliferation and cancer. Cameron IL, et al. **Magnesium** 1989;8(1):31–44 (47 ref.)

A proposal for the development of clonal hemopoietic leukemias. Matioli GT. **Med Hypotheses** 1989 Feb; 28(2):131–8

Origin of mutation in neoplasia. Morris SA. **Med Hypotheses** 1988 Nov;27(3):209–14

Antibodies against branched-chain alpha-keto acid dehydrogenase proteins for use in defining human mutations and gene isolation. Danner DJ, et al. **Methods Enzymol** 1988;166:108–14

Mutagenesis of cyanobacteria by classical and gene-transfer-based methods. Golden SS. **Methods Enzymol** 1988;167:714–27

Temperature-sensitive mutants with alterations in ribosomal protein L24 and isolation of intra- and extragenic suppressor mutants. Schnier J, et al. **Methods Enzymol** 1988; 164:706–9

Antibiotic resistance mutations in ribosomal RNA genes of Escherichia coli. Sigmund CD, et al. **Methods Enzymol** 1988;164:673–90

Salmonella typhimurium aroA mutants as carriers of the Escherichia coli heat-labile enterotoxin B subunit to the murine secretory and systemic immune systems. Maskell DJ, et al. **Microb Pathog** 1987 Mar;2(3):211–21

Characterization of a nalidixic-acid-resistant mutant of Escherichia coli as a strict aerobe. Yoshizawa Y, et al. **Microbiol Immunol** 1989;33(6):449–57

Fitness effects of amino acid replacements in the beta-galactosidase of Escherichia coli. Dean AM, et al. **Mol Biol Evol** 1988 Sep;5(5):469–85

Fitness effects of a deletion mutation increasing transcription of the 6-phosphogluconate dehydrogenase gene in Escherichia coli. Miller RD, et al. **Mol Biol Evol** 1988 Nov; 5(6):691–703

Characterization of a highly conserved sequence related to mutator transposable elements in maize. Talbert LE, et al. **Mol Biol Evol** 1988 Sep;5(5):519–29

Timing of proto-oncogene replication: a possible determinant of early S phase sensitivity of C3H 10T1/2 cells to transformation by chemical carcinogens. Doggett NA, et al. **Mol Carcinog** 1988;1(1):41–9

Molecular analysis of mutations induced in human cells by N-ethyl-N-nitrosourea. Eckert KA, et al. **Mol Carcinog** 1988;1(1):50–6

Mutational specificities of environmental carcinogens in the lacI gene of Escherichia coli. II: A host-mediated approach to N-nitroso-N,N-dimethylamine and endogenous mutagenesis in vivo. Horsfall MJ, et al. **Mol Carcinog** 1989; 2(2):107–15

Purification of a yeast centromere-binding protein that is able to distinguish single base-pair mutations in its recognition site. Cai MJ, et al. **Mol Cell Biol** 1989 Jun;9(6):2544–50

Isolation of mutations that act in trans to alter expression from a yeast hsp70 promoter. Findly RC, et al. **Mol Cell Biol** 1988 Aug;8(8):3423–31

Cell-dependent efficiency of reiterated nuclear signals in a mutant simian virus 40 oncoprotein targeted to the nucleus. Fischer-Fantuzzi L, et al. **Mol Cell Biol** 1988 Dec; 8(12):5495–503

Targeted transformation of Ascobolus immersus and de novo methylation of the resulting duplicated DNA sequences. Goyon C, et al. **Mol Cell Biol** 1989 Jul;9(7):2818–27

Nuclear proteins that bind the human gamma-globin gene promoter: alterations in binding produced by point mutations associated with hereditary persistence of fetal hemoglobin. Gumucio DL, et al. **Mol Cell Biol** 1988 Dec; 8(12):5310–22

Mitochondrial import and processing of mutant human ornithine transcarbamylase precursors in cultured cells. Isaya G, et al. **Mol Cell Biol** 1988 Dec;8(12):5150–8

Determination of the spectrum of mutations induced by defined-wavelength solar UVB (313-nm) radiation in mammalian cells by use of a shuttle vector. Keyse SM, et al. **Mol Cell Biol** 1988 Dec;8(12):5425–31

Somatic mutation and transcriptional deregulation of myc in endemic Burkitt's lymphoma disease: heptamer-nonamer recognition mistakes? Morse B, et al. **Mol Cell Biol** 1989 Jan;9(1):74–82

Role of SGP2, a suppressor of a gpa1 mutation, in the mating-factor signaling pathway of Saccharomyces cerevisiae. Nakayama N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5410–6

Genetic analysis of small nuclear RNAs in Saccharomyces cerevisiae: viable sextuple mutant. Parker R, et al. **Mol Cell Biol** 1988 Aug;8(8):3150–9

Step-arrest mutants of FLP recombinase: implications for the catalytic mechanism of DNA recombination. Parsons RL, et al. **Mol Cell Biol** 1988 Aug;8(8):3303–10

A novel pathway for transversion mutation induced by dCTP misincorporation in a mutator strain of CHO cells. Phear G, et al. **Mol Cell Biol** 1989 Apr;9(4):1810–2

Use of a simian virus 40-based shuttle vector to analyze enhanced mutagenesis in mitomycin C-treated monkey cells. Roilides E, et al. **Mol Cell Biol** 1988 Sep;8(9):3943–6

Spontaneous germ line virus infection and retroviral insertional mutagenesis in eighteen transgenic Srev lines of mice. Spence SE, et al. **Mol Cell Biol** 1989 Jan; 9(1):177–84

p21-ras effector domain mutants constructed by "cassette" mutagenesis. Stone JC, et al. **Mol Cell Biol** 1988 Aug; 8(8):3565–9

Characterization of mutant p53-hsp72/73 protein-protein complexes by transient expression in monkey COS cells. Stürzbecher HW, et al. **Mol Cell Biol** 1988 Sep;8(9):3740–7

Structural and functional analyses of Saccharomyces cerevisiae wild-type and mutant RNA1 genes. Traglia HM, et al. **Mol Cell Biol** 1989 Jul;9(7):2989–99

Nonsense mutations in the dihydrofolate reductase gene affect RNA processing. Urlaub G, et al. **Mol Cell Biol** 1989 Jul;9(7):2868–80

N-ras mutations in human cutaneous melanoma from sun-exposed body sites. van 't Veer LJ, et al. **Mol Cell Biol** 1989 Jul;9(7):3114–6

Kinds and spectrum of mutations induced by 1-nitrosopyrene adducts during plasmid replication in human cells. Yang JL, et al. **Mol Cell Biol** 1988 Aug;8(8):3364–72

Transformation of NIH 3T3 fibroblasts by an activated form of p59hck. Ziegler SF, et al. **Mol Cell Biol** 1989 Jun; 9(6):2724–7

Establishment of 8-azaguanine-resistant mutants from rat thyroid cell line FRTL-5. Sugawa H, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):319–26

Glucocorticoid receptor expression in receptorless mutants isolated from the human leukemic cell line CEM-C7. Harmon JM, et al. **Mol Endocrinol** 1989 Apr;3(4):734–43

Bioactive recombinant methionyl bovine prolactin: structure-function studies using site-specific mutagenesis. Luck DN, et al. **Mol Endocrinol** 1989 May;3(5):822–31

A mutation causing reduced biological activity and stability of thyroxine-binding globulin probably as a result of abnormal glycosylation of the molecule. Mori Y, et al. **Mol Endocrinol** 1989 Mar;3(3):575–9

Mutations in signal sequence cleavage domain of preproparathyroid hormone alter protein translocation, signal sequence cleavage, and membrane-binding properties. Wiren KM, et al. **Mol Endocrinol** 1989 Feb; 3(2):240–50

Functional analysis of the dna (Ts) mutants of Bacillus subtilis: plasmid pUB110 replication as a model system. Alonso JC, et al. **Mol Gen Genet** 1988 Nov;214(3):482–9

A translocation associated, loss-of-function mutation in the nitrogen metabolite repression regulatory gene of Aspergillus nidulans can revert intracistronically. Arst HN Jr, et al. **Mol Gen Genet** 1989 Jan;215(2):364–7

Anti-mutagenic effect of ultraviolet light on spontaneous tyrosine tRNA ochre suppressor mutations in Escherichia coli. Bockrath R, et al. **Mol Gen Genet** 1988 Oct; 214(2):361–4

Isolation of a formamidopyrimidine-DNA glycosylase (fpg) mutant of Escherichia coli K12. Boiteux S, et al. **Mol Gen Genet** 1989 Jan;215(2):300–5

Instability in the ctMR2 strain of Drosophila melanogaster: role of P element functions and structure of revertants. Brown AJ, et al. **Mol Gen Genet** 1989 Aug;218(2):208–13

A novel method for the cloning of chromosomal mutations in a single step: isolation of two mutant alleles of envZ, an osmoregulatory gene from Escherichia coli. Comeau DE, et al. **Mol Gen Genet** 1988 Jul;213(1):166–9

Genetic studies of mutants in a high-affinity methionine transport system in Salmonella typhimurium. Cottam AN, et al. **Mol Gen Genet** 1989 Jan;215(2):358–63

Point mutations in the 23 S rRNA genes of four lincomycin resistant Nicotiana plumbaginifolia mutants could provide new selectable markers for chloroplast transformation. Cseplö A, et al. **Mol Gen Genet** 1988 Oct;214(2):295–9

Alleviation of type I restriction in adenine methylase (dam) mutants of Escherichia coli. Efimova EP, et al. **Mol Gen Genet** 1988 Oct;214(2):313–6

Interactions between epsilon, the proofreading subunit of DNA polymerase III, and proteins involved in the SOS response of Escherichia coli. Foster PL, et al. **Mol Gen Genet** 1988 Nov;214(3):467–73

DNA sequence analysis of point mutations in traA, the F pilin gene, reveal two domains involved in F-specific bacteriophage attachment. Frost LS, et al. **Mol Gen Genet** 1988 Jul;213(1):134–9

Mapping of chloroplast mutations conferring resistance to antibiotics in Chlamydomonas: evidence for a novel site of streptomycin resistance in the small subunit rRNA. Gauthier A, et al. **Mol Gen Genet** 1988 Oct;214(2):192–7

Transfer of IncP plasmids into Stigmatella aurantiaca leading to insertional mutants affected in spore development. Glomp I, et al. **Mol Gen Genet** 1988 Oct;214(2):213–7

A mutational analysis of the bacteriophage P1 cin recombinase gene: intragenic complementation. Haffter P, et al. **Mol Gen Genet** 1989 Jan;215(2):245–9

Isolation and characterisation of transposon-induced mutants of Erwinia carotovora subsp. atroseptica exhibiting reduced virulence. Hinton JC, et al. **Mol Gen Genet** 1989 May; 217(1):141–8

Escherichia coli parA is an allele of the gyrB gene. Kato J, et al. **Mol Gen Genet** 1989 May;217(1):178–81

Genetic control of AAF-induced mutagenesis at alternating GC sequences: an additional role for RecA. Koffel-Schwartz N, et al. **Mol Gen Genet** 1989 Jan; 215(2):306–11

Isolation of hem3 mutants from Candida albicans by sequential gene disruption. Kurtz MB, et al. **Mol Gen Genet** 1989 May;217(1):47–52

Isolation and characterization of mammalian cell lines carrying suppressible mutations. López-Revilla R, et al. **Mol Gen Genet** 1988 Jul;213(1):105–11

Improved expression of streptomycin resistance in plants due to a deletion in the streptomycin phosphotransferase coding sequence. Maliga P, et al. **Mol Gen Genet** 1988 Nov; 214(3):456–9

Genetic characterization of the mei-41 locus in Drosophila melanogaster. Mason JM, et al. **Mol Gen Genet** 1989 Jan; 215(2):190–9

Lethal effect of lambda DNA terminase in recombination deficient Escherichia coli. Murialdo H. **Mol Gen Genet** 1988 Jul;213(1):42–9

Requirement of the Escherichia coli dnaA gene function for integrative suppression of dnaA mutations by plasmid R 100-1. Nagata T, et al. **Mol Gen Genet** 1988 Jul; 213(1):163–5

Isolation and characterization of a conditional replication mutant of the antibiotic resistance factor R1 affected in the gene of the replication protein repA. Ortega S, et al. **Mol Gen Genet** 1989 May;217(1):111–7

A selection cartridge for rapid detection and analysis of spontaneous mutations including insertions of transposable elements in Enterobacteriaceae. Raabe T, et al. **Mol Gen Genet** 1988 Dec;215(1):176–80

Formation of deletion in Escherichia coli between direct repeats located in the long inverted repeats of a cellular slime mold plasmid: participation of DNA gyrase. Saing KM, et al. **Mol Gen Genet** 1988 Sep;214(1):1–5

Selection of an atrazine-resistant tobacco cell line having a mutant psbA gene. Sato F, et al. **Mol Gen Genet** 1988 Oct;214(2):358–60

Characterization of a mutation that causes overproduction of inositol in Neurospora crassa. Schablik M, et al. **Mol Gen Genet** 1988 Jul;213(1):140–3

Mutagenic DNA repair genes on plasmids from the 'pre-antibiotic era'. Sedgwick SG, et al. **Mol Gen Genet** 1989 Aug;218(2):323–9

Alternative pathways of methyl methanesulfonate-induced mutagenesis in Escherichia coli. Sledziewska-Gójska E, et al. **Mol Gen Genet** 1989 Mar;216(1):126–31

Salmonella typhimurium LT2 metF operator mutations. Stauffer GV, et al. **Mol Gen Genet** 1988 Sep;214(1):32–6

Mapping of chromosomal loci associated with lipopolysaccharide synthesis and serotype specificity in Vibrio cholerae 01 by transposon mutagenesis using Tn5 and Tn2680. Ward HM, et al. **Mol Gen Genet** 1989 Aug; 218(2):367–70

Selection and characterization of ura5 mutants of Histoplasma capsulatum. Worsham PL, et al. **Mol Gen Genet** 1988 Oct;214(2):348–52

Cloning of xcp genes located at the 55 min region of the chromosome and involved in protein secretion in Pseudomonas aeruginosa. Filloux A, et al. **Mol Microbiol** 1989 Feb;3(2):261–5

Genetic analysis of phycobilisome mutants in the cyanobacterium Synechococcus species PCC 6301. Kalla R, et al. **Mol Microbiol** 1989 Mar;3(3):339–47

Regulation of exotoxin A synthesis in Pseudomonas aeruginosa: characterization of toxA-lacZ fusions in wild-type and mutant strains. Vasil ML, et al. **Mol Microbiol** 1989 Mar;3(3):371–81

Delayed expression of enhanced reactivation and decreased mutagenesis of UV-irradiated adenovirus in UV-irradiated ataxia telangiectasia fibroblasts. Bennett CB, et al. **Mutagenesis** 1988 Sep;3(5):389–95

Streptomycin-resistant and dependent mutants of E. coli:

possible indicators of two important types of DNA alteration by UV mutagenesis [letter] Bockrath R. **Mutagenesis** 1989 Jan;4(1):78–9

Testing human faecal extracts for genotoxic activity with the SOS Chromotest: the importance of controlling for faecal enzyme activity. Bosworth D, et al. **Mutagenesis** 1986 Mar;1(2):143–9

Mutagenicity in V79 Chinese hamster cells of n-alkanals produced by lipid peroxidation. Brambilla G, et al. **Mutagenesis** 1989 Jul;4(4):277–9

Mutagenic DNA repair in Escherichia coli. XII. Ultraviolet mutagenesis in excision-proficient umuC and lexA (ind-) bacteria as revealed by delayed photoreversal. Bridges BA, et al. **Mutagenesis** 1986 Mar;1(2):111–7

Antimutagenic specificity against spontaneous and nitrofurazone-induced mutations in Escherichia coli K12ND160. Clarke CH, et al. **Mutagenesis** 1989 Jan; 4(1):31–4

The mutagenicity of sodium fluoride to L5178Y [wild-type and TK+/- (3.7.2c)] mouse lymphoma cells. Cole J, et al. **Mutagenesis** 1986 Mar;1(2):157–67

Multiplicity reactivation and mutagenesis of trimethylpsoralen-damaged herpes virus in normal and Fanconi's anaemia cells. Coppey J, et al. **Mutagenesis** 1989 Jan;4(1):67–71

Bacterial genotoxicity of nitrosated famotidine. De Flora S, et al. **Mutagenesis** 1986 Mar;1(2):125–30

Detection of non-genotoxic carcinogens in the BALB/c 3T3 cell transformation/mutation assay system. Fitzgerald DJ, et al. **Mutagenesis** 1989 Jul;4(4):286–91

Expression of an E.coli O6-alkylguanine DNA alkyltransferase gene in Chinese hamster cells protects against N-methyl and N-ethylnitrosourea induced reverse mutation at the hypoxanthine phosphoribosyl transferase locus. Fox M, et al. **Mutagenesis** 1988 Sep;3(5):409–13

Inhibitory effects of para-aminobenzoic acid on the formation and mutagenicity of N-nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329–31

Short-term tests and the myth of the non-clastogenic mutagen. Green MH. **Mutagenesis** 1988 Sep;3(5):369–71 (7 ref.)

Mutagenic and antimutagenic factor(s) extracted from a desert mushroom using different solvents. Hannan MA, et al. **Mutagenesis** 1989 Mar;4(2):111–4

Impaired recovery and mutagenic SOS-like responses in ataxia telangiectasia cells. Hilgers G, et al. **Mutagenesis** 1989 Jul;4(4):271–6

Activating mutations in human c-Ha-ras-1 gene induced by reactive derivatives of safrole and the glutamic pyrolysis product, Glu-P-3. Ireland CM, et al. **Mutagenesis** 1988 Sep;3(5):429–35

Genetic effects of methylmethanesulphonate during meiosis in Saccharomyces cerevisiae. Kelly SL, et al. **Mutagenesis** 1986 Mar;1(2):151–5

Untargeted viral mutagenesis is not found in X-irradiated monkey cells. Lytle CD, et al. **Mutagenesis** 1988 Jul; 3(4):297–8

Antimutagenic effects of betel leaf extract against the mutagenicity of two tobacco-specific N-nitrosamines. Padma PR, et al. **Mutagenesis** 1989 Mar;4(2):154–6

H4IIEC3 rat hepatoma cells activate N-nitrosodimethylamine but are resistant to the genotoxic products. Roscher E, et al. **Mutagenesis** 1989 Jul;4(4):292–6

Mitogenic stimulation may induce an anti-mutagenic repair system in human lymphocytes. Sanderson BJ, et al. **Mutagenesis** 1986 Mar;1(2):131–3

Inter-individual variation in the mutagenic activation of 2-acetylaminofluorene by human liver in relation to animal metabolic models. Smith AJ, et al. **Mutagenesis** 1988 Jul; 3(4):323–8

Isolation and characterization of glucose-6-phosphate dehydrogenase-deficient Chinese hamster cells derived from pure mutant colonies. Stamato TD, et al. **Mutagenesis** 1989 Jul;4(4):259–64

Effects of X-rays on the induction of somatic mutations and growth in the retinal pigmented epithelium during development of the mouse eye. Stephenson DA, et al. **Mutagenesis** 1986 Mar;1(2):135–41

CHO mutant UV61 removes (6-4) photoproducts but not cyclobutane dimers. Thompson LH, et al. **Mutagenesis** 1989 Mar;4(2):140–6

The identification of micronucleated chromosomes: a possible assay for aneuploidy. Thomson EJ, et al. **Mutagenesis** 1988 Sep;3(5):415–8

'A failed paradigm: carcinogenesis is more than mutagenesis' [letter] Trosko JE. **Mutagenesis** 1988 Jul;3(4):363–6

Induction of SOS response in Escherichia coli strain PQ37 by 16 chemical compounds and human urine extracts. Venier P, et al. **Mutagenesis** 1989 Jan;4(1):51–7

Concentrated drinking water extracts, which cause bacterial mutation and chromosome damage in CHO cells, do not induce sex-linked recessive lethal mutations in Drosophila. Wilcox P, et al. **Mutagenesis** 1988 Sep;3(5):381–7

Mutation at the hprt locus. Stockholm, May 26–28, 1988. Abstracts. **Mutat Res** 1989 Feb;216(1):65–88

Role and mechanisms of inhibitors in prevention of mutation and cancer. **Mutat Res** 1988 Dec;202(2):277–446

Comparative mutagenicity testing of a drug candidate, U-48753E: mechanism of induction of gene mutations in mammalian cells and quantitation of potential hazard. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):111–20

Enhancement of benzene clastogenicity by praziquantel in mice. Anwar WA, et al. **Mutat Res** 1989 Mar;222(3):283–9

The molecular nature of spontaneous and chemically induced mutations in the hypoxanthine-guanine phosphoribosyl transferase gene in rat liver epithelial cells. Armel P, et al. **Mutat Res** 1988 Nov;202(1):147–53

Review on the genotoxic activity of thioacetamide. Arni P. **Mutat Res** 1989 Sep;221(2):153–62 (64 ref.)

The toxicological effects of saccharin in short-term genotoxicity assays. Arnold DL, et al. **Mutat Res** 1989 Sep; 221(2):69–132 (226 ref.)

Retroviral shuttle vectors as a tool for the study of mutational specificity (base substitution/deletion/mutational hotspot). Ashman CR. **Mutat Res** 1989 Mar-May;220(2–3):143–9

Antimutagenicity of some citrus fruits in Salmonella typhimurium. Bala S, et al. **Mutat Res** 1989 Mar; 222(3):141–8

Chromosomal aberration and sister-chromatid exchange frequencies in peripheral blood lymphocytes of a large human population sample. II. Extension of age range. Bender MA, et al. **Mutat Res** 1989 Jun;212(2):149–54

Low persistence of the induced mutant phenotype in Chinese hamster cells. Bradley WE, et al. **Mutat Res** 1989 Feb; 210(2):303–11

4-Quinolone antibiotics: positive genotoxic screening tests despite an apparent lack of mutation induction. Bredberg A, et al. **Mutat Res** 1989 Mar;211(1):171–80

Induction of specific locus mutations in mouse spermatogonial stem cells by combined chemical X-ray treatments. Cattanach BM, et al. **Mutat Res** 1989 May; 212(1):91–101

Modifications of the effect of bleomycin in the somatic mutation and recombination test in Drosophila melanogaster. Cederberg H, et al. **Mutat Res** 1989 Sep; 214(1):69–80

Preliminary molecular analysis of the TK locus in L5178Y large- and small-colony mouse lymphoma cell mutants. Cobb RR, et al. **Mutat Res** 1989 Aug;226(4):253–8

Ultraviolet mutagenesis of radiation-sensitive (rad) mutants of the nematode Caenorhabditis elegans. Coohill T, et al. **Mutat Res** 1988 Nov-Dec;209(3–4):99–106

Cytogenetical characterization of Chinese hamster ovary X-ray-sensitive mutant cells, xrs 5 and xrs 6. IV. Study of chromosomal aberrations and sister-chromatid exchanges by restriction endonucleases and inhibitors of DNA topoisomerase II. Darroudi F, et al. **Mutat Res** 1989 Jun;212(2):137–48

Cytogenetical characterization of Chinese hamster ovary X-ray-sensitive mutant cells xrs 5 and xrs 6. VII. Complementation analysis of X-irradiated wild-type CHO-K1 and xrs mutant cells using the premature chromosome condensation technique. Darroudi F, et al. **Mutat Res** 1989 Aug;213(2):249–55

The Chinese hamster aprt gene as a mutational target. Its sequence and an analysis of direct and inverted repeats. de Boer JG, et al. **Mutat Res** 1989 Aug;226(4):239–44

Problems and prospects in antimutagenesis and anticarcinogenesis. De Flora S. **Mutat Res** 1988 Dec; 202(2):279–83 (24 ref.)

Mechanisms of inhibitors of mutagenesis and carcinogenesis. Classification and overview. De Flora S, et al. **Mutat Res** 1988 Dec;202(2):285–306 (175 ref.)

Specific-locus mutations induced in eukaryotes (especially mammalian cells) by radiation and chemicals: a perspective. DeMarini DM, et al. **Mutat Res** 1989 Jan;220(1):11–29 (168 ref.)

X-ray-induced specific locus mutations in the ad-3 region of two-component heterokaryons of Neurospora crassa. III. Genetic fine structure analysis of the ad-3 and immediately adjacent genetic regions by means of complementation tests. de Serres FJ. **Mutat Res** 1989 Mar; 211(1):89–102

Micronucleus, chromosome aberration, and small-colony TK mutant analysis to quantitate chromosomal damage in L5178Y mouse lymphoma cells. Doerr CL, et al. **Mutat Res** 1989 Mar;222(3):191–203

Perspectives on the use of an endogenous gene target in studies of mutational specificity. Drobetsky EA, et al. **Mutat Res** 1989 Mar-May;220(2–3):235–40

Germ-cell mutations in mice: standards for protecting the human genome. Ehling UH. **Mutat Res** 1989 May; 212(1):43–53

Towards an understanding of the nature and fitness of induced mutations in germ cells of mice: homozygous viability and heterozygous fitness effects of induced specific-locus, dominant cataract and enzyme-activity mutations. Favor J, et al. **Mutat Res** 1989 May;212(1):67–75

In vivo antimutagenic effect of ascorbic acid against mutagenicity of the common antiamebic drug diiodohydroxyquinoline. Ghaskadbi S, et al. **Mutat Res** 1989 Mar;222(3):219–22

Mechanisms of inhibition of N-nitroso compounds-induced mutagenicity. Gichner T, et al. **Mutat Res** 1988 Dec; 202(2):325–34 (85 ref.)

Mutational specificity studies of endogenous mammalian cell loci: methodological aspects. Glickman BW, et al. **Mutat Res** 1989 Aug;226(4):245–52

Reduction of the translation fidelity by kanamycin: effects on growth and mutant frequency in S. typhimurium TA102. Gocke E. **Mutat Res** 1989 Jul;226(3):211–4

Modulation of mutagenesis involving precise excision of transposon Tn10. Hafner LM, et al. **Mutat Res** 1989 Apr; 211(2):291–9

Enhancement of UV-induced mutagenesis and sister-chromatid exchanges by nickel ions in V79 cells: evidence for inhibition of DNA repair. Hartwig A, et al. **Mutat Res** 1989 Jan;217(1):65–73

Dietary inhibitors of mutagenesis and carcinogenesis. Hayatsu H, et al. **Mutat Res** 1988 Dec;202(2):429–46 (188 ref.)

Hprt mutations and karyotype abnormalities in T-cell clones from healthy subjects and melphalan-treated ovarian carcinoma patients. He SM, et al. **Mutat Res** 1989 Feb; 210(2):353–8

PSO4: a novel gene involved in error-prone repair in Saccharomyces cerevisiae. Henriques JA, et al. **Mutat Res** 1989 Sep;218(2):111–24

The nature of oxidants and antioxidant systems in the inhibition of mutation and cancer. Hochstein P, et al. **Mutat Res** 1988 Dec;202(2):363–75 (110 ref.)

Use of data from bacteria to interpret data on DNA damage processing in mammalian cells. Hutchinson F. **Mutat Res** 1989 Mar-May;220(2–3):269–78 (73 ref.)

Shuttle vector system for the analysis of mutational events in mammalian chromosomal DNA. Ikehata H, et al. **Mutat Res** 1989 Feb;210(2):237–47

Temperature-dependent mutational specificity of an Escherichia coli mutator, dnaQ49, defective in 3'——5' exonuclease (proofreading) activity. Isbell RJ, et al. **Mutat Res** 1989 Aug;213(2):149–56

Epistasis, photoreactivation and mutagen sensitivity of DNA repair mutants upr-1 and mus-26 in Neurospora crassa. Ishii C, et al. **Mutat Res** 1989 Sep;218(2):95–103

Saccharomyces cerevisiae mutants with enhanced induced mutation and altered mitotic gene conversion. Ivanov EL, et al. **Mutat Res** 1989 Aug;213(2):105–115

Protective role of glutathione and glutathione transferases in mutagenesis and carcinogenesis. Ketterer B. **Mutat Res** 1988 Dec;202(2):343–61 (129 ref.)

DNA, mutations and aging. Kirkwood TB. **Mutat Res** 1988 Sep;:7–13 (52 ref.)

DNA, mutations and aging. Kirkwood TB. **Mutat Res** 1989 Jan;219(1):1–7 (52 ref.)

A chromosome study of 6-thioguanine-resistant mutants in T lymphocytes of Hiroshima atomic bomb survivors. Kodama Y, et al. **Mutat Res** 1989 Sep;227(1):31–8

Molecular characterization of thymidine kinase mutants of human cells induced by densely ionizing radiation. Kronenberg A, et al. **Mutat Res** 1989 Apr;211(2):215–24

Fixation and repair of radiation-induced potentially mutagenic damage sensitive to hypertonic treatment in human diploid fibroblasts. Kubota N, et al. **Mutat Res** 1989 Apr;216(2):137–43

Base-pair substitutions alter the site-specific mutagenicity of UV and MNNG in the SUP4-o gene of yeast. Kunz BA, et al. **Mutat Res** 1989 Aug;226(4):273–8

Antimutagenesis by factors affecting DNA repair in bacteria. Kuroda Y, et al. **Mutat Res** 1988 Dec;202(2):387–91 (16 ref.)

Comparing the frequency and spectra of mutations induced when an SV-40 based shuttle vector containing covalently bound residues of structurally-related carcinogens replicates in human cells. Maher VM, et al. **Mutat Res** 1989 Mar-May;220(2–3):83–92

Use of phi X174 as a shuttle vector for the study of in vivo mammalian mutagenesis. Malling HV, et al. **Mutat Res** 1989 May;212(1):11–21

Intermediate (6-4) photoproduct repair in Chinese hamster V79 mutant V-H1 correlates with intermediate levels of DNA incision and repair replication. Mitchell DL, et al. **Mutat Res** 1989 May;226(1):43–7

Development of molecular approaches to estimating germinal mutation rates. I. Detection of insertion/deletion/rearrangement variants in the human genome. Mohrenweiser HW, et al. **Mutat Res** 1989 Jun; 212(2):241–52

Antimutagenesis by shift in monooxygenase isoenzymes and induction of epoxide hydrolase. Oesch F. **Mutat Res** 1988 Dec;202(2):335–42 (39 ref.)

Mitochondrial DNA rearrangements are correlated with a delayed amplification of the mobile intron (plDNA) in a long-lived mutant of Podospora anserina. Osiewacz HD, et al. **Mutat Res** 1989 Jan;219(1):9–15

The nature of spontaneous mutations. Ramel C. **Mutat Res** 1989 May;212(1):33–42

Functional and structural analyses of mouse genomic regions screened by the morphological specific-locus test. Russell LB. **Mutat Res** 1989 May;212(1):23–32

Molecular mechanisms of mutagenesis in mammalian cells: present and future. Sarasin A. **Mutat Res** 1989 Mar-May; 220(2–3):51–3

Mutational spectrum analysis of umuC-independent and umuC-dependent gamma-radiation mutagenesis in Escherichia coli. Sargentini NJ, et al. **Mutat Res** 1989 Apr; 211(2):193–203

A cell-cycle stage-related chromosomal X-ray hypersensitivity in larval neuroblasts of Drosophila mei-9 and mei-41 mutants suggesting defective DNA double-strand break repair. Schweizer PM. **Mutat Res** 1989 Mar;211(1):111–24

Molecular dosimetry studies of forward mutation induced at the yg2 locus in maize by ethyl methanesulfonate. Schy WE, et al. **Mutat Res** 1989 Apr;211(2):231–41

The development of transient SV40 based shuttle vectors for mutagenesis studies: problems and solutions. Seidman

M. **Mutat Res** 1989 Mar-May;220(2-3):55-60

Different mutations responsible for the elevated sister-chromatid exchange frequencies in Bloom syndrome and X-irradiated B-lymphoblastoid cell lines originating from acute leukemia. Shiraishi Y, et al. **Mutat Res** 1989 Apr;211(2):273-8

Generation of oxy radicals in biosystems. Simic MG, et al. **Mutat Res** 1989 Sep;214(1):3-12 (60 ref.)

Mechanisms of inhibition of free-radical processes in mutagenesis and carcinogenesis. Simic MG. **Mutat Res** 1988 Dec;202(2):377-86 (48 ref.)

Mutations at six additional loci of Drosophila melanogaster cause alkylation hypermutability. Smith PD, et al. **Mutat Res** 1989 Jul;218(1):21-4

Deoxynucleoside triphosphate pool perturbation is not a general feature in mutagen-treated mammalian cells. Snyder RD, et al. **Mutat Res** 1988 Sep-Oct;209(1-2):51-6

Models and assumptions underlying genetic risk assessment. Sobels FH. **Mutat Res** 1989 May;212(1):77-89

Increased sister-chromatid exchanges (SCEs) and chromosomal fragilities by BrdU in a human mutant B-lymphoblastoid cell line. Taguchi T, et al. **Mutat Res** 1989 Mar;211(1):43-9

Effects of heat shock on the induction of mutations by chemical mutagens in Neurospora crassa. Tanaka S, et al. **Mutat Res** 1989 Jun;223(2):233-42

Synergism of mutant frequencies in the mouse lymphoma cell mutagenicity assay by binary mixtures of methyl methanesulfonate and ethyl methanesulfonate [published erratum appears in Mutat Res 1989 Apr;222(4):415] Tarlo KS, et al. **Mutat Res** 1988 Oct;206(2):239-46

Detection of somatic mutants in man: HPRT mutations in lymphocytes and hemoglobin mutations in erythrocytes. Tates AD, et al. **Mutat Res** 1989 Jul;213(1):73-82

The use of integrating DNA vectors to analyse the molecular defects in ionising radiation-sensitive mutants of mammalian cells including ataxia telangiectasia. Thacker J. **Mutat Res** 1989 Mar-May;220(2-3):187-204

Autoradiographic detection of mutation to exotoxin-A resistance in mouse fibroblasts treated with ethyl methanesulfonate, X-rays and ultraviolet light. Tiah M, et al. **Mutat Res** 1989 Aug;213(2):205-15

Molecular analysis of spontaneous mutations at the gpt locus in Chinese hamster ovary (AS52) cells. Tindall KR, et al. **Mutat Res** 1989 Mar-May;220(2-3):241-53

Somatic cell mutagenesis in Drosophila: recovery of genetic damage in relation to the types of DNA lesions induced in mutationally unstable and stable X-chromosomes. Vogel EW. **Mutat Res** 1989 Mar;211(1):153-70

Enhancement and inhibition of mutation by o-vanillin in Escherichia coli. Watanabe K, et al. **Mutat Res** 1989 Sep; 218(2):105-9

Non-mutability by ultraviolet light in uvrD recB derivatives of Escherichia coli WP2 uvrA is due to inhibition of RecA protein activation. Woodgate R, et al. **Mutat Res** 1989 Jul; 226(3):141-4

DNA photolyase in E. coli: effects on UV mutagenesis by plasmids expressing the phr gene. Yamamoto K, et al. **Mutat Res** 1989 Aug;226(4):259-62

Isolation and characterization of spontaneously occurring mutations at the HPRT locus in V79 Chinese hamster cells. Zhang LH, et al. **Mutat Res** 1989 Jun;212(2):253-62

Ataxia-telangiectasia: a variant with altered in vitro phenotype of fibroblast cells. Ziv Y, et al. **Mutat Res** 1989 Feb;210(2):211-9

An inherited defect in aldosterone biosynthesis caused by a mutation in or near the gene for steroid 11-hydroxylase. Globerman H, et al. **N Engl J Med** 1988 Nov 3; 319(18):1193-7

Malformations due to presumed spontaneous mutations in newborn infants. Nelson K, et al. **N Engl J Med** 1989 Jan 5;320(1):19-23

A mitochondrial DNA mutation as a cause of Leber's hereditary optic neuropathy. Singh G, et al. **N Engl J Med** 1989 May 18;320(20):1300-5

Origin of mutants disputed [letter] **Nature** 1988 Dec 8; 336(6199):525-8

Effect on eye development of dominant mutations in Drosophila homologue of the EGF receptor. Baker NE, et al. **Nature** 1989 Jul 13;340(6229):150-3

Evolutionary biology. A new reason for having sex [news] Bull JJ, et al. **Nature** 1989 May 25;339(6222):260-1

Mutations and plagiarisms [letter] Cairns J. **Nature** 1989 Feb 9;337(6207):497

Altering DNA-binding specificity of GAL4 requires sequences adjacent to the zinc finger. Corton JC, et al. **Nature** 1989 Aug 31;340(6236):724-7

Parental origin of mutations of the retinoblastoma gene. Dryja TP, et al. **Nature** 1989 Jun 15;339(6225):556-8

Tnt1, a mobile retroviral-like transposable element of tobacco isolated by plant cell genetics. Grandbastien MA, et al. **Nature** 1989 Jan 26;337(6205):376-80

Unhealthy genes [letter] Grinde B. **Nature** 1989 Mar 2; 338(6210):24

Anthropology. A tale of three cities [news] Jones JS. **Nature** 1989 May 18;339(6221):176-7

A mutation that changes cell movement and cell fate in the zebrafish embryo. Kimmel CB, et al. **Nature** 1989 Jan 26; 337(6205):358-62

Deleterious mutations and the evolution of sexual reproduction. Kondrashov AS. **Nature** 1988 Dec 1; 336(6198):435-40 (114 ref.)

GTPase inhibiting mutations activate the alpha chain of Gs and stimulate adenylyl cyclase in human pituitary tumours. Landis CA, et al. **Nature** 1989 Aug 31;340(6236):692-6

Another alternative to directed mutation [letter] Lenski RE, et al. **Nature** 1989 Jan 12;337(6203):123-4

Complete mutagenesis of the HIV-1 protease. Loeb DD, et al. **Nature** 1989 Aug 3;340(6232):397-400

Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes. Mansour SL, et al. **Nature** 1988 Nov 24;336(6197):348-52

Circadian rhythms: mutant hamster in a hurry [news] Mrosovsky N. **Nature** 1989 Jan 19;337(6204):213-4

Palindromic sequences in heteroduplex DNA inhibit mismatch repair in yeast. Nag DK, et al. **Nature** 1989 Jul 27;340(6231):318-20

Carcinogenesis. Is imprinting to blame? [news] Ponder B. **Nature** 1989 Jul 27;340(6231):264

Protein engineering: the sheep in wolf's clothing [news] Ringe D. **Nature** 1989 Jun 29;339(6227):658-9

Evolution. Anticipatory mutagenesis [news] Symonds N. **Nature** 1989 Jan 12;337(6203):119-20

A point mutation in the neu oncogene mimics ligand induction of receptor aggregation. Weiner DB, et al. **Nature** 1989 May 18;339(6221):230-1

Mutation rates differ among regions of the mammalian genome. Wolfe KH, et al. **Nature** 1989 Jan 19; 337(6204):283-5

Preferential germline mutation of the paternal allele in retinoblastoma. Zhu XP, et al. **Nature** 1989 Jul 27; 340(6231):312-3

Factors contributing to cerebral hypomyelination in the growth hormone-deficient little mouse. Morisawa K, et al. **Neurochem Res** 1989 Feb;14(2):173-7

Cytochrome c oxidase deficiency in Leigh's syndrome: genetic evidence for a nuclear DNA-encoded mutation. Miranda AF, et al. **Neurology** 1989 May;39(5):697-702

Evidence in a lethal infantile mitochondrial disease for a nuclear mutation affecting respiratory complexes I and IV. Zheng X, et al. **Neurology** 1989 Sep;39(9):1203-9

Nucleotide sequence of wild-type and mutant nifR4 (ntrA) genes of Rhodobacter capsulatus: identification of an essential glycine residue. Alias A, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5377

The use of native T7 DNA polymerase for site-directed mutagenesis. Bebenek K, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5408

Complementation of a Dictyostelium discoideum thymidylate synthase mutation with the mouse gene provides a new selectable marker for transformation. Chang AC, et al. **Nucleic Acids Res** 1989 May 25;17(10):3655-61

Enhancer functions and in vitro protein binding of native and mutated interferon-responsive sequences. Cohen B, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1679-95

Phasduction--a simplified protocol for oligonucleotide-directed mutagenesis by the gapped duplex DNA method. Friedrich K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5862

Exploration of the L18 binding site on 5S RNA by deletion mutagenesis. Gewirth DT, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10717-32

Distal CCAAT box deletion in the A gamma globin gene of two black adolescents with elevated fetal A gamma globin. Gilman JG, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10635-42

A novel method for factor binding site mutagenesis. Gilmartin PM, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4901

A point mutation G----A in exon 12 of the porphobilinogen deaminase gene results in exon skipping and is responsible for acute intermittent porphyria. Grandchamp B, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6637-49

Modification of enzymatically amplified DNA for the detection of point mutations. Haliassos A, et al. **Nucleic Acids Res** 1989 May 11;17(9):3606

A simple method for site-directed mutagenesis using the polymerase chain reaction. Hemsley A, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6545-51

Mutational analysis of the nucleotide sequence at the FNR-dependent nirB promoter in Escherichia coli. Jayaraman PS, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):135-45

A novel technique for the rapid preparation of mutant RNAs. Joyce GF, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):711-22

Rapid insertional mutagenesis of DNA by polymerase chain reaction (PCR). Kammann M, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5404

Pseudorevertants of a lac promoter mutation reveal overlapping nascent promoters. Karls R, et al. **Nucleic Acids Res** 1989 May 25;17(10):3927-49

Nucleotide sequence of the Saccharomyces cerevisiae positive regulatory mutant gene MAL2-8cp. Kopetzki E, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5390

Multiple functional domains of Tat, the trans-activator of HIV-1, defined by mutational analysis. Kuppuswamy M, et al. **Nucleic Acids Res** 1989 May 11;17(9):3551-61

Mutations in two regions upstream of the A gamma globin gene canonical promoter affect gene expression. Lloyd JA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4339-52

Frame-shift mutation in the lacZ gene of certain commercially available pUC18 plasmids. Lobet Y, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4897

Up-promoter mutations in the positively-regulated mer promoter of Tn501. Lund P, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5517-27

Sequence specificity of streptozotocin-induced mutations. Mack SL, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9811-20

A mutation in the 530 loop of Escherichia coli 16S ribosomal RNA causes resistance to streptomycin. Melançon P, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9631-9

Pig Hox-2.4 has accumulated a frameshift mutation relative to mouse Hox-2.4. Miller JR, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10364

Direct detection of point mutations by mismatch analysis: application to haemophilia B. Montandon AJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3347-58

Effects of palindromes on in vivo DNA replication and mutagenesis in bacteriophage phi X174 RF DNA. Müller UR, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10733-50

Random oligonucleotide mutagenesis: application to a large protein coding sequence of a major histocompatibility complex class I gene, H-2DP. Murray R, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9761-73

A method for introducing random single point deletions in specific DNA target sequences using oligonucleotides. Ner SS, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4015-23

Analysis of any point mutation in DNA. The amplification refractory mutation system (ARMS). Newton CR, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2503-16

Increased erythroid-specific expression of a mutated HPFH gamma-globin promoter requires the erythroid factor NFE-1. Nicolis S, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5509-16

Mutagenesis induced by site specifically placed 4'-hydroxymethyl-4,5',8-trimethylpsoralen adducts. Piette J, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):9961-77

A Dutch pedigree with mild hemophilia B with a missense mutation in the first EGF domain (factor IXOud en Nieuw Gastel). Poort SR, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5869

A Dutch family with moderately severe hemophilia B (factor IXHeerde) has a missense mutation identical to that of factor IX London 2. Poort SR, et al. **Nucleic Acids Res** 1989 May 11;17(9):3614

The nucleotide sequence and reading frames of a mutant hepatitis B virus subtype adr. Rho HM, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2124

Mutational analysis of the lac regulatory region: second-site changes that activate mutant promoters. Rothmel RK, et al. **Nucleic Acids Res** 1989 May 25;17(10):3909-25

Mutational analysis of the L1 binding site of 23S rRNA in Escherichia coli. Said B, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10529-45

A novel frameshift mutation causing beta-thalassaemia in Azerbaijan. Schwartz EI, et al. **Nucleic Acids Res** 1989 May 25;17(10):3997

Mouse thymidine kinase: the promoter sequence and the gene and pseudogene structures in normal cells and in thymidine kinase deficient mutants. Seiser C, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):185-95

Mutagenesis analysis of a self-cleaving RNA. Sheldon CC, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5679-85

Substitution of an invariant nucleotide at the base of the highly conserved '530-loop' of 15S rRNA causes suppression of yeast mitochondrial ochre mutations. Shen ZH, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4535-9

Efficient oligonucleotide-directed construction of mutations in expression vectors by the gapped duplex DNA method using alternating selectable markers. Stanssens P, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4441-54

G6PD mahidol, a common deficient variant in South East Asia is caused by a (163)glycine----serine mutation. Vulliamy TJ, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5868

Compensatory mutations demonstrate that P8 and P6 are RNA secondary structure elements important for processing of a group I intron. Williamson CL, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):675-89

Functional analysis of point mutations in the AAUAAA motif of the SV40 late polyadenylation signal. Wilusz J, et al. **Nucleic Acids Res** 1989 May 25;17(10):3899-908

A point mutation in a mitochondrial tRNA gene abolishes its 3' end processing. Zennaro E, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5751-64

The use of the pTZ19 phagemid for preparing site-directed mutations in long size DNA fragment. Jones DS, et al. **Nucleic Acids Symp Ser** 1988;(19):37-8

DNA damage caused by ascorbate in the presence of Cu2+ induces mutations. Kobayashi S, et al. **Nucleic Acids Symp Ser** 1988;(19):29-32

The use of oligonucleotide-directed mutagenesis to probe molecular mechanisms of mutagenesis. Kunkel TA. **Nucleic Acids Symp Ser** 1988;(19):43

In vitro mutagenesis by incorporation of N4-aminodeoxycytidine 5'-triphosphate. Negishi K, et al. **Nucleic Acids Symp Ser** 1988;(19):33-6

Lymphomagenesis in E mu-myc transgenic mice can involve ras mutations. Alexander WS, et al. **Oncogene** 1989 May; 4(5):575-81

Direct sequencing analysis of exon 1 of the c-K-ras gene shows a low frequency of mutations in human pancreatic adenocarcinomas. Gonzalez-Cadavid NF, et al. **Oncogene** 1989 Sep;4(9):1137-40

Point mutations in both transforming and non-transforming codons of the N-ras proto-oncogene of Ph+ leukemias. Rovera G, et al. **Oncogene** 1989 Jul;4(7):867-72

Activation of oncogenes in human oral cancer cells: a novel codon 13 mutation of c-H-ras-1 and concurrent amplifications of c-erbB-1 and c-myc. Tadokoro K, et al. **Oncogene** 1989 Apr;4(4):499-505

Mechanisms of ras mutation in myelodysplastic syndrome. Yunis JJ, et al. **Oncogene** 1989 May;4(5):609-14

Direct sequencing of amplified genomic fragments documents N-ras point mutations in myeloid leukemia. Collins SJ. **Oncogene Res** 1988 Sep;3(2):117-23

Designed diagnostic restriction fragment length polymorphisms for the detection of point mutations in ras oncogenes. Kumar R, et al. **Oncogene Res** 1989;4(3):235-41

Tumorigenic transformation of rat FR3T3 fibroblasts carrying an activated myc oncogene requires subsequent mutational events. Mougneau E, et al. **Oncogene Res** 1988; 2(2):177-88

Viral growth, origin binding, and p53 binding properties of simian virus 40 large T antigen transformation and replication mutants. Rutila JE, et al. **Oncogene Res** 1989; 4(4):303-10

Spontaneous or carcinogen-mediated amplification of a mutated ras gene promotes neoplastic transformation. Sorrentino V, et al. **Oncogene Res** 1988;2(2):189-95

Comparison of the effects of carboxyl terminal truncation and point mutations on pp60c-src activities. Yaciuk P, et al. **Oncogene Res** 1988 Sep;3(2):207-12

The transposable elements involved in hybrid dysgenesis in Drosophila melanogaster. Louis C, et al. **Oxf Surv Eukaryot Genes** 1988;5:205-50 (197 ref.)

Relative roles of mutation and selection in the maintenance of genetic variability. Nei M. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):615-29

Recognition of the HLA class II-peptide complex by T-cell receptor: reversal of major histocompatibility complex restriction of a T-cell clone by a point mutation in the peptide determinant. Rothbard JB, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):553-64

UV mutagenic photoproducts in Escherichia coli and human cells: a molecular genetics perspective on human skin cancer. Brash DE. **Photochem Photobiol** 1988 Jul; 48(1):59-66

Cytotoxic and mutagenic effects of the photodynamic action of chloroaluminum phthalocyanine and visible light in L5178Y cells. Evans HH, et al. **Photochem Photobiol** 1989 Jan;49(1):43-7

Mutation and sister chromatid exchange induction in Chinese hamster ovary (CHO) cells by pulsed excimer laser radiation at 193 nm and 308 nm and continuous UV radiation at 254 nm. Rasmussen RE, et al. **Photochem Photobiol** 1989 Apr;49(4):413-8

A novel spontaneous mutation of the bovine papillomavirus-1 genome. Burnett S, et al. **Plasmid** 1988 Jul;20(1):61-74

Cloning and characterization of variable-sized gypsy mobile elements in Drosophila melanogaster. Lambertsson A, et al. **Plasmid** 1989 Jul;22(1):22-31

Cloning and genetic analysis of tra cistrons of the Tra 2/Tra 3 region of plasmid RP1. Palombo EA, et al. **Plasmid** 1989 Jul;22(1):59-69

Multipartite structure of mitochondrial DNA in a fungal longlife mutant. Schulte E, et al. **Plasmid** 1989 Jan; 21(1):79-84

Specificity of deletion events in pBR322. Weston-Hafer K, et al. **Plasmid** 1989 May;21(3):251-3

A specific role of MutT protein: to prevent dG.dA mispairing in DNA replication. Akiyama M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3949-52

Direct characterization of factor VIII in plasma: detection of a mutation altering a thrombin cleavage site (arginine-372——histidine). Arai M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4277-81

Escherichia coli mutY gene product is required for specific A-G——C.G mismatch correction. Au KG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9163-6

Frequency and spectrum of mutations produced by a single cis-syn thymine-thymine cyclobutane dimer in a single-stranded vector. Banerjee SK, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8141-5

Analysis of temperature-sensitive mutations in the simian virus 40 gene encoding virion protein 1. Behm M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9421-5

Identifying determinants of folding and activity for a protein of unknown structure. Bowie JU, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2152-6

Mutations in the maize mitochondrial T-urf13 gene eliminate sensitivity to a fungal pathotoxin. Braun CJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4435-9

Ligand binding to synthetic mutant myoglobin (His-E7——Gly): role of the distal histidine. Braunstein D, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8497-501

Targeted correction of a major histocompatibility class II E alpha gene by DNA microinjected into mouse eggs. Brinster RL, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7087-91

Linkage mapping of a mouse gene, iv, that controls left-right asymmetry of the heart and viscera. Brueckner M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5035-8

Mutations in the KRAS2 oncogene during progressive stages of human colon carcinoma. Burmer GC, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2403-7

Single adduct mutagenesis: strong effect of the position of a single acetylaminofluorene adduct within a mutation hot spot [published erratum appears in Proc Natl Acad Sci U S A 1989 Sep;86(18):7097] Burnouf D, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4147-51

Intracellular methicillin selection of Listeria monocytogenes mutants unable to replicate in a macrophage cell line. Camilli A, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5522-6

A mutant human proinsulin is secreted from islets of Langerhans in increased amounts via an unregulated pathway. Carroll RJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8943-7

Recovery of induced mutations for X chromosome-linked muscular dystrophy in mice. Chapman VM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1292-6

Dissection of functional domains of adenovirus DNA polymerase by linker-insertion mutagenesis. Chen M, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6116-20

Thymidine kinase-negative herpes simplex virus mutants establish latency in mouse trigeminal ganglia but do not reactivate. Coen DM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4736-40

Addition of a foreign oligopeptide to the major capsid protein of poliovirus. Colbère-Garapin F, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8668-72

A set of lacZ mutations in Escherichia coli that allow rapid detection of each of the six base substitutions. Cupples CG, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5345-9

Transcriptional bias: a non-Lamarckian mechanism for substrate-induced mutations. Davis BD. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5005-9

Targeted mutation of the Hprt gene in mouse embryonic stem cells. Doetschman T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8583-7

Rapid detection of ultraviolet-induced reversion of an amber mutation in mouse L cells. Eccles SJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1297-301

Isolation of peroxisome-deficient mutants of Saccharomyces cerevisiae. Erdmann R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5419-23

An apaH mutation causes AppppA to accumulate and affects motility and catabolite repression in Escherichia coli. Farr SB, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5010-4

Interferon gamma-resistant mutants are defective in the induction of indoleamine 2,3-dioxygenase. Feng GS, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7144-8

Mutator phenotype of Werner syndrome is characterized by extensive deletions. Fukuchi K, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5893-7

Single amino acid exchanges in the finger domain impair the function of the Drosophila gene Krüppel (Kr). Gaul U, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4599-603

A sensitive molecular assay for mutagenesis in mammalian cells: reversion analysis in cells with a mutant shuttle vector gene integrated into chromosomal DNA. Gelbert LM, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9143-7

Mutant gene phenotypes mediated by a Drosophila melanogaster retrotransposon require sequences homologous to mammalian enhancers. Geyer PK, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8593-7

Xenopus oocyte germinal-vesicle breakdown induced by [Val12]Ras is inhibited by a cytosol-localized Ras mutant. Gibbs JB, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6630-4

Identification of mutations leading to the Lesch-Nyhan syndrome by automated direct DNA sequencing of in vitro amplified cDNA. Gibbs RA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1919-23

Point mutants of Moloney murine leukemia virus that fail to package viral RNA: evidence for specific RNA recognition by a "zinc finger-like" protein sequence. Gorelick RJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8420-4

Scanning detection of mutations in human ornithine transcarbamoylase by chemical mismatch cleavage. Grompe M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5888-92

Partial diversion of a mutant proinsulin (B10 aspartic acid) from the regulated to the constitutive secretory pathway in transfected AtT-20 cells. Gross DJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4107-11

Mutagenesis of aspartic acid-116 enhances the ribonucleolytic activity and angiogenic potency of angiogenin. Harper JW, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7139-43

Trans-inactivation of the Drosophila brown gene: evidence for transcriptional repression and somatic pairing dependence. Henikoff S, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6704-8

Aberrant splicing and missense mutations cause steroid 21-hydroxylase [P-450(C21)] deficiency in humans: possible gene conversion products. Higashi Y, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7486-90

The spfash mouse: a missense mutation in the ornithine transcarbamylase gene also causes aberrant mRNA splicing. Hodges PE, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4142-6

Mutants of human colon adenocarcinoma, selected for thymidylate synthase deficiency. Houghton PJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1377-81

Overproduction of the epsilon subunit of DNA polymerase III counteracts the SOS mutagenic response of Escherichia coli. Jonczyk P, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9124-7

High frequency of large spontaneous deletions of DNA in tumor-derived CHEF cells. Kaden DA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2306-10

Cysteine residues 110 and 187 are essential for the formation of correct structure in bovine rhodopsin. Karnik SS, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8459-63

Membranous intermediates in endocytosis are labile, as shown in a temperature-sensitive mutant. Kessell I, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4968-72

Secretion in yeast of human lysozymes with different specific activities created by replacing valine-110 with proline by site-directed mutagenesis. Kikuchi M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9411-5

Export of an N-terminal fragment of Escherichia coli flagellin by a flagellum-specific pathway. Kuwajima G, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4953-7

Mutational analysis of the HLA-DQ3.2 insulin-dependent diabetes mellitus susceptibility gene. Kwok WW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1027-30

Evidence for increased in vivo mutation and somatic recombination in Bloom's syndrome. Langlois RG, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):670-4

A major insertion accounts for a significant proportion of mutations underlying human lipoprotein lipase deficiency. Langlois S, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):948-52

Infectious potential of human immunodeficiency virus type 1 reverse transcriptase mutants with altered inhibitor sensitivity. Larder BA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4803-7

Construction, stable transformation, and function of an amber suppressor tRNA gene in Drosophila melanogaster. Laski FA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6696-8

Mutation and selection in bacterial populations: alternatives to the hypothesis of directed mutation. Lenski RE, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2775-8

S-phase-specific regulation by deletion mutants of the human thymidine kinase promoter. Lipson KE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6848-52

Codon discrimination and anticodon structural context. Lustig F, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6873-7

Identification of the structural mutation responsible for the dibucaine-resistant (atypical) variant form of human serum cholinesterase. McGuire MC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):953-7

Effect of mutations and variations of HLA-A2 on recognition of a virus peptide epitope by cytotoxic T lymphocytes. McMichael AJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9194-8

Site-directed mutagenesis of the catalytic residues Asp-52 and Glu-35 of chicken egg white lysozyme. Malcolm BA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):133-7

Mobility of the maize suppressor-mutator element in transgenic tobacco cells. Masson P, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2219-23

Implications of a quasispecies genome structure: effect of frequent, naturally occurring amino acid substitutions on the antigenicity of foot-and-mouth disease virus. Mateu MG, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5883-7

Stabilization of phage T4 lysozyme by engineered disulfide bonds. Matsumura M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6562-6

At least two mutant alleles of ornithine delta-aminotransferase cause gyrate atrophy of the choroid and retina in Finns. Mitchell GA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):197-201

Binding region for human immunodeficiency virus (HIV) and epitopes for HIV-blocking monoclonal antibodies of the CD4 molecule defined by site-directed mutagenesis. Mizukami T, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9273-7

Identification of receptor-binding residues in the inflammatory complement protein C5a by site-directed mutagenesis. Mollison KW, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):292-6

Exceptional chromosomal mutations in a rodent population are not strongly underdominant. Nachman MW, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6666-70

Analysis of RAS oncogene mutations in human lymphoid malignancies. Neri A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9268-72

Phorbol ester binding to protein kinase C requires a cysteine-rich zinc-finger-like sequence. Ono Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4868-71

Mutational analysis of a yeast transcriptional terminator [published erratum appears in Proc Natl Acad Sci U S A 1989 Aug;86(16):6142] Osborne BI, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4097-101

Pathway of proton transfer in bacterial reaction centers: replacement of glutamic acid 212 in the L subunit by glutamine inhibits quinone (secondary acceptor) turnover. Paddock ML, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6602-6

Purification and characterization of the nifN and nifE gene products from Azotobacter vinelandii mutant UW45.

Paustian TD, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6082–6

Molecular basis of adult-onset and chronic GM2 gangliosidoses in patients of Ashkenazi Jewish origin: substitution of serine for glycine at position 269 of the alpha-subunit of beta-hexosaminidase [published erratum appears in Proc Natl Acad Sci U S A 1989 Jul;86(14):5625] Paw BH, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2413–7

Disease tropism of c-erbB: effects of carboxyl-terminal tyrosine and internal mutations on tissue-specific transformation. Pelley RJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7164–8

Expression of diphtheria toxin fragment A and hormone-toxin fusion proteins in toxin-resistant yeast mutants. Perentesis JP, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8386–90

Evidence that a point mutation in dihydrofolate reductase-thymidylate synthase confers resistance to pyrimethamine in falciparum malaria. Peterson DS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9114–8

Tn5supF, a 264-base-pair transposon derived from Tn5 for insertion mutagenesis and sequencing DNAs cloned in phage lambda. Phadnis SH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5908–12

A cyanobacterial mutant requiring the expression of ribulose bisphosphate carboxylase from a photosynthetic anaerobe. Pierce J, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5753–7

Linker insertion mutagenesis of the human immunodeficiency virus reverse transcriptase expressed in bacteria: definition of the minimal polymerase domain. Prasad VR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3104–8

Site-directed mutagenesis of the phosphocarrier protein. IIIGlc, a major signal-transducing protein in Escherichia coli. Presper KA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4052–5

Assay of vacuolar pH in yeast and identification of acidification-defective mutants. Preston RA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7027–31

Effect of mutations on the binding and translocation functions of a chloroplast transit peptide. Reiss B, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):886–90

Cloning of the major histocompatibility complex class II promoter binding protein affected in a hereditary defect in class II gene regulation. Reith W, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4200–4

Highly attenuated vaccinia virus mutants for the generation of safe recombinant viruses. Rodriguez D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1287–91

High frequency of mosaic mutants produced by N-ethyl-N-nitrosourea exposure of mouse zygotes. Russell LB, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9167–70

Missense mutations in an infectious human immunodeficiency viral genome: functional mapping of tat and identification of the rev splice acceptor. Sadaie MR, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9224–8

Molecular cloning of a neuron-specific transcript and its regulation during normal and aberrant cerebellar development. Sangameswaran L, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5651–5

Mutations in the Escherichia coli UvrB ATPase motif compromise excision repair capacity. Seeley TW, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6577–81

Anomalous and selective DNA mutations of the Old World monkey alpha-globin genes. Shaw JP, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1312–6

Attachment of a 40-base-pair G + C-rich sequence (GC-clamp) to genomic DNA fragments by the polymerase chain reaction results in improved detection of single-base changes. Sheffield VC, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):232–6

Murine "viable motheaten" mutation reveals a gene critical to the development of both B and T lymphocytes. Sidman CL, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6279–82

Incision by UvrABC excinuclease is a step in the path to mutagenesis by psoralen crosslinks in Escherichia coli. Sladek FM, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):3982–6

Identification of a point mutation in growth factor repeat C of the low density lipoprotein-receptor gene in a patient with homozygous familial hypercholesterolemia that affects ligand binding and intracellular movement of receptors. Soutar AK, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4166–70

Mutation at position 791 in Escherichia coli 16S ribosomal RNA affects processes involved in the initiation of protein synthesis. Tapprich WE, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4927–31

Defects in the low density lipoprotein receptor gene affect lipoprotein (a) levels: multiplicative interaction of two gene loci associated with premature atherosclerosis. Utermann G, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4171–4

A 5' splice-region G——C mutation in exon 1 of the human beta-globin gene inhibits pre-mRNA splicing: a mechanism for beta+-thalassemia. Vidaud M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1041–5

Initiation of skin carcinogenesis can occur by induction of carcinogen-specific point mutations in the Harvey-ras gene. Bailleul B, et al. **Prog Clin Biol Res** 1989;298:137–45

Molecular pathology and detection of beta-thalassemias. Cao A, et al. **Prog Clin Biol Res** 1989;309:3–11 (8 ref.)

Analysis of a lethal mutation (tw18) in the mouse t-complex. Martin GR, et al. **Prog Clin Biol Res** 1988;284:147–61 (30 ref.)

Consequences of exposure to initiating levels of carcinogens in vitro and in vivo: altered differentiation and growth, mutations, and transformation. Yuspa SH, et al. **Prog Clin Biol Res** 1989;298:127–35 (34 ref.)

Transposable elements in mutagenesis and regulation of gene expression. **Prog Nucleic Acid Res Mol Biol** 1989;36:1–347

Molecular lesions induced by I-R hybrid dysgenesis in Drosophila melanogaster. Busseau I, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:111–6

Identifying and cloning Drosophila genes by single P element insertional mutagenesis. Cooley L, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:99–109 (26 ref.)

Spontaneous germ-line ecotropic murine leukemia virus infection: implications for retroviral insertional mutagenesis and germ-line gene transfer. Copeland NG, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:221–34

Insertional mutations in transgenic mice. Costantini F, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:159–69

A retroviral insertion in the dilute (d) locus provides molecular access to this region of mouse chromosome 9. Jenkins NA, et al. **Prog Nucleic Acid Res Mol Biol** 1989; 36:207–20 (24 ref.)

Complementary use of chemical modification and site-directed mutagenesis to probe structure-activity relationships in enzymes. Profy AT, et al. **Prog Nucleic Acid Res Mol Biol** 1988;35:1–26 (135 ref.)

Suppressible insertion-induced mutations in Drosophila. Zachar Z, et al. **Prog Nucleic Acid Res Mol Biol** 1989; 36:87–98 (31 ref.)

Site-directed mutagenesis of glyceraldehyde-3-phosphate dehydrogenase reveals the role of residue Ser148. Corbier C, et al. **Protein Eng** 1989 May;2(7):559–62

Improvement in the alkaline stability of subtilisin using an efficient random mutagenesis and screening procedure. Cunningham BC, et al. **Protein Eng** 1987 Aug-Sep; 1(4):319–25

Point mutations modifying the thrombin inhibition kinetics and antithrombotic activity in vivo of recombinant hirudin. Degryse E, et al. **Protein Eng** 1989 Mar;2(6):459–65

Improved peptide function from random mutagenesis over short 'windows'. Dunn IS, et al. **Protein Eng** 1988 Oct; 2(4):283–91

Point mutation of alanine (31) to valine prohibits the folding of reduced lysozyme by sulfhydryl-disulfide interchange. Imoto T, et al. **Protein Eng** 1987 Aug-Sep;1(4):333–8

A new method for random mutagenesis of complete genes: enzymatic generation of mutant libraries in vitro. Lehtovaara PM, et al. **Protein Eng** 1988 Apr;2(1):63–8

Use of site-directed mutagenesis to probe the role of Cys149 in the formation of charge-transfer transition in glyceraldehyde-3-phosphate dehydrogenase. Mougin A, et al. **Protein Eng** 1988 Apr;2(1):45–8

Hierarchical strategy for protein folding and design: synthesis and expression of T4 lysozyme gene and two putative folding mutants. Narang SA, et al. **Protein Eng** 1987 Dec; 1(6):481–5

Oligonucleotide-directed misincorporation mutagenesis on single-stranded DNA templates. Singh M, et al. **Protein Eng** 1986 Oct-Nov;1(1):75–6

Essentiality of Lys-329 of ribulose-1,5-bisphosphate carboxylase/oxygenase from Rhodospirillum rubrum as demonstrated by site-directed mutagenesis. Soper TS, et al. **Protein Eng** 1988 Apr;2(1):39–44

Alteration of catalytic properties of chymosin by site-directed mutagenesis. Suzuki J, et al. **Protein Eng** 1989 May;2(7):563–9

Rapid evolutionary repair of base mispairings in stem regions of eukaryotic 5S rRNA. Horimoto K, et al. **Protein Seq Data Anal** 1989 Feb;2(2):93–9

Formation of heterodimers between wild type and mutant trp aporepressor polypeptides of Escherichia coli. Graddis TJ, et al. **Proteins** 1988;4(3):173–81

Amino acid substitutions that increase the thermal stability of the lambda Cro protein. Pakula AA, et al. **Proteins** 1989; 5(3):202–10

Mutation induction in haploid yeast after split-dose radiation-exposure. I. Fractionated UV-irradiation. Schenk K, et al. **Radiat Environ Biophys** 1989;28(2):101–11

The RAD6 gene of yeast: a link between DNA repair, chromosome structure and protein degradation? Siede W. **Radiat Environ Biophys** 1988;27(4):277–86 (61 ref.)

Radiation and thermal characteristics of mouse lymphoma cells and their radiation-sensitive mutant. Baba Y, et al. **Radiat Med** 1988 Sep-Oct;6(5):232–9

Influence of hyperthermia on gamma-ray-induced mutation in V79 cells. Banerjee S, et al. **Radiat Res** 1989 Aug; 119(2):305–12

Interaction between radiation and drug damage in mammalian cells. IV. Radiation response of adriamycin-resistant V79 cells. Belli JA. **Radiat Res** 1989 Jul;119(1):88–100

Relative biological effectiveness of tritiated water to gamma radiation for germ line mutations. Byrne BJ, et al. **Radiat Res** 1989 Mar;117(3):469–79

Heritable hypersensitivity to induced mutagenesis in the progeny of cell populations exposed to UVC (254 nm). D'Arpa P, et al. **Radiat Res** 1989 Jan;117(1):163–9

Protection against radiation-induced mutagenesis in V79 cells by 2-[(aminopropyl)amino] ethanethiol under conditions of acute hypoxia. Grdina DJ, et al. **Radiat Res** 1989 Feb; 117(2):251–8

Protection by WR1065 and WR151326 against fission-neutron-induced mutations at the HGPRT locus in V79 cells. Grdina DJ, et al. **Radiat Res** 1989 Mar; 117(3):500–10

The molecular nature of mutants induced by X rays is altered by the presence of the radioprotector cysteamine. Liber HL, et al. **Radiat Res** 1989 May;118(2):324–9

Plating efficiency as a function of time postirradiation: evidence for the delayed expression of lethal mutations. Mendonca MS, et al. **Radiat Res** 1989 Aug;119(2):387–93

Response of X-ray-sensitive CHO mutant cells to gamma radiation. I. Effects of low dose rates and the process of repair of potentially lethal damage in G1 phase. Nagasawa H, et al. **Radiat Res** 1989 Jun;118(3):559–67

X-ray-induced mutations in cultured human thyroid cells. Nakamura N, et al. **Radiat Res** 1989 Jul;119(1):123–33

His+ reversions caused in Salmonella typhimurium by different types of ionizing radiation. Roos H, et al. **Radiat Res** 1988 Nov;116(2):292–304

Preliminary characterization of cis interactions between mutations of poliovirus genome. Agut H, et al. **Res Virol** 1989 Jul-Aug;140(4):303–12

Mutation in ras proto-oncogenes and malignancy. Marshall CJ. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:398–405

Masters of mutation. Beardsley TM. **Sci Am** 1988 Nov; 259(5):34

The mutagenicity of refuse leachate from a municipal incinerator. Kamiya A, et al. **Sci Total Environ** 1989 Jan; 78:131–45

A yeast actin-binding protein is encoded by SAC6, a gene found by suppression of an actin mutation. Adams AE, et al. **Science** 1989 Jan 13;243(4888):231–3

Chromosome 17 deletions and p53 gene mutations in colorectal carcinomas. Baker SJ, et al. **Science** 1989 Apr 14;244(4901):217–21

Generation of a catalytic antibody by site-directed mutagenesis. Baldwin E, et al. **Science** 1989 Sep 8; 245(4922):1104–7

Prevention of translational frameshifting by the modified nucleoside 1-methylguanosine. Björk GR, et al. **Science** 1989 May 26;244(4907):986–9

Repair of the secretion defect in the Z form of alpha 1-antitrypsin by addition of a second mutation. Brantly M, et al. **Science** 1988 Dec 23;242(4886):1700–2

Pertussis toxin S1 mutant with reduced enzyme activity and a conserved protective epitope. Burnette WN, et al. **Science** 1988 Oct 7;242(4875):72–4

Repeat-induced G-C to A-T mutations in Neurospora. Cambareri EB, et al. **Science** 1989 Jun 30;244(4912):1571–5

High-resolution epitope mapping of hGH-receptor interactions by alanine-scanning mutagenesis. Cunningham BC, et al. **Science** 1989 Jun 2;244(4908):1081–5

Receptor and antibody epitopes in human growth hormone identified by homolog-scanning mutagenesis. Cunningham BC, et al. **Science** 1989 Mar 10;243(4896):1330–6

Neonatal hepatitis induced by alpha 1-antitrypsin: a transgenic mouse model. Dycaico MJ, et al. **Science** 1988 Dec 9;242(4884):1409–12

The role of somatic hypermutation in the generation of antibody diversity. French DL, et al. **Science** 1989 Jun 9; 244(4909):1152–7 (66 ref.)

Hidden thermodynamics of mutant proteins: a molecular dynamics analysis. Gao J, et al. **Science** 1989 Jun 2; 244(4908):1069–72

Metabolic correction of defects in the lipid anchoring of Thy-1 in lymphoma mutants. Gupta D, et al. **Science** 1988 Dec 9;242(4884):1446–8

Point mutational inactivation of the retinoblastoma antioncogene. Horowitz JM, et al. **Science** 1989 Feb 17; 243(4893):937–40

Point mutations in the human vitamin D receptor gene associated with hypocalcemic rickets. Hughes MR, et al. **Science** 1988 Dec 23;242(4886):1702–5

Triggering of allostery in an enzyme by a point mutation: ornithine transcarbamoylase. Kuo LC, et al. **Science** 1989 Aug 4;245(4917):522–4

Human diabetes associated with a mutation in the tyrosine kinase domain of the insulin receptor. Odawara M, et al. **Science** 1989 Jul 7;245(4913):66–8

The molecular basis of muscular dystrophy in the mdx mouse: a point mutation. Sicinski P, et al. **Science** 1989 Jun 30; 244(4912):1578–80

Mitochondrial DNA mutation associated with Leber's hereditary optic neuropathy. Wallace DC, et al. **Science** 1988 Dec 9;242(4884):1427–30

Gene on short arm of human X chromosome complements murine tsA1S9 DNA synthesis mutation. Brown CJ, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):173–8

Three new complementation groups of temperature-sensitive Chinese hamster ovary cell mutants defective in the endocytic pathway. Colbaugh PA, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):499–507

High-frequency deletion event at aprt locus of CHO cells: detection and characterization of endpoints. Dewyse P, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):19–28

Genetic analysis of XR-1 mutation in hamster and human hybrids. Giaccia AJ, et al. **Somat Cell Mol Genet** 1989 Jan;

15(1):71–7
Sequence analysis of mouse mitochondrial chloramphenicol–resistant mutants. Howell N, et al. **Somat Cell Mol Genet** 1989 May;15(3):237–44
Single–step selection of mammalian cell mutants deficient in CTP synthetase. Li IC, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):85–91
Aphidicolin hypersensitive mutant of Chinese hamster V79 fibroblasts that underproduces DNA polymerase–alpha antigen. Liu PK, et al. **Somat Cell Mol Genet** 1989 Jul; 15(4):331–44
Novel genetic instability associated with a developmentally regulated glycosyltransferase locus in Chinese hamster ovary cells. Sallustio S, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):387–400
Steady–state and nuclear run–on analyses of transcription in a temperature–sensitive Chinese hamster cell mutant with a defect in RNA metabolism. Slezynger TC, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):439–59
Mutant Chinese hamster ovary cells with defective methotrexate uptake are distinguishable by reversion analysis. Underhill TM, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):49–59
Two types of mouse FM3A cell mutants deficient in 5–aminoimidazole–4–carboxamide ribonucleotide transformylase and their transformants isolated by human chromosome–mediated gene transfer. Yamauchi M, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):39–48
Effect of heat shock on the mutagenicity of mutagens and carcinogens in Euglena gracilis. Chreño O, et al. **Teratogenesis Carcinog Mutagen** 1988;8(3):161–8
Mutagenicity of topoisomerase–active agents in bacteriophage T4. DeMarini DM, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):293–301
Comparison of behaviors for detection of heritable mutations. Ficsor G, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(3):153–60
Effect of duration of exposure to benzo(a)pyrene diol–epoxide on neoplastic transformation, mutagenesis, cytotoxicity, and total covalent binding to DNA of rodent cells. Krolewski B, et al. **Teratogenesis Carcinog Mutagen** 1988;8(3):127–36
Studies of mutagenesis and neoplastic transformation by bivalent metal ions and ionizing radiation. Little JB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):287–92
Somatic mutation induced by heliotrine in Drosophila. Sivlingham R, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(4):205–13
Comparative antimutagenicity of chlorophyllin and five other agents against aflatoxin B1–induced reversion in Salmonella typhimurium strain TA98. Whong WZ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):215–24
Cortisone cure of the eyelid closure defect in lidgap–Stein fetal mice: a dose–response and time–response study as a test of the hypomorph hypothesis for the lidgap alleles. Harris MJ. **Teratology** 1989 Jun;39(6):601–9
Interaction between the splotch mutation and retinoic acid in mouse neural tube defects in vitro. Kapron–Brás CM, et al. **Teratology** 1988 Aug;38(2):165–73
Regular systems of inbreeding with mutation. Campbell RB. **Theor Popul Biol** 1988 Aug;34(1):24–37
The effect of the reproductive system on mutation load. Hopf FA, et al. **Theor Popul Biol** 1988 Jun;33(3):243–65
Pharmacokinetics, biochemical mechanism and mutation accumulation: a comprehensive model of chemical carcinogenesis. Conolly RB, et al. **Toxicol Lett** 1988 Oct; 43(1–3):189–200
Reversal of an immune response gene effect by point mutation in the antigen sequence. Lechler RI, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):618–20
Controlling P element insertional mutagenesis. Cooley L, et al. **Trends Genet** 1988 Sep;4(9):254–8 (13 ref.)
Slips, strings and species. Dover GA. **Trends Genet** 1989 Apr; 5(4):100–2 (21 ref.)
No Mickey Mouse genetics. Jackson IJ. **Trends Genet** 1988 Oct;4(10):273–4 (16 ref.)
Plant hormone mutants. King PJ. **Trends Genet** 1988 Jun; 4(6):157–62 (26 ref.)
Might gene conversion be the mechanism of somatic hypermutation of mammalian immunoglobulin genes? Maizels N. **Trends Genet** 1989 Jan;5(1):4–8 (32 ref.)
Heads or tails? A homeotic gene for both. Sánchez–Herrero E. **Trends Genet** 1988 May;4(5):119–20 (33 ref.)
neus about c–erb–B–2 and HER2. Sefton BM. **Trends Genet** 1988 Sep;4(9):247–8 (27 ref.)
Mitochondrial DNA mutations and neuromuscular disease. Wallace DC. **Trends Genet** 1989 Jan;5(1):9–13 (42 ref.)
Site–directed mutagenesis and single–channel currents define the ionic channel of the nicotinic acetylcholine receptor [news] Dani JA. **Trends Neurosci** 1989 Apr;12(4):125–8 (22 ref.)
Activation by point mutation of Ki–ras gene occurring in transfected human normal DNA. Viel A, et al. **Tumori** 1988 Oct 31;74(5):499–506
Factors affecting mutation and emerging diseases [letter] Dixon CG. **Vet Rec** 1988 Nov 12;123(20):527
Genetic stability of Ross River virus during epidemic spread in nonimmune humans. Burness AT, et al. **Virology** 1988 Dec;167(2):639–43
Mutation rate of the hepadnavirus genome. Girones R, et al. **Virology** 1989 Jun;170(2):595–7
Mutations in ARS1 increase the rate of simple loss of plasmids in Saccharomyces cerevisiae. Strich R, et al. **Yeast** 1986 Sep;2(3):169–78
Mutagenic and anti–mutagenic properties of meju and other Korean food products from fermented soybeans. Rapp NS, et al. **Yonsei Med J** 1988;29(2):117–23
Deoxyribonucleotide synthesis in an Escherichia coli mutant (H 1491) which lacks ribonucleotide reductase subunit B2. Harder J, et al. **Z Naturforsch [C]** 1989 Jul–Aug; 44(7–8):715–8
Mutagenicity of antiviral substances of nucleobase analogue type in Salmonella typhimurium employing metabolic activation by mouse liver homogenate or cell–free plant extracts. el–Tarras A, et al. **Zentralbl Mikrobiol** 1989; 144(3):191–6
[Protoplast fusion between 3 mutant strains of Bacillus subtilis 168] Valerianov Ts, et al. **Acta Microbiol Bulg** 1988;23:11–7 (Eng. Abstr.) **(Bul)**
[Clindamycin–resistant mutants of a Methanobrevibacter species] Xu BX, et al. **Wei Sheng Wu Hsueh Pao** 1988 Sep; 28(3):189–92 (Eng. Abstr.) **(Chi)**
[Isolation and preliminary characterization of mutants of Escherichia coli K–12 overproducers of 2 exported proteins: beta–lactamase and alkaline phosphatase] Magnouloux–Blanc B, et al. **C R Acad Sci [III]** 1988; 307(6):323–8 (Eng. Abstr.) **(Fre)**
[Effect of temperature on the expression of bobbed mutations in Drosophila melanogaster] Dardour Z, et al. **C R Soc Biol (Paris)** 1988;182(4):382–90 (Eng. Abstr.) **(Fre)**
[Use of acetamide by Bacillus gordonae. I. Isolation and characterization of mutants able to use this compound as a source of carbon and energy] Pichinoty F. **C R Soc Biol (Paris)** 1988;182(2):177–80 (Eng. Abstr.) **(Fre)**
[Use of acetamide by Bacillus gordonae. II. Research on acetamidase and the taxonomic value of spontaneous mutation permitting the acquisition of this enzyme] Pichinoty F. **C R Soc Biol (Paris)** 1988;182(2):181–5 (Eng. Abstr.) **(Fre)**
[The genotoxic effect of epichlorohydrin and epoxy resins] Bittersohl G, et al. **Arch Geschwulstforsch** 1989;59(3):171–5 (32 ref.) (Eng. Abstr.) **(Ger)**
[New mutations and paternal age. A special situation in genetic counseling] Lederer D, et al. **Med Klin** 1988 Nov 11;83(22):740–5 (14 ref.) (Eng. Abstr.) **(Ger)**
[Introduction to molecular genetic diagnosis] Sperling K. **Monatsschr Kinderheilkd** 1989 Apr;137(4):194–200 (8 ref.) (Eng. Abstr.) **(Ger)**
[New results on the linearity of the dose–response relationship of radiation–induced mutation] Traut H. **Naturwissenschaften** 1988 Aug;75(8):375–9 (18 ref.) (Eng. Abstr.) **(Ger)**
[atwp mutation in an albino mouse substrain (AB/Hum–1)] Bundschuh VG, et al. **Z Versuchstierkd** 1988;31(6):249–54 (Eng. Abstr.) **(Ger)**
[The mutagenicity of organic microcontamination in the environment. II. The mutagenicity of volatile organic halogens in the Salmonella microsome test (Ames Test) with regard to the contamination of groundwater and drinking water] Mersch–Sundermann V. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):230–43 (Eng. Abstr.) **(Ger)**
[Comparative study on the mutagenic activity of rat liver and bladder S9 by fluctuation test] Hayashi K, et al. **Sangyo Igaku** 1988 Sep;30(5):385–91 (Eng. Abstr.) **(Jpn)**
[Results of umu test for 170 chemical dyes] Kosaka H, et al. **Sangyo Igaku** 1988 Sep;30(5):398–9 **(Jpn)**
[Enzymes and the genes participating in DNA replication in animal cells. Human DNA topoisomerase I mutant] Andoh T, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(11):1784–92 **(Jpn)**
[Generation of active oxygen by environmental factors; mutagenicity and active oxygen species] Sofuni T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2830–7 **(Jpn)**
[Om mutability system in Drosophila ananassae] Tanda S, et al. **Tanpakushitsu Kakusan Koso** 1989 Jan;34(1):34–42 **(Jpn)**
[Methods used in evaluating mutagenic and genotoxic properties of chemical compounds. II. The Ames test (an abridged version)] Janik–Spiechowicz E. **Med Pr** 1989; 40(1):28–37 (Eng. Abstr.) **(Pol)**
[Methods used for evaluating mutagenic and genotoxic properties of chemical compounds. I. The micronucleus test in vivo (an abridged version)] Przybojewska B. **Med Pr** 1988;39(5):365–72 (Eng. Abstr.) **(Pol)**
[Use of DNA polymorphism in the diagnosis of human genetic diseases] Cebrat S. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):461–82 (33 ref.) (Eng. Abstr.) **(Pol)**
[Basic level of DNA damage in human cells] Jendryczko A, et al. **Przegl Lek** 1989;46(5):470–3 (24 ref.) **(Pol)**
[Carcinogenic, genotoxic and mutagenic effects of formaldehyde (letter)] Rucińska M. **Przegl Lek** 1988; 45(11):814 **(Pol)**
[Selected bacterial tests used for detection of genotoxic properties of chemical compounds] Jenek J. **Rocz Panstw Zakl Hig** 1988;39(6):475–84 (Eng. Abstr.) **(Pol)**
[Studies of genotoxic activity of flavoring smoke condensate in bacterial cell systems] Jenek J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):385–8 (Eng. Abstr.) **(Pol)**
[Hybridization of A–factor deficient mutants of Streptomyces griseus by means of fusion of protoplasts] Efremenkova OV, et al. **Antibiot Khimioter** 1988 Oct;33(10):723–6 (Eng. Abstr.) **(Rus)**
[Lipids of initial and mutant cultures of Penicillium chrysogenum, producers of penicillin] Konova IV, et al. **Antibiot Khimioter** 1989 Jan;34(1):3–6 (Eng. Abstr.) **(Rus)**
[Cytogenetic effect of the antineoplastic anthracycline antibiotic 4'–epidoxorubicin] Nersesian AK, et al. **Antibiot Khimioter** 1989 Mar;34(3):216–7 (Eng. Abstr.) **(Rus)**
[Kinetic features of aberration occurrence in thermally–induced reorganization of T4 phage] Khusainov AA, et al. **Biofizika** 1989 May–Jun;34(3):396–9 (Eng. Abstr.) **(Rus)**
[Trigger mechanism of temperature switching off of Src oncogene TS–mutant in the Georgiev model] Kovarskii VA, et al. **Biofizika** 1989 Mar–Apr;34(2):259–62 (Eng. Abstr.) **(Rus)**
[Mutants of the phototrophic bacteria Rhodobacter sphaeroides sensitive to the mutagenic action of long–wave ultraviolet light] Rodina NE, et al. **Biol Nauki** 1988;(5):83–8 (Eng. Abstr.) **(Rus)**
[Mutagenic activity of native and inactivated herpes simplex virus] Rubashevskii EL, et al. **Biol Nauki** 1988;(9):83–7 (Eng. Abstr.) **(Rus)**
[Amino acid substitutions in the beta–subunit of RNA–polymerase from E. coli compensating for mutation–induced damage of the rho termination factors] Ogryz'ko EP, et al. **Bioorg Khim** 1988 Jul;14(7):963–4 (Eng. Abstr.) **(Rus)**
[Primary structure of the mutant genes of human leukocyte interferon alpha2] Petrenko VA, et al. **Bioorg Khim** 1988 Jun;14(6):810–4 (Eng. Abstr.) **(Rus)**
[Mechanism of photoregulation of carotenogenesis in Neurospora crassa: the use of mutants] Chernysheva EK, et al. **Dokl Akad Nauk SSSR** 1988;301(2):484–6 **(Rus)**
[Role of DNA lesion localization in chromosome mutagenesis] Ganassi EE, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1250–3 **(Rus)**
[Site–directed mutagenesis in the cut locus of Drosophila melanogaster controlled by the mobile element mdg4] Gerasimova TI, et al. **Dokl Akad Nauk SSSR** 1988; 300(2):462–5 **(Rus)**
[Structure of a new transformation–defective mutant of Rous sarcoma virus] Kashuba VI, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):206–8 **(Rus)**
[Selection of mutants with nondisjunction of minichromosomes in Saccharomyces cerevisiae] Larionov VL, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1485–8 **(Rus)**
[The structure of nucleosomes containing the mutant H2B histone] Lishanskaia AI, et al. **Dokl Akad Nauk SSSR** 1988; 300(2):482–5 **(Rus)**
[Site–specific mutagenesis in vivo directed by phosphoester analogs of oligonucleotides] Petrenko VA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):1002–4 **(Rus)**
[The starting CDC28 gene and common control of nuclear and mitochondrial genetic stability in Saccharomyces cerevisiae] Smirnova ME, et al. **Dokl Akad Nauk SSSR** 1988;301(2):461–4 **(Rus)**
[Novel partial t–haplotypes of domestic mouse: characteristics of basic properties] Agul'nik AI, et al. **Genetika** 1989 May;25(5):894–901 (Eng. Abstr.) **(Rus)**
[Isolation of mutants with impaired retroinhibition of histidine biosynthesis] Astvatsaturiants GV, et al. **Genetika** 1988 Nov;24(11):1928–34 (Eng. Abstr.) **(Rus)**
[Genetic processes and the problem of the target in chromosomal mutagenesis] Beliaev IIa, et al. **Genetika** 1988 Aug;24(8):1384–92 (34 ref.) (Eng. Abstr.) **(Rus)**
[Cloning of the gpp gene of Escherichia coli and the use of recBC, sbcB cells for inserting its mutant allele into the chromosomal structure] Belitskii BR, et al. **Genetika** 1988 Aug;24(8):1333–42 (Eng. Abstr.) **(Rus)**
[Cloning and study of Corynebacterium glutamicum genes complementing ilvA and thrA2 mutations in Escherichia coli] Beskrovnaia OIu, et al. **Genetika** 1989 Jan;25(1):49–56 (Eng. Abstr.) **(Rus)**
[Characteristics of detection of mutants on selective media] Chepurnoi AI, et al. **Genetika** 1988 Sep;24(9):1572–8 (Eng. Abstr.) **(Rus)**
[Cloning the genetic determinant of alpha–hemolysin and obtaining a series of insertional mutations in this determinant by the transposon Tn1000] Elizbarashvili DA, et al. **Genetika** 1989 Feb;25(2):207–13 (Eng. Abstr.) **(Rus)**
[Characterization of multiple changes of antibiotic resistance characters in Streptomyces coelicolor A3(2)] Fedorenko VA, et al. **Genetika** 1989 Apr;25(4):626–34 (Eng. Abstr.) **(Rus)**
[Mutagenesis in cloned yeast genes. The effect of mutation rad2 on the frequency of gene mutation in plasmid and chromosome] Fedorova IV, et al. **Genetika** 1989 May; 25(5):937–40 (Eng. Abstr.) **(Rus)**
[Mutagenesis on cloned yeast genes. The mutation of the yeast gene comprising the plasmid and chromosome] Gracheva LM, et al. **Genetika** 1988 Jul;24(7):1178–86 (Eng. Abstr.) **(Rus)**
[Effect of the heat shock reaction on the phenotypic manifestation of mutations in rifampicin resistance affecting the gene of the RNA polymerase beta–subunit under the

control of the lactose promotor] Kashlev MV, et al. **Genetika** 1988 Aug;24(8):1343–52 (Eng. Abstr.) **(Rus)**

[Genetic analysis of mitochondrial rho–mutability in Saccharomyces yeasts. VI. Quantitative characteristics of the effect of mutation srm5 on the mitochondrial stability of natural and recombinant genetic structures] Koltovaia NA, et al. **Genetika** 1988 Oct;24(10):1761–7 (Eng. Abstr.) **(Rus)**

[Possible mechanisms of the occurrence of chromosome restructurings. IV. Chromosome restructurings in spontaneous mutagenesis] Lebedeva LI, et al. **Genetika** 1988 Jun;24(6):1033–40 (Eng. Abstr.) **(Rus)**

[Mutants of Escherichia coli K–12 with altered excision efficiency of transposons Tn5 and Tn9] Mukhamedshin EK, et al. **Genetika** 1989 Apr;25(4):605–13 (Eng. Abstr.) **(Rus)**

[Characteristics of Escherichia coli K–12 mutants with altered effectiveness of excision of Tn5 and Tn9 transposons] Mukhamedshin EK, et al. **Genetika** 1989 May; 25(5):829–37 (Eng. Abstr.) **(Rus)**

[Yeast resistance to polyene antibiotics. VII. The interaction of the mutant alleles of the nystatin resistance genes in Saccharomyces cerevisiae] Ogorodnikova TE, et al. **Genetika** 1988 Aug;24(8):1364–70 (Eng. Abstr.) **(Rus)**

[Mutations in the Escherichia coli RNA–polymerase beta–subunit gene cloned in a multicopy plasmid] Ogryz'ko EP, et al. **Genetika** 1988 Oct;24(10):1894–6 (Eng. Abstr.) **(Rus)**

[Mutability of LYS2 gene in diploid Saccharomyces yeasts. II. Frequency of mutants induced by 6–N–hydroxylaminopurine and propiolactone] Pavlov IuI, et al. **Genetika** 1988 Oct;24(10):1752–60 (Eng. Abstr.) **(Rus)**

[Genetic analysis of mitochondrial rho–mutability in Saccharomyces yeasts. V. Isolation and mapping of nuclear mutation srm5, which simultaneously reduces the rho–mutability and mitotic stability of chromosomes] Prosvirova TIu, et al. **Genetika** 1988 Sep;24(9):1586–92 (Eng. Abstr.) **(Rus)**

[Modifying action of carbamoylation reaction on mutagenic and toxic effects of alkylating compounds and heavy metal salts] Sal'nikova LE, et al. **Genetika** 1988 Nov; 24(11):2088–90 (Eng. Abstr.) **(Rus)**

[The induction of auxotrophic mutations for riboflavin by the integration of plasmid pLRS33 into the chromosome of Bacillus subtilis] Shevchenko TN, et al. **Genetika** 1988 Aug;24(8):1371–4 (Eng. Abstr.) **(Rus)**

[Effect of color mutation on the function of the adrenal cortex in chronic feed stress in American mink] Trapezov OV, et al. **Genetika** 1989 Mar;25(3):508–12 (Eng. Abstr.) **(Rus)**

[Macromutation and evolution: the fixation of Goldschmidt's macromutations as species and genus traits. Hairlessness mutations in mammals] Vorontsov NN. **Genetika** 1988 Jun; 24(6):1081–8 (26 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of the combined mutagenic effects of chromium and manganese on a model of microbial mutation] Balezin SL, et al. **Gig Sanit** 1988 Dec;(12):22–4 (Eng. Abstr.) **(Rus)**

[Mutagenic activity of various substituted 1,3–dioxanes] Belokon' EM, et al. **Gig Sanit** 1988 Jun;(6):88–9 **(Rus)**

[Analysis of normochromic erythrocytes with micronuclei in the peripheral blood of rats after peroral administration of benzol] Fel'dt EG, et al. **Gig Sanit** 1989 Mar;(3):84–5 **(Rus)**

[Study of the mutagenic effect of various chemical substances on Drosophila] Komissarova LA, et al. **Gig Sanit** 1989 Mar; (3):81–2 **(Rus)**

[Evaluation of genetic risk of radiation during roentgenologic examination of women of reproductive age] Strel'nikova NK. **Gig Sanit** 1989 Mar;(3):41–4 (Eng. Abstr.) **(Rus)**

[Modification of the mutagenic effect of cyclophosphamide after long–term induction of the microsomal monooxygenase system] Sycheva LP, et al. **Gig Sanit** 1989 Mar;(3):82–4 **(Rus)**

[Study of chronic toxicity and late effects of polyvinyl alcohol of the 18/11 mark] Vyshemirskaia LD, et al. **Gig Sanit** 1988 Sep;(9):83–4 **(Rus)**

[Mutagenicity and harmful effects of anthraquinone dyes on DNA] Vasil'eva LA, et al. **Gig Tr Prof Zabol** 1989;(5):28–30 (Eng. Abstr.) **(Rus)**

[The mutagenic action of the DNA fragments of bovine adenovirus type 3 (BAV–3) containing early E1 (oncogene) and E4 regions] Charikova EV. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):401–7 (Eng. Abstr.) **(Rus)**

[Mutant Bac. subtilis A2 with an enhanced capacity to induce an adaptive response] Lotareva OV. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):198–203 (Eng. Abstr.) **(Rus)**

[The role of the regeneration of the mucous membrane of the organs of the gastroduodenal system and mutations of epitheliocytes in the pathogenesis of peptic ulcer] Rabinovich PD. **Klin Med (Mosk)** 1988 Nov;66(11):140–1 **(Rus)**

[Enzyme activity of induced auxotrophic mutants of El Tor Vibrio cholerae] Ognevskii PIa, et al. **Lab Delo** 1989; (6):61–3 (Eng. Abstr.) **(Rus)**

[Auxotrophic mutants of cholera and nonagglutinating vibrios and a method of their determination] Vallamatov ST, et al. **Lab Delo** 1988;(6):52–4 (Eng. Abstr.) **(Rus)**

[Valine replacement in hemoglobin in sickle cell anemia and in p21 N–RAS protein] Lalaiants IE, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):13–8 (43 ref.) (Eng. Abstr.) **(Rus)**

[Mapping UVS1 and UVS2 mutations in Streptomyces olivaceus VKX] Lavrenchuk VIa, et al. **Mikrobiol Zh** 1983 May–Jun;45(3):3–8 (Eng. Abstr.) **(Rus)**

[The nature of the uvs mutations of Streptomyces olivaceus VKX strain 22c supersensitive to UV light] Lavrenchuk VIa. **Mikrobiol Zh** 1988 Mar–Apr;50(2):3–6 (Eng. Abstr.) **(Rus)**

[Complementation analysis of ts mutants of the temperate phage 59 of Erwinia carotovora 268] Mukvich NS, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):12–7 (Eng. Abstr.) **(Rus)**

[Isolation of auxotrophic mutants under the action of N–methyl–N'–nitro–N–nitrosoguanidine and UV radiation and the mapping of new loci on the Streptomyces griseus chromosome by protoplast fusion] Serdechnaia AI, et al. **Mikrobiol Zh** 1987 Sep–Oct;49(5):3–8 (Eng. Abstr.) **(Rus)**

[Regulation of alpha–amylase biosynthesis in Bacillus diastaticus mutants with various levels of enzyme synthesis] Murygina VP. **Mikrobiologiia** 1988 Sep–Oct;57(5):734–9 (Eng. Abstr.) **(Rus)**

[Fractional and fatty acid composition of the lipids in the fungus Fusarium solani and its oligoconidial mutants] Mysiakina IS. **Mikrobiologiia** 1988 May–Jun;57(3):389–93 **(Rus)**

[Accumulation of N–terminal fragment of recA protein in the htpR– mutant impairs the SOS–function of Escherichia coli cells] Kiselev VI, et al. **Mol Biol (Mosk)** 1988 Sep–Oct; 22(5):1198–203 (Eng. Abstr.) **(Rus)**

[Mutations in Escherichia coli pmp and htpR genes stabilize the products of foreign gene expression] Kliachko EV, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):760–6 (Eng. Abstr.) **(Rus)**

[Genetically engineered mutants of the envelope protein of the RNA–containing bacteriophage] Kozlovskaia TM, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):731–40 (Eng. Abstr.) **(Rus)**

[The causes of instability of artificial mini–chromosomes in yeasts mutant for chl genes] Kuprina NIu, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):1072–9 (Eng. Abstr.) **(Rus)**

[Loss of CpG dinucleotides from DNA. VI. Methylation of mitochondrial and chloroplast genes] Mazin AL, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1688–96 (Eng. Abstr.) **(Rus)**

[Location of amino acid substitutions in human hemoglobin. Mass spectrometric rapid analysis of tryptic peptides] Molchanova TP, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):225–39 (Eng. Abstr.) **(Rus)**

[Somatic hypermutagenesis in immunoglobulin genes. II. Properties of somatic mutations and clonal selection] Rogozin IB, et al. **Mol Biol (Mosk)** 1989 May–Jun; 23(3):795–802 (Eng. Abstr.) **(Rus)**

[Mutations in the alpha–amylase gene of Bacillus amyloliquefaciens, leading to a decrease in the temperature of protein inactivation] Smirnova NA, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1257–64 (Eng. Abstr.) **(Rus)**

[Two–codon mutagenesis of alpha–amylase gene of Bacillus amyloliquefaciens] Smirnova NA, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1265–71 (Eng. Abstr.) **(Rus)**

[Somatic hypermutagenesis in immunoglobulin genes. I. Connection of somatic mutations with repeats. A statistical weighting method] Solov'ev VV, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):783–94 (Eng. Abstr.) **(Rus)**

[Molecular bases of evolution] Vol'kenshtein MV. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):33–51 (77 ref.) (Eng. Abstr.) **(Rus)**

[Neutral mutations and interference–stability of the genetic code] Vol'kenshtein MV, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1673–7 (26 ref.) (Eng. Abstr.) **(Rus)**

[Reduced frequency of homologous recombination in Bacillus subtilis mutants resistant to novobiocin] Barabanshchikov BI, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):39–43 (Eng. Abstr.) **(Rus)**

[The effect of mutations in recB and recC genes on the precise excision of Tn5 from pNM1 plasmid genome] Davenis SV, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep; (9):14–7 (Eng. Abstr.) **(Rus)**

[Molecular basis of human hereditary diseases caused by gene expression deficiency] Gaitskhoki VS. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):3–13 (83 ref.) (Eng. Abstr.) **(Rus)**

[Properties of thermostable HtpR–mutant of Escherichia coli] Kiselev VI, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep; (9):21–6 (Eng. Abstr.) **(Rus)**

[Molecular cloning of plasmid ColIb–P9 genes responsible for its mutator function] Kolot MN, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):8–14 (Eng. Abstr.) **(Rus)**

[Mutagenesis directed by phosphotriester analogs of oligonucleotides: a way to site–specific mutagenesis in vivo] Petrenko VA, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar; (3):35–9 (Eng. Abstr.) **(Rus)**

[Cloning and insertion mutagenesis of DNA fragment coding for the luminescent system of Photobacterium leiognathi] Ptitsyn LR, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct; (10):17–9 (Eng. Abstr.) **(Rus)**

[Analysis of mutants of Bacillus subtilis, auxotrophic for lysine] Shevchenko TN, et al. **Mol Gen Mikrobiol Virusol** 1988 Jun;(6):33–7 (Eng. Abstr.) **(Rus)**

[Possible role of translation initiation factors in the regulation of expression of attenuated mutations of poliovirus] Svitkin IuV, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):3–6 (Eng. Abstr.) **(Rus)**

[The effect of a mutagenic factor on the morphologo–biochemical properties of the yeast Saccharomyces cerevisiae] Abramov ShA, et al. **Prikl Biokhim Mikrobiol** 1989 May–Jun;25(3):397–400 (Eng. Abstr.) **(Rus)**

[A method of biochemical identification of mutations in red adenine–dependent yeast strains] Alenin VV, et al. **Prikl Biokhim Mikrobiol** 1989 Jan–Feb;25(1):135–41 (Eng. Abstr.) **(Rus)**

[Biological properties of a Bacillus brevis 101 mutant] Vypiach AN, et al. **Prikl Biokhim Mikrobiol** 1988 Jul–Aug; 24(4):535–41 (Eng. Abstr.) **(Rus)**

[The mutagenic effect of accelerated heavy ions on E. coli cells] Amirtaev KG, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):23–9 (Eng. Abstr.) **(Rus)**

[Mutations of resistance to 6–thioguanine following roentgen irradiation and subsequent treatment with cytosine arabinoside combined with hydroxyurea in Chinese hamster cells in the G1 phase] Elisova TV, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):617–22 (Eng. Abstr.) **(Rus)**

[Lethal and mutagenic effect of incorporated 6–3H–pyrimidines on extracellular phage lambda] Konevega LV, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):17–22 (Eng. Abstr.) **(Rus)**

[Does a powerful electromagnetic field in the decimetric range possess genetic activity in relation to microorganisms?] Panasenko VI. **Radiobiologiia** 1988 Sep–Oct;28(5):707–13 (Eng. Abstr.) **(Rus)**

[Potassium cyanate modification of the toxic and mutagenic effects of gamma radiation and benzo(a)pyrene] Serebrianyi AM, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):235–40 (Eng. Abstr.) **(Rus)**

[The effect of pre–irradiation conditions of cultivation on the induction of mutations in E. coli bacteria by gamma radiation] Tokarova B, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):36–40 (Eng. Abstr.) **(Rus)**

[Long–term mutagenic effect in various types of somatic cells in monkeys exposed to low doses of penetrating radiation] Kosichenko LP. **Tsitol Genet** 1989 Jan–Feb;23(1):14–20 (Eng. Abstr.) **(Rus)**

[The recombination capacity of Uvs mutants of Streptomyces olivaceus VKX] Lavrenchuk VIa, et al. **Tsitol Genet** 1988 Nov–Dec;22(6):34–9 (Eng. Abstr.) **(Rus)**

[Genetic effects of the new pesticide rovicurt] Tashkhodzhaev PI, et al. **Tsitol Genet** 1988 Sep–Oct; 22(5):52–5 (Eng. Abstr.) **(Rus)**

[The role of UDP glucuronosyl– and sulfotransferases in the butylhydroxytoluene suppression of the mutagenic action of carcinogenic nitroso compounds and cyclophosphane] Kalinina EV, et al. **Vopr Onkol** 1989;35(2):220–5 (Eng. Abstr.) **(Rus)**

[Influence of actinomycin D on the effectiveness of producing ts mutants of the Japanese encephalitis virus] Tikhomirov EE. **Vopr Virusol** 1988 May–Jun;33(3):335–8 (Eng. Abstr.) **(Rus)**

[The genotoxicity of a static electrical field] Neumerzhitskaia LV, et al. **Vrach Delo** 1988 Dec;(12):87–9 (Eng. Abstr.) **(Rus)**

[The mutagenic effect of polymorphonuclear leukocytes on Yersinia pestis] Atchabarov BB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):10–4 (Eng. Abstr.) **(Rus)**

[Specificity of the protective action of a ribosomal Shigella vaccine and the absence of activity in the ribosomes from R mutants] Levenson VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):55–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the protease activity of Vibrio cholerae strains and mutants with various biological properties] Uraleva VS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):7–10 (Eng. Abstr.) **(Rus)**

[A combination of Duchenne's progressive muscular dystrophy with congenital ichthyosis—a deletion or 2 independent gene mutations at Xp21—Xp22?] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):48–51 (Eng. Abstr.) **(Rus)**

[A mutant of Streptococcus lactis with resistance to bacteriophages isolated in Argentina and the United States of America] De Fabrizio SV, et al. **Rev Argent Microbiol** 1989 Jan–Mar;21(1):1–7 (Eng. Abstr.) **(Spa)**

[A Mitochondrial mutation defect is identified in Leber's hereditary optic neuropathy] Ehinger B. **Lakartidningen** 1989 Mar 29;86(13):1161 **(Swe)**

DRUG EFFECTS

Oligonucleotide–directed mutagenesis: a sequence–based screening. Duilio A, et al. **Anal Biochem** 1988 Nov 1; 174(2):618–22

Application of an immunoassay for cyclic acrolein deoxyguanosine adducts to assess their formation in DNA of Salmonella typhimurium under conditions of mutation induction by acrolein. Foiles PG, et al. **Carcinogenesis** 1989

Jan;10(1):87–90
Different mechanisms are involved in DNA damage, bacterial mutagenicity and cytotoxicity induced by 1,2–dibromo–3–chloropropane in suspensions of rat liver cells. Holme JA, et al. **Carcinogenesis** 1989 Jan;10(1):49–54
Inhibitory effect of chlorophyll on the genotoxicity of 3–amino–1–methyl–5H–pyrido[4,3–b]indole (Trp–P–2). Negishi T, et al. **Carcinogenesis** 1989 Jan;10(1):145–9
The dependence of the mutagenicity of methanesulphonic acid esters in S. typhimurium TA100 on the alkylation mechanism. Eder E, et al. **Chem Biol Interact** 1989; 69(1):45–59
Mutagenicities of N–acyl–N–arylhydroxylamines for Salmonella. Wang CY, et al. **Chem Biol Interact** 1988; 67(3–4):215–23
Mutagenicity profiles of newer amsacrine analogues with activity against solid tumours: comparison of microbial and mammalian systems. Ferguson LR, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):255–61
Molecular analysis of ethyl methanesulfonate–induced reversion of a chromosomally integrated mutant shuttle vector gene in mammalian cells. Greenspan JA, et al. **Mol Cell Biol** 1988 Oct;8(10):4185–9
Clastogenic effects of acrylamide in mouse bone marrow cells. Adler ID, et al. **Mutat Res** 1988 Nov;206(3):379–85
Humic acids inhibit the formation but not the mutagenicity of N–methyl–N–nitrosourea. Badaev SA, et al. **Mutat Res** 1989 Jan;210(1):9–13
Catalase inhibition by sulfide and hydrogen peroxide–induced mutagenicity in Salmonella typhimurium strain TA102. Carlsson J, et al. **Mutat Res** 1988 Nov;202(1):59–64
Antimutagens against spontaneous and induced reversion of a lacZ frameshift mutation in E. coli K–12 strain ND–160. Clarke CH, et al. **Mutat Res** 1988 Nov;202(1):19–23
Mutagenesis of xeroderma pigmentosum fibroblasts by acrolein. Curren RD, et al. **Mutat Res** 1988 Sep–Oct; 209(1–2):17–22
Long–term, low–dose benzo[a]pyrene–induced mutation in human lymphoblasts competent in xenobiotic metabolism. Danheiser SL, et al. **Mutat Res** 1989 Jan;210(1):143–7
Cytogenetical characterization of Chinese hamster ovary X–ray–sensitive mutant cells xrs 5 and xrs 6. III. Induction of cell killing, chromosomal aberrations and sister–chromatid exchanges by bleomycin, mono– and bi–functional alkylating agents. Darroudi F, et al. **Mutat Res** 1989 Jun;212(2):123–35
The effect of gamma–radiation on smoked fish using short–term mutagenicity assays. Dela Rosa AM, et al. **Mutat Res** 1989 Jul;223(3):303–7
Induction of micronuclei in Vicia faba root tips treated with heavy metals (cadmium and chromium) in the presence of NTA. De Marco A, et al. **Mutat Res** 1988 Nov; 206(3):311–5
Induction of specific–locus mutations in female mice by 1–ethyl–1–nitrosourea and procarbazine. Ehling UH, et al. **Mutat Res** 1988 Nov;202(1):139–46
An analysis of the mutagenicity of 1,2–dibromoethane to Escherichia coli: influence of DNA repair activities and metabolic pathways. Foster PL, et al. **Mutat Res** 1988 Nov; 194(3):171–81
Modifying role of dietary factors on the mutagenicity of aflatoxin B1: in vitro effect of plant flavonoids. Francis AR, et al. **Mutat Res** 1989 Apr;222(4):393–401
Mutagenicity of nitrofurantoin and furazolidone in Chinese hamster ovary cell strains. Gao N, et al. **Mutat Res** 1989 Apr;225(4):181–7
Influence of nalidixic acid on killing and mutation of V79 cells exposed to different damaging agents. Ghosh R, et al. **Mutat Res** 1988 Nov;202(1):71–5
Influence of benzamide on killing and mutation of density–inhibited V79 cells by MNNG. Ghosh R, et al. **Mutat Res** 1989 Mar;225(3):137–41
Induced recombination between duplicated neo genes stably integrated in the genome of CHO cells. Hellgren D, et al. **Mutat Res** 1989 Jan;210(1):197–206
Effect of dietary fibre on the mutagenicity and distribution of 2–amino–3,4–dimethylimidazo[4,5–f]quinoline (MeIQ). Howes AJ, et al. **Mutat Res** 1989 Feb;210(2):227–35
Gene deletion, a mechanism of induced mutation by arabinosyl nucleosides. Huang P, et al. **Mutat Res** 1989 Feb;210(2):291–301
Mutational specificities of 1'–acetoxysafrole, N–benzoyloxy–N–methyl–4–aminoazobenzene, and ethyl methanesulfonate in human cells. Ingle CA, et al. **Mutat Res** 1989 Mar–May;220(2–3):133–42
Suppression of mitomycin C–induced micronuclei in mouse bone marrow cells by post–treatment with vanillin. Inouye T, et al. **Mutat Res** 1988 Nov;202(1):93–5
Crude tea extracts decrease the mutagenic activity of N–methyl–N'–nitro–N–nitrosoguanidine in vitro and in intragastric tract of rats. Jain AK, et al. **Mutat Res** 1989 Jan;210(1):1–8
Influence of dam and mismatch repair system on mutagenic and SOS–inducing activity of methyl methanesulfonate in Escherichia coli. Janion C, et al. **Mutat Res** 1989 Jan; 210(1):15–22
The structure–function relationships of nitrofluorenes and nitrofluorenones in the Salmonella mutagenicity and CHO sister–chromatid exchange assays. Kitchin RM, et al. **Mutat Res** 1988 Nov;206(3):367–77
Modifying action of gamma–radiation in mutagenesis of E. coli WU36–10 induced by ethylene oxide, ethyl methanesulfonate and methyl methanesulfonate. Kolman A, et al. **Mutat Res** 1989 Jun;212(2):269–74
The relationship between DNA damage and mutation frequency in mammalian cell lines treated with N–nitroso–N–2–fluorenylacetamide. Kuo ML, et al. **Mutat Res** 1989 Jun;212(2):231–9
Lethal and mutation frequency responses of Spiroplasma citri cells to UV irradiation. Labarère J, et al. **Mutat Res** 1989 Jan;210(1):135–41
Nucleic acid binding and mutagenicity of active metabolites of 2–amino–3,8–dimethylimidazo[4,5–f]quinoxaline. Negishi C, et al. **Mutat Res** 1989 Jan;210(1):127–34
Genotoxicity of quinoxaline 1,4–dioxide derivatives in Escherichia coli and Salmonella typhimurium. Nunoshiba T, et al. **Mutat Res** 1989 May;217(3):203–9
Differential effects induced by N–hydroxy–2–acetylaminofluorene and N–hydroxy–2–aminofluorene in DNA excision–repair–deficient Chinese hamster cells. Okinaka RT, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):45–50
Mutagenicity of 4–aminoantipyrine and 4–nitrosoantipyrine, the C–nitroso derivative of antipyrine. Parisis DM, et al. **Mutat Res** 1988 Nov;206(3):317–26
On the glucose effect in acridine–induced frameshift mutagenesis in Escherichia coli. Pons FW, et al. **Mutat Res** 1989 Jan;210(1):71–7
N–nitroso–butyl–3–carboxypropyl–amine (BCPN), a urinary bladder carcinogen, non–mutagenic in S. typhimurium. Pool BL, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):79–83
Enhanced mutagenesis during post–treatment incubation of Escherichia coli treated with cis–diamminedichloroplatinum(II). Razaka H, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):63–6
Frameshift mutagenesis in Escherichia coli by reversible DNA intercalators: sequence specificity. René B, et al. **Mutat Res** 1988 Nov;202(1):35–43
Evidence for the absence of mutagenic activity of furfuryl alcohol in tests of germ cells in Drosophila melanogaster. Rodriguez–Arnaiz R, et al. **Mutat Res** 1989 Jul; 223(3):309–11
Comment on mutagenicity of diethyl sulfate in mice and on germ–cell mutagenicity testing. Russell WL. **Mutat Res** 1989 Mar;225(3):127–9
Effects of medicinal plant extracts from Chinese herbal medicines on the mutagenic activity of benzo[a]pyrene. Sakai Y, et al. **Mutat Res** 1988 Nov;206(3):327–34
Modifying role of dietary factors on the mutagenicity of aflatoxin B1: in vitro effect of sulphur–containing amino acids. Shetty TK, et al. **Mutat Res** 1989 Apr;222(4):403–7
Enhancing effects of cinoxate and methyl sinapate on the frequencies of sister–chromatid exchanges and chromosome aberrations in cultured mammalian cells. Shimoi K, et al. **Mutat Res** 1989 Jun;212(2):213–21
Mutagenicity of saccharin in a human cell strain. Suzuki H, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):13–6
Suppression of UV mutagenicity by human interferon. Suzuki N, et al. **Mutat Res** 1988 Nov;202(1):179–83
Molecular analysis of spontaneous and ethyl methanesulphonate–induced mutations of the hprt gene in hamster cells. Thacker J, et al. **Mutat Res** 1989 Jan; 210(1):103–12
Genotoxicity of Rogor studied in the sex–linked recessive lethal test and wing, eye and female germ–line mosaic assays in Drosophila melanogaster. Tripathy NK, et al. **Mutat Res** 1988 Nov;206(3):351–60
Mutagenicity of nitro– and amino–substituted phenazines in Salmonella typhimurium. Watanabe T, et al. **Mutat Res** 1989 Mar;225(3):75–82
Mutagenic activity and specificity of N–nitrosomethylaniline and N–nitrosodiphenylamine in Salmonella. Zielenska M, et al. **Mutat Res** 1988 Nov;202(1):269–76
Liquid holding increases mutation induction by formaldehyde and some other cross–linking agents in Escherichia coli K12. Zijlstra JA. **Mutat Res** 1989 Feb;210(2):255–61
Influence of metabolic factors on the mutagenic effectiveness of cyclophosphamide in Drosophila melanogaster. Zijlstra JA, et al. **Mutat Res** 1989 Jan;210(1):79–92
Chlorambucil effectively induces deletion mutations in mouse germ cells. Russell LB, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3704–8
Gene dosage mutants at adenine phosphoribosyltransferase locus induced by colcemid in Chinese hamster V79–AP4 cells. Colella CM, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):593–604
[The cytotoxic and antimutagenic effect of dithranol] Bernd A, et al. **Dermatol Monatsschr** 1989;175(5):261–7 (Eng. Abstr.) (Ger)

RADIATION EFFECTS

Spontaneous and UV–induced mutations in Escherichia coli K–12 strains with altered or absent DNA polymerase I. Bates H, et al. **J Bacteriol** 1989 May;171(5):2480–4
New recA mutations that dissociate the various RecA protein activities in Escherichia coli provide evidence for an additional role for RecA protein in UV mutagenesis. Dutreix M, et al. **J Bacteriol** 1989 May;171(5):2415–23
Repair of the plasmid pBR322 damaged by gamma–irradiation or by restriction endonucleases using different recombination–proficient E. coli strains. Bien M, et al. **Mutat Res** 1988 Nov;194(3):193–205
X–ray–induced specific–locus mutations in the ad–3 region of two–component heterokaryons of Neurospora crassa. II. More extensive genetic tests reveal an unexpectedly high frequency of multiple–locus mutations. de Serres FJ. **Mutat Res** 1989 Feb;210(2):281–90
Influence of uvrB and pKM101 on the spectrum of spontaneous, UV– and gamma–ray–induced base substitutions that revert hisG46 in Salmonella typhimurium. Eisenstadt E, et al. **Mutat Res** 1989 Jan;210(1):113–25
Gamma–ray–induced numerical and structural chromosome anomalies in mouse immature oocytes. Griffin CS, et al. **Mutat Res** 1988 Nov;202(1):209–13
In vivo mutant T cell frequency in atomic bomb survivors carrying outlying values of chromosome aberration frequencies. Hakoda M, et al. **Mutat Res** 1988 Nov; 202(1):203–8
Modifying action of gamma–radiation in mutagenesis of E. coli WU36–10 induced by ethylene oxide, ethyl methanesulfonate and methyl methanesulfonate. Kolman A, et al. **Mutat Res** 1989 Jun;212(2):269–74
The induction of revertants by heavy particles and gamma–rays in Salmonella tester strains. Kozubek S, et al. **Mutat Res** 1989 Feb;210(2):221–6
UV mutagenesis, cytotoxicity and split–dose recovery in a human–CHO cell hybrid having intermediate (6–4) photoproduct repair. Nairn RS, et al. **Mutat Res** 1989 May; 217(3):193–201
Radiation effects in Caenorhabditis elegans, mutagenesis by high and low LET ionizing radiation. Nelson GA, et al. **Mutat Res** 1989 Jun;212(2):181–92
An increased frequency of structural chromosome aberrations in persons present in the vicinity of Chernobyl during and after the reactor accident. Is this effect caused by radiation exposure? Stephan G, et al. **Mutat Res** 1989 May;223(1):7–12
Suppression of UV mutagenicity by human interferon. Suzuki N, et al. **Mutat Res** 1988 Nov;202(1):179–83
Activation of N–ras induced by ultraviolet irradiation in vitro. Van der Lubbe JL, et al. **Oncogene Res** 1988; 3(1):9–20
Cytotoxicity and mutagenicity of ophthalmic solution preservatives and UVA radiation in L5178Y cells. Withrow TJ, et al. **Photochem Photobiol** 1989 Sep;50(3):385–9
Perspectives on UV light mutagenesis: investigation of the CHO aprt gene carried on a retroviral shuttle vector. Drobetsky EA, et al. **Somat Cell Mol Genet** 1989 Sep; 15(5):401–9
An eighth complementation group of rodent cells hypersensitive to ultraviolet radiation. Thompson LH, et al. **Somat Cell Mol Genet** 1988 Nov;14(6):605–12

MUTISM

DRUG THERAPY

Methylphenidate in amytal–resistant mutism. Frost LH. **Acta Psychiatr Scand** 1989 Apr;79(4):408–10
The effect of bromocriptine on speech dysfunction in patients with diffuse brain injury (akinetic mutism). Crismon ML, et al. **Clin Neuropharmacol** 1988 Oct;11(5):462–6
Benzodiazepines for catatonic symptoms, stupor, and mutism. Wetzel H, et al. **Pharmacopsychiatry** 1988 Nov;21(6):394–5

ETIOLOGY

Functions of the corpus callosum: observations from callosotomy performed for intractable epilepsy. Censori B, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):53–9
Transient mutism following removal of a cerebellar tumor. A case report and review of the literature. Ammirati M, et al. **Childs Nerv Syst** 1989 Feb;5(1):12–4 (10 ref.)
Positional oculogyric crises. Case report. Heimburger RF. **J Neurosurg** 1988 Dec;69(6):951–3

PSYCHOLOGY

Psychiatric Munchausen's syndrome: a college register [letter] Markantonakis A, et al. **Br J Psychiatry** 1988 Jun; 152:867
A procedural distinction between elective and progressive mutism. Paniagua FA, et al. **J Behav Ther Exp Psychiatry** 1988 Sep;19(3):207–10 (9 ref.)
[Hyperkinetic mutism within the scope of consciousness disorder in a case of systemic lupus erythematosus] Kurokawa Y, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):89–96 (Eng. Abstr.) (Ger)

MUTISM, AKINETIC see **AKINETIC MUTISM**

MUZOLIMINE see under **PYRAZOLES**

MYALGIA, EPIDEMIC see **PLEURODYNIA, EPIDEMIC**

MYASTHENIA GRAVIS

Azathioprine as possible explanation of etiology of pure red cell aplasia in myasthenics [letter; comment] Smith N, et al. **Am J Clin Pathol** 1989 Jan;91(1):112. **Comment on:** Am J Clin Pathol 1988 May;89(5):687–93
Myasthenia gravis. First European conference. Maastricht, June 15–16, 1987. Proceedings. **Monogr Allergy** 1988; 25:1–158
[Pregnancy, labor and the puerperium in myasthenic mothers and the care of their neonates] Vejvalka J, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):65–8 (Cze)
[Myasthenia presenting during general anesthesia] Le

Cacheux P, et al. **Cah Anesthesiol** 1988 Dec;36(8):643–4 **(Fre)**

BLOOD

Proliferative response of blood cells of patients with myasthenia gravis to purified mammalian acetylcholine receptor. Sisely A, et al. **Pathol Immunopathol Res** 1989; 8(2):113–7

[Study of circulating lymphocytes by monoclonal antibodies in myasthenia gravis] Marchiori PE, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):248–53 (Eng. Abstr.) **(Por)**

CHEMICALLY INDUCED

Myasthenic syndrome caused by direct effect of chloroquine on neuromuscular junction. Robberecht W, et al. **Arch Neurol** 1989 Apr;46(4):464–8 (65 ref.)

Fine antigenic specificities of antibodies in sera from patients with D-penicillamine-induced myasthenia gravis. Tzartos SJ, et al. **Clin Exp Immunol** 1988 Oct;74(1):80–6

COMPLICATIONS

Thymolipoma in patients with myasthenia gravis: report of two cases and review. Pan CH, et al. **Acta Neurol Scand** 1988 Jul;78(1):16–21 (34 ref.)

Ocular myasthenia gravis associated with autoimmune hemolytic anemia and Hashimoto's thyroiditis. Iwasaki Y, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):90–1

Proteins with epitopes of the acetylcholine receptor in epithelial cell cultures of thymomas in myasthenia gravis. Marx A, et al. **Am J Pathol** 1989 Apr;134(4):865–77

Autosomal recessive epidermolysis bullosa simplex. Generalized phenotypic features suggestive of junctional or dystrophic epidermolysis bullosa, and association with neuromuscular diseases. Fine JD, et al. **Arch Dermatol** 1989 Jul;125(7):931–8 (18 ref.)

Concurrence of limb girdle muscular dystrophy and myasthenia gravis. Husain F, et al. **Arch Neurol** 1989 Jan; 46(1):101–2

Multiple autoimmune diseases in a predisposed patient [letter] Laukaitis JP, et al. **Arthritis Rheum** 1989 Jan;32(1):119–20

Use of continuous prolonged administration of atracurium in the ITU to a patient with myasthenia gravis. Pollard BJ, et al. **Br J Anaesth** 1989 Jan;62(1):95–7

Myasthenia gravis and chronic lymphocytic leukaemia [letter] Bennett M, et al. **Eur J Haematol** 1989 Jan;42(1):104

An unusual case of myasthenia gravis in an elderly patient with severe muscular atrophy. Vellodi C, et al. **Gerontology** 1988;34(4):209–11

Histiocytosis X and lymphoid follicular hyperplasia of the thymus in myasthenia gravis. Pescarmona E, et al. **Histopathology** 1989 May;14(5):465–70

Myasthenia gravis and lupus erythematosus. Ciaccio M, et al. **Int J Dermatol** 1989 Jun;28(5):317–20

Generalized trichoepitheliomas with alopecia and myasthenia gravis [letter] Miyakawa S, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):361–2

Staphylococcal carriage and infection in myasthenia gravis patients receiving therapeutic apheresis. Johnson RB, et al. **J Clin Apheresis** 1988;4(4):155–7

A neuromuscular transmission disorder: combined myasthenia gravis and Lambert–Eaton syndrome in one patient [letter] Brenna A, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):684–5

Myasthenia gravis associated with multiple sclerosis. Epidemiological survey and immunological findings. Somer H, et al. **J Neurol Sci** 1989 Jan;89(1):37–48

Blepharospasm and autoimmune diseases. Jankovic J, et al. **Mov Disord** 1987;2(3):159–63

Association of IgA nephropathy and myasthenia gravis. Miyazaki M, et al. **Nephron** 1989;51(3):402–4

Myasthenia gravis and Schmidt syndrome. McAlpine JK, et al. **Postgrad Med J** 1988 Oct;64(756):787–8

[Primary biliary cirrhosis associated with sarcoidosis and myasthenia (letter)] Turner K, et al. **Ann Med Interne (Paris)** 1989;140(2):149–51 **(Fre)**

[Myasthenia associated with Horton's disease (letter)] Lioté F, et al. **Presse Med** 1988 Sep 10;17(30):1543 **(Fre)**

[The association of myasthenia gravis, primary biliary cirrhosis and insulin-dependent diabetes [letter]] Taillan B, et al. **Presse Med** 1989 Mar 4;18(9):493 **(Fre)**

[A case of myasthenia gravis associated with rheumatoid arthritis, Sjögren's syndrome, hypergammaglobulinemia and hyperthyroidism] Mizuno T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1191–3 (7 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of autoimmune hepatitis with myasthenia gravis] Kikuchi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2261–4 **(Jpn)**

[Co-existence of clinical and immunohistochemical features of polymyositis and myasthenia gravis] Iwatsubo T, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):913–8 (Eng. Abstr.) **(Jpn)**

[Spinal muscular atrophy with features of myasthenia gravis and Eaton–Lambert syndrome. A case report] Ono S, et al. **Rinsho Shinkeigaku** 1988 May;28(5):497–500 (Eng. Abstr.) **(Jpn)**

[Extended thymectomy with marginal resection of the left brachiocephalic vein in invasive thymoma in myasthenia] Vasil'ev VN, et al. **Vestn Khir** 1988 Dec;141(12):33–4 **(Rus)**

[Jejunal perforation and myasthenia gravis. Etiopathogenic classification of perforations of the small intestine] Marchena Gómez J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):473–6 (57 ref.) (Eng. Abstr.) **(Spa)**

[Poland syndrome and myasthenia gravis] Padua-Gabriel A, et al. **Rev Invest Clin** 1989 Jan–Mar;41(1):63–5 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital myasthenia gravis. The clinical spectrum. A practical approach to diagnosis and treatment. Dooley JM, et al. **Clin Pediatr (Phila)** 1988 Dec;27(12):575–8

Alpha-bungarotoxin blocking antibodies in neonatal myasthenia gravis: frequency and selectivity. Vernet-der Garabedian B, et al. **J Neuroimmunol** 1989 Jan;21(1):41–7

Congenital dystrophy and myasthenia gravis [letter] Robinson RO, et al. **Neuropediatrics** 1988 Aug;19(3):168

DIAGNOSIS

An unusual subacute progressive motor neuronopathy with myasthenia-like features. Noseworthy JH, et al. **Can J Neurol Sci** 1988 Aug;15(3):304–9

Imaging in myasthenia gravis. Moore NR. **Clin Radiol** 1989 Mar;40(2):115–6 (20 ref.)

Respiratory failure as the initial presentation of myasthenia gravis. Marlowe FI, et al. **Ear Nose Throat J** 1989 Jun; 68(6):472–3

Myasthenia gravis presenting as respiratory failure: confusion with a psychiatric illness. Jordan CB 2d, et al. **J S C Med Assoc** 1989 Jun;85(6):292–4

AAEE Minimonograph #33: electrodiagnostic approach to defects of neuromuscular transmission. Keesey JC. **Muscle Nerve** 1989 Aug;12(8):613–26 (52 ref.)

A false-positive edrophonium test in a patient with a brainstem glioma. Dirr LY, et al. **Neurology** 1989 Jun; 39(6):865–7

Ocular pseudomyasthenia or ocular myasthenia 'plus': a warning to clinicians. Moorthy G, et al. **Neurology** 1989 Sep;39(9):1150–4

Myasthenia gravis. Fenichel GM. **Pediatr Ann** 1989 Jul; 18(7):432–8 (11 ref.)

Neonatal myasthenia gravis: specific advantages of repetitive stimulation over edrophonium testing. Hays RM, et al. **Pediatr Neurol** 1988 Jul–Aug;4(4):245–7

[Magnetic resonance imaging in myasthenia gravis. An alternative to mediastinal computerized tomography?] Emskötter T, et al. **Dtsch Med Wochenschr** 1988 Sep 30; 113(39):1508–10 (Eng. Abstr.) **(Ger)**

[Diagnosis, pathogenesis and treatment of myasthenia in thymic tumors] Lobzin VS, et al. **Sov Med** 1988;(12):79–82 **(Rus)**

DRUG THERAPY

Parkinsonism induced by pyridostigmine [letter] Iwasaki Y, et al. **Acta Neurol Scand** 1988 Sep;78(3):236

Treatment of experimental allergic myasthenia gravis with a new immunosuppressant: 15-deoxyspergualin. Ishigaki Y, et al. **Ann N Y Acad Sci** 1988;540:551–3

Myasthenia gravis: discontinuation of long-term azathioprine [letter] Michels M, et al. **Ann Neurol** 1988 Dec;24(6):798

Disseminated thymoma and myasthenia gravis: dramatic response to prednisone [letter] Taylor R, et al. **Ann Neurol** 1989 Feb;25(2):208–9

Failure of treatment of myasthenia gravis by cyclosporin-A: A case report. Marchiori PE, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):91–3

The effect of thalidomide on experimental autoimmune myasthenia gravis. Crain E, et al. **J Autoimmun** 1989 Apr; 2(2):197–202

Azathioprine as a single drug or in combination with steroids in the treatment of myasthenia gravis. Mantegazza R, et al. **J Neurol** 1988 Nov;235(8):449–53

Ciclosporin treatment in experimental autoimmune myasthenia gravis. Gunn HC, et al. **Monogr Allergy** 1988; 25:96–107

Ciclosporin in the treatment of myasthenia gravis. Tindall RS, et al. **Monogr Allergy** 1988;25:135–47

Portal hypertension secondary to azathioprine in myasthenia gravis. Fonseca V, et al. **Postgrad Med J** 1988 Dec; 64(758):950–2

[Treatment of severe myasthenia gravis with cyclosporin. A 12-month open trial] Goulon M, et al. **Presse Med** 1989 Feb 18;18(7):341–6 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Possible relationship between poly(ADP-ribose)synthetase and formation of antibody against acetylcholine receptors in patients with myasthenia gravis. Aoyagi T, et al. **Biochem Int** 1989 Feb;18(2):391–8

EPIDEMIOLOGY

Epidemiological study of myasthenia gravis in Sardinia, Italy (1958–1986). Giagheddu M, et al. **Acta Neurol Scand** 1989 Apr;79(4):326–33

Myasthenia gravis in the county of Viborg, Denmark. Sørensen TT, et al. **Eur Neurol** 1989;29(3):177–9

ETIOLOGY

Myasthenia gravis after general anesthesia and hepatitis B vaccine. Biron P, et al. **Arch Intern Med** 1988 Dec; 148(12):2685

Massive benign thymoma presenting as ocular myasthenia. Goadsby PJ, et al. **Aust N Z J Med** 1989 Jun;19(3):257–8

Myasthenia gravis associated with human T-cell lymphotropic virus type III infection. Wessel HB, et al. **Pediatr Neurol** 1987 Jul–Aug;3(4):238–9

[Paraneoplastic neurological manifestations of pulmonary neoplasms. Apropos of 2 case reports] Buysschaert M, et al. **Rev Med Brux** 1988 Sep;9(6):313–6 (Eng. Abstr.) **(Fre)**

[Myasthenia-multiple sclerosis: a possible pathogenetic relationship?] De Meyer F, et al. **Rev Med Brux** 1988 Sep; 9(6):321–5 (19 ref.) (Eng. Abstr.) **(Fre)**

[Clinicopathological studies on myasthenia gravis and thymus] Kawaguchi T, et al. **Kokyu To Junkan** 1988 Oct; 36(10):1101–4 (Eng. Abstr.) **(Jpn)**

[Concurrence of acute autonomic and sensory neuropathy and myasthenia gravis—a case report and pathogenetic considerations] Senda Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):332–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnostic and therapeutic tactics in cancerous lesions of the thymus in patients with myasthenia] Kuzin MI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):72–7 (Eng. Abstr.) **(Rus)**

GENETICS

Myasthenia gravis: familial occurrence. A study of 1100 myasthenia gravis patients. Szobor A. **Acta Med Hung** 1989; 46(1):13–21

Associations of the autoimmune myasthenias with genetic markers in the immunoglobulin heavy chain region. Demaine A, et al. **Ann N Y Acad Sci** 1988;540:266–8

MHC association between antistriational antibody-negative myasthenia gravis in the Chinese. Gin W, et al. **Ann N Y Acad Sci** 1988;540:513–5

HLA antigens and susceptibility to myasthenia gravis. Matej H, et al. **Arch Immunol Ther Exp (Warsz)** 1987; 35(6):795–801

Analysis of immunoglobulin and T cell receptor gene rearrangements in the thymus of myasthenia gravis patients. Tesch H, et al. **J Neuroimmunol** 1989 Feb;21(2–3):169–76

Familial autoimmune myasthenia gravis with different pathogenetic antibodies. Provenzano C, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1228–30

T-cell receptor V alpha and C alpha alleles associated with multiple and myasthenia gravis. Oksenberg JR, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):988–92

[Neonatal myasthenia gravis] Cabré Segu J, et al. **An Esp Pediatr** 1988 Jul;29(1):85–7 **(Spa)**

IMMUNOLOGY

Electrophoretic immunoblotting analysis of anti-thymus microsome antibodies in patients with myasthenia gravis. Hazama T, et al. **Acta Neurol Scand** 1989 Feb;79(2):88–96

Enrichment of germinal centre cells. Brown AN, et al. **Adv Exp Med Biol** 1988;237:227–32

Isolation of an antiidiotypic antibody with acetylcholine-receptor-like binding properties from myasthenia gravis patients. Eng H, et al. **Ann Inst Pasteur Immunol** 1988 Sep-Oct;139(5):569–80

The start of an autoimmune disease: idiotypic network during early progression of myasthenia gravis. Lefvert AK. **Ann Inst Pasteur Immunol** 1988 Nov-Dec;139(6):633–43

Proliferative responses to acetylcholine receptor peptides in myasthenia gravis. Berrih-Aknin S, et al. **Ann N Y Acad Sci** 1988;540:504–5

B-cell compartment in the thymus of patients with myasthenia gravis and control subjects. Christensson B, et al. **Ann N Y Acad Sci** 1988;540:293–7

Responsiveness of myasthenia gravis lymphocytes to recombinant interleukin-2. Cohen-Kaminsky S, et al. **Ann N Y Acad Sci** 1988;540:506–7

T-cell clones specific to acetylcholine receptor, its subunits, and peptides. Fujii Y, et al. **Ann N Y Acad Sci** 1988; 540:357–9

Blood and thymic lymphocyte responses to peptide sequences of the acetylcholine receptor in myasthenia gravis. Harcourt G, et al. **Ann N Y Acad Sci** 1988;540:354–6

Stimulation of autoimmune helper T lymphocytes from patients with myasthenia gravis with synthetic peptides of the acetylcholine receptor alpha subunit. Hohlfeld R, et al. **Ann N Y Acad Sci** 1988;540:511–2

Monoclonal antibodies as probes for acetylcholine receptor epitopes in thymuses and thymic epithelial tumors of patients with myasthenia gravis and nonmyasthenic controls. Kirchner T, et al. **Ann N Y Acad Sci** 1988; 540:508–10

Long-term follow-up study of relapse in symptoms and reelevation of acetylcholine receptor antibody titers in patients with myasthenia gravis. Komiya T, et al. **Ann N Y Acad Sci** 1988;540:605–7

Synthetic peptide of human acetylcholine receptor alpha-subunit sequence 125–147 (methionine 144), a more potent autoantigen than its norleucine 144 analog. Lennon VA, et al. **Ann N Y Acad Sci** 1988;540:516–9

In vitro blockade of neuromuscular transmission by monoclonal anti-acetylcholine receptor antibodies. Maselli RA, et al. **Ann N Y Acad Sci** 1988;540:523–4

Autoimmunity in neuromuscular disease. Newsom-Davis J. **Ann N Y Acad Sci** 1988;540:25–38 (77 ref.)

Analysis of helper T-cell specificity involved in the antibody

response to the acetylcholine receptor. Tami JA, et al. **Ann N Y Acad Sci** 1988;540:340–2

Myasthenia gravis: nicotinic acetylcholine receptors as targets for autoimmune attack. Newsom-Davis J, et al. **Biochem Soc Trans** 1989 Aug;17(4):635–7 (12 ref.)

Neuroimmunology of myasthenia gravis. Vincent A. **Brain Behav Immun** 1988 Dec;2(4):346–51 (28 ref.)

Anti-AChR-negative myasthenia gravis: clinical and immunological features. Evoli A, et al. **Clin Invest Med** 1989 Apr;12(2):104–9

Suppression of antibody responses to the acetylcholine receptor by natural antibodies. Sundblad A, et al. **Eur J Immunol** 1989 Aug;19(8):1425–30

Differential properties of alpha-bungarotoxin and myasthenic IgG bound to cloned alpha-subunit of nicotinic acetylcholine receptor. Hudecová S, et al. **Gen Physiol Biophys** 1989 Apr;8(2):157–61

An immunodominant site of acetylcholine receptor in experimental myasthenia mapped with T lymphocyte clones and synthetic peptides. Pachner AR, et al. **Immunol Lett** 1989 Feb;20(3):199–204

Cellular aspects of myasthenia gravis. Berrih-Aknin S, et al. **Immunol Res** 1988;7(3):189–99

Binding and blocking antibodies to the human acetylcholine receptor: are they selected in various myasthenia gravis forms? Morel E, et al. **Immunol Res** 1988;7(3):212–7

High recombinant interleukin-2 sensitivity of peripheral blood lymphocytes from patients with myasthenia gravis: correlations with clinical parameters. Cohen-Kaminsky S, et al. **J Autoimmun** 1989 Jun;2(3):241–58

Anti-acetylcholine receptor antibody related idiotypes in myasthenia gravis. Lefvert AK. **J Autoimmun** 1988 Feb; 1(1):63–72

T-cell reactivity in myasthenia gravis. Newsom-Davis J, et al. **J Autoimmun** 1989 Jun;2 Suppl:101–8

Are spontaneous anti-idiotypic antibodies against anti-acetylcholine receptor antibodies present in myasthenia gravis? Vincent AC. **J Autoimmun** 1988 Apr; 1(2):131–42

Phenotypic characteristics of thymic B lymphocytes in myasthenia gravis. Zweiman B, et al. **J Clin Immunol** 1989 May;9(3):242–7

In vitro proliferative responses and antibody titers specific to human acetylcholine receptor synthetic peptides in patients with myasthenia gravis and relation to HLA class II genes. Brocke S, et al. **J Clin Invest** 1988 Dec; 82(6):1894–900

A juxta-membrane epitope on the human acetylcholine receptor recognized by T cells in myasthenia gravis. Harcourt GC, et al. **J Clin Invest** 1988 Oct;82(4):1295–300

Autoimmune T lymphocytes in myasthenia gravis. Determination of target epitopes using T lines and recombinant products of the mouse nicotinic acetylcholine receptor gene. Melms A, et al. **J Clin Invest** 1989 Mar; 83(3):785–90

Inhibition of acute passive transfer experimental autoimmune myasthenia gravis with Fab antibody to complement C6. Biesecker G, et al. **J Immunol** 1989 Apr 15;142(8):2654–9

Regulation of antibody production by helper T cell clones in experimental autoimmune myasthenia gravis. Fujii Y, et al. **J Immunol** 1988 Nov 15;141(10):3361–9

Differences between ocular and generalized myasthenia gravis: binding characteristics of anti-acetylcholine receptor antibody against bovine muscles. Hayashi M, et al. **J Neuroimmunol** 1989 Feb;21(2-3):227–33

Effect of myasthenic patient sera on the number and distribution of acetylcholine receptors in muscle and nerve-muscle cultures from rat. Correlations with clinical state. Eymard B, et al. **J Neurol Sci** 1988 Aug;86(1):41–59

Role of the macrophage in the pathogenesis of experimental autoimmune myasthenia gravis. Kinoshita I, et al. **J Neurol Sci** 1988 Oct;87(1):49–59

Combined features of myasthenia gravis and Eaton-Lambert syndrome: anti-ganglioside antibodies in serum. Kusunoki S, et al. **J Neurol Sci** 1988 Oct;87(1):61–6

Changes in tetrodotoxin-resistant action potentials after passive transfer of myasthenia gravis patient sera. Losavio A, et al. **J Neurol Sci** 1989 Jul;91(3):345–51

Specificity of calcium channel autoantibodies in Lambert-Eaton myasthenic syndrome. Sher E, et al. **Lancet** 1989 Sep 16;2(8664):640–3

Non-receptor striated muscle antibodies in sera from patients with myasthenia gravis. Aarli JA, et al. **Monogr Allergy** 1988;25:128–34 (23 ref.)

Suppressor T cells in myasthenia gravis. Clementi F, et al. **Monogr Allergy** 1988;25:41–9 (32 ref.)

Experimental autoimmune myasthenia gravis. De Baets MH, et al. **Monogr Allergy** 1988;25:1–11 (26 ref.)

Anti-nicotinic receptor autoimmunity in myasthenia gravis. Establishment of specific T-helper cell lines and identification of sensitizing epitopes on the alpha-subunit. Hohlfeld R, et al. **Monogr Allergy** 1988;25:50–67 (51 ref.)

Antibody specificity in myasthenia gravis. Vincent A, et al. **Monogr Allergy** 1988;25:33–40 (36 ref.)

Selected IgG rapidly induces Lambert-Eaton myasthenic syndrome in mice: complement independence and EMG abnormalities. Lambert EH, et al. **Muscle Nerve** 1988 Nov; 11(11):1133–45

HLA antigens and immunoglobulin allotypes in myasthenia gravis. Apolostolski S, et al. **Neurologija** 1987;36(1–4):41–9

Evidence against acetylcholine receptor having a main immunogenic region as target for autoantibodies in myasthenia gravis. Lennon VA, et al. **Neurology** 1989 Aug; 39(8):1069–76

Anticollagen antibodies in myasthenia gravis. de Oliveira RM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):186–7

Immunologic studies on myasthenia gravis. II: A new chemotactic factor for lymphocytes found in patients with myasthenia gravis. Annoh T, et al. **Surgery** 1989 May; 105(5):615–24

[Myasthenia gravis and pregnancy. Review of the literature and considerations on the immunoprotective effect of alpha-fetoprotein through the observation of a clinical case] Gliaschera M, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb;110(1):20–7 (70 ref.) (Eng. Abstr.) **(Ita)**

[Analysis of peripheral blood T cell subsets in patients with MG by two-color method] Kanazawa H, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):808–11 (Eng. Abstr.) **(Jpn)**

[Long-term follow-up study of anti-acetylcholine receptor antibody titers and clinical symptoms in patients with myasthenia gravis] Komiya T, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):727–34 (Eng. Abstr.) **(Jpn)**

[Intrathecal immunoactivation in the patients with myasthenia gravis—autoantibodies in the cerebrospinal fluid] Yamanaka N, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):13–7 (Eng. Abstr.) **(Jpn)**

[The 2-phase action on mice of immunoglobulins isolated from the blood of a myasthenia patient] Smirnov VA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):549–52 (Eng. Abstr.) **(Rus)**

[Changes in the immunoreactivity of patients with generalized myasthenia following thymectomy] Zaitsev VT, et al. **Klin Khir** 1988;(12):25–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of the rate of acetylcholine receptor synthesis on the severity of experimental autoimmune myasthenia gravis. De Baets MH, et al. **Immunol Res** 1988;7(3):200–11

Search for nicotinic acetylcholine receptors on human leukocytes: absence of alpha-bungarotoxin binding in studies of healthy individuals and myasthenia gravis patients. Kaufman RL, et al. **J Neuroimmunol** 1989 Jun; 23(1):83–7

NURSING

[Care of patients in crisis of myasthenia gravis] Wang DL, et al. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):267–8 **(Chi)**

PATHOLOGY

Analysis of lymphocyte phenotype in human thymomas. Berrih-Aknin S, et al. **Adv Exp Med Biol** 1988;237:369–74

Thymic hyperplasia in myasthenia gravis: immunohistological abnormalities and responsiveness to recombinant IL2. Cohen-Kaminsky S, et al. **Adv Exp Med Biol** 1988;237:375–81

Myasthenia gravis thymus: clinical, histological and culture correlations. Schluep M, et al. **J Autoimmun** 1988 Oct; 1(5):445–67

Thymic myoid cells—stimulants and/or targets of autoimmune myasthenia gravis. Müller-Hermelink HK, et al. **Monogr Allergy** 1988;25:68–74

Phenotypic changes of the subseptal thymic epithelium in myasthenia gravis. Savino W, et al. **Thymus** 1988–89; 12(2):111–6

[Clinico-morphologic analysis of thymus tumors in patients with myasthenia] Shevniuk MM, et al. **Vrach Delo** 1988 Aug;(8):75–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Respiratory muscle function in myasthenia gravis. Mier-Jedrzejowicz AK, et al. **Am Rev Respir Dis** 1988 Oct;138(4):867–73

Resistance to succinylcholine in myasthenia gravis: a dose-response study. Eisenkraft JB, et al. **Anesthesiology** 1988 Nov;69(5):760–3

Thymopoietin: a marker of the human nicotinic acetylcholine receptor. Morel E, et al. **Ann N Y Acad Sci** 1988; 540:298–300

Intact Bell's phenomenon in a patient with myasthenia gravis and upward gaze paresis [letter] Miller NR, et al. **Arch Ophthalmol** 1989 Aug;107(8):1117

Absence of central functional cholinergic deficits in myasthenia gravis. Lewis SW, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):258–61

Relapse of myasthenia gravis after amoxycillin therapy. Sonawalla AB, et al. **JPMA** 1989 Jan;39(1):18–9

Stimulation SFEMG in myasthenia gravis. Jabre JF, et al. **Muscle Nerve** 1989 Jan;12(1):38–42

The effect of cholinesterase inhibitors of SFEMG in myasthenia gravis. Massey JM, et al. **Muscle Nerve** 1989 Feb;12(2):154–5

Neuronal antinuclear antibodies in a patient with Lambert-Eaton myasthenic syndrome and small-cell lung carcinoma. Dropcho EJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):249–51

[Left ventricular systolic function in patients with myasthenia gravis] Cong ZQ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):103–6, 127–8 (Eng. Abstr.) **(Chi)**

[Contractile abnormalities of myasthenic muscle prior to neuromuscular transmission block] Takamori M, et al. **Rinsho Shinkeigaku** 1975 Feb;15(2):65–74 (Eng. Abstr.) **(Jpn)**

[Carrying a fetus to term twice in high risk pregnancy and giving birth to healthy infants by a woman with myasthenia gravis] Malarewicz A. **Ginekol Pol** 1988 Sep;59(9):588–90 (Eng. Abstr.) **(Pol)**

[Study of thymus gland function for the prognosis of the course of myasthenia gravis] Lobzin VS, et al. **Klin Med (Mosk)** 1988 Dec;66(12):78–80 (Eng. Abstr.) **(Rus)**

[The cardiovascular system in myasthenia (a review)] Orlov VA, et al. **Ter Arkh** 1988;60(10):44–8 (49 ref.) **(Rus)**

[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):96–102 (Eng. Abstr.) **(Rus)**

[Comparative analysis of disorders of neuromuscular conduction in patients with botulism and Eaton-Lambert myasthenic syndrome] Sanadze AG, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):102–7 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

The role of life events in the myasthenia gravis outcome: a one-year longitudinal study. Magni G, et al. **Acta Neurol Scand** 1989 Apr;79(4):288–91

A study of hand preference in myasthenia gravis. Cosi V, et al. **Cortex** 1988 Dec;24(4):573–7

Cognition in myasthenia [letter; comment] Iwasaki Y, et al. **Neurology** 1989 Jul;39(7):1002. **Comment on:** Neurology 1988 Aug;38(8):1173–7

Memory impairment in myasthenia gravis [letter] Riker WF. **Neurology** 1989 Apr;39(4):611–2

RADIOGRAPHY

Radiologic detection of thymoma in patients with myasthenia gravis. Ellis K, et al. **AJR** 1988 Nov;151(5):873–81

Radiographic and computed tomographic detection of thymoma in patients with myasthenia gravis. Lupi L, et al. **Rays** 1988 Jan–Apr;13(1):17–21

REHABILITATION

How to fight MG fatigue. Rhynsburger JF. **Am J Nurs** 1989 Mar;89(3):337–40

SURGERY

Thoracic epidural anesthesia for transsternal thymectomy in myasthenia gravis. Burgess FW, et al. **Anesth Analg** 1989 Oct;69(4):529–31

Transsternal radical thymectomy for myasthenia gravis: a 15-year review. Hatton PD, et al. **Ann Thorac Surg** 1989 Jun;47(6):838–40

Cumulative dose-response curves for atracurium in patients with myasthenia gravis. Smith CE, et al. **Can J Anaesth** 1989 Jul;36(4):402–6

Cervical thymectomy in the treatment of myasthenia gravis. Whyte RI, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):74–8

"Maximal" thymectomy for myasthenia gravis. Surgical anatomy and operative technique. Jaretzki A 3d, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):711–6

The use of atracurium in Chinese myasthenic patients undergoing thymectomy. Yang MW, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):161–8

Myasthenia gravis and Graves' disease [letter] Wolfe LK. **South Med J** 1988 Oct;81(10):1334–5

Urinary incontinence after transurethral resection of prostate in myasthenia gravis patients. Khan Z, et al. **Urology** 1989 Sep;34(3):168–9

[Advances in surgery of myasthenia gravis] Chen WQ. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):505–7 (17 ref.) **(Chi)**

[The value of thymectomy in myasthenia gravis] Buchmann P, et al. **Helv Chir Acta** 1989 Jan;55(5):553–8 (Eng. Abstr.) **(Ger)**

[Thymus surgery in myasthenia gravis] Dapper F, et al. **Helv Chir Acta** 1988 Nov;55(4):455–8 (Eng. Abstr.) **(Ger)**

[Surgical intervention on the thymus in children and adolescents] Schück R, et al. **Z Kinderchir** 1988 Aug; 43(4):239–42 (Eng. Abstr.) **(Ger)**

[Thymectomy and myasthenia gravis. Critical remarks on our experience] Tesauro B, et al. **Minerva Chir** 1988 Sep 15;43(17):1319–22 (Eng. Abstr.) **(Ita)**

[Evaluation of factors influencing the postoperative respiratory care in patients with myasthenia gravis] Araki Y, et al. **Kyobu Geka** 1988 Sep;41(10):854–8 (Eng. Abstr.) **(Jpn)**

[The result of extended thymectomy in patients with myasthenia gravis of pure ocular type] Yang DS, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):313–7 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus following thymectomy in myasthenia gravis] Kinoshita I, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1894–5 (6 ref.) **(Jpn)**

[A myasthenic crisis following cholecystectomy] Tatarchuk

PI, et al. **Klin Khir** 1988;(12):49–50 **(Rus)**
[Efferent methods in the complex treatment of myasthenia gravis] Sazonov AM, et al. **Sov Med** 1989;(1):17–20 (Eng. Abstr.) **(Rus)**
[Myasthenic thymoma in the residual thymus gland after thymectomy] Vasil'ev VN, et al. **Vestn Khir** 1989 Feb; 142(2):50–1 **(Rus)**
[Type 1 diabetes after thymectomy for myasthenia gravis (letter)] Alfaro A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):437–8 **(Spa)**
[Inhalation anesthesia in myasthenic patients undergoing elective thymectomy] Rubio Pascual P, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):308–10 (Eng. Abstr.) **(Spa)**
[Peroperative management of myasthenia gravis patients undergoing thymectomy] Portela JM, et al. **Rev Invest Clin** 1988 Jul–Sep;40(3):217–21 (Eng. Abstr.) **(Spa)**

THERAPY

Plasma exchange in myasthenia gravis: changes in serum complement and immunoglobulins. Thorlacius S, et al. **Acta Neurol Scand** 1988 Sep;78(3):221–7
Strategies for the treatment of myasthenia gravis. Drachman DB, et al. **Ann N Y Acad Sci** 1988;540:176–86 (60 ref.)
Therapeutic immunoadsorption of acetylcholine receptor antibodies in myasthenia gravis. Sato T, et al. **Ann N Y Acad Sci** 1988;540:554–6
Specific suppression of the antibody response to acetylcholine receptor in vitro and in vivo by daunomycin–acetylcholine receptor conjugates. Shelton D, et al. **Ann N Y Acad Sci** 1988;540:530–2
Treatment for refractory myasthenia gravis. Sakano T, et al. **Arch Dis Child** 1989 Aug;64(8):1191–3
Plasma perfusion in myasthenia gravis. Passalacqua S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):602–5
Treatment of experimental myasthenia with autologous idiotypes linked to muramyl dipeptide. Valderrama R, et al. **Clin Exp Immunol** 1988 Jul;73(1):123–7
Plasma exchange with selective immunoadsorption of anti–acetylcholine receptor antibodies. Somnier FE, et al. **J Neuroimmunol** 1989 Apr;22(2):123–7
Comparison of the results of different therapeutic measures in 198 myasthenia gravis patients. Apostolski S, et al. **Monogr Allergy** 1988;25:86–95
Long–term effects of treatment in 374 patients with myasthenia gravis. Oosterhuis HJ. **Monogr Allergy** 1988; 25:75–85
Myasthenia gravis: new therapeutic strategies. Toyka KV, et al. **Monogr Allergy** 1988;25:108–15 (15 ref.)
[Cholinergic crisis in a patient with myasthenia treated by plasma exchange and anticholinesterase agents] Pourrat O, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:51–2 (Eng. Abstr.) **(Fre)**
[Central nervous system infection caused by Aspergillus fumigatus. A complication of immunosuppressive therapy in myasthenia gravis] Nau R, et al. **Nervenarzt** 1989 Mar; 60(3):178–80 **(Ger)**
[The prognosis of juvenile myasthenia gravis] Toifl K, et al. **Padiatr Padol** 1988;23(3):195–207 (Eng. Abstr.) **(Ger)**
[Intensive therapy of myasthenia gravis] Henze T. **Psychiatr Neurol Med Psychol Beih** 1988;40:74–8 **(Ger)**
[Plasmapheresis in neuromuscular diseases. Personal cases] Affuso R, et al. **Acta Neurol (Napoli)** 1989 Apr–Jun; 11(2–3):200–10 (Eng. Abstr.) **(Ita)**
[Therapy of myasthenia and polymyositis] Messina C. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):186–99 (82 ref.) **(Ita)**
[Myasthenia gravis: treatment with thymectomy, corticoids and plasmapheresis] Diss–Tosta E, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):39–50 (Eng. Abstr.) **(Por)**
[Biological sorption in immunoneurologic diseases] Novikova RI, et al. **Vrach Delo** 1989 Jun;(6):87–90 (Eng. Abstr.) **(Rus)**
[High doses of intravenous gamma globulin in the treatment of myasthenia gravis] Fort López–Barajas JM, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):325–8 (Eng. Abstr.) **(Spa)**

VETERINARY

Congenital myasthenic syndrome in the dog breed Gammel Dansk Hønsehund: clinical, electrophysiological, pharmacological and immunological comparison with acquired myasthenia gravis. Flagstad A, et al. **Acta Vet Scand** 1989;30(1):89–102
Myasthenia gravis in the cat. Joseph RJ, et al. **J Vet Intern Med** 1988 Apr–Jun;2(2):75–9
[Myasthenia gravis and a thymoma in a cat] van Oosterhout IC, et al. **Tijdschr Diergeneeskd** 1989 May 1;114(9):499–504 (Eng. Abstr.) **(Dut)**

MYB GENES see **ONCOGENES**

MYC GENES see **ONCOGENES**

MYCETOMA see **MADUROMYCOSIS**

MYCETOZOA see **MYXOMYCOTA**

MYCOBACILLIN see under **ANTIBIOTICS, ANTIFUNGAL**

MYCOBACTERIACEAE

ANALYSIS

Distribution of phthiocerol diester, phenolic mycosides and related compounds in mycobacteria. Daffé M, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2049–55

MYCOBACTERIOPHAGES

Mycobacteriophage vector systems. Jacobs WR Jr, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S404–10 (12 ref.)

MYCOBACTERIUM

Effect of sodium diethyldithiocarbamate, Corynebacterium parvum and mycobacterium cell wall extract on in vitro blastogenic responses of bovine blood lymphocytes. Archambault D, et al. **Cornell Vet** 1989 Jan;79(1):11–24
Acid–fast smears: a cause of false positive reactions. Allen MA, et al. **Med Lab Sci** 1988 Apr;45(2):184–6
[Atypical mycobacteria causing generalized lung infections] Nurmela T, et al. **Duodecim** 1988;104(6):399–403 (15 ref.) **(Fin)**
[Atypical mycobacteria] Saito H. **Kekkaku** 1988 Oct; 63(10):667–76 (50 ref.) (Eng. Abstr.) **(Jpn)**
[Mycobacteria as a possible cause of Crohn's disease] Funakoshi O. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul; 85(7):1340–6 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Detection of phthiocerol derivatives in Mycobacterium ulcerans: a preliminary report. Lévy–Frébault V, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:61–3
Plasma desorption mass spectrometric analysis of mycobacterial glycolipids. Jardine I, et al. **Anal Chem** 1989 Mar 1;61(5):416–22
Characterization of total deoxyribonucleic acid of Mycobacterium paratuberculosis (ATCC 19698) and of M. avium complex (ATCC 25291) using restriction enzymes. Labidi A. **Arch Inst Pasteur Tunis** 1988 Jul–Oct; 65(3–4):261–70
Thermodynamic parameters and shape of the mycobacterial polymethylpolysaccharide–fatty acid complex. Kiho T, et al. **Biochemistry** 1988 Jul 26;27(15):5824–8
Analysis of fatty acids by negative ion gas chromatography/tandem mass spectrometry: structural correlations between alpha–mycolic acid chains and delta–5–monounsaturated fatty acids from Mycobacterium phlei. Couderc F, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):317–21
Particular matrix for fast atom bombardment mass spectrometric analysis of phenolic glycolipid antigens isolated from pathogen mycobacteria. Rivière M, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):275–8
Isolation and structural characterization of a new non–phosphorylated lipoamino acid from Mycobacterium phlei. Lerouge P, et al. **Chem Phys Lipids** 1988 Dec; 49(3):161–6
Tetraenoic and pentaenoic mycolic acids from Mycobacterium thamnopheos. Structure, taxonomic and biosynthetic implications. Daffé M, et al. **Eur J Biochem** 1988 Nov 1;177(2):339–44
Mycobacterium xenopi: identification of different chemotypes based on the lipid pattern analysis by TLC. Huttunen R, et al. **Folia Microbiol (Praha)** 1988;33(4):332–4
Capillary gas chromatographic analysis of mycolic acid cleavage products, cellular fatty acids, and alcohols of Mycobacterium xenopi. Luquin M, et al. **J Clin Microbiol** 1989 Jun;27(6):1403–6
Molecular species of mycolic acid subclasses in eight strains of Mycobacterium smegmatis. Baba T, et al. **Lipids** 1988 Dec;23(12):1132–8
Relationship between mycobacterial species and their carotenoid pigments. Ichiyama S, et al. **Microbiol Immunol** 1988;32(5):473–9
Structure of mycobacteria: recent developments in defining cell wall carbohydrates and proteins. Brennan PJ. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S420–30 (55 ref.)
[An immune adjuvant activity of mycolic acid–containing glycolipid, trehalose–2,3,6'–trimycolate, derived from Gordona aurantiaca] Ohtsubo Y, et al. **Nippon Saikingaku Zasshi** 1989 Mar;44(2):533–9 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

The use of fluorescein–conjugated lectins for visualizing atypical mycobacteria. Jackson M, et al. **Arch Ophthalmol** 1989 Aug;107(8):1206–9
The identification of mycobacteria met in clinical practice. Jenkins PA. **Bull Int Union Tuberc Lung Dis** 1988 Sep; 63(3):7–9
Mycobacterium scrofulaceum, serovar Cole. Schröder KH, et al. **Int J Med Microbiol** 1989 May;271(1):22–7
Diversity and sources of rapidly growing mycobacteria associated with infections following cardiac surgery. Wallace RJ Jr, et al. **J Infect Dis** 1989 Apr;159(4):708–16
Rapid identification of Mycobacterium species. Moinard D, et al. **Res Microbiol** 1989 Jan;140(1):33–41
[Differentiation between Mycobacterium malmoense and Mycobacterium nonchromogenicum by ethambutol susceptibility] Yamori S, et al. **Kekkaku** 1989 Feb; 64(2):95–7 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Additional structures seen in leprosy smears. Bhatia VN. **Indian J Lepr** 1989 Jul;61(3):415–7

DRUG EFFECTS

Mode of action of antimycobacterial drugs. David HL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:189–94 (51 ref.)
Qualitative and quantitative drug–susceptibility tests in mycobacteriology. Heifets L. **Am Rev Respir Dis** 1988 May; 137(5):1217–22
Comparative antimycobacterial activities of difloxacin, temafloxacin, enoxacin, pefloxacin, reference fluoroquinolones, and a new macrolide, clarithromycin. Gorzynski EA, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):591–2
Mycobacteria and the new quinolones. Leysen DC, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):1–5 (67 ref.)
Comparative mycobactericidal efficacy of chemical disinfectants in suspension and carrier tests. Best M, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2856–8
Antimycobacterial chemotherapy in inflammatory bowel disease. Picciotto A, et al. **Biomed Pharmacother** 1989; 43(2):141–3
In vitro effect of cefoxitin and amikacin combination on M. fortuitum. Orefici G, et al. **Boll Ist Sieroter Milan** 1988; 67(2):97–104
In vitro activity of antimicrobial agents against mycobacteria. Casal M, et al. **Drugs Exp Clin Res** 1988;14(12):741–5
Comparison of sensitivity of Mycobacterium spp. to combinations of clavulanic acid & penicillins with certain antitubercular agents. Bhattacharya CP, et al. **Indian J Med Res** 1988 Aug;88:118–23
New antibiotics, resorcinomycins A and B: antibacterial activity of resorcinomycin A against mycobacteria in vitro. Masaki S, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):463–6
In–vitro activity of seventeen antimicrobial compounds against seven species of mycobacteria. Collins CH, et al. **J Antimicrob Chemother** 1988 Dec;22(6):857–61
Comparative in–vitro activity of fleroxacin and other 6–fluoroquinolones against mycobacteria. Salfinger M, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:55–63
In–vitro susceptibility of Mycobacterium tuberculosis, Mycobacterium bovis and Mycobacterium kansasii to amoxycillin and ticarcillin in combination with clavulanic acid. Wong CS, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):863–6
Promising new drugs in the treatment of tuberculosis and mycobacteriosis. Casal M, et al. **J Chemother** 1989 Feb; 1(1):39–45
Quality control of individual components used in Middlebrook 7H10 medium for mycobacterial susceptibility testing. Guthertz LS, et al. **J Clin Microbiol** 1988 Nov; 26(11):2338–42
Crohn's disease, sulfasalazine, and mycobacteria. Van Caekenberghe D. **J Lab Clin Med** 1989 Jul;114(1):63–5
Activity of lavandino essential oil against non–tubercular opportunistic rapid grown mycobacteria. Gabbrielli G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:37–40
[In vitro determination of the sensitivity of mycobacteria to fluoroquinolones] Dailloux M, et al. **Pathol Biol (Paris)** 1989 May;37(5):346–9 (Eng. Abstr.) **(Fre)**
[Study of the minimal inhibitory concentration of rifabutine (Ansamycin LM 427) for Mycobacterium tuberculosis, Mycobacterium xenopi and Mycobacterium avium–intracellulare] Truffot–Pernot C, et al. **Rev Mal Respir** 1988;5(4):401–6 (Eng. Abstr.) **(Fre)**
[The effect of the culture medium on the testing of antimycobacterial compounds] Meindl W, et al. **Arch Pharm (Weinheim)** 1989 Jul;322(7):453–5 (Eng. Abstr.) **(Ger)**
[Synthesis and antimycobacterial action of lipophilic substituted 2,4–diamino–5–benzylpyrimidines] Hachtel G, et al. **Arzneimittelforschung** 1988 Dec;38(12):1778–83 (Eng. Abstr.) **(Ger)**
[Comparative in vitro activities of rifabutin and rifampicin against various mycobacteria using 7H10 agar and 1% Ogawa egg media] Sato K, et al. **Kekkaku** 1988 Sep; 63(9):601–4 (Eng. Abstr.) **(Jpn)**
[Comparison of multiple drug–resistance between Mycobacterium avium complex and Mycobacterium fortuitum and Mycobacterium chelonae] Tsukamura M. **Kekkaku** 1988 Aug;63(8):563–8 (Eng. Abstr.) **(Jpn)**
[Sulfadimethoxine as a promising drug in the treatment of infections caused by Mycobacterium kansasii and Mycobacterium xenopi—differentiation between M. kansasii and M. marinum and between M. gordonae and M. scrofulaceum by the susceptibility testing to sulfadimethoxine] Tsukamura M. **Kekkaku** 1989 Apr; 64(4):313–7 (Eng. Abstr.) **(Jpn)**
[Bactericidal effect of Tween 80 on mycobacteria] Tsukamura M. **Kekkaku** 1988 Nov;63(11):695–9 (Eng. Abstr.) **(Jpn)**
[Synergistic effects of davercin, rifampicin, ethambutol and isonicotinic acid hydrazide on selected standard strains of Mycobacterium in the in–vitro and in–vivo experiments] Janowiec M, et al. **Pneumonol Pol** 1988 Jun;56(6):278–82 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Studies on adenylate kinase (ATP:AMP phosphotransferase) of Mycobacterium marinum (ATCC 927). Batra PP, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:25–9

Isoenzymes as tools to discriminate various subdivisions in the Mycobacterium fortuitum complex. Blom–Potar MC, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:39–43

Isoenzymes profiles in slowly–growing and difficult–to–grow mycobacteria. Blom–Potar MC, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:48–9

Beta–lactamase production and biological characteristics in nitrosoguanidine induced Mycobacterium fortuitum mutants. Fattorini L, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:44–7

Beta–lactamase activity of Mycobacterium fortuitum. Fattorini L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):204–6

Modulation of arginine decarboxylase activity from Mycobacterium smegmatis. Evidence for pyridoxal–5'–phosphate–mediated conformational changes in the enzyme. Balasundaram D, et al. **Eur J Biochem** 1989 Aug 1;183(2):339–45

LDH isoenzyme as a tool for the identification of mycobacteria. Dhandayuthapani S, et al. **Indian J Lepr** 1989 Jan;61(1):61–4

Physical and chemical characterization of glutamine synthetase purified from Mycobacterium phlei. Kimura K, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):648–52

GENETICS

The genetic relationship between Mycobacterium paratuberculosis and the M. avium complex. Chiodini RJ. **Acta Leprol (Geneve)** 1989;7 Suppl 1:249–51

Structure of pAL5000, a plasmid from M. fortuitum and its utilization in transformation of mycobacteria. Gicquel–Sanzey B, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:208–11

Insertion elements in mycobacteria. Green EP, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:239–42

Isolation and first characterization of a temperate phage growing on Mycobacterium smegmatis and M. bovis–BCG. Haeseler F, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:252–3

Development of genetic systems for the mycobacteria. Jacobs WR Jr, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:203–7 (13 ref.)

Studies on ribosomal RNA genes of mycobacteria including M. leprae. Katoch VM, et al. **Acta Leprol (Geneve)** 1989; 7 Suppl 1:231–3

Genetic relatedness among Mycobacterium paratuberculosis and M. avium complex. Labidi A, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:245–8

Restriction map of mycobacteriophage D29 and its deletion mutant F5. Lazraq R, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:234–8

Temperate mycobacteriophage from M. smegmatis. Portugal I, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:243–4

Transformation of Mycobacterium smegmatis with E. coli plasmids. Zainuddin ZF, et al. **Acta Leprol (Geneve)** 1989; 7 Suppl 1:212–6

Molecular biology of mycobacteria. Hopwood DA, et al. **Br Med Bull** 1988 Jul;44(3):528–46 (51 ref.)

Cloning and restriction analysis of ribosomal RNA genes from Mycobacterium smegmatis. Bercovier H, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):125–8

Identification of a repetitive DNA sequence specific to Mycobacterium paratuberculosis. Collins DM, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):175–8

Complete nucleotide sequence of pAL5000, a plasmid from Mycobacterium fortuitum. Rauzier J, et al. **Gene** 1988 Nov 30;71(2):315–21

Repetitive DNA sequence of Mycobacterium tuberculosis: analysis of differential hybridization pattern with other mycobacteria. Reddi PP, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):592–8

Molecular biology of the mycobacteria. Colston MJ, et al. **Lepr Rev** 1989 Jun;60(2):89–93 (38 ref.)

Study on rRNA genes in Mycobacterium smegmatis. Suzuki Y, et al. **Microbiol Immunol** 1988;32(12):1259–62

Transformation of Mycobacterium smegmatis with Escherichia coli plasmids carrying a selectable resistance marker. Zainuddin ZF, et al. **Mol Microbiol** 1989 Jan; 3(1):29–34

Mycobacteriophage vector systems. Jacobs WR Jr, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S404–10 (12 ref.)

Analysis of restriction endonuclease fragment patterns of DNA from Mycobacterium paratuberculosis. Whipple DL, et al. **Vet Microbiol** 1989 Feb;19(2):189–94

GROWTH & DEVELOPMENT

Structure and function in Mycobacterium leprae and other difficult–to–grow mycobacteria. Proceedings of the 4th International Colloquium on Mycobacteria. Paris, 19, 20 and 21st of September 1988. **Acta Leprol (Geneve)** 1989;7 Suppl 1:1–257

What are difficult–to–grow mycobacteria? Draper P. **Acta Leprol (Geneve)** 1989;7 Suppl 1:5–9 (46 ref.)

Comparative intracellular growth of difficult–to–grow and other mycobacteria in a macrophage cell line. Rastogi N, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:156–9

Intestinal multiplication of Mycobacterium paratuberculosis in athymic nude gnotobiotic mice. Hamilton HL, et al. **Infect Immun** 1989 Jan;57(1):225–30

Psychrophilic mycobacteria in M. leprae–infected tissues [letter] Kato L. **Int J Lepr Other Mycobact Dis** 1988 Dec; 56(4):631–2

Progress in culture and subculture of spheroplasts and fastidious acid–fast bacilli isolated from intestinal tissues. Markesich DC, et al. **J Clin Microbiol** 1988 Aug; 26(8):1600–3

Metabolism of the TMA group of antigens during the growth cycle of mycobacteria. Cocito C, et al. **Med Microbiol Immunol (Berl)** 1988;177(6):357–67

Evidence suggesting that the life span of Mycobacterium avium complex is longer than that of other mycobacteria. Tsukamura M. **Microbiol Immunol** 1988;32(8):769–74

Investigation of the effect of heat enhancement on the growth of mycobacteria in radiometric medium. Cutler SJ. **Tubercle** 1988 Sep;69(3):197–203

Mycobacteria in biofilms. Schulze–Röbbecke R, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):385–90

[Comparison of growth of mycobacteria in commercially available Dubos Tween—albumin liquid media] Sato K, et al. **Kekkaku** 1988 Jul;63(7):507–11 (Eng. Abstr.) **(Jpn)**

[Mycobacterial growth in UIT modified media (UIT–L), liquid modification. I] Mederos Cuervo LM, et al. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):82–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Specificity and antigenicity of mycoside G and other glycolipids from Mycobacterium marinum. Cruaud P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:94–7

Limiting dilution of murine T cell response to mycobacterial antigens. Launois P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:179–80

Comparative studies of antigenic glycolipids of mycobacteria related to the leprosy bacillus. Minnikin DE, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:51–4

Detection of antibodies against purified mycobacterial phenolic–glycolipids (PGL's): a sensitive solidphase multiple–antigen–immuno–assay (MAIA). Roth F, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:133–5

Antigenic relationship between Mycobacterium paratuberculosis and Mycobacterium avium. Camphausen RT, et al. **Am J Vet Res** 1988 Aug;49(8):1307–10

Raised serum IgG and IgA antibodies to mycobacterial antigens in rheumatoid arthritis. Tsoulfa G, et al. **Ann Rheum Dis** 1989 Feb;48(2):118–23

Stress proteins and the immune response to mycobacteria—antigens as virulence factors? Young DB, et al. **Antonie Van Leeuwenhoek** 1988;54(5):431–9 (37 ref.)

Sequential bacteriological observations in relation to cell–mediated and humoral antibody responses of cattle infected with Mycobacterium paratuberculosis and maintained on normal or high iron intake. Lepper AW, et al. **Aust Vet J** 1989 Feb;66(2):50–5

Antigen specificity and function of human T lymphocyte clones reactive with mycobacteria. Lamb JR, et al. **Br Med Bull** 1988 Jul;44(3):600–10 (34 ref.)

Macrophage antimycobacterial mechanisms. Lowrie DB, et al. **Br Med Bull** 1988 Jul;44(3):624–34 (47 ref.)

Sensitivity to tuberculin and sensitins in Swedish children. Lind A, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec; 63(4):19–22

Identification of cytoplasmic membrane protein antigens of Mycobacterium avium, M. intracellulare, and M. scrofulaceum. George KL, et al. **Can J Microbiol** 1989 May;35(5):529–34

Orientation of epitopes influences the immunogenicity of synthetic peptide dimers. Cox JH, et al. **Eur J Immunol** 1988 Dec;18(12):2015–9

Specificity of proliferative response of human CD8 clones to mycobacterial antigens. Rees A, et al. **Eur J Immunol** 1988 Dec;18(12):1881–7

Evaluation of an enzyme immunoassay based on sonicate supernatant antigens of Mycobacterium w for immunodiagnosis of leprosy. Moudgil KD, et al. **Indian J Lepr** 1988 Apr;60(2):159–72

Relative cross reactivity of habanin, lepromin and tuberculin in guinea pigs sensitized with homologous and heterologous mycobacteria. Singh NB, et al. **Indian J Lepr** 1988 Jul; 60(3):407–12

Evaluation of the efficacy of candidate vaccines against M. leprae infection in mice. Sreevatsa, et al. **Indian J Lepr** 1988 Apr;60(2):252–9

Identification of partially methylated methyl glycosides by gas chromatography–mass spectrometry of trimethylsilyl derivatives. Application to mycobacterial glycolipid antigen analysis. Rivière M, et al. **J Chromatogr** 1988 Jul 8;445(1):87–95

Isolation of recombinant mycobacterial antigens by an automatic and generally applicable purification method for beta–galactosidase fusion proteins. Schoel B, et al. **J Chromatogr** 1988 Aug 31;448(1):165–72

Antibodies to mycobacterial peptidoglycolipid and to crude protein antigens in sera from different categories of human subjects. Wayne LG, et al. **J Clin Microbiol** 1988 Nov; 26(11):2300–6

Protection against streptococcal cell wall–induced arthritis by pretreatment with the 65–kD mycobacterial heat shock protein. van den Broek MF, et al. **J Exp Med** 1989 Aug 1;170(2):449–66

Effect of zinc deficiency on the appearance of two immunodominant protein antigens (32 kDa and 65 kDa) in culture filtrates of mycobacteria. De Bruyn J, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):79–84

Activation of mouse peritoneal macrophages by mannophosphoinositides of mycobacteria. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1989;178(1):21–7

Antigenic relatedness of a strongly immunogenic 65 kDA mycobacterial protein antigen with a similarly sized ubiquitous bacterial common antigen. Thole JE, et al. **Microb Pathog** 1988 Jan;4(1):71–83

New approaches to vaccine development. Bloom BR. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S460–6 (15 ref.)

Regulation of T cell responsiveness against mycobacterial antigens by HLA class 2 immune response genes. de Vries RR. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S400–3 (19 ref.)

Identification of mycobacterial antigens recognized by T lymphocytes. Lamb JR, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S443–7 (19 ref.)

Serology of mycobacteria: characterization of antigens recognized by monoclonal antibodies. Young DB, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S431–5 (45 ref.)

Rheumatoid arthritis, mycobacterial antigens and agalactosyl IgG. Rook GA. **Scand J Immunol** 1988 Oct;28(4):487–93 (31 ref.)

Immunological study of the defined constituents of mycobacteria. Ivanyi J, et al. **Springer Semin Immunopathol** 1988;10(4):279–300 (126 ref.)

Antibodies to mycobacteria in cattle not infected with Mycobacterium bovis. Auer LA, et al. **Vet Microbiol** 1988 Sep;18(1):51–61

Characterization of a monoclonal antibody to Mycobacterium kansasii. Wisingerová E, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):470–5

[Ms–ELISA for detection of serum antibody level in leprosy patient—establishment of Ms–ELISA] Wu QX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):451–5 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Isolation and characterization of mycobacteria colonizing the healthy skin. Salem JI, et al. **Acta Leprol (Geneve)** 1989; 7 Suppl 1:18–20

Fecal culture of Mycobacterium paratuberculosis in cattle using a centrifugation specimen processing step. Kim YG, et al. **Acta Vet Scand Suppl** 1988;84:203–5

A prospective evaluation of an enzyme–linked immunosorbent assay (ELISA) and agar gel immunodiffusion test (AGID) relative to fecal culture in the diagnosis of clinical and subclinical paratuberculosis in cattle in central Ohio. Spangler L, et al. **Acta Vet Scand Suppl** 1988;84:243–5

Evaluation of a new blood culture medium for mycobacteria. Strand CL, et al. **Am J Clin Pathol** 1989 Mar;91(3):316–8

Bone marrow in HIV infection. A comparison of fluorescent staining and cultures in the detection of mycobacteria. Uribe–Botero G, et al. **Am J Clin Pathol** 1989 Mar; 91(3):313–5

Comparison of two methods for isolation of Mycobacterium paratuberculosis from bovine fecal samples. Kim YG, et al. **Am J Vet Res** 1989 Jul;50(7):1110–3

Prevalence of nontuberculous mycobacteria in water supplies of hemodialysis centers. Carson LA, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3122–5

The use of mucolysed induced sputum for the identification of pulmonary pathogens associated with human immunodeficiency virus infection. Ng VL, et al. **Arch Pathol Lab Med** 1989 May;113(5):488–93

Degradation of 5–chloro–2–hydroxynicotinic acid by Mycobacterium sp. BA. Tibbles PE, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):601–6

Primary pulmonary infection caused by Mycobacterium terrae complex. Krisher KK, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):171–5

Preliminary report on isolation of mycobacteria from patients with Crohn's disease. Gitnick G, et al. **Dig Dis Sci** 1989 Jun;34(6):925–32

Incidence and nature of human tuberculosis due to Mycobacterium africanum in South–East England: 1977–87. Grange JM, et al. **Epidemiol Infect** 1989 Aug; 103(1):127–32

Evaluation of the oxoid signal system for detection of mycobacteria [letter] Cutler SJ. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):695–6

Mycobacterium chelonei infection of a Broviac catheter insertion site. Engler HD, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):521–3

Immunohistochemical examination for mycobacteria in intestinal tissues from patients with Crohn's disease. Kobayashi K, et al. **Gastroenterology** 1989 Apr; 96(4):1009–15

Investigation of mycobacteria in Crohn's disease tissue by Southern blotting and DNA hybridisation with cloned mycobacterial genomic DNA probes from a Crohn's disease isolated mycobacteria. Butcher PD, et al. **Gut** 1988 Sep;29(9):1222–8

Mixed mycobacterial cultures—occurrence in the clinical laboratory. Burnens AP, et al. **Int J Med Microbiol** 1989 May;271(1):85–90

Rapid radiometric detection of mycobacterial growth from smear–positive tissue samples from pigs. Hoffner SE, et al. **J Appl Bacteriol** 1989 Jan;66(1):65–7

Gas chromatographic fatty acid determination to differentiate Nocardia asteroides, Mycobacterium fortuitum and Mycobacterium chelonei. Fourche J, et al. **J Chromatogr** 1989 Jan 27;487(1):142–6

Development of a diagnostic test for Johne's disease using a DNA hybridization probe. Hurley SS, et al. **J Clin Microbiol** 1989 Jul;27(7):1582–7

Use of a cutoff range in identifying mycobacteria by the Gen–Probe Rapid Diagnostic System. Sherman I, et al. **J Clin Microbiol** 1989 Feb;27(2):241–4

Comparison of BACTEC 13A medium and Du Pont isolator for detection of mycobacteremia. Witebsky FG, et al. **J Clin Microbiol** 1988 Aug;26(8):1501–5

Selective isolation of mycobacteria from soil: a statistical analysis approach. Portaels F, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):849–55

Mycobacterial species responsible for tuberculosis and mycobacteriosis cases in the Czech Socialist Republic, 1981–1985. Kubin M, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):419–23

Mycobacterium malmoense infection presenting as a mediastinal mass in a child [letter] Griffiths D, et al. **J Infect** 1989 Jul;19(1):83–4

Heterogeneity among isolates of rapidly growing mycobacteria responsible for infections following augmentation mammaplasty despite case clustering in Texas and other southern coastal states. Wallace RJ Jr, et al. **J Infect Dis** 1989 Aug;160(2):281–8

Difficulty with Mycobacterium malmoense [letter] Katila ML, et al. **Lancet** 1989 Aug 26;2(8661):510–1

Mycobacteria can be seen as "negative images" in cytology smears from patients with acquired immunodeficiency syndrome. Maygarden SJ, et al. **Mod Pathol** 1989 May; 2(3):239–43

Cutaneous Mycobacterium thermoresistibile infection in a heart transplant recipient. Neeley SP, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):608–11

Broth culture: the modern 'guinea-pig' for isolation of mycobacteria. Martin T, et al. **Tubercle** 1989 Mar; 70(1):53–6

Paratuberculosis in cattle: a comparison of three serologic tests with results of fecal culture. Colgrove GS, et al. **Vet Microbiol** 1989 Feb;19(2):183–7

[Paratuberculosis. Diagnosis of the first case in an imported cattle in Senegal] Konte M. **Rev Elev Med Vet Pays Trop** 1988;41(2):147–8 (Eng. Abstr.) **(Fre)**

[Environmental investigation of non tubercular mycobacteria in the province of Sassari] Muresu E, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):73–84 (Eng. Abstr.) **(Ita)**

[Review: Mycobacterium marinum infections in humans. 1. Bacteriology of Mycobacterium marinum] Tsukamura M. **Kekkaku** 1988 Jul;63(7):487–91 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Isolation of mycobacteria from clinical specimens during the last decade] Tazawa S, et al. **Rinsho Byori** 1988 Jun; 36(6):715–8 **(Jpn)**

[Use of UAP culture medium in isolating mycobacteria from expectorations] Reyes-Escárcega V, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):11–3 (Eng. Abstr.) **(Spa)**

METABOLISM

Structure and function of mycobacterial glycolipids and glycopeptidolipids. Chatterjee D, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:81–4 (63 ref.)

Mycolic acid metabolism. Lanéelle G. **Acta Leprol (Geneve)** 1989;7 Suppl 1:65–73 (43 ref.)

Biosynthesis of phenolic glycolipids in M. microti. Thurman P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:74

Pyrimidine biosynthesis in Mycobacterium leprae and other intracellular mycobacteria. Wheeler PR. **Acta Leprol (Geneve)** 1989;7 Suppl 1:33–5

Reduction of tellurite and deesterification of fluorescein diacetate are not well correlated with the viability of mycobacteria. Mor N, et al. **Ann Inst Pasteur Microbiol** 1988 May–Jun;139(3):279–88

Degradation and O-methylation of chlorinated phenolic compounds by Rhodococcus and Mycobacterium strains. Häggblom MM, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3043–52

Microbial metabolism of polycyclic aromatic hydrocarbons: isolation and characterization of a pyrene-degrading bacterium. Heitkamp MA, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2549–55

Polycyclic aromatic hydrocarbon degradation by a Mycobacterium sp. in microcosms containing sediment and water from a pristine ecosystem. Heitkamp MA, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1968–73

Pyrene degradation by a Mycobacterium sp.: identification of ring oxidation and ring fission products. Heitkamp MA, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2556–65

Metabolism in Mycobacterium leprae, M. tuberculosis and other pathogenic mycobacteria. Wheeler PR, et al. **Br Med Bull** 1988 Jul;44(3):547–61 (32 ref.)

Mycolic acid metabolic filiation and location in Mycobacterium aurum and Mycobacterium phlei. Lacave C, et al. **Eur J Biochem** 1989 May 1;181(2):459–66

Metabolism of aspartate in Mycobacterium smegmatis. Sritharan V, et al. **Eur J Biochem** 1989 Apr 1;180(3):587–93

Co-ordinated expression of the components of iron transport (mycobactin, exochelin and envelope proteins) in Mycobacterium neoaurum. Sritharan M, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):183–5

Does aminoglycoside–acetyltransferase in rapidly growing mycobacteria have a metabolic function in addition to aminoglycoside inactivation? Udou T, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):227–30

Silicon (Si) utilisation by chemoautotrophic nocardioform bacteria isolated from human and animal tissues infected with leprosy bacillus. Chakrabarty AN, et al. **Indian J Exp Biol** 1988 Nov;26(11):839–44

Mycobactins and exochelins of Mycobacterium tuberculosis, M. bovis, M. africanum and other related species. Barclay R, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):771–6

Influence of oxygen tension on the respiratory activity of Mycobacterium phlei. Gillespie J, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):247–52

Structure and molecular species composition of three homologous series of alpha-mycolic acids from Mycobacterium spp. Kaneda K, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2213–29

Attachment of mycobacteria to fibronectin-coated surfaces. Ratliff TL, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1307–13

Utilisation of ethanol as sole carbon source by Mycobacterium marinum [letter] Tsukamura M. **Tubercle** 1988 Jun;69(2):153

PATHOGENICITY

Mechanisms of pathogenicity in mycobacteria. Rastogi N, et al. **Biochimie** 1988 Aug;70(8):1101–20 (136 ref.)

Granulomatous pulmonary reactions after instillation of Mycobacterium gordonae. Light and electron microscopic investigations on the rat model. Fasske E, et al. **Med Microbiol Immunol (Berl)** 1989;178(3):149–61

Mycobacterium avium complex and other nontuberculous mycobacteria in patients with HIV infection. MacDonell KB, et al. **Semin Respir Infect** 1989 Jun;4(2):123–32 (45 ref.)

[Intracellular activity and phagocyte formation of pathogenic and non-pathogenic strains of Mycobacterium fortuitum] Sosnovskaia AV. **Probl Tuberk** 1988;(6):59–62 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Chemical basis of rough and smooth variation in mycobacteria. Belisle JT, et al. **J Bacteriol** 1989 Jun; 171(6):3465–70

[Storage of mycobacteria on paper disks under laboratory conditions] Bil'ko IP. **Mikrobiol Zh** 1988 Jan–Feb; 50(1):96–7 (Eng. Abstr.) **(Rus)**

[The structure and biological role of polysaccharides in Mycobacterium, Corynebacterium and Nocardia] Varbanets LD. **Mikrobiol Zh** 1988 Sep–Oct;50(5):98–107 (48 ref.) **(Rus)**

ULTRASTRUCTURE

Morphological changes in Mycobacterium fortuitum induced by ofloxacin. Saito H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):448–55

[The surfaces of colonies of Mycobacterium species studied in the scanning electron microscope] Putina TG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):3–8 (Eng. Abstr.) **(Rus)**

MYCOBACTERIUM, ATYPICAL see under **MYCOBACTERIUM**

MYCOBACTERIUM AVIUM

CLASSIFICATION

[Determination of the serotypes of Mycobacterium avium–intracellulare (MAI) complexes of clinical isolates by immunological and biological methods] Goto K, et al. **Nippon Saikingaku Zasshi** 1988 May;43(3):653–71 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Effectiveness of ofloxacin against Mycobacterium tuberculosis and Mycobacterium avium, and rifampin against M. tuberculosis in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1988 May; 137(5):1141–6

Correlations among naturally occurring resistances to antituberculosis drugs in Mycobacterium avium complex strains. Tsukamura M, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):1033–5

Antibacterial action of amphipathic derivatives of isoniazid against the Mycobacterium avium complex. Rastogi N, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):456–62

[Relation between the chemical structure of substances and their antimicrobial action against atypical strains. II. 6-acycloamido-2-alkylthiobenzothiazoles, quantitative relation to their effectiveness spectrum] Macháček M, et al. **Cesk Farm** 1989 Feb;38(1):9–15 (Eng. Abstr.) **(Cze)**

ENZYMOLOGY

Plasmid-influenced changes in Mycobacterium avium catalase activity. Pethel ML, et al. **Infect Immun** 1989 Jun; 57(6):1714–8

GENETICS

Mycolic acids of Mycobacterium aurum. Structure and biogenetic implications. Lanéelle MA, et al. **Eur J Biochem** 1988 Nov 15;177(3):631–5

DNA probes demonstrate a single highly conserved strain of Mycobacterium avium infecting AIDS patients. Hampson SJ, et al. **Lancet** 1989 Jan 14;1(8629):65–8

Plasmid profiles of Mycobacterium avium complex isolated from swine. Masaki S, et al. **Microbiol Immunol** 1989; 33(5):429–33

Speciation of organisms within the Mycobacterium avium–Mycobacterium intracellulare–Mycobacterium scrofulaceum (MAIS) complex based on restriction fragment length polymorphisms. Picken RN, et al. **Mol Cell Probes** 1988 Dec;2(4):289–304

GROWTH & DEVELOPMENT

Evidence that host-recycling of Mycobacterium avium preserves its ability to hinder macrophage killing functions. Fréhel C, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:160–3

Phagosome–lysosome fusions in macrophages infected by Mycobacterium avium: role of mycosides-C and other cells surface components. Fréhel C, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:173–4

Inhibition by normal human serum of Mycobacterium avium multiplication in cultured human macrophages. Crowle AJ, et al. **Infect Immun** 1989 Apr;57(4):1332–5

IMMUNOLOGY

Serologic and immunocytochemical analysis of the Mycobacterium avium cell envelope. David HL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:55–8

Bacterial antigen processing in macrophages infected with the obligate intracellular bacterium, Mycobacterium avium. de Chastellier C, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:175–6

Resistance of Mycobacterium avium to microbicidal activities in bone-marrow macrophages from naturally-susceptible (C57B1/6) and naturally-resistant (DBA-2) mice. Rastogi N, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:177–8

Decreased mitogenic response of murine spleen cells following intraperitoneal injection of serovar-specific glycopeptidolipid antigens from the Mycobacterium avium complex. Hooper LC, et al. **Adv Exp Med Biol** 1988; 239:309–25

Antigenic relationship between Mycobacterium paratuberculosis and Mycobacterium avium. Camphausen RT, et al. **Am J Vet Res** 1988 Aug;49(8):1307–10

Non-tuberculous mycobacterial infection—a major cause of tuberculin conversion in unvaccinated children in south Sweden. Bulow K, et al. **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):10–1

The role of genetics in the response to tuberculin and to other mycobacterial sensitins. Magnusson M, et al. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):13–5

N-formylkansosaminyl-(1——3)-2-O-methyl-D-rhamnopyranose: the type-specific determinant of serovariant 14 of the Mycobacterium avium complex. McNeil M, et al. **Carbohydr Res** 1988 Jun 15;177:185–98

Production of a monoclonal antibody specific for Mycobacterium avium and immunological activity of the affinity-purified antigen. Abe C, et al. **Infect Immun** 1989 Apr;57(4):1095–9

Production and characterization of monoclonal antibodies against specific serotypes of Mycobacterium avium and the Mycobacterium avium–Mycobacterium intracellulare–Mycobacterium scrofulaceum complex. Kolk AH, et al. **Infect Immun** 1989 Aug;57(8):2514–21

Two types of suppressor T cells that inhibit delayed-type hypersensitivity to Mycobacterium intracellulare in mice. Nakamura RM, et al. **Infect Immun** 1989 Mar;57(3):779–84

Further novel amido sugars within the glycopeptidolipid antigens of Mycobacterium avium. Bozic CM, et al. **J Biol Chem** 1988 Oct 15;263(29):14984–91

AIDS and Mycobacterium avium serovars in Sweden [letter] Hoffner SE, et al. **Lancet** 1989 Aug 5;2(8658):336–7

[Suppressor T cells against delayed type hypersensitivity to Mycobacterium intracellulare] Kitamura K. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):187–95 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Isolation of Mycobacterium avium from waterfowl with polycystic livers. Roffe TJ. **Avian Dis** 1989 Jan–Mar; 33(1):195–8

Methods used to investigate a possible environmental source of Mycobacterium avium–intracellulare–scrofulaceum (MAIS) infection in farmed deer. Prosser BA. **J Appl Bacteriol** 1989 Mar;66(3):219–26

Waterborne Mycobacterium avium infection [letter] Yagupsky P, et al. **JAMA** 1989 Feb 17;261(7):994

Direct visualization of mycobacteria in blood culture [letter] Moffie BG, et al. **N Engl J Med** 1989 Jan 5;320(1):61–2

METABOLISM

Methionine as methyl-group donor in the synthesis of Mycobacterium avium envelope lipids, and its inhibition by DL-ethionine, D-norleucine and DL-norleucine. David HL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:77–80

Changes of the biotype of Mycobacterium avium-Mycobacterium intracellulare complex causing lung disease in Japan. Miyachi T, et al. **Tuberele** 1988 Jun; 69(2):133–7

PATHOGENICITY

Regulation of host resistance to Mycobacterium intracellulare in vivo and in vitro by the Bcg gene. Goto Y, et al. **Immunogenetics** 1989;30(3):218–21

Pathogenicity of Mycobacterium avium for human monocytes: absence of macrophage-activating factor activity of gamma interferon. Toba H, et al. **Infect Immun** 1989 Jan;57(1):239–44

[The role of Mycobacterium avium-intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354–9 (Eng. Abstr.) **(Pol)**

MYCOBACTERIUM AVIUM COMPLEX

ANALYSIS

Characterization of total deoxyribonucleic acid of Mycobacterium paratuberculosis (ATCC 19698) and of M. avium complex (ATCC 25291) using restriction enzymes. Labidi A. **Arch Inst Pasteur Tunis** 1988 Jul–Oct; 65(3–4):261–70

CLASSIFICATION

Monoclonal antibodies against Mycobacterium avium/intracellulare. Paramasivan CN, et al. **Indian J Med Res** 1988 Jul;88:13–7

DRUG EFFECTS

Studies on the mechanisms of the synergistic effects of ethambutol and other antibacterial drugs on Mycobacterium avium complex. Hoffner SE, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:195–9

Ethambutol: a key for Mycobacterium avium complex chemotherapy? [letter] Källenius G, et al. **Am Rev Respir Dis** 1989 Jul;140(1):264

Susceptibility of Mycobacterium avium complex to various two-drug combinations of antituberculosis agents. Ozenne G, et al. **Am Rev Respir Dis** 1988 Oct;138(4):878–81

Correlations among naturally occurring resistances to antituberculosis drugs in Mycobacterium avium complex strains. Tsukamura M, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):1033–5

Activities of amikacin, roxithromycin, and azithromycin alone or in combination with tumor necrosis factor against Mycobacterium avium complex. Bermudez LE, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1149–53

MIC as a quantitative measurement of the susceptibility of Mycobacterium avium strains to seven antituberculosis drugs. Heifets L. **Antimicrob Agents Chemother** 1988 Aug; 32(8):1131–6

Antimicrobial synergism against Mycobacterium avium complex strains isolated from patients with acquired immune deficiency syndrome. Yajko DM, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1392–5

Effects of surface-active agents on drug susceptibility levels and ultrastructure of Mycobacterium avium complex organisms isolated from AIDS patients. Naik SP, et al. **Diagn Microbiol Infect Dis** 1988 Sep;11(1):11–9

Susceptibilities of Mycobacterium leprae and M. avium complex to the H2O2-Fe-mediated halogenation system supplemented with antimicrobial agents. Tomioka H, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):628–32

In-vitro activity of dapsone and two potentiators against Mycobacterium avium complex. Gonzalez AH, et al. **J Antimicrob Chemother** 1989 Jul;24(1):19–22

In vitro and in vivo activity of azithromycin (CP 62,993) against the Mycobacterium avium complex. Inderlied CB, et al. **J Infect Dis** 1989 May;159(5):994–7

Susceptibility of Mycobacterium avium and Mycobacterium intracellulare to various antibacterial drugs. Tomioka H, et al. **Microbiol Immunol** 1989;33(6):509–14

Clofazimine and other rimino-compounds: minimal inhibitory and minimal bactericidal concentrations at different pHs for Mycobacterium avium complex. Lindholm-Levy PJ, et al. **Tubercle** 1988 Sep;69(3):179–86

Comparative in vitro and in vivo activity of rifabutin and rifampicin against Mycobacterium avium complex. Saito H, et al. **Tubercle** 1988 Sep;69(3):187–92

[Study of the minimal inhibitory concentration of rifabutine (Ansamycin LM 427) for Mycobacterium tuberculosis, Mycobacterium xenopi and Mycobacterium avium-intracellulare] Truffot-Pernot C, et al. **Rev Mal Respir** 1988;5(4):401–6 (Eng. Abstr.) **(Fre)**

[Comparison of multiple drug-resistance between Mycobacterium avium complex and Mycobacterium fortuitum and Mycobacterium chelonae] Tsukamura M. **Kekkaku** 1988 Aug;63(8):563–8 (Eng. Abstr.) **(Jpn)**

[Cross-resistance relationships of antituberculosis drugs in Mycobacterium avium complex] Tsukamura M. **Kekkaku** 1989 Jan;64(1):1–5 (Eng. Abstr.) **(Jpn)**

GENETICS

The genetic relationship between Mycobacterium paratuberculosis and the M. avium complex. Chiodini RJ. **Acta Leprol (Geneve)** 1989;7 Suppl 1:249–51

Genetic relatedness among Mycobacterium paratuberculosis and M. avium complex. Labidi A, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:245–8

Isolation and characterization of a recombinant lambda gt11 bacteriophage which expresses an immunoreactive Mycobacterium intracellulare protein in Escherichia coli. Morris SL, et al. **Infect Immun** 1988 Dec;56(12):3026–31

Speciation of organisms within the Mycobacterium avium-Mycobacterium intracellulare-Mycobacterium scrofulaceum (MAIS) complex based on restriction fragment length polymorphisms. Picken RN, et al. **Mol Cell Probes** 1988 Dec;2(4):289–304

GROWTH & DEVELOPMENT

Evidence suggesting that the life span of Mycobacterium avium complex is longer than that of other mycobacteria. Tsukamura M. **Microbiol Immunol** 1988;32(8):769–74

Ability of smooth and rough variants of Mycobacterium avium and M. intracellulare to multiply and survive intracellularly: role of C-mycosides. Rastogi N, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):345–60

[Mycobacterium avium complex bacteria probably live longer than other slowly growing mycobacteria] Tsukamura M, et al. **Kekkaku** 1988 Sep;63(9):597–600 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Human gut wall reactivity to monoclonal antibodies against M. avium glycolipid in relation to Crohn's disease (preliminary results). Blaauwgeers JL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:138–40

Defects in sera from acquired immunodeficiency syndrome (AIDS) patients and from non-AIDS patients with Mycobacterium avium infection which decrease macrophage resistance to M. avium. Crowle AJ, et al. **Infect Immun** 1989 May;57(5):1445–51

Production and characterization of monoclonal antibodies against specific serotypes of Mycobacterium avium and the Mycobacterium avium-Mycobacterium intracellulare-Mycobacterium scrofulaceum complex. Kolk AH, et al. **Infect Immun** 1989 Aug;57(8):2514–21

Generation of monoclonal antibodies to the specific sugar epitopes of Mycobacterium avium complex serovars. Rivoire B, et al. **Infect Immun** 1989 Oct;57(10):3147–58

ISOLATION & PURIFICATION

Epidemiology of infection by nontuberculous mycobacteria. VIII. Absence of mycobacteria in chicken litter. Falkinham JO 3d, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1347–9

Mycobacterium avium intracellulare as a marker of human immunodeficiency virus disease. Grotz RL, et al. **Conn Med** 1989 Jul;53(7):401–3

DNA probe reactivity of Mycobacterium avium complex isolates from patients without AIDS. Drake TA, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):125–8

Improved detection of Mycobacterium avium complex with the Bactec radiometric system. Hoffner SE. **Diagn Microbiol Infect Dis** 1988 May;10(1):1–6

Recovery of Mycobacterium avium-M. intracellulare from blood specimens by using the routine BACTEC 6B blood culture system. Horn R, et al. **J Clin Microbiol** 1989 Feb; 27(2):348–9

Identification of mycobacteria from culture by using the Gen-Probe Rapid Diagnostic System for Mycobacterium avium complex and Mycobacterium tuberculosis complex. Musial CE, et al. **J Clin Microbiol** 1988 Oct;26(10):2120–3

Direct identification of Mycobacterium tuberculosis, Mycobacterium avium, and Mycobacterium intracellulare from amplified primary cultures in BACTEC media using DNA probes. Peterson EM, et al. **J Clin Microbiol** 1989 Jul;27(7):1543–7

Identification and partial characterization of Mycobacterium avium and Mycobacterium intracellulare by using DNA probes. Saito H, et al. **J Clin Microbiol** 1989 May; 27(5):994–7

Mycobacterial cross contamination during radiometric culturing. Vannier AM, et al. **J Clin Microbiol** 1988 Sep; 26(9):1867–8

The isolation of Mycobacterium avium complex from soil, water, and dusts. Ichiyama S, et al. **Microbiol Immunol** 1988;32(7):733–9

Mycobacterium avium complex in a patient with cystic fibrosis: disease vs. colonization. Kinney JS, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):393–6

[A patient with disseminated Mycobacterium avium-complex infection and a deranged immune system (letter)] Krulder JW, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1673 **(Dut)**

PATHOGENICITY

The hamster model of chronic Mycobacterium avium complex infection. Yangco BG, et al. **J Infect Dis** 1989 Mar;159(3):556–61

Mycobacterium avium complex and other nontuberculous mycobacteria in patients with HIV infection. MacDonell KB, et al. **Semin Respir Infect** 1989 Jun;4(2):123–32 (45 ref.)

[The role of Mycobacterium avium-intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354–9 (Eng. Abstr.) **(Pol)**

MYCOBACTERIUM AVIUM-INTRACELLULARE see **MYCOBACTERIUM AVIUM COMPLEX**

MYCOBACTERIUM AVIUM-INTRACELLULARE COMPLEX see **MYCOBACTERIUM AVIUM COMPLEX**

MYCOBACTERIUM AVIUM-INTRACELLULARE INFECTION

Mycobacterium avium infection of the knee in a child. Pedersen AK, et al. **Acta Orthop Scand** 1988 Oct; 59(5):585–6

The diagnosis and management of disease caused by M. avium complex, M. kansasii, and other mycobacteria. Davidson PT. **Clin Chest Med** 1989 Sep;10(3):431–43 (94 ref.)

Cutaneous infection with Mycobacterium avium-intracellulare scrofulaceum intermediate: a new pathogenic entity. Noel SB, et al. **J Am Acad Dermatol** 1988 Sep;19(3):492–5

COMPLICATIONS

Mycobacteria and AIDS mortality [editorial] Chaisson RE, et al. **Am Rev Respir Dis** 1989 Jan;139(1):1–3

Disseminated Mycobacterium avium-intracellulare infection in a patient with polymyositis [letter] Nuñez JM, et al. **Arthritis Rheum** 1989 Jul;32(7):934–6

Endobronchial Mycobacterium avium-intracellulare infection in a patient with AIDS. Mehle ME, et al. **Chest** 1989 Jul;96(1):199–201

Mycobacterial diseases. Tuberculosis and Mycobacterium avium complex. Jacobson MA. **Infect Dis Clin North Am** 1988 Jun;2(2):465–74 (54 ref.)

Kaposi's sarcoma and Mycobacterium avium-intracellulare with cellulitis in patient with acquired immunodeficiency syndrome. DeCoste SD, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):574–6

Mycobacterium avium-intracellulare complex infections in the acquired immunodeficiency syndrome. Perfect JR. **J Electron Microsc Tech** 1988 Jan;8(1):105–13 (64 ref.)

Pulmonary clofazimine crystals in a child with acquired immunodeficiency syndrome and disseminated Mycobacterium avium-intracellulare infection. Hudson V, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):880–2

[Simultaneous detection of M. tuberculosis and M. avium-M. intracellulare. A contribution to the clinical aspects and diagnosis of mycobacterioses in AIDS] Ruf B, et al. **Internist (Berlin)** 1989 Jan;30(1):57–60 **(Ger)**

[AIDS and its manifestations in the form of tuberculosis and other pathology of the lungs] Erokhin VV, et al. **Probl Tuberk** 1989;(1):67–71 (49 ref.) **(Rus)**

DIAGNOSIS

Atypical mycobacterial infection. Picó Moreno MR, et al. **Bol Asoc Med P R** 1989 Jun;81(6):206–8

Infection by Mycobacterium avium intracellulare in AIDS: endoscopic duodenal appearance mimicking Whipple's disease. Vázquez-Iglesias JL, et al. **Endoscopy** 1988 Sep; 20(5):279–80

Diagnosis of Mycobacterium bacteremia in patients with acquired immunodeficiency syndrome by direct examination of blood films. Eng RH, et al. **J Clin Microbiol** 1989 Apr;27(4):768–9

Mycobacterial cross contamination during radiometric culturing. Vannier AM, et al. **J Clin Microbiol** 1988 Sep; 26(9):1867–8

Enzyme-linked immunosorbent assay for the differential diagnosis of pulmonary tuberculosis and pulmonary diseases due to Mycobacterium avium-intracellulare complex. Amano H, et al. **Jpn J Med** 1989 Mar-Apr; 28(2):196–201

Mycobacteremia in AIDS patients. Results of a prospective study. Ruf B, et al. **Klin Wochenschr** 1989 Jul 17; 67(14):717–22

Infection with Mycobacterium avium complex in patients without predisposing conditions [see comments] Prince DS, et al. **N Engl J Med** 1989 Sep 28;321(13):863–8. **Comment in: N Engl J Med** 1989 Sep 28;321(13):896–8

Mycobacterium avium complex in a patient with cystic fibrosis: disease vs. colonization. Kinney JS, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):393–6

[A patient with disseminated Mycobacterium avium-complex infection and a deranged immune system (letter)] Krulder JW, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1673 **(Dut)**

DRUG THERAPY

Synergism: the Rosetta stone for Mycobacterium avium complex chemotherapy? [editorial] Iseman MD. **Am Rev Respir Dis** 1988 Oct;138(4):767–8

Ethambutol: a key for Mycobacterium avium complex chemotherapy? [letter] Källenius G, et al. **Am Rev Respir Dis** 1989 Jul;140(1):264

Treating disseminated Mycobacterium avium-intracellulare infection [letter] Bach MC. **Ann Intern Med** 1989 Jan 15; 110(2):169–70

Amikacin, ciprofloxacin, and imipenem treatment for disseminated Mycobacterium avium complex infection of beige mice. Inderlied CB, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):176–80

Therapeutic efficacy of liposome-entrapped rifampin against Mycobacterium avium complex infection induced in mice. Saito H, et al. **Antimicrob Agents Chemother** 1989 Apr; 33(4):429–33

Triple therapy with isoniazid, rifampicin and pyrazinamide [letter] Campbell IA. **Bull Int Union Tubere Lung Dis** 1988 Dec;63(4):63

Treatment of mycobacterial infections. Davidson PT. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):23–5

Superiority of enviomycin or streptomycin over ethambutol in initial treatment of lung disease caused by Mycobacterium avium complex. Tsukamura M, et al. **Chest** 1989 May;95(5):1056–8

New antimycobacterial agents. Cynamon MH, et al. **Clin Chest Med** 1989 Sep;10(3):355–64 (62 ref.)

Effect of combined therapy with ansamycin, clofazimine, ethambutol, and isoniazid for Mycobacterium avium infection in patients with AIDS. Agins BD, et al. **J Infect Dis** 1989 Apr;159(4):784–7

In vitro and in vivo activity of azithromycin (CP 62,993) against the Mycobacterium avium complex. Inderlied CB, et al. **J Infect Dis** 1989 May;159(5):994–7

[Atypical mycobacterioses—a discussion] Nödl N. **Prax Klin Pneumol** 1988 Jul;42(7):613–4 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

The epidemiology of disseminated nontuberculous mycobacterial infection in the acquired immunodeficiency syndrome (AIDS). Horsburgh CR Jr, et al. **Am Rev Respir Dis** 1989 Jan;139(1):4–7

The acquired immunodeficiency syndrome and tuberculosis [letter] Cooper DA, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):714–5

Mycobacterium avium complex and the normal host: the other side of the coin [editorial; comment] Iseman MD. **N Engl J Med** 1989 Sep 28;321(13):896–8. **Comment on:** N Engl J Med 1989 Sep 28;321(13):863–8

[Lung diseases caused by non-tuberculous mycobacteria in East Germany and Hungary] Kalich R, et al. **Pneumologie** 1989 Mar;43(3):169–72 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Atypical mycobacterial infection in alpha interferon-treated hairy cell leukaemia. Giles FJ, et al. **Acta Haematol (Basel)** 1988;80(3):159–61

Fatal pericarditis due to Mycobacterium avium-intracellulare in acquired immunodeficiency syndrome. Woods GL, et al. **Chest** 1989 Jun;95(6):1355–7

Mycobacterium avium-Mycobacterium intracellulare infection limited to the skin and lymph nodes in patients with AIDS. Barbaro DJ, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):625–8

Mycotic aneurysm and disseminated Mycobacterium avium-intracellulare infection in a patient with hairy cell leukemia. Dugdale DC, et al. **West J Med** 1989 Feb; 150(2):207–8

[Pulmonary changes in AIDS] Blum U, et al. **ROFO** 1989 Mar;150(3):255–9 (Eng. Abstr.) **(Ger)**

[The role of Mycobacterium avium-intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354–9 (Eng. Abstr.) **(Pol)**

[Disseminated infection caused by Mycobacterium avium-intracellulare in a patient with acquired immunodeficiency syndrome (letter)] Oliván Ballabriga A, et al. **Med Clin (Barc)** 1988 May 14;90(19):796–7 **(Spa)**

IMMUNOLOGY

Non-tuberculous mycobacterial infection—a major cause of tuberculin conversion in unvaccinated children in south Sweden. Bulow K, et al. **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):10–1

Lysis of mycobacteria-infected monocytes by IL-2-activated killer cells: role of LFA-1. Blanchard DK, et al. **Cell Immunol** 1989 Apr 1;119(2):402–11

An analysis of in vitro T cell responsiveness in nontuberculous mycobacterial infection. Tsuyuguchi I, et al. **Chest** 1988 Oct;94(4):822–9

Defects in sera from acquired immunodeficiency syndrome (AIDS) patients and from non-AIDS patients with Mycobacterium avium infection which decrease macrophage resistance to M. avium. Crowle AJ, et al. **Infect Immun** 1989 May;57(5):1445–51

[A patient with disseminated Mycobacterium avium-complex infection and an immune system disorder (letter)] Holst PA. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2176 **(Dut)**

METABOLISM

The respiratory burst in activated macrophages: studies of its molecular basis and evidence for downregulation in chronic infection. Johnston RB Jr, et al. **Adv Exp Med Biol** 1988;239:63–72 (22 ref.)

MICROBIOLOGY

DNA probe reactivity of Mycobacterium avium complex isolates from patients without AIDS. Drake TA, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):125–8

Improved detection of Mycobacterium avium complex with the Bactec radiometric system. Hoffner SE. **Diagn Microbiol Infect Dis** 1988 May;10(1):1–6

PATHOLOGY

Histiocytic diseases of bone marrow. Lee RE. **Hematol Oncol Clin North Am** 1988 Dec;2(4):657–67

Muscle and nerve involvement in AIDS patient with disseminated Mycobacterium avium intracellulare infection [letter] Wrzolek MA, et al. **Muscle Nerve** 1989 Mar; 12(3):247–9

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 23–1989. A 25-year-old woman with a right pulmonary density 14 months after a right upper lobectomy for an atypical carcinoid tumor. **N Engl J Med** 1989 Jun 8;320(23):1540–50

PHYSIOPATHOLOGY

The hamster model of chronic Mycobacterium avium complex infection. Yangco BG, et al. **J Infect Dis** 1989 Mar;159(3):556–61

PREVENTION & CONTROL

Does vaccination with bacille Calmette-Guérin protect against AIDS? Källenius G, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):349–51

RADIONUCLIDE IMAGING

Cutaneous gallium uptake in patients with AIDS with mycobacterium avium-intracellulare septicemia. Allwright SJ, et al. **Clin Nucl Med** 1988 Jul;13(7):506–8

Failure of indium-111 leukocyte scanning to detect nodal involvement with Mycobacterium avium-intracellulare infection in the acquired immunodeficiency syndrome. Bach MC. **Clin Nucl Med** 1989 May;14(5):367–8

THERAPY

Use of transfer factor in a pediatric AIDS patient with disseminated Mycobacterium avium intracellulare. Perrick D, et al. **Ann Allergy** 1989 May;62(5):437–40

Interferon-gamma and Mycobacterium avium-intracellulare infection. Squires KE, et al. **J Infect Dis** 1989 Mar; 159(3):599–600

MYCOBACTERIUM BOVIS

Postoperative immunochemotherapy (BCG + 5-FU) in advanced gastric cancer. Popiela T, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1423–7

Mycobacterium bovis as an occupational hazard in abattoir workers [letter] **Aust N Z J Med** 1989 Aug;19(4):409–10

Melanoma relapse of the upper third of the vagina treated with BCG and beta-interferon. Cappello F, et al. **Clin Exp Obstet Gynecol** 1989;16(2–3):88–92

[BCG-polysaccharides-nucleic acid and its effect in the prophylactic treatment of the common cold] Wang H. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):20–3, 61 (Eng. Abstr.) **(Chi)**

[Subcutaneous abscess caused by Mycobacterium bovis BCG in a HIV-seropositive patient] Janier M, et al. **Ann Dermatol Venereol** 1989;116(1):35–7 **(Fre)**

ANALYSIS

Restriction endonuclease analysis of total deoxyribonucleic acid of Mycobacterium tuberculosis H37RV (ATCC 27294) and of M. bovis (ATCC 19210). Labidi A. **Arch Inst Pasteur Tunis** 1988 Jul–Oct;65(3–4):241–53

Efficient mapping and characterization of a T cell epitope by the simultaneous synthesis of multiple peptides. Van der Zee R, et al. **Eur J Immunol** 1989 Jan;19(1):43–7

Phenolic glycolipids of Mycobacterium bovis: new structures and synthesis of a corresponding seroreactive neoglycoprotein. Chatterjee D, et al. **Infect Immun** 1989 Feb;57(2):322–30

New-found phenolic glycolipids in Mycobacterium bovis BCG. Presence of a diglycosylated glycolipid. Vercellone A, et al. **J Biol Chem** 1989 May 5;264(13):7447–54

In vitro augmentation of natural killer cell activity and production of interferon-alpha/beta and -gamma with deoxyribonucleic acid fraction from Mycobacterium bovis BCG. Yamamoto S, et al. **Jpn J Cancer Res** 1988 Jul; 79(7):866–73

Fatty acids of Mycobacterium bovis BCG. Olson WP, et al. **Microbios** 1989;57(232–233):151–5

GENETICS

Genetic relatedness among Mycobacterium tuberculosis and M. bovis. Labidi A, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:217–21

Transformation of BCG with plasmid DNA. Lugosi L, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:256–7

Molecular cloning and partial sequencing of the M. bovis-BCG ornithine-carbamoyltransferase gene. Timm J, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:254–5

Genetic basis of host resistance and susceptibility to intracellular pathogens. Skamene E, et al. **Adv Exp Med Biol** 1988;239:23–37 (40 ref.)

Immunogenic protein MPB57 from Mycobacterium bovis BCG: molecular cloning, nucleotide sequence and expression. Yamaguchi R, et al. **FEBS Lett** 1988 Nov 21; 240(1–2):115–7

Molecular cloning of mycobacterial promoters in Escherichia coli. Sirakova TD, et al. **FEMS Microbiol Lett** 1989 May; 50(1–2):153–6

Complete nucleotide sequence of immunogenic protein MPB70 from Mycobacterium bovis BCG. Terasaka K, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):273–6

Cloning and characterization of the gene for immunogenic protein MPB64 of Mycobacterium bovis BCG. Yamaguchi R, et al. **Infect Immun** 1989 Jan;57(1):283–8

Gene isolation with human T lymphocyte probes. Isolation of a gene that expresses an epitope recognized by T cells specific for Mycobacterium bovis BCG and pathogenic mycobacteria. Mustafa AS, et al. **J Immunol** 1988 Oct 15; 141(8):2729–33

Linkage analysis of the Bcg gene on mouse chromosome 1. Identification of a tightly linked marker. Schurr E, et al. **J Immunol** 1989 Jun 15;142(12):4507–13

Expression of I-A by macrophages from Bcgr and Bcgs mice. Transient expression of I-A is due to degradation of MHC class II glycoproteins. Vespa L, et al. **J Immunol** 1989 Jul 1;143(1):214–20

In vitro augmentation of natural killer activity of peripheral blood cells from cancer patients by a DNA fraction from Mycobacterium bovis BCG. Mashiba H, et al. **Jpn J Med Sci Biol** 1988 Oct–Dec;41(5–6):197–202

GROWTH & DEVELOPMENT

Mechanisms of recrudescence of Mycobacterium bovis BCG infection in mice. Cox JH, et al. **Infect Immun** 1989 Jun; 57(6):1719–24

IMMUNOLOGY

Concentration dependent functional responsiveness to subcellular antigenic extracts of BCG and different mycobacterial PPDs, of tuberculin (Mtb-PPD) reactive human T-cell lines. Das PK, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:164–8

Isolation and first characterization of a temperate phage growing on Mycobacterium smegmatis and M. bovis-BCG. Haeseler F, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:252–3

Isolation and characterisation of an immunodominant protein from Mycobacterium bovis. Wood P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:186–7

Intrapleural BCG in postsurgical stage I non-small cell lung cancer. Macchiarini P, et al. **Anticancer Res** 1989 Mar–Apr; 9(2):391–3

Modulation of growth-stimulating and antitumor activity of macrophages by BCG and cyclophosphamide. Okulov VB, et al. **APMIS Suppl** 1988;2:130–5

An ELISA for the detection of anergic tuberculous cattle. Plackett P, et al. **Aust Vet J** 1989 Jan;66(1):15–9

BCG infection induces responsiveness to dead Mycobacterium leprae in hamsters. A Mitsuda-like reaction. Mariano M, et al. **Braz J Med Biol Res** 1989; 22(1):81–4

Immunological responsiveness to M. leprae and BCG antigens in 98 leprosy patients and their household contacts. Sarno EN, et al. **Braz J Med Biol Res** 1988;21(3):461–70

B-cell-mediated depression of the granulomatous response to BCG in mice. Campa M, et al. **Cell Immunol** 1989 Apr 1;119(2):279–85

BCG-RIVM: a new BCG preparation for intravesical immunotherapy of superficial bladder cancer. Schreinemachers L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):713–6

Serum monoclonal antibodies derived from patients with multiple myeloma react with mycobacterial phosphoinositides and nuclear antigens. Buskila D, et al. **Clin Exp Immunol** 1989 Jun;76(3):378–83

Microbial agents in cancer treatment. Clark JW. **Curr Probl Dermatol** 1989;18:277–82 (9 ref.)

Differential pattern of T cell recognition of the 65-kDa mycobacterial antigen following immunization with the whole protein or peptides. Brett SJ, et al. **Eur J Immunol** 1989 Jul;19(7):1303–10

Brain norepinephrine levels after BCG stimulation of the immune system [published erratum appears in Immunol Lett 1988 Dec;19(4):351] Barneoud P, et al. **Immunol Lett** 1988 Jul;18(3):201–4

Immunological consequences of innate resistance and susceptibility to BCG [published erratum appears in Immunol Lett 1989 Feb;20(3):247] Buschman E, et al. **Immunol Lett** 1988 Nov;19(3):199–209

Characterization of fibronectin-binding antigens released by Mycobacterium tuberculosis and Mycobacterium bovis BCG. Abou-Zeid C, et al. **Infect Immun** 1988 Dec; 56(12):3046–51

Homology of the 70-kilodalton antigens from Mycobacterium leprae and Mycobacterium bovis with the Mycobacterium tuberculosis 71-kilodalton antigen and with the conserved heat shock protein 70 of eucaryotes.

Garsia RJ, et al. **Infect Immun** 1989 Jan;57(1):204–12

H-2-linked control of in vitro gamma interferon production in response to a 32-kilodalton antigen (P32) of Mycobacterium bovis bacillus Calmette-Guérin. Huygen K, et al. **Infect Immun** 1988 Dec;56(12):3196–200

Expression of tumor necrosis factor in vitro by human mononuclear phagocytes stimulated with whole Mycobacterium bovis BCG and mycobacterial antigens. Valone SE, et al. **Infect Immun** 1988 Dec;56(12):3313–5

The production of mycobacterial antigens by homogeneous culture in a fermentor. Nyabenda J, et al. **J Biol Stand** 1988 Oct;16(4):259–67

Humoral immune response in human tuberculosis: immunoglobulins G, A, and M directed against the purified P32 protein antigen of Mycobacterium bovis bacillus Calmette-Guérin. Turneer M, et al. **J Clin Microbiol** 1988 Sep;26(9):1714–9

The recombinant 65-kD heat shock protein of Mycobacterium bovis Bacillus Calmette-Guerin/M. tuberculosis is a target molecule for CD4+ cytotoxic T lymphocytes that lyse human monocytes. Ottenhoff TH, et al. **J Exp Med** 1988 Nov 1;168(5):1947–52

Production and characterization of monoclonal antibodies specific for Mycobacterium bovis. Wood PR, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2599–604

Advances in the diagnosis and management of bladder cancer: flow cytometry, intravesical bacillus Calmette-Guerin, and systemic chemotherapy. Badalament RA, et al. **J Surg Oncol** 1989 Sep;42(1):33–8 (48 ref.)

Purification, characterization and identification of a 32 kDa protein antigen of Mycobacterium bovis BCG. De Bruyn J, et al. **Microb Pathog** 1987 May;2(5):351–66

Size characterization of Mycobacterium bovis BCG (Bacillus Calmette Guérin) vaccine, Tice substrain. Zhang A, et al. **Pharm Res** 1988 Sep;5(9):607–10

Use of PPD and phosphatide antigens in an ELISA to detect the serological response in experimental bovine tuberculosis. Hanna J, et al. **Res Vet Sci** 1989 Jul;47(1):43–7

Purification of a major Mycobacterium bovis antigen for the diagnosis of bovine tuberculosis. Fifis T, et al. **Scand J Immunol** 1989 Jan;29(1):91–101

BCG induced killer cell activity. Koga S, et al. **Urol Res** 1988;16(5):351–5

Antibodies to mycobacteria in cattle not infected with Mycobacterium bovis. Auer LA, et al. **Vet Microbiol** 1988 Sep;18(1):51–61

Low doses of recombinant interleukin-2 enhance delayed type hypersensitivity to PPD in mice infected with Mycobacterium bovis-BCG and fed a diet supplemented with vitamin A acetate. Ferraro F, et al. **Z Erkr Atmungsorgane** 1988;171(1):45–9

[Purification, characterization and immunological study of 2 protein antigens of the BCG strain Mycobacterium bovis] De Bruyn J, et al. **Bull Mem Acad R Med Belg** 1988; 143(1–2):157–70 (Eng. Abstr.) **(Fre)**

[Evaluation of four antigens for the detection of anti-Mycobacterium bovis antibodies by enzyme immunoassay] Ritacco V, et al. **Rev Argent Microbiol** 1988 Apr-Jun;20(2):97–101 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Disseminated BCG infection--a case report. Murugasu B, et al. **J Singapore Paediatr Soc** 1988;30(3–4):139–41

An evaluation of 1-hexadecylpyridinium chloride as a decontaminant in the primary isolation of Mycobacterium bovis from bovine lesions. Corner LA, et al. **Vet Microbiol** 1988 Oct;18(2):127–34

Identification of Mycobacterium bovis isolates using a monoclonal antibody. Corner LA, et al. **Vet Microbiol** 1988 Oct;18(2):191–6

Advantages of a new agar medium in the primary isolation of Mycobacterium bovis. Cousins DV, et al. **Vet Microbiol** 1989 May;20(1):89–95

Excretion of Mycobacterium bovis by experimentally infected cattle. Neill SD, et al. **Vet Rec** 1988 Sep 24; 123(13):340–3

[Effect of digestive juices on the absorption and destination of oral BCG vaccine] Mortatti RC, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec;19(4):251–8 (Eng. Abstr.) **(Por)**

[An immunologic method for identification of M. tuberculosis and M. bovis (BCG) based on the use of monoclonal antibodies] Androsova MV, et al. **Probl Tuberk** 1989; (5):43–6 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

[Biological activity of tubercule bacilli in an epizootic infectious process] Bokun AO. **Probl Tuberk** 1989;(1):51–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Characteristics of lung ultrastructure and variability mutability , mutation of the causative agent in experimental tuberculosis] Dzis' EI, et al. **Probl Tuberk** 1988;(12):42–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Thin bridgelike connections between cells in Mycobacterium bovis BCG and in Corynebacterium glutamicum. Ionescu MD, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan-Mar; 47(1):5–10

MYCOBACTERIUM INFECTIONS

Colonic tuberculosis due to atypical mycobacteria in a renal transplant recipient [letter] Kochhar R, et al. **Am J Gastroenterol** 1988 Dec;83(12):1435–6

Mycobacterium gordonae: an unusual peritoneal pathogen in a patient undergoing continuous ambulatory peritoneal dialysis. London RD, et al. **Am J Med** 1988 Nov; 85(5):703–4

Endogenous Mycobacterium chelonae endophthalmitis. Ambler JS, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):338–9

Nomenclature of mycobacterial disease [letter] Grange JM. **Am Rev Respir Dis** 1989 Aug;140(2):561

Mycobacterium chelonae keratitis. Richardson P, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):195–6

Mycobacterium ulcerans infection in Victoria: celebration of a golden jubilee? Hayman J. **Australas J Dermatol** 1987 Dec;28(3):99–105

Infections due to Mycobacterium chelonae. de Haller R, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):23

Characteristics of Mycobacterium xenopi disease. Thomas P, et al. **Bull Int Union Tuberc Lung Dis** 1988 Sep; 63(3):12–3

Mycobacterial diseases. **Clin Chest Med** 1989 Sep; 10(3):297–467

Mycobacterium terrae osteomyelitis and septic arthritis in a normal host. A case report. Rougraff BT, et al. **Clin Orthop** 1989 Jan;(238):308–10

Hand infections with Mycobacterium chelonei: a case report and review of the literature. Anouchi YS, et al. **J Hand Surg [Br]** 1988 Aug;13(3):331–2 (7 ref.)

Synovial hand infection from Mycobacterium terrae. Deenstra W. **J Hand Surg [Br]** 1988 Aug;13(3):335–6

Intraoral infection with Mycobacterium chelonae. A case report. Pedersen A, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):262–5

Disseminated cutaneous infection caused by Mycobacterium kansasii: report of a case. Tseng HM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):836–9

[Advances in research on atypical mycobacterium infections] Zhang TM. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):295–7 (15 ref.) **(Chi)**

['Typically atypical'] Hoekstra MO, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):329–32 **(Dut)**

[Atypical mycobacteria causing generalized lung infections] Nurmela T, et al. **Duodecim** 1988;104(6):399–403 (15 ref.) **(Fin)**

[Mycobacterium marinum infections in humans. 2. Infections caused by M. marinum] Tsukamura M. **Kekkaku** 1988 Aug; 63(8):577–80 (55 ref.) (Eng. Abstr.) **(Jpn)**

[Pneumonia caused by Mycobacterium chelonei. Apropos of a case (letter)] Chimpén Ruiz VA, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):318–9 **(Spa)**

[Pulmonary infection caused by Mycobacterium chelonei. A case with a duration of more than 2 years (letter)] García del Palacio JI, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):318 **(Spa)**

COMPLICATIONS

The treatment and prevention of mycobacterial disease in patients with HIV infection. Pitchenik AE. **Aids** 1988;2 Suppl 1:S177–82 (64 ref.)

Mycobacterium chelonae: a cause of nodular skin lesions with a proclivity for renal transplant recipients. Cooper JF, et al. **Am J Med** 1989 Feb;86(2):173–7

Unsuspected mycobacterial endophthalmitis with increased aqueous lactate dehydrogenase levels in a child. Croxatto JO, et al. **Ann Ophthalmol** 1989 Jun;21(6):233–7

Mycobacterial infections and AIDS. Nunn PP, et al. **Br Med Bull** 1988 Jul;44(3):801–13 (62 ref.)

Mycobacteriosis in patients with AIDS [letter] **Chest** 1988 Dec;94(6):1312–3

Mycobacterium fortuitum in systemic lupus erythematosus. Laborde H, et al. **Clin Exp Rheumatol** 1989 May-Jun; 7(3):291–3

Crohn's disease and the mycobacterioses: a review and comparison of two disease entities. Chiodini RJ. **Clin Microbiol Rev** 1989 Jan;2(1):90–117 (311 ref.)

Mycobacterium marinum infection in a patient with cryptosporidiosis and the acquired immunodeficiency syndrome. Lambertus MW, et al. **Cutis** 1988 Jul;42(1):38–40

Mycobacteria and autoimmunity. Shoenfeld Y, et al. **Immunol Today** 1988 Jun;9(6):178–82 (64 ref.)

Mycobacterium kansasii and Pneumocystis carinii pneumonia in a patient with the acquired immunodeficiency syndrome. Vurma-Rapp U, et al. **Infection** 1989 Mar-Apr;17(2):88–9

A Mycobacterium malmoense infection of the hand presenting as carpal tunnel syndrome. Prince H, et al. **J Hand Surg [Br]** 1988 Aug;13(3):328–30

Waterborne Mycobacterium avium infection [letter] Yagupsky P, et al. **JAMA** 1989 Feb 17;261(7):994

Mycobacteria can be seen as "negative images" in cytology smears from patients with acquired immunodeficiency syndrome. Maygarden SJ, et al. **Mod Pathol** 1989 May; 2(3):239–43

AIDS-related mycobacterial disease. Collins FM. **Springer Semin Immunopathol** 1988;10(4):375–91 (79 ref.)

[Cutaneous and articular infection by Mycobacterium chelonei in an immunodeficient patient (letter)] Brunel P, et al. **Ann Med Interne (Paris)** 1989;139(8):619–20 **(Fre)**

[Rectal ulcer infected by Mycobacterium fortuitum. Apropos of 4 cases] Demoulin L, et al. **Pathol Biol (Paris)** 1989 Apr; 37(4):245–8 (Eng. Abstr.) **(Fre)**

[Cervical adenitis caused by atypical mycobacteria in childhood] Boqué Genovard MA. **An Esp Pediatr** 1988 Oct; 29(4):284–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Rapid and precise diagnosis of atypical mycobacterial infection by chemotaxonomical and immunological methods. Ikawa H, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:85–8

Acid-fast staining of urine and gastric contents is an excellent indicator of mycobacterial disease [letter] Body BA, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1514–5

Pulmonary disease caused by Mycobacterium chelonae in a heart-lung transplant recipient with obliterative bronchiolitis. Trulock EP, et al. **Am Rev Respir Dis** 1989 Sep;140(3):802–5

The importance and evaluation of mycobacterial diseases as assessed by a mycobacteriological laboratory. Portaels F. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):13–6

Sporotrichoid spread of Mycobacterium chelonei. Higgins EM, et al. **Clin Exp Dermatol** 1988 Jul;13(4):234–6

Lethal extrapulmonary mycobacteriosis. Kos S, et al. **Eur Respir J** 1989 Jan;2(1):96–7

Mycobacterial infection mimicking inflammatory 'pseudotumour' of the lung. Loo KT, et al. **Histopathology** 1989 Feb;14(2):217–9

Comparison of BACTEC 13A medium and Du Pont isolator for detection of mycobacteremia. Witebsky FG, et al. **J Clin Microbiol** 1988 Aug;26(8):1501–5

Missed diagnosis of mycobacterial infection [letter] Elston RA. **Lancet** 1989 May 20;1(8647):1144

Diagnostic usefulness of mycobacterial skin test antigens in childhood lymphadenitis. Del Beccaro MA, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):206–10

Clinical presentation of Bacillus Calmette-Guérin infections in patients with immunodeficiency syndromes. Gonzalez B, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):201–6

[15th anniversary of the Mycobacteria Study Group] Schröder KH. **Pneumologie** 1989 May;43(5):262–4 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Antimycobacterial activity in vivo of LM427 (rifabutin). Orme IM. **Am Rev Respir Dis** 1988 Nov;138(5):1254–7

Mycobacteria and the new quinolones. Leysen DC, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):1–5 (67 ref.)

Treatment of mycobacterial infections. Davidson PT. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):23–5

Combination of ofloxacin and amikacin in the treatment of sternotomy wound infection. Yew WW, et al. **Chest** 1989 May;95(5):1051–5

Drug therapy of fungal and parasitic diseases. Weber LA, et al. **Dermatol Clin** 1989 Apr;7(2):387–96 (40 ref.)

The combined administration of thymomodulin and interleukin 2 reverses T-cell unresponsiveness in mice infected with Mycobacterium bovis-BCG. Colizzi V, et al. **Int J Immunopharmacol** 1988;10(3):271–5

Fungal and mycobacterial infections in patients infected with the human immunodeficiency virus. Spencer PM, et al. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:107–25 (58 ref.)

Cure of bacille Calmette-Guérin vaccination abscesses with erythromycin. Murphy PM, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):335–7

[Problems in relation to chemotherapy of mycobacterioses caused by so-called atypical Mycobacteria] Urbanczik R. **Prax Klin Pneumol** 1988 Jul;42(7):610–2 (Eng. Abstr.) **(Ger)**

[A case of Mycobacterium kansasii lung infection developed after treatment of Mycobacterium gordonae lung infection] Umeki S, et al. **Kekkaku** 1988 Dec;63(12):785–90 (Eng. Abstr.) **(Jpn)**

[Synergistic effects of davercin, rifampicin, ethambutol and isonicotinic acid hydrazide on selected standard strains of Mycobacterium in the in-vitro and in-vivo experiments] Janowiec M, et al. **Pneumonol Pol** 1988 Jun;56(6):278–82 (Eng. Abstr.) **(Pol)**

[Cutaneous mycobacteriosis caused by Mycobacterium chelonei var. abscessus] Martinez G, et al. **Med Cutan Ibero Lat Am** 1988;16(3):197–200 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Studies on the epidemiology of nontuberculous mycobacteriosis in Japan. Tsukamura M, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1280–4

The epidemiology of nontuberculous mycobacterial disease. O'Brien RJ. **Clin Chest Med** 1989 Sep;10(3):407–18 (79 ref.)

Septic arthritis of the hand due to Mycobacterium marinum. Jones MW, et al. **J Hand Surg [Br]** 1988 Aug;13(3):333–4

Mycobacterial species responsible for tuberculosis and mycobacteriosis cases in the Czech Socialist Republic, 1981–1985. Kubín M, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):419–23

Mycobacterial infection and the acquired immunodeficiency syndrome [letter] Dawson DJ. **Med J Aust** 1988 Oct 17;

149(8):445–6
[Lung diseases caused by non-tuberculous mycobacteria in East Germany and Hungary] Kalich R, et al. **Pneumologie** 1989 Mar;43(3):169–72 (Eng. Abstr.) **(Ger)**
[Infections due to Mycobacterium ulcerans and Mycobacterium haemophilum] Tsukamura M. **Kekkaku** 1988 Jun;63(6):433–9 (35 ref.) (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Mycobacterium kansasii diffuse pulmonary infection in a patient with acquired immune deficiency syndrome. Successful therapy with an antituberculous regimen. Jacobson MA, et al. **Am J Clin Pathol** 1989 Feb;91(2):236–8
Mycobacterium chelonae peritonitis associated with continuous ambulatory peritoneal dialysis. Merlin TL, et al. **Am J Clin Pathol** 1989 Jun;91(6):717–20
Nosocomial Mycobacterium fortuitum colonization from a contaminated ice machine. Laussucq S, et al. **Am Rev Respir Dis** 1988 Oct;138(4):891–4
Mycobacterium xenopi infections in the acquired immunodeficiency syndrome [letter] Ausina V, et al. **Ann Intern Med** 1988 Dec 1;109(11):927–8
Rapidly growing nontuberculous mycobacteria: a new enemy of the cardiac surgeon. Robicsek F, et al. **Ann Thorac Surg** 1988 Dec;46(6):703–10 (54 ref.)
Mycobacteria and AIDS [letter] Hanson PJ. **Br J Hosp Med** 1988 Aug;40(2):149
Canaliculitis caused by Mycobacterium chelonae after lacrimal intubation with silicone tubes. Rootman DS, et al. **Can J Ophthalmol** 1989 Aug;24(5):221–2
Mycobacterium chelonei keratitis in a soft-contact-lens wearer. Zabel RW, et al. **Can J Ophthalmol** 1988 Dec; 23(7):315–7
Mycobacterium chelonei infection of a Broviac catheter insertion site. Engler HD, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):521–3
Tenosynovitis of the hand caused by Mycobacterium terrae. Petrini B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug; 8(8):722–4
Disseminated Mycobacterium chelonae ssp. abscessus in an immunocompetent host and with a known portal of entry. Nelson BR, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):909–12
Bronchopulmonary cross-colonization and infection related to mycobacterial contamination of suction valves of bronchoscopes. Wheeler PW, et al. **J Infect Dis** 1989 May; 159(5):954–8
Bacillus Calmette-Guerin (BCG) endophthalmitis. Lester H, et al. **Retina** 1988;8(3):182–4
Cutaneous Mycobacterium thermoresistibile infection in a heart transplant recipient. Neeley SP, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):608–11
[Hospital pseudo-infections caused by Mycobacterium gordonae] Foresti V, et al. **Recenti Prog Med** 1989 Apr; 80(4):180–2 (Eng. Abstr.) **(Ita)**
[A case of Mycobacterium scrofulaceum lung infection occurring in old lung tuberculosis lesion] Umeki S. **Kekkaku** 1989 Jan;64(1):31–5 (Eng. Abstr.) **(Jpn)**

GENETICS

Molecular biology of mycobacteria. Hopwood DA, et al. **Br Med Bull** 1988 Jul;44(3):528–46 (51 ref.)
Gene isolation with human T lymphocyte probes. Isolation of a gene that expresses an epitope recognized by T cells specific for Mycobacterium bovis BCG and pathogenic mycobacteria. Mustafa AS, et al. **J Immunol** 1988 Oct 15; 141(8):2729–33
Genetic control of susceptibility to mycobacterial infections. Skamene E. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S394–9 (27 ref.)

IMMUNOLOGY

Partial characterization of suppressor factors in spleen cell culture supernatants of Mycobacterium lepraemurium–infected mice. Richard L, et al. **Adv Exp Med Biol** 1988;239:279–85
Stress proteins and the immune response to mycobacteria—antigens as virulence factors? Young DB, et al. **Antonie Van Leeuwenhoek** 1988;54(5):431–9 (37 ref.)
Sensitivity to tuberculin and sensitins in Swedish children. Lind A, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec; 63(4):19–22
Local reactivity, local resistance and systemic dissemination in Mycobacterium lepraemurium (MLM) infection. Løvik M, et al. **Clin Exp Immunol** 1989 Mar;75(3):461–5
T-cell–mediated immunity in persistent Mycobacterium intracellulare infections in mice. Takashima T, et al. **Infect Immun** 1988 Nov;56(11):2782–7
Antibodies to mycobacterial peptidoglycolipid and to crude protein antigens in sera from different categories of human subjects. Wayne LG, et al. **J Clin Microbiol** 1988 Nov; 26(11):2300–6
An immunoelectronmicroscopical study of the expression of major histocompatibility complex (MHC) class II antigens in guinea pig sciatic nerves following induction of intraneural mycobacterial granulomas. Cowley SA, et al. **J Neuroimmunol** 1989 Aug;23(3):223–31
Neutrophil–macrophage cooperation in the host defence against mycobacterial infections. Silva MT, et al. **Microb Pathog** 1989 May;6(5):369–80
Induction of non-specific immunosuppression in mice by mycobacterial infections and its relationship to macrophage activation. Appelberg R, et al. **Scand J Immunol** 1989 Aug; 30(2):165–74
Immunology of mycobacterial disease. **Springer Semin Immunopathol** 1988;10(4):279–391
Genetic aspects of innate resistance and acquired immunity to mycobacteria in inbred mice. Buschman E, et al. **Springer Semin Immunopathol** 1988;10(4):319–36 (52 ref.)
Human leukocyte antigens (HLA) and mycobacterial disease [published erratum appears in Springer Semin Immunopathol 1989;11(1):89] de Vries RR, et al. **Springer Semin Immunopathol** 1988;10(4):305–18 (56 ref.)
Assay of specific antibody response to mycobacterial antigen for the diagnosis of a pleural effusion in a patient with AIDS. Van Vooren JP, et al. **Tubercle** 1988 Dec; 69(4):303–5
[Intracellular activity and phagocyte formation of pathogenic and non-pathogenic strains of Mycobacterium fortuitum] Sosnovskaia AV. **Probl Tuberk** 1988;(6):59–62 (Eng. Abstr.) **(Rus)**

METABOLISM

Morphology of the fibrinogen exudate during evolution of a mycobacterial-induced murine eye granuloma. O'Rourke J, et al. **Curr Eye Res** 1988 Dec;7(12):1207–19

MICROBIOLOGY

Non-cultivable mycobacteria in ulcers of the skin. Salem JI, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:10–5
Ankylosing spondylitis lung disease and Mycobacterium scrofulaceum. Levy H, et al. **Br J Dis Chest** 1988 Jan; 82(1):84–7
Mycobacterium haemophilum in Quebec. Thibert L, et al. **Can Dis Wkly Rep** 1988 Oct 22;14(42):196 **(Eng, Fre)**
Primary pulmonary infection caused by Mycobacterium terrae complex. Krisher KK, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):171–5
Mycobacterium malmoense infection presenting as a mediastinal mass in a child [letter] Griffiths D, et al. **J Infect** 1989 Jul;19(1):83–4
Diversity and sources of rapidly growing mycobacteria associated with infections following cardiac surgery. Wallace RJ Jr, et al. **J Infect Dis** 1989 Apr;159(4):708–16
DNA probes demonstrate a single highly conserved strain of Mycobacterium avium infecting AIDS patients. Hampson SJ, et al. **Lancet** 1989 Jan 14;1(8629):65–8
[Non-tuberculous mycobacterium infections. Present status and therapeutic uncertainties] Chrétien J, et al. **Ann Med Interne (Paris)** 1989;140(3):203–4 **(Fre)**
[Mycobacteria and mycobacterioses (except for tuberculosis and leprosy)] Petersen KF. **Pneumologie** 1989 May; 43(5):236–49 (106 ref.) **(Ger)**
[Diseases caused by "atypical" Mycobacteria (mycobacterioses): diagnosis] Petersen KF. **Prax Klin Pneumol** 1988 Jul;42(7):606–9 (16 ref.) (Eng. Abstr.) **(Ger)**
[Sulfadimethoxine as a promising drug in the treatment of infections caused by Mycobacterium kansasii and Mycobacterium xenopi—differentiation between M. kansasii and M. marinum and between M. gordonae and M. scrofulaceum by the susceptibility testing to sulfadimethoxine] Tsukamura M. **Kekkaku** 1989 Apr; 64(4):313–7 (Eng. Abstr.) **(Jpn)**
[Use of UAP culture medium in isolating mycobacteria from expectorations] Reyes-Escárcega V, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):11–3 (Eng. Abstr.) **(Spa)**

MORTALITY

Deaths from AIDS-like illnesses in west Africans. Onwubalili JK, et al. **East Afr Med J** 1988 Dec;65(12):867–73

PATHOLOGY

Inner ear damage induced by bacteria. Morphological and behavioral study. Harada Y, et al. **Adv Otorhinolaryngol** 1988;42:162–71
Macrophages in bronchoalveolar lavage fluid do not represent macrophages in granulomas of the lungs of BCG-infected mice. Nibbering PH, et al. **Agents Actions** 1989 Jan;26(1–2):132–3
Mycobacterium chelonae scleral abscess after removal of a scleral buckle. Pope J Jr, et al. **Am J Ophthalmol** 1989 May 15;107(5):557–8
Postoperative mycobacterial endophthalmitis. Roussel TJ, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):403–6
Primary atypical mycobacteriosis of the intestine: a report of three cases. Fujisawa K, et al. **Gut** 1989 Apr;30(4):541–5
Granulomatous pulmonary reactions after instillation of Mycobacterium gordonae. Light and electron microscopic investigations on the rat model. Fasske E, et al. **Med Microbiol Immunol (Berl)** 1989;178(3):149–61
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 17-1989. A 58-year-old man with cavitary lung disease. **N Engl J Med** 1989 Apr 27;320(17):1130–9
Synovial involvement by Mycobacterium marinum. A histopathological study of 25 culture-proven cases. Collins RJ, et al. **Pathology** 1988 Oct;20(4):340–5
[Characterization of experimental infection with Mycobacterium lepraemurium in 2 strains of mice] Roggero E, et al. **Rev Argent Microbiol** 1988 Jan–Mar;20(1):26–35 (Eng. Abstr.) **(Spa)**
[Suspected atypical, mycobacterium infection in a child with a neck nodule] Tordai P, et al. **Lakartidningen** 1989 Mar 29;86(13):1173–4 **(Swe)**

PHYSIOPATHOLOGY

Response of the murine hematopoietic system to chronic infection with Mycobacterium lepraemurium. Resnick M, et al. **Infect Immun** 1988 Dec;56(12):3145–51

PREVENTION & CONTROL

Mycobacterial infections in recipients of kidney allografts. A seventeen-year experience. Costa JM, et al. **Acta Med Port** 1988 Jan–Feb;1(1):51–7

RADIOGRAPHY

Mycobacterial esophagitis in AIDS. Goodman P, et al. **Gastrointest Radiol** 1989 Spring;14(2):103–5

THERAPY

Atypical mycobacterial keratitis. McClellan KA, et al. **Aust N Z J Ophthalmol** 1989 Feb;17(1):103–5
Mycobacterium marinum flexor tenosynovitis. Lacy JN, et al. **Clin Orthop** 1989 Jan;(238):288–93

TRANSMISSION

Inoculation mycobacterioses. Grange JM, et al. **Clin Exp Dermatol** 1988 Jul;13(4):211–20 (144 ref.)
Nontuberculous mycobacteria and water: a love affair with increasing clinical importance. Wallace RJ Jr. **Infect Dis Clin North Am** 1987 Sep;1(3):677–86 (33 ref.)
Mycobacterium other than tubercle bacilli in various environments in Bangkok. Imwidthaya P, et al. **J Med Assoc Thai** 1989 Jun;72(6):317–20

VETERINARY

Ulcerative stomatitis and subcutaneous granulomas caused by Mycobacterium chelonei in a boa constrictor. Quesenberry KE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1131–2
A histopathological study of pulmonary infection of mice with Mycobacterium lepraemurium. Ha DK, et al. **J Comp Pathol** 1988 Nov;99(4):421–9
Haemophagocytosis and other haematological aspects of Mycobacterium lepraemurium disease of mice. Resnick M, et al. **J Comp Pathol** 1988 Jul;99(1):65–75
Concurrent infection with Mycobacterium farcinogenes and Actinobacillus lignièresi in slaughtered cattle. Tageldin MH, et al. **J Comp Pathol** 1988 Nov;99(4):431–7
Mycobacteriosis in yellow perch (Perca flavescens) from two lakes in Alberta. Daoust PY, et al. **J Wildl Dis** 1989 Jan; 25(1):31–7
[Mycobacteria in parrots and parakeets (Psittaciformes)] Forster F, et al. **DTW** 1988 Sep;95(8):338–42 (Eng. Abstr.) **(Ger)**

MYCOBACTERIUM INFECTIONS, ATYPICAL see under **MYCOBACTERIUM INFECTIONS**

MYCOBACTERIUM INTRACELLULARE see **MYCOBACTERIUM AVIUM COMPLEX**

MYCOBACTERIUM INTRACELLULARE INFECTION see **MYCOBACTERIUM AVIUM-INTRACELLULARE INFECTION**

MYCOBACTERIUM LEPRAE

[Inactivation methods of Mycobacterium leprae as a leprosy vaccine] Mori T, et al. **Nippon Rai Gakkai Zasshi** 1987 Oct–Dec;56(4):172–5 (Eng. Abstr.) **(Jpn)**
[Infection of Mycobacterium leprae and Mycobacterium lepraemurium into a cloned macrophage like cell line] Tanaka M, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep; 56(3):110–5 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Monitoring of bacterial drug response by mass spectrometry of single cells. Seydel U, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):457–9
Studies on lipids in mycobacterial cell wall: their important structure and function relating to pathogenicity and their biological activity. Bera A, et al. **Indian J Lepr** 1989 Apr; 61(2):143–50 (10 ref.)
Presence of mycobactin-like substance in Mycobacterium leprae. Dhople AM, et al. **Indian J Lepr** 1988 Jul; 60(3):348–59
Application of bioluminescent technology to patient care and research in leprosy. Katoch VM. **Indian J Lepr** 1989 Jul; 61(3):313–22 (58 ref.)
Application of ATP assay for in vitro drug screening testing against human derived M. leprae. Katoch VM, et al. **Indian J Lepr** 1989 Jul;61(3):333–44
Isolation and characterization of the highly immunogenic cell wall–associated protein of Mycobacterium leprae. Hunter SW, et al. **J Immunol** 1989 Apr 15;142(8):2864–72
In vitro methods for determination of viability of mycobacteria: comparison of ATP content, morphological

index and FDA-EB fluorescent staining in Mycobacterium leprae. Katoch VM, et al. **Lepr Rev** 1988 Jun;59(2):137-43

DRUG EFFECTS

Effects of a derivative of serotonin (deoxyfructoserotonin) and other antileprosy drugs on attachment and uptake of Mycobacterium leprae by Schwann cells in vitro. Choudhury A, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):866-70

Structure-activity relationships of selected phenazines against Mycobacterium leprae in vitro. Franzblau SG, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1583-5

In vitro and in vivo activities of macrolides against Mycobacterium leprae. Franzblau SG, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1758-62

In vitro effects of antimicrobial agents on Mycobacterium leprae in mouse peritoneal macrophages. Ramasesh N, et al. **Antimicrob Agents Chemother** 1989 May;33(5):657-62

Secondary and primary dapsone resistant leprosy: an analysis of 199 patients from St. Thomas Hospital and leprosy project, Chettupattu, South India. Aschhoff M, et al. **Indian J Lepr** 1988 Jan;60(1):34-46

Paucibacillary primary dapsone resistance--a case report. Deenabandhu A, et al. **Indian J Lepr** 1988 Jan;60(1):100-5

Correlation of in vitro Fc receptor assay with in vivo mouse foot pad method. Jagannathan P., et al. **Indian J Lepr** 1988 Oct;60(4):517-25

Primary drug resistance to both rifampicin and dapsone in a paucibacillary leprosy patient. Koranne RV, et al. **Indian J Lepr** 1988 Jan;60(1):90-2

Influence of acetylator phenotype of the leprosy patient on the emergence of dapsone resistant leprosy. Raj PP, et al. **Indian J Lepr** 1988 Jul;60(3):400-6

Controlled clinical trial for evaluation of antimicrobial drug activity against M. leprae. Grosset JH, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):529-31

Inhibition of phenolic glycolipid-I synthesis in extracellular Mycobacterium leprae as an indicator of antimicrobial activity. Harris EB, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):588-91

Effect of chemotherapy on viability of Mycobacterium leprae as determined by ATP content, morphological index and FDA-EB fluorescent staining. Katoch VM, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):615-21

Susceptibilities of Mycobacterium leprae and M. avium complex to the H2O2-Fe-mediated halogenation system supplemented with antimicrobial agents. Tomioka H, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):628-32

[Secondary sulfone resistance--presentation of a case of leprosy-Oswaldo Cruz Foundation, Rio de Janeiro-Brazil] Gallo ME, et al. **Med Cutan Ibero Lat Am** 1989;17(2):103-4 (Eng. Abstr.) **(Por)**

ENZYMOLOGY

D-alanine and catalase in Mycobacterium leprae [letter] Prabhakaran K. **Indian J Lepr** 1988 Apr;60(2):332

GENETICS

The primary structure of the 16SrRNA of Mycobacterium leprae: its use in phylogeny and development of DNA probes. Stackebrandt E, et al. **Acta Leprol (Geneve)** 1989; 7 Suppl 1:222-5

A study of the relatedness of Mycobacterium leprae isolates using restriction fragment length polymorphism analysis. Williams DL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:226-30

Benefits of recombinant DNA technology for the study of Mycobacterium leprae. Clark-Curtiss JE. **Curr Top Microbiol Immunol** 1988;138:61-79 (88 ref.)

Genetic relationships among Mycobacterium leprae, Mycobacterium tuberculosis, and candidate leprosy vaccine strains determined by DNA hybridization: identification of an M. leprae-specific repetitive sequence. Grosskinsky CM, et al. **Infect Immun** 1989 May;57(5):1535-41

HLA-DQ molecules may be products of an immune suppression gene responsible for Mycobacterium leprae-specific nonresponsiveness. Li SG, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):554-6

Conservation of genomic sequences among isolates of Mycobacterium leprae. Clark-Curtiss JE, et al. **J Bacteriol** 1989 Sep;171(9):4844-51

A protein antigen of Mycobacterium leprae is related to a family of small heat shock proteins. Nerland AH, et al. **J Bacteriol** 1988 Dec;170(12):5919-21

Characterization and taxonomic implications of the rRNA genes of Mycobacterium leprae. Sela S, et al. **J Bacteriol** 1989 Jan;171(1):70-3

Partial nucleotide sequence of 16S ribosomal RNA isolated from armadillo-grown Mycobacterium leprae. Estrada IC, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1449-53

A species-specific repetitive sequence in Mycobacterium leprae DNA. Clark-Curtiss JE, et al. **J Infect Dis** 1989 Jan;159(1):7-15

Size and homology of the genomes of leprosy-derived corynebacteria, Mycobacterium leprae, and other corynebacteria and mycobacteria. Antoine I, et al. **J Med Microbiol** 1988 Sep;27(1):45-50

GROWTH & DEVELOPMENT

Effect of lyophilization on viability of Mycobacterium leprae multiplied in nude mouse. Nakamura M, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:36-8

Filamentous phase in life cycle of M. leprae(?): a preliminary communication. Bhatia VN. **Indian J Lepr** 1988 Jul; 60(3):422-6

Morphology of M. leprae (?) in VS3E medium--a preliminary communication. Bhatia VN, et al. **Indian J Lepr** 1989 Apr;61(2):160-3

Armadillos in an Indian leprosy research centre. Desikan KV, et al. **Indian J Lepr** 1988 Jan;60(1):6-12

Effect of diet on growth of M. leprae in mouse footpads. Foster RL, et al. **Indian J Lepr** 1989 Jul;61(3):360-6

Multiplication of armadillo-derived M. leprae in murine dissociated Schwann cell cultures [letter] Antia NH, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):632-5

Investigations into cultivation of M. leprae under low oxygen tension [letter] Ishaque M. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):115-6

Psychrophilic mycobacteria in M. leprae-infected tissues [letter] Kato L. **Int J Lepr Other Mycobact Dis** 1988 Dec; 56(4):631-2

Changing concept in leprosy germ culture [editorial] Sarkar JK. **J Indian Med Assoc** 1989 Mar;87(3):57-8

Dermal characteristics of the hereditary hairless-athymic mouse and the multiplication at early stage of Mycobacterium leprae inoculated into the right hind foot. Yogi Y, et al. **Nippon Rai Gakkai Zasshi** 1988 Apr-Jun; 57(2):108-14

[Growth of human leprosy bacilli in the foot-pad of mice] Wang HY. **Chung Hua I Hsueh Tsa Chih** 1988 May; 68(5):281-2 **(Chi)**

IMMUNOLOGY

In situ locations of Mycobacterium leprae-specific antigens. Immunoelectronoptical studies. Boddingius J, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:107-12

Alteration of T cell subset pattern among in vitro M. leprae-stimulated blood lymphocytes of leprosy patients. Corbeau P, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:171-2

T lymphocytes, mononuclear phagocytes, Schwann cells and Mycobacterium leprae. Kaufmann SH, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:141-8

Mechanisms of Mycobacterium leprae-specific T-cell deficiency in lepromatous leprosy. Bach MA, et al. **Biochimie** 1988 Aug;70(8):1013-8 (50 ref.)

Structure of mycobacterial antigens. Young DB. **Br Med Bull** 1988 Jul;44(3):562-83 (82 ref.)

BCG infection induces responsiveness to dead Mycobacterium leprae in hamsters. A Mitsuda-like reaction. Mariano M, et al. **Braz J Med Biol Res** 1989; 22(1):81-4

Immunological responsiveness to M. leprae and BCG antigens in 98 leprosy patients and their household contacts. Sarno EN, et al. **Braz J Med Biol Res** 1988;21(3):461-70

Chemical synthesis of an artificial antigen containing the trisaccharide hapten of Mycobacterium leprae. Mariño-Albernas J, et al. **Carbohydr Res** 1988 Dec 1; 183(2):175-82

Failure of Mycobacterium leprae soluble antigens to suppress delayed-type hypersensitivity reaction to tuberculin. Fine PE, et al. **Clin Exp Immunol** 1989 Aug;77(2):226-9

In vitro suppression of interleukin 2 production by Mycobacterium leprae antigen. Makonkawkeyoon S, et al. **Clin Exp Immunol** 1989 Jun;76(3):398-403

Evidence that the Mitsuda reaction to Mycobacterium leprae can be mediated by lymphocytes responsive to Mycobacterium tuberculosis. Roberts PP, et al. **Clin Exp Immunol** 1988 Jun;72(3):390-3

Polyspecificity of human monoclonal antibodies reactive with Mycobacterium leprae, mitochondria, ssDNA, cytoskeletal proteins, and the acetylcholine receptor. Duggan DB, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):327-40

T cell responses to fractionated Mycobacterium leprae antigens in leprosy. The lepromatous nonresponder defect can be overcome in vitro by stimulation with fractionated M. leprae components. Ottenhoff TH, et al. **Eur J Immunol** 1989 Apr;19(4):707-13

The use of a 'universal' yeast expression vector to produce an antigenic protein of Mycobacterium leprae. Booth RJ, et al. **Immunol Lett** 1988 Sep;19(1):65-9

The efficacy of a cell-mediated reaction in the disposal of M. leprae in human skin. Kaplan G. **Immunol Lett** 1988 Nov;19(3):223-7

The use of antigen-bearing nitrocellulose particles derived from Western blots to study proliferative responses to 27 antigenic fractions from Mycobacterium leprae in patients and controls. Filley E, et al. **Immunology** 1989 May; 67(1):75-80

Use of non-conventional antigen: M. habana in detecting M. leprae antibodies from leprosy patients and contacts in FLA-ABS test. Rana NS, et al. **Indian J Lepr** 1988 Oct; 60(4):593-9

Detection of leprosy antigenuria through DOT-ELISA. Singh NB, et al. **Indian J Lepr** 1988 Oct;60(4):526-9

Lepromin conversion induced by a 'sub-unit' vaccine from ICRC bacilli. Bhatki WS, et al. **Indian J Med Res** 1988 Jun;87:545-54

Implications of prior BCG vaccination programmes in the community on the protective efficacy of new antileprosy vaccines. Radhakrishna S, et al. **Indian J Med Res** 1988 Aug;88:197-208

Correlation between macrophage activation and bactericidal function and Mycobacterium leprae antigen presentation in macrophages of leprosy patients and normal individuals. Desai SD, et al. **Infect Immun** 1989 Apr;57(4):1311-7

T-cell recognition of the 18-kilodalton antigen of Mycobacterium leprae. Dockrell HM, et al. **Infect Immun** 1989 Jul;57(7):1979-83

Immunological characterization of a human homolog of the 65-kilodalton mycobacterial antigen. Dudani AK, et al. **Infect Immun** 1989 Sep;57(9):2786-93

Homology of the 70-kilodalton antigens from Mycobacterium leprae and Mycobacterium bovis with the Mycobacterium tuberculosis 71-kilodalton antigen and with the conserved heat shock protein 70 of eucaryotes. Garsia RJ, et al. **Infect Immun** 1989 Jan;57(1):204-12

Cellular immune responses of leprosy contacts to fractionated Mycobacterium leprae antigens. Lee SP, et al. **Infect Immun** 1989 Aug;57(8):2475-80

Reduced suppressor cell response to Mycobacterium leprae in lepromatous leprosy. Sasiain MD, et al. **Infect Immun** 1989 Mar;57(3):951-6

Vaccination of mice against Mycobacterium leprae infection. Singh NB, et al. **Infect Immun** 1989 Feb;57(2):653-5

Accessory cell function of dendritic cells from lymph nodes containing Mycobacterium leprae induced granulomas. Verghese S, et al. **Int Arch Allergy Appl Immunol** 1988; 87(4):392-9

Use of anti-M. leprae phenolic glycolipid-I antibody detection for early diagnosis and prognosis of leprosy. Agis F, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec; 56(4):527-35

A pilot study of three potential vaccines for leprosy in Bombay. Ganapati R, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):33-7

Serum antibodies of normals and leprosy patients show equal binding to peripheral nerve. Ghaswala PS, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):690-2

Serologic responses to Mycobacterium leprae-specific phenolic glycolipid-I antigen in sooty mangabey monkeys with experimental leprosy. Gormus BJ, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):537-45

Comments on leprosy vaccination [letter] Kato L. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):693-4

Identification of Mycobacterium leprae antigens in tissues of leprosy patients using monoclonal antibodies. Khanolkar SR, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep; 57(3):652-8

In vitro synthesis of antimycobacterial antibodies with different specificities in various tissues of leprosy patients. Lai A Fat RF, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):552-8

Reactive oxygen intermediates inactivate Mycobacterium leprae in the phagocytes from human peripheral blood. Marolia J, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):483-91

A critique on the interpretation of the lepromin reaction using heat-killed M. leprae vaccine [letter] Mistry NF, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):110-3

HLA-DR-restricted antigen-induced proliferation and cytotoxicity mediated by CD4+ T-cell clones from subjects vaccinated with killed M. leprae. Mustafa AS, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):1-11

Relapse or late reversal reaction? Pannikar V, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):526-8

The generation of antigen-specific, major histocompatibility complex-restricted cytotoxic T lymphocytes of the CD4+ phenotype. Enhancement by the cutaneous administration of interleukin 2. Hancock GE, et al. **J Exp Med** 1989 Mar 1;169(3):909-19

Purification and characterization of a 36 kDa antigen of Mycobacterium leprae. de Wit MY, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1541-8

A 28-kDa protein from Mycobacterium leprae is a target of the human antibody response in lepromatous leprosy. Cherayil BJ, et al. **J Immunol** 1988 Dec 15;141(12):4370-5

Characterization of an antibody-binding epitope from the 18-kDa protein on Mycobacterium leprae. Doherty TM, et al. **J Immunol** 1989 Mar 1;142(5):1691-5

The mapping of epitopes of the 18-kDa protein of Mycobacterium leprae recognized by murine T cells in a proliferation assay. Harris DP, et al. **J Immunol** 1989 Sep 15;143(6):2006-12

Characterization of Mycobacterium leprae cell wall-associated proteins with the use of T lymphocyte clones. Mehra V, et al. **J Immunol** 1989 Apr 15; 142(8):2873-8

Suppression of monocyte oxidative response by phenolic glycolipid I of Mycobacterium leprae. Vachula M, et al. **J Immunol** 1989 Mar 1;142(5):1696-701

Use of an antigen-capture assay for characterisation of monoclonal antibodies to mycobacterial lipoarabinomannan. Khanolkar SR, et al. **J Med Microbiol** 1989 Mar;28(3):157-62

Serum antibody responses to mycobacteria in leprosy patients and their contacts. Cree IA, et al. **Lepr Rev** 1988 Dec; 59(4):317-27

Mucosal immunity to mycobacteria in leprosy patients and their contacts. Cree IA, et al. **Lepr Rev** 1988 Dec; 59(4):309-16

The effects of chemotherapy on antibody levels in lepromatous patients. Douglas JT, et al. **Lepr Rev** 1988 Jun;59(2):127-35

Evaluation of Mycobacterium leprae antigens in the

serological monitoring of a clofazimine-based chemotherapeutic study of dapsone resistant lepromatous leprosy patients in Cebu, Philippines. Douglas JT, et al. **Lepr Rev** 1989 Mar;60(1):8–19

Use of soluble antigens in leprosy epidemiology. Gupte MD, et al. **Lepr Rev** 1988 Dec;59(4):329–35

A comparative evaluation of serological assays for lepromatous leprosy. Mwatha J, et al. **Lepr Rev** 1988 Sep; 59(3):195–9

Influence of Mycobacterium leprae and its soluble products on the cutaneous responsiveness of leprosy patients to antigen and recombinant interleukin 2. Kaplan G, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6269–73

A Mycobacterium leprae-specific human T cell epitope cross-reactive with an HLA-DR2 peptide. Anderson DC, et al. **Science** 1988 Oct 14;242(4876):259–61

The present status of leprosy vaccine development. Noordeen SK. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):525–34

Isolation, purification and quantification of phenolic glycolipid-1 from human leprosy skin tissues. Venkatesan K, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):321–3

[The critical study of vaccine therapy of leprosy. The active life of mycobacteria in the long development cycle] Mazet G. **Acta Leprol (Geneve)** 1988 Jan-Mar;(108):45–50 **(Fre)**

[Correlation of skin tests and the production of gamma-interferon in leprosy patients] Suso L, et al. **Med Cutan Ibero Lat Am** 1988;16(3):193–6 (Eng. Abstr.) **(Por)**

[Serologic demonstration of the activity of a Mycobacterium leprae antigen obtained by chemical synthesis] González-Abreu Castells E, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):10–7 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Demonstration of acid fast bacilli in the circulating immune complex of leprosy cases and contacts. Chaudhury S, et al. **Indian J Dermatol** 1988 Oct;33(4):52–5

Auramine staining in detecting small number of bacilli in skin smears. Bhatia VN, et al. **Indian J Lepr** 1988 Jan; 60(1):13–6

Bacillaemia in leprosy: correlation with slit-skin and nasal smears. Chatterjee G, et al. **Indian J Lepr** 1988 Oct; 60(4):535–41

Reliability of direct skin smear microscopy in leprosy. Gupte MD, et al. **Indian J Lepr** 1988 Oct;60(4):566–71

Detection of lepromatous leprosy patients shedding M. leprae in nasal droppings by enzyme immunoassay. Moudgil KD, et al. **Indian J Lepr** 1988 Oct;60(4):549–53

Search for leprous infection in some small wild animals of Louisiana [letter] Job CK, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):630–1

Light- and electron-microscopic study of M. leprae-infected armadillo nerves. Liu TC, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):65–72

Appraisal of two Mycobacterium leprae-specific serological assays for monitoring chemotherapy in lepromatous (LL/BL) leprosy patients. Sinha S, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):24–32

Recognition of mycobacterial antigens by sera from patients with leprosy. Vega-Lopez F, et al. **J Clin Microbiol** 1988 Dec;26(12):2474–9

Improved staining of leprosy bacilli in tissues. Harada K, et al. **Lepr Rev** 1989 Jun;60(2):124–8

Histopathologic observations on the persistence of Mycobacterium leprae in the skin of multibacillary leprosy patients under chemotherapy. Wabitsch KR, et al. **Lepr Rev** 1988 Dec;59(4):341–6

Purification of M. leprae with special reference to the effects of purified M. leprae vaccines on host macrophage cell functions. Saito H, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul-Sep;56(3):101–9

Demonstration of acid-fast bacilli in skin biopsies from indeterminate leprosy cases. Alvarez-Mendoza A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):492–4

[Bacterial sampling using lymph node puncture-aspiration. A study of 50 patients with leprosy] Latapi-Contreras F, et al. **Acta Leprol (Geneve)** 1988 Jan-Mar;(108):7–16 (Eng. Abstr.) **(Fre)**

[Collection method of Mycobacterium leprae from infected armadillo liver—a comparison with Draper's method] Miyata Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Oct-Dec; 56(4):166–71 (Eng. Abstr.) **(Jpn)**

METABOLISM

Studies on energy synthesis in M. leprae. Bharadwaj VP, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:30–2

Pyrimidine biosynthesis in Mycobacterium leprae and other intracellular mycobacteria. Wheeler PR. **Acta Leprol (Geneve)** 1989;7 Suppl 1:33–5

Biosynthetic pathways in Mycobacterium leprae. Wheeler PR. **Acta Leprol (Geneve)** 1989;7 Suppl 1:21–4 (16 ref.)

Diglycosyl phenol phthiocerol diester of Mycobacterium leprae. Daffé M, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):333–7

Pyrimidine scavenging by Mycobacterium leprae. Wheeler PR. **FEMS Microbiol Lett** 1989 Jan 15;48(2):179–84

Pyrimidine biosynthesis de novo in M. leprae. Wheeler PR. **FEMS Microbiol Lett** 1989 Jan 15;48(2):185–9

Biochemistry of Mycobacterium leprae: its implications in culture of the bacillus and chemotherapy of leprosy. Prabhakaran K. **Indian J Lepr** 1989 Jan;61(1):1–9 (35 ref.)

Diphenoloxidase of Mycobacterium leprae: discovery, applications and prospects. Prabhakaran K. **Indian J Lepr** 1988 Oct;60(4):616–22

Use of carbon sources for lipid biosynthesis in Mycobacterium leprae: a comparison with other pathogenic mycobacteria. Wheeler PR, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2111–21

PATHOGENICITY

The macrophage in leprosy: a review on the current status. Birdi TJ, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):511–25 (136 ref.)

Interactions between simian immunodeficiency virus and Mycobacterium leprae in experimentally inoculated rhesus monkeys. Gormus BJ, et al. **J Infect Dis** 1989 Sep; 160(3):405–13

Inefficacy of thalidomide on rat adjuvant-induced arthritis and lack of arthrogenicity of Hansen bacilli. Tsutsumi S, et al. **Nippon Rai Gakkai Zasshi** 1988 Jul-Sep;57(3):122–8

Microbial glycolipids: possible virulence factors that scavenge oxygen radicals. Chan J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2453–7

PHYSIOLOGY

Intracellular parasitism of parenchymal cells by Mycobacterium leprae. Job CK, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):659–70

Effects of freezing and thawing on the viability and the ultrastructure of in vivo grown mycobacteria. Portaels F, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):580–7

ULTRASTRUCTURE

In vitro interaction of M. leprae-infected Schwann cells and splenic cells. Mehta R, et al. **Acta Neuropathol (Berl)** 1988; 76(4):407–10

New data on the ultrastructure of the membrane of Mycobacterium leprae. Silva MT, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):54–64

An electron microscopic study of alterations in the morphology and permeability of purified Mycobacterium leprae. Prabhakaran K, et al. **J Basic Microbiol** 1989; 29(1):41–8

[Electron microscopic study of fine structures of M. leprae and M. lepraemurium] Hirata T. **Nippon Rai Gakkai Zasshi** 1989 Jan-Mar;58(1):24–5 **(Jpn)**

MYCOBACTERIUM LEPRAEMURIUM

[Infection of Mycobacterium leprae and Mycobacterium lepraemurium into a cloned macrophage like cell line] Tanaka M, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul-Sep; 56(3):110–5 (Eng. Abstr.) **(Jpn)**

GROWTH & DEVELOPMENT

Enhancement of growth of Mycobacterium lepraemurium in macrophages by gamma interferon. Mor N, et al. **Infect Immun** 1989 Aug;57(8):2586–7

Doubling time of Mycobacterium lepraemurium in mouse footpads. Silbaq F, et al. **Res Microbiol** 1989 Jan; 140(1):43–50

IMMUNOLOGY

The effect of intracellular parasitism on cell phenotype. Poulter LW, et al. **Clin Exp Immunol** 1988 Dec;74(3):344–8

ULTRASTRUCTURE

[Electron microscopic study of fine structures of M. leprae and M. lepraemurium] Hirata T. **Nippon Rai Gakkai Zasshi** 1989 Jan-Mar;58(1):24–5 **(Jpn)**

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MYCOBACTERIUM SCROFULACEUM

GENETICS

Speciation of organisms within the Mycobacterium avium-Mycobacterium intracellulare-Mycobacterium scrofulaceum (MAIS) complex based on restriction fragment length polymorphisms. Picken RN, et al. **Mol Cell Probes** 1988 Dec;2(4):289–304

IMMUNOLOGY

Serum antibody responses to mycobacteria in leprosy patients and their contacts. Cree IA, et al. **Lepr Rev** 1988 Dec; 59(4):317–27

ISOLATION & PURIFICATION

Epidemiology of infection by nontuberculous mycobacteria. VIII. Absence of mycobacteria in chicken litter. Falkinham JO 3d, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1347–9

METABOLISM

Accumulation and transport of cadmium by tolerant and susceptible strains of Mycobacterium scrofulaceum. Erardi FX, et al. **Antimicrob Agents Chemother** 1989 Mar; 33(3):350–5

MYCOBACTERIUM TUBERCULOSIS

Poetry: the doctor and the tubercle bacilli. Askar AO. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):12

ANALYSIS

Restriction endonuclease analysis of total deoxyribonucleic acid of Mycobacterium tuberculosis H37RV (ATCC 27294) and of M. bovis (ATCC 19210). Labidi A. **Arch Inst Pasteur Tunis** 1988 Jul-Oct;65(3–4):241–53

Further specific triglycosyl phenol phthiocerol diester from Mycobacterium tuberculosis. Daffé M. **Biochim Biophys Acta** 1989 Apr 3;1002(2):257–60

Protective immunity to experimental tuberculosis by mannophosphoinositides of mycobacteria. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):265–84

Serodiagnostic potentialities of enzyme-linked immunosorbent assay (ELISA) using mannophosphoinositides of Mycobacterium tuberculosis H37Rv. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):285–92

CLASSIFICATION

Bacteriophage typing of Mycobacterium tuberculosis cultures from incidents of suspected laboratory cross-contamination. Jones WD Jr. **Tubercle** 1988 Mar; 69(1):43–6

[Distribution of bacteriophage types of Mycobacterium tuberculosis in France] Clavel-Sérès S, et al. **Rev Mal Respir** 1988;5(6):577–81 (Eng. Abstr.) **(Fre)**

[Taxonomic aspects of Mycobacterium tuberculosis] Lazovskaia AL. **Probl Tuberk** 1989;(5):68–71 (26 ref.) **(Rus)**

DRUG EFFECTS

Effectiveness of ofloxacin against Mycobacterium tuberculosis and Mycobacterium avium, and rifampin against M. tuberculosis in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1988 May; 137(5):1141–6

1,25(OH)2-vitamin D3 synergizes with pyrazinamide to kill tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1989 Feb;139(2):549–52

Minimal inhibitory concentrations of isoniazid, rifampin, ethambutol, and streptomycin against Mycobacterium tuberculosis strains isolated before treatment of patients in Taiwan. Suo J, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):999–1001

In vitro susceptibilities of Mycobacterium tuberculosis to 10 antimicrobial agents. Byrne SK, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1441–2

Development of a rapid method for determining the susceptibility of Mycobacterium tuberculosis to isoniazid using the Gen-Probe DNA Hybridization System. Kawa DE, et al. **Antimicrob Agents Chemother** 1989 Jul; 33(7):1000–5

Rapid susceptibility testing of Mycobacterium tuberculosis by bioluminescence assay of mycobacterial ATP. Nilsson LE, et al. **Antimicrob Agents Chemother** 1988 Aug; 32(8):1208–12

Determination of pyrazinamide MICs for Mycobacterium tuberculosis at different pHs by the radiometric method. Salfinger M, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):1002–4

Drug-resistant tuberculosis. Iseman MD, et al. **Clin Chest Med** 1989 Sep;10(3):341–53 (12 ref.)

Direct antimicrobial drug susceptibility testing of Mycobacterium tuberculosis by the radiometric method. Libonati JP, et al. **Diagn Microbiol Infect Dis** 1988 May; 10(1):41–8

Drug resistance of Mycobacterium tuberculosis isolated from sputum in Manipal. Rao PS, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):316–20

In-vitro susceptibility of Mycobacterium tuberculosis, Mycobacterium bovis and Mycobacterium kansasii to amoxycillin and ticarcillin in combination with clavulanic acid. Wong CS, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):863–6

Approaches to the development of new antituberculosis drugs. Sensi P. **Rev Infect Dis** 1989 Mar-Apr;11 Suppl 2:S467–70

Drug resistance of Mycobacterium tuberculosis isolated from treated patients in Pakistan. Aziz A, et al. **Tubercle** 1989 Mar;70(1):45–51

Effects of isoniazid and of ceforanide against virulent tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Tubercle** 1988 Mar;69(1):15–25

Primary antituberculosis drug resistance and acquired rifampicin resistance in Gujarat, India. Trivedi SS, et al. **Tubercle** 1988 Mar;69(1):37–42

In vitro activity of ciprofloxacin in combination with standard antituberculous drugs against mycobacterium tuberculosis. Uttley AH, et al. **Tubercle** 1988 Sep; 69(3):193–5

[Alteration of permeability of bacterial envelope barrier in rifamdin-resistant Mycobacterium tuberculosis] Li XZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;

19(4):388–91 (Eng. Abstr.) **(Chi)**

[Study of the minimal inhibitory concentration of rifabutine (Ansamycin LM 427) for Mycobacterium tuberculosis, Mycobacterium xenopi and Mycobacterium avium–intracellulare] Truffot–Pernot C, et al. **Rev Mal Respir** 1988;5(4):401–6 (Eng. Abstr.) **(Fre)**

[The mode of action of antimycobacterial benzylamines] Laske R, et al. **Arch Pharm (Weinheim)** 1989 May; 322(5):297–9 (Eng. Abstr.) **(Ger)**

[Antimycobacterial properties of phenothiazine type compounds] Meindl W, et al. **Arch Pharm (Weinheim)** 1989 Mar;322(3):133–6 (Eng. Abstr.) **(Ger)**

[Antimycobacterial properties of antihistaminic compounds] Meindl W. **Arch Pharm (Weinheim)** 1988 Aug;321(8):473–6 (Eng. Abstr.) **(Ger)**

[Comparison of the chemical structure and antimycobacterial action with particular reference to atypical strains. 3. Oxalamidines, a new group of potential antituberculer agents] Waisser K, et al. **Pharmazie** 1989 Mar;44(3):234–5 **(Ger)**

[Therapeutic efficacy of the principal antitubercular drugs: an evaluation by antibiogram] Cremonte LG, et al. **Minerva Med** 1989 Feb;80(2):153–6 (Eng. Abstr.) **(Ita)**

[Drug susceptibility test of mycobacteria] Kusano N. **Rinsho Byori** 1988 Nov;36(11):1274–80 **(Jpn)**

[Studies of pyrazine derivatives. XXV. Synthesis and the tuberculostatic activity of the products of reaction of 5–(6–methoxy– and 5–(6 morpholinopyrazinyl)–1,3,4–oxadiazol–2–thione with amines] Pancechowska–Ksepko D, et al. **Acta Pol Pharm** 1988;45(5):373–9 (Eng. Abstr.) **(Pol)**

[Studies on pyrazine derivatives. XXII. Synthesis and tuberculostatic activity of the products of reactions of pyrazinyl–1,3,4–oxadiazol–2–thione with amines] Pancechowska–Ksepko D, et al. **Acta Pol Pharm** 1988; 45(3):193–200 (Eng. Abstr.) **(Pol)**

[Synthesis of 1,3,4–thiadiazole derivatives with potential tuberculostatic action] Santus M. **Acta Pol Pharm** 1988; 45(3):219–24 (Eng. Abstr.) **(Pol)**

[Effect of various peptides on the growth of Mycobacterium tuberculosis] Malski M. **Med Dosw Mikrobiol** 1989; 41(1):9–14 (Eng. Abstr.) **(Pol)**

[Dynamics of the frequency of development of drug resistance in the causative agent of tuberculosis and its effect on the efficacy of treatment of patients with pulmonary tuberculosis] Abramovskaia AK, et al. **Probl Tuberk** 1988;(10):24–7 (Eng. Abstr.) **(Rus)**

[Use of 3H–thymidine to study the metabolism of Mycobacterium tuberculosis as changed during chemotherapy] Golyshevskaia VI, et al. **Probl Tuberk** 1988; (10):50–3 (Eng. Abstr.) **(Rus)**

[Chemotherapy of newly detected cases of pulmonary tuberculosis prior to the results of determining the drug sensitivity of Mycobacterium tuberculosis] Rudoi NM, et al. **Probl Tuberk** 1988;(11):24–8 (Eng. Abstr.) **(Rus)**

[Evaluation of BK positivity and resistance of Mycobacterium tuberculosis 1983–1986 in areas of Bosnia and Herzegovina] Vinik LK, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):32–5 (Eng. Abstr.) **(Scr)**

[Primary resistance to antitubercular drugs] Caminero Luna JA. **Med Clin (Barc)** 1989 Jun 3;93(1):30–6 (85 ref.) **(Spa)**

ENZYMOLOGY

Fluorescence histochemical double staining for the localization of intracellular hydrolases and tubercle bacilli. Kumar P, et al. **Mol Cell Probes** 1988 Jun;2(2):101–9

GENETICS

Genetic relatedness among Mycobacterium tuberculosis and M. bovis. Labidi A, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:217–21

Cloning, sequence determination, and expression of a 32–kilodalton–protein gene of Mycobacterium tuberculosis. Borremans M, et al. **Infect Immun** 1989 Oct;57(10):3123–30

Genetic relationships among Mycobacterium leprae, Mycobacterium tuberculosis, and candidate leprosy vaccine strains determined by DNA hybridization: identification of an M. leprae–specific repetitive sequence. Grosskinsky CM, et al. **Infect Immun** 1989 May;57(5):1535–41

Repetitive DNA sequence of Mycobacterium tuberculosis: analysis of differential hybridization pattern with other mycobacteria. Reddi PP, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):592–8

Repetitive DNA sequences as probes for Mycobacterium tuberculosis. Eisenach KD, et al. **J Clin Microbiol** 1988 Nov;26(11):2240–5

DNA probes for mycobacteria. I. Isolation of DNA probes for the identification of Mycobacterium tuberculosis complex and for mycobacteria other than tuberculosis (MOTT). Picken RN, et al. **Mol Cell Probes** 1988 Jun; 2(2):111–24

A major antigen from Mycobacterium tuberculosis which is homologous to the heat shock proteins groES from E. coli and the htpA gene product of Coxiella burneti. Baird PN, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9047

Identification of two unknown reading frames in Synechococcus 6301 as homologues of the 10k and 65k antigen genes of Mycobacterium tuberculosis and related heat shock genes in E. coli and Coxiella burnetii. Cookson MJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6392

The Mycobacterium tuberculosis BCG–a protein has homology with the Escherichia coli GroES protein. Shinnick TM, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1254

The detection of mycobacterial DNA sequences in uncultured clinical specimens with cloned Mycobacterium tuberculosis DNA as probes. Pao CC, et al. **Tubercle** 1988 Mar;69(1):27–36

Analysis of Mycobacterium tuberculosis genoma and production of a recombinant protein containing specific B and T cell antigenic determinants—new approaches to second generation antituberculosis vaccines. Colizzi V, et al. **Z Erkr Atmungsorgane** 1989;172(1):40–52

GROWTH & DEVELOPMENT

Application of rapid methods (BACTEC system) in clinical mycobacteriology and in the search for new drugs. Heifets L, et al. **Bull Int Union Tubere Lung Dis** 1988 Jun;63(2):19

Inhibition by retinoic acid of multiplication of virulent tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Infect Immun** 1989 Mar;57(3):840–4

A comparison of the use of pipettes and loops for the inoculation of Mycobacterium tuberculosis onto media [letter] Palhano Júnior L, et al. **Tubercle** 1988 Sep;69(3):232

[A modification of Sauton's liquid nutrient medium for cultivating Mycobacterium tuberculosis] Shchegoleva RA. **Lab Delo** 1989;(5):78 **(Rus)**

[Experience with practical use of a complex of 3 nutrient media for culture of Mycobacterium tuberculosis] Levina KA. **Probl Tuberk** 1988;(6):66–7 **(Rus)**

[Modified Fin–II medium for improving the bacteriological diagnosis of tuberculosis] Samillo GK, et al. **Voen Med Zh** 1988 Dec;(12):39 **(Rus)**

IMMUNOLOGY

Antibody responses against Mycobacterium tuberculosis and production of monoclonal antibodies in mice. Ljungqvist L, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:184–5

Evaluation of a phenolglycolipid antigen (PGL–Tb 1) from M. tuberculosis in the serodiagnosis of tuberculosis: comparison with PPD antigen. Martín Casabona N, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:89–93

Serological specificity of Mycobacterium tuberculosis glycolipids. Papa F, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:98–101

Monoclonal antibodies to 33 KD protein of Mycobacterium tuberculosis with varying epitope specificities. Rambukkana A, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:113–6

The use of PGL–Tb 1 from M. tuberculosis in the serological diagnosis of tuberculous meningitis: a preliminary report. Torgal–Garcia J, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:136–7

Mycobacterium tuberculosis antigen specific human T–cell lines are cytolytic to autologous antigen pulsed macrophages. Kumararatne DS, et al. **Adv Exp Med Biol** 1988;237:401–6

Evaluation of an enzyme–linked immunosorbent assay (ELISA) using an IgG antibody to Mycobacterium tuberculosis antigen 5 in the diagnosis of active tuberculosis in children. Alde SL, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):748–51

Specificity of Mycobacterium tuberculosis phenolic glycolipid (PGL–Tb1) antiserum. Papa F, et al. **Ann Inst Pasteur Microbiol** 1988 Sep–Oct;139(5):535–45

Preliminary evaluation of a Mycobacterium tuberculosis phenolglycolipid antigen in the serologic diagnosis of tuberculosis. Torgal–Garcia J, et al. **Ann Inst Pasteur Microbiol** 1988 May–Jun;139(3):289–94

Efficacy of two mycobacterial antigen preparations in the serodiagnosis of tuberculosis by enzyme–linked immunosorbent assay. Stavri D, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar;47(1):11–5

The 45 kilodalton molecule of Mycobacterium tuberculosis identified by immunoblotting and monoclonal antibodies as antigenic in patients with tuberculosis. Coates AR, et al. **Br J Exp Pathol** 1989 Apr;70(2):215–25

Structure of mycobacterial antigens. Young DB. **Br Med Bull** 1988 Jul;44(3):562–83 (82 ref.)

Stimulation of a major subset of lymphocytes expressing T cell receptor gamma delta by an antigen derived from Mycobacterium tuberculosis. O'Brien RL, et al. **Cell** 1989 May 19;57(4):667–74

Differentiation of sarcoidosis from tuberculosis using an enzyme–linked immunosorbent assay for the detection of antibodies against Mycobacterium tuberculosis. Levy H, et al. **Chest** 1988 Dec;94(6):1254–5

Detecting antimycobacterial antibodies [letter; comment] Van Vooren JP, et al. **Chest** 1989 Jul;96(1):223–4. **Comment on:** Chest 1988 Apr;93(4):762–6

Antibody levels to mycobacteria in relation to HLA type: evidence for non–HLA–linked high levels of antibody to the 65 kD heat shock protein of M. bovis in rheumatoid arthritis. Bahr GM, et al. **Clin Exp Immunol** 1988 Nov; 74(2):211–5

Lipoarabinomannan from Mycobacterium tuberculosis induces the production of tumour necrosis factor from human and murine macrophages. Moreno C, et al. **Clin Exp Immunol** 1989 May;76(2):240–5

Evidence that the Mitsuda reaction to Mycobacterium leprae can be mediated by lymphocytes responsive to Mycobacterium tuberculosis. Roberts PP, et al. **Clin Exp Immunol** 1988 Jun;72(3):390–3

Effect of lymphokines on B–cell responses to Mycobacterium tuberculosis: a comparison of in vitro secreted antibodies by Epstein Barr virus transmitted B–cell and non–transformed peripheral blood B–cells from the same donor. Githui WA. **East Afr Med J** 1988 Dec;65(12):829–37

Humoral response to defined epitopes of tubercle bacilli in adult pulmonary and child tuberculosis. Bothamley G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):639–45

T cell responses of normal individuals towards recombinant protein antigens of Mycobacterium tuberculosis. Munk ME, et al. **Eur J Immunol** 1988 Nov;18(11):1835–8

Characterization of fibronectin–binding antigens released by Mycobacterium tuberculosis and Mycobacterium bovis BCG. Abou–Zeid C, et al. **Infect Immun** 1988 Dec; 56(12):3046–51

Structure and mapping of antigenic domains of protein antigen b, a 38,000–molecular–weight protein of Mycobacterium tuberculosis. Andersen AB, et al. **Infect Immun** 1989 Aug;57(8):2481–8

Homology of the 70–kilodalton antigens from Mycobacterium leprae and Mycobacterium bovis with the Mycobacterium tuberculosis 71–kilodalton antigen and with the conserved heat shock protein 70 of eucaryotes. Garsia RJ, et al. **Infect Immun** 1989 Jan;57(1):204–12

Induction of nonspecific acquired resistance and delayed–type hypersensitivity, but not specific acquired resistance in mice inoculated with killed mycobacterial vaccines. Orme IM. **Infect Immun** 1988 Dec;56(12):3310–2

Effect of Mycobacterium tuberculosis–derived sulfolipid I on human phagocytic cells. Zhang L, et al. **Infect Immun** 1988 Nov;56(11):2876–83

The mycobacterial GroEL stress protein: a common target of T–cell recognition in infection and autoimmunity. Lamb JR, et al. **J Autoimmun** 1989 Jun;2 Suppl:93–100

Identification of antigens of Mycobacterium tuberculosis using human monoclonal antibodies. Wallis RS, et al. **J Clin Invest** 1989 Jul;84(1):214–9

Levels of antibody to defined antigens of Mycobacterium tuberculosis in tuberculous meningitis. Chandramuki A, et al. **J Clin Microbiol** 1989 May;27(5):821–5

Specificity of antibodies to immunodominant mycobacterial antigens in pulmonary tuberculosis. Jackett PS, et al. **J Clin Microbiol** 1988 Nov;26(11):2313–8

Monoclonal antibodies selectively directed against the cell wall surface of Mycobacterium tuberculosis. Mauch H, et al. **J Clin Microbiol** 1988 Sep;26(9):1691–4

Serological responses of patients with lepromatous and tuberculoid leprosy to 30–, 31–, and 32–kilodalton antigens of Mycobacterium tuberculosis. Rumschlag HS, et al. **J Clin Microbiol** 1988 Oct;26(10):2200–2

Monoclonal antibodies produced in BALB.B10 mice define new antigenic determinants in culture filtrate preparations of Mycobacterium tuberculosis. Worsaae A, et al. **J Clin Microbiol** 1988 Dec;26(12):2608–14

Streptococcal cell wall arthritis. Passive transfer of disease with a T cell line and crossreactivity of streptococcal cell wall antigens with Mycobacterium tuberculosis. DeJoy SQ, et al. **J Exp Med** 1989 Aug 1;170(2):369–82

The recombinant 65–kD heat shock protein of Mycobacterium bovis Bacillus Calmette–Guerin/M. tuberculosis is a target molecule for CD4+ cytotoxic T lymphocytes that lyse human monocytes. Ottenhoff TH, et al. **J Exp Med** 1988 Nov 1;168(5):1947–52

The secreted antigens of Mycobacterium tuberculosis and their relationship to those recognized by the available antibodies. Abou–Zeid C, et al. **J Gen Microbiol** 1988 Feb; 134 (Pt 2):531–8

Screening of serum antibodies against Mycobacterium tuberculosis by enzyme–linked immunosorbent assay (ELISA) in healthy population. Dubina J, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):83–9

Preparation and properties of monoclonal antibodies against Mycobacterium tuberculosis. Havelková M, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):233–9

Epitopes of the Mycobacterium tuberculosis 65–kilodalton protein antigen as recognized by human T cells. Oftung F, et al. **J Immunol** 1988 Oct 15;141(8):2749–54

Association of tuberculosis and M. tuberculosis–specific antibody levels with HLA. Bothamley GH, et al. **J Infect Dis** 1989 Mar;159(3):549–55

Rapid diagnosis of tuberculous meningitis by ELISA to detect mycobacterial antigen and antibody in the cerebrospinal fluid [letter] Chandramuki A. **J Infect Dis** 1989 Aug;160(2):343–4

Antibody and antigen detection for the immunodiagnosis of tuberculosis: why not? What more is needed? Where do we stand today? Daniel TM. **J Infect Dis** 1988 Oct; 158(4):678–80 (14 ref.)

Rapid diagnosis of tuberculous meningitis by using an enzyme–linked immunosorbent assay to detect mycobacterial antigen and antibody in cerebrospinal fluid. Watt G, et al. **J Infect Dis** 1988 Oct;158(4):681–6

Immunogenicity of ribonucleic acid–protein fraction of Mycobacterium tuberculosis encapsulated in liposomes. Pancholi P, et al. **J Med Microbiol** 1989 Jun;29(2):131–8

Serum antibody responses to mycobacteria in leprosy patients and their contacts. Cree IA, et al. **Lepr Rev** 1988 Dec; 59(4):317–27

Limiting dilution analysis of T cell unresponsiveness to mycobacteria in advanced disseminated tuberculosis.

Gilardini Montani MS, et al.
Med Microbiol Immunol (Berl) 1989;178(5):235–44

Comparative evaluation of the diagnostic significance of circulating immune complexes and antibodies to phosphatidylinositomannosides in pulmonary tuberculosis by enzyme-linked immunosorbent assay. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):229–33

Biochemical and antigenic characterization of the Mycobacterium tuberculosis 71kD antigen, a member of the 70kD heat-shock protein family. Mehlert A, et al. **Mol Microbiol** 1989 Feb;3(2):125–30

Nucleotide sequence of the 19 kDa antigen gene from Mycobacterium tuberculosis. Ashbridge KR, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1249

Booster effect of tuberculin testing in healthy 6-year-old school children vaccinated with Bacillus Calmette-Guérin at birth in Santiago, Chile. Sepulveda RL, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):578–81

The generation of guinea pig T-cell lines reactive to antigens from Mycobacterium tuberculosis. Selected lines induce erythematous skin reactions. Hasløv K, et al. **Scand J Immunol** 1989 Mar;29(3):281–8

Activation of gamma delta T cells in the primary immune response to Mycobacterium tuberculosis. Janis EM, et al. **Science** 1989 May 12;244(4905):713–6

Recognition of a category of responders to group II, slow-grower associated antigens amongst Kuwaiti senior school children, using a statistical model. McManus IC, et al. **Tubercle** 1988 Dec;69(4):275–81

A competition ELISA for the detection of mycobacterial antigen in tuberculosis exudates. Ramkisson A, et al. **Tubercle** 1988 Sep;69(3):209–12

Sensitisation by mycobacteria and the effects of BCG on children attending schools in the slums of Bombay. Stanford JL, et al. **Tubercle** 1988 Dec;69(4):293–8

Detection of mycobacterial antigens in cerebrospinal fluid by enzyme-linked immunosorbent assay. Wu CH, et al. **Tubercle** 1989 Mar;70(1):37–43

Identification of Mycobacterium bovis isolates using a monoclonal antibody. Corner LA, et al. **Vet Microbiol** 1988 Oct;18(2):191–6

[Uses of determination on IgG-antibody against mycobacterial antigens for the diagnosis in pulmonary tuberculosis]
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Aug; 11(4):222–4, 255 (Eng. Abstr.) **(Chi)**

[Evaluation of CSF Mycobacterium tuberculosis antigen 5 and its antibody detection in the diagnosis of tuberculous meningitis] Ma MH.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Oct; 11(5):260–2, 317 (Eng. Abstr.) **(Chi)**

[Specificity of monoclonal antibody TB-15 C3 to Mycobacterium tuberculosis] Sun SY.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Apr; 11(2):69–70, 126 (Eng. Abstr.) **(Chi)**

[The detection of mycobacterial antigens in cerebrospinal fluid by the enzyme-linked immunosorbent assay] Hu ZY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):695–7, 718 (Eng. Abstr.) **(Chi)**

[Indicators of antibody formation in patients with pulmonary tuberculosis and drug-resistant Mycobacteria] Evdokimov VN. **Probl Tuberk** 1988;(9):44–7 (Eng. Abstr.) **(Rus)**

[Radioimmunologic and immunoenzyme methods of analysis of anti-tuberculosis antibodies] Litvinov VI, et al. **Probl Tuberk** 1988;(7):71–4 (39 ref.) **(Rus)**

[Diagnostic significance of determining specific antibodies of various isotypes in patients with pulmonary tuberculosis] Titanian AS, et al. **Probl Tuberk** 1989;(5):40–3 (Eng. Abstr.) **(Rus)**

[Determination of antibodies to mycobacterial antigens in tuberculosis by erythrocyte immunoadsorption with a rosette marker] Plaskin DIu, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):79–82 (Eng. Abstr.) **(Rus)**

[Something new about an old acquaintance: the tuberculous bacillus (editorial)] de Kantor IN. **Medicina (B Aires)** 1988; 48(3):321–3 **(Spa)**

ISOLATION & PURIFICATION

The modern mycobacteriology laboratory. How it can help the clinician. Good RC, et al. **Clin Chest Med** 1989 Sep; 10(3):315–22 (53 ref.)

Lupus vulgaris with numerous tubercle bacilli. Duhra P, et al. **Clin Exp Dermatol** 1988 Jan;13(1):31–3

Identification of Mycobacterium tuberculosis in sputum by direct inoculation of the BACTEC NAP vial. Stager CE, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):67–73

Laboratory isolation of Mycobacteria tuberculosis in Kenya. Kamunyi R, et al. **East Afr Med J** 1988 Mar;65(3):171–8

Bacteriological status of notified tuberculosis cases in the Republic of Ireland 1982–85. O'Malley G, et al. **Ir J Med Sci** 1988 Oct;157(10):307–9

Gen-probe test should not be considered final in Mycobacterium tuberculosis identification [letter] Heifets L. **J Clin Microbiol** 1989 Jan;27(1):229

Identification of mycobacteria from culture by using the Gen-Probe Rapid Diagnostic System for Mycobacterium avium complex and Mycobacterium tuberculosis complex. Musial CE, et al. **J Clin Microbiol** 1988 Oct;26(10):2120–3

Direct identification of Mycobacterium tuberculosis, Mycobacterium avium, and Mycobacterium intracellulare from amplified primary cultures in BACTEC media using DNA probes. Peterson EM, et al. **J Clin Microbiol** 1989 Jul;27(7):1543–7

Tenosynovitis of the hand: a forgotten manifestation of tuberculosis. Jackson RH, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):616–8

A cloned DNA fragment for identification of Mycobacterium tuberculosis. Patel RJ, et al. **Rev Infect Dis** 1989 Mar–Apr; 11 Suppl 2:S411–9

The diagnostic yield of prebronchoscopy sputa and bronchial washings in patients with biopsy-proven pulmonary tuberculosis. Levy H, et al. **S Afr Med J** 1989 Jun 3; 75(11):527–8

The reliability of acid fast stained smears of gastric aspirate specimens. Berean K, et al. **Tubercle** 1988 Sep;69(3):205–8

The Bactec-system in the diagnosis of tuberculosis. Comparison of a conventional and the radiometric method (Bactec) for culturing, differentiation and susceptibility testing of mycobacteria. Presslich J, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1989 Mar; 270(4):487–91

[The BACTEC 460 system. 4. Comparison of BACTEC 460 and an animal experiment for the detection of tuberculosis bacteria] Schröder KH, et al. **Prax Klin Pneumol** 1988 Sep; 42(9):711–4 (Eng. Abstr.) **(Ger)**

[Isolation of mycobacteria from clinical specimens during the last decade] Tazawa S, et al. **Rinsho Byori** 1988 Jun; 36(6):715–8 **(Jpn)**

[Usefulness of bacteriologic examination of specimens obtained by fine-needle aspiration biopsy of the lungs in the diagnosis of tuberculosis] Sedlaczek A, et al. **Pneumonol Pol** 1988 Sep;56(9):406–10 (Eng. Abstr.) **(Pol)**

[Correlation of the results of bacterioscopy and examination by culture in demonstrating Koch's bacillus in specimens with few bacilli] Timoşca S, et al.
Rev Med Chir Soc Med Nat Iasi 1988 Jul–Sep;92(3):527–30 (Eng. Abstr.) **(Rum)**

[Experience in examining sputum for Mycobacterium tuberculosis using a bacterioscopic method in laboratories of a regional general medical network] Kunovskiĭ BV, et al. **Lab Delo** 1988;(10):70–1 **(Rus)**

[An immunologic method for identification of M. tuberculosis and M. bovis (BCG) based on the use of monoclonal antibodies] Androsova MV, et al. **Probl Tuberk** 1989; (5):43–6 (Eng. Abstr.) **(Rus)**

[A method of preservation of pathological specimens for detection of Mycobacterium tuberculosis in tissue culture] Balan VF. **Probl Tuberk** 1988;(7):40–1 (Eng. Abstr.) **(Rus)**

[Isolation of mycobacteria L forms as a prognostic criterion of recurrence and aggravation of tuberculosis in patients with extended residual tuberculous lesions of the lungs] Dorozhkova IR, et al. **Probl Tuberk** 1989;(3):14–8 (Eng. Abstr.) **(Rus)**

[Increasing the effectiveness of microbiological diagnosis of limited nondestructive pulmonary tuberculosis] Gamzaeva NF, et al. **Probl Tuberk** 1989;(2):55–7 **(Rus)**

[The etiologic significance of ultrafine forms of the causative agent of tuberculosis in the development of sarcoidosis of the respiratory organs] Khomenko AG, et al.
Probl Tuberk 1989;(6):3–7 (Eng. Abstr.) **(Rus)**

[Bacteriological method of examination in the diagnosis of reactivation of the tuberculous process among contingents in ambulatory care group VII] Krivtsova AE, et al. **Probl Tuberk** 1989;(1):12–4 (Eng. Abstr.) **(Rus)**

[The nature of bacterial shedding and its effect on treatment outcome in newly detected patients with destructive pulmonary tuberculosis] Omarov TO, et al. **Probl Tuberk** 1988;(8):19–20 (Eng. Abstr.) **(Rus)**

[Ways of increasing isolation and growth of Mycobacterium tuberculosis in modified Finn-II media] Samillo GK, et al. **Probl Tuberk** 1988;(12):62–3 **(Rus)**

[Methods of improving bacteriological confirmation in tuberculosis of the respiratory organs] Vasil'ev MI, et al. **Probl Tuberk** 1989;(3):55–7 **(Rus)**

[Microbiological characteristics of residual pulmonary caverns] Vorozhtsova MP, et al. **Probl Tuberk** 1989; (3):70–2 **(Rus)**

[Evaluation of the extent of massive bacterial elimination in newly detected patients with destructive pulmonary tuberculosis] Roslik SM, et al. **Vrach Delo** 1988 Oct; (10):39–40 (Eng. Abstr.) **(Rus)**

[Use of gas chromatography in the detection of M. tuberculosis] Franotović M, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):155–9 (Eng. Abstr.) **(Scr)**

[Isolated subcutaneous abscesses caused by tuberculosis] Elmstähl S, et al. **Lakartidningen** 1988 Dec 28;85(52):4644, 4646 (Eng. Abstr.) **(Swe)**

METABOLISM

Evidence for a highly conserved, immunoreactive lipid in Mycobacterium tuberculosis. Makonkawkeyoon S, et al. **Am Rev Respir Dis** 1989 Mar;139(3):774–8

PATHOGENICITY

Intraspecies differentiation of strains of Mycobacterium tuberculosis obtained from Czechoslovakian, Mongolian and south Indian patients. Venkataraman P, et al. **Indian J Med Res** 1988 Sep;88:211–6

T-cell-mediated protection of mice against virulent Mycobacterium tuberculosis. Leveton C, et al. **Infect Immun** 1989 Feb;57(2):390–5

[Studies on the virulence in the guinea pig of tuberculosis bacilli isolated from patients with pulmonary tuberculosis before treatment in Shanghai] Yang DY.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Feb; 12(1):15–7, 61 (Eng. Abstr.) **(Chi)**

[Current theories on the pathogenesis of tuberculosis (lecture)] Khomenko AG. **Probl Tuberk** 1988;(9):57–61 **(Rus)**

[The pathogenicity factors of Mycobacterium tuberculosis] Lazovskaia AL, et al. **Probl Tuberk** 1988;(8):72–6 (56 ref.) **(Rus)**

[Alcoholism and pulmonary tuberculosis] Khomenko AG, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):50–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A 25-kilodalton fraction from Mycobacterium tuberculosis that inhibits hexose monophosphate shunt activity, lysozyme release, and H2O2 production: reversal by gamma interferon. Wadee AA, et al. **Infect Immun** 1989 Mar;57(3):864–9

An experimental model of chemotherapy on dormant tuberculous infection, with particular reference to rifampicin. Kondo E, et al. **Jpn J Med Sci Biol** 1988 Apr; 41(2):37–47

RADIATION EFFECTS

[Results of the repeated effect of low-energy laser radiation on Mycobacterium tuberculosis] Maliev BM.
Probl Tuberk 1988;(10):53–5 (Eng. Abstr.) **(Rus)**

MYCOLIC ACIDS

Structure determination of mycolic acids by using charge remote fragmentation. Savagnac A, et al.
Chem Phys Lipids 1989 Jul;51(1):31–8

Structure and molecular species composition of three homologous series of alpha-mycolic acids from Mycobacterium spp. Kaneda K, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2213–29

ANALYSIS

Analysis of fatty acids by negative ion gas chromatography/tandem mass spectrometry: structural correlations between alpha-mycolic acid chains and delta-5-monounsaturated fatty acids from Mycobacterium phlei. Couderc F, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):317–21

Tetraenoic and pentaenoic mycolic acids from Mycobacterium thamnopheos. Structure, taxonomic and biosynthetic implications. Daffé M, et al.
Eur J Biochem 1988 Nov 1;177(2):339–44

Molecular species of mycolic acid subclasses in eight strains of Mycobacterium smegmatis. Baba T, et al. **Lipids** 1988 Dec;23(12):1132–8

[Mycolic acids and phospholipids analysis of nocardioform actinomycetes and related taxa] Liu ZH, et al.
Wei Sheng Wu Hsueh Pao 1988 Sep;28(3):206–10 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Thermally adaptive changes of mycolic acids in Mycobacterium smegmatis. Baba T, et al.
J Biochem (Tokyo) 1989 Jul;106(1):81–6

GENETICS

Reverse transcriptase sequencing of 16S ribosomal RNA from Faenia rectivirgula, Pseudonocardia thermophila and Saccharopolyspora hirsuta, three wall type IV actinomycetes which lack mycolic acids. Embley TM, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):961–6

ISOLATION & PURIFICATION

Relationships between structure and biological activity of the mycolic acid-containing glycolipids from Nocardia asteroides "sensu stricto" and related species. Han Y, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:130–2

Mycolic acids of Mycobacterium aurum. Structure and biogenetic implications. Lanéelle MA, et al.
Eur J Biochem 1988 Nov 15;177(3):631–5

METABOLISM

Mycolic acid metabolism. Lanéelle G.
Acta Leprol (Geneve) 1989;7 Suppl 1:65–73 (43 ref.)

Mycolic acid metabolic filiation and location in Mycobacterium aurum and Mycobacterium phlei. Lacave C, et al. **Eur J Biochem** 1989 May 1;181(2):459–66

Capillary gas chromatographic analysis of mycolic acid cleavage products, cellular fatty acids, and alcohols of Mycobacterium xenopi. Luquin M, et al.
J Clin Microbiol 1989 Jun;27(6):1403–6

Influence of Tween 80 on the mycolic acid composition of three cutaneous corynebacteria. Chevalier J, et al.
J Gen Microbiol 1988 Sep;134 (Pt 9):2457–61

MYCOLOGY

METHODS

The 'tape-method': a new and simple method for quantitative culture of Pityrosporum yeasts. Wikler JR, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):445–9

Biotyping of Candida albicans: results of an international collaborative survey. Odds FC, et al. **J Clin Microbiol** 1989 Jul;27(7):1506–9

Quality control slide for potassium hydroxide and cellufluor fungal preparations. Perry JL, et al. **J Clin Microbiol** 1989 Jun;27(6):1411–2

Multicenter evaluation of four methods of yeast inoculum preparation. Pfaller MA, et al. **J Clin Microbiol** 1988 Aug; 26(8):1437–41

STANDARDS

Progress in standardizing antifungal susceptibility tests. Galgiani JN. **Clin Lab Med** 1989 Jun;9(2):269–77 (21 ref.)

Mycology quality assessment: United Kingdom national scheme. Perry SF, et al. **J Clin Pathol** 1989 May;42(5):531–5

MYCOPHENOLIC ACID

PHARMACOLOGY

Growth inhibition and induction of phenotypic alterations in MCF-7 breast cancer cells by an IMP dehydrogenase inhibitor. Sidi Y, et al. **Br J Cancer** 1988 Jul;58(1):61–3

Depletion of guanine nucleotides with mycophenolic acid suppresses IgE receptor-mediated degranulation in rat basophilic leukemia cells. Wilson BS, et al. **J Immunol** 1989 Jul 1;143(1):259–65

Purine base transport in wild-type and mycophenolic acid-resistant Tritrichomonas foetus. Hedstrom L, et al. **Mol Biochem Parasitol** 1989 Jul;35(3):219–27

MYCOPLASMA

Mycoplasma viruses. Maniloff J. **CRC Crit Rev Microbiol** 1988;15(4):339–89 (192 ref.)

[The place of mycoplasmas in scientific research] Bonissol C. **Arch Inst Pasteur Tunis** 1988 Jan–Apr;65(1–2):69–80 (0 ref.) **(Fre)**

[Light optical and electron microscopic study of the microflora of the parchment of an ancient Greek manuscript] Poglazova MN, et al. **Mikrobiologiia** 1988 Jul–Aug;57(4):669–74 (Eng. Abstr.) **(Rus)**

ANALYSIS

Detection of Mycoplasma pulmonis in arthritic joints of rats by indirect immunoperoxidase staining. Kohn DF, et al. **Infect Immun** 1989 Apr;57(4):1321–3

Characterization of membrane components of the flask-shaped mycoplasma Mycoplasma mobile. Fischer M, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2385–92

Arthritogenic effects of Mycoplasma arthritidis T cell mitogen in rats. Cannon GW, et al. **J Rheumatol** 1988; 15(5):735–41

CLASSIFICATION

Comparison of Mycoplasma gallisepticum strains by hemagglutination-inhibition and restriction endonuclease analysis. Kleven SH, et al. **Avian Dis** 1988 Oct–Dec; 32(4):731–41

Status of the 1805 strain of Mycoplasma iowae (K component of serovar I,J,K, N,Q,R) and the SA strain of M. gallopavonis (serovar F). Zhao SH, et al. **Avian Dis** 1989 Jan–Mar;33(1):150–6

[Choice of the optimal method of numerical analysis in taxonometric study of mollicutes based on electrophoresis of their proteins] Skripal' IG, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):59–65 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Susceptibilities of genital mycoplasmas to the newer quinolones as determined by the agar dilution method. Kenny GE, et al. **Antimicrob Agents Chemother** 1989 Jan; 33(1):103–7

In vitro susceptibilities of mycoplasmas and ureaplasmas to new macrolides and aryl-fluoroquinolones. Waites KB, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1500–2

Eradication of Mycoplasma contamination from cell lines of different origin by the 5-bromouracil-fluorochrome procedure. Calorini L, et al. **Cancer Lett** 1989 Jul 15; 46(2):107–12

Further microbiological investigations of flurithromycin against gram-positive bacteria and mycoplasmas. Furneri P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):161–3

Synthesis and copper-dependent antimycoplasmal activity of 1-amino-3-(2-pyridyl)isoquinoline derivatives. 2. Amidines. de Zwart MA, et al. **J Med Chem** 1989 Feb; 32(2):487–93

Mycoplasma control [letter] Mowles J, et al. **Nature** 1989 Aug 3;340(6232):352

In vitro evaluation of various quinolone antibacterial agents against veterinary mycoplasmas and porcine respiratory bacterial pathogens. Hannan PC, et al. **Res Vet Sci** 1989 Mar;46(2):202–11

[In vitro antibiotic sensitivity of French strains of Mycoplasma bovis] Poumarat F, et al. **Ann Rech Vet** 1989; 20(2):145–52 (Eng. Abstr.) **(Fre)**

[Design and evaluation of an opacimetric method for determining the in vitro antibiotic sensitivity of Mycoplasma bovis] Poumarat F, et al. **Ann Rech Vet** 1989; 20(2):135–43 (Eng. Abstr.) **(Fre)**

[Antimycoplasmal activities of ofloxacin and commonly used antimicrobial agents on Mycoplasma gallisepticum] Takahashi I, et al. **Jpn J Antibiot** 1989 May;42(5):1166–72 (Eng. Abstr.) **(Jpn)**

[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. VI. Sensitivity of M. hominis to selected chemotherapeutic agents] Jagielski M. **Med Dosw Mikrobiol** 1988;40(1):38–49 (Eng. Abstr.) **(Pol)**

[Changes in the biological properties of Mycoplasma hominis under the influence of prednisolone and cyclophosphane] Nikonova NA, et al. **Mikrobiol Zh** 1989 Jan–Feb; 51(1):36–40 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Assay for detection of adenosine phosphorylase from mycoplasmas. Bonissol C, et al. **Ann Inst Pasteur Microbiol** 1988 Nov–Dec;139(6):703–15

Indicator cell lines for the detection of hidden mycoplasma contamination, using an adenosine phosphorylase screening test. Spierenburg GT, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):115–9

Identification of a novel site specific endonuclease produced by Mycoplasma fermentans: discovery while characterizing DNA binding proteins in T lymphocyte cell lines. Halden NF, et al. **Nucleic Acids Res** 1989 May 11;17(9):3491–9

GENETICS

DNA and protein sequence homologies between the adhesins of Mycoplasma genitalium and Mycoplasma pneumoniae. Dallo SF, et al. **Infect Immun** 1989 Apr;57(4):1059–65

Novel arrangement of rRNA genes in Mycoplasma gallisepticum: separation of the 16S gene of one set from the 23S and 5S genes. Chen X, et al. **J Bacteriol** 1989 May; 171(5):2876–8

High-frequency variation in Mycoplasma pulmonis colony size. Dybvig K, et al. **J Bacteriol** 1989 Sep;171(9):5165–8

Transformation of Mycoplasma pulmonis: demonstration of homologous recombination, introduction of cloned genes, and preliminary description of an integrating shuttle system. Mahairas GG, et al. **J Bacteriol** 1989 Apr; 171(4):1775–80

Homologous regions shared by adhesin genes of Mycoplasma pneumoniae and Mycoplasma genitalium. Dallo SF, et al. **Microb Pathog** 1989 Jan;6(1):69–73

Rapid identification of Mycoplasma gallisepticum using a simple method of nucleic acid hybridization. Stipkovits L, et al. **Mol Cell Probes** 1988 Dec;2(4):339–44

Reiterated DNA sequences defining genomic diversity within the species Mycoplasma hyorhinis. Taylor MA, et al. **Mol Microbiol** 1988 Sep;2(5):665–72

Rapid physical mapping of the Mycoplasma mobile genome by two-dimensional field inversion gel electrophoresis techniques. Bautsch W. **Nucleic Acids Res** 1988 Dec 23; 16(24):11461–7

Anomalous values of Mycoplasma genomes sizes determined by pulse-field gel electrophoresis. Maniloff J. **Nucleic Acids Res** 1989 Feb 11;17(3):1268

An improved method for photographing restriction endonuclease gel electrophoresis patterns of bacterial genomes. Morrow CJ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6751

Transformation of Mycoplasma pulmonis and Mycoplasma hyorhinis: transposition of Tn916 and formation of cointegrate structures. Dybvig K, et al. **Plasmid** 1988 Jul; 20(1):33–41

Random insertion of the gentamicin resistance transposon Tn4001 in Mycoplasma pulmonis. Mahairas GG, et al. **Plasmid** 1989 Jan;21(1):43–7

Codon discrimination and anticodon structural context. Lustig F, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6873–7

Differentiation of the vaccine F-strain from other strains of Mycoplasma gallisepticum by restriction endonuclease analysis. Khan MI, et al. **Vet Microbiol** 1989 Feb; 19(2):167–74

Genetic and antigenic relatedness between Mycoplasma gallisepticum and Mycoplasma synoviae. Yogev D, et al. **Vet Microbiol** 1989 Jan;19(1):75–84

GROWTH & DEVELOPMENT

pH-controlled continuous cultivation of mycoplasmas. Krebs B, et al. **Appl Environ Microbiol** 1989 Apr;55(4):852–5

Colonization of the intestine of turkey embryos exposed to Mycoplasma iowae. Mirsalimi SM, et al. **Avian Dis** 1989 Apr–Jun;33(2):310–5

Effect of blood culture media on the in vitro recovery of Mycoplasma hominis. Davies S, et al. **J Infect** 1988 Nov; 17(3):215–20

Effects of nitrogen dioxide on Mycoplasma pulmonis infection and humoral immune responses in mice. Nisizawa T, et al. **Jpn J Med Sci Biol** 1988 Aug;41(4):175–87

Mycoplasma infection of cultured cells. Hay RJ, et al. **Nature** 1989 Jun 8;339(6224):487–8

IMMUNOLOGY

Hemagglutination and hemagglutination inhibition of turkey red blood cells with Mycoplasma hyopneumoniae. Young TF, et al. **Am J Vet Res** 1989 Jul;50(7):1052–5

Protection against enzootic pneumonia of pigs: intraperitoneal inoculation with live LKR strain of Mycoplasma hyopneumoniae. Lloyd LC, et al. **Aust Vet J** 1989 Jan;66(1):9–12

Immunogenicity of Mycoplasma gallisepticum. Soeripto, et al. **Aust Vet J** 1989 Mar;66(3):73–7

Sensitivity and specificity of Mycoplasma gallisepticum agglutination antigens prepared from medium with artificial liposomes substituting for serum. Ahmad I, et al. **Avian Dis** 1988 Jul–Sep;32(3):519–26

Further studies of Mycoplasma gallisepticum serum plate agglutination antigen grown in medium with artificial liposomes substituting for serum. Ahmad I, et al. **Avian Dis** 1989 Jan–Mar;33(1):140–9

New biotin-conjugated antisera for quantitation of Mycoplasma gallisepticum-specific immunoglobulin A in chicken. Barbour EK, et al. **Avian Dis** 1988 Jul–Sep; 32(3):416–20

Monoclonal antibodies that recognize specific antigens of Mycoplasma gallisepticum and M. synoviae. Hwang YS, et al. **Avian Dis** 1989 Jan–Mar;33(1):42–52

Detection of antigenic variation among strains of Mycoplasma gallisepticum by enzyme-linked immunosorbent inhibition assay (ELISIA) and Western blot analysis. Thomas CB, et al. **Avian Dis** 1988 Oct–Dec; 32(4):748–56

Nonspecific reactions to Mycoplasma serum plate antigens induced by inactivated poultry disease vaccines. Yoder HW Jr. **Avian Dis** 1989 Jan–Mar;33(1):60–8

Immune responses to Mycoplasma bovis vaccination and experimental infection in the bovine mammary gland. Boothby JT, et al. **Can J Vet Res** 1988 Jul;52(3):355–9

Preparation of Mycoplasma hyopneumoniae antigen for the enzyme-linked immunosorbent assay. Kazama S, et al. **Can J Vet Res** 1989 Apr;53(2):176–81

Defective T-cell activation by Mycoplasma arthritidis mitogen is restored by interferon-gamma. Pischedda F, et al. **Cell Immunol** 1989 Apr 15;120(1):188–94

A solid-phase enzyme immunoassay using guinea pig C3 to detect anti-Mycoplasma pulmonis antibody in the sera of infected rats. Kobayashi N, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1803–7

Processing requirements for T cell activation by Mycoplasma arthritidis-derived mitogen. Bauer A, et al. **Eur J Immunol** 1988 Dec;18(12):2109–12

Clonal analysis of human T cell activation by the Mycoplasma arthritidis mitogen (MAS). Matthes M, et al. **Eur J Immunol** 1988 Nov;18(11):1733–7

Conversion of a melanoma cell line from an HLA class II positive to negative phenotype after treatment with anti-mycoplasma drugs. Carrington MN, et al. **Hum Immunol** 1988 Aug;22(4):275–82

Lipid-modified surface protein antigens expressing size variation within the species Mycoplasma hyorhinis. Boyer MJ, et al. **Infect Immun** 1989 Jan;57(1):245–54

Subunit structure of the variable V-1 antigen of Mycoplasma pulmonis. Watson HL, et al. **Infect Immun** 1989 Jun; 57(6):1684–90

Human cytomegalovirus and monocytes: limited infection and negligible immunosuppression in normal mononuclear cells infected in vitro with mycoplasma-free virus strains. Scott DM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):685–94

Stimulation of mouse lymphocytes by a mitogen derived from Mycoplasma arthritidis. VII. Responsiveness is associated with expression of a product(s) of the V beta 8 gene family present on the T cell receptor alpha/beta for antigen. Cole BC, et al. **J Immunol** 1989 Jun 15;142(12):4131–7

Induction of class II MHC antigen expression in macrophages by Mycoplasma species. Stuart PM, et al. **J Immunol** 1989 May 15;142(10):3392–9

Cross reactivity of Mycoplasma pulmonis and Mycoplasma arthritidis antigen strains to anti-Mycoplasma pulmonis antibody in the sera of Mycoplasma pulmonis infected rats. Kobayasi N, et al. **Kitasato Arch Exp Med** 1989 Apr; 62(1):45–51

An adhesion-hemadsorption inhibition test for the detection of serum antibody to Mycoplasma gallisepticum. Shimizu T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):491–5

Neonatal serologic response at term to the genital mycoplasmas. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):487–91

Protein antigens of genital mycoplasmas. Cassell GH, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S391–8 (42 ref.)

Contagious caprine pleuropneumonia: some observations in a field vaccination trial using inactivated Mycoplasma strain F38. Litamoi JK, et al. **Trop Anim Health Prod** 1989 May;21(2):146–50

Detection of antibody to mycoplasma F38 in goat sera by an enzyme-linked immunosorbent assay. Wamwayi HM, et al. **Trop Anim Health Prod** 1989 Feb;21(1):43–9

Identification of the antigenic components of the virulent Mycoplasma gallisepticum (R) in chickens: their role in differentiation from the vaccine strain (F). Barbour EK, et al. **Vet Immunol Immunopathol** 1989 Jun;21(2):197–206

Immunoblotting analysis of antibody response in swine experimentally inoculated with Mycoplasma hyopneumoniae. Mori Y, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):239–50

Recognition of Mycoplasma arthritidis membrane antigens by rats and rabbits: comparison by immunoblotting and radioimmunoprecipitation. Washburn LR, et al. **Vet Microbiol** 1988 May;17(1):45–57

Antigenic analysis of three strains of Mycoplasma meleagridis of varying pathogenicity. Zhao S, et al. **Vet Microbiol** 1988 Dec;18(3–4):373–77

Optimum age to vaccinate for contagious caprine pleuropneumonia. King GJ. **Vet Rec** 1988 Nov 26; 123(22):572–3

In vitro influence of Mycoplasma species on the stimulation of human polymorphonuclear granulocytes. Krausse R, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):228–36

Immunological reaction of rat tissue cells with antiserum against Mycoplasma arthritidis membranes in indirect immunofluorescence test. Stulle K, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):713–5

[Isolation and use of a Mycoplasma hominis antigen in the laboratory diagnosis of respiratory diseases] Kruglikov VT, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):68–72 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Postpartum bacteremia and placental colonization with genital mycoplasmas and pregnancy outcome. Naessens A, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):647–50

Isolation and identification of mycoplasmas from the nasal cavity of sheep. Brogden KA, et al. **Am J Vet Res** 1988 Oct;49(10):1669–72

Identification of Mycoplasma hyopneumoniae in formalin–fixed porcine lung, using an indirect immunoperoxidase method. Doster AR, et al. **Am J Vet Res** 1988 Oct;49(10):1719–21

Mycoplasmalike particles within the placenta. A potential placental–fetal pathogen. Sander CH, et al. **Ann N Y Acad Sci** 1988;549:81–102

Genital mycoplasmas and chlamydiae in men urethritis. Crăcea E, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan–Mar;42(1):25–30

The effect of biological isolation and a molt–inducing regimen on the recovery of Mycoplasma gallisepticum from commercial Leghorn hens. Branton SL, et al. **Avian Dis** 1989 Jul–Sep;33(3):574–7

Identification of Mycoplasma gallisepticum and M. synoviae by flow cytometry. May JD, et al. **Avian Dis** 1988 Jul–Sep; 32(3):513–6

Evaluation of a digitonin disk assay to discriminate between acholeplasma and mycoplasma isolates from bovine milk. Thurmond MC, et al. **Cornell Vet** 1989 Jan;79(1):71–81

Mycoplasma hominis septic thrombophlebitis in a patient with multiple trauma: a case report and literature review. Martinez OV, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):193–6 (18 ref.)

Detection of Chlamydia trachomatis, Mycoplasma hominis and Ureaplasma urealyticum in pregnant Dutch women. Vonsée HJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):149–56

Elimination of mycoplasmas from mouse myeloma cells by intraperitoneal passage in mice and by antibiotic treatment. Hirschberg L, et al. **Hybridoma** 1989 Apr;8(2):249–57

Mycoplasma in respiratory tract infections. Phadke SA, et al. **Indian J Med Sci** 1988 Aug;42(8):182–5

Isolation and characterization of Mycoplasma genitalium strains from the human respiratory tract. Baseman JB, et al. **J Clin Microbiol** 1988 Nov;26(11):2266–9

Rapid detection by transmission electron microscopy of mycoplasma contamination in sera and cell cultures. Barth OM, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):63–6

A non–radioactive DNA probe for the detection of Mycoplasma pulmonis in murine mycoplasmosis. Matsuzaki M, et al. **Microbiol Immunol** 1989;33(2):129–32

Characterization of a strain of Mycoplasma hominis lacking 120 kDa membrane protein isolated from Vero cell culture. Sasaki T, et al. **Microbiol Immunol** 1989;33(5):423–7

Species–specific biotinylated DNA probe for the detection of Mycoplasma gallisepticum [published erratum appears in Mol Cell Probes 1988 Dec;2(4):345] Geary SJ, et al. **Mol Cell Probes** 1988 Sep;2(3):237–44

AdoP assay detection of mycoplasmal contamination in biological media. Bonissol C, et al. **Res Virol** 1989 May–Jun;140(3):241–51

Increased severity of calf pneumonia associated with the appearance of Mycoplasma bovis in a rearing herd. Gourlay RN, et al. **Vet Rec** 1989 Apr 22;124(16):420–2

Isolation of mycoplasmas from diseased seals. Kirchhoff H, et al. **Vet Rec** 1989 May 13;124(19):513–4

Survey of Mycoplasma infections in cell cultures and a comparison of detection methods. Bölske G. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):331–40

[Isolation of Mycoplasma capricolum from bull semen] Bréard A, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(2):149–50 (Eng. Abstr.) **(Fre)**

[Fluorescence serological and culture detection of Mycoplasma hyopneumoniae and Mycoplasma hyorhinis in swine lungs] Binder A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):11–3 (Eng. Abstr.) **(Ger)**

[The isolation and identification of mycoplasmas and Chlamydia] **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar;270(4):470–86 (35 ref.) **(Ger)**

[Mycoplasma and rheumatoid arthritis in children] Vul'fovich IuV, et al. **Vestn Akad Med Nauk SSSR** 1989; (6):82–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Volume regulation in Mycoplasma gallisepticum: evidence that Na+ is extruded via a primary Na+ pump. Shirvan MH, et al. **J Bacteriol** 1989 Aug;171(8):4417–24

Role of Na+ cycle in cell volume regulation of Mycoplasma gallisepticum. Shirvan MH, et al. **J Bacteriol** 1989 Aug; 171(8):4410–6

Binding of thyrotropin to selected Mycoplasma species: detection of serum antibodies against a specific Mycoplasma membrane antigen in patients with autoimmune thyroid disease. Sack J, et al. **J Endocrinol Invest** 1989 Feb;12(2):77–86

Presence of anaplerotic reactions and transamination, and the absence of the tricarboxylic acid cycle in mollicutes. Manolukas JT, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):791–800

[Binding of oligodeoxyribonucleotides by Mycoplasma RNA polymerase related to gene promotors of various microorganisms] Sokolenko AA, et al. **Dokl Akad Nauk SSSR** 1989;305(2):490–3 **(Rus)**

PATHOGENICITY

Virulence and transmissibility of Mycoplasma gallisepticum. Soeripto, et al. **Aust Vet J** 1989 Mar;66(3):65–72

[Comparison of the pathogenicity of 3 Mycoplasma capricolum strains in adult and newborn goats] Taoudi A, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):353–8 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Attachment of Mycoplasma bovoculi to bovine conjunctival epithelium and lung fibroblasts. Salih BA, et al. **Am J Vet Res** 1988 Oct;49(10):1661–4

Tumor necrosis factor as a mediator of Mycoplasma orale–induced tumor cell lysis by macrophages. Gallily R, et al. **Cell Immunol** 1989 Jun;121(1):146–53

A mycoplasma high–affinity transport system and the in vitro invasiveness of mouse sarcoma cells. Dudler R, et al. **EMBO J** 1988 Dec 1;7(12):3963–70

Evidence for high affinity binding–protein dependent transport systems in gram–positive bacteria and in Mycoplasma. Gilson E, et al. **EMBO J** 1988 Dec 1; 7(12):3971–4

Mycoplasma provides for the spreading of opossum kidney cells in a serum–free, defined medium. Leiderman LJ, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):655–8

The surface layer of Mycoplasma mobile 163K and its possible relevance to cell cohesion and group motility. Rosengarten R, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):275–81

An adhesion–hemadsorption test for screening and identification of Mycoplasma gallisepticum. Shimizu T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):206–8

The effects of Mycoplasma mobile 163 K on the ciliary epithelium of tracheal organ cultures. Stadtländer C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):355–65

[Experimental infection of pregnant rats with radioactively–labeled Mycoplasma pulmonis] Juhr NC, et al. **Z Versuchstierkd** 1988;31(3):125–31 (Eng. Abstr.) **(Ger)**

[Biological properties of Mycoplasma isolated from bulls' semen] Marciszewska M, et al. **Pol Arch Weter** 1987; 27(2–3):75–87 (Eng. Abstr.) **(Pol)**

MYCOPLASMA INFECTIONS

Mycoplasma hominis in maternal and fetal infections. Embree J. **Ann N Y Acad Sci** 1988;549:56–64 (34 ref.)

Role of Chlamydia trachomatis and mycoplasmas in chronic prostatitis. A review. Weidner W, et al. **Urol Int** 1988; 43(3):167–73 (14 ref.)

[A case of peritonitis caused by Mycoplasma hominis] Shimada M, et al. **Kansenshogaku Zasshi** 1988 Sep; 62(9):841–4 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Association of Chlamydia trachomatis and Mycoplasma hominis with intrauterine growth retardation and preterm delivery. The John Hopkins Study of Cervicitis and Adverse Pregnancy Outcome. **Am J Epidemiol** 1989 Jun; 129(6):1247–57

Genital mycoplasma infections in infertile patients and their conceptuses. Horne HW Jr. **Ann N Y Acad Sci** 1988; 549:65–71

Evidence for Chlamydia trachomatis and Ureaplasma urealyticum in a patient with Reiter's disease. Smith RJ. **J Adolesc Health Care** 1989 Mar;10(2):155–9 (39 ref.)

Mycoplasma hominis as a respiratory pathogen in X–linked hypogammaglobulinaemia. Roberts D, et al. **J Infect** 1989 Mar;18(2):175–7

Is genital colonization with Mycoplasma hominis or Ureaplasma urealyticum associated with prematurity/low birth weight? Romero R, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):532–6 (25 ref.)

Chronic Mycoplasma hominis infection complicating severe intraventricular hemorrhage, in a premature neonate. Gilbert GL, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):817–8

Investigations on the role of some viral, chlamydian, rickettsian and mycoplasmic agents in several gynecological diseases. Stănescu D, et al. **Virologie** 1989 Jan–Mar;40(1):71–7

[A case of autoimmune neutropenia associated with extrapulmonery mycoplasma infection] Sadamoto H. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):819–22 **(Jpn)**

[Mycoplasma arthritis in man and mechanisms of its pathogenesis] Gorina LG, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):84–7 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Prosthetic valve endocarditis caused by Mycoplasma hominis. Cohen JI, et al. **Am J Med** 1989 Jun;86(6 Pt 2):819–21

Laboratory diagnosis of genital Mycoplasma infection. Kundsin RB, et al. **Ann N Y Acad Sci** 1988;549:72–80

Actual data in human Mycoplasma infections. Crăcea E. **Arch Roum Pathol Exp Microbiol** 1987 Oct–Dec; 46(4):285–95 (74 ref.)

A non–radioactive DNA probe for the detection of Mycoplasma pulmonis in murine mycoplasmosis. Matsuzaki M, et al. **Microbiol Immunol** 1989;33(2):129–32

Early postpartum endometritis: the role of bacteria, genital mycoplasmas, and Chlamydia trachomatis. Watts DH, et al. **Obstet Gynecol** 1989 Jan;73(1):52–60

[Isolation and use of a Mycoplasma hominis antigen in the laboratory diagnosis of respiratory diseases] Kruglikov VT, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):68–72 (Eng. Abstr.) **(Rus)**

[Use of the indirect immunofluorescence test in the diagnosis of an infection, caused by Mycoplasma pneumoniae] Kruglikov VT. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):75–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Alternative therapy for genital mycoplasma infections. Robertson JA. **Eur J Clin Microbiol Infect Dis** 1988 Oct; 7(5):603–5 (21 ref.)

Incidence of Mycoplasma hominis and Ureaplasma urealyticum infection in pregnant women and gynaecological patients; the effectivity of doxycycline therapy. Horváth B, et al. **Ther Hung** 1989;37(1):23–7

[Current therapeutic aspects of Chlamydia trachomatis and Mycoplasma infections in gynecology] Sesti F, et al. **Clin Ter** 1987 Jun 15;121(5):417–24 (38 ref.) (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Neutral endopeptidase and neurogenic inflammation in rats with respiratory infections. Borson DB, et al. **J Appl Physiol** 1989 Jun;66(6):2653–8

EPIDEMIOLOGY

[Incidence of Mycobacterium hominis in the genital tract during the first half of pregnancy] Mészáros G, et al. **Orv Hetil** 1988 Aug 14;129(33):1749–50, 1753 (Eng. Abstr.) **(Hun)**

ETIOLOGY

Mycoplasma hominis meningitis in a premature infant. McDonald JC, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):795–8

IMMUNOLOGY

Effects of nitrogen dioxide on Mycoplasma pulmonis infection and humoral immune responses in mice. Nisizawa T, et al. **Jpn J Med Sci Biol** 1988 Aug;41(4):175–87

Cross reactivity of Mycoplasma pulmonis and Mycoplasma arthritidis antigen strains to anti–Mycoplasma pulmonis antibody in the sera of Mycoplasma pulmonis infected rats. Kobayasi N, et al. **Kitasato Arch Exp Med** 1989 Apr; 62(1):45–51

Cell–mediated and humoral immune responses in mice during experimental infection with Mycoplasma pulmonis. Kishima M, et al. **Lab Anim** 1989 Apr;23(2):138–42

Neonatal serologic response at term to the genital mycoplasmas. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):487–91

Recognition of Mycoplasma arthritidis membrane antigens by rats and rabbits: comparison by immunoblotting and radioimmunoprecipitation. Washburn LR, et al. **Vet Microbiol** 1988 May;17(1):45–57

MICROBIOLOGY

Mycoplasma hominis septic thrombophlebitis in a patient with multiple trauma: a case report and literature review. Martinez OV, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):193–6 (18 ref.)

Effect of blood culture media on the in vitro recovery of Mycoplasma hominis. Davies S, et al. **J Infect** 1988 Nov; 17(3):215–20

[The isolation and identification of mycoplasmas and Chlamydia] **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989

Mar;270(4):470–86 (35 ref.) (Ger)
[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. VI. Sensitivity of M. hominis to selected chemotherapeutic agents] Jagielski M. **Med Dosw Mikrobiol** 1988;40(1):38–49 (Eng. Abstr.) (Pol)

PATHOLOGY

Histologic manifestations of perinatal genital mycoplasmal infection. Madan E, et al. **Arch Pathol Lab Med** 1989 May; 113(5):465–9
Cervical chlamydia trachomatis and mycoplasmal infections in women with abnormal papanicolaou smears. Cardillo MR. **Clin Exp Obstet Gynecol** 1988;15(4):161–7

PHYSIOPATHOLOGY

Effect of mycoplasmas on natural cytotoxic activity and release of tumor necrosis factor alpha by spleen cells. Lin Y, et al. **Infect Immun** 1988 Dec;56(12):3072–5

THERAPY

Successful management of Mycoplasma hominis septic arthritis involving a cementless prosthesis. Nylander N, et al. **Am J Med** 1989 Sep;87(3):348–52

TRANSMISSION

Transmission of genital mycoplasmas from mother to neonate in women with prolonged membrane rupture. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):483–7
Mycoplasma infection of the fetus and newborn. Quinn PA. **Prog Clin Biol Res** 1988;281:107–51 (162 ref.)

VETERINARY

Mycoplasma capricolum in an outbreak of polyarthritis and pneumonia in goats. Bölske G, et al. **Acta Vet Scand** 1988; 29(3–4):331–8
A Cox regression analysis of risk factors related to Mycoplasma suipneumoniae reinfection in Danish SPF-herds. Jorsal SE, et al. **Acta Vet Scand Suppl** 1988; 84:436–8
Identification of Mycoplasma hyopneumoniae in formalin-fixed porcine lung, using an indirect immunoperoxidase method. Doster AR, et al. **Am J Vet Res** 1988 Oct;49(10):1719–21
Pathogenicity of Mycoplasma mycoides subsp mycoides (large–colony type) for sheep udder. Banga HS, et al. **Aust Vet J** 1988 Nov;65(11):361–2
Virulence and transmissibility of Mycoplasma gallisepticum. Soeripto, et al. **Aust Vet J** 1989 Mar;66(3):65–72
Immunogenicity of Mycoplasma gallisepticum. Soeripto, et al. **Aust Vet J** 1989 Mar;66(3):73–7
Sensitivity and specificity of Mycoplasma gallisepticum agglutination antigens prepared from medium with artificial liposomes substituting for serum. Ahmad I, et al. **Avian Dis** 1988 Jul–Sep;32(3):519–26
New biotin–conjugated antisera for quantitation of Mycoplasma gallisepticum–specific immunoglobulin A in chicken. Barbour EK, et al. **Avian Dis** 1988 Jul–Sep; 32(3):416–20
The effect of biological isolation and a molt–inducing regimen on the recovery of Mycoplasma gallisepticum from commercial Leghorn hens. Branton SL, et al. **Avian Dis** 1989 Jul–Sep;33(3):574–7
The history of avian medicine in the United States. IX. Events in the history of avian mycoplasmosis 1905–70. Lancaster JE, et al. **Avian Dis** 1988 Oct–Dec;32(4):607–23
Colonization of the intestine of turkey embryos exposed to Mycoplasma iowae. Mirsalimi SM, et al. **Avian Dis** 1989 Apr–Jun;33(2):310–5
Immune responses to Mycoplasma bovis vaccination and experimental infection in the bovine mammary gland. Boothby JT, et al. **Can J Vet Res** 1988 Jul;52(3):355–9
Mycoplasma hyopneumoniae increases the susceptibility of pigs to experimental Pasteurella multocida pneumonia. Ciprián A, et al. **Can J Vet Res** 1988 Oct;52(4):434–8
Effect of adrenal blocking chemicals on viral and respiratory infections of chickens. Gross WB. **Can J Vet Res** 1989 Jan; 53(1):48–51
Preparation of Mycoplasma hyopneumoniae antigen for the enzyme–linked immunosorbent assay. Kazama S, et al. **Can J Vet Res** 1989 Apr;53(2):176–81
Prevalence of udder infections and mastitis in 50 California dairy herds. González RN, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):323–8
Serologic response of Rio Grande wild turkeys to experimental infections of Mycoplasma gallisepticum. Rocke TE, et al. **J Wildl Dis** 1988 Oct;24(4):668–71
Natural mycoplasmal infections in isolator–maintained LEW/Tru rats. Cox NR, et al. **Lab Anim Sci** 1988 Aug; 38(4):381–8
Mycoplasma pulmonis depresses humoral and cell–mediated responses in mice. Lai WC, et al. **Lab Anim Sci** 1989 Jan; 39(1):11–5
The choice of adjuvants in Mycoplasma vaccines. Garba SA, et al. **Microbios** 1989;57(230):15–9
An adhesion–hemadsorption inhibition test for the detection of serum antibody to Mycoplasma gallisepticum. Shimizu T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):491–5
Experimental infections of goats with Mycoplasma mycoides subspecies mycoides, LC type. Bölske G, et al. **Res Vet Sci** 1989 Mar;46(2):247–52
Clinico–pathological aspects of naturally–occurring contagious caprine pleuropneumonia in the Sudan. Abdelsalam EB, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(1):52–4
Contagious caprine pleuropneumonia: some observations in a field vaccination trial using inactivated Mycoplasma strain F38. Litamoi JK, et al. **Trop Anim Health Prod** 1989 May;21(2):146–50
Ovine keratoconjunctivitis experimentally induced by instillation of Mycoplasma conjunctivae. ter Laak EA, et al. **Vet Q** 1988 Oct;10(4):217–24
Optimum age to vaccinate for contagious caprine pleuropneumonia. King GJ. **Vet Rec** 1988 Nov 26; 123(22):572–3
Isolation of mycoplasmas from diseased seals. Kirchhoff H, et al. **Vet Rec** 1989 May 13;124(19):513–4
An outbreak of Mycoplasma anatis infection associated with nervous symptoms in large–scale duck flocks. Ivanics E, et al. **Zentralbl Veterinarmed** [B] 1988 Jun;35(5):368–78
[Enzootic pneumonia (EP): the partial curing of EP–reinfected swine herds as an alternative to total cure] Zimmermann W, et al. **Schweiz Arch Tierheilkd** 1989; 131(4):179–86, 191 (Eng. Abstr.) (Ger)
[Experimental infection of pregnant rats with radioactively–labeled Mycoplasma pulmonis] Juhr NC, et al. **Z Versuchstierkd** 1988;31(3):125–31 (Eng. Abstr.) (Ger)

MYCOPLASMA LAIDLAWII see **ACHOLEPLASMA LAIDLAWII**

MYCOPLASMA MYCOIDES

CLASSIFICATION

Numerical analysis of PAGE protein patterns and the taxonomic relationships within the 'Mycoplasma mycoides cluster'. Costas M, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3319–29

ENZYMOLOGY

[DNA–dependent RNA–polymerase of Mycoplasma mycoides subsp. capri PG 3] Skripal' IG, et al. **Mikrobiol Zh** 1988 May–Jun;50(3):83–8 (Eng. Abstr.) (Rus)
[Optimization of physico–chemical parameters of reaction media for determining the activity of RNA–polymerases of mollicutes] Skripal' IG, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):66–71 (Eng. Abstr.) (Rus)

GENETICS

Unconventional codon reading by Mycoplasma mycoides tRNAs as revealed by partial sequence analysis. Guindy YS, et al. **Biochem J** 1989 Mar 15;258(3):869–73
Homology of mycoplasma plasmid pADB201 and staphylococcal plasmid pE194. Bergemann AD, et al. **J Bacteriol** 1989 Jan;171(1):593–5
Isolation and characterization of Mycoplasma mycoides subsp. mycoides mutants deficient in nucleoside monophosphate transport. Youil R, et al. **J Bacteriol** 1988 Dec;170(12):5922–4

IMMUNOLOGY

The choice of adjuvants in Mycoplasma vaccines. Garba SA, et al. **Microbios** 1989;57(230):15–9

ISOLATION & PURIFICATION

Rapid photometric assay of growth of Mycoplasma mycoides subsp. capri. Meur SK, et al. **J Appl Bacteriol** 1989 Apr; 66(4):301–2

PATHOGENICITY

Pathogenicity of Mycoplasma mycoides subsp mycoides (large–colony type) for sheep udder. Banga HS, et al. **Aust Vet J** 1988 Nov;65(11):361–2
Experimental infections of goats with Mycoplasma mycoides subspecies mycoides, LC type. Bölske G, et al. **Res Vet Sci** 1989 Mar;46(2):247–52

MYCOPLASMA PNEUMONIA see **PNEUMONIA, MYCOPLASMA**

MYCOPLASMA PNEUMONIAE

CYTOLOGY

Pneumonia caused by Mycoplasma pneumoniae and the TWAR agent. Atmar RL, et al. **Semin Respir Infect** 1989 Mar;4(1):19–31 (73 ref.)

GENETICS

Laboratory diagnosis of Mycoplasma pneumoniae infection. 2. Comparison of methods for the direct detection of specific antigen or nucleic acid sequences in respiratory exudates. Harris R, et al. **Epidemiol Infect** 1988 Dec; 101(3):685–94
Analysis of the nucleotide sequence of the P1 operon of Mycoplasma pneumoniae. Inamine JM, et al. **Gene** 1988 Dec 15;73(1):175–83
Regions of Mycoplasma pneumoniae cytadhesin P1 structural gene exist as multiple copies. Su CJ, et al. **Infect Immun** 1988 Dec;56(12):3157–61
Spontaneous mutation results in loss of the cytadhesin (P1) of Mycoplasma pneumoniae. Su CJ, et al. **Infect Immun** 1989 Oct;57(10):3237–9
Nucleotide sequence of the deoC gene of Mycoplasma pneumoniae. Loechel S, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):801
Cloning of the complete Mycoplasma pneumoniae genome. Wenzel R, et al. **Nucleic Acids Res** 1989 Sep 12; 17(17):7029–43

IMMUNOLOGY

Preparative electroelution of specific protein antigens from Mycoplasma pneumoniae: use in an enzyme–linked immunosorbent assay (ELISA). Papierok G, et al. **Ann Inst Pasteur Microbiol** 1988 Sep–Oct;139(5):589–603
Development of urease conjugated enzyme–linked immunosorbent assays (ELISA) for the detection of IgM and IgG antibodies against Mycoplasma pneumoniae in human sera. Chia WK, et al. **Diagn Microbiol Infect Dis** 1988 Oct;11(2):101–7
Laboratory diagnosis of Mycoplasma pneumoniae infection. 1. Direct detection of antigen in respiratory exudates by enzyme immunoassay. Kok TW, et al. **Epidemiol Infect** 1988 Dec;101(3):669–84
Biological activities of monoclonal antibodies to Mycoplasma pneumoniae membrane glycolipids. Chandler DK, et al. **Infect Immun** 1989 Apr;57(4):1131–6
Binding sites of attachment–inhibiting monoclonal antibodies and antibodies from patients on peptide fragments of the Mycoplasma pneumoniae adhesin. Jacobs E, et al. **Infect Immun** 1989 Mar;57(3):685–8
Evidence for occurrence of passively adsorbed I antigen activity on a cultured strain of Mycoplasma pneumoniae. Uemura K, et al. **Infect Immun** 1988 Dec;56(12):3015–20
Incidence of antibodies to Mycoplasma pneumoniae at a Veterans Administration Medical Center. Reiber DT, et al. **J Okla State Med Assoc** 1989 May;82(5):213–5
Suppressive effect of macrophages on interferon–gamma production by human peripheral lymphocytes stimulated with Mycoplasma pneumoniae. Nakayama T, et al. **Microbiol Immunol** 1988;32(9):985–90
Detection of specific IgM antibodies for the diagnosis of Mycoplasma pneumoniae infections: a clinical evaluation. Vikerfors T, et al. **Scand J Infect Dis** 1988;20(6):601–10
Coexisting anti–I and anti–F1/Gd cold agglutinins in infections by Mycoplasma pneumoniae. König AL, et al. **Vox Sang** 1988;55(3):176–80
[The isolation of Mycoplasma from the bronchoalveolar lavage fluid and its antibody titer measurement in chronic obstructive pulmonary disease] Sun SJ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):275–8, 318–9 (Eng. Abstr.) (Chi)
[Survey of the antibody level of Mycoplasma pneumonia in healthy population in Yunnan Province] Dou HF. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):206–9 (Eng. Abstr.) (Chi)
[Species–specific monoclonal antibodies against Mycoplasma pneumoniae: antibody specificities, antigen characterization, and rapid antigenic detection method] Kuwahara K. **Kansenshogaku Zasshi** 1988 Nov; 62(11):1010–21 (Eng. Abstr.) (Jpn)
[Characteristics of the immunologic response to Mycoplasma pneumoniae as a polyclonal lymphocyte activator] Lisin VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug; (8):108–11 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Culture–amplified immunological detection of Mycoplasma pneumoniae in clinical specimens. Cimolai N, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):207–12
DNA probe versus culture for detection of Mycoplasma pneumoniae in clinical specimens. Tilton RC, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):109–12
Isolation of M. pneumoniae from monkeys (Presbitus cristata). Stipkovits L, et al. **Zentralbl Veterinarmed** [B] 1989 Mar;36(2):134–8
[Studies on the infection with Mycoplasma pneumoniae. (I)—Isolation of M. pneumoniae and clinicopathological analysis] Baba M, et al. **Rinsho Byori** 1988 Sep; 36(9):1095–100 (Jpn)
[The first isolation of Mycoplasma pneumoniae in Panama] de Moreno NO, et al. **Rev Med Panama** 1989 May; 14(2):99–103 (Eng. Abstr.) (Spa)
[Mycoplasma pneumoniae cultured from a healthy population aged 8 to 16] Usluer G, et al. **Mikrobiyol Bul** 1987 Jul; 21(3):206–11 (Eng. Abstr.) (Tur)

METABOLISM

Sialo–oligosaccharide receptors for Mycoplasma pneumoniae and related oligosaccharides of poly–N–acetyllactosamine series are polarized at the cilia and apical–microvillar domains of the ciliated cells in human bronchial epithelium. Loveless RW, et al. **Infect Immun** 1989 Apr;57(4):1285–9
The acquisition of human lactoferrin by Mycoplasma pneumoniae. Tryon VV, et al. **Microb Pathog** 1987 Dec; 3(6):437–43

PATHOGENICITY

[Pathogenicity factors of Mycoplasma pneumoniae] Junie M. **Rev Ig [Bacteriol]** 1989 Jan-Mar;34(1):67-74 (46 ref.) **(Rum)**

PHYSIOLOGY

Isolation of the adherence protein of Mycoplasma pneumoniae by fractionated solubilization and size exclusion chromatography. Jacobs E, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1295-9

Adhesion of Mycoplasma pneumoniae to sulfated glycolipids and inhibition by dextran sulfate. Krivan HC, et al. **J Biol Chem** 1989 Jun 5;264(16):9283-8

Sialic acid-dependent adhesion of Mycoplasma pneumoniae to purified glycoproteins. Roberts DD, et al. **J Biol Chem** 1989 Jun 5;264(16):9289-93

ULTRASTRUCTURE

Ultrastructure of Mycoplasma pneumoniae exposed to macrolide antibiotics during cultivation on a glass surface and in an organ culture, in relation to their mycoplasma-killing activity. Watanabe T. **Drugs Exp Clin Res** 1988;14(4):231-51

MYCOPLASMATACEAE

ENZYMOLOGY

[Transcriptases of Mollicutes studied using specific inhibitors of these enzymes] Skripal' IG, et al. **Mikrobiol Zh** 1988 Nov-Dec;50(6):14-20 (Eng. Abstr.) **(Rus)**

MYCOPLASMATALES

Crohn's disease uveitis. Parasitization of vitreous leukocytes by mollicute-like organisms. Johnson LA, et al. **Am J Clin Pathol** 1989 Mar;91(3):259-64

ISOLATION & PURIFICATION

Isolation of anaerobic mollicutes from the intestine of swine. Binder A, et al. **Vet Microbiol** 1988 Jun;17(2):151-8

[Presence of mycoplasmas in cell cultures in Argentina] Coronato S, et al. **Rev Argent Microbiol** 1987 Oct-Dec; 19(4):165-72 (Eng. Abstr.) **(Spa)**

MYCOPLASMATALES INFECTIONS

Ureaplasma urealyticum. Overview with emphasis on fetal and maternal infections. Shepard MC. **Ann N Y Acad Sci** 1988;549:48-55 (61 ref.)

The importance of Chlamydia trachomatis, Ureaplasma urealyticum and Mycoplasma hominis infections in obstetrics and gynaecology. Illei G, et al. **Ther Hung** 1988; 36(4):157-63 (66 ref.)

[Ureaplasma urealyticum and chorioamnionitis] Jacob-Cormier B, et al. **Rev Fr Gynecol Obstet** 1989 Jan; 84(1):25-8 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Mouse interstitial lung disease and pleuritis induction by human Mollicute-like organisms. Wirostko E, et al. **Br J Exp Pathol** 1988 Dec;69(6):891-902

[Localized Sweet syndrome in urethro-prostatitis caused by Ureaplasma] Stieler W, et al. **Hautarzt** 1988 Oct; 39(10):658-61 (25 ref.) (Eng. Abstr.) **(Ger)**

[Ureaplasma urealyticum and infertility in men] Korchilava TM. **Akush Ginekol (Mosk)** 1988 Aug;(8):69-70 **(Rus)**

DIAGNOSIS

Detection of antibodies to Ureaplasma urealyticum in pregnant women by enzyme-linked immunosorbent assay using membrane antigen and investigation of the significance of the antibodies. Liepmann MF, et al. **J Clin Microbiol** 1988 Oct;26(10):2157-60

[Clinical characteristics and treatment of chronic gonorrheal-chlamydial-ureaplasmal infection in men] Vasil'ev MM, et al. **Vestn Dermatol Venerol** 1988;(9):34-7 (Eng. Abstr.) **(Rus)**

[Use of olivomycin for the diagnosis of Ureaplasma infection of the sperm] Karpenko AE. **Vrach Delo** 1988 Jul; (7):109-11 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Alternative therapy for genital mycoplasma infections. Robertson JA. **Eur J Clin Microbiol Infect Dis** 1988 Oct; 7(5):603-5 (21 ref.)

Clinical efficacy of ciprofloxacin versus doxycycline in the treatment of non-gonococcal urethritis in males. van der Willigen AH, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):658-61

Erythromycin therapy for subclinical intrauterine infections in threatened preterm delivery--a preliminary report. Winkler M, et al. **J Perinat Med** 1988;16(3):253-6

Clinical efficacy of new quinolones for therapy of nongonococcal urethritis. Perea EJ, et al. **Sex Transm Dis** 1989 Jan-Mar;16(1):7-10

Incidence of Mycoplasma hominis and Ureaplasma urealyticum infection in pregnant women and gynaecological patients; the effectivity of doxycycline therapy. Horváth B, et al. **Ther Hung** 1989;37(1):23-7

EPIDEMIOLOGY

[Prevalence of chlamydial and ureaplasmal infections among women of child-bearing age with inflammatory diseases of the pelvic organs] Gomberg MA, et al. **Vestn Dermatol Venerol** 1988;(9):37-9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Mechanisms of macrolide resistance in Ureaplasma urealyticum: a study on collection and clinical strains. Palù G, et al. **Eur J Epidemiol** 1989 Jun;5(2):146-53

Infection of the epididymis by Ureaplasma urealyticum. Jalil N, et al. **Genitourin Med** 1988 Dec;64(6):367-8

Does Ureaplasma urealyticum cause respiratory disease in newborns? Cassell GH, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):535-41 (56 ref.)

Ureaplasma urealyticum colonization and chronic lung disease in low birth weight infants. Sánchez PJ, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):542-6

Role of Ureaplasma urealyticum and other pathogens in the development of chronic lung disease of prematurity. Wang EE, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):547-51

[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. V. Sensitivity of U. urealyticum to selected chemotherapeutic agents] Jagielski M. **Med Dosw Mikrobiol** 1988;40(1):18-37 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Ureaplasma urealyticum and male infertility: an animal model: II. Morphologic changes of testicular tissue at light microscopic level and electron microscopic findings. Audring H, et al. **Andrologia** 1989 Jan-Feb;21(1):66-75

Clinicopathologic diagnosis of mycoplasma endometritis. Khatamee MA, et al. **Int J Fertil** 1989 Jan-Feb;34(1):52-5

VETERINARY

Affinity of microorganisms of the genus ureaplasma to the reproductive organs of cattle. Pilaszek J, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(3-4):177-80

MYCOSES

Tenth congress of the Hungarian Society of Microbiology. Szeged, August 26-29, 1987. Abstracts. **Acta Microbiol Hung** 1988;35(2):121-219

Fusarium solani osteomyelitis with probable nosocomial spread. Nuovo MA, et al. **Am J Clin Pathol** 1988 Dec; 90(6):738-41

Cure of Paecilomyces endophthalmitis with multiple intravitreal injections of amphotericin B. Case report. Minogue MJ, et al. **Arch Ophthalmol** 1989 Sep;107(9):1281

Chronic fungal olecranon bursitis caused by Penicillium [letter] Berger RG. **Arthritis Rheum** 1989 Feb;32(2):239-40

Systemic mycoses and parasitic diseases. **Dermatol Clin** 1989 Apr;7(2):193-401

Mycotic diseases of the neck. Pincus RL. **Ear Nose Throat J** 1988 Nov;67(11):846-51 (33 ref.)

Otomycosis. Stern JC, et al. **Ear Nose Throat J** 1988 Nov; 67(11):804-5, 809-10 (14 ref.)

Systemic fungal infections: diagnosis and treatment II. **Infect Dis Clin North Am** 1989 Mar;3(1):1-186

Systemic fungal infections: diagnosis and treatment I. **Infect Dis Clin North Am** 1988 Dec;2(4):779-954

Systemic fungal infections: diagnosis and treatment II. Preface. Drutz DJ. **Infect Dis Clin North Am** 1989 Mar; 3(1):ix-xiii (22 ref.)

Infections caused by dematiaceous fungi: chromoblastomycosis and phaeohyphomycosis. Fader RC, et al. **Infect Dis Clin North Am** 1988 Dec;2(4):925-38 (26 ref.)

Trichosporonosis. Walsh TJ. **Infect Dis Clin North Am** 1989 Mar;3(1):43-52 (65 ref.)

Use of new broad spectrum antibiotics and the occurrence of fungal endocarditis in a centre for cardiovascular surgery in India [letter] Mehta G. **J Hosp Infect** 1989 Jul;14(1):83-4

Deep-seated mycoses. Clinical aspects, pathology, laboratory diagnosis and therapy as illustrated in case studies. 20th scientific conference of the German-speaking Mycological Society. Freiburg, 22-24 May 1986. **Mycoses** 1988;Suppl 1:1-108

Symposium: new developments in the diagnosis and treatment of systemic fungal infections. Utrecht, December 9, 1987. Proceedings. **Mycoses** 1988;31 Suppl 2:1-67

Clinical manifestations of systemic fungal infections. van 't Wout JW. **Mycoses** 1988;31 Suppl 2:9-14 (20 ref.)

Neurologic complications of endocarditis: a 12-year experience. Salgado AV, et al. **Neurology** 1989 Feb;39(2 Pt 1):173-8

Late bacterial and fungal keratitis after corneal transplantation. Spectrum of pathogens, graft survival, and visual prognosis. Harris DJ Jr, et al. **Ophthalmology** 1988 Oct;95(10):1450-7

Fungal diseases of the pleura: clinical manifestations, diagnosis, and treatment. Lambert RS, et al. **Semin Respir Infect** 1988 Dec;3(4):343-51 (51 ref.)

Trichosporon beigelii peritonitis. Parsonnet J. **South Med J** 1989 Aug;82(8):1062-3

Gastrointestinal tract infection in immunocompromised hosts. Arora A. **Trop Gastroenterol** 1989 Jan-Mar;10(1):9-22 (67 ref.)

[Current aspects of medical mycology] Dupouy-Camet J, et al. **Ann Biol Clin (Paris)** 1989;47(2):102-7 (53 ref.) (Eng. Abstr.) **(Fre)**

[A case of Cladosporium endophthalmitis] Raspiller A, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):455-7 (Eng. Abstr.) **(Fre)**

[Mycotic endocarditis. Apropos of 2 cases and a review of the literature] Kamoun S, et al. **Tunis Med** 1987 Nov; 65(11):719-22 (14 ref.) (Eng. Abstr.) **(Fre)**

[Endogenous fungal endophthalmitis in Japan reported from 1974 to 1986] Ishibashi Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):952-8 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Autopsy cases of terminal pulmonary infections] Nagata N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):14-24 (Eng. Abstr.) **(Jpn)**

[Entomophthoromycosis. Review] Bittencourt AL. **Med Cutan Ibero Lat Am** 1988;16(2):93-100 (54 ref.) (Eng. Abstr.) **(Por)**

[Fungal infection in surgical patients] Zemskov VS, et al. **Sov Med** 1989;(3):51-3 (41 ref.) **(Rus)**

[Dacryocystitis of mycotic etiology (based on the data of the Moscow Ophthalmological Clinical Hospital during the period 1979 to 1985)] Petrushina GD. **Vestn Oftalmol** 1989 Jan-Feb;105(1):62-4 **(Rus)**

[Endophthalmitis caused by the microscopic fungus Fusarium solani] Cechová M, et al. **Cesk Oftalmol** 1988 Sep; 44(5):362-8 (Eng. Abstr.) **(Slo)**

BLOOD

Catheter-related fungemia caused by trichosporon beigelii in non-neutropenic patients. Finkelstein R, et al. **Am J Med** 1989 Jan;86(1):133

CLASSIFICATION

Nosocomial fungal infections: a classification for hospital-acquired fungal infections and mycoses arising from endogenous flora or reactivation. Walsh TJ, et al. **Annu Rev Microbiol** 1988;42:517-45 (141 ref.)

COMPLICATIONS

The role of infections in the pathogenesis of peptic ulcer disease. Meisner S, et al. **Acta Chir Scand Suppl** 1988; 547:35-8 (31 ref.)

Invasive Scopulariopsis in the immunocompromised host. Neglia JP, et al. **Am J Med** 1987 Dec;83(6):1163-6

Life-threatening opportunistic fungal infection in patients with the acquired immunodeficiency syndrome. Armstrong D. **Ann N Y Acad Sci** 1988;544:443-50 (15 ref.)

Fungal infections in cancer patients. Bodey GP. **Ann N Y Acad Sci** 1988;544:431-42 (30 ref.)

Disseminated penicilliosis in a patient with acquired immunodeficiency syndrome. Piehl MR, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1262-4

Management of bacterial and fungal infections in bone marrow transplant recipients and other granulocytopenic patients. Heidt PJ. **Cancer Detect Prev** 1988;12(1-6):609-19 (87 ref.)

Pulmonary phaeohyphomycosis in a patient with hemoptysis. Barenfanger J, et al. **Chest** 1989 May;95(5):1158-60

Synopsis of mycotic infections in AIDS. Male O. **Curr Probl Dermatol** 1989;18:241-9 (47 ref.)

Allergic fungal sinusitis. Philip G, et al. **Histopathology** 1989 Feb;14(2):222-4

AIDS and the mycoses. Macher AM, et al. **Infect Dis Clin North Am** 1988 Dec;2(4):827-39 (63 ref.)

Emerging opportunists. Rinaldi MG. **Infect Dis Clin North Am** 1989 Mar;3(1):65-76 (20 ref.)

Fungal infections in the acquired immunodeficiency syndrome. Cairns MR. **J Electron Microsc Tech** 1988 Jan; 8(1):115-31 (62 ref.)

Disseminated penicilliosis associated with HIV infection [letter] Sathapatayavongs B, et al. **J Infect** 1989 Jul; 19(1):84-5

Human pythiosis associated with thalassemia hemoglobinopathy syndrome. Sathapatayavongs B, et al. **J Infect Dis** 1989 Feb;159(2):274-80 (19 ref.)

Infection of the central nervous system by Rhinocladiella atrovirens in a patient with acquired immunodeficiency syndrome. del Palacio-Hernanz A, et al. **J Med Vet Mycol** 1989;27(2):127-30

Hoarseness in children with neutropenia [letter] Dole M, et al. **J Pediatr** 1988 Oct;113(4):782

Disseminated Fusarium oxysporum infection in patient with heatstroke [letter] Sturm AW, et al. **Lancet** 1989 Apr 29; 1(8644):968

Maxillary sinusitis from Microascus cinereus and Aspergillus repens. Aznar C, et al. **Mycopathologia** 1989 Feb; 105(2):93-7

Trichosporon beigelii infection in an immunocompromised host. Payne AL, et al. **Mycoses** 1989 Apr;32(4):183-6

Infectious arthritides. **N Y State J Med** 1989 May;89(5):300-1

New spectrum of fungal infections in patients with cancer. Anaissie E, et al. **Rev Infect Dis** 1989 May-Jun;11(3):369-78

Intracranial mycotic aneurysm associated with transsphenoidal surgery to the pituitary adenoma. Onishi H, et al. **Surg Neurol** 1989 Feb;31(2):149-54

[Infection in malignant blood disorders] Ruutu P. **Duodecim** 1989;105(11):1130-7 (32 ref.) **(Fin)**

[Opportunistic parasitic diseases and mycoses in AIDS. Their

frequencies in Brazzaville (Congo)] Carme B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):311–6 (Eng. Abstr.) **(Fre)**

[Mycoses in otorhinolaryngology. Apropos of 167 cases] Ette A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):173–7 (Eng. Abstr.) **(Fre)**

[Histologic fungal infection in skin tumors] Schönborn C, et al. **Mycoses** 1988 Aug;31(8):411–7 (Eng. Abstr.) **(Ger)**

[Decrease in systemic fungal infections in hematological neoplasms with empirical use of amphotericin B therapy] Zimmermann–Hölsi MB, et al. **Schweiz Med Wochenschr** 1989 Jan 14;119(2):46–8 (Eng. Abstr.) **(Ger)**

[Fungal infections in patients with ARC with or without AIDS. Evaluation of the chemosensitivity of the isolated strains] Michelone G, et al. **G Ital Chemioter** 1987 Jan–Dec; 34(1–3):23–7 (Eng. Abstr.) **(Ita)**

[Disseminated Trichosporon beigelii infection in a patient with acute myelogenous leukemia] Fukayama M, et al. **Kansenshogaku Zasshi** 1988 Aug;62(8):734–8 (Eng. Abstr.) **(Jpn)**

[Pathologic changes of the hair and nails in generalized geotrichosis] Ratka P, et al. **Przegl Dermatol** 1986 Jul–Aug; 73(4):301–4 (Eng. Abstr.) **(Pol)**

[Infections in the oncologic patient. Prevention and treatment] Cubellos J. **An Esp Pediatr** 1988 Sep;29 Suppl 33:178–81 (15 ref.) **(Spa)**

[Mycotic and bacterial flora in patients with nail disorders] Arreaza F, et al. **Med Cutan Ibero Lat Am** 1988; 16(4):285–90 (Eng. Abstr.) **(Spa)**

[Infection by fungi in granulopenic patients] Bueno J, et al. **Sangre (Barc)** 1988 Oct;33(5):341–6 (17 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Allergic fungal sinusitis presenting as a paranasal sinus tumour. Robson JM, et al. **Aust N Z J Med** 1989 Aug; 19(4):351–3

Laboratory diagnosis of fungal diseases of the head and neck. Alleva M, et al. **Ear Nose Throat J** 1988 Nov;67(11):796, 799, 803 (7 ref.)

Serological techniques for diagnosis of fungal infection. de Repentigny L. **Eur J Clin Microbiol Infect Dis** 1989 Apr; 8(4):362–75 (159 ref.)

Serial study of C-reactive protein for the diagnosis of bacterial and fungal infections in neutropenic patients with hematologic malignancies. Venditti M, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):285–91

Identification of ocular fungi (ink–potassium hydroxide preparation) Vs current staining methods (clinical study). Kamlesh, et al. **Indian J Ophthalmol** 1987;35(5–6):146–8

Laboratory diagnosis of systemic fungal diseases. Gray LD, et al. **Infect Dis Clin North Am** 1988 Dec;2(4):779–803 (40 ref.)

Diagnostic validity of multivariate combinations of biochemical analytes as markers for rejection and infection in the follow-up of patients with heart transplants. Hölzel WG, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):667–71

Effect of delay in processing on lysis–centrifugation blood culture results from marrow transplant patients. Hamilton DJ, et al. **J Clin Microbiol** 1989 Jul;27(7):1588–93

Clinical evaluation of diagnostic hemoperfusion for in vivo enrichment of bacteria and fungi in comparison with a conventional blood culture technique. Kühnen E, et al. **J Clin Microbiol** 1988 Aug;26(8):1609–13

Diagnosis and successful treatment of fusariosis in the compromised host. Merz WG, et al. **J Infect Dis** 1988 Nov; 158(5):1046–55 (69 ref.)

Case 5. Mycotic sinusitis caused by Bipolaris specifera. **Radiographics** 1989 Jan;9(1):97–9

Fungal sinusitis: diagnosis with CT and MR imaging. Zinreich SJ, et al. **Radiology** 1988 Nov;169(2):439–44

Disseminated fusarial infection [letter] Helm T. **Rev Infect Dis** 1989 Jul–Aug;11(4):670–1

Severe infections early after liver transplantation. Jacobs F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2271–3

Biopsy diagnosis and clinical outcome of persistent focal pulmonary lesions after marrow transplantation. Crawford SW, et al. **Transplantation** 1989 Aug;48(2):266–71

Visualization of fungi in histological sections. Wachsmuth ED. **Virchows Arch [B]** 1988;56(1):1–4

[Diagnosis of mycotic diseases of the esophagus] Vašák M. **Cesk Otolaryngol** 1989 May;38(3):185–8 (Eng. Abstr.) **(Cze)**

[Bacteriologic and serologic studies] Sundmacher R. **Klin Monatsbl Augenheilkd** 1989 May;194(5):337–40 (7 ref.) (Eng. Abstr.) **(Ger)**

[Mycoses of the central nervous system. Neurosurgical forms] Rusu M, et al. **Rev Med Interna [Neurol Psihiatr]** 1988 Jul–Sep;33(3):189–98 (38 ref.) (Eng. Abstr.) **(Rum)**

[Intrauterine bacterial infection of the fetus and newborn infant. 2. Clinical symptoms, early laboratory diagnosis and principles of etiotropic therapy] Ankirskaia AS, et al. **Akush Ginekol (Mosk)** 1989 May;(5):73–7 **(Rus)**

[Diagnostic and treatment problems of rhinophycomycosis (conidiobolusomycosis)] Obiako MN. **Mikrobiol Zh** 1988 Sep–Oct;50(5):69–75 (Eng. Abstr.) **(Rus)**

[The use of solid–phase immunoenzyme analysis in medical mycology] Khrapova NP. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):108–11 (53 ref.) **(Rus)**

DRUG THERAPY

Brain cysticercosis treated with praziquantel. Report of six cases. Abad JM, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):88–91

Empiric antifungal therapy in febrile granulocytopenic patients. EORTC International Antimicrobial Therapy Cooperative Group. **Am J Med** 1989 Jun;86(6 Pt 1):668–72

Chemotherapy of the pulmonary mycoses. This Official Statement of the American Thoracic Society was adopted by the ATS Board of Directors, November 1987. **Am Rev Respir Dis** 1988 Oct;138(4):1078–81

Antifungal drugs. **Ann N Y Acad Sci** 1988;544:1–613

Treatment of fungal infections with semisynthetic derivatives of amphotericin B alpha. Hoeprich PD, et al. **Ann N Y Acad Sci** 1988;544:517–46

Liposomes as carriers of antifungal drugs. Lopez–Berestein G. **Ann N Y Acad Sci** 1988;544:590–7

Parenteral 5–fluorocytosine in the therapy of systemic mycoses. Mina FA, et al. **Ann N Y Acad Sci** 1988;544:571–4

Fungal infections and the search for novel antifungal agents. Opening remarks. St. Georgiev V. **Ann N Y Acad Sci** 1988; 544:1–3 (10 ref.)

Pharmacokinetics of antimycotics with emphasis on local treatment. Täuber U. **Ann N Y Acad Sci** 1988;544:414–26 (18 ref.)

Treatment of mycoses with itraconazole. Tucker RM, et al. **Ann N Y Acad Sci** 1988;544:451–70

Developments in systemic mycoses and antifungal chemotherapy. Wegmann T. **Br J Clin Pract Symp Suppl** 1988 Feb;57:15–9

Itraconazole. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic use in superficial and systemic mycoses. Grant SM, et al. **Drugs** 1989 Mar;37(3):310–44 (122 ref.)

In vitro and in vivo evaluation of antifungal agents. Espinel–Ingroff A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):352–61 (85 ref.)

New antifungal agents. Graybill JR. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):402–12 (81 ref.)

Treatment of systemic fungal infections: recent progress and current problems. Walsh TJ, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):460–75 (164 ref.)

A comparative study of anti–fungal drugs in mycotic corneal ulcer. Mahashabde S, et al. **Indian J Ophthalmol** 1987; 35(5–6):149–52

Silver sulphadiazine—a new drug for keratomycosis. Mohan M, et al. **Indian J Ophthalmol** 1987;35(5–6):83–7

Itraconazole therapy for fungal keratitis. Rajasekaran J, et al. **Indian J Ophthalmol** 1987;35(5–6):157–60

Challenging problems in diagnosis and management of fungal endophthalmitis. Shah RR. **Indian J Ophthalmol** 1987; 35(5–6):67–8

Oral ketoconazole in Keratomycosis. Thomas PA, et al. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):197–203

Systemic fungal infections: diagnosis and treatment. I. Therapeutic agents. Graybill JR. **Infect Dis Clin North Am** 1988 Dec;2(4):805–25 (123 ref.)

Secondary mycosis in surgery: treatment with fluconazole. Kujath P, et al. **Infection** 1989 Mar–Apr;17(2):111–7 (24 ref.)

Combination therapy for systemic mycosis. Polak A. **Infection** 1989 Jul–Aug;17(4):203–9 (32 ref.)

AIDS and AIDS–related infections: current strategies for prevention and therapy. Based on a meeting of the British Society for Antimicrobial Chemotherapy. Stratford–on–Avon, 21–22 April 1988. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:1–137

Fungal and mycobacterial infections in patients infected with the human immunodeficiency virus. Spencer PM, et al. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:107–25 (58 ref.)

Caution on use of merthiolate in the ear [letter] Cotton RT. **J Otolaryngol** 1988 Aug;17(5):260

Reduction of systemic fungal infections in patients with hematological malignancies, neutropenia, and prolonged fever by early amphotericin B therapy. Zimmermann–Hösli MB, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1010–4

Xth ISHAM Congress in Barcelona: new antifungals. Clayton Y. **Mycoses** 1988 Aug;31(8):393–4

Antifungal therapy in the immunocompromised host. Meunier F. **Mycoses** 1988;31 Suppl 2:54–8 (14 ref.)

Developments in treatment with new antifungal drugs. van 't Wout JW. **Mycoses** 1988;31 Suppl 2:59–64 (26 ref.)

Managing fungal and viral infection in the immunocompromised host. Jehn U. **Recent Results Cancer Res** 1988;108:61–70 (24 ref.)

Liposome–encapsulated amphotericin B: a promising new treatment for disseminated fungal infections. Wiebe VJ, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1097–101 (20 ref.)

Pharmacologic management of keratomycoses. Johns KJ, et al. **Surv Ophthalmol** 1988 Nov–Dec;33(3):178–88 (65 ref.)

[International symposium: Fluconazole in fungal infections. 20–21 January 1989, Berlin. Abstracts] **Gynakologe** 1989 Apr;22(2 Suppl):1–12 **(Ger)**

[The antimycotic drugs] Wegmann T. **Internist (Berlin)** 1989 Jan;30(1):46–50 (1 ref.) **(Ger)**

[Clinical study of fluconazole on deep–seated fungal infections] Ikemoto H, et al. **Jpn J Antibiot** 1989 Jan; 42(1):63–116 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of fluconazole in patients with mycotic infection] Matsushima T, et al. **Jpn J Antibiot** 1989 Jan; 42(1):153–63 (Eng. Abstr.) **(Jpn)**

[Fluconazole treatment of systemic mycoses] Mori T, et al. **Jpn J Antibiot** 1989 Jan;42(1):55–62 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of fluconazole] Oka S, et al. **Jpn J Antibiot** 1989 Jan;42(1):31–9 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of injectable fluconazole in the treatment of deep mycosis associated with hematological malignancy] Toyama K, et al. **Jpn J Antibiot** 1989 Jan; 42(1):47–54 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of fluconazole in the treatment of deep mycosis] Yagi S, et al. **Jpn J Antibiot** 1989 Jan;42(1):144–52 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Mycotic corneal ulcer in Bangladesh. Gomes DJ, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):49–57

Keratomycosis in corneal sepsis. Sharma SL, et al. **Indian J Ophthalmol** 1987;35(5–6):143–5

Mycotic keratitis in Madras. Venugopal PL, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):190–7

Fungal infections of ear with special reference to chronic suppurative otitis media. Talwar P, et al. **Mycopathologia** 1988 Oct;104(1):47–50

Incidence of yeasts in pregnant and non–pregnant women in Nigeria. Gugnani HC, et al. **Mycoses** 1989 Mar; 32(3):131–5

The incidence of deep–seated mycoses in Freiburg i. Br. (Federal Republic of Germany). Müller J, et al. **Mycoses** 1988;Suppl 1:9–28

[Epidemiology of infection in dentistry] Silla M, et al. **Minerva Stomatol** 1988 Sep;37(9):665–9 **(Ita)**

[Mycoses of the foot in student pilots] Zhuravel' VG. **Voen Med Zh** 1989 May;(5):35–6 **(Rus)**

ETIOLOGY

Disseminated Trichosporon beigelii infection after orthotopic liver transplantation. Ness MJ, et al. **Am J Clin Pathol** 1989 Jul;92(1):119–23

Fungal keratitis in contact lens wearers. Wilhelmus KR, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):708–14

Catheter–related fungemia by Hansenula anomala [letter] Muñoz P, et al. **Arch Intern Med** 1989 Mar;149(3):709, 713

Invasive Trichosporon cutaneum infection: an increasing problem in immunosuppressed patients. Lowenthal RM, et al. **Bone Marrow Transplant** 1987 Oct;2(3):321–7

Oral complications in cancer patients. Bodey GP, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):731–3

Geotrichosis: who is susceptible? [letter] Winer–Muram HT. **Chest** 1988 Dec;94(6):1315–6

Nail infections. Jules KT, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):403–16 (24 ref.)

Fungal air–borne spores as health risk factors among workers in alimentary industries. Palmas F, et al. **Eur J Epidemiol** 1989 Jun;5(2):239–43

Malassezia furfur fungaemia in infants receiving intravenous lipid emulsions. A rarity or just underestimated? Surmont I, et al. **Eur J Pediatr** 1989 Feb;148(5):435–8

Perspectives on gastrointestinal infections in AIDS. Janoff EN, et al. **Gastroenterol Clin North Am** 1988 Sep; 17(3):451–63 (91 ref.)

Pseudoepidemic of urinary tract infections due to Trichosporon beigelii. Stone J, et al. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):312–5 (17 ref.)

Invasive trichosporonosis in a patient with the acquired immunodeficiency syndrome [letter] Leaf HL, et al. **J Infect Dis** 1989 Aug;160(2):356–7

Corneal ulcer caused by Bipolaris hawaiiensis. Anandi V, et al. **J Med Vet Mycol** 1988;26(5):301–6

Incidence, severity, and prevention of infections in chronic granulomatous disease. Mouy R, et al. **J Pediatr** 1989 Apr; 114(4 Pt 1):555–60

Saccharomyces cerevisiae fungemia in a multiply traumatized patient. Manzella JP, et al. **J Trauma** 1989 Jan;29(1):129–30

Invasion of a soft contact lens by Exophiala jeanselmei. Hurtado I, et al. **Mycopathologia** 1989 Mar;105(3):171–3

Potted plants in hospitals as reservoirs of pathogenic fungi. Summerbell RC, et al. **Mycopathologia** 1989 Apr; 106(1):13–22

Bipolaris hawaiiensis–caused phaeohyphomycotic orbitopathy. A devastating fungal sinusitis in an apparently immunocompetent host. Maskin SL, et al. **Ophthalmology** 1989 Feb;96(2):175–9

Bipolaris: a serious new fungal pathogen of the paranasal sinus. Antoine GA, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):158–62 (12 ref.)

Infectious complications of marrow transplant: risk factors for infection. Meyers JD, et al. **Prog Clin Biol Res** 1989; 309:357–66 (24 ref.)

Hansenula anomala infection [letter] Dickensheets DL. **Rev Infect Dis** 1989 May–Jun;11(3):507–8

Infections due to Xylohypha bantiana (Cladosporium trichoides). Dixon DM, et al. **Rev Infect Dis** 1989 Jul–Aug; 11(4):515–25 (84 ref.)

Hansenula anomala fungemia. Haron E, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1182–6 (15 ref.)

Perioperative infection in liver transplant recipients under a quadruple immunosuppressive protocol. Pirsch JD, et al. **Transplant Proc** 1989 Jun;21(3):3559

Renal transplant incidence of superficial fungal infection as

related to immunosuppressive therapy. Segal R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2114–6

[Bacterial and mycotic infections in immunosuppressed patients: studies during antineoplastic therapy] Montagna MT, et al. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr; 38(1–2):107–15 (Eng. Abstr.) **(Ita)**

[Presence of potentially pathogenic bacteria and fungi in the cooling–lubricating emulsion used in the aluminum sheet rolling process] Wlodarczak K, et al. **Med Pr** 1989; 40(1):24–7 (Eng. Abstr.) **(Pol)**

[The role of fungal flora in urinary tract infections in children] Szajner–Milart I, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1584–7 **(Pol)**

[Mucocutaneous entomophthoromycosis. Presentation of a case with an atypical development] Bittencourt AL, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):119–22 (Eng. Abstr.) **(Por)**

[Aerogenic microflora in animal husbandry and poultry breeding areas, criteria of its harmful effect and hygienic regulation] Erman MI, et al. **Gig Tr Prof Zabol** 1989; (4):19–22 (Eng. Abstr.) **(Rus)**

[The role of a fungus of the genus Paecilomyces in the etiology of enteritis] Dekhkan–Khodzhaeva NA, et al. **Pediatriia** 1988;(5):74–8 **(Rus)**

[Expert assessment of postinjection complications] Ivashkevich GA, et al. **Sud Med Ekspert** 1988 Jul–Sep; 31(3):20–2 (Eng. Abstr.) **(Rus)**

[Infectious complications after kidney transplantation] Filiptsev Pla, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct; (5):65–70 (86 ref.) **(Rus)**

IMMUNOLOGY

Do natural killer cells help protect us from disease caused by pathogenic fungi? Granger DL, et al. **Am Rev Respir Dis** 1988 Sep;138(3):510–1 (18 ref.)

Fungal infections in the immunocompromised patient. Kimmelman CP. **Ear Nose Throat J** 1988 Nov;67(11):852–5 (18 ref.)

Host–parasite interaction in fungal infections. Khardori N. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):331–51 (143 ref.)

Serum immunoglobulins in mycotic keratitis—an interim report. Srinivasan M. **Indian J Ophthalmol** 1987; 35(5–6):153–6

Cryptococcal antigen survey among racing pigeon workers and patients with cryptococcosis, pythiosis, histoplasmosis and penicilliosis. Tanphaichitra D, et al. **Int J Clin Pharmacol Res** 1988;8(6):433–9

Experimental hypersensitivity pneumonitis in rabbits induced by Trichosporon cutaneum: role of local cellular and humoral immune responses. Sakata T, et al. **J Clin Lab Immunol** 1988 Apr;25(4):191–9

A health hazard evaluation of pheasant handlers. Goldstein MD, et al. **J Occup Med** 1989 May;31(5):473–6

Humoral immune responses to mycetoma organisms: characterization of specific antibodies by the use of enzyme–linked immunosorbent assay and immunoblotting. Wethered DB, et al. **Trans R Soc Trop Med Hyg** 1988; 82(6):918–23

MICROBIOLOGY

Penicillium marneffei infection: a follow–up [letter] DiSalvo AF. **Am J Clin Pathol** 1989 Apr;91(4):507

Fungal colonization of the esophagus. Vermeersch B, et al. **Am J Gastroenterol** 1989 Sep;84(9):1079–83

Interactive effects of antifungal and antineoplastic agents on yeasts commonly prevalent in cancer patients. Ghannoum MA, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):726–30

Cerebral phaeohyphomycosis caused by Fonsecaea pedrosoi in Saudi Arabia. al–Hedaithy SS, et al. **APMIS Suppl** 1988; 3:94–100

Antifungal susceptibility testing of Trichosporon beigelii to imidazole compounds. McBride ME, et al. **Can J Microbiol** 1988 Jul;34(7):850–4

Fungal infections of the immunocompromised host: clinical and laboratory aspects. Musial CE, et al. **Clin Microbiol Rev** 1988 Oct;1(4):349–64 (147 ref.)

Emerging fungal pathogens. Anaissie EJ, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):323–30 (71 ref.)

Contamination of an endoscope due to Trichosporon beigelli. Singh S, et al. **J Hosp Infect** 1989 Jul;14(1):49–53

Phaeohyphomycotic cutaneous disease caused by Pleurophoma in a cardiac transplant patient. Dooley DP, et al. **J Infect Dis** 1989 Mar;159(3):503–7

Mycotic infection of the ear (otomycosis): a prospective study. Paulose KO, et al. **J Laryngol Otol** 1989 Jan; 103(1):30–5

Antibodies against Trichosporon beigelii in vaginal washings from asymptomatic women. Quindos G, et al. **J Med Microbiol** 1989 Mar;28(3):223–5

Rhinocerebral zygomycosis caused by Saksenaea vasiformis. Kaufman L, et al. **J Med Vet Mycol** 1988;26(4):237–41

A case of disseminated trichosporonosis: a case report and immunohistochemical identification of fungal elements. Mochizuki T, et al. **J Med Vet Mycol** 1988;26(6):343–9

In vitro effectiveness of 13 agents in otomycosis and review of the literature. Stern JC, et al. **Laryngoscope** 1988 Nov; 98(11):1173–7 (16 ref.)

Cladosporiosis (cerebral phaeohyphomycosis) of brain—a case report. Banerjee U, et al. **Mycopathologia** 1989 Mar; 105(3):163–6

Urinary tract infection caused by Hansenula anomala. Qadri SM, et al. **Mycopathologia** 1988 Nov;104(2):99–101

Etiological agents of otomycosis in Nigeria. Gugnani HC, et al. **Mycoses** 1989 May;32(5):224–9

Antigenic relationship between Pythium insidiosum de Cock et al. 1987 and its synonym Pythium destruens Shipton 1987. Mendoza L, et al. **Mycoses** 1989 Feb;32(2):73–7

Mycotic keratitis caused by Phaeotrichoconis crotalariae. New report. Shukla PK, et al. **Mycoses** 1989 May; 32(5):230–2

Fusarium oxysporum keratitis. Hemo I, et al. **Ophthalmologica** 1989;198(1):3–7

Polymicrobial fungemia: microbiology, clinical features, and significance. Guerra–Romero L, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):208–12

Phialophora richardsiae infection in humans. Pitrak DL, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1195–203 (21 ref.)

Disseminated fusarial infection in the immunocompromised host. Richardson SE, et al. **Rev Infect Dis** 1988 Nov–Dec; 10(6):1171–81 (59 ref.)

Pathogenic yeasts. Stenderup A. **Yeast** 1989 Apr;5 Spec No:S215–24 (52 ref.)

[Yeasts: cause of infections of the respiratory tract?] Ringelmann R, et al. **Immun Infekt** 1989 Feb;17(1):13–7 (Eng. Abstr.) **(Ger)**

[Incidence and distribution of vaginal yeast in non selected obstetric and gynecologic patients] Laurelli T, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):245–57 (Eng. Abstr.) **(Ita)**

[Mycostatic activity of new nystatin and polyfungin derivatives against fungi isolated from patients with recurrent mycoses] Kwaśniewska J. **Pol Tyg Lek** 1988 Dec 5;43(49):1599–602 **(Pol)**

MORTALITY

[Causes of death in patients with non–Hodgkin's lymphoma] Walewski J, et al. **Nowotwory** 1988 Oct–Dec;38(4):274–80 (Eng. Abstr.) **(Pol)**

NURSING

[Postoperative care of mycotic endophthalmitis] Zhang HM. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):205–6 **(Chi)**

PATHOLOGY

Fatal brain abscesses caused by Ramichloridium obovoideum: report of three cases. Naim–ur–Rahman, et al. **Acta Neurochir (Wien)** 1988;93(3–4):92–5

Keratomycosis—a retrospective histopathologic and microbiologic analysis. Arora R, et al. **Ann Ophthalmol** 1988 Aug;20(8):306–10, 315

Mycoses in immunocompromised patients. An histopathologic study of 61 cases. Masini T, et al. **Boll Ist Sieroter Milan** 1988;67(3):232–40

Clinicopathological patterns of invasive and superficial fungal infection. McDonald GS, et al. **Ir J Med Sci** 1988 Jun; 157(6):185–90

Fulminant Drechslera sinusitis in an immunocompetent host. Pratt MF, et al. **Laryngoscope** 1988 Dec;98(12):1343–7

[Intestinal metaplasia and fungus involvement in peptic and neoplastic lesions of the mucosa of the stomach] Lüftner J. **Gastroenterol J** 1989;49(1):20–5 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Seminal vesicle and coagulating gland growth induced by intraperitoneal inoculation of fungi in mice. Lyons HJ, et al. **Am J Vet Res** 1989 Jan;50(1):32–3

Rhinocerebral phycomycosis. Taneja LN, et al. **Indian Pediatr** 1988 Nov;25(11):1111–3

PREVENTION & CONTROL

Prevention of fungal sepsis in patients with prolonged neutropenia: a randomized, double–blind, placebo–controlled trial of intravenous miconazole. Wingard JR, et al. **Am J Med** 1987 Dec;83(6):1103–10

Combating infections in neutropenic patients. Pizzo PA. **Hosp Pract [Off]** 1989 Jul 15;24(7):93–100, 103–4, 107–10 (7 ref.)

The effects of infection prevention regimens on early infectious complications in marrow transplant patients: a four arm randomized study. Petersen F, et al. **Infection** 1988 Jul–Aug;16(4):199–208

Relationship of surveillance cultures to bacteremia and fungemia in bone marrow transplant recipients with Hickman or Broviac catheters. Rotstein C, et al. **J Surg Oncol** 1988 Nov;39(3):154–8

Selective decontamination of the digestive tract and fungal infection in acute leukemia patients. Günther I, et al. **Recent Results Cancer Res** 1988;108:82–8

[Prevention of fungal infections with ketoconazole in cancer patients receiving cytostatic therapy] König HJ, et al. **Mycoses** 1988 Jun;31(6):324–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Intracranial phycomycosis: case reports. Tang LM, et al. **Neurosurgery** 1988 Jul;23(1):108–11

THERAPY

Aggressive combined modality treatment of progressive sinonasal fungal infections in immunocompromised patients. Goering P, et al. **Am J Med** 1988 Nov;85(5):619–23

TRANSMISSION

Corneo–scleral rim cultures: donor contamination a case of fungal endophthalmitis transmitted by K–Sol stored cornea. Fong LP, et al. **Eye** 1988;2 (Pt 6):670–6

Systemic mycoses. Wolf AM. **J Am Vet Med Assoc** 1989 May 1;194(9):1192–6 (47 ref.)

VETERINARY

The management of guttural pouch mycosis. Lane JG. **Equine Vet J** 1989 Sep;21(5):321–4 (18 ref.)

Phaeohyphomycosis caused by Alternaria alternata in a cat. Dhein CR, et al. **J Am Vet Med Assoc** 1988 Nov 1; 193(9):1101–3

Pseudallescheria boydii keratomycosis in a horse. Friedman DS, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):616–8

Hyalohyphomycosis caused by Paecilomyces lilacinus in an Aldabra tortoise. Heard DJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1143–5

Equine zygomycosis caused by Conidiobolus lamprauges. Humber RA, et al. **J Clin Microbiol** 1989 Mar;27(3):573–6

Phaeohyphomycosis caused by Alternaria alternata in a mare. Cabañes FJ, et al. **J Med Vet Mycol** 1988;26(6):359–65

Immunofluorescence staining of hyphae in the histopathological diagnosis of mycoses in cattle. Jensen HE, et al. **J Med Vet Mycol** 1989;27(1):33–44

Systemic mycotic disease of captive crocodile hatchling (Crocodylus porosus) caused by Paecilomyces lilacinus. Maslen M, et al. **J Med Vet Mycol** 1988;26(4):219–25

Fatal Fusarium solani infections in baby sharks. Smith AG, et al. **J Med Vet Mycol** 1989;27(2):83–91

A visceral mycosis in cultured masu salmon (Oncorhynchus masou) caused by a species of Ochroconis. Hatai K, et al. **J Wildl Dis** 1989 Jan;25(1):83–8

Fusarium oxysporum in red sea bream (Pagrus sp.). Hatai K, et al. **J Wildl Dis** 1986 Oct;22(4):570–1

Leukoencephalomalacia in a white–tailed deer from North Carolina. Howerth EW, et al. **J Wildl Dis** 1989 Jul; 25(3):384–7

Ichthyophonus infection in a Pacific staghorn sculpin (Leptocottus armatus) from Oregon. Olson RE. **J Wildl Dis** 1986 Oct;22(4):566–9

Preliminary studies on the mechanism of infection and characterization of Malassezia pachydermatis in association with canine otitis externa. Gabal MA. **Mycopathologia** 1988 Nov;104(2):93–8

A new Papulaspora species from the infected eye of a horse: Papulaspora equi sp. nov. Shadomy HJ, et al. **Mycopathologia** 1989 Apr;106(1):35–9

Infection ability of watermolds in some temperate fishes of Himalaya, India. Khulbe RD. **Mycoses** 1989 Feb;32(2):84–6

Infectious diseases of New–World camelids (NWC). Thedford TR, et al. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):145–57 (49 ref.)

Occlusion of the external carotid and maxillary arteries in the horse to prevent hemorrhage from guttural pouch mycosis. Freeman DE, et al. **Vet Surg** 1989 Jan–Feb; 18(1):39–47

[Disseminated intravascular coagulation in a cow of the breed "Deutsche Rotbunte" with fungal mastitis and abomasal displacement] Heuwieser W, et al. **Tierarztl Prax** 1989; 17(2):133–5 (Eng. Abstr.) **(Ger)**

MYCOSIS FUNGOIDES

Mycosis fungoides with polyarthritis [letter] Berger RG. **Arthritis Rheum** 1988 Oct;31(10):1335–6

Podiatric considerations in mycosis fungoides. Ward PE. **J Am Podiatr Med Assoc** 1988 Nov;78(11):572–6 (6 ref.)

Non–Hodgkin lymphoma of the skin excluding mycosis fungoides and cutaneous involvement of adult T–cell leukemia/lymphoma. Mukai K, et al. **J Cutan Pathol** 1988 Aug;15(4):193–200

BLOOD

Detection of clonal T–cell receptor gene rearrangements in the peripheral blood of patients with mycosis fungoides/Sezary syndrome. Weiss LM, et al. **J Invest Dermatol** 1989 Apr;92(4):601–4

COMPLICATIONS

Risk of second malignancy after cutaneous T–cell lymphoma. Kantor AF, et al. **Cancer** 1989 Apr 15;63(8):1612–5

Hypopigmented mycosis fungoides. Sigal M, et al. **Clin Exp Dermatol** 1987 Nov;12(6):453–4

Hodgkin's disease associated with mycosis fungoides [letter] Bettini R, et al. **Haematologica (Pavia)** 1988 Nov–Dec; 73(6):548

The eosinophilic variant of acute myelomonocytic leukemia developing as a secondary leukemia in a patient with m osis fungoides. Jones DB, et al. **Hematol Pathol** 1987; 1(1):67–76

The eosinophilic variant of acute myelomonocytic leukemia developing as a secondary leukemia in a patient with mycosis fungoides [letter] Kantarjian HM, et al.

Hematol Pathol 1987;1(3):191–2
Acanthosis nigricans associated with mycosis fungoides. Schweitzer WJ, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):951–3
[Mycosis fungoides. Unexpected etiology of chronic eczema of the hands with digital gigantism] Voigtländer V, et al. **Ann Dermatol Venereol** 1988;115(11):1212–4 **(Fre)**

DIAGNOSIS

Study of T-cell antigen receptor gene rearrangement: a useful tool for early diagnosis of mycosis fungoides. Bignon YJ, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):217–22
Mycosis fungoides of the central nervous system. Makepeace AR, et al. **J R Soc Med** 1989 Feb;82(2):116–7
[Re-expression of the sheep red blood cell receptor—a diagnostic marker of cutaneous T-cell lymphomas?] Westphal HJ, et al. **Dermatol Monatsschr** 1989;175(2):87–94 (Eng. Abstr.) **(Ger)**
[The significance of epidermal changes in the early diagnosis and development of mycosis fungoides] Persina IS, et al. **Arkh Patol** 1989;51(2):40–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

No detectable increase in sister chromatid exchanges in lymphocytes from mycosis fungoides patients after topical treatment with nitrogen mustard. Studstrup L, et al. **Br J Dermatol** 1988 Dec;119(6):711–5
Topical mechlorethamine therapy for early stage mycosis fungoides. Ramsay DL, et al. **J Am Acad Dermatol** 1988 Oct;19(4):684–91
Complete resolution of Kaposi's sarcoma with systemic etretinate therapy in a patient with mycosis fungoides. Sharpe RJ, et al. **J Am Acad Dermatol** 1989 Jun; 20(6):1123–4
Recombinant leukocyte interferon alfa-2a in the treatment of mycosis fungoides. Simoni R, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):93–9
[The pharmacokinetic and toxicologic profile of 8-methoxypsoralen. The basis for safe and effective PUVA therapy] Schmid J, et al. **Derm Beruf Umwelt** 1988 Nov–Dec;36(6):177–85 (60 ref.) (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Mycosis fungoides [letter] **JAMA** 1989 Apr 7;261(13):1882

ETIOLOGY

Lymphomatoid papulosis: mostly benign but potentially malignant—a case report with a fatal outcome. Parrott LH. **J S C Med Assoc** 1989 Mar;85(3):113–4
[Parapsoriasis en plaques and mycosis fungoides: an unclear relationship] Pimpinelli N, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):329–35 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Plasma cells in the dermal infiltrate of mycosis fungoides are of polyclonal origin. Boehncke WH, et al. **Acta Derm Venereol (Stockh)** 1989;69(2):166–9
Reactivity of T cells in mycosis fungoides exhibiting marked epidermotropism with the monoclonal antibody HML-1 that defines a membrane molecule on human mucosal lymphocytes. Sperling M, et al. **Am J Pathol** 1989 May; 134(5):955–60
Expression of T-cell receptor antigens in mycosis fungoides and inflammatory skin lesions. Michie SA, et al. **J Invest Dermatol** 1989 Jul;93(1):116–20
Cutaneous T cell lymphoma: immunocytochemical study on activation/proliferation and differentiation associated antigens in lymph nodes, skin, and peripheral blood. Küng E, et al. **Virchows Arch [A]** 1988;413(6):539–49

MICROBIOLOGY

HTLV-V: a new human retrovirus associated with cutaneous T-cell lymphoma (mycosis fungoides). Fine RM. **Int J Dermatol** 1988 Sep;27(7):473–4

MORTALITY

Population-based estimate of survival and determinants of prognosis in patients with mycosis fungoides. Weinstock MA, et al. **Cancer** 1988 Oct 15;62(8):1658–61

PATHOLOGY

Mycosis fungoides. Detection of OKT6+ cells by cytofluorographic analysis in one case. Cintorino M, et al. **Am J Dermatopathol** 1987 Apr;9(2):114–9
Large cell mycosis fungoides at the tumor stage. Unusual T8, T4, T6 phenotypic expression. Horiuchi Y, et al. **Am J Dermatopathol** 1988 Feb;10(1):54–8
Light-microscopic assessment of 100 patients with patch/plaque-stage mycosis fungoides. Nickoloff BJ. **Am J Dermatopathol** 1988 Dec;10(6):469–77 (27 ref.)
Nuclear contour irregularity correlates with Leu-9-, Leu-8-cells in benign lymphoid infiltrates of skin. An ultrastructural morphometric and quantitative immunophenotypic analysis suggesting the normal T-cell counterpart to the malignant mycosis fungoides/Sézary cell. Payne CM, et al. **Am J Dermatopathol** 1988 Oct; 10(5):377–89
Acquired epidermal cysts and mycosis fungoides. A possible pitfall in clinical staging. Radeff B, et al. **Am J Dermatopathol** 1988 Oct;10(5):424–9
Alopecia mucinosa progressing into mycosis fungoides. A long-term follow-up study of two patients. Sentis HJ, et al. **Am J Dermatopathol** 1988 Dec;10(6):478–86 (14 ref.)
Angiocentric T-cell lymphoma of the skin. An aggressive lymphoma distinct from mycosis fungoides. Chan JK, et al. **Am J Surg Pathol** 1988 Nov;12(11):861–76
The importance of changes in epidermis at early diagnosis of mycosis fungoides. Persina IS, et al. **Dermatol Monatsschr** 1988;174(6):319–23
Non lymphoblastic T cell lymphomas with prevalent skin involvement different from mycosis fungoides or Sézary's syndrome. A retrospective study of 6 cases in Europe. Grob JJ, et al. **Dermatologica** 1988;177(2):82–97
Mycosis fungoides with gastrointestinal involvement. Ganz R, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):478–81
Methods of simultaneous visualization of cytoplasmic enzyme reactivity and cell surface antigens (by cytochemistry combined with immunocytochemistry) in individual hematopoietic and lymphoid cells. Gloghini A, et al. **Int J Biol Markers** 1988 Oct–Dec;3(4):221–32 (29 ref.)
Unilesional mycosis fungoides: a distinct entity. Oliver GF, et al. **J Am Acad Dermatol** 1989 Jan;20(1):63–70
Morphometrical analysis of mycosis fungoides on paraffin-embedded sections. Rieger E, et al. **J Cutan Pathol** 1989 Feb;16(1):7–13
Peripheral neuropathy associated with mycosis fungoides. Comola M, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):536–8
Cutaneous T cell lymphoma. Worobec-Victor SM. **N J Med** 1989 May;86(5):395–400 (14 ref.)
[Poikiloderma vasculare atrophicans as an early manifestation of mycosis fungoides] Romanenko VN, et al. **Vestn Dermatol Venerol** 1988;(12):41–4 (Eng. Abstr.) **(Rus)**
[Disordered keratinocyte differentiation in epidermal tumors and mycosis fungoides] Vavilov AM, et al. **Vestn Dermatol Venerol** 1989;(1):26–9 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Combined total body X-ray irradiation and total skin electron beam radiotherapy with an improved technique for mycosis fungoides. Halberg FE, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):427–32
[Total cutaneous electron beam therapy of mycosis fungoides] Le Bourgeois JP, et al. **Ann Dermatol Venereol** 1989;116(3):213–7 (Eng. Abstr.) **(Fre)**
[Total skin electron beam therapy in mycosis fungoides—evaluation of a technic for deceleration of electron beam energy and a clinical study] Terashima H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1005–12 (Eng. Abstr.) **(Jpn)**

THERAPY

Beta interferon in the treatment of mycosis fungoides [letter] Zinzani PL, et al. **Haematologica (Pavia)** 1988 Nov–Dec; 73(6):547–8

VETERINARY

Cutaneous lymphoma resembling mycosis fungoides in the Syrian hamster (Mesocricetus auratus). Saunders GK, et al. **Lab Anim Sci** 1988 Oct;38(5):616–7

MYCOTIC ANEURYSM see **ANEURYSM, INFECTED**

MYCOTOXICOSIS see **MUSHROOM POISONING**

MYCOTOXINS

see related
ERGOTISM
Mycotoxins. **Arch Environ Contam Toxicol** 1989 May–Jun; 18(3):307–467
A practical guide to the prevention of Fusarium mycotoxins in grain and animal feedstuffs. Trenholm HL, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):443–51
Triticone A: a novel bioactive lactam with potential as a molecular probe. Kenfield D, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):174–82
Role of protein processing, intracellular trafficking and endocytosis in production of and immunity to yeast killer toxin. Douglas CM, et al. **Eur J Epidemiol** 1988 Dec; 4(4):400–8 (26 ref.)

ANALYSIS

Mycotoxins and Fusarium spp. associated with infected ears of corn in Minnesota. Abbas HK, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1930–3
Chromatography of mycotoxins on precoated reverse-phase thin-layer plates. Abramson D, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):327–30
Analysis and screening for mycotoxins and other secondary metabolites in fungal cultures by thin-layer chromatography and high-performance liquid chromatography. Frisvad JC, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):331–5
High-performance liquid chromatographic screening method for mycotoxins using new retention indexes and diode array detection. Kuronen P. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):336–48
Current situation on regulations for mycotoxins. Overview of tolerances and status of standard methods of sampling and analysis. Van Egmond HP. **Food Addit Contam** 1989 Apr–Jun;6(2):139–88 (23 ref.)
Evidence that phomopsins A and B are not the only toxic metabolites produced by Phomopsis leptostromiformis. Allen JG, et al. **J Appl Toxicol** 1989 Apr;9(2):83–9
Worldwide occurrence of mycotoxins in foods and feeds—an update. Jelinek CF, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):223–30 (91 ref.)
Enhanced surveillance of foodborne mycotoxins by immunochemical assay. Pestka JJ. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1075–81 (105 ref.)
Survey of aflatoxins, ochratoxin A, zearalenone, and sterigmatocystin in some Brazilian foods by using multi-toxin thin-layer chromatographic method. Soares LM, et al. **J Assoc Off Anal Chem** 1989 Jan–Feb;72(1):22–6
Profiling of Alternaria mycotoxins in foodstuffs by high-performance liquid chromatography with diode-array ultraviolet detection. Palmisano F, et al. **J Chromatogr** 1989 Mar 31;465(2):305–13
Simultaneous detection of trichothecenes and rosenonolactone in grape juice and wine by capillary gas chromatography. Schwenk S, et al. **J Chromatogr** 1988 Sep 16;448(3):424–7
Seedborne fungi of sesame (Sesamum indicum L) in Sierra Leone and their potential aflatoxin/mycotoxin production. Jonsyn FE. **Mycopathologia** 1988 Nov;104(2):123–7
Cyclopiazonic acid in combination with aflatoxins, zearalenone and ochratoxin A in Indonesian corn. Widiastuti R, et al. **Mycopathologia** 1988 Dec;104(3):153–6
Influence of degree of acetylation of scirpenol mycotoxins on feed refusal by chickens. Ademoyero AA, et al. **Poult Sci** 1989 Jun;68(6):854–6
A survey on the occurrence of Fusarium mycotoxins in Bavarian cereals from the 1987 harvest. Lepschy-v. Gleissenthal J, et al. **Z Lebensm Unters Forsch** 1989 Jun; 188(6):521–6
[The occurrence of Fusarium varieties and their mycotoxins on silo corn. 1. A method for the determination of zearalenone in corn and corn silage by high performance liquid chromatography (HPLC) with fluorescence detection] Lepom P. **Arch Tierernahr** 1988 Sep; 38(9):799–806 (Eng. Abstr.) **(Ger)**
[17th Environmental Health Seminar: "Mycotoxins in Feed and Food of Animal Origin". WHO Collaborating Centre for Research and Training in Veterinary Public Health and the Hannover School of Veterinary Medicine. Proceedings] **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):335–68 **(Ger)**
[Analytical methods for mycotoxins] Bauer J, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):346–50 (27 ref.) (Eng. Abstr.) **(Ger)**
[The occurrence of Fusarium toxins in feed] Drochner W. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):350–2 (19 ref.) (Eng. Abstr.) **(Ger)**
[The significance of mycotoxin assimilation for meat animals] Fink-Gremmels J. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug;96(7):360–3 (57 ref.) (Eng. Abstr.) **(Ger)**
[The collection and treatment of feed samples, particularly when suspecting mycotoxins] Schmidt HL. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):344–6 (6 ref.) (Eng. Abstr.) **(Ger)**
[Significance of toxic metabolites of the fungus Trichothecium roseum Link ex Fr. for viticulture] Schwenk S, et al. **Z Lebensm Unters Forsch** 1989 Jun; 188(6):527–30 (Eng. Abstr.) **(Ger)**
[Methods for determining fungus-produced gliotoxin in culture and in feeds] Kurbatskaia ZA, et al. **Mikrobiol Zh** 1989 Jan–Feb;51(1):100–2 **(Rus)**

BIOSYNTHESIS

Formation of fusarenone X, nivalenol, zearalenone, alpha-trans-zearalenol, beta-trans-zearalenol, and fusarin C by Fusarium crookwellense. Golinski P, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2147–8
Influence of metabolic and physical factors on production of diacetoxyscirpenol by Fusarium sambucinum Fuckel. Monnet D, et al. **Appl Environ Microbiol** 1988 Sep; 54(9):2167–9
Nitrogen inhibition of mycotoxin production by Alternaria alternata. Orvehed M, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2361–4
Biosynthesis of fusarochromanone and its monoacetyl derivative by Fusarium equiseti. Xie WP, et al. **Appl Environ Microbiol** 1989 Apr;55(4):794–7
Mycotoxins produced by toxic Fusarium isolates obtained from agricultural and nonagricultural areas (Arctic) of Norway. Abbas HK, et al. **Mycopathologia** 1989 Mar; 105(3):143–51
Mycoflora and mycotoxins of peanut (Arachis hypogaea L.) seeds in Egypt. III. Cellulose-decomposing and mycotoxin-producing fungi. el-Magraby OM, et al. **Mycopathologia** 1988 Oct;104(1):19–24
Mycotoxin-producing potential of fungi isolated from red kidney beans. Sanchis V, et al. **Mycopathologia** 1988 Dec; 104(3):157–62
Fusarium moniliforme Sheld. A fungus producing a broad

spectrum of bioactive metabolites. Brückner B, et al. **Zentralbl Mikrobiol** 1989;144(1):3–12 (41 ref.)

[Growth conditions for toxin-forming fungi] Böhm KH. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):339–41 (9 ref.) (Eng. Abstr.) (Ger)

[Measures for lessening the mycotoxin formation and concentration in feed] Müller HM. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):363–8 (42 ref.) (Eng. Abstr.) (Ger)

[Conditions for the formation of mycotoxins in animal feed] Thalmann A. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug;96(7):341–3 (Eng. Abstr.) (Ger)

[A new antibiotic produced by the yeast Williopsis pratensis Babjeva et Reshetova] Vustin MM, et al. **Dokl Akad Nauk SSSR** 1988;302(3):724–7 (Rus)

[Effect of temperature and moisture in feed on the growth of Aspergillus fumigatus and the formation of gliotoxin] Kurbatskaia ZA, et al. **Mikrobiol Zh** 1987 May–Jun; 49(3):62–5 (Rus)

GENETICS

A gene-cloning system for Kluyveromyces lactis and isolation of a chromosomal gene required for killer toxin production. Chen XJ, et al. **J Basic Microbiol** 1988; 28(4):211–20

Expression of pGKL killer 28K subunit in Saccharomyces cerevisiae: identification of 28K subunit as a killer protein. Tokunaga M, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3435–46

Detection of killer-independent dsRNA plasmids in Ustilago maydis by a simple and rapid method of extraction of dsRNA. Seroussi E, et al. **Plasmid** 1989 May;21(3):216–25

A nuclear gene required for the expression of the linear DNA-associated killer system in the yeast Kluyveromyces lactis. Wesolowski-Louvel M, et al. **Yeast** 1988 Mar; 4(1):71–81

IMMUNOLOGY

Production and characterization of monocional antibodies to the macrocyclic trichothecene roridin A. Hack R, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2328–30

Production and characterization of a monoclonal antibody to the trichothecene mycotoxin diacetoxyscirpenol. Pauly JU, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):487–92

ISOLATION & PURIFICATION

Purification and characterization of the anti–Candida toxin of Pichia anomala WC 65. Sawant AD, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):48–52

The connection between the Penicillia and Aspergilli and mycotoxins with special emphasis on misidentified isolates. Frisvad JC. **Arch Environ Contam Toxicol** 1989 May–Jun; 18(3):452–67

Purification and molecular properties of the toxin coded by Ustilago maydis virus P4. Ganesa C, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):651–7

Natural occurrence and clastogenic effects of nivalenol, deoxynivalenol, 3-acetyl-deoxynivalenol, 15-acetyl-deoxynivalenol, and zearalenone in corn from a high-risk area of esophageal cancer. Hsia CC, et al. **Cancer Detect Prev** 1988;13(2):79–86

Purification of cyclopiazonic acid by liquid chromatography. Peterson RE, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr; 72(2):332–5

Isolation of a mycotoxin (gliotoxin) from a bovine udder infected with Aspergillus fumigatus. Bauer J, et al. **J Med Vet Mycol** 1989;27(1):45–50

METABOLISM

Killer systems and pathogenic fungi. Polonelli L, et al. **Eur J Epidemiol** 1988 Dec;4(4):415–8

Instability and apparent lack of metabolism of phomopsin A during incubation with ovine rumen fluid. Vogel P. **J Appl Toxicol** 1988 Jun;8(3):227–8

[The significance of mycotoxin assimilation for the contamination of milk and milk products] Heeschen W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):355–60 (18 ref.) (Eng. Abstr.) (Ger)

PHARMACOKINETICS

Mannoprotein of the yeast cell wall as primary receptor for the killer toxin of Saccharomyces cerevisiae strain 28. Schmitt M, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3347–54

PHARMACOLOGY

In vitro effect of T-2 mycotoxin on the immune response of mice. Holt PS, et al. **Am J Vet Res** 1988 Sep;49(9):1480–4

The interaction of phomopsin A with bovine brain tubulin. Ludueña RF, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):32–8

Use of cell cultures for predicting the biological effects of mycotoxins. Robbana-Barnat S, et al. **Cell Biol Toxicol** 1989 Jun;5(2):217–26

Method for estimating activity of killer toxin from Kluyveromyces lactis. Palková Z, et al. **Folia Biol (Praha)** 1988;34(4):277–81

Comparative effects of T-2 toxin and diacetoxyscirpenol on drug metabolizing enzymes in rat tissues. Galtier P, et al. **Food Chem Toxicol** 1989 Apr;27(4):215–20

Some enzymes and substrates of Embden–Meyerhof pathway of different tissues and related hormones of mycotoxin, MT81, treated mice. Gupta M, et al. **Indian J Exp Biol** 1988 Apr;26(4):315–22

Toxicity of selected tremorgenic mycotoxins and related compounds to Spodoptera frugiperda and Heliothis zea. Dowd PF, et al. **J Antibiot (Tokyo)** 1988 Dec; 41(12):1868–72

Age and growth-related changes in cyclopiazonic acid–potentiated lipophilic cation accumulation by cultured cells and binding to freeze–thaw lysed cells. Riley RT, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:251–64

Gliotoxin induces apoptosis in macrophages unrelated to its antiphagocytic properties. Waring P, et al. **J Biol Chem** 1988 Dec 5;263(34):18493–9

Yeast killer toxins and dimorphism. Polonelli L, et al. **J Clin Microbiol** 1989 Jun;27(6):1423–5

On the reported channel-forming activity of HmT toxin [letter] Holden MJ, et al. **J Membr Biol** 1988 Jul; 103(2):205–6

The chemistry and biology of the immunomodulating agent gliotoxin and related epipolythiodioxopiperazines. Waring P, et al. **Med Res Rev** 1988 Oct–Dec;8(4):499–524 (83 ref.)

The tremorigen aflatrem is a positive allosteric modulator of the gamma-aminobutyric acidA receptor channel expressed in Xenopus oocytes. Yao Y, et al. **Mol Pharmacol** 1989 Mar;35(3):319–23

Conditioned saccharin taste aversion induced by mycotoxins in rats: lack of effect of ochratoxin A. Clark DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):819–21

Mutations in the maize mitochondrial T-urf13 gene eliminate sensitivity to a fungal pathotoxin. Braun CJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4435–9

POISONING

Toxicity of Fusarium moniliforme var. subglutinans for chicks, ducklings, and turkey poults. Engelhardt JA, et al. **Avian Dis** 1989 Apr–Jun;33(2):357–60

Suspected fusariomycotoxicosis in sandhill cranes (Grus canadensis): clinical and pathological findings. Roffe TJ, et al. **Avian Dis** 1989 Jul–Sep;33(3):451–7

Laboratory confirmation of Cortinarius poisoning [letter] Andary C, et al. **Lancet** 1989 Jan 28;1(8631):213

Outbreak of trichothecene mycotoxicosis associated with consumption of mould-damaged wheat production in Kashmir Valley, India. Bhat RV, et al. **Lancet** 1989 Jan 7;1(8628):35–7

Do microfungi help to induce the phototoxic disease alveld in Norway? Aas O, et al. **Vet Rec** 1989 May 27;124(21):563

[The significance of mycotoxicoses for humans and animals] Habermehl G. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug;96(7):335–8 (Eng. Abstr.) (Ger)

[The significance of mycotoxin assimilation for the productivity and health of animals] Schuh M. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):353–5 (Eng. Abstr.) (Ger)

TOXICITY

Complement, bacteriostatic, and enzymatic activities in sera from guinea pigs given aflatoxin and/or rubratoxin. Thurston JR, et al. **Am J Vet Res** 1989 Mar;50(3):356–8

Physionutritional effects of rubratoxin-B on rabbits. Abdelhamid AM. **Arch Tierernahr** 1988 Sep;38(9):825–32

Toxic properties of the mushroom Cortinarius orellanus. I. Chemical characterization of the main toxin of Cortinarius orellanus (Fries) and Cortinarius speciosissimus (Kühn & Romagn) and acute toxicity in mice. Prast H, et al. **Arch Toxicol** 1988 Aug;62(1):81–8

Toxic properties of the mushroom Cortinarius orellanus (Fries). II. Impairment of renal function in rats. Prast H, et al. **Arch Toxicol** 1988 Aug;62(1):89–96

Nephrotoxicity of orellanine, a toxin from the mushroom Cortinarius orellanus. Richard JM, et al. **Arch Toxicol** 1988; 62(2–3):242–5

Reproductive alterations in female C57BL/Crgl mice exposed neonatally to zearalenone, an estrogenic mycotoxin. Williams BA, et al. **Cancer Lett** 1989 Aug; 46(3):225–30

The initiator tRNA acceptance assay as a short-term test for carcinogens. 4. Results with 20 mycotoxins. Hradec J, et al. **Carcinogenesis** 1989 Jan;10(1):213–5

Effect of biological toxins on gap-junctional intercellular communication in Chinese hamster V79 cells. Jone C, et al. **Cell Biol Toxicol** 1987 Mar;3(1):1–15

Rubratoxin B mycotoxicosis in the Syrian hamster: ultrastructural alterations. Engelhardt JA, et al. **Exp Mol Pathol** 1989 Apr;50(2):193–204

Hepatotoxicity and renal toxicity in rats of corn samples associated with field cases of equine leukoencephalomalacia. Voss KA, et al. **Food Chem Toxicol** 1989 Feb;27(2):89–96

Mycotoxin interactions in poultry and swine. Huff WE, et al. **J Anim Sci** 1988 Sep;66(9):2351–5

Evidence that phomopsins A and B are not the only toxic metabolites produced by Phomopsis leptostromiformis. Allen JG, et al. **J Appl Toxicol** 1989 Apr;9(2):83–9

Cytological effects of fungal metabolites produced by fungi isolated from Egyptian poultry feedstuffs. Abdou RF, et al. **J Basic Microbiol** 1989;29(3):131–9

Effects of purified altertoxins I, II, and III in the metabolic communication V79 system. Boutin BK, et al. **J Toxicol Environ Health** 1989;26(1):75–81

Increased frequency of sister-chromatid exchange induced by dothistromin in CHO cells and human lymphocytes. Skinnider L, et al. **Mutat Res** 1989 Mar;222(3):167–70

Effects of cyclopiazonic acid and aflatoxin singly and in combination on selected clinical, pathological and immunological responses of guinea pigs. Pier AC, et al. **Mycopathologia** 1989 Mar;105(3):135–42

Leukoencephalomalacia in a horse induced by fumonisin B1 isolated from Fusarium moniliforme. Marasas WF, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):197–203

Mechanism of dimethylsulfoxide protection against the teratogenicity of secalonic acid D in mice. ElDeib MM, et al. **Teratology** 1988 Nov;38(5):419–25

Reduction of hepatic and renal nonprotein sulfhydryl content and increased toxicity of rubratoxin B in the Syrian hamster and Mongolian gerbil. Engelhardt JA, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):85–92

Toxicity of echinulin from Aspergillus chevalieri in rabbits. Ali M, et al. **Toxicol Lett** 1989 Sep;48(3):235–41

Preliminary studies on toxic effects of cyclopiazonic acid alone and in combination with aflatoxin B1 in non-human primates. Jaskiewicz K, et al. **Toxicology** 1988 Nov 30; 52(3):297–307

[Neurotropic fungal metabolites] Yamazaki M. **Seikagaku** 1989 Mar;61(3):207–10 (Jpn)

[Experimental fumigatotoxicosis in mink] Kurbatskaia ZA, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):55–8 (Eng. Abstr.) (Rus)

[Toxigenicity and pathogenicity of micromycetes isolated from fish roe] Lemeshchenko GP, et al. **Mikrobiol Zh** 1988 Sep–Oct;50(5):65–9 (Eng. Abstr.) (Rus)

[Sensitivity of the skin of the rabbit to extracts of a culture of Fusarium poae (Peck) Wollenweber] Lucía GE, et al. **Rev Argent Microbiol** 1984;16(1):27–32 (Eng. Abstr.) (Spa)

MYDRIATICS

Flurbiprofen sodium to prevent intraoperative miosis during vitreoretinal surgery. Vander JF, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):288–91

Effects of routine pupillary dilation on functional daylight vision. O'Connor PS, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1567–9

Ocular and systemic effects of topical instillation of different formulations of phenylephrine in rabbits. Cioli V, et al. **Boll Chim Farm** 1988 Apr;127(4):80–2

Pupillographic evaluation of the mydriatic effect of ibopamine solution. Gelmi C, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):346–51

Alpha 1- and alpha 2-adrenoreceptor antagonists produce opposing mydriatic effects by a central action. Hey JA, et al. **J Auton Pharmacol** 1988 Sep;8(3):229–39

ADMINISTRATION & DOSAGE

Prolonged unilateral mydriasis after nasotracheal intubation. Louis F, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):471

ADVERSE EFFECTS

The inhibitory effects of nifedipine and fentanyl on circulatory response during laryngoscopy and intubation in patients pretreated with neosynephrine eye drops for mydriasis. Ho CT, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):153–60

PHARMACOLOGY

Status of cyclopentolate as a cycloplegic in children: a comparison with atropine and homatropine. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):721–4

Consensual pupillary responses to mydriatic and miotic drugs. Theofilopoulos N, et al. **Br J Clin Pharmacol** 1988 Dec; 26(6):697–702

Topical phenylephrine for mydriasis affects rabbit retinal pigment epithelial transport. Frambach DA, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):343–4

Atypical alpha-adrenoceptor mediates phenylephrine-induced mydriasis in anesthetized cats. Hey JA, et al. **J Ocul Pharmacol** 1988 Winter;4(4):303–10

The effect of mydriasis on the pupillary centration of the human eye. Walsh G. **Ophthalmic Physiol Opt** 1988; 8(2):178–82

THERAPEUTIC USE

Acute iritis. How to preserve good vision. Griffin JR. **Postgrad Med** 1989 Sep 15;86(4):117–21

MYELENCEPHALON see MEDULLA OBLONGATA

MYELIN BASIC PROTEINS see ENCEPHALITOGENIC BASIC PROTEINS

MYELIN PROTEINS

Comparative study of myelin proteolipid apoprotein solvation by multilayer membranes of synthetic DPPC and biological lipid extract from bovine brain. An FT-IR investigation. Nedelec JF, et al. **Biochimie** 1989 Jan; 71(1):145–51

Structural parameters of the myelin transmembrane proteolipid in reverse micelles. Binks BP, et al.

Biophys J 1989 May;55(5):949–55

ANALYSIS

Phase separation of myelin proteins in triton X–114: differential behavior of myelin basic protein in purified myelin and in cultured oligodendrocytes. Bürgisser P, et al. **Dev Neurosci** 1989;11(3):179–87

Orientation of proteolipid protein in myelin: comparison of models with X-ray diffraction measurements. Inouye H, et al. **Dev Neurosci** 1989;11(2):81–9

Identification of thiol groups and a disulfide crosslink site in bovine myelin proteolipid protein. Shaw SY, et al. **FEBS Lett** 1989 Jul 3;250(2):306–10

Plasma membrane of cultured oligodendrocytes: III. Relatedness to myelin. Szuchet S, et al. **GLIA** 1988; 1(2):141–50

A morphological and biochemical study of the myelin-like membrane structures formed in cultures of pure oligodendrocytes. Nussbaum JL, et al. **Int J Dev Neurosci** 1988;6(4):395–408

Recovery of proteolipid protein in mice heterozygous for the jimpy gene. Benjamins JA, et al. **J Neurochem** 1989 Jul;53(1):279–86

Differential ultrastructural localization of myelin basic protein, myelin/oligodendroglial glycoprotein, and 2',3'-cyclic nucleotide 3'-phosphodiesterase in the CNS of adult rats. Brunner C, et al. **J Neurochem** 1989 Jan; 52(1):296–304

The distribution of MAG in association with the axonal lesions of canine progressive axonopathy. Griffiths IR, et al. **J Neurocytol** 1989 Jun;18(3):353–8

Co-localization of the myelin-associated glycoprotein and the microfilament components, F-actin and spectrin, in Schwann cells of myelinated nerve fibres. Trapp BD, et al. **J Neurocytol** 1989 Feb;18(1):47–60

Po, MBP, histone, and DNA levels in sciatic nerve. Postnatal accumulation studies in normal and trembler mice. Garbay B, et al. **Neurochem Pathol** 1988 Apr;8(2):91–107

Lipid composition of myelin and protein—lipid complex in a neurological rabbit mutant. Wikel H, et al. **Neurochem Pathol** 1988 Apr;8(2):109–19

Aspects of the protein and the lipid composition of myelinoid Marchi-positive bodies from mammalian spinal cord. Corneliuson O, et al. **Neurochem Res** 1988 Dec; 13(12):1149–56

BIOSYNTHESIS

Synthesis of soluble myelin-associated glycoprotein in insect and mammalian cells. Johnson PW, et al. **Gene** 1989 Apr 30;77(2):287–96

Developmental pattern of synthesis of basic proteins, proteolipid protein and wolfgram proteins in the myelinating rat brain: a study with brain polysomes. Akella VV, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):605–14

Translational regulation of myelin protein synthesis by steroids. Verdi JM, et al. **J Neurochem** 1989 Jan;52(1):321–4

How is oligodendrocyte differentiation and myelin formation regulated? Dutly F, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):19–21

GENETICS

Pelizaeus-Merzbacher disease: an X-linked neurologic disorder of myelin metabolism with a novel mutation in the gene encoding proteolipid protein. Gencic S, et al. **Am J Hum Genet** 1989 Sep;45(3):435–42

cDNA cloning and amino acid sequence for human myelin-associated glycoprotein. Sato S, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1473–80

Temporal changes in PO and MBP gene expression after crush-injury of the adult peripheral nerve. Gupta SK, et al. **Brain Res** 1988 Sep;464(2):133–41

Differential splicing of MAG transcripts during CNS and PNS development. Tropak MB, et al. **Brain Res** 1988 Sep; 464(2):143–55

Proteolipid proteins: structure and genetic expression in normal and myelin-deficient mutant mice. Nave KA, et al. **Crit Rev Neurobiol** 1989;5(1):65–91 (149 ref.)

Axons regulate Schwann cell expression of the major myelin and NGF receptor genes. Lemke G, et al. **Development** 1988 Mar;102(3):499–504

Developmental expression of the P0 glycoprotein and basic protein mRNAs in normal and trembler mutant mice. Garbay B, et al. **J Neurochem** 1989 Sep;53(3):907–11

Expression of myelin protein genes in Schwann cells. Griffiths IR, et al. **J Neurocytol** 1989 Jun;18(3):345–52

In situ hybridization analysis of myelin gene transcripts in developing mouse spinal cord. Jordan C, et al. **J Neurosci** 1989 Jan;9(1):248–57

Axonal regulation of myelin protein mRNA levels in actively myelinating Schwann cells. Trapp BD, et al. **J Neurosci** 1988 Sep;8(9):3515–21

Regional expression of myelin protein genes in the developing mouse brain: in situ hybridization studies. Verity AN, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):238–48

Cellular localization of 1B236/myelin-associated glycoprotein mRNA during rat brain development. Higgins GA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2074–8

The genes for myelin revisited. Sutcliffe JG. **Trends Genet** 1988 Aug;4(8):211–3 (17 ref.)

IMMUNOLOGY

Immunological studies of the pathogenesis of multiple sclerosis. Cell-mediated cytotoxicity by peripheral blood lymphocytes against basic protein of myelin, encephalitogenic peptide, cerebrosides and gangliosides. Frick E. **Acta Neurol Scand** 1989 Jan;79(1):1–11

Class and IgG subclass distribution of antibodies against peripheral nerve myelin in sera from patients with inflammatory demyelinating polyradiculoneuropathy. Vedeler CA, et al. **Acta Neurol Scand** 1988 Nov;78(5):401–7

Role of mast cells in peripheral nervous system demyelination. Johnson D, et al. **Ann N Y Acad Sci** 1988; 540:727–8

Antibodies to sulfated glucuronic acid containing glycosphingolipids in neuropathy associated with anti-MAG antibodies and in normal individuals. McGinnis S, et al. **Ann N Y Acad Sci** 1988;540:442–4

Experimental allergic encephalomyelitis mediated by murine encephalitogenic T-cell lines specific for myelin proteolipid apoprotein. Satoh J, et al. **Ann N Y Acad Sci** 1988;540:343–4

Characterization and in vitro use of a monoclonal anti-idiotypic antibody against HNK-1. Schluep M, et al. **Ann N Y Acad Sci** 1988;540:459–60

Autoimmune demyelination in the central nervous system. Tabira T. **Ann N Y Acad Sci** 1988;540:187–201 (26 ref.)

Susceptibility to PLP-induced EAE is regulated by non-H-2 genes. Tuohy VK, et al. **Ann N Y Acad Sci** 1988;540:709–11

Immunochemical differentiation of highly conserved forms of myelin proteolipid. Lin LF, et al. **Comp Biochem Physiol [B]** 1988;91(3):505–9

Peripheral neuropathy and anti-MAG antibodies. Latov N, et al. **Crit Rev Neurobiol** 1988;3(4):301–32 (175 ref.)

Chronic experimental autoimmune encephalomyelitis in the guinea pig. Presence of anti-M2 antibodies in central nervous system tissue and the possible role of M2 autoantigen in the induction of the disease. Lebar R, et al. **J Autoimmun** 1989 Apr;2(2):115–32

Identification of an encephalitogenic determinant of myelin proteolipid protein for SJL mice. Tuohy VK, et al. **J Immunol** 1989 Mar 1;142(5):1523–7

Identification of a common idiotype on myelin oligodendrocyte glycoprotein-specific autoantibodies in chronic relapsing experimental allergic encephalomyelitis. Gunn C, et al. **J Neuroimmunol** 1989 Jul;23(2):101–8

Antibodies to myelin-associated glycoprotein (MAG) in the cerebrospinal fluid of multiple sclerosis patients. Möller JR, et al. **J Neuroimmunol** 1989 Mar;22(1):55–61

Myelin-oligodendrocyte glycoprotein (MOG) is a surface marker of oligodendrocyte maturation. Scolding NJ, et al. **J Neuroimmunol** 1989 May;22(3):169–76

The adoptive transfer of chronic relapsing experimental allergic encephalomyelitis with lymph node cells sensitized to myelin proteolipid protein. van der Veen RC, et al. **J Neuroimmunol** 1989 Feb;21(2–3):183–91

Analysis of the feline immune response to human myelin-associated glycoprotein. Kahn SN, et al. **J Neurol Sci** 1989 Feb;89(2–3):141–8

Demyelination induced by intraneural injection of human antimyelin-associated glycoprotein antibodies. Willison HJ, et al. **Muscle Nerve** 1988 Nov;11(11):1169–76

Antibody binding to PNS myelin proteins in acute Guillain-Barré syndrome. Shuman S, et al. **Pathol Immunopathol Res** 1988;7(3):162–8

Oligodendrocyte-specific autoreactive T cells using an alpha/beta T-cell receptor kill their target without self restriction. Jewtoukoff V, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2824–8

Demyelination in brain cell aggregate cultures, induced by a monoclonal antibody against the myelin/oligodendrocyte glycoprotein (MOG). Honegger P, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):10–3

[Involvement of the cranial nerves in IgM monoclonal dysglobulinemia with antimyelin antibody activity (letter)] Mariette X, et al. **Presse Med** 1989 Mar 18;18(11):587 **(Fre)**

[A case of IgM paraproteinemia and chronic polyneuropathy with serum antibody reacting with PO protein and myelin-associated glycoprotein] Nomura K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):426–32 (Eng. Abstr.) **(Jpn)**

[Autoimmune disease and its carbohydrate epitope] Ariga T, et al. **Tanpakushitsu Kakusan Koso** 1989 Mar; 34(3):225–34 (45 ref.) **(Jpn)**

ISOLATION & PURIFICATION

Detection and partial biochemical characterization of a novel 57,500 dalton protein in rat brain myelin. Miller SL, et al. **J Neurosci Res** 1989 Mar;22(3):262–8

METABOLISM

Influence of lipid headgroup on the specificity and exchange dynamics in lipid-protein interactions. A spin-label study of myelin proteolipid apoprotein-phospholipid complexes. Horváth LI, et al. **Biochemistry** 1988 Jul 12;27(14):5296–304

Developmental profile and differential localization of mRNAs of myelin proteins (MBP and PLP) in oligodendrocytes in the brain and in culture. Shiota C, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):83–94

Non myelin-forming perineuronal Schwann cells in rat trigeminal ganglia express P0 myelin glycoprotein mRNA during postnatal development. Lamperth L, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):177–81

Substrate-dependent migration of myelin-associated glycoprotein immunoreactive cells in cultured explants of dorsal root ganglia from chick embryos. Rochat A, et al. **Dev Neurosci** 1988;10(4):236–44

Effect of lipid peroxidation on the accessibility of dansyl chloride labeling to lipids and proteins of bovine myelin. Arduini A, et al. **Free Radic Res Commun** 1985;1(2):129–35

Differential regulation of basic protein phosphorylation by calcium phospholipid and cyclic-AMP-dependent protein kinases. Dawson G, et al. **J Cell Biochem** 1989 Jul; 40(3):261–9

The initial events in myelin synthesis: orientation of proteolipid protein in the plasma membrane of cultured oligodendrocytes. Hudson LD, et al. **J Cell Biol** 1989 Aug; 109(2):717–27

Immunohistological localization of the adhesion molecules L1, N-CAM, and MAG in the developing and adult optic nerve of mice. Bartsch U, et al. **J Comp Neurol** 1989 Jun 15;284(3):451–62

Phosphorylation of myelin-associated glycoprotein in vivo and in vitro occurs only in the cytoplasmic domain of the large isoform. Edwards AM, et al. **J Neurochem** 1989 Jan; 52(1):317–20

Metabolism of functional groups modifying the CNS myelin-associated glycoprotein. Toews AD, et al. **J Neurochem** 1988 Nov;51(5):1646–50

Myelin proteins in reverse micelles: tight lipid association required for insertion of the Folch-Pi proteolipid into a membrane-mimetic system. Vacher M, et al. **J Neurochem** 1989 Jan;52(1):117–23

Decreased fatty acylation of myelin proteolipid protein in the twitcher mouse. Yoshimura T, et al. **J Neurochem** 1989 Mar;52(3):836–41

Interaction of myelin basic protein and proteolipid protein. Edwards AM, et al. **J Neurosci Res** 1989 Jan;22(1):97–102

Inhibition of the synthesis of glycosphingolipids affects the translocation of proteolipid protein to the myelin membrane. Pasquini JM, et al. **J Neurosci Res** 1989 Mar; 22(3):289–96

Acylation in vitro of the myelin proteolipid protein and comparison with acylation in vivo: acylation of a cysteine occurs nonenzymatically. Ross NW, et al. **J Neurosci Res** 1988 Sep;21(1):35–44

Increased turnover of myelin proteolipid protein in quaking mouse brain. Konat G, et al. **Metab Brain Dis** 1987 Jun; 2(2):113–6

Synthesis and acylation of myelin proteolipid protein in quaking mouse brain. Konat G, et al. **Metab Brain Dis** 1986 Dec;1(4):241–7

Peroxidative aggregation of myelin membrane proteins. Konat G, et al. **Metab Brain Dis** 1986 Sep;1(3):177–85

Tumor promoters accentuate phosphorylation of PO: evidence for the presence of protein kinase C in purified PNS myelin. Agrawal HC, et al. **Neurochem Res** 1989 May; 14(5):409–13

In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate. Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91–6

PHYSIOLOGY

Modulated adhesion: a proposal for the role of myelin-associated glycoprotein in myelin wrapping. Attia J, et al. **Clin Chem** 1989 May;35(5):717–20 (35 ref.)

Myelin-associated glycoprotein in demyelinating disorders. Quarles RH. **Crit Rev Neurobiol** 1989;5(1):1–28 (151 ref.)

Myelination in the jimpy mouse in the absence of proteolipid protein. Duncan ID, et al. **GLIA** 1989;2(3):148–54

Evidence for an early role for myelin-associated glycoprotein in the process of myelination. Owens GC, et al. **GLIA** 1989; 2(2):119–28

Neurite growth inhibition by CNS myelin proteins: a mechanism to confine fiber tracts? Chiquet M. **Trends Neurosci** 1989 Jan;12(1):1–3 (17 ref.)

ULTRASTRUCTURE

Conformation of brain proteolipid apoprotein. Effects of sonication and n-octyl-beta-D-glucopyranoside detergent. Carmona P, et al. **Eur Biophys J** 1988;16(3):169–76

MYELIN SHEATH

Non-myelin-forming Schwann cells proliferate rapidly during Wallerian degeneration in the rat sciatic nerve. Clemence A, et al. **J Neurocytol** 1989 Apr;18(2):185–92

The uncommon longitudinal relaxation dispersion of human brain white matter. Fischer HW, et al. **Magn Reson Med** 1989 Mar;9(3):441–6

[Dermal myxoma of nerve sheaths (neurothecoma) of Harkin and Reed. Apropos of a case] Mérot Y, et al. **Ann Dermatol Venereol** 1989;116(3):237–40 **(Fre)**

ABNORMALITIES

Central hypomyelination associated with congenital hypomyelinating polyneuropathy: report of an autopsied case. Johnson MD, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):28–34

ANALYSIS

A peanut agglutinin binding glycoprotein in CNS myelin and oligodendrocytes. Mikol DD, et al. **Ann N Y Acad Sci** 1988;

540:409–12
Topology of proteolipid protein in the myelin membrane of central nervous system. A study using antipeptide antibodies. Stoffel W, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):165–76
Phase separation of myelin proteins in triton X–114: differential behavior of myelin basic protein in purified myelin and in cultured oligodendrocytes. Bürgisser P, et al. **Dev Neurosci** 1989;11(3):179–87
Orientation of proteolipid protein in myelin: comparison of models with X–ray diffraction measurements. Inouye H, et al. **Dev Neurosci** 1989;11(2):81–9
A biochemical study of optic nerve myelin isolated by a micromethod from different aged rats. Jacks AS, et al. **Exp Gerontol** 1989;24(3):219–25
A morphological and biochemical study of the myelin–like membrane structures formed in cultures of pure oligodendrocytes. Nussbaum JL, et al. **Int J Dev Neurosci** 1988;6(4):395–408
Axon–myelin relationships in rat cranial nerves III, IV, and VI: a morphometric study of large– and small–fibre classes. Fraher JP. **J Comp Neurol** 1989 Aug 15;286(3):384–90
Buoyant density and lipid composition of purified myelin of aging human brain. Stommel A, et al. **Mech Ageing Dev** 1989 Apr;48(1):1–14
Myelin lipids in aging human brain. Wender M, et al. **Neurochem Pathol** 1988 Apr;8(2):121–30
Lipid composition of myelin and protein—lipid complex in a neurological rabbit mutant. Wikel H, et al. **Neurochem Pathol** 1988 Apr;8(2):109–19
Aspects of the protein and the lipid composition of myelinoid Marchi–positive bodies from mammalian spinal cord. Corneliuson O, et al. **Neurochem Res** 1988 Dec; 13(12):1149–56
Analysis of brain and myelin lipids by high–performance thin layer chromatography and densitometry. Di Biase A, et al. **Neurochem Res** 1989 Feb;14(2):153–6
Isolation and initial characterization of myelin–like membrane fractions from the nerve cord of earthworms (Lumbricus terrestris L). Pereyra PM, et al. **Neurochem Res** 1988 Sep; 13(9):893–901

CYTOLOGY

Differentiation–regulated loss of the polysialylated embryonic form and expression of the different polypeptides of the neural cell adhesion molecule by cultured oligodendrocytes and myelin. Trotter J, et al. **J Neurosci Res** 1989 Apr;22(4):369–83
[Silver impregnation of the myelin sheath. II] Krutsay M. **Zentralbl Allg Pathol** 1988;134(6):583–5 (Eng. Abstr.) **(Ger)**
[Myelin fibers of the musculocutaneous nerve during the postnatal life of man] Załuska S, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:227–32 (Eng. Abstr.) **(Pol)**
[Histological evaluation of neuroglia during the process of myelination in pt rabbits] Zelman IB, et al. **Neuropatol Pol** 1988;26(1):27–37 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Tumor necrosis factor mediates myelin damage in organotypic cultures of nervous tissue. Selmaj K, et al. **Ann N Y Acad Sci** 1988;540:568–70
Experimental neuropathy produced in rats with industrial solvents (thinner). Barroso–Moguel R, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):53–60
Cerebellar soluble lectin is responsible for cell adhesion and participates in myelin compaction in cultured rat oligodendrocytes. Kuchler S, et al. **Dev Neurosci** 1988; 10(3):199–212
Effect of growth hormone on growth and myelination in the neonatal hypothyroid rat. King RA, et al. **J Endocrinol** 1988 Oct;119(1):117–25

ENZYMOLOGY

Activity of myelin membrane Na+/K+–ATPase and 5'–nucleotidase in relation to phospholipid acyl profiles, ganglioside composition and phosphoinositides in developing brains of undernourished rats. Shantharam P, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):115–22
Cytochemical demonstration of TPPase in myelinated fibers in the central and peripheral nervous system of the rat. Castellano B, et al. **Brain Res** 1989 Jul 17;492(1–2):203–10
Ontogenetic development of the 5 alpha–reductase in the rat brain: cerebral cortex, hypothalamus, purified myelin and isolated oligodendrocytes. Melcangi RC, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):181–8
2',3'–cyclic nucleotide 3'–phosphodiesterase, an oligodendrocyte–Schwann cell and myelin–associated enzyme of the nervous system. Sprinkle TJ. **Crit Rev Neurobiol** 1989;4(3):235–301 (505 ref.)
Purified rat brain myelin contains measurable acyl–CoA:lysophospholipid acyltransferase(s) but little, if any, glycerol–3–phosphate acyltransferase. Vaswani KK, et al. **J Neurochem** 1989 Jan;52(1):69–74
Calcium–activated neutral proteinase in rat brain myelin and subcellular fractions. Chakrabarti AK, et al. **J Neurosci Res** 1988 Jul;20(3):351–8
Tumor promoters accentuate phosphorylation of PO: evidence for the presence of protein kinase C in purified PNS myelin. Agrawal HC, et al. **Neurochem Res** 1989 May; 14(5):409–13
Evidence for the presence of diacylglycerol kinase in rat brain myelin. Kahn DW, et al. **Neurochem Res** 1989 Jun; 14(6):541–6
Cytochemical localization of ATPase in axon–myelin–Schwann cell complex type. Dolapchieva S, et al. **Z Mikrosk Anat Forsch** 1989;103(1):151–65
[A new highly active proteolytic myelin enzyme and its possible role in the mechanism of the demyelinating process] Savchenko IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):49–53 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Antibody–induced generation of reactive oxygen radicals by brain macrophages in canine distemper encephalitis: a mechanism for bystander demyelination. Griot C, et al. **Acta Neuropathol (Berl)** 1989;78(4):396–403
Antisera to an axolemma–enriched fraction have antiaxon and antimyelin effects in vitro. Bourdette DN, et al. **Ann N Y Acad Sci** 1988;540:423–6
Isolation of human lymphocyte cell lines reactive with whole human myelin. Burns J, et al. **Ann N Y Acad Sci** 1988; 540:367–8
Monoclonal antibodies against the P2 protein of peripheral myelin and d18 protein of PC 12 cells bind to antigen–presenting cells and inhibit T–cell activation. Dwyer DS, et al. **Ann N Y Acad Sci** 1988;540:452–4
EAE serum decreases CNPase activity in cultures of B104 cells. Elkin R, et al. **Ann N Y Acad Sci** 1988;540:396–7
Myelin vesicles as an in vitro model to study mechanisms of myelin damage by immune effectors. Vanguri P, et al. **Ann N Y Acad Sci** 1988;540:374–5
Azimexone and cysteine hydrazide in the treatment of allergic encephalomyelitis. Blaszczyk B, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):217–27
Anti–peripheral nerve myelin antibodies in Guillain–Barre syndrome bind a neutral glycolipid of peripheral myelin and cross–react with Forssman antigen. Koski CL, et al. **J Clin Invest** 1989 Jul;84(1):280–7
Intercellular interactions in myelin–specific autoimmunity. Wekerle H. **J Neuroimmunol** 1988 Dec;20(2–3):211–6
Total, anti–viral, and anti–myelin IgG subclass reactivity in inflammatory diseases of the central nervous system. Mathiesen T, et al. **J Neurol** 1989 May;236(4):238–42
Normal rat serum cytotoxicity against syngeneic oligodendrocytes. Complement activation and attack in the absence of anti–myelin antibodies. Scolding NJ, et al. **J Neurol Sci** 1989 Feb;89(2–3):289–300
Immunogold localization and analysis of IgG during immune–mediated demyelination. Moore GR, et al. **Lab Invest** 1988 Nov;59(5):641–8
Neuron– and myelin–specific monoclonal antibodies recognizing cell–surface antigens of the central and peripheral nervous system. Patsavoudi E, et al. **Neuroscience** 1989;30(2):463–78
Bystander demyelination through antibody induced macrophage activation in canine distemper virus infection. Griot C, et al. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):39–41
Demyelination in brain cell aggregate cultures, induced by a monoclonal antibody against the myelin/oligodendrocyte glycoprotein (MOG). Honegger P, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):10–3

METABOLISM

Binding of swine IgM immunoglobulins to peripheral nerve myelin sheaths in electron microscopic immunocytochemistry. Sommer C, et al. **Acta Neuropathol (Berl)** 1988;77(1):100–3
Guanine nucleotides stimulate hydrolysis of phosphatidyl inositol bis phosphate in human myelin membranes. Boulias C, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):282–7
Magnesium–dependent non–specific binding of [125I]prolactin to myelinated tracts in the rat central nervous system. Mangurian LP, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):986–90
Characterization of a cytoskeletal matrix associated with myelin from rat brain. Gillespie CS, et al. **Biochem J** 1989 Jun 15;260(3):689–96
Lysolipids and membrane damage: lysolecithin and its interaction with myelin. Gregson NA. **Biochem Soc Trans** 1989 Apr;17(2):280–3
Immunological and cytological studies of autoimmune demyelination and multiple sclerosis. Colover J. **Brain Behav Immun** 1988 Dec;2(4):341–5 (15 ref.)
Non myelin–forming perineuronal Schwann cells in rat trigeminal ganglia express P0 myelin glycoprotein mRNA during postnatal development. Lamperth L, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):177–81
Expression and modulation of K+ currents in oligodendrocytes: possible role in myelinogenesis. Soliven B, et al. **Dev Neurosci** 1989;11(2):118–31 (51 ref.)
Effect of acclimation and fixation temperatures on the number of lamellae and periodicity of myelin in fibres of the optic nerve of goldfish. Matheson DF, et al. **Exp Brain Res** 1988;72(1):63–70
Inhibition of peroxisomal beta–oxidation and brain development in rats. Van den Branden C, et al. **GLIA** 1989; 2(4):260–5
Multiple sclerosis brain immunoglobulins stimulate myelin basic protein degradation in human myelin: a new cause of demyelination. de Rosbo NK, et al. **J Neurochem** 1989 Aug;53(2):513–8
Relationship of ATP turnover, polyphosphoinositide metabolism, and protein phosphorylation in sciatic nerve and derived peripheral myelin subfractions from normal and streptozotocin diabetic rats. Lowery JM, et al. **J Neurochem** 1989 Mar;52(3):921–32
Presence of proteolipid protein in coelacanth brain myelin demonstrates tetrapod affinities and questions a chondrichthyan association. Waehneldt TV, et al. **J Neurochem** 1989 Jun;52(6):1941–3
Decreased fatty acylation of myelin proteolipid protein in the twitcher mouse. Yoshimura T, et al. **J Neurochem** 1989 Mar;52(3):836–41
Stimulation of oligodendrocyte differentiation in culture by growth in the presence of a monoclonal antibody to sulfated glycolipid. Bansal R, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):260–7
Inhibition of the synthesis of glycosphingolipids affects the translocation of proteolipid protein to the myelin membrane. Pasquini JM, et al. **J Neurosci Res** 1989 Mar; 22(3):289–96
Dietary supplementation of undernourished rats with soy or safflower oil: effects on myelin polyunsaturated fatty acids. Divakaran P, et al. **Metab Brain Dis** 1986 Jun;1(2):157–64
Peroxidative aggregation of myelin membrane proteins. Konat G, et al. **Metab Brain Dis** 1986 Sep;1(3):177–85
In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate. Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91–6
Myelin lipids in senile rat brain. Wender M, et al. **Neuropatol Pol** 1988;26(4):555–60

PATHOLOGY

Observations on demyelinating lesions induced by Theiler's virus in CBA mice. Blakemore WF, et al. **Acta Neuropathol (Berl)** 1988;76(6):581–9
Central pontine myelinolysis and the rate of correction of hyponatremia [letter] Gledhill RF, et al. **Arch Neurol** 1989 Apr;46(4):359
Pontine myelinolysis and delayed encephalopathy following the rapid correction of acute hyponatremia. Weissman JD, et al. **Arch Neurol** 1989 Aug;46(8):926–7
Lymphocyte–myelin sheath interactions in acute experimental allergic encephalomyelitis. Blakemore WF, et al. **J Neuroimmunol** 1989 Jun;23(1):19–24
The nature of inflammatory components during demyelination in multiple sclerosis. Cuzner ML, et al. **J Neuroimmunol** 1988 Dec;20(2–3):203–9 (21 ref.)
Proton magnetic resonance in myelin deficient brains of mutant mice. Jolesz FA, et al. **J Neurol Sci** 1989 Jun; 91(1–2):85–96
Neurothekeoma (peripheral nerve sheath myxoma) of the external auditory canal. Youngs R, et al. **J Otolaryngol** 1989 Apr;18(3):90–3
Cockayne syndrome: MRI correlates of hypomyelination. Dabbagh O, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):113–6
Magnetic resonance imaging in Pelizaeus–Merzbacher disease. Shimomura C, et al. **Pediatr Neurol** 1988 Mar–Apr; 4(2):124–5
Hypomyelination in border disease: the roles of thyroid hormones, growth hormone, and virus infection of the CNS. Anderson CA, et al. **Prog Clin Biol Res** 1988; 281:59–70
Congenital hypomyelinating polyneuropathy in two golden retriever littermates. Braund KG, et al. **Vet Pathol** 1989 May;26(3):202–8
Congenital hypomyelinogenesis of Hereford calves. Duffell SJ, et al. **Vet Rec** 1988 Oct 15;123(16):423–4

PHYSIOLOGY

Changes of the ratio between myelin thickness and axon diameter in human developing sural, femoral, ulnar, facial, and trochlear nerves. Schröder JM, et al. **Acta Neuropathol (Berl)** 1988;76(5):471–83
MR assessment of myelination in infants and children: usefulness of marker sites. Bird CR, et al. **AJNR** 1989 Jul–Aug;10(4):731–40
Interleukin–2 blocks oligodendrocyte progenitor proliferation. Knobler RL, et al. **Ann N Y Acad Sci** 1988; 540:324–6
Intracellular messengers. Influence of oligodendrocyte substratum adhesion. Vartanian T, et al. **Ann N Y Acad Sci** 1988;540:433–6
The effect of temperature on a simulated systematically paranodally demyelinated nerve fiber. Stephanova DI. **Biol Cybern** 1988;60(1):73–7
Effects of vigabatrin and of GABA on myelinated rat cerebellar cultures: preliminary data. Hauw JJ, et al. **Br J Clin Pharmacol** 1989;27 Suppl 1:47S–52S
Antisera to the ganglioside GM1 do not have anti–myelin or anti–axon activities in vitro. Bourdette DN, et al. **Brain Res** 1989 Jan 23;478(1):175–80
A comparative study of myelination in precocial and altricial murid rodents. Tessitore C, et al. **Brain Res** 1988 Sep 1; 471(1):139–47
Modulated adhesion: a proposal for the role of myelin–associated glycoprotein in myelin wrapping. Attia J, et al. **Clin Chem** 1989 May;35(5):717–20 (35 ref.)
Postnatal delay of myelin formation in brains from Down

syndrome infants and children. Wisniewski KE, et al. **Clin Neuropathol** 1989 Mar–Apr;8(2):55–62

Myelination and remyelination in the central nervous system by transplanted oligodendrocytes using the shiverer model. Discussion on the remyelinating cell population in adult mammals. Gumpel M, et al. **Dev Neurosci** 1989;11(2):132–9 (42 ref.)

Review of the morphological aspects of remyelination. Hirano A. **Dev Neurosci** 1989;11(2):112–7 (18 ref.)

Evolving concepts and issues in remyelination. Ludwin SK. **Dev Neurosci** 1989;11(2):140–8 (60 ref.)

Effects of THA on ionic currents in myelinated axons of Xenopus laevis. Elinder F, et al. **Eur J Pharmacol** 1989 May 30;164(3):599–602

Interactions between Schwann cells and CNS axons following a delay in the normal formation of central myelin. Sims TJ, et al. **Exp Brain Res** 1989;75(3):513–22

Effects of limited postnatal ethanol exposure on the development of myelin and nerve fibers in rat optic nerve. Phillips DE. **Exp Neurol** 1989 Jan;103(1):90–100

Schwann cell myelination of the myelin deficient rat spinal cord following X-irradiation. Duncan ID, et al. **GLIA** 1988;1(3):233–9

Myelination in the jimpy mouse in the absence of proteolipid protein. Duncan ID, et al. **GLIA** 1989;2(3):148–54

Evidence for an early role for myelin-associated glycoprotein in the process of myelination. Owens GC, et al. **GLIA** 1989; 2(2):119–28

Morphological distribution of MBP-like immunoreactivity in the brain during development. Bjelke B, et al. **Int J Dev Neurosci** 1989;7(2):145–64

Development of axonal-oligodendroglial relationships and junctions during myelination of the optic nerve. Wiggins RC, et al. **Int J Dev Neurosci** 1988;6(3):233–43

The onset and rate of myelination in six peripheral and autonomic nerves of the rat. Schäfer K, et al. **J Anat** 1988 Aug;159:181–95

RGD-containing peptides inhibit the synthesis of myelin-like membrane by cultured oligodendrocytes. Cardwell MC, et al. **J Cell Biol** 1988 Oct;107(4):1551–9

A role for apolipoprotein E, apolipoprotein A-I, and low density lipoprotein receptors in cholesterol transport during regeneration and remyelination of the rat sciatic nerve. Boyles JK, et al. **J Clin Invest** 1989 Mar;83(3):1015–31

Rapid preparation of a distinct lysosomal population from myelinating mouse brain using Percoll gradients. Caimi L, et al. **J Neurochem** 1989 Jun;52(6):1722–8

Tellurium-induced neuropathy: metabolic alterations associated with demyelination and remyelination in rat sciatic nerve. Harry GJ, et al. **J Neurochem** 1989 Mar; 52(3):938–45

1-oleoyl-2-acetylglycerol and A23187 potentiate axolemma- and myelin-induced Schwann cell proliferation. Saunders RD, et al. **J Neurochem** 1988 Dec;51(6):1760–4

Role of intracellular pH in the axolemma- and myelin-induced proliferation of Schwann cells. Saunders RD, et al. **J Neurochem** 1989 May;52(5):1576–81

Defective myelination in the optic nerve of the Browman-Wyse (BW) mutant rat. Berry M, et al. **J Neurocytol** 1989 Apr;18(2):141–59

Transplantation of oligodendrocytes and Schwann cells into the spinal cord of the myelin-deficient rat. Duncan ID, et al. **J Neurocytol** 1988 Jun;17(3):351–60

Ultrastructural and immunohistochemical analysis of axonal regrowth and myelination in membranes which form over lesion sites in the rat visual system [published erratum appears in J Neurocytol 1989 Feb;18(1):139] Dyson SE, et al. **J Neurocytol** 1988 Dec;17(6):797–808

Myelin sheath remodelling in remyelinated rat sciatic nerve. Hildebrand C. **J Neurocytol** 1989 Jun;18(3):285–94

Double myelination of axons in the sympathetic nervous system of the mouse. II. Mechanisms of formation. Kidd GJ, et al. **J Neurocytol** 1988 Apr;17(2):263–76

Demyelination and remyelination in the dorsal funiculus of the rat spinal cord after heat injury. Sasaki M, et al. **J Neurocytol** 1989 Apr;18(2):225–39

Opsonization of normal myelin by anti-myelin antibodies and normal serum. Goldenberg PZ, et al. **J Neuroimmunol** 1989 Jul;23(2):157–66

Demyelination of sciatic nerve in acute experimental allergic neuritis of the rat. A gel electrophoresis investigation. Schott K, et al. **J Neuroimmunol** 1988 Nov;20(1):53–61

Myelination by oligodendrocytes isolated from 4–6-week-old rat central nervous system and transplanted into newborn shiverer brain. Lubetzki C, et al. **J Neurol Sci** 1988 Dec;88(1–3):161–75

Remyelination of central nervous system lesions in experimental genital herpes simplex virus infection. Soffer D, et al. **J Neurol Sci** 1988 Aug;86(1):83–95

Myelin phagocytosis by peritoneal macrophages in organ cultures of mouse peripheral nerve. A new model for studying myelin phagocytosis in vitro. Bonnekoh PG, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):140–53

Remyelination in the human central nervous system. Ghatak NR, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):507–18

Dendrotoxin blocks accommodation in frog myelinated axons. Poulter MO, et al. **J Neurophysiol** 1989 Jul; 62(1):174–84

Differentiation of axon-related Schwann cells in vitro: II. Control of myelin formation by basal lamina. Eldridge CF, et al. **J Neurosci** 1989 Feb;9(2):625–38

Oligodendrocytes and CNS myelin are nonpermissive substrates for neurite growth and fibroblast spreading in vitro. Schwab ME, et al. **J Neurosci** 1988 Jul;8(7):2381–93

Macrophage function during Wallerian degeneration of rat optic nerve: clearance of degenerating myelin and Ia expression. Stoll G, et al. **J Neurosci** 1989 Jul;9(7):2327–35

Axonal regulation of myelin protein mRNA levels in actively myelinating Schwann cells. Trapp BD, et al. **J Neurosci** 1988 Sep;8(9):3515–21

Role for the oligodendrocyte cytoskeleton in myelination. Wilson R, et al. **J Neurosci Res** 1989 Apr;22(4):439–48

Ionic channels and signal conduction in single remyelinating frog nerve fibres. Shrager P. **J Physiol (Lond)** 1988 Oct; 404:695–712

Abnormalities of myelination of the central nervous system associated with congenital tremor. Duncan ID. **J Vet Intern Med** 1987 Jan–Mar;1(1):10–23 (53 ref.)

Induction of oligodendrocyte proliferation and remyelination after chronic demyelination. Relevance to multiple sclerosis. Raine CS, et al. **Lab Invest** 1988 Oct;59(4):467–76

Restraint stress during late pregnancy in rats elicits early hypermyelination in the offspring. Wiggins RC, et al. **Metab Brain Dis** 1986 Sep;1(3):197–203

Factors contributing to cerebral hypomyelination in the growth hormone-deficient little mouse. Morisawa K, et al. **Neurochem Res** 1989 Feb;14(2):173–7

Myelin formation in myelin-deficient rat spinal cord following transplantation of normal fetal spinal cord. Rosenbluth J, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):35–40

Myelin formation in rat dorsal root ganglion cultured in a serum-free medium: influence of various culture media on myelin formation. Takahashi K, et al. **Neurosci Res** 1988 Dec;6(2):115–22

Early detection of delayed myelination in preterm infants. van de Bor M, et al. **Pediatrics** 1989 Sep;84(3):407–11

The action of flecainide acetate and its enantiomers on mammalian non-myelinated nerve fibres. Lie-A-Huen L, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):92–4

Restoration of myelin formation by a single type of myelin basic protein in transgenic shiverer mice. Kimura M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5661–5

Culture preparations of neuroglial cells useful for studies of myelin repair and axonal regeneration in the central nervous system. Bunge RP, et al. **Prog Brain Res** 1988; 78:321–6 (24 ref.)

Central nervous system regeneration: oligodendrocytes and myelin as non-permissive substrates for neurite growth. Caroni P, et al. **Prog Brain Res** 1988;78:363–70 (34 ref.)

[Degenerative changes of the myelin fibers of sciatic nerves in aged rats] Dolapchieva S, et al. **Eksp Med Morfol** 1989; 28(2):5–9 (Eng. Abstr.) **(Bul)**

[The action of aminobenzoic acid derivatives on the ion currents in myelinated nerves. 1. Dose-response relationship] Jedicke U, et al. **Arzneimittelforschung** 1988 Jun;38(6):801–5 (Eng. Abstr.) **(Ger)**

[Myelination, demyelination and re-myelination in the central nervous system] Graça DL. **Arq Neuropsiquiatr** 1988 Sep; 46(3):292–7 (48 ref.) (Eng. Abstr.) **(Por)**

[Changes in topography of axonal components of the action potential of chick embryonal neurons during axon myelinization] Velumian AA. **Dokl Akad Nauk SSSR** 1989; 304(2):486–9 **(Rus)**

PHYSIOPATHOLOGY

Hypomyelination in the neonatal rat central and peripheral nervous systems following tellurium intoxication. Jackson KF, et al. **Acta Neuropathol (Berl)** 1989;78(3):301–9

Serum lipids and demyelination in experimental allergic encephalomyelitis induced by the increased encephalitogenicity of myelin basic protein given with galactocerebrospide. Kržalić LJ, et al. **J Neuroimmunol** 1989 May;22(3):193–9

Central axons in injured cat spinal cord recover electrophysiological function following remyelination by Schwann cells. Blight AR, et al. **J Neurol Sci** 1989 Jun; 91(1–2):15–34

Axonal dystrophy as a consequence of long-term demyelination. Raine CS, et al. **Lab Invest** 1989 May; 60(5):714–25

ULTRASTRUCTURE

Freeze-fracture studies of reactive myelinated nerve fibres after diffuse axonal injury. Maxwell WL, et al. **Acta Neuropathol (Berl)** 1988;76(4):395–406

Membrane structure in isolated and intact myelins. Inouye H, et al. **Biophys J** 1989 Jul;56(1):129–37

Quaking shiverer double mutant mice: morphological phenotypes support possible dual actions of the shiverer locus. Wolf MK, et al. **Brain Res** 1988 Oct 4;461(2):257–73

Glial conditioned medium enables jimpy oligodendrocytes to express properties of normal oligodendrocytes: production of myelin antigens and membranes. Bartlett WP, et al. **GLIA** 1988;1(4):253–9

Cytoplasmic membrane elaborations in oligodendrocytes during myelination of spinal motoneuron axons. Waxman SG, et al. **GLIA** 1988;1(4):286–91

Dysmyelinogenesis in caprine beta-mannosidosis: ultrastructural and morphometric studies in fetal optic nerve. Lovell KL, et al. **Int J Dev Neurosci** 1987; 5(3):243–53

Movements of the Schwann cell nucleus implicate progression of the inner (axon-related) Schwann cell process during myelination. Bunge RP, et al. **J Cell Biol** 1989 Jul;109(1):273–84

Double myelination of axons in the sympathetic nervous system of the mouse. I. Ultrastructural features and distribution. Kidd GJ, et al. **J Neurocytol** 1988 Apr; 17(2):245–61

Internodal microvilli of Schwann cells of myelinated fibres in lizard spinal roots project onto unmyelinated axons. Pannese E, et al. **J Neurocytol** 1989 Jun;18(3):295–302

Chronic hypoxia induces selective maldevelopment of peripheral myelin in rat. Benstead TJ, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):599–608

Ultrastructure of axons in disturbed CNS myelination in pt rabbit. Taraszewska A. **Neuropatol Pol** 1988;26(3):385–402

Morphometric studies of the nerve fibers in corpus callosum of rats exposed to mild hypoxia. Wender M, et al. **Neuropatol Pol** 1988;26(2):185–91

Morphometry of myelin in the aging human brain. Wender M, et al. **Neuropatol Pol** 1988;26(1):9–18

[Central pontine myelosis. Morphology and forensic importance] Bratzke H, et al. **Z Rechtsmed** 1989; 102(2–3):79–97 (136 ref.) (Eng. Abstr.) **(Ger)**

MYELITIS

CHEMICALLY INDUCED

[Transverse syndrome following intramuscular injection of penicillin] Runge U, et al. **Z Arztl Fortbild (Jena)** 1989; 83(10):537–8 **(Ger)**

COMPLICATIONS

Treatable causes of meningomyeloradiculitis in individuals infected with human immunodeficiency virus [letter; comment] Lanska DJ, et al. **Arch Neurol** 1989 Jul; 46(7):722–3. **Comment on:** Arch Neurol 1988 Jun;45(6):691–3

Acute myeloradiculitis due to cytomegalovirus as the initial manifestation of AIDS. Mahieux F, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):270–4

[Post-traumatic central pontine myelinolysis] Chiara Y, et al. **Agressologie** 1988 May;29(6):427–30 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

MR imaging of AIDS myelitis. Shabas D, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S51–2

MRI of the spine and spinal cord: infectious and inflammatory pathology. Appel B, et al. **J Neuroradiol** 1988;15(4):325–34 **(Eng, Fre)**

Recurrent aseptic meningitis followed by transverse myelitis as a presentation of systemic lupus erythematosus. Sands ML, et al. **J Rheumatol** 1988;15(5):862–4

Demonstration of acute post-viral myelitis with magnetic resonance imaging. Awerbuch G, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):367–9

[Purulent epiduritis of the spine] Satalkin VN, et al. **Sov Med** 1988;(9):108–9 **(Rus)**

DRUG THERAPY

Rapid recovery of acute transverse myelitis treated with steroids. Kennedy PG, et al. **Postgrad Med J** 1988 May; 64(751):384–5

ETIOLOGY

Transverse myelitis occurring during pregnancy in a patient with systemic lupus erythematosus. Marabani M, et al. **Ann Rheum Dis** 1989 Feb;48(2):160–2

Acute transverse myelopathy complicating systemic lupus erythematosus. Propper DJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):512–5 (32 ref.)

Comment on the recent results of Hopewell, Morris and Dixon-Brown on radiation myelitis produced by irradiation of very short segments of rat spinal cord. Yaes RJ, et al. **Br J Radiol** 1988 Oct;61(730):967–9

Transient intrathecal IgG synthesis in herpes zoster myelitis: 2 case reports. Ceroni M, et al. **Eur Neurol** 1989;29(3):124–7

Transverse myelitis and hepatitis in varicella. Vahidy F, et al. **J Trop Med Hyg** 1989 Aug;92(4):295–6

Acute transverse myelopathy as the initial manifestation of probable systemic lupus erythematosus in a child. Linssen WH, et al. **Neuropediatrics** 1988 Nov;19(4):212–5

[Neurologic forms of Lyme disease. 12 cases] Viader F, et al. **Rev Neurol (Paris)** 1989;145(5):362–8 (42 ref.) (Eng. Abstr.) **(Fre)**

[Polyneuritis cranialis? Brain stem encephalitis and myelitis following preventive influenza vaccination] Buchner H, et al. **Nervenarzt** 1988 Nov;59(11):679–82 **(Ger)**

[A case of radiation myelitis following radiotherapy in lung cancer] Ogata N, et al. **Rinsho Hoshasen** 1989 Jan; 34(1):181–4 (Eng. Abstr.) **(Jpn)**

[Two cases of atypical HTLV-I associated myelopathy (HAM)] Kano M, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):80–4 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus associated with meningitis, myelitis, and bilateral optic neuritis] Ichiki S, et al. **Ryumachi** 1989 Apr;29(2):126–33 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Isolation and characterization of Borrelia burgdorferi–specific and autoreactive T–cell lines from the cerebrospinal fluid of patients with Lyme meningoradiculomyelitis. Martin R, et al. **Ann N Y Acad Sci** 1988;540:449–51

[Clinical, virological and immunological studies of human T–lymphotropic virus type–I–associated myelopathy (HAM)] Kuroda Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1212–8 **(Jpn)**

MICROBIOLOGY

HTLV–I myelitis: isolation of virus, genomic analysis, and infection in neural cell cultures. Saida T, et al. **Ann N Y Acad Sci** 1988;540:636–8

PATHOLOGY

Immunohistochemical localization of human immunodeficiency viral antigens in formalin–fixed spinal cords with AIDS myelopathy. Rhodes RH, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):22–7

PHYSIOPATHOLOGY

Expansion of receptive fields of spinal lamina I projection neurons in rats with unilateral adjuvant–induced inflammation: the contribution of dorsal horn mechanisms. Hylden JL, et al. **Pain** 1989 May;37(2):229–43 (51 ref.)

RADIOGRAPHY

[Transverse syndrome in aneurysmal bone cyst] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):247–51 (Eng. Abstr.) **(Ger)**

VETERINARY

Neospora caninum–like protozoon associated with fatal myelitis in newborn calves. Dubey JP, et al. **J Parasitol** 1989 Feb;75(1):146–8

MYELITIS, TRANSVERSE see under **MYELITIS**

MYELOBLASTIC LEUKEMIA, ACUTE see **LEUKEMIA, MYELOCYTIC, ACUTE**

MYELOBLASTOSIS VIRUS, AVIAN see under **AVIAN LEUKOSIS VIRUSES**

MYELOCELE see **MENINGOMYELOCELE**

MYELOCYTIC LEUKEMIA see **LEUKEMIA, MYELOID**

MYELOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, MYELOCYTIC, ACUTE**

MYELOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, MYELOID, CHRONIC**

MYELODYSPLASIA see **NEURAL TUBE DEFECTS**

MYELODYSPLASTIC SYNDROMES

Treatment of cutaneous granulocytic sarcoma in a patient with myelodysplasia. Prystowsky JH, et al. **Am J Med** 1989 Apr;86(4):477–80

The myelodysplastic syndromes. Verwilghen RL, et al. **Blood Rev** 1987 Mar;1(1):34–43 (36 ref.)

Red cell hypoplasia associated with myeloproliferative and myelodysplastic syndrome [letter] Cook MK. **J Clin Pathol** 1989 Aug;42(8):890–91

Myelodysplastic syndrome. Ghalaut PS, et al. **J Indian Med Assoc** 1988 Oct;86(10):276–8

Primary clonal myelodysplastic syndromes. Beris P. **Semin Hematol** 1989 Jul;26(3):216–33 (127 ref.)

Myelodysplastic syndromes. Doll DC, et al. **West J Med** 1989 Aug;151(2):161–7 (97 ref.)

[Myelodysplastic syndromes] Ruutu T. **Duodecim** 1989; 105(11):994–1000 (33 ref.) **(Fin)**

[Myelodysplastic syndromes] Lishner M, et al. **Harefuah** 1988 Aug;115(3–4):73–6 (48 ref.) **(Heb)**

[General concept of myelodysplastic syndromes and genetic diagnosis] Takaku F. **Nippon Rinsho** 1988 Jul;46(7):1637–45 (20 ref.) **(Jpn)**

[Prognostic factors in the myelodysplastic syndromes] Dan K, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1214–8 (Eng. Abstr.) **(Jpn)**

[Myelodysplastic syndrome] Helleskov Hansen NP, et al. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1627–8 (Eng. Abstr.) **(Nor)**

[Myelodysplastic syndrome] StaveM P. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1612–3 **(Nor)**

[Myelodysplastic syndromes] Vallespí T. **Med Clin (Barc)** 1988 Oct 22;91(13):496–8 (66 ref.) **(Spa)**

BLOOD

T lymphocyte subpopulations in myelodysplastic syndromes. Carpani G, et al. **Acta Haematol (Basel)** 1989;81(4):173–5

Definition of CD 11a, b, c, and CD 18 glycoproteins on chemotactically deficient granulocyte membranes in patients affected by myeloid disorders. Ricevuti G, et al. **Acta Haematol (Basel)** 1989;81(3):126–30

Three cases of myelodysplastic–myeloproliferative disorder with abnormal chromatin clumping in granulocytes [letter] Brizard A, et al. **Br J Haematol** 1989 Jun;72(2):294–5

Morphologic changes of neutrophils in myelodysplastic syndrome treated with recombinant human granulocyte colony–stimulating factor. Toyama K, et al. **Jpn J Cancer Res** 1988 Jul;79(7):813–6

Biochemical characterization of peripheral blood in an outpatient with atypical Gaucher's disease type 1 like myelodysplastic syndrome. Taketomi T, et al. **Jpn J Exp Med** 1989 Apr;59(2):85–8

Diagnostic significance of dysplastic features of peripheral blood polymorphs in myelodysplastic syndromes. Hast R, et al. **Leuk Res** 1989;13(2):173–8

Stimulation of CFU–Mk colony growth by normal plasma and plasma from myelodysplastic patients. Podolak–Dawidziak M. **Leuk Res** 1989;13(3):213–5

Effect of 5637–conditioned medium on peripheral blood granulocyte–macrophage progenitors in normal subjects and patients with the myelodysplastic syndrome. Tennant GB, et al. **Leuk Res** 1989;13(5):385–9

Serum and urine glycosaminoglycans in myeloid leukemia and myelodysplasia. Luikart SD, et al. **Leukemia** 1989 Jan; 3(1):48–50

Studies on micromegakaryocytes in myelodysplastic syndromes (MDS). Song YH, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):33–9

[Hemorheologic study in myelodysplastic syndrome] Rohrberg R, et al. **Folia Haematol (Leipz)** 1989; 116(1):75–80 **(Ger)**

CHEMICALLY INDUCED

Myelodysplastic syndrome and secondary acute leukemia after treatment of essential thrombocythemia with melphalan [letter] Gris JC, et al. **Am J Hematol** 1989 Jan; 30(1):47–8

Acquired immune deficiency, myelodysplasia, and acute nonlymphocytic leukemia associated with monosomy 7 and t(3;3) (q21;q26) in a child with Langerhans cell histiocytosis. Mahoney DH Jr, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):153–7

Secondary myelodysplasia/leukemia complex. Papa G, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:141–2 (7 ref.)

Marrow aplasia developing 3 years after treatment with busulphan for chronic myeloid leukaemia. Bowcock SJ, et al. **Eur J Haematol** 1989 May;42(5):496–7

Acute myeloid leukemia and other myelopathic disorders following treatment with alkylating agents. Bennett JM, et al. **Hematol Pathol** 1987;1(2):99–104

Myelodysplastic syndrome and acute nonlymphocytic leukemia secondary to mitolactol treatment in patients with breast cancer. Falkson G, et al. **J Clin Oncol** 1989 Sep; 7(9):1252–9 (31 ref.)

Severe bone marrow failure due to low dose oral methotrexate [letter] Buchbinder R, et al. **J Rheumatol** 1988 Oct;15(10):1586–8

Myelodysplasia, chemical exposure, and other environmental factors. Farrow A, et al. **Leukemia** 1989 Jan;3(1):33–5

CLASSIFICATION

Karyotype is prognostically more important than the FAB system's distinction between myelodysplastic syndrome and acute myelogenous leukemia. Estey EH, et al. **Hematol Pathol** 1987;1(4):203–8

Studies on blood and bone marrow findings of myelodysplastic syndromes: evaluation of proposals for classification of myelodysplastic syndromes. Yang CL, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):7–11

[Specific types of abnormal myelodysplastic syndromes] Pu Q. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):768–71 (16 ref.) **(Chi)**

COMPLICATIONS

Coexistence of myelodysplastic syndrome and untreated chronic lymphocytic leukemia with development of acute myeloid leukemia immediately after treatment of chronic lymphocytic leukemia. Bracey AW, et al. **Am J Hematol** 1989 Mar;30(3):174–80

Myelodysplastic syndrome with trisomy 11 associated with polycythemia vera. Ohyashiki K, et al. **Am J Hematol** 1989 Jun;31(2):122–5

Extramedullary disease in myelodysplastic syndromes. da Silva MA, et al. **Am J Med** 1988 Oct;85(4):589–90

AML associated with previous cytotoxic therapy, MDS or myeloproliferative disorders: results from the MRC's 9th AML trial. Hoyle CF, et al. **Br J Haematol** 1989 May; 72(1):45–53

Acute leukaemia with B– and T–lymphoid and myeloid characteristics in a patient with a myelodysplastic syndrome. Serke S, et al. **Br J Haematol** 1989 May; 72(1):110–1

Spontaneous splenic rupture in myelodysplastic syndrome [letter] Raafat A, et al. **Eur J Haematol** 1989 Apr; 42(4):410–1

Intensive chemotherapy for acute non–lymphoblastic leukemia after primary myelodysplastic syndrome. Martiat P, et al. **Hematol Oncol** 1988 Oct–Dec;6(4):299–305

Platelet transfusion therapy in thrombocytopaenia of haematologic malignancies. Charak BS, et al. **J Assoc Physicians India** 1989 Mar;37(3):201–3

A bladder pressure management system for myelodysplasia—clinical outcome. Wang SC, et al. **J Urol** 1988 Dec;140(6):1499–502

Cauda equina syndrome secondary to disseminated zygomycosis. Rozich J, et al. **JAMA** 1988 Dec 23–30; 260(24):3638–40

Typhlitis occurring in a myelodysplastic syndrome. Sra JS, et al. **N Y State J Med** 1989 Feb;89(2):89–90

Thrombocythaemic erythromelalgia in chronic myeloproliferative and myelodysplastic disorders. Michiels JJ, et al. **Neth J Med** 1989 Aug;35(1–2):4–10

Effect of thymopentin on the anaemia of myelodysplastic syndromes. A preliminary study [letter] Catarini M, et al. **Recenti Prog Med** 1989 Jan;80(1):46

[Long–term myelodysplastic syndrome transformed into blastic leukemia] Dimova R, et al. **Vutr Boles** 1988; 27(4):99–103 (Eng. Abstr.) **(Bul)**

[A 57–year–old patient with peripheral pancytopenia] Fink M, et al. **Internist (Berlin)** 1989 Mar;30(3):210–3 **(Ger)**

[Primary non–Hodgkin's lymphoma, small lymphocytic type, in the spleen complicating myelodysplastic syndrome] Kawashima Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1051–5 **(Jpn)**

[Disseminated aspergillosis with marked morphological and functional defects of polymorphonuclear leukocytes in a case of myelodysplastic syndrome] Kohi F, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1060–5 (Eng. Abstr.) **(Jpn)**

[Incomplete–form of Behçet disease in a case of monopathic myelodysplastic syndrome presenting as a thrombocytopenia] Nehashi Y, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1097–102 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Megakaryoblastic leukemia and transient abnormal myelopoiesis with Down's syndrome] Suda J, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1200–6 (Eng. Abstr.) **(Jpn)**

[Acute erythrocytic–monocytic leukemia as the outcome of a myelodysplastic syndrome occurring with a long–term spontaneous remission] Iavorkovskiĭ LL, et al. **Gematol Transfuziol** 1988 Aug;33(8):48–51 **(Rus)**

[Diabetes insipidus as the first cause of myelodysplastic syndrome] Krišlo V, et al. **Vnitr Lek** 1989 Feb;35(2):175–8 (Eng. Abstr.) **(Slo)**

[Hematologic significance of erythrocytic macrocytosis: prospective analysis of 109 successively studied cases] Outeiriño Pérez JJ, et al. **Sangre (Barc)** 1989 Feb; 34(1):32–40 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Orbital inflammation as presenting sign for myelodysplastic syndrome. Rouhiainen HJ. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):109–11

A myelokathexis–like variant of myelodysplasia. Rassam SM, et al. **Eur J Haematol** 1989 Jan;42(1):99–102

Application of megakaryocytic morphology in diagnosing 5q– syndrome. Thiede T, et al. **Eur J Haematol** 1988 Nov; 41(5):434–7

An autopsy case of myelodysplastic syndrome (MDS): diagnostic problems between MDS and the other haematopoietic disorders including acute myelofibrosis. Hayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb; 52(1):49–54

[15 patients with myelodysplastic syndrome] Dimova R, et al. **Vutr Boles** 1989;28(3):96–100 (Eng. Abstr.) **(Bul)**

[A case from practice (112). Patient: Mrs. O. Z., born 1955] Fritschi J. **Schweiz Rundsch Med Prax** 1988 Aug 2; 77(31–32):830–2 **(Ger)**

[Gene diagnosis of early–stage cancers] Takaku F. **Nippon Rinsho** 1989 May;47(5):1095–101 **(Jpn)**

[Diagnosis, course and outcome of myelodysplasias] Riauzova LIu, et al. **Gematol Transfuziol** 1988 Aug; 33(8):19–23 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Low–dose cytosine arabinoside in myelodysplastic syndromes [letter] Mineur P, et al. **Acta Clin Belg** 1989; 44(1):62–3

Differentiation in acute myeloid leukemia and myelodysplastic disorders. Is differentiation–induction therapy possible? Januszewicz EH, et al. **Aust N Z J Med** 1988 Aug;18(5):705–11 (46 ref.)

Phase I/II study of recombinant human granulocyte–macrophage colony–stimulating factor (GM–CSF) in bone marrow failure. Antin JH, et al. **Behring Inst Mitt** 1988 Aug;(83):149–53

Phase I/II study with GM–CSF in patients with myelodysplastic syndromes. Hoelzer D, et al. **Behring Inst Mitt** 1988 Aug;(83):134–8

Recombinant human granulocyte–macrophage colony–stimulating factor in patients with myelodysplastic syndromes—a phase I/II trial. Ganser A, et al. **Blood** 1989 Jan;73(1):31–7

13–cis–retinoic acid v placebo in myelodysplasia [letter] Jacobs A, et al. **Blood** 1988 Oct;72(4):1439–40

Short remission durations in therapy–related leukemia despite cytogenetic complete responses to high–dose cytarabine. Larson RA, et al. **Blood** 1988 Oct;72(4):1333–9

In vitro and in vivo action of recombinant human GM–CSF (rhGM–CSF) in patients with myelodysplastic syndromes.

Hoelzer D, et al. **Blood Cells** 1988;14(2-3):551-9

Aggressive chemotherapy in adult primary myelodysplastic syndromes. A report on 29 cases. Fenaux P, et al. **Blut** 1988 Nov;57(5):297-302

Multidrug resistance in haemopoietic cell lines, myelodysplastic syndromes and acute myeloblastic leukaemia. Holmes J, et al. **Br J Haematol** 1989 May; 72(1):40-4

Therapeutic efficacy of danazol in myelodysplastic syndromes. Marini B, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1481-9

Absent clinical effects of retinoic acid and isoretinoin treatment in the myelodysplastic syndrome. Hast R, et al. **Hematol Oncol** 1989 Jul-Aug;7(4):297-301

Low dose cytosine arabinoside in the treatment of myeloid leukaemias and myelodysplastic syndromes. Murray M, et al. **Ir J Med Sci** 1988 Jul;157(7):238-41

Subcutaneous granulocyte-macrophage colony-stimulating factor in patients with myelodysplastic syndrome: toxicity, pharmacokinetics, and hematological effects. Thompson JA, et al. **J Clin Oncol** 1989 May;7(5):629-37

Haemopoietic growth factors 2: clinical applications. Metcalf D. **Lancet** 1989 Apr 22;1(8643):885-7 (22 ref.)

Phase II trial of fenretinide [N-(4-hydroxyphenyl) retinamide] in myelodysplasia: possible retinoid-induced disease acceleration. Garewal HS, et al. **Leuk Res** 1989; 13(4):339-43

Results of aggressive chemotherapy for myelodysplastic syndromes. Dohy H, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1428-34

Treatment of MDS with special reference to the effects of androgen on ineffective erythropoiesis. Mitsutani S. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1455-60

Therapy of advanced myelodysplastic syndrome with aggressive chemotherapy. Richard C, et al. **Oncology** 1989; 46(1):6-9

The nature and evolving treatment of myelodysplastic syndromes. Greenberg P. **West J Med** 1989 Aug; 151(2):194-6

[Evaluation of chemotherapy of hematological malignancies] Masaoka T. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):316-22 (Eng. Abstr.) **(Jpn)**

[Therapeutic effectiveness of vitamin D3 in patients with myelodysplastic syndromes, leukemias and myeloproliferative disorders] Takahashi T, et al. **Rinsho Ketsueki** 1989 Jan;30(1):1-10 (Eng. Abstr.) **(Jpn)**

[Treatment of myelodysplastic syndromes with danazol] Aviles A, et al. **Arch Invest Med (Mex)** 1988 Jan-Mar; 19(1):73-7 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Erythrocyte enzyme activities in myelodysplastic syndromes: elevated pyruvate kinase activity. Tani K, et al. **Am J Hematol** 1989 Feb;30(2):97-103

EPIDEMIOLOGY

[Myelodysplastic syndromes. A retrospective analysis of 72 cases. I. Clinical symptomatology and evolution] Avilés A, et al. **Rev Invest Clin** 1988 Apr-Jun;40(2):161-5 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Myelodysplasia: pathogenesis and functional aspects. Jacobs A. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:136-7 (15 ref.)

A feline model for the myelodysplastic syndrome: pre-leukaemic abnormalities caused in cats by infection with a new isolate of feline leukaemia virus (FeLV), AB/GM1. Testa NG, et al. **Haematologica (Pavia)** 1988 Jul-Aug;73(4):317-20 (12 ref.)

Myelodysplastic syndrome and acute leukaemia following treatment of soft tissue sarcoma. de Graeff A, et al. **Neth J Med** 1989 Jun;34(5-6):251-7 (15 ref.)

[Secondary myelodysplastic syndrome with monosomy 7] Inokuchi K, et al. **Rinsho Ketsueki** 1988 May;29(5):718-22 (Eng. Abstr.) **(Jpn)**

GENETICS

Molecular implications of Ph (+) myelodysplastic syndrome. Toyama K, et al. **Adv Exp Med Biol** 1988;241:67-71

8;21 translocation in myelodysplasia secondary to essential thrombocythemia. Knottenbelt E, et al. **Am J Hematol** 1989 Apr;30(4):233-5

Myelodysplastic syndrome with trisomy 8 in an adolescent with Fanconi anaemia and selective IgA deficiency. Standen GR, et al. **Am J Hematol** 1989 Aug;31(4):280-3

Chromosomes in myelodysplastic syndrome: structural abnormalities of chromosome 11. Czechoslovak MDS Cooperative Group. Musilova J, et al. **Ann Genet** 1989; 32(1):43-6

Analysis of N-RAS exon-1 mutations in myelodysplastic syndromes by polymerase chain reaction and direct sequencing. Bar-Eli M, et al. **Blood** 1989 Jan;73(1):281-3

Interleukin-4 and interleukin-5 map to human chromosome 5 in a region encoding growth factors and receptors and are deleted in myeloid leukemias with a del(5q). Le Beau MM, et al. **Blood** 1989 Feb 15;73(3):647-50

Mutations in ras genes in myelocytic leukemias and myelodysplastic syndromes. Bartram CR. **Blood Cells** 1988; 14(2-3):533-8 (21 ref.)

Oncogenes in the myelodysplastic syndrome. Jacobs A. **Blood Rev** 1989 Jun;3(2):105-9 (34 ref.)

The karyotype in secondary hematologic disorders after treatment for Hodgkin's disease. A study of 19 patients. Iurlo A, et al. **Cancer Genet Cytogenet** 1988 Dec; 36(2):165-72

Combined trisomy 1q and monosomy 17p due to translocation t(1;17) in a patient with myelodysplastic syndrome. Mamaev N, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):21-5

A dysmorphic child with myelodysplasia characterized by a duplication of 1q and multiple duplications of 3q. Mascarello JT, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):9-12

Occupational history and involvement of chromosomes 5 and 7 in acute nonlymphocytic leukemia. Narod SA, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):261-9 (37 ref.)

Clinical-cytogenetic correlations in myelodysplasia (preleukemia). Pierre RV, et al. **Cancer Genet Cytogenet** 1989 Jul 15;40(2):149-61

6p+ and 9q- in two chromosomally distinct clones occurring in a case of myelodysplastic syndrome evolving to acute nonlymphocytic leukemia. Ringressi A, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):213-21 (30 ref.)

Double i(9p) in hematology. Smadja N, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):217-9

Translocation (2;7)(p13;q36) in a case of acute nonlymphocytic leukemia evolving from a myelodysplastic syndrome. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):199-204

KRAS2 oncogene overexpression in myelodysplastic syndrome with translocation 5;12. Srivastava A, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):61-71

Der(5)t(5;7)(q11.2;p11.2): a new recurring abnormality in malignant myeloid disorders. Thangavelu M, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):1-8

Is trisomy 11 another nonrandom chromosomal anomaly in acute nonlymphocytic leukemia and myelodysplastic syndromes? Weh HJ, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):205-11

Myelodysplastic syndrome in a kindred with ins(16) (p11.2). Clark RE, et al. **Clin Genet** 1988 Jun;33(6):418-23

Determination of the breakpoints of 1;7 translocations in myelodysplastic syndrome by in situ hybridization using chromosome-specific alpha satellite DNA from human chromosomes 1 and 7. Alitalo T, et al. **Cytogenet Cell Genet** 1989;50(1):49-53

Sister chromatid exchange in lymphocytes in myelodysplastic syndrome. Weryńska B, et al. **Folia Haematol (Leipz)** 1989; 116(1):133-43

Failure of karyotypic instability to predict clinical progression in patients with dysmyelopoietic syndromes. Glenn LD, et al. **Hematol Pathol** 1988;2(4):239-48

DNA index and karyotype analysis in myelodysplasia. Hoy TG, et al. **J Clin Pathol** 1989 May;42(5):498-501

Mutations of N-ras oncogene in myelodysplastic syndromes and leukemias detected by polymerase chain reaction. Mano H, et al. **Jpn J Cancer Res** 1989 Feb;80(2):102-6

Cytogenetically unrelated clones in hematological neoplasms. Heim S, et al. **Leukemia** 1989 Jan;3(1):6-8

Chromosome pattern in juvenile chronic myelogenous leukemia, myelodysplastic syndrome, and acute leukemia associated with neurofibromatosis. Kaneko Y, et al. **Leukemia** 1989 Jan;3(1):36-41

Restriction fragment length polymorphism of bcr in Japanese patients with hematological malignancies. Kato Y, et al. **Leukemia** 1988 Oct;2(10):701-3

The N-ras oncogene in myelodysplastic syndrome and leukemia. Hirai H, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1463-70

Chromosome abnormalities in hematopoietic malignancies. Kamada N. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1332-8

Chromosome 7 long arm deletion breakpoints in preleukemia: mapping by pulsed field gel electrophoresis. Kere J. **Nucleic Acids Res** 1989 Feb 25;17(4):1511-20

Mechanisms of ras mutation in myelodysplastic syndrome. Yunis JJ, et al. **Oncogene** 1989 May;4(5):609-14

t(1;7) in acute myeloblastic leukemia following myelodysplastic syndrome (RAEB-T). Defferrari R, et al. **Tumori** 1988 Oct 31;74(5):555-8

[Bone marrow monosomy 7 in children] Nelken B, et al. **Arch Fr Pediatr** 1988 Dec;45(10):813-4 (Eng. Abstr.) **(Fre)**

[Clinical significance of chromosome number deviations in myelodysplastic syndromes and in acute non-lymphoid leukemia] Balogh E, et al. **Orv Hetil** 1989 Mar 26; 130(13):655-63 (38 ref.) (Eng. Abstr.) **(Hun)**

[Analysis of the c-fms gene in hematopoietic neoplasia with changes of chromosome 5] Ohyashiki JH, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1109-14 (Eng. Abstr.) **(Jpn)**

[Myelodysplastic syndrome showing translocation (1 ; 7) and translocation (3 ; 3)] Kishimoto Y, et al. **Rinsho Ketsueki** 1988 May;29(5):743-7 (Eng. Abstr.) **(Jpn)**

[Chromosome 21 rearrangement in a case of therapy-related myelodysplastic syndrome in multiple myeloma] Nakamura H, et al. **Rinsho Ketsueki** 1989 Feb;30(2):216-21 (Eng. Abstr.) **(Jpn)**

[The cytogenetics of hemopoietic dysplasias] Mamaev NN, et al. **Gematol Transfuziol** 1988 Aug;33(8):42-5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Deficiency of lymphocyte lectin-dependent cytotoxicity in myelodysplastic syndromes. Fontana L, et al. **Acta Haematol (Basel)** 1989;82(1):1-6

Immunological abnormalities in myelodysplastic syndrome [letter] Seitanides B, et al. **J Clin Pathol** 1988 Aug; 41(8):922-3

[Positive direct Coombs' test in acute leukemias and other hemoblastoses: relation to clavulanic acid-containing antibiotics?] Blanchard M, et al. **Schweiz Med Wochenschr** 1989 Jan 14;119(2):39-45 (Eng. Abstr.) **(Ger)**

[Myelodysplastic syndrome with granulocyte function abnormalities resulted in intractable cutaneous infections] Yamane T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1088-92 (Eng. Abstr.) **(Jpn)**

METABOLISM

Inhibitor of normal granulopoiesis produced by cells of MDS patients. Cukrová V, et al. **Neoplasma** 1989;36(1):83-9

[Pharmacokinetics of stearyl-ara-CMP (YNK-01) in patients with hematologic neoplasms] Ueda T, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3303-6 **(Jpn)**

MORTALITY

Prognostic factors in myelodysplasic syndromes: a multivariante analysis in 138 patients. Avilés A, et al. **Arch Invest Med (Mex)** 1989 Jan-Mar;20(1):45-52

[Prediction of survival in myelodysplastic syndrome. Analysis of 2 scoring systems with prognostic value] Sanz GF, et al. **Sangre (Barc)** 1989 Feb;34(1):41-6 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Myelodysplastic syndrome: prospective evaluation of fifty-one patients using the Dutcher scoring system. Doll DC, et al. **Acta Haematol (Basel)** 1989;81(2):86-90

In vivo measurements of the T1 relaxation processes in the bone marrow in patients with myelodysplastic syndrome. A magnetic resonance imaging study. Jensen KE, et al. **Acta Radiol** 1989 Jul-Aug;30(4):365-8

Myelodysplasia and acute leukemia following treatment for Hodgkin's disease [letter; comment] McKenna RW, et al. **Am J Clin Pathol** 1989 Jul;92(1):127-8. **Comment on:** Am J Clin Pathol 1989 Jan;91(1):6-11

Platelet function and structure in myeloproliferative disease, myelodysplastic syndrome, and secondary thrombocytosis. Raman BK, et al. **Am J Clin Pathol** 1989 Jun;91(6):647-55

Sweet's syndrome and myelodysplastic syndrome in a patient with metastatic breast carcinoma. Meulders Q, et al. **Am J Med** 1989 Jan;86(1):138-9

Detection of leukemic clone maturation in vivo by premature chromosome condensation. Hittelman WN, et al. **Blood** 1988 Dec;72(6):1950-60

Clonal analysis of myelodysplastic syndromes: evidence of multipotent stem cell origin. Janssen JW, et al. **Blood** 1989 Jan;73(1):248-54

Multipotent stem cell origin of myelodysplastic syndromes [letter] Wiedermann CJ, et al. **Blood** 1989 Jun;73(8):2230

Myelodysplasia: clinical and morphological aspects and treatment. Geary CG. **Bone Marrow Transplant** 1989 Jan; 4 Suppl 1:138-40 (25 ref.)

The syndrome of abnormal chromatin clumping in leucocytes: a myelodysplastic disorder with proliferative features? Felman P, et al. **Br J Haematol** 1988 Sep; 70(1):49-54

Myelofibrosis in primary myelodysplastic syndromes: a clinico-morphological study of 10 cases. Pagliuca A, et al. **Br J Haematol** 1989 Apr;71(4):499-504

Bone marrow karyotype and prognosis in primary myelodysplastic syndromes. Billström R, et al. **Eur J Haematol** 1988 Oct;41(4):341-6

Colony formation by megakaryocyte progenitors in myelodysplastic syndromes. Juvonen E, et al. **Eur J Haematol** 1989 Apr;42(4):389-95

Bone marrow stromal culture from patients with myelodysplastic syndromes and patients at different stages of acute nonlymphocytic leukaemia. Elstner E, et al. **Folia Haematol (Leipz)** 1989;116(1):167-74

Modulation by retinoic acid of the growth of bone marrow cell progenitors from patients with myelodysplastic syndrome. De Francesco A, et al. **Haematologica (Pavia)** 1989 Jan-Feb;74(1):25-8

Cytochemistry and immunocytochemistry in bone marrow examination: contemporary techniques for the diagnosis of acute leukemia and myelodysplastic syndromes. A combined approach. Kass L, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):537-55 (111 ref.)

The bone marrow in myeloproliferative and dysmyelopoietic syndromes. Wolf BC, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):669-94 (126 ref.)

Induction of partial synchronization of leukemia cells by continuous infusion of low-dose methotrexate followed by citrovorum factor [letter] D'Incalci M, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1509-10

Differentiation induction therapy of myelodysplastic

syndromes. Hassan HT, et al. **Leuk Res** 1989;13(7):633–7 (81 ref.)
Heterogeneous colony forming ability in vitro of the abnormal clone-derived granulocyte-macrophage precursors in myelodysplastic syndromes. Okuda T, et al. **Leuk Res** 1988;12(8):687–92
Growth of human hematopoietic colonies from patients with myelodysplastic syndromes in response to recombinant human granulocyte-macrophage colony-stimulating factor. Carlo-Stella C, et al. **Leukemia** 1989 May;3(5):363–6
In vitro growth of myeloid and erythroid progenitor cells from myelodysplastic patients in response to recombinant human granulocyte-macrophage colony-stimulating factor. Mayani H, et al. **Leukemia** 1989 Jan;3(1):29–32
Role of autocrine growth factors in the leukemic transformation of the myelodysplastic syndromes. Russell NH, et al. **Leukemia** 1989 Jan;3(1):83–4 (27 ref.)
Defective in vitro colony growth in myelodysplastic syndromes. Azuno Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):720–30
Bone marrow biopsy of aplastic anemia, myelodysplastic syndromes and myeloproliferative disorders. Kikuchi M. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1339–46
Myelodysplastic syndrome and acute myelofibrosis. Nakayama S. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1435–40
Bone marrow analysis of the myelodysplastic syndromes: histological and immunohistochemical features related to the evolution of overt leukemia. Kitagawa M, et al. **Virchows Arch [B]** 1989;57(1):47–53
[Morphologic study of dyshematopoiesis in myelodysplastic syndromes (MDS)] Che CL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):476–9, 518 (Eng. Abstr.) **(Chi)**
[Studies on CFU-Mix in 54 cases of leukemia and myelodysplastic syndrome] Chen Y, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):35–8, 62–3 (Eng. Abstr.) **(Chi)**
[Esterases in the diagnosis of monocytic and myelomonocytic leukemias and the so-called atypical monocytes in myelodysplastic syndromes] Malásková V, et al. **Sb Lek** 1988 Sep;90(8–9):260–7 (Eng. Abstr.) **(Cze)**
[Primary myelodysplastic syndromes] Brohée D. **Rev Med Brux** 1988 Sep;9(6):327–33 (34 ref.) (Eng. Abstr.) **(Fre)**
[Three cases of Sweet's syndrome-like eruption accompanied by myelodysplastic syndrome] Iijima S, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Dec;98(14):1483–93 (Eng. Abstr.) **(Jpn)**
[Marked dysmyelopoiesis after induction chemotherapy in a case of acute myelomonocytic leukemia (M 4) with t(6; 11)] Tagawa M, et al. **Rinsho Ketsueki** 1989 Feb;30(2):232–8 (Eng. Abstr.) **(Jpn)**
[Myelodysplastic syndromes—diagnostic and therapeutic problems] Skotnicki AB, et al. **Przegl Lek** 1988; 45(11):801–11 (49 ref.) **(Pol)**
[Myelodysplastic syndrome evolving into acute erythromegakaryoblastic leukemia. Apropos of a pediatric case] Piñán Francés MA, et al. **An Esp Pediatr** 1988 Oct; 29 Suppl 34:150–3 **(Spa)**
[Myelodysplastic syndrome. A clinical study of 124 cases and a review of the literature] Sans-Sabrafen J, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):481–7 (44 ref.) (Eng. Abstr.) **(Spa)**
[Dyshemopoietic anemias (AD) (myelodysplastic syndromes). Retrospective analysis of 40 cases from the Instituto Nacional de la Nutrición Salvador Zubirán (INNSZ)] Lobato-Mendizábal E, et al. **Rev Invest Clin** 1989 Jan-Mar;41(1):17–24 (Eng. Abstr.) **(Spa)**
[In-vitro change in CFU-GM in chronic myeloid leukemia and myelodysplastic syndromes. Its implication in the dysfunction of the hematologic barrier] Gronda M, et al. **Sangre (Barc)** 1988 Aug;33(4):277–81 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Validation of survival-predictive models in myelodysplastic syndromes [letter] Sanz MA, et al. **Am J Hematol** 1989 Jan;30(1):44
Delayed maturation of skin window macrophages in myelodysplastic syndromes. Zwierzina H, et al. **Leuk Res** 1989;13(6):433–5

SURGERY

Bone marrow transplantation for children with myelodysplastic syndromes. Guinan EC, et al. **Blood** 1989 Feb;73(2):619–22
Partially matched bone marrow transplantation in patients with myelodysplastic syndromes. Bunin NJ, et al. **J Clin Oncol** 1988 Dec;6(12):1851–5
Timing of marrow transplantation in secondary leukemias and myelodysplastic syndromes. De Witte T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2958–9 (11 ref.)

THERAPY

Treatment of myelodysplastic syndromes with recombinant human granulocyte colony-stimulating factor: a preliminary report. Kobayashi Y, et al. **Am J Med** 1989 Feb;86(2):178–82
Treatment of myelodysplastic syndromes with recombinant human granulocyte colony-stimulating factor. A phase I–II trial. Negrin RS, et al. **Ann Intern Med** 1989 Jun 15; 110(12):976–84
Two regression models and a scoring system for predicting survival and planning treatment in myelodysplastic syndromes: a multivariate analysis of prognostic factors in 370 patients. Sanz GF, et al. **Blood** 1989 Jul;74(1):395–408
Progress in the therapy of myelodysplastic syndromes. Boogaerts MA. **Biut** 1989 Jun;58(6):265–70 (29 ref.)
Recombinant alpha-2a interferon in HIV-associated myelodysplasia [letter] Garavelli PL. **Haematologica (Pavia)** 1988 Nov-Dec;73(6):547
Effect of recombinant human granulocyte-macrophage colony-stimulating factor in patients with myelodysplastic syndrome with excess blasts. Herrmann F, et al. **Leukemia** 1989 May;3(5):335–8
Recombinant human granulocyte-macrophage colony-stimulating factor and low-dose cytosine arabinoside in patients with myelodysplastic syndrome. A pilot study. Ganser A, et al. **Onkologie** 1989 Feb;12(1):13–5
Biological molecules in the treatment of hematological disorders. Kurzrock R, et al. **Sangre (Barc)** 1989 Feb; 34(1):53–8 (22 ref.)
Colony-stimulating factors: present status and future applications. Groopman JE. **Semin Hematol** 1988 Jul;25(3 Suppl 3):30–7 (16 ref.)

MYELOFIBROSIS

Myelofibrosis: a concise review of clinical and pathologic features and treatment. Smith RE, et al. **Am J Hematol** 1988 Nov;29(3):174–80 (95 ref.)
[Primary myelofibrosis: description of a series of 53 patients] Pereira A, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):521–5 (34 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Serum procollagen-III-peptide level correlates with disease activity in myelofibrosis with myeloid metaplasia. Barosi G, et al. **Br J Haematol** 1989 May;72(1):16–20
Platelet aggregation in platelet rich plasma and whole blood in 18 patients affected by idiopathic myelofibrosis. Balduini CL, et al. **Eur J Haematol** 1988 Sep;41(3):267–72

CHEMICALLY INDUCED

Toluene-associated myelofibrosis [letter] Bosch X, et al. **Blut** 1989 Apr;58(4):219–20

CLASSIFICATION

A prognostic classification of myelofibrosis with myeloid metaplasia. Barosi G, et al. **Br J Haematol** 1988 Dec; 70(4):397–401

COMPLICATIONS

Left ventricular thrombus with normal left ventricular wall motion in a patient with myelofibrosis. Stoddard MF, et al. **Am Heart J** 1989 Apr;117(4):966–8
Idiopathic myelofibrosis terminating in erythroleukemia. Garcia S, et al. **Am J Hematol** 1989 Sep;32(1):70–1
Lymphoproliferative diseases and idiopathic myelofibrosis [letter] Krsnik I, et al. **Am J Hematol** 1989 Oct;32(2):156
Red cell aplasia in myelofibrosis [letter] Howarth JE, et al. **Br J Haematol** 1989 May;72(1):114
Meningeal hematopoiesis causing exophthalmus and hemiparesis in myelofibrosis: effect of radiotherapy. A case report. Landolfi R, et al. **Cancer** 1988 Dec 1;62(11):2346–9
Development of polycythaemia vera in a patient with myelofibrosis. Dokal I, et al. **Eur J Haematol** 1989 Jan; 42(1):96–8
Thrombocythaemic erythromelalgia in chronic myeloproliferative and myelodysplastic disorders. Michiels JJ, et al. **Neth J Med** 1989 Aug;35(1–2):4–10
Erythromelalgia in a patient with myelofibrosis. Smelt AH, et al. **Neth J Med** 1988 Dec;33(5–6):243–6
Diabetes insipidus complicating myelofibrosis. Dornan TL, et al. **Postgrad Med J** 1989 Jan;65(759):36–8
[Splenomegaly and peripheral pancytopenia in a 62-year-old patient] Hoever C, et al. **Internist (Berlin)** 1988 Sep; 29(9):641–5 **(Ger)**
[Coma, hyperviscosity syndrome, hyperammonemia and myelofibrosis in a patient with IgG, lambda type multiple myeloma] Tsunoda S, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):361–5 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

About primary myelofibrosis [letter] Ozsoylu S. **Eur J Haematol** 1988 Nov;41(5):509
Acute myelofibrosis: correlation of radiographic, bone scan, and biopsy findings. Marino GG, et al. **J Nucl Med** 1989 Feb;30(2):251–4
Vitamin D-deficiency rickets and myelofibrosis. Yetgin S, et al. **J Pediatr** 1989 Feb;114(2):213–7
A case of spongy lymphoid myelofibrosis: a variant of hairy cell leukemia? Tanaka M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):783–90

DRUG THERAPY

Remission of chronic idiopathic myelofibrosis to busulphan treatment [letter] Manoharan A. **Am J Med Sci** 1989 Feb; 297(2):133
High dose intravenous methylprednisolone for idiopathic myelofibrosis [letter] Ozsoylu S. **Br J Haematol** 1988 Nov; 70(3):388
Management of polycythaemia vera, essential thrombocythaemia and myelofibrosis with hydroxyurea. Löfvenberg E, et al. **Eur J Haematol** 1988 Oct;41(4):375–81
[The use of MCNU to a patient of primary myelofibrosis complicated with pericardial effusion and proteinuria] Shiga Y, et al. **Rinsho Ketsueki** 1989 Apr;30(4):497–501 (Eng. Abstr.) **(Jpn)**
[Therapeutic effectiveness of vitamin D3 in patients with myelodysplastic syndromes, leukemias and myeloproliferative disorders] Takahashi T, et al. **Rinsho Ketsueki** 1989 Jan;30(1):1–10 (Eng. Abstr.) **(Jpn)**
[Megakaryoblastic leukemia (acute myelofibrosis): complete remission of a case with low-dose cytosine arabinoside] Palomera L, et al. **Sangre (Barc)** 1988 Jun;33(3):232–7 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

[Incidence and nature of myelofibrosis in chronic myeloleukemia (based on trephine biopsy data)] Semenova EA, et al. **Gematol Transfuziol** 1988 Aug;33(8):23–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Myelofibrosis and pancytopenia in systemic lupus erythematosus. el Mouzan MI, et al. **Acta Haematol (Basel)** 1988;80(4):219–21
Myelofibrosis and aplastic anemia: first report of the two disorders occurring sequentially in the same person. Antonucci R, et al. **Am J Med** 1989 Mar;86(3):352–5
Acute monoblastic leukemia with osteosclerosis and extensive myelofibrosis. Janin A, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):319–22
[Role of growth factors of platelets (PDGF, TGF-beta, EGF) in the pathogenesis of myelofibrosis] Kimura A, et al. **Rinsho Byori** 1989 Apr;Spec No 81:1–8 **(Jpn)**
[Acute megakaryoblastic leukemia in Down syndrome with 3 q-, dominated by tumor formation and myelofibrosis] Hasegawa N, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2079–85 (Eng. Abstr.) **(Jpn)**
[Secondary myelofibrosis probably due to prostatic carcinoma] Koyama T, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1432–6 (Eng. Abstr.) **(Jpn)**
[A case report of angioimmunoblastic lymphadenopathy accompanying pancytopenia and bone marrow fibrosis] Saito T, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2073–8 (Eng. Abstr.) **(Jpn)**
[Pathogenesis of the development of fibroreticular tissue in patients with chronic myeloleukemia] Shardakov VI, et al. **Gematol Transfuziol** 1988 Aug;33(8):28–9 (Eng. Abstr.) **(Rus)**

GENETICS

Cytogenetic and molecular studies in primary myelofibrosis. Emilia G, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):101–13
Translocation t(1;7) revisited. Report of three further cases and review. Willem P, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):45–54 (32 ref.)
Evidence for pluripotent stem cell origin of idiopathic myelofibrosis: clonal analysis of a case characterized by a N-ras gene mutation. Buschle M, et al. **Leukemia** 1988 Oct;2(10):658–60

IMMUNOLOGY

Antigenic characteristics of erythropoietin dependent and independent erythroid progenitors (BFU-E and CFU-E) in polycythaemia vera and idiopathic myelofibrosis defined by monoclonal antibodies. Robak T. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):733–47

METABOLISM

Monocyte induces alkaline phosphatase synthesis in neutrophils of chronic myeloid leukemia and myelofibrosis with myeloid metaplasia patients. Chikkappa G, et al. **Am J Clin Pathol** 1989 May;91(5):550–7

PATHOLOGY

Primary myelofibrosis-osteomyelosclerosis (agnogenic myeloid metaplasia): correlation of clinical findings with bone marrow histopathology and prognosis. Thiele J, et al. **Anticancer Res** 1989 Mar-Apr;9(2):429–35
Myelofibrosis in primary myelodysplastic syndromes: a clinico-morphological study of 10 cases. Pagliuca A, et al. **Br J Haematol** 1989 Apr;71(4):499–504
Blast transformation in serosal cavities in idiopathic myelofibrosis. Casciaro S, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):403–5
Angiofollicular lymph node hyperplasia associated with myelofibrosis case report and immunologic marker studies. Bleiweiss IJ, et al. **Hematol Oncol** 1988 Oct-Dec; 6(4):275–84
Cellular composition and reticulin fibrosis in chronic myeloid leukaemia. Ghosh K, et al. **Indian J Cancer** 1988 Sep; 25(3):128–35
Megakaryocyte colony formation in chronic myeloid leukemia and myelofibrosis. Juvonen E. **Leuk Res** 1988; 12(9):751–6
Acute surgical abdomen and myelofibrosis. Payan HM, et al. **Mod Pathol** 1989 May;2(3):270–2

Myelodysplastic syndrome and acute myelofibrosis. Nakayama S. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1435–40

Follow-up studies with sequential bone marrow biopsies in chronic myeloid leukaemia and so-called primary (idiopathic) osteo-myelofibrosis. Evolution of histopathological lesions and clinical course in 40 patients. Thiele J, et al. **Pathol Res Pract** 1988 Aug;183(4):434–45

[Pathological analysis in 37 cases on secondary myelofibrosis] Pan WS. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep; 17(3):213–5 (Eng. Abstr.) **(Chi)**

[So-called primary (idiopathic) osteomyelofibrosis/-sclerosis (OMF) within the scope of chronic myeloproliferative diseases. I. Initial clinical and histologic findings in 102 patients with special reference to early hyperplastic and advanced fibrosclerotic stages] Zankovich R, et al. **Med Klin** 1988 Oct 4;83(19):617–28 (Eng. Abstr.) **(Ger)**

[Relation of acute myelofibrosis and megakaryoblastic leukemia. Immunohistochemical observations on bone marrow biopsies] Pich A, et al. **Recenti Prog Med** 1988 Dec;79(12):487–92 (Eng. Abstr.) **(Ita)**

[Mechanism of myelofibrosis in chronic myeloproliferative disorders] Nagao T, et al. **Rinsho Ketsueki** 1988 Jul; 29(7):983–8 (Eng. Abstr.) **(Jpn)**

[Acute myelofibrosis: apropos of a case with immunocytochemical and ultrastructural studies] Ocaña I, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):102–3 (Eng. Abstr.) **(Spa)**

[Polycythemia vera and blast transformation (clinical conference)] **Medicina (B Aires)** 1988;48(1):65–72 **(Spa)**

PHYSIOPATHOLOGY

Ferrokinetic study of splenic erythropoiesis: relationships among clinical diagnosis, myelofibrosis, splenomegaly, and extramedullary erythropoiesis. Beguin Y, et al. **Am J Hematol** 1989 Oct;32(2):123–8

Reversal of bone marrow fibrosis and subsequent development of polycythemia in patients with myeloproliferative disorders. Talarico L, et al. **Am J Hematol** 1989 Apr;30(4):248–53

The splenomegaly of myeloproliferative disorders: effects on blood volume and red blood count. Zhang B, et al. **Eur J Haematol** 1989 Mar;42(3):250–3

RADIOGRAPHY

CT characteristics of intrahepatic, periportal, extramedullary hematopoiesis. Kobayashi A, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):354–6

THERAPY

Cytoreductive effect of recombinant alpha interferon in patients with myelofibrosis with myeloid metaplasia. Barosi G, et al. **Blut** 1989 Jun;58(6):271–4

T cell–depleted allogeneic bone marrow transplantation in a case of childhood idiopathic myelofibrosis. Cahn JY, et al. **Bone Marrow Transplant** 1987 Aug;2(2):209–11

Allogeneic bone marrow transplantation for primary myelofibrosis. Dokal I, et al. **Br J Haematol** 1989 Jan; 71(1):158–60

Hypothesis: a possible role for interferon in the treatment of idiopathic myelofibrosis. Hasselbalch H. **Med Hypotheses** 1988 Dec;27(4):345–7

[So-called primary (idiopathic) osteomyelofibrosis/-sclerosis (OMF) within the scope of chronic myeloproliferative diseases. II. Course and therapy in 102 patients with special reference to early hyperplastic and advanced fibrosclerotic stages] Zankovich R, et al. **Med Klin** 1988 Oct 4; 83(19):629–36 (Eng. Abstr.) **(Ger)**

MYELOGENOUS LEUKEMIA see **LEUKEMIA, MYELOID**

MYELOGENOUS LEUKEMIA, ACUTE see **LEUKEMIA, MYELOCYTIC, ACUTE**

MYELOGENOUS LEUKEMIA, CHRONIC see **LEUKEMIA, MYELOID, CHRONIC**

MYELOGENOUS LEUKEMIA, CHRONIC, AGGRESSIVE-PHASE see **LEUKEMIA, MYELOID, AGGRESSIVE-PHASE**

MYELOGENOUS LEUKEMIA, CHRONIC, CHRONIC-PHASE see **LEUKEMIA, MYELOID, CHRONIC-PHASE**

MYELOGENOUS LEUKEMIA, PH1-NEGATIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-NEGATIVE**

MYELOGENOUS LEUKEMIA, PH1-POSITIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-POSITIVE**

MYELOGRAPHY

Non-corresponding radiological and surgical diagnoses in patients operated for sciatica. Slebus FG, et al. **Acta Neurochir (Wien)** 1988;94(3–4):137–43

Lumbar canal stenosis: results in 40 patients surgically treated. Spanu G, et al. **Acta Neurochir (Wien)** 1988; 94(3–4):144–9

Cauda equina syndrome with normal lumbar myelography. Tullberg T, et al. **Acta Orthop Scand** 1989 Jun;60(3):265–7

Comparison of myelography and computed tomography in establishing lumbar disc herniation. Fagerlund MK, et al. **Acta Radiol** 1989 May–Jun;30(3):241–6

Comparison of myelography, CT myelography and magnetic resonance imaging in cervical spondylosis and disk herniation. Pre- and postoperative findings. Larsson EM, et al. **Acta Radiol** 1989 May–Jun;30(3):233–9

Role of diskography after negative postmyelography CT scans [letter] Gould ES, et al. **AJNR** 1989 Jul–Aug; 10(4):848

Role of diskography after negative postmyelography CT scans [letter] Laros GS, et al. **AJNR** 1988 Nov–Dec; 9(6):1244

Risk of seizures after myelography: comparison of iohexol and metrizamide. Maly P, et al. **AJNR** 1988 Sep;9(5):879–83

Importance of absence of CSF pulsation artifacts in the MR detection of significant myelographic block at 1.5 T. Quint DJ, et al. **AJNR** 1989 Sep–Oct;10(5):1089–95

Comparison of MR and diskography in detecting radial tears of the anulus: a postmortem study. Yu SW, et al. **AJNR** 1989 Sep–Oct;10(5):1077–81

Outpatient myelography: an acceptable and cost-effective technique. Choudhri AH, et al. **Br J Radiol** 1989 Mar; 62(735):253–5

Iotrolan versus iopamidol for cervical myelography: a randomized double-blind trial. Coutinho C, et al. **Br J Radiol** 1988 Oct;61(730):965–7

Safety and antiemetic effects of metoclopramide in metrizamide myelography. Goldsmith TL, et al. **Clin Pharm** 1987 Oct;6(10):807–10

A possible mechanism for the neural adverse reactions caused by metrizamide. Azuma H, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:134–42

Neural tolerance of iotrolan 300 in ascending cervical myelography: results of a multicenter study. Behrends B, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:171–5

Iotrolan, a nonionic dimeric contrast medium in myelography. Bien S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:158–60

Diskography with iotrolan before chemonucleolysis with chymopapain. Bien S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:143–7

Clinical trials with iotrolan in myelographic and computed tomography applications in the United States. Goldstein HA, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:167–70

Comparative clinical study with iotrolan versus metrizamide in lumbar myelography. Inoue S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:161–6

Tolerance to iotrolan after subarachnoid injection in animals. Press WR, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:126–33

Iotrolan versus iopamidol: a controlled, multicenter, double-blind study of lumbar and direct cervical myelography. Ringel K, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:153–7

Plasma level and renal excretion of iotrolan after lumbar injection in patients. Weinmann HJ, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:224–7

Tolerance of iotrolan 190 and cerebrospinal fluid-diluted iotrolan 300 at the same iodine concentration in lumbar myelography. Wenzel-Hora BI, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:148–52

Beta-endorphin levels after intrathecal infusion of iodinated contrast media. Martin N, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):357–60

A comparison of myelography and computer tomography in lumbar disc herniation. Zsernaviczky J, et al. **Int Orthop** 1989;13(1):51–5

In vitro models for testing the metabolic effects of myelographic contrast media. Morris TW, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S213–6

A comparison between computerized tomography and myelography in radicular lumbar syndromes. Zirattu G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):127–32

Injected air mimicking leptomeningeal metastases on lumbar myelography: CT diagnosis. Harter SB, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):923–4

Usefulness of myelography in brachial plexus injuries. Nagano A, et al. **J Hand Surg [Br]** 1989 Feb;14(1):59–64

Meningoencephalopathy following iopamidol myelography [letter] Reynolds DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410

The human cervical myotomes: an anatomical correlation between electromyography and CT/myelography. Katirji MB, et al. **Muscle Nerve** 1988 Oct;11(10):1070–3

Spinal cord birth injury: value of computed tomographic myelography. Adams C, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):105–9

Spinal cord compression due to metastatic disease: diagnosis with MR imaging versus myelography. Carmody RF, et al. **Radiology** 1989 Oct;173(1):225–9

Lumbar myelography with iohexol in outpatients: prospective multicenter evaluation of safety. Wang H, et al. **Radiology** 1989 Oct;173(1):239–42

[Cervical myelography with iohexol (a report of 183 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr; 22(2):104–7 (Eng. Abstr.) **(Chi)**

[CT measurement of metrizamide myelography of 100 normal adults] Zhang YT. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):148–50 (Eng. Abstr.) **(Chi)**

[Diagnosis of intervertebral disk prolapse: myelography, computed tomography or MR tomography?] Russegger L, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1300–2 **(Ger)**

[Assessing the myelogram of the narrow spinal canal] Vitzthum HE. **Neurochirurgia (Stuttg)** 1989 May; 32(3):77–81 (Eng. Abstr.) **(Ger)**

[Conventional myelography—a benefit-risk estimation] Hentschel F. **Radiol Diagn (Berl)** 1989;30(1):79–86 (Eng. Abstr.) **(Ger)**

[Differentiation of organ dose distribution during exposure to plain film and transillumination in relation to the path of the rays] Hentschel F. **Radiol Diagn (Berl)** 1989; 30(2):189–96 (Eng. Abstr.) **(Ger)**

[Posture-related arrest of contrast medium in the myelogram] Glathe S, et al. **Rontgenblatter** 1989 Jun;42(6):274–6 (Eng. Abstr.) **(Ger)**

[Myelographic findings in arachnoiditis and possible relationship with previous manipulations of perimedullary spaces] Rigotti C, et al. **Minerva Anestesiol** 1988 May; 54(5):183–6 (Eng. Abstr.) **(Ita)**

[Myelography in obstetrical paralysis of the brachial plexus] Croci E, et al. **Radiol Med (Torino)** 1988 Oct;76(4):293–6 (Eng. Abstr.) **(Ita)**

[Adverse reactions and intracranial contrast medium after myelography] Fujii K, et al. **Rinsho Hoshasen** 1989 Mar; 34(3):323–7 (Eng. Abstr.) **(Jpn)**

[Hospitalized patients with backpain examined by means of myelography] Fretland S. **Tidsskr Nor Laegeforen** 1988 Oct 10;108(28):2371–3 (Eng. Abstr.) **(Nor)**

[Lateral cervical puncture for myelography and cerebrospinal fluid collection: technical note] Rosaitti SL, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):397–400 (Eng. Abstr.) **(Por)**

ADVERSE EFFECTS

Lumbar myelography with iohexol. Adverse effects compared with spinal puncture. Nestvold K, et al. **Acta Radiol** 1988 Nov–Dec;29(6):637–40

Absence status epilepticus with computed tomographic brain changes following metrizamide myelography. Obeid T, et al. **Ann Neurol** 1988 Oct;24(4):582–4

Outpatient myelography with iohexol and iopamidol; pilot study and contrast trial. Waugh JR, et al. **Australas Radiol** 1989 Feb;33(1):56–9

Absence status following metrizamide myelography: management of nonresponders. Amer-Ferrer G, et al. **Eur Neurol** 1988;28(6):341–4

Streptococcus pyogenes meningitis after myelography [letter] Damani NN, et al. **JPMA** 1988 Jul;38(7):197–8

Lumbar myelography with iopamidol: a methodological approach to the investigation of side effects. Provinciali L, et al. **Neuroradiology** 1988;30(6):528–33

Side effects after ambulatory lumbar iohexol myelography. Sand T, et al. **Neuroradiology** 1989;31(1):49–54

F-responses after metrizamide and iohexol lumbar myelography. Sand T. **Neuroradiology** 1988;30(6):534–7

Which factors affect reported headache incidences after lumbar myelography? A statistical analysis of publications in the literature. Sand T. **Neuroradiology** 1989;31(1):55–9

Paraparesis during myelography associated with a ruptured thoracic intervertebral disc. Lehman LB. **Neurosurgery** 1989 Jun;24(6):912–4

[Prolonged skin reactions after myelography] Wagner A. **Ugeskr Laeger** 1989 Apr 24;151(17):1058–9 (Eng. Abstr.) **(Dan)**

[Streptococcal meningitis secondary to inoculation. 2 cases (letter)] Dubost JJ, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):570 **(Fre)**

[Risk and value of conventional myelography with reference to the radiation burden of the patient] Hentschel F. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):31–7 (Eng. Abstr.) **(Ger)**

[A case of thorotrastoma of the mesentery] Ponzio F, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1195–6 (Eng. Abstr.) **(Ita)**

[The incidence of postural headache in in- and outpatients following lumbar myelography (needles of different gauges and headache)] Urso S, et al. **Radiol Med (Torino)** 1989 Mar;77(3):165–70 (Eng. Abstr.) **(Ita)**

HISTORY

Contrast agents used for myelography: an historical perspective. Lemansky E. **Radiol Technol** 1989 Jul–Aug; 60(6):489–96

METHODS

Cross-table cervical myelography: a technique to improve visualization. Minken TJ, et al. **AJNR** 1988 Sep;9(5):874

Outpatient myelography with fine-needle technique: an appraisal. Vezina JL, et al. **AJNR** 1989 May-Jun; 10(3):615-7

Outpatient myelography with fine-needle technique: an appraisal. Vezina JL, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):383-5

Cervical myelography. Run-up technique. de Baas PD, et al. **Ann Radiol (Paris)** 1988;31(7-8):393-401

Out-patient lumbar radiculography with iohexol. Davies AM, et al. **Clin Radiol** 1989 Jul;40(4):413-5

Pseudolesion with nonionic contrast myelography. Poe BM, et al. **Comput Med Imaging Graph** 1988 Sep-Oct; 12(5):267-9

CSF TRAP: a procedure to improve laboratory testing with myelography. Albright RE Jr, et al. **Neurosurgery** 1989 Jul;25(1):76-80

Single-puncture myelographic evaluation of epidural block in the young infant. Weinberger E, et al. **Pediatr Radiol** 1989;19(4):223-5

Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327-31

[A simple method of cervical myelography by lumbar injection of Omnipaque] Tóth-Daru P, et al. **Orv Hetil** 1989 Feb 12;130(6):291-3 (Eng. Abstr.) **(Hun)**

[Myelography and CT cisternography] Kobayashi N, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1419-27 **(Jpn)**

[Experiences with ambulatory radiculography] Aasly J, et al. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):951-2 (Eng. Abstr.) **(Nor)**

[Radiculography in the polyclinic] Eldevik P. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):939 **(Nor)**

[Ambulatory radiculography (lumbar myelography) with iohexol] Pedersen ON. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):947-50 (Eng. Abstr.) **(Nor)**

VETERINARY

Iohexol myelography in the horse. Burbidge HM, et al. **Equine Vet J** 1989 Sep;21(5):347-50

Sequelae of myelography in the horse. Hubbell JA, et al. **Equine Vet J** 1988 Nov;20(6):438-40

Iohexol and iopamidol: new contrast media for veterinary myelography. Widmer WR. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1714-6

MYELOID LEUKEMIA see **LEUKEMIA, MYELOID**

MYELOID LEUKEMIA, ACUTE, M1 see **LEUKEMIA, MYELOCYTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M2 see **LEUKEMIA, MYELOCYTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M3 see **LEUKEMIA, PROMYELOCYTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M4 see **LEUKEMIA, MYELOMONOCYTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M5 see **LEUKEMIA, MONOCYTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M6 see **LEUKEMIA, ERYTHROBLASTIC, ACUTE**

MYELOID LEUKEMIA, ACUTE, M7 see **LEUKEMIA, MEGAKARYOCYTIC, ACUTE**

MYELOID LEUKEMIA, CHRONIC see **LEUKEMIA, MYELOID, CHRONIC**

MYELOID LEUKEMIA, CHRONIC, ACCELERATED-PHASE see **LEUKEMIA, MYELOID, AGGRESSIVE-PHASE**

MYELOID LEUKEMIA, CHRONIC, AGGRESSIVE-PHASE see **LEUKEMIA, MYELOID, AGGRESSIVE-PHASE**

MYELOID LEUKEMIA, CHRONIC, CHRONIC-PHASE see **LEUKEMIA, MYELOID, CHRONIC-PHASE**

MYELOID LEUKEMIA, CHRONIC, STABLE-PHASE see **LEUKEMIA, MYELOID, CHRONIC-PHASE**

MYELOID LEUKEMIA, NAEGELI-TYPE see **LEUKEMIA, MYELOMONOCYTIC, ACUTE**

MYELOID LEUKEMIA, PH1-NEGATIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-NEGATIVE**

MYELOID LEUKEMIA, PH1-POSITIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-POSITIVE**

MYELOID LEUKEMIA, PHILADELPHIA-NEGATIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-NEGATIVE**

MYELOID LEUKEMIA, PHILADELPHIA-POSITIVE see **LEUKEMIA, MYELOID, PHILADELPHIA-POSITIVE**

MYELOID LEUKEMIA, SCHILLING-TYPE see **LEUKEMIA, MONOCYTIC, ACUTE**

MYELOID METAPLASIA

BLOOD

Increased circulating CSF-1 (M-CSF) in myeloproliferative disease: association with myeloid metaplasia and peripheral bone marrow extension. Gilbert HS, et al. **Blood** 1989 Sep; 74(4):1231-4

Serum procollagen-III-peptide level correlates with disease activity in myelofibrosis with myeloid metaplasia. Barosi G, et al. **Br J Haematol** 1989 May;72(1):16-20

CLASSIFICATION

A prognostic classification of myelofibrosis with myeloid metaplasia. Barosi G, et al. **Br J Haematol** 1988 Dec; 70(4):397-401

COMPLICATIONS

Hepatic sinusoidal fibrosis in agnogenic myeloid metaplasia. Tsao MS. **Am J Clin Pathol** 1989 Mar;91(3):302-5

Acquired focal dystonia following recovery from central pontine myelinolysis [letter] Grafton ST, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1354-5

[Acute febrile neutrophilic dermatosis (Sweet's syndrome) in a patient with agnogenic myeloid metaplasia] Suzuki K, et al. **Rinsho Ketsueki** 1989 Feb;30(2):202-6 (Eng. Abstr.) **(Jpn)**

[Severe post-splenectomy hepatic insufficiency in a patient with agnogenic myeloid metaplasia] Pérez-Villa F, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):108-10 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Primary (essential) thrombocythemia versus initial (hyperplastic) stages of agnogenic myeloid metaplasia with thrombocytosis--a critical evaluation of clinical and histomorphological data. Thiele J, et al. **Acta Haematol (Basel)** 1989;81(4):192-202

Pseudoleukemia in Down's syndrome. Analysis of immunophenotype and gene rearrangement. Domenico DR, et al. **Am J Clin Pathol** 1989 Jun;91(6):709-14

ETIOLOGY

[Myeloid metaplasia in a 2-year-old girl with fully developed McCune-Albright syndrome] Rujner J, et al. **Wiad Lek** 1988 Dec 15;41(24):1679-83 (Eng. Abstr.) **(Pol)**

METABOLISM

Monocyte induces alkaline phosphatase synthesis in neutrophils of chronic myeloid leukemia and myelofibrosis with myeloid metaplasia patients. Chikkappa G, et al. **Am J Clin Pathol** 1989 May;91(5):550-7

PATHOLOGY

Primary myelofibrosis-osteomyelosclerosis (agnogenic myeloid metaplasia): correlation of clinical findings with bone marrow histopathology and prognosis. Thiele J, et al. **Anticancer Res** 1989 Mar-Apr;9(2):429-35

Agnogenic myeloid metaplasia (AMM)--correlation of bone marrow lesions with laboratory data: a longitudinal clinicopathological study on 114 patients. Thiele J, et al. **Hematol Oncol** 1989 Sep-Oct;7(5):327-43

The bone marrow in myeloproliferative and dysmyelopoietic syndromes. Wolf BC, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):669-94 (126 ref.)

Hypothesis: splenic filtration and the pathogenesis of extramedullary hematopoiesis in agnogenic myeloid metaplasia. Wolf BC, et al. **Hematol Pathol** 1987;1(1):77-80 (31 ref.)

Histomorphometry of bone marrow biopsies in primary osteomyelofibrosis/-sclerosis (agnogenic myeloid metaplasia)--correlations between clinical and morphological features. Thiele J, et al. **Virchows Arch [A]** 1989;415(3):191-202

[Polycythemia vera and blast transformation (clinical conference)] **Medicina (B Aires)** 1988;48(1):65-72 **(Spa)**

SURGERY

Splenectomy in agnogenic myeloid metaplasia and postpolycythemic myeloid metaplasia. A study of 34 cases. Brenner B, et al. **Arch Intern Med** 1988 Nov;148(11):2501-5

THERAPY

Cytoreductive effect of recombinant alpha interferon in patients with myelofibrosis with myeloid metaplasia. Barosi G, et al. **Blut** 1989 Jun;58(6):271-4

MYELOMA, PLASMA CELL see **MULTIPLE MYELOMA**

MYELOMA PROTEINS

Similar binding properties of peptide ligands for a human immunoglobulin and its light chain dimer. Tribbick G, et al. **Mol Immunol** 1989 Jul;26(7):625-35

ANALYSIS

IgG heavy-chain subclass typing of myeloma paraproteins by isoelectric focusing immunoblot analysis. Fasullo FJ Jr, et al. **Clin Chem** 1989 Mar;35(3):364-8

Expression of an antibody Fv fragment in myeloma cells. Riechmann L, et al. **J Mol Biol** 1988 Oct 5;203(3):825-8

[Multiple myeloma exhibiting 2 monoclonal immunoglobulins. Apropos of a case] Ben Abdeladhim A, et al. **Tunis Med** 1987 Oct;65(10):631-3 (Eng. Abstr.) **(Fre)**

[Structural analysis of carbohydrate chains of normal and myeloma immunoglobulins G using HPLC] Arbatskiĭ NP, et al. **Bioorg Khim** 1989 Feb;15(2):175-80 (Eng. Abstr.) **(Rus)**

BLOOD

[Combination chemotherapy of MCNU, melphalan, procarbazine, and prednisolone (MMPP) in multiple myeloma; disappearance of M-peak on serum electrophoretic pattern] Kamiya O, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):863-5 **(Jpn)**

GENETICS

Genetics of the phosphocholine-specific antibody response to Streptococcus pneumoniae. Germ-line but not mutated T15 antibodies are dominantly selected. Claflin JL, et al. **J Immunol** 1988 Dec 1;141(11):4012-9

Regulation of idiotope expression. IV. Genetic linkage of two D region-dependent T15 idiotopes to the IgH allotype. Cronkhite R, et al. **J Immunol** 1989 Jan 15;142(2):568-74

Cloning, sequencing and expression of the rearranged MOPC 315 VH gene segment. Rinfret A, et al. **Mol Immunol** 1989 Apr;26(4):431-4

Molecular basis for expression of the A48 regulatory idiotope on antibodies encoded by immunoglobulin variable-region genes from various families. Zaghouani H, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2341-5

IMMUNOLOGY

Immune responses to an adjuvant-free native syngeneic myeloma protein (M315). Kristoffersen G, et al. **Eur J Immunol** 1988 Nov;18(11):1785-90

Evaluation of production and characterization of monoclonal antibodies to human IgG of four subclasses. Harada S, et al. **Microbiol Immunol** 1989;33(7):579-92

IgG subclass concentrations in sera from 200 normal adults and IgG subclass determination of 106 myeloma proteins: an interlaboratory study. Djurup R, et al. **Scand J Clin Lab Invest** 1988 Feb;48(1):77-83

Are idiotypic peptides from variable domains critical for T-dependent production of rheumatoid factors? Hannestad K, et al. **Scand J Rheumatol Suppl** 1988;75:97-101

METABOLISM

M-protein kinetics in multiple myeloma treated with melphalan, ifosfamide, prednisolone, nitrosourea and vincristine in combination. Ishii H. **Acta Med Okayama** 1988 Oct;42(5):279-86

Characterization of the combining site of mouse myeloma protein M315. Azuma T, et al. **Biochemistry** 1988 Aug 9; 27(16):6116-20

MYELOMONOCYTIC DIFFERENTIATION ANTIGENS see **ANTIGENS, DIFFERENTIATION, MYELOMONOCYTIC**

MYELOMONOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, MYELOMONOCYTIC, ACUTE**

MYELOMONOCYTIC LEUKEMIA, CHRONIC see **LEUKEMIA, MYELOMONOCYTIC, CHRONIC**

MYELOPATHIC MUSCULAR ATROPHY see **MUSCULAR ATROPHY, SPINAL**

MYELOPEROXIDASE

Magnetic resonance spectral characterization of the heme active site of Coprinus cinereus peroxidase. Lukat GS, et al. **Biochemistry** 1989 Apr 18;28(8):3338-45

Identification and properties of an oxoferryl structure in myeloperoxidase compound II. Oertling WA, et al. **Biochemistry** 1988 Jul 26;27(15):5395-400

A new commercial method for the enzymatic determination of creatinine in serum and urine evaluated: comparison with a kinetic Jaffé method and isotope dilution-mass spectrometry. Lindbäck B, et al. **Clin Chem** 1989 May; 35(5):835-7

Subunit structures of three human myeloperoxidases. Iwamoto H, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):688-92

Demonstration that spleen green hemeprotein is identical to granulocyte myeloperoxidase. Ikeda-Saito M, et al. **J Biol Chem** 1989 Mar 15;264(8):4559-63

ANALYSIS

Neutrophil and eosinophil involvement of the small bowel in patients with celiac disease and Crohn's disease: studies on the secretion rate and immunohistochemical localization of granulocyte granule constituents. Hällgren R, et al.

Am J Med 1989 Jan;86(1):56–64
The heat shock response of Neurospora crassa: stress-induced thermotolerance in relation to peroxidase and superoxide dismutase levels. Kapoor M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1097–102
Neutrophil-induced decrease in wound margin strength after intestinal anastomosis—influence on collagen and mechanisms of granulocyte action. Högström H, et al. **Eur Surg Res** 1988;20(4):260–6
Monocyte-lymphocyte discrimination in a new microtitre-based adhesion assay. Bath PM, et al. **J Immunol Methods** 1989 Mar 10;118(1):59–65
[Possible correlations between proliferation and differentiation of blast cells in acute promyelocytic leukemia: a molecular study] Tagliafico E, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):425–8 (Eng. Abstr.) **(Ita)**
[Analytical study on leukemic megakaryocytic cells using simultaneous demonstration of membrane antigen with monoclonal antibodies and peroxidase cytochemistry at ultrastructural level] Enomoto Y, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1150–62 (Eng. Abstr.) **(Jpn)**
[Flow cytometric analysis of myeloperoxidase negative acute unclassifiable leukemias by monoclonal antibodies. Acute myelogenous and acute megakaryocytic leukemia] Imamura N, et al. **Rinsho Ketsueki** 1989 Jan;30(1):11–21 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Inhibition of neutrophil myeloperoxidase by rabbit anti-(human myeloperoxidase) [letter] Thompson RA, et al. **Ann Rheum Dis** 1989 Jul;48(7):615
Isoniazid-mediated irreversible inhibition of the myeloperoxidase antimicrobial system of the human neutrophil and the effect of thyronines. van Zyl JM, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2363–73
Effect of 2,3-butanedione on human myeloperoxidase. Willassen NP, et al. **Int J Biochem** 1989;21(7):755–9

BIOSYNTHESIS

Synthesis and localization of myeloperoxidase protein in transfected BHK cells. Cully J, et al. **Exp Cell Res** 1989 Feb;180(2):440–50
Generation of recombinant, enzymatically active human thyroid peroxidase and its recognition by antibodies in the sera of patients with Hashimoto's thyroiditis. Kaufman KD, et al. **J Clin Invest** 1989 Aug;84(2):394–403

BLOOD

Colocalization of elastase and myeloperoxidase in human blood and bone marrow neutrophils using a monoclonal antibody and immunogold. Cramer EM, et al. **Am J Pathol** 1989 Jun;134(6):1275–84
Reactions of myeloperoxidase with superoxide and hydrogen peroxide: significance for its function in the neutrophil. Winterbourn CC, et al. **Basic Life Sci** 1988;49:823–7
Myeloperoxidase-mediated inhibition of microbial respiration: damage to Escherichia coli ubiquinol oxidase. Rakita RM, et al. **Biochemistry** 1989 Apr 4;28(7):3031–6
The bactericidal effects of the respiratory burst and the myeloperoxidase system isolated in neutrophil cytoplasts. Odell EW, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):266–74
Superoxide dismutase and myeloperoxidase activity in polymorphonuclear leukocytes, and serum ceruloplasmin and copper levels, in psoriasis. Doğan P, et al. **Br J Dermatol** 1989 Feb;120(2):239–44
Myeloperoxidase deficient polymorphonuclear leucocytes in leukaemia and allied disorders. Bendix-Hansen K. **Dan Med Bull** 1988 Dec;35(6):501–20 (210 ref.)
The activity of neutrophil myeloperoxidase in patients with lung carcinoma. Dąbrowska M, et al. **Folia Haematol (Leipz)** 1988;115(5):613–9
Uptake of human eosinophil peroxidase and myeloperoxidase by cells involved in the inflammatory process. Zabucchi G, et al. **J Histochem Cytochem** 1989 Apr;37(4):499–508
Notes on the peroxidase activity of human basophil leukocytes. Mitsui T. **Tokai J Exp Clin Med** 1988 Feb; 13(1):1–8 (24 ref.)
[Myeloperoxidase of neutrophils and its possible role in lipid peroxidation processes in arteriosclerosis] Davidenkova EF, et al. **Klin Med (Mosk)** 1989 Jun;67(6):56–8 (Eng. Abstr.) **(Rus)**
[Immunoradiometric analysis of rat myeloperoxidase] Tsyplenkov PV, et al. **Ukr Biokhim Zh** 1988 Nov–Dec; 60(6):72–5 (Eng. Abstr.) **(Rus)**
[Granulocyte alkaline phosphatase and myeloperoxidase in patients with ischemic heart disease] Terletskaia LM. **Vrach Delo** 1989 Mar;(3):13–4 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Aberrant restriction endonuclease digests of DNA from subjects with hereditary myeloperoxidase deficiency. Nauseef WM. **Blood** 1989 Jan;73(1):290–5
Evidence for a pretranslational defect in hereditary and acquired myeloperoxidase deficiency. Tobler A, et al. **Blood** 1989 May 15;73(7):1980–6
Response of hydroperoxidase and superoxide dismutase deficient mutants of Escherichia coli K-12 to oxidative stress. Schellhorn HE, et al. **Can J Microbiol** 1988 Oct; 34(10):1171–6
Eleven cases with lowered eosinophil peroxidase activity [letter] Takubo T. **Eur J Haematol** 1989 Jul;43(1):80
Depressed neutrophil-mediated tumor cell cytotoxicity in subjects affected by hereditary myeloperoxidase deficiency and secondary neoplasia. Lanza F, et al. **Haematologica (Pavia)** 1988 Sep–Oct;73(5):355–8
[Myeloperoxidase deficiency of the peripheral blood neutrophils and the incidence of infectious complications in patients with acute myeloblastic leukemia] Tishchenko LM, et al. **Vrach Delo** 1989 Mar;(3):49–51 (Eng. Abstr.) **(Rus)**

GENETICS

Multiple species of myeloperoxidase messenger RNAs produced by alternative splicing and differential polyadenylation [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Hashinaka K, et al. **Biochemistry** 1988 Aug 9;27(16):5906–14
Structure of the human thyroid peroxidase gene: comparison and relationship to the human myeloperoxidase gene. Kimura S, et al. **Biochemistry** 1989 May 16;28(10):4481–9
Differential expression of CD11b/CD18 (Mo1) and myeloperoxidase genes during myeloid differentiation. Rosmarin AG, et al. **Blood** 1989 Jan;73(1):131–6
Assignment of the human myeloperoxidase gene (MPO) to bands q21.3——q23 of chromosome 17. Inazawa J, et al. **Cytogenet Cell Genet** 1989;50(2–3):135–6
Overproduction of peroxide-scavenging enzymes in Escherichia coli suppresses spontaneous mutagenesis and sensitivity to redox-cycling agents in oxyR-mutants. Greenberg JT, et al. **EMBO J** 1988 Aug;7(8):2611–7
Interferon-gamma inhibits thyrotropin-induced thyroidal peroxidase gene expression in cultured human thyrocytes. Ashizawa K, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):475–7
Molecular cloning of the human eosinophil peroxidase. Evidence for the existence of a peroxidase multigene family. Ten RM, et al. **J Exp Med** 1989 May 1; 169(5):1757–69
Assignment of the myeloperoxidase gene MPO to human chromosome 17 using somatic cell hybrids and flow-sorted chromosomes. Kudoh J, et al. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):315–24
Expression of the myeloperoxidase gene in acute and chronic myeloid leukemias: relationship to the expression of cell cycle-related genes. Ferrari S, et al. **Leukemia** 1989 Jun; 3(6):423–30
Nucleotide sequence of cDNA for murine myeloperoxidase. Venturelli D, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5852
Exonuclease III and the catalase hydroperoxidase II in Escherichia coli are both regulated by the katF gene product. Sak BD, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3271–5
The myeloperoxidase gene in acute promyelocytic leukemia. **Science** 1989 May 19;244(4906):823–6

IMMUNOLOGY

Towards standard sera for the determination of anti-neutrophil cytoplasmic (ANCA) and anti-myeloperoxidase (aMPO) antibodies. Kallenberg CG, et al. **APMIS Suppl** 1989;6:14–5
Preparation and characterization of monoclonal antibodies against human myeloperoxidase. Homma T, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):189–96
Production and characterization of monoclonal antibodies to human myeloperoxidase. Zaki SR, et al. **Clin Immunol Immunopathol** 1989 Mar;50(3):283–97
Thyroglobulin and thyroid peroxidase share common epitopes recognized by autoantibodies in patients with chronic autoimmune thyroiditis. Kohno Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):899–907

ISOLATION & PURIFICATION

Isolation and characterization of an unprocessed extracellular myeloperoxidase in HL-60 cell cultures. Hur SJ, et al. **J Biol Chem** 1989 May 25;264(15):8542–8
Purification and cytotoxic potential of myeloperoxidase in cystic fibrosis sputum. Mohammed JR, et al. **J Lab Clin Med** 1988 Dec;112(6):711–20
Oxidative metabolism of propylthiouracil by peroxidases from rat bone marrow. Lee E, et al. **Xenobiotica** 1988 Oct; 18(10):1135–42

METABOLISM

Impaired microbial killing in two patients with defective degranulation of myeloperoxidase. Edwards SW, et al. **Acta Paediatr Hung** 1988–89;29(1–2):101–4
Induction of peroxidase and thyroglobulin by TSH in cultured thyroid cells from patients with Basedow's disease and its inhibition by actinomycin D. Yamashita H, et al. **Acta Pathol Jpn** 1989 Feb;39(2):121–6
Relationship between arachidonic acid metabolism, myeloperoxidase activity and leukocyte infiltration in a rat model of inflammatory bowel disease. Boughton-Smith NK, et al. **Agents Actions** 1988 Aug;25(1–2):115–23
Myeloperoxidase-positive acute megakaryoblastic leukemia. Moscinski LC, et al. **Am J Clin Pathol** 1989 May; 91(5):607–12
Role of myeloperoxidase in intracellular and extracellular chemiluminescence of neutrophils. Nurcombe HL, et al. **Ann Rheum Dis** 1989 Jan;48(1):56–62
The reactions of horseradish peroxidase, lactoperoxidase, and myeloperoxidase with enzymatically generated superoxide. Metodiewa D, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):245–53
Bovine myeloperoxidase and lactoperoxidase each contain a high affinity site for calcium. Booth KS, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):897–902
Cyanide binding to canine myeloperoxidase. Marquez LA, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):187–91
Inhibition of myeloperoxidase by salicylhydroxamic acid. Davies B, et al. **Biochem J** 1989 Mar 15;258(3):801–6
Thiols as myeloperoxidase-oxidase substrates. Svensson BE. **Biochem J** 1988 Jul 15;253(2):441–9
Myeloperoxidase oxidation states involved in myeloperoxidase-oxidase oxidation of thiols. Svensson BE. **Biochem J** 1988 Dec 15;256(3):751–5
The inhibitory effect of acetaminophen on the myeloperoxidase-induced antimicrobial system of the polymorphonuclear leukocyte. van Zyl JM, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):161–5
Oxidation of amino acids and peptides in reaction with myeloperoxidase, chloride and hydrogen peroxide. Drozdź R, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):47–52
The mechanism of myeloperoxidase-dependent chlorination of monochlorodimedon. Kettle AJ, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):185–91
Chloramines as intermediates of oxidation reaction of amino acids by myeloperoxidase. Zgliczyński JM, et al. **Biochim Biophys Acta** 1971 Jun 16;235(3):419–24
Candidacidal activity of the neutrophil myeloperoxidase system can be protected from excess hydrogen peroxide by the presence of ammonium ion. Beilke MA, et al. **Blood** 1989 Mar;73(4):1045–9
In-vitro sensitivity of Hodgkin's disease to hydrogen peroxide toxicity. Correlation with peroxidase activity. Samoszuk MK, et al. **Cancer** 1989 Jun 1;63(11):2111–4
A comparative study of some more important experimental animal peroxide metabolism enzymes. Matkovics B, et al. **Comp Biochem Physiol [B]** 1977;56(4):397–402
Acute stimulation of thyroidal NAD+ kinase, NADPH reoxidation, and peroxidase activities by physiological concentrations of thyroid stimulating hormone acting in vitro: a quantitative cytochemical study. Perrild H, et al. **Endocrinology** 1988 Nov;123(5):2499–505
Peroxidase activities in the hamster bronchoalveolar lining fluid: modifications induced by exposure to silica dust. de Mendez I, et al. **Exp Lung Res** 1989 Jul;15(4):681–94
Search for drugs that may reduce the load of neutrophil azurophilic granule enzymes in the lungs of patients with emphysema. Stevens MD, et al. **Exp Lung Res** 1989 Jul; 15(4):663–80
The distribution of peroxidase in phagocytizing human blood platelets, electron microscopy findings. Kemona H, et al. **Folia Haematol (Leipz)** 1988;115(5):653–9
Peroxidation of phospholipids promoted by myeloperoxidase. Carlin G, et al. **Free Radic Res Commun** 1988;4(4):251–7
Effect of O2 partial pressure on the myeloperoxidase pathway of neutrophils. Davis WB, et al. **J Appl Physiol** 1988 Nov; 65(5):1995–2003
Crevicular fluid myeloperoxidase at healthy, gingivitis and periodontitis sites. Cao CF, et al. **J Clin Periodontol** 1989 Jan;16(1):17–20
Differential modulation of adherence of oral streptococci by human neutrophil myeloperoxidase. Miyasaki KT, et al. **J Dent Res** 1988 Oct;67(10):1300–6
Selective suppression of endogenous peroxidase activity: application for enhancing appearance of HRP-labeled neurons in vitro. Metz CB, et al. **J Neurosci Methods** 1989 Jan;26(3):181–8
Evaluation of the effect of evan's blue and triphenyltetrazolium chloride dyes on myeloperoxidase activity in canine cardiac tissue. Griswold DE, et al. **J Pharmacol Methods** 1989 Mar;21(1):13–9
Kinetic study of platelet glycoproteins and PPO activity in TPA-induced k562 cells. Adachi M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1069–79
[Hybrid acute leukemia (biphenotypic): demonstration of ultrastructural myeloperoxidase activity in B4 reacting blast cells] Shimbo T, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2348–51 (Eng. Abstr.) **(Jpn)**
[Active oxygen production in myeloperoxidase system] Nakano M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2770–5 **(Jpn)**
[Electron factors in peroxidase properties and the mechanism of activation of oxygen with heme-containing proteins] Stavrov SS, et al. **Mol Biol (Mosk)** 1988 May–Jun; 22(3):837–43 (Eng. Abstr.) **(Rus)**
[The significance of peroxidase in the classification and prognosis in acute myeloid leukemia in adults] Maras J. **Acta Med Iugosl** 1988;42(3):175–82 (Eng. Abstr.) **(Scr)**

PHARMACOLOGY

Changes in the viscosity of hyaluronic acid after exposure to a myeloperoxidase-derived oxidant. Baker MS, et al. **Arthritis Rheum** 1989 Apr;32(4):461–7
Host modulation of adherence of oral bacteria: the effect of human neutrophil myeloperoxidase on the attachment of Actinomyces viscosus and Actinomyces naeslundii to

saliva-coated hydroxyapatite. de Camargo PM, et al. **J Periodont Res** 1988 Sep;23(5):334–9

[Erythrocyte oxidative damage by myeloperoxidase. The protective action of serum proteins] Govorova NIu, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):428–30 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Action of myeloperoxidase–hydrogen peroxide–chloride system on the egg white lysozyme. Drożdż R, et al. **Acta Biochim Pol** 1988;35(4):277–86

Inactivation of transferrin iron binding capacity by the neutrophil myeloperoxidase system. Clark RA, et al. **J Biol Chem** 1989 Jun 5;264(16):9420–7

Inhibition of growth of Trichophyton rubrum by the myeloperoxidase–hydrogen peroxide–chloride system. MacCarthy KG, et al. **J Invest Dermatol** 1989 Apr; 92(4):639–41

[The peroxidase content of human tears] Buchberger W, et al. **Fortschr Ophthalmol** 1989;86(2):164–6 (Eng. Abstr.) **(Ger)**

SECRETION

Peroxidase secretion by lacrimal glands from juvenile F344 rats. Bromberg BB, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):562–8

Myeloperoxidase secretion during phagocytosis: a case of a patient with impaired bactericidal activity. Edwards SW, et al. **J Clin Lab Immunol** 1988 Oct;27(2):97–102

Impaired neutrophil killing in a patient with defective degranulation of myeloperoxidase. Edwards SW, et al. **J Clin Lab Immunol** 1988 Apr;25(4):201–6

THERAPEUTIC USE

Cardioplegic arrest superimposed on evolving myocardial ischemia. Improved recovery after inhibition of hydroxyl radical generation by peroxidase or deferoxamine. A 31P nuclear resonance study. Bernard M, et al. **Circulation** 1988 Nov;78(5 Pt 2):III164–72

MYELOPROLIFERATIVE DISORDERS

see related
LEUKEMIA

Red cell hypoplasia associated with myeloproliferative and myelodysplastic syndrome [letter] Cook MK. **J Clin Pathol** 1989 Aug;42(8):890–91

[An unusual chronic myeloproliferation] Kolešková E, et al. **Vnitr Lek** 1989 May;35(5):489–92 (Eng. Abstr.) **(Cze)**

[Clinical course and terminal features of chronic myeloproliferative syndrome] Yonemitsu H. **Rinsho Ketsueki** 1988 Jul;29(7):950–9 (Eng. Abstr.) **(Jpn)**

BLOOD

Changes in the mitogenic activity of platelet-derived growth factor(s) in patients with myeloproliferative disease. Caenazzo A, et al. **Acta Haematol (Basel)** 1989;81(3):131–5

Increased circulating CSF-1 (M-CSF) in myeloproliferative disease: association with myeloid metaplasia and peripheral bone marrow extension. Gilbert HS, et al. **Blood** 1989 Sep; 74(4):1231–4

Three cases of myelodysplastic–myeloproliferative disorder with abnormal chromatin clumping in granulocytes [letter] Brizard A, et al. **Br J Haematol** 1989 Jun;72(2):294–5

Multimeric composition of plasma von Willebrand factor in chronic myeloproliferative disorders. Tatewaki W, et al. **Clin Lab Haematol** 1988;10(4):417–25

Endogenous megakaryocyte colonies from peripheral blood in precursor cell cultures of patients with myeloproliferative disorders. Battegay EJ, et al. **Eur J Haematol** 1989 Apr;42(4):321–6

The use of antiproteolytic mixture fails to modify the abnormal von Willebrand factor pattern in myeloproliferative disease. Casonato A, et al. **Folia Haematol (Leipz)** 1988;115(6):881–6

Blood platelet calcium content and aggregation behaviour in myeloproliferative disorders and secondary thrombocytosis. Mindner K, et al. **Folia Haematol (Leipz)** 1988;115(4):461–4

Chronic myeloproliferative diseases with an elevated platelet count (in excess of 1,000,000/microliter): a clinicopathological study on 46 patients with special emphasis on primary (essential) thrombocythemia. Thiele J, et al. **Hematol Pathol** 1987;1(4):227–37

Increased fibroblast colony stimulating activity (F-CSA) in serum of myeloproliferative disorders. Han ZC, et al. **J Biol Regul Homeost Agents** 1988 Jul–Sep;2(3):119–24

Application of analytical isotachophoresis in the study of platelet membrane proteins in patients with chronic myeloproliferative disorders. Kajii E, et al. **J Chromatogr** 1989 May 5;490(1):53–8

Abnormal Ca2+ homeostasis in platelets of patients with myeloproliferative disorders: low levels of Ca2+ influx and efflux across the plasma membrane and increased Ca2+ accumulation into the dense tubular system. Fujimoto T, et al. **Thromb Res** 1989 Jan 15;53(2):99–108

[Alteration of platelet function in myeloproliferative disorder and its clinical significance] Ni HY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):312–6 (Eng. Abstr.) **(Chi)**

[Defects in the prostaglandin system. VIII. A pathologic thrombocyte population in myeloproliferative syndrome, which forms no thromboxane from exogenous arachidonic acid] Sinzinger H, et al. **Wien Klin Wochenschr** 1988 Nov 4;100(21):715–8 (Eng. Abstr.) **(Ger)**

[Blood platelet changes in myeloproliferative disorders] D'Angelo G, et al. **Minerva Med** 1988 Oct;79(10):853–7 (Eng. Abstr.) **(Ita)**

[Acquired von Willebrand factor abnormalities in chronic myeloproliferative disorders] Tatewaki W, et al. **Rinsho Byori** 1989 Apr;Spec No 81:41–5 **(Jpn)**

[Role of PDGF on myeloproliferative disorders] Kimura A, et al. **Rinsho Ketsueki** 1988 Jul;29(7):989–93 (Eng. Abstr.) **(Jpn)**

[ATP and ADP of platelets in chronic myeloproliferative disorders and multiple myeloma] Terada H, et al. **Rinsho Ketsueki** 1989 Jan;30(1):22–8 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

[Hematologic phenotype versus cytogenic phenotype in 124 chronic myeloproliferative syndromes (1979–1987)] Sánchez-Fayos MP, et al. **Sangre (Barc)** 1988 Dec; 33(6):491–6 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Reversal of bone marrow fibrosis and subsequent development of polycythemia in patients with myeloproliferative disorders. Talarico L, et al. **Am J Hematol** 1989 Apr;30(4):248–53

Monoclonal gammopathy in chronic myeloproliferative disorders. Economopoulos T, et al. **Blut** 1989 Jan;58(1):7–9

Treatment of thrombocytosis in myeloproliferative disorders with interferon alpha-2a. Tichelli A, et al. **Blut** 1989 Jan; 58(1):15–9

AML associated with previous cytotoxic therapy, MDS or myeloproliferative disorders: results from the MRC's 9th AML trial. Hoyle CF, et al. **Br J Haematol** 1989 May; 72(1):45–53

Membranous obstruction of the inferior vena cava associated with a myeloproliferative disorder: a clue to membrane formation? Sevenet F, et al. **Gastroenterology** 1989 Oct; 97(4):1019–21

Bleeding and thrombosis in chronic myeloproliferative disorders: relation of platelet disorders to clinical aspects of the disease. Wehmeier A, et al. **Haemostasis** 1989; 19(5):251–9

Myeloproliferative disorders in portal vein thrombosis in adults. Knox TA, et al. **Hepatology** 1989 Sep;10(3):392–3

Long-term interferon therapy for thrombocytosis in myeloproliferative diseases. Gisslinger H, et al. **Lancet** 1989 Mar 25;1(8639):634–7

Von Recklinghausen neurofibromatosis and myeloproliferative disorders in adults [letter] Lightman SM. **Lancet** 1988 Nov 19;2(8621):1197–8

Coexistence of sarcoidosis and malignant disease: causality or coincidence? Brincker H. **Sarcoidosis** 1989 Mar; 6(1):31–43 (111 ref.)

[Conference at Salpêtrière. February 1987. Hepatomegaly, splenomegaly, hyperleukocytosis and progressive hemiparesis] Laplane D, et al. **Rev Neurol (Paris)** 1988; 144(12):835–9 **(Fre)**

[A primary skin tumor in myeloproliferative disease] Görg C, et al. **Internist (Berlin)** 1988 Sep;29(9):645–8 **(Ger)**

[Spontaneous association of a chronic lympho- and myeloproliferative disease in the same patient. Description of 2 cases] Guzzini F, et al. **Recenti Prog Med** 1988 Sep; 79(9):365–9 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

The application of X-chromosome gene probes to the diagnosis of myeloproliferative disease. Lucas GS, et al. **Br J Haematol** 1989 Aug;72(4):530–3

Myeloproliferative disorders: usefulness of X-linked probes in diagnosis. Taylor KM, et al. **Leukemia** 1989 Jun; 3(6):419–22

[Clinical characterization of essential thrombocythemia in comparison to other myeloproliferative diseases and reactive thrombocytoses] Zankovich R, et al. **Klin Wochenschr** 1988 Aug 1;66(15):699–702 **(Ger)**

[Serum vitamin B12 and vitamin B12 binding protein in chronic myeloproliferative disorders] Iseki T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):960–8 (Eng. Abstr.) **(Jpn)**

[The polymorphism of myeloproliferative tumor processes] Brilliant MD, et al. **Ter Arkh** 1988;60(5):3–9 **(Rus)**

DRUG THERAPY

Recombinant interferon-alpha therapy of Philadelphia chromosome-negative myeloproliferative disorders with thrombocytosis. Talpaz M, et al. **Am J Med** 1989 May; 86(5):554–8

ENZYMOLOGY

Reduced 12-lipoxygenase activity in platelets of patients with myeloproliferative disorders. Okuma M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:148–51

Red cell membrane phosphatidylinositol kinase activity in hemolytic anemias and myeloproliferative diseases. Boivin P, et al. **Clin Chim Acta** 1989 Jun 30;182(2):165–72

Myeloperoxidase deficient polymorphonuclear leucocytes in leukaemia and allied disorders. Bendix-Hansen K. **Dan Med Bull** 1988 Dec;35(6):501–20 (210 ref.)

EPIDEMIOLOGY

Myeloproliferative disease in children: a demographic study. Reid MM, et al. **J Clin Pathol** 1988 Aug;41(8):883–5

ETIOLOGY

A lethal myeloproliferative syndrome in mice transplanted with bone marrow cells infected with a retrovirus expressing granulocyte-macrophage colony stimulating factor. Johnson GR, et al. **EMBO J** 1989 Feb;8(2):441–8

Expression of v-src induces a myeloproliferative disease in bone-marrow-reconstituted mice. Keller G, et al. **Genes Dev** 1989 Jun;3(6):827–37

Retrovirus-mediated transfer and expression of the interleukin-3 gene in mouse hematopoietic cells result in a myeloproliferative disorder. Wong PM, et al. **Mol Cell Biol** 1989 Feb;9(2):798–808

GENETICS

Isodicentric X chromosome in myeloproliferative disorders. Temperani P, et al. **Acta Haematol (Basel)** 1989;81(3):152–4

Evaluation of c-sis mRNA expression by human megakaryocytic cells in normals and patients with myeloproliferative disorders. Kanz L, et al. **Adv Exp Med Biol** 1988;241:73–80

Nonneoplastic hematopoietic myeloproliferative syndrome induced by dysregulated multi-CSF (IL-3) expression. Chang JM, et al. **Blood** 1989 May 1;73(6):1487–97

Chromosome 7 long arm deletion in myeloid disorders: a narrow breakpoint region in 7q22 defined by molecular mapping. Kere J, et al. **Blood** 1989 Jan;73(1):230–4

A PvuII polymorphism of the bcr region in patients with hematopoietic disorders and their families. Opalka B, et al. **Blood** 1989 Feb 15;73(3):814–7

Translocation 1;7 in four cases of myeloid disorders. Sheppard DM, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):49–52

Cytogenetics might elucidate the etiology of acute transformation of chronic myeloproliferative syndromes without a Philadelphia chromosome. A brief report from a multicenter study by the Group Français de Cytogénétique Hématologique [letter] **Eur J Haematol** 1989 Jul;43(1):86–7

Clonal analysis of hematologic malignancies using Mediterranean G6PD mosaicism. Canepa L, et al. **Haematologica (Pavia)** 1988 Sep–Oct;73(5):343–6

Detection of cells with multidrug-resistant phenotype in myeloproliferative disorders before therapy. Kemnitz J, et al. **Hematol Pathol** 1989;3(2):73–8

Disomic homozygosity in 21-trisomic cells: a mechanism responsible for transient myeloproliferative syndrome. Abe K, et al. **Hum Genet** 1989 Jul;82(4):313–6

Cytogenetically unrelated clones in hematological neoplasms. Heim S, et al. **Leukemia** 1989 Jan;3(1):6–8

[Familial primary myeloproliferative syndrome. Three cases in the same family] Poissonnier M, et al. **J Genet Hum** 1988 Aug;36(4):367–71 **(Fre)**

[Molecular biologic study in chronic myelogenous leukemia and its related disorders] Ohyashiki JH, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1010–7 (Eng. Abstr.) **(Jpn)**

[bcr rearrangement in variant Ph1-positive chronic myelocytic leukemia and unclassified myeloproliferative disorders] Sekito N, et al. **Rinsho Ketsueki** 1988 Jul; 29(7):1018–24 (Eng. Abstr.) **(Jpn)**

[Cytogenetic studies on myeloproliferative disorder] Taniwaki M, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1001–9 (Eng. Abstr.) **(Jpn)**

[Deletions of long arms of chromosome 5 (5q-)] Rupniewska ZM. **Przegl Lek** 1988;45(4):406–11 **(Pol)**

[Cytogenetic study of exudates secondary to hematologic processes] Bello MJ, et al. **Sangre (Barc)** 1988 Jun; 33(3):165–70 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Decreased natural killer (NK) activity in patients with myeloproliferative disorders. Froom P, et al. **Cancer** 1989 Sep 1;64(5):1038–40

METABOLISM

Low-density lipoprotein (LDL) distribution shown by 99mtechnetium-LDL imaging in patients with myeloproliferative diseases. Vallabhajosula S, et al. **Ann Intern Med** 1989 Feb 1;110(3):208–13

PATHOLOGY

Bone marrow stromal cells in myeloproliferative disorders. Hirata J, et al. **Acta Haematol (Basel)** 1989;82(1):35–9

Bone marrow lymphoid nodules in myeloproliferative disorders: association with the nonmyelosclerotic phases of idiopathic myelofibrosis and immunological significance. Cervantes F, et al. **Br J Haematol** 1988 Nov;70(3):279–82

Metabolism in hematologic malignancy. Humberstone DA, et al. **Cancer** 1988 Oct 15;62(8):1619–24

Transient myeloproliferative disorder. In a neonate with Down syndrome. Immunophenotypic studies. Cook JA, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):132–5

The splenomegaly of myeloproliferative and lymphoproliferative disorders: splenic cellularity and vascularity. Zhang B, et al. **Eur J Haematol** 1989 Jul; 43(1):63–6

Bone marrow in megakaryocytic disorders. Burkhardt R. **Hematol Oncol Clin North Am** 1988 Dec;2(4):695–733 (147 ref.)

Cerebral venous thrombosis as presenting sign of myeloproliferative disorders. Haan J, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1219–20

Bone marrow biopsy of aplastic anemia, myelodysplastic syndromes and myeloproliferative disorders. Kikuchi M. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1339–46

Osteoclasts and bone remodeling in chronic myeloproliferative disorders. A histochemical and morphometric study on trephine biopsies in 165 patients. Thiele J, et al. **Pathol Res Pract** 1989 Jun;184(6):591–9

Histomorphometry of bone marrow biopsies in chronic myeloproliferative disorders with associated thrombocytosis—features of significance for the diagnosis of primary (essential) thrombocythaemia. Thiele J, et al. **Virchows Arch [A]** 1988;413(5):407–17

[Intravascular sclerosing broncho-alveolar tumor (IVSBAT). Case of an aggressive form with pseudo-hemopathic clinical manifestation] Delcourt A, et al. **Arch Anat Cytol Pathol** 1988;36(3):96–9 (Eng. Abstr.) **(Fre)**

[Megakaryocytic myelosis—clinical aspects, morphology and platelet function] Hochhaus A, et al. **Klin Wochenschr** 1989 Jan 20;67(2):51–9 (Eng. Abstr.) **(Ger)**

[So-called primary (idiopathic) osteomyelofibrosis/-sclerosis (OMF) within the scope of chronic myeloproliferative diseases. I. Initial clinical and histologic findings in 102 patients with special reference to early hyperplastic and advanced fibrosclerotic stages] Zankovich R, et al. **Med Klin** 1988 Oct 4;83(19):617–28 (Eng. Abstr.) **(Ger)**

[Borderline disorders in hematopoietic malignancy; pathological aspect] Itoyama S. **Gan No Rinsho** 1988 Aug; 34(10):1449–58 (Eng. Abstr.) **(Jpn)**

[Pathology of myeloproliferative disorders and related diseases] Motoi M. **Rinsho Ketsueki** 1988 Jul;29(7):969–76 (Eng. Abstr.) **(Jpn)**

[Mechanism of myelofibrosis in chronic myeloproliferative disorders] Nagao T, et al. **Rinsho Ketsueki** 1988 Jul; 29(7):983–8 (Eng. Abstr.) **(Jpn)**

[Analysis of chronic myeloproliferative syndromes using the technics of in vitro hematopoiesis (the origin and function of marrow stromal cells in CML)] Takahashi M, et al. **Rinsho Ketsueki** 1988 Jul;29(7):994–1000 (Eng. Abstr.) **(Jpn)**

[The value of the initial bone biopsy in chronic myeloproliferative syndromes. Review of 80 cases] Ortuño F, et al. **Sangre (Barc)** 1989 Apr;34(2):117–25 (33 ref.) (Eng. Abstr.) **(Spa)**

[Clonal megakaryocytopathies] Sánchez Fayos J, et al. **Sangre (Barc)** 1989 Aug;34(4):259–62 (42 ref.) **(Spa)**

[Incidence of mononuclear bone-marrow megakaryocytes in various hemopathies (letter)] Simón R, et al. **Sangre (Barc)** 1988 Jun;33(3):238–9 **(Spa)**

PHYSIOPATHOLOGY

The significance of endogenous erythroid colonies (EEC) in haematological disorders. Reid CD. **Blood Rev** 1987 Jun; 1(2):133–40 (47 ref.)

SURGERY

[Surgery in oncohematology: state of the art] Marmont AM, et al. **Minerva Chir** 1989 Feb 28;44(4):643–6 (11 ref.) **(Ita)**

THERAPY

Serum type-III-procollagen and laminin concentration after interferon therapy in chronic myeloproliferative disorders. Sréter L, et al. **Acta Med Hung** 1988;45(3–4):323–8

Interferon alpha-2b as treatment for Philadelphia-negative chronic myeloproliferative disorders with excessive thrombocytosis. Lazzarino M, et al. **Br J Haematol** 1989 Jun;72(2):173–7

[Management of chronic myeloproliferative disorders] Ikkala E, et al. **Duodecim** 1989;105(11):1007–15 (31 ref.) **(Fin)**

[Treatment of hematologic diseases with alpha interferon] Castaigne S. **Bull Cancer (Paris)** 1988;75(9):859–62 (Eng. Abstr.) **(Fre)**

[So-called primary (idiopathic) osteomyelofibrosis/-sclerosis (OMF) within the scope of chronic myeloproliferative diseases. II. Course and therapy in 102 patients with special reference to early hyperplastic and advanced fibrosclerotic stages] Zankovich R, et al. **Med Klin** 1988 Oct 4; 83(19):629–36 (Eng. Abstr.) **(Ger)**

VETERINARY

Thrombocytosis associated with a myeloproliferative disorder in a dog. Degen MA, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1457–9

MYELOSCLEROSIS see **MYELOFIBROSIS**

MYELOSIS, NONLEUKEMIC see **MYELOID METAPLASIA**

MYENTERIC PLEXUS

Diarrhea associated with myenteric ganglionitis in a dog. Willard MD, et al. **J Am Vet Med Assoc** 1988 Aug 1; 193(3):346–8

ANALYSIS

Differential localization of 5-HT1 receptors on myenteric and submucosal neurons. Galligan JJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G603–11

Peptide-containing neurons in explant cultures of guinea-pig myenteric plexus during development in vitro: gross morphology and growth patterns. Saffrey MJ, et al. **Cell Tissue Res** 1988 Oct;254(1):167–76

Demonstration of GABA-like immunoreactivity in myenteric plexus of frog stomach. Gábriel R, et al. **Histochemistry** 1989;91(6):523–5

A peptide with N-terminal histidine and C-terminal isoleucine amide (PHI) and vasoactive intestinal peptide (VIP) are copackaged in myenteric neurones of the guinea pig ileum. Agoston DV, et al. **Peptides** 1989 May-Jun; 10(3):571–3

[Cytomorphometric analysis of the DNA content of neurons in Auerbach's myenteric plexus] Geuna S, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):775–7 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Human myenteric plexus: confirmation of unfamiliar structures in adults and neonates. Kumar D, et al. **Gastroenterology** 1989 Apr;96(4):1021–8

A quantitative study on the myenteric plexus of the distal end of the human esophagus. de Souza RR, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):565–74

Projections of submucosal neurons to the myenteric plexus of the guinea pig intestine: in vitro tracing of microcircuits by retrograde and anterograde transport. Kirchgessner AL, et al. **J Comp Neurol** 1988 Nov 22;277(4):487–98

Structure, afferent innervation, and transmitter content of ganglia of the guinea pig gallbladder: relationship to the enteric nervous system. Mawe GM, et al. **J Comp Neurol** 1989 May 15;283(3):374–90

[The myenteric plexus of the human esophagus in membrane preparations] de Souza RR, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan-Feb;43(1):81–3 (Eng. Abstr.) **(Por)**

CYTOLOGY

Identification of collagen, elastic, elaunin and oxytalan fibres in ganglia of the myenteric plexus of the human oesophagus. Rodrigues de Souza R, et al. **Anat Embryol (Berl)** 1988;179(1):97–102

Histological identification of the interstitial cells of Cajal in the guinea-pig small intestine. Kobayashi S, et al. **Arch Histol Cytol** 1989 Jul;52(3):267–86

Shapes of nerve cells in the myenteric plexus of the guinea-pig small intestine revealed by the intracellular injection of dye. Furness JB, et al. **Cell Tissue Res** 1988; 254(3):561–71

Three-dimensional observation of the fibroblast-like cells associated with the rat myenteric plexus, with special reference to the interstitial cells of Cajal. Komuro T. **Cell Tissue Res** 1989 Feb;255(2):343–51

DNA content in neurons of Auerbach's plexus under experimental conditions in adult rats. Giacobini Robecchi MG, et al. **Int J Dev Neurosci** 1988;6(2):109–15

The forms of argyrophilic ganglion cells in the myenteric plexus throughout the gastrointestinal tract of the opossum. Christensen J. **J Auton Nerv Syst** 1988 Oct;24(3):251–60

Enteric neuron numbers and sizes in Auerbach's plexus in the small and large intestine of adult and aged rats. Santer RM, et al. **J Auton Nerv Syst** 1988 Nov;25(1):59–67

Rectospinal neurons: evidence for a direct projection from the enteric to the central nervous system in the rat. Doerffler-Melly J, et al. **Neurosci Lett** 1988 Oct 5; 92(2):121–5

Sennosides do not kill myenteric neurons in the colon of the rat or mouse. Kiernan JA, et al. **Neuroscience** 1989; 30(3):837–42

Visualization of neurons by NADH-diaphorase staining in the myenteric plexus of some invertebrate and vertebrate species. Gábriel R, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):769–84

DRUG EFFECTS

Additive interaction of haloperidol with morphine in the guinea pig ileum. Dvořák A, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):42–3

Haloperidol, chlorpromazine and lithium chloride antagonize the excitatory action of forskolin and of some gut peptides on guinea-pig myenteric neurones. Zafirov DH. **Acta Physiol Pharmacol Bulg** 1988;14(3):17–25

Blockade of 5-HT-mediated enteric slow EPSPs by BRL 24924: gastrokinetic effects. Mawe GM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G386–96

Muscarinic agonists and potassium currents in guinea-pig myenteric neurones. Galligan JJ, et al. **Br J Pharmacol** 1989 Jan;96(1):193–203

Effect of chemical ablation of myenteric neurones on intestinal cell proliferation. Zucoloto S, et al. **Cell Tissue Kinet** 1988 Jul;21(4):213–9

The actions of receptor-selective substance P analogs on myenteric neurons: an electrophysiological investigation. Hanani M, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):247–53

Mechanism of action of galanin on myenteric neurons. Tamura K, et al. **J Neurophysiol** 1988 Sep;60(3):966–79

Action of naloxone on myenteric neurons removed from morphine-treated guinea pigs. Cherubini E, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):830–8

Cholecystokinin, but not gastrin, induces gamma-aminobutyric acid release from myenteric neurons of the guinea pig ileum. Sano I, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):378–83

Opioid dependence in myenteric neurons innervating the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1–2):166–72

Morphine tolerance and nonspecific subsensitivity of the longitudinal muscle myenteric plexus preparation of the guinea-pig to inhibitory agonists. Taylor DA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):553–9

The effect of crotoxin on the longitudinal muscle-myenteric plexus preparation of the guinea pig ileum. Muniz ZM, et al. **Neuropharmacology** 1989 Jul;28(7):741–7

[Endoscopic pharmacologic denervation of the stomach in the treatment of duodenal ulcer] Sinev IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):133–5 **(Rus)**

[Selective endoscopic pharmacologic denervation of the stomach in the treatment of reflux esophagitis associated with duodenal ulcer] Sinëv IuV, et al. **Vestn Khir** 1988 Sep;141(9):13–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Quantitative assessment of the stage of neuronal maturation in the developing human fetal gut—a new dimension in the pathogenesis of developmental anomalies of the myenteric plexus. Vaos GC. **J Pediatr Surg** 1989 Sep; 24(9):920–5

ENZYMOLOGY

Consecutive diaphorase-acetylcholinesterase histochemistry in the myenteric plexus of frog stomach. Gábriel R, et al. **Acta Histochem (Jena)** 1989;85(2):135–41

Tyrosine hydroxylase-immunoreactive intrinsic neurons in the Auerbach's and Meissner's plexuses of humans. Wakabayashi K, et al. **Neurosci Lett** 1989 Jan 30; 96(3):259–63

GROWTH & DEVELOPMENT

[Morphological observations on the alteration of the myenteric plexus neurons in the bullfrog small intestine during metamorphosis] Torihashi S. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):465–77 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Ultrastructural analysis of substance P-immunoreactive nerve fibers in myenteric ganglia of guinea pig small intestine. Llewellyn-Smith IJ, et al. **J Neurosci** 1989 Jan;9(1):167–74

METABOLISM

[3H]saxitoxin as a marker for canine deep muscular plexus neurons. Ahmad S, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G462–9

Characterization of acetylcholine release from enzyme-dissociated myenteric ganglia. Yau WM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G233–9

Immunocytochemical analysis of potential neurotransmitters present in the myenteric plexus and muscular layers of the corpus of the guinea pig stomach. Mawe GM, et al. **Anat Rec** 1989 Jul;224(3):431–42

Agonists, antagonists and modulators of excitatory amino acid receptors in the guinea-pig myenteric plexus. Luzzi S, et al. **Br J Pharmacol** 1988 Dec;95(4):1271–7

Shapes and projections of neurons with immunoreactivity for gamma-aminobutyric acid in the guinea-pig small intestine. Furness JB, et al. **Cell Tissue Res** 1989; 256(2):293–301

Neuron-specific enolase and S-100 protein immunohistochemistry for defining the structure and topographical relationship of the different enteric nerve plexuses in the small intestine of the pig. Scheuermann DW, et al. **Cell Tissue Res** 1989 Apr;256(1):65–75

Glycine and kynurenate modulate the glutamate receptors in the myenteric plexus and in cortical membranes. Moroni F, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):123–6

Expression of substance P/neurokinin A-encoding preprotachykinin messenger ribonucleic acids in the rat enteric nervous system. Sternini C, et al. **Gastroenterology** 1989 Aug;97(2):348–56

Simultaneous localization of acetylcholinesterase activity and met-enkephalin, vasoactive intestinal peptide and substance P immunoreactivity in the rat myenteric plexus. Anglade P, et al. **Histochem J** 1988 Aug;20(8):464–7

Oligo-riboprobes. Tools for in situ hybridisation. Denny P, et al. **Histochemistry** 1988;89(5):481–3

Calcium uptake and protein phosphorylation in myenteric neurons, like the release of vasoactive intestinal polypeptide and acetylcholine, are frequency dependent. Agoston DV,

et al. **J Neurochem** 1989 May;52(5):1637–40
Contribution of external Ca2+ to the modulation by prostaglandin E2 of the release of acetylcholine from the myenteric plexus of guinea pig ileum. Takeuchi T, et al. **Jpn J Pharmacol** 1989 Apr;49(4):455–61
Galanin-like immunoreactive nerve elements in the small intestine of the rat. An electron microscopic immunocytochemical study. Fehér E, et al. **Neurosci Lett** 1988 Oct 5;92(2):137–42

MICROBIOLOGY

Spread of herpes simplex virus type-1 (Miyama +GC strain) to the central nervous system after intraperitoneal inoculation: the role of the myenteric plexus of the gut. Irie H, et al. **Arch Virol** 1989;105(3–4):247–57

PATHOLOGY

Parkinson's disease: the presence of Lewy bodies in Auerbach's and Meissner's plexuses. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1988;76(3):217–221
Evoked secretion of [3H]noradrenaline and ATP from nerve varicosities isolated from the myenteric plexus of the guinea pig ileum. Hammond JR, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):369–75
Paraneoplastic visceral neuropathy as a cause of severe gastrointestinal motor dysfunction. Chinn JS, et al. **Gastroenterology** 1988 Nov;95(5):1279–86
Fall in the number of myenteric neurons in aging guinea pigs. Gabella G. **Gastroenterology** 1989 Jun;96(6):1487–93
Deficient neurogenic innervation of the myenteric plexus with normal submucous plexus involving the entire small and large bowel. Mishalany H, et al. **J Pediatr Surg** 1989 Jan;24(1):83–6; discussion 86–7
[Hirschsprung disease: histochemical technic for alpha-naphthyl-esterase in the intraoperative diagnosis of the proximal extent of the aganglionosis] Dodero P, et al. **An Esp Pediatr** 1988 May;28(5):429–32 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Migrating myoelectric complex demonstrated in four avian species. Clench MH, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G598–603
Selective depletion of the acetylcholine and vasoactive intestinal polypeptide of the guinea-pig myenteric plexus by differential mobilization of distinct transmitter pools. Agoston DV, et al. **Exp Brain Res** 1988;72(3):535–42
Interactions of neurogenic responses of longitudinal and circular muscle in the guinea-pig ileum. Kadlec O, et al. **Gen Physiol Biophys** 1989 Aug;8(4):351–69
Pharmacological characterization of neural mechanisms regulating mucosal ion transport in mouse jejunum. Sheldon RJ, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):572–82
A device to evoke acetylcholine release electrically in the guinea pig myenteric plexus/longitudinal muscle preparation through mass electrodes. Silverman RW, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):673–6
Actions of galanin fragments on rat, guinea-pig, and canine intestinal motility. Fox JE, et al. **Peptides** 1988 Sep–Oct; 9(5):1183–9
Cisapride potentiates fast nicotinic synaptic potentials in the myenteric plexus of the guinea pig ileum. Galligan JJ, et al. **Proc West Pharmacol Soc** 1988;31:9–11
Biliary and pancreatic secretory component of the migrating myoelectric complex in the pig. Effect on intraduodenal pH. Abello J, et al. **Reprod Nutr Dev** 1988;28(4A):953–67

PHYSIOPATHOLOGY

Dependence and cross-dependence in the guinea-pig myenteric plexus. Schulz R.
Naunyn Schmiedebergs Arch Pharmacol 1988 Jun; 337(6):644–8

SECRETION

Somatostatin release from isolated ganglia of the myenteric plexus. Grider JR. **Am J Physiol** 1989 Aug;257(2 Pt 1):G313–5
Substance P and [leucine]enkephalin release in guinea pig ileum during naloxone-precipitated morphine withdrawal. Wang FS, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):329–32

ULTRASTRUCTURE

A new view of the arterial smooth muscle cells and autonomic nerve plexus by scanning electron microscopy in spontaneously hypertensive rats. Chaldakov GN, et al. **Exp Pathol** 1989;36(3):181–4
Characterization, by size, density, osmotic fragility, and immunoaffinity, of acetylcholine- and vasoactive intestinal polypeptide-containing storage particles from myenteric neurones of the guinea-pig. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1474–80
Direct contacts between Auerbach's ganglia and smooth muscle cells in the small intestine of the rat. Komuro T. **Neurosci Lett** 1988 Sep 23;92(1):27–9
Three-dimensional visualization of the ganglionated enteric nerve plexuses in the small intestine of the pig. Scheuermann DW, et al. **Prog Clin Biol Res** 1989;295:343–7

MYERS–BRIGGS TYPE INDICATOR see **PERSONALITY INVENTORY**

MYIASIS

Intestinal myiasis. Mohandas KM, et al.
J Assoc Physicians India 1988 Jul;36(7):450–1
Human intestinal myiasis [letter] Singh S, et al.
J Assoc Physicians India 1988 Dec;36(12):741–2
Myiasis in humans. Norris KR. **Med J Aust** 1989 Mar 6; 150(5):235–7
Myiasis in the highlands of Papua New Guinea. Barnish G, et al. **P N G Med J** 1989 Mar;32(1):63–4
Tumbu fly myiasis in a child. Lyko J, et al.
Trans R Soc Trop Med Hyg 1988;82(2):345
[Myiasis: facial location. Apropos of a case of Dermatobia hominis infection] Nderagakura F, et al.
Rev Stomatol Chir Maxillofac 1989;90(1):7–16 (42 ref.) (Eng. Abstr.) **(Fre)**
[Ophthalmomyasis interna in a 5-year-old girl] Koraszewska-Matuszewska B, et al. **Klin Oczna** 1988 Oct; 90(10):351–2 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Human intestinal myiasis [letter] Tripathi AK, et al.
J Assoc Physicians India 1988 Aug;36(8):523–4
A case of intestinal myiasis in Japan. Tachibana H, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):349–52

EPIDEMIOLOGY

External ophthalmomyiasis caused by Oestrus ovis. Garzozi H, et al. **Isr J Med Sci** 1989 Mar;25(3):162–3
The risk from exotic myiasis in Australia. **Med J Aust** 1989 Jun 19;150(12):722–3
Human cutaneous myiasis in Brisbane: a prospective study. Lukin LG. **Med J Aust** 1989 Mar 6;150(5):237–40
Human myiasis in Jamaica. Rawlins SC.
Trans R Soc Trop Med Hyg 1988;82(5):771–2

PARASITOLOGY

Myiasis. McIntyre FL. **Am Fam Physician** 1989 Jun; 39(6):129–31
External ophthalmomyiasis due to the sheep nostril botfly larva Oestrus ovis in Saudi Arabia. Omar MS, et al.
Ann Trop Med Parasitol 1988 Apr;82(2):221–3
Human intestinal myiasis. Arya TV, et al.
J Assoc Physicians India 1988 Feb;36(2):168–9
Intestinal myiasis caused by Megaselia scalaris (Diptera: Phoridae): a case report. Singh NB, et al.
J Commun Dis 1988 Jun;20(2):163
Aural myiasis caused by Wohlfahrtia magnifica. el Kadery AA, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):751–3

PATHOLOGY

An unusual case of Phormia regina myiasis of the scalp. Alexis JB, et al. **Am J Clin Pathol** 1988 Dec;90(6):734–7
Ophthalmomyiasis externa caused by the sheep nasal botfly Oestrus ovis. Gupta VP, et al. **Indian J Ophthalmol** 1988 Jan–Mar;36(1):41–2
Oral myiasis [corrected and issued with original paging in Int J Oral Maxillofac Surg 1988 Oct;17(5):288–9] Zeltser R, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):288–9

THERAPY

Nasal myiasis: review of 10 years experience. Sharma H, et al. **J Laryngol Otol** 1989 May;103(5):489–91

TRANSMISSION

[Import of tropical human cutaneous myiases] Leclercq M. **Rev Med Liege** 1989 Jan 1;44(1):28–32 **(Fre)**

URINE

Urogenital myiasis caused by Megaselia scalaris (Diptera: Phoridae): a case report. Singh TS, et al.
J Med Entomol 1989 May;26(3):228–9

VETERINARY

Cephenemyia ulrichii Brauer 1862, in Swedish moose. Stéen M, et al. **Acta Vet Scand** 1988;29(2):265–6
Myiasis by Wohlfahrtia vigil in nestling Microtus pennsylvanicus. Craine IT, et al. **J Wildl Dis** 1986 Oct; 22(4):587–9
Screwworm spread: African eradication plan threatened [news] McGourty C. **Nature** 1989 Aug 10;340(6233):422
Intraruminal controlled release of cyromazine for the prevention of Lucilia cuprina myiasis in sheep. Anderson N, et al. **Res Vet Sci** 1989 Mar;46(2):131–8
Myiasis caused by Wohlfahrtia magnifica (Schiner, 1862) in the Arabian camel (Camelus dromedarius) in the Peninsula of Sinai. Hadani A, et al. **Rev Elev Med Vet Pays Trop** 1989;42(1):33–8
Observations on Sudanese camel nasal myiasis caused by the larvae of Cephalopina titillator. Musa MT, et al.
Rev Elev Med Vet Pays Trop 1989;42(1):27–31
Effects of migrating Gasterophilus intestinalis larvae (Diptera: Gasterophilidae) on the mouth of the horse. Cogley TP. **Vet Parasitol** 1989 Jun;31(3–4):317–31
Observations on the occurrence of five species of Gasterophilus larvae in free-ranging horses in Umbria, central Italy. Principato M. **Vet Parasitol** 1989 May; 31(2):173–7
Parasites of the stomach in donkeys of the highveld of Zimbabwe. Pandey VS, et al. **Vet Q** 1988 Oct;10(4):246–8
Wound myiasis caused by Cochliomyia hominivorax in Libya [letter] el-Azazy OM. **Vet Rec** 1989 Jan 28;124(4):103
A case of canine otitis due to screwworm, Cochliomyia hominivorax, in France [letter] Chermette R. **Vet Rec** 1989 Jun 17;124(24):641
American screwworm fly in Libya [letter] Gabaj MM, et al. **Vet Rec** 1989 Feb 11;124(6):152
Control of Dermatobia hominis infestation in cattle using an ivermectin slow-release bolus. McMullin PF, et al.
Vet Rec 1989 Apr 29;124(17):465
Fly strike in a dog [letter] Penny DS. **Vet Rec** 1989 Jul 1; 125(1):24
[Oestrus ovis infestation in small ruminants in Burkina Faso] Belem AM, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(1):59–64 (Eng. Abstr.) **(Fre)**
[Survival of the larvae of the ship botfly Oestrus ovis L. depending on the function of the immune system of the host's body] Marchenko VA, et al. **Parazitologiia** 1989 Mar–Apr;23(2):129–33 (Eng. Abstr.) **(Rus)**

MYOBLASTOMA

Primary endobronchial granular cell myoblastoma. Lui RC, et al. **Ann Thorac Surg** 1989 Jul;48(1):113–5
Esophageal miliary granular cell tumor [letter] Meroni E, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):274

COMPLICATIONS

Acute bleeding from leiomyoblastoma of the greater omentum. A case report. Rye BA, et al. **Tumori** 1989 Jun 30;75(3):296–8 (10 ref.)

DIAGNOSIS

Granular cell tumor of the breast mimicking carcinoma in pregnancy. Kommoss F, et al. **Obstet Gynecol** 1989 May; 73(5 Pt 2):898–900 (16 ref.)
[Granular cell tumor—a benign tumor of the breast which mimics a carcinoma] Dolif R, et al. **ROFO** 1988 Oct; 149(4):438–9 **(Ger)**

PATHOLOGY

Granular cell tumor of the esophagus. Giacobbe A, et al. **Am J Gastroenterol** 1988 Dec;83(12):1398–400
Granular cell tumor of the stomach coincident with two early gastric carcinomas. Yamaguchi K, et al.
Am J Gastroenterol 1989 Jun;84(6):656–9
Bilateral granular cell tumors of the posterior mediastinum. Aisner SC, et al. **Ann Thorac Surg** 1988 Dec;46(6):688–9
Granular cell tumor of the esophagus: natural history, diagnosis, and therapy. Brady PG, et al. **Dig Dis Sci** 1988 Oct;33(10):1329–33
Obstruction of the pancreatic duct by a granular cell tumor. Sekas G, et al. **Dig Dis Sci** 1988 Oct;33(10):1334–7
An unusual laryngeal lesion in children: granular cell tumor. Goldofsky E, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):263–7
Granular cell myoblastoma of the supraglottis. Robb PJ, et al. **J Laryngol Otol** 1989 Mar;103(3):328–30
Morphometric study of pseudoepitheliomatous hyperplasia in granular cell tumors of the tongue. van der Wal N, et al. **J Oral Pathol Med** 1989 Jan;18(1):8–10
Reactive granular cell lesion in gingival fibrous hyperplasia: immunohistochemical observations. Alguacil-Garcia A, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):697–700
Alveolar soft part sarcoma of the nasal cavity. Barbareschi M, et al. **Pathologica** 1988 May–Jun;80(1067):363–70
Multiple cutaneous granular cell tumors in childhood. Kyler JR, et al. **South Med J** 1988 Dec;81(12):1583–6 (25 ref.)
[What is your diagnosis? Granular cell tumor (Abrikossoff's tumor)] Berbis P, et al. **Ann Dermatol Venereol** 1989; 116(3):247–8 **(Fre)**
[Granular cell tumor. Apropos of 3 cases] Ben Ayed M, et al. **Tunis Med** 1987 May;65(5):353–8 (Eng. Abstr.) **(Fre)**
[Granular cell myoblastoma of the pharynx] Maj J, et al. **Wiad Lek** 1988 Jul 15;41(14):958–62 (Eng. Abstr.) **(Pol)**
[Granular cell tumor of the lung] Bobylev NV, et al.
Vestn Khir 1987 Dec;139(12):56–8 **(Rus)**
[Granular cell tumor. Unusual location] Velasco Fernández C, et al. **Med Cutan Ibero Lat Am** 1988;16(4):319–21 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Intrathoracic granular cell myoblastoma. Robinson JM, et al. **South Med J** 1988 Nov;81(11):1453–7 (31 ref.)

SURGERY

Treatment of tracheobronchial granular cell myoblastomas with endoscopic bipolar cautery. Cunningham L, et al. **Chest** 1989 Aug;96(2):427–9
[Myoblastic myoma of the tendon of long flexor of the thumb] Urban K, et al.
Acta Chir Orthop Traumatol Cech 1989 Apr;56(2):129–33 (Eng. Abstr.) **(Cze)**

ULTRASTRUCTURE

Malignant granular cell tumour with intraperitoneal

dissemination. O'Donovan DG, et al. **Histopathology** 1989 Apr;14(4):417–9
Expression of intermediate filaments and stromal proteins in granular cell tumor of the tongue. Ophir D, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):689–96

MYOCARDIAL CONTRACTION

Changes in myocardial contractility during shock. Erdmann E. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):155–8
New criteria to increase the reliability of systolic time intervals in left bundle branch block and right ventricular pacing. Cokkinos DV, et al. **Acta Cardiol (Brux)** 1988; 43(5):583–94
Diastolic coronary artery narrowing due to left ventricular dilatation [corrected and republished article originally printed in Acta Cardiologica 1988;43(1):49–53] Cokkinos DV, et al. **Acta Cardiol (Brux)** 1988;43(5):625–30
Alteration of ventricular function during coronary artery surgery. Mangano DT. **Acta Chir Scand Suppl** 1989; 550:57–62
Effect of heart rate and myocardial contractile force on coronary resistance. Saito D, et al. **Acta Med Okayama** 1988 Dec;42(6):335–42
Atrioventricular valve plane displacement in healthy persons. An echocardiographic study. Höglund C, et al. **Acta Med Scand** 1988;224(6):557–62
Significance of ventricular ectopic activity in the early recovery phase of acute myocardial infarction. Rasmussen V, et al. **Acta Med Scand** 1988;224(5):431–7
Myocardial dysfunction in two hypothyroid twins with thalassaemia major. Fiorillo A, et al. **Acta Paediatr Scand** 1989 May;78(3):455–7
Mechanical behavior of rest contractions in cardiac muscle. Vassallo DV, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):87–97
Positive inotropic effect on the rat atrial myocardium compressed to 5, 10 and 30 bar. Ask JA, et al. **Acta Physiol Scand** 1988 Oct;134(2):277–83
Short-term effects of stimulus interval changes in guinea-pig and rat atrial muscle. Jóhannsson M, et al. **Acta Physiol Scand** 1989 Feb;135(2):73–81
The cardiovascular effects of deconditioning after endurance training in rats. Karhunen MK, et al. **Acta Physiol Scand** 1988 Jul;133(3):307–14
Transmural distribution of biochemical markers of total protein and collagen synthesis, myocardial contraction speed and capillary density in the rat left ventricle in angiotensin II–induced hypertension. Leipälä JA, et al. **Acta Physiol Scand** 1988 Jul;133(3):325–33
Increased cardiac contractility in rats exposed to 5 bar. Stuhr LE, et al. **Acta Physiol Scand** 1989 Jun;136(2):167–76
Factors reducing left and right ventricular output during simultaneous atrioventricular activation in the pig heart. Vengen OA, et al. **Acta Physiol Scand** 1989 Apr; 135(4):477–86
Coronary endarterectomy: an old technique and new controversies. Minale C, et al. **Adv Cardiol** 1988;36:34–40
The effect of IABP ventricular contractility of the normal and ischemic canine heart assessed in situ by T-Emax. Chen J, et al. **Adv Exp Med Biol** 1989;248:517–25
Of molecules, motion, man, and machines. Urry DW. **Ala J Med Sci** 1988 Oct;25(4):475–85
Late systolic indices of ventricular function: noninvasive derivation in congestive heart failure. Binkley PF, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1276–82
Diastolic segmental compression of saphenous vein bypass graft. Chokshi SK, et al. **Am Heart J** 1989 Aug; 118(2):402–4
Relationship of functional recovery to scar contraction after myocardial infarction in the canine left ventricle. Choong CY, et al. **Am Heart J** 1989 Apr;117(4):819–29
Acute determinants of the hangout interval in the pulmonary circulation. Dell'Italia LJ, et al. **Am Heart J** 1988 Nov; 116(5 Pt 1):1289–97
Diastolic mitral regurgitation in acute but not chronic aortic regurgitation: implications regarding the mechanism of mitral closure. Downes TR, et al. **Am Heart J** 1989 May; 117(5):1106–12
Effect of afterload alterations on the functional border zone measured with two-dimensional echocardiography during acute coronary occlusion. Kavanaugh KM, et al. **Am Heart J** 1988 Oct;116(4):942–53
Influence of coronary collaterals on left ventricular function in patients undergoing coronary angioplasty. Khaja F, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1174–80
Pseudoakinesis: a radionuclide ventriculography sign for subacute heart rupture and tamponade early after acute myocardial infarction. Leor J, et al. **Am Heart J** 1989 Sep; 118(3):612–4
Quantitative regional curvature analysis: a prospective evaluation of ventricular shape and wall motion measurements. Mancini GB, et al. **Am Heart J** 1988 Dec; 116(6 Pt 1):1616–21
The effect of regional myocardial ischemia on Doppler echocardiographic indexes of left ventricular performance: influence of heart rate, aortic blood pressure, and the size of the ischemic zone. Mathias DW, et al. **Am Heart J** 1988 Oct;116(4):953–60
Controlled versus hyperemic flow during reperfusion of jeopardized ischemic myocardium. Peng CF, et al. **Am Heart J** 1989 Mar;117(3):515–22
Changes in diastolic function—difficult to measure, harder to interpret. Plotnick GD. **Am Heart J** 1989 Sep; 118(3):637–41 (59 ref.)
Is "stunned myocardium" a protective mechanism? Effect of acute recruitment and acute beta-blockade on recovery of contractile function and high-energy phosphate stores at 1 day post-reperfusion. Przyklenk K, et al. **Am Heart J** 1989 Sep;118(3):480–9
Radionuclide left ventricular contractile indices and their relationship to heart size in dogs. Starling MR, et al. **Am Heart J** 1989 Aug;118(2):325–33
Plasma atrial natriuretic polypeptide as an index of left ventricular end-diastolic pressure in patients with chronic left-sided heart failure. Tsutamoto T, et al. **Am Heart J** 1989 Mar;117(3):599–606
Planar positron imaging of rubidium-82 for myocardial infarction: a comparison with thallium-201 and regional wall motion. Williams KA, et al. **Am Heart J** 1989 Sep; 118(3):601–10
Early recovery of regional left ventricular function after reperfusion in acute myocardial infarction assessed by serial two-dimensional echocardiography. Bourdillon PD, et al. **Am J Cardiol** 1989 Mar 15;63(11):641–6
Usefulness of ambulatory radionuclide monitoring of left ventricular function early after acute myocardial infarction for predicting residual myocardial ischemia. Breisblatt WM, et al. **Am J Cardiol** 1988 Nov 15;62(16):1005–10
Effects of ischemia, bypass surgery and past infarction on myocardial contraction, relaxation and compliance during exercise. Carroll JD, et al. **Am J Cardiol** 1989 Mar 7; 63(10):65E–71E
Clinical and hemodynamic significance of left ventricular diastolic volume changes by exercise radionuclide ventriculography in coronary artery disease. Choi BW, et al. **Am J Cardiol** 1989 Mar 1;63(9):522–5
Left ventricular inotropic effect of atrial pacing after coronary artery bypass grafting. Eichhorn EJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):687–92
Left ventricular exercise echocardiographic abnormalities in apparently healthy men with exertional hypotension. Fisman EZ, et al. **Am J Cardiol** 1989 Jan 1;63(1):81–5
Left ventricular filling patterns in aortic stenosis in patients older than 65 years of age. Gallino RA, et al. **Am J Cardiol** 1989 May 1;63(15):1103–6
Effect of aging on peak systolic left ventricular wall stress in normal subjects. Gardin JM, et al. **Am J Cardiol** 1989 Apr 15;63(13):998–9
Right ventricular myocardial function after atrial switch operation for transposition of the great arteries. Kato H, et al. **Am J Cardiol** 1989 Jan 15;63(3):226–30
On whether there is a true increase in myocardial stiffness during myocardial ischemia. Krayenbuehl HP, et al. **Am J Cardiol** 1989 Mar 7;63(10):78E–82E (11 ref.)
Usefulness of negative dP/dt upstroke pattern for assessment of left ventricular relaxation in coronary artery disease. Kumada T, et al. **Am J Cardiol** 1989 Mar 7;63(10):60E–64E
Effect of heart rate alterations produced by atrial pacing on the pattern of diastolic filling in normal subjects. Lavine SJ, et al. **Am J Cardiol** 1988 Nov 15;62(16):1098–102
Importance of the left ventricular filling pressure on diastolic filling in idiopathic dilated cardiomyopathy. Lavine SJ, et al. **Am J Cardiol** 1989 Jul 1;64(1):61–5
Comparison of Doppler echocardiographic and hemodynamic indexes of left ventricular diastolic properties in coronary artery disease. Lin SL, et al. **Am J Cardiol** 1988 Nov 1;62(13):882–6
Pulsed Doppler assessment of left ventricular diastolic filling in children with left ventricular outflow obstruction before and after balloon angioplasty. Meliones JN, et al. **Am J Cardiol** 1989 Jan 15;63(3):231–6
Influence of age on left ventricular contractility. Merino A, et al. **Am J Cardiol** 1988 Nov 15;62(16):1103–8
Left ventricular intrinsic contractility in pure rheumatic mitral stenosis. Mohan JC, et al. **Am J Cardiol** 1989 Jul 15;64(3):240–2
Alterations in left ventricular relaxation, early diastolic filling and passive viscoelastic properties during postpacing ischemia. Nakamura Y, et al. **Am J Cardiol** 1989 Mar 7; 63(10):72E–77E
What factors predict recovery of contractile function in the canine model of the stunned myocardium? Przyklenk K, et al. **Am J Cardiol** 1989 Sep 19;64(11):18F–26F
Respiratory influence on right and left ventricular diastolic function in normal children. Riggs TW, et al. **Am J Cardiol** 1989 Apr 1;63(12):858–61
Influence of left atrial systolic emptying on left ventricular early filling dynamics by Doppler in patients with sequential atrioventricular pacemakers. Rokey R, et al. **Am J Cardiol** 1988 Nov 1;62(13):968–71
Is there a true increase in myocardial stiffness with acute ischemia? Ross J Jr. **Am J Cardiol** 1989 Mar 7; 63(10):87E–91E (13 ref.)
Evolution of left ventricular function after intracoronary thrombolysis for acute myocardial infarction. Schmidt WG, et al. **Am J Cardiol** 1989 Mar 1;63(9):497–502
Transient atrial dysfunction after conversion of chronic atrial fibrillation to sinus rhythm. Shapiro EP, et al. **Am J Cardiol** 1988 Dec 1;62(17):1202–7
Factors influencing accuracy in left ventricular volume determination. Sheehan FH, et al. **Am J Cardiol** 1989 Sep 15;64(10):661–4
Doppler left ventricular diastolic filling abnormalities in aortic stenosis and their relation to hemodynamic parameters. Sheikh KH, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1360–8
Influence of age and sex on left ventricular filling at rest in subjects without clinical cardiac disease. Sinak LJ, et al. **Am J Cardiol** 1989 Sep 15;64(10):646–50
Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound. Störk TV, et al. **Am J Cardiol** 1989 Sep 15;64(10):655–60
Is stiffness increased during ischemia? Sys SU, et al. **Am J Cardiol** 1989 Mar 7;63(10):83E–86E (61 ref.)
Effect of acute systemic blood pressure elevation on left ventricular filling with and without mitral regurgitation. Takenaka K, et al. **Am J Cardiol** 1989 Mar 1;63(9):623–5
Dubious reliability of Q-wave formation in predicting new regional left ventricular akinesis after coronary artery bypass grafting. Taylor GJ, et al. **Am J Cardiol** 1988 Dec 1;62(17):1299–301
Relation of atrial natriuretic peptide release to atrial contraction. Vardas PE, et al. **Am J Cardiol** 1989 Mar 15; 63(11):753–5
Transient alterations of the QRS complex and ST segment during percutaneous transluminal balloon angioplasty of the left anterior descending coronary artery. Wagner NB, et al. **Am J Cardiol** 1988 Nov 15;62(16):1038–42
Effects of age and 24-hour ambulatory blood pressure on rapid left ventricular filling. White WB, et al. **Am J Cardiol** 1989 Jun 1;63(18):1343–7
Evaluation of left ventricular contractility indexes for the detection of symptomatic and silent myocardial ischemia. Wilson MF, et al. **Am J Cardiol** 1988 Dec 1;62(17):1176–9
Diastolic dysfunction in elderly patients with congestive heart failure. Wong WF, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1526–8
Decreased regional contractility in nonischemic myocardium during acute coronary artery occlusion in conscious pigs. Guth BD, et al. **Am J Cardiovasc Pathol** 1988;1(3):379–87
Effect of increasing intraabdominal pressure and volume on left ventricular function in continuous ambulatory peritoneal dialysis (CAPD). Franklin JO, et al. **Am J Kidney Dis** 1988 Oct;12(4):291–8
Altered myocardial states. The stunned and hibernating myocardium. Kloner RA, et al. **Am J Med** 1989 Jan 16; 86(1A):14–22 (80 ref.)
Connective tissue cells in healing rat myocardium. A study of cell reactions in rhythmically contracting environment. Vracko R, et al. **Am J Pathol** 1989 May;134(5):993–1006
Frog ventricle: participation of SR in excitation–contraction coupling. Anderson ME, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):H1432–9
Wall motion asynchrony prolongs time constant of left ventricular relaxation. Aoyagi T, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H883–90
SR Ca loading in cardiac muscle preparations based on rapid-cooling contractures. Bers DM. **Am J Physiol** 1989 Jan;256(1 Pt 1):C109–20
Nonuniform transmural recovery of contractile function in stunned myocardium. Bolli R, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H375–85
Pressure response to quick volume changes in tetanized isolated ferret hearts. Campbell KB, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H38–46
Left ventricular function in experimental volume overload hypertrophy. Carabello BA, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H974–81
Beyond pure parasystole: promises and problems in modeling complex arrhythmias. Courtemanche M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H693–706
Morphological and contractile characteristics of rat cardiac myocytes from maturation to senescence. Fraticelli A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H259–65
Isochronal behavior in left ventricular systolic pressure–wall thickness relations. Funai JT, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1136–43
Vagal stimulation decreases rate of left ventricular relaxation. Henning RJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H428–33
Effects of vagus nerve on heart rate and ventricular contractility in chicken. Lang SA, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1295–302
Single-beat evaluation of left ventricular inotropic state in conscious dogs. Lascano EC, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H56–65
Influence of nonuniformity on rate of left ventricular pressure fall in the dog. Lew WY, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H222–32
Developmental regulation of cardiac calcium channels and contractile sensitivity to [Ca]o. Marsh JD, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H179–85
Separation of rate of left ventricular relaxation from chamber stiffness in rats. Momomura S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1468–75
Modulation of Ca2+ channel selectivity and cardiac contraction by photorelease of Ca2+. Näbauer M, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H916–20
Contractile function of heterogeneously perfused myocardium in conscious dogs. Nagata M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H352–60
Tension and electrolyte changes with Na+–K+ pump inhibition in rat papillary muscle. Parsons D, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H942–53
Ca2+-dependent heterometric and homeometric

autoregulation in hypertrophied rat heart. Pawlush DG, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1139–47

Control of segment length or force in isolated papillary muscle: an adaptive approach. Peterson JN, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1726–34

Stiffness and shortening changes in myofilament-extracted rat cardiac myocytes. Roos KP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H539–51

Hyperemic response to coronary occlusion during a single diastole in conscious dog. Sadick N, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1645–50

Direct diastolic ventricular interaction gain measured with sudden hemodynamic transients. Slinker BK, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H567–73

Beat-to-beat regulation of left ventricular function in the intact cardiovascular system. Slinker BK, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R962–75

Simulated ischemia and intracellular pH in isolated ventricular muscle. Vanheel B, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C365–76

Effect of timing of transient diastolic changes in ventricular filling on LV performance in dogs. Van Hessen MW, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H305–13

Role of aiNa in positive force-frequency staircase in guinea pig papillary muscle. Wang DY, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C798–807

Minor preload dependence of O2 consumption of unloaded contraction in dog heart. Yasumura Y, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1289–94

Determination of decay constants from time-varying pressure data [letter; comment] Beattie C, et al. **Anesthesiology** 1989 Jan;70(1):159–60. **Comment on:** Anesthesiology 1988 May;68(5):764–70

Opening of coronary collaterals by repeated brief coronary occlusions in conscious dogs. Fujita M, et al. **Angiology** 1988 Nov;39(11):973–80

Free calcium in rat papillary muscle at contraction assessed with Ca-selective microelectrodes. Gasser R, et al. **Angiology** 1989 Aug;40(8):736–42

Mechanical, biochemical, and structural effects of vitamin D deficiency on the chick heart. Hochhauser E, et al. **Angiology** 1989 Apr;40(4 Pt 1):300–8

Coupling between cardiac and locomotor rhythms: the phase lag between heart beats and pedal thrusts. Kirby RL, et al. **Angiology** 1989 Jul;40(7):620–5

Systolic and diastolic septal and posterior wall echocardiographic measurements in normal subjects. Kounis NG, et al. **Angiology** 1989 Jun;40(6):521–6

Exercise first-pass radionuclide assessment of left and right ventricular function and valvular regurgitation in symptomatic mitral valve prolapse. Lumia FJ, et al. **Angiology** 1989 May;40(5):443–9

Increased production of oxygen free radicals by polymorphonuclear leukocytes in heart failure due to aortic stenosis. Prasad K, et al. **Angiology** 1989 May;40(5):472–8

Assessment of the left ventricular diastolic function in constrictive pericarditis by digitised M-mode echocardiography. Nordrehaug JE, et al. **Ann Clin Res** 1988;20(3):164–8

Electromechanical dissociation [letter] McGrath RB. **Ann Emerg Med** 1989 Jan;18(1):114

Right and left ventricular performance during and after abdominal aortic aneurysm repair. Harpole DH, et al. **Ann Surg** 1989 Mar;209(3):356–62

Akinetic versus dyskinetic left ventricular aneurysms diagnosed by gated scintigraphy: difference in surgical outcome. Mangschau A. **Ann Thorac Surg** 1989 May; 47(5):746–51

Assessment of left ventricular wall motion. Meaney E, et al. **Arch Inst Cardiol Mex** 1976 May-Jun;46(3):280–9

Heart failure with normal systolic function. Update of prevalence, differential diagnosis, prognosis, and therapy [see comments] Kessler KM. **Arch Intern Med** 1988 Oct; 148(10):2109–11. **Comment in:** Arch Intern Med 1989 Jul;149(7):1695

Heart failure secondary to diastolic dysfunction [letter; comment] Murphy PK. **Arch Intern Med** 1989 Jul; 149(7):1695. **Comment on:** Arch Intern Med 1988 Oct;148(10):2109–11

Long-term preservation of a beating heart in an artificial environment. Abe Y, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):778–81

Infestation in the dog by the paralysis tick, Ixodes holocyclus. 4. Cardiovascular effects. Ilkiw JE, et al. **Aust Vet J** 1988 Aug;65(8):232–5

Sex differences in the tolerance of immature rat myocardium to global ischemia. Avkiran M, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):618–25

Geometric and muscle physiological determinants of cardiac stroke volume as evaluated on the basis of model calculations. Gülch RW, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):476–85

High-energy phosphates, myocardial contractile function and material properties after short periods of oxygen deficiency. Hoffmeister HM, et al. **Basic Res Cardiol** 1989 Jan-Feb; 84(1):77–90

Ventricular pressure-volume relations as the primary basis for evaluation of cardiac mechanics. Return to Frank's diagram. Jacob R, et al. **Basic Res Cardiol** 1989 May-Jun; 84(3):227–46 (99 ref.)

Characterization of regional left ventricular contraction by curvature difference analysis. Marcus E, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):486–500

Rest- and stimulation-dependent changes in exchangeable calcium content in rabbit ventricular myocardium. Pytkowski B. **Basic Res Cardiol** 1989 Jan-Feb;84(1):22–9

Effects of physical training on the myocardium of streptozotocin-induced diabetic rats. Takeda N, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):525–30

Enhanced myocardial contractility but not tachycardia persists in isolated working hyperthyroid rat hearts. Wheatley AM, et al. **Basic Res Cardiol** 1988 Nov-Dec; 83(6):634–46

The effect of coronary arterial pressure on myocardial distensibility. Absence of a "garden hose" effect during in-vivo conditions. Zhao M, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):626–33

Simultaneous measurement of cytosolic free calcium concentration and cell circumference during contraction, both in a single rat cardiomuscular cell, by digital imaging microscopy with indo-1. Tamura K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):926–32

Effects of hemoglobin perfusion on contractile function of the isolated ventricular septa. Kim HW, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):331–45

Contribution of a Ca-dependent component to the transient outward current in rabbit ventricular fibres. Albitz R, et al. **Biomed Biochim Acta** 1988;47(12):1077–80

Phosphorylation of phospholamban and troponin I in the ischemic and reperfused heart: attenuation and restoration of isoprenaline responsiveness. Bartel S, et al. **Biomed Biochim Acta** 1989;48(2-3):S108–13

Afterload dependence of cardiac contraction parameters. Scheufler K, et al. **Biomed Biochim Acta** 1989; 48(5-6):S408–11

Threephasic contractions in mammalian myocardium. Isolation and identification of a late component. Implications for rested-state contractions. Schüttler K, et al. **Biomed Biochim Acta** 1989;48(5-6):S558–64

Left ventricular filling and early diastolic function at rest and during angina in patients with coronary artery disease. Dawson JR, et al. **Br Heart J** 1989 Mar;61(3):248–57

Diastolic function after cardiac and heart-lung transplantation. Hausdorf G, et al. **Br Heart J** 1989 Aug; 62(2):123–32

Effects of increasing afterload on early diastolic dysfunction in hypertrophic non-obstructive cardiomyopathy. Hausdorf G, et al. **Br Heart J** 1988 Sep;60(3):240–6

Impaired left ventricular diastolic filling in patients with familial amyloid polyneuropathy: a pulsed Doppler echocardiographic study. Kinoshita O, et al. **Br Heart J** 1989 Feb;61(2):198–203

Optimal atrioventricular delay at rest and during exercise in patients with dual chamber pacemakers: a non-invasive assessment by continuous wave Doppler. Mehta D, et al. **Br Heart J** 1989 Feb;61(2):161–6

Relation of third and fourth heart sounds to blood velocity during left ventricular filling. Vancheri F, et al. **Br Heart J** 1989 Feb;61(2):144–8

Negative inotropic activity of antilaminin IgG: participation of cholinergic mechanisms. Bacman S, et al. **Br J Pharmacol** 1989 Jun;97(2):377–82

The involvement of lactate and calcium as mediators of the electrical and mechanical responses of the myocardium to conditions of simulated ischaemia. Northover BJ. **Br J Pharmacol** 1989 Jul;97(3):809–18

Difference between the response of the pulmonary and systemic circulation during exercise in congestive heart failure. Lage SG, et al. **Braz J Med Biol Res** 1988; 21(1):65–70

Lack of correlation between anatomic infarct size and ventriculographic variables following coronary occlusion in closed-chest dogs. Laurindo FR, et al. **Braz J Med Biol Res** 1988;21(5):927–38

Influence of stimulatory parameters on sinus node recovery time: an in vitro study. Marques JL, et al. **Braz J Med Biol Res** 1988;21(5):1079–82

Right ventricular contractility depression in chronically infarcted rats. Mill JG, et al. **Braz J Med Biol Res** 1988; 21(3):621–4

Some applications of the P-V relation to the study of left ventricular performance. Shoucri RM, et al. **Bull Math Biol** 1989;51(4):475–84

Rest and exercise left ventricular ejection and filling characteristics following orthotopic cardiac transplantation. Pflugfelder PW, et al. **Can J Cardiol** 1989 Apr;5(3):161–7

Effects of manganese chloride, verapamil, and hypoxia on the rate-dependent increase in internal longitudinal resistance of rabbit myocardium. Alvarez J, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):263–8

Systolic pressure gradients between the wall of the left ventricle, the left ventricular chamber, and the aorta during positive inotropic states: implications for left ventricular efficiency. Butler CK, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):873–9

Relationship between oxidative phosphorylation and adenine nucleotide translocase activity of two populations of cardiac mitochondria and mechanical recovery of ischemic hearts following reperfusion. Duan J, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):704–9

The Anrep effect: an intrinsic myocardial mechanism [published erratum appears in Can J Physiol Pharmacol 1989 Feb;67(2):172] Nichols CG, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):924–9

Aftercontractions and excitation-contraction coupling in rat cardiac muscle. ter Keurs HE, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1239–45

Maturation and cardiac contractility. Anderson PA. **Cardiol Clin** 1989 May;7(2):209–25 (84 ref.)

Blood pool scintigraphy. Botvinick EH, et al. **Cardiol Clin** 1989 Aug;7(3):537–63 (118 ref.)

Assessment of anatomy and cardiac function by Doppler echocardiography. Douglas PS, et al. **Cardiol Clin** 1989 Aug;7(3):483–91 (36 ref.)

New radionuclide agents for cardiac imaging: description and application. Kahn JK, et al. **Cardiol Clin** 1989 Aug; 7(3):589–605 (58 ref.)

Ultrafast cardiac CT scanning. Rumberger JA, et al. **Cardiol Clin** 1989 Aug;7(3):713–34 (49 ref.)

Cine magnetic resonance imaging: tomographic analysis of left ventricular function. Wagner S, et al. **Cardiol Clin** 1989 Aug;7(3):651–9 (19 ref.)

Anterior ST segment depression in first inferior myocardial infarction: echocardiographic analysis of extent of left ventricular wall motion abnormality. Hayat NH, et al. **Cardiologia** 1988 Oct;33(10):921–6

Early systolic contraction abnormalities in chronic ischemic heart disease. Assessment by quantitative two-dimensional echocardiography. Zanolla L, et al. **Cardiologia** 1988 Oct; 33(10):977–83

Myocardial function in heart failure. Dalla-Volta S, et al. **Cardiology** 1988;75 Suppl 1:8–18 (39 ref.)

Effects of left bundle branch block on left ventricular function in apparently normal subjects. Study by equilibrium radionuclide angiocardiography at rest. De Nardo D, et al. **Cardiology** 1988;75(5):365–71

'Programmed' left ventricular angiography: a new method for assessing left ventricular compliance. Di Donato M, et al. **Cardiology** 1988;75(5):328–37

Noninvasive assessment of systolic and diastolic function in 50 patients with Friedreich's ataxia. Giunta A, et al. **Cardiology** 1988;75(5):321–7

Right ventricular function in cor pulmonale. MacNee W. **Cardiology** 1988;75 Suppl 1:30–40 (54 ref.)

Noninvasive assessment of left ventricular diastolic function by pulsed Doppler echocardiography in young alcoholics. Silberbauer K, et al. **Cardiology** 1988;75(6):431–9

The hemodynamic evaluation in hypertrophic cardiomyopathy: systolic and diastolic dysfunction. Murgo JP. **Cardiovasc Clin** 1988;19(1):193–220 (54 ref.)

A non-linear elastic model of contraction of ischaemic segments. Akaishi M, et al. **Cardiovasc Res** 1988 Dec; 22(12):889–99

Contractile function and reserve during acute ischaemia in the canine lateral border zone. Askenase AD, et al. **Cardiovasc Res** 1988 Feb;22(2):122–30

Diastolic characteristics and cardiac energetics of isolated hearts exposed to volume and pressure overload. Friberg P. **Cardiovasc Res** 1988 May;22(5):329–39

Changes in right ventricular relaxation during acute anterior myocardial infarction in pigs. Lancaster LD, et al. **Cardiovasc Res** 1989 Jan;23(1):46–52

Review: Relation between beat interval and force of the heartbeat and its clinical implications. Seed WA, et al. **Cardiovasc Res** 1988 May;22(5):303–14 (133 ref.)

Do all patients with aortic stenosis and left ventricular dysfunction benefit from aortic valve replacement? [editorial] Carabello BA. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):131–2

Relation between transpulmonary pressure and right ventricular isovolumetric pressure change during respiratory support. Jardin F, et al. **Cathet Cardiovasc Diagn** 1989 Apr;16(4):215–20

Use of a conductance (volume) catheter and transient inferior vena caval occlusion for rapid determination of pressure-volume relationships in man. Kass DA, et al. **Cathet Cardiovasc Diagn** 1988;15(3):192–202

Variability and reproducibility of quantitative left ventricular angiography. Rigaud M, et al. **Cathet Cardiovasc Diagn** 1989 Jan;16(1):8–15

Preservation of left ventricular function in patients with total occlusion of the left anterior descending coronary artery and wide-caliber distal vessel filling by collateral vasculature. Sedlis SP, et al. **Cathet Cardiovasc Diagn** 1988; 15(3):139–42

Preoperative left ventricular wall stress, ejection fraction, and aortic valve gradient as prognostic indicators in aortic valve stenosis. Smucker ML, et al. **Cathet Cardiovasc Diagn** 1989 Jul;17(3):133–43

Systolic and diastolic performance in normal human subjects as measured by ultrafast computed tomography. Wachspress JD, et al. **Cathet Cardiovasc Diagn** 1988; 15(4):277–83

Assessment of right ventricular function [editorial] Albert RK. **Chest** 1988 Dec;94(6):1123–4

Left ventricular function during stable sustained ventricular tachycardia. Hemodynamic and echo-Doppler analysis. Baron SB, et al. **Chest** 1989 Aug;96(2):275–80

Pulmonary hypertension and right ventricular function in patients with COPD. Biernacki W, et al. **Chest** 1988 Dec; 94(6):1169–75

Myocardial dysfunction in sepsis. Recent insights. Cunnion RE, et al. **Chest** 1989 May;95(5):941–5

Diastolic time during low-level exercise in the late phase of hospitalization for acute myocardial infarction.

Hasegawa T, et al. **Chest** 1989 Sep;96(3):601–5

Chronotropic responsiveness of developing sinoatrial and ventricular rat myocytes to autonomic agonists following adrenergic and cholinergic innervation in vitro. Atkins DL, et al. **Circ Res** 1989 Jun;64(6):1051–62

Relaxation of rabbit ventricular muscle by Na–Ca exchange and sarcoplasmic reticulum calcium pump. Ryanodine and voltage sensitivity. Bers DM, et al. **Circ Res** 1989 Aug; 65(2):334–42

Chronotropic stimulation: a primary effector for release of atrial natriuretic factor. Bilder GE, et al. **Circ Res** 1989 Apr;64(4):799–805

Marked reduction of free radical generation and contractile dysfunction by antioxidant therapy begun at the time of reperfusion. Evidence that myocardial "stunning" is a manifestation of reperfusion injury. Bolli R, et al. **Circ Res** 1989 Sep;65(3):607–22

Shortening velocity and myosin and myofibrillar ATPase activity related to myosin isoenzyme composition during postnatal development in rat myocardium. Cappelli V, et al. **Circ Res** 1989 Aug;65(2):446–57

Determinants of left ventricular filling and of the diastolic pressure–volume relation. Gilbert JC, et al. **Circ Res** 1989 May;64(5):827–52 (204 ref.)

Nonhomogeneous left ventricular regional shortening during acute right ventricular pressure overload. Goto Y, et al. **Circ Res** 1989 Jul;65(1):43–54

Fibrillar collagen and myocardial stiffness in the intact hypertrophied rat left ventricle. Jalil JE, et al. **Circ Res** 1989 Jun;64(6):1041–50

Spontaneous sarcoplasmic reticulum calcium release in rat and rabbit cardiac muscle: relation to transient and rested-state twitch tension. Kort AA, et al. **Circ Res** 1988 Nov;63(5):969–79

ATPase activity of the cross-linked complex between cardiac myosin subfragment 1 and actin in several models of chronic overloading. A new approach to the biochemistry of contractility. Lauer B, et al. **Circ Res** 1989 Jun; 64(6):1106–15

Regional left ventricular epicardial deformation in the passive dog heart. McCulloch AD, et al. **Circ Res** 1989 Apr; 64(4):721–33

Contraction modulates the capacity for protein synthesis during growth of neonatal heart cells in culture. McDermott PJ, et al. **Circ Res** 1989 Mar;64(3):542–53

Modulation by the thyroid state of intracellular calcium and contractility in ferret ventricular muscle. MacKinnon R, et al. **Circ Res** 1988 Dec;63(6):1080–9

Systolic direct ventricular interaction affects left ventricular contraction and relaxation in the intact dog circulation. Slinker BK, et al. **Circ Res** 1989 Aug;65(2):307–15

Effects of acidosis on ventricular muscle from adult and neonatal rats. Solaro RJ, et al. **Circ Res** 1988 Oct; 63(4):779–87

Myocardial stretch stimulates phosphatidylinositol turnover. von Harsdorf R, et al. **Circ Res** 1989 Aug;65(2):494–501

Progressive hypoxemia limits left ventricular oxygen consumption and contractility. Walley KR, et al. **Circ Res** 1988 Nov;63(5):849–59

Time-invariant oxygen cost of mechanical energy in dog left ventricle: consistency and inconsistency of time-varying elastance model with myocardial energetics. Yasumura Y, et al. **Circ Res** 1989 Apr;64(4):764–78

Variation in end-systolic pressure–diameter relationship using dP/dtmin or P/Dmax as a definition of end-systole in chronic endotoxemic pigs. Goldfarb RD, et al. **Circ Shock** 1989 Jun;28(2):109–19

Hemorrhagic shock depresses myocardial contractile function in the guinea pig. Horton JW. **Circ Shock** 1989 May;28(1):23–35

Effect of acute volume load on refractoriness and arrhythmia development in isolated, chronically infarcted canine hearts. Calkins H, et al. **Circulation** 1989 Mar;79(3):687–97

Protective effects of retrograde compared with antegrade cardioplegia on right ventricular systolic and diastolic function during coronary bypass surgery. Eichhorn EJ, et al. **Circulation** 1989 Jun;79(6):1271–81

Oscillations of conduction, action potential duration, and refractoriness. A mechanism for spontaneous termination of reentrant tachycardias. Frame LH, et al. **Circulation** 1988 Nov;78(5 Pt 1):1277–87

Stress–shortening relations and myocardial blood flow in compensated and failing canine hearts with pressure–overload hypertrophy. Gaasch WH, et al. **Circulation** 1989 Apr;79(4):872–83

Prognostic implications and predictors of enhanced regional wall motion of the noninfarct zone after thrombolysis and angioplasty therapy of acute myocardial infarction. The TAMI Study Groups. Grines CL, et al. **Circulation** 1989 Aug;80(2):245–53

Functional abnormalities in isolated left bundle branch block. The effect of interventricular asynchrony. Grines CL, et al. **Circulation** 1989 Apr;79(4):845–53

Influence of contractile state on curvilinearity of in situ end-systolic pressure–volume relations. Kass DA, et al. **Circulation** 1989 Jan;79(1):167–78

Cell calcium in the pathophysiology of ventricular fibrillation and in the pathogenesis of postarrhythmic contractile dysfunction. Koretsune Y, et al. **Circulation** 1989 Aug; 80(2):369–79

Effect of ischemia on calcium-dependent fluorescence transients in rabbit hearts containing indo 1. Correlation with monophasic action potentials and contraction. Lee HC, et al. **Circulation** 1988 Oct;78(4):1047–59

Evaluation of left ventricular diastolic function. Lew WY. **Circulation** 1989 Jun;79(6):1393–7

Left ventricular contractility and function in Kawasaki syndrome. Effect of intravenous gamma-globulin. Newburger JW, et al. **Circulation** 1989 Jun;79(6):1237–46

Quantitative analysis of regional systolic function with left ventricular aneurysm. Nicolosi AC, et al. **Circulation** 1988 Oct;78(4):856–62

Postextrasystolic potentiation worsens fast filling of the hypertrophied left ventricle in aortic stenosis and hypertrophic cardiomyopathy. Paulus WJ, et al. **Circulation** 1988 Oct;78(4):928–40

Assessment of ventricular contractile state and function in patients with univentricular heart. Sano T, et al. **Circulation** 1989 Jun;79(6):1247–56

Global and regional left ventricular systolic performance in the in situ ejecting canine heart. Importance of the mitral apparatus. Sarris GE, et al. **Circulation** 1989 Sep;80(3 Pt 1):1124–42

Myocardial inotropic responses to aggregating platelets and modulation by the endocardium. Shah AM, et al. **Circulation** 1989 Jun;79(6):1315–23

Influence of alteration in preload on the pattern of left ventricular diastolic filling as assessed by Doppler echocardiography in humans. Stoddard MF, et al. **Circulation** 1989 Jun;79(6):1226–36

Postsystolic shortening of acutely ischemic canine myocardium predicts early and late recovery of function after coronary artery reperfusion. Takayama M, et al. **Circulation** 1988 Oct;78(4):994–1007

Modulation of the Purkinje–ventricular muscle junctional conduction by elevated potassium and hypoxia. Tan RC, et al. **Circulation** 1989 May;79(5):1100–5

Exercise-induced pulmonary blood volume changes and diastolic dysfunction of the aged heart. Alexopoulos D, et al. **Clin Cardiol** 1989 Apr;12(4):209–13

Mechanism of prolongation of pre-ejection period in the hypertrophied left ventricle with normal systolic function in unanesthetized hypertensive dogs. Matsuno Y, et al. **Clin Cardiol** 1988 Oct;11(10):702–6

Aortic regurgitation secondary to diastolic prolapse of a tubular intimal flap into the left ventricle in a patient with anuloaortic ectasia. Matsuo T, et al. **Clin Cardiol** 1988 Oct; 11(10):719–22

Diastolic atrioventricular valve closure and regurgitation following atrial contraction: their relation to timing of atrial contraction. Okamoto M, et al. **Clin Cardiol** 1989 Mar; 12(3):149–53

Diagnostic accuracy of 2-D echocardiography for detection of exercise-induced wall motion abnormalities in patients with coronary artery disease: comparison to biplane cineventriculography. Voelker W, et al. **Clin Cardiol** 1988 Aug;11(8):547–52

Functional significance of B1- versus B2-receptors for cardiac inotropic and chronotropic responses in man. Leenen FH. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:43–58

Echocardiographic findings in patients on maintenance hemodialysis substituted with recombinant human erythropoietin. Löw I, et al. **Clin Nephrol** 1989 Jan; 31(1):26–30

Radionuclide detection of abnormal ventricular filling patterns in rejecting human allografts. Tatum JL, et al. **Clin Nucl Med** 1989 Mar;14(3):175–8

Age-dependency of left ventricular filling dynamics and relaxation as assessed by pulsed Doppler echocardiography. Myreng Y, et al. **Clin Physiol** 1989 Apr;9(2):99–106

Mathematical model of cardiac mechanogram rhythmicity (based on mollusc heart). Easton DM. **Comp Biochem Physiol [C]** 1988;91(1):91–8

Histamine directly acts on beta-adrenoceptors as well as H1-histaminergic receptors, and causes positive inotropic effects in isolated ventricular muscles of carp heart (Cyprinus carpio). Temma K, et al. **Comp Biochem Physiol [C]** 1989;92(1):143–8

Effect of aerobic training on left ventricular diastolic filling. Senior DG, et al. **Conn Med** 1989 Feb;53(2):67–70

Tachycardial disorders of cardiac rhythm as a cause of left ventricular dysfunction. Bredikis YY, et al. **Cor Vasa** 1989; 31(2):110–7

Echo-Doppler evaluation of diastolic filling in differently induced left ventricular hypertrophy. Giunta A, et al. **Cor Vasa** 1989;31(3):195–202

A comparison of radionuclide and contrast left ventriculography and coronary angiography in patients after myocardial infarction. Kasalický J, et al. **Cor Vasa** 1989;31(3):169–78

The effect of sympathetic and parasympathetic activity on QT duration. Clinical study in patients with normal and prolonged QT time. Solti F, et al. **Cor Vasa** 1989;31(1):9–15

Evaluation of right ventricular function in man (with particular reference to lung diseases). Widimský J. **Cor Vasa** 1989;31(3):242–8 (37 ref.)

Effects of acid base disturbance, septic shock, and calcium and phosphorous abnormalities on cardiovascular function. Mehta PM, et al. **Crit Care Clin** 1987 Oct;3(4):747–58 (120 ref.)

Quantitative analysis of regional systolic function with left ventricular aneurysm. Nicolosi AC, et al. **Curr Surg** 1988 Sep–Oct;45(5):387–9

Prognostic value of systolic ankle and toe blood pressure levels in outcome of diabetic foot ulcer. Apelqvist J, et al. **Diabetes Care** 1989 Jun;12(6):373–8

Contractile properties of cardiac papillary muscle in streptozotocin-diabetic rats and the effects of aldose reductase inhibition. Cameron NE, et al. **Diabetologia** 1989 Jun;32(6):365–70

Exercise-induced diastolic abnormalities in type 1 (insulin-dependent) diabetic patients without overt heart disease [letter] Jermendy G, et al. **Diabetologia** 1989 Jun; 32(6):396–7

Impairment of diastolic function in middle-aged type 1 (insulin-dependent) and type 2 (non-insulin-dependent) diabetic patients free of cardiovascular disease. Uusitupa M, et al. **Diabetologia** 1988 Nov;31(11):783–91

Effects of various high-fat diets on myocardial contractility and morphology in rats. Magnuson BA, et al. **Drug Nutr Interact** 1988;5(4):213–26

Prognostic value of segmental contractility assessed by cross-sectional echocardiography in first acute myocardial infarction. Domingo E, et al. **Eur Heart J** 1989 Jun; 10(6):532–7

Reproducibility of Doppler echocardiographic measurements of left ventricular diastolic function. Spirito P, et al. **Eur Heart J** 1988 Aug;9(8):879–86

Normalised radionuclide measures of left ventricular diastolic function. Lee KJ, et al. **Eur J Nucl Med** 1989;15(3):123–7

Development of the myocardial contractile system. Nakanishi T, et al. **Experientia** 1988 Dec 1;44(11–12):936–44 (32 ref.)

Characterization of the Ca2+-switch in skeletal and cardiac muscles. Babu A, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):177–82

What stops the flow of blood from the heart? Parker KH, et al. **Heart Vessels** 1988;4(4):241–5

Paired pulse pacing increases cardiac O2 consumption for activation without changing efficiency of contractile machinery in canine left ventricle. Suga H, et al. **Heart Vessels** 1988;4(2):79–87

Hydrodynamics in the heart modulates work. Watters TA, et al. **Heart Vessels** 1988;4(3):128–35

Diastolic heart failure. Diagnosis and management. Kessler KM. **Hosp Pract [Off]** 1989 Jul 15;24(7):137–41, 146–8, 158–60 passim (10 ref.)

Influence of hypertension with minimal hypertrophy on diastolic function during demand ischemia. Lorell BH, et al. **Hypertension** 1989 Apr;13(4):361–70

Coronary hypertension and diastolic compliance in isolated rabbit hearts. Wexler LF, et al. **Hypertension** 1989 Jun;13(6 Pt 1):598–606

Ability of the Lapicque and Blair strength–duration curves to fit experimentally obtained data from the dog heart. Mouchawar GA, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):971–4

Systolic time intervals in dilated cardiomyopathy. Kulkarni AU, et al. **Indian Heart J** 1989 Mar–Apr;41(2):95–8

Effect of treatment on systolic time intervals in systemic arterial hypertension. Mehrotra TN, et al. **Indian Heart J** 1989 Mar–Apr;41(2):105–7

Intraoperative assessment of myocardial contractility, limitations and perspectives. Simon P. **Int J Card Imaging** 1989;4(1):23–5 (12 ref.)

Can left ventricular end-diastolic pressure be estimated non-invasively? Ettles DF, et al. **Int J Cardiol** 1988 Aug; 20(2):239–45

Changes in isovolumic segment shortening following acute coronary occlusion: disproportionate effects of anterior versus posterior ischemia. Fujita M, et al. **Int J Cardiol** 1989 Jan;22(1):29–35

Changes in regional myocardial cross-sectional area during brief coronary occlusion and reperfusion in conscious dogs. Fujita M, et al. **Int J Cardiol** 1989 Jan;22(1):21–8

Left ventricular size and function in double inlet left ventricle. Isabella G, et al. **Int J Cardiol** 1988 Oct; 21(1):43–9

Assessment of right ventricular function in acute inferior myocardial infarction using 133-xenon imaging. McGhie I, et al. **Int J Cardiol** 1989 Feb;22(2):195–202

Effects of acute reperfusion on regional myocardial function: serial two-dimensional echocardiography assessment. Oh JK, et al. **Int J Cardiol** 1989 Feb;22(2):161–8

Cardiac muscle: a miracle of creation. Seely S. **Int J Cardiol** 1989 Sep;24(3):257–65 (4 ref.)

Alloimmune B-lymphocytes modify the myocardium contractility-inducing release of SRS-A. Genaro AM, et al. **Int J Immunopharmacol** 1988;10(5):563–8

Biventricular function during postextrasystolic potentiation in man. A study using list-mode radionuclide ventriculography. Polak JF, et al. **Invest Radiol** 1989 Jan; 24(1):20–4

Isolated chronic mitral regurgitation with preserved systolic left ventricular function and severe pulmonary hypertension. Alexopoulos D, et al. **J Am Coll Cardiol** 1989 Aug;14(2):319–22

Linearity of the left ventricular end-systolic pressure–volume relation in patients with severe heart failure. Aroney CN, et al. **J Am Coll Cardiol** 1989 Jul;14(1):127–34

Evolution of the temporal contraction sequence after acute experimental myocardial infarction. Ascah KJ, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):730–6

Chordal geometry determines the shape and extent of systolic anterior mitral motion: in vitro studies. Cape EG, et al. **J Am Coll Cardiol** 1989 May;13(6):1438–48

Prolonged abnormalities of left ventricular diastolic wall

thinning in the "stunned" myocardium in conscious dogs: time course and relation to systolic function. Charlat ML, et al. **J Am Coll Cardiol** 1989 Jan;13(1):185–94

Left ventricular diastolic dysfunction: early diastolic relaxation and late diastolic compliance. Devereux RB. **J Am Coll Cardiol** 1989 Feb;13(2):337–9

Alterations in diastolic function in response to progressive left ventricular hypertrophy. Douglas PS, et al. **J Am Coll Cardiol** 1989 Feb;13(2):461–7

Echocardiographic evaluation of left ventricular diastolic function. Feigenbaum H. **J Am Coll Cardiol** 1989 Apr; 13(5):1027–9

Is mitral regurgitation a useful marker of left ventricular deterioration in aortic stenosis? Fox AC. **J Am Coll Cardiol** 1989 Mar 15;13(4):802–3

Influence of loading patterns on peak length–tension relation and on relaxation in cardiac muscle [published erratum appears in J Am Coll Cardiol 1989 Jun;13(7):1694] Gillebert TC, et al. **J Am Coll Cardiol** 1989 Feb;13(2):483–90

Effect of long-term high intensity aerobic training on left ventricular volume during maximal upright exercise. Ginzton LE, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):364–71

Ischemia-induced diastolic dysfunction: new observations, new questions. Greenberg MA, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1071–2

Contraction pattern within ischemic-infarct zones in acute myocardial infarction [editorial] Grose R. **J Am Coll Cardiol** 1989 Mar 1;13(3):737–8

Radionuclide angiographic assessment of left ventricular diastolic filling in amyloid heart disease: a study of patients with familial amyloid polyneuropathy. Hongo M, et al. **J Am Coll Cardiol** 1989 Jan;13(1):48–53

Doppler characterization of left ventricular diastolic function in cardiac amyloidosis. Klein AL, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1017–26

Left ventricular thrombus incidence and behavior studied by serial two-dimensional echocardiography in acute anterior myocardial infarction: left ventricular wall motion, systemic embolism and oral anticoagulation. Küpper AJ, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1514–20

Exercise training after anterior Q wave myocardial infarction: importance of regional left ventricular function and topography [letter; comment] Kushner EC. **J Am Coll Cardiol** 1989 May;13(6):1451. **Comment on:** J Am Coll Cardiol 1988 Aug;12(2):362–72

Functional relation between infarct thickness and regional systolic function in the acutely and subacutely infarcted canine left ventricle. Mann DL, et al. **J Am Coll Cardiol** 1989 Aug;14(2):481–8

Early identification with ultrasonic integrated backscatter of viable but stunned myocardium in dogs. Milunski MR, et al. **J Am Coll Cardiol** 1989 Aug;14(2):462–71

Evaluation of ventricular contractility indexes in the dog with left ventricular dysfunction induced by rapid atrial pacing. Morgan DE, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):489–95; discussion 496–8

Effect of postextrasystolic potentiation on systolic bulging of ischemic myocardium. Noma S, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):723–9

Diastolic dysfunction in amyloid heart disease: restrictive cardiomyopathy or not? Plehn JF, et al. **J Am Coll Cardiol** 1989 Jan;13(1):54–6

Noninvasive evaluation of diastolic function: need for hemodynamically and clinically relevant variables. Plotnick GD, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1015–6

Patterns of regional diastolic function in the normal human left ventricle: an ultrafast computed tomographic study. Rumberger JA, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):119–26

Assessment of right ventricular performance by pulsed Doppler echocardiography in patients after intraatrial repair of aortopulmonary transposition in infancy or childhood. Schmidt KG, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1578–85

Mild mitral insufficiency is a marker of impaired left ventricular performance in aortic stenosis. Schulman DS, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):796–803

Load dependence of the single beat maximal pressure (stress)/volume ratios in humans. Starling MR, et al. **J Am Coll Cardiol** 1989 Aug;14(2):345–53; discussion 354–6

Left ventricular diastolic function: comparison of pulsed Doppler echocardiographic and hemodynamic indexes in subjects with and without coronary artery disease. Stoddard MF, et al. **J Am Coll Cardiol** 1989 Feb; 13(2):327–36

Effects of successful intravenous reperfusion therapy on regional myocardial function and geometry in humans: a tomographic assessment using two-dimensional echocardiography. Touchstone DA, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1506–13

Effects of chronic swimming training on cardiac sarcolemmal function and composition. Pierce GN, et al. **J Appl Physiol** 1989 Apr;66(4):1715–21

Simultaneous acquisition of ECG, BCG, and blood pressure from chick embryos in the egg. Tazawa H, et al. **J Appl Physiol** 1989 Jul;67(1):478–83

Effect of glycaemic control on left ventricular function in diabetics. Dixit VK, et al. **J Assoc Physicians India** 1988 Dec;36(12):720–1

Evaluation of right ventricular functions by radio nuclide angiography in myocardial infarction. Khanna CM, et al. **J Assoc Physicians India** 1988 May;36(5):315–8

A study of wall motion abnormalities by radionuclide ventriculography (RNV) and correlation with electrocardiographic changes in acute myocardial infarction. Khanna CM, et al. **J Assoc Physicians India** 1988 Jun;36(6):371–3

Heart rate and coronary flow effects on the cardiac response to sympathetic stimulation. Bhat AM, et al. **J Auton Nerv Syst** 1989 Feb;26(1):61–7

Kinetics of ATP hydrolysis and tension production in skinned cardiac muscle of the guinea pig. Barsotti RJ, et al. **J Biol Chem** 1988 Nov 15;263(32):16750–6

The role of oxygen-derived free radicals in burn-induced myocardial contractile depression. Horton JW, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):589–98

Optimal timing for valve replacement in chronic aortic regurgitation: analysis based on the myocardial contractility and postoperative prognosis. Hirota Y, et al. **J Cardiol** 1988 Sep;18(3):747–56

Diastolic left ventricular function in normal children: the maximal positive dD/dt compared with the E/A ratio of mitral flow pattern. Horino N, et al. **J Cardiol** 1988 Sep; 18(3):787–93

Effect of heart rate on the end-systolic wall stress–mean velocity of circumferential fiber shortening relation. Watanabe K, et al. **J Cardiol** 1988 Jun;18(2):451–6

The effects of activated complement on myocardial performance in vitro. Hendry PJ, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):351–8

The role of frequency of atrial contraction versus atrial pressure in atrial natriuretic peptide release. Burnett JC Jr, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):881–4

Concurrent aortic and mitral valve echocardiography permits measurement of systolic time intervals as an index of peripheral tissue thyroid functional status. Tseng KH, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):633–8

Chronic exercise training protects aged cardiac muscle against hypoxia. Wei JY, et al. **J Clin Invest** 1989 Mar; 83(3):778–84

Dissociation of changes in apparent myofibrillar Ca2+ sensitivity and twitch relaxation induced by adrenergic and cholinergic stimulation in isolated ferret cardiac muscle. McIvor ME, et al. **J Gen Physiol** 1988 Oct;92(4):509–29

Spontaneous and propagated contractions in rat cardiac trabeculae. Mulder BJ, et al. **J Gen Physiol** 1989 May; 93(5):943–61

Systolic anterior motion of the mitral valve as a manifestation of heart transplant rejection. Johnson DE, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):289–91

Assessment of left ventricular filling in patients with systemic hypertension. A Doppler echocardiographic study. Faggiano P, et al. **J Hum Hypertens** 1989 Jun;3(3):149–56

Non-invasive measurement of internal diameter of peripheral arteries during the cardiac cycle. Mooser V, et al. **J Hypertens Suppl** 1988 Dec;6(4):S179–81

Left ventricular systolic function in relation to withdrawal of different pharmacological treatments in hypertensives with left ventricular hypertrophy. Muiesan ML, et al. **J Hypertens Suppl** 1988 Dec;6(4):S97–100

Two-dimensional echocardiographic detection of in-hospital complications in acute myocardial infarction. Sahasakul Y, et al. **J Med Assoc Thai** 1989 Jan;72(1):21–4

Short and long term mortality after acute myocardial infarction as predicted by two-dimensional echocardiography. Sahasakul Y, et al. **J Med Assoc Thai** 1989 Jun;72(6):325–30

Characterization of avian angiotensin II cardiac receptors: coupling to mechanical activity and phosphoinositide metabolism. Baker KM, et al. **J Mol Cell Cardiol** 1989 Apr; 21(4):375–82

Force transient time course in heart muscle with high and low V1 to V3 myosin isoenzyme ratio. Berman MR, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):679–87

Can Ca entry via Na–Ca exchange directly activate cardiac muscle contraction? Bers DM, et al. **J Mol Cell Cardiol** 1988 May;20(5):405–14

Positive inotropic effect of somatostatin in guinea-pig ventricular muscles. Hirai S, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):607–16

Bound calcium and force development in skinned cardiac muscle bundles: effect of sarcomere length. Hofmann PA, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):667–77

A rapid cross-sectioning and freeze-clamping device for the beating canine heart. Hori S, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):203–10

Structural vs. contractile protein remodeling and myocardial stiffness in hypertrophied rat left ventricle. Jalil JE, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1179–87

Adaptation of cardiac contractile function to conditions of chronic energy deficiency. Kapelko VI, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:79–83

Ventricular myosin of the shrew Crocidura russula, correlation with contractile properties. Kessler-Icekson G, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1069–73

Electrophysiologic and mechanical properties of single feline RV and LV myocytes. Kleiman RB, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):973–82

Reduced aerobic metabolic efficiency in globally "stunned" myocardium. Laster SB, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):419–26

Mechanical properties of papillary muscle in cardiac failure: importance of pathogenesis and of ventricle of origin. Rouleau JL, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):817–28

Quantitative evaluation of relationship between cardiac energy metabolism and post-ischemic recovery of contractile function. Saks VA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:67–78

Diastolic function in acute myocardial infarction: a radionuclide study. Bonaduce D, et al. **J Nucl Med** 1988 Nov;29(11):1786–9

Regional left ventricular filling: does it reflect diastolic abnormalities in contiguous areas of myocardium? Brown EJ Jr, et al. **J Nucl Med** 1989 Feb;30(2):165–73

Clinical usefulness of ultrashort-lived iridium-191m from a carbon-based generator system for the evaluation of the left ventricular function. Franken PR, et al. **J Nucl Med** 1989 Jun;30(6):1025–31

Interplay among cardiac chambers. Left and right ventricular performance during changes in contractility, afterload and during simultaneous atrio-ventricular contraction. Vengen OA. **J Oslo City Hosp** 1989 Apr–May;39(4–5):53–61

Characterization of the adenosine receptor in cultured embryonic chick atrial myocytes: coupling to modulation of contractility and adenylate cyclase activity and identification by direct radioligand binding. Liang BT. **J Pharmacol Exp Ther** 1989 Jun;249(3):775–84

Measurement of ventricular relaxation. An alternative index of isovolumic relaxation to the time constant. Lee KC. **J Pharmacol Methods** 1989 Apr;21(2):141–53

The effects of changes in muscle length during diastole on the calcium transient in ferret ventricular muscle. Allen DG, et al. **J Physiol (Lond)** 1988 Dec;406:359–70

Activation of feline spinal neurones by potentiated ventricular contractions and other mechanical cardiac stimuli. Blair RW, et al. **J Physiol (Lond)** 1988 Oct; 404:649–57

Systolic time intervals in canine experimental acute hemorrhagic pancreatitis. Rmö P, et al. **J Surg Res** 1989 Mar;46(3):212–5

New technique for analysis of cardiac energetics using a modified Fenn equation. Ando H, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):565–74

Studies on prolonged acute regional ischemia. III. Early natural history of simulated single and multivessel disease with emphasis on remote myocardium. Beyersdorf F, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):368–80

Physiologic role of the mitral apparatus in left ventricular regional mechanics, contraction synergy, and global systolic performance. Hansen DE, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):521–33

Preloading history influences pressure-volume-derived indices of myocardial contractility in the ejecting canine left ventricle. Krukenkamp IB, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):551–64

Differential ventricular ischemic injury: an experimental model of right ventricular failure with a variable degree of left ventricular dysfunction. Morris JJ 3d, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):590–9

Depressed myocardial contractility and normal ejection performance after aortic valve replacement in patients with aortic regurgitation. Taniguchi K, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):258–65

Doppler diagnosis of intermittent subclavian steal during systole caused by axillary-axillary bypass graft. Kotval PS, et al. **J Ultrasound Med** 1988 Oct;7(10):593–5

Cardiac contractility. A review. Knowlen GG, et al. **J Vet Intern Med** 1987 Oct–Dec;1(4):188–98 (73 ref.)

Cardiac preload. Physiology and clinical implications. Olivier NB, et al. **J Vet Intern Med** 1987 Apr–Jun;1(2):81–5

Combined effects of hypoxia and elimination of glucose on resting and postextrasystolic potentiated contractions of papillary muscle of guinea pigs. Asayama J, et al. **Jpn Circ J** 1989 Apr;53(4):319–28

Two-dimensional echocardiography in acute myocardial infarction—relationship between left ventricular wall thickness and wall motion abnormalities. Kashiro S, et al. **Jpn Circ J** 1988 Nov;52(11):1257–67

Temporal Fourier transform of digital angiograms for left ventricular regional wall motion analysis. Katayama K, et al. **Jpn Circ J** 1988 Jul;52(7):607–16

Effect of local cardiac sympathectomy on regional myocardial contraction. Komatsu E, et al. **Jpn Circ J** 1988 Jul;52(7):617–23

Left ventricular systolic and diastolic time intervals in familial amyloid polyneuropathy. Kono J, et al. **Jpn Circ J** 1989 Apr;53(4):291–7

Role of afterload in progression of dilated cardiomyopathy—evaluation with force-velocity relation. Kurozumi H, et al. **Jpn Circ J** 1989 Jan;53(1):20–6

Left ventricular end-systolic wall stress—dimension relationship in unanesthetized dogs with perinephritic hypertension. Matsuno Y, et al. **Jpn Circ J** 1988 Dec; 52(12):1370–6

Mitral valve and its ring in hypertrophic cardiomyopathy—a mechanism creating surplus mitral leaflet involved in systolic anterior motion. Mikami T, et al. **Jpn Circ J** 1988 Jul;52(7):597–603

Relationship between the relative regional thallium-201 uptake and the regional systolic or diastolic filling function. Yamagishi T, et al. **Jpn Circ J** 1988 Jun;52(6):525–34

Load dependency of end-systolic pressure-volume relations in isolated, ejecting canine hearts. Nishioka O, et al. **Jpn Heart J** 1988 Sep;29(5):709–22

Crossbridge model compatible with the linear relation between left ventricular oxygen consumption and pressure–volume area. Yasumura Y, et al. **Jpn Heart J** 1988 May;29(3):335–47

Efficiencies from consumed O2 and pressure–volume area to work of in situ dog heart. Nozawa T, et al. **Jpn J Physiol** 1988;38(5):713–28

Relationship between contraction strength and stimulation frequency in cultured chick embryonic heart cells. Toyota H, et al. **Jpn J Physiol** 1989;39(1):87–100

The influence of coronary artery bypass grafting to totally occluded coronary arteries on the left ventricular contractility. Nagaoka H, et al. **Jpn J Surg** 1989 Jan; 19(1):42–8

Left ventricular relaxation and filling pattern in diabetic heart muscle disease: an echocardiographic study. Park JW, et al. **Klin Wochenschr** 1988 Sep 1;66(17):773–8

Diagnostic value of the apex beat [letter] Owens D, et al. **Lancet** 1989 Aug 26;2(8661):499

h–ANF does not play a role in the regulation of myocardial force of contraction. Böhm M, et al. **Life Sci** 1988; 43(16):1261–7

Functional characterization of beta–adrenoceptor subtypes in rabbit right atria. Tenner TE Jr, et al. **Life Sci** 1989; 44(10):651–60

The acute effect of peritoneal dialysis fluid on left ventricular function in patients on CAPD. Deligiannis A, et al. **Life Support Syst** 1983;1 Suppl 1:179–82

Effects of the dialysis on total peripheral resistance (TPR) and myocardial contractility. Mastrangelo F, et al. **Life Support Syst** 1983;1 Suppl 1:219–22

Effect of intraaortic balloon pumping on pulmonary edema in a low compliance high volume model. Stamatelopoulos S, et al. **Life Support Syst** 1983;1 Suppl 1:9–12

Assessment of diastolic function of the heart: background and current applications of Doppler echocardiography. Part II. Clinical studies. Nishimura RA, et al. **Mayo Clin Proc** 1989 Feb;64(2):181–204 (110 ref.)

Assessment of diastolic function of the heart: background and current applications of Doppler echocardiography. Part I. Physiologic and pathophysiologic features. Nishimura RA, et al. **Mayo Clin Proc** 1989 Jan;64(1):71–81 (93 ref.)

Left ventricular relaxation time index and left atrial emptying index as early echocardiographic indicators in predicting hypertensive heart disease. Drăgulescu SI, et al. **Med Interne** 1989 Jan–Mar;27(1):15–23

Normal cardiac contractility in patients with congenital nemaline myopathy. Airenne AL, et al. **Neuropediatrics** 1988 Aug;19(3):115–7

The evaluation of systolic time intervals and impedance cardiogram of neonates. Kagiya A, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):601–8

Morphology of endocardial T–waves of fusion beats. Boute W, et al. **PACE** 1988 Nov;11(11 Pt 2):1693–7

Comparison of ventricular refractory periods determined by incremental and decremental scanning of an extrastimulus. Morady F, et al. **PACE** 1989 Apr;12(4 Pt 1):546–54

The maximum effect of an increase in rate on human ventricular refractoriness. Morady F, et al. **PACE** 1988 Dec;11(12):2223–34

Oscillations of diastolic interval and refractory period following premature and postmature stimuli in canine cardiac Purkinje fibers. Watanabe M, et al. **PACE** 1989 Jul;12(7 Pt 1):1089–103 (18 ref.)

Radionuclide evaluation of right ventricular wall motion after surgery in tetralogy of Fallot. Ratib O, et al. **Pediatr Cardiol** 1989 Winter;10(1):25–31

Effects of guinea pig vasoactive intestinal peptide on the isolated perfused guinea pig heart. Hoover DB. **Peptides** 1989 Mar–Apr;10(2):343–7

An improved apparatus for the optical recording of contraction of single heart cells. Boyett MR, et al. **Pflugers Arch** 1988 Dec;413(2):197–205

Feline left ventricular oxygen consumption is not affected by volume expansion, ejection or redevelopment of pressure during relaxation. Duwel CM, et al. **Pflugers Arch** 1988 Sep;412(4):409–16

Calcium–induced calcium release activates contraction in intact cardiac cells. Valdeolmillos M, et al. **Pflugers Arch** 1989 Apr;413(6):676–8

Deformation of the dog aortic valve ring during the cardiac cycle. van Renterghem RJ, et al. **Pflugers Arch** 1988 Oct; 412(6):647–53

Calcium mobilization and cardiac inotropic mechanisms. Reiter M. **Pharmacol Rev** 1988 Sep;40(3):189–217 (422 ref.)

A device for microcomputer controlled stimulation of cardiac muscle. Rohlíček V. **Physiol Bohemoslov** 1988;37(5):451–8

Cardiac function and coronary flow in chronic endotoxemic pigs. Lee KJ, et al. **Proc Soc Exp Biol Med** 1988 Nov; 189(2):245–52

Isolated rabbit heart preparation to evaluate the inotropic effect of endotoxin. Krösl PE, et al. **Prog Clin Biol Res** 1989;308:225–30

Chemical characterization of a positive inotropic plasma factor in shock. Szabó I, et al. **Prog Clin Biol Res** 1989; 308:253–7

Use of systolic time intervals to evaluate the effect of dopamine infusion in septic and burn shock. Szabó K. **Prog Clin Biol Res** 1989;308:1101–6

Microcomputer automated system for measuring systolic time intervals in response to exercise and a psychophysiological task. VanDercar DH, et al. **Psychophysiology** 1988 Nov; 25(6):703–11

Mechanism of potentiation of contraction by depolarization during action potentials in guinea–pig ventricular muscle. Terrar DA, et al. **Q J Exp Physiol** 1989 May;74(3):355–8

Reflex responses of vascular resistance in anaesthetized dogs to independent changes in ventricular systolic pressure and cardiac inotropic state. Tutt SM, et al. **Q J Exp Physiol** 1988 Sep;73(5):801–4

Effect of age on the orientation of the auricular activation vector in pig. Rubio MD, et al. **Rev Esp Fisiol** 1989 Jun; 45(2):151–5

Onthogenic changes in the orientation of the ventricular activation and recovery mean vector in pig. Rubio MD, et al. **Rev Esp Fisiol** 1989 Jun;45(2):145–50

Direct effects of purified staphylococcal toxic shock syndrome toxin 1 on myocardial function of isolated rabbit atria. Olson RD, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S313–5

Esophageal manometry and vectorcardiography study of asymptomatic patients with Chagas' disease. Moraes–Filho JP, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):406–10

The load independence of the end–systolic pressure–length relationship of the heart. Coetzee AR, et al. **S Afr Med J** 1989 Sep 2;76(5):191–4

Innocent systolic murmurs in healthy young males: a study of the characteristics and prevalence in the SAF pre–enlistee population. Tan CC, et al. **Singapore Med J** 1988 Aug;29(4):337–40

Compartmentalizing chemomechanical transduction in the ejecting heart. Krukenkamp IB, et al. **Surgery** 1989 Aug; 106(2):239–46; discussion 246–7

Cardiogenic shock after acute coronary occlusion. Pathogenesis, early diagnosis, and treatment. Beyersdorf F, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):28–36

The effect of sustained stellate ganglion stimulation on left ventricular contractility in the dog. Kanda H, et al. **Tohoku J Exp Med** 1988 Oct;156(2):135–48

Cardiac cycle–dependent variation of integrated backscatter is not distorted by abnormal myocardial wall motion in human subjects with paradoxical septal motion. Milunski MR, et al. **Ultrasound Med Biol** 1989;15(4):311–7

Influence of age on the electrical auricular systole in swine. Rubio D, et al. **Zentralbl Veterinarmed [A]** 1989 Jan; 36(1):64–70

[Echo–apex–ECG–phonocardiographic control of left ventricular diastolic function in patients with unstable angina pectoris and other forms of ischemic heart disease] Penkov N, et al. **Vutr Boles** 1989;28(1):15–21 (76 ref.) **(Bul)**

[Left ventricular relaxation and compliance in normal subjects] Li HK, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):92–4, 127 (Eng. Abstr.) **(Chi)**

[Analysis of systolic interval and cardiac output in acute myocardial infarction patients during the recovery period] Song WT. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr;16(2):98–9 **(Chi)**

[Doppler evaluation of left ventricular diastolic filling after intravenous injection of verapamil in patients with hypertrophic cardiomyopathy] Jin L, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):412–4, 454 (Eng. Abstr.) **(Chi)**

[Left ventricular systolic function in patients with myasthenia gravis] Cong ZQ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):103–6, 127–8 (Eng. Abstr.) **(Chi)**

[Measurement for instantaneous acceleration of ventricular pressure and its significant] Guo ZM, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):102–10 (Eng. Abstr.) **(Chi)**

[Left ventricular end–systolic pressure–dimension relation and its sensitility to the positive inotropic factor in the anesthetized open–chest dogs] Li YX, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):153–62 (Eng. Abstr.) **(Chi)**

[Effects of acute myocardial ischemia on changes in hemorheology and heart contractile function] Zhao ZQ, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):293–8 (Eng. Abstr.) **(Chi)**

[Restitution of myocardial contractility] Bravený P. **Cesk Fysiol** 1988;37(6):525–8 **(Cze)**

[Echocardiographic indicators of contractility in patients after aortocoronary bypass] Dvořák I, et al. **Cesk Fysiol** 1988;37(6):567–71 **(Cze)**

[Use of electromagnetic kinetocardiography in studying myocardial contractility] Král V, et al. **Cesk Fysiol** 1988; 37(6):572–4 **(Cze)**

[Regulation of contractility of the cardiac muscle on the basis of contractile proteins] Pelouch V. **Cesk Fysiol** 1988; 37(6):529–33 **(Cze)**

[Changes in left ventricular contractility in acute myocardial infarct in the echocardiographic picture] Toman J, et al. **Cesk Fysiol** 1988;37(6):563–6 **(Cze)**

[Contractility of the isolated dog heart after a 4–hour period of ischemia] Vrána M, et al. **Cesk Fysiol** 1988;37(6):541–4 **(Cze)**

[Surgical treatment of postinfarction heart aneurysms and akinesias] Lichtenberg J, et al. **Rozhl Chir** 1989 Feb; 68(2):72–7 (Eng. Abstr.) **(Cze)**

[Comparison of changes in the mobility of the left ventricular wall with coronarographic findings in patients after myocardial infarct] Elbl L, et al. **Vnitr Lek** 1989 May; 35(5):425–32 (Eng. Abstr.) **(Cze)**

[Fetal systolic time intervals. A non–invasive parameter for assessing the intrauterine condition of the fetus] Gallée AM, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1662–5 (Eng. Abstr.) **(Dan)**

[Doppler echocardiography of ventricular diastole] Roudaut R, et al. **Arch Mal Coeur** 1988 Dec;81(12):1535–42 (30 ref.) (Eng. Abstr.) **(Fre)**

[Nul telediastolic flux. Prognostic value] Baton C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):615–23 (Eng. Abstr.) **(Fre)**

[The stunned myocardium. A new pathological entity] d'Ivernois C, et al. **Presse Med** 1989 Jan 28;18(3):119–21 (Eng. Abstr.) **(Fre)**

[Disorders of left ventricular relaxation in systemic arterial hypertension] Ollivier JP. **Presse Med** 1989 Mar 11; 18(10):515–6 **(Fre)**

[Immediate postoperative measurement of systolic pressure of the right ventricle after repair of tetralogy of Fallot. Comparison with measurements obtained after the operation (letter)] Vaksmann G, et al. **Presse Med** 1989 Apr 29;18(17):898 **(Fre)**

[Systolo–diastolic events in mitral stenosis] Grbic M, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1573–82 (Eng. Abstr.) **(Fre)**

[Determination of the systolic time interval: application to the study of myocardial contractility in sportsmen] Delabays A, et al. **Schweiz Z Sportmed** 1988 Oct; 36(3):128–32 (Eng. Abstr.) **(Fre)**

[Relation between myocardial perfusion, myocardial necrosis and residual glucose metabolism as a vitality parameter in the post–ischemic myocardium following coronary reperfusion] Sochor H. **Acta Med Austriaca Suppl** 1989; 39:1–36 (Eng. Abstr.) **(Ger)**

[Nuclear medicine and cardiology. Review of the current status] Hör G, et al. **Fortschr Med** 1988 Jun 20; 106(18):379–83 (22 ref.) (Eng. Abstr.) **(Ger)**

[Left ventricular ejection time (LVET) in the course of pregnancy] Kindt J, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):641–6 (Eng. Abstr.) **(Ger)**

[Acute myocardial infarct: myosin–light–chain liberation and ventricular function] Katus HA, et al. **Klin Wochenschr** 1988 Sep 1;66(17):784–9 (Eng. Abstr.) **(Ger)**

[Inositol trisphosphate, a new "second messenger" for positive inotropic effects on the heart?] Scholz J. **Klin Wochenschr** 1989 Mar 1;67(5):271–9 (105 ref.) (Eng. Abstr.) **(Ger)**

[Chronic aortic insufficiency: radionuclide ventriculography facilitates surgical planning and assessment of postoperative prognosis] Klepzig H Jr, et al. **Med Klin** 1988 Dec 9; 83(24):815–24 (Eng. Abstr.) **(Ger)**

[Progress in clinical cardiology. 2. Nuclear cardiology] Krause T, et al. **Med Monatsschr Pharm** 1989 Jan;12(1):2–7 (0 ref.) **(Ger)**

[Interstitial myocardial fibrosis in chronic uremia—the cause of chronic diastolic malfunction in dialysis patients?] Mall G, et al. **Pathologe** 1989 Jul;10(4):200–5 **(Ger)**

[Hyperthyroidism and its relation to heart function] Marek H, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):54–7 (Eng. Abstr.) **(Ger)**

[Relation of elevated ST segment in the electrocardiogram to echocardiography determined wall kinetics in patients after myocardial infarct] Schaller K, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):580–3 (Eng. Abstr.) **(Ger)**

[Friedrich Martius' studies of myocardial contraction and heart movements a century ago] Teichmann G. **Z Gesamte Inn Med** 1989 Feb 1;44(3):94–5 (Eng. Abstr.) **(Ger)**

[Cardiac mechanisms for the development of angina pectoris pain] Bassenge E, et al. **Z Kardiol** 1988;77 Suppl 5:5–14 (66 ref.) (Eng. Abstr.) **(Ger)**

[Echocardiography detection of reversible regional disorders of contraction in patients with unstable angina pectoris and Prinzmetal angina during an attack] Hofmann T, et al. **Z Kardiol** 1989 Jul;78(7):427–34 (Eng. Abstr.) **(Ger)**

[Validation of indirect myocardial parameters of oxygen consumption in patients with normal and pathologically changed ventricular function] Kahles H, et al. **Z Kardiol** 1989 May;78(5):285–93 (Eng. Abstr.) **(Ger)**

[Ischemic reaction in coronary angioplasty (PTCA) as a prerequisite for improving left ventricular function following intravenous thrombolysis in acute myocardial infarct] Leisch F, et al. **Z Kardiol** 1988 Sep;77(9):566–72 (Eng. Abstr.) **(Ger)**

[Function of the right ventricle in patients with mitral valve diseases] Unterberg R, et al. **Z Kardiol** 1989 Jun; 78(6):386–93 (Eng. Abstr.) **(Ger)**

[Diastolic opening of the pulmonary valve in a case of cardiomyopathy with restrictive dysfunction. Case report and review of the literature] Wittlich N, et al. **Z Kardiol** 1988 Oct;77(10):649–52 (24 ref.) (Eng. Abstr.) **(Ger)**

[Myocardial creatinine kinase liberation and left ventricular function in myocardial infarct with and without collateral blood supply] Wolf R, et al. **Z Kardiol** 1988 Aug; 77(8):490–6 (Eng. Abstr.) **(Ger)**

[Age–related peculiarities of adrenergic regulation of the contractility and pump function of the heart] Korkulko OV, et al. **ZFA** 1988 Nov–Dec;43(6):311–7 (Eng. Abstr.)

(Ger)
[Na-Ca exchange in the regulation of electrical and mechanical cardiac activity] Abete P, et al. **Cardiologia** 1988 May;33(5):475–80 (Eng. Abstr.) (Ita)
[The diastolic function in hypertrophic cardiomyopathy] Betocchi S, et al. **Cardiologia** 1988 Aug;33(8):741–6 (21 ref.) (Ita)
[Diastolic function and anatomical lesion of the myocardium in primary dilated cardiomyopathy] Chiddo A, et al. **Cardiologia** 1988 Jul;33(7):691–6 (Eng. Abstr.) (Ita)
[Respective contribution of the interventricular septum and free wall of the right ventricle to right ventricular contractile function in acute inferior myocardial infarction] Palagi B, et al. **Cardiologia** 1988 May;33(5):525–9 (Eng. Abstr.) (Ita)
[Quantitative evaluation of left ventricular systolic function using bidimensional echocardiography: comparison with cineangiography] Crepaz R, et al. **G Ital Cardiol** 1989 May; 19(5):393–401 (Eng. Abstr.) (Ita)
[Is the Frank–Starling law applicable to the normal heart?] Gioffrè PA, et al. **G Ital Cardiol** 1989 Mar;19(3):245–9 (11 ref.) (Ita)
[Which moments in the respiratory cycle have the most influence on right ventricular dynamics?] Rustici A, et al. **G Ital Cardiol** 1988 Dec;18(12):1018–24 (Eng. Abstr.) (Ita)
[First seconds after acute experimental ischemic: changes in isovolumic contraction and relaxation] Triulzi MO, et al. **G Ital Cardiol** 1988 Mar;18(3):218–24 (Eng. Abstr.) (Ita)
[Usefulness of the evaluation of the diastolic function with echopolygraphy and radioisotopic angiography in hypertrophic cardiomyopathy] Gianfagna P, et al. **Minerva Cardioangiol** 1988 Oct;36(10):529–40 (Eng. Abstr.) (Ita)
[Left and right ventricular diastolic properties in essential hypertension during cold pressor test: noninvasive assessment by pulsed Doppler echocardiography] Hamazaki N, et al. **J Cardiol** 1988 Sep;18(3):719–30 (Eng. Abstr.) (Jpn)
[Interventricular septal wall motion abnormality in left bundle branch block] Ikeoka K, et al. **J Cardiol** 1987 Dec; 17(4):887–94 (Eng. Abstr.) (Jpn)
[Right ventricular function in cardiovascular disease evaluated by magnetic resonance imaging] Imai H, et al. **J Cardiol** 1988 Sep;18(3):683–93 (Eng. Abstr.) (Jpn)
[Is this mitral valve prolapse? A case of mitral regurgitation with early systolic murmur due to early systolic prolapse of the posterior leaflet] Ishimitsu T, et al. **J Cardiol** 1989; 19 Suppl 21:97–105, discussion 106–8 (Eng. Abstr.) (Jpn)
[Value of exercise echocardiography in evaluating left ventricular systolic function in mitral stenosis] Kitamura H, et al. **J Cardiol** 1988 Jun;18(2):373–83 (Eng. Abstr.) (Jpn)
[Hemodynamic response to diurnal activities of patients with myocardial infarction evaluated by ambulatory monitoring of systolic time intervals using ear densitography] Matsutani M, et al. **J Cardiol** 1988 Mar;18(1):55–65 (Eng. Abstr.) (Jpn)
[Left ventricular systolic blood flow dynamics and left ventricular wall motion abnormalities in atrial fibrillation] Mawatari K, et al. **J Cardiol** 1988 Sep;18(3):803–11 (Eng. Abstr.) (Jpn)
[Pulsed Doppler echocardiographic findings in 117 professional cyclists] Miki T, et al. **J Cardiol** 1987 Dec; 17(4):769–78 (Eng. Abstr.) (Jpn)
[The influence of the right or left ventricular pressure overload on right and left ventricular diastolic behaviors as examined by pulsed Doppler echocardiography] Mizushige K, et al. **J Cardiol** 1987 Dec;17(4):853–64 (Eng. Abstr.) (Jpn)
[Anterolateral papillary muscle motion before and after septal myotomy in hypertrophic obstructive cardiomyopathy] Nagata S, et al. **J Cardiol** 1988 Jun;18(2):363–72 (Eng. Abstr.) (Jpn)
[Left ventricular asynergy in patients with impending myocardial infarction: two-dimensional echocardiographic assessment] Ohnishi S, et al. **J Cardiol** 1987 Dec; 17(4):711–20 (Eng. Abstr.) (Jpn)
[Left ventricular diastolic properties in dogs evaluated by stress pulsed Doppler echocardiography] Okamura A, et al. **J Cardiol** 1988 Jun;18(2):467–76 (Eng. Abstr.) (Jpn)
[Diastolic dysfunction and its relation to myocardial fibrosis in essential hypertension] Sugihara N, et al. **J Cardiol** 1988 Jun;18(2):353–61 (Eng. Abstr.) (Jpn)
[Noninvasive estimation of left ventricular end-systolic pressure] Suwa M, et al. **J Cardiol** 1987 Dec;17(4):845–51 (Eng. Abstr.) (Jpn)
[Left ventricular diastolic properties before and after percutaneous transluminal coronary angioplasty evaluated by pulsed Doppler echocardiography] Suzuki M, et al. **J Cardiol** 1987 Dec;17(4):683–90 (Eng. Abstr.) (Jpn)
[Treadmill exercise echocardiography: quantitative analysis of regional left ventricular wall motion by computer graphics] Takata H, et al. **J Cardiol** 1988 Sep;18(3):629–37 (Eng. Abstr.) (Jpn)
[Comparison of regional contractile dynamics and pathological findings of the left ventricular wall in patients with hypertrophic cardiomyopathy] Usuki S, et al. **J Cardiol** 1988 Sep;18(3):665–72 (Eng. Abstr.) (Jpn)
[Regional left ventricular diastolic dysfunction in patients with apical hypertrophy] Yasuda M, et al. **J Cardiol** 1988 Mar;18(1):105–12 (Eng. Abstr.) (Jpn)
[Effect of left ventricular systolic function on left atrial filling—clinical study using radionuclide angiography] Fujii K, et al. **Kaku Igaku** 1988 Oct;25(10):1081–8 (Eng. Abstr.) (Jpn)
[Estimation of myocardial viability in left ventricular regions with akinetic wall motion by postextrasystolic potentiation using list-mode radionuclide ventriculography in an interesting case with silent ischemia and with premature ventricular complexes (quadrigeminy)] Ishida Y, et al. **Kaku Igaku** 1989 Mar;26(3):425–31 (Eng. Abstr.) (Jpn)
[Quantitative analysis of left ventricular wall motion at exercise stress in myocardial infarction with single vessel coronary artery disease—difference in response according to site of infarction] Kodera K. **Kaku Igaku** 1988 Jul; 25(7):615–24 (Eng. Abstr.) (Jpn)
[Evaluation of right ventricular systolic and diastolic properties using 81mKr scintigraphy with continuous infusion] Sugihara H, et al. **Kaku Igaku** 1989 Jan; 26(1):95–100 (Eng. Abstr.) (Jpn)
[Clinical interpretation of left ventricular diastolic properties] Serizawa T, et al. **Kokyu To Junkan** 1988 Dec; 36(12):1299–307 (Jpn)
[Clinical study on the effects of assist bypass on left ventricular contractility] Eishi K, et al. **Kyobu Geka** 1989 Feb;42(2):103–7 (Eng. Abstr.) (Jpn)
[The effects of aorto-coronary bypass grafting on left ventricular diastolic function in patients with left ventricular dysfunction] Morishita K, et al. **Kyobu Geka** 1989 Jan;42(1):11–4 (Eng. Abstr.) (Jpn)
[Regional left ventricular wall motion and function after mitral valve replacement with preservation of the posterior leaflets and subvalvular tissues] Onitsuka T, et al. **Kyobu Geka** 1988 Oct;41(11):865–70 (Eng. Abstr.) (Jpn)
[Right ventricular regional wall motion and function after tetralogy repair] Onitsuka T, et al. **Kyobu Geka** 1989 Jan; 42(1):2–10 (Eng. Abstr.) (Jpn)
[Effects of acute hypoxia on cardiovascular dynamics, myocardial metabolism and ECG in dogs] Kasuda H, et al. **Masui** 1989 Mar;38(3):300–11 (Eng. Abstr.) (Jpn)
[Left ventricular diastolic impairment in diabetics with hemodialysis treatment—the predictor of the prognosis] Suzuki R, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct; 30(10):1171–9 (Eng. Abstr.) (Jpn)
[Intraoperative assessment of left ventricular systolic function utilizing end systolic pressure-volume relationship in patients with open heart surgery] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2170–4 (Eng. Abstr.) (Jpn)
[Regional and global right ventricular function and its relations to operative procedures late after repair of tetralogy of Fallot] Miura T. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2238–47 (Eng. Abstr.) (Jpn)
[The influence of thoracotomy on the chest wall movement—difference between intercostal thoracotomy and median sternotomy] Sumitomo S. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):1995–2004 (Eng. Abstr.) (Jpn)
[Regulation of myocardial contractility by catecholamines] Hiramoto T, et al. **Rinsho Byori** 1989 Jan;37(1):7–12 (Jpn)
[Effect of hypercalcemia and calcitonin on changes in the left-ventricular systolic time interval and T3 and T4 secretion in hyperthyroidism and euthyroid goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(1):49–56 (Eng. Abstr.) (Pol)
[Microvolt potentials in patients with arrhythmogenic dysplasia of the right ventricle] Walczak F, et al. **Kardiol Pol** 1988;31(11):719–26 (Eng. Abstr.) (Pol)
[Effect of percutaneous intravascular coronaroplasty on left-ventricular diastole in patients with unstable angina] Witkowski A, et al. **Kardiol Pol** 1988;31(3):145–53 (Eng. Abstr.) (Pol)
[Effect of ischemia on the indicators of left-ventricular diastole] Witkowski A. **Kardiol Pol** 1988;31(3):193–8 (39 ref.) (Pol)
[Reaction of the circulatory system to physical exertion in relation to the degree of coronary insufficiency in patients after myocardial infarction] Ziółkowski L. **Kardiol Pol** 1988;31(6):357–66 (Eng. Abstr.) (Pol)
[Echocardiographic evaluation of the left ventricle and hemodynamics in boys with borderline arterial hypertension during adolescence] Sobuś W, et al. **Pediatr Pol** 1988 Oct;63(10):633–8 (Eng. Abstr.) (Pol)
[Our modification of right-ventricular polycardiography] Sroczyński J, et al. **Pneumonol Pol** 1988 Dec;56(12):541–5 (Eng. Abstr.) (Pol)
[Verification of polycardiographic and ultrasonographic studies by isotope ventriculography in the evaluation of left-ventricular function in hypertension] Dosiak J, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):157–62 (Eng. Abstr.) (Pol)
[Polycardiographic evaluation of left-ventricular function in patients with diabetes mellitus] Dulbińska D. **Pol Arch Med Wewn** 1985 Sep;74(3):163–75 (Eng. Abstr.) (Pol)
[Usefulness of the analysis of left-ventricular systolic time intervals during transesophageal left-atrial pacing in the diagnosis of ischemic heart disease] Gawor Z, et al. **Pol Tyg Lek** 1988 Sep 5;43(36):1143–7 (Eng. Abstr.) (Pol)
[Evaluation of circadian activities of humans based on electrocardiographic recording by the Holter method] Ziółkowski L. **Przegl Lek** 1988;45(8):623–7 (Eng. Abstr.) (Pol)
[Polycardiographic evaluation of the effect of outpatient rehabilitation on left-ventricular function after myocardial infarction] Wysokiński A, et al. **Wiad Lek** 1988 Aug 15; 41(16):1053–8 (Eng. Abstr.) (Pol)
[Effect of outpatient rehabilitation on echocardiographic image of left-ventricular function in patients after myocardial infarction] Wysokiński A, et al. **Wiad Lek** 1988 Nov 1;41(21):1415–20 (Eng. Abstr.) (Pol)
[The clinical picture of endomyocardial fibrosis. Correlation with the intensity of fibrosis] Barretto AC, et al. **Arq Bras Cardiol** 1988 Jun;50(6):401–5 (Eng. Abstr.) (Por)
[ST segment depression in precordial derivations in acute myocardial infarction of the inferior wall] Campos Filho O, et al. **Arq Bras Cardiol** 1988 Sep;51(3):217–25 (Eng. Abstr.) (Por)
[New concepts on the physiopathology of cardiac insufficiency: diastolic and systolic dysfunction] Guimarães AC. **Arq Bras Cardiol** 1988 Jul;51(1):93–8 (20 ref.) (Por)
[Artificial pacemaker of VVI type with frequency response. Hemodynamic evaluation] Maia IG, et al. **Arq Bras Cardiol** 1988 Oct;51(4):327–30 (Eng. Abstr.) (Por)
[Evaluation of the diastolic performance of the left ventricle by computerized echocardiographic technic] Marin-Neto JA, et al. **Arq Bras Cardiol** 1988 Mar;50(3):141–4 (Por)
[Evaluation of the left ventricular chamber of patients with chronic Chagas cardiopathy using cineventriculography. II. Segmentary movement between end diastole and end systole] Nogueira EA. **Arq Bras Cardiol** 1988 Jun; 50(6):369–76 (Eng. Abstr.) (Por)
[Evaluation of the ventricular cavity in patients with chronic Chagas cardiopathy using cineventriculography. III. Segmental motion during the systolic period] Nogueira EA. **Arq Bras Cardiol** 1988 Aug;51(2):135–41 (Eng. Abstr.) (Por)
[The echocardiogram in the prognostic evaluation of cardiac insufficiency] Ortiz J, et al. **Arq Bras Cardiol** 1988 Jul; 51(1):89–91 (Por)
[Correlation of the clinical aspects of the patient evaluated by functional class and left ventricular function in chronic aortic insufficiency. II. Stresses] Peixoto EC, et al. **Arq Bras Cardiol** 1988 Sep;51(3):231–7 (Eng. Abstr.) (Por)
[Systolic and diastolic dysfunction in the indeterminate, digestive and chronic cardiac forms of Chagas' disease] Sousa AC, et al. **Arq Bras Cardiol** 1988 May;50(5):293–9 (Eng. Abstr.) (Por)
[Ventricular circumferential stress and its telesystolic relations in ischemic heart disease. Simple alternatives for its evaluation] Studart PC, et al. **Arq Bras Cardiol** 1988 Oct;51(4):309–14 (Eng. Abstr.) (Por)
[Effect of graduated embolization of the coronary vessels using microspheres on the pumping function and contractility of the left ventricle in rats] Dugin Sf, et al. **Biull Eksp Biol Med** 1989 May;107(5):550–2 (Eng. Abstr.) (Rus)
[Restoration of myocardial contractile function during gradual reperfusion after total ischemia] Shul'zhenko VS, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):407–9 (Eng. Abstr.) (Rus)
[Effect of various reperfusion regimens on the recovery of myocardial contractile function after total ischemia] Shul'zhenko VS, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):663–6 (Eng. Abstr.) (Rus)
[The action of ultrasound on the contraction strength and action potential of the papillary muscle of the rat heart] Zakharov SI, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):423–6 (Eng. Abstr.) (Rus)
[Functional status of the hypertrophic left-ventricular myocardium in patients with hypertension] Iurenev AP, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):56–8 (Eng. Abstr.) (Rus)
[Functional status of the heart conduction system and myocardial contractility in patients with alcoholic heart damage] Zinkin AV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):16–20 (Eng. Abstr.) (Rus)
[Peculiarities of rhythm-dependent characteristics of the myocardium during early signs of cardiac insufficiency] Antiuf'ev VF, et al. **Fiziol Cheloveka** 1989 Mar–Apr; 15(2):72–7 (Rus)
[Age-related characteristics of the structural-functional status of the left ventricle in young sportsmen of different specialties] Il'nitskiĭ VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):652–8 (Rus)
[Statistical analysis of systolic time intervals of cardiac contraction during postextrasystolic potentiation of healthy subjects] Serdiuk NG, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):416–23 (Rus)
[Effect of various concentrations of calcium ions and the frequency of stimulation of papillary muscles of the heart of mature and old rats on its contractile capability] Efimov DA. **Fiziol Zh** 1988 Sep–Oct;34(5):87–91 (Eng. Abstr.) (Rus)
[Assessment of myocardial contractility by transthoracic impedance rheoplethysmography] Gurevich MI, et al.

Fiziol Zh 1988 Jul-Aug;34(4):3-8 (Eng. Abstr.) (Rus)
[Effect of the natriuretic factor obtained from arterial blood of dogs on cardio- and hemodynamics in experimental studies] Konovchuk VN, et al. Fiziol Zh 1989 Mar-Apr; 35(2):89-92 (Eng. Abstr.) (Rus)
[Dynamics of cardiac rhythm in the transitional period during controlled physical exercises in persons of various ages] Korkushko OV, et al. Fiziol Zh 1989 May-Jun;35(3):38-42 (Eng. Abstr.) (Rus)
[Age-related characteristics of cholinergic regulation of the biomechanical function of the rat heart in hypoxia] Lobanok LM, et al. Fiziol Zh 1989 Mar-Apr;35(2):65-9 (Eng. Abstr.) (Rus)
[Relation of cardiac diastolic elasticity to its adaptation to loading] Kapel'ko VI, et al. Fiziol Zh SSSR 1988 Jul; 74(7):970-6 (Eng. Abstr.) (Rus)
[Electrical activity of the heart cells and myocardial contractility during a change in extracellular sodium concentration] Kobrin VI, et al. Fiziol Zh SSSR 1988 Sep; 74(9):1257-62 (Eng. Abstr.) (Rus)
[The effect of a single firing stimulation of the vagus nerve on atrioventricular behavior of stimulation in the cat heart] Sheikh-Zade IuR. Fiziol Zh SSSR 1989 Apr;75(4):536-41 (Eng. Abstr.) (Rus)
[Myocardial contractility in newborn kittens under a physiologic loading regimen] Tsyv'ian PB, et al. Fiziol Zh SSSR 1988 Sep;74(9):1243-8 (Eng. Abstr.) (Rus)
[Evaluation of the functional state of the cardiovascular system in watchmen on a shift-work schedule] Shmerling PM, et al. Gig Sanit 1989 Apr;(4):90-2 (Rus)
[Evaluation of the functional status of iron-ore miners based on the results of the mathematical analysis of cardiac rhythm] Antonik IP, et al. Gig Tr Prof Zabol 1988 Nov; (11):27-31 (Eng. Abstr.) (Rus)
[Intraoperative assessment of ventricular contractions before and after aortocoronary shunting] Sandrikov VA, et al. Grudn Khir 1988 May-Jun;(3):12-5 (Eng. Abstr.) (Rus)
[Study of morphofunctional characteristics of the myocardium in ischemic heart disease using ultrasonic methods] Adamian KG, et al. Kardiologiia 1988 Nov; 28(11):78-82 (Eng. Abstr.) (Rus)
[Indicators of central hemodynamics in patients with disorders of cardiac rhythm and conductivity and nonspecific ECG changes without organic myocardial lesions] Berzak NV, et al. Kardiologiia 1988 Nov; 28(11):63-6 (Eng. Abstr.) (Rus)
[Negative inotropic and vasoconstrictor effects of oxidized phospholipids] Bilenko MV, et al. Kardiologiia 1989 Jun; 29(6):88-94 (Eng. Abstr.) (Rus)
[General and regional functions of the right ventricle in idiopathic ventricular arrhythmias] Bokeriia LA, et al. Kardiologiia 1989 May;29(5):30-6 (Eng. Abstr.) (Rus)
[Adaptive capacity of the myocardium in middle-aged and elderly persons] Chadaev AP, et al. Kardiologiia 1989 Apr; 29(4):40-3 (Eng. Abstr.) (Rus)
[Use of pulsed Doppler cardiography for the evaluation of the parameters of central hemodynamics and myocardial contractility in patients with ischemic heart disease] Churganova LIu. Kardiologiia 1988 Jul;28(7):25-8 (Eng. Abstr.) (Rus)
[Phenomenon of premature opening of the pulmonary valves in patients with left- and right-ventricular myocardial infarction] Denisenko BA, et al. Kardiologiia 1988 Sep; 28(9):88-9 (Rus)
[Adaptation of myocardial function to conditions of myocardial insufficiency in patients with marked coronary arteriosclerosis] Furkalo NK, et al. Kardiologiia 1989 Mar; 29(3):30-4 (Eng. Abstr.) (Rus)
[Left-ventricular function and physical exertion tolerance in patients with myocardial infarction with isolated lesion of the coronary arteries] Golikov AP, et al. Kardiologiia 1989 Jan;29(1):59-62 (Eng. Abstr.) (Rus)
[Left-ventricular function in patients with unstable stenocardia after pharmacological and surgical treatment] Ioseliani DG, et al. Kardiologiia 1988 Jun;28(6):44-8 (Eng. Abstr.) (Rus)
[Mechanisms of adaptation of the cardiorespiratory system to physical loads in cardiosurgical patients] Kassirskiĭ GI, et al. Kardiologiia 1988 Nov;28(11):16-9 (Eng. Abstr.) (Rus)
[Clinico-functional characteristics of the course of ischemic heart disease in miners working in deep coal mines] Kobets GP, et al. Kardiologiia 1989 Apr;29(4):110-1 (Rus)
[Total and segmental left-ventricular myocardial function in patients with post-infarction heart aneurysm] Korytnikov KI. Kardiologiia 1988 Jul;28(7):37-41 (Eng. Abstr.) (Rus)
[Current possibilities of bloodless quantitative evaluation of the pumping function reserve of the heart based on the study of oxygen consumption during the treadmill test] Kudriashev VE, et al. Kardiologiia 1989 May;29(5):48-52 (Eng. Abstr.) (Rus)
[Effect of preliminary adaptation to long-term stress on disorders of the contractile function of the heart in experimental infarction] Kuznetsov VI, et al. Kardiologiia 1989 Feb;29(2):89-91 (Rus)
[A method of quantitative evaluation of left-ventricular functional reserve in patients with heart aneurysm] Labutskiĭ AK, et al. Kardiologiia 1988 Jul;28(7):48-52 (Eng. Abstr.) (Rus)
[Functional state of the left heart in aortic regurgitation of varying degrees] Moldotashev IK, et al. Kardiologiia 1989 Jun;29(6):68-71 (Eng. Abstr.) (Rus)
[Complex ultrasonic examination in the diagnosis and evaluation of cardiac function in right-ventricular infarction] Orlov MV, et al. Kardiologiia 1989 Mar; 29(3):71-4 (Eng. Abstr.) (Rus)
[Isolated mitral valve insufficiency in comparison with mitral-tricuspid insufficiency: various mechanisms of compensating for the defect and functional status of the myocardium] Petrovskiĭ PF, et al. Kardiologiia 1988 Sep; 28(9):27-31 (Eng. Abstr.) (Rus)
[Volume load in the evaluation of functional reserves of the heart in reconstructive surgery of the abdominal aorta and its branches] Pokrovskiĭ AV, et al. Kardiologiia 1988 Jun; 28(6):18-22 (Eng. Abstr.) (Rus)
[Evaluation of the functional status of the heart during aortocoronary shunting] Sandrikov VA, et al. Kardiologiia 1988 Jun;28(6):33-6 (Eng. Abstr.) (Rus)
[The volume load test for determining the functional status of the left ventricular myocardium in patients with chronic alcoholism, based on the data of contrast ventriculography] Savchenko AP, et al. Kardiologiia 1988 Nov;28(11):119-20 (Rus)
[Evaluation of functional reserves of the myocardium in patients with heart defects on the basis of changes in systolic time intervals during post-extrasystolic contraction] Serdiuk NG, et al. Kardiologiia 1988 Jul; 28(7):70-4 (Eng. Abstr.) (Rus)
[Non-invasive evaluation of left-ventricular function in hypertension] Vokrouglitskiĭ L, et al. Kardiologiia 1988 Dec;28(12):41-4 (Eng. Abstr.) (Rus)
[Rheocardiographic evaluation of left-ventricular contractility in the measured isometric pedal test] Zubarev MA, et al. Kardiologiia 1989 Feb;29(2):70-4 (Eng. Abstr.) (Rus)
[Late diastolic mitral regurgitation] Korytnikov KI. Klin Med (Mosk) 1989 Jun;67(6):66-9 (Eng. Abstr.) (Rus)
[Value of the end part of the ECG ventricular complex during exercise test in patients with acquired heart defects] Kudriashev VE, et al. Klin Med (Mosk) 1989 Jun; 67(6):87-91 (Eng. Abstr.) (Rus)
[Study of cardiac function in generalized meningococcal infection based on various biochemical indicators] Roslyĭ IM, et al. Klin Med (Mosk) 1989 Apr;67(4):54-8 (Eng. Abstr.) (Rus)
[Analysis of the informative value of the amplitude and time characteristics of early diastolic complex on the differential thoracic rheogram] Modin AIu. Kosm Biol Aviakosm Med 1989 May-Jun;23(3):79-80 (Rus)
[Regional and general contractile function of the myocardium following myocardial infarct] Sledzevskaia IK, et al. Med Radiol (Mosk) 1989 Aug;34(8):40-4 (Eng. Abstr.) (Rus)
[Neural regulation of heart function in the Pteropod mollusc Clione limacina] Arshavskiĭ IuI, et al. Neirofiziologiia 1989; 21(2):185-92 (Eng. Abstr.) (Rus)
[Study of the nonuniformity of the pathologically altered auricle of the atrium in man and dogs according to the rhythmo-inotropic response] Mukumov MR, et al. Patol Fiziol Eksp Ter 1988 Nov-Dec;(6):34-7 (Eng. Abstr.) (Rus)
[A method of cardiointervalography in pediatric toxicology] Fediaev VA, et al. Pediatriia 1988;(7):37-9 (Rus)
[Myocardial contractility and hemodynamic indicators in newborn infants with acute respiratory viral infections] Lomako LT, et al. Pediatriia 1989;(3):22-4 (Eng. Abstr.) (Rus)
[Evaluation of left-ventricular regional myocardial contractility by the method of two-dimensional echocardiography] Gorb IuG, et al. Sov Med 1988;(7):77-9 (Rus)
[Cardiac hemodynamics in esophageal cancer at different stages of its combined treatment] Mamontov AS, et al. Sov Med 1988;(7):20-3 (Eng. Abstr.) (Rus)
[Myocardial contractile capacity of the right ventricle in the decompensation of chronic cor pulmonale] Matkovskiĭ SK, et al. Sov Med 1988;(6):6-10 (Eng. Abstr.) (Rus)
[Atherosclerotic lesions of the coronary arteries in acute myocardial infarction: effects on myocardial contraction, disease course and prognosis] Orlov LL, et al. Sov Med 1989;(3):25-8 (Eng. Abstr.) (Rus)
[The contractile function of the myocardium in chronic alcoholism] Savchenko AP, et al. Sov Med 1988;(11):3-5 (Eng. Abstr.) (Rus)
[Adaptation of the myocardium after correction of isolated pulmonary valve stenosis] Selivanenko VT, et al. Sov Med 1989;(1):3-6 (Eng. Abstr.) (Rus)
[Clinical manifestations of ischemic heart disease in complete occlusion of one of the major coronary arteries] Knyshov GV, et al. Ter Arkh 1988;60(7):36-8 (Eng. Abstr.) (Rus)
[Evaluation of pump function of the heart in patients with occlusive diseases of the abdominal aorta and ischemic heart disease based on radionuclide ventriculography] Pokrovskiĭ AV, et al. Ter Arkh 1988;60(7):33-6 (Eng. Abstr.) (Rus)
[Comparative angiographic evaluation of the functions of the left and right heart ventricles in dilated cardiomyopathy] Savchenko AP, et al. Ter Arkh 1988;60(7):30-2 (Eng. Abstr.) (Rus)
[Total and regional myocardial contractility of the right ventricle during a volumetric loading test in patients with an alcoholic heart lesion] Smetnev AS, et al. Ter Arkh 1988;60(10):113-5 (Eng. Abstr.) (Rus)
[The effect of trifluoroperazine on cAMP levels in the rat myocardium during various phases of heart cycle] Prokop'eva VD, et al. Ukr Biokhim Zh 1988 Nov-Dec; 60(6):85-8 (Eng. Abstr.) (Rus)
[The phasic component of myocardial mechanical activity] Izakov VIa, et al. Usp Fiziol Nauk 1989 Jan-Mar; 20(1):106-25 (119 ref.) (Rus)
[Means for evaluating the contractile capacity of the heart and heart muscle] Ragimov SE, et al. Vestn Akad Med Nauk SSSR 1988;(5):59-67 (64 ref.) (Rus)
[Changes in diastole in patients with isolated stenosis of the pulmonary artery after correction of the defect] Selivanenko VT, et al. Vestn Akad Med Nauk SSSR 1988; (10):28-31 (Eng. Abstr.) (Rus)
[A method of quantitative evaluation of disorders of local contractility of the left ventricle based on contrast ventriculography data] Savchenko AP, et al. Vestn Rentgenol Radiol 1988 Jul-Aug;(4):9-13 (Eng. Abstr.) (Rus)
[The role of contraction asynchronism of the heart ventricles in the pathogenesis of pulmonary hypertension in ischemic heart disease] Denisiuk VI. Vrach Delo 1988 Jul;(7):31-3 (Eng. Abstr.) (Rus)
[The regional contractility of the left ventricle in patients with ischemic heart disease and concomitant hypertension] Ianovskiĭ GV, et al. Vrach Delo 1989 Jun;(6):48-50 (Eng. Abstr.) (Rus)
[Echocardiography in studying the indices of myocardial contractile function] Moroz GZ, et al. Vrach Delo 1989 Apr;(4):43-5 (Eng. Abstr.) (Rus)
[Morphologic changes of the contractile structures of the heart and walls of the major blood vessels during physical loading] Tal'ko VI. Vrach Delo 1989 Jun;(6):55-8 (Eng. Abstr.) (Rus)
[Myocardial contractile function in glomerulonephritis based on ultrasonic study data] Zharko KP. Vrach Delo 1988 Aug; (8):30-1 (Eng. Abstr.) (Rus)
[Passive diastolic properties of the left ventricle during development of cardiac hypertrophy] Turčáni M, et al. Bratisl Lek Listy 1989 Feb;90(2):110-4 (Eng. Abstr.) (Slo)
[Registration with piezoelectric sensors of the in vivo activity of right ventricular contractile elements in acute experimental pulmonary stenosis] Irigoyen EH, et al. Acta Physiol Pharmacol Latinoam 1988;38(1):19-25 (Eng. Abstr.) (Spa)
[Correlation between myocardial relaxation and phosphorylation of phospholamban] Vittone L, et al. Acta Physiol Pharmacol Latinoam 1988;38(2):213-27 (Eng. Abstr.) (Spa)
[Diagnosis of the myocardial inactivatable zone in the presence of right and bilateral intraventricular blocks] de Micheli A, et al. Arch Inst Cardiol Mex 1988 Nov-Dec; 58(6):575-86 (Eng. Abstr.) (Spa)
[Study of ventricular function by means of echocardiographic quantification of the thickness/radius (h/r) ratio of the left ventricle in healthy subjects] Guadalajara JF, et al. Arch Inst Cardiol Mex 1989 May-Jun;59(3):293-300 (Eng. Abstr.) (Spa)
[Apex cardiographic patterns and changes in the segmental motility of the apex, by isometric exercise in early chronic Chagas' cardiopathy] García Muller MR, et al. Arq Bras Cardiol 1988 Jan;50(1):[illegible]-8 (Eng. Abstr.) (Spa)
[Behavior of premature ventricular beats during exercise] Peidro RM, et al. Medicina (B Aires) 1988;48(3):239-44 (Eng. Abstr.) (Spa)
[Normal regional contractility by 2-dimensional echocardiography 1 year after acute myocardial infarction] Alonso Gómez AM, et al. Rev Esp Cardiol 1988 Dec; 41(10):590-5 (Eng. Abstr.) (Spa)
[Segmental contractility. Comparative study of 3 radioisotopic methods] Alvarez-Auñón A, et al. Rev Esp Cardiol 1988;41 Suppl 2:102-9 (Eng. Abstr.) (Spa)
[Regional differences in the contractile function of the subendocardium and subepicardium of the left ventricle in the dog] Rivera JM, et al. Rev Esp Cardiol 1989 Mar; 42(3):192-8 (Eng. Abstr.) (Spa)
[Segmental abnormalities of left ventricular contraction in dilated cardiomyopathy] Díaz RA, et al. Rev Med Chil 1988 Feb;116(2):107-11 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Cardiotoxicity of ropivacaine--a new amide local anaesthetic agent. Reiz S, et al. Acta Anaesthesiol Scand 1989 Feb; 33(2):93-8
Bell-shaped concentration-response curve for myocardial stimulation by glucocorticoids. An experimental study in the rat. Sellevold OF, et al. Acta Anaesthesiol Scand 1989 Jan;33(1):61-5
Pharmacological and contractile response of myocardium of Chagasic albino Swiss mice. Paglini-Oliva P, et al. Acta Physiol Pharmacol Latinoam 1987;37(3):395-401
Calcium-dependent changes of the myocardial contractile function at chronic adriamycin treatment. Kapelko VI, et al. Acta Physiol Pol 1988 May-Jun;39(3):166-74
Temporal relationship of contractility and myocardial

potassium balance following beta-adrenergic stimulation of the in situ pig heart. Ellingsen O, et al. **Acta Physiol Scand** 1988 Feb;132(2):241-50

Calcitonin gene-related peptide: release by capsaicin and prolongation of the action potential in the guinea-pig heart. Franco-Cereceda A, et al. **Acta Physiol Scand** 1988 Feb; 132(2):181-90

Calcitonin gene-related peptide and tachykinins in relation to local sensory control of cardiac contractility and coronary vascular tone. Franco-Cereceda A. **Acta Physiol Scand Suppl** 1988;569:1-63

Indirect evidence for a role of phosphatidylinositol turnover in the cardiac response to H1-receptor stimulation. Mantelli L, et al. **Agents Actions** 1988 Jul;24(3-4):232-6

Prostaglandin E1 attenuates postischemic contractile dysfunction after brief coronary occlusion and reperfusion. Farber NE, et al. **Am Heart J** 1989 Jul;118(1):17-24

Effect of the second-generation calcium channel blocking drug nisoldipine on diastolic left ventricular dysfunction in heart failure. Lewis BS, et al. **Am Heart J** 1989 Sep; 118(3):505-11

Amelioration by beta-adrenergic blockade of regional myocardial dysfunction induced by coronary artery occlusion after, but not before collateral development in conscious dogs. Mohri M, et al. **Am Heart J** 1989 Jan; 117(1):43-52

The effect of ionic contrast medium on the movement of acutely ischemic and nonischemic canine myocardium. Noma S, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1536-41

Noninvasive assessment of diastolic and systolic properties of ibopamine in patients with congestive heart failure. Stoddard MF, et al. **Am Heart J** 1989 Feb;117(2):395-402

Improvement in functional recovery of stunned canine myocardium by long-term pretreatment with oral propranolol. al-Wathiqui MH, et al. **Am Heart J** 1989 Apr; 117(4):791-8

Steroid-induced enhancement of functional recovery of postischemic, reperfused myocardium in conscious dogs. Wynsen JC, et al. **Am Heart J** 1988 Oct;116(4):915-25

Effect of intravenous metoprolol on left ventricular performance in Q-wave acute myocardial infarction. Dell'Italia LJ, et al. **Am J Cardiol** 1989 Jan 15;63(3):166-71

Effects of intravenous administration of nicorandil on cardiovascular hemodynamics and left ventricular function. Kambara H, et al. **Am J Cardiol** 1989 Jun 20;63(21):56J-60J

Myocardial properties of the new dihydropyridine calcium antagonist isradipine compared to nifedipine with or without additional beta blockade in coronary artery disease. Mauser M, et al. **Am J Cardiol** 1989 Jan 1;63(1):40-4

Transient increase in the contractile force induced by antiarrhythmic drugs in guinea pig cardiac muscles. Nawada T, et al. **Am J Cardiol** 1989 May 1;63(15):1144-6

Effects of nifedipine on left ventricular distensibility, relaxation and filling dynamics during pacing-induced myocardial ischemia. Sasayama S, et al. **Am J Cardiol** 1989 Mar 7;63(10):102E-107E

Effect of diltiazem on left ventricular mass and diastolic filling in mild to moderate hypertension. Szlachcic J, et al. **Am J Cardiol** 1989 Jan 15;63(3):198-201

Nifedipine, but not propranolol, improves left ventricular systolic and diastolic function in patients with hypertension. Zusman RM, et al. **Am J Cardiol** 1989 Sep 19; 64(11):51F-61F

Effects of nicardipine on left ventricular hemodynamic patterns in systemic hypertension. de Simone G, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):139-45

Fetal premature atrial contractions associated with hydralazine. Lodeiro JG, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):105-7

Alpha 1-adrenergic control of contractility and coronary flow in the perfused rat heart. Edwards SJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H334-40

Responses of contractile function to ruthenium red in rat heart. Gupta MP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1413-20

Effects of phenylephrine on calcium current and contractility of feline ventricular myocytes. Hartmann HA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1173-80

Slowly relaxing caffeine responses in rat ventricle: relationships of ryanodine and caffeine actions. Hilgemann DW, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1100-9

Positive inotropic action of novel vasoconstrictor peptide endothelin on guinea pig atria. Ishikawa T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H970-3

Ouabain uptake by endocytosis in isolated guinea pig atria. Núñez-Durán H, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C479-85

Inotropic sensitivity to beta-adrenergic stimulation in early sepsis. Smith LW, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H699-703

Calcitonin gene-related peptide increases cAMP, tension, and rate in rat atria. Wang X, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):R421-8

Aminophylline has little positive inotropic effect and a slightly negative diastolic effect on the left ventricle during hypoxic conditions in dogs. Gomez A, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1296-303

Hemodynamic and cardiodynamic effects of propofol and etomidate: negative inotropic properties of propofol. Brüssel T, et al. **Anesth Analg** 1989 Jul;69(1):35-40

Effect of various propofol plasma concentrations on regional myocardial contractility and left ventricular afterload. Coetzee A, et al. **Anesth Analg** 1989 Oct;69(4):473-83

Effect of N2O on segmental left ventricular function and effective arterial elastance in pigs when added to a halothane-fentanyl-pancuronium anesthetic technique. Coetzee A, et al. **Anesth Analg** 1989 Sep;69(3):313-22

Combined depressant effects of diltiazem and volatile anesthetics on contractility in isolated ventricular myocardium. Lynch C 3d. **Anesth Analg** 1988 Nov; 67(11):1036-46

The magnitude and duration of direct myocardial depression following intracoronary local anesthetics: a comparison of lidocaine and bupivacaine. Buffington CW. **Anesthesiology** 1989 Feb;70(2):280-7

Depression of myocardial force and stiffness without change in crossbridge kinetics: effects of volatile anesthetics reproduced by nifedipine. Chung OY, et al. **Anesthesiology** 1989 Sep;71(3):444-8

Isoflurane and halothane inhibit tetanic contractions in rabbit myocardium in vitro. DeTraglia MC, et al. **Anesthesiology** 1989 May;70(5):837-42

Regional differences in left ventricular wall motion in the anesthetized dog. Diedericks J, et al. **Anesthesiology** 1989 Jan;70(1):82-90

Effects of halothane on left ventricular relaxation and early diastolic coronary blood flow in the dog. Doyle RL, et al. **Anesthesiology** 1989 Apr;70(4):660-6

Comparative effects of halothane, enflurane, and isoflurane at equipotent anesthetic concentrations on isolated ventricular myocardium of the ferret. I. Contractility. Housmans PR, et al. **Anesthesiology** 1988 Oct;69(4):451-63

Comparative effects of halothane, enflurane, and isoflurane at equipotent anesthetic concentrations on isolated ventricular myocardium of the ferret. II. Relaxation. Housmans PR, et al. **Anesthesiology** 1988 Oct;69(4):464-71

Comparison of the effects of halothane on skinned myocardial fibers from newborn and adult rabbit. I. Effects on contractile proteins. Krane EJ, et al. **Anesthesiology** 1989 Jan;70(1):76-81

Depressant effects of volatile anesthetics upon rat and amphibian ventricular myocardium: insights into anesthetic mechanisms of action. Lynch C 3d, et al. **Anesthesiology** 1989 Mar;70(3):511-22

Inotropic effect of ketamine on rat cardiac papillary muscle. Riou B, et al. **Anesthesiology** 1989 Jul;71(1):116-25

Isoflurane depresses membrane currents associated with contraction in myocytes isolated from guinea-pig ventricle. Terrar DA, et al. **Anesthesiology** 1988 Nov;69(5):742-9

Recovery of contractile function of stunned myocardium in chronically instrumented dogs is enhanced by halothane or isoflurane. Warltier DC, et al. **Anesthesiology** 1988 Oct; 69(4):552-65

Comparison of the in vitro myocardial depressant effects of isoflurane and halothane anesthesia. Wolf WJ, et al. **Anesthesiology** 1988 Nov;69(5):660-6

Effects of nitroglycerin on myocardial excursions and velocities in the early hours of acute myocardial infarction. Kounis NG, et al. **Angiology** 1989 Sep;40(9):783-90

The effect of caffeine on exercise tolerance and left ventricular function in patients with coronary artery disease. Hirsch AT, et al. **Ann Intern Med** 1989 Apr 15; 110(8):593-8

Effect of pyruvate on regional ventricular function in normal and stunned myocardium. Mentzer RM Jr, et al. **Ann Surg** 1989 May;209(5):629-33; discussion 633-4

Reduction of anthracycline cardiotoxicity by amrinone and sulmazole. Bossa R, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1229-32

Effect of adriamycin on myocardial contractility and on the action of antibiotic ionophores. Bossa R, et al. **Anticancer Res** 1988 Jul-Aug;8(4):553-5

Influence of heart rate on left ventricular dp/dt following 1,1,1-trichloroethane inhalation. Kobayashi H, et al. **Arch Environ Health** 1988 Nov-Dec;43(6):430-5

Relative negative inotropic potencies of nine calcium channel blockers in cultured heart cells. Briand V, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:125-37

Positive inotropic effects of milrinone, sulmazole and AR-L100 on isolated normal and infarcted hearts of the rat. Verrijk R, et al. **Arch Int Pharmacodyn Ther** 1989 Jan-Feb;297:7-17

Sulfhydryl-induced restoration of myocardial contractility after alteration by mercury. Halbach S. **Arch Toxicol Suppl** 1989;13:349-52

Inotropic activity of digitoxigenin glucoside and related glycosides. Altman PM, et al. **Arzneimittelforschung** 1988 Aug;38(8):1115-9

Enhancement of coronary conductance by alpha-human atrial natriuretic polypeptide without effects on myocardial contractility. Shimizu A, et al. **Arzneimittelforschung** 1988 Nov;38(11):1572-7

Effects of bunitrolol on myocardial contractility and left ventricular myosin isoenzyme pattern. Takeda N, et al. **Arzneimittelforschung** 1988 Sep;38(9):1280-2

Effects of captopril on left ventricular structure and function in SHR with established hypertension. Canby CA, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):306-18

Recruitment of inotropic reserve in "stunned" myocardium by the cardiotonic agent AR-L 57. Heusch G, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):602-10

Effects of acute iron loading on contractility and spontaneous beating rate of cultured rat myocardial cells. Moreb J, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):360-8

Insulin-like growth factors and insulin increase the contractility of neonatal rat cardiocytes in vitro. Vetter U, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):647-54

Endothelin is a positive inotropic agent in human and rat heart in vitro. Moravec CS, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):14-8

Action of atrial natriuretic peptide and angiotensin II on the myocardium: studies in isolated rat ventricular cardiomyocytes. Neyses L, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1435-43

On the mechanism of the reduction by thyroid hormone of beta-adrenergic relaxation rate stimulation in rat heart. Beekman RE, et al. **Biochem J** 1989 Apr 1;259(1):229-36

Investigations on the mechanism of a diminished inotropic isoprenaline effect in isolated rat hearts after high linoleic acid diet. Hoffmann P, et al. **Biomed Biochim Acta** 1988; 47(9):881-6

Interaction of iloprost and indomethacin with the cardiac effects of isoprenaline, ouabain and trapidil. Mentz P, et al. **Biomed Biochim Acta** 1988;47(10-11):S109-12

Significance of the cardioprotective effect of prostanoids and indomethacin. Mentz P, et al. **Biomed Biochim Acta** 1988; 47(10-11):S48-51

Improved contractile function in the reperfused rat heart by the radical scavenger 2-[3-aminopropylamino] ethane thiol. Pissarek M, et al. **Biomed Biochim Acta** 1989; 48(2-3):S126-31

Effects of sodium deoxycholate on the mechanical and electrical activities and ultrastructure of guinea pig atria. Tripathi O, et al. **Biomed Biochim Acta** 1988;47(9):901-14

Cardiotoxic effects of the plasticizer metabolite, mono (2-ethylhexyl)phthalate (MEHP), on human myocardium [letter] Barry YA, et al. **Blood** 1988 Oct;72(4):1438-9

Long term doxorubicin cardiotoxicity in childhood: non-invasive evaluation of the contractile state and diastolic filling. Hausdorf G, et al. **Br Heart J** 1988 Oct; 60(4):309-15

Assessing cardiac pumping capability by exercise testing and inotropic stimulation. Tan LB, et al. **Br Heart J** 1989 Jul; 62(1):20-5

Cardiovascular (ECG and systolic time intervals) and anticholinergic effects of repeated doses of femoxetine--a comparison with amitriptyline and placebo in healthy men. Warrington SJ, et al. **Br J Clin Pharmacol** 1989 Mar; 27(3):343-51

Improvement in left ventricular diastolic function in patients with stable angina after chronic treatment with verapamil and nicardipine. Rodrigues EA, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:27-32

Effect of selective agonists and antagonists on atrial adenosine receptors and their interaction with Bay K 8644 and [3H]-nitrendipine. Borea PA, et al. **Br J Pharmacol** 1989 Feb;96(2):372-8

Control of interval-force relation in canine ventricular myocardium studied with ryanodine. Bose D, et al. **Br J Pharmacol** 1988 Nov;95(3):811-20

Effects of amiloride in guinea-pig and rat left atrial contraction as affected by frequency of stimulation and [Ca2+]0-[Na+]0 ratio: role of Na+/Ca2+ exchange. Cargnelli G, et al. **Br J Pharmacol** 1989 Jun;97(2):533-41

The cardiovascular pharmacology of ICI 170777 ((6RS)-6-methyl-5-(pyrid-4-yl)-3H,6H-1,3,4-thiadiazin-2-one) a novel compound with positive inotropic and vasodilator effects. Collis MG, et al. **Br J Pharmacol** 1989 Jun;97(2):409-18

Diffusion characteristics dissociate ouabain binding from inotropic effect in guinea-pig myocardium. Ebner F, et al. **Br J Pharmacol** 1988 Oct;95(2):399-404

Effects of propafenone on electrical and mechanical activities of single ventricular myocytes isolated from guinea-pig hearts. Honjo H, et al. **Br J Pharmacol** 1989 Jul;97(3):731-8

Inotropic and chronotropic effects of N6-substituted derivatives of cyclic AMP as assessed in guinea-pig isolated right atria and papillary muscle. Kawada T, et al. **Br J Pharmacol** 1989 Jun;97(2):371-6

Mechanisms of positive inotropic effects and delayed relaxation produced by DPI 201-106 in mammalian working myocardium: effects on intracellular calcium handling. Kihara Y, et al. **Br J Pharmacol** 1989 Apr; 96(4):927-39

GABAA receptor-mediated positive inotropism in guinea-pig isolated left atria: evidence for the involvement of capsaicin-sensitive nerves. Maggi CA, et al. **Br J Pharmacol** 1989 May;97(1):103-10

The effects of calcium antagonists on calcium overload contractures in embryonic chick myocytes induced by ouabain and veratrine. Patmore L, et al. **Br J Pharmacol** 1989 May;97(1):83-94

The effects of nitroglycerin on regional myocardial contractile dysfunction produced by treadmill exercise or isoprenaline stimulation in dogs. Schneider W, et al. **Br J Pharmacol** 1988 Dec;95(4):1141-50

The mode of inotropic action of ciguatoxin on guinea-pig cardiac muscle. Seino A, et al. **Br J Pharmacol** 1988 Nov; 95(3):876-82

Beneficial effect of amosulalol and phentolamine on post-hypoxic recovery of contractile force and energy metabolism in rabbit hearts. Tanonaka K, et al. **Br J Pharmacol** 1989 Jun;97(2):513-23

Depression of myocardial force development after urea treatment. Abaurre PF, et al. **Braz J Med Biol Res** 1988; 21(5):1049-52

Oscillations of cardiac rate induced by acetylcholine in the isolated guinea pig heart. Alpoim NC, et al. **Braz J Med Biol Res** 1989;22(1):87–96

The effect of verapamil on potentiated rest contractions in the rat ventricular myocardium. Leite CM, et al. **Braz J Med Biol Res** 1988;21(4):859–62

Effects of dichlorobenzamil, a sodium–calcium exchange inhibitor, on the calcium paradox and the sodium withdrawal contractures of frog atrial muscle. Suarez-Kurtz G, et al. **Braz J Med Biol Res** 1988; 21(6):1197–211 (25 ref.)

Enhanced inotropic response to isoproterenol in acute sinoaortic denervated rat heart. Vassallo DV, et al. **Braz J Med Biol Res** 1988;21(3):625–8

Pharmacologic alterations of the isovolumic index: a study of the effects of isoproterenol, propranolol and verapamil. McGillem MJ, et al. **Can J Cardiol** 1989 Mar;5(2):121–6

Characterization of the effects of AHN 086, an irreversible ligand of "peripheral" benzodiazepine receptors, on contraction in guinea-pig atrial and ileal longitudinal smooth muscle. Bolger GT, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):126–34

Scattered light intensity fluctuation in the canine ventricular myocardium: correlation with inotropic drug effect. Bose D, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1232–8 (31 ref.)

Voltage-dependent Vmax blockade in Na+-dependent action potentials after beta 1- and H2-receptor stimulation in mammalian ventricular myocardium. Gillis AM, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1291–6

Acetate-induced depression of electrical and contractile activity in normoxic and hypoxic guinea pig papillary muscle. Hayashi H, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):734–9

Improved myocardial performance induced by clofibrate during reperfusion after acute myocardial infarction. Prasad MR, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1518–23

Effect of catecholamine-induced cardiac hypertrophy on the force-interval relationship. Taylor PB, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):40–6

Digitalis-like pregnanes. Cardiac and renal effects of a glycoside of 14 beta-hydroxyprogesterone. Templeton JF, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1420–4

Analysis of the direct and indirect effects of adenosine on atrial and ventricular cardiac muscle. Wilson AN, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):294–303

Influence of gramicidin S on cardiac membrane Ca2+/Mg2+ ATPase activities and contractile force development. Zhao DY, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):546–52

Effect of amiloride on contractility of rat cardiac muscle exposed to chronic hypercapnia and acute acidosis. Baudouin SV, et al. **Cardiovasc Res** 1988 Nov;22(11):754–8

Inhibition of the effects of adenosine on force of contraction and the slow calcium inward current by pertussis toxin is associated with myocardial lesions. Böhm M, et al. **Cardiovasc Res** 1988 Feb;22(2):87–94

Propranolol and vagal nerve stimulation do not affect postsystolic shortening during acute myocardial ischaemia in the dog. Geary GG, et al. **Cardiovasc Res** 1988 Aug; 22(8):527–36

Effect of insulin on myocardial contractility during canine endotoxin shock. Law WR, et al. **Cardiovasc Res** 1988 Nov; 22(11):777–85

Interacting negative chronotropic effects of adenosine and the vagus nerve on the canine sinus node. Pelleg A, et al. **Cardiovasc Res** 1988 Jan;22(1):55–61

Load dependence of isovolumic relaxation in intact heart: facts or artifacts? Perlini S, et al. **Cardiovasc Res** 1988 Jan; 22(1):47–54

Direct effects of hydralazine on cardiac contractile function, haemodynamics, and myocardial energetics in isolated myocardium. Rendig SV, et al. **Cardiovasc Res** 1988 May; 22(5):322–8

Significance of right atrial function during right sided inotropic stimulation of pig hearts in situ. Vengen OA, et al. **Cardiovasc Res** 1988 Dec;22(12):875–80

Extracellular ATP has a potent effect to enhance cytosolic calcium and contractility in single ventricular myocytes. Danziger RS, et al. **Cell Calcium** 1988 Aug;9(4):193–9

Left ventricular diastolic filling characteristics and nifedipine effects on chronic aortic regurgitation. Shen WF, et al. **Chin Med J [Engl]** 1988 Jan;101(1):67–9

Inotropic effect of histamine on papillary muscle of guinea pig with right ventricular hypertrophy. Zhou CJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):228–33

Sensitization of dog and guinea pig heart myofilaments to Ca2+ activation and the inotropic effect of pimobendan: comparison with milrinone. Fujino K, et al. **Circ Res** 1988 Nov;63(5):911–22

Positive inotropic effect of calcitonin gene-related peptide mediated by cyclic AMP in guinea pig heart. Ishikawa T, et al. **Circ Res** 1988 Oct;63(4):726–34

"Reperfusion injury" by oxygen-derived free radicals? Effect of superoxide dismutase plus catalase, given at the time of reperfusion, on myocardial infarct size, contractile function, coronary microvasculature, and regional myocardial blood flow. Przyklenk K, et al. **Circ Res** 1989 Jan;64(1):86–96

Inotropic responses to isoproterenol and phosphodiesterase inhibitors in intact guinea pig hearts: comparison of cyclic AMP levels and phosphorylation of sarcoplasmic reticulum and myofibrillar proteins. Rapundalo ST, et al. **Circ Res** 1989 Jan;64(1):104–11

Cocaine depresses the canine myocardium. Abel FL, et al. **Circ Shock** 1989 Aug;28(4):309–19

Mechanisms involved in the effect of M6434 on experimental hemorrhagic shock: I. Effects on myocardial contractility and venous return. Uemura A, et al. **Circ Shock** 1989 Mar; 27(3):173–82

Isoproterenol-induced alterations in myocardial blood flow, systolic and diastolic function in conscious dogs with heart failure. Hittinger L, et al. **Circulation** 1989 Sep;80(3):658–68

Cardiovascular and renal hemodynamic effects of intravenous infusions of the selective DA1 agonist, fenoldopam, used alone or in combination with dopamine and dobutamine. Lass NA, et al. **Circulation** 1988 Nov;78(5 Pt 1):1310–5

Role of beta 1-receptors and vagal tone in cardiac inotropic and chronotropic responses to a beta 2-agonist in humans. Levine MA, et al. **Circulation** 1989 Jan;79(1):107–15

Effects of load alteration and coronary perfusion pressure on regional end-systolic relations. Miller WP, et al. **Circulation** 1988 Nov;78(5 Pt 1):1299–309

Endothelium-dependent inhibition of ergonovine-induced contraction is impaired in porcine coronary arteries with regenerated endothelium. Shimokawa H, et al. **Circulation** 1989 Sep;80(3):643–50

Sustained inotropic effects of a new cardiotonic agent. OPC-8212 in patients with chronic heart failure. Asanoi H, et al. **Clin Cardiol** 1989 Mar;12(3):133–8

Nicardipine, a new calcium channel blocker: role for vascular selectivity [letter] Fukyama O. **Clin Cardiol** 1989 Aug; 12(8):A11

Evaluation of left ventricular contractile performance from baseline stress-shortening data in humans: comparison with pharmacological afterload challenge. Hausdorf G, et al. **Clin Cardiol** 1988 Nov;11(11):764–70

Daily serial evaluation of left ventricular function with equilibrium radionuclide ventriculography following thrombolysis during acute myocardial infarction. Marx JD, et al. **Clin Cardiol** 1988 Oct;11(10):665–70

Myocardial contractility and performance capacity after magnesium infusions in young healthy persons: a double-blind, placebo-controlled, cross-over study. Rasmussen HS, et al. **Clin Cardiol** 1988 Aug;11(8):541–5

Characterization of single heart cell contractility by rapid imaging. Delbridge LM, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):179–84

Taurine: effect on myocardial relaxation. Rahimi AR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):41–7

The inotropic action of tolbutamide and glyburide. Rothschild MA, et al. **Clin Pharmacol Ther** 1989 Jun; 45(6):642–9

Histamine directly acts on beta-adrenoceptors as well as H1-histaminergic receptors, and causes positive inotropic effects in isolated ventricular muscles of carp heart (Cyprinus carpio). Temma K, et al. **Comp Biochem Physiol [C]** 1989;92(1):143–8

Basic mechanisms underlying prenylamine-induced 'torsade de pointes': differences between prenylamine and fendiline due to basic actions of the isomers. Bayer R, et al. **Curr Med Res Opin** 1988;11(4):254–72 (60 ref.)

A moderate concentration of ethanol alters cellular membrane potentials and decreases contractile force of human fetal heart. Richards IS, et al. **Dev Pharmacol Ther** 1989;13(1):51–6

Changes in sensitivity of rat heart to norepinephrine and isoproterenol during pre- and postnatal development and its relation to sympathetic innervation. Shigenobu K, et al. **Dev Pharmacol Ther** 1988;11(4):226–36

Involvement of thromboxane and leukotriene in arachidonate induced coronary constriction in diabetic rats. Takiguchi Y, et al. **Diabetologia** 1989 Jun;32(6):337–41

Doxofylline and theophylline are xanthines with partly different mechanisms of action in animals. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(7):479–89

Inotropic effect of thyrotropin-releasing hormone on the guinea pig myocardium. Hasegawa J, et al. **Endocrinology** 1988 Dec;123(6):2805–11

Reduction of beta-adrenoceptor density and evaluation of positive inotropic responses in isolated, diseased human myocardium. Böhm M, et al. **Eur Heart J** 1988 Aug; 9(8):844–52

Recovery of left ventricular function after myocardial infarction can be predicted immediately after thrombolysis by semiquantitative intracoronary thallium and technetium pyrophosphate scintigraphy. Schofer J, et al. **Eur Heart J** 1988 Oct;9(10):1088–97

Effects of halothane, isoflurane and enflurane on isolated rat heart muscle. Miralles FS, et al. **Eur J Anaesthesiol** 1989 May;6(3):197–206

Pyruvate-enhanced phosphorylation potential and inotropism in normoxic and postischemic isolated working heart. Near-complete prevention of reperfusion contractile failure. Bünger R, et al. **Eur J Biochem** 1989 Mar 1; 180(1):221–33

Positive inotropic effects in isolated ventricular myocardium from non-failing and terminally failing human hearts. Näbauer M, et al. **Eur J Clin Invest** 1988 Dec;18(6):600–6

The effects of nisoldipine on left ventricular filling rate in patients with ischemic heart disease measured with radionuclide gated blood pool scintigraphy. Otto AC, et al. **Eur J Nucl Med** 1988;14(11):542–5

Gentamicin causes the fast depression of action potential and contraction in cultured cardiocytes. De la Chapelle-Groz B, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):111–20

Differential vagal inhibition of the positive chronotropic and inotropic responses to cardiotonics in the isolated dog atrium. Furukawa Y, et al. **Eur J Pharmacol** 1989 Feb 14; 161(1):1–8

Different antagonism of the positive chronotropic and inotropic responses of the isolated, blood-perfused dog atrium to Bay k 8644 by nicardipine and verapamil. Furukawa Y, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):231–7

Effects of adenosine analogues on force and cAMP in the heart. Influence of adenosine deaminase. Heller T, et al. **Eur J Pharmacol** 1989 May 19;164(2):179–87

Endothelin has potent inotropic effects in rat atria. Hu JR, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):275–8

Effects of buffer magnesium on positive inotropic agents in guinea pig cardiac muscle. Kafiluddi R, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):181–9

The mechanism of hypothermia-induced supersensitivity of guinea pig left atria to carbachol. MacLeod KM. **Eur J Pharmacol** 1988 Dec 6;158(1–2):99–107

Azelastine effects on electrical and mechanical activities of guinea pig papillary muscles. Molyvdas PA, et al. **Eur J Pharmacol** 1989 May 30;164(3):547–53

Effects of praeruptorin C and E isolated from 'Qian-Hu' on swine coronary artery and guinea-pig atria. Rao MR, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):293–6

Inotropic effects of endothelin in ferret ventricular myocardium. Shah AM, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):365–7

Theophylline affects the inotropic status of guinea-pig left atria by actions on the sarcolemma and sarcoplasmic reticulum. Zavecz JH. **Eur J Pharmacol** 1989 Jan 24; 160(1):187–91

Failure of opioids to affect excitation and contraction in isolated ventricular heart muscle. Nawrath H, et al. **Experientia** 1989 Apr 15;45(4):337–9

Down-regulation of fast-twitch skeletal muscle fiber with cardiac troponin-C and recombinant mutants. Structure/function studies with site-directed mutagenesis. Gulati J, et al. **FEBS Lett** 1989 May 8;248(1–2):5–8

Left ventricular after load as a result of levocardiography with contrast media of various osmolality. Wittstamm FJ, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:228–30

The effects of imipramine, mianserin and trazodone on the chronotropic, inotropic and coronary vascular responses in the isolated perfused rat heart. Boschmans SA, et al. **Gen Pharmacol** 1989;20(2):233–7

Effects of bivalent cations on post-rest adaptation in guinea-pig heart muscle. Beyer T, et al. **Gen Physiol Biophys** 1988 Aug;7(4):329–44

Effects of isoprenaline on tonic tension and Na–Ca exchange in frog atrial fibres. Rakotonirina A, et al. **Gen Physiol Biophys** 1989 Aug;8(4):313–26

A new cardiotonic agent, OPC-8212, elevates the myocardial oxygen consumption versus pressure-volume area (PVA) relation in a similar manner to catecholamines and calcium in canine hearts. Futaki S, et al. **Heart Vessels** 1988; 4(3):153–61

Effects of intravenous verapamil on left ventricular systolic function and diastolic filling dynamics in patients with coronary artery disease: analysis of intramyocardial markers. Amende I, et al. **Int J Card Imaging** 1988; 3(2–3):169–76

Dopamine treatment of locally procured donor hearts: relevance on postoperative cardiac histology and function. Ballester M, et al. **Int J Cardiol** 1989 Jan;22(1):37–42

Synergistic effect of captopril and dobutamine on left ventricular pressure-volume and pressure-shortening relations in severe cardiac failure. Lewis BS, et al. **Int J Cardiol** 1988 Nov;21(2):157–66

Stimulation of heart contractility by supernatants from lectin-activated lymphocytes. Role of IL-2. Fink SB, et al. **Int J Immunopharmacol** 1989;11(4):367–70

Effects of contrast media on calcium transients and motion in cultured ventricular cells. Bell DA, et al. **Invest Radiol** 1988 Nov;23(11):842–6

Comparative effects of verapamil and nitroprusside on left ventricular function in patients with hypertension. Brush JE Jr, et al. **J Am Coll Cardiol** 1989 Aug;14(2):515–22

Effect of nitroglycerin-induced reduction of left ventricular filling pressure on diastolic filling in acute dilated heart failure. Lavine SJ, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):233–41

Nifedipine administered after reperfusion ablates systolic contractile dysfunction of postischemic "stunned" myocardium. Przyklenk K, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1176–83

The effects of beta-adrenoreceptor antagonists on the force responses of the electrically driven rat right ventricle strip to isoprenaline. Doggrell SA. **J Auton Pharmacol** 1989 Aug;9(4):265–77

Effects of low density lipoproteins and mevinolin on sympathetic responsiveness in cultured chick atrial cells. Regulation of beta-adrenergic receptors and alpha s. Barnett JV, et al. **J Biol Chem** 1989 Jun 25;264(18):10779–86

Effect of vasoactive intestinal peptide on myocardial contractility and coronary blood flow in the dog:

comparison with isoproterenol and forskolin. Anderson FL, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):365–71

Inotropic responses to cyclic nucleotide phosphodiesterase inhibitors in immature and adult rabbit myocardium. Artman M, et al. **J Cardiovasc Pharmacol** 1989 Jan; 13(1):146–54

Alpha-adrenoceptors and alpha-adrenoceptor-mediated positive inotropic effects in failing human myocardium. Böhm M, et al. **J Cardiovasc Pharmacol** 1988 Sep; 12(3):357–64

Species differences in the negative inotropic response of 1,4-dihydropyridine calcium channel blockers in myocardium. Boyd RA, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):650–7

Beta-adrenergic system is modified in compensatory pressure cardiac overload in rats: physiological and biochemical evidence. Chevalier B, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):412–20

Dominant role of circulating catecholamines in the myocardial contractile response to intravenous nicotine. Downey HF, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):58–64

Effect of KT-362, a putative intracellular calcium antagonist, on norepinephrine-induced contractions and inositol monophosphate accumulation in canine femoral artery. Eskinder H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):502–7

Positive inotropic and hemodynamic properties of flosequinan, a new vasodilator, and a sulfone metabolite. Falotico R, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):412–8

LY249933: a cardioselective 1,4-dihydropyridine with positive inotropic activity. Holland DR, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):483–91

Imidazopyridines: roles of pyridine nitrogen position and methylsulfinyl oxygen for in vitro positive inotropic mechanism and chronotropic activity. Honerjäger P, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):673–81

Xamoterol activates beta 1- but not beta 2-adrenoceptors in mammalian myocardium: comparison of its affinity for beta 1- and beta 2-adrenoceptors coupled to the adenylate cyclase in feline and human ventricle with positive inotropic effects. Lemoine H, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):105–17

Metabolic requirement for the inotropic effects of digitalis and BAY K 8644. Ogbaghebriel A, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):265–70

In vitro pharmacologic profile of Ro 40-5967, a novel Ca2+ channel blocker with potent vasodilator but weak inotropic action. Osterrieder W, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):754–9

Interaction of DPI 201-106 with cardiac glycosides. Scholtysik G, et al. **J Cardiovasc Pharmacol** 1989 Feb; 13(2):342–7

Improvement of postischemic, contractile function by the calcium channel blocking agent nitrendipine in conscious dogs. Warltier DC, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S120–4

Positive inotropic and vasoconstrictive effects of endothelin-1 in in vivo and in vitro experiments: characteristics and the role of L-type calcium channels. Watanabe T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S108–11 discussion s123

Differential coupling to positive inotropic responses of cyclic AMP produced by stimulation of beta 1- and beta 2-adrenergic receptors. Yanagisawa T, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):64–75

Role of intracellular sodium in the regulation of intracellular calcium and contractility. Effects of DPI 201-106 on excitation-contraction coupling in human ventricular myocardium. Gwathmey JK, et al. **J Clin Invest** 1988 Nov; 82(5):1592–605

Automated measurements of isolated heart muscle contractions: effects of halothane, calcium, and magnesium on guinea pig left atrial muscle. Kobata RS, et al. **J Clin Monit** 1989 Jan;5(1):26–33

Glycosidation of chlormadinol acetate alters its actions on Na+/K+-transporting ATPase and cardiac contractility: a contribution to the endogenous digitalis problem. Weiland J, et al. **J Enzym Inhib** 1987;2(1):31–6

Influence of temperature on the calcium sensitivity of the myofilaments of skinned ventricular muscle from the rabbit. Harrison SM, et al. **J Gen Physiol** 1989 Mar;93(3):411–28

Effects of rapid application of caffeine on intracellular calcium concentration in ferret papillary muscles. Smith GL, et al. **J Gen Physiol** 1988 Sep;92(3):351–68

The induction of cardiac hypertrophy by catecholamines can be dissociated from their inotropic effect. Carlier PG, et al. **J Hypertens Suppl** 1988 Dec;6(4):S119–21

Comparative effects of captopril and nifedipine on diastolic and systolic cardiac function in elderly hypertensive patients. Marmor A, et al. **J Hypertens Suppl** 1988 Nov; 6(1):S101–3

Atrial natriuretic peptide decreases contractility of cultured heart cell: preliminary report. Vaxelaire JF, et al. **J Hypertens Suppl** 1988 Dec;6(4):S282–3

Clinical significance of the negative inotropic effect of disopyramide. Kenedi PP. **J Int Med Res** 1988 Jul–Aug; 16(4):257–63

Augmentation of diastolic function with phosphodiesterase inhibition in congestive heart failure. Binkley PF, et al. **J Lab Clin Med** 1989 Sep;114(3):266–71

Effect of iron loading on transmembrane potential, contraction, and automaticity of rat ventricular muscle cells in culture. Link G, et al. **J Lab Clin Med** 1989 Jan; 113(1):103–11

Cardiotonic agents. 5. Fragments from the heterocycle-phenyl-imidazole pharmacophore. Erhardt PW, et al. **J Med Chem** 1989 Jun;32(6):1173–6

Effect of isoproterenol on force transient time course and on stiffness spectra in rabbit papillary muscle in barium contracture. Berman MR, et al. **J Mol Cell Cardiol** 1988 May;20(5):415–26

Contractile responses of isolated adult rat and rabbit cardiac myocytes to isoproterenol and calcium. Harding SE, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):635–47

The cardiac contractile failure induced by chronic creatine and phosphocreatine deficiency. Kapelko VI, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):465–79

Effect of triiodothyronine on cultured neonatal rat heart cells: beating rate, myosin subunits and CK-isozymes. Kessler-Icekson G. **J Mol Cell Cardiol** 1988 Jul; 20(7):649–55

Diastolic dysfunction of perfused rat hearts induced by hydrogen peroxide. Protective effect of selenium. Konz KH, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):789–95

Relationships between pre-ischemic ATP and glycogen content and post-ischemic recovery of rat heart. Kupriyanov VV, et al. **J Mol Cell Cardiol** 1988 Dec; 20(12):1151–62

A dihydropyridine calcium channel blocker with phosphodiesterase inhibitory activity: effects on cultured vascular smooth muscle and cultured heart cells. Marsh JD, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1141–50

The effects of Bay K 8644 on myocardial relaxation and cAMP levels in perfused rat heart: role of sympathetic neurotransmitter release. Mundiña C, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):765–9

Comparative effects of ouabain on isolated papillary muscle from tree shrews, guinea-pigs and rats. Koga T, et al. **J Pharm Pharmacol** 1989 Mar;41(3):212–3

Beta-2 adrenoceptor-mediated effects on sinus rate and atrial and ventricular contractility on isolated, blood-perfused dog heart preparations. Akahane K, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1276–82

Negative and positive inotropic responses to muscarinic agonists in guinea pig and rat atria in vitro. Eglen RM, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):911–7

Differential effects of somatostatin on atrial and ventricular contractile responses in guinea pig heart: influence of pretreatment with islet-activating protein. Endou M, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):726–33

Adenosine promotes histamine H1-mediated negative chronotropic and inotropic effects on human atrial myocardium. Genovese A, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):844–9

Thromboxane A2 antagonist and diltiazem-induced enhancement of contractile function: the effect of timing of treatment. Grover GJ, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):445–52

Effect of ouabain on the concentration of free cytosolic Ca++ and on contractility in cultured rat cardiac myocytes. Hallaq H, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):716–21

Aging: ouabain-sensitive 86Rb+ uptake rate and responsiveness to digoxin in rat left atrial muscle. Kennedy RH, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):104–10

Potent stimulation of myofilament force and adenosine triphosphatase activity of canine cardiac muscle through a direct enhancement of troponin C Ca++ binding by MCI-154, a novel cardiotonic agent. Kitada Y, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):272–7

Mechanism of protective effects of Ca++ channel blockers on energy deprivation contracture in cultured ventricular myocytes. Kohmoto O, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):871–8

Differential effects of (-)-norepinephrine and of (+/-)-isoproterenol on cardiac contraction, an uptake phenomenon. Korth M, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1164–71

Involvement of calcitonin gene-related peptide in the positive chronotropic and inotropic effects of piperine and development of cross-tachyphylaxis between piperine and capsaicin in the isolated rat atria. Miyauchi T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):816–24

Positive inotropic effect and phosphoinositide breakdown mediated by arachidonic acid and prostaglandin F2 alpha. Otani H, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):844–51

Positive inotropic effect of histamine on guinea pig left atrium: H1-receptor-induced stimulation of phosphoinositide turnover. Sakuma I, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):466–72

Altered responsiveness to sympathetic nerve stimulation and agonists of isolated left atria of diabetic rats: no evidence for involvement of hypothyroidism. Sato N, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):367–71

Effect of nisoldipine on coronary resistance, contractility and oxygen consumption of the isolated blood-perfused canine left ventricle. Schipke JD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1000–4

Both alpha and beta adrenoceptor-mediated components contribute to final inotropic response to norepinephrine in rat heart. Skomedal T, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1204–10

Beneficial effects of lidocaine and disopyramide on oxygen-deficiency-induced contractile failure and metabolic disturbance in isolated rabbit hearts. Takeo S, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):306–14

The anesthetized ferret, an in vivo model for evaluating inotropic activity: effects of milrinone and anagrelide. Baryla UM, et al. **J Pharmacol Methods** 1988 Dec; 20(4):299–306

Screening of positive inotropic agents in isolated cardiac preparations from different sources. Böhm M, et al. **J Pharmacol Methods** 1989 Mar;21(1):33–44

Rapid screening of experimental cardiac drugs using atria and a microcomputer. Timonen MK, et al. **J Pharmacol Methods** 1989 Mar;21(1):87–92

Effect of acetylstrophanthidin on twitches, microscopic tension fluctuations and cooling contractures in rabbit ventricle. Bers DM, et al. **J Physiol (Lond)** 1988 Oct; 404:53–69

The negative inotropic effect of acetylcholine on ferret ventricular myocardium. Boyett MR, et al. **J Physiol (Lond)** 1988 Oct;404:613–35

Hysteresis and the length dependence of calcium sensitivity in chemically skinned rat cardiac muscle. Harrison SM, et al. **J Physiol (Lond)** 1988 Jul;401:115–43

Caffeine contracture in guinea-pig ventricular muscle and the effect of extracellular sodium ions. Kitazawa T. **J Physiol (Lond)** 1988 Aug;402:703–29

ATP and other adenine compounds increase mechanical activity and inositol trisphosphate production in rat heart. Legssyer A, et al. **J Physiol (Lond)** 1988 Jul;401:185–99

Difference in the mechanical response to a cardioplegic solution observed between the neonatal and the adult guinea pig myocardium. Watanabe H, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):59–66

Studies on the calcium antagonistic action of tetrandrine: XVI. Effects of tetrandrine on positive staircase phenomenon and post-rest potentiation of contraction of isolated guinea pig left atrium. Wang G, et al. **J Tongji Med Univ** 1988;8(4):198–201

Contrast effects of isoproterenol and ouabain on left ventricular diastolic relaxation dysfunction in isolated, blood-perfused rabbit hearts. Isoyama S, et al. **Jpn Circ J** 1989 Mar;53(3):261–9

Chronotropic and inotropic effects of a new angiotensin converting enzyme inhibitor, MC-838 (altiopril calcium), on the dog heart. Chiba S, et al. **Jpn Heart J** 1988 Nov; 29(6):841–8

Cardiovascular effects of dibutyryl cyclic AMP in the intact dog heart and the isolated cross-perfused right atrium. Furukawa Y, et al. **Jpn Heart J** 1988 Jul;29(4):465–73

Negative chronotropic and positive inotropic effects of a unique cardioactive agent, N,N'-dicyclopropyl methyl piperazine (bis) hydrochloride (INO 2628), in isolated, blood-perfused dog atria. Furukawa Y, et al. **Jpn Heart J** 1988 Nov;29(6):863–9

Inotropic effects of (+/-)-higenamine and its chemically related components, (+)-R-coclaurine and (+)-S-reticuline, contained in the traditional sino-Japanese medicines "bushi" and "shin-i" in isolated guinea pig papillary muscle. Kimura I, et al. **Jpn J Pharmacol** 1989 May;50(1):75–8

The first demonstration of CGRP-immunoreactive fibers in canine hearts: coronary vasodilator, inotropic and chronotropic effects of CGRP in canine isolated, blood-perfused heart preparations. Sugiyama A, et al. **Jpn J Pharmacol** 1989 Aug;50(4):421–7

Differentiation of inotropic action from chronotropic action of sympathetic agents in cultured cells of chick embryonic ventricles. Toyota H, et al. **Jpn J Physiol** 1989;39(1):101–14

Influence of L-thyroxine on cardiac function in athyreotic thyroid cancer patients—an echophonocardiographic study. Punzengruber C, et al. **Klin Wochenschr** 1988 Aug 15;66(16):729–35

Phosphodiesterase inhibition by new cardiotonic agents: mechanism of action and possible clinical relevance in the therapy of congestive heart failure. von der Leyen H. **Klin Wochenschr** 1989 Jun 15;67(12):605–15 (131 ref.)

Dependence on extracellular potassium of the positive inotropic response to St 587, a selective alpha-1 adrenoceptor agonist, in Zucker rat heart ventricle. Auclair MC, et al. **Life Sci** 1989;44(20):1475–82

Atrial natriuretic peptide decreases contractility of cultured chick ventricular cells. Vaxelaire JF, et al. **Life Sci** 1989; 45(1):41–8

Cultured embryonic mouse heart cells as models for T. cruzi-muscle cell interaction: characterization of spontaneous firing and chronotropic responses to norepinephrine. de Nazareth M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:497

Effect of domperidone on the contractility of isolated guinea-pig atria. Martinez-Mir I, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct;10(10):613–7

Relation of positive inotropic and chronotropic effects of pimobendan, UD-CG 212 Cl, milrinone and other phosphodiesterase inhibitors to phosphodiesterase III inhibition in guinea-pig heart. Brunkhorst D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):575–83

Preponderance of beta- over alpha-adrenoceptors in mediating the positive inotropic effect of phenylephrine in the ferret ventricular myocardium. Endoh M, et al.

Naunyn Schmiedebergs Arch Pharmacol 1989 Mar; 339(3):362–6

Effects of 2-methyl-1,4-naphthoquinone (menadione) on myocardial contractility and cardiac sarcoplasmic reticulum Ca-ATPase. Floreani M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):448–55

Actions of calcitonin gene-related peptide and tachykinins in relation to the contractile effects of capsaicin in the guinea-pig and rat heart in vitro. Franco-Cereceda A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):649–55

Alpha 1-adrenoceptors of rat myocardium: comparison of agonist binding and positive inotropic response. Gross G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):582–8

Relations between beta-adrenoceptor occupancy and increases of contractile force and adenylate cyclase activity induced by catecholamines in human ventricular myocardium. Acute desensitization and comparison with feline ventricle. Kaumann AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):99–112

On minimum cyclic AMP formation rates associated with positive inotropic effects mediated through beta 1-adrenoceptors in kitten myocardium. Beta 1-specific and non-adrenergic stimulant effects of denopamine. Lemoine H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb;339(1–2):113–28

Positive inotropic effects of calcium channel antagonists are not necessarily caused by partial calcium channel agonism. Punt NC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug;338(2):211–4

Kynurenic acid inhibits the activation of kainic and N-methyl-D-aspartic acid-sensitive ionotropic receptors by a different mechanism. Bertolino M, et al. **Neuropharmacology** 1989 May;28(5):453–7

The cardiopulmonary effects of calcium infusion in infants with persistent pulmonary hypertension of the newborn. Bifano E, et al. **Pediatr Res** 1989 Mar;25(3):262–5

A diminished role for the sarcoplasmic reticulum in newborn myocardial contraction: effects of ryanodine. Klitzner TS, et al. **Pediatr Res** 1989 Aug;26(2):98–101

Comparative in vitro myocardial inotropic effects and in vivo hemodynamic effects of forskolin and isoproterenol in young lambs. Shaddy RE, et al. **Pediatr Res** 1989 Jun; 25(6):580–4

Capsaicin-sensitive structures as potential target sites for neurotensin and bradykinin in guinea pig atria. Rioux F, et al. **Peptides** 1988 Jul–Aug;9(4):883–92

The dual effects of ouabain on 45Ca2+ transport and contractility in adult rat ventricular myocytes. Horackova M, et al. **Pflugers Arch** 1988 Aug;412(3):277–84

Positive chronotropic effects of endothelin, a novel endothelium-derived vasoconstrictor peptide. Ishikawa T, et al. **Pflugers Arch** 1988 Nov;413(1):108–10

Effect of Bay K8644 on cytosolic calcium transients and contraction in embryonic cardiac ventricular myocytes. Lee HC, et al. **Pflugers Arch** 1989 Jan;413(3):225–33

Effects of pyruvate on post-ischemic myocardial recovery at various workloads. van Bilsen M, et al. **Pflugers Arch** 1988 Dec;413(2):167–73

Contractile activation and the effects of 2,3-butanedione monoxime (BDM) in skinned cardiac preparations from normal and dystrophic mice (129/ReJ). West JM, et al. **Pflugers Arch** 1989 Mar;413(5):546–52

Effect of circadian rhythm on the neuronal uptake and sensitivity to the inotropic action of norepinephrine by rat atria. Mehrabani P, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):475–7

A succinylcholine-like action of an Ipomoea carnea Jacq subsp. fistulosa (Mart. ex choisy) extract. Abdelhadi AA, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):431–7

Effects of a new calcium antagonist, Rec 15/2375, on cardiac contractility of conscious rabbits. Bianchi G, et al. **Pharmacol Res** 1989 Mar–Apr;21(2):193–200

New methylxanthine thio-derivatives inducing marked tracheal relaxation without increasing cardiac inotropism or motor activity. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Jul;20(7):621–2

Effect of peripheral benzodiazepine receptor ligands on the contraction of isolated heart atrium and papillary muscle of rats. Saano V, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):147–9

Electrocardiogram of rabbits experimentally intoxicated with carbaryl. Kossakowski S. **Pol Arch Weter** 1987; 27(2–3):15–28

Interleukin 1 and tumor necrosis factor inhibit cardiac myocyte beta-adrenergic responsiveness. Gulick T, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6753–7

Inotropic effects of veratridine on the canine atria and ventricles in vivo and in vitro. Blomquist TM, et al. **Proc West Pharmacol Soc** 1989;32:217–20

Effects of a human urine derived sodium-potassium pump inhibitor on isolated rabbit femoral artery and atria. Prins BA, et al. **Proc West Pharmacol Soc** 1988;31:301–3

Differential effects of acute endotoxin shock on myocardial contractility and performance. Raymond RM, et al. **Prog Clin Biol Res** 1989;299:123–9

Role of the Na+K+-ATPase in the cardiotonic action of cardiac glycosides. Schwartz A, et al. **Prog Clin Biol Res** 1988;268B:321–38 (42 ref.)

Inotropic and toxic actions of several cardiac steroids in sheep cardiac tissues. Wasserstrom JA, et al. **Prog Clin Biol Res** 1988;268B:469–76

TXB2: cardiostimulant effect that involves beta-adrenoceptor and Na+ + K+-ATPase activity. Pascual J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):53–9

Effects of calcium antagonists on hypertension and diastolic function [published erratum appears in S Afr Med J 1989 Sep 2;76(5):232] Opie LH, et al. **S Afr Med J** 1989 Aug 5;76(3):89–92

Low-dose intravenous glucagon has no effect on myocardial contractility in normal man. An echocardiographic study. Thuesen L, et al. **Scand J Clin Lab Invest** 1988 Feb; 48(1):71–5

Cardiovascular profile of AN-132, a new diamine derivative antiarrhythmic agent, revealed in the isolated, blood-perfused dog heart. Gotanda K, et al. **Tohoku J Exp Med** 1988 Sep;156(1):65–78

Negative inotropic and arrhythmic effects of high doses of ciguatoxin on guinea-pig atria and papillary muscles. Lewis RJ. **Toxicon** 1988;26(7):639–49

Doppler echocardiographic assessment of left ventricular diastolic function in patients with primary lung cancer treated with doxorubicin. Maione S, et al. **Tumori** 1988 Dec 31;74(6):725–9

Effect of caffeine on calcium flux across the sarcolemma of guinea pig atrial trabeculae during contracture. Suh CK, et al. **Yonsei Med J** 1988;29(4):341–9

New positive inotropic substances—true inotropy or peripheral effects? Wilmshurst P. **Z Kardiol** 1988;77 Suppl 5:103–11 (75 ref.)

[Effect of beta-adrenergic blockaders and nitrates on left ventricular diastolic function in patients with ischemic heart disease] Ivanov I. **Vutr Boles** 1989;28(1):26–31 (Eng. Abstr.) **(Bul)**

[Effect of diltiazem on left ventricular systolic and diastolic function in hypertrophic cardiomyopathy] Wang K, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):76–7, 126 (Eng. Abstr.) **(Chi)**

[Effect of sodium molybdate on the mechanism of electromechanic activity in heart muscle in guinea pigs] Zhang ST, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):110–2 **(Chi)**

[Calcium antagonistic action of corynanthine in isolated guinea pig left atria] Cheng B, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):327–9 (Eng. Abstr.) **(Chi)**

[Effects of neferine on the isolated rabbit myocardium] Li GR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar; 9(2):139–42 (Eng. Abstr.) **(Chi)**

[Negative chronotropic and inotropic effects of Panax notoginseng saponins] Wu JX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):409–12 (Eng. Abstr.) **(Chi)**

[Effects of resibufogenin on monophasic action potential and contractile force of rabbit heart in situ] Xie JT, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):536–8 (Eng. Abstr.) **(Chi)**

[Effects of neferine on physiologic properties and dose-effect response of isoprenaline and Ca2+ in guinea pig atria] Li GR, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):241–5 (Eng. Abstr.) **(Chi)**

[Effects of praziquantel and its enantiomers on the physiological properties of isolated rat atria] Qian YS, et al. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):812–6 (Eng. Abstr.) **(Chi)**

[The effect of trimecaine on isometric contractions of papillary muscles in rabbits during interpolated extrasystole conditions] **Cesk Fysiol** 1986;35(5):462–3 **(Cze)**

[Protective effect of diltiazem on post-ischemic restoration of contractility] Fišer B, et al. **Cesk Fysiol** 1988;37(6):556–8 **(Cze)**

[Myocardial contraction and calcium antagonists during ontogenesis] Kolář F, et al. **Cesk Fysiol** 1988;37(6):549–51 **(Cze)**

[Effects of antihypertensive treatment on the relaxation of the left ventricle in hypertensive patients] Ollivier JP, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jan;38(1):43–6 (17 ref.) (Eng. Abstr.) **(Fre)**

[Echocardiographic detection of adriamycin cardiotoxicity. Study of the relationship between the shortening fraction-constraint and the systolic shortening fraction-diameter of the left ventricle] Boujon B, et al. **Arch Mal Coeur** 1989 Feb;82(2):167–75 (Eng. Abstr.) **(Fre)**

[Atrial natriuretic factor diminishes the contractility of the cardiac cell in culture] Vaxelaire JF, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:271–3 (Eng. Abstr.) **(Fre)**

[Comparative effects of dihydropyridine inhibitors of calcium penetration on spontaneous contraction of the isolated heart atria in the guinea pig] Prostran M, et al. **C R Soc Biol (Paris)** 1988;182(6):556–62 (Eng. Abstr.) **(Fre)**

[The left ventricular functional parameter in M-mode echocardiography in various administration rates of a loading dose of theophylline in premature infants] Möller JC, et al. **Monatsschr Kinderheilkd** 1989 Jan;137(1):33–6 (Eng. Abstr.) **(Ger)**

[Negative inotropic action of famotidine] Kirch W, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1912–4 (Eng. Abstr.) **(Ger)**

[Fetal systolic time intervals in threatened premature labor and their relation to therapeutic efforts] Ruckhäberle KE, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun;193(3):129–33 (Eng. Abstr.) **(Ger)**

[Effect of ergonovine and the cold stress test on time intervals of left ventricular systole and their significance for the diagnosis of coronary heart disease] Gawor Z, et al. **Z Gesamte Inn Med** 1988 Aug 15;43(16):445–9 (Eng. Abstr.) **(Ger)**

[Diastolic left ventricular volume flow in patients with arterial hypertension before and following acute antihypertensive medication] Curtius JM, et al. **Z Kardiol** 1988 Dec;77(12):789–96 (Eng. Abstr.) **(Ger)**

[Thallium single photon emission computed tomography following thrombolysis: missing relation to left ventricular function] Schofer J, et al. **Z Kardiol** 1988 Aug; 77(8):497–502 (Eng. Abstr.) **(Ger)**

[Regression of hypertrophy following nitrendipine: effect on systolic and diastolic function] Vogt M, et al. **Z Kardiol** 1989 Jan;78(7):469–77 (Eng. Abstr.) **(Ger)**

[Effects of digitalis on the diastolic phase of the normal heart. Angiographic evaluation in man] Bolognesi R, et al. **Cardiologia** 1988 Jun;33(6):589–93 (Eng. Abstr.) **(Ita)**

[Effects of coenzyme Q10 on the contractility and fibrillation threshold of isolated rabbit heart during ischemia and reperfusion] Caldarera CM, et al. **Cardiologia** 1988 Nov; 33(11):1083–8 (Eng. Abstr.) **(Ita)**

[Modification of left ventricular filling after acute administration of nifedipine in hypertensive patients. Doppler echocardiographic study] Manca C, et al. **Cardiologia** 1989 Mar;34(3):237–45 (Eng. Abstr.) **(Ita)**

[Analysis of membrane current system involved in the inotropic effects mediated by alpha-adrenoceptors in the heart] Tohse N. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):754–71 (Eng. Abstr.) **(Jpn)**

[Effect of dobutamine on ventriculo-arterial coupling and ventricular work efficiency in patients with cardiac failure] Ishizaka S, et al. **J Cardiol** 1988 Jun;18(2):457–65 (Eng. Abstr.) **(Jpn)**

[The role of protein kinase C in left ventricular relaxation impaired by global ischemia] Sonoki H, et al. **Kokyu To Junkan** 1989 Jun;37(6):669–74 (Eng. Abstr.) **(Jpn)**

[Systolic time intervals by intratracheal pneumocardiogram and the effects of inhalation anesthetics on cardiac function using this technic] Yorozu T. **Masui** 1989 Apr;38(4):483–92 (Eng. Abstr.) **(Jpn)**

[Prospective monitoring of adriamycin cardiotoxicity with systolic time intervals] Nakamura K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1633–7 (Eng. Abstr.) **(Jpn)**

[Actions of vanadate on muscles] Sunano S. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):103–12 (123 ref.) (Eng. Abstr.) **(Jpn)**

[Non-invasive and invasive evaluation of the inotropic effect of dopamine in children after cardiosurgical procedures] Kruszyński Z. **Kardiol Pol** 1988;31(12):766–73 (Eng. Abstr.) **(Pol)**

[Effect of euphylline on the circulatory system in the light of current theories] Lewczuk J, et al. **Kardiol Pol** 1988; 31(12):799–805 (37 ref.) **(Pol)**

[Effect of a single dose of nifedipine on hemodynamic parameters of pulmonary circulation and left-ventricular function in patients with hypoxic pulmonary hypertension] Poloński L, et al. **Kardiol Pol** 1988;31(10):621–5 (Eng. Abstr.) **(Pol)**

[Effect of pindolol treatment on left-ventricular systolic and diastolic time intervals in men with borderline primary arterial hypertension] Gross-Sawicka E, et al. **Pol Tyg Lek** 1988 Jul 4;43(27):880–4 (Eng. Abstr.) **(Pol)**

[Effect of the treatment with pindolol and clopamide on left-ventricular systolic and diastolic time intervals in patients with moderate primary arterial hypertension] Gross-Sawicka E, et al. **Pol Tyg Lek** 1988 Jul 4; 43(27):885–8 (Eng. Abstr.) **(Pol)**

[Effect of the substitute treatment of hypothyroidism on echocardiographic changes] Łącka K, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1301–2 **(Pol)**

[Central and peripheral hemodynamics during anesthesia in minor gynecologic surgery] Askerov NM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):62–3 **(Rus)**

[Protective effect of antioxidant ionol in total ischemia of the heart] Bilenko MV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):412–5 (Eng. Abstr.) **(Rus)**

[Mechanism of the action of baclofen on the contractile activity of the myocardium and blood vessels] Darinskiĭ IuA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):436–8 (Eng. Abstr.) **(Rus)**

[Effect of the new anti-arrhythmia preparation Bonnecor on the hemodynamics and activity of the ischemic heart] Tolmacheva EA, et al. **Biull Eksp Biol Med** 1989 May; 107(5):588–90 (Eng. Abstr.) **(Rus)**

[Cardiodepressive effect of platelet activating factor] Vornovitskiĭ EG, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):27–30 (Eng. Abstr.) **(Rus)**

[Hypotensive and hemodynamic effects of guanfacine in arterial hypertension] Erina EV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):63–7 (Eng. Abstr.) **(Rus)**

[Effect of thrombolytic therapy on the contractile function of the left-ventricular myocardium in patients with acute myocardial infarction] Mirrakhimov EM, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):93-4 (Rus)

[Myocardial contractile function in acute heart failure during exposure to strophanthin and its combination with alpha-tocopherol] Chekman IS, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):44-7 (Eng. Abstr.) (Rus)

[Inotropic effect of chlorpromazine on the frog atrium] Iuriavichius IA, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):38-42 (Eng. Abstr.) (Rus)

[Features of contraction of various sections of the left ventricle of an intact heart upon the action of inotropic factors] Chernysh AM, et al. **Fiziol Zh SSSR** 1989 Apr; 75(4):529-35 (Eng. Abstr.) (Rus)

[The effect of stimulation frequency on the speed of isometric myocardial relaxation in mammals] Izakov VIa, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):44-51 (Eng. Abstr.) (Rus)

[Experimental study of the effect of rubidium on the cardiovascular system] Akinfieva TA, et al. **Gig Tr Prof Zabol** 1989;(3):16-20 (Eng. Abstr.) (Rus)

[Informative value of statistical and mathematical indicators of cardiac rhythm after exposure to chemical substances] Danev S, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):31-3 (Rus)

[Effect of molsidomine preparations on the contractile function of the myocardium and coronary circulation in patients with ischemic heart disease complicated by heart failure after isometric load] Alekperov EZ. **Kardiologiia** 1989 Apr;29(4):44-7 (Eng. Abstr.) (Rus)

[Study of the effect of the restoration of coronary blood flow on left-ventricular contractility in patients with acute myocardial infarction based on the data of computerized two-dimensional echocardiography] Chikvashvili DI, et al. **Kardiologiia** 1988 Dec;28(12):57-61 (Eng. Abstr.) (Rus)

[Hemodynamic effects of mesotrin after its intravenous administration] Dzhishambaev ED, et al. **Kardiologiia** 1988 Oct;28(10):51-4 (Eng. Abstr.) (Rus)

[Use of isometric load for evaluation of the anti-arrhythmia effect of drugs] Gel'fgat EB, et al. **Kardiologiia** 1988 Dec; 28(12):66-8 (Eng. Abstr.) (Rus)

[Combined effects of cordarone and ritmilen on the contractile function of the myocardium after intravenous and oral administration of loading doses] Gushchin IV, et al. **Kardiologiia** 1988 Oct;28(10):103-4 (Rus)

[Age-related characteristics of a change in cardiac systolic and diastolic functions under the influence of the adrenergic stimulants isadrin and mezaton (based on data from a computer analysis of the echocardiogram)] Korkushko OV, et al. **Kardiologiia** 1988 Aug;28(8):97-9 (Rus)

[Effect of inosine after early infusion of contrykal and heparin in various hemodynamic types of acute myocardial ischemia] Korotkov AA, et al. **Kardiologiia** 1988 Oct; 28(10):91-4 (Eng. Abstr.) (Rus)

[Differences in the effects of corinfar and nitroglycerin on coronary blood flow and myocardial function] Kostko SZ. **Kardiologiia** 1988 Oct;28(10):85-8 (Eng. Abstr.) (Rus)

[Value of echocardiography and amplified atrial vectorcardiography for selecting the methods of therapy and prevention of paroxysmal atrial fibrillation] Lozinskiĭ LG, et al. **Kardiologiia** 1989 Jan;29(1):40-4 (Eng. Abstr.) (Rus)

[Methodological approaches to the evaluation of the effectiveness of anti-anginal preparations in patients with stenocardia by 24-hour ECG monitoring] Metelitsa VI, et al. **Kardiologiia** 1988 Dec;28(12):61-5 (Eng. Abstr.) (Rus)

[Prevention of disorders of cardiac contractility with nicotinamide in adriblastin -related damage] Nurmukhambetov AN, et al. **Kardiologiia** 1988 Dec; 28(12):91-3 (Eng. Abstr.) (Rus)

[Effect of peripheral vasodilators on the local contractile function of the myocardium in patients with post-infarction cardiosclerosis] Ol'binskaia LI, et al. **Kardiologiia** 1988 Oct; 28(10):21-4 (Eng. Abstr.) (Rus)

[Effect of trimecaine on myocardial contractility and the rhythmoinotropic properties of the myocardium in hypoxia] Tsyvian PB, et al. **Kardiologiia** 1989 Jun; 29(6):99-102 (Eng. Abstr.) (Rus)

[Structural and functional status of the myocardium in patients with hypertension after long-term use of albetol] Zanozdra NS, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):58-62 (Eng. Abstr.) (Rus)

[Age-related characteristics of adrenergic regulation of the contractile function of the heart in hypoxia] Lobanok LM, et al. **Kosm Biol Aviakosm Med** 1988 Sep-Oct;22(5):64-8 (Eng. Abstr.) (Rus)

[Effect of medium molecular weight blood peptides in burns on the contractility of the isolated myocardium and the regulation of cardiac rhythm] Bal'dman BM, et al. **Patol Fiziol Eksp Ter** 1988 Nov-Dec;(6):40-3 (Eng. Abstr.) (Rus)

[Effect of ethanol on the contractile function of the heart and the concentration of free fatty acids in the blood of male and female rabbits] Frolov VA, et al. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):12-4 (Eng. Abstr.) (Rus)

[Contractile activity of the heart muscle in acute ethyl alcohol exposure at various times after the occurrence of an embolism of the pulmonary artery branches] Mogilevskiĭ VA. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):15-7 (Eng. Abstr.) (Rus)

[Calcium-induced disorders of myocardial contractility in rats and their prevention with the antioxidant ionol] Nurmukhambetov AN, et al. **Patol Fiziol Eksp Ter** 1988 Nov-Dec;(6):19-21 (Eng. Abstr.) (Rus)

[The effect of endotoxin on the cardiovascular system] Velkov ZA, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb; (1):49-52 (Eng. Abstr.) (Rus)

[Effectiveness and action characteristics of ethmozine in the treatment of children with extrasystole] Galstian AA, et al. **Pediatriia** 1988;(7):49-52 (Rus)

[Changes in myocardial function in patients with hypertension during treatment with minipress] Bakhshaliev AB, et al. **Ter Arkh** 1988;60(8):63-6 (Eng. Abstr.) (Rus)

[Comparison of the effect of BL 343 Ac with beta-adrenolytics on heart muscle preparations] Knezl V, et al. **Bratisl Lek Listy** 1989 Jun;90(6):441-6 (Eng. Abstr.) (Slo)

[Evaluation of left ventricular function in ischemic heart disease: hemodynamic, volumetric response and changes in wall kinetics during double left ventricular angiography] Simo M, et al. **Cesk Fysiol** 1988;37(6):559-62 (Slo)

[Effect of propranolol on left ventricular function in hyperthyroidism] Goldberg V, et al. **Medicina (B Aires)** 1988;48(2):167-71 (Eng. Abstr.) (Spa)

[Effect of several inhalation anesthetics on ectopic cardiac automaticity. Intervention of the calcium ion] Cárceles Barón MD, et al. **Rev Esp Anestesiol Reanim** 1989 May-Jun;36(3):140-4 (Eng. Abstr.) (Spa)

MYOCARDIAL DEPRESSANT FACTOR see under **PEPTIDES**

MYOCARDIAL DEPRESSANTS see **ANTI-ARRHYTHMIA AGENTS**

MYOCARDIAL DISEASES

Arrhythmogenic cardiomyopathy with ectodermal dysplasia [letter] Protonotarios N, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1651-2

Proceedings of the British Cardiac Society. Autumn meeting. London, 22 to 24 November 1988. Abstracts. **Br Heart J** 1989 Jan;61(1):71-127

The cardiomyopathies. **Cardiol Clin** 1988 May;6(2):185-320

Gender-related differences in cardiomyopathy. Berko BA. **Cardiovasc Clin** 1989;19(3):285-300 (67 ref.)

Physical activity after viral illness [letter] Rudoff J. **Chest** 1989 Sep;96(3):703

BLOOD

[Pathologic serum albumin in myocardial lesions of various origins] Mazurets AF. **Sov Med** 1988;(11):6-9 (Eng. Abstr.) (Rus)

[Transport of fatty acids and products of their peroxidation by serum albumin in ischemic and non-coronary injury of the myocardium] Tolkacheva NV, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):89-92 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Perturbation of the sarcolemmal membrane in isoproterenol-induced myocardial injury of the rat. Permeability and freeze-fracture studies in vivo and in vitro. Yunge L, et al. **Am J Pathol** 1989 Jan;134(1):171-85

Decreased cardiac toxicity of doxorubicin administered by continuous intravenous infusion in combination chemotherapy for metastatic breast carcinoma. Hortobagyi GN, et al. **Cancer** 1989 Jan 1;63(1):37-45

Circulating drug levels in patients presenting cardiotoxicity to 5-FU [letter] Thyss A, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1675-6

Morphometric study of myocardial changes during doxorubicin-induced cardiomyopathy in mice. van der Vijgh WJ, et al. **Eur J Cancer Clin Oncol** 1988 Oct; 24(10):1603-8

R-wave voltage in the right precordial leads in anthracycline cardiomyopathy: a clinical study. Onouchi Z, et al. **Int J Clin Pharmacol Res** 1988;8(6):423-31

Exercise training attenuates the myocardial dysfunction induced by endotoxin. DeBlieux PM, et al. **J Appl Physiol** 1989 Jun;66(6):2805-10

Evaluation of the JT and corrected JT intervals as a new ECG method for monitoring doxorubicin cardiotoxicity in the dog. Danesi R, et al. **J Pharmacol Methods** 1989 Jul;21(4):317-27

Cardiac damage in autologous bone marrow transplant patients: an autopsy study. Cardiotoxic pretreatment as a major risk factor. von Herbay A, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1175-81

Myocardial degeneration in chronic solvent abuse. Claydon SM. **Med Sci Law** 1988 Jul;28(3):217-8

A comparative study of minoxidil-induced myocardial lesions in beagle dogs and miniature swine. Herman EH, et al. **Toxicol Pathol** 1989;17(1 Pt 2):182-92

Fatal cardiomyopathy: suspected child abuse by chronic ipecac administration. Day L, et al. **Vet Hum Toxicol** 1989 Jun;31(3):255-7

[Fatal myocardiopathy due to adriamycin in spite of a reportedly non-dangerous cumulative dose] Battin J, et al. **Ann Pediatr (Paris)** 1989 Feb;36(2):136-40 (Eng. Abstr.) (Fre)

[Serial determination of anthracycline poisoning in children] Stein JI, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):45-8 (Eng. Abstr.) (Ger)

[Echocardiography with angiotensin administration in the diagnosis of adriamycin-induced cardiomyopathy] Göldel N, et al. **Z Kardiol** 1989 May;78(5):320-7 (Eng. Abstr.) (Ger)

[Cardiomyopathy due to adriamycin: the possibility of its prevention. Monitoring by noninvasive technics] Bianchi L, et al. **Minerva Med** 1989 Mar;80(3):215-26 (Eng. Abstr.) (Ita)

[Specific cardiomyopathy caused by high dose cyclophosphamide immediately after bone marrow transplantation] Mitsui H, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):387-91 (Eng. Abstr.) (Jpn)

[Changes in the myocardium damaged by strophanthin] Fedosenko NG, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):48-52 (Eng. Abstr.) (Rus)

[Effect of prostaglandin E2 on the development of adrenaline-induced myocardiodystrophy] Markova EA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):529-31 (Eng. Abstr.) (Rus)

[Development of myocardiopathy during treatment of acute lymphoblastic leukemia with anthracycline antibiotics] Radojković B, et al. **Srp Arh Celok Lek** 1988 Apr; 116(4):347-54 (Eng. Abstr.) (Scc)

CLASSIFICATION

Overview and classification of the cardiomyopathies. Goodwin JF. **Cardiovasc Clin** 1988;19(1):3-7 (25 ref.)

COMPLICATIONS

Vectorcardiographic evaluation of diabetic cardiomyopathy and of its contributing factors [see comments] Vitolo E, et al. **Acta Diabetol Lat** 1988 Jul-Sep;25(3):227-34. **Comment in:** Acta Diabetol Lat 1989 Jan-Mar;26(1):83-5

Frequency of acute and healed myocardial infarcts in fatal cardiac amyloidosis. Barbour DJ, et al. **Am J Cardiol** 1988 Nov 15;62(16):1134-5

Long-term follow-up of patients with echocardiographically detected mitral anular calcium and comparison with age- and sex-matched control subjects. Nair CK, et al. **Am J Cardiol** 1989 Feb 15;63(7):465-70

Fatal hemopericardium due to ruptured solitary myocardial abscess unassociated with infective endocarditis. Winek RR, et al. **Am J Cardiovasc Pathol** 1988;2(3):255-7

Senile cardiac amyloidosis and lethal arrhythmia [letter] Hudock PA, et al. **Am J Forensic Med Pathol** 1989 Mar; 10(1):90-1

Mitral regurgitation secondary to mitral valve involvement in cardiac amyloidosis. Richard C, et al. **Am J Med** 1988 Oct;85(4):582-4

AIDS and the heart [letter] Mullins RJ, et al. **Aust N Z J Med** 1988 Oct;18(6):809-11

Recognition of congestive heart failure due to senile cardiac amyloidosis. Gertz MA, et al. **Biomed Pharmacother** 1989; 43(2):101-6

Leber's congenital amaurosis--a new syndrome with a cardiomyopathy. Russell-Eggitt IM, et al. **Br J Ophthalmol** 1989 Apr;73(4):250-4

Cardiovascular complications of amyloidosis presenting in the urinary tract. Blundell JW. **Br J Urol** 1988 Oct; 62(4):386-7

Failure of corticosteroid therapy to prevent induction of ventricular tachycardia in sarcoidosis. Belhassen B, et al. **Chest** 1989 Apr;95(4):918-20

Fate of left ventricular thrombi in patients with remote myocardial infarction or idiopathic cardiomyopathy. Stratton JR, et al. **Circulation** 1988 Dec;78(6):1388-93

Mitral annular calcification and coarctation of aorta. Nair CK, et al. **Clin Cardiol** 1988 Aug;11(8):578-80

Cardiomyopathy in phaeochromocytoma: a case report. Villani A, et al. **Eur J Anaesthesiol** 1989 May;6(3):233-6

Catecholamine heart muscle disease in pheochromocytoma. Balažovjech I, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):29-36

Proliferative membranopathy and human immunodeficiency virus in AIDS hearts. Flomenbaum M, et al. **J Acquir Immune Defic Syndr** 1989;2(2):129-35

Cardiomyopathy associated with the acquired immune deficiency syndrome. Kaminski HJ, et al. **J Acquir Immune Defic Syndr** 1988;1(2):105-10

Endocarditis due to Neisseria mucosa complicated by myocardial abscess [letter] Fernández-Guerrero ML, et al. **J Infect** 1989 May;18(3):294-5

Hurler syndrome with cardiomyopathy in infancy. Donaldson MD, et al. **J Pediatr** 1989 Mar;114(3):430-2

DIDMOAD (diabetes insipidus, diabetes mellitus, optic atrophy and deafness) syndrome associated with myocardial disease. Ito H, et al. **Jpn Heart J** 1988 May; 29(3):371-5

Massive left ventricular endomyocardial calcification associated with apical hypertrophic cardiomyopathy. Bolz KD, et al. **ROFO** 1988 Oct;149(4):436-7

Pericardial actinomycosis with cardiac tamponade from a contiguous thoracic lesion. Slutzker AD, et al. **Thorax** 1989 May;44(5):442-3

Anginal chest pain in sarcoidosis. Wait JL, et al. **Thorax** 1989

May;44(5):391–5
[Sudden death of a young adult and right ventricular cardiomyopathy (letter)] Massen H. **Ann Fr Anesth Reanim** 1988;7(5):443 **(Fre)**
[Thrombosis of the right ventricle in 2 infants with myocardiopathy] Regaieg R, et al. **Ann Pediatr (Paris)** 1989 May;36(5):339–42 (Eng. Abstr.) **(Fre)**
[Amyloidosis as a cause of therapy refractory heart failure] Hartmann A, et al. **Med Klin** 1988 Oct 14;83(20):655–9 (Eng. Abstr.) **(Ger)**
[Progressive cardiomyopathic lentiginosis (Leopard syndrome, Moynahan syndrome)] Török L, et al. **Orv Hetil** 1989 Jul 16;130(29):1531–2, 1535–6 (Eng. Abstr.) **(Hun)**
[Atrial involvement in arrhythmogenic right ventricular dysplasia: primary or secondary? Description of a case of occult ventricular dysplasia with right atrial enlargement and exclusively sinoatrial arrhythmia] Proclemer A, et al. **G Ital Cardiol** 1988 Aug;18(8):671–5 (Eng. Abstr.) **(Ita)**
[A case of cardiac sarcoidosis with various electrocardiographic change] Hokamura Y, et al. **Kokyu To Junkan** 1989 May;37(5):547–52 (Eng. Abstr.) **(Jpn)**
[A case of myxedema of the heart with sleep apnea syndrome] Shiomi T, et al. **Kokyu To Junkan** 1988 Sep;36(9):1011–6 (Eng. Abstr.) **(Jpn)**
[Mechanisms of myocardial injuries and their role in the pathogenesis of endotoxic shock] Bardakhch'ian EA. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):80–4 (78 ref.) **(Rus)**

CONGENITAL

Dysplastic cardiac development presenting as cardiomyopathy. Allenby PA, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1255–8
[Myocardial dysplasia of the right ventricle (Uhl's anomaly) as a possible cause of sudden, unexpected death] Sigrist T, et al. **Z Rechtsmed** 1988;100(2–3):176–89 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Echocardiography and magnetic resonance imaging in cardiac amyloidosis. von Kemp K, et al. **Acta Cardiol** 1989; 44(1):29–36
MR imaging of myocardial sarcoidosis. Riedy K, et al. **AJR** 1988 Nov;151(5):915–6
Cardiac hydatid cyst with clinical features resembling subaortic stenosis. Russo G, et al. **Am Heart J** 1989 Jun; 117(6):1385–7
Results, perspectives, and forensic medical aspects of myocardial biopsy. Somogyi E. **Am J Forensic Med Pathol** 1989 Jun;10(2):115–23 (44 ref.)
The clinical presentation and laboratory evaluation of congestive and ischemic cardiomyopathies. Rahko PS, et al. **Cardiovasc Clin** 1988;19(1):75–119 (142 ref.)
Myocardial hydatid cyst ruptured into the pericardium: cross-sectional echocardiographic study and surgical treatment. De Martini M, et al. **Eur Heart J** 1988 Jul; 9(7):819–24
Contribution of cross-sectional echocardiography to the diagnosis of right ventricular dysplasia at the asymptomatic stage. Scognamiglio R, et al. **Eur Heart J** 1989 Jun; 10(6):538–42
Feasibility of identifying amyloid and hypertrophic cardiomyopathy with the use of computerized quantitative texture analysis of clinical echocardiographic data. Chandrasekaran K, et al. **J Am Coll Cardiol** 1989 Mar 15; 13(4):832–40
Quantitative characterization of myocardium with ultrasonic imaging. Pérez JE, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):149–57
Pyramid electrode location in a cardiac micropotential study. Kepski R, et al. **PACE** 1989 Jun;12(6):887–98
Diagnostic histology of myocardial disease in endomyocardial biopsies and at autopsy. Lie JT. **Pathol Annu** 1989;24 Pt 2:255–93 (88 ref.)
Asymptomatic myocardial abscess. Borowski A, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):338–40
Cardiac sarcoidosis. Oakley CM. **Thorax** 1989 May; 44(5):371–2 (12 ref.)
[Primary echinococcus cyst of the heart. A case report] Barnard PM, et al. **S Afr Med J** 1989 Sep 16;76(6):275–7 (Eng. Abstr.) **(Afr)**
[Radiographic examination of the thorax, fluoroscopy and echocardiography in cardiac calcification] Steensgaard-Hansen FV, et al. **Ugeskr Laeger** 1989 May 8;151(19):1186–8 (Eng. Abstr.) **(Dan)**
[Hydatid cyst of the heart of multivesicle type. Apropos of a case] Haouala H, et al. **Ann Cardiol Angeiol (Paris)** 1989 Feb;38(2):83–6 (12 ref.) (Eng. Abstr.) **(Fre)**
[Diagnosis of cardiomyopathies] Mager G, et al. **Dtsch Med Wochenschr** 1989 Jun 16;114(24):955–8 **(Ger)**
[The diagnosis of cardiomyopathies using magnetic resonance] Buser PT, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):896–901 (30 ref.) (Eng. Abstr.) **(Ger)**
[Echocardiography methods in the diagnosis of cardiomyopathies in children] First T, et al. **Wien Klin Wochenschr** 1988 Dec 16;100(24):801–5 (Eng. Abstr.) **(Ger)**
[A clinical case. Painful thoracic symptomatology of the constrictive type] Ippolito F, et al. **G Clin Med** 1989 Jan; 70(1):55–60 **(Ita)**
[Ambulatory ECG in cardiomyopathies] Mestroni L, et al. **G Ital Cardiol** 1987 Dec;17(12):1139–44 (Eng. Abstr.) **(Ita)**
[Cardiac amyloidosis. Invasive and noninvasive diagnosis] Pinamonti B, et al. **G Ital Cardiol** 1987 Dec;17(12):1016–30 (Eng. Abstr.) **(Ita)**
[Transesophageal echocardiography] Sparacino L, et al. **G Ital Cardiol** 1988 Sep;18(9):748–52 (49 ref.) **(Ita)**
[A case of cardiac sarcoidosis diagnosed by endomyocardial biopsy] Fuchi T, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):406–7 **(Jpn)**
[Cardiomyopathies: current aspects of the problem] Mukharliamov NM. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):3–6 **(Rus)**
[Current methods of examination in the diagnosis of sarcoidosis of the heart] Moiseev SV, et al. **Kardiologiia** 1988 Jul;28(7):41–4 (Eng. Abstr.) **(Rus)**
[Results of the exercise test in women with ischemic heart disease and autonomic-dyshormonal myocardial dystrophy] Mordovin VF, et al. **Kardiologiia** 1989 Jan; 29(1):95–7 **(Rus)**
[Diagnosis and treatment of echinococcosis in an unusual location] Usmanov NU, et al. **Khirurgiia (Mosk)** 1989 Jun; (6):86–90 (Eng. Abstr.) **(Rus)**
[Bicycle ergometry in the diagnosis of cardiac lesions in chronic tonsillitis] Karpov RS, et al. **Klin Med (Mosk)** 1989 Mar;67(3):68–71 (Eng. Abstr.) **(Rus)**
[Clinico-instrumental examination of women with myocardial dystrophy and neurocirculatory asthenia] Mordovich VF, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):46–8 (Eng. Abstr.) **(Rus)**
[Myocardial involvement in Reiter's disease] Balaban SIa, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):76–9 (Eng. Abstr.) **(Rus)**
[Enzyme diagnosis of cardiac lesions in meningococcal infection] Radzivil GG, et al. **Ter Arkh** 1988;60(11):53–7 **(Rus)**
[Functional activity of blood neutrophils in patients with non-coronarogenic myocardial diseases] Mazurets AF. **Vrach Delo** 1988 Oct;(10):21–3 (Eng. Abstr.) **(Rus)**
[The importance of endomyocardial biopsy in the diagnosis of noncoronarogenic diseases of the heart muscle] Tereshchenko VP, et al. **Vrach Delo** 1988 Aug;(8):46–8 (Eng. Abstr.) **(Rus)**
[Diagnostic usefulness of 2-dimensional echocardiography in eosinophilic endomyocardial disease (Loeffler disease)] González Torrecilla E, et al. **Rev Esp Cardiol** 1989 Feb; 42(2):126–30 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Effective therapy for a severe case of the idiopathic hypereosinophilic syndrome. Marshall GM, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):178–83 (26 ref.)
The effect of cibenzoline on myocardial damages in dogs. Taki K, et al. **Arzneimittelforschung** 1989 Mar;39(3):325–8
Medical therapy of end-stage congestive and ischemic cardiomyopathy. Leier CV, et al. **Cardiovasc Clin** 1988; 19(1):243–51 (26 ref.)
Pimobendan increases survival of cardiomyopathic hamsters. van Meel JC, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):508–9
Effective and safe therapy with coenzyme Q10 for cardiomyopathy. Langsjoen PH, et al. **Klin Wochenschr** 1988 Jul 1;66(13):583–90
Alprazolam reduces stress-induced mortality in cardiomyopathic hamsters. Tapp WN, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):331–6
[Therapy of cardiomyopathies] Klocke RK, et al. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):993–7 (12 ref.) **(Ger)**
[A case of myocardial sarcoidosis with corticosteroids therapy] Taniguchi H, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):726–31 **(Jpn)**
[Antiarrhythmic drug therapy for arrhythmogenic right ventricular dysplasia] You S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):387–92 **(Jpn)**
[Prevention of disorders of cardiac contractility with nicotinamide in adriblastin -related damage] Nurmukhambetov AN, et al. **Kardiologiia** 1988 Dec; 28(12):91–3 (Eng. Abstr.) **(Rus)**
[Use of cobamide coenzyme in non-coronarogenic myocardial diseases] Mazurets AF. **Sov Med** 1988;(5):57–60 **(Rus)**

ENZYMOLOGY

Heart protein kinase C activity increases during progression of disease in the cardiomyopathic hamster. Chambers TC, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):507–14
Na+,K+-ATPase concentration in rodent and human heart and skeletal muscle: apparent relation to muscle performance. Kjeldsen K, et al. **Cardiovasc Res** 1988 Feb; 22(2):95–100
Mechanism of myocardial injury in dogs with hypokalaemia. Sugiyama S, et al. **Cardiovasc Res** 1988 Apr;22(4):249–54
Absence of myophosphorylase in ethanol induced cardiomyopathy. Baruah JK, et al. **Exp Pathol** 1988; 33(4):197–200
The Na,K-pump in human myocardium: quantification in normal subjects and patients with suspected cardiomyopathy. Nørgaard A, et al. **Prog Clin Biol Res** 1988;268B:269–74

EPIDEMIOLOGY

[Postpartum cardiomyopathy in the Sudanese-Sahelian area. Clinical and epidemiologic studies of 66 cases] Cénac A, et al. **Arch Mal Coeur** 1989 Apr;82(4):553–8 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Catecholamine cardiotoxicity in pheochromocytoma [letter] Ganguly PK, et al. **Am Heart J** 1989 Jun;117(6):1399–400
Hypercalcemia, primary hyperparathyroidism, and cardiac calcifications [letter] Rao DS, et al. **Am J Med** 1989 Mar; 86(3):364
Myocardial calcification and cardiac dysfunction in chronic renal failure. Rostand SG, et al. **Am J Med** 1988 Nov; 85(5):651–7
Cytoskeletal injury and subsarcolemmal bleb formation in dog heart during in vitro total ischemia. Sage MD, et al. **Am J Pathol** 1988 Nov;133(2):327–37
Basis for myocardial mechanical defects associated with non-insulin-dependent diabetes. Schaffer SW, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E25–30
Reversible myocardial damage in gerbil brain ischaemia and its prevention by beta-adrenergic blockade. Kolin A, et al. **Br J Exp Pathol** 1988 Oct;69(5):621–30
Heart disease arising during or secondary to pregnancy. James KB, et al. **Cardiovasc Clin** 1989;19(3):81–96 (43 ref.)
Cardiac effects of common viral illnesses. Montague TJ, et al. **Chest** 1988 Nov;94(5):919–25
Coronary artery fistula in the heart transplant patient. A potential complication of endomyocardial biopsy. Sandhu JS, et al. **Circulation** 1989 Feb;79(2):350–6
Thalassemic cardiomyopathy: echocardiographic difference between major and intermediate thalassemia at rest and during isometric effort: yearly follow-up. Canale C, et al. **Clin Cardiol** 1988 Aug;11(8):563–71
Myocardial calcification [letter; comment] Smith JA, et al. **J Heart Transplant** 1989 May–Jun;8(3):268. **Comment on:** J Heart Transplant 1988 Jul–Aug;7(4):304–8
Is nonobstructive cardiomyopathy in AIDS a selenium deficiency-related disease? [letter] Zazzo JF, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):537–8
Perforation of a gastrojejunal ulcer into the pericardium. Yazicioglu N, et al. **N Y State J Med** 1989 Jun;89(6):358–9
Calcinosis of the myocardium in chronic haemodialysed patients. Zazgornik J, et al. **Pol Arch Med Wewn** 1985 Sep; 74(3):213–6
[Cardiac beriberi—heart failure associated with vasodilatation] Gajdošová I, et al. **Vnitr Lek** 1988 Nov; 34(11):1093–7 (Eng. Abstr.) **(Cze)**
[Primary cardiomyopathies and disorders of myocardial energy metabolism: causes or consequences?] Duboc D, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:41–5 (Eng. Abstr.) **(Fre)**
[Recurrent myocardial abscess during Streptococcus B endocarditis] Prunier L, et al. **Arch Mal Coeur** 1988 Jul; 81(7):925–8 (Eng. Abstr.) **(Fre)**
[Physiopathogeny of sclerodermal cardiomyopathy] Kahan A, et al. **Presse Med** 1988 Dec 3;17(43):2269–70 **(Fre)**
[Secondary diseases of the heart muscle and their differential diagnosis in childhood] Sieverding L, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):39–44 (Eng. Abstr.) **(Ger)**
[Myocardial calcification in chronic renal failure] Illyés G, et al. **Orv Hetil** 1989 Apr 23;130(17):883–6 (Eng. Abstr.) **(Hun)**
[Reversible cardiomyopathy caused by chronic tachyarrhythmia (editorial)] Critelli G. **Cardiologia** 1988 Jul;33(7):713–5 **(Ita)**
[Echocardiographic changes in primary autoimmune hypothyroidism] Castelli V, et al. **Recenti Prog Med** 1989 Apr;80(4):183–5 (Eng. Abstr.) **(Ita)**
[A case of massive myocardial calcification—13 years after myocardial infarction] Chida K, et al. **Kokyu To Junkan** 1988 Sep;36(9):1017–21 (Eng. Abstr.) **(Jpn)**
[A case of carrier of Duchenne's muscular dystrophy complicated with myocardial disease] Kurahashi M, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):655–60 **(Jpn)**
[Immune disorders in tonsillogenic lesions of the heart] Dutka RIa. **Vrach Delo** 1988 Nov;(11):55–7 (Eng. Abstr.) **(Rus)**
[Cardiopathy in Noonan syndrome. Review of 29 cases] Zubeldia Sánchez J, et al. **An Esp Pediatr** 1989 Feb; 30(2):104–8 (26 ref.) (Eng. Abstr.) **(Spa)**
[Cardiac involvement in scleroderma] Olivares LM, et al. **Med Cutan Ibero Lat Am** 1988;16(6):481–8 (Eng. Abstr.) **(Spa)**

GENETICS

Treatment by pacemaker in familial amyloid polyneuropathy. Anzai N, et al. **Chest** 1989 Jul;96(1):80–4
Juvenile sudden death and effort ventricular tachycardias in a family with right ventricular cardiomyopathy. Nava A, et al. **Int J Cardiol** 1988 Nov;21(2):111–26

Familial occurrence of right ventricular dysplasia: a study involving nine families. Nava A, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1222–8

Familial occurrence of right ventricular dysplasia: a study involving nine families. Perloff JK. **J Am Coll Cardiol** 1988 Nov;12(5):1229–30

Cellular oncogene expression in the idiopathic cardiomyopathic hamster heart during the growing process. Deguchi Y, et al. **J Mol Cell Cardiol** 1988 Sep; 20(9):801–9

Cardiac and neurological abnormalities in v–fps transgenic mice. Yee SP, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5873–7

[Familial primary disseminated amyloidosis (a new clinical form?)] Moulin G, et al. **Ann Dermatol Venereol** 1988; 115(5):565–70 (Eng. Abstr.) (Fre)

[The genetics of noncoronarogenic lesions of the heart muscle] Koshechkin VA. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):106–14 (56 ref.) (Rus)

[Hereditary hemochromatosis with a predominant lesion of the heart] Settarova DA, et al. **Sov Med** 1989;(2):61–6 (Rus)

[Rhythm and conduction disorders in familial myocardiopathy] Hurtado Buen Abad L, et al. **Arch Inst Cardiol Mex** 1976 May–Jun;46(3):253–61 (14 ref.) (Eng. Abstr.) (Spa)

IMMUNOLOGY

Immunopathology of cardiac diseases I. **Springer Semin Immunopathol** 1989;11(1):1–87

[Direct and indirect immunofluorescence studies in congestive myocardial diseases] Högye M, et al. **Orv Hetil** 1989 Jul 9;130(28):1471–9 (35 ref.) (Eng. Abstr.) (Hun)

[Immunologic disorders in noncoronary diseases of the myocardium] Rukosuev VS, et al. **Klin Med (Mosk)** 1988 Aug;66(8):71–5 (Rus)

[The effect of norkolut on immune system status in patients with dyshormonal myocardial dystrophy and hyperplastic processes of the uterus] Khait OV, et al. **Vrach Delo** 1989 Feb;(2):21–4 (Eng. Abstr.) (Rus)

METABOLISM

Adenylate cyclase activity coupled to the stimulatory guanine nucleotide binding protein in patients having electrophysiologic studies and either structurally normal hearts or idiopathic myocardial disease. Karliner JS, et al. **Am J Cardiol** 1988 Nov 15;62(16):1129–30

Magnesium deficiency cardiomyopathy. Bloom S. **Am J Cardiovasc Pathol** 1988 Apr;2(1):7–17 (66 ref.)

Influence of verapamil on some subcellular defects in diabetic cardiomyopathy. Afzal N, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):E453–8

Decreased atrial natriuretic factor receptors and impaired cGMP generation in glomeruli from the cardiomyopathic hamster. Levin ER, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):807–14

Inhibition of the effects of adenosine on force of contraction and the slow calcium inward current by pertussis toxin is associated with myocardial lesions. Böhm M, et al. **Cardiovasc Res** 1988 Feb;22(2):87–94

[3H]–nitrendipine binding sites in normal and cardiomyopathic hamsters: absence of a selective increase in putative calcium channels in cardiomyopathic hearts. Howlett SE, et al. **Cardiovasc Res** 1988 Nov;22(11):840–6

Subcellular calcium content in cardiomyopathic hamster hearts in vivo: an electron probe study. Bond M, et al. **Circ Res** 1989 May;64(5):1001–12

Ventricles as a major site of atrial natriuretic factor synthesis and release in cardiomyopathic hamsters with heart failure. Thibault G, et al. **Circ Res** 1989 Jul;65(1):71–82

Alterations in calcium antagonist receptors and sodium–calcium exchange in cardiomyopathic hamster tissues. Wagner JA, et al. **Circ Res** 1989 Jul;65(1):205–14

Cardiomyopathy associated with carnitine loss in kidneys and small intestine. Rodrigues Pereira R, et al. **Eur J Pediatr** 1988 Dec;148(3):193–7

Nonesterified fatty acid accumulation and release during heart muscle–cell (myocyte) injury: modulation by extracellular "acceptor". Janero DR, et al. **J Cell Physiol** 1989 Jul;140(1):150–60

Lung is an important source of atrial natriuretic factor in experimental cardiomyopathy. Gutkowska J, et al. **J Clin Invest** 1989 May;83(5):1500–4

Decreased bioactivity of the guanine nucleotide–binding protein that stimulates adenylate cyclase in hearts from cardiomyopathic Syrian hamsters. Kessler PD, et al. **J Clin Invest** 1989 Jul;84(1):244–52

Structural and chemical characterization of inorganic deposits in calcified human mitral valve. Bigi A, et al. **J Inorg Biochem** 1988 Oct;34(2):75–82

Reduction of myofibrillar ATPase activity and isomyosin shift in delayed doxorubicin cardiotoxicity. Cappelli V, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):93–101

Functional state of myofibrils, mitochondria and bound creatine kinase in skinned ventricular fibers of cardiomyopathic hamsters. Veksler VI, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):329–42

Increased 1,2–diacylglycerol content in myopathic hamster hearts at a prenecrotic stage. Okumura K, et al. **Life Sci** 1988;43(17):1371–7

Sarcolemmal Na+–Ca2+ exchange and Ca2+–pump activities in cardiomyopathies due to intracellular Ca2+–overload. Dhalla NS, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):75–9

Vitamin E deficiency accentuates adriamycin–induced cardiomyopathy and cell surface changes. Singal PK, et al. **Mol Cell Biochem** 1988 Dec;84(2):163–71

Calcium–antagonist receptors in cardiomyopathy [letter] Lohse MJ. **N Engl J Med** 1989 Sep 7;321(10):686–7

Effects of chronic alprazolam treatment on plasma concentrations of glucocorticoids, thyroid hormones, and testosterone in cardiomyopathic hamsters. Ottenweller JE, et al. **Psychopharmacology (Berlin)** 1989;98(3):369–71

MICROBIOLOGY

Enterovirus infection in peripartum cardiomyopathy [letter] Cénac A, et al. **Lancet** 1988 Oct 22;2(8617):968–9

Pathogenesis of acute myocardial necrosis in inbred mice infected with coxsackievirus B3. Grun JB, et al. **Microb Pathog** 1988 Jun;4(6):417–30

[Chronic cardiac actinomycosis. Case report and review of the literature] Sandoval V, et al. **Arch Inst Cardiol Mex** 1988 May–Jun;58(3):243–5 (15 ref.) (Eng. Abstr.) (Spa)

MORTALITY

[Circadian rhythm in the incidence of sudden cardiac death] Pasqualetti P, et al. **Cardiologia** 1989 Mar;34(3):201–7 (Eng. Abstr.) (Ita)

NURSING

Cardiomyopathy. Purcell JA, et al. **Am J Nurs** 1989 Jan; 89(1):57–74B

[Care of patients with acute Keshan disease] Sun GR, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):330–1 (Chi)

[Experience in the nursing care of patients with Keshan disease: report of 411 cases] Wu DR. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):328–9 (Chi)

PATHOLOGY

Cardiomyopathy characterized by abnormal accumulation of desmin–type intermediate filaments in cardiac muscle fibers. A case report and review of the literature. Tanaka M, et al. **Acta Pathol Jpn** 1989 Apr;39(4):266–73 (27 ref.)

Pathogenesis of cardiovascular disorders in streptozotocin–induced diabetes in rat. I. Cardiovascular, renal and morphologic changes in different stages of diabetes. Somova L, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):46–56

Structural manifestations of diabetic cardiomyopathy in the rat and its reversal by insulin treatment. Thompson EW. **Am J Anat** 1988 Jul;182(3):270–82

Cardiomyopathy in a rat model of pheochromocytoma. Morphological and functional alterations. Rosenbaum JS, et al. **Am J Cardiovasc Pathol** 1988;1(3):389–99

Cardiac pathology in the hypertensive diabetic rat. Biventricular damage with right ventricular predominance. Fein FS, et al. **Am J Pathol** 1989 May;134(5):1159–66

Myopathy in primary systemic amyloidosis. Roke ME, et al. **Can J Neurol Sci** 1988 Aug;15(3):314–6 (19 ref.)

Representativity of endomyocardial biopsies: a theoretical approach based on quantitative light microscopy. Jantunen E, et al. **Cardiology** 1989;76(1):1–9

Pathology of cardiomyopathies. Becker AE. **Cardiovasc Clin** 1988;19(1):9–31 (64 ref.)

Ethanol induced cardiomyopathy—role of periodic fasting. Baruah JK, et al. **Exp Pathol** 1988;33(4):201–6

Rat endomyocardial disease: a neural origin? Landes C, et al. **Exp Pathol** 1988;34(2):65–9

Acute pathological effects on rats of orally administered wortmannin–containing preparations and purified wortmannin from Fusarium oxysporum. Gunther R, et al. **Food Chem Toxicol** 1989 Mar;27(3):173–9

Abnormalities in position of left ventricular papillary muscles in congenital aortic stenosis. Connuck DM, et al. **Int J Cardiol** 1989 Sep;24(3):359–62

Surgical pathology of disease of the mitral valve, with special reference to lesions promoting valvar incompetence. Turri M, et al. **Int J Cardiol** 1989 Feb;22(2):213–9

Myocardial calcification after orthotopic heart transplantation [see comments] Cohnert TR, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):304–8. **Comment in:** J Heart Transplant 1989 May–Jun;8(3):268

Recurrence of amyloid in a cardiac allograft four months after transplantation. Valantine HA, et al. **J Heart Transplant** 1989 Jul–Aug;8(4):337–41

Ultrastructural localization of calcium in the myocardium of cardiomyopathic syrian hamsters. Olbrich HG, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):753–62

Myocardial involvement in Churg–Strauss syndrome: the role of endomyocardial biopsy. Leung WH, et al. **J Rheumatol** 1989 Jun;16(6):828–31

Senile cardiac amyloidosis in senescence accelerated mouse (SAM). Ogawa H. **Jpn Circ J** 1988 Dec;52(12):1377–83

Multiple fistulae of coronary arteries to both ventricles. Shiota K, et al. **Jpn Heart J** 1988 Sep;29(5):741–6

Inoperable plasma cell granuloma of the heart: spontaneous decrease in size during an 11–month period. Pearson PJ, et al. **Mayo Clin Proc** 1988 Oct;63(10):1022–5

Life–threatening congestive heart failure as the presentation of centronuclear myopathy. Gospe SM Jr, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):117–20

Cardiac fibrosis in the aged germfree and conventional Lobund–Wistar rat. Cornwell GG 3d, et al. **Prog Clin Biol Res** 1989;287:69–74

Usefulness of endomyocardial biopsy in tertiary care. Hosenpud JD. **West J Med** 1989 Jan;150(1):43–5

Cardiomyopathies with particular reference to the diagnostic relevance of endomyocardial biopsies. Becker AE. **Wien Klin Wochenschr** 1988 Dec 16;100(24):787–91 (25 ref.)

[Ultrastructural morphometric studies of the myocardium of cardiomyopathic hamsters of the BI0 8262 strain] Fitzl G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):191–3 (Eng. Abstr.) (Ger)

[Sarcoidosis with heart involvement] Krause U, et al. **Z Arztl Fortbild (Jena)** 1988;82(17):829–31 (Ger)

[Myocardial sarcoidosis] Schilling W, et al. **Z Erkr Atmungsorgane** 1988;170(3):279–82 (Ger)

[Endocardial calcification in neonatal fibroelastosis] Grumieri G, et al. **Radiol Med (Torino)** 1988 Sep;76(3):217–8 (Ita)

[Primary cardiomyopathies in children] Eremeeva AS, et al. **Arkh Patol** 1988;50(9):73–6 (Eng. Abstr.) (Rus)

[Senile cardiac amyloidosis] Serov VV, et al. **Arkh Patol** 1988;50(8):3–12 (Eng. Abstr.) (Rus)

[Echocardiographic follow–up of insulin–dependent diabetics] Cabrera Roca G, et al. **An Esp Pediatr** 1988 Oct; 29(4):271–3 (Eng. Abstr.) (Spa)

[Endomyocardial biopsy: clinical experience in 44 procedures] Kauffmann R, et al. **Rev Med Chil** 1988 Jan; 116(1):18–23 (Eng. Abstr.) (Spa)

[Idiopathic myocardial hemochromatosis: morphologic and ultrastructural study of 2 cases] Roa I, et al. **Rev Med Chil** 1988 Jul;116(7):671–5 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Arrhythmogenic right ventricular dysplasia: case report presentation and review of the literature. Kouvaras G, et al. **Acta Cardiol (Brux)** 1988;43(5):615–23

Prognosis in peripartum cardiomyopathy. Carvalho A, et al. **Am J Cardiol** 1989 Sep 1;64(8):540–2

Compound pulsus alternans: independent alternation within weak beats. Koito H, et al. **Am J Cardiol** 1989 Feb 1; 63(5):380–3

Time course and hemodynamic effects of alpha–1–adrenergic bolus administration in anesthetized patients with myocardial disease. Schwinn DA, et al. **Anesth Analg** 1989 May;68(5):571–8

Noninvasive assessment of myocardial dysfunction in patients with chronic aortic regurgitation. Wilson DB, et al. **Biomed Pharmacother** 1989;43(2):93–9 (37 ref.)

Impaired left ventricular diastolic filling in patients with familial amyloid polyneuropathy: a pulsed Doppler echocardiographic study. Kinoshita O, et al. **Br Heart J** 1989 Feb;61(2):198–203

Postnatal beta–adrenergic receptor [(3H] CGP–12177) binding in myocardial slices of cardiomyopathic hamsters. Watson–Wright WM, et al. **Can J Cardiol** 1989 Apr; 5(3):175–80

Evidence of late ventricular potentials in peripartal cardiomyopathy. Villani M, et al. **Cardiologia** 1988 Nov; 33(11):1093–4

Adenosine deaminase attenuates canine coronary vasodilatation during regional non–ischaemic myocardial hypoxia. Merrill GF, et al. **Cardiovasc Res** 1988 May; 22(5):345–50

Comparative effects of hypoxia and ischemia in the isolated, blood–perfused dog heart: evaluation of left ventricular diastolic chamber distensibility and wall thickness. Wyman RM, et al. **Circ Res** 1989 Jan;64(1):121–8

Altered acetylcholine and norepinephrine concentrations in diabetic rat hearts. Role of parasympathetic nervous system in diabetic cardiomyopathy. Akiyama N, et al. **Diabetes** 1989 Feb;38(2):231–6

Radionuclide angiographic assessment of left ventricular diastolic filling in amyloid heart disease: a study of patients with familial amyloid polyneuropathy. Hongo M, et al. **J Am Coll Cardiol** 1989 Jan;13(1):48–53

Diastolic dysfunction in amyloid heart disease: restrictive cardiomyopathy or not? Plehn JF, et al. **J Am Coll Cardiol** 1989 Jan;13(1):54–6

Echocardiographic findings in nine patients with cardiac amyloidosis: their correlation with necropsy findings. Nishikawa H, et al. **J Cardiol** 1988 Mar;18(1):121–33

Electrovectorcardiographic study of negative T waves on precordial leads in arrhythmogenic right ventricular dysplasia: relationship with right ventricular volumes. Nava A, et al. **J Electrocardiol** 1988 Aug;21(3):239–45

Disparate difference in preload reserve between myocardial hypertrophy due to essential hypertension and hypertrophic cardiomyopathy. Mukai M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S138–40

Left ventricular relaxation and filling pattern in diabetic heart muscle disease: an echocardiographic study. Park JW, et al. **Klin Wochenschr** 1988 Sep 1;66(17):773–8

The role of the lymphatics in aiding regression of hypokalemic lesions in rat cardiac muscle. Tepper SH, et al. **Lymphology** 1989 Mar;22(1):42–50

Normal cardiac contractility in patients with congenital nemaline myopathy. Airenne AL, et al. **Neuropediatrics** 1988 Aug;19(3):115–7

Cardiomyopathy of Duchenne muscular dystrophy.

D'Orsogna L, et al. **Pediatr Cardiol** 1988;9(4):205–13
Verapamil sensitizes cardiomyopathic hamsters to the effects of stress. Tapp WN, et al.
Res Commun Chem Pathol Pharmacol 1988 Dec;62(3):511–4
In search of a diabetic cardiopathy—a study of left ventricular function in 25 asymptomatic diabetics using M mode echocardiography—a pilot study [published erratum appears in Singapore Med J 1988 Aug;29(4):following 417] Balasingam S, et al. **Singapore Med J** 1988 Jun;29(3):246–51
Role of renin-angiotensin system in the pathogenesis of spontaneous myocardial fibrosis in Sprague-Dawley rats: effect of long-term administration of captopril. Yoshimura S, et al. **Tohoku J Exp Med** 1989 Mar;157(3):241–9
Carnitine deficiency, mitochondrial dysfunction and the heart. Identical defect of oxidative phosphorylation in muscle mitochondria in cardiomyopathy due to carnitine loss and in Duchenne muscular dystrophy. Scholte HR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):12–7
[Exertion-induced parameters of left ventricular function in patients with chronic cardiac insufficiency. An isotope study] Faivre R, et al. **Arch Mal Coeur** 1988 Jul;81(7):865–9 (Eng. Abstr.) **(Fre)**
[Electrophysiologic findings in so-called latent cardiomyopathies] Volkmann H, et al.
Z Gesamte Inn Med 1988 Oct 1;43(19):539–42 (Eng. Abstr.) **(Ger)**
[A case of sarcoidosis which showed gradual development of abnormal Q waves in the ECG] Kohama A, et al.
Nippon Naika Gakkai Zasshi 1988 Dec;77(12):1852–8 **(Jpn)**
[Effect of estrogens and thyroid hormones on the development of isoprenaline-induced myocardiodystrophy] Stroev EA, et al. **Kardiologiia** 1988 Aug;28(8):90–3 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Cardioprotective effects of diltiazem when given before, during or delayed after infusion of norepinephrine in anesthetized dogs. Todd GL, et al. **Am J Cardiol** 1988 Oct 5;62(11):25G–29G
The effects of anticalcification treatments on bioprosthetic heart valves implanted in sheep. Jones M, et al.
ASAIO Trans 1988 Oct–Dec;34(4):1027–30
Amelioration of 4'-epidoxorubicin-induced cardiotoxicity by sodium cromoglycate. Klugmann FB, et al.
Eur J Cancer Clin Oncol 1989 Feb;25(2):361–8
Prevention of hereditary cardiomyopathy in the Syrian hamster with chronic verapamil therapy. Factor SM, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1599–604
Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al.
J Cardiovasc Pharmacol 1989 May;13(5):715–22
[Antagonistic role played by the trace elements selenium, zinc and copper on the cardiotoxicity induced by adriamycin] Yang XP.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Jun; 16(3):164–5 **(Chi)**
[Role of calcium blockers in protecting the myocardium in cardiac surgery] Piwnica A, et al. **Therapie** 1989 May–Jun; 44(3):171–4 (15 ref.) (Eng. Abstr.) **(Fre)**
[Effect of prostaglandin E2 on the development of myocardial damage in rats with various resistance to hypoxia] Markova EA, et al. **Fiziol Zh** 1989 Mar–Apr; 35(2):100–3 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Multiple coronary artery-left ventricular fistulas: a pattern of anomalous coronary microvascularization. Gonda RL Jr, et al. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):313–8

RADIONUCLIDE IMAGING

Usefulness of dipyridamole-thallium-201 perfusion scanning for distinguishing ischemic from nonischemic cardiomyopathy. Eichhorn EJ, et al. **Am J Cardiol** 1988 Nov 1;62(13):945–51
Usefulness of technetium pyrophosphate scintigraphy in demonstrating cardiac amyloidosis in persons aged 85 years and older. Goldstein SA, et al. **Am J Cardiol** 1989 Mar 15;63(11):752–3
Positron emission tomography in clinical cardiology. Brunken RC, et al. **Cardiol Clin** 1989 Aug;7(3):607–29 (104 ref.)
Indium-111 WBC imaging in a pericardial abscess. Peterdy AE. **Clin Nucl Med** 1989 Jul;14(7):541
Indium-111 leukocyte scintigraphic detection of myocardial abscess formation in patients with endocarditis. Cerqueira MD, et al. **J Nucl Med** 1989 May;30(5):703–6
Dual tracer autoradiographic study with thallium-201 and radioiodinated fatty acid in cardiomyopathic hamsters. Kurata C, et al. **J Nucl Med** 1989 Jan;30(1):80–7
[Comparison of thallium-201 images in dilated cardiomyopathy and ischemic cardiomyopathy] Yuan JN, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Feb;17(1):26–8, 62–3 (Eng. Abstr.) **(Chi)**
[Technetium 99m pyrophosphate scintigraphy in cardiac amyloidosis (letter)] Guy JM, et al. **Presse Med** 1988 Sep 17;17(31):1588 **(Fre)**
[Stress testing of long-term type I diabetic patients with radionuclide ventriculography] Schmidt A, et al. **Klin Wochenschr** 1989 May 2;67(9):496–501 (Eng. Abstr.) **(Ger)**
[Myocardioscintigraphy with radioactive thallium (201Tl-chloride)] Palermo F, et al. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:38–51 **(Ita)**
[Technetium-99m-pyrophosphate single photon emission computed tomography of the heart in familial amyloid polyneuropathy: comparison with thallium-201 myocardial scintigraphy—a case report] Imamoto T, et al.
Kaku Igaku 1988 Oct;25(10):1117–23 (Eng. Abstr.) **(Jpn)**
[Estimation of regional myocardial sympathetic neuronal function with I-123 metaiodobenzylguanidine (MIBG) myocardial images in patients with cardiomyopathy] Tanaka T, et al. **Kaku Igaku** 1989 Feb;26(2):257–61 (Eng. Abstr.) **(Jpn)**
[Sequential changes of the cardiomyopathy in Duchenne muscular dystrophy by 201Tl myocardial SPECT] Ono S, et al. **Radioisotopes** 1989 Mar;38(3):130–5 (Eng. Abstr.) **(Jpn)**
[The potentials for the diagnostic use of radioactive gallium in cardiology] Blinov SI, et al. **Kardiologiia** 1988 Aug; 28(8):118–22 (81 ref.) **(Rus)**
[The use of single-photon emission computed tomography in cardiology] Salvatore M, et al. **Kardiologiia** 1988 Aug; 28(8):34–6 (Eng. Abstr.) **(Rus)**
[Isotopic ventriculography in the follow-up of cardiotoxicity induced by 4'epi-adriamycin] Casáns I, et al.
Rev Esp Cardiol 1988;41 Suppl 2:89–96 (Eng. Abstr.) **(Spa)**

SURGERY

Cardiac transplantation for the treatment of endstage ischemic cardiomyopathy. Primo G, et al. **Adv Cardiol** 1988;36:293–7
Patient selection and results of cardiac transplantation in patients with cardiomyopathy. Thompson ME, et al.
Cardiovasc Clin 1988;19(1):263–80 (79 ref.)
Orthotopic total artificial heart bridge to transplantation: preliminary results. Copeland JG, et al.
J Heart Transplant 1989 Mar–Apr;8(2):124–37; discussion 137–8
Systolic anterior motion of the mitral valve as a manifestation of heart transplant rejection. Johnson DE, et al.
J Heart Transplant 1988 Jul–Aug;7(4):289–91
Bridging to heart transplantation with circulatory support devices. Pennington DG, et al. **J Heart Transplant** 1989 Mar–Apr;8(2):116–23
Heart transplantation in a child with doxorubicin-induced cardiomyopathy [letter] Arico M, et al. **N Engl J Med** 1988 Nov 17;319(20):1353
[Current indications for heart transplantation] Haverich A, et al. **Chirurg** 1988 Jul;59(7):459–60 **(Ger)**
[The significance of heart rate for stress hemodynamics following heart transplantation] Permanetter B, et al.
Z Kardiol 1989 Apr;78(4):236–42 (Eng. Abstr.) **(Ger)**
[Cardiac echinococcosis: 2 cases treated surgically] Di Biasi P, et al. **G Ital Cardiol** 1989 Apr;19(4):345–9 (Eng. Abstr.) **(Ita)**

THERAPY

Cardiac transplantation in a patient with muscular dystrophy and cardiomyopathy. Donofrio PD, et al. **Arch Neurol** 1989 Jun;46(6):705–7
Therapeutics and management during pregnancy. Rutherford JD, et al. **Cardiovasc Clin** 1989;19(3):113–25 (40 ref.)
Improved protection of chronically inflow-limited myocardium with retrograde coronary sinus cardioplegia. Lust RM, et al. **Circulation** 1988 Nov;78(5 Pt 2):III217–23
[L-carnitine therapy and myocardial function in children treated with chronic hemodialysis] Khoss AE, et al.
Wien Klin Wochenschr 1989 Jan 6;101(1):17–20 (Eng. Abstr.) **(Ger)**
[The effectiveness of measured bicycle training in the combined treatment of myocardiodystrophy in children] Bisiarina VP, et al. **Vestn Akad Med Nauk SSSR** 1988; (5):72–6 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Myocardial involvement due to a disseminated human cytomegalovirus infection in a heart transplant recipient. A case report. Pucci A, et al. **G Ital Cardiol** 1989 Mar; 19(3):230–3

VETERINARY

Cardiomyopathy and woolly haircoat syndrome of Poll Hereford cattle: electrocardiographic findings in affected and unaffected calves. Whittington RJ, et al.
Aust Vet J 1988 Nov;65(11):341–4
Furazolidone toxicity in neomycin-treated turkey poults. Czarnecki CM. **Avian Dis** 1989 Jul–Sep;33(3):466–72
Taurine deficiency myocardial failure: new evidence for old theories. Pion PD. **Cornell Vet** 1989 Jan;79(1):5–9 (32 ref.)
Osteocartilaginous metaplasia of the right atrium in male domestic sheep. Anderson BC. **J Comp Pathol** 1989 Feb; 100(2):195–8
Investigation of caval syndrome in dogs experimentally infected with Dirofilaria immitis. Atkins CE, et al.
J Vet Intern Med 1988 Jan–Mar;2(1):36–40
Effect of a purified diet on dystrophic cardiac calcinosis in mice. Everitt JI, et al. **Lab Anim Sci** 1988 Aug;38(4):426–9
Idiopathic cardiomyopathy in C3Hf/Bd mice. Goad ME, et al. **Lab Anim Sci** 1989 Mar;39(2):137–41
Experimental gallop rhythm in sheep with Gousiekte: correlation of changes in amplitude with haemodynamic parameters. Pretorius PJ, et al.
Onderstepoort J Vet Res 1988 Dec;55(4):221–5
Effect of age and growth rate on myocardial irritability in broiler chickens. Greenlees KJ, et al.
Proc Soc Exp Biol Med 1989 Mar;190(3):282–5
Doxorubicin-induced cardiotoxicity in five dogs. Loar AS, et al. **Semin Vet Med Surg (Small Anim)** 1986 Feb; 1(1):68–71
Ultrastructure of spontaneous cardiac calcification in DBA/2NCrj mice. Itagaki S, et al. **Vet Pathol** 1988 Sep; 25(5):393–5

MYOCARDIAL DISEASES, PRIMARY see **MYOCARDIAL DISEASES**

MYOCARDIAL DISEASES, SECONDARY see **MYOCARDIAL DISEASES**

MYOCARDIAL INFARCTION

Recurrent myocardial infarction and sudden death after sport. Ciampricotti R, et al. **Am Heart J** 1989 Jan;117(1):188–91
Atrial infarction: diagnosis and management. Lazar EJ, et al. **Am Heart J** 1988 Oct;116(4):1058–63 (43 ref.)
A symposium: Myocardial infarction—direction for the '90s. November 12, 1988, Washington, D.C. **Am J Cardiol** 1989 Jul 18;64(4):1B–43B
Q-wave regression after transmural acute myocardial infarction [letter] Kyriakides Z, et al. **Am J Cardiol** 1988 Nov 15;62(16):1152–3
Application of meta-analysis using an electronic spread sheet to exercise testing in patients after myocardial infarction. Froelicher VF, et al. **Am J Med** 1987 Dec;83(6):1045–54 (34 ref.)
Delay between onset of chest pain and seeking medical care: the effect of public education. Ho MT, et al.
Ann Emerg Med 1989 Jul;18(7):727–31
Significance of delayed potentials detected on the signal-averaged electrocardiogram in patients with previous myocardial infarction. Denniss AR, et al.
Aust N Z J Med 1988 Oct;18(6):819–23
Anaesthetic management of a parturient with prior myocardial infarction and coronary artery bypass graft. Rosenlund RC, et al. **Can J Anaesth** 1988 Sep;35(5):515–7
Morning increase of onset of myocardial infarction. Implications concerning triggering events. Muller JE.
Cardiology 1989;76(2):96–104 (40 ref.)
Acute myocardial infarction. **Cardiovasc Clin** 1989; 20(1):1–329
Myocardial infarction in pregnancy. Nolan TE, et al.
Clin Obstet Gynecol 1989 Mar;32(1):68–75 (34 ref.)
Early identification of patients with acute myocardial infarction. Gibler WB, et al. **Compr Ther** 1988 Aug; 14(8):41–4
Myocardial infarction at young age. Riečanský I, et al.
Czech Med 1988;11(3):123–30
QT sensing rate responsive pacing and myocardial infarction: a case report. Edelstam C, et al. **PACE** 1989 Mar; 12(3):502–4
Coronary artery disease panel [clinical conference] Gazes PC 3d, et al. **Trans Assoc Life Insur Med Dir Am** 1989; 72:95–100
[Time perspective acute myocardial infarct. Highlights from three symposia. 1988] **Internist (Berlin)** 1989 Mar;30(3 Suppl):1–16 **(Ger)**
[Use of mobile coronary care unit by patients with myocardial infarction] Galimidi J, et al. **Harefuah** 1989 Feb 15;116(4):199–202 (Eng. Abstr.) **(Heb)**
[Identification of low risk post-infarction patients] Gotlieb S, et al. **Harefuah** 1989 Feb 15;116(4):214–7 (40 ref.) **(Heb)**
[Acute myocardial infarct in puerperium: description of 2 cases] Valente A, et al. **Cardiologia** 1988 Oct;33(10):995–8 (Eng. Abstr.) **(Ita)**
[GISSI 2: Subproject on epidemiologic and genetic aspects of risk factors for myocardial infarction] **G Ital Cardiol** 1988 Sep;18(9):770–2 **(Ita)**
[Clinical presentation of myocardial infarction]
Nippon Rinsho 1987 Dec;Spec No:671–863 **(Jpn)**
[Clinical evaluation of the prehospital phase of acute myocardial infarction in the elderly] Ezaki H, et al.
Nippon Ronen Igakkai Zasshi 1989 Jan;26(1):11–8 (Eng. Abstr.) **(Jpn)**
[Anthropometric parameters in persons with acute myocardial infarct] Vitić B, et al. **Med Pregl** 1988; 41(3–4):110–2 (Eng. Abstr.) **(Scr)**

BLOOD

Decreased red cell filterability in patients with acute myocardial infarction. Waldenlind L, et al.
Acta Med Scand 1988;224(3):225–9
Isolation and identification of human plasma factor which stimulates prostaglandin I2 production and its changes in patients with acute myocardial infarction. Uchida Y, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:299–302
Atrial natriuretic peptide and acute myocardial infarction. Svanegaard J, et al. **Am Heart J** 1989 Jan;117(1):194–5

Atrial natriuretic peptide after myocardial infarction. Tan AC, et al. **Am Heart J** 1989 Sep;118(3):490–4
ANP in AMI [letter] Tan AC, et al. **Am Heart J** 1989 Jun; 117(6):1406–7
Relation of plasma D–dimer concentrations to coronary artery reperfusion before and after thrombolytic treatment in patients with acute myocardial infarction. Brenner B, et al. **Am J Cardiol** 1989 May 15;63(17):1179–84
Polymorphonuclear leukocyte activity and ventricular arrhythmia in acute myocardial infarction. Kuzuya T, et al. **Am J Cardiol** 1988 Nov 1;62(13):868–72
The creatine kinase ratio: a useful means of detecting early peaking of the creatine kinase curve after acute myocardial infarction. Nidorf SM, et al. **Am J Cardiol** 1988 Nov 1; 62(13):961–3
Atrial natriuretic peptide in acute myocardial infarction. Tomoda H. **Am J Cardiol** 1988 Nov 15;62(16):1122–3
Helicopter transport of critical cardiac patients [letter] Morgan MT. **Am J Emerg Med** 1989 Jul;7(4):454–5
Rapid decrease in cyclic 3'5'-guanosine monophosphate in the earliest phase of acute myocardial infarction. Hauptlorenz S, et al. **Am J Med** 1989 May;86(5):627–8
Serum lipids and apolipoprotein levels in women with acute myocardial infarction. Johansson S, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):742–9
Serum lipoproteins in patients with myocardial infarction. Kauppinen–Mäkelin R, et al. **Atherosclerosis** 1988 Nov; 74(1–2):65–74
Transient changes of serum lipoprotein(a) as an acute phase protein. Maeda S, et al. **Atherosclerosis** 1989 Aug; 78(2–3):145–50
Changes in platelet membrane fatty acids after myocardial infarction. Maidment CG, et al. **Atherosclerosis** 1988 Nov; 74(1–2):9–14
Lipoproteins and apolipoproteins in young male survivors of myocardial infarction. Al–Muhtaseb N, et al. **Atherosclerosis** 1989 Jun;77(2–3):131–8
Plasma cholesterol, coronary heart disease, and cancer [letter; comment] **BMJ** 1989 Apr 29;298(6681):1176. **Comment on:** BMJ 1989 Apr 8;298(6678):920–4
Plasma atrial natriuretic peptide in patients with acute myocardial infarction: effects of streptokinase. Phillips PA, et al. **Br Heart J** 1989 Feb;61(2):139–43
Lymphocyte potassium and magnesium concentrations as prognostic factors after acute myocardial infarction [letter] Elin RJ, et al. **Cardiology** 1989;76(3):243–7
Myosin light chains release in acute myocardial infarction: non–invasive estimation of infarct size. Katus HA, et al. **Cardiovasc Res** 1988 Jul;22(7):456–63
Continuous monitoring of mixed venous oxygen saturation in patients with acute myocardial infarction. Kyff JV, et al. **Chest** 1989 Mar;95(3):607–11
Serum HDL cholesterol during acute myocardial infarction and its clinical significance. Zhu BQ, et al. **Chin Med J [Engl]** 1988 Jun;101(6):435–7
Serum immunoglobulin E after myocardial infarction [letter] Criqui MH. **Circulation** 1988 Nov;78(5 Pt 1):1322
Correlation between template bleeding times and spontaneous bleeding during treatment of acute myocardial infarction with recombinant tissue–type plasminogen activator. Gimple LW, et al. **Circulation** 1989 Sep;80(3):581–8
Serum immunoglobulin E after myocardial infarction [letter] Szczeklik A. **Circulation** 1989 Aug;80(2):419
Does ergometric stress test induce a procoagulative condition in patients with previous myocardial infarction? De Scalzi M, et al. **Clin Cardiol** 1989 May;12(5):255–8
Occurrence of hypokalemia in suspected acute myocardial infarction and its relation to clinical history and clinical course. Herlitz J, et al. **Clin Cardiol** 1988 Oct;11(10):678–82
Changes in magnesium, zinc, calcium, potassium, cholesterol, and creatine kinase concentrations in patients from pre–infarction syndrome to fatal myocardial infarction. Speich M, et al. **Clin Chem** 1988 Oct;34(10):2083–6
The quantitation of human ventricular myosin light chain 1 in serum after myocardial necrosis and infarction. Wang JX, et al. **Clin Chim Acta** 1989 May 31;181(3):325–35
An evaluation of two–dimensional electrophoresis for detection of human serum proteins in acute myocardial infarction. Marshall T, et al. **Electrophoresis** 1988 Oct; 9(10):672–5
Investigations of antithrombin III–activity in patients after myocardial infarction and a long–term coumarin therapy. Kühnel L, et al. **Folia Haematol (Leipz)** 1988;115(3):301–6
Alterations of antithrombin III after acute myocardial infarction. Oehler G, et al. **Folia Haematol (Leipz)** 1988; 115(3):319–23
Kinetics of radiolabelled (99mTc) heparin and low molecular weight heparin fractions CY 216, CY 222 in patients with uncomplicated myocardial infarction. Psuja P. **Folia Haematol (Leipz)** 1988;115(5):661–8
Total serum alkaline phosphatase (SAP) and serum cholesterol in relation to secretor status and blood groups in myocardial infarction patients. Mehta NJ, et al. **Indian Heart J** 1989 Mar–Apr;41(2):82–5
Myocardial infarction, persistent coronary artery thrombosis and lupus anticoagulant. Mills TJ, et al. **Int J Cardiol** 1988 Nov;21(2):190–4
Serum amyloid A protein, apolipoprotein A–I, and apolipoprotein B during the course of acute myocardial infarction. Maury CP, et al. **J Clin Pathol** 1988 Dec; 41(12):1263–8
Circulating tumour necrosis factor–alpha (cachectin) in myocardial infarction. Maury CP, et al. **J Intern Med** 1989 May;225(5):333–6
Myosin: a highly sensitive indicator of myocardial necrosis after cardiac operations. Séguin JR, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):397–401
The effects of trapidil and propranolol on platelet aggregation and prostacyclin–thromboxane balance following acute myocardial infarction in rabbits. Lu XA, et al. **J Tongji Med Univ** 1988;8(4):238–42
Selenium and myocardial infarction [letter] Burk RF. **JAMA** 1989 Aug 11;262(6):775
Intracoronary thrombodynamics in the early phase of acute myocardial infarction. Tomoda H, et al. **Jpn Circ J** 1988 Jul;52(7):628–37
Increased plasma concentrations of endothelin–1 and big endothelin–1 in acute myocardial infarction [letter] Miyauchi T, et al. **Lancet** 1989 Jul 1;2(8653):53–4
Modulation of coronary tone in acute myocardial infarction by endothelin [letter] Salminen K, et al. **Lancet** 1989 Sep 23;2(8665):747
Polyunsaturated fatty acids of serum lipids in myocardial infarction. Crofts JW, et al. **Lipids** 1988 Jun;23(6):539–45
Changes of human platelets studied by scanning electron microscopy in acute myocardial infarction. Carp C, et al. **Med Interne** 1982 Oct–Dec;20(4):259–65
Plasma levels of atrial natriuretic peptide in transient left ventricular ischemia [letter] Gasser R, et al. **N Engl J Med** 1989 Jun 29;320(26):1752
Plasma lipids can be reliably assessed within 24 hours after acute myocardial infarction. Sewdarsen M, et al. **Postgrad Med J** 1988 May;64(751):352–6
Plasma fibrinogen in unstable coronary artery disease. Swahn E, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):49–54
Platelet function and plasma fibrinogen and their relations to gender, smoking habits, obesity and beta–blocker treatment in young survivors of myocardial infarction. Berglund U, et al. **Thromb Haemost** 1988 Aug 30;60(1):21–4
Bleeding time and platelet volume in acute myocardial infarction—a 2 year follow–up study. Dalby Kristensen S, et al. **Thromb Haemost** 1988 Jun 16;59(3):353–6
Circadian fluctuations of plasminogen activator inhibitor and tissue plasminogen activator levels in plasma of patients with unstable coronary artery disease and acute myocardial infarction. Huber K, et al. **Thromb Haemost** 1988 Dec 22; 60(3):372–6
Platelet activity during acute myocardial infarction treated with tissue plasminogen activator. Ring ME, et al. **Thromb Res** 1988 Aug 1;51(3):331–4
Increased blood fibrinolytic activity after physical exercise: comparative study in individuals with different sporting activities and in patients after myocardial infarction taking part in a rehabilitation sports program. Speiser W, et al. **Thromb Res** 1988 Sep 1;51(5):543–55
Opioid peptides in pathological states. Slepushkin VD, et al. **Z Med Lab Diagn** 1989;30(5):281–2
[Changes in plasma tissue plasminogen activator and plasminogen activator inhibitor in acute myocardial infarction and its clinical significance] Jia HY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):214–6, 254 (Eng. Abstr.) **(Chi)**
[Preliminary study of the relation of acute myocardial infarction and thyroid hormones] Chen SX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):339–40, 388–9 (Eng. Abstr.) **(Chi)**
[Plasma atrial natriuretic peptide in patients with acute myocardial infarction] Yang XS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):551–3, 587 (Eng. Abstr.) **(Chi)**
[Observation on plasma serotonin (5–HT) and platelet membrane fluidity in AMI patients] CHENG HY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):456–8 (Eng. Abstr.) **(Chi)**
[Role of the adrenal medulla in hemorheologic changes during myocardial ischemia in dogs] Ma XL, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):140–4 (Eng. Abstr.) **(Chi)**
[Prognostic significance of radioimmunologic determination of myoglobin in acute myocardial infarct] Topolčan O, et al. **Vnitr Lek** 1988 Aug;34(8):729–33 (Eng. Abstr.) **(Cze)**
[Diagnosis of hyperlipidemia in patients admitted with acute myocardial infarction] Larsen ML, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):487–9 (Eng. Abstr.) **(Dan)**
[Hyperlipidemia in patients under 60 years of age admitted for suspected myocardial infarction] Larsen ML, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):489–91 (Eng. Abstr.) **(Dan)**
[New biochemical markers of myocardial ischemia during cardiac surgery] Séguin J, et al. **Ann Chir** 1988;42(8):566–70 (Eng. Abstr.) **(Fre)**
[Early peak activity of creatine kinase in non–thrombolysed myocardial infarction: prognostic factor?] Legeais S, et al. **Arch Mal Coeur** 1988 Nov;81(11):1345–52 (Eng. Abstr.) **(Fre)**
[Defects in the prostaglandin system. VI. Acquired plasma factor defect] Sinzinger H, et al. **Wien Klin Wochenschr** 1988 Nov 4;100(21):709–11 (Eng. Abstr.) **(Ger)**
[Hormone changes as indicators of stress in the development and course of myocardial infarct] Titlbach O, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):82–7 (Eng. Abstr.) **(Ger)**
[Peculiarities in the hypophyseal and sex hormone balance in males following survival of myocardial infarct] Jaross W, et al. **Z Med Lab Diagn** 1989;30(1):32–4 **(Ger)**
[Sequential evaluation of platelet count and mean platelet volume during myocardial infarction] D'Erasmo E, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):58–60 (Eng. Abstr.) **(Ita)**
[Serum myoglobin: clinico–diagnostic importance] Kaiser H, et al. **Ric Clin Lab** 1988;18 Suppl 1:95–104 (26 ref.) **(Ita)**
[Apolipoprotein E polymorphism, coronary risk factors, serum lipids, lipoproteins and apolipoproteins in myocardial infarction] Shiina Y. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):1–8 **(Jpn)**
[Blood lipid and lipoprotein profile in patients in the first week of myocardial infarction] Lorenc J. **Przegl Lek** 1989; 46(4):391–9 (Eng. Abstr.) **(Pol)**
[Evaluation of the nature and dynamics of hemostatic changes in myocardial infarction. III. Effect of the method of heparin administration on selected parameters of the system of hemostasis] Zapolska–Downar D, et al. **Przegl Lek** 1988;45(6):508–12 (Eng. Abstr.) **(Pol)**
[Evaluation of the nature and dynamics of changes in hemostasis in myocardial infarct. I. Antithrombin III and endogenous heparin activities] Zapolska–Downar D, et al. **Przegl Lek** 1988;45(4):387–91 (Eng. Abstr.) **(Pol)**
[Evaluation of the nature and dynamics of hemostatic changes in myocardial infarction. II. Evaluation of the nature and dynamics of the changes in selected parameters of the blood coagulation and fibrinolysis systems in myocardial infarction] Zapolska–Downar D, et al. **Przegl Lek** 1988;45(5):442–8 (Eng. Abstr.) **(Pol)**
[Rapi Tex myoglobin in myocardial infarction and unstable angina pectoris] Rotter A, et al. **Wiad Lek** 1988 Apr 1; 41(7):422–6 (Eng. Abstr.) **(Pol)**
[Lipid indicators of risk of myocardial infarct] Serban V, et al. **Rev Med Interna [Med Interna]** 1988 Sep–Oct; 40(5):427–36 (Eng. Abstr.) **(Rum)**
[Plasma levels of beta–endorphin and met enkephalin in patients with myocardial infarction] Zoloev GK, et al. **Kardiologiia** 1989 May;29(5):85–6 **(Rus)**
[Dynamics of the leukergic properties of leukocytes in the blood in myocardial infarct] Ivanov AI, et al. **Lab Delo** 1988;(6):55–9 (Eng. Abstr.) **(Rus)**
[Determination of the content of middle molecule peptides in the blood of patients with acute myocardial infarct] Korochkin IM, et al. **Lab Delo** 1988;(9):15–8 (Eng. Abstr.) **(Rus)**
[Prognostic value of high leukocytosis in myocardial infarction] Ivanov EA, et al. **Sov Med** 1988;(7):79–81 **(Rus)**
[Prognostic significance of serum alpha 1–antitrypsin levels in myocardial infarction] Solod NN, et al. **Sov Med** 1989; (4):23–6 (Eng. Abstr.) **(Rus)**
[Prognostic importance of blood plasma beta–endorphin levels in the most acute period of myocardial infarct] Bagrov AIa, et al. **Ter Arkh** 1988;60(5):92–4 **(Rus)**
[The thrombocyte link in the hemostasis of patients with acute myocardial infarct] Gritsiuk IA. **Vrach Delo** 1989 Mar;(3):11–2 (Eng. Abstr.) **(Rus)**
[Thrombocyte function and the repair of myocardial infarct] Kinoshenko EI, et al. **Vrach Delo** 1989 Jan;(1):27–9 (Eng. Abstr.) **(Rus)**
[Clinical significance of alpha 1–proteinase inhibitor in myocardial infarct] Miagkov II, et al. **Vrach Delo** 1989 Jan; (1):32–4 (Eng. Abstr.) **(Rus)**
[The effect of moderate physical activity on thrombocyte aggregation in persons with ischemic heart disease] Ciko Z, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):403–6 (Eng. Abstr.) **(Scr)**
[Protein C anticoagulant in myocardial infarct in patients under 40 years of age (letter)] Navarro Gonzalo I, et al. **Med Clin (Barc)** 1989 May 13;92(18):716 **(Spa)**
[Diagnostic yield of myoglobin–latex in the early stage of acute myocardial infarct (letter)] Olaz F, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):478–9 **(Spa)**
[Cholesterol and high–density lipoprotein cholesterol in acute myocardial infarct (letter)] Paniagua J, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):159 **(Spa)**
[The question of cholesterol: the cholesterol value is not a suitable indicator of risk of myocardial infarction and early death in women] Bengtsson C. **Lakartidningen** 1989 Mar 15;86(11):945–6 **(Swe)**

CHEMICALLY INDUCED

Right ventricular infarction: diagnostic value of ST elevation in lead III exceeding that of lead II during inferior/posterior infarction and comparison with right–chest leads V3R to V7R. Andersen HR, et al. **Am Heart J** 1989 Jan;117(1):82–6
Myocardial infarction in a 21–year–old body builder [letter] Capezzuto A, et al. **Am J Cardiol** 1989 Jun 15;63(20):1539
Risk factors for acute myocardial infarction in women [letter] Croft P, et al. **BMJ** 1989 Mar 11;298(6674):674
Adverse effect of intraoperative phenylephrine 10%: case report. Lai YK. **Br J Ophthalmol** 1989 Jun;73(6):468–9
Acute non–Q wave cocaine–related myocardial infarction. Kossowsky WA, et al. **Chest** 1989 Sep;96(3):617–21
Acute myocardial infarction due to coronary spasm associated with L–thyroxine therapy. Hiasa Y, et al. **Clin Cardiol** 1989 Mar;12(3):161–3
Cardiovascular effects of adolescent drug abuse. Choi YS, et al. **J Adolesc Health Care** 1989 Jul;10(4):332–7 (73 ref.)
Hypotension, myocardial infarction, and coagulopathy

following gila monster bite. Preston CA. **J Emerg Med** 1989 Jan-Feb;7(1):37-40

Risks of overtreatment of hypertension [editorial] Aagaard GN. **J Fam Pract** 1989 Jun;28(6):665-6

Myocardial injury after interleukin-2 therapy [letter] Laghi Pasini F, et al. **Lancet** 1989 Mar 25;1(8639):674

Verapamil withdrawal as a possible cause of myocardial infarction in a hypertensive woman with a normal coronary angiogram. Dimmitt SB, et al. **Med J Aust** 1988 Aug 15; 149(4):218

Myocardial infarction: a complication of amitriptyline overdose. Chamsi-Pasha H, et al. **Postgrad Med J** 1988 Dec;64(758):968-70

[Myocardial infarct caused by an ergotamine tartrate-troleandomycin combination] Baudouy PY, et al. **Rev Med Interne** 1988 Sep-Oct;9(4):420-2 **(Fre)**

[Myocardial infarct following cocaine abuse] Gubser R, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1657-9 (Eng. Abstr.) **(Fre)**

[Infarct-typical changes in the electrocardiogram following chemotherapy with vinblastine] Zeymer U, et al. **Dtsch Med Wochenschr** 1989 Apr 14;114(15):589-92 (Eng. Abstr.) **(Ger)**

[Acute myocardial infarct in a 14-year-old girl treated with contraceptives. Coronary arteriography and immediate thrombolytic therapy] Verna E, et al. **G Ital Cardiol** 1989 May;19(5):440-3 (Eng. Abstr.) **(Ita)**

[A case of acute myocardial infarction after treatment with cisplatin] Sasaki M, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2289-91 (Eng. Abstr.) **(Jpn)**

[A typical complications of using stimulating substances in sports] Mędraś M, et al. **Pol Tyg Lek** 1988 Oct 3; 43(40):1311-2 **(Pol)**

[Complications associated with cocaine consumption (letter)] Rello J, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):435 **(Spa)**

CLASSIFICATION

A new epidemiologic classification system for interim myocardial infarction from serial electrocardiographic changes. Crow RS, et al. **Am J Cardiol** 1989 Sep 1; 64(8):454-61

Coding of acute myocardial infarction. Clinical and policy implications. Iezzoni LI, et al. **Ann Intern Med** 1988 Nov 1;109(9):745-51

The diagnostic coding of myocardial infarction [letter] Schiff GD, et al. **Ann Intern Med** 1989 Feb 1;110(3):243

Q-wave versus non-Q-wave myocardial infarction. Willerson JT, et al. **Cardiovasc Clin** 1989;20(1):183-95 (79 ref.)

[Non-Q-wave acute myocardial infarction] Zheng X, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):710-1 (13 ref.) **(Chi)**

COMPLICATIONS

Ventricular and supraventricular arrhythmias in clinically silent right ventricular infarction. Lomuscio A, et al. **Acta Cardiol (Brux)** 1988;43(5):595-603

Hypokalemia and ventricular arrhythmias in acute myocardial infarction. Clausen TG, et al. **Acta Med Scand** 1988;224(6):531-7

Papillary muscle rupture as a first event in acute myocardial infarction. Sørensen HT, et al. **Acta Med Scand** 1988; 224(4):401-2

Conversion of induced ventricular tachycardia by single and serial chest thumps: a study in domestic pigs 1 week after experimental myocardial infarction. Gertsch M, et al. **Am Heart J** 1989 Aug;118(2):248-55

The effect of beta-adrenergic blockade on vulnerability to ventricular fibrillation and inducibility of ventricular arrhythmia in short- and long-term feline infarction models. Luketich J, et al. **Am Heart J** 1989 Aug; 118(2):265-71

Inferior myocardial infarction complicated by mural thrombus and systemic embolization despite anticoagulation in progressive systemic sclerosis with normal coronary arteriograms. Nair CK, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1357-9

The effect of thromboxane inhibition on vulnerability to ventricular fibrillation in the acute and chronic feline infarction models. O'Connor KM, et al. **Am Heart J** 1989 Apr;117(4):848-53

Electrophysiologic and antiarrhythmic actions of nadolol: acute ischemia in the presence of previous myocardial infarction. Patterson E, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1223-32

Management of myocardial infarction shock: current status. Schreiber TL, et al. **Am Heart J** 1989 Feb;117(2):435-43 (67 ref.)

Prognostic significance of the signal-averaged ECG depends on the time of recording in the postinfarction period. el-Sherif N, et al. **Am Heart J** 1989 Aug;118(2):256-64

Slow conduction in the infarct scar: relevance to the occurrence, detection, and ablation of ventricular reentry circuits resulting from myocardial infarction. Stevenson WG, et al. **Am Heart J** 1989 Feb;117(2):452-67 (131 ref.)

Pericarditis in acute myocardial infarction: characterization and clinical significance. Tofler GH, et al. **Am Heart J** 1989 Jan;117(1):86-92

Residual left ventricular function and prognosis of patients with asymmetric septal hypertrophy recovering from acute myocardial infarction. Tzivoni D, et al. **Am Heart J** 1989 Jul;118(1):121-7

Balloon catheter closure of patent foramen ovale complicating right ventricular infarction: improvement of hypoxia and intracardiac venous shunting. Uppstrom EL, et al. **Am Heart J** 1988 Oct;116(4):1092-7

Carbon monoxide and lethal arrhythmias in conscious dogs with a healed myocardial infarction. Vanoli E, et al. **Am Heart J** 1989 Feb;117(2):348-57

Transient reversal of bifascicular block during acute myocardial infarction with reperfusion therapy: a word of caution. Wiseman A, et al. **Am Heart J** 1989 Jun; 117(6):1381-3

Postpartum myocardial infarction in a patient with intermittent ventricular preexcitation. Wittry MD, et al. **Am Heart J** 1989 Jan;117(1):191-4

Adipose fatty acid composition and the risk of serious ventricular arrhythmias in acute myocardial infarction. Abraham R, et al. **Am J Cardiol** 1989 Feb 1;63(5):269-72

Left ventricular aneurysm and prognosis after first anterior wall acute myocardial infarction. Alexopoulos D, et al. **Am J Cardiol** 1989 Feb 1;63(5):362-4

Frequency of acute and healed myocardial infarcts in fatal cardiac amyloidosis. Barbour DJ, et al. **Am J Cardiol** 1988 Nov 15;62(16):1134-5

Clinical characteristics and natural history of survivors of pulmonary congestion during acute myocardial infarction. The Multicenter Postinfarction Research Group. Dwyer EM Jr, et al. **Am J Cardiol** 1989 Jun 15;63(20):1423-8

Congestive heart failure after acute myocardial infarction in patients receiving antiarrhythmic agents for ventricular premature complexes (Cardiac Arrhythmia Pilot Study). Greene HL, et al. **Am J Cardiol** 1989 Feb 15;63(7):393-8

Usefulness of aspirin plus dipyridamole in reducing left ventricular thrombus formation in anterior wall acute myocardial infarction. Johannessen KA, et al. **Am J Cardiol** 1989 Jan 1;63(1):101-2

Low vitamin B6 status in patients with acute myocardial infarction. Kok FJ, et al. **Am J Cardiol** 1989 Mar 1; 63(9):513-6

Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts. Kuchar DL, et al. **Am J Cardiol** 1989 Jul 1; 64(1):33-6

Evolution of late potential activity in the first six weeks after acute myocardial infarction. Lewis SJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):647-51

Lack of association between acute myocardial infarction and mitral valve prolapse. Peller OG, et al. **Am J Cardiol** 1988 Dec 1;62(17):1297

Factors associated with persistent and transient fascicular blocks in anterior wall acute myocardial infarction. Sugiura T, et al. **Am J Cardiol** 1989 Apr 1;63(12):784-7

Comparison of mortality and myocardial infarction rates in stable angina pectoris with and without ischemic episodes during daily activities. Tzivoni D, et al. **Am J Cardiol** 1989 Feb 1;63(5):273-6

One-year prognosis of primary ventricular fibrillation complicating acute myocardial infarction. The GISSI (Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto miocardico) investigators. Volpi A, et al. **Am J Cardiol** 1989 May 15;63(17):1174-8

Risk factors for long-term coronary prognosis after initial myocardial infarction: the Framingham Study. Wong ND, et al. **Am J Epidemiol** 1989 Sep;130(3):469-80

Incidence of arteriosclerotic lesions of the carotid arteries in chronic peripheral arterial disease and myocardial infarction. Spürk P, et al. **Angiology** 1989 Jan;40(1):39-44

Cardiac predictors of death after non-cardiac surgery evaluated by intention to treat [see comments] Dirksen A, et al. **BMJ** 1988 Oct 22;297(6655):1011-3. **Comment in:** BMJ 1989 Jan 21;298(6667):184-5

High gain signal averaged electrocardiogram combined with 24 hour monitoring in patients early after myocardial infarction for bedside prediction of arrhythmic events. Cripps T, et al. **Br Heart J** 1988 Sep;60(3):181-7

Relative power of clinical, exercise test, and angiographic variables in predicting clinical outcome after myocardial infarction: the Newham and Tower Hamlets study. de Belder MA, et al. **Br Heart J** 1988 Nov;60(5):377-89

Haemodynamic response to dopexamine hydrochloride in postinfarction heart failure: lack of tolerance after continuous infusion. Svenson G, et al. **Br Heart J** 1988 Dec;60(6):489-96

Constrictive pericarditis and anemia post myocardial infarction. Kanawaty DS, et al. **Can J Cardiol** 1989 Apr; 5(3):147-8

Ventricular arrhythmias: medical therapy, device treatment, and indications for electrophysiologic study. Sager PT, et al. **Cardiol Clin** 1988 Feb;6(1):37-47 (102 ref.)

Postinfarction unstable angina. Pathophysiologic basis for current treatment modalities. Becker RC, et al. **Cardiology** 1989;76(2):144-57 (89 ref.)

Recurrent sustained ventricular tachycardia solely responsive to verapamil in a patient with a remote myocardial infarction. Belhassen B, et al. **Cardiology** 1988;75(4):294-300

Bepridil versus nifedipine for ventricular tachycardia induced in the late postinfarction phase in conscious dogs. Brachmann J, et al. **Cardiology** 1989;76(3):211-21

Left ventricular dilatation following myocardial infarction: clinical course and potential for therapy. Lamas GA. **Cardiology** 1989;76(2):112-21 (32 ref.)

Pain in myocardial infarct [letter] Sørensen HT, et al. **Cardiology** 1988;75(5):396

New approaches to management of arrhythmias after myocardial infarction. Curtis AB, et al. **Cardiovasc Clin** 1989;20(1):259-81 (136 ref.)

The high-risk patient. Savage M, et al. **Cardiovasc Clin** 1988; 19(2):169-80 (32 ref.)

Electrophysiological effects of acute ischaemia on electrically stable myocardial infarction. Sakai T, et al. **Cardiovasc Res** 1989 Feb;23(2):169-76

Angiographic demonstration of atherosclerotic stenosis, arterial spasm, and thrombus formation in an infarct-related coronary artery. de Marchena EJ, et al. **Cathet Cardiovasc Diagn** 1988;15(3):169-72

Angiographic coronary morphology in postinfarction angina. Lo YS, et al. **Cathet Cardiovasc Diagn** 1989 Mar; 16(3):155-63

Recurrent acute pulmonary emboli in association with acute myocardial infarction. Ahdout DJ, et al. **Chest** 1989 Sep; 96(3):682-4

A one-sided affair? Myocardial infarction with pulmonary edema and forward failure. Zwaveling JH, et al. **Chest** 1989 Mar;95(3):673-5

Flecainide acetate in dogs with ischemic tachyarrhythmia. An electrophysiologic study. Cha YM, et al. **Chin Med J [Engl]** 1988 Oct;101(10):710-4

Relation of baseline characteristics to suppression of ventricular arrhythmias during placebo and active antiarrhythmic therapy in patients after myocardial infarction. Anderson JL, et al. **Circulation** 1989 Mar; 79(3):610-9

The risk of coronary bypass surgery for patients with postinfarction angina. Gardner TJ, et al. **Circulation** 1989 Jun;79(6 Pt 2):179-80

Cardiogenic shock complicating acute myocardial infarction. Gunnar RM. **Circulation** 1988 Dec;78(6):1508-10

Importance of collateral circulation for prevention of left ventricular aneurysm formation in acute myocardial infarction. Hirai T, et al. **Circulation** 1989 Apr;79(4):791-6

Coronary artery bypass grafting for postinfarction angina pectoris. Kouchoukos NT, et al. **Circulation** 1989 Jun;79(6 Pt 2):168-72

Fate of left ventricular thrombi in patients with remote myocardial infarction or idiopathic cardiomyopathy. Stratton JR, et al. **Circulation** 1988 Dec;78(6):1388-93

Myocardial abscess due to Fusobacterium following acute myocardial infarction. Berman DA, et al. **Clin Cardiol** 1988 Aug;11(8):575-7

Pericardial effusion early in acute myocardial infarction. Charlap S, et al. **Clin Cardiol** 1989 May;12(5):252-4

Deep vein thrombosis and its prevention in patients with acute myocardial infarction. Přerovský I, et al. **Cor Vasa** 1988;30(5):345-51

Low-dose heparin in the prevention of thrombotic complications following acute myocardial infarction. Zawilska K, et al. **Cor Vasa** 1989;31(3):179-85

Relationship of oxygen delivery and mixed venous oxygenation to lactic acidosis in patients with sepsis and myocardial infarction [letter] McConachie IW, et al. **Crit Care Med** 1989 Aug;17(8):844-5

Effect of flosequinan in patients with acute-onset heart failure complicating acute myocardial infarction. Schneeweiss A, et al. **Crit Care Med** 1989 Sep;17(9):879-81

Diabetic myocardial infarction. Interaction of diabetes with other preinfarction risk factors. Singer DE, et al. **Diabetes** 1989 Mar;38(3):350-7

Value of post-operative programmed ventricular stimulation after map-guided surgery for ventricular tachyarrhythmias--epicardial versus endocardial stimulation. Borggrefe M, et al. **Eur Heart J** 1988 Sep; 9(9):969-78

Randomized controlled trial of prophylactic antiarrhythmic therapy in patients with inducible ventricular tachyarrhythmias after recent myocardial infarction. Denniss AR, et al. **Eur Heart J** 1988 Jul;9(7):746-57

Late potentials in the acute phase of myocardial infarction indicate the risk of early ventricular fibrillation. Dłużniewski M, et al. **Eur Heart J** 1988 Nov;9(11):1175-80

Blood volume and right heart haemodynamics in abrupt hypotension following sublingual isosorbide dinitrate in acute myocardial infarction. Figueras J, et al. **Eur Heart J** 1989 Mar;10(3):244-9

Four-year prognostic value of exercise-induced angina and painless ST segment depression early after myocardial infarction. Fioretti P, et al. **Eur Heart J** 1988 Dec;9 Suppl N:123-7

Silent ischaemia following myocardial infarction: frequency, characteristics and prognosis. Fox JP, et al. **Eur Heart J** 1988 Dec;9 Suppl N:108-13

Pre-existing coronary stenoses in patients with first myocardial infarction are not necessarily severe. Hackett D, et al. **Eur Heart J** 1988 Dec;9(12):1317-23

Ventricular arrhythmias and left ventricular function: one-year follow-up after myocardial infarction. Juul-Möller S, et al. **Eur Heart J** 1988 Nov;9(11):1181-7

Silent myocardial ischaemia in Holter monitoring and exercise stress testing after a first myocardial infarction. Moczurad KW, et al. **Eur Heart J** 1988 Dec;9 Suppl N:114-8

A comparative evaluation of the effects of propafenone and lidocaine on early ventricular arrhythmias after acute myocardial infarction. Touboul P, et al. **Eur Heart J** 1988

Nov;9(11):1188–93
Value of induction of pleomorphic ventricular tachycardia during programmed stimulation. Trappe HJ, et al. **Eur Heart J** 1989 Feb;10(2):133–41
Left ventricular segmental wall motion score as a criterion for selecting patients for direct surgery in the treatment of postinfarction ventricular tachycardia. van Hemel NM, et al. **Eur Heart J** 1989 Apr;10(4):304–15
Right ventricular outflow obstruction secondary to post-infarction aneurysm: a possible new syndrome. Hasegawa K, et al. **Heart Vessels** 1988;4(2):116–9
Discrimination: the problem of look-alikes. Kassirer JP, et al. **Hosp Pract [Off]** 1988 Oct 15;23(10):21–2, 24–5, 29 passim
Hemodynamic complications of acute myocardial infarction. Messineo FC, et al. **Hosp Pract [Off]** 1989 Aug 15; 24(8):147–52, 154, 159–66
The surgical complications of acute myocardial infarction: color Doppler evaluation. Roelandt JR, et al. **Int J Card Imaging** 1989;4(1):45–7
Unexpected sudden death during acute myocardial infarction: role of primary electromechanical dissociation. Bellotto F, et al. **Int J Cardiol** 1989 Jul;24(1):77–81
Platelet aggregation and arrhythmias after myocardial infarction. Gębalska J, et al. **Int J Cardiol** 1989 Apr; 23(1):137–8
Chest pain—no difference in severity between those having a myocardial infarction and chest pain from other causes. Horner SM. **Int J Cardiol** 1989 Sep;24(3):371–2
Electrophysiologic actions and antifibrillatory efficacy of subacute left stellectomy in a conscious, post-infarction canine model of ischemic ventricular fibrillation. Nelson SD, et al. **Int J Cardiol** 1989 Mar;22(3):365–76
The effect of flosequinan in patients with heart failure of acute onset complicating acute myocardial infarction. Schneeweiss A, et al. **Int J Cardiol** 1989 Jul;24(1):73–6
Spatial vectorcardiogram in acute inferior wall myocardial infarction: its utility in identification of patients prone to complete heart block. Talwar KK, et al. **Int J Cardiol** 1989 Sep;24(3):289–92
High dose nalbuphine in early acute myocardial infarction. Trouton TG, et al. **Int J Cardiol** 1989 Apr;23(1):53–7
The in-hospital development of cardiogenic shock after myocardial infarction: incidence, predictors of occurrence, outcome and prognostic factors. The MILIS Study Group. Hands ME, et al. **J Am Coll Cardiol** 1989 Jul;14(1):40–6; discussion 47–8
Prospective two-dimensional echocardiographic evaluation of left ventricular thrombus and embolism after acute myocardial infarction. Jugdutt BI, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):554–64
Electrocardiographic localization of the site of origin of ventricular tachycardia in patients with prior myocardial infarction. Kuchar DL, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):893–903
Left ventricular thrombus incidence and behavior studied by serial two-dimensional echocardiography in acute anterior myocardial infarction: left ventricular wall motion, systemic embolism and oral anticoagulation. Küpper AJ, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1514–20
The effect of diabetes mellitus on prognosis and serial left ventricular function after acute myocardial infarction: contribution of both coronary disease and diastolic left ventricular dysfunction to the adverse prognosis. The MILIS Study Group. Stone PH, et al. **J Am Coll Cardiol** 1989 Jul;14(1):49–57
WPW syndrome with myocardial infarction. Loya YS, et al. **J Assoc Physicians India** 1988 Dec;36(12):724–5
Antiarrhythmic actions of left stellectomy in digitalis-mediated malignant ventricular arrhythmias in the postinfarcted canine heart. Nelson SD, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):196–207
Application of the signal-averaged electrocardiogram in patients with nonsustained ventricular tachycardia after myocardial infarction: implications for prediction of sudden cardiac death risk. Buxton AE, et al. **J Electrocardiol** 1988; 21 Suppl:S40–5
Electrophysiologic studies on ventricular tachyarrhythmias in a chronic canine infarct model. Moore EN, et al. **J Electrocardiol** 1988;21 Suppl:S64–7
Cod liver oil does not reduce ventricular extrasystoles after myocardial infarction. Hardarson T, et al. **J Intern Med** 1989 Jul;226(1):33–7
Viral and bacterial infections in patients with acute myocardial infarction. Mattila KJ. **J Intern Med** 1989 May; 225(5):293–6
Primary ventricular fibrillation in acute myocardial infarction. Mølstad P. **J Intern Med** 1989 Aug; 226(2):107–11
Incidence and significance of pericardial effusion in acute myocardial infarction as determined by two-dimensional echocardiography. Sahasakul Y, et al. **J Med Assoc Thai** 1988 Dec;71(12):680–4
Combined septal perforation and cardiac rupture after myocardial infarction. Clinical features and surgical considerations of a correctable condition. Aravot DJ, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):815–20
Delayed myocardial rupture after the use of an implantable left ventricular assist device intractable ventricular fibrillation caused by myocardial infarction [letter] Graham TR, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):307–8
Hemodynamic response to different types of mental stress in patients with recent myocardial infarction. Mazzuero G, et al. **Jpn Heart J** 1989 Jan;30(1):35–46
Serial analysis of spontaneous and induced ventricular arrhythmias in a canine model of myocardial infarction. Nogami A, et al. **Jpn Heart J** 1988 Jul;29(4):437–53
Effects of chronic hypokalemia on ventricular vulnerability during acute myocardial ischemia in the dog. Yano K, et al. **Jpn Heart J** 1989 Mar;30(2):205–17
Desmopressin and myocardial infarction [letter] **Lancet** 1989 Mar 25;1(8639):664–5
Antihypertensive treatment, myocardial infarction, and nocturnal myocardial ischaemia. Floras JS. **Lancet** 1988 Oct 29;2(8618):994–6 (36 ref.)
ISIS-2 and anticoagulation policy after anterior infarcts [letter] Nicol P. **Lancet** 1988 Oct 15;2(8616):914
Complete heart block complicating acute myocardial infarction: a six-year review. Chin K, et al. **Med J Malaysia** 1987 Jun;42(2):93–6
Streptozotocin-induced diabetes in rat. I. Influence of hypertension and myocardial infarction on the development of vascular complications. Somova L, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov;10(11):677–82
Pericardial effusion complicating acute myocardial infarction. Beahrs MM, et al. **Minn Med** 1989 Jan;72(1):33–7
Ventricular standstill in acute inferior myocardial infarction with high degree AV block. Gibbs HR, et al. **Mo Med** 1987 Jan;84(1):33–4
Heparin for mural thrombosis in anterior myocardial infarction [letter] **N Engl J Med** 1989 Jul 27;321(4):259–60
Preliminary report: effect of encainide and flecainide on mortality in a randomized trial of arrhythmia suppression after myocardial infarction. The Cardiac Arrhythmia Suppression Trial (CAST) Investigators [see comments] **N Engl J Med** 1989 Aug 10;321(6):406–12. **Comment in:** N Engl J Med 1989 Aug 10;321(6): 386–8
Left ventricular thrombi and cerebral embolism [editorial] Fuster V, et al. **N Engl J Med** 1989 Feb 9;320(6):392–4
Comparison of high-dose with low-dose subcutaneous heparin to prevent left ventricular mural thrombosis in patients with acute transmural anterior myocardial infarction. Turpie AG, et al. **N Engl J Med** 1989 Feb 9; 320(6):352–7
Full dose subcutaneous heparin therapy. Hollander G, et al. **N Y State J Med** 1989 Jul;89(7):387–9
Strategies for preventing thromboembolism in patients with acute myocardial infarction. Rooke TW. **N Y State J Med** 1989 Jul;89(7):381–2
Automatic external defibrillation of patients after myocardial infarction by family members: practical aspects and psychological impact of training. McDaniel CM, et al. **PACE** 1988 Nov;11(11 Pt 2):2029–34
Prognostic significance and evolution of late ventricular potentials in the first year after myocardial infarction: a prospective study. Verzoni A, et al. **PACE** 1989 Jan;12(1 Pt 1):41–51
Myocardial infarction in hemorrhagic shock and encephalopathy syndrome. Sofer S, et al. **Pediatr Emerg Care** 1989 Jun;5(2):99–101
Post-myocardial infarction pericarditis. Chronic symptoms in a middle-aged man. Holloway JD. **Postgrad Med** 1989 Feb 15;85(3):57–60
Left ventricular pseudoaneurysm after myocardial infarction. Jabi H, et al. **Postgrad Med** 1989 Jun;85(8):57–9, 62
Left ventricular thrombosis in acute transmural myocardial infarction. Chamsi-Pasha H, et al. **Postgrad Med J** 1988 Mar;64(749):188–90
Severe disseminated intravascular coagulation associated with massive ventricular mural thrombus following acute myocardial infarction. Solomon SA, et al. **Postgrad Med J** 1988 Oct;64(756):791–5
Right heart failure following acute myocardial infarction [letter] Virk S, et al. **Postgrad Med J** 1988 Oct;64(756):833
Surgery of ventricular tachycardia and ventricular fibrillation in patients with coronary artery disease and LV-aneurysms. Kromann-Hansen O, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):87–93
Long-term prognosis after resuscitation from primary ventricular fibrillation complicating acute transmural myocardial infarction in the north east of Scotland. Chan NS, et al. **Scott Med J** 1989 Apr;34(2):430–3
Postinfarction aneurysm: factors affecting surgical reparation. Leone A. **Singapore Med J** 1988 Dec;29(6):576–9
Postinfarction ventricular aneurysm: surgical results of aneurysmectomy and concomitant coronary artery bypass grafting. Chang H, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):773–9
Management problems of coincident traumatic diaphragmatic hernia and myocardial infarction. Chidamdaram M, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):167–9
Myocardial abscess after silent myocardial infarction. Weernink EE, et al. **Thorac Cardiovasc Surg** 1989 Apr; 37(2):103–4
Sudden death six weeks after a myocardial infarct [clinical conference] Lee F, et al. **Yale J Biol Med** 1988 Sep–Oct; 61(5):457–65
[An electrophysiologic study on the anti-ischemic arrhythmia effect of flecainide] Zha YM. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct; 16(5):294–7 **(Chi)**
[Determinants of left ventricular aneurysm formation after anterior myocardial infarction] Shen WF. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):324–6, 24 (Eng. Abstr.) **(Chi)**
[Cerebral stroke after myocardial infarction] Zhang WJ, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):345–7, 389 (Eng. Abstr.) **(Chi)**
[Long-term prognosis in patients with chronic postinfarct aneurysms. I. Conservative treatment of patients] Aschermann M, et al. **Cas Lek Cesk** 1989 Jan 20; 128(4):97–102 (Eng. Abstr.) **(Cze)**
[Long-term prognosis of patients with chronic post-infarct aneurysms. II. Comparison of patients treated conservatively and surgically] Aschermann M, et al. **Cas Lek Cesk** 1989 Feb 3;128(6):161–4 (Eng. Abstr.) **(Cze)**
[Surgical treatment of postinfarction heart aneurysms and akinesias] Lichtenberg J, et al. **Rozhl Chir** 1989 Feb; 68(2):72–7 (Eng. Abstr.) **(Cze)**
[Topography of foci of perfusion defects after myocardial infarct on standard ECG and thallium stress scintigraphy] Kasalický J, et al. **Vnitr Lek** 1989 Apr;35(4):325–32 (Eng. Abstr.) **(Cze)**
[Treatment of hypertension during acute myocardial infarct and unstable angina] Lupínek Z, et al. **Vnitr Lek** 1988 Aug; 34(8):762–71 (Eng. Abstr.) **(Cze)**
[Incidence of intraventricular thrombosis after acute myocardial infarct] Sipula J, et al. **Vnitr Lek** 1988 Dec; 34(12):1155–60 (Eng. Abstr.) **(Cze)**
[Ventricular pseudoaneurysm after acute myocardial infarction] Christensen C. **Ugeskr Laeger** 1989 Feb 27; 151(9):548–50 (Eng. Abstr.) **(Dan)**
[Systemic arterial emboli in myocardial infarction. ECG as a basis for preventive anticoagulant therapy] Rasmussen B, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3113–6 (Eng. Abstr.) **(Dan)**
[Heart disease and cerebrovascular disorders] Sotaniemi K, et al. **Duodecim** 1989;105(7):642–50 (83 ref.) **(Fin)**
[Myocardial infarction: secondary prevention with betablockers] Depelchin P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):155–61 (39 ref.) (Eng. Abstr.) **(Fre)**
[Comparative efficacy of amiodarone and propranolol on ventricular arrhythmia in the post-infarction period] Fournier C, et al. **Arch Mal Coeur** 1989 Jan;82(1):69–77 (Eng. Abstr.) **(Fre)**
[Septal rupture repaired in the acute stage of myocardial infarction. Clinical, hemodynamic and angio-coronarography findings in the evaluation of surgical risk] Jouve B, et al. **Arch Mal Coeur** 1989 Mar;82(3):337–43 (Eng. Abstr.) **(Fre)**
[Efficacy of verapamil in the prevention of ventricular fibrillation in the acute phase of myocardial infarction] Rolli A, et al. **Arch Mal Coeur** 1988 Jul;81(7):907–11 (Eng. Abstr.) **(Fre)**
[Preventive antifibrillatory treatment of sudden cardiac death in acute myocardial infarct] Thale J, et al. **Z Kardiol** 1988; 77 Suppl 4:11–22 (132 ref.) (Eng. Abstr.) **(Ger)**
[Ventricular tachycardia and ventricular fibrillation following myocardial infarct: determinants of prognosis and disease course] Trappe HJ, et al. **Z Kardiol** 1988 Nov; 77(11):687–95 (Eng. Abstr.) **(Ger)**
[Successful surgical management of rupture of the papillary muscle diagnosed by ultrasound] Végh G, et al. **Orv Hetil** 1989 May 14;130(20):1057–9 (Eng. Abstr.) **(Hun)**
[Clinical aspects, incidence and prognostic significance of early post-infarction angina] Di Tano G, et al. **Cardiologia** 1988 Nov;33(11):1029–32 (Eng. Abstr.) **(Ita)**
[Acute ischemic heart disease and reperfusion ventricular arrhythmia (editorial)] Salerno JA. **Cardiologia** 1988 Oct; 33(10):991–3 **(Ita)**
[Kinetics of intravenously administered flecainide in patients with acute myocardial infarct] Polizzi CA, et al. **Clin Ter** 1989 Feb 15;128(3):183–9 (Eng. Abstr.) **(Ita)**
[2 cases of lidocaine-resistant ventricular tachycardia treated with i.v. mexiletine during complicated acute myocardial infarct] Romanò M, et al. **Clin Ter** 1987 Nov 30; 123(4):297–301 (Eng. Abstr.) **(Ita)**
[Significance of QT interval as a premonitory sign of severe ventricular arrhythmia in the early phase of myocardial infarct] Giglioli C, et al. **G Ital Cardiol** 1988 Apr; 18(4):290–5 (Eng. Abstr.) **(Ita)**
[Measurement of QT interval in patients with myocardial infarct] Schwartz PJ. **G Ital Cardiol** 1988 Apr;18(4):296–300 **(Ita)**
[Electrocardiographic, clinical and prognostic evaluation of sustained ventricular tachycardia in acute and chronic ischemic heart disease] Boriani G, et al. **Minerva Cardioangiol** 1989 Apr;37(4):185–92 (Eng. Abstr.) **(Ita)**
[Non-Q infarct. Clinical and prognostic aspects] Parenti GF, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):3–9 (Eng. Abstr.) **(Ita)**
[Interatrial block in acute myocardial infarction. Description of a case] Vitali A, et al. **Minerva Cardioangiol** 1988 Jun; 36(6):327–30 (Eng. Abstr.) **(Ita)**
[Hyperglycemia in acute myocardial infarct] Caterini V. **Quad Sclavo Diagn** 1987 Dec;23(4):379–82 (Eng. Abstr.) **(Ita)**
[Coronary thromboembolism in hepatic sarcoma following myocardial infarct] Tenna M, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):61–5 (Eng. Abstr.) **(Ita)**
[A case of massive myocardial calcification—13 years after

myocardial infarction] Chida K, et al.
Kokyu To Junkan 1988 Sep;36(9):1017–21 (Eng. Abstr.) **(Jpn)**
[Sudden death due to myocardial infarction] Hiramori K. **Kokyu To Junkan** 1989 Mar;37(3):245–9 **(Jpn)**
[Acquired left coronary artery fistula to the left ventricle after myocardial infarction. Report of two cases] Mizuno S, et al. **Kokyu To Junkan** 1988 Jul;36(7):787–92 (Eng. Abstr.) **(Jpn)**
[A successful case of surgical treatment of postinfarction pseudoaneurysm of the left ventricle] Ohhira M, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Oct;36(10):2284–9 (Eng. Abstr.) **(Jpn)**
[Assessment of susceptibility to ventricular tachycardia following myocardial infarction by non-dipolarity of QRST area maps] Tsunakawa H, et al.
Nippon Naika Gakkai Zasshi 1988 Jul;77(7):987–92 **(Jpn)**
[Status of the coronary vessels after a recent first myocardial infarction] Aleksandrow-Wysznacka W, et al.
Kardiol Pol 1988;31(12):753–7 (Eng. Abstr.) **(Pol)**
[Changes in left-ventricular mural thrombus examined by two-dimensional echocardiography during hospitalization for acute myocardial infarction. Clinico-echocardiographic correlations and the effect of intravenous streptokinase and/or heparin] Piszczek I, et al. **Kardiol Pol** 1988; 31(8):481–7 (Eng. Abstr.) **(Pol)**
[Clinical course and prognosis in patients with acute disorders of intraventricular conduction in recent myocardial infarction] Piszczek I, et al. **Kardiol Pol** 1988;31(10):633–8 (Eng. Abstr.) **(Pol)**
[Effect of atenolol on the QT interval in the acute phase of myocardial infarction] Rynkiewicz A, et al.
Kardiol Pol 1988;31(8):505–9 (Eng. Abstr.) **(Pol)**
[Results of the use of intra-aortic counterpulsation in the treatment of post-infarction shock] Sadowski Z, et al.
Kardiol Pol 1988;31(7):411–7 (Eng. Abstr.) **(Pol)**
[Reaction of the circulatory system to physical exertion in relation to the degree of coronary insufficiency in patients after myocardial infarction] Ziółkowski L. **Kardiol Pol** 1988;31(6):357–66 (Eng. Abstr.) **(Pol)**
[Cellular response in patients with post-infarction Dresser syndrome studied by the leukocyte migration inhibition test] Domaniewski J, et al. **Pol Tyg Lek** 1988 Oct 17–24; 43(42–43):1363–5 (Eng. Abstr.) **(Pol)**
[Isosorbide dinitrate treatment of silent myocardial ischemia in patients after myocardial infarction] Moczurad KW, et al. **Przegl Lek** 1989;46(3):350–5 (Eng. Abstr.) **(Pol)**
[Survival time and the extent of pathomorphologic changes of the myocardium in cardiogenic shock] Kuch J, et al.
Wiad Lek 1988 May 1;41(9):545–9 (Eng. Abstr.) **(Pol)**
[Prognostic value of the exercise test after myocardial infarction] Wantrych M, et al. **Wiad Lek** 1988 Jul 15; 41(14):937–40 (28 ref.) (Eng. Abstr.) **(Pol)**
[Early postinfarct angina--its incidence, significance, prognosis] Gherasim L, et al.
Rev Med Interna [Med Interna] 1988 Mar-Apr;40(2):155–66 (Eng. Abstr.) **(Rum)**
[Use of klofelin in managing the pain syndrome in patients with acute myocardial infarct] Zaltsev AA, et al.
Anesteziol Reanimatol 1988 Nov-Dec;(6):30–3 **(Rus)**
[Elimination of disorders in the electrical stability of the heart during postinfarct cardiosclerosis by using a factor that induces GABA accumulation in the brain] Abdikaliev NA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):152–4 (Eng. Abstr.) **(Rus)**
[Level of enkephalins and cyclic nucleotides in the myocardium in ventricular fibrillation caused by experimental myocardial infarct] Maslov LN, et al.
Biull Eksp Biol Med 1988 Oct;106(10):408–10 (Eng. Abstr.) **(Rus)**
[Prevention of arrhythmia in acute ischemia in conscious animals using a serotonin analog] Shabunina EV, et al.
Biull Eksp Biol Med 1988 Oct;106(10):410–2 (Eng. Abstr.) **(Rus)**
[Allapinin pharmacokinetics after its single intravenous administration] Khakimov AG, et al.
Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(1):31–6 (Eng. Abstr.) **(Rus)**
[Life-threatening disorders of cardiac rhythm] Mazur NA.
Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(1):3–6 **(Rus)**
[Effect of long-term anticoagulant and antithrombocytic therapy on the size of intracavitary thrombus and the incidence of thromboembolic complications in patients with acute myocardial infarction] Rado Iu, et al.
Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(1):94 **(Rus)**
[Effect of complications in the acute period of myocardial infarction on physical exertion tolerance at the hospital stage of rehabilitation] Al'khimovich VM, et al.
Kardiologiia 1988 Nov;28(11):27–32 (Eng. Abstr.) **(Rus)**
[Effects of tetrodotoxin and verapamil on abnormal ventricular activity at the late stage of experimental myocardial infarction in dogs] Aniukhovskiĭ EP, et al.
Kardiologiia 1989 May;29(5):66–71 (Eng. Abstr.) **(Rus)**
[Prognosis of the course of ischemic heart disease in patients with a history of macrofocal and transmural myocardial infarction in relation to the degree of blood pressure in the pulmonary artery] Bokarev IN, et al. **Kardiologiia** 1989 May;29(5):86–8 **(Rus)**
[Dynamics of cardiac rhythm disorders in patients with myocardial infarction studied by 24-hour ECG monitoring] Dobrotvorskaia TE, et al. **Kardiologiia** 1989 Jan;29(1):44–8 (Eng. Abstr.) **(Rus)**
[Plasma lipid levels and body weight in patients with post-infarction cardiosclerosis with various degrees of systolic blood pressure] Iuldashev SS. **Kardiologiia** 1989 Mar;29(3):91–2 **(Rus)**
[Evaluation of the anti-arrhythmic effect of intracardiac laser therapy by 24-hour electrocardiographic monitoring of patients with acute myocardial infarction] Kipshidze NN, et al. **Kardiologiia** 1988 Jul;28(7):60–3 (Eng. Abstr.) **(Rus)**
[Total and segmental left-ventricular myocardial function in patients with post-infarction heart aneurysm] Korytnikov KI. **Kardiologiia** 1988 Jul;28(7):37–41 (Eng. Abstr.) **(Rus)**
[Ventricular fibrillation associated with accessory left-ventricular chorda in patients with myocardial infarction] Kuznetsov VA, et al. **Kardiologiia** 1989 Jan; 29(1):94–5 **(Rus)**
[Newly developed stenocardia: fibrinolysis and hemostasis at rest and during physical exercise after myocardial infarction] Liutova LV, et al. **Kardiologiia** 1989 Jun; 29(6):42–7 (Eng. Abstr.) **(Rus)**
[Effect of peripheral vasodilators on the local contractile function of the myocardium in patients with post-infarction cardiosclerosis] Ol'binskaia LI, et al. **Kardiologiia** 1988 Oct; 28(10):21–4 (Eng. Abstr.) **(Rus)**
[Prognosis of the clinical course of post-infarction cardiosclerosis on the basis of pyrophosphate-labeled myocardial scintigraphy] Vinogradov AV, et al.
Kardiologiia 1988 Jul;28(7):56–60 (Eng. Abstr.) **(Rus)**
[Functional state of the cardiovascular system in patients with post-infarction cardiosclerosis and the hypokinetic type of blood circulation in a tropical climate] Zakha'riants RL.
Kardiologiia 1989 May;29(5):96–7 **(Rus)**
[Early echocardiographic signs of cardiac failure in patients with acute-stage myocardial infarction] Gortsakalian EL.
Klin Med (Mosk) 1988 Oct;66(10):39–43 (Eng. Abstr.) **(Rus)**
[The problem of acute ulcers in myocardial infarction] Mokrousov VM. **Klin Med (Mosk)** 1988 Oct;66(10):37–9 (Eng. Abstr.) **(Rus)**
[Exacerbation of associated bronchial asthma in patients with myocardial infarct] Sinopal'nikov AI, et al.
Klin Med (Mosk) 1989 Jan;67(1):71–4 (Eng. Abstr.) **(Rus)**
[Prognosis of the course and outcome of acute myocardial infarction] Ananchenko VG, et al. **Sov Med** 1988;(5):3–6 (Eng. Abstr.) **(Rus)**
[A combination of acute myocardial infarct with early ventricular repolarization syndrome] Budianskiĭ MV, et al.
Sov Med 1988;(11):118–9 **(Rus)**
[Abdominal aspects of myocardial infarction] Gurevich RA, et al. **Sov Med** 1989;(5):65–8 **(Rus)**
[Use of ethacizine and lidocaine to prevent ventricular fibrillation in acute myocardial infarction] Tsyganov OO.
Sov Med 1988;(11):54–5 **(Rus)**
[The generalized form of yersiniosis in a patient with transmural myocardial infarct and diabetes mellitus] Markov IS, et al. **Ter Arkh** 1988;60(11):135–6 **(Rus)**
[Prediction of the course of post-infarction cardiosclerosis] Il'iash MG, et al. **Vrach Delo** 1989 May;(5):25–7 (Eng. Abstr.) **(Rus)**
[Myocardial infarction of the right ventricle with pulmonary bleeding] Muzykantova NR, et al. **Vrach Delo** 1989 Feb; (2):50–2 **(Rus)**
[Cardiac hemodynamic variants in the development of heart failure in patients with postinfarct cardiosclerosis] Selivonenko VG, et al. **Vrach Delo** 1989 Mar;(3):9–11 (Eng. Abstr.) **(Rus)**
[Use of diltiazem (Cortiazem Retard) in patients with post-infarction angina pectoris] Topalov V. **Med Pregl** 1988;41(5–6):237–40 (Eng. Abstr.) **(Scr)**
[Histologic correlation of ischemic and chagasic ventricular aneurysms. Relation to physiopathology] Castagnino HE, et al. **Arch Inst Cardiol Mex** 1988 Sep-Oct;58(5):425–32 (Eng. Abstr.) **(Spa)**
[Arrhythmia in acute myocardial infarction with involvement of the right ventricle] Córdoba Tejada M, et al.
Arch Inst Cardiol Mex 1989 Mar-Apr;59(2):113–9 (Eng. Abstr.) **(Spa)**
[Usefulness of 2-dimensional echocardiography in detecting intraventricular thrombi in patients with acute myocardial infarction] Vargas-Barrón J, et al.
Arch Inst Cardiol Mex 1989 Mar-Apr;59(2):121–4 (Eng. Abstr.) **(Spa)**
[Characteristics of pain in diabetics with acute myocardial infarct. Importance of autonomic cardiovascular neuropathy] Iglesias Guerrero M, et al. **Rev Clin Esp** 1988 Oct;183(6):296–9 (Eng. Abstr.) **(Spa)**
[Multicenter clinical trial on the prevention of sudden death after myocardial infarction by the use of anti-arrhythmia agents. Investigator Group of the Spanish Study on Sudden Death] **Rev Esp Cardiol** 1989 Feb;42(2):77–83 (Eng. Abstr.) **(Spa)**
[Residual ischemia after infarction (I). Detection methods and prognostic value] Bosch X. **Rev Esp Cardiol** 1988 Nov; 41(9):552–65 (112 ref.) (Eng. Abstr.) **(Spa)**
[Residual ischemia after myocardial infarct (II). Treatment] Bosch X. **Rev Esp Cardiol** 1988 Dec;41(10):616–29 (105 ref.) **(Spa)**
[Usefulness of bidimensional echocardiography in the diagnosis of left ventricular aneurysm in acute myocardial infarction] Heras M, et al. **Rev Esp Cardiol** 1988 May; 41(5):278–82 (Eng. Abstr.) **(Spa)**
[Value of early anticoagulation in the prevention of intraventricular thrombosis after a 1st myocardial infarction: prospective and randomized study] Díaz R, et al. **Rev Med Chil** 1988 Jan;116(1):13–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

The consequences of reviewing serial changes in the Minnesota code for diagnosis of acute myocardial infarction. Wolf HK, et al. **Acta Med Scand Suppl** 1988; 728:48–52
Serial assessment of myocardial infarction by using gated MR imaging and Gd-DTPA. Nishimura T, et al.
AJR Am J Roentgenol 1989 Oct;153(4):715–20
Assessment of myocardial infarct size by means of T2-weighted 1H nuclear magnetic resonance imaging. Bouchard A, et al. **Am Heart J** 1989 Feb;117(2):281–9
Risk identification at the time of admission to coronary care unit in patients with suspected myocardial infarction. Gheorghiade M, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1212–7
Silent myocardial ischemia in asymptomatic survivors of unrecognized myocardial infarction and matched controls. Hands ME, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1488–92
ECG findings after myocardial infarction in children after Kawasaki disease. Nakanishi T, et al. **Am Heart J** 1988 Oct;116(4):1028–33
Heart rate correlates with severity of coronary atherosclerosis in young postinfarction patients. Perski A, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1369–73
Thrombotic obstruction of prosthetic aortic valve presenting as acute myocardial infarction. Quintanilla MA, et al.
Am Heart J 1989 Jun;117(6):1378–9
Electrocardiographic manifestations of right ventricular infarction. Robalino BD, et al. **Am Heart J** 1989 Jul; 118(1):138–44 (37 ref.)
Early peak of creatine kinase-MB in acute myocardial infarction with a nondiagnostic electrocardiogram. Sharkey SW, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1207–11
ECG diagnosis of MI in LBBB [letter; comment] Spodick DH. **Am Heart J** 1989 Jun;117(6):1409. **Comment on:** Am Heart J 1988 Jul;116(1 Pt 1):23–31
New coronary events at four-year follow-up in elderly patients with recognized or unrecognized myocardial infarction. Aronow WS. **Am J Cardiol** 1989 Mar 1; 63(9):621–2
Prognostic significance of ST potentials determined by body surface mapping in inferior wall acute myocardial infarction. Bell AJ, et al. **Am J Cardiol** 1989 Aug 1; 64(5):319–23
Diagnostic significance of precordial ST-segment depression. Boden WE, et al. **Am J Cardiol** 1989 Feb 1;63(5):358–61 (29 ref.)
Multiparametric approach to diagnosis of non-Q-wave acute myocardial infarction. Carpeggiani C, et al.
Am J Cardiol 1989 Feb 15;63(7):404–8
Rapid serial enzyme measurements in evaluation of patients with suspected myocardial infarction. Dufour DR, et al.
Am J Cardiol 1989 Mar 15;63(11):652–5
Significance of nitroglycerin-induced hypotension with inferior wall acute myocardial infarction. Ferguson JJ, et al. **Am J Cardiol** 1989 Aug 1;64(5):311–4
Interobserver agreement and accuracy of bedside estimation of right and left ventricular ejection fraction in acute myocardial infarction. Gadsbøll N, et al. **Am J Cardiol** 1989 Jun 1;63(18):1301–7
Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset. Johnston DL, et al. **Am J Cardiol** 1989 Jul 15;64(3):172–9
Resolution of spontaneous contrast with platelet disaggregatory therapy (trifluoperazine). Mahony C, et al.
Am J Cardiol 1989 Apr 15;63(13):1009–10
Invalidation of the resting electrocardiogram obtained via exercise electrode sites as a standard 12-lead recording. Sevilla DC, et al. **Am J Cardiol** 1989 Jan 1;63(1):35–9
Comparison of clinical presentation of acute myocardial infarction in patients older than 65 years of age to younger patients: the Multicenter Chest Pain Study experience. Solomon CG, et al. **Am J Cardiol** 1989 Apr 1;63(12):772–6
Nuclear magnetic resonance and radionuclide angiographic assessment of acute myocardial infarction in a randomized trial of intravenous streptokinase. Wisenberg G, et al.
Am J Cardiol 1988 Nov 15;62(16):1011–6
Detection of early myocardial infarction in formalin-fixed, paraffin-embedded tissue. Fujiwara H, et al.
Am J Cardiovasc Pathol 1988 Apr;2(1):57–61
Does determination of serum aspartate aminotransferase contribute to the diagnosis of acute myocardial infarction? Rotenberg Z, et al. **Am J Clin Pathol** 1989 Jan;91(1):91–4
The utility of the presence or absence of chest pain in patients with suspected acute myocardial infarction. Fesmire FM, et al. **Am J Emerg Med** 1989 Jul;7(4):372–7
Early diagnosis of myocardial infarction by timed sequential enzyme measurements. Collinson PO, et al.
Ann Clin Biochem 1988 Jul;25 (Pt 4):376–82
Creatine determinations as an early marker for the diagnosis of acute myocardial infarction. Delanghe J, et al.
Ann Clin Biochem 1988 Jul;25 (Pt 4):383–8
Comparison of two latex agglutination test kits for serum

myoglobin in the exclusion of acute myocardial infarction. Konings CH, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):254–8

Initial ECG in Q wave and non-Q wave myocardial infarction. Fesmire FM, et al. **Ann Emerg Med** 1989 Jul; 18(7):741–6

Candidates for thrombolysis among emergency room patients with acute chest pain. Potential true- and false-positive rates. Lee TH, et al. **Ann Intern Med** 1989 Jun 15; 110(12):957–62

A clinical model for predicting survival... [letter] Nikolic G. **Aust N Z J Med** 1989 Apr;19(2):187–8

Acute right ventricular infarction. Caplin JL. **BMJ** 1989 Jul 8;299(6691):69–70 (29 ref.)

Right ventricular infarction: diagnostic accuracy of electrocardiographic right chest leads V3R to V7R investigated prospectively in 43 consecutive fatal cases from a coronary care unit. Andersen HR, et al. **Br Heart J** 1989 Jun;61(6):514–20

Myocardial infarct expansion during indomethacin or ibuprofen therapy for symptomatic post infarction pericarditis. Influence of other pharmacologic agents during early remodelling. Jugdutt BI, et al. **Can J Cardiol** 1989 May;5(4):211–21 (32 ref.)

Ultrasonic tissue characterization of acute canine myocardial infarction. Tak T, et al. **Can J Cardiol** 1989 May; 5(4):195–200

Electrocardiographic pseudo-myocardial infarct pattern in malignant cardiac disease. O'Dea D, et al. **Cancer** 1989 Mar 1;63(5):958–62

Assessment of myocardial ischemia and infarction by contrast enhanced magnetic resonance imaging. Wolfe CL. **Cardiol Clin** 1989 Aug;7(3):685–96 (44 ref.)

Anterior ST segment depression in first inferior myocardial infarction: echocardiographic analysis of extent of left ventricular wall motion abnormality. Hayat NH, et al. **Cardiologia** 1988 Oct;33(10):921–6

Unrecognized myocardial infarction. Bertolet BD, et al. **Cardiovasc Clin** 1989;20(1):173–82 (32 ref.)

Early biochemical markers of myocardial necrosis. Puleo P, et al. **Cardiovasc Clin** 1989;20(1):143–54 (60 ref.)

Precordial ST elevation with acute conus branch occlusion. Matthews RV, et al. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):180–2

Significance of the magnitude of a QS wave deflection in evaluating the uninvolved muscle in anterior wall myocardial infarction. Klainman E, et al. **Chest** 1988 Nov; 94(5):1002–7

Electrocardiographic diagnosis of remote posterior wall myocardial infarction using unipolar posterior lead V9. Rich MW, et al. **Chest** 1989 Sep;96(3):489–93

ST segment shifts are poor predictors of subsequent Q wave evolution in acute myocardial infarction. A natural history study of early non-Q wave infarction. Boden WE, et al. **Circulation** 1989 Mar;79(3):537–48

Diagnostic value of QRST isointegral maps in detecting myocardial infarction complicated by bundle branch block. Hayashi H, et al. **Circulation** 1989 Sep;80(3):542–50

Ultrasonic tissue characterization with integrated backscatter. Acute myocardial ischemia, reperfusion, and stunned myocardium in patients. Milunski MR, et al. **Circulation** 1989 Sep;80(3):491–503

Determination of left ventricular mass by magnetic resonance imaging in hearts deformed by acute infarction. Shapiro EP, et al. **Circulation** 1989 Mar;79(3):706–11

The diagnostic accuracy of three recommended methods for serum aspartate aminotransferase assays in patients suspected of myocardial infarction and hepatobiliary diseases. Goldberg DM, et al. **Clin Biochem** 1988 Oct; 21(5):323–8

Isoelectric focusing of creatine kinase MM isoforms and its application for diagnosis of acute myocardial infarction. Müller-Hansen S, et al. **Clin Biochem** 1989 Apr; 22(2):125–30

Prompt detection of myocardial injury by assay of creatine kinase isoforms in initial plasma samples. Abendschein D, et al. **Clin Cardiol** 1988 Oct;11(10):661–4

Outpatient cardiac catheterization and the problem of delay in evaluation and management of acute myocardial infarction [editorial] Conti CR. **Clin Cardiol** 1989 Jul; 12(7):361

Delay time in suspected acute myocardial infarction and the importance of its modification. Herlitz J, et al. **Clin Cardiol** 1989 Jul;12(7):370–4

Vector U loop in patients with old myocardial infarction. Yang Q, et al. **Clin Cardiol** 1989 May;12(5):277–82

More on methods for CK-MB [letter; comment] Indriksons A. **Clin Chem** 1989 May;35(5):899. **Comment on:** Clin Chem 1989 Jan;35(1):130–4

Measuring creatine kinase MB isoenzyme in a maintenance hemodialysis population: chemiluminometric immunoassay and electrophoresis compared. Latner BP, et al. **Clin Chem** 1989 Sep;35(9):1965–8

Re-evaluation of the diagnostic utility of serum total creatine kinase and creatine kinase-2 in myocardial infarction. Leung FY, et al. **Clin Chem** 1989 Jul;35(7):1435–40

Isoenzymes and isoforms of CK: what is the score? [editorial] Lott JA. **Clin Chem** 1989 Feb;35(2):201

Diagnostic efficiency of four lactate dehydrogenase isoenzyme-1 ratios in serum after myocardial infarction. Loughlin JF, et al. **Clin Chem** 1988 Oct;34(10):1960–5

Lactate dehydrogenase isoenzyme-1 in serum for detection of peri-operative myocardial infarction after cardiac surgery. Rotenberg Z, et al. **Clin Chem** 1988 Dec; 34(12):2469–74

Information induction for predicting acute myocardial infarction. Rudolph RA, et al. **Clin Chem** 1988 Oct; 34(10):2031–8

Reducing misdiagnosis of myocardial infarction [letter] Shah VD. **Clin Chem** 1989 Aug;35(8):1801–2

Use of creatine kinase MB isoenzyme for diagnosing myocardial infarction when total creatine kinase activity is high. Thompson WG, et al. **Clin Chem** 1988 Nov; 34(11):2208–10

Prognostic significance of late potentials after myocardial infarction. Opolski G, et al. **Cor Vasa** 1988;30(5):331–7

Vectorcardiographic criteria for acute right ventricular infarction. Carson W, et al. **Eur Heart J** 1988 Sep; 9(9):955–61

Magnetocardiographic studies of ventricular repolarization in old inferior myocardial infarction. Nomura M, et al. **Eur Heart J** 1989 Jan;10(1):8–15

Immunocytochemical diagnosis of early myocardial ischaemic/hypoxic damage. Leadbeatter S, et al. **Forensic Sci Int** 1989 Feb;40(2):171–80

Clinical diagnosis of acute myocardial infarction. Willerson JT. **Hosp Pract [Off]** 1989 Jun 15;24(6):65–77 (10 ref.)

The 'MI' that could have been worse--and was. Wong JG. **Hosp Pract [Off]** 1989 Apr 30;24(4A):52, 57–8

Diagnosis of myocardial infarct extension--value of multiple chest point mapping of ST segment. Goel UC, et al. **Indian Heart J** 1988 Jan–Feb;40(1):37–43

Electrocardiographic and coronary angiographic correlation in patients with transmural myocardial infarction. Prasad GS, et al. **Indian Heart J** 1988 Jul–Aug;40(4):218–22

Reciprocal ST depression in acute myocardial infarction: correlation with early post-infarction exercise testing and coronary angiography. Sethi KK, et al. **Indian Heart J** 1988 Jul–Aug;40(4):223–7

Evaluation of CPK and LDH isoenzyme assays as diagnostic aids in acute myocardial infarction. Ohri VC, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):35–40

Acute right ventricular infarction without infero-posterior left ventricular infarction. Gokhroo RK, et al. **Int J Cardiol** 1989 Jul;24(1):115–7

Clinical correlates of acute right ventricular infarction in acute inferior myocardial infarction. Sinha N, et al. **Int J Cardiol** 1989 Jul;24(1):55–61

A new approach to surveillance for acute myocardial infarction: reproducibility and cost efficiency. McKinlay SM, et al. **Int J Epidemiol** 1989 Mar;18(1):67–75

Diagnostic criteria for hospitalized acute myocardial infarction: the Minnesota experience. Mascioli SR, et al. **Int J Epidemiol** 1989 Mar;18(1):76–83

Canine acute myocardial infarction. In vivo detection by MRI with gradient echo technique and contribution of Gd-DOTA. Schouman-Claeys E, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S254–7

A rapid slide agglutination test contrasted with a radioimmunoassay for myoglobin measurement for the early diagnosis of myocardial necrosis. FitzGerald RJ, et al. **Ir J Med Sci** 1988 Sep;157(9):293–4

Early exercise testing and discharge of patients with acute chest pain syndromes. Coghlan JG, et al. **Ir Med J** 1989 Feb;82(1):8–10

High dose dipyridamole echocardiography early after uncomplicated acute myocardial infarction: correlation with exercise testing and coronary angiography. Bolognese L, et al. **J Am Coll Cardiol** 1989 Aug;14(2):357–63

Does the rest electrocardiogram after myocardial infarction determine the predictive value of exercise-induced ST depression? A 2 year follow-up study in a veteran population. Klein J, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):305–11

Non-Q-wave myocardial infarction--current status. Dhawan S, et al. **J Assoc Physicians India** 1988 Dec;36(12):726–8

Role of right precordial electrocardiography in the diagnosis of right ventricular infarction. Kaur A, et al. **J Assoc Physicians India** 1988 Nov;36(11):645–8

Acute pancreatitis with ischaemic heart disease--an abnormal electrocardiography. Kohli SC, et al. **J Assoc Physicians India** 1988 Jul;36(7):452–4

The effects of diagnostic criteria on trends in coronary heart disease morbidity: the Minnesota Heart Survey. Burke GL, et al. **J Clin Epidemiol** 1989;42(1):17–24

The post-operative electrocardiogram and creatine kinase: implications for diagnosis of myocardial infarction after non-cardiac surgery. Charlson ME, et al. **J Clin Epidemiol** 1989;42(1):25–34

Right ventricular infarction. The evolution of ST-segment elevation and Q wave in right chest leads. Andersen HR, et al. **J Electrocardiol** 1989 Jul;22(3):181–6

Effects of pulmonary emphysema on QRS infarct size score. Baber SA, et al. **J Electrocardiol** 1988;21 Suppl:S112–6

Diagnostic value of body surface potential mapping in old anterior non-Q myocardial infarction. De Ambroggi L, et al. **J Electrocardiol** 1988 Nov;21(4):321–9

Hyperkalemia-like ECG changes simulating acute myocardial infarction in a patient with hypokalemia undergoing potassium replacement [published erratum appears in J Electrocardiol 1989 Jul;22(3):following 276] Madias JE, et al. **J Electrocardiol** 1989 Jan;22(1):93–7

False-positive posterior myocardial infarct criteria during left anterior descending coronary angioplasty. Selvester RH, et al. **J Electrocardiol** 1988;21 Suppl:S105–11

Usefulness of abnormalities of repolarization in the electrocardiographic diagnosis of healed myocardial infarction. Warner RA, et al. **J Electrocardiol** 1988;21 Suppl:S93–7

Diagnostic value of Q waves outside standard precordial lead points in left anterior myocardial infarction undetectable by standard 12-lead electrocardiogram. Yabe S, et al. **J Electrocardiol** 1988 Nov;21(4):313–9

The early repolarization syndrome. Eastaugh JA. **J Emerg Med** 1989 May–Jun;7(3):257–62

The ECG in acute myocardial infarction. Fesmire FM, et al. **J Emerg Med** 1988 Sep–Oct;6(5):405–10

ECG of the month. Careful neglect. Acute inferior wall myocardial infraction and intermittent bundle branch block. Martinez-Lopez JI. **J La State Med Soc** 1988 Jul;140(7):7–9

ECG of the month. A fly in the ointment. Acute myocardial infarction. Martinez-Lopez JI. **J La State Med Soc** 1988 Dec;140(12):13, 15–6

Two-dimensional echocardiographic detection of in-hospital complications in acute myocardial infarction. Sahasakul Y, et al. **J Med Assoc Thai** 1989 Jan;72(1):21–4

Right ventricular myocardial infarction. Atkinson B. **J Miss State Med Assoc** 1988 Oct;29(10):297–300

Early diagnosis of acute myocardial infarction by myoglobin latex agglutination test. Pang SC, et al. **Jpn Heart J** 1988 Sep;29(5):631–8

Magnetic resonance imaging in patients with unstable angina: comparison with acute myocardial infarction and normals. Ahmad M, et al. **Magn Reson Imaging** 1988 Sep–Oct; 6(5):527–34

Effect of hyperosmotic mannitol on magnetic resonance relaxation parameters in reperfused canine myocardial infarction. Miller DD, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):79–88

Serial changes in nuclear magnetic resonance relaxation times after myocardial infarction in the rabbit: relationship to water content, severity of ischemia, and histopathology over a six-month period. Johnston DL, et al. **Magn Reson Med** 1988 Dec;8(4):363–79

Serum myoglobin in the diagnosis of acute myocardial infarction. Zeana C, et al. **Med Interne** 1982 Apr–Jun; 20(2):109–16

MMIE malpractice claim review. Internal medicine. MMIE Risk Management Committee. **Minn Med** 1986 Mar; 69(3):153–4

Electrographic alterations induced by hyperkalaemia simulating acute myocardial infarction. Campistol JM, et al. **Nephrol Dial Transplant** 1989;4(3):233–5 (22 ref.)

Noninvasive recording of late potentials: current state of the art. Kuchar DL, et al. **PACE** 1989 Sep;12(9):1538–51 (59 ref.)

Improved detection of healed myocardial infarction by Fourier amplitude and phase imaging in two projections: validation with MRI. Akins EW, et al. **Radiographics** 1989 Mar;9(2):323–39

Reperfused and nonreperfused myocardial infarction: diagnostic potential of Gd-DTPA--enhanced MR imaging. de Roos A, et al. **Radiology** 1989 Sep; 172(3):717–20

Success of acute thrombolytic therapy in acute myocardial infarction: what does it demand from cardiac imaging in the 1990s? [editorial] Higgins CB. **Radiology** 1989 Jul; 172(1):17–9

Chest pain evaluation unit: a cost-effective approach for ruling out acute myocardial infarction. de Leon AC Jr, et al. **South Med J** 1989 Sep;82(9):1083–9 (35 ref.)

Acute Epstein-Barr virus myocarditis simulating myocardial infarction with cardiogenic shock. Tyson AA Jr, et al. **South Med J** 1989 Sep;82(9):1184–7

Surveillance for postoperative myocardial infarction after noncardiac operations. Charlson ME, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):407–14

The need for imaging in acute myocardial infarction. Parisi AF. **Trans Am Clin Climatol Assoc** 1987;99:47–56 (22 ref.)

Ruling out myocardial infarction--updating a good idea [editorial] Goldman L. **West J Med** 1988 May;148(5):573–5

'Ruling out' myocardial infarction in the coronary care unit [clinical conference] Murata GH. **West J Med** 1988 May; 148(5):555–60

[Bicycle ergometry--an objective criterion for determining the work capacity of patients with a history of myocardial infarct] Bashliev I. **Vutr Boles** 1989;28(3):57–63 (Eng. Abstr.) **(Bul)**

[The prognostic value of an early bicycle ergometry test and the management of patients with uncomplicated acute myocardial infarct] Penkov N, et al. **Vutr Boles** 1989; 28(2):41–7 (Eng. Abstr.) **(Bul)**

[Advances in research on the diagnostic value of creatine kinase in acute myocardial infarction] Wang LS. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Feb; 17(1):55–7 (14 ref.) **(Chi)**

[Electrocardiographic peak mapping in determining the location and size of myocardial infarction--experience with 61 cases] Wen YM, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):668–72, 715–6 (Eng. Abstr.) **(Chi)**

[Assessment of associated electrocardiographic changes in the Wolff-Parkinson-White syndrome. II. Detection of focal disorders] Homola D, et al. **Vnitr Lek** 1988 Sep; 34(9):833–42 (Eng. Abstr.) **(Cze)**

[Long-term survival of patients with angina pectoris admitted with suspected myocardial infarction] Kjøller E,

et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2199–202 (Eng. Abstr.) **(Dan)**

[Pain in acute myocardial infarction] Nielsen FE, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1666–8 (Eng. Abstr.) **(Dan)**

[Prognostic value of ECG on admission in patients with acute myocardial infarction] Pehrson S, et al. **Ugeskr Laeger** 1989 May 1;151(18):1114–6 (Eng. Abstr.) **(Dan)**

[Prognostic value of ST elevation in right-sided precordial ECG leads in patients with suspected acute myocardial infarction] Hansen KN, et al. **Ugeskr Laeger** 1988 Jan 18; 150(3):158–61 (Eng. Abstr.) **(Dut)**

[Paraclinical tests in the diagnosis of right ventricle infarction] Lançon JP, et al. **Agressologie** 1989 Jan; 30(1):29–31 (20 ref.) (Eng. Abstr.) **(Fre)**

[Isolated ST-segment depression in precordial leads V2 to V4. An early electrocardiographic sign of posterolateral myocardial infarction] Bareiss P, et al. **Ann Cardiol Angeiol (Paris)** 1989 May;38(5):265–8 (Eng. Abstr.) **(Fre)**

[Prognostic value at 12 months of two-dimensional echocardiography performed during the acute phase of myocardial infarction. A prospective study of 140 patients] Carrie D, et al. **Arch Mal Coeur** 1988 Nov;81(11):1327–32 (Eng. Abstr.) **(Fre)**

[Detection of recent myocardial infarction by spin-echo MRI. Value of the third echo (published erratum appears in Arch Mal Coeur 1988 Sep;81(9):following 1140)] Kastler B, et al. **Arch Mal Coeur** 1988 Aug;81(8):963–71 (27 ref.) (Eng. Abstr.) **(Fre)**

[Quantitation of left ventricular function after an inferior or superior myocardial infarct. Comparative value of resting ejection fractions or after effort] Tissot A, et al. **J Mal Vasc** 1988;13(4):371–2 **(Fre)**

[Diagnosis, clinical presentation and triage criteria of emergency patients admitted for chest pain: prospective study of 278 cases] Buclin T, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1921–5 (Eng. Abstr.) **(Fre)**

[The clinical significance of ECG exercise testing at hospital discharge of patients with acute myocardial infarction] Knaus U, et al. **Schweiz Med Wochenschr** 1988 Nov 5; 118(44):1616–21 (Eng. Abstr.) **(Ger)**

[Acute myocardial infarct in patients under 30 years old] Zuber M, et al. **Schweiz Med Wochenschr** 1988 Dec 3; 118(48):1793–6 (Eng. Abstr.) **(Ger)**

[Silent myocardial ischemia] Boehringer K, et al. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):481–2 **(Ger)**

[A case from practice (123). Patient: Mr. B. H., born 1935, business clerk] Schneider K, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13;77(50):1386–8 **(Ger)**

[Deterioration of general condition, decreased functional performance, exertional dyspnea (clinical conference)] Sütsch G, et al. **Schweiz Rundsch Med Prax** 1988 Nov 22; 77(47):1299–301 (Eng. Abstr.) **(Ger)**

[ST-segment analysis in long-term ECG: amplitude and phase response of various systems in comparison with standard ECG and their effect on true original reproduction of ST segment depression] Brüggemann T, et al. **Z Kardiol** 1989 Jan;78(1):14–22 (Eng. Abstr.) **(Ger)**

[Asymptomatic course of severe tricuspid valve insufficiency with aeroseptal infarct, coronary fistula and ventricular septum defect as a sequela of blunt thoracic trauma] Renner U, et al. **Z Kardiol** 1989 May;78(5):343–7 (Eng. Abstr.) **(Ger)**

[Myocardial infarct with normal coronary angiogram] Richter G. **Z Kardiol** 1989 Jun;78(6):408–11 (Eng. Abstr.) **(Ger)**

[Glycogen phosphorylase as a marker for damage to the heart muscle] Krause EG, et al. **Z Med Lab Diagn** 1989; 30(1):21–4 **(Ger)**

[Myoglobin and light chains of cardiac myosin. Personal results on its significance in cardiology] Porstmann B, et al. **Z Med Lab Diagn** 1989;30(1):8–10 **(Ger)**

[Myoglobin, L-myosin and cGMP—new laboratory parameters in cardiology] Puschendorf B, et al. **Z Med Lab Diagn** 1989;30(1):4–5 **(Ger)**

[Immunoinhibition test for human glycogen phosphorylase BB in the diagnosis of acute myocardial infarct] Rabitzsch G, et al. **Z Med Lab Diagn** 1989;30(1):25–7 **(Ger)**

[Diagnostic value of serum lipid and apolipoprotein parameters for the detection of a coronary risk even in the range of nonpathological serum cholesterol and triglyceride values] Winkler L, et al. **Z Med Lab Diagn** 1988;29(6):314–20 (Eng. Abstr.) **(Ger)**

[Suspected acute coronary events in emergency room patients] Behar S, et al. **Harefuah** 1989 Jan 1;116(1):39–41 (Eng. Abstr.) **(Heb)**

[ECG characteristics of acute myocardial ischemia] Szabó P, et al. **Orv Hetil** 1989 May 7;130(19):999–1000 (Eng. Abstr.) **(Hun)**

[Non Q infarct: diagnostic and prognostic risks] Civitillo UF, et al. **Arch Monaldi Mal Torace** 1987 Jan–Feb;42(1):101–16 (56 ref.) (Eng. Abstr.) **(Ita)**

[Demonstration of an acute myocardial infarction by nuclear magnetic resonance: comparison with 2-dimensional echocardiography in localization of the necrotic area] Casolo GC, et al. **Cardiologia** 1989 Mar;34(3):229–36 (Eng. Abstr.) **(Ita)**

[Prognostic significance of clinical, ergometric and coronarographic data in patients soon after myocardial infarction] Dei Cas L, et al. **Cardiologia** 1989 Apr; 34(4):317–25 (Eng. Abstr.) **(Ita)**

[Reliability of electrocardiographic criteria for the diagnosis of apical myocardial infarct] Di Leo M, et al. **Cardiologia** 1989 Jan;34(1):21–6 (Eng. Abstr.) **(Ita)**

[Comparative evaluation of intrahospital clinical course and prognosis in myocardial infarct with and without Q wave] Golzio PG, et al. **Cardiologia** 1988 Nov;33(11):1047–54 (Eng. Abstr.) **(Ita)**

[Semiquantitative evaluation of infarct area by a vectorcardiographic study: a comparison of acute phase and after 6 months] Gotti G, et al. **Cardiologia** 1988 Aug; 33(8):759–63 (Eng. Abstr.) **(Ita)**

[Exercise two-dimensional echocardiography in recent myocardial infarction. Is it useful in the detection of multivessel disease?] Baldi C, et al. **G Ital Cardiol** 1988 Apr;18(4):313–20 (Eng. Abstr.) **(Ita)**

[Cardiologic instrumental diagnosis and follow-up in the first year after myocardial infarct. Data acquired at an operative unit of general medicine] Monaci R, et al. **Minerva Cardioangiol** 1988 May;36(5):205–10 (Eng. Abstr.) **(Ita)**

[Myoglobinemia as an early marker of acute myocardial infarction. Comparison with the traditional enzymatic method] Zamprogno R, et al. **Minerva Cardioangiol** 1988 Nov;36(11):551–5 (Eng. Abstr.) **(Ita)**

[Studies on clinical significance of exercise-induced ST-segment depression at non-infarct-related leads in patients with prior myocardial infarction using the stress scintigraphy] Ohkubo T. **Fukuoka Igaku Zasshi** 1988 Nov; 79(11):813–31 (Eng. Abstr.) **(Jpn)**

[Papillary muscle infarction: echocardiographic features and genetic factors] Izumi S, et al. **J Cardiol** 1987 Dec; 17(4):721–9 (Eng. Abstr.) **(Jpn)**

[Marked ST-segment elevation in the precordial and inferior leads in right ventricular myocardial infarction: a case report] Kataoka H, et al. **J Cardiol** 1988 Jun;18(2):541–51 (Eng. Abstr.) **(Jpn)**

[Comparison of two-dimensional echocardiography with 201Tl-single photon emission computed tomography for evaluating the myocardial infarct zone] Konishiike A, et al. **J Cardiol** 1987 Dec;17(4):699–710 (Eng. Abstr.) **(Jpn)**

[Left ventricular asynergy in patients with impending myocardial infarction: two-dimensional echocardiographic assessment] Ohnishi S, et al. **J Cardiol** 1987 Dec; 17(4):711–20 (Eng. Abstr.) **(Jpn)**

[Theoretical bases and clinical aspects of ST reciprocal changes] Hayashi H. **Kokyu To Junkan** 1988 Aug; 36(8):847–58 **(Jpn)**

[A case report of pseudomyocardial infarction due to hyperkalemia] Oda E, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1235–9 (Eng. Abstr.) **(Jpn)**

[The role of CT in myocardial infarction: comparison with echocardiography and thallium myocardial scintigraphy] Oyama Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1086–96 (Eng. Abstr.) **(Jpn)**

[The clinical significance of the low level treadmill exercise test in acute myocardial infarction] Hata N. **Nippon Ika Daigaku Zasshi** 1989 Feb;56(1):2–13 (Eng. Abstr.) **(Jpn)**

[Evaluation of diagnostic criteria for acute myocardial infarction] Kawaguchi M, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):712–3 **(Jpn)**

[Prediction of coronary artery lesions by two-dimensional echocardiography at rest and during exercise: in patients with left anterior descending artery lesion] Yamasawa M, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):9–14 **(Jpn)**

[Clinicopathological correlation of poor R wave progression for the diagnosis of anterior myocardial infarction in the elderly] Suzuki Y, et al. **Nippon Ronen Igakkai Zasshi** 1988 Nov;25(6):597–602 (Eng. Abstr.) **(Jpn)**

[Value of recording of late ventricular potentials and spectrum analysis of the ECG signal in myocardial infarction] Opolski G. **Pol Tyg Lek** 1988 Sep 5; 43(36):1166–8 **(Pol)**

[Is analysis of creatine kinase and MB isoenzyme activities necessary in the diagnosis of myocardial infarction?] Tadeusiak W, et al. **Pol Tyg Lek** 1988 Sep 5;43(36):1149–52 **(Pol)**

[Myocardial infarction in a 27-year-old woman] Ruciński Z. **Wiad Lek** 1988 Apr 1;41(7):456–8 (Eng. Abstr.) **(Pol)**

[Characteristics of the evolution of myocardial infarct in young people] Cosovanu A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):261–3 (Eng. Abstr.) **(Rum)**

[Possibilities of the use of various biochemical and immunologic indicators in the differential diagnosis of unstable stenocardia and acute myocardial infarction] Almazov VA, et al. **Kardiologiia** 1989 Apr;29(4):21–4 (Eng. Abstr.) **(Rus)**

[Atypical creatine phosphokinase isoenzyme fraction in the diagnosis of acute myocardial infarction] Bluzhas IN, et al. **Kardiologiia** 1988 Sep;28(9):46–8 (Eng. Abstr.) **(Rus)**

[ECG characteristics of premature ventricular repolarization syndrome associated with myocardial infarction] Bol'shakova TIu, et al. **Kardiologiia** 1988 Nov;28(11):116–9 **(Rus)**

[Computerized two-dimensional echocardiography in acute myocardial infarction. Possibility of determining the size of necrotic focus] Chikvashvili DI, et al. **Kardiologiia** 1988 Jul;28(7):32–7 (Eng. Abstr.) **(Rus)**

[Clinical value of statistical analysis of cardiac rhythm in patients with acute myocardial infarction] Matusova AP, et al. **Kardiologiia** 1989 Jan;29(1):29–32 (Eng. Abstr.) **(Rus)**

[Complex ultrasonic examination in the diagnosis and evaluation of cardiac function in right-ventricular infarction] Orlov MV, et al. **Kardiologiia** 1989 Mar; 29(3):71–4 (Eng. Abstr.) **(Rus)**

[Serum myoglobin level as an early diagnostic indicator in myocardial infarction and its complications] Panfilov IuA, et al. **Kardiologiia** 1988 Nov;28(11):114–6 **(Rus)**

[A new principle of precordial mapping and its value in the assessment of the size and development of the infarction focus] Stamboltsian RP, et al. **Kardiologiia** 1988 Jul; 28(7):21–4 **(Rus)**

[Possibilities of electrocardiography in the evaluation of necrotization process in posterior myocardial infarction] Vinogradov AV, et al. **Kardiologiia** 1988 Nov;28(11):58–61 (Eng. Abstr.) **(Rus)**

[Spontaneous pneumothorax simulating myocardial infarct] Eshchenko KH, et al. **Klin Med (Mosk)** 1988 Jun; 66(6):105–6 **(Rus)**

[Clinical aspects of patients with macrofocal myocardial infarction with a complicated or uncomplicated course] Malaia LT, et al. **Klin Med (Mosk)** 1989 Jan;67(1):67–70 (Eng. Abstr.) **(Rus)**

[A new method of diagnosing acute myocardial infarct of the right ventricle] Orlov LL, et al. **Klin Med (Mosk)** 1988 Jun;66(6):34–6 (Eng. Abstr.) **(Rus)**

[Enzyme and isoenzyme tests in the diagnosis of myocardial infarct during aortocoronary bypass] Mikhailov IuE, et al. **Lab Delo** 1989;(5):50–2 (Eng. Abstr.) **(Rus)**

[Diagnosis of myocardial infarct using an immunochemical method of determining LDH activity] Rashkovetskiĭ LG, et al. **Lab Delo** 1988;(12):7–11 (Eng. Abstr.) **(Rus)**

[Expert statistical methods of constructing algorithms for the prognosis of myocardial infarct] Meshalkin LD, et al. **Med Tekh** 1988 Nov–Dec;(6):16–22 **(Rus)**

[Atherosclerotic lesions of the coronary arteries in acute myocardial infarction: effects on myocardial contraction, disease course and prognosis] Orlov LL, et al. **Sov Med** 1989;(3):25–8 (Eng. Abstr.) **(Rus)**

[Clinical significance of reciprocal changes in the ECG in acute myocardial infarction] Charchoglian RA, et al. **Ter Arkh** 1989;61(4):36–9 (Eng. Abstr.) **(Rus)**

[Clinico-angiographic correlations in intramural myocardial infarction] Ioseliani DG, et al. **Ter Arkh** 1989;61(4):33–6 (Eng. Abstr.) **(Rus)**

[Infarction-like ECG changes in lupus pericarditis] Sarkisian NM, et al. **Ter Arkh** 1988;60(7):90–1 **(Rus)**

[The clinical and psychological aspects of permanent and temporary loss of work capacity in patients with postinfarct cardiosclerosis] Vinogradov VF, et al. **Ter Arkh** 1988; 60(12):110–3 (Eng. Abstr.) **(Rus)**

[Principles of enzyme diagnosis of myocardial infarction] Titov VN. **Vestn Akad Med Nauk SSSR** 1988;(10):19–24 **(Rus)**

[The early diagnosis of myocardial infarct (the Czechoslovak Socialist Republic)] Sohor K. **Voen Med Zh** 1988 Oct; (10):78 **(Rus)**

[Significance of isoenzymes for diagnosis of myocardial infarction and methods of their analysis] Wagenknecht C, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):133–7 **(Rus)**

[Functional tests in the diagnosis of heart failure in patients with myocardial infarct] Beziuk NN, et al. **Vrach Delo** 1988 Dec;(12):11–5 (Eng. Abstr.) **(Rus)**

[The work prognosis of patients who have had a myocardial infarct with complications in the acute period] Bugaenko VV, et al. **Vrach Delo** 1988 Aug;(8):34–5 (Eng. Abstr.) **(Rus)**

[Loading tests in assessing the treatment of patients having had a myocardial infarct] Cherevatov BG, et al. **Vrach Delo** 1988 Oct;(10):9–11 (Eng. Abstr.) **(Rus)**

[Myoglobin-latex in the early diagnosis of acute myocardial infarction] Sabriá Leal M, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):329–31 (Eng. Abstr.) **(Spa)**

[Modification of Sobel's formula for the determination of acute myocardial infarction size] Carreras J, et al. **Medicina (B Aires)** 1985;45(1):42–8 (Eng. Abstr.) **(Spa)**

[Silent myocardial ischemia] Bayés de Luna A, et al. **Rev Clin Esp** 1988 Nov;183(8):389–92 (49 ref.) **(Spa)**

DIET THERAPY

Comments on lipid reduction after myocardial infarction. Wilhelmsen L. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S97–9

Influence of highly concentrated n-3 fatty acids on serum lipids and hemostatic variables in survivors of myocardial infarction receiving either oral anticoagulants or matching placebo. Smith P, et al. **Thromb Res** 1989 Mar 1; 53(5):467–74

DRUG THERAPY

Intravenous thrombolytic treatment for acute myocardial infarction. Effects of early intervention and early examination. Golf S, et al. **Acta Med Scand** 1988;

224(6):523–9
Thrombolysis in acute myocardial infarction and the indication for aortocoronary bypass surgery. Bleifeld W. **Adv Cardiol** 1988;36:165–73 (23 ref.)
Why nitrates in acute myocardial infarction? Reduction of myocardial demand or increase in coronary blood supply. De Coster P. **Adv Cardiol** 1988;36:174–7 (8 ref.)
Effect of reperfusion on electrocardiographic and enzymatic infarct size: results of a randomized multicenter study of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) versus intracoronary streptokinase in acute myocardial infarction. Hackworthy RA, et al. **Am Heart J** 1988 Oct;116(4):903–14
Thrombolytic therapy and steroids [letter] Kenny D. **Am Heart J** 1989 Jun;117(6):1404–5
Presence of angina pectoris before acute myocardial infarction and degree of residual stenosis after coronary thrombolysis. Matsuda Y, et al. **Am Heart J** 1989 May; 117(5):1014–7
Angina preceding myocardial infarction and residual coronary narrowing after intracoronary thrombolysis. Ogasawara K, et al. **Am Heart J** 1989 Apr;117(4):804–8
Emergency room infusion of intravenous streptokinase in acute myocardial infarction: feasibility, safety, and hemodynamic consequences. Verheugt FW, et al. **Am Heart J** 1989 May;117(5):1018–22
Exercise-induced ischemia in the streptokinase-reperfused myocardium: relationship to extent of salvaged myocardium and degree of residual coronary stenosis. Weiss AT, et al. **Am Heart J** 1989 Jul;118(1):9–16
A symposium: Early intervention in the treatment of acute myocardial infarction—clinical profile of Eminase (APSAC). November 12, 1988, Washington, D.C. **Am J Cardiol** 1989 Jul 5;64(2):1A–42A
Reperfusion, patency and reocclusion with anistreplase (APSAC) in acute myocardial infarction. Anderson JL. **Am J Cardiol** 1989 Jul 5;64(2):12A–17A; discussion 24A–26A (31 ref.)
Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction. Barbash GI, et al. **Am J Cardiol** 1989 Jul 15;64(3):225–8
Limitation of myocardial infarct size and preservation of left ventricular function by early administration of APSAC in myocardial infarction. Bassand JP, et al. **Am J Cardiol** 1989 Jul 5;64(2):18A–23A; discussion 24A–26A
Importance of effective, early and sustained reperfusion during acute myocardial infarction. Belenkie I, et al. **Am J Cardiol** 1989 Apr 15;63(13):912–6
Prehospital use of APSAC: results of a placebo-controlled study. Castaigne AD, et al. **Am J Cardiol** 1989 Jul 5; 64(2):30A–33A; discussion 41A–42A
Unanswered questions in thrombolysis. Chamberlain DA. **Am J Cardiol** 1989 Jul 5;64(2):34A–40A; discussion 41A–42A (43 ref.)
Pharmacokinetics, thrombolytic efficacy and hemorrhagic risk of different streptokinase regimens in heparin-treated acute myocardial infarction. Col JJ, et al. **Am J Cardiol** 1989 May 15;63(17):1185–92
Do different doses of intravenous streptokinase alter the frequency of coronary reperfusion in acute myocardial infarction? Gottlich CM, et al. **Am J Cardiol** 1988 Nov 1;62(13):843–6
Low dose urokinase preactivated natural prourokinase for thrombolysis in acute myocardial infarction. Gulba DC, et al. **Am J Cardiol** 1989 May 1;63(15):1025–31
Thrombolytic agents in early myocardial infarction. Hugenholtz PG, et al. **Am J Cardiol** 1989 Mar 7; 63(10):94E–101E (54 ref.)
Tolerance with low dose intravenous nitroglycerin therapy in acute myocardial infarction. Jugdutt BI, et al. **Am J Cardiol** 1989 Sep 15;64(10):581–7
Increased survival after APSAC: 30-day and 12-month mortality data from the APSAC Intervention Mortality Study. Julian DG. **Am J Cardiol** 1989 Jul 5;64(2):27A–29A; discussion 41A–42A
Potential use of thrombolytic therapy before hospitalization. Kennedy JW, et al. **Am J Cardiol** 1989 Jul 5;64(2):8A–11A; discussion 24A–26A
Nonthrombolytic intervention in acute myocardial infarction. Kirshenbaum JM. **Am J Cardiol** 1989 Jul 18;64(4):25B–28B (24 ref.)
Early intravenous thrombolytic therapy for acute myocardial infarction in patients with prior coronary artery bypass grafts. Kleiman NS, et al. **Am J Cardiol** 1989 Jan 1; 63(1):102–4
Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction. Lupi G, et al. **Am J Cardiol** 1989 Sep 15;64(10):588–90
Prognostic significance of the extent of myocardial injury in acute myocardial infarction treated by streptokinase (the GISSI trial). Mauri F, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1291–5
Early versus late hospital arrival for acute myocardial infarction in the western Washington thrombolytic therapy trials. Maynard C, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1296–300
Propranolol and the morning increase in the frequency of sudden cardiac death (BHAT Study). Peters RW, et al. **Am J Cardiol** 1989 Jun 15;63(20):1518–20
Effect of chronic ibuprofen therapy on early healing of experimentally induced acute myocardial infarction in dogs. Przyklenk K. **Am J Cardiol** 1989 May 1;63(15):1146–8
Evolution of left ventricular function after intracoronary thrombolysis for acute myocardial infarction. Schmidt WG, et al. **Am J Cardiol** 1989 Mar 1;63(9):497–502
Antithrombotic therapy in acute myocardial infarction: prevention of venous, left ventricular and coronary artery thromboembolism. Stein B, et al. **Am J Cardiol** 1989 Jul 18;64(4):33B–40B (51 ref.)
Single-bolus injection of recombinant tissue-type plasminogen activator in acute myocardial infarction. Tebbe U, et al. **Am J Cardiol** 1989 Sep 1;64(8):448–53
Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction. Tranchesi B Jr, et al. **Am J Cardiol** 1989 Jul 15;64(3):229–32
Prevention of left ventricular mural thrombus. Turpie AG. **Am J Cardiol** 1989 Jul 18;64(4):41B–43B
Intravenous streptokinase in acute myocardial infarction at the community hospital: a six-year experience. Vogel JH, et al. **Am J Cardiol** 1988 Dec 6;62(18):25K–27K
Patient selection for thrombolytic therapy. Wasserman AG, et al. **Am J Cardiol** 1989 Jul 18;64(4):17B–21B (18 ref.)
Use of a proprietary database to examine lengths of hospital stay of patients who received drug therapy for acute myocardial infarction. Hopkins LE, et al. **Am J Hosp Pharm** 1989 May;46(5):957–61
Effects of nitroglycerin on myocardial excursions and velocities in the early hours of acute myocardial infarction. Kounis NG, et al. **Angiology** 1989 Sep;40(9):783–90
Thrombolytic therapy in the emergency department: a new treatment modality for acute myocardial infarction. **Ann Emerg Med** 1989 Aug;Suppl:1–15
Identification and transport of patients with acute myocardial infarction for thrombolytic therapy. Burney RE, et al. **Ann Emerg Med** 1988 Nov;17(11):1158–65 (46 ref.)
Chest pain: can we overemphasize that time is myocardium? [editorial] Butman SM, et al. **Ann Emerg Med** 1989 Jul; 18(7):789–91
Experience with the use of tPA in the treatment of acute myocardial infarction. Califf RM, et al. **Ann Emerg Med** 1988 Nov;17(11):1176–89 (60 ref.)
A community survey of the potential use of thrombolytic agents for acute myocardial infarction. Eisenberg MS, et al. **Ann Emerg Med** 1989 Aug;18(8):838–41
Evaluation of patients for the need of thrombolytic therapy in the prehospital setting. Grim PS, et al. **Ann Emerg Med** 1989 May;18(5):483–8
Emergency thrombolysis in acute myocardial infarction. Heras M, et al. **Ann Emerg Med** 1988 Nov;17(11):1168–75 (61 ref.)
Pharmacologic intervention in prehospital care: a critical appraisal. Shuster M, et al. **Ann Emerg Med** 1989 Feb; 18(2):192–6 (19 ref.)
New challenges for thrombolytic therapy. Tate DA, et al. **Ann Intern Med** 1989 Jun 15;110(12):953–5 (19 ref.)
Myocardial salvage with trolox and ascorbic acid for an acute evolving infarction. Mickle DA, et al. **Ann Thorac Surg** 1989 Apr;47(4):553–7
Thrombolytic therapy in acute myocardial infarction. Bang NU, et al. **Annu Rev Pharmacol Toxicol** 1989;29:323–41 (113 ref.)
Calcium channel blockers in myocardial infarction. Skolnick AE, et al. **Arch Intern Med** 1989 Jul;149(7):1669–77 (90 ref.)
Hemorrhagic myocardial infarction complicated by free wall-rupture: a case associated with unusual clinical features following intravenous thrombolytic therapy. Twidale N, et al. **Aust N Z J Med** 1989 Apr;19(2):138–40
Superior prevention of reinfarction by 30 mg/d aspirin compared with 1000 mg/d: results of a two years follow-up study in Cottbus. Förster W, et al. **Biomed Biochim Acta** 1988;47(10–11):S248–51
Thrombolytic therapy and acute myocardial infarction. Vandenbogaerde JF. **Biomed Pharmacother** 1989; 43(2):79–85 (45 ref.)
Dose ranging study of tissue plasminogen activator in acute myocardial infarction [letter] Day SJ. **BMJ** 1988 Sep 3; 297(6648):623
A milestone for myocardial infarction [editorial] Julian DG, et al. **BMJ** 1988 Aug 20–27;297(6647):497–8
A milestone for myocardial infarction [letter] Livesey SA, et al. **BMJ** 1988 Oct 15;297(6654):981
A milestone for myocardial infarction [letter] Majer RV, et al. **BMJ** 1988 Oct 22;297(6655):1047
Intravenous tissue plasminogen activator and size of infarct, left ventricular function, and survival in acute myocardial infarction. Van de Werf F, et al. **BMJ** 1988 Nov 26; 297(6660):1374–9
Thrombolytic drugs in myocardial infarction [letter] Woods KL. **BMJ** 1989 Jan 21;298(6667):186–7
Impact of a policy of direct admission to a coronary care unit on use of thrombolytic treatment. Burns JM, et al. **Br Heart J** 1989 Apr;61(4):322–5
Vasculitis complicating treatment with intravenous anisoylated plasminogen streptokinase activator complex in acute myocardial infarction [letter] Gemmill JD, et al. **Br Heart J** 1988 Oct;60(4):361
Electrocardiographic prediction of coronary artery patency after thrombolytic treatment in acute myocardial infarction: use of the ST segment as a non-invasive marker. Hogg KJ, et al. **Br Heart J** 1988 Oct;60(4):275–80
A double blind placebo controlled study of early and late administration of recombinant tissue plasminogen activator in acute myocardial infarction. McNeill AJ, et al. **Br Heart J** 1989 Apr;61(4):316–21
Does beta adrenergic blockade influence the prognostic implications of post-myocardial infarction exercise testing? Murray DP, et al. **Br Heart J** 1988 Dec;60(6):474–9
Effect of hyaluronidase on mortality and morbidity in patients with early peaking of plasma creatine kinase MB and non-transmural ischaemia. Multicentre investigation for the limitation of infarct size (MILIS). Roberts R, et al. **Br Heart J** 1988 Oct;60(4):290–8
Nitroglycerin in acute myocardial infarction. Jugdutt BI. **Can J Cardiol** 1989 Mar;5(2):110–6 (26 ref.)
Effect of superoxide dismutase plus catalase on myocardial infarct size in rabbits. Miura T, et al. **Can J Cardiol** 1988 Nov-Dec;4(8):407–11
Effect of nitroglycerin and ibuprofen on left ventricular topography and rupture threshold during healing after myocardial infarction in the dog. Jugdutt BI. **Can J Physiol Pharmacol** 1988 Apr;66(4):385–95
Improved myocardial performance induced by clofibrate during reperfusion after acute myocardial infarction. Prasad MR, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1518–23
Guidelines for the use of intravenous thrombolytic agents in acute myocardial infarction. Ontario Medical Association Consensus Group on Thrombolytic Therapy [published erratum appears in Can Med Assoc J 1989 Jul 15;141(2):104] Naylor CD, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1289–99
The role of anticoagulation in acute myocardial infarction. Brennan JJ Jr, et al. **Cardiol Clin** 1988 Feb;6(1):111–8 (63 ref.)
Thrombolysis in acute myocardial infarction. Chesebro JH, et al. **Cardiol Clin** 1988 Feb;6(1):119–37 (124 ref.)
Medical prophylaxis for the post myocardial infarct patient. Cohen LS. **Cardiol Clin** 1988 Feb;6(1):173–8 (15 ref.)
Analgesic therapy in acute myocardial infarction. Remetz MS, et al. **Cardiol Clin** 1988 Feb;6(1):29–36 (39 ref.)
Peaking time of creatine-kinase MB in patients treated with urokinase or conventionally during acute myocardial infarction: is it really a clue to reperfusion? Brunelli C, et al. **Cardiologia** 1988 Jul;33(7):669–74
Clinical trials of calcium channel blockers in patients with threatened and confirmed acute myocardial infarction. Gibson RS. **Cardiologia** 1988 Dec;33(12):1109–19 (45 ref.)
Role of nitroglycerin in acute myocardial infarction. Flaherty JT. **Cardiology** 1989;76(2):122–31 (12 ref.)
A community-wide perspective of secular trends in the therapeutic management of patients with acute myocardial infarction. The Worcester Heart Attack Study. Goldberg RJ. **Cardiology** 1989;76(2):105–11
Effect of early metoprolol injection followed by oral dosage on CK-MB release, and myocardial function in suspected acute myocardial infarction. A double-blind controlled study. Halinen MO, et al. **Cardiology** 1989;76(3):180–92
Early intravenous beta-blockade in acute myocardial infarction. Held P, et al. **Cardiology** 1989;76(2):132–43 (39 ref.)
Morbidity and quality of life 5 years after early intervention with metoprolol in suspected acute myocardial infarction. Herlitz J, et al. **Cardiology** 1988;75(5):357–64
Can thrombolysis prevent ischemic heart failure? Hugenholtz PG, et al. **Cardiology** 1988;75 Suppl 1:90–102 (43 ref.)
Changes in ventricular function and coronary stenosis after successful intravenous thrombolysis in acute myocardial infarction. Lotan C, et al. **Cardiology** 1988;75(6):419–30
Left ventricular failure complicating acute myocardial infarction—problems and potential of nonthrombolytic therapy. Taylor SH. **Cardiology** 1988;75 Suppl 1:67–89 (102 ref.)
Conventional drug therapy of patients with acute myocardial infarction. Conti CR. **Cardiovasc Clin** 1989;20(1):249–58 (24 ref.)
Beta-adrenergic blockers in patients with acute myocardial infarction. Furberg CD, et al. **Cardiovasc Clin** 1989; 20(1):235–48 (15 ref.)
Thrombolytic therapy for acute myocardial infarction. Ross AM. **Cardiovasc Clin** 1989;20(1):209–18 (24 ref.)
Changing outcome in acute myocardial infarction. Satler LF, et al. **Cardiovasc Clin** 1989;20(1):19–26 (26 ref.)
Interventional therapy in acute myocardial infarction. Zalewski A, et al. **Cardiovasc Clin** 1989;20(1):219–34 (43 ref.)
Lignocaine in experimental myocardial infarction: failure to prevent neutrophil accumulation and ventricular fibrillation and to reduce infarct size. de Lorgeril M, et al. **Cardiovasc Res** 1988 Jun;22(6):439–46
Tissue plasminogen activator (tPA) in cardiopulmonary disease. **Chest** 1989 May;95(5 Suppl):243S–292S
Thrombolytic therapy for acute myocardial infarction. Bates ER, et al. **Chest** 1989 May;95(5 Suppl):257S–264S (56 ref.)
Coronary artery dissection following tPA administration [letter] Bergeron G. **Chest** 1989 Apr;95(4):936
Cocaine-associated myocardial infarction. A word of caution about thrombolytic therapy. Bush HS. **Chest** 1988 Oct; 94(4):878
Hemorrhagic complications of thrombolytic therapy in the treatment of myocardial infarction and venous thromboembolism. Fennerty AG, et al. **Chest** 1989 Feb;95(2 Suppl):88S–97S (73 ref.)

Arrhythmias in the assessment of coronary artery reperfusion following thrombolytic therapy. Gore JM, et al. **Chest** 1988 Oct;94(4):727–30

Comparison of tissue plasminogen activator and streptokinase in the management of acute myocardial infarction. White HD. **Chest** 1989 May;95(5 Suppl):265S–269S (36 ref.)

Thrombolysis with tissue plasminogen activator in suspected acute myocardial infarction. The ASSET Study. Wilcox RG. **Chest** 1989 May;95(5 Suppl):270S–275S

Effect of superoxide dismutase on myocardial infarct size in the canine heart after 6 hours of regional ischemia and reperfusion: a demonstration of myocardial salvage. Chi LG, et al. **Circ Res** 1989 Apr;64(4):665–75

Can superoxide dismutase alter myocardial infarct size? Engler R, et al. **Circulation** 1989 May;79(5):1137–42 (50 ref.)

Intravenous nitroglycerin therapy to limit myocardial infarct size, expansion, and complications. Effect of timing, dosage, and infarct location [published erratum appears in Circulation 1989 May;79(5):1151] Jugdutt BI, et al. **Circulation** 1988 Oct;78(4):906–19

Randomized, double-blinded multicenter study. Comparison of intracoronary single-chain urokinase-type plasminogen activator, pro-urokinase (GE-0943), and intracoronary urokinase in patients with acute myocardial infarction. Kambara H, et al. **Circulation** 1988 Oct;78(4):899–905

Does tissue-type plasminogen activator have direct beneficial effects on the myocardium independent of its ability to lyse intracoronary thrombi? Kloner RA, et al. **Circulation** 1989 May;79(5):1125–36

Monitoring of fibrin generation during thrombolytic therapy of acute myocardial infarction with recombinant tissue-type plasminogen activator. Rapold HJ, et al. **Circulation** 1989 May;79(5):980–9

A randomized controlled trial of intravenous tissue plasminogen activator and early intravenous heparin in acute myocardial infarction. Topol EJ, et al. **Circulation** 1989 Feb;79(2):281–6

A system approach to intravenous thrombolysis in acute myocardial infarction in community hospitals: the influence of paramedics. Hartmann J, et al. **Clin Cardiol** 1988 Dec; 11(12):812–6

Daily serial evaluation of left ventricular function with equilibrium radionuclide ventriculography following thrombolysis during acute myocardial infarction. Marx JD, et al. **Clin Cardiol** 1988 Oct;11(10):665–70

Alterations in lactate dehydrogenase isoenzyme patterns after therapy with streptokinase or streptococcal infection. Podlasek SJ, et al. **Clin Chem** 1989 Aug;35(8):1763–6

Immunology of a serum sickness/vasculitis reaction secondary to streptokinase used for acute myocardial infarction. Davidson JR, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):381–4

Study finds similar reperfusion rates with intravenous APSAC and intracoronary streptokinase in acute myocardial infarction [news] **Clin Pharm** 1988 Sep;7(9):634, 638

Study suggests added benefit from combined aspirin—streptokinase therapy after myocardial infarction [news] **Clin Pharm** 1988 Nov;7(11):785–6

Antiarrhythmic therapy: reminders from CAST [editorial] Hasegawa GR. **Clin Pharm** 1989 Jul;8(7):509

Tissue plasminogen activator: an update. Myears DW, et al. **Compr Ther** 1989 Apr;15(4):3–9 (10 ref.)

Acute MI: role of thrombolysis and intervention. Cassidy DB, et al. **Crit Care Clin** 1989 Jul;5(3):435–53 (84 ref.)

Adverse effects of sublingual nifedipine in acute myocardial infarction. Shettigar UR, et al. **Crit Care Med** 1989 Feb; 17(2):196–7

Calcium-channel blockers in acute myocardial infarction. Babich MF, et al. **DICP** 1989 Jul–Aug;23(7–8):538–47 (83 ref.)

Analgesia in myocardial infarction. Herlitz J. **Drugs** 1989 Jun; 37(6):939–44 (36 ref.)

Digoxin after myocardial infarction. Does it have a role? Johnston GD. **Drugs** 1989 May;37(5):577–82 (52 ref.)

Thrombolysis in the management of acute myocardial infarction and unstable angina pectoris. Loscalzo J. **Drugs** 1989 Feb;37(2):191–204 (82 ref.)

Aspirin and thrombolytic therapy for acute myocardial infarction. Should the combination now be a routine therapy? Schreiber TL. **Drugs** 1989 Aug;38(2):180–4

Bleeding after thrombolysis in acute myocardial infarction. Erlemeier HH, et al. **Eur Heart J** 1989 Jan;10(1):16–23

Acute haemodynamic effects of diltiazem in patients with recent Q-wave myocardial infarction. Ghio S, et al. **Eur Heart J** 1988 Jul;9(7):740–5

Acute and chronic effects of nicardipine on rest and exercise haemodynamics in post-myocardial infarction patients with latent cardiac failure. La Rovere MT, et al. **Eur Heart J** 1989 May;10(5):429–36

Effects of metoprolol on mortality and late infarction in diabetics with suspected acute myocardial infarction. Retrospective data from two large studies. Malmberg K, et al. **Eur Heart J** 1989 May;10(5):423–8

Identification of Patients at Low Risk of Dying After Acute Myocardial Infarction, By Simple Clinical and Submaximal Exercise Test Criteria [letter] Rehnqvist N, et al. **Eur Heart J** 1989 Jan;10(1):97

High doses of L-carnitine in acute myocardial infarction: metabolic and antiarrhythmic effects. Rizzon P, et al. **Eur Heart J** 1989 Jun;10(6):502–8

Recovery of left ventricular function after myocardial infarction can be predicted immediately after thrombolysis by semiquantitative intracoronary thallium and technetium pyrophosphate scintigraphy. Schofer J, et al. **Eur Heart J** 1988 Oct;9(10):1088–97

Improvement of myocardial perfusion after thrombolysis assessed by thallium-201 exercise scintigraphy.Report of the Working Group on Thrombolytic Therapy in Acute Myocardial Infarction of the Netherlands Interuniversity Institute of Cardiology. van der Wall EE, et al. **Eur Heart J** 1988 Aug;9(8):828–35

Quality of life five years after myocardial infarction. Wiklund I, et al. **Eur Heart J** 1989 May;10(5):464–72

Use of urokinase in acute myocardial infarction. Makolkin VI, et al. **Folia Haematol (Leipz)** 1988;115(3):394–7

Medical decisions and premature disclosures. Schatz IJ. **Hawaii Med J** 1988 Oct;47(10):486

Symposium proceedings: Thrombolytic therapy for acute myocardial infarction: critical care nursing update, 1988. May 8, 1988, Dallas, Texas. **Heart Lung** 1988 Nov;17(6 Pt 2):741–92

Thrombolytic intervention and its effect on mortality in acute myocardial infarction: review of clinical trials. Brooks-Brunn JA. **Heart Lung** 1988 Nov;17(6 Pt 2):756–61 (13 ref.)

Treatment protocols: practical considerations for hospital implementation of thrombolytic therapy with tissue plasminogen activator. Greco A. **Heart Lung** 1988 Nov; 17(6 Pt 2):787–92

Assessment of successful reperfusion after thrombolysis. Henderson E. **Heart Lung** 1988 Nov;17(6 Pt 2):761–71 (46 ref.)

Comparison of thrombolytic agents: mechanism of action, efficacy, and safety. Kleven MR. **Heart Lung** 1988 Nov; 17(6 Pt 2):750–5 (27 ref.)

Management of bleeding in the patient receiving thrombolytic therapy for acute myocardial infarction: a nursing perspective. Kline E. **Heart Lung** 1988 Nov;17(6 Pt 2):771–7

Case history: successful thrombolytic therapy in a patient with acute myocardial infarction. Sait YR. **Heart Lung** 1988 Nov;17(6 Pt 2):782–6

Flosequinan induces hemodynamic improvement in heart failure complicating acute myocardial infarction. Schneeweiss A, et al. **Herz** 1988 Aug;13(4):259–62

Thrombolysis in the management of myocardial infarction. Proceedings of a symposium held in conjunction with the 38th annual scientific session of the American College of Cardiology. Anaheim, California, March 18, 1989. **Hosp Pract [Off]** 1989 Aug;24 Suppl 1:1–32

Thrombolysis in acute MI: recent randomized trials. Pitt B. **Hosp Pract [Off]** 1989 Aug;24 Suppl 1:8–12; discussion 28–32

New heart drugs demand physician cooperation. Koska MT. **Hospitals** 1989 Mar 20;63(6):70

Recanalization time after intravenous streptokinase in evolving acute myocardial infarction. Bhat A, et al. **Indian Heart J** 1988 Jul–Aug;40(4):228–31

Intravenous streptokinase therapy in evolving acute myocardial infarction. A study of forty-six consecutive cases in an industrial hospital. Bose TK, et al. **Indian Heart J** 1988 May–Jun;40(3):155–60

Specific reperfusion arrhythmias with high dose short term IV streptokinase therapy in acute myocardial infarction. Chopra KL, et al. **Indian Heart J** 1988 Jul–Aug;40(4):232–6

Beta-blockade in acute myocardial infarction—a clinical perspective [editorial] Peter T. **Indian Heart J** 1988 Jul–Aug;40(4):212–3

Effect of a synthetic short-chain ACTH 1-17 (HOE 433) on isoproterenol-induced myocardial infarction in rats. Asha Devi S. **Indian J Exp Biol** 1988 Sep;26(9):685–7

Effect of adenosine and inosine on experimental myocardial infarction in rats. Singh J, et al. **Indian J Exp Biol** 1988 Oct;26(10):771–4

Lack of correlation after reperfusion between ventricular function and infarct size estimated by thallium single-photon emission computed tomography. Schofer J, et al. **Int J Card Imaging** 1988–89;3(4):203–8

Early treatment with intravenous metoprolol for suspected acute myocardial infarction: a phase IV United States trial. Phase IV Metoprolol in Myocardial Infarction Study Group. Antman EM, et al. **Int J Cardiol** 1989 May; 23(2):185–97

The value of the left ventricular ejection fraction in the treatment of angina pectoris following acute myocardial infarction: a randomized double blind study. Gjørup T, et al. **Int J Cardiol** 1989 Aug;24(2):185–9

Early use of metoprolol and serum potassium in suspected acute myocardial infarction. Herlitz J, et al. **Int J Cardiol** 1989 Feb;22(2):169–75

Early intervention with propranolol after acute myocardial infarction: serial left ventricular function determined by M-mode and cross-sectional echocardiography. Kaul UA, et al. **Int J Cardiol** 1988 Dec;21(3):301–10

Myocardial salvage with streptokinase combined with nitroglycerine and verapamil in acute myocardial infarction. Lee KJ, et al. **Int J Cardiol** 1988 Dec; 21(3):279–91

Does acute-phase beta-blockade reduce mortality in acute myocardial infarction by limiting infarct size? Murray DP, et al. **Int J Cardiol** 1988 Sep;20(3):327–39

Reduced incidence of left ventricular thrombi with intravenous streptokinase in acute anterior myocardial infarction: prospective evaluation by cross-sectional echocardiography. Natarajan D, et al. **Int J Cardiol** 1988 Aug;20(2):201–7

Effect of metoprolol on early exercise-induced ST-segment changes and ventricular arrhythmias in patients with suspected acute myocardial infarction. Rønnevik PK, et al. **Int J Cardiol** 1989 Jan;22(1):51–7

Increased efficacy and toxicity of lidocaine in patients on beta-blockers. Wyse DG, et al. **Int J Cardiol** 1988 Oct; 21(1):59–70

The effects of phospholipase A2 inhibition on experimental infarct size, left ventricular hemodynamics and regional myocardial blood flow. Zalewski A, et al. **Int J Cardiol** 1988 Dec;21(3):247–57

Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2.ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):3A–13A

Thrombolysis in unstable angina: will the beneficial effects of thrombolytic therapy in myocardial infarction apply to patients with unstable angina? Ambrose JA, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1666–71 (39 ref.)

Tissue plasminogen activator: Toronto (TPAT) placebo-controlled randomized trial in acute myocardial infarction. Armstrong PW, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1469–76

Increased serum levels of fibrinogen degradation products due to treatment with recombinant tissue-type plasminogen activator for acute myocardial infarction are related to bleeding complications, but not to coronary patency. European Co-operative Study Groups for rt-PA. Arnold AE, et al. **J Am Coll Cardiol** 1989 Sep;14(3):581–8

The educational role of thrombolytic therapy [letter] Bahr RD. **J Am Coll Cardiol** 1989 Feb;13(2):511–2

Multicenter trial of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) in acute myocardial infarction: effects on infarct size and left ventricular function. Bassand JP, et al. **J Am Coll Cardiol** 1989 Apr;13(5):988–97

Reperfusion therapy in inferior myocardial infarction. Bates ER. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):44A–51A (48 ref.)

Antecedent angina: a predictor of residual stenosis after thrombolytic therapy. Bergelson BA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):91–5

Thrombolytic reperfusion of acute myocardial infarction: resolved and unresolved issues. Braunwald E. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):85A–92A (66 ref.)

A new thrombolytic regimen for acute myocardial infarction using combination half dose tissue-type plasminogen activator with full dose streptokinase: a pilot study. KAMIT Study Group. Grines CL, et al. **J Am Coll Cardiol** 1989 Sep;14(3):573–80

Plasminogen Activator Italian Multicenter Study (PAIMS): comparison of intravenous recombinant single-chain human tissue-type plasminogen activator (rt-PA) with intravenous streptokinase in acute myocardial infarction. Magnani B. **J Am Coll Cardiol** 1989 Jan;13(1):19–26

Administration of thrombolytic therapy in the community hospital: established principles and unresolved issues. Mark DB, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):32A–43A

Late thrombolytic therapy preserves left ventricular function in patients with collateralized total coronary occlusion: primary end point findings of the Second Mount Sinai-New York University Reperfusion Trial. Rentrop KP, et al. **J Am Coll Cardiol** 1989 Jul;14(1):58–64

Does thrombolytic therapy reduce infarct size? Selzer A. **J Am Coll Cardiol** 1989 May;13(6):1431–4 (21 ref.)

Differential effect of thrombolytic therapy [letter] Simoons ML. **J Am Coll Cardiol** 1988 Nov;12(5):1392

Cost and procedure implications of thrombolytic therapy for acute myocardial infarction. Steinberg EP, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):58A–68A (52 ref.)

Tissue plasminogen activator: why the backlash? Topol EJ, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1477–80

Effects of successful intravenous reperfusion therapy on regional myocardial function and geometry in humans: a tomographic assessment using two-dimensional echocardiography. Touchstone DA, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1506–13

Lessons from the European Cooperative recombinant tissue-type plasminogen activator (rt-PA) versus placebo trial. Van de Werf F. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):14A–19A

Quantitative radionuclide assessment of regional ventricular function after thrombolytic therapy for acute myocardial infarction: results of phase I Thrombolysis in Myocardial Infarction (TIMI) trial. Wackers FJ, et al. **J Am Coll Cardiol** 1989 Apr;13(5):998–1005

Thrombolytic therapy of acute myocardial infarction in a community hospital. Baxley PJ, et al. **J Arkansas Med Soc** 1989 Jan;85(8):334–6

Nifedipine induced gingival hyperplasia. Raman PG, et al. **J Assoc Physicians India** 1988 Mar;36(3):231–3

Antiarrhythmic effects of desethylamiodarone in dogs with subacute myocardial infarction and inducible ventricular arrhythmias. Abdollah H, et al. **J Cardiovasc Pharmacol**

1989 Jan;13(1):37–44
Beta–blockade in myocardial ischemia: acute interventions in myocardial infarction. Bleifeld WH. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S56–8 (16 ref.)
Beta–blockade in acute myocardial infarction. Cruickshank JM. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S59–70 (76 ref.)
Effects of angiotensin II and captopril on inducible sustained ventricular tachycardia two weeks after myocardial infarction in the pig. de Langen CD, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):186–91
The effect of the thromboxane A2/prostaglandin endoperoxide receptor antagonist SQ 30,741 on myocardial infarct size and blood flow during myocardial ischemia and reperfusion. Grover GJ, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):701–9
Beneficial effects of coronary venous retroinfusion of superoxide dismutase and catalase on reperfusion arrhythmias, myocardial function, and infarct size in dogs. Hatori N, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):396–404
Reduction of myocardial ischemia–reperfusion injury by KT–362, a new intracellular calcium antagonist in anesthetized dogs. Pelc LR, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):586–93
An overview of the clinical trials of agents (other than beta–blockers) that potentially limit myocardial infarct size. Yusuf S. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S48–55 (42 ref.)
The effect of chronic timolol in an animal model for myocardial infarction. Lathers CM, et al. **J Clin Pharmacol** 1988 Aug;28(8):736–45
Acute myocardial infarction. The clock is ticking... [editorial] Smith MS, et al. **J Emerg Med** 1988 Sep–Oct;6(5):423–4
The effects of angiotensin–converting enzyme inhibition on coronary blood flow and infarct size limitation. Dargie HJ, et al. **J Hum Hypertens** 1989 Jun;3 Suppl 1:101–6 (27 ref.)
Sympathetic (alpha–beta) or calcium channel blockade for hypertensive myocardial infarction? A haemodynamic comparison of labetalol and nifedipine. Verma SP, et al. **J Hypertens** 1988 Nov;6(11):897–904
Limitation of infarct size after acute myocardial infarction. Chatterjee CK. **J Indian Med Assoc** 1988 Aug;86(8):221–2
To reperfuse or not to reperfuse, which is the question? [editorial] Hugenholtz PG. **J Mol Cell Cardiol** 1988 Apr; 20(4):367–9
Demonstration of reperfusion after thrombolysis with technetium–99m isonitrile myocardial imaging. Kayden DS, et al. **J Nucl Med** 1988 Nov;29(11):1865–7
Effect of the thromboxane A2 receptor antagonist SQ 30,741 on ultimate myocardial infarct size, reperfusion injury and coronary flow reserve. Grover GJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):484–91
Thrombolytic therapy for acute myocardial infarction. Haley FL. **J Tenn Med Assoc** 1989 Apr;82(4):183–6
Prophylactic lidocaine in acute MI [letter] **JAMA** 1989 Mar 3;261(9):1278–9
Informed consent in emergency research. Prehospital thrombolytic therapy for acute myocardial infarction. Grim PS, et al. **JAMA** 1989 Jul 14;262(2):252–5
Coronary thrombolysis—it's worth the risk. Tiefenbrunn AJ, et al. **JAMA** 1989 Apr 14;261(14):2107–8 (20 ref.)
Reocclusion of the infarcted vessel during acute interventions in myocardial infarction. Hattori R, et al. **Jpn Circ J** 1988 Jul;52(7):709–14
Effects of coronary thrombolysis on left ventricular ejection fraction in patients with acute myocardial infarction. Ishikawa K, et al. **Jpn Circ J** 1988 Oct;52(10):1141–8
Hemodynamic benefits of long–term bunazosin (alpha–1 blocker) therapy in rats with myocardial infarction and heart failure. Itagaki T, et al. **Jpn Circ J** 1989 Apr; 53(4):313–8
Intracoronary urokinase in acute myocardial infarction: prevalence of total coronary occlusion during the early hours, effects on myocardial infarct size and left ventricular function, and outcome of residual coronary stenosis. Motomiya T, et al. **Jpn Circ J** 1988 Jul;52(7):702–8
A white flapping structure in the coronary artery lumen observed by angioscopy after coronary thrombolysis—is this the "ruptured atheroma" that initiated the acute myocardial infarction? Susawa T, et al. **Jpn Circ J** 1988 Jun;52(6):580–2
Human plasma superoxide dismutase (SOD) activity on reperfusion injury with successful thrombolysis in acute myocardial infarction. Kodama K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):202–6
Randomised double–blind trial of recombinant pro–urokinase against streptokinase in acute myocardial infarction. PRIMI Trial Study Group. **Lancet** 1989 Apr 22;1(8643):863–8
Randomised controlled trial of subcutaneous calcium–heparin in acute myocardial infarction. The SCATI (Studio sulla Calciparina nell'Angina e nella Trombosi Ventricolare nell'Infarto) Group. **Lancet** 1989 Jul 22;2(8656):182–6
Reperfusion or persisting occlusion? **Lancet** 1989 May 20; 1(8647):1114–5 (20 ref.)
Reperfusion injury after thrombolytic therapy for acute myocardial infarction. **Lancet** 1989 Sep 16;2(8664):655–7 (16 ref.)
Aspirin and fibrinolysis [letter] Basinski A, et al. **Lancet** 1988 Nov 19;2(8621):1188–9
Significant reduction in mortality with streptokinase given 7–24 hours after pain onset [letter] Collins R, et al. **Lancet** 1988 Nov 19;2(8621):1187–8
Out–of–hospital, paramedic administered streptokinase for acute myocardial infarction [letter] Greenberg H, et al. **Lancet** 1988 Nov 19;2(8621):1187
Alteplase versus placebo in myocardial infarction [letter] Hine LK. **Lancet** 1988 Dec 3;2(8623):1318
Desmopressin and myocardial infarction [letter] Lowe GD. **Lancet** 1989 Apr 22;1(8643):895–6
Thrombolytic therapy [letter; comment] Poole–Wilson PA. **Lancet** 1989 Jul 15;2(8655):153. **Comment on:** Lancet 1989 Jun 17;1(8651):1367–9
Left–ventricular function as an end–point [letter] White HD, et al. **Lancet** 1989 Sep 16;2(8664):676
Cardiovascular pharmacotherapy III. **Med Clin North Am** 1989 Mar;73(2):271–516
Beta–adrenergic blockade and calcium channel blockade in myocardial infarction. Frishman WH, et al. **Med Clin North Am** 1989 Mar;73(2):409–36 (98 ref.)
Thrombolytic therapy in acute myocardial infarction: Part II—rt–PA. Mueller HS, et al. **Med Clin North Am** 1989 Mar;73(2):387–407 (49 ref.)
Aspirin after myocardial infarction [letter] Glasziou P. **Med J Aust** 1989 Jan 2;150(1):50, 52
Coronary thrombolysis: an important therapy for myocardial infarction. Nidorf M, et al. **Med J Aust** 1988 Oct 3; 149(7):376–80 (69 ref.)
Coronary thrombolysis [letter] Stock E. **Med J Aust** 1989 Jan 16;150(2):109
Coronary thrombolysis [letter] Thompson PL, et al. **Med J Aust** 1989 Apr 17;150(8):466–7
Thrombolytic therapy on the homefront. Intravenous urokinase in community hospitals. Wall TC, et al. **N C Med J** 1989 Jul;50(7):363–6
Streptokinase or tissue plasminogen activator and left ventricular function after myocardial infarction [letter] **N Engl J Med** 1989 Sep 7;321(10):687–9
Diltiazem and mortality and reinfarction after myocardial infarction [letter] **N Engl J Med** 1989 Jan 12;320(2):123–4
Thrombolytic therapy [letter] **N Engl J Med** 1988 Dec 8; 319(23):1543–7
Thrombolysis in myocardial infarction (TIMI) phase II trial [letter] **N Engl J Med** 1989 Aug 31;321(9):612
Thrombolytic agents in acute myocardial infarction. Rapaport E. **N Engl J Med** 1989 Mar 30;320(13):861–4
Effect of intravenous streptokinase as compared with that of tissue plasminogen activator on left ventricular function after first myocardial infarction. White HD, et al. **N Engl J Med** 1989 Mar 30;320(13):817–21
Streptokinase in acute myocardial infarction [letter] Stubbs B. **N Z Med J** 1988 Oct 12;101(855):645
Streptokinase and acute myocardial infarction [letter] White H. **N Z Med J** 1988 Nov 23;101(858):805–6
Acute myocardial infarction: a true medical emergency. White HD. **N Z Med J** 1989 Jun 14;102(869):281–3 (30 ref.)
The effect of intracoronary lidocaine on ventricular arrhythmia in the infarcted canine heart. Tordjman T, et al. **Pharmacotherapy** 1988;8(5):295–8
Therapies to limit infarct size. Timing, dosage, and effectiveness. Peterson JE, et al. **Postgrad Med** 1989 Sep 1;86(3):54–9, 63
Thrombolytic therapy in acute myocardial infarction. Oldershaw P. **Postgrad Med J** 1988 Dec;64(758):915–8 (34 ref.)
Coronary thrombolysis. de Bono D, et al. **Practitioner** 1988 Oct 8;232(1456 (Pt 1)):1099–101 (8 ref.)
The effects of lipoxygenase inhibitor and peptidoleukotriene antagonist on myocardial injury in a canine coronary occlusion–reperfusion model. Toki Y, et al. **Prostaglandins** 1988 Apr;35(4):555–71
Quantitative ECG changes and patency of infarct–related arteries after intravenous streptokinase. Gourassas J, et al. **S Afr Med J** 1989 May 6;75(9):422–7
Quality of life in postmyocardial infarction patients in relation to drug therapy. Wiklund I, et al. **Scand J Prim Health Care** 1989 Mar;7(1):13–8
Innovative approaches to plasminogen activator therapy. Haber E, et al. **Science** 1989 Jan 6;243(4887):51–6 (54 ref.)
Which clot–dissolving drug is best? [news] Marx JL. **Science** 1988 Dec 16;242(4885):1505–6
Current perspectives in the antiplatelet therapy of thrombotic disorders. Breddin HK. **Semin Thromb Hemost** 1989 Apr; 15(2):144–9 (35 ref.)
A pilot evaluation of the effects of defibrotide in patients affected by acute myocardial infarction. Carelli M, et al. **Semin Thromb Hemost** 1988;14 Suppl:71–6
Development of anisoylated plasminogen–streptokinase activator complex from the acyl enzyme concept. Fears R. **Semin Thromb Hemost** 1989 Apr;15(2):129–39 (46 ref.)
Coronary thrombolysis in rural hospitals [letter] Tate DA, et al. **South Med J** 1989 Jan;82(1):95
The influence of physical exercise and intravenous heparin on plasmatic concentration of platelet factor 4 in young survivors of myocardial infarction. Zawilska K, et al. **Thromb Res** 1989 Jul 1;55(1):155–60
Early intravenous beta–adrenoceptor blockade for victims of heart attack. Sleight P. **Trends Pharmacol Sci** 1988 Feb; 9(2):52–4 (13 ref.)
Influence of drug therapy on survival following acute myocardial infarction. Taylor SH. **Z Kardiol** 1988;77 Suppl 4:43–51 (41 ref.)
[Percutaneous transluminal coronary thrombolysis in acute myocardial infarction] Li YG. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):140–1 (Chi)
[Effects of sophoramine on ventricular fibrillation threshold and dispersion of refractoriness in cats] Chen XS, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):551–4 (Eng. Abstr.) (Chi)
[First results of a randomized study of intravenous thrombolytic therapy in acute myocardial infarct—evaluation of the early period] Janoušek S, et al. **Vnitr Lek** 1988 Dec;34(12):1145–54 (Eng. Abstr.) (Cze)
[A critical overview of thrombolytic therapy in patients with acute myocardial infarct] Sochman J, et al. **Vnitr Lek** 1989 Mar;35(3):249–55 (29 ref.) (Eng. Abstr.) (Cze)
[Acetylsalicylic acid in acute ischemic coronary and cerebral diseases] Husted SE. **Ugeskr Laeger** 1989 Jun 19; 151(25):1589–90 (Dan)
[Levomepromazine (Nozinan) and pain therapy in acute myocardial infarction (letter)] Nielsen FE, et al. **Ugeskr Laeger** 1989 Aug 7;151(32):2048 (Dan)
[Atenolol in suspected acute myocardial infarction. The Danish experience of participation in an international multi–center study] Pedersen F, et al. **Ugeskr Laeger** 1988 Dec 5;150(49):3052–6 (Eng. Abstr.) (Dan)
[Naloxone and AMI (letter)] Riishede L, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2154 (Dan)
[Thrombolytic therapy of acute heart infarct] Arnold AE, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):335–8 (Dut)
[Thrombolytic therapy of acute heart infarct in 1988] Arnold AE, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):341–9 (42 ref.) (Dut)
[Thrombolytic therapy of acute heart infarct 1988 (letter)] de Jong PT. **Ned Tijdschr Geneeskd** 1989 Apr 15; 133(15):790 (Dut)
[ISIS–2, an international study of survival after a heart infarct: the power of large numbers?] Koster RW. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):338–40 (Dut)
[Optimal therapy following thrombolysis: aggressively or conservatively?] Meijer A, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):349–54 (63 ref.) (Dut)
[Safety and efficacy of thrombolysis during ambulance transportation of patients with an acute heart infarct] Oemrawsingh PV, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):354–8 (Eng. Abstr.) (Dut)
[Experiences at a peripheral hospital with the intracoronary administration of streptokinase and urokinase in acute heart infarct] van Brussel BL, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):358–62 (Eng. Abstr.) (Dut)
[Hemorrhagic risk in intravenously administered thrombolytic treatment in acute myocardial infarction] Acar J, et al. **Arch Mal Coeur** 1988 May;81 Spec No:59–65 (Eng. Abstr.) (Fre)
[Serum sickness after fibrinolysis using intravenous streptokinase in myocardial infarction] Albert F, et al. **Arch Mal Coeur** 1988 Aug;81(8):1013–5 (Eng. Abstr.) (Fre)
[Thrombolysis in the pre–hospitalization phase of myocardial infarction] Bonnet JL, et al. **Arch Mal Coeur** 1988 May; 81 Spec No:33–7 (Eng. Abstr.) (Fre)
[The 1st 2 hours of myocardial infarction: a crucial moment for the future of the patient (editorial)] Brochier ML. **Arch Mal Coeur** 1988 May;81 Spec No:11 (Fre)
[General principles of thrombolysis] Brochier ML, et al. **Arch Mal Coeur** 1988 May;81 Spec No:13–7 (37 ref.) (Fre)
[Intravenous thrombolysis in myocardial infarction. Influence of the quality of the anticoagulation on the early recurrence rate of angina or infarction] Camilleri JF, et al. **Arch Mal Coeur** 1988 Sep;81(9):1037–41 (Eng. Abstr.) (Fre)
[Angiographic morphology of the coronary arteries after a recent myocardial infarction treated by intravenous thrombolysis] Grand A, et al. **Arch Mal Coeur** 1989 Jan; 82(1):51–6 (Eng. Abstr.) (Fre)
[Socioeconomic implications of the practice of thrombolysis in the acute stage of myocardial infarction] Hervę C, et al. **Arch Mal Coeur** 1989 Mar;82(3):353–8 (Eng. Abstr.) (Fre)
[Reocclusion after treatment with actilyse] Raynaud P, et al. **Arch Mal Coeur** 1988 May;81 Spec No:25–32 (62 ref.) (Fre)
[At home thrombolysis. 100 cases (letter)] Hervé C, et al. **Presse Med** 1988 Dec 3;17(43):2308 (Fre)
[Current strategy in the treatment of acute myocardial infarct] Kappenberger L, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1691–4 (Eng. Abstr.) (Fre)
[Thrombolytic treatment in the acute phase of myocardial infarct] Mechmeche R, et al. **Tunis Med** 1987 Nov; 65(11):667–71 (Fre)
[Thrombolysis in myocardial infarct (apropos of 4 cases)] Slimane ML, et al. **Tunis Med** 1988 Nov;66(11):801–5 (Eng. Abstr.) (Fre)
[Intravenous thrombolysis in acute myocardial infarction (editorial)] Gagnon RM. **Union Med Can** 1988 Sep; 117(4):275 (Fre)
[Intravenous thrombolysis in acute myocardial infarction] Laramée P. **Union Med Can** 1988 Sep;117(4):276–8 (Fre)
[Thrombolysis in acute cardiac infarct (letter)] **Dtsch Med Wochenschr** 1989 May 5;114(18):729–30 (Ger)

[How many patients with acute myocardial infarction can be treated by thrombolysis?] Weiss B, et al. **Dtsch Med Wochenschr** 1988 Dec 9;113(49):1907–12 (Eng. Abstr.) **(Ger)**

[Thrombolysis following myocardial infarct: benefits are clarified] Michel D. **Fortschr Med** 1989 Jan 30;107(3):14–5 **(Ger)**

[Development of tolerance in continuous nitroglycerin infusion] Niestegge H, et al. **Herz** 1989 Feb;14(1):66–70 (Eng. Abstr.) **(Ger)**

[The dose of intracoronary urokinase infusion in acute myocardial infarct] Tebbe U, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1193–5 (Eng. Abstr.) **(Ger)**

[Experiences with early fibrinolysis in coronary infarct at an acute care hospital. Second report of experiences with 200 patients 1980 to 1985] von Eiff M, et al. **Med Klin** 1989 May 15;84(5):246–51 (Eng. Abstr.) **(Ger)**

[Initial experiences with thrombolysis in Swiss hospitals. Synopsis of a round-table discussion] Krayenbühl HP, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1695–7 (Eng. Abstr.) **(Ger)**

[Fibrinolysis in acute myocardial infarct. Treatment rate, assessment and follow-up treatment in the Zürich hospitals] Marx BE, et al. **Schweiz Med Wochenschr** 1988 Nov 26; 118(47):1753–7 (Eng. Abstr.) **(Ger)**

[Systemic thrombolysis using streptokinase. Experiences at the Civic Hospital of Lugano in the framework of the ISIS-2 study] Moccetti T, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1702–5 (Eng. Abstr.) **(Ger)**

[Thrombolysis in acute myocardial infarct. Initial experiences in a Swiss university hospital] Ritz R, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1706–10 (Eng. Abstr.) **(Ger)**

[Intravenous streptokinase therapy in acute myocardial infarct in a district hospital] Ziegler H. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1698–701 (Eng. Abstr.) **(Ger)**

[Thrombolytic therapy of acute myocardial infarct: which drugs? Which patients?] Pachinger O, et al. **Wien Med Wochenschr** 1988 Aug 31;138(15–16):373–9 (55 ref.) (Eng. Abstr.) **(Ger)**

[The significance of a staged diagnostic-therapeutic program for the disease course in patients following unstable angina pectoris during a follow-up period of 3 1/2 years] Brunke W, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):326–9 (Eng. Abstr.) **(Ger)**

[Update in thrombolytic therapy of acute myocardial infarction. International symposium. 27 November 1988, Berlin] **Z Kardiol** 1989 Feb;78(2 Suppl):1–20 **(Ger)**

[Thrombolysis in acute myocardial infarct: a status determination 1988] Schröder R. **Z Kardiol** 1989 Jan; 78(1):41–62 (178 ref.) (Eng. Abstr.) **(Ger)**

[Nifedipine in secondary prevention after myocardial infarction. SPRINT Study Group] **Harefuah** 1989 Jan 1; 116(1):1–6 (Eng. Abstr.) **(Heb)**

[Long-term follow-up of acute myocardial infarction after early intravenous streptokinase] Gurevitch J, et al. **Harefuah** 1989 Jan 1;116(1):6–11 (Eng. Abstr.) **(Heb)**

[Hemodynamic control of high-dose nitroglycerin therapy in acute myocardial infarction] Herpai Z, et al. **Orv Hetil** 1988 Jul 24;129(30):1589–94, 1599 (37 ref.) (Eng. Abstr.) **(Hun)**

[Changes in the plasma levels of fibrinopeptide A in acute myocardial infarction after administration of intravenous streptokinase] Amoriello A, et al. **Cardiologia** 1988 Dec; 33(12):1121–6 (Eng. Abstr.) **(Ita)**

[The GISSI-2 research protocol. National Association of Hospital Cardiologists, Mario Negri Institute of Pharmacological Research] **G Ital Cardiol** 1988 Jul; 18(7):624–31 **(Ita)**

[Buprenorphine and pentazocine in acute myocardial infarct. Study for a differential use] Cecchi CA, et al. **G Ital Cardiol** 1988 Sep;18(9):745–7 (Eng. Abstr.) **(Ita)**

[Calcium antagonists in acute myocardial infarction] Lotto A, et al. **G Ital Cardiol** 1988 Nov;18(11):974–81 (29 ref.) **(Ita)**

[On the possibility of accelerating thrombolytic therapy in the acute phase of myocardial infarction: efficacy of and tolerance to the infusion of 1.5 million units of streptokinase in 30 minutes] Mazzotta G, et al. **G Ital Cardiol** 1989 Jan; 19(1):53–8 (Eng. Abstr.) **(Ita)**

[Prodromic syndrome and recovery time in acute myocardial infarction] Beccaria E, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):1–2 (Eng. Abstr.) **(Ita)**

[Which therapy in the acute stage of myocardial infarct is in position to prolong survival?] Colombo ML, et al. **Minerva Cardioangiol** 1988 Oct;36(10):473–81 (43 ref.) (Eng. Abstr.) **(Ita)**

[Antiaggregant effect of slow-release dipyridamole in acute myocardial infarct] Scabbia E, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):347–50 (Eng. Abstr.) **(Ita)**

[Long-term effect of xamoterol "Corwin", beta 1 partial agonist, on hemodynamics and treadmill exercise in patients with previous myocardial infarction] Shimizu M, et al. **Kokyu To Junkan** 1988 Dec;36(12):1339–46 (Eng. Abstr.) **(Jpn)**

[Limitation of myocardial infarct size by polyethylene glycol-conjugated superoxide dismutase in a canine model of 90 min coronary occlusion followed by 4 days of reperfusion] Tamura Y, et al. **Kokyu To Junkan** 1989 Feb; 37(2):201–8 (Eng. Abstr.) **(Jpn)**

[Noninvasive assessment of the patency of the previously occluded coronary artery following coronary thrombolysis in patients with acute myocardial infarction using serial changes in serum creatine kinase] Sato Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):338–44 **(Jpn)**

[Streptokinase treatment in acute myocardial infarction] Dale J, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):429–32 (29 ref.) (Eng. Abstr.) **(Nor)**

[Thrombolytic treatment in acute myocardial infarction (editorial)] Røde R. **Tidsskr Nor Laegeforen** 1989 Feb 10; 109(4):428–9 **(Nor)**

[Bretylium tosylate in the treatment and prevention of ventricular arrhythmia: a new look at an old drug] Dłużniewski M. **Pol Tyg Lek** 1988 Oct 31;43(44):1415–8 (44 ref.) **(Pol)**

[Use of streptokinase in acute myocardial infarction] Dowgird M, et al. **Pol Tyg Lek** 1988 Oct 31; 43(44):1399–401 **(Pol)**

[Vasodilator agents in the treatment of acute myocardial infarction] Ostrzycki A, et al. **Pol Tyg Lek** 1988 Sep 5; 43(36):1139–42 **(Pol)**

[Arrhythmia in patients with aspirin-treated myocardial infarction] Banasiak W, et al. **Wiad Lek** 1988 Nov 1; 41(21):1409–14 (Eng. Abstr.) **(Pol)**

[Factors controlling the effectiveness of thrombolytic drugs administered by the intravenous route in myocardial infarction] Tubek S. **Wiad Lek** 1988 Jul 15;41(14):941–3 (17 ref.) (Eng. Abstr.) **(Pol)**

[Can streptokinase produce renal changes? (letter)] Tubek S. **Wiad Lek** 1988 May 1;41(9):613–5 **(Pol)**

[Favorable effect of short-term intravenous infusion of streptokinase in the early phase of myocardial infarction] Tubek S, et al. **Wiad Lek** 1988 Jun 15;41(12):801–3 (Eng. Abstr.) **(Pol)**

[Clinical trial with streptokinase and sequential procedures for the treatment of acute myocardial infarction] Bellotti G, et al. **Arq Bras Cardiol** 1988 Apr;50(4):223–9 (Eng. Abstr.) **(Por)**

[Intravenous streptokinase in acute myocardial infarction] Nicolau JC, et al. **Arq Bras Cardiol** 1988 Feb;50(2):87–91 (Eng. Abstr.) **(Por)**

[Reliability of clinical and laboratory signs of recanalization in acute myocardial infarction] Nicolau JC, et al. **Arq Bras Cardiol** 1988 Oct;51(4):321–5 (Eng. Abstr.) **(Por)**

[Thrombolysis with tissue plasminogen activator in patients with acute myocardial infarction. Preliminary report] Ribeiro EE, et al. **Arq Bras Cardiol** 1988 May;50(5):329–33 (Eng. Abstr.) **(Por)**

[Current developments in the treatment of unstable angina pectoris and acute myocardial infarct] Vlaicu R, et al. **Rev Med Interna [Med Interna]** 1988 Mar–Apr;40(2):117–28 (36 ref.) **(Rum)**

[Effect of a highly dispersed copper powder on superoxide dismutase and glutathione peroxidase activities in experimental myocardial infarct] Konovalova GG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):154–7 (Eng. Abstr.) **(Rus)**

[Elimination of disorders of the electrical stability of the heart in experimental myocardial infarct and postinfarct cardiosclerosis under the influence of a benzodiazepine receptor agonist] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 May;107(5):518–20 (Eng. Abstr.) **(Rus)**

[Effect of thrombolytic therapy on the contractile function of the left-ventricular myocardium in patients with acute myocardial infarction] Mirrakhimov EM, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):93–4 **(Rus)**

[Intracellular mechanisms of the effect of cytochrome C on various areas of the myocardium during the dynamic development of an experimental infarct] Irgashev ShB, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):41–4 (Eng. Abstr.) **(Rus)**

[Combined treatment with selective beta1 adrenoblockaders and beta2 adrenostimulants in patients with myocardial infarction associated with chronic obstructive lung diseases] Aksel'rud MM, et al. **Kardiologiia** 1989 Jan; 29(1):78–83 (Eng. Abstr.) **(Rus)**

[Effect of obzidan on coronary blood flow in patients with the hyperkinetic type of hemodynamics in the acute period of myocardial infarct] Bogatyrev IV, et al. **Kardiologiia** 1988 Aug;28(8):52–5 (Eng. Abstr.) **(Rus)**

[Use of urokinase in acute myocardial infarction] Bokarev IN, et al. **Kardiologiia** 1988 Nov;28(11):36–40 (Eng. Abstr.) **(Rus)**

[Study of the effect of the restoration of coronary blood flow on left-ventricular contractility in patients with acute myocardial infarction based on the data of computerized two-dimensional echocardiography] Chikvashvili DI, et al. **Kardiologiia** 1988 Dec;28(12):57–61 (Eng. Abstr.) **(Rus)**

[Use of obsidan in patients with myocardial infarction] Dobrotvorskaia TE, et al. **Kardiologiia** 1989 Jun;29(6):71–5 (Eng. Abstr.) **(Rus)**

[Hemodynamic and metabolic effects of adenosine in experimental myocardial infarction] Eliseev VV, et al. **Kardiologiia** 1988 Nov;28(11):103–6 (Eng. Abstr.) **(Rus)**

[Stimulation of reparative processes in myocardial infarction: comparative evaluation of the effects of piracetam and inosine] Golikov AP, et al. **Kardiologiia** 1988 Nov; 28(11):46–50 (Eng. Abstr.) **(Rus)**

[Effect of corvaton on ischemic left-ventricular damage and hemodynamic indicators in patients with acute myocardial infarction] Khal'fen ESh, et al. **Kardiologiia** 1988 Oct; 28(10):101–2 **(Rus)**

[Effect of exogenous phosphocreatine on the size of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Dec;28(12):88–91 (Eng. Abstr.) **(Rus)**

[Characteristics of the anti-arrhythmia effect of phosphocreatine in the acute stage of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Nov;28(11):100–3 (Eng. Abstr.) **(Rus)**

[Kallikrein-protease inhibitors (contrical, gordox) in the complex treatment of myocardial infarction] Leshchinskiĭ LA, et al. **Kardiologiia** 1989 Feb;29(2):22–6 (Eng. Abstr.) **(Rus)**

[Systemic fibrinolytic therapy with streptokinase preparations in patients with acute myocardial infarction] Liusov VA, et al. **Kardiologiia** 1989 Jun;29(6):118–20 **(Rus)**

[Effect of peripheral vasodilators on the oxygen system of the body and central hemodynamics in patients with acute myocardial infarction] Nazarov AM, et al. **Kardiologiia** 1988 Nov;28(11):61–3 (Eng. Abstr.) **(Rus)**

[Thrombolytic reperfusion of coronary arteries and the function of the left ventricle in acute myocardial infarction] Pomerantsev EV, et al. **Kardiologiia** 1989 Feb;29(2):13–8 (Eng. Abstr.) **(Rus)**

[Diagnosis and prevention of myocardial reperfusion injury in experimental myocardial infarction] Rudnev DV, et al. **Kardiologiia** 1988 Dec;28(12):94–7 (Eng. Abstr.) **(Rus)**

[Blood coagulation shifts in patients with myocardial infarction treated with streptokinase] Smirnov AA, et al. **Kardiologiia** 1988 Nov;28(11):40–6 (Eng. Abstr.) **(Rus)**

[Therapeutic effect of prostacyclins in stenocardia and myocardial infarction] Markov KhM. **Klin Med (Mosk)** 1988 Oct;66(10):6–14 (70 ref.) **(Rus)**

[Obsidan treatment of neuroendocrine disorders and hyperkinetic syndrome in patients with macrofocal myocardial infarction] Simerzin VV. **Klin Med (Mosk)** 1989 Jan;67(1):84–7 (Eng. Abstr.) **(Rus)**

[Comparative study of the action of dalargin and obsidan on the course of acute myocardial infarction in an experiment] Pavlenko VS, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):13–5 (Eng. Abstr.) **(Rus)**

[Hemodynamic effects of fenicoberan in the acute period of experimental myocardial infarction] Stepaniuk GI, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):53–5 (Eng. Abstr.) **(Rus)**

[A case of recurrent myocardial infarction after discontinuation of the treatment with beta adrenergic receptor blockaders] Fushtei IM, et al. **Sov Med** 1988; (7):117–8 **(Rus)**

[The effect of obsidan on the content of catecholamines and renin in the blood in myocardial infarct] Simerzin VV. **Sov Med** 1988;(11):59–62 **(Rus)**

[Advantages and shortcomings of platelet antiaggregants in the treatment of myocardial infarction] Nechaev DD, et al. **Ter Arkh** 1988;60(8):59–63 (Eng. Abstr.) **(Rus)**

[The use of anti-inflammatory agents and stimulators of reparative processes in myocardial infarction] Iabluchanskiĭ NI, et al. **Vrach Delo** 1989 May;(5):22–5 (Eng. Abstr.) **(Rus)**

[Pharmacodynamic characteristics of a test using intravenous obzidan administration in patients with myocardial infarct] Parkhomenko AN. **Vrach Delo** 1988 Dec;(12):8–11 (Eng. Abstr.) **(Rus)**

[The use of clofelin in the acute period of myocardial infarct] Zaĭtsev AA, et al. **Vrach Delo** 1989 May;(5):17–20 (Eng. Abstr.) **(Rus)**

[Intravenous streptokinase in acute myocardial infarction. A Mexican multicentric study] Martínez Ríos MA, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):511–5 (Eng. Abstr.) **(Spa)**

[Importance of the early intravenous administration of streptokinase in acute myocardial infarct] Martínez Ríos MA, et al. **Arch Inst Cardiol Mex** 1988 Jul–Aug; 58(4):307–11 (Eng. Abstr.) **(Spa)**

[Clinico-angiographic correlations in transmural acute myocardial infarction treated with thrombolytic agents (retracted in Medicina (B Aires) 1988;48(3):284)] Rodríguez A, et al. **Medicina (B Aires)** 1988;48(2):132–40 (Eng. Abstr.) **(Spa)**

[Use of thrombolytic agents in early myocardial infarction. A review in 1987] Hugenholtz PG, et al. **Rev Clin Esp** 1988 May;182(8):435–42 (44 ref.) **(Spa)**

[Thrombolysis in acute myocardial infarction. When should it be done? (letter)] Vila Subirana T, et al. **Rev Clin Esp** 1989 Feb;184(2):113–4 **(Spa)**

[The myocardium at risk saved by fibrinolytic treatment (editorial)] Zarco P. **Rev Clin Esp** 1988 May;182(8):399–402 **(Spa)**

[Intravenous streptokinase in acute myocardial infarction. Reduction of early in-hospital mortality] Cortadellas J, et al. **Rev Esp Cardiol** 1989 Apr;42(4):254–61 (Eng. Abstr.) **(Spa)**

[Coronary recanalization under conditions of systole] Franco JM, et al. **Rev Esp Cardiol** 1988 May;41(5):310–4 (Eng. Abstr.) **(Spa)**

[Ischemic heart disease (VII). Determinants of functional recovery after thrombolytic treatment] Suárez de Lezo J, et al. **Rev Esp Cardiol** 1988 Aug–Sep;41(7):426–36 **(Spa)**

[Intravenous thrombolytic therapy in acute infarct of the myocardium] Núñez P, et al. **Rev Med Panama** 1989 Jan; 14(1):16–25 (Eng. Abstr.) (Spa)

[Streptokinase or urokinase in the treatment of myocardial infarction?] Dahlström H. **Lakartidningen** 1988 Oct 12; 85(41):3367 (Swe)

[In which patients is beta blockade in myocardial infarction most effective?] Henning R. **Lakartidningen** 1989 Mar 22; 86(12):1050 (Swe)

ECONOMICS

Cost-benefit analysis of early return to work after uncomplicated acute myocardial infarction. Picard MH, et al. **Am J Cardiol** 1989 Jun 1;63(18):1308–14

Comparing cost/benefit ratios for AMI care [editorial] Hedges JR. **Ann Emerg Med** 1989 Sep;18(9):1014

Cost-effective management of patients following myocardial infarction: the impact of ischemia on alternative approaches. Dittus RS, et al. **PACE** 1988 Nov;11(11 Pt 2):2086–92

[Determination of the real value over 1 year of the cost of a myocardial infarction. Study in 78 thrombolysed or non-thrombolysed patients (letter)] Herve C, et al. **Presse Med** 1988 Dec 10;17(44):2355 (Fre)

ENZYMOLOGY

Rate of disappearance of creatine kinase-MB after acute myocardial infarction: clinical determinants of variability. Lee RT, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1493–9

Regional variation in rat cardiac myosin isoenzymes and ATPase activity after infarction. Geenen DL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H745–50

Canine myocardial creatine kinase isoenzyme response to coronary artery occlusion. Sharkey SW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H508–14

Lactic dehydrogenase isozyme patterns and alpha-hydroxybutyrate dehydrogenase activities in serum from newborns, patients with ovarian cancer or myocardial infarction. Kikuchi Y, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):125–9

An update on cardiac enzymes. Puleo PR, et al. **Cardiol Clin** 1988 Feb;6(1):97–109 (86 ref.)

Myocardial enzyme depletion in infarcted human hearts: infarct size and equivalent tissue mass. van der Veen FH, et al. **Cardiovasc Res** 1988 Sep;22(9):611–9

Diagnosis of acute myocardial infarction from two measurements of creatine kinase isoenzyme MB with use of nonparametric probability estimation. Bernstein LH, et al. **Clin Chem** 1989 Mar;35(3):444–7

Diagnosis of acute myocardial infarction when skeletal muscle damage is present: a caveat regarding use of creatine kinase isoenzymes [letter] Burns DE. **Clin Chem** 1989 Apr; 35(4):705

Concordance of creatine kinase-MB activity and mass. Eisenberg PR, et al. **Clin Chem** 1989 Mar;35(3):440–3

Greater than expected alanine aminotransferase activities in plasma and in hearts of patients with acute myocardial infarction. Giesen PL, et al. **Clin Chem** 1989 Feb; 35(2):279–83

On the rate of release of CK isoforms into serum of patients with myocardial infarction treated with thrombolysis [letter] Panteghini M, et al. **Clin Chem** 1989 Jun; 35(6):1264–5

Effects of therapeutic coronary reperfusion on aspartate aminotransferase isoenzymes in sera of patients with acute myocardial infarction. Panteghini M, et al. **Clin Chem** 1989 Jun;35(6):909–12

Two commercial test kits for CK-MM isoforms evaluated for early recognition of acute myocardial infarction. Shah VD, et al. **Clin Chem** 1989 Mar;35(3):493–4

IgA-CK-BB complex with CK-MB electrophoretic mobility can lead to erroneous diagnosis of acute myocardial infarction. Venta R, et al. **Clin Chem** 1989 Sep;35(9):2003–8

Changes in creatine kinase activity in the course of acute myocardial infarction. Weinberger I, et al. **Clin Chem** 1989 Mar;35(3):414–6

Heterogeneity of serum creatine kinase isoenzyme MM in myocardial infarction: clinical significance and post-synthetic conversion of "abnormal" sub-bands. Williams J, et al. **Clin Chem** 1989 Feb;35(2):206–10

Creatine kinase isoforms in ischemic heart disease. Wu AH. **Clin Chem** 1989 Jan;35(1):7–13 (60 ref.)

Serum arylesterase (paraoxonase) activity following myocardial infarction. Secchiero S, et al. **Clin Chim Acta** 1989 Jul 31;183(1):71–5

The correlation between CK MB curve type and the clinical course of recent myocardial infarction. Korewicki J, et al. **Cor Vasa** 1988;30(3):161–7

Right ventricular infarction: larger enzyme release with posterior than with anterior involvement. Andersen HR, et al. **Int J Cardiol** 1989 Mar;22(3):347–55

Increased creatine kinase (CK) MB isoenzyme in patients with "normal" total CK activity suspected of acute myocardial infarction. Vladutiu AO, et al. **J Med** 1989; 20(1):73–81

Latency from the onset of myocardial ischemia to the rise of serum creatine kinase activity is correlated inversely with infarct size in dogs. Hashimoto H, et al. **Jpn Heart J** 1989 Mar;30(2):197–203

[Macro creatine kinase. A cause of diagnostic problems in acute myocardial infarction] Antonsen S, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1526–8 (Eng. Abstr.) (Dan)

[Enzyme diagnosis of acute myocardial infarction] Hørder M, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1447–53 (11 ref.) (Eng. Abstr.) (Dan)

[CK-MB isoenzyme in the diagnosis of myocardial infarction after myocardial revascularization surgery] Lehot JJ, et al. **Ann Fr Anesth Reanim** 1988;7(5):370–6 (Eng. Abstr.) (Fre)

[Deficiency of creatine kinase MM fraction] Oita T, et al. **Rinsho Byori** 1988 Sep;36(9):1045–50 (Jpn)

[Enzyme status in myocardial infarction] Engebretsen LF, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1276–9 (Eng. Abstr.) (Nor)

[Malate dehydrogenase isoenzymes in myocardial infarction] Wagenknecht K, et al. **Kardiologiia** 1988 Nov;28(11):55–7 (Eng. Abstr.) (Rus)

[Excess blood creatine kinase and the relation of enzymes in acute myocardial infarct] Makarovskiĭ VV. **Lab Delo** 1989;(4):11–3 (Rus)

[Lactate dehydrogenase in the diagnosis of myocardial infarct: diagnostic and methodologic aspects] Titov VN, et al. **Lab Delo** 1988;(11):31–41 (52 ref.) (Rus)

[Distribution of aminoacyl-t-RNA-synthetase activity in rabbit liver cells during disruption of protein biosynthesis in experimental myocardia infarct] Ivanov LL, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):34–8 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Comparison of the attack rates of acute myocardial infarction in two Belgian towns. Berghmans L, et al. **Acta Med Scand Suppl** 1988;728:90–4

Measuring the incidence of acute myocardial infarction: the problem of possible acute myocardial infarction. Martin CA, et al. **Acta Med Scand Suppl** 1988;728:40–7

Mortality, morbidity and case fatality from myocardial infarction and the cardiovascular risk profile in the Warsaw population. Rywik S, et al. **Acta Med Scand Suppl** 1988; 728:95–105

Myocardial Infarction Register in MONICA-Czechoslovakia Centre. Skodová Z, et al. **Acta Med Scand Suppl** 1988; 728:79–83

Pol-MONICA Cracow on-going study: initial findings. Sznajd J, et al. **Acta Med Scand Suppl** 1988;728:106–12

Changing patterns of acute myocardial infarction: decline in period prevalence and delay in onset. Keil JE, et al. **Am Heart J** 1989 May;117(5):1022–9

Diabetes mellitus and hypertension in the elderly: concomitant hyperlipidemia and coronary heart disease risk. Assmann G, et al. **Am J Cardiol** 1989 May 2; 63(16):33H–37H

Trends in the incidence of myocardial infarction in Western Australia between 1971 and 1982. Martin CA, et al. **Am J Epidemiol** 1989 Apr;129(4):655–68

The incidence and prognosis of unrecognized myocardial infarction in the Honolulu, Hawaii, Heart Program. Yano K, et al. **Arch Intern Med** 1989 Jul;149(7):1528–32

Myocardial infarction in the young. Angiographic features and risk factor analysis of patients with myocardial infarction at or before the age of 35 years. Wolfe MW, et al. **Chest** 1988 Nov;94(5):926–30

Coronary events in the population of six districts of the Czech Socialist Republic. Škodová Z, et al. **Cor Vasa** 1988; 30(5):324–30

The relationship between blood lead, blood pressure, stroke, and heart attacks in middle-aged British men. Pocock SJ, et al. **Environ Health Perspect** 1988 Jun;78:23–30

Myocardial infarction in the Tikur Anbessa Teaching Hospital. A five-year review. Fikreyesus Y, et al. **Ethiop Med J** 1989 Apr;27(2):55–61

Geographic variation in the incidence of myocardial calcification associated with acute myocardial infarction. Bloom S, et al. **Hum Pathol** 1989 Aug;20(8):726–31

Acute myocardial infarction in the elderly [letter] Caso C, et al. **J Am Geriatr Soc** 1989 Feb;37(2):194–5

Circadian variation in the frequency of myocardial infarction and death associated with acute pulmonary edema. Barash D, et al. **J Emerg Med** 1989 Mar-Apr;7(2):119–21

Diagnosis of past history of myocardial infarction in epidemiological studies: an alternative based on the Caerphilly and Speedwell surveys. Yarnell JW, et al. **J Epidemiol Community Health** 1988 Jun;42(2):116–20

Acute myocardial infarction in elderly Chinese. A clinical analysis of 631 cases and comparison with 389 younger cases. Wang SW, et al. **Jpn Heart J** 1988 May;29(3):301–7

[Characteristics of acute myocardial infarction in the elderly] Chang NC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr; 87(4):452–8 (Eng. Abstr.) (Chi)

[Findings from a socio-medical study of acute myocardial infarct] Vomáčka Z, et al. **Cas Lek Cesk** 1989 Jan 20; 128(4):110–3 (Eng. Abstr.) (Cze)

[Myocardial infarction in Conakry. Apropos of 11 cases with 4 coronarographies] Fofana M, et al. **Ann Cardiol Angeiol (Paris)** 1988 Oct;37(8):435–7 (Eng. Abstr.) (Fre)

[Myocardial infarction in 3 French regions: comparison of incidence and mortality in 1985] Nuttens MC, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):335–41 (Eng. Abstr.) (Fre)

[Circadian variation in the incidence of myocardial infarction. New perceptions about the mechanisms of acute coronary disease] Willich SN, et al. **Dtsch Med Wochenschr** 1989 Apr 21;114(16):613–7 (Eng. Abstr.) (Ger)

[Acute myocardial infarction in elderly subjects. Significance of risk factors and method of presenting the clinical picture in the analysis of a cohort at a coronary care unit] Davi R, et al. **Clin Ter** 1989 Jun 15;129(5):365–73 (Eng. Abstr.) (Ita)

[New data on myocardial infarction in the young] Mammì G. **Clin Ter** 1987 Jun 15;121(5):385–90 (Eng. Abstr.) (Ita)

[Influence of meteorological factors on the morbidity of acute myocardial infarct] Cordioli E, et al. **G Clin Med** 1988 May;69(5):329–32 (Eng. Abstr.) (Ita)

[Type A behavior and reinfarction: a 4-year longitudinal evaluation] De Leo D, et al. **Minerva Cardioangiol** 1988 Jul-Aug;36(7–8):339–46 (Eng. Abstr.) (Ita)

[Registration of myocardial infarction in the Augustów region from January 1, 1983 to December 31, 1984] Krętowski J, et al. **Przegl Lek** 1989;46(5):460–5 (Eng. Abstr.) (Pol)

[An acute myocardial infarction register in Yerevan] Adamian KG, et al. **Kardiologiia** 1989 May;29(5):88–90 (Rus)

[Clinical and functional features of the development of myocardial infarction in miners engaged in deep coal mines] Kopytina RA, et al. **Ter Arkh** 1989;61(1):33–5 (Eng. Abstr.) (Rus)

[A follow-up study of patients with a history of myocardial infarction] Sledzevskaia IK, et al. **Ter Arkh** 1989; 61(1):29–32 (Eng. Abstr.) (Rus)

[The relation between occupation and coronary heart disease] Terzić D. **Arh Hig Rada Toksikol** 1988 Mar;39(1):23–6 (Eng. Abstr.) (Scr)

[A study of middle-aged men in Gothenburg. Workers run twice as high a risk of myocardial infarction as middle class office employees] Rosengren A, et al. **Lakartidningen** 1989 May 31;86(22):2102–5 (Swe)

ETHNOLOGY

First myocardial infarctions in Asian and white men. Hughes LO, et al. **BMJ** 1989 May 20;298(6684):1345–50

Myocardial infarction in Asian men [letter] McKeigue PM, et al. **BMJ** 1989 Jul 15;299(6692):179–80

First myocardial infarction in Asian and white men [letter] Samanta A, et al. **BMJ** 1989 Jul 1;299(6690):52

Diabetes mellitus as a risk factor for acute myocardial infarction in Asians and Europeans. Woods KL, et al. **Br Heart J** 1989 Aug;62(2):118–22

Abnormal glucose tolerance is the dominant risk factor in South African Indian women with myocardial infarction. Sewdarsen M, et al. **Cardiology** 1988;75(5):381–6

ETIOLOGY

Perioperative cardiac problems. Lowenstein E. **Acta Chir Scand Suppl** 1989;550:36–42 (12 ref.)

A new theory of infarction-genesis in cats. Szentiványi M, et al. **Acta Physiol Hung** 1989;73(1):39–45

Bioeffects of sonography [letter] Margolies L, et al. **AJR** 1988 Nov;151(5):1057–8

Acute myocardial infarction following hymenoptera envenomation. Freye HB, et al. **Allergy Proc** 1989 Mar-Apr;10(2):119–26

Angiographic demonstration of plaque fissure associated with acute coronary occlusion. Alpert DH, et al. **Am Heart J** 1989 Jan;117(1):185–6

Coronary thrombosis induced by coronary spasm without myocardial infarction. Chahine RA, et al. **Am Heart J** 1989 Jan;117(1):186–8

Myocardial damage associated with electrical injury. Ku CS, et al. **Am Heart J** 1989 Sep;118(3):621–4

A hitherto neglected cause of myocardial infarction associated with normal coronary arteries: chronic Chagas' heart disease [letter] Bestetti RB, et al. **Am J Cardiol** 1989 Mar 15;63(11):766

Extensive multifocal myocardial infarcts from cloth emboli after replacement of mitral and aortic valves with cloth-covered, caged-ball prostheses. Dollar AL, et al. **Am J Cardiol** 1989 Aug 1;64(5):410–2

Morphologic features of unstable atherothrombotic plaques underlying acute coronary syndromes. Falk E. **Am J Cardiol** 1989 Mar 7;63(10):114E–120E (63 ref.)

Coronary stenoses before and after acute myocardial infarction. Hackett D, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1517–8

Acute myocardial infarction complicating recanalization of aortocoronary bypass grafts with urokinase therapy. McKeever LS, et al. **Am J Cardiol** 1989 Sep 15;64(10):683–5

Morbidity associated with anomalous origin of the left circumflex coronary artery from the right aortic sinus. Piovesana P, et al. **Am J Cardiol** 1989 Mar 15;63(11):762–3

Acute myocardial infarction during Holter recording. Turitto G, et al. **Am J Cardiol** 1989 Feb 1;63(5):364–6

Risk of developing an acute myocardial infarction or sudden coronary death in patients with exercise-induced silent myocardial ischemia. A report from the Coronary Artery Surgery Study (CASS) registry. Weiner DA, et al. **Am J Cardiol** 1988 Dec 1;62(17):1155–8

Coffee consumption and myocardial infarction in women. La Vecchia C, et al. **Am J Epidemiol** 1989 Sep;130(3):481–5

Aspirin withdrawal in a patient with essential thrombocythemia: possible cause of myocardial infarction

[letter] Louwerenburg JW, et al. **Am J Med** 1987 Dec; 83(6):1175

Aortic degenerative changes and thrombus formation: an unusual cause of massive myocardial infarction with normal coronary arteries. Nader RG, et al. **Am J Med** 1989 Jun; 86(6 Pt 1):718–22

Coronary vasospasm during percutaneous trigeminal rhizotomy. Swerdlow B, et al. **Anaesthesia** 1988 Oct; 43(10):861–3

Myocardial infarction in carotid endarterectomy patients anesthetized with halothane, enflurane, or isoflurane. Cucchiara RF, et al. **Anesthesiology** 1988 Nov;69(5):783–4

Myocardial infarction caused by blunt chest injury: possible mechanisms involved—case reports. Foussas SG, et al. **Angiology** 1989 Apr;40(4 Pt 1):313–8

Is there a link between infection and infarction? Syrjänen J. **Ann Clin Res** 1988;20(3):151–3

Social effects of a history of ischaemic heart disease. Dobson AJ, et al. **Ann Med** 1989 Feb;21(1):17–21

The heart in systemic lupus erythematosus [clinical conference] Barker RA. **BMJ** 1989 Jul 22;299(6693):245–7

Risk factors for acute myocardial infarction in women: evidence from the Royal College of General Practitioners' oral contraception study. Croft P, et al. **BMJ** 1989 Jan 21;298(6667):165–8

Dental health and acute myocardial infarction [letter] Gilmour H, et al. **BMJ** 1989 Jun 10;298(6687):1579–80

Myocardial infarction on holiday [letter] Marshall RJ, et al. **BMJ** 1988 Sep 17;297(6650):738

Association between dental health and acute myocardial infarction. Mattila KJ, et al. **BMJ** 1989 Mar 25; 298(6676):779–81

Risk factors for acute myocardial infarction in women [letter] Perry I, et al. **BMJ** 1989 Apr 1;298(6677):893

Aspergillus coronary embolization causing acute myocardial infarction. Laszewski M, et al. **Bone Marrow Transplant** 1988 May;3(3):229–33

Postpartum myocardial infarction. Movsesian MA, et al. **Br Heart J** 1989 Aug;62(2):154–6

The role of risk factors in heart attacks occurring in men with pre-existing ischaemic heart disease. Phillips AN, et al. **Br Heart J** 1988 Nov;60(5):404–10

When does the risk of acute coronary heart disease in ex-smokers fall to that in non-smokers? A retrospective study of patients admitted to hospital with a first episode of myocardial infarction or unstable angina. Robinson K, et al. **Br Heart J** 1989 Jul;62(1):16–9

Smoking and acute coronary heart disease: a comparative study. Robinson K, et al. **Br Heart J** 1988 Dec;60(6):465–9

Acute myocardial infarction in infancy: unmasking of anomalous origin of the left coronary artery from the pulmonary artery by ligation of an arterial duct. Sreeram N, et al. **Br Heart J** 1989 Mar;61(3):307–8

Myocardial infarction in the young and in women. Jalowiec DA, et al. **Cardiovasc Clin** 1989;20(1):197–206 (58 ref.)

Coronary artery spasm and acute myocardial infarction. Lambert CR Jr, et al. **Cardiovasc Clin** 1989;20(1):131–40 (49 ref.)

Atherosclerotic and nonatherosclerotic coronary artery factors in acute myocardial infarction. Waller BF. **Cardiovasc Clin** 1989;20(1):29–104 (241 ref.)

A case of neurofibromatosis associated with a coronary artery aneurysm and myocardial infarction. Kandarpa K, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):143–5

Influence of tachycardia and arterial hypertension on infarct size in the pig. Garcia-Dorado D, et al. **Cardiovasc Res** 1988 Sep;22(9):620–6

Do overlapping vessels protect against canine right ventricular infarction after right coronary artery occlusion? Johnston WE, et al. **Cardiovasc Res** 1988 Nov; 22(11):786–92

Survival after myocardial infarction caused by acute left main coronary artery occlusion: case report and review of the literature. Cohen MC, et al. **Cathet Cardiovasc Diagn** 1989 Apr;16(4):230–8 (46 ref.)

Acute myocardial infarction during percutaneous aortic balloon valvuloplasty. Deligonul U, et al. **Cathet Cardiovasc Diagn** 1988;15(3):164–8

Coronary artery dissection secondary to blunt chest trauma. Kohli S, et al. **Cathet Cardiovasc Diagn** 1988;15(3):179–83

Myocardial infarction due to multiple coronary-ventricular fistulas. McLellan BA, et al. **Cathet Cardiovasc Diagn** 1989 Apr;16(4):247–9

Stenotic anomalous circumflex artery causing myocardial infarction following angioplasty of a right coronary artery stenosis. Rivitz SM, et al. **Cathet Cardiovasc Diagn** 1989 Jun;17(2):105–8

Myocardial infarction complicating cardiovascular stress testing with normal coronary arteriography. Jenkins M, et al. **Chest** 1989 Aug;96(2):431–2

Acute myocardial infarction after heart irradiation in young patients with Hodgkin's disease. Joensuu H. **Chest** 1989 Feb;95(2):388–90

Two cases of myocardial infarction in type 4 Ehlers-Danlos syndrome. Kitazono T, et al. **Chest** 1989 Jun;95(6):1274–7

Right-to-left shunt through patent foramen ovale complicating right ventricular infarction. Successful percutaneous catheter closure. Krueger SK, et al. **Chest** 1988 Nov;94(5):1100–1

Intracoronary thrombus and complex morphology in unstable angina. Relation to timing of angiography and in-hospital cardiac events. Freeman MR, et al. **Circulation** 1989 Jul; 80(1):17–23

Circadian variation and triggers of onset of acute cardiovascular disease. Muller JE, et al. **Circulation** 1989 Apr;79(4):733–43 (98 ref.)

Effect of perioperative myocardial infarction on survival of postcardiotomy patients supported with ventricular-assist devices. Pennington DG, et al. **Circulation** 1988 Nov;78(5 Pt 2):III110–5

Probable triggers of onset of acute myocardial infarction. Muller JE, et al. **Clin Cardiol** 1989 Aug;12(8):473–5

Coronary arterial embolism due to valvular debris after percutaneous valvuloplasty of calcific mitral stenosis. Wiegand V, et al. **Clin Cardiol** 1988 Nov;11(11):793–6

Fatal outcome associated with autopsy proven myocardial bridging of the left anterior descending coronary artery. Bestetti RB, et al. **Eur Heart J** 1989 Jun;10(6):573–6

Aetiological and prognostic correlates of site of myocardial infarction. Bourke S, et al. **Eur Heart J** 1988 Jul;9(7):734–9

Physical inactivity as a risk factor for primary and secondary coronary events in Göteborg, Sweden. Johansson S, et al. **Eur Heart J** 1988 Nov;9 Suppl L:8–19 (45 ref.)

Myocardial infarction before the age of 20 is rare [letter] Høst NB, et al. **Eur J Haematol** 1988 Nov;41(5):511

The role of enkephalins in the pathogenesis of acute myocardial infarction. Slepushkin VD, et al. **Exp Pathol** 1988;35(2):129–31

Potential risks in retrovenous revascularization of the myocardium. Tickman RJ, et al. **Hum Pathol** 1989 Aug; 20(8):784–6

Risk factors of myocardial infarction in Indian women. Chatterjee SS, et al. **Indian Heart J** 1987 Nov-Dec; 39(6):57–9

Accelerated atherosclerosis and myocardial infarction complicating anomalous origin of the right from the left coronary artery. Molajo AO, et al. **Int J Cardiol** 1989 Jun; 23(3):409–12

Traumatic left ventricular aneurysm: report of a case with normal coronary arteries. Murray NH, et al. **Int J Cardiol** 1989 Sep;24(3):377–9

Coronary arteriographic analysis and angiographic morphology [editorial] Ambrose JA. **J Am Coll Cardiol** 1989 Jun;13(7):1492–4

Morphology of left anterior descending coronary territory lesions as a predictor of anterior myocardial infarction: a CASS Registry Study. Ellis S, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1481–91

A comprehensive analysis of myocardial infarction due to left circumflex artery occlusion: comparison with infarction due to right coronary artery and left anterior descending artery occlusion. Huey BL, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1156–66

ST segment shift in unstable angina: pathophysiology and association with coronary anatomy and hospital outcome. Langer A, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1495–502

Acute myocardial infarction: a failure of timely, spontaneous thrombolysis. Swan HJ. **J Am Coll Cardiol** 1989 May; 13(6):1435–7 (27 ref.)

The incidence of perioperative myocardial infarction with transurethral resection of the prostate. Ashton CM, et al. **J Am Geriatr Soc** 1989 Jul;37(7):614–8

Myocardial infarction caused by hypotension during physical examination maneuvers in the elderly. Murden RA, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1120–2

Atrial fibrillation with inferior wall myocardial ischaemia following lightning [letter] Gupta GB, et al. **J Assoc Physicians India** 1988 May;36(5):354–5

Serum sex hormone levels and myocardial infarction in the Honolulu Heart Program. Pitfalls in prospective studies on sex hormones. Phillips GB, et al. **J Clin Epidemiol** 1988; 41(12):1151–6

Myocardial infarction in patients treated with mantle radiotherapy [letter] Silberberg JM, et al. **J Clin Oncol** 1989 Apr;7(4):541

Temporal pathophysiology or disease variation [editorial] Rosen P. **J Emerg Med** 1989 Mar-Apr;7(2):205–6

Pseudomyocardial infarction and hyperkalemia: a case report and subject review. Simon BC. **J Emerg Med** 1988 Nov-Dec;6(6):511–5

Coronary risk factors, development of myocardial infarction, and plasma oestrogens: a prospective case-control study in men. Eldrup E, et al. **J Intern Med** 1989 Jun; 225(6):367–72

Maternal mortality. A report of the KMA Maternal Mortality Study Committee. Greene JW Jr. **J Ky Med Assoc** 1989 Feb;87(2):79–80

Perioperative myocardial infarction in Thai patients; mortality and morbidity following anesthesia and surgery. Tritrakarn T, et al. **J Med Assoc Thai** 1988 Nov; 71(11):593–601

Loss prevention case of the month. Any old hired gun will do! Avery JK. **J Tenn Med Assoc** 1989 May;82(5):264

Decreased selenium levels in acute myocardial infarction. Kok FJ, et al. **JAMA** 1989 Feb 24;261(8):1161–4

Will mountains trekkers have heart attacks? [editorial] Rennie D. **JAMA** 1989 Feb 17;261(7):1045–6

Isolated right ventricular infarction resulting from thrombotic occlusion of a hypoplastic right coronary artery. Nakahara K, et al. **Jpn Heart J** 1989 Jan; 30(1):95–101

Cerebral and myocardial infarction induced by nonbacterial thrombotic endocarditis in a patient with ovarian cancer: report of a case. Mukai M, et al. **Jpn J Med** 1988 Aug; 27(3):321–4

Cardiac risk of non-cardiac surgery. Vine DL. **Kans Med** 1989 Jun;90(6):199–200

Chlamydia TWAR and acute myocardial infarction [letter] **Lancet** 1989 Jan 21;1(8630):158

Myocardial infarction risk, earlobe crease, and sleep apnoea syndrome [letter] Williams RR. **Lancet** 1989 Sep 16; 2(8664):676–7

Heart attack. Munster M, et al. **N C Med J** 1988 Sep; 49(9):441–4

Outpatient versus inpatient cardiac catheterization [letter] **N Engl J Med** 1989 Apr 6;320(14):938–9

Health and public policy implications of the "low yield" cigarette [editorial] Benowitz NL. **N Engl J Med** 1989 Jun 15;320(24):1619–21

Occlusive coronary-artery spasm as a cause of acute myocardial infarction after coronary-artery bypass grafting [letter] Fischell TA, et al. **N Engl J Med** 1989 Feb 9; 320(6):400–1

"Low yield" cigarettes and the risk of nonfatal myocardial infarction in women. Palmer JR, et al. **N Engl J Med** 1989 Jun 15;320(24):1569–73

Postpartum myocardial infarction in a patient receiving bromocriptine. Ruch A, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):448–51 (27 ref.)

Power frequency magnetic field; depressive illness and myocardial infarction. Perry S, et al. **Public Health** 1989 May;103(3):177–80

Myocardial infarction in Kawasaki disease. Gilbert RD, et al. **S Afr Med J** 1989 May 20;75(10):494–6

Anomalous origin of the right coronary artery from the left sinus of Valsalva. A report of 2 cases. Naidoo DP, et al. **S Afr Med J** 1988 Oct 15;74(8):420–1

Cardiac complications of aneurysm repair. Campbell JB, et al. **South Med J** 1989 Apr;82(4):458–61

Acute coronary artery thrombosis in paroxysmal nocturnal hemoglobinuria. Klein KL, et al. **South Med J** 1989 Sep; 82(9):1169–71

Stroke, myocardial infarction, and survival during long-term follow-up after carotid endarterectomy. Lee KS, et al. **Surg Neurol** 1989 Feb;31(2):113–9

Silent myocardial ischemia: its relationship to myocardial infarction and sudden cardiac death. Assey ME. **Trans Assoc Life Insur Med Dir Am** 1989;72:63–74 (40 ref.)

Acute myocardial infarction following blunt chest trauma due to the kick of a cow. Barton EN, et al. **West Indian Med J** 1988 Dec;37(4):236–9

Acute myocardial infarction following a gila monster (Heloderma suspectum cinctum) bite. Bou-Abboud CF, et al. **West J Med** 1988 May;148(5):577–9

[The risk profile of patients with myocardial infarct at a young age] Topolčan O, et al. **Vnitr Lek** 1988 Jul; 34(7):672–8 (Eng. Abstr.) **(Cze)**

[Acute myocardial infarction as the primary symptom in essential thrombocytosis in a 17-year-old male] Høst NB, et al. **Ugeskr Laeger** 1989 May 15;151(20):1250 (Eng. Abstr.) **(Dan)**

[Fatal acute myocardial infarction associated with postsplenectomy thrombocytosis] Nielsen H. **Ugeskr Laeger** 1988 Sep 5;150(36):2125–6 (Eng. Abstr.) **(Dan)**

[The vascular surgical patient: problems in the management of coronary and cerebrovascular risk] Van den Brande P, et al. **Acta Chir Belg** 1988 Sep-Oct;88(5):359–62 (Eng. Abstr.) **(Dut)**

[Anterior infarction of the left ventricle and infarct of the posterior wall of the right ventricle caused by thrombosis of the anterior interventricular artery] Penther P, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul-Sep;37(7):361–3 (7 ref.) (Eng. Abstr.) **(Fre)**

[Infarction with angiographically normal coronary vessels. (20 cases)] Rey JL, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):131–5 (25 ref.) (Eng. Abstr.) **(Fre)**

[Asymptomatic electrical myocardial necrosis during the infusion of betamimetics in status asthmaticus] Beauvoir C, et al. **Ann Fr Anesth Reanim** 1988;7(6):511–4 (Eng. Abstr.) **(Fre)**

[Myocardial infarction caused by the thrombosis of the common trunk of the left coronary artery. Fatal outcome despite an early obstruction removal by angioplasty. Apropos of a case] Delarche N, et al. **Arch Mal Coeur** 1988 Dec;81(12):1551–3 (Eng. Abstr.) **(Fre)**

[Double postelectrocution myocardial infarct] Zeana C. **Med Interne** 1982 Jan-Mar;20(1):45–9 **(Fre)**

[Chlamydia and coronary disease] Richer G. **Union Med Can** 1989 May-Jun;118(3):126–7 **(Fre)**

[Shift work and ischemic heart disease] Wagner U. **Z Arztl Fortbild (Jena)** 1989;83(5):229–33 (32 ref.) **(Ger)**

[A microcomputer project for medical documentation at polyclinics of the People's Republic of Poland] Melaniuk M. **Z Gesamte Hyg** 1988 Oct;34(10):555 (Eng. Abstr.) **(Ger)**

[Profile of cardiovascular risk factors in females with a definitive myocardial infarct up to 49 years of age] Stammberger K, et al. **Z Gesamte Inn Med** 1989 Mar 15; 44(6):177–9 (Eng. Abstr.) **(Ger)**

[Myocardial damage following lightning injury] Eber B, et al. **Z Kardiol** 1989 Jun;78(6):402–4 (Eng. Abstr.) **(Ger)**

[Common risk factors in the prognosis of myocardial infarction] Galassi A, et al. **Cardiologia** 1989 Mar; 34(3):195–200 (46 ref.) **(Ita)**

[Obesity as an infarction risk factor] Verga S, et al.

Cardiologia 1988 Oct;33(10):917–9 **(Ita)**

[Juvenile myocardial infarct. A description of 2 cases occurring before 20 years of age and a review of the literature] Guzzini F, et al. **G Clin Med** 1989 Mar; 70(3):179–85 (38 ref.) (Eng. Abstr.) **(Ita)**

[Acute coronary occlusion during transluminal angioplasty: role of coronary thrombosis] Buonanno C. **G Ital Cardiol** 1988 Jun;18(6):492–7 (Eng. Abstr.) **(Ita)**

[Type A personality and risk of post-infarction coronary events] De Leo D, et al. **G Ital Cardiol** 1988 Nov; 18(11):938–41 (Eng. Abstr.) **(Ita)**

[Cigarette smoking and the risk of myocardial infarction. A case-controlled study in northern Italy] Gramenzi A, et al. **G Ital Cardiol** 1989 Jan;19(1):82–8 (Eng. Abstr.) **(Ita)**

[Pattern of acute myocardial infarct in a patient with left atrial myxoma] Niccolini A, et al. **G Ital Cardiol** 1989 Apr; 19(4):355–9 (Eng. Abstr.) **(Ita)**

[Acute myocardial infarction in subjects under 40 years of age. Coronary risk factors] Roncarolo PL, et al. **Minerva Cardioangiol** 1989 May;37(5):219–28 (Eng. Abstr.) **(Ita)**

[Preinfarction angina and coronary thrombolysis] Fujii B, et al. **Kokyu To Junkan** 1988 Oct;36(10):1109–11 (Eng. Abstr.) **(Jpn)**

[Review of single coronary artery with myocardial infarction] Kanoh T, et al. **Kokyu To Junkan** 1989 Feb; 37(2):157–65 (30 ref.) **(Jpn)**

[An adult case of mixed connective tissue disease associated with myocardial infarction] Kato N, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):59–66 (Eng. Abstr.) **(Jpn)**

[A case of Heerfordt's syndrome associated with acquired type II-b hyperlipoproteinemia, leading to the development of myocardial infarction during its clinical course] Umeki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):881–7 (Eng. Abstr.) **(Jpn)**

[A patient with gnathostomiasis exhibiting myocardial infarction due to coronary vasospasms] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1719–24 **(Jpn)**

[Myocardial infarction and its limitations—hopes and dilemmas] Beręsewicz A. **Acta Physiol Pol** 1988;39 Suppl 32:53–102 **(Pol)**

[Myocardial infarction in patients with diabetes mellitus type 2] Ochotny R, et al. **Kardiol Pol** 1988;31(9):563–8 (Eng. Abstr.) **(Pol)**

[Medical complications of intensive physical exertion] Kostka T. **Przegl Lek** 1988;45(12):844–6 (36 ref.) **(Pol)**

[Extensive myocardial infarction in a young woman with slight stenosis of one coronary artery] Iwicka U, et al. **Wiad Lek** 1988 Mar 1;41(5):305–9 (Eng. Abstr.) **(Pol)**

[Extensive thrombosis of the right and left coronary arteries in bacterial endocarditis in a 28-year-old man] Kołacz J, et al. **Wiad Lek** 1988 Aug 15;41(16):1101–3 (Eng. Abstr.) **(Pol)**

[Acute myocardial infarction following dissection of the aorta during pregnancy. A case report] Coelho OR, et al. **Arq Bras Cardiol** 1987 Sep;49(3):169–71 (Eng. Abstr.) **(Por)**

[Myocardial infarction with normal coronary vessels, associated with thyrotoxicosis. A case report] de Andrade PJ, et al. **Arq Bras Cardiol** 1988 Feb;50(2):121–4 (Eng. Abstr.) **(Por)**

[The pathogenesis of myocardial infarct after aortocoronary shunting] Lebedeva RN, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):12–6 (Eng. Abstr.) **(Rus)**

[Thromboembolic syndrome with recurrent myocardial infarction after trivalvular prostheses] Goloshchapov VIu, et al. **Kardiologiia** 1988 Jun;28(6):114–6 **(Rus)**

[A case of myocardial infarction in a patient with botulism] Sheinkman EV, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):100–1 **(Rus)**

[Possibilities of acute myocardial infarction in patients with chronic cor pulmonale] Katz LG, et al. **Probl Tuberk** 1989; (5):75–6 **(Rus)**

[Characteristics of the course of myocardial infarct in patients with a history of Coxsackie B viral infection] Kipshidze NN, et al. **Vrach Delo** 1988 Aug;(8):31–4 (Eng. Abstr.) **(Rus)**

[Pathogenetic mechanisms of atherogenesis in patients with rheumatoid arthritis] Moshchich VP, et al. **Vrach Delo** 1989 May;(5):34–6 (Eng. Abstr.) **(Rus)**

[Juvenile coronary attack] Lázaro Fernández J, et al. **Rev Clin Esp** 1988 Oct;183(6):304–8 (Eng. Abstr.) **(Spa)**

GENETICS

[Defects in the prostaglandin system. VII. (Generalized, inherited [?]) cyclooxygenase defect] Fitscha P, et al. **Wien Klin Wochenschr** 1988 Nov 4;100(21):711–5 (Eng. Abstr.) **(Ger)**

HISTORY

Evolution of therapy of myocardial infarction. **N C Med J** 1988 Jul;49(7):381–5

IMMUNOLOGY

Coronary artery vasculitis and myocardial infarction associated with antiphospholipid antibodies in a pregnant woman. Rallings P, et al. **Aust N Z J Med** 1989 Aug; 19(4):347–50

Serologic response against cardiolipin and enterobacterial common antigen in young patients with acute myocardial infarction. Mattila K, et al. **Clin Immunol Immunopathol** 1989 Jun;51(3):414–8

Serological evidence of an association of a novel Chlamydia, TWAR, with chronic coronary heart disease and acute myocardial infarction. Saikku P, et al. **Lancet** 1988 Oct 29;2(8618):983–6

[The secretory type of persons who have survived a myocardial infarct] Slavchev S, et al. **Vutr Boles** 1989; 28(2):31–4 (Eng. Abstr.) **(Bul)**

[Immunology in myocardial infarct and acute coronary failure. Overview of findings on the problem] Krčmová I. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):213–22 (24 ref.) (Eng. Abstr.) **(Cze)**

[Secondary immunopathogenesis in myocarditis, diseases of the heart muscles and infarct-associated arrhythmia in childhood and adulthood] Maisch B, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):31–9 (76 ref.) (Eng. Abstr.) **(Ger)**

[Anti-adrenochrome autoantibodies in cardiovascular diseases] Korochkin IM, et al. **Sov Med** 1988;(10):13–5 (Eng. Abstr.) **(Rus)**

[Disorders of immunity in alcoholic patients with myocardial infarction] Medvedev VM, et al. **Sov Med** 1989;(2):3–5 (Eng. Abstr.) **(Rus)**

[Various mechanisms of immune homeostasis in myocardial infarction] Dobrotina NA, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):53–7 (Eng. Abstr.) **(Rus)**

[Myocardial infarction and antiphospholipid antibodies (letter)] Barquinero J, et al. **Med Clin (Barc)** 1989 Feb 11; 92(5):198–9 **(Spa)**

METABOLISM

Altered calcium homeostasis and membrane integrity in myocardial cell injury. Buja LM, et al. **Adv Exp Med Biol** 1988;232:115–24

Importance of magnesium chloride repletion after myocardial infarction. Sheehan J. **Am J Cardiol** 1989 Apr 18; 63(14):35G–38G (22 ref.)

Neuroendocrine changes in acute myocardial infarction. McAlpine HM, et al. **Am J Med** 1988 Mar 11;84(3A):61–6

Myocardial free fatty acid metabolism of the ischemic heart treated by left ventricular assist device. Noda H, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):294–6

Evidence that free radicals result in reperfusion injury in heart muscle. Weisfeldt ML, et al. **Basic Life Sci** 1988; 49:911–9

Mechanisms of reoxygenation injury in myocardial infarction: implications of a myoglobin redox cycle. Galaris D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1162–8

Cyclo-oxygenase inhibition does not unmask leukotriene release during ischaemia-reperfusion of the rat heart in vitro. Trevethick MA, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):377–9

Are different pharmacokinetic properties of lidocaine versus propafenone in normal as compared to ischemic myocardium responsible for different electrophysiologic effects which help preventing arrhythmias? Puddu PE, et al. **Cardiologia** 1988 May;33(5):459–62

Detection of leukotriene B4 in cardiac tissue and its role in infarct extension through leucocyte migration. Sasaki K, et al. **Cardiovasc Res** 1988 Feb;22(2):142–8

fMet-Leu-Phe receptor expression by an interstitial cell in rabbit right atrium following left ventricular myocardial infarction. Dunkel CG, et al. **Circ Res** 1989 Jul;65(1):215–23

Arachidonate metabolism in cultured fibroblasts derived from normal and infarcted canine heart. Weber DR, et al. **Circ Res** 1989 Sep;65(3):671–83

Atrial natriuretic peptide in a rat model of cardiac failure. Atrial and ventricular mRNA, atrial content, plasma levels, and effect of volume loading. Drexler H, et al. **Circulation** 1989 Mar;79(3):620–33

Neutral glycolipids of atherosclerotic plaques and unaffected human aorta tissue. Prokazova NV, et al. **Eur J Biochem** 1989 Mar 1;180(1):167–71

Affinity of LDL to a human arterial proteoglycan among male survivors of myocardial infarction. Linden T, et al. **Eur J Clin Invest** 1989 Feb;19(1):38–44

A study of the blood-gases and acid-base status in patients with acute myocardial infarction according to its location. Ovanessian M, et al. **Folia Med (Plovdiv)** 1987;29(3):42–51

Effects of dilazep in evolving myocardial infarction in dogs: a biochemical study. Gupta JB, et al. **Int J Cardiol** 1989 May;23(2):165–71

Cardiac 3,4-dihydroxyphenylethylene glycol (DHPG) and catecholamine levels during perindopril therapy of chronic left ventricular failure in rats. Howes LG, et al. **J Auton Pharmacol** 1989 Feb;9(1):15–21

Relationship between ventricular expression of atrial natriuretic polypeptide gene and hemodynamic parameter in old myocardial infarction. Saito Y, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S1–4

Role of invading leukocytes in enhanced atrial eicosanoid production following rabbit left ventricular myocardial infarction. Freed MS, et al. **J Clin Invest** 1989 Jan; 83(1):205–12

Effect of cannulation site on the primary determinants of myocardial oxygen consumption during left heart bypass. Cohen DJ, et al. **J Surg Res** 1989 Aug;47(2):159–65

Serial myocardial lactate metabolic changes after intracoronary thrombolysis in evolving myocardial infarction. Kodama K, et al. **Jpn Circ J** 1988 Jul; 52(7):695–701

Streptozotocin-induced diabetes in rat. II. Lipid and lipid peroxide changes of lipoprotein fractions in diabetes complicated by hypertension and myocardial infarction. Somova L, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):751–4

Reperfused-viable and reperfused-infarcted myocardium: differentiation with in vivo P-31 MR spectroscopy. Rehr RB, et al. **Radiology** 1989 Jul;172(1):53–8

Fibrin metabolism in patients with acute myocardial infarction during and after treatment with tissue-type plasminogen activator. Ring ME, et al. **Thromb Haemost** 1988 Dec 22;60(3):428–33

[A study of magnesium in the plasma, red blood cells and urine in patients with acute myocardial infarction] Yang LX, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct;16(5):286–8, 318 (Eng. Abstr.) **(Chi)**

[Effects of protocatechuic acid and propranolol on myocardial metabolism and infarct size in dogs with acute myocardial infarction] Rao MR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):27–30 (Eng. Abstr.) **(Chi)**

[Myocardial distribution of C-14 lidocaine and C-14 propafenone in relation to regional myocardial blood flow in a model of chronic-phase myocardial infarct] Naccarella F, et al. **Cardiologia** 1988 May;33(5):453–8 (Eng. Abstr.) **(Ita)**

[Characteristics of the normal gluconeogenesis effect of prostaglandin F2 alpha and in myocardial infarct] Blinov VA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):279–81 (Eng. Abstr.) **(Rus)**

[Clinico-biochemical equivalent of stromal destruction in acute myocardial infarction] Movshovich BL, et al. **Kardiologiia** 1989 May;29(5):90–1 **(Rus)**

[Metabolic pool of purine and pyrimidine compounds in the venous blood of patients with myocardial infarction and stenocardia] Toguzov RT, et al. **Kardiologiia** 1989 Feb; 29(2):57–60 (Eng. Abstr.) **(Rus)**

[Clinical regularities of myocardial infarction repair] Movshovich BL, et al. **Ter Arkh** 1989;61(4):39–42 (Eng. Abstr.) **(Rus)**

[Comparative cytophotometric analysis of the nucleic acid content in the cardiomyocytes of normal rats and following experimental infarct] Selivanova GV, et al. **Tsitologiia** 1988 Dec;30(12):1454–62 (Eng. Abstr.) **(Rus)**

[The cyclic nucleotide system in various sections of the dog myocardium in experimental infarction] Frolova NIu, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):64–8 (Eng. Abstr.) **(Rus)**

[Mechanism of activating the lymphocyte glucocorticoid receptor in acute myocardial infarct] Petrichenko IE, et al. **Vopr Med Khim** 1989 May-Jun;35(3):64–8 (Eng. Abstr.) **(Rus)**

[The adenylic system in the brain structures of rats with experimental myocardial infarct] Stupnitskiĭ IuI, et al. **Zh Vyssh Nerv Deiat** 1988 Sep-Oct;38(5):958–62 (Eng. Abstr.) **(Rus)**

[Rapid elimination of thallium-201 induced by aminophylline] Magriñá J, et al. **Rev Esp Cardiol** 1988 Nov; 41(9):571–3 (Eng. Abstr.) **(Spa)**

MORTALITY

Trends in coronary care. A retrospective study of patients with myocardial infarction treated in coronary care units. Ericsson CG, et al. **Acta Med Scand** 1988;224(6):507–13

Predicting long-term mortality after a myocardial infarction from routine hospital data. Maeland JG, et al. **Acta Med Scand** 1988;224(6):539–47

Monitoring of major cardiovascular diseases in Moscow, USSR. Varlamova T, et al. **Acta Med Scand Suppl** 1988; 728:73–8

First myocardial infarction: age and ejection fraction identify a low-risk group. Ahnve S, et al. **Am Heart J** 1988 Oct; 116(4):925–32

The impact of age on the incidence and prognosis of initial acute myocardial infarction: the Worcester Heart Attack Study. Goldberg RJ, et al. **Am Heart J** 1989 Mar; 117(3):543–9

The relationship between infarct size and mortality and morbidity during short-term and long-term follow-up after acute myocardial infarction. Herlitz J, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1378–82 (92 ref.)

Clinical significance and prognostic importance of left ventricular hypertrophy in non-Q-wave acute myocardial infarction. Boden WE, et al. **Am J Cardiol** 1988 Nov 15; 62(16):1000–4

Prospective evaluation of clinical assessment, exercise testing and signal-averaged electrocardiogram in predicting outcome after acute myocardial infarction. Cripps T, et al. **Am J Cardiol** 1988 Nov 15;62(16):995–9

Classification of deaths after myocardial infarction as arrhythmic or nonarrhythmic (the Cardiac Arrhythmia Pilot Study). Greene HL, et al. **Am J Cardiol** 1989 Jan 1;63(1):1–6

Prognostic significance of a low peak serum creatine kinase level in acute myocardial infarction. Piérard LA, et al. **Am J Cardiol** 1989 Apr 1;63(12):792–6

Characteristics associated with early (less than or equal to 3 months) versus late (greater than 3 months to less than or equal to 3 years) mortality after acute myocardial

infarction. Piérard LA, et al. **Am J Cardiol** 1989 Aug 1; 64(5):315–8

Frequency of rupture of the left ventricular free wall or ventricular septum among necropsy cases of fatal acute myocardial infarction since introduction of coronary care units. Reddy SG, et al. **Am J Cardiol** 1989 Apr 15; 63(13):906–11

Mortality for women after acute myocardial infarction: MILIS Study Group [letter; comment] Tofler GH, et al. **Am J Cardiol** 1989 Jul 15;64(3):256. **Comment on:** Am J Cardiol 1988 Jul 1;62(1):1–7

Factors leading to shorter survival after acute myocardial infarction in patients ages 65 to 75 years compared with younger patients. Tofler GH, et al. **Am J Cardiol** 1988 Nov 1;62(13):860–7

Coronary Prognostic Index for the Chinese [letter] Cheng TO. **Aust N Z J Med** 1988 Dec;18(7):901

Coronary flow reserve and the J curve [letter] **BMJ** 1988 Dec 17;297(6663):1606–8

Cardiac predictors of death after non–cardiac surgery [letter; comment] Herrema I, et al. **BMJ** 1989 Jan 21; 298(6667):184–5. **Comment on:** BMJ 1988 Oct 22;297(6655):1011–3

Changes in severity of myocardial infarction and three year survival rates after myocardial infarction in Auckland, 1966–7 and 1981–2. Stewart AW, et al. **BMJ** 1988 Aug 20–27;297(6647):517–9

One year mortality outcomes of all coronary and intensive care unit patients with acute myocardial infarction, unstable angina or other chest pain in Hamilton, Ontario, a city of 375,000 people. Cairns JA, et al. **Can J Cardiol** 1989 Jun–Aug;5(5):239–46

After the myocardial infarction: a review and approach to risk stratification. Dwyer EM Jr. **Cardiol Clin** 1988 Feb; 6(1):153–63 (63 ref.)

5–year mortality rate in patients with suspected acute myocardial infarction in relation to early diagnosis. Herlitz J, et al. **Cardiology** 1988;75(4):250–9

Risk profiling the patient after acute myocardial infarction. Hessen SE, et al. **Cardiovasc Clin** 1989;20(1):283–318 (187 ref.)

Baroreflex sensitivity, clinical correlates, and cardiovascular mortality among patients with a first myocardial infarction. A prospective study. La Rovere MT, et al. **Circulation** 1988 Oct;78(4):816–24

Short– and long–term clinical outcome after Q wave and non–Q wave myocardial infarction in a large patient population. Nicod P, et al. **Circulation** 1989 Mar; 79(3):528–36

Baroreflex impairment and sudden death after myocardial infarction [editorial] Rea RF, et al. **Circulation** 1988 Oct; 78(4):1072–4

Morbidity during five years after myocardial infarction and its relation to infarct size. Herlitz J, et al. **Clin Cardiol** 1988 Oct;11(10):672–7

Risk factors and in–hospital course of first myocardial infarction in the elderly. Robinson K, et al. **Clin Cardiol** 1988 Aug;11(8):519–23

Identification of patients at low risk of dying after acute myocardial infarction, by simple clinical and submaximal exercise test criteria. Campbell S, et al. **Eur Heart J** 1988 Sep;9(9):938–47

Long–term reduction in sudden deaths after a multifactorial intervention programme in patients with myocardial infarction: 10–year results of a controlled investigation. Hämäläinen H, et al. **Eur Heart J** 1989 Jan;10(1):55–62

Relative prognostic value of clinical, biochemical, echocardiographic and haemodynamic variables in predicting in–hospital and one–year cardiac mortality after acute myocardial infarction. Piérard LA, et al. **Eur Heart J** 1989 Jan;10(1):24–31

Early mortality in post–MI diabetics [letter] Matz R. **Hosp Pract [Off]** 1989 Jun 15;24(6):16

Environmental temperature and mortality from acute myocardial infarction. Mannino JA, et al. **Int J Biometeorol** 1989 Jan;33(1):32–5

Prognostic significance of right ventricular infarction diagnosed by ST elevation in right chest leads V3R to V7R. Andersen HR, et al. **Int J Cardiol** 1989 Jun;23(3):349–56

Effect of age on long–term prognosis of patients with myocardial infarction. Castelló R, et al. **Int J Cardiol** 1988 Aug;20(2):221–30

Unstable angina, myocardial infarction and sudden death after an exercise stress test. Ciampricotti R, et al. **Int J Cardiol** 1989 Aug;24(2):211–8

Short–term and long–term prognosis after myocardial infarction: prognostic value of coronary anatomy and left ventriculography. de Cock CC, et al. **Int J Cardiol** 1989 Aug;24(2):197–209

Which exercise test variables are of prognostic importance post–myocardial infarction? Murray DP, et al. **Int J Cardiol** 1988 Sep;20(3):353–63

Validation of a coronary prognostic index for the Chinese—a tale of three cities. Woo KS, et al. **Int J Cardiol** 1989 May; 23(2):173–8

Inducibility of sustained monomorphic ventricular tachycardia as a prognostic indicator in survivors of recent myocardial infarction: a prospective evaluation in relation to other prognostic variables. Cripps T, et al. **J Am Coll Cardiol** 1989 Aug;14(2):289–96

Implications for patient triage from survival and left ventricular functional recovery analyses in 500 patients treated with coronary angioplasty for acute myocardial infarction. Ellis SG, et al. **J Am Coll Cardiol** 1989 May; 13(6):1251–9

Computer–detected ventricular tachycardia in the coronary care unit: prognosis in patients with and without acute myocardial infarction. Feleke E, et al. **J Intern Med** 1989 Feb;225(2):117–21

Do X–ray determined cardiac volume and signs of congestive heart failure provide additional prognostic information after myocardial infarction if the left ventricular ejection fraction is known? Rollag A, et al. **J Intern Med** 1989 Apr; 225(4):267–72

Role of two–dimensional echocardiography in the prediction of in–hospital mortality after acute myocardial infarction. Sahasakul Y, et al. **J Med Assoc Thai** 1988 Jun;71(6):314–8

Short and long term mortality after acute myocardial infarction as predicted by two–dimensional echocardiography. Sahasakul Y, et al. **J Med Assoc Thai** 1989 Jun;72(6):325–30

Ischemic heart disease and acute myocardial infarction mortality among police officers. Dubrow R, et al. **J Occup Med** 1988 Aug;30(8):650–4

The impact of diabetes on survival following myocardial infarction in men vs women. The Framingham Study [published erratum appears in JAMA 1989 Apr 7;261(13):1884] Abbott RD, et al. **JAMA** 1988 Dec 16; 260(23):3456–60

Treatment–induced blood pressure reduction and the risk of myocardial infarction. Alderman MH, et al. **JAMA** 1989 Aug 18;262(7):920–4

Predicting hospital–associated mortality for Medicare patients. A method for patients with stroke, pneumonia, acute myocardial infarction, and congestive heart failure. Daley J, et al. **JAMA** 1988 Dec 23–30;260(24):3617–24

Interpreting hospital mortality data. The role of clinical risk adjustment. Jencks SF, et al. **JAMA** 1988 Dec 23–30; 260(24):3611–6

Myocardial infarction in the elderly. Vine DL. **Kans Med** 1988 Sep;89(9):244, 242

Incidence rates of fatal and nonfatal myocardial infarction in relation to the lipoprotein profile: first prospective results from the Göttingen Risk, Incidence, and Prevalence Study (GRIPS). Cremer P, et al. **Klin Wochenschr** 1988;66 Suppl 11:42–9

Discrepancies between the effects of coronary reperfusion on survival and left ventricular function [see comments] Van de Werf F. **Lancet** 1989 Jun 17;1(8651):1367–9 (25 ref.). **Comment in:** Lancet 1989 Jul 15;2(8655):153

Autopsy statistics on the relative frequency of acute myocardial infarction in the Japanese mental workers and the unemployed during the two oil–crises periods. Chang NC, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:106–19

Epidemiologic associations between hypertriglyceridemia and coronary heart disease. Austin MA. **Semin Thromb Hemost** 1988 Apr;14(2):137–42 (42 ref.)

The operational research study for the Singapore Myocardial Infarction Register. Emmanuel SC, et al. **Singapore Med J** 1988 Oct;29(5):446–57

Acute myocardial infarction and sudden death in Sioux Indians. Hrabovsky SL, et al. **West J Med** 1989 Apr; 150(4):420–2

[Mortality of patients with a history of acute myocardial infarct 3 months after the disease] Kokutsov A. **Vutr Boles** 1989;28(3):63–7 (Eng. Abstr.) **(Bul)**

[Compared predictive value of clinical variables and 24–hour Holter monitoring on survival 1 year and 4 years after myocardial infarction] André–Fouët X, et al. **Arch Mal Coeur** 1988 Jul;81(7):855–63 (Eng. Abstr.) **(Fre)**

[Acute myocardial infarct: aspects of changed mortality at the intensive care unit. Results of a prospective study from 1985 to 1987] Schäfer JH, et al. **Dtsch Med Wochenschr** 1989 Jul 28;114(30):1143–8 (Eng. Abstr.) **(Ger)**

[Mortality in 709 patients with acute myocardial infarct treated in the intensive care unit] Eichhorn P, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1398–402 (Eng. Abstr.) **(Ger)**

[The myocardial infarct status of a South German population: results of the Augsburg myocardial infarct register 1985] Löwel H, et al. **Z Kardiol** 1988 Aug;77(8):481–9 (Eng. Abstr.) **(Ger)**

[Different modalities of classification and prognostic significance of ventricular arrhythmias after acute myocardial infarct. Prospective study] Bonaduce D, et al. **G Ital Cardiol** 1988 May;18(5):384–90 (Eng. Abstr.) **(Ita)**

[Which therapy in the acute stage of myocardial infarct is in position to prolong survival?] Colombo ML, et al. **Minerva Cardioangiol** 1988 Oct;36(10):473–81 (43 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of the prognostic importance of the QT interval after myocardial infarct] Pomini G, et al. **Minerva Cardioangiol** 1988 Jun;36(6):271–5 (Eng. Abstr.) **(Ita)**

[Air pollution from the Soviet Union and mortality in Finnmark] Lund E. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1759–61 (Eng. Abstr.) **(Nor)**

[Analysis of myocardial infarction mortality in a large industrial city district] Podolecki A, et al. **Wiad Lek** 1988 May 15;41(10):624–8 (Eng. Abstr.) **(Pol)**

[Survival of patients with a history of myocardial infarction (data of a 10–year follow–up)] Volkov VS, et al. **Sov Med** 1989;(4):71–4 **(Rus)**

[Prognostic evaluation, medico–surgical therapy and the course of patients with acute myocardial infarction] Gutiérrez M, et al. **Rev Med Chil** 1988 Jul;116(7):618–25 (Eng. Abstr.) **(Spa)**

[Rapid management after myocardial infarction is essential for prognosis] Sylvén C, et al. **Lakartidningen** 1988 Nov 30;85(48):4183–5 **(Swe)**

NURSING

[Nursing care of patients with the onset of cardiovascular disease induced by post–transurethral prostatectomy] Li MY. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):334–5 **(Chi)**

PATHOLOGY

Relationship of functional recovery to scar contraction after myocardial infarction in the canine left ventricle. Choong CY, et al. **Am Heart J** 1989 Apr;117(4):819–29

Ventricular septal and free wall rupture complicating acute myocardial infarction: experience in the Multicenter Investigation of Limitation of Infarct Size. Pohjola–Sintonen S, et al. **Am Heart J** 1989 Apr; 117(4):809–18

QRS scoring and anterior and inferior MI size [letter; comment] Wagner GS, et al. **Am Heart J** 1989 Jun; 117(6):1405–6. **Comment on:** Am Heart J 1988 May;115(5):993–1001

Effects of residual stenosis on infarct size and regional transmural myocardial blood flow after reperfusion. Wilson JL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1523–9

Severity of coronary artery disease among blacks with acute myocardial infarction. Cooper R, et al. **Am J Cardiol** 1989 Apr 1;63(12):788–91

Effect of low dose acetylsalicylic acid on the frequency and hematologic activity of left ventricular thrombus in anterior wall acute myocardial infarction. Küpper AJ, et al. **Am J Cardiol** 1989 Apr 15;63(13):917–20

Rupture of the left ventricular free wall during acute myocardial infarction: analysis of 138 necropsy patients and comparison with 50 necropsy patients with acute myocardial infarction without rupture. Mann JM, et al. **Am J Cardiol** 1988 Nov 1;62(13):847–59 (21 ref.)

Effect of repeated reperfusion on the size of experimental myocardial infarction. Moscovitz M, et al. **Am J Cardiol** 1989 Jan 15;63(3):259–60

Location of an acute myocardial infarct in patients with a healed myocardial infarct: analysis of 129 patients studied at necropsy. Potkin BN, et al. **Am J Cardiol** 1988 Nov 15;62(16):1017–23

Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardial coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial infarction and unstable angina pectoris. Roberts WC. **Am J Cardiol** 1989 Aug 1;64(5):324–8

Comparison of patients with acute anterior or posterior myocardial infarcts with and without complete heart block. Hackel DB, et al. **Am J Cardiovasc Pathol** 1988;2(2):105–26

Thrombosis and infarction of the left atrial appendage in an infant: a case report. Spigel J, et al. **Am J Cardiovasc Pathol** 1988 Apr;2(1):87–90

Temporal relation between neutrophil accumulation and myocardial reperfusion injury. Smith EF 3d, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1060–8

Reduced myocardial neutrophil accumulation and infarct size following thromboxane synthetase inhibitor or receptor antagonist. Nichols WW, et al. **Angiology** 1989 Mar; 40(3):209–21

Right ventricular free wall ischemia: correlation of ischemic duration with extent of infarction in dogs. Johnston WE, et al. **Ann Thorac Surg** 1989 May;47(5):729–34

The transmural progression of the no–reflow phenomenon in globally ischemic hearts. Sheppard AJ, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):611–7

Cineangiographic and pathological features of the infarct related vessel in successful and unsuccessful thrombolysis. Onodera T, et al. **Br Heart J** 1989 May;61(5):385–9

Pathological changes after intravenous streptokinase treatment in eight patients with acute myocardial infarction. Richardson SG, et al. **Br Heart J** 1989 May; 61(5):390–5

Relation of infarct site to 15 year prognosis in patients who survived for 28 days after a first myocardial infarction. Robinson K, et al. **Br Heart J** 1988 Dec;60(6):470–3

Left ventricular volume measured rapidly by oblique magnetic resonance imaging. Underwood SR, et al. **Br Heart J** 1988 Sep;60(3):188–95

The blue infarct: a simple method for the quantification of myocardial damage in the rat. Flores CA, et al. **Braz J Med Biol Res** 1988;21(3):561–3

Lack of correlation between anatomic infarct size and ventriculographic variables following coronary occlusion in closed–chest dogs. Laurindo FR, et al. **Braz J Med Biol Res** 1988;21(5):927–38

The pathology of acute myocardial infarction: definition, location, pathogenesis, effects of reperfusion, complications, and sequelae. Waller BF. **Cardiol Clin** 1988 Feb;6(1):1–28 (137 ref.)

Topography of coronary lesions and their relation to heart weight in patients with myocardial infarction. Leone A. **Cardiologia** 1988 Aug;33(8):755–8

Quantification of myocardial infarct size after coronary reperfusion by serum cardiac myosin light chain II in conscious dogs. Isobe M, et al. **Circ Res** 1989 Sep; 65(3):684–94

"Reperfusion injury" by oxygen-derived free radicals? Effect of superoxide dismutase plus catalase, given at the time of reperfusion, on myocardial infarct size, contractile function, coronary microvasculature, and regional myocardial blood flow. Przyklenk K, et al. **Circ Res** 1989 Jan;64(1):86–96

Myocardial reperfusion, limitation of infarct size, reduction of left ventricular dysfunction, and improved survival. Should the paradigm be expanded? Braunwald E. **Circulation** 1989 Feb;79(2):441–4

Coronary sinus thrombosis in patients after heart transplantation. Urbanová D. **Cor Vasa** 1989;31(3):231–7

Aetiological and prognostic correlates of site of myocardial infarction. Bourke S, et al. **Eur Heart J** 1988 Jul;9(7):734–9

Comparison of different techniques for the postmortem diagnosis of myocardial infarction. Lachica E, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):21–6

Calcification in myocardial infarcts [editorial] Titus JL, et al. **Hum Pathol** 1989 Aug;20(8):721–2

Assessment of myocardial systolic wall thickening using nuclear magnetic resonance imaging. Peshock RM, et al. **J Am Coll Cardiol** 1989 Sep;14(3):653–9

Ultrasound integrated backscatter tissue characterization of remote myocardial infarction in human subjects. Vered Z, et al. **J Am Coll Cardiol** 1989 Jan;13(1):84–91

Correlation of electrocardiologic and pathologic findings in 100 cases of Q wave and non-Q wave myocardial infarction. Antalóczy Z, et al. **J Electrocardiol** 1988 Nov; 21(4):331–5

Method for quantification of myocardial infarction and inflammatory cell infiltration in rat cardiac tissue. Griswold DE, et al. **J Pharmacol Methods** 1988 Nov;20(3):225–35

Plaque rupture possibly induced by coronary spasm--an autopsy case of acute myocardial infarction. Morimoto S, et al. **Jpn Circ J** 1988 Nov;52(11):1286–92

Ultrastructural observation in clinical and experimental myocardial infarction, with reference to pathogenesis. Ohta M, et al. **Jpn Circ J** 1988 Jul;52(7):664–72

The percentage of the ischemic risk zone infarcting following permanent coronary occlusion is independent of ischemic zone size. Miura T, et al. **Jpn Heart J** 1988 May; 29(3):359–66

Biphasic accumulation of leukocytes in rat cardiac infarct tissue caused by leukotriene B4 and complement. Katori M, et al. **Jpn J Pharmacol** 1989 Jun;50(2):234–8

A morphometrical method to estimate isoproterenol-induced infarct size in the rat. Pérez-Cao A, et al. **Methods Find Exp Clin Pharmacol** 1989 May;11(5):309–14

Topography of coronary lesions and their relation to heart weight in infarcted patients. Leone A. **Pathologica** 1988 Jan–Feb;80(1065):105–10

Occlusive and reperfused myocardial infarcts: differentiation with Mn-DPDP--enhanced MR imaging. Saeed M, et al. **Radiology** 1989 Jul;172(1):59–64

Ultrastructure of Purkinje cells in the subendocardium and false tendons in early experimental myocardial infarction complicated by fibrillation in the dog. Sharov VG, et al. **Virchows Arch [B]** 1989;57(2):131–9

Intraluminal thrombosis of coronary arteries in fatal myocardial infarctions and in failed aortocoronary saphenous vein grafts. Kern WH. **West J Med** 1988 Oct; 149(4):426–8

[Influence of magnesium sulfate on the sizes of myocardial infarction in rabbits] Wang SR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):30–3 (Eng. Abstr.) **(Chi)**

[Time peak of creatine kinase activity in various sites of myocardial infarct] Sochman J, et al. **Cas Lek Cesk** 1989 May 12;128(20):625–7 (Eng. Abstr.) **(Cze)**

[Evaluation of infarct size using myocardial contrast echocardiography] Widimský P, et al. **Vnitr Lek** 1988 Aug; 34(8):734–44 (Eng. Abstr.) **(Cze)**

[Ulcerative defect formation following subepicardial myocardial infarct] Pollak S, et al. **Beitr Gerichtl Med** 1988; 46:417–21 (Eng. Abstr.) **(Ger)**

[Fatal re-infarct in pregnancy] Glaser D, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):656–8 (Eng. Abstr.) **(Ger)**

[Idiopathic arterial calcinosis in children. A case with arterial hypertension, heart infarct and cerebral massive hemorrhage] Hofmann WJ, et al. **Pathologe** 1989 Jul; 10(4):212–8 **(Ger)**

[Morphology of myocardial infarct] Mihatsch MJ. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1688–91 (Eng. Abstr.) **(Ger)**

[Infarct size related to the distribution and site of coronary artery lesions studied by the unfolded map technique using single photon emission computed tomography] Kamihata H, et al. **J Cardiol** 1988 Mar;18(1):31–41 (Eng. Abstr.) **(Jpn)**

[Relationship between ischemic size and infarct size in the closed-chest dog] Akizuki S, et al. **Kokyu To Junkan** 1988 Oct;36(10):1095–100 (Eng. Abstr.) **(Jpn)**

[A case report of myocardial infarction in a patient with systemic lupus erythematosus with marked atherosclerotic lesions demonstrated by autopsy] Tsuji M, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):700–4 **(Jpn)**

[The clinical and pathological study in the recurrent myocardial infarction] Toda G, et al. **Nippon Ronen Igakkai Zasshi** 1988 Sep;25(5):463–8 (Eng. Abstr.) **(Jpn)**

[Ischemic heart disease with previous epicardial coronary arteries. The heart capillaries in acute myocardial infarction] Jorge PA. **Arq Bras Cardiol** 1988 Sep; 51(3):227–30 (Eng. Abstr.) **(Por)**

[State of adrenergic innervation of intact sections of the myocardium and adrenal medulla in experimental myocardial infarction] Anikin AIu, et al. **Arkh Patol** 1988; 50(9):34–40 (Eng. Abstr.) **(Rus)**

[Morphologic characteristics of the evolution of myocardial infarct after effective thrombolytic therapy] Galankina IE. **Arkh Patol** 1988;50(7):63–70 (Eng. Abstr.) **(Rus)**

[A case of sudden death from a muscle bridge spanning the anterior interventricular branch of the left coronary artery] Liasauskaĭte VV. **Arkh Patol** 1988;50(10):67–9 (Eng. Abstr.) **(Rus)**

[The differential indicator method of determining the areas of ischemia and necrosis in experimental myocardial infarct in rats] Sernov LN, et al. **Biull Eksp Biol Med** 1989 May; 107(5):534–5 (Eng. Abstr.) **(Rus)**

[Histopathology of the myocardium in cases of sudden coronary death without myocardial infarct and postinfarct cardiosclerosis] Zhdanov VS, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):50–4 (Eng. Abstr.) **(Rus)**

[Effect of adenosine on the size of experimental myocardial infarction and "no re-flow" areas] Eliseev VV, et al. **Kardiologiia** 1988 Dec;28(12):98–9 (Eng. Abstr.) **(Rus)**

[Prognostic significance of the area of myocardial lesion and the status of the coronary bed during restoration of work capacity in patients with a complicated course of acute myocardial infarction] Golikov AP, et al. **Kardiologiia** 1989 Apr;29(4):24–7 (Eng. Abstr.) **(Rus)**

[Characteristics of the development of a necrotic area in macrofocal and microfocal myocardial infarction] Gvatua NA, et al. **Kardiologiia** 1988 Nov;28(11):112–4 **(Rus)**

[The rate of formation of necrotic focus and the severity of clinical picture in the acute period of myocardial infarction] Vinogradov AV, et al. **Kardiologiia** 1989 May; 29(5):27–30 (Eng. Abstr.) **(Rus)**

[Heart wall stability in health and mechanisms of its maintenance in myocardial infarction] Malaia LT, et al. **Vestn Akad Med Nauk SSSR** 1988;(10):13–9 (Eng. Abstr.) **(Rus)**

[Morphologic changes in the myocardium in experimental infarct treated with benzofurocaine] Grigor'eva NN, et al. **Vrach Delo** 1988 Aug;(8):36–8 (Eng. Abstr.) **(Rus)**

[A case of myocardial infarct of the right ventricle] Maliukov VM. **Vrach Delo** 1988 Aug;(8):35–6 **(Rus)**

[Determination of myocardial infarct size from the activity curve of creatine-kinase and MB-CK isoenzymes in blood] Vukosavić D, et al. **Acta Med Iugosl** 1988;42(5):337–52 (Eng. Abstr.) **(Scr)**

[Effect of conorphone on the dimensions of the myocardial infarct and the ultrastructural changes in the adjacent tissue] Nekrassov V, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):505–9 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

The relation between supraventricular tachyarrhythmias and left ventricular dysfunction after acute myocardial infarction. Zoni Berisso M, et al. **Acta Cardiol (Brux)** 1988; 43(6):689–701

Significance of ventricular ectopic activity in the early recovery phase of acute myocardial infarction. Rasmussen V, et al. **Acta Med Scand** 1988;224(5):431–7

Does the area at risk of infarction change over time? Sandhu R, et al. **Adv Exp Med Biol** 1989;248:641–52

"Non-Q wave," alias "nontransmural," myocardial infarction: a specific entity. André-Fouet X, et al. **Am Heart J** 1989 Apr;117(4):892–902 (84 ref.)

The effects of a transtelephonic surveillance and prehospital emergency intervention system on the 1-year course following acute myocardial infarction. Capone RJ, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1606–15

Influence of leukopenia on collateral flow, reperfusion flow, reflow ventricular fibrillation, and infarct size in dogs. de Lorgeril M, et al. **Am Heart J** 1989 Mar;117(3):523–32

Physiologic bases for anterior ST segment depression in patients with acute inferior wall myocardial infarction. Mirvis DM. **Am Heart J** 1988 Nov;116(5 Pt 1):1308–22 (78 ref.)

Oxygen uptake and heart rate during cross-country skiing and track walking after myocardial infarction. Oldridge NB, et al. **Am Heart J** 1989 Feb;117(2):495–7

Long-term stepwise sustained improvement in left ventricular ejection fraction after myocardial infarction. Silberberg J, et al. **Am Heart J** 1989 Mar;117(3):532–7

Functional significance of predischarge exercise thallium-201 findings following intravenous streptokinase therapy during acute myocardial infarction. Touchstone DA, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1500–7

Comparison of time- and frequency domain-based measures of cardiac parasympathetic activity in Holter recordings after myocardial infarction. Bigger JT Jr, et al. **Am J Cardiol** 1989 Sep 1;64(8):536–8

Effects of ischemia, bypass surgery and past infarction on myocardial contraction, relaxation and compliance during exercise. Carroll JD, et al. **Am J Cardiol** 1989 Mar 7; 63(10):65E–71E

Effect of intravenous metoprolol on left ventricular performance in Q-wave acute myocardial infarction. Dell'Italia LJ, et al. **Am J Cardiol** 1989 Jan 15;63(3):166–71

Safety and characteristics of exercise testing early after acute myocardial infarction. Hamm LF, et al. **Am J Cardiol** 1989 May 15;63(17):1193–7

Attenuation of neutrophil function by inhibitors of arachidonate metabolism reduces the extent of canine myocardial infarction. Hoshida S, et al. **Am J Cardiol** 1989 Mar 7;63(10):24E–28E

Is ST elevation or T inversion the most benign acute myocardial infarction? [letter] Krainin FH. **Am J Cardiol** 1989 Apr 15;63(13):1023

Effects of left ventricular shape and captopril therapy on exercise capacity after anterior wall acute myocardial infarction. Lamas GA, et al. **Am J Cardiol** 1989 May 15; 63(17):1167–73

Significance of persistent ST-elevation after healing of anterior wall acute myocardial infarction. Lindsay J Jr, et al. **Am J Cardiol** 1989 Jun 1;63(18):1404–5

New concepts in the pathophysiology of acute myocardial infarction. Pepine CJ. **Am J Cardiol** 1989 Jul 18; 64(4):2B–8B (45 ref.)

Left ventricular dysfunction in acute myocardial infarction due to isolated left circumflex coronary artery stenosis. Sheehan FH. **Am J Cardiol** 1989 Sep 1;64(8):440–7

Effects of intravenous metoprolol on global and regional left ventricular function after coronary arterial reperfusion in acute myocardial infarction. Steingart RM, et al. **Am J Cardiol** 1989 Apr 1;63(12):767–71

Regression of Q waves following acute myocardial infarction. Marcus EB, et al. **Am J Epidemiol** 1989 Jan;129(1):105–11

Analysis of healing after myocardial infarction using polarized light microscopy. Whittaker P, et al. **Am J Pathol** 1989 Apr;134(4):879–93

Effect of coronary occlusion and reperfusion on myocardial blood flow during infarct healing. Connelly CM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H365–74

Time course of hemodynamic changes in rats with healed severe myocardial infarction. DeFelice A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H289–96

Effects of 10- to 12-day treatment with L-thyroxine in rats with myocardial infarction. Gay RG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H801–6

A simple technique for occlusion and reperfusion of coronary artery in conscious rats. Himori N, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1719–25

Attenuated response to atrial natriuretic peptide in rats with myocardial infarction. Kohzuki M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H533–8

Progressive change in collateral blood flow after coronary occlusion in conscious dogs. Shen YT, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H478–85

Usefulness of immediate postexercise two-dimensional echocardiography in post-myocardial infarction patients without ischemic ECG changes in stress testing: comparison with radionuclide angiography. Pines A, et al. **Angiology** 1989 Jul;40(7):605–12

Evaluation of patients after recent acute myocardial infarction. American College of Physicians. **Ann Intern Med** 1989 Mar 15;110(6):485–8

Specialized testing after recent acute myocardial infarction. DeBusk RF. **Ann Intern Med** 1989 Mar 15;110(6):470–81 (46 ref.)

A canine model to assess the electrical stability of the transplanted heart. Levett JM, et al. **Ann Thorac Surg** 1988 Dec;46(6):631–7

Adrenocortical function in old age as reflected by plasma cortisol and ACTH test during the course of acute myocardial infarction. Jensen BA, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):289–96

Comparative effects of the antidepressants amitriptyline, mianserin and adinazolam on hemodynamics and ECG in myocardial infarcted dogs. Nishimoto M, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:98–109

Positive inotropic effects of milrinone, sulmazole and AR-L100 on isolated normal and infarcted hearts of the rat. Verrijk R, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:7–17

Risk stratification according to the initial electrocardiogram in patients with suspected acute myocardial infarction. Fesmire FM, et al. **Arch Intern Med** 1989 Jun;149(6):1294–7

Halothane anesthesia reduces inducibility of ventricular tachyarrhythmias in chronic canine myocardial infarction. Denniss AR, et al. **Basic Res Cardiol** 1989 Jan–Feb; 84(1):5–12

Coronary flow reserve and the J curve relation between diastolic blood pressure and myocardial infarction. Cruickshank JM. **BMJ** 1988 Nov 12;297(6658):1227–30

J curve relation between diastolic blood pressure and myocardial infarction [letter] Hansson L. **BMJ** 1989 Jan 7;298(6665):52

Prognostic significance of programmed ventricular stimulation in survivors of acute myocardial infarction. Bhandari AK, et al. **Br Heart J** 1989 May;61(5):410–6

Favourable long term prognosis in patients with non-Q wave acute myocardial infarction not associated with specific electrocardiographic changes. Diltiazem Reinfarction

Study Research Group. Boden WE, et al. **Br Heart J** 1989 May;61(5):396–402

Treatment of pain in acute myocardial infarction. Herlitz J, et al. **Br Heart J** 1989 Jan;61(1):9–13 (45 ref.)

Electrocardiographic evidence of myocardial salvage after thrombolysis in acute myocardial infarction. Hogg KJ, et al. **Br Heart J** 1989 Jun;61(6):489–95

Exercise testing soon after myocardial infarction: its relation to course and outcome at one year in patients aged less than 55 years. Peart I, et al. **Br Heart J** 1989 Mar; 61(3):231–7

Assessment of left ventricular function and prognosis in survivors of acute myocardial infarction using Doppler ultrasound: a comparison with radionuclide ventriculography. Singer M, et al. **Br J Clin Pract** 1987 Oct;41(10):963–6

Effects of calcium blockers on ventricular fibrillation during acute myocardial infarction. Da-Luz PL, et al. **Braz J Med Biol Res** 1988;21(4):801–10

Right ventricular contractility depression in chronically infarcted rats. Mill JG, et al. **Braz J Med Biol Res** 1988; 21(3):621–4

Electrophysiological effects of encainide and its metabolites in normal canine Purkinje fibers and Purkinje fibers surviving infarction. Kinnaird AA, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):751–6

Bradyarrhythmias, abnormalities of conduction, and indications for pacing in acute myocardial infarction. Rosenfeld LE. **Cardiol Clin** 1988 Feb;6(1):49–61 (43 ref.)

Significance of electrocardiographic abnormalities in the "lateral" leads in patients with acute inferior myocardial infarction. Mongiardo R, et al. **Cardiologia** 1988 Jul; 33(7):681–90

The pathophysiology of acute myocardial infarction. Alpert JS. **Cardiology** 1989;76(2):85–95 (76 ref.)

Noninvasive predictors of cardiac events after myocardial infarction. Complementary value of exercise testing and signal-averaged electrocardiography. Kuchar DL, et al. **Cardiology** 1989;76(1):18–31 (47 ref.)

Hemodynamics, circulating catecholamines and response to intravenous nitrate therapy in a specific subset of acute myocardial infarction: the hypertensive-hyperkinetic-coronary-active group. Rabinowitz B, et al. **Cardiology** 1988;75(4):260–8

Sinus node and atrioventricular nodal function in 220 patients recovering from acute myocardial infarction. Schuger CD, et al. **Cardiology** 1988;75(4):274–82

New concepts in the pathophysiology of acute myocardial ischemia and infarction and their relevance to contemporary management. Pepine CJ. **Cardiovasc Clin** 1989;20(1):3–18 (49 ref.)

A new technique for producing myocardial infarction using coronary artery balloon occlusion. Garner D, et al. **Cardiovasc Res** 1988 Jan;22(1):42–6

Long term spontaneous evolution of left ventricular function after experimental acute coronary occlusion. Jang IK, et al. **Cardiovasc Res** 1988 Jul;22(7):501–4

Changes in right ventricular relaxation during acute anterior myocardial infarction in pigs. Lancaster LD, et al. **Cardiovasc Res** 1989 Jan;23(1):46–52

Alterations in diastolic ventricular interdependence due to myocardial infarction. Santamore WP, et al. **Cardiovasc Res** 1988 Oct;22(10):726–31

Clinical significance of high frequency QRS potentials in myocardial infarction: analysis based on power spectrum of lead aVR. Talwar KK, et al. **Cardiovasc Res** 1989 Jan; 23(1):60–3

Endurance exercise in the presence of heart disease. Douglas PS, et al. **Chest** 1989 Mar;95(3):697–9

Diastolic time during low-level exercise in the late phase of hospitalization for acute myocardial infarction. Hasegawa T, et al. **Chest** 1989 Sep;96(3):601–5

Acute anterior wall myocardial infarction presenting with positive T waves and without ST segment shift. Electrocardiographic features and angiographic correlation. Sagie A, et al. **Chest** 1989 Jun;95(6):1211–5

Infarct artery recanalization and collateral circulation in patients with myocardial infarction. Shen WF, et al. **Chin Med J [Engl]** 1988 Dec;101(12):915–8

Circadian variations of heart rate and premature beats in healthy subjects and in patients with previous myocardial infarction. de Leonardis V, et al. **Chronobiol Int** 1987; 4(2):283–9

Electrophysiological and anatomic differences between canine hearts with inducible ventricular tachycardia and fibrillation associated with chronic myocardial infarction. Denniss AR, et al. **Circ Res** 1989 Jan;64(1):155–66

Intracellular pH of canine subendocardial Purkinje cells surviving in 1-day-old myocardial infarcts. Dresdner KP Jr, et al. **Circ Res** 1989 Sep;65(3):554–65

Effect of chronic myocardial infarction on vagal cardiopulmonary baroreflex. Minisi AJ, et al. **Circ Res** 1989 Aug;65(2):396–405

Protection against autonomic denervation following acute myocardial infarction by preconditioning ischemia. Miyazaki T, et al. **Circ Res** 1989 Mar;64(3):437–48

Importance of venodilatation in prevention of left ventricular dilatation after chronic large myocardial infarction in rats: a comparison of captopril and hydralazine. Raya TE, et al. **Circ Res** 1989 Feb;64(2):330–7

Effect of acute volume load on refractoriness and arrhythmia development in isolated, chronically infarcted canine hearts. Calkins H, et al. **Circulation** 1989 Mar;79(3):687–97

Reperfusion alters the relation between blood flow and the remaining myocardial infarction. Chu A, et al. **Circulation** 1989 Apr;79(4):884–9

Automatic and triggered impulse initiation in canine subepicardial ventricular muscle cells from border zones of 24-hour transmural infarcts. New mechanisms for malignant cardiac arrhythmias? Dangman KH, et al. **Circulation** 1988 Oct;78(4):1020–30

Early noninvasive detection of successful reperfusion in patients with acute myocardial infarction. Ellis AK, et al. **Circulation** 1988 Dec;78(6):1352–7

Stiffness of systemic arteries in patients with myocardial infarction. A noninvasive method to predict severity of coronary atherosclerosis. Hirai T, et al. **Circulation** 1989 Jul;80(1):78–86

Differing circadian patterns of symptom onset in subgroups of patients with acute myocardial infarction. Hjalmarson A, et al. **Circulation** 1989 Aug;80(2):267–75

Exercise training after experimental myocardial infarction increases the ventricular fibrillation threshold before and after the onset of reinfarction in the isolated rat heart. Posel D, et al. **Circulation** 1989 Jul;80(1):138–45

Autonomic mechanisms and sudden death. New insights from analysis of baroreceptor reflexes in conscious dogs with and without a myocardial infarction. Schwartz PJ, et al. **Circulation** 1988 Oct;78(4):969–79

The effect of oral diltiazem on left ventricular performance in postinfarction patients. Boström PA, et al. **Clin Cardiol** 1988 Nov;11(11):739–42

Coronary collateral development after acute myocardial infarction. Fujita M, et al. **Clin Cardiol** 1988 Aug; 11(8):525–8

Ischemic blocks during early phase of anterior myocardial infarction: correlation with ST-segment shift. Sclarovsky S, et al. **Clin Cardiol** 1988 Nov;11(11):757–62

Post-myocardial infarction risk assessment. Simons M, et al. **Compr Ther** 1989 Apr;15(4):71–6 (25 ref.)

Comparison of two simplified severity scores (SAPS and APACHE II) for patients with acute myocardial infarction. Moreau R, et al. **Crit Care Med** 1989 May;17(5):409–13

ECG changes and exercise tolerance in patients after myocardial infarction. Mikeš Z, et al. **Czech Med** 1989; 12(1):30–3

Early post-myocardial infarction exercise testing. Exercise response and clinical value. Saunamäki KI. **Dan Med Bull** 1988 Dec;35(6):549–64 (148 ref.)

Exercise training improves early survival rate in diabetic rats submitted to acute coronary artery ligation. Nadeau A, et al. **Diabetes Res** 1988 Sep;9(1):37–40

Magnesium, myocardial ischaemia and arrhythmias. The role of magnesium in myocardial infarction. Dubey A, et al. **Drugs** 1989 Jan;37(1):1–7 (76 ref.)

Excess fatigue as a precursor of myocardial infarction. Appels A, et al. **Eur Heart J** 1988 Jul;9(7):758–64

The role of collateral blood supply in ventricular tachycardia after myocardial infarction. Brugada P, et al. **Eur Heart J** 1988 Oct;9(10):1104–11

Patterns of maximal spatial ST vector of S-T segment elevation in the right praecordial leads of the electrocardiogram in patients with acute inferior myocardial infarction. Carson W. **Eur Heart J** 1988 Sep; 9(9):962–8

Reproducibility of cardiopulmonary exercise testing in men following myocardial infarction. Dickstein K, et al. **Eur Heart J** 1988 Sep;9(9):948–54

Prognostic value of segmental contractility assessed by cross-sectional echocardiography in first acute myocardial infarction. Domingo E, et al. **Eur Heart J** 1989 Jun; 10(6):532–7

Silent ischaemia in post-myocardial infarction patients submitted to physical training. Opasich C, et al. **Eur Heart J** 1988 Nov;9 Suppl M:22–7

Fibrin formation and platelet activation in patients with myocardial infarction and normal coronary arteries. Rapold HJ, et al. **Eur Heart J** 1989 Apr;10(4):323–33

Ventricular ectopic activity during exercise testing in patients with myocardial infarction. The relation to severity of coronary artery disease and return to work. Vermeulen A. **Eur Heart J** 1988 Nov;9 Suppl L:95–102

Dimethylthiourea, but not dimethylsulfoxide, reduces canine myocardial infarct size. Portz SJ, et al. **Free Radic Biol Med** 1989;7(1):53–8

Pathophysiology of acute myocardial infarction: a rationale for thrombolytic therapy. Misinski M. **Heart Lung** 1988 Nov;17(6 Pt 2):743–50 (36 ref.)

A study of right ventricular infarction. Kapoor N, et al. **Indian Heart J** 1987 Nov-Dec;39(6):29–33

Coronary anatomy, left ventricular function and electrocardiographic stress testing three to four weeks after first myocardial infarction. Sethi KK, et al. **Indian Heart J** 1988 Jan-Feb;40(1):51–7

Detection of multivessel coronary artery disease by early exercise testing after first myocardial infarction. Sethi KK, et al. **Indian Heart J** 1989 Jan-Feb;41(1):19–21

Q-T interval changes in acute transmural myocardial infarction. Sood K, et al. **Indian Heart J** 1989 Jan-Feb; 41(1):51–7

Temperature as a predictive criterion for myocardial infarction. Mitchell GS, et al. **Indiana Med** 1988 Oct; 81(10):837–9

Electrocardiographic correlates of hyperglycemia in acute myocardial infarction. Gokhroo R, et al. **Int J Cardiol** 1989 Feb;22(2):267–9

Streptokinase improves reperfusion blood flow after coronary artery occlusion. Mickelson JK, et al. **Int J Cardiol** 1989 Jun;23(3):373–84

Impaired parasympathetic control of heart rate after myocardial infarction. Niemelä MJ, et al. **Int J Cardiol** 1989 Sep;24(3):305–9

Effects of acute reperfusion on regional myocardial function: serial two-dimensional echocardiography assessment. Oh JK, et al. **Int J Cardiol** 1989 Feb;22(2):161–8

Evolution of the temporal contraction sequence after acute experimental myocardial infarction. Ascah KJ, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):730–6

Depolarization changes early in the course of myocardial infarction: significance of changes in the terminal portion of the QRS complex. Barnhill JE 3d, et al. **J Am Coll Cardiol** 1989 Jul;14(1):143–9

Posterior myocardial infarction revisited [editorial] Chaitman BR. **J Am Coll Cardiol** 1988 Nov;12(5):1167–8

Right ventricular performance assays: slowly coming of age. Ferlinz J. **J Am Coll Cardiol** 1989 Feb;13(2):360–2

Does exercise training deteriorate ventricular function? [letter; comment] Fisman EZ, et al. **J Am Coll Cardiol** 1989 Jul;14(1):263–4, **Comment on:** J Am Coll Cardiol 1988 Aug;12(2):362–72

The prognostic significance of quantitative signal-averaged variables relative to clinical variables, site of myocardial infarction, ejection fraction and ventricular premature beats: a prospective study. Gomes JA, et al. **J Am Coll Cardiol** 1989 Feb;13(2):377–84

Contraction pattern within ischemic-infarct zones in acute myocardial infarction [editorial] Grose R. **J Am Coll Cardiol** 1989 Mar 1;13(3):737–8

Influence of infarct age on reproducibility of ventricular tachycardia induction in a canine model. Hunt GB, et al. **J Am Coll Cardiol** 1989 Sep;14(3):765–73; discussion 774–6

Patterns of left ventricular dilation during the six months after myocardial infarction. Jeremy RW, et al. **J Am Coll Cardiol** 1989 Feb;13(2):304–10

Derived epicardial potentials differentiate ischemic ST depression from ST depression secondary to ST elevation in acute inferior myocardial infarction in humans. Kilpatrick D, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):695–702; discussion 703–4

Risk stratification in patients with first non-Q wave infarction: limited value of the early low level exercise test after uncomplicated infarcts. The Multicenter Post-Infarction Research Group. Krone RJ, et al. **J Am Coll Cardiol** 1989 Jul;14(1):31–7; discussion 38–9

Functional relation between infarct thickness and regional systolic function in the acutely and subacutely infarcted canine left ventricle. Mann DL, et al. **J Am Coll Cardiol** 1989 Aug;14(2):481–8

Increased afterload aggravates infarct expansion after acute myocardial infarction. Nolan SE, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1318–25

Exercise testing after myocardial infarction: relative values of the low level predischarge and the postdischarge exercise test. Senaratne MP, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1416–22

Cardiac adaptations to endurance training in rats with a chronic myocardial infarction. Musch TI, et al. **J Appl Physiol** 1989 Feb;66(2):712–9

Elevated blood pressure and heart rate in rats exposed to a coal-derived complex organic mixture. Sasser LB, et al. **J Appl Toxicol** 1989 Feb;9(1):47–52

Right ventricular infarction: a clinico-electrocardiographic study. Jha SK, et al. **J Assoc Physicians India** 1988 May; 36(5):303–5

Relationship between the occurrence of late potential on the body surface ECG and cardiac performance in myocardial infarction. Nakai K, et al. **J Cardiol** 1988 Mar;18(1):207–15

Influence of allopurinol plus verapamil treatment on myocardial tissue necrosis during permanent coronary occlusion in canine hearts with small infarcts. Kingma JG Jr, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):6–13

Effects of pimobendan (UD-CG 115 BS), a new positive inotropic agent, on ventricular tachycardia and ischemic ventricular fibrillation in a conscious canine model of recent myocardial infarction. Lynch JJ, et al. **J Cardiovasc Pharmacol** 1988;12(5):547–54

Acute electrophysiologic effects and antiarrhythmic/antifibrillatory activity of intravenous amiodarone in a chronic feline infarction model. Marinchak RA, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):389–95

Beta-blockade and acute experimental infarction. Schaper W. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S39–40

Adrenergic mechanisms in myocardial infarction: cardiac and systemic catecholamine release. Schömig A. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S1–7 (41 ref.)

Planarity of the spatial QRS loop. Comparative analysis in normals, infarcts, ventricular hypertrophies, and intraventricular conduction defects. Arnaud P, et al. **J Electrocardiol** 1989 Apr;22(2):143–52

Prognostic significance of signal-averaged ECGs during acute myocardial infarction: a preliminary report. Grimm M, et al. **J Electrocardiol** 1988 Aug;21(3):283–8

Arrhythmogenic effects of mexiletine in infarcted Purkinje tissues. Han J, et al. **J Electrocardiol** 1989 Jan;22(1):81–7

The natural course of electrocardiographic stages of acute inferior myocardial infarction in regard to R/Q ratio group

classification. Klainman E, et al. **J Electrocardiol** 1988 Nov; 21(4):293–301

A single ECG lead in the serial monitoring of ischemic injury and necrosis in patients with acute anterior myocardial infarction: comparison with 49–lead precordial maps and standard ECGs. Madias JE. **J Electrocardiol** 1988 Aug; 21(3):253–62

A comparison of serial 49–lead precordial ECG maps and standard 6–lead precordial ECGs in patients with acute anterior Q wave myocardial infarction. Madias JE. **J Electrocardiol** 1989 Apr;22(2):113–24

Transient ST–segment elevation in subarachnoid hemorrhage. Nakamura Y, et al. **J Electrocardiol** 1989 Apr; 22(2):133–7

Increasing precordial QRS voltage correlates with improvement in left ventricular function following anterior myocardial infarction. Salerno DM, et al. **J Electrocardiol** 1988 Nov;21(4):303–12

Prognostic significance of exercise testing three weeks after myocardial infarction. Gauri LA, et al. **J Indian Med Assoc** 1989 Mar;87(3):70–1

Action potentials of cardiac muscle in healing infarcts: response to norepinephrine and caffeine. Boyden PA, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):525–37

Myocardial dysfunction and coronary vasoconstriction induced by platelet–activating factor in the post–infarcted rabbit isolated heart. Mickelson JK, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):547–61

The impaired tolerance of the recently infarcted rat heart to cardioplegic arrest: the protective effect of orotic acid. Munsch C, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):751–4

In vitro method for measurement of cardiac performance and responses to inotropic drugs after experimentally induced myocardial infarction in the rat. Vleeming W, et al. **J Pharmacol Methods** 1989 Apr;21(2):95–102

Assessment of left ventricular function during dynamic and isometric exercise in normal subjects and myocardial infarct patients. Jetté M, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):124–31

Sensitivity of the recently infarcted heart to cardioplegic arrest. Beneficial effect of pretreatment with orotic acid. Newman MA, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):593–604

Body surface potential mapping in anterior myocardial infarction—a longitudinal study in acute, convalescent and chronic phases. Cahyadi YH, et al. **Jpn Circ J** 1989 Mar; 53(3):206–12

The correlation of the treadmill exercise test with cardiac hemodynamics in patients with previous myocardial infarction. Endo Y, et al. **Jpn Circ J** 1989 Apr;53(4):283–90

Two–dimensional echocardiography in acute myocardial infarction—relationship between left ventricular wall thickness and wall motion abnormalities. Kashiro S, et al. **Jpn Circ J** 1988 Nov;52(11):1257–67

The QRS complex of the standard 12–lead electrocardiogram in septal myocardial infarction. Saito D, et al. **Jpn Circ J** 1988 Nov;52(11):1268–76

Clinical significance of stress–induced ST segment elevation in patients with previous anterior myocardial infarction. Analysis of lactate metabolism with atrial pacing. Hiyamuta K. **Jpn Heart J** 1988 May;29(3):279–94

Clinical significance of exercise–induced negative U–waves in patients with anterior myocardial infarction. Ono S, et al. **Jpn Heart J** 1989 Mar;30(2):137–49

Changes in plasma level of alpha–atrial natriuretic polypeptide (alpha–ANP) and responsiveness of the aorta to exogenous alpha–ANP subsequent to myocardial infarction in rats. Wang YT, et al. **Jpn J Pharmacol** 1989 Apr;49(4):463–9

Stroke distance in acute myocardial infarction [letter] Eriksson P. **Lancet** 1989 Jul 29;2(8657):268–9

Spontaneous intermittent reperfusion in early myocardial infarction [letter] Gasser R. **Lancet** 1988 Nov 19; 2(8621):1189

Stroke distance in acute myocardial infarction: a simple measurement of left ventricular function. Metcalfe MJ, et al. **Lancet** 1989 Jun 17;1(8651):1371–3

Mechanism of late benefit in ISIS–2 [letter] White H. **Lancet** 1988 Oct 15;2(8616):914

Effect of captopril on ventricular dilatation after anterior myocardial infarction [letter] **N Engl J Med** 1988 Dec 29; 319(26):1736

Decreased incidence of ventricular late potentials after successful thrombolytic therapy for acute myocardial infarction. Gang ES, et al. **N Engl J Med** 1989 Sep 14; 321(11):712–6

In vivo assessment of thrombosis and fibrinolysis during acute myocardial infarction. Jaffe AS, et al. **Prog Hematol** 1987; 15:71–89 (74 ref.)

Essential fatty acid deficiency inhibits early but not late leukocyte infiltration in rabbit myocardial infarcts. Freed MS, et al. **Prostaglandins** 1989 Jul;38(1):33–44

An experimental study on isochronal ventricular mapping in acute myocardial infarction. Kinoshita E, et al. **Tokai J Exp Clin Med** 1988 Jun;13(2):109–19

Electrocardiographic and histopathologic changes developing during experimental brain death in the baboon. Novitzky D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2567–9

[Effects of acupuncture on microcirculation of acute myocardial infarction patients] Zhu BJ, et al. **Chen Tzu Yen Chiu** 1988;13(4):267–71 (Eng. Abstr.) **(Chi)**

[Power spectral analysis of heart rate in qi deficiency and both qi and yin deficiency in patients with coronary heart disease] Chen YQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):76–8, 67 (Eng. Abstr.) **(Chi)**

[Coronary artery recanalization and collateral circulation in patients with myocardial infarction] Shen WF, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):137–9, 188–9 (Eng. Abstr.) **(Chi)**

[Analysis of systolic interval and cardiac output in acute myocardial infarction patients during the recovery period] Song WT. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr;16(2):98–9 **(Chi)**

[Evaluation of left ventricular diastolic function in coronary artery disease using pulsed Doppler ultrasound] Zhu WL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun;16(3):144–6, 189 (Eng. Abstr.) **(Chi)**

[The effect isometric exertion on left ventricular function in patients after myocardial infarct] Kozák P, et al. **Cas Lek Cesk** 1989 Feb 3;128(6):165–7 (Eng. Abstr.) **(Cze)**

[Changes in left ventricular contractility in acute myocardial infarct in the echocardiographic picture] Toman J, et al. **Cesk Fysiol** 1988;37(6):563–6 **(Cze)**

[Comparison of changes in the mobility of the left ventricular wall with coronarographic findings in patients after myocardial infarct] Elbl L, et al. **Vnitr Lek** 1989 May; 35(5):425–32 (Eng. Abstr.) **(Cze)**

[Comparison of the QRS score and the left ventricular ejection fraction in patients after acute myocardial infarct] Janoušek S, et al. **Vnitr Lek** 1989 May;35(5):417–24 (Eng. Abstr.) **(Cze)**

[Right ventricular myocardial infarction. Prognostic significance of ST elevation in right chest leads V3R–V7R in patients with acute inferior/posterior myocardial infarction] Andersen HR, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1984–6 (Eng. Abstr.) **(Dan)**

[Value of the endothelium–derived relaxant factor as a mediator in vascular regulation. Effect of the vascular endothelium on vascular tone and thrombocyte function] Bassenge E, et al. **Fortschr Med** 1988 Jul 10;106(20):428–30 (21 ref.) (Eng. Abstr.) **(Ger)**

[Acute myocardial infarct: myosin–light–chain liberation and ventricular function] Katus HA, et al. **Klin Wochenschr** 1988 Sep 1;66(17):784–9 (Eng. Abstr.) **(Ger)**

[Relation of elevated ST segment in the electrocardiogram to echocardiography determined wall kinetics in patients after myocardial infarct] Schaller K, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):580–3 (Eng. Abstr.) **(Ger)**

[Uses and risks of hemodynamic monitoring by inflow catheter in acute myocardial infarct] Buchwalsky R. **Z Kardiol** 1988;77 Suppl 4:3–10 (8 ref.) (Eng. Abstr.) **(Ger)**

[Non–invasive Doppler sonographic measurement of left ventricular end–diastolic pressure] Störk T, et al. **Z Kardiol** 1988 Dec;77(12):767–73 (Eng. Abstr.) **(Ger)**

[Myocardial creatinine kinase liberation and left ventricular function in myocardial infarct with and without collateral blood supply] Wolf R, et al. **Z Kardiol** 1988 Aug; 77(8):490–6 (Eng. Abstr.) **(Ger)**

[Effect of tourniquet occlusion on peripheral blood pooling and ventricular function] Klein HO, et al. **Harefuah** 1989 Jan 1;116(1):32–4 (Eng. Abstr.) **(Heb)**

[Non–invasive determination and follow up of circulatory parameters by means of impedance cardiography] Gömöry A, et al. **Orv Hetil** 1988 Sep 25;129(39):2083–9 (Eng. Abstr.) **(Hun)**

[Symptomless (silent) myocardial ischemia and its prognostic significance] Jánosi A, et al. **Orv Hetil** 1989 Feb 26; 130(9):453–5 (Eng. Abstr.) **(Hun)**

[Transient electrocardiographic aspect of left bundle–branch block with right axial deviation appearing during lateral subendocardial infarct] Livi A, et al. **Cardiologia** 1988 Jun; 33(6):629–33 (9 ref.) (Eng. Abstr.) **(Ita)**

[Respective contribution of the interventricular septum and free wall of the right ventricle to right ventricular contractile function in acute inferior myocardial infarction] Palagi B, et al. **Cardiologia** 1988 May;33(5):525–9 (Eng. Abstr.) **(Ita)**

[Effects of vagal stimulation in conscious dogs with previous myocardial infarct] Stramba–Badiale M, et al. **Cardiologia** 1988 May;33(5):481–3 (Eng. Abstr.) **(Ita)**

[Prognostic meaning of the echo–dipyridamole test in recent non–Q myocardial infarct] Fiorini G, et al. **G Ital Cardiol** 1989 Mar;19(3):207–12 (Eng. Abstr.) **(Ita)**

[Comparison of two–dimensional echocardiography, angiocardioscintigraphy and cineventriculography in the study of left ventricular wall motion in ischemic cardiopathy] Spinnler MT, et al. **G Ital Cardiol** 1988 Jun; 18(6):456–64 (Eng. Abstr.) **(Ita)**

[Persistent changes in ST and T waves: non Q infarction? (letter)] Zambaldi G. **G Ital Cardiol** 1988 Sep;18(9):809–10 **(Ita)**

[Evaluation of different electrocardiographic scores (QRS score) for estimating the ejection fraction of the left ventricle after acute myocardial infarct] Canziani R, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):11–8 (Eng. Abstr.) **(Ita)**

[Prognostic value of the E–SIV distance, measured on discharge from the hospital, in patients surviving an acute primary myocardial infarction] Salici G, et al. **Minerva Cardioangiol** 1988 Sep;36(9):425–31 (Eng. Abstr.) **(Ita)**

[Respiratory changes of superior vena cava flow velocity in old myocardial infarction with severe left ventricular dysfunction] Iuchi K, et al. **J Cardiol** 1988 Mar;18(1):99–104 (Eng. Abstr.) **(Jpn)**

[Blood flow patterns in the left ventricle in patients with myocardial infarction and ventricular aneurysm: evaluation using real–time two–dimensional Doppler echocardiography] Konishiike A, et al. **J Cardiol** 1987 Dec; 17(4):671–82 (Eng. Abstr.) **(Jpn)**

[Evaluation of right ventricular function in severe left ventricular failure: comparison of old myocardial infarction with dilated cardiomyopathy] Kubota Y, et al. **J Cardiol** 1987 Dec;17(4):731–40 (Eng. Abstr.) **(Jpn)**

[Regional myocardial perfusion in ischemic heart disease assessed by myocardial contrast echocardiography] Lim YJ, et al. **J Cardiol** 1988 Mar;18(1):21–30 (Eng. Abstr.) **(Jpn)**

[Hemodynamic response to diurnal activities of patients with myocardial infarction evaluated by ambulatory monitoring of systolic time intervals using ear densitography] Matsutani M, et al. **J Cardiol** 1988 Mar;18(1):55–65 (Eng. Abstr.) **(Jpn)**

[Clinical significance of precordial ST segment depression during acute inferior myocardial infarction] Nishian K, et al. **J Cardiol** 1988 Mar;18(1):67–77 (Eng. Abstr.) **(Jpn)**

[Regional myocardial blood flow quantitatively measured using O–15 water and dynamic positron emission tomography] Takahashi A, et al. **J Cardiol** 1987 Dec; 17(4):741–8 (Eng. Abstr.) **(Jpn)**

[Quantitative analysis of left ventricular wall motion at exercise stress in myocardial infarction with single vessel coronary artery disease—difference in response according to site of infarction] Kodera K. **Kaku Igaku** 1988 Jul; 25(7):615–24 (Eng. Abstr.) **(Jpn)**

[Relationship between left atrial diameter and cardiac function in myocardial infarction—assessment of left ventricular end–diastolic pressure by the left atrial index] Ishikawa T, et al. **Kokyu To Junkan** 1989 Jun;37(6):657–61 (Eng. Abstr.) **(Jpn)**

[Experimental study of renal blood flow and renal function during LVAD assistance] Kurihara K. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2372–9 (Eng. Abstr.) **(Jpn)**

[Effect of left ventricular assist device on myocardial ischemic injury—analysis of epicardial mapping electrocardiography and myocardial regional blood flow] Yamamoto T. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2363–71 (Eng. Abstr.) **(Jpn)**

[The usefulness of the cardio–renal subset to predict early prognosis in acute myocardial infarction] Shimai S. **Nippon Ronen Igakkai Zasshi** 1988 Nov;25(6):610–20 (Eng. Abstr.) **(Jpn)**

[The hypothalamo–hypophyseal–gonadal system in men with myocardial infarction] Słowińska–Srzednicka J, et al. **Endokrynol Pol** 1987;38(6):429–37 (Eng. Abstr.) **(Pol)**

[Evaluation of the left–ventricular function using poly–, echo– and radiocardiography in patients with uncomplicated myocardial infarction] Kozłowska F, et al. **Kardiol Pol** 1988;31 Suppl 1:60–7 (Eng. Abstr.) **(Pol)**

[ST segment depression in precordial derivations in acute myocardial infarction of the inferior wall] Campos Filho O, et al. **Arq Bras Cardiol** 1988 Sep;51(3):217–25 (Eng. Abstr.) **(Por)**

[Participation of the opioid–ergic system in the regulation of afferent reactions of the damaged myocardium] Bilibin DP, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):415–7 (Eng. Abstr.) **(Rus)**

[Mechanisms of the anomalous activity of the Purkinje fibers in the late stage of experimental myocardial infarct in dogs] Aniukhovskiĭ EP, et al. **Biull Vsesoluznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):35–41 (Eng. Abstr.) **(Rus)**

[Appearance of pathologic diastolic impedance wave during exercise test as a sign of physical exertion intolerance in patients in the early period of myocardial infarction] Al'khimovich VM. **Kardiologiia** 1988 Jul;28(7):14–8 (Eng. Abstr.) **(Rus)**

[Phenomenon of premature opening of the pulmonary valves in patients with left– and right–ventricular myocardial infarction] Denisenko BA, et al. **Kardiologiia** 1988 Sep; 28(9):88–9 **(Rus)**

[Changes in systemic and regional hemodynamics in the acute period of myocardial infarction in conscious rabbits] Dugin SF, et al. **Kardiologiia** 1989 May;29(5):72–5 (Eng. Abstr.) **(Rus)**

[Left–ventricular function and physical exertion tolerance in patients with myocardial infarction with isolated lesion of the coronary arteries] Golikov AP, et al. **Kardiologiia** 1989 Jan;29(1):59–62 (Eng. Abstr.) **(Rus)**

[Effect of preliminary adaptation to long–term stress on disorders of the contractile function of the heart in experimental infarction] Kuznetsov VI, et al. **Kardiologiia** 1989 Feb;29(2):89–91 **(Rus)**

[Hemodynamics of the right region of the heart in patients with a history of left–ventricular infarction] Markarian SS, et al. **Kardiologiia** 1989 Mar;29(3):89–90 **(Rus)**

[Value of statistical analysis of cardiac rhythm for the prognosis of electric instability in patients with acute myocardial infarction] Matusova AP, et al. **Kardiologiia** 1989 Mar;29(3):27–30 (Eng. Abstr.) **(Rus)**

[Characteristics of the course of posterior diaphragmatic myocardial infarction in patients with depression of the ST segment in precordial ECG leads] Popov VG, et al. **Kardiologiia** 1988 Nov;28(11):50–4 (Eng. Abstr.) **(Rus)**

[Effect of adaptation to stress exposures on the cholino- and adrenoreactivity of the atria and their content of acetylcholine in rats with myocardial infarct] Pshennikova MG, et al. **Kardiologiia** 1988 Aug;28(8):82–6 (Eng. Abstr.) **(Rus)**

[Exocrine and endocrine functions of the pancreas in acute myocardial infarct] Gurevich RA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):65–9 (Eng. Abstr.) **(Rus)**

[Various rhythmologic precursors of terminal arrhythmia in patients with myocardial infarct] Oparin AA, et al. **Klin Med (Mosk)** 1989 Mar;67(3):58–61 (Eng. Abstr.) **(Rus)**

[Characteristics of cardiac insufficiency in myocardial infarction in the pre-rupture period] Golikov AP, et al. **Ter Arkh** 1988;60(7):17–20 (Eng. Abstr.) **(Rus)**

[Functional state of the neuroendocrine system in men after myocardial infarction in the period of rehabilitation] Kurbanov VA, et al. **Ter Arkh** 1988;60(9):57–61 (Eng. Abstr.) **(Rus)**

[Intracardiac hemodynamics of patients with a history of repeated myocardial infarct] Golovkov IuZh. **Vrach Delo** 1988 Sep;(9):44–7 (Eng. Abstr.) **(Rus)**

[Prognostic value of cardiac rhythm in acute myocardial infarction] Selivonenko VG, et al. **Vrach Delo** 1989 May;(5):20–2 (Eng. Abstr.) **(Rus)**

[Use of 35-lead mapping of the precordium in the evaluation of left ventricular function in patients after myocardial infarct] Zachar A, et al. **Bratisl Lek Listy** 1989 Apr;90(4):256–62 (Eng. Abstr.) **(Slo)**

[Vectorcardiographic diagnosis of the myocardial inactivatable zone] de Micheli A, et al. **Arch Inst Cardiol Mex** 1989 Mar–Apr;59(2):195–210 (35 ref.) (Eng. Abstr.) **(Spa)**

[Diagnosis of an inactivable myocardial zone in the presence of left intraventricular block] de Micheli A, et al. **Arch Inst Cardiol Mex** 1988 Sep–Oct;58(5):461–73 (Eng. Abstr.) **(Spa)**

[The Wenckebach phenomenon in patients with acute myocardial infarction] Férez S, et al. **Arch Inst Cardiol Mex** 1988 May–Jun;58(3):209–14 (Eng. Abstr.) **(Spa)**

[A low-level stress test, in the early phase of myocardial infarction and its correlation with coronary angiography] Kuri J, et al. **Arch Inst Cardiol Mex** 1989 May–Jun; 59(3):279–86 (Eng. Abstr.) **(Spa)**

[Study of thyroid function parameters and thyrotropin in general non-thyroid diseases] Gómez JM, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):5–9 (Eng. Abstr.) **(Spa)**

[Normal regional contractility by 2-dimensional echocardiography 1 year after acute myocardial infarction] Alonso Gómez AM, et al. **Rev Esp Cardiol** 1988 Dec; 41(10):590–5 (Eng. Abstr.) **(Spa)**

[Ischemic cardiopathy (XIV). Microvascular changes during myocardial ischemia and reperfusion] Fernández Avilés F, et al. **Rev Esp Cardiol** 1989 Apr;42(4):267–73 (49 ref.) **(Spa)**

PREVENTION & CONTROL

Antithrombotic therapy in the primary prevention of acute myocardial infarction. Miller GJ. **Am J Cardiol** 1989 Jul 18;64(4):29B–32B

Can differences in cerebral and coronary autoregulation and O2-extraction explain why antihypertensive treatment prevents stroke but not myocardial infarction? Strandgaard S, et al. **Ann Clin Res** 1988;20 Suppl 48:10–3

Non-Q-wave myocardial infarction: pathophysiology, prognosis, and therapeutic strategy. Gibson RS. **Annu Rev Med** 1989;40:395–410 (90 ref.)

Additional myocardial salvage by coadministration of the epoprostenol analog taprostene to recombinant single-chain urokinase-type plasminogen activator in a canine coronary thrombosis model. Groves R, et al. **Arzneimittelforschung** 1989 Apr;39(4):534–8

Aspirin and prevention of myocardial infarction. Hartney TJ. **Biomed Pharmacother** 1989;43(2):73–7 (45 ref.)

Who is testing for cholesterol testing? [letter] **BMJ** 1989 Jul 15;299(6692):180–1

Myocardial salvage with allopurinol during 24 h of permanent coronary occlusion: importance of pretreatment. Kingma JG Jr, et al. **Can J Cardiol** 1988 Oct;4(7):360–5

Experimental coronary artery spasm–induced thrombosis and myocardial infarction prevented by intravenous nifedipine. A study of hemodynamics, electrocardiograms, biochemistry and pathology. Jiang YQ, et al. **Chin Med J [Engl]** 1988 Oct;101(10):761–7

Myocardial protection during coronary angioplasty with an autoperfusion balloon catheter in humans. Quigley PJ, et al. **Circulation** 1988 Nov;78(5 Pt 1):1128–34

Variants of the course of ischaemic heart disease, its incidence and the level of main risk factors. Results of a two-stage screening trial in a male population. Lipovetsky BM, et al. **Cor Vasa** 1989;31(2):90–7

Diet and reinfarction trial (DART): design, recruitment, and compliance. Burr ML, et al. **Eur Heart J** 1989 Jun; 10(6):558–67

Effects of alinidine on survival and infarct size in rats with coronary artery occlusion. Reichhalter R, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):75–81

Anturan for secondary prophylaxis of myocardial infarction. Bokarev IN, et al. **Folia Haematol (Leipz)** 1988;115(4):595–8

Treatment strategies after successful thrombolysis in acute myocardial infarction. Ramsden CS. **Heart Lung** 1988 Nov; 17(6 Pt 2):777–82

Metabolic disturbances after coronary occlusion. Neely JR. **Hosp Pract [Off]** 1989 Apr 15;24(4):81–5, 90–6

Reduction of size of myocardial infarction with nicorandil, a new antianginal drug, after coronary artery occlusion in dogs. Endo T, et al. **J Cardiovasc Pharmacol** 1988; 12(5):587–92

Secondary prevention trials after myocardial infarction. Furberg CD. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S83–7 (28 ref.)

Cardiac hypertrophy and salt status in chronic myocardial infarction in the rat: effects of enalapril versus salt restriction. Hodsman GP, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):467–72

Prevention of reinfarction subsequent to non-Q-wave infarction. Roberts R, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 1:S36–46

Why has the primary prevention of myocardial infarction in the treatment of hypertension been so elusive? Cruickshank JM. **J Hum Hypertens** 1987 Sep;1(2):73–81 (81 ref.)

Effects of changes in fat, fish, and fibre intakes on death and myocardial reinfarction: diet and reinfarction trial (DART). Burr ML, et al. **Lancet** 1989 Sep 30; 2(8666):757–61

The Canadian American Ticlopidine Study (CATS) in thromboembolic stroke. Gent M, et al. **Lancet** 1989 Jun 3;1(8649):1215–20

Aspirin and primary prophylaxis in myocardial infarction [letter] Horton RC, et al. **Lancet** 1989 Sep 30;2(8666):800

Aspirin for prevention of myocardial infarction and stroke. **Med Lett Drugs Ther** 1989 Aug 25;31(799):77–9

Failure of thromboxane synthetase inhibition to protect the postinfarcted heart against the induction of ventricular tachycardia and ventricular fibrillation in a conscious canine model of sudden coronary death. Kitzen JM, et al. **Pharmacology** 1988;37(3):171–86

Acute myocardial infarction. The primary care physician as gatekeeper. Fowles RE. **Postgrad Med** 1988 Nov 15; 84(7):89–91, 94–6, 109–11

[Streptokinase in impending heart infarct (published erratum appears in Ned Tijdschr Geneeskd 1989 Apr 15;133(15):800)] Kiemeneij F, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):366–8 (Eng. Abstr.) **(Dut)**

[Secondary prevention of coronary disease using drugs] Follath F. **Rev Med Suisse Romande** 1988 Oct; 108(10):893–7 **(Fre)**

[The inadequate status of information of interested lay persons about the educational campaign regarding risk factors for cardiovascular diseases] Eber B, et al. **Acta Med Austriaca** 1989;16(1):19–22 (Eng. Abstr.) **(Ger)**

[Catalog of possibilities for decreasing coronary risk? Is the effort worth it?] **Fortschr Med** 1988;106 Suppl 46:16–9 **(Ger)**

[Emergency bypass operation following unsuccessful percutaneous transluminal coronary angioplasty: how important is ischemia time in preventing an infarct?] Bertschmann W, et al. **Helv Chir Acta** 1988 Nov; 55(4):509–14 (Eng. Abstr.) **(Ger)**

[Prevention of myocardial infarct with nitrates, beta blockers and calcium antagonists] Silber S. **Internist (Berlin)** 1989 May;30(5):322–30 (53 ref.) **(Ger)**

[Optimal dosage of acetylsalicylic acid. I: Use in primary and secondary prevention of myocardial infarct and following aortocoronary bypass operation] Zichner R, et al. **Med Klin** 1989 Jan 15;84(1):43–51 (37 ref.) **(Ger)**

[Current problems in the prevention of sudden cardiac death] Anders G. **Z Gesamte Inn Med** 1989 Jan 15;44(2):38–41 (27 ref.) (Eng. Abstr.) **(Ger)**

[Secondary prevention in the post-infarction period] Corea L, et al. **Cardiologia** 1989 Feb;34(2):127–33 (34 ref.) **(Ita)**

[Use of allopurinol for the protection of the myocardium from ischemia during aortocoronary bypass] Bochenek A, et al. **Kardiol Pol** 1988;31(9):569–75 (Eng. Abstr.) **(Pol)**

[Coronary collateral circulation: factors influencing its effect on the myocardium in cases of occluded arteries] Demkow M, et al. **Kardiol Pol** 1988;31(9):545–53 (Eng. Abstr.) **(Pol)**

[Effect of preliminary administration of alpha-tocopherol and intal on the course of experimental myocardial necrosis] Matevosian RSh, et al. **Kardiologiia** 1989 Apr;29(4):94–6 (Eng. Abstr.) **(Rus)**

[Possibility of preventing myocardial infarction] Ado MA, et al. **Klin Med (Mosk)** 1989 May;67(5):32–4 **(Rus)**

[Cardioprotective effect of carnitine and its synthetic analog 3-(2,2,2-trimethylhydrazinium) propionate in rats with experimental myocardial infarction] Ianson TM, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):122–5 (Eng. Abstr.) **(Rus)**

[Secondary prevention after myocardial infarction—beta blockade and acetylsalicylic acid is the basic therapy] Bergstrand R, et al. **Lakartidningen** 1989 Jan 4; 86(1–2):47–50 **(Swe)**

[Beta blockade after myocardial infarction or not?] Hjalmarson A. **Lakartidningen** 1988 Oct 12;85(41):3368–9 **(Swe)**

[Do beta blockaders prevent myocardial infarction?] Lithell H. **Lakartidningen** 1989 Jan 4;86(1–2):37–8 **(Swe)**

[Treatment with beta-blockaders after infarction—selection of patients, time and economics] Olsson G, et al. **Lakartidningen** 1988 Oct 5;85(40):3265–6 **(Swe)**

[Can the number of myocardial infarctions be reduced by improving the psychosocial work environment?] Theorell T, et al. **Lakartidningen** 1989 Apr 19;86(16):1455–6 **(Swe)**

PSYCHOLOGY

The nature and course of depression following myocardial infarction. Schleifer SJ, et al. **Arch Intern Med** 1989 Aug; 149(8):1785–9

Risk factors for myocardial infarction: the importance of relaxation. Wielgosz AT, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):209–17

Reasons for patients' delay in response to symptoms of acute myocardial infarction. Wielgosz AT, et al. **Can Med Assoc J** 1988 Nov 1;139(9):853–7

Psychological effects of training in coronary patients: a critical review of the literature. Langosch W. **Eur Heart J** 1988 Nov;9 Suppl M:37–42 (22 ref.)

Practical aspects of identifying and correcting worksite stress in post-infarction patients returning to work. Stolz I, et al. **Eur Heart J** 1988 Nov;9 Suppl L:82–3

Changes in smoking behavior after a myocardial infarction. Havik OE, et al. **Health Psychol** 1988;7(5):403–20

Emotional upset after myocardial infarction—how should it be conceptualised and measured? Philip AE. **Int J Rehabil Res** 1987;10(4 Suppl 5):191–5

Living with a history of a heart attack: a human science investigation. Ford JS. **J Adv Nurs** 1989 Mar;14(3):173–9

A randomized controlled trial of in-hospital nursing support for first time myocardial infarction patients and their partners: effects on anxiety and depression. Thompson DR. **J Adv Nurs** 1989 Apr;14(4):291–7

Myocardial infarction and denial [letter] Cheng TO. **J Fam Pract** 1989 Aug;29(2):136

Myocardial infarction and denial. Fields KB. **J Fam Pract** 1989 Feb;28(2):157–61

A sentimental journey postponed. Arnold PC. **Med J Aust** 1989 Jun 5;150(11):652, 655

Helping patients cope with the stress of myocardial infarction. Lawrence SA, et al. **Nurs Forum** 1987–88; 23(3):92–100

Sexual counseling of couples after a mastectomy or myocardial infarction. Whipple B. **Nurs Forum** 1987–88; 23(3):85–91

Major depressive disorder predicts cardiac events in patients with coronary artery disease. Carney RM, et al. **Psychosom Med** 1988 Nov–Dec;50(6):627–33

Self-assessment of health before and after a myocardial infarction. Maeland JG, et al. **Soc Sci Med** 1988; 27(6):597–605

Three conflicts as a result of causal attributions. ten Kroode H, et al. **Soc Sci Med** 1989;28(1):93–7

Marriage and the psychological consequences of a heart attack: a longitudinal study of adaptation to chronic illness after 3 years. Waltz M, et al. **Soc Sci Med** 1988;27(2):149–58

Perceived uncertainty and coping post myocardial infarction. Webster KK, et al. **West J Nurs Res** 1988 Aug; 10(4):384–400

[Patient behavior and length of the prehospital phase in myocardial infarction] Frohner K, et al. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):855–60 (Eng. Abstr.) **(Ger)**

[Psychological management of heart patients and their relatives in the pre- and postoperative phases: experiences from a 2 year model trial] Esser P, et al. **Rehabilitation (Stuttg)** 1989 Feb;28(1):1–9 (Eng. Abstr.) **(Ger)**

[Coronary risk factors and their relation to psychosocial factors in females with myocardial infarct] Meyer K, et al. **Soz Praventivmed** 1988;33(3):155–61 (Eng. Abstr.) **(Ger)**

[A case report on the phenomenology and psychodynamics of pain in acute myocardial infarct] Faller H. **Z Klin Psychol Psychopathol Psychother** 1989;37(2):218–27 (Eng. Abstr.) **(Ger)**

[Illness specificity and coping with illness—an empirical comparison of dialysis and heart infarct patients] Muthny FA. **Z Psychosom Med Psychoanal** 1988;34(3):259–73 (Eng. Abstr.) **(Ger)**

[Coronary Care Unit: an approach to potential hazards of a psychopathological order] Fragasso G, et al. **Cardiologia** 1988 Sep;33(9):829–31 **(Ita)**

[GISSI 2. Evaluation of the influence of psychological and behavioral determinants on the evolution of acute myocardial infarction] **G Ital Cardiol** 1989 Jan;19(1):81 **(Ita)**

[Personality, cancer and myocardial infarction—new research results] Gråwe RW, et al. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1662–4 (Eng. Abstr.) **(Nor)**

[Might a myocardial infarction be a positive experience?] Smith P, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30; 108(27):2243–5 (Eng. Abstr.) **(Nor)**

[Changes in various personality features in patients with

myocardial infarction after 1-month sanatorium rehabilitation] Nasiłowska-Barud A, et al. **Wiad Lek** 1988 Nov 1;41(21):1421-6 (Eng. Abstr.) (Pol)

[Evaluation of various psychosomatic syndromes in patients with acute myocardial infarction and diabetes mellitus] Nasiłowska-Barud A, et al. **Wiad Lek** 1988 Jul 1; 41(13):837-41 (Eng. Abstr.) (Pol)

[A method of rapid psychological diagnosis of patients with a history of myocardial infarction] Zaĭtsev VP, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):67-72 (Eng. Abstr.) (Rus)

[Clinical characteristics of neurotic and neurosis-like states in patients with acute myocardial infarct] Matveev VF, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):57-60 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Angiographic characteristics of the infarct-related coronary artery in patients with angina pectoris after myocardial infarction. Lange RA, et al. **Am J Cardiol** 1989 Aug 1; 64(5):257-60

Evaluation of myocardial perfusion abnormality by profile analysis for digital subtraction angiogram. Takeda T, et al. **Angiology** 1989 Mar;40(3):175-80

Ultrafast cardiac CT scanning. Rumberger JA, et al. **Cardiol Clin** 1989 Aug;7(3):713-34 (49 ref.)

'Programmed' left ventricular angiography: a new method for assessing left ventricular compliance. Di Donato M, et al. **Cardiology** 1988;75(5):328-37

Myocardial infarction and sudden death after sport: acute coronary angiographic findings. Ciampricotti R, et al. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):193-7

Coronary angiography during acute myocardial infarction in dogs. A comparison of the hemodynamic effects of ionic and nonionic contrast media. Piao ZE, et al. **Chin Med J [Engl]** 1988 Nov;101(11):828-32

Can coronary angiography predict the site of a subsequent myocardial infarction in patients with mild-to-moderate coronary artery disease? Little WC, et al. **Circulation** 1988 Nov;78(5 Pt 1):1157-66

Angiographic features in the infarct-related artery after intracoronary urokinase followed by prolonged anticoagulation. Role of ruptured atheromatous plaque and adherent thrombus in acute myocardial infarction in vivo. Nakagawa S, et al. **Circulation** 1988 Dec;78(6):1335-44

A decision scheme for coronary angiography after acute myocardial infarction. Ross J Jr, et al. **Circulation** 1989 Feb;79(2):292-303

A comparison of radionuclide and contrast left ventriculography and coronary angiography in patients after myocardial infarction. Kasalický J, et al. **Cor Vasa** 1989;31(3):169-78

When should angiography follow myocardial infarction? Vlietstra RE. **Hosp Pract [Off]** 1989 Aug;24 Suppl 1:18-23; discussion 28-32

Normal coronary arteries in myocardial infarction, typical and atypical angina. Gupta SR, et al. **Indian Heart J** 1987 Nov-Dec;39(6):24-8

Combined apical hypertrophic cardiomyopathy and acute myocardial infarction with coronary stenosis. Yano A, et al. **Int J Cardiol** 1988 Oct;21(1):74-6

[X-ray changes in the thoracic organs in acute heart infarct] Reinbold WD, et al. **Radiologe** 1988 Sep;28(9):417-21 (Eng. Abstr.) (Ger)

[Angiographic diagnosis of hemorrhagic myocardial infarct] Zingerman LS, et al. **Vestn Rentgenol Radiol** 1989 Jan-Feb; (1):19-24 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

The contribution of 99mTc-pyrophosphate tomoscintigraphy in the evaluation of necrotic myocardial lesions. Bourgeois P, et al. **Acta Cardiol** 1989;44(3):195-202

Planar positron imaging of rubidium-82 for myocardial infarction: a comparison with thallium-201 and regional wall motion. Williams KA, et al. **Am Heart J** 1989 Sep; 118(3):601-10

Measurement of acute Q-wave myocardial infarct size with single photon emission computed tomography imaging of indium-111 antimyosin. Antunes ML, et al. **Am J Cardiol** 1989 Apr 1;63(12):777-83

Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction. Berman DS, et al. **Am J Cardiol** 1989 Jul 18;64(4):9B-16B

Usefulness of ambulatory radionuclide monitoring of left ventricular function early after acute myocardial infarction for predicting residual myocardial ischemia. Breisblatt WM, et al. **Am J Cardiol** 1988 Nov 15;62(16):1005-10

Myocardial infarction determined by technetium-99m pyrophosphate single-photon tomography complicating elective coronary artery bypass grafting for angina pectoris. Burns RJ, et al. **Am J Cardiol** 1989 Jun 15;63(20):1429-34

Increased fluorine-18 deoxyglucose uptake after percutaneous transluminal coronary angioplasty in recently infarcted myocardium. Hashimoto T, et al. **Am J Cardiol** 1989 Mar 15;63(11):743-4

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction. van Vlies B, et al. **Am J Cardiol** 1989 Jul 15;64(3):167-71

Diagnosis of acute myocardial infarction by indium-111 antimyosin antibodies and correlation with the traditional techniques for the evaluation of extent and localization. Volpini M, et al. **Am J Cardiol** 1989 Jan 1;63(1):7-13

Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event. Younis LT, et al. **Am J Cardiol** 1989 Jul 15;64(3):161-6

Differentiation between infarction and cardiomyopathy in left bundle branch block by parametric radionuclide imaging. Henze E, et al. **Am J Physiol Imaging** 1988;3(3):121-7

Differential sensitivity of radionuclide ventriculography for the detection of anterior and inferior infarction. Underwood SR, et al. **Br Heart J** 1988 Nov;60(5):411-6

New developments in the field of acute myocardial infarction imaging [letter] Jain D, et al. **Br J Radiol** 1989 Mar; 62(735):294-5

Positron emission tomography in clinical cardiology. Brunken RC, et al. **Cardiol Clin** 1989 Aug;7(3):607-29 (104 ref.)

New radionuclide agents for cardiac imaging: description and application. Kahn JK, et al. **Cardiol Clin** 1989 Aug; 7(3):589-605 (58 ref.)

The role of nuclear cardiology in assessment of acute myocardial infarction. Kayden DS, et al. **Cardiol Clin** 1988 Feb;6(1):81-95 (105 ref.)

Radionuclide diagnosis and assessment of acute myocardial infarction. Gibson RS. **Cardiovasc Clin** 1989;20(1):155-71 (75 ref.)

Underestimation of residual ischemia by 201-thallium scintigraphy after myocardial infarction. Galli M, et al. **Chest** 1988 Oct;94(4):876-8

Quantification of infarct size by 201Tl single-photon emission computed tomography during acute myocardial infarction in humans. Comparison with enzymatic estimates. Mahmarian JJ, et al. **Circulation** 1988 Oct;78(4):831-9

Scintigraphic and electrophysiological evidence of canine myocardial sympathetic denervation and reinnervation produced by myocardial infarction or phenol application. Minardo JD, et al. **Circulation** 1988 Oct;78(4):1008-19

Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381

Dipyridamole-thallium 201 scintigraphy in the early post-infarction period. (Safety and accuracy in predicting the extent of coronary disease and future recurrence of angina in patients suffering from their first myocardial infarction). Pirelli S, et al. **Eur Heart J** 1988 Dec; 9(12):1324-31

Quantification of myocardial ischemia and infarction with single photon emission computed tomography. Hoffmeister HM, et al. **Eur J Nucl Med** 1989;15(1):26-31

Fatty acid myocardial imaging using 123I-beta-methyl-iodophenyl pentadecanoic acid (BMIPP): comparison of myocardial perfusion and fatty acid utilization in canine myocardial infarction (occlusion and reperfusion model). Nishimura T, et al. **Eur J Nucl Med** 1989;15(7):341-5

Automatic drawing of the left epicardial region of interest on thallium 201 scintigraphic images. Valette H, et al. **Eur J Nucl Med** 1988;14(9-10):485-8

Assessment of right ventricular function in acute inferior myocardial infarction using 133-xenon imaging. McGhie I, et al. **Int J Cardiol** 1989 Feb;22(2):195-202

Antimyosin imaging in acute transmural myocardial infarctions: results of a multicenter clinical trial. Johnson LL, et al. **J Am Coll Cardiol** 1989 Jan;13(1):27-35

Assessment of right ventricular anatomy and function by quantitative radionuclide ventriculography. Ratner SJ, et al. **J Am Coll Cardiol** 1989 Feb;13(2):354-9

Quantification of myocardial infarction during coronary occlusion and myocardial salvage after reperfusion using cardiac imaging with technetium-99m hexakis 2-methoxyisobutyl isonitrile. Verani MS, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1573-81

Evaluation of right ventricular functions by radio nuclide angiography in myocardial infarction. Khanna CM, et al. **J Assoc Physicians India** 1988 May;36(5):315-8

A study of wall motion abnormalities by radionuclide ventriculography (RNV) and correlation with electrocardiographic changes in acute myocardial infarction. Khanna CM, et al. **J Assoc Physicians India** 1988 Jun;36(6):371-3

Modification of monoclonal antimyosin antibody: enhanced specificity of localization and scintigraphic visualization in acute experimental myocardial infarction. Khaw BA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:31-5

Simultaneous technetium-99m MIBI angiography and myocardial perfusion imaging. Baillet GY, et al. **J Nucl Med** 1989 Jan;30(1):38-44

Diastolic function in acute myocardial infarction: a radionuclide study. Bonaduce D, et al. **J Nucl Med** 1988 Nov;29(11):1786-9

The evaluation of right ventricular function in acute myocardial infarction by xenon-133. Martin W, et al. **Nucl Med Commun** 1989 Jan;10(1):35-43

The use of 111In-labelled autologous neutrophils in imaging myocardial infarction. Muir AJ, et al. **Nucl Med Commun** 1988 Oct;9(10):707-11

99mTc-aminohexylidendiphosphonate and 99mTc-pyrophosphate in the scintigraphic diagnosis of experimental myocardial infarction in dogs. Duška F, et al. **Nuklearmedizin** 1988 Oct;27(5):226-7

PET detection of viable tissue in myocardial segments with persistent defects at T1-201 SPECT. Brunken RC, et al. **Radiology** 1989 Jul;172(1):65-73

The role of antimyosin antibodies in acute myocardial infarction. Johnson LL, et al. **Semin Nucl Med** 1989 Jul; 19(3):238-46 (33 ref.)

[Methoxy-isobutyl-isonitrile myocardial tomoscintigraphy in the very first hours of myocardial infarction. A new non-invasive method of studying myocardial perfusion (letter)] Faraggi M, et al. **Presse Med** 1989 Apr 1;18(13):683 (Fre)

[Scintigraphic findings in myocardial infarct] Schümichen C, et al. **Radiologe** 1988 Sep;28(9):409-16 (26 ref.) (Eng. Abstr.) (Ger)

[Quantification of the myocardial scar with technetium-99m-isonitrile (MIBI) in emission computerized tomography (SPECT)--comparison with serial creatine kinase determinations and radionuclide ventriculography] Clausen M, et al. **Z Kardiol** 1989 Mar; 78(3):167-71 (Eng. Abstr.) (Ger)

[Improved detection of acute myocardial infarct with combined simultaneous thallium-201/technetium-99m-PPi tomography in comparison with planar infarct scintigraphy] Krause T, et al. **Z Kardiol** 1989 Mar; 78(3):161-6 (Eng. Abstr.) (Ger)

[Myocardial perfusion with 201-thallium tomography in the post-infarct phase: prognostic significance and 1-year follow-up] Nienaber CA, et al. **Z Kardiol** 1988 Nov; 77(11):721-7 (Eng. Abstr.) (Ger)

[Nuclear cardiologic examinations in patients on disability compensation after myocardial infarct] Mester J, et al. **Orv Hetil** 1988 Dec 11;129(50):2675-9 (Eng. Abstr.) (Hun)

[Role of Tc 99m pyrophosphate cardiac scintigraphy in the diagnosis of perioperative infarction in myocardial revascularization] Mercanti CA, et al. **Cardiologia** 1988 Oct; 33(10):927-30 (Eng. Abstr.) (Ita)

[Use of angiocardioscintigraphy in acute myocardial infarct] Bisi G, et al. **G Ital Cardiol** 1988 Jun;18(6):526-31 (Ita)

[Use of antimyosin monoclonal antibodies in the diagnosis of acute myocardial infarct. Comparison with other imaging technics and in vivo kinetics study] Bisi G, et al. **G Ital Cardiol** 1988 Apr;18(4):281-9 (Eng. Abstr.) (Ita)

[Perfusion scintigraphy in a coronary unit] Marzullo P, et al. **G Ital Cardiol** 1988 May;18(5):418-22 (32 ref.) (Ita)

[Myocardial scintigraphy using 99m-technetium pyrophosphate in the diagnosis of acute myocardial infarct. Comparison of planar and tomographic imaging] Santoro GM, et al. **G Ital Cardiol** 1989 Apr;19(4):295-302 (Eng. Abstr.) (Ita)

[Usefulness of radioisotope ventriculography in the evaluation of right ventricular function in acute anterior and inferior myocardial infarction] Bruno A, et al. **Minerva Cardioangiol** 1988 Apr;36(4):183-8 (Eng. Abstr.) (Ita)

[Myocardial blood flow and glucose metabolism in patients with myocardial infarction evaluated by positron emission tomography: comparison with left ventriculography] Fudo T, et al. **J Cardiol** 1988 Mar;18(1):13-20 (Eng. Abstr.) (Jpn)

[Problems related to tracer concentration and wall thickness: pitfalls in positron CT diagnosis] Himi T, et al. **J Cardiol** 1987 Dec;17(4):831-6 (Eng. Abstr.) (Jpn)

[Stress thallium scan in right ventricular myocardial infarction: relation to clinical findings] Chiba H, et al. **Kaku Igaku** 1988 Dec;25(12):1353-61 (Eng. Abstr.) (Jpn)

[Usefulness of rest-redistribution thallium scan for the indication of PTCA in an interesting case with acute myocardial infarction] Chiba H, et al. **Kaku Igaku** 1988 Apr;25(4):331-7 (Eng. Abstr.) (Jpn)

[New application of myocardial infarct map using a dual isotope single photon emission computed tomography (SPECT) of [99mTc]pyrophosphate and [201Tl]chloride in patients with acute myocardial infarction] Hiroe M, et al. **Kaku Igaku** 1988 Oct;25(10):1125-9 (Eng. Abstr.) (Jpn)

[Estimation of myocardial viability in left ventricular regions with akinetic wall motion by postextrasystolic potentiation using list-mode radionuclide ventriculography in an interesting case with silent ischemia and with premature ventricular complexes (quadrigeminy)] Ishida Y, et al. **Kaku Igaku** 1989 Mar;26(3):425-31 (Eng. Abstr.) (Jpn)

[Evaluation of branched chain fatty acid, BMIPP [beta-methyl-omega-(p-iodophenyl)-pentadecanoic acid] for myocardial imaging--basic experiments] Kawamura Y, et al. **Kaku Igaku** 1988 Nov;25(11):1221-7 (Eng. Abstr.) (Jpn)

[The correlation among the LVEF response during exercise, diseased coronary arteries and RI parameters in acute myocardial infarction] Kinoshita E. **Kaku Igaku** 1988 Apr; 25(4):311-21 (Eng. Abstr.) (Jpn)

[Significance of cardiac blood pool scintigraphy using intravenous injection of isosorbide dinitrate for the evaluation of viability of ischemic myocardium] Kubota Y, et al. **Kaku Igaku** 1989 Mar;26(3):447-52 (Jpn)

[Detection of multivessel disease in patients with myocardial infarct using exercise myocardial scintigraphy--usefulness of SPECT with qualitative and quantitative analysis] Matsuo T, et al. **Kaku Igaku** 1989 Jan;26(1):1-13 (Eng. Abstr.) (Jpn)

[Long-term follow-up of thallium-201 myocardial scintigraphy in acute myocardial infarction--clinical significance of reverse redistribution during acute period]

Naka K, et al. **Kaku Igaku** 1989 Apr;26(4):539–43 (Eng. Abstr.) **(Jpn)**

[Fatty acid myocardial imaging using 123I-beta-methyl iodophenyl pentadecanoic acid (BMIPP): comparison of myocardial blood perfusion and fatty acid metabolism in canine myocardial infarction (occlusion and reperfusion model)] Nishimura T, et al. **Kaku Igaku** 1988 Dec; 25(12):1403–15 (Eng. Abstr.) **(Jpn)**

[A case of myocardial infarction with ventricular tachycardia, which had discrepancy of defect size between 123I-MIBG and 201TlCl myocardial imaging] Nishimura T, et al. **Kaku Igaku** 1989 Mar;26(3):419–23 (Eng. Abstr.) **(Jpn)**

[Quantitative estimation of viable myocardium in the infarcted zone by infarct-redistribution map from images of exercise thallium-201 emission computed tomography] Sekiai Y. **Kaku Igaku** 1988 Aug;25(8):735–42 (Eng. Abstr.) **(Jpn)**

[Automatic determination of the site of myocardial infarction and coronary perfusion territory with SPECT] Sekiai Y, et al. **Kaku Igaku** 1988 Apr;25(4):293–300 (Eng. Abstr.) **(Jpn)**

[Estimation of myocardial sympathetic neuronal function with I-123 metaiodobenzylguanidine (MIBG) in patients with acute myocardial infarction undergoing percutaneous transluminal coronary thrombolysis (PTCR)] Tanaka T, et al. **Kaku Igaku** 1988 Dec;25(12):1425–9 (Eng. Abstr.) **(Jpn)**

[Overestimation of myocardial viability due to an increase in thallium uptake by the lung] Tanaka T, et al. **Kaku Igaku** 1989 Jan;26(1):15–21 (Eng. Abstr.) **(Jpn)**

[Quantification of myocardial infarct size by technetium-99m pyrophosphate single photon emission computed tomography] Yamamoto H, et al. **Kaku Igaku** 1989 Apr; 26(4):469–76 (Eng. Abstr.) **(Jpn)**

[Relation between Tc-99m-PYP and Tl-201 scintigraphic findings and left ventricular function in acute myocardial infarction with early reperfusion] Mori T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):993–8 **(Jpn)**

[Scintigraphy presentation: Dual SPECT imaging of the myocardium with 201Tl and 99mTc] Kojima Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):897–8 **(Jpn)**

[Regional and general contractile function of the myocardium following myocardial infarct] Sledzevskaia IK, et al. **Med Radiol (Mosk)** 1989 Aug;34(8):40–4 (Eng. Abstr.) **(Rus)**

[Radionuclide ventriculography in the evaluation of the functional state of the left heart ventricle in patients following myocardial infarct] Sledzevskaia IK, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):38–43 (Eng. Abstr.) **(Rus)**

[Segmental contractility. Comparative study of 3 radioisotopic methods] Alvarez-Auñón A, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:102–9 (Eng. Abstr.) **(Spa)**

[Fourier analysis. Utilization of multiharmonic parametric images in the evaluation of coronary cardiopathy] García A, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:114–9 (Eng. Abstr.) **(Spa)**

[Gammagraphic evaluation of myocardial necrosis using antimyosin monoclonal antibodies] Sampere JJ, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:61–9 (Eng. Abstr.) **(Spa)**

[Right ventricular involvement in recent diaphragmatic infarction. Detection using radionuclide ventriculography] González P, et al. **Rev Med Chil** 1988 Jul;116(7):640–5 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

[Experiences with laser therapy in acute myocardial infarct] Kipschidse NN, et al. **Z Gesamte Inn Med** 1988 Dec 15; 43(24):703–4 (Eng. Abstr.) **(Ger)**

REHABILITATION

Smoking cessation after acute myocardial infarction: the effects of exercise training. Taylor CB, et al. **Addict Behav** 1988;13(4):331–5

Physical training and relaxation therapy in cardiac rehabilitation assessed through a composite criterion for training outcome. van Dixhoorn J, et al. **Am Heart J** 1989 Sep;118(3):545–52

Usefulness of myocardial ischemia as predictor of training effect in cardiac rehabilitation after acute myocardial infarction or coronary artery bypass grafting. Ades PA, et al. **Am J Cardiol** 1989 May 1;63(15):1032–6

Effect of rapid mobilization on ejection fractions and ventricular volumes after acute myocardial infarction. Rowe MH, et al. **Am J Cardiol** 1989 May 1;63(15):1037–41

Sexual healing after heart attack. McCann ME. **Am J Nurs** 1989 Sep;89(9):1133–8

A note on early indicators of non-adherence to a cardiac rehabilitation programme. Fielding R. **Br J Med Psychol** 1989 Mar;62 (Pt 1):97–101

Instantaneous electrocardiography. A simple screening technique for cardiac exercise programs. Franklin BA, et al. **Chest** 1989 Jul;96(1):174–7

Does cardiac rehabilitation increase long-term survival after myocardial infarction? Oberman A. **Circulation** 1989 Aug; 80(2):416–8

An overview of randomized trials of rehabilitation with exercise after myocardial infarction. O'Connor GT, et al. **Circulation** 1989 Aug;80(2):234–44

Psychological factors and return to work. Cay EL, et al. **Eur Heart J** 1988 Nov;9 Suppl L:74–81

Exercise training, cardiac rehabilitation and return to work in patients with coronary artery disease. Danchin N, et al. **Eur Heart J** 1988 Nov;9 Suppl M:43–6

Physiological cost of vocational activities after myocardial infarction. Denolin H, et al. **Eur Heart J** 1988 Nov;9 Suppl L:54–7

Guidelines for return to work after myocardial infarction and/or revascularisation. Denolin H, et al. **Eur Heart J** 1988 Nov;9 Suppl L:130–1

Working capacity after myocardial infarction. Fabián J, et al. **Eur Heart J** 1988 Nov;9 Suppl L:40–3

Social fate and long-term survival of patients with a recent myocardial infarction, after cardiac rehabilitation. Fioretti P, et al. **Eur Heart J** 1988 Nov;9 Suppl L:89–94

The influence of the type of occupation on return to work after myocardial infarction, coronary angioplasty and coronary bypass surgery. Gehring J, et al. **Eur Heart J** 1988 Nov;9 Suppl L:109–14

The proposal of the Italian Committee on Occupational Cardiology. Giordano A, et al. **Eur Heart J** 1988 Nov;9 Suppl L:115–9

Outcome from the questionnaire adopted for the consensus conference. Gobbato F, et al. **Eur Heart J** 1988 Nov;9 Suppl L:123–9

Effects of a short-term training programme in post-infarct patients with residual myocardial ischaemia. Ignone G, et al. **Eur Heart J** 1988 Nov;9 Suppl M:13–21

Summary and conclusions towards guidelines for return to work after myocardial infarction and myocardial revascularisation. Maisano G. **Eur Heart J** 1988 Nov;9 Suppl L:120–2

The long-term work record of post-infarction patients subjected to an informal rehabilitation and secondary prevention programme. Mulcahy R, et al. **Eur Heart J** 1988 Nov;9 Suppl L:84–8

Predictive markers of occupational activity in 415 post myocardial infarction patients after one-year follow-up. Turkulin K, et al. **Eur Heart J** 1988 Nov;9 Suppl L:103–8

Personal adjustments and regimen compliance 1 year after myocardial infarction. Miller P, et al. **Heart Lung** 1989 Jul; 18(4):339–46

Rehabilitation information and health beliefs in the post-coronary patient: do we meet their information needs? Murray PJ. **J Adv Nurs** 1989 Aug;14(8):686–93

Exercise training after anterior Q wave myocardial infarction: importance of regional left ventricular function and topography [letter; comment] Kushner EC. **J Am Coll Cardiol** 1989 May;13(6):1451. **Comment on:** J Am Coll Cardiol 1988 Aug;12(2):362–72

Patient and spouse responses to education early after myocardial infarction. Christie D, et al. **J Psychosom Res** 1988;32(3):321–5

Perceptions of ourselves as workers contribute to mental, physical health. Polakoff PL. **Occup Health Saf** 1988 Sep; 57(10):68

Acute myocardial infarction. Management after discharge from the coronary care unit. Del Core MG, et al. **Postgrad Med** 1989 Feb 1;85(2):157–60, 165–6, 169 (16 ref.)

Cardiac rehabilitation: evaluation of a long-term programme of physical training for out-patients. Perk J, et al. **Scand J Rehabil Med** 1989;21(1):13–7

After the myocardial infarction. A medical and psychological study with special emphasis on perceived illness. Maeland JG, et al. **Scand J Rehabil Med Suppl** 1989;22:1–87 (285 ref.)

Use of health services after a myocardial infarction. Maeland JG, et al. **Scand J Soc Med** 1989;17(1):93–102

Influence of a rehabilitation sports programme on the fibrinolytic activity of patients after myocardial infarction. Estellés A, et al. **Thromb Res** 1989 Jul 15;55(2):203–12

[The psychological rehabilitation of patients having had a myocardial infarct at the polyclinic stage] Kokutsov A, et al. **Vutr Boles** 1989;28(1):42–5 (Eng. Abstr.) **(Bul)**

[Rehabilitation in coronary disease] Moret P, et al. **Ther Umsch** 1988 Jul;45(7):458–65 (Eng. Abstr.) **(Fre)**

["Is my heart allowed in the sauna?" Physiologic effect of sauna bathing—also for infarct patients] Halhuber MJ. **Fortschr Med** 1989 Jun 20;107(18):22 **(Ger)**

[Emotional processing of perceived stresses by myocardial infarct rehabilitation patients: a speech content analytic study of affect in narrative interviews] Faller H. **Psychother Psychosom Med Psychol** 1989 May;39(5):151–60 (Eng. Abstr.) **(Ger)**

[The concept of illness and health behavior in myocardial infarct patients with special reference to occupational rehabilitation] Kauderer-Hübel M. **Psychother Psychosom Med Psychol** 1988 Dec;38(12):413–9 (Eng. Abstr.) **(Ger)**

[Return to work following myocardial infarct] Rauscha F, et al. **Wien Klin Wochenschr** 1988 Sep 23;100(18):605–10 (Eng. Abstr.) **(Ger)**

[Sports and coronary heart disease] Brugger P, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):357–61 (26 ref.) (Eng. Abstr.) **(Ger)**

[Early rehabilitation following myocardial infarct—results and conclusions] Reinhold D, et al. **Z Gesamte Inn Med** 1988 Dec 15;43(24):698–700 (Eng. Abstr.) **(Ger)**

[Protocol for rehabilitation of the infarction patient in the cardiac intensive care unit and in the post-intensive ward] Griffo R, et al. **G Ital Cardiol** 1988 Mar;18(3):228–34 **(Ita)**

[Role of ambulatory ECG in the evaluation of interventions: rehabilitation] Ignone G. **G Ital Cardiol** 1987 Dec; 17(12):1121–5 (Eng. Abstr.) **(Ita)**

[Rehabilitation in myocardial infarction] **Nippon Rinsho** 1987 Dec;Spec No:985–1011 **(Jpn)**

[Complex evaluation of ambulatory rehabilitation of patients based on long-term observation] Moczurad K. **Folia Med Cracov** 1987;28(3–4):227–56 (Eng. Abstr.) **(Pol)**

[Telemetric and ergometric evaluation of accelerated rehabilitation of patients with acute uncomplicated myocardial infarction] Dylewicz P, et al. **Kardiol Pol** 1988; 31 Suppl 1:68–76 (Eng. Abstr.) **(Pol)**

[Various factors influencing the decision to resume work by patients after myocardial infarction. Effect on myocardial infarction recurrence and mortality] Wrabec K, et al. **Kardiol Pol** 1988;31(6):367–74 (Eng. Abstr.) **(Pol)**

[Polycardiographic evaluation of the effect of outpatient rehabilitation on left-ventricular function after myocardial infarction] Wysokiński A, et al. **Wiad Lek** 1988 Aug 15; 41(16):1053–8 (Eng. Abstr.) **(Pol)**

[Effect of outpatient rehabilitation on echocardiographic image of left-ventricular function in patients after myocardial infarction] Wysokiński A, et al. **Wiad Lek** 1988 Nov 1;41(21):1415–20 (Eng. Abstr.) **(Pol)**

[Clinical observation of a patient who participated in a marathon race after myocardial infarction] Aronov DM, et al. **Kardiologiia** 1988 Sep;28(9):99–100 **(Rus)**

[Effect of occupational therapy on the mental state of patients with myocardial infarction at the hospital stage of rehabilitation] Rozykhodzhaeva GA, et al. **Kardiologiia** 1988 Nov;28(11):107–9 **(Rus)**

[Static load test during rehabilitation of patients after myocardial infarction] Sledzevskaia IK, et al. **Kardiologiia** 1989 Feb;29(2):95–6 **(Rus)**

[Use of a stochastic model for predicting the effectiveness of rehabilitation measures after myocardial infarction] Sledzevskaia IK, et al. **Kardiologiia** 1988 Sep;28(9):89–90 **(Rus)**

[Effect of occupational therapy on the psychosocial status of patients with myocardial infarction at the second stage of rehabilitation] Smirnov EK. **Kardiologiia** 1989 Apr; 29(4):88–91 (Eng. Abstr.) **(Rus)**

[Effect of an early single physical load on hemodynamics and plasma aldosterone level in patients with acute myocardial infarction] Zabello IN, et al. **Kardiologiia** 1989 Apr;29(4):107–10 **(Rus)**

["Dry" carbon dioxide baths in treating patients with myocardial infarction at the sanatorium stage of rehabilitation] Barashkova NL, et al. **Klin Med (Mosk)** 1989 May;67(5):38–41 (Eng. Abstr.) **(Rus)**

[Is walking permissible in the first days of acute myocardial infarct] Izvekova ML, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):61–3 (Eng. Abstr.) **(Rus)**

[Phospholipids in the blood serum of patients with ischemic heart disease at the stage of early rehabilitation at a sanatorium] Novgorodtseva TP, et al. **Lab Delo** 1989; (1):15–8 (Eng. Abstr.) **(Rus)**

[The initial results of the sanatorium rehabilitation of patients having had an acute myocardial infarct in a mid-alpine climate] Murataliev TM, et al. **Ter Arkh** 1988;60(12):36–40 (Eng. Abstr.) **(Rus)**

[Rehabilitation of patients with postinfarct cardiosclerosis depending on the characteristics of the pain syndrome] Beliakova NA. **Vrach Delo** 1988 Jul;(7):22–4 (Eng. Abstr.) **(Rus)**

[The motor regimen for myocardial infarct patients at the stage of hospital treatment] Sledzevskaia IK, et al. **Vrach Delo** 1989 Jan;(1):30–2 (Eng. Abstr.) **(Rus)**

[Rehabilitation results with patients having had a myocardial infarct] Sledzevskaia IK, et al. **Vrach Delo** 1989 Mar;(3):7–9 (Eng. Abstr.) **(Rus)**

[Swim training of patients after myocardial infarct] Lončarić J, et al. **Reumatizam** 1987;34(1–6):10–5 (Eng. Abstr.) **(Scr)**

SURGERY

Treatment of end-stage coronary artery disease. Proceedings of an international symposium. Antwerp, June 10–12, 1987. **Adv Cardiol** 1988;36:1–305

Immediate bypass surgery (0.5–3 h) for evolving myocardial infarction. Amsel BJ, et al. **Adv Cardiol** 1988;36:178–88

Surgical treatment of evolving and sustained myocardial infarction. Collins JJ Jr, et al. **Adv Cardiol** 1988;36:189–94

Emergency aortocoronary bypass surgery: late effects on infarct size and ventricular function. Flameng W, et al. **Adv Cardiol** 1988;36:195–201

Immediate bypass surgery for evolving myocardial infarction. Turina M, et al. **Adv Cardiol** 1988;36:213–8

Emer ..ncy coronary artery reperfusion for acute evolving myocardial infarction. Vidne BA. **Adv Cardiol** 1988; 36:219–25

Favorable early and long-term prognosis following coronary bypass surgery therapy for myocardial infarction: results of a multicenter trial. TAMI Study Group. Kereiakes DJ, et al. **Am Heart J** 1989 Aug;118(2):199–207

Use of the exercise test to predict prognosis after coronary artery bypass grafting. Dubach P, et al. **Am J Cardiol** 1989 Mar 1;63(9):530–3

Risk assessment of coronary artery bypass grafting within one month of acute myocardial infarction. Hartz RS, et al. **Am J Cardiol** 1988 Nov 1;62(13):964–6

Surgical recanalization for treatment of evolving myocardial infarction [editorial] Bergmann SR, et al. **Ann Thorac Surg** 1989 Sep;48(3):319–21

Reperfusion of infarcting myocardium: benefit of surgical reperfusion in a chronic model. Cheung EH, et al. **Ann Thorac Surg** 1989 Sep;48(3):331–8

Ventricular aneurysm after myocardial infarction: surgical excision with use of temporary cardiopulmonary bypass. Cooley DA. **Ann Thorac Surg** 1988 Nov;46(5):589

Angiocatheter coronary artery reperfusion before cardioplegia for evolving myocardial infarction. Nishida H, et al. **Ann Thorac Surg** 1989 Mar;47(3):470–1

Surgical treatment of acute myocardial infarction. Cohn LH. **Cardiology** 1989;76(2):167–72 (9 ref.)

Transluminal balloon embolization of an inadvertent aorto-to-coronary venous bypass to the anterior cardiac vein. Jost S, et al. **Cathet Cardiovasc Diagn** 1989 May; 17(1):28–30

Emergency coronary bypass not associated with preoperative cardiogenic shock in failed angioplasty, after thrombolysis, and for acute myocardial infarction. Barner HB, et al. **Circulation** 1989 Jun;79(6 Pt 2):I152–9 (49 ref.)

Coronary artery bypass graft surgery early after acute myocardial infarction. Kennedy JW, et al. **Circulation** 1989 Jun;79(6 Pt 2):I73–8

Cardiac surgical emergencies. Sweeney MS, et al. **Crit Care Clin** 1989 Jul;5(3):659–78 (59 ref.)

Termination of re-entrant ventricular tachycardia by subthreshold stimulus applied to the zone of slow conduction. Podczeck A, et al. **Eur Heart J** 1988 Oct; 9(10):1146–50

Medical and surgical management of early Q wave myocardial infarction. I. Effects of surgical reperfusion on survival, recurrent myocardial infarction, sudden death and functional class at 10 or more years of follow-up. DeWood MA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):65–77

Replacement of myocardium with a Dacron prosthesis for complications of acute myocardial infarction. Yamazaki Y, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr; 30(2):277–80

Is unified monitoring improving patient care? Nelissen RG, et al. **J Clin Monit** 1988 Jul;4(3):167–74

Late results after intracoronary thrombolysis and early bypass grafting for acute myocardial infarction. Messmer BJ, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):10–8

Postinfarction ventricular septal defect—surgical strategies and results. von Segesser LK, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):72–5

[Clinical application of intra-aortic balloon pumping in cases with coronary artery bypass graft in the emergency room] Zheng Y. **Chung Hua Wai Ko Tsa Chih** 1988 Oct; 26(10):588–9, 636 (Eng. Abstr.) **(Chi)**

[The role of surgery in the treatment of acute myocardial infarct] Hetzer R, et al. **Z Kardiol** 1988;77 Suppl 4:52–61 (67 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative changes in perfusion scintigraphic picture in patients with previous myocardial infarct] Galli M, et al. **G Ital Cardiol** 1988 Jul;18(7):543–51 (Eng. Abstr.) **(Ita)**

[Clinical results and modification of left ventricular function after emergency revascularization for acute myocardial infarction] Paolillo V, et al. **G Ital Cardiol** 1989 Feb; 19(2):104–13 (Eng. Abstr.) **(Ita)**

[Aorto-coronary bypass grafting in a patient with a single coronary artery complicated with myocardial infarction] Hirai T, et al. **Kyobu Geka** 1988 Jul;41(8):671–5 (Eng. Abstr.) **(Jpn)**

[A case report of anesthesia in cesarean section of a patient with an old myocardial infarction] Takahashi H, et al. **Masui** 1988 Dec;37(12):1537–41 (Eng. Abstr.) **(Jpn)**

[Surgical intervention of angina pectoris and myocardial infarction] Tanaka S, et al. **Nippon Ika Daigaku Zasshi** 1989 Jun;56(3):304–7 **(Jpn)**

[The role of oxygen-derived free radicals in ischemic heart damage] Karwatowska-Prokopczuk E, et al. **Kardiol Pol** 1988;31(12):786–98 (66 ref.) **(Pol)**

[The surgical treatment of acute myocardial infarct] Astaf'ev VI, et al. **Grudn Khir** 1989 Mar–Apr;(2):73–9 (44 ref.) **(Rus)**

[Myocardial revascularization surgery during a developing infarction] González Santos JM, et al. **Rev Esp Cardiol** 1989 May;42(5):309–17 (Eng. Abstr.) **(Spa)**

THERAPY

Factors influencing acute high-grade restenosis in emergency percutaneous transluminal coronary angioplasty for acute myocardial infarction. Kusachi S, et al. **Acta Med Okayama** 1989 Feb;43(1):55–63

Emergent surgical revascularization following acute myocardial infarction. Experimental and clinical considerations. Kirklin JK, et al. **Adv Cardiol** 1988; 36:202–12 (21 ref.)

Postpartum myocardial infarction treated with percutaneous transluminal coronary angioplasty. Giudici MC, et al. **Am Heart J** 1989 Sep;118(3):614–6

Left ventricular topographic alterations in the completely healed rat infarct caused by early and late coronary artery reperfusion. Hale SL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1508–13

Long-term follow-up of patients treated with coronary angioplasty for acute myocardial infarction. Kander NH, et al. **Am Heart J** 1989 Aug;118(2):228–33

A symposium: Interventional cardiology at a crossroad—diagnostics and therapeutics. March 26, 1988, Atlanta, Georgia. **Am J Cardiol** 1988 Dec 6;62(18):1K–29K

Early recovery of regional left ventricular function after reperfusion in acute myocardial infarction assessed by serial two-dimensional echocardiography. Bourdillon PD, et al. **Am J Cardiol** 1989 Mar 15;63(11):641–6

Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow. Cigarroa RG, et al. **Am J Cardiol** 1989 Jul 15;64(3):155–60

Incidence and predictors of early recurrent ischemia after successful percutaneous transluminal coronary angioplasty for acute myocardial infarction. Ellis SG, et al. **Am J Cardiol** 1989 Feb 1;63(5):263–8

Effect of a media campaign on delay times and ambulance use in suspected acute myocardial infarction. Herlitz J, et al. **Am J Cardiol** 1989 Jul 1;64(1):90–3

Emergency percutaneous transluminal coronary angioplasty during acute myocardial infarction for patients more than 70 years of age. Holland KJ, et al. **Am J Cardiol** 1989 Feb 15;63(7):399–403

Patient selection for percutaneous transluminal coronary angioplasty in acute myocardial infarction. King SB 3d. **Am J Cardiol** 1989 Jul 18;64(4):22B–24B

Primary percutaneous coronary angioplasty: a protagonist's view. O'Neill WW. **Am J Cardiol** 1988 Dec 6; 62(18):15K–20K (35 ref.)

A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction. Ong L, et al. **Am J Cardiol** 1989 Jul 1;64(1):11–5

Effects of type A behavioral counseling and severity of prior acute myocardial infarction on survival. Powell LH, et al. **Am J Cardiol** 1988 Dec 1;62(17):1159–63

Variables predictive of good functional outcome following thrombolytic therapy in the Thrombolysis in Myocardial Infarction phase II (TIMI II) pilot study. Rogers WJ, et al. **Am J Cardiol** 1989 Mar 1;63(9):503–12

The uncertain role of thrombolytic angioplasty within the treatment strategy for myocardial infarction. Ross AM. **Am J Cardiol** 1988 Dec 6;62(18):21K–24K (28 ref.)

Interventional cardiac catheterization at Duke Medical Center. Stack RS, et al. **Am J Cardiol** 1988 Oct 1;62(10 Pt 2):3F–24F (44 ref.)

Influence of fibrinolysis and percutaneous transluminal coronary angioplasty on the frequency of ventricular premature complexes. Théroux P, et al. **Am J Cardiol** 1989 Apr 1;63(12):797–801

Coronary angioplasty and thrombolysis for acute myocardial infarction: is two a crowd? Salem DN, et al. **Am J Med** 1989 Mar;86(3):259–61 (19 ref.)

General anesthesia during percutaneous transluminary coronary angioplasty for acute myocardial infarction: results of a randomized controlled clinical trial. de Bruijn NP, et al. **Anesth Analg** 1989 Mar;68(3):201–7

Coronary angioplasty following acute perioperative myocardial infarction. Roth S, et al. **Anesthesiology** 1989 Aug;71(2):300–3

PTCA—the initial 100 cases in the Singapore General Hospital. Koh TH, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):22–7

Effect of mobile paramedic units on outcome in patients with myocardial infarction. Dean NC, et al. **Ann Emerg Med** 1988 Oct;17(10):1034–41

The data on HMO patients with AMI [letter] Hossfeld G. **Ann Emerg Med** 1989 Mar;18(3):331–2

How many myocardial infarctions should we rule out? Wears RL, et al. **Ann Emerg Med** 1989 Sep;18(9):953–63

Evaluation of studies on the efficacy of paramedic treatment in acute myocardial infarction [letter] Yealy DM, et al. **Ann Emerg Med** 1989 Aug;18(8):909–10

Coronary angioplasty for acute myocardial infarction. Topol EJ. **Ann Intern Med** 1988 Dec 15;109(12):970–80 (110 ref.)

Thrombolytic therapy in acute myocardial infarction. Simoons ML. **Annu Rev Med** 1989;40:181–200 (57 ref.)

Feasibility and safety of emergency interhospital transport of patients during early hours of acute myocardial infarction. Gore JM, et al. **Arch Intern Med** 1989 Feb; 149(2):353–5

Nonemergent cardiac catheterization and risk-stratified revascularization following thrombolytic therapy for acute myocardial infarction. A critical analysis of therapy in the community setting. University of North Carolina Cardiology Consortium. Rowe WW, et al. **Arch Intern Med** 1989 Jul;149(7):1611–7

An overview of the thrombolysis and angioplasty in acute myocardial infarction (TAMI) trials. Topol EJ. **Arch Mal Coeur** 1988 May;81 Spec No:45–9

The role of permanent pacing after anterior myocardial infarction complicated by transient complete atrioventricular block. Grigg L, et al. **Aust N Z J Med** 1988 Aug;18(5):685–8

Myocardial infarction in rats: effects of metabolic and pharmacologic interventions. Zimmer HG, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):332–43

Angioplasty after thrombolysis in the treatment of evolving myocardial infarction. Bergmann SR, et al. **Biomed Pharmacother** 1989;43(2):107–12 (54 ref.)

Training for coronary angioplasty [letter] Mills P. **BMJ** 1989 May 13;298(6683):1310–1

A milestone for myocardial infarction [letter] Wallace WA. **BMJ** 1988 Nov 5;297(6657):1196

Interventional management of acute myocardial infarction. García-Gregory JA. **Bol Asoc Med P R** 1988 Oct; 80(10):384–6 (27 ref.)

If I had a first time coronary. Campbell S, et al. **Br J Clin Pract** 1988 Mar;42(3):93–4

My first coronary. Chambers J. **Br J Clin Pract** 1988 Mar; 42(3):95–6

Presentation and management of myocardial infarction in the elderly. Bayer AJ. **Br J Hosp Med** 1988 Oct;40(4):300–1, 304–6

Early management of acute myocardial infarction. Sullivan H, et al. **Br J Hosp Med** 1988 Dec;40(6):449–58 (61 ref.)

Contemporary treatment of acute myocardial infarction and unstable angina: cost effectiveness [editorial] Mizgala HF. **Can J Cardiol** 1989 Apr;5(3):127–8

Restoration of flow in acute coronary obstructive syndromes: consequences of different management strategies. Silberberg JS, et al. **Can J Cardiol** 1989 Apr;5(3):129–35 (44 ref.)

Management of acute myocardial infarction. **Cardiol Clin** 1988 Feb;6(1):1–184

Management of post-infarction angina. Gore JM, et al. **Cardiol Clin** 1988 Feb;6(1):165–72 (38 ref.)

Treatment of the hemodynamically unstable patient. Lee FA. **Cardiol Clin** 1988 Feb;6(1):63–79 (117 ref.)

Percutaneous transluminal coronary angioplasty during acute myocardial infarction. Remetz MS, et al. **Cardiol Clin** 1988 Feb;6(1):139–52 (86 ref.)

Recent advances in the management of patients with acute myocardial infarction. **Cardiology** 1989;76(2):85–172

Interventional treatment in evolving myocardial infarction. Kovach R, et al. **Cardiology** 1989;76(2):158–66 (34 ref.)

Unstable angina and acute myocardial infarction. Rentrop KP, et al. **Cardiovasc Clin** 1988;19(2):129–41 (47 ref.)

Acute reocclusion during percutaneous transluminal coronary angioplasty: immediate and long-term outcome. Buccino KR, et al. **Cathet Cardiovasc Diagn** 1989 Jun; 17(2):75–9

High-frequency rotablation of occluded coronary artery during heart catheterization. Erbel R, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):56–8

Therapeutic options in acute myocardial infarction. Coppola JT, et al. **Chest** 1989 Jun;95(6):1309–15 (59 ref.)

Prognostic implications and predictors of enhanced regional wall motion of the noninfarct zone after thrombolysis and angioplasty therapy of acute myocardial infarction. The TAMI Study Groups. Grines CL, et al. **Circulation** 1989 Aug;80(2):245–53

Percutaneous transluminal coronary angioplasty improves survival in acute myocardial infarction complicated by cardiogenic shock. Lee L, et al. **Circulation** 1988 Dec; 78(6):1345–51

Percutaneous transluminal coronary angioplasty after non-Q-wave infarction. Bellamy GR, et al. **Cleve Clin J Med** 1989 Mar–Apr;56(2):141–5

Cost and efficacy of intravenous streptokinase plus PTCA for acute myocardial infarction when therapy is initiated in community hospitals. Leimbach WN Jr, et al. **Clin Cardiol** 1988 Nov;11(11):731–8

Long-term efficacy of percutaneous transluminal angioplasty on incidence of myocardial infarction, relief of symptoms and survival. Sahni R, et al. **Clin Cardiol** 1989 Aug; 12(8):427–31

Morphologic correlates of coronary angiographic patterns at the site of percutaneous transluminal coronary angioplasty. Waller BF. **Clin Cardiol** 1988 Dec; 11(12):817–22

The effects of physical training in post-myocardial infarction patients with exercise-induced silent ischaemia. Opasich C, et al. **Eur Heart J** 1988 Dec;9 Suppl N:176–80

Nonthrombolytic therapy for acute myocardial infarction. Valle BK, et al. **Heart Lung** 1989 Sep;18(5):535–7

Clinical management of acute myocardial infarction. Guerci AD, et al. **Hosp Pract [Off]** 1989 Jul 15;24(7):67–80 (11 ref.)

PROs use medical practice standards to assess quality. Robinson ML. **Hospitals** 1988 Oct 20;62(20):19–20

Early cardiac catheterisation and coronary angiography in acute myocardial infarction. al Khateeb H, et al. **Indian Heart J** 1989 Jan–Feb;41(1):14–8

Percutaneous transluminal coronary angioplasty (PTCA)—application in evolving myocardial infarction. Reddy KN, et al. **Indian Heart J** 1988 May–Jun; 40(3):161–71

Treatment of acute myocardial infarction with cardiogenic shock using left ventricular assist device. Noda H, et al. **Int J Artif Organs** 1989 Mar;12(3):175–9

Hypersensitivity vasculitis complicating intravenous streptokinase therapy in acute myocardial infarction. Ong AC, et al. **Int J Cardiol** 1988 Oct;21(1):71–3

Thrombolysis and Angioplasty in Myocardial Infarction (TAMI-1) trial: influence of infarct location on arterial patency, left ventricular function and mortality. Bates ER, et al. **J Am Coll Cardiol** 1989 Jan;13(1):12–8

Myocardial reperfusion: is it ever too late? Califf RM. **J Am Coll Cardiol** 1989 Apr;13(5):1130–2

More on the saga of routine emergency coronary angioplasty for acute myocardial infarction. Chaitman BR. **J Am Coll Cardiol** 1989 May;13(6):1260–1

The European Cooperative Study Group trial of intravenous recombinant tissue-type plasminogen activator (rt-PA) and

conservative therapy versus rt-PA and immediate coronary angioplasty. de Bono DP. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):20A-23A

Medical and surgical management of early Q wave myocardial infarction. II. Effects on mortality and global and regional left ventricular function at 10 or more years of follow-up. DeWood MA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):78-90

Predictors of success for coronary angioplasty performed for acute myocardial infarction. Ellis SG, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1407-15

Coronary angioplasty as primary therapy for acute myocardial infarction 6 to 48 hours after symptom onset: report of an initial experience. Ellis SG, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1122-6

Long-term results of thrombolytic therapy with and without percutaneous transluminal coronary angioplasty. Erbel R, et al. **J Am Coll Cardiol** 1989 Aug;14(2):276-85; discussion 286-8

The risk of reperfusion strategies in the treatment of patients with acute myocardial infarction. Faxon DP. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):52A-57A (31 ref.)

Antithrombotic therapy after myocardial reperfusion in acute myocardial infarction. Fuster V, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):78A-84A (44 ref.)

Coronary angioplasty in acute myocardial infarction: should it be done? To whom? When? [editorial] Hutter AM Jr. **J Am Coll Cardiol** 1989 Apr;13(5):1127-9

A comparison of paramedic versus basic emergency medical care of patients at high and low risk during acute myocardial infarction. Pressley JC, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1555-61

Insights derived from the thrombolysis and angioplasty in myocardial infarction (TAMI) trials. Topol EJ, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):24A-31A

Effects of an exercise and stress management program on cardiac patients' psychosocial and vocational status: preliminary study. Liang MT, et al. **J Am Osteopath Assoc** 1988 Oct;88(10):1209-18

Is aeromedical transport of patients during acute myocardial infarction safe? Sternbach G, et al. **J Emerg Med** 1989 Jan-Feb;7(1):73-7

Acute intervention in myocardial infarction--role of thrombolytic therapy and adjuvant angioplasty. Joseph A, et al. **J Ky Med Assoc** 1988 Oct;86(10):561-6

Late left ventricular function following angioplasty in acute myocardial infarction. Waites TF, et al. **J Miss State Med Assoc** 1988 Aug;29(8):223-6

Aggressive management of acute myocardial infarction. Ferdinand KC. **J Natl Med Assoc** 1988 Sep;80(9):978-83 (22 ref.)

Medical management of ischemic heart disease. Timmis GC. **J Occup Med** 1981 Mar;23(3):202-9 (145 ref.)

Effect of acupuncture on left ventricular function, microcirculation, blood rheology and cyclicnucleotides in patients with acute myocardial infarction. Zhu BJ, et al. **J Tradit Chin Med** 1989 Mar;9(1):63-8

Immediate vs delayed catheterization and angioplasty following thrombolytic therapy for acute myocardial infarction. TIMI II A results. The TIMI Research Group. **JAMA** 1988 Nov 18;260(19):2849-58

The aggressive war on acute myocardial infarction: is the blitzkrieg strategy changing? Cheitlin MD. **JAMA** 1988 Nov 18;260(19):2894-6

Coronary angioplasty after thrombolysis. Vine DL. **Kans Med** 1988 Jul;89(7):214-5

Response to chest pain--why delayed? [editorial] Goble AJ. **Med J Aust** 1989 Jan 2;150(1):1-2

Factors influencing the time from onset of chest pain to arrival at hospital. Leitch JW, et al. **Med J Aust** 1989 Jan 2;150(1):6-10

Getting to the heart of the matter [interview by RL Reece] Swan HJ. **Minn Med** 1989 Jun;72(6):326, 367-9

Comparison of invasive and conservative strategies after treatment with intravenous tissue plasminogen activator in acute myocardial infarction. Results of the thrombolysis in myocardial infarction (TIMI) phase II trial. The TIMI Study Group. **N Engl J Med** 1989 Mar 9;320(10):618-27

TIMI II and the role of angioplasty in acute myocardial infarction [editorial] Guerci AD, et al. **N Engl J Med** 1989 Mar 9;320(10):663-5

Acute myocardial infarction. Options on arrival at the hospital. Leya F. **Postgrad Med** 1989 Feb 1;85(2):131-2, 135-42 (46 ref.)

Acute myocardial infarction. Treatment in the coronary care unit. Pitt B. **Postgrad Med** 1989 Feb 1;85(2):145-54 (37 ref.)

Acute myocardial infarction. The race to the hospital. Wehrmacher WH. **Postgrad Med** 1989 Feb 1;85(2):112-5, 118, 122 (21 ref.)

Treatment of myocardial infarction. Stadius ML. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988;:43-54

Intracoronary thrombolysis and coronary angioplasty for evolving myocardial infarction. Theron HD, et al. **S Afr Med J** 1988 Dec 17;74(12):615-8

Heartening news. Greenwell G. **Sci Am** 1988 May;258(5):36, 40

A practical approach to pre-hospital coronary care. Main G, et al. **Scott Med J** 1988 Oct;33(5):331

Thrombolytic treatment for acute myocardial infarction. Kleiman N, et al. **Tex Med** 1988 Oct;84(10):27-32 (29 ref.)

Helicopter transport of patients with acute myocardial infarction. Rodgers G, et al. **Tex Med** 1988 Oct;84(10):35-7

Aggressive use of intra-aortic balloon pump and emergency coronary bypass surgery. Enhanced survival in acute evolving MI. Mantia AM, et al. **W V Med J** 1989 Jun; 85(6):229-33

[Intraoperative laser coronary angioplasty. Report of 6 cases] Chan MC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct; 27(10):602-4, 651 (Eng. Abstr.) **(Chi)**

[The time interval before hospitalization in acute myocardial infarction] Høegholm A, et al. **Ugeskr Laeger** 1989 Jul 17; 151(29):1861-4 (Eng. Abstr.) **(Dan)**

[Treatment of acute myocardial infarction--an elucidative report] Madsen EB, et al. **Ugeskr Laeger** 1989 Jun 5; 151(23):1453-62 (Eng. Abstr.) **(Dan)**

[What strategy for treating the acute phase of myocardial infarction?] Bory M, et al. **Ann Cardiol Angeiol (Paris)** 1988 Dec;37(10):563-8 (37 ref.) (Eng. Abstr.) **(Fre)**

[6 months' results of coronary angioplasty after thrombolysis of myocardial infarction] Dubois-Randé JL, et al. **Arch Mal Coeur** 1989 Jun;82(6):853-9 (Eng. Abstr.) **(Fre)**

[Coronary angioplasty in the treatment of threatening extension of myocardial infarction] Morice MC, et al. **Arch Mal Coeur** 1989 Jan;82(1):45-50 (Eng. Abstr.) **(Fre)**

[Advantages of immediate coronary dilatation after thrombolysis using tissue-type plasminogen activator in acute myocardial infarction. A European Cooperative Group trial] Vahanian A. **Arch Mal Coeur** 1988 May;81 Spec No:39-43 (Eng. Abstr.) **(Fre)**

[Angiographic coronary arterial lesions after a recent myocardial infarction treated by intravenous thrombolysis (letter)] Grand A, et al. **Presse Med** 1989 May 20; 18(20):1032-3 **(Fre)**

[Evaluation of the status of access to emergency care of subjects with myocardial infarction] Arveiler D, et al. **Rev Epidemiol Sante Publique** 1988;36(4-5):350-9 (Eng. Abstr.) **(Fre)**

[Delays in hospitalization in acute myocardial infarction. Comparison between data recorded in Brussels and in Charleroi-La Louvière] Bernard R, et al. **Rev Med Brux** 1988 Oct;9(7-8):389-92 (Eng. Abstr.) **(Fre)**

[The practitioner's actions in cases of severe cardiac disorders] Broccard O, et al. **Rev Med Suisse Romande** 1989 Mar;109(3):235-7 **(Fre)**

[Blunt upper abdominal trauma as a complication of cardiac resuscitation] Reinartz H. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):111-4 (Eng. Abstr.) **(Ger)**

[Secondary prevention in heart groups from the viewpoint of the established physician. An empirical study] Heitkamp HC, et al. **Fortschr Med** 1989 Jun 10;107(17):371-4 (Eng. Abstr.) **(Ger)**

[Speed is trump in myocardial infarct. Only oriented diagnosis--immediate hospital admission] Michel D. **Fortschr Med** 1988 Oct 30;106(31):18-9 **(Ger)**

[Infusion hydrothorax as a sequel of malposition of an internal jugular vein catheter] Hoffmann W, et al. **Med Klin** 1988 Jul 15;83(15):496-8 **(Ger)**

[Acute myocardial infarct. A changing clinical picture] Just H. **Radiologe** 1988 Sep;28(9):401-8 (Eng. Abstr.) **(Ger)**

[The treatment of heart infarct in comparison: attempt at quality control] Kläui H, et al. **Schweiz Med Wochenschr** 1988 Oct 8;118(40):1442-7 (Eng. Abstr.) **(Ger)**

[Progress in the treatment of acute myocardial infarct] **Z Kardiol** 1988;77 Suppl 4:1-66 **(Ger)**

[Percutaneous transluminal coronary angioplasty following thrombolysis in acute myocardial infarct] Erbel R, et al. **Z Kardiol** 1988;77 Suppl 4:37-42 (44 ref.) (Eng. Abstr.) **(Ger)**

[Results of thrombolytic therapy in acute myocardial infarct] Gülker H, et al. **Z Kardiol** 1988;77 Suppl 4:23-36 (119 ref.) (Eng. Abstr.) **(Ger)**

[Success and complication rates of coronary angioplasty in the unstable angina pectoris stage after myocardial infarct--a comparison with percutaneous transluminal coronary angioplasty in the acute infarct stage and unstable angina pectoris without preceding myocardial infarct] Haase KK, et al. **Z Kardiol** 1989 Feb;78(2):81-5 (Eng. Abstr.) **(Ger)**

[Pseudostabilization of unstable angina pectoris: disappearance of symptoms in persistence of silent myocardial ischemia] Hausmann D, et al. **Z Kardiol** 1988 Dec;77(12):805-10 (Eng. Abstr.) **(Ger)**

[Ischemic reaction in coronary angioplasty (PTCA) as a prerequisite for improving left ventricular function following intravenous thrombolysis in acute myocardial infarct] Leisch F, et al. **Z Kardiol** 1988 Sep;77(9):566-72 (Eng. Abstr.) **(Ger)**

[Thallium single photon emission computed tomography following thrombolysis: missing relation to left ventricular function] Schofer J, et al. **Z Kardiol** 1988 Aug; 77(8):497-502 (Eng. Abstr.) **(Ger)**

[5-year survival rate in acute transmural heart infarct following thrombolysis and immediate coronary angioplasty] Schwarz F, et al. **Z Kardiol** 1988 Nov; 77(11):713-20 (Eng. Abstr.) **(Ger)**

[Use of the autoperfusion catheter in acute coronary occlusion within the scope of percutaneous transluminal coronary angioplasty (PTCA)] Tebbe U, et al. **Z Kardiol** 1989 Jan;78(1):63-7 (Eng. Abstr.) **(Ger)**

[Myocardial infarct. Contributions on the organization of work at a coronary intensive care unit in the light of current knowledge] Davi R, et al. **Clin Ter** 1988 Jun 30; 125(6):443-7 (32 ref.) (Eng. Abstr.) **(Ita)**

[Metabolic treatment of acute myocardial infarct] Pallares DS, et al. **G Clin Med** 1989 Feb;70(2):83-94 **(Ita)**

[Percutaneous coronary angioplasty in evolving myocardial infarction] Klugmann S, et al. **G Ital Cardiol** 1988 Aug; 18(8):698-701 **(Ita)**

[Dual energy emission computed tomography with 99mTc pyrophosphate and 201Tl in evaluating coronary reperfusion therapy in patients with acute myocardial infarction] Hashimoto T, et al. **J Cardiol** 1988 Jun; 18(2):291-7 (Eng. Abstr.) **(Jpn)**

[Acceleration of the left main coronary artery stenosis following PTCA: a report of a case] Iwasaki K, et al. **Kokyu To Junkan** 1989 Feb;37(2):215-9 (Eng. Abstr.) **(Jpn)**

[Protection of ischemic myocardium] Kobyashi A. **Kokyu To Junkan** 1989 Apr;37(4):395-403 **(Jpn)**

[Efficacy of home exercise program in a convalescent phase of acute myocardial infarction evaluated by Borg's indices, expiratory gas analysis and blood lactate] Ueshima K, et al. **Kokyu To Junkan** 1989 May;37(5):523-7 (Eng. Abstr.) **(Jpn)**

[Efficacy of non-supervised home exercise program in convalescent phase of acute myocardial infarction-evaluation of the effects by anaerobic threshold] Ueshima K, et al. **Kokyu To Junkan** 1988 Jun;36(6):661-5 (Eng. Abstr.) **(Jpn)**

[Hemosorption in patients with circulatory disorders] Togaibaev AA, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):70-3 (Eng. Abstr.) **(Rus)**

[Intracoronary thrombolytic therapy of acute myocardial infarct] Golikov AP, et al. **Sov Med** 1988;(9):3-5 (Eng. Abstr.) **(Rus)**

[Subpleural nerve block in stenocardia and myocardial infarction] Vagner EA, et al. **Sov Med** 1989;(4):68-71 **(Rus)**

[Experience in treating patients with myocardial infarct] Novikov VS, et al. **Voen Med Zh** 1988 May;(5):56-8 **(Rus)**

[Immediate coronary angioplasty in patients with acute infarct of myocardium treated with tissue plasminogen activator: evaluation with cardiac perfusion gammagraphy in exertion] Magriñá J, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:42-7 (Eng. Abstr.) **(Spa)**

[Therapeutic recommendations in reversible myocardial ischemia— angina pectoris] **Lakartidningen** 1988 Sep 7; 85(36):2864-6 **(Swe)**

[Rapid care after myocardial infarction crucial for the prognosis] Sylvén C, et al. **Nord Med** 1989;104(2):41-4 (Eng. Abstr.) **(Swe)**

URINE

[Urinary cyclic adenosine monophosphate in acute myocardial infarction. Case reports and review of the literature] Nardoni A, et al. **Minerva Cardioangiol** 1988 Sep; 36(9):445-9 (27 ref.) (Eng. Abstr.) **(Ita)**

VETERINARY

[Aortic valvular dysplasia in a dog] Amberger C, et al. **Schweiz Arch Tierheilkd** 1989;131(5):241-6 (Eng. Abstr.) **(Fre)**

MYOCARDIAL MITOCHONDRIA see **MITOCHONDRIA, HEART**

MYOCARDIAL REPERFUSION

Emergency coronary artery reperfusion for acute evolving myocardial infarction. Vidne BA. **Adv Cardiol** 1988; 36:219-25

Prostaglandin E1 attenuates postischemic contractile dysfunction after brief coronary occlusion and reperfusion. Farber NE, et al. **Am Heart J** 1989 Jul;118(1):17-24

Effect of reperfusion on electrocardiographic and enzymatic infarct size: results of a randomized multicenter study of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) versus intracoronary streptokinase in acute myocardial infarction. Hackworthy RA, et al. **Am Heart J** 1988 Oct;116(4):903-14

Left ventricular topographic alterations in the completely healed rat infarct caused by early and late coronary artery reperfusion. Hale SL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1508-13

Regional metabolism during coronary occlusion, reperfusion, and reocclusion using phosphorus31 nuclear magnetic resonance spectroscopy in the intact rabbit. Kavanaugh KM, et al. **Am Heart J** 1989 Jan;117(1):53-9

Effects of residual stenosis on infarct size and regional transmural myocardial blood flow after reperfusion. Wilson JL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1523-9

Transient reversal of bifascicular block during acute myocardial infarction with reperfusion therapy: a word of caution. Wiseman A, et al. **Am Heart J** 1989 Jun; 117(6):1381-3

Steroid-induced enhancement of functional recovery of postischemic, reperfused myocardium in conscious dogs.

Wynsen JC, et al. **Am Heart J** 1988 Oct;116(4):915–25

Importance of effective, early and sustained reperfusion during acute myocardial infarction. Belenkie I, et al. **Am J Cardiol** 1989 Apr 15;63(13):912–6

Early recovery of regional left ventricular function after reperfusion in acute myocardial infarction assessed by serial two-dimensional echocardiography. Bourdillon PD, et al. **Am J Cardiol** 1989 Mar 15;63(11):641–6

Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow. Cigarroa RG, et al. **Am J Cardiol** 1989 Jul 15;64(3):155–60

Effects of afterload elevation on the ischemic myocardium in isolated, paced canine heart with partial coronary stenosis. Maruyama Y, et al. **Am J Cardiol** 1989 Mar 7; 63(10):40E–44E

Effect of repeated reperfusion on the size of experimental myocardial infarction. Moscovitz M, et al. **Am J Cardiol** 1989 Jan 15;63(3):259–60

A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction. Ong L, et al. **Am J Cardiol** 1989 Jul 1;64(1):11–5

Effects of intravenous metoprolol on global and regional left ventricular function after coronary arterial reperfusion in acute myocardial infarction. Steingart RM, et al. **Am J Cardiol** 1989 Apr 1;63(12):767–71

Protective effects of captopril against ischemia/reperfusion-induced ventricular arrhythmias in vitro and in vivo. deGraeff PA, et al. **Am J Med** 1988 Mar 11;84(3A):67–74

Effect of coronary occlusion and reperfusion on myocardial blood flow during infarct healing. Connelly CM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H365–74

A simple technique for occlusion and reperfusion of coronary artery in conscious rats. Himori N, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1719–25

Release of platelet-activating factor from ischemic-reperfused rabbit heart. Montrucchio G, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1236–46

Mechanism of membrane phospholipid degradation in ischemic-reperfused rat hearts. Otani H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H252–8

Diabetes alters postischemic response to a prostacyclin mimetic. Pieper GM, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1353–60

Degradation of adenine nucleotides in ischemic and reperfused rat heart. Van Bilsen M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H47–54

Surgical recanalization for treatment of evolving myocardial infarction [editorial] Bergmann SR, et al. **Ann Thorac Surg** 1989 Sep;48(3):319–21

Reperfusion of infarcting myocardium: benefit of surgical reperfusion in a chronic model. Cheung EH, et al. **Ann Thorac Surg** 1989 Sep;48(3):331–8

Coronary and systemic vascular resistance during reperfusion after global myocardial ischemia. Digerness SB, et al. **Ann Thorac Surg** 1988 Oct;46(4):447–54

Prolonged asystole during intraoperative myocardial reperfusion [letter] Lazar HL. **Ann Thorac Surg** 1988 Dec; 46(6):711–2

Coronary sinus interventions during cardiac surgery. Lazar HL. **Ann Thorac Surg** 1988 Oct;46(4):475–82 (48 ref.)

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work. Rebeyka IM, et al. **Ann Thorac Surg** 1989 Sep;48(3):397–403

Cell death in ischemic, reperfused porcine hearts: a histochemical and functional study. Pich S, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):550–9

Captopril improves recovery of adenosine triphosphate during reperfusion of the ischemic isolated rat heart; a 31-phosphorus-nuclear magnetic resonance study. Rahusen FD, et al. **Basic Res Cardiol** 1988 Sep-Oct; 83(5):540–9

Phosphorylation of phospholamban and troponin I in the ischemic and reperfused heart: attenuation and restoration of isoprenaline responsiveness. Bartel S, et al. **Biomed Biochim Acta** 1989;48(2-3):S108–13

Immunenzymometric assay for the heart specific glycogen phosphorylase BB in human serum using monoclonal antibodies. Hofmann U, et al. **Biomed Biochim Acta** 1989; 48(2-3):S132–6

PGE1 and iloprost affect the high energy phosphates in the global ischemic and reperfused rat heart: a 31P-NMR study. Pissarek M, et al. **Biomed Biochim Acta** 1989; 48(1):43–50

Differences in transmural distribution of cardiomyocyte injury Ca paradox versus postischemic reperfusion phenomenon. Slezák J, et al. **Biomed Biochim Acta** 1989; 48(2-3):S102–7

Partial prevention of calcium paradox in isolated perfused rat hearts by diltiazem. Ziegelhöffer A, et al. **Biomed Biochim Acta** 1989;48(2-3):S96–101

Myocardial protection during percutaneous transluminal coronary angioplasty. Lasala JM, et al. **Cardiol Clin** 1988 Aug;6(3):329–43 (74 ref.)

Peaking time of creatine-kinase MB in patients treated with urokinase or conventionally during acute myocardial infarction: is it really a clue to reperfusion? Brunelli C, et al. **Cardiologia** 1988 Jul;33(7):669–74

Depletion of myocardial glutathione: its effects on heart function and metabolism during ischaemia and reperfusion. Chatham JC, et al. **Cardiovasc Res** 1988 Nov;22(11):833–9

In vitro cyclic AMP induced phosphorylation of phospholamban: an early marker of long-term recovery of function following reperfusion of ischaemic myocardium? van der Giessen WJ, et al. **Cardiovasc Res** 1988 Oct;22(10):714–8

Arrhythmias in the assessment of coronary artery reperfusion following thrombolytic therapy. Gore JM, et al. **Chest** 1988 Oct;94(4):727–30

Quantification of myocardial infarct size after coronary reperfusion by serum cardiac myosin light chain II in conscious dogs. Isobe M, et al. **Circ Res** 1989 Sep; 65(3):684–94

Low Ca2+ reperfusion and enhanced susceptibility of the postischemic heart to the calcium paradox. Kirkels JH, et al. **Circ Res** 1989 Jun;64(6):1158–64

Reduction of lipid peroxidation in reperfused isolated rabbit hearts by diltiazem. Koller PT, et al. **Circ Res** 1989 Sep; 65(3):838–46

Impaired canine coronary vasodilator response to acetylcholine and bradykinin after occlusion-reperfusion. Mehta JL, et al. **Circ Res** 1989 Jan;64(1):43–54

Fatty acid analogue accumulation: a marker of myocyte viability in ischemic-reperfused myocardium. Miller DD, et al. **Circ Res** 1988 Oct;63(4):681–92

Identification of a time window for therapy to reduce experimental canine myocardial injury: suppression of neutrophil activation during 72 hours of reperfusion. Simpson PJ, et al. **Circ Res** 1988 Dec;63(6):1070–9

Lipid alterations in isolated, working rat hearts during ischemia and reperfusion: its relation to myocardial damage. van Bilsen M, et al. **Circ Res** 1989 Feb; 64(2):304–14

Myocardial reperfusion, limitation of infarct size, reduction of left ventricular dysfunction, and improved survival. Should the paradigm be expanded? Braunwald E. **Circulation** 1989 Feb;79(2):441–4

Reperfusion alters the relation between blood flow and the remaining myocardial infarction. Chu A, et al. **Circulation** 1989 Apr;79(4):884–9

Early noninvasive detection of successful reperfusion in patients with acute myocardial infarction. Ellis AK, et al. **Circulation** 1988 Dec;78(6):1352–7

Alpha-adrenergic receptor stimulation during simulated ischemia and reperfusion in canine cardiac Purkinje fibers. Hamra M, et al. **Circulation** 1988 Dec;78(6):1495–502

Effects of acute hypoxia and reoxygenation in a blood-perfused neonatal heart model. Sadeghi AM, et al. **Circulation** 1988 Nov;78(5 Pt 2):III158–63

Postsystolic shortening of acutely ischemic canine myocardium predicts early and late recovery of function after coronary artery reperfusion. Takayama M, et al. **Circulation** 1988 Oct;78(4):994–1007

Effects of therapeutic coronary reperfusion on aspartate aminotransferase isoenzymes in sera of patients with acute myocardial infarction. Panteghini M, et al. **Clin Chem** 1989 Jun;35(6):909–12

Study finds similar reperfusion rates with intravenous APSAC and intracoronary streptokinase in acute myocardial infarction [news] **Clin Pharm** 1988 Sep;7(9):634, 638

Fatty acid myocardial imaging using 123I-beta-methyl-iodophenyl pentadecanoic acid (BMIPP): comparison of myocardial perfusion and fatty acid utilization in canine myocardial infarction (occlusion and reperfusion model). Nishimura T, et al. **Eur J Nucl Med** 1989;15(7):341–5

Increased ultra weak chemiluminescence emission from rat heart at postischemic reoxygenation: protective role of vitamin E. Barsacchi R, et al. **Free Radic Biol Med** 1989; 6(6):573–9

Oxidation and release of glutathione from myocardium during early reperfusion. Lesnefsky EJ, et al. **Free Radic Biol Med** 1989;7(1):31–5

Assessment of successful reperfusion after thrombolysis. Henderson E. **Heart Lung** 1988 Nov;17(6 Pt 2):761–71 (46 ref.)

Differing time courses between delta lactate and mitochondrial respiration during coronary occlusion and after reperfusion in canine hearts. Hanaki Y, et al. **Heart Vessels** 1988;4(3):149–52

Recanalization time after intravenous streptokinase in evolving acute myocardial infarction. Bhat A, et al. **Indian Heart J** 1988 Jul-Aug;40(4):228–31

Symposium on Myocardial Reperfusion 1988: practical considerations. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):1A–92A

Myocardial reperfusion: is it ever too late? Califf RM. **J Am Coll Cardiol** 1989 Apr;13(5):1130–2

Medical and surgical management of early Q wave myocardial infarction. I. Effects of surgical reperfusion on survival, recurrent myocardial infarction, sudden death and functional class at 10 or more years of follow-up. DeWood MA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):65–77

Nifedipine administered after reperfusion ablates systolic contractile dysfunction of postischemic "stunned" myocardium. Przyklenk K, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1176–83

Myocardial perfusion imaging by contrast echocardiography with use of intracoronary sonicated albumin in humans. Reisner SA, et al. **J Am Coll Cardiol** 1989 Sep;14(3):660–5

Does thrombolytic therapy reduce infarct size? Selzer A. **J Am Coll Cardiol** 1989 May;13(6):1431–4 (21 ref.)

Effects of successful intravenous reperfusion therapy on regional myocardial function and geometry in humans: a tomographic assessment using two-dimensional echocardiography. Touchstone DA, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1506–13

Alterations in oxidative function and respiratory regulation in the post-ischemic myocardium. Zimmer SD, et al. **J Biol Chem** 1989 Jul 25;264(21):12402–11

The effect of the thromboxane A2/prostaglandin endoperoxide receptor antagonist SQ 30,741 on myocardial infarct size and blood flow during myocardial ischemia and reperfusion. Grover GJ, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):701–9

Dihydropyridine binding sites in aerobically perfused, ischemic, and reperfused rat hearts: effect of temperature and time. Gu XH, et al. **J Cardiovasc Pharmacol** 1988 Sep; 12(3):272–8

The effects of L655,240, a selective thromboxane and prostaglandin endoperoxide antagonist, on ischemia- and reperfusion-induced cardiac arrhythmias. Wainwright CL, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):264–71

Effect of reperfusion on the cardiac acetylcholine and norepinephrine contents in rat hearts. Ohno O, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):139–49

Demonstration of reperfusion after thrombolysis with technetium-99m isonitrile myocardial imaging. Kayden DS, et al. **J Nucl Med** 1988 Nov;29(11):1865–7

Accumulation of polymorphonuclear leukocytes in reperfused ischemic canine myocardium: relation with tissue viability assessed by fluorine-18-2-deoxyglucose uptake. Wijns W, et al. **J Nucl Med** 1988 Nov; 29(11):1826–32

Regional O2 consumption and coronary flow during beta adrenoceptor stimulation in reperfused canine myocardium. Acad BA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):611–6

Maturational difference in functional/metabolic sequelae of free radical formation on reperfusion. del Nido PJ, et al. **J Surg Res** 1989 Jun;46(6):532–6

Myocardial blood flow and oxygen consumption after aortic cross-clamping. van der Veen FH, et al. **J Surg Res** 1989 Oct;47(4):319–24

Effects of antegrade cardioplegic infusion with simultaneously controlled coronary sinus occlusion on preservation of regionally ischemic myocardium after acute coronary artery occlusion and reperfusion. Sun SC, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):626–33

Myocardial reperfusion: beneficial or harmful? Kambara H. **Jpn Circ J** 1988 Jul;52(7):715–7

Experimental and clinical investigations for the time interval from onset of symptoms to the coronary reperfusion. Kanmatsuse K, et al. **Jpn Circ J** 1988 Jul;52(7):684–94

Reperfusion or persisting occlusion? **Lancet** 1989 May 20; 1(8647):1114–5 (20 ref.)

Discrepancies between the effects of coronary reperfusion on survival and left ventricular function [see comments] Van de Werf F. **Lancet** 1989 Jun 17;1(8651):1367–9 (25 ref.). **Comment in:** Lancet 1989 Jul 15;2(8655):153

Effect of hyperosmotic mannitol on magnetic resonance relaxation parameters in reperfused canine myocardial infarction. Miller DD, et al. **Magn Reson Imaging** 1989 Jan-Feb;7(1):79–88

A model of acute regional myocardial ischemia and reperfusion in the rat. Sievers RE, et al. **Magn Reson Med** 1989 May;10(2):172–81

Alterations in fatty acid oxidation in ischemic and reperfused myocardium. Huang XQ, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):145–53 (67 ref.)

The pattern of delivery and distribution of coronary venous retroinfusate in canine hearts. Chen SG, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):19–25

Metabolic protection of the reperfused canine endocardium by the thromboxane synthetase inhibitor, dazoxiben. Pieper GM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul;33(1):13–22

Reperfused and nonreperfused myocardial infarction: diagnostic potential of Gd-DTPA—enhanced MR imaging. de Roos A, et al. **Radiology** 1989 Sep; 172(3):717–20

Reperfused-viable and reperfused-infarcted myocardium: differentiation with in vivo P-31 MR spectroscopy. Rehr RB, et al. **Radiology** 1989 Jul;172(1):53–8

Occlusive and reperfused myocardial infarcts: differentiation with Mn-DPDP—enhanced MR imaging. Saeed M, et al. **Radiology** 1989 Jul;172(1):59–64

Acute myocardial ischemia and reperfusion: MR imaging with albumin-Gd-DTPA. Schmiedl U, et al. **Radiology** 1989 Feb;170(2):351–6

Diltiazem (0.5 mg/l) decreases coronary vascular resistance during reperfusion, but not during low flow ischemia, in the isolated perfused rat heart. Mohanlal RW, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):3–11

[Myocardial reperfusion—a double-edged sword?] Peuhkurinen K. **Duodecim** 1989;105(9):822–30 (57 ref.) **(Fin)**

[Toxicity of oxygen free radicals in reperfusion. Myth or reality?] de Leiris J, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:35–40 (Eng. Abstr.) **(Fre)**

[Effects of coenzyme Q10 on the contractility and fibrillation threshold of isolated rabbit heart during ischemia and reperfusion] Caldarera CM, et al. **Cardiologia** 1988 Nov; 33(11):1083–8 (Eng. Abstr.) **(Ita)**

[Dual energy emission computed tomography with 99mTc pyrophosphate and 201Tl in evaluating coronary reperfusion therapy in patients with acute myocardial infarction] Hashimoto T, et al. **J Cardiol** 1988 Jun; 18(2):291–7 (Eng. Abstr.) **(Jpn)**

[Increased lipid peroxides generation and calcium fluxes in hearts during reperfusion] Shimanuki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):688–93 (Eng. Abstr.) **(Jpn)**

[Myocardial infarction and its limitations—hopes and dilemmas] Beręsewicz A. **Acta Physiol Pol** 1988;39 Suppl 32:53–102 **(Pol)**

[Protective effect of antioxidant ionol in total ischemia of the heart] Bilenko MV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):412–5 (Eng. Abstr.) **(Rus)**

[Metabolism of the ischemic heart muscle and the effect of reperfusion and verapamil] Kucharská J, et al. **Bratisl Lek Listy** 1988 Nov;89(11):815–27 (Eng. Abstr.) **(Slo)**

[Intravenous streptokinase in acute myocardial infarction. A Mexican multicentric study] Martínez Ríos MA, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):511–5 (Eng. Abstr.) **(Spa)**

[Ischemic cardiopathy (XIV). Microvascular changes during myocardial ischemia and reperfusion] Fernández Avilés F, et al. **Rev Esp Cardiol** 1989 Apr;42(4):267–73 (49 ref.) **(Spa)**

[Myocardial revascularization surgery during a developing infarction] González Santos JM, et al. **Rev Esp Cardiol** 1989 May;42(5):309–17 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

The effects of PAF antagonists on arrhythmias and platelets during acute myocardial ischaemia and reperfusion. Wainwright CL, et al. **Eur Heart J** 1989 Mar;10(3):235–43

[The role of oxygen-derived free radicals in ischemic heart damage] Karwatowska-Prokopczuk E, et al. **Kardiol Pol** 1988;31(12):786–98 (66 ref.) **(Pol)**

INSTRUMENTATION

[Use of the autoperfusion catheter in acute coronary occlusion within the scope of percutaneous transluminal coronary angioplasty (PTCA)] Tebbe U, et al. **Z Kardiol** 1989 Jan;78(1):63–7 (Eng. Abstr.) **(Ger)**

METHODS

Influence of leukopenia on collateral flow, reperfusion flow, reflow ventricular fibrillation, and infarct size in dogs. de Lorgeril M, et al. **Am Heart J** 1989 Mar;117(3):523–32

Controlled versus hyperemic flow during reperfusion of jeopardized ischemic myocardium. Peng CF, et al. **Am Heart J** 1989 Mar;117(3):515–22

Primary percutaneous coronary angioplasty: a protagonist's view. O'Neill WW. **Am J Cardiol** 1988 Dec 6; 62(18):15K–20K (35 ref.)

The uncertain role of thrombolytic angioplasty within the treatment strategy for myocardial infarction. Ross AM. **Am J Cardiol** 1988 Dec 6;62(18):21K–24K (28 ref.)

Intravenous streptokinase in acute myocardial infarction at the community hospital: a six-year experience. Vogel JH, et al. **Am J Cardiol** 1988 Dec 6;62(18):25K–27K

Pressure-controlled reperfusion improves postischemic recovery of LV-hypertrophied rat hearts. Müller C, et al. **Angiology** 1989 Jun;40(6):574–80

Modified reperfusate after long-term preservation of the heart. Milliken JC, et al. **Ann Thorac Surg** 1989 May; 47(5):725–8

Angiocatheter coronary artery reperfusion before cardioplegia for evolving myocardial infarction. Nishida H, et al. **Ann Thorac Surg** 1989 Mar;47(3):470–1

Sarcolemmal integrity during ischaemia and reperfusion of the isolated rat heart. Harper IS, et al. **Basic Res Cardiol** 1989 Mar–Apr;84(2):208–26

Thrombolytic therapy for acute myocardial infarction. Bates ER, et al. **Chest** 1989 May;95(5 Suppl):257S–264S (56 ref.)

Coronary venous retroperfusion—beyond lytic therapy. Kar S. **Indian Heart J** 1989 May–Jun;41(3):139–41

Retrograde coronary sinus perfusion for myocardial protection. Fu XP, et al. **J Tongji Med Univ** 1988;8(2):114–7

[Protective effects of trans-coronosinal retrograde perfusion on the left and right ventricles: an experimental study] Li XN. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):702 **(Chi)**

[Effect of various reperfusion regimens on the recovery of myocardial contractile function after total ischemia] Shul'zhenko VS, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):663–6 (Eng. Abstr.) **(Rus)**

[Restoration of myocardial contractile function during gradual reperfusion after total ischemia] Shul'zhenko VS, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):407–9 (Eng. Abstr.) **(Rus)**

[Intracoronary thrombolytic therapy of acute myocardial infarct] Golikov AP, et al. **Sov Med** 1988;(9):3–5 (Eng. Abstr.) **(Rus)**

MYOCARDIAL REPERFUSION INJURY

Free radicals and myocardial protection: a surgical viewpoint. Menasché P, et al. **Ann Thorac Surg** 1989 Jun; 47(6):939–45 (63 ref.)

Free radicals: the reperfusion Ninja [editorial] Wechsler AS. **Ann Thorac Surg** 1989 Jun;47(6):798

Effects of polyoxyethylene-modified superoxide dismutase on reperfusion induced arrhythmias in isolated rat and guinea-pig hearts. Yamakawa T, et al. **J Mol Cell Cardiol** 1989 May;21(5):441–52

Anesthetized rabbit as a model for ischemia- and reperfusion-induced arrhythmias: effects of quinidine and bretylium. Coker SJ. **J Pharmacol Methods** 1989 Jul; 21(4):263–79

Ischemia- and reperfusion-induced arrhythmias in conscious rats—studies with prazosin and atenolol. Kinoshita K, et al. **Jpn Circ J** 1988 Dec;52(12):1384–94

[Anoxia-reoxygenation injury in isolated rat myocytes is modulated by cell sodium during the anoxia period] Li ZP, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):304–7 (Eng. Abstr.) **(Chi)**

[Role of oxygen free-radicals in myocardial ischemia reperfusion injury—practical implications] Leor J, et al. **Harefuah** 1988 Apr 15;114(8):400–3 (55 ref.) **(Heb)**

CHEMICALLY INDUCED

[Effect of adenosine on the size of experimental myocardial infarction and "no re-flow" areas] Eliseev VV, et al. **Kardiologiia** 1988 Dec;28(12):98–9 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Ischemia-induced and reperfusion-induced arrhythmias: importance of heart rate. Bernier M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H21–31

Reperfusion arrhythmias: dose-related protection by anti-free radical interventions. Bernier M, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1344–52

Hypoxic reperfusion attenuates postischemic microvascular injury. Korthuis RJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H315–9

The Lambeth Conventions: guidelines for the study of arrhythmias in ischaemia infarction, and reperfusion. Walker MJ, et al. **Cardiovasc Res** 1988 Jul;22(7):447–55

[Direct cardiotropic anti-arrhythmic effect of sodium valproate] Meerson FZ, et al. **Kardiologiia** 1988 Jun; 28(6):100–2 **(Rus)**

DIAGNOSIS

Enzymatic estimation of the extent of irreversible myocardial injury early after reperfusion. Devries SR, et al. **Am Heart J** 1989 Jan;117(1):31–6

Ultrasonic tissue characterization with integrated backscatter. Acute myocardial ischemia, reperfusion, and stunned myocardium in patients. Milunski MR, et al. **Circulation** 1989 Sep;80(3):491–503

DRUG THERAPY

Is "stunned myocardium" a protective mechanism? Effect of acute recruitment and acute beta-blockade on recovery of contractile function and high-energy phosphate stores at 1 day post-reperfusion. Przyklenk K, et al. **Am Heart J** 1989 Sep;118(3):480–9

Treatment of reperfusion injury with intracoronary calcium channel antagonists and reduced coronary free calcium concentration in regionally ischemic, reperfused porcine hearts. Klein HH, et al. **J Am Coll Cardiol** 1989 May; 13(6):1395–401

Beneficial effects of coronary venous retroinfusion of superoxide dismutase and catalase on reperfusion arrhythmias, myocardial function, and infarct size in dogs. Hatori N, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):396–404

Effects of anipamil on electrocardiogram, plasma creatine kinase, and reperfusion arrhythmias after coronary occlusion in closed-chest rats. Kirchengast M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S73–5

Effects of flecainide on occlusion and reperfusion arrhythmias in dogs. Lederman SN, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):541–6

Reduction of myocardial ischemia-reperfusion injury by KT-362, a new intracellular calcium antagonist in anesthetized dogs. Pelc LR, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):586–93

[Mechanism of myocardial reoxygenation injury and the protective effect of sheng mai san on the myocardium] Yao M. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):313–5, 22 (Eng. Abstr.) **(Chi)**

[Limitation of myocardial infarct size by polyethylene glycol-conjugated superoxide dismutase in a canine model of 90 min coronary occlusion followed by 4 days of reperfusion] Tamura Y, et al. **Kokyu To Junkan** 1989 Feb; 37(2):201–8 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Reperfusion induced enzyme release: washout effect or manifestation of reperfusion damage? Mohanlal RW, et al. **Cardiovasc Res** 1988 Sep;22(9):603–10

EPIDEMIOLOGY

Reperfusion arrhythmia: myth or reality? Burney RE, et al. **Ann Emerg Med** 1989 Mar;18(3):240–3

ETIOLOGY

Free radical and granulocyte-mediated injury during myocardial ischemia and reperfusion. Engler RL. **Am J Cardiol** 1989 Mar 7;63(10):19E–23E (52 ref.)

Early in reperfusion, leukocytes alter perfused coronary capillarity and vascular resistance. Reynolds JM, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H982–9

Evidence that free radicals result in reperfusion injury in heart muscle. Weisfeldt ML, et al. **Basic Life Sci** 1988; 49:911–9

The anti-arrhythmic effects of myocardial ischaemia. Relation to reperfusion arrhythmias? Podzuweit T, et al. **Cardiovasc Res** 1989 Feb;23(2):81–90

Pacing and reperfusion induced arrhythmias: protection by slow heart rate in the rat heart. Tosaki A, et al. **Cardiovasc Res** 1988 Nov;22(11):818–25

"Reperfusion injury" by oxygen-derived free radicals? Effect of superoxide dismutase plus catalase, given at the time of reperfusion, on myocardial infarct size, contractile function, coronary microvasculature, and regional myocardial blood flow. Przyklenk K, et al. **Circ Res** 1989 Jan;64(1):86–96

Myocardial reperfusion injury. Role of myocardial hypoxanthine and xanthine in free radical-mediated reperfusion injury. Abd-Elfattah AS, et al. **Circulation** 1988 Nov;78(5 Pt 2):III224–35

Specific reperfusion arrhythmias with high dose short term IV streptokinase therapy in acute myocardial infarction. Chopra KL, et al. **Indian Heart J** 1988 Jul–Aug;40(4):232–6

Reperfusion arrhythmias in acute myocardial infarction—fact or coincidence? Solimene MC, et al. **Int J Cardiol** 1988 Sep;20(3):341–51

Endothelial and myocardial injury during ischemia and reperfusion: pathogenesis and therapeutic implications. Forman MB, et al. **J Am Coll Cardiol** 1989 Feb;13(2):450–9 (103 ref.)

Reperfusion-induced arrhythmias are critically dependent upon occluded zone size: relevance to the mechanism of arrhythmogenesis. Curtis MJ, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):625–37

A new method to study activated oxygen species induced damage in cardiomyocytes and protection by Ca2+-antagonists. Ver Donck L, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):811–23

The link between free radicals and myocardial injury. Nakazawa H, et al. **Jpn Circ J** 1988 Jul;52(7):646–54

Reperfusion injury after thrombolytic therapy for acute myocardial infarction. **Lancet** 1989 Sep 16;2(8664):655–7 (16 ref.)

Role of arachidonic acid metabolites in cardiac ischemia and reperfusion injury. Fiedler VB. **Pharmacotherapy** 1988; 8(3):158–68 (93 ref.)

[A comparison of intermittent versus continuous aortic cross-clamping during multidose cardioplegic arrest and the possible participation of oxygen toxicity in the cellular injury induced by reperfusion of ischemic myocardium] Tamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):874–82 (Eng. Abstr.) **(Jpn)**

[The role of oxygen-derived free radicals in ischemic heart damage] Karwatowska-Prokopczuk E, et al. **Kardiol Pol** 1988;31(12):786–98 (66 ref.) **(Pol)**

[Negative inotropic and vasoconstrictor effects of oxidized phospholipids] Bilenko MV, et al. **Kardiologiia** 1989 Jun; 29(6):88–94 (Eng. Abstr.) **(Rus)**

GENETICS

Clastogenic factor in ischemia-reperfusion injury during open-heart surgery: protective effect of allopurinol. Emerit I, et al. **Ann Thorac Surg** 1988 Dec;46(6):619–24

IMMUNOLOGY

Ischemia-reperfusion injury and histamine release in isolated guinea-pig heart: the role of free radicals. Masini E, et al. **Agents Actions** 1989 Apr;27(1–2):154–7

METABOLISM

Reperfusion-induced calcium gain after ischemia. Elz JS, et al. **Am J Cardiol** 1989 Mar 7;63(10):7E–13E

Detection and measurement of free radical generation during cardiovascular injury. Arroyo CM, et al. **Basic Life Sci** 1988;49:905–10

Mechanisms of reoxygenation injury in myocardial infarction: implications of a myoglobin redox cycle. Galaris D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1162–8

Reactive oxygen metabolites and the human myocardium. Burrell CJ, et al. **Br Heart J** 1989 Jan;61(1):4–8 (40 ref.)

A direct role of endogenous prostaglandins in reperfusion-induced cardiac arrhythmias. Moffat MP, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):772–9

Alterations in cardiac sarcoplasmic reticulum calcium transport in the postischemic "stunned" myocardium. Krause SM, et al. **Circ Res** 1989 Aug;65(2):526–30

Lipid alterations in isolated, working rat hearts during ischemia and reperfusion: its relation to myocardial damage. van Bilsen M, et al. **Circ Res** 1989 Feb; 64(2):304–14

Kinetics of myoglobin release and prediction of myocardial myoglobin depletion after coronary artery reperfusion. Ellis AK, et al. **Circulation** 1989 Sep;80(3):676–83

GSH and reperfusion injury [letter] Goldfarb RD, et al.

Circulation 1989 Sep;80(3):712–3

Erythrocyte catalase decreases cardiac reperfusion injury. Brown JM, et al. **Curr Surg** 1989 Mar–Apr;46(2):122–4

Sustained nonoxidative glucose utilization and depletion of glycogen in reperfused canine myocardium. Schwaiger M, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):745–54

Effects of exogenous free radicals on electromechanical function and metabolism in isolated rabbit and guinea pig ventricle. Implications for ischemia and reperfusion injury. Goldhaber JI, et al. **J Clin Invest** 1989 Jun;83(6):1800–9

Leakage of heart fatty acid binding protein with ischemia and reperfusion in the rat. Knowlton AA, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):577–83

Developmental changes in reperfusion injury. Comparison of intracellular ion accumulation in ischemic and cardioplegic arrest. Pridjian AK, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):577–81

The coincidence of myocardial reperfusion injury and hydrogen peroxide production in the isolated rat heart. Brown JM, et al. **Surgery** 1989 Apr;105(4):496–501

[Lipid peroxidation and myocardial reperfusion injury in open heart surgery] Chen BT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):212–4 **(Chi)**

[Biochemistry of the physiopathologic and clinical aspects of free radicals in heart ischemia: free radicals as a mediator of ischemia–reperfusion injury] Okabe E, et al. **Nippon Rinsho** 1988 Oct;46(10):2190–5 **(Jpn)**

MORTALITY

Assessment of the impact of recipient age and organ ischemic time on heart transplant mortality. Fields BL, et al. **Transplant Proc** 1988 Oct;20(5):1035–7

PATHOLOGY

Acceleration of cell necrosis following reperfusion after ischemia in the pig heart without collateral circulation. Fujiwara H, et al. **Am J Cardiol** 1989 Mar 7;63(10):14E–18E

The transmural progression of the no–reflow phenomenon in globally ischemic hearts. Sheppard AJ, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):611–7

The pathology of acute myocardial infarction: definition, location, pathogenesis, effects of reperfusion, complications, and sequelae. Waller BF. **Cardiol Clin** 1988 Feb;6(1):1–28 (137 ref.)

Acute reoxygenation injury in the isolated rat heart: role of resident cardiac mast cells. Keller AM, et al. **Circ Res** 1988 Dec;63(6):1044–52

Ultrastructure, peroxisomes and lipid peroxidation in reperfused myocardium. Vaughan DM, et al. **Cytobios** 1988;55(221):71–80

Selective antagonism of peptidoleukotriene responses does not reduce myocardial damage or neutrophil accumulation following coronary artery occlusion with reperfusion. Egan JW, et al. **Prostaglandins** 1989 May;37(5):597–613

Endothelial cells of the cardiac microvasculature during and after cold cardioplegic ischaemia. Comparison of endothelial and myocyte damage. Lindal S, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):257–65

[Topography of foci of perfusion defects after myocardial infarct on standard ECG and thallium stress scintigraphy] Kasalický J, et al. **Vnitr Lek** 1989 Apr;35(4):325–32 (Eng. Abstr.) **(Cze)**

[Transmural differences between damaged cardiomyocytes due to post–ischemic reperfusion and calcium paradox] Slezák J, et al. **Bratisl Lek Listy** 1989 Feb;90(2):67–73 (Eng. Abstr.) **(Slo)**

PHYSIOPATHOLOGY

Influence of leukopenia on collateral flow, reperfusion flow, reflow ventricular fibrillation, and infarct size in dogs. de Lorgeril M, et al. **Am Heart J** 1989 Mar;117(3):523–32

Controlled versus hyperemic flow during reperfusion of jeopardized ischemic myocardium. Peng CF, et al. **Am Heart J** 1989 Mar;117(3):515–22

Preservation of coronary flow reserve in stunned myocardium. Jeremy RW, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):H1303–10

Role of iron in postischemic microvascular injury. Smith JK, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1472–7

Recovery of contractile function of stunned myocardium in chronically instrumented dogs is enhanced by halothane or isoflurane. Warltier DC, et al. **Anesthesiology** 1988 Oct; 69(4):552–65

Effect of pyruvate on regional ventricular function in normal and stunned myocardium. Mentzer RM Jr, et al. **Ann Surg** 1989 May;209(5):629–33; discussion 633–4

Oxygen radical scavengers and myocardial preservation during transplantation: role of xanthine oxidase. Stewart JR, et al. **Basic Life Sci** 1988;49:957–62 (21 ref.)

Sex differences in the tolerance of immature rat myocardium to global ischemia. Avkiran M, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):618–25

Involvement of calcium ions in the development of ischemia and reperfusion injury of the myocardium. Beresewicz A. **Biomed Biochim Acta** 1989;48(2–3):S89–95

Influence of the thromboxane synthetase inhibitor HOE 944, prostacyclin and indomethacin on reperfusion arrhythmias, cardiodynamics and metabolism in isolated ischemic rat hearts. Linz W, et al. **Biomed Biochim Acta** 1988; 47(10–11):S23–6

Myocardial reperfusion injury: an inflammatory reaction? Vaage J, et al. **Biomed Biochim Acta** 1989;48(2–3):S63–8

The effects of PAF antagonists on ischaemia and reperfusion arrhythmias and ischaemia–induced platelet aggregation. Wainwright CL, et al. **Biomed Biochim Acta** 1988; 47(10–11):S224–7

Marked reduction of free radical generation and contractile dysfunction by antioxidant therapy begun at the time of reperfusion. Evidence that myocardial "stunning" is a manifestation of reperfusion injury. Bolli R, et al. **Circ Res** 1989 Sep;65(3):607–22

Oxygen consumption and coronary reactivity in postischemic myocardium. Laxson DD, et al. **Circ Res** 1989 Jan; 64(1):9–20

Assessment of the antiarrhythmic activity of nicorandil during myocardial ischemia and reperfusion. Kempsford RD, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):61–8

Concepts related to the study of reactive oxygen and cardiac reperfusion injury. Kehrer JP. **Free Radic Res Commun** 1989;5(6):305–14 (59 ref.)

Changes in regional myocardial cross–sectional area during brief coronary occlusion and reperfusion in conscious dogs. Fujita M, et al. **Int J Cardiol** 1989 Jan;22(1):21–8

Evaluation of biochemical functions and ventricular performance in regional ischemic–reperfused myocardium by afterload reduction: differential effects of calcium blocking and non–calcium blocking vasodilators. Odom H 2d, et al. **Int J Cardiol** 1988 Dec;21(3):233–46

Effects of acute reperfusion on regional myocardial function: serial two–dimensional echocardiography assessment. Oh JK, et al. **Int J Cardiol** 1989 Feb;22(2):161–8

Prolonged abnormalities of left ventricular diastolic wall thinning in the "stunned" myocardium in conscious dogs: time course and relation to systolic function. Charlat ML, et al. **J Am Coll Cardiol** 1989 Jan;13(1):185–94

Neutrophil depletion does not prevent myocardial dysfunction after brief coronary occlusion. Jeremy RW, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1155–63

Do neutrophils mediate the phenomenon of stunned myocardium? Kloner RA. **J Am Coll Cardiol** 1989 Apr; 13(5):1164–6

Nifedipine administered after reperfusion ablates systolic contractile dysfunction of postischemic "stunned" myocardium. Przyklenk K, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1176–83

Adrenergic influences on ischemic and reperfusion arrhythmias in a canine model with diminished collateral blood flow. Euler DE, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):430–7

Antiinflammatory agent BW 755 C in ischemic reperfused porcine hearts. Klein HH, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):338–44

Inability of desferrioxamine to limit tissue injury in the ischaemic and reperfused rabbit heart. Maxwell MP, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):608–15

Electrical and ionic mechanisms of early reperfusion arrhythmias in sheep cardiac Purkinje's fibers. Abete P, et al. **J Electrocardiol** 1988 Aug;21(3):199–212

Atrial natriuretic factor protects the isolated working ischaemic rat heart against the action of angiotensin II. Linz W, et al. **J Hypertens Suppl** 1988 Dec;6(4):S339–41

Experimental studies on ischemic injury and reperfusion injury to the cardiac sarcoplasmic reticulum—the myocardial protective effect of nicorandil. Irié H. **Jpn Circ J** 1988 Jun;52(6):563–9

Energy deficiency, calcium overload or oxidative stress: possible causes of irreversible ischemic myocardial injury. Piper HM. **Klin Wochenschr** 1989 May 2;67(9):465–76 (87 ref.)

Antagonistic effects of alpha–adrenoceptor blocking agents on arrhythmias, enzyme release, and myocardial necrosis in isolated rat hearts with coronary occlusion and reperfusion. Bernauer W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):88–95

Effect of propranolol on ischemic myocardial damage and left ventricular hypertrophy following permanent coronary artery occlusion or occlusion followed by reperfusion. Smith EF 3d, et al. **Pharmacology** 1989;38(5):298–309

A comparative study of the antiarrhythmic properties of eicosanoid inhibitors, free radical scavengers and potassium channel blockers on reperfusion induced arrhythmias in the rat. Beatch GN, et al. **Proc West Pharmacol Soc** 1989; 32:285–9

[Opioid peptides, opioid receptors and ischemia–reperfusion induced cardiac arrhythmias] Wong TM, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):357–9 (30 ref.) **(Chi)**

[Relation between myocardial perfusion, myocardial necrosis and residual glucose metabolism as a vitality parameter in the post–ischemic myocardium following coronary reperfusion] Sochor H. **Acta Med Austriaca Suppl** 1989; 39:1–36 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Significant role of protease inhibition by aprotinin in myocardial protection from prolonged cardioplegia with hypothermia. Sunamori M, et al. **Adv Exp Med Biol** 1988; 240:399–404

Protective effect of the specific thromboxane receptor antagonist, BM–13505, in reperfusion injury following acute myocardial ischemia in cats. Bhat AM, et al. **Am Heart J** 1989 Apr;117(4):799–803

alpha–Tocopherol attenuates myocardial membrane–related alterations resulting from ischemia and reperfusion. Massey KD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1192–9

Enhanced myocardial protection with adenosine. Bolling SF, et al. **Ann Thorac Surg** 1989 Jun;47(6):809–15

Reduction of reperfusion injury with mannitol cardioplegia. Ferreira R, et al. **Ann Thorac Surg** 1989 Jul;48(1):77–83; discussion 83–4

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? Greene PS, et al. **Ann Thorac Surg** 1989 Jul;48(1):38–42

Myocardial salvage with trolox and ascorbic acid for an acute evolving infarction. Mickle DA, et al. **Ann Thorac Surg** 1989 Apr;47(4):553–7

Myocardial preservation related to magnesium content of hyperkalemic cardioplegic solutions at 8 degrees C. Reynolds TR, et al. **Ann Thorac Surg** 1989 Jun;47(6):907–13

Clastogenic factor in ischemia–reperfusion injury: protective effect of allopurinol. Emerit I, et al. **Basic Life Sci** 1988; 49:863–7

Inactivation of creatine phosphokinase by superoxide during reperfusion injury. McCord JM, et al. **Basic Life Sci** 1988; 49:869–73

Enhanced myocardial preservation by nicotinic acid, an antilipolytic compound: mechanism of action. Datta S, et al. **Basic Res Cardiol** 1989 Jan–Feb;84(1):63–76

Protection of the ischaemic myocardium from reperfusion injury by defibrotide and its possible mechanism of action. Thiemermann C, et al. **Biomed Biochim Acta** 1988; 47(10–11):S19–22

A closed–loop system for pressure–controlled intermittent coronary sinus occlusion. Sun Y. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):136–43

Mannitol and reperfusion–induced arrhythmias: possible mechanisms of action in the isolated rat heart. Yeatman M, et al. **Can J Cardiol** 1988 Sep;4(6):287–94

Low Ca2+ reperfusion and enhanced susceptibility of the postischemic heart to the calcium paradox. Kirkels JH, et al. **Circ Res** 1989 Jun;64(6):1158–64

Identification of a time window for therapy to reduce experimental canine myocardial injury: suppression of neutrophil activation during 72 hours of reperfusion. Simpson PJ, et al. **Circ Res** 1988 Dec;63(6):1070–9

Superoxide dismutase conjugated to polyethylene glycol provides sustained protection against myocardial ischemia/reperfusion injury in canine heart. Tamura Y, et al. **Circ Res** 1988 Nov;63(5):944–59

Percutaneous cardiopulmonary bypass limits myocardial injury from ischemic fibrillation and reperfusion. Axelrod HI, et al. **Circulation** 1988 Nov;78(5 Pt 2):III148–52

Limitation of myocardial reperfusion injury by intravenous perfluorochemicals. Role of neutrophil activation. Bajaj AK, et al. **Circulation** 1989 Mar;79(3):645–56

Superoxide dismutase reduces reperfusion arrhythmias but fails to salvage regional function or myocardium at risk in conscious dogs. Nejima J, et al. **Circulation** 1989 Jan; 79(1):143–53

Prevention of postischemic cardiac injury by the orally active iron chelator 1,2–dimethyl–3–hydroxy–4–pyridone (L1) and the antioxidant (+)–cyanidanol–3. van der Kraaij AM, et al. **Circulation** 1989 Jul;80(1):158–64

Early treatment with deferoxamine limits myocardial ischemic/reperfusion injury. Reddy BR, et al. **Free Radic Biol Med** 1989;7(1):45–52

Myocardial protection during ischemia by prior feeding with the creatine analog: cyclocreatine. Jacobstein MD, et al. **J Am Coll Cardiol** 1989 Jul;14(1):246–51

Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):715–22

Protective effect of lidocaine against ischemia and reperfusion–induced arrhythmias and shifts of myocardial sodium, potassium, and calcium content. Tosaki A, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):621–8

Protection of reperfused ischemic canine myocardium by CI–922, a new inhibitor of leukocyte activation. Werns SW, et al. **J Cardiovasc Pharmacol** 1988;12(5):608–14

Reperfusion–induced arrhythmias in the conscious rat: a comparative study with three calcium antagonists. Kinoshita K, et al. **J Surg Res** 1989 Aug;47(2):166–72

Age–related changes in the ability of hypothermia and cardioplegia to protect ischemic rabbit myocardium. Baker JE, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):717–24

Myocardial protection in cyanotic neonatal lambs. Fujiwara T, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):700–10

Improvement of myocardial function by trifluoperazine, a calmodulin antagonist, after acute coronary artery occlusion and coronary revascularization. Otani H, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):267–74

Optimal myocardial protection during crystalloid cardioplegia. Interrelationship between volume and duration of infusion. Takahashi A, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):730–40

Human plasma superoxide dismutase (SOD) activity on reperfusion injury with successful thrombolysis in acute myocardial infarction. Kodama K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):202–6

Protective effect of propionyl–L–carnitine against ischaemia and reperfusion–damage. Ferrari R, et al.

Mol Cell Biochem 1989 Jun 27–Jul 24;88(1–2):161–8

Inhibitors of adenosine catabolism improve recovery of dog myocardium after ischemia. Koke JR, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):107–13

Glucose oxidation is stimulated in reperfused ischemic hearts with the carnitine palmitoyltransferase 1 inhibitor, Etomoxir. Lopaschuk GD, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):175–9

Protection of the ischemic myocardium from reperfusion injury by prostaglandin E1 inhibition of ischemia–induced neutrophil activation. Schrör K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):268–74

Endotoxin pretreatment increases endogenous myocardial catalase activity and decreases ischemia–reperfusion injury of isolated rat hearts. Brown JM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2516–20

The effects of lipoxygenase inhibitor and peptidoleukotriene antagonist on myocardial injury in a canine coronary occlusion–reperfusion model. Toki Y, et al. **Prostaglandins** 1988 Apr;35(4):555–71

Protection of the heart from ischemia by a new oligomeric derivative of prostaglandin E1. Ohnishi ST, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):159–63

[Experimental study on myocardial protection with verapamil cardioplegia] Zhu P. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):316–9, 22 (Eng. Abstr.) **(Chi)**

[Preventive effect of mioflazine on myocardial calcium–overload during postischemic reperfusion in the rabbit heart] Liu GS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):221–3, 261 (Eng. Abstr.) **(Chi)**

[Prophylactic effects of m–nisoldipine and nisoldipine on reperfusion arrhythmia in hearts of rats] Li YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):542–7 (Eng. Abstr.) **(Chi)**

[A new concept of cardioplegic protection in cardiac surgery: iron chelation] Menasché P, et al. **Arch Mal Coeur** 1988 Jun;81(6):811–6 (Eng. Abstr.) **(Fre)**

[Increasing myocardial tolerance of global ischemia and reperfusion injury using a synthetic peptide] Dvortsin GF, et al. **Kardiologiia** 1989 Jun;29(6):85–8 (Eng. Abstr.) **(Rus)**

[Diagnosis and prevention of myocardial reperfusion injury in experimental myocardial infarction] Rudnev DV, et al. **Kardiologiia** 1988 Dec;28(12):94–7 (Eng. Abstr.) **(Rus)**

[Prevention of reperfusion–induced arrhythmia by Na+/H+ exchange block] Vasilets LA, et al. **Kardiologiia** 1989 Feb; 29(2):91–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Quantification of myocardial infarction during coronary occlusion and myocardial salvage after reperfusion using cardiac imaging with technetium–99m hexakis 2–methoxyisobutyl isonitrile. Verani MS, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1573–81

[Relation between Tc–99m–PYP and Tl–201 scintigraphic findings and left ventricular function in acute myocardial infarction with early reperfusion] Mori T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):993–8 **(Jpn)**

THERAPY

[Protection of ischemic myocardium] Kobyashi A. **Kokyu To Junkan** 1989 Apr;37(4):395–403 **(Jpn)**

MYOCARDIAL REVASCULARIZATION

Reoperations and the internal mammary artery. Green GE. **Adv Cardiol** 1988;36:158–61

Successful treatment of angina pectoris with liver transplantation and bilateral internal mammary bypass graft surgery in familial hypercholesterolemia. Brush JE Jr, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1365–7

A two–institution study of transfusion practice in 78 consecutive adult elective open–heart procedures. Goodnough LT, et al. **Am J Clin Pathol** 1989 Apr; 91(4):468–72

Regional citrate anticoagulation for hemodialysis following cardiovascular surgery. Lohr JW, et al. **Am J Nephrol** 1988; 8(5):368–72 (40 ref.)

Does choice of anesthetic agent significantly affect outcome after coronary artery surgery? Tuman KJ, et al. **Anesthesiology** 1989 Feb;70(2):189–98

Hypertonic saline attenuates the hormonal response to injury. Cross JS, et al. **Ann Surg** 1989 Jun;209(6):684–91; discussions 691–2

Coronary revascularization rather than cardiac transplantation for chronic ischemic cardiomyopathy. Kron IL, et al. **Ann Surg** 1989 Sep;210(3):348–52; discussion 352–4

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? Greene PS, et al. **Ann Thorac Surg** 1989 Jul;48(1):38–42

Coronary artery disease in patients with aortic aneurysm: a classification of 302 coronary angiograms and results of surgical management. Young JR, et al. **Ann Vasc Surg** 1986 May;1(1):36–42

Aortic valve replacement with combined myocardial revascularisation. Jones M, et al. **Br Heart J** 1989 Jul; 62(1):9–15

Interventional treatment in evolving myocardial infarction. Kovach R, et al. **Cardiology** 1989;76(2):158–66 (34 ref.)

Emergency cardiac procedures in patients in cardiogenic shock due to complications of coronary artery disease. Bolooki H. **Circulation** 1989 Jun;79(6 Pt 2):I137–48 (119 ref.)

Ventricular aneurysm resection. Trends in surgical risk. Cosgrove DM, et al. **Circulation** 1989 Jun;79(6 Pt 2):I97–101

Intracoronary thrombus and complex morphology in unstable angina. Relation to timing of angiography and in–hospital cardiac events. Freeman MR, et al. **Circulation** 1989 Jul; 80(1):17–23

Myocardial revascularization for unstable angina pectoris. Kaiser GC, et al. **Circulation** 1989 Jun;79(6 Pt 2):I60–7 (33 ref.)

A critique of emergency and urgent operations for complications of coronary artery disease. Spencer FC. **Circulation** 1989 Jun;79(6 Pt 2):I160–2

Application of percutaneous transluminal coronary angioplasty to the internal mammary artery graft. Shimshak TM, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1205–14

Current status of internal mammary artery as a conduit for myocardial revascularisation [published erratum appears in J Assoc Physicians India 1988 Dec;36(12):734] Wasir HS, et al. **J Assoc Physicians India** 1988 Jul;36(7):438–40 (47 ref.)

Results of combined valve replacement and myocardial revascularization. Relation to method of myocardial protection. Kaul TK, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):322–7

Reduction of blood utilization during myocardial revascularization. Dietrich W, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):213–9

Coronary revascularization and implantation of the automatic cardioverter/defibrillator: reliability of immediate intraoperative testing. Blakeman BM, et al. **PACE** 1989 Jan;12(1 Pt 1):86–91

Laser Doppler flowmetry estimating myocardial perfusion after internal mammary artery grafting. von Ahn HC, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):281–4

Expanded use of the right and left internal mammary arteries for myocardial revascularization. Rivera R, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):194–7

[Coronary bypass surgery using the internal mammary artery: results and 2–year clinical follow–up in Belgian patients] Van Schil P, et al. **Acta Chir Belg** 1989 Mar–Apr;89(2):61–5 (Eng. Abstr.) **(Dut)**

[Electromyographic study of the diaphragm following sternotomy in myocardial revascularization surgery] Delhez L, et al. **Acta Belg Med Phys** 1988 Jul–Sep; 11(3):111–4 **(Fre)**

[Sequential mammary graft: indications, operative technic, functional and angiographic control at 6 months. Apropos of 170 patients] Dion R, et al. **Ann Chir** 1988;42(8):521–7 (24 ref.) (Eng. Abstr.) **(Fre)**

[Surgical revascularization of the myocardium in 1989] Lanfranchi J. **Ann Med Interne (Paris)** 1989;140(1):3–4 **(Fre)**

[Suppuration caused by Corynebacterium I2 (letter)] Riche O, et al. **Presse Med** 1989 May 20;18(20):1033–4 **(Fre)**

[False echocardiographic images of an atrial thrombus in pericarditis] Beccaria E, et al. **Cardiologia** 1988 Dec; 33(12):1177–9 (Eng. Abstr.) **(Ita)**

[GISSI 2: PTCA subproject in phase 3B and 4B of the subproject on residual ischemia] **G Ital Cardiol** 1988 Sep; 18(9):764–5 **(Ita)**

[Evaluation of flow reserve in internal mammary artery in situ bypass] Zanchetta M, et al. **G Ital Cardiol** 1988 Nov; 18(11):914–9 (Eng. Abstr.) **(Ita)**

[Serial changes in left ventricular global and regional function during exercise after percutaneous transluminal coronary angioplasty; effect of complete coronary revascularization] Yoshino T. **Kaku Igaku** 1989 Apr;26(4):487–98 (Eng. Abstr.) **(Jpn)**

[The usefulness of preoperative exercise stress myocardial single photon emission CT with thallium–201 to predict the responses to coronary revascularization] Narita M, et al. **Kokyu To Junkan** 1989 Apr;37(4):421–8 (Eng. Abstr.) **(Jpn)**

[Analysis of localized blood velocity in the grafts during coronary revascularization surgery—comparison of the saphenous vein with internal mammary artery] Fujiwara T, et al. **Kyobu Geka** 1988 Sep;41(10):801–5 (Eng. Abstr.) **(Jpn)**

[Successful mitral valve repair and myocardial revascularization in an infant with anomalous origin of the left coronary artery from the pulmonary artery] Okita Y, et al. **Kyobu Geka** 1989 Jan;42(1):49–52 (Eng. Abstr.) **(Jpn)**

[History and present trends of coronary revascularization] Shoji T, et al. **Kyobu Geka** 1988 Jul;41(8):681–94 (182 ref.) **(Jpn)**

[Aorto–coronary bypass operation with IMA grafts] Yamamura M, et al. **Kyobu Geka** 1988 Dec;41(13):1031–9 (Eng. Abstr.) **(Jpn)**

[Arterial grafts for myocardial revascularization; experience of 65 internal mammary artery and gastroepiploic artery graftings] Fukumoto H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):938–44 (Eng. Abstr.) **(Jpn)**

[Echocardiographic analysis of ventricular septum motion in the postoperative period of cardiac surgery] Moisés VA, et al. **Arq Bras Cardiol** 1988 Jun;50(6):385–9 (Eng. Abstr.) **(Por)**

[Scanning electron microscopy analysis of peroperative injury at the junctions of the vasa vasorum and the collateral veins of venous autografts prepared for myocardial revascularization] Jelić I, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):6–9 (Eng. Abstr.) **(Ser)**

[Revascularization of the right coronary artery using the right mammary artery (letter)] Rivera R. **Rev Esp Cardiol** 1988 May;41(5):322–3 **(Spa)**

[Ischemic cardiopathy (XV). Indications for myocardial revascularization. Surgery and coronary angioplasty] San José JM, et al. **Rev Esp Cardiol** 1989 May;42(5):337–42 (27 ref.) **(Spa)**

ADVERSE EFFECTS

Lymphangiographic evaluation of chylothorax after myocardial revascularization [letter] Czarnecki DJ, et al. **AJR** 1988 Nov;151(5):1054–5

Pericardial flaps prevent wound complications [letter] Zollinger RW 2d. **Arch Surg** 1988 Dec;123(12):1526

Ischemia without symptoms after saphenous and mammary graft failure: palliation with coronary angioplasty? Riva L, et al. **Cardiologia** 1988 Sep;33(9):893–6

Potential risks in retrovenous revascularization of the myocardium. Tickman RJ, et al. **Hum Pathol** 1989 Aug; 20(8):784–6

Does low–dose propranolol reduce the incidence of supraventricular tachyarrhythmias following myocardial revascularisation? A clinical study. Shafei H, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):202–5

[Coronary steal syndrome following internal mammary artery bypass surgery: incidence and recommendations for avoiding it] Bilfinger TV. **Schweiz Med Wochenschr** 1989 Mar 11;119(10):318–21 (10 ref.) (Eng. Abstr.) **(Ger)**

[Role of Tc 99m pyrophosphate cardiac scintigraphy in the diagnosis of perioperative infarction in myocardial revascularization] Mercanti CA, et al. **Cardiologia** 1988 Oct; 33(10):927–30 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

A method of retraction during reoperative coronary operations using the Favaloro retractor. Antinori CH, et al. **Ann Thorac Surg** 1989 Sep;48(3):440

A versatile retractor for use in harvesting the internal mammary artery and performing standard cardiac operations. Phillips SJ, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):633–5

METHODS

Myocardial revascularization with combined arterial grafts utilizing the internal mammary and the gastroepiploic arteries. Suma H, et al. **Ann Thorac Surg** 1989 May; 47(5):712–5

Combined revascularization of coronary and femoral arteries: a proposed alternative. Suma H, et al. **Ann Thorac Surg** 1989 Sep;48(3):434–5; discussion 435–6

Preparation of the internal mammary artery graft. Which is the best method? Mills NL, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):73–7; discussion 78–9

Total retroperfusion of the coronary arteries and veins [letter] Pearl W, et al. **Lancet** 1989 Jul 15;2(8655):172

Myocardial revascularization: a 20–year lesson. Shanahan MX, et al. **Med J Aust** 1989 Jun 19;150(12):671–3 (33 ref.)

[Medium–term results of the Fontan's operation in tricuspid atresia] Leca F, et al. **Ann Chir** 1988;42(8):540–3 (Eng. Abstr.) **(Fre)**

[Left thoracotomy: an alternative to median sternotomy in coronary bypass in cases of pericardial adhesions] Gandjbakhch I, et al. **Arch Mal Coeur** 1989 Jun;82(6):913–5 (Eng. Abstr.) **(Fre)**

[Direct revascularization of the myocardium using the internal mammary artery] Péterffy A, et al. **Orv Hetil** 1989 Jul 2;130(27):1419–23 (Eng. Abstr.) **(Hun)**

[Myocardial revascularization using both internal mammary arteries. Clinical results and surgical strategy] Beretta L, et al. **G Ital Cardiol** 1988 Apr;18(4):276–80 (Eng. Abstr.) **(Ita)**

[Lower epigastric artery as a free graft. A new alternative in direct myocardial revascularization] Puig LB, et al. **Arq Bras Cardiol** 1988 Apr;50(4):259–61 (Eng. Abstr.) **(Por)**

[The surgical treatment of acute myocardial infarct] Astaf'ev VI, et al. **Grudn Khir** 1989 Mar–Apr;(2):73–9 (44 ref.) **(Rus)**

[Reverse revascularization of the myocardium] Olearchyk AS, et al. **Grudn Khir** 1988 Nov–Dec;(6):39–41 (Eng. Abstr.) **(Rus)**

[New approaches to the surgical treatment of coronary arteriosclerosis] Lebedev LV, et al. **Kardiologiia** 1988 Jun; 28(6):29–33 (Eng. Abstr.) **(Rus)**

[Experimental microsurgical transplantation of the heart (review of the literature)] Akchurin RS, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):140–3 (41 ref.) **(Rus)**

REHABILITATION

Work capacity after myocardial revascularization: factors related to work resumption. Danchin N. **Eur Heart J** 1988 Nov;9 Suppl L:44–7 (27 ref.)

Guidelines for return to work after myocardial infarction and/or revascularisation. Denolin H, et al. **Eur Heart J** 1988 Nov;9 Suppl L:130–1

Summary and conclusions towards guidelines for return to work after myocardial infarction and myocardial revascularisation. Maisano G. **Eur Heart J** 1988 Nov;9 Suppl L:120–2

[The importance of long-term physical training in patients after reconstructive surgery of the coronary vessels] Dvořák I, et al. **Vnitr Lek** 1988 Aug;34(8):745–54 (Eng. Abstr.) (Cze)

[Cardiac rehabilitation of patients with coronary disease. Evaluation after 3 and 6 months of aerobic training at the community level] Pozzan R, et al. **Arq Bras Cardiol** 1988 May;50(5):305–10 (Eng. Abstr.) (Por)

STATISTICS & NUMERICAL DATA

Repeat myocardial revascularization surgery: an analysis of 169 cases. Raman J, et al. **Med J Aust** 1989 Jul 3;151(1):26, 28–9

TRENDS

[Myocardial revascularization and internal mammary artery. Current status] Evora PR, et al. **Arq Bras Cardiol** 1987 Sep;49(3):129–31 (Por)

MYOCARDIAL STIMULANTS see CARDIOTONIC AGENTS

MYOCARDIOPATHIES see MYOCARDIAL DISEASES

MYOCARDITIS

Infections of the heart. Saiman L, et al. **Adv Pediatr Infect Dis** 1989;4:139–61 (116 ref.)

Recurrent left ventricular mural thrombi in a patient with acute myocarditis. Kojima J, et al. **Heart Vessels** 1988; 4(2):120–2

Viral myocarditis and cardiomyopathy. Matsumori A, et al. **Jpn J Med** 1989 May–Jun;28(3):416–8

Myocarditis and dilated cardiomyopathy [editorial] Abelmann WH. **West J Med** 1989 Apr;150(4):458–9

BLOOD

Erythrocyte Na+–K+ ATPase activity inhibition & increase in red cell fragility in experimental myocarditis produced by Indian red scorpion venom. Radha Krishna Murthy K, et al. **Indian J Med Res** 1988 Dec;88:536–40

[Indices of the interferon system in patients with viral myocarditis and dilated cardiomyopathy] Kipshidze NN, et al. **Ter Arkh** 1988;60(11):43–6 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Cocaine-induced myocarditis [letter; comment] Jentzen JM. **Am Heart J** 1989 Jun;117(6):1398–9. **Comment on:** Am Heart J 1988 May;115(5):1068–76

Pet food-derived penicillin residue as a potential cause of hypersensitivity myocarditis and sudden death. Markus CK, et al. **Am J Cardiol** 1989 May 1;63(15):1154–6

Hypersensitivity myocarditis. Kounis NG, et al. **Ann Allergy** 1989 Feb;62(2):71–4 (27 ref.)

Severe myocarditis following high-dose interleukin-2 administration. Samlowski WE, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):838–41

Hypersensitivity myocarditis and hepatitis associated with imipramine and its metabolite, desipramine. Morrow PL, et al. **J Forensic Sci** 1989 Jul;34(4):1016–20

Cardiac hypersensitivity to 5-aminosalicylic acid [letter] Agnholt J, et al. **Lancet** 1989 May 20;1(8647):1135

Myocarditis complicating ethylene glycol poisoning in the absence of neurological features. Denning DW, et al. **Postgrad Med J** 1988 Nov;64(757):867–70

[Myocarditis after the administration of antilymphocyte serum (letter)] Robert R, et al. **Presse Med** 1989 Jun 24; 18(25):1255 (Fre)

[A case of corticosteroid-induced myocarditis in a patient with bronchial asthma] Nemerov EV. **Klin Med (Mosk)** 1988 Dec;66(12):96–7 (Rus)

COMPLICATIONS

Accelerated ventricular rhythm in a 13-year-old male. Yokota Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct; 29(5):781–3

Cardiac involvement in postnatal rubella. Thanopoulos BD, et al. **Acta Paediatr Scand** 1989 Jan;78(1):141–4

Automatic implantable defibrillator with VVI pacemaker in a patient with chronic Chagas myocarditis and total atrioventricular block. de Paola AA, et al. **Am Heart J** 1989 Aug;118(2):415–7

Recently diagnosed idiopathic dilated cardiomyopathy: incidence of myocarditis and efficacy of prednisone therapy. Latham RD, et al. **Am Heart J** 1989 Apr; 117(4):876–82

Lyme carditis: an important cause of reversible heart block [see comments] McAlister HF, et al. **Ann Intern Med** 1989 Mar 1;110(5):339–45 (48 ref.). **Comment in:** Ann Intern Med 1989 Jul 1;111(1):90

Isolated eosinophilic coronary arteritis and eosinophilic myocarditis. A limited form of Churg–Strauss syndrome. Lie JT, et al. **Arch Pathol Lab Med** 1989 Feb; 113(2):199–201

Acute myocarditis causing fatal ventricular arrhythmia in treated polymyositis. White PG, et al. **Br J Rheumatol** 1988 Oct;27(5):399–402

Streptococcal tonsillitis and acute nonrheumatic myopericarditis. Karjalainen J. **Chest** 1989 Feb; 95(2):359–63

Rheumatoid pancarditis in a patient with well controlled rheumatoid arthritis. Sigal LH, et al. **J Rheumatol** 1989 Mar;16(3):368–73

Orbital myositis and giant cell myocarditis. Klein BR, et al. **Neurology** 1989 Jul;39(7):988–90

Myocarditis and sudden, unexpected death in childhood. Haas JE. **Pediatr Pathol** 1988;8(4):443–6

Meningococcaemia complicated by myocarditis. A report of 2 cases. Sandler MA, et al. **S Afr Med J** 1989 Apr 15; 75(8):391–3

Coronary artery vasospasm complicating acute myocarditis. A rare association. Ferguson DW, et al. **West J Med** 1988 Jun;148(6):664–9

[Myopericarditis in the 3d pregnancy trimester. Apropos of a case] Pajuelo-Gallego A, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):727–9 (Eng. Abstr.) (Fre)

[Atrioventricular block in Lyme carditis] Roelli H, et al. **Schweiz Med Wochenschr** 1989 Jan 21;119(3):81–3 (Eng. Abstr.) (Ger)

[Clinical aspects of AIDS—opportunistic infections of the lung and heart] Goebel FD. **Verh Dtsch Ges Inn Med** 1988; 94:511–6 (10 ref.) (Ger)

[Lack of effectiveness of coenzyme Q10 (ubiquinone) in long-term treatment of dilated cardiomyopathy] Permanetter B, et al. **Z Kardiol** 1989 Jun;78(6):360–5 (Eng. Abstr.) (Ger)

[Mitral valve prolapse in patients with myocarditis and collagen diseases] Miki T, et al. **J Cardiol** 1988;18 Suppl 18:85–93, discussion 94–6 (Eng. Abstr.) (Jpn)

[Acute myocarditis with localized left ventricular aneurysm: a report of three cases] Morishita M, et al. **J Cardiol** 1988 Jun;18(2):553–64 (Eng. Abstr.) (Jpn)

[A case of hepatitis A accompanied with acute myocarditis] Yazu T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun; 85(6):1304–7 (Jpn)

[Myocarditis and dilated cardiomyopathy (an analysis of questions of etiology, pathogenesis and differential diagnosis in a clinical example)] Samsonov MIu, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):13–8 (Eng. Abstr.) (Rus)

[Emergency states in idiopathic myocarditis] Khubutiia RD. **Sov Med** 1988;(12):61–4 (Rus)

[The relation of myocarditis to the development of cardiomyopathy] Kováliková V, et al. **Vnitr Lek** 1989 Apr; 35(4):352–7 (Eng. Abstr.) (Slo)

[Lesion of the heart conduction system tissue after streptococcal infection: oligosymptomatic manifestation of rheumatic disease?] Ramírez A, et al. **Rev Med Chil** 1988 Aug;116(8):743–50 (Eng. Abstr.) (Spa)

DIAGNOSIS

Detection of experimental myocarditis by monoclonal antimyosin antibody, Fab fragment. Rezkalla S, et al. **Am Heart J** 1989 Feb;117(2):391–5

Functional anatomy of severe mitral regurgitation in active rheumatic carditis. Marcus RH, et al. **Am J Cardiol** 1989 Mar 1;63(9):577–84

Detection of acute myocarditis using nuclear magnetic resonance imaging. Chandraratna PA, et al. **Am J Med** 1987 Dec;83(6):1144–6

Acute myocarditis presenting as asymmetric septal hypertrophy. Wilansky S, et al. **Can J Cardiol** 1989 Mar; 5(2):75–6

Endomyocardial biopsy in diagnosis and management of cardiovascular manifestations of systemic lupus erythematosus (SLE). Tamburino C, et al. **Clin Rheumatol** 1989 Mar;8(1):108–12

Incidence of Coxsackie virus infection in patients with dilated cardiomyopathy. Riečanský I, et al. **Cor Vasa** 1989; 31(3):225–30

Myocarditis. Riseman JA, et al. **IMJ** 1988 Nov;174(5):295–7

Laboratory diagnosis of viral myocarditis. A review. Shingu M. **Jpn Circ J** 1989 Jan;53(1):87–93 (28 ref.)

Diagnostic histology of myocardial disease in endomyocardial biopsies and at autopsy. Lie JT. **Pathol Annu** 1989;24 Pt 2:255–93 (88 ref.)

Myocarditis in children. Hohn AR, et al. **Pediatr Rev** 1987 Sep;9(3):83–8 (26 ref.)

Acute Epstein–Barr virus myocarditis simulating myocardial infarction with cardiogenic shock. Tyson AA Jr, et al. **South Med J** 1989 Sep;82(9):1184–7

[Diagnosis of viral myocarditis by enzyme-linked immunosorbent assay (ELISA)] Zhou ZY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):78–80, 126 (Eng. Abstr.) (Chi)

[Echocardiography diagnosis of a chronic course of myocarditis] Zott HJ, et al. **Z Gesamte Inn Med** 1988 Aug 15;43(16):454–7 (Eng. Abstr.) (Ger)

[Carditis and pregnancy] Dubiel JP. **Przegl Lek** 1988; 45(7):583–7 (Pol)

[Restrictive cardiomyopathy] Gurevich MA, et al. **Kardiologiia** 1988 Nov;28(11):125–8 (Rus)

[Diagnosis of cardiac lesions in the generalized form of meningococcal infection] Radzivil GG, et al. **Klin Med (Mosk)** 1989 Feb;67(2):118–23 (Eng. Abstr.) (Rus)

[A method of contact thermography in the diagnosis of myocarditis] Voronov KIu, et al. **Klin Med (Mosk)** 1988 Jun;66(6):51–3 (Eng. Abstr.) (Rus)

[Crystallographic research method in the differential diagnosis of rheumatic and nonrheumatic carditis in children] Chebotareva VD, et al. **Pediatriia** 1988;(6):61–5 (Rus)

[The importance of electrophysiologic study of the heart in determining the activity of primary rheumatic carditis] Ardashev VN, et al. **Voen Med Zh** 1989 Jan;(1):42–3 (Rus)

[Myocarditis in childhood] Cižmárová E, et al. **Cesk Pediatr** 1989 Jan;44(1):6–10 (Eng. Abstr.) (Slo)

DRUG THERAPY

Management strategies in viral myocarditis. Rezkalla SH, et al. **Am Heart J** 1989 Mar;117(3):706–8 (32 ref.)

The anti-inflammatory effect of LS 2616 and poly I:C in coxsackievirus B3 induced murine myocarditis. Ilbäck NG, et al. **Antiviral Res** 1988 Nov;10(1–3):129–40

Antiinflammatory effect of a lipoxygenase inhibitor (FLM 5011) in severe active myocarditis. Geissler W, et al. **Biomed Biochim Acta** 1988;47(10–11):S311–4

Immunosuppressive treatment in myocarditis. Salvi A, et al. **Int J Cardiol** 1989 Mar;22(3):329–38

Renal papillary necrosis in a child with rheumatic carditis treated with aspirin. Gradus DB, et al. **Isr J Med Sci** 1989 Apr;25(4):196–8

The use of intravenous ribavirin to treat influenza virus-associated acute myocarditis [published erratum appears in J Infect Dis 1989 Sep;160(3):564] Ray CG, et al. **J Infect Dis** 1989 May;159(5):829–36

Immunomodulating therapy in experimental myocarditis. Matsumori A, et al. **Springer Semin Immunopathol** 1989; 11(1):77–88 (39 ref.)

Diagnosing and treating active myocarditis. O'Connell JB, et al. **West J Med** 1989 Apr;150(4):431–5 (59 ref.)

[Cross-reacting antibodies destroy heart muscle tissue. Autoimmunologic mechanisms of infective myocarditis—immunosuppressive drugs] Hartung HD. **Fortschr Med** 1988 Aug 30;106(25):16 (Ger)

[Immunosuppressive treatment of chronic myocarditis] Wimmer M, et al. **Wien Klin Wochenschr** 1988 Oct 7; 100(19):658–63 (Eng. Abstr.) (Ger)

[Immunosuppressive therapy in myocarditis and dilated cardiomyopathy—a critical analysis] Schultheiss HP. **Z Kardiol** 1989 Jun;78(6):349–59 (67 ref.) (Eng. Abstr.) (Ger)

[Effect of strophanthin and digoxin on the activity of succinate and lactate dehydrogenases and membrane Na+, K+-ATPase in the heart of rats with experimental myocarditis] Galust'ian GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):442–4 (Eng. Abstr.) (Rus)

[Dopamine in the combined treatment of heart failure in a patient with Abramov-Fiedler myocarditis] Sirenko IuN. **Vrach Delo** 1989 Apr;(4):41–3 (Rus)

ENZYMOLOGY

[Perimyocarditis with elevated cardiac enzymes caused by Borrelia infection] Martinsson A, et al. **Lakartidningen** 1989 Mar 1;86(9):735 (Swe)

EPIDEMIOLOGY

Nonspecific myocarditis: a statistical and clinicopathological study of autopsy cases. Okada R, et al. **Jpn Circ J** 1989 Jan;53(1):40–8

ETIOLOGY

Lyme carditis in The Netherlands [letter] Blaauw AA, et al. **Ann Intern Med** 1989 Aug 1;111(3):261–2

Fulminant mumps myocarditis. Chaudary S, et al. **Ann Intern Med** 1989 Apr 1;110(7):569–70

Chronic neonatal coxsackie myocarditis. Goren A, et al. **Arch Dis Child** 1989 Mar;64(3):404–6

Complete heart block as the sole presentation of Lyme disease. Kimball SA, et al. **Arch Intern Med** 1989 Aug; 149(8):1897–8

The role of Coxsackie B viruses in the pathogenesis of myocarditis, dilated cardiomyopathy and inflammatory muscle disease. Archard LC, et al. **Biochem Soc Symp** 1987; 53:51–62 (47 ref.)

A new continuing fatigue syndrome following mild viral illness. A proscription to exercise [editorial] Lerner AM. **Chest** 1988 Nov;94(5):901–2

Aspergillus pancarditis following bone marrow transplantation for chronic myelogenous leukemia. Schwartz DA. **Chest** 1989 Jun;95(6):1338–9

A murine model of acute myocarditis infected by coxsackie virus B3m. Sun GX, et al. **Chin Med J [Engl]** 1988 Jan; 101(1):7–12

Myocarditis in Kawasaki syndrome. A minor villain? Takahashi M. **Circulation** 1989 Jun;79(6):1398–400

Myocardial involvement in systemic lupus erythematosus detected by magnetic resonance imaging. Been M, et al.

Eur Heart J 1988 Nov;9(11):1250–6
Coxsackie virus heart disease: 15 years after. Levi G, et al. Eur Heart J 1988 Dec;9(12):1303–7
Coxsackievirus infection as a trigger of cardiac autoimmunity. Wolfgram LJ, et al. Immunol Res 1989; 8(1):61–80 (126 ref.)
Autoimmune myocarditis: a paradigm of post–infection autoimmune disease. Rose NR, et al. Immunol Today 1988 Apr;9(4):117–20 (50 ref.)
Ribavirin treatment of murine coxsackievirus B3 myocarditis with analyses of lymphocyte subsets. Kishimoto C, et al. J Am Coll Cardiol 1988 Nov;12(5):1334–41
Rabies presenting with myocarditis and encephalitis. Raman GV, et al. J Infect 1988 Sep;17(2):155–8
Lymphedema, lymphocytic myocarditis, and sarcoidlike granulomatosis. Manifestations of Whipple's disease. Southern JF, et al. JAMA 1989 Mar 10;261(10):1467–70
Fatal mumps myocarditis. Ozkutlu S, et al. Jpn Heart J 1989 Jan;30(1):109–14
Perimyocarditis. Report on an unusual cause. Biton A, et al. Postgrad Med 1989 Apr;85(5):77–80
Still's disease and myocarditis associated with recent mumps infection. Ward SC, et al. Postgrad Med J 1988 Sep; 64(755):693–5
Cytomegalovirus myocarditis as a cause of cardiac dysfunction in a heart transplant recipient. Gonwa TA, et al. Transplantation 1989 Jan;47(1):197–9
Cardiovascular and pulmonary complications of epidemic typhus. Diab SM, et al. Trop Geogr Med 1989 Jan; 41(1):76–9
[Lyme myocarditis without auriculoventricular conduction disorders (letter)] Fauchier JP, et al. Presse Med 1988 Oct 29;17(38):2036–7 (Fre)
[Myocarditis in Still's disease in adults] Bergemer AM, et al. Rev Rhum Mal Osteoartic 1988 Nov;55(11):945–8 (25 ref.) (Fre)
[A case of measles in adolescents with myocarditis and pneumonia] Tokuyama T, et al. Kansenshogaku Zasshi 1989 May;63(5):530–3 (Eng. Abstr.) (Jpn)
[Hemolytic anemia and myocarditis caused by Mycoplasma pneumoniae infection] Wróblewska-Kałużewska M, et al. Wiad Lek 1989 Dec 1;41(23):1603–6 (Eng. Abstr.) (Pol)
[Extrapulmonary complications in infection caused by Mycoplasma pneumoniae] Wróblewska-Kałużewska M. Wiad Lek 1988 Jun 15;41(12):791–7 (39 ref.) (Eng. Abstr.) (Pol)
[Myocarditis due to cytomegalovirus in infants] Herdy GV, et al. Arq Bras Cardiol 1988 Jun;50(6):397–400 (Eng. Abstr.) (Por)
[Diphtheric myocarditis: clinico–pathologic correlation of 20 cases] Herdy GV, et al. Arq Bras Cardiol 1988 May; 50(5):323–7 (Eng. Abstr.) (Por)
[Myocarditis in chronic active hepatitis] Krel' PE, et al. Klin Med (Mosk) 1989 Feb;67(2):78–83 (Eng. Abstr.) (Rus)
[Infectious allergic myocarditis of tubercular etiology] Bobrovskaia MI, et al. Probl Tuberk 1989;(1):72–4 (Rus)
[Diphtheritic myocarditis in adults] Asta Yeva NV, et al. Sov Med 1989;(4):74–7 (Rus)
[Myocarditis caused by cytomegalovirus. Apropos of a case] Piñán López E, et al. An Esp Pediatr 1988 Sep;29(3):248–50 (Spa)
[Lupus myocarditis with severe heart insufficiency (letter)] López Soto A, et al. Med Clin (Barc) 1988 Sep 10;91(7):277 (Spa)
[Viral myocarditis (editorial)] Gómez RM, et al. Medicina (B Aires) 1988;48(4):435–9 (Spa)

GENETICS

Genetics of susceptibility to viral myocarditis in mice [published erratum appears in Pathol Immunopathol Res 1989;8(3–4):220] Rose NR, et al. Pathol Immunopathol Res 1988;7(4):266–78 (53 ref.)

IMMUNOLOGY

Desmin antibodies in acute infectious myopericarditis. Kurki P, et al. APMIS 1989 Jun;97(6):527–32
Immunosuppression and beta-blockade in heart failure. Lee HR, et al. Cardiol Clin 1989 Feb;7(1):171–81 (71 ref.)
Antibodies to the ADP/ATP carrier, an autoantigen in myocarditis and dilated cardiomyopathy, penetrate into myocardial cells and disturb energy metabolism in vivo. Schulze K, et al. Circ Res 1989 Feb;64(2):179–92
Myocardial uptake of antimyosin monoclonal antibody in a murine model of viral myocarditis. Matsumori A, et al. Circulation 1989 Feb;79(2):400–5
The role of T cells in mouse cytomegalovirus myocarditis. Lawson CM, et al. Immunology 1989 May;67(1):132–4
Monoclonal anti-idiotypic antibodies regulate the expression of virus-induced murine myocarditis. Paque RE, et al. Infect Immun 1989 Sep;57(9):2864–71
Effects of the immunomodulator LS 2616 on lymphocyte subpopulations in murine Coxsackievirus B3 myocarditis. Ilbäck NG, et al. J Immunol 1989 May 1;142(9):3225–8
Coxsackievirus–B3–induced myocarditis: virus receptor antibodies modulate myocarditis. Weller AH, et al. J Immunol 1989 Sep 15;143(6):1843–50
Polyclonal anti–idiotypes influence macrophage chemotaxis in coxsackievirus–induced murine myocarditis. Paque RE, et al. J Leukoc Biol 1989 Jan;45(1):79–86
Cell–mediated immune cardiocyte injury in viral myocarditis of mice and patients. Deguchi H, et al. Jpn Circ J 1989 Jan;53(1):61–77
Lymphocyte subsets in patients with acute myopericarditis, arrhythmias and dilated cardiomyopathy. Koga Y, et al. Jpn Circ J 1989 Jan;53(1):78–86
Viral myocarditis: immunopathogenesis and the effect of immunosuppressive treatment in a murine model. Matsumori A, et al. Jpn Circ J 1989 Jan;53(1):58–60
Lymphatic subpopulations and their transition in myocardial tissue and peripheral blood of patients with biopsy-proven myocarditis. Saito T, et al. Jpn Circ J 1989 Jan;53(1):1–6
Host factors regulating viral clearance. Gauntt CJ, et al. Pathol Immunopathol Res 1988;7(4):251–65 (87 ref.)
Humoral and cellular immune response in human myocarditis and dilated cardiomyopathy. Herzum M, et al. Pathol Immunopathol Res 1988;7(4):240–50 (53 ref.)
Immunopathogenic mechanisms in experimental picornavirus–induced autoimmunity. Huber SA, et al. Pathol Immunopathol Res 1988;7(4):279–91 (57 ref.)
Immunopathology of cardiac diseases I. Springer Semin Immunopathol 1989;11(1):1–87
Immunogenetic basis of myocarditis: role of fibrillary antigens. Beisel KW. Springer Semin Immunopathol 1989; 11(1):31–42 (69 ref.)
Role of natural killer cells in experimental murine myocarditis. Gauntt CJ, et al. Springer Semin Immunopathol 1989;11(1):51–9 (40 ref.)
Anti–viral and anti–myocyte antibodies in experimental myocarditis. Herzum M, et al. Springer Semin Immunopathol 1989;11(1):69–76 (24 ref.)
Therapeutic implications of immune mechanisms in myocarditis. O'Connell JB, et al. Springer Semin Immunopathol 1989;11(1):43–9 (32 ref.)
The significance of autoantibodies against the ADP/ATP carrier for the pathogenesis of myocarditis and dilated cardiomyopathy—clinical and experimental data. Schultheiss HP. Springer Semin Immunopathol 1989; 11(1):15–30
Role of cytotoxic T cells in experimental myocarditis. Van Houten N, et al. Springer Semin Immunopathol 1989; 11(1):61–8 (30 ref.)
Modulation of murine coxsackievirus–induced myocarditis utilizing anti–idiotypes. Paque RE, et al. Viral Immunol 1987–88;1(3):207–24
[Natural killer cell activity and induction of alpha and gamma interferon in patients with Coxsackie B viral myocarditis] Yang YZ, et al. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Dec; 16(6):337–9, 382 (Eng. Abstr.) (Chi)
[Clinical significance of the spontaneous change in serum viral antibody titers in patients with acute Coxsackie B virus myocarditis] Feng XM, et al. Chung Hua Nei Ko Tsa Chih 1988 Aug;27(8):466–8, 517–8 (Eng. Abstr.) (Chi)
[Secondary immunopathogenesis in myocarditis, diseases of the heart muscles and infarct–associated arrhythmia in childhood and adulthood] Maisch B, et al. Wien Klin Wochenschr 1989 Jan 6;101(1):31–9 (76 ref.) (Eng. Abstr.) (Ger)
[Lymphatic subsets in myocardial tissue and peripheral blood of biopsy proven myocarditis] Saito T, et al. Kokyu To Junkan 1988 Nov;36(11):1179–83 (Jpn)

METABOLISM

Laminin distribution and autoantibodies to laminin in dilated cardiomyopathy and myocarditis. Wolff PG, et al. Am Heart J 1989 Jun;117(6):1303–9
Increased synthesis and secretion of atrial natriuretic polypeptide during viral myocarditis. Morii N, et al. J Cardiovasc Pharmacol 1989;13 Suppl 6:S5–8
[Bioenergetics of the myocardiocytes in infectious–allergic myocarditis] Odinokova VA, et al. Sov Med 1989;(3):22–5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Clinical and experimental aspects of viral myocarditis. Leslie K, et al. Clin Microbiol Rev 1989 Apr;2(2):191–203 (151 ref.)
The natural history of encephalomyocarditis virus–induced myositis and myocarditis in mice. Viral persistence demonstrated by in situ hybridization. Cronin ME, et al. J Exp Med 1988 Nov 1;168(5):1639–48
Viral heart disease. Kandolf R, et al. Springer Semin Immunopathol 1989;11(1):1–13 (45 ref.)
[Type 2 Streptococcus suis (R–Streptococci) as pathogens of occupational diseases. Report of a case and a review of the literature] Köhler W, et al. Z Gesamte Inn Med 1989 Mar 1;44(5):144–8 (54 ref.) (Eng. Abstr.) (Ger)

NURSING

Myocarditis: review of a clinical enigma. Grady KL, et al. Heart Lung 1989 Jul;18(4):347–53 (19 ref.)

PATHOLOGY

Exercise in coxsackie B3 myocarditis: effects on heart lymphocyte subpopulations and the inflammatory reaction. Ilbäck NG, et al. Am Heart J 1989 Jun;117(6):1298–302
Myocarditis in Kawasaki disease [letter] Ino T, et al. Am Heart J 1989 Jun;117(6):1400–1
Coronary microvascular narrowing in acute murine coxsackie B3 myocarditis. Silver MA, et al. Am Heart J 1989 Jul;118(1):173–4
The correlation of monoauclear cell phenotype in endomyocardial biopsies with clinical history and cardiac dysfunction. Kolbeck PC, et al. Am J Clin Pathol 1989 Jan;91(1):37–44
Myocarditis and endomyocardial biopsy [letter] Billingham ME. Ann Intern Med 1989 Jan 15;110(2):165–6
The histologic diagnosis of myocarditis [letter] Latham RD, et al. Ann Intern Med 1989 Feb 15;110(4):321–2
Relation between histological findings on early repeat right ventricular biopsy and ventricular function in patients with myocarditis. Dec GW Jr, et al. Br Heart J 1988 Oct; 60(4):332–7
Myocardial involvement and its response to immunosuppressive therapy in nonspecific aortoarteritis (Takayasu's disease)—a study by endomyocardial biopsy. Talwar KK, et al. Int J Cardiol 1988 Dec;21(3):323–34
Characteristics of lymphocytes cultured from murine viral myocarditis specimens: a preliminary and technical report. Kishimoto C, et al. J Am Coll Cardiol 1989 Sep; 14(3):799–802
Value of endomyocardial biopsy in infants, children and adolescents with dilated or hypertrophic cardiomyopathy and myocarditis. Leatherbury L, et al. J Am Coll Cardiol 1988 Dec;12(6):1547–54
Enteric fever complicated by myocarditis, hepatitis and shock. Kovoor P, et al. J Assoc Physicians India 1988 May; 36(5):353
Febrile ulceronecrotic Mucha Habermann disease: a fatality. Hoghton MA, et al. J R Soc Med 1989 Aug;82(8):500–1
Myocarditis and arrhythmia: a clinico–pathological study of conduction system based on serial section in 65 cases. Inoue S, et al. Jpn Circ J 1989 Jan;53(1):49–57
Three autopsied cases of postmyocarditic cardiomegaly. Comparison with dilated cardiomyopathy. Kawai S, et al. Jpn Heart J 1988 Nov;29(6):809–21
Myocarditis, histology, and immunosuppression [editorial] Lancet 1988 Nov 26;2(8622):1233–4
Myocarditis as an incidental finding in young men dying from unnatural causes. Claydon SM. Med Sci Law 1989 Jan; 29(1):55–8
Clinical, electrophysiological, and histopathological observations in supraventricular tachycardia. Kobayashi Y, et al. PACE 1988 Aug;11(8):1154–67
Pathology and natural history of human myocarditis. Marboe CC, et al. Pathol Immunopathol Res 1988;7(4):226–39 (42 ref.)
Granulomatous myocarditis with unusual histologic features. Agosti SJ, et al. South Med J 1989 Sep;82(9):1180–3
Contrast of mediators: identification of cells and cytokines in human heart tissue with acute rejection and myocarditis. Zerbe TR. Transplant Proc 1989 Feb;21(1 Pt 1):443–4
[A pathologic and ultrastructural study of Coxsackie B3 myocarditis in mice] Lin JZ. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Jun; 16(3):159–60 (Chi)
[Myocarditis in an autopsy cohort] Wagner G, et al. Schweiz Med Wochenschr 1989 May 20;119(20):641–6 (Eng. Abstr.) (Fre)
[Fibrotic fraction and myocardial cell diameter in latent cardiomyopathy] Flegel HG, et al. Gegenbaurs Morphol Jahrb 1989;135(1):185–9 (Eng. Abstr.) (Ger)
[The course of myocarditis in childhood] Lang D, et al. Monatsschr Kinderheilkd 1988 Jul;136(7):362–7 (Eng. Abstr.) (Ger)
[Differential diagnosis and prognosis of primary and post–myocarditis cardiomyopathy in childhood] Schmaltz AA, et al. Wien Klin Wochenschr 1988 Dec 16; 100(24):811–3 (Eng. Abstr.) (Ger)
[Sudden heart death in a long distance runner during a marathon] Schuchert A, et al. Z Kardiol 1989 Apr; 78(4):276–80 (Eng. Abstr.) (Ger)
[Value of endomyocardial biopsy in the diagnosis of cardiomyopathy and myocarditis] Rosnowski A, et al. Patol Pol 1988 Oct–Dec;39(4):275–83 (Eng. Abstr.) (Pol)
[Idiopathic giant cell myocarditis. A case report] Castier MB, et al. Arq Bras Cardiol 1988 Oct;51(4):331–4 (Eng. Abstr.) (Por)
[Morphologic changes in the myocardium in infectious–allergic myocarditis with heart rhythm disorders] Odinokova VA, et al. Sov Med 1988;(6):77–9 (Rus)

PHYSIOPATHOLOGY

Multiform accelerated idioventricular rhythm (AIVR) in a child with acute myocarditis. Nakagawa M, et al. Clin Cardiol 1988 Dec;11(12):853–5
Main manifestations of carditis in diffuse connective tissue diseases in children. Isaeva LA, et al. Cor Vasa 1988; 30(3):211–7
The scale of myocardial involvement in varicella myocarditis. Lorber A, et al. Int J Cardiol 1988 Aug;20(2):257–62
Myocarditis manifesting as persistent atrial standstill. Talwar KK, et al. Int J Cardiol 1988 Aug;20(2):283–6
QS pattern in the right precordial leads of a child with extensive myocardial fibrosis following myocarditis. Onouchi Z, et al. Pediatr Cardiol 1988;9(3):167–9
[Viral myocarditis—new aspects of pathomechanisms, diagnosis and therapy] Schultheiss HP.

Wien Klin Wochenschr 1988 Dec 16;100(24):779–86 (44 ref.) (Eng. Abstr.) **(Ger)**

[The electrocardiogram in patients with active lymphocytic myocarditis] Mady C, et al. **Arq Bras Cardiol** 1988 Jan; 50(1):43–6 (Eng. Abstr.) **(Por)**

[Hemodynamics in patients with myocarditis] Paleev NR, et al. **Sov Med** 1988;(10):7–9 (Eng. Abstr.) **(Rus)**

[Pulmonary hypertension and hemodynamics in myocarditis during a head-down tilt test] Paleev NR, et al. **Sov Med** 1988;(12):19–21 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Prevention of murine coxsackie B3 viral myocarditis and associated lymphoid organ atrophy with recombinant human leucocyte interferon alpha A/D. Kishimoto C, et al. **Cardiovasc Res** 1988 Oct;22(10):732–8

Characterization of the antibody response in vaccinated mice protected against Coxsackievirus B3-induced myocarditis. Godney EK, et al. **Viral Immunol** 1987–88;1(4):305–14

RADIONUCLIDE IMAGING

Differentiation between infarction and cardiomyopathy in left bundle branch block by parametric radionuclide imaging. Henze E, et al. **Am J Physiol Imaging** 1988;3(3):121–7

Imaging necrotic myocardium: detection with 99mTc-pyrophosphate and radiolabeled antimyosin. Khaw BA, et al. **Cardiol Clin** 1989 Aug;7(3):577–88 (52 ref.)

Lyme myocarditis diagnosed by indium-111-antimyosin antibody scintigraphy. Casáns I, et al. **Eur J Nucl Med** 1989;15(6):330–1

Indium-111 antimyosin scintigraphy to assess myocardial damage in patients with suspected myocarditis and cardiac rejection. Carrió I, et al. **J Nucl Med** 1988 Dec; 29(12):1893–900

[Indium-111-antimyosin for the evaluation of myocardial damage in patients with suspected myocarditis and cardiac rejection] Carrió I, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:70–6 (Eng. Abstr.) **(Spa)**

THERAPY

Monoclonal antibody therapy for prevention of acute coxsackievirus B3 myocarditis in mice. Kishimoto C, et al. **Circulation** 1989 Jun;79(6):1300–8

The effect of interleukin-2 on parasitemia and myocarditis in experimental Chagas' disease. Hulsebos LH, et al. **J Protozool** 1989 May–Jun;36(3):293–8

Immunosuppression for myocarditis [letter] Schattner A. **Lancet** 1989 Jan 14;1(8629):97

Immunosuppressive therapy in experimental and clinical myocarditis. O'Connell JB, et al. **Pathol Immunopathol Res** 1988;7(4):292–304 (55 ref.)

[A case of pacemaker-dependent Lyme carditis] Borgmann H, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):247–8 (Eng. Abstr.) **(Ger)**

[Viral infections in medicine. 4. Viral myocarditis and cardiomyopathy] Matsumori A, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1351–4 **(Jpn)**

[Physiotherapeutic immune correction in patients with a history of infectious-allergic myocarditis] Vykhovaniuk IV, et al. **Vrach Delo** 1988 Sep;(9):54–6 (Eng. Abstr.) **(Rus)**

VETERINARY

Complete heart block in a dog seropositive for Borrelia burgdorferi. Similarity to human Lyme carditis. Levy SA, et al. **J Vet Intern Med** 1988 Jul–Sep;2(3):138–44

[Heart failure in a pig chronically infected with Sarcocystis miescheriana—a case report] Daugschies A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1;102(6):184–7 (Eng. Abstr.) **(Ger)**

MYOCARDIUM

Thyroid hormone and the mitochondrial population in the rat heart. de Martino Rosaroll P, et al. **J Endocrinol Invest** 1988 Sep;11(8):559–65

Optimal hypothermic preservation of arrested myocardium in isolated perfused rabbit hearts: a 31P NMR study. Whitman GJ, et al. **Surgery** 1989 Jan;105(1):100–8

ANALYSIS

Cardiac distribution of alpha-hANP in an infant with total anomalous pulmonary venous return. Sakai T, et al. **Agressologie** 1989 Feb;30(2):101–2

Intracellular distribution of adrenoceptors in the failing human myocardium. Limas CJ, et al. **Am Heart J** 1989 Jun;117(6):1310–6

Cardiac renin-angiotensin system. Linz W, et al. **Am J Hypertens** 1989 Apr;2(4):307–10 (23 ref.)

Assessment of tissue iron overload by nuclear magnetic resonance imaging. Johnston DL, et al. **Am J Med** 1989 Jul;87(1):40–7

Human cardiac myosin heavy chain gene mapped within chromosome region 14q11.2——q13. Matsuoka R, et al. **Am J Med Genet** 1989 Feb;32(2):279–84

Isolation of a translation-inhibiting peptide from myocardium. Havre PA, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1024–31

Distribution of alpha 1-adrenergic receptors in myocytic regions and vasculature of feline myocardium. Saffitz JE. **Am J Physiol** 1989 Jul;257(1 Pt 2):H162–9

Purification and characterization of low-molecular-weight beef heart proteolipids: use of fast atom bombardment-mass spectrometry for identification. Boyot P, et al. **Anal Biochem** 1988 Aug 15;173(1):75–85

L-type calcium channels in cardiac and skeletal muscle. Purification and phosphorylation. Hosey MM, et al. **Ann N Y Acad Sci** 1989;560:27–38 (29 ref.)

Ferritin mRNA is found on bound as well as on free polyribosomes in rat heart. Campbell CH, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):89–98

Heart tissue contains small and large aggregates of ferritin subunits. Linder MC, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):34–41

Postlabeling analysis of indigenous aromatic DNA adducts in mouse myocardium during aging. Gaubatz JW. **Arch Gerontol Geriatr** 1989 Jan;8(1):47–54

The localization of fibronectin and 140 Kd fibronectin receptor in the truncus arteriosus of the chick embryonic heart. Sumida H, et al. **Arch Histol Cytol** 1989 Mar; 52(1):31–6

Restrictive cardiomyopathy with kappa light chain deposits in myocardium as a complication of multiple myeloma. Histochemical and electron microscopic observations. McAllister HA Jr, et al. **Arch Pathol Lab Med** 1988 Nov; 112(11):1151–4

Occurrence of a novel cardiac natriuretic peptide in rats. Itoh H, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):732–9

Atrial natriuretic factor messenger ribonucleic acid and peptide in the human heart during ontogenic development. Mercadier JJ, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):777–82

Identification of a 29-amino acid natriuretic peptide in chicken heart. Miyata A, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1330–7

Identification of new atrial natriuretic peptides in frog heart. Sakata J, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1338–45

Fibroblast growth factors are present in adult cardiac myocytes, in vivo [corrected and issued with original paging in Biochem Biophys Res Commun 1988 Dec 30;157(3)] Speir E, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1336–40

Rat heart fatty acid-binding protein. Evidence that supports the amino acid sequence predicted from the cDNA. Kimura H, et al. **Biochem J** 1989 May 15;260(1):303–6

Solubilization and hydrodynamic properties of pig atrial muscarinic acetylcholine receptor in dodecyl beta-D-maltoside. Peterson GL, et al. **Biochem J** 1988 Oct 15;255(2):553–60

Preproenkephalin mRNA expression in developing rat heart and in cultured ventricular cardiac muscle cells. Springhorn JP, et al. **Biochem J** 1989 Feb 15;258(1):73–8

Analysis of the mineralocorticoid receptor in rat heart with the aid of two new spirolactone derivatives. Agarwal MK, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):36–45

Subcellular distribution of cardiac fatty acid-binding protein in bovine heart muscle and quantitation with an enzyme-linked immunosorbent assay. Börchers T, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):54–61

Solubilization and reconstitution of voltage-dependent calcium channel from bovine cardiac muscle. Ca2+ influx assay using the fluorescent dye Quin2. Nakao S, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):337–43

Detection, characterisation, and quantification of carnosine and other histidyl derivatives in cardiac and skeletal muscle. O'Dowd JJ, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):241–9

Purification of the cardiac Na+-Ca2+ exchange protein. Philipson KD, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):298–306

Studies in pig heart tissue on various 60,000 Da phosphoproteins. Guesdon F, et al. **Biochimie** 1989 Mar; 71(3):351–61

Simultaneous determination of myocardial creatine phosphate and adenine nucleotides by reversed-phase HPLC. Sanduja R, et al. **Biomed Chromatogr** 1987;2(4):156–8

Localisation of atrial natriuretic peptide immunoreactivity in the ventricular myocardium and conduction system of the human fetal and adult heart. Wharton J, et al. **Br Heart J** 1988 Oct;60(4):267–74

[Ca2+]i in single isolated cardiac cells: a review of recent results obtained with digital imaging microscopy and fura-2. Wier WG, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1224–31 (36 ref.)

X-ray microanalysis of the element content in the hearts of mice treated with digoxin. Djaldetti M, et al. **Cardiology** 1988;75(5):344–7

Detection of leukotriene B4 in cardiac tissue and its role in infarct extension through leucocyte migration. Sasaki K, et al. **Cardiovasc Res** 1988 Feb;22(2):142–8

Angiotensin II vascular receptors in fetal and neonatal rats. Ghiani P, et al. **Cell Biochem Funct** 1988 Oct;6(4):283–7

Cardiac S-100a0 protein: purification by a simple procedure and related immunocytochemical and immunochemical studies. Donato R, et al. **Cell Calcium** 1989 Feb–Mar; 10(2):81–92

Immunocytochemical studies of spectrin in hamster cardiac tissue. Messina DA, et al. **Cell Motil Cytoskeleton** 1989; 12(3):139–49

Adriamycin, aclacinomycin and thepirubicin intracardiac distribution examined by fluorescence microscopy. Scalori V, et al. **Chemioterapia** 1988 Jun;7(3):179–83

Subcellular calcium content in cardiomyopathic hamster hearts in vivo: an electron probe study. Bond M, et al. **Circ Res** 1989 May;64(5):1001–12

High molecular weight proteins purified from cardiac junctional sarcoplasmic reticulum vesicles are ryanodine-sensitive calcium channels. Rardon DP, et al. **Circ Res** 1989 Apr;64(4):779–89

Identification of alpha 1-adrenergic receptors on sarcolemma from normal subjects and patients with idiopathic dilated cardiomyopathy: characteristics and linkage to GTP-binding protein. Vago T, et al. **Circ Res** 1989 Mar; 64(3):474–81

Distribution of beta-adrenergic receptors in failing human myocardium. Implications for mechanisms of down-regulation. Murphree SS, et al. **Circulation** 1989 Jun; 79(6):1214–25

Isolation and characterization of myoglobin and its two major isoforms from sheep heart. Wu JT, et al. **Clin Chem** 1989 May;35(5):778–82

Expression of myosin in atrial areas of the bovine myocardium. Syrový I. **Comp Biochem Physiol [A]** 1989; 92(3):441–3

Ubiquinone analyses in fish tissues and in some marine invertebrates. Farbu T, et al. **Comp Biochem Physiol [B]** 1979;63(3):395–7

Comparison of protein constituents between atria and ventricles from various vertebrates by two-dimensional gel electrophoresis. Oh-Ishi M, et al. **Comp Biochem Physiol [B]** 1989;92(4):609–17

Altered acetylcholine and norepinephrine concentrations in diabetic rat hearts. Role of parasympathetic nervous system in diabetic cardiomyopathy. Akiyama N, et al. **Diabetes** 1989 Feb;38(2):231–6

Cardiac muscle protein analysis by high-resolution and microscale two-dimensional gel electrophoresis. Tanaka T, et al. **Electrophoresis** 1988 Feb;9(2):94–100

Reduction of beta-adrenoceptor density and evaluation of positive inotropic responses in isolated, diseased human myocardium. Böhm M, et al. **Eur Heart J** 1988 Aug; 9(8):844–52

Myocardial iron grading by endomyocardial biopsy. A clinico-pathologic study on iron overloaded patients. Barosi G, et al. **Eur J Haematol** 1989 Apr;42(4):382–8

Identification of a new epitope of the 4F2/44D7 molecular complex present on sarcolemma and isolated cardiac fibers. Bellone G, et al. **Eur J Immunol** 1989 Jan;19(1):1–8

Plasmalogen content and distribution in the sarcolemma of cultured neonatal rat myocytes. Post JA, et al. **FEBS Lett** 1988 Nov 21;240(1–2):78–82

Immunocytochemical diagnosis of early myocardial ischaemic/hypoxic damage. Leadbeatter S, et al. **Forensic Sci Int** 1989 Feb;40(2):171–80

Spin trapping of free radicals in homogenates of heart from selenium and vitamin E deficient rats. Arthur JR, et al. **Free Radic Res Commun** 1988;4(5):311–5

Phylogenetic study on the immunoreactive atrial natriuretic peptide in the heart. Kim SH, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):127–35

Immunohistocytochemical localization of alpha human atrial natriuretic peptide in human atrium obtained from endomyocardial biopsy and cardiac surgery. Nagata M, et al. **Heart Vessels** 1988;4(2):112–5

Immunohistochemical detection of deposits of eosinophil-derived neurotoxin and eosinophil peroxidase in the myocardium of patients with Chagas' disease. Molina HA, et al. **Immunology** 1988 Aug;64(4):725–31

Myocardial vitamin E (alpha-tocopherol) contents of spontaneously hypertensive and Wistar-Kyoto normotensive rats. Janero DR, et al. **Int J Vitam Nutr Res** 1988;58(3):292–4

Nuclear magnetic resonance imaging-guided phosphorus-31 spectroscopy of the human heart. Schaefer S, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1449–55

Effects of chronic swimming training on cardiac sarcolemmal function and composition. Pierce GN, et al. **J Appl Physiol** 1989 Apr;66(4):1715–21

Presence of 1-O-alk-1'-enyl-2-O-acetyl glycerophosphocholine (vinyl form of PAF) in perfused rat and guinea pig hearts. Nakayama R, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):494–6

Purification of a sarcoplasmic reticulum protein that binds Ca2+ and plasma lipoproteins. Hofmann SL, et al. **J Biol Chem** 1989 May 15;264(14):8260–70

Isolation and characterization of cDNA clones encoding embryonic and adult isoforms of rat cardiac troponin T. Jin JP, et al. **J Biol Chem** 1989 Aug 25;264(24):14471–7

Structure and expression of the murine slow/cardiac troponin C gene. Parmacek MS, et al. **J Biol Chem** 1989 Aug 5; 264(22):13217–25

Alpha and beta-adrenoceptors in hypertension. I. Cardiac and renal alpha 1-, beta 1-, and beta 2-adrenoceptors in rat models of acquired hypertension. Michel MC, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):421–31

High-performance liquid chromatographic method for the direct quantitation of oxy radicals in myocardium and blood by means of 1,3-dimethylthiourea and dimethyl sulfoxide. Rao PS, et al. **J Chromatogr** 1988 Dec 28; 459:269–73

Systemic senile amyloidosis. Identification of a new

prealbumin (transthyretin) variant in cardiac tissue: immunologic and biochemical similarity to one form of familial amyloidotic polyneuropathy. Gorevic PD, et al. **J Clin Invest** 1989 Mar;83(3):836–43

Cardiac beta myosin heavy chain diversity in normal and chronically hypertensive baboons. Henkel RD, et al. **J Clin Invest** 1989 May;83(5):1487–93

Regional study of free fatty acids and free carnitine behavior in cardiac tissue in relation to different causes of death. Lachica E, et al. **J Forensic Sci** 1988 Nov;33(6):1483–90

Dynamics of n-3 and n-6 fatty acids in phospholipids of heart muscle. Gudbjarnason S. **J Intern Med Suppl** 1989; 225(731):117–28 (24 ref.)

Reversible alterations in fatty acid composition of heart muscle membrane phospholipids induced by epinephrine in rats fed different fats. Benediktsdottir VE, et al. **J Lipid Res** 1988 Jun;29(6):765–72

Cellular oncogene expression in the idiopathic cardiomyopathic hamster heart during the growing process. Deguchi Y, et al. **J Mol Cell Cardiol** 1988 Sep; 20(9):801–9

An embryonic-like myosin heavy chain is transiently expressed in nodal conduction tissue of the rat heart. Gorza L, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):931–41

Estimates of interstitial adenosine from surface exudates of isolated rat hearts. Heller LJ, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):509–23

Relationships between pre-ischemic ATP and glycogen content and post-ischemic recovery of rat heart. Kupriyanov VV, et al. **J Mol Cell Cardiol** 1988 Dec; 20(12):1151–62

Effect of reperfusion on the cardiac acetylcholine and norepinephrine contents in rat hearts. Ohno O, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):139–49

Immunocytochemical localization of natriuretic peptide sequences in the human right auricle. Skepper JN, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):343–53

Ventricular beta-adrenoceptors in adriamycin-induced cardiomyopathy in the rabbit. Woodcock EA, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):771–7

Substance P levels in peripheral nerve, skin, atrial myocardium and gastrointestinal tract of rats with long-term diabetes mellitus. Effects of aldose reductase inhibition. Willars GB, et al. **J Neurol Sci** 1989 Jun; 91(1–2):153–64

Alpha-1 adrenergic receptors in the nonfailing and failing human heart. Bristow MR, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1039–45

Effect of ouabain on the concentration of free cytosolic Ca++ and on contractility in cultured rat cardiac myocytes. Hallaq H, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):716–21

Characterization of cardiac A1 adenosine receptors by ligand binding and photoaffinity labeling. Leung E, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1150–6

Preservation of high-energy phosphates in human myocardium. A phosphorus 31-nuclear magnetic resonance study of the effect of temperature on atrial appendages. Deslauriers R, et al. **J Thorac Cardiovasc Surg** 1989 Sep; 98(3):402–12

Isolation and characterization of two beta-type cardiac myosin in the canine atrium. Komuro I, et al. **Jpn Circ J** 1988 Oct;52(10):1191–200

Myocardial tissue pCO2 and calcium content during ventricular fibrillation and reperfusion periods. Kobayashi M, et al. **Jpn J Surg** 1988 Sep;18(5):494–501

Gamma 2-MSH immunoreactivity in the human heart. Ekman R, et al. **Life Sci** 1989;45(9):787–92

Cardiac membrane vitamin E and malondialdehyde levels in heart muscle of normotensive and spontaneously-hypertensive rats. Janero DR, et al. **Lipids** 1989 Jan;24(1):33–8

In vitro NMR characterization of mammalian myocardium: effect of specimen integrity on relaxation times. Scholz TD, et al. **Magn Reson Med** 1989 Sep;11(3):367–70

Estimation of the upper limit of the free magnesium concentration measured with Mg-sensitive microelectrodes in ferret ventricular muscle: (1) use of the Nicolsky-Eisenman equation and (2) in calibrating solutions of the appropriate concentration. Blatter LA, et al. **Magnesium** 1988;7(3):154–65

Effect of exercise on cardiac cyclic AMP. Palmer WK. **Med Sci Sports Exerc** 1988 Dec;20(6):525–30 (26 ref.)

Tissue distribution of atrial natriuretic factor in normal and pathologic human hearts. Truong LD, et al. **Mod Pathol** 1989 Mar;2(2):79–84

AFDX-116 discriminates between muscarinic M2 receptors of the heart and the iris smooth muscle. Honkanen RE, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):131–5

Biochemical characterization of the Ca2+ release channel of skeletal and cardiac sarcoplasmic reticulum. Meissner G, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):59–65

Selective parasympathectomy increases the quantity of inhibitory guanine nucleotide-binding proteins in canine cardiac ventricle. Hodges TD, et al. **Mol Pharmacol** 1989 Jul;36(1):72–7

The porcine heart M2 muscarinic receptor: agonist-induced phosphorylation and comparison of properties with the chick heart receptor. Kwatra MM, et al. **Mol Pharmacol** 1989 May;35(5):553–8

Calcium-antagonist receptors in the atrial tissue of patients with hypertrophic cardiomyopathy. Wagner JA, et al. **N Engl J Med** 1989 Mar 23;320(12):755–61

Primary structure and functional expression of the cardiac dihydropyridine-sensitive calcium channel. Mikami A, et al. **Nature** 1989 Jul 20;340(6230):230–3

Isolation and nucleotide sequence of the cDNA encoding human ventricular myosin light chain 2. Dalla Libera L, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2360

Ventricular myosin light chain 1 is developmentally regulated and does not change in hypertension. McNally EM, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2753–67

cDNA sequence for mouse heart fatty acid binding protein, H-FABP. Tweedie S, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4374

Tissue extract recovers cardiac calcium channels from 'run-down'. Kameyama M, et al. **Pflugers Arch** 1988 Aug; 412(3):328–30

The effect of time, 2-mercaptoethanol and inhibitors of proteases on isolation of cardiac myosin and its properties. Syrový I. **Physiol Bohemoslov** 1989;38(3):287–8

Levels of dihomo-gamma-linolenate are depressed in heart phosphatidylcholine and phosphatidylethanolamine in the biotin-deficient chick. Watkins BA. **Poult Sci** 1989 May; 68(5):698–705

Four exons encode a 93-base-pair insert in three neural cell adhesion molecule mRNAs specific for chicken heart and skeletal muscle. Prediger EA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9616–20

Blood risk factor metabolites associated with heart disease and myocardial fatty acids in copper-deficient male and female rats. Fields M, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):293–8

Localization of beta-endorphin in the rat heart and modulation by testosterone. Forman LJ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):240–5

Acute peripheral catecholaminergic changes in rat after MPTP and MPP+ treatment. Ambrosio S, et al. **Rev Esp Fisiol** 1989 Jun;45(2):157–61

Regional distribution of total lipids, free fatty acids and free carnitine in human heart. Lachica E, et al. **Rev Esp Fisiol** 1988 Dec;44(4):401–5

Intracellular water distribution and aging as examined by X-ray microanalysis. von Zglinicki T. **Scanning Microsc** 1988 Sep;2(3):1791–804

Intracellular calcium in cardiac myocytes: calcium transients measured using fluorescence imaging. Cannell MB, et al. **Soc Gen Physiol Ser** 1987;42:201–14

[Methods of quick-freezing and cryosubstitution of biological tissues in analytical ion microscopy] Mony MC, et al. **C R Soc Biol (Paris)** 1988;182(5):458–65 (Eng. Abstr.) **(Fre)**

[Determination of age- and exercise-dependent changes in myoglobin contents in murine skeletal and cardiac muscles] Nakatani A. **Nippon Seirigaku Zasshi** 1988;50(11):709–18 (Eng. Abstr.) **(Jpn)**

[Cation concentrations in myocardium and skeletal muscle of normal and hypertensive rats, young and adults] Haebisch EM, et al. **Arq Bras Cardiol** 1987 Sep;49(3):133–8 (Eng. Abstr.) **(Por)**

[The role of the N-terminal fragment of troponin T in the interaction with troponin-tropomyosin complex components of the heart] Verin AD, et al. **Biokhimiia** 1988 Aug;53(8):1235–46 (Eng. Abstr.) **(Rus)**

[Various properties of cardiac troponin C tryptic peptides] Verin AD, et al. **Biokhimiia** 1988 Jul;53(7):1069–77 (Eng. Abstr.) **(Rus)**

[Level of enkephalins and cyclic nucleotides in the myocardium in ventricular fibrillation caused by experimental myocardial infarct] Maslov LN, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):408–10 (Eng. Abstr.) **(Rus)**

[Spectrographic analysis of silicon in biological specimens] Anisimova ZA, et al. **Gig Sanit** 1988 Nov;(11):45–6 **(Rus)**

[Human heart muscle proteins: two-dimensional electrophoretic analysis in embryos] Kovalev LI, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):28–32 (Eng. Abstr.) **(Rus)**

[Comparative cytophotometric analysis of the nucleic acid content in the cardiomyocytes of normal rats and following experimental infarct] Selivanova GV, et al. **Tsitologiia** 1988 Dec;30(12):1454–62 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Effects of halothane on membrane ionic currents in guinea pig atrial and ventricular myocytes. Hirota K, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):239–44

Proliferation and biosynthetic activities of myocytes from conductive system and working myocardium of the developing mouse heart. Light microscopic autoradiographic study. Erokhina IL, et al. **Acta Histochem (Jena)** 1988;84(1):51–66

Myocardial cell relationships during morphogenesis in normal and cardiac lethal mutant axolotls, Ambystoma mexicanum. Fransen ME, et al. **Am J Anat** 1988 Nov; 183(3):245–57

Individual rabbit cardiac myocytes have different thresholds for alpha myosin heavy chain regulation by thyroid hormone. Lin ZY, et al. **Am J Anat** 1989 Aug;185(4):455–61

A novel effect of norepinephrine on cardiac cells is mediated by alpha 1-adrenoceptors. Fedida D, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1500–4

Morphological and contractile characteristics of rat cardiac myocytes from maturation to senescence. Fraticelli A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H259–65

Low-threshold current is major calcium current in chick ventricle cells. Kawano S, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):H1505–8

Energy depletion-repletion and calcium transients in single cardiomyocytes. Li Q, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C427–34

Left and right ventricular myocardial morphometry in fetal, neonatal, and adult sheep. Smolich JJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H1–9

Distribution of the neural crest cells in the heart of birds: a three dimensional analysis. Sumida H, et al. **Anat Embryol (Berl)** 1989;180(1):29–35

Primary cell culture and morphological characterization of ventricular myocytes from the adult newt, Notophthalmus viridescens. Tate JM, et al. **Anat Rec** 1989 May; 224(1):29–42

Expression of collagen adhesion proteins and their association with the cytoskeleton in cardiac myocytes. Terracio L, et al. **Anat Rec** 1989 Jan;223(1):62–71

SEM observations on the effect of anthracycline drugs on cultured newborn rat cardiomyocytes. Djaldetti M, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):672–7

Sensitivity to oxidants of mitochondrial and sarcoplasmic reticular calcium uptake in saponin-treated cardiac myocytes. Kaminishi T, et al. **Basic Res Cardiol** 1989 May–Jun;84(3):282–90

Are isolated cardiomyocytes a suitable experimental model in all lines of investigation in basic cardiology? Kammermeier H, et al. **Basic Res Cardiol** 1988 Jul–Aug; 83(4):343–9 (35 ref.)

Beta-adrenoceptor and adenylate cyclase regulation in cardiac myocyte growth. Karliner JS, et al. **Basic Res Cardiol** 1988 Nov–Dec;83(6):655–63

Excitation–contraction coupling in voltage-clamped cardiac myocytes. Meyer R, et al. **Basic Res Cardiol** 1989 Mar–Apr; 84(2):136–48

The effect of calcium ions and the calcium ionophore A23187 on choline uptake and phosphatidylcholine biosynthesis in chick embryo hearts. Rabkin SW. **Basic Res Cardiol** 1988 Nov–Dec;83(6):664–71

Dual loading of the fluorescent indicator fura-2 and 2,7-biscarboxyethyl-5(6)-carboxyfluorescein (BCECF) in isolated myocytes. Miyata H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):500–5

Simultaneous measurement of cytosolic free calcium concentration and cell circumference during contraction, both in a single rat cardiomuscular cell, by digital imaging microscopy with indo-1. Tamura K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):926–32

Effect of external K on the block of the inward rectifier during hyperpolarization in guinea-pig ventricular myocytes by external Na. Biermans G, et al. **Biomed Biochim Acta** 1989;48(5–6):S358–63

Block of sodium channels by psychotropic drugs in single guinea-pig cardiac myocytes. Ogata N, et al. **Br J Pharmacol** 1989 Jul;97(3):905–13

The effects of calcium antagonists on calcium overload contractures in embryonic chick myocytes induced by ouabain and veratrine. Patmore L, et al. **Br J Pharmacol** 1989 May;97(1):83–94

Oxidant injury to isolated heart cells. Kaminishi K, et al. **Can J Cardiol** 1989 Apr;5(3):168–74

Some determinants of quality and yield in the isolation of adult heart cells from rat. Haworth RA, et al. **Cell Calcium** 1989 Jan;10(1):57–62

Quantitative microchemical imaging of calcium in Na-K pump inhibited heart cells. LeFurgey A, et al. **Cell Calcium** 1988 Dec;9(5–6):219–35

Spontaneous calcium release from the sarcoplasmic reticulum in myocardial cells: mechanisms and consequences. Stern MD, et al. **Cell Calcium** 1988 Dec;9(5–6):247–56 (27 ref.)

Polyploidization of transplanted cardiac myocytes. Brodsky VYa, et al. **Cell Differ Dev** 1988 Dec;25(3):177–83

Immunohistochemical and ultrastructural localisation of peptide-containing nerves and myocardial cells in the human atrial appendage. Wharton J, et al. **Cell Tissue Res** 1988 Oct;254(1):155–66

Tissue organizational stability and intercellular invasion. Armstrong PB. **Ciba Found Symp** 1988;141:5–21 (18 ref.)

Chronotropic responsiveness of developing sinoatrial and ventricular rat myocytes to autonomic agonists following adrenergic and cholinergic innervation in vitro. Atkins DL, et al. **Circ Res** 1989 Jun;64(6):1051–62

Cellular origins of the transient inward current in cardiac myocytes. Role of fluctuations and waves of elevated intracellular calcium. Berlin JR, et al. **Circ Res** 1989 Jul; 65(1):115–26

Differentiation of adult rat cardiac myocytes in cell culture. Bugaisky LB, et al. **Circ Res** 1989 Mar;64(3):493–500

The behavior of sonicated albumin microbubbles within the microcirculation: a basis for their use during myocardial contrast echocardiography. Keller MW, et al. **Circ Res** 1989 Aug;65(2):458–67

On the mechanism of drug-induced blockade of Na+ currents: interaction of antiarrhythmic compounds with DPI-modified single cardiac Na+ channels. Kohlhardt M, et al. **Circ Res** 1989 May;64(5):867–81

Load regulation of the properties of adult feline cardiocytes: growth induction by cellular deformation. Mann DL, et al. **Circ Res** 1989 Jun;64(6):1079–90

Direct actions of cocaine on cardiac cellular electrical activity. Przywara DA, et al. **Circ Res** 1989 Jul; 65(1):185–92

Fate of gap junctions in isolated adult mammalian cardiomyocytes. Severs NJ, et al. **Circ Res** 1989 Jul; 65(1):22–42

Two components of transient outward current in canine ventricular myocytes. Tseng GN, et al. **Circ Res** 1989 Apr; 64(4):633–47

Characterization of single heart cell contractility by rapid imaging. Delbridge LM, et al.
Clin Exp Pharmacol Physiol 1989 Mar;16(3):179–84

Cytotoxic effect of phenazine methosulphate on the isolated frog heart. Duncan CJ. **Comp Biochem Physiol [A]** 1989; 92(1):133–5

Cryopreservation of human heart cells. Bustamante JO, et al. **Cryobiology** 1988 Oct;25(5):394–408

Immunocytochemical analysis of the regeneration of myofibrils in long-term cultures of adult cardiomyocytes of the rat. Eppenberger ME, et al. **Dev Biol** 1988 Nov; 130(1):1–15

Epithelial–mesenchymal cell transformation in the embryonic heart can be mediated, in part, by transforming growth factor beta. Potts JD, et al. **Dev Biol** 1989 Aug; 134(2):392–401

Effects of various high-fat diets on myocardial contractility and morphology in rats. Magnuson BA, et al.
Drug Nutr Interact 1988;5(4):213–26

Stimulation of glucose transport in rat cardiac myocytes by guanosine 3',5'-monophosphate. Shanahan MF, et al.
Endocrinology 1989 Aug;125(2):1074–81

Experimental aspects of isolation of myocytes from adult guinea-pig hearts. Zahradník I, et al.
Gen Physiol Biophys 1989 Apr;8(2):119–32

Serum-free, chemically defined medium to evaluate the direct effects of growth factors and inhibitors on proliferation and function of neonatal rat cardiac muscle cells in culture. Suzuki T, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):601–6

The effects of acutely increased ventricular cavity pressure on intrinsic myocardial connective tissue. Factor SM, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1582–9

Terminally differentiated neonatal rat myocardial cells proliferate and maintain specific differentiated functions following expression of SV40 large T antigen. Sen A, et al. **J Biol Chem** 1988 Dec 15;263(35):19132–6

Growth and partial differentiation of presumptive human cardiac myoblasts in culture. Kohtz DS, et al.
J Cell Biol 1989 Mar;108(3):1067–78

Polygons and adhesion plaques and the disassembly and assembly of myofibrils in cardiac myocytes. Lin ZX, et al. **J Cell Biol** 1989 Jun;108(6):2355–67

Differentiation of cardiac myocytes after mitogen withdrawal exhibits three sequential states of the ventricular growth response. Ueno H, et al. **J Cell Biol** 1988 Nov;107(5):1911–8

Light, scanning, and transmission electron microscopy of a single population of detergent-extracted cardiac myocytes in vitro. Delcarpio JB, et al. **J Electron Microsc Tech** 1989 May;12(1):24–8

Influence of pHo on calcium channel block by amlodipine, a charged dihydropyridine compound. Implications for location of the dihydropyridine receptor. **Kass RS, et al. J Gen Physiol** 1989 Jun;93(6):1109–27

Kinetic properties of single sodium channels in rat heart and rat brain. Kirsch GE, et al. **J Gen Physiol** 1989 Jan; 93(1):85–99

Nonmodal gating of cardiac calcium channels as revealed by dihydropyridines. Lacerda AE, et al. **J Gen Physiol** 1989 Jun;93(6):1243–73

Abnormal electrical activity induced by free radical generating systems in isolated cardiocytes. Barrington PL, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1163–78

Modification of the n-6/n-3 fatty acid ratio in the phospholipids of rat ventricular myocytes in culture by the use of synthetic media: functional and biochemical consequences in normoxic and hypoxic conditions. Grynberg A, et al. **J Mol Cell Cardiol** 1988 Oct; 20(10):863–74

Contractile responses of isolated adult rat and rabbit cardiac myocytes to isoproterenol and calcium. Harding SE, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):635–47

Isolation of cardiac ventricular myocytes from newborn rats by use of fractional elutriation centrifugation. Diamant B, et al. **J Pharmacol Methods** 1989 Aug;22(1):49–57

Effects of high potassium and high calcium on the action potential of the ventricular cells of the tortoise heart. Qin WN, et al. **J Tongji Med Univ** 1988;8(2):106–9

Two differential mechanisms of automaticity in diseased human atrial fibers. Kimura T, et al. **Jpn J Physiol** 1988; 38(6):851–67

Differentiation of inotropic action from chronotropic action of sympathetic agents in cultured cells of chick embryonic ventricles. Toyota H, et al. **Jpn J Physiol** 1989;39(1):101–14

Relationship between contraction strength and stimulation frequency in cultured chick embryonic heart cells. Toyota H, et al. **Jpn J Physiol** 1989;39(1):87–100

Isolation and enrichment of Ca2+-tolerant myocytes for biochemical experiments from guinea-pig heart. Stemmer P, et al. **Life Sci** 1989;44(17):1231–7

Cultured embryonic mouse heart cells as models for T. cruzi-muscle cell interaction: characterization of spontaneous firing and chronotropic responses to norepinephrine. de Nazareth M, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:497

Isolation of calcium-tolerant atrial and ventricular myocytes from adult rat heart. De Young MB, et al.
Methods Enzymol 1989;173:662–76

Preparation and culture of embryonic and neonatal heart muscle cells: modification of transport activity. Werdan K, et al. **Methods Enzymol** 1989;173:634–62

Insulin-like growth factors and neonatal cardiomyocyte development: ventricular gene expression and membrane receptor variations in normotensive and hypertensive rats. Engelmann GL, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):1–14

Anti-cholinergic effect of verapamil on the muscarinic acetylcholine receptor-gated K+ channel in isolated guinea-pig atrial myocytes. Ito H, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jan–Feb; 339(1–2):244–6

Noradrenaline-induced desensitization in cultured heart cells as a model for the defects of the adenylate cyclase system in severe heart failure. Reithmann C, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jan–Feb; 339(1–2):138–44

A Ca2+-activated K+ current in guinea-pig atrial myocytes. Baró I, et al. **Pflugers Arch** 1989;414 Suppl 1:S168

An improved apparatus for the optical recording of contraction of single heart cells. Boyett MR, et al.
Pflugers Arch 1988 Dec;413(2):197–205

K+ channels in cardiac cells: mechanisms of activation, inactivation, rectification and K+e sensitivity. Carmeliet E. **Pflugers Arch** 1989;414 Suppl 1:S88–92 (41 ref.)

Effect of diacetyl monoxime on transient outward current in rat ventricular myocytes. Coulombe A, et al.
Pflugers Arch 1989;414 Suppl 1:S173–4

The pharmacology of ATP-sensitive K+ channels in the heart. Escande D. **Pflugers Arch** 1989;414 Suppl 1:S93–8 (58 ref.)

Different K+ channels in human atrial cells. Heidbüchel H, et al. **Pflugers Arch** 1989;414 Suppl 1:S171–2

Effects of a protein phosphatase inhibitor, okadaic acid, on membrane currents of isolated guinea-pig cardiac myocytes. Hescheler J, et al. **Pflugers Arch** 1988 Aug; 412(3):248–52

Tetrodotoxin differentially blocks peak and steady-state sodium channel currents in early embryonic chick ventricular myocytes. Josephson IR, et al.
Pflugers Arch 1989 Jul;414(3):354–9

Alpha-adrenergic activation of the muscarinic K+ channel is mediated by arachidonic acid metabolites. Kurachi Y, et al. **Pflugers Arch** 1989 May;414(1):102–4

Activation of an ATP-sensitive K+ current is promoted by internal GDP in frog atrial myocytes. Pilsudski R, et al.
Pflugers Arch 1989;414 Suppl 1:S177

Single channel currents of homo- and heterologous gap junctions between cardiac fibroblasts and myocytes. Rook MB, et al. **Pflugers Arch** 1989 May;414(1):95–8

The potassium channel opener RP 49356 modifies the ATP-sensitivity of K+-ATP channels in cardiac myocytes. Thuringer D, et al. **Pflugers Arch** 1989;414 Suppl 1:S175

A novel cardiac potassium channel that is active and conductive at depolarized potentials. Yue DT, et al.
Pflugers Arch 1988 Dec;413(2):127–33

Joint Soviet-U.S. attack on heart muscle dogma [news] [published erratum appears in Science 1988 Nov 4;242(4879):652] Barnes DM. **Science** 1988 Oct 14; 242(4876):193–5

A controlled silver impregnation method to characterize cultured cardiomyocytes. Lascano EF, et al.
Stain Technol 1988 Jul;63(4):221–7

[Effect of Astragalus membranaceus on electrical activities of coxsackie B-2 virus-infected rat myocardial cells in culture] Yuan WL, et al.
Chung Hsi I Chieh Ho Tsa Chih 1989 Jun;9(6):355–7, 326 (Eng. Abstr.) **(Chi)**

[Effect of sodium molybdate on the mechanism of electromechanic activity in heart muscle in guinea pigs] Zhang ST, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Apr; 16(2):110–2 **(Chi)**

[Morphological study on incisural ended nuclei of myocardial cells in overheated rats] Xu DY, et al.
Chung-hua Ping Li Hsueh Tsa Chih 1988 Jun;17(2):133–5 (Eng. Abstr.) **(Chi)**

[Action potentials, membrane responsiveness and rapid electric activities in rat ventricular muscle cells] Gao TL, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):145–52 (Eng. Abstr.) **(Chi)**

[Anoxia-reoxygenation injury in isolated rat myocytes is modulated by cell sodium during the anoxia period] Li ZP, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):304–7 (Eng. Abstr.) **(Chi)**

[Toxic effect of fluid accumulated within silicone regeneration chambers on the survival and proliferation of fibroblasts of the heart of newborn rats] Hurtado H, et al. **C R Acad Sci [III]** 1988;307(3):129–32 (Eng. Abstr.) **(Fre)**

[Ultrastructural features of hormone-producing cardiomyocytes under certain experimental and clinical conditions] Korostyshevskaia IM, et al.
Arkh Anat Gistol Embriol 1989 Feb;96(2):42–9 (Eng. Abstr.) **(Rus)**

[Glycerinated myocardiocyte fibers in the rat myocardium as one of the models in a preclinical assessment of antianginal agents] Dzhanpoladian EG, et al.
Biull Eksp Biol Med 1989 Apr;107(4):444–6 (Eng. Abstr.) **(Rus)**

[Frequency-related blocking of sodium channels in the membrane of isolated rat cardiomyocytes by the calcium antagonist verapamil] Pidoplichko VI, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):87–9 (Eng. Abstr.) **(Rus)**

[Electrical activity of the heart cells and myocardial contractility during a change in extracellular sodium concentration] Kobrin VI, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1257–62 (Eng. Abstr.) **(Rus)**

[Metabolic criteria of viability of isolated cardiomyocytes] Gvozdjáková A, et al. **Bratisl Lek Listy** 1988 Aug; 89(8):582–5 (Eng. Abstr.) **(Slo)**

[Effect of caffeine on cardiac cells in vitro of rats (Rattus norvegicus)] Merentes E, et al. **Acta Cient Venez** 1988; 39(1):64–8 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Changes in myosin isozyme expression during cardiac hypertrophy in hyperthyroid rabbits. Seiden D, et al.
Acta Anat (Basel) 1989;135(3):222–30

Two forms of AMP deaminase in bovine heart. Składanowski AC, et al. **Acta Biochim Pol** 1988;35(1):29–37

The role of zinc status in altered cardiac adenylate cyclase activity in diabetic rats. Mooradian AD, et al.
Acta Endocrinol (Copenh) 1988 Oct;119(2):174–80

Functional and biochemical analyses of isolated rat hearts in renal and reversed renal hypertension. Friberg P, et al.
Acta Physiol Scand 1989 Feb;135(2):123–32

Regional distribution of citrate synthase and lactate dehydrogenase isoenzymes in the bovine heart. Sylvén C, et al. **Acta Physiol Scand** 1989 Jul;136(3):331–7

Key enzymes of myocardial energy metabolism in patients with valvular heart disease: relation to left ventricular function. Sylvén C, et al. **Acta Physiol Scand** 1988 Mar; 132(3):267–70

Biochemical aspects of inhibition of cardiovascular low (Km) cyclic adenosine monophosphate phosphodiesterase. Silver PJ. **Am J Cardiol** 1989 Jan 3;63(2):2A–8A (49 ref.)

Cardiac isoenzymes and electrocardiographic changes during ritodrine tocolysis. Hadi HA, et al.
Am J Obstet Gynecol 1989 Aug;161(2):318–21

Cytochrome-c-oxidase deficient cardiomyocytes in the human heart—an age-related phenomenon. A histochemical ultracytochemical study. Müller-Höcker J. **Am J Pathol** 1989 May;134(5):1167–73

Lipoprotein lipase in myocytes and capillary endothelium of heart: immunocytochemical study. Blanchette-Mackie EJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E818–28

Regional variation in rat cardiac myosin isoenzymes and ATPase activity after infarction. Geenen DL, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H745–50

Depression of heart sarcolemmal Ca2+-pump activity by oxygen free radicals. Kaneko M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H368–74

Effect of ischemia on sarcolemmal Na+-Ca2+ exchange in neonatal hearts. Meno H, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1615–20

Dietary carbohydrates modify cardiac myosin isoenzyme profiles of semistarved rats. Morris GS, et al.
Am J Physiol 1989 Apr;256(4 Pt 2):R976–81

Na+-dependent activation of Na+-K+ pump in human myocardium during recovery from acidosis. Rasmussen HH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H256–64

Phosphorylase synthesis in diabetic hepatocytes and cardiomyocytes. Rulfs J, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E74–80

Canine myocardial creatine kinase isoenzyme response to coronary artery occlusion. Sharkey SW, et al.
Am J Physiol 1989 Feb;256(2 Pt 2):H508–14

Spectrophotometric method for differentiation of cardiac and hepatic lactate dehydrogenase activities in dogs. Aguilera-Tejero E, et al. **Am J Vet Res** 1989 Jul; 50(7):1128–30

Purification of cardiac (Na+,K+)-activated adenosine triphosphatase from rat. Watanabe T, et al.
Anal Biochem 1988 Nov 15;175(1):284–8

Creatine kinase isozyme expression in embryonic chicken heart. Lamers WH, et al. **Anat Embryol (Berl)** 1989; 179(4):387–93

Hemodialysis with calcium-free dialysate prevents myocardial creatine kinase depletion after brief coronary artery occlusion in dogs. Darsinos J, et al. **Angiology** 1988 Oct;39(10):865–72

Hyperoxia and xanthine dehydrogenase/oxidase activities in rat lung and heart. Elsayed NM, et al.
Arch Biochem Biophys 1989 Sep;273(2):281–6

Inhibition of cardiac sarcoplasmic reticulum Ca2+-ATPase activity by menadione. Floreani M, et al.
Arch Biochem Biophys 1989 Apr;270(1):33–41

Examination of the role of thiolimidate formation in the cleavage of acetoacetyl-CoA catalyzed by thiolase I from porcine heart. Izbicka E, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):476–80

Amino-terminal sequence analysis of rat heart and muscle glycogen synthase: homology to the rabbit enzyme and the implications for hormonal control. Jaspers SR, et al.
Arch Biochem Biophys 1989 Feb 1;268(2):630–6

The mechanisms of reduction of protein mixed disulfides (dethiolation) in cardiac tissue. Park EM, et al. **Arch Biochem Biophys** 1989 Oct;274(1):47–54

Purification and kinetic properties of lysophosphatidylinositol acyltransferase from bovine heart muscle microsomes and comparison with lysophosphatidylcholine acyltransferase. Sanjanwala M, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):407–13

Specific stimulation of heart sarcolemmal Ca2+/Mg2+ ATPase by concanavalin A. Zhao DY, et al. **Arch Biochem Biophys** 1989 Jan;268(1):40–8

Substrate specificity studies of partially purified rabbit heart lipoprotein lipase. Bauer JE. **Artery** 1988;15(5):272–91

Pharmacological properties of the positive inotropic and alpha 1-adrenoceptor blocking agent saterinone. Armah BI, et al. **Arzneimittelforschung** 1988 Sep;38(9):1287–92

Selective inhibition of cAMP phosphodiesterase III activity by the cardiotonic agent saterinone in guinea pig myocardium. Brunkhorst D, et al. **Arzneimittelforschung** 1988 Sep;38(9):1293–8

Inhibition of cardiac phosphodiesterase III by the novel cardiotonic agent 6-[4-(4'-pyridyl)aminophenyl]-4,5-dihydro-3(2H)-pyridazinone hydrochloride. Sellin LC, et al. **Arzneimittelforschung** 1988 Dec;38(12):1787–9

Effects of bunitrolol on myocardial contractility and left ventricular myosin isoenzyme pattern. Takeda N, et al. **Arzneimittelforschung** 1988 Sep;38(9):1280–2

GTP-independent stimulation of rabbit heart adenylate cyclase by isoproterenol at physiological ATP concentrations. Harding SE, et al. **Basic Res Cardiol** 1989 Jan-Feb;84(1):30–41

Effect of chronic exercise on glucose uptake and activities of glycolytic enzymes measured regionally in rat heart. Kainulainen H, et al. **Basic Res Cardiol** 1989 Mar-Apr; 84(2):174–90

Heart protein kinase C activity increases during progression of disease in the cardiomyopathic hamster. Chambers TC, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):507–14

Catalytic subunit of cAMP-dependent protein kinase from bovine heart: several isoforms demonstrated by high resolution focusing in immobilized pH gradient. Hotz A, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):596–601

Subcellular distribution and immunocytochemical localization of protein kinase C in myocardium, and phosphorylation of troponin in isolated myocytes stimulated by isoproterenol or phorbol ester. Liu JD, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1105–10

Liberation of lipoate by human serum lipoamidase from bovine heart pyruvate dehydrogenase. Oizumi J, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):658–63

A cytosolic protein activator of cardiac sarcolemmal phosphoinositide phospholipase C. Quist EE, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):567–73

Atrial natriuretic peptide receptors and activation of guanylate cyclase in rat cardiac sarcolemma. Rugg EL, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1339–45

Evidence for a latent form of protein phosphatase 1 associated with cardiac myofibrils. Schlender KK, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):72–8

Human testicular lactate dehydrogenase-C gene is interrupted by six introns at positions homologous to those of LDH-A (muscle) and LDH-B (heart) genes. Takano T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):579–83

Isozymes of fructose 6-phosphate,2-kinase:fructose-2,6-bisphosphatase in rat and bovine heart, liver, and skeletal muscle. Taniyama M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):949–54

Monoacylglycerol lipase activity in cardiac myocytes. Severson DL, et al. **Biochem Cell Biol** 1988 Sep; 66(9):1013–8

Salt stimulation of the activation of latent protein phosphatase, Fc.M, by Mn++ and by Mn/trypsin. Schuchard MD, et al. **Biochem Int** 1989 Apr;18(4):845–9

Lysophospholipase A2 activity in guinea-pig heart microsomal fractions displaying high activities with 2-acylglycerophosphocholines with linoleic and arachidonic acids. Arthur G. **Biochem J** 1989 Jul 15; 261(2):581–6

Acylation of 2-acyl-glycerophosphocholine in guinea-pig heart microsomal fractions. Arthur G. **Biochem J** 1989 Jul 15;261(2):575–80

Pyruvate dehydrogenase activities during the fed-to-starved transition and on re-feeding after acute or prolonged starvation. Holness MJ, et al. **Biochem J** 1989 Mar 1; 258(2):529–33

The unfolding and refolding of cytoplasmic aspartate aminotransferase from pig heart. West SM, et al. **Biochem J** 1989 Jul 1;261(1):189–96

The influence of phosphatidate bilayers on pig heart AMP deaminase. Crucial role of pH-dependent lipid-phase transition. Woźniak M, et al. **Biochem J** 1988 Nov 1; 255(3):977–81

Acidic glutathione transferase from human heart. Characterization and N-terminal sequence determination. Caccuri AM, et al. **Biochem Med Metab Biol** 1988 Oct; 40(2):123–32

Angiotensin II receptors negatively coupled to adenylate cyclase in rat myocardial sarcolemma. Involvement of inhibitory guanine nucleotide regulatory protein. Anand-Srivastava MB. **Biochem Pharmacol** 1989 Feb 1; 38(3):489–96

Differential forskolin activation of rat heart and lung adenylate cyclase. Dependence on membrane-protein interactions. Jackman GP, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1091–5

Comparison of cyclic nucleotide phosphodiesterase isoforms from rat heart and bovine aorta. Separation and inhibition by selective reference phosphodiesterase inhibitors. Prigent AF, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3671–81

Effect of cryptosin on Na+, K+-ATPase—a 31P NMR spectroscopic study. Rao VR, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2039–41

Affinity labels and spectroscopic probes of porcine heart NADP-dependent isocitrate dehydrogenase. Colman RF. **Biochem Soc Trans** 1989 Apr;17(2):307–11

Lactate dehydrogenase isoenzymes A (muscle), B (heart) and C (testis) of mammals and the genes coding for these enzymes. Li SS. **Biochem Soc Trans** 1989 Apr;17(2):304–7

Purification and characterization of a calcium-calmodulin-dependent phospholamban kinase from canine myocardium. Gupta RC, et al. **Biochemistry** 1989 Jul 11;28(14):5909–16

Estimation of free energy barriers in the cytoplasmic and mitochondrial aspartate aminotransferase reactions probed by hydrogen-exchange kinetics of C alpha-labeled amino acids with solvent. Julin DA, et al. **Biochemistry** 1989 May 2;28(9):3815–21

Kinetic isotope effect studies on aspartate aminotransferase: evidence for a concerted 1,3 prototropic shift mechanism for the cytoplasmic isozyme and L-aspartate and dichotomy in mechanism. Julin DA, et al. **Biochemistry** 1989 May 2;28(9):3825–33

cDNA cloning and expression of pig cytosolic aspartate aminotransferase in Escherichia coli: amino-terminal heterogeneity of expressed products and lack of its correlation with enzyme function. Nagashima F, et al. **Biochemistry** 1989 Feb 7;28(3):1153–60

The myosin-bound form of protein phosphatase 1 (PP-1M) is the enzyme that dephosphorylates native myosin in skeletal and cardiac muscles. Chisholm AA, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):163–9

Avian adipose lipoprotein lipase: cDNA sequence and reciprocal regulation of mRNA levels in adipose and heart. Cooper DA, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):92–101

Interaction of bovine skeletal muscle lactate dehydrogenase with liposomes. Comparison with the data for the heart enzyme. Dąbrowska A, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):357–60

The effects of calcium, temperature and phospholamban phosphorylation on the dynamics of the calcium-stimulated ATPase of canine cardiac sarcoplasmic reticulum. Fowler C, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):348–56

Secondary structure of detergent-solubilized phospholamban, a phosphorylatable, oligomeric protein of cardiac sarcoplasmic reticulum. Simmerman HK, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):322–9

Solubilization and partial characterization of phospholipase A from rat heart sarcoplasmic reticulum. Trotz M, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):248–57

Ca2+-induced conformational changes in cardiac troponin C as measured by N-(1-pyrene)maleimide fluorescence. Verin AD, et al. **Biochim Biophys Acta** 1988 Sep 21; 956(2):197–208

Distribution of xanthine dehydrogenase and oxidase activities in human and rabbit tissues. Wajner M, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):79–84

Protein kinase C (calcium/phospholipid-dependent protein kinase) in developing chick heart: selective localization to atrium versus ventricle and changes in activity levels during cardiogenesis. Wrenn RW, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):110–2

Activation by reduction of the resting form of cytochrome c oxidase: tests of different models and evidence for the involvement of CuB. Wrigglesworth JM, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):452–64

Immobilization of aspartate aminotransferase on agarose. Kurkijärvi K, et al. **Biochimie** 1989 Apr;71(4):439–48

Purification of a specific peptidase in bovine atria for the processing of pro-atrial natriuretic factor. Imada T, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:113–20

Ubiquitin-calmodulin conjugating activity from cardiac muscle. Jennissen HP, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1325–30

Acyl-CoA dehydrogenase enzymes during early postnatal development in the rat. Carroll JE, et al. **Biol Neonate** 1989; 55(3):185–90

Does the measurement of xanthine oxidase (XOD)/xanthine dehydrogenase (XDH) ratio reflect the actual tissue content of these enzymes? Haberland A, et al. **Biomed Biochim Acta** 1989;48(2-3):S114–7

Immunenzymometric assay for the heart specific glycogen phosphorylase BB in human serum using monoclonal antibodies. Hofmann U, et al. **Biomed Biochim Acta** 1989; 48(2-3):S132–6

On the release of glycogen phosphorylase from heart muscle: effect of substrate depletion, ischemia and of imipramine. Krause EG, et al. **Biomed Biochim Acta** 1989; 48(2-3):S77–82

Alteration of cardiac myosin isozymes after whole-body irradiation. Litten RZ, et al. **Br J Radiol** 1989 Feb; 62(734):189–91

Tissue damage markers in experimental Chagas' disease. Palhares PE, et al. **Braz J Med Biol Res** 1988;21(5):957–9

Cardiac contracile protein ATPase activity in a diet induced model of noninsulin dependent diabetes mellitus. Pierce GN, et al. **Can J Cardiol** 1989 Mar;5(2):117–20

Influence of gramicidin S on cardiac membrane Ca2+/Mg2+ ATPase activities and contractile force development. Zhao DY, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):546–52

Ca, Mg-ATPase activity of permeabilised rat heart cells and its functional coupling to oxidative phosphorylation of the cells. Kümmel L. **Cardiovasc Res** 1988 May;22(5):359–67

Myocardial enzyme depletion in infarcted human hearts: infarct size and equivalent tissue mass. van der Veen FH, et al. **Cardiovasc Res** 1988 Sep;22(9):611–9

Enzymes in normally perfused and ischaemic dog hearts which release a substance with kinin like activity. Zeitlin IJ, et al. **Cardiovasc Res** 1989 Feb;23(2):91–7

Effect of starvation and refeeding on cysteamine dioxygenase activity in rat liver and heart. Rosei MA. **Cell Mol Biol** 1988;34(3):287–93

Shortening velocity and myosin and myofibrillar ATPase activity related to myosin isoenzyme composition during postnatal development in rat myocardium. Cappelli V, et al. **Circ Res** 1989 Aug;65(2):446–57

ATPase activity of the cross-linked complex between cardiac myosin subfragment 1 and actin in several models of chronic overloading. A new approach to the biochemistry of contractility. Lauer B, et al. **Circ Res** 1989 Jun; 64(6):1106–15

Gonadectomy and hormonal replacement changes systolic blood pressure and ventricular myosin isoenzyme pattern of spontaneously hypertensive rats. Lengsfeld M, et al. **Circ Res** 1988 Dec;63(6):1090–4

Response of isolated working hearts to fatty acids and carnitine palmitoyltransferase I inhibition during reduction of coronary flow in acutely and chronically diabetic rats. Lopaschuk GD, et al. **Circ Res** 1989 Aug;65(2):378–87

Regional distribution of the molecular forms of acetylcholinesterase in adult rat heart. Nyquist-Battie C, et al. **Circ Res** 1989 Jul;65(1):55–62

Beta-adrenergic receptor number and adenylate cyclase function in denervated transplanted and cardiomyopathic human hearts. Denniss AR, et al. **Circulation** 1989 May; 79(5):1028–34

Rapid purification of creatine kinase MB isoenzyme on preparative polyacrylamide slabs. Geng JG, et al. **Clin Chem** 1989 Jan;35(1):98–101

Greater than expected alanine aminotransferase activities in plasma and in hearts of patients with acute myocardial infarction. Giesen PL, et al. **Clin Chem** 1989 Feb; 35(2):279–83

Antibody inhibition procedure for myocardial (CK-MB) isoenzyme determination by a modified program on the Technicon RA-1000 analyzer. Itiaba K, et al. **Clin Chem** 1988 Dec;34(12):2579

Immunoaffinity purification of creatine kinase-MB from human, dog, and rabbit heart with use of a monoclonal antibody specific for CK-MB. Landt Y, et al. **Clin Chem** 1989 Jun;35(6):985–9

Effect of oxidation on the activity of angiotensin converting enzyme in the rat kidney, heart and brain. Tominaga M, et al. **Clin Exp Hypertens [A]** 1988;10(6):1271–8

Angiotensin converting enzyme in the rat heart: studies of its inhibition in vitro and ex vivo. Fabris B, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):309–13

Cardiac isoenzyme values after total joint arthroplasty. Wukich DK, et al. **Clin Orthop** 1989 May;(242):232–40

NAD glycohydrolase activity in dog cardiac tissue. Calva E, et al. **Comp Biochem Physiol [B]** 1978;61(1):173–9

The sequence around the phosphorylation site of the porcine heart type phosphorylase isoenzyme. Dombrádi V, et al. **Comp Biochem Physiol [B]** 1988;91(4):717–21

Polymorphic tetrameric superoxide dismutase in the pike Esox lucius L. (Pisces; Esocidae). Healy JA, et al. **Comp Biochem Physiol [B]** 1979;62(4):563–5

Immunological, electrophoretic and kinetic properties of cardiac myosins from various species. Higuchi M, et al. **Comp Biochem Physiol [B]** 1978;60(4):495–9

Myosin isoenzymes of fish hearts. Karasiński J. **Comp Biochem Physiol [B]** 1988;91(2):359–63

Phosphofructokinase from porcine heart, liver and erythrocytes. Koyama T, et al. **Comp Biochem Physiol [B]** 1989;93(3):517–21

Regional changes in ornithine decarboxylase activity and polyamine levels during thyroxine-induced cardiac hypertrophy. Tipnis UR, et al. **Cytobios** 1989;57(229):101–8

Characterization of two different genes (cDNA) for cytochrome c oxidase subunit VIa from heart and liver of the rat. Schlerf A, et al. **EMBO J** 1988 Aug;7(8):2387–91

The effect of insulin on glucose-6-phosphate dehydrogenase activity in liver, heart and skeletal muscle of rat during hypothermia. Torlińska T, et al. **Endokrynol Pol** 1988; 39(2):111–8

The visualization by affinity electrophoresis of a specific association between the consecutive citric acid cycle enzymes fumarase and malate dehydrogenase. Beeckmans

S, et al. **Eur J Biochem** 1989 Aug 1;183(2):449–54
Distances between functional sites in cardiac sarcoplasmic reticulum (Ca2+ +Mg2+)-ATPase. Inter-lanthanide energy transfer. Joshi NB, et al. **Eur J Biochem** 1988 Dec 15;178(2):483–7
Mechanism of interaction of citrate synthase with citryl-CoA. Pettersson G, et al. **Eur J Biochem** 1989 Jun 1;182(1):119–24
Effects of adenosine analogues on force and cAMP in the heart. Influence of adenosine deaminase. Heller T, et al. **Eur J Pharmacol** 1989 May 19;164(2):179–87
Circadian rhythm of the in vitro stimulation of adenylate cyclase in rat heart tissue. Lemmer B, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):311–5
Cardiac Na+,K+-ATPase isoenzymes: sensitivity to prednisolone bisguanylhydrazone. Ng YC, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):93–9
Homologous vs. heterologous desensitization of the adenylate cyclase system in heart cells. Reithmann C, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):99–104
Mechanism of noradrenaline-induced heterologous desensitization of adenylate cyclase stimulation in rat heart muscle cells: increase in the level of inhibitory G-protein alpha-subunits. Reithmann C, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):211–21
Cholinergic antagonism of beta-adrenergic stimulated action potentials and adenylate cyclase activity in rabbit ventricular cardiomyocytes. Watson JM, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):101–8
Frequent derepression of G6PD and HPRT on the marsupial inactive X chromosome associated with cell proliferation in vitro. Migeon BR, et al. **Exp Cell Res** 1989 Jun; 182(2):597–609
Antioxidant enzyme activities in heart and skeletal muscle of rats of different ages. Vertechy M, et al. **Exp Gerontol** 1989;24(3):211–8
Absence of myophosphorylase in ethanol induced cardiomyopathy. Baruah JK, et al. **Exp Pathol** 1988; 33(4):197–200
Thyroxine-induced redistribution of creatine kinase isoenzymes in rat cardiomyocyte cultures. Brik H, et al. **Experientia** 1989 Jun 15;45(6):591–4
An example of substrate channeling between co-immobilized enzymes. Coupled activity of myosin ATPase and creatine kinase bound to frog heart myofilaments. Arrio-Dupont M. **FEBS Lett** 1988 Nov 21;240(1–2):181–5
Conformational changes of type II regulatory subunit of cAMP-dependent protein kinase on cAMP binding. Johnson DR, et al. **FEBS Lett** 1989 Apr 24;247(2):480–2
Characterization and expression of the rat heart sarcoplasmic reticulum Ca2+-ATPase mRNA. Lompre AM, et al. **FEBS Lett** 1989 May 22;249(1):35–41
Reduction of oxygen by NADH/NADH dehydrogenase in the presence of adriamycin. Thornalley PJ, et al. **Free Radic Res Commun** 1986;2(3):163–71
Quantitative histoenzymological characteristics of the myocardium in sudden cardiac death. Vikhert AM, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):159–67
Suggestive evidence for inhibitory action of amiodarone on Na+, K+-pump activity in guinea pig heart. Aomine M. **Gen Pharmacol** 1989;20(4):491–6
Quantitative histochemistry of creatine kinase in rat myocardium and skeletal muscle. Frederiks WM, et al. **Histochem J** 1988 Nov;20(11):624–8
Blood cardioplegia—a comparative clinical and laboratory study. Desai RN, et al. **Indian Heart J** 1989 Mar–Apr; 41(2):134–6
Alternative pathway of glucose metabolism in developing human foetal heart. Dasgupta J, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):376–7
Heart lactate dehydrogenase isoenzymes as a function of age, exercise and experimental necrosis. Asha Devi S. **Indian J Exp Biol** 1988 Aug;26(8):628–32
Changes in cardiac lactate dehydrogenase isoenzymes following experimental necrosis in rats. Devi SA. **Indian J Physiol Pharmacol** 1988 Jan–Mar;32(1):11–20
Effect of chronic ethanol treatment under partial catalase inhibition on the activity of enzymes related to peroxide metabolism in rat liver and heart. Antonenkov VD, et al. **Int J Biochem** 1988;20(8):823–8
Activation and inactivation of glycogen phosphorylase isoenzymes purified from diabetic rat heart. Berndt N, et al. **Int J Biochem** 1989;21(4):355–60
Cytochrome c oxidase during human fetal development. Moggio M, et al. **Int J Dev Neurosci** 1989;7(1):5–14
Continuous fluorogenic substrates for atrial dipeptidyl carboxyhydrolase. Importance of Ser in the P1 position. Soler DF, et al. **Int J Pept Protein Res** 1988 Jul;32(1):35–40
Energy dependence of enzyme release from hypoxic isolated perfused rat heart tissue. Kehrer JP, et al. **J Appl Physiol** 1988 Oct;65(4):1855–60
Cryopreservation of the cyclic 3',5'-adenosine monophosphate-dependent protein kinase from bovine cardiac muscle. Prorok M, et al. **J Biochem Biophys Methods** 1989 May;18(3):167–75
Purification and characterization of a peptide C-terminal alpha-amidating enzyme from porcine atrium. Kojima M, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):440–3
Elementary steps of the actin-activated ATPase reaction of cardiac muscle myosin subfragment-1. Miyata M, et al. **J Biochem (Tokyo)** 1988 May;103(5):750–4
Effect of substitution of troponin C in cardiac myofibrils with skeletal troponin C or calmodulin on the Ca2+- and Sr2+-sensitive ATPase activity. Morimoto S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):149–54
Autonomic regulation of type 1 protein phosphatase in cardiac muscle. Ahmad Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3859–63
Kinetic characterization of the Ca2+-pumping ATPase of cardia sarcolemma in four states of activation. Dixon DA, et al. **J Biol Chem** 1989 Aug 15;264(23):13612–22
Substrate channeling of NADH and binding of dehydrogenases to complex I. Fukushima T, et al. **J Biol Chem** 1989 Oct 5;264(28):16483–8
Aspartyl peptide labeled by 2-(4-bromo-2,3-dioxobutylthio)adenosine 5'-diphosphate in the allosteric ADP site of pig heart NAD+-dependent isocitrate dehydrogenase. Huang YC, et al. **J Biol Chem** 1989 Jul 25;264(21):12208–14
Phosphorylation of myocardial fructose-6-phosphate,2-kinase: fructose-2,6-bisphosphatase by cAMP-dependent protein kinase and protein kinase C. Activation by phosphorylation and amino acid sequences of the phosphorylation sites. Kitamura K, et al. **J Biol Chem** 1988 Nov 15; 263(32):16796–801
Purification and characterization of phospholamban phosphatase from cardiac muscle. Kranias EG, et al. **J Biol Chem** 1988 Oct 25;263(30):15681–7
Cloning and sequencing of the cDNA for a 13th different subunit (IHQ) of beef heart cytochrome c oxidase. Lightowlers R, et al. **J Biol Chem** 1989 Oct 5; 264(28):16858–61
Molecular cloning of cDNAs from human kidney coding for two alternatively spliced products of the cardiac Ca2+-ATPase gene. Lytton J, et al. **J Biol Chem** 1988 Oct 15;263(29):15024–31
Developmental regulation of peptidylglycine alpha-amidating monooxygenase (PAM) in rat heart atrium and ventricle. Tissue-specific changes in distribution of PAM activity, mRNA levels, and protein forms. Ouafik L, et al. **J Biol Chem** 1989 Apr 5;264(10):5839–45
Bovine heart pyruvate dehydrogenase kinase stimulation by monovalent ions. Robertson JG, et al. **J Biol Chem** 1989 Jul 15;264(20):11626–31
Nucleotide specificity of canine cardiac sarcoplasmic reticulum. Differential alteration of enzyme properties by detergent treatment. Tate CA, et al. **J Biol Chem** 1989 May 15;264(14):7809–13
Inotropic responses to cyclic nucleotide phosphodiesterase inhibitors in immature and adult rabbit myocardium. Artman M, et al. **J Cardiovasc Pharmacol** 1989 Jan; 13(1):146–54
Multiple effects of ethanol on cardiac adenylate cyclase. Feldman AM, et al. **J Cardiovasc Pharmacol** 1989 May; 13(5):774–80
Differential sensitivity to cardiotonic drugs of cyclic AMP phosphodiesterases isolated from canine ventricular and sinoatrial-enriched tissues. Komas N, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):213–20
Xamoterol activates beta 1- but not beta 2-adrenoceptors in mammalian myocardium: comparison of its affinity for beta 1- and beta 2-adrenoceptors coupled to the adenylate cyclase in feline and human ventricle with positive inotropic effects. Lemoine H, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):105–17
Affinity chromatography of bovine heart lactate dehydrogenase using dye ligands linked directly or spacer-mediated to bead cellulose. Naumann M, et al. **J Chromatogr** 1989 Apr 19;466:319–29
Decreased bioactivity of the guanine nucleotide-binding protein that stimulates adenylate cyclase in hearts from cardiomyopathic Syrian hamsters. Kessler PD, et al. **J Clin Invest** 1989 Jul;84(1):244–52
Molecular cloning and characterization of a Ca2+ + Mg2+-dependent adenosine triphosphatase from rat cardiac sarcoplasmic reticulum. Regulation of its expression by pressure overload and developmental stage. Komuro I, et al. **J Clin Invest** 1989 Apr;83(4):1102–8
Immunocytochemical localization of creatine kinase M in canine myocardial cells: most creatine kinase M is distributed in the A-band. Otsu N, et al. **J Histochem Cytochem** 1989 Oct;37(10):1465–70
Correlation of polarized absorption spectroscopic and X-ray diffraction studies of crystalline cytosolic aspartate aminotransferase of pig hearts. Metzler CM, et al. **J Mol Biol** 1988 Sep 5;203(1):197–220
Comparison of lipoprotein lipase activity in heart myocytes and perfused hearts. Bagby GJ, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):253–62
Force transient time course in heart muscle with high and low V1 to V3 myosin isoenzyme ratio. Berman MR, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):679–87
Absence of detectable xanthine oxidase in human myocardium. Grum CM, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):263–7
Differential acute and chronic response of protein kinase C in cultured neonatal rat heart myocytes to alpha 1-adrenergic and phorbol ester stimulation. Henrich CJ, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1081–5
Subcellular distribution of high-affinity type IV cyclic AMP phosphodiesterase activities in rabbit ventricular myocardium: relations to post-natal maturation. Kithas PA, et al. **J Mol Cell Cardiol** 1989 May;21(5):507–17
Some properties of the millimolar Ca2+-dependent proteinase from bovine cardiac muscle. Tan FC, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):983–97
Immunolocalization of ornithine decarboxylase in rat heart atria. Tipnis UR, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):743–50
The effects of triiodothyronine on cultured neonatal rat cardiac myocytes. Williams HM, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):689–99
Ca2+-Mg2+ ATPase of mouse cardiac sarcoplasmic reticulum is affected by membrane n-6 and n-3 polyunsaturated fatty acid content. Swanson JE, et al. **J Nutr** 1989 Mar;119(3):364–72
Effect of pyridoxamine on semicarbazide-sensitive amine oxidase activity of rabbit lung and heart. Buffoni F, et al. **J Pharm Pharmacol** 1989 Jul;41(7):469–73
Kinetic analysis of the positive inotropic action (PIA) of ouabain in isolated perfused rabbit heart. Slow onset of PIA and slow binding to Na+, K+-adenosine triphosphatase. Harashima H, et al. **J Pharmacobiodyn** 1988 Aug;11(8):533–40
Inhibitory effect of KW-3049, a new 1,4-dihydropyridine calcium antagonist, on the reduction of myocardial creatine kinase activity and high-energy phosphate content in rats subjected to coronary artery ligation. Karasawa A, et al. **J Pharmacobiodyn** 1988 Nov;11(11):722–9
Gallamine allosterically antagonizes muscarinic receptor-mediated inhibition of adenylate cyclase activity in the rat myocardium. Ehlert FJ. **J Pharmacol Exp Ther** 1988 Nov;247(2):596–602
Activation of heart sarcoplasmic reticulum Ca++-stimulated adenosine triphosphatase by insulin. Gupta MP, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):623–30
Evaluation of the effect of evan's blue and triphenyltetrazolium chloride dyes on myeloperoxidase activity in canine cardiac tissue. Griswold DE, et al. **J Pharmacol Methods** 1989 Mar;21(1):13–9
Methionine-oxidized horse heart cytochrome c. III. Ascorbate reduction and the methionine-80-sulfur-iron linkage. Myer YP, et al. **J Protein Chem** 1989 Feb; 8(1):33–50
Activation of phospholipases A1 and A2 in heart, liver, and blood during endotoxin shock. Liu MS, et al. **J Surg Res** 1988 Nov;45(5):472–80
Inhibition of monoamine oxidase by the fungicide metalaxyl. Naidu KA. **J Toxicol Environ Health** 1989;27(3):395–8
Localisation of 11 beta-hydroxysteroid dehydrogenase—tissue specific protector of the mineralocorticoid receptor. Edwards CR, et al. **Lancet** 1988 Oct 29;2(8618):986–9
Effect of dietary trans fatty acids on some membrane-associated enzymes and receptors in rat heart. Alam SQ, et al. **Lipids** 1989 Jan;24(1):39–44
Myosin ATPase activity during avian cardiac and skeletal muscle development. Breckler JL, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):47–58
Does exercise training alter myocardial creatine kinase MB isoenzyme content? Miller TD, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):437–40 (27 ref.)
Kinetic and equilibrium characterization of an energy-transducing enzyme and its partial reactions. Inesi G, et al. **Methods Enzymol** 1988;157:154–90
Reconstitution of calcium pumping of cardiac sarcoplasmic reticulum. Inui M, et al. **Methods Enzymol** 1988;157:314–20
Purification of phospholamban from canine cardiac sarcoplasmic reticulum vesicles by use of sulfhydryl group affinity chromatography. Jones LR, et al. **Methods Enzymol** 1988;157:360–9
Purification of branched-chain-amino-acid aminotransferase from pig heart. Korpela TK. **Methods Enzymol** 1988; 166:269–74
Measurement of branched-chain alpha-keto acid dehydrogenase flux rates in perfused heart and liver. Lapointe DS, et al. **Methods Enzymol** 1988;166:484–97
Branched-chain alpha-keto acid dehydrogenase and its kinase from rabbit liver and heart. Paxton R. **Methods Enzymol** 1988;166:313–20
Regulation of Ca2+-pump from cardiac sarcoplasmic reticulum. Tada M, et al. **Methods Enzymol** 1988; 157:107–54
Comparison of ATPase activities and heavy chains of rabbit atrial and thyrotoxic ventricular myosin subfragment-1. Banerjee SK, et al. **Mol Cell Biochem** 1988 Sep;83(1):55–63
Allosteric regulation of cardiac sarcoplasmic reticulum Ca-ATPase: a comparative study. Cable MB, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):29–36
Physiological relevance of the changing subunit composition and regulatory properties of the 6-phosphofructo-1-kinase isozyme pools during heart and muscle development. Dunaway GA, et al. **Mol Cell Biochem** 1989 May 4; 87(1):71–7
Role of phospholipases in myocardial ischemia: effect of cardioprotective agents on the phospholipases A of heart cytosol and sarcoplasmic reticulum in vitro. Hostetler KY, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):77–82
Effect of taxol on the heparin-induced secretion of lipoprotein lipase from cardiac myocytes. Severson DL, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):17–22
Regulation of cardiac sarcoplasmic reticulum (Ca2+ + Mg2+)-ATPase. Shamoo AE, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):45–9

Adriamycin-induced leakage of lysosomal enzymes in vitro. Singal PK, et al. **Mol Cell Biochem** 1988 May;81(1):89–94

Purification and characterization of a Ca2+/Mg2+ ecto-ATPase from rat heart sarcolemma. Tuana BS, et al. **Mol Cell Biochem** 1988 May;81(1):75–88

Beta 1- and beta 2-adrenergic receptor-mediated adenylate cyclase stimulation in nonfailing and failing human ventricular myocardium. Bristow MR, et al. **Mol Pharmacol** 1989 Mar;35(3):295–303

Chloride conductance regulated by cyclic AMP-dependent protein kinase in cardiac myocytes. Bahinski A, et al. **Nature** 1989 Aug 31;340(6236):718–21

G-protein beta gamma-subunits activate the cardiac muscarinic K+-channel via phospholipase A2. Kim D, et al. **Nature** 1989 Feb 9;337(6207):557–60

Antagonistic effects of alpha-adrenoceptor blocking agents on arrhythmias, enzyme release, and myocardial necrosis in isolated rat hearts with coronary occlusion and reperfusion. Bernauer W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):88–95

Relation of positive inotropic and chronotropic effects of pimobendan, UD-CG 212 Cl, milrinone and other phosphodiesterase inhibitors to phosphodiesterase III inhibition in guinea-pig heart. Brunkhorst D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):575–83

Effects of 2-methyl-1,4-naphthoquinone (menadione) on myocardial contractility and cardiac sarcoplasmic reticulum Ca-ATPase. Floreani M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):448–55

Carbostyril-based beta-adrenergic agonists: evidence for long lasting or apparent irreversible receptor binding and activation of adenylate cyclase activity in vitro. Standifer KM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1-2):129–37

Age-associated alteration in actomyosin ATPase activity of human myocardium—I. Calcium sensitivity of Mg2+-ATPase activity. Yoshida K, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):358–62

Nucleotide sequence of cDNA encoding subunit Va from rat heart cytochrome c oxidase. Droste M, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4375

Normal myocardial enzymes and normal echocardiographic findings during noninvasive transcutaneous pacing. Madsen JK, et al. **PACE** 1988 Aug;11(8):1188–93

Endooligopeptidase A activity in rabbit heart: generation of enkephalin from enkephalin containing peptides. Cicilini MA, et al. **Peptides** 1988 Sep-Oct;9(5):945–55

Atrial dipeptidyl carboxyhydrolase is a zinc-metallo proteinase which possesses tripeptidyl carboxyhydrolase activity. Soler DF, et al. **Peptides** 1989 Jan-Feb;10(1):63–8

The effect of amrinone on LDH release and perfusion pressure in isolated ischemic rabbit hearts. Löwe H, et al. **Pharmazie** 1988 Jul;43(7):501–2

Intermittent high altitude--induced changes in energy metabolism in the rat myocardium and their reversibility. Bass A, et al. **Physiol Bohemoslov** 1989;38(2):155–61

Metabolism of ethanol and carcinogens by glutathione transferases. Bora PS, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4470–3

Endotoxin pretreatment increases endogenous myocardial catalase activity and decreases ischemia-reperfusion injury of isolated rat hearts. Brown JM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2516–20

Alternative mRNA splicing generates multiple forms of peptidyl-glycine alpha-amidating monooxygenase in rat atrium. Stoffers DA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):735–9

Comparative properties of alpha and alpha plus subunits in adult rat brain and heart. Berrebi-Bertrand I, et al. **Prog Clin Biol Res** 1988;268B:43–50

Quantification of the Na,K-pump in heart muscle by measurement of 3-O-methylfluorescein phosphatase activity. Larsen JS, et al. **Prog Clin Biol Res** 1988; 268B:257–62

Alpha subunits (alpha and alpha+) isoforms of the Na+, K+-ATPase in dog heart. Alteration of alpha+ in ischemia. Maixent JM, et al. **Prog Clin Biol Res** 1988; 268B:263–8

Two molecular forms of Na+,K+-ATPase in the ferret heart and developmental changes in digitalis sensitivity. Ng YC, et al. **Prog Clin Biol Res** 1988;268B:423–8

The Na,K-pump in human myocardium: quantification in normal subjects and patients with suspected cardiomyopathy. Nørgaard A, et al. **Prog Clin Biol Res** 1988;268B:269–74

Two forms of the Na,K-ATPase catalytic subunit detected by their immunological and electrophoretic differences. Alpha and alpha+ in mammalian heart. Sweadner KJ, et al. **Prog Clin Biol Res** 1988;268B:149–56

A selective inhibitor of thromboxane synthetase activity of rabbit heart tissue: a pyridazinic derivative. Pham Huu Chanh, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug;33(2):143–7

Key enzymes of myocardial energy metabolism in papillary muscle of patients with mitral valve disease--relation to left ventricular function. Sylvén C, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):63–7

Enzymatic activities in heart and skeletal muscle of children with cyanotic and noncyanotic congenital heart disease. Dernevik L, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):310–2

[Enzyme activity of cardiac glycogen metabolism: study of an in situ hypoxia protocol in the rat] Grably S, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):185–96 (Eng. Abstr.) **(Fre)**

[Direct cardiac effects of angiotensins I and II and 2 converting enzyme inhibitors (captopril and perindopril). Indirect demonstration of a converting enzyme in the rat heart] Diebold H, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:29–32 (Eng. Abstr.) **(Fre)**

[Energy-supplying metabolism of the volume overloaded and hypoxia stressed heart in children] Samánek M, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):21–4 (Eng. Abstr.) **(Ger)**

[Myocardial creatinine kinase liberation and left ventricular function in myocardial infarct with and without collateral blood supply] Wolf R, et al. **Z Kardiol** 1988 Aug; 77(8):490–6 (Eng. Abstr.) **(Ger)**

[Effect of Chinoin-103 on Na+, K+-activated adenosine triphosphatase of the rat heart] Szabó J, et al. **Acta Pharm Hung** 1989 Jul;59(4):179–88 (Eng. Abstr.) **(Hun)**

[Creatine kinase and aspartate and alanine transaminase activity in the myocardium and blood serum of albino rats in experimental streptozotocin diabetes mellitus. Effect of (-)-epicatechin] Sawicka T, et al. **Endokrynol Pol** 1988; 39(4):219–27 (Eng. Abstr.) **(Pol)**

[Effect of strophanthin and digoxin on the activity of succinate and lactate dehydrogenases and membrane Na+, K+-ATPase in the heart of rats with experimental myocarditis] Galust'ian GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):442–4 (Eng. Abstr.) **(Rus)**

[The dynamics of the histochemical activity of the oxidoreductases in the myocardium of mature and old rats undergoing whole-body gamma irradiation at a dose of 1 Gy] Amvros'ev AP, et al. **Radiobiologiia** 1989 Jul-Aug; 29(4):469–72 (Eng. Abstr.) **(Rus)**

[Interaction of pyruvate dehydrogenase complex from the heart muscle with thiamine diphosphate and its derivatives] Strumilo SA, et al. **Vopr Med Khim** 1989 Mar-Apr; 35(2):102–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The production of cardiovascular malformations with combined use of trypan blue and anti-heart serum in the rat. Ono S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec; 29(6):800–6

The cardiac and renal effects of the complement fragment C5a des Arg are partly mediated by the release of histamine and arachidonic acid metabolites. Ghanem NS, et al. **Agents Actions** 1989 Apr;27(1-2):138–41

The role of histamine in cardiac anaphylaxis; characterization of histaminergic H1- and H2-receptor effects. Felix SB, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):531–9

Cardiac anaphylaxis. Complement activation as an amplification system. del Balzo U, et al. **Circ Res** 1989 Sep; 65(3):847–57

Myocardial uptake of antimyosin monoclonal antibody in a murine model of viral myocarditis. Matsumori A, et al. **Circulation** 1989 Feb;79(2):400–5

Deposition of immune complexes containing cationized antibodies in myocardial small blood vessels of mice. Krant JD, et al. **Clin Immunol Immunopathol** 1989 Feb; 50(2):241–50

Demonstration of IgE-sensitized mast cells in human heart and kidney. Assem ES, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):101–4

Biological effects and cyclic AMP production during molecular histocompatibility antigen and beta-adrenoceptor interactions. Cremaschi GA, et al. **Int J Immunopharmacol** 1988;10(5):569–78

Alloimmune B-lymphocytes modify the myocardium contractility-inducing release of SRS-A. Genaro AM, et al. **Int J Immunopharmacol** 1988;10(5):563–8

Persistence of heart reactive antibodies (HRA) in acute rheumatic fever (ARF) and rheumatic heart disease (RHD) patients. Shastry P, et al. **J Clin Lab Immunol** 1988 Oct; 27(2):87–90

Cytoimmunologic monitoring and heart transplantation. Hanson CA, et al. **J Heart Transplant** 1988 Nov-Dec; 7(6):424–9

Studies of major histocompatibility complex class I/II expression on sequential human heart biopsy specimens after transplantation. Sell KW, et al. **J Heart Transplant** 1988 Nov-Dec;7(6):407–18

Human monoclonal antibodies reactive with antigens of the group A Streptococcus and human heart. Cunningham MW, et al. **J Immunol** 1988 Oct 15;141(8):2760–6

Coxsackievirus B-3-induced myocarditis. Virus and actinomycin D treatment of myocytes induces novel antigens recognized by cytolytic T lymphocytes. Huber SA, et al. **J Immunol** 1988 Nov 1;141(9):3214–9

Immunological characterization of rat cardiac gap junctions: presence of common antigenic determinants in heart of other vertebrate species and in various organs. Dupont E, et al. **J Membr Biol** 1988 Sep;104(2):119–28

Monoclonal antibodies to dog heart sarcoplasmic reticulum as markers of endoplasmic reticulum. Levitsky DO, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:55–8

Lymphatic subpopulations and their transition in myocardial tissue and peripheral blood of patients with biopsy-proven myocarditis. Saito T, et al. **Jpn Circ J** 1989 Jan;53(1):1–6

Antigen expression in different parenchymal cell types of rat kidney and heart. Mattila PM, et al. **Kidney Int** 1989 Aug;36(2):228–33

Relationship of parasite specific antibodies and heart specific autoantibodies in mice infected with Trypanosoma cruzi. Rowland EC, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:367

Anti-viral and anti-myocyte antibodies in experimental myocarditis. Herzum M, et al. **Springer Semin Immunopathol** 1989;11(1):69–76 (24 ref.)

Patterns of donor major histocompatibility complex antigen expression in rat heart grafts and a model of chronic vascular rejection. Forbes RD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):447–8

Depletion of donor class II MHC positive passenger cells and reduction of immunogenicity in longstanding rat heart allografts. Klempnauer J, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):487

Differential influence of poly I:C on class II and CD4-like markers on interstitial dendritic cells in the heart. Romaniuk A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):453–4

The mechanism of the induction of immunologic unresponsiveness to rat cardiac allografts by recipient pretreatment with donor lymphocyte subsets. Oluwole SF, et al. **Transplantation** 1989 Aug;48(2):281–8

Histocompatibility antigen expression by myocytes [letter] Rose M, et al. **Transplantation** 1989 Jan;47(1):205

Endomyocardial biopsies after heart transplantation. The presence of immunoglobulin/immune complex deposits. Schuurman HJ, et al. **Transplantation** 1989 Sep;48(3):435–8

Propagation of alloreactive lymphocytes from histologically negative endomyocardial biopsies from heart transplant patients. Association with subsequent histological evidence of allograft rejection. Weber T, et al. **Transplantation** 1989 Sep;48(3):430–5

[Functional and immunologic involvement in human African trypanosomiasis caused by Trypanosoma gambiense] Tsala Mbala P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):490–501 (Eng. Abstr.) **(Fre)**

[Presence of auto-antibodies in patients who are candidates for heart transplant] Benzi Cipelli R, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):403–8 (Eng. Abstr.) **(Ita)**

[Lymphatic subsets in myocardial tissue and peripheral blood of biopsy proven myocarditis] Saito T, et al. **Kokyu To Junkan** 1988 Nov;36(11):1179–83 **(Jpn)**

[Immunologic evaluation of the effect of noise] Alekseev SV, et al. **Gig Tr Prof Zabol** 1989;(3):45–7 **(Rus)**

[Functional changes in the immune system of animals exposed to noise] Ianushanets OI. **Gig Tr Prof Zabol** 1988 Dec; (12):53–5 **(Rus)**

METABOLISM

Effect of high dose alpha-tocopherol acetate on the toxicity and tissue distribution of adriamycin (doxorubicin). Shinozawa S, et al. **Acta Med Okayama** 1988 Oct; 42(5):253–8

Calmodulin antagonist reduces release of malondialdehyde from isolated ischemic/reperfused rat heart. Beręsewicz A, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5–6):442–9

Interaction between Na pumping and membrane potential in cardiac cells. Glitsch HG. **Acta Physiol Pol** 1988 May-Jun;39(3):157–65 (30 ref.)

Evidence for increased lipid peroxidation in the nonischemic portion of the heart with coronary occlusion. Herbaczyńska-Cedro K, et al. **Acta Physiol Pol** 1988 Mar-Apr;39(2):151–5

Metabolic response to starvation in late pregnant rats. I. Maternal response. Nowacka M, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5–6):427–34

Myocardial oxygen consumption during atrial pacing at various inotropic levels. Andersen FR, et al. **Acta Physiol Scand** 1988 Jul;133(3):315–24

In-vivo quantification of myocardial Na-K pump rate during beta-adrenergic stimulation of intact pig hearts. Ellingsen O, et al. **Acta Physiol Scand** 1989 Apr;135(4):493–503

Temporal relationship of contractility and myocardial potassium balance following beta-adrenergic stimulation of the in situ pig heart. Ellingsen O, et al. **Acta Physiol Scand** 1988 Feb;132(2):241–50

Effects of voluntary physical exercise on cardiac function and energetics in spontaneously hypertensive rats. Friberg P, et al. **Acta Physiol Scand** 1988 Aug;133(4):495–500

Decreased level of cardiac antioxidants in endurance-trained rats. Kihlström M, et al. **Acta Physiol Scand** 1989 Apr; 135(4):549–54

Elevated atrial natriuretic peptide in the brain and heart of Brattleboro rats. Tuomisto L, et al. **Acta Physiol Scand** 1989 May;136(1):133–4

Limitation of long chain fatty acid oxidation in volume over-loaded rat hearts. el Alaoui-Talibi Z, et al. **Adv Exp Med Biol** 1989;248:491–7

Myocardial oxygen transport during leftward shifts of the oxygen dissociation curve by carbamylation or hypothermia. Baer RW. **Adv Exp Med Biol** 1989;248:325–33

Na-Ca exchange in cardiac sarcolemmal vesicles. Bailey CA, et al. **Adv Exp Med Biol** 1988;232:97–104

The relative importance of calcium influx and efflux via Na-Ca exchange in cultured myocardial cells. Barry WH, et al. **Adv Exp Med Biol** 1988;232:87–95

Oxygen delivery and performance in the isolated, perfused

rat heart: comparison of perfusion with aqueous and perfluorocarbon-containing media. Biro GP, et al. **Adv Exp Med Biol** 1989;248:509–16

Altered calcium homeostasis and membrane integrity in myocardial cell injury. Buja LM, et al. **Adv Exp Med Biol** 1988;232:115–24

Buffering of muscle tissue PO2 levels by the superposition of the oxygen field from many capillaries. Clark PA, et al. **Adv Exp Med Biol** 1989;248:165–74

31P NMR studies of the metabolic status of pig hearts preserved for transplantation. Forester GV, et al. **Adv Exp Med Biol** 1989;248:551–60

Oxygen supply of the myocardium. Frank KH, et al. **Adv Exp Med Biol** 1989;248:561–6

The oxygen dependence of the energy state of cardiac tissue: 31P-NMR and optical measurement of myoglobin in perfused rat heart. Fukuda H, et al. **Adv Exp Med Biol** 1989;248:567–73

Relationship between cytosolic free calcium ion concentration and the control of pyruvate dehydrogenase in isolated cardiac myocytes and synaptosomes. Hansford RG. **Adv Exp Med Biol** 1988;232:230–43

Precapillary O2 loss and arteriovenous O2 diffusion shunt are below limit of detection in myocardium. Honig CR, et al. **Adv Exp Med Biol** 1989;248:591–9

The effects of temperature and buffer concentration on the metabolism of human atrial appendages measured by 31P and 1H NMR. Mainwood GW, et al. **Adv Exp Med Biol** 1989;248:611–9

Effects of leukocyte-derived oxidants on sarcolemmal Na,K,ATP-ase and calcium transport. Matsuoka T, et al. **Adv Exp Med Biol** 1989;248:621–8

Agonist bindings and their relationship to receptor responses in heart muscarinic receptors. Uchida S, et al. **Adv Exp Med Biol** 1988;236:255–64

Hypoxia in saline-perfused heart may be due to mismatch of regional metabolism and perfusion. van Beek JH. **Adv Exp Med Biol** 1989;248:499–507

The influence of different anesthetics on the oxygen delivery to and consumption of the heart. van Daal GJ, et al. **Adv Exp Med Biol** 1989;248:527–32

Influences of different routinely used muscle relaxants on oxygen delivery to and oxygen consumption by the heart during xenon-anesthesia. van Woerkens LJ, et al. **Adv Exp Med Biol** 1989;248:673–8

Hemodilution and myocardial oxygen supply. The influence of fluosol-DA. Vogel H, et al. **Adv Exp Med Biol** 1989; 248:653–61

The effect of acetylcholine on regional myocardial O2 consumption and coronary blood flow in the rabbit heart. Weiss HR, et al. **Adv Exp Med Biol** 1989;248:663–71

Mechanism of action of adrenergic and cholinergic stimuli on cardiac prostaglandin synthesis. Malik KU, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:327–30

Ventricular arrhythmias parallel cardiac histamine efflux after coronary artery occlusion in the dog. Wolff AA, et al. **Agents Actions** 1988 Dec;25(3–4):296–306

Of molecules, motion, man, and machines. Urry DW. **Ala J Med Sci** 1988 Oct;25(4):475–85

Influence of UDCG-115 on hemodynamics and myocardial energetics in patients with idiopathic dilated cardiomyopathy. Hasenfuss G, et al. **Am Heart J** 1989 Sep; 118(3):512–9

Regional metabolism during coronary occlusion, reperfusion, and reocclusion using phosphorus31 nuclear magnetic resonance spectroscopy in the intact rabbit. Kavanaugh KM, et al. **Am Heart J** 1989 Jan;117(1):53–9

Role of myocardial oxygen consumption in dipyridamole-induced ischemia. Picano E, et al. **Am Heart J** 1989 Aug;118(2):314–9

Is "stunned myocardium" a protective mechanism? Effect of acute recruitment and acute beta-blockade on recovery of contractile function and high-energy phosphate stores at 1 day post-reperfusion. Przyklenk K, et al. **Am Heart J** 1989 Sep;118(3):480–9

Antianginal and cardiac metabolic effects of low-dose glucose infusion during pacing in patients with and without coronary artery disease. Thomassen A, et al. **Am Heart J** 1989 Jul;118(1):25–32

Lectin histochemistry of the embryonic heart: fucose-specific lectin binding sites in developing rats and chicks. Fazel AR, et al. **Am J Anat** 1989 Jan;184(1):76–84

Lectin histochemistry of the embryonic heart: expression of terminal and penultimate galactose residues in developing rats and chicks. Fazel AR, et al. **Am J Anat** 1989 Jan; 184(1):85–94

Comparison of detecting sensitivities of different sizes of gold particles with electron-microscopic immunogold staining using atrial natriuretic peptide in rat atria as a model. Gu J, et al. **Am J Anat** 1989 Jun-Jul;185(2–3):264–70

Effect of phosphodiesterase inhibition on myocardial oxygen consumption and coronary blood flow. Baim DS. **Am J Cardiol** 1989 Jan 3;63(2):23A–26A

Adenylate cyclase activity coupled to the stimulatory guanine nucleotide binding protein in patients having electrophysiologic studies and either structurally normal hearts or idiopathic myocardial disease. Karliner JS, et al. **Am J Cardiol** 1988 Nov 15;62(16):1129–30

The myocardium in congestive heart failure. Katz AM. **Am J Cardiol** 1989 Jan 3;63(2):12A–16A

Myocardial carnitine in end-stage congestive heart failure. Pierpont ME, et al. **Am J Cardiol** 1989 Jul 1;64(1):56–60

Myocardial release of hypoxanthine and lactate during percutaneous transluminal coronary angioplasty. Serruys PW, et al. **Am J Cardiol** 1989 Mar 7;63(10):45E–51E

Abnormal myocardial fatty acid metabolism in dilated cardiomyopathy detected by iodine-123 phenylpentadecanoic acid and tomographic imaging. Ugolini V, et al. **Am J Cardiol** 1988 Nov 1;62(13):923–8

Noradrenaline release and the pathophysiology of primary human hypertension. Esler M, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 2):140S–146S (21 ref.)

Cardiac renin-angiotensin system. Molecular and functional aspects. Dzau VJ. **Am J Med** 1988 Mar 11;84(3A):22–7

Endogenous tissue renin-angiotensin systems. From molecular biology to therapy. Jin M, et al. **Am J Med** 1988 Mar 11;84(3A):28–36 (83 ref.)

Transient myocardial uptake of Tc-99m methylene diphosphonate in a patient with amyloidosis. Kinney EL, et al. **Am J Med Sci** 1988 Dec;296(6):413–6

Chronic sodium depletion increases myocardial calcium content in normotensive rats. Rossi G, et al. **Am J Med Sci** 1989 Mar;297(3):153–7

Light chain deposition disease derived from the kappa I light chain subgroup. Biochemical characterization. Picken MM, et al. **Am J Pathol** 1989 Apr;134(4):749–54

Ventricular function and fatty acid metabolism in neonatal piglet heart. Ascuitto RJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H9–15

SR Ca loading in cardiac muscle preparations based on rapid-cooling contractures. Bers DM. **Am J Physiol** 1989 Jan;256(1 Pt 1):C109–20

Caffeine-induced Ca2+ release activates Ca2+ extrusion via Na+-Ca2+ exchanger in cardiac myocytes. Callewaert G, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C147–52

Coronary hemodynamics and myocardial metabolism during and after pacing stress in normal humans. Camici P, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E309–17

Cytosolic free calcium concentration in individual cardiac myocytes in primary culture. Cheung JY, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1120–30

Glucocorticoid receptor activation in isolated perfused rat hearts. Czerwinski SM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C219–25

Adaptation to Pi deprivation of cell Na-dependent Pi uptake: a widespread process. Escoubet B, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C322–8

Kinetics of adenine nucleotide catabolism in coronary circulation of rats. Fleetwood G, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1565–72

Effect of oxygen deprivation on metabolism of arachidonic acid by cultures of rat heart cells. Freyss-Beguin M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H444–51

Acute inhibition of rat heart protein synthesis in vitro during beta-adrenergic stimulation or hypoxia. Fuller SJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E537–47

Training increases cardiac glucose uptake during rest and exercise in rats. Kainulainen H, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H839–45

Increase vs. decrease of calcium uptake by isolated heart cells induced by H2O2 vs. HOCl. Kaminishi T, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C598–607

Mechanism for depression of heart sarcolemmal Ca2+ pump by oxygen free radicals. Kaneko M, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H804–11

Effects of hydrodynamic forces on coronary production of prostacyclin and purines. Karwatowska-Prokopczuk E, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1532–8

Plasma membrane-specific deficiency in cardiac beta-adrenergic receptor in streptozocin-diabetic rats. Kashiwagi A, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E127–32

Relation between phosphate metabolites and oxygen consumption of heart in vivo. Katz LA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H265–74

Trypsin activation of atrial muscarinic K+ channels. Kirsch GE, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H334–8

Expression of cardiac sarcolemmal Na+-Ca2+ exchange activity in Xenopus laevis oocytes. Longoni S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C870–3

Beta-adrenergic receptor regulation during hypoxia in intact cultured heart cells. Marsh JD, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H275–81

Release of platelet-activating factor from ischemic-reperfused rabbit heart. Montrucchio G, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1236–46

Persistent right coronary flow reserve at low perfusion pressure. Murakami H, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1176–84

Sarcolemmal Ca2+ transport activities in cardiac hypertrophy caused by pressure overload. Nakanishi H, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H349–56

Ouabain uptake by endocytosis in isolated guinea pig atria. Núñez-Durán H, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C479–85

Mechanism of membrane phospholipid degradation in ischemic-reperfused rat hearts. Otani H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H252–8

Detection of La3+ influx in ventricular cells by indo-1 fluorescence. Peeters GA, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):C351–7

Cytosolic free magnesium concentration in cultured chick heart cells. Rotevatn S, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C141–6

Effects of lidocaine on sarcolemmal fluidity and cellular cAMP in rat cardiomyocytes. Roux S, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H422–7

Myocardial metabolism and coronary flow: effects of endotoxemia. Rumsey WL, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1295–304

Rat vs. rabbit ventricle: Ca flux and intracellular Na assessed by ion-selective microelectrodes. Shattock MJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C813–22

Downregulation and desensitization of A1-adenosine receptors in embryonic chicken heart. Shryock J, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H321–7

Laser backscatter studies of intracellular Ca2+ oscillations in isolated hearts. Stern MD, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):H665–73

Beta-receptor-adenylate cyclase coupling in hypoxic neonatal rat ventricular myocytes. Thandroyen FT, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1209–17

Metabolic hyperemia is reduced in adult vs. immature guinea pig hearts. Toma BS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1460–7

Degradation of adenine nucleotides in ischemic and reperfused rat heart. Van Bilsen M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H47–54

Ouabain treatment of cardiac cells induces enhanced Na+-Ca2+ exchange activity. Vemuri R, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1273–6

Na+-H+ exchange in isolated myocytes from adult rat heart. Wallert MA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C207–13

Subcellular electrolyte shifts during in vitro myocardial ischemia and reperfusion. Walsh LG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H917–28

Cellular compartmentation in ischemic myocardium: indirect analysis by electron probe. Walsh LG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H929–36

Transcapillary adenosine transport and interstitial adenosine concentration in guinea pig hearts. Wangler RD, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H89–106

Effect of higher aortic pressure on ribosome formation and cAMP content in rat heart. Watson PA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1257–61

Cellular K+ loss and anion efflux during myocardial ischemia and metabolic inhibition. Weiss JN, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1165–75

Refined membrane preparations mask ischemic fall in myocardial beta-receptor density. Wolff AA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H1032–6

Effects of thyroid status on atrial natriuretic peptide release from isolated rat atria. Wong NL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E64–7

Minor preload dependence of O2 consumption of unloaded contraction in dog heart. Yasumura Y, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1289–94

Sequential changes of the connective matrix components of the myocardium (fibronectin and laminin) and evolution of cardiac fibrosis in mice infected with Trypanosoma cruzi. Andrade SG, et al. **Am J Trop Med Hyg** 1989 Mar; 40(3):252–60

Isomyosin expression patterns during rat heart morphogenesis: an immunohistochemical study. de Groot IJ, et al. **Anat Rec** 1989 Jul;224(3):365–73

Deformation-corrected computer-aided three-dimensional reconstruction of immunohistochemically stained organs: application to the rat heart during early organogenesis. Laan AC, et al. **Anat Rec** 1989 Jul;224(3):443–57

Distribution of laminin, collagen type IV, collagen type I, and fibronectin in chicken cardiac jelly/basement membrane. Little CD, et al. **Anat Rec** 1989 Jul; 224(3):417–25

Immunofluorescent localization of desmin and vimentin in developing cardiac muscle of Syrian hamster. Osinska HE, et al. **Anat Rec** 1989 Apr;223(4):406–13

Heart contains receptors for dihydrotestosterone but not testosterone: possible role in the sex differential in coronary heart disease. Sheridan PJ, et al. **Anat Rec** 1989 Apr; 223(4):414–9

Halothane decreases calcium channel antagonist binding to cardiac membranes. Blanck TJ, et al. **Anesth Analg** 1988 Nov;67(11):1032–5

Left ventricular oxygen tensions in dogs during coronary vasodilation by enflurane, isoflurane and dipyridamole. Habazettl H, et al. **Anesth Analg** 1989 Mar;68(3):286–94

Control of intraoperative hypertension with isoflurane in patients with coronary artery disease: effects on regional myocardial blood flow and metabolism. Sahlman L, et al. **Anesth Analg** 1989 Feb;68(2):105–11

A primer on "grind and bind". Waud DR. **Anesth Analg** 1988 Nov;67(11):1025–31

Regional blood flow and tissue oxygen pressures of the collateral-dependent myocardium during isoflurane anesthesia in dogs. Conzen PF, et al. **Anesthesiology** 1989 Mar;70(3):442–52

Volatile anesthetics decrease calcium content of isolated myocytes. Katsuoka M, et al. **Anesthesiology** 1989 Jun; 70(6):954–60

Comparison of the effects of halothane on skinned myocardial fibers from newborn and adult rabbit: II. Effects on sarcoplasmic reticulum. Krane EJ, et al. **Anesthesiology** 1989 Jul;71(1):103–9

Halothane interaction with guanine nucleotide binding

proteins in mouse heart. Vulliemoz Y, et al. **Anesthesiology** 1988 Dec;69(6):876–80

The effect of halothane on the free intracellular calcium concentration of isolated rat heart cells. Wheeler DM, et al. **Anesthesiology** 1988 Oct;69(4):578–83

Mathematical evidence for flow-induced changes in myocardial oxygen consumption. Napper SA, et al. **Ann Biomed Eng** 1988;16(4):349–65

Individual free fatty acids and lactate uptake in the human heart during severe sepsis. Lefevre G, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):546–51

Complete heart block with myocardial membrane-bound glycogen and normal peripheral alpha-glucosidase activity. Tripathy D, et al. **Ann Intern Med** 1988 Dec 15; 109(12):985–7

Heparin and growth control of vascular cells. Thompson RW, et al. **Ann N Y Acad Sci** 1989;556:255–67

Reconstitution of cardiac sarcoplasmic reticulum calcium channels. Williams AJ, et al. **Ann N Y Acad Sci** 1989; 560:163–73

Internal cardiac cooling improves atrial preservation: electrophysiological and biochemical assessment. Chen XZ, et al. **Ann Thorac Surg** 1988 Oct;46(4):406–11

Myocardial adenine nucleotide metabolism in pediatric patients during hypothermic cardioplegic arrest and normothermic ischemia. Lofland GK, et al. **Ann Thorac Surg** 1989 May;47(5):663–8

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia. Mask WK, et al. **Ann Thorac Surg** 1989 Jul;48(1):109–12

Myocardial preservation related to magnesium content of hyperkalemic cardioplegic solutions at 8 degrees C. Reynolds TR, et al. **Ann Thorac Surg** 1989 Jun;47(6):907–13

Purification of phospholamban from bovine cardiac muscle with organic solvents. Boyot P, et al. **Arch Biochem Biophys** 1989 Mar;269(2):639–45

Regulation of polyphosphoinositide synthesis in cardiac membranes. Quist E, et al. **Arch Biochem Biophys** 1989 May 15;271(1):21–32

Identification of regulatory sites in the biosynthesis of ubiquinone in the perfused rat heart. Yamamoto T, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):86–92

Effects of niguldipine, a new dihydropyridine calcium antagonist, on regional blood flow, cardiac performance and myocardial metabolism in anaesthetized open-chest dogs. Fischer G, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:96–107

Effect of nisoldipine on the oxymyoglobin level of myocardial cells in hypoxic, perfused rat hearts. Hara A, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:78–89

pH-dependent effects of bepridil on Ca2+-extrusion across rat heart sarcolemma. Van Amsterdam FT, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:90–5

Regional myocardial O2 consumption and coronary blood flow responses to acetylcholine in rabbit heart. Acad BA, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):197–204

An evidence for presynaptic excitatory alpha 2-adrenergic receptors in frog myocardium. Sarioğlu Y, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):35–40

Glucagon effect on myocardial transport and utilization of energy-metabolites from the coronary microcirculation in the perfused rabbit heart. Zloković BV, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):7–16

Soft drug derivatives related to perhexiline. Part II: In vivo studies. Decker N, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1110–4

Binding of the new calcium entry blocker nilvadipine to rat aortic and guinea pig left ventricular membranes. Matsuo M, et al. **Arzneimittelforschung** 1989 May;39(5):576–9

Intracellular localization of the calcium- and calmodulin antagonist fendiline. Weyhenmeyer R, et al. **Arzneimittelforschung** 1989 Feb;39(2):199–201

Myocardial free fatty acid metabolism of the ischemic heart treated by left ventricular assist device. Noda H, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):294–6

Left ventricular oxygen consumption and organ blood flow distribution during pulsatile ventricular assist. Pantalos GM, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):356–60

Detection and measurement of free radical generation during cardiovascular injury. Arroyo CM, et al. **Basic Life Sci** 1988;49:905–10

Myocardial salvage by the free radical scavenging actions of xanthine oxidase inhibitors. Das DK, et al. **Basic Life Sci** 1988;49:951–5

Identification of free radical species in the myocardium. Nakazawa H, et al. **Basic Life Sci** 1988;49:921–6

Superoxide radical release into the cytoplasm of heart cells by an NADH-driven oxygen activator. Nohl H. **Basic Life Sci** 1988;49:898–903

Prevention by propionylcarnitine of NADPH and tert-butyl hydroperoxide-dependent chemiluminescence in heart microsomes. Schinetti ML, et al. **Basic Life Sci** 1988; 49:243–7

Evidence that free radicals result in reperfusion injury in heart muscle. Weisfeldt ML, et al. **Basic Life Sci** 1988; 49:911–9

Distribution pattern of alpha and beta myosin in normal and diseased human ventricular myocardium. Bouvagnet P, et al. **Basic Res Cardiol** 1989 Jan-Feb;84(1):91–102

Myocardial O2 supply and consumption in early cardiac hypertrophy of renal hypertensive rabbits. Cimini CM, et al. **Basic Res Cardiol** 1989 Jan-Feb;84(1):13–21

Cardiac mRNA levels during the development and growth of the rat. Garber PM, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):384–91

Acetate-induced changes in cardiac energy metabolism and hemodynamics in the rat. Kiviluoma KT, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):431–44

Rest- and stimulation-dependent changes in exchangeable calcium content in rabbit ventricular myocardium. Pytkowski B. **Basic Res Cardiol** 1989 Jan-Feb;84(1):22–9

Enhanced lipolysis of myocardial triglycerides during low-flow ischemia and anoxia in the isolated rat heart. Schoonderwoerd K, et al. **Basic Res Cardiol** 1989 Mar-Apr; 84(2):165–73

Effects of phospholipase inhibitors and calcium antagonists on the changes in myocardial phospholipids induced by isoproterenol. Takasu N, et al. **Basic Res Cardiol** 1988 Sep-Oct;83(5):567–75

Binding of A 1,4-dihydropyridine calcium channel activator, (-) S Bay K 8644, to cardiac preparations. Ferrante J, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):149–54

Captopril and hydralazine suppress atrial natriuretic peptide (ANP) gene expression in the ventricles of spontaneously hypertensive rat. Fukui K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):310–6

Functional endothelin/sarafotoxin receptors in rat heart myocytes: structure-activity relationships and receptor subtypes. Galron R, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):936–43

Transient accumulation of inositol (1,3,4,5)-tetrakisphosphate in response to alpha 1-adrenergic stimulation in adult cardiac myocytes. Heathers GP, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):485–92

Specific receptor for endothelin in cultured rat cardiocytes. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1438–44

Differences in calcium uptake in native canine cardiac microsomes are correlated with the ratio of unphosphorylated to phosphorylated phospholamban as determined by Western blot analysis. Kasinathan C, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1296–301

Effect of diabetes on guanine nucleotide exchange factor activity in skeletal muscle and heart. Kimball SR, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):706–11

Cytosolic factor(s) determines the impaired desensitization of beta-adrenoceptors in the myocardium of spontaneously hypertensive rats. Limas C, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1039–44

Cyclosporine increases endothelin-1 binding site density in cardiac cell membranes. Nayler WG, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1270–4

Effects of dietary eicosapentaenoate (20:5 n-3) on cardiac beta-adrenergic receptor activity in the marmoset monkey. Patten GS, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):686–93

Two distinct types of endothelin receptors are present on chick cardiac membranes. Watanabe H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1252–9

Calcitonin gene-related peptide(CGRP) stimulates the release of atrial natriuretic peptide(ANP) from isolated rat atria. Yamamoto A, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1452–8

Regulation of phosphatidylcholine metabolism in mammalian hearts. Hatch GM, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2-3):67–77 (104 ref.)

Effects of gamma-ray irradiation in utero on developing hearts of rat embryos: inhibition of accumulation of a 27-kDa protein. Higo H, et al. **Biochem Int** 1989 Apr; 18(4):695–700

Pharmacological intervention in oxidant-induced calcium pump dysfunction of dog heart. Yanagishita T, et al. **Biochem Int** 1989 Jun;18(6):1111–9

Effects of increasing extracellular pH on protein synthesis and protein degradation in the perfused working rat heart. Fuller SJ, et al. **Biochem J** 1989 Apr 1;259(1):173–9

Metabolism of inositol phosphates in alpha 1-adrenoceptor-stimulated and homogenized cardiac myocytes of adult rats. Guse AH, et al. **Biochem J** 1989 Jul 1;261(1):89–92

5'-Nucleotidase activity and adenosine formation in stimulated, hypoxic and underperfused rat heart. Headrick JP, et al. **Biochem J** 1989 Jul 15;261(2):541–50

Phospholamban is a good substrate for cyclic GMP-dependent protein kinase in vitro, but not in intact cardiac or smooth muscle. Huggins JP, et al. **Biochem J** 1989 Jun 15;260(3):829–35

Identification of the Ca2+-release activity and ryanodine receptor in sarcoplasmic-reticulum membranes during cardiac myogenesis. Michalak M. **Biochem J** 1988 Aug 1; 253(3):631–6

The effects of fasting or hypoxia on rates of protein synthesis in vivo in subcellular fractions of rat heart and gastrocnemius muscle. Preedy VR, et al. **Biochem J** 1989 Jan 15;257(2):519–27

Propionate metabolism in the rat heart by 13C n.m.r. spectroscopy. Sherry AD, et al. **Biochem J** 1988 Sep 1; 254(2):593–8

The presence and role of hormone-sensitive lipase in heart muscle. Small CA, et al. **Biochem J** 1989 Feb 15; 258(1):67–72

Pyruvate carboxylation in the rat heart. Role of biotin-dependent enzymes. Sundqvist KE, et al. **Biochem J** 1989 Feb 1;257(3):913–6

Suppression of snake-venom cardiotoxin-induced cardiomyocyte degeneration by blockage of Ca2+ influx or inhibition of non-lysosomal proteinases. Tzeng WF, et al. **Biochem J** 1988 Nov 15;256(1):89–95

Differential effects of amiodarone and propranolol on lipid dynamics and enzymatic activities in cardiac sarcolemmal membranes. Chatelain P, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1231–9

The effect of hypoxia and of energy depletion on 1,4-dihydropyridine binding sites in rat cardiac membrane fragments. Gu XH, et al. **Biochem Pharmacol** 1989 Jun 15; 38(12):1897–907

Protection of cardiac membrane phospholipid against oxidative injury by calcium antagonists. Janero DR, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4197–203

Differential sensitivity of alpha o and alpha i to ADP-ribosylation by pertussis toxin in the intact cultured embryonic chick ventricular myocyte. Relationship to the role of G proteins in the coupling of muscarinic cholinergic receptors to inhibition of adenylate cyclase activity. Liang BT, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4549–55

On the mechanism of muscarinic hydrolysis of choline phospholipids in the heart. Lindmar R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4689–95

Cyclo-oxygenase inhibition does not unmask leukotriene release during ischaemia-reperfusion of the rat heart in vitro. Trevethick MA, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):377–9

Effects of Ca2+ and subunit interactions on surface accessibility of cysteine residues in cardiac troponin. Ingraham RH, et al. **Biochemistry** 1988 Aug 9; 27(16):5891–8

Effect of ischemia on NMR detection of phosphorylated metabolites in the intact rat heart. Jeffrey FM, et al. **Biochemistry** 1989 Jun 27;28(13):5323–6

Phosphorylation of chick heart muscarinic cholinergic receptors by the beta-adrenergic receptor kinase. Kwatra MM, et al. **Biochemistry** 1989 May 30;28(11):4543–7

Comparison of the calcium release channel of cardiac and skeletal muscle sarcoplasmic reticulum by target inactivation analysis. McGrew SG, et al. **Biochemistry** 1989 Feb 7;28(3):1319–23

Positive cooperativity of ryanodine binding to the calcium release channel of sarcoplasmic reticulum from heart and skeletal muscle. McGrew SG, et al. **Biochemistry** 1989 Feb 21;28(4):1686–91

Guanosine 5'-triphosphate binding protein (Gi) and two additional pertussis toxin substrates associated with muscarinic receptors in rat heart myocytes: characterization and age dependency. Moscona-Amir E, et al. **Biochemistry** 1988 Jul 12;27(14):4985–91

Carnitine transport and exogenous palmitate oxidation in chronically volume-overloaded rat hearts. el Alaoui-Talibi Z, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):109–14

Carbamoylcholine-induced accumulation of inositol mono-, bis-, tris- and tetrakisphosphates in isolated cardiac myocytes from adult rats. Berg I, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):100–7

Effects of Ca2+ on the sodium pump observed in cardiac myocytes isolated from guinea pigs. Hagane K, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):279–87

Metabolism of long-chain polyunsaturated fatty acids in isolated cardiac myocytes. Hagve TA, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):338–44

Regulation of calcium transport in drug-induced taurine-depleted hearts. Harada H, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):273–8

Free-radical formation by mitomycin C and its novel analogs in cardiac microsomes and the perfused rat heart. Politi PM, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):341–8

Structure-function relationships in cardiac troponin T. Raggi A, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1-2):135–43

Expression of the human cardiac actin gene in differentiating rat skeletal myoblasts. Ruben MM, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):374–84

Palmitic and erucic acid metabolism in isolated perfused hearts from weanling pigs. Sauer FD, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):205–14

Altered acyl chain compositions of alkylacyl, alkenylacyl, and diacyl subclasses of choline and ethanolamine glycerophospholipids in rat heart by dietary fish oil. Yeo YK, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):25–30

Cardiac arrhythmias modelled by Cai-inactivated Ca2+ channels. Lambert MH, et al. **Biol Cybern** 1989;61(1):21–8

New NMR probe designs for neonatal, immature and adult heart research. With a brief review. Kost GJ, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):45–59

Phosphorylation of phospholamban and troponin I in the ischemic and reperfused heart: attenuation and restoration of isoprenaline responsiveness. Bartel S, et al. **Biomed Biochim Acta** 1989;48(2-3):S108–13

Bioconversion of leukotriene C4 by the bullfrog heart. Herman RP, et al. **Biomed Biochim Acta** 1988; 47(10-11):S174–7

Free radical membrane scavengers in myocardium of rats of different age exposed to chronic hypoxia. Lebedev AV, et al. **Biomed Biochim Acta** 1989;48(2-3):S122–5

Myocardial biosynthesis of prostacyclin and the influence of cardiac loading and drugs. Mentz P, et al. **Biomed Biochim Acta** 1988;47(10-11):S244–7

Subconductance states in cardiac sodium channels. Nilius B, et al. **Biomed Biochim Acta** 1989;48(5-6):S354-7
Action of iloprost and PGE1 on global ischemic and reperfused myocardium: a 31P-NMR-study. Pissarek M, et al. **Biomed Biochim Acta** 1988;47(10-11):S121-4
PGE1 and iloprost affect the high energy phosphates in the global ischemic and reperfused rat heart: a 31P-NMR study. Pissarek M, et al. **Biomed Biochim Acta** 1989; 48(1):43-50
Nicotinamide adenine dinucleotide fluorescence spectroscopy and imaging of isolated cardiac myocytes. Eng J, et al. **Biophys J** 1989 Apr;55(4):621-30
Partitioning and location of Bay K 8644, 1,4-dihydropyridine calcium channel agonist, in model and biological membranes. Mason RP, et al. **Biophys J** 1989 Apr; 55(4):769-78
ATP synthesis and degradation rates in the perfused rat heart. 31P-nuclear magnetic resonance double saturation transfer measurements [published erratum appears in Biophys J 1988 Dec;54(6):following 1186] Spencer RG, et al. **Biophys J** 1988 Nov;54(5):921-9
Stretch activated ion channels in ventricular myocytes. Craelius W, et al. **Biosci Rep** 1988 Oct;8(5):407-14
Reactive oxygen metabolites and the human myocardium. Burrell CJ, et al. **Br Heart J** 1989 Jan;61(1):4-8 (40 ref.)
Cardiac and whole body [3H]noradrenaline kinetics in ischaemic heart disease: contrast between unstable anginal syndromes and pacing induced ischaemia. McCance AJ, et al. **Br Heart J** 1989 Mar;61(3):238-47
Effects of enalapril on myocardial noradrenaline overflow during exercise in patients with chronic heart failure. Mulligan IP, et al. **Br Heart J** 1989 Jan;61(1):23-8
Ethanol, acetaldehyde and cardiac protein synthesis: the relation to cardiomyopathy. Schreiber SS. **Br J Addict** 1989 Feb;84(2):133-9 (45 ref.)
Inhalation anaesthetics decrease calcium content of cardiac sarcoplasmic reticulum. Katsuoka M, et al. **Br J Anaesth** 1989 Jun;62(6):669-73
Myocardial beta-adrenoceptor function and regulation in heart failure: implications for therapy. Barnett DB. **Br J Clin Pharmacol** 1989 May;27(5):527-37 (65 ref.)
Effects of magnesium, ouabain and bumetanide on 86rubidium uptake in a human atrial cell line. Borchgrevink PC, et al. **Br J Pharmacol** 1988 Oct;95(2):614-8
The beta 1-adrenoceptor antagonist, betaxolol, is not released from the heart of the anaesthetized dog during sympathetic nerve stimulation. Duval N, et al. **Br J Pharmacol** 1988 Nov;95(3):683-8
Diffusion characteristics dissociate ouabain binding from inotropic effect in guinea-pig myocardium. Ebner F, et al. **Br J Pharmacol** 1988 Oct;95(2):399-404
Mechanisms of positive inotropic effects and delayed relaxation produced by DPI 201-106 in mammalian working myocardium: effects on intracellular calcium handling. Kihara Y, et al. **Br J Pharmacol** 1989 Apr; 96(4):927-39
Comparison between effects of caffeine and ryanodine on electromechanical coupling in myocardium of hibernating chipmunks: role of internal Ca stores. Kondo N. **Br J Pharmacol** 1988 Dec;95(4):1287-91
Contribution of beta 1- and beta 2-adrenoceptors of human atrium and ventricle to the effects of noradrenaline and adrenaline as assessed with (-)-atenolol. Lemoine H, et al. **Br J Pharmacol** 1988 Sep;95(1):55-66
Effect of pirenzepine and gallamine on cardiac and pulmonary muscarinic receptors in the rabbit. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):506-12
Effect of phorbol ester and pertussis toxin on the enhancement of noradrenaline release by angiotensin II in mouse atria. Musgrave IF, et al. **Br J Pharmacol** 1989 Mar; 96(3):609-16
Heterogeneity of nucleoside transport inhibitory sites in heart: a quantitative autoradiographical analysis. Parkinson FE, et al. **Br J Pharmacol** 1989 Jun;97(2):361-70
Interaction of potassium channel openers and blockers in canine atrial muscle. Yanagisawa T, et al. **Br J Pharmacol** 1989 Jul;97(3):753-62
Neural cell adhesion molecule (N-CAM) expression during cardiac development in the rat. Wharton J, et al. **Brain Res** 1989 Mar 27;483(1):170-6
Effects of tracheal extubation on coronary blood flow, myocardial metabolism and systemic haemodynamic responses. Elia S, et al. **Can J Anaesth** 1989 Jan;36(1):2-8
Influence of ruthenium red on rat heart subcellular calcium transport. Gupta MP, et al. **Can J Cardiol** 1989 Jan-Feb; 5(1):55-63
Effects of different thyroid treatments on the biochemical characteristics of rabbit myocardium. Ling E, et al. **Can J Cardiol** 1988 Sep;4(6):301-6
Contracture and cell damage in calcium paradox is not caused by lipid peroxidation. Belluk B, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1087-91
Leukotriene C4 action and metabolism in the isolated perfused bullfrog heart. Herman RP, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):980-4
Binding of [3H]befunolol to beta-adrenoceptors in cardiac muscles of fetal and neonatal rat. Koike K, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):957-60
Effect of stimulation frequency on intracellular Na+ activity in rat atrial muscle. Ruch S, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1565-9
Platelet-activating factor: lack of direct action on guinea pig myocardium and possible transmitter release from cardiac sympathetic nerve endings at high concentrations. Shigenobu K, et al. **Can J Physiol Pharmacol** 1989 Jun; 67(6):669-74
Noradrenaline turnover in brown adipose tissue and the heart of fed and fasted golden hamsters. Trayhurn P, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):106-9
Alpha-adrenergic supersensitivity and decreased number of alpha-adrenoceptors in heart from acute diabetic rats. Wald M, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1154-60
Effect of sinus node on spontaneous release of natriuretic peptide in isolated atria. Wong NL, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):859-62
Magnetic resonance spectroscopy of the heart. Schaefer S, et al. **Cardiol Clin** 1989 Aug;7(3):697-712 (117 ref.)
Are different pharmacokinetic properties of lidocaine versus propafenone in normal as compared to ischemic myocardium responsible for different electrophysiologic effects which help preventing arrhythmias? Puddu PE, et al. **Cardiologia** 1988 May;33(5):459-62
Substrate regulation of the nucleotide pool during regional ischaemia and reperfusion in an isolated rat heart preparation: a phosphorus-31 magnetic resonance spectroscopy analysis. Camacho SA, et al. **Cardiovasc Res** 1988 Mar;22(3):193-203
Depletion of myocardial glutathione: its effects on heart function and metabolism during ischaemia and reperfusion. Chatham JC, et al. **Cardiovasc Res** 1988 Nov;22(11):833-9
Intramyocardial distribution of hydroquinidine in the dog. Ferriere M, et al. **Cardiovasc Res** 1988 May;22(5):372-4
Diastolic characteristics and cardiac energetics of isolated hearts exposed to volume and pressure overload. Friberg P. **Cardiovasc Res** 1988 May;22(5):329-39
Evidence for increased lipid peroxidation in the non-ischaemic portion of the heart with coronary occlusion. Herbaczyńska-Cedro K, et al. **Cardiovasc Res** 1989 Feb;23(2):98-103
Effects of graded intensity of oxygen deficiency on function and energy metabolism in post-ischaemic myocardium. Hoffmeister HM, et al. **Cardiovasc Res** 1988 Dec; 22(12):881-8
Postnatal DNA synthesis in hearts of mice: autoradiographic and cytofluorometric investigations. Nakagawa M, et al. **Cardiovasc Res** 1988 Aug;22(8):575-83
De novo cardiac beta adrenoceptor synthesis in adult rats under normoxic and hypoxic conditions. Winter RJ, et al. **Cardiovasc Res** 1988 Mar;22(3):159-62
Atrial natriuretic peptide in heart and specific binding in organs from fetal and newborn rats. Hersey RM, et al. **Cell Biochem Funct** 1989 Jan;7(1):35-41
Extracellular ATP has a potent effect to enhance cytosolic calcium and contractility in single ventricular myocytes. Danziger RS, et al. **Cell Calcium** 1988 Aug;9(4):193-9
Covalent regulation of the cardiac sarcoplasmic reticulum calcium pump. Review article. Le Peuch CJ, et al. **Cell Calcium** 1989 Aug-Sep;10(6):397-400 (25 ref.)
Involvement of 1,25-dihydroxyvitamin D3 in regulating myocardial calcium metabolism: physiological and pathological actions. Simpson RU, et al. **Cell Calcium** 1988 Dec;9(5-6):285-92 (27 ref.)
Repeated (isolation) stress increases tribulin-like activity in the rat. Armando I, et al. **Cell Mol Neurobiol** 1989 Mar; 9(1):115-22
Cellular origin and distribution of transforming growth factor-beta in the normal rat myocardium. Eghbali M. **Cell Tissue Res** 1989 Jun;256(3):553-8
Careful consideration of the effects induced by glutathione depletion in rat liver and heart. The involvement of cytosolic and mitochondrial glutathione pools. Romero FJ, et al. **Chem Biol Interact** 1989;70(1-2):29-37 (53 ref.)
Characteristics of cardiac beta-adrenoceptors in Suncus murinus. Abe K, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct; 36(10):4081-7
Regulation of intracellular pH in cardiac muscle. Vaughan-Jones RD. **Ciba Found Symp** 1988;139:23-46
Developmental changes in the expression of rabbit left ventricular troponin T. Anderson PA, et al. **Circ Res** 1988 Oct;63(4):742-7
fMet-Leu-Phe receptor expression by an interstitial cell in rabbit right atrium following left ventricular myocardial infarction. Dunkel CG, et al. **Circ Res** 1989 Jul;65(1):215-23
Simultaneous measurements of action potential duration and intracellular ATP in isolated ferret hearts exposed to cyanide. Elliott AC, et al. **Circ Res** 1989 Mar;64(3):583-91
Role of thromboxane A2 in the control of myocardial O2 supply/consumption balance and severity of ischemia during pacing-induced ischemia. Grover GJ, et al. **Circ Res** 1989 Mar;64(3):575-82
Vasoactive intestinal peptide receptor in failing human ventricular myocardium exhibits increased affinity and decreased density. Hershberger RE, et al. **Circ Res** 1989 Aug;65(2):283-94
IMP production by ATP-depleted adult rat heart cells. Effects of glycolysis and alpha 1-adrenergic stimulation. Hohl CM, et al. **Circ Res** 1989 Sep;65(3):754-60
Two structurally distinct calcium storage sites in rat cardiac sarcoplasmic reticulum: an electron microprobe analysis study. Jorgensen AO, et al. **Circ Res** 1988 Dec;63(6):1060-9
Voltage- and use-dependent modulation of cardiac calcium channels by the dihydropyridine (+)-202-791. Kamp TJ, et al. **Circ Res** 1989 Feb;64(2):338-51
Specific binding of [3H]LY186126, an analogue of indolidan (LY195115), to cardiac membranes enriched in sarcoplasmic reticulum vesicles. Kauffman RF, et al. **Circ Res** 1989 May;64(5):1037-40
Characterization and pharmacological relevance of high affinity binding sites for [3H]LY186126, a cardiotonic phosphodiesterase inhibitor, in canine cardiac membranes. Kauffman RF, et al. **Circ Res** 1989 Jul;65(1):154-63
Load responsiveness of protein synthesis in adult mammalian myocardium: role of cardiac deformation linked to sodium influx. Kent RL, et al. **Circ Res** 1989 Jan;64(1):74-85
Calcium current is increased in isolated adult myocytes from hypertrophied rat myocardium. Keung EC. **Circ Res** 1989 Apr;64(4):753-63
Polyamines mediate androgenic stimulation of calcium fluxes and membrane transport in rat heart myocytes. Koenig H, et al. **Circ Res** 1989 Mar;64(3):415-26
Reduction of lipid peroxidation in reperfused isolated rabbit hearts by diltiazem. Koller PT, et al. **Circ Res** 1989 Sep; 65(3):838-46
Bimodal effect of stimulation on light fluctuation transients monitoring spontaneous sarcoplasmic reticulum calcium release in rat cardiac muscle. Kort AA, et al. **Circ Res** 1988 Nov;63(5):960-8
Spontaneous sarcoplasmic reticulum calcium release in rat and rabbit cardiac muscle: relation to transient and rested-state twitch tension. Kort AA, et al. **Circ Res** 1988 Nov;63(5):969-79
Alterations in cardiac sarcoplasmic reticulum calcium transport in the postischemic "stunned" myocardium. Krause SM, et al. **Circ Res** 1989 Aug;65(2):526-30
Comparison of the myocardial uptake of a technetium-labeled isonitrile analogue and thallium. Leppo JA, et al. **Circ Res** 1989 Sep;65(3):632-9
Prostaglandin E receptors in cardiac sarcolemma. Identification and coupling to adenylate cyclase. Lopaschuk GD, et al. **Circ Res** 1989 Sep;65(3):538-45
Inhibition of Na-K pump current in guinea pig ventricular myocytes by dihydroouabain occurs at high- and low-affinity sites. Mogul DJ, et al. **Circ Res** 1989 Jun; 64(6):1063-9
Enhanced phosphodiesteratic breakdown and turnover of phosphoinositides during reperfusion of ischemic rat heart. Otani H, et al. **Circ Res** 1988 Nov;63(5):930-6
Effects of malnutrition on rat myocardial beta-adrenergic and muscarinic receptors. Ransnäs L, et al. **Circ Res** 1989 May;64(5):949-56
Differential effect of physical exercise routines on ventricular myosin and peripheral catecholamine stores in normotensive and spontaneously hypertensive rats. Rupp H. **Circ Res** 1989 Aug;65(2):370-7
Response of myocardial metabolites to graded regional ischemia: 31P NMR spectroscopy of porcine myocardium in vivo. Schaefer S, et al. **Circ Res** 1989 May;64(5):968-76
Antibodies to the ADP/ATP carrier, an autoantigen in myocarditis and dilated cardiomyopathy, penetrate into myocardial cells and disturb energy metabolism in vivo. Schulze K, et al. **Circ Res** 1989 Feb;64(2):179-92
Amiodarone: biochemical evidence for binding to a receptor for class I drugs associated with the rat cardiac sodium channel. Sheldon RS, et al. **Circ Res** 1989 Aug;65(2):477-82
Calmodulin modulation of single sarcoplasmic reticulum Ca2+-release channels from cardiac and skeletal muscle. Smith JS, et al. **Circ Res** 1989 Feb;64(2):352-9
Ventricles as a major site of atrial natriuretic factor synthesis and release in cardiomyopathic hamsters with heart failure. Thibault G, et al. **Circ Res** 1989 Jul;65(1):71-82
Lipid alterations in isolated, working rat hearts during ischemia and reperfusion: its relation to myocardial damage. van Bilsen M, et al. **Circ Res** 1989 Feb; 64(2):304-14
Myocardial stretch stimulates phosphatidylinositol turnover. von Harsdorf R, et al. **Circ Res** 1989 Aug;65(2):494-501
Progressive hypoxemia limits left ventricular oxygen consumption and contractility. Walley KR, et al. **Circ Res** 1988 Nov;63(5):849-59
Significance of the transmural diminution in regional hydrogen ion production after repeated coronary artery occlusions. Warner KG, et al. **Circ Res** 1989 Mar; 64(3):616-28
Arachidonate metabolism in cultured fibroblasts derived from normal and infarcted canine heart. Weber DR, et al. **Circ Res** 1989 Sep;65(3):671-83
The pH of spontaneously beating cultured rat heart cells is regulated by an ATP-calmodulin-dependent Na+/H+ antiport. Weissberg PL, et al. **Circ Res** 1989 Apr; 64(4):676-85
Increased cyclic AMP content accelerates protein synthesis in rat heart. Xenophontos XP, et al. **Circ Res** 1989 Sep; 65(3):647-56
Time-invariant oxygen cost of mechanical energy in dog left ventricle: consistency and inconsistency of time-varying elastance model with myocardial energetics. Yasumura Y, et al. **Circ Res** 1989 Apr;64(4):764-78
Improved survival from compound 48/80-induced lethal stress and inhibition of myocardial histamine and carnosine mobilization by lodoxamide. Flancbaum L, et al. **Circ Shock** 1989 Feb;27(2):155-64
Coronary blood flow and cardiac adenine nucleotides in E. coli endotoxemia in dogs: effects of oxygen radical scavengers. Laughlin MH, et al. **Circ Shock** 1988 Jul; 25(3):173-85
Adenosine restores myocardial responsiveness to insulin

during acute endotoxin shock in vivo. Law WR, et al. **Circ Shock** 1989 Aug;28(4):333–45

Calcium uptake by sarcoplasmic reticulum isolated from hearts of septic rats. McDonough KH. **Circ Shock** 1988 Aug;25(4):291–7

Myocardial reperfusion injury. Role of myocardial hypoxanthine and xanthine in free radical–mediated reperfusion injury. Abd–Elfattah AS, et al. **Circulation** 1988 Nov;78(5 Pt 2):III224–35

Cardiac norepinephrine kinetics in hypertrophic cardiomyopathy. Brush JE Jr, et al. **Circulation** 1989 Apr; 79(4):836–44

Noninvasive quantitation of regional myocardial oxygen consumption in vivo with [1–11C]acetate and dynamic positron emission tomography. Buxton DB, et al. **Circulation** 1989 Jan;79(1):134–42

Effect of surgical reduction of left ventricular outflow obstruction on hemodynamics, coronary flow, and myocardial metabolism in hypertrophic cardiomyopathy. Cannon RO 3d, et al. **Circulation** 1989 Apr;79(4):766–75

Distribution of extracellular potassium and electrophysiologic changes during two–stage coronary ligation in the isolated, perfused canine heart. Coronel R, et al. **Circulation** 1989 Jul;80(1):165–77

Kinetics of myoglobin release and prediction of myocardial myoglobin depletion after coronary artery reperfusion. Ellis AK, et al. **Circulation** 1989 Sep;80(3):676–83

Tissue acidosis: role in sustained arteriolar dilatation distal to a coronary stenosis. Gewirtz H, et al. **Circulation** 1989 Apr;79(4):890–8

Beta–adrenergic supersensitivity of the transplanted human heart is presynaptic in origin. Gilbert EM, et al. **Circulation** 1989 Feb;79(2):344–9

Myocardial energetics in patients with dilated cardiomyopathy. Influence of nitroprusside and enoximone. Hasenfuss G, et al. **Circulation** 1989 Jul;80(1):51–64

Abnormal I–123 metaiodobenzylguanidine myocardial washout and distribution may reflect myocardial adrenergic derangement in patients with congestive cardiomyopathy. Henderson EB, et al. **Circulation** 1988 Nov;78(5 Pt 1):1192–9

New pluronic–free perfluorocarbon cardioplegia improves myocardial oxygenation. Johnson DL, et al. **Circulation** 1988 Nov;78(5 Pt 2):III153–7

Myocardial oxygen use during epinephrine administration to ischemically injured canine hearts. Lekven J, et al. **Circulation** 1988 Nov;78(5 Pt 2):III125–36

Magnesium content of serum, circulating mononuclear cells, skeletal muscle, and myocardium in congestive heart failure. Ralston MA, et al. **Circulation** 1989 Sep; 80(3):573–80

Energy expenditure of autoperfusing heart–lung preparation. Riveron FA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III103–9

Atrial natriuretic peptide distribution in fetal and failed adult human hearts. Tsuchimochi H, et al. **Circulation** 1988 Oct; 78(4):920–7

Myocardial acidosis associated with CO2 production during cardiac arrest and resuscitation. von Planta M, et al. **Circulation** 1989 Sep;80(3):684–92

Regional myocardial free fatty acid extraction in normal and ischemic myocardium. Vyska K, et al. **Circulation** 1988 Nov;78(5 Pt 1):1218–33

Effects of verapamil and propranolol on changes in extracellular K+, pH, and local activation during graded coronary flow in the pig. Watanabe I, et al. **Circulation** 1989 Apr;79(4):939–47

Release of adenosine and lactate from human hearts during atrial pacing in patients with ischemic heart disease. Haneda T, et al. **Clin Cardiol** 1989 Feb;12(2):76–82

Effects of transient increase in intrathoracic pressure on hemodynamic determinants of myocardial oxygen supply and demand. Pepine CJ, et al. **Clin Cardiol** 1988 Dec; 11(12):831–7

Concentrations of some trace elements (Se, Zn, Cu, Fe, Mg, K) in blood and heart tissue of patients with coronary heart disease. Oster O, et al. **Clin Chem** 1989 May;35(5):851–6

Adenylate degradation products release from the human myocardium during open heart surgery. Smoleński RT, et al. **Clin Chim Acta** 1989 Jun 15;182(1):63–73

Effect of magnesium depletion and potassium depletion and chlorothiazide on intracellular pH in the rat, studied by 31P NMR. Adam WR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):33–40

Plasma, cardiac tissue and brain morphine concentrations in acute and chronic morphine–treated rats. Ko WW, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):117–20

Function, characterization and autoradiographic localization and quantitation of beta–adrenoceptors in cardiac tissues. Molenaar P, et al. **Clin Exp Pharmacol Physiol** 1989 Jun; 16(6):529–33

Dilatation of the right atrium stimulates phosphatidylinositol turnover. von Harsdorf R, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):341–4

A comparison of myocardial thallium–201 image quality after either dipyridamole or exercise stress. Bourke JP, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):49–56

Inosine causing insulin release and increased myocardial uptake of carbohydrates relative to free fatty acids in dogs. Smiseth OA, et al. **Clin Physiol** 1989 Feb;9(1):27–38

Changes in coronary haemodynamics and myocardial metabolism at rest and during exercise after a cardiotonic drug (prenalterol) in patients with coronary artery disease. Westheim A, et al. **Clin Physiol** 1988 Oct;8(5):463–74

Regulation of alpha– and beta–myosin heavy chain messenger RNAs in the rat myocardium by amiodarone and by thyroid status. Franklyn JA, et al. **Clin Sci** 1989 May; 76(5):463–7

Atrial natriuretic peptide levels in plasma and in cardiac tissues after chronic hypoxia in rats. Winter RJ, et al. **Clin Sci** 1989 Jan;76(1):95–101

Biochemical and antiarrhythmic effects of three calcium channel antagonists in ischemic canine hearts. Ito T, et al. **Clin Ther** 1989 Jul–Aug;11(4):461–71

Low–sodium contractures indicating sarcolemmal Na/Ca–exchange in the frog heart. Volkmann R. **Comp Biochem Physiol [A]** 1988;91(2):225–34 (128 ref.)

A comparison of the uptake of [i–14C]palmitate into cell fractions of the perfused toad, chick and guinea–pig heart. Gloster J, et al. **Comp Biochem Physiol [B]** 1977;57(2):163–5

Hydrogen shuttles in air versus water breathing fishes. Hochachka PW, et al. **Comp Biochem Physiol [B]** 1979; 63(1):45–56

Hydrogen shuttles in gills of water versus air breathing osteoglossids. Hochachka PW, et al. **Comp Biochem Physiol [B]** 1979;63(1):57–61

The effect of isoprenaline on the phospholipid content of the compact and spongious musculature of the carp ventricular myocardium. Drnková J, et al. **Comp Biochem Physiol [C]** 1988;90(1):257–61

Comparative studies on catecholamine content and glycogen phosphorylase activity in the myocardium of spontaneously hypertensive and normotensive rats. Ilieva T, et al. **Cor Vasa** 1989;31(1):55–63

Supplementary static effort during dynamic exercise. Its influence on electrocardiogram, haemodynamic and metabolic adaptation of circulation in coronary patients. Wójcik–Ziółkowska E, et al. **Cor Vasa** 1988;30(6):428–34

Differences in systemic and myocardial blood acid–base status during cardiopulmonary resuscitation. Capparelli EV, et al. **Crit Care Med** 1989 May;17(5):442–6

Myocardial blood flow and oxygen consumption during positive end–expiratory pressure ventilation at different levels of cardiac inotropy and frequency. Hevrøy O, et al. **Crit Care Med** 1989 Jan;17(1):48–52

Myocardial potassium uptake during experimental cardiopulmonary resuscitation. von Planta M, et al. **Crit Care Med** 1989 Sep;17(9):895–9

The effect of hemorrhagic shock and resuscitation on the intracellular cardiac glutathione redox system. Davis PK, et al. **Curr Surg** 1988 Sep–Oct;45(5):392–5

Effect of cannulation site on the primary determinants of myocardial oxygen consumption during left heart bypass. Kress DC, et al. **Curr Surg** 1988 Jul–Aug;45(4):303–7

A developmental study of the abnormal expression of alpha–cardiac and alpha–skeletal actins in the striated muscle of a mutant mouse. Garner I, et al. **Dev Biol** 1989 Jul;134(1):236–45

Cardiac metabolic and hemodynamic effects of insulin in patients with coronary artery disease. Thomassen A, et al. **Diabetes** 1989 Sep;38(9):1175–80

Effect of myo–inositol and T3 on myocardial lipids and cardiac function in streptozocin–induced diabetic rats. Xiang H, et al. **Diabetes** 1988 Nov;37(11):1542–8

The in vivo study of cardiac and skeletal muscle protein turnover. Barrett EJ, et al. **Diabetes Metab Rev** 1989 Mar; 5(2):133–48 (146 ref.)

Control of protein synthesis and ribosome formation in rat heart. Russo LA, et al. **Diabetes Metab Rev** 1989 Feb; 5(1):31–47 (130 ref.)

Dysregulation of glucose transport and transporters in perfused hearts of genetically obese (fa/fa) rats. Zaninetti D, et al. **Diabetologia** 1989 Jan;32(1):56–60

Transient coexpression of desmin and cytokeratins 8 and 18 in developing myocardial cells of some vertebrate species. Kuruc N, et al. **Differentiation** 1988 Sep;38(3):177–93

Cardiac and noncardiac atrial natriuretic factor (ANF) biosynthesis and storage and plasma ANF in the rat model of chronic ventricular dysfunction. Bilder GE, et al. **Endocrinology** 1989 Mar;124(3):1515–21

Atrial natriuretic peptide in plasma, atria, ventricles, and hypothalamus of Long–Evans and vasopressin–deficient Brattleboro rats. Ruskoaho H, et al. **Endocrinology** 1989 May;124(5):2595–603

A rapid, extranuclear effect of 3,5,3'–triiodothyronine on sugar uptake by several tissues in the rat in vivo. Evidence for a physiological role for the thyroid hormone action at the level of the plasma membrane. Segal J. **Endocrinology** 1989 Jun;124(6):2755–64

Processing of the atrial natriuretic factor propeptide by atrial cardiocytes as revealed by immunocryoultramicrotomy. Thibault G, et al. **Endocrinology** 1989 Jun;124(6):3109–16

The effect of thyroid hormones on lipid composition and activities of lipid–synthesizing enzymes in the rat heart sarcolemma. Szymański PT, et al. **Endokrynol Pol** 1989; 40(1):43–9

Effects of intracoronary infusion of nicardipine during silent ischaemia on myocardial metabolism and function. Hanet C, et al. **Eur Heart J** 1988 Dec;9 Suppl N:145–50

Features of myocardial metabolism of some amino acids and ammonia in patients with coronary artery disease. Pisarenko OI, et al. **Eur Heart J** 1989 Mar;10(3):209–17

A novel human myosin alkali light chain is developmentally regulated. Expression in fetal cardiac and skeletal muscle and in adult atria. Arnold HH, et al. **Eur J Biochem** 1988 Dec 1;178(1):53–60

Myocardial (iso)enzyme activities, DNA concentration and nuclear polyploidy in hearts of patients operated upon for congenital heart disease, and in normal and hypertrophic adult human hearts at autopsy. van der Laarse A, et al. **Eur J Clin Invest** 1989 Apr;19(2):192–200

Comparison of 16–iodohexadecanoic acid (IHDA) and 15–p–iodophenylpentadecanoic acid (IPPA) metabolism and kinetics in the isolated rat heart. DeGrado TR, et al. **Eur J Nucl Med** 1988;14(12):600–6

Iodomethylated fatty acid metabolism in mice and dogs. Fagret D, et al. **Eur J Nucl Med** 1988;14(12):624–7

Efficacy of 15–(123I)–p–iodophenyl pentadecanoic acid (IPPA) in assessing myocardial metabolism in a model of reversible global ischemia. Hudon MP, et al. **Eur J Nucl Med** 1988;14(12):594–9

Intracellular bretylium blocks Na+ and K+ currents in heart cells. Bkaily G, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):389–97

Characterization of guinea–pig cardiac muscarinic receptors by radioligand dissociation kinetics. Brunner F, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):249–57

Bretylium tosylate binds preferentially to muscarinic receptors labelled with [3H]oxotremorine M (SH or 'high affinity' receptors) in rat heart and brain cortex. Gillard M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):117–24

Interaction of DPI 201–106 with cardiac muscarinic receptors. Groschner K, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):125–31

Further characterization of the myocardial alpha–adrenoceptors mediating positive inotropic effects in the rabbit myocardium. Hiramoto T, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):301–10

Beta 2–adrenoceptor–mediated increase in the slow inward calcium current in atrial cells. Iijima T, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):357–60

Nitric oxide release from the isolated guinea pig heart. Kelm M, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):317–21

Effects of gallopamil, diltiazem and nifedipine on the loss of K+ from ischaemic pig hearts. Kirchengast M, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):349–58

AN–132, a new class I anti–arrhythmic agent, depresses the acetylcholine–induced K+ current in atrial myocytes. Kurachi Y, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2–3):319–22

Propranolol inhibits accumulation of non–esterified fatty acids in the ischemic dog heart. Miura I, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):281–8

Effect of propranolol on accumulation of NEFA in the ischemic perfused rat heart. Nakamura K, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):61–9

Atrial and brain natriuretic peptides share binding sites in the kidney and heart. Oehlenschlager WF, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):159–64

Subtypes of nucleoside transport inhibitory sites in heart: a quantitative autoradiographical analysis. Parkinson FE, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):69–75

Effects of MCI–154 on Ca2+ activation of skinned human myocardium. Perreault CL, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):305–8

Enhanced acetylcholine release from denervated atria: intrinsic neural supersensitivity. Smith DC, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):249–53

Dynorphin stimulates the release of ANP from isolated rat atria. Stasch JP, et al. **Eur J Pharmacol** 1989 Jan 2; 159(1):101–2

Protective action of YM–12617, an alpha 1–adrenoceptor antagonist, on the hypoxic and reoxygenated myocardium. Tanonaka K, et al. **Eur J Pharmacol** 1989 Jun 8; 165(1):97–106

The SH–H subgroup of cardiac M2 receptors (M2 alpha) inhibits adenylate cyclase activity. Zhou XM, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):229–36

Synthesis of shock proteins in cultured fetal mouse myocardial cells. Löw I, et al. **Exp Cell Res** 1989 Feb; 180(2):451–9

Enzymatic and nonenzymatic lipid peroxidation capacities and antioxidants in hypoxic and reoxygenated rat myocardium. Kihlström M, et al. **Exp Mol Pathol** 1989 Apr;50(2):230–8

Increased sarcolemmal membrane permeability of cardiac muscle cells in rats fed grains cultivated in a Keshan disease endemic area: a study with horseradish peroxidase as a tracer. Li C, et al. **Exp Mol Pathol** 1989 Jun;50(3):316–26

Solubilization and characterization of a ouabain–sensitive protein from transverse tubule membrane–junctional sarcoplasmic reticulum complexes (TTM–JSR) in cat cardiac muscle. Fujino S, et al. **Experientia** 1989 May 15; 45(5):466–9

Metabolites of the glycolytic pathway modulate the activity of single cardiac Na+ channels. Kohlhardt M, et al. **FASEB J** 1989 Jun;3(8):1963–7

Ischemia–induced changes in myocardial paramagnetic metabolites: implications for intracellular oxy–radical generation. Baker JE, et al. **FEBS Lett** 1989 Feb 27; 244(2):311–4

The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle–specific transcription. Braun T, et al. **FEBS Lett** 1988 Nov 7;239(2):309–12

Inhibition of glucose phosphorylation by fatty acids in the perfused rat heart. Chatham J, et al. **FEBS Lett** 1988 Oct

10;238(2):445–9
Involvement of electrostatic phenomena in phospholamban-induced stimulation of Ca uptake into cardiac sarcoplasmic reticulum. Chiesi M, et al. **FEBS Lett** 1989 Feb 13;244(1):241–4
Increased muscarinic receptor binding in heart membranes by an inhibitor of protein kinase C. Creazzo TL, et al. **FEBS Lett** 1988 Dec 19;242(1):175–7
Stimulation of phosphoinositide hydrolysis via class I antigen-specific recognition in murine cardiac tissue. Cremaschi GA, et al. **FEBS Lett** 1989 Jun 5;249(2):302–6
Protein synthesis in rat cardiac myocytes is stimulated at the level of translation by phorbol esters. Fuller SJ, et al. **FEBS Lett** 1989 Apr 24;247(2):209–12
Effect of acidosis on Ca2+ sensitivity of skinned cardiac muscle with troponin C exchange. Implications for myocardial ischemia. Gulati J, et al. **FEBS Lett** 1989 Mar 13;245(1–2):279–82
Leukotriene C4 inhibits ATP-dependent transport of glutathione S-conjugate across rat heart sarcolemma. Implication for leukotriene C4 translocation mediated by glutathione S-conjugate carrier. Ishikawa T. **FEBS Lett** 1989 Mar 27;246(1–2):177–80
Isolation and characterization of a fraction from brain that inhibits 1,4-[3H]dihydropyridine binding and L-type calcium channel current. Janis RA, et al. **FEBS Lett** 1988 Nov 7;239(2):233–6
Electrostimulation-induced increases in fatty acid-binding protein and myoglobin in rat fast-twitch muscle and comparison with tissue levels in heart. Kaufmann M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):181–4
Evidence for the existence of a cardiac specific isoform of the alpha 1 subunit of the voltage dependent calcium channel. Slish DF, et al. **FEBS Lett** 1989 Jul 3; 250(2):509–14
Identification of nucleus-encoded F0I protein of bovine heart mitochondrial H+-ATPase as a functional part of the F0 moiety. Zanotti F, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):9–14
Increased ultra weak chemiluminescence emission from rat heart at postischemic reoxygenation: protective role of vitamin E. Barsacchi R, et al. **Free Radic Biol Med** 1989; 6(6):573–9
Oxidation and release of glutathione from myocardium during early reperfusion. Lesnefsky EJ, et al. **Free Radic Biol Med** 1989;7(1):31–5
Effect of ambient oxygen concentration on lipofuscin accumulation in cultured rat heart myocytes—a novel in vitro model of lipofuscinogenesis. Sohal RS, et al. **Free Radic Biol Med** 1989;6(1):23–30
The glutathione status of perfused rat hearts subjected to hypoxia and reoxygenation: the oxygen paradox. Darley-Usmar VM, et al. **Free Radic Res Commun** 1989; 5(4–5):283–9
Effect of isoproterenol administration of rat heart glutathione status. Guarnieri C, et al. **Free Radic Res Commun** 1986; 2(1–2):101–5
The effect of hydrogen peroxide on beta-adrenoceptor function in the heart. Haenen GR, et al. **Free Radic Res Commun** 1988;4(4):243–9
Myocardial glutathione alterations in acute coronary occlusion in the dog. Romero FJ, et al. **Free Radic Res Commun** 1987;4(1):27–30
Effect of M2 muscarinic receptor antagonist 4-DAMP, on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **Gen Pharmacol** 1989; 20(4):497–502
The density of beta-adrenoreceptors in cardiac muscle membranes of muskrats and guinea pigs. McKean TA. **Gen Pharmacol** 1988;19(5):725–7
Effects of extracellular calcium and sodium on cadmium uptake in guinea-pig and rabbit aorta. Ueda F, et al. **Gen Pharmacol** 1989;20(1):85–7
Patch clamp analysis of Na channel gating in mammalian myocardium: reconstruction of double pulse inactivation and voltage dependence of Na currents. Benndorf K. **Gen Physiol Biophys** 1988 Aug;7(4):353–77
Effects of isoprenaline on tonic tension and Na-Ca exchange in frog atrial fibres. Rakotonirina A, et al. **Gen Physiol Biophys** 1989 Aug;8(4):313–26
Monovalent ions are spatially bound within the sarcomere. von Zglinicki T. **Gen Physiol Biophys** 1988 Oct; 7(5):495–503
A new cardiotonic agent, OPC-8212, elevates the myocardial oxygen consumption versus pressure-volume area (PVA) relation in a similar manner to catecholamines and calcium in canine hearts. Futaki S, et al. **Heart Vessels** 1988; 4(3):153–61
Impaired myocardial perfusion in patients with hypertrophic cardiomyopathy: assessment with digital subtraction coronary arteriography. Ikeda H, et al. **Heart Vessels** 1988; 4(3):170–8
Hydrodynamics in the heart modulates work. Watters TA, et al. **Heart Vessels** 1988;4(3):128–35
Characterization of the inactivation process of the sodium channel in frog ventricular cells. Miyoshi H, et al. **Hiroshima J Med Sci** 1988 Sep;37(3):139–43
The effect of diabetes on phosphatidylinositol turnover and calcium influx in myocardium. Bergh CH, et al. **Horm Metab Res** 1988 Jul;20(7):381–6
Metabolic disturbances after coronary occlusion. Neely JR. **Hosp Pract [Off]** 1989 Apr 15;24(4):81–5, 90–6
Enhanced release of atrial natriuretic factor by endothelin in atria from hypertensive rats. Winquist RJ, et al. **Hypertension** 1989 Jul;14(1):111–4
Age-related changes of glycogen metabolism in human fetal heart. Dasgupta J, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):123–5
Studies on monoamine levels in rat myocardium in different stresses. Suthanthirarajan N, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):35–8
Free radicals induce ischemia-reperfusion injury and histamine release in the isolated guinea pig heart. Masini E, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):132–3
Evidence for extracellular deamination of adenosine in the rat heart. Meghji P, et al. **Int J Biochem** 1988; 20(12):1335–41
Evaluation of biochemical functions and ventricular performance in regional ischemic-reperfused myocardium by afterload reduction: differential effects of calcium blocking and non-calcium blocking vasodilators. Odom H 2d, et al. **Int J Cardiol** 1988 Dec;21(3):233–46
In vitro buffering capacity of cardiac and skeletal muscle tissue in normotensive and hypertensive rats. Assessment using PCO2 equilibration of homogenates. Oldershaw PJ, et al. **Int J Cardiol** 1989 Apr;23(1):27–32
Myocardial metabolism of glutamate and left ventricular function in patients with coronary arterial disease. Pisarenko OI, et al. **Int J Cardiol** 1989 Apr;23(1):43–52
Cardiac muscle: a miracle of creation. Seely S. **Int J Cardiol** 1989 Sep;24(3):257–65 (4 ref.)
Influence of propranolol on high energy phosphate and tissue acidosis in regional ischemic myocardium of pigs: assessment with arterial pressure and respiration gated in vivo 31-phosphorus magnetic resonance spectroscopy. Tanaka M, et al. **Int J Cardiol** 1989 Aug;24(2):165–72
A study of plasma and cardiac tissue concentrations of ceftriaxone (Rocephin) in open heart surgery. Faragó E, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul; 27(7):358–61
Do catecholamines contribute to the effects of neonatal hypoxia on development of brain and heart? Influence of concurrent alpha-adrenergic blockade on ornithine decarboxylase activity. Slotkin TA, et al. **Int J Dev Neurosci** 1987;5(2):135–43
Effects of fasting on the myocardial subcellular distribution and lipid distribution of terminal p-iodophenyl-substituted fatty acids in rats. Ambrose KR, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):695–700
Biodistribution of two 99mTc-cardiac glycosides with end glucose unit: effect of lipophilicity on their relative myocardial accumulation. Sarkar HS, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):41–6
Influence of lipid peroxidation and hydrogen peroxide on muscarinic cholinergic receptors and ATP level in rat myocytes and lymphocytes. Gajewski M, et al. **Int J Tissue React** 1988;10(5):281–90
Adenosine binding sites in pig ventricular sarcolemma and interaction with calcium channels [published erratum appears in Int J Tissue React 1988;10(3):following 198] Ronca-Testoni S, et al. **Int J Tissue React** 1988;10(2):89–93
Comparative myocardial uptake characteristics of hexakis (alkylisonitrile) technetium(I) complexes. Effect of lipophilicity. Piwnica-Worms D, et al. **Invest Radiol** 1989 Jan;24(1):25–9
Effect of different degrees of hypoxia and reoxygenation on myocardial energetics. Edoute Y, et al. **Isr J Med Sci** 1989 Jul;25(7):382–8
Myocardial metabolism by positron emission tomography in hypertrophic cardiomyopathy [editorial] Gould KL. **J Am Coll Cardiol** 1989 Feb;13(2):325–6
Regional myocardial blood flow and metabolism at rest in mildly symptomatic patients with hypertrophic cardiomyopathy. Grover-McKay M, et al. **J Am Coll Cardiol** 1989 Feb;13(2):317–24
Myocardial metabolism of hypertrophic cardiomyopathy and glucose uptake [letter] Joyce DB. **J Am Coll Cardiol** 1989 Sep;14(3):811–2
Extracellular potassium ion dynamics and ventricular arrhythmias in the canine heart. Pelleg A, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):941–50
Demonstration of increased myocardial lipid with postischemic dysfunction ("myocardial stunning") by proton nuclear magnetic resonance spectroscopy. Reeves RC, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):739–44
Right coronary artery occlusion: its role in the mechanism of precordial ST segment depression. Sato H, et al. **J Am Coll Cardiol** 1989 Aug;14(2):297–302; discussion 303–4
Sustained nonoxidative glucose utilization and depletion of glycogen in reperfused canine myocardium. Schwaiger M, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):745–54
Measurement of O2 consumption in isolated organs without venous cannulation. DeGrado TR, et al. **J Appl Physiol** 1989 Mar;66(3):1316–20
Cardiac triacylglycerol content and lipase activity during recovery from exercise. Podbielski B, et al. **J Appl Physiol** 1989 Mar;66(3):1099–103
Distribution of substance P binding sites in guinea-pig heart and pharmacological effects of substance P. Hoover DB, et al. **J Auton Nerv Syst** 1988 Sep;23(3):189–97
Cardiac 3,4-dihydroxyphenylethylene glycol (DHPG) and catecholamine levels during perindopril therapy of chronic left ventricular failure in rats. Howes LG, et al. **J Auton Pharmacol** 1989 Feb;9(1):15–21
Kinetic studies on the binding of gostatin, a suicide substrate for aspartate aminotransferase, with the isoenzymes from porcine heart mitochondria and cytosol. Kitagishi K, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):585–8
Ca2+ binding to skeletal muscle troponin C in skeletal and cardiac myofibrils. Morimoto S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):435–9
NMR-invisible ATP in rat heart and its change in ischemia. Takami H, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):35–9
Structural and functional characterization of the purified cardiac ryanodine receptor-Ca2+ release channel complex. Anderson K, et al. **J Biol Chem** 1989 Jan 15; 264(2):1329–35
Kinetics of ATP hydrolysis and tension production in skinned cardiac muscle of the guinea pig. Barsotti RJ, et al. **J Biol Chem** 1988 Nov 15;263(32):16750–6
Dihydropyridine and phenylalkylamine receptors associated with cardiac and skeletal muscle calcium channels are structurally different. Chang FC, et al. **J Biol Chem** 1988 Dec 15;263(35):18929–37
Pseudoketogenesis in the perfused rat heart. Fink G, et al. **J Biol Chem** 1988 Dec 5;263(34):18036–42
Human ventricular/slow twitch myosin alkali light chain gene characterization, sequence, and chromosomal location. Fodor WL, et al. **J Biol Chem** 1989 Feb 5; 264(4):2143–9
Fatty acid-binding protein, a potential regulator of energy production in the heart. Investigation of mechanisms by electron spin resonance. Fournier NC, et al. **J Biol Chem** 1988 Oct 5;263(28):14471–9
Secretion of atrial natriuretic factor-(1–98) by primary cardiac myocytes. Glembotski CC, et al. **J Biol Chem** 1988 Nov 5;263(31):16073–81
Effect of phosphorylation on the interaction and functional properties of rabbit striated muscle alpha alpha-tropomyosin. Heeley DH, et al. **J Biol Chem** 1989 Feb 15;264(5):2424–30
Characterization of Na+-dependent phosphate transport in cardiac sarcolemmal vesicles. Jack MG, et al. **J Biol Chem** 1989 Mar 5;264(7):3904–8
Multinuclear NMR studies of the Langendorff perfused rat heart. Jelicks LA, et al. **J Biol Chem** 1989 Sep 15; 264(26):15230–5
Substituted diphenylbutylpiperidines bind to a unique high affinity site on the L-type calcium channel. Evidence for a fourth site in the cardiac calcium entry blocker receptor complex. King VF, et al. **J Biol Chem** 1989 Apr 5; 264(10):5633–41
Cytosolic free magnesium levels in ischemic rat heart. Murphy E, et al. **J Biol Chem** 1989 Apr 5;264(10):5622–7
Role of phosphatidylinositol in cardiac sarcolemmal membrane sodium-calcium exchange. Pierce GN, et al. **J Biol Chem** 1989 Sep 15;264(26):15344–50
Site-directed mutation of the trigger calcium-binding sites in cardiac troponin C. Putkey JA, et al. **J Biol Chem** 1989 Jul 25;264(21):12370–8
Influence of sterols and phospholipids on sarcolemmal and sarcoplasmic reticular cation transporters. Vemuri R, et al. **J Biol Chem** 1989 May 25;264(15):8680–5
Phospholamban phosphorylation in intact ventricles. Phosphorylation of serine 16 and threonine 17 in response to beta-adrenergic stimulation [published erratum appears in J Biol Chem 1989 Sep 15;264(26):15738] Wegener AD, et al. **J Biol Chem** 1989 Jul 5;264(19):11468–74
Translocation of glucose transporters in response to anoxia in heart. Wheeler TJ. **J Biol Chem** 1988 Dec 25; 263(36):19447–54
Modulation by polyelectrolytes of canine cardiac microsomal calcium uptake and the possible relationship to phospholamban. Xu ZC, et al. **J Biol Chem** 1989 Oct 5; 264(28):16644–51
Alterations in oxidative function and respiratory regulation in the post-ischemic myocardium. Zimmer SD, et al. **J Biol Chem** 1989 Jul 25;264(21):12402–11
Effect of alpha-tocopherol (vitamin E) in a porcine model of stunned myocardium. Buchwald A, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):46–52
Comparison of the effects of nifedipine and nitroglycerin on hemodynamic determinants of myocardial oxygen consumption and supply during exertional angina. Choong CY, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):361–9
Effect of halothane on glucose utilization in the perfused working rat heart. Cronau LH Jr, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):116–21
Basal and isoprenaline-stimulated cAMP content in failing versus nonfailing human cardiac preparations. Danielsen W, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):171–3
Effect of age and of hypertrophy on cardiac Ca2+ antagonist binding sites. Dillon JS, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):233–40
Effects of selective and nonselective beta-adrenoceptor antagonism on isoproterenol-stimulated myocardial potassium uptake in the intact dog. Elsner D, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):376–81
Effect of pH on the myocardial uptake and pharmacodynamics of propafenone in the isolated rabbit heart. Gillis AM, et al. **J Cardiovasc Pharmacol** 1988; 12(5):526–34
Characterization of [125I]endothelin-1 binding sites in rat cardiac membrane fragments. Gu XH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S171–3

Participation of the vasodilating property of nipradilol in improving ischemic derangement of myocardial energy metabolism. Higuchi M. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):157–65

Endothelin–1 receptors in cultured vascular smooth muscle cells and cardiocytes of rats. Hirata Y. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S157–8

Cardiac 3,4–dihydroxyphenylethylene glycol (DHPG) and catecholamine levels in a rat model of left ventricular failure. Howes LG, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):348–52

Block of heart calcium channels by amlodipine: influence of drug charge on blocking activity. Kass RS, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S45–9

The effect of desipramine on ischemia–induced changes in extracellular K+, Na+, and H+ concentrations and noradrenaline release in the isolated rat heart during global ischemia. Knopf H, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S8–14

Evidence for alpha 1–adrenoceptor–mediated increase of inositol trisphosphate in the human heart. Kohl C, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):324–7

Identification of the endothelin–1 receptor in the chick heart. Miyazaki H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S155–6

Possible increases in potassium conductance by apamin in mammalian ventricular papillary muscles: a comparison with the effects on enzymatically isolated ventricular cells. Nakagawa A, et al. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):38–45

A different desensitization pattern of cardiac beta–adrenoceptor subtypes by prolonged in vivo infusion of isoprenaline. Nanoff C, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):198–203

The effect of amlodipine on hypertension–induced cardiac hypertrophy and reperfusion–induced calcium overload. Nayler WG. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S42–4

Effect of chronic verapamil therapy on cardiac norepinephrine and beta–adrenoceptor density. Nayler WG, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):629–36

Metabolic requirement for the inotropic effects of digitalis and BAY K 8644. Ogbaghebriel A, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):265–70

Relationship between ventricular expression of atrial natriuretic polypeptide gene and hemodynamic parameter in old myocardial infarction. Saito Y, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S1–4

Adrenergic mechanisms in myocardial infarction: cardiac and systemic catecholamine release. Schömig A. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S1–7 (41 ref.)

Protective effect of lidocaine against ischemia and reperfusion–induced arrhythmias and shifts of myocardial sodium, potassium, and calcium content. Tosaki A, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):621–8

Prophylactic lidocaine: concentrations in plasma and myocardial tissue and antifibrillatoric efficacy during early ischemia in dogs and pigs. Vogt B, et al. **J Cardiovasc Pharmacol** 1988;12(5):571–8

Effects of digoxin on acetylcholine and norepinephrine concentrations in rat myocardium. Watanabe Y, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):702–8

Binding and transcytosis of glycoalbumin by the microvascular endothelium of the murine myocardium: evidence that glycoalbumin behaves as a bifunctional ligand. Predescu D, et al. **J Cell Biol** 1988 Nov; 107(5):1729–38

Amphiphile–induced heart muscle–cell (myocyte) injury: effects of intracellular fatty acid overload. Janero DR, et al. **J Cell Physiol** 1988 Oct;137(1):1–13

Abnormal fatty acid utilization by cultured cardiac cells from 7–day–old obese Zucker rats. Quignard–Boulange A, et al. **J Cell Physiol** 1989 Sep;140(3):449–54

Angiotensin II receptors in normal and failing human hearts. Urata H, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):54–66

Role of invading leukocytes in enhanced atrial eicosanoid production following rabbit left ventricular myocardial infarction. Freed MS, et al. **J Clin Invest** 1989 Jan; 83(1):205–12

Myocardial substrate utilization during exercise in humans. Dual carbon–labeled carbohydrate isotope experiments. Gertz EW, et al. **J Clin Invest** 1988 Dec;82(6):2017–25

Effects of exogenous free radicals on electromechanical function and metabolism in isolated rabbit and guinea pig ventricle. Implications for ischemia and reperfusion injury. Goldhaber JI, et al. **J Clin Invest** 1989 Jun;83(6):1800–9

Enhanced inositol trisphosphate response to alpha 1–adrenergic stimulation in cardiac myocytes exposed to hypoxia. Heathers GP, et al. **J Clin Invest** 1989 Apr; 83(4):1409–13

Alpha 1–adrenergic receptor stimulation of sarcomeric actin isogene transcription in hypertrophy of cultured rat heart muscle cells. Long CS, et al. **J Clin Invest** 1989 Mar; 83(3):1078–82

In vivo regulation of beta–adrenergic receptors on mononuclear leukocytes and heart. Assessment of receptor compartmentation after agonist infusion and acute aortic constriction in guinea pigs. Maisel AS, et al. **J Clin Invest** 1988 Dec;82(6):2038–44

Relationship between calcium loading and impaired energy metabolism during Na+, K+ pump inhibition and metabolic inhibition in cultured neonatal rat cardiac myocytes. Morris AC, et al. **J Clin Invest** 1989 Jun; 83(6):1876–87

Developmental changes in the relation between phosphate metabolites and oxygen consumption in the sheep heart in vivo. Portman MA, et al. **J Clin Invest** 1989 Feb; 83(2):456–64

Expression of diverse Na+ channel messenger RNAs in rat myocardium. Evidence for a cardiac–specific Na+ channel. Sills MN, et al. **J Clin Invest** 1989 Jul;84(1):331–6

Increased secretion of atrial natriuretic polypeptide from the left ventricle in patients with dilated cardiomyopathy. Yasue H, et al. **J Clin Invest** 1989 Jan;83(1):46–51

Evidence for improved myocardial oxygen delivery and function during hypoxia in the mole rat. Edoute Y, et al. **J Comp Physiol [B]** 1988;158(5):575–82

Effects of amiodarone on 5'–deiodination of thyroxine to tri–iodothyronine in rat myocardium. Ceppi JA, et al. **J Endocrinol** 1989 Jun;121(3):431–4

Differential regulation by thyroid hormones of myosin heavy chain alpha and beta mRNAs in the rat ventricular myocardium. Green NK, et al. **J Endocrinol** 1989 Jul; 122(1):193–200

Antibody–mediated enhancement of calcium permeability in cardiac myocytes. Schultheiss HP, et al. **J Exp Med** 1988 Dec 1;168(6):2105–19

A model of propagating calcium–induced calcium release mediated by calcium diffusion. Backx PH, et al. **J Gen Physiol** 1989 May;93(5):963–77

Sodium–calcium exchange current. Dependence on internal Ca and Na and competitive binding of external Na and Ca. Miura Y, et al. **J Gen Physiol** 1989 Jun;93(6):1129–45

Cardiac calcium channels in planar lipid bilayers. L–type channels and calcium–permeable channels open at negative membrane potentials. Rosenberg RL, et al. **J Gen Physiol** 1988 Jul;92(1):27–54

Beta–adrenergic modulation of cardiac ion channels. Differential temperature sensitivity of potassium and calcium currents. Walsh KB, et al. **J Gen Physiol** 1989 May;93(5):841–54

Limitations of interpretation of age–related changes in hormone levels: illustration by effects of thyroid hormones on cardiac and skeletal muscle. Florini JR. **J Gerontol** 1989 Sep;44(5):B107–9 (33 ref.)

Chronic beta–adrenoceptor antagonist treatment modulates human cardiac and vascular beta–adrenoceptor density in a subtype–selective fashion. Brodde OE, et al. **J Hypertens Suppl** 1988 Dec;6(4):S497–500

Cellular mechanism of atrial natriuretic factor secretion by cultured rat cardiocytes. Hirata Y, et al. **J Hypertens Suppl** 1988 Dec;6(4):S295–6

Soluble factor from the hypertrophied left ventricle of dogs in experimental hypertension: ability to stimulate protein metabolism of cultured heart cells. Honda M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S125–7

Steroid binding to cardiac type I receptors: in vivo studies. Pearce PT, et al. **J Hypertens Suppl** 1988 Dec;6(4):S131–3

Effects of the angiotensin converting enzyme inhibitor, ramipril, in isolated ischaemic rat heart are abolished by a bradykinin antagonist. Schölkens BA, et al. **J Hypertens Suppl** 1988 Dec;6(4):S25–8

Iron loading modifies the fatty acid composition of cultured rat myocardial cells and liposomal vesicles: effect of ascorbate and alpha–tocopherol on myocardial lipid peroxidation. Link G, et al. **J Lab Clin Med** 1989 Sep; 114(3):243–9

Effects of lysophosphatidylcholine on cultured heart cells: correlation of rate of uptake and extent of accumulation with cell injury. Sedlis SP, et al. **J Lab Clin Med** 1988 Dec;112(6):745–54

Synthesis of a tritium–labeled indolidan analogue and its use as a radioligand for phosphodiesterase–inhibitor cardiotonic binding sites. Robertson DW, et al. **J Med Chem** 1989 Jul; 32(7):1476–80

Evidence for high molecular weight Na–Ca exchange in cardiac sarcolemmal vesicles. Hale CC, et al. **J Membr Biol** 1988 Dec;106(3):211–8

Predominance of poorly reopening single Na+ channels and lack of slow Na+ inactivation in neonatal cardiocytes. Kohlhardt M, et al. **J Membr Biol** 1988 Aug;103(3):283–91

Heart and lung metabolism. US–USSR joint symposium. September 1–3, 1987, Asheville, NC, U.S.A. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:1–179

10th European Section Meeting, International Society for Heart Research. September 7–9, 1989, Rotterdam, The Netherlands. Abstracts. **J Mol Cell Cardiol** 1989 Jul;21 Suppl 4:S1–91

Increase of cyclic AMP in subcellular fractions of rat heart muscle after beta–adrenergic stimulation: prenalterol and isoprenaline caused different distribution of bound cyclic AMP. Aass H, et al. **J Mol Cell Cardiol** 1988 Sep; 20(9):847–60

Characterization of avian angiotensin II cardiac receptors: coupling to mechanical activity and phosphoinositide metabolism. Baker KM, et al. **J Mol Cell Cardiol** 1989 Apr; 21(4):375–82

Different phosphorylation patterns of cardiac myosin light chains using ATP and ATP gamma S as substrates. Bialojan C, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):575–8

Biochemical characteristics of mammalian myocardia. Blank S, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):367–73

Diabetes–induced changes of proteins synthesized by adult cardiac myocytes are partially reversed by insulin. Cagliero E, et al. **J Mol Cell Cardiol** 1988 May;20(5):427–34

Interaction of amiodarone and desethylamiodarone with the cardiac muscarinic receptor in vitro. Colvin RA, et al. **J Mol Cell Cardiol** 1989 May;21(5):453–60

Contribution of S–adenosylhomocysteine to cardiac adenosine formation. Deussen A, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):773–82

Alpha 1 adrenoceptors in the ischaemic and reperfused myocardium. Dillon JS, et al. **J Mol Cell Cardiol** 1988 Aug; 20(8):725–35

Characterization of alpha 1–adrenergic receptors in perfused rat heart. Edwards SJ, et al. **J Mol Cell Cardiol** 1988 Nov; 20(11):1025–34

Localization of types I, III and IV collagen mRNAs in rat heart cells by in situ hybridization. Eghbali M, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):103–13

Cardiac derived neutrophil chemotactic factors; preliminary biochemical characterization. Elgebaly SA, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):585–93

The role of polyamines in beta–adrenergic stimulation of calcium influx and membrane transport in rat heart. Fan CC, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):789–99

Contribution of the ryanodine–sensitive fraction to capabilities of cardiac SR. Feher JJ, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1107–18

Protective effect of a prostacyclin–mimetic on the ischaemic–reperfused rabbit myocardium. Ferrari R, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1095–106

The interpretation of experimentally obtained values of the cytoplasmic phosphorylation potential. Fiolet JW. **J Mol Cell Cardiol** 1988 Dec;20(12):1203–9 (40 ref.)

Fatty acid binding protein of cardiac muscle in spontaneously hypertensive rats: effect of hypertrophy and its regression. Fujii S, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):779–87

Autonomic receptor interactions in isolated cardiac myocytes from hypertensive rats. Grammas P, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):807–15

The effect of pH on the calcium dependence of calcium accumulation in dog cardiac muscle sarcoplasmic reticulum. Grassi de Gende AO. **J Mol Cell Cardiol** 1988 Dec;20(12):1087–93

Myocardial performance and free energy of ATP–hydrolysis in isolated rat hearts during graded hypoxia, reoxygenation and high Ke+–perfusion. Griese M, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1189–201

Synchronous depletion of ATP in isolated adult rat heart cells. Haworth RA, et al. **J Mol Cell Cardiol** 1988 Sep; 20(9):837–46

Metabolism of dioctanoylglycerol by isolated cardiac myocytes. Hee–Cheong M, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):829–37

Reconstitution of ionic channels from human heart. Hill JA Jr, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):315–22

Fluctuations of membrane potential in isolated single ventricular myocytes of guinea–pig upon resumption of oxidative phosphorylation. Honjo H, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):241–52

New views of human cardiac beta–adrenoceptors. Jones CR, et al. **J Mol Cell Cardiol** 1989 May;21(5):519–35 (117 ref.)

Adaptation of cardiac contractile function to conditions of chronic energy deficiency. Kapelko VI, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:79–83

Cytosolic glucocorticoid receptors in the developing rat heart. Katz SE, et al. **J Mol Cell Cardiol** 1988 Apr; 20(4):323–8

Doxorubicin–induced calcium release from cardiac sarcoplasmic reticulum vesicles. Kim DH, et al. **J Mol Cell Cardiol** 1989 May;21(5):433–6

Leakage of heart fatty acid binding protein with ischemia and reperfusion in the rat. Knowlton AA, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):577–83

The mechanism of respiratory control in the in vivo heart. Koretsky AP, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:59–66

Identification and immunolocalization of a new component of human cardiac muscle intercalated disc. Koteliansky VE, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:23–9

Energy metabolism in the perfused, arrested rabbit heart. Kotsanas G, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):211–21

Sarcolemmal calcium kinetics in the neonatal heart. Meno H, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):585–91

Cholinergic properties of rat atrial subcellular preparations. Meyer EM, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):305–13

Myocardial dysfunction and ultrastructural alterations mediated by oxygen metabolites. Miki S, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1009–24

Chronic hypertension changes myosin isoenzyme pattern and decreases myosin phosphorylation in the rat heart. Morano I, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):875–86

Synthesis of pyrimidine nucleotides in rat myocardium: potential role of blood cytidine. Olivares J, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):313–22

Autonomic receptor characterization in cultured adult rat cardiac myocytes: morphologic–functional correlation. Oriold Dereski M, et al. **J Mol Cell Cardiol** 1988 Aug; 20(8):701–10

Heart energetics: a framework for ion flux analysis. Ponce–Hornos JE. **J Mol Cell Cardiol** 1989 Jan;21(1):115–7

Inhibition of 3H–quinuclidinyl benzylate binding to cardiac muscarinic receptor by long chain fatty acids can be attenuated by ligand occupation of the receptor. Rauch B, et al. **J Mol Cell Cardiol** 1989 May;21(5):495–506

Identification of and changes in the expression of troponin T isoforms in developing avian and mammalian heart. Sabry MA, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):85–91
Quantitative evaluation of relationship between cardiac energy metabolism and post-ischemic recovery of contractile function. Saks VA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:67–78
Substrate oxidation by adult cardiomyocytes in long-term primary culture. Spahr R, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):175–85
Diltiazem and verapamil reduce the loss of adenine nucleotide metabolites from hypoxic hearts. Takeo S, et al. **J Mol Cell Cardiol** 1988 May;20(5):443–56
The cytoplasmic free energy of ATP hydrolysis in isolated rod-shaped rat ventricular myocytes. ter Welle HF, et al. **J Mol Cell Cardiol** 1988 May;20(5):435–41
Signal-transducing GTP-binding proteins of mammalian heart and lungs. Tkachuk VA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:91–5
Biochemical and functional effects of nucleoside transport inhibition in the isolated cat heart. Van Belle H, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):797–805
The myocardial content of fatty acids and phospholipids during the calcium paradox. van der Vusse GJ, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):617–23
Functional state of myofibrils, mitochondria and bound creatine kinase in skinned ventricular fibers of cardiomyopathic hamsters. Veksler VI, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):329–42
Interaction between propranolol and calcium channel blockers in cardiac and vascular smooth muscle. Weishaar RE, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):897–903
Fatty acid regulation of glucose metabolism in the intact beating rat heart assessed by carbon-13 NMR spectroscopy: the critical role of pyruvate dehydrogenase. Weiss RG, et al. **J Mol Cell Cardiol** 1989 May;21(5):469–78
Glutamate degradation in the ischemic dog heart: contribution to anaerobic energy production. Wiesner RJ, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):49–59
Catecholamine release and potassium accumulation in the isolated globally ischemic rabbit heart. Wilde AA, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):887–96
Effects of polyoxyethylene-modified superoxide dismutase on reperfusion induced arrhythmias in isolated rat and guinea-pig hearts. Yamakawa T, et al. **J Mol Cell Cardiol** 1989 May;21(5):441–52
Analysis of actin and tropomyosin in hearts of cardiac mutant axolotls by two-dimensional gel electrophoresis, western blots, and immunofluorescent microscopy. Starr CM, et al. **J Morphol** 1989 Jul;201(1):1–10
Identification and pattern of expression of a developmental isoform of troponin I in chicken and rat cardiac muscle. Sabry MA, et al. **J Muscle Res Cell Motil** 1989 Feb; 10(1):85–91
Effects of mild stress on adrenal and heart catecholamines in male and female rats. Carlsson M, et al. **J Neural Transm** 1989;77(2–3):217–26
Effect of chronic haloperidol treatment on peripheral benzodiazepine binding sites in cerebral cortex of rats. Gavish M, et al. **J Neural Transm** 1988;74(2):109–16
Ontogeny of the GTP-binding protein Go in rat brain and heart. Asano T, et al. **J Neurochem** 1988 Dec;51(6):1711–6
Effects of chronic chlorpromazine treatment on peripheral benzodiazepine binding sites in heart, kidney, and cerebral cortex of rats. Gavish M, et al. **J Neurochem** 1989 May; 52(5):1553–8
Calcitonin gene-related peptide-binding sites of porcine cardiac muscles and coronary arteries: solubilization and characterization. Sano Y, et al. **J Neurochem** 1989 Jun; 52(6):1919–24
Acetylcholine receptor-like molecules are found in both synaptic and extrasynaptic clusters on the surface of neurons in the frog cardiac ganglion. Sargent PB, et al. **J Neurosci** 1989 Mar;9(3):1062–72
Effect of ribose on thallium-201 myocardial redistribution. Angello DA, et al. **J Nucl Med** 1988 Dec;29(12):1943–50
Validity of estimates of myocardial oxidative metabolism with carbon-11 acetate and positron emission tomography despite altered patterns of substrate utilization. Brown MA, et al. **J Nucl Med** 1989 Feb;30(2):187–93
Quantitative analysis of myocardial kinetics of 15-p-[iodine-125] iodophenylpentadecanoic acid. DeGrado TR, et al. **J Nucl Med** 1989 Jul:30(7):1211–8
Simple noninvasive quantification method for measuring myocardial glucose utilization in humans employing positron emission tomography and fluorine-18 deoxyglucose. Gambhir SS, et al. **J Nucl Med** 1989 Mar; 30(3):359–66
Assessment of myocardial oxidative metabolic reserve with positron emission tomography and carbon-11 acetate. Henes CG, et al. **J Nucl Med** 1989 Sep;30(9):1489–99
Enhanced binding of the hypoxic cell marker [3H]fluoromisonidazole in ischemic myocardium. Martin GV, et al. **J Nucl Med** 1989 Feb;30(2):194–201
Comparison of hypoxia and ouabain effects on the myocardial uptake kinetics of technetium-99m hexakis 2-methoxyisobutyl isonitrile and thallium-201. Meerdink DJ, et al. **J Nucl Med** 1989 Sep;30(9):1500–6
Myocardial kinetics of fluorine-18 misonidazole: a marker of hypoxic myocardium. Shelton ME, et al. **J Nucl Med** 1989 Mar;30(3):351–8
Comparison of 17-iodine-131 heptadecanoic acid kinetics from externally measured time-activity curves and from serial myocardial biopsies in an open-chest canine model. van Eenige MJ, et al. **J Nucl Med** 1988 Dec;29(12):1934–42
Accumulation of polymorphonuclear leukocytes in reperfused ischemic canine myocardium: relation with tissue viability assessed by fluorine-18-2-deoxyglucose uptake. Wijns W, et al. **J Nucl Med** 1988 Nov; 29(11):1826–32
Myocardial potassium balance during adrenergic stimulation. Ellingsen O. **J Oslo City Hosp** 1989 Apr–May; 39(4–5):39–51
Improved myocardial oxygen utilization following propranolol infusion in adolescents with postburn hypermetabolism. Minifee PK, et al. **J Pediatr Surg** 1989 Aug;24(8):806–10; discussion 810–1
Effect of lithium chloride on the neurotransmitter release from adrenergic nerve terminals of guinea-pig atria. Mantelli L, et al. **J Pharm Pharmacol** 1989 Mar;41(3):203–5
Prediction of acute myocardial disposition of antiarrhythmic drugs. Morgan DJ, et al. **J Pharm Sci** 1989 May;78(5):384–8
Regional O2 consumption and coronary flow during beta adrenoceptor stimulation in reperfused canine myocardium. Acad BA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):611–6
Characterization of the inhibitory effect of some antidepressant drugs on the outward transport of norepinephrine in the ischemic myocardium. Carlsson L, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):715–20
Voltage-dependent binding of dihydropyridine calcium channel blockers to guinea pig ventricular myocytes. Kamp TJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1240–7
Aging: ouabain-sensitive 86Rb+ uptake rate and responsiveness to digoxin in rat left atrial muscle. Kennedy RH, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):104–10
Characterization of the adenosine receptor in cultured embryonic chick atrial myocytes: coupling to modulation of contractility and adenylate cyclase activity and identification by direct radioligand binding. Liang BT. **J Pharmacol Exp Ther** 1989 Jun;249(3):775–84
Release of N-[3H]methylscopolamine from isolated guinea pig atria is controlled by diffusion and rebinding. Lüllmann H, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):710–4
Contrasting effects of verapamil and nifedipine on pH of ischemic myocardium in the dog. Moo Y, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):654–60
Calmodulin and free oxygen radicals interaction with steady-state calcium accumulation and passive calcium permeability of cardiac sarcoplasmic reticulum. Okabe E, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):286–92
Uptake and hormonally induced hydrolysis of [3H]phosphatidyl choline in the isolated rabbit heart. Weis MT, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):614–20
Myocardial slice: a physiological approach to beta-adrenergic ([3H] CGP-12177) receptor binding in hamster and guinea pig heart. Watson-Wright WM, et al. **J Pharmacol Methods** 1989 Aug;22(1):37–47
Calcium concentration in the myoplasm of skinned ferret ventricular muscle following changes in muscle length. Allen DG, et al. **J Physiol (Lond)** 1988 Dec;407:489–503
Mechanism of release of calcium from sarcoplasmic reticulum of guinea-pig cardiac cells. Beuckelmann DJ, et al. **J Physiol (Lond)** 1988 Nov;405:233–55
Short- and long-latency muscarinic inhibition of noradrenaline release from rabbit atria induced by vagal stimulation. Habermeier-Muth A, et al. **J Physiol (Lond)** 1988 Jul;401:277–93
Left ventricular oxygen extraction during submaximal and maximal exertion in ponies. Manohar M. **J Physiol (Lond)** 1988 Oct;404:547–56
Oxygen-derived free radical damage in canine heart transplantation. Bando K, et al. **J Surg Res** 1989 Feb; 46(2):152–6
Uptake of perfusion imaging agents by transplanted hearts: an experimental study in rats. Bergsland J, et al. **J Surg Res** 1989 Feb;46(2):184–6
Effect of cannulation site on the primary determinants of myocardial oxygen consumption during left heart bypass. Cohen DJ, et al. **J Surg Res** 1989 Aug;47(2):159–65
Maturational difference in functional/metabolic sequelae of free radical formation on reperfusion. del Nido PJ, et al. **J Surg Res** 1989 Jun;46(6):532–6
Upgrading acellular to sanguineous cardioplegic efficacy. Illes RW, et al. **J Surg Res** 1989 Jun;46(6):543–8
A computer simulation of the effect of heart rate on ion concentrations in the heart. Boyett MR, et al. **J Theor Biol** 1988 May 7;132(1):15–27
New technique for analysis of cardiac energetics using a modified Fenn equation. Ando H, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):565–74
Differential ventricular ischemic injury: an experimental model of right ventricular failure with a variable degree of left ventricular dysfunction. Morris JJ 3d, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):590–9
Effect of triiodothyronine (T3) on myocardial high energy phosphates and lactate after ischemia and cardiopulmonary bypass. An experimental study in baboons. Novitzky D, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):600–7
Developmental changes in reperfusion injury. Comparison of intracellular ion accumulation in ischemic and cardioplegic arrest. Pridjian AK, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):577–81
Comparison of the metabolic response of the hypertrophic and the normal heart to hypothermic cardioplegia. The effect of temperature. Rabinov M, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):43–9
Right and left ventricular metabolites. Teoh KH, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):725–9
Impairment of mitochondrial respiratory activity in the early ischemic myocardium—with special reference to electron transport system. Geshi E, et al. **Jpn Circ J** 1988 Jun; 52(6):535–42
Alterations of the cardiovascular and renal prostaglandins and thromboxanes system in prehypertensive spontaneously hypertensive rats. Ishimitsu T, et al. **Jpn Circ J** 1989 Apr; 53(4):307–12
Serial myocardial lactate metabolic changes after intracoronary thrombolysis in evolving myocardial infarction. Kodama K, et al. **Jpn Circ J** 1988 Jul; 52(7):695–701
Augmentation of eicosanoids in ischemic heart muscle in dogs: its role in the deterioration of the ischemic lesion. Shibata N, et al. **Jpn Circ J** 1988 Jul;52(7):673–83
Modification of enzyme activities concerned with collagen metabolism in the heart of spontaneously hypertensive and aortic-constricted rats. Falcy C, et al. **Jpn Heart J** 1989 Jan;30(1):65–76
Direct formation of angiotensin II without renin or converting enzyme in the ischemic dog heart. Gondo M, et al. **Jpn Heart J** 1989 Mar;30(2):219–29
Clinical significance of stress-induced ST segment elevation in patients with previous anterior myocardial infarction. Analysis of lactate metabolism with atrial pacing. Hiyamuta K. **Jpn Heart J** 1988 May;29(3):279–94
Effects of procainamide and disopyramide on long chain acyl carnitine and long chain acyl CoA concentrations in the ischemic heart. Kobayashi A, et al. **Jpn Heart J** 1988 Nov; 29(6):831–40
Effects of acylcarnitine-transferase inhibitors on adenine nucleotide metabolism and ischemic tissue injury in isolated perfused rat heart. Shikama H, et al. **Jpn Heart J** 1988 Sep;29(5):723–34
Myocardial mechanical and myosin isoenzyme alterations in streptozotocin-diabetic rats. Takeda N, et al. **Jpn Heart J** 1988 Jul;29(4):455–63
Crossbridge model compatible with the linear relation between left ventricular oxygen consumption and pressure-volume area. Yasumura Y, et al. **Jpn Heart J** 1988 May;29(3):335–47
Developmental changes in the levels of substrates for cholera toxin-catalyzed and pertussis toxin-catalyzed ADP-ribosylation in rat cardiac cell membranes. Kojima M, et al. **Jpn J Pharmacol** 1988 Sep;48(1):23–30
Release of atrial natriuretic peptide from the isolated, blood-perfused right atrium of the dog. Motomura S, et al. **Jpn J Pharmacol** 1988 Jul;47(3):285–91
A new Ca-antagonist, CD-349, binding to the Ca-channel of rat myocardium and brain and hog coronary artery. Muramatsu M, et al. **Jpn J Pharmacol** 1988 Dec; 48(4):453–62
The first demonstration of CGRP-immunoreactive fibers in canine hearts: coronary vasodilator, inotropic and chronotropic effects of CGRP in canine isolated, blood-perfused heart preparations. Sugiyama A, et al. **Jpn J Pharmacol** 1989 Aug;50(4):421–7
Binding characteristics of 3H-CGP12177 to beta-adrenoceptors in rat myocardial membranes. Tsuchihashi H, et al. **Jpn J Pharmacol** 1989 Jan;49(1):11–9
Efficiencies from consumed O2 and pressure-volume area to work of in situ dog heart. Nozawa T, et al. **Jpn J Physiol** 1988;38(5):713–28
Fatty acid oxidation in the myocardium: effects of parathyroid hormone and CRF. Smogorzewski M, et al. **Kidney Int** 1988 Dec;34(6):797–803
Nicotine-induced release of noradrenaline and neuropeptide Y in guinea pig heart. Richardt G, et al. **Klin Wochenschr** 1988;66 Suppl 11:21–7
Increase in myocardial Gi-proteins in heart failure. Neumann J, et al. **Lancet** 1988 Oct 22;2(8617):936–7
Effects of specific alpha-adrenoceptive agents on extraneuronal uptake (uptake2) of isoproterenol in perfused rat heart. Akimoto Y, et al. **Life Sci** 1989;44(14):945–50
Secretion of atrial natriuretic peptide (ANP) from fish atrial and ventricular myocytes in tissue culture. Baranowski RL, et al. **Life Sci** 1989;44(3):187–91
Chronic inhibition of fatty acid oxidation: new model of diastolic dysfunction. Bressler R, et al. **Life Sci** 1989; 44(25):1897–906
Identification of a approximately 170K subunit of the cardiac calcium channel using a monoclonal antibody to the skeletal muscle dihydropyridine receptor. Chang RJ, et al. **Life Sci** 1988;43(13):1055–61
Effects of stress and chronic propranolol infusion on cardiac beta-receptor function in the Maudsley Reactive and Non-Reactive rat strains. Christ GJ, et al. **Life Sci** 1988; 43(22):1773–84
Uptake and catabolism of N6, 2'-O-dibutyryl cyclic AMP by the perfused heart. Drummond GI, et al. **Life Sci** 1974 Jul 15;15(2):319–28
Characterization of muscarinic receptor subtypes in human tissues. Giraldo E, et al. **Life Sci** 1988;43(19):1507–15
Cholera toxin enhances ischemia-induced arrhythmias in the isolated rat heart—involvement of a guanine nucleotide binding protein (Gs). Huang XD, et al. **Life Sci** 1989; 45(8):679–83

Intracellular adenosine formation and its carrier-mediated release in cultured embryonic chick heart cells. Meghji P, et al. **Life Sci** 1988;43(23):1851-9

Increased 1,2-diacylglycerol content in myopathic hamster hearts at a prenecrotic stage. Okumura K, et al. **Life Sci** 1988;43(17):1371-7

AF-DX 116 discriminates heart from gland M2-cholinoceptors in man. Pitschner HF, et al. **Life Sci** 1989;45(6):493-8

The effect of dichloroacetate on the isolated no flow arrested rat heart. Racey-Burns LA, et al. **Life Sci** 1989; 44(26):2015-23

Norepinephrine turnover in iron deficiency: effect of two semi-purified diets. Smith SM, et al. **Life Sci** 1989; 45(4):341-7

The organ distribution of liposome-encapsulated and free cobalt in rats. Liposomes decrease the cardiac uptake of the metal. Szebeni J, et al. **Life Sci** 1989;45(8):729-36

Relationship between beta-adrenoceptors and coronary blood flow heterogeneity. Upsher ME, et al. **Life Sci** 1989; 44(17):1173-84

Effects of dietary n-3 polyunsaturated fatty acids on phospholipid composition and calcium transport in mouse cardiac sarcoplasmic reticulum. Croset M, et al. **Lipids** 1989 Apr;24(4):278-85

Effects of fish oil, corn oil and lard diets on lipid peroxidation status and glutathione peroxidase activities in rat heart. Nalbone G, et al. **Lipids** 1989 Mar;24(3):179-86

31P and 1H magnetic resonance spectroscopy of acute alcohol cardiac depression in rats. Auffermann W, et al. **Magn Reson Med** 1988 Sep;8(1):58-69

NMR characteristics of "visible" intracellular myocardial potassium in perfused rat hearts. Burstein D, et al. **Magn Reson Med** 1989 Jan;9(1):66-78

Myocardial creatine kinase exchange rates and 31P NMR relaxation rates in intact pigs. Martin JF, et al. **Magn Reson Med** 1989 Jul;11(1):64-72

Transmural metabolite distribution in regional myocardial ischemia as studied with 31P NMR. Robitaille PM, et al. **Magn Reson Med** 1989 Apr;10(1):108-18

Spectroscopic imaging and spatial localization using adiabatic pulses and applications to detect transmural metabolite distribution in the canine heart. Robitaille PM, et al. **Magn Reson Med** 1989 Apr;10(1):14-37

Effect of ferric iron and desferrioxamine on lipofuscin accumulation in cultured rat heart myocytes. Marzabadi MR, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):145-57

Age-related accumulation of lipofuscin in myocardium of Japanese monkey (Macaca fuscata). Nakano M, et al. **Mech Ageing Dev** 1989 Jul;49(1):41-8

Are there stress resistant and susceptible myocardia? Knight VA. **Med Hypotheses** 1988 Nov;27(3):201-4

Effects of insulin and streptozotocin-diabetes on isoproterenol-stimulated cyclic AMP production in myocytes isolated from rat heart. Almira EC, et al. **Metabolism** 1989 Feb;38(2):102-3

Purification of Ca2+ release channel (ryanodine receptor) from heart and skeletal muscle sarcoplasmic reticulum. Inui M, et al. **Methods Enzymol** 1988;157:490-505

Nipradilol, a beta-adrenoceptor antagonist having a vasodilatory action, attenuates myocardial acidosis induced by coronary artery occlusion in dogs. Hiro T, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):373-8

Modification of anionic sites in myocardial capillary basal laminae of diabetic rats. Fischer VW. **Microvasc Res** 1989 Jan;37(1):42-52

Consequences of chronic K+ depletion for the ionic composition of brain, heart, skeletal muscle and cerebrospinal fluid. Schröck H, et al. **Miner Electrolyte Metab** 1989;15(3):171-7

Lipid metabolism in normoxic and ischemic heart. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):1-209

Modeling of palmitate transport in the heart. Bassingthwaighte JB, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):51-8 (19 ref.)

Influence of exercise on cardiac and skeletal muscle myofibrillar proteins. Belcastro AN, et al. **Mol Cell Biochem** 1988 Sep;83(1):27-36

Clinical applications of assessments of myocardial substrate utilization with positron emission tomography. Bergmann SR. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):201-9 (54 ref.)

The role of the endothelium in myocardial lipoprotein dynamics. Cryer A. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):7-15 (54 ref.)

Is there evidence of a role of the phosphoinositol-cycle in the myocardium? de Chaffoy de Courcelles D. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):65-72 (87 ref.)

Variables of myocardial backdiffusion, determined with 17-iodo-131 heptadecanoic acid in the normal dog heart. Duwel CM, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):191-4

Oxidation of proteins in rat heart and lungs by polymorphonuclear leukocyte oxidants. Fliss H. **Mol Cell Biochem** 1988 Dec;84(2):177-88

Fatty acid oxidation and myocardial phospholipase A2 activity. Franson RC, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):155-9

Intracellular transport of lipids. Glatz JF, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):37-44 (38 ref.)

Effect of calmodulin on sarcoplasmic reticular Ca2+-transport in the aging heart. Heyliger CE, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):75-9

Alterations in fatty acid oxidation in ischemic and reperfused myocardium. Huang XQ, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):145-53 (67 ref.)

Intramyocardial fate of 15-p-iodophenyl-beta-methylpentadecanoic acid (IMPPA): is it a good tracer of fatty acid myocardial uptake? Humbert T, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):195-200

Fatty acid turnover in the ischaemic compared to the non-ischaemic human heart. Kaijser L, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):181-4

Na+/Ca2+ exchange of isolated sarcolemmal membrane: effects of insulin, oxidants and insulin deficiency. Kato M, et al. **Mol Cell Biochem** 1988 Sep;83(1):15-25

Effects of hypoxia on lipolysis in isolated rat myocardial cells. Larsen TS, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):139-44

Glucose oxidation is stimulated in reperfused ischemic hearts with the carnitine palmitoyltransferase 1 inhibitor, Etomoxir. Lopaschuk GD, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):175-9

Alpha-1-adrenergic stimulation of phosphoinositide breakdown in cultured neonatal rat ventricular myocytes. Meij JT, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):73-5

Effect of glucocorticoids on arachidonic acid metabolism and prostaglandin secretion by cultures of newborn rat heart cells. Millanvoye-Van Brussel E, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):123-7

Phospholipase C-evoked glycerol release in energy depleted rat myocardial cells. Myrmel T, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):107-11

Regulation of the ATP-dependent calcium uptake activity of heart sarcolemmal vesicles by endogenous cytosolic proteins. Narayanan N, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):143-53

Is fatty acid uptake in cardiomyocytes determined by physicochemical fatty acid partition between albumin and membranes? Rose H, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):31-6

Subcellular distribution, molecular dynamics and catabolism of plasmalogens in myocardium. Scherrer LA, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):97-105 (31 ref.)

Hormones and triacylglycerol metabolism under normoxic and ischemic conditions. Schoonderwoerd K, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):129-37 (72 ref.)

Regulation of Ca2+ influx in myocardial cells by beta adrenergic receptors, cyclic nucleotides, and phosphorylation. Sperelakis N, et al. **Mol Cell Biochem** 1988 Jul-Aug;82(1-2):19-28

Transmembrane transport of fatty acids in the heart. Stremmel W. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):23-9 (19 ref.)

Significance of myocardial eicosanoid production. van Bilsen M, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):113-21 (61 ref.)

Myocardial fatty acid homeostasis. van der Vusse GJ, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):1-6 (40 ref.)

Degradation of phospholipids and triacylglycerol, and accumulation of fatty acids in anoxic myocardial tissue, disrupted by freeze-thawing. van der Vusse GJ, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):83-90

Biochemistry of radioiodinated free fatty acids. Visser FC, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):185-90

Enhanced activity of the cardiac endocrine system during right ventricular hypertrophy. Oehlenschlager WF, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):243-51

Determinants of stereospecific binding of type I antiarrhythmic drugs to cardiac sodium channels. Hill RJ, et al. **Mol Pharmacol** 1988 Nov;34(5):659-63

Muscarinic acetylcholine receptors linked to the inhibition of adenylate cyclase activity in membranes from the rat striatum and myocardium can be distinguished on the basis of agonist efficacy. Keen M, et al. **Mol Pharmacol** 1988 Dec;34(6):769-78

Electron microscopic localization of the beta-adrenergic receptor using a ferritin-alprenolol probe. Muntz KH, et al. **Mol Pharmacol** 1988 Oct;34(4):444-51

Atrial natriuretic factor [letter] Tait MJ. **N Z Med J** 1989 Apr 12;102(865):171

Properties of cardiac alpha- and beta-adrenoceptors in spontaneously hypertensive rats. Böhm M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):383-91

Preponderance of beta- over alpha-adrenoceptors in mediating the positive inotropic effect of phenylephrine in the ferret ventricular myocardium. Endoh M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):362-6

Characterization and presynaptic modulation of stimulation-evoked exocytotic co-release of noradrenaline and neuropeptide Y in guinea pig heart. Haass M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):71-8

Relations between beta-adrenoceptor occupancy and increases of contractile force and adenylate cyclase activity induced by catecholamines in human ventricular myocardium. Acute desensitization and comparison with feline ventricle. Kaumann AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):99-112

On minimum cyclic AMP formation rates associated with positive inotropic effects mediated through beta 1-adrenoceptors in kitten myocardium. Beta 1-specific and non-adrenergic stimulant effects of denopamine. Lemoine H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1-2):113-28

The antiadrenergic effect of neuropeptide Y on the ventricular cardiomyocyte. Millar BC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):426-9

Effect of phorbol esters and polymyxin B on modulation of noradrenaline release in mouse atria. Musgrave IF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):48-53

Effects of AN-132, a novel antiarrhythmic lidocaine analogue, and of lidocaine on membrane ionic currents of guinea-pig ventricular myocytes. Ono K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):221-9

ACTH increases noradrenaline release in the rabbit heart. Szabo B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct;338(4):368-72

Differential effects of verapamil and flunarizine on cardiac L-type and T-type Ca channels. Tytgat J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):690-2

Comparison of the muscarinic receptors in the coronary artery, cerebral artery and atrium of the pig. van Charldorp KJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):403-8

Methoctramine selectively blocks cardiac muscarinic M2 receptors in vivo. Wess J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):246-9

alpha-Fluoromethylhistidine decreases the histamine content of the rat right atrium under the influence of sympathetic activity. Yoshitomi I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):528-32

Membrane phospholipid polar heads influence the coupling of M2 muscarinic receptors to G proteins. Gies JP, et al. **Neurochem Res** 1988 Aug;13(8):737-42

Effects of beta-alanine treatment on the taurine and DNA content of the rat heart and retina. Lake N, et al. **Neurochem Res** 1988 Oct;13(10):1003-6

Increased content of immunoreactive Leu-enkephalin and alteration of delta-opioid receptor in hearts of spontaneously hypertensive rats. Dumont M, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):114-8

The presence and possible role of a galanin-like peptide in the mudpuppy heart. Parsons RL, et al. **Neuroscience** 1989; 29(3):749-59

Post-mortem muscular changes studied by nuclear magnetic resonance (NMR) spectroscopy--studies on the 31P-NMR spectrum of the myocardium after sudden death. Akaiwa T, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4-5):363-71

Influence of specific activity on myocardial uptake of 123I-mIBG in rats. Mock BH, et al. **Nucl Med Commun** 1988 Sep;9(9):663-7

Pacing and the non-invasive evaluation of myocardial fatty acid metabolism by means of 17-123I-heptadecanoic acid scintigraphy. Duwel CM, et al. **Nuklearmedizin** 1988 Oct; 27(5):204-8

Bioenergy recovery phenomenon in the myocardium following ischemia and factors contributing to the recovery studied by 31P magnetic resonance spectroscopy. Yoshiyama M. **Osaka City Med J** 1988 Oct;34(2):201-21

The reliability of rate-pressure product as an index of myocardial oxygen consumption in atrial synchronized versus fixed rate ventricular pacing. Nordlander R, et al. **PACE** 1989 Jun;12(6):917-21

Beta-adrenergic influence on increased myocardial oxygen consumption during hypoxemia in awake newborn lambs. Fisher DJ. **Pediatr Res** 1989 Jun;25(6):585-90

Maturation of calcium transport in cardiac sarcoplasmic reticulum. Mahony L. **Pediatr Res** 1988 Nov;24(5):639-43

A possible physiological role of the Ca-dependent protease calpain and its inhibitor calpastatin on the Ca current in guinea pig myocytes. Belles B, et al. **Pflugers Arch** 1988 Oct;412(5):554-6

Feline left ventricular oxygen consumption is not affected by volume expansion, ejection or redevelopment of pressure during relaxation. Duwel CM, et al. **Pflugers Arch** 1988 Sep;412(4):409-16

Endogenous adenosine improves work rate to oxygen consumption ratio in catecholamine stimulated isovolumic rat heart. Headrick J, et al. **Pflugers Arch** 1989 Feb; 413(4):354-8

The dual effects of ouabain on 45Ca2+ transport and contractility in adult rat ventricular myocytes. Horackova M, et al. **Pflugers Arch** 1988 Aug;412(3):277-84

Activation of atrial muscarinic K+ channels by low concentrations of beta gamma subunits of rat brain G protein. Kurachi Y, et al. **Pflugers Arch** 1989 Jan; 413(3):325-7

Effect of Bay K8644 on cytosolic calcium transients and contraction in embryonic cardiac ventricular myocytes. Lee HC, et al. **Pflugers Arch** 1989 Jan;413(3):225-33

The effects of repeated exposure to anoxia on intracellular calcium, glycogen and lactate in isolated ferret heart muscle. Lee JA, et al. **Pflugers Arch** 1988 Nov;413(1):83–9

Intracellular Ca modulates K–inward rectification in cardiac myocytes [published erratum appears in Pflugers Arch 1989 Apr;413(6):688] Mazzanti M, et al. **Pflugers Arch** 1989 Jan; 413(3):322–4

Different conductance states of the bursting Na channel in guinea–pig ventricular myocytes. Nilius B, et al. **Pflugers Arch** 1989 Jan;413(3):242–8

Properties of the bursting Na channel in the presence of DPI 201–106 in guinea–pig ventricular myocytes. Nilius B, et al. **Pflugers Arch** 1989 Jan;413(3):234–41

The use of the creatine kinase reaction to determine free energy change of ATP hydrolysis in anoxic cardiomyocytes. Siegmund B, et al. **Pflugers Arch** 1989 Feb; 413(4):435–7

Calcium–induced calcium release activates contraction in intact cardiac cells. Valdeolmillos M, et al. **Pflugers Arch** 1989 Apr;413(6):676–8

Oxygen uptake in saline–perfused rabbit heart is decreased to a similar extent during reductions in flow and in arterial oxygen concentration. van Beek JH, et al. **Pflugers Arch** 1989 May;414(1):82–8

Rate of decrease of myocardial O2 consumption due to cardiac arrest in anesthetized goats. Vergroesen I, et al. **Pflugers Arch** 1988 Dec;413(2):160–6

Glibenclamide inhibition of ATP–sensitive K+ channels and ischemia–induced K+ accumulation in the mammalian heart. Wilde AA, et al. **Pflugers Arch** 1989;414 Suppl 1:S176

Characterization of stress–induced alterations in [3H] Ro5–4864 binding to peripheral benzodiazepine receptors in rat heart and kidney. Drugan RC, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1015–20

Effect of (1–24)adrenocorticotrophin on the uptake of 3H–norepinephrine by the rat atria. Mehrabani PA, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):391–6

New positive inotropic agents acting by phosphodiesterase inhibition or alpha 1–adrenergic stimulation. von der Leyen H, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):329–37 (89 ref.)

Influence of long–term prenalterol treatment on the heart rate and the beta–adrenoceptor binding–sites in rat myocardium. Ahlner J, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):43–6

Allosteric stabilization of 3H–N–methylscopolamine binding in guinea–pig myocardium by an antidote against organophosphate intoxication. Jepsen K, et al. **Pharmacol Toxicol** 1988 Sep;63(3):163–8

Pinacidil uptake and effects in the isolated rabbit heart. Nielsen CB, et al. **Pharmacol Toxicol** 1989 Jan;64(1):14–9

Bepridil, myocardial accumulation kinetics and dynamic effects in the isolated rabbit heart. Nielsen–Kudsk F, et al. **Pharmacol Toxicol** 1988 Aug;63(2):122–8

The interaction of RS 86, a centrally acting m–cholinoceptor agonist with M1 and M2 receptors in rat brain and rat heart, respectively. Schubert T, et al. **Pharmacopsychiatry** 1988 Nov;21(6):321–3

Effect of isoprenaline on 85Sr accumulation in the myocardium of the adult rat. Oštádalová I, et al. **Physiol Bohemoslov** 1988;37(4):351–3

Postnatal development of the high–affinity uptake of choline and of the synthesis of acetylcholine in rat heart atria. Slavíková J, et al. **Physiol Bohemoslov** 1989;38(2):163–70

Comments on myocardial metabolism. Ionescu V, et al. **Physiologie** 1988 Oct–Dec;25(4):233–52 (16 ref.)

The effect of buthobendin on glycolysis in rabbit myocardial slices in vitro. Marchut E, et al. **Pol J Pharmacol Pharm** 1988 Mar–Apr;40(2):167–72

Manipulation of stretch–induced atriopeptin prohormone release and processing in the perfused rat heart. Ito T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8365–9

Ca2+ transient, Mg2+, and pH measurements in the cardiac cycle by 19F NMR. Kirschenlohr HL, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9017–21

Direct measurement of nitroxide pharmacokinetics in isolated hearts situated in a low–frequency electron spin resonance spectrometer: implications for spin trapping and in vivo oxymetry. Rosen GM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7772–6

BRL 34915 (cromakalim) activates ATP–sensitive K+ current in cardiac muscle. Sanguinetti MC, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8360–4

Free creatine available to the creatine phosphate energy shuttle in isolated rat atria. Savabi F. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7476–80

Acidic fibroblast growth factor mRNA is expressed by cardiac myocytes in culture and the protein is localized to the extracellular matrix. Weiner HL, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2683–7

Comparative 13C and 31P NMR assessment of altered metabolism during graded reductions in coronary flow in intact rat hearts. Weiss RG, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6426–30

Non–mitochondrial calcium ion regulation in rat ventricular myocytes. Fry CH, et al. **Proc R Soc Lond [Biol]** 1989 Feb 22;236(1282):53–77

Characterization of cardiac A1 adenosine receptors with the antagonist radioligand 8–cyclopentyl–1,3[3H]–dipropylxanthine. Leid M, et al. **Proc West Pharmacol Soc** 1988;31:103

Antimuscarinic oxotremorine analogs distinguish high and low affinity agonist states of muscarinic receptors. Ringdahl B, et al. **Proc West Pharmacol Soc** 1988;31:57–60

Effects of chronic cocaine administration on rat cardiac and splenic norepinephrine levels. St. John–Allan K, et al. **Proc West Pharmacol Soc** 1989;32:61–3

Comparison of the maximum capacity for active sodium–potassium transport in the left and right ventricle of mammalian heart. Bányász T, et al. **Prog Clin Biol Res** 1988;268B:233–8

Regulation of cardiac glycoside receptors with different affinities for cardiac glycosides in cultured rat heart cells. Berger HJ, et al. **Prog Clin Biol Res** 1988;268B:345–52

Dynamics of prostacyclin and thromboxane during myocardial ischemia. Röth E, et al. **Prog Clin Biol Res** 1989;308:907–11

The influence of mono– and divalent cations on the cardiac metabolism of arachidonic acid. Weis MT, et al. **Prostaglandins** 1989 Jun;37(6):707–23

Metabolic protection of the reperfused canine endocardium by the thromboxane synthetase inhibitor, dazoxiben. Pieper GM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul;33(1):13–22

Mechanisms and significance of calcium entry at positive membrane potentials in guinea–pig ventricular muscle cells. Terrar DA, et al. **Q J Exp Physiol** 1989 Mar;74(2):121–39

Collagen synthesis in CBA mouse heart after total thoracic irradiation. Murray JC, et al. **Radiother Oncol** 1988 Oct; 13(2):137–43

Characteristics of distension–induced release of immunoreactive atrial natriuretic peptide in isolated perfused rabbit atria. Cho KW, et al. **Regul Pept** 1988 Sep; 22(4):333–45

Effect of chronic hypoxia on cardiac beta–adrenergic and muscarinic receptors during maturation. Baker SP, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):307–15

Prevention of oxidative injury to cardiac phospholipid by membrane–active "stabilizing agents". Janero DR, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):163–73

Influence of experimental hyperthyroidism on blood and myocardial serotonin in rats. Noll B, et al. **Res Exp Med (Berl)** 1988;188(6):433–42

Effect of reperfusion on O2 supply/consumption balance in ischemic canine left ventricle. Upsher ME, et al. **Res Exp Med (Berl)** 1988;188(5):377–90

Effects of naloxone on cardiac energy metabolism in hypovolemic shock in rats. Kashimoto S, et al. **Resuscitation** 1989 Feb;17(1):33–8

Endogenous triacylglycerol utilization by the isolated rat atria. Varela A, et al. **Rev Esp Fisiol** 1988 Mar;44(1):87–91

Effects of verapamil on intracellular lipid accumulation in cat hearts with 3 h of regional–ischaemia. Jodalen H, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):55–61

Colloid versus crystalloid cardioplegia. A prospective, randomized clinical study. Lindberg H, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):127–33

Oxygen free radicals decrease survival time of isolated rat hearts. Semb AG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):135–8

Glucose and lactate balances in heart and leg after coronary surgery: influence of insulin infusion. Svensson S, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):145–50

Sarafotoxin, a novel vasoconstrictor peptide: phosphoinositide hydrolysis in rat heart and brain. Kloog Y, et al. **Science** 1988 Oct 14;242(4876):268–70

The adenosine Ri agonist, phenylisopropyladenosine, reduces high affinity isoproterenol binding to the beta–adrenergic receptor of rat myocardial membranes. Romano FD, et al. **Second Messengers Phosphoproteins** 1988;12(1):29–43

The coincidence of myocardial reperfusion injury and hydrogen peroxide production in the isolated rat heart. Brown JM, et al. **Surgery** 1989 Apr;105(4):496–501

Fatigue and cardiac and endocrine metabolic response to exercise after abdominal surgery. Christensen T, et al. **Surgery** 1989 Jan;105(1):46–50

Compartmentalizing chemomechanical transduction in the ejecting heart. Krukenkamp IB, et al. **Surgery** 1989 Aug; 106(2):239–46; discussion 246–7

Effects of exposing rat embryos in utero to physical or chemical teratogens are expressed later as enhanced induction of heat–shock proteins when embryonic hearts are cultured in vitro. Higo H, et al. **Teratogenesis Carcinog Mutagen** 1988;8(6):315–28

Intracellular pH, Na+– and K+–activities at the onset of St. Thomas' cardioplegia: a study with ionselective microelectrodes. Stinner B, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):247–53

Alkane production by isolated rat heart and lung. Dutta S, et al. **Toxicol Lett** 1988 Nov;44(1–2):55–64

Endocrine changes and metabolic responses. Novitzky D, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):33–8

Biochemical and immunological studies on the regulation of cardiac and neuronal muscarinic acetylcholine receptor number and function Subers EM, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:25–8 (14 ref.)

The effect of a diet with a high or low content of vitamin E on different skeletal muscles and myocardium in pigs. Jensen M, et al. **Zentralbl Veterinarmed [A]** 1988 Aug; 35(7):487–97

[Catecholamines—therapeutic and adverse effects on the heart] Steinmann CM. **S Afr Med J** 1989 Jul 1;76(1):31–3 (25 ref.) (Eng. Abstr.) (Afr)

[The effects of acupuncture at "Renzhong" point on hemorrhagic shock's myocardial glycogen and phosphorylase. A histochemical study] Xia YQ, et al. **Chen Tzu Yen Chiu** 1988;13(4):354–7 (Eng. Abstr.) (Chi)

[Lipid peroxidation and myocardial reperfusion injury in open heart surgery] Chen BT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):212–4 (Chi)

[Histamine contents in hearts and whole blood during early myocardial ischemia in 3 rodents] Li CG, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):239–42 (Eng. Abstr.) (Chi)

[Effects of total flavones of Hippophae rhamnoides L on cultured rat heart cells and on cAMP level and adenylate cyclase in myocardium] Liu FM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):539–42 (Eng. Abstr.) (Chi)

[Effects of protocatechuic acid and propranolol on myocardial metabolism and infarct size in dogs with acute myocardial infarction] Rao MR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):27–30 (Eng. Abstr.) (Chi)

[The relationship between coronary artery stenosis and myocardial metabolism of oxygen demand in dogs] Chen SL, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):272–7 (Eng. Abstr.) (Chi)

[Advances in myocardial calcium paradox research] Gao ZP, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):370–2 (29 ref.) (Chi)

[Effects of nitrendipine on coronary flow and myocardial oxygen and carbon dioxide metabolism in dogs] Rao MR, et al. **Yao Hsueh Hsueh Pao** 1988 Feb;23(2):100–3 (Eng. Abstr.) (Chi)

[Digoxin receptors in myocardial membranes in pressure loading of the left ventricle and in experimental thyrotoxicosis] Köbel F, et al. **Cesk Fysiol** 1989;38(2):183–6 (Cze)

[Contribution of nuclear magnetic resonance spectroscopy of phosphorus–31 and carbon–13 in the study of myocardial metabolism] Bernard M, et al. **Arch Mal Coeur** 1988 Oct; 81 Spec No:61–8 (Eng. Abstr.) (Fre)

[Intermediate myocardial metabolism. Changes in ischemia, diabetes and hyperthyroidism] Feuvray D, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:29–33 (Eng. Abstr.) (Fre)

[Lactates, amino acids, other derivatives and provocation tests] Louisot P. **Arch Mal Coeur** 1988 Oct;81 Spec No:9–22 (Eng. Abstr.) (Fre)

[Phenotype changes in myocardial proteins in hemodynamic overloads] Mercadier JJ, et al. **Arch Mal Coeur** 1988 Oct; 81 Spec No:23–7 (Eng. Abstr.) (Fre)

[Atraumatic approach in myocardial perfusion, metabolism and receptors by positron emission tomography] Syrota A. **Arch Mal Coeur** 1988 Oct;81 Spec No:53–9 (Eng. Abstr.) (Fre)

[Laser fluorimetry of NADH] Toussaint M, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:47–51 (Eng. Abstr.) (Fre)

[Myocardial metabolism as affected by propofol in geriatric patients. A comparison with etomidate] Larsen R, et al. **Anaesthesist** 1988 Aug;37(8):510–6 (Eng. Abstr.) (Ger)

[The effect of adrenaline and noradrenaline on the oxygen supply of the myocardium during cardiopulmonary resuscitation] Lindner KH, et al. **Anaesthesist** 1989 May; 38(5):245–50 (Eng. Abstr.) (Ger)

[The effect of pancuronium and norcuron on hemodynamics, coronary circulation and myocardial oxygen consumption in coronary surgery patients] Günnicker M, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):88–93 (Eng. Abstr.) (Ger)

[Effect of preoperative continuous nifedipine maintenance medication on hemodynamics and myocardial lactate extraction in coronary surgery patients] Rieke H, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):297–302 (Eng. Abstr.) (Ger)

[Elementary properties and the interaction of single myocardial Na+ channels with antiarrhythmic drugs] Kohlhardt M. **Arzneimittelforschung** 1989 Jan;39(1A):126–9 (30 ref.) (Eng. Abstr.) (Ger)

[Tomographic functional diagnosis in nuclear medicine: determination of regional reserves and balances] Büll U, et al. **Nuklearmedizin** 1989 Apr;28(2):96–9 (49 ref.) (Ger)

[Expanded evaluation possibilities of 123I–heptadecanoic acid metabolic studies of the myocardium using parametric scintigraphy] Hliscs R, et al. **Radiol Diagn (Berl)** 1988; 29(3):496–8 (Ger)

[Modification of vascular resistance and O2 utilization by prostaglandin E1] Stark G, et al. **Vasa Suppl** 1988;26:116–9 (Eng. Abstr.) (Ger)

[Changes in fatty acid metabolism in dilated cardiomyopathy and hypertrophic cardiomyopathy in childhood] Thies WR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):8–11 (Eng. Abstr.) (Ger)

[Hyperthyroidism and its relation to heart function] Marek H, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):54–7 (Eng. Abstr.) (Ger)

[Validation of indirect myocardial parameters of oxygen consumption in patients with normal and pathologically changed ventricular function] Kahles H, et al. **Z Kardiol** 1989 May;78(5):285–93 (Eng. Abstr.) (Ger)

[Reduced myocardial fatty acid utilization in coronary heart disease following symptom limited ergometric stress.

Detection of pathologic metabolic patterns using iodine-123-phenylpentadecanoic acid and sequential SPECT] Reske SN, et al. **Z Kardiol** 1989 Apr;78(4):262–70 (Eng. Abstr.) (Ger)

[The cGMP content of cultivated heart muscle cells] Wallukat G. **Z Med Lab Diagn** 1989;30(1):6–7 (Ger)

[Mid-term effects of l-carnitine on the lipidogram of rabbits with surgically denervated heart] Bononi P, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):255–8 (Eng. Abstr.) (Ita)

[Myocardial distribution of C-14 lidocaine and C-14 propafenone in relation to regional myocardial blood flow in a model of chronic-phase myocardial infarct] Naccarella F, et al. **Cardiologia** 1988 May;33(5):453–8 (Eng. Abstr.) (Ita)

[Drug effects on myocardial oxygen consumption, systolic arterial pressure, diastolic arterial pressure and heart rate at rest and during exercise: comparison of enalapril and captopril] Striano U, et al. **Cardiologia** 1988 Sep;33(9):841–6 (Eng. Abstr.) (Ita)

[The role of calcium in striated cardiac and vascular smooth muscle cells] D'Agostino F. **Clin Ter** 1988 Feb 29; 124(4):303–13 (35 ref.) (Eng. Abstr.) (Ita)

[Localization of atrial natriuretic peptide in the heart. Immunohistochemical and northern blot analyses] Mochizuki N. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):737–45 (Eng. Abstr.) (Jpn)

[Myocardial blood flow and glucose metabolism in patients with myocardial infarction evaluated by positron emission tomography: comparison with left ventriculography] Fudo T, et al. **J Cardiol** 1988 Mar;18(1):13–20 (Eng. Abstr.) (Jpn)

[Assessment of myocardial circulation and metabolism using positron CT] Shishido F, et al. **J Cardiol** 1987;17 Suppl 15:61–3 (Eng. Abstr.) (Jpn)

[Assessment of regional myocardial blood flow and energy metabolism] Yonekura Y, et al. **J Cardiol** 1987;17 Suppl 15:65–9 (Eng. Abstr.) (Jpn)

[Myocardial uptake of 125I-BMIPP in rats treated with adriamycin] Ogata M. **Kaku Igaku** 1989 Jan;26(1):69–76 (Eng. Abstr.) (Jpn)

[Theoretical analysis of ventricular energetics by a framework of ventriculo-arterial coupling] Yamaguchi I, et al. **Kokyu To Junkan** 1989 Apr;37(4):405–8 (Jpn)

[The effects of dopamine and amrinone on myocardial oxygen demand-supply relationship in dogs with coronary artery stenosis] Fujigaki T. **Masui** 1989 Jan;38(1):41–52 (Eng. Abstr.) (Jpn)

[Effects of acute hypoxia on cardiovascular dynamics, myocardial metabolism and ECG in dogs] Kasuda H, et al. **Masui** 1989 Mar;38(3):300–11 (Eng. Abstr.) (Jpn)

[The effect of magnesium containing cardioplegia by kinetic analysis of calcium and magnesium in myocardial tissue] Abe H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2248–54 (Eng. Abstr.) (Jpn)

[The results of clinical application of myocardial antimony pH monitor in 50 patients underwent open heart surgery—their evaluation by multivariate analysis] Mashiko K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2163–9 (Eng. Abstr.) (Jpn)

[Clinical study of blood cardioplegia—for aerobic metabolism during aortic cross-clamping] Okamura Y. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):287–96 (Eng. Abstr.) (Jpn)

[Accelerated myocardial metabolic and functional recovery with terminal nicorandil-mg cardioplegia in experimental heart transplantation] Orita H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2188–93 (Eng. Abstr.) (Jpn)

[Experimental studies on evaluation of myocardial viability using continuous intramyocardial pH measurements during hypothermic heart preservation] Saitoh K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1307–10 (Eng. Abstr.) (Jpn)

[Increased lipid peroxides generation and calcium fluxes in hearts during reperfusion] Shimanuki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):688–93 (Eng. Abstr.) (Jpn)

[Assessment of myocardial oxygen consumption during hypothermic perfusion on arrested heart with perfluorochemical and blood cardioplegia] Tamura K. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):612–21 (Eng. Abstr.) (Jpn)

[The experimental study of oxygenated crystalloid cardioplegia assessed by intramyocardial PCO2 monitoring] Watanabe T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1238–44 (Eng. Abstr.) (Jpn)

[Effects of levocarnitine chloride (LC-80) on hemodynamics and myocardial metabolism in anesthetized open-chest dogs under normoxic or hypoxic conditions] Kirimoto T, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):119–31 (Eng. Abstr.) (Jpn)

[Nuclear magnetic resonance (NMR) spectroscopy and its application to biomedical research] Nakazawa M, et al. **Nippon Yakurigaku Zasshi** 1988 Jul;92(1):1–9 (49 ref.) (Eng. Abstr.) (Jpn)

[Effects of cibenzoline on myocardial ischemia] Ohmi H, et al. **Nippon Yakurigaku Zasshi** 1988 Nov;92(5):325–35 (Eng. Abstr.) (Jpn)

[Myocardial infarction and its limitations—hopes and dilemmas] Beręsewicz A. **Acta Physiol Pol** 1988;39 Suppl 32:53–102 (Pol)

[The role of oxygen-derived free radicals in ischemic heart damage] Karwatowska-Prokopczuk E, et al. **Kardiol Pol** 1988;31(12):786–98 (66 ref.) (Pol)

[Beta adrenergic receptors and thyroid hormones] Szymański FT. **Kardiol Pol** 1988;31(10):662–8 (33 ref.) (Pol)

[Silent myocardial anoxia. A change in the philosophy of diagnosing and treating ischemic heart disease?] Dubiel JP, et al. **Przegl Lek** 1989;46(2):301–5 (33 ref.) (Pol)

[Various determinants of arrhythmia] Tomaszewski R. **Wiad Lek** 1988 Dec 15;41(24):1684–9 (Pol)

[The effect of intra-aortic balloon counterpulsation on the metabolism of the heart in acute cardiac insufficiency] Mordashev BK, et al. **Anesteziol Reanimatol** 1989 Mar-Apr;(2):30–4 (Eng. Abstr.) (Rus)

[Characteristics of the metabolism of energy substrates in the myocardium during inhalation and intravenous general anesthesia] Ovchinnikov IV, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):39–41 (Eng. Abstr.) (Rus)

[A method of estimating the protein-synthesizing functions of human cardiomyocytes] Mamaev NN, et al. **Arkh Anat Gistol Embriol** 1989 May;96(5):69–72 (Rus)

[ATP-dependent transport of Ca2+ in myocardium sarcolemma vesicles and its activation by phorbol esters] Kurskil MD, et al. **Biokhimiia** 1988 Jun;53(6):960–4 (Eng. Abstr.) (Rus)

[Ca2+-phospholipid-dependent phosphorylation of vesicular preparations of myocardial sarcolemma] Vorobets ZD, et al. **Biokhimiia** 1988 Aug;53(8):1327–33 (Eng. Abstr.) (Rus)

[The content of lipid peroxidation products and the activity of antioxidant enzymes in the myocardium and liver of rats with various vitamin E allowances] Arkhipenko IuV, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):670–1 (Eng. Abstr.) (Rus)

[Energy and plastic metabolism of the heart muscle in rabbits undergoing thyroid irradiation with decimeter waves] Bogoliubov VM, et al. **Biull Eksp Biol Med** 1989 May; 107(5):570–2 (Eng. Abstr.) (Rus)

[Effects on anthracycline antibiotics on ionic currents and contraction of frog atrial fibrils associated with Na+/Ca2+ exchange] Bukel' TI, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):456–8 (Eng. Abstr.) (Rus)

[The state of lipid peroxidation and enzymes of calcium transport system in sarcoplasmic reticulum of ischemic myocardium] Bulgakov VG, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):272–4 (Eng. Abstr.) (Rus)

[Elimination of stress-induced activation of DNA reparative synthesis in the myocardium by increasing the load on the heart] Meerson FZ, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):655–7 (Eng. Abstr.) (Rus)

[Comparative evaluation of the effect of immobilization stress on the dynamics of resistance to induction of lipid peroxidation in internal organs and brain] Arkhipenko IuV, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1500–3 (Rus)

[Effect of dopamine on the blood supply and oxygen balance of the ischemic myocardium] Katkov EV, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):41–4 (Eng. Abstr.) (Rus)

[Effect of anti-angina agents on the intensity of lipid peroxidation in the myocardium and liver of rats under hyperbaric oxygenation] Nikolai SL. **Farmakol Toksikol** 1988 Sep-Oct;51(5):65–8 (Eng. Abstr.) (Rus)

[Effect of cardiac glycosides on myocardial contractile proteins] Shevchenko AI. **Farmakol Toksikol** 1989 Jan-Feb;52(1):40–2 (Eng. Abstr.) (Rus)

[Effect of the calcium antagonists ryodipine and verapamil on the carnitine-dependent metabolism of fatty acids in the rat heart] Simkhovich BZ, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):34–7 (Eng. Abstr.) (Rus)

[Supply of nonesterified fatty acids and their use by the myocardium in patients with paroxysmal tachycardia] Kuz'min AI, et al. **Fiziol Cheloveka** 1988 Sep-Oct; 14(5):812–7 (Rus)

[Metabolic characteristics of the myocardium and muscle tissue of the thigh in rats] Mardashko AA, et al. **Fiziol Zh** 1989 May-Jun;35(3):21–6 (Eng. Abstr.) (Rus)

[Effect of prostaglandin E2 on the development of myocardial damage in rats with various resistance to hypoxia] Markova EA, et al. **Fiziol Zh** 1989 Mar-Apr; 35(2):100–3 (Eng. Abstr.) (Rus)

[The action of heart factor H1 on the synthesis and uptake of dopamine and noradrenaline in the rat heart] Chiflikian MD, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):948–52 (Eng. Abstr.) (Rus)

[Changes in the catecholamine level and energy metabolism of the myocardium in rats during cold and emotional stress] Gurin VN, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):542–7 (Eng. Abstr.) (Rus)

[Oxygen supply and the function of the isolated heart under various degrees of anemic hypoxia] Iarochkin VS, et al. **Gematol Transfuziol** 1988 Jul;33(7):21–5 (Eng. Abstr.) (Rus)

[Normal indicators of the cardiovascular system in laboratory animals (rats)] Muzurov IV, et al. **Gig Sanit** 1989 Feb; (2):84–6 (Rus)

[Induction with cadmium of lipid peroxidation in the tissues of albino rats and its prevention with ascorbic acid] Nurmukhambetov AN, et al. **Gig Sanit** 1989 Mar;(3):77–8 (Rus)

[Experimental study of the effect of rubidium on the cardiovascular system] Akinfieva TA, et al. **Gig Tr Prof Zabol** 1989;(3):16–20 (Eng. Abstr.) (Rus)

[Negative inotropic and vasoconstrictor effects of oxidized phospholipids] Bilenko MV, et al. **Kardiologiia** 1989 Jun; 29(6):88–94 (Eng. Abstr.) (Rus)

[Effect of anti-angina therapy on phospholipid levels of the myocardium in ischemic lesions] Dzhanpoladian EG, et al. **Kardiologiia** 1988 Oct;28(10):88–90 (Eng. Abstr.) (Rus)

[Hemodynamic and metabolic effects of adenosine in experimental myocardial infarction] Eliseev VV, et al. **Kardiologiia** 1988 Nov;28(11):103–6 (Eng. Abstr.) (Rus)

[Adaptation of myocardial function to conditions of myocardial insufficiency in patients with marked coronary arteriosclerosis] Furkalo NK, et al. **Kardiologiia** 1989 Mar; 29(3):30–4 (Eng. Abstr.) (Rus)

[Effect of the beta-blocker propranolol (obzidan) on the content of macroergic phosphates and the development of the size of necrotic areas in the myocardium in experimental acute coronary occlusion] Irgashev ShB, et al. **Kardiologiia** 1988 Aug;28(8):86–90 (Eng. Abstr.) (Rus)

[Effect of myocardial ischemia on the metabolism of nonesterified fatty acids] Ius'kovich AK, et al. **Kardiologiia** 1989 Feb;29(2):61–3 (Eng. Abstr.) (Rus)

[Coronary vessel tonus and cardiac resistance to ischemia in chronic adriamycin-induced myocardial damage] Kapel'ko VI, et al. **Kardiologiia** 1988 Oct;28(10):94–9 (Eng. Abstr.) (Rus)

[Possibility of reflex activation of stress-limiting systems and the prevention of arrhythmia by electroacupuncture] Meerson FZ, et al. **Kardiologiia** 1989 Jan;29(1):88–90 (Rus)

[Clinico-biochemical equivalent of stromal destruction in acute myocardial infarction] Movshovich BL, et al. **Kardiologiia** 1989 May;29(5):90–1 (Rus)

[Development of desensitization and hypersensitivity of the adenyl cyclase system of the heart to the action of hormones] Tkachuk VA. **Kardiologiia** 1989 Mar; 29(3):122–5 (33 ref.) (Rus)

[Interrelations of tissue and intravascular characteristics of microcirculation in patients with acute disorders of coronary circulation] Tsapaev VG, et al. **Kardiologiia** 1989 Feb;29(2):102–4 (Rus)

[Prevention of reperfusion-induced arrhythmia by Na+/H+ exchange block] Vasilets LA, et al. **Kardiologiia** 1989 Feb; 29(2):91–4 (Eng. Abstr.) (Rus)

[Disorders of metabolism and cardiac function in subacute adriamycin injury of the myocardium] Golikov A, et al. **Patol Fiziol Eksp Ter** 1988 Nov-Dec;(6):21–3 (Eng. Abstr.) (Rus)

[Role of venous blood return to the heart in restoring myocardial energy metabolism in experimental acute cardiovascular insufficiency] Gutnikova AR, et al. **Patol Fiziol Eksp Ter** 1988 Nov-Dec;(6):43–5 (Eng. Abstr.) (Rus)

[Changes in the activity of glucose-6-phosphate dehydrogenase in the myocardium of rats with high and low resistance to hypoxia after administration of a cardiotoxic dose of epinephrine] Markova EA, et al. **Patol Fiziol Eksp Ter** 1988 Nov-Dec;(6):23–4 (Eng. Abstr.) (Rus)

[Interrelation of changes in the levels of calcium, calmodulin and cyclic nucleotides in children with ectopic types of arrhythmia] Bakanov MI, et al. **Pediatriia** 1989;(4):40–3 (Eng. Abstr.) (Rus)

[Value of determining myoglobin and creatine phosphokinase levels in the evaluation of the cardiovascular status in children with acute pneumonia] Barlybaeva NA, et al. **Pediatriia** 1988;(4):33–6 (Eng. Abstr.) (Rus)

[Bioenergetics of the myocardiocytes in infectious-allergic myocarditis] Odinokova VA, et al. **Sov Med** 1989;(3):22–5 (Eng. Abstr.) (Rus)

[Cardiac lesions in hemochromatosis (diagnosis and treatment)] Eliseev OM. **Ter Arkh** 1988;60(8):141–7 (86 ref.) (Rus)

[3H-thymidine and 3H-uridine incorporation into the heart cells of the freshwater crayfish Astacus astacus and the swimming crab Portunus holsatus] Martynova MG. **Tsitologiia** 1988 Oct;30(10):1251–4 (Eng. Abstr.) (Rus)

[Protein conformation and localization in low density lipoproteins in health and in ischemic heart disease] Kuznetsov AS, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):47–52 (Eng. Abstr.) (Rus)

[The effect of trifluoroperazine on cAMP levels in the rat myocardium during various phases of heart cycle] Prokop'eva VD, et al. **Ukr Biokhim Zh** 1988 Nov-Dec; 60(6):85–8 (Eng. Abstr.) (Rus)

[Quantitative and qualitative disorders of energy transformation in the myocardial contractile protein system—a pivotal process in the development of heart failure] Karsanov NV, et al. **Vestn Akad Med Nauk SSSR** 1988;(12):60–8 (Eng. Abstr.) (Rus)

[Trophic disorders of tissue in afferent and efferent denervation] Zaiko NN, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):14–9 (Eng. Abstr.) (Rus)

[Effect of exogenous ribose-5-phosphate on the ATP level in a cardiomyocyte culture during "metabolic ischemia" and anoxia] Golubev MA, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):94–7 (Eng. Abstr.) (Rus)

[Cardioprotective effect of carnitine and its synthetic analog 3-(2,2,2-trimethylhydrazinium) propionate in rats with experimental myocardial infarction] Ianson TM, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):122-5 (Eng. Abstr.) (Rus)

[Change in the glycogen level in the liver, heart and skeletal muscles of rodents during exposure to plague toxin] Kratinov AG, et al. **Vopr Med Khim** 1971 Jul-Aug; 17(4):373-9 (Eng. Abstr.) (Rus)

[Adrenergic regulation of the level of enkephalins in the myocardium] Maslov LN, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):26-9 (Eng. Abstr.) (Rus)

[The effect of emotional-pain stress on the rate of DNA synthesis in heart and liver cells] Meerson FZ, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):59-62 (Eng. Abstr.) (Rus)

[Regulation of carnitine-dependent metabolism of fatty acids in the rat myocardium using 3-(2,2,2-trimethylhydrazinium) propionate] Shutenko ZhV, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):59-64 (Eng. Abstr.) (Rus)

[Effect of DL-carnitine and gamma-butyrobetaine hydroxylase inhibitor 3-(2,2,2-trimethylhydrazinium) propionate on isoproterenol-induced changes in the metabolism of the rat myocardium] Simkhovich BZ, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):30-4 (Eng. Abstr.) (Rus)

[Comparative determination of the potential for activating lipid peroxidation of the adrenal cortex, liver and heart in various animals] Doroshkevich NA, et al. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):398-401 (Eng. Abstr.) (Rus)

[Status of the kallikrein-kinin system in experimental disorders of cerebral circulation] Verkhovskiĭ AIu, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):54-7 (Eng. Abstr.) (Rus)

[Metabolism of the ischemic heart muscle and the effect of reperfusion and verapamil] Kucharská J, et al. **Bratisl Lek Listy** 1988 Nov;89(11):815-27 (Eng. Abstr.) (Slo)

[The isolated cardiomyocyte—a prospective model for the experimental study of the heart muscle] Simko F, et al. **Cesk Fysiol** 1986;35(5):414-28 (79 ref.) (Slo)

[Regulation of ion transport systems in the myocardial sarcolemma as a function of the secondary structure of membrane proteins modulated by direct interactions with cations] Vrbjar N, et al. **Cesk Fysiol** 1988;37(6):534-7 (Slo)

[The effect of smoking on the metabolic vitality of cardiomyocytes] Gvozdjáková A, et al. **Vnitr Lek** 1988 Jul;34(7):666-71 (Eng. Abstr.) (Slo)

[The effect of passive smoking and alcohol on cardiomyocytes in rabbits] Gvozdjáková A, et al. **Vnitr Lek** 1989 Apr;35(4):363-9 (Eng. Abstr.) (Slo)

[Effect of amiodarone on the conversion of thyroxine to triiodothyronine in the myocardium of rats in vivo and in vitro] Ceppi JA, et al. **Medicina (B Aires)** 1988; 48(1):29-32 (Eng. Abstr.) (Spa)

[Transcutaneous nerve stimulation in angina pectoris—effects on myocardial metabolism and hemodynamics] Mannheimer C, et al. **Lakartidningen** 1988 Oct 5; 85(40):3287-90 (Swe)

PATHOLOGY

Morphometric analysis of gap junctions in rat myocardium after hyperkalemia. Scheuermann DW, et al. **Acta Anat (Basel)** 1989;134(3):212-8

A case of complete atrioventricular block due to malignant lymphoma. Shigenobu M, et al. **Acta Med Okayama** 1988 Dec;42(6):355-8

Morphological differences in hearts of rats well adapted and poorly adapted to chronic hypoxia. Ogata M, et al. **Acta Pathol Jpn** 1988 May;38(5):549-58

Histopathological analysis of surgically resected myocardium in patients with sustained ventricular tachycardia. Yutani C, et al. **Acta Pathol Jpn** 1988 May;38(5):605-13

Pathogenesis of cardiovascular disorders in streptozotocin-induced diabetes in rat. I. Cardiovascular, renal and morphologic changes in different stages of diabetes. Somova L, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):46-56

Cardiac masses: assessment by MR imaging. Lund JT, et al. **AJR** 1989 Mar;152(3):469-73

Assessment of myocardial viability with SPECT and PET imaging. Cerqueira MD, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):477-83 (48 ref.)

Relationship of functional recovery to scar contraction after myocardial infarction in the canine left ventricle. Choong CY, et al. **Am Heart J** 1989 Apr;117(4):819-29

Left ventricular topographic alterations in the completely healed rat infarct caused by early and late coronary artery reperfusion. Hale SL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1508-13

The relationship between infarct size and mortality and morbidity during short-term and long-term follow-up after acute myocardial infarction. Herlitz J, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1378-82 (92 ref.)

Exercise in coxsackie B3 myocarditis: effects on heart lymphocyte subpopulations and the inflammatory reaction. Ilbäck NG, et al. **Am Heart J** 1989 Jun;117(6):1298-302

Myocardial tissue characterization by magnetic resonance imaging in Fabry's disease. Matsui S, et al. **Am Heart J** 1989 Feb;117(2):472-4

Myocardial salvage after regional beta-adrenergic blockade. Wappel M, et al. **Am Heart J** 1989 Jan;117(1):37-42

Inadequate collagen tethers in dilated cardiopathy. Weber KT, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1641-6

Exercise-induced ischemia in the streptokinase-reperfused myocardium: relationship to extent of salvaged myocardium and degree of residual coronary stenosis. Weiss AT, et al. **Am Heart J** 1989 Jul;118(1):9-16

Effects of residual stenosis on infarct size and regional transmural myocardial blood flow after reperfusion. Wilson JL, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1523-9

Structural manifestations of diabetic cardiomyopathy in the rat and its reversal by insulin treatment. Thompson EW. **Am J Anat** 1988 Jul;182(3):270-82

Extensive multifocal myocardial infarcts from cloth emboli after replacement of mitral and aortic valves with cloth-covered, caged-ball prostheses. Dollar AL, et al. **Am J Cardiol** 1989 Aug 1;64(5):410-2

Free radical and granulocyte-mediated injury during myocardial ischemia and reperfusion. Engler RL. **Am J Cardiol** 1989 Mar 7;63(10):19E-23E (52 ref.)

Acceleration of cell necrosis following reperfusion after ischemia in the pig heart without collateral circulation. Fujiwara H, et al. **Am J Cardiol** 1989 Mar 7;63(10):14E-18E

Changes by two-dimensional echocardiography in the myocardial appearance of patients with end-stage renal disease. Krane NK, et al. **Am J Cardiol** 1989 Aug 2; 64(6):40C-43C

Echocardiographic and histologic evaluation of the right ventricle in ventricular tachycardias of left bundle branch block morphology without overt cardiac abnormality. Mehta D, et al. **Am J Cardiol** 1989 Apr 15;63(13):939-44

Diagnostic and prognostic utility of right-sided catheterization and endomyocardial biopsy in idiopathic dilated cardiomyopathy. Popma JJ, et al. **Am J Cardiol** 1989 Apr 15;63(13):955-8

Location of an acute myocardial infarct in patients with a healed myocardial infarct: analysis of 129 patients studied at necropsy. Potkin BN, et al. **Am J Cardiol** 1988 Nov 15;62(16):1017-23

Correlation between histomorphometric findings on endomyocardial biopsy and clinical findings in idiopathic dilated cardiomyopathy. Tanganelli P, et al. **Am J Cardiol** 1989 Sep 1;64(8):504-6

Cardioprotective effects of diltiazem when given before, during or delayed after infusion of norepinephrine in anesthetized dogs. Todd GL, et al. **Am J Cardiol** 1988 Oct 5;62(11):25G-29G

Characterization of human cardiac infiltrating cells post transplantation. I. Phenotypic and functional alloreactivity. Ahmed-Ansari A, et al. **Am J Cardiovasc Pathol** 1988; 2(3):193-210

The heart after surgery for congenital heart disease. Becker AE, et al. **Am J Cardiovasc Pathol** 1988;1(3):301-17 (35 ref.)

The postsurgical heart. The pathology of cardiac transplantation. Billingham ME. **Am J Cardiovasc Pathol** 1988;1(3):319-34

Ischemic myocardial necrosis and papillary muscle dysfunction in infants and children. Donnelly WH. **Am J Cardiovasc Pathol** 1987;1(2):173-88 (84 ref.)

Premortem histologic evidence of chronic vascular rejection obtained from percutaneous endomyocardial biopsy: report of a case. Huntrakoon M, et al. **Am J Cardiovasc Pathol** 1988 Apr;2(1):91-6

Pathology of prosthetic cardiac valves. Silver MD. **Am J Cardiovasc Pathol** 1988;1(3):335-8 (16 ref.)

The heart after surgery for ischemic heart disease. Titus JL. **Am J Cardiovasc Pathol** 1988;1(3):339-51 (84 ref.)

Regional capillary and myocyte distribution in normal and exercise trained male and female rat hearts. White FC, et al. **Am J Cardiovasc Pathol** 1988;2(3):247-53

Results, perspectives, and forensic medical aspects of myocardial biopsy. Somogyi E. **Am J Forensic Med Pathol** 1989 Jun;10(2):115-23 (44 ref.)

Cardiac pathology in the hypertensive diabetic rat. Biventricular damage with right ventricular predominance. Fein FS, et al. **Am J Pathol** 1989 May;134(5):1159-66

The fibrillar nature and structure of isoproterenol-induced myocardial fibrosis in the rat. Pick R, et al. **Am J Pathol** 1989 Feb;134(2):365-71

Demonstration of early ischemic injury in porcine right ventricular myocardium. Spinale FG, et al. **Am J Pathol** 1989 Mar;134(3):693-704

Evidence for a regenerative capacity in adult mammalian cardiac myocytes. Butler R. **Am J Physiol** 1989 Mar;256(3 Pt 2):R797-800

Cell-to-cell interaction: a mechanism to explain wave-front progression of myocardial necrosis. Garcia-Dorado D, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1266-73

Myocardial neutrophil accumulation during reperfusion after reversible or irreversible ischemic injury. Go LO, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1188-98

Outward currents in normal and hypertrophied feline ventricular myocytes. Kleiman RB, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1450-61

Temporal relation between neutrophil accumulation and myocardial reperfusion injury. Smith EF 3d, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1060-8

Segmental mediolytic arteritis. A clinicopathologic and ultrastructural study of two cases. Slavin RE, et al. **Am J Surg Pathol** 1989 Jul;13(7):558-68 (13 ref.)

Mechanical, biochemical, and structural effects of vitamin D deficiency on the chick heart. Hochhauser E, et al. **Angiology** 1989 Apr;40(4 Pt 1):300-8

Reduced myocardial neutrophil accumulation and infarct size following thromboxane synthetase inhibitor or receptor antagonist. Nichols WW, et al. **Angiology** 1989 Mar; 40(3):209-21

Left ventricular wall mass and wall thickness in insulin dependent diabetic patients without clinical signs of ischaemic heart disease. Thuesen L, et al. **Ann Clin Res** 1988;20 Suppl 48:7-9

Myocarditis and endomyocardial biopsy [letter] Billingham ME. **Ann Intern Med** 1989 Jan 15;110(2):165-6

Biopsy assessment of myocardial protection for valve replacement over the last 24 years. Braimbridge MV, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S67-8 (4 ref.)

Cardiac cryolesions: factors affecting their size and a means of monitoring their formation. Markovitz LJ, et al. **Ann Thorac Surg** 1988 Nov;46(5):531-5

Autopsy findings 14 years after septation for single ventricle. Shirakura R, et al. **Ann Thorac Surg** 1989 Jul;48(1):124-5

Trifluoperazine does not affect doxorubicin cardiotoxicity in the rat. Villani F, et al. **Anticancer Res** 1988 Jul-Aug; 8(4):659-63

Transmural differences in ischaemic heart disease: a quantitative histologic study. Jantunen E, et al. **Appl Pathol** 1989;7(3):179-87

Effect of kwashiorkor on the cardiovascular system. Bergman JW, et al. **Arch Dis Child** 1988 Nov;63(11):1359-62

Dysplastic cardiac development presenting as cardiomyopathy. Allenby PA, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1255-8

Endomyocardial lymphocytic infiltrates in cardiac transplant recipients. Incidence and characterization. Kottke-Marchant K, et al. **Arch Pathol Lab Med** 1989 Jun; 113(6):690-8

Direct cocaine cardiotoxicity demonstrated by endomyocardial biopsy. Peng SK, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):842-5

Additional myocardial salvage by coadministration of the epoprostenol analog taprostene to recombinant single-chain urokinase-type plasminogen activator in a canine coronary thrombosis model. Groves R, et al. **Arzneimittelforschung** 1989 Apr;39(4):534-8

Cardiac disuse atrophy during LVAD pumping. Kinoshita M, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):208-12

Dietary fructose exacerbates the cardiac abnormalities of copper deficiency in rats. Redman RS, et al. **Atherosclerosis** 1988 Dec;74(3):203-14

Change in cardiac myocyte size distribution in aortic-constricted neonatal rats. Campbell SE, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):247-58

The transmural progression of the no-reflow phenomenon in globally ischemic hearts. Sheppard AJ, et al. **Basic Res Cardiol** 1988 Nov-Dec;83(6):611-7

The diagnosis of acute cardiac rejection by endomyocardial biopsy. Billingham ME. **Bibl Cardiol** 1988;(43):83-102

Monitoring of cardiac transplants with beta 2-microglobulin, cytoimmunological monitoring and endmyocardial biopsy: what's their value in detecting rejection? Semik M, et al. **Bibl Cardiol** 1988;(43):133-6

Cross sectional echocardiography for recognition of ventricular topology in atrioventricular septal defect. Carvalho JS, et al. **Br Heart J** 1989 Mar;61(3):285-8

Coronary venous aneurysms and accessory atrioventricular connections. Ho SY, et al. **Br Heart J** 1988 Oct; 60(4):348-51

Determination of left ventricular volumes by Simpson's rule in infants and children with congenital heart disease. Ino T, et al. **Br Heart J** 1989 Feb;61(2):182-5

Findings at necropsy in the heart of a patient with anticardiolipin syndrome. Murphy JJ, et al. **Br Heart J** 1989 Jul;62(1):61-4

Relation of infarct site to 15 year prognosis in patients who survived for 28 days after a first myocardial infarction. Robinson K, et al. **Br Heart J** 1988 Dec;60(6):470-3

Assessment of the thickness of the right ventricular free wall by magnetic resonance imaging in patients with hypertrophic cardiomyopathy. Suzuki J, et al. **Br Heart J** 1988 Nov;60(5):440-5

Left ventricular volume measured rapidly by oblique magnetic resonance imaging. Underwood SR, et al. **Br Heart J** 1988 Sep;60(3):188-95

Protection of rat atrial myocardium against electrical, mechanical and structural aspects of injury caused by exposure in vitro to conditions of simulated ischaemia. Northover AM, et al. **Br J Pharmacol** 1988 Aug; 94(4):1207-17

Preservation of left ventricular function during coronary artery bypass graft surgery. Shuhaiber HJ, et al. **Can J Cardiol** 1989 Mar;5(2):105-9

Imaging necrotic myocardium: detection with 99mTc-pyrophosphate and radiolabeled antimyosin. Khaw BA, et al. **Cardiol Clin** 1989 Aug;7(3):577-88 (52 ref.)

Morphological approach to the mechanism of heart failure. Hatt PY. **Cardiology** 1988;75 Suppl 1:3-7 (7 ref.)

Pathology of cardiomyopathies. Becker AE. **Cardiovasc Clin** 1988;19(1):9-31 (64 ref.)

A pressure overload model of congestive heart failure in rats. Desjardins S, et al. **Cardiovasc Res** 1988 Oct;22(10):696-702

Assessment of severity of cardiac rejection in heterotopic

heart transplantation using indium-111 antimyosin and magnetic resonance imaging. Nishimura T, et al. **Cardiovasc Res** 1988 Feb;22(2):108-12

Use of balloon tipped catheter to guide placement of the bioptome sheath in right ventricular percutaneous endomyocardial biopsy [letter] Kern MJ. **Cathet Cardiovasc Diagn** 1988;15(3):216

Influence of calcium antagonists on the antitumor activity and the cardiac toxicity of doxorubicin in the rat. Villani F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):686-7

Anthracycline cardiotoxicity in the rat: relationship between ECG changes and morphologic effects induced by different analogues. Villani F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):688-90

Conduction system in children with acquired immunodeficiency syndrome. Bharati S, et al. **Chest** 1989 Aug;96(2):406-13

Isoproterenol-induced myocardial fibrosis in relation to myocyte necrosis. Benjamin IJ, et al. **Circ Res** 1989 Sep; 65(3):657-70

Effect of superoxide dismutase on myocardial infarct size in the canine heart after 6 hours of regional ischemia and reperfusion: a demonstration of myocardial salvage. Chi LG, et al. **Circ Res** 1989 Apr;64(4):665-75

Fibrillar collagen and myocardial stiffness in the intact hypertrophied rat left ventricle. Jalil JE, et al. **Circ Res** 1989 Jun;64(6):1041-50

Fibrosis-induced reduction of endomyocardium in the rat after isoproterenol treatment. Jalil JE, et al. **Circ Res** 1989 Aug;65(2):258-64

Acute reoxygenation injury in the isolated rat heart: role of resid nt cardiac mast cells. Keller AM, et al. **Circ Res** 1988 Dec;63(6):1044-52

Fatty acid analogue accumulation: a marker of myocyte viability in ischemic-reperfused myocardium. Miller DD, et al. **Circ Res** 1988 Oct;63(4):681-92

Identification of a time window for therapy to reduce experimental canine myocardial injury: suppression of neutrophil activation during 72 hours of reperfusion. Simpson PJ, et al. **Circ Res** 1988 Dec;63(6):1070-9

Hypoxia-induced acute changes in capillary and fiber density and capillary red cell distribution in the rat heart. Vetterlein F, et al. **Circ Res** 1989 Apr;64(4):742-52

Percutaneous cardiopulmonary bypass limits myocardial injury from ischemic fibrillation and reperfusion. Axelrod HI, et al. **Circulation** 1988 Nov;78(5 Pt 2):III148-52

Left ventricular structure and function in aortic valve disease. Bonow RO. **Circulation** 1989 Apr;79(4):966-9

Transesophageal echocardiography. New window to the heart. Currie PJ. **Circulation** 1989 Jul;80(1):215-7

Subendocardial and subepicardial wall thickening during ischemia in exercising dogs. Homans DC, et al. **Circulation** 1988 Nov;78(5 Pt 1):1267-76

Left ventricular myocardial structure in aortic valve disease before, intermediate, and late after aortic valve replacement. Krayenbuehl HP, et al. **Circulation** 1989 Apr; 79(4):744-55

Clinical merit of endomyocardial biopsy. Mason JW, et al. **Circulation** 1989 May;79(5):971-9 (83 ref.)

Echocardiography-guided endomyocardial biopsy. A 5-year experience. Miller LW, et al. **Circulation** 1988 Nov;78(5 Pt 2):III99-102

Ultrasonic tissue characterization with integrated backscatter. Acute myocardial ischemia, reperfusion, and stunned myocardium in patients. Milunski MR, et al. **Circulation** 1989 Sep;80(3):491-503

Determination of left ventricular mass by magnetic resonance imaging in hearts deformed by acute infarction. Shapiro EP, et al. **Circulation** 1989 Mar;79(3):706-11

Quantitation of myocardial fibrosis and its relation to function in essential hypertension and hypertrophic cardiomyopathy. Sugihara N, et al. **Clin Cardiol** 1988 Nov; 11(11):771-8

The old-age heart: normal aging changes which can produce or mimic cardiac disease. Waller BF. **Clin Cardiol** 1988 Aug;11(8):513-7 (20 ref.)

The flavonoid tangeretin inhibits invasion of MO4 mouse cells into embryonic chick heart in vitro. Bracke ME, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):283-300

Restored invasion of mouse MO4 cells into chick heart in vitro through mutual conditioning at reduced temperature. Bruyneel EA, et al. **Clin Exp Metastasis** 1989 May-Jun; 7(3):361-71

The use of endomyocardial biopsy in heart failure. Maisch B, et al. **Eur Heart J** 1988 Jun;9 Suppl H:59-71

Death and damage caused by multiple direct current shocks: studies in an animal model. Wilson CM, et al. **Eur Heart J** 1988 Nov;9(11):1257-65

Morphometric study of myocardial changes during doxorubicin-induced cardiomyopathy in mice. van der Vijgh WJ, et al. **Eur J Cancer Clin Oncol** 1988 Oct; 24(10):1603-8

Behavioral correlates of renal damage and cardiac changes. Briner W. **Exp Mol Pathol** 1989 Apr;50(2):205-9

Myocardial effects of calcium cyclamate in the BIO F1D Alexander Syrian golden hamster. Ernst H, et al. **Exp Pathol** 1988;34(1):23-7

Creatine phosphokinase in serum and cerebrospinal fluid, and microscopic findings in brain and heart in hypothermic rabbits. Hirvonen J, et al. **Forensic Sci Int** 1988 Dec; 39(3):271-8

Postmortem changes in the level of calcium pumping adenosine triphosphatase in rat heart sarcoplasmic reticulum. Iwasa Y, et al. **Forensic Sci Int** 1988 Oct; 39(1):13-22

Cardiac lesions in sudden infant death syndrome. Kariks J. **Forensic Sci Int** 1988 Dec;39(3):211-25

Xanthine oxidase is not responsible for reoxygenation injury in isolated-perfused rat heart. Kehrer JP, et al. **Free Radic Res Commun** 1987;3(1-5):69-78

Reaction patterns of the myocardial interstitium in different models of cardiac hypertrophy--stereological investigations. Mall G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):151-8

The pathobiology of heart-lung transplantation [editorial] Atkinson JB. **Hum Pathol** 1988 Dec;19(12):1367-8

Rheumatic heart disease in a patient with acquired immunodeficiency syndrome. DiCarlo FJ, et al. **Hum Pathol** 1989 Sep;20(9):917-20

Eosinophilic products lead to myocardial damage. Sasano H, et al. **Hum Pathol** 1989 Sep;20(9):850-7

The pathology of combined heart-lung transplantation: an autopsy study. Tazelaar HD, et al. **Hum Pathol** 1988 Dec; 19(12):1403-16

Prevalence of cardiac structural and functional abnormalities in untreated primary hypertension [published erratum appears in Hypertension 1989 May;13(5):498] Laufer E, et al. **Hypertension** 1989 Feb;13(2):151-62

Effects of perfusion pressure on energy and work of isolated rat hearts. Watters T, et al. **Hypertension** 1989 May; 13(5):480-8

Interaction of human eosinophils or neutrophils with Trypanosoma cruzi in vitro causes bystander cardiac cell damage. Molina HA, et al. **Immunology** 1989 Feb; 66(2):289-95

Malnutrition and the heart: a microscopic analysis. Vandewoude MF, et al. **Infusionstherapie** 1988 Oct; 15(5):217-20

Tetralogy of Fallot--a centennial review. Anderson RH, et al. **Int J Cardiol** 1988 Dec;21(3):219-32 (26 ref.)

Dopamine treatment of locally procured donor hearts: relevance on postoperative cardiac histology and function. Ballester M, et al. **Int J Cardiol** 1989 Jan;22(1):37-42

Experimental ventricular hypertrophy in growing pigs. Guerreiro D, et al. **Int J Cardiol** 1988 Dec;21(3):311-22

Myocardial involvement and its response to immunosuppressive therapy in nonspecific aortoarteritis (Takayasu's disease)--a study by endomyocardial biopsy. Talwar KK, et al. **Int J Cardiol** 1988 Dec;21(3):323-34

Myocardial bridges at multiple sites over the left coronary artery in a patient with hypertrophic cardiomyopathy. Voelker W, et al. **Int J Cardiol** 1989 May;23(2):258-60

Changes in intraventricular septal thickness, left ventrical wall thickness and left ventricular volume in obese adolescents on a high protein weight reducing diet. Archibald EH, et al. **Int J Obes** 1989 Jun;13(3):265-9

Feasibility of identifying amyloid and hypertrophic cardiomyopathy with the use of computerized quantitative texture analysis of clinical echocardiographic data. Chandrasekaran K, et al. **J Am Coll Cardiol** 1989 Mar 15; 13(4):832-40

Value of endomyocardial biopsy in infants, children and adolescents with dilated or hypertrophic cardiomyopathy and myocarditis. Leatherbury L, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1547-54

Elderly patients with hypertrophic cardiomyopathy: a subset with distinctive left ventricular morphology and progressive clinical course late in life. Lewis JF, et al. **J Am Coll Cardiol** 1989 Jan;13(1):36-45

Significance of signal-averaged electrocardiography in relation to endomyocardial biopsy and ventricular stimulation studies in patients with ventricular tachycardia without clinically apparent heart disease. Mehta D, et al. **J Am Coll Cardiol** 1989 Aug;14(2):372-9; discussion 380-1

Ultrasound tissue characterization: can the state of the myocardium be assessed directly yet noninvasively? Skorton DJ. **J Am Coll Cardiol** 1989 Jan;13(1):92-4

Ultrasound integrated backscatter tissue characterization of remote myocardial infarction in human subjects. Vered Z, et al. **J Am Coll Cardiol** 1989 Jan;13(1):84-91

Cardiac interstitium in health and disease: the fibrillar collagen network. Weber KT. **J Am Coll Cardiol** 1989 Jun; 13(7):1637-52 (100 ref.)

Cottonseed meal (gossypol) toxicosis in a swine herd. Haschek WM, et al. **J Am Vet Med Assoc** 1989 Sep 1; 195(5):613-5

Congestive cardiomyopathy in neonatal artiodactyls. Tappe JP, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1052-5

The evaluation of HBDH and LDH isoenzymes in cardiac cell necrosis of the rat. Barrett RJ, et al. **J Appl Toxicol** 1988 Aug;8(4):233-8

Echocardiographic findings in nine patients with cardiac amyloidosis: their correlation with necropsy findings. Nishikawa H, et al. **J Cardiol** 1988 Mar;18(1):121-33

Influence of allopurinol plus verapamil treatment on myocardial tissue necrosis during permanent coronary occlusion in canine hearts with small infarcts. Kingma JG Jr, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):6-13

Osteocartilaginous metaplasia of the right atrium in male domestic sheep. Anderson BC. **J Comp Pathol** 1989 Feb; 100(2):195-8

A single ECG lead in the serial monitoring of ischemic injury and necrosis in patients with acute anterior myocardial infarction: comparison with 49-lead precordial maps and standard ECGs. Madias JE. **J Electrocardiol** 1988 Aug; 21(3):253-62

Threshold, enzymatic, and pathologic changes associated with prolonged transcutaneous pacing in a chronic heart block model. Hedges JR, et al. **J Emerg Med** 1989 Jan-Feb; 7(1):1-4

Propagation and characterization of lymphocytes from rejecting human cardiac allografts. Carlquist JF, et al. **J Heart Transplant** 1988 Nov-Dec;7(6):397-406

Predictive implications of bioptic diagnosis in cardiac allografts. Kemnitz J, et al. **J Heart Transplant** 1989 Jul-Aug;8(4):315-29

Magnetic resonance imaging of human orthotopic heart transplantation: correlation with endomyocardial biopsy. Revel D, et al. **J Heart Transplant** 1989 Mar-Apr; 8(2):139-46

Handling bioptomes [letter] Silver MD. **J Heart Transplant** 1988 Jul-Aug;7(4):312

Lymphocyte growth from cardiac allograft biopsy specimens with no or minimal cellular infiltrates: association with subsequent rejection episode. Weber T, et al. **J Heart Transplant** 1989 May-Jun;8(3):233-40

Treatment for one year with perindopril: effect on cardiac mass and arterial compliance in essential hypertension. Asmar RG, et al. **J Hypertens Suppl** 1988 Dec;6(3):S33-9

Regional changes in myocyte size during the reversal of thyroid-induced cardiac hypertrophy. Campbell SE, et al. **J Mol Cell Cardiol** 1988 May;20(5):379-87

Reperfusion-induced arrhythmias are critically dependent upon occluded zone size: relevance to the mechanism of arrhythmogenesis. Curtis MJ, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):625-37

Structural vs. contractile protein remodeling and myocardial stiffness in hypertrophied rat left ventricle. Jalil JE, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1179-87

Regional myocyte size in two-kidney, one clip renal hypertension. Smith SH, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1035-42

Monoclonal antibody against polyglucosan isolated from the myocardium of a patient with Lafora disease. Yokota T, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):572-7

Indium-111 antimyosin scintigraphy to assess myocardial damage in patients with suspected myocarditis and cardiac rejection. Carrió I, et al. **J Nucl Med** 1988 Dec; 29(12):1893-900

Qualitative ultrasonic tissue characterization of the myocardium. Nicolosi GL, et al. **J Nucl Med Allied Sci** 1988 Jul-Sep;32(3):139-48 (42 ref.)

Quantitative characterization of myocardium with ultrasonic imaging. Pérez JE, et al. **J Nucl Med Allied Sci** 1988 Jul-Sep;32(3):149-57

Experience with endomyocardial biopsy in 23 patients with heart transplants. Zuhdi N, et al. **J Okla State Med Assoc** 1989 Mar;82(3):109-11

Method for quantification of myocardial infarction and inflammatory cell infiltration in rat cardiac tissue. Griswold DE, et al. **J Pharmacol Methods** 1988 Nov;20(3):225-35

Myocardial involvement in Churg-Strauss syndrome: the role of endomyocardial biopsy. Leung WH, et al. **J Rheumatol** 1989 Jun;16(6):828-31

Cardiac dimensions and physical profile of masters level swimmers. Swan PD, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):97-103 (26 ref.)

Magnetic resonance imaging of cardiac and paracardiac masses. Brown JJ, et al. **J Thorac Imaging** 1989 Apr; 4(2):58-64

Cell-mediated immune cardiocyte injury in viral myocarditis of mice and patients. Deguchi H, et al. **Jpn Circ J** 1989 Jan;53(1):61-77

Two-dimensional echocardiography in acute myocardial infarction--relationship between left ventricular wall thickness and wall motion abnormalities. Kashiro S, et al. **Jpn Circ J** 1988 Nov;52(11):1257-67

Three autopsied cases of postmyocarditic cardiomegaly. Comparison with dilated cardiomyopathy. Kawai S, et al. **Jpn Heart J** 1988 Nov;29(6):809-21

The percentage of the ischemic risk zone infarcting following permanent coronary occlusion is independent of ischemic zone size. Miura T, et al. **Jpn Heart J** 1988 May; 29(3):359-66

The histological effects of cryocoagulation on the myocardium and coronary arteries. Iida S, et al. **Jpn J Surg** 1989 May;19(3):319-25 (17 ref.)

Effect of converting enzyme inhibitors on cardiac changes in experimental uremia. Rambausek M, et al. **Kidney Int Suppl** 1988 Sep;25:S201-3

Idiopathic cardiomyopathy in C3Hf/Bd mice. Goad ME, et al. **Lab Anim Sci** 1989 Mar;39(2):137-41

Structural remodeling of cardiac myocytes in rats with arteriovenous fistulas. Gerdes AM, et al. **Lab Invest** 1988 Dec;59(6):857-61

Alterations to subplasmalemmal leptomeres in adult canine myocytes during total in vitro ischemia. Sage MD, et al. **Lab Invest** 1989 Aug;61(2):171-6

The alterations of magnetic resonance relaxation parameters in excised myocardial tissue during NMR spectroscopy: the effects of time, environmental exposure and TTC staining. Liu P, et al. **Magn Reson Imaging** 1989 Jan-Feb; 7(1):109-13

Effect of hyperosmotic mannitol on magnetic resonance relaxation parameters in reperfused canine myocardial infarction. Miller DD, et al. **Magn Reson Imaging** 1989

Jan–Feb;7(1):79–88
Simultaneous multislice imaging (SIMUSIM) for improved cardiac imaging. Müller S. **Magn Reson Med** 1989 Apr; 10(1):145–55
The long–term involution of physiological cardiomegaly and cardiac hypertrophy. Dickhuth HH, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):244–9
The conduction system of the heart in mice chronically infected with Trypanosoma cruzi: histopathological lesions and electrocardiographic correlations. Andrade SG, et al. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):59–66
The effects of alcoholism on skeletal and cardiac muscle. Urbano–Marquez A, et al. **N Engl J Med** 1989 Feb 16; 320(7):409–15
Hyperadrenergic syndrome with hypertension, hypotension and myocardial necrosis in tetanus. van Lieshout JJ, et al. **Neth J Med** 1988 Aug;33(1–2):33–6
A case of sudden cardiac death manifesting contraction band necrosis of the cardiac myocytes. Bunai Y, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):403–6
Studies of the tissue reaction induced by transvenous pacemaker electrodes. I. Microscopic examination of the extent of connective tissue around the electrode tip in the human right ventricle. Beyersdorf F, et al. **PACE** 1988 Nov;11(11 Pt 2):1753–9
Histopathologic changes in the heart including the conduction system after catheter ablation. Bharati S, et al. **PACE** 1989 Jan;12(1 Pt 2):159–69
Catheter ablation of canine myocardium with radiofrequency energy. Franklin JO, et al. **PACE** 1989 Jan;12(1 Pt 2):170–6
Clinical, electrophysiological, and histopathological observations in supraventricular tachycardia. Kobayashi Y, et al. **PACE** 1988 Aug;11(8):1154–67
Percutaneous Nd:YAG laser coagulation of ventricular myocardium in dogs using a special electrode laser catheter. Weber H, et al. **PACE** 1989 Jun;12(6):899–910
Changes in nonmyocyte tissue composition associated with pressure overload of hypertrophic human hearts. Huysman JA, et al. **Pathol Res Pract** 1989 Jun;184(6):577–81
Topography of coronary lesions and their relation to heart weight in infarcted patients. Leone A. **Pathologica** 1988 Jan–Feb;80(1065):105–10
QS pattern in the right precordial leads of a child with extensive myocardial fibrosis following myocarditis. Onouchi Z, et al. **Pediatr Cardiol** 1988;9(3):167–9
Glycogen storage disease with normal acid maltase: skeletal and cardiac muscles. Tachi N, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):60–3
Neonatal tuberous sclerosis. US, CT, and MR diagnosis of brain and cardiac lesions. Christophe C, et al. **Pediatr Radiol** 1989;19(6–7):446–8
Chaotic behavior of myocardial cells: possible implications regarding the pathophysiology of heart failure. Lakatta EG. **Perspect Biol Med** 1989 Spring;32(3):421–33 (28 ref.)
Malformations of the cardiac infundibulum. Karczenski K. **Perspect Pediatr Pathol** 1988;12:100–14
Double–chambered right ventricle. Karczenski K. **Perspect Pediatr Pathol** 1988;12:115–27
Structural changes in the mouse heart one year after brain exposure to 60Co gamma ray. Yang VC, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Apr;12(2):77–83
Cardiac fibrosis in the aged germfree and conventional Lobund–Wistar rat. Cornwell GG 3d, et al. **Prog Clin Biol Res** 1989;287:69–74
Gated cardiac MR imaging and P–31 MR spectroscopy in humans at 1.5 T. Work in progress. Grist TM, et al. **Radiology** 1989 Feb;170(2):357–61
Morphometric analysis to detect suspected myocardial disease. A pilot study. Gregory MA, et al. **S Afr Med J** 1989 Feb 4;75(3):106–9
Cardiac biopsy [editorial] Rose AG. **S Afr Med J** 1989 Feb 4;75(3):97
Relationship between chromosomal aberrations and nuclear alterations induced in cultured rat heart cells by adriamycin. Lee YS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):857–65
Corticosterone induction of cleft palate in mice dosed with orciprenaline sulfate. Iida H, et al. **Teratology** 1988 Jul; 38(1):15–27
Hypercholesterolemia does not exacerbate arterial intimal thickening in chronically rejecting rat cardiac allografts. Adams DH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):437–9
Monocytes and macrophages in the rejection of human cardiac allografts. Gassel AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2514–6
Cytoimmunological monitoring to detect rejection after heart transplantation. Jutte NH, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2519–20
Electrophysiologic and histopathologic evaluation of the transplanted rat heart. Kitamura M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2544–6
Reproducibility and reliability of cytoimmunological monitoring (CIM) of heart transplanted patients (HTP). Klanke D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2512–3
Biochemical hypothyroidism and myocardial damage in organ donors: are they related? Montero JA, et al. **Transplant Proc** 1988 Oct;20(5):746–8
Myocardial and pulmonary histopathologic changes. Rose AG, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):29–32
The composition of inflammatory cells infiltrating rejecting heart allografts in rats is not reflected in the blood or lymph. Sanden M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):467
Cytoimmunologic monitoring for the diagnosis of acute rejection after heart transplantation. Wijngaard PL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2521–2
Contrast of mediators: identification of cells and cytokines in human heart tissue with acute rejection and myocarditis. Zerbe TR. **Transplant Proc** 1989 Feb;21(1 Pt 1):443–4
Cardiomyopathy in Cebus apella monkeys experimentally infected with Trypanosoma cruzi. Rosner IM, et al. **Trop Med Parasitol** 1989 Mar;40(1):24–31
Morphological changes across the border zone of cat hearts subjected to regional ischaemia. Greve G, et al. **Virchows Arch [A]** 1989;415(4):323–33
Cardiomyopathies with particular reference to the diagnostic relevance of endomyocardial biopsies. Becker AE. **Wien Klin Wochenschr** 1988 Dec 16;100(24):787–91 (25 ref.)
[Correlation of functional indices of the left ventricle with structural changes in the myocardium] Ovanesian Kh, et al. **Vutr Boles** 1988;27(6):97–100 (Eng. Abstr.) (Bul)
[Pathological changes of heart in schistosomiasis rabbits] Xu DW, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):192–4 (Eng. Abstr.) (Chi)
[Influence of magnesium sulfate on the sizes of myocardial infarction in rabbits] Wang SR, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):30–3 (Eng. Abstr.) (Chi)
[Evaluation of infarct size using myocardial contrast echocardiography] Widimský P, et al. **Vnitr Lek** 1988 Aug; 34(8):734–44 (Eng. Abstr.) (Cze)
[Magnetic resonance in cardiology—status and perspectives] Møgelvang J, et al. **Nord Med** 1988;103(11):323–6, 328 (Eng. Abstr.) (Dan)
[A heart transplant patient during the first year] Nieminen MS, et al. **Duodecim** 1988;104(12):949–54 (Fin)
[Echocardiography in anorexia nervosa] Conri C, et al. **Presse Med** 1989 Apr 22;18(16):806–8 (Eng. Abstr.) (Fre)
[Myocarditis in an autopsy cohort] Wagner G, et al. **Schweiz Med Wochenschr** 1989 May 20;119(20):641–6 (Eng. Abstr.) (Fre)
[Relation between myocardial perfusion, myocardial necrosis and residual glucose metabolism as a vitality parameter in the post–ischemic myocardium following coronary reperfusion] Sochor H. **Acta Med Austriaca Suppl** 1989; 39:1–36 (Eng. Abstr.) (Ger)
[The force of evidence of quantitative morphological heart studies on normal slaughtered and transport–killed swine of the Schwerfurt meat breed (formerly line 150)] Berg R, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):718–24 (Eng. Abstr.) (Ger)
[Ulcerative defect formation following subepicardial myocardial infarct] Pollak S, et al. **Beitr Gerichtl Med** 1988; 46:417–21 (Eng. Abstr.) (Ger)
[Myoglobin content of heart muscle following postmortem electrocution] Urban R, et al. **Beitr Gerichtl Med** 1988; 46:345–9 (Eng. Abstr.) (Ger)
[Heart failure in a pig chronically infected with Sarcocystis miescheriana—a case report] Daugschies A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1;102(6):184–7 (Eng. Abstr.) (Ger)
[Changes in the myocardium in encephalomyocarditis of pigs] Tsangaris T, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):301–3 (Eng. Abstr.) (Ger)
[Fibrotic fraction and myocardial cell diameter in latent cardiomyopathy] Flegel HG, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):185–9 (Eng. Abstr.) (Ger)
[Morphometry of the heterogenic distribution of tissue components] Löw O. **Gegenbaurs Morphol Jahrb** 1989; 135(1):133–6 (11 ref.) (Eng. Abstr.) (Ger)
[Endomyocardial biopsy following heart transplantation: results and complications] Furrer M, et al. **Helv Chir Acta** 1989 Jan;55(5):629–32 (Eng. Abstr.) (Ger)
[Morphometric study of the myocardial T–+L–system under the influence of the beta–adrenergic agent fenoterol] Meinen K, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun; 192(3):104–10 (Eng. Abstr.) (Ger)
[Myocardial noradrenaline content: a factor not considered up to now for the prognosis of patients with dilated cardiomyopathy] Schofer J, et al. **Z Kardiol** 1989 Jun; 78(6):366–71 (Eng. Abstr.) (Ger)
[Incidence of double–nucleated heart muscle fibers in hearts with dilated cardiomyopathy and secondary pressure or volume–induced hypertrophy] Schüpbach R, et al. **Z Kardiol** 1988 Dec;77(12):780–3 (Eng. Abstr.) (Ger)
[Uhl's anomaly of the heart] Lüders H, et al. **Zentralbl Allg Pathol** 1988;134(8):727–30 (Eng. Abstr.) (Ger)
[Effects of changes in dietary sodium intake on left ventricular mass in hypertensive patients] Lembo G, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):605–11 (Eng. Abstr.) (Ita)
[Diastolic function and anatomical lesion of the myocardium in primary dilated cardiomyopathy] Chiddo A, et al. **Cardiologia** 1988 Jul;33(7):691–6 (Eng. Abstr.) (Ita)
[Predictive value of myocellular hypertrophy in idiopathic dilated cardiomyopathy] Gallo P, et al. **Cardiologia** 1989 Jan;34(1):53–60 (Eng. Abstr.) (Ita)
[Cardiac changes in acquired immunodeficiency syndrome] Matturri L, et al. **Cardiologia** 1988 May;33(5):493–7 (Eng. Abstr.) (Ita)
[The senile heart] Giampalmo A, et al. **Pathologica** 1987 Nov–Dec;79(1064):715–50 (138 ref.) (Eng. Abstr.) (Ita)
[Radio frequency catheter ablation of the atrioventricular conduction system in a canine model] Iwa T. **Hokkaido Igaku Zasshi** 1988 Sep;63(5):719–35 (Eng. Abstr.) (Jpn)
[Clinico–pathological investigation of the neonatal myocardial necrosis] Murakami N. **Igaku Kenkyu** 1988 Jun; 58(3):97–108 (Eng. Abstr.) (Jpn)
[Prognosis of hypertrophic cardiomyopathy: echocardiographic and postmortem histopathologic study of 30 patients] Emoto R, et al. **J Cardiol** 1988 Sep; 18(3):695–703 (Eng. Abstr.) (Jpn)
[Problems related to tracer concentration and wall thickness: pitfalls in positron CT diagnosis] Himi T, et al. **J Cardiol** 1987 Dec;17(4):831–6 (Eng. Abstr.) (Jpn)
[Serial changes in left ventricular configuration and function in hypertrophic cardiomyopathy] Horita Y, et al. **J Cardiol** 1988 Sep;18(3):651–64 (Eng. Abstr.) (Jpn)
[Hypertrophic cardiomyopathy with left ventricular dilatation] Iwami G, et al. **J Cardiol** 1988 Jun;18(2):319–28 (Eng. Abstr.) (Jpn)
[Echocardiographic findings in a case of Fabry's disease with aortic regurgitation and complete AV block, and in his family members] Iwase M, et al. **J Cardiol** 1988 Jun; 18(2):589–98 (Eng. Abstr.) (Jpn)
[Analysis of myocardial texture in two–dimensional echocardiographic images] Kawamura K, et al. **J Cardiol** 1988 Sep;18(3):619–28 (Eng. Abstr.) (Jpn)
[Re–evaluation of determinants of the cardiothoracic ratio using two–dimensional echocardiography] Mikami T, et al. **J Cardiol** 1988 Jun;18(2):395–402 (Eng. Abstr.) (Jpn)
[Relationships between distribution of disorganized cardiac muscle cells and disease state in hypertrophic cardiomyopathy] Morimoto S, et al. **J Cardiol** 1987;17 Suppl 16:9–24 (Eng. Abstr.) (Jpn)
[Morphological problems in cardiac hypertrophy] Okada R. **J Cardiol** 1988 Jun;18(2):537–40 (Eng. Abstr.) (Jpn)
[Involvements of the mitral apparatus in rabbits induced by vagal stimulation: histological and biochemical investigations] Sekine I. **J Cardiol** 1987;17 Suppl 14:37–42 (Eng. Abstr.) (Jpn)
[Diastolic dysfunction and its relation to myocardial fibrosis in essential hypertension] Sugihara N, et al. **J Cardiol** 1988 Jun;18(2):353–61 (Eng. Abstr.) (Jpn)
[Deformity of the cardiac structures in patients with mitral valve prolapse: the relationship with flat chest] Sunami Y, et al. **J Cardiol** 1988;18 Suppl 18:75–83, discussion 83 (Eng. Abstr.) (Jpn)
[Comparison of regional contractile dynamics and pathological findings of the left ventricular wall in patients with hypertrophic cardiomyopathy] Usuki S, et al. **J Cardiol** 1988 Sep;18(3):665–72 (Eng. Abstr.) (Jpn)
[Usefulness of measuring right ventricular anterior wall thickness in patients with right ventricular overload using M–mode echocardiography] Yamamoto S, et al. **J Cardiol** 1987 Dec;17(4):837–43 (Eng. Abstr.) (Jpn)
[Tissue characteristics in left ventricular hypertrophy using magnetic resonance imaging] Yoshida S, et al. **J Cardiol** 1988 Jun;18(2):329–37 (Eng. Abstr.) (Jpn)
[Quantitative estimation of viable myocardium in the infarcted zone by infarct–redistribution map from images of exercise thallium–201 emission computed tomography] Sekiai Y. **Kaku Igaku** 1988 Aug;25(8):735–42 (Eng. Abstr.) (Jpn)
[Quantitative estimation of myocardial thickness by the wall thickness map with Tl–201 myocardium SPECT and its clinical use] Sekiai Y, et al. **Kaku Igaku** 1988 Aug; 25(8):749–57 (Eng. Abstr.) (Jpn)
[Relationship between ischemic size and infarct size in the closed–chest dog] Akizuki S, et al. **Kokyu To Junkan** 1988 Oct;36(10):1095–100 (Eng. Abstr.) (Jpn)
[The findings of endomyocardial biopsies in hypertensive hearts and hypertrophic cardiomyopathy] Fujiwara H. **Kokyu To Junkan** 1988 Nov;36(11):1165–70 (Jpn)
[Usefulness of endomyocardial biopsy in patients with cardiac arrhythmias] Hiroe M, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1185–91 (Jpn)
[Myocardial biopsy in dilated cardiomyopathy] Nakayama Y, et al. **Kokyu To Junkan** 1988 Nov;36(11):1171–7 (Jpn)
[Endomyocardial biopsy: technique and processing of specimen] Sekiguchi M, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1155–63 (Jpn)
[Histopathological studies of endomyocardial biopsy on the children with Kawasaki disease] Yonesaka S, et al. **Kokyu To Junkan** 1989 Apr;37(4):429–33 (Eng. Abstr.) (Jpn)
[Histopathological examination of endomyocardial biopsy in the cases of supraventricular tachycardia in children] Yonesaka S, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1221–5 (Eng. Abstr.) (Jpn)
[Morphological characteristics of the left ventricle with volume–and pressure–overload in valvular heart diseases] Fukuda J, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1454–7 (Eng. Abstr.) (Jpn)
[Assessment of regional myocardial ischemia by thermocardiography in the dog] Adachi H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2408–16 (Eng. Abstr.) (Jpn)

[Pure infundibular pulmonary stenosis induced by radiation therapy] Katayama T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):882–3 **(Jpn)**

[Disorganization of myocardial fibers. I. Pathophysiological principles. Methods of study] Grajek S, et al. **Kardiol Pol** 1988;31(4):241–7 (Eng. Abstr.) **(Pol)**

[Disorganization of myocardial fibers. III. Effect of myocardial hypertrophy on electrocardiographic criteria] Grajek S, et al. **Kardiol Pol** 1988;31(5):294–9 (Eng. Abstr.) **(Pol)**

[Disorganization of myocardial fibers. Results of the studies. The role in the pathogenesis of cardiac hypertrophy] Grajek S, et al. **Kardiol Pol** 1988;31(4):248–56 (Eng. Abstr.) **(Pol)**

[Biopsy of the myocardium in patients with ventricular arrhythmia of unknown etiology] Włodarska EK, et al. **Kardiol Pol** 1988;31(8):488–96 (Eng. Abstr.) **(Pol)**

[Value of endomyocardial biopsy in the diagnosis of cardiomyopathy and myocarditis] Rosnowski A, et al. **Patol Pol** 1988 Oct–Dec;39(4):275–83 (Eng. Abstr.) **(Pol)**

[Histological, histochemical and ultrastructural studies of the myocardium of rats on atherogenic diet] Ostapiuk HW. **Rocz Akad Med Bialymstoku** 1984–85;29–30:129–44 (Eng. Abstr.) **(Pol)**

[Survival time and the extent of pathomorphologic changes of the myocardium in cardiogenic shock] Kuch J, et al. **Wiad Lek** 1988 May 1;41(9):545–9 (Eng. Abstr.) **(Pol)**

[Endomyocardial biopsy in patients with chronic Chagas' cardiopathy. A study, in necropsy, for diagnostic determination] de Almeida EA, et al. **Arq Bras Cardiol** 1988 Feb;50(2):109–13 (Eng. Abstr.) **(Por)**

[Morphologic cardiac changes in human visceral leishmaniasis. Study based on 16 necropsy cases] de Morais CF, et al. **Arq Bras Cardiol** 1988 Dec;51(6):441–5 (Eng. Abstr.) **(Por)**

[The myocardium in sepsis: anatomo-pathologic aspects] Fernandes Júnior CJ, et al. **Arq Bras Cardiol** 1988 Mar; 50(3):175–8 (Eng. Abstr.) **(Por)**

[Changes in the myocardium damaged by strophanthin] Fedosenko NG, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):48–52 (Eng. Abstr.) **(Rus)**

[Structural variability of cardiomyocytes of various parts of the heart in its hyperfunction] Gnatiuk MS. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):53–7 (Eng. Abstr.) **(Rus)**

[Characteristic features of the pathological anatomy and involvement of the myocardium in anomalous branching of the left coronary artery from the pulmonary trunk (Clinico-anatomical comparisons)] Abdullaev FZ, et al. **Arkh Patol** 1988;50(6):35–41 (Eng. Abstr.) **(Rus)**

[The microcirculatory bed of the human myocardium in sudden cardiac death] Bogdanovich NK, et al. **Arkh Patol** 1988;50(8):33–5 (Eng. Abstr.) **(Rus)**

[Immuno-morphologic diagnosis of acute ischemia and early stages of myocardial necrosis in sudden coronary death] Chumachenko PV. **Arkh Patol** 1988;50(11):23–8 (Eng. Abstr.) **(Rus)**

[Architectonic characteristics of the heart ventricles in a perimembranous defect of the interventricular septum] Reinhold-Richter L, et al. **Arkh Patol** 1988;50(8):26–32 (Eng. Abstr.) **(Rus)**

[Disorders of neurohumoral regulatory mechanisms in sudden cardiac death] Shavalev VN, et al. **Arkh Patol** 1988; 50(11):5–14 (25 ref.) (Eng. Abstr.) **(Rus)**

[Elimination of disorders in the electrical stability of the heart during postinfarct cardiosclerosis by using a factor that induces GABA accumulation in the brain] Abdikaliev NA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):152–4 (Eng. Abstr.) **(Rus)**

[The differential indicator method of determining the areas of ischemia and necrosis in experimental myocardial infarct in rats] Sernov LN, et al. **Biull Eksp Biol Med** 1989 May; 107(5):534–5 (Eng. Abstr.) **(Rus)**

[Effect of hypoxia on a primary cardiomyocyte culture] Stvolinskaia NS, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):607–9 (Eng. Abstr.) **(Rus)**

[Magnetic resonance tomography of the heart in primary pulmonary hypertension] Sinitsyn VE, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):102–5 (Eng. Abstr.) **(Rus)**

[Histopathology of the myocardium in cases of sudden coronary death without myocardial infarct and postinfarct cardiosclerosis] Zhdanov VS, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra** AMN **SSSR** 1988;11(2):50–4 (Eng. Abstr.) **(Rus)**

[Study of morphofunctional characteristics of the myocardium in ischemic heart disease using ultrasonic methods] Adamian KG, et al. **Kardiologiia** 1988 Nov; 28(11):78–82 (Eng. Abstr.) **(Rus)**

[Computerized two-dimensional echocardiography in acute myocardial infarction. Possibility of determining the size of necrotic focus] Chikvashvili DI, et al. **Kardiologiia** 1988 Jul;28(7):32–7 (Eng. Abstr.) **(Rus)**

[Effect of adenosine on the size of experimental myocardial infarction and "no re-flow" areas] Eliseev VV, et al. **Kardiologiia** 1988 Dec;28(12):98–9 (Eng. Abstr.) **(Rus)**

[Prognostic significance of the area of myocardial lesion and the status of the coronary bed during restoration of work capacity in patients with a complicated course of acute myocardial infarction] Golikov AP, et al. **Kardiologiia** 1989 Apr;29(4):24–7 (Eng. Abstr.) **(Rus)**

[Characteristics of the development of a necrotic area in macrofocal and microfocal myocardial infarction] Gvatua NA, et al. **Kardiologiia** 1988 Nov;28(11):112–4 **(Rus)**

[Morphofunctional study of the myocardium in alcoholic intoxication] Iareshchenko VT, et al. **Kardiologiia** 1989 May;29(5):79–84 (Eng. Abstr.) **(Rus)**

[Effect of exogenous phosphocreatine on the size of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Dec;28(12):88–91 (Eng. Abstr.) **(Rus)**

[Effect of preliminary administration of alpha-tocopherol and intal on the course of experimental myocardial necrosis] Matevosian RSh, et al. **Kardiologiia** 1989 Apr;29(4):94–6 (Eng. Abstr.) **(Rus)**

[Stereometric evaluation of the myocardial cardiomyocyte-capillary ratio in emotional and pain-induced stress after administration of thiamine and nicotinamide] Shnelder AB. **Kardiologiia** 1989 Apr; 29(4):97–9 (Eng. Abstr.) **(Rus)**

[A new principle of precordial mapping and its value in the assessment of the size and development of the infarction focus] Stamboltsian RP, et al. **Kardiologiia** 1988 Jul; 28(7):21–4 **(Rus)**

[Possibilities of electrocardiography in the evaluation of necrotization process in posterior myocardial infarction] Vinogradov AV, et al. **Kardiologiia** 1988 Nov;28(11):58–61 (Eng. Abstr.) **(Rus)**

[Determining the size of myocardial necrosis by a time-related biochemical method] Vinogradov AV, et al. **Kardiologiia** 1988 Sep;28(9):48–52 (Eng. Abstr.) **(Rus)**

[The rate of formation of necrotic focus and the severity of clinical picture in the acute period of myocardial infarction] Vinogradov AV, et al. **Kardiologiia** 1989 May; 29(5):27–30 (Eng. Abstr.) **(Rus)**

[Methodologic problems in the use of dynamic magnetic mapping of the heart] Zhuravlev IuE, et al. **Kardiologiia** 1988 Jul;28(7):9–14 (Eng. Abstr.) **(Rus)**

[Characteristics of Doppler echocardiographic examination of the right heart in patients with lung diseases] Perleĭ V\ . et al. **Klin Med (Mosk)** 1989 Jun;67(6):72–5 (Eng. Abstr.) **(Rus)**

[Structural and functional status of the myocardium in patients with hypertension after long-term use of albetol] Zanozdra NS, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):58–62 (Eng. Abstr.) **(Rus)**

[Study of the nonuniformity of the pathologically altered auricle of the atrium in man and dogs according to the rhythmo-inotropic response] Mukumov MR, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):34–7 (Eng. Abstr.) **(Rus)**

[Regulatory systems and morphofunctional status of the myocardium in dogs after restoration of circulation in ischemic extremities] Sergeeva NA, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):45–8 (Eng. Abstr.) **(Rus)**

[Early diagnosis of left-ventricular hypertrophy using precordial electrocardiographic mapping of the heart] Murashko VV, et al. **Ter Arkh** 1988;60(7):41–4 (Eng. Abstr.) **(Rus)**

[Magnetic resonance tomography of the heart in hypertrophic cardiomyopathy] Sinitsyn VE, et al. **Ter Arkh** 1989;61(4):51–4 (Eng. Abstr.) **(Rus)**

[Morphologic changes in the myocardium in experimental infarct treated with benzofurocaine] Grigor'eva NN, et al. **Vrach Delo** 1988 Aug;(8):36–8 (Eng. Abstr.) **(Rus)**

[Diagnostic significance of protein complexes in ischemic and noncoronagenic damage of the myocardium] Mazurets AF, et al. **Vrach Delo** 1989 Feb;(2):54–7 (Eng. Abstr.) **(Rus)**

[Age- and sex-related characteristics of the heart and brain in hypertension patients] Petrenko AG. **Vrach Delo** 1989 Apr;(4):45–7 (Eng. Abstr.) **(Rus)**

[The importance of endomyocardial biopsy in the diagnosis of noncoronarogenic diseases of the heart muscle] Tereshchenko VP, et al. **Vrach Delo** 1988 Aug;(8):46–8 (Eng. Abstr.) **(Rus)**

[Structural changes of the heart in craniocerebral trauma] Zinchuk VS. **Vrach Delo** 1989 Mar;(3):18–21 (Eng. Abstr.) **(Rus)**

[Pathologico-anatomic changes of the myocardium in febrile schizophrenia] Zuev SA. **Zh Nevropatol Psikhiatr** 1988; 88(7):58–9 (Eng. Abstr.) **(Rus)**

[Cardiac complication of mucoviscidosis] Danihel L, et al. **Bratisl Lek Listy** 1989 May;90(5):328–35 (Eng. Abstr.) **(Slo)**

[The effect of diltiazem (Lachema) on transmural non-homogeneity of histochemical changes due to the Ca-paradox] Tribulová N, et al. **Bratisl Lek Listy** 1989 Mar;90(3):168–74 (Eng. Abstr.) **(Slo)**

[Evaluation of small branch occlusion and myocardial damage related to angioplasty. Usefulness of determining serum CK-MB] Angel J, et al. **Rev Esp Cardiol** 1989 Apr; 42(4):246–53 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Light and electron microscopic observation of specific atrial granules using water-miscible resin as an embedding medium. Nomura T, et al. **Acta Med Okayama** 1988 Dec; 42(6):311–6

Calcium channel binding characteristics in the human heart. Finkel MS, et al. **Am J Cardiol** 1988 Dec 1;62(17):1281–4

The effect of verapamil cardioplegia on myocardial ultrastructure. Atkinson JB, et al. **Am J Cardiovasc Pathol** 1988 Apr;2(1):69–77

The importance of membrane stabilization in protecting the developing rat myocardium from the actions of triac. Pearce PC, et al. **Am J Cardiovasc Pathol** 1988;2(2):173–9

Cardiac matrix alterations induced by adriamycin. Caulfield JB, et al. **Am J Pathol** 1988 Nov;133(2):298–305

Connective tissue cells in healing rat myocardium. A study of cell reactions in rhythmically contracting environment. Vracko R, et al. **Am J Pathol** 1989 May;134(5):993–1006

Influence of verapamil on some subcellular defects in diabetic cardiomyopathy. Afzal N, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):E453–8

Two structural states of Z-bands in cardiac muscle. Goldstein MA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H552–9

Ultrastructural characteristics of different stages of human chagasic myocarditis. Palacios-Prü E, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):29–40

A survey by scanning electron microscopy of the extracellular matrix and endothelial components of the primordial chick heart. Drake CJ, et al. **Anat Rec** 1988 Dec;222(4):391–400

Membrane systems of guinea pig myocardium: ultrastructure and morphometric studies. Forbes MS, et al. **Anat Rec** 1988 Dec;222(4):362–79

Effects of diltiazem on isoproterenol- or Ca-induced ventricular myocardial cell injuries in isolated perfused rabbit heart: an electron microscopic study. Kim HD, et al. **Anat Rec** 1988 Nov;222(3):260–71

Three-dimensional reconstruction of the myofiber pattern in the fetal and neonatal mouse heart. McLean M, et al. **Anat Rec** 1989 Jul;224(3):392–406

Cytoplasmic stress fibers in the developing heart. Sumida H, et al. **Anat Rec** 1989 Jan;223(1):82–9

Multiple types of calcium channels in heart muscle and neurons. Modulation by drugs and neurotransmitters. Bean BP. **Ann N Y Acad Sci** 1989;560:334–45 (33 ref.)

Doxorubicin affects both the number and the morphology of specific atrial granules in dog heart. Bellini O, et al. **Anticancer Res** 1988 Jul–Aug;8(4):599–604

Small granule-containing cells in the heart of the toad (Bufo melanostictus). Tay SW, et al. **Arch Histol Cytol** 1988 Oct; 51(4):341–8

Ultrastructure of electrophysiologically identified human sinoatrial nodes. Lowe JE, et al. **Basic Res Cardiol** 1988 Jul–Aug;83(4):401–9

Stimulated human neutrophils damage cardiac sarcoplasmic reticulum function by generation of oxidants. Kukreja RC, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):198–205

Subcellular distribution of malate-aspartate cycle intermediates during normoxia and anoxia in the heart. Wiesner RJ, et al. **Biochim Biophys Acta** 1988 Oct 26; 936(1):114–23

Free radical-induced damage of cardiac sarcolemma (SL) and activity loss of beta-receptor adenylate cyclase system (beta-RAS). A comparison of the time courses. Schimke I, et al. **Biomed Biochim Acta** 1989;48(2-3):S69–72

Sarcomere dynamics in isolated cardiac myocytes investigated by high-time resolution laser light diffractometry. Wussling M, et al. **Biomed Biochim Acta** 1989;48(5-6):S399–402

Collagen network remodelling and diastolic stiffness of the rat left ventricle with pressure overload hypertrophy. Doering CW, et al. **Cardiovasc Res** 1988 Oct;22(10):686–95

Microcarrier culture of neonatal cardiac myocytes in metabolic studies. Uusimaa PA, et al. **Cardiovasc Res** 1988 Apr;22(4):291–5

Localization of wheat-germ agglutinin-binding sites in the Golgi complex of cultured rat atrial myocytes. Iida H, et al. **Cell Tissue Res** 1989 Aug;257(2):325–31

Nuclear characteristics of cardiac myocytes following the proliferative response to mincing of the myocardium in the adult newt, Notophthalmus viridescens. Oberpriller JO, et al. **Cell Tissue Res** 1988 Sep;253(3):619–24

Atrial-specific granules in the hearts of normal and water-deprived rats. Toshimori H, et al. **Cell Tissue Res** 1988 Sep;253(3):547–52

Quantitative analyses of atrial myoendocrine cells and plasma atrial natriuretic peptides (ANP) of the rat with special reference to the twenty-four-hour variations in secretory granules and plasma ANP concentrations. Watanabe T, et al. **Cell Tissue Res** 1988 Oct;254(1):133–7

Improving myocardial protection with high-dose insulin. Yu ZH, et al. **Chin Med J [Engl]** 1988 Aug;101(8):571–8

Cardiac gap junctions and gap junction-associated vesicles: ultrastructural comparison of in situ negative staining with conventional positive staining. Chen L, et al. **Circ Res** 1989 Mar;64(3):501–14

Distribution and three-dimensional structure of intercellular junctions in canine myocardium. Hoyt RH, et al. **Circ Res** 1989 Mar;64(3):563–74

Ethanol induced cardiomyopathy--role of periodic fasting. Baruah JK, et al. **Exp Pathol** 1988;33(4):201–6

Systemic morphofunctional assessment of ultrastructural orga..ization and pathology of myocardial cells. Gevondyan TA. **Gegenbaurs Morphol Jahrb** 1989; 135(1):195–7

Isoproterenol-induced ultrastructural alterations in hearts of alloxan-diabetic rabbits. Bhimji S, et al. **Gen Pharmacol** 1989;20(4):479–85

Norepinephrine-induced enlargement of nucleus in cultured myocardial cells. Igawa T, et al. **Heart Vessels** 1988; 4(1):1–5

Microtubules in cardiac myocytes. Rappaport L, et al. **Int Rev Cytol** 1988;113:101–43 (139 ref.)
Proliferative membranopathy and human immunodeficiency virus in AIDS hearts. Flomenbaum M, et al. **J Acquir Immune Defic Syndr** 1989;2(2):129–35
Ultrastructural findings in endomyocardial biopsy of patients with Kearns–Sayre syndrome [published erratum appears in J Am Coll Cardiol 1989 Jan;13(1):264] Schwartzkopff B, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1522–8
Ultrastructure of the internodal myocardium in the rat. Ayettey AS, et al. **J Anat** 1988 Jun;158:77–90
Antisera directed against connexin43 peptides react with a 43-kD protein localized to gap junctions in myocardium and other tissues. Beyer EC, et al. **J Cell Biol** 1989 Feb; 108(2):595–605
The 43-kD polypeptide of heart gap junctions: immunolocalization, topology, and functional domains. Yancey SB, et al. **J Cell Biol** 1989 Jun;108(6):2241–54
Differential effect of DPI 201–106 on the sensitivity of the myofilaments to Ca2+ in intact and skinned trabeculae from control and myopathic human hearts. Hajjar RJ, et al. **J Clin Invest** 1988 Nov;82(5):1578–84
Inhibition of the release of arachidonic acid prevents the development of sarcolemmal membrane defects in cultured rat myocardial cells during adenosine triphosphate depletion. Sen A, et al. **J Clin Invest** 1988 Oct;82(4):1333–8
Visualization and identification of cytoskeletal filaments in embryonic chick heart by the quick-freeze deep-etch method combined with immunocytochemistry. Sugi Y. **J Electron Microsc (Tokyo)** 1989;38(2):126–31
Myocardial innervation in long-term heart transplant survivors: a quantitative ultrastructural survey. Rowan RA, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):448–52
Ultracytochemistry of calmodulin binding sites in myocardial cells by staining of frozen thin sections with colloidal gold-labeled calmodulin. Fujimoto K, et al. **J Histochem Cytochem** 1989 Feb;37(2):249–56
An immunocytochemical study on co-localization of cathepsin B and atrial natriuretic peptides in secretory granules of atrial myoendocrine cells of rat heart. Watanabe T, et al. **J Histochem Cytochem** 1989 Mar;37(3):347–51
Cross-linking of cardiac gap junction connexons by thiol/disulfide exchanges. Dupont E, et al. **J Membr Biol** 1989 Jun;108(3):247–52
Ultrastructural localization of calcium in the myocardium of cardiomyopathic syrian hamsters. Olbrich HG, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):753–62
Cardiac muscle following quick-freezing: preservation of in vivo ultrastructure and geometry with special emphasis on intercellular clefts in the intact frog heart. Sommer JR, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):285–302
Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64
Evaluation of the JT and corrected JT intervals as a new ECG method for monitoring doxorubicin cardiotoxicity in the dog. Danesi R, et al. **J Pharmacol Methods** 1989 Jul;21(4):317–27
Studies on prolonged acute regional ischemia. I. Evidence for preserved cellular viability after 6 hours of coronary occlusion. Beyersdorf F, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):112–26
Polarity and length of actin filaments at the fascia adherens of the cardiac intercalated disk. Yamaguchi M, et al. **J Ultrastruct Mol Struct Res** 1988 Sep;100(3):235–44
Epinephrine-induced cytotoxicity of rat plasma. Its effects on isolated cardiac myocytes. Noronha-Dutra AA, et al. **Lab Invest** 1988 Dec;59(6):817–23
Cardiac sarcolemmal substrate of the cGMP-dependent protein kinase. Cuppoletti J, et al. **Membr Biochem** 1987–88; 7(3):135–42
Isolation of canine cardiac sarcoplasmic reticulum. Chamberlain BK, et al. **Methods Enzymol** 1988;157:91–9
Junctional and longitudinal sarcoplasmic reticulum of heart muscle. Inui M, et al. **Methods Enzymol** 1988;157:100–6
Rapid preparation of canine cardiac sarcolemmal vesicles by sucrose flotation. Jones LR. **Methods Enzymol** 1988; 157:85–91
Effect of single injection of monocrotaline on rat atrial granulation. Nomura T, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2–3):71–87
Structural changes on crista terminalis fibres of rabbit hearts produced by different fixing procedures. Calligaro A, et al. **Pathologica** 1988 May–Jun;80(1067):319–23
Microvascular aspects of myocardial lymphatic vessels in the dog by scanning electron microscopy. Esperança-Pina JA. **Prog Clin Biol Res** 1989;295:435–41
The endocrine heart. Forssmann WG. **Prog Clin Biol Res** 1989;295:401–17 (27 ref.)
Three-dimensional localization of contractile proteins in cultured cardiac myocytes by immunogold staining and deep-etching replica electron microscopy. Isobe Y, et al. **Prog Clin Biol Res** 1989;295:295–300
Scanning electron microscopy in clinics. Laschi R, et al. **Prog Clin Biol Res** 1989;295:605–21 (37 ref.)
Surface morphology of myocardium, Purkinje fibers, and transitional cells. Shimada T, et al. **Prog Clin Biol Res** 1989; 295:419–25
Preservation of myocardial ultrastructural integrity following ischemic arrest. Clinical use of nifedipine cardioplegia. Preliminary report. Donegani E, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):363–7
Fine structure of A: autonomic nerve fibers and terminals in human myocardium; and B: myocardial changes in congenital heart disease. Dastur DK, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):413–31
Ultrastructure of spontaneous cardiac calcification in DBA/2NCrj mice. Itagaki S, et al. **Vet Pathol** 1988 Sep; 25(5):393–5
[A pathologic and ultrastructural study of Coxsackie B3 myocarditis in mice] Lin JZ. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):159–60 **(Chi)**
[Ultrastructural study of the myocardium of the right infundibulum in the tetralogy of Fallot] Song LF. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):252–3, 18 (Eng. Abstr.) **(Chi)**
[Mechanism of myocardial reoxygenation injury and the protective effect of sheng mai san on the myocardium] Yao M. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):313–5, 22 (Eng. Abstr.) **(Chi)**
[Comparative observation on atrial specific granules of secretive atriopeptides and secretive granules of beta-cells of pancreatic islets] Wang YP, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):385–7 (Eng. Abstr.) **(Chi)**
[Ultrastructural morphometric studies of the myocardium of cardiomyopathic hamsters of the BI0 8262 strain] Fitzl G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):191–3 (Eng. Abstr.) **(Ger)**
[Ultrastructural morphometric studies of myocardial cells of rats after 3 hour autolysis with and without preliminary short term physical exertion] Wassilew G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):215–9 (Eng. Abstr.) **(Ger)**
[Morphology of myocardial infarct] Mihatsch MJ. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1688–91 (Eng. Abstr.) **(Ger)**
[Ultrastructural study of left ventricular myocardium in mitral regurgitation—correlations with postoperative cardiac functions] Miyachi Y. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):297–305 (Eng. Abstr.) **(Jpn)**
[The effect of cardioplegic solution on the function of the myocardial cell membrane] Yoshida K. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1049–58 (Eng. Abstr.) **(Jpn)**
[Morphologic mechanisms of blood flow regulation in the hemomicrocirculatory system of the human heart during ontogenesis] Makovetskii VD, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):26–33 (Eng. Abstr.) **(Rus)**
[Ultrastructure of cardiomyocytes during mitral valve replacement in non-perfusion hypothermia] Maksimov VF, et al. **Arkh Patol** 1989;51(2):9–15 (Eng. Abstr.) **(Rus)**
[Ultrastructure of the human heart sinus node in alcoholic cardiomyopathy under acute alcohol intoxication and without it] Pavlovich ER. **Arkh Patol** 1988;50(11):28–35 (Eng. Abstr.) **(Rus)**
[Ultrastructural mechanisms of myocardial atrophy in white rats during starvation] Nepomniashchikh LM, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):477–81 (Eng. Abstr.) **(Rus)**
[Stereologic analysis of the myocardium in alcoholic cardiomyopathy] Nepomniashchikh LM, et al. **Biull Eksp Biol Med** 1989 May;107(5):629–33 (Eng. Abstr.) **(Rus)**
[Ultrastructural characteristics of division of cardiomyocyte nuclei in adult rats] Shperling ID, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):369–71 (Eng. Abstr.) **(Rus)**
[Myocardial ultrastructure, energetics and function in chronic adriamycin-induced lesions] Kapel'ko VI, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):22–7 (Eng. Abstr.) **(Rus)**
[Intracellular mechanisms of the effect of cytochrome C on various areas of the myocardium during the dynamic development of an experimental infarct] Irgashev ShB, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):41–4 (Eng. Abstr.) **(Rus)**
[Effect of ionol on the hematoparenchymatous barrier of the rat myocardium in hypoxic hypoxia] Man'kovskaia IN, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):7–13 (Eng. Abstr.) **(Rus)**
[Ultrastructural analysis of atrial cardiomyocytes of rats exposed to acceleration +5Gz] Artemian NA, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):60–4 (Eng. Abstr.) **(Rus)**
[Morphologic changes in the myocardium in infectious-allergic myocarditis with heart rhythm disorders] Odinokova VA, et al. **Sov Med** 1988;(6):77–9 **(Rus)**
[Transmural differences between damaged cardiomyocytes due to post-ischemic reperfusion and calcium paradox] Slezák J, et al. **Bratisl Lek Listy** 1989 Feb;90(2):67–73 (Eng. Abstr.) **(Slo)**
[Effect of conorphone on the dimensions of the myocardial infarct and the ultrastructural changes in the adjacent tissue] Nekrassov V, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):505–9 (Eng. Abstr.) **(Spa)**

MYOCLONIC EPILEPSY, PROGRESSIVE see **EPILEPSY, MYOCLONUS**

MYOCLONIC JERKING, MASSIVE see **SPASMS, INFANTILE**

MYOCLONUS

AAEE minimonograph #30: electrophysiologic studies of myoclonus [see comments] Shibasaki H. **Muscle Nerve** 1988 Sep;11(9):899–907 (32 ref.). **Comment in:** Muscle Nerve 1989 Jun;12(6):514–5
Palatal myoclonus in children [letter] Fox GN. **Neurology** 1989 Jun;39(6):877

CEREBROSPINAL FLUID

Cerebrospinal fluid neurochemistry in the myoclonic subtype of Alzheimer's disease. Kaye JA, et al. **Ann Neurol** 1988 Nov;24(5):647–50

CHEMICALLY INDUCED

Spinal myoclonus induced by contrast material: an alternative explanation [letter] Heyman SN, et al. **AJNR** 1989 May–Jun;10(3):653
Etomidate myoclonus and the open globe. Berry JM, et al. **Anesth Analg** 1989 Aug;69(2):256–9
Myoclonus associated with treatment with high doses of morphine: the role of supplemental drugs. Potter JM, et al. **BMJ** 1989 Jul 15;299(6692):150–3
Chorea and myoclonus in the monkey induced by gamma-aminobutyric acid antagonism in the lentiform complex. The site of drug action and a hypothesis for the neural mechanisms of chorea. Crossman AR, et al. **Brain** 1988 Oct;111 (Pt 5):1211–33
Myoclonic activity associated with cefmetazole, with a review of neurotoxicity of cephalosporins. Uchihara T, et al. **Clin Neurol Neurosurg** 1988;90(4):369–71
Myoclonus during combined tricyclic antidepressant and lithium treatment [letter] Devanand DP, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):446–7
Acute dystonic reaction with asterixis and myoclonus following metoclopramide therapy [letter] Lu CS, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1002–3
Tardive myoclonus. Little JT, et al. **Mov Disord** 1987; 2(4):307–11
Glycine involvement in DDT-induced myoclonus. Truong DD, et al. **Mov Disord** 1988;3(1):77–87
Nifedipine and myoclonic disorders [letter] Pedro-Botet ML, et al. **Nephron** 1989;51(2):281
[Myoclonic encephalopathy caused by bismuth salts. Efficacy of treatment with dimercaprol] Molina JA, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):20–2 (Eng. Abstr.) **(Spa)**
[Myoclonic encephalopathy caused by bismuth (letter)] Gómez Jiménez J, et al. **Rev Clin Esp** 1989 Mar;184(4):212 **(Spa)**

CLASSIFICATION

Myoclonus (nocturnus) [letter; comment] Kamphuisen HA. **Muscle Nerve** 1989 Jun;12(6):514–5. **Comment on:** Muscle Nerve 1988 Sep;11(9):899–907

COMPLICATIONS

Familial Alzheimer's disease with myoclonus and 'spongy change'. Duffy P, et al. **Arch Neurol** 1988 Oct; 45(10):1097–100
An intracranial arteriovenous malformation and palatal myoclonus related to pseudoxanthoma elasticum. Chalk JB, et al. **Aust N Z J Med** 1989 Apr;19(2):141–3
Myoclonus and adult coeliac disease. Tison F, et al. **J Neurol** 1989 Jul;236(5):307–8
Periodic movements in sleep and sleep–wake complaint. Saskin P, et al. **Sleep** 1985 Dec;8(4):319–24
[Opso-myoclonic syndrome and Coxsackie B3 (letter)] Hervé F, et al. **Arch Fr Pediatr** 1988 Oct;45(8):597–8 **(Fre)**
[Spinocerebellar degeneration with oculopalatal myoclonus: a study on palato-ocular synchrony] Yokota T, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):382–7 (Eng. Abstr.) **(Jpn)**
[Acute rhabdomyolysis] Fernández-Quero Bonilla L, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct;35(5):268–70 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

MRI findings of inferior olives in palatal myoclonus. Yokota T, et al. **J Neurol** 1989 Feb;236(2):115–6
Pontine lesion in opsoclonus–myoclonus syndrome shown by MRI. Hattori T, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1572–5
[Benign neonatal sleep myoclonus] Tsur M, et al. **Harefuah** 1988 Oct;115(7–8):179–80 (Eng. Abstr.) **(Heb)**

DRUG THERAPY

Successful treatment of cherry red spot–myoclonus syndrome with 5-hydroxytryptophan. Gascon G, et al. **Ann Neurol** 1988 Sep;24(3):453–5
The treatment of severe action myoclonus. Obeso JA, et al. **Brain** 1989 Jun;112 (Pt 3):765–77
Piracetam in the treatment of different types of myoclonus. Obeso JA, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):529–36
Periodic leg movement, sleep fragmentation and central sleep apnoea in two cases: reduction with Clonazepam.

Guilleminault C, et al. **Eur Respir J** 1988 Aug;1(8):762–5
Effectiveness of trihexyphenidyl against pendular nystagmus and palatal myoclonus: evidence of cholinergic dysfunction. Jabbari B, et al. **Mov Disord** 1987;2(2):93–8
Therapeutic trial with glycine in myoclonus. Truong DD, et al. **Mov Disord** 1988;3(3):222–32

ETIOLOGY

Hypertrophy of the inferior olivary nucleus. A clinico–pathological observation. De Bleecker J, et al. **Acta Neurol Belg** 1988 Aug–Oct;88(4):221–8
Myoclonus in a patient with spinal cord transection. Possible involvement of the spinal stepping generator. Bussel B, et al. **Brain** 1988 Oct;111 (Pt 5):1235–45
Crural and axial myoclonic dystonia following meralgia paraesthetica. ter Bruggen JP, et al. **Mov Disord** 1988; 3(2):176–8
Mumps–induced opsoclonus–myoclonus and ataxia. Ichiba N, et al. **Pediatr Neurol** 1988 Jul–Aug;4(4):224–7
[Spinal myoclonias in spinal cord angioma. Diagnosis and therapy] Artmann H, et al. **Nervenarzt** 1989 May; 60(5):305–9 **(Ger)**
[Spinal myoclonus related to HTLV–I associated myelopathy (HAM)] Kanda T, et al. **Rinsho Shinkeigaku** 1988 Sep; 28(9):1030–3 (Eng. Abstr.) **(Jpn)**
[Palatal myoclonus and hypertrophy of the olivary nucleus. Case report] Olejniczak P. **Neuropatol Pol** 1988; 26(3):377–83 (Eng. Abstr.) **(Pol)**

GENETICS

Hereditary myoclonus and chorea: the spectrum of hereditary nonprogressive hyperkinetic movement disorders. Kurlan R, et al. **Mov Disord** 1987;2(4):301–6

PHYSIOPATHOLOGY

Association of lower motor neuron disorders with fasciculation, neuromyotonia and myoclonus. Lance JW. **Aust Paediatr J** 1988;24 Suppl 1:113–5 (13 ref.)
A neurochemical study of a new mutant mouse presenting myoclonus–like involuntary movement: a possible model of spontaneous serotonergic hyperactivity. Ikeda M, et al. **Brain Res** 1989 Aug 28;495(2):337–48
Dancing eyes syndrome—brainstem acoustic evoked potential approach. Kálmánchey R, et al. **Neuropediatrics** 1988 Nov;19(4):193–6
Pathologic myoclonus of the newborn: electrographic and clinical correlations. Scher MS. **Pediatr Neurol** 1985 Nov–Dec;1(6):342–8
Chronic ACTH treatment: influence on 5–HT2 receptors and behavioral supersensitivity induced by 5,7–dihydroxytryptamine lesions. Pranzatelli MR, et al. **Peptides** 1989 Jan–Feb;10(1):5–8
LSD and other related hallucinogens elicit myoclonic jumping behavior in the guinea pig. Carvey P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):199–210
The opioid system in the restless legs and nocturnal myoclonus syndromes [letter] Sandyk R, et al. **Sleep** 1986 Jun;9(2):370–1
[A case of stimulus–sensitive segmental spinal myoclonus] Sagisaka H, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):310–4 (Eng. Abstr.) **(Jpn)**
[A case of adult type galactosialidosis—with special reference to pharmacologic and neurophysiologic studies on myoclonus] Yarita H, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1234–40 (Eng. Abstr.) **(Jpn)**
[Unilateral palatal myoclonus with peculiar ocular movements—neurotological studies and MRI] Yokota T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):159–63 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Opsoclonus–myoclonus syndrome: correlation of radiographic and pathological observations. Tuchman RF, et al. **Neuroradiology** 1989;31(3):250–2

THERAPY

Myoclonic dystonia: effective treatment by cervical cord stimulation. A case report. Groen RJ, et al. **Surg Neurol** 1989 Jul;32(1):72–4

VETERINARY

Deficit of spinal cord glycine/strychnine receptors in inherited myoclonus of Poll Hereford calves. Gundlach AL, et al. **Science** 1988 Sep 30;241(4874):1807–10

MYODYSTROPHIA FETALIS DEFORMANS see **ARTHROGRYPOSIS**

MYOEPITHELIAL TUMOR

ANALYSIS

Different contents of glycosaminoglycans in a human neoplastic salivary duct cell line and its subclone with a myoepithelial phenotype. Shirasuna K, et al. **Virchows Arch [B]** 1989;57(3):175–80

METABOLISM

Myoepitheliomas and myoepithelial adenomas of salivary gland origin. Immunohistochemical evaluation of filament proteins, S–100 alpha and beta, glial fibrillary acidic proteins, neuron–specific enolase, and lactoferrin. Mori M, et al. **Pathol Res Pract** 1989 Feb;184(2):168–78

PATHOLOGY

Spindle–cell adenomyoepithelioma of the breast. A microscopic, ultrastructural, and immunocytochemical study. Weidner N, et al. **Cancer** 1988 Oct 15;62(8):1561–7
Clear cell myoepithelial neoplasm of the breast. Cartagena N Jr, et al. **Hum Pathol** 1988 Oct;19(10):1239–43
Metaplastic carcinomas of the breast. I. Matrix–producing carcinoma. Wargotz ES, et al. **Hum Pathol** 1989 Jul; 20(7):628–35
[Adeno–myoepithelial proliferation in the breast] Decorsière JB, et al. **Ann Pathol** 1988;8(4–5):311–6 (Eng. Abstr.) **(Fre)**
[Myoepithelioma of the breast] Frei R, et al. **Pathologe** 1989 Jan;10(1):48–52 **(Ger)**
[The role of myoepithelial cells in neoplastic pathology of the salivary glands] Bertelli E, et al. **Minerva Stomatol** 1988 Oct;37(10):741–4 (Eng. Abstr.) **(Ita)**
[Malignant myoepithelioma of the breast (histological, immunomorphological and electron microscopic study)] Ermilova VD, et al. **Arkh Patol** 1988;50(6):53–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Myoepithelioma—new concepts of histology and classification: a light and electron microscopic study. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun; 13(2–3):187–224 (79 ref.)

MYOEPITHELIOMA see **MYOEPITHELIAL TUMOR**

MYOFASCIAL PAIN DYSFUNCTION SYNDROME, TEMPOROMANDIBULAR JOINT see **TEMPOROMANDIBULAR JOINT SYNDROME**

MYOFASCIAL PAIN SYNDROMES

Myofascial pain syndrome. Escobar PL, et al. **Orthop Rev** 1987 Oct;16(10):708–13 (35 ref.)
Regional myofascial pain syndromes. Campbell SM. **Rheum Dis Clin North Am** 1989 Feb;15(1):31–44 (70 ref.)

CLASSIFICATION

The concept of primary fibromyalgia [letter] Margoles MS. **Pain** 1989 Mar;36(3):391–2

COMPLICATIONS

Myofascial trigger points as a cause of headaches. Mennell J. **J Manipulative Physiol Ther** 1989 Aug;12(4):308–13
Musculoskeletal chest pain in patients with "angina": a prospective study. Levine PR, et al. **South Med J** 1989 May;82(5):580–5, 591

DIAGNOSIS

Thermographic imaging of myofascial trigger points [letter; comment] Wolf TD. **J Manipulative Physiol Ther** 1989 Feb; 12(1):63–4. **Comment on:** J Manipulative Physiol Ther 1988 Apr;11(2):114–7

EPIDEMIOLOGY

Prevalence of myofascial pain in general internal medicine practice. Skootsky SA, et al. **West J Med** 1989 Aug; 151(2):157–60

PHYSIOPATHOLOGY

Myofascial pain syndrome. Fricton JR. **Neurol Clin** 1989 May;7(2):413–27 (46 ref.)

PSYCHOLOGY

DSM–III diagnoses of patients with myofascial pain syndrome (fibrositis). Fishbain DA, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):433–8

RADIOTHERAPY

Chronic myofascial pain: management by low–output helium–neon laser therapy. Waylonis GW, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1017–20
Effects of helium–neon laser irradiation on skin resistance and pain in patients with trigger points in the neck or back. Snyder–Mackler L, et al. **Phys Ther** 1989 May;69(5):336–41

THERAPY

Low back disorders: conservative management [see comments] Fast A. **Arch Phys Med Rehabil** 1988 Oct; 69(10):880–91 (106 ref.). **Comment in:** Arch Phys Med Rehabil 1989 Mar;70(3):249
The case of the missing ozone: are physiatrists to blame? Vallentyne SW, et al. **Arch Phys Med Rehabil** 1988 Nov; 69(11):992–3
Myofascial pain in children. Aftimos S. **N Z Med J** 1989 Aug 23;102(874):440–1
Effects of transcutaneous electrical nerve stimulation on myofascial pain and trigger point sensitivity. Graff–Radford SB, et al. **Pain** 1989 Apr;37(1):1–5
A prospective, randomized, double–blind evaluation of trigger–point injection therapy for low–back pain. Garvey TA, et al. **Spine** 1989 Sep;14(9):962–4

MYOFIBRILS

see related **MUSCLE CONTRACTION**

ANALYSIS

Immunocytochemical studies of spectrin in hamster cardiac tissue. Messina DA, et al. **Cell Motil Cytoskeleton** 1989; 12(3):139–49
Myofibril assembly is linked with vinculin, alpha–actinin, and cell–substrate contacts in embryonic cardiac myocytes in vitro. Terai M, et al. **Cell Motil Cytoskeleton** 1989; 12(4):185–94
A silver–reducing component in rat striated muscle. I. Selective localization at the level of the terminal cistern/transverse tubule system. Light and electron microscope studies with a new histochemical procedure. Tandler CJ, et al. **Histochemistry** 1989;92(1):15–22
Localization of paratropomyosin in skeletal muscle myofibrils and its translocation during postmortem storage of muscles. Hattori A, et al. **J Biochem (Tokyo)** 1988 May;103(5):809–14
Identification of troponin–I of crayfish myofibrils. Shinoda Y, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):636–40
Histochemical characteristics of masseter and temporalis muscles after 5 weeks of maxillomandibular fixation—an investigation in Macaca mulatta. Mayo KH, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):421–6
[Connectin, muscle elastic protein] Maruyama K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(15):2579–84 **(Jpn)**

ANATOMY & HISTOLOGY

The range of sarcomere lengths in the muscles of the human lower limb. Cutts A. **J Anat** 1988 Oct;160:79–88

DRUG EFFECTS

Effect of paratropomyosin on the increase in sarcomere length of rigor–shortened skeletal muscles. Yamanoue M, et al. **J Biochem (Tokyo)** 1988 May;103(5):843–7
Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate. Lin ZX, et al. **J Cell Biol** 1989 Mar;108(3):1079–91
Increase by trifluoperazine in calcium sensitivity of myofibrils in a skinned fibre from frog skeletal muscle. Kurebayashi N, et al. **J Physiol (Lond)** 1988 Sep;403:407–24
Influence of sodium pentobarbital on pH, sarcomere length, and muscle tenderness of broiler Pectoralis major muscle. McGinnis JP, et al. **Poult Sci** 1989 Feb;68(2):244–8

ENZYMOLOGY

Binding of adenylosuccinate synthetase to contractile proteins of muscle. Manfredi JP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C29–35
Evidence for a latent form of protein phosphatase 1 associated with cardiac myofibrils. Schlender KK, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):72–8
Shortening velocity and myosin and myofibrillar ATPase activity related to myosin isoenzyme composition during postnatal development in rat myocardium. Cappelli V, et al. **Circ Res** 1989 Aug;65(2):446–57
Reaction intermediates formed by myofibrils during the ATPase reaction under relaxed conditions. Miyata M, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):271–4
Effect of substitution of troponin C in cardiac myofibrils with skeletal troponin C or calmodulin on the Ca2+– and Sr2+–sensitive ATPase activity. Morimoto S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):149–54

METABOLISM

In–vitro stimulation of the rat epitrochlearis muscle. I. Contractile activity per se affects myofibrillar protein degradation and amino acid metabolism. Nie ZT, et al. **Acta Physiol Scand** 1989 Apr;135(4):513–21
Total and myofibrillar protein degradation in isolated soleus muscles after exercise. Kasperek GJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E1–5
Cellular compartmentation in ischemic myocardium: indirect analysis by electron probe. Walsh LG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H929–36
Ca2+, crossbridge phosphorylation, and contraction. Hai CM, et al. **Annu Rev Physiol** 1989;51:285–98 (96 ref.)
Binding of myosin to actin in myofibrils during ATP hydrolysis. Duong AM, et al. **Biochemistry** 1989 Feb 7; 28(3):1307–13
Fibrillar collagen and myocardial stiffness in the intact hypertrophied rat left ventricle. Jalil JE, et al. **Circ Res** 1989 Jun;64(6):1041–50
Monovalent ions are spatially bound within the sarcomere. von Zglinicki T. **Gen Physiol Biophys** 1988 Oct; 7(5):495–503
Ca2+ binding to skeletal muscle troponin C in skeletal and cardiac myofibrils. Morimoto S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):435–9
Oxygen exchange reaction during ATP hydrolysis by

glycerinated muscle fibers, myofibrils, and synthetic actomyosin filaments. Yasui M, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):644–7

Binding of ADP and 5'-adenylyl imidodiphosphate to rabbit muscle myofibrils. Biosca JA, et al. **J Biol Chem** 1988 Oct 5;263(28):14231–5

Identification and characterization of a factor that binds to two human sarcomeric actin promoters. Boxer LM, et al. **J Biol Chem** 1989 Jan 15;264(2):1284–92

Coordinate changes in fast thin filament and Z-line protein expression in the early response to chronic stimulation. Schachat F, et al. **J Biol Chem** 1988 Oct 5;263(28):13975–8

Sequential expression of smooth muscle and sarcomeric alpha-actin isoforms during BC3H1 cell differentiation. Strauch AR, et al. **J Biol Chem** 1989 May 15; 264(14):8345–55

The expression of sarcomeric muscle-specific contractile protein genes in BC3H1 cells: BC3H1 cells resemble skeletal myoblasts that are defective for commitment to terminal differentiation. Taubman MB, et al. **J Cell Biol** 1989 May;108(5):1799–806

Alpha 1-adrenergic receptor stimulation of sarcomeric actin isogene transcription in hypertrophy of cultured rat heart muscle cells. Long CS, et al. **J Clin Invest** 1989 Mar; 83(3):1078–82

High-molecular-weight serine proteinase from lobster muscle that degrades myofibrillar proteins. Mykles DL. **J Exp Zool** 1989 Jun;250(3):244–52

Differential regulation of the degradation of myofibrillar and total proteins in skeletal muscle of rats: effects of streptozotocin-induced diabetes, dietary protein and starvation. Kadowaki M, et al. **J Nutr** 1989 Mar; 119(3):471–7

Total and myofibrillar protein breakdown in different types of rat skeletal muscle: effects of sepsis and regulation by insulin. Hasselgren PO, et al. **Metabolism** 1989 Jul; 38(7):634–40

Influence of exercise on cardiac and skeletal muscle myofibrillar proteins. Belcastro AN, et al. **Mol Cell Biochem** 1988 Sep;83(1):27–36

The sarcomeric actin CArG-binding factor is indistinguishable from the c-fos serum response factor. Boxer LM, et al. **Mol Cell Biol** 1989 Feb;9(2):515–22

PATHOLOGY

Morphometric evaluation of myofibrillar hypoplasia in splayleg piglets. Curvers P, et al. **DTW** 1989 Apr; 96(4):189–91

Shrinkage of muscle fibres during the fixation of cadaveric tissue. Cutts A. **J Anat** 1988 Oct;160:75–8

Alterations to subplasmalemmal leptomeres in adult canine myocytes during total in vitro ischemia. Sage MD, et al. **Lab Invest** 1989 Aug;61(2):171–6

Mechanisms that produce rapid damage to myofilaments of amphibian skeletal muscle. Duncan CJ. **Muscle Nerve** 1989 Mar;12(3):210–8 (29 ref.)

PHYSIOLOGY

Stiffness and shortening changes in myofilament-extracted rat cardiac myocytes. Roos KP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H539–51

Sarcomere dynamics in isolated cardiac myocytes investigated by high-time resolution laser light diffractometry. Wussling M, et al. **Biomed Biochim Acta** 1989;48(5–6):S399–402

The friction constants of bundle-like particles in solution. Suda H. **Biophys Chem** 1988 Dec;32(2–3):239–45

Sarcomere length dependence of the force-velocity relation in single frog muscle fibers. Granzier HL, et al. **Biophys J** 1989 Mar;55(3):499–507

Filament lattice of frog striated muscle. Radial forces, lattice stability, and filament compression in the A-band of relaxed and rigor muscle. Millman BM, et al. **Biophys J** 1988 Sep; 54(3):437–47

Potassium, sodium, water, and Donnan potential changes in the myofibrils of intact muscle fibres after exposure to ouabain and K-free Ringer. Fong CN, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1057–65

Skeletal muscle myofibrillogenesis as revealed with a monoclonal antibody to titin in combination with detection of the alpha- and gamma-isoforms of actin. Handel SE, et al. **Dev Biol** 1989 Mar;132(1):35–44

Relation of muscle cell contraction and calcium distribution in sarcomere. Poledna J. **Gen Physiol Biophys** 1989 Apr; 8(2):81–90

Regulation of binding of phosphofructokinase to myofibrils in the red and white muscle of the barred sand bass, Paralabrax nebulifer (Serranidae). Roberts SJ, et al. **J Exp Biol** 1988 Jul;137:13–27

Synchronous depletion of ATP in isolated adult rat heart cells. Haworth RA, et al. **J Mol Cell Cardiol** 1988 Sep; 20(9):837–46

Bound calcium and force development in skinned cardiac muscle bundles: effect of sarcomere length. Hofmann PA, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):667–77

Functional state of myofibrils, mitochondria and bound creatine kinase in skinned ventricular fibers of cardiomyopathic hamsters. Veksler VI, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):329–42

Sarcomere length behaviour along single frog muscle fibres at different lengths during isometric tetani. Burton K, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):67–84

Potent stimulation of myofilament force and adenosine triphosphatase activity of canine cardiac muscle through a direct enhancement of troponin C Ca++ binding by MCI-154, a novel cardiotonic agent. Kitada Y, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):272–7

Fibrillatory activity and other membrane changes in partially denervated muscles. Arancio O, et al. **Muscle Nerve** 1989 Feb;12(2):149–53

Sarcomere 'give' during stretch of frog single muscle fibres with added series compliance. Bottinelli R, et al. **Q J Exp Physiol** 1989 Mar;74(2):215–7

[Aggregation of isolated myofibrils stimulated by their contraction. I. Origin of the second phase of optical changes during myofibril contraction] Shelud'ko NS, et al. **Biofizika** 1989 May–Jun;34(3):473–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Two structural states of Z-bands in cardiac muscle. Goldstein MA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H552–9

Fish muscle cytoskeletal network: its spatial organization and its degradation by an endogenous serine proteinase. Busconi L, et al. **Arch Biochem Biophys** 1989 Jan;268(1):203–8

Ultrastructural studies of scrapie-associated fibrils and prion protein from hamster brains infected with scrapie. Liberski PP, et al. **Folia Histochem Cytobiol** 1989;27(1):3–9

Genetic dissection of Drosophila myofibril formation: effects of actin and myosin heavy chain null alleles. Beall CJ, et al. **Genes Dev** 1989 Feb;3(2):131–40

Extensible and less-extensible domains of connectin filaments in stretched vertebrate skeletal muscle sarcomeres as detected by immunofluorescence and immunoelectron microscopy using monoclonal antibodies. Itoh Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):504–8

Ifm(2)2 is a myosin heavy chain allele that disrupts myofibrillar assembly only in the indirect flight muscle of Drosophila melanogaster. Chun M, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2613–21

Polygons and adhesion plaques and the disassembly and assembly of myofibrils in cardiac myocytes. Lin ZX, et al. **J Cell Biol** 1989 Jun;108(6):2355–67

Immunocytochemical studies of cardiac myofibrillogenesis in early chick embryos. III. Generation of fasciae adherentes and costameres. Tokuyasu KT. **J Cell Biol** 1989 Jan;108(1):43–53

Variation in thin filament size in the skeletal muscle of the frog. Corsi A, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):569–75

Does titin regulate the length of muscle thick filaments? Whiting A, et al. **J Mol Biol** 1989 Jan 5;205(1):263–8

Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64

Plateau and descending limb of the sarcomere length-tension relation in short length-clamped segments of frog muscle fibres. Bagni MA, et al. **J Physiol (Lond)** 1988 Jul; 401:581–95

Muscle capillary tortuosity in high altitude mice depends on sarcomere length. Mathieu-Costello O. **Respir Physiol** 1989 Jun;76(3):289–302

[Ultrastructural study of thyrotoxic myopathy] Tang GY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):116–7, 128 (Eng. Abstr.) **(Chi)**

MYOGLOBIN

The interaction of oxymyoglobin with hydrogen peroxide: a kinetic anomaly at large excesses of hydrogen peroxide. Whitburn KD. **Arch Biochem Biophys** 1988 Dec; 267(2):614–22

Optical spectroscopic observation of a metastable form of sperm whale myoglobin generated by reconstitution. Gebe JA, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):290–4

Proton NMR study of the influence on iron oxidation/ligation/spin state on the heme orientational preference in myoglobin. La Mar GN, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):462–8

Multiple conformational states in myoglobin revealed by frequency domain fluorometry. Bismuto E, et al. **Biochemistry** 1989 Feb 21;28(4):1508–12

Resonance Raman evidence that distal histidine protonation removes the steric hindrance to upright binding of carbon monoxide by myoglobin. Ramsden J, et al. **Biochemistry** 1989 Apr 18;28(8):3125–8

A structure of sperm whale myoglobin at a nitrogen gas pressure of 145 atmospheres. Tilton RF Jr, et al. **Biochemistry** 1988 Aug 23;27(17):6574–82

Aplysia oxymyoglobin with an unusual stability property: involvement of two kinds of carboxyl groups. Matsuoka A, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):127–32

The mechanism of reaction of nitrosyl with met- and oxymyoglobin: an ESR study. Neto LM, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):189–96

pH-dependence of photo-induced electron transfer in zinc-substituted sperm whale myoglobin. Shosheva AC, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):202–6

Sequences of the soluble tryptic peptides from myoglobin of yellowfin tuna (Thunnus albacares). Rice RH, et al. **Comp Biochem Physiol [B]** 1979;62(4):481–7

Apomyoglobin forms a micellar complex with phospholipid at low pH. Lee JW, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):181–4

Determination of the functionally important heme peripheral vinyl group orientation in paramagnetic hemoprotein by 2D NMR. Yamamoto Y, et al. **FEBS Lett** 1989 Apr 24; 247(2):263–7

Time kinetics of hemoglobin and myoglobin activation by tetrachlorodecaoxide (TCDO). Youngman RJ, et al. **Free Radic Res Commun** 1986;1(5):311–9

Protein conformational changes induced by guanidine at predenaturational concentrations. Bismuto E, et al. **Int J Pept Protein Res** 1988 Nov;32(5):321–5

Structural characterization of nitrimyoglobin. Bondoc LL, et al. **J Biol Chem** 1989 Apr 15;264(11):6134–45

Aplysia limacina myoglobin. Crystallographic analysis at 1.6 A resolution. Bolognesi M, et al. **J Mol Biol** 1989 Feb 5;205(3):529–44

Thermodynamic study of the apomyoglobin structure. Griko YV, et al. **J Mol Biol** 1988 Jul 5;202(1):127–38

Protozoan myoglobin from Paramecium caudatum. Its unusual amino acid sequence. Iwaasa H, et al. **J Mol Biol** 1989 Jul 20;208(2):355–8

Solvent effect in protein crystals. A neutron diffraction analysis of solvent and ion density. Schoenborn BP. **J Mol Biol** 1988 Jun 20;201(4):741–9

Dynamical transition of myoglobin revealed by inelastic neutron scattering. Doster W, et al. **Nature** 1989 Feb 23; 337(6209):754–6

The role of the distal histidine in myoglobin and haemoglobin. Olson JS, et al. **Nature** 1988 Nov 17; 336(6196):265–6

Diffusion-collision model for the folding kinetics of myoglobin. Bashford D, et al. **Proteins** 1988;4(3):211–27

Structural alignment and analysis of two distantly related proteins: Aplysia limacina myoglobin and sea lamprey globin. Pastore A, et al. **Proteins** 1988;4(4):240–50

[Myoglobin—its importance and possible methods of determination] Kurcová I, et al. **Cesk Fysiol** 1989; 38(1):29–40 (77 ref.) **(Cze)**

[Reconstituted myoglobins and hemoglobins with synthetic hemes] Ogoshi H. **Tanpakushitsu Kakusan Koso** 1987 May; 32(6):791–6 (24 ref.) **(Jpn)**

[Energy calculation on conformational change of myoglobin and hemoglobin] Seno Y, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):716–21 **(Jpn)**

[Stability properties of oxymyoglobins] Shikama K. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):732–7 (26 ref.) **(Jpn)**

[Calorimetric study of the formation and melting of thermotropic gel in solutions of globular proteins] Belopol'skaia TV, et al. **Biofizika** 1989 May–Jun; 34(3):520–1 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Comparative quantum-chemical analysis of the electronic structure and Mössbauer parameters of the active site models for deoxymyoglobin and alpha- and beta-subunits of tetrameric deoxyhemoglobin. Khleskov VI, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1255–60

Glass transition of deoxymyoglobin probed by optical absorption spectroscopy. Kushida T, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):948–53

pH-dependent forms of the ferryl haem in myoglobin peroxide analysed by variable-temperature magnetic circular dichroism. Foote N, et al. **Biochem J** 1989 Jul 15; 261(2):515–22

Determination of the chirality of the saturated pyrrole in sulfmyoglobin using the nuclear Overhauser effect. Parker WO Jr, et al. **Biochemistry** 1989 Feb 21;28(4):1517–25

The effects of high pressure upon ligated and deoxyhemoglobins and myoglobin. An optical spectroscopic study. Alden RG, et al. **J Biol Chem** 1989 Feb 5;264(4):1933–40

Structure of myoglobin-ethyl isocyanide. Histidine as a swinging door for ligand entry. Johnson KA, et al. **J Mol Biol** 1989 May 20;207(2):459–63

ANALYSIS

Time-resolved spectroscopy of hemoglobin and myoglobin in resting and ischemic muscle. Chance B, et al. **Anal Biochem** 1988 Nov 1;174(2):698–707

Separation of two components of horse myoglobin by isoelectric focusing field-flow fractionation. Chmelík J, et al. **Anal Chem** 1989 Apr 15;61(8):912–4

Catalytic reduction of myoglobin and hemoglobin at chemically modified electrodes containing methylene blue. Ye JN, et al. **Anal Chem** 1988 Oct 15;60(20):2263–8

Changes in circular dichroic and absorption spectra of myoglobin induced by carboxymethylation. Batra PP, et al. **Biochem Int** 1989 Feb;18(2):319–24

Etiohemin as a prosthetic group of myoglobin. Neya S, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):226–32

Myoglobin: an evaluation of its role as a marker of rhabdomyosarcomas. Leader M, et al. **Br J Cancer** 1989 Jan;59(1):106–9

Amino acid composition and physico-chemical properties of bluefin tuna (Thunnus thynnus) myoglobin. Balestrieri C, et al. **Comp Biochem Physiol [B]** 1978;60(2):195–9

4-vinyl and 2,4-divinyl deuteration effects on the low frequency resonance Raman bands of myoglobin: correlation with the structure of vinyl group. Uchida K,

et al. **J Biochem (Tokyo)** 1988 Jun;103(6):979–85

Ion–exchange equilibria of lysozyme, myoglobin and bovine serum albumin. Effective valence and exchanger capacity. Whitley RD, et al. **J Chromatogr** 1989 Mar 31; 465(2):137–56

Mechanism of protein folding: I. General considerations and refolding of myoglobin. Saitô N, et al. **Proteins** 1988; 3(3):199–207

Anti–rat myoglobin antisera in the immunocytochemical diagnosis of rhabdomyosarcomas of rats. Takahashi K, et al. **Vet Pathol** 1988 Sep;25(5):337–42

[Bioenergetics of the myocardiocytes in infectious–allergic myocarditis] Odinokova VA, et al. **Sov Med** 1989;(3):22–5 (Eng. Abstr.) **(Rus)**

[The use of monoclonal antibodies for the quantitative determination of myoglobin by the solid phase immunoenzyme "sandwich" assay] Iuronen EI, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):132–6 (Eng. Abstr.) **(Rus)**

[Development and comparisons of information value of different methods of myoglobin determination: solid phase immunoenzyme assay and hemagglutination test] Rott GM, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):124–9 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

[Study of nonequilibrium states of cyanide complexes of hemoglobin and myoglobin by a low–temperature inhibition method] Stepanov SV, et al. **Biofizika** 1988 Nov–Dec;33(6):944–9 (Eng. Abstr.) **(Rus)**

BLOOD

Early diagnosis of myocardial infarction by timed sequential enzyme measurements. Collinson PO, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):376–82

Comparison of two latex agglutination test kits for serum myoglobin in the exclusion of acute myocardial infarction. Konings CH, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):254–8

Early noninvasive detection of successful reperfusion in patients with acute myocardial infarction. Ellis AK, et al. **Circulation** 1988 Dec;78(6):1352–7

Hereditary progressive muscular dystrophies: serum myoglobin pattern in patients with different types of muscular dystrophies. Pöche H, et al. **Clin Physiol Biochem** 1989;7(1):40–6

Importance of myoglobinaemia for the outcome of hypoxia in neonates. Boda D, et al. **Contrib Nephrol** 1988;67:149–51

Serum and urinary markers of skeletal muscle tissue damage after weight lifting exercise. Paul GL, et al. **Eur J Appl Physiol** 1989;58(7):786–90

Daytime serum myoglobin fluctuations in Steinert's disease. Sabriá–Leal M, et al. **Eur Neurol** 1989;29(4):194–6

Determination of serum level of myoglobin and plasma level of autoantibodies to myoglobin in patients with angina pectoris. Grunow G, et al. **Folia Haematol (Leipz)** 1988; 115(4):573–6

A rapid slide agglutination test contrasted with a radioimmunoassay for myoglobin measurement for the early diagnosis of myocardial necrosis. FitzGerald RJ, et al. **Ir J Med Sci** 1988 Sep;157(9):293–4

Early diagnosis of acute myocardial infarction by myoglobin latex agglutination test. Pang SC, et al. **Jpn Heart J** 1988 Sep;29(5):631–8

Serum myoglobin in the diagnosis of acute myocardial infarction. Zeana C, et al. **Med Interne** 1982 Apr–Jun; 20(2):109–16

Severe rhabdomyolysis in well conditioned athletes. Hurley JK. **Milit Med** 1989 May;154(5):244–5

[Prognostic significance of radioimmunologic determination of myoglobin in acute myocardial infarct] Topolčan O, et al. **Vnitr Lek** 1988 Aug;34(8):729–33 (Eng. Abstr.) **(Cze)**

[New biochemical markers of myocardial ischemia during cardiac surgery] Séguin J, et al. **Ann Chir** 1988;42(8):566–70 (Eng. Abstr.) **(Fre)**

[The rate of injection of succinylcholine and onset of neuromuscular action, serum potassium or myoglobin levels. Studies in men during halothane anesthesia] Plötz J, et al. **Anaesthesist** 1989 Aug;38(8):408–12 (Eng. Abstr.) **(Ger)**

[Myoglobin and light chains of cardiac myosin. Personal results on its significance in cardiology] Porstmann B, et al. **Z Med Lab Diagn** 1989;30(1):8–10 **(Ger)**

[Myoglobin, L–myosin and cGMP––new laboratory parameters in cardiology] Puschendorf B, et al. **Z Med Lab Diagn** 1989;30(1):4–5 **(Ger)**

[Myoglobinemia as an early marker of acute myocardial infarction. Comparison with the traditional enzymatic method] Zamprogno R, et al. **Minerva Cardioangiol** 1988 Nov;36(11):551–5 (Eng. Abstr.) **(Ita)**

[Levels of myoglobin in umbilical cord blood of infants born by spontaneous labor and cesarean section] Zanardo V, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):79–80 (Eng. Abstr.) **(Ita)**

[Serum myoglobin: clinico–diagnostic importance] Kaiser H, et al. **Ric Clin Lab** 1988;18 Suppl 1:95–104 (26 ref.) **(Ita)**

[A new procedure for prevention of MNMS using a plasma filter] Ichiwata M. **Nippon Geka Gakkai Zasshi** 1988 Jul; 89(7):1114–21 (Eng. Abstr.) **(Jpn)**

[Rapi Tex myoglobin in myocardial infarction and unstable angina pectoris] Rotter A, et al. **Wiad Lek** 1988 Apr 1; 41(7):422–6 (Eng. Abstr.) **(Pol)**

[Changes in serum aspartate and alanine aminotransferase, lactate dehydrogenase, gamma–glutamyltransferase and creatine kinase activities and the myoglobin level during hemodialysis] Starzyk J, et al. **Wiad Lek** 1988 Oct 15; 41(20):1357–60 (Eng. Abstr.) **(Pol)**

[The content of the chief amount of myoglobin in the blood serum as an immune complex] Rozhinskaia IV, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):308–10 (Eng. Abstr.) **(Rus)**

[Serum myoglobin in man under extreme conditions] Cherniaev AL, et al. **Fiziol Cheloveka** 1988 Sep–Oct; 14(5):871–3 **(Rus)**

[Myoglobin level in patients with occlusive diseases of the lower extremities] Lepner UR, et al. **Kardiologiia** 1989 Apr; 29(4):83–6 (Eng. Abstr.) **(Rus)**

[Hypermyoglobinemia in ischemic heart disease] Makarovskiĭ VV, et al. **Kardiologiia** 1989 Feb;29(2):18–21 (Eng. Abstr.) **(Rus)**

[Serum myoglobin level as an early diagnostic indicator in myocardial infarction and its complications] Panfilov IuA, et al. **Kardiologiia** 1988 Nov;28(11):114–6 **(Rus)**

[Value of determining myoglobin and creatine phosphokinase levels in the evaluation of the cardiovascular status in children with acute pneumonia] Barlybaeva NA, et al. **Pediatriia** 1988;(4):33–6 (Eng. Abstr.) **(Rus)**

[Diagnostic yield of myoglobin–latex in the early stage of acute myocardial infarct (letter)] Olaz F, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):478–9 **(Spa)**

[Myoglobin–latex in the early diagnosis of acute myocardial infarction] Sabriá Leal M, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):329–31 (Eng. Abstr.) **(Spa)**

GENETICS

The separation of whale myoglobins with two–dimensional electrophoresis. Spicer GS. **Biochem Genet** 1988 Oct; 26(9–10):645–55

Use of site–directed mutagenesis to destabilize native apomyoglobin relative to folding intermediates. Hughson FM, et al. **Biochemistry** 1989 May 16;28(10):4415–22

Resonance raman investigations of site–directed mutants of myoglobin: effects of distal histidine replacement. Morikis D, et al. **Biochemistry** 1989 May 30;28(11):4791–800

Electrostatic interactions in wild–type and mutant recombinant human myoglobins. Varadarajan R, et al. **Biochemistry** 1989 May 2;28(9):3771–81

Expression of bovine myoglobin cDNA as a functionally active holoprotein in Saccharomyces cerevisiae. Shimada H, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):417–22

Identification of a muscle–specific enhancer within the 5'–flanking region of the human myoglobin gene. Devlin BH, et al. **J Biol Chem** 1989 Aug 15;264(23):13896–901

IMMUNOLOGY

T–cell recognition and antigen presentation of myoglobin. Protein recognition by site–specific T–cell clones is influenced by amino acid substitutions outside the site. Yoshioka M, et al. **Biochem J** 1989 Mar 15;258(3):645–51

T cell response to myoglobin: a comparison of T cell clones in high–responder and low–responder mice. Gorai I, et al. **Eur J Immunol** 1988 Sep;18(9):1329–35

Conformation–dependent recognition of a protein by T–lymphocytes: apomyoglobin–specific T–cell clone recognizes conformational changes between apomyoglobin and myoglobin. Cohly HH, et al. **Immunol Invest** 1988 Jun; 17(4):337–42

Presentation of exogenous protein antigens by dendritic cells to T cell clones. Intact protein is presented best by immature, epidermal Langerhans cells. Romani N, et al. **J Exp Med** 1989 Mar 1;169(3):1169–78

[The generation of antimyoglobin serum and its use in the diagnosis of rhabdomyosarcoma] Dong XJ. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):204–6 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Isolation and characterization of myoglobin and its two major isoforms from sheep heart. Wu JT, et al. **Clin Chem** 1989 May;35(5):778–82

Purification and characterization of the myoglobins of Paramecium tetraurelia. Steers E Jr, et al. **Comp Biochem Physiol [B]** 1979;62(4):393–402

METABOLISM

Increase in myoglobin content and decrease in oxidative enzyme activities by leg muscle immobilization in man. Jansson E, et al. **Acta Physiol Scand** 1988 Apr;132(4):515–7

Microelectrode studies of facilitated O2 transport across hemoglobin and myoglobin layers. Buerk DG, et al. **Adv Exp Med Biol** 1989;248:125–35

Time resolved spectroscopic (TRS) and continuous wave spectroscopic (CWS) studies of photon migration in human arms and limbs. Chance B. **Adv Exp Med Biol** 1989; 248:21–31

The oxygen dependence of the energy state of cardiac tissue: 31P–NMR and optical measurement of myoglobin in perfused rat heart. Fukuda H, et al. **Adv Exp Med Biol** 1989;248:567–73

Precapillary O2 loss and arteriovenous O2 diffusion shunt are below limit of detection in myocardium. Honig CR, et al. **Adv Exp Med Biol** 1989;248:591–9

PO2 histograms in various models of tissue oxygenation in skeletal muscle. Turek Z, et al. **Adv Exp Med Biol** 1989; 248:227–37

Diffuse reflectance infrared Fourier transform spectroscopic characterization of a silica–immobilized N–hydroxysuccinimide active ester crosslinking agent and its precursors. Warner WS, et al. **Anal Biochem** 1989 Jan; 176(1):137–49

Long–range electron transfer in myoglobin. Cowan JA, et al. **Ann N Y Acad Sci** 1988;550:68–84

Redox cycling of myoglobin and ascorbate: a potential protective mechanism against oxidative reperfusion injury in muscle. Galaris D, et al. **Arch Biochem Biophys** 1989 Sep;273(2):497–504

Effect of nisoldipine on the oxymyoglobin level of myocardial cells in hypoxic, perfused rat hearts. Hara A, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:78–89

Mechanisms of reoxygenation injury in myocardial infarction: implications of a myoglobin redox cycle. Galaris D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1162–8

Distal His——Arg mutation in bovine myoglobin results in a ligand binding site similar to the abnormal beta site of hemoglobin Zurich (beta 63 His——Arg). Shimada H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):110–4

Diffusion of small molecules through the structure of myoglobin. Environmental effects. Barboy N, et al. **Biochemistry** 1989 Jun 27;28(13):5450–6

Local phenomena and distribution of molecular species during the unfolding of heme–free myoglobin in the presence of GdnHCl and urea as seen by time–resolved fluorescence spectroscopy. Fronticelli C, et al. **Biophys Chem** 1989 May;33(2):143–51

Energy distributions at the high–spin ferric sites in myoglobin crystals. Fiamingo FG, et al. **Biophys J** 1989 Jan; 55(1):67–77

Picosecond transient absorption study of photodissociated carboxy hemoglobin and myoglobin. Janes SM, et al. **Biophys J** 1988 Sep;54(3):545–9

Structural and dynamic properties of the heme pocket in myoglobin probed by optical spectroscopy. Cupane A, et al. **Biopolymers** 1988 Dec;27(12):1977–97

Electrostimulation–induced increases in fatty acid–binding protein and myoglobin in rat fast–twitch muscle and comparison with tissue levels in heart. Kaufmann M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):181–4

Haemoglobin and myoglobin as inhibitors of hydroxyl radical generation in a model system of "iron redox" cycle. Harel S, et al. **Free Radic Res Commun** 1989;6(1):1–10

Formation of hydroxyl radicals in biological systems. Does myoglobin stimulate hydroxyl radical formation from hydrogen peroxide? Puppo A, et al. **Free Radic Res Commun** 1988;4(6):415–22

Fibre typing using sarcoplasmic reticulum Ca2+–ATPase and myoglobin immunohistochemistry in rat gastrocnemius muscle. Krenács T, et al. **Histochem J** 1989 Mar; 21(3):145–55

Spectrophotometric measurements on verdo–myoglobin: relevance to the oxidation of ferri–myoglobin by chlorite ion. Modi S, et al. **Indian J Biochem Biophys** 1989 Apr; 26(2):84–6

CO binding to hemoglobin and myoglobin in equilibrium with a gas phase of low PO2 value. Agostoni A, et al. **J Appl Physiol** 1988 Dec;65(6):2513–7

The effects of high pressure upon ligated and deoxyhemoglobins and myoglobin. An optical spectroscopic study. Alden RG, et al. **J Biol Chem** 1989 Feb 5;264(4):1933–40

Reactions of the protein radical in peroxide–treated myoglobin. Formation of a heme–protein cross–link. Catalano CE, et al. **J Biol Chem** 1989 Jun 25; 264(18):10534–41

Single–crystal EPR study of novel azide complex of cyanogen bromide–modified myoglobin. Influence of specific modification of the heme distal histidyl residue on the ligand–binding structure. Hori H, et al. **J Biol Chem** 1989 Apr 5;264(10):5715–9

Axial coordination of ferric Aplysia myoglobin. Rousseau DL, et al. **J Biol Chem** 1989 May 15;264(14):7878–81

Discrimination between oxygen and carbon monoxide and inhibition of autooxidation by myoglobin. Site–directed mutagenesis of the distal histidine. Springer BA, et al. **J Biol Chem** 1989 Feb 25;264(6):3057–60

The myoglobin protein radical. Coupling of Tyr–103 to Tyr–151 in the H2O2–mediated cross–linking of sperm whale myoglobin. Tew D, et al. **J Biol Chem** 1988 Nov 25;263(33):17880–6

Comparative oxygen affinity of fish and mammalian myoglobins. Nichols JW, et al. **J Comp Physiol [B]** 1989; 159(2):205–9

Ligand and proton exchange dynamics in recombinant human myoglobin mutants. Lambright DG, et al. **J Mol Biol** 1989 May 5;207(1):289–99

Measurement of myoglobin diffusivity in the myoplasm of frog skeletal muscle fibres. Baylor SM, et al. **J Physiol (Lond)** 1988 Dec;406:247–75

Modulation of myoglobin–H2O2–mediated peroxidation reactions by sulfhydryl compounds. Mitsos SE, et al. **Lab Invest** 1988 Dec;59(6):824–30

Studies of mechanisms and protective maneuvers in myoglobinuric acute renal injury. Zager RA. **Lab Invest**

1989 May;60(5):619–29

Ligand binding to synthetic mutant myoglobin (His–E7——Gly): role of the distal histidine. Braunstein D, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8497–501

Orientation of carbon monoxide and structure–function relationship in carbonmonoxymyoglobin. Ormos P, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8492–6

Apomyoglobin as a molecular recognition surface: expression, reconstitution and crystallization of recombinant porcine myoglobin in Escherichia coli. Dodson G, et al. **Protein Eng** 1988 Sep;2(3):233–7

Effects of buried ionizable amino acids on the reduction potential of recombinant myoglobin. Varadarajan R, et al. **Science** 1989 Jan 6;243(4887):69–72

Myoglobin and haemoglobin: role of distal residues in reactions with haem ligands. Perutz MF. **Trends Biochem Sci** 1989 Feb;14(2):42–4 (10 ref.)

[Myoglobin content of heart muscle following postmortem electrocution] Urban R, et al. **Beitr Gerichtl Med** 1988; 46:345–9 (Eng. Abstr.) **(Ger)**

[Determination of age– and exercise–dependent changes in myoglobin contents in murine skeletal and cardiac muscles] Nakatani A. **Nippon Seirigaku Zasshi** 1988;50(11):709–18 (Eng. Abstr.) **(Jpn)**

[Capacity for autoxidation of myoglobin in man and various semi–aquatic animals] Korobov VN, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):17–22 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Kinetics of myoglobin release and prediction of myocardial myoglobin depletion after coronary artery reperfusion. Ellis AK, et al. **Circulation** 1989 Sep;80(3):676–83

MYOGLOBINURIA see under **RHABDOMYOLYSIS**

MYOGRAPHY

Flow–dependent contraction observed in a myograph–mounted resistance artery. Bevan JA, et al. **Blood Vessels** 1988;25(5):261–4

METHODS

[Objective assessment of the reactive effectiveness of middle frequency electromyostimulation using mechanical muscle diagnosis (myomechanography)] Ullmann P, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):91–6 (Eng. Abstr.) **(Ger)**

MYOINOSITOL see **INOSITOL**

MYOKYMIA see **FASCICULATION**

MYOMA

SURGERY

[Paralysis after surgery of the pelvis (letter)] Camus M, et al. **Presse Med** 1988 Sep 24;17(32):1651 **(Fre)**

[Cervical myoma: current surgical approach and our experience] Barbieri G, et al. **Minerva Ginecol** 1988 Jun; 40(6):365–8 (Eng. Abstr.) **(Ita)**

MYOMETRIUM

ANALYSIS

Comparison of the quantity of estrogen receptors in human endometrium and myometrium by steroid–binding assay and enzyme immunoassay based on monoclonal antibodies to human estrophilin. Senekjian EK, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):592–7

Compositional analysis of the three main gangliosides from adult human myometrium by a rapid capillary gas chromatographic method. Zhu ZM, et al. **Biomed Chromatogr** 1989 Jan;3(1):29–31

Ethnic variation in estrogen and progesterone receptor concentration in leiomyoma and normal myometrium. Sadan O, et al. **Gynecol Endocrinol** 1988 Dec;2(4):275–82

The endogenous concentration and subcellular distribution of androgens in normal human premenopausal endometrium, myometrium and vagina. Vermeulen–Meiners C, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):121–30

A comparative study of the estrogen receptor ratio in myometrium and uterine leiomyomas. Otsuka H, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):189–94

Alpha–2 adrenoceptors on nerves and muscles of rat uterus. Kyozuka M, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):1128–38

[Study on estrogen and progesterone receptors of endometrium and myometrium] Cao ZY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):333–6 (Eng. Abstr.) **(Chi)**

[Labor–determining factors. Study of myometrial receptors and our hypothesis of clinical approach] Cappa F, et al. **Minerva Ginecol** 1988 Jul;40(7):407–10 (Eng. Abstr.) **(Ita)**

[A comparison of radioreceptor assay and immunocytochemical staining for estrogen receptor in leiomyoma and myometrium] Ohtsuka H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1400–4 (Eng. Abstr.) **(Jpn)**

[Determining estrogen receptors in neoplastic and normal human tissues: comparison of immunoenzyme and radioligand methods] Chrapusta S, et al. **Nowotwory** 1988 Apr–Jun;38(2):87–94 **(Pol)**

BLOOD SUPPLY

Endometrial tissue in myometrial vessels not associated with menstruation. Sahin AA, et al. **Int J Gynecol Pathol** 1989; 8(2):139–46

Effect of endogenous vasoconstrictors on maternal intramyometrial and fetal stem villous arteries in pre–eclampsia. Allen J, et al. **J Hypertens** 1989 Jul; 7(7):529–36

CYTOLOGY

Morphologic and electrophysiologic characterization of isolated pregnant human myometrial cells. Pressman EK, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1273–9

[Morphologic studies of the rat uterus following selected methods of microsurgical anastomosis] Wydrzyński M. **Ginekol Pol** 1988 Nov;59(11):695–9 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Calcium ion–dependent regulation of uterine smooth muscle thin filaments by caldesmon. Marston S. **Am J Obstet Gynecol** 1989 Jan;160(1):252–7

Desensitization of rabbit myometrium to oxytocin and prostaglandin F2 alpha. Eiler H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E20–6

Are leukotrienes involved in human uterine contractility? López Bernal A, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):568–73

Effects of histamine and serotonin on the contractility of isolated pregnant and nonpregnant human myometrium. Cruz MA, et al. **Gynecol Obstet Invest** 1989;28(1):1–4

Pharmacological classification of receptors for adenyl purines in guinea pig myometrium. Smith MA, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1059–63

ENZYMOLOGY

The embryo influences adenylate cyclase activity and hormonal response in rabbit myometrium during early pregnancy. Boulet AP, et al. **Life Sci** 1988;43(20):1653–62

Membrane phosphorylation is involved in the inhibitory effect of micromolar Ca2+ on rat myometrial Na+K+–ATPase. Turi A, et al. **Prog Clin Biol Res** 1988; 268B:457–62

The measurement of phospholipase A2 activity in human myometrium: physiological and pathological implications. Bonney RC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):1–8

[Calmodulin–dependent regulation of Ca,Mg–ATPase activity in plasma membranes of the swine myometrium] Kondratiuk TP, et al. **Biokhimiia** 1988 May;53(5):793–8 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Histologic, morphometric, and immunocytochemical analysis of myometrial development in rats and mice: I. Normal development. Brody JR, et al. **Am J Anat** 1989 Sep; 186(1):1–20

Histologic, morphometric, and immunocytochemical analysis of myometrial development in rats and mice: II. Effects of DES on development. Brody JR, et al. **Am J Anat** 1989 Sep;186(1):21–42

Role of uterine epithelium in the development of myometrial smooth muscle cells. Cunha GR, et al. **Biol Reprod** 1989 Apr;40(4):861–71

IMMUNOLOGY

[A study on the production of CA125 antigen using tissue culture of eutopic and heterotopic endometrium] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):143–8 (Eng. Abstr.) **(Jpn)**

INNERVATION

A functional and structural study of the innervation of the human uterus. Morizaki N, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):218–28

Distribution of adrenergic and cholinergic nerves in the porcine myometrium during the oestrous cycle. A histochemical investigation. Thilander G, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):276–84

METABOLISM

Progesterone and oestradiol levels and cytoplasmic receptor concentrations in the human myometrium at term, before labour and during labour. Bernard A, et al. **Acta Physiol Hung** 1988;71(4):507–10

Counter current transfer of polypeptide hormones from uterus to ovary in gilts using insulin as a model. Koziorowski M, et al. **Acta Physiol Pol** 1988 Mar–Apr; 39(2):121–8

Up–regulation of guinea pig myometrial beta–adrenergic receptors by intrauterine estradiol and progesterone pellets. Hatjis CG, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):751–7

Prostacyclin biosynthesis by cultured human myometrial smooth muscle cells: dependency on arachidonic or linoleic acid in the culture medium. MacKenzie LW, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1365–72

A role for phosphoinositide hydrolysis in human uterine smooth muscle during parturition. Schrey MP, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):964–70

Dexamethasone effects on ritodrine–induced changes in myometrial contractility and beta–adrenergic receptor function. Ward SM, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1461–6

Oxytocin antagonist (dTVT) and oxytocin receptors in myometrium and decidua. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):205–8

Relative binding affinity of various progestins and antiprogestins to a rabbit myometrium receptor. Boonkasemsanti W, et al. **Arzneimittelforschung** 1989 Feb; 39(2):195–9

Fluoroaluminates mimic muscarinic– and oxytocin–receptor–mediated generation of inositol phosphates and contraction in the intact guinea–pig myometrium. Role for a pertussis/cholera–toxin–insensitive G protein. Marc S, et al. **Biochem J** 1988 Oct 15; 255(2):705–13

Binding characteristics of progesterone and antiprogestin ZK 98.299 in human endometrial and myometrial cytosol. Puri CP, et al. **Biochim Biophys Acta** 1989 May 10; 1011(2–3):176–82

Regulation of myometrial beta 2–adrenergic receptors by progesterone and estradiol–17 beta in late pregnant rats. Maltier JP, et al. **Biol Reprod** 1989 Mar;40(3):531–40

Alpha adrenergic stimulation reduces cyclic adenosine 3',5'–monophosphate generation in rabbit myometrium by two mechanisms. Wu YY, et al. **Biol Reprod** 1988 Aug; 39(1):58–65

Comparison of Ca2+–extrusion systems in the myometrial plasma membrane of pregnant and non–pregnant rats. Vér A, et al. **Biomed Biochim Acta** 1989;48(5–6):S393–8

Properties of intracellular calcium stores in pregnant rat myometrium. Kanmura Y, et al. **Br J Pharmacol** 1988 Sep; 95(1):284–90

Production and characterization of single–chain tissue–type plasminogen activator produced by an established cell line from human uterine muscle. Matsuo O, et al. **Cell Struct Funct** 1989 Feb;14(1):45–60

Oestrogen and progestogen receptors in endometrium and myometrium at the time of blastocyst implantation in pregnant diabetic rats. De Hertogh R, et al. **Diabetologia** 1989 Aug;32(8):568–72

Changes in intracellular free calcium in isolated myometrial cells: role of extracellular and intracellular calcium and possible involvement of guanine nucleotide–sensitive proteins. Anwer K, et al. **Endocrinology** 1989 Jan; 124(1):17–23

Antagonism of contractants and relaxants at the level of intracellular calcium and phosphoinositide turnover in the rat uterus. Anwer K, et al. **Endocrinology** 1989 Jun; 124(6):2995–3002

Platelet–activating factor stimulates phosphatidylinositol hydrolysis in the rat myometrium. Varol FG, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):97–8

Angiotensin II stimulates phosphoinositide turnover in the rat myometrium. Varol FG, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):37–41

Identification of both Gi2 and a novel, immunologically distinct, form of Go in rat myometrial membranes. Milligan G, et al. **FEBS Lett** 1989 Feb 27;244(2):411–6

Characterization of beta–adrenoceptors in myometrium of preparturient rats. Maltier JP, et al. **Fundam Clin Pharmacol** 1988;2(5):369–83

Identification of 16 alpha–hydroxy–estrone as a metabolite of estriol. van Haaften M, et al. **Gynecol Endocrinol** 1988 Sep;2(3):215–21

Characterization of membrane calcium channels in nonpregnant and pregnant human uterus. Batra SC, et al. **Gynecol Obstet Invest** 1989;27(2):57–61

Different alpha 2–adrenoceptor densities in the circular and longitudinal layers of human near–term myometrium as revealed by [3H]–idazoxan binding studies. Breuiller M, et al. **Gynecol Obstet Invest** 1988;26(1):14–20

Fleroxacin concentrations in myometrium, ovary and fallopian tube. Portmann R, et al. **J Antimicrob Chemother** 1989 Apr;23(4):662–4

Disappearance of beta–adrenergic response of human myometrial adenylate cyclase at the end of pregnancy. Litime MH, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):1–6

Correlation between myometrial receptor affinity, lipophilicity and antagonistic potency of oxytocin analogues in the rat. Atke A, et al. **J Endocrinol** 1988 Aug; 118(2):187–92

The binding of steroids to myometrium and leiomyomata (fibroids) in women treated with the gonadotrophin–releasing hormone agonist Zoladex (ICI 118630). Lumsden MA, et al. **J Endocrinol** 1989 May; 121(2):389–96

Pharmacological characterization of the muscarinic receptors mediating phosphoinositide hydrolysis in rat myometrium. Varol FG, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):11–5

Influence of alpha–tocopherol on prostacyclin synthesis by

rat's arterial and myometrial tissues. el-Tahir KE. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):97–103

[The analysis of bioenergetics of mouse uterine muscle by magnetic resonance spectroscopy (MRS)] Negami AI, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan; 41(1):93–4 **(Jpn)**

[The study of bioenergetics of mouse pregnant uterine muscle by magnetic resonance spectroscopy (MRS)] Negami AI, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):665–8 (Eng. Abstr.) **(Jpn)**

[Receptor binding of H3-dexamethasone in the myometrium during pregnancy and labor] Rakitskaia VV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):63–5 **(Rus)**

[cAMP-dependent phosphorylation inhibits potential-dependent passive transport of Ca2+ in myometrial sarcolemma vesicles] Kurskii MD, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):30–4 (Eng. Abstr.) **(Rus)**

[Ca2+ (calmodulin)-dependent phosphorylation of plasma membranes of pig myometrium] Prishchepa LA, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):85–9 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Magnetic resonance imaging determination of myometrial invasion in endometrial carcinoma. Yazigi R, et al. **Gynecol Oncol** 1989 Jul;34(1):94–7

[What lesions of the myometrium are responsible for hemorrhage?] Delarue T, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):679–86 (Eng. Abstr.) **(Fre)**

[Assessment of the myometrial infiltration of endometrial carcinoma (FIGO stage I–II). The accuracy of magnetic resonance (1.5 T)] Sironi S, et al. **Radiol Med (Torino)** 1989 Apr;77(4):386–90 (Eng. Abstr.) **(Ita)**

[Management of patients with uterine myoma showing trophic disorders] Brumshtein LM. **Akush Ginekol (Mosk)** 1989 Apr;(4):31–3 (Eng. Abstr.) **(Rus)**

[Characteristics of myometrial structure in uterine leiomyoma] Kokh LI, et al. **Akush Ginekol (Mosk)** 1988 May;(5):8–10 (Eng. Abstr.) **(Rus)**

[Uterine myoma] Marfunin DL. **Akush Ginekol (Mosk)** 1988 Nov;(11):6–9 (36 ref.) **(Rus)**

PHYSIOLOGY

Variation of myometrial activities and steroid sexual hormones following bilateral ovariectomy in the rat at midpregnancy. Clabaut M, et al. **Acta Physiol Hung** 1988; 71(4):477–83

Evolution of tissue levels of steroids: oestradiol-17 beta, oestrone and progesterone in the macaque myometrium during gestation. Germain G, et al. **Acta Physiol Hung** 1988; 71(4):471–6

Effect of alpha-adrenergic blocking agents on uterine activity in the ewe at the end of gestation. Prud'Homme MJ. **Acta Physiol Hung** 1988;71(4):485–9

Effect of food withdrawal on arterial blood glucose and plasma 13,14-dihydro-15-keto-prostaglandin F2 alpha concentrations and nocturnal myometrial electromyographic activity in the pregnant rhesus monkey in the last third of gestation: a model for preterm labor? Binienda Z, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):746–50

Myometrial alpha 1-adrenoceptors in pregnant guinea pig: their distribution and increased number. Arkinstall SJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E215–20

An ATP-sensitive conductance in cultured smooth muscle cells from pregnant rat myometrium. Honoré E, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C297–305

Improved propagation in myometrium associated with gap junctions during parturition. Miller SM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C130–41

TPA- and agonist-induced force development in myometrium from pregnant and non-pregnant rats. Missiaen L, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):302–6

Effects of inhibition of prostaglandin synthesis on uterine oxytocin receptor concentration and myometrial gap junction density in parturient rats. Chan WY, et al. **Biol Reprod** 1988 Dec;39(5):1117–28

Variation in myometrial response to intravenous oxytocin administration at different times of the day in the pregnant rhesus monkey. Honnebier MB, et al. **Endocrinology** 1989 Sep;125(3):1498–503

Changes in electrical activity of myometrium during intrauterine distribution of rat blastocysts and after prazosin administration. Legrand C, et al. **J Reprod Fertil** 1989 May; 86(1):39–49

Activities of uterine muscles from rats in late pregnancy. Chen CJ, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jan;13(1):42–6

RADIATION EFFECTS

[Histophysiology of the neurosecretory systems of the hypothalamus, epiphysis cerebri and myometrium in pregnant rats exposed to a helium-neon laser] Gul'iants ES, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):52–5 (Eng. Abstr.) **(Rus)**

SURGERY

[Transvaginal hysterectomy. Sub-serous technic] Querleu D. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):515–8 (Eng. Abstr.) **(Fre)**

[Necrosis of a postoperative uterine wound after cesarean section] Latoszkiewicz K, et al. **Przegl Lek** 1988; 45(8):656–8 **(Pol)**

ULTRASTRUCTURE

Fine structure of the porcine myometrium during the oestrous cycle. Thilander G, et al. **Acta Anat (Basel)** 1989; 134(2):160–70

Progesterone prevents linkage of rabbit myometrial alpha 2-adrenergic receptors to inhibition of adenylate cyclase. Wu YY, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):838–43; discussion 843–4

Oxytocin regulates the plasma membrane Ca2+ transport in rat myometrium. Enyedi A, et al. **Biochem J** 1989 Jul 1;261(1):23–8

Classic illustration from Gap junctions: their presence and necessity in myometrium during parturition. By R. E. Garfield, et al, Science 1977. Garfield RE. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):179–80

Smooth muscle differentiation at endometrio-myometrial junction. An ultrastructural study. Fujii S, et al. **Virchows Arch [A]** 1989;414(2):105–12

MYONEURAL JUNCTION see **NEUROMUSCULAR JUNCTION**

MYOPIA

Myopia Workshop. Fredensborg, Denmark, 1987 June 13–16. Proceedings. **Acta Ophthalmol Suppl (Copenh)** 1988; 185:1–176

Aland Island eye disease (Forsius-Eriksson syndrome) associated with contiguous deletion syndrome at Xp21. Similarity to incomplete congenital stationary night blindness. Weleber RG, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1170–9 (75 ref.)

Unilateral lens dislocation and axial elongation in Marfan syndrome [letter] Rasooly R, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):135–6

BLOOD

Study on serum copper and zinc levels in high myopia. Shiue C, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:141–2

Serum ornithine and myopia, a biochemical study. Wen LY, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:143–4

A metabolic analysis of high myopia and senile macular degeneration. Silverstone BZ, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(3):122–5

CHEMICALLY INDUCED

Pesticides and myopia, a working hypothesis. Ko LS, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:145–6

Accommodation insufficiency induced by glybenclamide. Teller J, et al. **Ann Ophthalmol** 1989 Jul;21(7):275–6

CLASSIFICATION

[Classification of juvenile myopia] Hu DN. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):274–6 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Pathologic myopia. Curtin BJ. **Acta Ophthalmol Suppl (Copenh)** 1988;185:105–6

Ocular morbidity in myopia. Goldschmidt E. **Acta Ophthalmol Suppl (Copenh)** 1988;185:86–7

Myopia as cause of blindness. Riise R. **Acta Ophthalmol Suppl (Copenh)** 1988;185:109–10

On the definition of pathologic myopia in group studies. Tokoro T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:107–8

Axial myopia increases the risk of retinal complications after neodymium-YAG laser posterior capsulotomy. Koch DD, et al. **Arch Ophthalmol** 1989 Jul;107(7):986–90

Myopia and pterygium [letter] Joseph M. **Aust N Z J Ophthalmol** 1988 Aug;16(3):261

Visual rehabilitation of patients with advanced stages of glaucoma, optic atrophy, myopia or retinitis pigmentosa. Nilsson UL. **Doc Ophthalmol** 1988 Dec;70(4):363–83

Lipid peroxidation and human cataractogenesis in diabetes and severe myopia. Simonelli F, et al. **Exp Eye Res** 1989 Aug;49(2):181–7

Dye laser photocoagulation of macular subretinal neovascularization in pathological myopia. A randomized study of three different wavelengths. Brancato R, et al. **Int Ophthalmol** 1988 Feb;11(4):235–8

Risk factors for aphakic retinal detachment [letter] Percival SP. **J Cataract Refract Surg** 1988 Nov;14(6):692–3

Mature cataracts in eyes with unilateral axial myopia. Shammas HJ, et al. **J Cataract Refract Surg** 1989 May; 15(3):308–11

Amblyopia in myopia [letter] Mark HH. **Ophthalmology** 1988 Nov;95(11):1596

The cause of organic amblyopia in high myopia [letter] Romano PE. **Ophthalmology** 1988 Feb;95(2):288

High myopia as an unusual cause of restrictive motility disturbance. Demer JL, et al. **Surv Ophthalmol** 1989 Jan-Feb;33(4):281–4

[Retinal detachment of various etiologies. Clinical aspects and the results of surgical treatment] Winter W. **Klin Oczna** 1988 Jun;90(6):214 (Eng. Abstr.) **(Pol)**

[Clinico-immunologic aspects of development of cataracts in patients with myopia] Fedorov SN, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(1):18–20 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

The role of accommodation in myopia. Tokoro T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:153–5

[The role of the ocular drainage system in progressive myopia] Levchenko OG. **Vestn Oftalmol** 1988 Nov-Dec; 104(6):34–6 (Eng. Abstr.) **(Rus)**

[Instrument-associated myopia and its effect on the work capacity of microscopists] Niurenberg OIu. **Vestn Oftalmol** 1988 Sep-Oct;104(5):52–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Pathologic myopia and pharmaceutical agents: rheo-oculographic experience. Giovannini A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:100–1

Myopia prevention and therapy. The role of pharmaceutical agents. Japanese studies. Hosaka A. **Acta Ophthalmol Suppl (Copenh)** 1988;185:130–1

Timolol maleate in the control of myopia. A preliminary report. Jensen H. **Acta Ophthalmol Suppl (Copenh)** 1988; 185:128–9

Atropine effect on school myopia. A preliminary report. Kao SC, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:132–3

Pharmaceutical agents and the prevention or reduction of progressive myopia. Vogel R. **Acta Ophthalmol Suppl (Copenh)** 1988;185:134–8 (78 ref.)

Comparison of the effect of atropine and cyclopentolate on myopia. Yen MY, et al. **Ann Ophthalmol** 1989 May; 21(5):180–2, 187

[Remote results of sclera-fortifying injections in progressive myopia] Avetisov ES, et al. **Vestn Oftalmol** 1988 Jul-Aug; 104(4):59–61 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Myopia prevalence in Scandinavia. A survey, with emphasis on factors of relevance for epidemiological refraction studies in general. Fledelius HC. **Acta Ophthalmol Suppl (Copenh)** 1988;185:44–50 (33 ref.)

Myopia in Melanesian school children in Vanuatu. Grosvenor T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:24–8

Population studies—myopia experience in Japan. Hosaka A. **Acta Ophthalmol Suppl (Copenh)** 1988;185:37–40

Myopia in arctic regions. A survey. Johnson GJ. **Acta Ophthalmol Suppl (Copenh)** 1988;185:13–8 (19 ref.)

Nation-wide survey of myopia among schoolchildren in Taiwan, 1986. Lin LL, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:29–33

Study of myopia among aboriginal school children in Taiwan. Lin LL, et al. **Acta Ophthalmol Suppl (Copenh)** 1988; 185:34–6

Myopia in India. Mohan M, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:19–23 (14 ref.)

The pattern of myopia in young Singaporean men. Chew SJ, et al. **Singapore Med J** 1988 Jun;29(3):201–11

Myopia in young Singaporeans. Fan R. **Singapore Med J** 1988 Jun;29(3):195

ETIOLOGY

Topics to be considered when establishing standards for clinical myopia studies. Curtin B. **Acta Ophthalmol Suppl (Copenh)** 1988;185:61–2

Adult myopia. Curtin BJ. **Acta Ophthalmol Suppl (Copenh)** 1988;185:78–9

Anterior chamber anomalies and pathologic myopia. Curtin BJ. **Acta Ophthalmol Suppl (Copenh)** 1988;185:111–3

Corneal curvature radius. Oculometric considerations with reference to age and refractive change. Fledelius HC. **Acta Ophthalmol Suppl (Copenh)** 1988;185:74–7

The growth of the eye and its components. Japanese studies. Hosaka A. **Acta Ophthalmol Suppl (Copenh)** 1988;185:65–8

Correlation of optical components with ocular refraction among teen-agers in Taipei. Lin LL, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:69–73

Myopia and diabetes. A review. Mäntyjärvi M. **Acta Ophthalmol Suppl (Copenh)** 1988;185:82–5 (21 ref.)

Occupational near-work myopia. Nyman KG. **Acta Ophthalmol Suppl (Copenh)** 1988;185:167–71

Transitory myopia after high fever. Riise D. **Acta Ophthalmol Suppl (Copenh)** 1988;185:80–1

Myopia and its relationship to education, intelligence and height. Preliminary results from an on-going study of Danish draftees. Teasdale TW, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:41–3

Effect of visual display terminal (VDT) work on myopia progression. Tokoro T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:172–4

Tonic pupillary reaction after epidemic nephropathy and transient myopia. Pärssinen O, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):201–2

High axial length/corneal radius ratio as a risk factor in the development of myopia. Grosvenor T. **Am J Optom Physiol Opt** 1988 Sep;65(9):689–96

Undercorrection and myopia development [letter] Sivak JG. **Am J Optom Physiol Opt** 1988 Sep;65(9):766
Corneal shape and astigmatism: with a note on myopia. Weale RA. **Br J Ophthalmol** 1988 Sep;72(9):696–9
Myopia: induced, normal and clinical. Holden AL, et al. **Eye** 1988;2 Suppl:S242–56 (74 ref.)
Effect of penetrating keratoplasty using grafts of various sizes on keratoconic myopia and astigmatism. Girard LJ, et al. **J Cataract Refract Surg** 1988 Sep;14(5):541–7
A closer look at the eye in homocystinuria: a screened population. Burke JP, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:237–9
Juvenile glaucoma, race, and refraction. Lotufo D, et al. **JAMA** 1989 Jan 13;261(2):249–52
Early ocular manifestations of Korean hemorrhagic fever. Yu YS, et al. **Korean J Ophthalmol** 1988 Jun;2(1):39–43
Postoperative refractive changes in children with congenital esotropia: a preliminary study. Snir M, et al. **Ophthalmic Surg** 1989 Jan;20(1):57–62
Effect of recipient–donor trephine size disparity on refractive error in keratoconus. Wilson SE, et al. **Ophthalmology** 1989 Mar;96(3):299–305
Aetiopathogenesis of myopia: a new neuroendocrine–genetic theory. Balacco–Gabrieli C. **Recenti Prog Med** 1989 Apr; 80(4):197–200 (32 ref.)
Clinical observations on occlusion myopia. Shih YF, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):164–8
[Causes and prevention of myopia] Sachsenweger R. **Fortschr Ophthalmol** 1988;85(3):289–91 (5 ref.) (Eng. Abstr.) **(Ger)**
[Temporary myopia and subjective symptoms in video display terminal operators] Luberto F, et al. **Med Lav** 1989 Mar–Apr;80(2):155–63 (Eng. Abstr.) **(Ita)**
[A case of rapidly developed myopia among VDT–workers] Yoshikawa H, et al. **Sangyo Igaku** 1989 Jan;31(1):24–5 **(Jpn)**
[The role of scleral strain in the genesis of myopic vitreochorioretinal dystrophies] Avetisov ES, et al. **Oftalmol Zh** 1988;(3):137–8 (Eng. Abstr.) **(Rus)**
[The development of pseudomyopia and myopia and their prevention] Dashevskiĭ AI. **Oftalmol Zh** 1988;(3):132–6 (Eng. Abstr.) **(Rus)**
[Pathogenesis of myopic maculopathy] Ivanishko IuA. **Oftalmol Zh** 1988;(3):161–4 (Eng. Abstr.) **(Rus)**
[Hypothesis of the pathogenesis of myopia] Sergienko NM, et al. **Oftalmol Zh** 1988;(3):138–43 (45 ref.) (Eng. Abstr.) **(Rus)**
[The probable mechanisms of ocular myopization in the school years] Volkov VV. **Oftalmol Zh** 1988;(3):129–32 (20 ref.) (Eng. Abstr.) **(Rus)**

GENETICS

X–linked myopia in Danish family. Haim M, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):450–6
Progressive cone–rod dystrophy and high myopia in a Finnish family. Mäntyjärvi M, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):234–42
A twin study on myopia in Chinese school children. Lin LL, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:51–3
The role of environmental factors and hereditary predisposition in the causation of low myopia. Mohan M, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:54–7
Selected review on genetic factors in myopia. Goss DA, et al. **J Am Optom Assoc** 1988 Nov;59(11):875–84 (102 ref.)
[Concordance for myopia and discordance for optic disk cupping in a pair of monozygotic twins] Edmund J, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):645–6 (Eng. Abstr.) **(Ger)**
[Hereditary progressive arthro–ophthalmopathy (Stickler syndrome)] Bernd L, et al. **Z Orthop** 1989 May–Jun; 127(3):358–61 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

[Disorders of the immune status of the body in patients with myopia] Puchkovskaia NA, et al. **Oftalmol Zh** 1988; (3):146–50 (Eng. Abstr.) **(Rus)**
[Local and systemic humoral immunity in myopic subjects] Kazanets LI, et al. **Vestn Oftalmol** 1988 Sep–Oct; 104(5):35–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Retinal dopamine and form–deprivation myopia. Stone RA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):704–6
[Biochemical aspects of progressive myopia] Vinetskaia MI, et al. **Oftalmol Zh** 1988;(3):155–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Optic disk morphometry in high myopia. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):587–90
Degree of myopia in relation to intelligence and educational level. Teasdale TW, et al. **Lancet** 1988 Dec 10; 2(8624):1351–4
Optic pit versus glaucomatous cupping in a myopic patient. Romano A, et al. **Metab Pediatr Syst Ophthalmol** 1988; 11(4):149–51
Increase in ocular axial length in patients with corneal opacification. Gee SS, et al. **Ophthalmology** 1988 Sep; 95(9):1276–8
[Clinical study on posterior fundus changes in high myopia] Cao JT, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):188–93 (Eng. Abstr.) **(Chi)**
[Ultrastructural and histochemical characteristics of the sclera in glaucoma associated with nearsightedness] Andreeva LD, et al. **Vestn Oftalmol** 1988 May–Jun; 104(3):17–20 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Permeability of the blood–retinal barrier in myopia. An analysis employing vitreous fluorophotometry and computer simulation. Hosaka A. **Acta Ophthalmol Suppl (Copenh)** 1988;185:95–9
Progressive myopia and intraocular pressure: what is the linkage? A literature review. Pruett RC. **Acta Ophthalmol Suppl (Copenh)** 1988;185:117–27 (139 ref.)
The mechanism of lid–suture myopia. Raviola E, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:91–2
Experimental myopia in Japan. Tokoro T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:93–4
On the nature of myopia and the mechanism of accommodation. McCollim RJ. **Med Hypotheses** 1989 Mar; 28(3):197–211
[Relationship of corrected visual acuity and macular lesion in high myopia] Guan ZS, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):181–7 (Eng. Abstr.) **(Chi)**
[Observation of accommodation in juvenile myopia] Zhai HF, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):228–31, 209 (Eng. Abstr.) **(Chi)**
[Refraction–induced myopia] Pau H. **Fortschr Ophthalmol** 1988;85(3):292–5 (40 ref.) (Eng. Abstr.) **(Ger)**
[Clinical and pathophysiologic characteristics of congenital myopia and possibilities for improving visual function] Avetisov ES, et al. **Oftalmol Zh** 1988;(7):385–7 (Eng. Abstr.) **(Rus)**
[Reserve potentials of the cardiovascular system in healthy students with myopic refraction] Eremenko NS, et al. **Oftalmol Zh** 1988;(3):150–3 (Eng. Abstr.) **(Rus)**
[Pupil size, its reaction to light and visual acuity in children with myopia] Kliuka IV, et al. **Oftalmol Zh** 1988;(3):159–60 (Eng. Abstr.) **(Rus)**
[The role of hydrodynamic fluctuations in the progression of myopia] Levchenko OG. **Oftalmol Zh** 1988;(3):143–6 (Eng. Abstr.) **(Rus)**
[The accommodative function in myopia] Sergienko NM, et al. **Oftalmol Zh** 1988;(6):338–41 (Eng. Abstr.) **(Rus)**
[Tissue hydrophilicity in myopia] Shilkin GA, et al. **Oftalmol Zh** 1988;(3):153–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

The Taiwan program to strengthen the vision health care for the school children. **Acta Ophthalmol Suppl (Copenh)** 1988;185:148–50
Spectacle–use, bifocals and prevention of myopic progression. The two–years results of a randomized trial among schoolchildren. Pärssinen O, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:156–61
The effect of green classroom on the prevention of myopia progression. Wang AH, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:147
[Binocular fusion method for prevention of myopia] Xu GD. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):90–2 (Eng. Abstr.) **(Chi)**
[Our experience with the use of sclera–strengthening injections in the prevention of progressive myopia] Golychev VN, et al. **Vestn Oftalmol** 1989 May–Jun; 105(3):26–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

[Scleroplasty results in progressive myopia as viewed by computed tomography] Shamkhalova ESh, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):29–32 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Rehabilitation with contact lenses for patients with myopia and a history of surgery for retinal detachment] Tsipurskaia SS, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):62–4 (Eng. Abstr.) **(Rus)**
[Efficacy of the use of contact lenses in patients with myopia complicated by peripheral vitreochorioretinal dystrophy] Tsipurskaia SS, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):36–9 (Eng. Abstr.) **(Rus)**

SURGERY

Radial keratotomy: in–to–out and out–to–in. Preliminary results in the Singapore General Hospital. Lee CP. **Ann Acad Med Singapore** 1989 Mar;18(2):141–50
The current and future status of refractive surgery. Lin DT, et al. **Ann Acad Med Singapore** 1989 Mar;18(2):136–40 (31 ref.)
Refractive surgery: psychophysical considerations in progressive myopia. Pruett RC. **Ann Acad Med Singapore** 1989 Mar;18(2):131–5 (21 ref.)
Intraepikeratophakia: surgical technique and postoperative visual recovery. Martel JR, et al. **Ann Ophthalmol** 1989 Jan;21(1):7–12
Innovations and creativity in contemporary ophthalmology: preliminary experience with the phakic myopic intraocular lens. Praeger DL. **Ann Ophthalmol** 1988 Dec;20(12):456–62
Phakic myopic intraocular lens—an alternative to kerato–lenticulorefractive procedures. Praeger DL. **Ann Ophthalmol** 1988 Jul;20(7):246
Excimer laser ablation in a human eye. Case report. McDonald MB, et al. **Arch Ophthalmol** 1989 May; 107(5):641–2
Scleral reinforcement in the treatment of pathologic myopia. Coroneo MT, et al. **Aust N Z J Ophthalmol** 1988 Nov; 16(4):317–20
The theory of corneal curvature change with the Intrastromal Corneal Ring. Fleming JF, et al. **CLAO J** 1989 Apr–Jun; 15(2):146–50
Radial keratotomy: where did it go wrong? Percival SP. **Eye** 1988;2 (Pt 5):478–83
A prospective clinical study of radial keratotomy in Koreans. Kim JH. **Korean J Ophthalmol** 1988 Jun;2(1):13–21
Radial keratotomy in high myopia. Lee JH, et al. **Korean J Ophthalmol** 1987 Jun;1(1):47–51
Sling markers in scleral reinforcement surgery. Brian GR, et al. **Ophthalmic Surg** 1988 Sep;19(9):647–8
Radial keratotomy for myopia. American Academy of Ophthalmology. **Ophthalmology** 1989 May;96(5):671–87 (130 ref.)
Refractive surgery for myopia. Halliday B. **Practitioner** 1988 Sep 22;232(1454 (Pt 2)):1039–41
[Use of soft contact lenses after scleroplasty surgery for myopia] Sušický P, et al. **Cesk Oftalmol** 1989 Feb; 45(1):56–61 (Eng. Abstr.) **(Cze)**
[Radial keratotomy. Current status in Lyon] Burillon C, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1097–9 **(Fre)**
[Radial keratotomy: practical problems apropos of 40 case reports] Colin J. **Bull Soc Ophtalmol Fr** 1988 Jan; 88(1):139–40 **(Fre)**
[Radial keratotomy. Can the predictability of results be improved?] Leroux Les Jardins S, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):39–40, 43–8 **(Fre)**
[Reflections apropos of 100 cases of radial keratotomy] Levy JP. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):513–8 **(Fre)**
[Predictive factors in radial keratotomy. Analysis of results] Montard M, et al. **J Fr Ophtalmol** 1988;11(12):807–16 (Eng. Abstr.) **(Fre)**
[Results of myopic keratomileusis. A retrospective clinical study apropos of 40 cases] Saragoussi JJ, et al. **J Fr Ophtalmol** 1988;11(4):311–6 (Eng. Abstr.) **(Fre)**
[Comparative results of myopic keratomileusis with and without freezing] Couderc JL, et al. **Ophtalmologie** 1988 Oct;2(4):293–6 (Eng. Abstr.) **(Fre)**
[Functional results of epikeratophakia] Bleckmann H. **Fortschr Ophthalmol** 1988;85(3):248–50 (Eng. Abstr.) **(Ger)**
[Tonometry following lamellating refractive corneal surgery] Böhnke M, et al. **Fortschr Ophthalmol** 1988;85(3):243–7 (Eng. Abstr.) **(Ger)**
[Intraocular lens for the correction of myopia of the phakic eye] Fechner PU, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):29–34 (Eng. Abstr.) **(Ger)**
[Optical consequences of implantation of a negative intraocular lens in myopic patients] van der Heijde GL, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):99–102 (Eng. Abstr.) **(Ger)**
[Surgical therapy of ametropia] Marchi V, et al. **Clin Ter** 1988 Sep 30;126(6):399–403 (Eng. Abstr.) **(Ita)**
[Scleroplasty in degenerative myopia. Postoperative results] Cojocaru G. **Rev Chir [Oftalmol]** 1988 Oct–Dec; 32(4):289–94 (Eng. Abstr.) **(Rum)**
[Fukala's operation in marked myopia] Radian AB, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec;32(4):279–82 (Eng. Abstr.) **(Rum)**
[The clinical significance of studying corneal topography in correcting myopia and astigmatism by radial keratotomy] Avetisov SE, et al. **Oftalmol Zh** 1988;(8):449–53 (Eng. Abstr.) **(Rus)**
[Radial keratotomy as the method of choice in the optical correction of myopia and myopic astigmatism] Avetisov SE. **Oftalmol Zh** 1989;(2):122–4 (Eng. Abstr.) **(Rus)**
[Transudative myopic maculopathy: pathogenetic validity and comparative effectiveness of laser interventions] Ivanishko IuA. **Oftalmol Zh** 1989;(2):99–104 (Eng. Abstr.) **(Rus)**
[A question on the role of correction using radial keratotomy in myopia] Ivanov DF. **Oftalmol Zh** 1988;(8):495–8 (Eng. Abstr.) **(Rus)**
[The hypotensive action and efficacy of sclera–enhancing surgery in progressive myopia] Kondratenko IuN. **Oftalmol Zh** 1988;(8):457–8 (Eng. Abstr.) **(Rus)**
[Indications for radial keratotomy in mild, medium and severe myopia] Puchkovskaia NA. **Oftalmol Zh** 1988;(4):244–5 **(Rus)**
[Long–term results of simple scleroplasty in progressive myopia in children] Savinykh VI, et al. **Oftalmol Zh** 1988; (8):459–61 (Eng. Abstr.) **(Rus)**
[Scleroplasty using a corneo–scleral graft in school–age children th progressive myopia] Vatchenko AA, et al. **Oftalmol Zh** 1988;(4):228–30 (Eng. Abstr.) **(Rus)**
[Ergonomic analysis of the results of the surgical correction of myopia using radial keratotomy (a review of the literature)] Avetisov SE, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):72–5 (28 ref.) **(Rus)**
[Interlamellar refraction tunnel keratoplasty in the correction of myopia and astigmatism] Gonchar PA, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):25–30 (Eng. Abstr.) **(Rus)**
[Scleroplastic operations in pathological myopia] Vurgaft

MB. **Vestn Oftalmol** 1988 Nov-Dec;104(6):32-3 (Eng. Abstr.) **(Rus)**

[Use of the computer for predicting the outcome of refraction surgery of myopia] Antoniuk VD. **Voen Med Zh** 1989 Jan; (1):37 **(Rus)**

[The effect of posterior scleroplasty on the axial length of the bulb, refraction and visual acuity] Valášková T. **Cesk Oftalmol** 1988 Sep;44(5):313-6 (Eng. Abstr.) **(Slo)**

THERAPY

The role of bifocal and contact lenses in myopia control. Grosvenor T, et al. **Acta Ophthalmol Suppl (Copenh)** 1988; 185:162-6

The effect of distance gazing and eye ball exercise on the prevention of myopia progression. Lin LL, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:139-40

The correction of myopia by lens implantation into phakic eyes. Fechner PU, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):659-63

Undercorrection and myopia development [letter] Birnbaum MH. **Am J Optom Physiol Opt** 1988 Dec;65(12):974-5

Visual acuity improvement following fading and feedback training—I. Comparison of myopic and emmetropic volunteers. Collins FL Jr, et al. **Behav Res Ther** 1988; 26(6):461-6

Visual acuity improvement following fading and feedback training—II. Relationship to changes in refractive error. Pbert LA, et al. **Behav Res Ther** 1988;26(6):467-73

Visual acuity improvement following fading and feedback training—III. Effects on acuity for stimuli in the natural environment. Ricci JA, et al. **Behav Res Ther** 1988; 26(6):475-80

Effect of spectacle use and accommodation on myopic progression: final results of a three-year randomised clinical trial among schoolchildren. Pärssinen O, et al. **Br J Ophthalmol** 1989 Jul;73(7):547-51

Fluoroperm extended wear RGP contact lenses for myopia, hyperopia, aphakia, astigmatism, and keratoconus. Kastl PR, et al. **CLAO J** 1989 Jan-Mar;15(1):61-3

Visolett magnifier without and with bifocal. Fonda GE. **Ophthalmology** 1989 Sep;Pt 2:1-5

Myopia: what can we do about it clinically? Grosvenor T. **Optom Vis Sci** 1989 Jul;66(7):415-9 (44 ref.)

Use of silicone-acrylate contact lenses for the control of myopia: results after two years of lens wear. Grosvenor T, et al. **Optom Vis Sci** 1989 Jan;66(1):41-7

[Management of unilateral refractive errors with contact lenses] Höh H. **Fortschr Ophthalmol** 1989;86(1):64-6 (Eng. Abstr.) **(Ger)**

[Use of a sinusoidal modulated pulsed current for improving ocular accommodation capacity in the combined treatment of progressive myopia in school-age children] Iakimchuk VV, et al. **Oftalmol Zh** 1988;(7):416-8 (Eng. Abstr.) **(Rus)**

[The immediate results of a nonsurgical method of scleral reinforcement in progressive myopia] Iusupov AA. **Vestn Oftalmol** 1988 Nov-Dec;104(6):24-6 (Eng. Abstr.) **(Rus)**

[Ocular vasocompression in progressive myopia and the follow-up of its efficacy (preliminary report)] Ivashina AI, et al. **Vestn Oftalmol** 1988 Sep-Oct;104(5):31-4 (Eng. Abstr.) **(Rus)**

[Evaluation of the stabilizing action of the injection of a scleral-reinforcing agent on clinical ocular refraction in progressive myopia] Musaelian ZV. **Vestn Oftalmol** 1988 Nov-Dec;104(6):26-8 (Eng. Abstr.) **(Rus)**

[Use of electroacupuncture reflexotherapy in myopia] Val'kova IV, et al. **Vestn Oftalmol** 1989 Jan-Feb; 105(1):33-5 (Eng. Abstr.) **(Rus)**

MYOSARCOMA see under **SARCOMA**

MYOSIN

Fluorescent modification and orientation of myosin sulfhydryl 2 in skeletal muscle fibers. Ajtai K, et al. **Biochemistry** 1989 Mar 7;28(5):2204-10

Nucleotide-induced states of myosin subfragment 1 cross-linked to actin. Duong AM, et al. **Biochemistry** 1989 Apr 18;28(8):3502-9

Thermal unfolding of myosin rod and light meromyosin: circular dichroism and tryptophan fluorescence studies. King L, et al. **Biochemistry** 1989 Apr 18;28(8):3498-502

Prediction of the secondary structure of myosin light chains from comparison of homologous sequences. Implications for the interaction between myosin heavy and light chains. Béchet JJ, et al. **Biochim Biophys Acta** 1989 Jul 6; 996(3):199-208

Amino-acid sequence of the short subfragment-2 in adult chicken skeletal muscle myosin. Watanabe B. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):549-58

Correlation among the proton charges and molecular masses of myosin subunits. Béchet JJ, et al. **FEBS Lett** 1989 May 22;249(1):8-12

Photocross-linking from dinitrophenylated SH1 in myosin head. II. Cross-linked site on 50-kDa fragment. Muno D, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):427-32

Position of Mercenaria regulatory light-chain Cys50 site on the surface of myosin visualized by electron microscopy. Chantler PD, et al. **J Mol Biol** 1989 Jun 5;207(3):631-6

Comparison of the structure of myosin subfragment 1 bound to actin and free in solution. A neutron scattering study using actin made "invisible" by deuteration. Curmi PM, et al. **J Mol Biol** 1988 Oct 5;203(3):781-98

Shape of the myosin head in the rigor complex. Three-dimensional image reconstruction of the actin-tropomyosin-heavy meromyosin complex. Kajiyama H. **J Mol Biol** 1988 Dec 5;204(3):639-52

Electron microscopic mappings of myosin head with site-directed antibodies. Sutoh K, et al. **J Mol Biol** 1989 Mar 20;206(2):357-63

[A method for quick freezing of muscles in tetanic contraction] Alamo L, et al. **Acta Cient Venez** 1987; 38(4):513-4 **(Spa)**

ANALYSIS

Myosin, tubulin and laminin immunoreactivity in the ectoderm of the growing area opaca of the chick embryo. Monnet-Tschudi F, et al. **Anat Embryol (Berl)** 1988; 179(2):157-64

The distribution of heavy-chain isoforms of myosin in airways smooth muscle from adult and neonate humans. Mohammad MA, et al. **Biochem J** 1989 Jun 1;260(2):421-6

Glutamic acid-88 is close to SH-1 in the tertiary structure of myosin subfragment 1. Lu RC, et al. **Biochemistry** 1989 May 30;28(11):4826-9

LC2 involvement in the assembly of skeletal myosin filaments. Chowrashi PK, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):216-23

Amino-acid sequence of the hinge region in chicken myosin subfragment-2. Watanabe B. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):55-61

Subunit composition of native myosin isoenzymes of some striated mammalian muscles. Marechal G, et al. **Biomed Biochim Acta** 1989;48(5-6):S417-21

A comparative study of chicken ventricular and slow skeletal myosin light chains. Libera LD. **Cell Biol Int Rep** 1988 Dec;12(12):1089-98

Correlation between the distribution of smooth muscle or non muscle myosins and alpha-smooth muscle actin in normal and pathological soft tissues. Benzonana G, et al. **Cell Motil Cytoskeleton** 1988;11(4):260-74

Proteolytic fragmentation of Dictyostelium myosin and localization of the in vivo heavy chain phosphorylation site. Kuczmarski ER, et al. **Cell Motil Cytoskeleton** 1988; 10(4):471-81

Chemoattractant-elicited translocation of myosin in motile Dictyostelium. Nachmias VT, et al. **Cell Motil Cytoskeleton** 1989;13(3):158-69

Direct visualization of bipolar myosin filaments in stress fibers of cultured fibroblasts. Svitkina TM, et al. **Cell Motil Cytoskeleton** 1989;12(3):150-6

Pig brain homogenates contain smooth muscle myosin and cytoplasmic myosin isoforms. Gröschel-Stewart U, et al. **Cell Tissue Res** 1989 Jul;257(1):137-9

Nonsynchronous accumulation of alpha-skeletal actin and beta-myosin heavy chain mRNAs during early stages of pressure-overload—induced cardiac hypertrophy demonstrated by in situ hybridization. Schiaffino S, et al. **Circ Res** 1989 May;64(5):937-48

Expression of myosin in atrial areas of the bovine myocardium. Syrový I. **Comp Biochem Physiol [A]** 1989; 92(3):441-3

Myosin light chains of guinea-pig striated muscles. Similarities and differences with rat myosin light chains. d'Albis A, et al. **Comp Biochem Physiol [B]** 1989; 93(2):355-8

Lobster (Homarus americanus) striated muscle myosin. Regenstein JM. **Comp Biochem Physiol [B]** 1977; 56(3):239-44

Electron microscopic localization of myosin II and ABP-120 in the cortical actin matrix of Dictyostelium amoebae using IgG-gold conjugates. Ogihara S, et al. **Dev Genet** 1988; 9(4-5):505-20

Evidence for the presence of a distinct embryonic isoform of myosin heavy chain in chicken skeletal muscle. Dhoot GK. **Differentiation** 1989 Jun;40(3):176-83

Chronic stimulation-induced changes of myosin light chains at the mRNA and protein levels in rat fast-twitch muscle. Kirschbaum BJ, et al. **Eur J Biochem** 1989 Jan 15; 179(1):23-9

Myosin heavy-chain isoforms in human smooth muscle. Sartore S, et al. **Eur J Biochem** 1989 Jan 15;179(1):79-85

Intramuscular comparison of myosin isozymes and light chains in rat extensor digitorum longus muscle. Rosenblatt JD, et al. **Experientia** 1989 Apr 15;45(4):339-41

Diversity in expression of myosin heavy chain isoforms and M-band proteins in rat muscle spindles. Pedrosa F, et al. **Histochemistry** 1989;92(3):185-94

Propagation of Acto-S-1 ATPase reaction-coupled conformational change in actin along the filament. Ando T. **J Biochem (Tokyo)** 1989 May;105(5):818-22

Measurement of ATPase activity of immobilized myosin heads. Hayashi H, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):875-7

Physical, enzymatic, and contractile properties of brain myosin with anti-brain myosin Fab fragment bound on its tail. Matsumura S, et al. **J Biochem (Tokyo)** 1989 May; 105(5):803-12

Distribution of isoelectric variants of the 17,000-dalton myosin light chain in mammalian smooth muscle [published erratum appears in J Biol Chem 1989 Feb 5;264(4):2391] Helper DJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15748-53

The organization of myosin and actin in rapid frozen nerve growth cones. Bridgman PC, et al. **J Cell Biol** 1989 Jan; 108(1):95-109

The dynamic distribution of fluorescent analogues of actin and myosin in protrusions at the leading edge of migrating Swiss 3T3 fibroblasts. DeBiasio RL, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2631-45

Structural changes induced in Ca2+-regulated myosin filaments by Ca2+ and ATP. Frado LL, et al. **J Cell Biol** 1989 Aug;109(2):529-38

Characterization of intestinal microvillar membrane disks: detergent-resistant membrane sheets enriched in associated brush border myosin I (110K-calmodulin). Mooseker MS, et al. **J Cell Biol** 1989 Sep;109(3):1153-61

Distribution of fast myosin heavy chain isoforms in thick filaments of developing chicken pectoral muscle. Taylor LD, et al. **J Cell Biol** 1989 Feb;108(2):533-42

Substructure and accessory proteins in scallop myosin filaments. Vibert P, et al. **J Cell Biol** 1989 Aug; 109(2):539-47

In situ localization of myosin and actin in dendritic spines with the immunogold technique. Morales M, et al. **J Comp Neurol** 1989 Jan 22;279(4):666-74

Is the myosin type altered in the aging platysma? Oudet C, et al. **J Craniomaxillofac Surg** 1989 May;17(4):190-4

Lanthanide chelates as new fluorochrome labels for cytochemistry. Soini EJ, et al. **J Histochem Cytochem** 1988 Nov;36(11):1449-51

Two attached non-rigor crossbridge forms in insect flight muscle. Reedy MC, et al. **J Mol Biol** 1988 Nov 20; 204(2):357-83

An embryonic-like myosin heavy chain is transiently expressed in nodal conduction tissue of the rat heart. Gorza L, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):931-41

Phosphorylatable serine residues are located in a non-helical tailpiece of a catch muscle myosin. Castellani L, et al. **J Muscle Res Cell Motil** 1988 Dec;9(6):533-40

Immunocytochemical analysis of the perinatal development of cat masseter muscle using anti-myosin antibodies. Hoh JF, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):312-25

Identification and distribution of some developmental isoforms of myosin heavy chains in avian muscle fibres. Kilby K, et al. **J Muscle Res Cell Motil** 1988 Dec; 9(6):516-24

Functional sequences of the myosin head. Mornet D, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):10-24 (77 ref.)

Complexity of myosin species in the avian posterior latissimus dorsi muscle. Rushbrook JI, et al. **J Muscle Res Cell Motil** 1988 Dec;9(6):552-62

Three myosin heavy chain isoforms in type 2 skeletal muscle fibres. Schiaffino S, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):197-205

Actin filament organization and myosin head labelling patterns in vertebrate skeletal muscles in the rigor and weak binding states. Squire JM, et al. **J Muscle Res Cell Motil** 1988 Aug;9(4):344-58 (51 ref.)

Visualization of domains in native and nucleotide-trapped myosin heads by negative staining. Walker M, et al. **J Muscle Res Cell Motil** 1988 Aug;9(4):359-66

Paracrystals of myosin rod. Ward R, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):34-52

Altered structural and functional properties of myosins, from platelets of idiopathic scoliosis patients. Peleg I, et al. **J Orthop Res** 1989;7(2):260-5

Myosin ATPase activity during avian cardiac and skeletal muscle development. Breckler JL, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):47-58

Myosin heavy chain composition of muscle fibers in spinal muscular atrophy. Biral D, et al. **Muscle Nerve** 1989 Jan; 12(1):43-51

Ventricular myosin light chain 1 is developmentally regulated and does not change in hypertension. McNally EM, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2753-67

Determination of myofibrillar and connective tissue protein contents of young and adult avian (Gallus domesticus) skeletal muscles and the N tau-methylhistidine content of avian actins. Khalili AD, et al. **Poult Sci** 1988 Nov; 67(11):1593-614

[Native myosins of the masticatory muscles of the cat using non-dissociative gel electrophoresis] Navez M, et al. **Orthod Fr** 1987;58 Pt 2:591-8 (Eng. Abstr.) **(Fre)**

[Biochemical analysis of human external urethral sphincter] Tokunaka S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):539-46 (Eng. Abstr.) **(Jpn)**

[Domain structure of myosin subfragment 1] Shnyrov VL, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1497-9 **(Rus)**

BIOSYNTHESIS

Vascular myosin expression during cytokinesis, attachment, and hypertrophy. Seidel CL, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):C793-8

Thyroid hormone induces synthesis and accumulation of tropomyosin and myosin heavy chain in limb buds of premetamorphic tadpoles. Dhanarajan ZC, et al. **Biochem Cell Biol** 1988 Jul;66(7):724-34

Regional differences in the in vivo synthesis and degradation of myosin subunits in rabbit ventricular myocardium. Samarel AM. **Circ Res** 1989 Feb;64(2):193-202

A myosin isoform repressed in hypertrophied ALD muscle of the chicken reappears during regeneration following cold injury. Stewart AF, et al. **Dev Biol** 1989 Oct; 135(2):367-75

Fast myosin heavy chain expression during the early and

late embryonic stages of chicken skeletal muscle development. Van Horn R, et al. **Dev Biol** 1989 Aug; 134(2):279–88

Altered expression of myosin light-chain isoforms in chronically stimulated fast-twitch muscle of the rat. Bär A, et al. **Eur J Biochem** 1989 Jan 2;178(3):591–4

Specific programs of myosin expression in the postnatal development of rat muscles. d'Albis A, et al. **Eur J Biochem** 1989 Aug 15;183(3):583–90

Expression of smooth muscle myosin in relation to growth kinetics of cultured aortic smooth muscle cells. Hämmerle H, et al. **Exp Cell Res** 1988 Oct;178(2):390–400

Synthesis and assembly of native myosin on muscle polyribosomes. Gagnon J, et al. **FEBS Lett** 1989 Jul 3; 250(2):549–55

I-protein forms cage-like aggregates of myosin in vitro. Ohashi K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):104–9

Coexpression of myosin isoforms in muscle of patients with neurogenic disease. Sawchak JA, et al. **Muscle Nerve** 1989 Aug;12(8):679–89 (23 ref.)

[Myosin isoforms synthesized during regeneration of fast contraction skeletal muscle regeneration, in the presence of motor nerve and after denervation. Study in adult rats and mice] d'Albis A, et al. **Reprod Nutr Dev** 1988; 28(3B):753–6 (Eng. Abstr.) **(Fre)**

BLOOD

Correlation of enzymatic properties and conformation of bovine erythrocyte myosin. Higashihara M, et al. **Biochemistry** 1989 Feb 21;28(4):1642–9

Myosin light chains release in acute myocardial infarction: non-invasive estimation of infarct size. Katus HA, et al. **Cardiovasc Res** 1988 Jul;22(7):456–63

Quantification of myocardial infarct size after coronary reperfusion by serum cardiac myosin light chain II in conscious dogs. Isobe M, et al. **Circ Res** 1989 Sep; 65(3):684–94

The quantitation of human ventricular myosin light chain 1 in serum after myocardial necrosis and infarction. Wang JX, et al. **Clin Chim Acta** 1989 May 31;181(3):325–35

Studies on the physical states of human platelet myosin in crude extracts. Takashima T, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):1027–35

In situ phosphorylation of human platelet myosin heavy and light chains by protein kinase C [published erratum appears in J Biol Chem 1989 May 15;264(14):8442] Kawamoto S, et al. **J Biol Chem** 1989 Feb 5;264(4):2258–65

Myosin: a highly sensitive indicator of myocardial necrosis after cardiac operations. Séguin JR, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):397–401

Studies on myosin light chain phosphorylation in intact platelets, utilizing a cell-penetrating thiol protease inhibitor. Tsujinaka T, et al. **Thromb Res** 1988 Aug 15; 51(4):365–72

[New biochemical markers of myocardial ischemia during cardiac surgery] Séguin J, et al. **Ann Chir** 1988;42(8):566–70 (Eng. Abstr.) **(Fre)**

[Acute myocardial infarct: myosin-light-chain liberation and ventricular function] Katus HA, et al. **Klin Wochenschr** 1988 Sep 1;66(17):784–9 (Eng. Abstr.) **(Ger)**

[Myoglobin and light chains of cardiac myosin. Personal results on its significance in cardiology] Porstmann B, et al. **Z Med Lab Diagn** 1989;30(1):8–10 **(Ger)**

[Myoglobin, L-myosin and cGMP—new laboratory parameters in cardiology] Puschendorf B, et al. **Z Med Lab Diagn** 1989;30(1):4–5 **(Ger)**

GENETICS

Human cardiac myosin heavy chain gene mapped within chromosome region 14q11.2----q13. Matsuoka R, et al. **Am J Med Genet** 1989 Feb;32(2):279–84

Protein metabolism and beta-myosin heavy-chain mRNA in unweighted soleus muscle. Thomason DB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R300–5

Regulation of myosin heavy-chain gene expression during skeletal-muscle hypertrophy. Periasamy M, et al. **Biochem J** 1989 Feb 1;257(3):691–8

Regulation of expression of avian slow myosin heavy-chain isoforms. Reid SK, et al. **Biochem J** 1989 Jun 1; 260(2):449–54

Characterization and differential expression of human vascular smooth muscle myosin light chain 2 isoform in nonmuscle cells. Kumar CC, et al. **Biochemistry** 1989 May 2;28(9):4027–35

Variability in the amino terminus of myosin light chain 1. Rushbrook JI, et al. **Biochemistry** 1988 Dec 13; 27(25):8953–8

Hormonal control of myosin heavy chain genes during development of skeletal muscles. Rubinstein NA, et al. **Ciba Found Symp** 1988;138:35–51 (20 ref.)

Regulation of alpha- and beta-myosin heavy chain messenger RNAs in the rat myocardium by amiodarone and by thyroid status. Franklyn JA, et al. **Clin Sci** 1989 May; 76(5):463–7

New analytical tool for analysis of splice site sequence determinants. Mengeritsky G, et al. **Comput Appl Biosci** 1989 Apr;5(2):97–100

Tissue-specific expression of the alternately processed Drosophila myosin heavy-chain messenger RNAs. Kazzaz JA, et al. **Dev Biol** 1989 Jun;133(2):550–61

Developmental and muscle-specific changes in methylation of the myosin light chain LC1f and LC3f promoters during avian myogenesis. Lamson G, et al. **Dev Biol** 1989 Mar; 132(1):62–8

Expression of myosin heavy chain transcripts during Xenopus laevis development. Radice GP, et al. **Dev Biol** 1989 Jun; 133(2):562–8

Evidence for expression of a common myosin heavy chain phenotype in future fast and slow skeletal muscle during initial stages of avian embryogenesis. Sweeney LJ, et al. **Dev Biol** 1989 Jun;133(2):361–74

Identification and developmental expression of a novel embryonic myosin heavy-chain gene in chicken. Lagrutta AA, et al. **DNA** 1989 Jan-Feb;8(1):39–50

Identification of the gene for fly non-muscle myosin heavy chain: Drosophila myosin heavy chains are encoded by a gene family [published erratum appears in EMBO J 1989 Jun;8(6):1896] Kiehart DP, et al. **EMBO J** 1989 Mar; 8(3):913–22

Gene replacement in Dictyostelium: generation of myosin null mutants. Manstein DJ, et al. **EMBO J** 1989 Mar; 8(3):923–32

A novel human myosin alkali light chain is developmentally regulated. Expression in fetal cardiac and skeletal muscle and in adult atria. Arnold HH, et al. **Eur J Biochem** 1988 Dec 1;178(1):53–60

The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle-specific transcription. Braun T, et al. **FEBS Lett** 1988 Nov 7;239(2):309–12

Genetic dissection of Drosophila myofibril formation: effects of actin and myosin heavy chain null alleles. Beall CJ, et al. **Genes Dev** 1989 Feb;3(2):131–40

Myosin heavy-chain mutations that disrupt Caenorhabditis elegans thick filament assembly. Bejsovec A, et al. **Genes Dev** 1988 Oct;2(10):1307–17

A muscle-specific enhancer is located at the 3' end of the myosin light-chain 1/3 gene locus. Donoghue M, et al. **Genes Dev** 1988 Dec;2(12B):1779–90

Co-localization to chromosome bands 99E1-3 of the Drosophila melanogaster myosin light chain-2 gene and a haplo-insufficient locus that affects flight behavior. Warmke JW, et al. **Genetics** 1989 May;122(1):139–51

Chromosomal assignment of two myosin alkali light-chain genes encoding the ventricular/slow skeletal muscle isoform and the atrial/fetal muscle isoform (MYL3, MYL4). Cohen-Haguenauer O, et al. **Hum Genet** 1989 Feb; 81(3):278–82

Isolation and characterization of the complete human beta-myosin heavy chain gene. Diederich KW, et al. **Hum Genet** 1989 Feb;81(3):214–20

Muscle-specific regulation of a transfected rabbit myosin heavy chain beta gene promoter. Cribbs LL, et al. **J Biol Chem** 1989 Jun 25;264(18):10672–8

Human ventricular/slow twitch myosin alkali light chain gene characterization, sequence, and chromosomal location. Fodor WL, et al. **J Biol Chem** 1989 Feb 5; 264(4):2143–9

The alkali light chains of human smooth and nonmuscle myosins are encoded by a single gene. Tissue-specific expression by alternative splicing pathways. Lenz S, et al. **J Biol Chem** 1989 May 25;264(15):9009–15

Evolutionarily conserved sequences of striated muscle myosin heavy chain isoforms. Epitope mapping by cDNA expression. Miller JB, et al. **J Biol Chem** 1989 Aug 5; 264(22):13122–30

Identification of two types of smooth muscle myosin heavy chain isoforms by cDNA cloning and immunoblot analysis. Nagai R, et al. **J Biol Chem** 1989 Jun 15;264(17):9734–7

Identification of the functional promoter regions in the human gene encoding the myosin alkali light chains MLC1 and MLC3 of fast skeletal muscle. Seidel U, et al. **J Biol Chem** 1989 Sep 25;264(27):16109–17

Ifm(2)2 is a myosin heavy chain allele that disrupts myofibrillar assembly only in the indirect flight muscle of Drosophila melanogaster. Chun M, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2613–21

Molecular genetic characterization of a developmentally regulated human perinatal myosin heavy chain. Feghali R, et al. **J Cell Biol** 1989 May;108(5):1791–7

Molecular and ultrastructural defects in a Drosophila myosin heavy chain mutant: differential effects on muscle function produced by similar thick filament abnormalities. O'Donnell PT, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2601–12

Differential regulation by thyroid hormones of myosin heavy chain alpha and beta mRNAs in the rat ventricular myocardium. Green NK, et al. **J Endocrinol** 1989 Jul; 122(1):193–200

In situ hybridization and immunocytochemistry in serial sections of rabbit skeletal muscle to detect myosin expression. Dix DJ, et al. **J Histochem Cytochem** 1988 Dec; 36(12):1519–26

Structure and expression of a newt cardio-skeletal myosin gene. Implications for the C value paradox. Casimir CM, et al. **J Mol Biol** 1988 Jul 20;202(2):287–96

Sequence analysis of the complete Caenorhabditis elegans myosin heavy chain gene family. Dibb NJ, et al. **J Mol Biol** 1989 Feb 5;205(3):603–13

Regulatory and essential light-chain-binding sites in myosin heavy chain subfragment-1 mapped by site-directed mutagenesis. Mitchell EJ, et al. **J Mol Biol** 1989 Jul 5; 208(1):199–205

Isolation of the chick myosin alkali light chain gene expressed in embryonic gizzard muscle and transitional expression of the light chain gene family in vivo. Nabeshima Y, et al. **J Mol Biol** 1988 Dec 5;204(3):497–505

Single chicken cardiac myosin alkali light-chain gene generates two different mRNAs by alternative splicing of a complex exon. Nakamura S, et al. **J Mol Biol** 1988 Oct 20;203(4):895–904

Myosin heavy chain expression in human muscle cocultured with mouse spinal cord. Ecob-Prince M, et al. **J Neurol Sci** 1989 Apr;90(2):167–77

Starvation leads to decreased levels of mRNA for myofibrillar proteins. Fong Y, et al. **J Surg Res** 1989 May; 46(5):457–61

The genes for beta-myosin heavy chain and glycogen phosphorylase are discoordinately regulated during compensatory growth of plantaris muscle in the adult rat. Crerar MM, et al. **Mol Cell Biochem** 1989 Apr 11; 86(2):115–23

Sequence and expression of human myosin alkali light chain isoforms. Wade R, et al. **Mol Cell Biochem** 1989 Jun 1; 87(2):119–36

Promoter upstream elements of the chicken cardiac myosin light-chain 2-A gene interact with trans-acting regulatory factors for muscle-specific transcription. Braun T, et al. **Mol Cell Biol** 1989 Jun;9(6):2513–25

Regulatory myosin light-chain genes of Caenorhabditis elegans. Cummins C, et al. **Mol Cell Biol** 1988 Dec; 8(12):5339–49

Functional domains of the Drosophila melanogaster muscle myosin heavy-chain gene are encoded by alternatively spliced exons. George EL, et al. **Mol Cell Biol** 1989 Jul; 9(7):2957–74

Structures of spontaneous deletions in Caenorhabditis elegans. Pulak RA, et al. **Mol Cell Biol** 1988 Sep; 8(9):3748–54

Dictyostelium discoideum myosin: isolation and characterization of cDNAs encoding the regulatory light chain. Tafuri SR, et al. **Mol Cell Biol** 1989 Jul;9(7):3073–80

Interaction of nuclear proteins with a positive cis-acting element of rat embryonic myosin heavy-chain promoter: identification of a new transcriptional factor. Yu YT, et al. **Mol Cell Biol** 1989 May;9(5):1839–49

Linkage analysis of the myosin heavy chain gene in Dictyostelium discoideum using a mutation generated by homologous recombination. Welker DL, et al. **Mol Gen Genet** 1989 Apr;216(2-3):498–502

Changes in skeletal muscle gene transcription induced by chronic stimulation. Brownson C, et al. **Muscle Nerve** 1988 Nov;11(11):1183–9

Promoter analysis of myosin alkali light chain genes expressed in mouse striated muscle. Cohen A, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10037–52

Isolation and nucleotide sequence of the cDNA encoding human ventricular myosin light chain 2. Dalla Libera L, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2360

Nucleotide sequence of full length human embryonic myosin heavy chain cDNA. Eller M, et al. **Nucleic Acids Res** 1989 May 11;17(9):3591–2

Expression and DNA sequence analysis of a human embryonic skeletal muscle myosin heavy chain gene. Karsch-Mizrachi I, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6167–79

Structure and expression of a muscle specific gene which is adjacent to the Drosophila myosin heavy-chain gene and can encode a cytochrome b related protein. Levin RJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6349–67

BamHI polymorphism at the human embryonic/atrial myosin alkali light chain gene locus. Vanin EF. **Nucleic Acids Res** 1989 Jun 26;17(12):4910

Recombinant growth hormone enhances muscle myosin heavy-chain mRNA accumulation and amino acid accrual in humans. Fong Y, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3371–4

Dictyostelium discoideum contains a gene encoding a myosin I heavy chain. Jung G, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6186–90

Coexpression and assembly of myosin heavy chain and myosin light chain in Escherichia coli. McNally EM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7270–3

Characterization of human cardiac myosin heavy chain genes. Yamauchi-Takihara K, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3504–8

[Muscle genes of Caenorhabditis elegans] Kagawa H, et al. **Tanpakushitsu Kakusan Koso** 1989 Apr;34(4):325–31 **(Jpn)**

HISTORY

The role of sulfhydryl groups in the interaction of myosin and actin. 1947 [classical article] Bailey K, et al. **Biochim Biophys Acta** 1989;1000:177–8

The interaction of actin and myosin 40 years ago: a commentary on 'An Electron Microscope and X-Ray Study of Actin'. Perry SV. **Biochim Biophys Acta** 1989; 1000:159–62

IMMUNOLOGY

Detection of experimental myocarditis by monoclonal antimyosin antibody, Fab fragment. Rezkalla S, et al. **Am Heart J** 1989 Feb;117(2):391–5

Measurement of acute Q-wave myocardial infarct size with

single photon emission computed tomography imaging of indium-111 antimyosin. Antunes ML, et al. **Am J Cardiol** 1989 Apr 1;63(12):777–83

Diagnosis of acute myocardial infarction by indium-111 antimyosin antibodies and correlation with the traditional techniques for the evaluation of extent and localization. Volpini M, et al. **Am J Cardiol** 1989 Jan 1;63(1):7–13

Investigative study of radiopharmaceuticals useful for imaging skeletal muscle injury in experimental animals. Owunwanne A, et al. **Am J Physiol Imaging** 1989;4(2):62–5

Myocardial uptake of antimyosin monoclonal antibody in a murine model of viral myocarditis. Matsumori A, et al. **Circulation** 1989 Feb;79(2):400–5

Immunological, electrophoretic and kinetic properties of cardiac myosins from various species. Higuchi M, et al. **Comp Biochem Physiol [B]** 1978;60(4):495–9

Myosin and Ca2+-sensitive streaming in the alga Chara: detection of two polypeptides reacting with a monoclonal anti-myosin and their localization in the streaming endoplasm. Grolig F, et al. **Eur J Cell Biol** 1988 Oct; 47(1):22–31

Stress fiber dynamics as probed by antibodies against myosin. Höner B, et al. **Eur J Cell Biol** 1988 Oct;47(1):14–21

Lyme myocarditis diagnosed by indium-111-antimyosin antibody scintigraphy. Casáns I, et al. **Eur J Nucl Med** 1989;15(6):330–1

Autoimmunity in Chagas' disease: specific inhibition of reactivity of CD4+ T cells against myosin in mice chronically infected with Trypanosoma cruzi. Rizzo LV, et al. **Infect Immun** 1989 Sep;57(9):2640–4

Antimyosin imaging in acute transmural myocardial infarctions: results of a multicenter clinical trial. Johnson LL, et al. **J Am Coll Cardiol** 1989 Jan;13(1):27–35

High prevalence of myocardial monoclonal antimyosin antibody uptake in patients with chronic idiopathic dilated cardiomyopathy. Obrador D, et al. **J Am Coll Cardiol** 1989 May;13(6):1289–93

Inhibition of conformational change in smooth muscle myosin by a monoclonal antibody against the 17-kDa light chain. Highashihara M, et al. **J Biol Chem** 1989 Mar 25; 264(9):5218–25

Structural and immunological characterization of the myosin-like 110-kD subunit of the intestinal microvillar 110K-calmodulin complex: evidence for discrete myosin head and calmodulin-binding domains. Carboni JM, et al. **J Cell Biol** 1988 Nov;107(5):1749–57

Monoclonal antibody ALD 180: a reagent specific for a human prenatal skeletal muscle myosin isoform. Sawchak JA, et al. **J Histochem Cytochem** 1989 Oct;37(10):1539–43

Indium-111 antimyosin scintigraphy to assess myocardial damage in patients with suspected myocarditis and cardiac rejection. Carrió I, et al. **J Nucl Med** 1988 Dec; 29(12):1893–900

Antimyosin antibodies and constrictive pericarditis in lupus erythematosus. Wolf RE, et al. **J Rheumatol** 1988 Aug; 15(8):1284–7

Autoimmunity in Chagas' disease: immunomodulation of autoimmune and T. cruzi-specific immune responses. Rizzo LV, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:360–2

The role of antimyosin antibodies in acute myocardial infarction. Johnson LL, et al. **Semin Nucl Med** 1989 Jul; 19(3):238–46 (33 ref.)

Immunogenetic basis of myocarditis: role of fibrillary antigens. Beisel KW. **Springer Semin Immunopathol** 1989; 11(1):31–42 (69 ref.)

[Use of antimyosin monoclonal antibodies in the diagnosis of acute myocardial infarct. Comparison with other imaging technics and in vivo kinetics study] Bisi G, et al. **G Ital Cardiol** 1988 Apr;18(4):281–9 (Eng. Abstr.) **(Ita)**

ISOLATION & PURIFICATION

Bulk isolation of the 20,000-Da light chain of smooth muscle myosin: separation of the unphosphorylated and phosphorylated species. Sobieszek A. **Anal Biochem** 1988 Jul;172(1):43–50

Isolation and characterization of the N-terminal 23-kilodalton fragment of myosin subfragment 1. Muhlrad A. **Biochemistry** 1989 May 2;28(9):4002–10

Preparation and characterization of heavy meromyosin and subfragment 1 from vertebrate cytoplasmic myosins. Sellers JR, et al. **Biochemistry** 1988 Sep 6;27(18):6977–82

Lysosomal proteinase-sensitive regions in fast and slow skeletal muscle myosins. Dufour E, et al. **Biochimie** 1989 May;71(5):625–32

The light chain composition of embryonic myosin. Perzanowska A. **Comp Biochem Physiol [B]** 1979; 63(2):189–92

Two isoforms of smooth muscle myosin regulatory light chain in chicken gizzard. Inoue A, et al. **Eur J Biochem** 1989 Aug 15;183(3):645–51

Purification of myosin from Ehrlich ascites tumour cells (phosphorylation of its light chain and heavy chain). Kuźnicki J, et al. **Int J Biochem** 1988;20(11):1203–9

Preparation of subfragment-1 from abalone smooth muscle myosin. Asakawa T, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):667–71

Cross-linking of native myosin forms oligomers of myosin heavy chain dimers. Hu DH, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):509–11

Cardiac beta myosin heavy chain diversity in normal and chronically hypertensive baboons. Henkel RD, et al. **J Clin Invest** 1989 May;83(5):1487–93

Isolation and characterization of two beta-type cardiac myosin in the canine atrium. Komuro I, et al. **Jpn Circ J** 1988 Oct;52(10):1191–200

The effect of time, 2-mercaptoethanol and inhibitors of proteases on isolation of cardiac myosin and its properties. Syrový I. **Physiol Bohemoslov** 1989;38(3):287–8

[Rapid method for isolation and purification of myosin from muscle of tarantulas] Martelo MJ, et al. **Acta Cient Venez** 1987;38(3):394–5 **(Spa)**

METABOLISM

Changes in myosin isozyme expression during cardiac hypertrophy in hyperthyroid rabbits. Seiden D, et al. **Acta Anat (Basel)** 1989;135(3):222–30

Shortening velocity, myosin light chain phosphorylation and Ca2+ dependence of force during metabolic inhibition in smooth muscle of rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1989 Jul;136(3):367–76

Myosin heavy chain isoforms and velocity of shortening of type 2 skeletal muscle fibres. Schiaffino S, et al. **Acta Physiol Scand** 1988 Dec;134(4):575–6

Individual rabbit cardiac myocytes have different thresholds for alpha myosin heavy chain regulation by thyroid hormone. Lin ZY, et al. **Am J Anat** 1989 Aug;185(4):455–61

ADP release from myosin in permeabilized smooth muscle. Butler TM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C59–66

Myosin dephosphorylation during rapid relaxation of hog carotid artery smooth muscle. Driska SP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C315–21

Regional variation in rat cardiac myosin isoenzymes and ATPase activity after infarction. Geenen DL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H745–50

Dependence of stress on length, Ca2+, and myosin phosphorylation in skinned smooth muscle. Moreland RS, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C473–8

Dependence of stress on cross-bridge phosphorylation in vascular smooth muscle. Ratz PH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C96–100

[Ca2+]-dependent myosin phosphorylation in phorbol diester stimulated smooth muscle contraction. Rembold CM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C719–23

Postnatal expression of myosin heavy chains in muscle spindles of the rat. Kucera J, et al. **Anat Embryol (Berl)** 1989;179(4):369–76

Isomyosin expression patterns during rat heart morphogenesis: an immunohistochemical study. de Groot IJ, et al. **Anat Rec** 1989 Jul;224(3):365–73

Phosphorylation of the 20,000-Da myosin light chain isoforms of arterial smooth muscle by myosin light chain kinase and protein kinase C. Erdödi F, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):583–91

Structural changes in myosin subfragment 1 by mild denaturation and proteolysis probed by antibodies. Rajasekharan KN, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):304–11

The binding of 8-anilino-1-naphthalene sulfonate (ANS) to fish myosin and the effect of salts on the thermal transitions of fish myosin-ANS complex. Wicker L, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):452–61

Distribution pattern of alpha and beta myosin in normal and diseased human ventricular myocardium. Bouvagnet P, et al. **Basic Res Cardiol** 1989 Jan-Feb;84(1):91–102

Myosin P-light chain isoenzymes in the human heart: evidence for diphosphorylation of the atrial P-LC form. Morano I, et al. **Basic Res Cardiol** 1989 May-Jun; 84(3):298–305

Increased calcium sensitivity of chemically skinned human atria by myosin light chain kinase. Morano I, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):350–9

Inhibition of myosin light chain kinase by amiloride. Higashihara M. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1253–9

Characteristics of the myosin and tropomyosin binding regions of the smooth muscle caldesmon. Katayama E, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1316–22

Sucrose feeding prevents changes in myosin isoenzymes and sarcoplasmic reticulum Ca2+-pump ATPase in pressure-loaded rat heart. Rupp H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):917–23

The effect of nucleotide upon a specific isomerization of actomyosin subfragment 1. Geeves MA, et al. **Biochem J** 1988 Nov 15;256(1):41–6

Effects of deletion of tropomyosin overlap on regulated actomyosin subfragment 1 ATPase. Heeley DH, et al. **Biochem J** 1989 Mar 15;258(3):831–6

Study of the phosphorylatable light chains of skeletal and gizzard myosins by nuclear magnetic resonance spectroscopy. Levine BA, et al. **Biochem J** 1988 Aug 15; 254(1):277–86

How phosphorylation controls the self-assembly of vertebrate smooth and non-muscle myosins. Cross RA, et al. **Biochem Soc Trans** 1988 Aug;16(4):501–3

Myosin light chain and heavy chain phosphorylation in smooth muscle: potential regulatory roles for calcium, phospholipids and cyclic nucleotides. Hathaway DR, et al. **Biochem Soc Trans** 1988 Aug;16(4):499–501

Characterization of the ethenoadenosine diphosphate binding site of myosin subfragment 1. Energetics of the equilibrium between two states of nucleotide.S1 and vanadate-induced global conformation changes detected by energy transfer. Aguirre R, et al. **Biochemistry** 1989 Jan 24;28(2):799–807

Cross-linking of the skeletal myosin subfragment 1 heavy chain to the N-terminal actin segment of residues 40–113. Bertrand R, et al. **Biochemistry** 1988 Jul 26;27(15):5728–36

Demembranated muscle fibers catalyze a more rapid exchange between phosphate and adenosine triphosphate than actomyosin subfragment 1. Bowater R, et al. **Biochemistry** 1988 Jul 12;27(14):5314–23

Binding of myosin to actin in myofibrils during ATP hydrolysis. Duong AM, et al. **Biochemistry** 1989 Feb 7; 28(3):1307–13

Dynamic interaction between actin and myosin subfragment 1 in the presence of ADP. Geeves MA. **Biochemistry** 1989 Jul 11;28(14):5864–71

Effect of nucleotide structure on cardiac myosin subfragment 1 transient kinetics. Hazzard JH, et al. **Biochemistry** 1989 Jan 24;28(2):807–13

Flexibility of the myosin heavy chain: direct evidence that the region containing SH1 and SH2 can move 10 A under the influence of nucleotide binding. Huston EE, et al. **Biochemistry** 1988 Dec 13;27(25):8945–52

Effect of monoclonal antibodies on the properties of smooth muscle myosin. Ito M, et al. **Biochemistry** 1989 Jun 27; 28(13):5567–72

Orientation of actin monomer in the F-actin filament: radial coordinate of glutamine-41 and effect of myosin subfragment 1 binding on the monomer orientation [published erratum appears in Biochemistry 1988 Nov 1;27(22):8508] Kasprzak AA, et al. **Biochemistry** 1988 Jun 14;27(12):4512–22

Serine-324 of myosin's heavy chain is photoaffinity-labeled by 3'(2')-O-(4-benzoylbenzoyl)adenosine triphosphate. Mahmood R, et al. **Biochemistry** 1989 May 2;28(9):3989–95

Interaction of smooth muscle tropomyosin and smooth muscle myosin. Effect on the properties of myosin. Merkel L, et al. **Biochemistry** 1989 Mar 7;28(5):2215–20

Differential behavior of two cysteine residues on the myosin head in muscle fibers. Miyanishi T, et al. **Biochemistry** 1989 Feb 7;28(3):1287–94

Evidence for the association between two myosin heads in rigor acto-smooth muscle heavy meromyosin. Onishi H, et al. **Biochemistry** 1989 Feb 21;28(4):1898–904

Subtilisin-cleaved actin: polymerization and interaction with myosin subfragment 1. Schwyter D, et al. **Biochemistry** 1989 Jul 11;28(14):5889–95

Transient kinetics of the interaction of 1,N6-ethenoadenosine 5'-triphosphate with myosin subfragment 1 under normal and cryoenzymic conditions: a comparison with adenosine 5'-triphosphate. Tesi C, et al. **Biochemistry** 1988 Jun 28; 27(13):4903–8

Cooperative turning on of myosin subfragment 1 adenosinetriphosphatase activity by the troponin-tropomyosin-actin complex. Williams DL Jr, et al. **Biochemistry** 1988 Sep 6;27(18):6987–93

Binding manner of actin to the lysine-rich sequence of myosin subfragment 1 in the presence and absence of ATP. Yamamoto K. **Biochemistry** 1989 Jun 27;28(13):5573–7

Effects of ATP reduction on the pattern of force development and myosin light chain phosphorylation in intact arterial smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):278–82

The myosin-bound form of protein phosphatase 1 (PP-1M) is the enzyme that dephosphorylates native myosin in skeletal and cardiac muscles. Chisholm AA, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):163–9

The myosin filament. XIII. The sensitivity of LMM assembly to Mg.ATP. Chowrashi PK, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):182–7

Comparison of Ca2+-dependent effects of caldesmon-tropomyosin-calmodulin and troponin-tropomyosin complexes on the structure of F-actin in ghost fibers and its interaction with myosin heads. Dobrowolski Z, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):140–50

Dephosphorylation of distinct sites in myosin light chain by two types of phosphatase in aortic smooth muscle. Erdödi F, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):67–74

A hydrophobic region on myosin light chains modulated by divalent cations. Hardwicke PM, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):352–8

Synthetic peptides derived from the nonmuscle myosin light chains are highly specific substrates for protein kinase C. Hassell TC, et al. **Biochim Biophys Acta** 1988 Nov 2; 957(1):1–10

Cryoenzymic studies on myosin: transient kinetic evidence for two types of head with different ATP binding properties. Tesi C, et al. **Biochimie** 1989 Mar;71(3):363–72

Modulation of myosin assembly. Epstein HF. **Bioessays** 1988 Dec;9(6):197–200 (28 ref.)

Force-velocity relation and myosin isozymes of rat muscles. Beckers-Bleukx G, et al. **Biomed Biochim Acta** 1989; 48(5-6):S412–6

Transport properties of rigid bent-rod macromolecules and of semiflexible broken rods in the rigid-body treatment. Analysis of the flexibility of myosin rod. Iniesta A, et al. **Biophys J** 1988 Aug;54(2):269–75

Biochemical kinetics of skeletal actosubfragment-1 at high subfragment-1 concentrations. Stein LA, et al. **Biophys J** 1989 Aug;56(2):263–72

Interactions between actin and myosin filaments in skeletal muscle visualized in frozen-hydrated thin sections. Trus BL, et al. **Biophys J** 1989 Apr;55(4):713–24

Dynamic light-scattering study of synthetic myosin filaments. Mochizuki-Oda N, et al. **Biopolymers** 1988 Sep; 27(9):1389-401

Kinetics of actin-myosin binding. ATP-ase activity and sol-gel dissipative structures. Klonowski W. **Biosystems** 1989;22(2):127-33

Proteolytic fragmentation of Dictyostelium myosin and localization of the in vivo heavy chain phosphorylation site. Kuczmarski ER, et al. **Cell Motil Cytoskeleton** 1988; 10(4):471-81

Myosin regulation and calcium transients in fibroblast shape change, attachment, and patching. Rees DA, et al. **Cell Motil Cytoskeleton** 1989;13(2):112-22

Shortening velocity and myosin and myofibrillar ATPase activity related to myosin isoenzyme composition during postnatal development in rat myocardium. Cappelli V, et al. **Circ Res** 1989 Aug;65(2):446-57

ATPase activity of the cross-linked complex between cardiac myosin subfragment 1 and actin in several models of chronic overloading. A new approach to the biochemistry of contractility. Lauer B, et al. **Circ Res** 1989 Jun; 64(6):1106-15

Gonadectomy and hormonal replacement changes systolic blood pressure and ventricular myosin isoenzyme pattern of spontaneously hypertensive rats. Lengsfeld M, et al. **Circ Res** 1988 Dec;63(6):1090-4

Biochemical kinetics of porcine cardiac subfragment-1. II. Pre-steady-state studies of the initial phosphate burst. Stein LA, et al. **Circ Res** 1989 Aug;65(2):515-25

Calcium binding and calcium-sensitivity of heavy meromyosin and subfragment-1 from squid (Todarodes pacificus) mantle and scallop (Patinopecten yessoensis) adductor muscles. Kamiya S, et al. **Comp Biochem Physiol [B]** 1989;92(3):481-6

Thick filaments of fish myosin and its actin-activated Mg-ATPase activity. Matsuura M, et al. **Comp Biochem Physiol [B]** 1988;90(4):803-8

Diversity of fast myosin heavy chain expression during development of gastrocnemius, bicep brachii, and posterior latissimus dorsi muscles in normal and dystrophic chickens. Bandman E, et al. **Dev Biol** 1988 Nov;130(1):220-31

Myosin isoform transitions in regeneration of fast and slow muscles during postnatal development of the rat. d'Albis A, et al. **Dev Biol** 1989 Oct;135(2):320-5

Nerve-dependent accumulation of myosin light chain 3 in developing limb musculature. Merrifield PA, et al. **Development** 1987 Dec;101(4):673-84

Neonatal myosin heavy chains are not expressed in Ni-induced rat rhabdomyosarcoma. Borrione AC, et al. **Differentiation** 1988 Jun;38(1):49-59

Concomitant increase in cytosolic free calcium and phosphorylation of myosin light chain by vasoconstrictive hormones in cultured rat vascular smooth muscle cells. Takata S, et al. **Endocrinol Jpn** 1988 Aug;35(4):577-84

The effect of myosin light chain phosphorylation and Mg2+ on the conformation of myosin in thick filaments of glycerinated fibers of rabbit skeletal muscle. Borovikov YS, et al. **Eur J Biochem** 1989 Jul 15;183(1):83-8

Myosin heavy-chain isoforms in adult and developing rabbit vascular smooth muscle. Borrione AC, et al. **Eur J Biochem** 1989 Aug 1;183(2):413-7

Myosin isoenzymes and their subunits in urodelan amphibian fast skeletal muscle. Coexistence of larval and adult heavy chains in neotenic individuals. Chanoine C, et al. **Eur J Biochem** 1989 Apr 15;181(1):125-8

The influence of substoichiometric concentrations of myosin subfragment 1 on the state of aggregation of actin under depolymerizing conditions. Grazi E, et al. **Eur J Biochem** 1989 Jun 15;182(2):277-82

Temperature-dependent conformational transition in the head-rod junctional region of the myosin molecule. Rędowicz MJ, et al. **Eur J Biochem** 1988 Nov 15; 177(3):615-24

The assembly of the rod portion of brain myosin. Barylko B, et al. **Eur J Cell Biol** 1989 Apr;48(2):264-70

Reactivation of cell-free models of Physarum plasmodia after myosin reconstitution. Bell R. **Eur J Cell Biol** 1988 Oct; 47(1):7-13

Immunoelectron microscopic localization of actin, alpha-actinin, actin-binding protein and myosin in resting and activated human blood platelets. Sixma JJ, et al. **Eur J Cell Biol** 1989 Apr;48(2):271-81

Selective cleavage at lysine of the 50 kDa-20 kDa connector loop segment of skeletal myosin S-1 by endoproteinase Arg-C. Bertrand R, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):171-6

Selective cleavage of skeletal myosin subfragment-1 to form a 26 kDa peptide which shows ATP-sensitive actin binding. Griffiths AJ, et al. **FEBS Lett** 1989 Jan 2; 242(2):275-8

Six myosin heavy chain isoforms are expressed during chick breast muscle development. Hofmann S, et al. **FEBS Lett** 1988 Oct 10;238(2):245-8

Electrostimulation-induced fast-to-slow transitions of myosin light and heavy chains in rabbit fast-twitch muscle at the mRNA level. Kirschbaum BJ, et al. **FEBS Lett** 1989 Jan 30;243(2):123-6

Dependence of the length of the heavy chain of chymotryptic subfragment 1 on the temperature of myosin digestion. Pliszka B, et al. **FEBS Lett** 1989 Jan 16;243(1):30-2

Immunocytochemical localization of myosin in normal and phalloidin-treated rat hepatocytes. Yasuura S, et al. **Gastroenterology** 1989 Oct;97(4):982-9

Ontogenic differentiation of pig atrial and ventricular myosin. Syrový I. **Gen Physiol Biophys** 1989 Feb;8(1):57-61

Immunocytochemical localization of myosin, tropomyosin and actin in vestibular hair cells of human fetuses and cats. Sans A, et al. **Hear Res** 1989 Jun 15;40(1-2):117-25

Heterogeneity of fast-oxidative muscle fibers of chicken demonstrated by anti-myosin monoclonal antibodies. Zhang Y, et al. **Histochemistry** 1989;91(2):143-9

Novel redistribution of myosin-containing filaments in cultured keratinocytes identified by a human monoclonal autoantibody. Williams CL, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):397-401

Isoproterenol attenuates myosin phosphorylation and contraction of tracheal muscle. Obara K, et al. **J Appl Physiol** 1989 May;66(5):2017-22

Interaction of alkali light chain 1 with the isolated 20-kilodalton fragment of myosin subfragment-1 heavy chain and F-actin. Katoh T, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):633-5

Physarum myosin light chain interacts with actin in a Ca2+-dependent manner. Kohama K, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):995-8

Fluorescence quenching studies of fluorescein attached to Lys-61 or Cys-374 in actin: effects of polymerization, myosin subfragment-1 binding, and tropomyosin-troponin binding. Miki M, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):232-5

Interaction of two heads of myosin with F-actin: binding of H-meromyosin with F-actin in the absence of nucleotide. Miyata M, et al. **J Biochem (Tokyo)** 1989 Jan; 105(1):103-9

Elementary steps of the actin-activated ATPase reaction of cardiac muscle myosin subfragment-1. Miyata M, et al. **J Biochem (Tokyo)** 1988 May;103(5):750-4

Binding of connectin to myosin filaments. Murayama T, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):323-6

Regulatory light chain-a myosin kinase (aMK) catalyzes phosphorylation of smooth muscle myosin heavy chains of scallop, Patinopecten yessoensis. Sohma H, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):889-93

The steady state intermediate of scallop smooth muscle myosin ATPase and effect of light chain phosphorylation. A molecular mechanism for catch contraction. Takahashi M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):102-7

Oxygen exchange during the acto-subfragment-1 ATPase reaction: evidence for the two-route mechanism of the actomyosin ATPase reaction. Yasui M, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):550-6

Cooperative dependence of the actin-activated Mg2+-ATPase activity of Acanthamoeba myosin II on the extent of filament phosphorylation. Atkinson MA, et al. **J Biol Chem** 1989 Mar 5;264(7):4127-32

Binding of ADP and 5'-adenylyl imidodiphosphate to rabbit muscle myofibrils. Biosca JA, et al. **J Biol Chem** 1988 Oct 5;263(28):14231-5

The actin-myosin subfragment-1 complex stabilized by phenyldiglyoxal. Bonet A, et al. **J Biol Chem** 1988 Oct 5;263(28):14115-21

Measurement of the reversibility of ATP binding to myosin in calcium-activated skinned fibers from rabbit skeletal muscle. Oxygen exchange between water and ATP released to the solution. Bowater R, et al. **J Biol Chem** 1989 May 5;264(13):7193-201

The effect of actin and phosphorylation on the tryptic cleavage pattern of Acanthamoeba myosin IA. Brzeska H, et al. **J Biol Chem** 1989 Jun 15;264(17):10243-50

Sites phosphorylated in myosin light chain in contracting smooth muscle. Colburn JC, et al. **J Biol Chem** 1988 Dec 15;263(35):19166-73

Characterization of thermotropic state changes in myosin subfragment-1 and heavy meromyosin by UV difference spectroscopy. Kamath U, et al. **J Biol Chem** 1989 Apr 5; 264(10):5586-92

Antigen-induced secretion of histamine and the phosphorylation of myosin by protein kinase C in rat basophilic leukemia cells. Ludowyke RI, et al. **J Biol Chem** 1989 Jul 25;264(21):12492-501

Removal of tropomyosin overlap modifies cooperative binding of myosin S-1 to reconstituted thin filaments of rabbit striated muscle. Pan BS, et al. **J Biol Chem** 1989 May 25;264(15):8495-8

Studies of ligand-induced conformational perturbations in myosin subfragment 1. An examination of the environment about the SH2 and SH1 thiols using a photoprobe. Rajasekharan KN, et al. **J Biol Chem** 1989 Jun 25; 264(18):10810-9

Phosphorylation of caldesmon prevents its interaction with smooth muscle myosin. Sutherland C, et al. **J Biol Chem** 1989 Jan 5;264(1):578-83

Calcium dependence of myosin light chain phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14456-62

Cytoplasmic Ca2+ is a primary determinant for myosin phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1989 Apr 15;264(11):6207-13

The regulatory light chain is required for folding of smooth muscle myosin. Trybus KM, et al. **J Biol Chem** 1988 Nov 5;263(31):16485-92

Effect of multiple phosphorylations of smooth muscle and cytoplasmic myosins on movement in an in vitro motility assay. Umemoto S, et al. **J Biol Chem** 1989 Jan 25; 264(3):1431-6

Myoplasmic [Ca2+] determines myosin phosphorylation and isometric stress in agonist-stimulated swine arterial smooth muscle. Rembold CM, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S38-42

Spatial pattern of myosin phosphorylation in contracting smooth muscle cells: evidence for contractile zones. Bennett JP, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2623-9

Parallel modulation of brush border myosin conformation and enzyme activity induced by monoclonal antibodies. Citi S, et al. **J Cell Biol** 1989 Aug;109(2):549-56

Myogenesis in the mouse embryo: differential onset of expression of myogenic proteins and the involvement of titin in myofibril assembly. Fürst DO, et al. **J Cell Biol** 1989 Aug;109(2):517-27

Association of microinjected myosin and its subfragments with myofibrils in living muscle cells. Johnson CS, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2213-21

Expression of nuclear lamin A and muscle-specific proteins in differentiating muscle cells in ovo and in vitro. Lourim D, et al. **J Cell Biol** 1989 Aug;109(2):495-504

Formation and movement of myosin-containing structures in living fibroblasts. McKenna NM, et al. **J Cell Biol** 1989 Sep;109(3):1163-72

Cytoplasmic free calcium, myosin light chain phosphorylation, and force in phasic and tonic smooth muscle. Himpens B, et al. **J Gen Physiol** 1988 Dec; 92(6):713-29

Variations in cross-bridge attachment rate and tension with phosphorylation of myosin in mammalian skinned skeletal muscle fibers. Implications for twitch potentiation in intact muscle. Metzger JM, et al. **J Gen Physiol** 1989 May; 93(5):855-83

Active site trapping of nucleotide by smooth and non-muscle myosins. Cross RA, et al. **J Mol Biol** 1988 Sep 5; 203(1):173-81

Calcium-triggered movement of regulated actin in vitro. A fluorescence microscopy study. Honda H, et al. **J Mol Biol** 1989 Feb 20;205(4):677-83

Force transient time course in heart muscle with high and low V1 to V3 myosin isoenzyme ratio. Berman MR, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):679-87

Different phosphorylation patterns of cardiac myosin light chains using ATP and ATP gamma S as substrates. Bialojan C, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):575-8

Ventricular myosin of the shrew Crocidura russula, correlation with contractile properties. Kessler-Icekson G, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1069-73

Effect of triiodothyronine on cultured neonatal rat heart cells: beating rate, myosin subunits and CK-isozymes. Kessler-Icekson G. **J Mol Cell Cardiol** 1988 Jul; 20(7):649-55

Chronic hypertension changes myosin isoenzyme pattern and decreases myosin phosphorylation in the rat heart. Morano I, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):875-86

SH-1 modification of rabbit myosin interferes with calcium regulation. Titus MA, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):25-33

Species differences in the effects of prostaglandins on inositol trisphosphate accumulation, phosphatidic acid formation, myosin light chain phosphorylation and contraction in iris sphincter of the mammalian eye: interaction with the cyclic AMP system. Yousufzai SY, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1064-72

Comments on the molecular jet process for the in vitro movements: is it valid to use steady state kinetics to analyse actin-myosin based motility? [letter] Morel JE, et al. **J Theor Biol** 1988 Nov 8;135(1):119-21

Muscle contraction and movement of cellular organelles: are there two different types of mechanisms for their generation? Morel JE, et al. **J Theor Biol** 1988 May 7; 132(1):83-96

Myocardial mechanical and myosin isoenzyme alterations in streptozotocin-diabetic rats. Takeda N, et al. **Jpn Heart J** 1988 Jul;29(4):455-63

Immunofluorescence studies of the cytoskeletal and contractile elements in cultured human trabecular cells. Tamura M, et al. **Jpn J Ophthalmol** 1989;33(1):95-102

Effects of cimaterol, a beta-adrenergic agonist, on protein metabolism in rats. Eadara JK, et al. **Metabolism** 1989 Sep; 38(9):883-90

Polyphosphoinositides, generation of second messengers, myosin light chain phosphorylation and contraction in rabbit iris sphincter smooth muscle. Abdel-Latif AA. **Mol Cell Biochem** 1988 Jul-Aug;82(1-2):125-30

Comparison of ATPase activities and heavy chains of rabbit atrial and thyrotoxic ventricular myosin subfragment-1. Banerjee SK, et al. **Mol Cell Biochem** 1988 Sep;83(1):55-63

Enhancement of the phosphorylation of membrane bound myosin light chain by antigen stimulation in rat basophilic leukemia cells. Teshima R, et al. **Mol Immunol** 1989 Jul; 26(7):641-8

The distribution of slow myosin in rat muscles after neonatal nerve crush. Lowrie MB, et al. **Muscle Nerve** 1988 Oct; 11(10):1043-50

Binding of myosin I to membrane lipids. Adams RJ, et al. **Nature** 1989 Aug 17;340(6234):565-8

Formation of reverse rigor chevrons by myosin heads. Reedy MC, et al. **Nature** 1989 Jun 8;339(6224):481-3

Bidirectional movement of actin filaments along tracks of myosin heads. Toyoshima YY, et al. **Nature** 1989 Sep 14; 341(6238):154-6

The re-expression of two myosin heavy chains in regenerated rat muscle spindles. Fei C, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):75-9

The effect of neonatal deafferentation or deefferentation on the immunocytochemistry of muscle spindles in the rat. Kucera J, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):88-92

Agonist-specific myosin phosphorylation and intracellular calcium during isometric contractions of arterial smooth muscle. Jiang MJ, et al. **Pflugers Arch** 1989 Apr; 413(6):637-43

Myosin composition and functional properties of smooth muscle from the uterus of pregnant and non-pregnant rats. Sparrow MP, et al. **Pflugers Arch** 1988 Oct;412(6):624-33

Coupling of nonpolymerizable monomeric actin to the F-actin binding region of the myosin head. Bettache N, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6028-32

On the origin and transmission of force in actomyosin subfragment 1. Botts J, et al.
Proc Natl Acad Sci U S A 1989 Apr;86(7):2204-8

Effect of negative mechanical stress on the orientation of myosin cross-bridges in muscle fibers. Burghardt TP, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5366-70

Modifying preselected sites on proteins: the stretch of residues 633-642 of the myosin heavy chain is part of the actin-binding site. Chaussepied P, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7471-5

Actin filaments mediate Dictyostelium myosin assembly in vitro. Mahajan RK, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6161-5

Myosin light chains in regenerating rat skeletal muscle following chronic, low-frequency, electrical stimulation. Rosenblatt JD, et al. **Q J Exp Physiol** 1988 Jul;73(4):619-22

An experimental orthopedic treatment of the rat mandible using a functional appliance alters the fibre and myosin types in masticatory muscles. Oudet C, et al.
Reprod Nutr Dev 1988;28(3B):795-803

Nucleotide regulatory sites on skeletal myosin.
Laborda-Santesteban MS, et al. **Rev Esp Fisiol** 1989 Mar; 45(1):71-7

[Polymorphism of acetylcholinesterase and myosin during development of fast and slow muscles denervated in the newborn rabbit] Bacou F, et al. **Reprod Nutr Dev** 1988; 28(3B):757-68 (Eng. Abstr.) **(Fre)**

[Innervation, activity rhythm and accumulation of myosin light chains in a fast muscle of chickens] Gardahaut MF, et al. **Reprod Nutr Dev** 1988;28(3B):773-80 (Eng. Abstr.) **(Fre)**

[Action of muscular proteinases on fast and slow myosins. Relation with post-mortem proteolysis in muscles of variable contractility] Ouali A, et al. **Reprod Nutr Dev** 1988; 28(3B):839-44 (Eng. Abstr.) **(Fre)**

[Molecular mechanisms of muscle contraction] Fazekas S, et al. **Orv Hetil** 1989 Aug 6;130(32):1707-10, 1713 (32 ref.) (Eng. Abstr.) **(Hun)**

[Changes of cardiac myosin in spontaneously hypertensive rats and control rats, during the various stages of development of essential arterial hypertension] Vulpis V, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):103-10 (Eng. Abstr.) **(Ita)**

[How can bivalves continue to close the shells?--regulation and a molecular mechanism on the economical catch contraction] Morita F. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1307-16 (42 ref.) **(Jpn)**

[Effect of phosphorylation of light chain myosin and Ca2+ on the conformation of F-actin during skeletal muscle contraction] Borovikov IuS, et al. **Biokhimiia** 1989 Jan; 54(1):162-6 (Eng. Abstr.) **(Rus)**

[The effect of proteolysis of myosin heads on conformational changes induced by them in F-actin] Borovikov IuS, et al. **Biokhimiia** 1988 Oct;53(10):1754-7 (Eng. Abstr.) **(Rus)**

[Structural and functional changes in myosin from rat skeletal muscles during postmortem autolysis] Nikitina ZK, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):76-81 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Myosin and Ca2+-sensitive streaming in the alga Chara: detection of two polypeptides reacting with a monoclonal anti-myosin and their localization in the streaming endoplasm. Grolig F, et al. **Eur J Cell Biol** 1988 Oct; 47(1):22-31

Modulation of phospholipase A2 lytic activity by actin and myosin. Dubose DA, et al. **Inflammation** 1989 Feb; 13(1):15-29

[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. **Tsitologiia** 1988 Aug;30(8):1014-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cross-bridge dephosphorylation and relaxation of vascular smooth muscle. Hai CM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C282-7

Phosphatase inhibition with okadaic acid does not alter the relationship between force and myosin light chain phosphorylation in permeabilized smooth muscle. Siegman MJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):838-42

Fluorescence resonance energy transfer within the complex formed by actin and myosin subfragment 1. Comparison between weakly and strongly attached states. Trayer HR, et al. **Biochemistry** 1988 Jul 26;27(15):5718-27

Smooth operators. The molecular mechanics of smooth muscle contraction. Cross RA. **Bioessays** 1989 Jul; 11(1):18-21 (26 ref.)

Microinjection into Acanthamoeba castellanii of monoclonal antibodies to myosin-II slows but does not stop cell locomotion. Sinard JH, et al. **Cell Motil Cytoskeleton** 1989; 12(1):42-52

Changes in myosin and C-protein isoforms proceed independently of the conversion to singly innervated neuromuscular junctions in developing pectoral muscle. Hall JA, et al. **Dev Biol** 1988 Dec;130(2):591-8

Ca2+-sensitive transition in the molecular conformation of molluscan muscle myosins. Takahashi M, et al.
J Biochem (Tokyo) 1989 Feb;105(2):149-51

The binding of caldesmon to actin and its effect on the ATPase activity of soluble myosin subfragments in the presence and absence of tropomyosin. Velaz L, et al.
J Biol Chem 1989 Jun 5;264(16):9602-10

Modulation of cellular morphology and locomotory activity by antibodies against myosin. Höner B, et al.
J Cell Biol 1988 Dec;107(6 Pt 1):2181-9

The expression of slow myosin during mammalian somitogenesis and limb bud differentiation. Vivarelli E, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2191-7

Brush border myosin filament assembly and interaction with actin investigated with monoclonal antibodies. Citi S, et al. **J Muscle Res Cell Motil** 1988 Aug;9(4):306-19

Positioning of actin filaments and tension generation in skinned muscle fibres released after stretch beyond overlap of the actin and myosin filaments. Higuchi H, et al.
J Muscle Res Cell Motil 1988 Dec;9(6):491-8

Constraints on the attachment of myosin to actin [published erratum appears in J Muscle Res Cell Motil 1988 Oct;9(5):479] Tregear R. **J Muscle Res Cell Motil** 1988 Aug;9(4):293-5

Domains, motions and regulation in the myosin head. Vibert P, et al. **J Muscle Res Cell Motil** 1988 Aug;9(4):296-305 (126 ref.)

Immunocytochemical demonstration of myosin heavy chain expression in human muscle. Ecob-Prince M, et al.
J Neurol Sci 1989 Jun;91(1-2):71-8

Variations in contractile properties of rabbit single muscle fibres in relation to troponin T isoforms and myosin light chains. Greaser ML, et al. **J Physiol (Lond)** 1988 Dec; 406:85-98

Cell motility. Myosin linkage strengthened [news] Mooseker MS. **Nature** 1989 Aug 17;340(6234):505

Simultaneous recordings of force and sliding movement between a myosin-coated glass microneedle and actin cables in vitro. Chaen S, et al.
Proc Natl Acad Sci U S A 1989 Mar;86(5):1510-4

Antihemostatic activity of heparin disaccharides and oligosaccharides obtained by chemical and enzymatic fragmentation: reversal of the hemorrhagic activity by ATP and myosin. Nader HB, et al. **Thromb Res** 1989 May 1;54(3):207-14

[Analysis of the equatorial section of X-ray diffraction patterns of striated muscles of tarantulas under various experimental conditions] Sosa H, et al.
Acta Cient Venez 1988;39(1):51-9 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

UV-induced vanadate-dependent modification and cleavage of skeletal myosin subfragment 1 heavy chain. 2. Oxidation of serine in the 23-kDa NH2-terminal tryptic peptide. Cremo CR, et al. **Biochemistry** 1988 Nov 1;27(22):8415-20

UV-induced vanadate-dependent modification and cleavage of skeletal myosin subfragment 1 heavy chain. 1. Evidence for active site modification. Grammer JC, et al.
Biochemistry 1988 Nov 1;27(22):8408-15

Vanadate-mediated photocleavage of rabbit skeletal myosin. Mocz G. **Eur J Biochem** 1989 Feb 1;179(2):373-8

ULTRASTRUCTURE

Analysis of equatorial x-ray diffraction patterns from skeletal muscle. Yu LC. **Biophys J** 1989 Mar;55(3):433-40

Direct observation of molecular motility by light microscopy. Harada Y, et al. **Cell Motil Cytoskeleton** 1988;10(1-2):71-6

Arrangement of myosin heads on Limulus thick filaments. Levine RJ, et al. **J Cell Biol** 1988 Nov;107(5):1739-47

Intermolecular versus intramolecular interactions of Dictyostelium myosin: possible regulation by heavy chain phosphorylation. Pasternak C, et al. **J Cell Biol** 1989 Jul; 109(1):203-10

Location of the head-tail junction of myosin. Rimm DL, et al. **J Cell Biol** 1989 May;108(5):1783-9

Cryo-electron microscopy of insect flight muscle thick filaments. An approach to dynamic electron microscope studies. Menetret JF, et al. **J Mol Biol** 1988 Jul 5; 202(1):175-8

Myosin filaments isolated from skinned amphibian smooth muscle cells are side-polar. Cooke PH, et al.
J Muscle Res Cell Motil 1989 Jun;10(3):206-20

MYOSIN ADENOSINE TRIPHOSPHATASE see ADENOSINE TRIPHOSPHATASE, MYOSIN

MYOSIN ATPASE see ADENOSINE TRIPHOSPHATASE, MYOSIN

MYOSIN

MYOSIN ISOENZYMES see ADENOSINE TRIPHOSPHATASE, MYOSIN

MYOSIN ISOZYMES see ADENOSINE TRIPHOSPHATASE, MYOSIN

MYOSIN KINASE see MYOSIN-LIGHT-CHAIN KINASE

MYOSIN-LIGHT-CHAIN KINASE

Identification in turkey gizzard of an acidic protein related to the C-terminal portion of smooth muscle myosin light chain kinase. Ito M, et al. **J Biol Chem** 1989 Aug 25; 264(24):13971-4

ANALYSIS

Toward a model of the calmodulin-myosin light-chain kinase complex: implications for calmodulin function. Persechini A, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S1-12 (48 ref.)

ANTAGONISTS & INHIBITORS

Smooth muscle contraction and local anesthetics: calmodulin-dependent myosin light-chain kinase. Nosaka S, et al. **Anesth Analg** 1989 Oct;69(4):504-10

Inhibition of myosin light chain kinase by amiloride. Higashihara M. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1253-9

Minimum requirements for inhibition of smooth-muscle myosin light-chain kinase by synthetic peptides. Hunt JT, et al. **Biochem J** 1989 Jan 1;257(1):73-8

Inhibition of natural killer cell-mediated cytotoxicity by ML-9, a selective inhibitor of myosin light chain kinase. Ito M, et al. **Int J Immunopharmacol** 1989;11(2):185-90

Selective binding of L-thyroxine by myosin light chain kinase. Hagiwara M, et al. **J Biol Chem** 1989 Jan 5; 264(1):40-4

BLOOD

Thyroid hormones inhibit platelet function and myosin light chain kinase. Mamiya S, et al. **J Biol Chem** 1989 May 25; 264(15):8575-9

GENETICS

Molecular characterization of rat skeletal muscle myosin light chain kinase. Herring BP, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):C399-404

IMMUNOLOGY

Monoclonal antibody assessment of tissue- and species-specific myosin light chain kinase isozymes. Hagiwara M, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):71-5

ISOLATION & PURIFICATION

Caldesmon: anomalous electrophoretic behaviour in polyacrylamide gel. Cavanni P, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):174-80

Purification and characterization of myosin light-chain kinase from the rat pancreas. Bissonnette M, et al. **Biochem J** 1989 Mar 15;258(3):739-47

Isolation from bovine brain of 155 kDa component exhibiting myosin light chain kinase activity. Kuwayama H, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):858-61

Preparation of protein components exhibiting myosin light chain kinase activities from bovine aorta: discrepancies between its enzyme activity and actomyosin activating effect. Kuwayama H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):862-6

METABOLISM

Phosphorylation of the 20,000-Da myosin light chain isoforms of arterial smooth muscle by myosin light chain kinase and protein kinase C. Erdödi F, et al.
Arch Biochem Biophys 1988 Nov 1;266(2):583-91

Myosin P-light chain isoenzymes in the human heart: evidence for diphosphorylation of the atrial P-LC form. Morano I, et al. **Basic Res Cardiol** 1989 May-Jun; 84(3):298-305

Synthetic peptides based on the calmodulin-binding domain of myosin light chain kinase inhibit activation of other calmodulin-dependent enzymes. Blumenthal DK, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):860-5

Structural characterization of the interactions between calmodulin and skeletal muscle myosin light chain kinase: effect of peptide (576-594)G binding on the Ca2+-binding domains. Seeholzer SH, et al. **Biochemistry** 1989 May 2; 28(9):4011-20

Effect of Ca2+ entry blockers on myosin light-chain kinase and protein kinase C. Schächtele C, et al.
Eur J Pharmacol 1989 Apr 12;163(1):151-5

Regulatory light chain-a myosin kinase (aMK) catalyzes phosphorylation of smooth muscle myosin heavy chains of scallop, Patinopecten yessoensis. Sohma H, et al.
J Biochem (Tokyo) 1988 Dec;104(6):889-93

The sites on calmodulin cross-linked to myosin light chain kinase and troponin I with water-soluble carbodiimide. Yamamoto K, et al. **J Biochem (Tokyo)** 1988 Aug;

104(2):251-4
Myosin light chain kinase structure function analysis using bacterial expression. Bagchi IC, et al. **J Biol Chem** 1989 Sep 25;264(27):15843-9
Location of the inhibitory region of smooth muscle myosin light chain kinase. Ikebe M, et al. **J Biol Chem** 1989 Apr 25;264(12):6967-71
Calcium dependence of myosin light chain phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14456-62
An enzymatically active cross-linked complex of calmodulin and rabbit skeletal muscle myosin light chain kinase. Zot HG, et al. **J Biol Chem** 1989 Sep 15;264(26):15552-5
Calmodulin regulation of smooth-muscle myosin light-chain kinase. Means AR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S25-9 (28 ref.)
Effects of modulators of myosin light-chain kinase activity in single smooth muscle cells. Itoh T, et al. **Nature** 1989 Mar 9;338(6211):164-7
[X-ray diffraction study of the structural changes that follow phosphorylation of thick muscle filaments in tarantulas] Panté N, et al. **Acta Cient Venez** 1988;39(3):230-6 (Eng. Abstr.) (Spa)

PHARMACOLOGY

Effects of protein kinase inhibitors on growth factor-stimulated DNA synthesis in cultured rat vascular smooth muscle cells. Takagi Y, et al. **Atherosclerosis** 1988 Dec;74(3):227-30
Increased calcium sensitivity of chemically skinned human atria by myosin light chain kinase. Morano I, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):350-9

PHYSIOLOGY

Myosin light-chain kinase inhibitor, 1-(5-chlornaphthalene-1-sulfonyl)-1H-hexahydro-1,4-diazepine (ML-9), inhibits catecholamine secretion from adrenal chromaffin cells by inhibiting Ca2+ uptake into the cells. Nakanishi A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2615-9

MYOSITIS

Current concepts in the idiopathic inflammatory myopathies: polymyositis, dermatomyositis, and related disorders. Plotz PH, et al. **Ann Intern Med** 1989 Jul 15;111(2):143-57 (100 ref.)
Polymyositis/dermatomyositis: a case presentation and review. Newman JH. **Del Med J** 1989 Mar;61(3):145-53
Retroperitoneal infectious myositis. Badellino F, et al. **Int Surg** 1989 Apr-Jun;74(2):126-8
Polymyositis and dermatomyositis. **Mt Sinai J Med (NY)** 1988 Nov;55(6):435-505
Overview and clinical manifestations of inflammatory myositis: polymyositis and dermatomyositis. Strongwater SL. **Mt Sinai J Med (NY)** 1988 Nov;55(6):435-46 (84 ref.)
Primary idiopathic polymyositis and dermatomyositis complicating pregnancy: diagnosis and management. Rosenzweig BA, et al. **Obstet Gynecol Surv** 1989 Mar; 44(3):162-70 (40 ref.)
[Polymyositis and dermatomyositis (a report of 83 cases)] Chen DR. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):107-9, 128 (Eng. Abstr.) (Chi)
[Twin pregnancy in polymyositis (letter)] Le Thi Huong D, et al. **Ann Med Interne (Paris)** 1988;139(4):286-7 (Fre)
[Polymyositis-dermatomyositis complex. A subject for debate] Urbano-Márquez A. **Rev Clin Esp** 1989 Mar; 184(4):199-200 (Spa)

CHEMICALLY INDUCED

The role of cholesterol-lowering agents in drug-induced rhabdomyolysis and polymyositis [letter] Goldman JA, et al. **Arthritis Rheum** 1989 Mar;32(3):358-9
Myositis in association with carbimazole therapy [letter] Page SR, et al. **Lancet** 1989 Apr 29;1(8644):964
[Acute severe myositis due to bezafibrate treatment] Yeshurun D, et al. **Harefuah** 1989 Mar 1;116(5):261-3 (Eng. Abstr.) (Heb)

CLASSIFICATION

[Anatomoclinical expressions of polymyositis in the child. 23 cases] Serratrice G, et al. **Ann Pediatr (Paris)** 1989 Apr; 36(4):237-43 (Eng. Abstr.) (Fre)

COMPLICATIONS

Non-tropical pyomyositis in children--with report of severe neurological complications. Brik R, et al. **Acta Paediatr Scand** 1989 Mar;78(2):331-4
Pyomyositis in a child with acquired immunodeficiency syndrome. Patient report and brief review. Raphael SA, et al. **Am J Dis Child** 1989 Jul;143(7):779-81
Orbital hemorrhage and eyelid ecchymosis in acute orbital myositis. Reifler DM, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):111-3
Myositis in mice with congenital toxoplasmosis. Hay J, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):631-3
Pyomyositis in a patient with the acquired immunodeficiency syndrome [letter] Victor G, et al. **Arch Intern Med** 1989 Mar;149(3):705, 709
Inflammatory myopathy and acquired immunodeficiency syndrome. Nordstrom DM, et al. **Arthritis Rheum** 1989 Apr;32(4):475-9
Disseminated Mycobacterium avium-intracellulare infection in a patient with polymyositis [letter] Nuñez JM, et al. **Arthritis Rheum** 1989 Jul;32(7):934-6
Pyomyositis associated with Epstein-Barr virus infection [letter] Eggelmeijer F, et al. **Br J Rheumatol** 1988 Oct; 27(5):409-11
Acute myocarditis causing fatal ventricular arrhythmia in treated polymyositis. White PG, et al. **Br J Rheumatol** 1988 Oct;27(5):399-402
Vitiligo and polymyositis [letter] van Linthoudt D, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):334-5
Polymyositis and hepatocellular carcinoma. Sattar MA, et al. **Clin Rheumatol** 1988 Dec;7(4):538-42
Acute respiratory failure in polymyositis [letter] Takase Y, et al. **J Neurol** 1989 Feb;236(2):123-4
Rhabdomyolysis associated with simultaneous Epstein-Barr virus infection and isolation of echovirus 6 from muscle: a dual infection [letter] Poels PJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):412-4
Successive unfolding of two different collagen vascular diseases in the same patient. Gertner E, et al. **J Rheumatol** 1989 Jan;16(1):126-7
Acroosteolysis and polymyositis [letter] Lee EW, et al. **J Rheumatol** 1988 Oct;15(10):1592-4
Coexistence of adult onset Still's disease and polymyositis with rhabdomyolysis successfully treated with methotrexate and corticosteroids. Samuels AJ, et al. **J Rheumatol** 1989 May;16(5):685-7 (15 ref.)
The heart in polymyositis and dermatomyositis. Askari AD. **Mt Sinai J Med (NY)** 1988 Nov;55(6):479-82 (38 ref.)
Temporal association of polymyositis-dermatomyositis with malignancy: methodologic and clinical considerations. Masi AT, et al. **Mt Sinai J Med (NY)** 1988 Nov;55(6):471-8 (40 ref.)
Orbital myositis and giant cell myocarditis. Klein BR, et al. **Neurology** 1989 Jul;39(7):988-90
Adverse impact of interstitial pulmonary fibrosis on prognosis in polymyositis and dermatomyositis. Arsura EL, et al. **Semin Arthritis Rheum** 1988 Aug;18(1):29-37
Kaposi's sarcoma in a patient with rheumatoid arthritis and polymyositis treated with corticosteroids. Weiner SR, et al. **West J Med** 1988 Jun;148(6):702-3
[Focal nodular myositis simulating a sural thrombophlebitis. Association with cryoglobulinemia with polyneuropathy and glomerular disease (letter)] Dupond JL, et al. **Presse Med** 1988 Sep 24;17(32):1649 (Fre)
[A new case of localized myositis in Adamantiades-Behçet disease (letter)] Theoharis G, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):965-6 (Fre)
[Cachexia, pain and muscle weakness in a 69-year-old woman (clinical conference)] Pécoud A, et al. **Schweiz Med Wochenschr** 1989 Mar 25;119(12):407-15 (Eng. Abstr.) (Fre)
[An unusual association of psoriasis with polymyositis (letter)] Melina D, et al. **G Ital Dermatol Venereol** 1988 May; 123(5):261 (Ita)
[Relationship between collagen disease and malignancy] Takashina N, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):30-4 (Jpn)
[A case of overlap syndrome with polymyositis and progressive systemic sclerosis associated with acute renal failure due to myoglobinuria] Yamazoe Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1551-5 (Jpn)
[An autopsy case of polymyositis-scleroderma overlap syndrome associated with lung cancer] Yuhara T, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):738-9 (Jpn)
[Co-existence of clinical and immunohistochemical features of polymyositis and myasthenia gravis] Iwatsubo T, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):913-8 (Eng. Abstr.) (Jpn)
[A case of silicosis associated with polymyositis and benign monoclonal gammopathy] Aoki A, et al. **Ryumachi** 1988 Oct;28(5):373-8 (29 ref.) (Eng. Abstr.) (Jpn)
[Double location of hydatid echinococcosis] Ivanov GV. **Vestn Khir** 1988 Sep;141(9):69 (Rus)
[Heart disease in juvenile polymyositis (letter)] Grau JM, et al. **Med Clin (Barc)** 1989 May 6;92(17):676-7 (Spa)

CONGENITAL

Infantile myositis: a case diagnosed in the neonatal period. Roddy SM, et al. **Pediatr Neurol** 1986 Jul-Aug;2(4):241-4

DIAGNOSIS

Recurrent primary hydatidosis of sartorius muscle. Case report. Vietri F, et al. **Acta Chir Scand** 1988 Sep; 154(9):535-6
Pyomyositis presenting as septic arthritis. A report of 2 cases. Andrew JG, et al. **Acta Orthop Scand** 1988 Oct;59(5):587-8
Localized nodular myositis as the first manifestation of polymyositis [letter] Brown P, et al. **Br J Rheumatol** 1989 Feb;28(1):84
Pyomyositis mimicking soft-tissue sarcoma. Pittam MR. **Eur J Surg Oncol** 1988 Oct;14(5):459-61
Pyogenic myositis: CT evaluation. Tumeh SS, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1002-5
Recurrent localised myositis [letter] Wilson DC, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):411-2
Orbital myositis involving the oblique muscles. An echographic study. Wan WL, et al. **Ophthalmology** 1988 Nov;95(11):1522-8
Tropical pyomyositis in a Greek adult. Meletis J, et al. **Scand J Infect Dis** 1989;21(3):343-4
Pyomyositis of the anterior abdominal wall. Elechi EN, et al. **Trop Doct** 1988 Oct;18(4):167-9
[Determination of anti polymyositis-1 antibody and its clinical significance] Jiang M, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):427-8, 455 (Eng. Abstr.) (Chi)
[Myositis or non-inflammatory myopathy: an EMG diagnosis?] Heistercamp F, et al. **Acta Belg Med Phys** 1988 Jul-Sep;11(3):115-8 (Eng. Abstr.) (Dut)
[Echinococcosis of the diaphragm] Gurbanaliev IG, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):73-6 (Eng. Abstr.) (Rus)
[A case of generalized actinomycosis] Egorova LP, et al. **Klin Med (Mosk)** 1989 Apr;67(4):116-8 (Rus)
[Idiopathic inflammatory myopathies in childhood. A study of 7 patients] Colomer Oferil J, et al. **An Esp Pediatr** 1988 Sep;29(3):223-6 (Eng. Abstr.) (Spa)
[Polymyositis: acute presentation form (letter)] Aguilar Bargalló X, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):396-7 (Spa)

DRUG THERAPY

Indomethacin for the treatment of idiopathic orbital myositis. Noble AG, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):336-8
Current management of polymyositis and dermatomyositis. Oddis CV, et al. **Drugs** 1989 Mar;37(3):382-90 (31 ref.)
Relationship between serum creatine kinase level and corticosteroid therapy in polymyositis-dermatomyositis. Oddis CV, et al. **J Rheumatol** 1988;15(5):807-11
Cyclophosphamide in severe polymyositis [letter] Bombardieri S, et al. **Lancet** 1989 May 20;1(8647):1138-9
[Reevaluation of glucocorticoid therapy on polymyositis: dose-response relationship between glucocorticoid and long-term therapeutic effect] Saito E, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):999-1004 (Jpn)

EPIDEMIOLOGY

Pyomyositis--an under-reported disease in temperate climates [letter] Muscat I. **J Infect** 1989 May;18(3):295-6
Epidemiology of polymyositis/dermatomyositis. Hochberg MC. **Mt Sinai J Med (NY)** 1988 Nov;55(6):447-52 (34 ref.)

ETIOLOGY

Pyomyositis: a report on two cases from a region with a temperate climate. Espersen GT. **Afr J Med Med Sci** 1989 Mar;18(1):33-4
Acute transient myositis due to Toxocara. Walsh SS, et al. **Arch Dis Child** 1988 Sep;63(9):1087-8
Pyomyositis in an intravenous drug user with human immunodeficiency virus [letter] Vartian C, et al. **Arch Intern Med** 1988 Dec;148(12):2689
Polymyositis/dermatomyositis associated with dermatitis herpetiformis. Kalovidouris AE, et al. **Arthritis Rheum** 1989 Sep;32(9):1179-81
The role of Coxsackie B viruses in the pathogenesis of myocarditis, dilated cardiomyopathy and inflammatory muscle disease. Archard LC, et al. **Biochem Soc Symp** 1987; 53:51-62 (47 ref.)
Pyomyositis and probable toxic shock syndrome caused by a toxin-1 producing strain of Staphylococcus aureus [letter] Gahrn-Hansen B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):89-90
Myositis caused by Borrelia burgdorferi: report of four cases. Reimers CD, et al. **J Neurol Sci** 1989 Jun;91(1-2):215-26
Sarcoidosis presenting as acute myositis. Report and review of the literature. Jamal MM, et al. **J Rheumatol** 1988 Dec; 15(12):1868-71 (17 ref.)
Staphylococcal pyomyositis with idiopathic dermatomyositis. Gelfand MS, et al. **J Tenn Med Assoc** 1989 May;82(5):243-4
Animal models of myositis. Plotz PH, et al. **Mt Sinai J Med (NY)** 1988 Nov;55(6):501-5 (30 ref.)
HTLV-I polymyositis in a patient also infected with the human immunodeficiency virus. Wiley CA, et al. **N Engl J Med** 1989 Apr 13;320(15):992-5
Primary suppurative myositis associated with Haemophilus influenzae type b septicemia. Mustafa MM, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):815-7
Post-varicella streptococcal pyomyositis. Raphael SA, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):187-9
Acute transient myositis associated with influenza virus infection. Stang H. **Pediatr Infect Dis J** 1989 Apr;8(4):257-8 (10 ref.)
Pyomyositis in patients with diabetes. Computed tomography as a key to diagnosis. Brown RL. **Postgrad Med** 1989 Jul; 86(1):79-81, 84, 89
Myositis due to Rickettsia conorii infection. San José A, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):346
Nontropical pyomyositis in a renal allograft recipient. Bowen PA 2d, et al. **Transplantation** 1989 Sep;48(3):539-41
Myositis due to Salmonella enteritidis bacteremia [letter] Studemeister AE, et al. **West J Med** 1989 Jul;151(1):85
[Myositis associated with ulcero-hemorrhagic rectocolitis. Apropos of a case] Evrard P, et al. **Acta Gastroenterol Belg** 1987 Nov-Dec;50(6):675-9 (Eng.

Abstr.) (Fre)
[Polymyositis and subcutaneous fat necrosis, manifestations of toxoplasmosis origin (letter)] Couzineau P, et al. **Presse Med** 1989 May 20;18(20):1035 (Fre)
[Tropical myositis or diabetic pyomyositis? (letter)] Strobel M, et al. **Presse Med** 1989 May 27;18(21):1077 (Fre)
[Sarcoidosis: apropos of a case of isolated myopathy] de Pree C, et al. **Schweiz Rundsch Med Prax** 1989 May 9; 78(19):557–9 (Eng. Abstr.) (Fre)
[Nontropical pyomyositis] Klein L, et al. **Harefuah** 1989 Feb 1;116(3):145–6 (Eng. Abstr.) (Heb)
[Viral hepatitis B and polymyositis. Description of a case of polymyositis associated with viral hepatitis B] Pizzigallo E, et al. **Pathologica** 1988 Jan–Feb;80(1065):73–9 (Eng. Abstr.) (Ita)
[Polymyositis associated with aseptic meningitis: a case report] Matsuo H, et al. **Rinsho Shinkeigaku** 1988 Jul; 28(7):765–8 (Eng. Abstr.) (Jpn)
[HTLV-I associated myelopathy (HAM) complicated with chronic polymyositis] Tanaka T, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):102–7 (Eng. Abstr.) (Jpn)
[Myositis and toxoplasmosis] Santiago MB, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):121–3 (Eng. Abstr.) (Por)
[Pyogenic abscesses of the psoas: report of 2 cases] Sánchez Chapado MV, et al. **Arch Esp Urol** 1988 May;41(4):312–6 (Eng. Abstr.) (Spa)

GENETICS

Major histocompatibility complex genes in systemic lupus erythematosus, Sjögren's syndrome, and polymyositis. Arnett FC, et al. **Am J Med** 1988 Dec 23;85(6A):38–41 (15 ref.)

IMMUNOLOGY

A serial study of anticardiolipin antibody and antimitochondrial antibody type M5 in a patient with polyarthritis and polymyositis. Keane A, et al. **Br J Rheumatol** 1989 Apr;28(2):158–60
Marker antibodies in scleroderma and polymyositis: clinical associations. de Rooij DJ, et al. **Clin Rheumatol** 1989 Jun; 8(2):231–7
A human monoclonal anti-DNA antibody derived from a patient with polymyositis having the common lupus 16/6 idiotype. Shoenfeld Y, et al. **Immunol Lett** 1988 Sep; 19(1):77–83
Polymyositis and pulmonary fibrosis associated with anti-PL-7 antibody [letter] LaMedica G, et al. **J Am Acad Dermatol** 1988 Sep;19(3):567–8
Anti-KJ: a new antibody associated with the syndrome of polymyositis and interstitial lung disease. Targoff IN, et al. **J Clin Invest** 1989 Jul;84(1):162–72
Epitope mapping of the cloned human autoantigen, histidyl-tRNA synthetase. Analysis of the myositis-associated anti-Jo-1 autoimmune response. Ramsden DA, et al. **J Immunol** 1989 Oct 1;143(7):2267–72
Fluorescent antibodies in polymyositis using cultured human skin fibroblasts: granular perinuclear cytoplasmic staining pattern by sera from patients with polymyositis and pulmonary fibrosis. Saito E, et al. **J Rheumatol** 1989 Jan; 16(1):47–54
Humoral immunity in polymyositis and dermatomyositis. Targoff IN, et al. **Mt Sinai J Med (NY)** 1988 Nov; 55(6):487–93 (56 ref.)
Cellular immunity in polymyositis/dermatomyositis. Ytterberg SR. **Mt Sinai J Med (NY)** 1988 Nov; 55(6):494–500 (34 ref.)
[Immuno-pathological studies on muscles of polymyositis and dermatomyositis] Yu MX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):279–82 (Eng. Abstr.) (Chi)
[Fluorescence anti-nuclear antibodies (FANA), using cultured human skin fibroblasts as substrate—clinical significance in polymyositis (PM)] Yoshimoto Y. **Ryumachi** 1988 Aug;28(4):214–21 (Eng. Abstr.) (Jpn)

MICROBIOLOGY

Inclusion body myositis: the mumps virus hypothesis. Nishino H, et al. **Ann Neurol** 1989 Mar;25(3):260–4
Tropical myositis, the great imitator: a case report. Trotter JL, et al. **Hawaii Med J** 1988 Oct;47(10):468, 471–2
The natural history of encephalomyocarditis virus-induced myositis and myocarditis in mice. Viral persistence demonstrated by in situ hybridization. Cronin ME, et al. **J Exp Med** 1988 Nov 1;168(5):1639–48
Pyomyositis—an under-reported disease in temperate climates. Farrag N, et al. **J Infect** 1988 Nov;17(3):259–63
Spontaneous streptococcal gangrenous myositis: survival with early debridement. Doebbeling BN, et al. **South Med J** 1989 Jul;82(7):900–2
[Abscess of the psoas muscle and pyomyositis caused by Staphylococcus aureus (letter)] Alfaro MJ, et al. **Rev Clin Esp** 1989 Apr;184(6):342–3 (Spa)

PATHOLOGY

Inclusion body myositis in post-poliomyelitis muscular atrophy. Abarbanel JM, et al. **Acta Neurol Scand** 1988 Aug; 78(2):81–4
Sarcoid myositis with pseudohypertrophy. Matteson EL, et al. **Am J Med** 1989 Aug;87(2):240–1
A quantitative study of myonuclear and satellite cell nuclear size in Duchenne's muscular dystrophy, polymyositis and normal human skeletal muscle. Watkins SC, et al. **Anat Rec** 1988 Sep;222(1):6–11
Fulminant streptococcal myositis. Schattner A, et al. **Ann Emerg Med** 1989 Mar;18(3):320–2
Clinical heterogeneity and treatment response in inclusion body myositis. Cohen MR, et al. **Arthritis Rheum** 1989 Jun; 32(6):734–40
Proliferative response of peripheral blood mononuclear cells to autologous and allogeneic muscle in patients with polymyositis/dermatomyositis. Kalovidouris AE, et al. **Arthritis Rheum** 1989 Apr;32(4):446–53
Familial myopathy with changes resembling inclusion body myositis and periventricular leucoencephalopathy. A new syndrome. Cole AJ, et al. **Brain** 1988 Oct;111 (Pt 5):1025–37
Inclusion body myositis. Observations in 40 patients. Lotz BP, et al. **Brain** 1989 Jun;112 (Pt 3):727–47
A fatal case of acute polymyositis with persistent myoglobinuria and progressive renal failure. Misra A, et al. **J Assoc Physicians India** 1988 Feb;36(2):153–4
Aberrant expression of class II MHC antigens by skeletal muscle endothelial cells in experimental autoimmune myositis. Rosenberg NL, et al. **J Immunol** 1989 Jun 15; 142(12):4289–94
Dysphagia in inclusion body myositis. Wintzen AR, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1542–5
Subacute perimyositis. Fang MA, et al. **J Rheumatol** 1988 Aug;15(8):1291–3
Polymyositis with tubular aggregates. Grunnet ML, et al. **J Rheumatol** 1988 Aug;15(8):1288–90
Pathology of polymyositis/dermatomyositis. Roelofs RI. **Mt Sinai J Med (NY)** 1988 Nov;55(6):453–8 (17 ref.)
Inflammatory myopathies. Kingston WJ, et al. **Neurol Clin** 1988 Aug;6(3):545–61 (84 ref.)
Proliferative myositis in an infant: report of a case with electron microscopic observations. Pasquel P, et al. **Pediatr Pathol** 1988;8(5):545–51
Tartrate-resistant acid phosphatase containing cells in nodular fasciitis, proliferative fasciitis, and proliferative myositis. Grouls V, et al. **Zentralbl Allg Pathol** 1988; 134(4–5):399–407
[Immunocytochemical study of the inflammatory forms of facioscapulohumeral myopathies and correlation with other types of myositis] Figarella-Branger D, et al. **Ann Pathol** 1989;9(2):100–8 (Eng. Abstr.) (Fre)
[Clinico-developmental aspects in 44 cases of polymyositis/dermatomyositis] Bravaccio F, et al. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):102–16 (Eng. Abstr.) (Ita)
[Clinical, pathological and immunohistological features of a case of localized nodular myopathy] Kawano H, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):661–5 (Jpn)

PHYSIOPATHOLOGY

Histological and neurophysiological changes induced by carrageenan in skeletal muscle of cat and rat. Diehl B, et al. **Agents Actions** 1988 Dec;25(3–4):210–3
The heart in polymyositis-dermatomyositis. Agrawal CS, et al. **J Neurol** 1989 May;236(4):249–50
Abnormalities in quadriceps-hamstring strength. Relationships in polymyositis and dermatomyositis. Kroll MA, et al. **J Rheumatol** 1988 Dec;15(12):1782–8
Electromyography in idiopathic myositis. Bromberg MB, et al. **Mt Sinai J Med (NY)** 1988 Nov;55(6):459–64 (12 ref.)
[Ocular myositis—morphology and function—long-term studies of 15 patients] Guthoff R, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):393–400 (Eng. Abstr.) (Ger)
[Non-pseudotumoral focal inflammatory myopathy (letter)] Rodríguez Heredia JN, et al. **Med Clin (Barc)** 1989 Feb 18;92(6):238–9 (Spa)

RADIOGRAPHY

Tropical pyomyositis. Gyssens IC, et al. **Neth J Med** 1989 Apr;34(3–4):205–9

RADIONUCLIDE IMAGING

HIV-associated myositis detected by radionuclide bone scanning. Scott JA, et al. **J Nucl Med** 1989 Apr;30(4):556–8

SURGERY

Trial of primary closure of skeletal muscle abscesses. Visvanathan R. **J R Coll Surg Edinb** 1988 Oct;33(5):255–6
[Pyomyositis in childhood (0–10 years). An analysis of 154 cases] Gluschko S, et al. **Zentralbl Chir** 1988;113(24):1576–9 (Eng. Abstr.) (Ger)
[Current methods of treating post-injection abscesses] Borodianskiĭ VS, et al. **Klin Khir** 1989;(4):25–7 (Eng. Abstr.) (Rus)
[Various problems of the diagnosis and treatment of post-injection abscesses] Ersh ZIa, et al. **Vestn Khir** 1988 Sep;141(9):127–8 (Rus)
[Tropical pyomyositis, necrotic fasciitis and Fournier's gangrene] Ryndin VD, et al. **Vestn Khir** 1988 May; 140(5):48–52 (Rus)

THERAPY

Adult onset of idiopathic inflammatory myopathies—therapy and prognosis. Pourmand R. **Indiana Med** 1989 Feb; 82(2):116–8
Plasma exchange in dermatomyositis/polymyositis: beneficial effects in three cases. Clarke CR, et al. **J Clin Lab Immunol** 1988 Nov;27(3):149–52
The therapy of polymyositis. Bunch TW. **Mt Sinai J Med (NY)** 1988 Nov;55(6):483–6 (37 ref.)
[Therapy of myasthenia and polymyositis] Messina C. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):186–99 (82 ref.) (Ita)
[Treatment of cervical myositis in children] Bagdasarian SM. **Pediatriia** 1988;(4):94–5 (Rus)

VETERINARY

Type-I hypersensitivity as a component of eosinophilic myositis (muscular sarcocystosis) in cattle. Granstrom DE, et al. **Am J Vet Res** 1989 Apr;50(4):571–4
Induction of equine postanesthetic myositis after halothane-induced hypotension. Lindsay WA, et al. **Am J Vet Res** 1989 Mar;50(3):404–10
Encephalitis, proventricular and ventricular myositis, and myenteric ganglioneuritis in an umbrella cockatoo. Joyner KL, et al. **Avian Dis** 1989 Apr–Jun;33(2):379–81
Suspected fusariomycotoxicosis in sandhill cranes (Grus canadensis): clinical and pathological findings. Roffe TJ, et al. **Avian Dis** 1989 Jul–Sep;33(3):451–7
Intramuscular injection techniques and the development of clostridial myositis or cellulitis in horses. Brown CM, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):668–70
Clostridial myositis in a dog. Poonacha KB, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):69–70
Intracellular calcium in canine muscle biopsies. Valentine BA, et al. **J Comp Pathol** 1989 Apr;100(3):223–30
Encephalomyelitis and myositis in a boxer puppy due to a Neospora-like infection. Uggla A, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):255–60
Fatal clostridial myositis in a cow [letter] Cule AP. **Vet Rec** 1988 Oct 15;123(16):427
Equine postanaesthetic myositis: thromboxanes, prostacyclin and prostaglandin E2 production. Serteyn D, et al. **Vet Res Commun** 1988;12(2–3):219–26

MYOSITIS OSSIFICANS

[Circumscribed non-traumatic myositis ossificans. Apropos of 14 cases and a general review] Ducloyer P, et al. **Rev Chir Orthop** 1988;74(7):659–68 (29 ref.) (Eng. Abstr.) (Fre)
[A case of myositis ossificans of fibrodysplasia ossificans progressiva type (letter)] Serratrice G, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):798–9 (Fre)
[Myositis ossificans circumscripta of the masseter muscle] Iannetti G, et al. **Minerva Stomatol** 1988 May;37(5):373–80 (Eng. Abstr.) (Ita)
[Fibrodysplasia ossificans progressiva or Münchmeyer's disease] Galvagno G, et al. **Recenti Prog Med** 1989 Apr; 80(4):208–13 (47 ref.) (Eng. Abstr.) (Ita)

COMPLICATIONS

General anesthesia and fibrodysplasia ossificans progressiva. Lininger TE, et al. **Anesth Analg** 1989 Feb;68(2):175–6

DIAGNOSIS

Early myositis ossificans: a new echographic sign. Peck RJ, et al. **Clin Radiol** 1988 Nov;39(6):586–8
Sonographic diagnosis of myositis ossificans. Fornage BD, et al. **J Ultrasound Med** 1989 Aug;8(8):463–6
Case report 488: Post-traumatic myositis ossificans mimicking a soft tissue neoplasm. Ackerman L, et al. **Skeletal Radiol** 1988;17(4):310–4
[Myositis ossificans presenting clinically as acute arthritis. Apropos of a case (letter)] Ruiz Martín JM, et al. **Rev Clin Esp** 1989 May;184(8):448 (Spa)

DRUG THERAPY

[Treatment of myositis ossificans (letter)] Kjaersgaard-Andersen P. **Ugeskr Laeger** 1988 Sep 26; 150(39):2354 (Dan)

ETIOLOGY

Clear-cell chondrosarcoma. An unusual case complicated by a microinfiltrative pattern of bone marrow involvement and postsurgical myositis ossificans. Present DA, et al. **Clin Orthop** 1988 Dec;(237):164–9
[Traumatic myositis ossificans of the medial pterygoid muscle] Gotte P, et al. **Minerva Stomatol** 1988 Oct; 37(10):757–62 (Eng. Abstr.) (Ita)

PATHOLOGY

Bone formation in experimental myositis ossificans. Light and electron microscopy study. Aho HJ, et al. **APMIS** 1988 Oct;96(10):933–40
Pseudomalignant myositis ossificans. Heinrich SD, et al. **Orthopedics** 1989 Apr;12(4):599–602
[Facial circumscribed ossifying myositis. Anatomo-clinical and tomodensitometric study] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):1–6 (Eng. Abstr.)

(Fre)
[Multilocular myositis ossificans—damage caused by excessive stress in performance sports?] Gast W, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):59–63 (Eng. Abstr.) (Ger)
[Fibrodysplasia ossificans progressiva or Münchmeyer's disease. Personal observation] Galvagno G, et al. **Recenti Prog Med** 1989 Apr;80(4):188–91 (Eng. Abstr.) (Ita)
[Progressive myositis ossificans. Presentation of a case and review of the literature] Ravachi-Toledo R, et al. **Bol Med Hosp Infant Mex** 1988 Oct;45(10):681–5 (13 ref.) (Eng. Abstr.) (Spa)

RADIOGRAPHY

Value of bone scanning and computed tomography in fibrodysplasia ossificans progressiva. Carter SR, et al. **Br J Radiol** 1989 Mar;62(735):269–72
Pseudomalignant heterotopic ossification ("myositis ossificans"). Recurrence after excision with subsequent resorption. Spencer JD, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):317–9
Fibrodysplasia (myositis) ossificans progressiva in Dominica. Cooles P, et al. **West Indian Med J** 1989 Mar;38(1):48–50
[Fibrodysplasia ossificans progressiva in a 2-year-old girl] Verberne AA, et al. **Tijdschr Kindergeneeskd** 1988 Aug; 56(4):167–9 (Eng. Abstr.) (Dut)
[Spinal and sacro-iliac ankylosis suggesting ankylosing spondyloarthritis in progressive ossifying myositis (letter)] Crouzet J, et al. **Rev Rhum Mal Osteoartic** 1988 Nov; 55(11):966–7 (Fre)
[Nontraumatic myositis ossificans circumscripta in CT] Friedrich M, et al. **ROFO** 1989 Feb;150(2):225–7 (Ger)
[Tumefaction of the hand in a young man] Jiménez Jurado MD, et al. **Rev Clin Esp** 1989 Apr;184(6):330–1 (Spa)

RADIONUCLIDE IMAGING

The nuclear medicine bone image and myositis ossificans progressiva. Guze BH, et al. **Clin Nucl Med** 1989 Mar; 14(3):161–2

RADIOTHERAPY

[Various clinical aspects of the treatment of patients with traumatic myositis ossificans (preliminary report)] Belozor VI, et al. **Ortop Travmatol Protez** 1989 Jan;(1):56–7 (Rus)

THERAPY

The management of athletes with myositis ossificans traumatica. Booth DW, et al. **Can J Sport Sci** 1989 Mar; 14(1):10–6 (39 ref.)

MYOTONIA

Myotonic muscular dystrophy in the military. Tuttle PV 3d, et al. **Milit Med** 1988 Oct;153(10):505–9

DIAGNOSIS

Facilitation of electrical myotonia and denervation fibrillation by direct current stimulation [letter] Landau WM. **Muscle Nerve** 1988 Aug;11(8):892

DRUG THERAPY

Study on the effect of 150-mg Mydocalm coated tablets in peripheral vascular diseases and in myotonias of various origin. Abrányi I. **Ther Hung** 1988;36(2):56–61

ETIOLOGY

[Pathomechanism of myotonia and its treatment] Kwieciński H. **Pol Tyg Lek** 1988 Nov 14;43(46):1482–5 (Pol)

METABOLISM

Potassium uptake in muscle during paramyotonic weakness. Moxley RT 3d, et al. **Neurology** 1989 Jul;39(7):952–5

PHYSIOPATHOLOGY

Effect of diltiazem on 2,4-D-induced myotonia in rats. al-Rajeh S, et al. **Muscle Nerve** 1989 Jun;12(6):470–2
Myotonia. Barchi RL. **Neurol Clin** 1988 Aug;6(3):473–84 (41 ref.)
[Infantile spinal amyotrophy with myotonia. Electromyographic study] Renault F. **Neurophysiol Clin** 1989 May;19(2):155–61 (Eng. Abstr.) (Fre)

VETERINARY

Effect of phenytoin on the clinical signs and in vitro muscle twitch characteristics in horses with chronic intermittent rhabdomyolysis and myotonia [published erratum appears in Am J Vet Res 1989 Mar;50(3):432] Beech J, et al. **Am J Vet Res** 1988 Dec;49(12):2130–3

MYOTONIA ATROPHICA

Anaesthesia in myotonia dystrophica [letter] Pollard BJ, et al. **Anaesthesia** 1989 Aug;44(8):699
Steinert's disease or myotonic dystrophy "a disease unlike others" [editorial] Lemieux B. **Can J Neurol Sci** 1989 Feb; 16(1):89–92 (Eng, Fre)

BLOOD

Increased pro-opiomelanocortin-derived peptide release in myotonic dystrophy. Jackson RV, et al. **Aust Paediatr J** 1988;24 Suppl 1:70–3
Hypertriglyceridemia and lower LDL cholesterol concentration in relation to apolipoprotein E phenotypes in myotonic dystrophy. Moorjani S, et al. **Can J Neurol Sci** 1989 Feb;16(1):129–33
Daytime serum myoglobin fluctuations in Steinert's disease. Sabriá-Leal M, et al. **Eur Neurol** 1989;29(4):194–6
Discordance between growth hormone (GH) responses after GH-releasing hormone and insulin hypoglycemia in myotonic dystrophy. Okimura Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1074–9
Myotonic dystrophy is not associated with abnormalities of calcium homeostasis. McElduff A, et al. **Neurology** 1989 Apr;39(4):605–6

COMPLICATIONS

Extradural fentanyl and dystrophia myotonica [letter] Youssef MS. **Anaesthesia** 1989 Apr;44(4):360–1
Normal pressure hydrocephalus in myotonic dystrophy. Christensen PB. **Eur Neurol** 1988;28(5):285–7
Dilated cardiomyopathy in myotonic dystrophy [letter] Lin AE, et al. **J Am Coll Cardiol** 1989 Jan;13(1):262–3
Hyperparathyroidism in a patient with myotonic dystrophy. Middleton PG, et al. **J R Soc Med** 1989 Apr;82(4):227
Focal right atrial dysplasia and atrial flutter in a patient with myotonic dystrophy. Pickering JG, et al. **PACE** 1989 Aug; 12(8):1317–23
Multiple pilomatrixomas and myotonic dystrophy: a case report. Salerni E, et al. **Riv Neurol** 1988 May–Jun; 58(3):124–6
[Auricular flutter preceding by several years the discovery of Steinert's disease. 3 cases] Rey JL, et al. **Ann Cardiol Angeiol (Paris)** 1989 May;38(5):255–9 (28 ref.) (Eng. Abstr.) (Fre)
[Oral dantrolene in a parturient with myotonic dystrophy and susceptibility to malignant hyperthermia] Houvenaeghel M, et al. **Ann Fr Anesth Reanim** 1988; 7(5):408–11 (Eng. Abstr.) (Fre)
[The mother and infant with Steinert's myotonic dystrophy] Paris G, et al. **Can J Neurol Sci** 1989 Feb;16(1):104–8 (Eng. Abstr.) (Fre)
[The electrocardiogram in Steinert's disease (letter)] Madrazo Rios JM, et al. **Rev Clin Esp** 1989 Jan;184(1):49 (Spa)

CONGENITAL

Congenital myotonic dystrophy: respiratory function at birth determines survival. Rutherford MA, et al. **Arch Dis Child** 1989 Feb;64(2):191–5

DIAGNOSIS

High-resolution magnetic resonance imaging findings in juvenile-onset myotonic dystrophy [letter] Peterson AC, et al. **Arch Neurol** 1989 May;46(5):481–2
Do mothers of floppy babies have a firm handshake? Koh TH. **Br J Clin Pract** 1988 Jan;42(1):38–9
[A case of myotonic dystrophy diagnosed after delivery] Yorinaga Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):613–6 (Jpn)

DRUG THERAPY

Randomized controlled trial of testosterone in myotonic dystrophy. Griggs RC, et al. **Neurology** 1989 Feb;39(2 Pt 1):219–22

ENZYMOLOGY

Sialyltransferase activity in erythrocyte membranes and serum in patients with myotonic dystrophy. Stibler H, et al. **Acta Neurol Scand** 1988 Oct;78(4):278–81

EPIDEMIOLOGY

[Myotonic dystrophy: I. Socioeconomic and residential characteristics of the patients] Perron M, et al. **Can J Neurol Sci** 1989 Feb;16(1):109–13 (Eng. Abstr.) (Fre)
[Myotonic dystrophy: II. Marital status, fertility and gene transmission] Veillette S, et al. **Can J Neurol Sci** 1989 Feb; 16(1):114–8 (Eng. Abstr.) (Fre)

GENETICS

Linkage analysis of the apolipoprotein C2 gene and myotonic dystrophy on human chromosome 19 reveals linkage disequilibrium in a French-Canadian population. MacKenzie AE, et al. **Am J Hum Genet** 1989 Jan; 44(1):140–7
Neonatal myotonic dystrophy. Cunningham A, et al. **Aust Paediatr J** 1988;24 Suppl 1:74–6
Myotonic dystrophy: update on progress to define the gene. Roses AD, et al. **Aust Paediatr J** 1988;24 Suppl 1:66–9 (24 ref.)
Anticipation in myotonic dystrophy: fact or fiction? Höweler CJ, et al. **Brain** 1989 Jun;112 (Pt 3):779–97
Origin and diffusion of the myotonic dystrophy gene in the Saguenay region (Quebec). Bouchard G, et al. **Can J Neurol Sci** 1989 Feb;16(1):119–22
Myotonic dystrophy in Quebec: geographical distribution and concept of genetic homogeneity. Laberge C. **Can J Neurol Sci** 1989 Feb;16(1):123–8
Myotonic dystrophy: linkage with apolipoprotein E and estimation of the gene carrier status with genetic markers. Thibault MC, et al. **Can J Neurol Sci** 1989 Feb;16(1):134–40
Linkage relationships of the protein kinase C gamma gene which exclude it as a candidate for myotonic dystrophy. Johnson KJ, et al. **Cytogenet Cell Genet** 1988;48(1):13–5
Paramyotonia congenita and myotonic dystrophy are not allelic disorders. Koch M, et al. **Cytogenet Cell Genet** 1989; 50(2–3):176–7
Localization of a human Na+,K+-ATPase alpha subunit gene to chromosome 19q12----q13.2 and linkage to the myotonic dystrophy locus. Harley HG, et al. **Genomics** 1988 Nov;3(4):380–4
Definition of subchromosomal intervals around the myotonic dystrophy gene region at 19q. Schonk D, et al. **Genomics** 1989 Apr;4(3):384–96
Myotonic dystrophy is closely linked to the gene for muscle-type creatine kinase (CKMM). Brunner HG, et al. **Hum Genet** 1989 Mar;81(4):308–10
Segregation of linked probes to myotonic dystrophy in a family demonstrating that 152 and APOC2 are on the same side of DM on 19q. Johnson K, et al. **Hum Genet** 1988 Dec;80(4):379–81
Myotonia congenita (Thomsen's disease) excluded from the region of the myotonic dystrophy locus on chromosome 19. Koch M, et al. **Hum Genet** 1989 May;82(2):163–6
Long-range restriction map of a region of human chromosome 19 containing the apolipoprotein genes, a CLL-associated translocation breakpoint, and two polymorphic MluI sites. Shaw DJ, et al. **Hum Genet** 1989 Aug;83(1):71–4
Myotonic dystrophy and hyperparathyroidism: association with neurofibromatosis and multiple endocrine adenomatosis type 2A. Rosenberg NL, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1578–80
Hypervariable microsatellite for genetic diagnosis [letter] Taylor GR, et al. **Lancet** 1989 Aug 19;2(8660):454
Myotonic dystrophy. Jozefowicz RF, et al. **Neurol Clin** 1988 Aug;6(3):455–72 (56 ref.)
Criteria for establishing the validity of genetic recombination in myotonic dystrophy. Griggs RC, et al. **Neurology** 1989 Mar;39(3):420–1
Definition of subchromosomal intervals around the myotonic dystrophy locus at 19q. Brunner H, et al. **Prog Clin Biol Res** 1989;306:107–14
[Steinert's disease and conduction disorders. Apropos of a familial study] Maloisel F, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul–Sep;37(7):357–60 (30 ref.) (Eng. Abstr.) (Fre)
[Phenotype variability in Steinert's myotonic dystrophy] Bouchard JP. **Can J Neurol Sci** 1989 Feb;16(1):93–8 (Eng. Abstr.) (Fre)
[Myotonic dystrophy of Steinert] Junien C. **J Genet Hum** 1989 Jan;37(1):51–4 (7 ref.) (Eng. Abstr.) (Fre)
[Vecuronium in dystrophia myotonica (Curschmann-Steinert)] Wruck G, et al. **Anaesthesist** 1989 May;38(5):255–8 (Eng. Abstr.) (Ger)

HISTORY

Myotonic dystrophy: hypotheses and facts about the illness of the Ypsilante brothers. Soteriadou-Vayenas C, et al. **J Neurol Sci** 1989 Apr;90(2):231–7

METABOLISM

[Abnormal calcium metabolism in myotonic dystrophy (II): Increased level of nephrogenous cyclic AMP and serum immunoreactive parathyroid hormone] Yoshida H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):539–46 (Eng. Abstr.) (Jpn)

PATHOLOGY

Intracytoplasmic inclusion bodies of the thalamus and the substantia nigra, and Marinesco bodies in myotonic dystrophy: a quantitative morphological study. Ono S, et al. **Acta Neuropathol (Berl)** 1989;77(4):350–6
Partial syndrome of myotonic dystrophy: clinical presentation and follow-up. Mathieu J, et al. **Can J Neurol Sci** 1989 Feb;16(1):99–103

PHYSIOPATHOLOGY

Muscle function and morphology in myotonic dystrophy. Grimby G, et al. **Acta Med Scand** 1988;224(4):349–56
Multimodal evoked potentials, EEG and electroretinography in patients with dystrophia myotonica. Ganes T, et al. **Acta Neurol Scand** 1988 Nov;78(5):436–42
Transient paresis in myotonic syndromes. A surface EMG study. Zwarts MJ, et al. **Brain** 1989 Jun;112 (Pt 3):665–80
24-hour electrocardiographic study in myotonic dystrophy. Forsberg H, et al. **Cardiology** 1988;75(4):241–9
Muscle function and craniofacial morphology: a clinical study in patients with myotonic dystrophy. Kiliaridis S, et al. **Eur J Orthod** 1989 May;11(2):131–8
Multimodality evoked potentials in myotonic dystrophy. Sartucci F, et al. **Ital J Neurol Sci** 1989 Feb;10(1):61–7
Physiological characterisation of the "warm up" effect of activity in patients with myotonic dystrophy. Cooper RG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1134–41
Myotonic dystrophy with unilateral bulbar involvement

[letter] Giladi N, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1461-2

Abnormalities of the fast sodium current in myotonic dystrophy, recessive generalized myotonia, and adynamia episodica. Rüdel R, et al. **Muscle Nerve** 1989 Apr; 12(4):281-7

Clinical and electrophysiological abnormalities in the visual system in myotonic dystrophy. Kerty E, et al. **Ophthalmologica** 1989;198(2):95-102

[Hypotonia bulbi and gonadotropins in myotonic dystrophy] Küchle M, et al. **Klin Monatsbl Augenheilkd** 1988 Oct; 193(4):388-92 (Eng. Abstr.) **(Ger)**

[Diaphragmatic EMG using transesophageal electrodes in a myotonic dystrophy patient] Ito T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1150-3 (Eng. Abstr.) **(Jpn)**

[Abnormal regulation of parathyroid hormone secretion by serum calcium level in myotonic dystrophy] Yoshida H. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):547-53 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Magnetic resonance imaging and clinical correlates of intellectual impairment in myotonic dystrophy. Huber SJ, et al. **Arch Neurol** 1989 May;46(5):536-40

RADIOGRAPHY

Computed tomographic findings of brain and skull in myotonic dystrophy [letter] Cornacchia L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1463-4

REHABILITATION

[Clinical symptoms and disability of myotonic dystrophy in Japan] Matsuoka Y, et al. **No To Shinkei** 1988 Oct; 40(10):947-52 (Eng. Abstr.) **(Jpn)**

SURGERY

Continuous infusion of propofol in dystrophia myotonica. White DA, et al. **Can J Anaesth** 1989 Mar;36(2):200-3

[Prolonged respiratory depression following general anesthesia in a patient with dystrophia myotonica] Isozaki K, et al. **Masui** 1989 Apr;38(4):552-6 (Eng. Abstr.) **(Jpn)**

THERAPY

[The positive effect of mud applications in the treatment of myotonic dystrophy] Strelkova NI, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):49-51 (Eng. Abstr.) **(Rus)**

MYOTONIA CONGENITA

Congenital myotonic dystrophy in children—a review of ten years' experience. Anderson BJ, et al. **Anaesth Intensive Care** 1989 Aug;17(3):320-4 (19 ref.)

Schwartz-Jampel syndrome. Mukherjee A, et al. **J Assoc Physicians India** 1988 Dec;36(12):729-30

[Clinical characteristics of myotonia congenita—analyses of seven cases and review of Japanese cases] Sahashi K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):401-8 (21 ref.) (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Myotonia levior: contribution to the nosography. Siciliano G, et al. **Riv Neurol** 1988 Sep-Oct;58(5):204-9

COMPLICATIONS

Malignant hyperthermia and myotonia congenita (Thomsen's disease) [letter] Haberer JP, et al. **Anaesthesia** 1989 Feb; 44(2):166

An unusual concurrence of myotonia congenita and Wilson's disease. Wyszynski B, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):303-8

DIAGNOSIS

[Paramyotonia congenita or Von Eulenburg syndrome] Compernolle P, et al. **Acta Belg Med Phys** 1989 Jan-Mar; 12(1):11-8 **(Dut)**

[Periodic paramyotonic paralysis] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):3-7 (13 ref.) (Eng. Abstr.) **(Rus)**

[Malignant hyperthermia or myotonia congenita (letter)] Amores Lloret A, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):346 **(Spa)**

GENETICS

Linkage studies of Myotonia congenita and Paramyotonia congenita. Bender K, et al. **Clin Genet** 1989 Aug;36(2):92-9

Paramyotonia congenita and myotonic dystrophy are not allelic disorders. Koch M, et al. **Cytogenet Cell Genet** 1989; 50(2-3):176-7

Myotonia congenita (Thomsen's disease) excluded from the region of the myotonic dystrophy locus on chromosome 19. Koch M, et al. **Hum Genet** 1989 May;82(2):163-6

[Myotonia congenita with familial spastic paraparesis] Wessel K, et al. **Nervenarzt** 1988 Nov;59(11):675-8 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Histopathological study of the biopsied muscles from juvenile patients with congenital myotonic dystrophy. Wakai S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):7-12

PHYSIOPATHOLOGY

Anaesthesia for a child with congenital myotonic dystrophy. Anderson BJ, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):351-4

Membrane channels and muscle disease. Bretag AH. **Aust Paediatr J** 1988;24 Suppl 1:50-4

Transient paresis in myotonic syndromes. A surface EMG study. Zwarts MJ, et al. **Brain** 1989 Jun;112 (Pt 3):665-80

Myotonic mice: effects of tubocurarine on muscle contractility [letter] Entrikin RK, et al. **Muscle Nerve** 1989 Feb;12(2):161-3

Abnormalities of the fast sodium current in myotonic dystrophy, recessive generalized myotonia, and adynamia episodica. Rüdel R, et al. **Muscle Nerve** 1989 Apr; 12(4):281-7

MYOXIDAE see **RODENTIA**

MYRINGOPLASTY

Experimental study of collagen as eardrum graft support in dogs. Morgon A, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5-6):450-5

Facial nerve palsy following tympanmastoid surgery [letter] Madden G. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):635

Tests of eustachian tube function and ear surgery. Sloth H, et al. **Clin Otolaryngol** 1989 Jun;14(3):227-30

[Myringoplasty in childhood] Dickopf B. **Kinderarztl Prax** 1988 Jun;56(6):289-93 (Eng. Abstr.) **(Ger)**

METHODS

The fasciaform graft: a technique for the repair of large perforations of the tympanic membrane. Pfleiderer AG, et al. **Clin Otolaryngol** 1988 Dec;13(6):427-34

Myringoplasty with three meatal flaps. Zaman K, et al. **J Laryngol Otol** 1988 Sep;102(9):777-8

MYRISTATES see under **MYRISTIC ACIDS**

MYRISTIC ACIDS

Identification of N-myristoylated proteins by reverse-phase high performance liquid chromatography of an azlactone derivative of N-myristoylglycine. Goddard C, et al. **Biochem J** 1988 Aug 1;253(3):839-43

Prevention of pressure sores. A comparison of new and old pressure sore treatments. van der Cammen TJ, et al. **Br J Clin Pract** 1987 Nov;41(11):1009-11

[Function of protein myristoylation in cellular regulation and viral proliferation] Shoji S, et al. **Yakugaku Zasshi** 1989 Feb;109(2):71-85 (49 ref.) (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Venous complications of sclerotherapy for esophageal varices. Hunter GC, et al. **Am J Surg** 1988 Dec; 156(6):497-501

ANALYSIS

Antibodies to an NH2-terminal myristoyl glycine moiety can detect NH2-terminal myristoylated proteins in the retrovirus-infected cells. Shoji S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):724-32

Identification of N-myristoylated proteins by reverse-phase high performance liquid chromatography of an azlactone derivative of N-myristoylglycine. Goddard C, et al. **Biochem J** 1988 Aug 1;253(3):839-43

Evidence of myristylated disulfide-linked dimer of variant surface glycoprotein of Trypanosoma brucei-brucei. Hublart M, et al. **Comp Biochem Physiol [B]** 1989; 92(4):705-10

Chemical characterization of p17gag from human immunodeficiency virus as an N-terminally myristoylated protein. Goddard C, et al. **Eur J Biochem** 1989 Jun 15; 182(2):323-6

Myristic acid is the NH2-terminal blocking group of the 43-kDa protein of Torpedo nicotinic post-synaptic membranes. Carr C, et al. **FEBS Lett** 1989 Jan 16; 243(1):65-9

METABOLISM

Association of a myristoylated protein with a biological membrane and its increased phosphorylation by protein kinase C. Utsumi T, et al. **FEBS Lett** 1988 Sep 26; 238(1):13-6

The HIV-1 Gag precursor Pr55gag synthesized in yeast is myristoylated and targeted to the plasma membrane. Jacobs E, et al. **Gene** 1989 Jun 30;79(1):71-81

Antimyristoylation of gag proteins in human T-cell leukemia and human immunodeficiency viruses with N-myristoyl glycinal diethylacetal. Shoji S, et al. **J Biochem (Tokyo)** 1988 May;103(5):747-9

Acylation of keratinocyte transglutaminase by palmitic and myristic acids in the membrane Anchorage region. Chakravarty R, et al. **J Biol Chem** 1989 Jan 5;264(1):625-9

High affinity binding of an N-terminal myristoylated p60src peptide. Goddard C, et al. **J Biol Chem** 1989 Sep 15; 264(26):15173-6

Acylation of proteins by myristic acid in isolated mitochondria. Stucki JW, et al. **J Biol Chem** 1989 Apr 15; 264(11):6376-80

Intramitochondrial fatty acylation of a cytoplasmic imported protein in animal cells. Vijayasarathy C, et al. **J Biol Chem** 1989 May 15;264(14):7772-5

Acylation of monocyte and glomerular mesangial cell proteins. Myristyl acylation of the interleukin 1 precursors. Bursten SL, et al. **J Clin Invest** 1988 Nov;82(5):1479-88

Myristylation of rotavirus proteins. Clark B, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2681-6

N myristylation of the human immunodeficiency virus type 1 gag polyprotein precursor in Saccharomyces cerevisiae. Bathurst IC, et al. **J Virol** 1989 Jul;63(7):3176-9

Myristoylation of budgerigar fledgling disease virus capsid protein VP2. Schmidt M, et al. **J Virol** 1989 Jan; 63(1):429-31

Creation and expression of myristylated forms of Rous sarcoma virus gag protein in mammalian cells. Wills JW, et al. **J Virol** 1989 Oct;63(10):4331-43

The six amino-terminal amino acids of p60src are sufficient to cause myristylation of p21v-ras. Buss JE, et al. **Mol Cell Biol** 1988 Sep;8(9):3960-3

In vitro synthesis of pp60v-src: myristylation in a cell-free system. Deichaite I, et al. **Mol Cell Biol** 1988 Oct; 8(10):4295-301

In vivo labeling of myelin lipids and proteolipid protein with [3H]myristate, [14C]linoleate, and [14C]linolenate. Bürgisser P, et al. **Neurochem Res** 1989 Jan;14(1):91-6

Role of capsid precursor processing and myristoylation in morphogenesis and infectivity of human immunodeficiency virus type 1. Göttlinger HG, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5781-5

Altered membrane association of p60v-src and a murine 63-kDa N-myristoyl protein after incorporation of an oxygen-substituted analog of myristic acid. Heuckeroth RO, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5262-6

PHARMACOLOGY

Myristoylation of neutrophil proteins and their biological characteristics. Terada S, et al. **Cell Struct Funct** 1988 Oct; 13(5):359-71

Inhibition of thrombin-induced platelet aggregation by myristic acid. Fukamachi N, et al. **Thromb Res** 1988 Nov 1;52(3):227-35

PHYSIOLOGY

Unmyristylated Moloney murine leukemia virus Pr65gag is excluded from virus assembly and maturation events. Schultz AM, et al. **J Virol** 1989 May;63(5):2370-3

Activation of the cellular proto-oncogene product p21Ras by addition of a myristylation signal. Buss JE, et al. **Science** 1989 Mar 24;243(4898):1600-3

URINE

Two-dimensional gas chromatography with electron-capture detection used in the determination of specific peptidoglycan and lipopolysaccharide constituents of gram-negative bacteria in infected human urine. Sonesson A, et al. **J Chromatogr** 1989 May 5;490(1):71-9

MYSTICISM

Ancient magic in modern medicine. Christy NP. **Trans Am Clin Climatol Assoc** 1987;99:170-6 (12 ref.)

[Medicine and modern mysticism] Petlenko VP, et al. **Voen Med Zh** 1988 May;(5):18-21 **(Rus)**

HISTORY

Contributions to the history of psychology: LIII. Maimonides' "Freudian" theory of prophecy. Bakan D. **Psychol Rep** 1989 Apr;64(2):667-75

MYTHOLOGY

Oedipus' parents were child abusers. Taylor DC. **Br J Psychiatry** 1988 Oct;153:561-3

Myths, masks and mechanisms of facial deformity. Friel Memorial Lecture 1987. Poswillo DE. **Eur J Orthod** 1989 Feb;11(1):1-9

The Oedipus Cycle: developmental mythology, Greek tragedy, and the sociology of knowledge. Datan N. **Int J Aging Hum Dev** 1988;27(1):1-10

The personal myth as a defence against internal primitive aggression. Beratis S. **Int J Psychoanal** 1988;69 (Pt 4):475-82

Variations in secondary themes of the Oedipal legend. Roll S, et al. **J Am Acad Psychoanal** 1988 Oct;16(4):537-47

Robert the Bruce, King of Scots; the leprosy myth [letter] Sanders WL. **J R Army Med Corps** 1989 Feb;135(1):35-6

The persistence of myth: psychoanalytic and structuralist perspectives. **Psychoanal Rev** 1988 Spring;75(1):1-176

Apollo and Marsyas: a metaphor of creative conflict. Adams L. **Psychoanal Rev** 1988 Summer;75(2):319-38

The body of Oedipus. Edmunds L. **Psychoanal Rev** 1988 Spring;75(1):51-66

Doubling, mythic difference, and the scapegoating of female power in Macbeth. Hunter D. **Psychoanal Rev** 1988 Spring;

75(1):129–52
Late medieval representations of Saint Mary Magdalene. Leach E. **Psychoanal Rev** 1988 Spring;75(1):95–109
The riddle of the riddle of the Sphinx. Lidz T. **Psychoanal Rev** 1988 Spring;75(1):35–49
The troubled house of Oedipus and Chrétien's Néo-Tristan: re-writing the mythologies of desire. Rubey D. **Psychoanal Rev** 1988 Spring;75(1):67–94
Sisyphus and the triumphs of medicine. Peschel R, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):891–5
The caduceus and the aesculapian staff: ancient eastern origins, evolution, and western parallels. Metzer WS. **South Med J** 1989 Jun;82(6):743–8
Priapus and priapism. From mythology to medicine. Papadopoulos I, et al. **Urology** 1988 Oct;32(4):385–6
[About sirens] Duhamel B. **J Genet Hum** 1988 Dec; 36(5):491–500 **(Fre)**
[Unconscious fantasy and the development of myths in psychoanalytic theories on the differences between the sexes] Rohde-Dachser C. **Psyche (Stuttg)** 1989 Mar; 43(3):193–218 (59 ref.) (Eng. Abstr.) **(Ger)**

MYTILUS see MUSSELS

MYXEDEMA

BLOOD

[Induction of mucin deposition in mouse skin by serum from a patient with lichen myxedematosus] Kamimura K, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1039–44 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Myxedema coma associated with lithium therapy. Waldman SA, et al. **Am J Med** 1989 Sep;87(3):355–6

COMPLICATIONS

Sleep apnea, sleep disorders, and hypothyroidism. VanDyck P, et al. **Am J Med Sci** 1989 Aug;298(2):119–22
A cervicofacial infection due to Veillonella parvula in a patient with myxoedema. Jones DC, et al. **Br Dent J** 1989 May 6;166(9):339–40
'A cervicofacial infection due to Veillonella parvula in a patient with myxoedema' [letter] Lewis MA. **Br Dent J** 1989 Jun 24;166(12):437
Comparative study of neurological and myxoedematous cretinism associated with severe iodine deficiency. Chaouki ML, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):399–408
Keratoderma of myxoedema. Good JM, et al. **Clin Exp Dermatol** 1988 Sep;13(5):339–41
Oliguria as the presenting manifestation of myxoedema [letter] Kelkar PN. **J Assoc Physicians India** 1988 Jul; 36(7):460
Concomitant occurrence of hyperparathyroidism and myxedema. Aronson PR, et al. **N C Med J** 1988 Jul; 49(7):357–8
[A case of myxedema of the heart with sleep apnea syndrome] Shiomi T, et al. **Kokyu To Junkan** 1988 Sep;36(9):1011–6 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Value of clinical features for distinguishing myxedema ascites from other forms of ascites. Kinney EL, et al. **Comput Biol Med** 1989;19(1):55–9
The diagnostic dilemma of myxedema and madness, axis I and axis II: a longitudinal case report. Darko DF, et al. **Int J Psychiatry Med** 1988;18(3):263–70

DRUG THERAPY

Normalization of skin appearance in a patient with scleromyxoedema after intensive chemotherapy for Hodgkin's disease. Alberts AS, et al. **Dermatologica** 1989; 178(4):221–4

ETIOLOGY

Pretibial myxedema: an overlapping clinical manifestation of autoimmune thyroid disease [letter] Humbert P, et al. **Am J Med** 1987 Dec;83(6):1170–1
A comparative study of neurological and myxedematous endemic cretinism in western China. Boyages SC, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1262–71
Periorbital myxedema [letter] Avakoff JC. **Plast Reconstr Surg** 1989 Jan;83(1):197

HISTORY

Myxedema. An historical reconnaissance. Felts JH. **N C Med J** 1989 Feb;50(2):73–5
[The myxedema report. A centennial] Haugen HN. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3222 **(Nor)**

IMMUNOLOGY

Inhibition of thyrotropin-stimulated adenylate cyclase activation and growth of rat thyroid cells, FRTL-5, by immunoglobulin G from patients with primary myxedema: comparison with activities of thyrotropin-binding inhibitor immunoglobulins. Cho BY, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):99–106
Endemic cretinism: possible role for thyroid autoimmunity. Boyages SC, et al. **Lancet** 1989 Sep 2;2(8662):529–32

PATHOLOGY

Pouting sublinguals: enlarged salivary glands in myxoedema. Fulop M. **Lancet** 1989 Sep 2;2(8662):550–1

SURGERY

The use of carbon dioxide laser in lichen myxedematosus. Kaymen AH, et al. **J Dermatol Surg Oncol** 1989 Aug; 15(8):862–5

THERAPY

Beneficial effects of plasmapheresis followed by immunosuppressive therapy in pretibial myxedema. Noppen M, et al. **Acta Clin Belg** 1988;43(5):381–3

MYXICOLA see POLYCHAETA

MYXOBACTERALES

GENETICS

Reverse transcriptase associated with the biosynthesis of the branched RNA-linked msDNA in Myxococcus xanthus. Inouye S, et al. **Cell** 1989 Feb 24;56(4):709–17
Reverse transcriptase with concomitant ribonuclease H activity in the cell-free synthesis of branched RNA-linked msDNA of Myxococcus xanthus. Lampson BC, et al. **Cell** 1989 Feb 24;56(4):701–7
A link between cell movement and gene expression argues that motility is required for cell-cell signaling during fruiting body development. Kroos L, et al. **Genes Dev** 1988 Dec;2(12a):1677–85
Mutations that affect production of branched RNA-linked msDNA in Myxococcus xanthus. Dhundale A, et al. **J Bacteriol** 1988 Dec;170(12):5620–4
Localization of the cis-acting regulatory DNA sequences of the Myxococcus xanthus tps and ops genes. Downard JS, et al. **J Bacteriol** 1988 Oct;170(10):4931–8
Tn5-mediated transposition of plasmid DNA after transduction to Myxococcus xanthus. Downard JS. **J Bacteriol** 1988 Oct;170(10):4939–41
Genetic identification and cloning of a gene required for developmental cell interactions in Myxococcus xanthus. Gill RE, et al. **J Bacteriol** 1988 Nov;170(11):5279–88
Identification and characterization of the Myxococcus xanthus bsgA gene product. Gill RE, et al. **J Bacteriol** 1988 Nov;170(11):5289–97
Genes required for developmental signalling in Myxococcus xanthus: three asg loci. Kuspa A, et al. **J Bacteriol** 1989 May;171(5):2762–72
Site-specific integration and expression of a developmental promoter in Myxococcus xanthus. Li SF, et al. **J Bacteriol** 1988 Dec;170(12):5552–6
Developmental bypass suppression of Myxococcus xanthus csgA mutations. Rhie HG, et al. **J Bacteriol** 1989 Jun; 171(6):3268–76
Movement of multiple DNA units between Myxococcus xanthus cells. Starich T, et al. **J Bacteriol** 1989 May; 171(5):2323–36
Gliding motility in Myxococcus xanthus: mgl locus, RNA, and predicted protein products. Stephens K, et al. **J Bacteriol** 1989 Feb;171(2):819–30
Structural requirements of the RNA precursor for the biosynthesis of the branched RNA-linked multicopy single-stranded DNA of Myxococcus xanthus. Hsu MY, et al. **J Biol Chem** 1989 Apr 15;264(11):6214–9
Utilization of IncP-1 plasmids as vectors for transposon mutagenesis in myxobacteria. Saulnier P, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2889–95
Transfer of IncP plasmids into Stigmatella aurantiaca leading to insertional mutants affected in spore development. Glomp I, et al. **Mol Gen Genet** 1988 Oct;214(2):213–7
"Frizzy" aggregation genes of the gliding bacterium Myxococcus xanthus show sequence similarities to the chemotaxis genes of enteric bacteria. McBride MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):424–8

GROWTH & DEVELOPMENT

dsg, a gene required for cell-cell interaction early in Myxococcus development. Cheng Y, et al. **J Bacteriol** 1989 Jul;171(7):3719–26
dsg, a gene required for Myxococcus development, is necessary for cell viability. Cheng Y, et al. **J Bacteriol** 1989 Jul;171(7):3727–31
Role of Myxococcus xanthus cell surface antigen 1604 in development. Jarvis BW, et al. **J Bacteriol** 1989 Sep; 171(9):4667–73
Novel change in the carbohydrate portion of Myxococcus xanthus lipopolysaccharide during development. Panasenko SM, et al. **J Bacteriol** 1989 Apr;171(4):1835–40
Cell-density-dependent lysis and sporulation of Myxococcus xanthus in agarose microbeads. Rosenbluh A, et al. **J Bacteriol** 1989 Sep;171(9):4923–9
Autocide AMI rescues development in dsg mutants of Myxococcus xanthus. Rosenbluh A, et al. **J Bacteriol** 1989 Mar;171(3):1513–8

IMMUNOLOGY

Characterization of lipopolysaccharide from Myxococcus xanthus by use of monoclonal antibodies. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2028–32
Isolation of cell surface antigen mutants of Myxococcus xanthus by use of monoclonal antibodies. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2033–41
Isolation of additional monoclonal antibodies directed against cell surface antigens of Myxococcus xanthus cells undergoing submerged development. Gill JS, et al. **J Bacteriol** 1988 Dec;170(12):5953–5
Purification and properties of Myxococcus xanthus cell surface antigen 1604. Jarvis BW, et al. **J Bacteriol** 1989 Sep;171(9):4655–66

METABOLISM

Saframycin Mx1, a new natural saframycin isolated from a myxobacterium. Irschik H, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):993–8
Myxochelin A, a new iron-chelating compound from Angiococcus disciformis (Myxobacterales). Production, isolation, physico-chemical and biological properties. Kunze B, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):14–7
Enhanced production of the minor components of glidobactins in Polyangium brachysporum. Numata K, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1358–65
Myxococcus xanthus msDNA.Mx162 exists as a complex with proteins. Viswanathan M, et al. **J Biol Chem** 1989 Aug 15;264(23):13665–71
An extracellular blood-anticoagulant glycopeptide produced exclusively during vegetative growth by Myxococcus xanthus and other myxobacteria is not co-regulated with other extracellular macromolecules. Masson PJ, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):801–6

PHYSIOLOGY

Evidence for a membrane-associated GTP-binding protein in Stigmatella aurantiaca, a prokaryotic cell. Dérijard B, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):562–8
Inhibition of cell-cell interactions in Myxococcus xanthus by congo red. Arnold JW, et al. **J Bacteriol** 1988 Dec; 170(12):5765–70
Cell surface properties correlated with cohesion in Myxococcus xanthus. Arnold JW, et al. **J Bacteriol** 1988 Dec;170(12):5771–7
Defects in motility and development of Myxococcus xanthus lipopolysaccharide mutants. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2042–8
Acceleration of starvation- and glycerol-induced myxospore formation by prior heat shock in Myxococcus xanthus. Killeen KP, et al. **J Bacteriol** 1988 Nov;170(11):5200–7
Sporulation of Myxococcus xanthus in liquid shake flask cultures. Rosenbluh A, et al. **J Bacteriol** 1989 Aug; 171(8):4521–4

MYXOID CYST see SYNOVIAL CYST

MYXOMA

Carney's complex [letter] Apted J. **Med J Aust** 1988 Oct 17;149(8):447
[Primary heart tumors] von Brandis C, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2017–9 (Eng. Abstr.) **(Nor)**
[Left atrial myxoma in a 47-year-old patient with a retroperitoneal tumor removed at 11 years of age] Akhmedzhanov MIu, et al. **Ter Arkh** 1989;61(3):105–7 **(Rus)**
[Cardiac myxoma in childhood: presentation of 2 cases] Rubio Vidal MD, et al. **Rev Esp Cardiol** 1988 May; 41(5):318–21 (Eng. Abstr.) **(Spa)**

ANALYSIS

Immunohistochemical staining for vimentin filaments and S-100 protein in myxoma of the jaws. Lombardi T, et al. **J Oral Pathol** 1988 Apr;17(4):175–7

CHEMICALLY INDUCED

Evaluation of the carcinogenic risk of the phenoxyherbicide MCPA to an urodele amphibian. Zavanella T, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):114–22

COMPLICATIONS

Coronary angiography in atrial myxoma: findings in nine cases. Fueredi GA, et al. **AJR** 1989 Apr;152(4):737–8
Repeated general anaesthetics in the presence of a large undiagnosed left atrial myxoma [letter] Carr CM, et al. **Anaesthesia** 1988 Dec;43(12):1058
Left atrial myxoma associated with systemic AA amyloidosis. Wens R, et al. **Arch Intern Med** 1989 Feb;149(2):453–4
Hoarseness secondary to left atrial myxoma. Rubens F, et al. **Chest** 1989 May;95(5):1139–40 (7 ref.)
Myxoma of the mitral valve associated with Hemophilus parainfluenza bacteremia. Ghazi F, et al. **Cleve Clin J Med** 1988 Sep–Oct;55(5):470–2
Cyclical Cushing's syndrome presenting as short stature in a boy with recurrent atrial myxomas and freckled skin pigmentation. Carson DJ, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):173–80

Bilateral retinopathy and encephalopathy. Matamoros N, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):39–41
Right atrial myxoma presenting as chronic right heart failure—a case report. Nambiar CA, et al. **Indian Heart J** 1988 Mar–Apr;40(2):129–31
Syndrome myxoma. Sundaram U, et al. **Indian Pediatr** 1988 Sep;25(9):888–91
Myxoma of the heart presenting with recurrent episodes of hemorrhagic cerebral infarction: MR findings. Michael AS, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):123–5
Adult dominant polycystic kidney disease and atrial myxoma. Earle K, et al. **Nephron** 1989;52(2):197
Vaginal myxoma presenting as acute urinary retention. Egley CC, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):882–3
Intracranial aneurysms in a child with recurrent atrial myxoma. Bobo H, et al. **Pediatr Neurol** 1987 Jul–Aug; 3(4):230–2
Saddle embolus as first presentation of left atrial myxoma in a 14-year-old girl. Leach WJ, et al. **Scott Med J** 1988 Oct;33(5):340–1
Atrial myxoma as the cause of acute lower limb ischaemia in a teenager. Weerasena NA, et al. **Scott Med J** 1989 Apr; 34(2):440–1
Neurologic manifestations of atrial myxoma. A 12-year experience and review. Knepper LE, et al. **Stroke** 1988 Nov;19(11):1435–40
Multiple strokes due to atrial myxoma with a negative echocardiogram. Thompson J, et al. **Stroke** 1988 Dec; 19(12):1570–1
[Carney's complex (myxomas, pigmented spots and endocrine hyperactivity). Apropos of a partial form in monozygotic twins] Gaillard F, et al. **Ann Pathol** 1988;8(3):239–43 (Eng. Abstr.) **(Fre)**
[Pattern of acute myocardial infarct in a patient with left atrial myxoma] Niccolini A, et al. **G Ital Cardiol** 1989 Apr; 19(4):355–9 (Eng. Abstr.) **(Ita)**
[A case of cardiac myxoma associated with long-term lasting symptoms of mitral stenosis] Imawaki S, et al. **Kyobu Geka** 1989 Mar;42(3):218–21 (Eng. Abstr.) **(Jpn)**
[Association of sciatic hernia and myxoma of the gluteal region] Karev ID, et al. **Khirurgiia (Mosk)** 1989 Apr; (4):136–7 **(Rus)**
[Strangulation of a myxoma of the vermiform process in an umbilical hernia] Tazhimametov BT, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):124–5 **(Rus)**

DIAGNOSIS

Bilateral atrial myxomas detected by transesophageal two-dimensional echocardiography. Dittmann H, et al. **Am Heart J** 1989 Jul;118(1):172–3
Left ventricular myxoma simulating aortic stenosis. Rosenzweig A, et al. **Am Heart J** 1989 Apr;117(4):962–3
Myxoma attached solely to the tricuspid valve. Cole DJ, et al. **Am J Cardiol** 1989 Sep 1;64(8):546–7
Comparison of transthoracic and transesophageal echocardiography in diagnosis of left atrial myxoma. Obeid AI, et al. **Am J Cardiol** 1989 Apr 15;63(13):1006–8
Antiphospholipid antibody syndrome with right atrial thrombosis mimicking an atrial myxoma. Leventhal LJ, et al. **Am J Med** 1989 Jul;87(1):111–3
Aggressive angiomyxoma first diagnosed as levator hernia. Sutton GP, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):73–5
Petrified cardiac myxoma masquerading as organized atrial mural thrombus. Lie JT. **Arch Pathol Lab Med** 1989 Jul; 113(7):742–5
Calcified right atrial myxoma demonstrated by magnetic resonance imaging. de Roos A, et al. **Chest** 1989 Feb; 95(2):478–9
The etiology of tumor plop in a patient with huge right atrial myxoma. Keren A, et al. **Chest** 1989 May;95(5):1147–9
Myxomas in the fingertips. Winke BM, et al. **Clin Orthop** 1988 Dec;(237):271–4 (19 ref.)
Angiosarcoma of the left atrium mimicking myxoma: case report. Keohane ME, et al. **Hum Pathol** 1989 Jun; 20(6):599–601
Left atrial myxoma infected with Streptococcus viridans. Dawson JR, et al. **Int J Cardiol** 1988 Dec;21(3):354–8 (15 ref.)
Intramuscular myxoma: MR features. Kransdorf MJ, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):836–9
Magnetic resonance imaging and angiography of the brain in embolic left atrial myxoma. Marazuela M, et al. **Neuroradiology** 1989;31(2):137–9
Case report 557: Solitary intramuscular myxoma in a patient with polyostotic fibrous dysplasia. Glass-Royal MC, et al. **Skeletal Radiol** 1989;18(5):392–8
[Diagnosis by machine] Verheul JA, et al. **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1057–60 **(Dut)**
[Spontaneous course of myxoma of the left atrium] Allal J, et al. **Arch Mal Coeur** 1988 Oct;81(10):1263–6 (7 ref.) (Eng. Abstr.) **(Fre)**
[Atrial myxoma and signs of autoimmune disease] Metz-Kurschel U, et al. **Dtsch Med Wochenschr** 1989 Feb 3;114(5):181–3 (Eng. Abstr.) **(Ger)**
[Cutaneous myxoma (focal dermal mucinosis)] Senff H, et al. **Hautarzt** 1988 Sep;39(9):606–10 (Eng. Abstr.) **(Ger)**
[A case from practice (134). Patient: Mr. J.D., 1956, electrician] Troxler M. **Schweiz Rundsch Med Prax** 1989 Mar 21;78(12):338–40 **(Ger)**
[Echocardiography in the diagnosis of the intracardiac mass] Alcini E, et al. **Ann Ital Chir** 1987;59(1–6):21–30 (Eng. Abstr.) **(Ita)**
[Persistence of the right venous sinus valve simulating a right atrial myxoma in a case of total anomalous pulmonary venous return. Echocardiographic, anatomo-clinical and surgical aspects] Mollica N, et al. **Minerva Cardioangiol** 1989 Apr;37(4):201–4 (Eng. Abstr.) **(Ita)**
[Right atrial myxoma demonstrated by 201thallium scan with a wide splitting of the first heart sound] Kataoka N, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):544–8 **(Jpn)**
[A case of mucocele of the appendix diagnosed by imagings before laparotomy] Negami AI, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):757–60 **(Jpn)**
[Diagnosis and treatment of myxoma of the right heart ventricle] Nechaenko MA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):83–7 **(Rus)**
[Cardiac tumors in children] Deliagin VM, et al. **Pediatriia** 1988;(4):79–83 **(Rus)**
[Diagnosis of myxoma of the left atrium] Kotel'nikova GP, et al. **Sov Med** 1989;(1):62–5 **(Rus)**
[Myxoma of the left atrium extending to the ventricular cavity] Zelinskaia SI, et al. **Ter Arkh** 1988;60(7):121–2 **(Rus)**

ETIOLOGY

Intramuscular myxoma: a rare but important association with fibrous dysplasia of bone. Sundaram M, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):107–8

GENETICS

Familial myxomatous valvular disease. Rogan KM, et al. **Am J Cardiol** 1989 May 1;63(15):1149–51
["Heart myxoma syndrome" a hereditary disease?] Althoff H, et al. **Pathologe** 1988 Jul;9(4):204–10 **(Ger)**
[Familial myxoma. Report of a case and review of the literature] Pagola Carrasco JA, et al. **Arch Inst Cardiol Mex** 1989 Mar–Apr;59(2):169–73 (18 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Anti-neutrophil cytoplasmic antibodies associated with atrial myxoma [letter] Savige JA, et al. **Am J Med** 1988 Nov; 85(5):755–6

MORTALITY

[Late results in the surgical treatment of patients with cardiac myxoma] Petrovskii BV, et al. **Klin Med (Mosk)** 1988 Jun; 66(6):30–3 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Rare attachment of left atrial myxoma: two-dimensional echocardiographic evidence. Torrecilla EG, et al. **Am Heart J** 1989 Jun;117(6):1389–90
The pathology of metastatic cardiac myxoma. Rupp GM, et al. **Am J Clin Pathol** 1989 Feb;91(2):221–7
Embolic and metastatic cardiac myxoma. Reed RJ, et al. **Am J Dermatopathol** 1989 Apr;11(2):157–65
Intramuscular myxoma. Jaser NA, et al. **Ann Chir Gynaecol** 1988;77(2):78–80 (11 ref.)
Histogenesis of cardiac myxomas. An immunohistochemical study of 19 cases, including one with glandular structures, and review of the literature. Johansson L. **Arch Pathol Lab Med** 1989 Jul;113(7):735–41 (35 ref.)
The identity and histogenesis of cardiac myxomas. A controversy put to rest [editorial] Lie JT. **Arch Pathol Lab Med** 1989 Jul;113(7):724–6
Angiomyxoma of the umbilical cord with massive cystic degeneration of Wharton's jelly. Yavner DL, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):935–7
Nerve sheath myxoma of digital nerve. Blumberg AK, et al. **Cancer** 1989 Mar 15;63(6):1215–8 (13 ref.)
Fine-needle aspiration of metastatic atrial myxoma. Moriarty AT, et al. **Diagn Cytopathol** 1988;4(3):250–3
Role of 2-D echocardiography in atrial tumors. A PGI experience. Grover A, et al. **Indian Heart J** 1987 Nov–Dec; 39(6):51–6
Neurothekeoma (peripheral nerve sheath myxoma) of the external auditory canal. Youngs R, et al. **J Otolaryngol** 1989 Apr;18(3):90–3
Intramuscular myxoma. Busuttil A, et al. **J R Coll Surg Edinb** 1988 Aug;33(4):225–6
Cardiac myxoma. Clinical and pathologic features in 15 cases. Schmid C, et al. **Klin Wochenschr** 1988 Aug 15;66(16):713–7
Primary mucinous cystadenocarcinoma of the appendix with pseudomyxoma peritonei manifested as a splenic mass. Holder PD, et al. **South Med J** 1989 Aug;82(8):1029–31 (14 ref.)
Carney's complex of primary pigmented nodular adrenocortical disease and pigmentous and myxomatous lesions. Cheung PS, et al. **Surg Gynecol Obstet** 1989 May; 168(5):413–6
[Dermal myxoma of nerve sheaths (neurothecoma) of Harkin and Reed. Apropos of a case] Mérot Y, et al. **Ann Dermatol Venereol** 1989;116(3):237–40 **(Fre)**
[Bi-auricular myxoma. A complete review of the literature] Khiari F, et al. **Tunis Med** 1988 Dec;66(12):877–82 (17 ref.) (Eng. Abstr.) **(Fre)**
[Primary atrial heart tumors—a review of 21 cases] Heni HE, et al. **Z Kardiol** 1988 Jul;77(7):425–31 (Eng. Abstr.) **(Ger)**
[A case of aggressive angiomyxoma of the vulva] Kuramoto M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1907–10 **(Jpn)**

RADIOGRAPHY

Primary myxoma of the cranium: CT findings. Ng SH, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):903–5

RADIONUCLIDE IMAGING

Detection of left atrial myxoma with SPECT cardiac imaging. McLaughlin MG, et al. **Clin Nucl Med** 1989 Feb; 14(2):101–3
[Assessment of the left atrial myxoma with gated blood pool SPECT] Maeda H, et al. **Kaku Igaku** 1989 Feb;26(2):253–6 (Eng. Abstr.) **(Jpn)**

SECONDARY

Cardiac myxoma metastatic to the temporal bone. Jungreis CA, et al. **Radiology** 1989 Jan;170(1 Pt 1):244

SURGERY

Left ventricular recurrence of a resected left atrial myxoma. Pavlides GS, et al. **Am Heart J** 1989 Jun;117(6):1390–2
Right atrial myxoma: case report and anaesthetic considerations. Moritz HA, et al. **Can J Anaesth** 1989 Mar; 36(2):212–4
Survival of a Patient With an Infected Right Atrial Myxoma Following Surgery [letter] Chow WH. **Eur Heart J** 1989 Jan;10(1):97
Cystic myxomatous degeneration of the right common and external iliac artery. Wolffenbuttel KP, et al. **Eur J Vasc Surg** 1989 Aug;3(4):373–4
Surgical treatment of cardiac myxoma. Valiathan MS, et al. **Indian Heart J** 1988 Jan–Feb;40(1):44–6
Cervical spinal intramedullary myxoma in childhood. Case report. Paşaoğlu A, et al. **J Neurosurg** 1988 Nov; 69(5):772–4
Surgical treatment of cardiac myxomas. Burakovsky VI, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):800–5
Atrial myxoma: a new surgical approach using neodymium:yttrium-aluminum-garnet laser photocoagulation [letter] Mesnildrey P, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):313–4
Myxoma of the skull and orbit. Maiuri F, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):136–8
Urgent indications for surgery in primary or secondary cardiac neoplasm. Hake U, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):111–4
Atrial myxomas: results of 25 years' experience and review of the literature. Larsson S, et al. **Surgery** 1989 Jun; 105(6):695–8 (22 ref.)
[Atrial myxoma in the aged. Apropos of 2 clinical cases] Labriola E, et al. **Minerva Med** 1988 Nov;79(11):987–90 (Eng. Abstr.) **(Ita)**
[Surgical removal of a right atrial myxoma in an 81-year-old woman] Maeda M, et al. **Kyobu Geka** 1988 Dec; 41(13):1099–102 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of right atrial myxoma with tricuspid regurgitation—report of a case and review of literature] Sawatani O, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1021–6 (21 ref.) (Eng. Abstr.) **(Jpn)**
[Myxoma of the left and right sections of the heart] Frantsev VI, et al. **Grudn Khir** 1988 May–Jun;(3):92–3 **(Rus)**

ULTRASTRUCTURE

[Myxoma of the left atrium: surgical and ultrastructural aspects. Report of 2 cases] de Carvalho RG, et al. **Arq Bras Cardiol** 1988 Aug;51(2):171–5 (Eng. Abstr.) **(Por)**

MYXOMA VIRUS

GENETICS

Cloning and molecular characterization of the myxoma virus genome. Russell RJ, et al. **Virology** 1989 May;170(1):147–59

MYXOMATOSIS, INFECTIOUS

see related
MYXOMA VIRUS

MYXOMATOSIS VIRUS see **MYXOMA VIRUS**

MYXOMYCETES see **MYXOMYCOTA**

MYXOMYCOTA

CLASSIFICATION

5S ribosomal RNA sequence of Pneumocystis carinii and .ts phylogenetic association with "Rhizopoda/Myxomycota/Zygomycota group". Watanabe J, et al. **J Protozool** 1989 Jan–Feb;36(1):16S–18S

ENZYMOLOGY

Acidic protein kinases of Polysphondylium violaceum: characterization and developmental regulation. Flotow H, et al. **Mol Cell Biochem** 1988 Nov;84(1):105–16

GENETICS

A mutant strain of Polysphondylium with defects in many genes. Francis D, et al. **Dev Genet** 1988;9(4–5):629–38
Phylogenetic association of Pneumocystis carinii with the 'Rhizopoda/Myxomycota/Zygomycota group' indicated by comparison of 5S ribosomal RNA sequences. Watanabe J, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):163–7
Non-mendelian inheritance of mitochondrial DNA and ribosomal DNA in the myxomycete, Didymium iridis. Silliker ME, et al. **Mol Gen Genet** 1988 Aug;213(2–3):370–8

GROWTH & DEVELOPMENT

Evidence for a plasma membrane mating receptor in the myxomycete Didymium iridis. Yemma JJ, et al. **Cytobios** 1988;56(226–227):135–44
Geometry and spatial patterns in Polysphondylium pallidum. McNally JG, et al. **Dev Genet** 1988;9(4–5):663–72 (23 ref.)
Studies of cell-surface glorin receptors, glorin degradation, and glorin-induced cellular responses during development of Polysphondylium violaceum. De Wit RJ, et al. **Exp Cell Res** 1988 Dec;179(2):332–43

PHYSIOLOGY

Purification, characterization, and partial structure of D factor from Polysphondylium violaceum. Hanna MH, et al. **Dev Genet** 1988;9(4–5):653–62
Spatial patterns in the fruiting bodies of the cellular slime mold Polysphondylium pallidum. Cox EC, et al. **Differentiation** 1988 Jul;38(2):73–81

MYXOSARCOMA see under SARCOMA

MYXOVIRUS INFLUENZAE-A HOMINIS see ORTHOMYXOVIRUS TYPE A, HUMAN

MYXOVIRUS PAROTITIDIS see MUMPS VIRUS

MYXOVIRUS PESTIS-GALLI see ORTHOMYXOVIRUS TYPE A, AVIAN

MYXOVIRUSES see ORTHOMYXOVIRIDAE

N-RAS GENES see RAS GENES

NAD

Native gel activity stain and preparative electrophoretic method for the detection and purification of pyridine nucleotide-linked dehydrogenases. Seymour JL, et al. **Anal Biochem** 1989 May 1;178(2):243–7
The involvement of superoxide anions in the nitro blue tetrazolium chloride reduction mediated by NADH and phenazine methosulfate. Van Noorden CJ, et al. **Anal Biochem** 1989 Jan;176(1):170–4
An NADH-linked luciferase assay for glycogen: the preparation of glycogen-free, viable human eccrine sweat glands. Welch C, et al. **Anal Biochem** 1989 Feb 1; 176(2):228–33
Preparation and kinetic properties of 5-ethylphenazine-poly(ethylene glycol)-NAD+ conjugate, a unique catalyst having an intramolecular reaction step. Yomo T, et al. **Eur J Biochem** 1989 Feb 1;179(2):299–305
Photosensitization by antitumor agents. 5. Daunorubicin-photosensitized oxidation of NAD(P)H in aqueous and N,N-dimethylformamide/aqueous solutions—an electron paramagnetic resonance study. Reszka K, et al. **Free Radic Biol Med** 1988;5(2):63–70
Single-electron-transfer in the reduction of 1,2-dioxetanes by biologically active substrates. Adam W, et al. **Free Radic Res Commun** 1989;5(4–5):253–8
Nucleotide modification, a radical mechanism of oxidative toxicity. Bernofsky C, et al. **Free Radic Res Commun** 1986; 2(3):129–36
Photocatalyzed anaerobic oxidation of nicotinamide coenzyme dimers to NAD+ by adriamycin. Carelli V, et al. **Free Radic Res Commun** 1988;4(6):397–402
Isolation and characterization of cDNA clones encoding the murine NAD-dependent methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase. Bélanger C, et al. **J Biol Chem** 1989 Mar 25;264(9):4837–43
Photoexcitation of the methionine-iron bond in iron(III) cytochrome c: bimolecular reaction with NADH. Ferri A, et al. **J Photochem Photobiol -B-** 1988 Nov;2(3):341–53

ANALOGS & DERIVATIVES

Equilibrium of 5,6-hydration of NADH and mechanism of ATP-dependent dehydration. Acheson SA, et al. **Biochemistry** 1988 Sep 20;27(19):7371–5
Selective probing of ADP-ribosylation reactions with oxidized 2'-deoxy-nicotinamide adenine dinucleotide. Alvarez-Gonzalez R, et al. **Biochemistry** 1988 Jul 12; 27(14):5378–83
Dihydrofolate reductase from Escherichia coli: the kinetic mechanism with NADPH and reduced acetylpyridine adenine dinucleotide phosphate as substrates. Stone SR, et al. **Biochemistry** 1988 Jul 26;27(15):5493–9
In vitro drug delivery mediated by ecto-NAD+-glycohydrolase ligand-targeted liposomes. Salord J, et al. **Biochim Biophys Acta** 1988 Sep 16; 971(2):197–206
ALT reagent with thionicotinamide adenine dinucleotide. Dolan PA, et al. **Clin Chem** 1989 Sep;35(9):1857–8
4-Chloroacetylpyridine adenine dinucleotide. A highly reactive and chromophoric affinity label of glyceraldehyde-3-phosphate dehydrogenase from sturgeon. Tritsch D, et al. **Eur J Biochem** 1989 Apr 15; 181(1):215–22
3'-Deoxy-NAD+ as a substrate for poly(ADP-ribose)polymerase and the reaction mechanism of poly(ADP-ribose) elongation. Alvarez-Gonzalez R. **J Biol Chem** 1988 Nov 25;263(33):17690–6
Fluorescent labeling of signal-transducing G-proteins. Pertussis toxin-catalyzed etheno-ADP ribosylation of transducin. Hingorani VN, et al. **J Biol Chem** 1988 Dec 25;263(36):19804–8
Synthesis and purification of deoxyribose analogues of NAD+ by affinity chromatography and strong-anion-exchange high-performance liquid chromatography. Alvarez-Gonzalez R. **J Chromatogr** 1988 Jul 1;444:89–95
Phosphorescence maxima and triplet state lifetimes of NAD+ and epsilon-NAD+ in ternary complexes with horse liver alcohol dehydrogenase. Rousslang K, et al. **Photochem Photobiol** 1989 Feb;49(2):137–43

ANALYSIS

Differential effect of benzamide on NAD+ content and the frequency of chromatid aberrations in X-irradiated L5178Y-R and L5178Y-S cells. Szumiel I, et al. **Acta Oncol** 1988;27(6b):851–5
Enzymatic amplification for spectrophotometric and electrochemical assays of NAD+ and NADH. Bergel A, et al. **Anal Biochem** 1989 Jun;179(2):382–8
Analysis of pyridine dinucleotides in cultured rat hepatocytes by high-performance liquid chromatography. Litt MR, et al. **Anal Biochem** 1989 May 15;179(1):34–6
Oxidation of NADH by vanadium compounds in the presence of thiols. Keller RJ, et al. **Arch Biochem Biophys** 1989 May 15;271(1):40–8
Fibre-optic sensor with co-immobilised bacterial bioluminescence enzymes. Gautier SM, et al. **Biosensors** 1989;4(3):181–94
Determination of pyridine nucleotide contents of cell monolayers by bioluminescence. Lane DA, et al. **J Biochem Biophys Methods** 1988 Oct;17(2):107–17
Preventive effect of 3-aminobenzamide on the reduction of NAD levels in rat liver following administration of diethylnitrosamine. Uchida K, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1094–100
NAD+ levels and glucose uptake of cultured human epidermal cells exposed to sulfur mustard. Mol MA, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):159–65
[Laser fluorimetry of NADH] Toussaint M, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:47–51 (Eng. Abstr.) **(Fre)**
[Pyridine nucleotide autofluorescence in the rabbit lens] Tsubota K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1657–61 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

The biosynthesis of nicotinamide adenine dinucleotide during early stages of frog embryonic development of haploid and diploid embryos. Dragos S, et al. **Comp Biochem Physiol [B]** 1979;62(4):335–8
Tryptophan metabolism by the isolated rat liver cells—effects of leucine and its metabolites. Kiyohara Y, et al. **Int J Vitam Nutr Res** 1989;59(1):85–92
Primary role of NADH formed by glucose dehydrogenase in ATP provision at the early stage of spore germination in Bacillus megaterium QM B1551. Sano K, et al. **Microbiol Immunol** 1988;32(9):877–85

BLOOD

Impaired erythrocyte NAD synthesis: a metabolic abnormality in thalassemia. Zerez CR, et al. **Am J Hematol** 1989 Sep;32(1):1–7
Relationship between the nicotinamide adenine dinucleotide redox potential and the 2,3-diphosphoglycerate content in the erythrocyte in sickle cell disease. Lachant NA, et al. **Br J Haematol** 1989 Jun;72(2):265–71
Purine and pyridine nucleotides in rabbit red blood cells of different maturity. Werner A, et al. **Cell Biochem Funct** 1988 Oct;6(4):251–6
Native fluorescence of plasma from patients with acute leukemias. Lohmann W, et al. **Naturwissenschaften** 1988 Jul;75(7):365–7

METABOLISM

Skeletal muscle pathology in ovine congenital progressive muscular dystrophy. 1. Histopathology and histochemistry. Richards RB, et al. **Acta Neuropathol (Berl)** 1988; 77(2):161–7
Programmed cell death and adenine deoxynucleotide metabolism in human lymphocytes. Carson DA, et al. **Adv Enzyme Regul** 1988;27:395–404
Mechanism and regulation of ethanol elimination in humans: intermolecular hydrogen transfer and oxidoreduction in vivo. Cronholm T, et al. **Alcoholism (NY)** 1988 Oct; 12(5):683–6
Effect of CCK-8 on pentose phosphate shunt activity, pyridine nucleotides, and glucokinase of rat islets. Verspohl EJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E68–73
Interaction of ferric complexes with rat liver nuclei to catalyze NADH-and NADPH-Dependent production of oxygen radicals. Kukielka E, et al. **Arch Biochem Biophys** 1989 Sep;273(2):319–30
Effects of vanadate on the oxidation of NADH by xanthine oxidase. Liochev S, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):188–93
delta pH driven energy-linked NAD+ reduction in Rhodospirillum rubrum chromatophores. Nore BF. **Arch Biochem Biophys** 1989 Oct;274(1):285–9
The reduction of putidaredoxin reductase by reduced pyridine nucleotides. Roome PW, et al. **Arch Biochem Biophys** 1988 Oct;266(1):32–40
Vanadate-mediated oxidation of NADH: description of an in vitro system requiring ascorbate and phosphate. Yoshino S, et al. **Arch Biochem Biophys** 1989 Jul;272(1):76–80
Purification, properties, and metabolic roles of NAD+-glutamate dehydrogenase in Clostridium botulinum 113B. Hammer BA, et al. **Arch Microbiol** 1988; 150(5):460–4
Vanadate stimulation of pyridine nucleotide oxidation in mammalian liver microsomal membranes. Coulombe RA Jr, et al. **Basic Life Sci** 1988;49:777–80
Superoxide radical release into the cytoplasm of heart cells by an NADH-driven oxygen activator. Nohl H. **Basic Life Sci** 1988;49:898–903
Poly(ADP-ribose) polymerase inhibits DNA synthesis initiation in the absence of NAD. Nobori T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1113–8
A micellar model for investigating the chemical nature of hydrogen transfer in NAD(P)H-dependent enzymatic reactions. Rao UM. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1330–6
NADH substrate inhibition and enhanced thermal stability of higher plant nitrate reductase immobilized via a monoclonal antibody. Ruoff P, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):496–501
The binding of NADH to cytoplasmic aldehyde dehydrogenase after modification with p-nitrophenyl dimethylcarbamate. Kitson TM. **Biochem J** 1989 Jan 15; 257(2):585–90
Nitroreductase activity of NADH dehydrogenase of the respiratory redox chain. Smyth GE, et al. **Biochem J** 1989 Feb 1;257(3):859–63
Effect of styrene and other alkyl benzene derivatives on oxidation of FAD- and NAD-linked substrates in rat liver mitochondria. Mickiewicz W, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4439–44
Interconversion of NAD(H) to NADP(H). A cellular response to quinone-induced oxidative stress in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2631–7
Lack of competition between cytochrome c and anthraquinone type drugs for the reductive sites of NADH dehydrogenase. Tarasiuk J, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2285–9
Coenzyme binding in alcohol dehydrogenase. Eklund H. **Biochem Soc Trans** 1989 Apr;17(2):293–6
Human aldehyde dehydrogenase: coenzyme binding studies. Ambroziak W, et al. **Biochemistry** 1989 Jun 27; 28(13):5367–73
An ultraviolet resonance Raman study of dehydrogenase enzymes and their interactions with coenzymes and substrates. Austin JC, et al. **Biochemistry** 1989 Feb 21; 28(4):1533–8
Classical Raman spectroscopic studies of NADH and NAD+ bound to lactate dehydrogenase by difference techniques. Deng H, et al. **Biochemistry** 1989 Feb 21;28(4):1525–33
UDP-galactose 4-epimerase. Phosphorus-31 nuclear magnetic resonance analysis of NAD+ and NADH bound at the active site. Konopka JM, et al. **Biochemistry** 1989 Mar 21;28(6):2645–54
Isotope effects on binding of NAD+ to lactate dehydrogenase. LaReau RD, et al. **Biochemistry** 1989 Apr 18;28(8):3619–24
Coenzyme binding by 3-hydroxybutyrate dehydrogenase, a lipid-requiring enzyme: lecithin acts as an allosteric modulator to enhance the affinity for coenzyme. Rudy B, et al. **Biochemistry** 1989 Jun 27;28(13):5354–66
Mechanism of binding of horse liver alcohol dehydrogenase and nicotinamide adenine dinucleotide. Sekhar VC, et al. **Biochemistry** 1988 Jul 12;27(14):5082–8
Rat liver S-adenosylhomocysteinase. Spectrophotometric study of coenzyme binding. Gomi T, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):172–9
Time-resolved fluorescence studies on NADH bound to mitochondrial malate dehydrogenase. Jameson DM, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):187–90
Measurement of microsomal ATPase activities: a comparison between the inorganic phosphate-release assay and the NADH-coupled enzyme assay. Missiaen L, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):40–4
Hydrogen evolution of Enterobacter aerogenes depending on culture pH: mechanism of hydrogen evolution from NADH by means of membrane-bound hydrogenase. Tanisho S, et al. **Biochim Biophys Acta** 1989 Jan 26; 973(1):1–6
Catalytic mechanism and interactions of NAD+ with glyceraldehyde-3-phosphate dehydrogenase: correlation of EPR data and enzymatic studies. Wilder RT, et al.

Biochim Biophys Acta 1989 Jul 27;997(1-2):65-77

Calcium uptake by bovine epididymal spermatozoa is regulated by the redox state of the mitochondrial pyridine nucleotides. Vijayaraghavan S, et al. **Biol Reprod** 1989 Apr; 40(4):744-51

Nicotinamide adenine dinucleotide fluorescence spectroscopy and imaging of isolated cardiac myocytes. Eng J, et al. **Biophys J** 1989 Apr;55(4):621-30

Cytosolic free calcium and NAD/NADH redox state in the cat cortex during in vivo activation of NMDA receptors. Uematsu D, et al. **Brain Res** 1989 Mar 13;482(1):129-35

NAD-linked glutamate dehydrogenase in Trypanosoma cruzi. Cazzulo JJ, et al. **Comp Biochem Physiol [B]** 1979; 64(1):129-31

V-factor (NAD) independent Haemophilus parainfluenzae recovered from a human genital ulcer [letter] Gromkova R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):569

Effects of hydrostatic pressure (HP = 101 ATA) on nucleotides and pyridine dinucleotides tissue contents in trout. Cann-Moisan C, et al. **Exp Biol** 1988;47(4):239-42

Glucose flux and the redox state of pyridine dinucleotides in the rat lens. Cheng HM, et al. **Exp Eye Res** 1988 Jun; 46(6):947-52

Identification of an active-site residue in subunit S1 of pertussis toxin by photocrosslinking to NAD. Cockle SA. **FEBS Lett** 1989 Jun 5;249(2):329-32

Hysteretic interaction of NADH and Mg2+ with mammalian NADH:CoQ reductase from beef heart. Tushurashvili PR, et al. **FEBS Lett** 1989 Feb 27;244(2):268-70

Importance of hydroxyl radical in the vanadium-stimulated oxidation of NADH. Keller RJ, et al. **Free Radic Biol Med** 1989;6(1):15-22

A study on the mechanism of the vanadate-dependent NADH oxidation. Liochev SI, et al. **Free Radic Biol Med** 1988;5(5-6):349-54

Vanadate-stimulated oxidation of NAD(P)H. Liochev SI, et al. **Free Radic Biol Med** 1989;6(6):617-22 (36 ref.)

Vanadate-stimulated NADH oxidation requires polymeric vanadate, phosphate and superoxide. Patole MS, et al. **Free Radic Res Commun** 1988;4(4):201-7

Evidence for age-related changes in pyridine nucleotide content of isolated rat islets. Azhar S, et al. **Horm Metab Res** 1988 Sep;20(9):559-61

Is the NAD-poly (ADP-ribose) polymerase system the trigger in radiation-induced death of mouse thymocytes? Denisenko MF, et al. **Int J Radiat Biol** 1989 Sep; 56(3):277-85

Pyridine nucleotides and phosphorylation potential of rabbit corneal epithelium and endothelium. Masters BR, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):861-68

Estimation of the mitochondrial redox state in human skeletal muscle during exercise. Graham TE, et al. **J Appl Physiol** 1989 Feb;66(2):561-6

NADH shuttle enzymes and cytochrome b5 reductase in human skeletal muscle: effect of strength training. Schantz PG, et al. **J Appl Physiol** 1989 Jul;67(1):123-7

Permeability of Rickettsia prowazekii to NAD. Atkinson WH, et al. **J Bacteriol** 1989 Feb;171(2):761-6

DNA ligase and the pyridine nucleotide cycle in Salmonella typhimurium. Park UE, et al. **J Bacteriol** 1989 Apr; 171(4):2173-80

A stopped-flow mixer device for a batch microcalorimeter application to NAD-NADase reaction. Berger RL, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):113-24

Enzymatic in situ determination of stereospecificity of NAD-dependent dehydrogenases. Esaki N, et al. **J Biol Chem** 1989 Jun 15;264(17):9750-2

Substrate channeling of NADH and binding of dehydrogenases to complex I. Fukushima T, et al. **J Biol Chem** 1989 Oct 5;264(28):16483-8

Expression of rat liver S-adenosylhomocysteinase cDNA in Escherichia coli and mutagenesis at the putative NAD binding site. Gomi T, et al. **J Biol Chem** 1989 Sep 25; 264(27):16138-42

Aspartyl peptide labeled by 2-(4-bromo-2,3-dioxobutylthio)adenosine 5'-diphosphate in the allosteric ADP site of pig heart NAD+-dependent isocitrate dehydrogenase. Huang YC, et al. **J Biol Chem** 1989 Jul 25;264(21):12208-14

Conformation of NAD+ bound to allosteric L-lactate dehydrogenase activated by chemical modification. Koide S, et al. **J Biol Chem** 1989 May 25;264(15):8676-9

Lactate dehydrogenase displays absolute stereospecificity in the transfer of the prochiral hydrogen of NADH. LaReau RD, et al. **J Biol Chem** 1989 Sep 15;264(26):15338-43

Structural determination of a cyclic metabolite of NAD+ with intracellular Ca2+-mobilizing activity. Lee HC, et al. **J Biol Chem** 1989 Jan 25;264(3):1608-15

The nicotinamide adenine dinucleotide-binding site of chicken liver xanthine dehydrogenase. Evidence for alteration of the redox potential of the flavin by NAD binding or modification of the NAD-binding site and isolation of a modified peptide. Nishino T, et al. **J Biol Chem** 1989 Apr 5;264(10):5468-73

Histidine 21 is at the NAD+ binding site of diphtheria toxin. Papini E, et al. **J Biol Chem** 1989 Jul 25;264(21):12385-8

Widespread occurrence in animal tissues of an enzyme catalyzing the conversion of NAD+ into a cyclic metabolite with intracellular Ca2+-mobilizing activity. Rusinko N, et al. **J Biol Chem** 1989 Jul 15;264(20):11725-31

Differences in environment of FAD between NAD-dependent and O2-dependent types of rat liver xanthine dehydrogenase shown by active site probe study. Saito T, et al. **J Biol Chem** 1989 Sep 25;264(27):15930-5

Differences in redox and kinetic properties between NAD-dependent and O2-dependent types of rat liver xanthine dehydrogenase. Saito T, et al. **J Biol Chem** 1989 Jun 15;264(17):10015-22

Redox studies of the epiphyseal growth cartilage: pyridine nucleotide metabolism and the development of mineralization. Kakuta S, et al. **J Bone Miner Res** 1986 Oct;1(5):433-40

Differential effects of hyperoxia and hydrogen peroxide on DNA damage, polyadenosine diphosphate-ribose polymerase activity, and nicotinamide adenine dinucleotide and adenosine triphosphate contents in cultured endothelial cells and fibroblasts. Junod AF, et al. **J Cell Physiol** 1989 Jul;140(1):177-85

Cytosolic free calcium, NAD/NADH redox state and hemodynamic changes in the cat cortex during severe hypoglycemia. Uematsu D, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):149-55

Utilization and metabolism of NAD by Haemophilus parainfluenzae. Cynamon MH, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2789-99

Purification and properties of NAD-dependent glutamate dehydrogenase from Phycomyces spores. Van Laere AJ. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1597-601

Alterations of NAD and adenylyl dinucleotide metabolism in Chediak-Higashi syndrome fibroblasts. Baker JC, et al. **J Inherited Metab Dis** 1988;11(3):221-8

Ferriprotoporphyrin IX mediated oxygen activation/insertion reactions: the anerobic reduction of the aniline-Fe3+-microperoxidase-8 complex by NADH. Adams PA, et al. **J Inorg Biochem** 1988 Nov;34(3):177-87

Indo-1 measurements of intracellular free calcium in the hippocampal slice: complications of labile NADH fluorescence. Sick TJ, et al. **J Neurosci Methods** 1989 May; 28(1-2):125-32

DNA strand break accumulation, thymidylate synthesis and NAD levels in lymphocytes from methyl donor-deficient rats. James SJ, et al. **J Nutr** 1989 Apr;119(4):661-4

The effect of halothane on mitochondrial permeability to NADH. Nahrwold ML, et al. **Life Sci** 1974 Oct 1; 15(7):1261-5

Nicotinamide adenosine dinucleotide level in dimethylsulfate-treated or UV-irradiated mouse epidermis. Balard B, et al. **Mutat Res** 1989 Jan;219(1):71-9

Effects of lethal exposure to hyperoxia and to hydrogen peroxide on NAD(H) and ATP pools in Chinese hamster ovary cells. Gille JJ, et al. **Mutat Res** 1989 Sep;214(1):89-96

An oil-well method for time-resolved microfluorescence assays. Rüegg JC, et al. **Pflugers Arch** 1989 Sep; 414(5):597-9

Phosphorescence maxima and triplet state lifetimes of NAD+ and epsilon-NAD+ in ternary complexes with horse liver alcohol dehydrogenase. Rousslang K, et al. **Photochem Photobiol** 1989 Feb;49(2):137-43

Reexamination of the kinetics of the transfer of NADH between its complexes with glycerol-3-phosphate dehydrogenase and with lactate dehydrogenase. Chock PB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8870-4

Import of cytochrome c into mitochondria: reduction of heme, mediated by NADH and flavin nucleotides, is obligatory for its covalent linkage to apocytochrome c. Nicholson DW, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4340-4

Direct transfer of NADH between alpha-glycerol phosphate dehydrogenase and lactate dehydrogenase: fact or misinterpretation? Srivastava DK, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6464-8

Evidence for several fold more activity of NAD+-dependent uterine prostaglandin 15-hydroxydehydrogenase in transsexual than in non-transsexual women. Roy AC, et al. **Prostaglandins** 1989 Feb;37(2):171-80

Reactions of the intracellular NADpool in the yeast S. cerevisiae after UV-C- or X-ray irradiation. Winckler K, et al. **Radiat Environ Biophys** 1988;27(4):287-93

Pyridine nucleotide fluorometry in preserved porcine liver with fluorocarbon emulsion. Ozaki N, et al. **Transplantation** 1989 Aug;48(2):198-201

[Noninvasive metabolic analysis of cultured corneas] Tsubota K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1321-6 (Eng. Abstr.) **(Jpn)**

[Hysteresis behavior of complex I in delta mu H+-dependent reduction of NAD+ succinate] Kotliar AB, et al. **Biokhimiia** 1989 Jan;54(1):9-16 (Eng. Abstr.) **(Rus)**

[NAD participation in protecting DNA from damaging factors] Muliavko NA, et al. **Biokhimiia** 1989 Jan; 54(1):140-4 (Eng. Abstr.) **(Rus)**

[5-Alkyl(C19-C25) resorcinols as regulators of succinate and NAD-dependent substrate oxidation by mitochondria] Nenashev VA, et al. **Biokhimiia** 1989 May;54(5):784-7 (Eng. Abstr.) **(Rus)**

[Structural organization of a hexamer of glutamate dehydrogenase. 3. Effect of the coenzyme and substrate on the urea-induced dissociation and inactivation of the hexamer] Karabashian LV, et al. **Bioorg Khim** 1989 Jan; 15(1):32-9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

NAD-linked, GSH- and factor-independent aldehyde dehydrogenase of the methylotrophic bacterium, Hyphomicrobium X. Poels PA, et al. **Arch Biochem Biophys** 1989 May 15;271(1):240-5

NADH-sensitive propionyl-CoA hydrolase in brown-adipose-tissue mitochondria of the rat. Alexson SE, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):13-9

Characterization of NAD-dependent 3 alpha- and 3 beta-hydroxysteroid dehydrogenase and of NADP-dependent 7 beta-hydroxysteroid dehydrogenase from Peptostreptococcus productus. Edenharder R, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):230-8

Effects of pyridine nucleotides on the gating of ATP-sensitive potassium channels in insulin-secreting cells. Dunne MJ, et al. **J Membr Biol** 1988 Jun; 102(3):205-16

The effect of NADH on different human and mouse cell lines. Lohmann W, et al. **Naturwissenschaften** 1989 Feb; 76(2):72-4

[Effect of nucleotide aggregants and anti-aggregants on the coagulation potential of blood plasma] Chumakov VN, et al. **Gematol Transfuziol** 1989 Feb;34(2):30-4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

NAD+ depletion and cytotoxicity in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3967-74

RADIATION EFFECTS

Adriamycin-catalyzed aerobic photooxidation of NAD dimers to NAD+. Carelli V, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):25-9

Photosensitization by antitumor agents--7. Correlation between anthracenedione-photosensitized DNA damage, NADH oxidation and oxygen consumption following visible light illumination. Hartley JA, et al. **Photochem Photobiol** 1988 Jul;48(1):19-25

THERAPEUTIC USE

Nicotinamidadenindinucleotide (NADH): the new approach in the therapy of Parkinson's disease. Birkmayer W, et al. **Ann Clin Lab Sci** 1989 Jan-Feb;19(1):38-43

NAD+ ADP-RIBOSYLTRANSFERASE see **POLY ADP RIBOSE POLYMERASE**

NAD-ARGININE ADP-RIBOSYLTRANSFERASE

ANTAGONISTS & INHIBITORS

Benzamides can stimulate as well as inhibit the activity of nuclear ADP-ribosyltransferase. Jones J, et al. **Carcinogenesis** 1988 Nov;9(11):2023-6

Quantitative studies of inhibitors of ADP-ribosylation in vitro and in vivo. Rankin PW, et al. **J Biol Chem** 1989 Mar 15;264(8):4312-7

GENETICS

Analysis of the diphtheria tox promoter by site-directed mutagenesis. Boyd J, et al. **J Bacteriol** 1988 Dec; 170(12):5949-52

IMMUNOLOGY

Immuno-crossreactivity between botulinum neurotoxin type C1 or D and exoenzyme C3. Toratani S, et al. **FEBS Lett** 1989 Jul 31;252(1-2):83-7

ISOLATION & PURIFICATION

Purification and properties of dinitrogenase reductase ADP-ribosyltransferase from the photosynthetic bacterium Rhodospirillum rubrum. Lowery RG, et al. **J Biol Chem** 1988 Nov 15;263(32):16714-9

METABOLISM

Demonstration and partial characterization of ADP-ribosylation in Pseudomonas maltophilia. Edmonds C, et al. **Biochem J** 1989 Jul 1;261(1):113-8

The mammalian G protein rhoC is ADP-ribosylated by Clostridium botulinum exoenzyme C3 and affects actin microfilaments in Vero cells. Chardin P, et al. **EMBO J** 1989 Apr;8(4):1087-92

Purification of the 22 kDa protein substrate of botulinum ADP-ribosyltransferase C3 from porcine brain cytosol and its characterization as a GTP-binding protein highly homologous to the rho gene product. Braun U, et al. **FEBS Lett** 1989 Jan 16;243(1):70-6

Production by Clostridium spiroforme of an iotalike toxin that possesses mono(ADP-riboayl)transferase activity: identification of a novel class of ADP-ribosyltransferases. Simpson LL, et al. **Infect Immun** 1989 Jan;57(1):255-61

ADP-ribosylation of 24-26-kDa GTP-binding proteins localized in neuronal and non-neuronal cells by botulinum neurotoxin D. Matsuoka I, et al. **J Biol Chem** 1989 Jan 15;264(2):706-12

Assay and purification of cytosolic factor required for cholera toxin activity. Woolkalis M, et al. **Methods Enzymol** 1988;165:246-9

NAD DIAPHORASE see **LIPOAMIDE**

DEHYDROGENASE

NAD NUCLEOSIDASE

ANALYSIS

High-performance liquid chromatography determination of enzyme activities in the presence of small amounts of product. Pace M, et al. **Anal Biochem** 1989 Feb 1; 176(2):437-9

ANTAGONISTS & INHIBITORS

Quantitative studies of inhibitors of ADP-ribosylation in vitro and in vivo. Rankin PW, et al. **J Biol Chem** 1989 Mar 15;264(8):4312-7

BIOSYNTHESIS

The occurrence of nicotinamide adenine dinucleotide glycohydrolase and the serum opacity reaction in groups B, C, F and G streptococci. Reitmeyer JC, et al. **Microbios** 1989;58(236-237):183-7

ISOLATION & PURIFICATION

Properties of native calf spleen NAD+ glycohydrolase immobilized by hydrophobic interaction. Muller HM, et al. **Biochem Int** 1988 Nov;17(5):953-63

Properties of NAD glycohydrolase purified from five-pace snake (Agkistrodon acutus) venom. Huang WZ, et al. **Toxicon** 1988;26(6):535-42

METABOLISM

NAD glycohydrolase activity in dog cardiac tissue. Calva E, et al. **Comp Biochem Physiol [B]** 1978;61(1):173-9

A stopped-flow mixer device for a batch microcalorimeter application to NAD-NADase reaction. Berger RL, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):113-24

NAD(P)H DEHYDROGENASES(QUINONE) see **QUINONE REDUCTASES**

NAD-PROTEIN ADP-RIBOSYLTRANSFERASE see **NAD-ARGININE ADP-RIBOSYLTRANSFERASE**

NADASE see **NAD NUCLEOSIDASE**

NADH DEHYDROGENASE see under **CYTOCHROME REDUCTASES**

NADH DIAPHORASE see **LIPOAMIDE DEHYDROGENASE**

NADH, NADPH OXIDOREDUCTASES

Selective sparing of NADPH-diaphorase neurons in neonatal hypoxia-ischemia. Ferriero DM, et al. **Ann Neurol** 1988 Nov;24(5):670-6

Crystallization and preliminary x-ray characterization of thioredoxin reductase from Escherichia coli. Kuriyan J, et al. **J Biol Chem** 1989 Aug 5;264(22):12752-3

ANALYSIS

A spectrophotometric assay for dissimilatory nitrite reductases. Hulse CL, et al. **Anal Biochem** 1988 Aug 1; 172(2):420-6

Thermostable reduced nicotinamide adenine dinucleotide oxidase: application to amperometric enzyme assay. McNeil CJ, et al. **Anal Chem** 1989 Jan 1;61(1):25-9

High-level expression of human dihydropteridine reductase (EC 1.6.99.7), without N-terminal amino acid protection, in Escherichia coli. Armarego WL, et al. **Biochem J** 1989 Jul 1;261(1):265-8

C-PON containing neurons in the rat striatum are also positive for NADPH-diaphorase activity. A light microscopic study. Villalba RM, et al. **Brain Res** 1988 Oct 18;462(2):359-62

Quantification of P450scc, P450(17) alpha, and iron sulfur protein reductase in Leydig cells and adrenals of inbred strains of mice. Perkins LM, et al. **Endocrinology** 1988 Dec; 123(6):2675-82

Ultrastructural demonstration of thioredoxin and thioredoxin reductase in rat hepatocytes. Rozell B, et al. **Eur J Cell Biol** 1988 Aug;46(3):470-7

Dual granule localization of the dormant NADPH oxidase and cytochrome b559 in human neutrophils. Bjerrum OW, et al. **Eur J Haematol** 1989 Jul;43(1):67-77

Fibre types in Limulus telson muscles: morphology and histochemistry. Levine RJ, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):53-66

Cytochemical localization of plasma membrane enzyme markers during interiorization of tachyzoites of Toxoplasma gondii by macrophages. de Carvalho L, et al. **J Protozool** 1989 Mar-Apr;36(2):164-70

Distinct patterns of distribution among NADPH-diaphorase neurones of the guinea pig retina. Cobcroft M, et al. **Neurosci Lett** 1989 Aug 14;103(1):1-7

ANTAGONISTS & INHIBITORS

The stereospecific suicide inhibition of human melanoma thioredoxin reductase by 13-cis-retinoic acid. Schallreuter KU, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):573-9

Studies on the anti-inflammatory activity of ebselen. Ebselen interferes with granulocyte oxidative burst by dual inhibition of NADPH oxidase and protein kinase C? Cotgreave IA, et al. **Biochem Pharmacol** 1989 Feb 15; 38(4):649-56

Inhibition of NADPH oxidase by aminoacyl chloromethane protease inhibitors in phorbol-ester-stimulated human neutrophils: a reinvestigation. Are proteases really involved in the activation process? Conseiller EC, et al. **Eur J Biochem** 1989 Jul 15;183(1):107-14

Inhibition of human neutrophil NADPH oxidase by Chlamydia serovars E, K, and L2. Tauber AI, et al. **Infect Immun** 1989 Apr;57(4):1108-12

Simple method for the determination of rhein in biological fluids by high-performance liquid chromatography. Springolo V, et al. **J Chromatogr** 1988 Jun 24;428(1):173-7

Quantitative structure-activity relationship study on some dihydropteridine reductase inhibitors. Babbar R, et al. **J Enzym Inhib** 1989;2(4):231-7

Rat striatal synaptosomes as a model system for studying the inhibition of dihydropteridine reductase activity. Shen RS, et al. **J Enzym Inhib** 1987;1(3):223-9

Inhibition of dihydropteridine reductase in rat striatal synaptosomes and from human liver by metabolites of biogenic amines. Shen RS. **J Enzym Inhib** 1985;1(1):61-6

Excretion and distribution of [14C]rhein and [14C]rhein anthrone in rat. De Witte P, et al. **J Pharm Pharmacol** 1988 Sep;40(9):652-5

Disturbance of cerebral function by aluminium in haemodialysis patients [letter] **Lancet** 1989 Aug 26; 2(8661):501-2

Trypanothione is the primary target for arsenical drugs against African trypanosomes. Fairlamb AH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2607-11

BIOSYNTHESIS

Expression of denitrification enzymes in response to the dissolved oxygen level and respiratory substrate in continuous culture of Pseudomonas stutzeri. Körner H, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1670-6

Expression of Trypanosoma congolense trypanothione reductase in Escherichia coli: overproduction, purification, and characterization. Sullivan FX, et al. **Biochemistry** 1989 Jun 13;28(12):4986-92

BLOOD

Flow cytometric analysis of oxidase activity of neutrophils from chronic granulomatous disease patients. Hassan NF, et al. **Adv Exp Med Biol** 1988;239:73-8

The respiratory burst oxidase. Babior BM. **Basic Life Sci** 1988;49:815-21 (37 ref.)

Diferric transferrin reductase in Plasmodium falciparum-infected erythrocytes. Fry M. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):469-73

Enhanced activation of the respiratory burst oxidase in neutrophils from hypertensive patients. Pontremoli S, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):966-72

Superoxide generation by the electrogenic NADPH oxidase of human neutrophils is limited by the movement of a compensating charge. Henderson LM, et al. **Biochem J** 1988 Oct 1;255(1):285-90

Role of cytochrome b-559 in arachidonic acid activation of resting human neutrophils. Amit N, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):437-43

Difference in hydrogen peroxide release between human neutrophils and neutrophil cytoplasts following calcium ionophore activation. A role of the subcellular granule in activation of the NADPH-oxidase in human neutrophils? Dahlgren C, et al. **Biochim Biophys Acta** 1989 Jan 17; 1010(1):41-8

The 47-kDa protein involved in the NADPH:O2 oxidoreductase activity of human neutrophils is phosphorylated by cyclic AMP-dependent protein kinase without induction of a respiratory burst. Kramer IM, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):189-96

Metabolism of stimulated polymorphonuclear leukocytes. Takeshige K, et al. **Biomed Biochim Acta** 1989; 48(2-3):S25-30

Captopril--a potential free radical scavenger: inhibition of PMN NADPH oxidase. Egan TM, et al. **Clin Invest Med** 1988 Oct;11(5):351-6

DHPR activity decrease in dried blood spots stored at 4 degrees C. Lenzi G, et al. **Enzyme** 1989;41(1):43-6

Purine and pyrimidine nucleotides potentiate activation of NADPH oxidase and degranulation by chemotactic peptides and induce aggregation of human neutrophils via G proteins. Seifert R, et al. **Eur J Biochem** 1989 Apr 15; 181(1):277-85

Leukotriene B4 metabolism in neutrophils of patients with chronic granulomatous disease: phorbol myristate acetate decreases endogenous leukotriene B4 via NADPH oxidase-dependent mechanism. Hamasaki T, et al. **Eur J Clin Invest** 1989 Aug;19(4):404-11

GTP-dependent and -independent activation of superoxide producing NADPH oxidase in a neutrophil cell-free system. Ishida K, et al. **FEBS Lett** 1989 Jan 30; 243(2):169-72

Studies on the nature and activation of O2- -forming NADPH oxidase of leukocytes. II. Relationships between phosphorylation of a component of the enzyme and oxidase activity. Bellavite P, et al. **Free Radic Res Commun** 1987; 4(2):83-98

Subcellular localization and dynamics of components of the respiratory burst oxidase. Borregaard N. **J Bioenerg Biomembr** 1988 Dec;20(6):637-51 (80 ref.)

Activation of the respiratory burst oxidase in neutrophils: on the role of membrane-derived second messengers, Ca++, and protein kinase C. Lambeth JD. **J Bioenerg Biomembr** 1988 Dec;20(6):709-33 (173 ref.)

Studies on the NADPH oxidase of phagocytes. Production of a monoclonal antibody which blocks the enzymatic activity of pig neutrophil NADPH oxidase. Berton G, et al. **J Biol Chem** 1989 Apr 5;264(10):5564-8

Affinity labeling of the cytosolic and membrane components of the respiratory burst oxidase by the 2',3'-dialdehyde derivative of NADPH. Evidence for a cytosolic location of the nucleotide-binding site in the resting cell. Smith RM, et al. **J Biol Chem** 1989 Feb 5;264(4):1958-62

Use of an affinity label to probe the function of the NADPH binding component of the respiratory burst oxidase of human neutrophils. Smith RM, et al. **J Biol Chem** 1989 Jul 25;264(21):12243-8

A phosphoprotein of Mr 47,000, defective in autosomal chronic granulomatous disease, copurifies with one of two soluble components required for NADPH:O2 oxidoreductase activity in human neutrophils. Bolscher BG, et al. **J Clin Invest** 1989 Mar;83(3):757-63

Cytosolic components of the respiratory burst oxidase: resolution of four components, two of which are missing in complementing types of chronic granulomatous disease. Curnutte JT, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):825-9

DEFICIENCY

Genetic variants of chronic granulomatous disease: prevalence of deficiencies of two cytosolic components of the NADPH oxidase system. Clark RA, et al. **N Engl J Med** 1989 Sep 7;321(10):647-52

Progressive intracranial calcification in dihydropteridine reductase deficiency prior to folinic acid therapy. Woody RC, et al. **Neurology** 1989 May;39(5):673-5

Basal ganglion calcification in hyperphenylalaninemia due to deficiency of dihydropteridine reductase. Schmidt H, et al. **Pediatr Radiol** 1988;19(1):54-6

Two cytosolic neutrophil oxidase components absent in autosomal chronic granulomatous disease. Volpp BD, et al. **Science** 1988 Dec 2;242(4883):1295-7

Congenital methemoglobinemia due to NADH-methemoglobin reductase deficiency: report of a case. Cheng NJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):823-7

[A case of mitochondrial enzymopathy] Parafiniuk W, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):260-3 (Eng. Abstr.) (Pol)

GENETICS

Amino acid sequence of the signal peptide of mitochondrial nicotinamide nucleotide transhydrogenase as determined from the sequence of its messenger RNA. Yamaguchi M, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):24-9

Nucleotide sequence of the gene encoding the GMP reductase of Escherichia coli K12. Andrews SC, et al. **Biochem J** 1988 Oct 1;255(1):35-43

Trypanothione reductase of Trypanosoma congolense: gene isolation, primary sequence determination, and comparison to glutathione reductase. Shames SL, et al. **Biochemistry** 1988 Jul 12;27(14):5014-9

The human mRNA that provides the N-terminus of chimeric G6PD encodes GMP reductase. Henikoff S, et al. **Cell** 1989 Sep 22;58(6):1021-2

cDNA sequence of adrenodoxin reductase. Identification of NADP-binding sites in oxidoreductases. Hanukoglu I, et al. **Eur J Biochem** 1989 Mar 15;180(2):479-84

Nitrite reductase from Pseudomonas aeruginosa: sequence of the gene and the protein. Silvestrini MC, et al. **FEBS Lett** 1989 Aug 28;254(1-2):33-8

Analysis of the transcriptional unit encoding the genes for rubredoxin (rub) and a putative rubredoxin oxidoreductase (rbo) in Desulfovibrio vulgaris Hildenborough. Brumlik MJ, et al. **J Bacteriol** 1989 Sep;171(9):4996-5004

The nirB promoter of Escherichia coli: location of nucleotide sequences essential for regulation by oxygen, the FNR protein and nitrite. Jayaraman PS, et al. **Mol Microbiol** 1988 Jul;2(4):527-30

Mutational analysis of the nucleotide sequence at the FNR-dependent nirB promoter in Escherichia coli. Jayaraman PS, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):135-45

Human adrenodoxin reductase: two mRNAs encoded by a single gene on chromosome 17cen----q25 are expressed in steroidogenic tissues. Solish SB, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7104-8

Cloning of the cDNA and functional expression of the 47-kilodalton cytosolic component of human neutrophil respiratory burst oxidase. Volpp BD, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7195-9

HISTORY

Energy-linked nicotinamide nucleotide transhydrogenase

1963–1988: a commentary on 'Equilibrium Studies of the Energy-Dependent and Non-Energy-Dependent Pyridine Nucleotide Transhydrogenase Reactions'. Lee CP, et al. **Biochim Biophys Acta** 1989;1000:371–6

Equilibrium studies of the energy-dependent and non-energy-dependent pyridine nucleotide transhydrogenase reactions. 1964 [classical article] Lee CP, et al. **Biochim Biophys Acta** 1989;1000:377–80

IMMUNOLOGY

Antibodies against alcohol dehydrogenase and lactate dehydrogenase inhibit the activities of other unrelated NADH-requiring dehydrogenases. Srivastava A, et al. **Biochem Int** 1988 Oct;17(4):611–5

Antigenic similarities between ferredoxin-dependent nitrite reductase and glutamate synthase from Chlamydomonas reinhardtii. Romero LC, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):152–7

ISOLATION & PURIFICATION

An NADP/thioredoxin system in leaves: purification and characterization of NADP-thioredoxin reductase and thioredoxin h from spinach. Florencio FJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):496–507

Liver microsomes contain two distinct NADPH-Monooxygenases with NH2-terminal segments homologous to the flavin containing NADPH-monooxygenase of Pseudomonas fluorescens. Ozols J. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):49–55

The activity and purification of membrane-associated thioredoxin reductase from human metastatic melanotic melanoma. Schallreuter KU, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):103–9

Solubilization of the NADPH-oxidase from bone marrow derived macrophages by dialkylphospholipid and purification by HPLC-anion exchange chromatography. Storch J, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):403–6

Purification and catalytic properties of a cross-linked complex between adrenodoxin reductase and adrenodoxin. Hara T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):594–600

Spinach ferredoxin-nitrite reductase: characterization of catalytic activity and interaction of the enzyme with substrates. Mikami B, et al. **J Biochem (Tokyo)** 1989 Jan; 105(1):47–50

Isolation of the respiratory burst oxidase: the role of a flavoprotein component. Parkinson JF, et al. **J Bioenerg Biomembr** 1988 Dec;20(6):653–77 (68 ref.)

N5-(L-1-carboxyethyl)-L-ornithine:NADP+ oxidoreductase from Streptococcus lactis. Purification and partial characterization. Thompson J. **J Biol Chem** 1989 Jun 5;264(16):9592–601

METABOLISM

Thioredoxin and thioredoxin reductase show function-related changes in the gastric mucosa: immunohistochemical evidence. Hansson HA, et al. **Acta Physiol Scand** 1988 Mar;132(3):313–20

The enzymatic reduction of actinomycin D to a free radical species. Flitter WD, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):632–9

The reduction of putidaredoxin reductase by reduced pyridine nucleotides. Roome PW, et al. **Arch Biochem Biophys** 1988 Oct;266(1):32–40

The oxidation of reduced putidaredoxin reductase by oxidized putidaredoxin. Roome PW, et al. **Arch Biochem Biophys** 1988 Oct;266(1):41–50

Regulation of thioredoxin reductase by calcium in Hermansky-Pudlak syndrome. Schallreuter KU, et al. **Arch Dermatol Res** 1989;281(1):40–4

Opioids stimulate sarcolemmal NAD(P)H-vanadate dehydrogenase activity. Ventura C, et al. **Basic Res Cardiol** 1988 Jul–Aug;83(4):376–83

Inositol lipids and phosphatidic acid inhibit cell-free activation of neutrophil NADPH oxidase. Aviram I, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):712–9

Parameters of activation of the membrane-bound O2--generating oxidase from bovine neutrophils in a cell-free system. Pilloud MC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):783–90

A micellar model for investigating the chemical nature of hydrogen transfer in NAD(P)H-dependent enzymatic reactions. Rao UM. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1330–6

EF-hands calcium binding regulates the thioredoxin reductase/thioredoxin electron transfer in human keratinocytes. Schallreuter KU, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1311–6

Differential expression of cytosolic activation factors for NADPH oxidase in HL-60 leukemic cells. Seifert R, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1109–17

Activation of human neutrophil NADPH-oxidase in vitro by the catalytic fragment of protein kinase-C. Tauber AI, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):884–90

Rate enhancement of the electron transfer the adrenodoxin-adrenodoxin reductase system by dicarboxylic acids. Yamano T, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):168–74

Kinetics of cell-free activation of neutrophil NADPH oxidase. Effects of neomycin and guanine nucleotides. Aviram I, et al. **Biochem J** 1989 Jul 15;261(2):477–82

Localization of the 47 kDa phosphoprotein involved in the respiratory-burst NADPH oxidase of phagocytic cells. Heyworth PG, et al. **Biochem J** 1989 May 15;260(1):243–8

Activation of NADPH oxidase by purine and pyrimidine nucleotides involves G proteins and is potentiated by chemotactic peptides. Seifert R, et al. **Biochem J** 1989 May 1;259(3):813–9

The mobilization of ferritin iron by liver cytosol. A comparison of xanthine and NADH as reducing substrates. Topham R, et al. **Biochem J** 1989 Jul 1;261(1):137–43

Dihydropteridine reductase from Escherichia coli. Vasudevan SG, et al. **Biochem J** 1988 Oct 15;255(2):581–8

Human liver microsomal cytochrome P-450IIE1. Immunological evaluation of its contribution to microsomal ethanol oxidation, carbon tetrachloride reduction and NADPH oxidase activity. Ekström G, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):689–93

Conformational features of bovine heart mitochondrial transhydrogenase. Modrak DE, et al. **Biochemistry** 1988 Oct 4;27(20):7665–71

Mitochondrial nicotinamide nucleotide transhydrogenase: NADPH binding increases and NADP binding decreases the acidity and susceptibility to modification of cysteine-893. Yamaguchi M, et al. **Biochemistry** 1989 Jul 11;28(14):6050–6

Characterization of an 8-hydroxy-5-deazaflavin:NADPH oxidoreductase from Streptomyces griseus. Eker AP, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):80–6

Calcium regulates thioredoxin reductase in human metastatic melanoma. Schallreuter KU, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):242–7

Respiratory burst oxidase activation can be dissociated from phosphatidylinositol bisphosphate degradation in a cell-free system from human neutrophils. Traynor AE, et al. **Blood** 1989 Jan;73(1):296–300

NADPH diaphorase staining within the developing olfactory bulbs of normal and unilaterally odor-deprived rats. Croul-Ottman CE, et al. **Brain Res** 1988 Sep 20; 460(2):323–8

GABA-like immunoreactivity in NADPH-diaphorase amacrine cells of the rabbit retina. Vaney DI, et al. **Brain Res** 1988 Dec 6;474(2):380–5

Two nuclearly inherited loci conferring increased diuron resistance to NADH oxidase in Saccharomyces cerevisiae. Meunier B, et al. **Curr Genet** 1989 Jan;15(1):31–8

The energy-conserving nitric-oxide-reductase system in Paracoccus denitrificans. Distinction from the nitrite reductase that catalyses synthesis of nitric oxide and evidence from trapping experiments for nitric oxide as a free intermediate during denitrification. Carr GJ, et al. **Eur J Biochem** 1989 Feb 15;179(3):683–92

The coupling between protonmotive force and the NAD(P)+ transhydrogenase in chromatophores from photosynthetic bacteria. Cotton NP, et al. **Eur J Biochem** 1989 Jul 1;182(3):593–603

Trypanothione reductase from Trypanosoma cruzi. Catalytic properties of the enzyme and inhibition studies with trypanocidal compounds. Jockers-Scherübl MC, et al. **Eur J Biochem** 1989 Mar 15;180(2):267–72

Preparation and properties of a cross-linked complex between ferredoxin—NADP+ reductase and flavodoxin. Pueyo JJ, et al. **Eur J Biochem** 1989 Aug 15;183(3):539–44

Changes in the distribution of insulin-like growth factor I, thioredoxin, thioredoxin reductase and ribonucleotide reductase during the development of the retina. Hansson HA, et al. **Exp Eye Res** 1989 Mar;48(3):411–20

Studies on the nature and activation of O2(-)-forming NADPH oxidase of leukocytes. Identification of a phosphorylated component of the active enzyme. Bellavite P, et al. **Free Radic Res Commun** 1985;1(1):11–29

On the role of oxygen in dehydrogenase reactions using tetrazolium salts. Van Noorden CJ. **Histochem J** 1988 Oct; 20(10):587–93

Role of menaquinone in inactivation and activation of the Bacillus cereus forespore respiratory system. Escamilla JE, et al. **J Bacteriol** 1988 Dec;170(12):5908–12

Active complex between adrenodoxin reductase and adrenodoxin in the cytochrome P-450scc reduction reaction. Hara T, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):601–5

Effect of 2',3'-dialdehyde NADPH on activation of superoxide-producing NADPH oxidase in a cell-free system of pig neutrophils. Takasugi S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):155–7

Dynamics of the respiratory burst oxidase. **J Bioenerg Biomembr** 1988 Dec;20(6):633–757

Activation of the neutrophil respiratory burst by chemoattractants: regulation of the N-formyl peptide receptor in the plasma membrane. Jesaitis AJ, et al. **J Bioenerg Biomembr** 1988 Dec;20(6):679–707 (151 ref.)

Introduction: respiratory burst oxidase and its regulation. Lambeth JD. **J Bioenerg Biomembr** 1988 Dec;20(6):633–5

Resonance Raman spectra of the copper-sulfur chromophores in Achromobacter cycloclastes nitrite reductase. Dooley DM, et al. **J Biol Chem** 1988 Oct 15; 263(29):14625–8

Correlation of kinetic parameters of nitroreductase enzymes with redox properties of nitroaromatic compounds. Orna MV, et al. **J Biol Chem** 1989 Jul 25;264(21):12379–84

Cross-linking of the high affinity Fc receptor for human immunoglobulin G1 triggers transient activation of NADPH oxidase activity. Continuous oxidase activation requires continuous de novo receptor cross-linking. Pfefferkorn LC, et al. **J Biol Chem** 1989 Aug 25; 264(24):14112–20

Characterization of two active site mutations of thioredoxin reductase from Escherichia coli [published erratum appears in J Biol Chem 1989 Jul 15;264(20):12113] Prongay AJ, et al. **J Biol Chem** 1989 Feb 15;264(5):2656–64

Activation of the superoxide forming NADPH oxidase in a cell-free system by sodium dodecyl sulfate. Absolute lipid dependence of the solubilized enzyme. Shpungin S, et al. **J Biol Chem** 1989 Jun 5;264(16):9195–203

Thioredoxin reductase-dependent insulin disulfide reduction by phage T7 DNA polymerase reflects dissociation of the enzyme into subunits. Slaby I, et al. **J Biol Chem** 1989 Oct 5;264(28):16502–6

The function of gamma-glutamylcysteine and bis-gamma-glutamylcystine reductase in Halobacterium halobium. Sundquist AR, et al. **J Biol Chem** 1989 Jan 15; 264(2):719–25

Tumor necrosis factor and immune interferon synergistically induce cytochrome b-245 heavy-chain gene expression and nicotinamide-adenine dinucleotide phosphate hydrogenase oxidase in human leukemic myeloid cells. Cassatella MA, et al. **J Clin Invest** 1989 May;83(5):1570–9

Functional defect in neutrophil cytosols from two patients with autosomal recessive cytochrome-positive chronic granulomatous disease. Curnutte JT, et al. **J Clin Invest** 1989 Apr;83(4):1236–40

Distribution of reduced-nicotinamide-adenine-dinucleotide-phosphate diaphorase-positive cells and fibers in the cat central nervous system. Mizukawa K, et al. **J Comp Neurol** 1989 Jan 8;279(2):281–311

Localization of immunoreactive GABA and enkephalin and NADPH-diaphorase-positive neurons in fetal striatal grafts in the quinolinic-acid-lesioned rat neostriatum. Roberts RC, et al. **J Comp Neurol** 1988 Aug 15;274(3):406–21

Nitrosamine formation by denitrifying and non-denitrifying bacteria: implication of nitrite reductase and nitrate reductase in nitrosation catalysis. Calmels S, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):221–6

Histochemical characterization of neuronal NADPH-diaphorase. Hope BT, et al. **J Histochem Cytochem** 1989 May;37(5):653–61

Mitochondrial hydrogen peroxide generation by NADH-oxidase activity following regional myocardial ischemia in the dog. Vandeplassche G, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):383–92

Developmental changes in the intra-acinar distribution of succinate dehydrogenase, glutamate dehydrogenase, glucose-6-phosphatase, and NADPH dehydrogenase in the rat liver. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):522–7

Ascorbate free radical reductase and ascorbate redox cycle in the human lens. Bando M, et al. **Jpn J Ophthalmol** 1988; 32(2):176–86

Disturbance of cerebral function by aluminium in haemodialysis patients without overt aluminium toxicity. Altmann P, et al. **Lancet** 1989 Jul 1;2(8653):7–12

Immunohistochemical demonstration of adrenodoxin reductase in bovine and human adrenals. Sasano H, et al. **Pathol Res Pract** 1989 May;184(5):473–9

Respiratory burst oxidase of fertilization. Heinecke JW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1259–63

Recombinant 47-kilodalton cytosol factor restores NADPH oxidase in chronic granulomatous disease. Lomax KJ, et al. **Science** 1989 Jul 28;245(4916):409–12

[NADPH oxidase--O2- -generating system in phagocytes] Tanaka T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2756–62 **(Jpn)**

[Methemoglobin reducing systems] Yubisui T, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):854–65 (36 ref.) **(Jpn)**

[Effect of kerosine hydrocarbons and phenobarbital on components of the microsomal electron transport chain in the rat liver] Starek A, et al. **Folia Med Cracov** 1988; 29(1-2):49–57 (Eng. Abstr.) **(Pol)**

[Mechanism of electron transport in the cholesterol-hydroxylating system of adrenal cortex mitochondria: a triple complex of adrenodoxin reductase, adrenodoxin and cytochrome P-450] Turko IV, et al. **Biokhimiia** 1988 Aug;53(8):1352–6 (Eng. Abstr.) **(Rus)**

[NADPH oxidase activity in evaluating the status of newborn infants] Dluzhevskaia TS, et al. **Pediatriia** 1989;(3):44–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Ferredoxin-NADP+ oxidoreductase is the respiratory NADPH dehydrogenase of the cyanobacterium Anabaena variabilis. Scherer S, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):228–35

Physiological roles of nicotinamide nucleotide transhydrogenase. Hoek JB, et al. **Biochem J** 1988 Aug 15;254(1):1–10 (93 ref.)

Thioredoxin reductase in control of the pigmentary system. Schallreuter KU, et al. **Clin Dermatol** 1989 Apr–Jun; 7(2):92–105 (37 ref.)

Superoxide anion is the initial product in the hydrogen peroxide formation catalyzed by NADPH oxidase in

porcine thyroid plasma membrane. Nakamura Y, et al. **J Biol Chem** 1989 Mar 25;264(9):4759–61

The electron transport chain of the microbicidal oxidase of phagocytic cells and its involvement in the molecular pathology of chronic granulomatous disease. Segal AW. **J Clin Invest** 1989 Jun;83(6):1785–93 (97 ref.)

Time course of expression of neuropeptide Y, calcitonin gene-related peptide, and NADPH diaphorase activity in neurons of the developing murine bowel and the appearance of 5-hydroxytryptamine in mucosal enterochromaffin cells. Branchek TA, et al. **J Comp Neurol** 1989 Jul 8;285(2):262–73

Regulation of phagolysosome pH in bovine and human neutrophils: the role of NADPH oxidase activity and an Na+/H+ antiporter. Mayer SJ, et al. **J Leukoc Biol** 1989 Mar;45(3):239–48

[Inhibitory mechanism of active oxygen production: monodehydroascorbic acid reductase] Mano J, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2862–8 **(Jpn)**

NADH TETRAZOLIUM REDUCTASE see under **NADH, NADPH OXIDOREDUCTASES**

NADOLOL

ADVERSE EFFECTS

Prolonged bradycardia and hypotension after neostigmine administration in a patient receiving atenolol [letter] Shankar KB, et al. **Anaesthesia** 1988 Sep;43(9):797–8

Long-term effect of nadolol on quantitative liver function tests in patients with cirrhosis. Merkel C, et al. **Eur J Clin Pharmacol** 1988;34(5):501–4

Bradycardia induced by an interaction between phenelzine and beta blockers. Reggev A, et al. **Psychosomatics** 1989 Winter;30(1):106–8

ANALYSIS

Colorimetric determination of nadolol in tablets. Ozden S, et al. **Arch Pharm (Weinheim)** 1988 Sep;321(9):565–6

PHARMACOKINETICS

Penetration of nadolol into aqueous humour after a single oral dose. Tiong TH, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):92–5

Beta-blockade disappearance rate predicts beta-adrenergic hypersensitivity. Reeves RA, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):279–90

PHARMACOLOGY

Nadolol antihypertensive effect and disposition in young and elderly adults with mild to moderate essential hypertension. Mitenko PA, et al. **Clin Pharmacol Ther** 1989 Jul; 46(1):56–62

Effect of nadolol on plasma lipids in hyperthyroidism. Littley MD, et al. **Horm Metab Res** 1989 Jun;21(6):331–3

Beta-adrenergic blockers prevent short photoperiod-induced gonadal regression, but not melatonin-induced regression in male Syrian hamsters. Champney TH. **J Exp Zool** 1989 Feb;249(2):221–8

Cardiovascular and hormonal responses to DDAVP before and after beta-blockade in patients with mild essential hypertension [published erratum appears in J Hypertens Suppl 1989 May;7(5):following H62] Fallo F, et al. **J Hypertens Suppl** 1988 Dec;6(4):S675–7

Effects of calcium antagonists and beta-adrenergic receptor blocking agents on cardiovascular rhythmicity. Bellomo G, et al. **Panminerva Med** 1988 Oct–Dec;30(4):236–9

THERAPEUTIC USE

Electrophysiologic and antiarrhythmic actions of nadolol: acute ischemia in the presence of previous myocardial infarction. Patterson E, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1223–32

Comparison of the duration of action of atenolol and nadolol for treatment of angina pectoris. Kostis JB. **Am J Cardiol** 1988 Dec 1;62(17):1171–5

Effects of nadolol on arrhythmias during laparoscopy performed under general anaesthesia. Burns JM, et al. **Br J Anaesth** 1988 Sep;61(3):345–6

Nadolol in the treatment of aggressive behavior associated with schizophrenia. Ritrovato CA, et al. **Clin Pharm** 1989 Feb;8(2):132–5

"Nadolol in migrainous patients" [letter] Pascual J. **Headache** 1988 Oct;28(9):623–4

Effect of nadolol on flushing reactions in rosacea. Wilkin JK. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):202–5

A comparison of carteolol and nadolol in the treatment of stable angina pectoris. Luther RR, et al. **J Clin Pharmacol** 1988 Jul;28(7):634–9

Nadolol for prophylaxis of gastrointestinal bleeding in patients with cirrhosis. A randomized trial. Lebrec D, et al. **J Hepatol** 1988 Aug;7(1):118–25

NADP

Native gel activity stain and preparative electrophoretic method for the detection and purification of pyridine nucleotide-linked dehydrogenases. Seymour JL, et al. **Anal Biochem** 1989 May 1;178(2):243–7

Photosensitization by antitumor agents. 5. Daunorubicin-photosensitized oxidation of NAD(P)H in aqueous and N,N-dimethylformamide/aqueous solutions—an electron paramagnetic resonance study. Reszka K, et al. **Free Radic Biol Med** 1988;5(2):63–70

An ESR study of nonenzymatic reactions of nitroso compounds with biological reducing agents. Takahashi N, et al. **Free Radic Res Commun** 1988;4(6):351–8

[Isolation of highly-purified NADP(H)-dependent enzymes from the rat liver using NADP-hydrazidoadipoyl oxypropyl sepharose] Bondar' VS, et al. **Prikl Biokhim Mikrobiol** 1988 May–Jun;24(3):361–7 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Effect of 2',3'-dialdehyde NADPH on activation of superoxide-producing NADPH oxidase in a cell-free system of pig neutrophils. Takasugi S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):155–7

Use of an affinity label to probe the function of the NADPH binding component of the respiratory burst oxidase of human neutrophils. Smith RM, et al. **J Biol Chem** 1989 Jul 25;264(21):12243–8

Affinity labeling of the cytosolic and membrane components of the respiratory burst oxidase by the 2',3'-dialdehyde derivative of NADPH. Evidence for a cytosolic location of the nucleotide-binding site in the resting cell. Smith RM, et al. **J Biol Chem** 1989 Feb 5;264(4):1958–62

ANALYSIS

Analysis of pyridine dinucleotides in cultured rat hepatocytes by high-performance liquid chromatography. Litt MR, et al. **Anal Biochem** 1989 May 15;179(1):34–6

Reduced nicotinamide adenine dinucleotide phosphate (NADPH)-diaphorase-positive neurons in cat cerebral white matter. Mizukawa K, et al. **Brain Res** 1988 Oct 4; 461(2):274–81

Determination of pyridine nucleotide contents of cell monolayers by bioluminescence. Lane DA, et al. **J Biochem Biophys Methods** 1988 Oct;17(2):107–17

Morphology and distribution of nicotinamide adenine dinucleotide phosphate (reduced form) diaphorase reactive neurons in human brainstem. Kowall NW, et al. **Neuroscience** 1988 Aug;26(2):645–54

[Determination of enzyme activity in the reaction with pyridine nucleotide-dependent dehydrogenases] Cherniad'eva IF, et al. **Lab Delo** 1988;(7):64–7 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

NADPH production by the malarial parasite Plasmodium falciparum. Vander Jagt DL, et al. **Blood** 1989 Jul; 74(1):471–4

NADPH generation in Aspergillus nidulans: is the mannitol cycle involved? Singh M, et al. **J Gen Microbiol** 1988 Mar; 134 (Pt 3):643–54

BLOOD

Purine and pyridine nucleotides in rabbit red blood cells of different maturity. Werner A, et al. **Cell Biochem Funct** 1988 Oct;6(4):251–6

METABOLISM

Effect of CCK-8 on pentose phosphate shunt activity, pyridine nucleotides, and glucokinase of rat islets. Verspohl EJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E68–73

The enzymatic reduction of actinomycin D to a free radical species. Flitter WD, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):632–9

Interaction of ferric complexes with rat liver nuclei to catalyze NADH-and NADPH-Dependent production of oxygen radicals. Kukielka E, et al. **Arch Biochem Biophys** 1989 Sep;273(2):319–30

Relationships between the NAD(P) redox state, fatty acid oxidation, and inner membrane permeability in rat liver mitochondria. Lê-Quôc D, et al. **Arch Biochem Biophys** 1989 Sep;273(2):466–78

Vanadate-dependent NAD(P)H oxidation by microsomal enzymes. Reif DW, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):137–43

The reduction of putidaredoxin reductase by reduced pyridine nucleotides. Roome PW, et al. **Arch Biochem Biophys** 1988 Oct;266(1):32–40

Vanadate stimulation of pyridine nucleotide oxidation in mammalian liver microsomal membranes. Coulombe RA Jr, et al. **Basic Life Sci** 1988;49:777–80

Prevention by propionylcarnitine of NADPH and tert-butyl hydroperoxide-dependent chemiluminescence in heart microsomes. Schinetti ML, et al. **Basic Life Sci** 1988; 49:243–7

Affinity labeling of cofactor-binding region of human placental estradiol 17 beta-dehydrogenase by periodate-oxidized NADP+ (o-NADP+). Inano H, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):617–23

Structure of mouse fatty acid synthase mRNA. Identification of the two NADPH binding sites. Paulauskis JD, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):690–5

A micellar model for investigating the chemical nature of hydrogen transfer in NAD(P)H-dependent enzymatic reactions. Rao UM. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1330–6

Rat liver microsomal NADPH-supported oxidase activity and lipid peroxidation dependent on ethanol-inducible cytochrome P-450 (P-450IIE1). Ekström G, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1313–9

Lipid peroxidation as a possible cause of ochratoxin A toxicity. Rahimtula AD, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4469–77

Interconversion of NAD(H) to NADP(H). A cellular response to quinone-induced oxidative stress in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2631–7

Affinity labels and spectroscopic probes of porcine heart NADP-dependent isocitrate dehydrogenase. Colman RF. **Biochem Soc Trans** 1989 Apr;17(2):307–11

NADPH-dependent disulphide reductases. Krauth-Siegel RL, et al. **Biochem Soc Trans** 1989 Apr;17(2):315–7

N.m.r. studies of coenzyme binding to Lactobacillus casei dihydrofolate reductase. Roberts GC. **Biochem Soc Trans** 1989 Apr;17(2):297–9

Mechanism of the reaction catalyzed by dihydrofolate reductase from Escherichia coli: pH and deuterium isotope effects with NADPH as the variable substrate. Morrison JF, et al. **Biochemistry** 1988 Jul 26;27(15):5499–506

Crystallographic analysis of the binding of NADPH, NADPH fragments, and NADPH analogues to glutathione reductase. Pai EF, et al. **Biochemistry** 1988 Jun 14; 27(12):4465–74

Dihydrofolate reductase from Escherichia coli: the kinetic mechanism with NADPH and reduced acetylpyridine adenine dinucleotide phosphate as substrates. Stone SR, et al. **Biochemistry** 1988 Jul 26;27(15):5493–9

A highly stable NADP-dependent isocitrate dehydrogenase from Thermus thermophilus HB8: purification and general properties. Eguchi H, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):133–7

NAD(P)H oxidation elicits anion superoxide formation in radish plasmalemma vesicles. Vianello A, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):202–8

Phospho adenylylation and phospho ADP-ribosylation, types of covalent protein modification derived from NADP. Hilz H. **Biofactors** 1988 Jan;1(1):37–40 (17 ref.)

20 Beta-hydroxysteroid dehydrogenase of neonatal pig testis: cofactor requirement and stereospecificity of hydrogen transfer from nicotinamide adenine dinucleotide phosphate, reduced form. Nakajin S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):148–50

Time-dependent inactivation of human placental aromatase by bromoacetoxy 4-androsten-3-ones in the presence of reduced nicotinamide adenine dinucleotide phosphate (NADPH). Numazawa M, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):735–7

Counterregulation of nuclear 3,5,3'-triiodo-L-thyronine (T3) binding by oxidized and reduced-nicotinamide adenine dinucleotide phosphates in the presence of cytosolic T3-binding protein in vitro. Hashizume K, et al. **Endocrinology** 1989 Apr;124(4):1678–83

Acute stimulation of thyroidal NAD+ kinase, NADPH reoxidation, and peroxidase activities by physiological concentrations of thyroid stimulating hormone acting in vitro: a quantitative cytochemical study. Perrild H, et al. **Endocrinology** 1988 Nov;123(5):2499–505

Effects of hydrostatic pressure (HP = 101 ATA) on nucleotides and pyridine dinucleotides tissue contents in trout. Cann-Moisan C, et al. **Exp Biol** 1988;47(4):239–42

Vanadate-stimulated oxidation of NAD(P)H. Liochev SI, et al. **Free Radic Biol Med** 1989;6(6):617–22 (36 ref.)

NADPH-induced microsomal lipid peroxidation as measured by malondialdehyde production in rat liver. Inhibitory effect of naftidrofuryl. Parussini R, et al. **Free Radic Res Commun** 1986;2(1-2):93–100

An unusual NAD(P)H-dependent O2-.-enerating redox system in hepatoma 22a nuclei. Peskin AV, et al. **Free Radic Res Commun** 1987;3(1-5):47–55

NADPH-dependent drug redox cycling and lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Int J Biochem** 1989;21(2):183–90

Purification and characterization of NADP+-dependent 3 alpha-hydroxysteroid dehydrogenase from mouse liver cytosol. Hara A, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):1027–34

Rubredoxin as an intermediary electron carrier for nitrate reduction by NAD(P)H in Clostridium perfringens. Seki S, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):583–4

Purified human erythrocyte pyrroline-5-carboxylate reductase. Preferential oxidation of NADPH. Merrill MJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9352–8

Interactions of nicotinamide adenine dinucleotides with varied states and forms of hemoglobin. Ogo S, et al. **J Biol Chem** 1989 Jul 5;264(19):11302–6

Use of an affinity label to probe the function of the NADPH binding component of the respiratory burst oxidase of human neutrophils. Smith RM, et al. **J Biol Chem** 1989 Jul 25;264(21):12243–8

Inhibition of NADPH-induced microsomal lipid peroxidation in the livers of cholestatic rats. Aykaç G, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):39–42

pH, pCO2 and NADP changes during aerobic and anaerobic incubation of the brain cortex of young and adult rats. Mourek J. **Physiol Bohemoslov** 1989;38(3):223–30

Oxidation of diethyldithiocarbamate to disulfiram by liver microsomes in the presence of NADPH and subsequent

loss of microsomal enzyme activity in vitro. Masuda Y. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):251–66

Regulation of the pentose phosphate cycle in bass (Dicentrarchus labrax L.) liver. Medina-Puerta MM, et al. **Rev Esp Fisiol** 1988 Dec;44(4):433–9

Pyridine nucleotide fluorometry in preserved porcine liver with fluorocarbon emulsion. Ozaki N, et al. **Transplantation** 1989 Aug;48(2):198–201

Effects of an NADPH-generating system on primaquine degradation by hamster liver fractions. Abu-El-Haj S, et al. **Xenobiotica** 1988 Oct;18(10):1165–78

[Purification and properties of NADP-specific malate dehydrogenase from bovine adrenal cortex mitochondria] Senkevich SB. **Biokhimiia** 1988 Nov;53(11):1783–90 (Eng. Abstr.) **(Rus)**

[Partial purification and properties of extracellular NADP+-dependent sorbitol dehydrogenase in Fusarium sp.] Sokolova EV. **Mikrobiol Zh** 1988 Sep–Oct;50(5):60–5 (Eng. Abstr.) **(Rus)**

[Oxidation of pyridine nucleotides in injuries of the cornea] Egorova EV, et al. **Vestn Oftalmol** 1989 May–Jun; 105(3):43–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

NAD(P)H-dependent reduction of 12-ketoeicosatetraenoic acid to 12(R)- and 12(S)-hydroxyeicosatetraenoic acid by rat liver microsomes. Falgueyret JP, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1083–9

Gene cloning and sequence determination of leucine dehydrogenase from Bacillus stearothermophilus and structural comparison with other NAD(P)+-dependent dehydrogenases. Nagata S, et al. **Biochemistry** 1988 Dec 13;27(25):9056–62

Glucose-6-phosphate dehydrogenase from Dicentrarchus labrax liver: kinetic mechanism and kinetics of NADPH inhibition. Bautista JM, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):354–63

Characterization of NAD-dependent 3 alpha- and 3 beta-hydroxysteroid dehydrogenase and of NADP-dependent 7 beta-hydroxysteroid dehydrogenase from Peptostreptococcus productus. Edenharder R, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):230–8

Characterization of NADP-dependent 12 beta-hydroxysteroid dehydrogenase from Clostridium paraputrificum. Edenharder R, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):362–70

NADP-dependent 3 beta-, 7 alpha- and 7 beta-hydroxysteroid dehydrogenase activities from a lecithinase-lipase-negative Clostridium species 25.11.c. Edenharder R, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):37–44

Effects of pyridine nucleotides on the gating of ATP-sensitive potassium channels in insulin-secreting cells. Dunne MJ, et al. **J Membr Biol** 1988 Jun; 102(3):205–16

Rat hepatic and renal 5'-deiodination of rT3 during fasting: supportive role of intermediate Mr cytosolic non-glutathione thiol cofactor and NADPH. Iwase K, et al. **Metabolism** 1989 Mar;38(3):230–7

PHYSIOLOGY

Increased NADPH-dependent chemiluminescence by microsomes after chronic ethanol consumption. Puntarulo S, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):435–45

Purification and characterization of NADPH-dependent cytosolic 3,5,3'-triiodo-L-thyronine binding protein in rat kidney. Hashizume K, et al. **J Biol Chem** 1989 Mar 25; 264(9):4857–63

NADP-ARGININE ADP-RIBOSYLTRANSFERASE see **NAD-ARGININE ADP-RIBOSYLTRANSFERASE**

NADP TRANSHYDROGENASE see under **NADH, NADPH OXIDOREDUCTASES**

NADPH CYTOCHROME C REDUCTASE

Electrostatic interactions between cytochrome P-450 LM2 and NADPH-cytochrome P-450 reductase. Bernhardt R, et al. **Biomed Biochim Acta** 1988;47(7):581–92

ANALYSIS

Immunohistochemical localization of NADPH-cytochrome P450 reductase in human tissues. Hall PM, et al. **Carcinogenesis** 1989 Mar;10(3):521–30

ANTAGONISTS & INHIBITORS

Effects of inhibition of NADPH: cytochrome P-450 reductase on benzo(a)pyrene metabolism in mouse liver microsomes. Byczkowski JZ, et al. **Int J Biochem** 1989; 21(5):525–9

BIOSYNTHESIS

Induction of microsomal NADPH-cytochrome P-450 reductase and cytochrome P-450IVA1 (P-450LA omega) by dehydroepiandrosterone in rats: a possible peroxisomal proliferator. Wu HQ, et al. **Cancer Res** 1989 May 1; 49(9):2337–43

Induction of cytochrome P-450, cytochrome b-5, NADPH-cytochrome c reductase and change of cytochrome P-450 isozymes with long-term trichloroethylene treatment. Kawamoto T, et al. **Toxicology** 1988 Dec 30;53(2–3):239–49

GENETICS

Disruption of the Saccharomyces cerevisiae gene for NADPH-cytochrome P450 reductase causes increased sensitivity to ketoconazole. Sutter TR, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1257–66

Genetically engineered modification of P450 monooxygenases: functional analysis of the amino-terminal hydrophobic region and hinge region of the P450/reductase fused enzyme. Yabusaki Y, et al. **DNA** 1988 Dec; 7(10):701–11

Primary structure of Saccharomyces cerevisiae NADPH-cytochrome P450 reductase deduced from nucleotide sequence of its cloned gene. Yabusaki Y, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1004–10

Human NADPH-P450 oxidoreductase: complementary DNA cloning, sequence and vaccinia virus-mediated expression and localization of the CYPOR gene to chromosome 7. Yamano S, et al. **Mol Pharmacol** 1989 Jul; 36(1):83–8

IMMUNOLOGY

Immunochemical characterization of NADPH-cytochrome P-450 reductase from Jerusalem artichoke and other higher plants. Benveniste I, et al. **Biochem J** 1989 May 1; 259(3):847–53

ISOLATION & PURIFICATION

Purification and some properties of NADPH-cytochrome P-450 reductase from crab-eating monkey liver microsomes. Ohmori S, et al. **Biochem Int** 1988 Aug; 17(2):249–56

Comparison of highly purified sheep liver and lung NADPH-cytochrome P-450 reductases by the analysis of kinetic and catalytic properties. Işcan MY, et al. **Int J Biochem** 1988;20(11):1189–96

METABOLISM

Redox cycling of resorufin catalyzed by rat liver microsomal NADPH-cytochrome P450 reductase. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):605–16

Reduction of 7-alkoxyresorufins by NADPH-cytochrome P450 reductase and its differential effects on their O-dealkylation by rat liver microsomal cytochrome P450. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):617–29

Vanadate-dependent NAD(P)H oxidation by microsomal enzymes. Reif DW, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):137–43

Lipid peroxidation in rat liver microsomes. I. Stimulation of the NADPH-cytochrome P-450 reductase-dependent process in hyperthyroid state. Landriscina C, et al. **Biochem Int** 1988 Aug;17(2):385–93

Synergistic interactions between NADPH-cytochrome P-450 reductase, paraquat, and iron in the generation of active oxygen radicals. Clejan L, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1779–86

Modification of cytochrome P-450, NADPH-cytochrome c reductase and aryl hydrocarbon hydroxylase activities by schistosomicidal drugs. Mostafa MH, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):251–5

Cytochrome b5, cytochrome c, and cytochrome P-450 interactions with NADPH-cytochrome P-450 reductase in phospholipid vesicles. Nisimoto Y, et al. **Biochemistry** 1988 Aug 9;27(16):5869–76

Immunochemical and catalytical characterization of the human liver NADPH-cytochrome P450 reductase. McManus ME, et al. **Clin Exp Pharmacol Physiol** 1989 Feb; 16(2):121–34

Phosphorylation of NADPH-cytochrome c reductase in guinea pig peritoneal macrophages stimulated with phorbol myristate acetate. Tamoto K, et al. **FEBS Lett** 1989 Feb 13;244(1):159–62

Liver nuclear NADPH-cytochrome P-450 reductase may be involved in redox cycling of bleomycin-Fe(III), oxy radical formation and DNA damage. Kappus H, et al. **Free Radic Res Commun** 1987;2(4–6):271–7

Cytochrome P-450 LM2 reduction. Substrate effects on the rate of reductase-LM2 association. Backes WL, et al. **J Biol Chem** 1989 Apr 15;264(11):6252–9

Correlation of kinetic parameters of nitroreductase enzymes with redox properties of nitroaromatic compounds. Orna MV, et al. **J Biol Chem** 1989 Jul 25;264(21):12379–84

The presence of essential carboxyl group for binding of cytochrome c in rat hepatic NADPH-cytochrome P-450 reductase by the reaction with 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. Inano H, et al. **J Enzym Inhib** 1985;1(1):47–59

Effects of different degrees of iron deficiency on cytochrome P450 complex and pentose phosphate pathway dehydrogenases in the rat. Dhur A, et al. **J Nutr** 1989 Jan; 119(1):40–7

Two sites of azo reduction in the monooxygenase system. Peterson FJ, et al. **Mol Pharmacol** 1988 Oct;34(4):597–603

Hypophysectomy differentially alters P-450 protein levels and enzyme activities in rat liver: pituitary control of hepatic NADPH cytochrome P-450 reductase. Waxman DJ, et al. **Mol Pharmacol** 1989 Apr;35(4):519–25

Localisation of a particulate luliberin hydrolysing activity in microsomal membranes of guinea pig brain. Elmore MA, et al. **Regul Pept** 1989 Jun–Jul;25(3):343–52

Phenobarbital-induced cytosolic cytoprotective mechanisms that offset increases in NADPH cytochrome P450 reductase activity in menadione-mediated cytotoxicity. Utley WS, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):323–33

NADPH CYTOCHROME P-450 REDUCTASE see **NADPH CYTOCHROME C REDUCTASE**

NADPH DEHYDROGENASE see under **NADH, NADPH OXIDOREDUCTASES**

NAEGLERIA

CLASSIFICATION

Application of isoenzymatic typing to the identification of nonaxenic strains of Naegleria (Protozoa, Rhizopoda). Pernin P, et al. **Parasitol Res** 1989;75(8):595–8

DRUG EFFECTS

Effects of cyclophosphamide and a metabolite, acrolein, on Naegleria fowleri in vitro and in vivo. Zhang L, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):962–5

Carbonic acid and the excystment of Naegleria gruberi (Heterolobosea: Vahlkampfiidae). Blackler SJ, et al. **Int J Parasitol** 1988 Sep;18(6):785–91

An in vitro comparative study on the effect of amphotericin B, econazole, and 5-fluorocytosine on Naegleria fowleri, Naegleria australiensis, and Naegleria australiensis s.sp. italica. Scaglia M, et al. **Microbiologica** 1988 Oct; 11(4):279–88

ENZYMOLOGY

Elastase in the pathogenic free-living amoebae Naegleria and Acanthamoeba spp. Ferrante A, et al. **Infect Immun** 1988 Dec;56(12):3320–1

GENETICS

Restriction fragment length polymorphisms of the DNA of selected Naegleria and Acanthamoeba amebae. McLaughlin GL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1655–8

Large genetic heterogeneity within amoebas of the species Naegleria gruberi and evolutionary affinities to the other species of the genus. Pernin P, et al. **J Protozool** 1989 Mar–Apr;36(2):179–81

Evaluation of evolutionary divergence in the genus Naegleria by analysis of ribosomal DNA plasmid restriction patterns. Clark CG, et al. **Mol Biochem Parasitol** 1989 May 15; 34(3):281–96

Small-subunit ribosomal RNA sequence from Naegleria gruberi supports the polyphyletic origin of amoebas. Clark CG, et al. **Mol Biol Evol** 1988 Sep;5(5):512–8

GROWTH & DEVELOPMENT

Effect of thermal additions on the density and distribution of thermophilic amoebae and pathogenic Naegleria fowleri in a newly created cooling lake. Tyndall RL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):722–32

IMMUNOLOGY

Augmentation of the neutrophil response to Naegleria fowleri by tumor necrosis factor alpha. Ferrante A. **Infect Immun** 1989 Oct;57(10):3110–5

Acanthamoeba culbertsoni and Naegleria fowleri: occurrence of antibodies in man. Cerva L. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):99–103

ISOLATION & PURIFICATION

Isolation of pathogenic free-living Naegleria amoebae from cooling water of a power plant in Shanghai. Yang C, et al. **Chin Med J [Engl]** 1988 Aug;101(8):559–63

PHYSIOLOGY

Biochemical and functional characterization of a membrane-associated pore-forming protein from the pathogenic ameboflagellate Naegleria fowleri. Young JD, et al. **J Biol Chem** 1989 Jan 15;264(2):1077–83

NAFCILLIN

ADVERSE EFFECTS

Intraventricular nafcillin-induced seizures in a neonate. Brozanski BS, et al. **Pediatr Neurol** 1988 May–Jun; 4(3):188–90

BLOOD

A rapid analysis of nafcillin using high-performance liquid chromatography. Fan-Havard P, et al. **Ther Drug Monit** 1989;11(1):105–8

PHARMACOLOGY

Warfarin resistance associated with nafcillin therapy. Fraser GL, et al. **Am J Med** 1989 Aug;87(2):237–8

THERAPEUTIC USE

Right-sided staphylococcal endocarditis [letter] Monane M, et al. **Ann Intern Med** 1989 May 1;110(9):749–50

NAFENOPIN see under **PROPIONATES**

NAFOXIDINE see under **PYRROLIDINES**

NAFRONYL see under **FURANS**

NAGANA see under **TRYPANOSOMIASIS, AFRICAN**

NAIL BITING

COMPLICATIONS

Unilateral onychodystrophy secondary to nail biting. Singer P, et al. **Cutis** 1988 Sep;42(3):191–2

Subungual squamous cell carcinoma of a nailbed. A case report. Schwartz GB. **Orthop Rev** 1988 Sep;17(9):883–5

Acro-osteolysis of the fingers in a spinal cord injury patient. A case report. Marmolya G, et al. **Spine** 1989 Jan; 14(1):137–9

NAIL DISEASES

Nail disorders. **Clin Podiatr Med Surg** 1989 Apr;6(2):215–475

Longitudinal melanonychia revisited. Baran R. **G Ital Dermatol Venereol** 1988 Nov;123(11):525–6 (0 ref.)

Hand, foot and nail disease—a common manifestation of chronic dermatophytosis. **Kaaman T. Mycoses** 1988 Dec; 31(12):613–6

Subungual keratoacanthoma. Case report. Boe S, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):181–3

[Twenty-nail dystrophy] Rossi A, et al. **Minerva Pediatr** 1989 Jan;41(1):53–6 (Eng. Abstr.) **(Ita)**

BLOOD

Yellow nail syndrome with persistent hypoalbuminaemia. Sahi SP, et al. **Br J Clin Pract** 1988 Jan;42(1):36–7

CHEMICALLY INDUCED

Nail-changes induced by penicillamine. Bjellerup M. **Acta Derm Venereol (Stockh)** 1989;69(4):339–41

Azidothymidine-induced hyperpigmentation of skin and nails [letter] Bendick C, et al. **Arch Dermatol** 1989 Sep; 125(9):1285–6

White lines in the fingernails induced by combination chemotherapy. Shetty MR. **BMJ** 1988 Dec 24–31; 297(6664):1635

Nail toxicity due to the combination adriamycin–mitoxantrone [letter] Van Belle SJ, et al. **Cancer Chemother Pharmacol** 1989;24(1):69–70

Nailing down arsenic intoxication. Goldstein GD, et al. **Chest** 1989 Sep;96(3):670–1

Nail changes secondary to environmental influences. Positano RG, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):417–29 (82 ref.)

Permanent loss of fingernails due to allergic reaction to an acrylic nail preparation: a sixteen-year follow-up study. Fisher AA. **Cutis** 1989 May;43(5):404–6

Mitoxantrone-induced discoloration of the nails [letter] Scheithauer W, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):763–5

Possible carbamazepine-induced reversible onychomadesis. Mishra D, et al. **Int J Dermatol** 1989 Sep;28(7):460–1

PUVA-induced pigmented nails. Weiss E, et al. **Int J Dermatol** 1989 Apr;28(3):188–9

Hyperpigmentation of the nail from lead deposition [letter] Zhu WY, et al. **Int J Dermatol** 1989 May;28(4):273–5

Nail dystrophy and periungual dermatitis due to cyanoacrylate glue sensitivity [letter] Shelley ED, et al. **J Am Acad Dermatol** 1988 Sep;19(3):574–5

Melanonychia induced by systemic photochemotherapy. Hann SK, et al. **Photodermatol** 1989 Apr;6(2):98–9

Nail pigmentation associated with zidovudine [letter] Dupon M, et al. **Scand J Infect Dis** 1989;21(2):237–8

[Striated nail discoloration caused by zidovudine] Bendick C, et al. **Z Hautkr** 1989 Feb 15;64(2):91–5 (Eng. Abstr.) **(Ger)**

[Bluish pigmentation of the nails in AIDS patients. Possibly an adverse effect of Zidovudine? (letter)] González Lahoz JM, et al. **Rev Clin Esp** 1988 Oct;183(5):278–9 **(Spa)**

COMPLICATIONS

Nail discoloration and human immunodeficiency virus infection. Chandrasekar PH. **Am J Med** 1989 Apr; 86(4):506–7

Clinical observations on nail changes in psoriasis. Tham SN, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):482–5

Nail dystrophy associated with iron deficiency anaemia [letter] Handfield-Jones SE, et al. **Clin Exp Dermatol** 1988 Jan;13(1):54

Nail involvement in lichen planopilaris. Tosti A, et al. **Cutis** 1988 Sep;42(3):213–4

[Pleural effusion and yellow nails (letter)] Voisin S, et al. **Ann Med Interne (Paris)** 1988;139(4):287–9 **(Fre)**

[Yellow nail syndrome with chylous effusions] Valmary J, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):425–8 (14 ref.) (Eng. Abstr.) **(Fre)**

[Melanonychia striata and Addison's disease] Bardazzi F, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):539–40 **(Ita)**

CONGENITAL

Pachyonychia congenita. Feinstein A, et al. **J Am Acad Dermatol** 1988 Oct;19(4):705–11 (122 ref.)

[Total congenital leukonychia] Patrizi A, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):547–9 **(Ita)**

DIAGNOSIS

Unilateral pterygium inversum unguis. Morimoto SS, et al. **Int J Dermatol** 1988 Sep;27(7):491–4 (14 ref.)

[What is your diagnosis? Frictional longitudinal melanonychia] Grosshans E. **Ann Dermatol Venereol** 1989; 116(1):45–6 **(Fre)**

DRUG THERAPY

Lichen planus of the nail: treatment with antimalarials. Mostafa WZ. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):289–90

[Treatment of brittle fingernails with biotin] Floersheim GL. **Z Hautkr** 1989 Jan 15;64(1):41–8 (Eng. Abstr.) **(Ger)**

[Evaluation of the topical antimycotic treatment in psoriatic onychopathy with severe perionychia] Santagostino L, et al. **G Ital Dermatol Venereol** 1988 May;123(5):253–9 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

Koilonychia of the toenails in children. Yinnon AM, et al. **Int J Dermatol** 1988 Dec;27(10):685–7

ETHNOLOGY

Koilonychia in Ladakhis [letter] Anand IS, et al. **Br J Dermatol** 1988 Aug;119(2):267–8

ETIOLOGY

Nail dystrophy in cutaneous T-cell lymphoma. Dalziel KL, et al. **Br J Dermatol** 1989 Apr;120(4):571–4

Pseudo-mycotic nail dystrophy and vitiligo. Milligan A, et al. **Clin Exp Dermatol** 1988 Mar;13(2):109–10

Nail infections. Jules KT, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):403–16 (24 ref.)

Nail changes associated with systemic disease and vascular insufficiency. Kosinski MA, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):295–318 (124 ref.)

Nail disorders due to trauma and other acquired conditions of the nail. Mantoura A, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):347–54 (18 ref.)

Nail entities. Nzuzi SM. **Clin Podiatr Med Surg** 1989 Apr; 6(2):253–71 (65 ref.)

Common nail disorders. Nzuzi SM. **Clin Podiatr Med Surg** 1989 Apr;6(2):273–94 (97 ref.)

A systematic approach to examining the patient with nail disease. Positano RG, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):247–51 (3 ref.)

Nail changes in the seropositive and seronegative arthridities. Sarnow MR, et al. **Clin Podiatr Med Surg** 1989 Apr; 6(2):389–402 (27 ref.)

Nail changes associated with scleroderma: a case report. Spinosa FA, et al. **Clin Podiatr Med Surg** 1989 Apr; 6(2):319–25

Nail changes in glandular disease. Valletta MJ, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):365–71 (12 ref.)

Unilateral onychodystrophy secondary to nail biting. Singer P, et al. **Cutis** 1988 Sep;42(3):191–2

The thyroid. Diven DG, et al. **Dermatol Clin** 1989 Jul; 7(3):547–58 (93 ref.)

Transverse striate leukonychia associated with acute rejection of renal allograft. Held JL, et al. **J Am Acad Dermatol** 1989 Mar;20(3):513–4

Spontaneous photo-onycholysis. Horio T. **J Dermatol (Tokyo)** 1988 Dec;15(6):540–2

Subungual squamous cell carcinoma of a nailbed. A case report. Schwartz GB. **Orthop Rev** 1988 Sep;17(9):883–5

[Nail changes in hormonal disorders] Haneke E. **Med Monatsschr Pharm** 1989 Jun;12(6):173–8 (12 ref.) **(Ger)**

[Onychopathy in the renal transplantation patient] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):157–8 (Eng. Abstr.) **(Ita)**

[Ungual pathology in histiocytosis x] Satriano RA, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):541–2 **(Ita)**

[Yellow nail syndrome. Description of 2 cases] Toffolo P, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):553–4 **(Ita)**

[Ungual involvement in AIDS] Valenzano L, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):527–8 (8 ref.) **(Ita)**

[Pathologic changes of the hair and nails in generalized geotrichosis] Ratka P, et al. **Przegl Dermatol** 1986 Jul–Aug; 73(4):301–4 (Eng. Abstr.) **(Pol)**

[Involvement of fingernails in scabies in an infant] Sokolova TV, et al. **Vestn Dermatol Venerol** 1989;(2):68–9 (Eng. Abstr.) **(Rus)**

[Mycotic and bacterial flora in patients with nail disorders] Arreaza F, et al. **Med Cutan Ibero Lat Am** 1988; 16(4):285–90 (Eng. Abstr.) **(Spa)**

GENETICS

Heritable nail diseases. Gass SF, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):339–45 (26 ref.)

MICROBIOLOGY

Cutaneous and ungual phaeohyphomycosis caused by species of Chaetomium Kunze (1817) ex Fresenius, 1829. Costa AR, et al. **J Med Vet Mycol** 1988;26(5):261–8

Human papillomavirus type 16 DNA in periungual squamous cell carcinomas. Moy RL, et al. **JAMA** 1989 May 12; 261(18):2669–73

PATHOLOGY

Longitudinal melanonychia after healing of lichen planus. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):338–9

Clinical and histopathologic characteristics of early lesions of subungual malignant melanoma. Saida T, et al. **Cancer** 1989 Feb 1;63(3):556–60

Tumors of the nail and nail bed. Donohue LH, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):373–87 (31 ref.)

Subungual epidermoid inclusions: report of 8 cases. Fanti PA, et al. **Dermatologica** 1989;178(4):209–12

Lichen planus of the nail presenting as a tumor: diagnosis by longitudinal nail bed biopsy. Lambert DR, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1245–7

Dyskeratosis congenita. Davidson HR, et al. **J Med Genet** 1988 Dec;25(12):843–6

[Case for diagnosis. Longitudinal melanonychia] Baran R. **Ann Dermatol Venereol** 1988;115(5):611–2 **(Fre)**

[Subungual melanoma: problems of differential diagnosis] Arcangeli F, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):545–6 **(Ita)**

[Parakeratosis pustolosa] Bardazzi F, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):557 **(Ita)**

[A case of Laugier-Hunziker syndrome] Borrello P, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):537–8 **(Ita)**

[Pathology of the skin appendages in porphyria cutanea tarda] Pizzino D, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):607–8 **(Ita)**

[Lichen planus of an exclusive ungual localization] Tosti A, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):529–31 **(Ita)**

PHYSIOPATHOLOGY

Pedal nail pathology: biomechanical implications. Rzonca EC, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):327–37 (17 ref.)

RADIOGRAPHY

Three select subungual pathologies: subungual exostosis, subungual osteochondroma, and subungual hematoma. G.isafi PJ, et al. **Clin Podiatr Med Surg** 1989 Apr; 6(2):355–64 (35 ref.)

RADIOTHERAPY

Psoriasis of the nails treated with grenz rays: a double-blind bilateral trial. Lindelöf B. **Acta Derm Venereol (Stockh)** 1989;69(1):80–2

[Roentgen treatment of psoriatic finger nails] Mensing H. **Hautarzt** 1989 Jun;40(6):376 **(Ger)**

SURGERY

Surgical nail procedures. Caprioli R, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):431–51 (12 ref.)

Laser matricectomy in the toes. Wright G. **Foot Ankle** 1989 Apr;9(5):246–7

Subungual keratoacanthoma in the hand. Patel MR, et al. **J Hand Surg [Am]** 1989 Jan;14(1):139–42

[Surgery of periungual granuloma] Greco I, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):543–4 (9 ref.) **(Ita)**

THERAPY

Nail and hyperkeratotic problems in the elderly foot. Helfand AE. **Am Fam Physician** 1989 Feb;39(2):101–10

Isolated regional perfusion in the treatment of subungual melanoma. Baas PC, et al. **Arch Surg** 1989 Mar;124(3):373–6 (20 ref.)

Commonsense advice on treating nail disorders. Stone OJ. **Postgrad Med** 1989 May 1;85(6):279–83, 286–8

[The use of laser radiation in the combined treatment of fingernail pathology] Tashliev AB, et al. **Vestn Dermatol Venerol** 1989;(2):62–4 (Eng. Abstr.) **(Rus)**

NAIL-PATELLA SYNDROME

COMPLICATIONS

Shoulder girdle dysplasia associated with nail patella syndrome. A case report and literature review. Loomer RL. **Clin Orthop** 1989 Jan;(238):112–6 (12 ref.)

Living-related renal transplantation in a patient with nail-patella syndrome. Chan PC, et al. **Nephron** 1988; 50(2):164–6

Case report 548: Nail–patella syndrome(hereditary onycho–osteodysplasia) with congenital absence of the fibulae. Banskota AK, et al. **Skeletal Radiol** 1989; 18(4):318–21 (23 ref.)

GENETICS

Genetic counselling in hereditary osteo–onychodysplasia (HOOD, nail–patella syndrome) with nephropathy. Looij BJ Jr, et al. **J Med Genet** 1988 Oct;25(10):682–6

Nephropathy in hereditary osteo–onycho dysplasia (HOOD): variable expression or genetic heterogeneity? Lommen EJ, et al. **Prog Clin Biol Res** 1989;305:157–60

[Hereditary onycho–osteodysplasia (HOOD)] te Slaa RL, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):298–303 (Eng. Abstr.) **(Dut)**

[The patella–nail syndrome. Study of 2 families] Adam G, et al. **Radiologe** 1988 Dec;28(12):579–83 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Variability of the antigenicity of the glomerular basement membrane in nail–patella syndrome. Sutcliffe NP, et al. **Nephrol Dial Transplant** 1989;4(4):262–5

PATHOLOGY

Inherited defects of renal basement membranes. Noël LH, et al. **Adv Nephrol** 1989;18:77–94 (83 ref.)

RADIOGRAPHY

[Hereditary onycho–osteodysplasia] Barozzi L, et al. **Radiol Med (Torino)** 1988 Nov;76(5):492–4 **(Ita)**

NAILING, INTRAMEDULLARY see **FRACTURE FIXATION, INTRAMEDULLARY**

NAILS

Pseudomonas corneal ulcers after artificial fingernail injuries. Parker AV, et al. **Am J Ophthalmol** 1989 May 15; 107(5):548–9

Pulse oximeters and finger nails [letter] Tweedie IE. **Anaesthesia** 1989 Mar;44(3):268

Nail polish and oximetry [letter] White PF, et al. **Anesth Analg** 1989 Apr;68(4):546–7

Use of pulse oximeter with nail polish [letter] White L. **AORN J** 1989 Sep;50(3):520

Azidothymidine–induced nail pigmentation. Fisher CA, et al. **Cutis** 1989 Jun;43(6):552–4

Nail discoloration due to mahogany. Harris AO, et al. **Cutis** 1989 Jan;43(1):55–6

A piece of my mind. Mr Turner's toenails. Berlin RM. **JAMA** 1989 Apr 14;261(14):2124

[The contents from under the nails as an object of forensic medical expertise in material evidence] Druz' AF, et al. **Sud Med Ekspert** 1988 Jul–Sep;31(3):32–3 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Two other cases of ANOTHER syndrome? Family report and update. Pinheiro M, et al. **Clin Genet** 1989 Apr; 35(4):237–42 (8 ref.)

Nail entities. Nzuzi SM. **Clin Podiatr Med Surg** 1989 Apr; 6(2):253–71 (65 ref.)

Pachyonychia congenita with tuberous sclerosis. Sharma VK, et al. **Int J Dermatol** 1989 Jun;28(5):332–3

Hypoplastic–hypocalcified enamel of teeth and dysplastic nails: an undescribed ectodermal dysplasia syndrome. Takeda Y, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):73–5

Limb anomalies in the CHARGE association. Meinecke P, et al. **J Med Genet** 1989 Mar;26(3):202–3

[Epidermolysis bullosa and congenital skin aplasia (Bart's syndrome). Report of 3 cases] Tincopa–Wong OW, et al. **Med Cutan Ibero Lat Am** 1988;16(2):149–54 (Eng. Abstr.) **(Spa)**

ANALYSIS

Survey of trace elements in human nails: an international comparison. Takagi Y, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):690–5

Formation of radicals by mechanical processes. Symons MC. **Free Radic Res Commun** 1988;5(3):131–9 (50 ref.)

Analysis of methamphetamine in hair, nail, sweat, and saliva by mass fragmentography. Suzuki S, et al. **J Anal Toxicol** 1989 May–Jun;13(3):176–8

Glycosylated proteins of skin, nail and hair: application as an index for long–term control of diabetes mellitus. Sueki H, et al. **J Dermatol** 1989 Apr;16(2):103–10

Glycosylated proteins of stratum corneum, nail and hair in diabetes mellitus: correlation with cutaneous manifestations. Nozaki S, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):320–4

Trace element imbalances in hair and nails of Alzheimer's disease patients. Vance DE, et al. **Neurotoxicology** 1988 Summer;9(2):197–208

X–ray microanalysis of the fingernails in term and preterm infants. Sirota L, et al. **Pediatr Dermatol** 1988 Aug; 5(3):184–6

ANATOMY & HISTOLOGY

Ultrasound structure of the human nail plate. Jemec GB, et al. **Arch Dermatol** 1989 May;125(5):643–6

Nail size in normal infants. Establishing standards for healthy term infants. Seaborg B, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):142–5

Anatomy of the nail. Dykyj D. **Clin Podiatr Med Surg** 1989 Apr;6(2):215–28 (34 ref.)

BLOOD SUPPLY

The pathology of clubbing: vascular changes in the nail bed. Currie AE, et al. **Br J Dis Chest** 1988 Oct;82(4):382–5

Microvascular dynamics at the nailfold in rheumatoid arthritis. Grassi W, et al. **Clin Exp Rheumatol** 1989 Jan–Feb; 7(1):47–53

Nail changes associated with systemic disease and vascular insufficiency. Kosinski MA, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):295–318 (124 ref.)

Nail fold capillaroscopy findings in patients with primary fibromyalgia. Frödin T, et al. **Clin Rheumatol** 1988 Sep; 7(3):384–8

Increased peripheral vasoconstrictor reaction upon local cold in patients with coronary heart disease. Saner HE, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):127–34

[Observing the effect on the nail microcirculation of the hemiplegia patients by needling tongtian and anterior shencong to xuanli] Shun YZ, et al. **Chen Tzu Yen Chiu** 1988;13(2):90–3 (Eng. Abstr.) **(Chi)**

[Quantitative measurement of microcirculation of human nailfold, lips, and tongue apex by applying laser Doppler technique] Han XM. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):491–3, 34 (Eng. Abstr.) **(Chi)**

[A study on the features of nailfold microcirculation in 103 healthy pilots of jet fighter] Liu ZY. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):497–9, 34 (Eng. Abstr.) **(Chi)**

[Effects on the extremities' micro–circulation—Raynaud's disease caused by drinking high arsenic well water] Hu Y. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):149–51 (Eng. Abstr.) **(Chi)**

[Changes in central hemodynamics and microcirculation in patients with hepatobiliary pathology undergoing operations using ketamine, neuroleptanalgesia and epidural anesthesia] Vasil'kov VG, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):66–9 (Eng. Abstr.) **(Rus)**

[Increased reactivity of microcirculation and T lymphocytes to adrenaline in sailors during long sea voyages] Okhotnikov SV, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):686–92 **(Rus)**

DRUG EFFECTS

Phenol and alcohol chemical matrixectomy. Burzotta JL, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):453–67 (29 ref.)

[Brown hair and nail discoloration by water containing iron] Platschek H, et al. **Hautarzt** 1989 Jul;40(7):441–2 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

Patterns of expression of trichocytic and epithelial cytokeratins in mammalian tissues. III. Hair and nail formation during human fetal development. Moll I, et al. **Differentiation** 1988 Dec;39(3):167–84

INJURIES

Nail disorders due to trauma and other acquired conditions of the nail. Mantoura A, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):347–54 (18 ref.)

Dressings of the nailbed following nail avulsion. Dove AF, et al. **J Hand Surg [Br]** 1988 Nov;13(4):408–10

Finger tip and nail bed injuries. Ditmars DM Jr. **Occup Med** 1989 Jul–Sep;4(3):449–61 (30 ref.)

INNERVATION

[Trophic disorders following primary nerve sutures of the upper extremity] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):72–3 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Keratinophilic fungi from the duck nails in Egypt. Abdel–Gawad KM, et al. **J Basic Microbiol** 1989; 29(5):259–63

PATHOLOGY

Idiopathic atrophy of the nails. A clinico–pathological study. Barth JH, et al. **Am J Dermatopathol** 1988 Dec;10(6):514–7

Unilateral Muehrcke's lines following trauma [letter] Feldman SR, et al. **Arch Dermatol** 1989 Jan;125(1):133–4

Pigmented nail streaks may indicate Laugier–Hunziker syndrome. Sterling GB, et al. **Cutis** 1988 Oct;42(4):325–6

Red lunulae revisited: a clinical and histopathologic examination. Wilkerson MG, et al. **J Am Acad Dermatol** 1989 Mar;20(3):453–7 (18 ref.)

Beau's lines following hand trauma. Ward DJ, et al. **J Hand Surg [Br]** 1988 Nov;13(4):411–4

Splinter haemorrhages: facts and fiction. Young JB, et al. **J R Coll Physicians Lond** 1988 Oct;22(4):240–3

[Median ungual dystrophy caused by trauma] Guerra L, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):555–6 **(Ita)**

SURGERY

Nailplasty using a distally based ulnar finger dorsum flap. Kasai K, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):125–8

External fixation of injured nail bed with the INRO surgical nail splint. Ogunro EO. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):236–41 (12 ref.)

Zadik's operation for permanent removal of great toenail [letter] Liddle W. **J R Coll Surg Edinb** 1988 Aug;33(4):227

NAILS, INGROWN

COMPLICATIONS

Paravertebral abscess due to nondiphtheria coryneform bacteria as a complication of ingrown toenails. Dieleman LA, et al. **Infection** 1989 Jan–Feb;17(1):26–7

DRUG THERAPY

Phenol and alcohol chemical matrixectomy. Burzotta JL, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):453–67 (29 ref.)

ETIOLOGY

Risk factors in onychocryptosis. Langford DT, et al. **Br J Surg** 1989 Jan;76(1):45–8

PATHOLOGY

Congenital hypertrophy of the lateral nail folds of the hallux. Hammerton MD, et al. **Pediatr Dermatol** 1988 Nov; 5(4):243–5

SURGERY

Treatment of ingrowing toenails [letter] Fowler AW. **BMJ** 1988 Sep 3;297(6648):625

Two post–operative epidermoid cysts following realignment of the hallux nail. Baran R, et al. **Br J Dermatol** 1988 Aug; 119(2):245–7

Phenol cauterization for ingrowing toenails: a review of five years' experience. Byrne DS, et al. **Br J Surg** 1989 Jun; 76(6):598–9

Surgical nail procedures. Caprioli R, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):431–51 (12 ref.)

Ingrown toenail: results of surgical treatment. Pettine KA, et al. **Foot Ankle** 1988 Dec;9(3):130–4

Ingrowing toe nail. Daudi I. **JPMA** 1989 Jan;39(1):21–3

Practical management of ingrown toenails. Gillette RD. **Postgrad Med** 1988 Dec;84(8):145–6, 151–3, 156–8

[A comparative study of 2 treatment methods for onychocryptosis (ingrown toenail)] Burssens P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):294–7 (Eng. Abstr.) **(Dut)**

[A case from practice (131). Patient: Mr. H.J. S., born 1962, clerk] Suter F. **Schweiz Rundsch Med Prax** 1989 Feb 21; 78(8):200–1 **(Ger)**

NAILS, MALFORMED

CHEMICALLY INDUCED

Nail changes secondary to environmental influences. Positano RG, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):417–29 (82 ref.)

CLASSIFICATION

Congenital and hereditary nail dystrophies—an embryological approach to classification. Telfer NR, et al. **Clin Exp Dermatol** 1988 May;13(3):160–3

COMPLICATIONS

[Congenital ischemic onychodystrophy (Iso–Kikuchi syndrome) and chronic lupus erythematosus] Bittar EQ, et al. **Hautarzt** 1988 Nov;39(11):750–2 (Eng. Abstr.) **(Ger)**

CONGENITAL

[Zinsser–Cole–Engman syndrome (dyskeratosis congenita)] Korovenkov RI, et al. **Vestn Oftalmol** 1988 Sep–Oct; 104(5):75–6 **(Rus)**

ETIOLOGY

Nail changes associated with systemic disease and vascular insufficiency. Kosinski MA, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):295–318 (124 ref.)

Nail disorders due to trauma and other acquired conditions of the nail. Mantoura A, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):347–54 (18 ref.)

Nail entities. Nzuzi SM. **Clin Podiatr Med Surg** 1989 Apr; 6(2):253–71 (65 ref.)

Common nail disorders. Nzuzi SM. **Clin Podiatr Med Surg** 1989 Apr;6(2):273–94 (97 ref.)

Nail changes associated with scleroderma: a case report. Spinosa FA, et al. **Clin Podiatr Med Surg** 1989 Apr; 6(2):319–25

Nail changes in glandular disease. Valletta MJ, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):365–71 (12 ref.)

Deformation of the nail following elastic band traction—a case report. Hoddinott C, et al. **J Hand Surg [Br]** 1989 Feb;14(1):23–4

GENETICS

Etiologic heterogeneity in dyskeratosis congenita. Pai GS, et al. **Am J Med Genet** 1989 Jan;32(1):63–6

Heritable nail diseases. Gass SF, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):339–45 (26 ref.)

Hirschsprung's disease, hypoplastic nails, and minor dysmorphic features: a distinct autosomal recessive syndrome? al-Gazali LI, et al. **J Med Genet** 1988 Nov; 25(11):758–61

Palmoplantar keratoderma, nail dystrophy, and hereditary motor and sensory neuropathy: an autosomal dominant trait. Tolmie JL, et al. **J Med Genet** 1988 Nov;25(11):754–7

Congenital atrichia with nail dystrophy, abnormal facies, and retarded psychomotor development in two siblings: a new autosomal recessive syndrome? Vogt BR, et al. **Pediatr Dermatol** 1988 Nov;5(4):236–42

PATHOLOGY

Subungual epidermoid inclusions: report of 8 cases. Fanti PA, et al. **Dermatologica** 1989;178(4):209–12

[Histologic aspects of dystrophy of the 20 nails associated with alopecia areata] Fanti PA, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):533–4 (Ita)

[Nail dystrophy of the big toe. Description of a clinical case] Bran G, et al. **Med Cutan Ibero Lat Am** 1988;16(2):165–9 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Pedal nail pathology: biomechanical implications. Rzonca EC, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):327–37 (17 ref.)

SURGERY

Surgical nail procedures. Caprioli R, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):431–51 (12 ref.)

NAJA VENOMS see **COBRA VENOMS**

NALBUPHINE see under **MORPHINANS**

NALED see under **INSECTICIDES, ORGANOPHOSPHATE**

NALIDIXIC ACID

ADVERSE EFFECTS

Acute painful proximal myopathy associated with nalidixic acid. Carmichael AJ, et al. **BMJ** 1988 Sep 17;297(6650):742

ANALOGS & DERIVATIVES

Comparison of Mictral with amoxycillin, trimethoprim and nitrofurantoin in the treatment of acute cystitis. Lightstone BL, et al. **Br J Clin Pract** 1988 Jul;42(7):283–8

BLOOD

Protein binding of quinolonecarboxylic acids. I. Cinoxacin, nalidixic acid and pipemidic acid. Izumi T, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):742–5

Protein binding of quinolonecarboxylic acids. II. Spectral changes on the interaction of cinoxacin, nalidixic acid and pipemidic acid with human and rat albumins. Izumi T, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):746–52

PHARMACOKINETICS

Pharmacokinetics of nalidixic acid in man: hydroxylation and glucuronidation. Vree TB, et al. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):193–9

PHARMACOLOGY

Development of resistance to nalidixic acid and the fluoroquinolones after the introduction of norfloxacin and ofloxacin. Kresken M, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1285–8

Effect of nalidixic acid on DNA repair in rat hepatocytes. McQueen CA, et al. **Cell Biol Toxicol** 1989 Jun;5(2):201–6

In vitro activity of pefloxacin compared with five other quinolones on nalidixic acid-resistant proteae species. Piccolomini R, et al. **Chemioterapia** 1988 Oct;7(5):287–91

The comparative in vitro activity of ofloxacin (RU 43 280) and other quinolone derivatives against 722 bacteria of clinical interest. Santos Ferreira M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):145–7

Inhibition of plasmid conjugation by some recently synthetized 4-quinolone compounds. Scazzocchio F, et al. **Chemioterapia** 1988 Oct;7(5):295–7

Plasmid "curing" by some recently synthetized 4-quinolone compounds. Selan L, et al. **Chemioterapia** 1988 Oct; 7(5):292–4

Susceptibility of Campylobacter pylori isolated from pediatric and adult patients to seven new quinolone antibiotics and nalidixic acid. Hupertz V, et al. **Chemotherapy** 1988;34(4):341–4

Nalidixic acid and oxolinic acid reversibly suppress 3-methylcholanthrene-induced cell transformation of BALB/3T3 mouse cells. Kaneko M, et al. **Int J Cancer** 1988 Dec 15;42(6):913–6

Effect of quinolone antimicrobials on theophylline pharmacokinetics. Prince RA, et al. **J Clin Pharmacol** 1989 Jul;29(7):650–4

4-quinolones and the SOS response. Lewin CS, et al. **J Med Microbiol** 1989 Jun;29(2):139–44

Nalidixic-acid resistant Shigella dysenteriae type 1 in eastern India [letter] Sen D, et al. **Lancet** 1988 Oct 15;2(8616):911

Characterization of a nalidixic-acid-resistant mutant of Escherichia coli as a strict aerobe. Yoshizawa Y, et al. **Microbiol Immunol** 1989;33(6):449–57

Influence of nalidixic acid on killing and mutation of V79 cells exposed to different damaging agents. Ghosh R, et al. **Mutat Res** 1988 Nov;202(1):71–5

Antimicrobial susceptibility of Campylobacter jejuni, Campylobacter coli, and Campylobacter laridis from cats, dogs, pigs, and seagulls. Kaneuchi C, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):685–91

Weigle-reactivation in a cyanobacterium (Synechococcus PCC7934) is induced by UV but not by mitomycin-C or nalidixic acid. Lanham PG, et al. **Photochem Photobiol** 1988 Oct;48(4):473–5

[Comparison of the antibacterial effects of ofloxacin, oxolinic acid and nalidixic acid] Langšádl L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):297–308 (Eng. Abstr.) (Cze)

[In vitro antibacterial activity of a new fluoroquinolone, fleroxacin as a function of the sensitivity or resistance to nalidixic acid and to pefloxacin] Soussy CJ, et al. **Pathol Biol (Paris)** 1989 May;37(5):364–9 (Eng. Abstr.) (Fre)

[Fluoroquinolones (gyrase inhibitors)] Senf HJ. **Pharmazie** 1988 Jun;43(6):444–7 (40 ref.) (Ger)

[Interactions of DNA topoisomerase inhibitors novobiocin and nalidixic acid with some cytotoxic agents. In vitro investigations in rat thymic and splenic cells] Tempel K. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):673–9 (Eng. Abstr.) (Ger)

[Selective medium with nalidixic acid for isolating antibiotic-producing Actinomyces] Alferova IV, et al. **Antibiot Khimioter** 1989 May;34(5):344–8 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Nalidixic acid. Singh H, et al. **Indian Pediatr** 1988 Mar; 25(3):279–81 (18 ref.)

Therapy for shigellosis. I. Randomized, double-blind trial of nalidixic acid in childhood shigellosis [see comments] Salam MA, et al. **J Pediatr** 1988 Nov;113(5):901–7. **Comment in:** J Pediatr 1989 Jul;115(1):168–9

NALIDIXIN see **NALIDIXIC ACID**

NALORPHINE

Peripheral modulation of pain in conscious guinea pigs: effect of morphine, nalorphine and clonidine. Nakamura M, et al. **Braz J Med Biol Res** 1988;21(3):577–83

PHARMACOKINETICS

Relation between renal and hepatic excretion of drugs: X. Excretion of nalorphine in young and adult rats pretreated with hormones or xenobiotics. Fleck C, et al. **Exp Pathol** 1988;34(3):171–80

NALOXIPHAN see **LEVALLORPHAN**

NALOXONE

A physicochemical study of the interaction of phosphatidylinositol with buprenorphine and naloxone. Reig F, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):533–49

ADMINISTRATION & DOSAGE

Naloxone affects the release of cortisol, but not of vasopressin or oxytocin, in dehydrated sheep. Thornton SN, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):50–4

Clonidine poisoning treated with naloxone [letter] Wedin GP, et al. **Am J Emerg Med** 1989 May;7(3):343–4

The effect of inhaled naloxone on resting bronchial tone and exercise-induced asthma. Popa V, et al. **Am Rev Respir Dis** 1989 Mar;139(3):702–9

CO2 levels during opioid reversal with naloxone [letter] Bailey PL. **Anesth Analg** 1989 Sep;69(3):420–3

The effect of fentanyl anesthesia and intrathecal naloxone on neurologic outcome following spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Sep;71(3):426–30

Repeated naloxone administration in schizophrenia: a phase II World Health Organization Study. Pickar D, et al. **Biol Psychiatry** 1989 Feb 15;25(4):440–8

Comparison of peripheral and central administration of naloxone in precipitating abstinence in morphine-dependent rats. Bell J, et al. **Drug Alcohol Depend** 1988 Jul;21(3):189–94

Acute opioid physical dependence in humans: effect of varying the morphine-naloxone interval. I. Heishman SJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):485–91

Continuous naloxone administration suppresses opiate withdrawal symptoms in human opiate addicts during detoxification treatment. Loimer N, et al. **J Psychiatr Res** 1989;23(1):81–6

Analgesia produced by normal doses of opioid antagonists alone and in combination with morphine. Vaccarino AL, et al. **Pain** 1989 Jan;36(1):103–9

American Academy of Pediatrics. Emergency drug doses for infants and children and naloxone use in newborns: clarification. **Pediatrics** 1989 May;83(5):803

Improved donor kidney function and hemodynamics following naloxone administration. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):733–5

[Naloxone and AMI (letter)] Riishede L, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2154 (Dan)

[The use of naloxone (Narcantil) in newborns after maternal analgesia with meperidine] Svane D, et al. **Ugeskr Laeger** 1988 Dec 5;150(49):3035–8 (Eng. Abstr.) (Dan)

[Pharmacologic modification of vigilance in the postnarcotic phase— naloxone or physostigmine?] Schneck HJ, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):209–13 (Eng. Abstr.) (Ger)

[The dose-dependent action of naloxone on systemic and portal circulation in acute blood loss in rats] Kovalenko NIa, et al. **Biull Eksp Biol Med** 1989 May;107(5):547–9 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Seizure associated with low-dose naloxone. Mariani PJ. **Am J Emerg Med** 1989 Jan;7(1):127–9

Increased nausea and vomiting induced by naloxone in patients receiving cancer chemotherapy. Kobrinsky NL, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):206–8

A fatal case of pulmonary oedema in a healthy young male following naloxone administration. Wride SR, et al. **Anaesth Intensive Care** 1989 Aug;17(3):374–7

No adverse reaction [letter] Allen T. **Ann Emerg Med** 1989 Jan;18(1):116

Use of high dose naloxone in acute stroke: possible side-effects. Barsan WG, et al. **Crit Care Med** 1989 Aug; 17(8):762–7

Naloxone hazard in infant of opioid abuser [letter] Gibbs J, et al. **Lancet** 1989 Jul 15;2(8655):159–60

Naloxone hazard in drug abuser [letter] Popper C, et al. **Lancet** 1989 Aug 19;2(8660):446

ANALOGS & DERIVATIVES

Receptor binding of [3H]naloxone benzoylhydrazone: a reversible kappa and slowly dissociable mu opiate. Price M, et al. **Mol Pharmacol** 1989 Jan;35(1):67–74

A naloxone-steroid hybrid azine with selective and long-acting opioid antagonism at delta receptors in vitro. Koman A, et al. **Pharm Res** 1987 Apr;4(2):147–9

ANTAGONISTS & INHIBITORS

Dose-dependent and stereoselective antagonism by diltiazem of naloxone-precipitated morphine abstinence after acute morphine-dependence in vivo and in vitro. Caro G, et al. **Life Sci** 1988;43(19):1523–7

BLOOD

Quantitative and pharmacokinetic analysis of naloxone in plasma using high-performance liquid chromatography with electrochemical detection and solid-phase extraction. Albeck H, et al. **J Chromatogr** 1989 Mar 24;488(2):435–45

DIAGNOSTIC USE

Severity of precipitated opiate withdrawal predicts drug dependence by DSM-III-R criteria. Kosten TA, et al. **Am J Drug Alcohol Abuse** 1989;15(3):237–50

Naloxone applied to conjunctiva as a test for physical opiate dependence. Creighton FJ, et al. **Lancet** 1989 Apr 8; 1(8641):748–50

METABOLISM

[3H]naloxone binding in the brain of the domestic chick (Gallus domesticus) determined by in vitro quantitative autoradiography. Csillag A, et al. **Brain Res** 1989 Feb 13; 479(2):391–6

Metabolic interaction between morphine and naloxone in human liver. A common pathway of glucuronidation? Wahlström A, et al. **Drug Metab Dispos** 1989 Mar-Apr; 17(2):218–20

Decreases in mediobasal hypothalamic and preoptic area opioid ([3H]naloxone) binding are associated with the progesterone-induced luteinizing hormone surge. Jacobson W, et al. **Endocrinology** 1989 Jan;124(1):199–206

A novel series of potent and selective agonists at the opioid kappa-receptor. Costello GF, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):475–8

Specific binding of naloxone to ovine brain tissue: comparison of brain regions and endocrine states. Weesner GD, et al. **J Anim Sci** 1989 Jun;67(6):1532–7

Binding of 3H-naloxone in the mouse brain: effect of ions and tolerance development. Hitzemann RJ, et al. **Life Sci** 1974 Jun 16;14(12):2393–404

Cocaine-induced changes in 3H-naloxone binding in brain membranes isolated from spontaneously hypertensive and Wistar-Kyoto rats. Ishizuka Y, et al. **Life Sci** 1988; 43(26):2275–82

Characterization of human placental opioid receptors by 3H-ethylketocyclazocine and 3H-naloxone binding. Agbas A, et al. **Neuropeptides** 1988 Oct;12(3):171–6

Histidine abolishes the inhibition by zinc of naloxone binding to opioid receptors in rat brain. Hanissian SH, et al. **Neuropharmacology** 1988 Nov;27(11):1145–9

Human brain metabolism of morphine and naloxone. Wahlström A, et al. **Pain** 1988 Nov;35(2):121–7

The sensitivity to noxious heat in relation to brain and liver opioid glucuronidation in inbred strains of mice. Wahlström A, et al. **Pain** 1989 Jul;38(1):71–5

Naloxone binding in the frontal cortex of postmortem human brain. Pöğün S, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(1–2):167–71

Cocaine alters opiate receptor binding in critical brain reward regions. Hammer RP Jr. **Synapse** 1989;3(1):55–60

[Opiate receptor binding of naloxone in the rat brain: effect of sodium ions] Balashov AM, et al. **Biokhimiia** 1988 Sep; 53(9):1527–31 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Decreased [3H]–naloxone binding and elevated dynorphin–A(1–8) content in Zucker rat brain. Roane DS, et al. **Physiol Behav** 1988;43(3):371–4

[Pharmacokinetic aspects of the Valoron–N principle. Balanced pharmacokinetics of nortilidine and naloxone] Vollmer KO. **Fortschr Med** 1988 Oct 10;106(29):593–6 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Effect of naloxone on endocrine abnormalities in acute renal failure. Grzeszczak W, et al. **Acta Med Pol** 1988; 29(1–2):1–15

Effect of naloxone on tooth pulp–evoked jaw–opening reflex in the barbiturate–anaesthetized cat. Huopaniemi T, et al. **Acta Physiol Scand** 1988 Nov;134(3):327–31

Studies on the enhanced effect of acupuncture analgesia and acupuncture anesthesia by D–phenylalanine (first report)—effect on pain threshold and inhibition by naloxone. Kitade T, et al. **Acupunct Electrother Res** 1988; 13(2–3):87–97

Laser photobiostimulation–induced hypoalgesia in rats is not naloxone reversible. Ponnudurai RN, et al.
Acupunct Electrother Res 1988;13(2–3):109–17

The [lactate]/[pyruvate] ratio and alcohol metabolism: experiments with naloxone in fasting normal male volunteers. Morgan CJ, et al. **Alcohol Alcohol** 1989; 24(3):185–8

Effects of naloxone and naltrexone on self–injury: a double–blind, placebo–controlled analysis. Barrett RP, et al. **Am J Ment Retard** 1989 May;93(6):644–51

Naloxone alters organ perfusion during endotoxin shock in conscious rats. Law WR, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1106–13

Effects of naloxone on glucose homeostasis during insulin–induced hypoglycemia. Nash JA, et al.
Am J Physiol 1989 Sep;257(3 Pt 1):E367–73

Differentiation of cardiac baroreflex properties by cuff and drug methods in two rabbit strains. Weinstock M, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):R654–64

Ethanol–induced depression of hypoxic drive and reversal by naloxone—a sex difference. McCauley VB, et al.
Am Rev Respir Dis 1988 Jun;137(6):1406–10

Naloxone does not alter response to hypercapnia or resistive loading in chronic obstructive pulmonary disease. Simon PM, et al. **Am Rev Respir Dis** 1989 Jan;139(1):134–8

The opiate antagonist naloxone counteracts the inhibition of sympathetic nerve activity caused by halothane anesthesia in rats. Delle M, et al. **Anesthesiology** 1989 Feb;70(2):309–17

Effect of ibogaine on naloxone–precipitated withdrawal syndrome in chronic morphine–dependent rats. Dzoljic ED, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug; 294:64–70

Effects of the opiate antagonist naloxone upon hypothalamically elicited affective defense behavior in the cat. Brutus M, et al. **Behav Brain Res** 1989 May 1; 33(1):23–32

Effects of opiate antagonists and their quaternary analogues on nucleus accumbens self–stimulation. Trujillo KA, et al. **Behav Brain Res** 1989 Jun 1;33(2):181–8

Naloxone administration impairs autoshaped learning. Messing RB, et al. **Behav Neural Biol** 1989 Jan;51(1):34–45

Effects of opioid microinjections into the medial septal area on spatial memory in rats. Bostock E, et al.
Behav Neurosci 1988 Oct;102(5):643–52

Effects of time of testing, stress level, and number of conditioning days on naloxone sensitivity of conditioned stress–induced analgesia in rats. Hagen HS, et al.
Behav Neurosci 1988 Dec;102(6):906–14

Memory facilitation by posttraining and pretest ACTH, epinephrine, and vasopressin administration: two separate effects. Izquierdo I, et al. **Behav Neurosci** 1988 Oct; 102(5):803–6

Inhibition of acoustic startle in the rat by a footshock prestimulus: effects of morphine and naloxone. Leitner DS.
Behav Neurosci 1988 Aug;102(4):526–33

Differential effects of yohimbine and naloxone on copulatory behaviors of male rats. Peters RH, et al.
Behav Neurosci 1988 Aug;102(4):559–64

Central mediation of naloxone–induced anorexia in the ventral tegmental area. Segall MA, et al.
Behav Neurosci 1989 Aug;103(4):857–64

Auricular microelectrostimulation: naloxone–reversible attenuation of opiate abstinence syndrome. Malin DH, et al. **Biol Psychiatry** 1988 Dec;24(8):886–90

Sexual differentiation of the luteinizing hormone response of neonatal rats to the narcotic antagonist naloxone: critical role of estrogen receptors. Almeida OF, et al.
Biol Reprod 1988 Dec;39(5):1009–12

Effects of photoperiod, beta–endorphin, and naloxone on in vitro secretion of testosterone in white–footed mouse (Peromyscus leucopus) testes. Knotts LK, et al.
Biol Reprod 1988 Aug;39(1):205–12

Effects of weaning and naloxone on luteinizing hormone secretion in postpartum ewes. Newton GR, et al.
Biol Reprod 1988 Oct;39(3):532–5

Age–related alterations in pulsatile luteinizing hormone release: effects of long–term ovariectomy, repeated pregnancies and naloxone. Wise PM, et al. **Biol Reprod** 1988 Dec;39(5):1060–6

Opioidergic control of luteinizing hormone release in the female rabbit: influence of ovariectomy and steroid replacement on pulsatile secretion [published erratum appears in Biol Reprod 1988 Dec;39(5):1255] Younglai EV, et al. **Biol Reprod** 1988 Oct;39(3):630–7

Influence of naloxone on the effects of high frequency transcutaneous electrical nerve stimulation in angina pectoris induced by atrial pacing. Mannheimer C, et al.
Br Heart J 1989 Jul;62(1):36–42

Primary sensory neurones and naloxone–precipitated morphine withdrawal. Donnerer J. **Br J Pharmacol** 1989 Apr;96(4):767–72

Effects of naloxone and opioid agonists on gastric excitatory responses to stimulation of the vagus nerve in cats. Okamoto T, et al. **Br J Pharmacol** 1988 Oct;95(2):329–34

Sex differences in the responses of hypothalamic luteinizing hormone–releasing hormone and catecholamine systems to ovarian hormones and naloxone: implications for sexual differentiation of luteinizing hormone secretion in rats. Crowley WR. **Brain Res** 1988 Oct 4;461(2):314–21

Memory enhancement with intra–amygdala post–training naloxone is blocked by concurrent administration of propranolol. Introini–Collison IB, et al. **Brain Res** 1989 Jan 2;476(1):94–101

Sensitivity of magnocellular oxytocin neurones to opioid antagonists in rats treated chronically with intracerebroventricular (i.c.v.) morphine. Leng G, et al.
Brain Res 1989 Apr 10;484(1–2):290–6

Electrophysiological evidence for a tonic activity of the spinal cord intrinsic opioid systems in a chronic pain model. Lombard MC, et al. **Brain Res** 1989 Jan 16;477(1–2):48–56

Opioid–neuroleptic interaction in brainstem self–stimulation. Rompré PP, et al. **Brain Res** 1989 Jan 16;477(1–2):144–51

Opiate antagonists and self–stimulation: extinction–like response patterns suggest selective reward deficit. Trujillo KA, et al. **Brain Res** 1989 Jul 17;492(1–2):15–28

Analysis of estradiol–independent and –dependent endogenous opioid peptide suppression of pulsatile LH release between the mornings of diestrus 2 and proestrus in the rat estrous cycle. Babu GN, et al.
Brain Res Bull 1988 Aug;21(2):277–84

Endogenous opioid systems and neural cancer: transmission and scanning electron microscopic studies of murine neuroblastoma in tissue culture. Zagon IS.
Brain Res Bull 1988 Nov;21(5):777–84

Developmental changes in FSH secretion induced by 5–hydroxytryptophan, naloxone and haloperidol in male and female rats. Becú–Villalobos D, et al.
Brain Res Dev Brain Res 1989 Jun 1;47(2):181–6

Naloxone reverses the hypnotic effect and the depressed baroreceptor reflex of halothane anaesthesia in the dog. Freye E, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):235–41

Lack of clinical–EEG effects of naloxone injection on infantile spasms. Nalin A, et al. **Childs Nerv Syst** 1988 Dec; 4(6):365–6

Opiate receptor antagonism in right–sided congestive heart failure. Naloxone exerts salutary hemodynamic effects through its action on the central nervous system. Sakamoto S, et al. **Circ Res** 1989 Jul;65(1):103–14

Beneficial effects of buprenorphine (a partial opiate agonist) in porcine Escherichia coli septicaemia: a comparison with naloxone. Donaldson MD, et al. **Circ Shock** 1988 Jul; 25(3):209–21

Naloxone potentiates epinephrine's pressor actions in endotoxemic rats. Malcolm DS, et al. **Circ Shock** 1988 Aug; 25(4):259–65

Effects of naloxone on glucose and insulin regulation during endotoxicosis in fed and fasted rats. Yelich MR.
Circ Shock 1988 Nov;26(3):273–85

Endogenous opioids inhibit oxytocin release during nicotine–stimulated secretion of vasopressin in man. Seckl JR, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):509–14

Effects of opiate receptor blockade on gonadotrophin secretion before and after administration of the oestrogen receptor blocker tamoxifen in eugonadal men. Spijkstra JJ, et al. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):179–88

Changes in the responsiveness of luteinizing hormone secretion to infusion of the opioid antagonist naloxone throughout male sexual maturation. Ulloa–Aguirre A, et al. **Clin Endocrinol (Oxf)** 1988 Jul;29(1):17–28

Potentiation of fenfluramine–induced ACTH release in man by naloxone. Jackson RV, et al.
Clin Exp Pharmacol Physiol 1989 Apr;16(4):263–7

Naloxone reversal of buprenorphine–induced respiratory depression. Gal TJ. **Clin Pharmacol Ther** 1989 Jan; 45(1):66–71

Differential effect of high–dose naloxone on the plasma adrenaline response to the cold–pressor test. Bouloux PM, et al. **Clin Sci** 1989 Jun;76(6):625–30

Naloxone–reversible inhibition of gall–bladder mucosal fluid secretion in experimental cholecystitis in the cat by acetorphan, an enkephalinase inhibitor. Jivegård L, et al.
Clin Sci 1989 Jul;77(1):49–54

Phagocytosis in Tetrahymena thermophila: naloxone–reversible inhibition by opiates. De Jesus S, et al. **Comp Biochem Physiol [C]** 1989;92(1):139–42

Comparison of high–dose opioid antagonist effects on ovine fetal cardiovascular function. Dunlap CE 3d, et al.
Dev Pharmacol Ther 1989;13(1):28–37

Naloxone potentiates the plasma catecholamine response to asphyxia in the fetus. Lewis AB, et al.
Dev Pharmacol Ther 1988;11(4):219–25

Effects of progesterone and weaning on LH and FSH responses to naloxone in postpartum beef cows. Cross JC, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):111–22

Endogenous opioid suppression of release of luteinizing hormone during suckling in postpartum anestrous beef cows. Myers TR, et al. **Domest Anim Endocrinol** 1989 Jul; 6(3):183–90

In vivo evidence for a direct effect of naloxone on testicular steroidogenesis in the male rat. Cicero TJ, et al.
Endocrinology 1989 Aug;125(2):957–63

Neonatal organization of the brain opioid systems controlling prolactin and luteinizing hormone secretion. Limonta P, et al. **Endocrinology** 1989 Feb;124(2):681–6

Effects of naloxone on vasopressin secretion in conscious rats: evidence for inhibitory role of endogenous opioid peptides in vasopressin secretion. Yamada T, et al.
Endocrinology 1989 Aug;125(2):785–90

Effect of naloxone infusion on the rate of epileptiform discharges in patients with complex partial seizures. Molaie M, et al. **Epilepsia** 1989 Mar–Apr;30(2):194–200

Lack of effect of naloxone on prolactin and seizures in electroconvulsive therapy. Sperling MR, et al. **Epilepsia** 1989 Jan–Feb;30(1):41–4

Massed amygdaloid kindling in encéphale isolé cats: its facilitation by naloxone. Fernández–Guardiola A, et al.
Epilepsy Res 1989 Jul–Aug;4(1):55–62

5–HT1 receptor agonists attenuate the naloxone–induced jumping behaviour in morphine–dependent mice. Berthold H, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):19–27

Antiarrhythmic properties of naloxone: an electrophysiological study on sheep cardiac Purkinje fibers. Cerbai E, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):491–500

Changes in naloxone and haloperidol effects during the development of captivity–induced jumping stereotypy in bank voles. Kennes D, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):19–24

Intermittent naloxone attenuates the development of physical dependence on methadone in rhesus monkeys. Krystal JH, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):331–8

Behavioural and electrophysiological studies on the paradoxical antinociceptive effects of an extremely low dose of naloxone in an animal model of acute and localized inflammation. Kayser V, et al. **Exp Brain Res** 1988; 73(2):402–10

Changes of dipeptidyl peptidase (DP IV) activity in the T lymphocytes of rats following administration of ACTH, dexamethasone and opiates. Korányi L, et al.
Exp Clin Endocrinol 1989 Apr;93(1):61–8

Adrenal steroid responses to naloxone in polycystic ovarian disease. D'Ambrogio G, et al. **Gynecol Endocrinol** 1987 Dec;1(4):355–61

Gonadotropin secretion in azotemic male rats—effect of opioid blockade. Elias AN, et al. **Horm Res** 1988; 30(1):39–43

Bilateral suprachiasmatic injection of naloxone disrupts circadian rhythm of food intake. Reghunandanan V, et al.
Indian J Exp Biol 1988 Dec;26(12):954–6

Effect of naloxone & catecholamines on renal function & survival in haemorrhagic shock in dogs. Reghunandanan R, et al. **Indian J Med Res** 1988 May;87:516–20

The effect of naloxone on the blood level of morphine and histamine in morphine perfused dogs. Akkan AG, et al.
Int J Clin Pharmacol Ther Toxicol 1988 Dec;26(12):594–6

Immunomodulatory effect of naloxone in duodenal ulcer patients. Malec P, et al. **Int J Immunopharmacol** 1989; 11(2):111–6

A stereoselective blockade by naloxone of opioid and non–opioid–induced granulocyte activation. Marcoli M, et al. **Int J Immunopharmacol** 1989;11(1):57–61

Naloxone alteration of blood flow in a nonischemic region of the partially ischemic gerbil brain. Brown DF, et al.
J Am Osteopath Assoc 1989 Feb;89(2):171–4

Evidence for endogenous opioid modulation of serum luteinizing hormone and prolactin in the steer. Peck DD, et al. **J Anim Sci** 1988 Dec;66(12):3197–201

Influence of the ovary and suckling on luteinizing hormone response to naloxone in postpartum beef cows. Rund LA, et al. **J Anim Sci** 1989 Jun;67(6):1527–31

Effect of naloxone on blood pressure responses and plasma catecholamine levels following clonidine injection in conscious, unrestrained rats. Chang AP, et al.
J Cardiovasc Pharmacol 1989 Feb;13(2):277–82

The effects of naloxone on cerebral blood flow and cerebral function during relative cerebral ischemia. Skarphedinsson JO, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):515–22

Corticotropin–releasing hormone inhibition of gonadotropin

release and the effect of opioid blockade. Barbarino A, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):523–8

Naloxone antagonism of corticotropin-releasing hormone stimulation of prolactin secretion in rhesus monkeys. Vanvugt DA, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1060–6

Naloxone suppresses buprenorphine stimulation of plasma prolactin. Mendelson JH, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):105–9

Lack of an effect of morphine or naloxone on the oestrogen-induced LH surge in anoestrous ewes. Horton RJ, et al. **J Endocrinol** 1988 Oct;119(1):89–93

Seasonal and steroid-dependent effects on the modulation of LH secretion in the ewe by intracerebroventricularly administered beta-endorphin or naloxone. Horton RJ, et al. **J Endocrinol** 1989 Aug;122(2):509–17

Influence of neonatal opioid blockade or injections of gonadotrophin-releasing hormone on the timing of puberty in female rats: correlation of opioid effects with occupation of hypothalamic mu-opioid receptors. Landymore KM, et al. **J Endocrinol** 1988 Dec;119(3):447–52

Effects of morphine and naloxone on plasma levels of LH, FSH, prolactin and growth hormone in the immature male pig. Trudeau VL, et al. **J Endocrinol** 1988 Dec;119(3):501–8

Metergoline, naloxone, and sodium valproate did not modify arginine vasopressin response to insulin-induced hypoglycemia in man. Chiodera P, et al. **J Endocrinol Invest** 1988 May;11(5):365–9

The effects of prolonged opioidergic blockade on LH pulsatile secretion during the menstrual cycle. Rossmanith WG, et al. **J Endocrinol Invest** 1989 Apr;12(4):245–52

Preparation and in vitro activity of liposome encapsulated opioids. Reig F, et al. **J Microencapsul** 1989 Jul–Sep; 6(3):277–83

Beta-endorphin suppresses rat plaque-forming cell response by a non-opioid mechanism. Hemmick LM, et al. **J Neuroimmunol** 1989 Jun;23(1):67–71

The specificity of the pupillary actions of morphine and naloxone. Rabinowitz R, et al. **J Ocul Pharmacol** 1987 Spring;3(1):17–21

Naloxone-insensitive inhibitory and excitatory effects of opioid agonists in the rat isolated uterus. Ohia SE, et al. **J Pharm Pharmacol** 1989 Mar;41(3):168–72

Lack of mixed agonist-antagonist properties of [Gln8-Gly31]-beta h-EP-Gly-Gly-NH2 and [Arg9,19,24,28,29]-beta h-EP in the rat vas deferens neuroeffector junction: studies with naloxone, beta-funaltrexamine and ICI 174,864. Valenzuela R, et al. **J Pharm Pharmacol** 1989 Feb;41(2):92–6

Action of naloxone on myenteric neurons removed from morphine-treated guinea pigs. Cherubini E, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):830–8

Effects of buprenorphine, methadone and naloxone on acquisition of behavioral chains. Cleary J, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):569–75

Inhibition of naloxone-resistant antinociception by centrally administered H2-antagonists. Gogas KR, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):262–7

Acute opioid physical dependence in postaddict humans: naloxone dose effects after brief morphine exposure. Heishman SJ, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):127–34

Plasma arginine vasopressin response to intravenous methadone and naloxone in conscious dogs. Hellebrekers LJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):329–33

Glucose utilization in the rat brain during chronic morphine treatment and naloxone-precipitated morphine withdrawal. Kimes AS, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):538–45

Morphine blocks and naloxone enhances suppression of operant behavior by low doses of 3-isobutyl-1-methylxanthine. Kleven MS, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):273–7

Paradoxical analgesia produced by low doses of the opiate-antagonist naloxone is mediated by interaction at a site with characteristics of the delta opioid receptor. Taiwo YO, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):97–100

Substance P and [leucine]enkephalin release in guinea pig ileum during naloxone-precipitated morphine withdrawal. Wang FS, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):329–32

Tail immersion test for the evaluation of a nociceptive reaction in mice. Methodological considerations. Ramabadran K, et al. **J Pharmacol Methods** 1989 Mar; 21(1):21–31

Adrenergic and opioidergic modulation of a spinal reflex in the decerebrated rabbit. Clarke RW, et al. **J Physiol (Lond)** 1988 Oct;404:407–17

Fluctuation in responsiveness of LH and lack of responsiveness of FSH to prolonged infusion of morphine and naloxone in the ewe. Currie WD, et al. **J Reprod Fertil** 1989 May;86(1):359–66

Prokinetic effects of cisapride, naloxone and parasympathetic stimulation at the equine ileo-caeco-colonic junction. Ruckebusch Y, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):322–9

Physiological response of gray wolves to butorphanol-xylazine immobilization and antagonism by naloxone and yohimbine. Kreeger TJ, et al. **J Wildl Dis** 1989 Jan;25(1):89–94

Opioid inhibition of neurally mediated mucus secretion in human bronchi. Rogers DF, et al. **Lancet** 1989 Apr 29; 1(8644):930–2

Regulation of body temperature in postmenopausal women: interactions between bromocriptine and the endogenous opioid system. Cagnacci A, et al. **Life Sci** 1989; 44(19):1395–402

Rebound increase of basal cAMP level in NG108-15 cells during chronic morphine treatment: effects of naloxone and chloramphenicol. Copeland RL Jr, et al. **Life Sci** 1989; 44(16):1107–16

Trans-cranial electrical stimulation attenuates the severity of naloxone-precipitated morphine withdrawal in rats. Dougherty PM, et al. **Life Sci** 1989;44(26):2051–6

Delayed suppression of serum luteinizing hormone after naloxone treatment in neonatal female rats. Field EA, et al. **Life Sci** 1989;44(26):2025–32

Effects of morphine and naloxone on feline colonic transit. Krevsky B, et al. **Life Sci** 1989;44(13):873–9

Stereospecific reversal of nitrous oxide analgesia by naloxone. Moody EJ, et al. **Life Sci** 1989;44(11):703–9

Naloxone does not antagonize PCP-induced stimulation of the pituitary-adrenal axis in the rat. Pechnick RN, et al. **Life Sci** 1989;44(2):143–7

Abolition of clonidine's effects on ventricular refractoriness by naloxone in the conscious dog. Pinto JM, et al. **Life Sci** 1989;45(5):413–20

Saccharin exposure increases the potency and aversive property of naloxone in drug-naive rats. Walker MJ, et al. **Life Sci** 1988;43(16):1305–11

Naloxone does not affect muscle blood flow during low intensity exercise in rats. Mohrman SJ, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):34–9

Effect of opioid antagonism on esophageal temperature during exercise. Schwellnus MP, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):381–4

Naloxone abolishes the inhibiting effect of somatostatin on the release of oxytocin evoked by insulin-induced hypoglycemia in humans. Chiodera P, et al. **Metabolism** 1989 Aug;38(8):709–11

Effect of intravenous enkephalin administration on kallikrein-kinin system in experimental hemorrhagic shock. Evidence for activation of kallikrein-kinin system by naloxone. Grässler J, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):755–60

Effect of naloxone on TRH-induced PRL and TSH response in normal man. Rampinini A, et al. **Minerva Endocrinol** 1989 Apr–Jun;14(2):125–8

Up-regulation of opiate receptors following chronic naloxone treatment in aged rats. Neisewander JL, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):55–8

Delayed sexual maturation induced by daily melatonin administration eliminates the LH response to naloxone despite normal responsiveness to GnRH in juvenile male rats. Aubert ML, et al. **Neuroendocrinology** 1988 Jul; 48(1):72–80

Naloxone potentiation of effects of cholecystokinin and lithium chloride on oxytocin secretion, gastric motility and feeding. Flanagan LM, et al. **Neuroendocrinology** 1988 Dec; 48(6):668–73

Effect of morphine and naloxone on plasma prolactin concentrations in the fetal sheep and pregnant ewe during late gestation. McMillen IC, et al. **Neuroendocrinology** 1989 Mar;49(3):286–90

The paradoxical stimulatory effect of morphine on LH secretion is dose-dependent and naloxone-reversible. Van Vugt DA, et al. **Neuroendocrinology** 1989 Jul;50(1):109–16

Comparison of the duration of action of nalmefene and naloxone on the hypothalamic-pituitary axis of the rhesus monkey. VanVugt DA, et al. **Neuroendocrinology** 1989 Mar;49(3):275–80

Antagonism of dermorphin-induced catalepsy with naloxone, TRH-analog CG3703 and the benzodiazepine antagonist, Ro 15-1788. Paakkari P, et al. **Neuropharmacology** 1988 Oct;27(10):1007–12

Naloxone-precipitated contractions of the guinea pig ileum made tolerant to a synthetic opioid peptide: evidence against the involvement of capsaicin-sensitive neurones. Barthó L. **Neurosci Lett** 1988 Dec 19;95(1-3):198–202

Opioid inhibition of secretion from oxytocin and vasopressin nerve terminals following selective depletion of neurohypophysial catecholamines. Bicknell RJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):281–6

Enhancement by haloperidol of the locomotor response induced by naloxone in morphine-treated guinea pigs. Chahl LA, et al. **Neurosci Lett** 1989 Jan 16;96(2):213–7

Effects of clonidine and naloxone on the dopamine levels in the rat mediobasal hypothalamus measured by in vivo voltammetry. Koshiyama H, et al. **Neurosci Lett** 1989 May 8;99(3):328–32

Rhythmic digastric activity in the naloxone-treated decerebrate rabbit pup. Thexton AJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):242–6

Enigmatic action of ciclosporine A on the naloxone-precipitated morphine withdrawal syndrome in mice. Berthold H, et al. **Neuroscience** 1989;31(1):97–103

Ultrasonic vocalization in rat pups as a marker of behavioral development: an investigation of the effects of drugs influencing brain opioid system. Cuomo V, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):465–9

Naloxone-reversible inhibition by opiates of phagocytosis in Tetrahymena thermophila and mouse macrophages. Casellas AM, et al. **P R Health Sci J** 1988 Aug;7(2):103–5

Dose-dependent inhibition by naloxone of nociceptive activity evoked in the rat thalamus. Jurna I. **Pain** 1988 Dec; 35(3):349–54

Opioid involvement in TRH-induced antinociception in the rat following intracerebral administration. Reny-Palasse V, et al. **Pain** 1989 Aug;38(2):193–201

Naloxone does not alter the perception of pain induced by electrical and thermal stimulation of the skin in healthy humans. Stacher G, et al. **Pain** 1988 Sep;34(3):271–6

Differential inhibitory effects of MIF-1, Tyr-MIF-1, naloxone and beta-funaltrexamine on body rotation-induced analgesia in the meadow vole, Microtus pennsylvanicus. Lipa SM, et al. **Peptides** 1989 May-Jun; 10(3):493–7

Opiate and alpha receptor antagonists block the pressor responses of conscious rats given intravenous dynorphin. Thornhill JA, et al. **Peptides** 1989 Jan–Feb;10(1):171–7

Opioids and sexual behavior in the male rat. Agmo A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1021–34

Hippocampal serotonin mediates hypoactivity in dietarily obese hamsters: a possible manifestation of aging? Borer KT, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):885–92

Effects of naloxone and naltrexone on memory consolidation in CD1 mice: involvement of GABAergic mechanisms. Castellano C, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):563–7

Effects of naloxone on penile erection in cats. Domer FR, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):543–5

Opposite effects of restraint on morphine analgesia and naloxone-induced jumping. Dymshitz J, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):905–10

Naloxone fails to alter local cerebral glucose utilization in the rat. Fanelli RJ, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):481–5

Stimulation of opioid receptors suppresses penile erectile reflexes and seminal emission in rats. Gomez-Marrero J, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):393–6

Effects of ketamine, naloxone, and physostigmine on flash evoked potentials in rat superior colliculus. Hetzler BE, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):511–8

The psychopharmacologic and prolactin response after large doses of naloxone in man. Kumor KM, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):967–75

Effect of morphine and naloxone on a defensive response of the crab Chasmagnathus granulatus. Lozada M, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):635–40

Gamma-butyrolactone's discriminability and effect on low rates of lever pressing by rats: alone and in combination with D-amphetamine and naloxone. McIntire KD, et al. **Pharmacol Biochem Behav** 1988 May;30(1):45–53

Effects of naloxone and picrotoxin on diazepam- or pentobarbital-induced hyperphagia in nondeprived rats. Naruse T, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):709–11

Naloxone, but not Tyr-MIF-1, reduces volitional ethanol drinking in rats: correlation with degree of spontaneous preference. Pulvirenti L, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):129–34

Effect of naloxone on the locomotor stimulatory action of chlordiazepoxide in mice. Sansone M, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):371–3

Naloxone-induced modulation of feline aggression elicited from midbrain periaqueductal gray. Shaikh MB, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):791–6

Naloxone suppression of self-stimulation is independent of response difficulty. Trujillo KA, et al. **Pharmacol Biochem Behav** 1989 May;33(1):147–55

Catecholamines and endogenous opioids in ventral tegmental self-stimulation reward. van Wolfswinkel L, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):589–95

Dissociation of naloxone-sensitive and naloxone-insensitive effects of U-50,488H. Young GA. **Pharmacol Biochem Behav** 1989 May;33(1):215–7

The effect of morphine, naloxone, D- and L-aspartic acid on the brain and lung ACE in mice. Koyuncuoğlu H, et al. **Pharmacol Res Commun** 1983 Nov;15(10):969–78

Nociceptive circling and naloxone. Rabinowitz R, et al. **Pharmacol Res Commun** 1983 Nov;15(10):963–7

The influence of morphine and naloxone on plasma oxytocin concentration in the rat. Grell S, et al. **Pharmacol Toxicol** 1988 Oct;63(4):274–6

Effect of 5 alpha-dihydrotestosterone and flutamide on the facilitation of lordosis by LHRH and naloxone in estrogen-primed female rats. Erskine MS. **Physiol Behav** 1989 Apr;45(4):753–9

Brief exposure to a natural predator, the short-tailed weasel, induces benzodiazepine-sensitive analgesia in white-footed mice. Kavaliers M. **Physiol Behav** 1988;43(2):187–93

Naloxone attenuation of sham feeding is modified by manipulation of sucrose concentration. Kirkham TC, et al. **Physiol Behav** 1988;44(4-5):491–4

Attenuation of sham feeding by naloxone is stereospecific: evidence for opioid mediation of orosensory reward. Kirkham TC, et al. **Physiol Behav** 1988;43(6):845–7

Systemic naloxone does not affect pain-related behaviour in the formalin test in rat. Kocher L. **Physiol Behav** 1988; 43(3):265–8

Naloxone reversal of stress-induced suppression of LH release in the common marmoset. O'Byrne KT, et al. **Physiol Behav** 1989 May;45(5):1077–80

Angiotensin II, bombesin and naloxone in tooth pulp and cutaneous nociceptive mechanisms in rabbits. Raevskaya

OS, et al. **Physiol Bohemoslov** 1988;37(3):281–5

The action of naloxone on the blood pressure and heart rate in conscious SHR and WKY rats. Cader S, et al. **Proc West Pharmacol Soc** 1989;32:299–301

Effect of phentolamine on blood pressure, heart rate and plasma catecholamine levels in conscious, unrestrained morphine dependent rats during naloxone precipitated autonomic withdrawal responses. Dixon WR, et al. **Proc West Pharmacol Soc** 1988;31:117–9

Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. **Prog Brain Res** 1988;77:321–7

EEG and ERP responses to naloxone and ethanol in monkeys. Ehlers CL. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):217–28

Effect of naloxone on the growth hormone response to clonidine in normal women during the mid–luteal phase. Phipps WR, et al. **Psychoneuroendocrinology** 1989; 14(1–2):137–43

"Paradoxical" analgesia induced by naloxone and naltrexone. Greeley JD, et al. **Psychopharmacology (Berlin)** 1988; 96(1):36–9

Interactions of clonidine and naloxone on schedule–controlled behavior in opioid–naive mice. Katz JL. **Psychopharmacology (Berlin)** 1989;98(4):445–7

The hyperalgesic effect of naloxone is attenuated in streptozotocin–diabetic mice. Ramabadran K, et al. **Psychopharmacology (Berlin)** 1989;97(2):169–74

Clonidine infusions into the locus coeruleus attenuate behavioral and neurochemical changes associated with naloxone–precipitated withdrawal. Taylor JR, et al. **Psychopharmacology (Berlin)** 1988;96(1):121–34

The effect of naloxone on blood pressure, heart rate, plasma catecholamines, renin activity and aldosterone following exercise in healthy males. Bramnert M. **Regul Pept** 1988 Sep;22(4):295–301

Adrenal vein and arterial levels of catecholamines and immunoreactive metenkephalin in canine endotoxin shock and their response to naloxone. Watson JD, et al. **Res Exp Med (Berl)** 1988;188(5):319–28

Naloxone enhances the response to hypercapnia of spinal and cranial respiratory nerves. Overholt JL, et al. **Respir Physiol** 1988 Dec;74(3):299–309

Effect of naloxone on acute ethylic intoxication. An EEG study. Dawid–Milner MS, et al. **Rev Esp Fisiol** 1989 Jun; 45(2):203–6

Electroencephalographic study of naloxone effects in the recovery of an acute alcoholic intoxication. Dawid–Milner MS, et al. **Rev Esp Fisiol** 1989 Jun;45(2):207–10

Effect of opioid antagonism on the ability to tolerate maximal anaerobic exercise. Gordon NF, et al. **S Afr Med J** 1989 Sep 16;76(6):268–9

Naloxone–reversible monocyte dysfunction in patients with chronic fatigue syndrome. Prieto J, et al. **Scand J Immunol** 1989 Jul;30(1):13–20

Plasma beta–endorphin and the effect of naloxone on hemodynamic changes during experimental acute pancreatitis in dogs. Satake K, et al. **Surg Gynecol Obstet** 1989 May;168(5):402–6

Effect of naloxone, nalbuphine, progesterone and pregnant mare's serum gonadotrophin on the sexual behaviour of ewes. Fuentes VO. **Vet Rec** 1989 Mar 18;124(11):274–6

[Frequency of electroacupuncture as a cardinal factor determining the potency of analgesia and its vulnerability to naloxone blockade in rabbits] Wang XM, et al. **Chen Tzu Yen Chiu** 1988;13(1):56–60 (Eng. Abstr.) **(Chi)**

[The influence of intravenous naloxone on the blood pressure lowering effect of electro–acupuncture] Zhang HX, et al. **Chen Tzu Yen Chiu** 1988;13(1):61–4 (Eng. Abstr.) **(Chi)**

[Hemodynamic effects of naloxone in early acute pancreatitis in the dog and its efficacy in treating acute pancreatitis] Shen J. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):173–6, 190 (Eng. Abstr.) **(Chi)**

[Naloxone and endotoxic shock] Shen XL, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):279–81 (28 ref.) **(Chi)**

[Effects of naloxone on the analgesia induced by vibratory stimulation (letter)] Guieu R, et al. **Presse Med** 1989 Jun 17;18(24):1207–8 **(Fre)**

[The effect of naloxone on basal and maximum gastric secretion in patients with chronic duodenal ulcer] Markiewicz K, et al. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(3–4):138–44 (Eng. Abstr.) **(Ger)**

[Effect of naloxone on corticotropin (ACTH) and somatotropin (HGH) secretion in patients with chronic renal failure] Grzeszczak W, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):181–8 (Eng. Abstr.) **(Pol)**

[Effect of naloxone on plasma renin activity and aldosteronemia in patients with chronic renal failure] Grzeszczak W, et al. **Pol Arch Med Wewn** 1985 Nov–Dec; 74(5–6):334–9 (Eng. Abstr.) **(Pol)**

[The effect of naloxone on the secretion of luteotropin (LH), follicle–stimulating hormone (FSH), prolactin and testosterone in patients with chronic kidney failure] Grzeszczak W, et al. **Pol Arch Med Wewn** 1985 May; 73(5):278–89 (Eng. Abstr.) **(Pol)**

[Effect of naloxone on vasopressin level in the blood of patients with acute and chronic renal failure] Grzeszczak W, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):176–80 (Eng. Abstr.) **(Pol)**

[The development of ischemic cardiac arrhythmias during naloxone blockade of the opiate receptors] Kositskiĭ GI, et al. **Biull Eksp Biol Med** 1989 May;107(5):528–30 (Eng. Abstr.) **(Rus)**

[Intensification of neurogenic spasms of the cerebral vessels by naloxone] Mirzoian RS, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):41–4 (Eng. Abstr.) **(Rus)**

[Effect of angiotensin II and naloxone on the nociceptive sensitivity of rabbits undergoing electrostimulation of the skin and dental pulp] Raevskaia OS, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):23–7 (Eng. Abstr.) **(Rus)**

[The effect of naloxone and delta–sleep inducing peptide on the homocarnosine content of brain tissue] Makletsova MG, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):112–4 (Eng. Abstr.) **(Rus)**

[An experimental pain model: the formaldehyde test] Seijo F, et al. **Arch Neurobiol (Madr)** 1989 May–Jun;52(3):134–9 (Eng. Abstr.) **(Spa)**

[Naloxone and alcoholic intoxication (letter)] Benítez Rosario MA, et al. **Rev Clin Esp** 1988 May;182(8):447–8 **(Spa)**

[Respiratory effects of nicotine and naloxone] Jiménez–Vargas J, et al. **Rev Med Univ Navarra** 1988 Jan–Mar;32(1):51–2 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Buprenorphine antagonism of ventilatory depression following fentanyl anaesthesia. Boysen K, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):490–2

The effect of naloxone on the symptoms of narcolepsy. Sonka K, et al. **Agressologie** 1989 Feb;30(2):93–6

Hemodynamic effects of high dose naloxone in congestive heart failure. Kindman LA, et al. **Am J Cardiol** 1989 Sep 1;64(8):542–4

Duration of antagonistic effects of nalmefene and naloxone in opiate–induced sedation for emergency department procedures. Barsan WG, et al. **Am J Emerg Med** 1989 Mar; 7(2):155–61

Naloxone attenuates development of hypertension in two–kidney one–clip Goldblatt rats. Chen M, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E839–42

Rapid detoxification from opioid dependence [letter] Kosten TR, et al. **Am J Psychiatry** 1989 Oct;146(10):1349

Lack of effect of naloxone on selection of nutrients by bulimic women [letter] Soll E, et al. **Am J Psychiatry** 1989 Jun; 146(6):803

Central nervous system manifestations of a valproic acid overdose responsive to naloxone. Alberto G, et al. **Ann Emerg Med** 1989 Aug;18(8):889–91

Multicenter trial of naloxone in Alzheimer's disease. Henderson VW, et al. **Ann Neurol** 1989 Apr;25(4):404–6

Use of naloxone in opioid–induced anaphylactoid reaction [letter] Panos MZ, et al. **Br J Anaesth** 1988 Sep;61(3):371

Naloxone in heroin withdrawal [letter] Brewer C. **Br J Psychiatry** 1988 Jul;153:120

Naloxone treatment for opiate withdrawal syndrome [letter] Loimer N, et al. **Br J Psychiatry** 1988 Dec;153:851–2

The use of naloxone during the withdrawal syndrome from heroin. Vlissides DN, et al. **Br J Psychiatry** 1988 Apr; 152:565–7

Behavioural evidence for a bidirectional effect of systemic naloxone in a model of experimental neuropathy in the rat. Attal N, et al. **Brain Res** 1989 Aug 14;494(2):276–84

Modulation of murine melanoma growth by naloxone. Murgo AJ. **Cancer Lett** 1989 Feb;44(2):137–42

Naloxone therapy in stroke [letter] Muoghalu BU, et al. **Clin Pharm** 1989 Feb;8(2):90

Is there a role for naloxone in the treatment of stroke? [editorial] Martinez–Arizola A, et al. **Crit Care Med** 1989 Aug;17(8):839–40

Physiologic and plasma hormone correlates of survival in endotoxic dogs: effects of opiate antagonists. Murray MJ, et al. **Crit Care Med** 1989 Jan;17(1):39–47

Potentiation of pentazocine analgesia by low–dose naloxone. Levine JD, et al. **J Clin Invest** 1988 Nov;82(5):1574–7

Melatonin mediates the antidyskinetic effects of naloxone in tardive dyskinesia [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):147–8

Use of naloxone in septic shock. Canady J, et al. **J Natl Med Assoc** 1989 Jun;81(6):669–73

Use of naloxone in asphyxiated neonates [letter] Grylack L. **J Pediatr** 1989 Mar;114(3):509

Effects of naloxone and verapamil in experimental amitriptyline poisoning in rats. Knudsen K, et al. **J Toxicol Clin Toxicol** 1988;26(5–6):313–24

Naloxone and opiate addiction [letter] Brewer C, et al. **Lancet** 1989 Sep 16;2(8664):683–4

Camylofin intoxication reversed by naloxone [letter] Schvartsman S, et al. **Lancet** 1988 Nov 26;2(8622):1246

Naloxone for septic shock [letter] Soulioti AM. **Lancet** 1988 Nov 12;2(8620):1133–4

Effects of methyl prednisolone, dimethyl sulphoxide and naloxone in experimental spinal cord injuries in rats. Zileli M, et al. **Neurol Res** 1988 Dec;10(4):232–5

Paradoxical effects of low doses of naloxone in experimental models of inflammatory pain. Kayser V, et al. **Prog Brain Res** 1988;77:301–12

High–dose naloxone in tardive dyskinesia. Lindenmayer JP, et al. **Psychiatry Res** 1988 Oct;26(1):19–28

Effects of naloxone on cardiac energy metabolism in hypovolemic shock in rats. Kashimoto S, et al. **Resuscitation** 1989 Feb;17(1):33–8

Drug therapy for ischemic stroke. Gorelick PB, et al. **Semin Neurol** 1987 Jun;7(2):119–27 (88 ref.)

Naloxone and mortality in the gerbil stroke model. Benzel EC, et al. **South Med J** 1989 May;82(5):555–7

Intravenously and iontophoretically administered naloxone reverses ischemic changes in rat hippocampus. Dalkara T, et al. **Stroke** 1989 Aug;20(8):1059–64

Beta–endorphin disregulation in autistic and self–injurious behavior: a neurodevelopmental hypothesis. Sandman CA. **Synapse** 1988;2(3):193–9

[Naloxone in the treatment and prevention of shock] Zou CM. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):580–2 (11 ref.) **(Chi)**

[Late respiratory depression after intra–thecal injection of morphine. Reversal by naloxone administered by the same route] Facon A, et al. **Cah Anesthesiol** 1988 Jun–Jul; 36(4):327–8 **(Fre)**

[Naloxone and naltrexone in the treatment of chronic obstructive bronchopneumopathies (letter)] Caillaud D, et al. **Presse Med** 1988 Oct 29;17(38):2036 **(Fre)**

[Comparison of the action of 2 effective analgesics. Experimental study: tramadol versus tilidine/naloxone] Bromm B, et al. **Fortschr Med** 1989 Jun 10;107(17):385–9 (Eng. Abstr.) **(Ger)**

["Induced detoxification treatment" of opiate dependent patients—a new therapy concept] Loimer N, et al. **Wien Klin Wochenschr** 1989 Jun 23;101(13):451–4 (Eng. Abstr.) **(Ger)**

[Effect of naloxone on blood microcirculatory changes in anaphylactic shock] Panchenko SV. **Biull Eksp Biol Med** 1989 May;107(5):540–2 (Eng. Abstr.) **(Rus)**

NALTREXONE

ADMINISTRATION & DOSAGE

Analgesia produced by normal doses of opioid antagonists alone and in combination with morphine. Vaccarino AL, et al. **Pain** 1989 Jan;36(1):103–9

Neonatal naltrexone treatment: effects on sexual and exploratory behavior in male and female rats. Meyerson BJ, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):63–7

Endorphins in male impotence: evidence for naltrexone stimulation of erectile activity in patient therapy. Fabbri A, et al. **Psychoneuroendocrinology** 1989;14(1–2):103–11

ADVERSE EFFECTS

More on idiosyncratic reaction to naltrexone [letter] Malcolm R, et al. **Am J Psychiatry** 1989 Jan;146(1):124–5

Effects of acute administration of naltrexone on cardiovascular function, body temperature, body weight and serum concentrations of liver enzymes in autistic children. Herman BH, et al. **Dev Pharmacol Ther** 1989; 12(3):118–27

ANALOGS & DERIVATIVES

Opiate antagonist nalmefene inhibits ethanol–induced flushing in Asians: a preliminary study. Ho SB, et al. **Alcoholism (NY)** 1988 Oct;12(5):705–12

Duration of antagonistic effects of nalmefene and naloxone in opiate–induced sedation for emergency department procedures. Barsan WG, et al. **Am J Emerg Med** 1989 Mar; 7(2):155–61

Opioid peptides and primary biliary cirrhosis. Thornton JR, et al. **BMJ** 1988 Dec 10;297(6662):1501–4

Antagonism of morphine–induced respiratory depression with nalmefene. Konieczko KM, et al. **Br J Anaesth** 1988 Sep;61(3):318–23

Estimation of opioid receptor agonist dissociation constants with beta–chlornaltrexamine, an irreversible ligand which also displays agonism. Leff P, et al. **Br J Pharmacol** 1988 Sep;95(1):234–40

Spinal kappa–opiate receptor involvement in the analgesia of pregnancy: effects of intrathecal nor–binaltorphimine, a kappa–selective antagonist. Sander HW, et al. **Brain Res** 1988 Dec 6;474(2):343–7

Beta–funaltrexamine disrupts the day–night rhythm of nociception in mice. Kavaliers M. **Brain Res Bull** 1989 May; 22(5):783–5

Opiates, sleep and itch [letter] Burch JR, et al. **Clin Exp Dermatol** 1988 Nov;13(6):418–9

Recovery from opioid receptor alkylation: social conflict analgesia and brain [3H]etorphine binding in beta–chlornaltrexamine–treated mice. Lazega D, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):333–7

Evaluation of delta receptor mediation of supraspinal opioid analgesia by in vivo protection against the beta–funaltrexamine antagonist effect. Sánchez–Blázquez P, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):9–19

Effects of beta–funaltrexamine on ingestive behaviors in the rat. Ukai M, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):161–5

Estimated membrane structure and receptor subtype selection of an opioid alkaloid–peptide hybrid. Schwyzer R. **Int J Pept Protein Res** 1988 Dec;32(6):476–83

The effects of nalmefene, a potent oral opiate antagonist, on exercise–induced bronchospasm. Christopher MA, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1037–41

Efficacy and safety of nalmefene in patients with severe pruritis caused by chronic urticaria and atopic dermatitis.

Monroe EW. **J Am Acad Dermatol** 1989 Jul;21(1):135–6

Use of narcotic antagonists to modify stereotypic self–licking, self–chewing, and scratching behavior in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):815–9

The implication of opiates in the glucocorticoid–mediated inhibition of LH secretion in rats. Belhadj H, et al. **J Endocrinol** 1989 Aug;122(2):451–6

Opioid agonist and antagonist activities of peripherally selective derivatives of naltrexamine and oxymorphamine. Botros S, et al. **J Med Chem** 1989 Sep;32(9):2068–71

Lack of mixed agonist–antagonist properties of [Gln8–Gly31]–beta h–EP–Gly–Gly–NH2 and [Arg9,19,24,28,29]–beta h–EP in the rat vas deferens neuroeffector junction: studies with naloxone, beta–funaltrexamine and ICI 174,864. Valenzuela R, et al. **J Pharm Pharmacol** 1989 Feb;41(2):92–6

beta–FNA binds irreversibly to the opiate receptor complex: in vivo and in vitro evidence. Rothman RB, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):405–16

Suppression by nor–binaltorphimine of kappa opioid–mediated diuresis in rats. Takemori AE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):971–4

Irreversible opiate agonists and antagonists: V. Hydrazone and acylhydrazone derivatives of naltrexone. Luke MC, et al. **Life Sci** 1988;43(15):1249–56

Central pharmacological activity of a quaternary ammonium compound in streptozotocin diabetic mice. Quock RM, et al. **Life Sci** 1988;43(17):1411–7

Selective kappa antagonist properties of nor–binaltorphimine in the rat MES seizure model. Tortella FC, et al. **Life Sci** 1989;44(10):661–5

Comparison of the duration of action of nalmefene and naloxone on the hypothalamic–pituitary axis of the rhesus monkey. VanVugt DA, et al. **Neuroendocrinology** 1989 Mar;49(3):275–80

A brief study of the selectivity of norbinaltorphimine, (–)–cyclofoxy, and (+)–cyclofoxy among opioid receptor subtypes in vitro. Rothman RB, et al. **Neuropeptides** 1988 Oct;12(3):181–7

Reversal by beta–funaltrexamine and 16–methyl cyprenorphine of the antinociceptive effects of opioid agonists in the mouse and guinea–pig. Hayes AG, et al. **Neuropharmacology** 1988 Aug;27(8):813–6

Differential inhibitory effects of MIF–1, Tyr–MIF–1, naloxone and beta–funaltrexamine on body rotation–induced analgesia in the meadow vole, Microtus pennsylvanicus. Lipa SM, et al. **Peptides** 1989 May–Jun; 10(3):493–7

Isolation of a novel morphinan 3–O–diglucuronide metabolite from dog urine. Dixon R, et al. **Pharm Res** 1989 Jan; 6(1):28–32

Naltrexone–3–salicylate (a prodrug of naltrexone): synthesis and pharmacokinetics in dogs. Hussain MA, et al. **Pharm Res** 1988 Feb;5(2):113–5

Antagonist treatment in nucleus accumbens or periaqueductal grey affects heroin self–administration. Corrigall WA, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):443–50

METABOLISM

Estimated membrane structure and receptor subtype selection of an opioid alkaloid–peptide hybrid. Schwyzer R. **Int J Pept Protein Res** 1988 Dec;32(6):476–83

Coupling of naltrexone to biodegradable poly(alpha–amino acids). Negishi N, et al. **Pharm Res** 1987 Aug;4(4):305–10

PHARMACOLOGY

Effects of naloxone and naltrexone on self–injury: a double–blind, placebo–controlled analysis. Barrett RP, et al. **Am J Ment Retard** 1989 May;93(6):644–51

Behavioral evidence for cholecystokinin–opiate interactions in neonatal rats. Weller A, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R901–7

Effects of opiate antagonists and their quaternary analogues on nucleus accumbens self–stimulation. Trujillo KA, et al. **Behav Brain Res** 1989 Jun 1;33(2):181–8

Place avoidance learning and stress–induced analgesia in the attacked mouse: role of endogenous opioids. Siegfried B, et al. **Behav Neural Biol** 1989 Jul;52(1):95–107

Naltrexone–reversible pain suppression in the isolated attacking mouse. Siegfried B, et al. **Behav Neural Biol** 1988 Nov;50(3):354–60

Stress– and morphine–induced elevations of plasma and tissue cholesterol in mice: reversal by naltrexone. Bryant HU, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3777–80

Long–lasting effects of naltrexone, an opioid receptor antagonist, on cell proliferation in developing rat forebrain. Schmahl W, et al. **Brain Res** 1989 May 8;486(2):297–300

Opiate antagonists and self–stimulation: extinction–like response patterns suggest selective reward deficit. Trujillo KA, et al. **Brain Res** 1989 Jul 17;492(1–2):15–28

Apomorphine markedly potentiates naltrexone–induced hypodipsia in the rat. Ukai M, et al. **Brain Res** 1988 Jun 7;451(1–2):357–60

Locus ceruleus discharge characteristics of morphine–dependent rats: effects of naltrexone. Valentino RJ, et al. **Brain Res** 1989 May 29;488(1–2):126–34

Effects of naltrexone on nucleus accumbens, lateral hypothalamic and ventral tegmental self–stimulation rate–frequency functions. West TE, et al. **Brain Res** 1988 Oct 11;462(1):126–33

Chronic opioid antagonist treatment increases mu and delta receptor mediated spinal opioid analgesia. Yoburn BC, et al. **Brain Res** 1989 Apr 17;485(1):176–8

Opioid antagonist modulation of murine neuroblastoma: a profile of cell proliferation and opioid peptides and receptors. Zagon IS, et al. **Brain Res** 1989 Feb 20; 480(1–2):16–28

Endogenous opioid systems and neural cancer: transmission and scanning electron microscopic studies of murine neuroblastoma in tissue culture. Zagon IS. **Brain Res Bull** 1988 Nov;21(5):777–84

Early undernutrition blocks the effect of naltrexone on rat exploratory behavior. Rotta FT, et al. **Braz J Med Biol Res** 1988;21(2):305–12

Evaluation of the anti–arrhythmic potency of naltrexone in the isolated ischaemic rat heart. Liu XL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):40–3

Comparison of high–dose opioid antagonist effects on ovine fetal cardiovascular function. Dunlap CE 3d, et al. **Dev Pharmacol Ther** 1989;13(1):28–37

Chronic administration of morphine and naltrexone up–regulate mu–opioid binding sites labeled by [3H][D–Ala2,MePhe4,Gly–ol5]enkephalin: further evidence for two mu–binding sites. Rothman RB, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):71–82

Naltrexone suppresses abnormal sexual behavior in Tourette's syndrome. Sandyk R. **Int J Neurosci** 1988 Nov; 43(1–2):107–10

Use of narcotic antagonists to modify stereotypic self–licking, self–chewing, and scratching behavior in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):815–9

Increase in plasma melatonin, beta–endorphin, and cortisol after a 28.5–mile mountain race: relationship to performance and lack of effect of naltrexone. Strassman RJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):540–5

Influence of antiopioids on luteinizing hormone pulsatility in aging men. Vermeulen A, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):68–72

Endogenous opioid systems and the regulation of dendritic growth and spine formation. Hauser KF, et al. **J Comp Neurol** 1989 Mar 1;281(1):13–22

Paradoxical and subtype–specific effects of opiate antagonists on the expression of opioid receptors in rat brain cultures. Barg J, et al. **J Neurosci Res** 1989 Mar;22(3):322–30

Pharmacological characterization of supersensitivity to naltrexone in squirrel monkeys. France CP, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):928–36

Discriminative stimulus effects of naltrexone in morphine–treated rhesus monkeys. France CP, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):937–43

Environmental determinants of enhanced sensitivity to the behavioral effects of naltrexone. Warren PH, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):546–51

Regional brain glucose utilization during and following chronic naltrexone administration: preliminary observations in rat brain. Dow–Edwards DL, et al. **Life Sci** 1989; 44(8):571–7

Central pharmacological activity of a quaternary ammonium compound in streptozotocin diabetic mice. Quock RM, et al. **Life Sci** 1988;43(17):1411–7

Upregulation of opioid receptor subtypes correlates with potency changes of morphine and DADLE. Yoburn BC, et al. **Life Sci** 1988;43(16):1319–24

Chronic treatment with naltrexone enhances morphine–stimulated dopamine neurotransmission: neurochemical and behavioral evidence. Bardo MT, et al. **Neuropharmacology** 1988 Nov;27(11):1103–9

Chronic administration of morphine and naltrexone up–regulate[3H][D–Ala2,D–leu5]enkephalin binding sites by different mechanisms. Danks JA, et al. **Neuropharmacology** 1988 Sep;27(9):965–74

Comparison of the oxytocin response to water–deprivation, hyperosmolarity and administration of morphine or naltrexone in lactating and virgin female rats. Evans RG, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):177–81

Chronic stress attenuation of alpha 2–adrenoceptor reactivity is reversed by naltrexone. Cancela LM, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):33–5

Effects of naloxone and naltrexone on memory consolidation in CD1 mice: involvement of GABAergic mechanisms. Castellano C, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):563–7

Effects of naltrexone on food preference and concurrent behavioral responses in food–deprived rats. Cooper SJ, et al. **Pharmacol Biochem Behav** 1989 May;33(1):17–20

Effects of a low dose of naltrexone on glucose–induced allesthesia and hunger in humans. Melchior JC, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):117–21

Naltrexone effects on pituitary and gonadal hormones in male and female rhesus monkeys. Mello NK, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):683–91

Inhibition of drinking by naltrexone in the rat: interaction with the dopamine D–1 antagonist SCH 23390 and the D–2 antagonist sulpiride. Ukai M, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):651–5

The effect of tetrahydropapaveroline and naltrexone on voluntary ethanol ingestion in rats. Oster L, et al. **Proc West Pharmacol Soc** 1988;31:277–9

Chronic naltrexone enhances acquisition of the radial maze task in rats. Spain JW, et al. **Proc West Pharmacol Soc** 1989;32:141–2

Up–regulation of opiate receptors following chronic naltrexone treatment in mature and aged male and female rats. Neisewander JL, et al. **Prog Clin Biol Res** 1989; 292:471–6

"Paradoxical" analgesia induced by naloxone and naltrexone. Greeley JD, et al. **Psychopharmacology (Berlin)** 1988; 96(1):36–9

Effects of naltrexone, and d–amphetamine, and their interaction on the stimulus control of choice behavior of rats. Grilly DM, et al. **Psychopharmacology (Berlin)** 1988; 96(1):73–80

Naltrexone blocks amphetamine–induced hyperactivity, but not disruption of social and agonistic behavior in mice and squirrel monkeys. Winslow JT, et al. **Psychopharmacology (Berlin)** 1988;96(4):493–9

Naltrexone potentiates glycemic responses during stress and epinephrine challenge in genetically obese mice. McCubbin JA, et al. **Psychosom Med** 1989 Jul–Aug;51(4):441–8

THERAPEUTIC USE

A naturalistic analytic study of veterans using naltrexone in Puerto Rico. Santos EF. **Bol Asoc Med P R** 1989 Apr; 81(4):134–6

Opioid withdrawal and naltrexone induction in 48–72 hours with minimal drop–out, using a modification of the naltrexone–clonidine technique. Brewer C, et al. **Br J Psychiatry** 1988 Sep;153:340–3

Adrenal vein catecholamines and met–enkephalin during staged hemorrhage and naltrexone administration in cats. Gaumann DM, et al. **Circ Shock** 1989 Feb;27(2):139–54

Physiologic and plasma hormone correlates of survival in endotoxic dogs: effects of opiate antagonists. Murray MJ, et al. **Crit Care Med** 1989 Jan;17(1):39–47

A multicentre study to introduce naltrexone for opiate dependence in Spain. García–Alonso F, et al. **Drug Alcohol Depend** 1989 Apr;23(2):117–21

Naltrexone in autistic children: an acute open dose range tolerance trial. Campbell M, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):200–6

Naltrexone for neurotic excoriations [letter] Smith KC, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):860–1

Use of narcotic antagonists to modify stereotypic self–licking, self–chewing, and scratching behavior in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):815–9

A placebo–controlled, double–blind crossover study of naltrexone hydrochloride in outpatients with normal weight bulimia. Mitchell JE, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):94–7

Codeine–induced abdominal pain [letter] Wilkinson JE. **J Emerg Med** 1989 May–Jun;7(3):292

Chronic naltrexone suppresses platelet aggregation induced by adrenaline and 5–hydroxytryptamine in former heroin addicts. García–Sevilla JA, et al. **J Neural Transm** 1988; 73(2):157–60

Naltrexone treatment—the problem of patient acceptance. Fram DH, et al. **J Subst Abuse Treat** 1989;6(2):119–22

Urine testing in impaired physicians. Croughan J, et al. **Mo Med** 1989 Jun;86(6):341–2

[Efficacy of the treatment of sleep apnea using naltrexone. A clinical, polygraphic and gasometric study] Ferber C, et al. **C R Acad Sci [III]** 1988;307(12):695–700 (Eng. Abstr.) **(Fre)**

[Naloxone and naltrexone in the treatment of chronic obstructive bronchopneumopathies (letter)] Caillaud D, et al. **Presse Med** 1988 Oct 29;17(38):2036 **(Fre)**

[Naltrexone, opiate antagonist, in the therapy of drug dependence] Cugurra F. **Clin Ter** 1988 Nov 15; 127(3):173–80 (24 ref.) (Eng. Abstr.) **(Ita)**

[Naltrexone] Schifano F, et al. **G Clin Med** 1989 May; 70(5):379–84 (19 ref.) **(Ita)**

[Naltrexone and prevention of opiate dependence relapse. An Italian experience] Cibin M, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):93–8 (Eng. Abstr.) **(Ita)**

NAMES

Mating structure, isonymy and social class in late nineteenth century Tasmania. Lafranchi M, et al. **Ann Hum Biol** 1988 Sep–Oct;15(5):325–36

Ethnicity determination by names among the Aymara of Chile and Bolivia. Chakraborty R, et al. **Hum Biol** 1989 Apr;61(2):159–77

Surnames and cancer genes. Cleek RK. **Hum Biol** 1989 Apr; 61(2):195–211

Coefficients of relationship by isonymy within and between the regions of Scotland. Holloway SM, et al. **Hum Biol** 1989 Feb;61(1):87–97

Relationship between 17 Venezuelan counties estimated through communality of surnames. Rodríguez–Larralde A. **Hum Biol** 1989 Feb;61(1):31–44

What's in a name? Bruhn JG. **J Allied Health** 1988 Nov; 17(4):365–70

The classification of ethnic status using name information. Coldman AJ, et al. **J Epidemiol Community Health** 1988 Dec;42(4):390–5

First vs last name preferences of patients [letter] **J Fam Pract** 1989 Mar;28(3):329, 333

How patients and physicians address each other in the office [see comments] Bergman JJ, et al. **J Fam Pract** 1988 Oct; 27(4):399–402. **Comment in:** J Fam Pract 1989 Apr;28(4):388

Use of first name [letter; comment] Deisher JB. **J Fam Pract** 1989 Apr;28(4):388. **Comment on:** J Fam Pract 1988 Oct;27(4):399–402

Discriminating powers of partial agreements of names for linking personal records. Part I: The logical basis. Newcombe HB, et al. **Methods Inf Med** 1989 Apr; 28(2):86–91

Discriminating powers of partial agreements of names for linking personal records. Part II: The empirical test. Newcombe HB, et al. **Methods Inf Med** 1989 Apr; 28(2):92–6

[Regarding the surname Madinaveitia (letter)] Gallart-Esquerdo A. **Rev Esp Enferm Apar Dig** 1988 May; 73(5 Pt 2):636–7 **(Spa)**

NANDROLONE

ADMINISTRATION & DOSAGE

The administration of pharmacological doses of testosterone or 19-nortestosterone to normal men is not associated with increased insulin secretion or impaired glucose tolerance. Friedl KE, et al. **J Clin Endocrinol Metab** 1989 May; 68(5):971–5

ANALOGS & DERIVATIVES

Successful treatment of severe refractory aplastic anemia with 3-beta etiocholanolone and nandrolone decanoate. Seewald TR, et al. **Am J Hematol** 1989 Jul;31(3):216–8

Effects of nandrolone decanoate and antiresorptive therapy on vertebral density in osteoporotic postmenopausal women. Need AG, et al. **Arch Intern Med** 1989 Jan; 149(1):57–60

Cross-over study of fat-corrected forearm mineral content during nandrolone decanoate therapy for osteoporosis. Need AG, et al. **Bone** 1989;10(1):3–6

Long-term effect of nandrolone decanoate, 1 alpha-hydroxyvitamin D3 or intermittent calcium infusion therapy on bone mineral content, bone remodeling and fracture rate in symptomatic osteoporosis: a double-blind controlled study. Geusens P, et al. **Bone Miner** 1986 Sep; 1(4):347–57

Treatment of postmenopausal osteoporosis: is the anabolic steroid nandrolone decanoate a candidate? Johansen JS, et al. **Bone Miner** 1989 Apr;6(1):77–86

The distribution of progesterone receptor in the 20-day-old fetal mouse: an autoradiographic study with [125I]progestin. Shughrue PJ, et al. **Endocrinology** 1988 Nov;123(5):2382–9

Combination of 19-nortestosterone-hexyloxyphenylpropionate (Anadur) and depot-medroxyprogesterone-acetate (Clinovir) for male contraception. Knuth UA, et al. **Fertil Steril** 1989 Jun;51(6):1011–8

Effect of TSAA-291 on male reproductive tract and fertility of the rat. Srivastava A, et al. **Int J Fertil** 1989 May-Jun; 34(3):235–9

Nandrolone decanoate therapy for anemia in patients on haemodialysis [letter] Balaji HD, et al. **J Assoc Physicians India** 1988 Nov;36(11):677–8

125I-ligand for progesterone receptor: 17 alpha-(6'-iodohex-1'-ynyl)-19-nortestosterone. Salman M, et al. **J Steroid Biochem** 1989 Jul;33(1):25–31

Changes in soft tissue body composition and plasma lipid metabolism during nandrolone decanoate therapy in postmenopausal osteoporotic women. Hassager C, et al. **Metabolism** 1989 Mar;38(3):238–42

Antiandrogenic treatment of benign prostatic hyperplasia: a placebo controlled trial. Ostri P, et al. **Urol Res** 1989; 17(1):29–33

[Prophylaxis and treatment of osteoporosis] Kopera H. **Klin Wochenschr** 1989 May 15;67(10):557–8 **(Ger)**

[The behavior of cytoplasmic progesterone receptors in the cycling endometrium and the effect of hormonal contraceptives] Carol W, et al. **Zentralbl Gynakol** 1989; 111(12):793–9 (Eng. Abstr.) **(Ger)**

[Behavior of parameters of liver metabolism in intermediate-term use of the gestagen dienogest in the treatment of endometriosis] Köhler G, et al. **Zentralbl Gynakol** 1989;111(12):807–10 (Eng. Abstr.) **(Ger)**

[Effects on the bones of nandrolone decanoate therapy in postmenopausal osteoporosis] Gennari C, et al. **Minerva Endocrinol** 1989 Jan-Mar;14(1):69–74 (Eng. Abstr.) **(Ita)**

[Comparison of the binding nature of mibolerone to androgen receptor of human prostate with that of R1881] Miki H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20; 64(8):655–65 (Eng. Abstr.) **(Jpn)**

[Effect of synthetic analogs of the sex steroid hormones on the secretory and proliferative activity of the adenohypophysis in vivo and in vitro in rats] Fedotov VP, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):57–61 (Eng. Abstr.) **(Rus)**

[Effect of somatotropic hormone and retabolil on the osteogenic activity of bone tissue] Sumarokov DD, et al. **Ortop Travmatol Protez** 1989 Feb;(2):66–9 **(Rus)**

ANALYSIS

[The presence of nortestosterone in edible parts from non-castrated male pigs] van Ginkel LA, et al. **Tijdschr Diergeneeskd** 1989 Mar 15;114(6):311–4 (Eng. Abstr.) **(Dut)**

METABOLISM

Determination of beta-19-nortestosterone and its metabolite alpha-19-nortestosterone in biological samples at the sub parts per billion level by high-performance liquid chromatography with on-line immunoaffinity sample pretreatment. Haasnoot W, et al. **J Chromatogr** 1989 Apr 7;489(1):157–71

Distinction between oral and parenteral application of 19-nortestosterone by residue analysis in kidney fat from veal calves using high-performance liquid chromatography and enzyme immunoassay. Meyer HH, et al. **J Chromatogr** 1989 Apr 7;489(1):173–80

Effective monitoring of residues of nortestosterone and its major metabolite in bovine urine and bile. van Ginkel LA, et al. **J Chromatogr** 1989 Apr 7;489(1):95–104

Steroids in equine testes: the identification of endogenous 19-hydroxy and 19-nor neutral steroids by gas chromatography--mass spectrometry. Dumasia MC, et al. **J Endocrinol** 1989 Feb;120(2):223–9

Synthesis and aromatization of 19-norandrogens in the stallion testis. Dintinger T, et al. **J Steroid Biochem** 1989 Apr;32(4):537–44

Aromatization of 19-norandrogens by porcine Leydig cells. Raeside JI, et al. **J Steroid Biochem** 1989 May;32(5):729–35

PHARMACOKINETICS

Biotransformation of beta-nortestosterone by cultured porcine hepatocytes. Hoogenboom LA, et al. **J Chromatogr** 1989 Apr 7;489(1):105–9

URINE

Enzyme immunoassay screening procedure for the synthetic anabolic estrogens and androgens diethylstilbestrol, nortestosterone, methyltestosterone and trenbolone in bovine urine. Degand G, et al. **J Chromatogr** 1989 Apr 7;489(1):235–43

Immunoaffinity pre-column for selective on-line sample pre-treatment in high-performance liquid chromatography determination of 19-nortestosterone. Farjam A, et al. **J Chromatogr** 1988 Oct 28;452:419–33

NANISM see **DWARFISM**

NANNIZZIA see **MICROSPORUM**

NAPHAZOLINE see under **IMIDAZOLES**

NAPHTHACENES

ANALYSIS

Quantitative determination of adriamycin in rat hepatocytes using a volatile extraction buffer, HPLC and fluorescence detection. Mahdadi R, et al. **Biomed Chromatogr** 1987; 2(3):91–4

BLOOD

Rapid quantitative determination of doxorubicin and its metabolites in biological samples. Sqalli A, et al. **Ann Biol Clin (Paris)** 1989;47(2):63–6

CHEMICAL SYNTHESIS

N,N-disubstituted 4-amino-(6-methoxy)-3-phenyl-2H-naphtho [1,2-b]pyran-2-ones with antiarrhythmic, platelet antiaggregating and local anesthetic activities. Bargagna A, et al. **Farmaco [Sci]** 1988 Nov;43(11):857–77

NAPHTHALENEACETIC ACIDS

METABOLISM

Metabolism of isobutylnaphthyl acetic acid in rats: determination of the chemical structures of metabolites. Achtert G, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan-Mar;14(1):29–34

PHARMACOKINETICS

A pharmacokinetic study of the active metabolite of nabumetone in young healthy subjects and older arthritis patients. Kendall MJ, et al. **Eur J Clin Pharmacol** 1989; 36(3):299–305

[Absent enterohepatic circulation of the active metabolite of nabumetone] Brett MA, et al. **Fortschr Med** 1988 Dec 20;106(36):736 **(Ger)**

NAPHTHALENES

Determination of naphthalene-2,3-dicarboxaldehyde-labeled amino acids by open tubular liquid chromatography with electrochemical detection. Oates MD, et al. **Anal Chem** 1989 Mar 1;61(5):432–5

Mutagenicities of N-acyl-N-arylhydroxylamines for Salmonella. Wang CY, et al. **Chem Biol Interact** 1988; 67(3-4):215–23

Fluorometric determination of magnesium in serum with 2-hydroxy-1-naphthaldehyde salicyloylhydrazone. Ioannou PC, et al. **Clin Chem** 1989 Jul;35(7):1492–6

Synthesis and ionic channels of a linear gramicidin containing naphthylalanine instead of tryptophan. Ranjalahy-Rasoloarijao L, et al. **Int J Pept Protein Res** 1989 Apr;33(4):273–80

The radiosynthesis of [N-methyl-11C]-sertraline. Lasne MC, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):147–51

X-ray crystal structure of the tert-octylamine salt (RMS-431) of pravastatin. Sato S, et al. **J Antibiot (Tokyo)** 1988 Sep;41(9):1265–7

6-Deoxy-8-O-methylrabelomycin and 8-O-methylrabelomycin from a Streptomyces species. Shigihara Y, et al. **J Antibiot (Tokyo)** 1988 Sep;41(9):1260–4

Topical nonsteroidal antipsoriatic agents. 2. 2,3-(Alkylidenedioxy)naphthalene analogues of lonapalene. Venuti MC, et al. **J Med Chem** 1988 Nov;31(11):2132–6

ANALYSIS

Assay of dipeptidyl peptidase IV in serum by fluorometry of 4-methoxy-2-naphthylamine. Scharpé S, et al. **Clin Chem** 1988 Nov;34(11):2299–301

A new bioassay for terbinafine. Häuser M, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):531–3

Determination of benzenes and naphthalenes in water by purge and trap isolation and capillary column chromatography. Barnung TN, et al. **J Chromatogr** 1989 Apr 19;466:271–8

Determination of enantiomeric purity of the new D-2 dopamine agonist 2-(N-propyl-N-2-thienylethylamino)-5-hydroxytetralin (N-0437) by reversed-phase high-performance liquid chromatography after pre-column derivatization with D(+)-glucuronic acid. Gerding TK, et al. **J Chromatogr** 1989 Jan 27;487(1):125–34

Development of a radioreceptor assay for the D2-selective dopamine agonist N-0437. Ensing K, et al. **Pharm Res** 1988 May;5(5):283–7

ANTAGONISTS & INHIBITORS

NAN-190: an arylpiperazine analog that antagonizes the stimulus effects of the 5-HT1A agonist 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT). Glennon RA, et al. **Eur J Pharmacol** 1988 Sep 23; 154(3):339–41

Antagonism by pindolol, but not betaxolol, of 8-OH-DPAT-induced facilitation of male rat sexual behavior. Ahlenius S, et al. **J Neural Transm** 1989; 77(2-3):163–70

BIOSYNTHESIS

Origin of monacolin L from Aspergillus terreus cultures. Treiber LR, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):30–6

BLOOD

Analysis of the dopamine agonist N-0437 in rat serum using reversed-phase high-performance liquid chromatography with electrochemical detection. den Daas I, et al. **J Chromatogr** 1989 Jan 27;487(1):210–4

CHEMICAL SYNTHESIS

Synthesis of arylnaphthalenyl derivatives: inhibitors of 3-hydroxy-3-methylglutaryl-coenzyme a reductase. Mewshaw RE, et al. **Drug Des Deliv** 1988 Nov;3(3):235–43

Computer-assisted design and synthesis of novel aldose reductase inhibitors. Butera J, et al. **J Med Chem** 1989 Apr; 32(4):757–65

Introduction of a putative dopaminergic prodrug moiety into a 6,7-substitution pattern characteristic of certain 2-aminotetralin dopaminergic agonists. Cannon JG, et al. **J Med Chem** 1989 Sep;32(9):2210–4

2-(Alkylamino)tetralin derivatives: interaction with 5-HT1A serotonin binding sites. Naiman N, et al. **J Med Chem** 1989 Jan;32(1):253–6

[Modulation of brain Ca2+-calmodulin-dependent phosphodiesterase activity by naphthalene sulfamides] Shaikhin SM, et al. **Biokhimiia** 1988 Aug;53(8):1357–64 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

[The study of the structure of active center of membrane-bound cytochrome p-450 using 1-naphthoxyalcanthiols] Slyn'ko NM, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):999–1004 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Characterization of a carbamic acid ester glucuronide of the secondary amine sertraline. Tremaine LM, et al. **Drug Metab Dispos** 1989 Jan-Feb;17(1):58–63

METABOLISM

Determination of desmosine, isodesmosine, and other amino acids by liquid chromatography with electrochemical detection following precolumn derivatization with naphthalenedialdehyde/cyanide. Lunte SM, et al. **Anal Biochem** 1989 Apr;178(1):202–7

New naphthalene-degrading marine Pseudomonas strains. Garcia-Valdés E, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2478–85

Spectroscopic and functional characterization of an environmentally sensitive fluorescent actin conjugate. Marriott G, et al. **Biochemistry** 1988 Aug 23;27(17):6214–20

Comparative study on metabolic formation of N-arylformamides and N-arylacetamides from carcinogenic arylamines in mammalian species. Tatsumi K, et al. **Cancer Res** 1989 Apr 15;49(8):2059–64

Characterization of a carbamic acid ester glucuronide of the secondary amine sertraline. Tremaine LM, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):58–63

Biosynthesis of monacolins: conversion of monacolin L to monacolin J by a monooxygenase of Monascus ruber. Komagata D, et al. **J Antibiot (Tokyo)** 1989 Mar; 42(3):407–12

Detection of influenza C virus by using an in situ esterase assay. Wagaman PC, et al. **J Clin Microbiol** 1989 May; 27(5):832–6

Metabolism and nephrotoxicity of tetralin in male Fischer 344 rats. Servé MP, et al. **J Toxicol Environ Health** 1989; 26(3):267–75

Relationship of naphthalene and 2-methylnaphthalene metabolism to pulmonary bronchiolar epithelial cell necrosis. Buckpitt AR, et al. **Pharmacol Ther** 1989; 41(1–2):393–410 (108 ref.)

In vitro inhibition by stiripentol of rat brain cytochrome P-450–mediated naphthalene hydroxylation. Mesnil M, et al. **Xenobiotica** 1988 Sep;18(9):1097–106

[Cloning of Pseudomonas putida genes responsible for the primary stages of oxidation of naphthalene in Escherichia coli cells] Boronin AM, et al. **Genetika** 1989 Feb; 25(2):226–37 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Analytical methods for the determination of terbinafine and its metabolites in human plasma, milk and urine. Schatz F, et al. **Arzneimittelforschung** 1989 Apr;39(4):527–32

Tissue selectivity of the cholesterol-lowering agents lovastatin, simvastatin and pravastatin in rats in vivo. Germershausen JI, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):667–75

Release of lonapalene from two-phase emulsion-type ointment systems. Ong JT, et al. **Pharm Res** 1988 Jan; 5(1):16–20

Metabolism of naphthalene in roosters. Bakke JE, et al. **Xenobiotica** 1988 Sep;18(9):1057–62

PHARMACOLOGY

The antimycotic drug terbinafine in contrast to ketoconazole lacks acute effects on the pituitary-testicular function of healthy men: a placebo-controlled double-blind trial. Nashan D, et al. **Acta Endocrinol (Copenh)** 1989 May; 120(5):677–81

Effect of an original piperazine derivative of tetraline on the adrenergically mediated metabolic responses in cats and rats. Bogoslovova T, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):55–64

Beta-adrenoblocking activity of a new derivative of 2-aminotetraline based on some metabolic responses in cats and rats. Bogoslovova T, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):39–45

Treatment with sertraline, a new serotonin uptake inhibitor, reduces voluntary ethanol consumption in rats. Gill K, et al. **Alcohol** 1988 Sep–Oct;5(5):349–54

A further examination of the effects of sertraline on voluntary ethanol consumption. Gill K, et al. **Alcohol** 1988 Sep–Oct; 5(5):355–8

Effects of the 5-HT receptor agonist, 8-OH-DPAT, on ethanol preference in the rat. Svensson L, et al. **Alcohol** 1989 Jan–Feb;6(1):17–21

Galactose feeding causes glomerular hyperperfusion: prevention by aldose reductase inhibition. Bank N, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F994–9

Serotonin-glutamate interaction in rat cerebellum: involvement of 5-hydroxytryptamine receptor subtypes. Maura G, et al. **Ann Ist Super Sanita** 1988;24(3):389–95

Mechanism of action and biochemical selectivity of allylamine antimycotic agents. Ryder NS. **Ann N Y Acad Sci** 1988;544:208–20

Synergistic effects of ketoconazole and SF-86327 on the proliferation of epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. **Ann N Y Acad Sci** 1988;544:357–8

Antiproliferative synergism of the allylamine SF 86-327 and ketoconazole on epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1237–42

Anti-ischemic effect of the novel anti-ischemic agent 2-(4-(p-fluorobenzoyl)-piperidin-1-yl)-2'-acetonaphthone hydrochloride and possible mechanism of its action. Kaneko T, et al. **Arzneimittelforschung** 1989 Apr; 39(4):445–50

Effect of CS-514 (pravastatin) on VLDL-triglyceride kinetics in rats. Yoshino G, et al. **Atherosclerosis** 1988 Oct; 73(2–3):191–5

Effects of GABA compounds injected into the subpallidal regions of rat brain on nucleus accumbens evoked hyperactivity. Patel S, et al. **Behav Neurosci** 1988 Aug; 102(4):596–600

Serotonergic involvement in learning and memory. Hunter AJ. **Biochem Soc Trans** 1989 Feb;17(1):79–81

Design of a selective insulin receptor tyrosine kinase inhibitor and its effect on glucose uptake and metabolism in intact cells. Saperstein R, et al. **Biochemistry** 1989 Jun 27; 28(13):5694–701

Effect of CS-514, a competitive inhibitor of hydroxymethylglutaryl coenzyme A reductase, on cholesterol gallstone formation in hamsters. Koide K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):65–71

The arrhythmogenic effect of platelet activating factor (PAF) is inhibited by PAF antagonist and by substances influencing eicosanoids. Mest HJ, et al. **Biomed Biochim Acta** 1988;47(10–11):S219–23

Comparative effects of two antimycotic agents, ketoconazole and terbinafine on the metabolism of tolbutamide, ethinyloestradiol, cyclosporin and ethoxycoumarin by human liver microsomes in vitro. Back DJ, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):166–70

Carotid haemodynamics in pigs during infusions of 8-OH-DPAT: reduction in arteriovenous shunting is mediated by 5-HT1-like receptors. Bom AH, et al. **Br J Pharmacol** 1989 Jan;96(1):125–32

8-OH-DPAT, flesinoxan and guanfacine: systemic and regional haemodynamic effects of centrally acting antihypertensive agents in anaesthetized rabbits. Hof RP, et al. **Br J Pharmacol** 1989 Apr;96(4):864–71

5-HT1 agonists reduce 5-hydroxytryptamine release in rat hippocampus in vivo as determined by brain microdialysis. Sharp T, et al. **Br J Pharmacol** 1989 Feb;96(2):283–90

Buspirone, 8-OH-DPAT and ipsapirone: effects on hippocampal cerebellar and sciatic fiber excitability. Hiner BC, et al. **Brain Res** 1988 Sep 27;461(1):1–9

Microstructural analysis of the anorectic effect of N-0437, a highly selective dopamine D2 agonist. Rusk IN, et al. **Brain Res** 1989 Aug 14;494(2):350–8

Drug treatments for metastasis of the Lewis lung carcinoma: lack of correlation between inhibition of lung metastasis and survival. Merriman RL, et al. **Cancer Res** 1989 Aug 15;49(16):4509–16

The effect of a new lipoxygenase inhibitor on the production of arachidonic acid metabolites during experimental herpes simplex keratitis. Limberg MB, et al. **Curr Eye Res** 1988 Nov;7(11):1131–5

In vivo effects of terbinafine and ketoconazole on testosterone plasma levels in healthy males. Effendy I, et al. **Dermatologica** 1989;178(2):103–6

Psychopharmacological effects of sertraline in normal, healthy volunteers. Hindmarch I, et al. **Eur J Clin Pharmacol** 1988;35(2):221–3

Facilitation of 8-OHDPAT-induced forepaw treading of rats by the 5-HT2 agonist DOI. Arnt J, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):45–51

Differential effects of long-term antidepressant treatments on 8-OHDPAT-induced increases in plasma prolactin and corticosterone in rats. Aulakh CS, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):395–400

8-Hydroxy-2-(di-n-propylamino)tetralin, a selective serotonin1A receptor agonist, reduces the immobility of rats in the forced swimming test by acting on the nucleus raphe dorsalis. Cervo L, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):53–9

Feeding responses to a high dose of 8-OH-DPAT in young and adult rats: influence of food texture. Chaouloff F, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):267–73

8-OH-DPAT increases corticosterone but not other 5-HT1A receptor-dependent responses more in females. Haleem DJ, et al. **Eur J Pharmacol** 1989 May 30; 164(3):435–43

Median raphe, but not dorsal raphe, application of the 5-HT1A agonist 8-OH-DPAT stimulates rat motor activity. Hillegaart V, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):303–7

Opposite control mediated by central 5-HT1A and non-5-HT1A (5-HT1B or 5-HT1C) receptors on periaqueductal gray aversion. Jenck F, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):219–21

Ventrolateral medullary pressor area: site of hypotensive and sympatho-inhibitory effects of (+/-)8-OH-DPAT in anaesthetized dogs. Laubie M, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):385–94

Blockade of potentiated startle responding in rats by 5-hydroxytryptamine1A receptor ligands. Mansbach RS, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):375–83

Three putative 5-HT1A agonists act as 5-HT antagonists in frog sensory neurons. Marszalec W, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):325–8

Sertraline potently displaces (+)-[3H]3-PPP binding to sigma sites in rat brain. Schmidt A, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):335–6

Microdialysis and striatal dopamine release: stereoselective actions of the enantiomers of N-0437. Timmerman W, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):143–50

The behavioural effects of 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT) in mice. Yamada J, et al. **Eur J Pharmacol** 1988 Sep 23; 154(3):299–304

The platelet serotonergic system in depression and following sertraline treatment. Butler J, et al. **Int Clin Psychopharmacol** 1988 Oct;3(4):343–7

Comparison between the cardiovascular effects of 8-hydroxy-2-(di-n-propylamino) tetralin (8-OH-DPAT) and clonidine in the conscious sino-aortic denervated rat. Petty MA, et al. **J Auton Pharmacol** 1988 Dec;8(4):267–76

Novel adrenergic compounds. I. Receptor interactions of ABBOTT-54741 [(5,6-dihydroxy-1,2,3,4-tetrahydro-1-naphthtyl)= imidazoline], an alpha-adrenergic agonist. Kyncl JJ, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):382–91

In vitro pharmacologic profile of Ro 40-5967, a novel Ca2+ channel blocker with potent vasodilator but weak inotropic action. Osterrieder W, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):754–9

Inhibition of macrophage activation by isoquinolinesulfonamides, phenothiazines, and a napthalenesulfonamide. Holian A, et al. **J Cell Physiol** 1988 Oct;137(1):45–54

Resolved N,N-dialkylated 2-amino-8-hydroxytetralins: stereoselective interactions with 5-HT1A receptors in the brain. Björk L, et al. **J Med Chem** 1989 Apr;32(4):779–83

Thromboxane A2 synthetase inhibitors. 2. Syntheses and activities of tetrahydronaphthalene and indan derivatives. Kanao M, et al. **J Med Chem** 1989 Jun;32(6):1326–34

Subsensitivity of serotonin and substance P receptors involved in nociception after repeated administration of a serotonin receptor agonist. Eide PK, et al. **J Neural Transm** 1989;77(1):1–10

Suppression of conditioned avoidance by 8-OH-DPAT in the rat. Wadenberg ML, et al. **J Neural Transm** 1988; 74(3):195–8

[3H]8-OH-DPAT labels the 5-hydroxytryptamine uptake recognition site and the 5-HT1A binding site in the rat striatum. Alexander BS, et al. **J Pharm Pharmacol** 1988 Dec;40(12):888–91

Marked increases in plasma catecholamine concentrations precede hypotension and bradycardia caused by 8-hydroxy-2-(di-n-propylamino) tetralin (8-OH-DPAT) in conscious rats. Bagdy G, et al. **J Pharm Pharmacol** 1989 Apr;41(4):270–2

Pharmacological profile of a chromanamine analogue (DP-6OH-3CA) of the selective presynaptic dopamine agonist N,N-dipropyl-7-hydroxy-2-aminotetralin. Vermue NA, et al. **J Pharm Pharmacol** 1988 Aug; 40(8):574–7

Cytotoxicity and antitumor activities of fungal bis(naphtho-gamma-pyrone) derivatives. Koyama K, et al. **J Pharmacobiodyn** 1988 Sep;11(9):630–5

Prejunctional inhibitory effect of a dopamine D-2 agonist, N-0437, on vascular adrenergic responses. Friedman DJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):853–9

Terbinafine inhibits the mitogenic response to platelet-derived growth factor in vitro and neointimal proliferation in vivo. Nemecek GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1167–74

Inhibition of erythrocyte anion exchange by tolrestat, an inhibitor of aldose reductase. Gunn RB, et al. **Metabolism** 1989 Aug;38(8):801–4

Pharmacodynamic effects of a 2-piperazinotetralin (P-11)—combined alpha- and beta-adrenoceptor blocking drug with hypotensive action. Mutafova-Yambolieva V, et al. **Methods Find Exp Clin Pharmacol** 1988 Sep; 10(9):551–7

Involvement of peripheral dopaminergic mechanisms in the action of a 2-piperazinotetralin (P-11) with hypotensive activity. Mutafova-Yambolieva V, et al. **Methods Find Exp Clin Pharmacol** 1988 Sep;10(9):559–62

Activation of sodium channels and inhibition of [3H]batrachotoxinin A-20-alpha-benzoate binding by an N-alkylamide neurotoxin. Ottea JA, et al. **Mol Pharmacol** 1989 Aug;36(2):280–4

Evidence for selective inhibition of limbic forebrain dopamine synthesis by 8-OH-DPAT in the rat. Ahlenius S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):551–6

The 5-HT 1A receptor agonist, 8-OH-DPAT, preferentially activates cell body 5-HT autoreceptors in rat brain in vivo. Hjorth S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov;338(5):463–71

Effects of 8-OH-DPAT on ultrasonic vocalization and audiogenic immobility reaction in pre-weanling rats. Hård E, et al. **Neuropharmacology** 1988 Oct;27(10):981–6

Hippocampal 5-HT synthesis and release in vivo is decreased by infusion of 8-OHDPAT into the nucleus raphe dorsalis. Hutson PH, et al. **Neurosci Lett** 1989 May 22; 100(1–3):276–80

A comparison of feeding and locomotion responses to serotonin agonists in three rat strains. Aulakh CS, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):567–71

Effects of buspirone differ from those of gepirone and 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT) on unpunished responding of pigeons. Barrett JE, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):723–7

Dextrofenfluramine, but not 8-OH-DPAT affects the decrease in food consumed by rats submitted to physical exercise. Chaouloff F, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):573–6

Stimulation and inhibition of food intake by the selective dopamine D2 agonist, N-0437: a meal pattern analysis. Clifton PG, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):21–6

Sucrose sham-feeding in the rat after administration of the selective dopamine D2 receptor agonist N-0437, d-amphetamine or cocaine. Cooper SJ, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):447–52

Effects of 8-OH-DPAT on motor activity in the rat. Hillegaart V, et al. **Pharmacol Biochem Behav** 1989 Mar; 32(3):797–800

Neurochemical changes in pigeon cerebrospinal fluid during chronic administration of buspirone or 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT).

Nader MA, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):227–32

The effect of 8–OH–DPAT on temperature in the rat and its modification by chronic antidepressant treatments. Wozniak KM, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):451–6

Relationships between chemical structure and inhibition of choline acetyltransferase by 2–(alpha–naphthoyl)ethyltrimethylammonium and related compounds. Sastry BV, et al. **Pharmacol Res Commun** 1988 Sep;20(9):751–71

Antipsychotic–like properties of the 5–HT1A agonist 8–OH–DPAT in the rat. Ahlenius S. **Pharmacol Toxicol** 1989 Jan;64(1):3–5

Specific effect of putative 5–HT1A agonists, 8–OH–DPAT and gepirone, to increase hypertonic saline consumption in the rat: evidence against a general hyperdipsic action. Cooper SJ, et al. **Physiol Behav** 1988;43(4):533–7

Copulatory performance of penile desensitized male rats following the administration of 8–OH–DPAT. Dahlöf LG, et al. **Physiol Behav** 1988;43(6):841–3

Profile of the selective dopamine D–2 receptor agonist N–0437: its effects on palatability– and deprivation–induced feeding, and operant responding for food. Rusk IN, et al. **Physiol Behav** 1988;44(4–5):545–53

A component analysis of the effects of DPAT on male rat sexual behavior. Schnur SL, et al. **Physiol Behav** 1989 May; 45(5):897–901

Structure–activity relationships of N–substituted–2,3–dimethyl–1,4 endo or exo–(3',4'–pyrrolidino)–1,4–dihydronaphthalenes. Zuzack JW, et al. **Proc West Pharmacol Soc** 1989;32:5–8

The chronic effects of desipramine and sertraline on platelet and synaptosomal 5HT uptake in olfactory bulbectomised rats. Butler J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):585–94

Relationship of increased food intake and plasma ACTH levels to 5–HT1A receptor activation in rats. Gilbert F, et al. **Psychoneuroendocrinology** 1988;13(6):471–8

Reduction of feeding behavior by the serotonin uptake inhibitor sertraline. Lucki I, et al. **Psychopharmacology (Berlin)** 1988;96(3):289–95

5HT1A agonist, 8–hydroxy–2–(di–n–propylamino)tetralin (8–OH–DPAT), inhibits non–opioid analgesia in defeated mice: influence of route of administration. Rodgers RJ, et al. **Psychopharmacology (Berlin)** 1989;97(2):163–5

Sertraline–induced desensitization of the serotonin 5HT–2 receptor transmembrane signaling system. Sanders–Bush E, et al. **Psychopharmacology (Berlin)** 1989;99(1):64–9

Studies on the mechanism of action of 1–(2–methyl–3–hydroxy–5–hydroxy–methyl–4–pyridyl)–6,7–dihydroxy–1,2,3, 4– tetrahydroisoquinoline (PTIQ) on blood pressure in the anesthetized dog. Siu PM, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):421–33

[Significance of experimental cataracts for the development of senile cataracts exemplified by naphthalene and dimethyl sulfoxide–induced lens opacities] Rossa V, et al. **Fortschr Ophthalmol** 1988;85(4):396–9 (Eng. Abstr.) **(Ger)**

[Diabetic changes in pupillary reactions and iris histology. No. 3. The role of aldose reductase inhibitor to iridal vessel hyperpermeability of galactose–fed rats] Kador PF, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1577–81 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect on pig testicular 20 beta–hydroxysteroid dehydrogenase by various inhibitors of steroid metabolizing enzymes] Nakajin S, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1219–22 (Eng. Abstr.) **(Jpn)**

POISONING

Naphthalene–induced hemolysis in a black female toddler deficient in glucose–6–phosphate dehydrogenase. Melzer–Lange M, et al. **Pediatr Emerg Care** 1989 Mar; 5(1):24–6

Haemolytic anaemia associated with ingestion of naphthalene–containing anointing oil. Ostlere L, et al. **Postgrad Med J** 1988 Jun;64(752):444–6

THERAPEUTIC USE

Effects of CS–514 (eptastatin), an inhibitor of 3–hydroxy–3–methylglutaryl coenzyme A (HMG–CoA) reductase, on serum lipid and apolipoprotein levels in heterozygous familial hypercholesterolemic patients treated by low density lipoprotein (LDL)–apheresis. Mabuchi H, et al. **Atherosclerosis** 1988 Aug;72(2–3):183–8

Dose–dependent hypolipidemic effect of an inhibitor of HMG–CoA reductase, pravastatin (CS–514), in hypercholesterolemic subjects. A double blind test. Saito Y, et al. **Atherosclerosis** 1988 Aug;72(2–3):205–11

Long–term treatment of hypercholesterolemic non–insulin dependent diabetics (NIDDM) with pravastatin (CS–514). Yoshino G, et al. **Atherosclerosis** 1989 Jan;75(1):67–72

Influence of the thromboxane synthetase inhibitor HOE 944, prostacyclin and indomethacin on reperfusion arrhythmias, cardiodynamics and metabolism in isolated ischemic rat hearts. Linz W, et al. **Biomed Biochim Acta** 1988; 47(10–11):S23–6

Induction of mRNA for low–density lipoprotein receptors in heterozygous Watanabe heritable hyperlipidemic rabbits treated with CS–514 (Pravastatin) and cholestyramine. Kume N, et al. **Circulation** 1989 May;79(5):1084–90

Plasma lipoprotein changes after treatment with pravastatin and gemfibrozil in patients with familial hypercholesterolemia. Franceschini G, et al. **J Lab Clin Med** 1989 Sep;114(3):250–9

[Effect of naphthalane baths on the cardiovascular system in patients with osteoarthrosis deformans associated with ischemic heart disease] Gulieva SA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):41–3 **(Rus)**

TOXICITY

Organ–specific effects of naphthalene on tissue peroxidation, glutathione peroxidases and superoxide dismutase in the rat. Germansky M, et al. **Arch Toxicol** 1988;61(6):480–3

Active oxygen contributes to the major part of chromosomal aberrations in V79 Chinese hamster cells exposed to N–hydroxy–2–naphthylamine. Ochi T, et al. **Free Radic Res Commun** 1989;5(6):351–8

Activity of the human carcinogens benzidine and 2–naphthylamine in male mouse bone marrow micronucleus assays. Mirkova E, et al. **Mutagenesis** 1988 Sep;3(5):437–9

Tolerance to multiple doses of the pulmonary toxicant, naphthalene. O'Brien KA, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):487–500

In vivo murine studies on the biochemical mechanism of naphthalene cataractogenesis. Wells PG, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):466–73

[Exposure to beta–naphthylamine in the Polish industry] Gromiec JP, et al. **Med Pr** 1988;39(5):359–64 (Eng. Abstr.) **(Pol)**

[Hygienic characteristics of the working conditions of operators of chemical shops at coke plants] Altynbekov BE, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):21–4 (Eng. Abstr.) **(Rus)**

NAPHTHALENESULFONATES

Fluorescent derivative of cysteine–10 reveals thyroxine–dependent conformational modifications in human serum prealbumin. González G. **Arch Biochem Biophys** 1989 May 15;271(1):200–5

ANALYSIS

Determination of diisobutyl– and diisopropylnaphthalenesulphonates in pesticide wettable powders and dispersible granules by high–performance liquid chromatography. Schreuder RH, et al. **J Chromatogr** 1989 Apr 21;467(1):177–84

DIAGNOSTIC USE

Histochemical study of the biphasic cellular pattern of tubular adenoid cystic carcinoma with azophloxine, amidoblack and acid blue. Triantafyllou A, et al. **Ann Dent** 1989 Summer;48(1):20–4

METABOLISM

Changes in the steady–state fluorescence anisotropy of N–iodoacetyl–N'–(5–sulfo–1–naphthyl)ethylenediamine attached to the specific thiol of sarcoplasmic reticulum Ca2+–ATPase throughout the catalytic cycle. Suzuki H, et al. **J Biol Chem** 1989 Jan 15;264(2):920–7

Simultaneous monitoring of changes in magnesium and calcium concentrations in frog cut twitch fibers containing antipyrylazo III. Irving M, et al. **J Gen Physiol** 1989 Apr; 93(4):585–608

Chemical derivatization of Ca2+–pump protein from skeletal muscle with N–substituted maleimides and 5–(2–iodoacetamidoethyl)aminonaphthalene 1–sulfonate. Kawakita M, et al. **Methods Enzymol** 1988;157:251–61

Reduction rate of 14C–Carmoisine by resting cell bacterial suspension from human and rat faeces. Flaminio LM, et al. **Pharmacol Res Commun** 1988 Oct;20(10):907–17

NAPHTHAMIDOPENICILLIN see **NAFCILLIN**

NAPHTHOL AS D ACETATESTERASE see **NAPHTHOL AS D ESTERASE**

NAPHTHOL AS D CHLOROACETATE ESTERASE see **NAPHTHOL AS D ESTERASE**

NAPHTHOL AS D ESTERASE

Acid alpha–naphthyl acetate esterase (ANAE) staining of porcine lymphocytes. Inoue T, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1169–76

ANALYSIS

Hirschsprung's disease: alpha–naphthylesterase activity in the enzyme–histochemical evaluation of the extent of the aganglionic segment during surgery. Martucciello G, et al. **Mater Med Pol** 1988 Oct–Dec;20(4):245–51

[Hirschsprung disease: histochemical technic for alpha–naphthyl–esterase in the intraoperative diagnosis of the proximal extent of the aganglionosis] Dodero P, et al. **An Esp Pediatr** 1988 May;28(5):429–32 (Eng. Abstr.) **(Spa)**

BLOOD

Avian esterases as indicators of exposure to insecticides—the factor of diurnal variation. Thompson HM, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):4–11

[The rosette test with sensitized sheep erythrocytes, acid phosphatase and alpha–naphthylacetate esterase in an acid medium: comparative immunocytochemical T–cell exhibition in Hodgkin's disease] Plat M, et al. **Folia Haematol (Leipz)** 1989;116(1):87–95 **(Ger)**

[Changes in the activity of nonspecific alpha–naphthyl acetate esterase in the peripheral blood lymphocytes of psoriasis patients] Moszczyński P, et al. **Vestn Dermatol Venerol** 1988;(5):22–4 (Eng. Abstr.) **(Rus)**

[Esterase activity of the peripheral blood phagocytes and its nonspecific correction in patients with rubromycosis pedis] Svirid SG, et al. **Vrach Delo** 1988 Jul;(7):92–3 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Alpha–naphthyl–acetate–esterase activity in cerebrospinal fluid cells. De Reuck J, et al. **Acta Neurol Scand** 1988 Sep; 78(3):190–3

GENETICS

Isolation of an organophosphate susceptible strain of Culex quinquefasciatus from a resistant field population by discrimination against esterase–2 phenotypes. al–Khatib ZI. **J Am Mosq Control Assoc** 1985 Mar;1(1):105–7

Genetic association between highly active esterases and organophosphate resistance in Culex tarsalis. Prabhaker N, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):473–5

NAPHTHOLS

Optimization of the histochemical demonstration of DNA using 3–hydroxy–2–naphthoic acid hydrazide and fast blue B. Nöhammer G. **Histochemistry** 1989;90(6):465–73

Naphthyl– and quinolylluciferin: green and red light emitting firefly luciferin analogues. Branchini BR, et al. **Photochem Photobiol** 1989 May;49(5):689–95

Color–contrast staining of two different lymphocyte subpopulations: a two–color modification of alkaline phosphatase monoclonal anti–alkaline phosphatase complex technique. Wagner L, et al. **Stain Technol** 1988 May; 63(3):129–36

ADMINISTRATION & DOSAGE

Activity of a novel hydroquinone inhibitor of leukotriene synthesis (U–66,858) in the rhesus monkey Ascaris reactor. Johnson HG, et al. **Int Arch Allergy Appl Immunol** 1988; 87(2):204–7

ADVERSE EFFECTS

Sudan I as a cause of pigmented contact dermatitis in "kumkum" (an Indian cosmetic). Kozuka I, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):492–4

Significant changes in nonspecific bronchial responsiveness after isolated immediate bronchospecific reactions caused by isocyanates but not after a late reaction caused by plicatic acid. Malo JL, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):159–65

ANALYSIS

Collisional activation mass spectra of M–. ions of azo dyes containing 2–naphthol. Brumley WC, et al. **Biomed Environ Mass Spectrom** 1989 Jun;18(6):394–400

Stability of 1–naphthol in sea water solutions and its uptake by the marine prosobranch gastropod Littorina littorea (L.). Cajaraville MP, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):799–806

Roles of oxygen in photochemical reaction of naphthols in aqueous nitrite solution and mutagen formation. Suzuki J, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4567–75

Formation of mutagens by photochemical reaction of 2–naphthol in aqueous nitrite solution. Suzuki J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2204–11

Liquid chromatographic determination of Lake Red C amine and 2–naphthol in D&C Red No. 8. Scher AL, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):1007–11

Determination of methyl yellow, Sudan I and Sudan II in water by high–performance liquid chromatography. Nagase M, et al. **J Chromatogr** 1989 Mar 31;465(2):434–7

Identification and purity determination of benzathine and embonate salts of some beta–lactam antibiotics by thin–layer chromatography. Saesman T. **J Chromatogr** 1989 Feb 3;463(2):469–73

CHEMICAL SYNTHESIS

[Intramolecular aromatic alkylation. 24. Synthesis and pharmacologic testing of N–alkyldecahydro–7H–naphthioisoquinolines] Reimann E, et al. **Arch Pharm (Weinheim)** 1989 Mar;322(3):177–80 (Eng. Abstr.) **(Ger)**

[In vivo antitumor activity of 5–hydroxy 3,4–dihydro naphthalene 1,8–carbolactone and its derivatives] Berlion M, et al. **Pharmazie** 1988 Jul;43(7):515–6 **(Ger)**

DIAGNOSTIC USE

Entamoeba histolytica: demonstration by PAS/Martius yellow technique. Hulman G, et al. **Med Lab Sci** 1987 Oct; 44(4):396–7

METABOLISM

Effect of substrate concentration, product concentration, and peptides on the in vitro hydrolysis of model ester prodrugs by corneal esterases. Lee VH, et al. **J Ocul Pharmacol** 1985 Fall;1(3):269–78

PHARMACOLOGY

Some pharmacological activities of novel adenine-related compounds isolated from a marine sponge Agelas mauritiana. Fathi-Afshar R, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):276–81

The action of carbaryl and its metabolite alpha-naphthol on mitosis in V79 Chinese hamster fibroblasts. Indications of the involvement of some cholinester in cell division. Söderpalm-Berndes C, et al. **Mutat Res** 1988 Oct; 201(2):349–63

New antihepatotoxic naphtho-pyrone glycosides from the seeds of Cassia tora. Wong SM, et al. **Planta Med** 1989 Jun;55(3):276–80

TOXICITY

In-vivo carcinogenicity of 2-nitro-oxaphenalenes. Salmon RJ, et al. **Carcinogenesis** 1989 May;10(5):803–5

1-Naphthol—single and repeated dose (30-day) oral toxicity studies in the mouse. Poole A, et al. **Food Chem Toxicol** 1989 Apr;27(4):233–8

The toxicity of constituents of cedar and pine woods to pulmonary epithelium. Ayars GH, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):610–8

Mutagenicity on chlorination of products formed by ozonation of naphthoresorcinol in water. Sayato Y, et al. **Mutat Res** 1989 Jul;226(3):151–5

NAPHTHOQUINONES

1,4-naphthoquinone-2-sulfonic acid derivatives coupled to dextran as carriers for interferon. Piasecki E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):129–32

1,4-Reductive addition of glutathione to quinone epoxides. Mechanistic studies with h.p.l.c. with electrochemical detection under anaerobic and aerobic conditions. Evaluation of chemical reactivity in terms of autoxidation reactions. Brunmark A, et al. **Free Radic Biol Med** 1989; 6(2):149–65

DT-diaphorase-catalyzed two-electron reduction of various p-benzoquinone- and 1,4-naphthoquinone epoxides. Brunmark A, et al. **Free Radic Biol Med** 1988;5(3):133–43

Electrochemical label for high-performance liquid chromatography. I. Beta-naphthoquinone-4-sulphonate as an electrochemical detection labelling reagent of amines. Nakahara Y, et al. **J Chromatogr** 1989 Apr 14;489(2):371–6

ADVERSE EFFECTS

The sensitizing capacity of chimaphilin, a naturally-occurring quinone. Hausen BM, et al. **Contact Dermatitis** 1988 Sep; 19(3):180–3

BIOSYNTHESIS

[Tissue cultures of Lithospermum erythrorhizon and biosynthesis of shikonin derivatives] Fan HX, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):716–20 (43 ref.) **(Chi)**

CHEMICAL SYNTHESIS

Synthesis of 2,3-diaziridinyl-1,4-naphthoquinone sulfonate derivatives as potential antineoplastic agents. Lin TS, et al. **J Med Chem** 1989 Jul;32(7):1467–71

METABOLISM

DT-diaphorase-catalysed reduction of 1,4-naphthoquinone derivatives and glutathionyl-quinone conjugates. Effect of substituents on autoxidation rates. Buffinton GD, et al. **Biochem J** 1989 Jan 15;257(2):561–71

Degradation of 1,4-naphthoquinones by Pseudomonas putida. Müller U, et al. **Biol Chem Hoppe Seyler** 1988 Sep; 369(9):1031–43

PHARMACOKINETICS

[A study on absorption, distribution and excretion of 3H-shikonin in mice] Wang WJ, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):246–51 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Characterization of CGS 8515 as a selective 5-lipoxygenase (5-LO) inhibitor. Ku EC, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:86–9

Inhibition of leukotriene release in anaphylactic guinea-pig hearts by a 5-lipoxygenase inhibitor, CGS 8515. Yaacob HB, et al. **Br J Pharmacol** 1988 Dec;95(4):1322–8

In vitro activity of natural and synthetic naphthoquinones against erythrocytic stages of Plasmodium falciparum. Carvalho LH, et al. **Braz J Med Biol Res** 1988;21(3):485–7

Inhibition of potentially lethal DNA damage repair in human tumor cells by beta-lapachone, an activator of topoisomerase I. Boothman DA, et al. **Cancer Res** 1989 Feb 1;49(3):605–12

Theileria parva: reappearance of schizonts in infected lymphoblastoid cells treated with parvaquone is dependent on interleukin 2-like growth factors. Brown WC, et al. **Exp Parasitol** 1989 Apr;68(3):308–25

Effects of the chitin synthetase inhibitor plumbagin and its 2-demethyl derivative juglone on insect ecdysone 20-monooxygenase activity. Mitchell MJ, et al. **Experientia** 1988 Dec 1;44(11–12):990–1

Inhibition of prolyl hydroxylase activity and collagen biosynthesis by fibrostatin C, a novel inhibitor produced by Streptomyces catenulae subsp. griseospora No. 23924. Ishimaru T, et al. **J Antibiot (Tokyo)** 1988 Nov; 41(11):1668–74

Beneficial effects of a 5-lipoxygenase inhibitor in endotoxic shock in the rat. Matera G, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):363–71

Anticarcinogenic potential of DNA-repair modulators. Boothman DA, et al. **Mutat Res** 1988 Dec;202(2):393–411 (191 ref.)

Inhibition of radiation-induced neoplastic transformation by beta-lapachone. Boothman DA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4963–7

[Antimicrobial activity of polyhydroxynaphthoquinones from sea urchins] Stekhova SI, et al. **Antibiot Khimioter** 1988 Nov;33(11):831–3 (Eng. Abstr.) **(Rus)**

[Effects of nifurtimox, benznidazole, and beta-lapachone on the metabolism of DNA, RNA and proteins in Trypanosoma cruzi] Goijman SG, et al. **Rev Argent Microbiol** 1983;15(4):193–204 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Evaluations of buparvaquone as a treatment for equine babesiosis (Babesia equi). Zaugg JL, et al. **Am J Vet Res** 1989 May;50(5):782–5

Efficacy of parvaquone in the treatment of naturally occurring theileriosis in cattle in Iraq. Hawa N, et al. **Trop Anim Health Prod** 1988 Aug;20(3):130–6

Effectiveness of parvaquone in cattle infected with Theileria annulata. Unsuren H, et al. **Trop Anim Health Prod** 1988 Nov;20(4):256–8

TOXICITY

Modulation of hepatic cytochrome P-450 and DT-diaphorase by oral and sub-cutaneous administration of the pro-oxidant fungicide dichlone (2,3-dichloro-1,4-naphthoquinone). Elliott AJ, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):164–71

Hydroxyl radical generation and DNA strand scission mediated by natural anticancer and synthetic quinones. Rumyantseva GV, et al. **FEBS Lett** 1989 Jan 2; 242(2):397–400

Induction and exacerbation of hyaline droplet formation in the proximal tubular cells of the kidneys from male rats receiving a variety of pharmacological agents. Read NG, et al. **Toxicology** 1988 Nov 14;52(1–2):81–101

NAPHTHYLAMIDASES see **AMINO ACID NAPHTHYLAMIDASES**

1-NAPHTHYLAMINE see under **NAPHTHALENES**

2-NAPHTHYLAMINE see under **NAPHTHALENES**

NAPHTHYLISOPROTERENOL see **PRONETHALOL**

1-NAPHTHYLISOTHIOCYANATE see under **THIOCYANATES**

NAPHTHYLVINYLPYRIDINE see under **PYRIDINES**

NAPHTHYRIDINES

ADMINISTRATION & DOSAGE

[Therapeutic effect of pyronaridine in plain tablets and enteric-coated tablets in falciparum malaria patients] Huang ZS, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):19–21 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

Studies on heterocyclic compounds. IX. Synthesis and antiallergic activity of furo[2,3-b] [1,8]naphthyridine-3,4(2H,9H)-diones and 4H-furo[2,3-d]pyrido [1,2-alpha]-pyrimidine-3,4(2H)-diones. Kuo SC, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4403–7

Fluoronaphthyridines and quinolones as antibacterial agents. 1. Synthesis and structure-activity relationships of new 1-substituted derivatives. Bouzard D, et al. **J Med Chem** 1989 Mar;32(3):537–42

(8a alpha,12a alpha,13a alpha)-5,8,8a,9,10,11,12,12a,13,13a-decahydro-3-methoxy-12-(methylsulfonyl)-6H-isoquino[2,1-g][1,6]naphthyridi ne, a potent and highly selective alpha 2-adrenoceptor antagonist. Clark RD, et al. **J Med Chem** 1989 Sep;32(9):2034–6

PHARMACOKINETICS

[Distribution and excretion of 3H-pyronaridine in mice] Feng Z, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):629–32 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Antiallergy agents. 1. Substituted 1,8-naphthyridin-2(1H)-ones as inhibitors of SRS-A release. Sherlock MH, et al. **J Med Chem** 1988 Nov; 31(11):2108–21

Dopamine and sexual behavior in the male rat: a reevaluation. Agmo A, et al. **J Neural Transm** 1989;77(1):21–37

A leukotriene and thromboxane inhibitor (Sch 37224) blocks antigen-induced immediate and late responses and airway hyperresponsiveness in allergic sheep. Abraham WM, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1004–11

Antiallergy activity of Sch 37224, a new inhibitor of leukotriene formation. Kreutner W, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):997–1003

Pharmacologic characterization of a novel non-benzodiazepine selective anxiolytic, DN-2327. Wada T, et al. **Jpn J Pharmacol** 1989 Mar;49(3):337–49

Intravenous self-administration of the indirect dopaminergic agonist amfonelic acid by rats. Porrino LJ, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):623–6

Behavioral and neurochemical effects of amfonelic acid on the spontaneously diabetic Wistar-BB rat: implications of impaired dopamine function. Ahmad Q, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):551–8

[Effects of artesunate, pyronaridine and hydroxypiperaquine on chloroquine-sensitive and chloroquine-resistant isolates of Plasmodium falciparum in vitro] Li J, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):83–6 (Eng. Abstr.) **(Chi)**

[Effects of large doses of pyronaridine and chloroquine on the ultrastructure of the erythrocytic stages of pyronaridine-resistant line of Plasmodium berghei] Wu LJ. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):87–9 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

Clinical pharmacologic features of fluoroquinolone antimicrobial drugs. Neer TM. **J Am Vet Med Assoc** 1988 Sep 1;193(5):577–80 (26 ref.)

NAPHURIDE see **SURAMIN**

NAPROXEN

A panel discussion on the safety of nonsteroidal antiinflammatory drugs. Markenson J. **Semin Arthritis Rheum** 1987 Feb;17(3 Suppl 2):1–6

ADMINISTRATION & DOSAGE

Naproxen/naproxen sodium [letter] Mehanna R. **Aust Fam Physician** 1988 Oct;17(10):838–9

[Piroxicam versus naproxen in primary dysmenorrhea] Saltveit T. **Tidsskr Nor Laegeforen** 1989 Feb 20; 109(5):576–8 (Eng. Abstr.) **(Nor)**

ADVERSE EFFECTS

Naproxen thrombocytopenia [letter] Poldre PA. **Am J Hematol** 1989 May;31(1):74

Hypersensitivity angiitis associated with naproxen. Singhal PC, et al. **Ann Allergy** 1989 Aug;63(2):107–9

Hair loss in a child associated with naproxen. Barter DA. **BMJ** 1989 Feb 4;298(6669):325

Drug induced hair loss. Barth JH, et al. **BMJ** 1989 Mar 11; 298(6674):675

Evaluation of the efficacy and comparative effects on gastric and duodenal mucosa of etodolac and naproxen in patients with rheumatoid arthritis using endoscopy. Taha AS, et al. **Br J Rheumatol** 1989 Aug;28(4):329–32

Gold-naproxen pneumonitis. A toxic drug interaction? McFadden RG, et al. **Chest** 1989 Jul;96(1):216–8

Naproxen pseudoporphyria in a patient with vitiligo [letter] Diffey BL, et al. **Clin Exp Dermatol** 1988 May;13(3):207

Assessment of cognitive function in elderly patients treated with naproxen. A prospective study. Wysenbeek AJ, et al. **Clin Exp Rheumatol** 1988 Oct-Dec;6(4):399–400

Generalised eruptive pustular drug rash due to naproxen [letter] Grattan CE. **Dermatologica** 1989;179(1):57–8

FUO and eosinophiluria in a diabetic with arthritis. McCue JD, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):71–2

Molecular mechanism of naproxen photosensitization in red blood cells. Costanzo LL, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):223–35

Naproxen-induced bullous photodermatitis. Rivers JK, et al. **Med J Aust** 1989 Aug 7;151(3):167–8

A safety profile of controlled release naproxen tablets. Allen B, et al. **N Z Med J** 1989 Jun 28;102(870):310–2

Naprosyn (naproxen) after 12 years: a current update on safety. Proceedings of a symposium. Paris (post-EULAR, July 12, 1987). **Semin Arthritis Rheum** 1987 Feb;17(3 Suppl 2):1–45

A panel discussion on the safety of nonsteroidal antiinflammatory drugs. Markenson J.

Semin Arthritis Rheum 1987 Feb;17(3 Suppl 2):1–6
Naproxen: antirheumatic efficacy and safety in patients with pre–existing gastrointestinal disease. Roth SH.
Semin Arthritis Rheum 1987 Feb;17(3 Suppl 2):36–9
Hepatic and renal tolerability of long–term naproxen treatment in patients with rheumatoid arthritis. Turner R.
Semin Arthritis Rheum 1987 Feb;17(3 Suppl 2):29–35
Kidney function during naproxen therapy in patients at risk for renal insufficiency. Watson WA, et al.
Semin Arthritis Rheum 1987 Feb;17(3 Suppl 2):12–6
[Can naproxen impair menstruation?] Meyboom RH, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1326–7 (Eng. Abstr.) **(Dut)**
[Possible association between etiology of multiple organ failure and ingestion of non–steroidal anti–inflammatory drugs: description of a case] Berlot G, et al. **G Clin Med** 1988 Nov;69(11):671–3 (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

Isolation and identification of 6–desmethylnaproxen sulfate as a new metabolite of naproxen in human plasma. Kiang CH, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):43–8

ANALYSIS

Construction of a naproxen ion–selective electrode and its application to pharmaceutical analysis. Valsami GN, et al. **Analyst** 1989 Mar;114(3):387–91
S–(+)–naproxen chloride as acylating agent for separating the enantiomers of chiral amines and alcohols. Spahn H. **Arch Pharm (Weinheim)** 1988 Dec;321(12):847–50

BLOOD

High–performance liquid chromatographic determination of ketoprofen and naproxen in rat plasma. Satterwhite JH, et al. **J Chromatogr** 1988 Oct 14;431(2):444–9

DIAGNOSTIC USE

Separation and determination of some amino acid ester enantiomers by thin–layer chromatography after derivatization with (S)–(+)–naproxen. Büyüktimkin N, et al. **J Chromatogr** 1988 Oct 21;450(2):281–3

ISOLATION & PURIFICATION

Solubilization and interaction of naproxen with polyvinylpyrrolidone in aqueous solution and in the solid state. Bettinetti GP, et al. **Farmaco [Prat]** 1988 Nov; 43(11):331–43

METABOLISM

Isolation and identification of 6–desmethylnaproxen sulfate as a new metabolite of naproxen in human plasma. Kiang CH, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):43–8
Studies on intestinal lymphatic absorption of drugs. II. Glyceride prodrugs for improving lymphatic absorption of naproxen and nicotinic acid. Sugihara J, et al. **J Pharmacobiodyn** 1988 Aug;11(8):555–62

PHARMACOKINETICS

Effects of food and sucralfate on the pharmacokinetics of naproxen and ketoprofen in humans. Caillé G, et al. **Am J Med** 1989 Jun 9;86(6A):38–44
Naproxen kinetics in synovial fluid of patients with osteoarthritis. Bruno R, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):41–4
Pharmacokinetic properties and clinical efficacy of once–daily sustained–release naproxen. Kelly JG, et al. **Eur J Clin Pharmacol** 1989;36(4):383–8
Transcutaneous absorption of naproxen gel. van den Ouweland FA, et al. **Eur J Clin Pharmacol** 1989; 36(2):209–11
Absorption of naproxen controlled–release tablets in fasting and postprandial volunteers. Mroszczak E, et al. **J Clin Pharmacol** 1988 Dec;28(12):1128–31
Steady state pharmacokinetics of naproxen in young and elderly healthy volunteers. Cohen A, et al. **Semin Arthritis Rheum** 1987 Feb;17(3 Suppl 2):7–11

PHARMACOLOGY

Effect of naproxen on renal haemodynamics in elderly patients with arthritis. Wallis PJ, et al. **Age Ageing** 1989 Jan;18(1):26–30
Effects of systemic inhibition of prostaglandin production on protein metabolism in tumor–bearing rats. Strelkov AB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C261–9
Effects of inhibition of prostaglandin synthesis on uterine oxytocin receptor concentration and myometrial gap junction density in parturient rats. Chan WY, et al. **Biol Reprod** 1988 Dec;39(5):1117–28
Effect of R and S enantiomers of naproxen on aggregation and thromboxane production in human platelets. Kean WF, et al. **J Pharm Sci** 1989 Apr;78(4):324–7

POISONING

[Acute anemia, rectorrhagia and hematuria caused by ingestion of naproxen] Fidalgo I, et al. **An Esp Pediatr** 1989 Apr;30(4):317–9 **(Spa)**

THERAPEUTIC USE

The effect of flurbiprofen and naproxen sodium on intra–uterine pressure and menstrual pain in patients with primary dysmenorrhea. Milsom I, et al. **Acta Obstet Gynecol Scand** 1988;67(8):711–6
Effect of naproxen, a prostaglandin inhibitor, on acute otitis media and persistence of middle ear effusion in children. Varsano IB, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):389–92
Double–blind study of naproxen vs placebo in the treatment of acute migraine attacks. Andersson PG, et al. **Cephalalgia** 1989 Mar;9(1):29–32
A crossover study of naproxen, diclofenac and tolmetin in seronegative juvenile chronic arthritis. Leak AM, et al. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):157–60
Aborting a migraine attack: naproxen sodium v ergotamine plus caffeine. Sargent JD, et al. **Headache** 1988 May; 28(4):263–6
A double–blind trial of ademetionine vs naproxen in activated gonarthrosis. Domljan Z, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):329–33
The influence of anxiety and locus of control on adolescents' response to naproxen sodium for mild to moderate pain. DuRant RH, et al. **J Adolesc Health Care** 1988 Sep; 9(5):424–30
Lack of interaction between sulindac or naproxen and propranolol in hypertensive patients. Schuna AA, et al. **J Clin Pharmacol** 1989 Jun;29(6):524–8
Naproxen reversal of nortriptyline–induced orthostatic hypotension [letter] Forster HS. **J Clin Psychiatry** 1989 Sep;50(9):356
Efficacy and tolerability of nimesulide in elderly patients with osteoarthritis: double–blind trial versus naproxen. Fossaluzza V, et al. **J Int Med Res** 1989 May–Jun; 17(3):295–303
Two double blind trials of diclofenac sodium with aspirin and with naproxen in the treatment of patients with rheumatoid arthritis. Kolodny AL. **J Rheumatol** 1988 Aug; 15(8):1205–11
Dynamics and significance of placebo response in primary dysmenorrhea. Fedele L, et al. **Pain** 1989 Jan;36(1):43–7
Naproxen sodium in treatment of bone pain due to metastatic cancer. Levick S, et al. **Pain** 1988 Dec;35(3):253–8
A multicenter study of the safety and efficacy of naproxen: analysis of blood pressure. Goldberg MA. **Semin Arthritis Rheum** 1987 Feb;17(3 Suppl 2):23–8
[Naproxen sodium compared with ketoprofen lysine and lysine acetylsalicylate in the management of postoperative pain in gynecologic surgery] Rossi S, et al. **Minerva Ginecol** 1988 May;40(5):329–35 (32 ref.) (Eng. Abstr.) **(Ita)**
[Analgesic and anti–inflammatory treatment with sodium naproxen in odontostomatology] Moniaci D, et al. **Minerva Stomatol** 1988 Dec;37(12):1011–3 (Eng. Abstr.) **(Ita)**
[The effect of naproxen on fever following transcatheter arterial embolization of hepatic tumors] Miyazaki M, et al. **Gan No Rinsho** 1988 Oct;34(12):1659–62 (Eng. Abstr.) **(Jpn)**

URINE

Coupling of TLC and UV–measurement for quantification of naproxen and its main metabolite in urine. Abdel–Moety EM, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):267–71

NARCINE see **TORPEDO**

NARCISSISM

A review of the pathogenesis of borderline and narcissistic personality disorders. Rinsley DB. **Adolesc Psychiatry** 1988; 15:387–406 (100 ref.)
The "silver–spoon" syndrome in the super rich: the pathologic linkage of affluence and narcissism in family systems. LeBeau J. **Am J Psychother** 1988 Jul;42(3):425–36
Transformations of narcissism. Bragan K. **Aust N Z J Psychiatry** 1989 Jun;23(2):207–11
Anxiety, supervision and a space for thinking: some narcissistic perils for clinical psychologists in learning psychotherapy. Mollon P. **Br J Med Psychol** 1989 Jun;62 (Pt 2):113–22
Narcissistic traits in psychiatric patients. Ronningstam E, et al. **Compr Psychiatry** 1988 Nov–Dec;29(6):545–9
Long–term crisis management by furthering group dependence as a narcissistic reinforcement of drug and alcohol dependents. Battegay R. **Crisis** 1988 Nov;9(2):83–92
Attention, interpretation, identity and narcissism. Boschan PJ. **Int J Psychoanal** 1989;70 (Pt 2):255–63
The narcissistic investment in pathological character traits and the narcissistic depression: some implications for treatment. Lax RF. **Int J Psychoanal** 1989;70 (Pt 1):81–90
The impact of cultural changes on the internal experience of the adolescent. Wilson P. **J Adolesc** 1988 Dec; 11(4):271–86
Freud's "narcissism of minor differences": a review and reassessment. Werman DS. **J Am Acad Psychoanal** 1988 Oct;16(4):451–9
Kernberg and Kohut: a test of competing psychoanalytic models of narcissism. Glassman M. **J Am Psychoanal Assoc** 1988;36(3):597–625
Narcissistic clients. Antelyes J. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1032–4
Two methods of assessing narcissism: comparison of the Narcissism–Projective (N–P) and the Narcissistic Personality Inventory (NPI). Shulman DG, et al. **J Clin Psychol** 1988 Nov;44(6):857–66
Toward an assessment of the construct validity of four measures of narcissism. Mullins LS, et al. **J Pers Assess** 1988 Winter;52(4):610–25
An MMPI description of the narcissistic personality. Raskin R, et al. **J Pers Assess** 1989 Spring;53(1):66–80
Narcissistic deficits in drug abusers: a self–psychological approach. Nighorn S. **J Psychosoc Nurs Ment Health Serv** 1988 Sep;26(9):22–6
"Tragic man" and "tragic woman": gender differences in narcissistic styles. Richman JA, et al. **Psychiatry** 1988 Nov; 51(4):368–77
Comparing three systems for diagnosing narcissistic personality disorder. Ronningstam E. **Psychiatry** 1988 Aug; 51(3):300–11
Levels of adaptation and narcissistic psychopathology. Wilson A. **Psychiatry** 1989 May;52(2):218–36
The narcissistic counterpart. Seiden HM. **Psychoanal Rev** 1989 Spring;76(1):67–81
From the analysis of a 5–year–old boy with pathological narcissism. Berberich E. **Psychoanal Study Child** 1988; 43:263–78
Narcissistic personality features and self–reported anger. McCann JT, et al. **Psychol Rep** 1989 Feb;64(1):55–8
[The narcissistic family] Penot B. **Psychiatr Enfant** 1988; 31(2):607–41 (Eng. Abstr.) **(Fre)**
[Narcissism vs narcissism. An attempt to analyze an institutional sequence] Scharmann G. **Psychiatr Enfant** 1988;31(2):557–69 (Eng. Abstr.) **(Fre)**
[Transsexualism as a symptom of personality disorder and its treatment] Küchenhoff B. **Nervenarzt** 1988 Dec; 59(12):734–8 **(Ger)**
[Pop music, puberty and narcissism] Hoffmann J. **Psyche (Stuttg)** 1988 Nov;42(11):961–80 (Eng. Abstr.) **(Ger)**
[A case of phallic–narcissistic personality] Meissner WW. **Psyche (Stuttg)** 1989 Jan;43(1):67–95 **(Ger)**
[Gratification and refusal in the psychoanalysis of a phallic–narcissistic homosexual patient. Case report of a character analysis] von Blarer A. **Psyche (Stuttg)** 1988 Oct; 42(10):849–72 (Eng. Abstr.) **(Ger)**
[Narcissism: origin and goal of the ego. Reflections of Lou Andreas–Salomé] Weber I. **Psyche (Stuttg)** 1989 Mar; 43(3):256–85 (Eng. Abstr.) **(Ger)**
[Structure and fantasy] Held T. **Psychother Psychosom Med Psychol** 1988 Jul;38(7):225–31 (Eng. Abstr.) **(Ger)**
[Freud's narcissism concept] Palmowski B. **Z Psychosom Med Psychoanal** 1989;35(2):101–16 (80 ref.) (Eng. Abstr.) **(Ger)**

NARCOLEPSY

CEREBROSPINAL FLUID

Cerebrospinal fluid monoamine metabolites in narcolepsy: reanalysis [letter] Faull KF, et al. **Ann Neurol** 1989 Mar; 25(3):310–1
Monoamine interactions in narcolepsy and hypersomnia: reanalysis [letter] Faull KF, et al. **Sleep** 1989 Apr; 12(2):185–6

COMPLICATIONS

Coexisting bipolar disorder and narcolepsy [letter] Sholomskas AJ, et al. **Psychosomatics** 1988 Fall;29(4):453

DIAGNOSIS

Narcolepsy mimicking suicidal carbon monoxide poisoning. Bell M, et al. **Am J Forensic Med Pathol** 1989 Sep; 10(3):226–8
Narcolepsy. Diagnosis, treatment, and management. Mitler MM, et al. **Psychiatr Clin North Am** 1987 Dec; 10(4):593–606 (55 ref.)
Disorders of excessive sleepiness: narcolepsy and hypersomnia. Manfredi RL, et al. **Semin Neurol** 1987 Sep; 7(3):250–8 (73 ref.)
Diagnosis of narcolepsy using the multiple sleep latency test: analysis of current laboratory criteria. Amira SA, et al. **Sleep** 1985 Dec;8(4):325–31
[Pickwickian syndrome or Dickens betrayed] Bonard EC. **Rev Med Suisse Romande** 1988 Oct;108(10):881–2 **(Fre)**
[Narcolepsy–cataplexy] Billiard M. **Schweiz Arch Neurol Psychiatr** 1989;140(3):249–53 **(Fre)**
[A case from practice (115). Patient: Mr. M. B., born 7–12–1921, painter] Hungerbühler U. **Schweiz Rundsch Med Prax** 1988 Sep 20;77(38):1019–20 **(Ger)**
[Differential diagnosis of abnormal daytime drowsiness] Meier–Ewert K. **Schweiz Rundsch Med Prax** 1988 Aug 30;77(35):920–5 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

The effect of naloxone on the symptoms of narcolepsy. Sonka K, et al. **Agressologie** 1989 Feb;30(2):93–6
GHB—new hope for narcoleptics? [editorial] Scharf MB, et al. **Biol Psychiatry** 1989 Aug;26(4):329–30

Efficacy of gamma-hydroxybutyrate versus placebo in treating narcolepsy-cataplexy: double-blind subjective measures. Scrima L, et al. **Biol Psychiatry** 1989 Aug; 26(4):331-43

Marked blood pressure fluctuations during narcoleptic attacks alternating with abnormal wakefulness: effects of treatment with clonidine. Reggiani P, et al. **Eur Heart J** 1989 Jan;10(1):2-7

Treatment of narcolepsy with L-tyrosine. Mouret J, et al. **Lancet** 1988 Dec 24-31;2(8626-8627):1458-9

Successful treatment of idiopathic hypersomnia and narcolepsy with modafinil. Bastuji H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):695-700

ETIOLOGY

Sequelae of electrical shock [letter] Roberts HJ. **South Med J** 1989 Jul;82(7):931

GENETICS

Narcolepsy and HLA in the Japanese. Juji T, et al. **Ann N Y Acad Sci** 1988;540:106-14

Narcolepsy without unique MHC class II antigen association: studies in the canine model. Dean RR, et al. **Hum Immunol** 1989 May;25(1):27-35

No difference in the nucleotide sequence of the DQ beta beta 1 domain between narcoleptic and healthy individuals with DR2,Dw2. Uryu N, et al. **Hum Immunol** 1989 Mar; 24(3):175-81

Monozygotic twins concordant for the narcoleptic syndrome [see comments] Douglass AB, et al. **Neurology** 1989 Jan; 39(1):140-1. **Comment in:** Neurology 1989 Jul;39(7):1005-6

HLA-DR2 in childhood narcolepsy. Lenn NJ. **Pediatr Neurol** 1986 Sep-Oct;2(5):314-5

A study of the occurrence of HLA DR2 in 124 narcoleptics: clinical aspects. Roth B, et al. **Schweiz Arch Neurol Psychiatr** 1988;139(4):41-51

IMMUNOLOGY

No male segregation distortion of DR2 haplotypes in Japanese narcoleptic patients. Matsuki K, et al. **Hum Immunol** 1988 Sep;23(1):23-6

Cellular approach for detecting narcolepsy-specific alterations in DR2 haplotypes. Strohmaier P, et al. **Hum Immunol** 1988 Aug;22(4):221-5

Narcoleptic twins [letter; comment] Carlson SE. **Neurology** 1989 Jul;39(7):1005-6. **Comment on:** Neurology 1989 Jan;39(1):140-1

METABOLISM

Central alpha 1 adrenoceptor subtypes in narcolepsy-cataplexy: a disorder of REM sleep. Mignot E, et al. **Brain Res** 1989 Jun 19;490(1):186-91

Compound narcolepsy: development of biochemical imbalance. Smith KM, et al. **Int J Neurosci** 1988 Oct; 42(3-4):229-52 (234 ref.)

PHYSIOPATHOLOGY

Heart rate and blood pressure changes during sleep-waking cycles and cataplexy in narcoleptic dogs. Siegel JM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H111-9

Determination of sleep latency in polysomnographic evaluations of daytime somnolence in patients with sleep apnea and patients with narcolepsy. Browman CP, et al. **Clin Electroencephalogr** 1989 Jan;20(1):45-8

Fragmented sleep, daytime somnolence and age in narcolepsy. Lamphere J, et al. **Clin Electroencephalogr** 1989 Jan;20(1):49-54

Nocturnal gamma-hydroxybutyrate. Effect on periodic leg movements and sleep organization of narcoleptic patients. Bédard MA, et al. **Clin Neuropharmacol** 1989 Feb; 12(1):29-36

Ambulatory 24 hour sleep-wake monitoring in narcolepsy-cataplexy compared to matched controls. Broughton R, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):473-81

Compound narcolepsy: sleep pattern and involution. Smith KM, et al. **Int J Neurosci** 1988 Oct;42(3-4):209-27 (207 ref.)

Narcolepsy: a review of a common, life-long sleep disorder. Cohen FL. **J Adv Nurs** 1988 Sep;13(5):546-56 (59 ref.)

A comparison of multiple and single sleep latency and cerebral evoked potential (P300) measures in the assessment of excessive daytime sleepiness in narcolepsy-cataplexy. Broughton R, et al. **Sleep** 1988 Dec;11(6):537-45

[Clinico-electrophysiologic research on narcolepsy (an evolutionary-dissolution approach)] Iakhno NN, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):20-4 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

The pattern of isolated sleep paralysis among Nigerian medical students. Ohaeri JU, et al. **J Natl Med Assoc** 1989 Jul;81(7):805-8

THERAPY

Bright white light does not improve narcoleptic symptoms. Hajek M, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 238(4):203-7

Daytime naps in narcoleptic patients [letter] Burton SA. **Sleep** 1989 Apr;12(2):184-5

VETERINARY

Restriction fragment length polymorphism in canine narcolepsy. Motoyama M, et al. **Immunogenetics** 1989; 29(2):124-6

Prostaglandin E2 and its methyl ester reduce cataplexy in canine narcolepsy. Nishino S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2483-7

NARCOSYNTHESIS see NARCOTHERAPY

NARCOTHERAPY

[Treatment of alcoholism by affective counterattribution] Grinenko AIa, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):101-5 (Eng. Abstr.) **(Rus)**

NARCOTIC ANALGESICS see ANALGESICS, ADDICTIVE

NARCOTIC ANTAGONISTS

Benefit-risk of agonist-antagonist analgesics [editorial] Ghodse AH. **Br J Addict** 1989 May;84(5):455-7 (7 ref.)

Agonist-antagonist opioids: theory and clinical practice. Rosow C. **Can J Anaesth** 1989 May;36(3 Pt 2):S5-8 (22 ref.)

Buprenorphine is a potent kappa-opioid receptor antagonist in pigeons and mice. Leander JD. **Eur J Pharmacol** 1988 Jul 14;151(3):457-61

Pertussis toxin differentially reduces the efficacy of opioids to produce supraspinal analgesia in the mouse. Sánchez-Blázquez P, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):357-61

Beta-endorphin-(1-27) is a naturally occurring antagonist of the reinforcing effects of opioids. Bals-Kubik R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):392-6

ADMINISTRATION & DOSAGE

The effects of nalmefene, a potent oral opiate antagonist, on exercise-induced bronchospasm. Christopher MA, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1037-41

Opioid agonist and antagonist activities of peripherally selective derivatives of naltrexamine and oxymorphamine. Botros S, et al. **J Med Chem** 1989 Sep;32(9):2068-71

Improved buccal delivery of opioid analgesics and antagonists with bitterless prodrugs. Hussain MA, et al. **Pharm Res** 1988 Sep;5(9):615-8

CHEMICAL SYNTHESIS

New 4-(heteroanilido)piperidines, structurally related to the pure opioid agonist fentanyl, with agonist and/or antagonist properties. Bagley JR, et al. **J Med Chem** 1989 Mar; 32(3):663-71

DIAGNOSTIC USE

Estimation of opioid receptor agonist dissociation constants with beta-chlornaltrexamine, an irreversible ligand which also displays agonism. Leff P, et al. **Br J Pharmacol** 1988 Sep;95(1):234-40

PHARMACOLOGY

Opiate antagonist nalmefene inhibits ethanol-induced flushing in Asians: a preliminary study. Ho SB, et al. **Alcoholism (NY)** 1988 Oct;12(5):705-12

Influence of dopamine agonists and an opiate antagonist on agaricus-induced catalepsy, as tested by a new method. Sukul NC, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct; 295:40-51

Very long-acting narcotic antagonists: the 14 beta-p-substituted cinnamoylaminomorphinones and their partial mu agonist codeinone relatives. Aceto MD, et al. **Arzneimittelforschung** 1989 May;39(5):570-5

Effects of opiate antagonists and their quaternary analogues on nucleus accumbens self-stimulation. Trujillo KA, et al. **Behav Brain Res** 1989 Jun 1;33(2):181-8

Modulation of appetitively and aversively motivated behavior by the kappa opioid antagonist MR2266. Fanselow MS, et al. **Behav Neurosci** 1989 Jun;103(3):663-72

Effects of an opioid antagonist on pulsatile luteinizing hormone secretion in the ewe vary with changes in steroid negative feedback. Whisnant CS, et al. **Biol Reprod** 1988 Dec;39(5):1032-8

Antagonism of morphine-induced respiratory depression with nalmefene. Konieczko KM, et al. **Br J Anaesth** 1988 Sep;61(3):318-23

Evaluation of delta receptor mediation of supraspinal opioid analgesia by in vivo protection against the beta-funaltrexamine antagonist effect. Sánchez-Blázquez P, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):9-23

Use of narcotic antagonists to modify stereotypic self-licking, self-chewing, and scratching behavior in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):815-9

The implication of opiates in the glucocorticoid-mediated inhibition of LH secretion in rats. Belhadj H, et al. **J Endocrinol** 1989 Aug;122(2):451-6

Seizure-induced delay of puberty in female rats: effects of age, stress and opioid antagonists. Carson RC, et al. **J Endocrinol** 1989 May;121(2):229-38

Effects of selective opioid-receptor blockade on the hypothalamo-pituitary-adrenocortical responses to surgical trauma in the rat. Cover PO, et al. **J Endocrinol** 1989 May;121(2):213-20

Effects of addition of a 2-methyl group to ethyl nipecotates (beta-meperidines) on receptor affinities and opiate agonist/antagonist activities. Lawson JA, et al. **J Med Chem** 1988 Oct;31(10):2015-21

Synthesis and biological evaluation of 14-alkoxymorphinans. 2. (-)-N-(cyclopropylmethyl)-4,14-dimethoxymorphinan-6-one, a selective mu opioid receptor antagonist. Schmidhammer H, et al. **J Med Chem** 1989 Feb; 32(2):418-21

Lack of mixed agonist-antagonist properties of [Gln8-Gly31]-beta h-EP-Gly-Gly-NH2 and [Arg9,19,24,28,29]-beta h-EP in the rat vas deferens neuroeffector junction: studies with naloxone, beta-funaltrexamine and ICI 174,864. Valenzuela R, et al. **J Pharm Pharmacol** 1989 Feb;41(2):92-6

Molecular orbital calculations of proton transfer energetics in model systems: the interaction of opiate agonists and antagonists with opiate receptors. Bennett LK, et al. **J Pharm Sci** 1988 Nov;77(11):986-90

Levels of endogenous opioids and effects of an opiate antagonist during regional cerebral ischemia in rats. Andrews BT, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1248-54

Buprenorphine: dose-related blockade of opioid challenge effects in opioid dependent humans. Bickel WK, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):47-53

Novel peptidic mu opioid antagonists: pharmacologic characterization in vitro and in vivo. Kramer TH, et al. **J Pharmacol Exp Ther** 1989 May;249(2):544-51

Effects of the novel opiate antagonist, SDZ 210-096, on luteinizing hormone secretion in the rat. Siegel RA, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):264-70

Suppression by nor-binaltorphimine of kappa opioid-mediated diuresis in rats. Takemori AE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):971-4

Failure of melatonin to influence endogenous opioid effects on LH secretion in the anoestrous ewe. Yang KP, et al. **J Reprod Fertil** 1989 Mar;85(2):397-403

Reversal of fentanyl/fluanisone neuroleptanalgesia in the rabbit using mixed agonist/antagonist opioids. Flecknell PA, et al. **Lab Anim** 1989 Apr;23(2):147-55

Taste aversion involving central opioid antagonism is potentiated in morphine-dependent rats. Mucha RF. **Life Sci** 1989;45(8):671-8

Reversal by beta-funaltrexamine and 16-methyl cyprenorphine of the antinociceptive effects of opioid agonists in the mouse and guinea-pig. Hayes AG, et al. **Neuropharmacology** 1988 Aug;27(8):813-6

The opioid antagonist, MR2266, specifically decreases saline intake in the mouse. Ukai M, et al. **Neuropharmacology** 1988 Oct;27(10):1027-31

Selective opioid antagonist effects on opioid-induced inhibition of release of norepinephrine in guinea pig cortex. Werling LL, et al. **Neuropharmacology** 1989 Feb; 28(2):103-7

Differential inhibitory effects of MIF-1, Tyr-MIF-1, naloxone and beta-funaltrexamine on body rotation-induced analgesia in the meadow vole, Microtus pennsylvanicus. Lipa SM, et al. **Peptides** 1989 May-Jun; 10(3):493-7

A naloxone-steroid hybrid azine with selective and long-acting opioid antagonism at delta receptors in vitro. Koman A, et al. **Pharm Res** 1987 Apr;4(2):147-9

Antagonist treatment in nucleus accumbens or periaqueductal grey affects heroin self-administration. Corrigall WA, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):443-50

Effects of opiate agonists and antagonists on aggressive encounters and subsequent opioid-induced analgesia, activity and feeding responses in male mice. Teskey GC, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):43-52

Effects of ethanol in an open field apparatus: modification by U50488H and WIN 44441-3. Pohorecky LA, et al. **Physiol Behav** 1989 Feb;45(2):273-87

In vitro evaluation of a novel, non-competitive opioid receptor antagonist. Davis P, et al. **Proc West Pharmacol Soc** 1989;32:163-6

RX809055AX in vivo: a long lasting opioid antagonist at mu and delta receptors. Lemcke PK, et al. **Proc West Pharmacol Soc** 1989;32:173-5

Evidence that the aversive effects of opioid antagonists and kappa-agonists are centrally mediated. Bals-Kubik R, et al. **Psychopharmacology (Berlin)** 1989;98(2):203-6

Relationship between behavioral and nociceptive changes in attacked mice: effects of opiate antagonists. Frischknecht HR, et al. **Psychopharmacology (Berlin)** 1989;97(2):160-2

Opioid antagonist-induced upregulation and functional supersensitivity. Yoburn BC. **Rev Clin Basic Pharm** 1988 Jan-Dec;7(1-4):109-28 (68 ref.)

THERAPEUTIC USE

Opioid peptides and primary biliary cirrhosis. Thornton JR, et al. **BMJ** 1988 Dec 10;297(6662):1501-4

Efficacy and safety of nalmefene in patients with severe pruritis caused by chronic urticaria and atopic dermatitis.

Monroe EW. **J Am Acad Dermatol** 1989 Jul;21(1):135–6

Use of narcotic antagonists to modify stereotypic self-licking, self-chewing, and scratching behavior in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):815–9

Management of pain caused by pancreatitis [letter] Shapiro BS, et al. **J Pediatr** 1989 Mar;114(3):506–7

Role of opioid antagonists in treating intravenous cocaine abuse. Kosten TR, et al. **Life Sci** 1989;44(13):887–92

TOXICITY

Neurologic deficits and neuronal injury in rats resulting from nonopioid actions of the delta opioid receptor antagonist ICI 174864. Long JB, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1169–77

NARCOTIC CONTROL see **DRUG AND NARCOTIC CONTROL**

NARCOTIC DEPENDENCE

Suicidality among opioid addicts: 2.5 year follow-up. Kosten TR, et al. **Am J Drug Alcohol Abuse** 1988;14(3):357–69

Diet and opiate addiction: a quantitative assessment of the diet of non-institutionalized opiate addicts. Morabia A, et al. **Br J Addict** 1989 Feb;84(2):173–80

Naloxone treatment for opiate withdrawal syndrome [letter] Loimer N, et al. **Br J Psychiatry** 1988 Dec;153:851–2

Narcotic addiction and the sudden infant death syndrome [letter] Thomas DB. **Med J Aust** 1988 Nov 21;149(10):562

Unlimited entitlement to health care: the dilemma of narcotic dependency. Stimmel B. **Mt Sinai J Med** 1989 May; 56(3):176–9

Who is to blame? [editorial] Brinton LF. **N C Med J** 1988 Nov;49(11):597

Dinner with De Quincey. Loperamide overdose. Mack RB. **N C Med J** 1989 Apr;50(4):204–6

[Buprenorphine (Temgesic)—a new agent for abuse (letter)] Waal H. **Tidsskr Nor Laegeforen** 1989 Apr 30; 109(12):1326–7 **(Nor)**

COMPLICATIONS

Infective endocarditis in opiate addicts: analysis of 80 cases studied at necropsy. Dressler FA, et al. **Am J Cardiol** 1989 May 15;63(17):1240–57

Alcohol use and psychopathology in opioid addicts on methadone maintenance. Roszell DK, et al. **Am J Drug Alcohol Abuse** 1986;12(3):269–78

No adverse reaction [letter] Allen T. **Ann Emerg Med** 1989 Jan;18(1):116

Cauliflower ears, opium, and Errol Flynn. Owens D, et al. **BMJ** 1988 Dec 24–31;297(6664):1643–4

Alcohol: the hidden drug among substance abusers [editorial] De Leon G. **Br J Addict** 1989 Aug;84(8):837–40

Variations in needle sharing practices among intravenous drug users in Possil (Glasgow). Rahman MZ, et al. **Br J Addict** 1989 Aug;84(8):923–7

Methadone maintenance program for AIDS-affected opiate addicts. Sorensen JL, et al. **J Subst Abuse Treat** 1989; 6(2):87–94

Opioid-addicted parturient, labor, and outcome: a reappraisal. Wolman I, et al. **Obstet Gynecol Surv** 1989 Aug;44(8):592–7 (58 ref.)

Human immunodeficiency virus seropositivity in intravenous drug users in Ohio. Seligman PJ, et al. **Ohio Med** 1989 Jan;85(1):56–9

[Anesthesia and analgesia in opiate dependence] Jage J. **Anaesthesist** 1988 Aug;37(8):470–82 (101 ref.) (Eng. Abstr.) **(Ger)**

[The HIV epidemic—concealed figures among intravenous drug abusers (letter)] Eskild A. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2302–3 **(Nor)**

[Risk of transmission of HIV/AIDS and narcotic dependence (letter)] Kristoffersen JE. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2185 **(Nor)**

[Risk of HIV/AIDS transmission and narcotic abuse] Sundby P. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1609–10 **(Nor)**

[Clinical characteristics of the progeny of mothers with narcotic dependence] Moskalenko VD. **Sov Med** 1988; (10):63–6 (25 ref.) **(Rus)**

[Venereal diseases in women who abuse narcotic substances] Slutskin BM, et al. **Vestn Dermatol Venerol** 1988;(10):65–7 (Eng. Abstr.) **(Rus)**

[HIV infection among intravenous drug users in Sweden] Blaxhult A, et al. **Lakartidningen** 1989 Jul 12; 86(28–29):2518–9 **(Swe)**

[A dramatic spread of HIV in Southeast Asia. The number of infected addicts using syringes increased from 16 to 43 per cent in 1 year in Thailand] Lennholm B. **Lakartidningen** 1989 Feb 22;86(8):633–4 **(Swe)**

[Swedish physicians and social workers in a fight for free syringes for narcotic addicts] Finer D. **Nord Med** 1989; 104(8–9):227 **(Swe)**

DIAGNOSIS

Severity of precipitated opiate withdrawal predicts drug dependence by DSM-III-R criteria. Kosten TA, et al. **Am J Drug Alcohol Abuse** 1989;15(3):237–50

Naloxone applied to conjunctiva as a test for physical opiate dependence. Creighton FJ, et al. **Lancet** 1989 Apr 8; 1(8641):748–50

[Diagnosis and treatment of narcotic dependence in pregnant women and the neonatal abstinence syndrome in newborn infants] Rabe-Jabłońska J. **Pol Tyg Lek** 1988 Nov 7; 43(45):1427–9 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

A multicentre study to introduce naltrexone for opiate dependence in Spain. García-Alonso F, et al. **Drug Alcohol Depend** 1989 Apr;23(2):117–21

Antagonist effects of nalbuphine in opioid-dependent human volunteers. Preston KL, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):929–37

Pharmacological adjuncts in the treatment of opioid and cocaine addicts. Herridge P, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):233–42 (83 ref.)

[Naltrexone and prevention of opiate dependence relapse. An Italian experience] Cibin M, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):93–8 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

Opium, heroin and South Asia [editorial] Jee A. **Br J Addict** 1989 Jan;84(1):5–6

Buprenorphine abuse among opiate addicts. O'Connor JJ, et al. **Br J Addict** 1988 Sep;83(9):1085–7

Buprenorphine and temazepam abuse by drug takers in Glasgow—an increase [letter] Sakol MS, et al. **Br J Addict** 1989 Apr;84(4):439–41

An epidemic of opium dependence among Asian refugees in Minnesota: characteristics and causes. Westermeyer J, et al. **Br J Addict** 1989 Jul;84(7):785–9

[Hepatitis B is not a good marker of the occurrence of narcotic abuse] Tunving K. **Lakartidningen** 1989 May 3; 86(18):1680 **(Swe)**

ETIOLOGY

Obstetric pain medication and eventual adult amphetamine addiction in offspring. Jacobson B, et al. **Acta Obstet Gynecol Scand** 1988;67(8):677–82

Meperidine addiction associated with amphoteracin treatment in leukemia: case study and staff reaction. Fincannon J. **Arch Psychiatr Nurs** 1988 Oct;2(5):302–6

Benefit-risk of agonist-antagonist analgesics [editorial] Ghodse AH. **Br J Addict** 1989 May;84(5):455–7 (7 ref.)

GENETICS

Family and environment in the choice of opioid dependence or alcoholism. Maddux JF, et al. **Am J Drug Alcohol Abuse** 1989;15(2):117–34

HISTORY

The criminal justice system and opiate addiction: a historical perspective. Joseph H. **NIDA Res Monogr** 1988;86:106–25

IMMUNOLOGY

T cell immunophenotypes and DR antigen expression in intravenous drug users. Relationship to human immunodeficiency virus serology. Lin RY, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):263–8

MORTALITY

[Fatal poisoning in Scandinavia—narcotic addicts are a high-risk group] Ceder G, et al. **Nord Med** 1989; 104(8–9):224–7 (Eng. Abstr.) **(Swe)**

PATHOLOGY

[Forensic medicine analysis of fatal cases of narcotic addiction in Belgrade 1980–1984] Veljković S, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):311–6 (Eng. Abstr.) **(Scc)**

PHYSIOPATHOLOGY

Buprenorphine: dose-related blockade of opioid challenge effects in opioid dependent humans. Bickel WK, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):47–53

Acute opioid physical dependence in postaddict humans: naloxone dose effects after brief morphine exposure. Heishman SJ, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):127–34

Opioid dependence in myenteric neurons innervating the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):166–72

Quantitative experimental analysis of the emergence of opiate dependence. Villarreal JE, et al. **Proc West Pharmacol Soc** 1989;32:137–40

[The effect of oxytocin and vasopressin on individual behavior and EEG-correlates of narcotic dependent rats in the "open field" test] Ibragimov RSh, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):441–6 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Impact of the revision of DUI legislation in Alabama. Maghsoodloo S, et al. **Am J Drug Alcohol Abuse** 1988; 14(1):97–108

The saboteurs of Britain's opiate policy: overprescribing physicians or American-style "junkies"? Blackwell J. **Int J Addict** 1988 May;23(5):517–26 (25 ref.)

The moral myths of opium, AIDS, and MAACs [letter] MacKool RJ. **Ophthalmic Surg** 1988 Nov;19(11):825–6

Metabolism of methadone by chicken embryos prevents induction of chronic opioid-type dependence after a single injection: use of osmotic pumps for continuous infusion. Seran GF, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):357–63

PSYCHOLOGY

Psychopathology of opiate addiction: comparative data from the MMPI and MCMI. Marsh DT, et al. **Am J Drug Alcohol Abuse** 1988;14(1):17–27

The opiate dependence syndrome: replication study using the SODQ in a New York clinic. Sutherland G, et al. **Br J Addict** 1988 Jul;83(7):755–60

Differences in organization of psychological needs between inpatient and outpatient opiate addicts. Craig RJ, et al. **J Clin Psychol** 1989 May;45(3):462–6

Classically conditioned responses in opioid and cocaine dependence: a role in relapse? Childress AR, et al. **NIDA Res Monogr** 1988;84:25–43

REHABILITATION

Consequences and costs of shutting off methadone. Anglin MD, et al. **Addict Behav** 1989;14(3):307–26

The case of Dr. Y. Leitner WA. **Ala Med** 1989 Jan;58(7):9–10

Rapid detoxification from opioid dependence [letter] Kosten TR, et al. **Am J Psychiatry** 1989 Oct;146(10):1349

A naturalistic analytic study of veterans using naltrexone in Puerto Rico. Santos EF. **Bol Asoc Med P R** 1989 Apr; 81(4):134–6

The Bethlem Study on NET: putting the record straight [letter] Gossop M, et al. **Br J Addict** 1989 Jul;84(7):818–9

Neuro-electric therapy: criticisms of the 1984 Bethlem Study [letter] Patterson MA. **Br J Addict** 1989 Jul;84(7):818

Cyclizine abuse among a group of opiate dependents receiving methadone. Ruben SM, et al. **Br J Addict** 1989 Aug;84(8):929–34

Contingency management in methadone maintenance: effects of reinforcing and aversive consequences on illicit polydrug use. Iguchi MY, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):1–7

Differences in psychological needs among drug abusers: first admissions compared to recidivists. Craig RJ, et al. **Int J Addict** 1988 Jun;23(6):649–54

Atypical withdrawal syndrome (organic delusional syndrome) secondary to oxycodone detoxification [letter] Fishbain DA, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):441–2

Psychological symptoms in methadone maintenance patients: prevalence and change over treatment. Corty E, et al. **J Consult Clin Psychol** 1988 Oct;56(5):776–7

Differences among treatment clinic types in attitudes toward narcotic addiction. Nurco DN, et al. **J Nerv Ment Dis** 1988 Dec;176(12):714–8

Continuous naloxone administration suppresses opiate withdrawal symptoms in human opiate addicts during detoxification treatment. Loimer N, et al. **J Psychiatr Res** 1989;23(1):81–6

Naltrexone treatment—the problem of patient acceptance. Fram DH, et al. **J Subst Abuse Treat** 1989;6(2):119–22

Group psychotherapy with methadone-maintained pregnant women. Mackie-Ramos RL, et al. **J Subst Abuse Treat** 1988;5(3):151–61

Methadone and theories of addiction [letter] **JAMA** 1989 Apr 7;261(13):1879–80

Implications of methadone maintenance for theories of narcotic addiction. Dole VP. **JAMA** 1988 Nov 25; 260(20):3025–9 (33 ref.)

Methadone maintenance [letter] Kell MJ, et al. **JAMA** 1988 Nov 18;260(19):2835–6

Urine testing in impaired physicians. Croughan J, et al. **Mo Med** 1989 Jun;86(6):341–2

[Drug substitution with methadone—pro arguments] Hüsgen HA. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):530–2 (Eng. Abstr.) **(Ger)**

[Drug substitution with methadone—contra arguments] Lux F. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):533–8 (Eng. Abstr.) **(Ger)**

THERAPY

The efficacy of civil commitment in treating narcotic addiction. Anglin MD. **NIDA Res Monogr** 1988;86:8–34

Some considerations on the clinical efficacy of compulsory treatment: reviewing the New York experience. Inciardi JA. **NIDA Res Monogr** 1988;86:126–38

Clinical experience with civil commitment. Maddux JF. **NIDA Res Monogr** 1988;86:35–56 (44 ref.)

Legal status and long-term outcomes for addicts in the DARP followup project. Simpson DD, et al. **NIDA Res Monogr** 1988;86:81–98

NARCOTIC LAWS see **LEGISLATION, DRUG**

NARCOTIC RECEPTORS see **RECEPTORS, ENDORPHIN**

NARCOTICS

see related
ANALGESICS, ADDICTIVE

SUBSTANCE DEPENDENCE

Comparing the efficacy of epidural opiates with that of patient-controlled analgesia [letter] Hord AH. **Anesthesiology** 1988 Oct;69(4):632-3

The neuromuscular blocking and cardiovascular effects of doxacurium chloride in patients receiving nitrous oxide narcotic anesthesia. Murray DJ, et al. **Anesthesiology** 1988 Oct;69(4):472-7

The rational use of intrathecal and extradural opioids. Morgan M. **Br J Anaesth** 1989 Aug;63(2):165-88 (208 ref.)

Practical aspects of pain control in the patient with cancer. Portenoy RK. **CA** 1988 Nov-Dec;38(6):327-52 (123 ref.)

Sublingual versus subcutaneous buprenorphine in opiate abusers. Jasinski DR, et al. **Clin Pharmacol Ther** 1989 May; 45(5):513-9

Neurophysiology and neurochemistry of drug dependence: a review. Kiyatkin EA. **Int J Neurosci** 1989 Feb; 44(3-4):283-316 (111 ref.)

A review of the characteristics and treatment progress of 45 pregnant opiate addicts attending the Irish National Drug Advisory and Treatment Centre over a two year period. O'Connor JJ, et al. **Ir J Med Sci** 1988 May; 157(5):146-9

A hierarchical model of opiate addiction. Failures of self-regulation as a central aspect of substance abuse. Wilson A, et al. **J Nerv Ment Dis** 1989 Jul;177(7):390-9

Treatment and detoxification of opiate dependent drug users in different countries. Roberts K. **J R Soc Health** 1989 Jun;109(3):100-5, 109

Naloxone and opiate addiction [letter] Brewer C, et al. **Lancet** 1989 Sep 16;2(8664):683-4

X-ray diffraction studies of enkephalins and opiates. Griffin JF, et al. **NIDA Res Monogr** 1988;87:41-59 (29 ref.)

Cooperative reinforcement of opioid pharmacophores. Lipkowski AW. **Pol J Pharmacol Pharm** 1987 Sep-Oct; 39(5):585-96 (45 ref.)

Motivational properties of opioids. Shippenberg T, et al. **Pol J Pharmacol Pharm** 1987 Sep-Oct;39(5):577-83 (20 ref.)

[Slang and jargon in drug addiction] Hagelsten JO. **Nord Med** 1989;104(8-9):228-31 (Eng. Abstr.) **(Dan)**

[Errors in the wording and dispatching of section 5 prescriptions] Laursen E, et al. **Ugeskr Laeger** 1989 May 1;151(18):1133-6 **(Dan)**

[Pharmacologic modification of vigilance in the postnarcotic phase-- naloxone or physostigmine?] Schneck HJ, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):209-13 (Eng. Abstr.) **(Ger)**

[The use of opiates in hospital practice] Saavedra H, et al. **Rev Med Chil** 1989 Jun;116(6):532-7 (Eng. Abstr.) **(Spa)**

[Routine abdominal plain films detect swallowed narcotic capsules] Nilsson J. **Lakartidningen** 1989 Apr 12; 86(15):1359-61 **(Swe)**

ADMINISTRATION & DOSAGE

Narcotics plus methylphenidate (Ritalin) for advanced cancer pain. Bruera E, et al. **Am J Nurs** 1988 Nov;88(11):1555-6

Epidural opioids--the preferred route of administration [editorial] Campbell C. **Anesth Analg** 1989 Jun;68(6):710-1

Selection of implantable narcotic delivery systems. Waldman SD, et al. **Anesth Analg** 1989 Mar;68(3):377-84

Epidural portals. Long-term management of intractable pain. Parish KA, et al. **AORN J** 1989 Jul;50(1):52-7, 60-4

Practical aspects of pain management in cancer patients. Schauer PK, et al. **Conn Med** 1989 Apr;53(4):211-5

Sedation and pain management for the critically ill. Veselis RA. **Crit Care Clin** 1988 Jan;4(1):167-81 (147 ref.)

Spinal opioid analgesia. A critical update. Gustafsson LL, et al. **Drugs** 1988 Jun;35(6):597-603 (41 ref.)

The search for the ultimate equine sedative: are we 'Waiting for Godot'? Combined use of detomidine with opiates in the horse [letter] Jöchle W, et al. **Equine Vet J** 1989 Mar; 21(2):96-7

Effect of inhaled and systemic opiates on responses to inhaled capsaicin in humans. Fuller RW, et al. **J Appl Physiol** 1988 Sep;65(3):1125-30

Efficacy of transdermal clonidine for headache prophylaxis and reduction of narcotic use in migraine patients. A randomized crossover trial. Bredfeldt RC, et al. **J Fam Pract** 1989 Aug;29(2):153-6; discussion 157-8

Hypodermoclysis for the administration of fluids and narcotic analgesics in patients with advanced cancer [letter] Bruera E, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1108-9

Pharmacological modifications of cocaine and opioid self-administration. Winger G. **NIDA Res Monogr** 1988; 88:125-36 (19 ref.)

Intrathecal Opioids, Potency and Lipophilicity [letter] Shir Y. **Pain** 1989 Aug;38(2):235-6

Improved buccal delivery of opioid analgesics and antagonists with bitterless prodrugs. Hussain MA, et al. **Pharm Res** 1988 Sep;5(9):615-8

Smoking and narcotics use among chronic pain patients. Barton SB, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1253-4

ADVERSE EFFECTS

Acute and chronic toxic nephropathies. Sanders MM, et al. **Ann Clin Lab Sci** 1989 May-Jun;19(3):216-20 (16 ref.)

Opioid withdrawal and naltrexone induction in 48-72 hours with minimal drop-out, using a modification of the naltrexone-clonidine technique. Brewer C, et al. **Br J Psychiatry** 1988 Sep;153:340-3

Clonidine and the treatment of the opiate withdrawal syndrome. Gossop M. **Drug Alcohol Depend** 1988 Jul; 21(3):253-9 (45 ref.)

The narcotic bowel syndrome. Rogers M, et al. **J Clin Gastroenterol** 1989 Apr;11(2):132-5 (22 ref.)

Cocaine abuse and opioid withdrawal [letter] Kosten TA, et al. **Lancet** 1989 Jul 15;2(8655):165-6

Easing drug withdrawal [news] **Ohio Med** 1988 Jun;84(6):427

Adenosine triphosphate blocks opiate withdrawal symptoms in rats and mice. Gomaa AA, et al. **Pharmacol Toxicol** 1989 Jan;64(1):111-5

[Maternal addiction to opiates during pregnancy and fetal health] Rosati P, et al. **Minerva Ginecol** 1988 Oct; 40(10):583-9 (Eng. Abstr.) **(Ita)**

ANALYSIS

[Evaluation and improvement of field test kits for identification of abused drugs] Nakahara Y. **Eisei Shikenjo Hokoku** 1988;(106):111-5 (Eng. Abstr.) **(Jpn)**

BLOOD

Evaluation of the Abbott TDx analyzer. Lee CW, et al. **J Anal Toxicol** 1989 Jan-Feb;13(1):50-6

A novel procedure for the analysis of drugs in whole blood by homogeneous enzyme immunoassay (EMIT). Lewellen LJ, et al. **J Anal Toxicol** 1988 Sep-Oct;12(5):260-4

Plasma levels of opioid material in man following sublingual and intravenous administration of buprenorphine: exogenous/endogenous opioid interaction? [letter] Olley JE, et al. **J Pharm Pharmacol** 1988 Sep;40(9):666-7

Improved radioreceptor assay of opiate narcotics in human serum: application to fentanyl and morphine metabolism. Levi V, et al. **Pharm Res** 1987 Feb;4(1):46-9

CHEMICAL SYNTHESIS

Narcotic alkylating agents: synthesis, structure and biological activities. Frigola J, et al. **Farmaco [Sci]** 1988 Apr; 43(4):347-62

CLASSIFICATION

The narcotic equivalency index [letter] Hoskin PJ, et al. **World Health Forum** 1989;10(1):94-5

HISTORY

[Analgesics and narcotics before 1600. A nearly unknown chapter in drug history] Schmitz R, et al. **Pharm Unserer Zeit** 1989 Jan;18(1):11-9 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Affinity resins for the purification of opioid-binding materials. Fujioka T, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1100-2

Effects on mice locomotor activity of a narcotic-like principle from Psidium guajava leaves. Lutterodt GD, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):219-31

METABOLISM

Behavioral and metabolic alterations in the opiate withdrawal syndrome induced by lesions of fasciculus retroflexus. Cutlip AC, et al. **Brain Res** 1988 Jun 7;451(1-2):54-8

Characterization of opiate binding sites on membranes of rat lymphocytes. Ovadia H, et al. **J Neuroimmunol** 1989 Feb; 21(2-3):93-102

Dopamine, GABA, cholecystokinin and opioids in neuroleptic-induced tardive dyskinesia. Ebadi M, et al. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):179-87 (129 ref.)

PHARMACOKINETICS

Positron emission tomography in studies on fetomaternal disposition of opioids. Hartvig P, et al. **Dev Pharmacol Ther** 1989;12(2):74-80

PHARMACOLOGY

Determinants of the analgesic action of opiates. Kiyatkin EA, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):10-7

Biological tests for opiate activity of newly-synthesized compounds--opioid peptides and cyclic beta-diketones. Petkov VD, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(1):19-30

Respiratory effects of epidural and subcutaneous morphine, meperidine, fentanyl and sufentanil in the rat. van den Hoogen RH, et al. **Anesth Analg** 1988 Nov;67(11):1071-8

Is in vivo dissociation between the antipropulsive and antidiarrheal properties of opioids in rats related to gut selectivity? Megens AA, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:220-9

Receptor binding, analgesic and antitussive potency of tramadol and other selected opioids. Hennies HH, et al. **Arzneimittelforschung** 1988 Jul;38(7):877-80

Kappa-opioid-induced changes in renal water and electrolyte management and endocrine secretion. Ashton N, et al. **Br J Pharmacol** 1989 Jul;97(3):769-76

Evaluation of opioid-induced antinociceptive effects in anaesthetized and conscious animals. Clark SJ, et al. **Br J Pharmacol** 1988 Sep;95(1):275-83

Local opioid-sensitive afferent sensory neurones in the modulation of gastric damage induced by Paf. Esplugues JV, et al. **Br J Pharmacol** 1989 Jun;97(2):579-85

Effects of naloxone and opioid agonists on gastric excitatory responses to stimulation of the vagus nerve in cats. Okamoto T, et al. **Br J Pharmacol** 1988 Oct;95(2):329-34

Differential sensitivity of antinociceptive tests to opioid agonists and partial agonists. Shaw JS, et al. **Br J Pharmacol** 1988 Oct;95(2):578-84

Human liver morphine UDP-glucuronyl transferase enantioselectivity and inhibition by opioid congeners and oxazepam. Wahlström A, et al. **Br J Pharmacol** 1988 Jul; 94(3):864-70

Opioids induce postural asymmetry in spinal rat: the side of the flexed limb depends upon the type of opioid agonist. Bakalkin GYa, et al. **Brain Res** 1989 Feb 20;480(1-2):277-89

Substance P release from knee joint afferent terminals: modulation by opioids. Yaksh TL. **Brain Res** 1988 Aug 23;458(2):319-24

Blockade of K+ contractures in skeletal muscle by opioid drugs: a nonstereospecific effect. Kokate TG, et al. **Can J Physiol Pharmacol** 1989 May;67(5):435-41

Effects of subacute opioid administration during late pregnancy in the rat on the initiation, duration and outcome of parturition and maternal levels of oxytocin and arginine vasopressin. Evans RG, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):169-78

Phagocytosis in Tetrahymena thermophila: naloxone-reversible inhibition by opiates. De Jesus S, et al. **Comp Biochem Physiol [C]** 1989;92(1):139-42

Evidence for dopaminergic and opioid involvement in the regulation of locomotor activity in the land crab Gecarcinus lateralis. Martinez EA, et al. **Comp Biochem Physiol [C]** 1988;90(1):89-93

Different gamma-aminobutyric acid receptor subtypes are involved in the regulation of opiate-dependent and independent luteinizing hormone-releasing hormone secretion. Masotto C, et al. **Endocrinology** 1989 Jul; 125(1):548-53

Combined use of detomidine with opiates in the horse. Clarke KW, et al. **Equine Vet J** 1988 Sep;20(5):331-4

Opioids and non-opioid enantiomers selectively attenuate N-methyl-D-aspartate neurotoxicity on cortical neurons. Choi DW, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1-2):27-35

A novel series of potent and selective agonists at the opioid kappa-receptor. Costello GF, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):475-8

Modulation of mu-mediated antinociception by delta agonists in the mouse: selective potentiation of morphine and normorphine by [D-Pen2,D-Pen5]enkephalin. Heyman JS, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):1-10

Effects of pentazocine and other opioids on the potassium-evoked release of [3H]noradrenaline from guinea pig cortical slices. Kinouchi K, et al. **Eur J Pharmacol** 1989 May 2;164(1):63-8

Indirect evidence for a role of prostaglandins as second messengers of the prejunctional effect of opioids in guinea-pig ventricular preparations. Ledda F, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):323-7

ICI 197067 is a selective ligand for the U-69593-sensitive kappa opiate binding site. Nock B, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):385-6

Selective sigma receptor agonist and antagonist affect dopamine neuronal activity. Steinfels GF, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):167-70

Effects of opioids on the heat stimulus-evoked substance P release and thermal edema in the rat hind paw. Yonehara N, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):381-7

Kappa opiate agonists inhibit Ca2+ influx in rat spinal cord-dorsal root ganglion cocultures. Involvement of a GTP-binding protein. Attali B, et al. **J Biol Chem** 1989 Jan 5;264(1):347-53

Opiate and peptide inhibition of transmitter release in parasympathetic nerve terminals. Gray DB, et al. **J Neurosci** 1989 May;9(5):1683-92

Two cell types in rat substantia nigra zona compacta distinguished by membrane properties and the actions of dopamine and opioids. Lacey MG, et al. **J Neurosci** 1989 Apr;9(4):1233-41

Opioids induce convulsions and wet dog shakes in rats: mediation by hippocampal mu, but not delta or kappa opioid receptors. Lee PH, et al. **J Neurosci** 1989 Feb; 9(2):692-7

Inward rectification of resting and opiate-activated potassium currents in rat locus coeruleus neurons. Williams JT, et al. **J Neurosci** 1988 Nov;8(11):4299-306

Hyperglycemia does not modify the pupillary effects of mu and kappa opiate agonists in mice. Bansinath M, et al. **J Ocul Pharmacol** 1989 Spring;5(1):33-43

Orally administered kappa but not mu opiate agonists enhance gastric emptying of a solid canned food meal in dogs. Gué M, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):873-5

Effects of opioid agonists on urine production in neonatal rats. Jackson HC, et al. **J Pharm Pharmacol** 1989 Apr; 41(4):281-3

Naloxone-insensitive inhibitory and excitatory effects of opioid agonists in the rat isolated uterus. Ohia SE, et al. **J Pharm Pharmacol** 1989 Mar;41(3):168-72

Hyperglycaemia as a factor affecting kappa-opiate agonist-induced inhibition of the gastrointestinal transit in mice. Ramabadran K, et al. **J Pharm Pharmacol** 1989 Jul;

41(7):496–8
Mu- and delta-opioid receptor-mediated inhibition of adenylate cyclase activity stimulated by released endogenous dopamine in rat neostriatal slices; demonstration of potent delta-agonist activity of bremazocine. Heijna MH, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):864–8
Opioid- and phencyclidine-like discriminative effects of ditolylguanidine, a selective sigma ligand. Holtzman SG. **J Pharmacol Exp Ther** 1989 Mar;248(3):1054–62
Reversal of fentanyl/fluanisone neuroleptanalgesia in the rabbit using mixed agonist/antagonist opioids. Flecknell PA, et al. **Lab Anim** 1989 Apr;23(2):147–55
Dynorphin A (1–13), microinjected into the preoptic area, stimulates water intake in rats. Shimizu H, et al. **Life Sci** 1989;45(1):25–30
The effects of sufentanil on the hemodynamic and respiratory response to exercise. Ward DS, et al. **Med Sci Sports Exere** 1988 Dec;20(6):579–86
Electrophysiological analysis of opioid peptides: extracellular and intracellular approaches. French ED, et al. **Methods Enzymol** 1989;168:103–29
Effects of pertussis toxin on opioid regulation of catecholamine release from rat and guinea pig brain slices. Werling LL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):509–13
Reversal by beta-funaltrexamine and 16-methyl cyprenorphine of the antinociceptive effects of opioid agonists in the mouse and guinea-pig. Hayes AG, et al. **Neuropharmacology** 1988 Aug;27(8):813–6
Selective opioid antagonist effects on opioid-induced inhibition of release of norepinephrine in guinea pig cortex. Werling LL, et al. **Neuropharmacology** 1989 Feb; 28(2):103–7
Interactions between anticholinesterase poisoning and opioid analgesia and locomotion in mice. Green PG, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):315–9
Naloxone-reversible inhibition by opiates of phagocytosis in Tetrahymena thermophila and mouse macrophages. Casellas AM, et al. **P R Health Sci J** 1988 Aug;7(2):103–5
Motivational effects of opioids in an animal model of prolonged inflammatory pain: alteration in the effects of kappa- but not of mu-receptor agonists. Shippenberg TS, et al. **Pain** 1988 Nov;35(2):179–86
Dissociation of the opioid and nonopioid effects of cyclazocine. Calligaro D, et al. **Pharmacol Biochem Behav** 1988 May;30(1):163–7
Opioid influence on some aspects of stereotyped behavior induced by repeated amphetamine treatment. Cancela LM, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):899–904
Effects of opiate agonists and antagonists on aggressive encounters and subsequent opioid-induced analgesia, activity and feeding responses in male mice. Teskey GC, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):43–52
Endogenous and exogenous opioids in the control of gastrointestinal motility and secretion. Kromer W. **Pharmacol Rev** 1988 Jun;40(2):121–62 (494 ref.)
Does individually different sensitivity to dopaminergic stimulation determine the degree of tolerance and dependence to opioids? Havemann U. **Pharmacopsychiatry** 1988 Nov;21(6):314–6
Effects of kappa-opioid receptor agonists on locomotor activity and memory processes in mice. Castellano C, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):507–13
Antihistaminic-opioid combination: effect on locomotor activity in mice. Sansone M. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):515–23
Evidence for opioid receptor interactions in vivo. Heyman JS, et al. **Proc West Pharmacol Soc** 1988;31:287–9
Neural regulation of ion transport by opioids in mouse small intestine. Malarchik ME, et al. **Proc West Pharmacol Soc** 1988;31:221–3
In vitro comparison of efficacies of "full" kappa opioid agonists. Wire WS, et al. **Proc West Pharmacol Soc** 1989; 32:177–81
A QSAR study of Overton's tadpole data. Lipnick RL. **Prog Clin Biol Res** 1989;291:421–4
Post-natal morphine differentially affects opiate and stress analgesia in adult rats. Arjune D, et al. **Psychopharmacology (Berlin)** 1989;98(4):512–7
Evidence that the aversive effects of opioid antagonists and kappa-agonists are centrally mediated. Bals-Kubik R, et al. **Psychopharmacology (Berlin)** 1989;98(2):203–6
Visual effects of opiates in pigeons: II. Contrast sensitivity to sinewave gratings. Blough PM, et al. **Psychopharmacology (Berlin)** 1989;97(1):85–8
Visual effects of opiates in pigeons: I. Target location in visual search. Blough PM, et al. **Psychopharmacology (Berlin)** 1989;97(1):80–4
Behavioural effects of selective mu-, kappa-, and delta-opioid agonists in neonatal rats. Jackson HC, et al. **Psychopharmacology (Berlin)** 1989;97(3):404–9
Interactions of clonidine and naloxone on schedule-controlled behavior in opioid-naive mice. Katz JL. **Psychopharmacology (Berlin)** 1989;98(4):445–7
Tolerance and selective cross-tolerance to the motivational effects of opioids. Shippenberg TS, et al. **Psychopharmacology (Berlin)** 1988;96(1):110–5
Biochemical and behavioral effects of sigma and PCP ligands. Contreras PC, et al. **Synapse** 1988;2(3):240–3
Centrally mediated opioid induced depression of hepatic glutathione: effects of intracerebroventricular administration of mu, kappa, sigma and delta agonists. James RC, et al. **Toxicology** 1988 Oct;51(2-3):267–79
[Opiate receptors] Reimann IW. **Med Monatsschr Pharm** 1988 Dec;11(12):390–2 **(Ger)**

POISONING

[Acute drug poisoning: our experience 1966–1985] Pach J, et al. **Pol Tyg Lek** 1989 Jan 2;44(1):7–10 **(Pol)**

THERAPEUTIC USE

Opioids in chronic pain. McQuay HJ. **Br J Anaesth** 1989 Aug;63(2):213–26 (78 ref.)
Narcotics and cancer pain control. Hill CS Jr. CA 1988 Nov-Dec;38(6):322–6
Use and abuse of drug pumps in cancer pain. Penn RD. **Clin Neurosurg** 1989;35:409–21
Sedation and pain management for the critically ill. Veselis RA. **Crit Care Clin** 1988 Jan;4(1):167–81 (147 ref.)
Can opiates relieve neuropathic pain? [letter] Fields HL. **Pain** 1988 Dec;35(3):365–7

TOXICITY

Perinatal opiate exposure. Effects on metabolism of xenobiotics and steroids in adult rat liver. Hansson T, et al. **Dev Pharmacol Ther** 1989;12(3):146–52
[Effect of opioids on granulocyte adherence] Krumholz W, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):313–5 (Eng. Abstr.) **(Ger)**

URINE

Development of a single reagent polarisation fluoroimmunoassay for the detection of opiates in urine. Colbert DL, et al. **J Immunoassay** 1988;9(3-4):367–83

NARCOTINE see **NOSCAPINE**

NASAL BONE

Destruction of ala nasi and loss of columella in borderline tuberculoid leprosy--a case report. Siddappa K, et al. **Indian J Lepr** 1989 Jan;61(1):113–4

ABNORMALITIES

The craniofacial morphology in persons with maxillonasal dysplasia (Binder syndrome). A longitudinal cephalometric study of orthodontically treated children. Olow-Nordenram M, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):148–58
Treatment of the facial skeleton in naso-maxillo-acro-dysostosis. Bütow KW, et al. **J Craniomaxillofac Surg** 1988 Aug;16(6):266–72
Congenital nasal pyriform aperture stenosis. Brown OE, et al. **Laryngoscope** 1989 Jan;99(1):86–91
Le Fort II osteotomy in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al. **S Afr J Surg** 1988 Sep;26(3):88–9
Skull bone grafts in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al. **S Afr J Surg** 1988 Sep;26(3):90–4
Nasomaxillo-acrodysostosis. Bütow KW, et al. **S Afr Med J** 1989 Jan 7;75(1):5–11
[A new case of fronto-nasal dysplasia associated with craniosynostosis] Calzolari C, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):537–40 (Eng. Abstr.) **(Ita)**

ANALYSIS

Distribution of the mineralized tissues in the nasal ventral conchae (os conchae nasalis ventralis) of piglets after birth: relationship with atrophic rhinitis. Trépanier H, et al. **Anat Rec** 1988 Nov;222(3):237–44

ANATOMY & HISTOLOGY

Rotational effects of S-N on the dentoskeletal pattern within the range of normal. Sarhan OA. **Angle Orthod** 1989 Spring; 59(1):43–9
[Anatomic considerations on the pyramid and nasal septum. Quantitative data apropos of 33 dissections on fresh corpses] Soudant J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):233–8 (Eng. Abstr.) **(Fre)**

GROWTH & DEVELOPMENT

Labial root torque: effect on the maxilla and incisor root apex. Goldin B. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):208–19

INJURIES

Naso-orbital fractures: management and complications. Petrelli RL. **Adv Ophthalmic Plast Reconstr Surg** 1987; 7:27–32
One-stage salvage of fractured nasal prosthesis with immediate calvarial bone grafting. Chang YL, et al. **Aesthetic Plast Surg** 1988 Nov;12(4):235–7
Nasal bone fractures in greyhounds [letter] Burley DR. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1005
Manipulation of the fractured nose using topical local anaesthesia. el-Kholy A. **J Laryngol Otol** 1989 Jun; 103(6):580–1
The bimanual examination for assessing instability in naso-orbitoethmoidal injuries. Paskert JP, et al. **Plast Reconstr Surg** 1989 Jan;83(1):165–7
[Timely diagnosis of isolated nose fractures] de Vries N, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2141–3 **(Dut)**
[X-ray diagnosis of injuries with image processing] Kossovoi AL, et al. **Sud Med Ekspert** 1988 Oct–Dec;31(4):22–3 (Eng. Abstr.) **(Rus)**

SURGERY

Reconstruction of nasal fistulas of the medial canthus. Putterman AM. **Am J Ophthalmol** 1989 Jul 15;108(1):68–74
Craniofacial approach for the neonatal management of frontonasal encephalocoeles. Gussack GS, et al. **Int J Pediatr Otorhinolaryngol** 1988 Dec;16(3):225–35
Cantilever nasal bone grafting with miniscrew fixation. David DJ, et al. **Plast Reconstr Surg** 1989 Apr;83(4):728–32

NASAL CAVITY

Retained nasopharyngeal airway [letter] Smith BL. **Anaesthesia** 1989 May;44(5):447
An unusual nasal foreign body. Wasson C. **BMJ** 1988 Dec 24–31;297(6664):1636
Visualization techniques in the nasal airway: their role in the diagnosis of upper airway disease and measurement of therapeutic response. Selner JC. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):909–16 (2 ref.)
Malignant melanoma of the nasal cavity. Going JJ, et al. **J Laryngol Otol** 1989 Feb;103(2):231–3
What's new in tumours of the nasal cavity? Adenocarcinomas arising after exposure to wood dust. Kleinsasser O, et al. **Pathol Res Pract** 1989 May;184(5):554–8
Radiation therapy of carcinomas of the skin of nose and nasal vestibule: a report of 1676 cases by the Groupe Europeen de Curiethérapie. Mazeron JJ, et al. **Radiother Oncol** 1988 Nov;13(3):165–73
Malignant lymphomas of the nasal cavity and paranasal sinuses. Fellbaum C, et al. **Virchows Arch [A]** 1989; 414(5):399–405
[Intranasal meningoceles] Chaloupková J, et al. **Sb Lek** 1989 May;91(5):157–60 (Eng. Abstr.) **(Cze)**
[Lymphoma of the nasal sinus] Daele J, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):502–12 (Eng. Abstr.) **(Fre)**
[Tumors of the nasal cavity in human immunodeficiency virus infection. A case of polyclonal lymphoid hyperplasia] Pulik M, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):543–7 (34 ref.) (Eng. Abstr.) **(Fre)**
[A case of cancer of the nasal cavity associated with giant cyst of the maxillary sinus] Lipovich MM, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):74–6 **(Rus)**
[Diagnosis and treatment of malignant tumors of the nasal cavity and paranasal sinuses] Pogosov VS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):56–60 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Neonatal surgical casebook: nasal glioma. Lorch V, et al. **J Perinatol** 1987 Winter;7(1):62–3

ANATOMY & HISTOLOGY

Lectin-binding pattern of neuroepithelial and respiratory epithelial cells in the mouse nasal cavity. Lundh B, et al. **Histochem J** 1989 Jan;21(1):33–43
The rostral nasal anatomy of two elephant shrews. Kratzing JE, et al. **J Anat** 1988 Apr;157:135–43
Acoustic rhinometry: evaluation of nasal cavity geometry by acoustic reflection. Hilberg O, et al. **J Appl Physiol** 1989 Jan;66(1):295–303
The relationship between nasal anatomy and human olfaction. Leopold DA. **Laryngoscope** 1988 Nov;98(11):1232–8
Large area sectioning for morphologic studies of nonhuman primate nasal cavities. Randall HW, et al. **Stain Technol** 1988 Nov;63(6):355–62
[The distance between the ductus nasolacrimus and the canalis palatinus major on the sidewall of the nasal septum and the distances between the ostium pharyngeum tubae auditivae and canalis palatinus major and the upper side of the soft palate] Lang J, et al. **Anat Anz** 1989; 168(4):315–20 (Eng. Abstr.) **(Ger)**
[Structure of the nasal cavity in mammals] Pędziwiatr ZF. **Otolaryngol Pol** 1988;42(3):174–81 (Eng. Abstr.) **(Pol)**

CYTOLOGY

[Rhinomanometry, mucociliary function and nasal cytology in the evaluation of hot air] González Díaz SN, et al. **Rev Alerg Mex** 1988 Nov–Dec;35(5):105–11 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Sulfur dioxide does not acutely increase nasal symptoms or nasal resistance in subjects with rhinitis or in subjects with bronchial responsiveness to sulfur dioxide [published erratum appears in Am Rev Respir Dis 1989 Jun;139(6):1579] Tam EK, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1559–64
Intranasal tolerance and histopathologic effects of a novel

synthetic interferon, rIFN-alpha Con1. Hayden FG, et al. **Antiviral Res** 1988 Dec 1;10(4-5):225-34

Comparison of acute ozone-induced nasal and pulmonary inflammatory responses in rats. Hotchkiss JA, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):289-302

EMBRYOLOGY

Relationship of the primary choanae and anterior cranial base in the mouse embryo. Sim DW. **Acta Anat (Basel)** 1989; 134(3):242-4

Pre-natal development of rat nasal epithelia. IV. Freeze-fracturing on apices, microvilli and primary and secondary cilia of olfactory and respiratory epithelial cells, and on olfactory axons. Menco BP. **Anat Embryol (Berl)** 1988;178(4):309-26

Relative contributions of the nasal septum and airways to total nasal capsule volume in normal and cleft lip and palate fetal specimens. Kimes KR, et al. **Cleft Palate J** 1988 Jul; 25(3):282-7

IMMUNOLOGY

An immunohistochemical study on the postnatal development of rat nasal-associated lymphoid tissue (NALT). Hameleers DM, et al. **Cell Tissue Res** 1989; 256(2):431-8

INJURIES

[A foreign body of the nasal cavity and both ethmoid labyrinths with injury of the eyeball and optic nerves] Pogosian MG. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):73-4 **(Rus)**

INNERVATION

The distribution of thermoreceptors within the nasal cavity. Jones AS, et al. **Clin Otolaryngol** 1989 Jun;14(3):235-9

Characterization of cat nasal afferents and brain stem neurones receiving ethmoidal input. Lucier GE, et al. **Exp Neurol** 1989 Jan;103(1):83-9

METABOLISM

Deposition pattern of nasal sprays in man. Newman SP, et al. **Rhinology** 1988 Jun;26(2):111-20

MICROBIOLOGY

Isolation and identification of mycoplasmas from the nasal cavity of sheep. Brogden KA, et al. **Am J Vet Res** 1988 Oct;49(10):1669-72

Infection of the middle nasal meatus of calves with Pasteurella haemolytica serotype 1. Frank GH, et al. **Am J Vet Res** 1989 Aug;50(8):1297-301

Pneumococcal carriage amongst children in Adelaide, South Australia. Hansman D, et al. **Epidemiol Infect** 1988 Oct; 101(2):411-7

A marker of personal hygiene? [letter] Abood AA, et al. **J Hosp Infect** 1988 Oct;12(3):238

Bacterial flora in the nasopharynx and nasal cavity of healthy young men. Ylikoski J, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(1):50-5

In vivo localization of Staphylococcus aureus in nasal tissues of healthy and influenza A virus-infected ferrets. Sanford BA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):163-9

A long-term study of the nasal carriage of Staphylococcus aureus in healthy Nigerian students. Lamikanra A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):500-2

[Aerobic and aero-anaerobic bacterial flora of the nasal cavities of lambs] Menoueri N, et al. **Ann Rech Vet** 1988; 19(3):175-80 (Eng. Abstr.) **(Fre)**

[Staphylococcus aureus: carriers among food handlers] Raddi MS, et al. **Rev Saude Publica** 1988 Feb;22(1):36-40 (Eng. Abstr.) **(Por)**

PARASITOLOGY

[A survey of the prevalence of Anatrichosoma sp. in nasal cavities of cynomolgus monkeys] Takenaka T, et al. **Jikken Dobutsu** 1989 Jan;38(1):93-6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Pathologic quiz case 2. Leiomyosarcoma of the nasal cavity. Kahn J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan; 115(1):114-5, 117

Rhinolith: an unusual cause of palatal perforation. Flood TR. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):486-90

Clear cell rhabdomyosarcoma of the nasal cavity and paranasal sinuses. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):391-9

Ganglioneuroblastic transformation of olfactory neuroblastoma. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):425-8

Papillary endothelial hyperplasia in the nose. Stevens DJ. **J Laryngol Otol** 1988 Oct;102(10):935-7

Leiomyoma of the nasal cavity. Tang SO, et al. **J Laryngol Otol** 1988 Sep;102(9):831-3 (12 ref.)

Cephalometric airway analysis in obstructive sleep apnea syndrome. Strelzow VV, et al. **Laryngoscope** 1988 Nov; 98(11):1149-58

Clinical study of malignant lymphoma of head and neck in the nasal cavity and Waldyer's ring. Sasaki A, et al. **Osaka City Med J** 1989 Jun;35(1):13-9

Alveolar rhabdomyosarcoma arising in the nasal cavity of a 3-year-old child. Pardo RJ, et al. **Pediatr Dermatol** 1988 Nov;5(4):254-6

MRI of the paranasal sinuses and nasal cavity. Shapiro MD, et al. **Radiol Clin North Am** 1989 Mar;27(2):447-75 (39 ref.)

[Preliminary study on nasal cavity exfoliative cells in "lung diseases" in traditional Chinese medicine] Li H, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):333-5, 323 (Eng. Abstr.) **(Chi)**

[Possibilities for using rhinoscopy and otoscopy in forensic autopsy] Saternus KS. **Beitr Gerichtl Med** 1988;46:497-502 (17 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

The effect of nasal flow on breathlessness in patients with chronic obstructive pulmonary disease. Liss HP, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1285-8

Airway secretions influence upper airway patency in the rabbit. Olson LG, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1379-81

Unilateral naris closure in adult mice: atrophy of the deprived-side olfactory bulbs. Maruniak JA, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):27-33

Theoretical considerations of nasal airflow mechanics and surgical implications. O'Neill G, et al. **Clin Otolaryngol** 1988 Aug;13(4):273-7

The nasal valve: a physiological and clinical study. Jones AS, et al. **J Laryngol Otol** 1988 Dec;102(12):1089-94

The effect of unilateral naris occlusion on cell dynamics in the developing rat olfactory epithelium. Farbman AI, et al. **J Neurosci** 1988 Sep;8(9):3290-5

Accuracy of pressure-flow estimates of velopharyngeal orifice size in an analog model and human subjects. Guyette TW, et al. **J Speech Hear Res** 1988 Dec;31(4):537-48

Is the nasal cycle an artifact? The role of asymmetrical postures. Haight JS, et al. **Laryngoscope** 1989 May; 99(5):538-41

[Effects of exercise on nasal patency] Ohki M. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1419-34 (Eng. Abstr.) **(Jpn)**

[Rhinomanometric study in children] Ruiz Franco M, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):561-70 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Characteristics of upper airway chemoreflex prolonged apnea in human infants. Davies AM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):668-73

Estimation of nasal cross-sectional areas, using oral versus nasal pressure measurements. Smith BE, et al. **Cleft Palate J** 1988 Jul;25(3):199-202

Toronto rhinomanometry: laboratory, field and clinical studies. Cole P. **J Otolaryngol** 1988 Oct;17(6):331-5

RADIOGRAPHY

Evaluation of the frontonasal duct in frontal sinus fractures. Heller EM, et al. **Head Neck** 1989 Jan-Feb;11(1):46-50 (14 ref.)

Radiological examination of the nasal cavity. Aspestrand F. **Radiologe** 1989 Apr;29(4):187-90

Extradural nasal and orbital extension of malignant glioma. Case report. Orita T, et al. **Surg Neurol** 1989 May; 31(5):395-9

SURGERY

Sublabial rhinotomy with septal transfixion as an approach to the nasal fossa, paranasal sinuses and nasopharynx. Bingham BJ, et al. **J Laryngol Otol** 1989 Jul;103(7):661-3

Reconstruction of the nasofrontal duct following frontoethmoidectomy. Donegan JO. **Laryngoscope** 1988 Dec;98(12):1356-7

[Rechanneling of the nasal fossae with alloplastic material in ozena] Călărașu R, et al. **Rev Chir [Otorinolaringol]** 1988 Oct-Dec;33(4):303-6 (Eng. Abstr.) **(Rum)**

ULTRASTRUCTURE

Ultrastructural morphometry distinguishes Burkitt's-like lymphomas from neuroendocrine neoplasms: useful criteria applied to the evaluation of a poorly differentiated neuroendocrine neoplasm of the nasal cavity masquerading as Burkitt's-like lymphoma. Payne CM, et al. **Mod Pathol** 1989 Jan;2(1):35-45

NASAL DECONGESTANTS see **VASOCONSTRICTOR AGENTS, NASAL**

NASAL MUCOSA

The differential diagnosis of nasal mucosal swelling and adenoidal hyperplasia using two- and three-parameter discriminant functions. Ayiomamitis A, et al. **Arch Otorhinolaryngol** 1989;246(2):83-8

The effect of cryopreservation on ciliary beat frequency of human respiratory epithelium. Di Benedetto G, et al. **Cryobiology** 1989 Aug;26(4):328-32

[Allergic reactions in the nasal mucosa (letter)] Dieges PH, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):132-3 **(Dut)**

[Mucocutaneous entomophthoromycosis. Presentation of a case with an atypical development] Bittencourt AL, et al. **Rev Soc Bras Med Trop** 1987 Apr-Jun;20(2):119-22 (Eng. Abstr.) **(Por)**

ANALYSIS

CD-1 (T6), HLA-DR-expressing cells, presumably Langerhans cells, in nasal mucosa. Fokkens WJ, et al. **Allergy** 1989 Apr;44(3):167-72

Nasal secretory response to allergen provocation. Cohen RA, et al. **Clin Allergy** 1988 Sep;18(5):435-43

Airway secretion electrolytes: reflection of water and salt states of the body. Cavaliere F, et al. **Crit Care Med** 1989 Sep;17(9):891-4

Phenotypic expression of proteoglycan in mast cells of the human nasal mucosa. Pipkorn U, et al. **Histochem J** 1988 Sep;20(9):519-25

Concentrations of roxithromycin (RU 28965) in serum and in sinus mucosa [letter] Kropec A, et al. **Infection** 1988 Jul-Aug;16(4):250

Demonstration of alpha 1-adrenoceptors in rat nasal mucosa. van Megen YJ, et al. **J Recept Res** 1989;9(3):221-34

[Surfactant in the upper airways: a preliminary plan of study] Passàli D, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:61-5 (Eng. Abstr.) **(Ita)**

[Changes in muscarinic receptors in nasal mucosa in guinea pigs sensitized with ovalbumin and effect of anti-allergic drugs to these receptors] Terada N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):847-55 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

[A method of photometric measurement of the ciliary beat of cultivated ciliated cells of the upper respiratory tract in the human] Wolf G, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):400-3 (Eng. Abstr.) **(Ger)**

[Structural and ultrastructural aspects of normal and atrophic nasal mucosa] Riva R, et al. **Arch Ital Anat Embriol** 1988 Jan-Jun;93(1-2):97-107 (Eng. Abstr.) **(Ita)**

BLOOD SUPPLY

Vascular corrosion casts of the nasal mucosa. An experimental study in the rabbit. Grevers G, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):254-61

Reflex activation in allergen-induced nasal mucosal vascular reactions. Holmberg K, et al. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug;108(1-2):130-5

Nasal resistance and nasal blood flow in postural changes. Kurita N, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec; 106(5-6):448-52

Sympathetic vascular control of the pig nasal mucosa (2): Reserpine-resistant, non-adrenergic nervous responses in relation to neuropeptide Y and ATP. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jun;133(2):183-97

Sympathetic vascular control of the pig nasal mucosa: (I). Increased resistance and capacitance vessel responses upon stimulation with irregular bursts compared to continuous impulses. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jan; 132(1):83-90

Adrenergic and non-adrenergic mechanisms in sympathetic vascular control of the nasal mucosa. Lacroix JS. **Acta Physiol Scand Suppl** 1989;581:1-63

Mucosal blood flow in the human nose following local challenge with histamine. Holmberg K, et al. **Allergy** 1989 Jan;44(1):45-51

Establishment of human mucosal microvascular endothelial cells from inferior turbinate in culture. Fukuda K, et al. **Am J Otolaryngol** 1989 Mar-Apr;10(2):85-91

Nasal mucosal blood flow in patients with diabetes mellitus. Löth S, et al. **J Laryngol Otol** 1988 Sep;102(9):791-2

Morphological aspects of nasal blood vessels. Grevers G, et al. **Prog Clin Biol Res** 1989;295:451-6

Do cholinergic neurons directly innervate nasal blood vessels? Wang HW, et al. **Rhinology** 1988 Jun;26(2):139-46

[The angioarchitecture of the septal mucosa. Experimental studies of the rabbit] Grevers G, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):526-31 (Eng. Abstr.) **(Ger)**

[Functional morphology of endonasal blood capillaries] Grevers G. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan; 68(1):23-8 (37 ref.) (Eng. Abstr.) **(Ger)**

[Do arteriovenous anastomoses of the olfactory mucosa exist? A light and transmission electron microscopy study in the rabbit] Grevers G. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):395-9 (Eng. Abstr.) **(Ger)**

[Reflex control of the nasal blood vessels--relationships between nasal blood vessels and lung receptors] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):865-71 (Eng. Abstr.) **(Jpn)**

[Clinico-morphologic and biomicroscopic parallels in the management of patients with various forms of purulent paranasal sinusitis and methods of correcting microcirculatory disorders] Bezshapochnyĭ SB, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):43-50 (Eng. Abstr.) **(Rus)**

[Changes in nasal and cerebral blood supply after magnetotherapy of allergic rhinitis] Lur'e AZ, et al. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):6-11 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Response of nasal ciliated cells of the guinea-pig during

allergic reactions in human blood. Ohashi Y, et al. **Eur Respir J** 1988 Jul;1(7):621–5

Fluctuation of the number of CD–1(T6)–positive dendritic cells, presumably Langerhans cells, in the nasal mucosa of patients with an isolated grass–pollen allergy before, during, and after the grass–pollen season. Fokkens WJ, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):39–43

The effect of unilateral naris occlusion on cell dynamics in the developing rat olfactory epithelium. Farbman AI, et al. **J Neurosci** 1988 Sep;8(9):3290–5

[The sensory cells of the fetal vomeronasal organ in the human. A contribution to the variability of their differentiation and rudimentary development] Ortmann R. **HNO** 1989 May;37(5):191–7 (41 ref.) (Eng. Abstr.) **(Ger)**

[Nasal cytology in the diagnosis of chronic rhinitis in children] Sala O, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:25–33 (Eng. Abstr.) **(Ita)**

[Histochemical heterogeneity of mast cells in the human upper respiratory mucosa] Ohkubo K. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1920–7 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Injurious effect of the eosinophil peroxide–hydrogen peroxide–halide system and major basic protein on human nasal epithelium in vitro. Ayars GH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):125–31

Irritation of the upper airways from mixtures of cumene and n–propanol. Mechanisms and their consequences for setting industrial exposure limits. Nielsen GD, et al. **Arch Toxicol** 1988;62(2–3):209–15

Occupational exposure to formaldehyde and histopathological changes in the nasal mucosa. Edling C, et al. **Br J Ind Med** 1988 Nov;45(11):761–5

The effect of topical nasal anaesthesia on allergen–induced symptoms, obstruction and blood flow. Holmberg K, et al. **Clin Exp Allergy** 1989 Jul;19(4):443–7

The effect of platelet activating factor on nasal hypersensitivity. Andersson M, et al. **Eur J Clin Pharmacol** 1988;35(3):231–5

The influence of drugs on nasal ciliary movement. Hermens WA, et al. **Pharm Res** 1987 Dec;4(6):445–9 (60 ref.)

The use of alpha–aminoboronic acid derivatives to stabilize peptide drugs during their intranasal absorption. Hussain MA, et al. **Pharm Res** 1989 Feb;6(2):186–9

Injurious effect of eosinophil extract on the human nasal mucosa. Liu CM, et al. **Rhinology** 1988 Jun;26(2):121–32

Early cell proliferative and cytotoxic effects of phenacetin on rat nasal mucosa. Bogdanffy MS, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):100–12

Subchronic (13–week) inhalation toxicity study of formaldehyde in male rats: 8–hour intermittent versus 8–hour continuous exposures. Wilmer JW, et al. **Toxicol Lett** 1989 Jun;47(3):287–93

Formaldehyde–induced lesions of xenotransplanted human nasal respiratory epithelium. Klein–Szanto AJ, et al. **Toxicol Pathol** 1989;17(1 Pt 1):33–7

Two–year inhalation carcinogenesis studies of methyl methacrylate in rats and mice: inflammation and degeneration of nasal epithelium. Chan PC, et al. **Toxicology** 1988 Nov 30;52(3):237–52

[Individual sensitivity of cilia. A simple in vitro test method] Wichelhaus A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):523–5 (Eng. Abstr.) **(Ger)**

[Pharmacologic studies of cultivated human ciliated cells of the upper respiratory tract] Wolf G, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):518–22 (Eng. Abstr.) **(Ger)**

[The effect of S–carboxymethylcysteine on ciliary beat frequency of nasal mucosa] Amesara R, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1413–8 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

Pre–natal development of rat nasal epithelia. V. Freeze–fracturing on necklaces of primary and secondary cilia of olfactory and respiratory epithelial cells. Menco BP. **Anat Embryol (Berl)** 1988;178(5):381–8

Early stages of ciliogenesis in the respiratory epithelium of the nasal cavity of rabbit embryos. Loots GP, et al. **Cell Tissue Res** 1989 Mar;255(3):589–94

ENZYMOLOGY

Tryptase levels in nasal–lavage fluid as an indicator of the immediate allergic response. Castells M, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):348–55

The cyanide–metabolizing enzyme rhodanese in rat nasal respiratory and olfactory mucosa. Dahl AR. **Toxicol Lett** 1989 Feb;45(2–3):199–205

Biotransformation enzymes in nasal mucosa and liver of Sprague–Dawley rats. Longo V, et al. **Toxicol Lett** 1988 Dec;44(3):289–97

[A study on collagenase production of nasal polyp–derived fibroblasts stimulated by nasal secretions of chronic sinusitis] Matsuzaki T. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):617–28 (Eng. Abstr.) **(Jpn)**

GROWTH & DEVELOPMENT

[Experience concerning the anatomo–functional maturation of the nasal mucosa in children] Passàli D, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:71–7 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Objective monitoring of the allergic inflammatory response of the nasal mucosa in patients with hay fever during natural allergen exposure. Andersson M, et al. **Am Rev Respir Dis** 1989 Apr;139(4):911–4

A new method for IgE detection in nasal mucosa. Marcucci F, et al. **Clin Exp Allergy** 1989 Mar;19(2):157–62

Intra–epithelial lymphocytes and non–lymphoid cells in the human nasal mucosa. Hameleers DM, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):317–22

Mucosal immunity to mycobacteria in leprosy patients and their contacts. Cree IA, et al. **Lepr Rev** 1988 Dec; 59(4):309–16

Mucosal immunology—with special reference to specific immune defence of the upper respiratory tract. Brandtzaeg P. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):225–35 (48 ref.)

[[Allergic reactions in the nasal mucosa (letter)] Dieges PH, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2032–3 **(Dut)**

[Effect of a visit in an eradication environment on reactivity to mites in the respiratory mucus] Caubet Y, et al. **Allerg Immunol (Paris)** 1989 Mar;21(3):108–9, 112–3 (Eng. Abstr.) **(Fre)**

[The changes in nasal mucosa with sex and age—measuring by methacholine inhalation test] Takeyasu Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):926–32 (Eng. Abstr.) **(Jpn)**

[Status of systemic humoral and local immunity in children with vasomotor rhinitis] Prozorovskaia KN, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):11–5 (Eng. Abstr.) **(Rus)**

INNERVATION

Olfactory neural pathway in mouse hepatitis virus nasoencephalitis. Barthold SW. **Acta Neuropathol (Berl)** 1988;76(5):502–6

Functional disturbances of the sympathetic nerve in experimentally–induced nasal hypersensitivity. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:5–13

Histamine and acetylcholine regulation of sympathetic nerve activity in guinea–pig nasal mucosa. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:29–38

Enhanced parasympathetic nerve activities in experimentally–induced nasal hypersensitivity. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:14–20

Sympathetic vascular control of the pig nasal mucosa (III): Co–release of noradrenaline and neuropeptide Y. Lacroix JS, et al. **Acta Physiol Scand** 1989 Jan;135(1):17–28

Gustatory rhinorrhoea syndrome: result of misreinnervation in leprosy. Soni NK. **Indian J Lepr** 1988 Jul;60(3):418–21

The effect of vidian neurectomy on nasal mucociliary clearance. Greenstone MA, et al. **J Laryngol Otol** 1988 Oct;102(10):894–5

Cigarette smoke–induced irritation in the airways in relation to peptide–containing, capsaicin–sensitive sensory neurons. Lundberg JM, et al. **Klin Wochenschr** 1988;66 Suppl 11:151–60

Effect of long–term use of reserpine, a sympathetic neuron blocker, on muscarinic cholinergic receptors in the guinea pig nasal mucosa. Konno A, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):334–9

[The variability of the surface morphology of olfactory sensory receptors] Heinzmann U, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):645–50 (Eng. Abstr.) **(Ger)**

[New aspects in the pathogenesis and therapy of hyperreflexive rhinopathy] Wolf G. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):438–45 (41 ref.) (Eng. Abstr.) **(Ger)**

[Innervation of the nasal mucosa of the guinea pig] Su WC. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):602–7 (Eng. Abstr.) **(Jpn)**

[Present–day status of surgery of the vidian nerve] Solabre Martínez M, et al. **An Otorrinolaringol Ibero Am** 1988; 15(4):397–408 (Eng. Abstr.) **(Spa)**

METABOLISM

Histamine content and histamine H1 receptor in experimentally–induced nasal hypersensitivity. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:21–8

Norepinephrine content in guinea–pig nasal mucosa response to histamine and methacholine provocation. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:39–43

Beta–adrenergic receptors in nasal tissue with reference to their role in asthma and atopy. Kunkel G, et al. **Allergol Immunopathol (Madr)** 1989 Mar–Apr;17(2):67–72 (73 ref.)

Eosinophils and eosinophil cationic protein in nasal lavages in allergen–induced hyperresponsiveness: effects of topical glucocorticosteroid treatment. Andersson M, et al. **Allergy** 1989 Jul;44(5):342–8

Intracellular Cl– activity and cellular Cl– pathways in cultured human airway epithelium. Willumsen NJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1033–44

Cellular Cl– transport in cultured cystic fibrosis airway epithelium. Willumsen NJ, et al. **Am J Physiol** 1989 May; 256(5 Pt 1):C1045–53

Shunt resistance and ion permeabilities in normal and cystic fibrosis airway epithelia. Willumsen NJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1054–63

Metabolism of diethylnitrosamine by microsomes of human respiratory nasal mucosa and liver. Longo V, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1867–9

Formation of cigarette smoke–induced DNA adducts in the rat lung and nasal mucosa. Gupta RC, et al. **Cancer Res** 1989 Apr 15;49(8):1916–20

Metabolism of aflatoxin B1 in the bovine olfactory mucosa. Larsson P, et al. **Carcinogenesis** 1989 Jun;10(6):1113–8

Nasal absorption and metabolism of progesterone and 17 beta–estradiol in the rat. Bawarshi–Nassar RN, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):248–54

Xenobiotic metabolism in the nasal epithelia. Jenner J, et al. **Drug Metabol Drug Interact** 1988;6(2):123–48 (45 ref.)

Covalent binding of inhaled formaldehyde to DNA in the nasal mucosa of Fischer 344 rats: analysis of formaldehyde and DNA by high–performance liquid chromatography and provisional pharmacokinetic interpretation. Casanova M, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):397–417

Increased sulfation of glycoconjugates by cultured nasal epithelial cells from patients with cystic fibrosis. Cheng PW, et al. **J Clin Invest** 1989 Jul;84(1):68–72

Nasal and conjunctival contributions to the systemic absorption of topical timolol in the pigmented rabbit: implications in the design of strategies to maximize the ratio of ocular to systemic absorption. Chang SC, et al. **J Ocul Pharmacol** 1987 Summer;3(2):159–69

The effect of some preservatives used in nasal preparations on mucociliary clearance. Batts AH, et al. **J Pharm Pharmacol** 1989 Mar;41(3):156–9

Promotion of nasal absorption of insulin by glycyrrhetinic acid derivatives. I. Mishima M, et al. **J Pharmacobiodyn** 1989 Jan;12(1):31–6

Effect of sodium glycocholate and polyoxyethylene–9–lauryl ether on the hydrolysis of varying concentrations of insulin in the nasal homogenates of the albino rabbit. Hayakawa E, et al. **Life Sci** 1989;45(2):167–74

The adjuvant effect of bacitracin on nasal absorption of gonadorelin and buserelin in rats. Rachs SC, et al. **Pharm Res** 1988 Nov;5(11):689–93

Mechanism of nasal absorption of drugs. Hussain AA. **Prog Clin Biol Res** 1989;292:261–72 (12 ref.)

Amyloid–like protein in children with rhinoscleroma. Karchev T, et al. **Rhinology** 1989 Mar;27(1):27–36

[Permeability changes in guinea pig nasal epithelium after exposure of hypotonic solution] Odaira H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2003–10 (Eng. Abstr.) **(Jpn)**

[Infiltration of India ink from subarachnoid space to nasal mucosa along olfactory nerves in rabbits] Yamazumi H. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):608–16 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

NIDDM and prevalence of nasal Staphylococcus aureus colonization. San Luis Valley Diabetes Study. Boyko EJ, et al. **Diabetes Care** 1989 Mar;12(3):189–92

Bacillaemia in leprosy: correlation with slit–skin and nasal smears. Chatterjee G, et al. **Indian J Lepr** 1988 Oct; 60(4):535–41

Detection of lepromatous leprosy patients shedding M. leprae in nasal droppings by enzyme immunoassay. Moudgil KD, et al. **Indian J Lepr** 1988 Oct;60(4):549–53

Dacryocystitis: bacteriological study and its relation with nasal pathology. Bale RN. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):178–82

Bordetella parapertussis invasion of HeLa 229 cells and human respiratory epithelial cells in primary culture. Ewanowich CA, et al. **Infect Immun** 1989 Apr;57(4):1240–7

Use of nasal and pharyngeal swabs for rapid detection of respiratory syncytial virus and adenovirus antigens by enzyme–linked immunosorbent assay. Bručková M, et al. **J Clin Microbiol** 1989 Aug;27(8):1867–9

Non–lethal infection of aminergic reticular core neurons: age–dependent spread of ts mutant vesicular stomatitis virus from the nose. Lundh B, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):497–506

Recurrent staphylococcal furunculosis in families. Zimakoff J, et al. **Scand J Infect Dis** 1988;20(4):403–5

Transmission of tuberculosis from experimentally infected cattle to in–contact calves. Neill SD, et al. **Vet Rec** 1989 Mar 18;124(11):269–71

Excretion of Mycobacterium bovis by experimentally infected cattle. Neill SD, et al. **Vet Rec** 1988 Sep 24; 123(13):340–3

[The antimicrobial effect of lysozyme on nasal mucosa] Glück U. **HNO** 1989 May;37(5):207–10 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Histological changes in the nasal mucosa in persons occupationally exposed to formaldehyde alone and in combination with wood dust. Holmström M, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):120–9

The influx of inflammatory cells into nasal washings during the late response to antigen challenge. Effect of systemic steroid pretreatment. Bascom R, et al. **Am Rev Respir Dis** 1988 Aug;138(2):406–12

Nasal mucosal response to repeated challenges with pollen

allergen. Pipkorn U, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):729–36

Nasal cytology in allergic processes and other syndromes caused by hyperreactivity. Rivasi F, et al. **Diagn Cytopathol** 1988;4(2):99–105

Methods for obtaining specimens from the nasal mucosa for morphological and biochemical analysis. Pipkorn U, et al. **Eur Respir J** 1988 Oct;1(9):856–62 (43 ref.)

Reactional states in the nasal mucosa: a clinical and histopathological study. Job A, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):523–6

The cellular response of the human allergic mucosa to natural allergen exposure. Pipkorn U, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1046–54

Nasal tumours in rats after severe injury to the nasal mucosa and prolonged exposure to 10 ppm formaldehyde. Woutersen RA, et al. **J Appl Toxicol** 1989 Feb;9(1):39–46

Morphological alterations in the nasal mucosa in heat stroke. Anim JT, et al. **J Environ Pathol Toxicol Oncol** 1988;8(7 Spec No):39–47

Acromegaly—the mucosal changes within the nose and paranasal sinuses. Skinner DW, et al. **J Laryngol Otol** 1988 Dec;102(12):1107–10

Nasal-secretion leukocyte populations determined by flow cytometry during acute rhinovirus infection. Levandowski RA, et al. **J Med Virol** 1988 Aug;25(4):423–32

Mucosal origin of sinonasal tract adenomatous neoplasms. Gnepp DR, et al. **Mod Pathol** 1989 Jul;2(4):365–71

A nose for Alzheimer's disease? [news] Altman J. **Nature** 1989 Feb 23;337(6209):688

Natural allergen exposure does not influence the density of goblet cells in the nasal mucosa of patients with seasonal allergic rhinitis. Karlsson G, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):171–4

Clinical and cytomorphological alterations of nasal mucosa in laryngectomized patients. Cvetnić V, et al. **Rhinology** 1988 Sep;26(3):183–9

A biopsy method to obtain high quality specimens of nasal mucosa. Fokkens WJ, et al. **Rhinology** 1988 Dec; 26(4):293–5

Immunohistological characteristics of nasal polyps. A comparison with healthy mucosa and chronic sinusitis. Jankowski R, et al. **Rhinology** 1989;Suppl 8:51–8

Seasonal variation of nasal surface basophilic cells and eosinophils in Japanese cedar pollinosis. Liu CM. **Rhinology** 1988 Sep;26(3):167–73

[The diffuse lymphatic system of the nasal mucosa in allergic rhinitis] Cuccurullo L, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):51–6 (Eng. Abstr.) **(Fre)**

[Effect of warm air inhalation on the nasal ciliated epithelium] Deitmer T, et al. **HNO** 1989 Jul;37(7):299–302 (Eng. Abstr.) **(Ger)**

[Cryosurgical treatment of chronic tonsillitis and vasomotor and hypertrophic rhinitis in a troop unit] Karal-Ogly IuR. **Voen Med Zh** 1988 May;(5):61–2 **(Rus)**

PHYSIOLOGY

Use of pharmacologic decongestion in the generation of rhinomanometric norms for the nasal airway. Jessen M, et al. **Am J Otolaryngol** 1988 Nov–Dec;9(6):336–40

Breathing and upper airway CO2 in reptiles: role of the nasal and vomeronasal systems. Coates EL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R91–7

The introduction of biologically active foreign genes into human respiratory epithelial cells using electroporation. Iannuzzi MC, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):965–8

Nasal challenge with cold, dry air induces a late-phase reaction. Iliopoulos O, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):400–5

Role of mucus and cilia in nasal mucociliary clearance in healthy subjects. Lioté H, et al. **Am Rev Respir Dis** 1989 Jul;140(1):132–6

Increased ciliary beating frequency of nasal mucosa following immunotherapy for allergy. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):350–4

Measurement of nasal mucociliary clearance. Corbo GM, et al. **Arch Dis Child** 1989 Apr;64(4):546–50

Nasal mucociliary transport in healthy subjects is slower when breathing dry air. Salah B, et al. **Eur Respir J** 1988 Oct;1(9):852–5

Amplifying role of convergence in olfactory system a comparative study of receptor cell and second-order neuron sensitivities. Duchamp-Viret P, et al. **J Neurophysiol** 1989 May;61(5):1085–94

How the nose cools the brain during copulation in the male rat. Blumberg MS, et al. **Physiol Behav** 1988;43(2):173–6

The nasal response to exercise and exercise induced bronchoconstriction in normal and asthmatic subjects. Strohl KP, et al. **Thorax** 1988 Nov;43(11):890–5

[Data on the physiology and physiopathology of lymph circulation of the nasal mucosa] Bucur A. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):135–41 (9 ref.) (Eng. Abstr.) **(Rum)**

PHYSIOPATHOLOGY

Changes in human nasal mucosa during experimental coronavirus common colds. Bende M, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):262–9

Gustatory rhinitis: a syndrome of food-induced rhinorrhea. Raphael G, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):110–5

The role of nasal airway obstruction in sinus disease and facial development. Shapiro GG. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):935–40 (9 ref.)

Eustachian tube and nasal function during pregnancy: a prospective study. Derkay CS. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):558–66 (35 ref.)

[Physiological functions of the nose before and after laser treatment of acute and chronic maxillary sinusitis in children] Pekli FF, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):53–5 (Eng. Abstr.) **(Rus)**

[The endonasopalpebral reflex] Vinnitskiĭ AR, et al. **Vrach Delo** 1989 Jun;(6):90–1 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Functional and morphological pathology of the nasal mucosa after x-ray irradiation. Ohashi Y, et al. **Clin Otolaryngol** 1988 Dec;13(6):435–46

SECRETION

Circadian changes in the secretory activity of nasal mucosa. Passàli D, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct; 106(3–4):281–5

The effect of ipratropium bromide on nasal hypersecretion induced by methacholine in patients with vasomotor rhinitis. A double-blind, cross-over, placebo-controlled and randomized dose-response study. Sjögren I, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):453–9

Eosinophils in nasal secretion. Masuyama K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:181–9

Histamine release from nasal mucosal mast cells in patients with chronic hypertrophic non-allergic rhinitis, after parasympathetic nerve stimulation. Rucci L, et al. **Agents Actions** 1988 Dec;25(3–4):314–20

Bovine serum and nasal secretion immunoglobulins against Pasteurella haemolytica serotype 1 antigens. Nelson SL, et al. **Am J Vet Res** 1989 Aug;50(8):1244–9

Pathophysiology of rhinitis. I. Assessment of the sources of protein in methacholine-induced nasal secretions. Raphael GD, et al. **Am Rev Respir Dis** 1988 Aug;138(2):413–20

The pathophysiology of rhinitis. II. Assessment of the sources of protein in histamine-induced nasal secretions. Raphael GD, et al. **Am Rev Respir Dis** 1989 Mar;139(3):791–800

Substance P and nasal secretion in dog, rat, and man. Petersson G, et al. **Ann Allergy** 1989 May;62(5):410–4

Exercise induced rhinorrhoea (athlete's nose). Stanford CF, et al. **BMJ** 1988 Sep 10;297(6649):660

Capsaicin and nicotine-sensitive afferent neurones and nasal secretion in healthy human volunteers and in patients with vasomotor rhinitis. Stjärne P, et al. **Br J Pharmacol** 1989 Mar;96(3):693–701

Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. **Cephalalgia** 1989 Jun;9(2):147–56

Artifact on iodine-131 whole body scan due to contaminated handkerchief. Chandramouly BS, et al. **Clin Nucl Med** 1989 Apr;14(4):301–2

Hyperosmolarity but not histamine evokes secretion of nasal fluid in the rat. Petersson G, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):37–43

The runny nose. Infection of the paranasal sinuses. Daley CL, et al. **Infect Dis Clin North Am** 1988 Mar;2(1):131–47 (75 ref.)

Secretory activity of nasal mucosal mast cells and histamine release in hay fever. Pipkorn U, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):349–60

Correlation between symptoms and the threshold for release of mediators in nasal secretions during nasal challenge with grass-pollen grains. Lebel B, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):869–77

Cytologic changes in the nasal secretions during the late nasal response. Pelikan Z, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1068–79

Cytologic changes in the nasal secretions during the immediate nasal response [published erratum appears in J Allergy Clin Immunol 1989 May;83(5):870] Pelikan Z, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1103–12

Leukotriene C4 release in upper respiratory mucosa during natural exposure to ragweed-sensitive children. Volovitz B, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):414–8

PGE2 and PGF2 alpha in the nasal lavage fluid from healthy subjects: methodological aspects. Ramis I, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov; 34(2):109–12

Secretory leukocyte protease inhibitor in normal, allergic and virus induced nasal secretions. Fryksmark U, et al. **Rhinology** 1989 Jun;27(2):97–103

Reversibility and reproducibility of histamine induced plasma leakage in nasal airways. Svensson C, et al. **Thorax** 1989 Jan;44(1):13–8

[Cytologic examination of nasal secretions in workers in the amino acid production industry] Gordienko VE. **Vrach Delo** 1989 Feb;(2):100–2 (Eng. Abstr.) **(Rus)**

[Measles antibodies in exocrine secretions] Redechkina ZP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct; (10):67–70 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

[Reconstruction of the larynx after extended fronto-lateral laryngectomy using a muco-cartilaginous transplant from the nasal septum] Szmeja Z, et al. **Otolaryngol Pol** 1988; 42(1–2):18–22 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

Extensive variations in nasal mucosa in infants with and without recurrent acute otitis media. A scanning electron-microscopic study. Jørgensen F, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):571–80

An ultrastructural study of the mucosal surface of the human inferior concha. I. Normal appearances. Davis AE, et al. **J Anat** 1988 Dec;161:61–71

Ultrastructural observations on primary atrophic rhinitis. Effect of partial closure of the nostril. Elwany S. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):389–96

Olfactory and nasal respiratory epithelia, and foliate taste buds visualized with rapid-freeze freeze-substitution and Lowicryl K11M embedding. Ultrastructural and initial cytochemical studies. Menco BP. **Scanning Microsc** 1989 Mar;3(1):257–72

Kartagener's syndrome in a chow chow dog with normal ciliary ultrastructure. Edwards DF, et al. **Vet Pathol** 1989 Jul;26(4):338–40

[Electron microscopy studies of the nasal mucosa of rats after orchiectomy] Hettwer H, et al. **Z Mikrosk Anat Forsch** 1988;102(6):993–1005 (Eng. Abstr.) **(Ger)**

NASAL POLYPS

Bronchial asthma, nasal polyps, and aspirin sensitivity: Samter's syndrome. Zeitz HJ. **Clin Chest Med** 1988 Dec; 9(4):567–76 (100 ref.)

Antro-choanal polyp: a 10-year retrospective study in the pediatric population with a review of the literature. Chen JM, et al. **J Otolaryngol** 1989 Jun;18(4):168–72 (13 ref.)

Recurrent polyposis nasi. Plenary session, held during the 12th Congress of the European Rhinologic Society, including the VIIth I.S.I.A.N. Amsterdam (The Netherlands), June 1988. **Rhinology** 1989;Suppl 8:1–64

[NARES syndrome. A developing link in the Fernand-Widal triad] Moneret-Vautrin DA, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):47–50 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Adverse reaction of acetaminophen as an alternative analgesic in A.A.S. Triad. Barles PG, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):321–5

COMPLICATIONS

An unusual nasal foreign body. Wasson C. **BMJ** 1988 Dec 24–31;297(6664):1636

Sinusitis in adults and its relation to allergic rhinitis, asthma, and nasal polyps. Slavin RG. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):950–6 (8 ref.)

Cystic fibrosis and sinusitis. Cuyler JP, et al. **J Otolaryngol** 1989 Jun;18(4):173–5

DIAGNOSIS

[Naso-sinusal polyposis: endoscopic evaluation of the ethmoidal cavity] Friedrich JP. **Rev Med Suisse Romande** 1988 Dec;108(12):1029–33 **(Fre)**

[Carbachol nasal provocation test in vasomotor and polyposis rhinopathy] Latorre F, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):119–29 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

[A study on collagenase production of nasal polyp-derived fibroblasts stimulated by nasal secretions of chronic sinusitis] Matsuzaki T. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):617–28 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

[Prevalence of polypous rhinosinusitis among the population] Portenko GM. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):52–4 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Nasal polyps and sinusitis in children with cystic fibrosis. Drake-Lee AB, et al. **J Laryngol Otol** 1989 Aug; 103(8):753–5

Etiology of nasal polyps associated with aspirin-sensitive asthma. Yamashita T, et al. **Rhinology** 1989;Suppl 8:15–24

[Relationships between nasal polyps and nasal allergy] Fang SY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug; 87(8):802–7 (Eng. Abstr.) **(Chi)**

[Recent advances concerning etiopathogenesis of nasal polyposis] Bellioni P, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb;9(1):3–13 (29 ref.) (Eng. Abstr.) **(Ita)**

[Role of mast cells in the etiopathogenesis of nasal polyps] Bellioni P, et al. **Acta Otorhinolaryngol Ital** 1988 Jul–Aug; 8(4):371–83 (Eng. Abstr.) **(Ita)**

GENETICS

Two unrelated clonal chromosome rearrangements in a nasal

papilloma. Jin YS, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):29–34

[Alpha 1–antitrypsin phenotypes in healthy persons and patients with polypous rhinosinusitis] Portenko GM. **Vestn Otorinolaringol** 1989 May–Jun;(3):24–7 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

High molecular weight–neutrophil chemotactic activity in nasal allergy. Nagakura T, et al. **Allergy Proc** 1989 May–Jun;10(3):233–5 (16 ref.)

Insulinlike growth factor I immunoreactivity in nasal polyps. Petruson B, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov;114(11):1272–5

METABOLISM

Alpha–adrenergic regulation of Na–Cl cotransport in human airway epithelium. Liedtke CM. **Am J Physiol** 1989 Aug; 257(2 Pt 1):L125–9

Hematopoietic growth factor production by cultured cells of human nasal polyp epithelial scrapings: kinetics, cell source, and relationship to clinical status. Ohnishi M, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1091–100

The release of histamine from nasal polyp tissue and peripheral blood when challenged with antihuman IgE, house dust mite extract and mixed grass pollen extract and compared with positive skin tests. Drake–Lee AB, et al. **J Laryngol Otol** 1988 Oct;102(10):886–9

PATHOLOGY

Human nasal polyp epithelial basophil/mast cell and eosinophil colony–stimulating activity. The effect is T–cell–dependent. Ohnishi M, et al. **Am Rev Respir Dis** 1988 Sep;138(3):560–4

Origin of the choanal polyp. Berg O, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1270–1

Immortalization of nasal polyp epithelial cells from cystic fibrosis patients. Scholte BJ, et al. **Exp Cell Res** 1989 Jun; 182(2):559–71

The effects of different fixations on the distribution and numbers of mast cells in patients with nasal polyps. Drake–Lee AB, et al. **J Laryngol Otol** 1988 Dec; 102(12):1099–101

Characterization of potassium channels in respiratory cells. I. General properties. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):291–6

Characterization of potassium channels in respiratory cells. II. Inhibitors and regulation. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):297–303

Immunohistological characteristics of nasal polyps. A comparison with healthy mucosa and chronic sinusitis. Jankowski R, et al. **Rhinology** 1989;Suppl 8:51–8

[Histomorphological changes in nasal polyps in patients with glucose metabolism disorders] Bellioni P, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):591–603 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Sphenochoanal polyp: CT findings. Hayes E, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):365–6

Recurrent polyposis nasi. Documentation. Clement PA, et al. **Rhinology** 1989;Suppl 8:5–14

SURGERY

The safety and efficacy of intra–nasal ethmoidectomy. Watson DJ, et al. **J Laryngol Otol** 1988 Sep;102(9):802–4

Difficult decisions in endoscopic sinus surgery. Friedman M, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):777–99

The role of endoscopic sinus surgery for the treatment of nasal polyposis. Josephson JS. **Otolaryngol Clin North Am** 1989 Aug;22(4):831–40

Lasers and endoscopic rhinologic surgery. Levine HL. **Otolaryngol Clin North Am** 1989 Aug;22(4):739–48

New bone formation in nasal polyps. de Vries N. **Rhinology** 1988 Sep;26(3):217–9

Recurrence of nasal polyps after surgical treatment. Jäntti–Alanko S, et al. **Rhinology** 1989;Suppl 8:59–64

Surgical versus medical treatment of nasal polyps. Lildholdt T. **Rhinology** 1989;Suppl 8:31–3

Laser polypectomy. Ohyama M. **Rhinology** 1989;Suppl 8:35–43

Treatment of nasal polyps—medication or surgery and which technique. Tos M, et al. **Rhinology** 1989;Suppl 8:45–9

Microsurgical treatment of recurrent nasal polyposis. Wigand ME, et al. **Rhinology** 1989;Suppl 8:25–9

[Use of kanoxicel, hemostatic viscose and gauze and feracryl in otorhinolaryngologic practice] Nasyrov VA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):78–9 **(Rus)**

[Laser polypotomy in a patient with Werlhof's disease] Riazantsev SV, et al. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):74–5 **(Rus)**

[Present–day status of surgery of the vidian nerve] Solabre Martínez M, et al. **An Otorrinolaringol Ibero Am** 1988; 15(4):397–408 (Eng. Abstr.) **(Spa)**

NASAL PROVOCATION TESTS

Nasal provocation tests in diagnosis and therapy control. Palma–Carlos AG, et al. **Allerg Immunol (Paris)** 1989 Mar; 21(3):120–5 (9 ref.)

Nasal histamine release following hyperosmolar and allergen challenge. Krayenbuhl MC, et al. **Allergy** 1989 Jan; 44(1):25–9

Nasal provocative testing [letter] Hosen H. **Ann Allergy** 1988 Nov;61(5):405

Nasal provocative tests for the diagnosis of nasal allergy [letter] Hosen H. **Ann Allergy** 1989 May;62(5):479

Nasal provocation challenge—strategies for experimental design [letter] Pelikan Z. **Ann Allergy** 1988 Nov;61(5):405–6

Nasal secretory response to allergen provocation. Cohen RA, et al. **Clin Allergy** 1988 Sep;18(5):435–43

Nasal provocation with histamine in allergic rhinitis patients: clinical significance and reproducibility. van Wijk RG, et al. **Clin Exp Allergy** 1989 May;19(3):293–8

Topical glucocorticosteroids and allergen–induced increase in nasal reactivity: relationship between treatment time and inhibitory effect. Andersson M, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1019–26

Antiallergic activity of H1–receptor antagonists assessed by nasal challenge. Bousquet J, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):881–7

Responses to ragweed–pollen nasal challenge before and after immunotherapy. Creticos PS, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):197–205

Correlation between symptoms and the threshold for release of mediators in nasal secretions during nasal challenge with grass–pollen grains. Lebel B, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):869–77

Cytologic changes in the nasal secretions during the immediate nasal response [published erratum appears in J Allergy Clin Immunol 1989 May;83(5):870] Pelikan Z, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1103–12

The nasal provocation test in the diagnosis of allergic rhinitis. II. Comparison with other diagnostic tests. Olive–Pérez A. **Rhinology** 1988 Sep;26(3):175–81

[[Allergic reactions in the nasal mucosa (letter)] Dieges PH, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2032–3 **(Dut)**

[Effect of a visit in an eradication environment on reactivity to mites in the respiratory mucus] Caubet Y, et al. **Allerg Immunol (Paris)** 1989 Mar;21(3):108–9, 112–3 (Eng. Abstr.) **(Fre)**

[Challenge provocation tests and nonspecific bronchial hyperreactivity in occupational asthma] Balland S, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):15–23 (Eng. Abstr.) **(Fre)**

[Occupational asthma and rhinitis: challenge tests and nasal hyperreactivity: current practice and future perspectives] Grosclaude M, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):7–13 (6 ref.) (Eng. Abstr.) **(Fre)**

[Carbachol nasal provocation test in vasomotor and polyposis rhinopathy] Latorre F, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):119–29 (Eng. Abstr.) **(Ita)**

[Nasal cytogram after specific nasal provocation test] Pighi GP, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr; 8(2):147–55 (Eng. Abstr.) **(Ita)**

[The changes in nasal mucosa with sex and age—measuring by methacholine inhalation test] Takeyasu Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):926–32 (Eng. Abstr.) **(Jpn)**

[Effect of nasal provocation tests on bronchial patency in allergic rhinitis and asthma] Chervinskaia TA, et al. **Sov Med** 1989;(4):77–80 **(Rus)**

INSTRUMENTATION

[The technic of intranasal hyposensitization and provocation with rhinomanometric control] Enzmann H, et al. **HNO** 1989 May;37(5):203–6 (Eng. Abstr.) **(Ger)**

METHODS

Nasal reactions elicited by unilateral allergen challenge. Malmberg H, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):446–9

Nasal provocation. Pipkorn U. **Clin Rev Allergy** 1988 Fall; 6(3):285–302 (81 ref.)

[Inhalation mite provocation in atopic patients in relation to high altitude conditions] Gühring H. **Z Hautkr** 1989 Jun 15;64(6):461–2, 465 (Eng. Abstr.) **(Ger)**

NASAL SEPTUM

Destruction of ala nasi and loss of columella in borderline tuberculoid leprosy—a case report. Siddappa K, et al. **Indian J Lepr** 1989 Jan;61(1):113–4

Nasal septal perforations and nasal obstruction. Kuriloff DB. **Otolaryngol Clin North Am** 1989 Apr;22(2):333–50 (56 ref.)

Pleomorphic adenoma of the nasal septum. Haberman RS 2d, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):610–2

[A case of brown tumor of the vomer] Carner M, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):199–202 (Eng. Abstr.) **(Ita)**

[Fixed drainage in the treatment of abscesses of the nasal septum] Telezhkina VI, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):82–3 **(Rus)**

ABNORMALITIES

The morphology of the nasal septum in identical twins. Grymer LF, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):642–6

Nasal obstruction. The nasal septum and concha bullosa. Blaugrund SM. **Otolaryngol Clin North Am** 1989 Apr; 22(2):291–306 (48 ref.)

The influence of the caudal process on the formation of septal deformities. Mladina R, et al. **Rhinology** 1989 Jun; 27(2):113–8

The evolution of the nasal septum and the formation of septal deformity. Takahashi R. **Rhinology** 1988;Suppl 6:1–23

ANATOMY & HISTOLOGY

Effect of dietary consistency and incisor trimming on the morphology of the craniofacial complex in the rat (Rattus norvegicus). I. The nasal septum. Grauer S, et al. **Acta Anat (Basel)** 1989;135(1):77–83

The nasal septal cartilage in the newborn. van Loosen J, et al. **Rhinology** 1988 Sep;26(3):161–5

[Anatomic considerations on the pyramid and nasal septum. Quantitative data apropos of 33 dissections on fresh corpses] Soudant J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):233–8 (Eng. Abstr.) **(Fre)**

[The distance between the ductus nasolacrimus and the canalis palatinus major on the sidewall of the nasal septum and the distances between the ostium pharyngeum tubae auditivae and canalis palatinus major and the upper side of the soft palate] Lang J, et al. **Anat Anz** 1989; 168(4):315–20 (Eng. Abstr.) **(Ger)**

[Macroscopic study of the peripheral organ of olfaction in the rat] Gil–Carcedo LM, et al. **An Otorrinolaringol Ibero Am** 1988;15(4):387–95 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

[The angioarchitecture of the septal mucosa. Experimental studies of the rabbit] Grevers G, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):526–31 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Neurogenesis in the vomeronasal epithelium of adult garter snakes: 3. Use of H3–thymidine autoradiography to trace the genesis and migration of bipolar neurons. Wang RT, et al. **Am J Anat** 1988 Oct;183(2):178–85

EMBRYOLOGY

Development of bone–like substance in cartilaginous rat nasal septum under experimental conditions. Tsao SW, et al. **Anat Rec** 1988 Aug;221(4):834–40

Relative contributions of the nasal septum and airways to total nasal capsule volume in normal and cleft lip and palate fetal specimens. Kimes KR, et al. **Cleft Palate J** 1988 Jul; 25(3):282–7

Tight–junctional strands first appear in regions where three cells meet in differentiating olfactory epithelium: a freeze–fracture study. Menco BP. **J Cell Sci** 1988 Apr;89 (Pt 4):495–505

INJURIES

Surgical considerations in the open rhinoplasty approach to closure of septal perforations. Arnstein DP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):435–8

Acrylic nasal septal obturators for nasal septal perforations. McKinstry RE, et al. **Laryngoscope** 1989 May;99(5):560–3

Restoration of the rat nasal septum and turbinates after damage by intranasal electrocoagulation. Immel HR, et al. **Z Versuchstierkd** 1988;31(5):233–40

[Nasolabioplasty after rupture of the nasal ring in cattle] Köstlin RG, et al. **Tierarztl Prax** 1988;16(3):253–8 (Eng. Abstr.) **(Ger)**

[Nasal septum abscess—a rare condition but still of current interest] Nordkvist A, et al. **Lakartidningen** 1989 May 17; 86(20):1911 **(Swe)**

PATHOLOGY

Human nasal septal cartilage: analysis of intracellular enzyme activities, glycogen content, cell density and clonal proliferation of septal chondrocytes of healthy adults and acromegalic patients. Vetter U, et al. **Connect Tissue Res** 1989;18(4):243–54

Osteocartilaginous necrosis of the sinonasal tract following cocaine abuse. Kuriloff DB, et al. **Laryngoscope** 1989 Sep; 99(9):918–24

[Relation between deviation of the nasal septum and diseases of the paranasal sinuses] Točik J. **Cesk Otolaryngol** 1989 Jan;38(1):41–4 (Eng. Abstr.) **(Slo)**

PHYSIOLOGY

Stress and woundhealing of the cartilaginous nasal septum. Verwoerd CD, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):441–5

Breathing and upper airway CO2 in reptiles: role of the nasal and vomeronasal systems. Coates EL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R91–7

Bilateral transection of the lateral olfactory tract but not removal of the vomeronasal organs inhibits short–photoperiod–induced testicular regression in golden hamsters. Pieper DR, et al. **Brain Res** 1989 Apr 24; 485(2):382–90

Effects of LHRH on the display of receptive and proceptive behaviors in female rats following removal of the

vomeronasal organ. Saito TR, et al.
Nippon Jibiaku Zasshi 1989 Feb;51(1):191–3
Mechanical properties of septal cartilage homografts. Glasgold MJ, et al. **Otolaryngol Head Neck Surg** 1988 Oct; 99(4):374–9
Vomeronasal organ removal and female mouse aggression: the role of experience. Bean NJ, et al. **Physiol Behav** 1989 May;45(5):875–82
Vomeronasal organ and social factors affect urine marking by male mice. Labov JB, et al. **Physiol Behav** 1989 Feb; 45(2):443–7
[Role of the septal cartilage in facial growth. Experimental study in rats] Bui P, et al. **Ann Chir Plast Esthet** 1989; 34(2):167–73 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Measuring the size of nasal septal perforations. A simple radiological method. Rettinger G, et al. **Rhinology** 1988 Sep;26(3):157–9

SURGERY

Closure of nasal septal perforation with a cutaneous flap and a perichondrocutaneous graft. Ohlsén L. **Ann Plast Surg** 1988 Sep;21(3):276–88
External septorhinoplasty—exposure for the difficult nose. Stubbs RH. **Ann Plast Surg** 1989 Apr;22(4):283–92
Secure endoscopic sinus surgery as an adjunct to functional nasal surgery. Toffel PH, et al.
Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):822–5
The transverse forked flap in columella reconstruction. Earley MJ, et al. **Br J Plast Surg** 1989 May;42(3):270–3
The effect of submucous resection of the nasal septum on mucociliary transport and nasal airway. Barr GS.
Clin Otolaryngol 1989 Apr;14(2):127–30
Nasal airway resistance and symptoms after functional septoplasty: comparison of findings at 9 months and 9 years. Jessen M, et al. **Clin Otolaryngol** 1989 Jun;14(3):231–4
Rhinomanometrical findings after septoplasty in children. Risavi R, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov; 16(2):149–55
A modified incision for the trans-septal trans-sphenoidal approach to the pituitary. Baraka ME. **J Laryngol Otol** 1989 Jul;103(7):670–1
Sublabial rhinotomy with septal transfixion as an approach to the nasal fossa, paranasal sinuses and nasopharynx. Bingham BJ, et al. **J Laryngol Otol** 1989 Jul;103(7):661–3
Septoplasty and/or submucous resection? 5 years nasal septum operations. Fjermedal O, et al. **J Laryngol Otol** 1988 Sep;102(9):796–8
Local anaesthetic with vasoconstrictor combinations in septal surgery. McClymont LG, et al. **J Laryngol Otol** 1988 Sep; 102(9):793–5
Nasal cryosurgery and cautery: should the septum be treated and is a diagnosis relevant? Haight JS, et al.
J Otolaryngol 1989 Jun;18(4):144–50
Digitalized auto-septoplasty [letter] Hassard AD.
J Otolaryngol 1988 Aug;17(5):260
Repair of nasal septal perforations with tragal cartilage and perichondrium grafts. Eviatar A, et al.
Otolaryngol Head Neck Surg 1989 Apr;100(4):300–2
Reconstruction of the destroyed septal infrastructure. Hellmich S. **Otolaryngol Head Neck Surg** 1989 Feb; 100(2):92–4
Is packing after septorhinoplasty necessary? A randomized study. Guyuron B. **Plast Reconstr Surg** 1989 Jul;84(1):41–4; discussion 45–6
Septal perforations—prosthetic and surgical treatment. Haye R. **Rhinology** 1989 Mar;27(1):11–5
Reconstruction of the nasal septum and dorsum by cartilage transplants—autogeneic or allogeneic?[clinical conference] Huizing EH, et al. **Rhinology** 1989 Mar;27(1):5–10 (6 ref.)
Spirometric forced volume measurements in the assessment of nasal patency after septoplasty. A prospective clinical study. Larsen K, et al. **Rhinology** 1988 Sep;26(3):203–8
Surgery for bilateral nasal valvular collapse. Ochi JW, et al. **Rhinology** 1988 Jun;26(2):105–10
Wedge resection in rhinosurgery: a review of the literature and long-term results in a hundred cases. Pirsig W, et al. **Rhinology** 1988 Jun;26(2):77–88 (16 ref.)
Septorhinoplastic procedures versus submucous resection of the septum, using septum perforation as an indicator. Schønsted-Madsen U, et al. **Rhinology** 1989 Mar;27(1):63–6
Metastatic renal cell carcinoma of the nasal septum. Lim RY, et al. **W V Med J** 1989 Apr;85(4):143–5
[Reimplantation of a free graft of the nasal septum. Technic and indications] Gubisch W, et al.
Ann Otolaryngol Chir Cervicofac 1989;106(2):135–7 (Eng. Abstr.) **(Fre)**
[Esthetic components in model correction of the nasal septum] Fries R, et al. **Fortschr Kiefer Gesichtschir** 1989; 34:40–3 **(Ger)**
[The difficult septum] Gubisch W. **HNO** 1988 Jul;36(7):286–9 (Eng. Abstr.) **(Ger)**
[The bridge flap concept in closure of large defects of the nasal septum] Schultz-Coulon HJ. **HNO** 1989 Apr; 37(4):123–7 (Eng. Abstr.) **(Ger)**
[Body plethysmography studies in patients with obstructed nasal respiration before and following corrective surgery of the nasal septum] Kautzky M, et al.
Laryngol Rhinol Otol (Stuttg) 1988 Nov;67(11):593–8 (Eng. Abstr.) **(Ger)**
[How do I facilitate postoperative breathing in nasal septum operated patients?] Wustrow TP, et al.
Laryngorhinootologie 1989 Jun;68(6):363–4 **(Ger)**
[Complications of septorhinoplasty] Elia L, et al.
Minerva Chir 1989 May 31;44(10):1499–502 (Eng. Abstr.) **(Ita)**
[An elevator scalpel for the submucosal resection of the nasal septum] Freze IuV. **Voen Med Zh** 1988 Jun;(6):60 **(Rus)**
[Evaluation of a drug combination in the postoperative course of surgical trauma to the nasal fossa] Vallés Varela H, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):277–89 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Laryngotracheal reconstruction with composite nasal septal cartilage grafts. Duncavage JA, et al.
Ann Otol Rhinol Laryngol 1989 Aug;98(8 Pt 1):581–5
[Reconstruction of the larynx after extended fronto-lateral laryngectomy using a muco-cartilaginous transplant from the nasal septum] Szmeja Z, et al. **Otolaryngol Pol** 1988; 42(1–2):18–22 (Eng. Abstr.) **(Pol)**

NASAL SINUSES see **PARANASAL SINUSES**

NASMYTH'S MEMBRANE see **ENAMEL CUTICLE**

NASOLACRIMAL DUCT see under **LACRIMAL APPARATUS**

NASOPHARYNGEAL DISEASES

Nasopharyngeal cysts. Report of seven cases with review of the literature. Nicolai P, et al.
Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):860–4 (41 ref.)
Nasopharyngeal obstruction. Pincus RL.
Otolaryngol Clin North Am 1989 Apr;22(2):367–82 (55 ref.)
[Tuberculosis of the nasopharynx] Milojević L, et al.
Srp Arh Celok Lek 1986 Mar;114(3):327–30 (Eng. Abstr.) **(Scc)**

COMPLICATIONS

A study on the relationship between adenoid vegetation and rhinosinusitis. Fukuda K, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):214–6

DIAGNOSIS

Magnetic resonance imaging of Thornwaldt's cyst. Norfray JF, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):569–70
Video nasopharyngoscopy: a comparison of fiberscopic, telescopic, and microscopic documentation. Yanagisawa E, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):15–20
Preliminary study of rhinolaryngoscopy by family physicians. Corey GA, et al. **Fam Med** 1988 Jul–Aug;20(4):262–5
Diagnosis of nasopharyngeal tuberculosis by detection of tuberculostearic acid in formalin fixed, paraffin wax embedded tissue biopsy specimens. Arnold M, et al.
J Clin Pathol 1988 Dec;41(12):1334–6
[Use of nuclear magnetic resonance in cranio-facial pathology. Preliminary study] Cirillo G, et al.
Minerva Stomatol 1989 Mar;38(3):307–16 (Eng. Abstr.) **(Ita)**
[Fiber endoscopy of the nasopharynx: its indications] Vallés Varela H, et al. **An Otorrinolaringol Ibero Am** 1989; 16(1):13–20 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Upper aerodigestive tract manifestations of cicatricial pemphigoid. Hanson RD, et al.
Ann Otol Rhinol Laryngol 1988 Sep–Oct;97(5 Pt 1):493–9

PATHOLOGY

Infectious mononucleosis in the nasopharynx with a histological picture of malignant lymphoma. Takimoto T, et al. **Arch Otorhinolaryngol** 1988;245(6):348–50
Oncocytic cystic lesions of the upper respiratory tract. Ophir D, et al. **Ear Nose Throat J** 1989 Mar;68(3):237–8, 240, 243–4
[A case of nasopharyngeal amyloidosis] Kumagami H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):165–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Rhinocerebral phycomycosis. Taneja LN, et al.
Indian Pediatr 1988 Nov;25(11):1111–3
Experimental studies on the relationship between maxillary sinus ventilation and various obstructions of the nose and nasopharynx. Bachert C, et al. **Rhinology** 1989 Mar; 27(1):37–43
[Comparative tympanometric study, in normal subjects and in rhino- and oropharynx diseases] Baixauli Besó A.
An Otorrinolaringol Ibero Am 1988;15(6):595–606 (Eng. Abstr.) **(Spa)**

SURGERY

Local iatrogenic complications in nasopharyngeal rhinoscleroma. Dawlatly EE, et al. **J Laryngol Otol** 1988 Dec;102(12):1115–8

THERAPY

[Intracranial penetration by a Foley bladder catheter. A rare iatrogenic complication of severe frontomaxillary fractures] Reif J, et al. **Unfallchirurg** 1988 Sep;91(9):428–31 (Eng. Abstr.) **(Ger)**

NASOPHARYNGEAL NEOPLASMS

Hypertrophic pulmonary osteoarthropathy and nasopharyngeal carcinoma in a young Chinese patient. Wallington MM, et al. **Australas Radiol** 1988 Nov; 32(4):444–7
Stage 1 Hodgkin's disease of the nasopharynx. Daniel F, et al. **J Laryngol Otol** 1988 Dec;102(12):1179–81 (17 ref.)
Antro-choanal polyp: a 10-year retrospective study in the pediatric population with a review of the literature. Chen JM, et al. **J Otolaryngol** 1989 Jun;18(4):168–72 (13 ref.)
[Non-differentiated carcinoma of the nasopharynx in children] Šíbl O, et al. **Cesk Otolaryngol** 1989 Mar; 38(2):121–7 (Eng. Abstr.) **(Cze)**
[Nasopharyngeal angiofibroma] Liška K, et al. **Sb Lek** 1989 Jun;91(6):186–92 (Eng. Abstr.) **(Cze)**
[Epipharyngeal cancer] Liavaag PG, et al.
Tidsskr Nor Laegeforen 1989 May 20;109(14):1521–3 (Eng. Abstr.) **(Nor)**

ANALYSIS

DNA flow cytometric analysis of human nasopharyngeal carcinoma in nude mice. Cao SL, et al.
Int J Radiat Oncol Biol Phys 1989 Feb;16(2):343–5
[Particle induced X-ray emission for trace element analysis of hairs from patients with cancer] Yao HY, et al.
Chung Hua Chung Liu Tsa Chih 1988 Mar;10(2):92–4 (Eng. Abstr.) **(Chi)**
[DNA-cytophotometry of nasopharyngeal carcinoma imprints] Zong YS, et al.
Chung-hua Ping Li Hsueh Tsa Chih 1988 Jun;17(2):105–6 (Eng. Abstr.) **(Chi)**

BLOOD

Lymphopenia and deranged lymphocyte subsets in nasopharyngeal carcinoma. Cheng PN, et al.
Clin Otolaryngol 1989 Feb;14(1):53–9
High interferon titer and defective NK-cell activity in the circulation of nasopharyngeal carcinoma patients. Lakhdar M, et al. **Int J Cancer** 1989 Apr 15;43(4):543–8
[Detection of serum gamma interferon in nasopharyngeal carcinoma patients using reversed passive hemagglutination method] Tsai ST, et al.
Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih 1988 May;21(2):104–9 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Does formaldehyde cause nasopharyngeal cancer in man? Purchase IF, et al. **Cancer Lett** 1989 Jul 15;46(2):79–85 (20 ref.)
[Induction of precancerous changes and carcinoma of the nasopharynx in rats and the inhibitory effect of RI on carcinogenesis] Cai HY.
Chung-hua Ping Li Hsueh Tsa Chih 1988 Jun;17(2):98–101 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Nasopharyngeal neoplasms and their association with adult onset otitis media with effusion. Dempster JH, et al.
Clin Otolaryngol 1988 Oct;13(5):363–5
Nasopharyngeal carcinoma with dermatomyositis. Teo P, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):471–4
An infiltrating capillary hemangioma of the nasopharynx causing proptosis (a case report). Desouza CE, et al.
J Postgrad Med 1988 Jul;34(3):182–4
Nasal obstruction due to benign and malignant neoplasms. Komisar A. **Otolaryngol Clin North Am** 1989 Apr; 22(2):351–65 (14 ref.)
Nasopharyngeal carcinoma not associated with HIV in Sudan. Fox E, et al. **Trans R Soc Trop Med Hyg** 1987; 81(6):1012–3
[Ophthalmologic signs and symptoms of nasopharyngeal carcinoma (NPC)] Li PL, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):233–6 (Eng. Abstr.) **(Chi)**
[Neurological disorders during the treatment of patients with nAsopharyngeal cancer] Voinarevich AO, et al.
Sov Med 1988;(12):82–5 **(Rus)**

DIAGNOSIS

Detection of Epstein-Barr virus-associated antigen in fine needle aspiration smears from cervical lymph nodes in the diagnosis of nasopharyngeal carcinoma. Chan MK, et al.
Acta Cytol 1989 May–Jun;33(3):351–4
Fine needle aspiration cytology of metastatic lymphoepithelioma. A case report. Powers CN, et al.
Acta Cytol 1989 Mar–Apr;33(2):254–8
Role of fine needle aspiration in the diagnosis of lesions of the oral cavity, oropharynx, and nasopharynx. Scher RL, et al. **Cancer** 1988 Dec 15;62(12):2602–6
Practical value of immunohistochemistry in histopathological diagnosis of nasopharyngeal carcinoma. Feng BC, et al.
Chin Med J [Engl] 1988 Oct;101(10):745–7
Serological markers in the diagnosis of histopathological types of nasopharyngeal carcinoma. Sam CK, et al.

Eur J Surg Oncol 1989 Aug;15(4):357–60

Craniopharyngioma presenting as a nasopharyngeal mass: CT and MR findings. Benitez WI, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1068–72

Aids to diagnosis of nasopharyngeal carcinoma. Umapati P, et al. **Med J Malaysia** 1988 Jun;43(2):109–16

Nasopharyngeal mass in a teenage male. Stavas J. **Nebr Med J** 1989 Mar;74(3):61–4

Garcin syndrome with hypopituitarythm. MR imaging. Abe K, et al. **Neuroradiology** 1988;30(5):447–8

[An approach to discovering patients with nasopharyngeal carcinoma by detection of EB virus VCA–IgA antibody] Li SJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):161–3 (Eng. Abstr.) **(Chi)**

[A case of (benign) teratoma of the nasopharynx] Resimont S, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):681–9 (Eng. Abstr.) **(Fre)**

[MRI of the nasopharynx with Gd–DTPA: its value and differential diagnostic criteria] Vogl T, et al. **ROFO** 1989 May;150(5):516–22 (Eng. Abstr.) **(Ger)**

[Characteristics of the onset in cavum tumors] Constantinovici A, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1988 Oct–Dec;33(4):277–82 **(Rum)**

DRUG THERAPY

Pharmacokinetic and pharmacodynamic studies with 4'-epi–doxorubicin in nasopharyngeal carcinoma patients. Hu OY, et al. **Cancer Chemother Pharmacol** 1989; 24(5):332–7

Treatment of esthesioneuroblastoma with chemotherapy: a report of two cases. Heros DO, et al. **J Neurooncol** 1988 Sep;6(2):141–5

Case report of successful use of VP–16 in nasopharyngeal carcinoma. Daghistani D, et al. **Med Pediatr Oncol** 1989; 17(2):168–9

[Vincristine–bleomycin–methotrexate in the treatment of recurrence of ORL carcinoma] Airoldi M, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr;8(2):125–31 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

Epidemiological studies of nasopharyngeal cancer in the Guangzhou area, China. Preliminary report. Yan L, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):424–7

Screening for NPC. Chan SH. **Ann Acad Med Singapore** 1989 Jan;18(1):80–2

Increased risk of cancer in siblings of Alaskan native patients with nasopharyngeal carcinoma. Ireland B, et al. **Int J Epidemiol** 1988 Sep;17(3):509–11

[A case–control study of nasal tumors and occupational exposure] Bimbi G, et al. **Med Lav** 1988 Jul–Aug; 79(4):280–7 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Mutagenicity and carcinogenicity of smoked meat from Nagaland, a region of India prone to a high incidence of nasopharyngeal cancer. Sarkar S, et al. **Carcinogenesis** 1989 Apr;10(4):733–6

Diet and nasopharyngeal carcinoma: a case–control study in Guangzhou, China. Yu MC, et al. **Int J Cancer** 1989 Jun 15;43(6):1077–82

Chronic infection with Epstein–Barr virus, Chlamydia and hepatitis A virus, terminating in cirrhosis and nasopharyngeal carcinoma. Ariad S, et al. **Isr J Med Sci** 1989 Jun;25(6):328–31

Pathogenic diversity of Epstein–Barr virus. Spring SB, et al. **J Natl Cancer Inst** 1989 Jan 4;81(1):13–20

Does neoplasia in–situ develop due to the interaction of Epstein–Barr virus or herpes simplex virus–2 with Langerhans cells in the epithelium? Becker Y. **Virus Genes** 1988 Jul;1(4):385–97 (94 ref.)

[Case–control study on nasopharyngeal carcinoma] Na YJ, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug;9(4):224–6 (Eng. Abstr.) **(Chi)**

[The role of Epstein–Barr virus in the etiology of nasopharyngeal cancer] Wilke J, et al. **Otolaryngol Pol** 1988;42(3):151–7 (Eng. Abstr.) **(Pol)**

GENETICS

Fragile site 1q44 involved in nasopharyngeal carcinoma. A study of a marker chromosome der(1)t(1;3)(q44;p11). Xia JH, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):135–40

Sister chromatid exchanges in lymphocytes of early cases of nasopharyngeal carcinoma and in 100 healthy subjects. Hu YC, et al. **Cell Biol Toxicol** 1987 Sep;3(3):321–5

Cytogenetics of undifferentiated nasopharyngeal carcinoma xenografts from southern Chinese. Huang DP, et al. **Int J Cancer** 1989 May 15;43(5):936–9

Sister chromatid exchange and nasopharyngeal carcinoma. Li GY, et al. **Int J Cancer** 1989 Apr 15;43(4):613–8

Comparison of P+–active and –inactive pro–1 homologues from human nasopharyngeal carcinoma cells. Dowjat WK, et al. **Mol Carcinog** 1988;1(1):33–40

Detection of novel non–ras oncogenes in rat nasal squamous cell carcinomas. Hochwalt AE, et al. **Mol Carcinog** 1988; 1(1):4–6

[Studies on oncogene of nasopharyngeal carcinoma. II. Identification of the oncogene in human nasopharyngeal carcinoma cell line] Li YW. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):116–9 (Eng. Abstr.) **(Chi)**

[Studies on oncogene of nasopharyngeal carcinoma. I. Transforming activity of CNE–2 DNA in NIH3T3 cells] Yao GQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):112–5 (Eng. Abstr.) **(Chi)**

[HLA in cancers of Waldeyer's pharyngeal ring] Sibl O, et al. **HNO** 1988 Sep;36(9):355–8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Constitutive expression of HLA class II antigens on EBV positive malignant cells from nasopharyngeal carcinoma: possible involvement in T cell infiltration. Busson P, et al. **Cancer Detect Prev** 1988;12(1–6):363–8

A study of lymphocyte kinetics in nasopharyngeal carcinoma with indium III oxine–labelled lymphocytes. Cheng PN, et al. **Clin Exp Immunol** 1988 Dec;74(3):398–403

Specific Epstein–Barr virus serological response in patients with nasopharyngeal carcinoma detected by immunoblotting. Cevenini R, et al. **Eur J Epidemiol** 1988 Sep;4(3):301–5

Antibody to Epstein–Barr virus–specific DNase as a marker for field survey of patients with nasopharyngeal carcinoma in Taiwan. Chen JY, et al. **J Med Virol** 1989 Apr; 27(4):269–73

Antibody against Epstein–Barr virus DNA polymerase activity in sera of patients with nasopharyngeal carcinoma. Liu MY, et al. **J Med Virol** 1989 Jun;28(2):101–5

Epstein–Barr virus (EBV)–containing nasopharyngeal carcinoma cells express the B–cell activation antigen blast2/CD23 and low levels of the EBV receptor CR2. Billaud M, et al. **J Virol** 1989 Oct;63(10):4121–8

A prospective study of antibodies to Epstein–Barr virus DNase and viral capsid antigen for prognostication of patients with nasopharyngeal carcinoma. Hsu MM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):984–8

[Immunofluorescent localization of associated antigen of anti–human nasopharyngeal carcinoma cell monoclonal antibody] Sui YF, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):95–7 (Eng. Abstr.) **(Chi)**

[HLA typing of nasopharyngeal carcinoma in Hunan province] Yi YN. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):267–9 (Eng. Abstr.) **(Chi)**

[Correlation between nasopharyngeal carcinoma and HLA in Sichuan] Yuan BW. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):263–6 (Eng. Abstr.) **(Chi)**

[Natural killer cell activity in nasopharyngeal carcinoma before and after radiotherapy] Lynn TC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):75–8 (Eng. Abstr.) **(Chi)**

[EBV–specific antibodies in patients with nasopharyngeal cancer and tonsillar cancer. Follow–up of over 4 years] Oberender H, et al. **Laryngorhinootologie** 1989 Mar; 68(3):181–5 (Eng. Abstr.) **(Ger)**

[EB virus–associated tumors–opportunistic B cell lymphoma, Burkitt's lymphoma, nasopharyngeal carcinoma] Mizuno F. **Nippon Rinsho** 1989 Feb;47(2):481–6 **(Jpn)**

METABOLISM

Multiple steroid receptors in nasopharyngeal angiofibromas. Brentani MM, et al. **Laryngoscope** 1989 Apr;99(4):398–401

MICROBIOLOGY

Epstein–Barr virus serology in the control of nasopharyngeal carcinoma. Levine PH, et al. **Cancer Detect Prev** 1988; 12(1–6):357–62 (26 ref.)

Relationship between nasopharyngeal carcinoma and high antibody titers to Epstein–Barr virus–specific thymidine kinase. de Turenne–Tessier M, et al. **Int J Cancer** 1989 Jan 15;43(1):45–8

Gene mapping of an Epstein–Barr virus isolate obtained from a nasopharyngeal carcinoma. Zhang HY, et al. **Intervirology** 1989;30(1):52–60

Epstein–Barr virus with transforming and early antigen–inducing ability originating from nasopharyngeal carcinoma: mapping of the viral genome. Sato H, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):717–27

Cytopathic effects induced by Epstein–Barr virus replication in epithelial nasopharyngeal carcinoma hybrid cells. Sato H, et al. **J Virol** 1989 Aug;63(8):3555–9

In situ detection of Epstein–Barr virus markers in nasopharyngeal carcinoma patients. Lung ML, et al. **Oncology** 1989;46(5):310–7

Epstein–Barr virus DNA in nasopharyngeal biopsies. Zhang HY, et al. **Virus Res** 1989 Jan;12(1):53–9

[Relationship between EB virus and nasopharyngeal carcinoma. I. Detection of EBV DNA–related sequences in biopsy specimens of nasopharyngeal carcinoma] Cui HY. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):260–2 (Eng. Abstr.) **(Chi)**

[Epstein–Barr virus infections. New pathogenic and clinical aspects] Wilmes E, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):36–43 (55 ref.) (Eng. Abstr.) **(Ger)**

MORTALITY

Prognostic factors of patients with nasopharyngeal carcinoma. Shu MM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:34–40

Prognostic factors for nasopharyngeal carcinoma analysed by Cox model. Zhen BG, et al. **Chin Med J [Engl]** 1988 Aug;101(8):591–6

[Statistical data on results of radiotherapy and survival of patients with cancer of the nasopharynx] Bykov VL. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):61–3 **(Rus)**

PATHOLOGY

Fine needle aspiration cytodiagnosis of nasopharyngeal carcinoma in cervical lymph nodes. A study of 40 cases. Chan MK, et al. **Acta Cytol** 1989 May–Jun;33(3):344–50

Polymorphous low–grade adenocarcinoma of seromucous glands of the nasopharynx. A report of a case and a discussion of the morphologic and immunohistochemical features. Wenig BM, et al. **Am J Clin Pathol** 1989 Jul; 92(1):104–9 (15 ref.)

Malignant lymphoma presenting as pseudoepitheliomatous hyperplasia. A report of two cases. Krasne DL, et al. **Am J Surg Pathol** 1988 Nov;12(11):835–42

Nasopharyngeal papillary adenocarcinoma. A clinicopathologic study of a low–grade carcinoma. Wenig BM, et al. **Am J Surg Pathol** 1988 Dec;12(12):946–53

Malignant rhabdoid tumor. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):690–1

Large pituitary adenomas with extension into the nasopharynx. Report of three cases with a review of the literature. van der Mey AG, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):618–24

Neurofibromatosis type II of the head and neck. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):380–3

Pathologic quiz case 2. Nasopharyngeal carcinoma with cervical nodal metastasis. Nuss DW, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):998, 1001

Infectious mononucleosis in the nasopharynx with a histological picture of malignant lymphoma. Takimoto T, et al. **Arch Otorhinolaryngol** 1988;245(6):348–50

Cervical adenocarcinoma in women with nasopharyngeal carcinoma (NPC). Singh P, et al. **Cancer** 1989 Sep 1; 64(5):1152–5

Teratoma of the nasopharynx [letter] Singh RK, et al. **Ear Nose Throat J** 1988 Sep;67(9):692, 694–5

Squamous papillary neoplasia of the adult upper aerodigestive tract. Crissman JD, et al. **Hum Pathol** 1988 Dec; 19(12):1387–96

Establishment and characterization of three transplantable EBV–containing nasopharyngeal carcinomas. Busson P, et al. **Int J Cancer** 1988 Oct 15;42(4):599–606

Growth inhibition of human nasopharyngeal carcinoma in athymic mice by anti–epidermal growth factor receptor monoclonal antibodies. Guan E, et al. **Int J Cell Cloning** 1989 Jul;7(4):242–56

Nasopharyngeal teratoma involving the temporal bone. de Vries EJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov; 16(2):167–73

MR imaging of perineural metastasis along the vidian nerve. Pandolfo I, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):498–500

Nasopharyngeal Warthin's tumour: a metaplastic lesion. Kristensen S, et al. **J Laryngol Otol** 1989 Jun;103(6):616–9

Dermoids ('hairy polyps') of the oro–nasopharynx. McShane D, et al. **J Laryngol Otol** 1989 Jun;103(6):612–5

Transitional type papilloma of the nasopharynx. O'Reilly BJ, et al. **J Laryngol Otol** 1989 May;103(5):528–30

Rhabdomyosarcoma of the nasopharynx a case with recurrence of tumour after 20 years. Wight RG, et al. **J Laryngol Otol** 1988 Dec;102(12):1182–4

Carcinoma of the nasopharynx—comparison of the UICC and Ho clinical staging systems. Roth SL, et al. **Klin Wochenschr** 1989 Jan 20;67(2):74–85

Two cases of human sarcocystosis in East Malaysia. Pathmanathan R, et al. **Med J Malaysia** 1987 Sep; 42(3):212–4

Nasopharyngeal Hodgkin's disease with intracranial extension in a child. Mallouh AA. **Med Pediatr Oncol** 1989; 17(2):174–7

Retronasopharyngeal lipoma: a case report. Pitts DB, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):248–51

[Immunocytochemical and morphologic features of poorly differentiated adenocarcinoma of the nasopharynx] Feng BC, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar; 10(2):114–6 (Eng. Abstr.) **(Chi)**

[Growth capability of epithelial cell line of human poorly differentiated nasopharyngeal carcinoma and its response to Chinese medicinal herbs and marine drugs] Zhao ML, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar; 10(2):98–101 (Eng. Abstr.) **(Chi)**

[Endoscopic study of the Eustachian tube of nasopharyngeal carcinoma] Chen HL, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov;40(5):451–6 (Eng. Abstr.) **(Chi)**

[Study on invasion of human amnion by malignant tumor cells] Liu ZJ. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):219–21 (Eng. Abstr.) **(Chi)**

[T lymphoma of the nasopharynx, a rare entity. Apropos of a case] Canioni D, et al. **Pathol Biol (Paris)** 1989 Apr; 37(4):254–8 (33 ref.) (Eng. Abstr.) **(Fre)**

[Burkitt's lymphoma disclosed and isolated in the nasopharyngeal region (apropos of a Tunisian case)] Ben Abdeladhim A, et al. **Tunis Med** 1988 Dec;66(12):873–6

(Eng. Abstr.) (Fre)
[Growth patterns of juvenile nasopharyngeal fibromas. A histological analysis on the basis of 40 cases] Stiller D, et al. **Zentralbl Allg Pathol** 1988;134(4–5):409–22 (Eng. Abstr.) (Ger)
[Carcinoma of the nasopharynx: current status of its morphologic diagnosis] Vera Sempere FJ. **Med Clin (Barc)** 1988 Nov 5;91(15):589–95 (77 ref.) (Spa)

PHYSIOPATHOLOGY

[Tympanometric change in NPC patients before and after radiotherapy] Lee JT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):105–10 (Eng. Abstr.) (Chi)

PREVENTION & CONTROL

[Radiation therapy of carcinoma of the hypopharynx and recurrence in the epipharynx and mesopharynx] Itami J, et al. **Gan No Rinsho** 1989 Mar;35(4):445–9 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

CT of nasopharyngeal carcinoma: significance of widening of the preoccipital soft tissue on axial scans. Hoe J. **AJR Am J Roentgenol** 1989 Oct;153(4):867–72
Involution of juvenile nasopharyngeal angiofibroma with intracranial extension. A case report with computed tomographic assessment. Jacobsson M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):238–9
Osseous regeneration after therapy in patients with head and neck tumors. Estrin E, et al. **Cancer** 1989 Sep 15; 64(6):1222–5
Computed tomography in the management of nasopharyngeal carcinoma. Zheng GL, et al. **Clin Radiol** 1989 Jan; 40(1):25–9
Computed tomography of nasopharyngeal carcinoma. A review of CT appearances in 56 patients. Hoe JW. **Eur J Radiol** 1989 May;9(2):83–90
Perineural spread of nasopharyngeal carcinoma: radiological and CT demonstration. Pandolfo I, et al. **Eur J Radiol** 1988 Nov;8(4):231–5
A revealing C.T. examination in nasopharyngeal carcinoma. Annis JA, et al. **J Laryngol Otol** 1989 Aug;103(8):801–2
The value of computed tomography in the diagnosis of tumors of the nasopharynx and paranasal sinuses. Rotte KH, et al. **Radiol Diagn (Berl)** 1988;29(3):391–6
Evaluating EMP with computed tomography. Fueredi GA, et al. **Wis Med J** 1989 Apr;88(4):15–6
[Mode of spread in nasopharyngeal carcinoma as seen on CT scan] Zheng GL. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):293–5 (Eng. Abstr.) (Chi)
[Computed tomography of tumors in the infratemporal, parapharyngeal space and pterrgopalatine fossa] Wang DY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):90–1, 127 (Eng. Abstr.) (Chi)
[Advances in the diagnosis of early recurrences of maxillary neoplasms and various problems of the CT diagnosis of nasopharyngeal lesions] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):149–55 (Eng. Abstr.) (Pol)

RADIONUCLIDE IMAGING

Ipsilateral craniofacial uptake of Tc-99m MDP in nasopharyngeal carcinoma: incidence and implication. Nuruddin RN, et al. **Australas Radiol** 1989 Feb;33(1):93–6

RADIOTHERAPY

What is the role of the poststyloid space in the treatment of nasopharyngeal carcinoma? [letter] Gaeta M, et al. **Acta Oncol** 1988;27(4):415–6
Results of radiotherapy in nasopharyngeal cancer. A retrospective comparison of split-course and continuous-course treatment schedules. Mingchen Z. **Acta Oncol** 1989;28(1):77–80
High-dose boost irradiation techniques for carcinoma of the nasopharynx. Wazer DE, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):173–80
Treatment of residual and recurrent cervical metastasis from nasopharyngeal carcinoma. Ho YH, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):22–4
Clinical significance of cranial nerve deficit in the therapy of nasopharyngeal carcinoma. Chen MS, et al. **Br J Radiol** 1989 Aug;62(740):739–43
Evaluation of response following irradiation of juvenile angiofibromas. Robinson AC, et al. **Br J Radiol** 1989 Mar; 62(735):245–7
Treatment of persistent and recurrent nasopharyngeal carcinoma by brachytherapy. Sham JS, et al. **Br J Radiol** 1989 Apr;62(736):355–61
Accelerated hyperfractionation radiation therapy for carcinoma of the nasopharynx. Techniques and results. Wang CC. **Cancer** 1989 Jun 15;63(12):2461–7
Non-Hodgkin's lymphoma of the nasopharynx, paranasal sinus and palate. Makepeace AR, et al. **Clin Radiol** 1989 Mar;40(2):144–6
Cancer of nasopharynx—a review of 93 patients treated with radiotherapy. Padmanabhan TK, et al. **Indian J Cancer** 1988 Sep;25(3):144–50
Proton therapy for carcinoma of the nasopharynx: a study in comparative treatment planning. Brown AP, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1607–14
Long-term observation after radiotherapy for nasopharyngeal carcinoma (NPC). Chen WZ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):311–4
Occasional case reports/communications from the international radiation oncology community [letter] Furong Z. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1655–6
Nasopharyngeal carcinoma in Saudi Arabia: a retrospective study of 166 cases treated with curative intent. Laramore GE, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov; 15(5):1119–27
Comparison of continuous and split-course radiotherapy for nasopharyngeal carcinoma. Luo RX, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):307–10
Management of local residual primary lesion of nasopharyngeal carcinoma (NPC): are higher doses beneficial? Yan JH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1465–9
Radiation therapy of nasopharyngeal carcinoma: prognostic factors based on a 10-year follow-up of 1302 patients. Zhang EP, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):301–5
Intracavitary radiation treatment of nasopharyngeal carcinoma by the high dose rate afterloading technique. Zhang YW, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):315–8
Brainstem auditory evoked potentials after irradiation of nasopharyngeal carcinoma—report on two cases with myelopathy of the brainstem. Lau SK, et al. **J Laryngol Otol** 1988 Dec;102(12):1142–6
Effects of radiation therapy on neuropsychological functioning in patients with nasopharyngeal carcinoma. Lee PW, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):488–92
Temporal lobe and hypothalamic-pituitary dysfunctions after radiotherapy for nasopharyngeal carcinoma: a distinct clinical syndrome. Woo E, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1302–7
Nasopharyngeal carcinoma in India: end-result analysis (1980–1984). Koppikar SB, et al. **J Surg Oncol** 1988 Nov; 39(3):179–82
The importance of the poststyloid space in the treatment of nasopharyngeal carcinoma. De Renzis C, et al. **Rays** 1987 Sep–Dec;12(3):95–9
[Radiotherapy of nasopharyngeal carcinoma—analysis of 1379 patients] Qin DX, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):217–9 (Eng. Abstr.) (Chi)
[Analysis of radiotherapeutic effects on nasopharyngeal carcinoma extending beyond the nasopharynx with damage of the cranial nerve and destruction of the base of skull] Zhang YW. **Chung Hua I Hsueh Tsa Chih** 1989 Jan; 69(1):41–3 (Chi)
[Cis-diamminedichloroplatinum (CDDP)-radiation therapy of an advanced nasopharyngeal carcinoma] Chatani M, et al. **Gan No Rinsho** 1989 May;35(6):717–21 (Eng. Abstr.) (Jpn)
[Radiotherapy of nasopharyngeal carcinoma—optimization by histological type and extent of the disease] Inakoshi H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1142–52 (Eng. Abstr.) (Jpn)
[Statistical data on results of radiotherapy and survival of patients with cancer of the nasopharynx] Bykov VL. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):61–3 (Rus)

SURGERY

Surgical experience with juvenile nasopharyngeal angiofibroma. Maharaj D, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):269–72
Surgical management of nasopharyngeal angiofibroma involving the cavernous sinus. Close LG, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1091–5
Osteotomy at the Le Fort I level. A versatile procedure. Wood GD, et al. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):33–8
Results of surgical management of nasopharyngeal angiofibroma. The Cleveland Clinic experience, 1977–1986. Roberts JK, et al. **Cleve Clin J Med** 1989 Jul–Aug; 56(5):529–33
Benign nasopharyngeal teratomas in the neonate. Clark DP, et al. **Int J Pediatr Otorhinolaryngol** 1988 Dec;16(3):219–24
Nasopharyngeal angiofibroma: (a nine-year experience). Tandon DA, et al. **J Laryngol Otol** 1988 Sep;102(9):805–9
Nasal and nasopharyngeal paraganglioma. Kuhn JA, et al. **J Surg Oncol** 1989 Jan;40(1):38–45 (27 ref.)
The surgical management of extensive nasopharyngeal angiofibromas with the infratemporal fossa approach. Andrews JC, et al. **Laryngoscope** 1989 Apr;99(4):429–37
Surgical management of recurrent nasopharyngeal carcinoma after radiation failure at the primary site. Fee WE Jr, et al. **Laryngoscope** 1988 Nov;98(11):1220–6
Lateral skull base surgery for cancer. Krespi YP. **Laryngoscope** 1989 May;99(5):514–24
[Salvage surgery for cervical residual and recurrent lesions of nasopharyngeal carcinoma after radiotherapy] Ma DB. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):296–8 (Eng. Abstr.) (Chi)
[Surgical treatment of angiofibroma of the rhinopharynx] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:41–61 (Eng. Abstr.) (Ita)
[Surgical approach to rhinopharyngeal fibroma. Critical review] Busca GP, et al. **Minerva Stomatol** 1988 Jul; 37(7):569–74 (52 ref.) (Eng. Abstr.) (Ita)
[Nasopharyngeal teratoma in a newborn infant] Gurin MA. **Vestn Otorinolaringol** 1988 May–Jun;(3):70–1 (Rus)
[Contemporary surgery of angiofibroma] Sánchez Marle JF, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):481–92 (Eng. Abstr.) (Spa)

THERAPY

Adjuvant chemotherapy for advanced nasopharyngeal carcinoma in childhood. Kim TH, et al. **Cancer** 1989 May 15;63(10):1922–6 (33 ref.)
Improved results in the treatment of nasopharyngeal carcinoma using combined radiotherapy and chemotherapy. Tsujii H, et al. **Cancer** 1989 May 1; 63(9):1668–72
Effect of anticancer drugs and hyperthermia on nasopharyngeal carcinoma cell line in vitro. Ha DK, et al. **Cancer Lett** 1989 May;45(2):103–7
Pediatric nasopharyngeal carcinoma: long term follow-up of 29 patients. Pao WJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):299–305
A clinical study of 407 cases of nasopharyngeal carcinoma in Hong Kong. Teo P, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):515–30
Chinese herb "destagnation" series I: Combination of radiation with destagnation in the treatment of nasopharyngeal carcinoma (NPC): a prospective randomized trial on 188 cases. Xu GZ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):297–300
Recombinant interferon-gamma in the treatment of recurrent nasopharyngeal carcinoma. Dimery IW, et al. **J Biol Response Mod** 1989 Jun;8(3):221–6
Adjuvant PSK immunotherapy in patients with carcinoma of the nasopharynx. Go P, et al. **J Int Med Res** 1989 Mar–Apr;17(2):141–9
Treatment options for angiofibroma. Cuyler JP. **J Otolaryngol** 1988 Aug;17(5):214–8
Pre-operative embolization of naso-pharyngeal angiofibromas. Report of 58 cases. Garcia-Cervigon E, et al. **Neuroradiology** 1988;30(6):556–60
[Duokangjiasu combined with radiotherapy in the treatment of 32 nasopharyngeal carcinoma (NPC) patients] Li QQ. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):299–300 (Eng. Abstr.) (Chi)

NASOPHARYNGITIS see under **PHARYNGITIS**

NASOPHARYNX

Domiciliary use of nasopharyngeal intubation for obstructive sleep apnoea in a child with mucopolysaccharidosis. Steven IM. **Anaesth Intensive Care** 1988 Nov;16(4):493–4
Unusual complication of nasopharyngeal intubation [letter] Smith WD, et al. **Anaesthesia** 1989 Jul;44(7):615–6
Topical nasopharyngeal anaesthesia with vasoconstriction in preeclampsia–eclampsia. Mokriski BK, et al. **Can J Anaesth** 1988 Nov;35(6):641–3
Treatment of the obstructive sleep apnea syndrome using a nasopharyngeal tube. Nahmias JS, et al. **Chest** 1988 Dec; 94(6):1142–7
Reliability of flexible fiberoptic nasopharyngoscopy for evaluation of velopharyngeal function in a clinical population. D'Antonio LL, et al. **Cleft Palate J** 1989 Jul; 26(3):217–25; discussion 225
Nasopharyngeal neoplasms and their association with adult onset otitis media with effusion. Dempster JH, et al. **Clin Otolaryngol** 1988 Oct;13(5):363–5
Nasopharyngeal EEG recording in psychiatric patients. Gupta BK, et al. **J Clin Psychiatry** 1989 Jul;50(7):262–4
[A signet ring of the nasopharynx in a 3-year-old child] Sabirova MM, et al. **Vestn Otorinolaringol** 1988 Nov–Dec; (6):64 (Rus)

ABNORMALITIES

Prometaphase chromosomes in the tricho-rhino-phalangeal syndrome type I. Yamamoto Y, et al. **Am J Med Genet** 1989 Apr;32(4):524–7

ANATOMY & HISTOLOGY

Relationships of changes in craniofacial morphology, head posture, and nasopharyngeal airway size following mandibular osteotomy. Wenzel A, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):138–43
Effect of nasal airway positive pressure on upper airway size and configuration. Kuna ST, et al. **Am Rev Respir Dis** 1988 Oct;138(4):969–75
Changes in head posture and nasopharyngeal airway following surgical correction of mandibular prognathism. Wenzel A, et al. **Eur J Orthod** 1989 Feb;11(1):37–42

CYTOLOGY

The difference in tumorigenicity between Epstein-Barr virus (EBV) genome-positive and genome-negative epithelial hybrid cell lines derived from the human nasopharynx. Takimoto T, et al. **Laryngoscope** 1988 Dec;98(12):1334–8

DRUG EFFECTS

Effects of vasodilators on rates of change of nasopharyngeal temperature and systemic vascular resistance during

cardiopulmonary bypass in anaesthetized dogs. Li DM, et al. **Aust N Z J Surg** 1988 Apr;58(4):327–33

IMMUNOLOGY

IgD in nasopharyngeal secretions and tonsils from otitis-prone children. Sørensen CH, et al. **Clin Exp Immunol** 1988 Jul;73(1):149–54

Whooping cough diagnosis: a clinical evaluation of complementing culture and immunofluorescence with enzyme-linked immunosorbent assay of pertussis immunoglobulin A in nasopharyngeal secretions. Campbell PB, et al. **J Med Microbiol** 1988 Dec;27(4):247–54

Antigen detection in the diagnosis of viral infections. Hietala J, et al. **Scand J Infect Dis** 1988;20(6):595–9

[Cytotoxic effector cells specific for Epstein-Barr nuclear antigen positive nasopharyngeal hybrid cells are present in patients with infectious mononucleosis] Furukawa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov; 91(11):1831–6 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

The bacterial flora of the nasopharynx, with special reference to middle ear pathogens. A quantitative study in twenty children. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):122–5

Colonization of middle ear pathogens in the nasopharyngeal opening of the Eustachian tube during secretory otitis media. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):104–10

Otitis media with effusion and the nasopharynx. A bacteriological and immunological study. Kurono Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:214–7

Nasopharyngeal lymphoid tissue—a threat to the middle ear? Rynnel-Dagöö B, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:208–9

Adenoids and otitis media with effusion: nasopharyngeal flora. Tomonaga K, et al. **Am J Otolaryngol** 1989 May–Jun; 10(3):204–7

Evaluation of single-dose ciprofloxacin in the eradication of Neisseria meningitidis from nasopharyngeal carriers. Dworzack DL, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1740–1

Nasopharyngeal culture with quantitative analysis of pathogenes in chronic otitis media with effusion. Effects on pathogen yield of different swabs and transport methods. Hemlin C, et al. **APMIS** 1989 Jul;97(7):606–10

Epstein-Barr virus infection in cultured non-malignant epithelial cells from human nasopharyngeal mucosa. Albeck H, et al. **Arch Otorhinolaryngol** 1989;246(3):142–6

Increased bacterial binding to respiratory epithelial cells in vitamin A deficiency. Chandra RK. **BMJ** 1988 Oct 1; 297(6652):834–5

Comparison of the Abbott and Ortho enzyme immunoassays and cell culture for the detection of respiratory syncytial virus in nasopharyngeal specimens. Christensen ML, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):245–50

Methods for isolation of Bordetella pertussis from patients with whooping cough. Hoppe JE. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):616–20 (29 ref.)

Direct plating versus use of transport medium for detection of Bordetella species from nasopharyngeal swabs [letter] Hoppe JE, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar; 8(3):264–5

Failure of the sterile air-flow component of a protected environment detected by demonstration of Chaetomium species colonization of four consecutive immunosuppressed occupants. Woods GL, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):451–6

Nasopharyngeal swabs and nasopharyngeal aspirates equally effective for the diagnosis of viral respiratory disease in hospitalized children. Frayha H, et al. **J Clin Microbiol** 1989 Jun;27(6):1387–9

Recovery of Bordetella pertussis from nasopharyngeal swabs [letter] Hoppe JE. **J Clin Microbiol** 1989 Mar;27(3):595–6

Effects of transport temperature and medium on recovery of Bordetella pertussis from nasopharyngeal swabs. Morrill WE, et al. **J Clin Microbiol** 1988 Sep;26(9):1814–7

Evaluation of the Abbott TESTPACK RSV enzyme immunoassay for detection of respiratory syncytial virus in nasopharyngeal swab specimens. Swierkosz EM, et al. **J Clin Microbiol** 1989 Jun;27(6):1151–4

Detection of respiratory syncytial virus in nasopharyngeal secretions by DNA-RNA hybridization. Van Dyke RB, et al. **J Clin Microbiol** 1989 Aug;27(8):1739–43

Time-resolved fluoroimmunoassay compared with virus isolation for rapid detection of respiratory syncytial virus in nasopharyngeal aspirates. Waris M, et al. **J Clin Microbiol** 1988 Dec;26(12):2581–5

The nasopharyngeal bacterial flora in the sudden infant death syndrome. Telford DR, et al. **J Infect** 1989 Mar; 18(2):125–30

Nasopharyngeal bacterial flora before and after adenoidectomy. Talaat AM, et al. **J Laryngol Otol** 1989 Apr;103(4):372–4

Effect of smoking on meningococcal carriage. Stuart JM, et al. **Lancet** 1989 Sep 23;2(8665):723–5

Rapid detection of respiratory syncytial virus in nasopharyngeal secretions by immunofluorescence and ELISA does not justify discontinuation of virus isolation. Percivalle E, et al. **Microbiologica** 1989 Jul;12(3):203–13

Bacterial flora in the nasopharynx and nasal cavity of healthy young men. Ylikoski J, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(1):50–5

Epstein-Barr virus DNA in nasopharyngeal biopsies. Zhang HY, et al. **Virus Res** 1989 Jan;12(1):53–9

[Bacterial colonization of the upper respiratory tract of healthy day care children] Ritter E, et al. **Z Gesamte Hyg** 1988 Oct;34(10):585–8 (Eng. Abstr.) **(Ger)**

[Streptococci of the nasopharynx in healthy persons] Kolotilova LV, et al. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):64–8 (Eng. Abstr.) **(Rus)**

[Prevention of dysbacteriosis in the early neonatal period using a pure culture of acidophilic bacteria] Moshchich PS, et al. **Pediatriia** 1989;(3):25–30 (Eng. Abstr.) **(Rus)**

[Molecular hybridization of nucleic acids as a method for the laboratory diagnosis of influenza in model experiments on cell cultures and in research on nasopharyngeal smears obtained from patients] Pliusnin AZ, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):19–23 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Use of deer models to study larviposition by wild nasopharyngeal bot flies (Diptera: Oestridae). Anderson JR. **J Med Entomol** 1989 May;26(3):234–6

PATHOLOGY

Ciliocytophthoria (ccp) in nasopharyngeal smear from patients with acute tonsillitis. Sasaki Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:175–7

Video nasopharyngoscopy: a comparison of fiberscopic, telescopic, and microscopic documentation. Yanagisawa E, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):15–20

The skull base and nasopharynx in Down's syndrome in relation to hearing impairment. Brown PM, et al. **Clin Otolaryngol** 1989 Jun;14(3):241–6

Oncocytic cystic lesions of the upper respiratory tract. Ophir D, et al. **Ear Nose Throat J** 1989 Mar;68(3):237–8, 240, 243–4

Naso- and oropharyngeal dimensions in children with obstructive sleep apnea. Brodsky L, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb;17(1):1–11

MRI of the nasopharynx. Braun IF. **Radiol Clin North Am** 1989 Mar;27(2):315–30 (18 ref.)

[MRI of the nasopharynx with Gd-DTPA: its value and differential diagnostic criteria] Vogl T, et al. **ROFO** 1989 May;150(5):516–22 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

The use of videonasopharyngoscopy for biofeedback therapy in adults after pharyngeal flap surgery. Witzel MA, et al. **Cleft Palate J** 1989 Apr;26(2):129–34; discussion 135

Importance of functional integrity of the upper airways. Szereda-Przestaszewska MA. **Mater Med Pol** 1988 Oct–Dec;20(4):224–6 (38 ref.)

[Measurement of pH of the rhinopharynx in children with gastroesophageal reflux] Contencin P, et al. **Presse Med** 1989 Jan 7–14;18(1):13–6 (Eng. Abstr.) **(Fre)**

[Recording of subcortical somatosensory evoked potentials using nasopharyngeal electrodes—a study in sedated patients] Wagner W. **EEG EMG** 1988 Sep;19(3):141–7 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

The measurement of inspiratory muscle strength by sniff esophageal, nasopharyngeal, and mouth pressures. Koulouris N, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):641–6

Water vapour and temperature dynamics in the upper airways of normal and CF subjects. Primiano FP Jr, et al. **Eur Respir J** 1988 May;1(5):407–14

Aging of the upper airway and the senses of taste and smell. Leopold DA, et al. **Otolaryngol Head Neck Surg** 1989 Apr; 100(4):287–9

RADIOGRAPHY

Comparison of multi-view videofluoroscopy and nasopharyngoscopy in the assessment of velopharyngeal insufficiency. Stringer DA, et al. **Cleft Palate J** 1989 Apr; 26(2):88–92

Effect of respiration on nasopharyngeal radiographs when assessing adenoidal enlargement. Britton PD. **J Laryngol Otol** 1989 Jan;103(1):71–3

The swallowed foreign body: is it in the nasopharynx? Parker AJ, et al. **Postgrad Med J** 1988 Mar;64(749):201–3

[Computed tomography of tumors in the infratemporal, parapharyngeal space and pterrgopalatine fossa] Wang DY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):90–1, 127 (Eng. Abstr.) **(Chi)**

[Radiography of the nasopharynx and pharynx] Tada S, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1433–7 **(Jpn)**

[Measurement of adenoid tissue in the lateral plate of the nasopharynx. Clinico-radiologic correlation] López-Marure EN, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):409–13 (Eng. Abstr.) **(Spa)**

SECRETION

Asphyxiation by glottic impaction of nasal secretions. Leadbeatter S, et al. **Am J Forensic Med Pathol** 1989 Sep; 10(3):235–8

The release of leukotrienes in the respiratory tract during infection with respiratory syncytial virus: role in obstructive airway disease. Volovitz B, et al. **Pediatr Res** 1988 Oct;24(4):504–7

SURGERY

Sublabial rhinotomy with septal transfixion as an approach to the nasal fossa, paranasal sinuses and nasopharynx. Bingham BJ, et al. **J Laryngol Otol** 1989 Jul;103(7):661–3

The lateral facial approach to the nasopharynx and infratemporal fossa. Gates GA. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):321–5

ULTRASTRUCTURE

Ultrastructural and immunoelectron-microscopic study of the human pharyngeal hypophysis. Puy LA, et al. **Acta Anat (Basel)** 1989;135(2):111–8

Study of the nasopharynx in man by scanning electron microscopy. Gulisano M, et al. **J Laryngol Otol** 1988 Dec; 102(12):1102–6

NATAL TEETH see under **TOOTH, DECIDUOUS**

NATAMYCIN see **PIMARICIN**

NATIONAL ACADEMY OF SCIENCES (U.S.) see under **ORGANIZATIONS**

NATIONAL CENTER FOR HEALTH CARE TECHNOLOGY see under **UNITED STATES PUBLIC HEALTH SERVICE**

NATIONAL CENTER FOR HEALTH STATISTICS (U.S.) see under **UNITED STATES PUBLIC HEALTH SERVICE**

NATIONAL HEALTH INSURANCE, NON-U.S. see **NATIONAL HEALTH PROGRAMS**

NATIONAL HEALTH INSURANCE, UNITED STATES

Will employers accept a national health plan? Droste T. **Hospitals** 1989 May 20;63(10):81

McCarthy outlines standards for health reform. McCarthy C. **Hospitals** 1989 Aug 20;63(16):25–30, 32

The rediscovery of the National Health Program by the Democratic Party of the United States: a chronicle of the Jesse Jackson 1988 campaign. Navarro V. **Int J Health Serv** 1989;19(1):1–18

Ideology or self-interest? Medical students' attitudes toward national health insurance. Sudit M. **J Health Soc Behav** 1988 Dec;29(4):376–84

A consumer-choice health plan for the 1990s. Universal health insurance in a system designed to promote quality and economy (2). Enthoven A, et al. **N Engl J Med** 1989 Jan 12;320(2):94–101

Universal health insurance: its time has come [editorial] Relman AS. **N Engl J Med** 1989 Jan 12;320(2):117–8

The National Leadership Commission's health care plan [editorial] Relman AS. **N Engl J Med** 1989 Feb 2; 320(5):314–5

It is time for universal access, not universal insurance. Todd JS. **N Engl J Med** 1989 Jul 6;321(1):46–7

ECONOMICS

A national health program for the United States. A physicians' proposal. Himmelstein DU, et al. **N Engl J Med** 1989 Jan 12;320(2):102–8

LEGISLATION & JURISPRUDENCE

Principles for a national health program: a framework for analysis and development. Brown ER. **Milbank Q** 1988; 66(4):573–617

A consumer-choice health plan for the 1990s. Universal health insurance in a system designed to promote quality and economy (1). Enthoven A, et al. **N Engl J Med** 1989 Jan 5;320(1):29–37

METHODS

A national medical care program: review and synthesis of past proposals. Cyphert ST, et al. **J Public Health Policy** 1988 Winter;9(4):456–72

ORGANIZATION & ADMINISTRATION

The Jackson National Health Program. Navarro V, et al. **Int J Health Serv** 1989;19(1):19–44

Two plans for universal health insurance [letter] **N Engl J Med** 1989 Jul 13;321(2):114–9

TRENDS

National health insurance in America—can we practice with it? Can we continue to practice without it? Grumbach K. **West J Med** 1989 Aug;151(2):210–6 (69 ref.)

NATIONAL HEALTH PLANNING INFORMATION CENTER see under **UNITED STATES HEALTH RESOURCES AND SERVICES ADMINISTRATION**

NATIONAL HEALTH POLICY see HEALTH POLICY

NATIONAL HEALTH PROGRAMS

Policies and programs in nutrition and physical fitness in Australia. Dwyer T. **Am J Clin Nutr** 1989 May;49(5 Suppl):1030–4

Policies and programs in nutrition and physical fitness: framework for a national physical activity policy. Edwards RA. **Am J Clin Nutr** 1989 May;49(5 Suppl):934–6

Policies and programs in nutrition and physical fitness in Italy. Fidanza F. **Am J Clin Nutr** 1989 May;49(5 Suppl):1035–8

United States government policies and programs in nutrition and physical fitness. Hayes AE. **Am J Clin Nutr** 1989 May; 49(5 Suppl):1039–41

Policies and programs in nutrition and physical fitness in Venezuela. Lara-Pantin E. **Am J Clin Nutr** 1989 May;49(5 Suppl):1057–9

Health care for the homeless in a national health program. Reuler JB. **Am J Public Health** 1989 Aug;79(8):1033–5

Recommendations for treatment of high blood cholesterol. The National Cholesterol Education Program Adult Treatment Panel. Ernst ND, et al. **Bol Asoc Med P R** 1988 Jul;80(7):258–61

Royal mounted bunk [editorial] **Can Med Assoc J** 1989 Aug 15;141(4):341

Second opinion [letter] Dubas S. **Can Med Assoc J** 1989 Aug 15;141(4):278

Life in Yorkton before Medicare came along [letter] Robertson WJ. **Can Med Assoc J** 1989 Aug 1;141(3):188

A fight worth fighting: reflections on the National Cancer Program. Ultmann JE. **Cancer Invest** 1988;6(3):357–60

Healthy Cities (Australia) Project: issues of evaluation for the new public health. Baum F, et al. **Community Health Stud** 1989;13(2):140–9

Guidelines for research practice in Australia: NHMRC Statement & Professional Codes. Berglund CA, et al. **Community Health Stud** 1989;13(2):121–9

A survey of pre-school vaccination programmes in England and Wales. Begg NT, et al. **Community Med** 1988 Nov; 10(4):344–50

Canada's medical care system [letter] Czarsty JC. **Conn Med** 1989 Jul;53(7):440

Socialized medicine or state-ruled medicine: the Venezuelan dilemma. Morgado PJ. **Dis Colon Rectum** 1989 Jul; 32(7):615–7

Family practice in Canada. Perkin RL. **Fam Med** 1989 Jul-Aug;21(4):248–50, 310–1

Five years of hanseniasis control activities in the Cape Verde Islands based on the OMSLEP system. Loretti A. **Hansenol Int** 1985;10(1–2):38–52

Test of the prevention of blindness health education programme for Ethiopian primary schools. De Sole G, et al. **Int Ophthalmol** 1988 Feb;11(4):255–9

Refining our cholesterol awareness [editorial] Allen TW. **J Am Osteopath Assoc** 1989 Jan;89(1):35, 38

National strategy for control of Japanese encephalitis. Narasimham MV. **J Commun Dis** 1988 Mar;20(1):18–21

Strategy of malaria control at cross roads with particular reference to India. Sharma MI. **J Commun Dis** 1988 Jun; 20(2):93–103

The global implementation of ORT. Northrup R. **J Diarrhoeal Dis Res** 1987 Dec;5(4):265–9

Resolving the cost/access conflict: the case for a national health program. Woolhandler S, et al. **J Gen Intern Med** 1989 Jan-Feb;4(1):54–60

National Cholesterol Education Program: report of the expert panel on the detection, evaluation, and treatment of high blood cholesterol in adults. LaRosa JH. **J Occup Med** 1988 Oct;30(10):826–9

What should be done about the uninsured poor? [letter; comment] Navarro V. **JAMA** 1989 Jul 14;262(2):209–10. **Comment on:** JAMA 1988 Dec 2;260(21):3176–7

NHS white-paper [letter] **Lancet** 1989 Mar 11;1(8637):558–9

UK obstetrics and the new health service [editorial] [see comments] **Lancet** 1989 Jun 10;1(8650):1303–4. **Comment in:** Lancet 1989 Jul 15;2(8655):162

Called to account. A radiologist. **Lancet** 1989 Mar 18; 1(8638):605–7

Called to account. Surgery. Orthopedics. **Lancet** 1989 Apr 1;1(8640):714–6

Called to account. Obstetrics. Pediatrics. **Lancet** 1989 Mar 25;1(8639):661–2

Policies, pills, and political will: a critique of policies to improve the health status of ethnic minorities. Ahmad WI. **Lancet** 1989 Jan 21;1(8630):148–50

NHS white-paper and medical education [letter] Allinson A, et al. **Lancet** 1989 Apr 22;1(8643):907

Differential capitation rates [letter] Frankford R. **Lancet** 1989 May 27;1(8648):1204

Impact of an essential drugs programme on availability and rational use of drugs. Hogerzeil HV, et al. **Lancet** 1989 Jan 21;1(8630):141–2

Clinical freedom: two lessons for the UK from US experience with privatisation of health care. Lee PR, et al. **Lancet** 1989 Feb 4;1(8632):263–5 (31 ref.)

British diplomas and limited registration [letter] Towers PL. **Lancet** 1989 May 27;1(8648):1204

Wastage among the tall poppies. Best J. **Med J Aust** 1989 Sep 4;151(5):294–7

". . . and repose is taboo'd by anxiety". Dunjey L. **Med J Aust** 1989 Mar 20;150(6):324–5

Controlling health expenditures—the Canadian reality [letter] **N Engl J Med** 1989 Aug 24;321(8):548–50

1988 New Zealand national immunisation survey: methodology. Clements CJ, et al. **N Z Med J** 1989 Jun 28;102(870):320–2

Paying the price of health care. **Nature** 1989 Feb 9; 337(6207):489

Using a national health care data base to determine surgical complications in community hospitals: lumbar discectomy as an example. Ramirez LF, et al. **Neurosurgery** 1989 Aug; 25(2):218–25

The tragedy of infant mortality. Brecht MC. **Nurs Outlook** 1989 Jan-Feb;37(1):18–22

West German health insurance system results in segregated medical care [editorial] Strasser AL. **Occup Health Saf** 1989 May;58(5):30

Canadian medical system [letter] Orient JM. **Perspect Biol Med** 1988 Summer;31(4):614–7

Home care for life-supported persons: the French system of quality control, technology assessment, and cost containment. Goldberg AI. **Public Health Rep** 1989 Jul-Aug;104(4):329–35

Introducing quality assurance in hospitals within the national health system of Kuwait. Banoub SN, et al. **QRB** 1989 Feb;15(2):67–71

Why some countries have national health insurance, others have national health services, and the U.S. has neither. Navarro V. **Soc Sci Med** 1989;28(9):887–98 (47 ref.)

Malaria in Saudi Arabia. Sebai ZA. **Trop Doct** 1988 Oct; 18(4):183–8

More for less. Clancy CM, et al. **Va Med** 1989 Apr;116(4):185

A national health program [letter] **West J Med** 1989 May; 150(5):587–9

Why it's time for a national health program in the United States. Waitzkin H. **West J Med** 1989 Jan;150(1):101–7

Mobilizing media support for health. Abeyagunawardene LN, et al. **World Health Forum** 1989;10(1):30–1

Planning for health in Mali. Konaté S. **World Health Forum** 1988;9(1):46–9

[The tasks and activities of cardiology in fulfilling the National Program for Controlling Socially Significant Diseases in Bulgaria] Tomov I. **Vutr Boles** 1988;27(5):1–9 (36 ref.) **(Bul)**

[Personal experience with implementation of the nationwide program in cardiology in the West Bohemia Region] Hüla J, et al. **Cesk Zdrav** 1989 May;37(5):224–7 (Eng. Abstr.) **(Cze)**

[Evaluation of coverage under the national plan for measles and rubella vaccination based on a sample of schools] Goulet V, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):43–8 (Eng. Abstr.) **(Fre)**

[Integration of malignant tumors of the head and neck region into the strategy of cancer control in the GDR] Löbe LP, et al. **Arch Geschwulstforsch** 1989;59(1):23–9 (Eng. Abstr.) **(Ger)**

[Comparison of medical care of inpatients aged 70 or more with different medical insurance] Nishigaki C, et al. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):741–8 (Eng. Abstr.) **(Jpn)**

[Mass screening for endometrial cancer according to the Law of Health for the Elderly] Kashimura M, et al. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):155–61 (Eng. Abstr.) **(Jpn)**

[Brazil: the problem of human resources in the health district] de Campos FE. **Educ Med Salud** 1989 Apr-Jun; 23(2):168–81 **(Por)**

[Ambulatory care of the population and its role in the mastery of practical skills by subordinate surgeons] Mazurik MF. **Klin Khir** 1989;(5):52–3 **(Rus)**

[A program for the prevention of diabetes mellitus in Lithuania] Danis IuK, et al. **Vestn Akad Med Nauk SSSR** 1989;(5):39–43 (Eng. Abstr.) **(Rus)**

[National program of prenatal diagnosis] Benavides A, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:192–4 **(Spa)**

[Venezuela: alternative focusing of teaching and service in the national health system] Ferrer de Sánchez M, et al. **Educ Med Salud** 1988;22(2):169–79 (Eng. Abstr.) **(Spa)**

[Responsibility of the State for the health care of the population (editorial)] Viel B. **Rev Med Chil** 1988 Jan; 116(1):61–3 (Eng. Abstr.) **(Spa)**

ECONOMICS

Conflict over drug policy in Australia [editorial] Louis WJ. **BMJ** 1989 Feb 25;298(6672):472–3

O'Brien-Bell leaves office with his concerns about two-tier system growing [interview by Terry Moran] O'Brien-Bell J. **Can Med Assoc J** 1989 Aug 15;141(4):330, 332

Epidemiological model and cost-effectiveness analysis of tuberculosis treatment programmes in Indonesia. Joesoef MR, et al. **Int J Epidemiol** 1989 Mar;18(1):174–9

Fee controls as cost control: tales from the frozen North. Barer ML, et al. **Milbank Q** 1988;66(1):1–64

Controlling health expenditures—the Canadian reality. Evans RG, et al. **N Engl J Med** 1989 Mar 2;320(9):571–7

[The financing of health in Mexico] Valdés-Olmedo C. **Salud Publica Mex** 1988 Nov-Dec;30(6):815–26 (Eng. Abstr.) **(Spa)**

HISTORY

The politics of birth control. Rosoff JI. **Fam Plann Perspect** 1988 Nov-Dec;20(6):312–20, 297

LEGISLATION & JURISPRUDENCE

Medical politics and Canadian Medicare: professional response to the Canada Health Act. Stevenson HM, et al. **Milbank Q** 1988;66(1):65–104

ORGANIZATION & ADMINISTRATION

Multipurpose arthritis centers. A ten-year progress report. Singsen BH, et al. **Arthritis Rheum** 1988 Dec; 31(12):1574–83

Canada's health care legislation: good intentions, bad laws. Coffey JE. **Can Med Assoc J** 1989 Feb 1;140(3):316–7

Caring for the elderly and Malta's National Health Scheme. Agius E. **Hastings Cent Rep** 1989 Jul-Aug;SPEC Suppl:7–8

Recent developments in the Grenada mental health program. Fisher FD, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):980–5

Impact of multidrug therapy on leprosy in Baroda district (Gujarat). Chopra NK, et al. **Indian J Lepr** 1989 Apr; 61(2):179–89

Leprosy control based on multi drug treatment in India. Rao CK, et al. **Indian J Lepr** 1988 Apr;60(2):290–302

The need for a national health program: thoughts on examining the Jackson National Health Program. Miller CA. **Int J Health Serv** 1989;19(3):553–6

The feasibility of a national health program. Roemer MI. **Int J Health Serv** 1989;19(3):549–51

Free care: a quantitative analysis of health and cost effects of a national health program for the United States. Woolhandler S, et al. **Int J Health Serv** 1988;18(3):393–9

Community mental health care in Grenada. DeVooght J, et al. **Int Nurs Rev** 1989 Jan-Feb;36(1):22–4

It's time for Canada to finish Medicare's job. Conway JF. **J Public Health Policy** 1989 Summer;10(2):157–60

Socializing health services in Greece. Kent GD. **J Public Health Policy** 1989 Summer;10(2):222–45

Lessons for national health systems from small-scale projects: a case study from Tanzania. Twaha A, et al. **J Trop Pediatr** 1989 Feb;35(1):40–3

Curtains up on the NHS review [editorial] **Lancet** 1989 Feb 4;1(8632):247–9

The new GP contract: will patients suffer? [editorial] **Lancet** 1989 Apr 29;1(8644):936–8

Working for which patients and at what cost? Bevan G, et al. **Lancet** 1989 Apr 29;1(8644):947–9

Medical defence and crown indemnity. Brahams D. **Lancet** 1989 Apr 8;1(8641):795

UK health education [letter] Maitland D. **Lancet** 1989 Jun 10;1(8650):1330–1

Adverse selection: the Achilles heel of the NHS reforms. Scheffler R. **Lancet** 1989 Apr 29;1(8644):950–2

Rationing of medical care [letter] Shenkin HA. **Lancet** 1989 Jun 17;1(8651):1392

Irish health services [letter] Tormey WP. **Lancet** 1989 Aug 5;2(8658):331

Health inequalities in Britain and Sweden. Vågerö D, et al. **Lancet** 1989 Jul 1;2(8653):35–6

Innovation within the federal healthcare services: initiatives and promises. Lambert WJ Jr. **Milit Med** 1989 Jul; 154(7):341–5

American medicine at the crossroads: signs from Canada [editorial] Relman AS. **N Engl J Med** 1989 Mar 2; 320(9):590–1

Community care [editorial] **Public Health** 1988 Jul; 102(4):305–6

From pilot project to national implementation: experiences from the North Karelia Project. Nissinen A, et al. **Scand J Prim Health Care Suppl** 1988;1:49–56

Community-based health care in Kibwezi, Kenya: 10 years in retrospect. Johnson KE, et al. **Soc Sci Med** 1989; 28(10):1039–51

Availability of pharmaceuticals in sub-Saharan Africa: roles of the public, private and church mission sectors. Vogel RJ, et al. **Soc Sci Med** 1989;29(4):479–86

A view from Canada [editorial] Banks PJ. **West J Med** 1989 Aug;151(2):196–7

Lessons from the frozen North. Burrow GN. **West J Med** 1989 Aug;151(2):217–9

National health insurance in America—can we practice with it? Can we continue to practice without it? Grumbach K. **West J Med** 1989 Aug;151(2):210–6 (69 ref.)

The way ahead for district health systems. Newell K. **World Health Forum** 1989;10(1):80–7

[Tuberculosis control programme in Japan] Shimao T. **Kekkaku** 1988 Oct;63(10):677–85 (Eng. Abstr.) **(Jpn)**

[Problems in organizing intensive, short-term antituberculosis chemotherapy in a national program] Anastasatu C, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan-Mar;37(1):5–13 **(Rum)**

[The Canadian national AIDS program] Clayton AJ, et al. **Bol Of Sanit Panam** 1988 Nov-Dec;105(5–6):615–22 (Eng. Abstr.) **(Spa)**

[The overlap of the demand on the National Health System of Mexico: limitations on the interinstitutional integration] González-Block MA. **Salud Publica Mex** 1988 Nov-Dec; 30(6):804–14 (Eng. Abstr.) **(Spa)**

[Health care services in Canada: public financing has a monopoly but there is also a competition among health care providers] Carlsson P, et al. **Lakartidningen** 1989 Mar

15;86(11):937–41 (Swe)

TRENDS

From the Centers for Disease Control. Year 2000 national health objectives. **JAMA** 1989 Oct 13;262(14):1919, 1923
Year 2000 national health objectives. **MMWR** 1989 Sep 22; 38(37):629–33

NATIONAL HEALTH SERVICE, BRITISH see **STATE MEDICINE**

NATIONAL HEALTH SERVICE CORPS see **MEDICALLY UNDERSERVED AREA**

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH see under **CENTERS FOR DISEASE CONTROL (U.S.)**

NATIONAL INSTITUTE OF MENTAL HEALTH (U.S.) see under **UNITED STATES ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION**

NATIONAL INSTITUTES OF HEALTH (U.S.)

A tribute to the National Institute of Health. Moloney WC. **Adv Exp Med Biol** 1988;241:7–8
Infarcts of undetermined cause: the NINCDS Stroke Data Bank. Sacco RL, et al. **Ann Neurol** 1989 Apr;25(4):382–90
Interrater reliability of the NIH stroke scale. Goldstein LB, et al. **Arch Neurol** 1989 Jun;46(6):660–2
The CRISP system: an untapped resource for biomedical research project information. Collins KA. **Bull Med Libr Assoc** 1989 Jan;77(1):8–14
Therapy: state-of-the-art assessment of quality. The National Cancer Institute perspective. Ford LG. **Cancer** 1989 Jul 1;64(1 Suppl):219–222; discussion 240–3
The National Cancer Institute's Smoking, Tobacco, and Cancer Program. Cullen JW. **Chest** 1989 Jul;96(1 Suppl):9S–13S
Report of the AFCR Public Policy Committee: current issues in public policy. **Clin Res** 1988 Sep;36(5):507–9
Revitalizing the federal commitment in support of biomedical research. Hathaway DR. **Clin Res** 1988 Sep;36(5):475–82
Testimony of the American Federation for Clinical Research concerning the 1990 budget for the National Institutes of Health before the Subcommittee on Labor, Health and Human Services, and Education Committee on Appropriations United States House of Representatives. Hsueh WA. **Clin Res** 1989 Sep;37(3):506–9
Research programs of the National Heart, Lung, and Blood Institute. Bethesda, Maryland, U.S.A. Roth CA, et al. **Cor Vasa** 1989;31(2):81–9
NIH funding [letter] Dillon PF, et al. **FASEB J** 1989 Jun; 3(8):1994
Recent actions related to scientific misconduct. Farnham P. **FASEB J** 1988 Nov;2(14):2937–8
Rating intervals: an experiment in peer review. Green JG, et al. **FASEB J** 1989 Jun;3(8):1987–92
NIH funding [letter] Mandel HG, et al. **FASEB J** 1989 Sep; 3(11):2322–3
IOM study finds NIH's intramural program 'invaluable'. Urges some administrative changes. Mazzaschi A. **FASEB J** 1989 Feb;3(2):115–6
The NIH training grant program. A program in trouble? Mazzaschi A. **FASEB J** 1989 May;3(7):1797–8
Growth of digestive diseases research funds and investigators supported by the National Institutes of Health. Kalser SC, et al. **Gastroenterology** 1989 Aug;97(2):482–7
Federal support for digestive diseases research [editorial] Trier JS. **Gastroenterology** 1989 Aug;97(2):504–5
Don't give up on your grant application [letter] Kalser SC. **Hepatology** 1989 May;9(5):796–7
Giving credit [letter] Hine MK. **J Am Dent Assoc** 1988 Sep; 117(3):412
Summary of Institute of Medicine study of resources for clinical investigation. Antman KH. **J Natl Cancer Inst** 1989 Mar 15;81(6):402–3
Genome project to expand intramural participation [news] Kumar S. **J Natl Cancer Inst** 1989 Aug 16;81(16):1212–3
International activities of the National Cancer Institute. Masnyk IJ. **J Natl Cancer Inst** 1988 Nov 2;80(17):1366–72
Drawing medical students into research: Hughes program expands [news] Vanchieri C. **J Natl Cancer Inst** 1988 Nov 2;80(17):1358–60
Ingredients of a successful grant application to the National Institutes of Health. Gordon SL. **J Orthop Res** 1989; 7(1):138–41
National Center for Nursing Research. Bullough B. **J Prof Nurs** 1986 Sep–Oct;2(5):270
Fogarty International Center: a resource for international nursing. Glittenberg JE. **J Prof Nurs** 1989 Jan–Feb;5(1):7, 55–6
Research. Evolving clinical nursing research priorities: a national endeavor. Hinshaw AS, et al. **J Prof Nurs** 1988 Nov–Dec;4(6):398, 458–9
The NIH clinician-investigator award: how to write a training grant application. Pollock RE, et al. **J Surg Res** 1989 Jan;46(1):1–3
NIH finds research on fetal tissue "acceptable". **Lancet** 1988 Nov 5;2(8619):1088 (0 ref.)
Rackham Arthritis Research Unit article clarified [letter] Palella TD. **Mich Med** 1989 Apr;88(4):7
Misconduct inquiry. Disputed paper still causing problems [news] Anderson A, et al. **Nature** 1989 May 4;339(6219):3
US congressman attacks NIH investigation [news] Anderson A, et al. **Nature** 1988 Nov 24;336(6197):295
NIH cuts bring in hard times for biomedical researchers [news] Barinaga M. **Nature** 1988 Dec 1;336(6198):414
NIH to end support for electronic network [news] Ezzell C. **Nature** 1989 Jul 13;340(6229):87
NIH guidance is rejected [news] McGourty C. **Nature** 1989 Jul 6;340(6228):7
Changes in misconduct investigation planned [news] Palca J. **Nature** 1989 Mar 16;338(6212):189
NIH delay first gene transfer [news] Palca J. **Nature** 1988 Oct 27;335(6193):754
NIH change procedures for monitoring scientific misconduct [news] Palca J. **Nature** 1989 Feb 16;337(6208):588
NIH on the market [news] Palca J. **Nature** 1988 Nov 10; 336(6195):103
More criticism for NIH over 'summary' cut of grants [news] Shulman S. **Nature** 1989 Jan 26;337(6205):294
National Institutes of Health stop Harvard researchers' grants [news] Shulman S. **Nature** 1988 Dec 8;336(6199):506
US Congress scuttles federal agency salary increases [news] Swinbanks D. **Nature** 1989 Feb 16;337(6208):588
Silent stroke in the NINCDS Stroke Data Bank. Chodosh EH, et al. **Neurology** 1988 Nov;38(11):1674–9
NIH support for the Caribbean Primate Research Center (1975 to present). Whitehair LA. **P R Health Sci J** 1989 Apr;8(1):43–4
A price index for biomedical research and development. Holloway TM, et al. **Public Health Rep** 1989 Jan–Feb; 104(1):11–3
National Institutes of Health and academic radiology: a view from the inside. Doppman JL. **Radiology** 1989 Apr; 171(1):281–2
Back to the bases. Beardsley TM. **Sci Am** 1989 Jan; 260(1):16–7
Who's minding the store? Central gene-research facility is nearly lost in NIH shuffle. Wallich P. **Sci Am** 1989 Oct; 261(4):20, 22
NIDA's role in war on drugs [letter] **Science** 1988 Oct 7; 242(4875):15–6
Stopping the brain drain at NIH [news] Booth W. **Science** 1988 Dec 23;242(4886):1631
NIH scientists agonize over technology transfer [news] Booth W. **Science** 1989 Jan 6;243(4887):20–1
...and grant-getters [news] Byrne G. **Science** 1988 Nov 11; 242(4880):869
NIH holds a science fair [news] [published erratum appears in Science 1989 Jan 13;243(4888):152] Byrne G. **Science** 1988 Nov 4;242(4879):661
Superpay for NIH superstars [news] Culliton B. **Science** 1989 Jun 2;244(4908):1038
Panel backs fetal tissue research [news] Culliton BJ. **Science** 1988 Dec 23;242(4886):1625–6
Abortion: litmus test for NIH director [news] Culliton BJ. **Science** 1989 Oct 6;246(4926):27
NIH delays gene transfer experiment [news] Culliton BJ. **Science** 1988 Nov 11;242(4880):856–7
NIH, Inc.: the CRADA boom [news] Culliton BJ. **Science** 1989 Sep 8;245(4922):1034–6
Jim Watson on the budget [news] Culliton BJ. **Science** 1988 Dec 9;242(4884):1376
Academic search for NCI head [news] Culliton BJ. **Science** 1988 Sep 30;241(4874):1752
Fund-raising and NIH [letter] Glazer RI. **Science** 1989 Apr 14;244(4901):128
Gallo associate subject to investigation [news] Holden C. **Science** 1989 Jul 28;245(4916):350
Ethics in science. NIH grapples with conflict of interest [news] Palca J. **Science** 1989 Jul 7;245(4913):23
Genome projects are growing like weeds [news] Palca J. **Science** 1989 Jul 14;245(4914):131
Conflict over conflict of interest [news] Palca J. **Science** 1989 Sep 29;245(4925):1440
New round in Dingell v. NIH? [news] [published erratum appears in Science 1989 Sep 22;245(4924):1312] Palca J. **Science** 1989 Jul 28;245(4916):349
Budget cuts at NIH [letter] Peak MJ. **Science** 1989 May 12; 244(4905):631
Watson will head NIH Genome Office [news] Roberts L. **Science** 1988 Sep 30;241(4874):1752
National Institutes of Health research support to manpower in pediatric nephrology: an overview. Hirschman GH, et al. **Semin Nephrol** 1989 Mar;9(1):2–4
Children's Inn at NIH [editorial] **W V Med J** 1988 Oct; 84(10):461–2

HISTORY

Historical role of the National Institutes of Health in biomedical research. Badman DG. **Adv Exp Med Biol** 1988; 241:1–5
The 1988 Harry G. Armstrong lecture: contributions of NIH to aerospace medicine. Wyngaarden JB. **Aviat Space Environ Med** 1989 Mar;60(3):271–6
The medical schools of New York and the national enterprise of biomedical research, 1850–1987. Ludmerer KM. **Bull N Y Acad Med** 1988 Apr;64(3):216–36
The impact of the National Institutes of Health on the development of Canadian biomedical research. Friesen HG. **Clin Invest Med** 1988 Aug;11(4):310–4
Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1989 May;118(5):593
NIH centennial: the influence of NIH on dermatology research training. Miller LH, et al. **J Invest Dermatol** 1989 Apr;92(4 Suppl):177S–178S
Establishment of the Caribbean Primate Research Center. Goodwin WJ. **P R Health Sci J** 1989 Apr;8(1):31–2
Cayo Santiago as a part of the laboratory of perinatal physiology (NINDB). Vandenbergh JG, et al. **P R Health Sci J** 1989 Apr;8(1):29–30
NIDR—40 years of research advances in dental health. Sheridan PG. **Public Health Rep** 1988 Sep–Oct; 103(5):493–9
NIH: the good old days [news] Culliton BJ. **Science** 1989 Jun 23;244(4911):1437

MANPOWER

NIH: calling all alumni [news] Culliton BJ. **Science** 1989 Feb 10;243(4892):734

ORGANIZATION & ADMINISTRATION

Research fraud often goes undetected. Holthaus D. **Hospitals** 1988 Nov 5;62(21):87
Do consensus conferences work? A process evaluation of the NIH Consensus Development Program. Wortman PM, et al. **J Health Polit Policy Law** 1988 Fall;13(3):469–98
System of Scientific Advisory Boards at the National Cancer Institute. Rambaut PC, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1365–9
Institute of Medicine panel suggests changes to revitalize National Institutes of Health [news] Marwick C. **JAMA** 1989 Jan 20;261(3):344, 349
Wyngaarden to leave NIH directorship in July [news] Marwick C. **JAMA** 1989 May 26;261(20):2935–6
NIH. Wyngaarden resigns [news] Austin P. **Nature** 1989 May 4;339(6219):6
Latest NIH institute [news] Palca J. **Nature** 1988 Nov 17; 336(6196):191
Scientific misconduct. New office gets going [news] Palca J. **Nature** 1989 Apr 27;338(6218):695
Privatization not the answer to NIH problems [news] Palca J. **Nature** 1988 Dec 22–29;336(6201):701
Recent changes in NIH peer review system. Demsey A. **Physiologist** 1988 Dec;31(6):155–6
Bethesda brain drain. Beardsley TM. **Sci Am** 1988 Jun; 258(6):34
Wyngaarden to leave NIH [news] Culliton BJ. **Science** 1989 Apr 28;244(4903):414
Samuel Broder new head of NCI [news] Culliton BJ. **Science** 1989 Jan 6;243(4887):21
19 say no to NIH job [news] Culliton BJ. **Science** 1989 Jun 30;244(4912):1538
Help wanted: Director, NIH [news] Culliton BJ. **Science** 1989 Sep 15;245(4923):1181
Research resources merger [news] Holden C. **Science** 1988 Nov 4;242(4879):665
Genome planners fear avalanche of red tape [news] [published erratum appears in Science 1989 Jul 28;245(4916):343] Lewin R. **Science** 1989 Jun 30; 244(4912):1543
Office of scientific integrity [letter; comment] Mason JO. **Science** 1989 May 26;244(4907):903–4. **Comment on:** Science 1989 Mar 24;243(4898):1545
NIH, CDC search committees formed [news] Norman C. **Science** 1989 Jun 9;244(4909):1135
Broder picked to head NCI [news] Roberts L. **Science** 1988 Dec 2;242(4883):1239
[National Institute. USA promotes AIDS research with a new Institute (news)] **Fortschr Med** 1988 Aug 20;106(24):13 (Ger)

STANDARDS

NIH restricts university links with industry [news] McGourty C. **Nature** 1989 Sep 21;341(6239):173
Fraud review may be taken from NIH [news] [see comments] Culliton BJ. **Science** 1989 Mar 24;243(4898):1545. **Comment in:** Science 1989 May 26;244(4907):903–4

NATIONAL LIBRARY OF MEDICINE (U.S.)

Preservation activities and needs in U.S. biomedical libraries: a status report. Kirkpatrick BA. **Bull Med Libr Assoc** 1989 Jul;77(3):276–83
Impact of DOCLINE on interlibrary loan service at the National Library of Medicine. Lacroix EM, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):42–7
New AIDS reference service available through National Library of Medicine [news] **Clin Pharm** 1988 Oct;7(10):714
The National Library of Medicine, computers, and the garbage can method of problem solving. Davies NE. **J Med Assoc Ga** 1988 Aug;77(8):638–42
The National Library of Medicine. The great equalizer between small hospitals and major medical centers. Stead EA Jr. **N C Med J** 1988 Jul;49(7):360
Bio-information center. Ezzell C. **Nature** 1989 Mar 9; 338(6211):104

ORGANIZATION & ADMINISTRATION

Monograph support provided by the National Library of Medicine and its regional medical libraries in the medical behavioral sciences. Saye JD, et al.
Bull Med Libr Assoc 1988 Oct;76(4):295-305

NATIONALITY see ETHNIC GROUPS

NATRIURESIS

Excretory function after unilateral renal denervation and administration of propranolol to unanaesthetized dogs. Girchev R, et al. **Acta Physiol Hung** 1989;73(1):53-60
Natriuresis associated with elevated plasma atrial natriuretic hormone during supraventricular tachycardia. Nicklas JM, et al. **Am Heart J** 1989 Feb;117(2):377-81
Hormone and catecholamine responses accompanying the antinatriuresis of glucose ingestion. Levinson PD, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):178-81
Effects of water immersion on atrial natriuretic peptide release in humans. Epstein M, et al. **Am J Nephrol** 1989; 9(1):1-24 (161 ref.)
Relationship between plasma ANF responsiveness and renal sodium handling in cirrhotic humans. Epstein M, et al. **Am J Nephrol** 1989;9(2):133-43
Glomerular dynamics and salt balance in pregnant rats with renal hypertension. Dal Canton A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F728-34
Effects of renal artery pressure on interstitial pressure and Na excretion during renal vasodilation. Granger JP, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F828-33
Natriuretic response to hypervolemia is absent in rats with papillary necrosis. Keeler R, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):R422-6
Effect of renal decapsulation on renal interstitial hydrostatic pressure and natriuresis. Khraibi AA, et al.
Am J Physiol 1989 Jul;257(1 Pt 2):R44-8
Renal interstitial hydrostatic pressure during pressure natriuresis in hypertension. Khraibi AA, et al.
Am J Physiol 1988 Nov;255(5 Pt 2):R756-9
Micropuncture localization of the natriuretic effect of interleukin 1. Kohan DE, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):F810-3
Renal sympathetic nerve activity and natriuresis during water immersion in conscious dogs. Miki K, et al.
Am J Physiol 1989 Feb;256(2 Pt 2):R299-305
Modulation of natriuresis by sympathetic nerves and angiotensin II in conscious dogs. Persson PB, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):F485-9
Role of atrial peptide in the natriuresis and diuresis that follows relief of obstruction in rat. Purkerson ML, et al.
Am J Physiol 1989 Apr;256(4 Pt 2):F583-9
Role of ANP in natriuresis of head-out immersion in humans. Rabelink TJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F375-82
Control of sodium excretion in NE-ACTH hypertension: role of pressure natriuresis. Woods LL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R894-900
Vagal afferents inhibit the antidiuresis and antinatriuresis secondary to bilateral carotid occlusion in the chloralose-anesthetized dog. Gorman AJ, et al.
Basic Res Cardiol 1989 Mar-Apr;84(2):125-35
Urinary kallikrein excretion following chronic sinoaortic denervation in conscious dogs. Valet P, et al.
Clin Exp Hypertens [A] 1989;11(2):215-31
Hyperresponsiveness to water immersion in sodium retaining cirrhotics: the role of atrial natriuretic factor. Campbell PJ, et al. **Clin Invest Med** 1988 Dec;11(6):392-5
Involvement of atrial natriuretic peptide in long-term regulation of sodium-homeostasis in man [letter] Janssen WM, et al. **Clin Nephrol** 1988 Sep;30(3):172
Atrial natriuretic peptide: physiological release associated with natriuresis during negative pressure breathing in man. Anderson JV, et al. **Clin Sci** 1989 Apr;76(4):423-9
Contrasting plasma atrial natriuretic factor concentrations during comparable natriuresis with infusions of atrial natriuretic factor and saline in normal man. Richards AM, et al. **Clin Sci** 1988 Nov;75(5):455-62
Atrial natriuretic peptide and other vasoactive hormones in volume regulation. Rascher W, et al. **Contrib Nephrol** 1988; 67:1-8 (18 ref.)
Natriuretic factors and lithium clearance in patients with the syndrome of inappropriate antidiuretic hormone (SIADH) [letter] Dorhout Mees EJ. **Eur J Clin Invest** 1989 Aug; 19(4):413
Pathogenesis of sodium retention complicating cirrhosis: is there room for diminished "effective" arterial blood volume? Rector WG Jr, et al. **Gastroenterology** 1988 Dec; 95(6):1658-63
Circadian variation in renal sodium and potassium handling in cirrhosis. The role of aldosterone, cortisol, sympathoadrenergic tone, and intratubular factors. Trevisani F, et al. **Gastroenterology** 1989 Apr;96(4):1187-98
Attenuated diuretic and natriuretic effects of atrial natriuretic peptide in rats with heart failure. Tikkanen T, et al.
Horm Metab Res 1989 Apr;21(4):185-8
Blunted pressure natriuresis in the Brattleboro diabetes insipidus rat. Gonzalez-Campoy JM, et al. **Hypertension** 1989 Apr;13(4):322-6
Salt sensitivity in blacks. Salt intake and natriuretic substances. Sowers JR, et al. **Hypertension** 1988 Nov; 12(5):485-90
Lithium clearance in water immersion-induced natriuresis in humans. Rabelink TJ, et al. **J Appl Physiol** 1989 Apr; 66(4):1744-8
Dissociation of natriuresis and diuresis and heterogeneity of the effector system of atrial natriuretic factor in rats. Willenbrock RC, et al. **J Clin Invest** 1989 Feb;83(2):482-9
Control of renal and extrarenal salt and water excretion by plasma angiotensin II in the kelp gull (Larus dominicanus). Gray DA, et al. **J Comp Physiol [B]** 1989;158(6):651-60
Exaggerated natriuresis and lithium clearance in spontaneously hypertensive rats. Holstein-Rathlou NH, et al. **J Hypertens** 1988 Nov;6(11):889-95
Physiological increases in circulating noradrenaline are antinatriuretic in man. McMurray JJ, et al. **J Hypertens** 1988 Sep;6(9):757-61
On the renal basis for essential hypertension: nephron heterogeneity with discordant renin secretion and sodium excretion causing a hypertensive vasoconstriction-volume relationship. Sealey JE, et al. **J Hypertens** 1988 Oct; 6(10):763-77 (67 ref.)
The effect of adrenal surgery on plasma atrial natriuretic factor and sodium escape phenomenon in patients with primary aldosteronism. Nakada T, et al. **J Urol** 1989 Jul; 142(1):13-8
Mineralocorticoid activity and the excretion of an oral potassium load in normal man. Hené RJ, et al.
Kidney Int 1988 Nov;34(5):697-703
Atrial natriuretic peptide. An important factor in sodium and blood pressure regulation. Espiner EA, et al. **Lancet** 1989 Apr 1;1(8640):707-10 (38 ref.)
Natriuretic response to volume expansion in polycystic kidney disease. Torres VE, et al. **Mayo Clin Proc** 1989 May;64(5):509-15
Role of renal prostaglandins in bile-induced diuresis in the dog. Alon U, et al. **Miner Electrolyte Metab** 1988; 14(6):338-42
Amplification of the natriuretic response to acute unilateral nephrectomy by volume expansion. Chaves C, et al.
Miner Electrolyte Metab 1988;14(5):277-82
Inhibition of renal sympathetic nerve activity by the nucleus tractus solitarii (NTS) in exaggerated natriuresis of hypertension. Kawamura H, et al.
Nippon Jinzo Gakkai Shi 1988 Mar;30(3):285-90
Hypoxic modulation of systolic blood pressure and urinary sodium excretion in spontaneously hypertensive rats after carotid body denervation. Behm R, et al.
Physiol Bohemoslov 1989;38(3):207-13
Bilateral acute heart atrial auriectomy reduced diuresis and natriuresis following hypertonic sodium load in anaesthetized dogs. Okoličány J, et al.
Physiol Bohemoslov 1989;38(2):179-87
The relationship of the renin-angiotensin-aldosterone system to atrial natriuretic peptide and the natriuresis of volume expansion in diabetics with and without proteinuria. O'Hare JP, et al. **Postgrad Med J** 1988;64 Suppl 3:35-8; discussion 48-9
Natriuresis of volume expansion and atrial factors: contrasts and comparisons. Gyory AZ, et al.
Prog Biochem Pharmacol 1988;23:61-70
Effects of recovery from anesthesia and surgery on renal sodium handling in conscious rats. Thomsen K, et al.
Renal Physiol Biochem 1988 Nov-Dec;11(6):316-24
The handling of NaCl load in rats during DOCA-salt and Goldblatt 2 kidney-1 clip hypertension development. Vargas F, et al. **Rev Esp Fisiol** 1988 Jun;44(2):185-90
Role of endogenous dopamine on renal sodium excretion. Felder RA, et al. **Semin Nephrol** 1989 Mar;9(1):91-3 (27 ref.)
[Effect of the renal nerves and prostaglandins on sodium and water excretion during carotid compression in anesthetized rabbits] Dimitrov D, et al. **Eksp Med Morfol** 1988; 27(4):39-44 (Eng. Abstr.) **(Bul)**
[A study of the correlation between 24-hour urinary sodium, potassium, calcium, magnesium, creatinine and blood pressure] Huang DX.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1988 Oct; 9(5):278-81 (Eng. Abstr.) **(Chi)**
[Role of renal nerves in urine flow and sodium excretion during atrial distension] Gao YA, et al.
Sheng Li Hsueh Pao 1988 Apr;40(2):191-6 (Eng. Abstr.) **(Chi)**
[Renal function and sleep apnea syndromes] Krieger J, et al. **Neurophysiol Clin** 1989 Jun;19(3):199-207 (Eng. Abstr.) **(Fre)**
[A simple method for measuring 24-hour urinary excretions of salt and potassium] Takemori K, et al.
Nippon Eiseigaku Zasshi 1988 Dec;43(5):1036-41 (Eng. Abstr.) **(Jpn)**
[Atriopeptin--a searched-for natriuretic hormone] Sanak M. **Przegl Lek** 1988;45(9):690-2 (23 ref.) **(Pol)**
[Hepatorenal syndrome] dos Santos OF, et al.
AMB Rev Assoc Med Bras 1987 Sep-Oct;33(9-10):177-9 **(Por)**
[The interrelation of the sodium-excretory function of the kidneys and vascular reactivity in hypertension patients] Shkhvatsabaia IK, et al. **Kardiologiia** 1988 Aug;28(8):18-22 (Eng. Abstr.) **(Rus)**
[The renin-angiotensin system in childhood obesity] Tribol OB, et al. **Pediatriia** 1988;(4):25-7 (Eng. Abstr.) **(Rus)**
[The effect of short-term fasting on the renal excretion of electrolytes in sheep] Szanyiová M, et al.
Vet Med (Praha) 1988 Sep;33(9):545-50 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Natriuretic action of arginine vasopressin in the conscious unrestrained rat. Brimble MJ, et al.
Acta Endocrinol (Copenh) 1988 Nov;119(3):386-90
Relation between urinary dopamine and sodium output in term infants. Igarashi N, et al.
Acta Paediatr Jpn Overseas Ed 1988 Feb;30(1):49-55
Potentiation of the diuretic and natriuretic effect of furosemide by the calcium antagonist nifedipine. Piryova B, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):13-8
Atrial natriuretic factors (ANF) and antidiuretic agents. Croxatto HR, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):1-9
CNS-induced natriuresis during dopamine receptor blockade. Further support for the existence of, at least, two separate natriuretic hormonal systems. Hansell P, et al. **Acta Physiol Scand** 1988 Jul;133(3):373-80
Antihypertensive drugs and sodium restriction. Analysis of their interaction based on pressure-natriuresis relationship. Kimura G, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):372-9
Effects of oral calcium, potassium, digoxin, and nifedipine on natriuresis in normal humans. Luft FC, et al.
Am J Hypertens 1989 Jan;2(1):14-9
Cardiorenal effects of atrial natriuretic factor administration in congestive heart failure: natriuresis and diuresis without hemodynamic alterations. Firth BG, et al.
Am J Med Sci 1989 Apr;297(4):203-8
Atrial natriuretic factor induces natriuresis during pacing tachycardia in dogs. Christensen G, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1245-9
Arginine vasopressin potentiates natriuretic effect of atrial peptide. Graczak LM, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H925-7
Effect of various 6-dehydro-corticosteroids, 9, 11-dehydro-DOCA and 9 alpha-fluoro-DOCA on the fluxes of sodium and potassium. Genard P, et al.
Arch Int Physiol Biochim 1989 Apr;97(2):175-83
The renal effects of atrial natriuretic peptide in man are not attenuated by (+)-sulpiride. Freestone S, et al.
Br J Clin Pharmacol 1989 Jan;27(1):13-8
Effects of intracerebroventricular infusion of angiotensin II and related peptides on water and sodium ingestion and excretion. Gonçalves JR, et al. **Braz J Med Biol Res** 1988; 21(3):615-9
Role of renal nerves in the potentiation of atriopeptin-induced natriuresis by vasopressin. Hartupee DA, et al. **Circ Res** 1989 Feb;64(2):370-5
Natriuretic and hypotensive effects of brain natriuretic peptide in anaesthetized DOCA-salt hypertensive rats. Kita T, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):185-90
Verapamil-induced natriuretic and diuretic effects: dependency on sodium intake. Hughes GS Jr, et al.
Clin Pharmacol Ther 1988 Oct;44(4):400-7
Mechanisms of the antinatriuretic action of physiological doses of angiotensin II in man. Seidelin PH, et al.
Clin Sci 1989 Jun;76(6):653-8
Effects of felodipine on natriuresis, atrial natriuretic factor, the renin-angiotensin-aldosterone system, and blood pressure in essential hypertension. Cerasola G, et al.
Clin Ther 1988;10(6):694-703
The antinatriuretic and kaliuretic effects of the glucocorticoids corticosterone and cortisol following pretreatment with carbenoxolone sodium (a liquorice derivative) in the adrenalectomized rat. Souness GW, et al. **Endocrinology** 1989 Mar;124(3):1588-90
Arginine vasopressin dissociates the diuresis and natriuresis due to atrial natriuretic factor in man. McMurray J, et al.
Eur J Clin Invest 1988 Dec;18(6):627-32
Evaluation of the natriuretic and beta-adrenoceptor-blocking effects of tienoxolol in normal volunteers. Berdeaux A, et al. **Fundam Clin Pharmacol** 1988;2(5):441-54
Mediators of vasopressin induced natriuresis in cirrhosis--possible role of atrial natriuretic factor [letter] Gerbes AL. **Gut** 1989 Aug;30(8):1158-9
Blunted natriuretic response and low blood pressure after atrial natriuretic factor in early cirrhosis. Beutler JJ, et al. **Hepatology** 1989 Aug;10(2):148-53
Role of kidney dopamine in the natriuretic response to volume expansion in rats. Hegde SS, et al.
Hypertension 1989 Jun;13(6 Pt 2):828-34
Dose-dependent effects of felodipine on diuresis and natriuresis in healthy subjects. Bengtsson-Hasselgren B, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):134-9
Natriuretic activity of amlodipine, diltiazem, and nitrendipine in saline-loaded anesthetized dogs. Carter AJ, et al.
J Cardiovasc Pharmacol 1988;12 Suppl 7:S34-8
Facilitation of natriuresis with nifedipine in normal humans. Luft FC, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S120-2
Persistence of the natriuretic effect of calcium entry blockers. Ruilope LM, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S136-9
Thiorphan, an inhibitor of endopeptidase 24.11, potentiates the natriuretic activity of atrial natriuretic peptide. Trapani AJ, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):419-24
Natriuretic action of ANP is blunted by ACE inhibition in humans. Wambach G, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):748-53
Effects of the intracerebroventricular atrial natriuretic factor on angiotensin II or sodium-induced blood pressure elevation and natriuresis. Yoshida K, et al.
J Cardiovasc Pharmacol 1989;13 Suppl 6:S24-6

Pressure natriuresis and control of arterial pressure during chronic norepinephrine infusion. Hall JE, et al. **J Hypertens** 1988 Sep;6(9):723–31

Atrial natriuretic peptide and exaggerated natriuresis during acute hypertonic volume expansion in essential hypertension. Sørensen SS, et al. **J Hypertens** 1989 Jan; 7(1):21–9

Effects of perindopril on renal haemodynamics and natriuresis in essential hypertension. Chaignon M, et al. **J Hypertens Suppl** 1988 Dec;6(3):S61–4

Effects of captopril and nitrendipine on the response to acute volume expansion in essential hypertension. Ribstein J, et al. **J Hypertens Suppl** 1988 Dec;6(4):S473–5

1-(2-aminoethyl)-6-aryl-4H-[1,2,4]triazolo[4,3-a][1,4]benzodiazepines with diuretic and natriuretic activity. Hester JB, et al. **J Med Chem** 1989 Jun;32(6):1157–63

Salicylic acid causes a diuresis and natriuresis in normal and common bile-duct-ligated cirrhotic miniature swine. Zambraski EJ, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):983–8

Factors influencing vascular and natriuretic responses to ANP. Torikai S. **Jpn Circ J** 1988 Dec;52(12):1450–2

Escape from the sodium-retaining effects of mineralocorticoids: role of ANF and intrarenal hormone systems. Gonzalez-Campoy JM, et al. **Kidney Int** 1989 Mar; 35(3):767–77 (112 ref.)

Natriuretic and renal hemodynamic effects of nicardipine in essential hypertension. Chaignon M, et al. **Kidney Int Suppl** 1988 Sep;25:S184–6

Natriuretic and hypotensive effects of brain natriuretic peptide (BNP) in spontaneously hypertensive rats. Kita T, et al. **Life Sci** 1989;44(21):1541–5

Atrial natriuretic peptides cleaved by endopeptidase are inactive in conscious spontaneously hypertensive rats. Seymour AA, et al. **Life Sci** 1988;43(26):2265–74

The effect of carbidopa and lithium on the systemic and renal response to acute intravenous saline loading in normal man. Jeffrey RF, et al. **Nephrol Dial Transplant** 1989;4(4):271–7

Increased natriuretic ability and hypotensive effect during short-term high calcium intake in essential hypertension. Lasaridis AN, et al. **Nephron** 1989;51(4):517–23

Impaired renal hemodynamic but conserved natriuretic response to dopamine in patients with renal disease. Smit AJ, et al. **Nephron** 1989;52(4):338–46

Dissociation of the natriuretic and antikaliuretic properties of triamterene derivatives by dose-response experiments. Priewer H, et al. **Pharm Res** 1987 Feb;4(1):66–9

Kinetics of potassium excretion following oral supplements: evidence of induced natriuresis. Rakhit A, et al. **Pharm Res** 1987 Dec;4(6):531–5

Dopaminergic mediation of the diuretic and natriuretic action of centrally administered rat atrial natriuretic factor (99–126). Torres M, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):18–22

[The effects of inhibition of converting enzyme by perindopril on renal hemodynamics and natriuresis in essential arterial hypertension] Chaignon M, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:151–4 (Eng. Abstr.) **(Fre)**

[Possible involvement of cyclic GMP (cGMP) in atrial natriuretic factor (ANF) induced natriuresis] Shiina T. **Nippon Jinzo Gakkai Shi** 1989 Apr;31(4):385–91 (Eng. Abstr.) **(Jpn)**

[Renal mechanisms of the natriuretic effect of Soviet-made furosemide] Merzon AK, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):92–6 **(Rus)**

[Acute natriuretic effect of nifedipine in elderly people with essential hypertension] Schnapp P, et al. **Bratisl Lek Listy** 1989 Jun;90(6):454–7 (Eng. Abstr.) **(Slo)**

NATRIURETIC FACTOR see NATRIURETIC HORMONE

NATRIURETIC HORMONE

BLOOD

Plasma levels of digitalis-like substance in Nigerians with essential hypertension. Osotimehin B, et al. **Afr J Med Med Sci** 1988 Dec;17(4):231–5

Effect of posture on the plasma levels of atrial natriuretic factor. Franco-Saenz R, et al. **Clin Exp Hypertens [A]** 1989; 11(2):337–47

Atrial natriuretic peptide concentration and natriuretic hormone activity in plasma of patients with chronic renal failure. Horký K, et al. **Horm Metab Res** 1988 Nov; 20(11):709–12

[Digoxin-like substance (DLS) in acute asthma] Odajima Y, et al. **Arerugi** 1988 Sep;37(9):905–10 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Partial purification of a sodium pump inhibitor from bovine adenohypophysis. Its comparison with the natriuretic factor isolated from hypothalamus. Illescas M, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:301–7

PHARMACOLOGY

Effects of lead and natriuretic hormone on kinetics of sodium-potassium-activated adenosine triphosphatase: possible relevance to hypertension. Weiler E, et al. **Environ Health Perspect** 1988 Jun;78:113–7

On the topically effective ocular hypotensive properties of ICI 147,798, a natriuretic beta-adrenoceptor antagonist, in rabbits. Kau ST, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):132–6

[Effect of a natriuretic factor of hepatic origin on the indices of water-salt metabolism and blood circulation] Konovchuk VN, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):245–50 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Humoral mechanisms in the pathogenesis of arterial hypertension with emphasis on the renin-angiotensin-aldosterone system and natriuretic substances] Horký K. **Vnitr Lek** 1989 Mar;35(3):219–25 (Eng. Abstr.) **(Cze)**

[Effect of the natriuretic factor obtained from arterial blood of dogs on cardio- and hemodynamics in experimental studies] Konovchuk VN, et al. **Fiziol Zh** 1989 Mar-Apr; 35(2):89–92 (Eng. Abstr.) **(Rus)**

[Influence of a natriuretic factor on the chemically sensitive membrane of dialyzed snail neurons] Krivorotov SV. **Neirofiziologiia** 1989;21(1):122–4 (Eng. Abstr.) **(Rus)**

[The role of the natriuretic factor in the genesis of water-electrolyte disorders in patients with chronic circulatory failure] Gapon LI, et al. **Ter Arkh** 1988; 60(12):28–32 (Eng. Abstr.) **(Rus)**

NATRIURETIC PEPTIDES, ATRIAL

Atrial natriuretic factor in patients with liver disease. Epstein M. **Am J Nephrol** 1989;9(2):89–100 (80 ref.)

Expression, purification, and in vivo activity of atrial natriuretic factor prohormone produced in Escherichia coli. Gierse JK, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):441–6

NMR study of the solution conformation of rat atrial natriuretic factor 7–23 in sodium dodecyl sulfate micelles. Olejniczak ET, et al. **Biochemistry** 1988 Sep 6; 27(18):7124–31

The amino acid sequences of frog heart atrial natriuretic-like peptide and mammalian ANF are closely related. Lazure C, et al. **FEBS Lett** 1988 Oct 10;238(2):300–6

Atrial natriuretic factor. Narang R, et al. **J Assoc Physicians India** 1988 Nov;36(11):657–9 (32 ref.)

The conformation of alpha-human atrial natriuretic polypeptide in solution. Kobayashi Y, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):322–5

Atrial natriuretic factor. Inagami T. **J Biol Chem** 1989 Feb 25;264(6):3043–6 (100 ref.)

Atrial natriuretic factor. What's in a name? [letter] de Wildt D, et al. **Nephron** 1988;50(1):87

[ANF (atrial natriuretic factor): a novel hormone of cardiac origin (I)] Radermacher L, et al. **Nephrologie** 1989; 10(1):11–5 (0 ref.) **(Fre)**

[Atrial natriuretic peptide] Naruse M, et al. **Kokyu To Junkan** 1989 Apr;37(4):375–86 (74 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

Effect of atrial natriuretic peptide on catecholamine release from human pheochromocytoma. Nakamaru M, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):107–12

Renal responses to intracerebroventricular infusions of atrial natriuretic peptide in the conscious goat. Eriksson I, et al. **Acta Physiol Scand** 1988 Jan;132(1):121–3

Renal effects of atriopeptin II and dopamine receptor blockade in acutely volume-expanded rats. Hansell P, et al. **Acta Physiol Scand** 1988 May;133(1):35–40

Increased duodenal HCO3- output after blood volume expansion in the rat: an effect mediated by atrial natriuretic peptide (ANP)? Jönson C, et al. **Acta Physiol Scand** 1989 Jun;136(2):263–9

Differential haemodynamic effects of atrial natriuretic peptide (ANP) in normotensive and spontaneously hypertensive rats. Pettersson A, et al. **Acta Physiol Scand** 1988 Oct;134(2):247–51

Renal hemodynamic and natriuretic effects of human atrial natriuretic factor infusion in cirrhosis with ascites. Laffi G, et al. **Gastroenterology** 1989 Jan;96(1):167–77

Blunted natriuretic response and low blood pressure after atrial natriuretic factor in early cirrhosis. Beutler JJ, et al. **Hepatology** 1989 Aug;10(2):148–53

Captopril reduces the renal response to intravenous atrial natriuretic peptide in normotensives. Wilkins MR, et al. **J Hum Hypertens** 1987 Jun;1(1):47–51

Effects of alpha human atrial natriuretic polypeptide on the systemic hemodynamics and coronary circulation in patients with ischemic heart disease. Serizawa T, et al. **Jpn Circ J** 1988 Oct;52(10):1107–13

Renal response to low-dose infusion of atrial natriuretic peptide in normal man. Cottier C, et al. **Kidney Int Suppl** 1988 Sep;25:S72–8

Inhibitory effect of brain natriuretic peptide on central angiotensin II-stimulated pressor response in conscious rats. Shirakami G, et al. **Neurosci Lett** 1988 Aug 15; 91(1):77–83

Four-hour atrial natriuretic peptide infusion in conscious rats: effects on urinary volume, sodium, and cyclic GMP. Campbell HT, et al. **Proc Soc Exp Biol Med** 1988 Dec; 189(3):317–24

[The intraocular pressure lowering effect of human atrial peptide] Diestelhorst M, et al. **Fortschr Ophthalmol** 1989; 86(2):89–91 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Hemodynamic, hormonal, and renal effects of atrial natriuretic peptide in untreated congestive cardiac failure. Anand IS, et al. **Am Heart J** 1989 Sep;118(3):500–5

Identification of structural requirements for analogues of atrial natriuretic peptide (ANP) to discriminate between ANP receptor subtypes. Bovy PR, et al. **J Med Chem** 1989 Apr;32(4):869–74

ANALYSIS

Cardiac distribution of alpha-hANP in an infant with total anomalous pulmonary venous return. Sakai T, et al. **Agressologie** 1989 Feb;30(2):101–2

Atrial wall function and plasma atriopeptin during volume expansion in conscious dogs. Hintze TH, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H713–9

Atrial natriuretic factor and salt adaptation in the teleost fish Gila atraria. Westenfelder C, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):F1281–6

Bidimensional reversed-phase high-pressure liquid chromatography analysis of cultured cell neuropeptides: application to atrial natriuretic factor. Nguyen TT, et al. **Anal Biochem** 1989 May 15;179(1):24–7

Ultrastructural aspects of atrium development: demonstration of endocardial discontinuities and immunolabeling of atrial natriuretic factor in the Syrian hamster. Gilloteaux J. **Anat Embryol (Berl)** 1989;179(3):227–36

Demonstration of atrial natriuretic peptide/cardiodilatin (ANP/CDD)-immunoreactivity in the salt gland of the Pekin duck. Lange W, et al. **Anat Embryol (Berl)** 1989; 179(5):465–9

Development of immunoreactive atrial natriuretic peptide in fetal hearts of spontaneously hypertensive and Wistar-Kyoto rats. Scott JN, et al. **Anat Embryol (Berl)** 1988;178(4):359–63

Radioimmunoassay for brain natriuretic peptide (BNP) detection of BNP in canine brain. Itoh H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):120–8

Atrial natriuretic factor messenger ribonucleic acid and peptide in the human heart during ontogenic development. Mercadier JJ, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):777–82

Identification of a 29-amino acid natriuretic peptide in chicken heart. Miyata A, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1330–7

Identification of new atrial natriuretic peptides in frog heart. Sakata J, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1338–45

Localisation of atrial natriuretic peptide immunoreactivity in the ventricular myocardium and conduction system of the human fetal and adult heart. Wharton J, et al. **Br Heart J** 1988 Oct;60(4):267–74

Atrial natriuretic factor in the pleural fluid of congestive heart failure patients. Vesely DL, et al. **Chest** 1989 May; 95(5):1107–9

Evaluation of a direct assay for atrial natriuretic peptide. Tan AC, et al. **Clin Chim Acta** 1989 Jan 13;179(1):1–11

Atrial natriuretic factor in experimental and human hypertension. Cantin M, et al. **Eur Heart J** 1988 Jun;9 Suppl H:21–7

Phylogenetic study on the immunoreactive atrial natriuretic peptide in the heart. Kim SH, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):127–35

Immunohistocytochemical localization of alpha human atrial natriuretic peptide in human atrium obtained from endomyocardial biopsy and cardiac surgery. Nagata M, et al. **Heart Vessels** 1988;4(2):112–5

Immunohistochemical localization of atrial natriuretic polypeptide (ANP) in human atrial and ventricular myocardiocytes. Yamada H, et al. **Histochemistry** 1988; 89(5):411–3

Atrial natriuretic factor in specific brain areas of spontaneously hypertensive rats. Bahner U, et al. **Hypertension** 1988 Nov;12(5):519–24

D-amino acid-substituted atrial natriuretic peptide analogs reveal novel receptor recognition requirements. Scarborough RM, et al. **J Biol Chem** 1988 Nov 15; 263(32):16818–22

Separation of synthetic cardiodilatin/atrial natriuretic factor and related peptides by reversed-phase high-performance liquid chromatography. Dörner T, et al. **J Chromatogr** 1989 May 30;490(2):411–7

Localization of atrial natriuretic factor (ANF) binding sites in the central nervous system of the frog. Tong Y, et al. **J Comp Neurol** 1989 Mar 15;281(3):384–96

An immunocytochemical study on co-localization of cathepsin B and atrial natriuretic peptides in secretory granules of atrial myoendocrine cells of rat heart. Watanabe T, et al. **J Histochem Cytochem** 1989 Mar;37(3):347–51

Human atrial natriuretic factor (ANF). Characterisation of a monoclonal antibody panel and its use in radioimmunoassay. Prowse C, et al. **J Immunol Methods** 1989 Mar 10;118(1):91–100

Immunocytochemical localization of natriuretic peptide sequences in the human right auricle. Skepper JN, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):343–53

Clinical significance of atrial natriuretic peptide in different diseases of the nose. Yue WL. **J Otolaryngol** 1989 Jun;

18(4):181–3
An integrated study employing histopathological, immunohistocytochemical and radioimmunoassay analyses of atrial natriuretic peptide in the right and left atria in patients with mitral valve disease. Nagata M, et al. **Jpn Circ J** 1988 Dec;52(12):1453–6
Presence of the atrial natriuretic factor (ANF) in human ascitic fluid. Gerbes AL, et al. **Life Sci** 1988;43(19):1517–21
Tissue distribution of atrial natriuretic factor in normal and pathologic human hearts. Truong LD, et al. **Mod Pathol** 1989 Mar;2(2):79–84
Atrial natriuretic factor during the perinatal period: equal depletion in both atria. Dolan LM, et al. **Pediatr Res** 1989 Apr;25(4):339–41
Atrial natriuretic factor in the spinal cord of normotensive and hypertensive rats. Debinski W, et al. **Peptides** 1988 Sep–Oct;9(5):1101–5
A two-site immunoradiometric assay of proatrial natriuretic factor. Application to tissue extracts. Thibault G, et al. **Peptides** 1988 Sep–Oct;9(5):1059–65
Presence of atrial natriuretic peptide–like material in guinea pig intestine. Vollmar AM, et al. **Peptides** 1988 Sep–Oct; 9(5):965–71
Postmortem stability of the rat atrial natriuretic peptide in blood and atrial tissue. Lorente JA, et al. **Rev Esp Fisiol** 1989 Jun;45(2):127–30
[Alpha-hANP-like immunoreactivity in lung cancer] An SZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):171–3 (Eng. Abstr.) **(Chi)**
[Atrial natriuretic polypeptide in the human and rat spinal cord] Xu D, et al. **Sheng Li Hsueh Pao** 1989 Feb; 41(1):49–55 (Eng. Abstr.) **(Chi)**
[Contents and molecular forms of human atrial natriuretic peptide in right and left auricle in patients with heart disease] Akimoto K, et al. **Kokyu To Junkan** 1989 Mar; 37(3):307–11 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Natriuretic action of ANP is blunted by ACE inhibition in humans. Wambach G, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):748–53
Chronic blockade of endogenous atrial natriuretic polypeptide (ANP) by monoclonal antibody against ANP accelerates the development of hypertension in spontaneously hypertensive and deoxycorticosterone acetate-salt–hypertensive rats. Itoh H, et al. **J Clin Invest** 1989 Jul;84(1):145–54
Effects of UK 69 578: a novel atriopeptidase inhibitor. Northridge DB, et al. **Lancet** 1989 Sep 9;2(8663):591–3

BIOSYNTHESIS

Atrial-natriuretic-factor mRNA is developmentally regulated in heart ventricles and actively expressed in cultured ventricular cardiac muscle cells of rat and human. Claycomb WC. **Biochem J** 1988 Oct 15;255(2):617–20
Ventricles as a major site of atrial natriuretic factor synthesis and release in cardiomyopathic hamsters with heart failure. Thibault G, et al. **Circ Res** 1989 Jul;65(1):71–82
Increased neural atrial natriuretic factor generation in spontaneously hypertensive rats. Debinski WK, et al. **Hypertension** 1989 Jun;13(6 Pt 2):804–7
Increased synthesis and secretion of atrial natriuretic polypeptide during viral myocarditis. Morii N, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S5–8
Relationship between ventricular expression of atrial natriuretic polypeptide gene and hemodynamic parameter in old myocardial infarction. Saito Y, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S1–4
Lung is an important source of atrial natriuretic factor in experimental cardiomyopathy. Gutkowska J, et al. **J Clin Invest** 1989 May;83(5):1500–4

BLOOD

Variations in the plasma concentration of atrial natriuretic factor across 24 hours. McCance DR, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):266–70
Degradation of atrial natriuretic peptide in dogs. Masuda T, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):170–4
Atrial natriuretic peptide in pregnant and lactating goats. Olsson K, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):519–25
A deficient response of atrial natriuretic peptide to volume overload in Gordon's syndrome. Välimäki M, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):331–6
Atrial natriuretic polypeptide in patients with subarachnoid haemorrhage due to aneurysmal rupture. Correlation to hyponatremia. Shimoda M, et al. **Acta Neurochir (Wien)** 1989;97(1–2):53–61
Plasma atrial natriuretic peptide (ANP) and maternal hemodynamic changes during normal pregnancy. Milsom I, et al. **Acta Obstet Gynecol Scand** 1988;67(8):717–22
Plasma concentrations of atrial natriuretic peptide in children with persistent hypertension. Ito Y, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):12–6
Relationship between plasma atrial natriuretic peptide concentrations and cardio-thoracic ratio during the early neonatal period. Kojima T, et al. **Acta Paediatr Scand** 1989 Jan;78(1):29–33
Atrial natriuretic factor, urinary catechol compounds and electrolyte excretion in rats during normal hydration and isotonic volume expansion. Influence of dopamine receptor blockade. Hansell P, et al. **Acta Physiol Scand** 1988 Nov; 134(3):421–8
Temporary lack of ANP response to intravenous saline loads in goat kids. Olsson K, et al. **Acta Physiol Scand** 1989 Apr; 135(4):591–2
Haemodynamics and plasma ANP (atrial natriuretic peptide) after acute blood volume expansion in normotensive and spontaneously hypertensive rats. Pettersson A, et al. **Acta Physiol Scand** 1988 Aug;133(4):513–8
Increased circulating atrial natriuretic factor (ANF) release during induced ventricular tachycardia. Ellenbogen KA, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1233–8
Rapid fall in elevated plasma atrial natriuretic peptide levels after successful catheter balloon valvuloplasty of mitral stenosis. Hung JS, et al. **Am Heart J** 1989 Feb;117(2):381–5
Plasma levels of atrial natriuretic peptide during myocardial ischemia induced by percutaneous transluminal coronary angioplasty or dynamic exercise. Ikäheimo MJ, et al. **Am Heart J** 1989 Apr;117(4):837–41
Stimulation of atrial natriuretic peptide and vasopressin during percutaneous transluminal aortic valvuloplasty. Lewin RF, et al. **Am Heart J** 1989 Aug;118(2):292–8
Simultaneous measurement of alpha-human atrial natriuretic factor (hANF) and NH2-terminal fragment of pro-hANF in essential hypertension. Matsubara H, et al. **Am Heart J** 1989 Sep;118(3):494–9
Prohormone atrial natriuretic peptides 1–30, 31–67, and 99–126 increase in proportion to right ventricular pacing rate. Ngo L, et al. **Am Heart J** 1989 Feb;117(2):385–90
Natriuresis associated with elevated plasma atrial natriuretic hormone during supraventricular tachycardia. Nicklas JM, et al. **Am Heart J** 1989 Feb;117(2):377–81
Exaggerated secretion of atrial natriuretic polypeptide during dynamic exercise in patients with essential hypertension. Saito Y, et al. **Am Heart J** 1988 Oct;116(4):1052–7
Atrial natriuretic peptide and acute myocardial infarction. Svanegaard J, et al. **Am Heart J** 1989 Jan;117(1):194–5
ANP in AMI [letter] Tan AC, et al. **Am Heart J** 1989 Jun; 117(6):1406–7
Atrial natriuretic peptide after myocardial infarction. Tan AC, et al. **Am Heart J** 1989 Sep;118(3):490–4
Plasma atrial natriuretic polypeptide as an index of left ventricular end-diastolic pressure in patients with chronic left-sided heart failure. Tsutamoto T, et al. **Am Heart J** 1989 Mar;117(3):599–606
Diurnal change of plasma atrial natriuretic peptide concentrations in patients with congestive heart failure. Yoshino F, et al. **Am Heart J** 1989 Jun;117(6):1316–9
Atrial natriuretic factor concentration in congenital heart disease [letter] Cheng TO. **Am J Cardiol** 1989 Apr 15; 63(13):1023
Effect of beta-adrenergic blockade on plasma atrial natriuretic factor and cardiac volumes during exercise in normal men. Donckier JE, et al. **Am J Cardiol** 1989 Apr 15;63(13):1000–2
Increases in atrial natriuretic peptide after delivery and in the puerperium. Duprez D, et al. **Am J Cardiol** 1989 Sep 15;64(10):674–5
Increase in plasma atrial natriuretic factor during ventriculoatrial pacing. Ellenbogen KA, et al. **Am J Cardiol** 1989 Jul 15;64(3):236–7
Relation of atrial natriuretic factor to vasoconstrictor hormones and regional blood flow in congestive heart failure. Hirsch AT, et al. **Am J Cardiol** 1989 Jan 15; 63(3):211–6
Plasma atrial natriuretic peptide in carcinoid heart disease. Lundin L, et al. **Am J Cardiol** 1989 Apr 15;63(13):969–72
Low atrial natriuretic factor levels and absent pulmonary edema in pericardial compression of the heart. Spodick DH. **Am J Cardiol** 1989 May 15;63(17):1271–2 (15 ref.)
Atrial natriuretic peptide in acute myocardial infarction. Tomoda H. **Am J Cardiol** 1988 Nov 15;62(16):1122–3
Effect of reducing atrial pressure on atrial natriuretic factor and vasoactive hormones in congestive heart failure secondary to ischemic and nonischemic dilated cardiomyopathy. Webster MW, et al. **Am J Cardiol** 1989 Jan 15;63(3):217–21
Release of atrial natriuretic factor after pericardiectomy for chronic constrictive pericarditis. Wolozin MW, et al. **Am J Cardiol** 1988 Dec 1;62(17):1323–5
Circadian rhythm of atrial natriuretic peptide, plasmatic renin activity, and plasma aldosterone in compensated cirrhosis of the liver. Colantonio D, et al. **Am J Gastroenterol** 1989 Feb;84(2):209–10
Plasma concentrations of atrial natriuretic peptide in patients with decompensated liver cirrhosis [letter] Tulassay Z, et al. **Am J Gastroenterol** 1989 Aug;84(8):978–81
Reciprocal changes in atrial natriuretic peptide levels and plasma renin activity during treatment of pulmonary embolism. Tan AC, et al. **Am J Hypertens** 1989 Jul; 2(7):570–2
Atrial natriuretic factor in renal failure and posthemodialytic postural hypotension. Morrissey EC, et al. **Am J Kidney Dis** 1988 Dec;12(6):510–5
Atrial natriuretic factor (ANF): a preliminary report of cervical heart transplant model for study. Hardy JD. **Am J Med Sci** 1989 Feb;297(2):71–2
Prohormone atrial natriuretic peptides 1–30 and 31–67 increase in hyperthyroidism and decrease in hypothyroidism. Vesely DL, et al. **Am J Med Sci** 1989 Apr;297(4):209–15
Plasma levels of atrial natriuretic factor in inappropriate secretion of antidiuretic hormone syndrome [letter] Deray G, et al. **Am J Nephrol** 1988;8(6):510–1
Relationship between plasma ANF responsiveness and renal sodium handling in cirrhotic humans. Epstein M, et al. **Am J Nephrol** 1989;9(2):133–43
Atrial natriuretic factor in normal and hypertensive pregnancy. Bond AL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1112–6
Plasma atrial natriuretic peptide levels during the rat estrous cycle, pregnancy, and puerperium. Castro LC, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):15–9
Perinatal factors influencing atrial natriuretic peptide levels in umbilical arterial plasma at the time of delivery. Castro LC, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):623–7
Fetal hypoxia elevates plasma atrial natriuretic factor concentration. Cheung CY, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1263–8
Autonomic modulation of fetal atrial natriuretic factor and urine flow responses to vascular volume expansion. Miner LK, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1341–6
Plasma atrial natriuretic peptide in human fetus: response to intravascular blood transfusion. Panos MZ, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):357–61
Ovine fetal lung fluid response to intravenous saline solution infusion: fetal atrial natriuretic factor effect. Sherman DJ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1347–52
Atrial natriuretic factor, digoxin-like immunoreactive substance, norepinephrine, epinephrine, and plasma renin activity in human fetuses and their alteration by fetal disease. Weiner CP, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1353–60
Effects of propranolol and pindolol on plasma ANP levels in humans at rest and during exercise. Bouissou P, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R259–64
Fetal and adult urine flow and ANF responses to vascular volume expansion. Brace RA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R846–50
ANP and sodium excretion during acute baroreflex hypertension in conscious dogs. Ehmke H, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1044–9
Plasma atriopeptin during exercise in dogs under beta-blockade. Péronnet F, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):R1098–102
Hormonal responses to gradual changes in dietary sodium intake in humans. Sagnella GA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1171–5
DOCA administration and atrial natriuretic factor in dogs with chronic heart failure. Villarreal D, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H739–45
Atrial natriuretic peptide response to rapid atrial pacing in cardiac-denervated dogs. Williams TD, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R162–7
Effects of hypercalcemia and ouabain on plasma atrial natriuretic polypeptide in anesthetized dogs. Yamamoto A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E437–41
Effect of exercise on atrial natriuretic peptide (ANP) levels in patients with COPD [letter] Nichol GM, et al. **Am Rev Respir Dis** 1988 Aug;138(2):488
Plasma atrial natriuretic polypeptide and angiotensin II in rats during anesthesia and volume loading. Hoffman WE, et al. **Anesth Analg** 1989 Jan;68(1):40–5
The effect of fentanyl on basal and stimulated plasma levels of atrial natriuretic peptide [letter] Hynynen M. **Anesth Analg** 1989 Oct;69(4):549
Effects of calcium antagonists and nitroglycerin on atrial natriuretic peptide in normal subjects and patients with essential hypertension. Iwasaki T, et al. **Angiology** 1989 Jan; 40(1):24–8
Atrial natriuretic factor. Wilkins MR, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):115–8 (50 ref.)
Elevated plasma atrial natriuretic factor and vasopressin in high-altitude pulmonary edema. Cosby RL, et al. **Ann Intern Med** 1988 Nov 15;109(10):796–9
Is atrial natriuretic polypeptide a cause of pathophysiology in total artificial heart animals? Mabuch K, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):463–5
Hemodynamic and atrial natriuretic peptide responses to fluid removal and reinfusion in hemodialysis patients. Petersen J, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):509–11
Altered humoral control of circulating volume during artificial circulation. Taenaka Y, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):692–5
Plasma concentrations of human atrial natriuretic peptide at vaginal delivery and elective cesarean section. Okamoto E, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun; 15(2):199–202
Release of atrial natriuretic factor (ANF) induced by acute airway obstruction. Amyot R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):808–12
Water immersion increases the concentration of the immunoreactive N-terminal fragment of proatrial natriuretic factor in human plasma. Gerbes AL, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):228–32
Daily sequential changes in plasma atrial natriuretic factor concentrations in mechanically ventilated low-birth-weight infants. Effect of surfactant replacement. Liechty EA, et al. **Biol Neonate** 1989;55(4–5):244–50
Atrial natriuretic peptide in the fetus. Kingdom JC, et al. **BMJ** 1989 May 6;298(6682):1221–2
Plasma atrial natriuretic peptide in patients with acute myocardial infarction: effects of streptokinase. Phillips PA, et al. **Br Heart J** 1989 Feb;61(2):139–43

The effect of acute ACE inhibition on atrial natriuretic peptide. Doorenbos CJ, et al. **Br J Clin Pharmacol** 1989; 27 Suppl 2:243S–247S

Circadian variations of plasma atrial natriuretic peptide in four types of hypertensive disorder during pregnancy. Sumioki H, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):922–7

The effect of medetomidine, an alpha 2-adrenoceptor agonist, on plasma atrial natriuretic peptide levels, haemodynamics and renal excretory function in spontaneously hypertensive and Wistar–Kyoto rats. Ruskoaho H, et al. **Br J Pharmacol** 1989 May;97(1):125–32

Plasma vasopressin and atrial natriuretic factor in response to blood volume changes in the anaesthetized rabbit. Courneya CA, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):344–52

Effect of lower body positive pressure on blood pressure, plasma atrial natriuretic factor concentration, and sodium and water excretion in healthy volunteers and cardiac transplant recipients. Wilkins MR, et al. **Cardiovasc Res** 1988 Apr;22(4):231–5

Quantitative analyses of atrial myoendocrine cells and plasma atrial natriuretic peptides (ANP) of the rat with special reference to the twenty-four-hour variations in secretory granules and plasma ANP concentrations. Watanabe T, et al. **Cell Tissue Res** 1988 Oct;254(1):133–7

Determinants of atrial natriuretic factor in the adult respiratory distress syndrome. Eison HB, et al. **Chest** 1988 Nov;94(5):1040–5

Changes in plasma concentrations of atrial natriuretic peptide during the first ten days and the second month of life. Fede C, et al. **Child Nephrol Urol** 1988–89;9(3):144–6

Circadian rhythm of prohormone atrial natriuretic peptides 1–30, 31–67 and 99–126 in man. Winters CJ, et al. **Chronobiol Int** 1988;5(4):403–9

Enkephalinase inhibition increases plasma atrial natriuretic peptide levels, glomerular filtration rate, and urinary sodium excretion in rats with reduced renal mass. Lafferty HM, et al. **Circ Res** 1989 Sep;65(3):640–6

Rapid reduction of plasma atrial natriuretic peptide levels during percutaneous transvenous mitral commissurotomy in patients with mitral stenosis. Ishikura F, et al. **Circulation** 1989 Jan;79(1):47–50

Failure of atrial natriuretic factor to increase with volume expansion in acute and chronic congestive heart failure in the dog. Redfield MM, et al. **Circulation** 1989 Sep; 80(3):651–7

The N-terminus and a 4,000-MW peptide from the midportion of the N-terminus of the atrial natriuretic factor prohormone each circulate in humans and increase in congestive heart failure. Winters CJ, et al. **Circulation** 1989 Sep;80(3):438–49

Optimization of atrial natriuretic factor radioimmunoassay. Sarda IR, et al. **Clin Biochem** 1989 Feb;22(1):11–5

Changes in the levels of plasma atrial natriuretic peptide, hemodynamic measurements, and the levels of vasoactive hormones during the clinical course of congestive heart failure. Hara H, et al. **Clin Cardiol** 1988 Nov;11(11):743–7

Correlation between heart disorders and concentrations of directly measured atrial natriuretic peptide in plasma. Fridrich L, et al. **Clin Chem** 1989 Mar;35(3):435–9

Development and validation of a two-site immunoradiometric assay for human atrial natriuretic factor in unextracted plasma. Lewis HM, et al. **Clin Chem** 1989 Jun;35(6):953–7

A highly specific radioreceptor assay for the active circulating form of atrial natriuretic factor in human plasma. Ong H, et al. **Clin Chem** 1988 Nov;34(11):2275–9

Improved radioimmunoassay of atrial natriuretic peptide in plasma. Poiesi C, et al. **Clin Chem** 1989 Jul;35(7):1431–4

Influence of blood pressure, heart rate, age, and sex on concentrations of atrial natriuretic factor and cyclic GMP in 124 volunteers. Wencker M, et al. **Clin Chem** 1989 Jul; 35(7):1519–23

Enzyme immunoassay for alpha-human atrial natriuretic polypeptide—direct measurement of plasma level. Hashida S, et al. **Clin Chim Acta** 1988 Jun 30;175(1):11–7

The effects of atrial pacing and ballooning on the plasma concentration of atrial natriuretic peptide in anesthetized dogs with or without vagotomy. Hirata Y, et al. **Clin Exp Hypertens [A]** 1989;11(1):89–101

Effect of long-term treatment with diltiazem on atrial natriuretic peptides in spontaneously hypertensive rats. Kohno M, et al. **Clin Exp Hypertens [A]** 1988;10(5):859–71

Increased circulating concentration of atrial natriuretic factor in persons with pheochromocytomas. Vesely DL, et al. **Clin Exp Hypertens [A]** 1989;11(3):353–69

Atrial natriuretic peptide levels in congestive heart failure in man before and during converting enzyme inhibition. Crozier IG, et al. **Clin Exp Pharmacol Physiol** 1989 May; 16(5):417–24

Levels of atrial natriuretic peptide are not always consistent with atrial pressure: is there alternative regulation as evidenced in Gordon's and Bartter's syndromes? Klemm SA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr; 16(4):269–74

Plasma neuropeptide Y and atrial natriuretic peptide concentrations in man. Russell AE, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):955–8

Effects of altitude on atrial natriuretic peptide: the Bicentennial Mount Everest Expedition. Tunny TJ, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):287–91

Acute hormonal and renal effects of oral dilevalol in normal men. Whitworth JA, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):59–63

Cardiac function and cardiovascular hormone balance during hemodialysis with special reference to atrial natriuretic peptide. Andersson U, et al. **Clin Nephrol** 1988 Dec; 30(6):303–7

Effects of changes in intravascular volume on atrial size and plasma levels of immunoreactive atrial natriuretic peptide in uremic man. Cannella G, et al. **Clin Nephrol** 1988 Oct; 30(4):187–92

Correlates of plasma atrial natriuretic peptide levels in renal transplant recipients. Doorenbos CJ, et al. **Clin Nephrol** 1989 Mar;31(3):146–9

Physiological significance of increased levels of endogenous atrial natriuretic factor in human acute renal failure. Kanfer A, et al. **Clin Nephrol** 1989 Aug;32(2):51–6

Water immersion-induced alterations of plasma atrial natriuretic peptide level and its relationship to the renin-angiotensin-aldosterone system and vasopressin secretion in acute and chronic renal failure. Kokot F, et al. **Clin Nephrol** 1989 May;31(5):247–52

Increased plasma levels of immunoreactive human atrial natriuretic factor in primary IgA nephropathy. Manno C, et al. **Clin Nephrol** 1988 Dec;30(6):308–14

Increased plasma atrial natriuretic factor and reduced plasma renin in patients with poorly controlled diabetes mellitus. Bell GM, et al. **Clin Sci** 1989 Aug;77(2):177–82

Effects of hypoxia and hypercapnia on atrial natriuretic factor and plasma renin activity in conscious dogs. Clozel JP, et al. **Clin Sci** 1989 Mar;76(3):249–54

Effects of the baroreceptor reflex system on atrial natriuretic factor secretion during volume expansion in dogs. Kohara K, et al. **Clin Sci** 1989 Jul;77(1):29–34

Urinary guanosine 3':5'-cyclic monophosphate but not tissue kallikrein follows the plasma atrial natriuretic factor response to acute volume expansion with saline. Lewis HM, et al. **Clin Sci** 1988 Nov;75(5):489–94

Contrasting plasma atrial natriuretic factor concentrations during comparable natriuresis with infusions of atrial natriuretic factor and saline in normal man. Richards AM, et al. **Clin Sci** 1988 Nov;75(5):455–62

Atrial natriuretic factor increases after a protein meal in man. Rodríguez-Iturbe B, et al. **Clin Sci** 1988 Nov;75(5):495–8

Effects of felodipine on natriuresis, atrial natriuretic factor, the renin-angiotensin-aldosterone system, and blood pressure in essential hypertension. Cerasola G, et al. **Clin Ther** 1988;10(6):694–703

Atrial natriuretic peptide and other vasoactive hormones during treatment of severe diabetic ketoacidosis in children. Tulassay T, et al. **Contrib Nephrol** 1988;67:53–7

Plasma levels of atrial natriuretic factor in nonhibernating and hibernating marmots. Zatzman ML, et al. **Cryobiology** 1989 Apr;26(2):196–8

Exercise and posture-related changes of atrial natriuretic factor and cardiac function in diabetes. Donckier JE, et al. **Diabetes Care** 1989 Jul–Aug;12(7):475–80

Plasma atrial natriuretic peptide in states of altered thyroid function. Yamaji T, et al. **Endocrinol Jpn** 1988 Apr; 35(2):343–8

Humoral adaptation mechanisms and clinical outcome during vasodilator therapy. Dietz R, et al. **Eur Heart J** 1988 Jun; 9 Suppl H:73–5

Effects of physical exercise and anti-G suit inflation on atrial natriuretic factor plasma level. Guezennec CY, et al. **Eur J Appl Physiol** 1989;58(5):500–7

Ventilatory, circulatory, endocrine, and renal effects of almitrine infusion in man: a contribution to high altitude physiology. Koller EA, et al. **Eur J Appl Physiol** 1989; 58(4):419–25

Effect of exercise on plasma atrial natriuretic factor and cardiac function in men and women. Donckier JE, et al. **Eur J Clin Invest** 1988 Aug;18(4):415–9

Plasma atrial natriuretic peptide and the renin-aldosterone system during long-term administration of the diuretic xipamide in man. Lijnen P, et al. **Eur J Clin Pharmacol** 1989;36(2):111–7

Effect of arginine vasopressin on urine formation and plasma atrial natriuretic peptide level in conscious dogs. Hellebrekers LJ, et al. **Eur J Pharmacol** 1989 May 2; 164(1):55–62

Plasma atrial natriuretic peptide in conscious rats with reduced renal mass. Brandt MA, et al. **FASEB J** 1989 Sep; 3(11):2302–7

Atrial natriuretic peptide, plasma renin activity, and aldosterone in women on estrogen therapy and with premenstrual syndrome. Davidson BJ, et al. **Fertil Steril** 1988 Nov;50(5):743–6

Plasma levels of atrial natriuretic peptide in patients with liver cirrhosis and its relation to ascites and renal function. Fukui H, et al. **Gastroenterol Jpn** 1989 Apr;24(2):149–55

Atrial natriuretic factor in cirrhotic patients with ascites [letter; comment] **Gastroenterology** 1989 Apr;96(4):1225–7
. **Comment on:** Gastroenterology 1988 Sep;95(3):764–70

Plasma human atrial natriuretic factor in cirrhosis and ascites with and without functional renal failure. Morgan TR, et al. **Gastroenterology** 1988 Dec;95(6):1641–7

Are there any characteristic changes in the plasma concentration of atrial natriuretic factor in liver cirrhosis? [letter; comment] Tulassay T, et al. **Hepatology** 1989 Aug; 10(2):263–4. **Comment on:** Hepatology 1988 May–Jun;8(3)636–42

Atrial natriuretic peptide in diabetic patients with microangiopathy. Dussaule JC, et al. **Horm Metab Res** 1988 Sep;20(9):592–4

Atrial natriuretic peptide concentration and natriuretic hormone activity in plasma of patients with chronic renal failure. Horký K, et al. **Horm Metab Res** 1988 Nov; 20(11):709–12

Human atrial natriuretic polypeptide in plasma of patients with anorexia nervosa. Ohashi M, et al. **Horm Metab Res** 1988 Nov;20(11):705–8

Calcium infusion increases plasma atrial natriuretic factor in spontaneously hypertensive rats. Fujimura A, et al. **Hypertension** 1989 Jul;14(1):98–103

Hemodynamic and renal responses to physiological levels of atrial natriuretic factor in conscious dogs. Pichet R, et al. **Hypertension** 1989 Jul;14(1):104–10

Plasma concentrations of atrial natriuretic peptide, arginine vasopressin and hormones of the renin-angiotensin system in patients with end-stage renal disease. Elias AN, et al. **Int J Artif Organs** 1989 Mar;12(3):153–8

Atrial natriuretic peptide plasma levels during hemodialysis and hemofiltration in patients with end-stage renal disease. Groll J, et al. **Int J Artif Organs** 1989 May;12(5):284–8

Plasma atrial natriuretic factor in essential hypertension: relation to cardiac size, function and systemic hemodynamics. Ganau A, et al. **J Am Coll Cardiol** 1989 Sep;14(3):715–24; discussion 725–7

Prognostic importance of atrial natriuretic peptide in patients with chronic heart failure [published erratum appears in J Am Coll Cardiol 1989 Sep;14(3):812] Gottlieb SS, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1534–9

Alterations in serum sodium in relation to atrial natriuretic factor and other neuroendocrine variables in experimental pacing-induced heart failure. Moe GW, et al. **J Am Coll Cardiol** 1989 Jan;13(1):173–9

Atrial natriuretic peptide levels during and after acute cardiac tamponade in dogs. Zioris H, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):936–40

Effect of beta-adrenoceptor blockade on renin-aldosterone and alpha-ANF during exercise at altitude. Bouissou P, et al. **J Appl Physiol** 1989 Jul;67(1):141–6

Plasma atrial natriuretic peptide during brief upright and supine exercise in humans. Perrault H, et al. **J Appl Physiol** 1989 May;66(5):2159–67

Circulating atrial natriuretic factor activates vagal afferent inputs to paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1989 Mar;26(2):129–34

Characteristics of the distribution of plasma atrial natriuretic peptides in a cross-sectional study of middle-aged untreated male workers. Cappuccio FP, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S51–4

Effects of intranasal administration of synthetic (4–28)human atrial natriuretic peptide to normal volunteers. Delabays A, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):173–6

Human atrial natriuretic peptide in aortic and coronary sinus blood during atrial pacing in patients with ischemic heart disease. Oda H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):392–7

Effects of norepinephrine and angiotensin II on plasma atrial natriuretic peptide concentration in humans. Shimamoto K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S59–62

Echocardiographic measurements and plasma levels of atrial natriuretic factor. Testaert E, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S47–50

Development of a solid-phase extraction technique for alpha-human atrial natriuretic peptide in human plasma. O'Flynn MA, et al. **J Chromatogr** 1988 Oct 28;452:469–76

Sustained saline-induced secretion of atrial natriuretic hormone is not maintained by atrial stretch. Dananberg J, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):735–9

Atrial natriuretic peptide in the sheep. Castro LC, et al. **J Dev Physiol** 1988 Jun;10(3):235–46

Plasma and urinary clearance rates of atrial natriuretic factor during ontogeny in sheep. Robillard JE, et al. **J Dev Physiol** 1988 Aug;10(4):335–46

Atrial natriuretic factor in various stages of diabetic nephropathy. Sawicki PT, et al. **J Diabetic Complications** 1988 Oct–Dec;2(4):207–9

Effect of a hypertonic saline load on plasma concentrations of atrial natriuretic peptide in fetal calves and their dams. Amadieu-Farmakis M, et al. **J Endocrinol** 1989 Apr; 121(1):5–9

Increase in plasma concentrations of atrial natriuretic peptide during infusion of hypertonic saline in conscious newborn calves. Amadieu-Farmakis M, et al. **J Endocrinol** 1988 Oct; 119(1):23–9

Plasma levels of atrial natriuretic peptides during pregnancy and post partum in the rat. Jansakul C, et al. **J Endocrinol** 1989 Jan;120(1):113–7

Raised plasma levels of atrial natriuretic peptides in Addison's disease. Cappuccio FP, et al. **J Endocrinol Invest** 1989 Mar; 12(3):205–7

Plasma levels of atrial natriuretic factor in mild to moderate hypertensives without signs of left ventricular hypertrophy: correlation with the known duration of hypertension. Dessì-Fulgheri P, et al. **J Hum Hypertens** 1988 Oct; 2(3):177–82

Relationship between basal and sodium-stimulated plasma atrial natriuretic factor, age, sex and blood pressure in normal man. McKnight JA, et al. **J Hum Hypertens** 1989 Jun;3(3):157–63

Exaggerated atrial natriuretic peptide release during acute

exercise in essential hypertension. Sudhir K, et al. **J Hum Hypertens** 1988 Mar;1(4):299–304

Changed cyclic guanosine monophosphate atrial natriuretic factor relationship in hypertensive man. Bruun NE, et al. **J Hypertens** 1989 Apr;7(4):287–91

Modulation by chronic nifedipine of plasma atrial natriuretic peptide, cell Na+ transport and plasma volume in rats with renal hypertension. Knorr AM, et al. **J Hypertens** 1988 Oct;6(10):839–44

Platelet binding sites and plasma concentration of atrial natriuretic peptide in patients with essential hypertension. Schiffrin EL, et al. **J Hypertens** 1988 Jul;6(7):565–72

Atrial natriuretic peptide and exaggerated natriuresis during acute hypertonic volume expansion in essential hypertension. Sørensen SS, et al. **J Hypertens** 1989 Jan; 7(1):21–9

Relationship between plasma atrial natriuretic peptide and left atrial and left ventricular involvement in essential hypertension. Wambach G, et al. **J Hypertens** 1988 Jul; 6(7):573–7

Similar plasma atrial natriuretic factor levels in children and young adults with a high and low probability of developing hypertension: the Dutch Hypertension and Offspring Study. Van Hooft IM, et al. **J Hypertens Suppl** 1989 Feb; 7(1):S43–4

Effects of licorice on plasma atrial natriuretic peptide in healthy volunteers. Forslund T, et al. **J Intern Med** 1989 Feb;225(2):95–9

Atrial natriuretic peptide (ANP) in relation to blood pressure: a study in middle-aged men with normal and elevated blood pressure. Hedner T, et al. **J Intern Med** 1989 Apr; 225(4):229–35

The effect of subarachnoid hemorrhage on blood and CSF atrial natriuretic factor. Rosenfeld JV, et al. **J Neurosurg** 1989 Jul;71(1):32–7

Is human atrial natriuretic peptide in fetal blood useful as a parameter to detect the decompensate state of the fetal heart? Shimokawa H, et al. **J Perinat Med** 1988; 16(5–6):485–6

Characterization of the effect of nicotine on vasopressin and atrial natriuretic factor in the rabbit. Larose P, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1093–7

Recovery of elevated atrial natriuretic peptide in pressure-overload right heart failure. Hsieh CM, et al. **J Surg Res** 1989 Oct;47(4):304–8

Significance of changes in plasma atrial natriuretic peptide in congestive heart failure. Zhao HY, et al. **J Tongji Med Univ** 1988;8(4):213–8

Atrial natriuretic peptide in patients with obstructive uropathy. Gulmi FA, et al. **J Urol** 1989 Aug;142(2):268–72

The effect of adrenal surgery on plasma atrial natriuretic factor and sodium escape phenomenon in patients with primary aldosteronism. Nakada T, et al. **J Urol** 1989 Jul; 142(1):13–8

Plasma concentration of alpha-hANP and renal responses to alpha-hANP infusion in patients with congestive heart failure and those with chronic renal failure. Hirata Y, et al. **Jpn Circ J** 1988 Dec;52(12):1459–64

Effect of exercise on circulating atrial natriuretic peptide and left ventricular ejection fraction in healthy persons and patients with coronary artery disease. Nakamura T, et al. **Jpn Heart J** 1988 Nov;29(6):761–70

Changes in plasma level of alpha-atrial natriuretic polypeptide (alpha-ANP) and responsiveness of the aorta to exogenous alpha-ANP subsequent to myocardial infarction in rats. Wang YT, et al. **Jpn J Pharmacol** 1989 Apr;49(4):463–9

Response of atrial natriuretic peptide in plasma and urine to changes in dietary intake of sodium chloride in man. Shirataka M, et al. **Jpn J Physiol** 1988;38(5):677–87

Plasma levels of atrial natriuretic peptide in chronically dialyzed patients. Deray G, et al. **Kidney Int Suppl** 1988 Sep;25:S86–8

Ouabain-like natriuretic factor and atrial natriuretic factor in pregnancy. Fievet P, et al. **Kidney Int Suppl** 1988 Sep; 25:S89–92

Changes of molecular forms of atrial natriuretic peptide after treatment for congestive heart failure. Marumo F, et al. **Klin Wochenschr** 1988 Aug 1;66(15):675–81

Atrial natriuretic peptide-renin-aldosterone system in cirrhosis of the liver: circadian study. Colantonio D, et al. **Life Sci** 1989;45(7):631–5

The influence of carotid sinus pressure on plasma atrial natriuretic peptide in anaesthetized rabbits. King KA, et al. **Life Sci** 1989;44(26):2081–8

Atrial natriuretic factor in essential hypertension. Taylor MA, et al. **Life Sci** 1989;44(9):603–10

Elevated plasma levels of atrial natriuretic peptide (ANP) as a possible aggravating agent in congestive heart failure. Krupienicz A. **Med Hypotheses** 1989 Jan;28(1):11–2

Plasma levels of atrial natriuretic peptide in transient left ventricular ischemia [letter] Gasser R, et al. **N Engl J Med** 1989 Jun 29;320(26):1752

Atrial natriuretic factor and sodium intake in offspring of hypertensive and normotensive parents [letter] van Hooft IM, et al. **N Engl J Med** 1989 Mar 30;320(13):867–8

Effect of reduction of blood volume on plasma immunoreactive atrial natriuretic factor concentrations in normal man. Cannella G, et al. **Nephrol Dial Transplant** 1988;3(5):601–3

Increased plasma levels of atrial natriuretic peptide in patients with chronic renal failure: effect of noradrenaline infusion. Jespersen B, et al. **Nephrol Dial Transplant** 1988;3(6):762–7

Plasma alpha-human atrial natriuretic peptide and volume status in chronic haemodialysis patients. Leunissen KM, et al. **Nephrol Dial Transplant** 1989;4(5):382–6

Comparative effects of haemodialysis and haemofiltration on plasma atrial natriuretic peptide. Raine AE, et al. **Nephrol Dial Transplant** 1989;4(3):222–7

The effect of renal transplantation on plasma atrial natriuretic peptide. Woolf AS, et al. **Nephrol Dial Transplant** 1988; 3(2):205–8

Plasma levels of human atrial natriuretic factor in patients treated by hemodialysis and continuous ambulatory peritoneal dialysis. Ando R, et al. **Nephron** 1988;50(3):225–8

Plasma concentration of atrial natriuretic peptide in different phases of Korean hemorrhagic fever. Cho KW, et al. **Nephron** 1989;51(2):215–9

Atriopeptin in the twin transfusion syndrome. Nageotte MP, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):867–70

Influence of AV synchrony on the plasma levels of atrial natriuretic peptide (ANP) in patients with total AV block. Stangl K, et al. **PACE** 1988 Aug;11(8):1176–81

Fetal atrial natriuretic factor and arginine vasopressin responses to hyperosmolality and hypervolemia. Ross MG, et al. **Pediatr Res** 1988 Sep;24(3):318–21

Plasma atrial natriuretic peptide in patients with congenital heart diseases. Matsuoka S, et al. **Pediatrics** 1988 Oct; 82(4):639–43

Pro-atrial natriuretic peptide (1–98): the circulating cardiodilatin in man. Meleagros L, et al. **Peptides** 1989 May–Jun;10(3):545–50

Responsiveness of the ANP providing system to volume load in conscious dogs. Nishida Y, et al. **Pflugers Arch** 1988 Oct;412(5):535–40

Effects of penbutolol on plasma atrial natriuretic peptide and antidiuretic hormone levels before and after exercise: a double-blind comparison against placebo. Verho M, et al. **Pharmatherapeutica** 1989;5(5):320–8

Radioimmunoassay of atrial natriuretic peptide in human plasma: application to studies of volume and blood pressure homeostasis. Horký K, et al. **Physiol Bohemoslov** 1988; 37(4):299–305

Plasma ANF concentrations during head-down bed rest of various duration (from several hours to one month). Role of LBNP countermeasure. Gharib C, et al. **Physiologist** 1989 Feb;32(1 Suppl):S69–72

The relationship of the renin-angiotensin-aldosterone system to atrial natriuretic peptide and the natriuresis of volume expansion in diabetics with and without proteinuria. O'Hare JP, et al. **Postgrad Med J** 1988;64 Suppl 3:35–8; discussion 48–9

Effect of experimental obesity and subsequent weight reduction upon circulating atrial natriuretic peptide. Crandall DL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):352–6

Atrial natriuretic factor levels in diabetic rats. Hebden RA, et al. **Proc West Pharmacol Soc** 1988;31:297–9

Effect of central hypertonic stimulation on plasma atrial natriuretic peptide and oxytocin in conscious rats. Hattori T, et al. **Regul Pept** 1988 Dec;23(3):271–8

Atrial natriuretic peptide, arginine vasopressin, and the renin-angiotensin system in carbon tetrachloride-induced hepatitis in rats. Elias AN, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun;60(3):401–8

Plasma concentrations of atrial natriuretic factor in acute left ventricular failure in the dog. Hall C, et al. **Res Exp Med (Berl)** 1988;188(6):443–50

Plasma levels of atrial natriuretic peptide under acute hypoxia in normal subjects. Kawashima A, et al. **Respir Physiol** 1989 Apr;76(1):79–91

Atrial content and plasma levels of atrial natriuretic peptides in rats with chronic renal failure. Petersen JS, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):431–9

Increased atrial natriuretic peptide in an early stage of chronic glomerulonephritis. Sørensen SS, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):347–55

Late recurrence of operated adrenocortical carcinoma: atrial natriuretic factor before and after treatment with mitotane. Donckier JE, et al. **Surgery** 1989 May;105(5):690–2

Plasma atrial natriuretic peptide (ANP) in primary aldosteronism. Chen JH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):851–6

Atrial natriuretic peptide concentrations in hypoxic secondary pulmonary hypertension: relation to haemodynamic and blood gas variables and response to supplemental oxygen. Winter RJ, et al. **Thorax** 1989 Jan; 44(1):58–62

Effects of antihypertensive drugs on renal function and atrial natriuretic polypeptide in spontaneously hypertensive rats with renal ablation. Yasujima M, et al. **Tohoku J Exp Med** 1989 May;158(1):85–94

Plasma atrial natriuretic factor and other water- and sodium-regulating hormones after human heart transplantation. Farge D, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2573–5

Water immersion-induced alterations of plasma atrial natriuretic peptide, plasma renin activity, plasma aldosterone, and vasopressin in kidney transplant recipients. Kokot F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2052–5

Compensatory changes of sympathetic tone, the renin-angiotensin-aldosterone system, vasopressin, and ANF as potential therapeutic targets in congestive heart failure. van Zwieten PA. **Z Kardiol** 1988;77 Suppl 5:67–76 (38 ref.)

[Clinical significance of cardionatrin in the diagnosis of deficiency of heart-lung qi] Wang WH, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):521–2, 515 (Eng. Abstr.) (Chi)

[Plasma atrial natriuretic peptide in patients with acute myocardial infarction] Yang XS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):551–3, 587 (Eng. Abstr.) (Chi)

[Research on the relation of reninangiotensin-aldosterone and cardionatrin in endemic cretinism] You CY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):659–61, 715 (Eng. Abstr.) (Chi)

[Relation between atrial natriuretic factor and the renin-angiotensin-aldosterone system in the renal reaction to acute volume loading in patients with essential hypertension] Horký K, et al. **Cas Lek Cesk** 1989 Mar 17; 128(12):363–7 (Eng. Abstr.) (Cze)

[Atrial natriuretic factor in liver cirrhosis. The effect of volume loading] Tesař V, et al. **Cas Lek Cesk** 1988 Dec 2;127(49):1515–21 (Eng. Abstr.) (Cze)

[Natriuretic hormones of the heart] Tikkanen I, et al. **Duodecim** 1988;104(11):816–22 (46 ref.) (Fin)

[Effects of phenylephrine on atrial natriuretic factor and the renin-aldosterone axis in normal patients and essential hypertensive patients] Closas J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:75–8 (Eng. Abstr.) (Fre)

[Atrial natriuretic factor, catecholamines and the renin-angiotensin system in cardiac insufficiency. Relation to hemodynamic parameters] Komajda M, et al. **Arch Mal Coeur** 1988 Jul;81(7):845–53 (Eng. Abstr.) (Fre)

[Variations in the plasma concentrations of atrial natriuretic factor and endogenous digitalis compounds during acute volume expansion in the conscious rat] Morris M, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:105–8 (Eng. Abstr.) (Fre)

[Effects of anesthesia induction with propofol on plasma renin activity and atrial natriuretic factor secretion. A preliminary study] Journois D, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):59–62 (Eng. Abstr.) (Fre)

[Influence of the redistribution of liquid volumes on atrial natriuretic factor] Galen FX, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):983–7 (Eng. Abstr.) (Fre)

[Development of natriuretic atrial factor in pregnancy (letter)] Cellier M, et al. **Presse Med** 1989 Feb 18;18(7):360 (Fre)

[Modification of atrial natriuretic factor by the AV transmission time in pacemaker patients] Noll B, et al. **Dtsch Med Wochenschr** 1988 Dec 23;113(51–52):1994–6 (Eng. Abstr.) (Ger)

[Modification of atrial natriuretic peptide (ANP) and cyclic GMP by hemofiltration and hemodialysis] Eisenhauer T, et al. **Klin Wochenschr** 1988 Sep 15;66(18):940–5 (Eng. Abstr.) (Ger)

[Increased atrial natriuretic peptide in essential hypertension--relation to right atrial pressure behavior] Neyses L, et al. **Klin Wochenschr** 1989 Aug 1;67(15):756–61 (Eng. Abstr.) (Ger)

[Elevated levels of atrial natriuretic peptide and plasma catecholamines in arterial hypertension--indications for an interaction] Neyses L, et al. **Z Kardiol** 1988 Jul;77(7):407–12 (Eng. Abstr.) (Ger)

[Atrial natriuretic peptide (ANP) in cardiologic laboratory diagnosis] Woloszczuk W, et al. **Z Med Lab Diagn** 1989; 30(1):31 (Ger)

[Circadian rhythm of atrial natriuretic peptide in healthy man] Colantonio D, et al. **Cardiologia** 1988 May;33(5):511–3 (Eng. Abstr.) (Ita)

[Atrial natriuretic factor: an epidemiological study. Preliminary results] Musca A, et al. **Clin Ter** 1989 Mar 15;128(5):313–20 (Eng. Abstr.) (Ita)

[Atrial natriuretic factor in acute atrial hyperkinetic arrhythmia and chronic atrial fibrillo-flutter] Fontana F, et al. **G Ital Cardiol** 1989 May;19(5):417–27 (Eng. Abstr.) (Ita)

[Lack of correlation between atrial natriuretic peptide and arterial pressure in hemodialysed patients] Calzavara P, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):436–7 (Eng. Abstr.) (Ita)

[Massive pericardial effusion in a patient with scleroderma with special reference to concentration of alpha-hANP in plasma and pericardial effusion] Imamura S, et al. **Kokyu To Junkan** 1989 Apr;37(4):449–53 (Eng. Abstr.) (Jpn)

[Correlations between serum ANF concentration and cardiac functional indices assessed by two-dimensional echocardiography and pulse Doppler method in various cardiac diseases] Liang H, et al. **Kokyu To Junkan** 1988 Oct;36(10):1089–94 (Eng. Abstr.) (Jpn)

[Molecular forms of plasma atrial natriuretic peptide (ANP) after three kinds of ANP releasing stimulation] Nagae A, et al. **Nippon Jinzo Gakkai Shi** 1989 Apr;31(4):379–83 (Eng. Abstr.) (Jpn)

[Plasma level of atrial natriuretic polypeptide during and after cardiopulmonary bypass] Nishimura K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2213–20 (Eng. Abstr.) (Jpn)

[Determination of plasma alpha human atrial natriuretic polypeptide using monoclonal antibodies in patients with chronic renal failure] Naomi S, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Mar 20;65(3):152–60

(Eng. Abstr.) (Jpn)
[Age-related changes of serum human atrial natriuretic polypeptide levels in normal subjects and clinical significance in liver cirrhosis, diabetes mellitus] Sato R, et al. **Rinsho Byori** 1989 May;37(5):543–8 (Jpn)
[Atrial natriuretic factor] da Graça CA, et al. **Arq Bras Cardiol** 1988 Sep;51(3):201–2 (Por)

CEREBROSPINAL FLUID

Atrial natriuretic peptide, angiotensin, norepinephrine and electrolyte in cerebrospinal fluid of essential hypertension. Kawano Y, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:399–403
The presence of atrial natriuretic peptide in canine cerebrospinal fluid and its possible origin in the brain. Marumo F, et al. **J Endocrinol** 1988 Oct;119(1):127–31
Pituitary protein 7B2-like immunoreactivity in cerebrospinal fluid: comparison with other neuropeptides. Suzuki H, et al. **J Lab Clin Med** 1989 Jun;113(6):743–8
Increased concentration of atrial natriuretic factor in the cerebrospinal fluid of patients with aneurysmal subarachnoid hemorrhage and raised intracranial pressure. Dóczi T, et al. **Neurosurgery** 1988 Jul;23(1):16–9

CHEMICAL SYNTHESIS

Design and synthesis of metabolically stable atrial natriuretic factor analogs. Amino- and carboxy-terminal stabilization. Berman JM, et al. **FEBS Lett** 1988 Sep 12;237(1–2):76–80
Synthesis and activity of partial retro-inverso modified atrial natriuretic factor analogs. Berman JM, et al. **Int J Pept Protein Res** 1988 Jul;32(1):47–55
Conformationally restricted analogues of atriopeptin(103–125)amide. Spear KL, et al. **J Med Chem** 1989 Jan;32(1):67–72
The synthesis of protective fragments of alpha-human atrial natriuretic polypeptide (alpha-hANP). Cai MS, et al. **Sci Sin [B]** 1988 Apr;31(4):444–56
[Atrial natriuretic peptides. II. Synthesis of N-terminal fragments] Ovchinnikov MV, et al. **Bioorg Khim** 1988 Jun; 14(6):768–76 (Eng. Abstr.) (Rus)
[Atrial natriuretic peptides. III. Synthesis and biological activity of alpha-r-ANP, APII, APIII and des-Ser5,Ser6-APII] Ovchinnikov MV, et al. **Bioorg Khim** 1988 Jun;14(6):777–82 (Eng. Abstr.) (Rus)
[Atrial natriuretic peptides. I. Synthesis of C-terminal fragments] Ovchinnikov MV, et al. **Bioorg Khim** 1988 Jun; 14(6):759–67 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Atrial natriuretic factor—a new neuropeptide?] Januszewicz P, et al. **Przegl Lek** 1988;45(9):684–6 (26 ref.) (Pol)

DEFICIENCY

Neurological complications of total heart replacement: a proposed role for atrial natriuretic factor. Sharlow MF. **Med Hypotheses** 1988 Aug;26(4):237–8

GENETICS

A genetic linkage map of 27 loci from PND to FY on the short arm of human chromosome I. Dracopoli NC, et al. **Am J Hum Genet** 1988 Oct;43(4):462–70
Atrial natriuretic factor gene expression in rat ventricle during experimental hypertension. Mercadier JJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H979–87
Captopril and hydralazine suppress atrial natriuretic peptide (ANP) gene expression in the ventricles of spontaneously hypertensive rat. Fukui K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):310–6
Cloning and sequence analysis of cDNA encoding a precursor for rat brain natriuretic peptide. Kojima M, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1420–6
Atrial natriuretic peptide gene expression and its secretion by pneumocytes derived from neonatal rat lungs. Matsubara H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):619–27
Cloning and sequence analysis of cDNA encoding a precursor for human brain natriuretic peptide. Sudoh T, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1427–34
Expression of the gene for preproatriopeptin in the central nervous system of the rat. Standaert DG, et al. **Brain Res** 1988 Aug;464(1):7–13
Cloning and expression of the atrial natriuretic factor gene. Nemer M, et al. **Clin Physiol Biochem** 1988;6(3–4):163–70
Processing of the atrial natriuretic factor propeptide by atrial cardiocytes as revealed by immunocryoultramicrotomy. Thibault G, et al. **Endocrinology** 1989 Jun;124(6):3109–16
Expression and secretion of human atrial natriuretic alpha-factor in Bacillus subtilis using the subtilisin signal peptide. Wang LF, et al. **Gene** 1988 Sep 15;69(1):39–47
NsiI and ScaI restriction fragment length polymorphisms at the atrial natriuretic peptides (ANP) gene locus. Masharani U, et al. **Hum Genet** 1988 Nov;80(3):307
Tissue-specific determinants of human atrial natriuretic factor gene expression in cardiac tissue. Wu J, et al. **J Biol Chem** 1989 Apr 15;264(11):6472–9
Expression of the atrial natriuretic peptide gene in human fetal heart. Gardner DG, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):729–37
Gene for the rat atrial natriuretic peptide is regulated by glucocorticoids in vitro. Gardner DG, et al. **J Clin Invest** 1988 Oct;82(4):1275–81
Augmented expression of atrial natriuretic polypeptide gene in ventricle of human failing heart. Saito Y, et al. **J Clin Invest** 1989 Jan;83(1):298–305
Expression of atrial natriuretic factor gene in hearts from neonates of spontaneously hypertensive rats and stroke-prone spontaneously hypertensive rats. Arai H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S276–8
Effect of changes in sodium balance on renin, angiotensinogen and atrial natriuretic factor messenger RNA levels in rats. Iwao H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S297–9
Atrial natriuretic factor (ANF) gene expression in the Brattleboro rat. Lavigne JP, et al. **Peptides** 1988 Jul–Aug; 9(4):817–24

IMMUNOLOGY

Production of a monoclonal antibody against C terminus of atrial natriuretic factor by in vitro immunization. Rathinavelu A, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):634–8
Atrial natriuretic peptide in the central nervous system of the rat. Skofitsch G, et al. **Cell Mol Neurobiol** 1988 Dec; 8(4):339–91 (181 ref.)
Preparation of monoclonal antibodies against atrial natriuretic polypeptide precursor and application to highly sensitive sandwich enzyme immunoassay. Mukoyama M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S320–2

ISOLATION & PURIFICATION

Isolation and characterization of iso-rANP, a new natriuretic peptide from rat atria. Flynn TG, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):830–7
Occurrence of a novel cardiac natriuretic peptide in rats. Itoh H, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):732–9
Isolation and sequence determination of rat cardiac natriuretic peptide. Kambayashi Y, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):233–40
Discovery of atrial natriuretic factor in the brain: its characterization and cardiovascular implication. Inagami T, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):75–85 (56 ref.)

METABOLISM

Elevated atrial natriuretic peptide in the brain and heart of Brattleboro rats. Tuomisto L, et al. **Acta Physiol Scand** 1989 May;136(1):133–4
Atrial natriuretic peptide release during atrial arrhythmias in cardiac transplantation. Mulrow JP, et al. **Am Heart J** 1988 Oct;116(4):1101–3
Comparison of detecting sensitivities of different sizes of gold particles with electron-microscopic immunogold staining using atrial natriuretic peptide in rat atria as a model. Gu J, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):264–70
Pulmonary extraction of immunoreactive atrial natriuretic factor in dogs. Bates ER, et al. **Am J Cardiol** 1989 Feb 1;63(5):372–3
Relation of atrial natriuretic peptide release to atrial contraction. Vardas PE, et al. **Am J Cardiol** 1989 Mar 15; 63(11):753–5
Effect of fructose-induced hypertension on the renin-angiotensin-aldosterone system and atrial natriuretic factor. Hwang IS, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):424–7
Atrial natriuretic peptide: binding and cyclic GMP response in cultured vascular smooth muscle cells from spontaneously hypertensive rats. Resink TJ, et al. **Am J Hypertens** 1989 Jan;2(1):32–9
Regulation of cardiac preload by atrial natriuretic peptide in congestive cardiac failure. Johnston CI, et al. **Am J Med** 1988 Mar 11;84(3A):105–11
Atrial natriuretic peptide receptors in guinea pig placentas. Hatjis CG, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):493–6
Alveolar hypoxia is a powerful stimulus for ANF release in conscious lambs. Baertschi AJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H990–8
Atrial natriuretic factor binding sites in the jejunum. Bianchi C, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G436–41
Glomerular and vascular atrial natriuretic factor receptors in adrenalectomized rats. Cachofeiro V, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1250–7
Atrial peptide release after hemorrhage in unanesthetized swine. Carlson DE, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R915–21
Glomerular atrial natriuretic factor receptors during rehydration: plasma NH2- and COOH-terminal levels. Gauquelin G, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F621–5
Normal atrial natriuretic peptide release after acute and chronic stimuli in hypophysectomized rats. Hoffman A, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R522–7
Leukotriene D4 inhibits atrial natriuretic factor-dependent cGMP production in rat glomerulus. Terada Y, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F95–9
Effects of thyroid status on atrial natriuretic peptide release from isolated rat atria. Wong NL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E64–7
Specific binding and steroidogenetic effects of atrial natriuretic factor (ANF) in Leydig cells of rats. Foresta C, et al. **Arch Androl** 1987;19(3):253–9
Phosphorylation and dephosphorylation of the natriuretic peptide urodilatin (CDD-/ANP-95–126) and the effect on biological activity. Dörner T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):830–5
Decreased atrial natriuretic factor receptors and impaired cGMP generation in glomeruli from the cardiomyopathic hamster. Levin ER, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):807–14
Stimulation of protein phosphorylation by atrial natriuretic factor in plasma membranes of bovine adrenal cortical cells. Pandey KN. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):988–94
High affinity receptors for atrial natriuretic factor in PC12 cells. Rathinavelu A, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):78–85
Characterization of specific receptors for atrial natriuretic factor on cultured bovine brain capillary endothelial cells. Smith KR, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):308–14
Brain natriuretic peptide receptors in the rat peripheral sympathetic ganglia. Torda T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1032–8
Calcitonin gene-related peptide(CGRP) stimulates the release of atrial natriuretic peptide(ANP) from isolated rat atria. Yamamoto A, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1452–8
Hydrolysis of alpha-human atrial natriuretic peptide in vitro by human kidney membranes and purified endopeptidase-24.11. Evidence for a novel cleavage site. Vanneste Y, et al. **Biochem J** 1988 Sep 1;254(2):531–7
Degradation of atrial natriuretic peptides by an enzyme in rat kidney resembling neutral endopeptidase 24.11. Bertrand P, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3817–21
Interaction of gentamicin with atrial natriuretic polypeptide receptors in renal cells. Hori R, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1359–61
Topographical characterization of the domain structure of the bovine adrenal atrial natriuretic factor R1 receptor. Liu B, et al. **Biochemistry** 1989 Jun 27;28(13):5599–605
Atrial natriuretic factor R1 receptor from bovine adrenal zona glomerulosa: purification, characterization, and modulation by amiloride. Meloche S, et al. **Biochemistry** 1988 Oct 18;27(21):8151–8
Purification of a specific peptidase in bovine atria for the processing of pro-atrial natriuretic factor. Imada T, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:113–20
Fast atom bombardment mass spectrometric investigation of in vitro degradation within the disulfide-linked core of atrial natriuretic factor. Chen TM, et al. **Biomed Environ Mass Spectrom** 1989 Jan;18(1):12–9
Placental barrier to atrial natriuretic peptide in rats. Mulay S, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):1–4
Effect of sinus node on spontaneous release of natriuretic peptide in isolated atria. Wong NL, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):859–62
Atrial natriuretic peptide in heart and specific binding in organs from fetal and newborn rats. Hersey RM, et al. **Cell Biochem Funct** 1989 Jan;7(1):35–41
Atrial natriuretic peptide and angiotensin II binding sites in cerebral capillaries of spontaneously hypertensive rats. Ibaragi M, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):221–31
Atrial natriuretic peptide in the central nervous system of the rat. Skofitsch G, et al. **Cell Mol Neurobiol** 1988 Dec; 8(4):339–91 (181 ref.)
Atrial myoendocrine cells (cardiodilatin/atrial natriuretic polypeptide-containing myocardiocytes) are target cells for estradiol. Back H, et al. **Cell Tissue Res** 1989 Mar; 255(3):673–4
Atrial natriuretic factor in the impulse-conduction system of rat cardiac ventricles. Cantin M, et al. **Cell Tissue Res** 1989;256(2):309–25
Atrial natriuretic peptide in a rat model of cardiac failure. Atrial and ventricular mRNA, atrial content, plasma levels, and effect of volume loading. Drexler H, et al. **Circulation** 1989 Mar;79(3):620–33
Regulation of ventricular atrial natriuretic peptide release in hypertrophied rat myocardium. Effects of exercise. Ruskoaho H, et al. **Circulation** 1989 Aug;80(2):390–400
Atrial natriuretic peptide distribution in fetal and failed adult human hearts. Tsuchimochi H, et al. **Circulation** 1988 Oct; 78(4):920–7
Human atrial natriuretic peptide in non-dialyzed patients with chronic renal failure. Predel HG, et al. **Clin Nephrol** 1989 Mar;31(3):150–5
Atrial natriuretic peptide vascular receptor: regulation of low-affinity binding by calcium. Morton JJ, et al. **Clin Sci** 1989 Jan;76(1):9–11
Atrial natriuretic peptide levels in plasma and in cardiac tissues after chronic hypoxia in rats. Winter RJ, et al. **Clin Sci** 1989 Jan;76(1):95–101
Binding sites for atrial natriuretic peptide in the kidney and aorta of the hagfish (Myxine glutinosa). Kloas W, et al. **Comp Biochem Physiol [A]** 1988;91(4):685–8
Localization of atrial natriuretic peptide degrading activity in the rat kidney. Katz AI, et al. **Contrib Nephrol** 1988; 68:66–71
Clearance receptors of atrial natriuretic factor. Maack T, et al. **Contrib Nephrol** 1988;68:58–65
Release of human natriuretic peptide in kidney

transplantation. Offner G, et al. **Contrib Nephrol** 1988; 67:48–52

Metabolism of atrial natriuretic peptide. Extraction by organs in the rat. Krieter PA, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):14–9

Human atrial natriuretic peptide receptor defines a new paradigm for second messenger signal transduction. Lowe DG, et al. **EMBO J** 1989 May;8(5):1377–84

Atrial natriuretic peptide in kidney of renal disease patients and healthy persons. Marumo F, et al. **Endocrinol Jpn** 1988 Aug;35(4):523–9

Changes in the plasma and urine alpha human atrial natriuretic peptide (alpha hANP) concentration in patients with thyroid disorders. Suzuki Y, et al. **Endocrinol Jpn** 1988 Dec;35(6):907–13

Pathogenesis of extracellular fluid abnormalities of hypothalamic hypodipsia–hypernatremia syndrome. Yamamoto T, et al. **Endocrinol Jpn** 1988 Dec;35(6):915–24

Cardiac and noncardiac atrial natriuretic factor (ANF) biosynthesis and storage and plasma ANF in the rat model of chronic ventricular dysfunction. Bilder GE, et al. **Endocrinology** 1989 Mar;124(3):1515–21

Is atrial natriuretic peptide synthesized and internalized by gonadotrophs? Morel G, et al. **Endocrinology** 1989 Apr; 124(4):1703–10

Atrial natriuretic peptide in plasma, atria, ventricles, and hypothalamus of Long–Evans and vasopressin–deficient Brattleboro rats. Ruskoaho H, et al. **Endocrinology** 1989 May;124(5):2595–603

Angiotensin II and atrial natriuretic factor–binding sites in various tissues in hypertension: comparative receptor localization and changes in different hypertension models in the rat. Wilson SK, et al. **Endocrinology** 1989 Jun; 124(6):2799–808

Natriuretic factors and lithium clearance in patients with the syndrome of inappropriate antidiuretic hormone (SIADH). Gross P, et al. **Eur J Clin Invest** 1989 Feb;19(1):11–9

Binding sites for atrial natriuretic peptide on platelets in patients with congestive cardiomyopathy. Strom TM, et al. **Eur J Clin Invest** 1988 Oct;18(5):524–8

Multiple types of receptors for atrial natriuretic peptide. Agui T, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):301–7

Direct binding of atrial natriuretic factor to adrenocortical mitochondria. Heisler S. **Eur J Pharmacol** 1989 Mar 21; 162(2):281–8

Atrial and brain natriuretic peptides share binding sites in the kidney and heart. Oehlenschlager WF, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):159–64

Dynorphin stimulates the release of ANP from isolated rat atria. Stasch JP, et al. **Eur J Pharmacol** 1989 Jan 2; 159(1):101–2

An immunocytochemical study of the sinuatrial node and atrioventricular conducting system of the rat for atrial natriuretic peptide distribution. Skeper JN. **Histochem J** 1989 Feb;21(2):72–8

Ontogeny of atrial natriuretic peptide receptors in fetal rat kidney and adrenal gland. Scott JN, et al. **Histochemistry** 1989;91(5):395–400

Atrial natriuretic factor in Purkinje fibers of rabbit heart. Anand–Srivastava MB, et al. **Hypertension** 1989 Jun;13(6 Pt 2):789–98

Enhanced release of atrial natriuretic factor by endothelin in atria from hypertensive rats. Winquist RJ, et al. **Hypertension** 1989 Jul;14(1):111–4

Metabolism of 125I–atrial natriuretic factor by vascular smooth muscle cells. Evidence for a peptidase that specifically removes the COOH–terminal tripeptide. Johnson GR, et al. **J Biol Chem** 1989 Jul 15; 264(20):11637–42

Recombinant expression of a secreted form of the atrial natriuretic peptide clearance receptor. Porter JG, et al. **J Biol Chem** 1989 Aug 25;264(24):14179–84

Atrial natriuretic peptide in brain preoptic areas: implications for fluid and salt homeostasis. Geiger H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S20–3

Functional atrial natriuretic peptide receptor in human adrenal tumor. Shionoiri H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S9–12

Degradation of atrial natriuretic peptide: pharmacologic effects of protease EC 24.11 inhibition. Webb RL, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):285–93

The effect of local angiotensin converting enzyme inhibition on the action of atrial natriuretic peptide in the human forearm. Cockcroft JR, et al. **J Hum Hypertens** 1989 Feb; 3(1):49–52

Atrial natriuretic factor: specific binding to renal glomeruli during the development of two–kidney, one clip hypertension in the rat. Gauquelin G, et al. **J Hypertens** 1988 Jul;6(7):587–92

Atrial natriuretic factor release during angiotensin II infusion in right and left atrial appendectomized rats. Lachance D, et al. **J Hypertens** 1989 Apr;7(4):293–8

Peptides derived from atrial natriuretic polypeptide precursor in human and monkey brains. Itoh H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S309–13

Ganglionic, spinal cord and hypothalamic atrial natriuretic factor: its distribution, origin and possible role in spontaneously hypertensive rats. Kuchel O, et al. **J Hypertens Suppl** 1988 Dec;6(4):S279–81

Cosecretion of peptides derived from gamma–human atrial natriuretic polypeptide in normal volunteers and patients with essential hypertension and adrenal disorders. Sugawara A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S327–9

Increase in plasma atrial natriuretic factor and right atrial area during endogenous and exogenous volume loading in healthy volunteers: effect on plasma renin activity, aldosterone and antidiuretic hormone. Wingender W, et al. **J Hypertens Suppl** 1988 Dec;6(4):S314–6

Analogues of atriopeptin(103–125)amide having high binding selectivity. Spear KL, et al. **J Med Chem** 1989 May; 32(5):1094–8

Decrease of atrial natriuretic peptide content in rat superior cervical sympathetic ganglion after denervation and axotomy. Nagata Y, et al. **J Neurochem** 1989 May; 52(5):1570–5

In vivo metabolism of atrial natriuretic peptide: identification of plasma metabolites and enzymes responsible for their generation. Krieter PA, et al. **J Pharmacol Exp Ther** 1989 May;249(2):411–7

Biochemical mechanism of release of atrial natriuretic polypeptide. Hayashi J, et al. **Jpn Circ J** 1988 Dec; 52(12):1421–4

Physiological factors of atrial natriuretic polypeptide release and its neural regulation in conscious dogs. Nishida Y, et al. **Jpn Circ J** 1988 Dec;52(12):1425–9

Release of atrial natriuretic peptide from the isolated, blood–perfused right atrium of the dog. Motomura S, et al. **Jpn J Pharmacol** 1988 Jul;47(3):285–91

Plasma and atrial levels of atrial natriuretic peptide (ANP) in pulmonary hypertensive rats. Akimoto K, et al. **Life Sci** 1988;43(14):1125–32

Receptor binding affinity and thermolysin degradation of truncated and retro–inverso–isomeric ANF analogs. Berman JM, et al. **Life Sci** 1989;44(18):1267–70

Characterization of specific binding of atrial natriuretic peptide (ANP) to rat PC12 phaeochromocytoma cells. Boumezrag A, et al. **Life Sci** 1988;43(24):2035–42

Effect of ATP and amiloride on ANF binding and stimulation of cyclic GMP accumulation in rat glomerular membranes. Cole FE, et al. **Life Sci** 1989;45(6):477–84

Identification and characterization of atrial natriuretic factor receptors in the rat retina. Fernandez–Durango R, et al. **Life Sci** 1989;44(24):1837–46

Specific binding of atrial natriuretic factor to renal glomeruli during day or night antiorthostatic suspension in the rat. Gauquelin G, et al. **Life Sci** 1988;43(23):1905–12

Receptors for atrial natriuretic peptide (ANP) and regulation of thyroglobulin secretion by ANP in human thyroid cells. Sellitti DF, et al. **Life Sci** 1989;45(9):793–801

Splanchnic disposal of human atrial natriuretic peptide in humans. Vierhapper H, et al. **Metabolism** 1988 Oct; 37(10):973–5

Immunocytochemical localization, binding, and effects of atrial natriuretic peptide in rat adipocytes. Jeandel L, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):69–78

Enhanced activity of the cardiac endocrine system during right ventricular hypertrophy. Oehlenschlager WF, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):243–51

Specific inhibitors of endopeptidase 24.11 inhibit the metabolism of atrial natriuretic peptides in vitro and in vivo. Olins GM, et al. **Mol Cell Endocrinol** 1989 Feb; 61(2):201–8

Brain natriuretic peptides: differential localization of a new family of neuropeptides. Saper CB, et al. **Neurosci Lett** 1989 Jan 2;96(1):29–34

Atrial natriuretic factor in sympathetic ganglia of the rat: dependence on cholinergic innervation. Debinski W, et al. **Neuroscience** 1988 Dec;27(3):965–8

Plasma and urine concentrations of atrial natriuretic peptide in patients with diabetes mellitus. Suzuki Y, et al. **Pancreas** 1988;3(4):404–8

Receptor binding sites for atrial natriuretic factor are expressed by brown adipose tissue. Bacay AC, et al. **Peptides** 1988 Sep–Oct;9(5):1021–6

Specificity of serine proteases for cleavage sites on proatrial natriuretic factor. Fischman AJ, et al. **Peptides** 1988 Nov–Dec;9(6):1275–83

Manipulation of stretch–induced atriopeptin prohormone release and processing in the perfused rat heart. Ito T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8365–9

Characteristics of distension–induced release of immunoreactive atrial natriuretic peptide in isolated perfused rabbit atria. Cho KW, et al. **Regul Pept** 1988 Sep; 22(4):333–45

Atrial natriuretic peptide in human neuroblastoma. Niimura S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):189–200

Evidence that atrial natriuretic factor is the humoral factor by which volume loading or mannitol infusion produces an improved renal function after acute ischemia. An experimental study in dogs. Gianello P, et al. **Transplantation** 1989 Jul;48(1):9–14

Atrial natriuretic factors and the brain: an update [published erratum appears in Trends Neurosci 1988 Jun;11(6):277] Quirion R. **Trends Neurosci** 1988 Feb;11(2):58–62 (39 ref.)

[Localization of atrial natriuretic peptide in the heart. Immunohistochemical and northern blot analyses] Mochizuki N. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):737–45 (Eng. Abstr.) **(Jpn)**

[Biosynthesis and secretion of atrial natriuretic peptide] Nakao K, et al. **Tanpakushitsu Kakusan Koso** 1988 Nov; 33(14):2461–75 **(Jpn)**

PHARMACOKINETICS

Localization of 125I–labelled alpha–r–atrial natriuretic peptide in rat tissues by whole–body and microautoradiography. Tjälve H, et al. **Acta Physiol Scand** 1988 Dec;134(4):467–72

Clearance function of type C receptors of atrial natriuretic factor in rats. Almeida FA, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):R469–75

Contribution of the kidney to metabolic clearance of atrial natriuretic peptide. Woods RL. **Am J Physiol** 1988 Dec; 255(6 Pt 1):E934–41

Internalization of atrial natriuretic peptide by adrenal glomerulosa cells. Morel G, et al. **Biol Cell** 1989;65(2):181–8

Atrial natriuretic factor causes secretion in the isolated perfused rabbit ileum. Bastidas JA, et al. **Curr Surg** 1988 Sep–Oct;45(5):372–4

Pharmacokinetics of vasopressin and atrial natriuretic peptide in anesthetized rabbits. King KA, et al. **Endocrinology** 1989 Jan;124(1):77–83

Autoradiographic localization of [125I]endothelin–1 and [125I]atrial natriuretic peptide in rat tissue: a comparative study. Neuser D, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S67–73; discussion S74

Clearance of atrial natriuretic factor by lung, liver, and kidney in human subjects and the dog. Hollister AS, et al. **J Clin Invest** 1989 Feb;83(2):623–8

Pharmacokinetics and pharmacodynamics of atrial natriuretic peptide after bolus and infusion administration in the isolated perfused rat kidney. Brier ME, et al. **J Pharmacol Exp Ther** 1989 May;249(2):372–7

PHARMACOLOGY

Hormonal responses to synthetic atrial natriuretic peptide in patients on regular hemodialysis. Nakajima S, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):257–62

Effects of alpha–human atrial natriuretic polypeptide, sodium nitroprusside and dibutyryl cyclic GMP on aldosterone production in bovine zona glomerulosa cells. Okamoto M. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):358–66

Atrial natriuretic peptide directly inhibits corticosteroid biosynthesis in human aldosterone–producing adenoma. Gláz E, et al. **Acta Med Hung** 1988;45(3–4):377–86

Effects of antidiuretic hormone (AVP) and human atrial natriuretic peptide (hANP) on water and electrolyte balance in neonates. Takata M, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:146–54

Atrial natriuretic factors (ANF) and antidiuretic agents. Croxatto HR, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):1–9

Vasodilator responses to alpha–human–atrial natriuretic peptide in isolated omental and pulmonary arteries from rabbit and man. Lindberg F, et al. **Acta Physiol Scand** 1988 Nov;134(3):391–7

Relationship between renal sympathetic activity and diuretic effects of atrial natriuretic peptide (ANP) in the rat. Pettersson A, et al. **Acta Physiol Scand** 1989 Mar; 135(3):323–33

Renal interaction between sympathetic activity and ANP in rats with chronic ischaemic heart failure. Pettersson A, et al. **Acta Physiol Scand** 1989 Apr;135(4):487–92

Effects of atrial natriuretic peptide (ANP) on jejunal net fluid absorption in the rat. Pettersson A, et al. **Acta Physiol Scand** 1989 Jul;136(3):419–26

Characterization of bilateral renal response to atrial natriuretic peptide in 2–kidney, 1 clip hypertensive rats. Huang WC, et al. **Adv Exp Med Biol** 1989;252:349–56

Atrial natriuretic peptide (ANP)–induced increase in capillary albumin and water flux. Huxley VH, et al. **Adv Exp Med Biol** 1988;242:23–31

Cardiac effects of atrial natriuretic peptide in subjects with normal left ventricular function. Indolfi C, et al. **Am J Cardiol** 1989 Feb 1;63(5):353–7

The effects of atrial peptide in humans with chronic renal failure. Windus DW, et al. **Am J Kidney Dis** 1989 Jun; 13(6):477–84

Atrial natriuretic peptides and renin release. Richards AM, et al. **Am J Med** 1988 Mar 11;84(3A):112–8

Atrial natriuretic peptide attenuates the reflex sympathetic responses to lower body negative pressure. Imam K, et al. **Am J Med Sci** 1989 Jul;298(1):1–7

The effects of alpha–human atrial natriuretic polypeptide on steroidogenesis by fetal zone cells of the human fetal adrenal gland. Carr BR, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1361–5

Selective increase in placental blood flow by atrial natriuretic peptide in hypertensive rats. Chemtob S, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):477–9

ANF inhibits glucose–stimulated insulin secretion in mouse and rat. Ahrén B. **Am J Physiol** 1988 Nov;255(5 Pt 1):E579–82

Effects of a physiological dose of ANP on renal function in dogs. Banks RO. **Am J Physiol** 1988 Nov;255(5 Pt 2):F907–10

Effects of atrial natriuretic peptide on renal medullary prostaglandin E2 production. Bolterman RJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F336–40

Fetal cardiovascular, endocrine, and fluid responses to atrial natriuretic factor infusion. Brace RA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R580–7

Renal dose response and pharmacokinetics of atrial natriuretic factor in dogs. Cernacek P, et al.

Am J Physiol 1988 Dec;255(6 Pt 2):R929–35

Atrial natriuretic factor induces natriuresis during pacing tachycardia in dogs. Christensen G, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1245–9

Effects of ANP on venous pressures and microvascular protein permeability in dog forelimb. Eliades D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H272–9

Neuronal and cardiovascular responses to ANF microinjected into the solitary nucleus. Ermirio R, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R577–82

Hemodynamic effects of chronic infusion of rANP in renal hypertensive rats. Fenoy FJ, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):H1393–8

Regional hemodynamic effects of atrial natriuretic peptide or captopril in Brattleboro rats. Gardiner SM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R737–43

Arginine vasopressin potentiates natriuretic effect of atrial peptide. Graczak LM, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H925–7

Mechanism mediating hypotensive effect of ANF in sodium-depleted dogs. Granger JP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H502–5

Hemodynamic, renal, and hormonal responses to incremental ANF infusions in humans. Groban L, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F780–6

Characteristics of ANP-sensitive guanylate cyclase in inner medullary collecting duct cells. Gunning M, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F766–75

Atrial natriuretic factor suppresses neural stimulation of renin release in dogs. Hisa H, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E332–5

Effect of ANP on sustained aldosterone secretion stimulated by angiotensin II. Isales CM, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):C89–95

ANP relaxes bovine tracheal smooth muscle and increases cGMP. Ishii K, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C495–500

Permissive role of dopamine in renal action of ANP in volume-expanded rats. Katoh T, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F300–9

Natriuretic response to hypervolemia is absent in rats with papillary necrosis. Keeler R, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):R422–6

Attenuated response to atrial natriuretic peptide in rats with myocardial infarction. Kohzuki M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H533–8

Mechanism for decrease in cardiac output with atrial natriuretic peptide in dogs. Lee RW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H760–5

Response to atrial natriuretic peptide in dogs with hypovolemic acute pancreatitis. Levy M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F211–7

Baroreceptor activation or glutamate coinjection facilitates depressor responses to ANF microinjection into NTS. McKitrick DJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R405–9

Atrial peptide potentiates renal responses to volume expansion in conscious dogs. Metzler CH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R284–9

Physiological doses of atrial peptide inhibit angiotensin II-stimulated aldosterone secretion. Metzler CH, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1155–9

ANF inhibits vasopressin-induced Ca2+ mobilization and contraction in glomerular mesangial cells. Meyer-Lehnert H, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F771–80

Blunted cGMP response to ANF in vascular smooth muscle cells of SHR. Nakamura M, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):C573–80

ANF inhibits NaCl and fluid absorption in cortical collecting duct of rat kidney. Nonoguchi H, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F179–86

Regulation of Na-K-Cl cotransport in endothelial cells by atrial natriuretic factor. O'Donnell ME. **Am J Physiol** 1989 Jul;257(1 Pt 1):C36–44

Cyclic nucleotide-mediated effects of ANF and VIP on flounder intestinal ion transport. O'grady SM. **Am J Physiol** 1989 Jan;256(1 Pt 1):C142–6

Effects of atrial natriuretic factor on isolated arteries and perfused organs of trout. Olson KR, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R10–8

Endogenous ANP augments fractional excretion of Pi, Ca, and Na in rats with reduced renal mass. Ortola FV, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1091–7

Effects of converting-enzyme inhibitor on hemodynamic actions of ANP in renal hypertensive rats. Salom MG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R365–9

Mechanism of inhibition of renin response to hypotension by atrial natriuretic factor. Scheuer DA, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R194–203

Atrial natriuretic hormone effect on renal function and aldosterone secretion in sodium depletion. Shenker Y. **Am J Physiol** 1988 Dec;255(6 Pt 2):R867–73

Atrial natriuretic peptide and nitroprusside cause relaxation of cultured rat mesangial cells. Singhal PC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C86–93

Effect of ANP on circulating blood volume. Sugimoto E, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R127–31

Effect of nicardipine and atriopeptin on transcapillary shift of fluid and proteins. Valentin JP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R174–9

Influence of volume expansion on hemodynamic effects of atrial natriuretic factor in rabbits. Volpe M, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H852–8

Urinary cGMP as biological marker of the renal activity of atrial natriuretic factor. Wong KR, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1220–4

The biochemical pharmacology of atrial peptides. Needleman P, et al. **Annu Rev Pharmacol Toxicol** 1989;29:23–54 (212 ref.)

Effects of atrial natriuretic factor (ANF) on rat testicular steroidogenesis in vitro. Foresta C, et al. **Arch Androl** 1988; 21(3):181–7

Factors mediating a regional difference in vasorelaxing effects of human natriuretic polypeptide in dogs. Kawanishi M, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr; 298:198–209

Enhancement of coronary conductance by alpha-human atrial natriuretic polypeptide without effects on myocardial contractility. Shimizu A, et al. **Arzneimittelforschung** 1988 Nov;38(11):1572–7

Atrial natriuretic factor inhibits proliferation of vascular smooth muscle cells stimulated by platelet-derived growth factor. Abell TJ, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1392–6

Atrial natriuretic factor increases the magnitude of duodenal spontaneous phasic contractions. Baeyens DA, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1437–43

Stimulation of Na-K-Cl cotransport in cultured vascular endothelial cells by atrial natriuretic peptide. Fujita T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):734–40

Atrial natriuretic factor inhibits angiotensin-induced aldosterone secretion: not through cGMP or interference with phospholipase C. Ganguly A, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):148–54

Action of atrial natriuretic peptide and angiotensin II on the myocardium: studies in isolated rat ventricular cardiomyocytes. Neyses L, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1435–43

Mechanism of activation of particulate guanylate cyclase by atrial natriuretic peptide as deduced from radiation inactivation analysis. Ohuchi S, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):603–9

Effects of atrial natriuretic factor on urinary concentration of catecholamines and renin secretion in dogs. Sowers JR, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1070–6

Effect of atrial natriuretic factor on brush border membrane transport of phosphate in phosphate-deprived rats. Yusufi AN, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):4027–9

Stimulatory effects of atrial natriuretic factor on phosphoinositide hydrolysis in cultured bovine aortic smooth muscle cells. Hirata M, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):346–51

Venous responsiveness to atrial natriuretic factor in man. Ford GA, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):797–9

The renal effects of atrial natriuretic peptide in man are not attenuated by (+)-sulpiride. Freestone S, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):13–8

Noradrenaline attenuates the natriuretic effect of atrial natriuretic factor in man. McMurray JJ, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):7–12

Vascular responses to local atrial natriuretic peptide infusion in man. Webb DJ, et al. **Br J Clin Pharmacol** 1988 Sep; 26(3):245–51

Potentiation of atrial natriuretic peptide-stimulated cyclic guanosine monophosphate formation by glucocorticoids in cultured rat renal cells. Kanda K, et al. **Br J Pharmacol** 1989 Apr;96(4):795–800

Evidence against the central nervous system being involved in altered reflex control of sympathetic nerve activity by atrial natriuretic peptide. Suzuki S, et al. **Brain Res** 1989 Apr 17;485(1):109–14

Atrial natriuretic factor alters autonomic interactions in the control of heart rate in conscious rats. Ackermann U, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):930–6

Angiotensin restores atrial natriuretic factor-induced decrease of baroreceptor sensitivity in normotensive rats, but not in spontaneously hypertensive rats. Ackermann U, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):675–81

Effect of rat cardionatrin I (rat ANF 99–126) on the response of toad skin to angiotensin II. Coviello A, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):362–5

Heterogeneity in responses of isolated monkey arteries and veins to atrial natriuretic peptide. Kawai Y, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):326–30

Effect of atrial natriuretic factor on blood-brain barrier permeability. Nag S, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):637–40

Vasorelaxant effects of and receptors for atrial natriuretic peptides in the mesenteric artery and aorta of the rat. St-Louis J, et al. **Can J Physiol Pharmacol** 1988 Jul; 66(7):951–6

Atrial natriuretic peptide interferes with calcium requirements in vascular tissues of the rat. St-Louis J, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):963–6

Effects of atrial natriuretic peptide on systemic haemodynamics and cardiac function in normal man. Allen MJ, et al. **Cardiovasc Res** 1989 Jan;23(1):70–5

Role of renal nerves in the potentiation of atriopeptin-induced natriuresis by vasopressin. Hartupee DA, et al. **Circ Res** 1989 Feb;64(2):370–5

Effects of alpha-human atrial natriuretic peptide on the interrelationship of arterial pressure, aortic nerve activity, and aortic diameter. Hirooka Y, et al. **Circ Res** 1988 Dec; 63(6):987–96

Mechanisms underlying atriopeptin-induced increases in hematocrit and vascular permeation in rats. Williamson JR, et al. **Circ Res** 1989 May;64(5):890–9

Hormonal and renal effects of atrial natriuretic peptide in patients with secondary hypertension. Hirata Y, et al. **Circulation** 1988 Dec;78(6):1401–10

Cardiac and vascular effects of atrial natriuretic factor and sodium nitroprusside in healthy men. Roy LF, et al. **Circulation** 1989 Feb;79(2):383–92

Hemodynamic and renal effects of atrial natriuretic factor (99–126) in volume expanded sheep. Parkes DG, et al. **Clin Exp Hypertens [A]** 1988;10(6):1107–26

Evidence against the central nervous system involved in altered reflex control of sympathetic nerve activity by atrial natriuretic peptide. Suzuki S, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:263–8

Renal effects of atrial natriuretic peptide in conscious rabbits with renal wrap hypertension. Takata M, et al. **Clin Exp Hypertens [A]** 1989;11(1):59–74

Effect of atrial peptide on collecting duct function. Fitzgibbon W, et al. **Clin Exp Pharmacol Physiol** 1988 Nov; 15(11):845–55

Enhancement of renal but not haemodynamic effects of atrial natriuretic peptide (1–28) in sheep treated with ACTH. Parkes DG, et al. **Clin Exp Pharmacol Physiol** 1988 Dec; 15(12):945–53

Renal interaction of atrial natriuretic peptide with angiotensin II: glomerular and tubular effects. Rakugi H, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):97–107

Renal effects of atrial natriuretic factor (99–126) in water-deprived sheep. Yates NA, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):433–7

Physiological effects of synthetic atrial natriuretic factor in normal conscious dogs. Moe GW, et al. **Clin Invest Med** 1988 Dec;11(6):417–24

Effect of atrial peptide on gastric acid secretion in rats. Stapelfeldt W, et al. **Clin Physiol Biochem** 1988;6(5):262–7

Domperidone, a DA2-specific dopamine antagonist, has no effect on the renal or haemodynamic response to atrial natriuretic peptide in man. Allen MJ, et al. **Clin Sci** 1988 Dec;75(6):569–75

Atrial natriuretic peptide-induced decreases in renal blood flow in man: implications for the natriuretic mechanism. Janssen WM, et al. **Clin Sci** 1989 Jul;77(1):55–60

Effect of low dose infusion of atrial natriuretic peptide on renal function in man. Solomon LR, et al. **Clin Sci** 1988 Oct;75(4):403–10

Effects of nitrovasodilators, endothelium-dependent vasodilators, and atrial peptides on cGMP. Murad F, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:1005–9 (49 ref.)

Physiological concentrations of atrial natriuretic factors with intact N-terminal sequences inhibit corticotropin-releasing factor-stimulated adrenocorticotropin secretion from cultured anterior pituitary cells. King MS, et al. **Endocrinology** 1989 Jan;124(1):286–92

The role of Ca2+ and calmodulin in the regulation of atrial natriuretic peptide-stimulated guanosine 3',5'-cyclic monophosphate accumulation by isolated mouse Leydig cells. Mukhopadhyay AK, et al. **Endocrinology** 1989 Aug; 125(2):686–92

Effects of dibutyryl adenosine 3',5'-monophosphate, angiotensin II, and atrial natriuretic factor on phosphorylation of a 17,600-dalton protein in adrenal glomerulosa cells. Takagi M, et al. **Endocrinology** 1988 Nov;123(5):2419–23

Renal responses to atrial natriuretic factor in patients with congestive heart failure. Cody RJ, et al. **Eur Heart J** 1988 Jun;9 Suppl H:29–33

Morphological characterization of cultured bovine aortic endothelial cells and the effects of atriopeptin II and sodium nitroprusside on cellular and extracellular accumulation of cyclic GMP. Schini V, et al. **Eur J Cell Biol** 1988 Oct; 47(1):53–61

Atrial natriuretic factor enhances vasopressin-induced bradycardia in normotensive (WKY) but not in spontaneously hypertensive (SHR) rats. Lapiński M, et al. **Eur J Clin Invest** 1988 Dec;18(6):568–74

Arginine vasopressin dissociates the diuresis and natriuresis due to atrial natriuretic factor in man. McMurray J, et al. **Eur J Clin Invest** 1988 Dec;18(6):627–32

Renal response to infusion versus repeated bolus injections of atrial natriuretic factor in man. Gaillard CA, et al. **Eur J Clin Pharmacol** 1989;36(2):195–7

Effect of human atrial natriuretic peptide on blood glucose concentrations and hormone stimulation during insulin-induced hypoglycaemia in healthy man. Jungmann E, et al. **Eur J Clin Pharmacol** 1989;36(6):593–7

Frusemide pretreatment blunts the inhibition of renal tubular sodium reabsorption by ANF in man. McMurray J, et al. **Eur J Clin Pharmacol** 1988;35(4):333–8

Atrial natriuretic factor inhibits ACTH stimulated aldosterone, but not cortisol, secretion in man. McMurray J, et al. **Eur J Clin Pharmacol** 1988;35(4):409–12

Sustained dilatation of large coronary artery by alpha-human atrial natriuretic peptide in conscious dogs: a comparison with nitroglycerin. Adachi H, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):189–96

Effects of human ANF-(99–126) on sympathetic nerve function, hemodynamic parameters and plasma cGMP

levels in anesthetized, ganglion-blocked dogs. Bergey JL, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):103–12

Atrial natriuretic peptide inhibits the release of endothelium-derived relaxing factor from blood vessels of the rabbit. Hogan JC, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):129–34

Hypotensive response to atrial natriuretic factor in conscious chronic pulmonary hypertensive rats. Lee KC, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):153–6

Vasorelaxant effects of atriopeptins in human internal mammary artery. McMahon EG, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):155–8

Hyperresponsiveness to atrial natriuretic factor in adult Brattleboro rats. Palluk R, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):245–55

Development of more potent atrial natriuretic factor (ANF) analogs. Song DL, et al. **Eur J Pharmacol** 1989 Jan 24; 160(1):141–8

Growth inhibitory activity of atrial natriuretic factor in rat glomerular mesangial cells. Appel RG. **FEBS Lett** 1988 Sep 26;238(1):135–8

A dicarba analog of beta-atrial natriuretic peptide (beta-ANP) inhibits guanosine 3',5'-cyclic monophosphate production induced by alpha-ANP in cultured rat vascular smooth muscle cells. Kambayashi Y, et al. **FEBS Lett** 1989 May 8;248(1–2):28–34

Hemodynamic, renal, and endocrine effects of 4-h infusions of human atrial natriuretic peptide in normal volunteers. Bidiville J, et al. **Fundam Clin Pharmacol** 1988;2(5):413–29

The effects of atriopeptin and angiotensin on the rat right ventricle. Doggrell SA. **Gen Pharmacol** 1989;20(2):253–7

Effects of atrial natriuretic polypeptide and organic nitrates on levels of relaxation and cyclic nucleotide of canine coronary artery with and without endothelial injury. Nakagawa H, et al. **Heart Vessels** 1988;4(1):19–25

Chronic and acute volume expansion in normal man: effect on atrial diameter and plasma atrial natriuretic peptide. Cuneo RC, et al. **Horm Metab Res** 1989 Mar;21(3):148–51

Alpha-human atrial natriuretic polypeptide inhibits 19-hydroxy-androstenedione secretion by human adrenal cells. Higuchi K, et al. **Horm Metab Res** 1989 Feb; 21(2):92–5

Atrial natriuretic factor effects on cyclic nucleotides in a human renal cell line. Cole FE, et al. **Hypertension** 1989 Jun;13(6 Pt 2):799–803

Analogue-specific action in vitro of atrial natriuretic factor on human red blood cell Ca2+-ATPase activity. Davis FB, et al. **Hypertension** 1988 Oct;12(4):428–33

Opposite effects of enalapril and nitrendipine on natriuretic response to atrial natriuretic factor. Renal function evaluated with clearance studies in humans. Gaillard CA, et al. **Hypertension** 1989 Feb;13(2):173–80

Enhanced natriuretic effect of atrial natriuretic factor during mineralocorticoid escape in humans. Gaillard CA, et al. **Hypertension** 1988 Oct;12(4):450–6

Antihypertensive effect of a 5-day infusion of atrial natriuretic factor in humans. Janssen WM, et al. **Hypertension** 1989 Jun;13(6 Pt 1):640–6

Atrial natriuretic factor inhibits isoproterenol- and furosemide-stimulated renin release in humans. McMurray JJ, et al. **Hypertension** 1989 Jan;13(1):9–14

Effects of incremental infusions of atrial natriuretic factor on aldosterone, renin, and blood pressure in humans. Oelkers W, et al. **Hypertension** 1988 Oct;12(4):462–7

Low dose atrial natriuretic factor in primary aldosteronism: renal, hemodynamic, and vascular effects. Pedrinelli R, et al. **Hypertension** 1989 Aug;14(2):156–63

Interaction of angiotensin converting enzyme inhibition and atrial natriuretic factor. Richards AM, et al. **Hypertension** 1989 Mar;13(3):193–9

Role of prostaglandins in mediating the renal effects of atrial natriuretic factor. Salazar FJ, et al. **Hypertension** 1988 Sep; 12(3):274–8

Potentiation of renal effects of atrial natriuretic factor-(99–126) by SQ 29,072. Seymour AA, et al. **Hypertension** 1989 Jul;14(1):87–97

The influence of the atrial natriuretic factor on venous tone in man. Ljutić D, et al. **Int J Clin Pharmacol Res** 1989; 9(4):255–60

The intraocular pressure response of human atrial natriuretic factor in glaucoma. Diestelhorst M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):99–101

Atrial natriuretic factor attenuates the pulmonary pressor response to hypoxia. Adnot S, et al. **J Appl Physiol** 1988 Nov;65(5):1975–83

Atrial natriuretic peptide lowers pulmonary arterial pressure in hypoxia-adapted rats. Jin HK, et al. **J Appl Physiol** 1988 Oct;65(4):1729–35

Effects of atrial natriuretic factor (ANF) on phenylephrine-triggered intra- and extracellular calcium dependent contraction in rat aorta. Delaflotte S, et al. **J Auton Pharmacol** 1989 Jun;9(3):211–8

Differential stimulation of rat lung particulate guanylate cyclase activity by atrial natriuretic peptide and sodium nitroprusside. Iwasa F, et al. **J Biochem (Tokyo)** 1989 May; 105(5):697–9

Amiloride interacts with guanine nucleotide regulatory proteins and attenuates the hormonal inhibition of adenylate cyclase. Anand-Srivastava MB. **J Biol Chem** 1989 Jun 5; 264(16):9491–6

Regulation of intracellular Ca2+ levels in cultured vascular smooth muscle cells. Reduction of Ca2+ by atriopeptin and 8-bromo-cyclic GMP is mediated by cyclic GMP-dependent protein kinase. Cornwell TL, et al. **J Biol Chem** 1989 Jan 15;264(2):1146–55

Atrial natriuretic factor-induced egression of cyclic guanosine 3',5'-monophosphate in cultured vascular smooth muscle and endothelial cells. Hamet P, et al. **J Biol Chem** 1989 Jul 25;264(21):12364–9

Inhibition of atrial natriuretic peptide-induced cyclic GMP accumulation in the bovine endothelial cells with anti-atrial natriuretic peptide receptor antiserum. Ishido M, et al. **J Biol Chem** 1989 Jan 5;264(1):641–5

Discrimination between phenylephrine-triggered contractile events by atrial natriuretic factor in rat aorta. Auguet M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S17–9

The vasodilating effect of atrial natriuretic peptide in normotensive and hypertensive humans. Bolli P, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S75–9 (27 ref.)

Bolus injections of synthetic atrial natriuretic peptide in patients with chronic renal failure or nephrotic syndrome. Burnier M, et al. **J Cardiovasc Pharmacol** 1989 May; 13(5):682–90

Effects of intranasal administration of synthetic (4–28)human atrial natriuretic peptide to normal volunteers. Delabays A, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):173–6

Effect of atrial natriuretic factor on renin and aldosterone. Franco-Saenz R, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S31–5 (21 ref.)

Differential renal responses to atrial natriuretic peptide in two-kidney, one clip goldblatt hypertensive rats. Huang WC, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):7–15

Atrial natriuretic factor attenuates prostaglandin E2-stimulated plasma renin activity in humans. McMurray J, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):326–30

Role of angiotensin II in the renal response to atrial natriuretic peptide in normal subjects. Rakugi H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S55–8

Atrial natriuretic factor administered to humans: 1984–1988. Richards AM. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S69–74 (21 ref.)

Interaction of atrial natriuretic peptide and amiloride on renal hemodynamics through renal kallikrein and kinins in anesthetized rabbits. Seino M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S39–42

Potentiation of the depressor responses to atrial natriuretic peptides in conscious SHR by an inhibitor of neutral endopeptidase. Seymour AA, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):194–204

A comparison of synthetic human and rat ANP administered intracerebroventricularly in freely moving normotensive and hypertensive rats. Squadrito F, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S27–30

Difference between the effects of atrial natriuretic peptide and calcium antagonist on cytosolic free calcium in cultured vascular smooth muscle cells. Takeuchi K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S13–6

Thiorphan, an inhibitor of endopeptidase 24.11, potentiates the natriuretic activity of atrial natriuretic peptide. Trapani AJ, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):419–24

Inhibitory effect of human atrial natriuretic peptide on cyclic AMP levels in microdissected human glomeruli. Umemura S, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S36–8

Direct and neurohumoral cardiovascular effects of atrial natriuretic peptide. Woods RL, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):177–85

Effects of the intracerebroventricular atrial natriuretic factor on angiotensin II or sodium-induced blood pressure elevation and natriuresis. Yoshida K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S24–6

Atrial natriuretic hormone has biological effects in man at physiological plasma concentrations. Richards AM, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1134–9

Interaction of atriopeptin III and vasopressin on calcium kinetics and contraction of aortic smooth muscle cells. Meyer-Lehnert H, et al. **J Clin Invest** 1988 Oct; 82(4):1407–14

Atrial natriuretic factor inhibits vasopressin-stimulated osmotic water permeability in rat inner medullary collecting duct. Nonoguchi H, et al. **J Clin Invest** 1988 Oct;82(4):1383–90

Chronotropic and inotropic effects of atrial peptides on the isolated systemic heart of Octopus vulgaris. Agnisolo C, et al. **J Comp Physiol [B]** 1989;158(6):637–41

Atrial natriuretic peptide and sodium nitroprusside stimulate cyclic GMP accumulation by avian skin fibroblasts and epiphyseal growth-plate chondroprogenitor cells. Pines M, et al. **J Endocrinol** 1989 Feb;120(2):319–24

Lack of aldosterone inhibition by atrial natriuretic factor in primary aldosteronism: in vitro studies. Rocco S, et al. **J Endocrinol Invest** 1989 Jan;12(1):13–7

Cardiovascular, renal and endocrine responses to low doses of atrial natriuretic factor in mild essential hypertension. Cusson JR, et al. **J Hum Hypertens** 1989 Apr;3(2):89–96

Sympathoadrenal responses during bradycardia-hypotension associated with combined infusion of atrial natriuretic factor and prostaglandin E2. McMurray J, et al. **J Hum Hypertens** 1989 Feb;3(1):61–3

Hypotensive and diuretic effects of atrial natriuretic factor in diabetic patients. Pusterla C, et al. **J Hum Hypertens** 1989 Apr;3(2):79–87

Effect of a chronic infusion of atrial natriuretic factor on glomerular and vascular receptors in spontaneously hypertensive rats. Cachofeiro V, et al. **J Hypertens** 1989 Apr;7(4):335–42

The effect of atrial natriuretic factor on urinary albumin and beta 2-microglobulin excretion in man. McMurray J, et al. **J Hypertens** 1988 Oct;6(10):783–6

The vasodilator effect of human atrial natriuretic factor (99–126) on human omental arteries. Bruschi G, et al. **J Hypertens Suppl** 1988 Dec;6(4):S333–5

Interaction between atrial natriuretic factor and angiotensin II receptors in the regulation of blood pressure. Chabrier PE, et al. **J Hypertens Suppl** 1988 Dec;6(4):S290–1

Effect of atrial natriuretic factor on arterial baroreceptor control of heart rate and blood pressure in conscious rats. Ferrari AU, et al. **J Hypertens Suppl** 1988 Dec;6(4):S284–6

Amiloride potentiates the vascular effects of atrial natriuretic factor. Linz W, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S300–2

Atrial natriuretic factor protects the isolated working ischaemic rat heart against the action of angiotensin II. Linz W, et al. **J Hypertens Suppl** 1988 Dec;6(4):S339–41

Impaired aldosterone production by chronic intravenous infusion of atrial natriuretic factor in rabbits. Nagano M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S306–8

Dopaminergic control of aldosterone secretion is not mediated by atrial natriuretic factor in patients with essential hypertension. Sala C, et al. **J Hypertens Suppl** 1988 Dec;6(4):S336–8

Nicardipine and atrial natriuretic factor increase whole body vascular permeability in rats. Valentin JP, et al. **J Hypertens Suppl** 1988 Dec;6(4):S303–5

Atrial natriuretic peptide decreases contractility of cultured heart cell: preliminary report. Vaxelaire JF, et al. **J Hypertens Suppl** 1988 Dec;6(4):S282–3

Effect of synthetic atrial natriuretic factor on superficial and deep proximal tubule sodium reabsorption. Haas JA, et al. **J Lab Clin Med** 1989 Apr;113(4):458–62

Carboxyalkyl dipeptides with atrial natriuretic factor potentiating and antihypertensive activity. Haslanger MF, et al. **J Med Chem** 1989 Apr;32(4):737–9

Elevation by atrial natriuretic factors of cyclic GMP levels in astroglia-rich cultures from murine brain. Friedl A, et al. **J Neurochem** 1989 Feb;52(2):589–97

Atrial natriuretic peptide and sodium azide dependent guanylate cyclase activities in placentas from normal and severely toxemic patients. Hatjis CG, et al. **J Perinat Med** 1989;17(1):25–31

Regulation of phosphorylase A formation and calcium content in aortic smooth muscle and smooth muscle cells: effects of atrial natriuretic peptide II. Cornwell TL, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):524–30

Atrial natriuretic factor inhibits adrenergic and purinergic neurotransmission in the rabbit isolated vas deferens. Drewett JG, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):135–42

Cyclic guanosine 3',5' monophosphate mediates the inhibitory effect of atrial natriuretic factor in adrenergic, neuronal pheochromocytoma cells. Drewett JG, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):428–32

Influence of atrial natriuretic factor on 5-(N-ethyl-N-isopropyl)amiloride-sensitive 22Na+ uptake in rabbit aorta. Gupta S, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):991–6

Interaction of non-guanylate cyclase-linked atriopeptin receptor ligand and endopeptidase inhibitor in conscious rats. Koepke JP, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):172–6

SCH 39370, a neutral metalloendopeptidase inhibitor, potentiates biological responses to atrial natriuretic factor and lowers blood pressure in desoxycorticosterone acetate-sodium hypertensive rats. Sybertz EJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):624–31

The effects of atrial natriuretic peptide and glucagon on proximal glomerulo-tubular balance in anaesthetized rats. Harris PJ, et al. **J Physiol (Lond)** 1988 Aug;402:29–42

Influence of right atrial stretch and atrial natriuretic factor on rat intestinal fluid content. Kaufman S, et al. **J Physiol (Lond)** 1988 Aug;402:1–8

Atrial natriuretic peptide-induced stimulation of cyclic GMP formation by isolated bovine luteal cells. Brunswig B, et al. **J Reprod Fertil** 1989 Jul;86(2):665–9

Interaction between sympathetic nerve activity and atrial natriuretic peptide with respect to the effects on renal hemodynamics in patients with cardiovascular diseases. Hirata Y, et al. **Jpn Circ J** 1989 May;53(5):446–52

Molecular mechanism of action by atrial natriuretic peptide in rat vascular smooth muscle cells. Hirata Y, et al. **Jpn Circ J** 1988 Dec;52(12):1430–5

Factors influencing vascular and natriuretic responses to ANP. Torikai S. **Jpn Circ J** 1988 Dec;52(12):1450–2

Pharmacological actions of synthetic atrial natriuretic factor on coronary vascular smooth muscle. Yanagisawa A, et al. **Jpn Circ J** 1988 Dec;52(12):1436–40

Effects of chronically administered atrial natriuretic factor in aldosterone-infused hypertensive rats. Yasujima M, et al. **Jpn Circ J** 1988 Dec;52(12):1446–9

Effects of atrial natriuretic peptide on regional renal blood flow measured by a thermal diffusion technique. Tsuchiya K, et al. **Jpn J Exp Med** 1989 Feb;59(1):27–35

Atrial natriuretic peptide-induced inhibition of amiloride-sensitive 22Na+ uptake into cerebral capillaries of spontaneously hypertensive rats. Ibaragi M, et al. **Jpn J Pharmacol** 1989 May;50(1):82–5

Possible involvement of sodium pump in the relaxation of

rat aorta induced by alpha-human atrial natriuretic polypeptide. Sato K, et al. **Jpn J Physiol** 1988;38(2):187-98
Enzymatic and binding effects of atrial natriuretic factor in glomeruli and nephrons. Kim JK, et al. **Kidney Int** 1989 Mar;35(3):799-805
Atrial natriuretic peptide and furosemide effects on hydraulic pressure in the renal papilla. Méndez RE, et al. **Kidney Int** 1988 Jul;34(1):36-42
Prior inhibition of vasoconstrictors normalizes GFR in postobstructed kidneys. Purkerson ML, et al. **Kidney Int** 1989 Jun;35(6):1305-14
The effect of atrial natriuretic factor on blood pressure and renal function of long-term hypothyroid rats. Capasso G, et al. **Kidney Int Suppl** 1988 Sep;25:S104-9
Mechanism of action of atrial natriuretic peptides does not involve adenylate cyclase system of different rat brain areas. Geiger H, et al. **Kidney Int Suppl** 1988 Sep; 25:S98-100
Uranyl nitrate-induced acute renal failure in rats: effect of atrial natriuretic peptide on renal function. Heidbreder E, et al. **Kidney Int Suppl** 1988 Sep;25:S79-82
Central nervous system mediated vasodepressor action of atrial natriuretic factor. Levin ER, et al. **Life Sci** 1989; 44(22):1617-24
Physiological responses to low dose infusions of atrial peptide in conscious dogs. Metzler CH, et al. **Life Sci** 1989; 44(14):935-43
Atrial natriuretic peptides cleaved by endopeptidase are inactive in conscious spontaneously hypertensive rats. Seymour AA, et al. **Life Sci** 1988;43(26):2265-74
Atrial natriuretic peptide decreases contractility of cultured chick ventricular cells. Vaxelaire JF, et al. **Life Sci** 1989; 45(1):41-8
Effect of atrial natriuretic peptide on the release of rat renal kallikrein. Klein HG, et al. **Miner Electrolyte Metab** 1989; 15(3):130-6
Atrial natriuretic peptide (ANP) acts via specific binding sites on cGMP system of rat pancreatic islets without affecting insulin release. Verspohl EJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):348-53
Evidence for a proximal and distal nephron action of atrial natriuretic factor in man. McMurray J, et al. **Nephron** 1989; 51(1):39-43
Pupillary response to atrial natriuretic factor in rabbits. Hernandez DE, et al. **Neuropeptides** 1988 Nov-Dec; 12(4):219-24
Atrial natriuretic factor suppresses M-current in frog but not in rat sympathetic neurones. Pant KK, et al. **Neurosci Lett** 1989 May 22;100(1-3):243-8
Renal and hemodynamic effects of synthetic atrial natriuretic peptide in dogs with chronic renal failure. Tsuchiya K, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):151-7
Effect of alpha-human atrial natriuretic peptides on intraocular pressure in normal albino rabbits. Tsukahara S, et al. **Ophthalmologica** 1988;197(2):104-9
Renal effects of atrial natriuretic peptide infusion in young and adult rats. Chevalier RL, et al. **Pediatr Res** 1988 Sep; 24(3):333-7
Renal and cardiovascular effects of atrial natriuretic peptide in fetal sheep. Hargrave BY, et al. **Pediatr Res** 1989 Jul; 26(1):1-5
Effects of aldosterone and atrial natriuretic peptide on water and electrolyte homeostasis of sick neonates. Kojima T, et al. **Pediatr Res** 1989 Jun;25(6):591-4
Renal hemodynamic response to atrial natriuretic factor in fetal and newborn sheep. Varille VA, et al. **Pediatr Res** 1989 Mar;25(3):291-4
Amiloride enhances atrial natriuretic factor stimulation of cGMP accumulation in rat glomeruli. Iwata T, et al. **Peptides** 1989 May-Jun;10(3):575-9
Effect of atrial natriuretic factor (ANF) on nicotinic acetylcholine receptor channels in bovine chromaffin cells. Bormann J, et al. **Pflugers Arch** 1989 May;414(1):11-4
Vascular actions of atrial natriuretic peptide. Mulvany MJ. **Pharmacol Res Commun** 1988 Sep;20 Suppl 3:23-34 (39 ref.)
Effect of domperidone on renal response to certain atrial natriuretic substances in rats. Hathaway SJ, et al. **Pharmacology** 1989;38(1):47-56
Atriopeptin inhibition of thrombin-mediated changes in the morphology and permeability of endothelial monolayers. Baron DA, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3394-8
Effect of angiotensin converting enzyme inhibition on renal response to atrial natriuretic factor in rats. Wu JN, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul;12(3):186-93
Relaxing effect of atrial natriuretic factor on endothelin-precontracted vascular strips. Bonhomme MC, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):309-15
The degree of atrial natriuretic peptide (ANP)-induced contraction inhibition is dependent on spare receptors. Prins BA, et al. **Proc West Pharmacol Soc** 1989;32:263
Failure of select diuretics, except furosemide, to attenuate action of atrial natriuretic peptide. Solomon S, et al. **Proc West Pharmacol Soc** 1988;31:77-80
Relaxant effects of atrial natriuretic polypeptide on guinea pig tracheal smooth muscle. Watanabe H, et al. **Prog Biochem Pharmacol** 1988;23:136-41
Prostaglandin E2 and atriopeptin III oppose the contractile effect of angiotensin II in rat kidney mesangial cell cultures. Fandrey J, et al. **Prostaglandins** 1988 Aug;36(2):249-57
Centrally injected atrial natriuretic factor inhibits angiotensin- and osmotically-induced drinking in pigs. Thornton SN, et al. **Q J Exp Physiol** 1988 Nov; 73(6):1009-12
Atrial natriuretic peptide inhibits water and sodium intake in rabbits. Tarjan E, et al. **Regul Pept** 1988 Oct;23(1):63-75
Effect of atrial natriuretic peptide on arterial pressure and renal function in cirrhotic rats with ascites. López C, et al. **Rev Esp Fisiol** 1988 Sep;44(3):265-72
Atrial natriuretic peptide inhibits a cation channel in renal inner medullary collecting duct cells. Light DB, et al. **Science** 1989 Jan 20;243(4889):383-5
Blood pressure and renal responses to synthetic rat atrial natriuretic factor in deoxycorticosterone acetate-salt hypertension. Kohzuki M, et al. **Tohoku J Exp Med** 1989 Apr;157(4):301-11
Acute and chronic effects of synthetic atrial natriuretic factor on blood pressure and sodium excretion in spontaneously hypertensive rats. Kohzuki M, et al. **Tohoku J Exp Med** 1989 Mar;157(3):279-88
Cyclic GMP accumulation by atriopeptins in cultured rat renal and vascular smooth muscle cells. Sato M, et al. **Tohoku J Exp Med** 1988 Apr;154(4):399-411
The effect of atrial natriuretic peptide on cytosolic free calcium in cultured vascular smooth muscle cells. Takeuchi K, et al. **Tohoku J Exp Med** 1989 May;158(1):47-56
Effect of human atrial natriuretic peptide on postischemic acute renal failure in conscious dogs. Neumayer HH, et al. **Transplant Proc** 1988 Oct;20(5):917-20
Prevention of acute cyclosporine nephrotoxicity by atrial natriuretic factor after ischemia in the rat. Gianello P, et al. **Transplantation** 1989 Mar;47(3):512-5
[Effects of atriopeptin III on isolated perfused rat heart] Gao F, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):597-602 (Eng. Abstr.) **(Chi)**
[Effects of human atrial natriuretic factor-(99-126) on plasma and brain vasopressin in stroke-prone spontaneously hypertensive rats] Sun SD, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):56-62 (Eng. Abstr.) **(Chi)**
[Atrial natriuretic factor diminishes the contractility of the cardiac cell in culture] Vaxelaire JF, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:271-3 (Eng. Abstr.) **(Fre)**
[Atrial natriuretic factor--a new hormone system] Saxenhofer H, et al. **Ther Umsch** 1988 Dec;45(12):836-41 (27 ref.) (Eng. Abstr.) **(Ger)**
[Effects of atrial natriuretic peptide on left ventricular function in man] Indolfi C, et al. **Cardiologia** 1989 Mar; 34(3):253-7 (Eng. Abstr.) **(Ita)**
[Hemodynamic and renal effects of synthetic atrial natriuretic factor (alpha-h-ANF) in patients with congestive heart failure] Fontana F, et al. **G Ital Cardiol** 1988 Jul; 18(7):567-77 (Eng. Abstr.) **(Ita)**
[Hemodynamic, renal and humoral effects of the infusion of human natriuretic peptide in hypertensive patients] Rizzoni D, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):194-5 (Eng. Abstr.) **(Ita)**
[Possible involvement of cyclic GMP (cGMP) in atrial natriuretic factor (ANF) induced natriuresis] Shiina T. **Nippon Jinzo Gakkai Shi** 1989 Apr;31(4):385-91 (Eng. Abstr.) **(Jpn)**
[Effect of atriopeptin on the adrenergic mechanism regulating blood vessel tonus] Azin AL, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):390-2 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Endocrine function of the heart in cardiac disease. Condorelli M, et al. **Acta Cardiol** 1989;44(3):203-19 (99 ref.)
Regulation of brain water and electrolyte contents: the opposite actions of central vasopressin and atrial natriuretic factor (ANF). Dóczi T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:186-8
Atrial natriuretic factor. Davis AL. **Adv Pediatr** 1989; 36:137-50 (95 ref.)
Is atrial natriuretic peptide important in the circadian rhythm of arterial blood pressure? [letter] Colantonio D, et al. **Am J Cardiol** 1989 May 1;63(15):1166
The atrial peptide system in cardiac disease. Burnett JC Jr. **Am J Hypertens** 1988 Oct;1(4 Pt 2):410S-420S (62 ref.)
Atrial natriuretic factor. Its possible role in hypertension and congestive heart failure. Dietz R, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 2):29S-33S (35 ref.)
Atrial natriuretic factor: neuromodulator of the central nervous system regulation of blood pressure. Levin ER. **Am J Hypertens** 1989 Jul;2(7):594-8 (53 ref.)
Cytosolic Ca2+ regulation attenuates ANP-induced cGMP response in vascular smooth muscle cells of the SHR. Nakamura M, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):111-3
Effects of water immersion on atrial natriuretic peptide release in humans. Epstein M, et al. **Am J Nephrol** 1989; 9(1):1-24 (161 ref.)
Physiologic role of endogenous human atrial natriuretic peptide in preeclamptic pregnancies. Miyamoto S, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):155-9
Role of endogenous atrial natriuretic peptide in congestive heart failure. Awazu M, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R641-6
Neurohumoral changes during onset and offset of ovine heart failure: role of ANP. Fitzpatrick MA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1052-9
Role of atrial peptide in the natriuresis and diuresis that follows relief of obstruction in rat. Purkerson ML, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F583-9
Role of ANP in natriuresis of head-out immersion in humans. Rabelink TJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F375-82
Urodilatin and beta-ANF: binding properties and activation of particulate guanylate cyclase. Heim JM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):37-41
Physiological concentrations of atrial natriuretic factor stimulate human erythroid progenitors in vitro. Niskanen E, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):15-21
Atrial natriuretic peptide receptors and activation of guanylate cyclase in rat cardiac sarcolemma. Rugg EL, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1339-45
Atrial natriuretic factor (ANF) increases urinary protein excretion in patients with essential hypertension: a possible role of ANF for renal handling of protein. Suenaga K, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):936-42
Role of cyclic GMP in the mechanism of action of nitrovasodilators, endothelium-dependent agents and atrial natriuretic peptide. Murad F. **Biochem Soc Trans** 1988 Aug; 16(4):490-2 (36 ref.)
Atrial natriuretic peptides: receptors and second messengers. Waldman SA, et al. **Bioessays** 1989 Jan;10(1):16-9 (26 ref.)
Atrial natriuretic factor [editorial] Hadley ME. **Chest** 1989 May;95(5):947
Possible antagonistic relationship between atrial natriuretic peptide (ANP)-brain natriuretic peptide (BNP) system and brain renin-angiotensin system in central control of body fluid and cardiovascular function. Nakao K, et al. **Clin Exp Hypertens [A]** 1988;10(6):1289-91
Hyperresponsiveness to water immersion in sodium retaining cirrhotics: the role of atrial natriuretic factor. Campbell PJ, et al. **Clin Invest Med** 1988 Dec;11(6):392-5
Involvement of atrial natriuretic peptide in long-term regulation of sodium-homeostasis in man [letter] Janssen WM, et al. **Clin Nephrol** 1988 Sep;30(3):172
Atrial natriuretic peptide: physiological release associated with natriuresis during negative pressure breathing in man. Anderson JV, et al. **Clin Sci** 1989 Apr;76(4):423-9
Renal actions of atrial natriuretic factor. Raine AE, et al. **Clin Sci** 1989 Jan;76(1):1-8 (85 ref.)
Atrial natriuretic peptide and other vasoactive hormones in volume regulation. Rascher W, et al. **Contrib Nephrol** 1988; 67:1-8 (18 ref.)
Role of atrial natriuretic peptide in the postnatal adaptation of term and preterm infants. Tulassay T. **Contrib Nephrol** 1988;67:138-44
Atrial natriuretic factor in the pediatric intensive care unit. Davis A. **Crit Care Clin** 1988 Oct;4(4):803-12 (58 ref.)
Atrial natriuretic factor and its role in the regulation of electrolyte, volume and pressure homeostasis. Horký K, et al. **Czech Med** 1989;12(1):1-21 (29 ref.)
Effect of atrial natriuretic factor (ANF) on the secretory activity of zona glomerulosa in sodium-restricted rats. Nussdorfer GG, et al. **Endocr Res** 1988-89;14(4):293-303
Comparative biological activities of alpha-rat and alpha-human atrial natriuretic peptide in the inhibition of arginine vasopressin release in conscious rats. Kaneko K, et al. **Endocrinol Jpn** 1988 Dec;35(6):809-17
Cardiac failure, the kidney, renin and atrial peptides. Robertson JI, et al. **Eur Heart J** 1988 Jun;9 Suppl H:11-4 (19 ref.)
Role of atrial natriuretic factor, cyclic GMP and the renin-aldosterone system in acute volume regulation of healthy human subjects. Gerbes AL, et al. **Eur J Clin Invest** 1988 Aug;18(4):425-9
The effect of atrial natriuretic factor on arginine-8-vasopressin and oxytocin levels in various brain regions and plasma. Laczi F, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):328-34
Atrial natriuretic hormones. Kramer HJ. **Gen Pharmacol** 1988;19(6):747-53 (24 ref.)
Mediators of vasopressin induced natriuresis in cirrhosis--possible role of atrial natriuretic factor [letter] Gerbes AL. **Gut** 1989 Aug;30(8):1158-9
Atrial natriuretic peptide: a new cardiac hormone. Cosgrove JA. **Heart Lung** 1989 Sep;18(5):461-5 (12 ref.)
Atrial natriuretic factor and renin-aldosterone in volume regulation of patients with cirrhosis. Gerbes AL, et al. **Hepatology** 1989 Mar;9(3):417-22
Attenuated diuretic and natriuretic effects of atrial natriuretic peptide in rats with heart failure. Tikkanen T, et al. **Horm Metab Res** 1989 Apr;21(4):185-8
Regulation of aldosterone receptor in rat kidney cytosol by atrial natriuretic factor. Horiuchi M, et al. **Hypertension** 1989 Apr;13(4):334-40
Developmental change of kidney receptor for atrial natriuretic factor in spontaneously hypertensive rat. Ogura T, et al. **Hypertension** 1989 May;13(5):449-55
Atrial natriuretic peptide: its mechanism of release from the atrium. Ferrari R, et al. **Int J Cardiol** 1989 Aug; 24(2):137-49 (121 ref.)
Atrial natriuretic peptide: an atavistic hormone? [letter] Vasan RS, et al. **Int J Cardiol** 1989 Mar;22(3):407-8
Radioautographic localization of atrial natriuretic factor receptors in the rat testis. Pelletier G. **J Androl** 1988 Sep-Oct;9(5):352-5
Involvement of ANF in the acute antidiuresis during PEEP

ventilation. Andrivet P, et al. **J Appl Physiol** 1988 Nov; 65(5):1967–74

Atrial natriuretic peptide in acute mountain sickness. Bärtsch P, et al. **J Appl Physiol** 1988 Nov;65(5):1929–37

Effects of atrial natriuretic peptide on ischaemia-induced arrhythmias in the rat heart: arrhythmogen or endogenous antiarrhythmic agent? Chowdrey HS, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):451–4

A possible physiological role of atrial natriuretic peptide in body fluid volume regulation. Hirata Y, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S63–8

Atrial natriuretic factor in chronic obstructive lung disease with pulmonary hypertension. Physiological correlates and response to peptide infusion. Adnot S, et al. **J Clin Invest** 1989 Mar;83(3):986–93

Dissociation of natriuresis and diuresis and heterogeneity of the effector system of atrial natriuretic factor in rats. Willenbrock RC, et al. **J Clin Invest** 1989 Feb;83(2):482–9

Atrial natriuretic factor: implications in congestive heart failure and hypertension. Burnett JC Jr. **J Hum Hypertens** 1989 Jun;3 Suppl 1:41–6 (36 ref.)

Cytosolic Ca2+ attenuates ANF-induced cyclic GMP response in vascular smooth muscle cells. Nakamura M, et al. **J Hypertens** 1989 Jan;7(1):51–6

A new Australian kindred with the syndrome of hypertension and hyperkalaemia has dysregulation of atrial natriuretic factor. Gordon RD, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S323–6

Atrial natriuretic peptide in man. Weidmann P, et al. **J Steroid Biochem** 1989 Jan;32(1B):229–41 (150 ref.)

Physiological significance of atrial natriuretic peptides in essential hypertension. Kohno M, et al. **Jpn Circ J** 1988 Dec;52(12):1465–7

Role of atrial natriuretic peptide in experimental renal failure. Sanaka T, et al. **Jpn Circ J** 1988 Dec;52(12):1441–5

Escape from the sodium-retaining effects of mineralocorticoids: role of ANF and intrarenal hormone systems. Gonzalez-Campoy JM, et al. **Kidney Int** 1989 Mar; 35(3):767–77 (112 ref.)

Atrial natriuretic peptide and the renal response to hypervolemia in nephrotic humans. Peterson C, et al. **Kidney Int** 1988 Dec;34(6):825–31

Is the effect of calcium diet or parathyroidectomy on the development of hypertension in spontaneously hypertensive rats mediated by atrial natriuretic peptide? Geiger H, et al. **Kidney Int Suppl** 1988 Sep;25:S93–7

Atrial natriuretic hormone: a regulator of blood pressure and volume homeostasis. Laragh JH, et al. **Kidney Int Suppl** 1988 Sep;25:S64–71 (78 ref.)

Atrial natriuretic peptide. An important factor in sodium and blood pressure regulation. Espiner EA, et al. **Lancet** 1989 Apr 1;1(8640):707–10 (38 ref.)

h-ANF does not play a role in the regulation of myocardial force of contraction. Böhm M, et al. **Life Sci** 1988; 43(16):1261–7

A hypothesis of the pathogenesis of preeclampsia. Fröhlich ED. **Med Hypotheses** 1989 Feb;28(2):107–8

Atrial natriuretic peptide and pulmonary edema [letter] Spodick DH. **N Engl J Med** 1989 Mar 9;320(10):671

Atrial natriuretic factor [letter] Tait MJ. **N Z Med J** 1989 Apr 12;102(865):171

Differential activation by atrial and brain natriuretic peptides of two different receptor guanylate cyclases. Chang MS, et al. **Nature** 1989 Sep 7;341(6237):68–72

ANF receptors: distribution and regulation in central and peripheral tissues. Stewart RE, et al. **Neurosci Biobehav Rev** 1988 Summer;12(2):151–68 (144 ref.)

Pathophysiological role of atrial natriuretic peptide in man. Bühler FR, et al. **Pharmacol Res Commun** 1988 Sep;20 Suppl 3:35–53 (53 ref.)

Bilateral acute heart atrial auriectomy reduced diuresis and natriuresis following hypertonic sodium load in anaesthetized dogs. Okoličány J, et al. **Physiol Bohemoslov** 1989;38(2):179–87

Water intake in rats subjected to hypothalamic immunoneutralization of angiotensin II, atrial natriuretic peptide, vasopressin, or oxytocin. Franci CR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2952–6

Role of atrial natriuretic factor in regulation of blood pressure in normotensive rats having reduced renal mass. Pamnani MB, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):297–303

Dopaminergic mediation of the diuretic and natriuretic action of centrally administered rat atrial natriuretic factor (99–126). Torres M, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):18–22

Rat atrial natriuretic factor (ANP-III) inhibits phosphate transport in brush border membrane from superficial and juxtamedullary cortex. Yusufi AN, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):87–90

Natriuresis of volume expansion and atrial factors: contrasts and comparisons. Gyory AZ, et al. **Prog Biochem Pharmacol** 1988;23:61–70

Endogenous Na,K-ATPase inhibitor(s) and atrial natriuretic peptides: are they interrelated? Haupert GT Jr. **Prog Biochem Pharmacol** 1988;23:71–6 (23 ref.)

Role of atrial natriuretic factor in reduced renal mass saline hypertension. Pamnani MB, et al. **Prog Biochem Pharmacol** 1988;23:55–60 (14 ref.)

Diuresis from atrial receptors after hypophysectomy and local ablation with no changes in plasma vasopressin. Bennett KL, et al. **Q J Exp Physiol** 1988 Sep;73(5):755–65

The protein kinase domain of the ANP receptor is required for signaling. Chinkers M, et al. **Science** 1989 Sep 22; 245(4924):1392–4

New type of receptor found [news] Marx JL. **Science** 1989 Jun 9;244(4909):1140–1

Beneficial effects of maximal hydration on early renal function after ischemia is mediated by atrial natriuretic factor. Gianello P, et al. **Transplant Proc** 1988 Oct; 20(5):923–7

[Atrial natriuretic factor: its physiologic characteristics] Belova N. **Eksp Med Morfol** 1988;27(3):48–53 **(Bul)**

[The mechanism of antihypertension and clinical application of atrial natriuretic factor] Zhao G, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):115–6 (22 ref.) **(Chi)**

[Dynorphin and atriopeptin may be involved in the depressor mechanism of clonidine] Yin LY, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):249–54 (Eng. Abstr.) **(Chi)**

[The role of atriopeptin in the hypotensive effect of dynorphin] Yin LY, et al. **Sheng Li Hsueh Pao** 1988 Aug; 40(4):343–8 (Eng. Abstr.) **(Chi)**

[Effect of atriopeptin on renal function] Li HP. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):53–6 (38 ref.) **(Chi)**

[Humoral mechanisms in the pathogenesis of arterial hypertension with emphasis on the renin-angiotensin-aldosterone system and natriuretic substances] Horký K. **Vnitr Lek** 1989 Mar;35(3):219–25 (Eng. Abstr.) **(Cze)**

[Does the atrial natriuretic factor play a role in cirrhosis?] Donckier J. **Acta Gastroenterol Belg** 1987 Nov-Dec; 50(6):649–55 (48 ref.) **(Fre)**

[Atrial natriuretic factor in cardiovascular pathology] Carayon A. **Ann Cardiol Angeiol (Paris)** 1988 Dec; 37(10):587–93 (42 ref.) (Eng. Abstr.) **(Fre)**

[Arterial hypertension with hyperkalemia, tubular acidosis and normal renal function: Gordon syndrome and/or pseudohypoaldosteronism type II?] Ader JL, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:193–7 (Eng. Abstr.) **(Fre)**

[Role of atrial natriuretic peptide in the renal response to acute volume expansion in the normal and essential hypertensive patient] Mimran A, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:101–4 (Eng. Abstr.) **(Fre)**

[Atrial natriuretic factor in cirrhosis] Vinel JP, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):697–703 (124 ref.) **(Fre)**

[Auricular natriuretic factor] Lefort O, et al. **Rev Med Interne** 1988 Sep-Oct;9(4):385–9 (23 ref.) **(Fre)**

[Does atrial natriuretic peptide have physiologic significance?] Noll B, et al. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):885–7 (26 ref.) **(Ger)**

[Atrial natriuretic peptide] Wambach G. **Med Klin** 1988 Nov 25;83(23):795–9 (69 ref.) **(Ger)**

[Conditions of secretion and peripheral effects of atrial natriuretic peptide in heart failure] Riegger AJ. **Z Kardiol** 1988;77 Suppl 5:77–86 (67 ref.) (Eng. Abstr.) **(Ger)**

[Atrial natriuretic factor (ANF)—physiological aspects] Abassi Z, et al. **Harefuah** 1988 Nov 15;115(10):296–300 (49 ref.) **(Heb)**

[Renal action of atrial natriuretic peptide] Imai M, et al. **Tanpakushitsu Kakusan Koso** 1988 Nov;33(14):2476–89 **(Jpn)**

[Natriuretic peptide family: ANP and BNP] Matsuo H, et al. **Tanpakushitsu Kakusan Koso** 1988 Nov;33(14):2438–50 **(Jpn)**

[Role of ANP in the regulation of blood pressure] Oda H, et al. **Tanpakushitsu Kakusan Koso** 1988 Nov;33(14):2490–5 **(Jpn)**

[Studies on the role of heart innervation and other non-osmotic factors in regulating water and sodium metabolism] Pruszczyński W. **Pol Tyg Lek** 1988 Sep 5; 43(36):1169–72 **(Pol)**

[Atriopeptin—a searched-for natriuretic hormone] Sanak M. **Przegl Lek** 1988;45(9):690–2 (23 ref.) **(Pol)**

[Atrial natriuretic factor] Zharova EA, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):99–108 (130 ref.) **(Rus)**

[The heart—a gland with endocrine effects] Ljutić D. **Lijec Vjesn** 1988 Aug;110(8):284–8 (76 ref.) (Eng. Abstr.) **(Scr)**

[Atrial natriuretic factor] de León H, et al. **Arch Inst Cardiol Mex** 1988 Jul-Aug;58(4):351–71 (299 ref.) (Eng. Abstr.) **(Spa)**

[Atrial natriuretic factor] Olavarría F, et al. **Rev Chil Pediatr** 1988 Jul-Aug;59(4):282–5 (23 ref.) (Eng. Abstr.) **(Spa)**

SECRETION

Effects of an oral water load and intravenous administration of isotonic glucose, hypertonic saline, mannitol and furosemide on the release of atrial natriuretic peptide in men. Yamasaki Y, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):269–76

Atrial natriuretic peptide (ANP): response to NaCl is attenuated in rat atria in vitro after hypophysectomy. Arjamaa O. **Acta Physiol Scand** 1989 Aug;136(4):499–505

The release mechanism for atrial natriuretic factor during blood volume expansion and tachycardia in dogs. Christensen G, et al. **Acta Physiol Scand** 1988 Oct; 134(2):263–70

Time relation between changes in central venous pressure and the secretion of atrial natriuretic peptide in humans. Schütten HJ, et al. **Acta Physiol Scand** 1988 Nov; 134(3):449–50

Hyponatremia and atrial natriuretic peptide secretion in patients with vasopressin-induced antidiuresis [letter] Vieweg WV, et al. **Am J Med** 1988 Oct;85(4):594–5

Effect of manipulations of Ca2+ environment on atrial natriuretic factor release. De Bold ML, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1588–94

Release of atrial natriuretic factor in hypophysectomized rats. Dietz JR, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R534–8

Determinants of atrial natriuretic peptide secretion in cultured atrial myocytes. Iida H, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C608–13

Effect of vasopressin on atrial natriuretic peptide release and renal function in dogs. Inoue M, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E449–55

Mechanisms of hypoxia-induced atrial natriuretic factor release from rat hearts. Lew RA, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H147–56

Response of atrial natriuretic peptide to acute saline loading in essential hypertension. Mimran A, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1085–90

ANF secretion and renal responses to volume expansion with equilibrated blood. Paul RV, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):F936–43

Mechanism of inhibition by methacholine of norepinephrine-stimulated ANP secretion. Schiebinger RJ. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1429–33

Pericardial pressure attenuates release of atriopeptin in volume-expanded dogs. Stone JA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H648–54

Atrial natriuretic factor may mediate the renal effects of PEEP ventilation. Kharasch ED, et al. **Anesthesiology** 1988 Dec;69(6):862–9

Inhibition of atrial natriuretic peptide secretion by forskolin in noncontracting cultured atrial myocytes. Iida H, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):330–6

Endothelial cells stimulate ANF secretion from atrial myocytes in co-culture. Lew RA, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):701–9

Chronotropic stimulation: a primary effector for release of atrial natriuretic factor. Bilder GE, et al. **Circ Res** 1989 Apr;64(4):799–805

Pressor hormones regulate atrial-stretch-induced release of atrial natriuretic peptide in the pithed rat. Ruskoaho H, et al. **Circ Res** 1989 Mar;64(3):482–92

Calcium, its role in isoproterenol-stimulated atrial natriuretic peptide secretion by superfused rat atria. Schiebinger RJ. **Circ Res** 1989 Sep;65(3):600–6

Insulin-induced hypoglycaemia increases plasma concentrations of angiotensin II and does not modify atrial natriuretic polypeptide secretion in man. Trovati M, et al. **Diabetologia** 1988 Nov;31(11):816–20

Stimulation by calcitonin gene-related peptide of atrial natriuretic peptide secretion in vitro and its mechanism of action. Schiebinger RJ, et al. **Endocrinology** 1989 May; 124(5):2473–9

Effects of posture and saline infusion on atrial natriuretic peptide and haemodynamics in patients with Bartter's syndrome and healthy controls. Doorenbos CJ, et al. **Eur J Clin Invest** 1988 Aug;18(4):369–74

Endothelin stimulates atrial natriuretic peptide (ANP) release from rat atria. Hu JR, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):177–8

Hyposecretion of atrial natriuretic factor by prehypertensive Dahl salt-sensitive rat. Onwochei MO, et al. **Hypertension** 1989 May;13(5):440–8

Atrial natriuretic peptide secretion in heart transplant patients. Kokot F, et al. **Int J Artif Organs** 1989 May; 12(5):321–6

Effect of induced ventricular tachycardia on atrial natriuretic peptide in humans. Fromer M, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1395–9

Effect of rehydration on atrial natriuretic peptide release during exercise in the heat. Follenius M, et al. **J Appl Physiol** 1989 Jun;66(6):2516–21

Secretion of atrial natriuretic factor-(1–98) by primary cardiac myocytes. Glembotski CC, et al. **J Biol Chem** 1988 Nov 5;263(31):16073–81

Regulation of atrial natriuretic factor-(99–126) secretion from neonatal rat primary atrial cultures by activators of protein kinases A and C. Shields PP, et al. **J Biol Chem** 1989 Jun 5;264(16):9322–8

The role of frequency of atrial contraction versus atrial pressure in atrial natriuretic peptide release. Burnett JC Jr, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):881–4

Stretch-induced atriopeptin secretion in the isolated rat myocyte and its negative modulation by calcium. Greenwald JE, et al. **J Clin Invest** 1989 Mar;83(3):1061–5

Increased secretion of atrial natriuretic polypeptide from the left ventricle in patients with dilated cardiomyopathy. Yasue H, et al. **J Clin Invest** 1989 Jan;83(1):46–51

Reduction volume dependence of immunoreactive atrial natriuretic peptide secretion in isolated perfused rabbit atria. Cho KW, et al. **J Hypertens** 1989 May;7(5):371–5

Atrial wall stress rather than pressure per se might be responsible for the increased secretion of atrial natriuretic factor after heart transplantation. Brouwer RM, et al. **J Hypertens Suppl** 1988 Dec;6(4):S330–2

Cellular mechanism of atrial natriuretic factor secretion by cultured rat cardiocytes. Hirata Y, et al. **J Hypertens Suppl** 1988 Dec;6(4):S295–6

Effects of calcium and ouabain on the release of atrial natriuretic factor. Yamamoto A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S317–9

Stretch-induced centrifugal movement of atrial specific granules—a preparatory step in atrial natriuretic peptide secretion. Agnoletti G, et al. **J Mol Cell Cardiol** 1989 Mar; 21(3):235–9

The effect of calcium antagonists on atrial natriuretic peptide (ANP) release from the rat heart during rapid cardiac pacing. Doubell AF. **J Mol Cell Cardiol** 1989 May; 21(5):437–40

Carbachol-induced cosecretion of immunoreactive atrial natriuretic peptides with catecholamines from cultured bovine adrenal medullary cells. Okazaki M, et al. **J Neurochem** 1989 Jan;52(1):222–8

Secretion of atrial natriuretic peptide (ANP) from fish atrial and ventricular myocytes in tissue culture. Baranowski RL, et al. **Life Sci** 1989;44(3):187–91

Experimental ductus arteriosus: the relationships of atrial pressure, dilatation and flow with ANF secretion. Pesonen E, et al. **Life Sci** 1989;45(6):553–8

Impaired response of atrial natriuretic factor to high salt intake in persons prone to hypertension [letter] Ferrier C, et al. **N Engl J Med** 1988 Nov 3;319(18):1223–4

Clonidine and morphine increase atrial natriuretic peptide secretion in anesthetized rats. Chen M, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):299–303

Effects of exercise on atrial natriuretic factor. Release mechanisms and implications for fluid homeostasis [published erratum appears in Sports Med 1989 Jun;7(6):following Table of Contents] Freund BJ, et al. **Sports Med** 1988 Dec;6(6):364–77 (78 ref.)

Enhanced atrial natriuretic factor release during exercise in cardiac transplant recipients. Keogh A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2576–8

[Comparative observation on atrial specific granules of secretive atriopeptides and secretive granules of beta-cells of pancreatic islets] Wang YP, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):385–7 (Eng. Abstr.) **(Chi)**

[Circadian rhythm of atrial natriuretic peptide, plasma renin and aldosterone activity in healthy subjects and in patients with compensated liver cirrhosis] Colantonio D, et al. **Recenti Prog Med** 1989 Mar;80(3):147–9 (Eng. Abstr.) **(Ita)**

[Evaluation of water-electrolyte metabolism in patients with upper GI tract cancer—the dynamic status of secretion of alpha-hANP levels] Kojima Y. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1603–10 (Eng. Abstr.) **(Jpn)**

[Secretion of atrial natriuretic peptide in patients with non-insulin-dependent diabetes mellitus and effect of autonomic neuropathy] Kojima A, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 May 20;65(5):512–24 (Eng. Abstr.) **(Jpn)**

[A case of postoperative craniopharyngioma with hypernatremia. The mechanisms of ADH and atrial natriuretic peptide (ANP) releases] Ota M, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1262–7 **(Jpn)**

[Secretion and clinical significance of atrial natriuretic peptide in patients with muscular dystrophy] Kimura C, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):290–5 (Eng. Abstr.) **(Jpn)**

STANDARDS

The international standard for atrial natriuretic factor. Calibration by an international collaborative study. Poole S, et al. **Hypertension** 1988 Dec;12(6):629–34

THERAPEUTIC USE

Cardiorenal effects of atrial natriuretic factor administration in congestive heart failure: natriuresis and diuresis without hemodynamic alterations. Firth BG, et al. **Am J Med Sci** 1989 Apr;297(4):203–8

Significance of atrial natriuretic factor in chronic heart failure. McMurray J, et al. **Br J Hosp Med** 1988 Jul; 40(1):55–7 (37 ref.)

Effects of atrial natriuretic peptide on transmural blood flow and reactive hyperemia in the presence of flow-limiting coronary stenosis in the awake dog: evidence for dilation of the intramural vasculature. Chu A, et al. **Circ Res** 1989 Mar;64(3):600–6

Atrial natriuretic factor in hypertension: bioactivity at normal plasma levels. Richards AM, et al. **Hypertension** 1989 Sep; 14(3):261–8

Infusion of atrial natriuretic peptide to patients with congestive heart failure. Goy JJ, et al. **J Cardiovasc Pharmacol** 1988;12(5):562–70

Atrial natriuretic peptide infusion in chronic heart failure in the rat. Kohzuki M, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 6:S43–6

Atrial natriuretic peptide administered as intravenous infusion or bolus injection to patients with liver cirrhosis and ascites. Petrillo A, et al. **J Cardiovasc Pharmacol** 1988 Sep; 12(3):279–85

Atrial natriuretic peptide and dopamine in a rat model of ischemic acute renal failure. Conger JD, et al. **Kidney Int** 1989 May;35(5):1126–32

Effect of synthetic human atrial natriuretic peptide (102–126) in nephrotic syndrome. Zietse R, et al. **Kidney Int** 1988 Nov;34(5):717–24

Atrial natriuretic peptide in gentamicin-induced acute renal failure. Schafferhans K, et al. **Kidney Int Suppl** 1988 Sep; 25:S101–3

Acute hemodynamic effects of atrial natriuretic peptide in essential hypertension. Volpe M, et al. **Kidney Int Suppl** 1988 Sep;25:S83–5

Effects of physiological infusion of atrial natriuretic factor on healthy subjects and patients with the nephrotic syndrome. Woolf AS, et al. **Nephron** 1989;52(3):244–50

Neuro-endocrine changes as new targets in the drug treatment of congestive heart failure. van Zwieten PA. **Pharmacol Res Commun** 1988 Dec;20(12):1017–23

Beneficial effect of atrial natriuretic factor on ischemically injured kidneys in rats. Gianello P, et al. **Transplant Proc** 1988 Oct;20(5):921–2

[Effect of alpha-human atrial natriuretic polypeptide on renal, cardiovascular and endocrine functions during haemorrhagic shock in dogs] Hashimoto H. **Masui** 1988 Aug;37(8):910–22 (Eng. Abstr.) **(Jpn)**

[Effect of infusion of atrial natriuretic peptide on endocrine function after administration of endotoxin in dogs] Oshima S. **Masui** 1988 Sep;37(9):1083–95 (Eng. Abstr.) **(Jpn)**

URINE

Response of atrial natriuretic peptide in plasma and urine to changes in dietary intake of sodium chloride in man. Shirataka M, et al. **Jpn J Physiol** 1988;38(5):677–87

Atrial natriuretic peptide in human urine. Ando K, et al. **Klin Wochenschr** 1988 Sep 1;66(17):768–72

Isolation and structural analysis of "urodilatin", a new peptide of the cardiodilatin-(ANP)-family, extracted from human urine. Schulz-Knappe P, et al. **Klin Wochenschr** 1988 Sep 1;66(17):752–9

Urinary excretion of atrial natriuretic peptide during saline infusion and supraventricular tachycardia. Kojima S, et al. **Nephron** 1989;51(2):283–4

NATURAL CHILDBIRTH

Vaginal birth after cesarean section [letter] Chez RA. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1251

A sense of balance [letter] Douglas HM. **Aust Paediatr J** 1989 Feb;25(1):52

Birthday honors [editorial] Barrie H. **J Perinatol** 1987 Summer;7(3):177

[Acid-base balance and blood gas composition in the mother, fetus and newborn infant following the use of central electroanalgesia during natural labor] Mateeva E, et al. **Akush Ginekol (Sofiia)** 1988;27(3):38–43 (Eng. Abstr.) **(Bul)**

[The need for stimulating natural childbirth] Alves Filho N. **AMB Rev Assoc Med Bras** 1988 May-Jun;34(3):111–2 **(Por)**

[Management of labor through the natural birth canal in pregnant women with a history of cesarean section] Pogorelova AB, et al. **Akush Ginekol (Mosk)** 1988 Oct; (10):44–6 (Eng. Abstr.) **(Rus)**

[Blood Eh and pH indices of newborn infants and their mothers in natural and surgical delivery] Bylinkina VV. **Pediatriia** 1988;(11):106 **(Rus)**

ADVERSE EFFECTS

Perineal rupture following vaginal delivery. Long-term consequences. Mellerup Sørensen S, et al. **Acta Obstet Gynecol Scand** 1988;67(4):315–8

PSYCHOLOGY

[Changes in the indices of gas exchange, pulmonary ventilation and hemodynamics as affected by the physiopsychoprophylactic preparation of pregnant women for labor] Lopatin VA, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):460–5 **(Rus)**

NATURAL DISASTERS see under **DISASTERS**

NATURAL KILLER CELLS see **KILLER CELLS, NATURAL**

NATURAL LANGUAGE PROCESSING see under **ARTIFICIAL INTELLIGENCE**

NATURAL RESOURCES CONSERVATION see **CONSERVATION OF NATURAL RESOURCES**

NATURAL SELECTION see **SELECTION (GENETICS)**

NATUROPATHY

Achieving health by hope. Nowotny R. **Aust Fam Physician** 1989 Apr;18(4):379–83

[Therapeutic possibilities with moor components] Zimmerman W. **Fortschr Med** 1989 Aug 10;107(23):24–5 **(Ger)**

[Personal experiences with naturopathy. Therapeutic possibilities in diseases of the paranasal sinuses] Zimmermann W. **Fortschr Med** 1989 Apr 30;107(13):30, 33 **(Ger)**

[Naturopathy procedures. Problems in differentiation from unconventional and scientifically generally unrecognized diagnostic and therapeutic methods] Ostendorf GM. **Versicherungsmedizin** 1989 Mar 1;41(2):58–61 (14 ref.) (Eng. Abstr.) **(Ger)**

HISTORY

[Cocaine euphoria and natural science] Reicheneder JG. **Sudhoffs Arch** 1988;72(2):170–84 (Eng. Abstr.) **(Ger)**

[Organic life as circle movement: on the significance of the circle metaphor in F. W. J. Schelling's natural philosophy] Schubert C. **Sudhoffs Arch** 1988;72(2):154–9 (Eng. Abstr.) **(Ger)**

[The public health association and the proletarian naturopathy movement (1891–1933)] Domeinski H. **Z Gesamte Hyg** 1989 May;35(5):294–7 (Eng. Abstr.) **(Ger)**

NAUSEA

BLOOD

Arginine vasopressin—a mediator of chemotherapy induced emesis? Edwards CM, et al. **Br J Cancer** 1989 Mar; 59(3):467–70

Responses of plasma oxytocin and arginine vasopressin to nausea induced by apomorphine and ipecacuanha. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):297–304

CHEMICALLY INDUCED

Increased nausea and vomiting induced by naloxone in patients receiving cancer chemotherapy. Kobrinsky NL, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):206–8

Regulation of nausea and vomiting in cancer chemotherapy. A review with emphasis on opiate mediators. Kobrinsky NL. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):209–13 (51 ref.)

Interleukin-2 initiates metabolic responses associated with critical illness in humans. Michie HR, et al. **Ann Surg** 1988 Oct;208(4):493–503

Chemotherapy-related nausea and vomiting: etiology and management. Morrow GR. **CA** 1989 Mar-Apr;39(2):89–104 (39 ref.)

Anticipatory nausea and vomiting: does it remain a significant clinical problem? Stefanek ME, et al. **Cancer** 1988 Dec 15; 62(12):2654–7

Intravenous erythromycin lactobionate-induced severe nausea and vomiting. Seifert CF, et al. **DICP** 1989 Jan; 23(1):40–4 (19 ref.)

Nausea and vomiting after general anaesthesia with isoflurane, enflurane or fentanyl in combination with nitrous oxide and oxygen. Hovorka J, et al. **Eur J Anaesthesiol** 1988 May;5(3):177–82

The role of motion sickness in predicting anticipatory nausea. Leventhal H, et al. **J Behav Med** 1988 Apr;11(2):117–30

Pentobarbital's effect in a combination antiemetic regimen for cisplatin induced nausea and vomiting. Wheelock JB. **J Miss State Med Assoc** 1989 Jan;30(1):5–8

Nausea and vomiting after general anaesthesia [editorial] [see comments] **Lancet** 1989 Mar 25;1(8639):651–2. **Comment in:** Lancet 1989 May 6;8645:1016

Midazolam: an effective antiemetic agent for cytotoxic chemotherapy [letter] Olynyk JK, et al. **Med J Aust** 1989 Apr 17;150(8):466

Anticipatory nausea and vomiting: prevalence and predictors in chemotherapy patients. Alba E, et al. **Oncology** 1989; 46(1):26–30

Hypnotherapy as antiemetic treatment in cancer chemotherapy. Fortuin AA. **Recent Results Cancer Res** 1988;108:112–6 (4 ref.)

[Nausea and vomiting induced by anticancer chemotherapy: mechanisms and prevention] Bonneterre J, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):163–4 **(Fre)**

[Complaints in the postoperative phase related to anesthetics] Guggenberger H, et al. **Anaesthesist** 1988 Dec; 37(12):746–51 (Eng. Abstr.) **(Ger)**

[Adverse reactions to carcinostatics and countermeasures] Nakao I. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1099–107 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

A double-blind trial comparing antiemetic efficacy and toxicity of metoclopramide versus methylprednisolone versus domperidone in patients receiving doxorubicin chemotherapy alone or in combination with other antiblastic agents. Basurto C, et al. **Am J Clin Oncol** 1988 Oct;11(5):594–6

Haloperidol and lorazepam for the treatment of nausea and vomiting associated with the treatment of intractable migraine headaches [letter] Backonja M, et al. **Arch Neurol** 1989 Jul;46(7):724

Mechanisms and management of chemotherapy-induced nausea and vomiting. Allan SG. **Blood Rev** 1987 Mar; 1(1):50–7 (68 ref.)

Studies of prochlorperazine as a buccal tablet (Buccastem) and an oral tablet (Stemetil) for the treatment of dizziness, nausea or vomiting in a general practice setting. Ward AE. **Br J Clin Pract** 1988 Jun;42(6):228–32

Myths of antiemetic administration. Peters CA. **Cancer Nurs** 1989 Apr;12(2):102–6

Failure of methylprednisolone acetate to prolong the

antinauseant effect of intravenous methylprednisolone sodium succinate in patients receiving chemotherapy. Osoba D, et al. **Clin Invest Med** 1988 Oct;11(5):377–9
Recent advances in the management of nausea and vomiting caused by antineoplastic agents. Merrifield KR, et al. **Clin Pharm** 1989 Mar;8(3):187–99 (68 ref.)
Domperidone: an alternative to metoclopramide [published erratum appears in Drug Ther Bull 1988 Aug 22;26(17):68] **Drug Ther Bull** 1988 Jul 25;26(15):59–60
Antiemetic treatment of chemotherapy-induced nausea in ovarian carcinoma patients. Sorbe B, et al. **Gynecol Oncol** 1989 Aug;34(2):141–4
Methylprednisolone and chlorpromazine in patients receiving cancer chemotherapy: a prospective non-randomized study. Gez E, et al. **J Chemother** 1989 Apr;1(2):140–3
Neuroleptic malignant syndrome in a child treated with metoclopramide for chemotherapy-related nausea [letter] Brower RD, et al. **J Child Neurol** 1989 Jul;4(3):230–2
Oh, what a tangled web. Grunberg SM. **J Clin Oncol** 1989 Jun;7(6):691–3
Double-blind randomized cross-over trial of dexamethasone and prochlorperazine as anti-emetics for cancer chemotherapy. Goldstein D, et al. **Oncology** 1989; 46(2):105–8
Antiemetic prophylaxis of cancer chemotherapy-induced nausea and vomiting with cinnarizine and lorazepam. Wilder-Smith CH, et al. **Oncology** 1989;46(3):169–72
[Drug treatment of nausea and vomiting caused by cancer chemotherapy] Havsteen H, et al. **Ugeskr Laeger** 1989 Feb 13;151(7):430–4 (Eng. Abstr.) **(Dan)**
[Comparison of the antiemetic effectiveness of high-dose corticosteroids with synacthene in nausea induced by chemotherapy: results of a randomized study] Brice P, et al. **Bull Cancer (Paris)** 1989;76(6):637–42 (Eng. Abstr.) **(Fre)**
[Antiemetic and antinauseant effect of alizapride in patients subjected to antiblastic infusion chemotherapy in a day-hospital regime] Cicchetti F, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):18–21 (Eng. Abstr.) **(Ita)**
[Treatment of vomiting induced by cytostatic agents] Díaz-Rubio E. **Med Clin (Barc)** 1989 Jun 10;93(2):54–7 (28 ref.) **(Spa)**

EPIDEMIOLOGY

Postoperative nausea and vomiting. A comparison of sufentanil, nitrous oxide, and isoflurane. Bloomfield E, et al. **Cleve Clin J Med** 1988 Nov-Dec;55(6):549–52
Nausea and vomiting in early pregnancy. Vellacott ID, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):57–62
Incidence and duration of chemotherapy-induced nausea and vomiting in the outpatient oncology population. Lindley CM, et al. **J Clin Oncol** 1989 Aug;7(8):1142–9
[Occurrence of postoperative nausea and vomiting] Gelett S, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2731–2 (Eng. Abstr.) **(Nor)**

ETIOLOGY

Acute glaucoma presenting with abdominal symptoms. Watson NJ, et al. **BMJ** 1989 Jul 22;299(6693):254
Chemoradiotherapy toxicity during bone marrow transplantation: time course and variation in pain and nausea. Chapko MK, et al. **Bone Marrow Transplant** 1989 Mar;4(2):181–6
Nitrous oxide does not increase nausea and vomiting following gynaecological laparoscopy. Hovorka J, et al. **Can J Anaesth** 1989 Mar;36(2):145–8
Nausea and vomiting after general anaesthesia [letter] Dundee JW, et al. **Lancet** 1989 May 6;1(8645):1016
Etiology and treatment of the psychological side effects associated with cancer chemotherapy: a critical review and discussion. Carey MP, et al. **Psychol Bull** 1988 Nov; 104(3):307–25 (104 ref.)
Influence of personal characteristics, job-related factors and psychosocial factors on the sick building syndrome. Danish Indoor Climate Study Group. Skov P, et al. **Scand J Work Environ Health** 1989 Aug;15(4):286–95

PHYSIOPATHOLOGY

Postprandial antral hypomotility in patients with idiopathic nausea and vomiting. Kerlin P. **Gut** 1989 Jan;30(1):54–9
Idiopathic cyclic nausea and vomiting--a disorder of gastrointestinal motility? Abell TL, et al. **Mayo Clin Proc** 1988 Dec;63(12):1169–75

PREVENTION & CONTROL

Double-blind comparison of transdermal scopolamine, droperidol and placebo against postoperative nausea and vomiting. Tigerstedt I, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):454–7
Antiemetic activity of high-dose metoclopramide combined with methylprednisolone versus metoclopramide alone in dacarbazine-treated cancer patients. A randomized double-blind study of the Italian Oncology Group for Clinical Research. Basurto C, et al. **Am J Clin Oncol** 1989 Jun;12(3):235–8
Dose-ranging antiemetic trial of high-dose oral metoclopramide. Tyson LB, et al. **Am J Clin Oncol** 1989 Jun;12(3):239–43
Preoperative transdermal hyoscine for the prevention of postoperative nausea and vomiting. Wilkinson AR, et al. **Anaesth Intensive Care** 1989 Aug;17(3):285–9
Prophylactic transdermal scopolamine patches reduce nausea in postoperative patients receiving epidural morphine. Loper KA, et al. **Anesth Analg** 1989 Feb;68(2):144–6
Dose-response study of droperidol and metoclopramide as antiemetics for outpatient anesthesia. Pandit SK, et al. **Anesth Analg** 1989 Jun;68(6):798–802
A phase I study of a new 5HT3-receptor antagonist, BRL43694A, an agent for the prevention of chemotherapy-induced nausea and vomiting. Falkson G, et al. **Cancer Chemother Pharmacol** 1989;24(3):193–6
The efficacy and safety of GR38032F in the prophylaxis of ifosfamide-induced nausea and vomiting. Green JA, et al. **Cancer Chemother Pharmacol** 1989;24(2):137–9
GR38032F, a 5HT3 receptor antagonist, in the prophylaxis of acute cisplatin-induced nausea and vomiting. Marty M, et al. **Cancer Chemother Pharmacol** 1989;23(6):389–91
Hypothesis: a new basis for sensory-behavioral pretreatments to ameliorate radiation therapy-induced nausea and vomiting? Blum RH. **Cancer Treat Rev** 1988 Sep; 15(3):211–27 (66 ref.)
Safety and antiemetic effects of metoclopramide in metrizamide myelography. Goldsmith TL, et al. **Clin Pharm** 1987 Oct;6(10):807–10
The efficacy of GR38032F, an antagonist of 5-hydroxytryptamine-3 (5-HT3) in the prophylaxis of cisplatin (CDDP)-induced nausea and vomiting [letter] de Haan LD, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1383–4
Self-regulation treatment to reduce the aversiveness of cancer chemotherapy. Kaufman KL, et al. **J Adolesc Health Care** 1989 Jul;10(4):323–7
Dose ranging phase I study of the serotonin antagonist GR38032F for prevention of cisplatin-induced nausea and vomiting. Grunberg SM, et al. **J Clin Oncol** 1989 Aug; 7(8):1137–41
GR 38032F (GR-C507/75): a novel compound effective in the prevention of acute cisplatin-induced emesis. Hesketh PJ, et al. **J Clin Oncol** 1989 Jun;7(6):700–5
Controlling delayed vomiting: double-blind, randomized trial comparing placebo, dexamethasone alone, and metoclopramide plus dexamethasone in patients receiving cisplatin. Kris MG, et al. **J Clin Oncol** 1989 Jan;7(1):108–14
Comparison of intermittent versus continuous infusion metoclopramide in control of acute nausea induced by cisplatin chemotherapy. Navari RM. **J Clin Oncol** 1989 Jul;7(7):943–6
BRL 43694: a novel antiemetic to prevent nausea and vomiting induced by chemotherapy [letter] Joss RA, et al. **J Natl Cancer Inst** 1988 Oct 19;80(16):1340–1
Acupuncture prophylaxis of cancer chemotherapy-induced sickness. Dundee JW, et al. **J R Soc Med** 1989 May; 82(5):268–71
Nausea and vomiting after general anaesthesia [letter] Millar JM. **Lancet** 1989 Jun 17;1(8651):1400
A preliminary report on the efficacy of hypnosis to control anticipatory nausea and vomiting caused by cancer chemotherapy. Axelrod A, et al. **Prog Clin Biol Res** 1988; 278:147–50
Use of Motilium in the perioperative period from the aspect of the anaesthesiologist. Fister T. **Ther Hung** 1988; 36(2):88–91
Effect of domperidone on postoperative vomiting and dyspepsia aggravated by operation. Takács G. **Ther Hung** 1988;36(3):119–22
[Transdermal scopolamine to prevent postoperative nausea and vomiting after uterine curettage and termination of pregnancy. A double-blind clinically controlled study with placebo] Jespersen TW, et al. **Ugeskr Laeger** 1989 May 15;151(20):1246–8 (Eng. Abstr.) **(Dan)**
[The effect of metoclopramide on postoperative nausea and vomiting] Vollmer-Larsen B, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):154–5 (Eng. Abstr.) **(Dut)**
[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy-vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Panic and nausea instead of grief in an adolescent [clinical conference] Smith GR Jr, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):509–13
Can children understand and use a rating scale to quantify somatic symptoms: Assessment of nausea and vomiting as a model. Zeltzer LK, et al. **J Consult Clin Psychol** 1988 Aug;56(4):567–72
Vomiting and nausea in the first 12 weeks of pregnancy. Iatrakis GM, et al. **Psychother Psychosom** 1988;49(1):22–4

THERAPY

Acupressure therapy for morning sickness. A controlled clinical trial. Hyde E. **J Nurse Midwifery** 1989 Jul–Aug; 34(4):171–8
Inhalation marijuana as an antiemetic for cancer chemotherapy. Vinciguerra V, et al. **N Y State J Med** 1988 Oct;88(10):525–7
Combined medical and psychological treatment of postchemotherapy nausea and vomiting: a case study. Booraem CD, et al. **Psychol Rep** 1989 Aug;65(1):187–93

NAUTICAL MEDICINE see **NAVAL MEDICINE**

NAVAL MEDICINE

see related
DIVING
SHIPS

Seamen exposed to organic solvents. A cross-sectional study with special reference to the nervous system. Moen BE, et al. **Acta Neurol Scand** 1988 Aug;78(2):123–35
Simulator sickness in U.S. Navy flight simulators [published erratum appears in Aviat Space Environ Med 1989 May;60(5):473] Kennedy RS, et al. **Aviat Space Environ Med** 1989 Jan;60(1):10–6
An audiological survey of aircrew. Jones DG. **J R Nav Med Serv** 1988 Spring;74(1):44–50
The Royal Naval Reserve Medical Branch—past and future. Malcolm-Smith NA. **J R Nav Med Serv** 1988 Winter; 74(3):133–6
Computers: application of micro computer in a Royal Naval Air Station. Sheard SC, et al. **J R Nav Med Serv** 1987 Winter;73(3):189–91
Ocean's bottom more distant (in a sense) than moon's behind, say some researchers [news] Marwick C. **JAMA** 1989 May 19;261(19):2814, 2816, 2821
Getting bugs out of military operations is job of environmental health specialty team [news] Marwick C. **JAMA** 1989 May 19;261(19):2821
Physician must rely on remote-duty corpsman when patient is deep in, or far across, sea [news] Raymond C. **JAMA** 1989 May 19;261(19):2793
Newest in long tradition of hospital ships originally were launched as supertankers [news] Raymond C. **JAMA** 1989 May 19;261(19):2795–6
Blending with surroundings, 'NAMRU' aids hosts while studying disease threats to US military [news] Raymond C. **JAMA** 1989 May 19;261(19):2798, 2801
Medical aspects of the First Fleet Re-enactment Voyage. Simpson RL, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):664–7
Prolonged human survival alone at sea: a prospective study. Mallory DL, et al. **Milit Med** 1988 Sep;153(9):459–64
USS Franklin and the USS Stark—recurrent problems in the prevention and treatment of naval battle casualties. Pinkstaff CA, et al. **Milit Med** 1989 May;154(5):229–33
A portable ECG recorder for shipboard use. Ryack BL. **Milit Med** 1989 Apr;154(4):184–5
Excretion of morphine in urine following the ingestion of poppy seeds. Struempler RE. **Milit Med** 1988 Sep; 153(9):468–70
Smoking and physical fitness among Navy shipboard men [letter] Tow DJ. **Milit Med** 1989 May;154(5):274
[Preliminary ergonomic assessment of the work sites and living conditions for the crew on board the new t/h Ignacy Daszyński series of merchant ships] Węclawik Z. **Sante Publique (Bucur)** 1989 Jan–Mar;32(1):65–70 (Eng. Abstr.) **(Fre)**
[Evacuation of patients from the North Sea] Freund KG. **Tidsskr Nor Laegeforen** 1989 Jun 10;109(16):1757–8 (Eng. Abstr.) **(Nor)**
[Medical help and health problems of persons at sea] Skogland A. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1753–4 **(Nor)**
[Death of 3 men in the loading compartment caused by lack of oxygen] Debon D, et al. **Med Pr** 1988;39(6):442–5 (Eng. Abstr.) **(Pol)**
[Our experiences regarding imported malaria] Nahorski W, et al. **Wiad Parazytol** 1988;34(4–6):655–62 **(Pol)**
[Increased reactivity of microcirculation and T lymphocytes to adrenaline in sailors during long sea voyages] Okhotnikov SV, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):686–92 **(Rus)**
[Morbidity with temporary disability among sailors] Netudykhatka OIu. **Gig Sanit** 1988 Oct;(10):48–50 **(Rus)**
[The absolute light sensitivity of the visual analyzer in sailors during a 10-month commercial voyage] Ponomarchuk VS, et al. **Oftalmol Zh** 1989;(2):107–11 (Eng. Abstr.) **(Rus)**
[Problems of preventing ischemic heart disease among naval personnel] Vinnikova VN, et al. **Sov Zdravookhr** 1989; (4):34–7 (Eng. Abstr.) **(Rus)**
[Stomatological morbidity among the crews of the Northern Marine Steamship Company] Opravin AS, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):68–9 **(Rus)**
[The outlook for introducing the Konsul'tant-2 expert medical system on board ships] Grigorenko GF, et al. **Voen Med Zh** 1989 Feb;(2):49–50 **(Rus)**
[Perestroika in the work of the Pacific Ocean Fleet Hospital] Grishaev LI, et al. **Voen Med Zh** 1988 Jul;(7):8–10 **(Rus)**
[Experience in organizing a rest during the cruise for the ship's crew on a hospital ship] Lukavskii MI, et al. **Voen Med Zh** 1988 Nov;(11):45–6 **(Rus)**
[The effect of motion sickness on the diurnal rhythm of the sinus node of the heart conduction system] Marchenko AM, et al. **Voen Med Zh** 1989 May;(5):59–61 **(Rus)**
[Let us raise the prevention of infectious diseases to a new level of quality] Perepelkin VS. **Voen Med Zh** 1988 May; (5):4–7 **(Rus)**
[Effect of microclimate on the adaptation of sailors during a cruise at low latitudes] Plakhov NN, et al. **Voen Med Zh** 1988 May;(5):51–3 **(Rus)**
[Physiological mechanisms of autogenic training and its use

with sailors on a prolonged cruise] Pogorelov IA, et al. **Voen Med Zh** 1988 Jul;(7):57–8 (Rus)
[Characteristics of psychoprophylactic and mental hygiene work in the navy] Shinskiĭ SE. **Voen Med Zh** 1989 Apr; (4):55–8 (Rus)
[The importance of the polarographic study of oxygen tension in the tissues in assessing body functional state in sailors] Tiunov LA, et al. **Voen Med Zh** 1989 Mar;(3):47–9 (Rus)
[Medical support for diving operations in the Far North using a drifting ice floe] Zhukov VG, et al. **Voen Med Zh** 1988 Oct;(10):56–7 (Rus)

EDUCATION

[The training of medical personnel for the naval forces of the USA] Konovalov VD, et al. **Voen Med Zh** 1989 Mar; (3):72–4 (12 ref.) (Rus)
[Experience in teaching military naval therapy] Sukhanova GI, et al. **Voen Med Zh** 1989 Apr;(4):33–4 (Rus)

HISTORY

Medical aspects of Arctic exploration. 4. A brave assault on the Northwest Passage: W. Edward Parry (1819–20). Fortuine R. **Arctic Med Res** 1988 Jul;47(3):144–7
Death on the Argus: American medical malpractice versus British chauvinism in the War of 1812. Estes JW, et al. **J Hist Med Allied Sci** 1989 Apr;44(2):179–95
'My story'—sinking of HMS Gurkha January 17 1942. Brown WM. **J R Nav Med Serv** 1988 Winter;74(3):137–9
The Royal Navy and the spread of vaccination. Jones RW. **J R Nav Med Serv** 1987 Winter;73(3):204–6
The First Fleet surgeons [letter] **Med J Aust** 1989 Apr 3; 150(7):412
Gentlemen of the faculty: a synopsis of the First Fleet surgeons. Comparisons and contrasts of the personalities who were the founders of medicine in Australia. Pearn J. **Med J Aust** 1988 Dec 5–19;149(11–12):639–43
Medical aspects of the voyage of the First Fleet. Royle HG, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):625–30
[Dr. Walter Weisspfennig, the murderer of shipwrecked men] Sterkowicz S. **Przegl Lek** 1989;46(1):141–3 (Pol)
[Organization, activities and scientific problems of the Department of Tropical Parasitology of the Institute of Naval and Tropical Medicine in Gdynia] Wegner Z. **Wiad Parazytol** 1988;34(3):358–66 (Pol)
[50th anniversary of the Department of the Organization and Tactics of the Naval Medical Service] Konoplin AS. **Voen Med Zh** 1989 Apr;(4):66–8 (Rus)
[The scientific work of physicians of the Black Sea Fleet] Ugulava SN, et al. **Voen Med Zh** 1988 Jul;(7):74–6 (Rus)

INSTRUMENTATION

[A portable ENT kit for the ship's physician] Revskoĭ IuK, et al. **Voen Med Zh** 1988 Dec;(12):49–50 (Rus)

LEGISLATION & JURISPRUDENCE

[International legal aspects of rendering medical care at sea] Markov VIu, et al. **Voen Med Zh** 1988 Jun;(6):49–50 (Rus)

ORGANIZATION & ADMINISTRATION

Shipboard medical information systems: familiarity and receptivity. Blood CG, et al. **J Med Syst** 1988 Jun; 12(3):147–52
Pacific is far-flung region for US military but medical care spans the vast distances [news] Cowart VS. **JAMA** 1989 May 19;261(19):2788, 2792–3
[The work organization of a temporary office for neurofunctional diagnosis at a naval hospital] Nozdrunov LM, et al. **Voen Med Zh** 1988 Oct;(10):61–2 (Rus)

STANDARDS

[Effect of relative air humidity on the results of sanitaro-chemical studies of polymer materials] Antonenkov AG, et al. **Gig Sanit** 1989 May;(5):90 (Rus)
[Specific work processes in sailors of the Arctic navy at "ice moorages" and their effect on various body systems] Bychikhin NP, et al. **Gig Sanit** 1989 May;(5):22–4 (Eng. Abstr.) (Rus)
[Physiologic and hygienic evaluation of the work of river transport workers during the navigation period] Evstaf'ev VN. **Gig Sanit** 1988 Nov;(11):83–5 (Rus)
[Study of the microflora of fish and fish products on ships] Potravnova RS, et al. **Gig Sanit** 1988 Sep;(9):86–7 (Rus)
[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. **Gig Sanit** 1989 May; (5):90–2 (Rus)
[Experimental complex for studying the biological effect of exposure to ultrahigh frequency irradiation at a ship's radar station] Grigorenko AV, et al. **Gig Tr Prof Zabol** 1989; (5):49–50 (Rus)
[Hygienic evaluation of working conditions of operators of floating hydraulic equipment] Kuratov LE. **Gig Tr Prof Zabol** 1988 Aug;(8):54–5 (Rus)
[Characteristics of morbidity among sailors] Netudykhatka OIu. **Gig Tr Prof Zabol** 1989;(5):16–8 (Eng. Abstr.) (Rus)
[New standards for the procurement of medical stores] Il'in GI. **Voen Med Zh** 1988 Nov;(11):47–50 (Rus)

STATISTICS & NUMERICAL DATA

[Multiple injuries among sailors on ships] Shapovalov KA. **Ortop Travmatol Protez** 1988 Dec;(12):44–5 (Rus)

TRENDS

[The results of the work of the medical service of the Armed Forces in 1988 and tasks for the new academic year] **Voen Med Zh** 1989 Jan;(1):3–9 (Rus)
[The main trends in the further improvement of sanatorium-health resort support in the Army and the Navy] Sinopal'nikov IV, et al. **Voen Med Zh** 1988 Jul; (7):3–7 (Rus)

NAVAL SCIENCE see **MILITARY SCIENCE**

NBD CHLORIDE see under **OXADIAZOLES**

NEAMIN see **NEOMYCIN**

NEBRAMYCIN see under **ANTIBIOTICS**

NEBRAMYCIN FACTOR 6 see **TOBRAMYCIN**

NEBULIZERS AND VAPORIZERS

see related
AEROSOLS
ANESTHESIA, INHALATION
RESPIRATORY THERAPY

Inhaler technique and elderly patients [letter] Connolly MJ. **Age Ageing** 1989 Jan;18(1):67
PEP-spacer: an adaptation for administration of MDI to infants [letter] Bisgaard H, et al. **Allergy** 1989 Jul; 44(5):363–4
Cool ultrasonic humidifiers for lowering fever [letter] Schneiderman H, et al. **Am Fam Physician** 1989 Feb; 39(2):39
Experience with a metered-dose inhaler with a spacer in the pediatric emergency department. Benton G, et al. **Am J Dis Child** 1989 Jun;143(6):678–81
The efficacy and safety of home nebulizer therapy for children with asthma. Zimo DA, et al. **Am J Dis Child** 1989 Feb;143(2):208–11
Protection against exercise-induced bronchoconstriction by nebulized disodium cromoglycate [letter] **Am Rev Respir Dis** 1989 Feb;139(2):570–1
The drawover Boyle's machine—a safe alternative [letter] **Anaesthesia** 1988 Nov;43(11):993–4
Long-term performance of Tec vaporizers. Basis for a rational maintenance policy. Carter KB, et al. **Anaesthesia** 1988 Dec;43(12):1042–6
Dependence of the output of a halothane vaporizer on thymol concentration. Gray WM. **Anaesthesia** 1988 Dec; 43(12):1047–9
An unexpected cause of total expiratory obstruction [letter] Stewart KG, et al. **Anaesthesia** 1988 Sep;43(9):810–1
An anesthetic adapter for all metered dose inhalers that is readily available to all [letter] Koska AJ 3d, et al. **Anesth Analg** 1989 Aug;69(2):266–7
Vaporizer for volatile anesthetics during high-frequency jet ventilation. Mazloomdoost M, et al. **Anesthesiology** 1989 Jul;71(1):150–3
Potentially lethal failure of the vapor exclusion system. Silvasi DL, et al. **Anesthesiology** 1989 Aug;71(2):289–91
2 year old asthmatics can learn to operate a tube spacer by copying their mothers. Croft RD. **Arch Dis Child** 1989 May;64(5):742–3
Aerosol bronchodilator delivery methods. Relative impact on pulmonary function and cost of respiratory care. Summer W, et al. **Arch Intern Med** 1989 Mar;149(3):618–23
Improvement of inhaler technique. Galak M. **Aust Fam Physician** 1989 Jul;18(7):850
Alternatives to chlorofluorocarbons [letter] Ellmers S. **BMJ** 1989 Apr 22;298(6680):1100–1
Spacer device with face mask attachment for giving bronchodilators to infants with asthma. O'Callaghan C, et al. **BMJ** 1989 Jan 21;298(6667):160–1
Systemic beta-adrenoceptor responses to salbutamol given by metered-dose inhaler alone and with pear shaped spacer attachment: comparison of electrocardiographic, hypokalaemic and haemodynamic effects. Lipworth BJ, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):837–42
Nebuhaler or nebulizer for high dose bronchodilator therapy in chronic bronchitis: a comparison. Allen MB, et al. **Br J Dis Chest** 1988 Oct;82(4):368–73
Nebuhaler technique. Gleeson JG, et al. **Br J Dis Chest** 1988 Apr;82(2):172–4
Bronchodilatory therapy with nebuhaler: how important is the delay between firing the dose and inhaling? Newman SP, et al. **Br J Dis Chest** 1988 Jul;82(3):262–7
Safe vaporizers [letter] Coleshill GG. **Can J Anaesth** 1988 Nov;35(6):667–8
Vigorous cleaning of Inspirease Reservoir Devices [letter] French CL, et al. **Chest** 1989 Jun;95(6):1366
Delivery of albuterol and ipratropium bromide from two nebulizer systems in chronic stable asthma. Efficacy and pulmonary deposition. Johnson MA, et al. **Chest** 1989 Jul; 96(1):6–10
Comparison of beta-adrenergic agents delivered by nebulizer vs metered dose inhaler with InspirEase in hospitalized asthmatic patients. Morley TF, et al. **Chest** 1988 Dec; 94(6):1205–10
Aerosol deposition in the human lung: effect of high-frequency oscillation on the deposition characteristics of an inhaled nebulized aerosol. Thomas SH, et al. **Clin Sci** 1988 Nov;75(5):535–42
Evaluation of the combination inhaler of salbutamol and beclomethasone dipropionate in the management of asthma. McDonald C, et al. **Curr Med Res Opin** 1988;11(2):116–22
Extender device adaptability with metered-dose inhalers [letter] Madrazo G, et al. **DICP** 1989 Apr;23(4):341–2
An objective method of compliance assessment with metered-dose inhalers. Nemec MA, et al. **DICP** 1989 Feb; 23(2):128–32
The stability of 99mTc-DTPA and 99mTc-HIDA following ultrasonic nebulisation. Durovic N, et al. **Eur J Nucl Med** 1988;14(7–8):400–2
Inaccurate calculation of drug output from nebulisers. O'Callaghan C, et al. **Eur J Pediatr** 1989 Feb;148(5):473–4
Breath-actuated inhalers: comparison of terbutaline Turbohaler with salbutamol Rotahaler. Anani A, et al. **Eur Respir J** 1989 Jul;2(7):640–2
New inhalation devices [editorial] Crompton GK. **Eur Respir J** 1988 Aug;1(8):679–80
Methods of testing nonspecific bronchial hyperresponsiveness. Eiser N. **Eur Respir J** 1988 May; 1(5):482–3 (10 ref.)
Optimal inhalation technique with terbutaline Turbuhaler. Hansen OR, et al. **Eur Respir J** 1989 Jul;2(7):637–9
Room temperature influences output from the Wright jet nebulizer. Kongerud J, et al. **Eur Respir J** 1989 Jul; 2(7):681–4
Deposition and clinical efficacy of terbutaline sulphate from Turbuhaler, a new multi-dose powder inhaler. Newman SP, et al. **Eur Respir J** 1989 Mar;2(3):247–52
A new multiple dose powder inhaler, (Turbuhaler), compared with a pressurized inhaler in a study of terbutaline in asthmatics. Persson G, et al. **Eur Respir J** 1988 Aug; 1(8):681–4
The bronchodilator response from inhaled terbutaline is influenced by the mass of small particles: a study on a dry powder inhaler (Turbuhaler). Persson G, et al. **Eur Respir J** 1989 Mar;2(3):253–6
Aerosol treatment of asthma. Singh M, et al. **Indian Pediatr** 1988 Apr;25(4):361–7 (25 ref.)
Medicated aerosol delivery. McGowan JE, et al. **Iowa Med** 1989 Feb;79(2):78–80
Comparison of ipratropium solution, fenoterol solution, and their combination administered by nebulizer and face mask to children with acute asthma. Watson WT, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1012–8
Evaluation report: heated humidifiers. **J Med Eng Technol** 1988 Nov–Dec;12(6):282–6
Which inhaler is best? [editorial] Holmes B. **J R Soc Med** 1989 Feb;82(2):64
Nebulised budesonide in severe childhood asthma [letter] **Lancet** 1989 Feb 18;1(8634):379–80
Measurement of exhaled chlorofluorocarbons. Coady TJ, et al. **Lancet** 1988 Dec 3;2(8623):1286–7
Differences in relative efficiency of nebulisers for pentamidine administration. O'Doherty MJ, et al. **Lancet** 1988 Dec 3;2(8623):1283–6
Preservatives in bronchodilator nebuliser solutions [letter] Summers Q, et al. **Lancet** 1989 Sep 23;2(8665):740–1
A comparative bronchodilator study of salbutamol and salbutamol sulphate that were administered by metered-dose inhalers. Ruffin RE, et al. **Med J Aust** 1989 Mar 6;150(5):274–5, 277
The Viralizer for the common cold. **Med Lett Drugs Ther** 1989 Jan 27;31(784):8
Cooling of metered-dose inhalers decreases pressure output from canisters [letter] Hampson NB, et al. **N Engl J Med** 1989 Feb 2;320(5):321
Patient use of metered dose inhalers [letter] Nakao MA. **N Y State J Med** 1988 Sep;88(9):504
Reliable salbutamol administration in 6- to 36-month-old children by means of a metered dose inhaler and Aerochamber with mask. Conner WT, et al. **Pediatr Pulmonol** 1989;6(4):263–7
A trial of metaproterenol by metered-dose inhaler and two spacers in preschool asthmatics. König P, et al. **Pediatr Pulmonol** 1988;5(4):247–51
An inexpensive spacer for use with metered-dose bronchodilators in young asthmatic children. Teo J, et al. **Pediatr Pulmonol** 1988;5(4):244–6
High-versus low-dose, frequently administered, nebulized albuterol in children with severe, acute asthma. Schuh S, et al. **Pediatrics** 1989 Apr;83(4):513–8
Optimized inhalation aerosols. I. The effects of spherical baffle size and position upon the output of several pressurized nonaqueous suspension formulations. Byron PR, et al. **Pharm Res** 1989 Mar;6(3):225–9
Turbuhaler: a new powder inhaler for administration of drugs to the airways. Wetterlin K. **Pharm Res** 1988 Aug; 5(8):506–8
Metered dose inhalers: the value of instruction. Smith D. **Practitioner** 1988 May 9;232(1448):507, 510
Deposition pattern of nasal sprays in man. New [illegible] SP, et al. **Rhinology** 1988 Jun;26(2):111–20
Methacholine bronchial challenge using a dosimeter with controlled tidal breathing. Nieminen MM, et al. **Thorax** 1988 Nov;43(11):896–900
[A mistake in the filling of a vaporizer detected by an infrared

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